T.C.
BAYINDIRLIK ve İSKÂN BAKANLIĞI
AFET İŞLERİ GENEL MÜDÜRLÜĞÜ
DEPREM ARAŞTIRMA DAİRESİ

DEPREM ARAŞTIRMA BÜLTENİ

71

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DEPREM ARAŞTIRMA BÜLTENİ

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Üç Ayda Bir Yayınlanır
Bilim ve Meslek Dergisi

★

Sahibi
Bayındırlık ve İskan Bakanlığı Adına
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DEPREM ARAŞTIRMA BÜLTENİ

YIL 20 SAYI 71 1993

BU SAYIDA

TÜRKİYE VE CİVARININ DEPREM KATALOĞU

1970-1990

(*)
Aysel YATMAN , Günruh BAĞCI , Serap ÖZDEMİR , Hülya BAYÜLKE , Sami ZÜNBÜL

ÖZET

1970-1990 yılları ,Türkiye ve civarının deprem kataloğunu oluşturmak için , (32-45) ° Kuzey enlemleri ve (23-48) ° Doğu boylamları arasında kalan alanda , magnitüdü M ≥ 4.0 olan deprem verisi incelenmiş ve liste haline getirilmiştir.

Kullanılan veriler , International Seismological Center (I.S.C.) tarafından yayınlanan , Regional Catalogue of Earthquakes , U.S. Geological Survey' in Preliminary Determination of Epicenters (P.D.E) aylık listeleri ve Boğaziçi Üniversitesi Kandilli Rasathanesi listelerinden derlenmiştir.

ABSTRACT

To compile the earthquake catalogue in Türkiye and surrounding area , for 1970 - 1990, for the area between the degrees (32 - 45) ° N and (23 - 48) ° E , for the earthquakes with magnitudes M ≥ 4.0 , available data has been studied and listed.

The data has been taken from the Regional Catalogue of Earthquakes , International Seismological Center , U.S. Geological Survey, Monthly Listings and Boğaziçi University , Kandilli Observatory Listings.

GİRİŞ

Bu katalog çalışması , (32-45) °K enlemleri ve (23-48) °D boylamları arasında kalan alanda,1970-1990 yılları arasında meydana gelen M ≥ 4.0 olan depremlerle ilgili bilgileri içermektedir.

Kullanılan veriler , International Seismological Center (I.S.C.) tarafından yayınlanan Regional Catalogue of Earthquakes ,U. S. Geological Survey' in Preliminary Determination of Epicenters (P.D.E.) aylık listeleri ve Boğaziçi Üniversitesi , Kandilli Rasathanesi (I.K.) listelerinden derlenmiştir.

Seçilen alanda , yüksek deprem etkinliği gösteren Ege, Doğu Akdeniz , Anadolu , Kafkasya , Batı İran bölgeleri yer almaktadır.

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I.S.C. kataloğunda , M_b (Hacım dalgası magnitüdü) değeri , Gutenberg ve Richter (1956) tarafından , periyodu $\leq$ 3.0 sn. olan P dalgası için geliştirilen yönteme göre hesaplanmıştır. Derinlik - uzaklık faktörü Q ise , i ninci istasyon için

$q_i = \log_{10}$ genlik (nanometre) / periyod (saniye) ise , n istasyon için , M_b değeri :

$$M_b = n^{-1} \sum_{1}^{n} [Q(\Delta_i, h) + q_i)] - 3$$ olarak hesaplanmıştır.

Bu yöntemde , genlik değerinin , kısa periyod , düşey sismometre kayıtlarından alındığı varsayılmıştır.

M_s (Yüzey dalgası magnitüdü) ise ' Prague formülü ' (Vanek ve diğ. 1962) kullanılarak ;

$$M_s = \log_{10} (A/T)_{max} + 1.66 \log \Delta + 3.3$$ olarak hesaplanmıştır.

Bu eşitlikte A genlik , T ortalama periyod , Δ ise derece olarak episantr uzaklığıdır. Genlik ve periyod değerleri ,10 - 60 saniye aralığında yüzey dalgaları için ele alınmış olup , M_s değeri , 5 - 160 derece uzaklık aralığında , derinliği 60 km ve daha az olan depremler için hesaplanmıştır.

P.D.E aylık listelerinde , M_s magnitüdü , yukarıda verilen formüle göre hesaplanmış, $18 \leq T \leq 22$ ve $20 \leq \Delta \leq 160$ derece olarak alınmıştır. M_b değeri ise ,Gutenberg ve Richter (1956) tarafından tanımlanan formüle göre hesaplanmıştır.

$$M_b = \log (A/T) + Q(D, h)$$

Periyod değeri $0.1 \leq T \leq 3.0$ sn., A mikrometre cinsinden genlik , Q ise uzaklık (D) ve derinliğin (h) fonksiyonu olup $D \geq 5$ derecedir.

Yerel magnitüd M_l ise , Richter (1935) tarafından tanımlanan formüle göre hesaplanmıştır.

$$M_l = \log A - \log A_o$$

A , kısa periyod , standart torsiyon sismometresi ile kaydedilen maksimum genlik (mikrometre) , A_o ise uzaklığın (D) standart fonksiyonu olup $D \leq 600$ km dir.

Katalogda ;

1. sütun deprem numarasını ,
2 ., 3. ve 4. sütunlar depremin oluş zamanınını (gün, ay, yıl) ,
5. ,6. ve 7. sütunlar depremin oluş zamanını (Greenwich ortalama zamanı , saat, dakika, saniye),
8. sütun oluş zamanının saniye olarak hatasını,
9. ve 10. sütunlar deprem episantrının coğrafi koordinatlarını ,
11. ve 12. sütunlar coğrafi koordinatların derece olarak hatasını ,
13. sütun depremin odak derinliğini (km),
14. sütun derinlikteki hatayı (km),
15. sütun değerlendirmeye giren istasyon sayısını ,
16., 17. ve 18. sütunlar ortalama M_s , M_b ve M_l magnitüd değerlerini,
19. sütun verinin alındığı kaynağı (IS : ISC Kataloğu , IK : Kandilli Rasathanesi Listeleri , US : P.D.E. Aylık Listeleri) ,

içermektedir.

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SIRA NO	TARiH			OLUS ZAMANI				KOORDiNATLAR				DERiN-LiK		ist say	MAGNiTUD			Ky
	Gn	Ay	Yil	Sa	Dk	Sn	h_O	Enl.	Boyl.	h_E	h_B		hD		Ms	Mb	Ml	
1	02	01	1970	21	43	49.8	0.9	36.90	27.60	.10	.14	68	12	8	-	4.1	-	IS
2	03	01	1970	06	54	46.1	0.4	41.80	43.35	.03	.03	41	5	145	4.9	5.1	-	IS
3	15	01	1970	08	27	17.0	5.1	36.50	25.50	.51	.59	-	-	4	-	4.1	-	IS
4	16	01	1970	22	41	53.5	0.8	34.97	23.85	.06	.07	72	8	25	-	4.3	-	IS
5	22	01	1970	10	32	43.9	0.6	38.75	29.34	.05	.08	-	-	20	-	-	4.3	IS
6	24	01	1970	15	43	54.0	0.6	37.21	23.45	.06	.06	105	7	42	-	4.7	-	IS
7	01	02	1970	03	04	25.0	1.6	34.49	32.70	.05	.06	17	14	12	-	4.6	-	IS
8	05	02	1970	05	17	48.0	3.7	34.70	28.00	.20	.18	3	8	5	-	-	4.2	IS
9	09	02	1970	03	31	00.0	-	33.30	24.00	-	-	-	-	2	-	4.1	-	IS
10	10	02	1970	02	31	11.0	1.6	39.00	24.20	.16	.20	-	-	9	-	4.3	-	IS
11	17	02	1970	02	59	56.7	0.5	38.65	43.36	.03	.03	47	6	79	-	4.7	-	IS
12	17	02	1970	16	16	52.6	0.6	38.66	43.41	.04	.05	41	7	51	-	4.6	-	IS
13	18	02	1970	01	50	37.2	0.6	34.72	26.45	.07	.07	-	-	15	-	-	4.0	IS
14	18	02	1970	19	49	10.0	2.2	36.41	27.12	.08	.09	11	17	19	-	-	4.0	IS
15	20	02	1970	07	22	07.0	2.6	35.07	27.18	.08	.09	3	18	20	-	-	4.3	IS
16	20	02	1970	10	06	13.0	1.3	36.40	27.20	.16	.17	33	-	20	-	-	4.2	IS
17	20	02	1970	20	19	32.0	1.5	36.55	27.26	.04	.04	20	13	39	-	-	4.0	IS
18	22	02	1970	15	48	31.0	1.1	35.21	25.24	.08	.08	43	11	58	-	5.1	-	IS
19	22	02	1970	15	52	17.1	0.8	35.38	25.27	.05	.05	34	8	75	-	4.8	-	IS
20	24	02	1970	01	44	38.5	0.2	36.37	27.94	.03	.04	102	3	25	-	-	4.0	IS
21	28	02	1970	12	32	58.0	-	40.40	43.20	-	-	20	-	1	-	-	4.0	IS
22	04	03	1970	01	51	30.7	0.6	34.47	26.48	.04	.04	44	6	60	-	4.7	-	IS
23	05	03	1970	02	37	33.0	-	35.30	25.53	-	-	-	-	3	-	-	4.2	IS
24	14	03	1970	01	51	47.8	0.3	38.62	44.80	.02	.02	50	3	172	-	5.2	-	IS
25	14	03	1970	02	00	54.0	-	39.10	44.50	-	-	-	-	1	-	-	4.3	IS
26	18	03	1970	17	08	29.1	0.6	34.42	32.49	.07	.07	38	11	18	-	-	4.5	IS
27	23	03	1970	07	56	08.0	5.1	39.20	28.20	.11	.22	26	47	13	-	-	4.2	IS
28	28	03	1970	20	08	23.0	-	37.20	29.00	-	-	-	-	2	-	-	4.3	IS
29	28	03	1970	21	02	23.5	0.6	39.21	29.51	.02	.02	18	4	347	-	6.0	-	IS
30	28	03	1970	21	10	25.0	-	38.90	29.70	-	-	-	-	1	-	-	5.1	IS
31	28	03	1970	21	12	10.0	-	39.50	30.30	-	-	-	-	3	-	-	5.3	IS
32	28	03	1970	21	13	24.0	-	39.30	30.70	-	-	-	-	2	-	-	4.0	IS
33	28	03	1970	21	18	12.0	-	38.20	30.10	-	-	-	-	1	-	-	4.4	IS
34	28	03	1970	21	19	20.0	-	39.50	30.70	-	-	-	-	1	-	-	4.4	IS
35	28	03	1970	21	23	28.0	2.9	38.10	29.20	.35	.27	33	-	14	-	4.7	-	IS
36	28	03	1970	21	30	36.0	-	38.90	30.70	-	-	-	-	5	-	-	4.3	IS
37	28	03	1970	21	32	10.0	4.6	38.80	30.00	.46	.50	-	-	7	-	4.3	-	IS
38	28	03	1970	21	33	11.0	-	37.60	30.40	-	-	-	-	3	-	-	4.5	IS
39	28	03	1970	21	37	47.0	-	38.70	31.40	-	-	-	-	2	-	-	4.8	IS
40	28	03	1970	21	41	20.0	0.7	38.13	29.53	.04	.06	42	8	75	-	4.5	-	IS
41	28	03	1970	21	45	01.0	-	38.90	31.50	-	-	-	-	4	-	-	4.4	IS
42	28	03	1970	21	52	15.0	-	39.50	31.10	-	-	-	-	5	-	-	4.4	IS
43	28	03	1970	21	59	10.9	0.3	39.28	29.46	.05	.06	17	-	71	-	4.8	-	IS
44	28	03	1970	22	05	28.2	0.3	38.81	29.71	.03	.06	7	-	35	-	4.4	-	IS
45	28	03	1970	22	40	15.9	0.9	39.02	29.43	.05	.06	43	10	46	-	4.2	-	IS
46	28	03	1970	22	59	34.1	0.7	39.13	29.00	.08	.17	-	-	17	-	-	4.1	IS
47	28	03	1970	23	11	43.4	0.9	39.15	29.56	.03	.03	31	7	158	-	4.8	-	IS
48	28	03	1970	23	28	27.7	0.6	39.23	29.50	.04	.05	50	7	98	-	4.4	-	IS
49	28	03	1970	23	30	52.0	1.6	38.90	29.90	.14	.23	-	-	16	-	4.3	-	IS
50	28	03	1970	23	44	00.0	1.0	39.07	29.76	.03	.03	32	7	145	-	5.0	-	IS
51	29	03	1970	01	28	55.0	1.1	38.80	29.50	.08	.12	55	13	25	-	4.1	-	IS
52	29	03	1970	01	47	15.0	8.4	39.00	29.40	.12	.17	13	52	22	-	4.1	-	IS
53	29	03	1970	02	05	27.5	0.5	39.29	29.18	.04	.04	38	6	71	-	4.5	-	IS
54	29	03	1970	02	37	11.8	0.7	39.01	30.40	.06	.26	33	-	4	-	4.6	-	IS
55	29	03	1970	02	40	35.4	0.8	38.92	29.70	.09	.13	33	-	27	-	4.2	-	IS

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56	29	03	1970	02	45	51.0	1.2	39.35	30.00	.08	.13	40	14	28	-	4.3	-	IS
57	29	03	1970	02	54	52.0	1.5	39.12	29.53	.05	.05	22	13	69	-	4.2	-	IS
58	29	03	1970	03	10	46.7	0.9	39.06	29.68	.06	.06	37	9	42	-	4.4	-	IS
59	29	03	1970	03	55	40.5	0.7	39.36	29.51	.05	.08	38	7	25	-	4.4	-	IS
60	29	03	1970	04	25	11.0	-	39.60	31.10	-	-	-	-	1	-	-	4.0	IS
61	29	03	1970	04	56	48.0	-	38.40	29.30	-	-	-	-	1	-	-	4.1	IS
62	29	03	1970	05	06	27.7	-	42.80	29.50	-	-	-	-	4	-	-	4.0	IS
63	29	03	1970	06	56	24.4	0.6	39.06	29.74	.02	.02	29	5	195	-	5.1	-	IS
64	29	03	1970	07	40	42.0	-	39.60	31.00	-	-	-	-	3	-	-	4.3	IS
65	29	03	1970	07	58	30.0	2.2	39.29	29.20	.05	.13	2	14	23	-	4.3	-	IS
66	29	03	1970	09	00	35.7	0.9	39.08	29.50	.07	.12	42	12	19	-	4.3	-	IS
67	29	03	1970	09	40	12.5	1.0	39.01	30.00	.09	.19	-	-	23	-	4.2	-	IS
68	29	03	1970	09	52	17.8	0.6	39.16	29.41	.04	.07	47	7	47	-	4.3	-	IS
69	29	03	1970	14	37	19.6	0.6	38.74	27.83	.04	.05	56	7	94	-	4.5	-	IS
70	29	03	1970	14	40	26.6	1.0	38.73	28.00	.04	.09	47	10	46	-	4.5	-	IS
71	29	03	1970	19	11	43.0	1.0	39.14	29.42	.03	.03	22	8	122	-	4.7	-	IS
72	29	03	1970	22	12	43.0	2.0	39.20	29.20	.19	.30	-	-	11	-	-	4.4	IS
73	30	03	1970	00	15	44.5	0.9	38.96	29.73	.07	.09	55	10	24	-	4.3	-	IS
74	30	03	1970	01	23	37.2	0.6	39.18	29.60	.06	.13	-	-	24	-	4.1	-	IS
75	30	03	1970	02	22	34.0	1.1	39.14	29.80	.06	.12	58	10	12	-	4.4	-	IS
76	30	03	1970	05	20	35.0	-	39.20	29.80	-	-	-	-	2	-	-	4.1	IS
77	30	03	1970	06	46	24.9	0.3	39.09	29.03	.03	.05	23	-	57	-	4.5	-	IS
78	30	03	1970	06	49	05.0	0.3	39.43	29.40	.03	.05	33	-	73	-	4.6	-	IS
79	30	03	1970	07	59	52.0	1.0	39.34	29.26	.03	.03	16	8	176	-	5.1	-	IS
80	30	03	1970	08	08	58.0	5.1	39.40	30.00	.34	.75	-	-	8	-	4.4	-	IS
81	30	03	1970	08	35	18.2	0.6	39.29	29.24	.05	.05	36	8	72	-	4.7	-	IS
82	30	03	1970	11	27	58.0	1.2	39.20	30.30	.10	.14	53	13	25	-	4.2	-	IS
83	30	03	1970	13	48	05.0	1.5	39.34	29.13	.04	.05	21	13	36	-	4.3	-	IS
84	30	03	1970	16	32	36.5	0.9	39.09	29.59	.02	.03	30	7	127	-	4.7	-	IS
85	30	03	1970	20	38	05.0	1.7	39.05	29.62	.04	.05	28	14	54	-	4.5	-	IS
86	30	03	1970	20	59	30.5	0.3	39.30	29.29	.04	.07	33	-	53	-	4.6	-	IS
87	30	03	1970	21	42	31.0	0.8	39.03	29.90	.06	.01	35	15	15	-	-	4.4	IS
88	30	03	1970	00	26	10.0	2.3	39.01	29.40	.06	.12	18	20	27	-	4.3	-	IS
89	31	03	1970	00	51	36.0	1.1	39.33	29.41	.03	.04	18	9	87	-	4.6	-	IS
90	31	03	1970	01	07	55.0	2.1	39.40	29.32	.06	.07	25	18	38	-	4.0	-	IS
91	31	03	1970	03	38	15.0	7.9	39.10	30.00	.33	-	-	-	7	-	-	4.3	IS
92	31	03	1970	03	46	51.1	0.4	39.03	29.79	.02	.03	35	4	127	-	4.7	-	IS
93	31	03	1970	04	10	05.0	2.3	39.01	29.20	.03	.05	9	16	47	-	4.2	-	IS
94	31	03	1970	04	45	55.0	1.4	39.11	29.90	.09	.21	-	-	9	-	-	4.4	IS
95	31	03	1970	04	47	17.0	-	39.00	30.10	-	-	15	-	6	-	-	4.4	IS
96	31	03	1970	05	21	14.0	-	39.60	31.10	-	-	-	-	3	-	-	4.3	IS
97	31	03	1970	05	40	44.0	2.4	39.11	29.77	.03	.09	9	14	12	-	-	4.3	IS
98	31	03	1970	08	30	49.4	0.9	38.93	29.30	.06	.10	55	13	21	-	4.0	-	IS
99	31	03	1970	11	57	59.9	0.5	38.89	29.73	.04	.05	41	-	54	-	4.6	-	IS
100	31	03	1970	16	08	22.5	0.6	39.03	29.49	.04	.07	37	9	24	-	-	4.3	IS
101	31	03	1970	21	20	34.0	1.6	39.12	29.51	.04	.07	20	14	24	-	4.2	-	IS
102	01	04	1970	15	56	04.6	0.4	39.32	29.27	.02	.03	35	4	120	-	4.8	-	IS
103	01	04	1970	17	55	14.0	0.6	39.01	29.69	.04	.07	41	9	19	-	-	4.4	IS
104	02	04	1970	00	28	32.3	0.3	39.11	29.57	.03	.05	28	-	57	-	4.4	-	IS
105	02	04	1970	02	45	47.0	3.4	38.96	29.44	.05	.10	10	23	19	-	4.3	-	IS
106	02	04	1970	13	05	16.0	4.5	39.04	29.20	.10	.19	15	40	18	-	4.2	-	IS
107	02	04	1970	20	35	09.0	0.4	39.05	29.72	.03	.03	35	5	81	-	4.4	-	IS
108	03	04	1970	08	00	07.7	0.9	34.75	25.00	.09	.11	-	-	10	-	-	4.1	IS
109	03	04	1970	10	48	43.0	1.5	34.70	24.66	.06	.08	3	9	13	-	-	4.0	IS
110	03	04	1970	12	16	45.8	0.9	38.95	29.50	.09	.14	-	-	31	-	4.2	-	IS

SIRA NO	TARiH			OLUS ZAMANI				KOORDiNATLAR				DERiN-LiK		ist say	MAGNiTUD			Ky
	Gn	Ay	Yil	Sa	Dk	Sn	h_O	Enl.	Boyl.	h_E	h_B		hD		Ms	Mb	Ml	
111	03	04	1970	23	19	38.0	3.9	38.90	29.70	.06	.08	3	27	27	-	4.1	-	IS
112	04	04	1970	03	52	26.2	-	39.70	30.00	-	-	-	-	3	-	-	4.3	IS
113	04	04	1970	04	48	00.1	-	34.20	39.70	-	-	-	-	1	-	-	4.4	IS
114	04	04	1970	12	06	47.0	-	38.90	30.30	-	-	-	-	3	-	-	4.5	IS
115	04	04	1970	16	48	10.0	1.1	38.90	29.90	.12	.18	33	-	13	-	4.6	-	IS
116	05	04	1970	04	55	39.5	0.9	34.68	25.07	.06	.06	35	9	68	-	4.5	-	IS
117	05	04	1970	05	47	27.3	0.6	38.88	29.89	.04	.06	32	7	46	-	4.6	-	IS
118	05	04	1970	12	29	47.7	0.4	39.31	29.18	.04	.07	-	-	28	-	4.3	-	IS
119	05	04	1970	19	48	48.0	4.3	39.20	31.70	.30	.47	-	-	8	-	-	4.2	IS
120	07	04	1970	04	12	33.9	0.4	39.32	29.09	.04	.06	33	-	53	-	4.4	-	IS
121	07	04	1970	09	18	44.0	1.3	34.57	26.14	.04	.04	20	-	111	-	4.9	-	IS
122	07	04	1970	10	55	02.0	1.4	39.00	27.80	.11	.17	48	22	21	-	-	4.4	IS
123	07	04	1970	17	05	11.9	0.8	39.34	29.32	.02	.03	33	7	184	-	5.1	-	IS
124	07	04	1970	22	58	55.0	1.8	39.01	30.11	.04	.10	21	15	11	-	4.5	-	IS
125	08	04	1970	05	50	46.0	-	36.40	24.70	-	-	-	-	1	-	4.0	-	IS
126	09	04	1970	02	39	23.0	-	34.20	33.70	-	-	-	-	1	-	-	4.0	IS
127	09	04	1970	10	12	30.4	0.4	39.11	29.41	.03	.03	34	4	121	-	4.7	-	IS
128	09	04	1970	20	43	22.0	1.9	39.21	29.35	.05	.07	30	17	27	-	4.2	-	IS
129	10	04	1970	01	14	40.0	1.6	39.13	29.31	.04	.06	22	14	55	-	4.2	-	IS
130	11	04	1970	01	03	11.2	0.7	38.20	23.10	-	-	70	-	-	-	-	4.5	IS
131	11	04	1970	08	36	38.0	1.7	39.10	28.80	.13	.25	49	29	10	-	-	4.4	IS
132	11	04	1970	17	24	25.0	1.6	39.09	27.76	.04	.05	22	14	36	4.6	-	-	IS
133	12	04	1970	08	39	51.0	-	39.50	31.00	-	-	-	-	1	-	-	4.2	IS
134	12	04	1970	19	55	27.0	2.5	38.86	29.50	.05	.01	27	22	30	-	4.0	-	IS
135	13	04	1970	05	16	00.0	2.0	39.32	29.03	.04	.05	15	13	67	-	4.4	-	IS
136	13	04	1970	05	58	15.0	1.5	39.40	28.00	.13	.29	33	-	4	-	-	4.2	IS
137	15	04	1970	00	36	02.2	0.4	39.01	29.77	.03	.04	40	6	29	-	4.3	-	IS
138	15	04	1970	16	27	53.0	1.6	39.27	29.70	.09	.21	41	21	16	-	4.1	-	IS
139	15	04	1970	16	29	58.0	1.3	39.34	29.30	.03	.04	28	11	96	-	4.6	-	IS
140	16	04	1970	01	07	02.0	1.9	39.21	29.13	.04	.07	17	18	35	-	4.2	-	IS
141	16	04	1970	02	38	00.0	-	39.60	30.90	-	-	10	-	3	-	-	4.0	IS
142	16	04	1970	10	42	22.3	0.6	39.02	29.91	.02	.02	31	4	208	-	5.4	-	IS
143	16	04	1970	11	43	22.3	0.5	38.98	29.95	.03	.04	43	5	86	-	4.8	-	IS
144	16	04	1970	12	59	18.0	1.2	38.99	29.50	.08	.14	67	11	26	-	4.3	-	IS
145	16	04	1970	22	39	31.3	0.8	40.67	23.45	.02	.03	20	7	159	-	4.9	-	IS
146	16	04	1970	23	11	45.0	1.7	40.74	23.62	.05	.08	1	13	20	-	-	4.0	IS
147	17	04	1970	01	31	39.0	2.9	37.09	26.92	.08	.10	32	-	38	-	-	4.2	IS
148	17	04	1970	20	27	22.0	1.0	38.92	29.71	.06	.10	51	13	21	-	-	4.5	IS
149	18	04	1970	01	54	19.0	2.6	38.80	29.70	.25	.32	73	2	8	-	4.2	-	IS
150	18	04	1970	02	12	23.0	-	42.70	29.30	-	-	-	-	6	-	-	4.1	IS
151	18	04	1970	05	37	24.0	1.9	39.22	29.38	.05	.09	16	16	45	-	4.3	-	IS
152	18	04	1970	12	31	09.8	0.7	38.80	29.70	.05	.13	45	9	18	-	4.6	-	IS
153	18	04	1970	18	14	49.0	-	38.70	31.70	-	-	-	-	2	-	4.0	-	IS
154	18	04	1970	23	06	29.4	0.7	38.80	29.90	.07	.10	33	-	29	-	-	4.1	IS
155	19	04	1970	13	29	36.5	0.8	39.03	29.76	.02	.02	18	6	246	5.6	5.5	-	IS
156	19	04	1970	13	33	41.5	-	40.00	30.90	-	-	-	-	5	-	-	5.0	IS
157	19	04	1970	13	47	35.0	0.6	39.03	29.80	.02	.02	24	4	221	5.5	5.4	-	IS
158	19	04	1970	13	50	27.0	-	39.60	30.70	-	-	-	-	1	-	-	4.9	IS
159	19	04	1970	13	50	56.0	-	39.60	30.70	-	-	-	-	3	-	-	5.3	IS
160	19	04	1970	13	59	32.0	-	36.00	27.10	-	-	-	-	1	-	4.5	-	IS
161	19	04	1970	14	14	20.0	-	39.50	31.00	-	-	-	-	3	-	-	4.5	IS
162	19	04	1970	14	22	13.0	-	38.20	29.90	-	-	-	-	2	-	-	4.4	IS
163	19	04	1970	22	05	52.0	5.9	38.87	30.20	.07	.12	10	41	14	-	-	4.5	IS
164	20	04	1970	02	23	26.7	0.7	38.98	30.09	.05	.06	35	8	36	-	-	4.6	IS
165	20	04	1970	07	19	07.0	1.0	38.98	29.60	.07	.11	59	12	21	-	-	4.4	IS

SIRA NO	TARiH			OLUS ZAMANI				KOORDiNATLAR				DERiN-LiK		ist say	MAGNiTUD			Ky
	Gn	Ay	Yil	Sa	Dk	Sn	h_O	Enl.	Boyl.	h_E	h_B		hD		Ms	Mb	Ml	
166	20	04	1970	18	00	33.0	2.8	38.84	29.92	.06	.10	23	27	27	-	4.3	-	IS
167	20	04	1970	18	33	14.5	0.7	38.89	30.30	.06	.11	33	-	27	-	4.2	-	IS
168	21	04	1970	01	33	01.0	2.1	38.89	30.18	.05	.09	28	18	22	-	4.4	-	IS
169	21	04	1970	07	36	58.0	1.5	30.08	29.90	.05	.06	25	13	54	-	4.5	-	IS
170	21	04	1970	14	51	53.0	3.3	39.22	41.40	.09	.11	28	26	26	-	4.4	-	IS
171	21	04	1970	18	04	11.1	0.6	38.91	29.91	.04	.06	49	7	25	-	-	4.3	IS
172	22	04	1970	04	51	00.2	0.7	38.87	29.98	.05	.08	36	9	16	-	4.5	-	IS
173	22	04	1970	05	24	06.0	0.4	39.02	29.77	.02	.02	37	4	160	-	5.1	-	IS
174	22	04	1970	18	38	50.1	0.4	39.08	29.43	.03	.03	48	5	101	-	4.6	-	IS
175	23	04	1970	04	29	49.0	-	37.50	23.10	-	-	110	-	-	-	-	4.8	IS
176	23	04	1970	07	18	31.8	0.9	38.94	30.01	.03	.03	32	7	129	-	4.9	-	IS
177	23	04	1970	09	01	26.6	0.7	39.13	28.65	.02	.02	28	6	208	5.3	5.2	-	IS
178	24	04	1970	00	40	01.4	0.9	39.01	29.85	.03	.03	32	7	129	-	4.8	-	IS
179	24	04	1970	02	40	14.0	1.4	39.06	28.60	.04	.05	21	1	67	-	4.2	-	IS
180	24	04	1970	14	37	20.0	0.6	36.75	28.66	.04	.05	34	7	61	-	4.6	-	IS
181	24	04	1970	16	54	00.0	0.7	39.12	28.74	.06	.07	37	11	21	-	4.3	-	IS
182	24	04	1970	22	52	49.7	0.7	39.12	29.68	.07	.10	-	-	13	-	-	4.4	IS
183	26	04	1970	13	23	04.0	-	39.90	28.90	-	-	-	-	3	-	4.1	-	IS
184	26	04	1970	23	15	02.0	1.3	38.86	29.94	.03	.04	18	11	41	-	4.5	-	IS
185	27	04	1970	01	54	12.6	0.4	38.94	29.81	.03	.03	37	5	86	-	4.4	-	IS
186	27	04	1970	09	34	34.0	1.0	38.98	30.02	.03	.04	32	8	58	-	4.3	-	IS
187	27	04	1970	09	35	13.1	0.3	38.96	29.58	.04	.06	33	-	72	-	4.8	-	IS
188	27	04	1970	10	39	12.0	1.9	38.97	29.33	.05	.07	17	17	27	-	4.0	-	IS
189	27	04	1970	22	24	43.0	1.6	39.06	29.54	.03	.03	11	11	112	-	4.7	-	IS
190	30	04	1970	14	58	22.0	1.2	39.31	29.31	.03	.04	25	10	74	-	4.6	-	IS
191	30	04	1970	16	44	47.0	1.4	39.32	29.22	.04	.04	24	12	95	-	4.7	-	IS
192	30	04	1970	23	59	09.0	1.2	39.09	29.59	.03	.05	29	10	80	-	4.5	-	IS
193	06	05	1970	05	50	30.0	-	38.90	31.30	-	-	-	-	2	-	-	4.1	IS
194	06	05	1970	21	02	05.0	1.8	38.93	29.94	.04	.07	33	16	39	-	4.2	-	IS
195	08	05	1970	02	49	14.6	0.9	38.93	29.98	.02	.03	20	7	109	-	4.6	-	IS
196	08	05	1970	06	58	59.0	1.4	38.91	30.01	.04	.05	29	12	50	-	4.3	-	IS
197	08	05	1970	10	06	21.0	1.0	38.99	29.50	.07	.12	38	15	15	-	-	4.4	IS
198	08	05	1970	10	10	28.7	0.9	38.93	29.99	.06	.10	37	13	19	-	-	4.4	IS
199	08	05	1970	14	00	41.1	0.5	38.93	30.07	.04	.05	35	7	37	-	4.1	-	IS
200	11	05	1970	09	58	47.1	0.5	39.36	29.32	.05	.08	-	-	26	-	-	4.5	IS
201	11	05	1970	16	28	30.0	2.1	38.95	29.90	.05	.07	20	19	41	-	4.2	-	IS
202	14	05	1970	09	20	22.0	1.3	43.13	47.14	.02	.02	12	8	255	5.5	5.5	-	IS
203	14	05	1970	17	05	32.0	1.0	43.07	47.40	.09	.16	56	13	21	-	4.4	-	IS
204	14	05	1970	17	19	13.3	0.6	43.13	45.90	.08	.25	-	-	9	-	4.4	-	IS
205	14	05	1970	18	12	27.3	0.1	43.09	47.07	.02	.03	32	3	315	-	5.6	-	IS
206	14	05	1970	18	34	32.0	1.9	42.99	46.71	.04	.07	21	14	34	-	4.7	-	IS
207	14	05	1970	18	47	06.0	1.0	43.01	47.10	.08	.11	45	13	31	-	4.6	-	IS
208	14	05	1970	19	20	25.0	1.9	42.97	46.86	.04	.06	26	15	32	-	4.6	-	IS
209	14	05	1970	19	31	40.0	1.3	42.99	47.08	.05	.06	48	14	43	-	4.6	-	IS
210	14	05	1970	20	25	35.0	1.3	43.03	46.70	.06	.10	76	16	10	-	4.0	-	IS
211	14	05	1970	20	47	44.0	2.0	43.10	46.80	.12	.24	166	22	23	-	4.2	-	IS
212	14	05	1970	21	10	19.0	2.0	43.00	47.00	.14	.28	208	25	16	-	4.4	-	IS
213	14	05	1970	21	15	50.7	0.5	43.15	47.28	.03	.04	34	6	97	-	4.8	-	IS
214	14	05	1970	21	34	07.0	1.0	38.84	30.00	.05	.11	35	12	13	-	4.2	-	IS
215	14	05	1970	23	10	06.0	1.3	42.96	46.80	.07	.11	100	17	9	-	4.2	-	IS
216	14	05	1970	23	59	41.0	2.9	43.14	46.94	.07	.09	27	24	24	-	4.3	-	IS
217	15	05	1970	01	56	49.0	1.1	42.95	47.20	.08	.12	42	13	41	-	4.4	-	IS
218	15	05	1970	02	08	04.0	1.7	43.12	47.25	.04	.06	31	14	66	-	4.7	-	IS
219	15	05	1970	03	30	30.4	1.0	43.02	46.00	.05	.33	33	-	4	-	-	4.0	IS
220	15	05	1970	03	57	36.0	0.6	41.10	43.00	.32	.80	-	-	8	-	4.3	-	IS

SIRA NO	TARiH			OLUS ZAMANI				KOORDiNATLAR				DERiN-LiK		ist say	MAGNiTUD			Ky
	Gn	Ay	Yil	Sa	Dk	Sn	h_O	Enl.	Boyl.	h_E	h_B		hD		Ms	Mb	Ml	
221	15	05	1970	04	12	36.0	2.1	43.17	46.94	.04	.06	24	17	39	-	4.8	-	IS
222	15	05	1970	06	19	17.0	2.0	43.17	47.35	.04	.06	30	16	52	-	4.5	-	IS
223	15	05	1970	21	52	23.1	0.3	43.08	47.02	.03	.06	33	-	21	-	4.2	-	IS
224	16	05	1970	05	10	43.0	1.1	43.00	46.80	.05	.11	49	13	22	-	4.6	-	IS
225	16	05	1970	10	43	22.0	2.2	43.50	47.29	.05	.06	15	19	49	-	4.6	-	IS
226	16	05	1970	21	26	55.0	1.5	43.16	47.09	.04	.04	30	12	82	-	4.7	-	IS
227	17	05	1970	05	02	14.0	2.4	43.16	47.06	.04	.05	6	16	79	-	4.6	-	IS
228	17	05	1970	06	49	02.0	1.6	43.15	46.98	.03	.03	4	10	160	-	5.0	-	IS
229	18	05	1970	03	12	42.0	1.9	43.00	45.90	.12	.38	160	23	12	-	4.3	-	IS
230	18	05	1970	05	36	45.9	0.6	43.07	47.10	.06	.11	33	-	23	-	4.5	-	IS
231	21	05	1970	03	37	25.0	-	43.40	45.70	-	-	-	-	4	-	-	4.0	IS
232	21	05	1970	10	14	44.8	0.7	41.84	43.43	.07	.06	43	10	23	-	4.3	-	IS
233	24	05	1970	04	37	11.0	-	32.70	40.70	-	-	-	-	1	-	4.0	-	IS
234	24	05	1970	11	03	01.0	1.0	36.05	25.49	.07	.09	37	12	26	-	4.9	-	IS
235	25	05	1970	18	13	08.9	0.6	35.94	25.42	.07	.09	29	-	26	-	-	4.4	IS
236	26	05	1970	00	50	52.0	1.4	43.20	44.50	.10	.14	163	20	14	-	4.2	-	IS
237	26	05	1970	05	51	51.2	0.7	38.92	29.44	.07	.09	59	12	13	4.5	-	-	IS
238	28	05	1970	02	52	17.9	0.7	38.95	30.03	.04	.07	34	9	34	-	4.6	-	IS
239	29	05	1970	23	38	51.0	-	39.11	29.68	-	-	21	-	27	-	-	4.4	IS
240	31	05	1970	10	25	52.9	0.9	43.08	47.08	.08	.08	37	11	39	-	4.5	-	IS
241	01	06	1970	06	43	13.0	2.4	39.00	29.70	.16	.27	54	28	18	-	-	4.4	IS
242	01	06	1970	07	54	52.0	2.1	34.30	24.20	.13	.13	51	20	17	-	-	4.4	IS
243	08	06	1970	12	33	03.0	1.8	43.20	47.16	.04	.04	32	15	55	-	4.6	-	IS
244	09	06	1970	06	25	58.0	-	43.11	47.18	-	-	17	-	30	-	4.4	-	IS
245	09	06	1970	14	40	19.6	1.0	38.80	30.00	.10	.15	-	-	23	-	-	4.4	IS
246	09	06	1970	20	43	30.0	0.7	36.16	25.56	.05	.06	63	8	44	-	4.5	-	IS
247	10	06	1970	05	17	15.5	0.4	39.15	29.46	.03	.03	43	5	73	-	4.4	-	IS
248	10	06	1970	17	44	57.0	1.1	39.07	30.20	.07	.15	37	14	21	-	4.1	-	IS
249	14	06	1970	00	58	26.0	2.1	39.25	29.17	.04	.07	23	20	33	-	4.4	-	IS
250	15	06	1970	06	22	15.0	5.9	43.22	47.07	.09	.08	3	40	39	-	4.8	-	IS
251	15	06	1970	15	59	43.9	-	38.85	36.88	-	-	33	-	17	-	-	4.2	IS
252	16	06	1970	09	46	46.0	0.5	36.27	28.19	.03	.06	-	-	4	-	-	4.0	IS
253	17	06	1970	00	34	45.0	5.1	43.20	47.03	.07	.09	11	34	30	-	4.5	-	IS
254	20	06	1970	06	04	27.2	0.7	38.85	29.87	.05	.07	45	9	62	-	4.2	-	IS
255	22	06	1970	23	46	57.0	1.8	39.20	29.70	.17	.27	212	-	6	-	-	4.4	IS
256	23	06	1970	06	33	23.0	1.1	35.56	26.11	.10	.08	67	11	13	-	-	4.0	IS
257	26	06	1970	01	56	16.0	1.4	38.70	45.10	.13	.13	65	19	27	-	4.5	-	IS
258	27	06	1970	00	46	07.3	0.8	43.22	47.31	.06	.08	33	10	39	-	4.5	-	IS
259	28	06	1970	07	54	42.0	-	43.00	45.70	-	-	148	-	17	-	4.5	-	IS
260	28	06	1970	09	20	50.0	3.0	36.20	27.10	.27	.31	-	-	10	-	-	4.2	IS
261	01	07	1970	15	50	41.0	0.5	35.23	31.29	.04	.05	53	5	55	-	4.8	-	IS
262	02	07	1970	02	24	34.7	0.8	38.87	36.81	.02	.02	19	6	117	-	4.7	-	IS
263	09	07	1970	21	08	18.5	0.2	45.80	26.58	.03	.03	138	4	87	-	4.4	-	IS
264	10	07	1970	05	36	20.0	1.9	39.16	28.60	.03	.08	12	13	11	-	4.2	-	IS
265	10	07	1970	13	29	59.7	0.9	40.99	35.91	.05	.07	37	10	58	-	4.5	-	IS
266	10	07	1970	14	18	58.1	0.3	47.95	25.83	.03	.05	33	-	-	-	-	5.0	IS
267	07	08	1970	04	53	24.3	0.9	39.08	30.01	.06	.08	41	11	41	-	-	4.2	IS
268	08	08	1970	12	48	05.0	1.7	34.70	25.50	.14	.20	-	-	8	-	-	4.3	IS
269	24	08	1970	16	36	03.0	2.1	38.32	39.45	.06	.06	27	18	48	-	4.4	-	IS
270	03	09	1970	05	32	10.2	0.2	39.60	38.78	.04	.03	22	4	167	5.3	5.0	-	IS
271	06	09	1970	17	39	10.0	1.2	40.20	28.50	.12	.14	-	-	6	-	-	4.0	IS
272	09	09	1970	00	12	44.7	0.6	34.59	32.21	.04	.05	49	7	52	-	-	4.7	IS
273	09	09	1970	05	25	58.8	0.5	38.97	29.52	.06	.06	-	-	52	-	4.8	-	IS
274	09	09	1970	23	37	28.9	-	34.75	23.56	-	-	51	-	6	-	-	4.0	IS
275	12	09	1970	04	52	22.0	-	42.30	46.60	-	-	-	-	3	-	-	4.0	IS

SIRA NO	TARiH			OLUS ZAMANI				KOORDiNATLAR				DERiN-LiK		ist say	MAGNiTUD			Ky
	Gn	Ay	Yil	Sa	Dk	Sn	h_O	Enl.	Boyl.	h_E	h_B		hD		Ms	Mb	Ml	
276	14	09	1970	07	10	13.0	0.8	39.24	29.32	.05	.09	37	14	27	-	-	4.4	IS
277	15	09	1970	06	28	48.0	1.9	39.70	28.54	.11	.09	10	17	9	-	-	4.0	IS
278	17	09	1970	22	29	15.0	-	34.20	25.90	-	-	-	-	5	-	-	4.3	IS
279	18	09	1970	16	53	38.0	2.1	34.33	26.26	.05	.04	12	13	62	-	4.7	-	IS
280	18	09	1970	19	35	49.0	1.9	34.20	25.20	.19	.19	-	-	16	-	-	4.3	IS
281	21	09	1970	19	08	02.0	1.6	38.80	30.00	.04	.06	27	15	23	-	4.2	-	IS
282	24	09	1970	21	25	15.0	0.7	34.17	26.18	.04	.06	42	8	21	-	4.4	-	IS
283	27	09	1970	07	26	22.0	-	34.80	26.70	-	-	-	-	3	-	-	4.0	IS
284	28	09	1970	19	54	09.0	1.7	37.09	28.59	.04	.07	24	16	36	-	-	4.2	IS
285	29	09	1970	04	11	17.0	-	33.20	34.40	-	-	-	-	1	-	-	4.1	IS
286	03	10	1970	02	47	46.0	1.1	33.90	47.56	.06	.05	85	11	49	-	4.9	-	IS
287	05	10	1970	14	53	11.4	0.6	35.04	39.00	.03	.03	34	6	57	-	4.8	-	IS
288	07	10	1970	10	46	04.7	0.2	43.77	44.33	.03	.05	33	-	47	-	4.5	-	IS
289	13	10	1970	00	53	37.3	0.8	38.28	36.98	.06	.05	34	10	54	-	4.6	-	IS
290	17	10	1970	01	50	23.5	0.5	40.61	35.79	.06	.07	33	-	39	-	-	4.2	IS
291	19	10	1970	01	32	25.0	3.1	37.01	29.01	.05	.07	11	-	25	-	-	4.6	IS
292	20	10	1970	07	16	43.0	0.8	41.57	44.51	.09	.10	60	11	43	4.0	-	-	IS
293	24	10	1970	14	55	54.1	0.5	35.79	28.07	.03	.05	54	6	29	-	-	4.4	IS
294	24	10	1970	19	34	11.0	3.5	36.86	28.80	.09	.12	28	32	27	-	-	4.1	IS
295	25	10	1970	11	22	21.3	0.4	36.74	45.17	.02	.02	44	4	194	-	5.3	-	IS
296	28	10	1970	08	50	13.0	-	44.60	47.10	-	-	-	-	1	-	-	4.2	IS
297	31	10	1970	04	36	11.4	0.6	39.92	26.16	.07	.08	-	-	15	-	-	4.0	IS
298	31	10	1970	13	05	50.0	1.8	36.10	27.70	.19	.23	-	-	14	-	-	4.0	IS
299	07	11	1970	19	15	00.1	-	43.95	38.70	-	-	-	-	26	4.0	-	-	IS
300	11	11	1970	20	58	11.9	0.5	35.99	28.24	.03	.03	35	5	164	-	4.9	-	IS
301	15	11	1970	03	14	56.4	0.5	39.32	29.28	.03	.07	-	-	8	4.0	-	-	IS
302	17	11	1970	00	24	38.6	0.5	36.74	29.55	.03	.03	44	5	65	-	4.5	-	IS
303	17	11	1970	06	27	35.0	1.0	34.96	23.15	.07	.07	38	10	21	-	-	4.2	IS
304	21	11	1970	02	03	40.6	0.5	39.12	24.43	.06	.07	-	-	17	-	-	4.1	IS
305	21	11	1970	02	13	50.0	1.9	36.88	28.92	.05	.05	19	18	48	-	-	4.4	IS
306	26	11	1970	01	57	39.7	0.8	34.50	24.05	.05	.05	47	7	87	-	4.7	-	IS
307	01	12	1970	11	57	30.0	1.2	39.90	38.93	.04	.03	26	10	126	-	4.7	-	IS
308	04	12	1970	01	59	29.5	0.2	43.80	39.27	.03	.03	33	-	163	-	4.8	-	IS
309	13	12	1970	20	18	46.0	-	39.10	29.60	-	-	-	-	10	-	-	4.0	IS
310	17	12	1970	02	17	05.0	3.5	39.27	29.40	.06	.14	26	30	17	-	4.8	-	IS
311	20	12	1970	11	01	46.8	0.7	39.36	26.24	.02	.02	26	6	178	-	5.0	-	IS
312	21	12	1970	00	22	25.0	2.0	39.09	29.41	.04	.07	27	19	29	-	-	4.1	IS
313	26	12	1970	09	20	40.0	-	34.20	33.70	-	-	-	-	3	-	-	4.0	IS
314	28	12	1970	01	56	54.0	1.9	41.51	44.20	.06	.04	18	17	43	-	4.8	-	IS
315	28	12	1970	03	42	15.0	1.2	37.06	29.02	.03	.05	7	9	27	-	-	4.5	IS
316	28	12	1970	12	43	52.0	1.9	37.09	28.91	.04	.07	23	19	11	-	-	4.4	IS
317	28	12	1970	17	00	46.0	2.0	35.92	28.21	.05	.05	28	16	65	-	4.6	-	IS
318	28	12	1970	17	48	53.9	1.0	35.95	28.20	.08	.14	33	-	12	-	-	4.2	IS
319	29	12	1970	00	49	04.0	1.1	35.05	23.32	.06	.07	36	11	52	-	-	4.4	IS
320	29	12	1970	12	47	10.0	1.1	35.05	23.36	.07	.08	49	10	37	-	-	4.2	IS
321	29	12	1970	20	34	07.4	0.3	35.98	28.25	.04	.04	16	-	44	-	-	4.3	IS
322	29	12	1970	21	03	38.0	1.4	36.03	38.34	.03	.05	26	12	39	-	4.6	-	IS
323	30	12	1970	18	54	44.0	1.8	36.96	28.94	.04	.05	23	16	51	-	-	4.5	IS
324	31	12	1970	10	29	29.2	0.7	37.11	29.00	.05	.10	38	12	17	-	4.1	-	IS
325	01	01	1971	20	11	33.4	0.9	34.57	25.57	.07	.08	58	11	25	-	4.0	-	IS
326	02	01	1971	00	46	15.9	0.6	35.12	23.12	.04	.04	42	6	95	-	4.6	-	IS
327	02	01	1971	03	25	36.0	1.8	37.07	29.04	.03	.04	7	12	52	-	4.4	-	IS
328	02	01	1971	03	54	20.0	1.4	36.80	29.10	.12	.15	60	22	23	-	-	4.2	IS
329	03	01	1971	12	46	09.0	2.9	37.08	28.99	.06	.09	26	29	17	-	4.4	-	IS
330	03	01	1971	23	18	43.1	0.6	34.63	26.32	.03	.03	47	5	220	5.2	5.2	-	IS

SIRA NO	TARiH Gn	Ay	Yil	OLUS ZAMANI Sa	Dk	Sn	h_O	KOORDiNATLAR Enl.	Boyl.	h_E	h_B	DERiN-LiK	hD	ist say	MAGNiTUD Ms	Mb	Ml	Ky
331	08	01	1971	06	09	09.3	0.7	34.43	26.53	.05	.06	36	8	35	-	4.3	-	IS
332	08	01	1971	22	10	20.3	0.7	35.05	26.91	.06	.06	63	10	25	-	4.2	-	IS
333	16	01	1971	15	09	53.3	0.3	36.63	26.90	.04	.04	157	4	46	-	4.2	-	IS
334	19	01	1971	23	33	56.7	0.6	34.30	24.06	.03	.03	34	6	143	4.5	4.9	-	IS
335	20	01	1971	21	32	02.4	0.4	35.02	46.91	.02	.02	53	4	140	5.0	5.1	-	IS
336	22	01	1971	10	32	43.9	0.6	38.75	29.34	.05	.08	-	-	20	-	-	4.3	IS
337	26	01	1971	22	48	29.0	2.2	43.93	39.20	.04	.04	6	15	92	4.0	4.8	-	IS
338	28	01	1971	15	51	07.3	0.7	34.91	47.01	.05	.04	51	8	42	4.3	4.7	-	IS
339	30	01	1971	16	22	36.0	1.1	35.20	27.26	.10	.08	52	22	9	4.0	-	-	IS
340	31	01	1971	05	37	30.0	2.6	37.04	30.38	.06	.07	31	25	34	4.6	4.6	-	IS
341	01	02	1971	01	12	26.0	1.7	37.13	30.28	.05	.05	30	15	55	4.2	4.5	-	IS
342	07	02	1971	04	59	44.0	1.2	36.06	28.29	.03	.03	25	10	64	-	4.2	-	IS
343	11	02	1971	01	41	30.7	0.8	38.34	47.12	.06	.08	59	10	32	-	4.1	-	IS
344	15	02	1971	08	19	57.1	0.7	39.19	29.36	.02	.02	32	6	146	-	4.9	-	IS
345	18	02	1971	14	03	31.9	0.5	36.10	27.02	.04	.03	-	-	7	-	-	4.0	IS
346	20	02	1971	07	15	22.8	0.5	37.82	29.39	.04	.04	36	6	91	4.2	4.6	-	IS
347	22	02	1971	14	27	44.9	0.3	37.24	30.30	.02	.02	47	4	158	4.5	5.0	-	IS
348	23	02	1971	19	41	23.0	0.2	39.62	27.32	.02	.02	10	3	214	5.4	5.0	-	IS
349	24	02	1971	02	14	42.0	2.0	37.05	29.00	.03	.05	12	14	23	-	4.5	-	IS
350	25	02	1971	04	46	54.0	2.8	37.06	29.09	.04	.06	9	18	41	-	4.5	-	IS
351	26	02	1971	11	54	42.5	0.4	37.49	29.83	.03	.04	34	5	46	-	4.8	-	IS
352	28	02	1971	23	11	49.0	1.1	37.37	29.70	.10	.17	26	-	17	-	4.2	-	IS
353	08	03	1971	22	44	50.1	0.6	37.49	29.84	.04	.05	36	6	80	-	4.8	-	IS
354	15	03	1971	15	23	19.8	0.7	37.29	24.14	.05	.05	41	7	78	-	4.8	-	IS
355	18	03	1971	16	08	02.1	0.3	36.32	26.98	.03	.03	141	4	81	-	4.6	-	IS
356	23	03	1971	00	33	57.0	1.2	35.39	23.20	.90	.12	79	12	21	-	4.4	-	IS
357	25	03	1971	15	26	34.1	1.0	34.40	24.14	.06	.05	44	8	70	-	4.6	-	IS
358	25	03	1971	16	48	50.7	0.3	39.05	25.25	.03	.03	11	-	25	-	4.2	-	IS
359	26	03	1971	21	18	40.6	0.8	35.21	46.54	.06	.06	65	9	33	4.0	4.3	-	IS
360	02	04	1971	03	47	56.4	0.8	34.66	47.20	.07	.05	48	8	54	4.0	4.3	-	IS
361	03	04	1971	10	19	23.0	1.8	33.10	46.30	.11	.15	47	18	15	-	4.1	-	IS
362	08	04	1971	18	18	13.0	4.6	34.30	24.00	.13	.12	29	34	31	-	-	4.2	IS
363	09	04	1971	22	09	21.5	0.6	34.76	24.23	.04	.04	42	5	81	-	4.6	-	IS
364	10	04	1971	13	21	54.0	1.2	38.83	29.14	.03	.05	20	10	17	4.1	4.7	-	IS
365	13	04	1971	12	52	38.7	0.3	39.03	29.80	.02	.02	41	3	165	4.5	5.1	-	IS
366	16	04	1971	21	27	42.0	1.2	33.64	35.43	.04	.04	8	8	56	-	5.0	-	IS
367	17	04	1971	08	27	30.0	1.3	36.02	27.30	.09	.10	33	16	37	-	-	4.5	IS
368	17	04	1971	16	37	39.3	0.3	21.24	37.08	.05	.04	33	-	122	4.1	4.8	-	IS
369	21	04	1971	20	06	06.0	1.1	34.41	24.12	.07	.08	53	12	33	-	4.2	-	IS
370	27	04	1971	05	19	19.1	0.3	39.33	29.12	.02	.04	-	-	11	-	-	4.1	IS
371	27	04	1971	17	19	58.0	2.1	38.91	29.06	.05	.07	14	15	32	-	4.6	-	IS
372	30	04	1971	06	10	04.0	1.3	37.76	36.18	.07	.09	60	14	35	-	4.4	-	IS
373	30	04	1971	16	44	04.0	4.0	39.19	28.52	.04	.08	5	30	15	-	-	4.2	IS
374	01	05	1971	13	45	27.4	0.3	40.95	27.99	.04	.04	13	-	133	-	4.7	-	IS
375	06	05	1971	04	24	35.7	0.3	39.04	29.75	.02	.03	34	4	130	-	4.8	-	IS
376	06	05	1971	12	22	59.4	0.6	42.92	47.40	.07	.13	33	-	11	-	4.5	-	IS
377	07	05	1971	08	51	59.1	0.5	36.31	27.06	.06	.04	-	-	6	-	-	4.0	IS
378	10	05	1971	07	32	23.0	1.0	38.87	29.60	.07	.11	-	-	13	-	-	4.0	IS
379	12	05	1971	06	25	15.4	0.9	37.64	29.72	.03	.03	30	7	289	6.1	5.6	5.8	IS
380	12	05	1971	06	33	44.0	2.9	37.70	29.50	.19	.31	-	-	17	-	-	4.6	IS
381	12	05	1971	06	44	10.3	0.4	37.56	30.09	.05	.07	15	-	43	-	4.5	-	IS
382	12	05	1971	08	26	33.8	1.0	37.70	30.10	.11	.16	33	-	27	-	4.3	-	IS
383	12	05	1971	10	10	25.4	0.3	37.51	29.71	.04	.05	29	2	68	5.2	5.2	-	IS
384	12	05	1971	10	10	37.8	0.1	37.60	29.68	.02	.02	36	3	195	-	5.4	-	IS
385	12	05	1971	12	57	25.0	0.1	37.58	29.60	.02	.02	63	8	254	5.4	5.5	-	IS

SIRA NO	TARiH			OLUS ZAMANI				KOORDiNATLAR				DERiN-LiK		ist say	MAGNiTUD			Ky
	Gn	Ay	Yil	Sa	Dk	Sn	h_O	Enl.	Boyl.	h_E	h_B		hD		Ms	Mb	Ml	
386	12	05	1971	14	23	34.0	1.4	37.51	29.62	.04	.05	19	12	44	-	4.4	-	IS
387	12	05	1971	15	11	53.1	0.7	37.63	30.10	.05	.05	43	8	64	-	4.4	-	IS
388	12	05	1971	17	12	26.7	0.4	37.60	29.93	.03	.03	35	4	135	4.6	4.7	-	IS
389	12	05	1971	17	48	05.1	0.7	37.50	29.57	.06	.05	49	7	78	4.9	4.4	-	IS
390	12	05	1971	19	02	27.1	0.6	37.49	29.70	.04	.05	40	7	72	4.4	4.8	-	IS
391	12	05	1971	20	13	05.0	1.2	37.56	29.86	.03	.03	8	7	137	4.6	4.8	-	IS
392	13	05	1971	04	07	23.6	0.6	37.54	29.97	.04	.05	36	7	80	-	4.4	-	IS
393	13	05	1971	04	45	29.1	0.9	37.49	29.78	.03	.03	23	8	125	4.4	4.8	-	IS
394	13	05	1971	08	14	36.3	0.5	37.56	29.97	.04	.04	35	6	74	4.2	4.6	-	IS
395	13	05	1971	08	30	24.0	2.3	37.59	30.06	-	-	13	-	69	4.2	4.5	-	IS
396	13	05	1971	11	04	14.2	0.5	37.51	29.83	.06	.08	-	-	24	-	4.5	-	IS
397	13	05	1971	13	28	39.0	1.2	37.67	29.99	.03	.03	27	10	96	4.1	4.7	-	IS
398	13	05	1971	22	47	11.1	0.6	37.62	29.91	.04	.05	46	8	65	-	4.4	-	IS
399	13	05	1971	23	32	56.0	2.3	37.55	29.93	.06	.08	33	20	37	-	4.5	-	IS
400	14	05	1971	03	51	41.0	1.0	37.57	29.70	.09	.15	-	-	13	-	4.2	-	IS
401	14	05	1971	04	18	31.0	2.2	37.51	29.90	.05	.07	24	19	46	-	4.4	-	IS
402	14	05	1971	22	18	24.0	1.0	37.65	29.96	.03	.03	31	9	90	4.2	4.6	-	IS
403	14	05	1971	22	51	08.0	1.1	37.47	29.55	.03	.03	8	7	114	4.5	4.7	-	IS
404	15	05	1971	07	36	37.1	0.6	37.61	29.96	.05	.08	34	9	19	-	4.5	-	IS
405	15	05	1971	08	11	40.0	2.4	37.40	30.00	.19	.17	-	-	13	-	4.2	-	IS
406	15	05	1971	12	19	57.1	0.7	37.57	30.06	.06	.10	33	-	28	-	4.3	-	IS
407	15	05	1971	14	34	12.0	2.3	37.54	29.77	.06	.10	28	20	21	-	4.5	-	IS
408	15	05	1971	21	30	00.0	2.2	37.62	29.88	.03	.05	14	15	21	-	4.5	-	IS
409	15	05	1971	21	47	36.0	1.3	37.64	29.91	.03	.04	29	12	21	-	4.6	-	IS
410	16	05	1971	05	27	50.0	2.0	37.54	29.95	.05	.08	18	17	40	-	4.7	-	IS
411	16	05	1971	08	39	34.9	0.5	37.55	29.86	.04	.04	32	6	78	-	4.5	-	IS
412	16	05	1971	09	24	58.0	1.4	37.55	29.81	.04	.04	3	9	128	4.9	4.9	-	IS
413	16	05	1971	12	05	14.0	2.2	37.44	29.58	.03	.05	4	15	16	-	4.2	-	IS
414	16	05	1971	20	17	36.2	0.8	42.51	43.37	.07	.08	42	11	33	4.1	4.2	-	IS
415	16	05	1971	20	29	09.3	0.4	37.54	29.62	.06	.07	-	-	21	-	4.2	-	IS
416	16	05	1971	23	28	01.9	0.4	37.57	30.03	.04	.05	-	-	24	-	4.4	-	IS
417	17	05	1971	14	16	19.0	0.3	37.67	29.87	.02	.03	39	4	125	4.4	4.8	-	IS
418	18	05	1971	00	11	56.0	2.3	42.40	43.35	.06	.07	25	21	17	4.1	-	-	IS
419	18	05	1971	02	03	56.0	0.5	37.46	29.91	.05	.07	33	-	48	-	4.5	-	IS
420	18	05	1971	08	19	29.0	1.6	42.40	43.30	.15	.16	46	24	21	-	-	4.6	IS
421	20	05	1971	01	14	36.0	1.4	37.56	30.00	.04	.05	15	12	52	-	4.4	-	IS
422	20	05	1971	03	06	44.6	1.0	37.58	29.98	.03	.03	23	8	120	-	4.8	-	IS
423	21	05	1971	09	41	13.3	0.9	37.52	29.65	.03	.02	12	6	123	4.6	4.9	-	IS
424	22	05	1971	16	43	59.3	0.1	38.85	40.52	.02	.02	3	-	327	6.8	6.1	-	IS
425	22	05	1971	17	32	34.2	0.9	38.96	40.34	.09	.08	80	11	24	-	4.4	-	IS
426	22	05	1971	17	34	18.0	2.1	38.92	40.65	.06	.05	26	16	65	-	4.8	-	IS
427	22	05	1971	18	35	31.8	0.5	39.08	40.63	.04	.03	41	6	97	5.4	4.7	-	IS
428	22	05	1971	18	43	41.6	0.7	39.23	40.61	.05	.04	50	7	50	-	4.4	-	IS
429	23	05	1971	00	27	38.4	0.5	37.69	30.14	.03	.03	14	4	26	-	4.4	-	IS
430	23	05	1971	01	02	55.0	0.3	37.58	30.12	.04	.04	33	-	66	-	4.4	-	IS
431	23	05	1971	02	36	35.0	0.5	37.56	29.67	.05	.06	33	-	18	-	4.3	-	IS
432	23	05	1971	04	26	06.0	1.3	37.60	30.02	.04	.06	10	11	23	-	4.3	-	IS
433	23	05	1971	05	19	08.0	1.0	37.61	30.12	.04	.04	6	7	71	4.0	4.5	-	IS
434	23	05	1971	14	03	19.0	1.0	39.96	28.72	.04	.05	3	8	11	-	-	4.3	IS
435	23	05	1971	20	11	21.5	0.6	37.48	29.95	.06	.08	35	12	19	-	4.7	-	IS
436	24	05	1971	02	20	14.5	0.3	38.98	40.60	.05	.05	33	-	60	-	4.7	-	IS
437	24	05	1971	10	11	34.0	1.7	40.00	28.50	.11	.25	-	-	6	-	-	4.1	IS
438	24	05	1971	11	17	45.8	0.8	37.48	29.89	.03	.04	2	6	39	-	4.5	-	IS
439	24	05	1971	12	49	12.0	1.6	38.80	39.50	.27	.25	33	-	15	-	4.2	-	IS
440	24	05	1971	16	46	32.0	1.8	38.80	39.90	.13	.13	62	24	27	-	-	4.2	IS

SIRA NO	TARiH			OLUS ZAMANI				KOORDiNATLAR				DERiN-LiK		ist say	MAGNiTUD			Ky
	Gn	Ay	Yil	Sa	Dk	Sn	h_O	Enl.	Boyl.	h_E	h_B		hD		Ms	Mb	Ml	
441	24	05	1971	18	32	14.0	1.8	39.40	40.60	.16	.15	62	28	16	-	4.4	-	IS
442	25	05	1971	05	43	26.1	0.5	39.05	29.71	.02	.02	16	4	291	5.7	6.0	-	IS
443	25	05	1971	05	53	28.6	0.7	39.05	29.69	.03	.04	13	4	11	-	-	4.4	IS
444	25	05	1971	06	18	45.6	0.5	38.89	29.74	.05	.09	33	-	24	-	4.5	-	IS
445	26	05	1971	16	46	02.0	0.4	43.60	45.68	.04	.07	-	-	53	4.3	4.5	-	IS
446	29	05	1971	12	06	23.0	2.1	39.30	40.00	.27	.42	33	-	10	-	4.4	-	IS
447	30	05	1971	10	50	11.0	5.2	37.55	29.80	.08	.22	24	34	13	-	4.5	-	IS
448	02	06	1971	03	47	56.4	0.8	34.66	47.20	.07	.05	48	8	54	4.0	4.3	-	IS
449	04	06	1971	15	06	09.0	2.1	37.56	29.82	.03	.05	7	15	25	-	4.6	-	IS
450	08	06	1971	16	59	27.0	1.3	37.48	29.81	.04	.04	21	11	105	4.3	4.8	-	IS
451	08	06	1971	23	42	54.0	1.7	37.55	29.79	.03	.03	11	11	145	4.8	4.9	-	IS
452	09	06	1971	02	57	18.0	1.4	37.60	30.40	.12	.20	-	-	13	-	-	4.3	IS
453	09	06	1971	02	57	26.2	0.4	37.46	29.85	.05	.06	12	-	38	-	4.4	-	IS
454	10	06	1971	09	31	53.0	0.2	39.02	29.63	.03	.03	33	-	102	4.3	4.9	-	IS
455	15	06	1971	22	55	41.0	1.0	37.03	29.04	.03	.03	3	7	68	-	4.7	-	IS
456	19	06	1971	00	27	16.7	0.5	37.16	29.64	.04	.05	34	6	56	-	4.8	-	IS
457	23	06	1971	21	54	10.0	1.4	37.55	29.76	.03	.06	20	13	21	-	-	4.1	IS
458	24	06	1971	05	58	34.3	0.7	35.22	28.14	.06	.09	63	8	25	-	4.3	-	IS
459	28	06	1971	19	53	45.8	0.8	42.54	43.34	.06	.06	34	-	64	4.2	4.9	-	IS
460	28	06	1971	23	37	43.0	1.1	37.61	29.87	.03	.03	23	9	129	4.8	4.9	-	IS
461	29	06	1971	04	26	32.0	1.2	37.51	29.87	.03	.04	29	10	128	4.7	4.9	-	IS
462	29	06	1971	09	08	12.0	0.5	37.11	36.85	.03	.03	35	5	152	5.3	5.1	-	IS
463	29	06	1971	11	13	41.0	2.5	37.33	36.72	.04	.05	12	16	53	-	4.6	-	IS
464	01	07	1971	12	13	30.8	0.4	36.36	43.46	.03	.03	45	5	105	4.6	5.1	-	IS
465	01	07	1971	23	15	03.4	0.3	37.17	36.91	.04	.06	-	-	37	-	4.5	-	IS
466	03	07	1971	04	05	55.4	0.7	35.15	27.89	.04	.04	40	7	116	4.6	4.6	-	IS
467	05	07	1971	16	52	49.0	1.5	41.75	32.48	.04	.04	5	11	71	-	4.3	-	IS
468	08	07	1971	06	35	23.0	1.3	36.80	29.40	.10	.15	40	21	23	-	4.3	-	IS
469	11	07	1971	20	12	56.2	0.9	37.16	36.85	.02	.02	19	6	158	5.6	5.1	-	IS
470	15	07	1971	06	15	31.3	0.6	37.20	36.80	.03	.04	34	6	57	-	4.6	-	IS
471	16	07	1971	05	50	23.9	0.7	35.12	23.07	.04	.04	39	6	83	4.4	4.6	-	IS
472	17	07	1971	21	45	23.0	2.9	38.72	40.28	.09	.07	25	25	47	4.0	4.5	-	IS
473	18	07	1971	00	02	26.1	0.7	34.05	45.11	.04	.06	32	8	17	-	4.7	-	IS
474	19	07	1971	20	40	25.0	3.7	40.03	41.79	.06	.05	2	25	28	-	-	4.4	IS
475	19	07	1971	23	48	20.0	3.5	37.00	26.90	.03	.02	97	67	12	-	-	4.0	IS
476	23	07	1971	15	05	57.0	0.6	39.98	25.90	.06	.07	-	-	19	-	-	4.2	IS
477	30	07	1971	13	07	20.0	1.2	36.90	28.90	.11	.19	-	-	16	-	4.2	-	IS
478	01	08	1971	03	31	50.8	0.9	35.68	23.14	.07	.09	48	11	10	-	4.2	-	IS
479	07	08	1971	17	07	25.0	1.4	38.87	29.91	.04	.04	20	12	72	4.0	4.6	-	IS
480	08	08	1971	13	58	12.0	3.1	39.40	29.00	.13	.17	10	24	10	-	-	4.0	IS
481	09	08	1971	04	40	46.8	0.4	37.51	29.71	.04	.05	11	-	34	-	4.8	-	IS
482	09	08	1971	11	32	27.0	1.3	37.57	30.17	.03	.07	1	9	16	-	4.4	-	IS
483	11	08	1971	05	37	27.3	0.4	36.81	23.96	.03	.03	109	4	131	-	5.0	-	IS
484	17	08	1971	04	29	33.4	0.4	37.09	36.77	.02	.02	35	4	145	4.6	5.0	-	IS
485	22	08	1971	09	26	56.0	2.1	40.06	26.70	.19	.22	-	-	8	-	-	4.1	IS
486	23	08	1971	14	41	46.0	0.8	36.83	28.50	.05	.01	32	12	22	-	-	4.1	IS
487	25	08	1971	09	06	40.6	0.9	38.42	40.81	.07	.07	41	10	25	-	-	4.9	IS
488	26	08	1971	12	11	32.0	1.5	36.10	44.00	.10	.11	38	16	17	-	-	4.7	IS
489	26	08	1971	15	17	08.0	1.1	39.20	29.20	.10	.12	-	-	12	-	-	4.1	IS
490	28	08	1971	12	17	02.0	-	35.70	27.30	-	-	-	-	-	-	-	4.0	IS
491	03	09	1971	13	17	01.0	1.3	36.80	28.80	.14	.21	-	-	22	-	4.6	-	IS
492	05	09	1971	11	46	28.9	0.8	37.20	30.15	.06	.09	37	14	19	-	4.4	-	IS
493	05	09	1971	12	19	59.0	1.4	37.24	30.19	.04	.05	24	12	64	-	4.5	-	IS
494	08	09	1971	17	01	10.0	0.2	37.22	30.12	.03	.04	6	-	104	-	4.9	-	IS
495	08	09	1971	22	35	15.8	0.3	41.25	44.00	.05	.05	33	-	71	4.6	4.8	-	IS

SIRA NO	TARiH			OLUS ZAMANI				KOORDiNATLAR				DERiN-LiK		ist	MAGNiTUD			Ky
	Gn	Ay	Yil	Sa	Dk	Sn	h_O	Enl.	Boyl.	h_E	h_B		hD	say	Ms	Mb	Ml	
496	09	09	1971	15	10	06.7	0.4	37.34	30.18	.03	.02	49	4	188	-	5.3	-	IS
497	20	09	1971	08	02	36.9	0.5	41.54	32.66	.06	.07	-	-	31	-	4.0	-	IS
498	20	09	1971	10	57	35.1	0.7	41.58	32.44	.06	.09	-	-	24	-	4.2	-	IS
499	21	09	1971	01	04	19.0	4.0	38.60	44.14	.11	.09	17	34	42	-	4.3	-	IS
500	21	09	1971	16	48	52.1	0.5	37.27	30.17	.03	.03	42	5	126	-	4.8	-	IS
501	28	09	1971	05	10	26.0	1.5	37.21	30.15	.04	.04	32	12	110	-	4.7	-	IS
502	29	09	1971	21	02	34.3	0.8	37.02	23.28	.06	.07	60	9	44	-	4.5	-	IS
503	30	09	1971	08	45	56.0	2.0	37.64	30.13	.05	.08	16	18	33	-	4.5	-	IS
504	02	10	1971	10	56	45.0	-	45.11	42.20	.07	.11	33	-	39	4.0	-	-	IS
505	03	10	1971	07	44	28.0	1.1	38.94	29.92	.03	.04	26	10	67	-	4.7	-	IS
506	03	10	1971	17	18	53.0	1.5	36.77	30.12	.04	.05	22	13	39	-	4.4	-	IS
507	03	10	1971	23	19	41.2	0.3	34.10	26.08	.04	.04	35	-	111	4.4	4.7	-	IS
508	04	10	1971	16	35	09.0	1.5	34.16	26.18	.03	.03	17	9	103	-	4.7	-	IS
509	05	10	1971	18	53	10.0	1.4	38.93	29.61	.04	.05	30	13	36	-	4.5	-	IS
510	06	10	1971	01	46	38.8	0.3	38.32	30.14	.03	.03	19	-	72	4.1	4.5	-	IS
511	06	10	1971	23	16	04.8	0.4	38.06	27.27	.04	.07	-	-	25	-	-	4.2	IS
512	09	10	1971	22	29	14.0	2.6	37.24	30.33	.04	.05	10	17	59	4.0	4.5	-	IS
513	10	10	1971	02	10	54.0	2.7	37.16	30.20	.07	.11	31	26	22	-	4.3	-	IS
514	13	10	1971	03	26	26.1	1.0	34.24	26.06	.03	.02	17	7	183	-	5.1	-	IS
515	15	10	1971	08	18	41.0	1.3	34.62	25.50	.08	.01	35	14	42	-	4.3	-	IS
516	16	10	1971	09	45	35.8	0.4	36.63	28.54	.03	.04	61	5	55	-	4.8	-	IS
517	17	10	1971	00	54	09.9	0.9	34.80	27.34	.10	.10	-	-	13	-	-	4.0	IS
518	17	10	1971	08	20	34.0	1.6	37.25	29.02	.05	.07	28	15	17	-	-	4.3	IS
519	21	10	1971	07	11	36.8	0.3	37.92	30.28	.03	.04	33	-	46	-	4.6	-	IS
520	21	10	1971	22	50	39.8	0.7	34.78	24.34	.08	.09	33	-	27	-	4.1	-	IS
521	22	10	1971	21	04	54.6	0.8	38.61	33.90	.07	.10	-	-	12	-	-	4.0	IS
522	03	11	1971	21	56	14.0	2.3	37.07	26.85	.05	.07	26	23	16	-	-	4.0	IS
523	06	11	1971	19	43	47.5	1.0	39.02	29.78	.03	.03	16	8	152	-	5.0	-	IS
524	08	11	1971	00	04	47.1	1.0	38.64	23.80	.09	.15	-	-	9	-	-	4.1	IS
525	12	11	1971	12	30	51.0	1.5	36.61	27.09	.04	.05	23	13	55	-	4.9	-	IS
526	13	11	1971	09	30	23.7	0.6	36.29	26.91	.06	.05	-	-	5	-	-	4.1	IS
527	22	11	1971	19	26	45.7	0.6	35.24	27.81	.03	.04	34	6	100	-	4.8	-	IS
528	24	11	1971	06	26	40.0	-	35.00	28.40	-	-	-	-	-	-	-	4.2	IS
529	26	11	1971	16	22	31.3	1.0	35.95	29.20	.08	.10	41	14	29	-	4.4	-	IS
530	27	11	1971	03	54	28.0	1.7	39.75	25.66	.04	.06	24	15	61	-	4.6	-	IS
531	02	12	1971	09	40	58.4	0.8	38.23	26.45	.07	.09	35	14	32	-	4.5	-	IS
532	04	12	1971	23	15	27.0	1.2	34.97	23.30	.07	.09	41	13	31	-	4.4	-	IS
533	06	12	1971	10	09	08.0	1.1	35.31	23.10	.07	.11	44	13	18	-	4.2	-	IS
534	07	12	1971	00	51	20.0	1.6	37.62	29.87	.03	.05	21	16	15	-	4.2	-	IS
535	07	12	1971	15	00	34.6	0.8	39.11	40.11	.06	.06	71	9	31	-	4.3	-	IS
536	16	12	1971	16	42	02.0	1.1	39.52	27.80	.10	.13	-	-	27	-	-	4.1	IS
537	17	12	1971	02	06	05.0	1.2	34.94	23.96	.04	.03	26	9	104	-	4.8	-	IS
538	18	12	1971	00	43	08.0	1.6	39.50	29.10	.12	.19	-	-	20	-	-	4.3	IS
539	18	12	1971	02	33	29.7	0.6	36.76	23.02	.05	.04	44	6	76	-	4.5	-	IS
540	20	12	1971	16	39	42.7	0.6	35.07	27.85	.06	.08	-	-	16	-	-	4.3	IS
541	30	12	1971	02	25	53.2	0.7	35.44	27.82	.06	.08	-	-	13	-	-	4.1	IS
542	07	01	1972	00	15	31.0	1.0	37.12	28.10	.06	.01	-	-	8	-	-	4.1	IS
543	10	01	1972	15	12	15.3	0.5	35.18	28.04	.05	.07	62	78	22	-	4.1	-	IS
544	12	01	1972	13	51	20.0	0.6	35.01	23.61	.04	.03	46	5	141	-	5.0	-	IS
545	14	01	1972	22	10	04.6	0.5	32.87	46.84	.03	.02	40	5	89	5.3	5.1	-	IS
546	15	01	1972	10	50	26.0	1.3	40.01	41.87	.09	.08	43	14	31	-	4.4	-	IS
547	17	01	1972	05	54	20.0	3.2	34.86	27.00	.09	.11	25	28	19	-	4.3	-	IS
548	20	01	1972	00	52	19.0	1.3	36.64	27.15	.04	.04	16	12	79	-	4.6	-	IS
549	20	01	1972	02	15	06.9	0.6	36.64	27.23	.04	.04	34	7	83	-	4.8	-	IS
550	22	01	1972	17	17	31.0	4.4	37.41	29.60	.07	.11	10	31	20	-	4.4	-	IS

SIRA NO	TARiH			OLUS ZAMANI				KOORDiNATLAR				DERiN-LiK		ist say	MAGNiTUD			Ky
	Gn	Ay	Yil	Sa	Dk	Sn	h_O	Enl.	Boyl.	h_E	h_B		hD		Ms	Mb	Ml	
551	04	02	1972	18	57	03.0	2.2	36.20	26.90	.02	.03	-	-	12	-	-	4.0	IS
552	05	02	1972	21	52	42.9	0.9	33.95	47.22	.06	.07	44	9	-	-	4.7	-	IS
553	09	02	1972	11	22	53.0	0.7	42.91	45.98	.05	.06	58	8	50	-	4.6	-	IS
554	13	02	1972	11	27	39.8	0.6	36.07	23.98	.04	.05	78	7	42	-	4.5	4.0	IS
555	13	02	1972	13	07	12.0	0.8	36.97	24.08	.08	.10	27	-	51	-	4.7	4.1	IS
556	14	02	1972	04	04	21.0	2.8	36.60	27.20	.26	.23	-	-	9	-	-	4.3	IS
557	15	02	1972	12	33	52.0	2.0	37.10	24.17	.08	.10	10	12	20	-	4.2	3.9	IS
558	16	02	1972	00	42	25.0	2.7	37.03	24.17	.07	.08	25	22	49	-	4.5	4.0	IS
559	16	02	1972	02	56	25.0	1.0	37.04	24.00	.07	.10	41	13	28	-	4.3	3.5	IS
560	17	02	1972	19	13	29.0	1.3	34.77	26.24	.04	.04	2	8	12	-	-	4.2	IS
561	28	02	1972	02	04	35.2	0.4	40.40	29.00	.03	.05	6	8	24	3.5	4.1	4.4	IS
562	28	02	1972	10	52	48.0	1.5	37.06	24.09	.04	.04	32	12	19	4.5	4.8	4.4	IS
563	01	03	1972	22	30	04.0	2.3	41.80	23.82	.04	.06	32	24	19	-	3.6	4.0	IS
564	04	03	1972	01	09	37.3	1.0	36.78	23.11	.07	.10	54	11	23	-	4.4	3.4	IS
565	10	03	1972	22	13	17.8	0.2	36.55	26.98	.27	.03	150	6	21	-	4.7	3.8	IS
566	14	03	1972	14	05	46.6	0.3	39.32	29.47	.02	.02	38	3	13	4.9	5.4	5.5	IS
567	16	03	1972	03	35	35.9	0.3	37.89	23.43	.03	.04	142	3	63	-	4.5	3.3	IS
568	21	03	1972	01	31	05.9	0.7	34.69	28.94	.07	.07	53	7	20	-	-	4.7	IS
569	21	03	1972	18	16	54.0	4.2	40.70	42.40	.12	.10	22	35	7	-	4.5	-	IS
570	22	03	1972	00	51	47.0	2.1	40.42	42.42	.04	.04	2	4	8	-	5.2	-	IS
571	25	03	1972	06	16	08.8	0.9	36.67	27.50	.08	.10	55	12	32	-	4.4	4.0	IS
572	31	03	1972	08	16	29.0	-	37.00	31.00	-	-	-	-	-	-	-	4.6	IS
573	31	03	1972	20	04	29.5	0.7	36.68	27.40	.08	.10	-	-	29	-	4.2	4.2	IS
574	31	03	1972	30	20	01.0	1.5	36.62	27.09	.04	.04	18	13	86	-	4.6	4.5	IS
575	01	04	1972	20	24	54.0	2.9	36.50	26.50	.26	.27	33	-	14	-	-	4.3	IS
576	06	04	1972	00	03	32.0	2.4	34.62	24.60	.08	.18	1	12	13	-	4.2	4.0	IS
577	07	04	1972	06	31	23.0	1.8	37.00	26.60	.17	.22	120	34	15	-	-	4.0	IS
578	15	04	1972	15	41	25.1	0.6	40.42	25.59	.06	.07	-	-	27	-	-	4.0	IS
579	16	04	1972	03	20	57.0	1.0	34.36	24.20	.09	.15	-	-	11	-	4.1	3.9	IS
580	26	04	1972	06	30	23.2	0.8	39.43	26.36	.02	.03	18	6	114	-	5.0	4.6	IS
581	26	04	1972	15	59	44.9	0.9	39.45	26.33	.02	.03	25	7	146	4.8	4.8	4.7	IS
582	29	04	1972	18	29	38.3	0.5	34.80	24.66	.03	.02	48	4	178	-	5.2	4.4	IS
583	30	04	1972	10	13	44.5	1.0	35.08	23.72	.08	.08	72	8	29	-	4.3	3.9	IS
584	01	05	1972	12	30	47.4	0.6	39.47	26.38	.03	.05	12	55	14	-	-	4.3	IS
585	04	05	1972	21	39	57.0	1.3	35.15	23.56	.02	.02	14	8	332	6.3	6.1	6.1	IS
586	08	05	1972	08	58	16.3	0.8	41.48	23.60	.07	.10	51	15	33	-	4.5	4.3	IS
587	08	05	1972	09	20	55.0	1.0	41.69	23.64	.09	.02	12	7	168	-	5.0	5.0	IS
588	09	05	1972	13	38	09.8	0.5	41.71	23.69	.05	.06	-	-	20	-	-	4.1	IS
589	09	05	1972	17	40	22.0	1.1	39.46	26.37	.03	.04	10	8	108	-	4.9	4.2	IS
590	16	05	1972	01	41	43.0	3.6	34.14	25.63	.10	.09	32	29	69	-	4.1	4.3	IS
591	16	05	1972	03	40	21.9	1.0	34.29	25.80	.10	.13	-	-	12	-	-	4.2	IS
592	23	05	1972	03	14	30.0	2.3	41.50	23.64	.06	.09	5	18	45	-	4.4	4.2	IS
593	28	05	1972	03	14	36.2	0.7	38.96	30.04	.21	.02	29	6	105	-	4.8	4.6	IS
594	04	06	1972	16	29	36.0	2.9	39.49	26.37	.06	.08	28	31	22	-	4.1	3.8	IS
595	08	06	1972	00	29	46.1	0.9	35.46	26.89	.08	.08	47	12	21	-	4.0	4.0	IS
596	08	06	1972	09	39	25.0	0.6	34.09	46.28	.03	.03	46	5	-	-	4.9	-	IS
597	08	06	1972	17	25	51.5	0.3	43.15	47.03	.04	.05	51	-	88	-	4.5	-	IS
598	09	06	1972	07	42	20.5	0.6	34.73	26.55	.03	.03	41	5	117	-	4.9	4.5	IS
599	10	06	1972	19	31	42.7	0.9	32.79	46.16	.06	.06	44	9	26	-	4.0	-	IS
600	12	06	1972	13	34	00.3	0.5	32.98	46.25	.02	.02	34	5	5	5.2	5.4	-	IS
601	12	06	1972	13	40	12.0	1.9	33.40	45.73	.12	.07	134	13	46	-	5.1	-	IS
602	13	06	1972	00	55	38.0	0.8	33.06	46.19	.02	.02	31	6	198	-	5.1	-	IS
603	14	06	1972	04	34	29.6	0.4	33.05	46.12	.02	.02	47	4	3	4.9	5.3	-	IS
604	15	06	1972	14	18	30.1	0.9	34.25	24.00	.08	.11	-	-	22	-	-	4.1	IS
605	21	06	1972	05	06	16.2	0.4	40.26	30.04	.04	.04	33	-	25	-	4.1	-	IS

SIRA NO	TARiH Gn	Ay	Yil	OLUS ZAMANI Sa	Dk	Sn	h_O	KOORDiNATLAR Enl.	Boyl.	h_E	h_B	DERiN-LiK	hD	ist say	MAGNiTUD Ms	Mb	Ml	Ky
606	23	06	1972	04	25	30.0	1.0	39.19	28.90	.91	.11	41	25	19	-	-	4.3	IS
607	23	06	1972	06	50	13.4	0.9	36.55	32.25	.07	.09	43	12	43	-	4.3	-	IS
608	23	06	1972	08	39	37.2	0.6	32.89	46.21	.05	.04	51	6	49	-	4.7	-	IS
609	23	06	1972	17	16	03.0	3.0	39.16	29.17	.05	.10	20	30	22	-	-	4.2	IS
610	26	06	1972	12	31	58.9	0.4	35.59	27.09	.04	.04	83	4	38	-	4.2	4.0	IS
611	28	06	1972	09	09	40.0	1.2	39.00	29.40	.11	.12	19	-	10	-	4.0	-	IS
612	04	07	1972	06	17	19.2	0.8	41.70	33.44	.07	.10	-	-	22	-	4.0	-	IS
613	06	07	1972	05	24	21.0	3.6	34.70	24.12	.17	.08	9	14	11	-	-	4.0	IS
614	08	07	1972	05	46	15.3	0.7	41.56	23.68	.06	.09	38	13	39	-	4.7	4.1	IS
615	11	07	1972	22	49	04.3	0.5	36.07	45.70	.04	.03	47	6	98	-	4.5	-	IS
616	16	07	1972	02	46	51.7	0.5	38.23	43.36	.03	.03	46	6	126	-	4.9	-	IS
617	17	07	1972	03	13	59.2	0.6	35.19	27.63	.05	.06	-	-	-	-	-	4.3	IS
618	18	07	1972	13	45	49.0	2.9	41.61	23.85	.06	.08	30	30	29	-	4.0	4.1	IS
619	24	07	1972	10	22	25.0	1.3	39.54	40.60	.09	.11	40	18	33	-	4.3	-	IS
620	27	07	1972	12	08	11.0	2.5	38.97	29.95	.05	.08	18	25	19	-	4.2	-	IS
621	30	07	1972	01	30	06.3	0.4	39.92	24.03	.04	.06	-	-	27	-	4.4	3.9	IS
622	31	07	1972	23	55	13.5	0.7	36.67	31.23	.06	.09	68	7	42	-	4.4	-	IS
623	02	08	1972	15	11	09.0	3.2	37.71	32.56	.06	.06	-	23	36	-	4.3	-	IS
624	03	08	1972	02	04	26.5	0.7	37.76	32.72	.06	.05	44	97	48	-	4.3	-	IS
625	03	08	1972	21	39	25.6	0.6	37.85	32.81	.05	.04	34	8	87	-	4.5	-	IS
626	04	08	1972	05	30	01.2	0.6	37.79	32.74	.04	.05	41	7	52	-	4.3	-	IS
627	06	08	1972	00	53	08.6	0.3	44.63	32.63	.04	.04	-	-	91	-	4.7	-	IS
628	06	08	1972	10	06	57.1	0.9	35.77	27.09	.05	.05	8	6	26	-	-	4.2	IS
629	17	08	1972	17	07	41.0	0.7	35.71	27.18	.07	.06	-	-	22	-	-	4.1	IS
630	22	08	1972	02	44	08.9	1.0	34.89	26.31	.08	.06	58	11	22	-	-	4.0	IS
631	29	08	1972	02	48	36.9	0.5	37.00	29.14	.05	.06	-	-	27	-	4.4	4.4	IS
632	29	08	1972	21	56	30.0	1.7	34.40	26.10	.12	.12	45	16	34	-	3.9	4.1	IS
633	03	09	1972	08	38	46.3	1.0	39.16	27.98	.03	.03	30	8	118	-	4.6	4.7	IS
634	06	09	1972	07	24	46.0	1.2	37.75	23.89	.08	.07	46	9	33	-	4.3	4.0	IS
635	06	09	1972	18	12	27.4	0.4	35.54	25.60	.04	.04	87	4	46	-	4.6	3.8	IS
636	18	09	1972	01	45	05.9	0.4	36.05	24.65	.05	.05	103	5	34	-	4.0	3.6	IS
637	21	09	1972	07	49	23.0	1.5	35.70	23.80	.14	.18	57	15	16	-	4.3	3.8	IS
638	22	09	1972	23	55	39.0	1.2	35.79	27.23	.09	.06	-	-	6	-	-	4.0	IS
639	23	09	1972	01	53	16.0	1.2	42.25	25.31	.03	.04	25	12	89	-	4.7	4.3	IS
640	23	09	1972	02	20	39.0	4.5	42.15	25.20	.08	.13	27	48	27	-	3.6	4.1	IS
641	23	09	1972	03	32	49.1	0.6	39.78	28.57	.05	.08	-	-	12	-	-	4.3	IS
642	25	09	1972	18	05	30.6	0.4	36.54	26.78	.04	.04	163	4	43	-	4.1	3.5	IS
643	25	09	1972	22	34	34.0	1.1	39.11	29.20	.10	.13	51	12	13	-	4.0	-	IS
644	26	09	1972	12	16	59.4	1.0	34.25	26.15	.03	.03	23	7	151	-	5.1	4.2	IS
645	27	09	1972	16	46	47.6	0.3	38.71	24.45	.03	.04	-	-	20	-	4.0	3.8	IS
646	04	10	1972	06	14	25.8	0.4	39.14	29.44	.30	.03	34	5	80	-	4.5	4.4	IS
647	10	10	1972	04	31	40.3	0.6	35.24	25.42	.04	.03	34	5	92	-	4.7	4.2	IS
648	10	10	1972	19	23	38.7	0.6	35.18	25.51	.07	.07	41	-	37	-	4.7	3.9	IS
649	19	10	1972	14	56	46.0	-	34.00	26.40	-	-	-	-	8	-	-	4.4	IS
650	23	10	1972	09	56	27.0	2.4	37.78	26.32	.06	.09	28	22	35	-	4.5	4.2	IS
651	05	11	1972	13	06	41.0	-	41.20	47.40	-	-	-	-	-	-	-	4.6	IS
652	05	11	1972	17	06	44.0	-	41.21	47.40	-	-	20	-	48	-	4.7	-	IS
653	05	11	1972	19	25	42.6	0.9	35.03	24.77	.03	.02	32	7	198	5.4	5.2	4.6	IS
654	06	11	1972	07	07	27.0	1.2	36.18	27.40	.09	.06	5	8	10	-	-	4.0	IS
655	07	11	1972	22	41	33.6	0.5	34.91	24.75	.06	.07	16	-	26	-	4.5	3.9	IS
656	10	11	1972	07	40	41.3	0.7	40.41	28.73	.04	.08	-	-	23	-	-	4.3	IS
657	11	11	1972	14	49	44.7	0.5	34.23	25.30	.04	.05	-	-	11	-	-	4.0	IS
658	12	11	1972	20	27	19.0	2.5	34.30	24.62	.19	.09	-	-	11	-	-	4.0	IS
659	15	11	1972	12	21	47.4	0.4	34.10	26.30	.03	.05	-	-	11	-	4.4	4.2	IS
660	16	11	1972	01	17	01.0	0.5	35.55	26.63	.04	.03	-	-	12	-	-	4.0	IS

SIRA	TARiH			OLUS ZAMANI				KOORDiNATLAR				DERiN-LiK		ist	MAGNiTUD			Ky
NO	Gn	Ay	Yil	Sa	Dk	Sn	h_O	Enl.	Boyl.	h_E	h_B		hD	say	Ms	Mb	Ml	
661	16	11	1972	01	31	31.0	0.8	35.54	26.63	.08	.06	-	-	10	-	-	4.0	IS
662	28	11	1972	13	26	11.8	0.3	33.80	27.77	.04	.04	2	-	81	-	4.8	4.6	IS
663	29	11	1972	01	58	03.0	1.5	33.93	25.80	.07	.15	44	18	9	-	4.1	-	IS
664	02	12	1972	13	28	22.8	0.6	35.28	27.06	.04	.03	36	5	168	-	5.1	5.0	IS
665	04	12	1972	03	24	55.1	0.6	35.19	27.29	.04	.06	33	7	56	-	4.6	4.4	IS
666	05	12	1972	12	00	15.0	0.5	39.14	23.64	.04	.06	40	76	56	4.8	4.6	4.4	IS
667	06	12	1972	02	49	03.6	0.3	37.73	23.86	.04	.05	158	4	43	-	4.0	4.2	IS
668	13	12	1972	02	58	53.1	-	41.66	24.09	-	-	41	-	52	-	4.4	4.3	IS
669	15	12	1972	17	55	43.1	0.9	35.15	27.20	.08	.10	-	-	31	-	4.7	4.1	IS
670	17	12	1972	12	44	30.7	0.6	34.27	26.22	.04	.04	39	6	82	-	4.7	4.4	IS
671	19	12	1972	19	34	29.9	0.7	35.29	27.74	.04	.04	41	7	120	-	4.7	4.6	IS
672	23	12	1972	12	55	48.2	-	38.72	23.53	-	-	38	-	25	-	4.0	4.0	IS
673	24	12	1972	03	39	39.6	0.8	36.19	27.77	.07	.09	35	9	31	-	4.3	4.3	IS
674	24	12	1972	05	43	53.8	0.7	37.61	27.08	.06	.07	-	-	25	-	-	4.0	IS
675	25	12	1972	09	14	03.9	0.7	40.65	27.34	.06	.10	33	-	25	-	3.7	4.2	IS
676	29	12	1972	03	44	43.0	1.1	34.91	23.59	.07	.09	40	11	32	-	4.3	3.8	IS
677	30	12	1972	15	21	05.0	1.2	40.27	25.74	.03	.04	14	9	31	-	4.4	4.2	IS
678	06	01	1973	15	39	35.7	0.1	37.95	46.67	.06	.06	65	9	49	-	4.3	-	IS
679	13	01	1973	23	12	06.0	1.0	36.30	26.78	.09	.09	54	12	24	-	4.2	4.2	IS
680	23	01	1973	11	46	43.0	0.6	34.28	24.98	.04	.03	37	5	101	-	4.7	4.0	IS
681	30	01	1973	07	52	18.0	1.6	38.13	42.38	.04	.05	19	13	41	-	4.1	-	IS
682	07	02	1973	20	08	22.2	0.7	37.58	29.76	.05	.07	34	9	35	-	4.4	4.3	IS
683	08	02	1973	14	33	14.0	1.1	39.25	28.70	.08	.14	38	16	20	-	4.2	4.2	IS
684	11	02	1973	09	03	22.9	0.7	35.68	23.95	.05	.08	33	8	30	-	4.2	4.0	IS
685	11	02	1973	12	57	38.6	0.6	40.42	28.33	.05	.07	-	-	20	-	-	4.0	IS
686	19	02	1973	18	10	01.5	1.0	40.28	33.96	.03	.27	22	8	143	-	4.6	-	IS
687	20	02	1973	05	55	15.0	1.8	34.38	23.88	.05	.04	19	13	101	-	4.5	4.5	IS
688	21	02	1973	00	24	19.7	0.7	40.61	42.42	.05	.07	39	9	23	-	4.0	-	IS
689	24	02	1973	23	54	03.0	1.4	35.00	24.50	.10	.10	50	12	29	-	4.1	4.1	IS
690	25	02	1973	14	55	22.4	0.4	38.92	29.39	.04	.05	18	-	29	-	4.1	-	IS
691	27	02	1973	17	10	11.0	1.4	38.83	29.87	.04	.04	30	13	6	-	4.1	-	IS
692	02	03	1973	19	30	01.0	1.2	39.20	28.10	.12	.13	55	-	26	-	3.6	4.2	IS
693	06	03	1973	12	21	34.7	0.4	38.77	23.56	.03	.05	35	6	36	-	4.0	3.8	IS
694	12	03	1973	08	31	15.4	0.7	37.44	29.80	.07	.11	28	-	28	-	4.3	-	IS
695	19	03	1973	12	20	07.9	0.9	40.00	40.30	.14	.15	33	-	26	-	4.4	-	IS
696	21	03	1973	08	16	24.0	3.3	37.10	30.20	.18	.22	32	21	13	-	4.3	-	IS
697	21	03	1973	11	25	25.1	0.7	37.47	23.67	.06	.05	43	7	42	-	4.3	4.1	IS
698	21	03	1973	12	29	52.0	4.0	35.00	23.80	.30	.17	42	24	19	-	4.0	4.1	IS
699	27	03	1973	03	11	28.0	4.0	34.40	26.40	.11	.13	30	31	23	-	4.0	-	IS
700	06	04	1973	14	13	57.3	0.5	34.41	25.18	.27	.02	37	4	199	-	5.1	4.6	IS
701	08	04	1973	09	52	47.4	0.9	39.17	28.39	.03	.36	7	7	31	-	-	4.2	IS
702	14	04	1973	03	10	28.0	2.2	34.43	24.09	.04	.04	12	14	83	-	4.3	4.2	IS
703	16	04	1973	00	05	42.2	0.8	36.64	25.01	.05	.05	44	7	131	-	4.5	4.4	IS
704	19	04	1973	06	00	17.9	0.6	35.96	27.41	.05	.63	47	7	13	-	4.3	4.2	IS
705	19	04	1973	22	13	55.0	1.6	38.29	26.94	.04	.05	17	15	68	-	4.5	4.3	IS
706	21	04	1973	02	05	17.0	1.5	38.40	26.90	.14	.15	-	-	12	-	-	4.0	IS
707	22	04	1973	13	39	44.4	0.7	35.07	23.45	.04	.04	46	6	118	-	4.5	4.2	IS
708	22	04	1973	22	20	57.0	3.7	37.15	30.55	.07	.10	32	39	19	-	4.3	-	IS
709	27	04	1973	00	31	03.0	1.1	38.65	32.92	.04	.03	29	9	95	-	4.6	-	IS
710	28	04	1973	02	58	27.7	0.5	34.25	26.33	.03	.04	36	5	52	-	4.3	-	IS
711	28	04	1973	02	58	31.0	1.0	34.25	26.27	.07	.04	46	9	13	-	-	4.1	IS
712	30	04	1973	15	48	24.2	0.5	43.44	43.93	.04	.05	38	7	52	-	4.2	-	IS
713	05	05	1973	08	09	45.0	2.5	39.09	23.32	.05	.09	22	25	26	-	3.7	4.0	IS
714	07	05	1973	22	38	02.5	0.5	38.95	24.20	.05	.06	-	-	22	-	-	4.2	IS
715	12	05	1973	09	31	32.8	0.8	38.89	29.21	.04	.05	5	5	15	-	4.5	-	IS

SIRA NO	TARiH			OLUS ZAMANI				KOORDiNATLAR				DERiN-LiK		ist	MAGNiTUD			Ky
	Gn	Ay	Yil	Sa	Dk	Sn	h_O	Enl.	Boyl.	h_E	h_B		hD	say	Ms	Mb	Ml	
716	19	05	1973	21	50	38.0	1.8	42.54	45.55	.05	.05	24	16	66	-	4.4	-	IS
717	07	06	1973	00	06	05.3	0.6	35.05	27.07	.05	.05	55	8	36	-	3.8	4.1	IS
718	09	06	1973	19	09	33.6	0.5	36.20	28.42	.04	.05	63	6	47	-	4.1	-	IS
719	11	06	1973	00	29	33.3	0.9	40.31	29.30	.08	.12	26	-	24	-	-	4.2	IS
720	12	06	1973	11	01	52.3	0.8	34.18	26.15	.06	.05	47	7	63	-	4.4	4.3	IS
721	16	06	1973	14	58	38.0	1.6	34.40	23.40	.12	.14	-	-	9	-	4.8	4.4	IS
722	26	06	1973	19	05	23.4	0.5	34.36	26.13	.03	.03	50	5	158	-	4.8	4.4	IS
723	27	06	1973	11	50	23.0	1.9	40.72	27.49	.08	.10	5	17	22	-	-	4.2	IS
724	02	07	1973	12	14	09.8	0.8	39.68	23.73	.08	.10	33	-	48	-	4.2	3.9	IS
725	03	07	1973	16	06	14.8	0.6	40.62	27.54	.06	.07	6	-	27	-	-	4.1	IS
726	05	07	1973	03	32	18.1	0.5	41.17	33.82	.52	.06	33	-	37	-	4.0	-	IS
727	19	07	1973	22	32	52.0	3.6	36.00	27.20	.34	.17	-	-	8	-	-	4.0	IS
728	21	07	1973	08	03	04.0	1.4	34.88	24.76	.09	.08	39	15	31	-	3.8	4.0	IS
729	21	07	1973	12	51	55.0	1.5	34.94	24.72	.05	.04	33	12	73	-	4.6	4.3	IS
730	28	07	1973	18	55	11.4	0.5	36.06	31.39	.04	.84	77	5	73	-	4.5	4.5	IS
731	29	07	1973	15	01	21.0	2.0	37.12	28.56	.05	.08	18	18	40	-	4.1	4.2	IS
732	01	08	1973	19	56	09.0	0.5	40.91	34.60	.06	.07	19	-	29	-	4.3	-	IS
733	03	08	1973	22	34	42.0	1.1	39.30	29.20	.10	.12	-	-	14	-	-	4.1	IS
734	14	08	1973	02	30	45.0	1.0	35.35	23.05	.08	.08	71	8	31	-	4.0	3.6	IS
735	25	08	1973	12	48	19.0	2.6	34.76	24.79	.08	.06	20	19	36	-	4.2	3.8	IS
736	30	08	1973	07	36	25.2	0.6	37.96	42.75	.04	.03	45	7	144	4.7	4.8	-	IS
737	31	08	1973	04	57	16.1	0.4	43.28	45.32	.05	.06	33	-	50	3.4	4.7	-	IS
738	10	09	1973	03	02	05.0	0.4	38.48	39.64	.03	.03	39	5	134	-	4.8	-	IS
739	12	09	1973	01	26	49.0	0.3	36.56	26.99	.03	.03	157	3	50	-	4.3	4.0	IS
740	18	09	1973	03	54	30.0	1.8	39.84	23.69	.06	.08	1	15	27	-	4.3	3.8	IS
741	18	09	1973	08	47	45.2	0.8	36.85	30.36	.06	.05	35	9	86	-	4.5	4.7	IS
742	22	09	1973	06	29	42.3	0.5	36.54	23.59	.04	.06	89	5	51	-	4.3	3.9	IS
743	25	09	1973	05	29	42.0	1.6	34.90	28.30	.13	.19	89	21	13	-	4.1	-	IS
744	03	10	1973	08	10	39.9	0.9	34.08	47.69	.09	.08	52	10	16	-	4.0	-	IS
745	03	10	1973	09	24	43.0	0.5	43.28	41.04	.09	.07	-	-	45	-	4.1	-	IS
746	06	10	1973	21	19	59.0	0.8	34.80	26.34	.05	.04	39	7	112	-	4.4	4.6	IS
747	09	10	1973	09	09	10.7	0.8	34.68	25.32	.07	.06	-	-	15	-	-	4.1	IS
748	10	10	1973	11	05	34.8	0.5	34.34	28.45	.04	.03	63	4	78	-	4.6	4.5	IS
749	13	10	1973	06	00	35.0	1.7	34.70	26.39	.04	.04	52	6	99	-	4.6	4.3	IS
750	14	10	1973	18	07	16.4	0.6	34.68	26.31	.04	.03	51	6	152	-	4.8	4.5	IS
751	30	10	1973	19	40	04.0	2.3	37.40	29.10	.21	.24	19	-	11	-	4.3	-	IS
752	05	11	1973	20	12	01.2	0.7	38.01	43.07	.06	.04	69	8	88	-	4.6	-	IS
753	08	11	1973	01	02	47.2	0.9	38.68	25.40	.10	.11	33	-	26	-	4.2	3.8	IS
754	10	11	1973	18	26	11.0	2.4	37.89	31.06	.04	.07	23	24	19	-	4.4	-	IS
755	12	11	1973	00	07	11.3	0.6	35.35	27.74	.04	.03	47	6	160	-	4.7	4.8	IS
756	12	11	1973	00	11	49.4	0.3	35.40	27.65	.04	.04	21	4	193	5.1	5.2	5.1	IS
757	12	11	1973	00	36	12.0	1.5	35.20	27.80	.12	.12	-	-	18	-	-	4.0	IS
758	12	11	1973	07	54	08.9	1.0	35.17	27.84	.08	.10	82	11	41	-	4.0	4.2	IS
759	13	11	1973	13	41	50.0	1.2	35.30	27.67	.10	.10	-	-	13	-	-	4.1	IS
760	14	11	1973	09	33	57.4	0.7	35.29	27.74	.04	.04	42	7	102	-	4.5	4.3	IS
761	19	11	1973	07	28	59.9	0.5	35.34	27.71	.03	.03	60	5	118	-	4.7	4.9	IS
762	19	11	1973	07	33	51.5	0.5	35.35	27.86	.04	.05	83	4	23	-	-	4.4	IS
763	20	11	1973	13	02	34.2	0.3	39.31	23.80	.04	.04	-	-	134	-	4.7	4.9	IS
764	22	11	1973	14	54	53.0	2.8	40.36	29.88	.05	.06	8	20	61	-	4.2	4.4	IS
765	29	11	1973	10	57	44.3	0.5	35.18	23.81	.03	.02	37	4	309	5.6	5.7	5.5	IS
766	30	11	1973	06	47	44.0	5.1	36.30	28.70	.45	.44	25	-	12	-	4.5	-	IS
767	05	12	1973	03	50	50.4	0.3	35.36	26.42	.02	.02	70	3	204	-	5.1	4.9	IS
768	06	12	1973	19	51	57.4	0.5	35.28	27.75	.04	.03	55	5	83	-	4.2	4.5	IS
769	07	12	1973	05	18	33.9	0.7	34.28	24.72	.05	.06	-	-	22	-	-	4.0	IS
770	08	12	1973	19	40	07.0	2.5	37.32	29.75	.06	.08	17	24	28	-	4.5	4.1	IS

SIRA NO	TARiH			OLUS ZAMANI				KOORDiNATLAR				DERiN-LiK		ist say	MAGNiTUD			Ky
	Gn	Ay	Yil	Sa	Dk	Sn	h_O	Enl.	Boyl.	h_E	h_B		hD		Ms	Mb	Ml	
771	08	12	1973	21	02	42.4	0.8	35.20	27.81	.06	.07	50	10	27	-	3.7	4.3	IS
772	11	12	1973	03	49	03.0	1.3	35.06	23.28	.08	.08	48	12	71	-	4.2	4.0	IS
773	23	12	1973	22	03	09.6	0.9	35.96	25.90	.08	.11	50	-	20	-	4.0	4.0	IS
774	24	12	1973	13	53	54.8	0.9	35.08	27.69	.07	.06	53	8	68	-	4.3	4.8	IS
775	24	12	1973	20	22	46.6	0.5	34.76	24.66	.03	.03	48	4	133	5.2	4.9	4.2	IS
776	03	01	1974	07	39	48.0	1.6	39.74	26.82	.04	.46	29	15	76	-	4.3	4.3	IS
777	06	01	1974	07	46	07.9	0.6	35.29	27.81	.05	.06	64	10	17	-	3.2	4.3	IS
778	06	01	1974	21	37	25.0	1.7	38.28	42.92	.05	.49	28	14	50	-	4.3	-	IS
779	06	01	1974	23	24	16.0	0.4	40.08	24.57	.04	.05	33	-	34	-	4.2	3.8	IS
780	07	01	1974	15	24	40.0	0.5	33.26	47.95	.03	.02	52	5	197	-	5.0	-	IS
781	07	01	1974	17	50	47.0	3.3	33.10	47.70	.30	.27	83	33	12	-	4.2	-	IS
782	09	01	1974	00	50	43.0	4.3	35.40	40.10	.14	.13	30	39	20	-	4.2	-	IS
783	09	01	1974	16	03	45.0	1.5	34.60	30.80	.12	.21	-	-	14	-	4.1	-	IS
784	17	01	1974	01	36	49.0	2.4	36.80	27.60	.18	.29	-	-	9	-	-	4.0	IS
785	18	01	1974	10	57	14.0	1.3	40.50	28.94	.03	.04	18	13	32	-	4.1	4.5	IS
786	18	01	1974	14	41	32.0	4.7	37.90	37.90	.12	.11	28	45	30	-	4.4	-	IS
787	26	01	1974	05	19	16.0	1.5	37.41	29.74	.03	.04	21	15	33	-	4.4	4.2	IS
788	26	01	1974	05	49	20.0	1.2	37.25	29.60	.10	.14	34	27	13	-	-	4.0	IS
789	27	01	1974	21	06	17.4	0.6	35.04	25.38	.04	.03	35	5	119	-	4.5	4.1	IS
790	01	02	1974	00	01	02.0	0.9	38.55	27.22	.03	.03	24	8	176	-	5.2	-	IS
791	03	02	1974	14	59	11.6	0.3	33.21	47.90	.05	.08	42	-	9	-	4.2	-	IS
792	05	02	1974	15	05	25.0	0.2	36.77	28.86	.02	.02	156	2	145	4.2	4.8	-	IS
793	05	02	1974	18	23	23.0	1.1	37.33	29.68	.04	.05	5	8	46	4.8	4.5	-	IS
794	07	02	1974	08	46	51.9	0.5	39.70	26.88	.04	.07	37	-	40	-	4.3	4.0	IS
795	07	02	1974	08	49	41.0	1.2	39.50	27.00	.12	.13	-	-	20	-	-	4.0	IS
796	10	02	1974	04	11	58.3	0.4	37.46	28.68	.03	.05	33	-	15	-	4.6	-	IS
797	14	02	1974	09	17	14.0	1.3	38.50	27.20	.12	.19	36	24	22	-	4.3	-	IS
798	18	02	1974	18	23	38.0	3.6	37.50	43.40	.10	.11	24	30	27	-	4.0	-	IS
799	27	02	1974	00	18	59.0	3.3	38.90	30.80	.32	.23	-	-	10	-	4.1	-	IS
800	03	03	1974	21	36	28.0	2.1	34.20	25.69	.19	.07	63	9	10	-	4.1	-	IS
801	07	03	1974	03	50	30.6	0.7	33.93	25.66	.04	.06	49	6	32	-	4.2	3.9	IS
802	08	03	1974	02	33	52.8	0.8	34.66	24.74	.05	.04	47	7	119	-	4.7	4.3	IS
803	08	03	1974	12	30	18.0	1.3	34.70	24.70	.09	.10	44	12	35	-	4.3	4.1	IS
804	09	03	1974	03	52	07.0	1.3	34.54	24.80	.09	.10	38	15	38	-	4.2	4.3	IS
805	09	03	1974	04	12	07.5	0.9	34.59	24.80	.06	.05	42	8	96	-	4.6	4.2	IS
806	12	03	1974	06	53	51.1	0.7	38.42	43.96	.05	.05	40	8	66	-	4.5	-	IS
807	12	03	1974	18	21	34.7	0.4	36.76	26.40	.03	.03	45	5	113	4.1	4.8	4.6	IS
808	13	03	1974	17	20	45.2	0.8	34.60	24.75	.05	.04	46	7	144	-	4.6	4.4	IS
809	19	03	1974	17	07	20.0	1.7	34.00	25.70	.12	.11	39	12	38	-	4.1	4.1	IS
810	24	03	1974	07	36	34.0	7.9	41.00	47.10	.11	.11	33	-	32	-	4.1	-	IS
811	30	03	1974	00	35	05.0	1.3	41.50	44.30	.18	.18	33	-	22	-	4.0	-	IS
812	07	04	1974	14	22	48.7	0.7	34.75	24.70	.04	.03	38	6	204	5.0	4.7	4.6	IS
813	14	04	1974	11	29	33.0	2.0	34.50	25.70	.21	.16	2	-	38	-	4.2	4.3	IS
814	14	04	1974	12	02	26.0	1.2	36.00	27.50	.12	.11	59	15	8	-	4.0	4.2	IS
815	18	04	1974	10	15	49.0	1.7	34.50	24.70	.12	.11	46	15	34	-	4.1	4.0	IS
816	22	04	1974	03	20	14.4	0.5	34.92	27.67	.04	.04	65	5	68	-	4.3	4.2	IS
817	28	04	1974	00	55	36.0	0.3	36.00	31.78	.03	.04	90	4	33	-	4.1	-	IS
818	28	04	1974	16	29	35.3	0.8	34.58	24.71	.06	.06	49	9	39	-	4.3	4.0	IS
819	28	04	1974	21	07	25.1	0.8	35.80	27.34	.05	.03	10	6	12	-	-	4.0	IS
820	29	04	1974	22	41	10.0	1.6	32.40	46.00	.19	.18	33	-	9	-	3.8	4.2	IS
821	09	05	1974	17	02	24.0	1.2	36.62	27.22	.06	.07	26	18	44	-	4.5	4.6	IS
822	12	05	1974	00	20	57.6	0.3	36.71	26.89	.03	.02	149	3	121	-	4.4	4.2	IS
823	12	05	1974	15	06	12.3	1.0	36.61	27.40	.08	.12	100	-	7	-	-	4.0	IS
824	16	05	1974	15	07	28.1	0.8	36.11	27.27	.06	.06	32	10	62	-	4.1	4.5	IS
825	19	05	1974	22	01	09.7	0.3	35.47	26.31	.02	.02	84	3	238	-	4.7	4.8	IS

SIRA NO	TARiH			OLUS ZAMANI				KOORDiNATLAR				DERiN-LiK		ist say	MAGNiTUD			Ky
	Gn	Ay	Yil	Sa	Dk	Sn	h_O	Enl.	Boyl.	h_E	h_B		hD		Ms	Mb	Ml	
826	24	05	1974	21	27	08.6	1.0	36.73	29.22	.08	.09	37	20	29	-	-	4.2	IS
827	30	05	1974	15	39	40.6	0.3	39.33	24.86	.03	.04	38	-	44	-	4.3	4.0	IS
828	11	06	1974	02	06	34.5	1.0	34.70	28.35	.07	.08	36	10	44	-	4.1	4.2	IS
829	12	06	1974	10	19	48.8	0.9	34.10	37.28	.09	.10	-	-	29	-	4.6	-	IS
830	15	06	1974	00	52	05.6	0.6	43.19	45.35	.04	.04	35	8	84	-	4.7	-	IS
831	15	06	1974	03	58	00.0	2.0	43.00	45.10	.23	.25	55	33	19	-	4.0	-	IS
832	22	06	1974	06	11	44.7	0.9	41.80	46.65	.09	.10	57	14	28	-	4.1	-	IS
833	22	06	1974	23	30	12.1	0.7	41.25	23.05	.02	.03	8	-	159	4.4	5.1	4.7	IS
834	23	06	1974	21	06	14.0	1.1	38.75	39.17	.08	.10	75	16	-	-	4.5	-	IS
835	26	06	1974	14	24	39.7	1.0	36.63	34.74	.08	.10	45	14	33	-	4.0	-	IS
836	07	07	1974	22	31	52.0	1.7	34.80	27.00	.14	.12	-	-	17	-	-	4.1	IS
837	09	07	1974	02	32	15.4	0.3	36.57	28.48	.02	.02	49	3	195	-	5.0	5.0	IS
838	10	07	1974	19	34	55.3	0.9	37.03	23.02	.08	.09	83	10	26	-	4.0	3.3	IS
839	18	07	1974	22	20	07.4	0.3	42.53	45.17	.04	.05	-	-	61	-	4.6	-	IS
840	19	07	1974	07	40	23.4	0.4	35.72	31.52	.03	.05	67	4	37	-	4.1	-	IS
841	20	07	1974	14	49	34.0	1.1	36.30	26.96	.11	.06	-	-	-	-	-	4.0	IS
842	20	07	1974	20	07	38.5	0.4	33.34	38.43	.05	.09	-	-	6	-	4.2	-	IS
843	21	07	1974	12	58	42.0	1.6	36.10	27.10	.14	.15	50	25	-	-	-	4.1	IS
844	21	07	1974	23	56	19.0	-	35.90	26.60	-	-	-	-	4	-	-	4.1	IS
845	25	07	1974	21	16	02.1	0.5	38.86	23.90	.05	.06	33	-	19	-	3.0	4.0	IS
846	29	07	1974	01	16	05.0	1.6	39.05	40.65	.05	.04	17	14	50	-	4.2	-	IS
847	02	08	1974	10	30	16.0	0.5	35.68	26.70	.04	.04	56	5	71	-	4.3	4.2	IS
848	03	08	1974	10	44	43.0	2.0	34.70	26.80	.17	.17	-	-	22	-	3.8	4.0	IS
849	04	08	1974	15	06	17.2	0.4	42.36	45.97	.02	.02	33	4	245	5.1	5.5	-	IS
850	14	08	1974	13	01	41.0	1.3	44.94	36.90	.08	.19	-	-	15	-	-	4.7	IS
851	14	08	1974	16	05	20.1	0.7	35.44	23.04	.05	.05	64	7	53	-	4.4	-	IS
852	15	08	1974	05	37	55.0	0.6	36.28	30.13	.06	.07	88	10	16	-	-	4.0	IS
853	21	08	1974	13	36	34.0	1.9	38.80	38.80	.27	.26	11	-	12	-	4.4	-	IS
854	29	08	1974	08	02	30.0	1.4	38.84	29.28	.02	.04	19	16	20	-	4.2	-	IS
855	30	08	1974	00	13	38.0	1.4	38.59	23.87	.03	.04	20	14	27	-	3.7	4.0	IS
856	02	09	1974	23	26	05.9	0.3	38.65	23.85	.02	.03	-	-	22	-	-	4.0	IS
857	05	09	1974	11	34	37.4	0.5	35.71	24.75	.04	.03	53	5	118	-	4.2	3.9	IS
858	07	09	1974	08	33	19.2	0.3	39.67	28.61	.02	.05	17	-	29	-	3.8	4.2	IS
859	08	09	1974	19	09	56.7	0.5	39.66	24.39	.05	.06	-	-	77	-	4.3	4.5	IS
860	13	09	1974	04	55	06.8	0.5	37.40	36.06	.03	.04	59	5	54	-	4.3	-	IS
861	13	09	1974	12	10	03.0	3.0	40.79	28.29	.06	.08	8	31	34	-	3.6	4.6	IS
862	13	09	1974	18	24	57.4	0.8	40.48	23.39	.03	.03	8	6	91	-	4.5	4.0	IS
863	14	09	1974	11	19	54.0	-	35.70	24.80	-	-	-	-	21	-	4.2	3.5	IS
864	18	09	1974	05	20	42.0	2.0	34.51	24.33	.06	.05	31	16	40	-	4.2	4.1	IS
865	20	09	1974	20	34	35.0	4.8	34.60	23.80	.26	.19	-	-	20	-	4.0	-	IS
866	24	09	1974	17	43	52.0	1.2	35.75	24.30	.09	.13	-	-	20	-	4.4	3.5	IS
867	28	09	1974	01	34	59.0	1.1	34.87	23.86	.07	.06	38	10	57	-	4.5	4.0	IS
868	29	09	1974	06	35	33.4	0.5	35.40	27.89	.03	.03	49	5	107	-	4.6	4.9	IS
869	03	10	1974	21	32	39.1	0.7	35.23	27.30	.07	.07	102	13	20	-	-	4.1	IS
870	13	10	1974	00	20	26.0	1.7	34.18	26.40	.08	.15	55	17	15	-	4.1	-	IS
871	23	10	1974	02	04	33.0	1.5	35.60	23.10	.12	.14	-	-	16	-	4.0	3.7	IS
872	25	10	1974	11	43	35.0	0.8	34.67	23.37	.05	.04	41	7	107	-	4.9	4.8	IS
873	27	10	1974	08	52	20.0	1.2	34.24	25.05	.08	.06	45	10	59	-	4.4	-	IS
874	27	10	1974	23	26	34.0	3.4	39.76	39.13	.10	.10	24	32	14	-	4.1	-	IS
875	04	11	1974	02	57	29.6	0.4	38.28	25.79	.04	.04	-	-	33	-	4.1	3.8	IS
876	05	11	1974	07	00	40.0	1.0	39.16	29.30	.02	.04	16	10	31	-	3.9	4.3	IS
877	06	11	1974	04	41	10.2	0.9	43.20	45.50	.11	.14	147	14	21	-	4.4	-	IS
878	13	11	1974	02	36	24.2	0.9	42.90	46.56	.02	.02	25	7	187	4.8	5.2	-	IS
879	14	11	1974	12	41	27.3	0.6	38.50	23.06	.03	.03	3	5	21	-	4.1	3.8	IS
880	14	11	1974	13	22	34.7	0.9	38.50	23.08	.03	.03	27	7	185	5.0	5.0	4.7	IS

SIRA NO	TARİH			OLUS ZAMANI				KOORDİNATLAR				DERİN-LİK		ist	MAGNİTUD			Ky
	Gn	Ay	Yil	Sa	Dk	Sn	h_O	Enl.	Boyl.	h_E	h_B		hD	say	Ms	Mb	Ml	
881	14	11	1974	14	26	46.6	0.5	38.48	23.01	.02	.02	6	4	182	5.2	5.1	4.7	IS
882	14	11	1974	15	29	46.8	0.3	38.50	23.15	.02	.02	35	4	174	5.1	5.0	4.8	IS
883	14	11	1974	22	01	14.0	0.5	38.56	23.11	.05	.06	11	-	23	-	3.9	4.1	IS
884	17	11	1974	03	25	53.0	1.1	36.63	42.71	.09	.08	57	14	25	-	4.5	-	IS
885	23	11	1974	21	47	35.8	0.9	37.79	31.87	.04	.08	32	14	23	-	4.3	-	IS
886	25	11	1974	23	54	39.0	1.1	38.96	27.85	.04	.06	7	9	17	-	-	4.0	IS
887	27	11	1974	07	39	17.0	0.6	33.30	46.92	.04	.03	39	6	61	-	4.9	-	IS
888	27	11	1974	16	52	51.1	0.4	35.26	45.66	.03	.02	57	4	164	-	5.0	-	IS
889	28	11	1974	01	16	28.0	1.0	34.18	24.13	.09	.10	-	-	26	-	4.3	3.6	IS
890	01	12	1974	06	21	19.0	1.5	38.53	23.10	.03	.05	31	15	47	-	4.2	4.4	IS
891	01	12	1974	11	20	12.6	0.3	39.53	26.36	.03	.04	-	-	33	-	4.2	3.6	IS
892	01	12	1974	12	09	29.5	0.3	39.48	26.35	.03	.04	36	-	95	-	4.5	4.3	IS
893	02	12	1974	14	15	44.1	0.7	41.13	23.07	.07	.10	22	17	30	-	4.2	3.8	IS
894	04	12	1974	23	21	36.0	0.5	38.53	23.15	.02	.02	8	5	20	-	-	4.0	IS
895	05	12	1974	07	07	38.0	1.7	38.25	25.83	.04	.05	23	17	39	-	4.4	3.7	IS
896	18	12	1974	21	30	54.8	0.7	39.95	23.86	.06	.08	33	14	46	-	4.5	3.9	IS
897	23	12	1974	05	22	09.0	0.6	43.16	46.94	.04	.03	37	7	154	5.0	4.9	-	IS
898	23	12	1974	16	31	27.2	0.7	35.52	26.10	.06	.05	46	7	75	-	4.4	4.3	IS
899	24	12	1974	10	27	43.0	1.3	37.54	29.91	.04	.05	24	11	55	-	4.6	4.5	IS
900	26	12	1974	23	42	03.9	0.4	35.46	26.07	.04	.03	-	-	10	-	-	4.2	IS
901	27	12	1974	23	03	28.4	0.8	33.20	46.97	.05	.04	49	8	41	-	4.7	-	IS
902	31	12	1974	15	52	45.7	0.9	42.46	44.62	.09	.09	50	12	30	-	4.4	-	IS
903	01	01	1975	00	30	01.3	0.8	36.67	36.49	.05	.04	35	8	145	-	4.8	-	IS
904	03	01	1975	01	59	44.4	0.5	35.62	27.34	.03	.03	42	4	156	-	4.8	5.0	IS
905	04	01	1975	20	54	55.0	2.1	35.50	27.90	.19	.11	65	19	18	-	-	4.0	IS
906	08	01	1975	19	28	11.3	0.5	38.14	23.00	.04	.05	53	6	54	-	4.4	3.8	IS
907	09	01	1975	18	53	44.3	0.6	34.78	24.03	.04	.03	41	5	142	-	4.6	4.4	IS
908	09	01	1975	23	09	45.1	0.9	43.01	47.11	.03	.02	18	7	182	-	5.2	-	IS
909	09	01	1975	23	40	06.3	1.0	43.00	47.10	.03	.03	27	8	139	4.7	4.9	-	IS
910	09	01	1975	23	57	06.3	0.3	42.73	46.80	.06	.06	33	-	13	-	4.4	-	IS
911	10	01	1975	01	09	23.1	0.5	42.97	47.04	.04	.03	36	6	99	-	4.7	-	IS
912	10	01	1975	01	29	23.0	1.0	43.01	47.11	.03	.03	30	8	132	-	4.9	-	IS
913	10	01	1975	03	51	25.0	1.2	34.55	23.90	.10	.10	-	-	39	-	4.3	4.3	IS
914	10	01	1975	04	35	37.0	3.8	43.00	47.10	.10	.11	21	34	32	-	4.2	-	IS
915	10	01	1975	12	33	04.3	0.3	34.99	44.47	.04	.04	-	-	6	-	4.3	-	IS
916	11	01	1975	18	06	55.0	1.1	34.76	23.98	.07	.06	42	10	41	-	4.4	4.0	IS
917	12	01	1975	04	39	46.9	0.6	40.68	42.00	.04	.04	47	6	105	-	4.9	-	IS
918	12	01	1975	13	51	54.0	1.8	43.02	47.18	.05	.05	29	16	53	-	4.5	-	IS
919	13	01	1975	07	58	36.8	0.6	43.02	47.04	.05	.04	33	8	81	-	4.6	-	IS
920	13	01	1975	08	43	56.0	0.3	42.01	23.16	.03	.04	37	-	39	-	3.4	4.2	IS
921	14	01	1975	22	07	53.8	0.4	35.44	44.82	.03	.02	68	4	127	-	5.0	-	IS
922	18	01	1975	04	09	57.3	0.6	35.15	23.21	.05	.04	75	6	36	-	4.3	4.0	IS
923	18	01	1975	08	04	23.0	1.9	35.20	27.10	.16	.11	-	-	27	-	-	4.4	IS
924	21	01	1975	17	50	25.0	1.9	39.07	30.67	.04	.06	23	18	42	-	4.5	-	IS
925	21	01	1975	19	59	20.0	1.1	34.97	23.44	.08	.08	54	12	24	-	4.0	-	IS
926	25	01	1975	00	15	33.0	1.8	34.61	24.11	.06	.04	32	13	76	-	4.3	4.2	IS
927	26	01	1975	05	30	52.0	1.1	36.72	24.44	.04	.03	32	8	152	-	4.8	4.1	IS
928	26	01	1975	12	36	44.6	0.4	39.29	26.45	.04	.04	-	-	20	-	-	4.2	IS
929	28	01	1975	21	12	32.0	0.7	34.54	33.81	.05	.05	35	7	86	-	4.7	-	IS
930	30	01	1975	04	51	25.1	0.2	39.82	28.60	.02	.03	-	-	28	-	-	4.0	IS
931	30	01	1975	16	26	18.6	0.3	39.87	28.64	.02	.04	-	-	23	-	3.4	4.3	IS
932	31	01	1975	20	51	01.5	0.3	35.04	26.30	.03	.03	64	5	16	-	4.1	4.0	IS
933	07	02	1975	03	21	13.2	0.2	38.75	28.35	.02	.04	5	6	19	-	-	4.1	IS
934	09	02	1975	12	36	05.0	1.1	38.71	26.16	.04	.04	27	10	79	-	4.5	4.1	IS
935	09	02	1975	12	37	53.6	0.8	38.73	26.21	.05	.07	11	7	15	-	4.0	3.7	IS

SIRA NO	TARiH			OLUS ZAMANI				KOORDiNATLAR				DERiN-LiK		ist say	MAGNiTUD			Ky
	Gn	Ay	Yil	Sa	Dk	Sn	h_O	Enl.	Boyl.	h_E	h_B		hD		Ms	Mb	Ml	
936	10	02	1975	19	58	24.7	0.7	39.19	28.99	.05	.09	-	-	29	-	3.9	4.2	IS
937	12	02	1975	01	48	23.0	2.0	39.14	29.00	.03	.05	15	22	19	-	4.2	-	IS
938	15	02	1975	10	23	21.0	0.4	35.77	26.95	.03	.03	46	4	132	-	4.7	4.6	IS
939	20	02	1975	14	44	25.0	1.3	42.49	45.18	.03	.03	23	11	108	-	4.8	-	IS
940	27	02	1975	03	33	16.2	0.7	43.03	47.00	.06	.07	44	9	32	-	4.4	-	IS
941	03	03	1975	16	05	09.8	1.0	35.50	46.20	.10	.12	90	15	17	-	4.0	-	IS
942	16	03	1975	08	37	16.3	0.4	40.36	26.14	.04	.05	5	-	79	-	4.2	4.4	IS
943	17	03	1975	02	06	39.1	0.3	40.48	26.03	.04	.04	2	-	114	-	4.6	4.2	IS
944	17	03	1975	05	11	16.5	0.2	40.48	25.95	.03	.04	22	3	219	5.4	5.1	4.8	IS
945	17	03	1975	05	17	47.1	0.2	40.40	26.24	.03	.04	5	-	138	5.5	5.1	5.0	IS
946	17	03	1975	05	35	17.6	0.2	40.48	26.08	.02	.02	18	4	252	5.9	5.3	5.2	IS
947	19	03	1975	09	26	23.4	0.5	40.31	26.01	.04	.06	-	-	24	-	-	4.0	IS
948	21	03	1975	02	59	27.5	0.5	40.79	43.90	.04	.05	62	6	6	-	4.4	-	IS
949	23	03	1975	14	10	50.0	3.8	30.50	23.20	.18	.14	13	18	19	-	4.0	3.8	IS
950	24	03	1975	07	33	04.0	1.5	30.50	26.01	.14	.10	-	-	22	-	-	4.2	IS
951	25	03	1975	02	52	52.6	0.7	34.66	23.69	.07	.08	-	-	44	-	4.5	4.1	IS
952	25	03	1975	03	39	32.0	2.5	35.10	23.50	.21	.19	-	-	18	-	4.3	-	IS
953	27	03	1975	05	15	07.9	0.1	40.45	26.12	.01	.01	15	2	337	6.7	5.6	5.7	IS
954	27	03	1975	05	23	31.1	0.8	40.19	26.01	.07	.08	-	-	14	-	-	4.1	IS
955	27	03	1975	06	15	46.0	1.1	40.41	26.23	.03	.04	22	10	100	-	4.8	4.5	IS
956	27	03	1975	06	43	57.4	0.4	40.51	26.50	.04	.06	56	14	26	-	3.8	4.0	IS
957	27	03	1975	07	51	21.4	0.7	40.32	26.27	.06	.08	-	-	28	-	-	4.0	IS
958	27	03	1975	19	42	42.5	0.3	40.48	26.08	.03	.04	5	-	80	-	4.6	4.5	IS
959	27	03	1975	21	16	04.7	0.9	40.42	26.24	.04	.04	-	8	29	-	-	4.0	IS
960	28	03	1975	08	32	52.9	0.7	40.29	26.31	.06	.08	-	-	26	-	-	4.0	IS
961	29	03	1975	02	06	05.0	0.7	40.42	26.00	.06	.10	33	-	11	-	5.3	-	IS
962	30	03	1975	13	03	17.6	0.4	40.57	26.36	.04	.05	-	-	64	-	4.5	4.1	IS
963	01	04	1975	02	02	08.1	0.9	35.60	23.59	.11	.07	-	-	5	-	4.0	-	IS
964	01	04	1975	08	20	02.0	1.2	38.53	23.25	.05	.05	8	10	44	-	4.6	4.0	IS
965	02	04	1975	04	23	03.8	0.8	34.43	26.58	.06	.06	42	7	40	-	4.5	3.8	IS
966	04	04	1975	07	17	25.0	4.7	32.50	44.70	.49	.22	-	-	5	-	-	4.6	IS
967	17	04	1975	07	35	18.9	0.9	43.83	32.44	.07	.09	46	12	34	-	4.2	-	IS
968	18	04	1975	16	43	23.4	0.5	40.35	27.28	.05	.06	5	-	27	-	3.4	4.0	IS
969	18	04	1975	20	59	10.4	0.9	39.01	23.42	.03	.04	3	7	40	-	4.2	4.1	IS
970	19	04	1975	06	52	58.0	1.2	37.69	27.30	.10	.15	-	-	9	-	-	4.3	IS
971	21	04	1975	20	21	03.6	0.8	36.54	23.07	.06	.07	47	10	48	-	4.3	3.8	IS
972	22	04	1975	05	03	31.0	1.0	40.28	26.20	.10	.13	36	32	25	-	4.0	3.8	IS
973	23	04	1975	01	08	08.4	0.4	40.40	26.04	.04	.06	20	-	69	-	4.4	4.3	IS
974	26	04	1975	13	27	26.9	0.6	40.37	25.96	.05	.07	-	-	25	-	-	4.0	IS
975	27	04	1975	21	34	38.0	0.7	35.71	27.05	.07	.07	60	9	31	-	4.3	4.2	IS
976	28	04	1975	02	29	08.3	0.5	34.60	28.52	.03	.03	37	4	121	-	4.7	4.6	IS
977	29	04	1975	18	45	33.0	2.3	36.90	31.50	.21	.22	-	-	14	-	4.1	-	IS
978	30	04	1975	04	28	57.7	0.2	36.19	30.74	.02	.14	61	2	291	-	5.6	5.3	IS
979	07	05	1975	17	59	17.5	0.7	40.47	26.50	.06	.10	44	25	25	-	-	4.0	IS
980	09	05	1975	12	48	01.4	1.0	38.86	44.80	.09	.11	73	13	24	-	4.1	-	IS
981	11	05	1975	23	11	47.9	0.5	37.36	23.84	.04	.04	43	5	81	-	4.7	4.0	IS
982	15	05	1975	03	54	55.0	1.1	36.10	27.21	.11	.08	-	-	17	-	-	4.3	IS
983	30	05	1975	05	13	44.8	0.5	39.12	27.68	.03	.05	10	-	37	-	3.9	4.0	IS
984	30	05	1975	14	22	42.2	0.5	38.75	27.60	.04	.06	9	-	44	-	-	4.2	IS
985	31	05	1975	05	36	54.2	0.6	36.20	28.98	.06	.07	42	-	28	-	4.0	3.7	IS
986	31	05	1975	12	41	26.1	0.6	36.74	28.23	.05	.06	34	8	53	-	4.1	4.3	IS
987	02	06	1975	03	19	08.0	1.8	36.47	26.52	.05	.05	31	16	92	-	4.6	4.0	IS
988	04	06	1975	02	57	05.0	1.1	41.09	32.30	.07	.15	-	-	22	-	4.0	-	IS
989	07	06	1975	05	59	07.0	1.2	42.20	47.70	.21	.15	127	25	17	-	4.1	-	IS
990	07	06	1975	17	28	35.3	0.7	34.31	26.28	.05	.05	58	6	36	-	4.1	3.8	IS

SIRA NO	TARiH			OLUS ZAMANI				KOORDiNATLAR				DERiN-LiK		ist say	MAGNiTUD			Ky
	Gn	Ay	Yil	Sa	Dk	Sn	h_O	Enl.	Boyl.	h_E	h_B		hD		Ms	Mb	Ml	
991	07	06	1975	17	36	36.9	0.6	34.32	26.22	.04	.04	51	5	61	-	4.5	3.9	IS
992	08	06	1975	02	30	03.0	1.7	38.27	37.64	.05	.05	28	15	47	-	4.2	-	IS
993	08	06	1975	17	22	28.3	0.8	34.60	23.45	.05	.05	47	7	67	-	4.5	4.1	IS
994	10	06	1975	06	23	41.9	0.5	36.13	30.74	.05	.06	40	7	40	-	4.0	4.4	IS
995	10	06	1975	08	42	27.3	0.8	35.98	30.70	.06	.08	36	10	48	-	4.2	4.3	IS
996	15	06	1975	06	05	23.0	2.4	36.60	23.00	.11	.01	3	18	15	-	4.2	3.2	IS
997	16	06	1975	15	07	52.8	0.6	34.68	26.62	.06	.05	77	5	18	-	4.0	-	IS
998	19	06	1975	20	40	50.7	0.9	34.96	26.92	.06	.05	38	10	49	-	4.2	4.3	IS
999	21	06	1975	16	19	30.1	0.8	36.11	31.11	.06	.08	34	12	31	-	4.1	-	IS
1000	05	07	1975	10	31	51.0	1.2	35.59	23.02	.09	.09	56	12	48	-	4.0	3.9	IS
1001	09	07	1975	14	57	24.1	1.0	35.86	29.80	.09	.12	19	-	40	-	3.4	4.1	IS
1002	12	07	1975	22	11	41.1	1.0	39.27	43.86	.09	.08	53	14	24	-	4.0	-	IS
1003	15	07	1975	21	59	27.0	1.0	40.93	36.08	.03	.03	18	9	129	-	4.7	-	IS
1004	18	07	1975	23	45	03.0	1.1	38.97	45.70	.10	.14	62	13	21	-	4.0	-	IS
1005	20	07	1975	05	17	55.0	2.5	34.80	23.00	.11	.13	7	14	15	-	4.0	3.6	IS
1006	27	07	1975	00	53	47.2	0.7	34.53	45.60	.05	.07	108	9	26	-	4.4	-	IS
1007	28	07	1975	11	04	30.4	0.8	35.89	27.50	.06	.06	60	6	45	-	4.2	4.5	IS
1008	29	07	1975	02	37	56.1	0.9	34.32	23.86	.07	.09	-	-	22	-	4.1	4.0	IS
1009	29	07	1975	10	30	42.0	1.0	35.68	27.63	.09	.09	66	11	26	-	3.7	4.3	IS
1010	29	07	1975	15	07	12.8	0.7	34.84	24.95	.04	.03	47	6	169	-	4.7	4.5	IS
1011	29	07	1975	16	10	33.0	1.1	34.93	25.06	.10	.10	-	-	25	-	4.1	4.0	IS
1012	29	07	1975	16	19	02.0	1.0	34.99	25.03	.09	.07	-	-	18	-	-	4.0	IS
1013	30	07	1975	16	25	17.0	1.0	39.45	32.13	.02	.02	2	7	109	-	4.6	-	IS
1014	31	07	1975	07	28	19.0	1.1	34.75	25.18	.09	.07	46	10	36	-	3.8	4.1	IS
1015	10	08	1975	14	14	18.0	3.5	34.70	24.70	.27	.15	-	-	11	-	-	4.0	IS
1016	12	08	1975	14	52	09.0	-	32.25	24.50	-	-	-	-	-	-	-	4.1	IS
1017	12	08	1975	16	06	09.3	0.4	37.40	31.16	.04	.05	107	4	46	-	4.1	-	IS
1018	18	08	1975	03	19	52.5	0.5	40.26	26.06	.04	.07	46	14	49	-	3.7	4.3	IS
1019	30	08	1975	17	05	52.8	0.8	38.60	30.18	.03	.05	8	5	21	-	4.1	-	IS
1020	04	09	1975	04	55	16.3	1.0	38.13	27.20	.08	.11	-	-	24	-	-	4.0	IS
1021	06	09	1975	09	20	12.0	0.6	38.51	40.77	.02	.02	32	5	405	6.7	6.1	-	IS
1022	06	09	1975	10	11	02.0	1.1	38.60	40.80	.21	.11	166	16	22	-	4.4	-	IS
1023	06	09	1975	10	13	10.3	0.5	38.55	40.58	.03	.03	47	5	142	-	5.0	-	IS
1024	06	09	1975	10	31	02.0	1.9	38.50	40.50	.19	.18	48	25	12	-	4.2	-	IS
1025	06	09	1975	10	52	16.6	0.4	38.46	40.82	.03	.02	47	5	189	-	5.2	-	IS
1026	06	09	1975	12	10	43.0	1.6	38.33	40.56	.03	.02	2	10	165	4.9	4.9	-	IS
1027	06	09	1975	12	24	02.1	0.8	38.44	40.48	.06	.05	44	8	77	-	4.5	-	IS
1028	06	09	1975	13	20	52.0	2.1	38.42	40.90	.06	.07	31	18	30	-	4.2	-	IS
1029	06	09	1975	22	42	52.0	1.9	38.38	40.42	.06	.04	32	17	93	-	4.3	-	IS
1030	07	09	1975	07	13	36.0	1.2	38.80	40.70	.10	.10	58	16	37	-	4.0	-	IS
1031	10	09	1975	05	42	27.1	0.8	38.40	40.30	.11	.10	33	-	15	-	4.2	-	IS
1032	12	09	1975	00	41	27.0	1.8	38.43	40.55	.06	.04	25	15	79	-	4.6	4.3	IS
1033	15	09	1975	18	40	25.3	0.4	38.40	27.40	.04	.05	16	-	41	-	4.2	-	IS
1034	16	09	1975	12	51	16.9	0.7	38.51	40.64	.05	.05	35	9	60	-	4.4	-	IS
1035	17	09	1975	00	14	22.0	2.2	38.64	40.83	.06	.05	29	20	53	-	4.2	-	IS
1036	17	09	1975	09	12	48.4	0.9	38.76	40.78	.07	.07	51	10	47	-	4.4	-	IS
1037	17	09	1975	11	21	24.0	0.6	38.41	40.47	.05	.04	38	7	66	-	4.6	-	IS
1038	17	09	1975	23	04	07.2	0.2	36.37	23.06	.03	.03	35	-	201	-	5.0	4.9	IS
1039	17	09	1975	23	04	07.2	0.2	36.37	23.06	.03	.03	35	-	201	-	5.0	4.9	IS
1040	19	09	1975	12	00	32.5	0.8	38.71	40.82	.07	.06	51	12	52	-	4.3	-	IS
1041	20	09	1975	05	22	18.2	0.5	34.60	26.41	.04	.04	60	5	89	-	4.7	4.2	IS
1042	20	09	1975	05	40	20.3	0.5	36.14	30.73	.04	.03	40	5	103	-	4.1	4.7	IS
1043	20	09	1975	15	53	30.5	0.8	38.74	40.76	.06	.05	70	10	57	-	4.4	-	IS
1044	21	09	1975	20	06	08.0	1.6	39.39	40.63	.05	.03	18	13	102	-	4.5	-	IS
1045	22	09	1975	00	44	56.4	0.4	35.20	26.26	.02	.02	55	3	312	5.0	5.5	5.1	IS

SIRA NO	TARiH Gn	Ay	Yil	OLUS ZAMANI Sa	Dk	Sn	h_O	KOORDiNATLAR Enl.	Boyl.	h_E	h_B	DERiN-LiK	hD	ist say	MAGNiTUD Ms	Mb	Ml	Ky
1046	22	09	1975	12	56	00.0	2.2	40.36	33.40	.06	.05	3	15	99	-	4.4	-	IS
1047	22	09	1975	16	31	04.9	0.3	40.26	33.34	.04	.04	18	-	49	-	4.3	-	IS
1048	23	09	1975	21	34	14.1	0.3	36.60	26.76	.03	.03	158	3	86	-	4.6	4.0	IS
1049	24	09	1975	15	41	17.3	0.8	38.68	40.65	.07	.04	38	9	97	-	4.6	-	IS
1050	03	10	1975	14	58	16.8	0.7	38.45	40.66	.06	.04	50	9	96	-	4.7	-	IS
1051	06	10	1975	21	27	54.0	2.0	34.13	25.22	.06	.04	24	15	80	-	4.3	4.3	IS
1052	07	10	1975	04	59	56.3	0.6	38.71	40.50	.04	.04	40	6	40	-	4.9	4.6	IS
1053	12	10	1975	08	23	12.6	0.3	37.91	23.12	.03	.02	35	4	159	-	4.9	-	IS
1054	12	10	1975	21	47	28.0	1.1	38.70	40.81	.09	.03	42	1	43	-	4.3	-	IS
1055	20	10	1975	02	54	15.0	1.3	43.40	44.30	.13	.25	33	-	21	-	4.4	-	IS
1056	20	10	1975	07	57	02.0	1.1	43.30	44.72	.10	.07	135	18	11	-	4.2	-	IS
1057	26	10	1975	07	05	03.0	1.2	40.08	35.02	.04	.03	24	11	108	-	4.6	-	IS
1058	28	10	1975	02	43	23.8	0.9	35.34	23.19	.07	.08	67	12	31	-	4.1	4.8	IS
1059	28	10	1975	23	41	40.0	1.4	38.71	31.01	.03	.04	23	13	60	-	4.4	-	IS
1060	01	11	1975	09	39	46.2	0.4	36.42	30.79	.03	.04	59	6	30	-	3.9	4.6	IS
1061	08	11	1975	12	54	12.0	1.4	38.50	40.40	.11	.10	51	16	37	-	4.2	-	IS
1062	12	11	1975	09	03	48.8	0.2	36.28	28.15	.02	.02	64	2	263	-	5.3	5.0	IS
1063	14	11	1975	12	32	05.9	0.8	38.65	40.75	.06	.05	45	9	70	-	4.7	-	IS
1064	15	11	1975	06	45	16.6	0.8	38.49	40.63	.06	.05	50	9	63	-	4.4	-	IS
1065	17	11	1975	14	36	41.0	4.1	34.29	23.34	.08	.07	2	26	64	-	4.0	4.7	IS
1066	18	11	1975	04	54	28.3	0.8	40.26	27.29	.03	.04	7	7	27	-	4.1	-	IS
1067	28	11	1975	23	33	40.0	1.6	38.40	40.30	.13	.11	51	21	-	-	3.8	4.7	IS
1068	29	11	1975	17	03	43.0	2.6	40.55	43.22	.07	.07	23	23	31	-	4.7	-	IS
1069	06	12	1975	08	19	10.0	1.8	38.50	25.69	.03	.04	23	20	43	-	3.8	4.5	IS
1070	08	12	1975	23	03	38.0	2.1	36.43	27.90	.09	.11	5	18	18	-	4.3	-	IS
1071	10	12	1975	18	12	28.3	0.7	34.14	25.72	.05	.05	44	7	56	-	4.8	3.7	IS
1072	17	12	1975	02	52	17.2	0.9	34.09	26.20	.06	.06	42	8	44	-	4.5	4.2	IS
1073	21	12	1975	15	37	16.6	0.3	35.62	26.78	.03	.03	98	3	62	-	4.5	4.3	IS
1074	27	12	1975	00	52	02.0	3.0	40.33	32.70	.08	.33	-	-	20	-	4.0	-	IS
1075	30	12	1975	14	36	08.0	1.4	38.62	40.50	.05	.03	28	12	103	-	4.6	-	IS
1076	30	12	1975	16	00	22.0	1.1	38.47	40.28	.09	.08	40	15	38	-	4.6	-	IS
1077	01	01	1976	13	59	05.0	1.2	38.80	40.30	.10	.11	62	17	27	-	4.1	-	IS
1078	07	01	1976	07	11	16.6	-	36.91	27.76	-	-	-	-	11	-	4.4	4.3	IK
1079	10	01	1976	07	11	20.0	1.6	38.80	27.92	.04	.05	31	14	70	-	4.6	-	IS
1080	12	01	1976	17	50	25.7	0.4	34.44	32.63	.03	.04	36	4	164	-	5.1	-	IS
1081	12	01	1976	20	20	00.4	-	34.38	32.55	-	-	47	-	84	5.0	4.9	-	IS
1082	12	01	1976	22	41	51.6	0.4	38.61	43.20	.03	.02	56	4	109	-	5.0	-	IS
1083	13	01	1976	20	58	45.0	1.4	38.60	40.70	.12	.11	68	18	33	-	4.5	-	IS
1084	14	01	1976	18	14	29.0	1.4	37.70	24.04	.11	.05	10	-	21	-	-	4.1	IS
1085	21	01	1976	18	15	10.5	-	39.14	29.62	-	-	-	-	10	-	4.1	-	IK
1086	26	01	1976	22	44	56.2	-	35.89	31.01	-	-	-	-	8	-	4.5	-	IK
1087	02	02	1976	13	37	50.3	-	40.58	25.96	-	-	-	-	13	-	4.2	4.1	IK
1088	04	02	1976	02	34	29.3	0.3	39.26	24.38	.03	.04	10	-	28	-	3.5	4.2	IS
1089	08	02	1976	20	06	22.0	-	36.80	27.53	-	-	-	-	12	-	4.1	4.1	IK
1090	10	02	1976	09	52	06.5	-	37.10	27.59	-	-	-	-	9	-	4.6	4.2	IK
1091	11	02	1976	01	21	20.2	-	39.14	27.03	-	-	-	-	16	-	4.5	4.3	IK
1092	11	02	1976	07	35	46.7	0.9	40.53	24.50	.09	.08	10	-	10	-	5.1	-	IS
1093	11	02	1976	09	01	44.4	-	36.84	27.57	-	-	-	-	11	-	4.0	4.0	IK
1094	14	02	1976	16	17	52.7	-	37.25	27.87	-	-	-	-	13	-	4.0	4.0	IK
1095	15	02	1976	23	36	42.2	-	36.87	28.64	-	-	-	-	10	-	4.3	-	IK
1096	18	02	1976	23	07	15.4	-	41.60	31.92	-	-	-	-	11	-	4.5	-	IK
1097	19	02	1976	20	35	06.0	2.5	34.38	24.57	.07	.07	20	21	4	-	-	4.0	IS
1098	23	02	1976	10	13	26.6	-	39.09	28.59	-	-	-	-	12	-	4.0	3.9	IK
1099	23	02	1976	16	18	27.8	-	38.34	25.58	-	-	-	-	17	-	5.0	4.7	IK
1100	23	02	1976	17	12	18.3	-	35.14	26.59	-	-	-	-	14	-	4.4	4.2	IK

SIRA NO	TARiH			OLUS ZAMANI				KOORDiNATLAR				DERiN-LiK		ist	MAGNiTUD			Ky
	Gn	Ay	Yil	Sa	Dk	Sn	h_O	Enl.	Boyl.	h_E	h_B		hD	say	Ms	Mb	Ml	
1101	23	02	1976	17	14	39.8	-	35.74	26.46	-	-	-	-	5	-	4.1	-	IK
1102	25	02	1976	00	36	41.1	-	38.84	26.37	-	-	-	-	15	-	4.0	3.5	IK
1103	26	02	1976	19	32	37.8	-	38.35	26.50	-	-	-	-	18	-	4.5	3.9	IK
1104	04	03	1976	22	22	46.4	-	38.25	25.47	-	-	-	-	14	-	4.1	3.6	IK
1105	06	03	1976	16	35	22.0	1.9	32.02	24.40	.10	.16	77	19	14	-	4.0	-	IS
1106	11	03	1976	03	14	10.5	-	39.42	27.71	-	-	-	-	16	-	4.1	3.8	IK
1107	11	03	1976	03	41	46.3	-	39.41	27.72	-	-	-	-	15	-	4.0	3.6	IK
1108	13	03	1976	09	32	23.0	-	43.30	45.41	-	-	-	51	22	-	4.1	-	IS
1109	25	03	1976	11	55	40.0	1.0	41.10	42.97	.04	.02	25	9	161	-	4.8	-	IS
1110	28	03	1976	00	55	25.0	-	36.26	30.67	-	-	-	-	7	-	4.0	-	IK
1111	02	04	1976	16	58	05.0	1.5	39.85	43.69	.38	.03	14	10	146	-	4.6	-	IS
1112	02	04	1976	17	52	25.0	1.5	43.70	45.10	-	-	4	-	75	-	4.5	-	IS
1113	03	04	1976	09	50	01.0	1.1	37.90	37.70	.55	.17	-	-	11	-	4.0	-	IS
1114	04	04	1976	22	26	27.4	0.9	34.83	26.42	.06	.06	36	10	44	-	4.5	4.1	IS
1115	06	04	1976	05	29	35.3	0.2	36.62	27.28	.03	.03	151	3	17	-	4.5	3.7	IS
1116	10	04	1976	00	54	09.7	0.6	36.34	23.18	.06	.06	94	7	-	-	-	4.4	IS
1117	12	04	1976	01	05	26.8	-	39.88	24.37	-	-	-	-	10	-	4.0	3.4	IK
1118	14	04	1976	07	25	50.4	-	40.10	48.00	-	-	33	-	5	-	-	4.3	IS
1119	15	04	1976	12	19	58.0	1.2	36.22	23.10	.10	.12	-	-	14	-	-	4.7	IS
1120	16	04	1976	15	17	15.5	0.8	34.94	26.43	.07	.05	71	6	34	-	3.5	4.1	IS
1121	19	04	1976	00	27	50.0	0.4	35.52	24.66	.03	.02	64	3	165	-	4.9	4.2	IS
1122	20	04	1976	04	57	19.2	0.6	40.86	42.10	.05	.04	37	6	65	-	4.5	-	IS
1123	21	04	1976	03	51	37.5	0.6	33.68	47.01	.04	.03	50	5	95	-	4.7	-	IS
1124	21	04	1976	21	58	05.5	0.4	40.77	42.11	.04	.03	43	5	78	-	4.5	-	IS
1125	26	04	1976	22	42	19.3	-	39.26	23.79	-	-	-	-	18	-	3.9	4.0	IK
1126	29	04	1976	22	18	07.7	0.7	40.96	42.87	.02	.02	30	6	204	5.5	5.0	-	IS
1127	30	04	1976	16	09	30.2	0.3	35.97	24.66	.03	.03	98	4	89	-	4.7	-	IS
1128	01	05	1976	07	26	24.9	-	37.25	27.69	-	-	-	-	12	-	4.3	4.0	IK
1129	03	05	1976	09	46	41.8	-	37.10	28.69	-	-	-	-	13	-	4.1	-	IK
1130	05	05	1976	08	41	48.3	0.5	39.34	29.11	.03	.06	34	-	23	-	-	4.1	IS
1131	06	05	1976	17	59	01.9	0.8	34.68	23.83	.05	.04	38	6	109	-	4.8	3.9	IS
1132	07	05	1976	23	05	18.2	-	39.36	29.07	-	-	-	-	8	-	4.1	-	IK
1133	08	05	1976	23	25	06.7	-	39.45	29.16	-	-	-	-	18	-	4.7	4.9	IK
1134	09	05	1976	02	55	50.3	-	39.50	29.19	-	-	-	-	15	-	3.9	4.0	IK
1135	09	05	1976	11	19	45.9	-	39.36	29.13	-	-	-	-	9	-	4.2	4.3	IK
1136	09	05	1976	15	01	18.6	-	39.42	29.15	-	-	-	-	11	-	4.2	4.5	IK
1137	09	05	1976	20	10	58.6	-	39.34	29.01	-	-	-	-	8	-	4.2	-	IK
1138	10	05	1976	12	01	31.7	-	39.40	29.02	-	-	-	-	13	-	4.3	4.4	IK
1139	10	05	1976	15	20	47.0	-	39.40	29.01	-	-	-	-	14	-	4.2	4.4	IK
1140	10	05	1976	23	54	11.2	-	39.31	29.12	-	-	-	-	12	-	4.4	4.3	IK
1141	11	05	1976	03	32	01.5	-	39.34	29.11	-	-	-	-	9	-	4.3	4.4	IK
1142	12	05	1976	05	11	40.2	-	39.34	29.34	-	-	-	-	16	-	4.3	4.6	IK
1143	14	05	1976	01	23	14.8	-	37.86	29.62	-	-	-	-	14	-	4.1	4.2	IK
1144	14	05	1976	11	06	15.7	-	39.38	29.46	-	-	-	-	15	-	4.1	-	IK
1145	15	05	1976	02	47	28.3	1.0	35.10	25.00	.10	.08	45	-	28	-	4.1	3.8	IS
1146	15	05	1976	03	03	37.9	-	36.54	23.41	-	-	-	-	18	-	4.4	-	IK
1147	17	05	1976	15	39	09.9	-	39.40	29.19	-	-	-	-	14	-	4.0	-	IK
1148	18	05	1976	08	30	20.7	0.4	34.92	25.42	.03	.02	71	3	155	-	4.7	4.2	IS
1149	19	05	1976	16	44	09.9	0.3	38.65	23.30	.02	.03	40	7	26	-	-	4.2	IS
1150	21	05	1976	09	37	00.6	-	39.41	29.00	-	-	-	-	11	-	4.4	4.4	IK
1151	22	05	1976	18	01	58.3	-	39.34	29.20	-	-	-	-	13	-	4.1	4.4	IK
1152	25	05	1976	18	43	29.1	-	39.34	29.08	-	-	-	-	10	-	4.6	4.8	IK
1153	26	05	1976	07	03	29.6	-	39.43	29.16	-	-	-	-	11	-	-	4.0	IK
1154	27	05	1976	01	44	17.1	-	36.87	29.12	-	-	-	-	6	-	4.0	-	IK
1155	28	05	1976	23	02	21.5	-	39.34	29.01	-	-	-	-	10	-	4.4	-	IK

SIRA NO	TARiH			OLUS ZAMANI				KOORDiNATLAR				DERiN-LiK		ist say	MAGNiTUD			Ky
	Gn	Ay	Yil	Sa	Dk	Sn	h_O	Enl.	Boyl.	h_E	h_B		hD		Ms	Mb	Ml	
1156	28	05	1976	23	09	38.7	-	39.39	29.06	-	-	-	-	11	-	4.2	4.8	IK
1157	29	05	1976	03	45	31.3	-	39.39	29.16	-	-	-	-	10	-	4.2	-	IK
1158	29	05	1976	22	42	10.1	-	40.53	28.84	-	-	-	-	5	-	4.1	4.4	IK
1159	30	05	1976	22	01	52.4	0.5	41.13	42.91	.08	.06	10	-	34	-	4.2	4.1	IS
1160	31	05	1976	05	10	24.6	0.8	39.48	29.10	.07	.13	40	13	12	-	4.9	-	IS
1161	09	06	1976	10	02	33.0	0.2	39.24	29.15	.03	.03	12	6	134	-	4.6	4.9	IS
1162	10	06	1976	05	55	18.1	1.0	35.09	23.68	.08	.06	64	8	66	-	4.4	4.0	IS
1163	11	06	1976	00	52	36.1	-	39.24	29.03	-	-	-	-	11	-	4.2	4.1	IK
1164	11	06	1976	09	55	20.3	-	39.37	29.20	-	-	-	-	10	-	4.2	3.8	IK
1165	14	06	1976	06	52	39.1	-	39.37	29.20	-	-	-	-	7	-	4.6	4.7	IK
1166	15	06	1976	00	08	00.5	0.7	34.61	24.70	.05	.04	58	7	52	-	4.3	3.9	IS
1167	15	06	1976	18	01	00.6	-	38.71	32.39	-	-	-	-	8	-	4.1	-	IK
1168	21	06	1976	10	59	17.2	1.0	34.64	24.03	.07	.06	47	9	55	-	4.5	4.2	IS
1169	25	06	1976	07	01	06.6	1.0	35.07	23.25	.03	.02	22	7	198	5.4	5.0	4.8	IS
1170	27	06	1976	16	28	28.0	2.2	33.20	47.80	.23	.20	33	-	9	-	-	4.5	IS
1171	01	07	1976	14	38	25.0	1.3	40.20	44.80	.15	.22	44	24	20	-	4.1	-	IS
1172	02	07	1976	08	50	17.0	1.6	38.40	40.10	.15	.12	59	21	18	-	4.3	-	IS
1173	09	07	1976	09	34	40.9	0.5	38.29	40.41	.07	.07	10	-	43	-	4.3	-	IS
1174	10	07	1976	21	31	48.8	0.3	37.31	24.94	.03	.03	183	3	30	-	4.3	3.5	IS
1175	15	07	1976	12	06	59.9	-	39.38	29.02	-	-	-	-	10	-	4.3	4.5	IK
1176	15	07	1976	20	24	11.7	0.4	37.55	35.90	.03	.03	55	5	111	-	4.7	-	IS
1177	18	07	1976	02	17	09.8	0.9	36.60	23.08	.07	.07	33	11	47	-	4.3	3.6	IS
1178	23	07	1976	06	44	48.0	-	38.20	31.42	-	-	-	-	11	-	4.7	-	IK
1179	26	07	1976	11	46	36.1	0.2	43.04	45.01	.03	.04	10	-	67	-	4.5	-	IS
1180	28	07	1976	20	17	44.1	0.2	43.18	45.57	.04	.04	18	1	334	6.1	5.4	-	IS
1181	28	07	1976	21	04	52.4	0.6	43.13	45.53	.04	.04	41	7	62	-	4.6	-	IS
1182	28	07	1976	21	33	07.0	6.3	42.60	44.90	.28	.31	128	6	11	-	4.3	-	IS
1183	28	07	1976	23	01	32.8	0.8	43.12	45.39	.05	.05	43	10	74	-	4.6	-	IS
1184	29	07	1976	06	30	31.0	0.8	42.96	44.81	.06	.07	42	11	28	-	4.5	-	IS
1185	30	07	1976	07	23	26.0	0.6	36.71	35.90	.04	.05	58	8	23	-	4.3	-	IS
1186	02	08	1976	05	15	35.7	0.3	35.63	25.86	.03	.03	117	2	77	-	4.7	4.1	IS
1187	12	08	1976	09	38	00.6	0.6	42.35	40.30	.08	.10	-	-	11	-	4.2	-	IS
1188	14	08	1976	10	15	41.0	0.7	36.09	31.25	.05	.08	63	9	21	-	4.0	-	IS
1189	15	08	1976	18	56	47.0	1.2	37.80	28.80	.11	.15	11	-	28	-	5.3	4.1	IS
1190	17	08	1976	17	37	59.3	-	36.76	27.23	-	-	-	-	12	-	4.4	-	IK
1191	17	08	1976	17	54	23.9	-	37.31	30.32	-	-	-	-	-	-	-	4.0	IS
1192	17	08	1976	20	48	46.1	0.9	36.18	30.50	.09	.12	33	-	10	-	-	4.0	IS
1193	18	08	1976	00	58	04.7	0.3	36.48	26.95	.04	.03	148	3	47	-	4.3	3.5	IS
1194	18	08	1976	17	06	34.8	0.3	36.73	27.42	.03	.03	157	2	54	-	4.7	3.5	IS
1195	19	08	1976	01	12	39.2	-	37.96	28.80	-	-	-	-	14	5.0	5.2	4.8	IK
1196	20	08	1976	19	20	58.0	2.9	35.50	29.20	.24	.32	11	-	7	-	4.2	-	IS
1197	22	08	1976	03	04	48.1	0.9	38.58	40.55	.07	.06	44	10	36	-	4.2	-	IS
1198	22	08	1976	13	28	47.5	-	39.54	29.11	-	-	-	-	16	4.6	4.7	4.7	IK
1199	24	08	1976	07	26	27.8	0.9	34.24	26.11	.08	.05	58	6	34	-	4.1	4.2	IS
1200	24	08	1976	18	44	45.6	0.8	39.34	29.10	.06	.11	-	-	11	-	4.9	-	IS
1201	25	08	1976	04	04	14.1	0.4	43.25	45.37	.05	.06	4	-	66	-	4.6	-	IS
1202	29	08	1976	20	01	24.2	0.6	31.62	47.36	.09	.07	33	-	18	-	-	5.1	IS
1203	01	09	1976	21	10	13.0	1.1	35.82	30.00	.09	.10	5	-	21	-	-	4.2	IS
1204	03	09	1976	20	53	26.9	0.7	39.21	28.16	.06	.08	4	-	23	-	-	4.0	IS
1205	05	09	1976	22	07	34.4	0.9	38.51	40.94	.03	.02	17	8	186	4.8	5.0	-	IS
1206	06	09	1976	14	11	38.0	0.9	38.06	29.00	.08	.10	11	-	20	-	-	4.0	IS
1207	07	09	1976	21	17	03.0	-	38.30	30.50	-	-	-	-	4	-	-	4.0	IS
1208	08	09	1976	00	09	10.3	-	36.06	31.95	-	-	-	-	-	-	4.1	-	IK
1209	10	09	1976	14	54	45.6	-	35.81	31.50	-	-	-	-	-	-	-	4.0	IS
1210	12	09	1976	00	42	18.6	0.2	36.95	26.96	.03	.03	154	3	43	-	4.3	3.8	IS

SIRA NO	TARiH			OLUS ZAMANI				KOORDiNATLAR				DERiN-LiK		ist say	MAGNiTUD			Ky
	Gn	Ay	Yil	Sa	Dk	Sn	h_O	Enl.	Boyl.	h_E	h_B		hD		Ms	Mb	Ml	
1211	16	09	1976	06	54	17.1	0.9	36.01	29.03	.05	.05	3	7	5	-	-	4.0	IS
1212	23	09	1976	14	04	09.7	-	34.79	27.66	-	-	-	-	-	-	-	4.1	IS
1213	24	09	1976	13	40	06.3	0.4	36.37	31.81	.03	.06	33	-	9	-	-	4.0	IS
1214	24	09	1976	20	03	27.8	-	38.34	26.69	-	-	-	-	-	-	4.1	-	IK
1215	30	09	1976	21	20	00.0	1.2	34.50	25.27	.11	.10	75	23	23	-	-	4.0	IS
1216	01	10	1976	09	23	21.2	1.0	38.46	26.90	.09	.12	11	-	16	-	-	4.1	IS
1217	02	10	1976	10	06	02.9	0.5	39.47	39.95	.04	.03	53	6	128	-	4.7	-	IS
1218	02	10	1976	14	45	33.8	0.8	38.49	27.10	.07	.11	11	-	13	-	-	4.1	IS
1219	03	10	1976	00	53	44.8	-	38.38	26.54	-	-	-	-	-	-	4.2	4.1	IK
1220	04	10	1976	05	22	17.0	1.2	38.40	26.90	.10	.13	14	-	18	-	-	4.0	IS
1221	08	10	1976	17	11	56.0	1.4	38.52	40.59	.05	.04	27	13	115	-	4.8	-	IS
1222	09	10	1976	19	31	05.0	-	40.71	30.36	-	-	-	-	-	-	4.0	4.0	IK
1223	16	10	1976	17	41	31.3	1.0	32.88	47.23	.07	.07	77	8	13	-	4.3	-	IS
1224	17	10	1976	00	22	24.0	0.4	38.56	23.10	.04	.05	10	-	39	-	-	4.1	IS
1225	17	10	1976	00	27	27.0	1.1	38.61	23.06	.05	.05	2	9	29	-	-	4.1	IS
1226	17	10	1976	21	26	38.6	0.4	35.20	25.13	.04	.04	92	4	41	-	4.4	4.0	IS
1227	19	10	1976	23	08	51.5	0.4	40.11	38.93	.06	.06	39	-	25	-	4.4	-	IS
1228	21	10	1976	01	45	26.4	-	38.77	26.65	-	-	-	-	-	-	4.0	4.0	IK
1229	21	10	1976	12	48	09.0	-	35.97	26.96	-	-	-	-	-	-	4.8	4.4	IK
1230	23	10	1976	12	08	24.4	0.8	34.10	25.34	.07	.05	60	6	21	-	4.3	-	IS
1231	27	10	1976	09	28	45.0	2.5	34.14	25.86	.63	.08	31	21	31	-	4.3	-	IS
1232	28	10	1976	01	04	59.6	-	35.81	26.93	-	-	-	-	-	-	4.4	4.1	IK
1233	02	11	1976	23	16	38.0	2.6	31.60	46.90	.24	.43	33	-	8	-	-	4.6	IS
1234	07	11	1976	11	07	58.4	0.4	33.20	47.94	.02	.02	63	4	220	-	5.5	-	IS
1235	09	11	1976	16	02	20.4	0.5	35.71	23.97	.04	.05	72	5	68	-	4.5	3.9	IS
1236	11	11	1976	18	13	30.0	2.0	32.70	47.80	.20	.18	33	-	10	-	-	4.6	IS
1237	12	11	1976	09	51	11.3	0.5	38.54	26.74	.05	.05	19	-	86	-	4.5	4.7	IS
1238	12	11	1976	09	55	33.8	-	38.61	26.85	-	-	-	-	-	-	4.8	4.8	IK
1239	13	11	1976	06	09	49.1	0.5	35.09	23.36	.03	.02	48	4	209	4.6	5.1	4.7	IS
1240	13	11	1976	11	54	44.3	-	38.61	26.55	-	-	-	-	-	-	4.5	4.0	IK
1241	15	11	1976	08	03	23.3	0.4	33.19	47.94	.02	.02	53	4	220	4.9	5.4	5.9	IS
1242	16	11	1976	18	06	46.5	-	38.56	26.55	-	-	-	-	-	-	4.1	-	IK
1243	17	11	1976	00	48	34.8	-	38.64	26.85	-	-	-	-	-	-	4.2	4.8	IK
1244	17	11	1976	01	29	20.0	0.8	35.40	31.10	.10	.15	-	-	7	-	-	4.0	IS
1245	17	11	1976	10	42	21.0	5.1	33.00	47.20	.39	.58	33	-	6	-	-	4.4	IS
1246	18	11	1976	12	09	21.0	0.4	36.74	24.49	.03	.04	41	6	43	-	4.3	3.8	IS
1247	18	11	1976	12	40	19.4	0.5	36.70	24.45	.05	.06	10	-	44	-	4.1	3.5	IS
1248	21	11	1976	23	10	30.6	-	38.40	26.93	-	-	-	-	-	-	4.2	3.9	IK
1249	23	11	1976	16	29	43.6	0.5	34.55	28.43	.04	.03	41	5	74	-	4.6	3.8	IS
1250	24	11	1976	12	22	16.0	1.0	39.05	44.04	.02	.02	10	6	450	7.3	6.1	-	IS
1251	24	11	1976	12	30	40.9	0.3	39.17	43.95	.04	.06	33	-	36	-	5.1	-	IS
1252	24	11	1976	12	36	48.7	0.8	39.10	44.20	.04	.04	63	8	13	-	5.5	-	IS
1253	24	11	1976	13	12	28.1	0.8	39.20	43.60	.14	.15	33	-	9	-	4.5	-	IS
1254	24	11	1976	13	18	08.9	0.5	39.09	43.71	.04	.03	49	6	77	-	4.9	-	IS
1255	24	11	1976	13	43	59.0	2.0	39.50	45.00	.27	.39	33	-	14	-	4.3	-	IS
1256	24	11	1976	14	11	20.0	1.3	39.60	43.65	.10	.09	43	15	46	-	4.5	-	IS
1257	24	11	1976	15	04	05.1	0.5	39.18	43.71	.04	.03	46	6	108	-	4.9	-	IS
1258	24	11	1976	15	11	07.6	0.5	39.00	44.19	.04	.03	62	5	131	-	5.0	-	IS
1259	24	11	1976	16	41	06.0	1.2	39.90	43.80	.19	.15	33	-	47	-	5.1	-	IS
1260	24	11	1976	18	52	31.1	0.8	39.50	43.70	.16	.23	-	-	9	-	4.6	-	IS
1261	24	11	1976	20	46	07.2	0.4	39.08	44.13	.03	.02	55	4	159	-	4.9	-	IS
1262	25	11	1976	09	49	27.0	0.4	38.96	44.28	.03	.02	38	5	151	-	5.0	-	IS
1263	25	11	1976	23	52	46.0	1.2	36.50	26.99	.12	.10	10	-	13	-	4.0	-	IS
1264	26	11	1976	01	15	29.0	1.0	36.50	27.20	.10	.10	-	-	15	-	-	4.0	IS
1265	26	11	1976	12	20	58.0	1.2	39.40	44.40	.11	.14	58	14	20	-	4.1	-	IS

SIRA NO	TARiH			OLUS ZAMANI				KOORDiNATLAR				DERiN-LiK		ist say	MAGNiTUD			Ky
	Gn	Ay	Yil	Sa	Dk	Sn	h_O	Enl.	Boyl.	h_E	h_B		hD		Ms	Mb	Ml	
1266	26	11	1976	21	18	17.1	0.5	39.11	44.27	.09	.08	33	-	13	-	4.4	-	IS
1267	26	11	1976	21	30	44.0	1.0	36.30	27.30	.11	.10	42	-	15	-	4.3	4.3	IS
1268	26	11	1976	22	37	59.2	1.0	39.00	44.30	.12	.13	33	-	28	-	4.3	-	IS
1269	26	11	1976	23	56	10.0	1.4	36.60	27.40	.15	.13	8	-	9	-	-	4.0	IS
1270	27	11	1976	00	52	43.0	1.1	36.50	27.20	.11	.10	5	-	7	-	-	4.1	IS
1271	27	11	1976	02	10	18.8	0.9	36.49	27.22	.09	.08	28	-	14	-	-	4.3	IS
1272	28	11	1976	00	26	43.0	1.3	39.20	44.50	.11	.15	49	15	16	-	4.2	-	IS
1273	28	11	1976	11	13	24.0	0.6	39.08	44.06	.08	.07	33	-	29	-	4.5	-	IS
1274	28	11	1976	12	00	06.0	1.0	41.40	47.40	.14	.15	33	-	46	-	4.6	-	IS
1275	28	11	1976	19	05	27.0	1.9	36.40	27.00	.18	.17	-	-	15	-	-	4.0	IS
1276	29	11	1976	17	16	06.7	0.7	34.84	25.73	.05	.04	37	6	106	-	4.7	4.2	IS
1277	30	11	1976	11	45	06.0	0.9	39.35	44.37	.08	.08	54	11	27	-	4.6	-	IS
1278	01	12	1976	14	38	25.0	1.3	40.20	44.80	.15	.22	44	24	20	-	4.1	-	IS
1279	01	12	1976	15	41	17.0	1.0	39.90	44.20	.10	.12	45	13	27	-	4.4	-	IS
1280	03	12	1976	10	54	39.2	0.9	38.70	27.30	.09	.10	1	-	6	-	-	4.0	IS
1281	03	12	1976	20	34	34.0	1.0	39.34	44.29	.09	.10	59	11	30	-	4.0	-	IS
1282	04	12	1976	04	10	36.8	0.6	39.31	43.66	.05	.04	53	7	98	-	4.9	-	IS
1283	05	12	1976	19	15	01.0	1.3	39.20	44.36	.11	.16	65	16	21	-	4.2	-	IS
1284	06	12	1976	03	58	06.5	0.8	39.13	44.48	.06	.06	58	9	65	-	4.4	-	IS
1285	06	12	1976	04	06	04.0	1.0	39.04	44.41	.07	.06	51	13	23	-	4.4	-	IS
1286	11	12	1976	00	03	06.0	1.2	39.20	44.60	.11	.12	65	16	34	-	4.0	-	IS
1287	11	12	1976	04	09	27.1	0.5	33.69	46.60	.03	.03	49	5	122	-	5.0	-	IS
1288	12	12	1976	07	54	20.4	0.5	39.00	44.26	.04	.03	41	5	123	-	4.8	-	IS
1289	15	12	1976	16	06	26.9	0.7	35.60	23.58	.06	.05	64	5	87	-	4.6	3.9	IS
1290	16	12	1976	07	43	14.0	1.2	35.40	27.82	.11	.07	48	16	27	-	3.8	4.8	IS
1291	21	12	1976	14	55	17.0	-	32.70	47.50	-	-	-	-	4	-	-	4.3	IS
1292	22	12	1976	14	33	30.9	0.8	35.37	47.63	.09	.08	39	22	10	-	-	4.4	IS
1293	24	12	1976	21	48	39.3	-	36.28	26.76	-	-	-	-	-	-	4.3	3.9	IK
1294	25	12	1976	22	19	11.0	0.5	38.97	44.30	.04	.04	47	6	58	-	4.6	-	IS
1295	28	12	1976	17	55	16.0	0.9	39.46	43.63	.08	.06	51	10	46	-	4.4	-	IS
1296	30	12	1976	06	37	58.1	0.8	35.46	23.48	.07	.06	66	9	29	-	4.0	3.9	IS
1297	01	01	1977	22	26	42.0	0.3	39.35	43.48	.05	.04	24	-	57	-	4.9	-	IS
1298	02	01	1977	19	37	26.6	0.5	39.29	43.62	.04	.03	46	6	91	-	4.9	-	IS
1299	10	01	1977	09	14	43.0	-	39.64	27.30	-	-	-	-	10	-	4.1	4.2	IK
1300	10	01	1977	15	46	14.0	2.6	33.60	46.10	.27	.27	-	-	8	-	-	4.4	IS
1301	17	01	1977	05	19	24.7	0.4	39.27	43.70	.03	.02	39	4	163	5.3	5.3	-	IS
1302	18	01	1977	08	48	54.3	0.4	33.11	48.00	.02	.02	49	4	203	5.2	5.4	-	IS
1303	18	01	1977	20	46	51.7	-	35.99	29.23	-	-	-	-	7	-	4.4	4.7	IK
1304	22	01	1977	02	51	48.0	-	35.90	26.61	-	-	-	-	6	-	4.2	3.8	IK
1305	23	01	1977	06	58	04.2	-	37.89	29.68	-	-	-	-	9	-	4.0	-	IK
1306	24	01	1977	06	38	02.0	1.0	34.84	25.36	.08	.07	49	9	39	-	4.1	4.0	IS
1307	25	01	1977	23	54	16.1	-	39.39	28.22	-	-	-	-	11	-	4.4	4.1	IK
1308	26	01	1977	14	40	02.3	0.8	35.08	27.96	.08	.10	10	-	33	-	-	4.4	IS
1309	04	02	1977	20	47	25.9	0.9	39.00	44.10	.11	.12	33	-	37	-	4.7	-	IS
1310	18	02	1977	00	08	58.3	0.5	40.48	41.68	.08	.06	10	-	42	-	4.6	-	IS
1311	21	02	1977	13	02	30.8	0.5	39.90	40.08	.07	.05	33	-	69	-	4.7	-	IS
1312	23	02	1977	14	12	08.1	0.5	32.43	47.80	.07	.04	33	-	32	-	4.8	-	IS
1313	24	02	1977	16	12	28.8	-	37.88	26.57	-	-	-	-	11	-	4.1	3.8	IK
1314	24	02	1977	20	47	18.2	0.8	38.55	27.66	.02	.02	20	6	191	-	4.5	5.0	IS
1315	05	03	1977	22	22	05.3	-	36.98	27.66	-	-	-	-	7	-	4.0	-	IK
1316	08	03	1977	03	01	37.3	-	36.75	28.62	-	-	-	-	9	-	4.2	-	IK
1317	13	03	1977	20	42	25.4	-	39.24	26.65	-	-	-	-	9	-	4.1	4.0	IK
1318	14	03	1977	19	42	59.5	0.5	41.52	44.11	.07	.07	16	-	-	-	4.6	-	IS
1319	21	03	1977	15	56	06.6	-	39.41	29.08	-	-	-	-	12	-	4.1	-	IK
1320	22	03	1977	06	37	51.4	0.8	34.65	26.44	.06	.06	56	7	58	-	4.3	4.4	IS

SIRA NO	TARiH			OLUS ZAMANI				KOORDiNATLAR				DERiN-LiK		ist say	MAGNiTUD			Ky
	Gn	Ay	Yil	Sa	Dk	Sn	h_O	Enl.	Boyl.	h_E	h_B		hD		Ms	Mb	Ml	
1321	23	03	1977	11	55	51.2	-	39.73	28.55	-	-	-	-	13	-	4.4	4.5	IK
1322	25	03	1977	02	39	58.9	1.0	38.58	40.03	.03	.03	29	8	201	4.9	5.1	-	IS
1323	26	03	1977	05	04	36.0	1.3	39.34	43.50	.04	.04	25	11	71	-	4.9	-	IS
1324	26	03	1977	05	48	45.2	0.4	37.78	23.26	.04	.05	47	5	64	-	4.7	4.2	IS
1325	28	03	1977	10	50	18.6	-	36.91	27.38	-	-	-	-	14	-	4.7	4.6	IK
1326	01	04	1977	16	12	39.1	-	36.81	25.93	-	-	-	-	7	-	4.0	4.2	IK
1327	05	04	1977	17	15	08.9	0.4	39.28	23.30	.03	.05	43	10	43	-	4.5	4.0	IS
1328	05	04	1977	19	50	49.0	0.6	35.03	26.44	.05	.04	59	6	69	-	4.3	4.1	IS
1329	05	04	1977	21	43	14.0	1.2	37.30	29.30	.11	.12	10	-	13	-	-	4.3	IS
1330	11	04	1977	05	05	41.1	0.8	34.77	26.39	.07	.05	54	8	35	-	4.0	4.0	IS
1331	11	04	1977	16	22	59.2	-	36.92	30.71	-	-	-	-	7	-	4.7	4.0	IK
1332	18	04	1977	02	04	14.5	-	36.40	28.97	-	-	-	-	8	-	4.0	-	IK
1333	21	04	1977	03	25	50.7	-	38.77	31.54	-	-	-	-	11	-	4.0	-	IK
1334	26	04	1977	13	31	43.0	0.8	39.14	43.42	.09	.10	28	-	31	-	4.3	-	IS
1335	02	05	1977	18	55	02.4	0.8	39.48	44.09	.07	.06	38	10	51	-	4.7	-	IS
1336	03	05	1977	17	51	50.9	-	36.67	31.14	-	-	-	-	12	-	4.1	-	IK
1337	05	05	1977	23	13	10.0	1.0	34.59	24.83	.07	.05	33	9	93	-	4.3	4.2	IS
1338	11	05	1977	23	46	17.7	0.6	33.17	47.92	.04	.03	41	6	136	-	4.9	-	IS
1339	13	05	1977	07	28	46.0	1.4	34.10	47.10	.20	.18	33	-	11	-	-	4.8	IS
1340	13	05	1977	16	14	34.0	1.4	39.06	23.69	.03	.04	23	14	46	-	4.7	4.0	IS
1341	13	05	1977	18	17	44.5	0.8	39.13	23.52	.02	.02	-	-	200	-	4.8	4.6	IS
1342	14	05	1977	21	43	38.0	2.3	38.74	40.05	.05	.04	4	-	73	-	4.6	-	IS
1343	16	05	1977	08	16	02.1	-	35.63	26.35	-	-	-	-	14	-	4.3	4.1	IK
1344	18	05	1977	17	24	42.1	-	40.49	26.35	-	-	-	-	21	-	4.1	4.7	IK
1345	21	05	1977	23	22	49.7	-	36.47	27.05	-	-	-	-	6	-	4.1	4.0	IK
1346	22	05	1977	00	09	25.0	1.9	35.80	27.40	.19	.13	7	-	8	-	-	4.0	IS
1347	26	05	1977	01	35	13.9	0.2	38.93	44.38	.02	.01	38	3	271	5.4	5.3	-	IS
1348	26	05	1977	09	50	24.5	0.4	38.89	44.35	.03	.02	40	50	115	3.5	4.9	-	IS
1349	27	05	1977	22	31	49.4	-	35.44	26.45	-	-	-	-	10	-	4.7	4.6	IK
1350	30	05	1977	03	43	00.3	1.0	39.20	44.90	.12	.12	108	13	31	-	4.9	-	IS
1351	30	05	1977	11	20	42.0	1.0	39.30	45.00	.13	.15	44	-	16	-	4.2	-	IS
1352	30	05	1977	18	06	57.3	0.6	38.94	44.40	.05	.05	7	8	53	-	4.5	-	IS
1353	01	06	1977	12	54	50.6	-	36.10	31.18	-	-	-	-	10	-	5.5	-	IK
1354	02	06	1977	17	20	25.1	-	35.52	27.92	-	-	-	-	11	-	4.3	4.5	IK
1355	02	06	1977	19	08	33.1	-	35.49	27.75	-	-	-	-	11	-	4.0	4.1	IK
1356	05	06	1977	04	59	17.8	0.7	32.74	47.94	.03	.03	77	6	142	-	4.9	-	IS
1357	05	06	1977	05	58	52.9	0.7	32.53	47.90	.09	.06	33	-	78	-	4.7	-	IS
1358	05	06	1977	08	45	13.7	0.7	32.68	47.90	.04	.03	60	6	131	-	4.7	-	IS
1359	05	06	1977	12	02	40.9	0.7	32.58	47.90	.09	.09	33	-	18	-	4.6	-	IS
1360	05	06	1977	14	02	46.0	1.9	32.40	47.50	.18	.21	33	-	7	-	-	4.7	IS
1361	05	06	1977	15	17	25.0	1.2	32.10	47.90	.13	.13	33	-	14	-	4.5	-	IS
1362	05	06	1977	16	48	03.7	1.0	32.40	47.80	.15	.12	33	-	9	-	-	4.7	IS
1363	08	06	1977	04	49	57.9	-	36.33	28.81	-	-	-	-	13	-	4.0	4.0	IK
1364	10	06	1977	06	47	50.3	0.8	32.32	47.61	.08	.09	33	-	6	-	-	4.3	IS
1365	13	06	1977	08	59	35.3	-	37.26	29.18	-	-	-	-	9	-	4.0	4.0	IK
1366	14	06	1977	20	55	59.0	1.8	33.79	25.62	.05	.04	2	11	69	-	4.0	4.0	IS
1367	15	06	1977	11	16	22.5	-	36.12	31.12	-	-	-	-	15	-	4.0	4.1	IK
1368	18	06	1977	14	32	31.0	1.1	41.97	43.98	.03	.03	25	10	114	-	4.6	-	IS
1369	21	06	1977	11	31	46.9	-	39.53	27.55	-	-	-	-	14	-	4.2	4.1	IK
1370	21	06	1977	19	13	28.7	-	35.67	29.54	-	-	-	-	13	-	4.7	4.4	IK
1371	27	06	1977	22	53	45.2	-	36.02	27.13	-	-	-	-	12	-	4.3	4.4	IK
1372	01	07	1977	21	49	19.9	0.4	43.16	45.70	.54	.07	53	-	49	-	4.8	-	IS
1373	02	07	1977	22	01	46.6	-	35.63	30.87	-	-	-	-	8	-	4.3	-	IK
1374	08	07	1977	18	59	44.9	0.9	39.62	41.15	.08	.08	53	12	33	-	4.4	-	IS
1375	09	07	1977	10	24	26.0	0.7	35.16	23.54	.06	.05	69	6	79	-	4.3	4.0	IS

SIRA NO	TARiH			OLUS ZAMANI				KOORDiNATLAR				DERiN-LiK		ist	MAGNiTUD			Ky
	Gn	Ay	Yil	Sa	Dk	Sn	h_O	Enl.	Boyl.	h_E	h_B		hD	say	Ms	Mb	Ml	
1376	10	07	1977	23	16	11.5	0.4	36.58	25.73	.03	.05	10	-	21	-	4.3	3.9	IS
1377	11	07	1977	06	27	03.0	0.4	36.56	25.88	.04	.05	8	-	19	-	-	4.0	IS
1378	11	07	1977	16	04	04.0	0.7	39.60	44.00	.13	.14	10	-	17	-	4.4	-	IS
1379	12	07	1977	02	26	31.6	-	39.50	29.43	-	-	-	-	9	-	4.0	-	IK
1380	12	07	1977	13	33	01.1	-	36.86	26.94	-	-	-	-	10	-	4.3	3.8	IK
1381	14	07	1977	00	39	09.6	-	36.78	27.80	-	-	-	-	8	-	4.2	4.2	IK
1382	14	07	1977	16	35	29.8	0.8	42.60	47.50	.13	.21	33	-	18	-	4.7	-	IS
1383	16	07	1977	06	07	01.0	1.3	36.00	27.50	.16	.13	28	-	10	-	-	4.2	IS
1384	17	07	1977	09	00	34.2	0.7	38.53	39.80	.09	.11	33	-	19	-	4.3	-	IS
1385	22	07	1977	01	43	16.5	0.3	36.13	24.80	.04	.03	115	4	68	-	4.2	4.0	IS
1386	25	07	1977	22	28	53.0	2.0	35.00	23.70	.06	.05	30	16	91	-	4.5	4.2	IS
1387	27	07	1977	23	49	28.6	0.5	34.05	26.17	.05	.06	10	-	18	-	4.7	-	IS
1388	30	07	1977	13	50	42.0	1.3	34.53	24.86	.09	.10	41	18	20	-	-	4.1	IS
1389	02	08	1977	16	07	28.4	0.7	34.66	26.53	.07	.06	10	-	28	-	3.9	4.0	IS
1390	05	08	1977	13	19	56.0	1.3	34.28	25.81	.04	.03	33	9	118	-	4.5	4.2	IS
1391	06	08	1977	07	40	53.5	0.5	36.61	25.96	.05	.06	24	-	45	-	4.0	4.3	IS
1392	18	08	1977	06	38	38.1	-	39.69	25.54	-	-	-	-	18	-	4.7	3.9	IK
1393	18	08	1977	09	27	40.7	0.4	35.27	23.52	.03	.02	47	4	331	5.3	5.4	5.2	IS
1394	18	08	1977	10	04	45.9	0.9	35.13	23.50	.06	.06	63	7	54	-	4.3	3.8	IS
1395	24	08	1977	12	14	04.0	1.4	35.30	30.60	.13	.28	-	-	11	-	-	4.3	IS
1396	25	08	1977	01	52	19.4	-	37.83	27.33	-	-	-	-	11	-	4.0	-	IK
1397	25	08	1977	03	03	12.2	-	35.16	28.39	-	-	-	-	9	-	4.2	-	IK
1398	28	08	1977	05	45	53.8	0.5	35.23	27.31	.04	.04	91	6	25	-	-	4.0	IS
1399	09	09	1977	14	59	38.5	0.5	34.54	26.34	.05	.05	68	5	41	-	4.0	4.0	IS
1400	10	09	1977	00	56	09.3	0.7	34.59	26.21	.05	.04	55	6	80	-	4.1	4.1	IS
1401	10	09	1977	06	31	42.0	1.3	34.93	23.09	.04	.03	24	10	180	5.1	4.8	4.7	IS
1402	10	09	1977	06	56	34.6	-	37.90	28.45	-	-	-	-	8	-	4.2	4.0	IK
1403	11	09	1977	23	19	19.0	0.8	34.95	23.05	.02	.02	4	5	4	6.0	5.8	5.9	IS
1404	11	09	1977	23	30	35.0	1.8	34.80	23.04	.16	.07	-	-	19	-	-	4.1	IS
1405	11	09	1977	23	31	47.0	1.3	34.89	23.09	.10	.07	40	10	66	-	4.2	4.1	IS
1406	12	09	1977	02	30	43.0	1.2	34.91	23.05	.09	.08	43	11	51	-	4.1	3.8	IS
1407	12	09	1977	02	57	55.0	0.6	34.91	23.23	.04	.03	38	5	169	-	4.7	4.3	IS
1408	12	09	1977	07	04	32.0	1.1	35.04	23.16	.08	.06	50	9	64	-	4.2	4.0	IS
1409	12	09	1977	10	52	31.0	0.9	34.99	23.15	.07	.05	55	7	84	-	4.3	4.7	IS
1410	12	09	1977	23	10	19.0	1.6	34.90	23.29	.13	.09	54	-	44	-	-	4.0	IS
1411	13	09	1977	13	04	09.9	0.8	34.86	23.20	.05	.04	38	7	112	-	4.5	4.3	IS
1412	14	09	1977	05	34	35.0	1.0	34.68	23.27	.10	.09	52	-	27	-	-	4.1	IS
1413	14	09	1977	18	49	05.0	1.1	34.86	23.07	.04	.03	19	-	176	-	4.8	4.3	IS
1414	15	09	1977	15	19	45.3	0.5	39.13	43.90	.04	.05	34	5	24	-	4.7	-	IS
1415	15	09	1977	15	53	40.7	0.8	34.95	23.04	.05	.04	50	7	110	-	4.6	4.5	IS
1416	18	09	1977	05	57	18.0	2.3	34.75	23.11	.07	.06	25	-	53	-	4.3	4.0	IS
1417	24	09	1977	20	43	07.8	1.0	34.96	23.25	.07	.05	51	8	106	-	4.4	4.0	IS
1418	25	09	1977	03	12	25.0	1.1	34.96	23.20	.08	.06	64	8	73	-	4.3	4.0	IS
1419	25	09	1977	03	44	08.6	-	37.84	27.16	-	-	-	-	7	-	4.3	3.9	IK
1420	25	09	1977	19	56	57.8	-	38.69	30.94	-	-	-	-	10	-	4.3	-	IK
1421	28	09	1977	05	36	37.0	1.8	33.40	47.70	.13	.21	33	-	5	-	-	4.4	IS
1422	30	09	1977	16	50	37.0	1.0	40.04	45.02	.04	.04	1	7	73	-	4.8	-	IS
1423	05	10	1977	05	34	54.9	-	40.82	32.87	-	-	-	-	6	5.8	5.0	-	IK
1424	05	10	1977	16	07	35.0	2.1	34.70	23.00	.15	.13	42	13	38	-	4.6	3.9	IS
1425	08	10	1977	10	25	29.0	1.5	34.80	23.40	.11	.11	62	12	36	-	4.2	3.9	IS
1426	10	10	1977	08	49	37.0	1.5	34.90	23.36	.12	.10	62	9	42	-	4.3	3.9	IS
1427	10	10	1977	18	51	40.6	0.6	35.44	27.61	.06	.06	61	8	22	-	4.0	4.1	IS
1428	12	10	1977	20	37	39.0	1.2	35.01	23.43	.10	.09	67	9	29	-	4.2	3.8	IS
1429	14	10	1977	14	10	52.5	-	37.09	32.20	-	-	-	-	8	-	4.2	-	IK
1430	17	10	1977	15	16	55.3	-	36.20	27.96	-	-	-	-	5	-	4.0	4.1	IK

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	Gn	Ay	Yil	Sa	Dk	Sn	h_O	Enl.	Boyl.	h_E	h_B		hD		Ms	Mb	MI	
1431	19	10	1977	14	14	16.7	-	39.05	29.78	-	-	-	-	11	-	4.4	-	IK
1432	19	10	1977	21	29	12.0	1.4	34.30	24.80	.12	.10	-	-	35	-	4.3	4.2	IS
1433	22	10	1977	10	02	08.3	0.9	34.90	23.16	.03	.02	28	7	238	4.5	5.2	4.7	IS
1434	22	10	1977	10	08	01.0	2.0	35.30	23.70	.19	.14	114	-	20	-	-	4.3	IS
1435	24	10	1977	05	38	20.8	0.9	34.29	26.63	.06	.07	54	9	60	-	4.4	3.6	IS
1436	27	10	1977	06	59	24.8	-	35.40	27.61	-	-	-	-	10	4.8	5.1	-	IK
1437	27	10	1977	13	22	39.0	1.1	35.10	27.91	.09	.09	10	-	29	-	-	4.3	IS
1438	27	10	1977	22	23	01.3	-	37.89	27.67	-	-	-	-	10	-	4.2	-	IK
1439	27	10	1977	22	43	32.2	1.0	37.87	27.88	.03	.03	16	8	208	5.5	4.9	4.9	IS
1440	28	10	1977	00	31	53.5	-	38.00	27.78	-	-	-	-	9	-	4.2	4.0	IK
1441	28	10	1977	00	41	11.9	-	37.98	27.76	-	-	-	-	9	-	4.3	4.2	IK
1442	03	11	1977	02	22	56.0	-	42.12	24.03	.02	.02	11	5	294	5.3	5.4	-	IS
1443	03	11	1977	19	46	16.5	0.7	36.31	43.53	.05	.04	38	8	77	-	5.2	-	IS
1444	06	11	1977	02	48	45.6	0.3	42.13	24.17	.03	.04	23	-	64	-	4.7	4.1	IS
1445	10	11	1977	04	12	25.7	-	38.02	27.66	-	-	-	-	11	-	4.1	4.0	IK
1446	10	11	1977	23	14	05.8	-	36.33	27.00	-	-	-	-	9	-	4.1	-	IK
1447	17	11	1977	06	28	09.2	0.3	40.06	24.10	.04	.05	10	-	48	-	4.7	-	IS
1448	23	11	1977	07	31	45.2	0.4	44.87	32.85	.05	.06	10	-	43	-	4.4	-	IS
1449	23	11	1977	09	08	17.7	-	37.95	27.79	-	-	-	-	8	-	4.2	4.0	IK
1450	26	11	1977	00	12	08.0	-	37.93	27.71	-	-	-	-	9	-	4.2	4.3	IK
1451	27	11	1977	20	42	43.9	-	37.90	31.94	-	-	-	-	11	-	4.2	-	IK
1452	28	11	1977	02	59	10.0	0.2	35.96	27.79	.02	.02	81	2	320	-	5.5	5.2	IS
1453	06	12	1977	18	12	53.7	-	40.34	25.67	-	-	-	-	7	-	4.1	3.8	IK
1454	07	12	1977	22	56	30.2	-	35.86	31.01	-	-	-	-	6	-	4.1	4.1	IK
1455	08	12	1977	00	40	43.1	0.8	35.13	23.48	.06	.05	55	7	91	-	4.6	4.2	IS
1456	09	12	1977	15	53	38.0	-	38.56	27.47	-	-	-	-	12	-	4.7	4.9	IK
1457	09	12	1977	20	36	45.8	0.8	39.36	29.13	.06	.10	10	-	10	-	4.3	-	IS
1458	09	12	1977	21	32	14.2	-	39.59	28.15	-	-	-	-	11	-	4.2	3.9	IK
1459	11	12	1977	04	28	25.0	1.0	34.46	47.34	.07	.06	42	11	34	-	4.2	-	IS
1460	11	12	1977	22	48	35.0	1.2	37.31	36.20	.06	.15	68	12	15	-	4.7	-	IS
1461	15	12	1977	08	06	11.0	1.1	34.97	23.13	.07	.07	48	10	54	-	4.6	3.8	IS
1462	15	12	1977	15	07	53.1	0.5	43.36	45.21	.03	.03	43	5	118	-	4.9	-	IS
1463	15	12	1977	15	23	30.1	0.4	43.47	45.28	.07	.09	33	-	40	-	4.6	-	IS
1464	16	12	1977	07	37	29.3	0.6	38.41	27.19	.02	.02	24	5	241	4.2	5.3	5.3	IS
1465	16	12	1977	07	40	47.6	-	38.49	28.02	-	-	-	-	5	-	4.4	-	IK
1466	16	12	1977	07	44	22.2	-	38.45	27.23	-	-	-	-	7	-	4.2	4.0	IK
1467	16	12	1977	23	17	25.0	2.6	42.90	47.80	.18	.43	135	36	8	-	4.7	-	IS
1468	19	12	1977	06	01	14.0	1.1	36.70	26.40	.10	.11	-	-	13	-	-	4.0	IS
1469	19	12	1977	16	25	10.4	0.9	35.24	24.54	.05	.07	40	11	9	-	4.1	-	IS
1470	21	12	1977	08	30	48.0	1.2	41.93	47.68	.07	.07	41	16	31	-	4.7	-	IS
1471	22	12	1977	08	34	15.2	-	37.12	29.73	-	-	-	-	8	-	4.2	-	IK
1472	29	12	1977	05	39	20.0	2.3	33.10	47.44	.20	.09	33	-	5	-	-	4.4	IS
1473	02	01	1978	06	31	28.8	0.2	41.56	44.27	.03	.03	13	2	225	5.2	5.5	-	IS
1474	03	01	1978	03	08	30.0	3.6	35.40	23.60	.37	.38	-	-	6	-	4.1	-	IS
1475	05	01	1978	04	29	03.0	3.4	41.70	47.40	.28	.35	167	49	15	-	4.6	-	IS
1476	07	01	1978	14	55	17.9	-	39.73	28.85	-	-	-	-	6	-	4.0	-	IK
1477	07	01	1978	16	48	47.6	0.7	40.11	42.37	.07	.07	67	9	34	-	4.7	-	IS
1478	11	01	1978	03	57	49.1	-	37.56	28.53	-	-	-	-	8	3.7	4.7	4.4	IK
1479	16	01	1978	08	50	23.0	-	40.47	29.25	-	-	-	-	9	-	4.2	-	IK
1480	17	01	1978	00	09	34.0	1.4	39.40	41.40	.16	.16	139	22	18	-	4.6	-	IS
1481	17	01	1978	04	05	58.9	0.7	34.78	26.34	.05	.05	48	7	49	-	4.1	4.3	IS
1482	17	01	1978	19	12	07.2	0.6	41.04	44.26	.07	.08	14	-	-	-	4.7	-	IS
1483	18	01	1978	03	48	31.0	2.3	34.70	23.30	.16	.13	36	20	28	-	4.8	3.8	IS
1484	18	01	1978	13	39	52.0	2.0	34.70	23.16	.11	.10	18	12	19	-	4.4	4.1	IS
1485	19	01	1978	12	08	16.8	-	38.93	27.60	-	-	-	-	8	-	4.3	4.1	IK

SIRA NO	TARiH			OLUS ZAMANI				KOORDiNATLAR				DERiN-LiK		ist say	MAGNiTUD			Ky
	Gn	Ay	Yil	Sa	Dk	Sn	h_O	Enl.	Boyl.	h_E	h_B		hD		Ms	Mb	Ml	
1486	23	01	1978	21	00	41.4	-	39.63	32.34	-	-	-	-	8	-	4.2	-	IK
1487	28	01	1978	03	29	37.1	0.5	34.88	23.79	.03	.02	45	4	212	4.6	5.0	4.6	IS
1488	28	01	1978	10	12	22.0	2.7	34.70	23.70	.28	.19	-	-	9	3.4	4.5	-	IS
1489	28	01	1978	14	19	07.7	1.0	39.51	43.70	.07	.10	56	7	23	-	4.5	-	IS
1490	29	01	1978	10	23	43.4	0.4	34.92	25.67	.02	.02	35	3	282	4.6	5.2	5.4	IS
1491	30	01	1978	07	52	48.1	0.5	34.67	33.84	.04	.05	36	6	50	4.3	4.6	-	IS
1492	05	02	1978	21	27	30.0	1.4	34.60	23.00	.12	.13	-	-	25	-	4.0	-	IS
1493	06	02	1978	14	06	02.9	0.7	39.65	44.10	.06	.08	56	8	19	-	4.7	-	IS
1494	06	02	1978	22	48	48.0	1.6	39.30	44.50	.15	.22	33	-	15	-	4.5	-	IS
1495	07	02	1978	02	05	25.0	1.6	39.00	43.60	.17	.19	55	-	19	-	4.3	-	IS
1496	07	02	1978	07	34	29.1	-	37.75	27.02	-	-	-	-	10	-	4.0	-	IK
1497	09	02	1978	21	10	36.6	0.6	37.07	36.84	.04	.04	42	7	86	3.8	4.4	-	IS
1498	10	02	1978	15	53	56.3	0.6	35.49	26.71	.05	.05	66	9	43	-	4.0	4.0	IS
1499	13	02	1978	05	31	25.8	-	40.32	28.84	-	-	-	-	10	-	4.2	4.2	IK
1500	14	02	1978	22	38	36.9	-	43.41	29.81	-	-	-	-	8	-	4.0	-	IK
1501	15	02	1978	03	17	39.4	0.5	39.67	39.88	.05	.03	48	6	123	4.5	4.8	-	IS
1502	15	02	1978	03	27	43.7	0.9	39.76	40.01	.08	.06	54	10	52	4.3	4.6	-	IS
1503	15	02	1978	05	47	53.2	0.6	36.69	39.67	.05	.05	42	8	61	4.2	4.5	-	IS
1504	19	02	1978	03	33	51.1	-	37.95	32.36	-	-	-	-	6	-	4.1	-	IK
1505	24	02	1978	02	51	25.0	-	38.00	32.55	-	-	-	-	10	-	4.5	-	IK
1506	24	02	1978	18	47	36.1	-	39.27	26.59	-	-	-	-	8	-	4.3	3.8	IK
1507	28	02	1978	00	43	04.0	1.2	36.70	27.60	.11	.13	10	-	20	-	-	4.1	IS
1508	28	02	1978	22	58	14.8	0.3	44.19	42.73	.04	.05	10	-	112	-	4.8	4.6	IS
1509	01	03	1978	22	51	11.4	-	36.39	27.15	-	-	-	-	8	-	4.9	4.3	IK
1510	01	03	1978	23	27	59.5	0.9	40.97	42.90	.08	.07	38	12	43	-	4.4	-	IS
1511	05	03	1978	05	26	11.2	0.7	35.20	23.53	.06	.04	72	4	63	3.4	4.5	4.0	IS
1512	07	03	1978	22	33	46.6	0.4	34.48	25.24	.02	.03	41	3	322	5.0	5.5	5.1	IS
1513	07	03	1978	22	59	58.4	0.5	34.30	25.28	.04	.03	40	5	130	-	4.5	4.5	IS
1514	08	03	1978	01	03	42.3	0.9	34.03	23.16	.07	.05	10	-	120	-	-	4.2	IS
1515	08	03	1978	23	54	29.2	1.0	34.86	23.16	.09	.08	10	-	60	3.4	4.2	4.3	IS
1516	10	03	1978	00	23	08.0	1.6	35.00	23.07	.12	.08	76	11	79	3.4	4.2	4.1	IS
1517	10	03	1978	06	15	05.0	1.8	35.00	23.60	.13	.11	55	16	23	-	4.1	3.6	IS
1518	10	03	1978	11	01	20.8	-	38.10	32.39	-	-	-	-	12	-	4.3	-	IK
1519	13	03	1978	13	06	35.5	-	37.53	26.26	-	-	-	-	9	-	4.6	4.0	IK
1520	20	03	1978	07	14	42.9	0.6	38.70	23.12	.06	.08	-	-	25	-	-	4.1	IS
1521	22	03	1978	10	40	59.1	-	39.50	26.32	-	-	-	-	11	-	4.2	3.7	IK
1522	23	03	1978	05	56	25.1	0.8	36.44	25.50	.08	.10	33	-	20	-	-	4.0	IS
1523	01	04	1978	03	05	49.8	-	38.65	34.18	-	-	-	-	7	-	4.2	-	IK
1524	03	04	1978	15	44	16.6	0.9	37.20	28.99	.12	.08	-	-	5	-	4.9	-	IS
1525	05	04	1978	04	50	45.0	1.0	37.68	23.15	.05	.05	31	9	91	5.1	4.6	4.0	IS
1526	07	04	1978	22	01	43.0	1.6	36.30	26.60	.16	.17	100	-	14	-	-	4.0	IS
1527	08	04	1978	06	22	27.1	0.5	36.95	23.24	.04	.04	48	4	124	5.1	4.6	4.0	IS
1528	09	04	1978	06	20	43.8	-	38.34	26.97	-	-	-	-	7	-	4.0	3.8	IK
1529	09	04	1978	06	53	10.0	-	38.38	27.21	-	-	-	-	8	-	4.4	-	IK
1530	12	04	1978	12	13	02.0	1.3	36.90	23.20	.12	.12	33	-	20	-	4.1	3.5	IS
1531	14	04	1978	08	59	40.7	-	36.90	29.12	-	-	-	-	6	-	4.0	-	IK
1532	14	04	1978	14	30	30.6	-	40.06	25.48	-	-	-	-	9	-	4.2	3.8	IK
1533	22	04	1978	04	22	22.3	-	40.00	25.85	-	-	-	-	10	-	4.2	3.6	IK
1534	22	04	1978	05	01	20.3	0.8	35.22	26.21	.08	.06	48	10	24	-	3.9	4.0	IS
1535	24	04	1978	01	49	31.7	-	38.07	27.84	-	-	-	-	8	-	4.0	-	IK
1536	26	04	1978	14	01	36.0	-	38.76	31.49	-	-	-	-	11	-	4.1	-	IK
1537	27	04	1978	01	38	01.1	-	37.77	32.62	-	-	-	-	9	-	4.2	-	IK
1538	27	04	1978	05	14	11.5	-	38.72	31.74	-	-	-	-	12	-	4.1	-	IK
1539	27	04	1978	20	33	30.0	1.5	35.10	27.70	.13	.12	10	-	20	-	4.3	4.0	IS
1540	01	05	1978	04	37	32.6	0.6	34.85	25.75	.06	.05	34	-	68	-	4.4	4.2	IS

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	Gn	Ay	Yil	Sa	Dk	Sn	h_O	Enl.	Boyl.	h_E	h_B		hD		Ms	Mb	Ml	
1541	05	05	1978	04	18	34.7	-	39.12	26.53	-	-	-	-	9	-	4.1	3.8	IK
1542	06	05	1978	18	42	24.0	1.9	34.79	25.72	.07	.06	-	-	29	-	4.2	4.1	IS
1543	08	05	1978	14	38	59.6	0.3	40.71	23.38	.02	.03	40	5	89	3.5	4.3	-	IS
1544	08	05	1978	15	00	08.5	0.3	40.74	23.39	.03	.04	10	-	48	3.6	4.1	3.4	IS
1545	10	05	1978	13	12	52.0	0.9	40.71	23.38	.02	.03	29	8	101	-	4.3	4.3	IS
1546	11	05	1978	16	35	41.0	1.1	40.20	29.60	.10	.11	10	-	8	-	4.3	-	IS
1547	13	05	1978	08	35	36.0	1.4	40.68	23.45	.03	.03	16	15	57	-	4.1	4.1	IS
1548	19	05	1978	14	46	09.6	0.3	40.72	23.43	.03	.03	36	12	47	-	4.0	3.9	IS
1549	20	05	1978	18	45	09.0	1.7	40.35	42.65	.07	.06	13	11	26	-	4.4	-	IS
1550	21	05	1978	23	23	05.7	0.7	35.01	23.17	.06	.06	10	-	33	-	4.2	3.9	IS
1551	23	05	1978	22	40	23.3	-	39.77	26.13	-	-	-	-	9	-	4.1	3.5	IK
1552	23	05	1978	23	34	11.4	0.1	40.73	23.25	.01	.01	9	3	392	5.7	5.6	-	IS
1553	24	05	1978	02	12	28.1	1.0	40.71	23.34	.02	.02	8	7	169	5.0	4.8	4.1	IS
1554	24	05	1978	05	57	28.0	0.8	40.74	23.30	.03	.03	19	8	129	-	4.5	4.2	IS
1555	24	05	1978	08	13	06.7	0.2	40.77	23.41	.03	.03	10	-	49	-	4.1	3.9	IS
1556	24	05	1978	08	46	28.0	1.5	40.78	23.35	.03	.04	5	12	60	-	4.2	3.9	IS
1557	26	05	1978	05	53	20.7	0.9	40.65	23.20	.07	.01	10	-	19	-	-	4.0	IS
1558	26	05	1978	13	43	37.9	0.3	42.00	46.55	.02	.02	36	3	326	5.2	5.8	-	IS
1559	27	05	1978	23	52	20.4	0.7	35.61	26.96	.06	.06	33	-	16	-	-	4.0	IS
1560	02	06	1978	22	31	25.4	0.2	40.80	23.19	.02	.02	19	-	221	4.2	4.6	3.7	IS
1561	10	06	1978	05	35	02.0	-	42.57	31.53	-	-	-	-	12	3.9	4.6	4.0	IK
1562	10	06	1978	14	42	46.0	-	38.96	27.16	-	-	-	-	11	-	4.0	3.9	IK
1563	12	06	1978	17	44	48.4	1.0	40.73	23.36	.03	.04	19	10	90	4.2	4.3	4.1	IS
1564	12	06	1978	23	36	44.8	0.4	40.76	23.24	.03	.04	33	8	102	-	4.2	4.8	IS
1565	13	06	1978	01	36	54.4	0.3	40.83	23.33	.03	.04	10	-	37	-	4.2	4.8	IS
1566	15	06	1978	00	26	43.8	-	41.02	27.54	-	-	-	-	13	4.1	4.4	4.3	IK
1567	15	06	1978	01	10	40.0	1.3	41.41	23.06	.03	.04	3	11	45	-	3.5	4.0	IS
1568	15	06	1978	16	10	52.8	-	35.84	31.39	-	-	-	-	9	4.3	4.5	-	IK
1569	15	06	1978	19	31	16.6	-	36.65	26.82	-	-	-	-	10	-	4.0	-	IK
1570	17	06	1978	20	40	39.7	-	37.38	28.66	-	-	-	-	8	-	4.6	-	IK
1571	17	06	1978	21	19	29.9	0.3	39.14	24.62	.03	.04	-	-	84	3.6	4.4	4.7	IS
1572	19	06	1978	03	12	53.0	1.2	40.69	23.38	.05	.04	5	9	69	3.3	4.0	4.1	IS
1573	19	06	1978	10	31	05.5	0.7	40.77	23.24	.01	.02	10	4	322	5.0	5.2	4.8	IS
1574	19	06	1978	10	48	11.0	0.9	40.73	23.23	.02	.02	8	6	166	3.8	4.7	4.2	IS
1575	19	06	1978	16	15	06.7	0.8	36.88	23.14	.07	.06	10	-	30	-	4.1	3.7	IS
1576	20	06	1978	20	03	21.5	0.1	40.78	23.24	.01	.01	3	-	451	6.4	6.1	6.0	IS
1577	20	06	1978	20	27	56.9	0.5	40.71	23.13	.04	.08	-	-	37	-	4.0	-	IS
1578	20	06	1978	20	37	39.0	1.3	40.73	23.06	.04	.05	16	14	65	-	3.9	4.0	IS
1579	20	06	1978	20	45	23.0	1.9	40.66	23.11	.04	.05	6	15	77	-	4.3	4.1	IS
1580	20	06	1978	20	52	39.6	0.9	40.75	23.07	.02	.03	3	7	59	-	4.3	3.9	IS
1581	20	06	1978	21	51	04.0	1.1	40.71	23.20	.02	.02	11	7	153	-	4.5	4.2	IS
1582	21	06	1978	01	02	53.7	0.9	40.83	23.11	.03	.04	19	10	41	-	4.1	3.9	IS
1583	21	06	1978	03	20	26.0	1.1	40.75	23.23	.02	.03	5	8	80	3.3	4.3	4.0	IS
1584	21	06	1978	06	00	05.0	1.1	40.73	23.30	.03	.03	2	8	101	3.5	4.2	4.1	IS
1585	21	06	1978	07	12	26.0	0.5	40.76	23.23	.04	.07	-	-	31	-	4.0	3.7	IS
1586	21	06	1978	12	29	43.1	1.0	40.81	23.06	.02	.02	1	7	168	5.0	4.7	4.3	IS
1587	21	06	1978	13	20	59.6	0.6	40.76	23.17	.02	.03	17	7	31	-	4.4	3.7	IS
1588	21	06	1978	18	52	06.1	0.8	40.71	23.22	.02	.03	22	8	108	3.5	4.4	4.0	IS
1589	22	06	1978	19	06	04.0	1.2	33.00	47.80	.13	.12	33	-	33	3.5	4.5	-	IS
1590	23	06	1978	01	57	01.6	0.2	40.82	23.11	.02	.03	10	-	69	4.0	4.2	4.1	IS
1591	25	06	1978	11	00	53.5	0.7	34.68	33.40	.07	.12	33	-	15	-	4.1	-	IS
1592	27	06	1978	00	47	01.1	0.7	34.40	26.65	.06	.05	51	7	31	3.4	3.8	4.2	IS
1593	27	06	1978	04	45	17.8	0.5	41.23	44.04	.06	.07	10	-	45	3.4	4.6	-	IS
1594	27	06	1978	12	18	22.0	2.9	42.08	24.10	.03	.04	9	22	79	-	4.4	4.3	IS
1595	03	07	1978	20	09	48.8	0.3	40.61	23.36	.03	.04	-	-	56	-	4.0	3.8	IS

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	Gn	Ay	Yil	Sa	Dk	Sn	h_O	Enl.	Boyl.	h_E	h_B		hD		Ms	Mb	Ml	
1596	04	07	1978	22	23	28.4	0.5	40.75	23.06	.02	.02	18	4	271	4.9	4.9	4.6	IS
1597	04	07	1978	22	39	16.5	0.9	39.45	33.19	.03	.02	23	7	182	4.5	4.9	-	IS
1598	10	07	1978	09	41	59.0	1.7	33.90	25.10	.15	.17	33	-	27	-	-	4.3	IS
1599	12	07	1978	00	32	15.0	1.0	34.42	24.85	.08	.05	47	8	63	3.4	3.9	4.1	IS
1600	12	07	1978	11	52	15.0	2.7	43.47	45.14	.04	.04	8	18	108	4.3	4.8	-	IS
1601	13	07	1978	17	26	56.6	0.8	40.78	23.23	.02	.03	4	6	80	3.8	4.0	4.0	IS
1602	19	07	1978	16	08	33.7	0.6	34.24	26.14	.04	.03	46	4	97	3.4	4.6	4.2	IS
1603	27	07	1978	08	30	09.7	0.7	39.15	24.50	.03	.03	16	9	38	-	3.9	4.2	IS
1604	29	07	1978	04	34	43.3	-	37.46	30.04	-	-	-	-	11	4.5	4.7	4.5	IK
1605	29	07	1978	14	53	39.1	-	38.30	32.31	-	-	-	-	10	-	4.0	-	IK
1606	10	08	1978	19	50	26.5	0.6	34.20	47.92	.04	.04	47	7	23	-	4.5	-	IS
1607	13	08	1978	17	20	25.0	1.3	39.30	41.10	.13	.14	128	-	26	-	4.5	-	IS
1608	15	08	1978	09	04	22.0	1.3	41.25	43.99	.04	.04	8	9	108	4.5	4.8	-	IS
1609	20	08	1978	16	11	23.0	-	36.60	29.06	-	-	-	-	9	-	4.3	4.3	IK
1610	22	08	1978	09	29	35.0	-	36.45	27.61	-	-	-	-	11	-	4.0	4.0	IK
1611	22	08	1978	22	48	11.0	1.1	41.94	43.87	.03	.03	4	7	151	4.2	4.8	-	IS
1612	24	08	1978	01	23	51.0	1.3	40.70	23.49	.04	.05	17	15	49	3.3	4.2	3.9	IS
1613	25	08	1978	12	02	09.0	1.6	34.07	25.21	.04	.03	10	10	147	3.6	4.4	4.4	IS
1614	30	08	1978	23	52	08.5	-	37.13	30.61	-	-	-	-	9	-	4.1	-	IK
1615	03	09	1978	00	21	16.7	0.1	44.45	38.01	.02	.02	43	3	364	5.5	5.8	-	IS
1616	09	09	1978	16	32	01.1	0.9	38.45	23.22	.03	.03	23	8	155	4.3	4.4	4.4	IS
1617	14	09	1978	22	24	43.0	1.7	34.70	23.10	.13	.11	40	14	20	-	4.0	3.8	IS
1618	16	09	1978	12	59	18.9	0.6	32.84	46.04	.08	.07	33	-	11	-	4.4	-	IS
1619	16	09	1978	18	21	34.2	0.6	38.58	47.58	.07	.10	33	-	5	-	4.1	-	IS
1620	16	09	1978	21	54	15.4	-	40.61	25.72	-	-	-	-	7	-	4.0	3.9	IK
1621	16	09	1978	22	31	11.0	1.4	40.45	25.63	.04	.05	24	16	39	-	3.4	4.0	IS
1622	18	09	1978	17	34	54.5	-	36.60	29.06	-	-	-	-	7	-	4.0	-	IK
1623	19	09	1978	07	02	35.8	0.9	34.05	25.31	.08	.08	10	-	34	-	3.8	4.3	IS
1624	21	09	1978	11	08	49.0	1.2	38.06	38.65	.04	.03	31	10	95	4.3	4.7	-	IS
1625	21	09	1978	19	37	48.0	1.1	37.97	38.59	.03	.02	22	9	115	4.1	4.6	-	IS
1626	21	09	1978	23	29	19.0	1.6	38.03	38.47	.05	.04	26	13	51	4.2	4.2	-	IS
1627	24	09	1978	06	23	33.3	-	37.78	26.58	-	-	-	-	8	-	4.0	3.6	IK
1628	24	09	1978	20	17	25.0	4.1	34.40	23.50	.31	.22	33	-	17	-	4.0	3.8	IS
1629	24	09	1978	21	33	08.9	0.6	35.34	27.15	.05	.05	58	9	21	-	-	4.1	IS
1630	25	09	1978	23	37	18.5	0.6	38.49	27.32	.06	.08	44	16	33	-	3.9	4.2	IS
1631	29	09	1978	12	03	55.5	0.5	35.24	27.08	.04	.04	52	5	34	-	4.0	4.3	IS
1632	29	09	1978	12	56	50.9	0.5	35.13	27.16	.04	.04	75	6	23	-	3.9	4.2	IS
1633	29	09	1978	23	25	02.7	0.6	35.20	27.17	.05	.04	10	-	14	-	-	4.3	IS
1634	30	09	1978	15	04	03.5	0.8	34.88	23.05	.07	.06	10	-	24	-	4.1	4.3	IS
1635	03	10	1978	09	55	06.7	-	37.67	29.29	-	-	-	-	8	-	4.1	-	IK
1636	07	10	1978	01	49	39.0	1.0	35.80	27.40	.10	.11	33	-	13	-	-	4.0	IS
1637	07	10	1978	10	18	43.5	1.0	36.10	26.99	.09	.08	10	-	18	-	-	4.0	IS
1638	12	10	1978	06	11	13.0	3.0	41.07	33.21	.04	.06	2	21	44	3.3	4.1	-	IS
1639	18	10	1978	23	37	05.4	0.4	34.96	25.97	.04	.04	10	-	116	-	4.5	3.9	IS
1640	19	10	1978	19	52	05.0	3.3	34.00	25.18	.08	.06	14	21	64	-	3.7	4.3	IS
1641	21	10	1978	05	12	22.8	-	40.82	25.49	-	-	-	-	13	-	4.0	4.0	IK
1642	25	10	1978	20	15	29.3	0.2	36.69	27.07	.03	.04	167	4	34	-	4.2	-	IS
1643	29	10	1978	02	14	39.0	1.8	36.04	27.24	.06	.07	9	13	32	-	4.0	4.0	IS
1644	01	11	1978	12	55	12.0	1.2	34.90	26.04	.12	.09	10	-	39	-	4.0	4.1	IS
1645	03	11	1978	05	45	22.0	0.7	35.03	27.82	.06	.07	73	9	35	-	4.1	-	IS
1646	03	11	1978	09	35	03.4	0.6	40.91	32.35	.06	.05	10	-	19	-	-	4.2	IS
1647	03	11	1978	18	54	06.9	0.3	42.50	45.26	.04	.05	33	-	46	-	4.5	-	IS
1648	06	11	1978	22	33	38.0	1.5	35.90	27.20	.15	.14	33	-	18	-	-	4.2	IS
1649	11	11	1978	02	45	55.8	0.8	38.10	38.44	.06	.07	40	10	37	3.7	4.1	-	IS
1650	11	11	1978	02	47	36.9	0.9	37.40	38.10	.19	.11	33	-	28	-	4.5	-	IS

SIRA NO	TARİH			OLUS ZAMANI				KOORDiNATLAR				DERiN-LiK		ist say	MAGNiTUD			Ky
	Gn	Ay	Yil	Sa	Dk	Sn	h_O	Enl.	Boyl.	h_E	h_B		hD		Ms	Mb	Ml	
1651	12	11	1978	06	26	24.0	2.7	35.10	23.40	.23	.19	33	-	23	-	4.3	4.0	IS
1652	15	11	1978	23	48	54.3	0.9	35.22	28.00	.09	.11	33	-	30	-	4.2	-	IS
1653	16	11	1978	04	11	24.0	1.1	34.88	23.25	.05	.05	21	9	43	-	4.5	4.1	IS
1654	23	11	1978	15	24	39.0	1.2	44.17	39.34	.04	.04	25	11	106	3.9	4.6	-	IS
1655	25	11	1978	08	57	25.0	0.8	39.90	44.10	.12	.12	10	-	41	3.7	4.4	-	IS
1656	28	11	1978	18	02	23.9	-	36.31	26.53	-	-	-	-	11	4.5	4.9	4.5	IK
1657	04	12	1978	03	12	37.6	0.4	38.07	37.43	.02	.02	37	4	220	-	4.7	-	IS
1658	06	12	1978	13	09	18.0	1.4	40.50	34.97	.04	.04	17	12	118	4.6	5.1	-	IS
1659	22	12	1978	03	53	18.4	-	36.30	28.03	-	-	-	-	9	-	4.3	-	IK
1660	29	12	1978	22	16	00.0	1.7	34.60	23.00	.15	.11	33	-	18	-	4.3	3.7	IS
1661	31	12	1978	15	56	14.6	0.7	41.99	23.22	.02	.03	21	7	93	4.6	4.5	4.6	IS
1662	31	12	1978	16	26	06.0	1.1	41.97	23.17	.02	.03	9	8	82	-	4.4	4.4	IS
1663	04	01	1979	20	51	22.9	0.6	43.29	46.41	.08	.10	33	-	38	3.7	4.5	-	IS
1664	05	01	1979	10	03	52.8	-	39.92	25.80	-	-	-	-	12	-	4.3	-	IK
1665	09	01	1979	16	33	00.0	6.8	38.30	36.50	.45	.63	-	-	10	-	4.2	-	IS
1666	13	01	1979	04	45	52.8	0.8	35.69	31.05	.06	.06	101	9	51	-	4.1	-	IS
1667	19	01	1979	23	36	58.8	0.3	39.91	39.60	.05	.04	11	-	137	4.3	4.9	-	IS
1668	20	01	1979	03	46	05.3	0.7	39.97	39.64	.07	.05	42	-	37	-	4.6	-	IS
1669	26	01	1979	20	11	33.4	0.9	38.62	23.57	.04	.06	5	9	24	-	4.0	3.6	IS
1670	03	02	1979	00	36	07.0	1.1	38.06	36.60	.09	.14	10	-	25	3.4	4.0	-	IS
1671	03	02	1979	14	49	18.0	1.2	41.32	44.20	.10	.16	3	-	9	-	4.6	-	IS
1672	07	02	1979	10	16	48.3	0.3	39.56	23.26	.02	.03	42	4	84	3.5	4.6	4.3	IS
1673	08	02	1979	12	17	16.3	0.7	34.20	25.19	.07	.10	10	-	39	-	4.3	4.1	IS
1674	08	02	1979	21	29	24.6	0.8	34.47	26.52	.07	.06	57	8	67	3.4	4.2	4.2	IS
1675	09	02	1979	11	20	40.5	0.6	44.67	45.60	.06	.11	3	-	23	3.7	4.4	-	IS
1676	11	02	1979	01	08	34.2	0.7	36.43	23.20	.07	.08	58	10	34	-	4.3	3.5	IS
1677	16	02	1979	04	28	22.2	0.5	36.66	25.82	.03	.04	40	5	128	3.9	4.5	5.0	IS
1678	19	02	1979	04	03	40.3	-	36.13	31.37	-	-	-	-	6	-	4.1	-	IK
1679	22	02	1979	00	29	29.8	0.6	35.01	24.48	.04	.04	53	5	65	-	4.2	3.9	IS
1680	28	02	1979	03	18	08.7	0.3	36.63	27.05	.04	.04	136	4	40	-	4.2	3.9	IS
1681	01	03	1979	02	50	32.8	0.3	39.29	23.28	.03	.04	-	-	34	-	4.2	3.7	IS
1682	02	03	1979	15	35	26.0	2.1	41.28	46.46	.07	.06	19	18	95	4.3	4.7	-	IS
1683	07	03	1979	22	10	06.3	0.9	41.35	46.20	.10	.14	33	-	18	-	4.4	-	IS
1684	11	03	1979	05	11	26.2	0.3	37.60	23.44	.03	.04	156	3	102	-	4.4	3.6	IS
1685	11	03	1979	12	14	27.6	-	39.12	43.91	-	-	44	-	132	4.4	5.0	-	IS
1686	13	03	1979	13	48	58.7	0.8	38.54	24.29	.03	.03	19	5	122	4.3	4.5	4.6	IS
1687	21	03	1979	00	48	21.7	0.8	34.77	27.90	.08	.06	-	-	17	-	4.0	-	IS
1688	21	03	1979	05	04	16.3	0.8	38.50	39.50	.11	.12	10	-	15	-	4.5	-	IS
1689	23	03	1979	12	04	43.0	1.0	35.09	27.70	.09	.05	-	-	15	-	4.0	-	IS
1690	23	03	1979	12	57	42.4	0.5	35.02	28.05	.04	.05	52	6	33	3.5	4.0	-	IS
1691	25	03	1979	21	16	54.9	0.9	32.34	47.84	.10	.10	33	-	9	-	4.3	-	IS
1692	04	04	1979	21	17	16.3	-	36.80	30.21	-	-	-	-	12	3.4	4.3	-	IK
1693	11	04	1979	12	14	27.6	0.5	39.12	43.91	.03	.03	44	5	132	4.4	5.0	-	IS
1694	11	04	1979	22	34	27.5	0.7	39.33	41.51	.07	.06	89	9	33	3.4	4.4	-	IS
1695	12	04	1979	01	02	21.6	-	39.21	25.83	-	-	-	-	10	-	4.1	4.0	IK
1696	12	04	1979	23	09	12.4	0.4	39.14	24.24	.04	.04	10	-	110	-	4.5	4.8	IS
1697	18	04	1979	14	42	50.2	0.5	33.39	46.47	.03	.02	66	5	188	4.1	5.1	-	IS
1698	19	04	1979	15	24	23.6	0.2	41.32	23.53	.02	.03	10	-	46	-	3.3	4.0	IS
1699	21	04	1979	09	40	21.2	-	36.00	29.11	-	-	-	-	6	-	4.0	-	IK
1700	22	04	1979	05	47	49.1	0.9	34.86	25.30	.09	.07	33	-	18	-	4.0	-	IS
1701	25	04	1979	07	33	08.0	1.2	37.60	27.10	.10	.14	-	-	17	-	-	4.0	IS
1702	25	04	1979	07	39	45.0	0.6	41.62	44.08	.07	.09	3	-	27	-	4.6	-	IS
1703	26	04	1979	09	28	01.1	0.5	37.54	36.16	.04	.03	45	5	115	4.0	4.7	-	IS
1704	29	04	1979	19	15	26.7	0.7	36.89	27.24	.05	.06	10	-	22	-	-	4.1	IS
1705	05	05	1979	21	39	18.0	1.7	34.81	25.36	.09	.04	1	7	32	-	3.6	4.0	IS

SIRA NO	TARiH			OLUS ZAMANI				KOORDiNATLAR				DERiN-LiK		ist	MAGNiTUD			Ky
	Gn	Ay	Yil	Sa	Dk	Sn	h_O	Enl.	Boyl.	h_E	h_B		hD	say	Ms	Mb	Ml	
1706	11	05	1979	01	46	26.8	0.8	40.74	23.27	.02	.03	5	6	179	4.5	4.6	4.3	IS
1707	11	05	1979	10	54	53.0	1.3	35.70	27.54	.13	.08	-	-	9	-	-	4.3	IS
1708	12	05	1979	17	52	45.9	-	38.30	26.01	-	-	-	-	15	3.3	4.2	4.0	IK
1709	14	05	1979	00	53	22.2	0.2	39.15	24.38	.02	.03	10	-	35	-	-	4.2	IS
1710	15	05	1979	06	59	22.6	0.3	34.58	24.45	.02	.01	43	3	392	5.5	5.6	5.4	IS
1711	15	05	1979	07	09	20.0	1.2	34.12	24.39	.09	.08	-	-	24	-	4.2	-	IS
1712	16	05	1979	22	20	25.0	1.3	32.60	47.77	.18	.08	33	-	13	-	4.4	-	IS
1713	18	05	1979	15	09	05.4	0.6	34.94	23.43	.04	.03	55	5	163	4.0	4.9	4.4	IS
1714	19	05	1979	09	46	07.0	0.3	38.71	25.46	.03	.03	10	-	49	3.3	4.3	3.8	IS
1715	28	05	1979	09	27	37.7	-	36.63	31.70	-	-	-	-	13	5.5	5.6	-	IK
1716	29	05	1979	14	23	08.5	0.7	40.89	33.58	.07	.07	10	-	16	-	4.1	-	IS
1717	02	06	1979	03	11	59.0	0.3	40.30	24.14	.03	.03	10	-	141	3.8	4.3	4.2	IS
1718	02	06	1979	05	53	15.0	0.9	34.46	26.28	.07	.06	62	7	50	3.4	4.0	4.3	IS
1719	06	06	1979	17	30	56.0	1.3	42.40	46.30	.13	.13	70	20	40	3.4	4.2	-	IS
1720	08	06	1979	20	47	41.1	0.5	38.44	23.14	.04	.05	10	-	26	-	4.6	3.9	IS
1721	14	06	1979	11	44	50.1	-	38.92	26.89	-	-	-	-	12	5.7	5.5	5.5	IK
1722	14	06	1979	13	00	59.6	-	38.91	26.80	-	-	-	-	12	3.5	4.3	4.3	IK
1723	15	06	1979	07	31	27.8	-	38.90	26.83	-	-	-	-	13	-	4.0	3.9	IK
1724	15	06	1979	11	34	16.7	0.5	34.94	24.21	.03	.02	41	4	310	5.1	5.6	5.1	IS
1725	16	06	1979	18	42	02.4	-	38.88	26.76	-	-	-	-	12	5.1	4.9	4.8	IK
1726	17	06	1979	06	40	57.2	0.7	34.75	26.32	.06	.06	10	-	33	-	4.0	4.1	IS
1727	17	06	1979	23	08	39.3	-	38.90	26.72	-	-	-	-	13	4.0	4.4	4.4	IK
1728	18	06	1979	03	25	57.9	0.5	38.68	26.59	.02	.03	7	4	36	-	4.6	3.6	IS
1729	19	06	1979	23	09	57.9	-	38.87	26.78	-	-	-	-	13	4.4	4.5	4.3	IK
1730	22	06	1979	10	34	53.9	-	36.70	29.10	-	-	-	-	12	-	4.1	-	IK
1731	23	06	1979	20	07	39.3	0.9	38.76	23.34	.03	.04	7	7	43	-	4.0	4.1	IS
1732	25	06	1979	19	45	37.2	-	36.14	29.07	-	-	-	-	6	3.5	4.2	-	IK
1733	26	06	1979	03	34	34.3	0.2	39.15	24.40	.02	.02	-	-	53	-	4.0	4.4	IS
1734	26	06	1979	15	34	30.6	0.9	38.81	23.27	.03	.03	4	7	80	3.3	4.5	4.3	IS
1735	26	06	1979	22	38	15.4	0.5	38.72	26.61	.02	.03	2	4	33	-	4.6	3.7	IS
1736	27	06	1979	10	38	20.7	0.7	38.95	26.76	.04	.10	-	-	6	-	4.6	-	IS
1737	28	06	1979	21	22	16.2	-	40.75	31.62	-	-	-	-	13	4.2	4.5	3.8	IK
1738	01	07	1979	09	37	31.8	0.5	34.83	46.17	.04	.03	50	5	106	3.9	4.7	-	IS
1739	02	07	1979	20	40	41.1	-	35.66	29.09	-	-	-	-	6	-	4.0	-	IK
1740	18	07	1979	13	12	03.1	-	39.72	28.50	-	-	-	-	10	5.0	5.2	5.1	IK
1741	20	07	1979	03	54	30.2	0.4	35.40	27.18	.03	.03	55	4	82	3.4	4.2	4.6	IS
1742	23	07	1979	11	41	27.0	1.2	35.19	26.29	.10	.09	53	11	40	-	4.0	-	IS
1743	23	07	1979	11	41	55.1	0.4	35.48	26.37	.02	.02	36	4	341	5.1	5.3	5.1	IS
1744	24	07	1979	08	27	03.6	0.3	39.01	27.75	.02	.03	10	-	29	-	-	4.0	IS
1745	24	07	1979	12	47	16.8	0.7	35.43	26.40	.06	.05	-	-	19	-	3.8	4.0	IS
1746	24	07	1979	23	30	06.8	0.5	35.34	26.33	.04	.03	49	5	91	-	4.3	4.4	IS
1747	25	07	1979	19	29	24.3	0.7	35.28	26.32	.05	.04	40	6	104	3.8	4.3	4.2	IS
1748	26	07	1979	12	11	09.0	1.5	35.78	23.89	.07	.07	16	15	46	3.4	4.0	4.0	IS
1749	31	07	1979	05	49	34.0	1.1	38.70	38.70	.16	.10	10	-	15	3.4	4.2	-	IS
1750	08	08	1979	09	41	52.0	0.9	35.23	26.41	.06	.04	29	8	30	-	3.9	4.0	IS
1751	08	08	1979	14	16	40.2	0.8	35.24	26.43	.07	.05	10	-	35	-	3.9	4.1	IS
1752	08	08	1979	15	50	05.0	1.2	35.23	26.42	.05	.05	26	10	62	-	4.2	4.3	IS
1753	10	08	1979	09	48	50.0	1.1	35.00	26.49	.11	.08	62	12	22	-	4.0	4.0	IS
1754	11	08	1979	22	30	29.2	0.5	35.40	26.34	.03	.02	40	4	218	4.2	4.8	4.5	IS
1755	14	08	1979	17	32	45.5	0.7	33.60	34.56	.08	.08	10	33	47	-	4.3	-	IS
1756	22	08	1979	11	47	32.1	-	38.04	28.82	-	-	-	-	16	-	4.0	4.3	IK
1757	22	08	1979	20	12	49.1	-	36.07	27.58	-	-	-	-	15	4.2	5.1	4.3	IK
1758	23	08	1979	11	28	48.0	1.2	34.51	23.97	.08	.09	42	14	27	3.4	4.0	-	IS
1759	23	08	1979	16	47	46.9	0.6	39.69	28.57	.05	.06	10	-	7	-	5.0	-	IS
1760	23	08	1979	17	35	13.7	-	37.96	28.76	-	-	-	-	12	3.3	4.2	4.2	IK

SIRA	TARiH			OLUS ZAMANI				KOORDiNATLAR				DERiN-LiK		ist	MAGNiTUD			Ky
NO	Gn	Ay	Yil	Sa	Dk	Sn	h_O	Enl.	Boyl.	h_E	h_B		hD	say	Ms	Mb	Ml	
1761	25	08	1979	03	37	05.0	1.1	35.40	26.52	.10	.10	-	-	18	-	-	4.0	IS
1762	28	08	1979	01	26	38.5	0.8	35.45	26.52	.07	.06	-	-	15	-	-	4.0	IS
1763	31	08	1979	15	15	36.0	1.5	40.82	33.73	.04	.04	1	-	63	3.6	4.1	-	IS
1764	31	08	1979	17	24	10.0	1.9	40.73	23.36	.03	.03	11	14	133	4.5	4.3	4.4	IS
1765	01	09	1979	13	02	15.5	0.7	36.43	26.31	.07	.06	10	-	22	3.3	4.2	3.8	IS
1766	03	09	1979	02	58	56.8	0.4	36.05	27.68	.04	.04	88	6	26	-	4.1	4.0	IS
1767	04	09	1979	07	14	04.0	1.1	39.90	43.80	.11	.19	50	-	15	-	4.5	-	IS
1768	08	09	1979	15	09	26.3	0.7	36.00	30.60	.06	.14	49	9	27	-	3.8	4.2	IS
1769	09	09	1979	16	10	13.2	1.0	39.32	28.83	.03	.05	8	7	51	-	3.9	4.2	IS
1770	10	09	1979	03	18	13.0	5.5	44.20	43.10	.47	.51	33	-	8	-	4.2	-	IS
1771	12	09	1979	16	14	54.0	1.2	38.41	39.80	.09	.06	35	13	72	4.2	5.0	-	IS
1772	13	09	1979	12	06	43.1	0.8	42.15	25.29	.02	.04	16	9	71	-	4.7	4.3	IS
1773	14	09	1979	15	39	21.0	-	37.01	30.03	-	-	-	-	7	-	4.2	-	IK
1774	14	09	1979	17	26	48.0	1.3	36.99	30.29	.05	.07	32	13	18	-	4.6	-	IS
1775	15	09	1979	00	49	46.8	1.0	43.09	35.70	.09	.12	33	-	21	-	4.1	-	IS
1776	20	09	1979	10	36	37.6	0.6	35.20	30.89	.04	.06	49	6	64	3.7	4.4	-	IS
1777	27	09	1979	05	35	08.3	0.8	34.65	25.74	.06	.05	41	7	39	-	3.9	4.2	IS
1778	29	09	1979	14	04	26.5	0.9	35.38	27.03	.06	.04	53	7	37	-	4.3	4.4	IS
1779	02	10	1979	04	27	45.4	0.7	34.34	26.46	.06	.05	62	6	62	-	4.4	4.2	IS
1780	12	10	1979	19	29	19.8	0.7	36.62	23.05	.05	.05	40	7	90	3.3	4.7	4.0	IS
1781	14	10	1979	20	38	32.5	0.3	39.35	27.94	.03	.04	10	-	58	-	3.8	4.2	IS
1782	15	10	1979	02	50	15.4	0.6	39.41	27.85	.02	.04	4	5	29	-	-	4.0	IS
1783	17	10	1979	21	34	43.9	0.2	34.55	24.04	.01	.02	125	2	5	-	4.1	-	IS
1784	20	10	1979	22	42	19.3	0.8	35.46	26.57	.05	.05	16	10	16	-	-	4.0	IS
1785	21	10	1979	00	48	11.9	0.5	38.08	23.03	.06	.06	123	7	57	-	4.3	3.0	IS
1786	21	10	1979	13	53	10.6	-	37.14	27.72	-	-	-	-	8	-	4.0	4.2	IK
1787	24	10	1979	10	20	17.5	0.8	35.48	25.26	.08	.07	-	-	24	-	5.2	3.8	IS
1788	26	10	1979	14	11	26.1	0.9	36.91	27.80	.07	.10	10	-	31	-	4.6	3.9	IS
1789	31	10	1979	02	12	41.4	0.8	34.09	25.06	.05	.04	44	7	92	3.4	4.6	4.3	IS
1790	31	10	1979	02	25	59.8	0.8	34.14	23.82	.08	.09	10	-	33	-	-	4.0	IS
1791	02	11	1979	02	06	11.9	0.2	36.63	25.43	.03	.03	158	3	66	-	4.1	-	IS
1792	04	11	1979	06	27	16.0	0.7	35.37	26.54	.08	.03	5	7	12	-	-	4.0	IS
1793	06	11	1979	23	07	31.2	0.7	36.83	27.99	.06	.09	10	-	28	-	4.4	4.0	IS
1794	09	11	1979	05	42	33.5	0.9	36.89	27.93	.03	.04	5	7	65	3.6	4.4	4.3	IS
1795	10	11	1979	01	51	29.7	0.8	35.77	30.80	.07	.14	67	11	33	3.4	4.0	-	IS
1796	15	11	1979	02	18	31.0	0.8	40.82	23.43	.02	.04	7	7	41	-	4.1	3.7	IS
1797	17	11	1979	01	53	50.9	-	36.80	28.98	-	-	-	-	9	-	4.1	-	IK
1798	18	11	1979	02	36	46.0	1.9	34.92	26.70	.07	.07	24	17	42	-	4.3	4.3	IS
1799	21	11	1979	15	36	05.3	0.6	38.19	47.23	.04	.04	41	6	60	4.2	4.6	-	IS
1800	23	11	1979	10	42	17.8	0.4	36.51	27.79	.04	.05	10	-	18	-	-	4.0	IS
1801	10	12	1979	01	12	31.8	0.7	35.00	23.16	.05	.04	58	6	111	3.8	4.7	4.3	IS
1802	21	12	1979	11	52	57.7	0.5	42.64	41.92	.08	.06	3	-	26	3.3	4.4	-	IS
1803	27	12	1979	21	16	50.4	0.4	42.72	41.83	.06	.06	-	-	39	3.6	4.4	-	IS
1804	28	12	1979	03	09	08.1	0.3	37.52	35.85	.02	.02	47	3	247	4.6	5.1	-	IS
1805	30	12	1979	10	56	08.0	1.9	38.40	42.60	.16	.27	33	-	5	3.4	4.4	-	IS
1806	31	12	1979	06	21	38.7	-	36.33	31.32	-	-	-	-	11	5.0	5.3	-	IK
1807	31	12	1979	07	39	39.9	-	36.14	27.57	-	-	-	-	7	-	4.1	4.4	IK
1808	31	12	1979	08	25	04.3	0.5	36.10	31.44	.03	.06	79	5	16	-	4.1	-	IS
1809	02	01	1980	12	52	27.0	1.3	36.56	36.38	.05	.03	32	10	88	-	4.7	-	IS
1810	03	01	1980	13	47	15.8	0.5	40.27	30.83	.05	.05	-	-	37	3.6	4.2	-	IS
1811	04	01	1980	22	00	48.4	0.3	39.27	23.01	.02	.04	10	-	36	-	4.1	3.3	IS
1812	21	01	1980	07	15	52.5	0.3	39.29	23.03	.02	.03	10	-	43	-	4.5	4.0	IS
1813	22	01	1980	09	47	04.3	-	36.43	31.36	-	-	-	-	7	-	3.9	4.0	IK
1814	24	01	1980	17	41	11.0	-	34.20	24.30	-	-	-	-	-	-	3.9	4.2	IS
1815	25	01	1980	23	08	15.4	0.3	39.21	23.03	.03	.04	-	-	64	3.2	4.5	4.2	IS

SIRA NO	TARiH			OLUS ZAMANI				KOORDiNATLAR				DERiN-LiK		ist say	MAGNiTUD			Ky
	Gn	Ay	Yil	Sa	Dk	Sn	h_O	Enl.	Boyl.	h_E	h_B		hD		Ms	Mb	Ml	
1816	02	02	1980	15	22	59.0	2.5	34.50	23.32	.13	.10	10	11	17	-	4.1	-	IS
1817	03	02	1980	09	16	39.7	0.4	39.38	28.29	.02	.03	2	4	29	-	-	4.1	IS
1818	14	02	1980	15	02	51.0	0.5	35.14	26.88	.05	.05	77	5	37	-	4.0	4.3	IS
1819	14	02	1980	20	14	28.8	0.5	39.10	29.35	.04	.07	10	-	45	-	4.2	-	IS
1820	15	02	1980	19	21	57.1	-	40.60	25.90	-	-	-	-	10	-	4.7	4.2	IK
1821	15	02	1980	22	42	57.0	2.4	37.91	38.19	.08	.07	29	18	37	-	4.1	-	IS
1822	16	02	1980	19	08	11.0	1.3	35.54	24.10	.10	.11	63	14	36	3.7	4.4	4.0	IS
1823	18	02	1980	02	10	46.7	-	37.10	27.78	-	-	-	-	12	-	4.4	4.1	IK
1824	18	02	1980	20	35	57.0	2.0	34.30	27.00	.21	.19	-	-	21	-	4.3	-	IS
1825	19	02	1980	01	54	12.4	0.6	40.44	25.81	.05	.07	10	-	13	-	4.2	-	IS
1826	19	02	1980	08	43	30.4	0.8	35.94	31.20	.07	.12	10	-	21	-	4.0	-	IS
1827	19	02	1980	14	16	26.4	-	37.24	27.90	-	-	-	-	11	-	4.4	4.1	IK
1828	20	02	1980	10	26	12.1	0.4	35.78	31.01	.04	.07	66	5	27	-	4.3	-	IS
1829	20	02	1980	22	55	23.5	0.4	40.42	26.04	.03	.05	10	-	33	-	4.2	-	IS
1830	21	02	1980	13	57	06.0	1.5	32.50	47.60	.13	.11	84	16	17	-	4.6	-	IS
1831	21	02	1980	13	59	50.0	1.3	32.50	47.42	.11	.06	74	10	31	-	4.7	-	IS
1832	21	02	1980	14	08	17.3	0.8	32.58	47.52	.06	.04	63	7	44	-	4.9	-	IS
1833	23	02	1980	18	12	42.5	0.8	35.25	26.98	.07	.05	10	-	16	-	-	4.1	IS
1834	28	02	1980	11	03	54.9	0.5	34.29	28.83	.04	.04	-	-	9	-	4.2	-	IS
1835	28	02	1980	23	45	16.6	0.8	38.17	23.23	.04	.03	30	7	154	3.9	4.5	4.3	IS
1836	29	02	1980	04	16	52.3	0.7	38.19	23.22	.04	.04	11	6	26	-	4.6	3.8	IS
1837	02	03	1980	05	32	12.4	0.4	39.26	29.39	.04	.04	6	-	45	-	4.6	-	IS
1838	03	03	1980	06	15	06.1	0.6	38.13	27.75	.05	.07	-	-	25	-	-	4.2	IS
1839	04	03	1980	05	12	34.7	0.5	35.47	23.10	.03	.02	51	4	201	4.1	4.7	4.7	IS
1840	09	03	1980	16	52	24.0	1.5	43.04	23.36	.02	.02	9	11	132	-	4.4	-	IS
1841	10	03	1980	09	21	11.0	5.7	33.60	23.10	.44	.21	-	-	4	-	4.1	-	IS
1842	10	03	1980	22	58	31.0	1.7	34.40	24.89	.16	.07	7	9	30	4.0	4.2	-	IS
1843	18	03	1980	10	38	45.0	3.2	42.40	34.40	.12	.36	10	-	9	-	4.1	-	IS
1844	25	03	1980	03	57	30.0	1.3	39.03	45.58	.09	.09	55	16	54	-	4.6	-	IS
1845	25	03	1980	04	25	25.0	1.2	38.93	45.72	.09	.08	72	15	43	-	4.4	-	IS
1846	27	03	1980	11	13	05.5	0.6	37.20	23.41	.05	.05	-	-	10	-	4.1	2.7	IS
1847	28	03	1980	02	50	50.3	0.9	34.92	23.49	.06	.06	42	9	62	3.4	4.4	3.9	IS
1848	28	03	1980	16	25	55.0	1.1	33.53	46.85	.08	.08	70	13	7	-	4.2	-	IS
1849	29	03	1980	03	58	07.8	-	36.35	28.31	-	-	-	-	10	3.3	4.6	4.3	IK
1850	11	04	1980	18	56	05.4	0.4	36.96	27.84	.03	.04	-	-	19	-	4.6	3.9	IS
1851	15	04	1980	09	30	03.9	0.9	36.73	23.07	.08	.09	39	15	40	-	4.3	3.5	IS
1852	15	04	1980	22	25	14.8	0.4	36.68	27.34	.03	.03	-	-	21	-	4.2	3.8	IS
1853	21	04	1980	17	04	19.0	2.2	40.40	42.20	.24	.22	-	-	8	-	4.0	-	IS
1854	24	04	1980	19	33	43.4	0.3	38.20	23.28	.03	.03	39	4	100	-	4.4	4.3	IS
1855	25	04	1980	00	57	42.8	0.6	40.65	42.57	.07	.09	3	-	26	-	4.3	-	IS
1856	25	04	1980	17	26	06.6	-	38.85	26.43	-	-	-	-	8	-	4.0	3.9	IK
1857	27	04	1980	09	54	25.2	-	39.21	28.94	-	-	-	-	9	-	4.2	4.0	IK
1858	28	04	1980	17	19	31.5	0.3	37.25	24.23	.04	.05	159	4	55	-	4.2	4.0	IS
1859	29	04	1980	02	41	23.8	0.5	35.28	27.93	.04	.06	53	5	44	3.4	3.7	4.4	IS
1860	29	04	1980	21	19	09.0	1.2	37.07	28.73	.03	.08	32	8	14	-	4.5	4.1	IS
1861	30	04	1980	02	28	35.3	0.5	39.58	40.15	.07	.05	33	-	74	3.3	4.6	-	IS
1862	02	05	1980	05	31	10.8	-	36.40	29.43	-	-	-	-	6	5.3	5.3	5.0	IK
1863	03	05	1980	04	26	02.1	-	39.18	28.95	-	-	-	-	8	-	4.1	4.1	IK
1864	04	05	1980	09	22	12.5	-	39.23	28.89	-	-	-	-	8	3.2	4.4	4.2	IK
1865	09	05	1980	12	10	52.0	1.2	39.90	32.60	.08	.15	33	-	17	-	4.3	-	IS
1866	16	05	1980	00	37	29.5	0.4	35.89	27.35	.03	.02	57	4	256	4.6	5.0	5.6	IS
1867	16	05	1980	03	05	38.9	0.6	38.77	45.93	.05	.06	33	7	34	3.7	4.4	-	IS
1868	16	05	1980	19	50	15.7	0.7	38.91	46.00	.06	.06	44	8	59	3.8	4.5	-	IS
1869	18	05	1980	00	14	15.2	0.5	35.77	27.30	.04	.04	-	-	14	-	4.6	-	IS
1870	19	05	1980	15	50	33.4	0.5	37.57	35.92	.04	.03	50	5	52	3.4	4.4	-	IS

SIRA NO	TARiH			OLUS ZAMANI				KOORDiNATLAR				DERiN-LiK		ist say	MAGNiTUD			Ky
	Gn	Ay	Yil	Sa	Dk	Sn	h_O	Enl.	Boyl.	h_E	h_B		hD		Ms	Mb	Ml	
1871	26	05	1980	21	29	42.0	1.6	38.97	31.77	.39	.64	29	16	12	-	4.0	-	IS
1872	29	05	1980	00	33	37.5	0.9	34.88	23.14	.07	.07	-	-	25	-	4.4	3.7	IS
1873	01	06	1980	22	46	46.6	0.7	40.16	41.98	.09	.08	10	-	40	-	4.5	-	IS
1874	11	06	1980	17	16	27.3	-	36.46	27.74	-	-	-	-	7	-	4.3	3.9	IK
1875	13	06	1980	02	08	37.1	0.2	33.75	23.07	.02	.02	19	-	194	-	4.9	4.7	IS
1876	13	06	1980	13	23	04.0	0.7	35.57	23.58	.05	.07	40	11	34	-	4.6	3.7	IS
1877	15	06	1980	05	12	31.0	1.7	33.70	24.90	.12	.14	-	-	7	-	4.3	-	IS
1878	16	06	1980	22	49	24.0	1.0	34.58	23.60	.07	.08	-	-	11	-	4.3	-	IS
1879	22	06	1980	18	05	45.1	0.4	35.48	26.57	.03	.03	50	4	105	-	4.2	4.4	IS
1880	24	06	1980	16	42	00.0	4.9	33.50	24.60	.34	.19	-	-	7	-	4.2	-	IS
1881	04	07	1980	20	48	51.5	0.5	39.29	23.02	.03	.04	5	6	13	-	4.6	3.4	IS
1882	05	07	1980	02	48	03.5	0.7	36.17	33.95	.04	.05	42	7	72	3.7	4.2	-	IS
1883	05	07	1980	06	18	12.5	0.4	39.18	23.00	.04	.05	10	-	31	-	4.8	3.5	IS
1884	09	07	1980	06	41	51.6	0.3	39.26	23.03	.03	.03	-	-	57	-	4.3	3.9	IS
1885	10	07	1980	16	00	23.7	0.9	39.32	23.07	.02	.02	5	7	68	3.5	4.1	3.8	IS
1886	11	07	1980	12	24	29.6	-	38.83	28.95	-	-	-	-	14	-	-	4.2	IK
1887	11	07	1980	12	33	31.8	0.4	38.54	40.83	.03	.02	53	4	193	4.2	5.1	-	IS
1888	12	07	1980	08	51	54.0	1.2	39.29	23.03	.03	.04	12	9	80	3.8	4.3	4.0	IS
1889	12	07	1980	18	49	33.0	1.5	35.10	23.30	.14	.13	88	14	15	-	4.1	4.1	IS
1890	12	07	1980	22	30	38.4	0.6	39.29	23.09	.02	.03	24	8	49	-	4.0	3.9	IS
1891	13	07	1980	13	39	51.0	0.7	39.26	23.04	.02	.02	17	8	46	-	4.0	3.6	IS
1892	14	07	1980	22	39	27.6	0.6	39.27	23.08	.02	.03	25	6	61	-	4.0	3.9	IS
1893	14	07	1980	22	45	32.1	0.3	39.30	23.01	.03	.04	33	-	17	-	4.5	3.3	IS
1894	15	07	1980	00	31	42.0	0.6	39.28	23.07	.03	.03	22	6	106	3.2	4.5	4.4	IS
1895	15	07	1980	11	34	54.5	0.7	39.28	23.12	.02	.03	25	6	128	3.2	4.7	4.4	IS
1896	17	07	1980	02	50	34.9	0.2	39.29	23.02	.02	.03	56	7	36	-	4.6	3.5	IS
1897	17	07	1980	11	09	31.8	0.9	39.26	23.07	.02	.02	13	7	54	-	4.4	3.8	IS
1898	17	07	1980	14	13	43.9	1.0	39.28	23.13	.02	.03	6	7	49	-	4.7	3.6	IS
1899	18	07	1980	04	09	00.8	0.2	39.24	23.07	.02	.03	-	-	40	3.7	4.5	3.9	IS
1900	19	07	1980	20	33	10.2	0.3	39.24	23.91	.03	.04	10	-	93	3.2	4.3	4.4	IS
1901	20	07	1980	19	19	33.1	0.3	35.76	26.17	.03	.03	-	-	24	-	-	4.0	IS
1902	22	07	1980	19	08	51.3	0.5	39.35	23.13	.04	.06	34	11	38	-	4.2	3.6	IS
1903	24	07	1980	10	07	53.4	0.2	39.30	23.19	.02	.03	46	5	66	3.2	4.5	4.0	IS
1904	24	07	1980	10	44	12.3	0.9	39.29	23.05	.02	.02	10	7	88	3.7	4.8	4.3	IS
1905	24	07	1980	13	32	30.7	0.8	39.27	23.17	.03	.04	1	7	71	3.2	4.3	3.8	IS
1906	24	07	1980	22	31	30.8	1.0	39.26	23.15	.03	.04	20	10	59	3.2	4.3	3.8	IS
1907	24	07	1980	22	36	43.1	0.3	39.23	23.14	.03	.04	10	-	37	-	4.6	3.5	IS
1908	28	07	1980	20	39	07.0	0.3	39.26	23.08	.02	.03	37	7	51	-	4.1	3.7	IS
1909	28	07	1980	21	37	32.0	0.7	34.79	25.45	.06	.04	-	-	17	-	-	4.1	IS
1910	29	07	1980	06	48	38.4	0.3	39.88	29.14	.04	.09	21	9	6	-	4.1	-	IS
1911	29	07	1980	20	41	31.2	0.2	39.31	23.01	.02	.02	34	3	204	4.2	4.9	4.9	IS
1912	30	07	1980	09	38	36.4	0.8	39.31	23.12	.02	.03	12	6	58	-	4.1	3.8	IS
1913	02	08	1980	00	52	11.8	0.4	38.93	27.42	.03	.07	-	-	7	-	5.3	-	IS
1914	07	08	1980	22	54	13.6	-	39.41	28.06	-	-	-	-	16	-	-	4.1	IK
1915	08	08	1980	04	10	05.6	0.9	33.96	25.75	.06	.05	33	8	116	3.9	4.2	4.4	IS
1916	12	08	1980	06	25	04.1	-	36.61	28.23	-	-	-	-	11	-	-	4.1	IK
1917	14	08	1980	01	56	05.0	1.5	34.00	26.05	.11	.07	56	12	88	3.8	4.1	4.4	IS
1918	15	08	1980	02	04	29.8	0.7	35.08	27.21	.06	.05	10	-	30	-	-	4.3	IS
1919	20	08	1980	04	55	12.3	0.4	40.68	23.08	.04	.05	10	-	38	-	-	4.0	IS
1920	01	09	1980	16	39	26.7	0.4	37.64	36.15	.05	.04	10	-	44	3.5	4.2	-	IS
1921	05	09	1980	15	02	57.0	0.6	35.73	27.14	.05	.04	-	-	20	-	4.6	4.3	IS
1922	05	09	1980	21	09	51.0	2.2	42.45	45.11	.06	.05	29	19	93	3.3	4.5	-	IS
1923	08	09	1980	23	02	54.0	2.9	34.50	25.29	.16	.04	14	11	15	-	-	4.0	IS
1924	13	09	1980	15	17	49.2	-	37.51	29.71	-	-	-	-	15	-	-	4.2	IK
1925	22	09	1980	19	36	43.6	0.5	35.32	31.86	.04	.05	65	5	53	-	4.2	-	IS

SIRA NO	TARiH			OLUS ZAMANI				KOORDiNATLAR				DERiN-LiK		ist	MAGNiTUD			Ky
	Gn	Ay	Yil	Sa	Dk	Sn	h_O	Enl.	Boyl.	h_E	h_B		hD	say	Ms	Mb	Ml	
1926	23	09	1980	02	43	14.0	1.5	34.68	24.87	.06	.04	5	9	67	3.5	4.3	4.2	IS
1927	02	10	1980	11	21	35.2	0.4	40.09	33.17	.05	.04	33	-	72	-	4.1	-	IS
1928	02	10	1980	23	08	12.8	-	38.06	30.74	-	-	-	-	17	-	4.4	4.4	IK
1929	02	10	1980	23	21	37.8	-	38.07	30.80	-	-	-	-	12	-	4.5	4.0	IK
1930	04	10	1980	15	12	04.0	-	36.84	28.58	-	-	-	-	15	4.8	5.0	4.9	IK
1931	04	10	1980	16	05	39.6	-	36.78	28.59	-	-	-	-	11	-	3.9	4.2	IK
1932	05	10	1980	21	31	40.7	0.6	37.60	37.15	.04	.03	64	6	50	-	4.1	-	IS
1933	07	10	1980	13	58	42.1	-	36.01	28.49	-	-	-	-	7	-	4.2	4.1	IK
1934	10	10	1980	11	09	53.8	0.5	38.40	45.91	.05	.04	47	6	64	3.5	4.8	-	IS
1935	12	10	1980	18	35	23.0	1.1	34.80	23.52	.07	.07	-	-	16	-	4.2	-	IS
1936	14	10	1980	05	40	53.0	2.5	34.30	27.70	.22	.22	-	-	18	-	4.2	-	IS
1937	14	10	1980	09	45	52.5	0.8	35.77	27.10	.07	.06	33	10	37	-	4.0	4.3	IS
1938	18	10	1980	03	14	10.4	0.3	39.91	40.31	.02	.02	37	3	237	4.6	5.1	-	IS
1939	21	10	1980	02	35	43.3	0.8	39.29	23.05	.03	.03	4	6	146	4.1	4.4	4.3	IS
1940	21	10	1980	03	01	55.6	0.5	34.55	29.33	.05	.07	-	-	21	-	4.0	-	IS
1941	21	10	1980	04	07	18.4	0.6	39.29	23.05	.02	.02	7	4	164	4.2	4.6	4.5	IS
1942	24	10	1980	02	04	06.4	2.1	40.02	24.91	.02	.03	10	-	53	-	4.0	3.9	IS
1943	24	10	1980	18	58	15.4	0.5	38.43	25.65	.05	.05	10	-	48	-	4.4	4.6	IS
1944	25	10	1980	05	16	29.4	0.8	37.97	38.61	.08	.05	64	9	44	-	4.6	-	IS
1945	25	10	1980	06	56	20.3	0.2	38.36	25.68	.02	.03	62	7	39	-	4.3	3.6	IS
1946	28	10	1980	16	52	56.0	1.1	40.32	46.09	.05	.05	-	9	33	-	4.0	-	IS
1947	31	10	1980	10	29	23.4	0.8	34.38	23.46	.08	.08	10	-	71	3.6	4.5	4.4	IS
1948	04	11	1980	17	33	22.0	-	38.92	25.42	-	-	-	-	15	-	4.6	3.7	IK
1949	11	11	1980	01	22	29.8	-	36.75	28.53	-	-	-	-	10	-	4.9	4.1	IK
1950	11	11	1980	01	45	55.7	-	36.67	28.54	-	-	-	-	9	-	4.1	4.1	IK
1951	11	11	1980	15	35	42.0	1.2	39.04	24.31	.03	.03	1	9	134	4.4	4.4	4.7	IS
1952	12	11	1980	15	35	42.0	1.2	39.04	24.31	.03	.03	1	9	134	4.4	4.4	4.7	IS
1953	12	11	1980	16	04	46.8	0.2	39.10	24.30	.02	.03	-	-	28	-	4.6	3.6	IS
1954	14	11	1980	11	12	52.1	0.6	39.28	23.09	.03	.04	11	5	30	-	4.6	3.4	IS
1955	14	11	1980	18	04	28.4	0.8	39.10	24.29	.02	.02	1	7	64	3.7	4.4	4.4	IS
1956	15	11	1980	05	29	08.5	0.6	36.60	25.55	.06	.06	10	-	36	-	4.4	3.8	IS
1957	19	11	1980	23	13	09.1	0.3	35.17	26.29	.03	.03	90	3	51	-	4.3	3.8	IS
1958	20	11	1980	10	58	43.0	0.6	35.07	24.52	.05	.04	75	5	66	-	4.2	-	IS
1959	22	11	1980	10	32	48.0	1.1	38.30	39.30	.17	.12	10	-	44	3.4	4.2	-	IS
1960	25	11	1980	02	31	02.7	-	38.60	25.28	-	-	-	-	12	-	4.5	4.2	IK
1961	27	11	1980	15	49	55.3	-	39.19	27.65	-	-	-	-	12	-	-	4.1	IK
1962	29	11	1980	10	00	34.8	-	40.15	26.97	-	-	-	-	5	-	-	4.9	IK
1963	29	11	1980	20	03	10.2	0.8	38.47	25.36	.03	.03	1	6	157	3.8	4.7	4.6	IS
1964	30	11	1980	00	40	36.1	0.5	35.18	27.16	.04	.03	60	5	91	-	4.4	4.7	IS
1965	30	11	1980	01	08	40.5	-	36.46	31.23	-	-	-	-	13	3.7	4.7	4.6	IK
1966	03	12	1980	06	53	32.8	0.7	34.83	23.61	.07	.05	-	-	47	-	4.7	4.0	IS
1967	08	12	1980	06	29	12.1	0.4	38.91	27.67	.03	.05	-	-	25	-	-	4.0	IS
1968	09	12	1980	20	17	30.7	0.7	35.88	23.71	.06	.08	10	-	26	3.4	4.4	3.8	IS
1969	11	12	1980	00	14	36.0	1.1	40.31	46.07	.03	.03	18	9	105	3.8	4.8	-	IS
1970	11	12	1980	11	55	06.6	1.0	34.63	23.96	.06	.05	41	8	119	4.2	4.5	4.4	IS
1971	14	12	1980	01	15	09.4	0.6	33.25	46.71	.06	.06	141	11	7	-	4.4	-	IS
1972	15	12	1980	22	48	17.6	0.4	35.78	44.59	.02	.02	65	4	210	4.7	4.0	-	IS
1973	16	12	1980	11	21	09.9	0.5	35.07	26.92	.05	.03	79	5	25	-	3.9	4.2	IS
1974	16	12	1980	17	13	25.3	0.2	38.80	26.65	.02	.02	10	-	28	-	4.6	4.1	IS
1975	18	12	1980	12	34	20.1	0.4	35.94	44.65	.02	.02	74	3	332	5.8	5.4	-	IS
1976	18	12	1980	14	31	33.7	0.9	35.76	44.35	.06	.07	44	10	34	-	4.8	-	IS
1977	18	12	1980	16	40	58.6	0.5	36.03	44.10	.06	.11	-	-	8	-	4.6	-	IS
1978	18	12	1980	19	56	18.0	1.2	34.88	24.52	.05	.05	3	7	24	-	4.5	3.9	IS
1979	19	12	1980	07	49	21.8	-	38.02	27.58	-	-	-	-	12	-	4.7	4.0	IK
1980	19	12	1980	13	42	08.7	0.9	35.56	44.42	.06	.05	58	9	66	-	4.7	-	IS

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	Gn	Ay	Yil	Sa	Dk	Sn	h_O	Enl.	Boyl.	h_E	h_B		hD		Ms	Mb	Ml	
1981	19	12	1980	14	37	55.0	1.3	34.90	24.56	.06	.06	11	8	19	-	4.6	3.9	IS
1982	20	12	1980	04	15	42.0	1.6	35.99	45.40	.07	.22	-	-	4	-	4.3	-	IS
1983	21	12	1980	16	28	33.2	-	39.26	25.22	-	-	-	-	14	3.7	4.5	4.2	IK
1984	29	12	1980	21	53	07.3	0.7	38.55	44.98	.06	.05	66	7	43	-	4.6	-	IS
1985	30	12	1980	00	40	36.1	0.5	35.18	27.16	.04	.03	60	5	91	-	4.4	4.7	IS
1986	30	12	1980	12	40	35.7	0.4	39.34	23.17	.04	.05	40	12	51	-	4.3	3.8	IS
1987	03	01	1981	06	01	41.5	-	36.71	28.61	-	-	-	-	11	-	4.8	4.0	IK
1988	04	01	1981	07	19	46.3	0.9	38.48	44.91	.03	.03	38	9	72	3.9	4.7	-	IS
1989	07	01	1981	20	37	21.7	0.5	34.71	25.38	.04	.04	67	4	53	-	4.4	4.0	IS
1990	13	01	1981	20	22	47.5	-	38.92	25.55	-	-	-	-	11	-	4.2	4.0	IK
1991	15	01	1981	16	39	45.9	0.3	34.71	24.06	.07	.06	50	8	42	-	4.3	4.0	IS
1992	20	01	1981	08	27	49.0	1.1	38.05	38.59	.04	.03	24	8	215	4.7	5.1	-	IS
1993	22	01	1981	16	25	44.9	0.5	34.16	25.25	.03	.02	49	4	217	4.8	4.8	4.6	IS
1994	25	01	1981	04	26	49.1	0.6	36.16	27.74	.06	.07	57	8	33	-	4.1	4.1	IS
1995	25	01	1981	06	15	20.0	0.4	39.09	27.99	.02	.03	2	4	30	-	-	4.1	IS
1996	25	01	1981	19	37	32.0	1.8	43.86	39.21	.06	.05	2	13	64	-	4.4	-	IS
1997	26	01	1981	06	28	36.5	0.6	43.83	39.40	.07	.10	-	-	14	-	4.5	-	IS
1998	29	01	1981	07	24	10.5	-	35.69	30.39	-	-	-	-	8	3.8	4.6	4.4	IK
1999	29	01	1981	23	00	53.4	-	36.78	30.49	-	-	-	-	6	-	4.2	4.3	IK
2000	30	01	1981	05	28	12.9	0.7	36.36	30.64	.07	.06	67	7	9	-	4.3	-	IS
2001	04	02	1981	22	11	23.9	0.4	40.97	40.26	.06	.07	33	-	9	-	4.1	-	IS
2002	09	02	1981	13	34	39.7	0.8	34.29	23.57	.07	.06	-	-	25	-	4.5	4.0	IS
2003	09	02	1981	20	58	33.0	1.2	34.06	25.81	.04	.03	27	8	175	3.8	4.7	4.2	IS
2004	10	02	1981	08	01	59.8	1.0	34.29	23.60	.06	.04	36	8	156	4.6	4.6	4.5	IS
2005	10	02	1981	08	05	33.5	0.8	34.32	23.76	.05	.05	54	7	59	-	4.2	4.3	IS
2006	10	02	1981	11	38	03.0	1.4	34.23	23.79	.06	.06	28	11	71	3.4	4.2	4.0	IS
2007	11	02	1981	04	05	08.0	1.1	34.28	23.74	.04	.03	31	7	180	4.5	4.6	4.4	IS
2008	12	02	1981	18	43	23.5	0.7	42.63	45.10	.09	.13	33	-	22	-	4.4	-	IS
2009	19	02	1981	02	41	55.6	0.4	36.35	36.42	.03	.02	52	4	102	3.8	4.6	-	IS
2010	23	02	1981	04	06	40.3	0.3	41.83	46.08	.03	.02	35	4	265	4.9	5.1	-	IS
2011	24	02	1981	21	35	06.1	0.8	38.14	23.09	.04	.04	12	7	60	-	4.1	4.0	IS
2012	24	02	1981	21	53	30.1	0.4	38.16	23.06	.04	.04	32	7	29	-	3.8	4.0	IS
2013	24	02	1981	22	26	18.3	0.3	38.18	23.05	.03	.03	-	-	23	-	4.1	3.7	IS
2014	24	02	1981	22	29	42.1	0.4	38.12	23.01	.03	.02	40	4	144	-	4.4	4.0	IS
2015	24	02	1981	22	41	08.0	0.5	36.44	36.18	.05	.04	36	5	31	-	4.4	-	IS
2016	24	02	1981	23	01	53.1	0.6	38.18	23.03	.03	.03	7	6	55	-	4.1	3.7	IS
2017	24	02	1981	23	17	19.2	0.3	38.25	23.03	.02	.02	46	4	72	-	4.4	4.1	IS
2018	25	02	1981	01	00	23.3	0.3	38.11	23.21	.03	.03	33	-	46	-	4.1	3.5	IS
2019	25	02	1981	01	15	33.1	0.9	38.11	23.10	.04	.04	18	9	84	3.3	4.2	4.0	IS
2020	25	02	1981	01	57	57.2	0.3	38.14	23.12	.02	.02	37	3	264	4.3	4.8	5.2	IS
2021	25	02	1981	02	35	53.5	0.4	38.17	23.12	.02	.01	30	3	442	6.3	5.7	5.9	IS
2022	25	02	1981	03	18	26.8	0.3	38.14	23.00	.04	.03	33	-	45	-	4.1	3.7	IS
2023	25	02	1981	04	30	19.0	0.3	38.20	23.13	.02	.02	47	3	134	-	4.4	4.2	IS
2024	25	02	1981	05	08	16.4	0.3	39.19	23.20	.03	.02	34	3	224	4.4	4.8	5.1	IS
2025	25	02	1981	05	09	58.7	0.5	38.28	23.15	.07	.07	33	-	38	-	4.6	4.9	IS
2026	25	02	1981	06	08	43.9	0.4	38.18	23.12	.03	.03	40	4	112	-	4.5	4.1	IS
2027	25	02	1981	06	59	42.2	0.2	38.21	23.13	.02	.02	41	3	112	3.6	4.4	4.3	IS
2028	25	02	1981	10	07	43.7	0.4	38.26	23.10	.03	.03	35	5	102	4.5	4.3	4.2	IS
2029	25	02	1981	11	34	26.6	0.9	38.20	23.23	.04	.04	1	8	37	-	4.2	4.2	IS
2030	25	02	1981	13	53	35.1	0.4	38.15	23.21	.03	.03	47	5	87	4.4	4.2	4.1	IS
2031	25	02	1981	18	10	10.5	0.4	38.21	23.11	.04	.04	-	-	13	-	4.4	3.2	IS
2032	25	02	1981	21	10	18.0	0.5	35.97	27.42	.05	.04	48	5	46	-	4.2	4.2	IS
2033	26	02	1981	02	43	32.6	0.4	38.20	23.00	.02	.03	22	5	32	-	4.1	4.0	IS
2034	26	02	1981	02	58	33.3	0.7	38.09	23.05	.04	.04	22	7	83	3.3	4.0	4.3	IS
2035	26	02	1981	14	49	25.3	0.4	38.12	22.79	.03	.04	-	-	27	-	4.1	3.5	IS

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	Gn	Ay	Yil	Sa	Dk	Sn	h_O	Enl.	Boyl.	h_E	h_B		hD		Ms	Mb	Ml	
2036	26	02	1981	16	09	21.1	0.3	38.24	23.23	.03	.03	44	5	57	-	4.3	4.1	IS
2037	26	02	1981	19	30	47.0	1.1	38.21	23.17	.03	.03	11	8	114	-	4.4	4.2	IS
2038	26	02	1981	20	09	04.1	0.3	38.17	23.22	.03	.03	10	-	54	-	3.6	4.2	IS
2039	27	02	1981	01	01	47.0	1.1	38.14	23.27	.03	.03	12	8	96	3.6	4.4	4.3	IS
2040	27	02	1981	01	11	14.7	0.9	38.25	23.19	.05	.04	21	10	65	3.3	4.1	4.0	IS
2041	27	02	1981	03	24	04.8	0.3	38.27	23.15	.03	.03	-	-	11	-	4.6	3.4	IS
2042	27	02	1981	03	47	08.4	0.4	38.20	23.06	.03	.03	20	6	23	-	4.2	3.8	IS
2043	27	02	1981	06	54	55.8	0.3	38.16	23.25	.03	.04	26	-	38	-	4.4	3.9	IS
2044	27	02	1981	09	00	40.1	0.6	38.28	23.25	.02	.03	10	6	24	-	4.6	3.8	IS
2045	28	02	1981	13	00	54.0	0.4	38.15	23.27	.03	.03	38	5	90	4.0	4.5	4.2	IS
2046	28	02	1981	17	06	24.4	0.6	38.17	23.27	.02	.02	28	5	214	4.7	4.7	4.5	IS
2047	28	02	1981	19	50	49.0	1.3	35.10	24.95	.12	.06	48	9	21	-	-	4.0	IS
2048	01	03	1981	05	11	59.7	0.5	38.08	23.01	.04	.04	45	5	94	3.5	4.6	4.1	IS
2049	02	03	1981	13	13	47.0	1.1	38.23	23.35	.03	.03	13	9	61	-	4.4	3.9	IS
2050	02	03	1981	21	37	48.3	0.5	40.69	23.21	.02	.03	23	5	145	3.1	4.5	4.2	IS
2051	03	03	1981	10	27	09.0	1.1	38.10	23.22	.04	.03	11	8	91	-	4.3	4.3	IS
2052	03	03	1981	10	28	03.0	2.5	38.60	23.50	.16	.40	-	-	14	-	3.6	4.1	IS
2053	03	03	1981	13	04	29.0	1.4	38.15	23.26	.04	.04	2	12	42	-	3.7	4.1	IS
2054	03	03	1981	17	00	53.0	1.2	38.21	23.32	.06	.06	16	14	45	3.2	4.1	3.8	IS
2055	03	03	1981	17	01	43.4	1.0	38.30	23.30	.10	.10	-	-	42	-	4.5	4.3	IS
2056	04	03	1981	13	48	35.2	0.3	38.30	23.16	.02	.02	39	3	121	3.5	4.4	4.3	IS
2057	04	03	1981	18	21	38.9	0.5	38.18	23.30	.04	.05	37	7	77	3.3	4.4	4.1	IS
2058	04	03	1981	19	12	55.1	0.3	38.16	23.34	.03	.03	36	5	60	-	4.2	3.9	IS
2059	04	03	1981	21	58	07.2	0.5	38.24	23.26	.02	.02	32	4	459	6.4	5.9	5.8	IS
2060	04	03	1981	22	03	11.0	-	38.20	23.20	-	-	-	-	-	-	-	4.0	IS
2061	04	03	1981	22	14	30.4	0.5	38.24	23.33	.04	.04	41	7	55	-	4.5	4.3	IS
2062	04	03	1981	22	31	08.0	0.7	38.21	23.24	.03	.03	22	6	106	-	4.4	4.4	IS
2063	04	03	1981	22	34	32.0	1.2	37.90	23.20	.12	.13	62	14	19	-	4.0	3.9	IS
2064	04	03	1981	22	38	14.9	0.9	38.18	23.10	.09	.12	-	-	15	-	4.2	3.8	IS
2065	04	03	1981	22	43	06.6	0.8	38.16	23.10	.09	.10	-	-	14	-	4.1	3.6	IS
2066	04	03	1981	22	47	29.0	1.0	38.32	23.38	.04	.04	3	8	48	-	4.2	4.2	IS
2067	04	03	1981	22	56	46.0	1.4	38.21	23.25	.07	.07	25	15	46	-	4.4	4.0	IS
2068	04	03	1981	23	04	49.8	0.4	38.16	23.21	.04	.03	36	5	155	-	4.6	4.5	IS
2069	04	03	1981	23	06	48.0	1.3	38.19	23.15	.09	.07	3	12	9	-	-	4.0	IS
2070	04	03	1981	23	17	52.0	0.7	38.21	23.25	.04	.06	25	7	36	-	4.3	4.2	IS
2071	04	03	1981	23	22	11.5	0.5	38.23	23.29	.02	.03	21	5	38	-	4.2	3.9	IS
2072	04	03	1981	23	42	58.4	0.6	38.30	23.18	.06	.06	-	-	9	-	4.4	3.2	IS
2073	04	03	1981	23	59	21.6	0.7	38.25	23.42	.04	.06	28	8	41	-	4.4	3.8	IS
2074	05	03	1981	00	35	20.8	0.5	38.18	23.26	.04	.05	11	-	28	-	4.4	3.9	IS
2075	05	03	1981	00	50	37.7	0.8	38.15	23.25	.05	.05	2	7	62	-	4.3	4.1	IS
2076	05	03	1981	01	10	16.5	0.4	38.14	23.19	.03	.03	43	4	136	3.8	4.5	4.7	IS
2077	05	03	1981	02	53	48.6	0.9	38.32	23.45	.05	.05	19	13	43	3.2	4.1	4.1	IS
2078	05	03	1981	04	30	24.9	0.9	38.27	23.46	.06	.09	31	10	18	3.0	4.0	3.7	IS
2079	05	03	1981	06	59	07.9	0.4	38.20	23.13	.02	.02	31	3	325	5.2	5.3	5.6	IS
2080	05	03	1981	10	29	46.1	0.7	38.17	23.29	.03	.03	3	5	88	-	4.5	4.2	IS
2081	05	03	1981	12	53	36.5	0.5	38.22	23.28	.04	.05	10	-	30	-	4.3	3.7	IS
2082	05	03	1981	15	44	06.8	0.5	38.20	23.19	.03	.04	20	6	48	-	4.2	3.9	IS
2083	05	03	1981	16	14	45.6	0.4	38.22	23.28	.04	.04	-	-	15	-	4.2	4.5	IS
2084	05	03	1981	18	08	27.1	0.7	38.17	23.21	.05	.05	1	9	19	-	-	4.0	IS
2085	05	03	1981	19	05	08.3	0.7	38.21	23.12	.04	.04	3	6	36	-	4.2	3.5	IS
2086	05	03	1981	21	26	22.1	0.4	38.27	23.38	.03	.04	35	-	47	-	4.2	3.9	IS
2087	05	03	1981	21	54	39.6	0.3	38.20	23.34	.02	.02	40	3	109	-	4.4	4.3	IS
2088	05	03	1981	23	58	37.3	0.8	38.29	23.45	.04	.05	20	11	36	-	3.6	4.0	IS
2089	06	03	1981	23	34	20.1	0.4	38.34	23.16	.04	.04	-	-	13	-	4.5	3.2	IS
2090	07	03	1981	11	34	44.3	0.4	38.19	23.27	.02	.02	33	3	353	4.8	5.5	5.1	IS

SIRA NO	TARiH Gn	Ay	Yil	OLUS ZAMANI Sa	Dk	Sn	h_O	KOORDiNATLAR Enl.	Boyl.	h_E	h_B	DERiN-LiK	hD	ist say	MAGNiTUD Ms	Mb	Ml	Ky
2091	07	03	1981	11	51	37.0	0.5	38.19	23.21	.03	.02	28	5	125	4.1	4.6	4.5	IS
2092	07	03	1981	16	54	34.3	0.3	38.24	23.35	.03	.03	16	-	60	-	4.3	4.3	IS
2093	07	03	1981	20	12	58.7	0.5	38.21	23.26	.04	.04	9	-	49	-	-	4.0	IS
2094	08	03	1981	02	18	19.0	0.4	38.16	23.06	.04	.04	13	-	55	-	4.1	4.1	IS
2095	09	03	1981	07	00	07.4	0.4	38.21	23.27	.03	.04	10	-	32	-	4.0	3.8	IS
2096	10	03	1981	01	49	01.6	1.0	38.18	23.16	.04	.04	1	8	75	-	4.1	3.9	IS
2097	10	03	1981	03	06	15.8	0.3	38.05	23.01	.03	.03	13	-	61	-	4.1	3.8	IS
2098	11	03	1981	03	40	03.6	0.9	38.13	23.26	.04	.05	22	11	46	-	4.1	3.7	IS
2099	11	03	1981	07	34	13.4	0.4	38.18	23.33	.04	.04	42	8	66	-	4.3	4.4	IS
2100	12	03	1981	01	49	40.5	0.5	38.22	23.28	.02	.02	27	4	163	4.4	4.8	4.6	IS
2101	12	03	1981	04	05	58.3	-	40.85	28.06	-	-	-	-	13	4.8	4.6	4.6	IK
2102	12	03	1981	11	12	44.0	1.9	34.00	23.90	.15	.11	-	-	17	-	4.1	4.1	IS
2103	13	03	1981	12	35	36.5	0.5	38.17	23.22	.04	.05	10	-	32	-	4.4	3.6	IS
2104	13	03	1981	22	44	50.7	0.5	38.20	23.11	.05	.05	-	-	19	-	4.3	3.5	IS
2105	15	03	1981	08	43	21.9	0.7	43.74	44.20	.08	.11	20	-	61	3.6	4.2	-	IS
2106	16	03	1981	01	52	13.8	0.3	38.13	23.14	.03	.02	22	-	156	3.7	4.6	4.3	IS
2107	18	03	1981	16	55	30.7	0.9	38.15	23.21	.03	.03	12	6	145	3.7	4.5	4.7	IS
2108	19	03	1981	15	18	46.8	0.9	38.20	23.29	.04	.04	2	7	67	3.8	4.2	4.1	IS
2109	24	03	1981	11	35	54.0	0.4	38.24	23.28	.03	.04	-	-	32	-	4.1	3.9	IS
2110	25	03	1981	04	46	37.3	-	37.83	31.65	-	-	-	-	12	-	4.6	4.0	IK
2111	26	03	1981	14	40	14.6	0.3	38.16	23.11	.03	.02	37	4	103	-	4.3	4.4	IS
2112	27	03	1981	08	56	43.0	2.5	35.20	23.12	.15	.10	33	14	27	-	3.8	4.1	IS
2113	31	03	1981	09	52	41.3	0.3	38.20	23.14	.03	.03	-	-	16	-	4.1	3.2	IS
2114	31	03	1981	23	20	03.4	0.9	38.33	23.40	.03	.30	8	7	48	-	4.0	3.7	IS
2115	02	04	1981	01	38	39.0	0.4	39.10	23.35	.03	.04	10	-	49	-	3.7	4.1	IS
2116	02	04	1981	22	40	08.0	1.4	34.20	25.41	.11	.06	77	10	78	3.4	4.2	4.2	IS
2117	03	04	1981	18	36	31.0	0.3	39.13	24.56	.03	.03	10	-	110	3.6	4.1	4.4	IS
2118	07	04	1981	15	15	23.5	0.6	35.56	44.51	.08	.02	33	-	8	-	4.3	-	IS
2119	08	04	1981	13	49	40.0	1.5	36.70	36.30	.13	.12	-	-	28	-	-	4.0	IS
2120	10	04	1981	03	16	43.0	1.2	39.00	33.10	.08	.11	38	12	21	-	4.0	-	IS
2121	11	04	1981	19	21	20.5	-	38.27	26.13	-	-	-	-	7	-	4.1	3.9	IK
2122	13	04	1981	08	11	53.1	0.4	38.13	23.46	.03	.05	13	-	45	-	4.5	4.3	IS
2123	13	04	1981	19	41	45.1	0.8	39.94	40.67	.07	.06	52	10	40	-	4.5	-	IS
2124	17	04	1981	04	36	56.0	0.4	44.04	38.69	.02	.08	33	-	13	-	4.2	-	IS
2125	18	04	1981	08	07	08.8	0.3	38.28	23.18	.03	.03	38	4	113	3.3	4.3	4.3	IS
2126	19	04	1981	04	37	20.0	1.0	34.76	23.78	.08	.04	56	7	83	3.7	4.5	-	IS
2127	25	04	1981	21	59	24.6	0.8	38.29	23.30	.23	.22	-	-	72	2.9	4.2	3.9	IS
2128	26	04	1981	14	13	29.7	-	36.55	30.51	-	-	-	-	16	5.2	5.4	5.1	IK
2129	27	04	1981	16	23	55.2	-	36.37	28.79	-	-	-	-	12	3.4	4.4	4.5	IK
2130	29	04	1981	19	48	49.8	-	37.35	44.89	-	-	-	-	5	-	4.4	-	IS
2131	03	05	1981	19	54	46.8	-	36.52	30.59	-	-	-	-	16	3.5	4.1	4.4	IK
2132	03	05	1981	20	41	11.2	-	40.83	27.99	-	-	-	-	14	3.7	4.1	4.4	IK
2133	04	05	1981	16	13	59.2	0.6	34.33	45.73	.04	.03	53	6	126	4.1	4.8	-	IS
2134	08	05	1981	09	19	39.1	-	36.34	27.61	-	-	-	-	15	3.2	4.6	4.3	IK
2135	09	05	1981	07	22	49.1	0.7	34.24	25.83	.05	.03	53	5	127	3.4	4.6	-	IS
2136	09	05	1981	14	01	00.3	0.6	38.18	23.30	.05	.04	36	7	119	-	4.3	4.4	IS
2137	10	05	1981	05	30	30.0	2.7	34.10	23.20	.22	.12	-	-	24	-	4.0	4.2	IS
2138	11	05	1981	19	15	23.5	-	36.87	27.76	-	-	-	-	16	4.0	4.7	4.8	IK
2139	12	05	1981	04	48	14.0	1.0	34.85	24.31	.08	.08	82	9	45	-	4.4	4.0	IS
2140	12	05	1981	17	43	05.7	0.2	42.88	45.75	.02	.02	52	3	275	4.4	5.2	-	IS
2141	15	05	1981	09	36	16.3	0.6	38.12	23.06	.02	.03	7	5	27	-	4.3	3.6	IS
2142	19	05	1981	22	33	26.0	1.4	35.10	26.64	.12	.05	16	9	21	-	4.2	3.8	IS
2143	23	05	1981	21	00	41.7	0.3	39.11	24.45	.03	.03	10	-	143	4.5	4.5	4.9	IS
2144	24	05	1981	00	03	44.6	0.4	39.23	24.63	.03	.05	35	13	26	-	4.0	3.8	IS
2145	24	05	1981	21	12	25.4	0.7	38.52	45.43	.06	.05	46	8	79	3.7	4.5	-	IS

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	Gn	Ay	Yil	Sa	Dk	Sn	h_O	Enl.	Boyl.	h_E	h_B		hD		Ms	Mb	Ml	
2146	24	05	1981	22	07	09.0	0.7	38.41	45.46	.05	.04	47	7	105	3.7	4.6	-	IS
2147	28	05	1981	21	04	02.6	-	37.11	29.58	-	-	-	-	8	-	-	4.1	IK
2148	31	05	1981	04	29	20.5	0.6	38.14	23.25	.03	.03	26	6	104	3.5	4.4	4.2	IS
2149	01	06	1981	08	47	27.0	-	35.48	26.48	-	-	-	-	14	5.0	5.1	5.0	IK
2150	02	06	1981	19	07	17.2	-	39.30	27.58	-	-	-	-	17	3.6	4.1	4.4	IK
2151	05	06	1981	18	29	05.2	0.8	43.03	46.12	.07	.09	40	13	22	3.0	4.1	-	IS
2152	07	06	1981	16	05	26.3	0.8	36.13	26.99	.06	.06	-	-	8	-	-	4.0	IS
2153	08	06	1981	21	06	49.0	2.9	36.20	28.90	.13	.29	68	8	12	-	4.1	-	IS
2154	10	06	1981	19	12	17.2	0.9	35.40	27.00	.08	.05	-	-	6	-	-	4.2	IS
2155	11	06	1981	02	49	55.0	1.6	34.40	25.44	.12	.05	-	-	19	-	-	4.2	IS
2156	16	06	1981	19	38	29.5	0.4	38.05	23.18	.03	.30	35	6	35	-	4.3	4.0	IS
2157	17	06	1981	12	17	54.9	0.7	38.13	23.15	.03	.04	22	7	67	-	4.3	4.0	IS
2158	21	06	1981	05	10	07.8	0.5	38.15	23.27	.03	.02	21	5	97	3.2	4.1	4.2	IS
2159	23	06	1981	17	03	55.0	1.7	40.00	38.00	.25	.12	33	-	15	-	4.5	-	IS
2160	24	06	1981	23	12	38.0	1.3	33.70	24.20	.10	.10	-	-	16	-	4.1	4.0	IS
2161	28	06	1981	16	52	30.9	0.2	33.50	45.43	.03	.04	119	4	5	-	4.5	-	IS
2162	29	06	1981	22	02	09.8	0.3	38.32	23.39	.03	.03	40	7	40	-	4.2	3.8	IS
2163	30	06	1981	07	59	08.5	0.6	36.17	35.89	.04	.03	63	-	112	3.9	4.6	-	IS
2164	02	07	1981	03	14	40.6	1.0	38.35	23.35	.04	.03	5	10	47	-	4.0	3.6	IS
2165	02	07	1981	12	35	09.1	0.4	38.24	23.28	.02	.02	17	6	40	-	4.1	3.7	IS
2166	05	07	1981	22	57	58.0	3.0	33.70	24.50	.26	.12	-	-	23	-	4.3	4.2	IS
2167	06	07	1981	06	50	10.0	1.7	34.00	24.80	.12	.07	-	-	7	-	4.3	-	IS
2168	06	07	1981	21	25	11.0	1.9	35.30	44.70	.11	.14	31	32	-	-	4.6	-	IS
2169	08	07	1981	15	01	08.0	3.4	34.90	26.00	.28	.12	-	-	5	-	4.1	-	IS
2170	15	07	1981	00	47	09.0	1.1	33.60	46.70	.11	.12	33	-	17	-	4.4	-	IS
2171	15	07	1981	17	41	17.6	-	33.89	45.34	-	-	87	-	10	-	4.6	-	IS
2172	19	07	1981	22	13	42.6	0.4	38.23	23.12	.03	.03	25	5	63	-	4.1	3.9	IS
2173	21	07	1981	09	43	37.2	0.8	40.23	28.86	.04	.05	1	6	59	-	4.0	4.6	IS
2174	22	07	1981	22	02	45.9	0.6	40.27	28.90	.02	.03	2	5	67	-	4.0	4.5	IS
2175	23	07	1981	00	05	32.6	0.3	37.11	45.21	.02	.01	51	3	361	5.6	5.6	-	IS
2176	23	07	1981	06	15	53.5	0.3	43.06	27.46	.03	.05	51	7	70	-	4.1	-	IS
2177	23	07	1981	14	07	17.2	0.6	37.27	45.44	.05	.08	79	8	35	4.0	4.6	-	IS
2178	23	07	1981	16	35	28.1	1.0	40.30	28.94	.03	.04	7	8	39	-	4.2	-	IS
2179	24	07	1981	14	54	31.6	1.0	38.10	37.90	.11	.11	10	-	39	-	4.5	-	IS
2180	25	07	1981	22	26	06.2	0.8	36.73	24.49	.03	.04	11	7	17	-	4.6	3.2	IS
2181	26	07	1981	04	16	27.3	0.6	38.22	23.18	.02	.03	14	5	61	-	4.3	3.8	IS
2182	26	07	1981	08	21	46.2	0.2	38.22	23.37	.02	.03	19	-	27	-	4.0	3.4	IS
2183	28	07	1981	13	28	43.5	-	37.26	30.66	-	-	-	-	8	-	-	4.0	IK
2184	31	07	1981	14	37	13.0	1.2	34.80	27.21	.12	.04	19	11	8	-	-	4.3	IS
2185	06	08	1981	03	27	29.3	1.0	35.48	26.52	.09	.06	-	-	9	-	-	4.2	IS
2186	10	08	1981	05	21	29.5	-	36.27	29.82	-	-	-	-	13	3.9	4.6	4.6	IK
2187	11	08	1981	05	26	43.0	1.2	36.10	27.13	.12	.08	-	-	8	-	-	4.0	IS
2188	15	08	1981	05	46	30.8	-	37.08	29.53	-	-	-	-	10	-	4.1	4.1	IK
2189	17	08	1981	14	43	59.0	1.6	34.80	24.98	.12	.06	-	-	15	-	-	4.0	IS
2190	21	08	1981	22	42	37.3	0.3	39.73	27.81	.02	.02	2	3	52	3.2	3.9	4.0	IS
2191	22	08	1981	09	33	52.2	0.5	39.27	23.78	.02	.03	5	5	39	-	4.6	3.6	IS
2192	25	08	1981	21	28	35.0	2.3	33.80	25.35	.14	.06	28	11	31	-	4.0	-	IS
2193	27	08	1981	04	44	49.4	0.8	38.16	23.22	.03	.04	17	7	83	3.2	4.1	4.3	IS
2194	28	08	1981	07	17	08.9	0.5	40.47	29.21	.04	.06	10	-	36	3.1	4.0	4.3	IS
2195	31	08	1981	05	45	29.3	-	36.70	27.67	-	-	-	-	11	-	3.8	4.3	IK
2196	02	09	1981	20	30	34.1	0.8	36.33	44.30	.09	.16	33	-	7	-	4.1	-	IS
2197	03	09	1981	05	18	48.0	1.6	35.00	25.73	.12	.05	112	14	10	-	-	4.1	IS
2198	03	09	1981	22	34	50.8	1.0	34.71	24.02	.08	.07	73	8	26	-	3.9	4.1	IS
2199	04	09	1981	23	52	19.0	1.4	38.90	27.00	.16	.14	84	15	26	-	4.3	-	IS
2200	05	09	1981	02	41	54.0	0.7	35.84	44.22	.07	.08	62	9	36	-	4.4	-	IS

SIRA NO	TARiH			OLUS ZAMANI				KOORDiNATLAR				DERiN-LiK		ist	MAGNiTUD			Ky
	Gn	Ay	Yil	Sa	Dk	Sn	h_O	Enl.	Boyl.	h_E	h_B		hD	say	Ms	Mb	Ml	
2201	09	09	1981	07	46	17.0	1.3	40.14	38.23	.09	.05	25	13	42	4.0	4.5	-	IS
2202	09	09	1981	14	36	54.0	2.3	35.90	29.50	.24	.39	33	-	10	-	4.1	-	IS
2203	10	09	1981	09	55	55.5	0.8	34.96	24.10	.07	.03	61	4	26	-	4.5	4.0	IS
2204	10	09	1981	21	42	09.0	1.7	34.59	25.05	.07	.04	7	9	109	3.4	4.4	4.4	IS
2205	12	09	1981	22	40	27.0	1.7	34.54	25.11	.09	.05	21	10	110	3.4	4.4	4.3	IS
2206	13	09	1981	23	14	31.4	1.0	34.93	23.94	.08	.04	67	6	32	-	4.2	4.0	IS
2207	13	09	1981	23	25	27.3	0.6	34.78	25.11	.04	.02	39	5	303	5.0	4.9	4.9	IS
2208	14	09	1981	01	00	12.0	1.7	34.80	25.10	.14	.05	10	-	17	-	-	4.1	IS
2209	14	09	1981	01	21	38.8	0.8	34.73	25.05	.03	.02	26	6	260	4.4	4.8	4.8	IS
2210	14	09	1981	01	53	38.0	1.6	35.00	25.05	.13	.06	10	-	28	-	3.4	4.1	IS
2211	14	09	1981	02	22	48.0	1.4	34.70	25.01	.11	.05	9	-	124	-	-	4.1	IS
2212	14	09	1981	04	59	51.0	1.5	34.71	25.01	.06	.03	9	8	124	3.4	4.5	4.4	IS
2213	14	09	1981	12	03	46.2	0.5	37.10	45.25	.02	.03	51	5	56	3.4	4.5	-	IS
2214	14	09	1981	16	57	52.0	1.4	33.80	26.00	.12	.06	-	-	14	-	4.3	-	IS
2215	16	09	1981	23	04	01.0	1.7	35.00	25.15	.15	.05	-	-	24	-	-	4.3	IS
2216	18	09	1981	16	35	31.0	-	36.76	27.62	-	-	-	-	9	-	-	4.1	IK
2217	20	09	1981	19	54	15.7	0.6	38.59	23.61	.02	.02	11	5	58	-	3.9	4.1	IS
2218	23	09	1981	23	10	02.4	0.3	38.30	23.30	.02	.02	30	4	65	-	4.3	4.1	IS
2219	27	09	1981	02	55	03.0	0.5	38.32	23.37	.02	.02	13	4	37	-	4.0	3.7	IS
2220	27	09	1981	21	45	35.5	0.4	38.31	23.29	.03	.03	20	6	37	-	4.1	3.5	IS
2221	28	09	1981	01	32	39.0	2.3	33.80	24.90	.18	.10	10	-	29	-	4.2	4.4	IS
2222	28	09	1981	13	51	24.0	2.1	35.40	24.20	.22	.19	108	15	9	-	4.1	3.3	IS
2223	29	09	1981	20	11	14.8	0.3	38.35	23.26	.02	.03	-	-	30	-	4.0	3.5	IS
2224	30	09	1981	07	36	00.0	1.1	34.03	25.60	.03	.02	30	8	280	5.0	5.2	4.7	IS
2225	30	09	1981	12	03	02.7	0.5	41.72	23.29	.04	.05	10	-	16	-	4.2	-	IS
2226	01	10	1981	12	10	45.0	1.3	41.03	23.20	.10	.13	10	-	13	-	-	4.1	IS
2227	09	10	1981	01	36	13.1	0.8	36.60	45.20	.13	.11	33	-	17	-	4.8	4.0	IS
2228	09	10	1981	23	26	19.0	-	34.72	25.10	-	-	10	-	37	-	3.9	4.1	IS
2229	11	10	1981	20	01	18.8	0.3	38.17	23.01	.03	.03	10	-	49	-	4.2	3.9	IS
2230	14	10	1981	10	58	29.4	-	39.47	25.64	-	-	-	-	17	3.9	4.4	4.4	IK
2231	18	10	1981	05	22	28.6	0.3	43.31	45.32	.02	.02	34	3	263	5.6	5.0	-	IS
2232	18	10	1981	18	18	02.3	0.7	43.52	45.45	.09	.10	33	-	44	-	4.5	-	IS
2233	19	10	1981	05	49	49.1	0.3	43.41	45.33	.04	.04	15	-	72	-	4.5	-	IS
2234	19	10	1981	13	53	34.6	0.7	43.42	45.32	.07	.07	36	10	34	-	4.5	-	IS
2235	20	10	1981	14	11	37.3	0.5	43.25	45.40	.04	.04	39	7	88	3.9	4.7	-	IS
2236	21	10	1981	00	50	15.4	0.5	44.81	37.09	.05	.07	33	-	26	-	4.1	-	IS
2237	22	10	1981	18	29	44.0	1.7	43.26	45.33	.05	.06	20	16	77	3.6	4.4	-	IS
2238	31	10	1981	08	20	19.7	0.2	37.11	23.86	.02	.02	127	3	49	-	4.1	3.4	IS
2239	31	10	1981	11	30	25.0	1.3	34.56	23.64	.10	.06	-	-	19	-	4.0	-	IS
2240	03	11	1981	20	49	16.5	-	37.29	26.79	-	-	-	-	6	-	-	4.0	IK
2241	09	11	1981	01	11	21.4	0.9	34.40	35.94	.11	.09	33	-	17	-	4.4	-	IS
2242	11	11	1981	10	29	27.3	-	36.62	30.11	-	-	-	-	14	4.3	5.1	4.6	IK
2243	12	11	1981	07	01	52.0	1.6	34.80	24.69	.16	.06	66	7	16	-	4.3	-	IS
2244	16	11	1981	11	39	55.5	-	37.15	27.31	-	-	-	-	9	-	-	4.3	IK
2245	17	11	1981	10	45	45.0	2.0	33.10	47.40	.15	.10	42	17	13	-	4.5	-	IS
2246	18	11	1981	08	52	25.0	1.0	34.52	24.02	.07	.05	34	8	59	3.7	4.3	4.1	IS
2247	19	11	1981	16	05	39.7	-	36.35	27.48	-	-	-	-	8	3.5	4.3	4.4	IK
2248	22	11	1981	23	42	59.4	0.9	34.07	25.60	.76	.05	49	7	101	3.5	4.2	4.3	IS
2249	23	11	1981	10	56	48.1	-	37.04	29.54	-	-	-	-	9	-	4.7	4.1	IK
2250	24	11	1981	09	37	02.2	0.4	33.01	35.66	.02	.06	8	-	7	-	-	4.3	IS
2251	27	11	1981	13	30	31.2	-	36.03	30.12	-	-	-	-	11	3.9	4.6	4.2	IK
2252	27	11	1981	19	32	07.4	1.0	34.40	23.90	.08	.13	-	-	7	-	4.3	-	IS
2253	28	11	1981	09	07	20.0	2.8	35.20	23.80	.26	.13	-	-	8	-	4.5	-	IS
2254	28	11	1981	11	28	14.3	0.6	35.00	26.43	.04	.04	49	6	52	3.5	4.3	4.3	IS
2255	03	12	1981	10	14	45.0	1.5	35.10	26.43	.12	.05	10	-	29	-	-	4.3	IS

SIRA NO	TARiH			OLUS ZAMANI				KOORDiNATLAR				DERiN-LiK		ist say	MAGNiTUD			Ky
	Gn	Ay	Yil	Sa	Dk	Sn	h_O	Enl.	Boyl.	h_E	h_B		hD		Ms	Mb	Ml	
2256	07	12	1981	21	17	04.3	0.3	40.66	36.00	.04	.04	10	-	45	-	4.5	-	IS
2257	17	12	1981	21	54	54.5	0.5	34.54	26.69	.05	.05	10	-	37	-	4.3	4.2	IS
2258	19	12	1981	14	10	51.1	0.1	39.22	25.25	.02	.02	10	-	489	7.1	6.1	6.3	IS
2259	19	12	1981	14	16	13.0	-	39.10	25.00	-	-	-	-	-	-	-	4.6	IS
2260	19	12	1981	14	49	42.9	-	39.24	25.55	-	-	-	-	8	-	4.4	4.0	IK
2261	19	12	1981	18	10	59.8	-	39.30	26.44	-	-	-	-	10	4.0	4.5	4.5	IK
2262	19	12	1981	18	32	51.0	1.4	38.87	24.93	.03	.03	6	11	58	-	4.2	4.3	IS
2263	19	12	1981	19	39	51.3	-	39.42	25.32	-	-	-	-	11	-	3.8	4.0	IK
2264	19	12	1981	21	14	26.8	0.5	39.29	25.40	.02	.02	17	4	228	4.4	4.7	4.8	IS
2265	20	12	1981	10	59	05.2	-	39.05	25.47	-	-	-	-	10	-	4.4	4.0	IK
2266	20	12	1981	22	54	29.4	0.6	39.33	25.51	.02	.02	25	6	99	-	4.4	4.0	IS
2267	21	12	1981	13	54	40.6	0.4	39.14	25.26	.01	.01	25	3	211	4.2	4.7	4.8	IS
2268	21	12	1981	14	13	16.5	0.6	39.26	25.37	.02	.02	5	4	253	4.9	4.9	5.0	IS
2269	21	12	1981	14	15	44.0	1.2	39.20	25.45	.05	.05	11	9	79	-	5.0	4.4	IS
2270	21	12	1981	22	22	01.7	1.0	36.58	26.81	.05	.05	2	9	13	-	4.6	3.8	IS
2271	22	12	1981	06	28	08.4	0.5	38.87	24.98	.02	.02	3	5	38	-	4.1	3.8	IS
2272	23	12	1981	06	35	29.5	0.2	38.99	24.91	.02	.02	10	-	48	-	4.0	3.8	IS
2273	23	12	1981	17	35	32.2	0.5	38.65	23.50	.02	.03	28	6	52	2.9	4.1	4.1	IS
2274	24	12	1981	08	12	44.8	1.0	35.10	26.51	.09	.08	86	12	31	-	3.9	4.2	IS
2275	26	12	1981	14	29	13.4	0.5	39.04	25.14	.02	.02	18	4	148	3.6	4.6	4.3	IS
2276	26	12	1981	17	53	37.0	-	40.16	28.45	-	-	-	-	12	-	4.8	4.6	IK
2277	27	12	1981	15	56	25.0	2.2	43.03	47.12	.09	.08	12	16	31	-	4.0	-	IS
2278	27	12	1981	17	39	17.0	-	39.09	25.41	-	-	-	-	11	6.5	5.5	5.7	IK
2279	28	12	1981	14	49	43.7	3.6	34.98	45.91	.02	.02	62	4	181	4.0	5.2	-	IS
2280	28	12	1981	14	52	26.1	-	39.39	29.16	-	-	-	-	11	-	4.3	4.5	IK
2281	28	12	1981	19	44	05.8	0.7	38.66	24.74	.02	.03	7	6	35	-	4.3	3.5	IS
2282	28	12	1981	21	18	10.2	0.3	37.52	23.32	.03	.03	119	4	42	-	4.1	3.1	IS
2283	29	12	1981	05	08	14.4	0.6	38.96	24.97	.02	.02	3	5	53	-	4.5	4.0	IS
2284	29	12	1981	08	00	44.1	0.8	38.75	24.80	.02	.02	2	5	279	5.3	5.0	5.4	IS
2285	30	12	1981	01	12	23.0	1.2	40.13	25.15	.03	.03	4	11	55	-	4.2	3.7	IS
2286	30	12	1981	08	38	59.7	0.2	38.86	24.99	.02	.03	10	-	37	-	4.2	3.7	IS
2287	30	12	1981	09	39	08.2	0.5	40.12	28.62	.02	.03	3	4	32	3.7	3.6	4.0	IS
2288	30	12	1981	19	08	36.0	0.7	34.92	24.90	.07	.05	82	4	28	-	4.1	4.0	IS
2289	31	12	1981	00	55	20.2	0.2	38.86	24.97	.01	.02	10	-	46	-	4.6	3.7	IS
2290	01	01	1982	19	30	23.9	0.3	37.24	42.61	.06	.04	10	-	62	-	4.8	-	IS
2291	03	01	1982	19	35	11.6	0.3	38.87	24.85	.02	.03	7	-	41	-	4.9	3.6	IS
2292	05	01	1982	00	21	11.7	0.2	38.79	24.85	.02	.02	10	-	54	-	4.0	4.1	IS
2293	05	01	1982	00	30	35.1	0.2	38.84	24.83	.02	.02	10	-	95	4.3	4.6	4.4	IS
2294	06	01	1982	02	07	56.3	0.5	40.16	27.64	.02	.03	4	4	27	-	-	4.0	IS
2295	07	01	1982	00	39	19.0	1.8	38.86	24.86	.02	.03	12	15	43	-	4.3	3.8	IS
2296	08	01	1982	22	20	21.2	0.3	38.79	24.85	.03	.03	10	-	59	-	4.5	4.1	IS
2297	09	01	1982	18	46	56.6	-	37.80	28.58	-	-	7	-	8	3.8	4.4	4.3	IK
2298	13	01	1982	04	09	00.4	0.3	38.85	24.87	.03	.04	11	-	40	-	4.1	3.7	IS
2299	13	01	1982	18	35	56.8	-	32.73	35.51	-	-	1	-	4	-	-	4.2	IS
2300	13	01	1982	21	23	40.0	0.9	38.86	24.94	.02	.03	-	8	30	-	4.6	3.4	IS
2301	15	01	1982	19	11	14.3	-	39.44	25.66	-	-	-	-	12	-	4.1	4.0	IK
2302	17	01	1982	02	18	21.8	0.2	38.87	24.86	.02	.02	10	-	44	-	4.0	4.0	IS
2303	17	01	1982	04	26	09.0	1.1	35.37	23.30	.10	.08	80	11	36	-	4.0	3.7	IS
2304	17	01	1982	08	05	07.9	-	39.19	25.19	-	-	-	-	9	-	4.3	3.6	IK
2305	17	01	1982	10	27	42.2	0.7	41.10	44.05	.04	.05	6	6	53	-	4.4	-	IS
2306	18	01	1982	19	27	25.0	0.2	39.96	24.39	.02	.02	10	-	467	6.9	5.8	6.4	IS
2307	18	01	1982	19	31	07.9	0.4	40.03	24.56	.04	.07	10	-	28	6.8	4.7	4.3	IS
2308	18	01	1982	19	41	02.0	0.5	39.92	24.42	.04	.06	-	-	14	-	4.0	3.7	IS
2309	18	01	1982	19	46	32.0	1.7	39.89	24.58	.05	.04	11	14	34	-	4.2	4.0	IS
2310	18	01	1982	19	52	34.3	0.4	40.04	24.62	.03	.05	10	-	17	-	4.1	3.5	IS

SIRA NO	TARiH Gn	Ay	Yil	OLUS ZAMANI Sa	Dk	Sn	h_O	KOORDiNATLAR Enl.	Boyl.	h_E	h_B	DERiN-LiK	hD	ist say	MAGNiTUD Ms	Mb	Ml	Ky
2311	18	01	1982	19	55	00.1	0.7	39.80	24.40	.03	.04	13	5	18	-	4.2	3.6	IS
2312	18	01	1982	20	00	03.0	1.4	39.75	24.10	.04	.04	12	10	140	-	4.3	4.8	IS
2313	18	01	1982	20	00	52.6	0.2	39.86	24.26	.02	.04	10	-	20	-	4.7	4.9	IS
2314	18	01	1982	20	08	13.7	0.6	39.95	24.59	.02	.03	22	6	46	-	4.3	3.9	IS
2315	18	01	1982	20	32	01.7	0.4	39.71	24.29	.04	.04	17	-	101	-	4.3	4.4	IS
2316	18	01	1982	20	52	24.6	0.7	39.78	24.25	.02	.02	10	6	73	-	4.0	4.2	IS
2317	18	01	1982	23	40	36.8	0.2	39.83	24.41	.03	.03	10	-	134	3.7	4.3	4.3	IS
2318	19	01	1982	06	39	46.1	0.8	39.77	24.18	.02	.02	15	6	45	-	4.1	3.7	IS
2319	19	01	1982	07	36	24.3	0.3	39.73	24.24	.03	.03	10	-	45	-	4.0	3.6	IS
2320	19	01	1982	12	18	18.4	0.3	39.72	24.34	.03	.03	10	-	169	4.5	4.4	4.8	IS
2321	19	01	1982	14	54	44.9	0.7	39.84	24.39	.02	.02	6	6	48	-	3.6	4.0	IS
2322	19	01	1982	16	17	56.6	0.6	39.59	23.69	.02	.02	17	5	163	4.2	4.6	4.4	IS
2323	19	01	1982	17	35	33.2	0.6	39.89	24.42	.02	.02	7	5	41	-	4.2	3.6	IS
2324	19	01	1982	18	38	52.0	0.7	35.93	35.61	.05	.04	46	7	72	-	4.5	-	IS
2325	20	01	1982	08	25	44.4	0.3	40.21	47.86	.03	.02	60	3	106	-	4.8	-	IS
2326	20	01	1982	17	04	32.0	1.1	39.48	24.08	.03	.03	10	8	62	-	4.3	3.8	IS
2327	23	01	1982	22	58	10.0	2.0	39.89	24.48	.02	.02	8	15	99	3.7	4.1	4.3	IS
2328	24	01	1982	02	03	50.9	0.7	41.99	43.40	.03	.04	6	5	62	-	4.4	-	IS
2329	24	01	1982	05	37	07.7	-	36.73	27.36	-	-	-	-	8	-	4.5	3.7	IK
2330	27	01	1982	09	21	37.1	0.9	39.87	24.49	.03	.04	1	8	29	-	4.8	3.5	IS
2331	28	01	1982	09	36	14.3	0.9	37.24	43.60	.10	.15	33	-	6	-	4.5	-	IS
2332	07	02	1982	12	48	15.7	0.8	39.76	24.23	.02	.02	17	9	64	-	4.2	3.9	IS
2333	08	02	1982	03	54	43.0	2.8	34.40	23.88	.16	.07	8	11	32	-	3.9	4.2	IS
2334	08	02	1982	11	20	09.4	0.4	39.33	29.05	.04	.05	13	-	35	-	4.1	-	IS
2335	09	02	1982	02	44	24.3	0.9	39.70	24.26	.03	.03	6	7	126	3.9	4.3	4.5	IS
2336	11	02	1982	02	36	20.1	0.5	34.83	25.19	.04	.02	45	4	182	-	4.7	4.3	IS
2337	11	02	1982	15	50	00.4	0.5	36.08	35.89	.06	.06	33	-	19	-	4.3	-	IS
2338	12	02	1982	13	02	49.9	0.7	34.67	26.05	.05	.04	-	-	20	-	-	4.1	IS
2339	16	02	1982	19	43	22.4	-	38.78	25.80	-	-	-	-	-	-	-	4.0	IS
2340	17	02	1982	15	08	50.1	0.5	40.38	33.31	.06	.06	10	-	44	-	4.1	-	IS
2341	20	02	1982	07	36	25.7	0.6	41.71	46.73	.07	.10	33	-	19	-	4.3	-	IS
2342	02	03	1982	12	13	35.3	0.7	34.82	24.61	.06	.05	58	10	19	-	4.8	4.0	IS
2343	06	03	1982	00	07	50.1	0.8	35.87	44.50	.09	.13	33	-	13	-	4.4	-	IS
2344	06	03	1982	08	14	41.8	-	35.24	30.22	-	-	-	-	8	-	4.4	4.0	IK
2345	10	03	1982	14	01	50.3	-	35.55	25.98	-	-	-	-	11	-	4.6	4.4	IK
2346	11	03	1982	23	09	15.5	0.4	33.57	33.87	.06	.06	15	-	9	-	-	4.1	IS
2347	14	03	1982	15	09	09.8	-	38.63	31.07	-	-	-	-	14	-	4.3	4.0	IK
2348	14	03	1982	18	43	41.3	-	39.00	25.29	-	-	-	-	11	-	4.0	3.9	IK
2349	17	03	1982	23	52	39.4	0.3	38.72	24.73	.03	.03	-	-	69	3.7	4.2	4.0	IS
2350	18	03	1982	07	33	31.6	0.9	39.06	25.14	.03	.03	4	6	105	4.1	4.4	4.3	IS
2351	18	03	1982	08	20	17.3	0.7	38.83	24.93	.02	.02	2	6	40	-	4.7	3.8	IS
2352	19	03	1982	23	14	35.3	0.6	39.27	41.88	.07	.05	33	-	32	-	4.3	-	IS
2353	23	03	1982	09	56	12.8	0.4	39.22	41.82	.05	.05	10	-	51	3.6	4.6	-	IS
2354	23	03	1982	15	10	36.8	0.9	39.50	41.79	.12	.08	10	-	38	-	4.6	-	IS
2355	26	03	1982	03	41	38.8	0.9	36.08	23.90	.08	.08	10	-	27	-	4.1	3.9	IS
2356	26	03	1982	03	46	08.5	0.9	36.26	23.91	.08	.06	-	-	21	-	4.1	3.8	IS
2357	26	03	1982	06	16	57.6	-	39.93	25.09	-	-	-	-	10	-	3.7	4.0	IK
2358	26	03	1982	13	48	55.2	0.4	35.81	24.08	.04	.03	83	4	75	-	4.4	3.8	IS
2359	27	03	1982	19	57	24.0	0.3	39.23	41.90	.02	.01	38	3	293	5.3	5.5	-	IS
2360	28	03	1982	01	34	03.5	0.7	39.14	41.88	.08	.07	-	-	28	-	4.3	-	IS
2361	31	03	1982	00	35	41.0	3.9	35.00	23.20	.40	.21	-	-	9	-	4.1	-	IS
2362	31	03	1982	01	15	57.8	0.2	38.59	28.18	.02	.03	10	-	31	-	-	4.1	IS
2363	01	04	1982	16	08	21.9	0.6	35.47	26.74	.63	.05	10	-	13	-	-	4.1	IS
2364	03	04	1982	01	48	25.0	1.8	36.00	27.40	.20	.13	-	-	12	-	-	4.4	IS
2365	04	04	1982	10	36	46.4	0.4	39.87	24.56	.02	.02	22	5	70	3.6	4.2	4.1	IS

SIRA NO	TARiH Gn	Ay	Yil	OLUS ZAMANI Sa	Dk	Sn	h_O	KOORDiNATLAR Enl.	Boyl.	h_E	h_B	DERiN-LiK	hD	ist say	MAGNiTUD Ms	Mb	Ml	Ky
2366	05	04	1982	03	36	50.4	-	37.32	26.69	-	-	-	-	11	-	-	4.1	IK
2367	05	04	1982	15	53	45.0	2.3	33.20	26.66	.22	.10	-	-	18	-	4.0	-	IS
2368	06	04	1982	22	48	47.0	1.6	34.50	23.13	.13	.10	-	-	22	-	4.1	4.1	IS
2369	10	04	1982	04	50	51.1	0.7	39.95	24.58	.02	.02	2	5	286	5.1	4.9	4.8	IS
2370	10	04	1982	11	38	05.2	0.7	39.43	25.54	.02	.01	12	4	242	4.1	4.7	4.5	IS
2371	11	04	1982	04	47	26.9	-	36.48	27.72	-	-	-	-	9	-	4.1	4.2	IK
2372	12	04	1982	03	39	28.4	0.7	40.54	23.69	.03	.03	4	6	74	-	4.1	4.2	IS
2373	13	04	1982	02	12	05.3	0.8	34.19	25.15	.58	.05	53	7	69	3.8	4.2	4.3	IS
2374	16	04	1982	04	48	22.5	0.3	39.54	26.08	.03	.04	-	-	33	-	4.1	3.7	IS
2375	16	04	1982	08	01	29.3	0.4	40.79	29.84	.03	.04	-	-	23	-	4.0	-	IS
2376	17	04	1982	10	23	09.9	-	39.46	26.00	-	-	-	-	6	-	-	4.2	IK
2377	17	04	1982	17	31	46.2	-	38.18	32.17	-	-	-	-	15	-	4.5	4.1	IK
2378	18	04	1982	23	18	10.2	-	37.14	27.64	-	-	-	-	17	-	5.0	4.3	IK
2379	18	04	1982	23	56	06.9	0.4	38.89	28.15	.03	.05	10	-	34	-	-	4.0	IS
2380	19	04	1982	04	32	54.5	-	38.88	27.01	-	-	-	-	16	3.7	4.4	4.4	IK
2381	20	04	1982	18	32	20.7	-	38.77	26.87	-	-	-	-	14	3.5	4.3	4.2	IK
2382	20	04	1982	19	30	35.6	0.3	35.58	23.31	.02	.02	66	3	253	-	4.8	4.5	IS
2383	21	04	1982	13	40	06.4	0.7	35.92	44.90	.04	.06	60	8	38	-	4.6	-	IS
2384	21	04	1982	15	38	0.03	0.6	35.81	44.36	.03	.04	58	5	48	-	4.6	-	IS
2385	21	04	1982	16	57	58.1	0.3	36.09	44.03	.04	.05	33	-	7	-	4.3	-	IS
2386	24	04	1982	00	02	05.0	1.2	37.74	35.40	.08	.10	59	10	22	-	4.3	-	IS
2387	24	04	1982	18	04	08.4	0.7	38.22	39.60	.04	.06	39	7	126	3.9	4.5	-	IS
2388	25	04	1982	12	01	23.0	2.8	34.40	25.46	.18	.07	22	12	23	-	4.0	4.1	IS
2389	27	04	1982	17	16	28.0	1.4	39.12	46.31	.08	.10	23	11	14	-	4.2	-	IS
2390	30	04	1982	17	27	51.3	0.8	33.30	46.04	.08	.07	68	8	28	-	4.6	-	IS
2391	03	05	1982	04	10	04.9	0.3	41.21	46.20	.02	.02	45	3	317	4.7	5.2	-	IS
2392	04	05	1982	17	02	27.3	-	37.53	27.81	-	-	-	-	5	-	4.6	4.0	IK
2393	05	05	1982	18	58	53.6	-	37.47	27.76	-	-	-	-	6	-	4.3	4.1	IK
2394	09	05	1982	22	48	31.0	-	36.34	26.76	-	-	-	-	8	-	4.3	3.9	IK
2395	11	05	1982	10	25	59.9	0.8	36.93	28.86	.07	.08	12	-	38	-	4.3	3.5	IS
2396	15	05	1982	05	09	03.1	0.7	39.50	41.80	.12	.11	-	-	19	3.7	4.4	-	IS
2397	18	05	1982	16	59	38.0	1.0	38.30	23.47	.04	.05	11	9	48	-	4.2	3.8	IS
2398	18	05	1982	17	20	14.8	0.5	38.28	23.43	.03	.03	16	6	55	-	4.2	3.8	IS
2399	18	05	1982	19	38	03.0	4.5	37.10	36.40	.24	.35	54	16	18	-	4.1	-	IS
2400	19	05	1982	13	32	58.8	0.5	40.07	42.26	.05	.03	62	5	98	3.2	4.7	-	IS
2401	20	05	1982	02	42	50.8	-	40.48	28.87	-	-	-	-	13	3.5	4.0	4.3	IK
2402	20	05	1982	03	28	04.4	0.3	35.05	33.70	.02	.02	71	4	161	-	4.6	4.6	IS
2403	20	05	1982	20	50	27.0	3.1	37.60	35.80	.23	.29	33	-	16	-	4.0	-	IS
2404	22	05	1982	21	03	31.3	0.7	35.26	24.64	.05	.04	81	4	75	-	4.3	3.7	IS
2405	23	05	1982	16	23	07.6	-	40.58	29.09	-	-	-	-	12	-	3.4	4.1	IK
2406	23	05	1982	22	17	53.0	1.2	40.75	30.55	.03	.04	16	8	42	-	4.2	-	IS
2407	25	05	1982	08	06	04.7	0.5	41.42	44.00	.03	.02	5	4	131	4.1	4.7	-	IS
2408	25	05	1982	14	45	36.5	-	37.54	28.25	-	-	-	-	10	-	4.4	4.0	IK
2409	29	05	1982	14	22	01.2	0.2	39.40	43.72	.03	.02	33	-	12	4.4	4.8	-	IS
2410	30	05	1982	09	11	57.2	0.7	38.97	24.98	.03	.03	22	8	57	-	4.0	3.8	IS
2411	06	06	1982	05	32	58.1	0.6	39.29	25.50	.02	.02	7	6	62	-	4.0	3.7	IS
2412	07	06	1982	00	31	27.7	-	37.19	27.76	-	-	-	-	11	4.1	4.7	4.5	IK
2413	07	06	1982	16	48	50.3	-	37.13	27.76	-	-	-	-	6	-	-	4.1	IK
2414	09	06	1982	04	13	39.2	-	40.43	28.81	-	-	-	-	11	-	4.5	4.6	IK
2415	10	06	1982	04	17	34.8	0.5	37.17	45.07	.04	.03	66	6	89	-	4.6	-	IS
2416	11	06	1982	02	57	14.3	0.7	39.55	23.68	.02	.03	8	5	75	-	4.4	4.0	IS
2417	11	06	1982	10	44	26.4	-	37.31	27.94	-	-	-	-	6	-	-	4.1	IK
2418	12	06	1982	03	16	11.7	-	37.41	28.36	-	-	-	-	5	-	-	4.0	IK
2419	12	06	1982	07	08	43.0	0.3	36.92	27.89	.03	.03	10	-	114	4.0	4.4	4.3	IS
2420	12	06	1982	07	19	41.3	-	37.07	27.78	-	-	-	-	9	3.7	4.2	4.2	IK

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	Gn	Ay	Yil	Sa	Dk	Sn	h_O	Enl.	Boyl.	h_E	h_B		hD		Ms	Mb	Ml	
2421	12	06	1982	10	37	59.6	-	37.12	27.78	-	-	-	-	7	3.8	4.5	4.2	IK
2422	16	06	1982	20	52	33.2	0.8	34.98	24.16	.06	.04	37	6	111	3.5	4.2	3.9	IS
2423	20	06	1982	13	57	15.3	-	40.13	25.46	-	-	-	-	11	3.7	4.2	4.1	IK
2424	20	06	1982	21	46	03.2	0.7	33.58	46.06	.09	.06	55	8	21	3.4	4.4	-	IS
2425	22	06	1982	23	38	14.8	-	40.27	25.70	-	-	-	-	12	3.4	4.1	4.1	IK
2426	23	06	1982	10	54	39.5	0.6	38.86	24.78	.02	.03	1	6	27	-	4.8	3.6	IS
2427	24	06	1982	22	32	53.0	1.1	35.94	27.37	.10	.07	13	10	11	-	-	4.0	IS
2428	25	06	1982	16	52	34.2	-	38.82	25.62	-	-	-	-	8	3.3	3.8	4.0	IK
2429	27	06	1982	10	15	39.2	0.6	35.68	26.17	.06	.04	110	4	24	-	4.2	3.6	IS
2430	28	06	1982	09	29	49.2	-	37.10	27.70	-	-	-	-	8	4.4	4.4	4.4	IK
2431	29	06	1982	06	57	41.9	-	37.13	27.85	-	-	-	-	8	4.1	4.6	4.5	IK
2432	07	07	1982	13	02	27.0	1.6	34.40	29.90	.14	.11	-	-	19	-	4.1	3.8	IS
2433	08	07	1982	01	55	25.5	0.8	35.02	26.21	.06	.05	60	6	81	-	4.3	4.3	IS
2434	08	07	1982	07	08	03.0	4.6	34.40	23.70	.26	.11	5	17	14	-	3.8	4.1	IS
2435	08	07	1982	10	35	23.9	-	39.12	25.18	-	-	-	-	11	4.3	4.6	4.5	IK
2436	12	07	1982	14	46	10.9	-	41.05	27.67	-	-	-	-	11	3.7	4.6	4.2	IK
2437	12	07	1982	17	43	33.0	0.8	35.96	23.06	.06	.06	41	9	45	3.2	4.0	3.6	IS
2438	18	07	1982	13	41	55.8	-	39.27	25.35	-	-	-	-	12	4.1	4.4	4.4	IK
2439	18	07	1982	17	36	09.0	2.7	34.60	23.73	.15	.07	14	9	18	-	4.1	3.8	IS
2440	19	07	1982	07	19	24.9	0.6	33.51	46.07	.03	.02	58	5	131	3.9	4.9	-	IS
2441	20	07	1982	05	52	02.0	0.7	36.01	27.13	.07	.05	-	-	10	-	4.0	-	IS
2442	22	07	1982	12	38	32.9	0.8	39.04	25.14	.03	.03	11	6	137	3.9	4.4	4.1	IS
2443	22	07	1982	19	57	30.8	-	39.29	25.74	-	-	-	-	7	-	4.2	4.0	IK
2444	23	07	1982	00	38	47.9	-	39.20	25.11	-	-	-	-	8	3.7	4.6	4.5	IK
2445	23	07	1982	05	17	11.0	2.6	34.50	24.65	.19	.08	-	-	13	-	-	4.0	IS
2446	26	07	1982	08	28	06.2	0.8	38.27	23.17	.03	.03	14	6	49	-	4.5	3.9	IS
2447	26	07	1982	17	17	07.0	0.2	36.88	23.72	.02	.02	106	3	85	-	4.3	4.1	IS
2448	27	07	1982	10	23	16.2	-	40.44	28.82	-	-	-	-	10	3.4	4.3	4.4	IK
2449	28	07	1982	14	05	52.0	1.5	39.10	38.10	.30	.27	33	-	11	-	4.0	-	IS
2450	29	07	1982	06	05	57.8	0.6	39.10	38.03	.10	.09	10	-	17	-	4.3	-	IS
2451	29	07	1982	22	08	47.6	0.7	38.08	23.23	.03	.03	8	5	70	2.7	4.2	4.1	IS
2452	01	08	1982	18	21	51.1	0.4	38.26	23.17	.04	.05	10	-	33	-	4.6	3.4	IS
2453	05	08	1982	07	54	02.1	0.9	37.99	35.23	.09	.05	46	8	62	3.5	4.4	-	IS
2454	05	08	1982	08	55	47.9	0.6	39.12	23.39	.02	.04	7	5	56	3.3	4.4	4.0	IS
2455	05	08	1982	11	05	44.0	0.6	39.30	23.00	.02	.03	28	5	103	3.6	4.5	4.3	IS
2456	06	08	1982	13	03	20.8	-	39.28	25.43	-	-	-	-	10	3.5	4.1	3.9	IK
2457	07	08	1982	06	52	57.0	3.3	35.00	26.70	.30	.15	-	-	17	-	3.8	4.0	IS
2458	12	08	1982	00	49	46.1	0.5	35.81	23.97	.04	.05	79	6	41	-	4.1	3.4	IS
2459	23	08	1982	05	00	50.0	-	36.98	30.15	-	-	-	-	6	-	3.6	4.0	IK
2460	26	08	1982	06	29	23.4	0.7	43.53	41.46	.09	.11	5	-	24	-	4.1	-	IS
2461	27	08	1982	09	58	56.8	0.4	43.67	26.07	.03	.05	43	8	96	-	4.7	-	IS
2462	30	08	1982	19	05	12.0	1.3	36.80	27.20	.12	.13	10	-	28	-	4.3	-	IS
2463	03	09	1982	22	20	15.0	2.0	34.40	24.47	.15	.07	-	-	14	-	-	4.0	IS
2464	09	09	1982	05	47	10.8	0.7	40.98	27.87	.06	.08	10	-	51	-	4.2	4.4	IS
2465	09	09	1982	20	23	14.1	0.9	41.05	42.95	.09	.10	3	-	33	-	4.5	-	IS
2466	11	09	1982	10	54	11.5	-	40.48	25.88	-	-	-	-	10	3.8	4.2	4.3	IK
2467	17	09	1982	21	14	22.0	-	33.70	24.10	-	-	-	-	-	-	-	4.3	IS
2468	20	09	1982	01	22	11.7	0.5	34.30	25.99	.03	.02	39	4	28	4.8	5.0	4.6	IS
2469	20	09	1982	03	23	30.0	1.1	34.24	26.00	.06	.05	26	7	16	-	4.1	-	IS
2470	20	09	1982	14	54	19.0	2.1	34.20	26.29	.17	.09	-	-	14	-	4.6	-	IS
2471	20	09	1982	14	58	20.0	0.8	34.24	26.22	.06	.07	-	-	12	-	4.5	-	IS
2472	21	09	1982	05	39	17.3	0.9	41.97	43.39	.05	.05	2	7	67	3.3	4.4	-	IS
2473	21	09	1982	06	44	03.0	1.1	33.93	26.21	.10	.07	10	-	52	-	4.3	4.4	IS
2474	21	09	1982	19	51	14.8	0.4	34.34	26.01	.02	.02	42	3	340	5.0	5.3	4.9	IS
2475	06	10	1982	01	17	17.0	1.1	34.34	25.77	.09	.06	-	-	33	-	4.5	4.3	IS

SIRA NO	TARİH			OLUŞ ZAMANI				KOORDİNATLAR				DERİN-LİK		ist say	MAGNİTÜD			Ky
	Gn	Ay	Yıl	Sa	Dk	Sn	h_O	Enl.	Boyl.	h_E	h_B		hD		Ms	Mb	Ml	
2476	07	10	1982	10	13	39.6	0.7	34.69	26.34	.05	.05	67	6	61	-	4.3	4.3	IS
2477	07	10	1982	11	27	41.0	0.6	34.40	26.59	.05	.06	75	6	41	-	4.4	4.3	IS
2478	07	10	1982	17	14	13.1	0.8	35.88	25.79	.07	.08	10	-	41	-	4.5	4.4	IS
2479	11	10	1982	03	19	48.3	-	35.87	27.80	-	-	-	-	11	-	4.6	4.7	IK
2480	13	10	1982	03	51	31.1	0.5	39.19	41.92	.04	.03	40	6	104	4.0	4.7	-	IS
2481	21	10	1982	21	49	54.0	0.6	34.52	26.81	.04	.07	32	4	19	-	4.1	-	IS
2482	02	11	1982	05	58	48.4	-	38.49	28.44	-	-	-	-	12	-	4.4	4.2	IK
2483	04	11	1982	00	45	50.5	0.7	38.58	45.45	.09	.10	33	-	10	-	4.2	-	IS
2484	05	11	1982	04	16	53.5	0.4	35.51	27.26	.04	.04	94	5	50	-	4.2	4.3	IS
2485	07	11	1982	17	04	12.4	0.8	36.53	25.61	.05	.06	23	9	26	-	4.3	3.9	IS
2486	14	11	1982	09	08	29.9	-	40.34	25.35	-	-	-	-	7	-	-	4.1	IK
2487	15	11	1982	02	37	59.6	0.3	35.48	31.50	.03	.06	97	4	39	-	4.2	-	IS
2488	23	11	1982	11	49	04.4	-	37.27	29.36	-	-	-	-	7	-	4.4	4.2	IK
2489	28	11	1982	12	12	09.1	-	36.39	26.15	-	-	-	-	5	-	4.6	4.1	IK
2490	03	12	1982	23	33	22.0	1.2	38.90	25.02	.02	.02	23	13	56	-	4.3	3.7	IS
2491	05	12	1982	19	16	04.0	2.7	39.90	26.50	.19	.39	-	-	7	-	4.6	-	IS
2492	06	12	1982	05	37	42.0	0.7	34.46	26.73	.07	.06	64	7	30	-	4.3	-	IS
2493	09	12	1982	22	31	43.3	0.4	38.42	40.61	.03	.02	41	4	179	4.2	4.9	-	IS
2494	11	12	1982	16	25	59.1	0.4	38.43	40.58	.06	.05	33	-	45	-	4.4	-	IS
2495	14	12	1982	19	23	55.6	0.3	38.69	24.79	.03	.03	9	-	222	5.0	4.7	4.3	IS
2496	19	12	1982	19	17	33.0	0.5	34.89	34.06	.05	.07	37	7	45	-	4.8	4.2	IS
2497	20	12	1982	22	56	59.7	0.5	38.57	24.53	.02	.03	28	5	83	-	4.5	4.5	IS
2498	20	12	1982	23	00	59.4	0.6	38.57	24.61	.02	.02	5	5	42	-	4.7	4.1	IS
2499	26	12	1982	17	48	04.7	-	39.37	28.30	-	-	-	-	13	-	4.9	4.0	IK
2500	27	12	1982	02	04	47.6	0.5	38.96	27.91	.04	.06	8	-	31	-	-	4.2	IS
2501	27	12	1982	11	02	44.8	-	39.38	28.20	-	-	-	-	12	-	4.8	4.1	IK
2502	27	12	1982	15	32	00.6	1.5	38.95	27.82	.03	.04	5	12	34	-	-	4.0	IS
2503	27	12	1982	19	55	24.8	0.3	39.01	27.83	.02	.03	17	-	33	-	-	4.1	IS
2504	28	12	1982	03	06	03.0	1.3	37.45	24.53	.07	.08	1	11	14	-	4.2	3.2	IS
2505	28	12	1982	05	09	39.7	0.8	38.67	25.10	.08	.10	11	-	8	-	4.1	3.0	IS
2506	01	01	1983	23	06	22.2	0.5	39.45	40.35	.07	.06	33	-	48	-	4.6	-	IS
2507	02	01	1983	18	05	54.0	1.5	37.80	38.10	.18	.19	10	-	19	-	4.5	-	IS
2508	03	01	1983	00	12	25.5	0.3	34.53	24.31	.02	.01	71	2	403	5.1	5.4	4.8	IS
2509	07	01	1983	07	25	54.0	0.7	36.14	41.11	.05	.04	45	7	49	-	4.8	-	IS
2510	10	01	1983	01	29	13.0	0.7	34.72	24.58	.05	.03	53	6	106	-	4.3	4.2	IS
2511	10	01	1983	22	20	22.2	0.9	34.70	24.58	.10	.08	87	12	9	-	4.2	-	IS
2512	12	01	1983	03	55	44.0	1.3	38.86	24.97	.02	.02	28	14	61	-	4.4	3.7	IS
2513	13	01	1983	23	12	50.0	0.6	33.77	27.61	.05	.04	62	11	17	-	-	4.2	IS
2514	15	01	1983	10	55	28.4	0.4	34.01	47.14	.06	.06	10	-	52	-	4.7	-	IS
2515	19	01	1983	03	07	58.0	5.7	38.80	23.20	.53	.46	10	-	10	-	4.3	-	IS
2516	20	01	1983	17	22	23.0	2.4	38.68	24.75	.02	.03	9	19	64	-	4.7	3.7	IS
2517	21	01	1983	03	24	01.0	2.6	43.25	46.70	.09	.10	2	18	36	-	4.5	-	IS
2518	21	01	1983	05	49	10.1	0.5	39.27	23.06	.02	.03	10	5	59	-	4.3	3.8	IS
2519	21	01	1983	21	52	29.0	1.6	39.40	32.30	.14	.15	10	-	26	-	4.6	-	IS
2520	23	01	1983	09	38	30.9	0.4	35.17	24.55	.04	.03	76	4	25	-	4.3	4.0	IS
2521	27	01	1983	04	50	51.6	0.5	35.31	27.45	.04	.03	50	4	140	-	4.6	4.6	IS
2522	28	01	1983	02	02	42.0	7.9	33.60	26.20	.66	.16	18	-	16	-	-	4.3	IS
2523	30	01	1983	11	51	31.6	0.5	34.21	26.27	.04	.03	52	5	20	-	4.4	-	IS
2524	30	01	1983	11	57	38.0	1.5	35.20	26.76	.14	.07	10	-	9	-	-	4.1	IS
2525	31	01	1983	12	08	52.1	0.6	32.57	46.81	.08	.07	33	-	8	-	4.8	-	IS
2526	01	02	1983	13	54	11.2	0.9	40.20	28.94	.03	.04	3	7	51	-	4.8	-	IS
2527	02	02	1983	20	06	18.0	1.2	35.50	26.85	.13	.09	89	11	14	-	-	4.1	IS
2528	05	02	1983	14	07	28.6	0.6	35.25	23.27	.04	.04	57	5	119	-	4.8	4.0	IS
2529	06	02	1983	23	35	33.7	0.6	35.81	23.16	.04	.05	35	6	78	-	4.7	3.9	IS
2530	12	02	1983	19	27	43.8	0.4	36.78	27.52	.03	.04	37	5	84	-	4.5	4.2	IS

SIRA NO	TARiH			OLUS ZAMANI				KOORDiNATLAR				DERiN-LiK		ist	MAGNiTUD			Ky
	Gn	Ay	Yil	Sa	Dk	Sn	h_O	Enl.	Boyl.	h_E	h_B		hD	say	Ms	Mb	Ml	
2531	14	02	1983	07	28	07.1	0.4	41.95	32.89	.39	.05	33	-	44	-	4.1	-	IS
2532	15	02	1983	02	21	45.7	0.9	39.07	28.71	.03	.05	7	7	31	-	4.6	-	IS
2533	18	02	1983	08	42	26.0	1.8	34.20	23.66	.16	.08	10	-	10	-	4.0	-	IS
2534	23	02	1983	16	53	29.7	0.8	39.17	29.29	.03	.04	3	7	28	-	-	4.0	IS
2535	24	02	1983	00	43	50.0	1.3	37.18	24.47	.05	.05	19	11	89	-	4.5	4.0	IS
2536	24	02	1983	19	50	52.7	0.7	42.42	44.76	.03	.04	7	6	29	-	4.1	-	IS
2537	27	02	1983	07	39	20.0	2.5	39.51	33.02	.04	.06	8	17	20	-	4.0	-	IS
2538	28	02	1983	16	04	14.4	0.8	38.82	24.94	.02	.02	27	8	150	-	4.6	4.8	IS
2539	28	02	1983	17	28	44.4	0.3	36.30	27.72	.03	.03	107	3	71	-	4.5	-	IS
2540	06	03	1983	09	53	26.0	1.1	39.10	28.68	.02	.04	11	9	34	-	-	4.3	IS
2541	07	03	1983	16	22	56.0	1.4	35.10	46.00	.18	.23	33	-	6	-	4.4	-	IS
2542	10	03	1983	05	02	20.0	1.4	38.34	38.97	.05	.03	25	13	55	-	4.3	-	IS
2543	11	03	1983	08	37	36.0	0.2	38.92	25.05	.02	.03	35	9	54	-	4.5	3.9	IS
2544	11	03	1983	21	26	16.9	0.9	34.30	46.10	.11	.13	33	-	13	-	4.5	-	IS
2545	11	03	1983	22	55	50.2	0.2	40.16	24.87	.02	.20	9	-	73	-	4.2	4.2	IS
2546	12	03	1983	04	10	57.0	2.2	40.24	24.90	.02	.02	11	17	62	-	3.9	4.0	IS
2547	12	03	1983	04	17	05.5	0.6	40.16	24.85	.02	.02	27	6	75	-	4.3	4.3	IS
2548	13	03	1983	09	08	19.0	1.9	34.20	26.40	.16	.12	71	15	16	-	4.2	-	IS
2549	13	03	1983	21	30	29.0	3.3	34.10	24.56	.34	.10	80	-	16	-	4.0	-	IS
2550	16	03	1983	03	21	08.0	2.4	38.85	25.01	.03	.03	4	19	45	-	4.4	3.5	IS
2551	19	03	1983	21	41	42.0	0.3	35.02	25.32	.02	.01	59	2	462	5.2	5.7	5.2	IS
2552	20	03	1983	17	08	34.3	0.8	35.22	23.19	.06	.05	70	6	74	-	4.4	3.8	IS
2553	22	03	1983	11	19	59.1	0.7	37.31	29.24	.07	.07	10	-	28	-	4.4	-	IS
2554	24	03	1983	10	55	57.0	0.3	37.11	29.35	.03	.03	10	-	64	3.8	4.6	-	IS
2555	26	03	1983	10	51	48.3	0.4	38.81	44.20	.03	.04	44	4	63	-	4.6	-	IS
2556	06	04	1983	07	35	51.2	0.4	39.89	40.43	.03	.02	45	4	248	4.5	5.0	-	IS
2557	06	04	1983	14	48	05.2	1.0	38.11	27.16	.03	.04	9	8	31	-	-	4.1	IS
2558	14	04	1983	05	59	23.8	0.2	37.10	30.95	.02	.04	101	3	20	-	4.4	-	IS
2559	14	04	1983	09	36	28.3	0.6	36.57	27.03	.06	.07	10	-	21	-	4.7	4.0	IS
2560	14	04	1983	12	16	27.4	0.4	41.45	43.77	.05	.06	10	-	43	-	4.3	-	IS
2561	17	04	1983	15	17	09.1	0.9	35.54	23.60	.09	.08	89	6	37	-	4.5	3.6	IS
2562	20	04	1983	10	00	52.4	0.4	39.93	38.68	.06	.04	10	-	79	-	4.6	-	IS
2563	20	04	1983	22	52	42.4	0.4	35.48	26.23	.03	.03	77	4	106	-	4.5	3.9	IS
2564	21	04	1983	05	23	36.3	0.5	36.25	27.72	.05	.04	10	-	14	-	4.6	-	IS
2565	21	04	1983	16	18	57.2	0.4	39.31	33.06	.03	.03	36	4	216	4.1	4.8	-	IS
2566	23	04	1983	08	58	39.5	0.2	36.24	26.43	.03	.02	136	2	75	-	4.4	3.8	IS
2567	03	05	1983	04	37	50.2	0.2	39.36	23.02	.02	.03	10	-	43	-	4.2	3.4	IS
2568	04	05	1983	00	41	32.5	0.7	34.75	24.65	.05	.03	57	5	90	3.3	4.3	3.8	IS
2569	06	05	1983	01	56	16.6	0.6	38.39	25.98	.05	.08	5	-	11	-	4.0	-	IS
2570	08	05	1983	03	38	52.1	0.4	35.78	24.16	.03	.02	78	3	149	-	4.6	4.2	IS
2571	09	05	1983	02	06	24.2	0.6	35.34	44.43	.07	.05	68	6	18	-	4.7	-	IS
2572	16	05	1983	09	07	50.0	1.1	36.16	28.08	.09	.08	5	-	16	-	-	4.0	IS
2573	18	05	1983	16	48	27.4	0.6	38.64	24.06	.02	.02	11	5	41	-	2.7	4.1	IS
2574	24	05	1983	07	39	12.0	1.8	36.89	28.19	.07	.09	11	14	18	-	-	4.0	IS
2575	28	05	1983	02	40	15.2	1.0	40.02	26.89	.02	.03	9	8	34	-	4.4	-	IS
2576	28	05	1983	15	27	08.3	0.6	37.11	28.79	.05	.06	10	-	29	-	-	4.0	IS
2577	31	05	1983	16	10	19.5	0.2	34.13	32.73	.03	.04	27	-	15	-	-	4.0	IS
2578	01	06	1983	14	44	32.4	0.8	38.44	26.55	.03	.03	22	7	137	3.5	4.6	4.4	IS
2579	03	06	1983	02	04	39.9	1.0	33.83	35.75	.03	.04	8	6	120	3.9	4.7	4.9	IS
2580	04	06	1983	09	47	32.0	1.2	34.64	24.98	.10	.10	49	9	27	-	4.1	3.9	IS
2581	04	06	1983	11	10	06.0	1.5	41.80	23.30	.29	.12	-	-	5	-	4.7	-	IS
2582	14	06	1983	03	55	59.1	0.3	36.44	28.44	.03	.03	93	3	43	-	4.1	-	IS
2583	14	06	1983	04	40	42.8	0.2	40.47	24.00	.01	.02	12	-	114	-	4.2	3.9	IS
2584	15	06	1983	13	45	08.9	0.5	39.46	28.24	.02	.03	10	4	40	-	-	4.2	IS
2585	20	06	1983	00	28	36.8	0.4	39.84	42.06	.05	.05	10	-	56	3.6	4.6	-	IS

SIRA NO	TARiH			OLUS ZAMANI				KOORDiNATLAR				DERiN-LiK		ist	MAGNiTUD			Ky
	Gn	Ay	Yil	Sa	Dk	Sn	h_O	Enl.	Boyl.	h_E	h_B		hD	say	Ms	Mb	Ml	
2586	24	06	1983	14	25	43.0	0.6	43.26	47.59	.06	.08	10	-	45	-	4.3	-	IS
2587	24	06	1983	14	47	48.4	0.2	37.84	29.50	.03	.03	-	-	145	3.8	4.4	-	IS
2588	25	06	1983	05	33	49.3	0.7	37.79	29.35	.06	.08	10	-	22	-	4.1	-	IS
2589	27	06	1983	05	50	14.6	0.4	36.33	23.80	.03	.04	71	-	48	-	5.4	3.9	IS
2590	30	06	1983	01	21	39.0	1.5	34.90	24.07	.01	.07	61	5	13	-	4.1	-	IS
2591	04	07	1983	10	20	50.0	1.6	35.60	25.50	.16	.14	30	-	24	-	4.2	-	IS
2592	04	07	1983	11	35	37.8	1.0	34.05	25.48	.07	.05	36	8	106	3.7	4.3	3.9	IS
2593	05	07	1983	12	01	27.0	0.5	40.33	27.21	.01	.01	7	3	401	6.2	5.6	5.9	IS
2594	05	07	1983	17	30	43.1	-	40.26	27.16	.03	.03	4	8	121	-	4.1	4.4	IS
2595	07	07	1983	21	31	11.0	1.2	36.69	30.54	.06	.06	7	7	15	-	4.7	-	IS
2596	08	07	1983	02	55	01.1	0.3	40.23	27.18	.03	.03	17	-	109	-	3.9	4.2	IS
2597	13	07	1983	20	09	59.0	1.1	38.21	26.62	.03	.03	9	8	127	-	4.4	4.4	IS
2598	17	07	1983	12	17	45.4	0.8	36.20	27.11	.08	.06	16	-	13	-	-	4.1	IS
2599	23	07	1983	17	00	42.9	0.5	41.07	47.42	.06	.06	10	-	45	3.3	4.1	-	IS
2600	01	08	1983	23	50	02.0	1.1	32.10	47.28	.10	.09	81	14	8	-	4.7	-	IS
2601	03	08	1983	03	06	02.1	0.5	38.91	44.69	.05	.06	33	-	49	3.7	4.4	-	IS
2602	04	08	1983	20	39	15.1	0.5	37.84	27.59	.05	.07	-	-	35	-	4.7	-	IS
2603	06	08	1983	15	43	51.9	0.1	40.14	27.74	.02	.02	2	-	546	7.0	6.1	6.6	IS
2604	06	08	1983	16	46	23.0	2.0	39.85	24.55	.02	.03	7	-	91	-	4.4	4.4	IS
2605	06	08	1983	17	15	44.8	0.5	39.87	24.45	.04	.08	38	17	19	-	4.1	3.7	IS
2606	06	08	1983	17	55	51.4	0.5	39.91	24.52	.02	.02	8	4	78	-	3.9	4.1	IS
2607	06	08	1983	18	46	44.7	0.5	39.97	24.62	.02	.02	18	5	83	-	4.1	3.2	IS
2608	06	08	1983	18	58	35.4	0.2	40.11	24.80	.02	.02	7	-	97	-	4.1	4.2	IS
2609	06	08	1983	22	10	43.4	0.3	40.15	24.89	.03	.04	10	-	37	-	-	4.0	IS
2610	07	08	1983	01	44	10.7	0.7	40.09	24.76	.02	.02	3	6	122	4.4	4.2	4.3	IS
2611	07	08	1983	03	04	23.4	1.0	40.11	24.82	.01	.02	15	11	69	-	4.0	4.1	IS
2612	07	08	1983	20	45	24.6	0.6	39.39	23.83	.02	.03	2	5	66	-	4.0	3.1	IS
2613	08	08	1983	01	56	42.6	0.2	40.06	24.76	.02	.02	10	-	96	-	4.0	4.1	IS
2614	08	08	1983	02	41	38.4	0.9	40.13	24.85	.03	.03	10	7	48	-	3.5	4.1	IS
2615	08	08	1983	08	09	37.9	0.2	40.02	24.79	.02	.03	5	-	170	4.6	4.2	5.1	IS
2616	08	08	1983	16	03	25.1	0.9	40.06	24.85	.03	.04	10	7	36	-	-	4.0	IS
2617	11	08	1983	01	04	36.7	0.2	40.10	24.82	.02	.02	9	-	136	4.1	4.2	4.4	IS
2618	11	08	1983	05	26	30.1	0.4	37.72	31.28	.07	.08	33	-	11	-	4.8	-	IS
2619	11	08	1983	13	44	15.9	0.7	39.02	44.20	.05	.07	40	8	22	-	4.3	-	IS
2620	12	08	1983	17	17	26.2	0.4	38.11	23.23	.02	.02	18	4	153	3.3	4.7	4.0	IS
2621	13	08	1983	04	39	48.0	2.2	34.28	24.31	.06	.05	31	17	96	3.4	4.5	4.1	IS
2622	15	08	1983	14	43	38.6	0.9	40.11	24.86	.02	.02	12	7	66	-	3.8	4.0	IS
2623	16	08	1983	19	57	16.9	0.4	40.02	24.80	.04	.05	5	-	32	-	-	4.0	IS
2624	17	08	1983	11	26	32.8	0.4	40.09	24.83	.02	.02	23	5	69	-	3.8	4.4	IS
2625	18	08	1983	13	10	54.0	1.0	40.08	24.82	.02	.03	14	8	69	-	-	4.1	IS
2626	19	08	1983	04	43	19.3	0.4	40.10	24.79	.01	.02	29	5	77	-	4.1	4.2	IS
2627	19	08	1983	06	31	37.8	0.4	38.26	23.42	.02	.03	1	4	37	-	4.0	3.0	IS
2628	19	08	1983	12	19	59.8	-	35.15	31.70	-	-	33	-	13	-	4.0	3.7	IS
2629	20	08	1983	06	18	52.0	1.4	40.06	24.58	.03	.04	6	11	69	-	3.6	4.0	IS
2630	21	08	1983	07	55	53.7	0.7	40.08	24.61	.02	.03	4	5	70	-	3.6	4.0	IS
2631	23	08	1983	05	42	03.6	0.2	39.93	24.63	.02	.02	9	-	145	4.3	4.4	4.0	IS
2632	24	08	1983	19	53	40.7	0.7	40.14	24.89	.02	.02	11	6	73	-	3.7	4.0	IS
2633	26	08	1983	12	52	08.9	0.6	40.50	23.91	.02	.02	3	4	296	4.8	4.8	4.5	IS
2634	27	08	1983	11	46	05.5	0.5	38.71	41.04	.07	.06	-	-	18	-	4.5	-	IS
2635	01	09	1983	05	47	40.8	0.8	40.19	24.89	.03	.03	22	10	44	-	-	4.0	IS
2636	02	09	1983	07	53	49.9	0.6	35.62	27.27	.05	.04	12	-	10	-	-	4.0	IS
2637	03	09	1983	03	28	09.1	0.5	39.09	25.54	.02	.02	22	5	134	-	4.5	4.2	IS
2638	09	09	1983	17	59	45.4	0.3	35.48	27.23	.02	.02	35	3	318	5.1	5.1	5.1	IS
2639	23	09	1983	08	32	54.0	1.7	38.83	27.07	.07	.08	10	18	16	-	-	4.0	IS
2640	24	09	1983	05	46	00.2	0.7	39.49	25.99	.03	.05	10	6	18	-	-	4.0	IS

SIRA NO	TARiH			OLUS ZAMANI				KOORDiNATLAR				DERiN-LiK		ist say	MAGNiTUD			Ky
	Gn	Ay	Yil	Sa	Dk	Sn	h_O	Enl.	Boyl.	h_E	h_B		hD		Ms	Mb	Ml	
2641	24	09	1983	16	40	07.4	-	34.62	33.32	-	-	46	-	97	3.9	4.6	4.6	IS
2642	27	09	1983	23	59	39.0	0.2	36.72	26.93	.01	.01	160	2	344	-	5.5	5.2	IS
2643	28	09	1983	07	17	19.7	0.6	37.01	28.09	.04	.07	5	-	11	-	-	4.0	IS
2644	28	09	1983	11	18	55.7	0.4	35.24	25.81	.03	.02	74	3	216	-	5.0	4.8	IS
2645	28	09	1983	20	00	03.4	0.4	34.87	32.72	.05	.07	58	7	35	-	4.4	4.3	IS
2646	29	09	1983	07	11	15.6	0.8	34.65	24.14	.05	.03	36	7	209	-	4.9	4.5	IS
2647	30	09	1983	22	41	13.9	0.2	38.88	24.99	.02	.02	10	-	37	4.3	4.1	3.6	IS
2648	03	10	1983	11	15	09.6	0.5	37.16	43.64	.03	.04	48	5	49	-	4.7	-	IS
2649	04	10	1983	19	30	57.6	0.4	36.58	23.09	.04	.04	48	5	28	-	4.3	3.3	IS
2650	07	10	1983	04	14	04.2	0.2	37.98	23.27	.02	.02	136	2	122	-	4.7	3.8	IS
2651	10	10	1983	10	16	57.9	0.7	40.26	25.29	.01	.01	4	5	322	5.3	4.9	5.4	IS
2652	11	10	1983	05	08	21.6	0.3	40.27	25.29	.03	.03	10	-	62	-	-	4.2	IS
2653	11	10	1983	05	14	03.0	0.3	40.25	25.28	.03	.04	10	-	41	-	-	4.0	IS
2654	11	10	1983	12	08	18.7	0.5	38.85	29.21	.04	.05	10	-	80	-	4.2	-	IS
2655	11	10	1983	20	08	18.5	-	38.97	29.25	-	-	-	-	-	-	-	4.1	IS
2656	13	10	1983	06	52	40.2	0.2	39.77	24.25	.02	.03	12	-	91	-	4.4	4.6	IS
2657	16	10	1983	03	34	44.7	0.8	36.10	27.15	.11	.07	71	-	-	-	-	4.0	IS
2658	21	10	1983	20	34	49.3	0.7	40.14	29.35	.01	.01	12	5	324	5.1	5.1	-	IS
2659	22	10	1983	19	50	51.5	0.4	38.22	30.93	.03	.05	9	-	28	-	4.0	-	IS
2660	23	10	1983	03	15	35.4	0.4	36.63	25.67	.03	.03	34	4	172	4.2	4.7	4.6	IS
2661	27	10	1983	08	40	10.0	2.6	40.16	29.30	.03	.05	18	29	23	-	4.3	-	IS
2662	28	10	1983	05	08	18.8	0.2	40.04	24.79	.03	.03	17	-	231	-	4.7	4.8	IS
2663	30	10	1983	03	50	56.8	0.2	40.10	24.84	.02	.02	12	-	98	-	4.5	4.2	IS
2664	30	10	1983	04	12	28.1	0.5	40.35	42.18	.02	.01	16	4	531	6.9	6.1	-	IS
2665	30	10	1983	04	44	42.8	0.6	40.80	42.20	.20	.15	10	-	18	-	4.7	-	IS
2666	30	10	1983	05	26	25.7	0.3	40.67	42.25	.06	.05	10	-	44	-	4.6	-	IS
2667	30	10	1983	08	13	50.2	0.5	40.23	42.03	.06	.05	10	-	33	-	4.5	-	IS
2668	30	10	1983	12	40	25.5	0.6	40.45	42.17	.02	.02	31	5	325	5.3	5.4	-	IS
2669	30	10	1983	13	48	17.0	2.8	40.36	42.01	.07	.08	3	19	27	-	5.0	-	IS
2670	31	10	1983	18	51	59.7	0.3	34.90	33.65	.04	.06	75	6	27	-	4.5	4.1	IS
2671	31	10	1983	20	11	40.5	0.8	39.84	24.48	.02	.02	1	6	76	-	4.3	4.2	IS
2672	31	10	1983	20	52	42.8	0.2	39.81	24.44	.02	.02	13	-	57	-	4.5	4.0	IS
2673	01	11	1983	13	11	56.2	0.9	40.65	42.38	.08	.09	39	12	32	-	4.4	-	IS
2674	01	11	1983	18	03	28.0	1.0	40.43	42.21	.05	.03	23	9	97	4.1	4.8	-	IS
2675	02	11	1983	00	15	18.5	0.9	40.32	42.16	.04	.03	29	7	88	4.1	4.7	-	IS
2676	02	11	1983	00	24	22.6	0.6	40.36	42.06	.03	.02	25	5	147	-	4.8	-	IS
2677	02	11	1983	08	36	22.7	0.4	34.91	27.68	.03	.03	54	4	99	-	4.9	4.3	IS
2678	02	11	1983	14	56	01.8	0.4	40.47	42.04	.07	.06	10	-	33	-	4.6	-	IS
2679	02	11	1983	17	09	42.7	0.9	41.89	44.33	.49	.05	1	7	57	-	4.5	-	IS
2680	02	11	1983	22	53	08.8	0.8	40.10	29.36	.02	.02	4	5	169	3.6	4.6	-	IS
2681	03	11	1983	18	46	17.8	0.7	40.16	29.28	.02	.03	14	5	59	-	4.0	-	IS
2682	05	11	1983	05	44	25.9	0.5	40.52	41.95	.06	.06	-	-	30	-	4.4	-	IS
2683	05	11	1983	19	28	49.0	1.4	36.00	27.30	.17	.11	39	-	12	-	-	4.1	IS
2684	06	11	1983	00	21	52.8	0.7	35.24	26.75	.07	.03	5	-	17	-	-	4.0	IS
2685	06	11	1983	05	17	04.0	1.0	39.33	29.32	.02	.02	14	7	209	4.0	4.5	-	IS
2686	06	11	1983	15	31	25.7	0.6	35.19	23.30	.05	.04	79	4	27	-	4.4	3.9	IS
2687	08	11	1983	05	32	56.9	0.4	40.03	42.52	.05	.05	3	-	37	-	4.4	-	IS
2688	08	11	1983	08	31	37.2	0.6	40.09	42.53	.05	.06	33	-	17	-	4.5	-	IS
2689	09	11	1983	03	50	59.1	0.2	42.42	45.16	.03	.03	10	-	94	4.3	4.6	-	IS
2690	09	11	1983	09	57	42.6	0.3	38.97	23.40	.02	.03	10	-	63	-	3.8	4.0	IS
2691	09	11	1983	12	12	06.9	0.4	35.73	27.46	.04	.02	10	-	25	-	-	4.2	IS
2692	10	11	1983	17	28	21.0	1.7	43.14	27.54	.02	.04	3	12	166	-	4.6	-	IS
2693	12	11	1983	00	23	22.9	0.9	40.55	42.28	.07	.08	48	9	37	-	4.4	-	IS
2694	14	11	1983	04	01	51.6	0.6	38.16	38.05	.05	.09	10	-	5	-	4.4	-	IS
2695	15	11	1983	10	59	11.8	0.6	40.12	29.28	.02	.03	7	4	83	3.5	4.4	-	IS

SIRA NO	TARiH			OLUS ZAMANI				KOORDiNATLAR				DERiN-LiK		ist	MAGNiTUD			Ky
	Gn	Ay	Yil	Sa	Dk	Sn	h_O	Enl.	Boyl.	h_E	h_B		hD	say	Ms	Mb	Ml	
2696	16	11	1983	05	56	28.6	0.2	39.87	24.41	.01	.02	10	-	80	-	4.3	4.5	IS
2697	17	11	1983	16	17	14.3	0.5	33.98	25.18	.05	.05	33	-	51	-	4.5	-	IS
2698	18	11	1983	01	15	37.5	0.3	39.79	39.43	.02	.02	37	3	300	5.0	5.0	-	IS
2699	18	11	1983	02	07	25.9	0.8	39.90	39.22	.11	.09	33	-	33	-	4.7	-	IS
2700	18	11	1983	07	13	29.9	0.6	36.87	28.82	.06	.07	15	-	71	-	4.6	-	IS
2701	19	11	1983	07	57	59.4	0.4	34.33	45.96	.03	.02	43	5	209	4.6	5.1	-	IS
2702	19	11	1983	18	09	31.0	1.2	40.38	42.14	.05	.05	32	10	41	-	4.6	-	IS
2703	20	11	1983	16	04	35.5	0.4	39.82	39.33	.04	.03	47	5	128	-	4.6	-	IS
2704	21	11	1983	01	42	19.5	0.7	36.26	27.10	.03	.02	24	7	109	-	4.5	4.3	IS
2705	21	11	1983	11	43	30.6	0.7	36.33	26.96	.07	.05	5	-	47	-	4.2	4.2	IS
2706	21	11	1983	14	00	03.8	0.9	36.46	27.10	.10	.08	34	-	14	-	-	4.0	IS
2707	21	11	1983	17	19	19.0	1.0	36.40	26.92	.10	.09	43	17	25	-	4.6	4.1	IS
2708	24	11	1983	00	14	08.9	0.4	37.05	36.12	.02	.02	37	4	114	-	4.7	-	IS
2709	26	11	1983	10	09	29.9	0.8	36.30	27.01	.07	.06	5	-	25	-	-	4.1	IS
2710	26	11	1983	10	38	21.1	0.8	36.18	27.07	.08	.06	-	-	13	-	-	4.1	IS
2711	27	11	1983	09	54	31.0	1.0	35.41	23.28	.09	.07	69	10	27	-	4.2	3.8	IS
2712	29	11	1983	21	23	50.8	0.6	40.61	42.25	.08	.06	-	-	27	-	4.7	-	IS
2713	02	12	1983	10	32	05.3	0.7	39.61	45.04	.07	.09	-	-	22	-	4.2	-	IS
2714	07	12	1983	14	05	30.2	0.2	40.07	29.37	.02	.03	8	-	48	-	4.0	-	IS
2715	09	12	1983	00	40	10.0	1.1	37.83	29.42	.03	.04	6	9	36	-	4.5	-	IS
2716	09	12	1983	02	55	23.0	0.2	40.43	25.49	.02	.02	10	-	52	-	-	4.3	IS
2717	10	12	1983	02	10	39.1	0.5	40.07	42.42	.06	.07	-	-	26	-	4.6	-	IS
2718	11	12	1983	17	54	02.2	0.5	34.42	26.18	.04	.04	49	5	82	3.4	4.4	4.1	IS
2719	15	12	1983	07	17	42.0	1.1	40.24	46.11	.04	.04	5	8	46	-	4.4	-	IS
2720	15	12	1983	12	15	32.5	0.6	35.89	23.18	.04	.03	64	6	80	-	4.5	3.9	IS
2721	16	12	1983	05	34	41.7	0.4	36.58	27.73	.03	.04	10	-	13	-	-	4.2	IS
2722	17	12	1983	00	14	21.3	0.6	41.20	44.04	.03	.03	1	4	90	3.8	4.7	-	IS
2723	18	12	1983	05	00	13.5	0.6	40.23	25.25	.02	.03	27	7	72	-	3.8	4.1	IS
2724	20	12	1983	23	43	13.8	1.0	40.35	25.50	.09	.12	-	-	15	-	4.2	-	IS
2725	25	12	1983	12	47	00.3	0.2	37.27	23.82	.02	.02	42	3	73	-	4.3	3.9	IS
2726	26	12	1983	03	03	53.8	0.3	37.29	23.90	.03	.03	50	5	61	-	4.3	3.3	IS
2727	30	12	1983	04	40	50.8	0.6	40.10	25.41	.03	.04	7	6	22	-	-	4.0	IS
2728	31	12	1983	06	36	01.7	0.9	35.59	26.36	.09	.06	5	-	12	-	-	4.1	IS
2729	02	01	1984	22	25	23.0	1.3	35.20	23.24	.10	.09	73	8	31	3.7	4.4	3.7	IS
2730	04	01	1984	00	16	16.4	0.6	34.87	23.02	.04	.03	38	4	174	4.7	5.6	4.3	IS
2731	06	01	1984	19	38	17.2	-	35.40	26.27	-	-	-	-	6	-	4.4	4.1	IK
2732	13	01	1984	23	14	00.6	-	35.20	26.30	-	-	-	-	7	-	-	4.1	IK
2733	14	01	1984	22	15	02.7	0.4	35.14	24.53	.03	.02	59	3	337	4.0	5.1	3.8	IS
2734	18	01	1984	07	36	29.5	0.8	40.19	42.00	.07	.07	51	8	24	-	4.4	-	IS
2735	19	01	1984	09	21	31.9	0.6	41.33	43.67	.04	.04	3	5	90	3.5	4.5	-	IS
2736	21	01	1984	10	04	08.4	-	39.48	26.33	-	-	-	-	15	-	4.0	4.1	IK
2737	21	01	1984	12	07	15.4	0.5	35.35	26.77	.05	.04	46	12	22	-	-	4.3	IS
2738	23	01	1984	07	38	22.0	1.3	35.20	23.50	.12	.12	67	10	34	-	4.2	4.0	IS
2739	23	01	1984	10	26	33.5	0.5	41.90	23.40	.02	.02	6	4	82	-	4.2	4.1	IS
2740	23	01	1984	14	42	32.0	-	36.73	31.02	-	-	-	-	43	-	4.5	4.5	IK
2741	23	01	1984	20	14	03.6	-	35.29	27.07	-	-	-	-	10	-	4.9	4.2	IK
2742	30	01	1984	00	39	33.8	0.7	32.60	47.83	.09	.09	33	-	8	-	4.1	-	IS
2743	30	01	1984	05	58	24.9	0.8	43.06	45.59	.03	.04	23	7	80	3.8	4.7	-	IS
2744	30	01	1984	05	58	25.8	0.5	40.50	27.49	.05	.05	10	-	21	3.7	4.5	-	IS
2745	31	01	1984	15	51	38.1	-	37.20	27.95	-	-	-	-	12	-	4.5	4.1	IK
2746	05	02	1984	00	20	20.3	-	37.23	28.49	-	-	-	-	15	4.1	5.1	4.8	IK
2747	05	02	1984	21	07	49.2	-	37.26	28.48	-	-	-	-	14	-	-	4.1	IK
2748	06	02	1984	04	03	26.8	-	37.30	27.99	-	-	-	-	15	-	4.7	4.2	IK
2749	06	02	1984	07	59	41.0	1.4	36.45	26.91	.05	.04	14	11	27	-	-	4.2	IS
2750	08	02	1984	09	43	44.0	1.5	43.05	45.46	.06	.08	27	15	46	-	4.4	-	IS

SIRA NO	TARiH			OLUS ZAMANI				KOORDiNATLAR				DERiN-LiK		ist say	MAGNiTUD			Ky
	Gn	Ay	Yil	Sa	Dk	Sn	h_O	Enl.	Boyl.	h_E	h_B		hD		Ms	Mb	Ml	
2751	09	02	1984	18	21	14.2	0.6	40.48	42.10	.06	.07	33	-	23	-	4.1	-	IS
2752	11	02	1984	08	12	32.5	-	36.93	30.27	-	-	-	-	12	5.3	4.9	4.5	IK
2753	11	02	1984	16	15	22.8	0.1	36.09	28.35	.02	.02	76	2	23	-	4.0	-	IS
2754	12	02	1984	04	54	51.1	0.5	40.65	42.12	.04	.06	48	8	29	-	4.8	-	IS
2755	17	02	1984	21	19	53.6	0.5	39.21	23.46	.02	.03	6	4	78	-	4.5	3.9	IS
2756	18	02	1984	16	34	46.8	0.4	34.81	26.05	.03	.02	37	4	241	-	4.8	4.3	IS
2757	18	02	1984	21	40	53.0	1.7	34.80	24.18	.15	.08	75	83	20	-	4.0	3.7	IS
2758	19	02	1984	02	11	06.0	1.0	40.50	38.53	.13	.09	3	-	28	-	4.1	-	IS
2759	19	02	1984	02	53	00.8	0.5	40.62	23.37	.02	.03	8	5	60	-	4.0	3.7	IS
2760	19	02	1984	03	47	22.5	0.3	40.67	23.36	.01	.02	24	3	251	-	4.9	4.3	IS
2761	19	02	1984	05	03	50.0	0.9	34.89	23.72	.07	.06	66	6	57	-	4.6	4.0	IS
2762	21	02	1984	01	24	53.8	0.5	36.15	23.52	.04	.04	39	6	93	4.1	4.4	3.9	IS
2763	22	02	1984	07	52	27.2	-	35.64	28.41	-	-	-	-	5	-	-	4.0	IK
2764	25	02	1984	22	01	00.9	0.2	39.38	27.88	.02	.03	9	-	38	-	-	4.0	IS
2765	28	02	1984	08	48	17.4	-	36.20	25.72	-	-	-	-	5	-	4.7	4.3	IK
2766	29	02	1984	14	07	10.1	-	36.54	28.74	-	-	-	-	9	-	-	4.2	IK
2767	29	02	1984	20	12	22.4	0.6	34.39	24.35	.04	.03	37	5	169	4.2	4.7	4.2	IS
2768	01	03	1984	06	39	34.9	-	39.32	27.89	-	-	-	-	14	-	-	4.0	IK
2769	01	03	1984	09	08	35.3	-	35.57	25.65	-	-	-	-	11	-	4.6	4.3	IK
2770	04	03	1984	10	01	33.3	0.6	43.14	45.56	.02	.02	18	5	11	5.3	5.2	-	IS
2771	04	03	1984	14	51	06.4	0.6	43.06	45.60	.02	.03	29	5	118	-	4.8	-	IS
2772	04	03	1984	16	32	20.2	0.7	43.15	45.51	.04	.06	31	6	34	-	4.2	-	IS
2773	04	03	1984	19	24	46.4	0.3	43.11	45.63	.02	.02	31	3	336	5.4	5.3	-	IS
2774	04	03	1984	20	45	13.0	0.7	43.06	45.75	.04	.05	27	6	28	-	4.5	-	IS
2775	05	03	1984	19	33	13.3	0.4	33.21	35.53	.02	.02	4	2	15	-	-	4.1	IS
2776	07	03	1984	23	29	32.0	2.1	39.01	43.31	.04	.05	4	14	58	3.7	4.6	-	IS
2777	08	03	1984	06	40	25.0	0.4	35.34	27.17	.05	.03	5	-	14	-	-	4.0	IS
2778	08	03	1984	23	22	06.0	1.0	43.07	45.62	.04	.06	30	9	66	-	4.4	-	IS
2779	11	03	1984	23	58	22.7	0.1	43.39	41.18	.03	.02	10	-	217	3.5	4.8	-	IS
2780	12	03	1984	19	58	10.1	0.8	43.10	45.52	.03	.04	27	7	78	-	4.7	-	IS
2781	13	03	1984	20	35	05.3	0.4	34.78	23.82	.03	.02	38	3	347	4.4	5.3	4.7	IS
2782	14	03	1984	18	43	31.8	-	37.06	27.18	-	-	-	-	8	-	4.6	4.0	IK
2783	21	03	1984	05	40	23.1	-	34.35	26.51	-	-	61	-	35	-	4.3	-	IS
2784	21	03	1984	23	15	29.9	-	37.94	28.68	-	-	-	-	9	-	4.2	4.2	IK
2785	25	03	1984	02	44	58.7	0.6	38.25	45.28	.07	.08	33	-	45	-	4.6	-	IS
2786	25	03	1984	14	48	17.6	-	37.90	28.75	-	-	-	-	10	3.7	4.5	4.4	IK
2787	26	03	1984	12	00	26.9	1.0	34.34	45.37	.08	.10	75	11	17	-	4.7	-	IS
2788	27	03	1984	01	21	20.3	0.7	43.07	45.67	.03	.04	29	6	103	4.0	4.7	-	IS
2789	28	03	1984	16	15	06.1	0.2	34.75	33.58	.02	.02	38	3	219	4.3	5.0	-	IS
2790	29	03	1984	00	06	02.9	-	39.70	27.75	-	-	-	-	16	3.8	4.5	4.6	IK
2791	31	03	1984	02	05	06.2	-	37.98	30.77	-	-	-	-	13	-	-	4.0	IK
2792	31	03	1984	13	56	46.2	-	39.62	28.77	-	-	-	-	12	-	-	4.1	IK
2793	01	04	1984	17	17	44.3	-	39.60	28.78	-	-	-	-	14	3.7	4.2	4.4	IK
2794	01	04	1984	20	16	59.0	1.1	38.88	24.97	.01	.01	12	9	7	-	4.0	3.5	IS
2795	02	04	1984	21	59	32.4	0.5	37.62	42.88	.04	.05	43	7	48	-	4.4	-	IS
2796	03	04	1984	23	47	41.0	1.7	35.90	27.27	.10	.07	16	17	12	-	-	4.4	IS
2797	04	04	1984	19	41	43.4	0.7	40.43	42.14	.06	.06	45	9	43	-	4.4	-	IS
2798	06	04	1984	22	13	30.0	2.7	40.52	36.63	.08	.06	13	19	35	-	4.1	-	IS
2799	07	04	1984	09	20	22.6	0.3	33.78	32.15	.04	.04	48	5	31	-	4.6	4.2	IS
2800	08	04	1984	09	49	50.5	0.4	38.82	24.95	.20	.21	15	5	46	-	4.0	-	IS
2801	16	04	1984	01	38	41.0	1.8	36.53	25.57	.06	.05	2	13	47	-	4.7	3.9	IS
2802	16	04	1984	17	55	51.9	0.4	35.72	31.20	.06	.07	47	6	20	-	4.5	-	IS
2803	20	04	1984	14	21	08.0	-	36.00	28.12	-	-	-	-	80	-	4.7	4.5	IK
2804	21	04	1984	01	25	12.6	-	36.06	27.24	-	-	49	-	194	-	4.7	3.9	IS
2805	21	04	1984	21	05	09.5	-	36.04	27.13	-	-	-	-	10	-	-	4.6	IK

SIRA NO	TARİH			OLUS ZAMANI				KOORDİNATLAR				DERİN-LİK		ist say	MAGNİTUD			Ky
	Gn	Ay	Yil	Sa	Dk	Sn	h_O	Enl.	Boyl.	h_E	h_B		hD		Ms	Mb	Ml	
2806	23	04	1984	10	31	46.6	-	37.87	26.91	-	-	-	-	84	-	4.6	4.4	IK
2807	23	04	1984	12	11	33.8	-	37.86	26.77	-	-	-	-	13	3.8	4.8	4.5	IK
2808	26	04	1984	00	28	47.8	-	37.22	28.17	-	-	-	-	12	-	4.3	4.3	IK
2809	26	04	1984	22	36	03.7	0.9	43.33	46.11	.06	.07	48	12	35	-	4.6	-	IS
2810	27	04	1984	02	31	40.7	0.8	34.54	25.59	.06	.05	71	6	99	-	4.1	4.2	IS
2811	27	04	1984	03	02	59.1	-	38.88	31.47	-	-	-	-	14	-	-	4.0	IK
2812	27	04	1984	06	05	48.0	0.4	35.54	27.60	.04	.05	55	7	30	-	3.9	4.2	IS
2813	30	04	1984	05	41	09.0	0.7	35.07	27.97	.05	.06	58	7	45	-	4.5	4.4	IS
2814	30	04	1984	20	54	21.0	1.1	35.20	23.21	.09	.08	74	6	51	-	4.4	3.9	IS
2815	02	05	1984	13	46	51.1	-	38.79	25.09	-	-	-	-	7	-	-	4.0	IK
2816	02	05	1984	14	47	40.6	0.8	34.29	25.09	.06	.05	48	7	54	-	4.4	4.1	IS
2817	02	05	1984	17	45	12.9	0.8	34.33	25.10	.06	.04	56	6	62	-	4.5	4.1	IS
2818	03	05	1984	01	46	32.8	0.6	38.74	24.87	.02	.02	17	7	49	-	4.6	3.5	IS
2819	04	05	1984	21	35	04.1	-	37.87	29.23	-	-	-	-	12	-	4.7	4.7	IK
2820	06	05	1984	09	12	01.4	-	38.88	25.51	-	-	-	-	14	5.3	5.1	4.7	IK
2821	07	05	1984	06	15	42.0	-	36.81	31.23	-	-	-	-	13	-	4.5	4.5	IK
2822	13	05	1984	02	37	57.8	-	38.91	25.88	-	-	-	-	11	-	-	4.0	IK
2823	13	05	1984	02	43	14.5	-	38.89	25.65	-	-	-	-	12	-	-	4.0	IK
2824	14	05	1984	11	21	51.8	-	39.07	25.72	-	-	-	-	11	-	4.3	4.3	IK
2825	14	05	1984	14	13	37.2	0.8	40.60	42.38	.11	.09	33	-	24	4.0	4.1	-	IS
2826	14	05	1984	15	18	53.4	-	38.85	25.82	-	-	-	-	9	-	-	4.0	IK
2827	15	05	1984	17	41	36.5	0.5	39.82	39.43	.07	.07	10	-	33	-	4.6	-	IS
2828	15	05	1984	22	53	06.5	-	38.88	25.87	-	-	-	-	9	-	4.7	4.2	IK
2829	22	05	1984	08	11	29.5	0.4	34.89	33.81	.05	.08	27	-	21	-	-	4.1	IS
2830	23	05	1984	08	06	30.7	-	36.96	27.85	-	-	-	-	8	-	-	4.0	IK
2831	26	05	1984	08	39	37.7	-	40.60	30.23	-	-	-	-	11	-	4.1	4.0	IK
2832	26	05	1984	15	55	31.2	0.7	32.56	47.99	.06	.05	67	74	27	-	4.5	-	IS
2833	30	05	1984	10	16	44.6	0.2	32.27	35.33	.01	.01	9	2	17	-	-	4.0	IS
2834	30	05	1984	15	00	30.1	-	38.88	26.65	-	-	-	-	13	-	-	4.0	IK
2835	07	06	1984	23	38	00.4	-	37.44	28.58	-	-	-	-	8	-	4.3	4.1	IK
2836	10	06	1984	09	01	00.0	2.0	34.90	26.18	.06	.04	11	12	228	3.8	4.6	4.3	IS
2837	11	06	1984	20	17	32.1	0.8	34.27	25.55	.07	.06	50	9	81	-	4.3	4.0	IS
2838	12	06	1984	00	10	33.0	0.4	40.08	24.92	.02	.02	20	5	84	-	4.2	3.9	IS
2839	16	06	1984	03	48	27.1	-	38.40	30.45	-	-	-	-	15	-	4.3	4.4	IK
2840	17	06	1984	07	48	04.7	-	38.95	25.87	-	-	-	-	15	5.3	5.0	5.1	IK
2841	17	06	1984	07	53	03.6	-	39.01	26.10	-	-	-	-	13	-	4.2	4.2	IK
2842	18	06	1984	23	59	14.0	1.5	35.10	23.15	.13	.10	69	8	32	-	4.3	3.8	IS
2843	20	06	1984	15	29	42.7	-	37.08	27.29	-	-	-	-	14	-	4.7	4.0	IK
2844	21	06	1984	10	43	40.5	0.6	35.31	23.28	.02	.02	25	4	543	5.9	5.8	5.9	IS
2845	21	06	1984	11	13	36.6	0.6	35.21	23.14	.04	.03	47	5	147	-	4.4	4.2	IS
2846	23	06	1984	13	31	26.9	-	38.94	31.73	-	-	-	-	7	-	-	4.0	IK
2847	23	06	1984	21	11	01.1	1.0	40.37	25.46	.02	.02	16	8	66	-	-	4.0	IS
2848	26	06	1984	19	48	10.7	-	38.92	25.81	-	-	-	-	16	4.8	4.8	4.8	IK
2849	27	06	1984	18	16	41.0	-	39.25	28.76	-	-	-	-	13	-	3.7	4.0	IK
2850	29	06	1984	16	37	55.2	0.6	34.40	26.49	.04	.02	45	5	225	4.5	4.6	4.1	IS
2851	29	06	1984	19	55	18.3	0.5	38.42	45.16	.04	.03	40	5	106	3.9	4.6	-	IS
2852	02	07	1984	09	41	58.0	1.2	35.22	23.34	.10	.07	70	7	72	-	4.5	3.9	IS
2853	04	07	1984	13	05	35.0	1.3	35.16	23.09	.10	.07	59	8	53	-	4.4	3.8	IS
2854	04	07	1984	21	25	51.0	0.8	42.94	41.16	.03	.02	3	5	152	-	4.7	-	IS
2855	09	07	1984	12	40	37.0	1.1	34.28	25.31	.08	.08	57	10	42	-	4.3	-	IS
2856	14	07	1984	05	56	23.0	1.1	34.93	23.00	.08	.05	53	7	113	3.8	4.4	3.9	IS
2857	15	07	1984	17	47	02.5	0.3	39.22	27.72	.02	.03	10	-	55	-	-	4.1	IS
2858	15	07	1984	20	00	50.6	0.4	38.76	38.04	.06	.05	10	-	15	-	4.6	-	IS
2859	16	07	1984	05	59	01.5	0.7	44.28	39.90	.07	.05	49	17	22	-	4.3	-	IS
2860	17	07	1984	22	32	37.0	1.2	34.08	26.09	.06	.04	31	8	28	-	4.6	-	IS

SIRA NO	TARiH			OLUS ZAMANI				KOORDiNATLAR				DERiN-LiK		ist say	MAGNiTUD			Ky
	Gn	Ay	Yil	Sa	Dk	Sn	h_O	Enl.	Boyl.	h_E	h_B		hD		Ms	Mb	Ml	
2861	18	07	1984	00	19	10.6	0.9	40.70	42.19	.12	.10	10	-	31	4.0	4.2	-	IS
2862	19	07	1984	19	05	29.6	0.5	36.13	27.31	.05	.04	55	6	31	-	4.4	4.0	IS
2863	22	07	1984	07	56	02.8	-	38.79	25.53	-	-	-	-	9	-	4.1	4.1	IK
2864	24	07	1984	01	34	51.6	-	38.93	25.85	-	-	-	-	10	-	4.3	3.9	IK
2865	24	07	1984	18	07	55.4	0.7	34.64	26.41	.05	.04	39	6	140	3.6	4.5	4.2	IS
2866	26	07	1984	15	30	20.2	0.5	34.52	27.09	.05	.04	65	5	51	-	4.2	-	IS
2867	29	07	1984	01	58	43.2	-	40.58	25.95	-	-	-	-	8	4.6	5.0	4.9	IK
2868	29	07	1984	02	21	12.6	-	40.55	26.01	-	-	-	-	8	4.6	4.8	4.5	IK
2869	29	07	1984	09	48	24.1	-	40.48	26.07	-	-	-	-	12	4.3	4,5	4.6	IK
2870	29	07	1984	22	22	28.1	-	40.54	26.07	-	-	-	-	13	4.0	4.0	4.4	IK
2871	31	07	1984	12	44	30.2	-	36.72	28.74	-	-	-	-	7	-	-	4.0	IK
2872	02	08	1984	05	52	53.1	0.7	40.22	44.33	.07	.09	33	-	30	-	4.4	-	IS
2873	08	08	1984	09	11	11.0	0.6	34.50	47.90	.21	.18	33	-	9	-	4.6	-	IS
2874	08	08	1984	16	47	45.2	0.4	39.44	26.30	.02	.02	6	4	44	-	4.0	3.8	IS
2875	12	08	1984	16	51	25.8	-	35.15	27.15	-	-	-	-	30	-	4.2	4.2	IK
2876	14	08	1984	23	03	55.2	1.0	36.24	45.29	.10	.08	46	14	15	-	4.1	-	IS
2877	15	08	1984	16	09	29.0	-	38.98	25.77	-	-	-	-	11	-	3.8	4.0	IK
2878	16	08	1984	11	13	30.0	1.5	35.20	27.21	.13	.09	15	-	10	-	-	4.2	IS
2879	22	08	1984	12	49	37.7	-	38.47	30.58	-	-	-	-	14	-	3.9	4.2	IK
2880	22	08	1984	23	29	22.3	-	38.97	25.94	-	-	-	-	13	-	4.2	4.1	IK
2881	23	08	1984	20	26	46.9	0.7	36.24	43.03	.03	.03	22	6	77	-	4.6	-	IS
2882	24	08	1984	06	02	22.6	0.2	32.76	35.04	.03	.03	-	-	265	4.2	5.1	5.2	IS
2883	24	08	1984	09	02	22.0	2.0	38.64	23.76	.02	.02	11	15	71	-	4.1	3.6	IS
2884	24	08	1984	11	31	42.0	0.3	38.50	45.95	.04	.04	10	-	16	-	5.0	-	IS
2885	24	08	1984	22	28	53.4	-	37.59	30.14	-	-	-	-	10	-	-	4.0	IK
2886	25	08	1984	21	09	20.0	-	39.01	26.00	-	-	-	-	12	-	3.5	4.1	IK
2887	27	08	1984	06	32	14.1	0.6	40.77	30.00	.03	.05	27	5	25	-	4.0	-	IS
2888	01	09	1984	07	05	28.0	1.5	34.56	25.26	.05	.04	8	9	60	-	4.2	4.0	IS
2889	01	09	1984	21	50	14.3	-	37.81	29.50	-	-	-	-	12	-	-	4.1	IK
2890	03	09	1984	02	16	03.1	-	38.58	25.93	-	-	-	-	11	-	4.1	3.9	IK
2891	05	09	1984	11	10	54.6	0.4	34.70	27.75	.04	.05	33	-	9	-	4.0	-	IS
2892	08	09	1984	20	22	27.5	-	38.12	30.91	-	-	-	-	12	-	4.3	4.3	IK
2893	11	09	1984	01	43	11.0	1.1	39.50	38.60	.12	.16	10	-	15	-	4.3	-	IS
2894	13	09	1984	01	25	03.8	-	25.87	29.96	-	-	-	-	25	-	4.6	4.6	IK
2895	18	09	1984	13	26	02.2	0.1	40.90	42.24	.02	.02	10	-	343	5.9	5.3	-	IS
2896	23	09	1984	11	32	44.0	0.4	36.35	44.70	.04	.04	54	5	15	-	4.6	-	IS
2897	23	09	1984	14	19	25.2	0.3	36.52	26.49	.03	.03	155	2	83	-	4.5	3.5	IS
2898	23	09	1984	22	38	53.1	0.4	34.82	26.72	.03	.02	55	4	198	3.4	4.9	4.3	IS
2899	29	09	1984	06	11	38.2	0.5	36.46	27.01	.05	.05	5	-	14	-	-	4.1	IS
2900	03	10	1984	04	23	44.0	0.2	40.06	24.70	.02	.02	9	-	72	-	-	4.4	IS
2901	03	10	1984	04	41	52.2	0.2	39.98	24.71	.02	.02	10	-	59	-	-	4.2	IS
2902	03	10	1984	23	37	49.6	0.8	36.11	45.20	.09	.12	33	-	10	-	4.6	-	IS
2903	05	10	1984	14	22	47.7	0.6	40.93	23.48	.02	.02	7	5	97	-	4.2	4.0	IS
2904	05	10	1984	20	58	49.0	1.0	39.15	25.26	.02	.02	9	7	308	4.7	5.0	5.2	IS
2905	06	10	1984	11	46	18.1	-	35.99	30.76	-	-	-	-	7	-	4.0	4.1	IK
2906	10	10	1984	21	11	18.3	0.3	36.85	23.48	.03	.02	103	3	211	-	4.6	4.2	IS
2907	13	10	1984	08	21	21.0	1.1	35.29	23.24	.09	.07	76	8	50	-	4.1	4.1	IS
2908	16	10	1984	03	18	58.5	-	35.76	28.13	-	-	-	-	17	-	4.0	4.0	IK
2909	17	10	1984	14	16	05.2	0.5	40.76	42.49	.05	.06	33	-	33	-	4.7	-	IS
2910	17	10	1984	20	45	05.0	1.1	40.83	42.50	.05	.04	20	9	70	-	4.5	-	IS
2911	18	10	1984	07	19	18.4	0.4	33.23	35.63	.02	.04	18	4	26	-	3.7	4.5	IS
2912	18	10	1984	09	46	20.7	0.5	40.79	42.48	.02	.02	19	4	350	5.2	5.4	-	IS
2913	19	10	1984	13	00	03.6	0.8	40.68	24.41	.07	.06	36	10	47	-	4.6	-	IS
2914	20	10	1984	00	30	47.0	1.9	34.60	26.46	.17	.09	5	-	18	-	4.2	4.1	IS
2915	20	10	1984	13	29	32.4	0.7	34.85	26.57	.05	.04	50	8	71	3.1	4.4	4.1	IS

SIRA NO	TARiH			OLUS ZAMANI				KOORDiNATLAR				DERiN-LiK		ist say	MAGNiTUD			Ky
	Gn	Ay	Yil	Sa	Dk	Sn	h_O	Enl.	Boyl.	h_E	h_B		hD		Ms	Mb	Ml	
2916	21	10	1984	00	31	36.0	1.5	40.70	42.27	.14	.09	32	17	28	-	4.4	-	IS
2917	21	10	1984	18	04	26.4	0.7	40.76	42.49	.03	.02	21	5	195	3.9	4.7	-	IS
2918	21	10	1984	23	40	21.9	0.4	32.71	47.54	.03	.02	50	4	150	-	5.0	-	IS
2919	22	10	1984	22	26	00.9	0.7	40.83	42.47	.06	.05	34	9	50	-	4.4	-	IS
2920	23	10	1984	01	42	35.4	-	36.04	26.44	-	-	-	-	17	-	4.1	4.0	IK
2921	24	10	1984	06	33	02.8	-	39.08	26.00	-	-	-	-	13	-	-	4.0	IK
2922	26	10	1984	15	08	03.1	0.5	40.50	41.54	.04	.03	39	6	96	3.9	4.7	-	IS
2923	27	10	1984	00	57	33.7	-	39.06	25.26	-	-	-	-	11	3.6	4.5	3.9	IK
2924	28	10	1984	08	17	58.0	1.4	40.07	29.26	.06	.09	9	11	23	-	4.8	-	IS
2925	28	10	1984	22	03	54.4	0.3	37.03	45.29	.04	.04	33	-	21	-	4.6	-	IS
2926	03	11	1984	22	28	02.8	0.4	35.77	23.09	.04	.04	60	4	15	-	4.0	3.5	IS
2927	07	11	1984	11	39	45.0	-	39.01	27.77	-	-	-	-	13	-	4.1	4.3	IK
2928	10	11	1984	14	39	59.0	0.8	34.49	24.65	.08	.07	5	-	41	-	4.2	4.0	IS
2929	14	11	1984	10	01	33.0	-	35.97	31.12	-	-	-	-	10	-	4.3	4.2	IK
2930	14	11	1984	14	24	24.9	0.9	40.33	27.23	.03	.03	6	8	37	-	4.1	-	IS
2931	14	11	1984	14	53	50.2	0.5	40.72	23.38	.02	.03	6	4	140	3.6	4.3	4.0	IS
2932	15	11	1984	03	28	46.7	0.6	37.12	36.28	.04	.05	39	7	51	-	4.3	-	IS
2933	15	11	1984	07	23	53.8	0.5	39.12	25.44	.05	.06	5	-	29	-	-	4.1	IS
2934	15	11	1984	08	14	38.0	1.1	36.30	27.61	.11	.09	5	-	29	-	4.3	-	IS
2935	18	11	1984	13	48	22.9	-	37.86	28.87	-	-	-	-	11	-	4.2	4.0	IK
2936	20	11	1984	08	03	10.9	0.2	40.11	24.82	.02	.02	10	-	56	-	5.1	3.9	IS
2937	20	11	1984	09	49	34.0	1.2	40.13	24.74	.02	.03	4	10	49	-	-	4.0	IS
2938	20	11	1984	15	41	49.9	0.4	35.58	26.52	.04	.03	120	3	45	-	4.0	4.1	IS
2939	29	11	1984	15	28	58.1	-	37.98	27.05	-	-	-	-	21	-	4.7	3.9	IK
2940	03	12	1984	07	38	12.2	0.4	37.94	43.18	.03	.03	55	5	114	5.4	4.8	-	IS
2941	08	12	1984	03	19	11.2	0.5	37.97	43.20	.04	.05	51	7	75	-	4.5	-	IS
2942	16	12	1984	12	08	07.0	0.2	37.10	24.11	.03	.03	138	3	77	-	4.3	3.7	IS
2943	16	12	1984	19	40	48.4	0.2	36.35	26.82	.03	.03	147	3	51	-	4.3	3.9	IS
2944	18	12	1984	13	59	34.9	0.4	35.29	35.32	.03	.03	39	5	120	4.5	4.6	-	IS
2945	26	12	1984	21	43	22.9	0.6	35.67	26.46	.06	.05	5	-	13	-	-	4.0	IS
2946	27	12	1984	02	07	59.0	1.6	34.80	45.10	.17	.18	60	28	10	-	4.3	-	IS
2947	27	12	1984	02	16	29.3	0.5	34.78	45.37	.05	.06	92	11	8	-	4.3	-	IS
2948	05	01	1985	03	24	26.1	-	35.86	28.88	-	-	-	-	12	-	-	4.1	IK
2949	05	01	1985	22	20	50.9	-	40.24	25.17	-	-	-	-	8	-	3.9	4.3	IK
2950	08	01	1985	13	34	49.9	0.8	34.75	26.88	.06	.05	55	7	35	-	4.5	4.3	IS
2951	11	01	1985	17	40	17.0	2.6	34.00	23.40	.23	.12	5	-	8	-	4.4	-	IS
2952	20	01	1985	20	19	37.6	0.9	34.25	26.20	.07	.05	54	7	27	-	4.1	4.2	IS
2953	23	01	1985	01	23	31.2	0.5	39.11	35.94	.05	.04	33	7	88	3.6	4.6	-	IS
2954	25	01	1985	02	42	18.0	2.1	38.53	27.36	.05	.06	7	19	26	-	-	4.1	IS
2955	31	01	1985	01	21	06.2	-	37.50	30.83	-	-	-	-	7	4.1	4.5	-	IK
2956	31	01	1985	01	25	50.7	-	37.50	30.80	-	-	-	-	11	4.4	4.5	4.4	IK
2957	31	01	1985	02	03	19.2	-	37.47	30.73	-	-	-	-	5	-	4.7	4.1	IK
2958	03	02	1985	16	40	46.3	0.3	37.78	23.81	.03	.04	195	4	33	-	4.0	3.3	IS
2959	05	02	1985	01	29	17.6	0.9	34.85	24.39	.09	.05	83	6	35	-	4.1	-	IS
2960	07	02	1985	13	18	45.9	-	39.03	29.85	-	-	-	-	14	-	4.6	4.1	IK
2961	09	02	1985	01	57	55.0	1.2	34.66	24.00	.09	.09	51	13	23	-	4.1	4.0	IS
2962	10	02	1985	15	32	21.0	-	38.60	25.34	-	-	-	-	12	-	4.3	4.2	IK
2963	10	02	1985	19	22	37.9	0.3	43.05	46.19	.04	.04	110	4	23	-	4.1	-	IS
2964	16	02	1985	06	33	41.5	0.7	42.05	23.68	.02	.03	11	5	97	-	4.6	4.3	IS
2965	16	02	1985	17	48	27.9	0.3	36.52	26.52	.04	.04	142	4	21	-	4.5	-	IS
2966	16	02	1985	21	33	29.6	0.2	39.83	41.80	.03	.03	10	-	147	3.8	4.9	-	IS
2967	17	02	1985	10	45	27.7	-	36.76	27.57	-	-	-	-	11	-	4.7	4.2	IK
2968	19	02	1985	18	46	16.9	0.4	38.79	24.78	.03	.04	10	-	41	-	4.5	3.5	IS
2969	20	02	1985	19	59	06.6	0.6	37.64	48.00	.08	.10	-	-	7	-	4.3	-	IS
2970	21	02	1985	03	03	33.0	1.2	39.83	24.40	.03	.03	4	9	85	-	4.1	4.3	IS

SIRA	TARiH			OLUS ZAMANI				KOORDiNATLAR				DERiN-		ist	MAGNiTUD			Ky
NO	Gn	Ay	Yil	Sa	Dk	Sn	h_O	Enl.	Boyl.	h_E	h_B	LiK	hD	say	Ms	Mb	Ml	
2971	22	02	1985	14	46	03.7	0.6	38.88	24.87	.02	.02	31	7	56	-	4.4	4.0	IS
2972	24	02	1985	23	33	14.7	0.8	35.06	26.98	.06	.06	48	8	70	-	4.3	4.2	IS
2973	25	02	1985	19	26	08.0	0.2	36.43	26.70	.03	.03	157	2	90	-	4.3	3.9	IS
2974	26	02	1985	02	44	07.9	0.4	32.60	47.34	.03	.02	49	4	166	3.9	4.9	-	IS
2975	26	02	1985	03	34	40.8	0.5	32.92	47.46	.05	.04	86	4	14	-	4.7	-	IS
2976	26	02	1985	04	12	34.8	0.4	32.64	47.37	.03	.02	44	4	180	3.9	5.0	-	IS
2977	26	02	1985	06	06	32.5	0.5	32.79	47.15	.04	.03	64	5	34	-	4.5	-	IS
2978	26	02	1985	10	39	02.0	2.6	32.30	47.80	.30	.27	-	-	7	-	4.7	-	IS
2979	26	02	1985	20	36	57.5	0.4	32.57	47.25	.03	.02	53	4	70	3.9	4.8	-	IS
2980	27	02	1985	16	34	19.5	0.5	38.04	43.09	.03	.03	40	5	118	4.2	4.7	-	IS
2981	01	03	1985	02	59	38.1	0.7	37.99	43.18	.05	.06	38	9	44	3.8	4.2	-	IS
2982	03	03	1985	13	02	12.9	0.5	39.13	33.17	.05	.05	10	-	41	-	4.3	-	IS
2983	04	03	1985	03	40	33.9	0.9	34.85	25.38	.08	.04	5	-	20	-	-	4.0	IS
2984	06	03	1985	01	11	47.6	0.2	38.90	24.90	.02	.02	5	-	58	-	4.0	3.7	IS
2985	11	03	1985	20	34	45.0	1.1	38.75	24.87	.06	.07	16	15	38	-	4.2	3.7	IS
2986	11	03	1985	20	34	45.0	1.1	38.75	24.87	.06	.07	16	15	38	-	4.2	3.7	IS
2987	12	03	1985	09	51	07.2	0.8	39.44	23.98	.02	.02	6	5	169	-	4.8	4.6	IS
2988	13	03	1985	19	45	37.3	-	36.74	31.49	-	-	-	-	7	-	-	4.2	IK
2989	14	03	1985	11	35	41.4	-	38.69	27.62	-	-	-	-	11	3.5	4.5	4.3	IK
2990	14	03	1985	15	06	24.6	0.2	36.91	31.67	.04	.05	16	-	26	-	4.2	-	IS
2991	15	03	1985	03	22	57.7	0.5	35.24	27.91	.05	.04	34	13	20	-	4.2	4.2	IS
2992	15	03	1985	03	24	46.0	0.3	38.78	25.00	.03	.03	10	-	57	-	4.0	3.6	IS
2993	16	03	1985	15	45	01.3	0.6	34.51	23.39	.06	.07	33	-	58	-	4.5	3.9	IS
2994	17	03	1985	02	51	43.7	0.9	34.49	45.43	.08	.07	70	10	50	-	4.7	-	IS
2995	17	03	1985	10	02	36.9	0.5	35.99	26.85	.05	.03	10	-	13	-	-	4.0	IS
2996	29	03	1985	09	24	08.4	0.7	38.80	26.57	.03	.04	26	8	48	-	4.8	3.8	IS
2997	05	04	1985	02	31	54.0	0.6	34.57	26.25	.06	.05	72	11	21	-	3.3	4.1	IS
2998	06	04	1985	04	42	00.0	1.8	39.55	32.93	.04	.03	5	12	102	-	4.4	3.7	IS
2999	06	04	1985	08	26	19.5	0.7	35.94	23.52	.05	.06	44	15	22	-	4.8	3.2	IS
3000	09	04	1985	03	31	06.6	0.5	39.32	46.60	.05	.07	33	-	42	-	4.2	-	IS
3001	10	04	1985	03	56	43.8	0.7	36.77	27.46	.06	.07	5	-	24	-	4.5	3.9	IS
3002	10	04	1985	08	35	12.4	-	37.13	27.50	-	-	-	-	5	-	4.6	4.1	IK
3003	10	04	1985	10	44	42.1	-	36.96	31.17	-	-	-	-	5	-	-	4.0	IK
3004	11	04	1985	13	11	45.7	1.0	40.70	29.01	.03	.04	6	7	66	4.1	4.3	-	IS
3005	13	04	1985	04	03	29.8	-	38.57	25.22	-	-	-	-	12	-	4.0	4.1	IK
3006	15	04	1985	11	14	32.0	-	35.38	27.90	-	-	-	-	8	-	4.2	4.2	IK
3007	15	04	1985	15	55	53.3	0.2	38.84	25.67	.02	.02	10	-	53	-	4.1	3.7	IS
3008	18	04	1985	16	34	39.5	0.6	39.64	44.58	.07	.09	-	-	48	-	4.5	-	IS
3009	20	04	1985	20	48	33.8	0.7	35.78	46.36	.09	.08	110	17	9	-	4.0	-	IS
3010	23	04	1985	12	46	46.5	-	36.29	26.89	-	-	-	-	5	-	4.3	3.9	IK
3011	26	04	1985	03	53	17.8	0.7	34.02	36.69	.04	.04	18	9	17	-	-	4.4	IS
3012	27	04	1985	12	33	07.4	-	40.96	27.21	-	-	-	-	14	-	4.4	4.5	IK
3013	29	04	1985	11	38	40.5	-	38.40	29.92	-	-	-	-	10	4.0	4.6	4.3	IK
3014	06	05	1985	16	41	46.0	1.3	34.10	25.50	.12	.13	5	-	21	-	4.7	-	IS
3015	10	05	1985	04	01	16.5	0.9	35.40	27.25	.03	.02	32	8	188	-	4.5	4.4	IS
3016	13	05	1985	15	18	01.2	-	35.30	27.48	-	-	-	-	12	-	4.6	4.4	IK
3017	13	05	1985	15	22	21.3	-	35.23	27.38	-	-	-	-	9	-	4.6	4.4	IK
3018	14	05	1985	04	52	18.5	0.4	39.71	26.09	.03	.03	26	5	44	-	-	4.0	IS
3019	17	05	1985	11	31	12.0	3.1	35.50	23.10	.24	.24	5	-	20	-	4.0	-	IS
3020	20	05	1985	10	33	41.2	-	36.14	28.81	-	-	-	-	145	4.0	4.8	4.8	IK
3021	25	05	1985	09	40	48.4	0.3	33.38	31.63	.03	.04	33	-	26	-	-	4.0	IS
3022	28	05	1985	04	36	22.8	0.8	35.54	23.61	.03	.02	16	6	218	3.7	4.9	4.2	IS
3023	30	05	1985	09	40	55.7	0.7	35.55	27.44	.06	.04	5	-	14	-	-	4.1	IS
3024	30	05	1985	17	12	33.0	1.1	34.90	27.09	.12	.05	86	6	13	-	4.0	-	IS
3025	04	06	1985	01	05	58.5	0.6	40.86	27.84	.04	.08	10	-	9	-	4.1	-	IS

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	Gn	Ay	Yil	Sa	Dk	Sn	h_O	Enl.	Boyl.	h_E	h_B		hD		Ms	Mb	Ml	
3026	05	06	1985	08	48	32.3	-	36.52	27.63	-	-	-	-	7	-	4.2	4.2	IK
3027	05	06	1985	08	50	51.9	-	35.14	26.66	-	-	-	-	6	-	-	4.1	IK
3028	06	06	1985	13	08	44.9	-	35.76	31.26	-	-	-	-	7	-	4.9	4.0	IK
3029	06	06	1985	18	18	19.5	0.6	34.85	32.65	.09	.09	42	10	24	-	4.6	3.7	IS
3030	08	06	1985	22	52	38.8	0.4	34.83	32.47	.05	.07	45	7	32	-	4.0	4.1	IS
3031	10	06	1985	11	41	54.5	0.2	40.60	35.80	.03	.03	10	-	215	4.5	4.8	-	IS
3032	10	06	1985	12	02	26.8	0.3	40.56	35.81	.05	.03	10	-	48	-	4.5	-	IS
3033	10	06	1985	21	41	43.0	1.2	39.80	39.60	.11	.14	33	-	21	-	4.5	-	IS
3034	12	06	1985	14	05	19.3	0.3	43.15	27.61	.03	.04	10	-	111	-	4.3	-	IS
3035	13	06	1985	00	53	12.7	-	39.09	25.70	-	-	-	-	12	4.1	4.4	4.4	IK
3036	13	06	1985	12	54	49.1	-	37.05	26.39	-	-	-	-	7	-	3.9	4.0	IK
3037	14	06	1985	03	20	19.0	1.6	38.33	39.26	.04	.07	9	12	11	-	4.2	-	IS
3038	22	06	1985	07	58	35.1	0.3	37.26	36.98	.04	.05	33	-	42	-	4.5	-	IS
3039	28	06	1985	18	19	40.5	0.4	40.22	42.01	.04	.04	-	-	5	3.5	4.3	-	IS
3040	03	07	1985	23	30	41.7	0.5	41.20	45.94	.05	.07	33	-	36	-	4.3	-	IS
3041	04	07	1985	05	08	32.2	0.5	42.15	45.80	.03	.03	35	6	284	5.1	5.2	-	IS
3042	08	07	1985	07	00	47.7	-	36.62	28.20	-	-	-	-	12	-	3.9	4.2	IK
3043	14	07	1985	15	09	52.6	-	35.90	26.25	-	-	-	-	97	-	4.6	4.5	IK
3044	16	07	1985	13	45	00.0	1.4	38.81	24.97	.03	.03	24	16	89	-	4.0	4.4	IS
3045	22	07	1985	21	32	29.8	0.8	34.37	28.27	.03	.02	29	5	404	4.1	5.5	5.3	IS
3046	24	07	1985	16	57	58.6	0.7	35.77	45.97	.06	.04	55	9	72	3.5	4.6	-	IS
3047	26	07	1985	13	26	15.0	1.5	34.56	23.40	.05	.04	16	11	137	-	4.7	3.9	IS
3048	27	07	1985	03	12	12.8	0.9	32.99	46.29	.07	.05	54	9	62	-	4.7	-	IS
3049	09	08	1985	08	08	38.8	0.5	37.20	23.26	.04	.04	61	6	112	-	4.5	4.2	IS
3050	12	08	1985	02	54	44.2	0.9	39.95	39.77	.03	.02	29	7	251	4.2	4.9	-	IS
3051	17	08	1985	05	03	32.9	0.8	37.43	23.58	.07	.09	134	14	20	-	4.0	3.2	IS
3052	19	08	1985	10	56	00.6	0.7	34.54	27.39	.06	.05	50	6	103	3.7	4.6	4.0	IS
3053	23	08	1985	20	38	39.2	-	37.31	28.46	-	-	-	-	9	-	4.5	4.2	IK
3054	28	08	1985	00	33	40.4	0.5	37.23	23.33	.05	.05	68	6	86	-	4.4	4.1	IS
3055	28	08	1985	15	19	27.0	1.1	44.02	39.20	.08	.24	33	-	11	-	4.2	-	IS
3056	02	09	1985	02	13	36.2	0.4	43.50	47.06	.05	.06	33	-	50	-	4.8	-	IS
3057	03	09	1985	14	20	39.1	0.9	41.51	48.00	.07	.10	33	-	22	-	4.5	-	IS
3058	05	09	1985	09	14	39.2	0.6	40.24	40.19	.06	.06	3	-	30	4.0	4.0	-	IS
3059	11	09	1985	01	56	24.4	0.6	33.07	47.53	.09	.09	33	-	31	4.9	4.4	-	IS
3060	11	09	1985	11	08	35.1	-	36.64	28.68	-	-	-	-	14	4.2	4.4	4.3	IK
3061	14	09	1985	15	23	09.0	1.1	40.72	29.10	.10	.13	8	17	7	-	4.7	-	IS
3062	14	09	1985	15	33	54.2	0.6	37.41	24.23	.07	.07	165	6	44	-	4.3	3.0	IS
3063	20	09	1985	06	29	40.7	0.5	40.82	42.54	.06	.05	10	-	37	-	4.5	-	IS
3064	23	09	1985	22	19	57.4	0.4	38.86	27.01	.03	.05	5	-	39	-	-	4.0	IS
3065	27	09	1985	16	39	46.4	0.2	34.40	26.55	.02	.02	41	3	447	5.4	5.6	5.2	IS
3066	04	10	1985	13	36	10.3	-	39.26	26.12	-	-	-	-	15	-	4.1	4.2	IK
3067	06	10	1985	03	23	27.0	3.0	34.60	25.14	.26	.09	16	-	15	-	-	4.1	IS
3068	10	10	1985	15	51	17.3	1.0	34.17	26.83	.10	.08	86	16	20	-	4.1	-	IS
3069	10	10	1985	17	52	18.0	1.6	35.30	23.70	.14	.11	82	13	31	-	4.3	3.4	IS
3070	15	10	1985	02	25	01.6	-	36.07	31.72	-	-	-	-	11	-	4.0	4.0	IK
3071	17	10	1985	19	15	27.9	-	38.83	27.54	-	-	-	-	14	-	4.1	4.3	IK
3072	19	10	1985	22	36	25.1	0.3	38.75	23.98	.03	.03	10	-	83	-	4.1	-	IS
3073	20	10	1985	07	52	35.5	-	37.77	25.87	-	-	-	-	31	-	4.5	4.4	IK
3074	22	10	1985	01	26	08.6	0.4	42.94	46.81	.04	.05	25	-	47	-	4.6	4.1	IS
3075	23	10	1985	06	14	32.5	-	38.84	27.61	-	-	-	-	15	-	4.3	4.2	IK
3076	26	10	1985	08	59	44.4	0.9	34.42	25.91	.06	.05	55	7	115	-	4.5	4.0	IS
3077	30	10	1985	02	44	45.0	1.0	35.04	23.97	.07	.06	44	10	71	-	4.4	4.1	IS
3078	30	10	1985	21	53	16.3	0.4	36.20	44.92	.07	.07	10	-	45	-	4.4	-	IS
3079	07	11	1985	08	26	21.7	0.9	40.37	42.29	.03	.02	31	7	299	4.7	5.1	-	IS
3080	09	11	1985	23	30	42.9	0.4	41.26	23.98	.02	.02	18	3	428	5.3	5.5	5.1	IS

SIRA NO	TARiH			OLUS ZAMANI				KOORDiNATLAR				DERiN-LiK		ist say	MAGNiTUD			Ky
	Gn	Ay	Yil	Sa	Dk	Sn	h_O	Enl.	Boyl.	h_E	h_B		hD		Ms	Mb	Ml	
3081	16	11	1985	11	26	26.9	0.5	35.03	23.40	.10	.14	66	10	29	-	4.1	4.1	IS
3082	17	11	1985	00	16	12.0	2.3	37.60	33.30	.17	.17	10	-	12	-	4.2	-	IS
3083	18	11	1985	08	44	51.3	1.0	36.03	27.42	.08	.07	10	-	21	-	4.2	4.1	IS
3084	21	11	1985	03	49	07.0	1.3	34.24	26.13	.05	.04	22	10	130	-	4.6	4.2	IS
3085	24	11	1985	01	19	40.7	-	37.63	27.24	-	-	-	-	7	-	4.5	4.3	IK
3086	28	11	1985	23	26	30.6	0.7	35.90	45.73	.06	.05	57	9	60	3.8	4.6	-	IS
3087	01	12	1985	11	47	41.2	-	39.33	27.69	-	-	-	-	8	3.7	4.5	4.5	IK
3088	03	12	1985	18	12	39.5	-	36.64	26.85	-	-	-	-	93	-	4.7	4.5	IK
3089	06	12	1985	22	35	32.1	-	36.88	28.63	-	-	-	-	8	4.5	4.6	4.4	IK
3090	11	12	1985	09	11	31.7	0.5	35.80	45.60	.10	.07	48	-	35	-	4.7	-	IS
3091	16	12	1985	22	51	51.1	-	35.67	29.52	-	-	-	-	72	-	4.3	4.2	IK
3092	18	12	1985	05	46	03.1	-	39.26	26.32	-	-	-	-	10	5.1	5.0	4.8	IK
3093	19	12	1985	06	31	15.0	1.6	35.40	23.20	.14	.11	66	10	39	-	4.4	4.1	IS
3094	19	12	1985	09	27	43.3	-	39.23	26.27	-	-	-	-	10	-	4.1	4.1	IK
3095	19	12	1985	14	34	56.5	0.3	40.20	27.26	.03	.37	10	-	59	-	-	4.1	IS
3096	19	12	1985	22	32	25.7	0.7	35.18	24.54	.07	.06	81	8	53	-	4.5	3.8	IS
3097	21	12	1985	05	05	36.5	0.4	37.55	35.47	.04	.04	33	-	97	-	4.6	-	IS
3098	21	12	1985	06	11	13.5	0.6	37.56	35.40	.07	.11	33	-	26	-	4.4	-	IS
3099	23	12	1985	16	56	17.9	0.6	36.88	26.58	.06	.06	39	8	36	-	4.2	4.2	IS
3100	23	12	1985	20	08	57.1	-	36.81	26.68	-	-	-	-	110	4.3	4.8	4.8	IK
3101	28	12	1985	21	39	47.2	0.6	35.08	23.04	.06	.05	33	-	59	-	4.4	4.0	IS
3102	29	12	1985	00	55	26.0	2.7	38.70	44.50	.23	.15	33	-	7	-	4.4	-	IS
3103	01	01	1986	06	09	06.3	0.5	39.14	41.83	.03	.03	36	5	151	4.2	4.8	-	IS
3104	03	01	1986	00	30	29.8	0.8	35.08	44.55	.07	.08	-	-	9	-	4.1	-	IS
3105	05	01	1986	11	37	03.4	-	35.23	27.72	-	-	-	-	50	-	4.4	4.3	IK
3106	14	01	1986	05	45	14.5	0.8	34.41	24.53	.09	.08	33	-	18	-	4.6	-	IS
3107	15	01	1986	06	05	42.6	0.3	38.36	23.92	.03	.04	10	-	53	-	4.2	3.8	IS
3108	17	01	1986	02	11	48.1	-	38.58	31.59	-	-	-	-	12	-	4.7	4.1	IK
3109	21	01	1986	03	22	45.0	1.0	38.38	23.90	.03	.03	10	9	83	3.7	4.1	3.7	IS
3110	21	01	1986	05	46	20.9	0.9	36.50	23.04	.08	.09	33	-	26	-	4.0	3.3	IS
3111	27	01	1986	03	02	06.0	1.0	28.47	51.45	.08	.06	46	11	29	4.6	4.6	-	IS
3112	27	01	1986	07	19	34.3	1.0	34.72	25.24	.07	.04	63	7	114	-	4.6	4.2	IS
3113	27	01	1986	10	49	06.0	3.5	34.90	25.77	.02	.07	4	17	17	-	-	4.0	IS
3114	30	01	1986	11	40	22.8	-	35.41	27.99	-	-	-	-	37	-	4.4	4.5	IK
3115	31	01	1986	23	28	20.0	-	36.03	28.46	-	-	-	-	6	-	4.2	4.2	IK
3116	07	02	1986	02	48	39.4	0.6	35.91	27.68	.07	.08	33	-	23	-	4.1	-	IS
3117	12	02	1986	23	57	50.3	0.6	35.13	23.54	.05	.03	52	5	198	4.0	4.8	4.3	IS
3118	15	02	1986	07	34	11.9	0.7	35.04	24.71	.04	.04	44	6	163	-	4.7	-	IS
3119	15	02	1986	07	36	59.0	1.6	35.00	24.70	.12	.10	45	11	33	-	4.3	4.0	IS
3120	16	02	1986	02	06	15.2	0.6	34.32	26.69	.07	.06	33	-	37	-	4.1	4.1	IS
3121	18	02	1986	05	34	41.7	0.6	40.70	23.23	.03	.03	2	5	76	-	3.9	4.1	IS
3122	21	02	1986	05	39	55.3	0.8	43.30	25.96	.02	.02	11	6	347	5.5	4.9	5.2	IS
3123	21	02	1986	06	18	36.4	0.3	43.29	26.00	.02	.03	16	-	117	-	4.6	-	IS
3124	21	02	1986	17	24	43.9	-	36.40	26.57	-	-	-	-	116	-	4.9	4.7	IK
3125	22	02	1986	20	03	11.7	-	39.00	31.50	-	-	-	-	13	-	4.4	4.0	IK
3126	26	02	1986	05	45	01.9	0.5	38.98	31.52	.05	.07	10	-	31	-	4.5	-	IS
3127	26	02	1986	07	37	06.0	1.1	35.41	23.40	.09	.10	90	9	32	-	4.5	3.9	IS
3128	03	03	1986	07	26	03.0	1.1	43.76	31.51	.03	.03	18	9	125	-	4.5	-	IS
3129	08	03	1986	03	08	32.0	2.0	35.50	27.80	.02	.15	25	20	15	-	3.8	4.4	IS
3130	09	03	1986	13	13	50.5	-	36.83	25.76	-	-	-	-	9	-	4.3	4.4	IK
3131	12	03	1986	11	39	17.0	0.7	39.67	40.10	.09	.12	10	-	12	-	4.3	-	IS
3132	15	03	1986	07	59	30.2	0.5	32.39	46.95	.08	.07	33	-	50	-	4.8	-	IS
3133	19	03	1986	15	29	13.3	-	37.67	26.81	-	-	-	-	17	-	4.5	4.3	IK
3134	19	03	1986	16	24	36.0	-	36.02	31.02	-	-	-	-	13	-	4.3	4.0	IK
3135	19	03	1986	16	47	27.0	0.4	37.61	26.93	.04	.04	5	-	38	-	4.6	3.7	IS

SIRA NO	TARiH			OLUS ZAMANI				KOORDiNATLAR				DERiN-LiK		ist	MAGNiTUD			Ky
	Gn	Ay	Yil	Sa	Dk	Sn	h_O	Enl.	Boyl.	h_E	h_B		hD	say	Ms	Mb	Ml	
3136	25	03	1986	01	41	34.6	-	38.35	25.14	-	-	-	-	181	5.5	5.2	5.2	IK
3137	25	03	1986	03	22	15.0	1.2	36.99	26.58	.07	.06	19	15	16	-	-	4.0	IS
3138	25	03	1986	07	39	37.5	0.4	38.38	25.13	.03	.04	10	-	57	-	4.0	3.9	IS
3139	25	03	1986	15	12	20.3	-	38.35	25.20	-	-	-	-	27	-	4.2	3.9	IK
3140	26	03	1986	10	37	22.7	0.9	35.10	48.00	.15	.12	33	-	9	-	4.3	-	IS
3141	28	03	1986	21	50	46.1	-	38.51	25.22	-	-	-	-	11	-	3.9	4.0	IK
3142	28	03	1986	22	32	45.5	-	38.53	25.07	-	-	-	-	10	-	4.2	3.9	IK
3143	29	03	1986	18	36	37.8	-	38.38	25.17	-	-	-	-	202	5.6	5.1	5.3	IK
3144	29	03	1986	19	22	29.5	-	38.46	25.11	-	-	-	-	11	-	3.9	4.1	IK
3145	30	03	1986	11	01	32.2	-	38.45	25.14	-	-	-	-	9	-	3.7	4.1	IK
3146	30	03	1986	20	31	06.0	1.1	38.96	44.61	.09	.08	49	15	32	-	4.3	-	IS
3147	31	03	1986	02	05	44.7	-	38.51	25.19	-	-	-	-	15	-	4.3	4.2	IK
3148	31	03	1986	05	08	55.0	-	38.44	25.24	-	-	-	-	9	-	3.8	4.0	IK
3149	31	03	1986	23	44	32.9	1.0	34.74	24.53	.72	.04	48	7	107	-	4.4	4.1	IS
3150	03	04	1986	23	32	18.6	-	38.36	25.07	-	-	-	-	141	4.2	4.8	4.8	IK
3151	04	04	1986	00	09	40.5	-	38.34	25.12	-	-	-	-	64	-	4.3	4.3	IK
3152	07	04	1986	02	57	24.5	0.8	38.88	23.38	.03	.03	18	9	82	-	4.2	4.2	IS
3153	10	04	1986	07	11	27.0	2.1	34.80	24.29	.19	.09	71	12	30	-	3.9	4.1	IS
3154	10	04	1986	09	19	45.6	0.6	34.28	24.16	.06	.06	10	-	36	-	4.7	4.1	IS
3155	10	04	1986	14	43	05.7	-	38.42	25.18	-	-	-	-	38	-	4.2	4.3	IK
3156	11	04	1986	04	10	34.4	0.2	40.01	43.34	.03	.03	33	-	134	3.8	5.0	-	IS
3157	17	04	1986	16	03	19.0	1.5	33.72	25.51	.06	.05	17	11	83	-	4.4	4.1	IS
3158	18	04	1986	13	48	24.9	-	38.24	25.25	-	-	-	-	41	3.5	4.2	4.2	IK
3159	21	04	1986	13	37	14.4	-	38.48	25.11	-	-	-	-	10	-	4.1	4.2	IK
3160	23	04	1986	22	56	11.7	0.4	38.44	25.12	.04	.04	5	-	60	-	3.8	4.0	IS
3161	25	04	1986	05	00	50.8	-	38.51	25.16	-	-	-	-	11	4.1	4.6	4.6	IK
3162	26	04	1986	19	52	15.0	-	38.41	25.17	-	-	-	-	36	3.8	4.2	4.2	IK
3163	26	04	1986	20	23	39.2	-	38.45	25.19	-	-	-	-	13	3.8	4.3	4.1	IK
3164	27	04	1986	09	27	06.0	1.2	34.73	23.33	.04	.02	27	8	288	4.4	4.9	4.5	IS
3165	30	04	1986	23	04	59.7	-	35.43	30.90	-	-	-	-	28	-	4.6	4.4	IK
3166	03	05	1986	10	42	25.5	-	36.93	28.00	-	-	119	-	-	-	-	4.1	IS
3167	04	05	1986	13	41	17.2	0.3	38.46	25.16	.03	.04	10	-	64	3.5	3.9	4.1	IS
3168	05	05	1986	03	35	38.0	1.0	38.02	37.79	.02	.02	4	6	506	6.0	5.8	-	IS
3169	05	05	1986	04	09	31.6	0.7	38.12	37.85	.09	.09	10	-	19	-	4.2	-	IS
3170	05	05	1986	07	01	32.9	0.6	38.06	37.79	.05	.03	36	6	111	-	4.6	-	IS
3171	07	05	1986	12	35	34.0	0.5	37.98	37.85	.06	.04	10	-	46	-	4.2	-	IS
3172	09	05	1986	04	23	24.7	0.5	36.22	25.45	.05	.07	108	8	25	-	4.3	3.5	IS
3173	11	05	1986	07	29	15.0	1.2	36.97	45.28	.09	.08	43	14	31	3.5	4.7	-	IS
3174	11	05	1986	07	50	08.0	1.3	37.00	45.30	.11	.11	42	18	22	-	4.6	-	IS
3175	13	05	1986	08	44	01.9	0.5	41.44	43.72	.02	.02	8	3	430	5.4	5.6	-	IS
3176	14	05	1986	03	01	28.4	-	39.51	28.30	-	-	-	-	11	-	4.4	4.2	IK
3177	14	05	1986	06	25	22.2	0.5	40.70	47.46	.04	.06	-	-	35	-	4.3	-	IS
3178	15	05	1986	06	59	31.3	0.8	35.76	26.44	.08	.06	5	-	15	-	-	4.0	IS
3179	15	05	1986	18	13	56.0	1.8	40.72	27.60	.06	.02	10	-	10	-	4.6	-	IS
3180	19	05	1986	17	36	32.5	0.9	37.90	43.16	.21	.25	10	-	14	-	4.2	-	IS
3181	20	05	1986	07	43	38.2	-	38.42	26.60	-	-	-	-	9	-	-	4.0	IK
3182	22	05	1986	05	52	30.0	0.3	38.16	23.22	.03	.02	40	4	193	4.0	4.5	-	IS
3183	22	05	1986	19	52	22.4	0.5	34.64	26.52	.03	.02	48	4	387	5.2	5.3	-	IS
3184	22	05	1986	20	20	54.0	2.6	34.70	26.67	.24	.09	22	-	11	-	-	4.0	IS
3185	22	05	1986	20	34	29.5	1.0	34.50	26.60	.10	.07	33	-	25	-	3.9	4.0	IS
3186	22	05	1986	21	02	34.0	2.5	34.70	26.63	.22	.09	17	-	14	-	-	4.0	IS
3187	23	05	1986	09	19	45.8	0.6	34.35	26.68	.68	.06	10	-	33	-	3.9	4.3	IS
3188	27	05	1986	04	44	49.6	0.4	38.88	27.53	.03	.05	10	-	41	-	-	4.0	IS
3189	27	05	1986	08	54	59.9	-	39.41	28.47	-	-	-	-	9	3.5	4.5	4.4	IK
3190	28	05	1986	20	07	24.9	0.9	34.06	25.03	.84	.06	10	-	41	-	3.6	4.1	IS

SIRA	TARiH			OLUS ZAMANI				KOORDiNATLAR				DERiN-LiK		ist	MAGNiTUD			Ky
NO	Gn	Ay	Yil	Sa	Dk	Sn	h_O	Enl.	Boyl.	h_E	h_B		hD	say	Ms	Mb	Ml	
3191	30	05	1986	02	11	09.3	0.9	34.90	44.40	.10	.11	5	-	9	-	4.3	-	IS
3192	02	06	1986	06	25	21.5	0.4	35.91	45.69	.05	.06	23	-	124	4.5	4.7	-	IS
3193	02	06	1986	15	16	19.0	0.5	40.94	47.87	.04	.04	50	7	97	4.3	4.6	-	IS
3194	02	06	1986	22	16	30.0	1.0	40.60	41.80	.10	.16	10	-	15	-	4.2	-	IS
3195	03	06	1986	06	16	33.6	-	38.53	25.30	-	-	-	-	9	4.6	4.5	4.7	IK
3196	03	06	1986	10	57	50.5	-	38.64	25.21	-	-	-	-	7	-	3.6	4.2	IK
3197	03	06	1986	19	35	56.3	-	39.50	28.32	-	-	-	-	12	-	4.3	4.0	IK
3198	03	06	1986	23	23	19.6	0.7	34.42	26.72	.08	.07	33	-	24	-	4.3	-	IS
3199	04	06	1986	08	06	03.3	-	38.37	25.10	-	-	-	-	73	3.9	4.4	4.5	IK
3200	06	06	1986	10	39	47.0	1.0	38.01	37.91	.02	.02	11	7	452	5.7	5.6	-	IS
3201	06	06	1986	10	50	33.0	1.2	37.98	38.00	.10	.15	10	-	26	-	4.5	-	IS
3202	06	06	1986	11	29	46.2	0.3	38.02	37.84	.04	.04	10	-	72	-	4.5	-	IS
3203	06	06	1986	12	07	54.7	0.6	38.01	37.91	.05	.10	10	-	17	-	4.5	-	IS
3204	06	06	1986	18	15	06.6	0.5	38.02	37.82	.05	.07	10	-	30	-	4.2	-	IS
3205	09	06	1986	03	30	42.5	0.4	37.97	37.80	.04	.04	10	-	59	-	4.3	-	IS
3206	10	06	1986	07	57	43.2	1.0	38.03	37.85	.04	.03	30	9	106	3.7	4.7	-	IS
3207	11	06	1986	21	05	58.3	-	38.36	25.15	-	-	-	-	35	-	4.4	4.2	IK
3208	12	06	1986	06	42	24.6	0.5	39.09	28.70	.04	.08	10	-	27	-	4.1	-	IS
3209	15	06	1986	09	18	34.4	0.3	38.04	37.82	.04	.03	10	-	118	-	4.5	-	IS
3210	15	06	1986	09	28	54.5	0.6	38.05	37.92	.06	.08	10	-	21	-	4.0	-	IS
3211	15	06	1986	10	02	27.0	1.1	38.00	37.82	.05	.04	28	10	103	-	4.4	-	IS
3212	17	06	1986	17	54	25.8	-	38.59	25.12	-	-	-	-	13	5.2	4.7	4.7	IK
3213	17	06	1986	19	19	00.7	-	38.55	25.19	-	-	-	-	11	-	4.0	4.3	IK
3214	23	06	1986	08	12	35.6	0.6	34.95	23.34	.04	.03	44	5	235	4.1	4.6	4.4	IS
3215	25	06	1986	11	48	25.5	-	39.51	28.29	-	-	-	-	13	3.7	3.9	4.0	IK
3216	27	06	1986	11	33	05.0	1.5	35.00	24.27	.16	.09	85	9	27	-	4.0	3.9	IS
3217	27	06	1986	18	33	37.6	-	41.00	28.25	-	-	-	-	11	-	4.1	4.2	IK
3218	29	06	1986	00	45	12.1	-	36.01	30.43	-	-	-	-	29	-	4.3	4.3	IK
3219	04	07	1986	15	03	49.6	0.7	36.28	32.35	.07	.09	10	-	19	-	4.1	-	IS
3220	07	07	1986	14	17	25.0	0.5	34.80	33.67	.04	.03	49	5	147	3.3	4.6	-	IS
3221	10	07	1986	18	57	17.3	0.3	38.37	45.22	.04	.04	33	-	67	3.7	4.7	-	IS
3222	12	07	1986	10	29	31.6	0.6	32.42	30.50	.06	.08	10	-	20	-	4.1	-	IS
3223	12	07	1986	17	00	54.2	0.5	38.40	45.15	.03	.04	45	5	127	-	4.8	-	IS
3224	15	07	1986	15	15	53.1	0.5	36.66	23.11	.05	.05	124	7	77	-	4.0	3.4	IS
3225	15	07	1986	23	57	09.2	0.8	34.91	26.99	.07	.07	66	11	30	-	4.0	4.0	IS
3226	17	07	1986	00	11	59.7	0.4	38.43	45.18	.04	.05	10	-	51	-	4.4	-	IS
3227	20	07	1986	04	01	18.0	1.9	37.81	35.91	.07	.09	2	14	26	-	4.2	-	IS
3228	26	07	1986	22	43	00.0	1.7	35.40	23.40	.15	.12	75	10	25	-	4.5	3.8	IS
3229	27	07	1986	19	03	54.8	0.6	43.20	47.18	.05	.08	-	-	30	-	4.5	-	IS
3230	29	07	1986	03	17	37.0	0.4	36.46	45.35	.06	.06	17	-	26	-	4.6	-	IS
3231	29	07	1986	07	54	23.0	1.1	35.09	26.37	.09	.07	80	9	42	-	4.0	4.0	IS
3232	29	07	1986	17	40	50.3	0.5	36.69	27.94	.05	.06	109	6	65	-	4.1	4.0	IS
3233	30	07	1986	02	12	59.0	0.4	34.67	32.31	.03	.03	37	4	239	4.1	4.9	-	IS
3234	03	08	1986	01	33	24.5	0.5	37.19	37.16	.04	.03	39	5	242	4.1	5.0	-	IS
3235	05	08	1986	19	58	40.7	0.3	37.19	37.26	.03	.04	10	-	96	-	4.6	-	IS
3236	08	08	1986	03	46	38.5	0.5	36.70	25.86	.05	.05	10	-	56	-	4.2	4.5	IS
3237	08	08	1986	18	51	45.0	1.4	38.01	37.70	.04	.04	19	11	120	3.9	4.6	-	IS
3238	10	08	1986	17	47	57.0	0.8	38.48	43.43	.05	.04	53	9	131	3.9	4.7	-	IS
3239	11	08	1986	01	25	23.1	0.4	36.20	26.83	.05	.05	128	5	87	-	4.2	3.7	IS
3240	13	08	1986	02	17	22.2	0.7	34.98	26.90	.07	.05	67	9	62	-	4.1	4.1	IS
3241	13	08	1986	19	02	06.0	1.1	34.40	26.72	.05	.05	28	9	49	3.8	4.3	-	IS
3242	17	08	1986	04	05	34.6	-	36.53	26.93	-	-	-	-	45	-	4.2	4.1	IK
3243	18	08	1986	08	11	31.2	0.4	38.59	27.10	.04	.04	10	-	50	-	4.3	3.9	IS
3244	18	08	1986	09	49	16.0	1.1	35.80	44.37	.11	.09	38	14	16	-	4.9	-	IS
3245	19	08	1986	06	03	54.4	0.4	39.04	28.79	.03	.04	10	-	81	-	4.4	4.2	IS

SIRA NO	TARiH			OLUS ZAMANI				KOORDiNATLAR				DERiN-LiK		ist say	MAGNiTUD			Ky
	Gn	Ay	Yil	Sa	Dk	Sn	h_O	Enl.	Boyl.	h_E	h_B		hD		Ms	Mb	Ml	
3246	19	08	1986	13	29	11.2	0.5	34.52	25.09	.06	.05	10	-	55	4.1	4.6	4.0	IS
3247	24	08	1986	01	08	55.1	0.3	38.89	24.29	.03	.03	10	-	60	-	4.7	-	IS
3248	24	08	1986	10	54	21.1	0.4	36.08	32.14	.04	.07	100	6	54	-	4.3	-	IS
3249	25	08	1986	01	21	56.5	0.5	37.02	44.93	.08	.10	10	-	39	4.0	4.6	-	IS
3250	28	08	1986	07	49	10.4	0.9	39.50	46.30	.15	.27	33	-	7	-	4.5	-	IS
3251	30	08	1986	04	47	10.9	0.4	39.11	27.84	.04	.05	10	-	40	-	-	4.1	IS
3252	03	09	1986	09	28	17.6	0.7	41.57	43.25	.03	.03	5	5	156	3.9	4.8	-	IS
3253	05	09	1986	19	53	26.0	-	36.02	31.64	-	-	-	-	10	-	4.3	4.4	IK
3254	10	09	1986	06	47	45.7	0.6	38.03	39.13	.05	.08	10	-	21	-	4.1	-	IS
3255	12	09	1986	10	34	50.5	0.3	40.25	27.32	.03	.04	5	-	-	-	-	4.1	IS
3256	14	09	1986	17	53	19.2	0.4	34.30	25.72	.04	.04	39	5	155	4.6	4.4	4.3	IS
3257	22	09	1986	16	44	25.0	2.7	34.59	29.80	.05	.06	7	19	82	3.7	4.4	-	IS
3258	22	09	1986	21	13	20.9	0.5	34.68	29.98	.07	.08	12	-	28	-	4.0	-	IS
3259	23	09	1986	08	41	27.2	-	39.13	27.73	-	-	-	-	10	-	-	4.1	IK
3260	26	09	1986	18	12	21.8	0.7	34.36	26.17	.04	.03	49	6	179	3.7	4.6	-	IS
3261	29	09	1986	17	38	03.9	0.4	39.07	27.79	.04	.05	11	-	30	-	-	4.1	IS
3262	30	09	1986	05	04	37.7	0.9	34.84	24.19	.07	.06	59	8	84	-	4.4	-	IS
3263	02	10	1986	10	12	45.2	0.5	34.82	28.31	.03	.02	42	4	431	4.7	5.5	4.5	IS
3264	02	10	1986	15	53	35.0	1.9	38.91	40.30	.06	.10	9	13	28	-	4.4	-	IS
3265	05	10	1986	05	12	18.6	0.5	34.73	23.34	.03	.02	33	5	357	4.5	5.2	4.9	IS
3266	05	10	1986	10	13	46.0	1.1	35.80	46.00	.11	.25	33	-	6	-	4.0	-	IS
3267	08	10	1986	22	02	58.7	0.5	36.92	26.56	.04	.04	10	-	44	-	4.5	4.0	IS
3268	09	10	1986	16	27	14.1	-	37.70	25.90	-	-	-	-	16	-	4.2	3.9	IK
3269	11	10	1986	09	00	12.0	-	37.90	28.48	-	-	-	-	14	5.5	5.5	5.5	IK
3270	12	10	1986	11	13	40.0	1.2	39.66	28.97	.04	.05	11	9	52	-	4.4	-	IS
3271	17	10	1986	10	33	09.3	-	41.19	32.34	-	-	-	-	15	-	4.5	4.4	IK
3272	18	10	1986	15	53	52.0	0.8	35.00	25.93	.12	.08	33	-	21	-	4.2	4.0	IS
3273	20	10	1986	10	43	59.0	3.3	37.80	27.40	.17	.29	3	17	6	-	4.5	-	IS
3274	20	10	1986	16	48	57.3	0.7	34.94	26.41	.07	.06	33	-	23	-	4.5	4.0	IS
3275	26	10	1986	04	49	29.9	0.3	40.80	28.99	.03	.04	10	-	-	-	-	4.6	IS
3276	28	10	1986	11	50	43.0	3.5	34.70	26.33	.29	.07	10	-	14	-	4.8	4.1	IS
3277	28	10	1986	23	21	34.0	0.9	34.50	26.14	.10	.08	33	-	21	-	3.8	4.1	IS
3278	30	10	1986	03	46	46.0	1.0	39.74	28.78	.03	.05	8	7	76	-	4.0	4.2	IS
3279	30	10	1986	06	37	24.3	0.7	44.00	33.88	.04	.09	10	-	39	-	4.0	-	IS
3280	01	11	1986	03	18	10.3	0.7	41.24	40.21	.04	.03	29	6	180	4.0	4.7	-	IS
3281	03	11	1986	18	44	07.2	-	40.32	25.30	-	-	-	-	14	-	4.0	4.0	IK
3282	10	11	1986	19	43	45.7	-	38.49	25.13	-	-	-	-	13	3.8	4.5	4.5	IK
3283	12	11	1986	16	02	48.5	1.0	34.40	46.36	.10	.07	-	-	10	-	4.5	-	IS
3284	14	11	1986	03	38	58.4	0.4	39.36	29.06	.03	.05	10	-	36	-	4.5	-	IS
3285	15	11	1986	13	30	19.0	1.3	34.10	25.10	.11	.10	64	14	20	-	4.3	3.8	IS
3286	15	11	1986	21	52	18.0	1.0	39.37	28.90	.07	.13	10	-	9	-	4.5	-	IS
3287	19	11	1986	23	36	05.9	0.7	35.10	23.88	.05	.04	42	6	164	3.7	4.5	4.2	IS
3288	20	11	1986	11	05	26.4	0.9	34.84	45.30	.09	.15	66	11	10	-	4.5	-	IS
3289	23	11	1986	09	50	29.0	3.0	34.80	23.80	.26	.13	16	-	8	-	-	4.0	IS
3290	25	11	1986	10	57	36.3	0.3	38.88	25.62	.03	.03	3	-	66	-	4.3	3.9	IS
3291	26	11	1986	23	08	38.8	-	35.82	30.89	-	-	-	-	9	-	4.2	4.0	IK
3292	30	11	1986	05	29	18.3	0.4	38.75	27.74	.04	.05	14	-	53	-	4.1	4.0	IS
3293	07	12	1986	14	17	08.1	0.8	43.29	25.94	.02	.02	7	6	413	5.8	5.2	-	IS
3294	07	12	1986	17	26	06.5	0.2	43.25	26.01	.02	.02	10	-	187	5.0	4.4	4.6	IS
3295	08	12	1986	05	58	11.5	-	36.62	31.76	-	-	-	-	102	-	4.7	4.6	IK
3296	08	12	1986	14	44	28.5	0.8	43.30	25.99	.02	.03	24	8	143	-	4.4	4.4	IS
3297	12	12	1986	19	29	52.4	1.0	43.29	26.06	.02	.03	10	8	143	-	4.4	5.0	IS
3298	13	12	1986	04	01	39.0	1.3	34.90	24.41	.11	.07	53	14	24	-	4.0	3.8	IS
3299	16	12	1986	04	51	29.0	1.4	32.60	46.70	.15	.15	33	-	12	-	4.8	-	IS
3300	17	12	1986	00	49	22.4	0.9	35.99	43.70	.09	.11	33	-	10	-	4.4	-	IS

SIRA NO	TARiH			OLUS ZAMANI				KOORDiNATLAR				DERiN-LiK		ist	MAGNiTUD			Ky
	Gn	Ay	Yil	Sa	Dk	Sn	h_O	Enl.	Boyl.	h_E	h_B		hD	say	Ms	Mb	Ml	
3301	17	12	1986	22	01	46.2	0.7	43.29	26.08	.02	.02	15	7	189	-	4.6	4.3	IS
3302	18	12	1986	17	16	16.8	0.8	43.28	26.03	.02	.03	22	8	141	-	4.7	-	IS
3303	19	12	1986	16	11	18.3	0.4	39.58	38.55	.07	.06	11	-	31	-	4.4	-	IS
3304	26	12	1986	22	35	43.9	0.8	35.65	26.43	.08	.05	47	8	31	-	4.4	4.1	IS
3305	30	12	1986	10	21	32.0	-	38.18	27.04	-	-	-	-	7	-	-	4.0	IK
3306	31	12	1986	06	06	09.9	-	36.20	27.07	-	-	-	-	97	3.8	4.7	4.7	IK
3307	31	12	1986	11	12	33.2	-	35.10	25.95	-	-	-	-	17	-	4.2	4.0	IK
3308	01	01	1987	22	36	34.9	-	36.25	27.99	.09	.08	10	-	10	-	4.0	-	IS
3309	06	01	1987	06	55	30.0	1.1	36.19	28.03	.06	.06	7	9	23	-	4.3	4.3	IS
3310	06	01	1987	07	54	07.8	0.9	36.15	28.12	.05	.06	16	7	38	-	4.4	4.3	IS
3311	07	01	1987	20	30	37.6	0.6	36.17	28.11	.50	.06	35	8	56	-	4.2	4.2	IS
3312	10	01	1987	15	03	55.1	0.6	34.63	33.30	.05	.11	36	-	33	-	4.3	-	IS
3313	15	01	1987	11	19	35.2	0.4	34.63	33.86	.03	.03	40	-	203	3.9	5.1	-	IS
3314	17	01	1987	00	30	30.4	0.3	39.83	24.37	.04	.04	10	4	49	-	3.6	4.0	IS
3315	19	01	1987	14	15	01.8	0.8	34.49	46.30	.08	.15	33	-	11	-	4.4	-	IS
3316	20	01	1987	17	10	43.4	0.4	36.44	26.89	.06	.06	147	7	56	-	4.1	-	IS
3317	21	01	1987	20	01	06.0	1.0	32.73	47.65	.07	.06	54	10	60	-	4.7	-	IS
3318	22	01	1987	05	42	17.5	0.9	40.20	42.20	.13	.25	10	-	9	-	4.3	-	IS
3319	29	01	1987	11	58	07.1	0.4	38.82	26.89	.04	.04	12	-	39	-	-	4.0	IS
3320	30	01	1987	23	38	00.4	0.6	35.71	27.13	.05	.05	51	8	59	-	4.3	4.2	IS
3321	31	01	1987	10	40	48.0	1.3	36.63	25.81	.07	.03	25	12	18	-	4.6	4.0	IS
3322	31	01	1987	16	06	17.1	0.7	36.16	28.14	.04	.05	17	6	77	3.7	4.3	4.3	IS
3323	01	02	1987	01	43	36.1	0.8	36.24	28.00	.09	.07	6	-	11	-	4.1	-	IS
3324	01	02	1987	04	27	37.9	0.7	36.26	28.00	.07	.07	1	-	10	-	4.0	-	IS
3325	01	02	1987	16	48	03.4	1.0	36.31	27.89	.10	.08	10	-	15	-	4.0	4.0	IS
3326	01	02	1987	18	02	16.5	0.7	36.22	28.02	.07	.08	10	-	14	-	4.2	-	IS
3327	01	02	1987	19	42	21.0	1.1	36.08	28.12	.04	.04	25	10	90	3.6	4.4	4.4	IS
3328	02	02	1987	04	16	18.0	1.0	34.89	23.89	.07	.06	62	9	60	-	4.4	3.7	IS
3329	08	02	1987	00	07	21.1	1.0	35.90	27.29	.11	.07	5	-	11	-	-	4.1	IS
3330	09	02	1987	16	59	57.0	2.1	35.60	27.80	.19	.15	86	22	13	-	-	4.3	IS
3331	09	02	1987	12	28	23.5	1.0	35.41	26.08	.04	.03	18	8	163	-	4.5	4.4	IS
3332	09	02	1987	12	56	54.2	0.8	35.11	26.08	.10	.07	59	-	25	-	4.2	4.2	IS
3333	09	02	1987	14	56	59.7	1.0	35.30	26.25	.07	.06	18	11	32	-	4.3	4.0	IS
3334	09	02	1987	17	16	22 0	1.2	35.50	26.23	.12	.08	1	-	9	-	-	4.0	IS
3335	09	02	1987	23	45	47.0	1.8	35.20	26.27	.11	.09	3	18	13	-	-	4.1	IS
3336	09	02	1987	23	55	07.7	0.7	35.29	26.26	.08	.06	33	-	19	-	-	4.0	IS
3337	16	02	1987	17	37	16.6	0.7	32.74	32.19	.08	.10	10	-	20	-	4.0	-	IS
3338	16	02	1987	17	37	16.6	7.1	32.74	32.19	.07	.10	10	-	20	-	4.0	-	IS
3339	18	02	1987	05	34	59.1	0.4	34.90	32.26	.04	.06	49	6	113	-	4.7	-	IS
3340	22	02	1987	06	51	42.3	0.3	38.42	40.50	.03	.03	10	-	92	-	5.0	-	IS
3341	04	03	1987	12	04	43.0	3.2	34.20	23.50	.20	.11	17	17	18	-	4.4	-	IS
3342	06	03	1987	15	06	06.0	1.1	42.10	33.20	.08	.13	10	-	14	-	4.2	-	IS
3343	11	03	1987	01	59	32.0	1.3	33.10	46.27	.12	.10	67	13	18	-	4.4	-	IS
3344	18	03	1987	08	53	06.5	1.0	34.12	26.31	.09	.08	38	11	26	-	4.2	-	IS
3345	18	03	1987	13	18	10.0	1.0	35.04	23.94	.09	.08	1	-	17	-	4.1	-	IS
3346	29	03	1987	08	24	41.4	0.5	34.88	26.48	.05	.06	48	-	36	-	4.4	4.0	IS
3347	01	04	1987	05	53	06.8	0.8	34.86	23.12	.06	.06	40	7	81	-	4.5	4.0	IS
3348	04	04	1987	15	59	08.1	0.7	36.92	28.39	.03	.03	20	6	161	3.8	4.7	4.4	IS
3349	08	04	1987	12	16	42.8	0.6	36.35	26.05	.08	.07	133	11	16	-	4.1	-	IS
3350	08	04	1987	13	14	31.4	0.5	36.09	27.12	.04	.04	46	6	95	-	4.3	4.5	IS
3351	09	04	1987	00	02	49.5	0.8	36.03	27.12	.08	-	10	-	19	-	-	4.1	IS
3352	09	04	1987	00	09	10.0	1.7	35.50	27.40	.17	.11	10	-	9	-	-	4.0	IS
3353	09	04	1987	00	23	17.0	2.4	35.80	27.80	.22	.18	73	-	9	-	-	4.1	IS
3354	09	04	1987	00	25	22.0	1.8	35.40	27.50	.18	.11	10	-	9	-	-	4.0	IS
3355	09	04	1987	03	00	04.6	-	32.39	28.97	.04	.03	10	-	153	-	4.6	4.4	IS

SIRA NO	TARİH			OLUS ZAMANI				KOORDİNATLAR				DERİN-LİK		ist say	MAGNİTUD			Ky
	Gn	Ay	Yil	Sa	Dk	Sn	h_O	Enl.	Boyl.	h_E	h_B		hD		Ms	Mb	Ml	
3356	12	04	1987	02	47	20.6	0.5	35.51	23.41	.03	.02	53	4	429	-	5.2	5.2	IS
3357	13	04	1987	00	24	03.2	0.4	34.72	23.37	.04	.04	40	-	38	-	4.4	3.7	IS
3358	13	04	1987	00	32	07.0	1.3	35.20	23.55	.12	.08	79	-	38	-	4.1	3.7	IS
3359	17	04	1987	02	46	57.0	2.7	35.70	27.30	.14	.11	7	19	9	-	-	4.0	IS
3360	17	04	1987	03	56	08.5	0.4	36.07	27.13	.04	.04	41	6	114	3.9	4.3	4.6	IS
3361	17	04	1987	13	22	08.0	1.8	35.40	27.00	.18	.11	10	6	8	-	-	4.2	IS
3362	18	04	1987	12	19	51.0	1.9	35.50	27.40	.18	.13	32	-	9	-	-	4.3	IS
3363	23	04	1987	20	48	18.4	0.6	34.74	26.24	.05	.05	56	8	70	-	4.1	3.8	IS
3364	24	04	1987	16	34	30.0	1.0	40.45	25.97	.03	.03	5	9	48	-	-	4.0	IS
3365	25	04	1987	22	11	00.0	1.5	39.30	27.92	.04	.04	3	11	70	-	4.3	4.0	IS
3366	25	04	1987	23	46	06.1	1.5	34.57	25.75	.04	.04	43	6	135	-	4.2	4.0	IS
3367	01	05	1987	21	15	09.7	0.6	36.07	27.34	.06	.05	39	10	30	-	4.7	4.0	IS
3368	02	05	1987	03	02	35.5	0.9	36.03	27.33	.05	.04	24	8	43	-	4.5	4.1	IS
3369	05	05	1987	10	40	48.7	0.4	42.33	46.81	.05	.05	80	6	82	-	4.4	-	IS
3370	07	05	1987	08	56	52.7	0.2	36.63	26.75	.02	.02	153	2	346	-	4.8	4.0	IS
3371	14	05	1987	22	24	00.4	0.2	39.95	40.16	.03	.03	10	-	167	3.8	4.7	5.0	IS
3372	16	05	1987	13	11	34.6	0.7	34.88	23.39	.06	.07	33	-	44	-	4.2	3.7	IS
3373	16	05	1987	21	39	19.1	0.8	36.00	25.76	.11	.08	156	8	25	-	4.1	3.7	IS
3374	20	05	1987	23	00	38.1	0.3	35.43	38.08	.04	.04	10	-	16	-	4.7	2.7	IS
3375	22	05	1987	19	16	37.0	4.8	32.00	47.20	.50	.16	33	-	6	-	4.1	-	IS
3376	23	05	1987	13	31	51.1	0.8	34.07	46.54	.03	.08	33	-	253	-	4.4	-	IS
3377	29	05	1987	00	35	36.0	1.1	35.20	23.39	.09	.04	66	12	38	-	4.0	3.8	IS
3378	31	05	1987	09	15	10.0	1.7	35.40	23.30	.17	.12	36	-	14	-	4.3	3.6	IS
3379	01	06	1987	02	28	30.0	0.4	36.70	25.46	.05	.04	166	5	57	-	4.5	3.9	IS
3380	11	06	1987	05	28	57.9	0.4	36.34	26.53	.07	.06	147	7	50	-	4.3	3.5	IS
3381	14	06	1987	04	16	25.8	0.9	35.62	27.32	.09	.08	2	-	9	-	-	4.1	IS
3382	14	06	1987	11	07	26.0	0.7	35.67	27.22	.08	.08	60	11	26	-	3.9	4.2	IS
3383	16	06	1987	06	17	39.6	0.5	35.55	35.25	.07	.06	33	-	70	-	4.7	-	IS
3384	16	06	1987	06	37	53.0	1.7	35.70	27.40	.16	.12	35	-	11	-	-	4.1	IS
3385	17	06	1987	15	16	41.1	0.5	35.73	27.28	.04	.05	50	7	62	-	4.4	4.3	IS
3386	17	06	1987	22	30	46.6	0.5	35.69	27.25	.06	.06	47	-	34	-	4.1	4.3	IS
3387	19	06	1987	18	45	42.3	0.3	36.80	28.18	.02	.02	85	3	419	-	5.0	-	IS
3388	23	06	1987	15	17	44.0	1.3	34.11	26.25	.05	.05	32	11	68	3.6	4.4	-	IS
3389	28	06	1987	00	50	16.2	0.2	32.79	24.32	.02	.02	10	-	482	4.5	5.3	-	IS
3390	28	06	1987	05	58	10.5	0.5	35.75	27.32	.05	.05	56	7	79	-	4.2	4.4	IS
3391	09	07	1987	23	00	25.0	1.3	38.84	25.74	.04	.04	25	14	61	-	4.0	3.6	IS
3392	10	07	1987	04	26	58.9	0.5	34.37	24.10	.05	.05	1	-	58	3.4	4.3	-	IS
3393	11	07	1987	13	55	54.4	0.3	36.64	26.90	.04	.04	161	4	101	-	4.5	3.5	IS
3394	12	07	1987	16	01	28.1	0.5	34.91	46.92	.04	.03	51	6	189	4.6	4.9	-	IS
3395	13	07	1987	12	54	30.3	0.5	39.09	43.52	.08	.09	10	-	25	3.4	4.4	3.5	IS
3396	16	07	1987	11	23	20.6	0.9	34.60	23.11	.08	.07	10	-	26	-	4.6	3.8	IS
3397	18	07	1987	14	30	43.7	0.5	36.15	28.24	.04	.04	51	8	73	-	4.2	4.3	IS
3398	22	07	1987	18	05	07.1	0.3	37.88	46.81	.04	.04	10	-	74	3.8	4.2	-	IS
3399	23	07	1987	07	07	37.2	0.6	38.73	27.82	.05	.05	10	-	23	-	-	4.0	IS
3400	23	07	1987	12	30	19.0	2.5	34.30	26.42	.11	.08	23	20	45	-	4.2	4.0	IS
3401	04	08	1987	01	38	49.4	0.5	38.82	24.95	.05	.04	10	-	39	-	4.3	3.3	IS
3402	06	08	1987	06	21	29.7	0.6	39.25	26.26	.03	.03	19	6	185	3.7	4.5	4.7	IS
3403	08	08	1987	22	15	17.6	0.3	40.14	24.95	.03	.03	10	-	131	4.1	4.2	4.6	IS
3404	14	08	1987	02	13	57.9	0.8	41.09	48.20	.10	.20	33	-	19	3.2	4.3	-	IS
3405	15	08	1987	09	12	06.0	1.1	34.19	26.50	.05	.04	20	9	125	-	4.6	4.1	IS
3406	22	08	1987	14	30	33.0	1.5	35.50	27.30	.18	.11	39	-	7	-	-	4.2	IS
3407	23	08	1987	01	30	41.0	0.7	35.88	27.17	.09	.07	97	-	18	-	4.0	4.0	IS
3408	25	08	1987	03	26	24.4	0.7	34.60	26.58	.05	.04	40	6	115	-	4.5	4.1	IS
3409	28	08	1987	19	16	53.0	0.7	34.75	24.66	.07	.06	69	8	63	-	4.0	3.6	IS
3410	31	08	1987	20	36	37.3	0.7	35.04	27.62	.06	.06	63	13	30	-	3.7	4.2	IS

SIRA NO	TARiH			OLUS ZAMANI				KOORDiNATLAR				DERiN-LiK		ist	MAGNiTUD			Ky
	Gn	Ay	Yil	Sa	Dk	Sn	h_O	Enl.	Boyl.	h_E	h_B		hD	say	Ms	Mb	Ml	
3411	31	08	1987	23	20	49.7	0.6	36.58	27.70	.07	.08	113	10	33	-	4.0	-	IS
3412	03	09	1987	16	24	53.2	0.9	40.46	29.24	.04	.05	8	7	54	-	4.1	-	IS
3413	03	09	1987	12	39	55.9	0.3	35.91	30.61	.02	.02	52	3	330	4.4	5.0	-	IS
3414	03	09	1987	21	02	24.1	0.5	36.70	27.17	.10	.08	162	9	24	-	4.1	-	IS
3415	04	09	1987	11	00	01.0	0.5	35.64	27.35	.06	.05	70	8	52	-	4.2	4.2	IS
3416	06	09	1987	02	46	11.7	0.8	39.15	40.50	.09	.12	10	-	15	-	4.3	-	IS
3417	08	09	1987	09	04	48.0	2.0	34.77	23.25	.06	.06	6	12	78	3.7	4.7	-	IS
3418	09	09	1987	23	29	29.9	0.9	33.70	47.12	.08	.05	66	9	57	-	4.5	-	IS
3419	12	09	1987	22	00	56.0	1.2	35.15	23.91	.04	.03	24	10	201	-	4.5	4.3	IS
3420	13	09	1987	01	23	14.0	0.8	40.64	40.90	.08	.13	10	-	18	-	4.3	-	IS
3421	13	09	1987	23	54	56.5	0.7	32.44	24.25	.08	.05	10	-	68	-	4.2	4.8	IS
3422	14	09	1987	15	51	55.3	0.3	36.74	31.10	.03	.02	111	3	238	-	4.7	-	IS
3423	15	09	1987	16	02	05.4	0.4	37.85	26.95	.04	.04	1	-	51	-	4.7	3.8	IS
3424	20	09	1987	11	41	08.3	0.9	34.96	25.63	.03	.02	18	6	325	4.5	4.9	4.7	IS
3425	20	09	1987	21	51	56.0	3.5	34.60	25.72	.32	.10	10	-	10	-	4.0	-	IS
3426	02	10	1987	00	32	12.6	0.7	34.50	26.27	.05	.06	63	9	74	-	4.2	-	IS
3427	05	10	1987	09	27	02.3	0.7	36.24	28.27	.02	.02	27	5	353	-	5.1	-	IS
3428	06	10	1987	11	28	23.6	1.0	36.21	28.29	.03	.03	16	9	146	-	4.6	-	IS
3429	06	10	1987	11	31	16.6	-	36.27	28.45	-	-	15	-	-	-	-	4.4	IS
3430	06	10	1987	12	07	07.4	0.5	36.25	28.26	.04	.04	36	7	80	-	4.5	-	IS
3431	06	10	1987	20	45	59.1	0.9	36.28	28.24	.06	.08	20	10	17	-	4.5	-	IS
3432	06	10	1987	21	25	51.0	1.2	36.28	28.33	.05	.06	14	9	32	-	4.7	-	IS
3433	09	10	1987	11	22	59.4	0.4	36.28	28.35	.04	.05	10	-	57	-	4.4	-	IS
3434	09	10	1987	12	09	38.1	0.4	36.24	28.31	.04	.05	8	-	44	-	4.6	-	IS
3435	12	10	1987	02	44	08.5	0.8	36.26	28.30	.07	.09	10	-	13	-	4.6	-	IS
3436	14	10	1987	14	45	04.8	0.7	32.86	47.78	.08	.07	33	-	18	-	4.6	-	IS
3437	18	10	1987	02	11	47.0	1.6	35.99	46.80	.10	.24	33	-	10	-	4.2	-	IS
3438	22	10	1987	17	52	18.1	0.5	34.70	26.36	.04	.04	36	6	129	-	4.4	-	IS
3439	23	10	1987	06	50	34.0	1.0	42.49	43.34	.04	.04	5	7	113	3.7	4.7	-	IS
3440	24	10	1987	12	36	48.5	0.3	34.42	39.09	.04	.05	-	-	58	3.5	4.4	-	IS
3441	25	10	1987	13	02	00.4	1.0	36.30	28.35	.03	.03	24	8	197	4.0	4.6	-	IS
3442	25	10	1987	14	40	14.0	1.8	36.28	28.17	.05	.05	8	13	46	-	4.2	-	IS
3443	25	10	1987	16	19	56.0	1.3	36.38	28.21	.06	.06	18	15	19	-	4.5	-	IS
3444	27	10	1987	03	15	30.6	0.5	40.42	28.46	.03	.03	18	5	121	3.7	4.4	-	IS
3445	27	10	1987	14	48	47.5	0.6	36.19	28.33	.06	.06	6	-	17	-	4.6	-	IS
3446	27	10	1987	21	29	12.5	0.5	32.96	47.80	.07	.07	33	-	22	-	4.6	-	IS
3447	28	10	1987	19	09	35.0	1.4	37.87	30.27	.05	.07	12	11	38	-	4.2	-	IS
3448	30	10	1987	10	28	30.5	0.4	37.64	37.56	.04	.06	10	-	62	-	4.7	-	IS
3449	01	11	1987	17	00	22.3	0.6	32.42	26.20	.07	.05	33	-	62	3.2	4.0	-	IS
3450	02	11	1987	11	44	41.0	1.6	34.40	25.05	.13	.08	63	13	24	-	4.0	-	IS
3451	04	11	1987	09	03	23.0	1.7	34.22	24.55	.07	.07	19	14	48	-	4.4	-	IS
3452	05	11	1987	10	38	56.2	0.6	34.84	27.90	.05	.05	51	8	59	-	4.3	-	IS
3453	09	11	1987	06	02	43.8	-	34.54	32.94	-	-	10	-	-	-	4.8	-	IS
3454	09	11	1987	07	50	17.0	1.0	34.72	32.88	.04	.06	23	9	76	-	4.4	-	IS
3455	09	11	1987	16	43	42.3	0.8	32.82	47.83	.06	.05	39	9	71	4.5	4.7	-	IS
3456	09	11	1987	17	29	37.0	1.6	32.80	47.85	.16	.08	41	13	23	4.1	4.5	-	IS
3457	24	11	1987	07	07	04.0	1.3	34.80	23.93	.11	.10	70	12	23	-	4.2	-	IS
3458	25	11	1987	00	11	12.0	-	37.93	30.97	-	-	9	-	-	-	4.6	-	IS
3459	26	11	1987	00	28	23.0	2.1	36.06	29.15	.06	.07	14	16	26	-	4.5	-	IS
3460	26	11	1987	23	00	22.0	1.4	37.93	31.10	.03	.05	16	12	88	-	4.5	-	IS
3461	27	11	1987	05	44	23.1	0.5	37.98	31.08	.05	.09	10	-	22	-	4.6	-	IS
3462	28	11	1987	10	18	46.0	1.3	36.00	45.60	.10	.20	10	-	6	-	4.1	-	IS
3463	03	12	1987	08	01	46.5	0.7	34.32	25.44	.07	.09	33	-	13	-	4.2	-	IS
3464	03	12	1987	15	29	22.9	0.5	34.38	25.17	.06	.06	10	-	26	-	4.5	-	IS
3465	05	12	1987	02	28	09.1	0.9	34.67	23.99	.06	.05	52	9	52	-	4.3	-	IS

SIRA NO	TARiH			OLUS ZAMANI				KOORDiNATLAR				DERiN-LiK		ist	MAGNiTUD			Ky
	Gn	Ay	Yil	Sa	Dk	Sn	h_O	Enl.	Boyl.	h_E	h_B		hD	say	Ms	Mb	Ml	
3466	07	12	1987	00	07	32.3	0.3	37.95	42.95	.04	.05	33	-	106	4.1	4.8	-	IS
3467	08	12	1987	02	11	00.0	1.8	34.04	26.11	.08	.06	24	15	46	-	4.2	-	IS
3468	10	12	1987	05	44	30.0	1.1	34.84	26.73	.03	.03	7	7	223	4.3	4.8	-	IS
3469	12	12	1987	18	24	58.6	0.3	36.78	28.28	.03	.04	78	5	109	-	4.3	-	IS
3470	16	12	1987	00	34	39.0	0.3	37.91	30.99	.03	.06	10	-	52	-	4.2	-	IS
3471	17	12	1987	19	14	03.0	-	37.92	30.96	-	-	10	-	-	-	4.6	-	IS
3472	17	12	1987	19	16	34.0	3.9	34.40	27.20	.22	-	4	16	31	-	4.2	-	IS
3473	21	12	1987	19	34	36.7	0.9	35.26	26.20	.04	.04	29	8	67	-	4.8	-	IS
3474	26	12	1987	07	45	15.6	0.5	36.89	27.71	.04	.03	35	5	137	-	4.7	-	IS
3475	26	12	1987	10	28	51.9	-	36.87	28.21	-	-	85	-	-	-	-	4.1	IS
3476	30	12	1987	16	17	09.7	0.8	36.88	27.72	.03	.03	30	7	207	4.0	4.8	-	IS
3477	31	12	1987	17	26	04.4	0.4	37.02	36.02	.04	.06	10	-	42	-	4.2	-	IS
3478	01	01	1988	04	17	41.6	-	36.44	35.43	-	-	10	-	9	-	-	4.4	US
3479	01	01	1988	12	21	51.5	-	40.12	29.24	-	-	10	-	29	-	4.5	-	US
3480	03	01	1988	20	46	42.8	-	34.71	27.09	-	-	17	-	86	-	4.4	4.2	US
3481	10	01	1988	09	26	17.7	-	34.38	23.32	-	-	33	-	42	-	4.4	3.8	US
3482	11	01	1988	04	24	01.8	-	34.84	23.47	-	-	33	-	15	-	4.6	-	US
3483	11	01	1988	14	49	41.3	-	32.09	48.32	-	-	43	-	7	-	4.3	-	US
3484	13	01	1988	07	58	45.4	-	38.34	30.83	-	-	14	-	52	-	4.5	-	US
3485	14	01	1988	18	35	55.7	-	39.92	29.09	-	-	17	-	33	-	4.1	-	US
3486	17	01	1988	16	21	38.2	-	33.51	47.57	-	-	33	-	7	-	4.4	-	US
3487	17	01	1988	18	20	11.5	-	32.67	46.86	-	-	51	-	15	-	4.8	-	US
3488	17	01	1988	18	41	42.7	-	32.70	46.53	-	-	40	-	14	-	4.6	-	US
3489	18	01	1988	21	41	04.8	-	37.80	37.61	-	-	8	-	50	-	4.4	-	US
3490	19	01	1988	21	03	23.7	-	31.91	47.68	-	-	58	-	7	-	4.2	-	US
3491	20	01	1988	06	55	27.7	-	32.83	46.29	-	-	48	-	17	-	4.5	-	US
3492	26	01	1988	09	34	48.7	-	32.67	47.05	-	-	34	-	178	5.3	5.2	-	US
3493	26	01	1988	09	45	50.1	-	32.96	47.19	-	-	78	-	45	-	5.0	-	US
3494	26	01	1988	14	36	30.3	-	32.63	46.92	-	-	36	-	41	4.0	4.9	-	US
3495	27	01	1988	03	46	59.5	-	39.83	45.15	-	-	33	-	46	4.2	4.6	-	US
3496	27	01	1988	07	44	14.2	-	32.66	46.75	-	-	37	-	52	3.7	5.0	-	US
3497	28	01	1988	01	34	49.4	-	32.62	46.96	-	-	38	-	61	3.7	4.7	-	US
3498	28	01	1988	05	32	58.6	-	32.92	47.17	-	-	75	-	18	-	5.0	-	US
3499	29	01	1988	10	54	15.0	-	34.45	46.29	-	-	33	-	12	-	4.5	-	US
3500	30	01	1988	03	00	00.0	-	32.16	35.44	-	-	10	-	8	-	-	4.1	US
3501	01	02	1988	06	41	35.9	-	34.36	26.83	-	-	18	-	45	-	4.5	-	US
3502	04	02	1988	06	20	52.1	-	34.31	26.52	-	-	33	-	11	-	4.2	4.2	US
3503	16	02	1988	11	20	16.8	-	35.20	27.14	-	-	38	-	32	-	4.8	-	US
3504	18	02	1988	11	11	34.3	-	39.08	23.45	-	-	15	-	79	-	4.1	4.6	US
3505	20	02	1988	02	48	56.7	-	35.51	25.14	-	-	54	-	64	-	4.0	-	US
3506	21	02	1988	03	08	58.8	-	34.88	23.06	-	-	33	-	22	-	3.9	4.1	US
3507	08	03	1988	23	16	58.4	-	34.80	26.67	-	-	40	-	60	-	4.2	4.2	US
3508	13	03	1988	01	00	11.5	-	38.83	26.10	-	-	10	-	25	-	4.0	-	US
3509	26	03	1988	00	33	33.4	-	34.59	24.04	-	-	33	-	19	-	4.0	3.9	US
3510	30	03	1988	21	42	04.1	-	39.28	40.46	-	-	10	-	20	3.3	4.5	-	US
3511	02	04	1988	08	13	03.3	-	44.92	32.80	-	-	33	-	34	-	4.2	-	US
3512	02	04	1988	21	57	59.4	-	38.05	24.06	-	-	27	-	116	3.7	4.4	4.1	US
3513	03	04	1988	01	19	22.1	-	35.73	27.51	-	-	43	-	42	-	4.0	-	US
3514	09	04	1988	03	34	46.6	-	38.85	40.46	-	-	10	-	17	-	4.4	-	US
3515	14	04	1988	00	03	47.6	-	34.26	25.36	-	-	33	-	31	-	4.1	4.4	US
3516	16	04	1988	07	34	01.3	-	34.22	25.10	-	-	39	-	23	-	4.6	-	US
3517	18	04	1988	22	00	19.4	-	34.80	25.75	-	-	19	-	138	3.9	4.3	4.4	US
3518	20	04	1988	03	50	08.3	-	39.11	44.12	-	-	55	-	207	4.7	5.0	-	US
3519	21	04	1988	10	01	48.0	-	39.05	44.05	-	-	47	-	45	4.0	4.7	-	US
3520	24	04	1988	20	49	33.6	-	40.86	28.23	-	-	16	-	167	-	5.0	4.8	US

SIRA NO	TARiH Gn	Ay	Yil	OLUS ZAMANI Sa	Dk	Sn	h_O	KOORDiNATLAR Enl.	Boyl.	h_E	h_B	DERiN-LiK	hD	ist say	MAGNiTUD Ms	Mb	Ml	Ky
3521	02	05	1988	13	37	15.3	-	34.39	25.69	-	-	33	-	9	-	4.6	-	US
3522	03	05	1988	08	41	22.7	-	42.50	47.64	-	-	33	-	52	3.7	4.6	-	US
3523	03	05	1988	09	15	21.7	-	42.47	46.66	-	-	22	-	212	4.5	5.1	-	US
3524	03	05	1988	10	07	51.1	-	42.37	47.91	-	-	33	-	12	-	4.3	-	US
3525	04	05	1988	02	51	18.1	-	42.13	47.15	-	-	33	-	8	-	4.4	-	US
3526	06	05	1988	00	14	41.7	-	39.17	43.98	-	-	10	-	14	-	4.3	-	US
3527	06	05	1988	12	18	49.5	-	36.92	29.65	-	-	27	-	85	-	4.4	-	US
3528	10	05	1988	14	27	14.2	-	34.31	26.11	-	-	30	-	81	-	4.3	4.2	US
3529	17	05	1988	11	40	46.2	-	40.62	41.96	-	-	10	-	18	4.0	4.4	-	US
3530	23	05	1988	10	21	45.6	-	35.01	26.71	-	-	43	-	17	-	3.8	4.1	US
3531	24	05	1988	14	16	06.7	-	36.08	28.14	-	-	32	-	49	3.2	4.2	4.4	US
3532	30	05	1988	16	47	01.3	-	40.29	25.84	-	-	12	-	60	3.9	4.0	4.3	US
3533	31	05	1988	21	06	42.3	-	40.66	34.78	-	-	10	-	25	-	4.5	-	US
3534	02	06	1988	07	34	18.9	-	36.27	26.72	-	-	132	-	25	-	4.0	-	US
3535	08	06	1988	15	51	50.2	-	35.49	45.03	-	-	33	-	4	-	4.2	-	US
3536	09	06	1988	02	18	23.2	-	32.24	27.90	-	-	10	-	132	-	-	4.2	US
3537	12	06	1988	08	56	13.4	-	34.62	24.20	-	-	31	-	69	-	-	4.1	US
3538	25	06	1988	16	15	38.3	-	38.46	43.04	-	-	51	-	264	5.0	5.3	-	US
3539	05	07	1988	03	44	43.0	1.3	39.06	44.10	.10	.10	54	16	22	3.6	4.1	-	IS
3540	12	07	1988	02	26	54.1	0.6	38.75	23.45	.02	.02	18	5	234	4.5	4.7	-	IS
3541	13	07	1988	01	49	44.3	0.8	33.00	47.10	.13	.11	79	-	25	-	4.8	-	IS
3542	13	07	1988	07	27	14.0	3.7	34.50	23.70	.25	.13	24	16	14	-	4.0	-	IS
3543	14	07	1988	12	05	51.3	-	38.78	23.45	-	-	15	-	-	-	4.0	-	IS
3544	14	07	1988	12	05	52.9	-	38.67	23.29	-	-	1	-	-	-	-	4.0	IS
3545	16	07	1988	17	56	28.5	0.8	39.98	23.85	.03	.03	13	6	72	4.0	3.9	-	IS
3546	18	07	1988	01	44	15.1	0.7	34.97	23.32	.07	.08	33	-	25	-	4.0	-	IS
3547	19	07	1988	20	44	13.1	0.4	38.22	38.73	.05	.06	10	-	41	-	4.1	-	IS
3548	22	07	1988	03	42	31.0	1.2	34.10	46.60	.08	.21	33	-	11	-	4.6	-	IS
3549	22	07	1988	16	31	27.9	0.7	38.90	44.50	.08	.15	33	-	18	3.4	4.1	-	IS
3550	22	07	1988	16	49	33.9	0.9	38.92	45.50	.07	.19	33	-	9	-	4.0	-	IS
3551	27	07	1988	05	00	07.8	0.5	35.17	24.97	.04	.04	56	7	59	-	4.5	-	IS
3552	03	08	1988	17	05	31.0	1.0	41.00	41.70	.12	.16	10	-	14	4.2	4.2	-	IS
3553	03	08	1988	20	42	34.3	0.4	35.88	35.65	.03	.04	56	5	194	3.9	4.6	-	IS
3554	04	08	1988	08	25	18.0	1.3	38.86	27.00	.03	.04	3	11	65	-	4.5	-	IS
3555	05	08	1988	12	53	23.3	0.5	35.54	25.97	.05	.04	56	7	59	-	4.5	-	IS
3556	08	08	1988	13	34	55.6	0.9	42.60	44.40	.14	.16	10	-	10	-	3.6	4.0	IS
3557	08	08	1988	16	56	31.6	0.4	36.77	44.05	.03	.02	56	5	229	4.1	4.9	-	IS
3558	09	08	1988	01	31	04.8	0.7	36.89	44.01	.08	.08	33	-	15	-	4.0	-	IS
3559	11	08	1988	12	45	52.5	0.9	39.89	23.89	.03	.03	5	7	75	-	4.2	-	IS
3560	13	08	1988	02	26	21.0	0.9	39.96	24.00	.03	.03	11	7	116	4.2	4.0	-	IS
3561	15	08	1988	07	47	09.9	0.5	37.89	29.24	.04	.07	11	-	31	-	4.7	-	IS
3562	16	08	1988	21	34	08.4	-	39.93	23.99	.02	.02	9	6	151	4.0	4.4	-	IS
3563	24	08	1988	12	13	29.1	0.8	36.59	26.29	.04	.04	26	9	74	-	5.0	-	IS
3564	25	08	1988	07	58	42.2	0.9	35.97	45.88	.05	.08	70	8	103	-	4.9	-	IS
3565	05	09	1988	20	03	25.6	0.2	34.44	26.56	.02	.02	70	-	395	5.2	5.0	-	IS
3566	06	09	1988	19	16	38.2	1.0	42.05	41.68	.03	.02	11	7	269	4.7	5.0	-	IS
3567	07	09	1988	14	39	42.0	1.2	34.17	26.45	.06	.05	18	10	57	-	4.2	-	IS
3568	11	09	1988	02	18	12.5	0.6	36.26	26.35	.09	.07	124	9	25	-	4.6	-	IS
3569	11	09	1988	21	45	23.9	-	38.12	23.22	.03	.02	24	5	250	3.6	4.8	-	IS
3570	27	09	1988	11	19	25.1	0.7	36.02	27.16	.06	.06	49	10	38	-	4.2	-	IS
3571	30	09	1988	01	10	33.4	-	34.54	26.16	-	-	33	-	-	-	4.0	-	IS
3572	03	10	1988	12	40	15.6	0.5	35.98	27.40	.04	.04	40	5	120	-	4.5	-	IS
3573	03	10	1988	18	09	40.7	0.8	34.75	26.07	.07	.06	62	13	29	-	4.1	-	IS
3574	06	10	1988	17	37	23.0	1.1	34.68	24.06	.10	.07	60	12	28	-	4.3	-	IS
3575	08	10	1988	06	20	04.5	0.7	35.20	23.25	.05	.04	38	6	113	-	4.6	-	IS

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	Gn	Ay	Yil	Sa	Dk	Sn	h_O	Enl.	Boyl.	h_E	h_B		hD		Ms	Mb	Ml	
3576	09	10	1988	16	08	04.9	0.4	35.76	26.85	.03	.03	92	5	121	-	4.6	-	IS
3577	16	10	1988	23	35	24.7	0.5	38.00	44.76	.12	.07	33	-	17	-	4.5	-	IS
3578	17	10	1988	19	58	34.6	0.4	37.17	23.12	.03	.03	99	5	145	-	4.3	-	IS
3579	18	10	1988	12	35	44.5	0.4	40.35	41.50	.07	.04	10	-	63	3.3	4.9	-	IS
3580	21	10	1988	14	25	53.0	3.0	34.14	25.44	.08	.06	12	2	38	-	4.2	-	IS
3581	22	10	1988	02	50	30.8	0.3	38.87	24.95	.03	.03	19	-	72	-	4.0	-	IS
3582	22	10	1988	06	10	27.0	1.1	34.16	25.52	.05	.04	28	10	105	-	4.2	-	IS
3583	10	10	1988	17	21	20.3	-	36.71	28.54	-	-	111	-	-	-	4.2	4.0	IS
3584	26	10	1988	10	10	28.0	1.0	32.96	27.69	.05	.07	19	12	31	-	4.8	-	IS
3585	29	10	1988	04	13	22.0	1.4	36.10	28.15	.05	.06	4	11	27	-	4.7	-	IS
3586	09	11	1988	17	01	10.0	1.5	34.57	25.30	.06	.06	23	14	39	-	4.1	-	IS
3587	15	11	1988	01	34	40.0	1.8	35.00	24.10	.17	.10	61	11	30	-	4.1	-	IS
3588	17	11	1988	15	13	11.9	0.6	34.37	26.02	.07	.06	97	7	61	-	4.1	-	IS
3589	18	11	1988	18	54	05.7	0.9	34.70	25.82	.04	.03	22	7	148	-	4.5	-	IS
3590	18	11	1988	20	04	46.9	0.4	38.45	30.08	.03	.04	37	7	80	-	4.5	-	IS
3591	26	11	1988	10	39	30.0	1.9	35.20	23.10	.13	.15	42	20	14	-	4.3	-	IS
3592	01	12	1988	21	52	05.0	1.5	34.44	24.06	.06	.05	24	11	94	3.6	4.7	-	IS
3593	07	12	1988	07	41	24.3	0.9	40.96	44.16	.02	.01	5	-	736	6.7	6.0	-	IS
3594	07	12	1988	07	45	45.0	1.2	40.96	44.27	.05	.05	11	7	157	-	5.8	-	IS
3595	07	12	1988	08	06	29.0	1.3	40.83	44.23	.06	.06	16	11	48	5.3	4.7	-	IS
3596	07	12	1988	08	57	06.3	0.9	40.90	43.20	.13	.28	10	-	8	-	4.4	-	IS
3597	07	12	1988	09	34	33.8	0.9	40.93	44.08	.03	.03	8	6	194	4.4	5.0	-	IS
3598	07	12	1988	10	56	51.0	1.4	40.96	44.24	.06	.06	2	10	32	-	4.7	-	IS
3599	07	12	1988	13	19	33.9	-	39.17	30.25	-	-	10	-	-	-	4.1	-	IS
3600	07	12	1988	14	10	16.9	0.5	41.06	44.35	.05	.05	10	-	50	-	4.3	-	IS
3601	07	12	1988	18	05	42.0	1.4	40.90	44.21	.05	.06	2	9	49	-	4.4	-	IS
3602	07	12	1988	19	17	58.0	1.7	41.80	44.30	.11	.52	10	-	9	3.5	4.2	-	IS
3603	07	12	1988	20	07	31.0	1.1	41.12	44.32	.05	.05	7	7	49	-	4.4	-	IS
3604	08	12	1988	01	15	58.0	2.1	40.85	44.23	.05	.05	14	16	48	-	4.8	-	IS
3605	08	12	1988	01	49	40.0	1.2	41.03	44.04	.05	.05	7	9	39	-	4.2	-	IS
3606	08	12	1988	04	09	38.3	0.4	41.04	44.37	.05	.05	10	-	48	-	4.5	-	IS
3607	08	12	1988	05	36	30.0	1.5	41.03	44.18	.05	.05	10	10	54	-	4.6	-	IS
3608	08	12	1988	07	46	03.3	0.9	40.91	44.42	.04	.04	22	7	105	4.6	4.8	-	IS
3609	08	12	1988	13	33	51.2	0.4	36.62	30.03	.05	.06	77	7	33	-	4.9	-	IS
3610	08	12	1988	20	32	06.4	0.2	41.02	44.25	.03	.03	10	-	130	3.5	4.8	-	IS
3611	10	12	1988	19	13	58.6	0.7	40.71	44.20	.06	.19	10	-	10	-	4.4	-	IS
3612	12	12	1988	15	36	18.1	0.4	40.93	44.20	.04	.06	10	-	35	-	4.5	-	IS
3613	13	12	1988	15	46	24.0	0.7	38.73	39.47	.07	.09	10	-	22	-	4.2	-	IS
3614	17	12	1988	18	24	05.6	0.6	35.06	24.06	.05	.10	49	7	136	-	4.7	-	IS
3615	19	12	1988	04	44	03.0	1.7	35.43	46.07	.09	.11	9	13	9	-	4.6	-	IS
3616	19	12	1988	17	29	35.9	0.5	41.02	44.35	.05	.06	10	-	38	-	4.4	-	IS
3617	21	12	1988	11	58	42.3	0.3	35.35	27.43	.03	.02	42	3	304	4.1	4.9	-	IS
3618	22	12	1988	15	30	12.1	0.5	36.74	23.21	.06	.07	126	13	29	-	4.5	-	IS
3619	22	12	1988	20	32	59.4	0.3	37.59	32.11	.04	.05	8	-	47	-	4.6	-	IS
3620	24	12	1988	20	36	05.0	2.0	37.58	32.15	.03	.04	12	14	116	-	4.5	-	IS
3621	24	12	1988	22	13	19.4	0.5	37.61	32.09	.05	.06	10	-	20	-	4.7	-	IS
3622	25	12	1988	11	02	55.1	-	36.13	27.17	-	-	36	-	-	-	4.0	-	IS
3623	27	12	1988	22	08	51.6	0.8	31.74	47.49	.08	.10	33	-	14	-	4.7	-	IS
3624	29	12	1988	07	31	01.5	0.7	35.92	27.40	.09	.10	50	12	13	-	4.3	-	IS
3625	30	12	1988	11	56	01.0	0.8	36.07	27.27	.06	.06	31	9	18	-	4.5	-	IS
3626	31	12	1988	04	07	09.3	0.8	40.95	44.05	.04	.04	2	5	113	4.1	4.7	-	IS
3627	01	01	1989	03	18	10.1	0.5	37.72	32.15	.05	.06	10	-	25	-	4.5	-	IS
3628	04	01	1989	07	29	40.3	0.9	40.93	44.26	.03	.03	3	6	127	4.1	4.9	-	IS
3629	04	01	1989	14	55	01.0	1.5	39.78	30.70	.03	.04	5	11	82	-	4.3	-	IS
3630	05	01	1989	07	57	44.7	0.4	37.09	27.69	.03	.04	10	-	64	-	4.6	-	IS

SIRA NO	TARiH			OLUS ZAMANI				KOORDiNATLAR				DERiN-LiK		ist say	MAGNiTUD			Ky
	Gn	Ay	Yil	Sa	Dk	Sn	h_O	Enl.	Boyl.	h_E	h_B		hD		Ms	Mb	Ml	
3631	07	01	1989	18	29	22.0	2.4	34.44	24.40	.09	.10	-	14	37	-	4.6	-	IS
3632	08	01	1989	03	01	18.0	2.1	37.00	27.60	.04	.05	8	15	77	-	4.4	-	IS
3633	08	01	1989	07	07	49.6	0.5	38.77	40.80	.05	.07	10	-	37	-	4.3	-	IS
3634	08	01	1989	13	09	23.3	0.4	41.01	44.10	.04	.04	10	-	49	-	4.3	-	IS
3635	11	01	1989	20	57	49.1	0.4	38.89	24.94	.03	.04	10	-	44	-	4.4	-	IS
3636	14	01	1989	22	19	01.7	0.4	35.76	27.31	.04	.04	92	6	65	-	4.0	-	IS
3637	16	01	1989	05	33	11.9	0.4	37.17	30.95	.05	.07	132	7	31	-	4.1	-	IS
3638	19	01	1989	17	28	18.0	5.0	38.14	39.57	.08	.06	10	-	18	-	4.3	-	IS
3639	24	01	1989	02	31	10.5	0.6	41.03	44.37	.06	.08	10	-	23	-	4.3	-	IS
3640	27	01	1989	09	48	35.7	0.7	40.43	29.15	.03	.05	11	5	61	-	4.1	-	IS
3641	31	01	1989	15	18	10.0	0.7	36.57	25.78	.04	.05	24	7	49	-	4.3	-	IS
3642	06	02	1989	11	37	36.3	0.3	39.16	24.55	.03	.03	10	-	60	-	4.2	-	IS
3643	10	02	1989	22	26	41.0	1.0	34.63	23.00	.10	.10	33	-	28	-	4.5	-	IS
3644	15	02	1989	04	01	16.9	0.9	39.05	29.71	.03	.04	23	8	107	-	4.4	-	IS
3645	19	02	1989	03	36	39.0	1.2	34.68	24.21	.05	.04	18	10	120	-	4.5	-	IS
3646	19	02	1989	14	28	45.7	1.0	36.98	28.20	.02	.02	1	7	309	4.7	4.8	-	IS
3647	22	02	1989	08	33	06.6	0.6	43.18	41.46	.06	.06	33	9	46	-	4.1	-	IS
3648	24	02	1989	00	40	34.4	0.9	37.73	29.33	.02	.02	10	6	382	4.7	5.0	-	IS
3649	24	02	1989	01	17	44.1	0.9	37.72	29.26	.03	.04	19	9	104	-	4.4	-	IS
3650	24	02	1989	12	30	11.7	0.9	37.73	29.24	.03	.03	23	8	115	-	4.5	-	IS
3651	26	02	1989	15	56	14.3	1.0	34.14	26.20	.08	.06	42	-	43	-	4.4	-	IS
3652	26	02	1989	23	54	26.8	0.2	39.14	24.52	.02	.03	10	-	144	-	4.9	-	IS
3653	02	03	1989	09	24	33.5	0.9	35.10	46.30	.11	.08	33	10	22	-	4.3	-	IS
3654	08	03	1989	06	49	26.0	0.3	36.33	27.74	.03	.03	96	4	167	-	4.5	-	IS
3655	09	03	1989	00	28	31.3	1.0	35.22	27.66	.04	.04	20	10	92	-	4.1	-	IS
3656	09	03	1989	04	20	22.3	0.9	34.72	24.03	.06	.05	45	9	62	-	4.1	-	IS
3657	10	03	1989	08	00	50.3	0.4	40.26	41.96	.08	.08	10	-	55	4.0	4.7	-	IS
3658	14	03	1989	11	08	02.8	0.6	35.50	23.34	.04	.03	59	5	199	-	4.8	-	IS
3659	17	03	1989	05	42	54.5	0.8	36.64	25.44	.03	.02	31	6	431	5.0	4.9	-	IS
3660	18	03	1989	21	27	39.4	0.8	39.24	23.53	.02	.02	9	6	212	4.3	4.5	-	IS
3661	19	03	1989	00	19	20.6	0.9	39.25	23.53	.03	.03	7	7	68	-	4.7	-	IS
3662	19	03	1989	05	36	59.2	0.1	39.24	23.50	.02	.01	10	-	490	5.4	5.2	-	IS
3663	19	03	1989	05	41	45.3	1.0	39.26	23.62	.04	.04	27	10	82	-	4.6	-	IS
3664	19	03	1989	05	48	53.4	0.3	39.28	23.58	.03	.03	48	6	103	-	4.1	-	IS
3665	19	03	1989	05	49	37.0	1.8	39.33	23.60	.04	.04	25	18	65	-	4.4	-	IS
3666	19	03	1989	05	57	43.9	0.3	39.29	23.57	.03	.03	38	6	102	-	4.2	-	IS
3667	19	03	1989	11	31	27.5	0.9	39.25	23.66	.02	.02	5	7	135	3.9	4.4	-	IS
3668	20	03	1989	10	39	13.6	0.6	39.27	23.62	.02	.02	17	6	168	3.8	4.4	-	IS
3669	28	03	1989	13	29	12.3	0.2	34.09	24.66	.02	.02	40	3	509	5.2	5.4	-	IS
3670	30	03	1989	16	36	23.8	0.9	41.05	43.95	.03	.03	3	5	156	4.0	4.5	-	IS
3671	02	04	1989	10	30	14.6	0.5	35.12	46.32	.08	.07	5	-	19	-	4.1	-	IS
3672	02	04	1989	21	24	37.0	0.1	32.60	47.77	.02	.02	33	-	47	5.0	5.5	-	IS
3673	05	04	1989	15	09	06.2	0.9	34.66	24.11	.03	.03	30	7	247	4.5	4.9	-	IS
3674	09	04	1989	02	54	04.5	0.3	36.61	42.21	.04	.03	33	-	81	-	4.5	-	IS
3675	12	04	1989	21	43	50.1	0.9	39.28	23.58	.03	.03	7	7	80	-	4.5	-	IS
3676	14	04	1989	23	30	39.8	0.2	32.65	47.77	.04	.04	33	-	110	-	4.9	-	IS
3677	16	04	1989	22	17	13.9	0.6	32.46	47.87	.08	.07	33	-	24	-	4.5	-	IS
3678	18	04	1989	00	47	58.0	1.0	39.29	23.61	.03	.03	10	8	102	-	4.2	-	IS
3679	21	04	1989	13	51	36.4	0.6	37.37	23.55	.05	.06	10	-	18	-	4.8	-	IS
3680	23	04	1989	02	25	04.9	1.0	39.24	23.66	.03	.03	7	8	89	-	4.6	-	IS
3681	23	04	1989	19	51	23.0	1.1	39.22	23.67	.03	.03	4	9	64	-	4.9	-	IS
3682	26	04	1989	04	03	56.0	1.1	34.61	45.70	.09	.14	33	-	6	-	4.2	-	IS
3683	27	04	1989	23	06	52.3	0.7	37.04	28.17	.02	.02	12	4	407	5.0	5.3	-	IS
3684	28	04	1989	04	02	37.2	0.6	39.29	23.61	.02	.02	16	5	235	4.7	4.7	-	IS
3685	28	04	1989	13	30	19.8	0.5	37.03	28.11	.02	.02	17	4	373	5.1	5.1	-	IS

SIRA NO	TARiH			OLUS ZAMANI				KOORDiNATLAR				DERiN-LiK		ist say	MAGNiTUD			Ky
	Gn	Ay	Yil	Sa	Dk	Sn	h_O	Enl.	Boyl.	h_E	h_B		hD		Ms	Mb	Ml	
3686	28	04	1989	14	52	56.0	1.1	37.05	28.03	.03	.05	6	9	65	-	4.1	-	IS
3687	30	04	1989	05	10	59.7	0.9	39.29	23.59	.03	.03	11	7	125	-	4.4	-	IS
3688	08	05	1989	17	54	43.2	0.5	36.22	28.09	.05	.06	81	7	33	-	4.0	-	IS
3689	08	05	1989	23	28	29.9	0.9	34.93	44.70	.07	.11	49	11	16	3.9	4.5	-	IS
3690	10	05	1989	01	37	34.1	0.6	34.24	26.65	.03	.04	42	6	131	3.4	4.4	-	IS
3691	10	05	1989	03	05	28.6	0.2	39.67	27.88	.02	.03	10	-	182	3.5	4.2	-	IS
3692	20	05	1989	20	44	02.2	0.3	39.59	40.18	.02	.02	34	3	393	5.3	5.0	-	IS
3693	11	06	1989	18	11	53.8	1.0	34.16	24.56	.08	.10	10	-	12	-	4.4	-	IS
3694	12	06	1989	06	57	31.0	0.7	35.00	46.28	.12	.07	33	-	21	-	4.5	-	IS
3695	14	06	1989	18	06	38.7	0.2	34.30	26.04	.02	.02	15	-	461	5.0	5.2	-	IS
3696	14	06	1989	18	26	19.0	1.6	34.14	26.10	.06	.04	17	13	108	-	4.4	-	IS
3697	14	06	1989	18	29	25.0	4.0	33.96	26.12	.07	.06	9	28	40	-	4.3	-	IS
3698	23	06	1989	03	23	42.0	1.0	34.46	24.79	.09	.07	10	-	21	-	4.2	-	IS
3699	24	06	1989	03	09	58.3	0.4	36.71	35.93	.03	.02	46	4	335	4.4	4.9	-	IS
3700	24	06	1989	15	01	25.3	0.6	37.02	28.06	.03	.03	21	6	116	-	4.3	-	IS
3701	01	07	1989	18	24	14.4	0.5	42.41	45.97	.06	.09	33	-	31	-	4.3	-	IS
3702	07	07	1989	22	18	00.5	0.4	34.59	23.87	.04	.04	15	-	85	-	4.4	4.0	IS
3703	08	07	1989	14	31	41.0	1.1	34.20	26.03	.11	.10	39	-	89	-	4.4	-	IS
3704	11	07	1989	02	43	30.2	0.6	34.53	26.88	.05	.05	52	-	67	-	4.1	4.2	IS
3705	12	07	1989	07	46	04.1	0.6	35.44	26.69	.07	.06	65	9	24	-	4.1	3.8	IS
3706	12	07	1989	13	42	54.0	0.3	37.16	31.09	.03	.05	125	4	83	-	4.2	-	IS
3707	15	07	1989	11	49	23.1	0.6	35.98	30.78	.05	.08	62	10	28	-	4.6	4.0	IS
3708	16	07	1989	16	48	24.0	1.2	39.12	26.60	.03	.04	3	10	61	-	4.1	4.0	IS
3709	17	07	1989	14	28	21.7	0.5	34.70	25.89	.05	.04	10	-	74	-	4.3	4.2	IS
3710	19	07	1989	10	08	47.3	0.5	36.14	27.19	.05	.05	49	8	39	-	4.2	4.1	IS
3711	20	07	1989	05	41	38.7	0.8	36.46	34.80	.06	.10	61	10	36	-	4.0	-	IS
3712	22	07	1989	19	23	21.5	0.6	43.05	45.81	.06	.07	39	9	28	-	4.2	-	IS
3713	22	07	1989	23	48	29.6	0.5	35.57	45.15	.03	.03	57	5	267	4.3	4.9	-	IS
3714	25	07	1989	15	40	45.8	0.4	36.11	29.41	.05	.04	33	-	36	-	4.0	4.1	IS
3715	28	07	1989	10	15	06.0	3.3	34.90	24.10	.28	.17	54	17	14	3.4	4.2	-	IS
3716	28	07	1989	15	54	36.8	0.9	35.63	45.40	.08	.18	30	12	12	-	4.5	-	IS
3717	31	07	1989	03	40	46.0	1.1	35.70	24.40	.11	.11	10	-	6	-	4.0	-	IS
3718	01	08	1989	00	23	35.0	1.9	35.90	31.70	.13	.23	140	34	8	-	-	4.0	IS
3719	01	08	1989	02	23	30.0	1.7	39.22	23.68	.02	.02	9	13	160	-	4.5	4.5	IS
3720	02	08	1989	23	44	25.9	0.9	34.62	24.09	.07	.05	35	9	65	-	4.2	3.9	IS
3721	03	08	1989	07	42	42.1	0.9	43.57	45.37	.03	.02	25	7	320	5.3	5.2	-	IS
3722	04	08	1989	09	22	57.0	1.3	43.57	45.37	.05	.05	22	12	69	3.6	4.3	-	IS
3723	04	08	1989	12	04	29.0	1.2	30.02	36.00	.06	.11	17	17	30	-	4.1	3.8	IS
3724	06	08	1989	11	53	08.5	0.4	37.19	23.18	.03	.03	46	5	149	3.2	4.4	4.1	IS
3725	13	08	1989	19	05	58.9	0.9	43.10	45.70	.15	.18	33	-	12	3.2	4.4	-	IS
3726	15	08	1989	16	08	08.2	0.8	39.18	26.32	.02	.03	8	6	158	-	4.3	4.1	IS
3727	15	08	1989	17	03	30.4	0.2	39.22	26.25	.02	.02	10	-	304	4.5	4.9	4.4	IS
3728	16	08	1989	11	22	34.8	0.6	36.08	28.85	.07	.07	58	9	'23	-	4.2	4.0	IS
3729	19	08	1989	07	59	44.0	2.4	34.50	23.30	.21	.10	10	-	10	-	4.0	3.9	IS
3730	20	08	1989	20	57	21.3	0.8	39.94	23.94	.02	.03	13	6	116	-	4.2	4.0	IS
3731	21	08	1989	21	54	31.3	0.8	35.63	27.00	.10	.07	17	11	27	-	-	4.1	IS
3732	23	08	1989	11	03	38.0	2.1	34.80	25.81	.19	.07	10	-	12	-	-	4.0	IS
3733	27	08	1989	01	21	16.5	0.4	34.82	26.25	.03	.02	51	4	477	4.8	5.3	4.7	IS
3734	30	08	1989	06	09	53.0	1.2	35.50	26.87	.19	.93	5	-	7	-	4.4	3.7	IS
3735	05	09	1989	06	52	29.0	1.0	40.19	25.08	.02	.02	3	7	299	5.0	5.0	5.0	IS
3736	05	09	1989	08	50	13.1	0.6	35.48	31.09	.07	.90	22	-	8	-	-	4.1	IS
3737	08	09	1989	20	12	15.4	1.0	43.45	46.70	.04	.04	25	9	89	3.8	4.6	-	IS
3738	09	09	1989	20	15	04.2	0.8	34.57	32.91	.04	.06	29	9	51	-	4.2	4.0	IS
3739	13	09	1989	09	36	51.5	0.9	37.70	30.25	.04	.05	28	10	76	-	4.3	-	IS
3740	14	09	1989	15	25	48.0	1.7	35.40	23.20	.12	.16	59	26	16	-	4.7	-	IS

SIRA NO	TARiH			OLUS ZAMANI				KOORDiNATLAR				DERiN-LiK		ist say	MAGNiTUD			Ky
	Gn	Ay	Yil	Sa	Dk	Sn	h_O	Enl.	Boyl.	h_E	h_B		hD		Ms	Mb	Ml	
3741	18	09	1989	02	27	37.8	0.4	38.97	35.54	.05	.06	33	-	70	-	4.3	-	IS
3742	18	09	1989	22	52	10.0	1.1	33.60	24.61	.12	.09	33	-	19	-	4.4	-	IS
3743	28	09	1989	16	49	25.0	2.1	34.80	27.48	.21	.10	76	12	16	-	4.0	4.0	IS
3744	29	09	1989	01	33	08.9	0.4	35.63	27.33	.04	.04	53	-	100	-	4.3	4.2	IS
3745	30	09	1989	01	47	16.0	1.7	35.20	23.20	.13	.10	68	12	37	-	4.0	3.8	IS
3746	30	09	1989	14	53	29.8	0.9	34.63	23.93	.03	.02	26	7	270	4.0	4.5	4.6	IS
3747	02	10	1989	11	41	55.0	1.3	33.67	34.82	.05	.07	26	14	53	-	3.8	4.1	IS
3748	06	10	1989	15	12	55.0	1.7	34.76	24.03	.08	.06	20	14	45	-	4.3	3.9	IS
3749	09	10	1989	05	07	23.0	1.5	34.20	25.00	.11	.11	55	15	22	-	3.9	-	IS
3750	10	10	1989	03	09	00.1	0.8	39.01	35.40	.05	.08	36	9	49	-	4.2	-	IS
3751	14	10	1989	07	14	41.1	0.4	36.70	25.32	.06	.05	169	6	57	-	4.0	3.6	IS
3752	18	10	1989	14	01	27.0	1.2	35.40	24.67	.17	.08	33	-	10	-	4.0	3.9	IS
3753	25	10	1989	15	27	42.0	1.4	43.00	26.62	.02	.03	13	11	112	-	4.2	-	IS
3754	28	10	1989	12	52	57.7	0.7	35.41	26.76	.07	.05	26	-	26	-	-	4.0	IS
3755	05	11	1989	09	00	58.0	1.5	35.81	23.00	.07	.06	5	10	33	-	4.2	3.6	IS
3756	06	11	1989	04	41	20.5	0.9	34.81	24.26	.03	.03	27	7	192	-	4.5	4.4	IS
3757	06	11	1989	06	33	28.5	0.4	38.06	23.01	.03	.04	4	-	48	-	4.6	3.8	IS
3758	12	11	1989	04	50	05.0	1.0	38.62	26.19	.02	.03	13	8	120	3.8	4.3	4.2	IS
3759	12	11	1989	10	31	59.3	0.3	33.10	31.41	.04	.04	33	-	66	-	4.2	3.8	IS
3760	18	11	1989	21	32	53.0	2.2	34.31	25.02	.04	.03	8	14	118	-	4.3	4.4	IS
3761	29	11	1989	02	25	07.5	0.3	36.53	28.59	.04	.05	81	10	40	-	3.9	4.1	IS
3762	02	12	1989	04	51	59.4	0.7	38.45	45.42	.04	.06	20	6	48	-	4.6	-	IS
3763	03	12	1989	07	39	11.5	0.6	38.44	45.35	.04	.03	40	6	139	4.3	4.9	-	IS
3764	07	12	1989	06	13	54.0	0.4	36.68	26.95	.05	.05	159	6	44	-	4.2	-	IS
3765	09	12	1989	22	06	16.1	0.3	38.37	25.05	.03	.03	43	6	118	-	4.3	4.4	IS
3766	11	12	1989	15	23	34.8	0.3	38.34	25.05	.03	.03	17	-	83	-	4.2	4.2	IS
3767	11	12	1989	15	36	38.6	0.3	38.36	25.07	.03	.03	10	-	67	-	4.2	4.1	IS
3768	12	12	1989	04	27	22.0	0.3	38.36	35.06	.03	.03	10	-	58	-	3.8	4.1	IS
3769	16	12	1989	01	06	56.0	1.4	34.57	23.10	.09	.13	33	-	25	-	4.7	3.5	IS
3770	16	12	1989	21	10	39.2	0.3	35.20	26.62	.03	.03	88	5	145	-	4.5	4.3	IS
3771	17	12	1989	05	50	33.6	0.9	41.88	46.35	.05	.06	10	7	32	-	4.6	-	IS
3772	17	12	1989	21	22	33.1	0.4	39.30	28.27	.03	.04	10	-	46	-	-	4.2	IS
3773	18	12	1989	13	58	12.0	1.8	37.87	29.22	.04	.06	7	14	39	-	4.6	4.2	IS
3774	18	12	1989	14	03	14.1	0.4	37.94	29.19	.03	.06	10	-	38	-	4.8	4.0	IS
3775	22	12	1989	00	43	41.8	0.5	36.91	26.42	.04	.05	10	-	26	-	4.6	3.9	IS
3776	23	12	1989	14	59	03.0	1.0	38.30	26.54	.03	.04	6	8	48	-	4.6	3.7	IS
3777	24	12	1989	01	20	21.0	0.4	35.39	31.92	.06	.06	82	13	29	-	4.1	3.8	IS
3778	25	12	1989	12	33	20.0	1.4	35.70	23.70	.14	.15	1	-	8	-	4.0	-	IS
3779	25	12	1989	17	49	05.0	1.2	36.79	26.61	.05	.05	16	14	26	-	-	4.1	IS
3780	26	12	1989	02	30	09.8	0.2	36.41	26.79	.03	.03	142	4	164	-	4.4	3.8	IS
3781	26	12	1989	13	24	41.0	0.6	36.28	27.15	.05	.05	1	-	16	-	-	4.0	IS
3782	27	12	1989	06	12	18.3	0.7	33.51	47.55	.05	.07	45	8	77	-	4.9	-	IS
3783	27	12	1989	14	31	31.5	0.8	32.72	47.94	.05	.04	47	8	59	-	4.7	-	IS
3784	28	12	1989	01	40	13.0	0.9	34.89	24.34	.07	.06	65	10	54	-	3.9	3.9	IS
3785	31	12	1989	08	04	31.7	0.4	36.14	27.08	.05	.04	10	-	-	-	4.3	4.0	IS
3786	02	01	1990	20	35	41.0	2.0	38.60	24.21	.03	.03	2	16	141	-	4.5	4.4	IS
3787	02	01	1990	23	24	32.0	1.9	36.57	25.59	.04	.04	8	16	53	-	4.4	3.9	IS
3788	06	01	1990	21	42	02.0	1.5	34.40	26.21	.14	.07	17	-	32	-	4.2	4.1	IS
3789	08	01	1990	10	28	44.2	0.6	36.08	27.15	.04	.04	26	7	39	-	4.2	-	IS
3790	08	01	1990	20	32	00.0	1.2	36.16	27.18	.06	.06	1	12	15	-	-	4.0	IS
3791	10	01	1990	05	38	24.5	0.6	34.04	27.10	.03	.03	26	51	136	-	4.6	4.5	IS
3792	10	01	1990	11	15	57.2	0.9	33.16	47.10	.07	.11	33	-	11	-	4.4	-	IS
3793	11	01	1990	19	39	01.1	0.4	36.50	26.44	.08	.05	148	7	32	-	4.0	-	IS
3794	13	01	1990	05	05	58.0	0.6	36.10	27.10	.03	.03	28	5	204	3.9	4.7	4.7	IS
3795	13	01	1990	10	22	13.3	0.6	36.17	27.15	.06	.05	10	-	15	-	-	4.0	IS

SIRA NO	TARiH			OLUS ZAMANI				KOORDiNATLAR				DERiN-LiK		ist say	MAGNiTUD			Ky
	Gn	Ay	Yil	Sa	Dk	Sn	h_O	Enl.	Boyl.	h_E	h_B		hD		Ms	Mb	Ml	
3796	13	01	1990	10	26	29.2	0.8	36.09	27.16	.04	.04	23	9	41	-	4.6	4.1	IS
3797	13	01	1990	14	03	15.5	0.6	36.12	27.16	.06	.06	10	-	37	-	-	4.0	IS
3798	13	01	1990	20	56	57.0	1.6	36.16	27.10	.05	.05	6	13	37	-	4.5	4.0	IS
3799	13	01	1990	22	48	07.0	1.2	36.12	27.17	.04	.04	1	11	32	-	4.7	4.1	IS
3800	13	01	1990	23	08	28.0	3.9	36.00	27.19	.06	.06	12	32	17	-	4.5	4.1	IS
3801	14	01	1990	01	38	50.0	0.8	36.04	27.14	.05	.04	23	8	44	-	4.6	-	IS
3802	14	01	1990	02	29	22.8	0.8	36.12	27.14	.03	.03	16	7	94	-	4.3	4.1	IS
3803	14	01	1990	02	32	13.0	2.4	36.13	27.14	.05	.06	13	20	21	-	4.4	4.0	IS
3804	14	01	1990	03	09	41.5	0.5	36.15	27.18	.05	.05	10	-	21	-	-	4.0	IS
3805	14	01	1990	07	28	00.0	0.7	36.04	27.11	.08	.07	37	12	27	-	4.1	4.1	IS
3806	14	01	1990	08	22	03.8	0.7	36.03	27.23	.07	.06	21	12	15	-	-	4.0	IS
3807	14	01	1990	17	08	36.0	1.2	35.21	26.11	.03	.02	1	8	216	3.6	4.7	4.5	IS
3808	14	01	1990	21	25	52.3	0.7	35.97	27.25	.05	.04	22	9	34	-	4.4	4.1	IS
3809	16	01	1990	14	18	15.2	0.8	33.30	46.87	.06	.04	57	8	77	-	4.8	-	IS
3810	17	01	1990	07	52	51.7	0.5	36.05	27.14	.04	.05	42	7	61	-	4.4	4.3	IS
3811	20	01	1990	11	55	47.0	1.9	36.13	27.16	.08	.06	5	21	13	-	-	4.0	IS
3812	20	01	1990	19	16	13.9	0.7	34.74	26.19	.07	.06	10	-	32	-	-	4.0	IS
3813	24	01	1990	13	17	47.7	0.3	35.69	26.15	.04	.03	115	9	81	-	4.2	3.7	IS
3814	25	01	1990	13	07	09.0	1.1	36.07	27.26	.07	.07	22	10	18	-	4.6	4.2	IS
3815	25	01	1990	20	29	47.3	1.0	36.09	27.27	.05	.06	23	11	25	-	4.3	4.1	IS
3816	26	01	1990	01	43	17.0	1.4	35.30	27.11	.12	.07	10	-	29	-	-	4.1	IS
3817	26	01	1990	09	40	15.0	1.2	36.01	27.19	.06	.06	15	15	17	-	-	4.3	IS
3818	27	01	1990	19	52	39.0	1.4	38.54	23.55	.03	.03	9	11	88	-	4.3	4.0	IS
3819	28	01	1990	17	51	32.2	0.9	36.06	27.18	.06	.06	24	11	20	-	4.4	4.0	IS
3820	28	01	1990	18	36	24.0	1.8	36.09	27.14	.04	.05	10	9	32	-	4.7	3.9	IS
3821	29	01	1990	13	01	45.5	0.7	39.97	23.94	.02	.03	13	5	88	-	4.3	4.1	IS
3822	31	01	1990	15	00	31.2	0.9	39.48	26.09	.03	.03	10	7	69	-	4.3	3.8	IS
3823	08	02	1990	09	09	38.0	1.5	33.10	48.18	.16	.09	89	13	14	-	4.7	-	IS
3824	08	02	1990	07	47	28.0	1.0	39.15	23.71	.04	.04	2	9	56	-	4.8	4.0	IS
3825	08	02	1990	20	17	52.6	0.3	36.66	27.07	.03	.03	159	4	149	-	4.6	3.9	IS
3826	10	02	1990	19	48	01.1	1.0	39.57	27.90	.06	.13	10	-	10	-	4.0	-	IS
3827	12	02	1990	15	42	06.0	0.9	36.20	27.10	.04	.04	7	7	47	-	4.8	4.2	IS
3828	19	02	1990	05	43	45.0	0.7	36.10	27.18	.03	.04	20	7	95	-	4.4	4.2	IS
3829	19	02	1990	20	56	40.2	0.4	36.11	27.18	.03	.03	37	6	106	-	4.6	4.2	IS
3830	19	02	1990	21	07	46.2	0.4	36.19	27.14	.03	.02	40	4	156	-	4.6	4.6	IS
3831	19	02	1990	21	45	51.1	0.7	36.07	27.15	.05	.05	27	9	32	-	-	4.0	IS
3832	19	02	1990	23	18	15.3	0.7	34.56	24.87	.07	.05	69	11	51	-	4.2	3.9	IS
3833	19	02	1990	23	48	46.1	0.9	33.92	46.58	.09	.06	52	10	23	-	4.9	-	IS
3834	20	02	1990	05	55	03.8	0.5	32.56	44.22	.04	.03	37	6	90	-	4.6	-	IS
3835	20	02	1990	08	43	12.5	0.7	36.16	27.09	.04	.04	20	7	52	-	4.3	-	IS
3836	21	02	1990	00	24	45.7	0.4	36.05	27.21	.04	.04	54	7	65	-	4.0	4.3	IS
3837	22	02	1990	22	59	20.8	0.5	35.26	23.12	.05	.04	5	-	58	-	4.3	3.8	IS
3838	23	02	1990	22	59	16.5	0.3	34.66	25.31	.04	.03	81	-	232	-	4.5	4.7	IS
3839	23	02	1990	23	22	54.4	0.4	35.26	23.23	.04	.03	5	-	111	-	4.3	3.9	IS
3840	23	02	1990	23	55	26.5	0.9	36.05	27.12	.04	.04	19	10	53	-	4.6	4.0	IS
3841	24	02	1990	06	18	37.8	0.9	35.29	23.17	.09	.07	10	-	19	-	4.4	3.7	IS
3842	24	02	1990	15	19	37.0	-	35.00	23.20	.05	.06	10	-	28	-	4.5	3.7	IS
3843	25	02	1990	02	49	51.0	2.6	35.00	26.14	.30	.10	26	23	11	-	-	4.0	IS
3844	02	03	1990	18	08	34.0	-	39.03	23.68	.02	.02	11	6	195	-	4.5	4.2	IS
3845	07	03	1990	23	32	06.0	2.2	34.30	25.23	.10	.08	25	15	18	-	4.0	-	IS
3846	13	03	1990	23	55	01.0	0.2	39.26	25.46	.02	.02	18	-	136	-	4.3	4.1	IS
3847	14	03	1990	19	21	49.3	0.8	36.50	27.20	.05	.04	21	10	27	-	4.0	4.1	IS
3848	15	03	1990	02	28	56.8	0.4	35.26	27.02	.03	.03	33	5	172	-	4.3	4.3	IS
3849	16	03	1990	21	03	03.4	0.4	35.67	26.39	.06	.05	110	10	30	-	4.1	3.8	IS
3850	31	03	1990	01	38	17.0	0.8	39.92	24.03	.02	.02	12	6	197	-	4.4	4.4	IS

SIRA NO	TARiH			OLUS ZAMANI				KOORDiNATLAR				DERiN-LiK		ist say	MAGNiTUD			Ky
	Gn	Ay	Yil	Sa	Dk	Sn	h_O	Enl.	Boyl.	h_E	h_B		hD		Ms	Mb	Ml	
3851	31	03	1990	01	39	54.4	0.8	39.89	23.84	.05	.08	12	7	15	-	4.4	4.1	IS
3852	31	03	1990	01	48	39.2	0.9	39.94	24.04	.06	.03	2	8	73	-	4.0	3.7	IS
3853	04	04	1990	00	13	23.1	0.7	39.94	24.03	.03	.03	9	6	98	-	4.0	3.8	IS
3854	04	04	1990	09	40	39.1	0.4	36.10	27.11	.03	.03	35	5	187	-	4.7	-	IS
3855	20	04	1990	07	01	24.0	1.6	36.18	27.13	.08	.07	22	16	17	-	4.7	4.1	IS
3856	20	04	1990	23	30	05.1	-	40.12	40.07	.03	.02	22	6	286	4.7	5.0	-	IS
3857	22	04	1990	00	49	14.0	1.1	40.20	39.30	.15	.20	10	-	6	-	4.1	-	IS
3858	22	04	1990	16	35	43.7	0.2	36.52	26.88	.03	.02	149	3	243	-	4.7	4.2	IS
3859	24	04	1990	18	02	42.4	0.8	36.15	27.24	.07	.07	1	-	12	-	4.0	-	IS
3860	25	04	1990	22	17	34.0	0.6	37.11	26.75	.05	.06	5	-	22	-	4.1	3.7	IS
3861	03	05	1990	21	05	18.0	0.9	39.60	38.40	.03	.03	24	8	230	4.0	4.8	-	IS
3862	06	05	1990	20	02	44.1	0.8	36.09	27.19	.06	.04	21	11	29	-	-	4.1	IS
3863	07	05	1990	00	12	01.6	0.5	36.27	27.14	.05	.04	10	4	35	-	4.4	4.1	IS
3864	08	05	1990	11	40	00.5	0.6	36.22	27.15	.08	.05	10	-	18	-	-	4.0	IS
3865	08	05	1990	12	16	08.0	1.1	36.02	27.25	.05	.05	20	12	29	-	-	4.1	IS
3866	08	05	1990	23	27	53.7	-	36.16	27.17	.05	.04	10	-	47	-	4.1	4.1	IS
3867	08	05	1990	23	45	47.6	-	36.28	27.19	.06	.05	-	-	16	-	-	4.0	IS
3868	09	05	1990	21	40	22.9	0.8	36.15	27.10	.05	.04	19	9	37	-	4.1	4.0	IS
3869	13	05	1990	14	07	10.8	0.9	34.88	26.44	.03	.03	27	8	145	3.6	4.3	4.4	IS
3870	15	05	1990	17	15	40.0	3.4	36.10	27.18	.05	.04	11	26	37	-	4.6	4.2	IS
3871	16	05	1990	02	31	49.1	0.6	35.05	23.16	.04	.03	34	6	163	-	4.7	3.9	IS
3872	16	05	1990	02	39	41.7	-	34.73	23.20	-	-	1	-	9	-	4.2	-	IS
3873	22	05	1990	22	22	50.4	0.5	36.89	28.64	.05	.06	10	-	30	-	4.2	-	IS
3874	24	05	1990	05	49	06.4	0.7	39.98	27.48	.03	.03	28	7	94	-	4.2	4.3	IS
3875	24	05	1990	15	12	16.3	0.9	32.88	46.80	.07	.03	53	8	155	-	5.0	-	IS
3876	26	05	1990	17	34	48.0	0.3	36.85	28.66	.04	.05	12	-	51	-	4.1	-	IS
3877	27	05	1990	15	33	22.0	1.6	34.46	23.96	.04	.03	1	11	180	-	4.6	4.3	IS
3878	27	05	1990	18	27	58.4	0.9	40.92	44.24	.03	.02	14	6	271	-	5.0	4.5	IS
3879	31	05	1990	02	29	22.0	1.6	34.64	25.32	.08	.05	16	13	48	-	4.1	4.0	IS
3880	09	06	1990	12	30	27.1	0.7	39.21	23.66	.02	.02	24	7	168	-	4.5	4.4	IS
3881	09	06	1990	22	46	22.6	0.3	39.21	23.66	.03	.03	12	-	58	-	4.0	3.8	IS
3882	10	06	1990	11	36	43.5	0.7	41.31	29.35	.03	.04	6	5	116	-	4.0	4.5	IS
3883	12	06	1990	00	43	34.9	0.8	37.37	26.61	.09	.07	1	-	14	-	4.0	-	IS
3884	13	06	1990	21	34	37.5	0.5	36.53	26.98	.05	.04	10	-	34	-	4.3	4.1	IS
3885	16	06	1990	22	09	15.8	0.9	37.23	23.13	.05	.06	2	10	13	-	4.1	3.3	IS
3886	17	06	1990	13	44	56.7	0.6	39.20	23.62	.02	.03	17	7	120	-	4.0	4.1	IS
3887	21	06	1990	22	25	56.4	0.3	42.27	45.67	.04	.04	33	-	100	-	4.5	-	IS
3888	26	06	1990	04	48	13.2	0.7	37.33	29.23	.03	.04	19	8	94	-	4.2	-	IS
3889	02	07	1990	00	35	48.1	0.9	44.86	34.70	.05	.13	33	-	32	-	4.0	-	IS
3890	05	07	1990	03	57	50.4	-	36.73	31.20	-	-	85	-	49	-	4.2	-	US
3891	09	07	1990	11	22	18.1	0.4	34.94	26.63	.03	.02	37	4	385	5.0	5.0	-	IS
3892	14	07	1990	16	28	37.0	1.1	34.90	25.41	.10	.09	33	-	10	-	4.0	3.8	IS
3893	15	07	1990	21	50	35.0	1.1	36.49	25.53	.03	.02	9	8	201	-	4.6	4.3	IS
3894	17	07	1990	13	15	23.3	0.7	46.49	37.10	.06	.10	10	-	29	-	4.4	-	IS
3895	18	07	1990	11	13	19.4	0.9	34.48	24.86	.08	.06	10	-	27	-	4.2	4.0	IS
3896	18	07	1990	11	58	37.0	1.1	37.04	29.54	.04	.05	11	8	63	-	4.2	-	IS
3897	18	07	1990	14	56	28.6	0.9	27.06	29.54	.04	.05	20	10	48	-	4.0	4.1	IS
3898	20	07	1990	19	49	09.0	1.1	33.48	46.79	.06	.04	77	13	82	-	4.6	-	IS
3899	23	07	1990	20	54	54.2	0.3	42.93	46.18	.05	.04	10	-	67	-	4.8	-	IS
3900	27	07	1990	17	55	56.6	0.7	38.63	23.74	.03	.03	19	8	129	-	4.3	4.1	IS
3901	30	07	1990	17	52	37.9	0.5	34.48	25.54	.04	.04	46	6	164	3.4	4.4	4.4	IS
3902	31	07	1990	11	31	34.0	1.4	32.29	47.20	.09	.23	66	23	8	-	4.1	-	IS
3903	02	08	1990	19	12	39.0	1.3	37.00	29.53	.03	.04	13	10	78	-	4.0	4.3	IS
3904	04	08	1990	03	48	35.0	2.3	32.90	47.80	.22	.16	69	13	30	-	4.5	-	IS
3905	05	08	1990	18	31	49.6	0.7	40.23	33.88	.02	.02	17	6	279	-	4.9	-	IS

SIRA NO	TARiH			OLUS ZAMANI				KOORDiNATLAR				DERiN-LiK		ist say	MAGNiTUD			Ky
	Gn	Ay	Yil	Sa	Dk	Sn	h_O	Enl.	Boyl.	h_E	h_B		hD		Ms	Mb	Ml	
3906	07	08	1990	13	09	20.0	1.1	37.03	29.56	.04	.05	13	9	39	-	4.0	4.0	IS
3907	09	08	1990	12	29	26.0	1.2	32.70	47.60	.10	.22	60	16	10	-	4.4	-	IS
3908	09	08	1990	12	38	33.0	1.1	32.70	47.50	.10	.15	55	21	9	3.4	4.0	-	IS
3909	11	08	1990	02	15	55.0	2.5	34.35	24.93	.07	.05	12	16	94	-	4.1	4.3	IS
3910	12	08	1990	06	52	1.00	3.2	32.60	47.50	.16	.84	70	-	5	-	4.1	-	IS
3911	16	08	1990	04	32	18.6	0.6	44.75	34.99	.03	.03	28	5	85	3.7	4.9	-	IS
3912	20	08	1990	22	55	55.4	0.4	37.00	29.59	.03	.04	36	6	77	-	4.2	4.2	IS
3913	25	08	1990	14	57	58.8	0.3	35.88	28.12	.03	.03	59	4	271	3.6	4.7	4.2	IS
3914	28	08	1990	20	21	22.2	0.3	36.27	27.22	.03	.03	41	4	192	4.1	4.5	-	IS
3915	30	08	1990	20	42	40.0	2.0	34.40	24.58	.08	.07	21	17	46	-	4.1	3.7	IS
3916	01	09	1990	17	24	42.3	-	37.05	28.03	-	-	25	-	37	-	4.0	3.8	US
3917	03	09	1990	00	04	45.3	0.8	37.04	29.53	.03	.03	20	8	144	3.1	4.2	4.5	IS
3918	03	09	1990	05	35	50.6	-	39.94	24.00	-	-	21	-	73	-	4.1	4.1	US
3919	03	09	1990	07	56	18.0	1.2	37.08	29.61	.05	.06	19	12	26	-	4.0	4.0	IS
3920	05	09	1990	23	34	01.1	0.5	35.21	23.09	.05	.05	26	-	59	-	4.1	3.8	IS
3921	08	09	1990	21	01	42.0	0.4	37.14	29.52	.04	.05	1	-	40	-	4.3	-	IS
3922	09	09	1990	07	08	58.4	-	35.37	23.58	-	-	19	-	23	-	4.9	-	US
3923	09	09	1990	19	00	39.2	-	39.89	24.03	-	-	14	-	120	-	4.2	4.1	US
3924	12	09	1990	08	22	15.1	0.5	36.22	31.80	.08	.11	98	10	37	-	4.1	4.1	IS
3925	13	09	1990	22	05	13.2	0.4	39.54	28.53	.03	.04	10	-	70	-	4.2	4.2	IS
3926	14	09	1990	07	37	27.7	-	35.79	23.01	-	-	5	-	13	-	4.6	-	US
3927	16	09	1990	17	29	36.2	0.6	34.86	26.63	.06	.05	33	-	39	-	-	4.0	IS
3928	20	09	1990	08	15	19.2	0.7	36.12	27.25	.07	.06	10	-	22	-	-	4.1	IS
3929	22	09	1990	02	46	02.9	0.4	42.38	46.32	.05	.05	33	-	49	-	4.3	-	IS
3930	24	09	1990	21	45	28.4	0.3	37.41	30.55	.03	.04	10	-	92	4.0	4.3	4.3	IS
3931	29	09	1990	16	28	51.5	0.4	36.45	28.22	.04	.05	77	15	31	-	-	4.1	IS
3932	02	10	1990	20	20	20.0	3.9	35.30	23.30	.23	.18	7	17	13	-	4.1	3.7	IS
3933	03	10	1990	19	24	36.0	-	37.07	29.40	-	-	10	-	15	-	-	4.0	US
3934	04	10	1990	16	00	42.3	-	37.01	29.51	-	-	10	-	14	-	-	4.0	US
3935	06	10	1990	19	09	56.1	-	45.49	26.23	-	-	142	-	173	-	4.8	-	US
3936	07	10	1990	00	12	52.5	0.9	37.52	29.58	.03	.04	23	10	86	3.0	4.3	4.2	IS
3937	08	10	1990	02	19	44.2	-	40.25	25.18	-	-	7	-	41	-	-	4.2	US
3938	09	10	1990	23	36	51.0	1.3	34.60	23.04	.10	.10	10	-	23	-	4.0	3.8	IS
3939	12	10	1990	03	09	47.3	0.9	35.00	47.80	.15	.10	33	-	9	-	4.3	-	IS
3940	12	10	1990	05	36	16.2	0.7	38.17	23.14	.03	.03	16	7	126	-	4.2	4.0	IS
3941	12	10	1990	14	26	03.0	1.3	34.77	23.13	.05	.03	31	9	138	3.2	4.5	4.2	IS
3942	13	10	1990	04	12	07.4	0.5	40.70	23.41	.02	.02	4	4	103	-	4.3	4.0	IS
3943	17	10	1990	02	00	53.0	2.3	37.05	33.99	.06	.07	24	20	46	-	4.3	-	IS
3944	18	10	1990	16	55	21.1	0.7	38.25	30.91	.05	.08	8	-	30	-	-	4.0	IS
3945	18	10	1990	23	29	16.0	1.5	40.20	33.80	.13	.14	10	-	6	-	-	4.2	IS
3946	19	10	1990	04	12	01.6	-	38.49	26.92	-	-	10	-	19	-	-	4.0	US
3947	23	10	1990	01	39	34.0	1.4	43.32	47.04	.06	.07	27	14	35	-	4.4	-	IS
3948	24	10	1990	11	16	44.3	0.9	39.84	30.23	.04	.05	18	9	60	3.3	4.3	4.4	IS
3949	25	10	1990	22	11	18.0	1.3	34.02	25.94	.05	.04	27	10	129	3.3	4.5	4.2	IS
3950	26	10	1990	00	09	22.8	0.4	33.93	25.87	.05	.04	10	-	56	-	4.3	4.2	IS
3951	26	10	1990	00	17	48.0	1.8	33.99	25.93	.03	.03	7	12	190	4.0	4.5	4.3	IS
3952	26	10	1990	03	37	26.0	2.1	33.83	25.92	.06	.05	21	20	63	3.4	4.2	4.2	IS
3953	26	10	1990	05	42	01.0	0.8	33.84	26.10	.09	.11	10	-	11	-	4.1	4.0	IS
3954	28	10	1990	09	16	29.7	0.5	33.98	25.85	.05	.05	23	-	45	-	4.1	-	IS
3955	28	10	1990	17	12	26.5	-	37.10	29.83	-	-	10	-	5	-	-	4.4	US
3956	28	10	1990	20	46	46.0	1.1	34.65	24.04	.10	.07	68	14	26	-	4.2	3.7	IS
3957	29	10	1990	00	26	13.5	0.4	34.22	25.64	.04	.04	21	-	87	-	4.3	4.2	IS
3958	29	10	1990	07	20	23.0	1.2	34.10	25.52	.14	.08	63	40	16	-	-	4.0	IS
3959	31	10	1990	04	15	55.5	-	36.33	29.44	-	-	75	-	17	-	-	4.0	US
3960	06	11	1990	15	21	57.9	0.4	35.85	35.62	.03	.06	10	-	48	3.4	4.4	4.4	IS

SIRA NO	TARiH			OLUS ZAMANI				KOORDiNATLAR				DERiN-LiK		ist say	MAGNiTUD			Ky
	Gn	Ay	Yil	Sa	Dk	Sn	h_O	Enl.	Boyl.	h_E	h_B		hD		Ms	Mb	Ml	
3961	12	11	1990	11	54	58.1	0.7	35.15	27.21	.07	.06	79	8	36	-	4.0	-	IS
3962	14	11	1990	12	14	57.6	0.5	35.29	26.73	.05	.04	1	-	30	-	4.5	4.1	IS
3963	16	11	1990	21	42	10.0	1.4	35.50	23.02	.11	.09	10	-	33	-	4.0	4.0	IS
3964	20	11	1990	00	58	23.0	1.5	35.50	26.65	.10	.06	13	12	13	-	-	4.0	IS
3965	21	11	1990	14	02	48.2	0.8	37.03	29.60	.04	.05	18	10	40	-	5.0	4.4	IS
3966	23	11	1990	06	43	58.0	1.0	34.67	32.95	.03	.06	23	10	76	-	4.3	4.1	IS
3967	23	11	1990	23	18	21.8	0.3	36.35	26.85	.03	.04	131	5	93	-	4.2	3.8	IS
3968	26	11	1990	19	35	46.3	0.6	38.38	36.60	.04	.05	35	9	77	3.4	4.2	4.2	IS
3969	30	11	1990	11	05	53.0	1.6	35.30	26.60	.11	.09	30	21	13	-	4.3	3.9	IS
3970	09	12	1990	01	16	37.0	2.4	36.23	33.92	.04	.08	27	24	38	-	4.1	3.8	IS
3971	13	12	1990	07	31	52.5	0.3	34.65	33.92	.04	.06	50	6	71	-	4.2	3.9	IS
3972	16	12	1990	15	45	40.3	0.6	41.37	43.72	.02	.02	28	4	411	5.1	5.4	-	IS
3973	17	12	1990	06	47	30.2	0.6	40.37	31.33	.05	.07	10	-	27	-	4.1	4.3	IS
3974	19	12	1990	09	46	45.0	1.2	38.59	28.04	.03	.03	7	8	102	-	4.5	4.4	IS
3975	19	12	1990	12	38	59.2	0.5	34.92	23.30	.04	.03	43	5	213	3.8	4.7	4.4	IS
3976	20	12	1990	20	35	22.1	0.7	33.86	47.30	.10	.12	33	-	17	-	4.2	-	IS
3977	23	12	1990	21	28	51.0	0.8	42.10	44.30	.14	.18	33	-	13	-	4.1	-	IS
3978	24	12	1990	14	51	01.0	1.0	35.09	23.45	.07	.07	61	9	51	-	4.3	-	IS
3979	27	12	1990	17	40	32.4	0.5	34.96	26.48	.04	.04	55	7	70	-	4.5	4.1	IS
3980	28	12	1990	06	08	58.0	1.3	32.44	46.90	.08	.15	55	18	12	-	4.2	-	IS
3981	29	12	1990	13	33	58.0	1.8	37.90	28.00	.19	.19	10	-	7	-	-	4.1	IS
3982	29	12	1990	15	34	17.2	0.5	32.59	47.86	.03	.02	67	5	314	-	5.0	-	IS

YAPI TEMELLERİNİN DEPREM TİTREŞİMLERİNDEN LASTİK TAKOZLARLA YALITIMI

BASE ISOLATION WITH RUBBER PADS

NEJAT BAYÜLKE*

SUMMARY

Base isolation is a method for reducing the lateral forces coming to a building during earthquakes by increasing the period vibration and damping of structures. Earthquake ground motion on firm ground tend to have smaller acceleration amplitudes at components with longer periods. Increasing the period of vibration of buildings to 2.0 to 2.5 seconds considerably reduces the forces coming to the structures. Experimental and earthquake observations support this approach. Protection of important buildings like hospitals etc and strengthening of historical buildings by base isolation are becoming a very popular earthquake protection method. Using rubber pads for base isolation is rapidly developing. Design rules for rubber pads to be used for base isolation and the properties of rubber pads are presented. Rubber pad production has similarities to concrete production and each rubber pad should be tested prior to use. Rubber pad production and testing facilities should be nationally developed before any wide scale usage of this method of earthquake protection.

ÖZET

Depremlerde yapılara gelen yatay yükleri yapı periyotlarını uzatarak azaltmak taban yalıtımı yöntemi olarak tanımlanmaktadır. Sağlam zeminler üzerinde alınan kuvvetli yer hareketinin uzun periyotlarda daha küçük olan genlikleri uzun periyotlu yapılara daha az yatay yük gelmesini sağlamaktadır. Yapıların periyotlarının uzatmak için altlarına yatay yönde rijitliği çok az olan lastik takozlar konulmaktadır. Bu biçimde taban yalıtımı yapılmış yapıların depremlerde yapılara gelen yükleri önemli ölçüde azalttıkları gözlenmiştir. Lastik takozların tasarımı ve özelliklerinin deneysel olarak irdelenmesi için genel ilkeler bu bildirinin ana konularıdır. Konuya kısa ve temel ilkeler tanıtılarak bir giriş yapılmaktadır.

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DEPREMLERDE YAPILARA GELEN KUVVETLER

Depremlerde yapılara zaman içinde değişen dinamik kuvvetler etkir. Bu kuvvet F= m α (t) olarak tanımlanabilir. Burada m= yapının kütlesi, α(t)= deprem yer ivmesinin deprem süresi içinde değişimidir ve yapı dinamik özelliklerine bağlıdır.

Değişik periyot ve sönümlü yapılarda bir depremin kuvvetli yer hareketinin yaratacağı en büyük deprem ivmesi, hızı yada ötelenmesini veren mukabele spektrumları, depremlerde yapılara çok büyük elastik yüklerin etkidiğini gösterir. Ancak yapıların elastik yük taşıma gücü sınırlıdır. Eğer en şiddetli depreme de yapının elastik, yani hasar görmeden dayanması isteniyorsa, yapı bu çok yüksek yatay yükler altında elastik kalacak biçimde tasarlanmalıdır. Bu ise yapı hesaplarında kullanılan yatay yük katsayılarının, yönetmelikde verilen değerlerin en az 3-5 katına çıkarılmasını gerektirir. Bu kadar büyük kuvvetlere karşı ekonomik yapı tasarımı olanağı yoktur ve yapıların depremlerin titreşim enerjisini, kalıcı deformasyon ve çatlaklarla ortaya çıkan, plastik biçimde tüketimi öngörülür ve şiddetli depremlerde yapılarda hasar olur.

Bir diğer deyişle "depreme dayanıklı" yapı hafif depremlerde hiç hasar görmemeli, orta şiddetli depremlerde minari hasar olurken taşıyıcı sistem hasarı olmamalı ve çok şiddetli depremlerde de yapıda taşıyıcı sistem hasarı olurken can kaybı olmamalıdır.

Deprem hasarı olan yapı bir süre kullanılamayacaktır. Ancak hastane, telefon santralı, itfaiye, vb bazı önemli yapıların deprem sırasında bir süre bile kullanılamaması kabul edilemez. Bu nedenle bu tür yapılar için başka depreme dayanıklı tasarım seçenekleri geliştirilmiştir.

TABAN YALITIMI

Şekil-1'deki, genellikle "sağlam" zeminler üzerinde alınmış kuvvetli yer hareketi kayıtlarından hesaplanmış ivme spektrumundan görüleceği gibi kısa periyotlu ve küçük sönümlü yapılara gelen deprem yatay kuvvetleri, uzun periyotlu ve yüksek sönümlü yapılara gelen kuvvetlerden daha büyüktür. Taban yalıtımı kavramı deprem kuvvetli yer hareketi spektrumunun bu özelliğini kullanma yaklaşımından geliştirilmiştir: Sönüm ve periyot büyütülürse yapılara daha az yatay kuvvet gelir ve deprem hasarı azalır.

Şekil-2'deki ötelenme spektrumuna göre ise yapı periyodu uzayınca ivme azalırken yapının ötelenmesi artmaktadır. Öte yandan sönüm artışı ile hem ivme hemde ötelenme azalmaktadır. Taban yalıtımında deprem altında ötelenmenin 30-40 cm'i aşmaması istenmektedir (Robinson ve Haskell-1994).

Yalıtım ile yapı periyodu 2.0-2.5 saniye civarında olması amaçlanmaktadır (Muhr-1994). Yapı periyodu kütle ile doğru, rijitlikle ise ters orantılıdır. Yapı ağırlığı azaltılamadığı için, yatay yöndeki rijitliği azaltılabilir. Böylece yapının periyodu spektrumda yatay yüklerin büyük olduğu bölgenin dışına çıkarılabilir.

Yapı temeline yatay yüklere karşı rijitliği çok az olan lastik takozlar konularak yapı periyodunun uzatılması, yapıyı kesin anlamda deprem titreşimlerinden "yalıtmaz" ancak yapı dinamik özellikleri nedeni ile daha az zorlanacağı bir konuma gelmiş olur. Yalıtım sözcüğü bir etkinin bir engeli aşarak geçememesi eylemidir.

Yapı temeline konulacak yalıtma araçlarının düşey yönde rijitliği büyük olmalı, normal koşullarda düşey yükler sorunsuz taşınmalıdır. Düşey yönde rijitliğin büyük olmasının bir gereği de tabanda yatay yüklerin oluşturacağı devrilme momenti etkileri altında yapının rijit bir kütle olarak dönmesinin önlenmesidir. Düşey yükler normal kullanım süresinde güvenle taşınırken yalıtım takozları uzun süre dayanıklı olmalıdır.

LASTİK TAKOZLAR

Taban yalıtımı için değişik seçenekler varsa da en yaygın olan lastik takozla yalıtımdır. Lastik YÜKSEK SÖNÜMLÜ, yaklaşık % 10, olduğu için de yapıya gelen kuvvetleri azaltmaktadır. Düşey yönde büyük rijitliği ve büyük düşey yük taşıma gücü olan lastik takozlar üretilebilmektedir. Lastik takozlar özellikle köprülerde ısı değişimi sonucu olan genleşmenin getirdiği gerilmeleri önlemek ve tabliye titreşimlerini temellere geçirmemek içinde kullanılır.

PERİYOT UZATARAK YALITIMIN SORUNLARI

Yapı "yumuşak" bir zemin üzerinde ise yer hareketinin uzun periyotlu bileşenlerinin genlikleri daha büyük olduğu için yapı periyodunu uzatmak yapıya gelecek yatay yükü artıracağı için, yumuşak zeminler üzerindeki yapılarda periyot uzatarak deprem yükünü azaltma olanağı yoktur.

TABAN YALITIMININ KULLANILDIĞI YAPILAR

Taban yalıtımının yapının kendisinin önemli olduğu TARİHİ yapılarda ya da sağlayacağı hizmetin deprem süresinde ve sonrasında aksamaması gereken önemli HİZMET yapılarında kullanılması üstünlükler sağlamaktadır. Deprem yükü yapının dayanım düzeyinin altına yada yapı içindeki eşyaları ve hizmeti etkilemeyecek düzeye indirilebilir. Temel yalıtımı ile tarihi yapının mimari özelliği bozulmadığı gibi yapının bütün katlarının güçlendirilmesi yerine yalnızca temel yalıtımı ile kullanımı etkilemeden güçlendirme yapılabilir.

Perde duvar ve kolon eklenmesi ile yapılacak klasik güçlendirme yapının yeniden yapılamayacak değerli iç kaplamalarının yıkımını gerektirir. Anıtsal yapılarda buna izin verilemez. Yalıtımla gelen yük azaltmasının yetmediği durumlarda ise daha düşük bir güçlendirme düzeyi ile uygulanabilir.

Hizmeti önemli hastane, telefon santralı, itfaiye gibi yapılarda temel yalıtımı yapı içindeki eşyaları korur ve hizmeti aksatmaz.

TEMEL YALITIMIN ETKİNLİĞİ

17 Ocak 1994 Los Angeles Northridge Depreminden etkilenmiş taban yalıtımlı bir yapıda temelinin altında en büyük değeri 0.37g olarak ölçülen deprem yer ivmesi yalıtım takozlarının hemen üstünde 0.13 g olarak ölçülmüştür. Bir başka yapıda, Los Angeles Yangın Komuta ve Kontrol Merkezi, yapıya gelen taban ivmesi azaltılmıştır (Şekil-3).

Japonya'da deneysel olarak ve yan yana yapılmış biri klasik temelli diğeri taban yalıtımlı iki yapıda, en büyük yer ivmesi 0.05 g düzeyindeki küçük depremlerde, ölçülen deprem hareketleri taban yalıtımının yapıların çatı düzeyindeki ivmelerini 3 ile 6 kez küçülttüğü gözlenmiştir (Izumi ve Yamahara-1988). Buna karşılık klasik temelli yapı yer ivmesini büyütmektedir.

Temel yalıtımının yapılara gelen yatay yükleri, belli koşullarda küçülttüğü bir gerçektir.

LASTİK TAKOZ ÜRETİMİ

Özel teknoloji gerektirdiği için üreterek deneyim kazanmak gerekmektedir. Doğal kauçuktan yapılan takozlara ozon gazına karşı dayanımı, çekme ve basınç dayanımını artırmak için özel katkı maddeleri konulmaktadır. Bu arada rijitlik ve sönüm artışı için karbon siyahının da katıldığı söylenmektedir. Doğal olarak takoz imalatçıları katkı maddeleri konusunda sırlarını saklamaktadır.

Birkaç milimetre yada santim kalınlığında rulo biçiminde üretilen lastik daire biçimde kesilir ve aralarına birkaç mm kalınlığında çelik levhalar konulur. Çelik levhaların lastiğe iyi yapışması için metal yüzeyler parlatılır ve yapıştırıcı sürülür. İstenilen sayıda lastik ve çelik levhalar arda arda ağır bir çelik kalıba konulduktan sonra en alt ve en üst tabaka lastik olmak üzere kalıpta 135° C'de 14 saat bekletilerek lastik "VULKANİZE" edilmektedir. Bu işlem sırasında kalıptan dışarı taşan lastik olabilir. Çevreye konulan lastik çeliği paslanma ve yangından korumak içindir. Doğal kauçuğun yapısında ve katkı maddelerinde değişimler ve karıştırma ve kür sırasındaki koşullardaki değişkenlikler nedeni ile arka arkaya üretilen lastik takozların özelliklerinde önemli farklar olduğu deneylerle belirlenmişir. Bu açıdan lastik takoz üretimi beton üretimine benzemektedir.

LASTİK TAKOZLARIN TASARIMI

Belirli bir cins lastikten yapılan takozların (Şekil-4) tasarımında lastik tabakasının kalınlığı (t) azaltılırsa düşey yük taşıma gücü artmaktadır. Lastik tabakasının sayısı (n) artırılınca takozun yatay ötelenme ve dönme direnci azalır. Lastik takozların ortasına kurşun takozlar konulunca histeretik sönüm oranları artar.

Düşey basınç altında takoz Şekil-5'deki gibi şişer ve içinde kesme birim deformasyonları oluşur

$$\gamma_{xz} = 6\ S\ \epsilon_z$$

Düşey yönde birim deformasyon $\epsilon_z = \epsilon / t$ olarak ifade edilir. Takozların önemli bir katsayısı Biçim Katsayısıdır:

$$S = \text{YÜKLÜ ALAN} / \text{YÜKSÜZ ALAN} = D / 4\ t$$

Lastik içinde oluşan kesme kuvvetleri merkezden uzaklıkla orantılı bir basınç gerilimi dağılımı yaratır (Şekil-6). En büyük basınç gerilmesi $\sigma_0 = 2\ G\ S$

γ_{xz}, toplam yük (P) ise $P = A\ G\ S\ \gamma_{xz}$ olur. Eğer takoz yatay yük altında ötelenirse düşey yük taşıyan alan (A)' olur (Şekil-7). Bu durumda toplam yük $P_{max} = A'\ G\ S_w$ ve γ_w yükten dolayı izin verilen en büyük kesme birim şekil değiştirmedir. Skinner ve diğerlerine göre (1993) $\gamma_w = 0.2\ \epsilon_t$ olarak verilir.

n-adet tabakalı lastik takozun yatay rijitliği (K_s) $K_s = G\ A\ /h = G\ A\ /\ n\ t$'ye eşittir. Burada A= her lastik katının alanı, G= Lastiğin kesme modülü, n= Lastik katı sayısı, ve t= Her lastik katının kalınlığıdır . Şekil-8'de lastik takozların yatay yükler altındaki deformasyon özellikleri verilmektedir. Lastik takozların başlangıçtaki küçük olan rijitliği ötelenme artınca büyümektedir. Böylece şiddetli depremlerde yatay ötelenme kısıtlanmaktadır.

TAKOZLARIN PERİYODU

Takozların titreşim periyodu $T = 2\pi\sqrt{(S\ h_w\ A')/A\ g}$ denkleminden hesaplanır. Burada g= Yer çekimi ivmesidir.

DÜŞEY YÖNDE RİJİTLİK

Lastik takozların düşey yöndeki rijitliği (K_d) $K_d = E_c\ A/\ n\ t$'ye eşittir. Burada E_c= Lastiğin basınç elastisite modülüdür. Bu denklem lastikteki kesme deformasyonlarının çok küçük olduğu durumlar için geçerlidir.

Lastik takozun deprem sırasında büyük yatay ötelenme altında düşey rijitliği ise

$$K_d = \frac{6\ G\ S^2\ A\ E_c}{(6\ G\ S^2 + E_c)\ h}$$

denkleni ile verilmektedir.

Deprem yükleri altında lastik takozda izin verilen en büyük yatay kesme birim şekil değiştirmesi önemlidir. Düşey yük altında kesme birim şekil değiştirme $_w$, izin verilen en büyük kesme birim şekil değiştirmeden küçük ise yatay ötelenme altında $_s$ kadar bir kesme birim şekil değiştirmesi olabilir. Bu durumda takozun yatay ötelenmesi $X_b = h\ _s$ olacaktır.

Büyük yatay ötelenmelerde toplam alan A ile yüklenmiş alan A' arasındaki oran takozun yapacağı en büyük güvenli yatay ötelenmede etkilidir. Silindir biçimindeki takozlarda yatay ötelenme $X_b = 0.8\ D\ (1-A'/A)$ olarak düzeltilmelidir.

Lastik takozlarda izin verilen en büyük kesme birim deformasyonunun $_s$, lastiğin çekme birim deformasyonunun ϵ_t % 40 ile 70'i arasında olması önerilir (Skinner ve Diğerleri-1993). Hesap depreminde 0.4 ϵ_t, olabilecek en şiddetli depremde 0.7 ϵ_t.

Oluşan büyük çekme gerilmeleri lastik içinde küçük yırtılmalar yaratır ve eksenel rijitlik azalır. Özellikle yapıların köşe kolonlarınındaki takozların yalnızca üst taraflarından sabitleştirilmesi ve devrilme etkisi altında takozda çekme gerilmesinin olması önlenmelidir (Skinner ve Diğerleri-1993).

HASAR BİÇİMLERİ VE DAYANIM DENEYLERİ

Şekil-9'da lastik takozlardaki kesme, basınç ve eğilme hasarı biçimleri verilmektedir.

Lastiğin zaman içinde eskimesi hızlandırılmış bir deneyle yapılmaktadır. Lastik 70°C'de 4 gün fırında tutulduktan sonra düşey yöndeki rijitlike % 10 civarında bir azalma yeterli görülmektedir. Lastiğin ısıya dayanım deneyi ise 800°C sıcaklıkta 100 dakika tutulduktan sonra yük-deformasyon özellikleri ölçülerek yapılmaktadır.

KULLANILAN LASTİKLERİN ÖZELLİKLERİ

Çin Halk Cumhuriyetinde üretilen lastik takozların özellikleri aşağıdadır:

En küçük çekme dayanımı	17.3 Kg/Cm^2'den az
Kopma birim uzama	% 425'den az
En düşük yırtılma enerjisi	815 Kg/m'den az
En büyük basınç altında oturma 24 saat 70°C sıcaklıkta boyut değişimi	% 35'den az
En düşük çeliğe yapışma dayanımı	714 Kg/m
Eskime dayanımı (7 gün 70°C derecede)	± %15
Başlangıç değerinde en büyük değişme	
E_b (%)	± % 20
IRHD	-5 +10
Ozon dayanımı 100 saat 50 pphm 40° C sıcakta % 30 birim şekil değiştirme altında	Çatlak Yok
Elastik modül ($E_{kütle\ modülü}$) sertlik=40	20816 Kg/Cm^2
Kesme Modülü G sertlik=40	4.7 Kg/Cm^2
HSA	40 ±5
	50
	60

Bir başka kaynakta (Blakely ve Diğerleri-1979) kullanılan lastiklerin özellikleri:

Kopma Uzaması	% 600
Durometre sertliği	50 ±5
Elastisite Modülü (E_c)	31 Kg/Cm^2
Kesme Modülü (G)	7.7 Kg/Cm^2

ZAMAN İÇİNDE SERTLEŞME

Lastik takozların özelliklerinde zaman içinde değişmelerin olduğu gözlenmektedir: 1-Köprülerdeki lastik takozlarda 1953-1983 Yılları arasında elastisite modülünde % 15.5 İLE % 4.5 artış olmuştur (Mayes ve Diğerleri-1988), 2- 20 yıl kullanımdan sonra % 10 artış gözlenmiştir (Mayes ve Diğerleri-1988). Takozun kesme rijitliğinde % 25'lik bir artış periyodua % 10 azaltır. Lastik takozlardaki sertleşmenin ilk bir kaç yılda olduğu ve daha sonra yavaşladığı bilinmektedir.

LASTİK TAKOZUN MESNETTEN DÖNEREK (ROLL-OUT) DEVRİLME ÖTELENMESİ

Yapı tabanına ve temele bağlanmış takozlar büyük yatay ötelenmelerde yırtılabilir (Şekil-10). Takoz bir yuva içinde ya da kamalı ise takozların uçlarında olan bükülme ile yırtılmaya yol açacak çekme gerilmelerinin oluşması önlenir. Ancak bu durumda takozun büyük ötelenme altında dönerek mesnetten çıkma tehlikesi vardır.

Bu duruma yol açacak ötelenme

$$D_{dönme} = \frac{2 P a}{K_s L + P}$$

denkleni ile verilmektedir. Burada P= Düşey yük (Ton), a= Takozun çapı (Cm), K_s= Kesme rijitliği (Ton/Cm) ve L= Takozun yüksekliği (Cm)'dir. Takozun dönmesi için P-kuvvetinin uygulandığı yerin takozun ucuna kadar kaymış olması gerekir.

Şekil-11'den görüleceği gibi eksenel (düşey) yük miktarı takozun devrilme ötelenmesi üzerinde etkilidir: Düşey yük azaldıkça daha küçük bir yatay ötelennede devrilme olabilir.

Yapının yatay ötelenmesi ile Şekil-12'deki gibi bir devrilme kuvveti oluşmaktadır. Bu kuvvetin yapının kütle merkezinde bir dönme oluşturmaması için

$$P = K_s d h / w$$

olmalıdır. Burada d=Takozlardaki ötelenme miktarı, h= Kütle merkezinin yüksekliği, w= eğer iki sıra takoz varsa bunların arasındaki uzaklıktır.

Takozların düşey yükünde, yatay ötelenme (D) sonucu olan azaltmayla oluşan ötelenne ($D_{dönme}$) ile olan azalma

$$P_o - P = \frac{K_s d h}{w \alpha}$$

olur. Burada $1/\alpha$ toplam düşey yükte olan azalmanın oranıdır. Bu durumda devrilme yatay ötelennesi

$$D^*_{dönme} = \frac{K_s L + P_o + 2 a K_s (h/w\alpha) - \sqrt{(K_s + P_o + 2 a K_s (h/w\alpha))^2 - 8 P_o K_s a (h/w\alpha)}}{2 K_o (h/w\alpha)}$$

denkleni ile verilmektedir ve $D^*_{dönme} < D^*$'den daha küçüktür.

MAALİYET

İngiliz yapımı lastik takozların tanesinin 1500 US Doları olduğu, Çin Halk Cumhuriyeti'de ise 250 US Dolarına mal olan takozların yapıldığı öğrenilmiştir. Bu arada takozların özelliklerinin bilinmesi için denenmesin de bir maliyeti vardır. Taban yalıtımının maaliyeti bitmiş yapıları karşılaştırarak yapılmalıdır. Tarics ve diğerleri (1988) tasarlayıp inşaa ettikleri FOOTHILL LAW AND JUSTICE CENTER için verdikleri maaliyet değerine bakmak yararlıdır.17 000 M^2 alanı olan yapı 96 takoz üzerinde, bodrum katı betonarme perdeli, dört normal katı çelik bir yapıdır. Yapı 38 x 10^6 US Dolarına mal olmuştur. 1986 fiyatları ile takozların bedeli 0.3 x 10^6 US dolarıdır. Bu bedelin yapıdaki mobilyaların edelinden daha az olduğu söylenmektedir. Takozların bedeli yapı bedelinin % 0.79'u kadardır.

Bugünkü fiyatlarla yapı 17 000 M^2 X 3.5 X 10^6 TL/M^2 = 59.5 X 10^9 TL ederken takozlar 0.5 X 10^6 US Doları X 40 X 10^3 TL/DOLAR = 2 X 10^6 TL yapı bedelinin 2/59.5 = % 3.36'sı olmaktadır. Bu bedelin ek temel bedelini de içermesi gerekir.

YALITIMSIZ YAPILARLA MALİYET KARŞILAŞTIRMASI

İkinci bir zemin yada bodrum katı ve takozların üst tarafında yeniden temel kirişleri yapılması, takoz ve sönüm elemanlarının bedeli, özel tasarım, takozların deney ve yapım bedelleri, takozların bağlantı bedelleri, çevrede istinat duvarı yapımı, daha derin temel için ek temel kazısı, takozların gözlenmesi için ulaşılabilen hacimler, yapıda burulma olmaması için mimaride değişim gereği, tasarım, yapım ve projenin onaylanması için daha çok zaman harcanması taban yalıtımının getirdiği ek bedeller olmaktadır.

Temel yalıtımı ile yüksek yapı güvenliği sağlanır. Daha küçük kolon ve kiriş boyut ve donatıları yeterli olur. Yere sağlam tespit gerekmediği için taşıyıcı olmayan eleman ve mimari ayrıntılardan kazanç sağlanır.

ASIL KAZANÇ yapının ekonomik ömrü içinde olacak depremlerde yapı hasarının daha az olması ile sağlanan onarım ve güçlendirme kazancıdır. Bu kazancın başlangıçta hesabı zor ve varsayımlara dayanacaktır. Hafif ve orta şiddetli depremlerde yapı içindeki mimari ve eşya hasarı önlenecek, her şiddetteki depremde yapının kullanım işlevinde aksama olmayacaktır. Maliyet 1-Zemine ankastre yapıda eş düzeyde deprem güvenliği sağlamak için gereken yatay yüke göre hesaplanmış yapı elemanı boyutları ile taban yalıtımlı yapının daha küçük eleman boyutları ve 2-Yapı ekonomik ömrü içinde olan depremlerde her iki tür yapıda oluşacak ZARAR ve KAYIPLARIN bedellerinin karşılaştırılması şeklinde olmalıdır.

SONUÇ

Lastik takozlarla temel yalıtımı yönteni özellikle önemli yapılarla, tarihi yapıların güçlendirilmesinde önemli bir tasarım seçeneği olarak ele alınmalıdır. Bu yöntenin etkin ve yaygın olarak kullanılması düşünülüyorsa takozların Türkiye'de üretimi ve özelliklerinin deneysel olarak incelenmesi için gerekli laboratuvar olanakları geliştirilmelidir.

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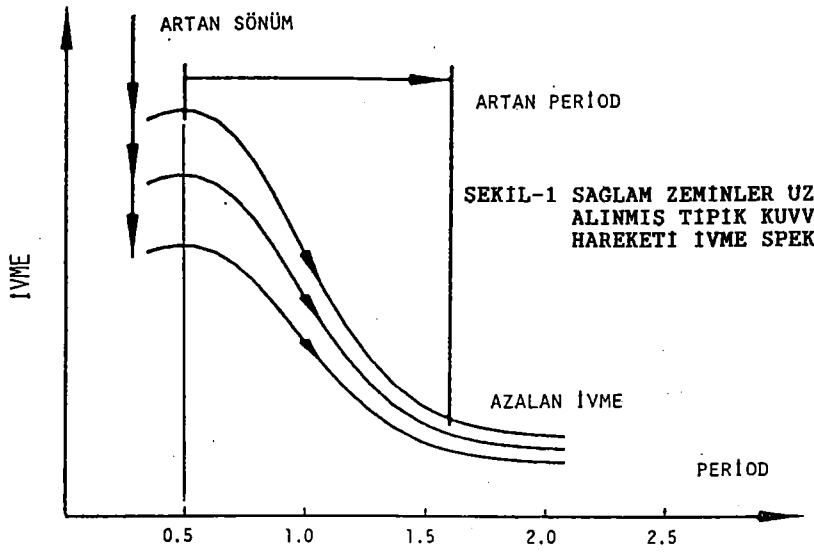
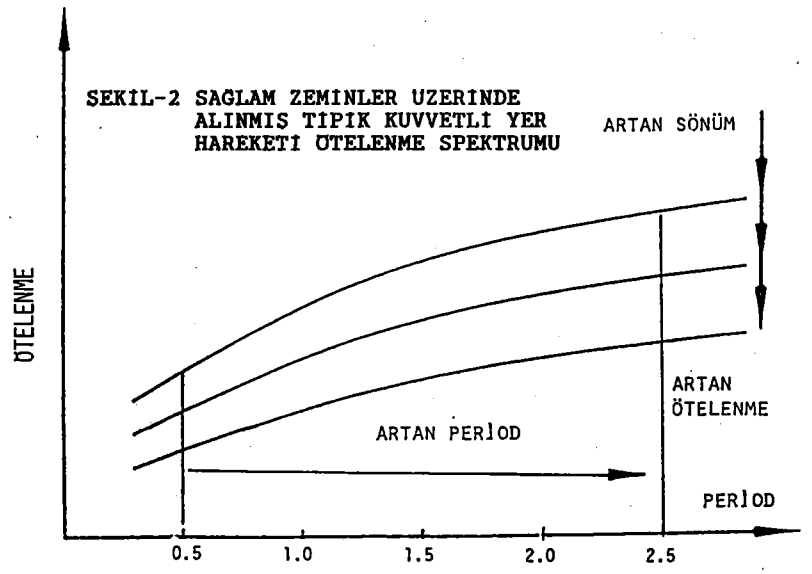
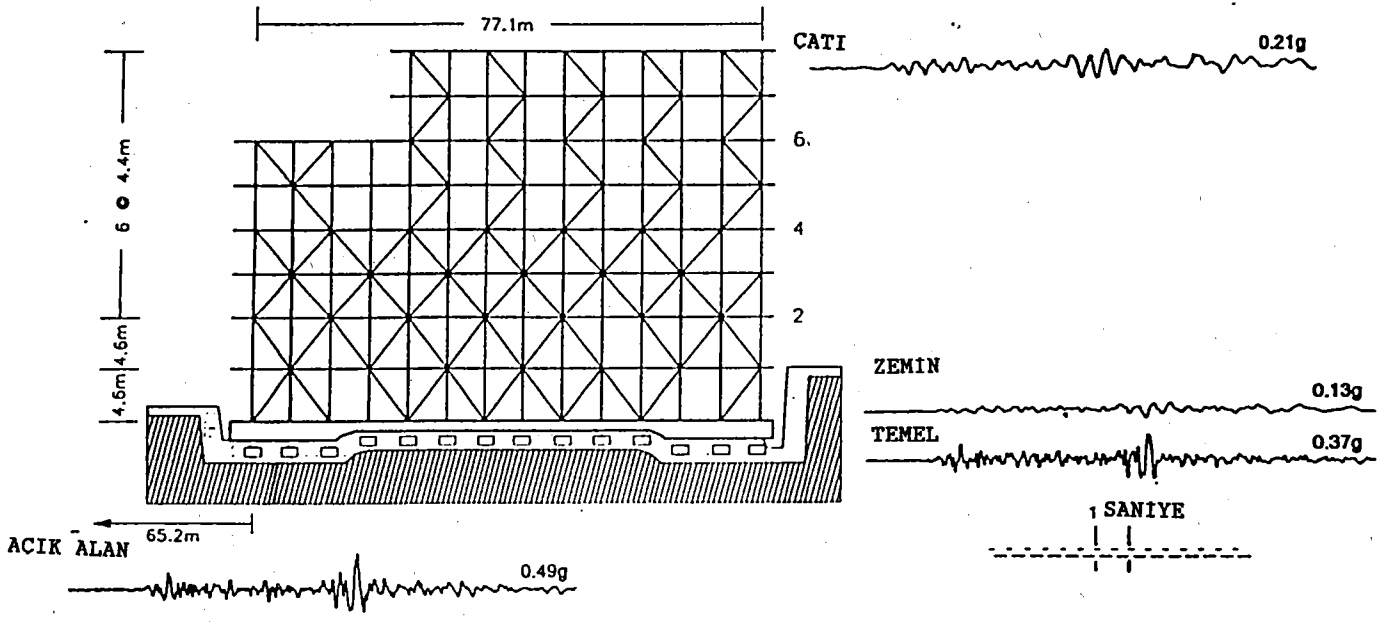


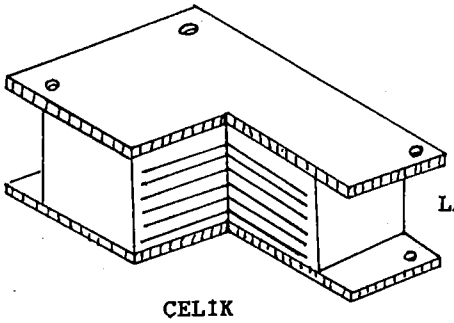
ŞEKİL-1 SAĞLAM ZEMİNLER UZERİNDE ALINMIŞ TIPIK KUVVETLİ YER HAREKETİ İVME SPEKTRUMU



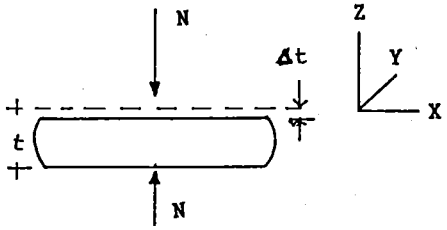
ŞEKİL-2 SAĞLAM ZEMİNLER UZERİNDE ALINMIŞ TIPIK KUVVETLİ YER HAREKETİ ÖTELENME SPEKTRUMU



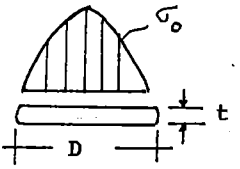
SEKIL-3 NORTHRIDGE DEPREMINDE TABAN YALITIMLI YAPIDA
ÖLÇÜLMÜŞ İVME KAYITLARI



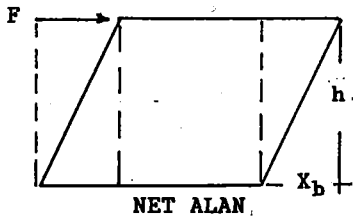
ŞEKİL-4 TIPİK METAL VE LASTİK TAKOZ EN KESİTİ

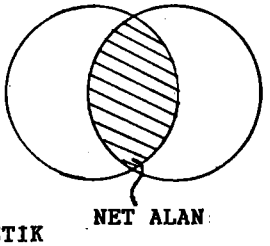


ŞEKİL-5 DÜŞEY YÜKLER ALTINDA TAKOZDA ŞEKİL DEĞİŞTİRME

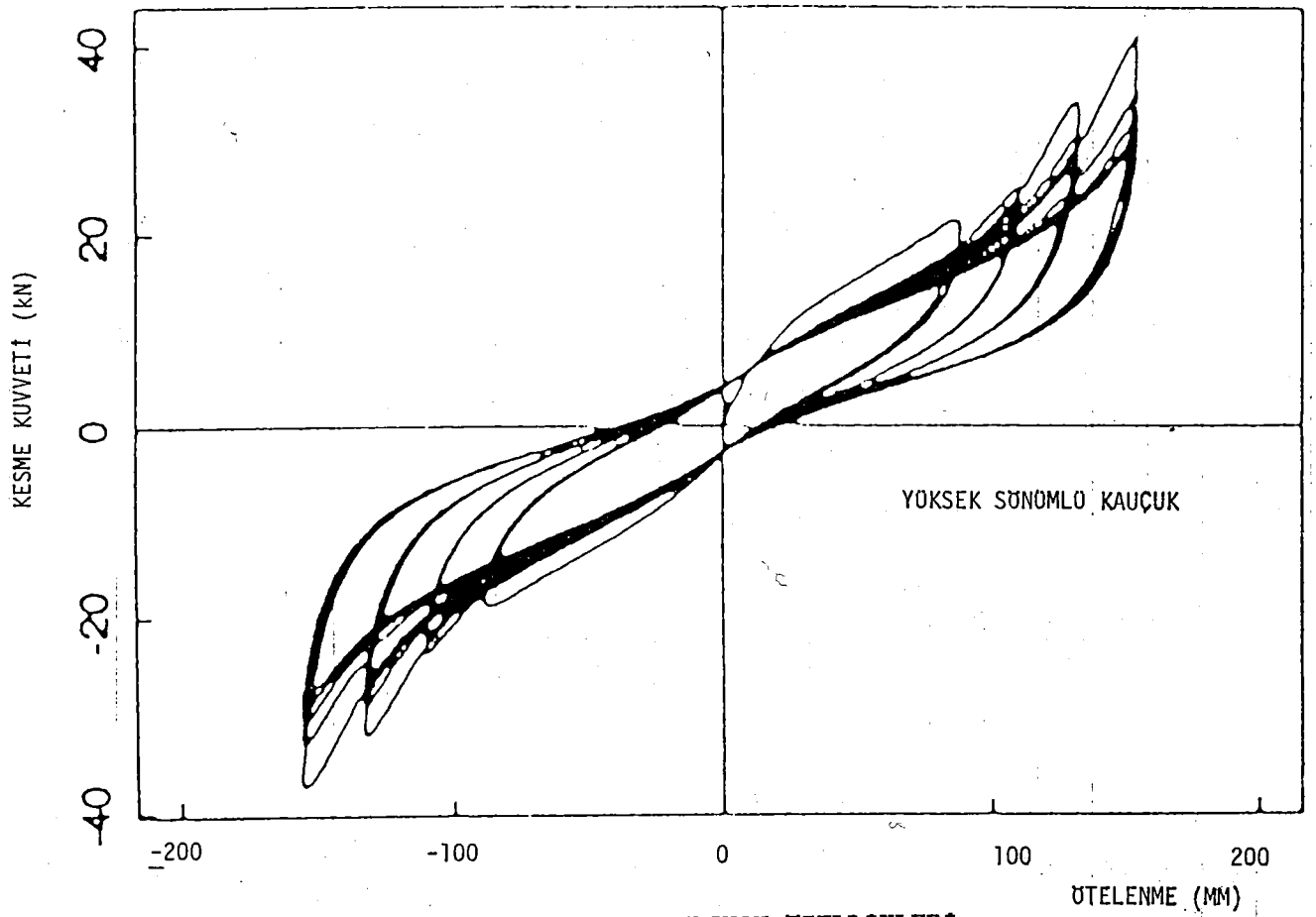


ŞEKİL-6 LASTİK TAKOZDA DÜŞEY YÜKLER ALTINDA GERİLME DAĞILIMI





ŞEKİL-7 YATAY ÖTELENME ALTINDA LASTİK TAKOZ VE NET ALAN



ŞEKİL-8 LASTİK TAKOZ YUK-DEFORMASYON ÖZELLİKLERİ

$S_1 = D/4t$

$S_2 = D/nt$

DOŞOK EKSENEL YOK

KESME TİPİ KIRILMA

BOYOK EKSENEL YOK

EĞİLME TİPİ KIRILMA

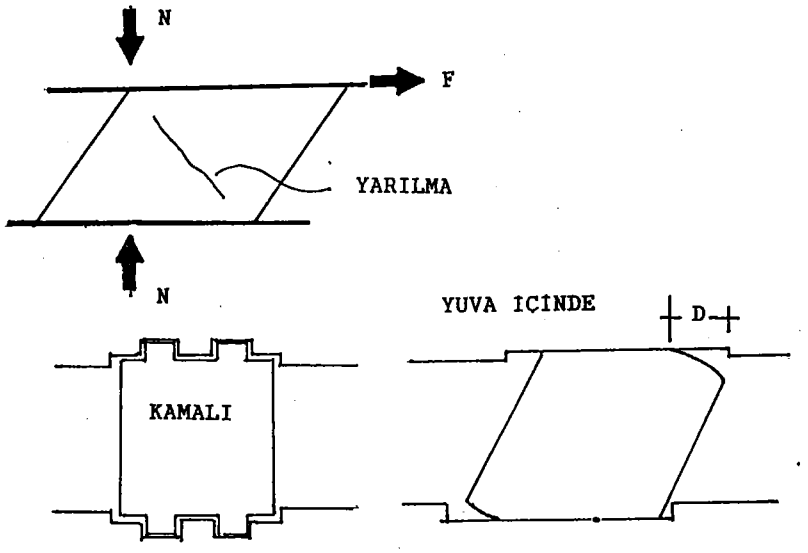
BOYOK EKSENEL YOK

KOÇOK S_1

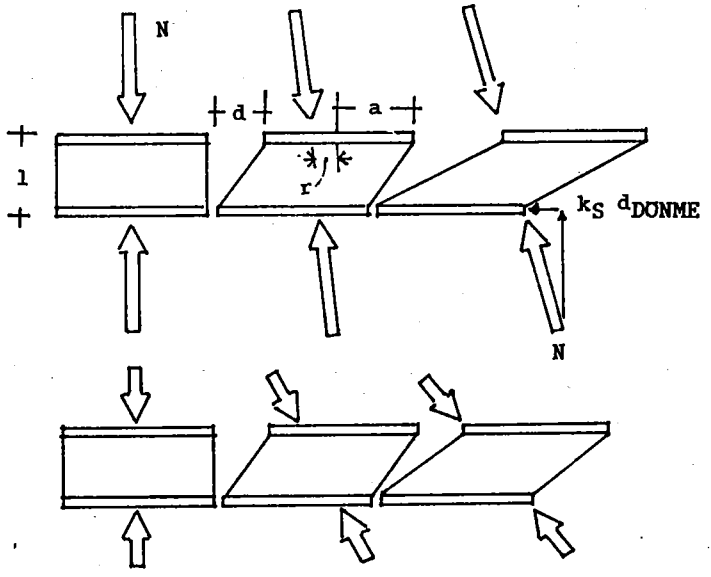
BASINÇ TİPİ KIRILMA

S_1 VE S_2 KOÇOK İSE BURKULMA, BASINÇ VE KESME YOKO ALTINDA ŞEKİL DEĞİŞTİRME KAPASİTESİ AZ

ŞEKİL-9 LASTİK TAKOZLARDA HASAR BİÇİMLERİ

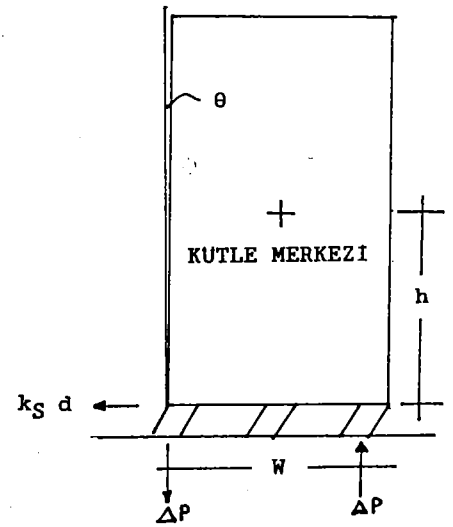


ŞEKİL-10 BÜYÜK YATAY ÖTELENMELERDE TAKOZLARIN DAVRANIŞI



KESME ÖTELENMESİ 0 MM 100 MM $d_{DÖNME}$

ŞEKİL-11 EKSENEL VE YANAL YÜK ALTINDA TAKOZLARIN YANAL ÖTELENMELERİ



SEKIL-12 TEMEL TAKOZLARINDAKI DONMELERIN
DUŞEY YUKLER UZERINDEKI ETKISI

GÜNEY BATI ANADOLU'NUN GÖLLER BÖLGESİNDE DEPREM OLUŞ UMLARININ İNCELENMESİ

AN INVESTIGATION OF EARTHQUAKE OCCURRENCES IN LAKES REGION OF SOUTHWEST ANATOLIA

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Deprem Araştırma Dairesi, Sismoloji Bölümü

ÖZET

Bu çalışmada, 1900-1993 yılları arasında 37° - 39° K enlemleri ve 29° - 32° D boylamları arasında yer alan Göller Bölgesinde meydana gelen depremlerin verileri, Poisson Modeli ve Gumbel Uç Değerler Dağılım Modeli esas alınarak incelenmiş ve sismik risk değerleri hesaplanmıştır. Deprem etkinliğinin göstergesi olan magnitüd-frekans bağıntısının tesbit edilmesinde, "a" ve "b" değerleri 0.1 magnitüd adımlaması ile hesaplanmıştır.

Bölgede 1900-1993 yılları arasında olmuş magnitüdleri 4.0 ve daha büyük depremlerin magnitüde göre episantır haritası hazırlanmıştır. Bu bölgede deprem etkinliğini ortaya koymak için depremlerin zaman içerisindeki dağılımları incelenmiştir. Magnitüd-frekans bağıntısında "a", 6.184 ve "b", 0.907 olarak bulunmuştur.

İncelenen bölgedeki depremlerin gelecekte oluşma olasılıkları ve dönüş periyodları tesbit edilmiştir. Poisson modeliyle 6.0 magnitüdündeki depremin dönüş periyodu 36 yıl olarak hesaplanırken, Gumbel I modeliyle 22 yıl ve Gumbel III modeliyle 24 yıl olarak hesaplanmıştır.

ABSTRACT

In this study, earthquakes occurred in Lakes Region of Southwest Anatolia located in the region of 37° - 39° N latitudes and 29° - 32° E longitudes between 1900-1993 were investigated by using Poisson Model and Gumbel

Extreme Value Distribution Model and seismic risk values were calculated.For the determination of frequency-magnitude relationship which is a measure of seismic activity, "**a**" and "**b**" values were calculated with 0.1 magnitude interval.

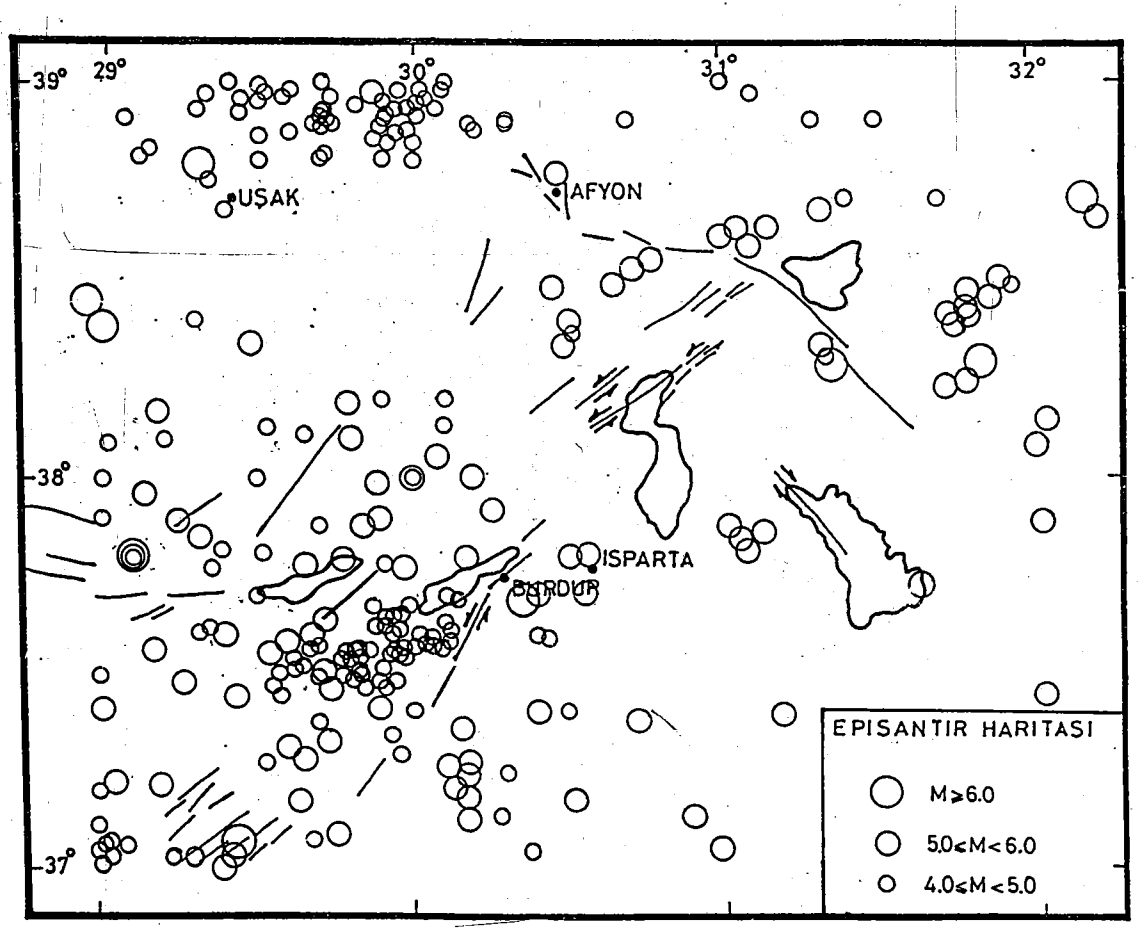
The epicenter map of earthquakes with magnitude of 4.0 and greater occurred in region between 1900-1993 was prepared as a function of magnitude. In order to determine the seismic activity in this zone, time distribution of earthquakes were investigated. In magnitud-frequency relationship, "**a**" and "**b**" values were calculated as 6.184 and 0.907, respectively.

In investigated area, return periods and probabilities of earthquake occurrences were determined. Return period was found to be 22 years with Gumbel I model and 24 years with Gumbel III model, while it was found to be 36 years with Poisson model.

GİRİŞ

Sismik risk çalışması yapılan ve sismik aktivitesi yüksek olan bölgelerde, depremlerin tekrar oluşmasının ve dönüş periyodlarının tesbit edilmesi önem kazanmaktadır. Deprem oluşumlarının ve dönüş periyodlarının tesbit edilmesinde istatistiksel yöntemler kullanılmaktadır. Geçmişte gözlenen ve kaydedilen deprem verileriyle, gelecekte oluşabilecek depremlerin oluşma olasılıklarıda istatistik modellerle belirlenebilmektedir.

Göller Bölgesi yaygın depremselliği ile dikkati çekmektedir. 1900-1993 yılları arasındaki deprem verilerinden yararlanılarak magnitüdlerine göre çizilmiş episantır haritası Şekil 1'de gösterilmiştir. Bölgede yay şeklinde iki deprem kuşağı tanımlanabilir. Bunlardan birincisi Ege Denizi adalar yayı ile ilişkilidir.



Şekil 1. Göller Bölgesindeki depremlerin magnitüdlerine göre episantır haritası (1900-1993).

İkincisi Kıbrıs yay kuşağıdır ve bu kuşaklar Güneybatı Anadolu'da Burdur yakınlarında kesişmektedirler.

Bu çalışmada, 1900-1993 yılları arasında Göller Bölgesinde olmuş olan depremlerin verileri Gumbel Uç Değerler Dağılım Modeli ve Poisson Modeli kullanılarak çalışılmış ve seçilen bölge için dönüş periyodları ve oluşma olasılıkları tesbit edilmiştir.

GÖLLER BÖLGESİNİN JEOLOJİSİ

Göller Bölgesinin tektonik gelişimi üç döneme ayrılmaktadır. Bunlar Eski Tektonik dönem, Geçiş dönemi ve Yeni Tektonik dönemdir. Geç Miyosen-Erken Pliyosen sırasında başlamış olan Yeni Tektonik dönem (Neotektonik) ise çekme tektoniği denetiminde gelişen karasal tortullaşma, onunla yaşıt kıta içi volkanizma ve blok faylanma ile belirginlik kazanır. Neotektonik dönemi temsil eden jeolojik olay ve yapılar güneydeki Ege hendeğine bağlı olarak gelişen çekme tektoniğinin bir sonucudur. İnceleme alanı verev atımlı normal faylarla sınırlı çok sayıda ve değişik boyutta bloğa bölünmüş olup bunların birçoğu depremselliği yüksek olan alanlardır (Koçyiğit, 1984). Çöküntü çukurlarında (Burdur, Beyşehir, Muğla, Uşak) oluşan göllerde blok faylanmanın denetiminde önemli karasal çökeller gelişmiştir. Neotektonik dönemde karasal tortullaşmayla yaşıt volkanizma olayları da etkin olmuştur. Bölgedeki volkanik faaliyetler genel olarak Lias'tan başlayarak Üst Neojen ve Kuvaterner'e kadar devam etmiştir.

İnceleme alanımız olan Göller Bölgesi Güneybatı Anadolu'da yer almaktadır. Bölgede iki sismik kuşaktan birincisi Girit adası - Rodos adası - Fethiye - Burdur boyunca, diğeri ise Simav - Emet - Gediz - Afyon boyunca uzanmaktadır. Bu iki kuşak Güneybatı Anadolu'da depremselliği en yüksek alanlardır (Ergin ve diğ., 1967). Bu kuşaklardan ilki kuzeydoğuya doğru KD-GB gidişli Burdur-Acıgöl grabenleriyle, ikincisi ise güneydoğuya doğru KB-

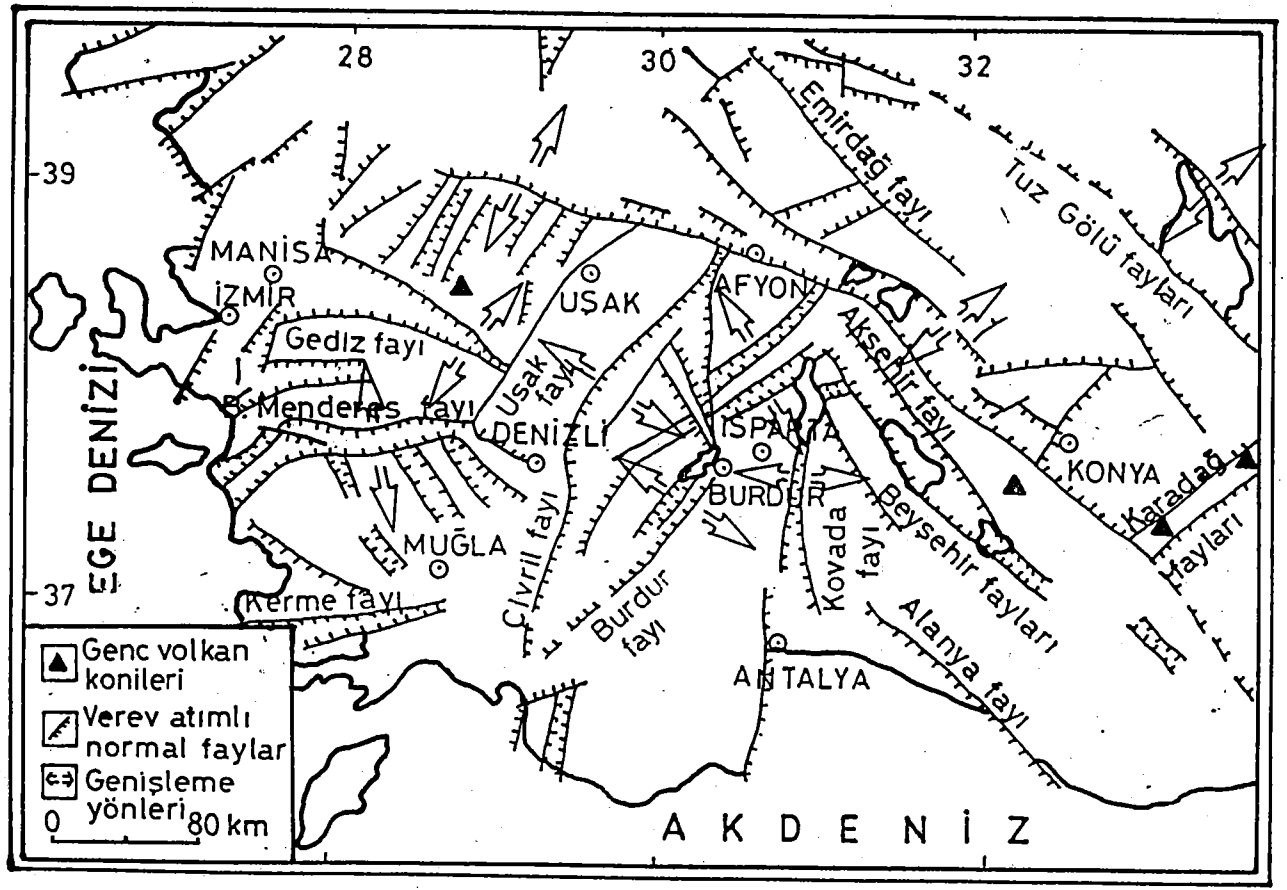
GD gidişli Afyon-Akşehir grabenleriyle Şekil 2'de görüldüğü gibi birleşmektedir. Dinar (Afyon) yöresinde, egemen normal fay takımları KB-GD, KD-GB ve D-B gidişli olup, KD-GB gidişli olanlar, genellikle diğerlerini kesip ötelemiştir (Öztürk, 1982). Diğer taraftan Burdur grabenlerinin oluşumunu, bir sıkışma fazını izleyen ve ona dik yönde gelişen çekme gerilimine bağlı normal faylarla açıklayan Dumont ve diğ., (1979) inceleme alanında dört ayrı grabenleşme evresi saptamışlardır. Bunlar Miyosen sonu - erken Pliyosen (KB-GD sıkışma, KD-GB çekme), Pliyosen (K-G sıkışma, D-B çekme), eski Kuvaterner (Burdur dolayında K-G sıkışma, D-B çekme), Genç Kuvaterner (Burdur yöresinde KB-GD çekme) grabenleşmeleridir.

MAGNİTÜD-FREKANS BAĞINTISI

Depremlerin oluş sayıları incelendiğinde magnitüdün fonksiyonu olarak doğrusal bir ilişki elde edilmektedir. Deprem istatistiğinin temelini oluşturan magnitüd-frekans ilşkisi Gutenberg-Richter (1954) tarafından aşağıdaki bağıntıyla ifade edilmiştir:

$$\text{Log } N = a - b\,M \qquad (1)$$

Bu bağıntıda, N, magnitüdü M ve daha büyük depremlerin kümülatif sayısını göstermektedir. "**a**" ve "**b**" ise sabit katsayılardır. "**a**" katsayısı inceleme alanının genişliğine, gözlem dönemine ve deprem etkinliğinin düzeyine bağlı olarak değişmektedir. "**b**" katsayısı sismotektonik parametredir ve deprem oluşumunun fiziği ile doğrudan ilişkili olduğundan depremlerin istatistik analizinde önemli yer tutmaktadır. Hesaplanan "**b**" değerleri kullanılan verilere, yöntemlere, depremlerin normal ve kümülatif frekanslarına bağlı olarak değişmektedir. Göller Bölgesi için magnitüd-frekans bağıntısı en küçük kareler yöntemiyle magnitüd aralığı $\Delta M = 0.1$ alınarak hesaplanmıştır. Çalışılan bölge için, 1900-1993 yılları arasında magnitüdü $M \geq 4.0$ olan depremler kullanılarak magnitüd-frekans bağıntısı;



Şekil 2. Göller Bölgesinin tektonik haritası (Koçyiğit, 1984).

Log N = 6.184 -0.907 M

şeklinde elde edilmiş ve ilişki Şekil 3 'de gösterilmiştir.

Göller bölgesinde deprem etkinliğini ortaya koymak için depremlerin zaman içerisindeki dağılımları incelenmiştir. Bölgede yıllara göre deprem sayılarının grafiği Şekil 4 'de gösterilmiştir. Bu grafik incelendiğinde, bölgede 1925-1971 yılları arasında sakin bir deprem etkinliği gözlenirken, 12 Mayıs 1971 tarihinde Burdur'da meydana gelen M=6.1 magnitüdlü depremle maksimuma ulaşmış ve 1971 yılında kaydedilen deprem sayısı artmıştır. 1971 yılından 1993 yılına kadar meydana gelen depremlerle deprem etkinliği aktif olarak devam etmiştir.

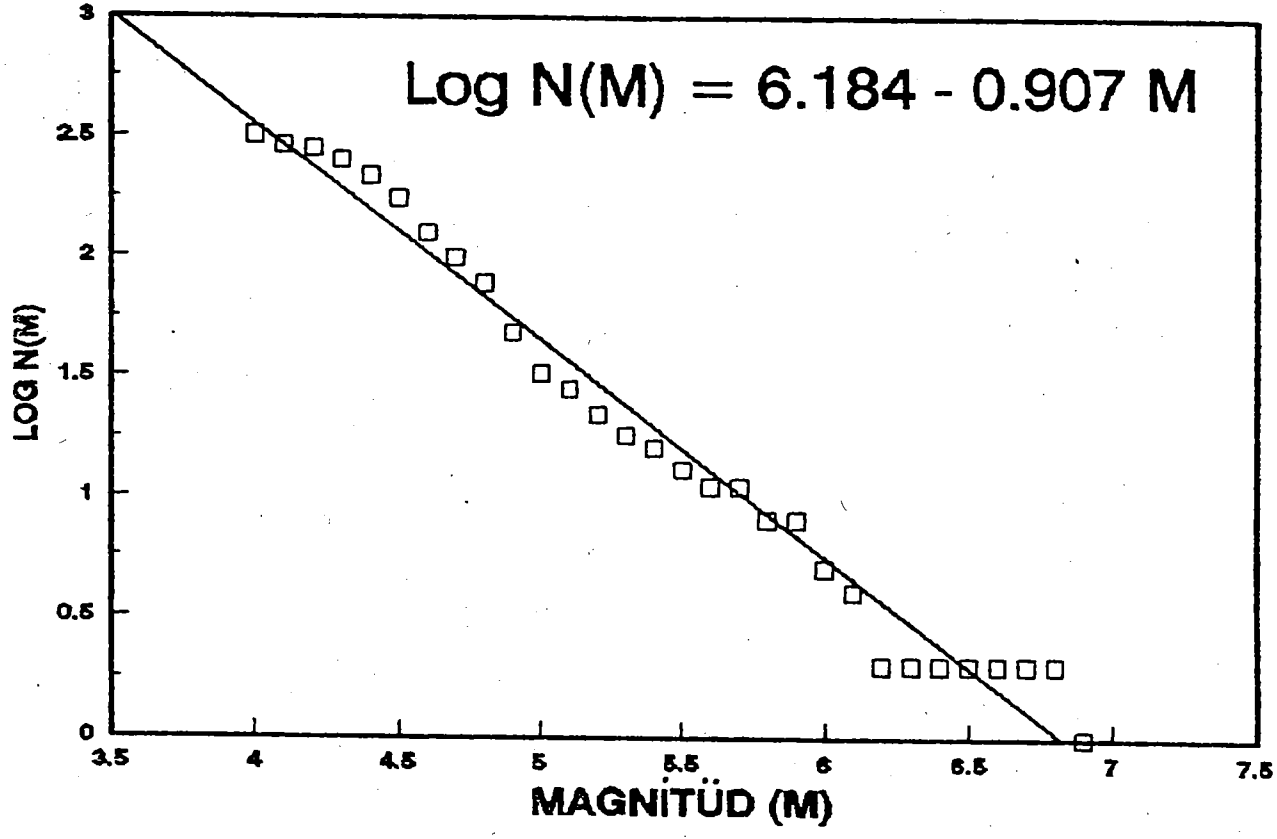
POİSSON MODELİ

Deprem oluşumunu modellemekte en çok kullanılan model Poisson modelidir. Bu modelde, deprem oluşumunun bir Poisson dağılımı olduğu kabul edilmekte ve deprem olma olasılığı (2) nolu bağıntı ile ifade edilmektedir. Böyle bir modelde, kümülatif frekans dağılımı, yani **t** zaman aralığında **N** veya daha az deprem bulunma olasılığı,

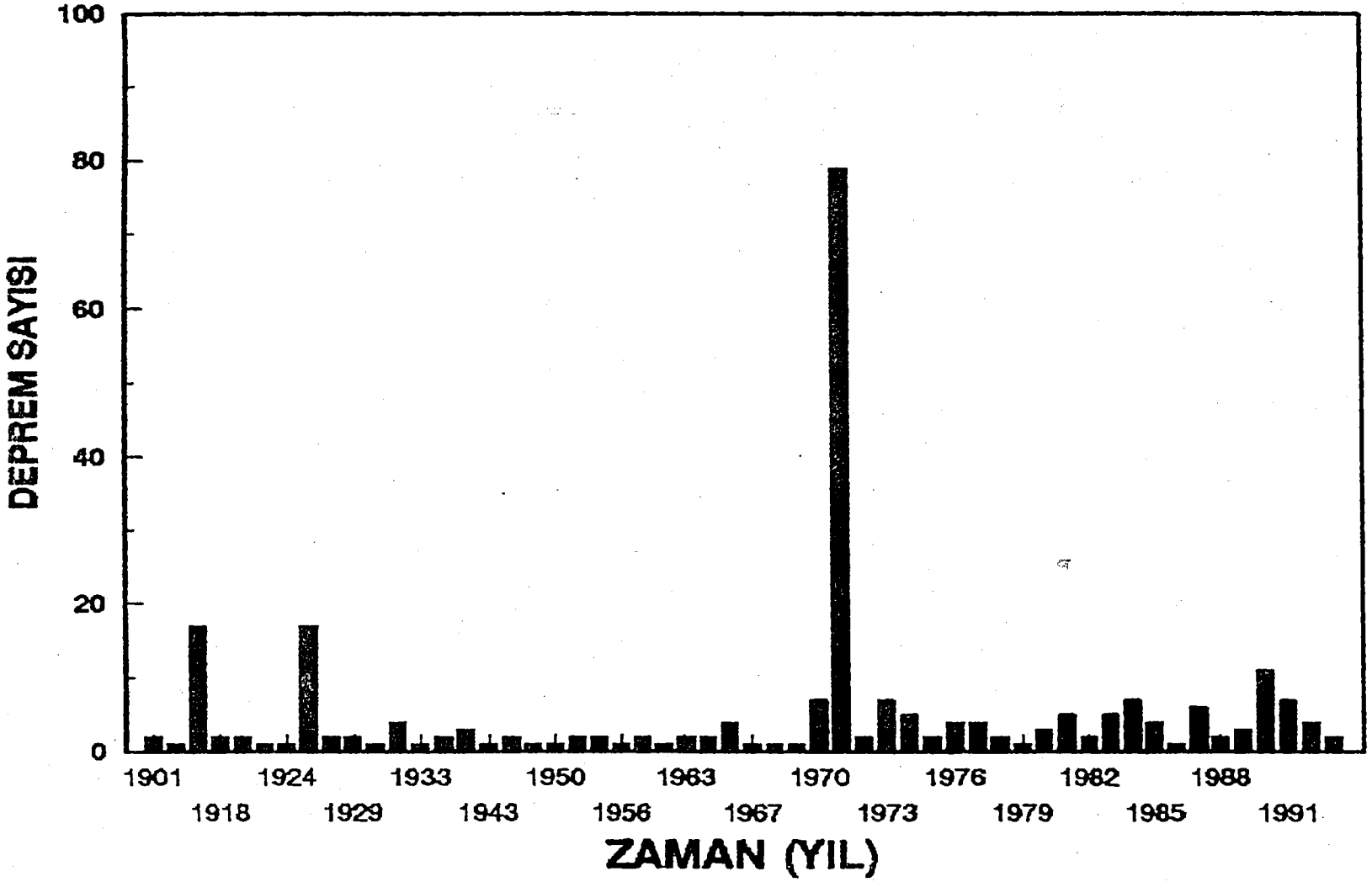
$$F(N,t) = \sum_{\lambda=0}^{N} \frac{(\lambda t)^k}{k!} e^{-\lambda t} \qquad (2)$$

ile verilir. Poisson dağılımında deprem oluşumları arasındaki zamanlar negatif üstel dağılımı gösterirler.

$$P(t) = -\lambda e^{-\lambda t} dt \qquad (3)$$



Şekil 3. Göller Bölgesinin magnitüd-frekans bağıntısı.



Şekil 4. Göller Bölgesi depremlerinin yıllara göre dağılımları.

Burada, **P**, iki deprem arasındaki verilen bir zaman aralığının, **(t,t+dt)** zaman aralığı içerisine düşme olasılığıdır. Buna karşılık gelen kümülatif dağılım fonksiyonu,

$$F(t) = 1 - e^{-\lambda t} \qquad (4)$$

dir. **F(t)**, iki deprem arasındaki verilen bir zaman aralığının **t** ve daha az olma olasılığıdır. Poisson modeline göre bir sonraki depremin oluşması için geçen bekleme zamanının dağılımı, bir önceki depremin oluşundan itibaren geçen zamandan etkilenmez ve istatistik veriler Poisson modelinin büyük depremler için geçerli olduğunu göstermektedir. Verilen bir zaman diliminde, magnitüdleri M_1 değerinden büyük veya ona eşit olan depremlerin yıllık ortalama sayısı $n(M \geq M_1)$ (Tuksal, 1976) ve sismik risk değerleri hesaplanabilmektedir (Gencoğlu, 1972, Tabban ve Gencoğlu, 1975). Hesaplanan depremsellik parametreleri Çizelge 1'de gösterilmiştir. Göller Bölgesinin sismik risk değerleri,

$$R(M) = 1 - e^{-n(M)T} \qquad (5)$$

bağıntısından bulunur. **n(M)** değerlerinden dönüş periyodu yıl olarak aşağıdaki bağıntı kullanılarak hesaplanabilmektedir,

$$Q = \frac{1}{n(M)} \qquad (6)$$

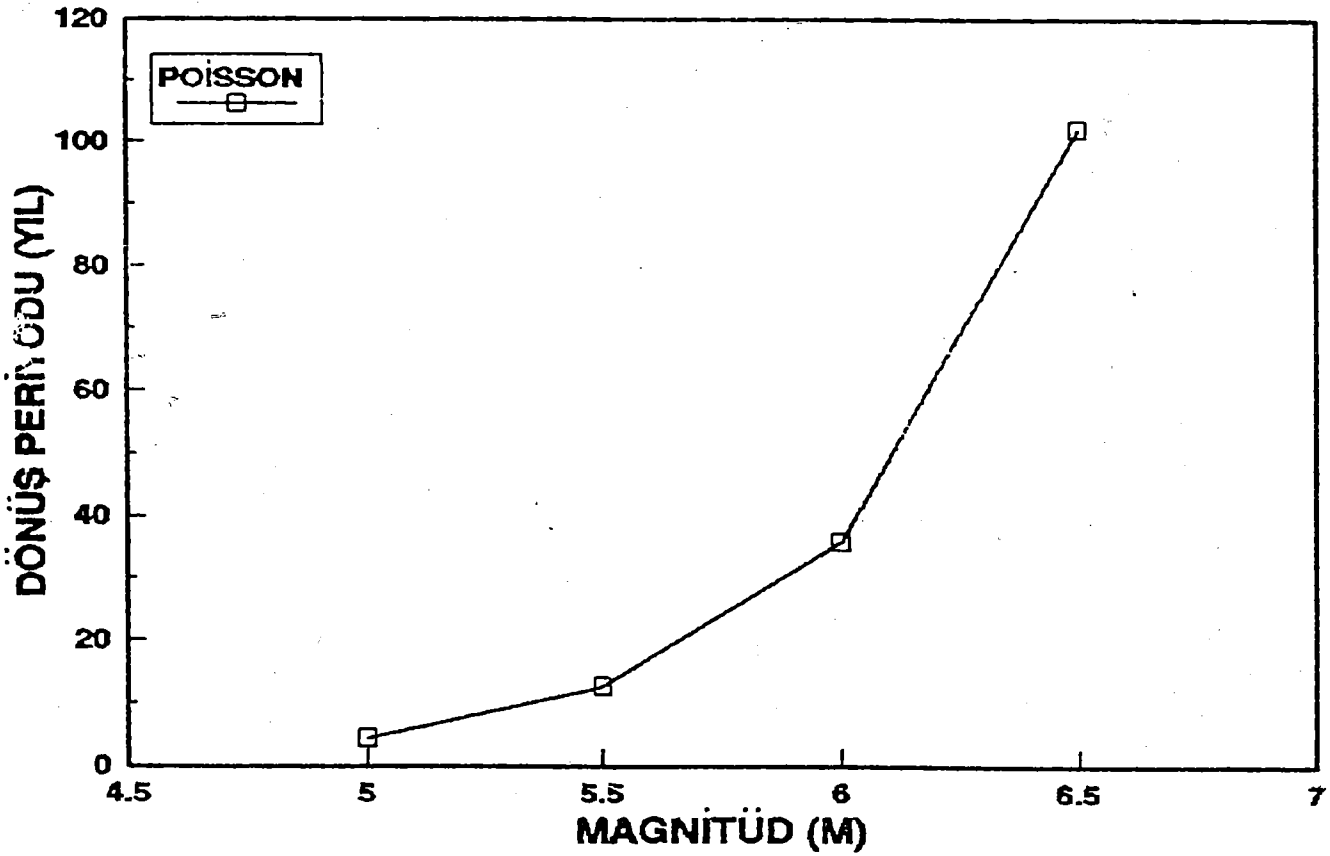
Hesaplanan sismik risk değerleri Çizelge 2'de verilmiştir. Bu çizelgeden, M=6.0 olan depremin dönüş periyodu 36 yıl olarak bulunmuştur. M=6.0 olan depremin 10 yıllık süre içerisinde olma olasılığı %24, 20 yıl içerisinde %43 ve 30 yıl içerisinde %57 olarak tesbit edilmiştir. Dönüş periyodlarının magnitüde göre değişimleri Şekil 5'de gösterilmiştir.

a	b	a'	a_1	a_1'
6.184	0.907	5.877	4.220	3.899

Çizelge 1. Depremsellik parametreleri.

MAGNİTÜD	DEP. SAY.	DÖNÜŞ PERİYODU, YIL	DEPREM OLUŞUM OLASILIKLARI, %								
			10	20	30	40	50	60	70	80	90
5.0	0.2262	4.4	89.59	98.92	99.89	99.99	100.00	100.00	100.00	100.00	100.00
5.5	0.0794	12.6	54.81	79.58	90.77	95.83	98.12	99.15	99.62	99.83	99.92
6.0	0.0279	35.9	24.34	42.76	56.69	67.23	75.21	81.24	85.81	89.26	91.88
6.5	0.0098	102.1	9.33	17.79	25.46	32.42	38.72	44.44	49.62	54.32	58.59
7.0	0.0034	290.7	3.38	6.65	9.80	12.85	15.80	18.65	21.40	24.06	26.62
7.5	0.0012	827.9	1.20	2.39	3.56	4.72	5.86	6.99	8.11	9.21	10.30

Çizelge 2. Sismik risk değerleri.



Şekil 5. Dönüş periyodlarının magnitüdle değişimi (Poisson modeli)

GUMBEL UÇ DEĞERLER DAĞILIM MODELİ

Maksimum magnitüdlü depremlerin oluşma olasılıklarının "Uç Değerler Teorisi" kullanılarak tesbit edilebileceği çalışması ilk olarak Nordquist (1945) tarafından yapılmıştır. En büyük deprem magnitüdlerine uygulanan Gumbel teorisinin matematiği birçok araştırmacı tarafından rapor edilmiştir (Knopoff ve Kagan, 1977; Burton,1979; Burton, 1981). Gumbel (1958) tarafından bulunan uç değerler teorisinin avantajı, deprem oluşumlarının istatistiksel analizinde verilerin eksik olması durumunda da kullanılabilmesidir. Genelde, Gumbel teorisi, daha önceden belirlenen aralıklarda, en büyük magnitüd değerleri kullanılarak deprem verilerinin sıralanmasında kullanılmaktadır. **G(m)**, uç değerlerin üç ayrı asimtotik dağılımlarından biri olarak tanımlanabilmektedir. Uç değerlerin asimtotik dağılımlarından birincisi olan Gumbel I,

$$G1(m) = \exp\{-\exp\{-A(M-B)\}\} \qquad (6)$$

şeklinde ifade edilmektedir. Bu dağılımda, iki parametre vardır. **A** sabit katsayı ve **B** ise model uç değerinin karakteristiğidir. Deprem verilerinin eksik olması durumunda, Gumbel III aşağıdaki şekilde ifade edilmektedir:

$$G3(m) = \exp\{-(W-M)/(W-U)^K\} \qquad M<W \qquad (7)$$

$$= 1 \qquad M>W$$

Bu üç parametreli dağılımın grafiksel davranışı kavisleşen eğri şeklindedir ve bu eğride **K** kavisleşme parametresi , **W**, uç değerlerin aralığının üst sınırı ve **U** tekrarlanan uç değerlerin karakteristik değeridir. Maksimum magnitüdlü depremlerin tekrar oluşmasının risk analizi Burton (1979) tarafından Gumbel III modeli kullanılarak yapılmıştır. Maksimum magnitüdlü depremlerin oluşma olasılıklarında, üst sınır olması gerektiğini belirlemişler ve **W** değişkeninin

önemini belirtmişlerdir. Gumbel olasılık dağılımının bulunabilmesi için, elde bulunan deprem verileri içerisinden, **n** yıl içerisindeki "**i**" inci en büyük magnitüdlü depremin yeri ise aşağıdaki bağıntı ile ifade edilmektedir:

$$G_i(m) = i/n+1 \qquad (8)$$

(6), (7) ve (8) no.lu denklemlerden hesaplanan olasılık dağılımları kullanılarak, dönüş periyodunun T(M) (yıl) bulunması mümkündür. Dönüş periyodu T(M), gözlenen M'ye eşit veya ondan büyük olan maksimum depremin bulunduğu aralıktaki ortalama değerdir ve aşağıdaki şekilde ifade edilmektedir:

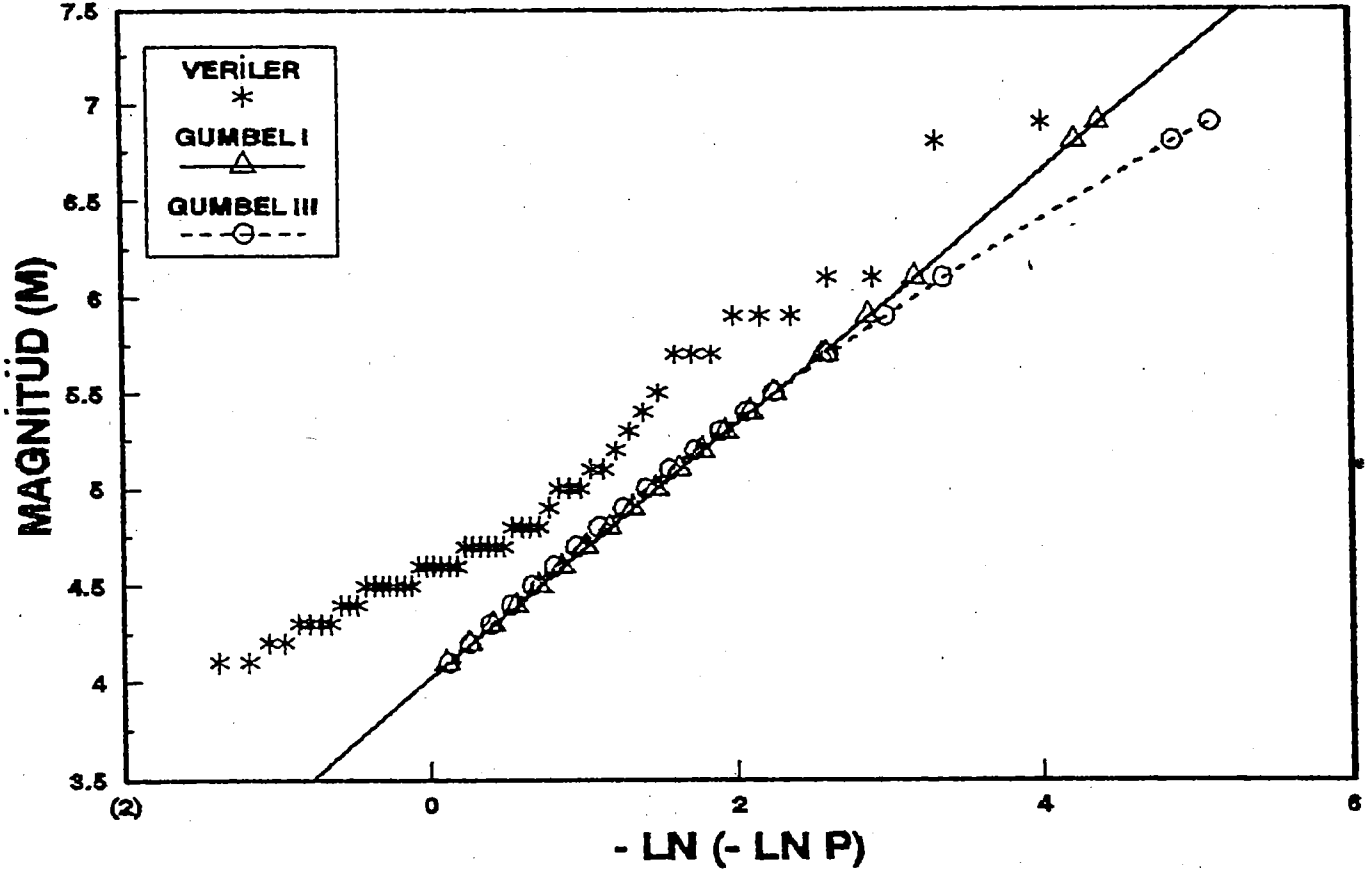
$$T_i(M) = \left[1 - G_i(M)\right]^{-1} \qquad (9)$$

Gumbel I doğrusal bir davranış göstermesine rağmen, Gumbel III aşağı doğru kavisleşen bir eğri davranışı göstermektedir ve **K** kavislenme asimtotu için, az zaman olasılıklarında veya yüksek dönüşüm periyodlarında **W** 'ya doğru kavislenme parametresi olarak tanımlanmaktadır.

Gumbel I ve Gumbel III asimtotik dağılım modelleri kullanılarak çalışılan bölge için Gumbel I'in parametreleri olan **A** ve **B**, Gumbel III'ün parametreleri olan **W**, **U**, **K** 'nın hesaplanan değerleri Çizelge 3'de verilmiştir. Gumbel I ve Gumbel III için bulunan bu parametreler kullanılarak bölge için **-ln(-ln G(m))** değerleri yıllık maksimum magnitüd değerlerine göre hesaplanmıştır. Gözlenen verilerin dağılımları ile, Gumbel I ve Gumbel III modelleri için olasılık dağılımları Şekil 6'da gösterilmiştir. Gumbel I ve Gumbel III olasılık modellerinin **A**, **B**, **W**, **U** ve **K** parametrelerinin hesaplanmasından ve Kolmogorov-Smirnov uygunluk testinden sonra deprem risk hesaplamalarında belirlenen deprem magnitüdlerinin dönüş periyodları hesaplanmıştır. Tasarımlanan oluşum periyodları ve oluşum olasılıkları

GUMBEL I		GUMBEL III	
A = 1.5345 B = 4.0268		W = 10.1724 U =3.9977 K = 8.0303	
MAGNİTÜD	DÖNÜŞ PERİYODU (YIL)	MAGNİTÜD	DÖNÜŞ PERİYODU (YIL)
4.7	3.3	4.5	2.5
5.2	6.5	4.8	3.6
5.7	13.3	5.1	5.4
6.2	27.8	5.4	8.4
6.7	58.8	5.7	13.8
7.2	125.1	6.0	23.8
7.7	266.9	6.3	42.9

Çizelge 3. Gumbel I ve Gumbel III parametreleri.



Şekil 6. Gumbel I ve Gumbel III olasılık dağılımları.

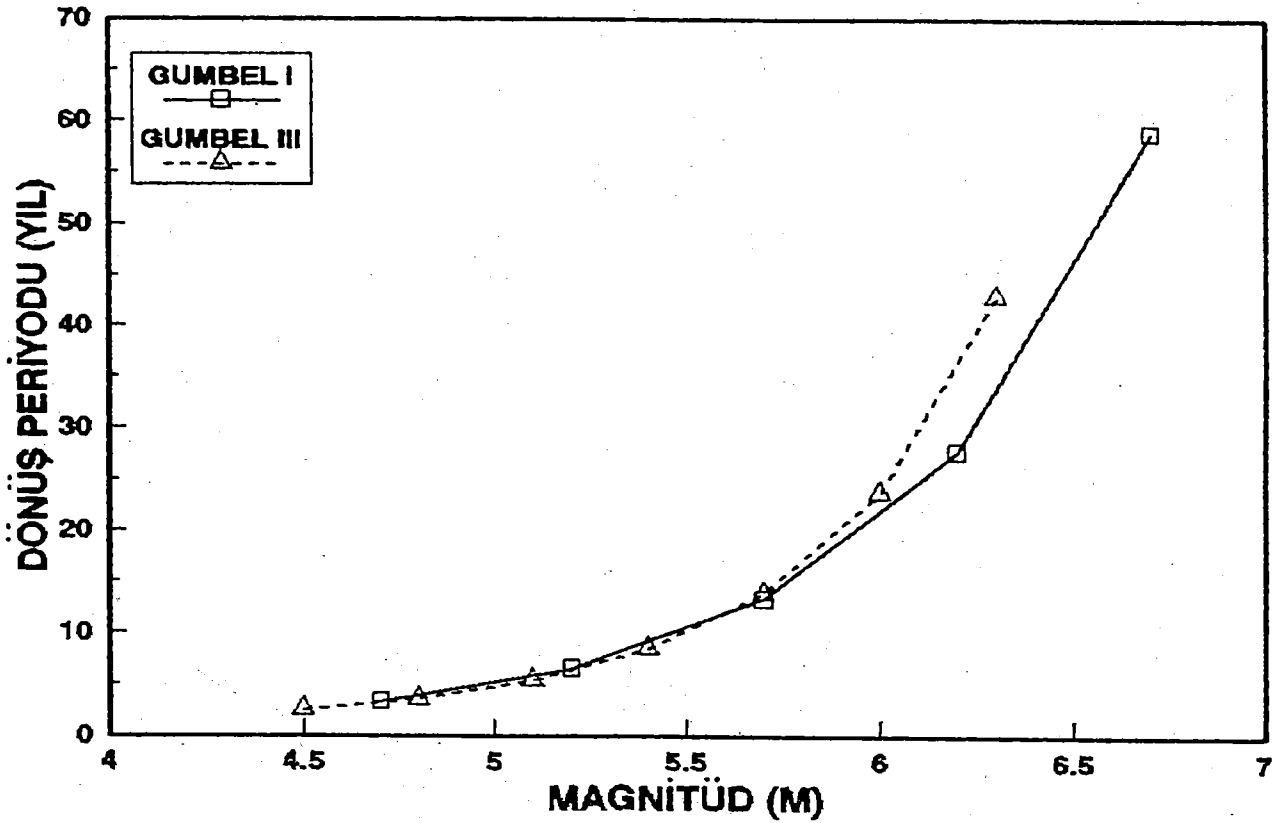
GUMBEL I

MAGNİTÜD	DEPREM OLUŞUM OLASILIKLARI,%						
	50	75	100	125	150	175	200
4.7	100.00	100.00	100.00	100.00	100.00	100.00	100.00
5.2	100.00	100.00	100.00	100.00	100.00	100.00	100.00
5.7	98.00	99.70	100.00	100.00	100.00	100.00	100.00
6.2	84.00	93.60	97.40	99.00	99.60	99.80	99.90
6.7	57.60	72.40	82.00	88.30	92.40	95.00	96.80
7.2	33.00	45.20	55.20	63.30	70.00	75.40	79.90
7.7	17.10	24.50	31.30	37.50	43.10	48.20	52.80

GUMBEL III

MAGNİTÜD	DEPREM OLUŞUM OLASILIKLARI,%						
	50	75	100	125	150	175	200
4.5	100.00	100.00	100.00	100.00	100.00	100.00	100.00
4.8	100.00	100.00	100.00	100.00	100.00	100.00	100.00
5.1	100.00	100.00	100.00	100.00	100.00	100.00	100.00
5.4	99.80	100.00	100.00	100.00	100.00	100.00	100.00
5.7	99.70	99.60	99.90	100.00	100.00	100.00	100.00
6.0	88.30	96.00	98.60	99.50	99.80	99.90	100.00
6.3	69.30	83.00	90.60	94.80	97.10	98.40	99.10

Çizelge 4. Deprem magnitüdlerinin tasarımlanan oluşum olasılıkları.
(Gumbel I ve Gumbel III modelleriyle)



Şekil 7. Dönüş periyodlarının magnitüdle değişimi.
(Gumbel I ve Gumbel III modelleri)

Çizelge 4'de verilmiştir. Depremlerin Gumbel I ve Gumbel III modelleriyle hesaplanan dönüş periyodlarının magnitüdle olan değişimi Şekil 7'de gösterilmiştir.

SONUÇLAR

Göller Bölgesinde, 1900-1993 yılları arasında magnitüdü M≥4.0 olan depremlerin Poisson ve Gumbel Uç Değerler dağılımlarına uygunluk gösterdikleri tesbit edilmiştir. Bölgenin depremsellik parametrelerinden "a" ve "b" değerleri en küçük kareler yöntemiyle 6.184 ve 0.907 olarak bulunmuştur. Poisson modeliyle M=6.0 olan depremin 50 yıl içerisindeki olma olasılığı %75 olarak bulunurken, Gumbel I modeliyle %80 ve Gumbel III modeliyle %88 olarak bulunmuştur. Aynı magnitüddeki depremin dönüşüm periyodu ise Poisson modeliyle 36 yıl, Gumbel I modeliyle 22 yıl ve Gumbel III modeliyle 24 yıl hesaplanmıştır.

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DEPREM ARAŞTIRMA BÜLTENİ YAYIN KOŞULLARI

1. Bültene gönderilecek telif ve tercüme yazıların :
   a) Depremle doğrudan doğruya, ya da dolaylı yoldan ilgili olması,
   b) Bilimsel ve teknik bir değer taşıması,
   c) Yurt içinde daha önce başka bir yerde yayınlanmamış olması,
   d) Daktilo ile ve kağıdın yalnız bir yüzüne en az iki nüsha olarak yazılmış bulunması,
   e) Şekillerin aydınger kağıdına çini mürekkebi ile çizilmiş olması,
   e) Fotoğrafların net ve klişe alınmasına müsait bulunması gerekmektedir.
2. Telif araştırma yazılarının baş tarafına araştırmanın genel çerçevesini belirten en az 200 kelimelik İngilizce, Fransızca ya da Almanca bir özet konulmalıdır.
3. Bayındırlık ve İskan Bakanlığı mensubu elemanları tarafından hazırlanan ve telif ya da tercüme ücreti ödenerek yayınlanacak olan yazıların, mesai saatleri dışında hazırlanmış olduğu yazan derleyen, ya da çevirenin bağlı bulunduğu birim amiri tarafından (genel müdürlüklerde daire başkanı, müstakil birimlerde birim amiri) verilecek bir belge ile belgelendirilmesi zorunludur. Bu belge ile birlikte verilmeyen yazılar için ücret ödenmez.
4. Telif ve tercüme ücretleri ancak yazı bültende yayınlandıktan sonra tahakkuka bağlanır.
5. Bültende yayımlanacak yazılara, «Kamu Kurum ve Kuruluşlarınca Ödenecek Telif ve İşlenme Ücretleri Hakkında Yönetmelik» esaslarına göre ücret ödenir.
6. Yazılarda bulunan şekiller için, gerekli olan asgari alan içinde bulunabilecek kelime sayısına göre ücret taktir edilir.
7. Yazıların bültende yayınlanması Genel Müdürlüğümüz bünyesinde teşekkül eden Uzmanlar Kurulu'nun kararı ile olur.
8. Seçmeyi yapacak Uzmanlar Kurulu 5. maddede sözü edilen asgari alanları hesaplamaya, yazı sahiplerine gereksiz uzatmaların kısaltılmasını teklif etmeye, verilecek ücerete esas teşkil edecek kelime sayısını tesbit etmeye ve yazıların yayın sırasını tayine yetkilidir.
9. Kurulca incelenen yazıların bültende yayınlanıp yayınlanmayacağı yazı sahiplerine yazı ile duyurulur.
10. Yayınlanmayacak yazılar bu duyurmadan sonra en geç bir ay içinde sahipleri tarafından geri alınabilir. Bu süre içinde alınmayan yazıların korunmasından Genel Müdürlüğümüz sorumlu değildir.
11. Yayınlanan yazılardaki fikir, görüş ve öneriler tamamen yazarlarına ait olup, Afet İşleri Genel Müdürlüğünü bağlamaz ve Genel Müdürlüğümüzün resmi görüşünü yansıtmaz.
12. Diğer kuruluşlar ve Bakanlık mensupları tarafından bilgi, haber tanıtma vb. gibi nedenlerle gönderilecek not ve açıklamalar, ya da bu nitelikteki yazılar için ücret ödenmez.
13. Genel Müdürlüğümüz mensupları Genel Müdürlükçe kendilerine verilen görevlere ait çalışmalardan ötürü her hangi bir telif ya da tercüme ücreti talep edemezler.