

トルコ共和国

ザマント・ギョクタシュ水力発電開発計画

調査報告書

付 録

1989年10月

国際協力事業団

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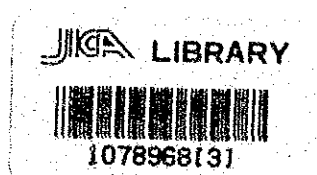


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マイクロ  
フィルム作成

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**A-1 POWER DEMAND FORECAST AND SUPPLY PROGRAM**





## A-1 POWER DEMAND FORECAST AND SUPPLY PROGRAM

Table A-1-1 Construction Schedule of Power Plants in Turkey (1/5 - 5/5)



TABLE A-1-1 CONSTRUCTION SCHEDULE OF POWER PLANTS IN TURKEY (1/5)  
updated 89-5-2

Year	Thermal Power Plant						Hydraulic Plant				Total			
	Name of Station	Unit #	Fuel Type	Capacity (MW)	Annual Eng. (GWH) *	Retire (MW)	Name of Station	Unit #	Capacity (MW)	Annual Energy Ave (GWH) Firm	Installed Capacity (MW)	Energy Ave. (GW) Firm		
1987	Existing	—	—	7,489	40,370		Existing	—	5,003	17,558	14,046	12,492	57,928	54,416
1988	Kangal Catalagzi B Hamitbat Ambarli	1 1 3,4 1,2	oil Stone coal N. Gas N. Gas	150 150 2*100 2*138.8	(900)* (900)		Altinkaya Karakaya Kokluce Kaplukaya Others	2,3,4 4,5,6 1,2 1,2,3	3*175 3*300 2*45 3*18 14					
Sub-total Total				341 7,830	42,205	-437			1,583 6,586	23,113	18,490	14,416	65,318	60,695
1989	Kangal Seyitomer Hamitbat Ambarli Others	2 4 1,2 3,4,5,6	lignite lignite N. Gas N. Gas	150 150 2*100 4*138.8	315 (900) 405 (900) 300 (1200) 1,624 (3331)		Menzelet Kilickaya Adiguzel Derbent Yenice Others	1,2,3,4 1,2 1,2 1,2,3 1	4*30 2*60 2*31 3*18.7 12. 54	155 (590) 209 (332) 81 (280) 119 (257) 2 (122)	122 (515) 174 (227) 5 (15) 94 (201) 2 (92)			
Sub-total Total				892 8,722	3,533 45,738	-163			424 7,010	1,909 25,022	1,089 19,579	15,732	70,760	65,317
1990	Kemerko Catalagzi B Soma B Ambarli Orhanelli Denizli Others	1,2 2 5 1,2,3 1 2	Lignite Stone coal Lignite N. Gas Lignite Geothermal	2*210 150 165 3*172.7 210 20	504 (2520) 360 (900) 247 (990) 1,554 (3109) 441 (1260) 6 (120)		Ataturk Yenice Gezende Catalan Kralkizi Kuzgun Camligoze Others	1,2 2,3 1,2,3 1,2,3 1,2 1,2,3,4 1	2*300 2*12 3*50 3*51 2*45 4*5 16.2 342.8	1,680 (2200) 54 (122) 210 (528) 305 (509) 33 (146) 13 (36) 5 (88) 1,194	1,680 (1850) 35 (92) 51 (130) 163 (271) 25 (111) 0 (0) 5 (77) 718			
Sub-total Total				1,483 10,205	6,029 51,767				1,396 8,406	3,494 28,516	2,677 22,256	18,611	80,283	74,032
1991	Soma B Kemerko Adiyaman Can-Lapseki Others	6 3 1 1	Lignite Lignite	165 210 210 150	544 (990) 441 (1260) 63 (1260) 46 (923)		Ataturk Dicle Ozluce-Peni Batman Kurtun Beyko Others	3,4,5 1,2 1,2 1,2,3 1,2 1,2	3*300 2*55 2*85.5 3*62 2*40 2*5 183	2,860 (3310) 208 (298) 166 (87) 3*62 (182) (34)	2,600 (2275) 159 (228) 207 (145) (251) (95)			
Sub-total Total				735 10,940	6,167 57,934	5,073			1,640 10,046	6,910 35,426	5,366 27,622	20,986	93,360	85,556
1992	Bingol-Karlio Iskenderun Others	1 1,2,3,4	Import-coal	60 4*350	18 (360) 3,424 (7762)		Ataturk Urfa Others	6,7,8 1,2,3	3*300 3*16 5	2,060 (8850) 74	2,000 (7400) 0			
Sub-total Total				1,460 12,400	7,222 65,156	3,780			953 10,999	3,420 38,846	2,143 29,765	23,399	104,002	94,921
1993	Tekirdag Aliaga Others	1,2 1	Import-coal Import-coal	2*480 500	2,779 (5760) 811 (3000)		Ozkoy Kayraktepe Akkoy 1 Torul Others		150 420 60 100 90	146 132 (990) 87 (263) 86 (322) 839	99 85 (640) 57 (174) 35 (131) 297			
Sub-total Total				1,460 13,860	9,181 74,337	5,591			820 11,819	1,290 40,136	541 30,338	25,679	114,473	104,675

(NOTE) \* Annual Energy GWH: Commissioning year ( after next next year )  
\*\* Imported Coal fired power plants are included

TABLE A-1-1 CONSTRUCTION SCHEDULE OF POWER PLANTS IN TURKEY (2/5)

YEAR	Thermal Power Plant			Hydraulic Power Plant				TOTAL		
	Name of P. Station	Inst. capacity (MW)	Annual Energy (GWH)	Name of P. Station	Inst. Capacity (MW)	Annual Production Average	Energy (GWH) Firm	Installed Capacity (MW)	Annual Energy (GWH) Agerage	Firm
1994	Adiyaman-Golbasi Imported Coal P. Others	177 500	1,062 3,000 1,428	Karkamis Yedigöze Duzkesme Others	180 300 168	650 980 916 1,044	460 420 678			
Sub-total Total		677 14,537	5,490 79,827		648 12,262	3,590 43,726	1,558 31,896	26,799	123,553	111,723
1995	Cankiri-Orta Elbistan A 5,6 Import N Gas Others	150 2*340 1*600	900 2*1,950 3,600 600	Birecik	672	2,520	1,800			
Sub-total Total		1,430 15,967	9,000 88,827		672 12,934	2,520 46,246	1,800 33,696	28,901	135,073	122,523
1996	Amasra 1 Yatagan 4 Imported coal P. Imported N. Gas (Retirement)	150 210 350 600 -173	900 1,260 2,530 3,600 -920	Cizre Klavuzlu Alpaslan Boyapat-Kepez Ilisu-1	240 54 160 513 600	1,205 100 485 1,470 2,030	947 7 416 925 1,360			
Sub-total Total		1,137 17,104	7,370 96,197		1,567 14,501	5,290 51,536	3,655 37,351	31,605	147,733	133,548
1997	Amasra 2 Saray 1,2 Seyitomer B 1 Orhaneli 2 Imported Coal P. Imported Coal P. (Retirement)	150 2*150 150 210 2*350 480 -350	900 2*900 900 1,260 2*2,530 3,470 ---	Ilisu-2 (Retirement)	600 -250	1,800	1,090			
Sub-total Total		1,640 18,744	13,390 109,587		350 14,851	1,800 53,336	1,090 38,441	33,595	162,923	148,028
1998	Cayirhan B 1,2 Amasra 3,4 Elbistan B 1,2 Beysehir	2*150 2*150 2*340 340	2*900 2*900 2*1,950 1,950	Deriner-Artvin Demirkapi Borcka Mulatli Uzuncayir Lamas 3 Lamas 4 Tozkoy	670 105 300 115 72 16 22 120	2,120 365 1,039 445 309 84 109 347	1,340 130 600 255 171 40 48 148			
Sub-total Total		1,620 20,364	9,450 119,037		1,420 16,271	4,818 58,154	2,732 41,173	36,635	177,191	160,210
1999	Seyitomer B 2 Cayirhan B 3,4 Potansiyel 1 Soma C 1-3 Kemerkoç 4 Mugla Yoresi 1 Elbistan B 3,4 Ithal Kömür	150 2*150 150 3*165 210 210 2*340 350	900 2*900 900 3*900 1,260 1,260 2*1,950 2,530		0	0	0			
Sub-total Total		2,545 22,909	15,520 134,557		0 16,271	0 58,154	0 41,173	2,545	15,520	15,520

TABLE A-1-1 CONSTRUCTION SCHEDULE OF POWER PLANTS IN TURKEY (3/5)

YEAR	Thermal Power Plant			Hydraulic Power Plant				TOTAL		
	Name of P. Station	Inst. capacity (MW)	Annual Energy (GWH)	Name of P. Station	Inst. Capacity (MW)	Annual Production Average	Energy (GWH) Firm	Installed Capacity (MW)	Annual Energy Agerage	Energy Firm
2000	Potansiyel Soma C 4 Mugla Yoresi 2, 3 Ithal Komour Ithal Komour	3*150 165 2*210 350 2*480	3*900 990 2*1,260 2,530 3,470	Yamanli II Yamanli III Kahta Patopasa Tatlar Dutdere Ilica Indere Kirazlikopru Koprubasi Kolca Kocali Doganli	120 30 75 22 60 25 88 62 40 84 90 40 462	393 175 171 47 203 70 196 236 112 213 227 120 1,327	120 76 125 30 83 15 70 181 74 151 135 0 0			
Sub-total Total		2,345 25,254	12,210 146,767		1,198 17,469	3,490 61,644	1,060 42,233	3,543	15,700	13,270
2001	Potansiyel 5,6 Soma C 5,6 Mugla Yoresi. 4 Ithal Komur	2*150 2*165 210 3*350	2*900 2*990 1,260 3*2,530							
Sub-total Total		1,890 27,144	12,630 159,397		0 17,469	0 61,644	0 42,233	1,890	12,630	12,090
2002	Soma D 1-3 Elbistan C 1,2 Ithal Komur	3*165 2*340 350	3*990 2*1,950 2,530	Kargi Gursogut Yamula Hakkari Cukurca Gullubag Ayvali Baglik Bayram Ulubat Cinarcik Obruk CevizlikK Kadincik IV Kopru Peke Camlica I Dalaman Sandalcik Narli Beskonak Konaktepe Others	194 242 200 322 245 64 70 60 54 255 180 90 50 189 170 140 50 175 130 200 90 770	246 276 443 1,043 796 292 228 211 172 567 473 397 186 481 426 226 205 514 400 659 289 2,979	140 159 345 0 0 183 184 103 94 450 336 140 92 149 123 1 111 172 102 380 250 1,302			
Sub-total Total		1,525 28,669	9,400 168,797		3,940 21,409	11,509 73,153	4,816 47,049	5,465	20,909	14,216
2003	Soma D 4,5 Elbistan C 3,4 Ithal Komur	2*165 2*340 2*480	2*990 2*1,950 2*3,470	Akkoy II Buyukduz Artvin (Inanli) Arkun (Karakale) Beyler Laleli Ispir Aksu Kavsak Bendi Karyagmaz Kizkayasi Others	180 60 320 201 90 85 58 115 120 135 114 451	603 174 999 801 240 180 267 355 564 310 261 1724	399 90 698 614 95 49 249 212 295 239 200 825			
Sub-total Total		1,970 30,639	12,820 181,617		1,929 23,338	6,478 79,631	3,965 51,014	3,899	19,298	16,785

TABLE A-1-1 CONSTRUCTION SCHEDULE OF POWER PLANTS IN TURKEY (4/5)

YEAR	Thermal Power Plant			Hydraulic Power Plant				TOTAL		
	Name of P. Station	Inst. capacity (MW)	Annual Energy (GWH)	Name of P. Station	Inst. Capacity (MW)	Annual Production Energy (GWH) Average	Firm	Installed Capacity (MW)	Annual Energy (GWH) Agerage	Firm
2004	Potansiyel 7,8 Soma D 6 Elbistan D 1,2 Ithal Komour Ithal Komour	2*150 165 2*340 350 480	2*900 990 2*1,950 2,530 3,470	Meydancik Sarigol Durak Kesikkopru Camlica Silvan Others	53 139 120 63 110 300 1,034	144 280 547 375 495 1,500 4,669	57 48 228 268 209 1,240 2,070			
Sub-total Total		1,975 32,614	12,890 194,307		1,819 25,157	8,010 87,641	4,120 55,134	3,794	20,700	16,810
2005	Elbistan D 3,4 Ithal Komour Ithal Komour	2*340 350 2*480	2*1,950 2,530 2*3,470	Kayakopru Kizilagac Koroglu-Sevimli Palu Kozbuku 1 Topcam Yumrucaktas Zarova 2 Niksar Akkopru Dillek Beyler Kaletepe Kanadil B Kanadil 1 Kanadil 2 Others	55 63 150 78 100 90 87 128 97 115 105 100 60 55 103 103 854	157 257 443 413 283 182 487 247 560 343 386 240 215 178 371 362 3,376	129 39 272 290 166 138 418 1 426 176 321 95 166 115 240 233 1,365			
Sub-total Total		1,990 34,604	13,370 207,677		2,343 27,500	8,500 93,141	4,590 59,724	4,333	21,870	17,960
2006	Potansiyel 9, Nukleer	150 2*1,000	900 2*6,750	Gurpinar Kalekoy KayaJar Koclu Kovanlik Ordu Akimli Alarahan Bagistas Denizgolü Dereli Garzan Karakurt Kargi Others	50 183 83 65 75 55 110 120 188 105 60 90 100 78 586	128 963 176 184 207 215 483 335 1,040 300 230 355 355 390 2,394	86 712 149 153 137 165 338 211 730 78 103 180 191 298 1,389			
Sub-total Total		2,150 36,754	14,400 222,077		1,948 29,448	7,755 103,896	4,920 64,644	5,465	20,909	14,216
2007	Ithal Komur Nukleer	2*480 1,000	2*3,470 6,750	Besikkaya Cat Damlapinar Guzeldere Harmanli-Kura Inciilitas-Kura Kalekoy Alkumru Cetin Keskin Kigi Pervari Others	160 140 80 73 60 100 78 176 244 164 55 120 794	779 405 400 168 360 418 460 807 1,100 740 475 542 4,127	1 247 250 37 340 410 342 383 533 359 450 255 2,158			
Sub-total Total		1,960 38,714	13,690 235,767		2,244 31,692	10,781 114,677	5,765 70,409	4,204	24,471	19,455

TABLE A-1-1 CONSTRUCTION SCHEDULE OF POWER PLANTS IN TURKEY (5/5)

YEAR	Thermal Power Plant			Hydraulic Power Plant				TOTAL		
	Name of P. Station	Inst. capacity (MW)	Annual Energy (GWH)	Name of P. Station	Inst. Capacity (MW)	Annual Production Average	Energy (GWH) Firm	Installed Capacity (MW)	Annual Energy (GWH) Agerage	Firm
2 0 0 8	Potansiyel 10 Ithal Komur Ithal Komur Nukleer	150 4*350 480 1,000	900 4*2,530 3,470 6,750							
Sub-total Total		3,030 41,744	21,240 257,007		0 31,692	0 114,677	0 70,409	3,033	21,240	21,240





## **A-2 METEOROLOGICAL AND HYDROLOGICAL DATA**



## A-2 METEOROLOGICAL AND HYDROLOGICAL DATA

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Table A-2-1 Monthly Flow Volume at No. 1801 Gauging Station (unit: 10<sup>6</sup> m<sup>3</sup>)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
1935	83.27	134.33	156.13	141.86	143.30	112.52	65.97	50.28	44.76	51.91	103.74	164.84	1145.23
1936	73.70	189.66	248.24	217.28	142.59	73.51	56.61	48.08	41.40	44.82	73.31	119.38	1308.58
1937	97.63	75.29	143.38	259.06	164.15	82.84	65.98	55.63	43.77	42.84	40.17	41.33	1111.87
1938	58.65	67.56	133.78	231.53	137.81	80.61	62.38	48.26	44.68	43.93	40.82	51.14	1001.16
1940	120.41	93.63	171.57	236.95	108.59	72.21	54.00	45.79	40.25	42.30	49.06	109.33	1134.09
1941	107.78	147.89	249.09	167.31	100.43	67.87	57.33	48.40	42.41	42.80	40.88	40.92	1114.92
1942	45.90	61.34	270.37	241.15	120.24	63.37	50.89	46.14	40.71	41.33	69.41	58.99	1109.95
1943	75.10	57.87	86.33	239.99	145.90	84.60	60.15	52.14	44.57	43.41	42.68	41.35	974.61
1944	45.21	37.89	239.64	208.04	127.43	75.01	52.59	45.34	40.78	40.75	41.06	42.23	1015.98
1945	45.28	38.91	170.55	196.33	109.90	60.06	47.29	40.57	36.15	36.23	34.94	38.96	755.16
1946	40.68	41.77	140.56	173.94	163.12	68.12	53.87	42.82	36.52	123.02	35.92	38.64	960.98
1947	57.31	68.47	228.31	161.62	86.49	64.64	44.78	39.36	36.17	39.25	73.03	107.20	1007.36
1948	76.01	163.62	98.62	220.29	168.13	97.82	70.23	50.79	39.23	37.78	36.98	40.85	1098.36
1949	38.29	34.94	92.61	202.95	139.78	78.62	46.95	36.29	38.81	35.85	38.32	38.26	821.66
1950	36.28	61.29	200.28	198.37	193.51	73.28	46.98	36.86	34.35	54.64	35.23	36.18	1007.25
1951	36.44	53.99	153.23	141.13	160.94	103.12	56.96	40.56	39.98	46.85	46.59	44.05	926.63
1952	44.06	73.15	167.41	300.46	142.72	90.77	62.83	48.29	42.94	6.43	42.35	48.70	1070.12
1953	64.48	121.45	113.11	303.35	164.00	89.84	65.08	51.87	44.74	43.93	42.92	40.61	1145.40
1954	45.64	51.10	148.85	248.35	159.94	87.19	61.58	52.00	44.13	44.24	43.35	70.30	1054.87
1955	79.43	73.86	108.37	105.36	129.87	54.90	48.01	41.52	36.11	36.85	39.38	55.39	776.95
1956	54.99	106.06	130.56	199.96	129.87	70.55	56.25	47.82	43.23	42.58	41.26	42.72	965.86
1957	37.07	48.62	133.75	86.52	84.36	63.49	50.05	45.24	44.60	43.37	42.98	67.33	743.58
1958	121.37	106.40	198.66	188.57	119.78	84.40	56.53	56.89	52.23	51.06	47.32	49.53	1143.28
1959	58.33	50.01	116.76	151.61	99.76	73.75	54.00	49.51	44.86	47.60	45.83	45.17	835.98
1960	69.40	74.60	117.75	151.09	128.59	74.26	61.79	34.48	48.38	34.08	32.38	31.70	876.09
1961	33.26	38.15	53.06	76.11	50.77	34.74	30.27	39.38	27.98	28.50	27.66	38.55	468.44
1962	37.76	58.24	171.60	113.21	90.18	49.79	39.90	35.71	29.87	31.10	29.98	81.18	768.53
1963	148.33	153.91	175.42	207.86	162.55	113.48	65.51	48.27	45.14	42.38	39.05	38.56	1239.48
1964	32.35	31.38	99.93	66.23	49.32	39.74	32.05	27.57	27.23	28.18	28.39	33.35	695.71
1965	32.90	38.28	164.40	204.79	112.40	63.47	46.20	36.22	34.04	33.92	33.92	63.93	864.47
1966	238.51	167.56	198.85	218.50	120.95	65.53	53.50	44.80	42.41	41.52	40.48	110.00	1346.40
1967	108.10	67.94	133.20	221.75	146.54	79.61	62.43	48.95	43.76	40.97	47.22	74.00	1074.50
1968	88.91	88.82	358.19	304.51	140.55	80.10	59.68	47.16	43.10	42.76	48.46	79.28	1383.51
1969	80.00	68.45	267.62	221.40	189.06	93.36	64.61	51.84	43.67	41.38	39.10	60.49	1222.67
1970	60.55	112.01	180.31	136.05	72.79	53.36	42.54	36.10	33.65	32.75	41.76	60.36	861.23
1971	46.06	59.33	102.45	161.71	89.44	51.14	37.63	38.50	31.95	31.20	30.33	32.07	691.78
1972	28.99	28.35	60.64	91.39	90.68	49.44	33.14	28.60	29.98	33.33	33.31	29.52	543.38
1973	24.28	35.55	97.01	126.39	68.64	42.37	30.33	28.90	28.51	28.17	27.62	30.46	570.22
1974	28.78	28.49	103.60	87.83	58.25	34.85	27.55	27.12	26.52	28.20	27.94	42.60	521.75
1975	42.12	37.74	166.33	237.12	189.22	78.04	50.08	38.02	35.60	35.55	33.38	31.27	974.42
1976	43.08	37.80	114.38	269.52	160.45	93.94	53.94	44.28	46.00	52.77	43.84	96.19	1058.81
1977	51.40	113.85	216.02	240.39	159.38	78.93	56.16	42.25	38.28	38.11	36.81	39.36	1110.93
1978	206.59	133.18	184.22	205.76	138.24	70.77	48.99	41.79	36.72	46.49	51.30	73.16	1301.48
1979	62.44	62.91	259.03	387.28	277.28	105.73	71.47	56.21	44.66	43.65	42.84	63.06	1476.56
1980	75.76	93.23	312.62	178.92	136.77	79.99	49.59	39.36	38.41	34.82	44.44	127.85	1211.75
1981	134.09	62.02	111.79	194.69	150.08	65.98	45.83	40.30	40.01	37.26	27.37	26.84	926.25
1983	31.30	35.25	133.71	215.81	117.11	66.29	47.72	30.25	27.68	27.68	27.68	27.68	*****
TOTAL	3316.80	3703.45	7695.66	9234.94	6185.09	3510.93	2513.08	2073.54	1876.05	1975.34	2057.75	2874.55	45991.57
MEAN	69.10	77.16	160.33	192.39	128.86	73.14	52.36	43.20	39.08	41.15	42.87	59.89	978.54
MAX	238.51	169.66	358.19	387.28	277.28	112.52	71.47	56.89	52.23	123.02	103.74	164.84	1476.56
MIN	26.28	28.35	53.06	66.23	49.32	34.74	27.55	27.12	26.52	6.43	27.37	26.84	468.44

Table A-2-2 Monthly Flow Volume at No. 1802 Gauging Station (unit: 10<sup>6</sup> m<sup>3</sup>)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
1935	30.95	38.76	65.50	97.62	95.10	81.64	49.99	41.83	37.34	15.83	49.15	48.38	*****
1936	49.87	68.01	107.99	148.65	109.59	57.60	38.98	33.52	29.53	31.00	33.22	43.74	654.77
1937	35.77	37.59	46.18	160.46	115.73	56.16	41.43	37.14	32.75	42.77	37.92	40.05	760.79
1938	34.34	32.17	76.96	170.20	135.76	70.17	50.03	43.45	41.23	31.10	39.23	41.02	672.39
1939	48.06	51.70	80.17	178.98	107.30	68.45	44.16	34.62	32.45	35.70	40.75	49.71	767.33
1940	44.94	63.72	125.56	173.91	110.63	57.41	47.62	41.04	36.12	39.01	38.19	34.78	772.07
1941	34.98	37.80	102.72	190.50	129.44	57.68	38.45	33.36	34.21	40.10	53.99	51.25	804.50
1942	43.48	35.55	49.19	173.43	151.10	72.08	41.09	33.52	30.20	33.28	32.74	31.31	726.72
1943	32.09	43.02	102.36	129.20	133.63	80.14	44.41	36.42	33.01	33.45	35.94	33.72	759.40
1944	32.76	28.54	38.76	108.20	124.11	66.98	56.75	29.86	29.02	31.81	31.02	32.51	590.32
1945	29.51	28.68	53.03	103.48	127.27	58.98	36.51	31.23	29.76	33.36	30.85	31.67	594.42
1946	34.57	42.15	90.91	91.19	68.24	56.56	32.58	24.07	27.48	27.34	68.44	59.82	623.35
1947	48.24	48.22	48.54	147.61	174.17	105.45	50.55	40.09	37.57	37.71	33.87	34.39	806.20
1948	30.82	27.32	55.24	105.49	140.87	58.12	32.62	25.94	28.01	31.46	32.20	30.33	598.61
1949	25.06	27.35	71.56	117.67	132.58	53.18	38.12	28.89	27.81	31.45	28.82	27.76	608.28
1950	27.44	24.84	70.00	77.43	93.91	61.71	35.93	28.41	26.72	33.17	32.61	35.64	547.81
1951	35.67	54.92	68.47	185.98	120.24	50.82	27.83	22.65	18.27	20.94	22.80	23.80	672.39
1952	23.53	31.55	36.18	189.32	163.33	91.72	36.33	24.61	23.69	22.67	23.26	21.14	687.53
1953	22.89	27.86	85.40	163.33	*****	*****	*****	*****	*****	*****	*****	*****	*****
TOTAL	660.80	749.75	1394.51	2712.65	2225.03	1204.86	721.57	599.87	554.82	611.20	705.45	720.85	12439.49
MEAN	54.78	39.46	73.40	142.77	123.61	66.94	40.09	32.53	30.82	32.17	37.13	37.94	691.08
MAX	48.24	68.01	125.56	190.50	174.17	105.45	50.55	43.45	41.23	42.77	68.44	59.82	812.73
MIN	22.89	24.84	36.18	77.43	68.24	50.82	27.83	22.65	18.27	15.83	22.80	21.14	547.81



Table A-2-3 Monthly Flow Volume at No. 1803 Gauging Station (unit: 10<sup>6</sup> m<sup>3</sup>)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
1938	38.12	30.36	66.55	147.36	108.29	59.25	39.14	34.68	32.33	33.37	11.16	38.13	654.52
1939	38.47	38.82	60.11	147.35	86.50	57.71	36.42	30.52	29.01	31.42	31.32	33.75	630.11
1940	56.57	50.89	101.78	159.97	95.79	49.20	41.36	35.74	32.57	33.83	32.05	39.73	702.62
1941	32.03	29.25	72.43	165.57	103.05	46.25	32.20	29.42	28.57	31.71	41.53	40.31	652.43
1942	33.75	27.12	32.25	129.21	107.21	49.87	30.34	27.42	26.03	26.99	26.13	28.52	544.82
1943	29.04	27.11	54.65	73.81	73.96	41.12	26.60	25.32	24.42	24.42	24.42	28.52	544.82
TOTAL	207.99	203.55	387.77	823.27	574.79	303.40	206.06	183.30	172.93	157.33	176.93	212.71	3184.51
MEAN	34.67	33.93	64.63	137.21	95.80	50.57	34.34	30.55	28.82	31.47	29.49	35.45	636.90
MAX	38.47	50.89	101.78	165.57	108.29	59.25	41.36	35.74	32.57	33.83	41.63	40.31	702.62
MIN	29.04	27.11	32.25	73.81	73.96	41.12	26.60	25.32	24.42	26.99	11.16	28.52	544.82

Table A-2-4 Monthly Flow Volume at No. 1804 Gauging Station (unit: 10<sup>6</sup> m<sup>3</sup>)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
1940	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
1941	25.10	36.09	65.38	89.58	55.63	36.24	32.44	27.48	25.22	25.95	24.70	29.54	*****
1942	31.58	24.94	54.16	102.00	59.76	35.43	26.92	24.99	24.08	25.69	27.19	28.36	475.54
1943	27.43	24.65	29.38	81.75	56.73	33.64	27.35	25.42	23.59	24.53	23.54	24.69	465.84
1944	24.96	25.93	43.87	46.22	43.93	38.35	26.68	25.12	23.48	24.16	23.68	24.16	402.70
1945	24.69	22.31	25.34	47.74	42.67	27.50	23.92	23.01	22.03	22.79	22.14	23.22	367.35
1946	22.69	21.00	26.38	35.80	36.77	23.69	23.11	22.47	21.80	23.60	22.03	22.74	327.56
1947	22.71	21.05	36.40	33.72	24.83	27.19	24.05	22.39	22.04	22.66	23.30	24.45	304.82
1948	24.69	22.43	24.86	56.64	63.91	39.06	27.78	25.28	23.61	23.92	22.89	23.81	378.87
1949	24.00	21.99	30.99	43.88	43.68	23.92	22.65	22.42	21.80	22.58	21.98	23.03	322.91
1950	23.46	21.48	27.40	41.63	55.79	25.12	22.15	21.48	20.66	21.58	20.74	21.48	322.87
1951	21.56	19.50	35.17	26.96	32.76	28.90	23.66	21.45	20.74	21.56	20.74	21.61	293.60
1952	23.01	26.83	42.35	85.67	49.66	31.16	26.65	24.29	23.50	23.28	22.84	23.14	401.57
1953	23.49	21.63	24.35	75.45	55.50	38.23	28.28	25.44	24.08	24.51	23.72	24.21	388.89
1954	24.16	24.94	53.38	115.03	86.22	50.75	40.36	35.57	34.37	34.36	32.69	33.05	564.89
1955	34.04	29.76	35.19	41.78	*****	*****	*****	*****	*****	*****	*****	*****	*****
1956	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
1957	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
1958	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
1959	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
1960	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
1961	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
1962	14.78	13.57	53.09	44.74	34.79	21.00	17.30	15.91	15.45	12.11	12.42	14.62	285.19
1963	29.41	29.39	50.03	75.63	68.62	*****	*****	28.87	28.23	16.69	15.86	22.02	*****
1964	*****	*****	*****	52.85	39.67	29.21	19.77	17.73	18.71	20.01	19.34	19.55	*****
1965	19.36	18.87	60.18	80.12	55.84	31.21	25.26	24.40	22.08	24.21	23.20	24.91	406.65
1966	34.85	34.50	49.98	69.36	50.89	30.35	26.62	27.40	25.79	25.31	24.15	27.53	488.74
1967	30.69	25.89	39.96	103.16	95.14	45.59	34.79	33.88	29.06	29.39	30.22	34.04	532.32
1968	30.72	36.58	93.88	130.79	90.93	60.24	36.53	34.47	35.56	*****	*****	*****	*****
TOTAL	540.39	523.33	901.71	1480.50	1143.70	673.79	535.25	526.49	505.70	495.16	481.62	519.31	6970.16
MEAN	25.73	24.92	42.94	67.30	54.46	33.69	26.76	25.07	24.08	23.58	22.93	24.73	387.23
MAX	34.85	36.58	93.88	130.79	95.14	60.24	40.36	35.57	35.56	34.36	32.69	34.04	564.89
MIN	14.78	13.57	24.35	26.96	24.83	21.00	17.30	15.91	15.45	12.11	12.42	14.62	285.19

Table A-2-5 Monthly Flow Volume at No. 1805 Gauging Station (unit: 106 m<sup>3</sup>)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
1938	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
1939	159.31	149.91	500.09	493.10	216.03	110.05	76.03	63.18	56.88	61.52	56.58	74.76	2017.43
1940	168.08	278.58	327.45	471.61	205.48	119.78	81.10	64.62	59.54	59.34	76.86	203.76	2112.62
1941	232.91	286.45	467.83	297.97	153.77	92.69	73.46	63.25	56.58	59.37	54.56	69.49	1908.31
1942	98.85	193.92	357.50	335.98	191.37	95.72	70.43	59.59	53.92	58.80	122.68	86.34	2128.09
1943	257.91	164.51	175.39	619.19	303.51	138.52	83.69	65.78	55.80	57.34	53.67	58.09	2029.22
1944	74.56	218.50	671.05	524.71	243.31	115.44	74.96	61.51	53.47	53.47	55.56	58.32	2204.55
1945	112.85	89.69	150.79	324.31	189.28	86.37	60.91	51.61	46.13	47.55	46.61	70.29	1274.37
1946	69.83	141.90	338.88	407.26	339.46	119.45	74.92	58.96	51.28	69.61	50.71	71.52	1793.60
1947	211.62	269.50	479.12	248.92	125.89	87.28	64.35	52.07	47.37	51.74	268.33	308.16	2214.35
1948	190.14	566.66	278.86	596.21	396.88	154.94	91.35	71.51	60.37	57.95	55.70	35.20	2575.79
1949	72.35	76.79	272.98	457.46	249.90	91.82	65.51	52.02	49.78	47.45	50.45	55.02	1541.62
1950	61.81	71.88	230.75	253.45	283.91	102.54	67.69	52.82	47.25	50.96	45.19	49.41	1317.66
1951	96.47	72.12	258.31	224.62	186.78	95.22	64.45	53.80	50.43	55.22	59.25	146.10	1362.78
1952	113.97	329.26	519.06	589.11	235.87	128.82	83.61	64.89	56.64	55.11	69.61	102.37	2348.50
1953	192.29	439.02	326.96	964.86	404.05	176.01	99.07	72.26	60.59	56.99	60.28	53.75	2906.05
1954	127.40	127.89	377.22	628.12	313.40	128.79	81.76	64.11	54.97	52.74	64.36	240.37	2251.13
1955	212.61	162.00	273.08	199.14	186.15	84.11	91.68	57.50	45.65	47.47	65.49	70.80	1646.34
1956	82.14	293.55	272.08	390.36	204.89	94.78	66.30	54.68	51.26	50.19	50.11	53.86	1860.20
1957	51.35	68.62	332.41	115.15	126.20	76.43	52.96	45.90	45.17	46.41	46.41	249.45	1253.96
1958	522.82	268.49	640.11	427.20	191.10	113.58	70.41	57.37	51.59	50.31	47.63	53.70	2494.32
1959	201.89	116.37	225.16	334.64	156.51	94.96	61.82	51.92	47.73	50.00	47.24	56.82	1444.87
1960	123.50	105.75	283.84	371.21	240.44	106.49	68.77	55.49	50.98	51.11	39.67	186.30	1560.68
1961	62.99	149.81	110.69	153.46	92.27	57.04	43.47	39.17	39.99	40.31	39.67	186.30	1015.14
1962	88.30	266.27	437.64	244.15	205.20	93.82	65.04	52.82	47.35	48.63	45.41	30.06	1904.69
1963	394.80	464.66	405.48	480.47	410.75	256.54	121.87	83.29	72.12	68.10	61.13	62.48	2881.67
1964	55.48	62.97	192.77	125.22	101.68	69.72	51.06	46.42	44.34	42.94	56.36	67.12	916.06
1965	90.91	150.67	366.19	443.06	222.46	113.25	71.88	59.75	53.17	53.94	56.33	139.73	1821.35
1966	706.26	319.42	371.95	421.11	229.02	114.95	84.88	69.79	63.36	73.45	73.45	298.01	2820.09
1967	246.78	137.45	308.06	412.99	309.52	134.26	89.06	69.23	62.74	62.02	82.81	159.87	2074.80
1968	271.46	285.40	731.64	499.05	225.31	128.35	82.86	74.04	73.13	65.60	109.05	280.79	2826.46
1969	260.85	172.27	540.09	459.99	378.08	151.93	96.73	76.32	68.79	65.80	65.66	188.90	2523.41
1970	134.11	277.69	367.80	239.76	130.43	86.32	70.90	59.05	54.59	59.04	85.10	94.36	1659.15
1971	68.20	74.30	205.33	365.63	161.28	83.31	57.52	54.81	47.94	46.06	48.38	54.62	1267.38
1972	47.61	60.08	111.32	197.63	232.35	96.26	61.91	52.89	48.87	55.12	46.48	42.87	1053.40
1973	41.01	69.15	143.20	197.13	134.05	74.33	49.21	40.00	39.06	40.12	39.39	59.25	923.91
1974	66.80	59.40	211.80	160.89	99.42	59.44	44.46	44.18	46.16	53.90	54.20	180.72	1061.39
1975	188.43	135.91	325.65	584.58	470.61	147.06	98.71	72.58	60.55	62.27	59.73	63.46	2269.55
1976	164.37	130.43	230.83	487.47	297.54	148.69	92.78	82.49	69.52	83.79	88.33	243.49	2119.73
1977	132.30	302.94	438.31	465.87	342.51	137.20	94.99	73.43	71.85	67.82	63.94	75.57	2266.73
1978	237.66	394.90	380.88	477.79	275.82	130.86	82.42	66.83	60.65	89.44	75.89	173.58	2446.53
1979	531.84	292.61	223.66	332.87	172.78	131.97	81.47	60.44	53.17	55.94	94.31	176.07	2107.14
1980	236.72	195.13	614.33	692.32	522.63	204.78	113.95	81.63	75.72	75.72	71.29	133.52	3014.28
1981	338.52	315.79	568.34	339.47	278.20	157.44	98.84	74.36	75.57	76.56	86.22	395.89	2805.21
1982	247.63	145.47	222.73	395.16	285.00	141.62	103.96	77.42	72.05	76.30	61.02	62.29	1890.61
1983	115.03	129.16	352.12	491.79	253.41	145.04	91.43	68.65	57.43	*****	*****	*****	*****
TOTAL	8142.71	9083.25	15770.16	18040.46	10974.10	5282.07	3474.63	2774.44	2505.77	2542.67	2961.03	5787.16	85532.16
MEAN	180.95	201.85	350.45	400.90	243.87	117.38	77.21	61.65	55.68	57.79	67.30	128.60	1943.91
MAX	706.26	566.66	731.64	964.86	522.63	256.54	121.87	83.29	75.57	89.44	268.33	395.89	3014.28
MIN	41.01	59.40	110.69	113.15	92.27	57.04	43.47	39.17	39.06	40.12	39.39	42.87	916.06

Table A-2-6 Monthly Flow Volume at No. 1806 Gauging Station (unit: 10<sup>6</sup> m<sup>3</sup>)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
1938	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
1939	161.47	137.64	270.65	421.68	305.94	184.03	149.03	128.95	116.63	116.09	106.91	120.92	157.82
1940	152.28	207.13	266.21	485.40	249.12	196.87	150.49	124.58	107.22	108.34	127.43	190.70	2219.97
1941	172.64	220.16	312.45	368.95	256.91	164.81	143.19	125.88	110.79	108.88	102.25	100.05	2385.76
1942	104.23	140.31	375.03	485.56	307.90	168.77	136.06	119.95	110.49	120.67	188.07	155.70	2136.97
1943	172.12	144.56	184.08	518.56	402.33	208.58	153.74	131.76	113.88	116.22	113.45	106.66	2412.75
1944	124.43	196.76	444.02	403.76	353.97	218.31	162.05	138.58	118.18	114.58	110.91	108.89	2367.93
1945	128.21	121.07	155.86	345.63	299.14	166.74	123.13	106.94	95.96	93.56	89.40	116.54	2494.23
1946	99.41	114.01	202.39	325.96	364.48	189.58	143.43	120.41	102.12	102.66	93.41	116.14	1844.19
1947	166.71	183.68	311.21	224.63	162.35	143.51	112.74	98.44	91.42	88.56	259.13	277.37	2119.75
1948	158.36	219.45	176.87	428.39	416.02	266.26	162.17	135.17	113.63	105.88	94.09	89.67	2365.97
1949	85.39	82.81	216.41	323.50	316.56	159.89	110.88	100.54	91.70	88.59	86.03	94.87	1762.98
1950	87.32	84.99	226.05	283.15	342.06	160.44	127.81	106.67	97.77	96.36	86.11	85.53	1784.27
1951	101.50	80.94	175.42	171.75	213.43	149.96	118.01	98.12	89.63	92.48	98.89	143.28	1533.41
1952	107.38	173.56	288.33	449.73	301.90	188.54	145.21	121.83	104.44	99.94	107.50	143.70	2231.86
1953	171.92	237.09	188.19	620.31	430.00	269.62	173.55	141.90	111.84	110.76	99.75	89.80	2654.52
1954	110.06	119.57	286.98	479.72	389.40	200.31	150.09	126.18	112.42	106.61	128.92	221.69	2451.94
1955	209.09	154.36	180.56	204.26	235.69	123.64	106.39	123.64	93.99	90.64	95.40	99.91	2744.46
1956	107.32	173.05	170.52	304.07	229.17	148.13	113.60	98.64	89.27	*****	*****	*****	*****
1957	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
1958	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
1959	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
1960	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
1961	99.97	138.18	152.70	212.59	161.08	119.54	108.88	94.57	88.82	93.59	88.28	93.86	1524.49
1962	125.44	174.27	362.85	275.12	265.59	164.27	130.27	109.65	98.85	95.57	88.62	225.48	2117.98
1963	186.17	256.85	264.94	351.48	374.80	301.59	192.70	154.99	138.94	130.52	116.56	112.17	2581.50
1964	93.66	101.97	226.14	181.45	177.76	145.65	114.77	101.87	96.01	93.67	99.69	136.11	1568.56
1965	138.51	155.57	352.00	394.85	299.49	222.55	167.27	141.54	123.15	121.56	112.68	139.79	2370.85
1966	368.34	223.12	273.30	339.60	285.56	201.69	162.96	141.62	127.23	138.08	136.72	244.56	2622.78
1967	186.42	127.33	247.30	404.61	406.94	227.93	180.18	155.81	136.62	130.26	175.63	167.68	2546.92
1968	197.87	202.49	418.82	472.18	327.97	247.16	172.53	155.24	141.10	136.01	189.06	250.67	2908.91
1969	242.82	186.80	504.14	428.54	485.74	270.79	205.82	178.33	150.86	146.59	134.71	207.39	3150.52
1970	183.13	208.16	284.08	270.17	218.42	171.66	144.89	121.98	109.05	120.03	144.89	141.64	2118.11
1971	128.04	115.58	201.34	303.77	230.94	172.05	133.40	116.22	101.29	101.85	97.45	114.99	1816.91
1972	97.17	97.28	176.24	262.39	268.14	220.96	160.47	129.42	118.28	121.06	107.02	99.44	1857.86
1973	91.25	101.74	151.19	190.96	181.03	134.84	103.98	91.43	86.26	86.66	81.80	90.37	1391.53
1974	78.99	84.26	210.11	179.41	169.93	112.95	92.38	84.40	80.12	92.42	94.78	145.27	1424.92
1975	113.88	101.34	252.69	465.52	432.52	219.03	165.87	136.35	115.43	109.95	103.34	109.30	2325.02
1976	130.70	123.80	197.13	341.57	288.07	194.82	138.47	116.75	121.72	135.80	135.74	198.28	2122.67
1977	137.98	218.83	268.94	336.61	334.28	201.83	153.01	127.33	117.89	117.80	106.82	110.50	2231.63
1978	189.08	242.76	278.29	331.78	285.36	190.77	144.38	119.72	110.50	121.69	111.90	148.43	2294.65
1979	224.78	202.31	197.34	222.89	204.95	185.92	144.05	117.51	106.51	*****	*****	*****	*****
TOTAL	5433.70	5854.07	9450.49	12810.29	10974.97	7039.57	5327.91	4525.50	4060.01	3918.01	4195.10	5354.51	75470.79
MEAN	146.86	158.22	255.42	346.22	296.62	190.26	144.00	122.31	109.73	108.83	116.53	144.72	2156.31
MAX	368.34	256.85	504.14	620.31	485.74	301.59	205.82	178.33	158.86	146.59	259.13	277.37	3150.52
MIN	78.99	80.94	151.19	171.75	161.08	112.85	92.38	84.40	80.12	86.66	81.80	85.53	1391.53

Table A-2-7 Monthly Flow Volume at No. 1812 Gauging Station (unit: 10<sup>6</sup> m<sup>3</sup>)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
1954	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
1955	22.85	19.11	24.83	30.90	56.53	18.25	16.15	16.37	15.27	24.69	22.63	22.71	246.84
1956	14.95	17.56	22.85	*****	*****	*****	*****	*****	*****	18.64	18.04	16.37	*****
1957	15.21	14.39	33.60	25.93	25.66	22.24	14.68	12.86	13.25	18.64	18.04	16.37	217.30
1958	13.07	13.35	20.84	50.00	34.39	29.00	18.29	18.24	16.93	17.33	16.25	16.61	264.50
1959	16.26	12.68	30.40	38.02	28.71	23.66	16.74	15.40	14.80	15.83	15.37	14.89	242.56
1960	14.97	21.50	21.88	62.03	38.49	22.89	19.58	18.75	17.47	16.23	15.63	15.03	284.24
1961	15.05	14.32	18.56	22.73	17.28	18.27	13.95	11.65	11.28	11.44	11.28	12.70	178.50
1962	11.12	11.06	36.37	33.28	27.72	17.70	15.24	14.95	14.02	14.46	13.82	17.44	227.17
1963	21.91	19.26	29.27	52.46	47.92	41.19	29.25	24.16	22.27	22.34	20.89	20.49	351.40
1964	17.84	16.56	44.11	37.42	30.24	23.22	16.82	15.51	16.04	15.75	14.64	15.91	263.87
1965	14.87	13.02	47.54	53.65	42.18	26.70	21.51	19.45	17.78	19.20	18.79	20.92	315.61
1966	25.47	25.50	36.02	54.38	40.85	24.88	21.75	19.66	20.45	20.49	19.44	21.12	331.02
1967	20.60	17.32	27.40	77.73	66.61	32.61	28.36	25.26	22.37	23.09	22.71	24.75	388.80
1968	21.88	24.28	61.52	118.64	66.16	43.68	30.00	28.52	25.30	26.01	25.40	27.43	498.81
1969	25.87	22.79	76.71	80.30	80.41	46.22	33.61	28.71	26.57	27.99	26.72	29.27	505.17
1970	30.40	30.70	45.21	52.20	33.96	24.62	21.21	19.50	19.03	19.79	20.74	21.32	338.69
1971	19.18	18.68	25.10	37.48	26.38	23.04	15.88	18.67	16.77	17.62	17.31	16.55	252.67
1972	16.69	15.61	24.33	38.96	39.24	55.62	24.29	20.25	18.48	19.23	18.01	15.96	306.88
1973	15.34	15.00	20.49	25.40	28.44	19.23	11.28	11.30	11.53	15.53	14.88	15.67	204.00
TOTAL	353.41	342.68	647.05	891.34	711.17	512.83	368.60	339.19	319.59	374.57	360.16	375.89	5418.04
MEAN	18.60	18.04	34.06	49.52	39.51	28.49	20.48	18.84	17.76	18.73	18.01	18.79	301.00
MAX	30.40	30.70	76.71	118.64	80.41	55.62	33.61	28.71	26.57	27.99	26.72	29.27	505.17
MIN	11.12	11.06	18.56	22.73	17.28	17.70	11.28	11.30	11.28	11.44	11.28	12.70	178.50

Table A-2-8 Monthly Flow Volume at No. 1813 Gauging Station (unit: 106 m<sup>3</sup>)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
1962	*****	*****	*****	*****	*****	*****	*****	*****	*****	4.553	4.147	5.276	*****
1963	3.991	4.548	18.883	11.586	9.723	6.998	6.267	6.857	6.376	6.964	6.195	7.787	96.155
1964	8.383	7.467	14.945	21.669	21.347	20.010	14.385	11.758	11.197	11.410	10.083	10.392	163.045
1965	7.178	6.504	28.712	16.148	12.026	9.435	7.660	7.205	7.335	7.178	6.836	7.553	123.671
1966	7.607	6.266	28.793	24.261	18.374	11.405	10.285	9.374	8.709	9.482	9.020	9.669	153.244
1967	11.731	12.604	16.606	20.399	15.669	10.757	10.526	10.365	11.094	10.312	9.357	10.339	149.759
1968	11.865	9.647	11.892	37.921	27.454	15.915	15.776	15.963	14.541	12.990	11.871	13.633	199.468
1969	12.642	14.104	41.970	62.441	37.283	26.983	17.651	17.142	14.437	14.758	14.126	15.106	288.644
1970	12.547	10.765	45.881	44.816	36.882	21.565	18.347	16.526	14.930	15.508	14.593	15.187	267.347
1971	16.472	16.475	21.481	21.073	15.776	12.468	10.687	10.526	9.124	10.794	11.249	11.356	167.480
1972	9.642	10.098	12.696	15.656	11.812	11.871	7.419	8.116	7.154	7.912	7.429	7.371	117.174
1973	6.784	6.841	15.811	13.268	17.195	22.983	10.623	8.536	8.618	8.823	8.712	9.034	137.229
1974	7.941	7.504	9.720	8.976	10.122	7.426	5.089	4.923	4.772	6.045	5.467	6.147	84.132
1975	5.547	5.213	11.212	13.377	8.882	4.754	4.403	5.220	7.133	*****	*****	*****	*****
TOTAL	122.132	118.136	278.602	311.592	242.542	182.570	139.116	132.511	125.422	126.728	118.885	128.831	1947.350
MEAN	9.395	9.087	21.431	23.969	18.657	14.044	10.701	10.193	9.648	9.748	9.145	9.910	162.279
MAX	16.472	16.475	45.881	62.441	37.283	26.983	18.347	17.142	14.930	15.508	14.593	15.187	288.644
MIN	3.991	4.548	9.720	8.976	8.882	4.754	4.403	4.923	4.772	4.553	4.147	5.276	84.132

Table A-2-9 Monthly Flow Volume at No. 1822 Gauging Station (unit: 10<sup>6</sup> m<sup>3</sup>)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
1968	53.47	46.07	157.62	171.05	217.52	102.50	68.21	55.28	49.06	46.93	41.15	57.76	1062.43
1969	53.71	62.94	101.21	126.48	89.82	59.39	38.84	31.93	30.80	37.78	39.54	33.56	711.95
1970	37.50	30.79	50.69	85.06	74.47	45.37	28.93	26.25	24.86	26.73	27.84	30.71	483.21
1971	27.71	26.75	49.51	81.42	79.13	91.31	39.21	25.16	27.89	32.95	31.15	33.61	545.79
1972	38.30	27.55	43.70	68.11	67.49	31.29	14.49	13.43	14.96	19.38	20.38	25.15	384.23
1973	30.70	28.07	59.00	66.73	57.43	18.79	13.77	15.68	18.87	20.68	22.15	24.06	375.94
1974	24.11	22.21	69.41	154.79	172.84	71.31	41.31	29.93	27.01	29.63	29.45	29.37	701.35
1975	27.14	23.95	58.66	149.06	142.30	67.99	28.39	21.89	25.99	37.16	35.01	42.79	660.35
1976	32.81	54.92	92.04	138.17	150.53	62.84	34.27	27.06	27.40	31.78	32.30	34.82	718.94
1977	55.29	51.63	77.39	121.57	123.41	61.60	31.47	25.95	30.09	33.32	36.05	43.99	671.76
1978	54.59	63.47	75.27	94.66	80.17	72.20	36.92	26.40	23.64	26.31	44.06	41.69	639.38
1979	44.76	43.27	96.66	182.69	245.26	97.72	54.44	40.17	41.39	50.52	41.94	50.17	988.99
1980	43.94	42.98	129.83	124.77	144.55	113.11	53.83	36.73	33.49	39.11	41.08	73.60	877.04
1981	52.36	63.85	58.43	179.85	135.23	68.62	39.98	31.48	36.18	35.65	34.72	25.30	761.63
1982	36.78	40.62	63.56	120.35	103.44	55.87	23.95	16.81	22.80	*****	*****	*****	*****
1983	593.15	629.07	1182.98	1864.75	1883.59	1019.92	542.00	424.15	434.43	467.92	476.81	606.10	9582.97
TOTAL	39.54	41.94	78.37	124.32	125.57	67.99	36.13	28.28	28.96	33.42	34.06	40.41	684.50
MEAN	54.59	63.85	157.62	182.69	245.26	113.11	68.21	55.28	49.06	50.52	44.06	73.60	1062.43
MAX	24.11	22.21	43.70	66.73	57.43	18.79	13.77	13.43	14.96	19.38	20.38	24.06	375.94
MIN													

Table A-2-10 Monthly Flow Volume at No. 1823 Gauging Station (unit: 10<sup>6</sup> m<sup>3</sup>)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
1973	15.24	15.00	20.49	25.40	28.44	19.23	11.28	11.30	11.53	15.53	14.88	15.67	204.00
1974	13.20	12.29	33.00	45.75	29.94	15.09	12.16	13.77	13.89	12.80	14.05	15.99	231.93
1975	13.15	12.60	29.86	96.99	122.30	35.89	29.88	22.20	15.94	21.53	19.65	19.12	438.73
1976	16.23	15.23	21.08	74.57	61.74	35.72	23.28	18.88	19.70	25.61	17.88	20.33	350.25
1977	16.07	32.55	42.08	60.03	70.31	30.51	21.75	18.27	19.10	22.34	19.70	19.50	375.50
1978	17.14	31.98	46.79	61.85	45.21	26.85	20.38	17.95	18.43	22.66	21.18	22.71	353.13
1979	23.52	36.63	40.39	42.33	33.24	31.62	25.30	23.25	17.39	21.11	20.58	20.73	336.28
1980	17.06	19.59	50.27	87.84	105.64	37.92	29.30	27.78	25.69	25.47	25.01	28.77	479.34
1981	27.91	25.69	54.34	43.99	57.37	43.47	31.52	25.71	26.49	27.05	24.91	30.77	419.25
1982	28.47	23.13	34.82	91.47	46.98	33.41	28.04	25.36	21.15	23.41	19.88	21.24	397.37
1983	19.31	19.12	41.30	49.27	51.85	27.09	15.45	14.62	16.30	*****	*****	*****	*****
TOTAL	207.31	242.12	414.43	679.49	653.02	336.60	248.34	219.09	205.62	220.51	197.72	214.83	3585.76
MEAN	18.85	22.01	37.68	61.77	59.37	30.60	22.58	19.92	18.69	22.05	19.77	21.48	358.58
MAX	28.47	36.63	54.34	96.99	122.30	43.47	31.52	27.78	26.49	27.05	25.01	30.77	479.34
MIN	13.15	12.29	20.49	25.40	28.44	15.09	11.28	11.30	11.53	12.80	14.05	15.67	204.00



Table A-2-11 Monthly Flow Volume at No. 1818 Gauging Station (unit: 10<sup>6</sup> m<sup>3</sup>)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
1965	*****	*****	*****	*****	*****	*****	*****	*****	*****	178.52	176.67	304.68	*****
1966	1298.85	592.53	696.30	782.61	535.59	345.17	269.84	224.75	206.31	192.44	214.25	581.14	5939.80
1967	508.98	320.28	687.14	905.82	806.54	396.52	291.91	243.10	217.02	209.72	293.39	382.19	5262.41
1968	620.70	643.08	1363.39	1074.47	615.00	399.69	282.03	251.60	231.80	219.84	378.73	760.92	6841.24
1969	691.11	444.70	1525.15	1001.20	959.56	485.22	347.93	289.87	251.08	234.02	215.76	534.76	6679.77
1970	402.88	593.05	786.15	582.94	398.30	289.28	242.16	200.96	181.65	211.03	264.13	272.09	4424.64
1971	226.71	231.76	446.08	838.86	448.42	296.14	230.11	213.61	177.52	170.45	177.03	197.51	3644.20
1972	164.61	200.23	360.24	511.06	588.74	359.94	251.97	208.95	196.30	189.12	171.72	161.51	3362.39
1973	151.96	199.32	352.08	452.91	376.70	250.72	170.03	149.76	149.54	139.19	131.12	174.67	2698.01
1974	148.16	168.77	512.70	386.38	314.51	201.83	159.77	154.26	151.61	162.37	153.15	472.53	2986.05
1975	386.12	290.44	654.31	1234.92	1081.90	456.02	286.08	231.02	192.58	190.39	182.68	195.14	5381.60
1976	372.95	326.32	459.01	922.67	655.86	398.22	262.54	221.99	205.07	228.89	271.50	531.19	4856.20
1977	337.74	609.90	788.66	970.88	756.09	381.46	278.69	217.32	205.79	198.18	183.24	204.85	5132.78
1978	554.86	748.31	741.31	917.91	629.94	341.19	239.76	197.96	183.48	247.09	219.06	401.16	5422.03
1979	850.61	546.83	464.49	507.69	433.04	360.46	268.88	204.80	178.10	*****	*****	*****	*****
1980	*****	*****	*****	*****	*****	*****	*****	*****	*****	226.95	215.00	522.51	*****
1981	791.22	726.54	1183.94	742.78	656.64	450.32	346.38	256.29	228.80	243.74	249.04	809.96	6685.64
1982	497.49	501.54	448.68	728.44	591.49	356.36	281.06	232.15	215.89	219.86	189.22	190.74	4232.90
1983	249.85	280.21	658.80	984.53	552.53	338.08	246.56	195.42	168.41	*****	*****	*****	*****
TOTAL	8254.81	7223.81	11828.42	13546.05	10398.86	6086.41	4445.50	3693.19	3340.96	3461.81	3685.69	6497.56	73549.66
MEAN	485.58	424.93	695.79	796.83	611.70	358.02	261.50	217.25	196.53	203.64	216.81	382.21	4903.31
MAX	1298.85	748.31	1363.39	1234.92	1081.90	485.22	347.93	289.27	251.08	247.09	378.73	809.96	6841.24
MIN	148.16	168.77	352.08	386.38	314.51	201.83	159.77	149.76	149.54	139.19	131.12	161.51	2698.01

Table A-2-12 Monthly Total Precipitation at Seyhli Meteorological Station (unit: mm)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
1969	50.5	35.5	54.2	52.0	84.1	10.0	2.9	10.6	8.3	14.7	39.5	124.5	486.8
1970	30.1	29.1	30.2	20.3	48.7	32.1	1.7	0.0	3.3	55.9	43.9	17.9	313.2
1971	18.3	23.0	37.5	90.5	18.4	25.9	45.2	33.4	0.0	19.8	70.8	30.3	413.1
1972	10.4	28.9	20.2	81.0	40.7	59.5	7.9	8.7	35.6	25.7	26.9	2.4	347.9
1973	11.6	75.4	71.5	62.7	64.3	38.5	7.2	0.0	0.0	2.5	31.4	32.9	400.0
1974	17.9	14.7	40.0	93.5	31.9	9.7	0.0	34.0	2.8	22.2	40.6	66.6	373.9
1975	59.0	26.1	54.1	218.1	45.9	39.3	4.1	0.0	7.5	7.5	26.8	26.7	515.1
1976	50.2	12.0	21.6	119.7	71.3	19.9	16.7	0.0	28.4	79.8	42.2	26.4	488.2
1977	32.0	30.1	60.8	91.2	44.5	15.4	6.0	0.0	36.1	35.0	5.8	39.0	395.9
1978	121.3	50.7	67.1	60.5	22.7	16.4	0.0	0.0	9.6	41.5	0.6	34.3	444.7
1979	46.1	6.2	35.2	44.4	27.8	13.2	12.2	0.0	5.6	5.1	38.1	69.9	303.8
1980	38.7	25.8	125.2	56.1	45.3	1.3	2.9	17.7	1.3	10.7	15.0	36.0	376.0
1981	76.8	45.3	47.3	24.4	51.3	42.2	9.3	0.0	3.2	22.0	24.6	78.9	425.3
1982	13.5	13.2	41.8	64.5	25.1	18.2	2.6	11.4	1.6	27.5	12.9	20.6	252.9
1983	73.0	21.7	42.7	84.9	48.5	27.2	0.8	0.0	0.9	27.4	50.6	46.9	424.6
1984	58.1	18.4	48.4	36.5	13.7	23.6	6.4	0.9	1.2	0.8	22.3	23.8	254.1
1985	13.0	52.0	33.5	38.5	31.2	5.2	2.1	0.0	0.0	72.2	*****	*****	*****
TOTAL	720.5	508.1	831.3	1258.8	717.4	397.6	128.0	116.7	145.4	470.3	492.0	677.1	6215.5
MEAN	42.4	29.9	48.9	74.0	42.2	23.4	7.5	6.9	8.6	27.7	30.7	42.3	388.5
MAX	121.3	75.4	125.2	218.1	84.1	59.5	45.2	34.0	36.1	79.8	70.8	124.5	515.1
MIN	10.4	6.2	20.2	20.3	13.7	1.3	0.0	0.0	0.0	0.8	0.6	2.4	252.9

Table A-2-13 Monthly Total Precipitation at Bakirdag Meteorological Station (unit: mm)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
1960	66.7	51.8	32.7	81.2	31.8	47.8	2.1	1.0	10.0	25.1	55.2	14.3	419.7
1961	32.8	16.1	28.3	7.1	34.5	14.5	2.5	0.0	37.8	9.2	26.9	79.7	289.4
1962	6.1	45.4	47.0	56.2	65.9	3.0	0.0	0.0	0.0	27.4	8.9	77.0	336.9
1963	92.3	34.9	42.1	46.8	58.9	34.1	11.5	0.0	30.7	11.3	20.1	6.7	389.4
1964	11.0	18.0	75.8	1.6	72.4	59.3	0.0	3.4	16.8	0.5	55.6	30.7	343.1
1965	25.1	32.8	78.9	61.1	21.2	32.9	2.2	0.0	2.9	38.4	34.7	55.4	385.6
1966	100.3	16.4	31.9	30.0	51.3	9.6	0.0	12.5	12.0	26.8	38.4	71.9	401.1
1967	39.0	20.3	43.9	19.0	71.3	25.7	8.1	0.0	0.0	12.0	72.1	19.4	330.8
1968	72.5	33.0	44.0	12.5	44.3	49.8	0.0	25.0	51.9	54.6	37.1	54.1	478.8
1969	24.8	53.1	37.1	33.6	64.2	51.7	0.0	0.0	2.1	5.1	50.8	44.0	366.5
1970	28.9	24.8	24.1	12.8	29.6	35.1	2.9	0.0	14.5	51.8	37.9	23.4	285.8
1971	8.9	12.1	26.9	33.4	37.9	42.2	6.3	10.4	0.0	11.5	45.5	20.8	255.9
1972	10.4	12.3	2.9	51.7	30.4	69.8	7.0	8.0	12.4	26.5	10.6	1.1	243.1
1973	8.8	18.5	33.3	43.8	36.1	32.8	8.4	0.0	0.0	3.4	13.9	30.1	229.1
1974	29.3	13.3	39.2	71.1	27.5	12.6	0.0	40.4	18.3	9.1	23.7	46.0	330.5
1975	39.4	20.4	14.7	112.2	58.8	55.0	0.0	0.0	0.0	0.0	28.4	48.8	387.3
1976	33.6	20.7	4.3	64.2	54.2	16.4	14.5	0.0	14.3	57.5	27.0	21.4	328.1
1977	23.8	12.0	53.0	73.1	45.9	26.6	2.1	0.0	28.9	40.9	3.6	39.2	349.1
1978	80.5	38.8	40.8	45.5	37.8	0.0	0.0	0.0	36.9	50.5	0.0	28.1	358.9
1979	47.9	18.4	26.2	45.3	59.3	56.0	10.7	0.0	3.5	18.5	30.3	6.8	322.9
1980	34.3	29.6	109.2	29.4	58.9	0.0	6.2	0.0	8.7	21.3	21.7	31.9	351.2
1981	29.5	34.8	61.2	24.4	52.5	61.0	10.3	0.0	7.6	35.0	26.8	57.9	401.0
TOTAL	845.9	577.5	895.5	956.0	1044.7	735.9	94.8	110.3	309.3	536.4	669.2	808.7	7584.2
MEAN	38.4	26.2	40.7	43.5	47.5	33.4	4.3	5.0	14.1	24.4	30.4	36.8	344.7
MAX	100.3	53.1	109.2	112.2	72.4	69.8	14.5	40.4	51.9	57.5	72.1	79.7	478.8
MIN	6.1	12.0	2.9	1.6	21.2	0.0	0.0	0.0	0.0	0.0	0.0	1.1	229.1

Table A-2-14 Monthly Total Precipitation at Huseyinli Meteorological Station (unit: mm)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
1967	33.5	18.0	59.4	48.2	72.6	22.1	0.0	0.0	0.0	14.7	45.3	22.8	336.6
1968	56.3	19.4	38.8	12.6	82.3	32.1	0.0	6.8	73.8	44.3	36.5	53.3	456.2
1969	23.9	43.1	33.6	34.8	53.9	27.6	0.0	0.0	5.6	14.0	52.5	63.0	352.0
1970	39.2	20.4	17.5	21.5	52.5	41.4	7.8	0.0	7.3	60.9	31.3	25.4	325.2
1971	11.0	15.8	22.0	67.8	30.7	33.4	7.4	20.5	6.9	20.1	41.3	37.5	314.4
1972	15.8	22.0	2.8	81.0	48.4	69.2	37.1	4.0	31.2	20.1	18.2	0.2	350.0
TOTAL	179.7	138.7	174.1	265.9	340.4	225.8	52.3	31.3	124.8	174.1	225.1	202.2	2134.4
MEAN	29.9	23.1	29.0	44.3	56.7	37.6	8.7	5.2	20.8	29.0	37.5	33.7	355.7
MAX	56.3	43.1	59.4	81.0	82.3	69.2	37.1	20.5	73.8	60.9	52.5	63.0	456.2
MIN	11.0	15.8	2.8	12.6	30.7	22.1	0.0	0.0	0.0	14.0	18.2	0.2	314.4

Table A-2-15 Monthly Total Precipitation at Tomarza Meteorological Station (unit: mm)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
1963	51.9	40.6	56.5	70.9	64.2	52.0	13.4	0.0	23.5	26.8	14.7	16.6	431.1
1964	14.3	28.7	99.5	9.1	106.9	64.3	0.0	0.0	17.3	0.0	30.8	31.4	402.3
1965	13.2	35.3	75.2	60.9	45.8	28.5	5.3	0.0	12.0	46.8	36.9	57.2	417.1
1966	82.0	9.5	26.8	52.2	29.2	9.4	9.6	21.3	16.0	4.6	43.6	79.3	383.5
1967	54.5	36.1	60.1	36.8	49.3	60.2	0.3	0.0	0.6	21.8	60.9	52.7	433.3
1968	96.0	59.3	80.6	10.4	64.1	48.5	0.3	29.2	55.2	35.3	40.9	64.8	584.6
1969	40.1	77.4	58.2	70.9	86.4	46.4	17.8	0.0	8.0	11.0	43.7	117.8	577.7
1970	35.0	35.9	42.2	9.1	38.7	24.2	2.4	0.9	10.5	66.4	39.7	30.8	335.8
1971	18.5	19.2	40.8	102.5	32.6	43.5	6.2	16.0	10.0	19.4	28.9	63.8	401.4
1972	32.7	35.0	9.0	92.4	68.9	87.5	15.0	12.7	36.5	53.1	20.0	1.3	464.1
1973	15.7	16.2	28.9	64.3	68.2	28.8	5.6	0.0	2.2	1.7	22.8	41.8	296.2
1974	17.5	14.6	75.9	58.5	21.0	19.8	0.0	3.2	25.9	35.0	31.1	36.5	339.0
1975	54.0	31.0	27.4	107.0	53.2	84.9	11.1	10.2	0.1	6.1	27.0	41.8	453.8
1976	47.7	33.5	9.9	85.1	67.8	45.0	3.2	0.0	54.1	48.2	7.0	28.3	429.8
1977	29.2	19.8	40.5	83.9	54.0	56.2	22.6	0.0	17.0	27.2	3.7	33.8	387.9
1978	71.3	44.0	41.9	61.4	12.6	8.7	0.1	0.0	42.3	44.1	0.0	38.1	364.5
1979	57.2	34.2	20.4	53.3	77.5	76.7	22.4	0.9	4.9	15.6	54.0	35.1	452.2
1980	53.2	22.7	108.7	45.4	74.7	32.7	0.3	0.0	14.4	19.5	33.5	38.7	443.8
1981	16.9	31.0	56.7	18.2	95.1	33.2	33.8	0.0	16.9	32.4	53.5	61.9	457.2
1982	24.5	17.5	39.7	42.1	29.7	30.7	5.8	5.2	16.6	28.6	9.6	28.4	270.8
1983	33.3	31.2	17.3	84.6	67.8	27.5	1.4	11.2	4.3	87.8	94.3	25.2	485.9
1984	8.5	21.8	30.7	76.5	29.2	6.8	17.2	5.7	0.0	9.0	16.3	45.9	267.6
1985	30.1	58.9	29.7	43.6	62.6	16.7	6.8	9.7	0.8	68.3	28.5	32.1	387.8
1986	34.3	41.6	5.3	25.1	70.7	56.8	0.0	2.5	7.5	15.6	51.3	43.2	353.9
TOTAL	931.6	795.0	1081.9	1364.2	1370.2	989.0	200.6	128.7	396.6	724.3	792.7	1046.5	9821.3
MEAN	38.8	33.1	45.1	56.8	57.1	41.2	8.4	5.4	16.5	30.2	33.0	43.6	409.2
MAX	96.0	77.4	108.7	107.0	106.9	87.5	33.8	29.2	55.2	87.8	94.3	117.8	584.6
MIN	8.5	9.5	5.3	9.1	12.6	6.8	0.0	0.0	0.0	0.0	0.0	1.3	267.6

Table A-2-16 Monthly Total Precipitation at Toklar Meteorological Station (unit: mm)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
1965	18.4	41.7	70.1	109.1	23.7	54.2	11.1	8.3	11.3	60.7	38.9	53.4	500.9
1966	67.7	14.9	23.3	43.7	37.9	21.3	2.5	14.4	18.3	35.6	40.4	68.9	388.9
1967	58.4	28.3	63.0	46.9	58.7	24.4	2.8	0.0	1.1	28.0	87.9	23.1	422.6
1968	60.6	33.5	40.9	3.7	57.6	22.1	0.0	7.1	27.3	48.8	30.2	*****	*****
1969	*****	*****	*****	*****	83.7	20.8	3.8	0.0	8.8	13.8	39.7	96.3	*****
1970	31.9	35.1	43.5	15.3	46.6	54.1	8.8	0.3	13.1	63.3	22.3	15.8	350.1
1971	10.3	12.8	45.2	58.2	22.4	51.7	6.5	47.0	2.5	28.6	34.9	51.9	372.0
1972	17.2	17.9	8.2	92.7	56.1	96.4	19.3	31.2	22.5	42.6	16.6	3.4	424.1
1973	16.2	14.8	35.3	64.7	73.5	22.8	1.7	0.0	5.3	10.9	16.9	31.4	293.5
1974	17.5	10.1	46.5	83.0	32.0	8.4	0.0	0.0	25.0	12.0	26.7	27.7	288.9
1975	41.0	27.4	21.3	104.5	80.1	47.5	3.9	8.0	0.0	0.0	14.2	23.8	371.7
1976	33.7	32.5	8.1	75.2	52.5	29.6	4.5	0.0	62.1	71.6	3.2	23.4	396.4
1977	19.7	13.7	52.7	55.3	36.7	41.2	8.5	0.0	30.7	37.5	0.7	18.7	315.4
1978	55.6	32.4	31.2	50.9	*****	*****	*****	*****	*****	26.3	0.0	58.4	*****
1979	51.2	31.3	34.3	67.0	92.6	67.3	29.7	13.2	17.1	33.6	75.5	49.7	562.5
1980	52.3	27.5	155.7	41.5	82.3	28.7	0.0	0.0	33.7	22.4	48.9	27.6	520.6
1981	34.1	23.8	75.7	24.3	90.7	60.4	*****	0.0	16.4	38.8	31.3	53.7	*****
1982	30.6	25.3	33.9	61.8	38.4	23.7	23.5	13.8	25.4	40.1	13.4	24.7	354.6
1983	24.9	23.4	11.7	64.7	43.2	33.1	0.0	2.2	11.3	88.7	81.0	16.4	400.6
1984	29.3	13.9	30.7	87.1	33.8	2.7	41.5	0.0	1.6	17.1	*****	*****	*****
TOTAL	670.6	460.3	831.3	1149.6	1042.5	710.4	168.1	145.5	333.5	720.4	622.7	668.3	5962.8
MEAN	35.3	24.2	43.8	60.5	54.9	37.4	9.3	7.7	17.6	36.0	32.8	37.1	397.5
MAX	67.7	41.7	155.7	109.1	92.6	96.4	41.5	47.0	62.1	88.7	87.9	96.3	562.5
MIN	10.3	10.1	8.1	3.7	22.4	2.7	0.0	0.0	0.0	0.0	0.0	3.4	288.9

Table A-2-17 Monthly Total Precipitation at Elbasi Meteorological Station (unit: mm)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
1965	11.1	17.6	59.0	70.7	37.7	25.1	7.8	0.0	9.5	4.2	18.2	51.4	*****
1966	*****	*****	*****	*****	18.8	31.5	5.1	12.5	10.7	22.3	51.7	49.3	*****
1967	26.9	16.3	31.4	32.7	42.6	30.7	0.4	0.3	5.9	22.3	28.8	26.9	310.5
1968	62.2	31.0	43.6	4.9	41.2	26.7	0.0	6.5	45.0	45.4	28.8	26.9	362.2
1969	17.6	58.1	53.7	44.0	67.1	28.3	10.9	0.7	3.4	5.6	29.8	65.3	384.5
1970	19.6	20.9	22.4	16.7	42.5	34.6	42.8	0.0	8.7	43.6	23.0	16.9	291.7
1971	13.0	13.0	22.6	69.1	19.9	64.0	0.0	2.4	21.7	8.3	16.8	37.6	288.4
1972	18.5	25.8	6.7	52.2	51.9	102.6	14.6	6.8	52.9	38.4	11.0	2.1	383.5
1973	12.7	20.8	26.3	67.5	75.9	39.6	15.0	0.0	0.0	6.4	15.7	26.4	306.3
1974	16.2	8.0	36.7	61.2	7.6	22.8	0.0	0.0	26.5	30.7	19.4	28.9	258.0
1975	41.1	17.9	20.5	126.9	61.0	31.5	0.0	0.0	0.0	8.6	33.2	56.6	397.3
1976	45.5	24.1	6.8	68.2	123.6	18.2	0.0	3.4	45.8	53.2	1.8	21.0	411.6
1977	18.8	23.0	44.8	67.4	108.3	17.9	16.1	0.0	27.4	28.1	4.6	34.2	390.6
1978	101.9	29.3	28.1	66.7	23.2	6.5	0.0	0.0	60.7	43.1	0.0	44.7	404.2
1979	58.3	41.0	23.4	42.7	55.9	66.3	30.6	5.9	3.0	22.7	55.2	23.5	428.5
1980	69.2	27.1	83.9	44.1	81.2	35.3	2.6	0.0	8.1	20.4	33.1	41.4	446.4
1981	21.7	30.1	74.4	23.3	82.0	34.9	30.4	0.0	10.4	31.1	36.4	60.2	434.9
1982	33.2	23.0	40.4	50.2	46.8	30.5	20.4	5.5	31.5	20.2	13.8	31.6	346.9
1983	23.6	22.6	18.1	73.6	24.5	30.9	0.0	0.0	7.9	51.6	79.3	27.2	359.3
1984	17.7	23.6	35.9	73.4	28.0	6.1	15.5	0.0	0.0	6.2	16.8	41.6	264.8
1985	27.7	45.1	21.3	44.2	13.4	11.1	0.0	2.7	0.6	60.4	16.8	28.5	273.8
1986	23.6	43.8	9.6	38.2	82.5	65.7	0.0	0.0	9.6	13.8	54.0	45.2	386.0
TOTAL	680.1	562.1	709.6	1137.9	1137.6	760.8	212.2	44.7	389.1	564.3	559.4	760.5	7129.4
MEAN	32.4	26.8	33.8	54.2	51.7	34.6	9.6	2.1	17.7	26.9	26.6	36.2	356.5
MAX	101.9	58.1	83.9	126.9	123.6	102.6	42.8	12.5	60.7	60.4	79.3	65.3	446.4
MIN	11.1	8.0	6.7	4.9	7.6	6.1	0.0	0.0	0.0	4.2	0.0	2.1	258.0

Table A-2-18 Monthly Total Precipitation at Pazaroren Meteorological Station (unit: mm)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
1964	10.9	32.9	58.4	7.3	61.8	64.5	0.0	0.0	23.2	0.9	31.4	50.5	341.8
1965	15.3	33.1	83.8	77.6	39.7	38.0	18.0	0.0	9.1	41.3	32.6	54.5	443.0
1966	54.1	10.8	25.2	57.4	22.7	23.1	8.1	51.1	8.8	2.7	20.3	77.1	361.4
1967	31.8	23.3	30.9	42.5	98.2	47.0	32.4	3.2	4.5	27.8	89.8	39.2	470.6
1968	51.2	32.4	24.1	7.8	88.9	34.6	0.0	8.3	27.9	35.1	36.1	35.7	382.1
1969	21.4	68.1	54.1	41.4	81.1	61.4	7.2	0.0	27.1	10.4	32.1	49.1	453.4
1970	23.4	35.5	24.5	18.9	35.3	30.9	13.7	4.9	10.5	63.7	30.8	28.3	320.4
1971	15.2	16.6	32.1	58.1	34.4	65.8	1.8	72.5	0.0	15.4	25.9	53.8	391.6
1972	15.5	20.7	12.4	76.8	99.2	191.6	13.8	4.2	27.7	39.7	8.8	5.9	516.3
1973	20.7	17.5	37.5	93.1	112.1	42.7	0.0	0.0	5.7	4.4	13.1	38.5	385.3
1974	18.1	14.9	49.6	114.9	29.7	16.8	0.0	6.1	30.1	27.7	44.1	31.9	383.9
1975	36.2	25.4	26.5	132.5	90.7	101.9	0.0	2.3	0.0	5.5	28.7	61.0	510.7
1976	36.1	21.7	6.8	108.8	77.8	30.7	4.3	6.9	45.8	65.1	4.2	21.8	430.0
1977	20.7	23.9	59.2	75.8	75.4	15.1	0.0	0.0	22.5	32.1	4.7	35.3	364.7
1978	103.5	41.8	33.4	69.6	23.2	7.7	0.0	0.0	47.2	44.8	2.3	47.5	481.0
1979	61.2	32.0	27.5	55.9	50.1	40.4	12.8	3.4	8.3	30.5	44.5	24.6	391.2
1980	51.0	12.9	63.2	34.9	92.1	24.1	2.3	1.6	13.3	20.6	41.1	22.7	379.8
1981	27.8	32.2	73.6	21.3	111.9	40.0	9.1	0.0	15.3	37.8	38.8	51.1	458.9
1982	36.1	18.8	36.4	95.9	58.7	42.8	26.9	2.6	44.3	21.5	17.2	36.6	437.8
1983	21.6	21.7	26.7	87.6	55.5	51.6	2.1	3.9	12.2	58.2	98.6	18.9	458.6
1984	18.1	20.1	55.7	89.1	41.7	1.7	4.3	14.8	0.0	6.8	25.0	32.7	310.0
1985	19.4	38.5	29.6	42.0	50.7	28.8	8.2	0.0	0.0	79.2	21.9	25.9	344.2
1986	27.5	36.8	11.2	33.2	98.7	69.8	0.0	0.0	4.2	9.2	53.6	37.3	383.5
TOTAL	736.8	633.6	882.4	1442.4	1529.6	1071.0	165.0	185.8	387.7	680.4	745.6	879.9	9340.2
MEAN	32.0	27.5	38.4	62.7	66.5	46.6	7.2	8.1	16.9	29.6	32.4	36.3	406.1
MAX	103.5	68.1	83.8	132.5	112.1	191.6	32.4	72.5	47.2	79.2	98.6	77.1	516.3
MIN	10.9	10.8	6.8	7.3	22.7	1.7	0.0	0.0	0.0	0.9	2.3	5.9	310.0



Table A-2-19 Monthly Total Precipitation at Pinarbasi Meteorological Station (unit: mm)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
1950	*****	*****	*****	*****	138.5	19.1	3.0	3.7	1.7	27.5	34.6	28.8	*****
1951	31.4	10.9	42.1	46.7	68.6	120.9	12.5	5.5	13.7	79.9	36.1	34.1	502.4
1952	17.8	35.2	47.2	20.7	67.3	51.6	13.4	0.0	6.3	0.8	67.9	25.2	353.4
1953	22.7	72.4	27.3	46.1	50.4	58.8	0.0	1.1	31.3	17.6	36.7	15.3	379.7
1954	55.3	41.3	35.2	87.7	67.6	23.9	7.1	0.0	6.9	1.4	12.6	33.8	372.8
1955	15.8	29.8	39.0	37.9	65.8	12.9	0.0	8.5	2.2	24.5	31.0	48.9	316.3
1956	25.0	109.2	40.1	11.6	37.9	10.5	2.9	3.1	10.4	11.8	15.1	33.6	306.4
1957	12.9	38.0	26.9	57.3	72.4	55.8	1.2	0.0	11.4	15.3	37.4	31.5	360.1
1958	32.5	22.6	82.5	89.5	68.5	88.5	1.4	43.6	5.6	12.4	4.0	51.4	502.5
1959	58.1	41.6	24.3	31.9	59.4	62.3	34.2	2.1	12.8	31.6	30.2	6.0	394.5
1960	69.7	52.9	52.9	117.3	34.2	29.5	12.8	0.0	1.4	19.0	26.6	20.0	436.3
1961	38.2	11.6	38.7	9.6	52.7	37.2	0.0	0.0	56.9	1.6	36.0	41.7	324.2
1962	14.7	61.9	52.7	29.6	69.7	20.7	0.0	18.0	0.0	19.4	19.6	138.6	444.9
1963	63.6	43.8	85.5	46.9	74.9	51.6	42.9	0.0	35.6	25.2	12.4	33.2	515.6
1964	14.2	49.3	69.9	18.0	65.1	60.9	0.5	0.3	31.1	1.1	54.2	66.9	431.5
1965	14.2	53.8	72.2	93.1	45.0	54.2	3.8	0.0	11.9	53.6	44.3	82.3	528.4
1966	91.1	21.0	40.6	52.7	26.8	19.5	4.5	36.4	14.5	2.4	24.0	96.8	430.3
1967	64.2	36.6	52.8	37.6	69.8	36.2	1.2	37.8	13.1	18.2	88.6	61.3	517.4
1968	106.0	42.2	64.0	18.7	44.6	23.5	0.0	32.3	24.4	28.7	35.4	62.0	481.8
1969	31.4	99.5	60.7	55.4	60.6	83.1	4.3	1.3	25.0	21.8	26.6	95.8	565.5
1970	33.7	68.5	36.2	19.9	50.8	35.8	17.6	2.7	15.6	52.3	24.4	35.4	392.9
1971	14.9	11.9	49.1	56.8	34.1	74.5	0.2	51.0	7.7	18.6	34.1	51.7	400.7
1972	20.0	21.8	14.3	70.5	94.1	136.9	13.0	10.0	26.3	34.9	17.2	12.2	471.2
1973	28.8	33.6	52.4	77.4	97.1	29.9	2.5	0.0	9.7	15.3	30.7	43.8	421.2
1974	21.9	22.2	60.7	143.8	35.9	11.5	0.0	18.7	30.0	38.3	42.6	64.4	466.8
1975	37.3	34.3	37.4	138.8	95.8	60.2	0.0	33.4	0.0	4.5	20.8	64.4	526.9
1976	60.8	22.7	11.4	81.8	102.7	31.4	5.2	1.0	35.8	55.7	8.2	42.7	459.4
1977	30.6	34.1	76.0	86.0	87.3	29.1	4.5	0.0	17.5	22.0	7.0	35.9	430.0
1978	123.9	50.8	39.8	100.6	18.8	15.1	0.1	0.0	53.9	47.7	0.0	50.2	500.9
1979	78.0	70.9	31.7	50.9	83.6	77.5	26.2	7.7	11.9	35.4	62.7	35.5	572.0
1980	76.2	9.6	90.8	49.5	111.0	20.9	0.8	9.7	22.0	21.4	49.7	27.2	486.8
1981	40.4	27.4	90.5	25.1	96.7	62.7	9.9	0.2	10.1	41.9	56.5	52.9	514.3
1982	41.2	18.1	33.6	58.3	31.2	57.3	19.8	0.3	18.3	21.4	3.5	45.2	348.2
1983	25.6	29.6	22.9	67.0	87.7	28.3	0.1	0.4	9.1	71.0	94.5	9.8	446.0
1984	9.7	15.0	64.7	60.5	55.2	2.6	18.9	3.5	0.0	7.2	10.8	19.0	267.1
1985	17.2	42.7	22.3	42.7	17.5	27.4	4.1	5.1	0.2	70.8	32.7	29.0	311.7
1986	24.9	32.8	7.8	31.4	106.7	43.0	0.0	3.6	15.1	5.4	44.4	36.1	351.2
TOTAL	1463.9	1419.6	1696.2	2069.3	2442.1	1660.0	268.6	341.0	599.4	977.6	1213.1	1639.4	15533.3
MEAN	40.7	39.4	47.1	57.5	66.0	44.9	7.3	9.2	16.2	26.4	32.8	44.3	431.5
MAX	123.9	109.2	90.8	143.8	138.5	136.9	42.9	51.0	56.9	79.9	94.5	138.6	572.0
MIN	9.7	9.6	7.8	9.6	17.5	2.6	0.0	0.0	0.0	0.8	0.0	6.0	267.1

Table A-2-20 Monthly Total Precipitation at Yedioluk Meteorological Station (unit: mm)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
1967	77.1	28.2	29.9	61.6	53.1	50.4	28.9	9.3	4.4	32.8	104.2	68.0	547.9
1968	58.6	39.2	62.0	34.6	65.1	52.9	0.1	12.4	57.6	40.2	110.2	95.8	628.7
1969	37.0	72.5	87.4	70.6	127.3	58.4	4.4	5.0	36.8	31.4	50.6	129.3	710.7
1970	25.1	86.6	82.0	39.9	50.5	22.1	81.5	2.3	11.3	83.0	73.6	63.5	621.4
1971	11.0	45.2	99.7	130.2	57.9	71.4	4.6	45.2	5.1	22.1	37.9	92.4	622.7
1972	20.6	23.1	23.0	128.7	105.3	115.2	10.4	39.5	19.6	43.4	34.0	3.9	567.7
TOTAL	229.4	294.8	384.0	465.6	459.2	371.4	129.9	113.7	134.8	252.9	410.5	452.9	3699.1
MEAN	38.2	49.1	64.0	77.6	76.5	61.9	21.6	18.9	22.5	42.1	68.4	75.5	616.5
MAX	77.1	86.6	99.7	130.2	127.3	116.2	81.5	45.2	57.6	83.0	110.2	129.3	710.7
MIN	11.0	23.1	23.0	34.6	50.5	22.1	0.1	2.3	4.4	22.1	34.0	3.9	547.9

Table A-2-21 Monthly Total Precipitation at Kaynar Meteorological Station (unit: mm)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
1965	11.3	23.3	34.2	47.2	24.7	53.4	13.7	0.0	23.1	48.4	37.3	40.2	356.8
1966	41.4	15.6	23.6	20.3	15.9	14.7	13.3	21.5	31.2	5.7	21.6	49.3	274.1
1967	30.0	14.0	19.1	17.1	35.6	19.1	32.9	19.1	3.0	17.5	55.5	38.0	300.9
1968	27.9	13.1	37.1	10.4	82.2	28.4	0.0	19.9	11.8	19.2	29.1	32.1	311.2
1969	20.2	38.0	39.5	49.7	38.2	42.6	5.4	0.0	4.4	12.0	20.7	53.5	324.2
1970	12.0	36.2	27.8	21.9	25.8	16.1	41.3	0.5	9.8	51.3	49.5	15.8	310.0
1971	9.6	10.4	39.7	70.3	23.1	60.9	2.4	66.3	3.2	13.3	26.2	38.0	363.4
1972	15.6	6.2	9.4	74.0	89.2	103.2	6.1	6.5	19.4	35.4	9.8	4.7	379.5
1973	7.5	15.2	24.6	47.2	61.7	21.4	6.4	0.0	7.0	11.7	16.8	28.3	247.6
1974	15.4	6.1	42.4	76.7	30.6	9.3	0.0	8.9	28.2	36.9	34.6	29.2	318.3
1975	35.4	22.2	34.9	141.7	79.9	32.5	3.4	7.9	0.0	32.2	20.5	58.8	469.4
1976	41.9	18.5	9.7	79.6	60.1	11.2	6.2	0.0	27.8	52.5	3.6	26.7	337.8
1977	10.9	34.5	50.5	65.4	48.9	44.3	4.1	0.0	18.4	25.9	9.0	38.6	350.5
1978	76.1	35.4	38.1	49.3	23.0	15.7	0.0	0.0	51.7	43.5	4.2	47.4	384.4
1979	50.3	50.0	30.4	45.7	74.2	70.3	33.8	10.5	2.8	24.9	45.6	17.9	456.4
1980	46.7	7.7	52.0	34.4	125.0	11.3	0.0	2.8	1.6	19.3	33.8	22.6	357.2
1981	18.8	16.0	88.7	18.0	86.2	58.1	1.2	0.0	14.8	37.1	41.8	66.9	447.6
1982	39.6	12.5	19.1	53.6	70.3	51.0	16.4	0.7	3.9	15.8	30.5	36.4	349.8
1983	20.9	10.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	31.5
TOTAL	531.5	385.5	620.8	922.5	994.6	665.5	186.6	164.6	262.1	502.6	490.1	644.4	6370.8
MEAN	28.0	20.3	32.7	48.6	52.3	35.0	9.8	8.7	13.8	26.5	25.8	33.9	335.3
MAX	76.1	50.0	88.7	141.7	125.0	103.2	41.3	66.3	51.7	52.5	55.5	66.9	469.4
MIN	7.5	6.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	31.5

Table A-2-22 Monthly Total Precipitation at M. Basoren Meteorological Station (unit: mm)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
1967	76.4	48.7	55.7	74.6	47.3	45.8	9.2	0.0	19.2	39.6	46.4	68.7	531.6
1968	93.6	23.1	71.6	27.4	104.3	54.8	0.0	12.7	34.2	45.4	48.1	69.7	584.9
1969	49.9	57.6	55.8	40.3	89.8	59.8	13.4	3.4	3.8	16.7	33.4	46.2	470.1
1970	29.9	79.3	46.0	15.2	37.4	23.8	30.2	2.2	5.5	54.0	41.4	40.5	405.4
1971	21.2	31.0	43.1	130.9	51.8	40.5	14.7	9.8	4.2	6.4	29.1	19.2	401.9
1972	21.5	21.0	20.9	88.7	101.7	150.7	2.4	24.3	38.7	22.8	10.0	11.1	513.8
1973	9.9	24.5	32.2	59.0	36.5	47.8	15.8	0.0	0.0	5.1	34.0	23.7	288.5
1974	37.9	19.7	49.6	71.5	38.1	4.4	0.0	0.0	28.9	25.7	46.1	44.5	366.4
1975	27.5	31.0	35.2	113.7	102.0	39.4	0.0	2.2	0.0	8.7	19.1	49.2	428.0
1976	32.8	37.4	21.1	73.6	56.0	38.6	5.4	12.2	61.2	48.5	5.4	26.7	418.9
1977	36.2	27.5	45.2	57.5	73.6	72.5	20.3	0.0	34.0	19.2	10.8	29.4	426.2
1978	55.7	47.5	31.0	91.6	46.1	25.2	0.0	0.0	54.5	62.9	0.0	22.5	437.0
1979	53.6	41.4	59.7	49.5	64.9	45.9	25.2	27.7	17.9	24.7	38.6	25.7	475.8
1980	93.5	34.8	87.4	30.7	154.1	15.4	3.5	0.0	8.3	31.3	49.5	24.5	533.0
1981	9.1	23.0	102.3	23.6	131.6	59.1	10.9	0.0	10.5	33.6	37.3	18.3	459.3
1982	36.2	17.1	15.5	67.7	42.6	59.4	22.3	0.0	11.8	19.2	3.9	16.9	312.6
1983	18.1	31.6	24.2	55.8	66.4	51.8	0.0	4.4	8.5	42.4	135.7	26.1	465.0
1984	11.4	14.4	44.2	114.0	77.9	22.6	27.9	1.5	5.5	6.6	18.5	17.4	361.9
1985	27.5	57.2	35.8	66.5	33.4	29.9	15.4	2.4	0.0	78.5	63.1	26.8	436.5
1986	26.0	39.9	5.6	17.0	181.0	39.0	0.0	0.0	9.4	14.7	39.9	20.5	393.0
TOTAL	767.9	707.7	882.1	1268.8	1536.5	926.4	216.6	102.8	356.1	606.0	710.3	628.6	8709.8
MEAN	38.4	35.4	44.1	63.4	76.8	46.3	10.8	5.1	17.8	30.3	35.5	31.4	435.5
MAX	93.6	79.3	102.3	130.9	181.0	150.7	30.2	27.7	61.2	78.5	135.7	69.7	584.9
MIN	9.1	14.4	5.6	15.2	33.4	4.4	0.0	0.0	0.0	5.1	0.0	11.1	288.5

Table A-2-23 Monthly Total Precipitation at Kazancik Meteorological Station (unit: mm)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
1967	25.1	11.2	4.2	13.2	18.9	18.3	0.0	0.0	12.8	19.6	31.8	53.5	208.6
1968	19.9	12.4	32.1	43.1	52.4	37.3	0.0	23.9	8.3	28.2	24.7	17.1	299.4
1969	8.5	14.0	31.1	50.6	39.6	26.8	0.0	1.0	6.9	17.8	20.0	34.1	250.4
1970	11.1	8.5	40.4	15.8	46.1	20.0	16.2	2.3	8.6	15.5	30.7	10.6	225.8
1971	11.0	6.7	10.8	28.0	34.2	25.9	26.6	38.8	5.5	8.8	20.7	24.2	241.2
1972	11.8	13.1	15.3	54.7	57.6	86.2	2.5	7.5	37.9	29.4	9.7	0.3	328.0
1973	7.6	12.6	15.6	32.2	50.1	25.8	0.9	0.0	13.1	5.2	19.1	24.3	206.5
1974	6.2	5.6	39.0	46.3	32.3	25.7	0.0	2.5	16.5	46.1	12.0	13.2	245.4
1975	21.0	9.4	22.5	97.5	54.8	30.8	0.0	9.2	0.0	2.0	11.5	34.6	293.3
1976	14.1	16.1	6.2	74.3	60.0	17.8	0.0	0.0	29.6	59.7	0.0	37.3	315.1
1977	12.2	24.9	35.6	61.7	58.9	27.7	0.3	0.0	35.4	37.9	4.5	25.3	324.4
1978	32.0	30.0	34.6	64.0	25.6	8.2	0.0	0.0	41.8	29.1	3.1	20.1	288.5
1979	22.2	31.1	20.0	26.8	39.8	41.7	4.8	23.0	8.0	33.2	18.8	5.8	275.2
1980	28.6	5.8	36.8	28.1	104.5	11.9	3.5	0.0	6.6	30.5	32.9	16.9	306.1
1981	11.1	12.6	57.3	8.1	88.8	15.1	14.7	0.0	12.5	22.3	33.3	27.0	302.8
1982	28.3	5.7	7.5	35.9	37.6	26.1	19.8	0.5	5.0	12.0	4.4	19.6	202.4
1983	3.5	11.8	13.0	61.5	40.7	26.0	2.8	1.3	2.1	58.5	97.9	6.3	325.4
1984	7.2	14.2	39.4	75.9	37.3	20.9	24.5	1.0	0.0	1.3	7.2	4.9	233.8
1985	17.6	8.6	22.5	31.3	32.0	24.2	4.8	19.5	1.6	52.4	27.7	15.6	257.8
1986	23.4	27.4	1.6	16.4	76.6	30.2	0.0	0.0	19.6	4.1	19.8	16.1	235.2
TOTAL	322.4	281.7	485.5	865.4	987.8	546.6	121.4	130.5	271.8	513.6	429.8	406.8	5363.3
MEAN	16.1	14.1	24.3	43.3	49.4	27.3	6.1	6.5	13.6	25.7	21.5	20.3	268.2
MAX	32.0	31.1	57.3	97.5	104.5	86.2	26.6	38.8	41.8	59.7	97.9	53.5	326.0
MIN	3.5	5.6	1.6	8.1	18.9	8.2	0.0	0.0	0.0	1.3	0.0	0.3	202.4

Table A-2-24 Monthly Total Precipitation at Orensehir Meteorological Station (unit: mm)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
1964	9.0	48.4	50.7	21.8	39.1	45.6	0.0	0.0	21.1	0.0	29.4	46.6	311.7
1965	15.9	38.3	41.6	59.7	26.7	51.7	7.1	0.0	19.3	45.4	40.7	72.1	418.5
1966	37.5	18.8	19.8	28.7	16.5	16.8	0.7	23.9	23.5	16.9	18.0	52.9	274.0
1967	44.9	22.1	24.7	24.3	33.4	59.5	10.3	5.6	16.1	34.5	50.5	63.4	389.3
1968	81.3	21.9	50.5	34.4	121.7	36.5	0.0	27.0	25.4	56.1	33.3	30.9	519.0
1969	37.2	59.5	47.7	54.5	73.8	44.2	6.2	0.0	4.1	12.1	22.7	72.4	434.4
1970	20.7	32.6	30.2	38.1	32.7	32.5	7.5	1.3	5.9	57.4	37.7	19.3	315.9
1971	7.8	15.7	46.3	59.2	39.4	55.6	17.1	52.5	4.3	15.3	24.3	36.5	374.0
1972	13.3	14.5	15.8	78.4	67.7	103.6	13.5	31.9	24.7	19.7	19.4	6.2	408.7
1973	13.2	27.1	32.1	57.4	39.6	26.6	5.2	0.0	12.5	14.0	31.4	30.3	289.4
1974	15.4	8.7	34.6	84.8	25.9	9.9	0.0	10.5	24.5	24.9	45.1	30.4	314.7
1975	34.3	22.8	33.3	105.2	62.9	44.6	2.2	4.5	1.1	4.9	23.7	49.9	393.4
1976	44.5	25.1	8.7	76.3	63.7	8.3	1.0	5.8	35.4	49.8	2.4	30.9	351.9
1977	10.9	53.5	63.8	72.8	71.2	20.9	6.6	0.0	22.9	23.9	10.6	34.7	371.8
1978	50.8	22.6	35.6	60.0	16.9	19.4	0.0	0.0	53.7	34.4	0.9	45.4	339.7
1979	44.5	48.6	41.8	34.7	49.6	57.8	7.3	15.6	3.2	27.4	29.3	14.9	374.7
1980	49.1	6.3	58.2	38.6	114.7	20.1	0.8	1.7	8.8	23.2	45.4	19.8	386.7
1981	13.3	17.0	68.9	16.7	143.1	24.7	15.2	0.0	13.9	40.1	59.7	48.1	460.7
1982	58.5	19.1	21.3	40.6	55.3	27.5	51.6	0.0	2.7	12.8	10.2	39.5	319.1
1983	11.1	18.3	15.7	68.2	78.1	36.1	3.9	0.0	0.0	96.2	92.5	7.9	429.7
1984	17.9	10.8	38.4	88.1	50.1	6.6	17.6	4.6	0.0	4.9	15.1	12.5	266.6
1985	24.1	33.5	20.3	40.2	15.8	26.7	0.0	4.2	2.5	55.8	30.5	35.3	288.9
1986	39.9	34.5	0.0	20.3	110.6	18.6	0.0	4.5	20.1	9.5	39.3	38.7	336.0
TOTAL	695.1	599.7	800.0	1203.0	1328.5	795.8	173.8	197.3	345.7	679.2	712.1	838.6	8368.8
MEAN	30.2	26.1	34.8	52.3	57.8	34.6	7.6	8.6	15.0	29.5	31.0	36.5	363.9
MAX	81.3	59.5	68.9	105.2	143.1	103.6	51.6	52.5	53.7	96.2	92.5	72.4	519.0
MIN	7.8	6.3	0.0	16.7	15.8	6.6	0.0	0.0	0.0	0.0	0.9	6.2	266.6

Table A-2-25 Monthly Total Precipitation at Uzunpinar Meteorological Station (unit: mm)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
1959	*****	*****	*****	*****	*****	27.8	0.0	0.0	6.5	13.5	12.3	7.3	*****
1960	35.8	34.1	22.4	97.0	14.5	9.0	0.5	0.0	2.0	7.1	28.1	33.0	283.5
1961	30.4	25.8	32.0	19.8	6.9	37.5	0.0	2.7	43.4	12.8	59.7	60.6	331.6
1962	11.4	43.2	52.1	13.2	71.1	12.2	0.0	1.9	0.9	32.2	20.3	85.1	343.6
1963	73.7	35.2	511.8	29.6	78.6	47.5	34.0	0.0	41.0	32.7	8.5	1.9	894.5
1964	2.7	38.2	69.4	13.5	54.9	75.5	0.0	0.0	9.5	0.0	44.3	47.0	355.0
1965	18.2	58.3	42.9	60.5	23.5	32.6	8.0	0.0	20.2	56.5	42.7	78.0	441.4
1966	66.5	10.6	39.9	45.0	20.5	31.3	0.0	25.1	28.7	15.9	27.0	67.1	377.6
1967	51.2	27.4	19.8	38.6	90.0	51.6	21.5	2.5	6.2	36.0	53.0	58.7	456.5
1968	73.9	29.0	44.1	15.7	101.6	42.4	0.0	12.6	51.1	23.5	43.7	27.6	465.2
1969	26.4	60.7	59.6	64.1	57.9	42.1	7.4	0.0	9.3	26.7	27.9	70.5	452.6
1970	15.4	36.3	35.0	17.8	33.2	30.9	16.7	3.0	4.0	57.4	32.1	32.9	314.7
1971	8.2	17.2	48.7	61.6	32.0	42.5	2.5	30.0	4.6	*****	37.4	42.0	*****
1972	18.3	7.5	16.4	69.0	81.1	107.6	4.6	12.0	17.9	18.5	9.1	3.1	365.1
1973	11.5	22.8	23.3	45.0	57.3	7.3	0.2	0.0	7.5	15.4	18.4	19.3	228.0
1974	13.6	3.0	31.5	85.0	18.9	2.8	0.0	31.0	72.5	21.4	51.8	23.6	355.1
1975	15.5	12.0	10.3	109.1	49.7	41.0	1.5	12.5	0.0	3.9	6.5	18.3	280.3
1976	26.6	16.9	6.8	48.4	73.8	21.4	5.0	0.0	23.3	59.8	4.9	8.4	295.3
1977	9.7	30.9	35.5	66.4	60.7	27.3	0.0	1.8	10.0	15.5	4.5	19.2	281.5
1978	7.8	8.7	14.9	39.3	13.0	39.5	0.0	0.0	38.5	34.2	0.0	17.3	213.2
1979	39.5	25.5	16.4	30.0	50.1	73.7	5.5	38.6	5.5	31.0	30.5	19.8	366.1
1980	24.4	5.6	66.2	21.6	108.0	14.0	6.6	0.8	5.5	14.5	34.5	6.1	307.8
1981	15.8	10.2	41.1	11.5	132.0	40.5	72.0	0.0	15.0	29.5	23.5	23.6	414.7
1982	21.3	10.4	10.7	37.1	37.5	33.5	52.5	8.0	6.5	11.5	5.0	14.9	246.9
1983	10.9	15.5	10.5	61.5	73.5	32.5	4.5	0.0	0.5	82.0	50.0	5.0	346.4
1984	8.0	6.5	18.5	48.5	48.5	9.0	36.0	1.5	0.0	0.0	20.0	10.5	207.0
1985	3.5	18.5	7.0	24.5	23.0	11.5	1.0	5.5	3.0	33.0	16.0	14.5	161.0
1986	10.0	14.0	0.0	13.0	103.0	68.5	0.0	6.5	11.0	33.5	41.5	17.0	318.0
TOTAL	650.2	624.0	1286.8	1156.3	1514.8	1013.0	280.0	196.0	444.1	718.0	751.2	832.3	9102.6
MEAN	24.1	23.1	47.7	43.9	56.1	36.2	10.0	7.0	15.9	26.6	26.8	29.7	350.1
MAX	73.9	60.7	511.8	109.1	132.0	107.6	72.0	38.6	72.5	82.0	59.7	85.1	894.5
MIN	2.7	3.0	0.0	11.5	6.9	2.8	0.0	0.0	0.0	0.0	0.0	1.9	161.0

Table A-2-26 Monthly Total Precipitation at Ortaca Meteorological Station (unit: mm)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
1961	57.5	282.5	55.8	26.3	40.6	53.2	*****	13.3	26.4	69.1	52.8	456.9	*****
1962	92.1	238.1	48.8	79.9	124.8	3.0	0.0	36.5	1.2	53.3	19.8	421.5	1119.0
1963	233.3	174.3	95.5	138.2	121.9	75.9	110.1	0.0	56.9	13.2	12.1	51.7	1083.1
1964	16.4	59.3	153.3	17.4	121.6	60.0	12.6	17.1	21.4	0.0	154.7	135.0	788.8
1965	146.3	225.7	140.9	152.1	175.9	30.7	0.0	19.3	0.5	52.3	89.2	191.8	1224.7
1966	49.1	47.1	136.8	56.5	57.5	31.0	0.6	0.2	45.9	14.1	*****	*****	*****
1967	94.2	86.1	240.4	144.2	88.4	27.6	21.2	12.8	35.6	98.1	186.8	110.3	1145.7
1968	378.2	85.9	291.7	15.0	269.5	77.2	0.0	22.0	78.2	91.4	343.4	360.7	2013.2
TOTAL	1067.1	1199.0	1163.2	629.6	1000.2	358.6	144.5	121.2	266.1	391.5	858.8	1727.9	7354.5
MEAN	133.4	149.9	145.4	78.7	125.0	44.8	20.6	15.1	33.3	48.9	122.7	246.8	1225.7
MAX	378.2	282.5	291.7	152.1	269.5	77.2	110.1	36.5	78.2	96.1	343.4	456.9	2013.2
MIN	16.4	47.1	48.8	15.0	40.6	3.0	0.0	0.0	0.5	0.0	12.1	51.7	788.8



Table A-2-27 Monthly Total Precipitation at Karsanti Meteorological Station (unit: mm)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
1960	155.1	62.6	165.8	160.3	53.6	7.0	8.9	1.5	4.5	7.4	85.6	75.4	787.7
1961	97.8	364.8	60.8	62.4	53.3	3.7	0.0	0.0	56.5	78.9	25.5	494.6	1299.3
1962	131.4	242.5	58.8	67.0	92.9	0.0	0.0	11.7	1.9	48.6	2.9	370.4	1028.1
1963	259.6	146.7	68.5	113.5	144.1	69.0	60.4	0.0	22.1	4.9	12.2	72.7	953.7
1964	10.0	160.4	146.2	9.5	127.3	76.2	9.4	4.0	39.0	0.0	257.4	113.7	953.1
1965	186.0	266.0	125.4	122.7	75.3	27.3	0.0	3.9	0.0	41.5	130.3	176.2	1154.6
1966	635.3	37.5	83.9	60.3	73.5	13.7	1.0	15.3	41.0	18.5	78.1	330.5	1888.6
1967	95.0	81.9	229.7	63.3	83.3	5.6	14.9	17.1	33.0	90.8	128.9	104.3	947.8
1968	339.1	84.8	151.5	8.6	152.1	42.4	0.0	30.2	43.4	47.0	348.2	374.2	1621.5
1969	222.3	131.8	157.7	86.0	79.2	17.9	20.8	4.0	0.7	47.3	72.9	309.7	1150.3
1970	126.4	175.2	126.1	23.9	91.4	12.1	18.3	0.0	14.6	193.3	162.1	51.0	994.4
1971	29.5	169.7	141.0	234.4	24.5	33.1	0.0	49.7	7.4	1.5	160.3	112.5	963.6
1972	51.8	158.1	66.6	186.1	76.2	71.4	41.2	44.2	32.2	58.0	37.9	0.0	825.7
1973	37.6	115.1	89.7	93.3	38.2	22.5	6.9	3.1	13.2	28.2	57.9	108.0	613.7
1974	103.4	91.5	119.7	44.9	21.5	11.3	0.0	43.5	37.4	119.7	45.6	374.1	1012.6
1975	149.8	136.6	66.3	279.8	67.5	39.2	2.5	0.6	6.5	0.0	91.3	121.5	961.6
1976	196.1	86.8	35.2	133.7	116.2	*****	*****	*****	*****	*****	*****	*****	*****
1977	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
1978	328.8	197.5	158.9	129.6	12.1	12.3	0.0	*****	*****	*****	*****	160.7	*****
1979	214.4	29.4	53.3	111.8	68.9	121.0	46.7	2.9	7.9	37.3	152.6	237.4	1033.6
1980	*****	*****	*****	*****	173.9	0.0	2.5	0.0	10.1	26.5	139.5	207.6	*****
1981	774.2	181.6	64.2	9.7	102.9	33.0	17.5	0.0	1.6	28.9	110.9	499.3	1823.8
1982	38.7	36.1	124.0	93.2	*****	*****	0.0	16.3	13.2	74.4	0.8	75.8	*****
TOTAL	4182.3	2956.6	2293.3	2094.0	1727.9	616.7	231.0	250.0	384.2	953.7	2100.9	4369.6	19563.7
MEAN	199.2	140.8	109.2	99.7	82.3	30.9	11.0	12.5	19.3	47.7	105.0	208.1	1086.9
MAX	774.2	364.8	229.7	279.8	173.9	121.0	46.7	49.7	56.5	193.3	348.2	499.3	1823.8
MIN	10.0	29.4	35.2	8.6	12.1	0.0	0.0	0.0	0.0	0.0	0.8	0.0	613.7

Table A-2-28 Monthly Total Precipitation at Ergenusagi Meteorological Station (unit: mm)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
1963	369.4	285.0	201.8	295.0	132.6	180.8	29.5	0.0	86.7	15.6	4.6	14.7	1615.7
1964	1.9	20.7	16.3	24.8	114.7	26.6	0.0	8.8	23.4	0.0	229.7	113.3	580.2
1965	174.6	233.1	204.7	152.5	128.5	31.1	0.0	0.0	1.7	63.6	107.0	215.1	1311.9
1966	566.4	56.2	111.4	60.4	34.4	43.0	2.2	44.4	48.5	5.0	87.5	413.1	1473.5
1967	106.6	83.7	249.8	131.3	89.6	47.0	0.0	0.0	50.2	62.3	142.4	135.1	1098.0
1968	210.1	87.8	128.2	17.2	108.5	74.7	0.0	30.2	176.8	46.9	233.4	358.0	1471.8
1969	114.3	110.4	159.7	94.1	69.8	20.2	0.0	3.5	9.4	38.6	85.9	242.5	948.4
1970	88.0	124.2	73.5	24.1	19.9	6.6	73.1	0.0	26.9	66.4	221.1	33.8	757.6
1971	24.0	162.4	175.4	161.6	9.2	6.3	6.4	46.4	3.0	16.3	163.4	91.4	865.8
1972	23.7	120.8	26.3	35.9	10.5	17.5	2.0	5.2	14.1	15.3	7.1	*****	*****
TOTAL	1679.0	1284.3	1347.1	996.9	717.7	453.8	113.2	138.5	441.7	330.0	1282.1	1617.0	10122.9
MEAN	167.9	128.4	134.7	99.7	71.8	45.4	11.3	13.8	44.2	33.0	128.2	179.7	1124.8
MAX	566.4	285.0	249.8	295.0	132.6	180.8	73.1	46.4	176.8	66.4	233.4	413.1	1615.7
MIN	1.9	20.7	16.3	17.2	9.2	6.3	0.0	0.0	1.7	0.0	4.6	14.7	580.2

Table A-2-29 Monthly Total Precipitation at Mansurlu Meteorological Station (unit: mm)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
1964	2.0	78.9	118.5	0.0	51.0	20.0	0.0	0.0	17.4	0.0	230.0	85.0	602.8
1965	112.6	142.3	62.2	126.0	57.3	15.2	0.0	10.0	0.0	35.3	63.9	195.3	820.1
1966	590.2	80.1	223.8	40.7	24.2	7.0	0.0	17.7	46.0	11.0	*****	278.7	*****
1967	100.5	74.2	133.4	74.3	106.9	20.2	0.0	0.0	8.7	41.5	103.1	104.3	767.1
1968	260.3	94.1	148.1	21.3	57.9	39.0	0.0	32.0	63.1	41.4	203.3	239.5	1200.0
1969	162.5	111.8	141.7	113.2	110.1	14.5	0.0	28.4	52.1	60.8	32.0	232.9	1060.0
1970	127.2	149.0	71.6	18.4	50.6	15.1	5.6	0.0	24.5	107.5	134.9	43.2	747.6
1971	30.6	124.8	98.9	201.5	41.9	85.8	7.0	46.7	9.7	9.5	125.9	79.1	861.4
1972	18.7	115.4	42.4	187.0	98.1	91.6	2.4	17.0	62.8	82.9	59.4	0.0	777.7
1973	15.6	115.8	91.3	131.5	72.0	73.0	15.0	0.0	19.8	26.8	62.6	99.6	723.0
1974	94.5	59.2	132.8	86.4	66.3	17.6	0.0	74.2	30.2	97.6	66.2	250.8	975.8
1975	120.4	76.5	64.3	344.1	138.4	29.7	5.3	6.8	27.5	2.0	110.9	113.8	1039.7
1976	203.6	102.7	79.2	140.3	110.6	9.0	16.1	36.0	29.0	92.7	176.0	200.4	1195.6
1977	121.6	96.9	108.5	203.6	79.0	18.3	64.0	0.0	35.3	22.4	5.3	150.3	905.2
1978	225.0	169.3	183.0	141.9	17.9	0.0	0.0	0.0	10.0	209.5	0.0	143.9	1100.5
1979	257.4	72.3	10.9	144.9	34.0	71.3	46.7	10.2	0.0	72.0	157.5	152.8	1040.0
1980	221.2	129.4	297.5	155.8	253.8	9.1	0.0	9.8	10.1	24.2	108.4	164.7	1394.0
1981	409.5	188.3	81.4	32.7	123.1	22.6	0.0	0.0	1.0	20.0	91.8	308.6	1279.0
1982	69.5	27.9	96.8	110.5	37.5	34.4	49.4	15.2	4.3	84.7	5.0	40.9	576.1
1983	236.8	179.2	154.2	150.4	81.7	12.9	0.0	0.0	1.4	71.5	119.1	161.5	1168.7
1984	233.1	100.7	94.1	187.7	14.4	49.0	18.4	2.4	0.0	0.0	82.5	87.4	869.7
1985	168.2	120.3	126.0	67.3	105.9	11.1	0.0	0.0	9.0	167.9	104.1	39.4	919.2
TOTAL	3781.0	2389.1	2560.6	2679.5	1742.6	666.4	229.9	306.4	461.9	1281.2	2051.9	3172.1	20023.2
MEAN	171.9	108.6	116.4	121.8	79.2	30.3	10.4	13.9	21.0	58.2	97.7	144.2	953.5
MAX	590.2	188.3	297.5	344.1	263.8	91.6	64.0	74.2	63.1	209.5	230.0	308.6	1394.0
MIN	2.0	27.9	10.9	0.0	14.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	576.1

Table A-2-30 Monthly Total Precipitation at Feko Meteorological Station (unit: mm)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
1941	*****	*****	30.9	52.9	13.9	0.0	14.7	21.4	22.3	93.6	26.9	132.5	*****
1942	208.9	143.5	60.2	47.4	6.0	16.2	0.0	0.4	32.8	111.9	184.6	5.9	817.8
1943	132.4	57.8	9.8	88.1	109.4	25.6	14.1	0.0	0.0	61.1	29.1	76.5	603.9
1944	97.8	363.0	245.7	32.3	99.6	48.6	0.0	32.3	4.8	43.4	84.3	66.9	1118.7
1945	185.5	71.7	59.7	67.2	24.7	31.7	0.0	34.1	0.0	39.0	79.8	174.4	767.8
1946	35.5	261.3	224.7	171.4	61.4	45.5	5.0	14.2	5.4	137.6	41.7	149.9	1153.6
1947	268.1	150.0	75.7	87.1	70.1	47.5	17.6	11.4	29.5	80.8	325.0	147.5	1310.3
1948	24.4	310.1	59.3	131.3	83.8	23.2	0.0	7.4	8.0	12.9	63.4	63.1	786.9
1949	213.3	79.6	146.2	134.3	8.2	1.0	86.5	0.0	42.7	11.0	30.5	74.6	827.9
1950	72.0	87.5	147.1	180.5	165.6	27.0	18.3	0.0	24.4	107.9	37.9	80.2	948.4
1951	135.8	80.4	184.5	153.3	64.2	105.4	0.0	0.0	51.4	93.8	92.6	176.0	1139.6
1952	99.5	181.5	145.2	61.3	102.7	55.1	6.1	0.0	68.2	36.4	164.0	139.6	1059.6
1953	205.3	329.6	131.2	130.4	117.9	95.4	4.2	5.5	28.4	7.0	125.0	20.5	1200.4
1954	228.8	100.6	99.5	126.9	70.8	30.6	0.0	5.2	27.1	41.3	128.2	232.8	1091.8
1955	66.0	102.5	105.7	78.7	46.3	22.4	36.0	81.5	1.4	53.4	131.9	72.1	797.9
1956	63.9	199.5	96.8	24.6	49.3	0.0	9.5	16.5	30.9	25.9	52.7	70.4	640.0
1957	49.0	77.9	128.3	71.2	103.3	52.2	1.6	1.6	77.9	42.1	31.6	260.0	895.1
1958	266.5	78.3	158.0	73.7	112.6	73.9	1.6	29.3	16.3	14.2	9.2	85.9	919.5
1959	182.2	114.6	31.1	119.3	89.7	61.3	26.1	10.1	21.8	60.1	30.0	120.6	866.9
1960	149.4	68.9	145.2	180.5	66.4	56.8	3.0	0.0	6.0	17.6	75.0	49.0	837.8
1961	66.3	174.8	88.6	13.6	39.5	38.6	0.0	9.6	32.3	24.4	34.1	321.8	843.6
1962	0.0	190.0	88.5	48.2	93.9	13.5	0.0	0.0	*****	0.0	0.0	0.0	*****
1963	235.3	163.5	106.9	199.6	98.3	65.5	88.4	*****	*****	*****	*****	*****	*****
1964	11.1	114.8	143.5	13.8	110.3	18.4	5.9	4.2	6.4	0.0	160.2	83.7	672.3
1965	*****	*****	*****	*****	*****	*****	*****	*****	0.0	45.1	120.0	182.0	*****
1966	456.0	34.6	122.9	62.0	43.8	29.6	1.4	50.9	31.9	10.5	86.3	318.5	1248.4
1967	135.4	48.5	151.4	104.3	*****	*****	*****	*****	14.8	30.2	150.8	188.0	*****
1968	316.6	124.3	183.8	31.2	79.0	46.7	0.0	16.0	62.5	43.9	179.9	258.3	1342.2
1969	117.7	90.9	158.4	127.4	78.8	9.2	8.8	0.0	9.5	18.2	68.2	233.1	920.2
1970	86.3	195.2	89.3	21.9	63.6	14.6	15.9	0.0	27.7	73.8	105.8	72.7	766.8
1971	30.7	78.5	133.4	192.7	36.2	37.8	7.2	30.3	13.7	20.0	86.4	50.4	717.3
1972	23.2	115.6	42.7	150.7	43.1	32.2	7.5	27.4	64.1	59.6	33.7	0.0	597.8
1973	15.1	152.5	86.1	130.9	79.7	19.3	3.9	0.0	21.7	10.0	62.5	112.9	694.6
1974	92.4	48.3	108.2	73.1	20.9	25.7	0.0	35.2	61.7	64.3	50.0	244.4	824.2
1975	112.0	86.8	96.0	242.4	83.0	19.8	2.7	19.3	30.6	15.5	49.0	111.1	868.2
1976	288.4	76.7	42.0	105.5	116.9	22.1	17.3	49.0	48.3	116.6	112.8	158.1	1153.7
1977	87.6	79.6	158.0	194.3	49.8	43.4	25.6	0.0	21.1	28.9	14.7	119.7	822.7
1978	244.8	219.1	110.0	155.8	45.2	5.5	0.0	0.0	12.0	188.3	7.5	139.0	1127.2
1979	285.2	98.1	30.7	144.3	113.2	18.5	52.6	0.0	24.7	48.9	138.8	149.8	1104.8
1980	213.6	95.8	334.9	117.6	180.5	26.5	0.0	7.6	1.7	45.3	58.9	142.1	1224.5
1981	353.4	130.6	105.6	121.7	121.7	27.3	11.3	8.9	1.5	33.5	100.8	327.2	1257.7
1982	32.9	41.6	88.0	150.7	69.0	7.4	33.3	11.2	22.0	88.4	4.0	87.2	635.7
1983	200.0	146.8	76.9	157.8	55.0	78.8	0.0	2.0	7.7	59.9	271.3	107.8	1164.0
1984	150.2	96.7	79.1	197.5	16.0	14.8	40.8	3.9	0.0	15.3	66.2	91.5	772.8
1985	162.6	117.8	109.2	110.9	69.3	28.6	6.8	0.4	8.5	106.6	61.0	39.8	817.5
1986	146.7	91.5	21.8	52.6	92.5	73.1	0.0	0.3	13.6	29.5	106.2	243.6	871.4
TOTAL	6545.8	5671.1	5040.7	4849.1	3263.1	1534.3	570.1	547.1	1037.3	2265.7	3872.5	6001.1	38230.7
MEAN	148.8	128.9	112.0	107.8	74.2	34.9	13.0	12.7	23.6	50.3	86.1	133.4	922.5
MAX	456.0	363.0	334.9	242.4	180.5	105.4	88.4	81.5	77.9	188.3	325.0	327.2	1342.2
MIN	0.0	34.6	9.8	13.6	6.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	597.8

Table A-2-31 Monthly Total Precipitation at Cokak Meteorological Station (unit: mm)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
1969	143.3	239.2	198.1	144.1	199.4	24.0	10.3	3.4	19.6	60.8	59.1	285.2	1386.5
1970	79.8	375.9	186.3	70.2	74.8	68.5	1.5	2.7	47.8	87.7	152.6	129.2	1277.0
1971	21.7	171.6	260.3	220.8	39.8	24.7	0.0	43.7	19.8	70.3	99.2	75.7	1047.6
1972	26.5	101.9	131.5	230.1	90.2	31.6	20.1	6.6	25.7	150.2	121.0	1.0	936.4
1973	23.7	208.3	225.6	254.6	45.1	53.2	0.0	0.0	38.5	68.8	143.6	250.7	1312.1
1974	87.9	59.4	129.1	117.9	40.8	25.6	0.0	55.2	59.2	102.3	80.7	375.2	1133.3
1975	142.6	146.6	160.0	281.8	126.0	6.2	1.2	9.0	9.0	6.3	107.7	134.3	1130.7
1976	471.3	112.0	56.6	190.9	159.1	28.0	13.2	29.0	36.4	148.4	119.6	415.6	1780.1
1977	54.9	138.8	243.8	316.6	79.6	33.8	7.2	0.0	86.0	40.9	66.9	236.8	1305.3
1978	392.3	315.8	194.5	272.9	76.5	12.4	4.0	0.0	35.8	183.3	19.2	419.4	1926.1
1979	722.7	276.1	48.9	159.8	89.6	32.9	18.2	0.0	21.4	107.8	176.2	277.8	1931.4
1980	376.6	92.3	451.0	198.3	269.1	15.4	7.2	0.0	1.5	98.2	103.4	284.6	1897.6
1981	427.1	211.2	276.7	63.4	139.3	63.7	12.3	15.2	3.3	124.1	195.4	517.3	2049.0
1982	182.6	77.9	178.3	239.2	58.0	31.1	27.9	1.5	15.2	88.8	18.3	246.6	1165.4
1983	157.8	232.7	106.0	169.1	134.4	38.7	5.4	0.0	13.7	79.5	393.5	132.4	1463.2
1984	139.0	202.9	133.1	357.9	18.8	6.6	5.4	14.8	0.0	12.5	75.6	83.0	1049.6
1985	253.8	258.8	98.6	118.2	86.3	57.2	3.6	24.2	8.4	211.7	106.9	46.9	1274.6
1986	348.8	130.1	17.1	65.4	137.4	92.4	6.5	0.0	10.8	59.7	149.1	443.5	1460.8
TOTAL	4052.4	3351.5	3095.5	3471.2	1864.2	646.0	144.0	205.3	452.1	1701.3	2188.0	4355.2	25526.7
MEAN	225.1	186.2	172.0	192.8	103.6	35.9	8.0	11.4	25.1	94.5	121.6	242.0	1418.1
MAX	722.7	375.9	451.0	357.9	269.1	92.4	27.9	55.2	86.0	211.7	393.5	517.3	2049.0
MIN	21.7	59.4	17.1	63.4	18.8	6.2	0.0	0.0	0.0	6.3	18.3	1.0	936.4

Table A-2-32 Monthly Mean Temperature at Feko Meteorological Station (unit: °C)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
1965	6.7	9.2	9.8	14.2	18.2	23.5	26.8	27.4	26.6	15.3	8.2	6.6	15.3
1966	4.1	3.4	7.6	12.5	15.8	19.2	22.6	24.3	21.2	17.3	13.4	7.2	16.3
1967	2.1	4.9	8.6	10.8	15.8	19.3	23.5	26.8	23.0	16.7	10.6	6.7	14.8
1968	4.9	6.0	10.4	15.8	19.3	23.5	26.8	26.8	23.0	16.7	10.6	6.9	15.3
1969	6.5	7.6	10.7	15.8	19.3	23.5	26.8	26.8	23.0	16.7	10.6	6.9	15.3
1970	4.9	6.0	10.4	15.8	19.3	23.5	26.8	26.8	23.0	16.7	10.6	6.9	15.3
1971	6.3	5.3	8.8	12.4	18.9	22.5	26.3	25.3	23.1	14.8	10.0	4.9	14.9
1972	2.1	2.9	9.0	14.7	17.2	21.6	24.4	25.2	22.1	16.8	9.0	3.3	14.0
1973	3.6	6.8	8.0	12.7	16.2	21.0	25.8	26.4	22.6	17.2	8.5	5.2	14.7
1974	2.3	5.8	11.1	12.4	17.9	23.4	27.2	25.1	20.3	17.9	10.0	5.4	14.9
1975	3.3	4.1	9.6	14.6	17.4	22.4	27.0	26.3	23.1	15.8	9.3	4.0	14.7
1976	3.8	3.0	8.7	12.6	17.5	22.8	24.3	24.9	21.1	16.1	10.7	6.8	14.4
1977	2.7	8.6	8.8	14.0	18.9	22.8	26.7	27.9	22.9	18.0	11.7	5.3	15.7
1978	5.7	7.4	9.8	13.0	20.2	22.8	28.4	25.9	22.4	18.1	8.9	7.1	15.8
1979	5.5	8.6	11.3	14.7	18.9	22.5	25.1	26.4	22.8	17.2	11.8	4.8	15.8
1980	2.2	5.2	8.4	12.7	17.9	24.0	27.9	27.5	22.9	17.1	11.9	7.8	15.5
1981	4.8	6.7	12.3	14.2	16.6	23.8	27.4	27.9	23.9	18.8	9.1	8.9	16.2
1982	6.1	4.0	7.9	14.1	18.4	23.6	25.2	26.2	23.4	16.3	9.0	5.1	14.9
1983	1.2	3.3	8.7	13.9	18.6	22.3	26.3	26.3	23.0	15.6	11.8	7.0	14.8
1984	6.4	7.8	10.7	12.4	19.7	24.1	26.7	25.2	24.6	17.4	10.8	4.1	15.8
1985	6.5	2.7	8.3	14.6	19.5	22.9	26.1	28.2	23.4	14.4	11.6	6.0	15.3
1986	5.8	7.6	10.6	16.0	15.6	21.8	26.5	27.7	24.4	17.0	8.7	5.6	15.6
MEAN	4.4	5.8	9.5	13.7	18.3	23.9	26.4	26.4	22.8	16.5	10.3	5.9	15.3
MAX	6.7	9.2	12.3	16.0	20.2	24.1	28.4	28.2	26.6	18.8	13.4	8.9	16.3
MIN	1.2	2.7	7.6	10.8	15.6	21.0	24.3	24.3	19.9	13.3	8.2	3.3	14.0

Table A-2-33 Monthly Mean Temperature at Tomarza Meteorological Station (unit: °C)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
1965	*****	-1.0	3.8	7.0	11.4	16.7	18.9	21.4	16.9	6.6	3.6	0.6	*****
1966	1.7	3.4	3.7	9.3	12.4	17.5	21.1	22.2	15.4	11.8	8.6	-0.2	10.6
1967	-4.9	-8.2	-0.5	6.8	12.8	14.9	18.2	19.0	14.8	9.9	1.5	-0.4	7.0
1968	-7.3	-6.0	0.7	9.8	13.7	15.2	20.3	18.0	14.2	9.8	5.2	1.3	7.9
1969	-2.8	-6.8	3.4	4.9	13.2	17.5	18.1	20.1	15.6	9.4	3.1	-0.2	8.0
1970	-1.2	1.7	4.5	10.6	12.0	16.7	20.6	18.6	14.3	7.8	5.8	-2.7	9.1
1971	0.7	-1.0	3.3	6.7	12.4	15.5	20.2	18.8	16.5	7.5	5.7	-3.3	8.4
1972	-12.7	-9.2	1.5	9.7	12.0	15.4	20.3	20.0	16.7	10.8	1.6	-4.7	6.6
1973	-4.8	1.4	0.9	7.0	12.8	14.7	19.6	19.4	15.8	10.4	0.2	-3.2	7.8
1974	-9.2	-2.4	4.9	6.2	12.8	18.3	19.9	18.7	13.7	13.0	4.3	-1.4	8.2
1975	-10.7	-5.9	1.0	9.3	11.9	16.6	21.1	19.8	15.3	8.8	1.2	-4.4	7.0
1976	-6.1	-9.4	-0.2	7.0	12.2	15.8	18.2	19.4	14.0	10.4	5.4	-0.8	7.2
1977	-7.9	1.5	2.2	7.8	12.4	15.6	19.2	20.3	13.7	6.5	5.7	-5.1	7.8
1978	-3.1	1.9	4.2	7.7	13.7	16.6	21.1	18.4	15.6	11.5	0.9	1.3	9.1
1979	-2.3	1.6	4.8	8.4	13.4	16.3	18.6	21.4	17.2	10.6	6.1	-1.0	9.6
1980	-7.9	-4.8	0.8	7.7	13.1	17.7	18.6	19.5	14.8	9.8	3.8	-0.1	8.1
1981	-0.2	-0.2	4.9	7.4	10.0	16.3	20.4	19.4	16.6	11.8	1.9	-2.9	8.3
1982	-1.5	-8.8	1.0	9.1	12.9	16.3	17.9	18.6	15.5	9.1	1.8	1.3	7.8
1983	-10.2	-5.7	2.3	7.9	12.5	15.4	19.7	17.7	14.7	8.2	6.0	0.4	7.4
1984	0.8	1.1	4.4	6.7	12.6	16.6	19.3	16.8	17.2	9.5	4.4	-8.2	8.4
1985	-0.2	-5.2	-0.9	9.7	13.7	17.2	17.8	21.1	14.9	7.4	5.6	-2.1	8.2
1986	-1.5	0.0	3.2	9.2	9.0	15.0	21.1	22.0	16.9	9.3	-1.9	-4.1	8.2
MEAN	-4.3	-2.8	2.4	8.0	12.4	16.3	19.7	19.6	15.5	9.5	3.6	-1.8	8.2
MAX	1.7	3.4	4.9	10.6	13.7	18.3	22.5	22.2	17.2	13.0	8.6	1.3	10.6
MIN	-12.7	-9.4	-0.9	4.9	9.0	14.7	17.8	16.8	13.7	6.5	-1.9	-8.2	6.8

Table A-2-34 Monthly Mean Temperature at Pinarbasi Meteorological Station (unit: °C)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
1965	*****	*****	*****	*****	*****	*****	18.1	18.6	14.7	9.9	4.0	-1.0	*****
1964	-9.8	-4.5	3.3	6.0	11.1	15.7	19.2	17.9	13.4	8.8	3.1	0.0	7.1
1965	-2.6	-2.1	3.5	6.3	11.7	15.9	18.8	20.6	15.3	5.9	2.6	0.2	7.9
1966	1.2	2.3	3.5	8.7	11.8	16.2	19.5	20.3	14.2	9.7	7.7	-1.1	9.5
1967	-6.1	-8.0	-1.0	6.1	11.8	13.7	16.6	17.4	13.6	9.3	1.9	-0.3	6.2
1968	-6.3	-4.2	0.9	9.5	13.6	14.5	19.1	16.8	13.8	9.7	5.1	0.6	7.8
1969	-2.4	-4.9	3.0	5.2	13.2	16.6	17.2	19.0	14.3	9.0	2.6	0.3	7.2
1970	-0.4	1.1	4.4	10.4	11.4	15.8	19.1	17.4	13.5	7.5	5.6	-3.1	8.6
1971	0.2	-1.0	3.3	6.8	12.9	14.7	19.5	17.6	13.7	6.9	3.6	-3.6	8.0
1972	-11.4	-6.8	1.3	9.9	11.6	14.7	19.9	19.1	14.8	10.5	1.9	-2.2	6.8
1973	-4.3	0.9	1.1	7.1	12.2	14.3	18.7	18.4	12.7	9.8	0.5	-2.8	7.5
1974	-8.8	-2.4	4.5	5.5	13.0	18.3	19.1	18.1	14.4	12.9	3.8	-1.2	8.0
1975	-8.0	-4.8	2.2	9.0	11.6	15.8	20.3	18.9	14.6	8.0	2.0	-4.6	7.1
1976	-5.0	-7.4	0.5	7.2	12.1	15.7	18.0	17.9	13.1	9.9	4.7	-5.1	7.6
1977	-7.5	2.0	1.0	8.2	12.1	15.3	19.0	20.8	15.2	5.8	1.7	1.1	8.4
1978	-3.6	0.6	2.9	6.2	12.3	15.7	21.0	22.2	17.7	11.0	7.5	-0.4	10.3
1979	-0.8	1.9	5.4	9.7	13.9	16.4	18.8	22.2	17.7	11.0	7.5	-0.9	7.8
1980	-6.8	-5.1	0.4	7.8	13.0	17.1	22.1	19.0	16.8	9.7	3.0	2.5	8.4
1981	-1.9	-1.5	2.5	6.0	8.6	14.9	18.9	18.9	16.7	11.9	2.2	-0.1	6.5
1982	-3.6	-9.4	-0.3	8.2	12.3	16.3	17.7	18.7	14.2	7.8	-0.1	-3.5	6.3
1983	-11.1	-7.7	0.8	7.5	11.8	14.4	18.3	16.8	13.5	7.0	4.8	-0.5	7.4
1984	-0.6	-0.7	3.0	6.0	11.7	15.7	17.9	15.3	16.5	9.0	3.2	-7.9	7.6
1985	-1.2	-6.5	-2.4	8.7	13.5	16.4	16.4	21.0	14.4	6.9	5.9	-1.5	7.6
1986	-2.2	-0.8	2.7	9.1	8.2	14.5	19.7	20.8	16.5	9.4	-1.8	-2.8	7.8
MEAN	-4.5	-3.0	2.0	7.6	12.0	15.6	18.9	18.7	14.6	9.1	3.4	-1.7	7.7
MAX	1.2	2.3	5.4	10.4	13.9	18.3	22.1	22.2	17.7	12.9	7.7	2.3	10.3
MIN	-11.4	-9.4	-2.4	5.2	8.2	13.7	16.4	15.3	12.7	5.8	-1.8	-7.9	6.2



Table A-2-35 Monthly Mean Temperature at Adana Meteorological Station (unit: °C)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
1939	10.6	9.7	11.8	16.2	23.0	24.0	27.8	27.3	25.4	22.4	14.9	11.4	18.9
1940	9.0	11.3	12.2	17.7	20.0	24.9	27.0	27.4	24.6	21.0	15.5	11.9	18.5
1941	9.7	12.2	12.9	17.9	23.0	25.4	27.5	27.8	24.4	18.2	14.7	7.5	18.4
1942	8.7	11.5	13.2	16.7	21.7	26.4	27.5	27.8	24.7	20.3	15.2	10.5	18.5
1943	8.7	8.4	10.0	14.9	20.0	23.6	26.6	28.6	26.6	22.2	17.5	11.9	18.2
1944	8.5	10.3	13.7	17.6	20.1	24.8	27.2	27.2	24.7	21.2	15.3	11.4	18.5
1945	9.1	9.6	10.6	15.2	23.3	25.1	28.0	28.3	26.1	20.0	15.7	10.5	18.5
1946	9.5	9.8	12.5	17.5	20.4	25.1	27.8	28.5	26.8	19.0	17.9	11.9	18.9
1947	9.8	11.0	15.4	18.1	22.3	25.3	28.3	28.4	24.8	20.5	16.4	12.2	19.4
1948	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
1949	8.1	7.3	11.8	14.2	21.9	24.5	26.3	27.0	22.6	20.1	17.2	11.4	17.7
1950	5.4	7.9	12.9	19.3	20.5	24.4	27.0	27.0	25.6	19.1	15.7	12.4	18.1
1951	9.9	10.9	14.8	17.8	21.2	24.9	27.5	28.2	25.3	18.4	15.3	9.6	18.6
1952	9.6	10.9	11.6	17.0	20.5	24.7	27.2	28.3	27.2	22.0	15.1	13.3	18.9
1953	10.0	10.3	9.7	16.2	20.3	24.9	28.1	28.2	24.0	20.3	12.3	7.3	17.8
1954	7.7	10.3	14.4	15.4	20.5	25.8	28.7	29.1	25.5	21.3	15.9	11.7	18.9
1955	10.8	13.1	13.0	16.8	21.6	26.6	27.8	27.0	25.4	22.5	16.0	11.6	19.3
1956	9.9	11.1	11.5	16.9	19.8	25.6	28.2	28.7	25.0	19.6	14.8	9.5	18.4
1957	8.4	11.4	14.1	17.2	20.6	26.2	28.1	28.7	25.8	22.8	15.3	10.8	19.1
1958	9.8	11.5	14.0	17.0	21.0	24.6	26.9	28.5	24.6	20.1	16.2	11.9	18.8
1959	11.0	8.1	12.9	17.9	21.7	24.2	26.8	27.4	23.7	18.7	14.9	12.1	18.1
1960	10.8	11.4	13.3	17.4	23.2	25.1	27.8	28.0	25.5	22.2	17.6	13.8	19.7
1961	9.6	9.4	12.4	17.9	21.7	25.4	28.2	28.6	23.5	20.2	15.4	12.3	18.7
1962	11.0	10.0	15.6	16.6	21.9	24.8	27.6	29.0	26.2	21.3	18.6	12.6	19.7
1963	12.1	12.8	11.7	17.2	20.0	24.8	27.6	28.3	25.3	21.6	15.8	10.8	19.1
1964	5.9	10.1	14.6	16.8	20.2	24.8	27.3	27.7	23.4	21.4	18.6	11.7	18.6
1965	10.0	10.0	14.4	16.5	20.9	26.2	27.7	27.8	25.7	18.5	14.9	11.7	18.7
1966	11.6	13.6	13.8	18.1	21.2	25.5	27.7	28.5	25.2	22.3	19.1	11.7	19.9
1967	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
1968	7.6	10.0	12.8	19.3	23.6	25.4	28.3	26.8	24.4	20.9	15.8	12.2	18.9
1969	9.7	11.0	14.6	16.2	22.7	26.0	26.9	27.6	26.2	21.0	14.8	12.1	19.1
1970	11.3	12.3	14.5	19.0	20.7	25.6	27.6	28.0	25.2	20.0	17.2	10.2	19.5
1971	12.2	10.0	13.7	15.8	22.6	25.5	27.4	27.8	25.9	20.0	15.6	9.6	18.8
1972	7.4	8.5	13.4	18.9	21.0	25.1	26.9	27.9	26.4	21.5	14.9	10.2	18.5
1973	9.3	12.9	13.2	17.1	22.2	25.2	27.8	28.0	26.5	22.3	13.1	10.8	19.0
1974	8.3	11.3	14.9	16.4	21.1	25.5	27.9	26.9	24.9	23.1	16.2	10.8	18.9
1975	9.2	9.5	14.0	18.8	20.9	25.2	27.9	27.7	26.3	21.3	14.9	9.2	18.7
1976	9.7	8.4	13.3	16.3	21.0	25.0	27.2	27.2	24.6	21.5	16.9	11.9	18.6
1977	8.3	13.4	13.4	17.3	22.5	25.9	28.4	28.7	25.8	19.6	16.6	10.4	19.2
1978	10.7	12.2	13.8	16.7	22.2	25.3	29.4	27.4	24.6	22.4	13.7	12.4	19.2
1979	10.7	12.9	14.5	17.8	21.6	25.9	27.9	27.8	26.2	21.8	17.7	10.9	19.6
1980	7.7	10.1	13.1	16.6	20.8	25.4	28.1	28.2	25.0	21.5	16.4	12.3	18.8
1981	10.1	10.7	15.2	17.1	19.9	25.6	28.5	28.4	26.8	23.0	14.2	13.4	19.4
1982	10.7	9.1	11.9	18.1	21.8	25.5	27.0	28.0	26.5	21.1	14.0	10.4	18.7
1983	7.6	9.1	12.7	17.0	21.5	24.8	27.7	27.6	25.2	20.4	14.5	12.3	18.4
1984	11.6	12.5	14.5	16.2	22.4	25.3	27.6	26.6	26.2	22.1	14.9	9.7	19.1
1985	11.2	7.4	13.4	18.0	22.4	25.3	27.4	29.0	26.5	19.4	17.1	11.5	19.0
1986	11.1	12.3	15.2	19.9	20.0	26.3	27.9	28.8	27.0	21.9	13.7	10.9	19.5
MEAN	9.5	10.6	13.3	17.2	21.4	25.3	27.7	28.0	25.5	20.9	15.7	11.2	18.3
MAX	12.2	13.6	15.6	19.9	23.6	26.6	29.4	29.1	27.6	23.1	19.1	13.8	19.9
MIN	5.4	6.1	9.7	14.2	19.8	23.6	26.3	26.6	22.6	18.2	12.3	7.3	17.6

Table A-2-36 Monthly Mean Temperature at Kayseri Meteorological Station (unit: °C)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
1939	-0.5	-1.9	3.2	10.5	16.9	18.8	21.7	21.2	17.0	13.4	4.2	2.5	10.6
1940	-4.6	2.7	2.9	12.1	14.2	19.0	23.1	23.3	16.9	12.3	6.7	5.0	11.1
1941	-0.4	2.6	4.7	11.6	18.0	20.9	23.6	21.7	17.2	9.3	4.8	-6.5	10.6
1942	-4.8	2.1	4.3	10.3	16.5	21.4	21.9	23.0	16.0	11.7	5.9	-0.5	10.6
1943	-1.5	-5.3	-0.5	9.2	14.6	18.6	21.3	22.3	17.4	13.7	7.5	0.9	9.8
1944	-3.5	2.2	6.2	10.3	13.5	19.3	21.8	20.4	16.3	13.5	6.1	2.1	10.7
1945	-0.3	-3.1	0.5	7.5	16.3	17.3	21.7	22.4	17.4	17.0	5.7	0.5	9.6
1946	-2.3	1.2	4.8	10.6	14.5	18.6	22.1	22.0	18.2	9.5	7.8	2.3	10.8
1947	-1.0	1.3	8.0	11.3	16.3	20.8	23.3	21.1	16.2	10.1	7.4	3.0	11.5
1948	2.7	2.2	9.2	9.2	15.0	22.7	22.7	23.0	16.8	10.1	1.7	-3.2	10.0
1949	-7.0	-5.1	2.7	6.9	16.5	21.5	23.1	20.9	14.9	12.3	7.6	3.0	9.8
1950	-6.4	5.9	4.4	15.0	15.3	18.1	21.8	21.2	20.6	10.1	6.8	1.7	11.2
1951	0.4	1.7	8.5	12.1	15.1	18.9	22.5	23.5	18.3	9.0	6.2	-3.6	11.0
1952	-1.3	0.9	3.4	11.1	14.3	17.7	22.2	23.0	20.7	14.6	6.7	4.3	11.5
1953	2.7	1.4	-1.4	10.9	14.5	19.1	22.4	22.7	16.7	11.9	0.9	-8.7	9.4
1954	-4.5	-1.5	4.9	8.5	16.0	20.3	24.7	24.2	18.3	13.6	7.4	2.1	11.2
1955	-0.9	6.6	6.6	10.6	15.9	21.9	23.8	22.5	18.9	15.2	6.2	1.6	12.4
1956	1.0	1.0	1.6	11.8	13.5	20.0	22.3	23.2	15.1	10.1	4.0	-5.1	9.9
1957	-6.7	-1.8	5.6	11.7	14.4	19.1	23.6	24.3	20.9	13.6	4.8	2.2	11.0
1958	1.7	3.0	7.2	11.5	16.0	18.5	22.1	22.4	17.4	10.7	5.8	2.2	11.5
1959	1.6	-0.7	3.0	11.7	16.0	18.9	23.4	21.6	15.3	9.1	5.5	3.4	10.2
1960	0.3	-0.7	5.4	10.2	17.1	18.9	23.4	21.5	18.5	16.2	8.5	3.8	11.8
1961	-0.9	1.4	3.8	12.4	18.0	20.0	22.8	23.1	14.5	12.0	6.3	3.3	11.4
1962	0.0	1.0	8.4	10.7	16.6	21.4	25.2	24.8	19.0	13.4	9.2	4.5	12.8
1963	3.3	4.0	2.8	10.5	14.2	19.2	22.5	22.5	18.0	13.0	5.9	0.9	11.4
1964	-7.1	-1.4	6.6	9.6	14.5	18.7	22.6	21.4	16.7	12.1	6.5	2.8	10.2
1965	-1.0	0.9	6.8	10.0	14.0	19.0	21.7	22.9	16.4	7.4	3.7	2.1	11.3
1966	3.6	4.4	5.6	11.7	14.1	19.0	22.9	22.2	16.5	12.3	8.1	1.7	11.9
1967	-3.8	-5.7	2.1	8.6	14.4	16.8	20.4	20.5	15.7	11.3	3.8	1.1	8.8
1968	-4.1	-1.7	3.1	12.1	16.1	17.1	22.2	19.6	16.1	11.3	6.2	3.2	10.1
1969	-0.9	-7.1	6.4	7.4	15.8	20.3	20.8	22.0	17.4	10.5	3.3	3.1	9.9
1970	2.1	4.1	7.4	12.9	14.8	19.3	23.2	20.4	15.5	10.3	6.4	-1.9	11.2
1971	-9.4	1.3	6.0	9.1	15.0	17.7	22.6	20.5	17.5	8.8	4.9	-1.1	10.3
1972	-3.5	-5.7	3.9	12.7	14.1	17.9	22.7	21.9	17.9	11.8	2.2	-5.7	8.7
1973	-8.8	-2.5	6.8	8.3	14.9	20.6	21.9	20.6	16.6	14.5	5.5	-2.0	9.6
1974	-8.9	-2.4	5.5	12.2	14.3	19.0	23.1	20.6	16.4	9.7	1.5	-5.8	8.9
1975	-4.7	-5.4	3.3	10.0	14.2	18.2	20.6	19.7	15.0	11.4	5.6	0.4	9.0
1976	-4.2	4.5	3.9	10.1	14.6	18.3	21.5	21.5	16.8	7.6	6.5	-3.7	9.8
1977	-0.5	4.3	6.1	8.9	14.7	18.3	22.4	19.5	16.1	11.7	0.4	1.9	10.3
1978	-0.1	2.8	6.0	9.8	15.5	17.6	22.4	22.3	17.0	12.0	7.2	-0.2	10.8
1979	-5.2	-1.7	3.6	9.7	16.3	19.4	23.7	19.6	14.8	10.6	5.0	1.9	9.6
1980	2.2	2.4	7.2	9.1	12.5	19.2	22.8	20.8	17.1	12.5	3.3	4.6	11.1
1981	-0.1	-4.0	3.1	11.8	15.0	19.6	23.7	20.8	17.0	10.6	3.2	-1.1	9.5
1982	-8.1	-1.4	4.1	10.2	14.9	18.2	21.9	19.1	15.5	10.6	7.0	0.2	9.2
1983	1.3	2.4	6.4	8.4	14.3	18.8	21.1	18.1	17.0	9.6	5.7	-6.3	9.7
1984	1.2	-3.2	0.8	11.9	16.9	19.7	19.8	22.4	15.2	8.6	6.8	-0.3	10.0
1985	-0.3	1.7	4.4	10.9	11.6	17.0	22.4	22.8	17.3	10.3	0.8	-0.5	9.9
1986	-1.9	0.1	4.5	10.5	15.1	19.0	22.3	21.7	16.9	11.3	5.3	0.4	10.4
MEAN	3.6	6.6	8.5	15.0	18.0	21.9	25.2	24.8	20.9	15.2	9.2	5.0	12.8
MAX	-9.4	-7.6	-1.4	6.9	11.6	16.8	19.6	18.1	14.5	7.4	0.4	-8.7	8.7
MIN													

Table A-2-37 Monthly Maximum Temperature at Feko Meteorological Station (unit: °C)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MAX
1966	15.3	22.1	23.5	30.0	29.5	35.2	39.2	40.6	35.7	30.7	29.5	17.3	40.6
1967	15.6	20.5	21.1	26.7	*****	*****	*****	*****	34.0	29.2	22.9	17.9	*****
1968	11.7	19.2	21.7	29.3	32.4	33.6	39.7	34.9	34.6	31.3	23.5	17.0	39.7
1969	14.8	16.7	23.3	27.0	35.6	37.0	36.6	39.4	40.3	31.6	25.4	18.2	40.3
1970	19.3	18.2	24.6	32.4	29.7	35.6	37.2	41.0	35.9	29.7	26.0	16.5	41.0
1971	21.6	18.0	21.6	29.7	35.1	35.3	35.1	37.6	37.5	31.3	23.8	16.8	37.6
1972	17.5	16.0	23.6	28.3	32.4	36.0	35.8	38.0	36.2	31.8	23.5	19.6	38.0
1973	18.0	19.7	23.3	26.5	33.5	35.3	39.5	39.7	36.2	33.4	23.4	17.5	39.7
1974	15.0	17.3	22.0	31.6	32.5	35.7	40.0	39.5	33.5	33.5	23.0	18.4	40.0
1975	13.1	15.3	27.0	31.6	32.8	36.7	40.2	41.7	39.5	33.0	26.6	17.4	41.7
1976	16.5	18.8	25.0	29.0	31.5	35.3	37.7	38.9	35.6	33.0	27.3	19.1	38.9
1977	16.0	25.0	26.4	30.4	34.8	35.0	39.2	42.5	36.3	31.0	28.3	19.8	42.5
1978	15.8	21.0	25.0	27.0	32.3	38.9	41.7	41.5	34.8	36.2	24.2	17.6	41.7
1979	18.1	23.4	25.5	30.9	32.6	37.0	39.7	*****	38.4	34.5	24.7	19.5	*****
1980	12.7	16.3	26.4	25.9	37.0	40.0	42.8	40.5	35.7	31.9	28.5	20.6	42.8
1981	14.5	18.0	26.5	31.6	32.6	38.6	42.0	40.0	40.0	33.0	23.8	18.0	42.0
1982	17.4	19.0	21.0	27.0	33.8	37.7	37.8	40.3	38.3	30.5	26.1	19.4	40.3
1983	13.6	18.7	27.4	30.8	31.0	36.5	37.5	37.4	36.8	31.0	28.2	19.3	37.5
1984	18.0	19.2	23.6	26.6	32.7	37.0	39.4	37.5	38.0	36.7	23.5	17.4	39.4
1985	18.2	16.5	24.5	32.0	35.0	36.5	40.8	42.5	37.7	34.7	25.0	21.0	42.5
1986	18.7	18.6	26.0	29.6	30.0	33.8	39.0	40.5	38.5	30.3	22.5	21.5	40.5
MEAN	16.3	18.9	24.3	28.9	32.8	36.3	39.0	39.7	36.8	32.3	25.3	18.6	40.4
MAX	21.6	25.0	27.4	32.4	37.0	40.0	42.8	42.5	40.3	36.7	29.5	21.5	42.8
MIN	11.7	15.3	21.0	25.0	29.5	33.6	35.1	34.9	33.5	29.2	22.5	16.5	37.5

Table A-2-38 Monthly Minimum Temperature at Feke Meteorological Station (unit: °C)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MIN
1966	-3.1	-0.9	-1.3	1.9	5.2	11.3	15.7	16.8	11.3	7.3	3.5	-1.7	-3.1
1967	-4.5	-5.0	-2.2	0.5	*****	*****	*****	*****	5.3	6.9	-3.8	-5.3	-5.3
1968	-10.6	-5.0	-1.3	4.2	9.9	12.9	14.6	13.8	10.3	6.0	2.5	-2.3	-10.6
1969	-3.8	-3.3	0.3	1.0	7.6	13.4	13.5	14.8	9.3	1.1	-0.6	-1.3	-3.8
1970	-2.4	-2.1	1.5	2.7	6.7	12.0	14.9	14.3	9.5	4.5	2.7	-5.0	-5.0
1971	-4.8	-5.8	-2.0	3.1	9.1	11.5	15.9	15.0	9.5	0.5	-0.4	-3.8	-5.8
1972	-6.5	-12.3	-2.0	2.6	6.6	12.6	12.7	15.0	12.8	6.0	-3.0	-8.6	-12.3
1973	-8.3	-2.5	-1.4	3.0	7.3	9.0	14.7	14.2	10.5	2.0	-3.7	-4.8	-8.3
1974	-7.3	-6.9	2.5	1.6	7.3	11.5	13.1	13.0	8.3	7.4	-1.6	-3.9	-7.3
1975	-5.4	-9.9	-3.1	5.5	5.3	11.3	15.0	13.4	10.3	3.5	-1.3	-4.7	-9.9
1976	-4.5	-6.6	-6.3	3.3	8.3	9.6	13.0	13.6	8.1	4.6	0.6	-4.0	-6.6
1977	-5.8	-1.5	-2.0	3.5	9.3	10.0	13.4	14.5	11.9	2.0	-1.2	-4.0	-5.8
1978	-2.9	-1.9	-0.3	3.0	5.7	7.7	15.6	14.5	10.5	8.4	-1.6	-4.0	-2.9
1979	-3.5	-1.4	-0.6	3.5	9.6	11.9	14.0	*****	10.0	7.4	2.8	-4.6	-1.4
1980	-6.5	-3.0	-0.6	2.0	7.5	10.5	16.8	15.1	9.4	6.0	0.7	-2.6	-6.5
1981	-2.6	-1.2	0.5	2.5	3.8	10.6	16.0	15.6	11.5	7.2	-1.4	-0.6	-2.6
1982	-4.3	-5.8	-3.0	3.3	6.6	11.7	13.0	15.1	12.2	5.0	-3.0	-4.6	-5.8
1983	-7.6	-11.5	-4.5	2.5	9.4	12.0	14.8	13.4	8.7	6.2	1.4	-3.6	-11.5
1984	-2.2	-1.9	0.5	2.5	5.0	13.0	15.0	13.4	12.4	3.7	1.7	-5.5	-5.5
1985	-1.5	-7.6	-6.9	4.4	4.6	12.0	11.9	16.5	10.0	1.5	3.5	-4.5	-7.6
1986	-3.8	-1.9	0.3	5.5	5.5	12.2	15.0	17.9	12.7	6.6	-1.3	-4.0	-4.0
MEAN	-4.9	-4.7	-1.5	2.9	7.0	11.3	14.4	14.7	10.2	4.9	-0.2	-3.9	-6.4
MAX	-1.5	-0.9	2.5	5.5	9.9	13.4	16.8	17.9	12.8	8.4	3.5	-0.6	-2.6
MIN	-10.6	-12.3	-6.9	0.5	3.8	7.7	11.9	13.0	5.3	0.5	-3.8	-8.6	-12.3

Table A-2-39 Monthly Total Evaporation at Tomarza Meteorological Station (unit: mm)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
1974	0.0	0.0	0.0	0.0	72.7	106.8	249.5	204.1	119.3	88.8	0.0	0.0	736.9
1975	0.0	0.0	0.0	0.0	72.7	106.8	214.0	194.1	169.3	0.0	0.0	0.0	736.9
1976	0.0	0.0	0.0	0.0	72.7	106.8	214.0	194.1	169.3	0.0	0.0	0.0	736.9
1977	0.0	0.0	0.0	0.0	72.7	106.8	214.0	194.1	169.3	0.0	0.0	0.0	736.9
1978	0.0	0.0	0.0	0.0	72.7	106.8	214.0	194.1	169.3	0.0	0.0	0.0	736.9
1979	0.0	0.0	0.0	0.0	72.7	106.8	214.0	194.1	169.3	0.0	0.0	0.0	736.9
1980	0.0	0.0	0.0	0.0	72.7	106.8	214.0	194.1	169.3	0.0	0.0	0.0	736.9
1981	0.0	0.0	0.0	0.0	72.7	106.8	214.0	194.1	169.3	0.0	0.0	0.0	736.9
1982	0.0	0.0	0.0	0.0	67.1	131.1	169.7	163.4	115.4	67.0	0.0	0.0	715.4
1983	0.0	0.0	0.0	0.0	70.6	145.9	168.3	147.7	123.8	77.3	0.0	0.0	733.6
1984	0.0	0.0	0.0	0.0	84.7	120.0	178.0	189.2	127.3	53.3	0.0	0.0	907.5
1985	0.0	0.0	0.0	0.0	84.7	120.0	178.0	189.2	127.3	53.3	0.0	0.0	907.5
1986	0.0	0.0	0.0	0.0	100.9	82.0	254.2	255.7	164.8	85.9	0.0	0.0	1085.6
TOTAL	0.0	0.0	0.0	185.6	412.4	680.9	1233.7	1154.2	917.8	428.7	14.3	0.0	4179.0
MEAN	0.0	0.0	0.0	37.1	82.5	136.2	205.6	192.4	131.1	61.2	2.0	0.0	855.8
MAX	0.0	0.0	0.0	100.9	120.0	155.0	254.2	255.7	164.8	88.8	14.3	0.0	1085.6
MIN	0.0	0.0	0.0	0.0	67.1	106.8	168.3	147.7	113.4	0.0	0.0	0.0	715.4

Table A-2-40 Monthly Total Evaporation at Kayseri Meteorological Station (unit: mm)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
1961	*****	*****	*****	*****	*****	*****	270.5	272.7	141.0	110.3	61.9	0.0	*****
1962	0.0	0.0	0.0	133.6	192.3	271.9	269.8	260.5	197.6	107.5	46.8	0.0	1480.0
1963	0.0	0.0	0.0	0.0	144.2	169.0	248.3	255.0	154.3	84.7	0.0	0.0	1035.5
1964	0.0	0.0	0.0	124.6	149.2	179.7	250.0	230.9	157.3	133.9	0.0	0.0	1225.6
1965	0.0	0.0	0.0	0.0	174.2	244.5	272.3	279.3	175.1	77.5	0.0	0.0	1222.9
1966	0.0	0.0	0.0	0.0	189.0	253.3	292.6	293.6	164.7	103.7	0.0	0.0	1298.9
1967	0.0	0.0	0.0	0.0	166.5	234.7	255.8	243.3	191.8	91.1	0.0	0.0	1183.2
1968	0.0	0.0	0.0	0.0	178.2	204.4	284.2	248.6	151.1	0.0	0.0	0.0	1066.5
1969	0.0	0.0	0.0	0.0	194.3	269.9	312.7	288.8	219.9	70.7	0.0	0.0	1066.5
1970	0.0	0.0	0.0	0.0	220.8	291.0	354.9	253.3	131.1	65.2	21.2	0.0	1337.5
1971	0.0	0.0	0.0	86.3	156.1	180.8	222.6	185.9	135.6	61.7	0.0	0.0	1029.0
1972	0.0	0.0	0.0	118.0	151.5	155.2	216.9	188.8	137.0	54.0	0.0	0.0	1021.4
1973	0.0	0.0	0.0	100.1	153.2	172.4	205.6	181.0	131.3	83.4	0.0	0.0	1027.0
1974	0.0	0.0	0.0	92.8	156.5	213.2	221.0	154.8	103.9	108.5	0.0	0.0	1050.7
1975	0.0	0.0	0.0	0.0	123.1	156.6	198.2	156.5	122.2	0.0	0.0	0.0	756.6
1976	0.0	0.0	0.0	48.2	135.7	171.3	213.7	186.3	127.4	68.0	0.0	0.0	950.8
1977	0.0	0.0	0.0	0.0	117.7	171.9	213.2	206.0	121.1	39.0	0.0	0.0	868.9
1978	0.0	0.0	0.0	0.0	44.2	158.2	178.2	152.0	106.5	59.2	0.0	0.0	698.3
1979	0.0	0.0	0.0	0.0	123.8	138.9	166.6	153.4	120.6	66.6	0.0	0.0	769.9
1980	0.0	0.0	0.0	42.6	123.8	166.5	195.5	144.4	85.0	7.7	0.0	0.0	765.5
1981	0.0	0.0	0.0	0.0	87.7	128.0	187.0	156.1	114.0	0.0	0.0	0.0	672.8
1982	0.0	0.0	0.0	0.0	80.9	128.6	151.7	136.5	92.6	0.0	0.0	0.0	590.3
1983	0.0	0.0	0.0	77.9	101.1	127.3	172.4	151.7	99.0	48.3	0.0	0.0	777.7
1984	0.0	0.0	0.0	70.6	98.3	150.6	159.7	136.5	130.7	0.0	0.0	0.0	746.4
1985	0.0	0.0	0.0	93.9	115.9	164.5	169.0	184.4	117.7	56.1	0.0	0.0	901.5
1986	0.0	0.0	0.0	90.0	77.3	136.3	236.5	227.8	147.7	82.0	0.0	0.0	997.6
TOTAL	0.0	0.0	0.0	1078.6	3455.5	4640.7	5918.9	5288.3	3596.2	1579.1	129.9	0.0	24810.8
MEAN	0.0	0.0	0.0	43.1	138.2	185.6	227.6	203.4	158.3	60.7	5.0	0.0	992.4
MAX	0.0	0.0	0.0	133.6	220.8	291.0	354.9	293.6	219.9	133.9	61.9	0.0	1480.0
MIN	0.0	0.0	0.0	0.0	64.2	127.3	151.7	136.5	85.0	0.0	0.0	0.0	590.3

Table A-2-41 Monthly Total Evaporation at Goksun Meteorological Station (unit: mm)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
1973	0.0	0.0	0.0	0.0	147.9	196.5	265.8	237.0	171.6	93.2	0.0	0.0	1112.0
1974	0.0	0.0	0.0	0.0	151.1	200.0	275.5	191.2	136.3	0.0	0.0	0.0	934.1
1975	0.0	0.0	0.0	0.0	109.0	177.6	239.5	219.3	157.8	0.0	0.0	0.0	903.2
1976	0.0	0.0	0.0	0.0	88.2	176.7	226.2	219.8	130.5	0.0	0.0	0.0	841.4
1977	0.0	0.0	0.0	0.0	42.4	74.8	122.8	226.7	138.0	52.6	0.0	0.0	657.3
1978	0.0	0.0	0.0	0.0	146.3	190.6	238.1	218.9	153.6	78.7	7.2	0.0	1033.4
1979	0.0	0.0	0.0	0.0	114.4	169.9	224.9	200.9	157.2	81.6	0.0	0.0	945.9
1980	0.0	0.0	0.0	0.0	113.7	199.2	237.8	205.3	144.6	0.0	0.0	0.0	900.6
1981	0.0	0.0	0.0	0.0	118.1	59.3	108.1	96.6	66.5	45.0	0.0	0.0	493.6
1982	0.0	0.0	0.0	0.0	44.6	80.9	103.0	178.1	128.5	95.1	0.0	0.0	630.2
1983	0.0	0.0	0.0	0.0	105.3	162.2	193.3	189.3	151.9	0.0	0.0	0.0	802.0
1984	0.0	0.0	0.0	0.0	136.2	189.7	225.3	212.7	158.9	72.7	0.0	0.0	995.5
1985	0.0	0.0	0.0	0.0	123.6	177.9	247.8	202.2	152.3	0.0	0.0	0.0	903.8
1986	0.0	0.0	0.0	56.0	86.0	147.5	234.4	188.1	131.6	0.0	0.0	0.0	843.6
TOTAL	0.0	0.0	0.0	56.0	1526.8	2199.8	2942.5	2786.1	1979.3	518.9	7.2	0.0	12016.6
MEAN	0.0	0.0	0.0	4.0	109.1	157.1	210.2	199.0	141.4	37.1	0.5	0.0	858.3
MAX	0.0	0.0	0.0	56.0	151.1	200.0	275.5	237.0	171.6	95.1	7.2	0.0	1112.0
MIN	0.0	0.0	0.0	0.0	42.4	59.3	103.0	96.6	66.5	0.0	0.0	0.0	493.6

Table A-2-42 Monthly Total Evaporation at Adana Meteorological Station (unit: mm)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
1962	54.3	59.5	97.7	116.7	145.2	217.2	245.0	262.0	212.0	118.4	88.0	27.2	1644.5
1963	53.2	44.9	86.6	149.5	175.7	196.8	241.4	259.0	190.2	120.9	68.1	67.7	1690.7
1964	55.4	41.0	93.0	119.2	175.2	242.4	258.8	239.3	189.8	127.5	78.4	39.6	1659.7
1965	32.5	57.9	105.7	127.7	219.4	257.0	264.7	248.4	195.6	141.9	90.1	44.5	1785.4
1966	52.8	65.4	79.8	111.1	167.6	249.5	292.9	264.3	189.8	145.5	66.5	33.5	1718.5
1967	32.9	57.2	104.2	156.8	213.7	238.5	271.8	233.3	174.0	112.2	63.4	36.7	1694.7
1968	43.8	61.2	88.8	150.4	212.0	289.0	313.4	236.1	194.5	128.4	70.9	39.3	1827.8
1969	16.1	44.8	96.9	166.8	202.6	220.1	226.5	230.1	179.8	117.5	59.6	45.7	1606.5
1970	55.5	54.4	82.2	89.5	178.4	225.6	212.7	209.5	166.2	125.4	62.6	50.4	1512.4
1971	43.2	66.9	89.7	113.6	159.1	182.9	209.0	208.8	164.8	109.9	71.9	64.1	1483.9
1972	66.1	71.4	102.5	131.5	187.6	226.6	242.8	223.4	179.8	125.7	69.5	39.2	1666.1
1973	54.2	67.9	75.1	104.4	169.3	214.0	246.9	207.3	207.4	122.4	207.4	48.6	1385.7
1974	40.6	47.7	95.3	109.5	146.2	201.0	234.7	215.8	193.1	133.4	62.3	42.2	1521.8
1975	43.1	61.1	79.3	94.1	135.5	188.2	222.3	214.0	169.2	102.7	58.6	40.5	1408.6
1976	41.5	43.4	68.9	101.8	188.3	209.2	250.8	231.8	164.0	109.9	78.9	50.0	2338.5
1977	44.3	64.8	81.7	98.5	197.9	272.6	272.6	214.0	158.7	106.5	61.1	33.5	1501.0
1978	39.3	50.5	66.5	123.0	173.8	203.2	241.9	217.0	183.3	102.9	66.0	34.3	1501.7
1979	38.8	47.1	66.5	100.9	146.3	207.0	206.6	219.9	159.0	97.1	59.7	45.0	1393.9
1980	35.1	42.6	72.2	114.3	152.4	184.7	201.9	187.3	165.1	111.8	58.9	37.8	1364.1
1981	38.5	57.5	73.6	100.2	163.9	185.5	206.7	202.6	158.3	99.4	86.7	51.5	1424.4
1982	54.0	43.8	64.2	90.9	133.9	172.3	214.4	201.8	159.7	111.3	53.4	38.7	1338.4
1983	47.1	54.5	69.7	100.5	166.0	179.2	217.2	210.6	150.7	126.9	51.8	46.3	1420.5
1984	35.1	40.1	95.8	101.9	144.7	175.3	241.1	225.2	182.6	95.2	45.3	44.5	1426.8
1985	41.0	48.3	86.3	132.7	130.1	188.3	207.8	200.5	178.0	113.5	65.8	54.2	1446.5
1986	1058.4	1293.9	2022.2	2805.5	4054.5	5051.4	5743.9	5362.0	4473.7	2938.4	1682.8	1101.0	37162.1
MEAN	44.1	53.9	84.3	116.9	168.9	210.5	239.3	223.4	178.9	118.3	67.3	44.0	1548.4
MAX	66.1	71.4	105.7	166.8	219.4	289.0	313.4	264.3	212.0	157.5	90.1	67.7	1827.8
MIN	16.1	40.1	64.2	89.5	130.1	172.3	201.9	187.3	150.7	95.2	45.3	27.2	1358.4



**A-3 GEOLOGY AND CONSTRUCTION MATERIALS**



### A-3 GEOLOGY AND CONSTRUCTION MATERIALS

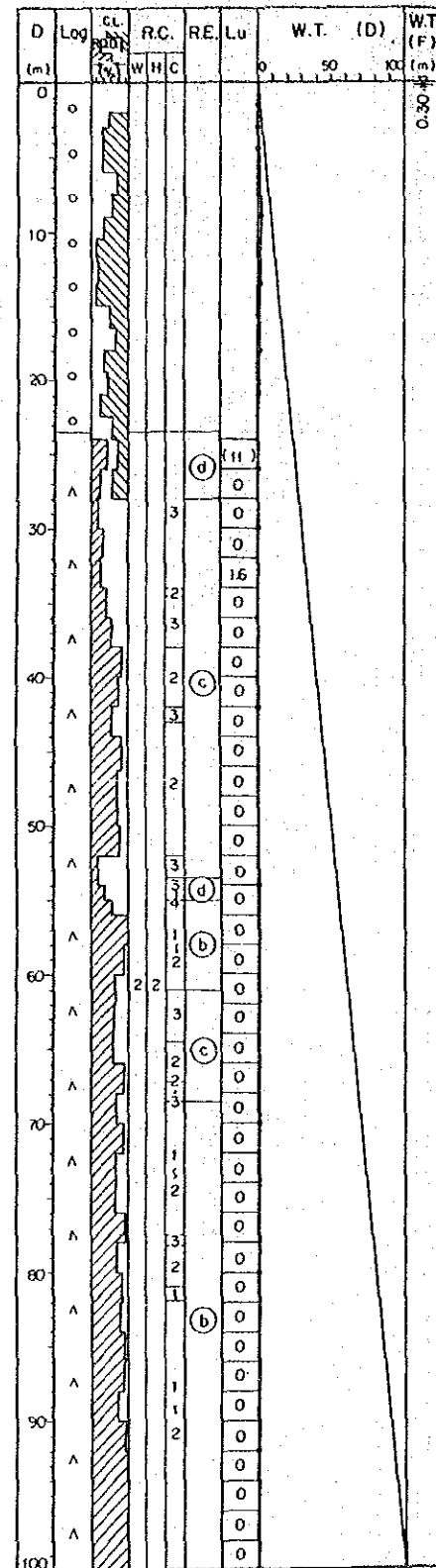
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**Hole No. SK-1**

Elevation: 510 m

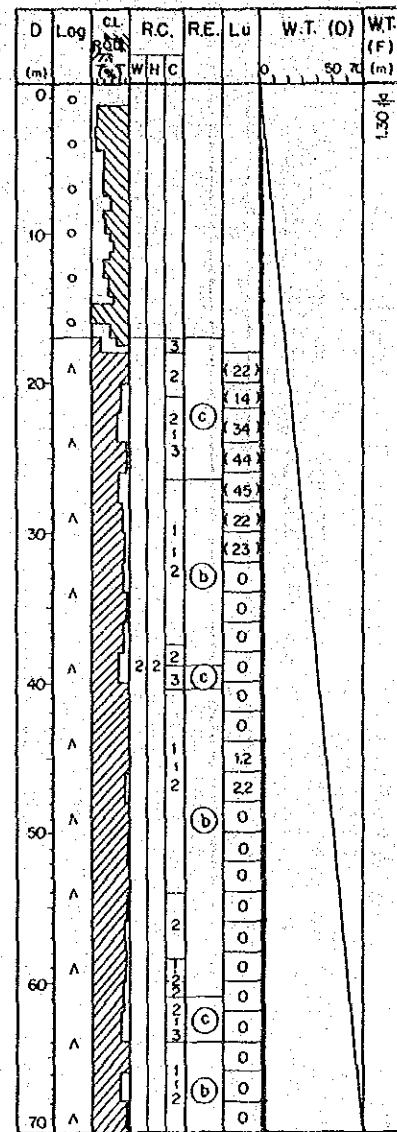
Depth of Hole: 100.00 m Angle from Horizontal: Vertical



**Hole No. SK-2**

Elevation: 510.834 m

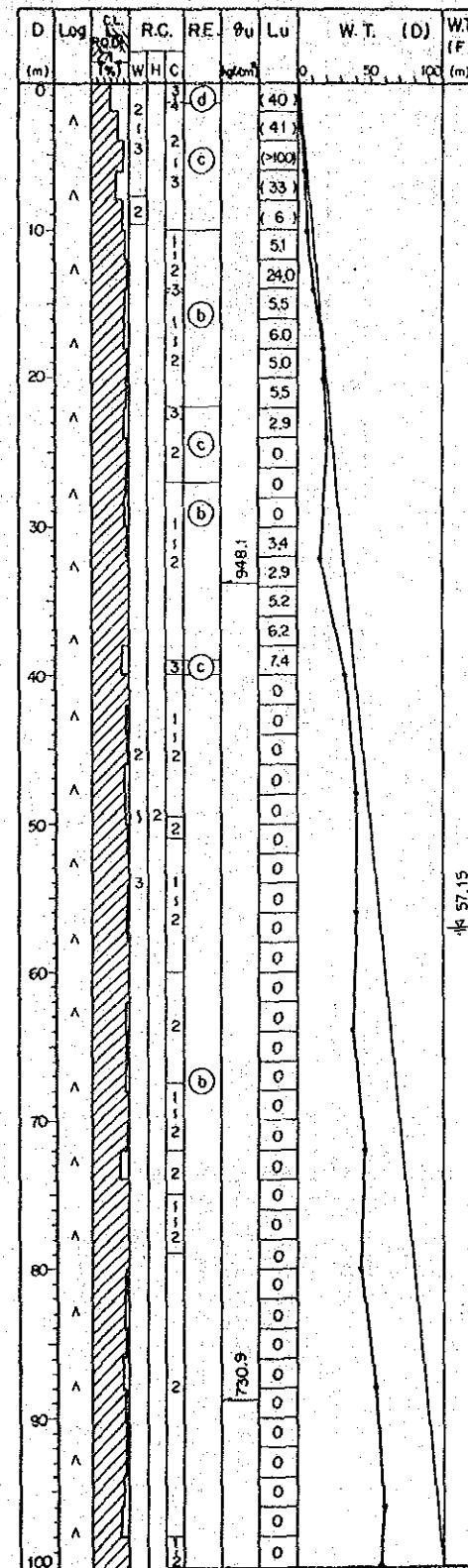
Depth of Hole: 70.00 m Angle from Horizontal: Vertical



**Hole No. SK-3**

Elevation: 607.609 m

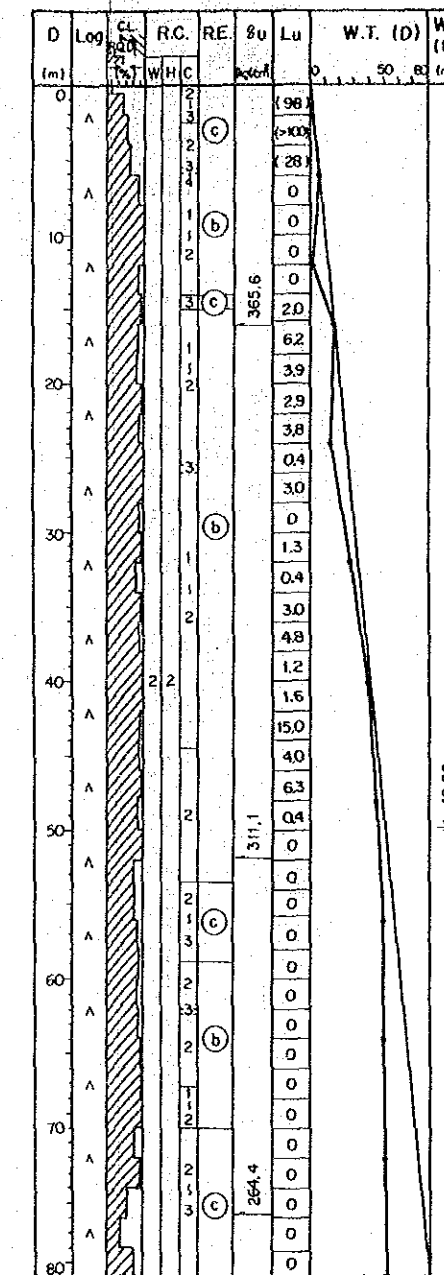
Depth of Hole: 100.00 m Angle from Horizontal: Vertical



**Hole No. SK-4**

Elevation: 607.222 m

Bearing of Angle Hole: S 25° E  
Depth of Hole: 80.00 m Angle from Horizontal: - 45°



**LEGEND**

- ○ Alluvium
- △ △ Slope wash
- △ △ Peridotite
- Limestone
- Limestone (Bituminous)
- Sandy limestone
- Dolomitic limestone
- Sandstone
- Shale

- ① Depth of Drillhole (m)
- ② Geological Log
- ③ R.Q.D = Rock Quality Designation (%)  
C.L. = Core Loss (%)
- ④ R.C. = Rock Classification  
W : Weathering 1 ( Very Fresh )  
5 ( Strongly Weathered )  
H : Hardness 1 ( Very Hard )  
5 ( Soft )  
C : Interval of Cracks  
1 ( Over 30 cm )  
5 ( Under 1 cm )
- ⑤ R.E. = Rock Evaluation  
⊙ Very Good  
⊙ Very Bad
- ⑥  $\phi_u$  = Unconfined Compression Strength of Core (kgf/cm<sup>2</sup>)
- ⑦ Lu = Lugeon Value (#/m / min / 10 kgf/cm<sup>2</sup>)  
( ) : Converted Lugeon Value
- ⑧ W.T.(D) = Water Table in Drillhole during Drilling
- ⑨ W.T.(F) = Final Water Table (m)

①	②	③	④	⑤	⑥	⑦	⑧	⑨
D (m)	Log	CL (%)	R.C.	R.E.	$\phi_u$	Lu	W.T. (D)	W.T. (F)
(m)					kgf/cm <sup>2</sup>	#/m	(m)	(m)



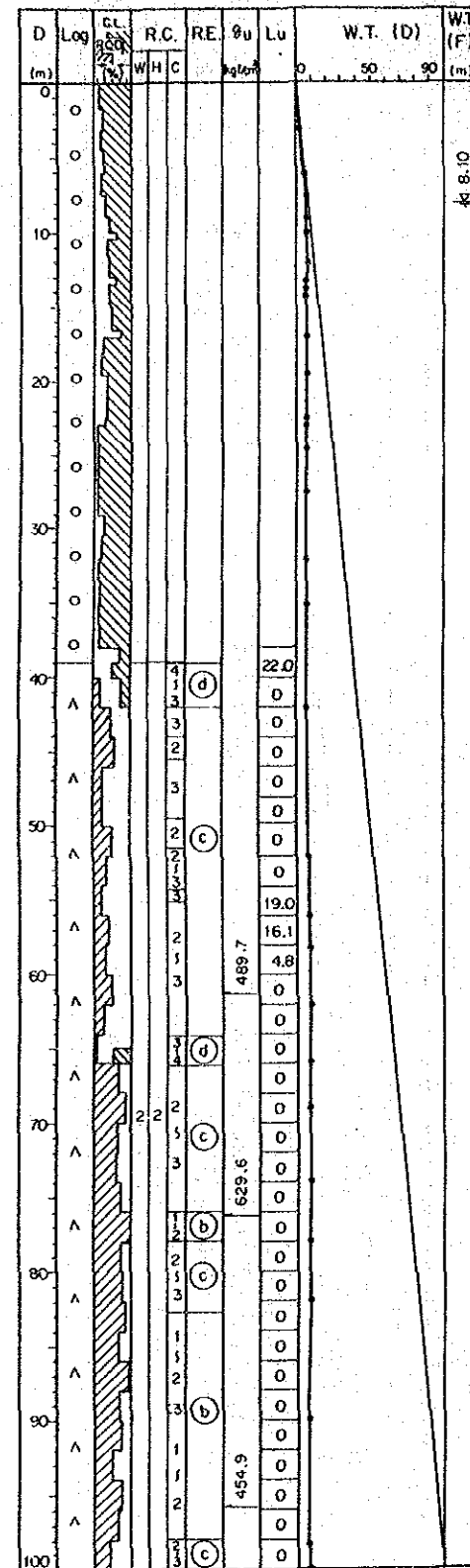
ZAMANTI GÖRTAŞ HYDROELECTRIC  
POWER DEVELOPMENT PROJECT

**SUMMARY LOGS OF DRILL HOLES**

( 1 - 4 )

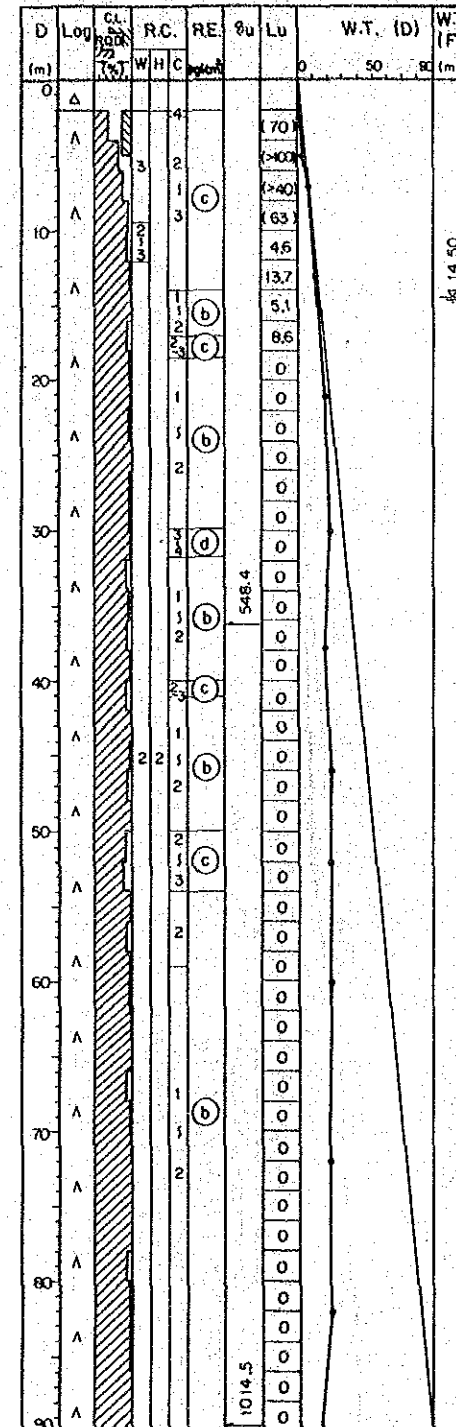
**Hole No. SK-5**

Elevation: 517.561 m Bearing of Angle Hole: S40°E  
 Depth of Hole: 100.00 m Angle from Horizontal: -55°



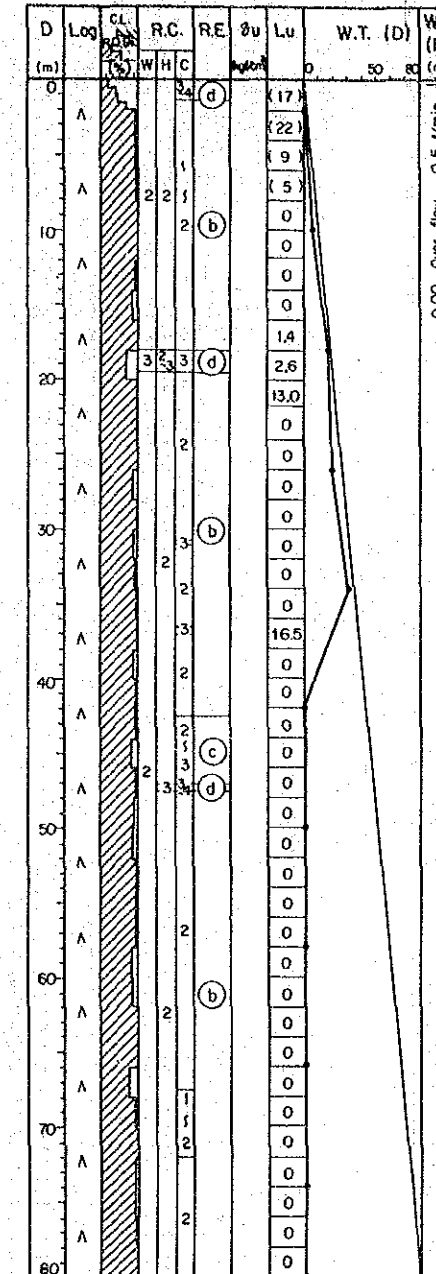
**Hole No. SK-6**

Elevation: 542.365 m Bearing of Angle Hole: N25°W  
 Depth of Hole: 90.00 m Angle from Horizontal: Vertical



**Hole No. SK-7**

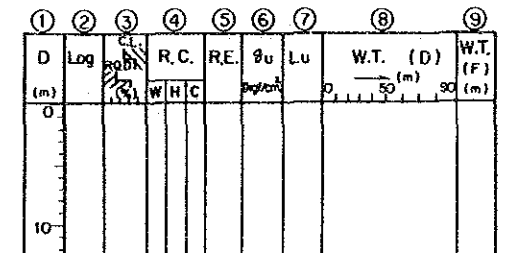
Elevation: 603.687 m Bearing of Angle Hole: N25°W  
 Depth of Hole: 80.00 m Angle from Horizontal: -60°



**LEGEND**

- ○ Alluvium
- △ △ Slope wash
- △ △ Peridotite
- Limestone
- Limestone (Bituminous)
- Sandy limestone
- Dolomitic limestone
- Sandstone
- Shale

- ① Depth of Drillhole (m)
- ② Geological Log
- ③ R.Q.D = Rock Quality Designation (%)  
C.L. = Core Loss (%)
- ④ R.C. = Rock Classification  
W : Weathering 1 ( Very Fresh )  
                  5 ( Strongly Weathered )  
H : Hardness 1 ( Very Hard )  
                  5 ( Soft )  
C : Interval of Cracks  
                  1 ( Over 30 cm )  
                  5 ( Under 1 cm )
- ⑤ R.E. = Rock Evaluation  
    ⓐ Very Good  
    ⓑ Very Bad
- ⑥  $\sigma_u$  = Unconfined Compression Strength of Core (kg/cm<sup>2</sup>)
- ⑦ Lu = Lugeon Value (L/m/min / 10kgf/cm<sup>2</sup>)  
    ( ) : Converted Lugeon Value
- ⑧ W.T.(D) = Water Table in Drillhole during Drilling
- ⑨ W.T.(F) = Final Water Table (m)



ZAMANTI GÖKTAS HYDROELECTRIC POWER DEVELOPMENT PROJECT

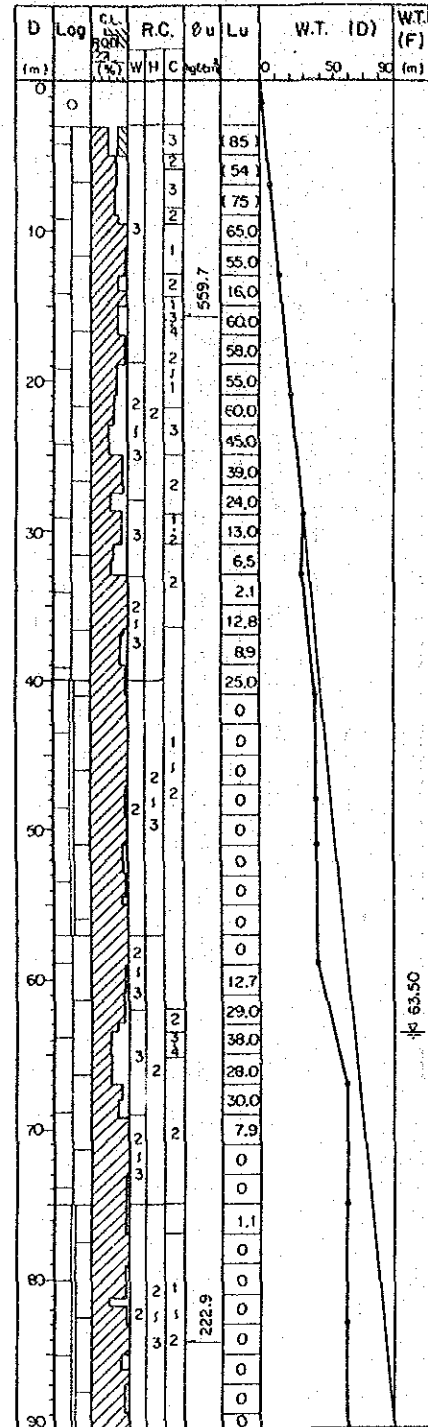
**SUMMARY LOGS OF DRILL HOLES**

( 2 - 4 )

**Hole No. TB-1**

Elevation: 631.357 m

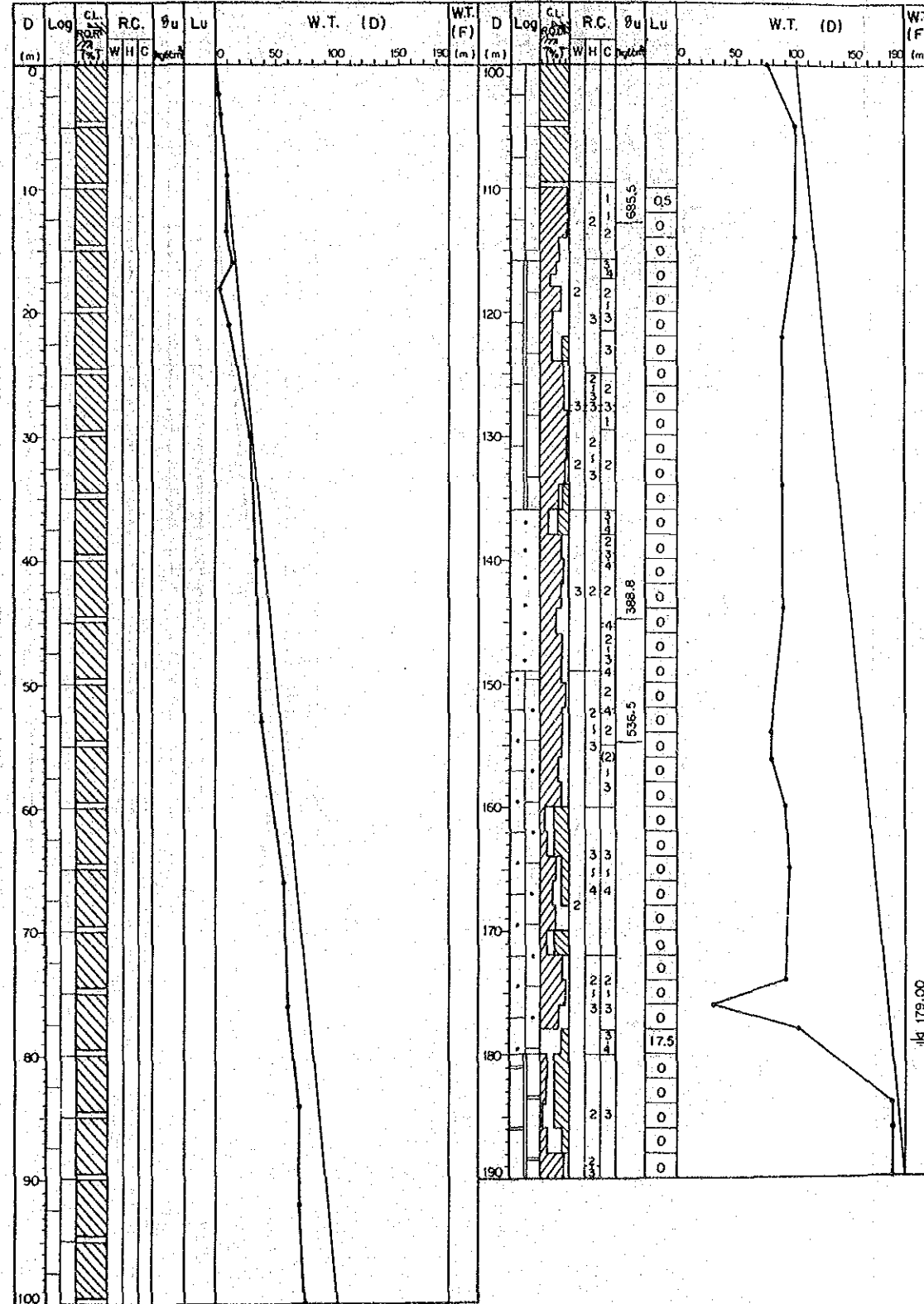
Depth of Hole: 90.00 m Angle from Horizontal: Vertical



**Hole No. TB-2**

Elevation: 740.076 m

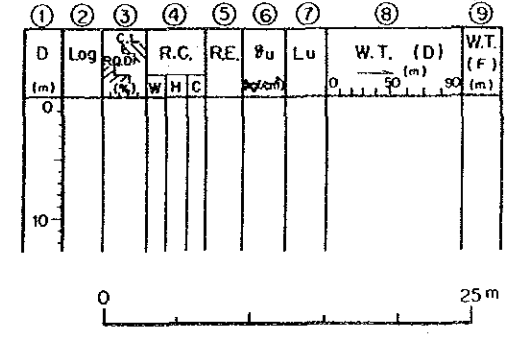
Depth of Hole: 190.00 m Angle from Horizontal: Vertical



**LEGEND**

- ○ Alluvium
- △ △ Slope wash
- ▲ ▲ Peridotite
- Limestone
- Limestone (Bituminous)
- Sandy limestone
- Dolomitic limestone
- Sandstone
- Shale

- ① Depth of Drillhole (m)
- ② Geological Log
- ③ R.Q.D = Rock Quality Designation (%)  
C.L. = Core Loss (%)
- ④ R.C. = Rock Classification  
W : Weathering 1 (Very Fresh)  
                  5 (Strongly Weathered)  
H : Hardness 1 (Very Hard)  
                  5 (Soft)  
C : Interval of Cracks  
                  1 (Over 30cm)  
                  5 (Under 1cm)
- ⑤ R.E. = Rock Evaluation  
    ⊙ Very Good  
    ⊙ Very Bad
- ⑥ σu = Unconfined Compression Strength of Core (kgf/cm<sup>2</sup>)
- ⑦ Lu = Lugeon Value (L/m/min/10kgf/cm<sup>2</sup>)  
    { } : Converted Lugeon Value
- ⑧ W.T.(D) = Water Table in Drillhole during Drilling
- ⑨ W.T.(F) = Final Water Table (m)



ZAMANTI GÖKTAŞ HYDROELECTRIC  
POWER DEVELOPMENT PROJECT

SUMMARY LOGS OF DRILL HOLES  
( 3 - 4 )

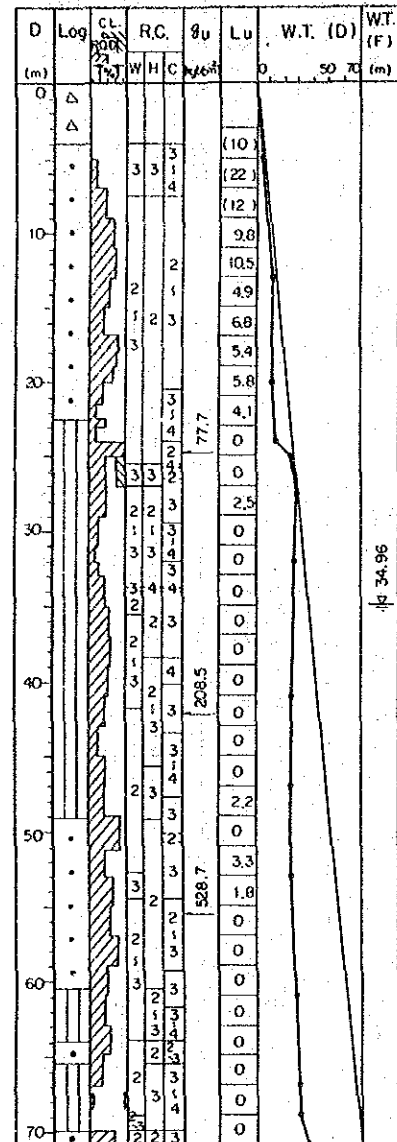
**LEGEND**

- Alluvium
- Slope wash
- Peridotite
- Limestone
- Limestone (Bituminous)
- Sandy limestone
- Dolomitic limestone
- Sandstone
- Shale

**Hole No. PB-1**

Elevation : 391.912 m

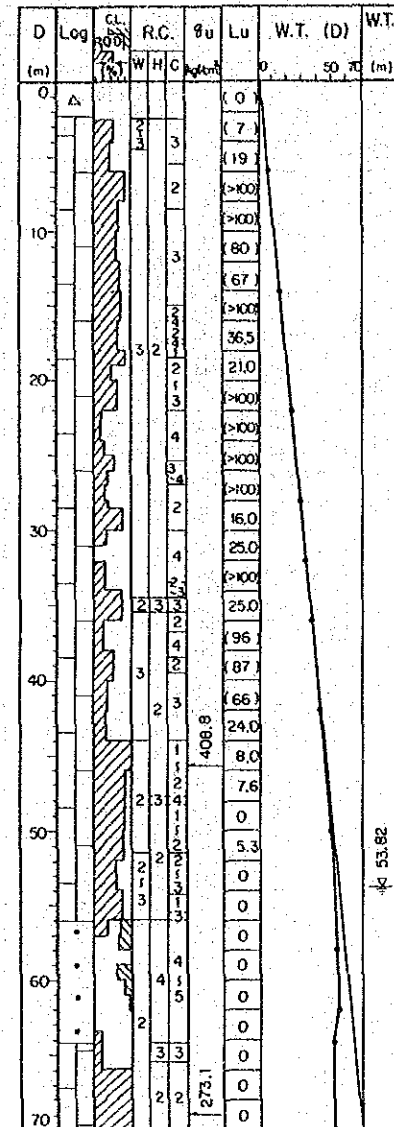
Depth of Hole: 71.00 m Angle from Horizontal: Vertical



**Hole No. PB-2**

Elevation : 521.333 m

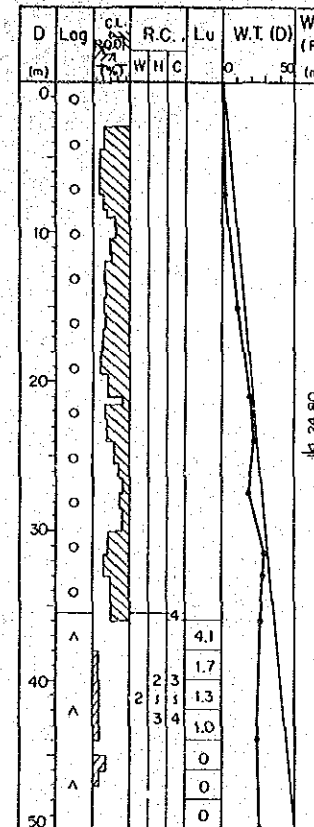
Depth of Hole: 70.00 m Angle from Horizontal: Vertical



**Hole No. SSK-1**

Elevation : 520.518 m

Depth of Hole: 50.00 m Angle from Horizontal: Vertical



- ① Depth of Drillhole (m)
- ② Geological Log
- ③ R.Q.D = Rock Quality Designation (%)  
C.L. = Core Loss (%)
- ④ R.C. = Rock Classification  
W : Weathering 1 ( Very Fresh )  
5 ( Strongly Weathered )  
H : Hardness 1 ( Very Hard )  
5 ( Soft )  
C : Interval of Cracks  
1 ( Over 30 cm )  
5 ( Under 1 cm )
- ⑤ R.E. = Rock Evaluation  
⊕ Very Good  
⊖ Very Bad
- ⑥  $\sigma_u$  = Unconfined Compression Strength of Core (kgf/cm<sup>2</sup>)
- ⑦ Lu = Lugeon Value (L/m / min / 10 kgf/cm<sup>2</sup>)  
( ): Converted Lugeon Value
- ⑧ W.T.(D)= Water Table in Drillhole during Drilling
- ⑨ W.T.(F)= Final Water Table (m)

①	②	③	④	⑤	⑥	⑦	⑧	⑨
D	Log	R.C.	R.E.	$\sigma_u$	Lu	W.T. (D)	W.T. (F)	
(m)	(m)	(W H C)		(kgf/cm <sup>2</sup> )		(m)	(m)	
0								
10								

0 25 m

ZAMANTI GÖKTAŞ HYDROELECTRIC POWER DEVELOPMENT PROJECT

SUMMARY LOGS OF DRILL HOLES

( 4 - 4 )





Standard of Rock Classification for Drilled Core

Weathering		Hardness		Interval of Cracks	
1	Very fresh. No weathering of mineral component.	1	Very hard. Broken into Knifedged pieces by strong hammer blow.	1	Over 30 cm
2	Fresh. Some minerals are weathered slightly. Usually no brown crack.	2	Hard. Broken into pieces by strong hammer blow.	2	10 - 30 cm
3	Fairly fresh. Some minerals are weathered. Cracks are stained and with weathered material.	3	Brittle. Broken into pieces by medium hammer blow.	3	3 - 10 cm
4	Weathered. Fresh portions still remain partially.	4	Very brittle. Easy broken into pieces by medium hammer blow.	4	1 - 3 cm
5	Strongly weathered. Most minerals are weathered and altered to second minerals.	5	Soft. Able to dig with hammer.	5	Under 1 cm

# GEOLOGIC LOG OF DRILL HOLE

**GOKTAS** PROJECT HOLE No. **SK-1** (SHEET 1 of 5)

LOCATION **DAM** DEPTH OF HOLE **100.00** m COMMENCED **29-8-1987**  
 ELEVATION **510** m DEPTH OF OVERBURDEN **23.50** m COMPLETED **29-9-1987**  
 COORDINATE **-** LENGTH OF ROCK DRILLING **77.50** m DRILLED BY **DSI**  
 ANGLE FROM HORIZONTAL **90** TOTAL LENGTH OF CORE **85.17** m LOGGED BY **JICA**  
 BEARING OF ANGLE HOLE **-** CORE RECOVERY **85.17** %

DEPTH	ROCK NAME	LOG	CORE RECOVERY	CEMENTATION KIND OF BIT CASING	OBSERVATION OF CORE				DESCRIPTION	WATER TABLE		DEPTH	ELEVATION
					COLOR	WEATHERING	HARDNESS	CORE CUTTING		WATER PRESSURE TEST	LEAKAGE OF DRILLING WATER		
0m			0 → 100%							LUGEON	m	0m	510
1								Alluvium.		0.30		1	
2								Peridotite and limestone gravels.		0.00		2	
3								No fine material in core box.		0.00		3	
4								Peridotite gravel is mainly composed.		0.00		4	
6								Distribution of limestone gravels		0.00		6	
8								{ 4~6m 6~7.5m 21.0m		0.30		8	
9										0.30		9	
10								Distribution of red-shale gravel, 15.0m.				10	
11										0.30		11	
12										0.30		12	
13										0.30		13	
14										0.50		14	
16										0.50		16	
18										0.50		18	
19										0.30		19	
20										0.30		20	490

Alluvium

φ90 mm

Dark gray



driller's note 1  
 1 (stick), 2 (substick), 3 (piece), 4 (fragment), 5 (grain)  
 1 (hard) - 5 (soft)  
 1 (fresh) - 5 (decomposed)

Water table after drilling → 0.30  
 Water table before drilling → 0.50

# GEOLOGIC LOG OF DRILL HOLE

<b>GOKTAS</b>	<b>PROJECT</b>	<b>HOLE No. SK-1</b>	<b>(SHEET 2 of 5)</b>
<b>LOCATION</b> DAM	<b>DEPTH OF HOLE</b> 100.00 m	<b>COMMENCED</b> 29-8-1987	
<b>ELEVATION</b> 510 m	<b>DEPTH OF OVERBURDEN</b> 23.50 m	<b>COMPLETED</b> 29-9-1987	
<b>COORDINATE</b> -	<b>LENGTH OF ROCK DRILLING</b> 77.50 m	<b>DRILLED BY</b> DSI	
<b>ANGLE FROM HORIZONTAL</b> 90°	<b>TOTAL LENGTH OF CORE</b> 85.17 m	<b>LOGGED BY</b> JICA	
<b>BEARING OF ANGLE HOLE</b> -	<b>CORE RECOVERY</b> 85.17 %		

DEPTH	ROCK NAME	LOG	CORE RECOVERY	CEMENTATION KIND OF BIT CASING	OBSERVATION OF CORE				DESCRIPTION	WATER TABLE		DEPTH	ELEVATION
					COLOR	WEATHERING	HARDNESS	CORE CUTTING		WATER PRESSURE TEST	LEAKAGE OF DRILLING WATER		
0			0-100%							LUGEON	m	0m	490
1	Alluvium	O	φ 90 mm		Dark gray			ditto.			0.30	1	486.5
2											0.00	2	
3											0.00	3	
4	Peridotite	^	φ 56 mm		Dark gray	N	N	23.5	Fractured peridotite. Serpentinization and slickenside are seen in some fractures.	Lu = 11	Po max. = 8.0 kg/cm <sup>2</sup>	0.00	4
5								0.00	5				
6								0.00	6				
7									7				
8									8				
9									9				
10									10				
11									11				
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97		97											
98		98											
99		99											
100		100											

driller's note

1 (stick), 2 (nubstick), 3 (piece), 4 (fragment), 5 (grain)

(hard) - 5 (soft)

1 (fresh) - 5 (decomposed)

Water table after drilling → 0.30

Water table before drilling → 0.50

# GEOLOGIC LOG OF DRILL HOLE

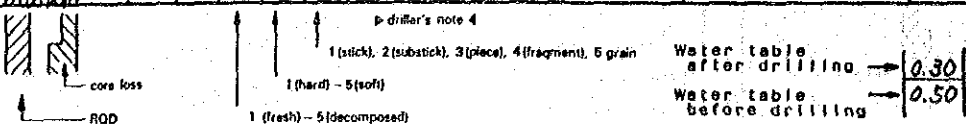
GOKTAS

PROJECT

HOLE No. SK-1 (SHEET 3 of 5)

LOCATION DAM DEPTH OF HOLE 100.00 m COMMENCED 29-8-1987  
 ELEVATION 510 m DEPTH OF OVERBURDEN 23.50 m COMPLETED 29-9-1987  
 COORDINATE - LENGTH OF ROCK DRILLING 77.50 m DRILLED BY DSI  
 ANGLE FROM HORIZONTAL 90 TOTAL LENGTH OF CORE 85.17 m LOGGED BY JICA  
 BEARING OF ANGLE HOLE - CORE RECOVERY 85.17 %

DEPTH	ROCK NAME	LOG	CORE RECOVERY	CEMENTATION KIND OF BITTING CASING	OBSERVATION OF CORE					DESCRIPTION	WATER TABLE		DEPTH	ELEVATION
					COLOR	WEATHERING	HARDNESS	CORE CUTTING	WATER PRESSURE TEST		LEAKAGE OF DRILLING WATER	LUCEON		
4.0			0 → 100%									0m	470	
1		^					2			Lu = 0 Po max. = 10.0	0.00	1		
2							3	425	45° dip cracks main.	Lu = 0 Po max. = 10.0	0.00	2		
3		^					3	430		Lu = 0 Po max. = 10.0		3		
4										Lu = 0 Po max. = 10.0		4		
5		^								Lu = 0 Po max. = 10.0		5		
6										Lu = 0 Po max. = 10.0		6		
7		^					2			Lu = 0 Po max. = 10.0		7		
8										Lu = 0 Po max. = 10.0		8		
9		^								Lu = 0 Po max. = 10.0	0.00	9		
5	Peridotite			φ56 mm		Dark gray	2			Lu = 0 Po max. = 10.0		0		
1		^								Lu = 0 Po max. = 10.0		1		
2								520		Lu = 0 Po max. = 10.0		2		
3		^					3			Lu = 0 Po max. = 10.0		3		
4							3	53.5	53.5 ~ 55.0 m : Serpentine	Lu = 0 Po max. = 10.0	0.00	4		
5		^					4		1-2 mm wide along 45°, 70° and 90° dip cracks.	Lu = 0 Po max. = 10.0	0.00	5		
6										Lu = 0 Po max. = 10.0		6		
7		^					1		56.4 m : Serpentine 1mm wide.	Lu = 0 Po max. = 10.0		7		
8							2			Lu = 0 Po max. = 10.0		8		
9		^								Lu = 0 Po max. = 10.0		9		
6										Lu = 0 Po max. = 10.0		0	450	



# GEOLOGIC LOG OF DRILL HOLE

**GOKTAS PROJECT**      **HOLE No. SK-1** (SHEET 4 of 5)

LOCATION: DAM      DEPTH OF HOLE: 100.00 m      COMMENCED: 29-8-1987  
 ELEVATION: 510 m      DEPTH OF OVERBURDEN: 23.50 m      COMPLETED: 29-9-1987  
 COORDINATE: -      LENGTH OF ROCK DRILLING: 77.50 m      DRILLED BY: DSI  
 ANGLE FROM HORIZONTAL: 90      TOTAL LENGTH OF CORE: 85.17 m      LOGGED BY: JICA  
 BEARING OF ANGLE HOLE: -      CORE RECOVERY: 85.17 %

DEPTH	ROCK NAME	LOG	CORE RECOVERY	CEMENTATION KIND OF BIT CASING	OBSERVATION OF CORE					WATER TABLE		DEPTH	ELEVATION	
					COLOR	WEATHERING	HARDNESS	CORE CUTTING	DESCRIPTION	WATER PRESSURE TEST	LEAKAGE OF DRILLING WATER			
6.0m			0 → 100%									0m	450m	
1	Peridotite	✓	100%	φ56 mm	Dark grey	2	2	1-2	61.0		Lu = 0 Po max. = 10.0 kg/cm <sup>2</sup>	0.00	1	430
2								3	63.5m: Serpentine 0.1~1mm wide along 40° dip crack.	Lu = 0 Po max. = 10.0	0.00	2		
3								4	64.5	Lu = 0 Po max. = 10.0	0.00	3		
4								5	67.2	Lu = 0 Po max. = 10.0	0.00	4		
5								6	67.4	Lu = 0 Po max. = 10.0	0.00	5		
6								7	68.0	Lu = 0 Po max. = 10.0	0.00	6		
7								8	68.5	Lu = 0 Po max. = 10.0	0.00	7		
8								9	70.1	Lu = 0 Po max. = 10.0	0.00	8		
9								10	70.3	Lu = 0 Po max. = 10.0	0.00	9		
10								11	77.5	Lu = 0 Po max. = 10.0	0.00	10		
11														

▶ driller's note 4  
 1 (edck), 2 (subedck), 3 (piece), 4 (fragment), 5 (grain)  
 1 (hard) - 5 (soft)  
 1 (fresh) - 5 (decomposed)

Water table after drilling → 0.30  
 Water table before drilling → 0.50

# GEOLOGIC LOG OF DRILL HOLE

**GOKTAS PROJECT** HOLE No. **SK-1** (SHEET **5 of 5**)

LOCATION **DAM** DEPTH OF HOLE **100.00 m** COMMENCED **29-8-1987**  
 ELEVATION **510 m** DEPTH OF OVERBURDEN **23.50 m** COMPLETED **29-9-1987**  
 COORDINATE **---** LENGTH OF ROCK DRILLING **77.50 m** DRILLED BY **DSI**  
 ANGLE FROM HORIZONTAL **90°** TOTAL LENGTH OF CORE **85.17 m** LOGGED BY **JICA**  
 BEARING OF ANGLE HOLE **---** CORE RECOVERY **85.17 %**

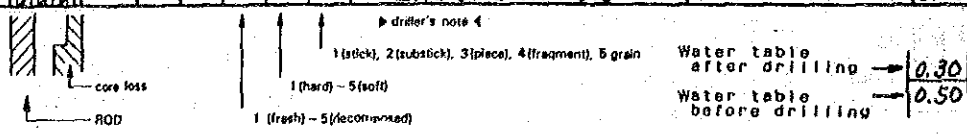
DEPTH	ROCK NAME	LOG	CORE RECOVERY	CEMENTATION KIND OF BIT CASING	COLOR	WEATHERING	HARDNESS	CORE CUTTING	OBSERVATION OF CORE		WATER TABLE		DEPTH	ELEVATION	
									DESCRIPTION	WATER PRESSURE TEST	LEAKAGE OF DRILLING WATER	LUGEON			
0			0 → 100%									m	0m	430	
1	Peridotite	✓	✓	✓	Dark gray	2	2	2	81.0		Lu = 0	Po max. = 10.0 kg/cm <sup>2</sup>	0.00	1	
2								1	81.8		Lu = 0	Po max. = 10.0	0.00	2	
3											Lu = 0	Po max. = 10.0	0.00	3	
4											Lu = 0	Po max. = 10.0	0.00	4	
5											Lu = 0	Po max. = 10.0	0.00	5	
6											Lu = 0	Po max. = 10.0	0.00	6	
7											Lu = 0	Po max. = 10.0	0.00	7	
8											Lu = 0	Po max. = 10.0	0.00	8	
9											Lu = 0	Po max. = 10.0	0.00	9	
10											Lu = 0	Po max. = 10.0	0.30	0	410

φ56 mm

89.0 m: 45° dip crack, no serpentine.  
 89.4 m: Partly serpentinization less than 1mm wide.

No serpentinization.

R.Q.D (Av.) = 67%  
 End of drill hole



# GEOLOGIC LOG OF DRILL HOLE

GOKTAS PROJECT

HOLE No. SK-2 (SHEET 1 of 4)

LOCATION	DAM	DEPTH OF HOLE	70.00 m	COMMENCED	2 - 9 - 1987
ELEVATION	510.834 m	DEPTH OF OVERBURDEN	17.00 m	COMPLETED	17 - 9 - 1987
COORDINATE	X: 4,728,695.19 Y: 4,178,250.45	LENGTH OF ROCK DRILLING	53.00 m	DRILLED BY	DSI
ANGLE FROM HORIZONTAL	90°	TOTAL LENGTH OF CORE	58.75 m	LOGGED BY	JICA
BEARING OF ANGLE HOLE	-	CORE RECOVERY	83.9 %		

DEPTH	ROCK NAME	LOG	CORE RECOVERY	CEMENTATION KIND OF CASING	OBSERVATION OF CORE					DESCRIPTION	WATER TABLE		DEPTH	ELEVATION	
					COLOR	WEATHERING	HARDNESS	CORE CUTTING	WATER PRESSURE TEST		LEAKAGE OF DRILLING WATER	LUGEON			m
0m			0 → 100%										0m	510.834m	
1										Alluvium. They include peridotite and some limestone gravels. No fine material in core box. Distribution of limestone gravels, 7.5m 14.0m 16~17m.		1.30	1		
2													1.50	2	
3													1.50	3	
4													1.50	4	
5													1.50	5	
6													1.30	6	
7													1.30	7	
8													1.30	8	
9													1.30	9	
10													1.30	10	
11													1.30	11	
12													1.30	12	
13													1.30	13	
14													1.30	14	
15													1.30	15	
16													1.30	16	
17													1.30	17	493.834
18	Peridotite									Fractured, but strong peridotite.			1.30	18	
19													1.30	19	
20													1.30	20	490.834

