Table 1.36 Monthly Rainfall between 1960 and 1990, Station: Ordu, Station No.:33

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
1960	128.0	113.2	43.1	121.4	49.3	73.0	53.9	81.5	61.2	34.9	80.0	54.5	894.0
1961	167.8	99.8	146.3	24.1	50.1	52.5	119.9	55.5	147.7	61.3	186.4	137.1	1248.5
1962	79.3	173.4	71.7	47.4	27.2	29.1	10.7	32.4	74.2	209.0	33.8	225.6	1013.8
1963	194.8	54.3	137.9	97.6	56.6	27.9	66.3	36.4	92.1	116.6	41.1	118.7	1040.3
1964	87.3	39.4	95.5	34.2	42.5	90.7	37.9	37.7	70.1	43.0	135.5	92.6	806.4
1965	96.9	79.2	57.8	64.9	43.9	45.8	169.9	41.7	30.5	191.1	117.5	120.4	1059.6
1966	67.9	40.7	98.6	41.9	97.2	35.8	163.9	125.0	69.6	0.3	30.4	223.1	994.4
1967	244.0	176.7	78.3	47.6	63.3	110.1	14.7	77.2	60.5	114.2	228.0	114.0	1328.6
1968	93.6	66.0	83.3	40.1	33.5	97.6	35.7	82.4	49.0	120.2	31.7	131.7	864.8
1969	89.1	66.0	46.2	102.4	19.4	48.9	63.1	36.8	56.5	122.1	150.4	90.0	890.9
1970	61.1	88.8	63.7	47.9	45.9	17.0	19.7	76.5	124.3	93.1	87.0	143.3	868.3
1971	27.0	48.4	77.1	65.5	30.8	62.1	204.4	76.6	92.5	151.9	90.9	179.2	1106.4
1972	46.4	23.1	21.2	66.0	51.5	184.6	20.7	56.7	105.7	183.6	100.6	91.9	952.0
1973	31.9	37.0	94.8	59.1	46.1	137.5	39.7	83.0	24.3	154.6	131.3	154.1	993.4
1974	74.4	45.6	34.0	56.3	75.7	13.8	61.0	98.7	69.0	22.8	90.0	178.2	819.5
1975	30.4	124.6	32.3	79.0	28.1	206.8	67.0	55.0	66.4	135.8	78.4	105.7	1009.5
1976	176.9	118.9	42.8	40.4	59.6	105.7	70.7	149.1	39.9	150.1	62.2	45.8	1062.1
1977	56.2	40.4	156.6	128.3	54.3	37.2	114.9	102.3	169.8	112.8	65.6	177.7	1216.1
1978	127.9	50.0	71.7	136.2	35.8	60.4	27.2	76.4	77.8	101.4	97.1	132.0	993.9
1979	195.1	69.9	41.3	74.1	20.7	78.2	75.7	33.7	89.4	91.1	100.1	34.3	903.6
1980	139.2	61.0	93.3	90.0	102.7	28.7	9.6	111.5	135.7	63.8	116.4	81.7	1033.6
1981	47.2	50.6	74.6	71.2	93.0	93.1	136.6	59.3	64.4	122.6	223.3	76.1	1112.0
1982	70.9	113.2	89.5	59.0	26.0	109.7	139.0	16.8	88.5	97.0	200.2	99.9	1109.7
1983	118.4	117.4	79.9	35.2	71.7	72.5	100.6	52.8	50.2	166.9	249.6	55.6	1170.8
1984	87.8	67.0	71.7	130.3	30.0	89.7	53.8	95.2	12.0	129.2	87.4	66.7	920.8
1985	52.9	156.3	15.6	60.2	23.0	36.6	39.6	2.3	22.0	208.8	47.8	122.4	787.5
1986	65.8	92.7	18.5	67.0	104.7	43.9	60.6	99.5	81.8	128.4	213.2	137.4	1113.5
1987	133.0	48.0	129.4	99.4	28.6	60.1	17.1	56.5	14.5	133.1	110.1	225.8	1055.6
1988	116.4	59.8	143.9	30.5	46.3	115.1	61.6	131.2	52.9	215.7	196.0	84.0	1253.4
1989	70.8	46.9	61.9	35.0	34.6	24.5	37.2	15.9	128.1	241.1	128.8	133.4	958.2
1990	59.7	45.7	32.8	112.3	88.7	95.9	56.6	39.2	90.3	83.7	105.6	110.8	921.3
Mean	98.0	77.9	74.4	69.8	51.0	73.7	69.3	67.6	74.5	122.6	116.7	120.8	1016.2
P50%	97.4	77.4	73.9	69.4	50.7	73.2	68.9	67.1	74.1	121.8	115.9	120.0	1009.6
P80%	86.9	69.0	65.9	61.9	45.2	65.3	61.5	59.9	66.1	108.7	103.4	107.0	900.8
P90%	81.7	64.9	62.0	58.2	42.5	61.5	57.8	56.4	62.2	102.2	97.3	100.7	847.5

Table 1.37 Monthly Rainfall between 1960 and 1990, Station: Ankara, Station No.:130

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
1960	30.1	51.0	49.4	48.8	27.5	42.5	16.9	3.9	9.2	31.7	22.2	27.8	361.0
1961	30.9	57.3	25.3	11.0	33.0	121.9	5.0	0.0	26.6	26.7	5.6	57.7	401.0
1962	33.4	74.3	64.1	20.4	25.7	9.5	3.0	12.0	67.7	30.3	9.6	96.1	446.1
1963	90.5	80.8	32.8	82.5	121.5	22.9	21.4		64.1	28.4	10.6	57.1	612.6
1964	4.9	58.9	45.1	14.2	40.1	58.2	7.3	3.7	11.5	0.0	41.0	90.8	375.7
1965	16.7	76.2	39.3	47.2	62.4	14.6	7.9	1.8	0.0	10.4	41.3	33.3	351.1
1966	55.7	2.3	59.5	49.2	64.1	16.8	24.8	24.3	12.4	7.7	19.2	43.8	379.8
1967	37.8	27.4	49.6	82.7	53.9	11.1	7.1	6.0	4.1	10.9	30.6	39.8	361.0
1968	98.0	18.6	52.9	49.6	40.7	64.8	13.1	15.7	41.2	33.3	56.8	86.5	571.2
1969	98.0	18.6	52.9	49.6	40.7	64.8	13.1	15.7	41.2	33.3	56.8	86.5	571.2
1970	47.5	59.7	33.6	11.9	48.5	17.2	36.3		15.5	35.0	25.2	41.4	371.8
1971	37.5	21.4	40.7	41.5	78.6	26.3	6.6	7.9	18.8	14.2	53.7	49.7	396.9
1972	16.4	21.8	13.8	41.7	49.9	83.0	38.7	34.9	43.6	65.9	17.7	14.2	441.6
1973	13.3	21.7	41.9	63.0	21.9	58.3	17.1	4.2	18.5	2.9	13.5	52.0	328.3
1974	7.2	24.9	25.5	26.3	103.8	49.8	12.5	18.4	21.8	14.6	14.9	57.3	377.0
1975	57.6	35.2	19.1	80.4	98.7	75.7	3.9	24.4	0.2	20.0	58.8	40.5	514.5
1976	75.0	18.5	24.7	44.5	65.3	28.7	1.2	1.8	17.1	76.0	17.9	67.2	437.9
1977	26.9	12.1	27.5	50.6	26.1	15.0	4.6	10.0	18.4	8.4	17.9	24.5	242.0
1978	48.5	44.2	35.8	90.9	14.0	6.2	0.4	4.5	59.4	47.9	0.7	67.7	420.2
1979	101.7	25.7	16.8	7.8	62.6	16.9	5.6	1.4	0.5	38.6	40.7	29.2	347.5
1980	85.5	31.2	33.5	58.5	67.5	18.7	10.2	6.0	0.5	3.3	61.3	38.9	415.1
1981	65.7	37.1	87.1	25.6	52.8	24.8	23.0	8.1	23.9	14.7	55.8	75.3	493.9
1982	32.9	9.6	25.4	87.4	23.7	44.1	18.6	80.9	0.5	23.3	3.3	23.9	373.6
1983	42.9	37.0	13.4	41.5	73.4	42.1	41.6	28.1	9.5	20.6	113.4	23.7	487.2
1984	41.0	24.0	37.7	77.1	28.7	27.1	36.9	14.5		0.4	22.3	4.2	313.9
1985	63.1	74.4	17.4	48.8	48.9	5.0	6.4	1.9	0.0	56.4	49.2	33.0	404.5
1986	75.8	48.5	15.5	15.0	38.7	63.2	6.9	0.2	14.0	8.3	23.9	74.0	384.0
1987	84.7	18.8	48.5	37.7	52.3	37.5	17.9	3.0	2.4	19.8	26.4	69.3	418.3
1988	14.8	38.6	65.2	56.0	47.0	96.1	2.2	0.0	10.0	74.6	35.8	16.7	457.0
1989	6.5	13.6	18.6	6.7	74.8	19.6	11.4	11.1	3.5	62.7	86.1	36.9	351.7
1990	21.8	14.4	28.4	110.8	51.4	15.0	17.1	23.0	49.1	39.7	15.6	44.2	430.5
Mean	47.2	35.4	36.8	47.7	52.8	38.6	14.2	12.7	20.2	27.7	33.8	48.5	414.1
P50%	46.3	34.8	36.1	46.8	51.9	37.9	13.9	12.4	19.8	27.2	33.2	47.6	406.5
P80%	39.5	29.7	30.8	40.0	44.3	32.4	11.9	10.6	16.9	23.2	28.3	40.6	346.8
P90%	36.4	27.3	28.4	36.8	40.8	29.8	10.9	9.8	15.6	21.4	26.1	37.4	319.4

Table 1.38 Monthly Rainfall between 1960 and 1990, Station: Bolu, Station No.:70

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
1960	117.6	53.5	65.6	35.1	63.3	67.7	42.8	69.8	17.0	40.7	13.1	66.2	652.4
1961	42.1	58.0	54.4	41.0	39.3	79.2	16.9	1.4	22.7	57.1	59.4	24.4	495.9
1962	21.0	66.0	55.8	52.7	36.9	8.7	12.0		36.8	76.5	18.1	114.9	499.4
1963	106.1	28.7	59.9	60.6	77.9	47.4	57.2	1.5	36.6	38.2	32.8	107.9	654.8
1964	53.7	54.9	51.0	35.7	42.0	70.0	6.9	32.7	50.7	5.0	76.3	69.9	548.8
1965	20.7	71.4	59.3	69.2	63.7	44.2	83.4	15.6		18.3	56.4	56.0	558.2
1966	56.4	6.7	82.1	64.5	59.6	20.5	20.4	42.9	22.0	24.3	13.6	47.0	460.0
1967	48.1	51.4	49.2	47.4	84.8	39.7	29.3	2.8	30.8	25.1	96.2	46.9	551.7
1968	129.7	35.7	77.6	53.0	68.6	59.9	5.2	25.4	79.2	28.7	31.9	65.3	660.2
1969	46.4	39.9	42.5	55.7	43.4	79.6	8.3		20.1	11.1	26.4	61.9	435.3
1970	54.3	111.1	80.6	49.3	80.1	67.5	18.4	35.8	21.4	36.2	31.4	130.8	716.8
1971	46.8	37.8	65.1	65.8	81.7	58.5	22.7	12.0	37.6	44.7	32.9	155.8	661.4
1972	24.0	8.7	12.1	55.3	44.9	155.5	41.9	55.8	58.1	78.3	31.3	18.4	584.3
1973	49.6	33.7	55.0	58.5	34.9	54.4	33.3	22.6	7.9	27.3	114.5	42.5	534.2
1974	52.4	23.3	38.6	66.3	79.8	51.9	6.0	39.2	43.2	18.3	30.5	38.7	488.2
1975	57.0	49.5	49.8	47.7	174.4	67.5	5.9	73.7	14.1	41.3	39.1	85.7	705.7
1976	78.3	29.3	43.9	32.4	90.6	30.2	38.8	47.2	19.1	51.9	24.2	54.8	540.7
1977	32.6	20.2	45.1	53.7	23.5	31.3	6.7	14.0	29.5	30.4	45.0	45.4	377.4
1978	80.2	42.6	24.5	91.4	43.5	13.4	35.8	22.0	72.2	48.7	2.6	81.5	558.4
1979	85.9	48.5	20.1	37.9	76.5	55.8	66.1	17.0	12.8	26.1	76.1	42.5	565.3
1980	76.4	33.1	79.4	56.5	57.6	19.2	1.8	12.1	22.8	17.6	104.4	75.7	556.6
1981	65.8	40.1	97.7	14.2	65.3	11.9	5.8	4.7	32.6	44.9	43.8	125.8	552.6
1982	55.4	34.5	28.1	50.4	63.1	28.3	50.9	77.6	36.3	23.9	17.4	25.2	491.1
1983	100.3	41.9	21.2	29.5	39.7	62.5	94.9	18.4	30.4	64.6	90.8	28.4	622.6
1984	52.3	30.7	45.3	70.7	51.8	28.2	35.5	44.4	3.0	13.3	51.5	15.2	441.9
1985	42.2	121.0	22.5	46.2	51.2	38.0	14.0	4.0	5.6	58.0	27.1	125.8	555.6
1986	82.9	45.4	10.2	35.8	50.2	71.4	20.0	14.3	7.6	36.9	54.6	62.3	491.6
1987	88.5	16.2	44.8	50.6	63.6	37.0	43.1	19.4	2.6	61.9	30.0	95.4	553.1
1988	26.5	35.5	65.3	34.0	83.4	99.8	42.9	13.1	4.6	55.7	52.7	83.3	596.8
1989	18.3	16.6	27.0	7.1	66.6	103.4	30.2	40.0	24.6	58.0	72.5	66.4	520.7
1990	30.9	9.7	14.5	72.0	42.6	40.2	14.5	6.7	49.0	64.0	39.3	61.5	444.9
Mean	59.4	41.8	48.0	49.7	62.4	53.0	29.4	27.1	28.4	39.6	46.3	68.4	550.9
P50%	56.5	41.1	47.2	48.9	61.4	52.1	28.9	26.7	27.9	38.9	45.6	67.3	541.9
P80%	51.8	36.4	41.8	43.3	54.4	46.2	25.6	23.6	24.7	34.5	40.4	59.6	480.0
P90%	48.8	34.3	39.4	40.8	51.2	43.5	24.1	22.2	23.3	32.5	38.0	56.1	451.9

Table1.39 Monthly Rainfall between 1960 and 1990, Station: Cankiri, Station No.:80

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
1960	131.0	82.0	44.3	66.3	35.6	27.6			2.3	2.3	115.8	256.5	763.7
1961	170.8	75.3	8.6	53.6	25.2	30.2		3.5	2.8	17.9	51.8	94.1	533.8
1962	49.1	140.7	119.4	40.3	1.8	3.9	2.3		16.4	66.0	141.5	268.2	849.6
1963	130.3	125.7	51.8	22.8	27.5				0.3	78.8	33.3	121.9	592.4
1964	45.3	79.6	144.8	3.8	8.4	0.0		5.7	65.3	0.2	46.2	206.2	605.5
1965	59.7	253.0	32.2	81.8	80.7	0.0		0.0		13.1	129.7	250.9	901.1
1966	266.9	31.1	160.6	14.3	16.7	8.9		24.8	26.4	1.4	94.7	314.3	960.1
1967	179.4	40.4	38.1	76.7	10.8	0.3			1.7	20.4	23.2	110.3	501.3
1968	324.1	75.6	64.6	10.8	7.9	4.7		12.1	14.3	26.3	49.4	75.6	665.4
1969	142.6	96.4	50.3	66.1	16.8	11.5	13.2		0.1	0.9	10.4	256.0	664.3
1970	114.1	201.5	45.3	32.6	25.0	3.8	0.7			60.2	41.6	86.4	613.2
1971	83.9	145.0	200.6	49.3	29.9	5.5	2.7	0.1	2.9	30.6	147.8	67.9	766.2
1972	57.5	65.2	43.5	94.6	28.0	0.3	0.1	9.7	13.1	145.3	46.7	1.6	505.6
1973	131.2	189.0	134.0	39.9	0.1	3.8	2.1	2.4	4.6	28.1	36.7	68.1	640.0
1974	18.5	79.3	137.1	22.4	14.8	0.4	0.2	0.8	4.7	35.0	152.1	171.4	636.7
1975	170.9	30.4	65.6	22.2	36.0	23.2	0.3	1.7	5.1	41.3	95.8	76.3	568.8
1976	50.0	109.8	78.5	79.0	19.2	7.3	23.9	12.0	4.8	118.5	91.8	105.5	700.3
1977	71.6	60.0	23.5	22.5	7.8	9.3	0.1		33.2	36.1	65.9	72.5	402.5
1978	137.1	160.2	121.2	107.2	23.5	8.6			61.0	37.1	40.0	14.7	710.6
1979	180.3	71.2	36.1	30.8	72.5	9.3				22.7	168.1	95.2	686.2
1980	145.7	12.1	81.2	51.0	22.3	14.4	4.1		0.1	1.6	75.4	120.8	528.7
1981	202.0	33.5	57.0	16.5	18.8				8.7	17.9	126.7	258.6	739.7
1982	54.4	59.6	47.9	61.9	60.3	0.1	1.7	1.1		44.8	38.1	159.4	529.3
1983	51.6	104.5	7.0	32.4	37.3	5.1	9.7	1.6	2.2	12.7	142.4	125.6	532.1
1984	196.3	97.0	145.0	76.8	0.5	0.6	0.5	0.2	0.4		113.4	42.3	673.0
1985	152.2	48.7	94.5	4.6	17.1					32.8	126.2	22.2	498.3
1986	160.1	132.9	34.2	46.6	11.5	5.7				8.3	13.3	112.0	524.6
1987	164.1	110.7	73.3	47.7	11.0	5.3	0.1	0.5		5.5	124.1	105.4	647.7
1988	34.5	69.1	128.9	37.4	18.1	26.8			1.1	7.1	180.2	154.5	657.7
1989	3.8	56.3	2.7	31.7	20.9			1.9	33.7	39.8	82.8	95.3	368.9
1990	2.9	40.1	7.2	72.2	4.9	5.4		7.9	2.1	35.9	39.3	229.1	447.0
Mean	118.8	92.8	73.5	45.7	22.9	8.2	4.1	5.1	12.8	33.0	85.3	133.6	626.3
P50%	115.4	90.1	71.4	44.4	22.3	8.0	4.0	4.9	12.4	32.0	82.9	129.7	608.3
P80%	96.4	75.3	59.7	37.1	18.6	6.7	3.3	4.1	10.4	26.7	69.2	108.4	508.2
P90%	88.0	68.7	54.5	33.8	17.0	6.1	3.0	3.7	9.5	24.4	63.2	99.0	464.0

Table 1.40 Monthly Rainfall between 1960 and 1990, Station: Kirikkale, Station No.:135

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
1960	25.9	39.0	54.0	71.5	17.6	18.1	2.7		5.7	17.7	27.7	23.8	303.7
1961	19.2					39.9			36.5	11.0	0.0	81.2	187.8
1962				6.8	33.2	12.7	2.9		41.2	35.1	3.7	102.9	238.5
1963	79.2	45.5	21.3	78.7	76.8	5.4	20.4		33.6	41.8	9.8	20.9	433.4
1964	2.5	89.6	44.6	4.2	30.9	86.1	4.3	0.9	9.7		33.7	47.7	354.2
1965	18.5	59.3	57.9	27.6	47.5	13.5	5.5	16.2		5.1	12.6	34.0	297.7
1966	80.3	1.9	24.9	33.6	48.7	9.8	21.9	4.9	3.3	0.5	24.9	59.9	314.6
1967	27.1	19.6	38.5	61.2	65.9	11.6	2.2	4.9	1.5	11.0	37.1	43.8	324.4
1968	74.6	14.2	59.7	29.7	58.6	34.4	15.9	48.9	46.4	26.3	45.5	53.0	507.2
1969	71.9	71.9	35.7	44.9	60.2	32.7	2.3	0.7	2.6	6.1	36.8	88.5	454.3
1970	59.2	60.8	44.7	18.5	7.2	30.1	6.3		11.1	65.8	26.6	39.0	369.3
1971	29.9	26.2	29.0	53.3	86.4	40.7	3.9	27.3	16.2	15.3	49.3	40.4	417.9
1972	22.6	28.0	11.0	24.3	38.2	53.5	52.6	9.8	23.4	53.9	6.5	25.6	349.4
1973	9.1	9.4	20.1	72.1	51.1	46.7	1.1	7.0	2.9	1.1	19.3	29.5	269.4
1974	16.4	19.1	43.6	35.9	99.9	111.5	15.3	15.0	18.0	11.3	13.5	58.1	457.6
1975	41.4	22.7	15.1	81.7	57.1	14.4	2.3	13.2	0.0	24.9	36.4	41.1	350.3
1976	55.6	13.9	17.0	57.1	75.7	59.1	9.4	3.8	7.2	83.0	12.6	44.8	439.2
1977	41.4	17.5	63.2	67.0	85.6	15.9	3.0	0.5	62.5	25.0	9.8	29.4	420.8
1978	87.8	34.4	21.6	65.8	19.8	1.8	0.9		11.8	68.8	0.4	50.5	363.6
1979	66.1	17.9	10.3	7.0	21.0	14.5	2.1	7.3	1.9	24.5	34.5	37.5	244.6
1980	84.5	32.8	38.2	54.9	54.4	8.9	2.6	2.5	4.4	3.4		28.3	314.9
1981	84.5	39.8	46.6	25.8	46.1	51.1	45.5	9.3	2.9	19.8	28.8	63.6	463.8
1982	28.9	13.2	44.0	63.2	36.2	80.9	31.2	5.2	0.5	6.3	6.2	34.6	350.4
1983	53.7	53.2	23.3	31.0	97.2	49.9	25.3	19.5	38.3	23.7	114.7	69.2	599.0
1984	39.7	26.4	35.9	101.4	28.4	27.4	12.3	10.9	0.0	0.2	24.3	9.1	316.0
1985	52.5	34.4	20.2	69.0	56.2	18.2	12.0	0.7	0.5	54.7	52.8	28.3	399.5
1986	33.5	29.7	16.9	11.6	51.1	45.5	0.5		21.9	11.2	28.4	58.8	309.1
1987	52.5	21.5	42.2	46.9	25.6	33.4	36.0	6.0		47.2	28.5	93.6	433.4
1988	17.6	68.5	60.9	53.9	65.4	58.6	10.6		5.7	47.8	77.4	33.0	499.6
1989	7.8	13.8	10.9	32.2	88.5	16.2	6.3	0.3		58.4	79.9	32.0	346.3
1990	20.6	14.4	6.1	57.8	64.5	13.0	4.3	6.3	13.3	39.1	10.6	69.6	319.6
Mean	43.5	32.4	33.0	46.3	53.2	34.1	12.1	9.6	15.1	28.0	29.7	47.5	369.3
P50%	41.6	31.0	31.6	44.3	50.9	32.6	11.5	9.2	14.5	26.8	28.5	45.5	353.7
P80%	34.2	25.5	26.0	36.4	41.9	26.8	9.5	7.6	11.9	22.0	23.4	37.4	290.8
P90%	31.2	23.2	23.7	33.2	38.1	24.4	8.6	6.9	10.8	20.1	21.3	34.0	264.7

Table 1.41 Monthly Rainfall between 1960 and 1990, Station: Eskisehir Anodolu, Station No.:706

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
1960	51.5	38.0	78.8	66.8	47.9	76.2	9.8	11.3	14.1	18.4	11.3	83.0	507.1
1961	27.8	15.6	14.8	14.2	16.1	127.7	10.7		13.1	35.9	10.4	31.8	318.1
1962	23.5	44.0	46.0	25.7	15.4	7.2	0.3	0.2	32.1	43.8	26.7	128.2	393.1
1963	92.2	60.1	25.9	62.8	71.3	59.1	14.5		11.7	39.5	41.0	40.0	518.1
1964	7.4	58.2	69.1	31.0	7.6	62.2	9.0	0.9	42.9		26.4	34.3	349.0
1965	25.3	47.5	59.4	67.7	108.7	10.7	16.1	8.2	0.0	5.8	36.3	63.8	449.5
1966	61.3	8.7	62.4	66.6	78.1	51.6	10.1	4.3	9.5	3.4	14.0	45.2	416.2
1967	52.7	25.6	41.3	40.2	25.9	11.0	11.9		23.2	4.1	21.5	40.9	298.3
1968	78.8	27.0	69.8	46.1	28.5	26.3	0.6	8.1	11.6	37.2	55.1	95.2	484.3
1969	57.5	74.6	55.7	27.3	25.4	22.5	6.3	0.6	12.6	9.2	14.7	97.1	403.5
1970	79.8	78.2	71.4	39.4	28.0	43.2	4.5	1.1	20.2	25.9	19.3	55.9	466.9
1971	26.9	8.5	57.1	28.9	56.2	17.7	28.3	13.2	8.7	39.3	48.5	44.3	377.6
1972	20.0	12.4	32.5	35.4	10.4	71.7	47.4	20.9	34.7	60.2	15.7	0.9	362.2
1973	11.8	39.4	20.6	59.6	29.4	78.3	64.2	17.8	1.6	42.8	45.5	62.2	473.2
1974	13.5	49.2	45.3	50.5	70.8	29.1	0.6	19.5	10.6	27.2	30.1	37.2	383.6
1975	49.3	28.9	41.0	29.0	126.9	32.6	0.2	15.2	1.6	7.5	40.3	42.4	414.9
1976	43.3	24.6	27.2	33.2	87.4	47.3	10.6	3.5	3.8	37.3	17.5	62.4	398.1
1977	32.7	18.0	30.3	61.3	16.8	35.2	7.0	39.7	16.3	38.9	29.8	56.3	382.3
1978	100.7	70.4	54.4	66.6	52.1	2.1	0.4	1.9	37.2	53.2	0.7	36.9	476.6
1979	104.0	23.0	16.0	10.6	59.7	31.7	2.9	0.1	11.6	40.1	43.5	25.2	368.4
1980	48.4	32.1	47.4	34.9	34.3	25.5	11.5	0.0	34.2	12.0	36.9	56.2	373.4
1981	56.3	25.5	38.8	24.8	51.4	8.7	12.1	18.5	4.8	40.5	27.8	68.3	377.5
1982	37.3	22.1	29.5	64.1	58.6	11.1	16.9	8.1	3.4	26.3	3.3	26.5	307.2
1983	34.3	26.4	11.5	28.9	80.6	41.8	16.6	8.6	1.8	18.9	72.9	51.1	393.4
1984	30.5	39.7	62.1	117.4	30.5	3.7	28.3	7.4	0.8	0.1	24.0	5.5	350.0
1985	64.5	51.1	48.8	34.8	18.8	5.3	3.8	0.2	1.6	29.3	47.4	39.7	345.3
1986	49.0	44.6	7.3	14.8	19.5	37.9	4.2	5.5	2.5	16.3	8.2	86.0	295.8
1987	95.0	9.6	52.5	40.8	44.2	22.9	0.4	7.6	3.8	9.0	30.8	52.7	369.3
1988	14.6	26.9	46.3	44.6	65.1	60.8	1.4	2.0	1.7	52.8	51.1	31.8	399.1
1989	7.9	10.3	18.2	8.9	41.4	33.5	29.1	7.7	2.5	55.1	60.0	57.3	331.9
1990	9.0	15.9	11.8	52.9	17.7	16.5	20.3	3.6	33.5	23.7	31.2	69.8	305.9
Mean	45.4	34.1	41.7	42.9	46.0	35.8	12.9	8.4	13.2	28.5	30.4	52.6	390.0
P50%	45.0	33.8	41.4	42.5	45.6	35.5	12.8	8.3	13.0	28.2	30.1	52.1	386.8
P80%	39.4	29.6	36.2	37.2	39.9	31.1	11.2	7.3	11.4	24.7	26.4	45.6	338.7
P90%	36.7	27.6	33.7	34.7	37.2	29.0	10.4	6.8	10.6	23.0	24.6	42.5	315.5

Table 1.42 Monthly Rainfall between 1960 and 1990, Station: Kutahya, Station No.:725

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
1960	122.0	58.8	99.9	57.5	44.1	59.8	18.6	4.6	15.0	43.2	22.0	183.2	728.7
1961	49.1	68.8	51.3	48.3	14.3	56.7	0.2	2.2	22.9	49.6	28.8	63.2	455.4
1962	41.0	98.2	110.1	40.5	39.7	11.7	8.5	0.2	51.1	48.5	29.9	205.0	684.4
1963	102.5	115.3	67.5	41.3	108.0	55.1	24.6		5.8	65.9	39.5	91.0	716.5
1964	10.4	40.1	111.7	19.2	46.4	122.1	17.5	3.3	36.8		55.6	82.5	545.6
1965	44.2	136.5	57.9	117.2	146.0	5.6	15.3	0.4		12.2	98.0	69.7	703.0
1966	137.7	20.7	139.8	53.9	48.8	35.9	15.2	37.1	5.6	7.3	40.1	97.8	639.9
1967	74.6	45.9	62.0	56.3	37.2	5.1	47.0	1.1	7.6	20.7	24.1	99.4	481.0
1968	172.6	45.2	148.1	25.5	35.0	33.4	1.3	17.5	14.6	43.0	40.0	119.5	695.7
1969	74.9	94.0	48.2	64.5	28.1	37.3	44.8		3.0	4.5	48.8	170.4	618.5
1970	97.8	141.9	136.5	38.5	39.7	28.1	14.4	0.0	30.7	50.3	44.0	82.5	704.4
1971	63.2	34.4	96.6	36.2	66.1	41.6	60.7	25.9	27.8	57.5	75.2	83.7	668.9
1972	28.1	26.2	33.5	37.8	66.3	79.2	47.9	27.0	28.9	96.8	24.1	3.7	499.5
1973	15.8	97.5	43.9	64.3	36.2	42.0	14.0	5.3	9.1	61.8	50.1	102.4	542.4
1974	30.0	77.2	35.0	65.1	59.2	28.8	0.1	26.5	32.7	32.2	39.2	68.0	494.0
1975	46.3	52.6	98.7	55.2	109.8	68.6	0.0	38.5	25.9	28.7	84.9	83.6	692.8
1976	71.6	35.3	28.6	55.2	62.6	29.1	23.2	13.4	9.1	65.2	13.0	132.4	538.7
1977	36.1	28.9	35.0	76.7	26.3	34.3	16.6	9.1	47.7	67.5	58.4	120.1	556.7
1978	119.8	104.6	68.8	62.5	49.2	12.2	0.0	0.0	75.7	55.7	14.8	71.4	634.7
1979	177.1	34.7	24.7	27.4	103.3	73.0	3.8	0.5	19.2	41.9	90.2	72.7	668.5
1980	152.3	27.8	85.5	55.9	34.8	25.9	2.5	1.7	57.3	40.5	90.4	158.6	733.2
1981	115.1	70.6	61.1	37.3	45.3	54.9	11.7	20.3	9.2	49.4	66.2	170.3	711.4
1982	48.5	37.4	19.5	88.4	58.3	15.7	16.5	1.1	9.8	33.5	5.4	26.9	361.0
1983	86.0	48.5	19.4	60.3	46.1	28.8	54.0	1.9	3.9	24.3	161.8	46.9	581.9
1984	59.3	60.1	75.5	111.5	42.6	2.9	23.1	41.1	0.6	1.2	43.0	10.7	471.6
1985	151.3	78.5	59.7	35.0	32.8	18.8	0.0	7.8	1.8	22.4	70.8	42.4	521.3
1986	96.3	97.2	10.4	32.5	33.3	36.3	3.0	4.8	29.4	21.7	11.7	168.8	545.4
1987	142.7	30.5	57.9	68.0	47.7	34.1	14.7	22.6	0.5	24.2	60.4	61.1	564.4
1988	16.1	70.6	53.1	62.5	64.6	47.2	8.8	20.4	6.9	79.5	84.9	56.6	571.2
1989	14.6	15.0	20.4	2.9	48.6	12.5	33.0	2.8	0.2	78.6	83.6	72.5	384.7
1990	11.6	31.1	24.2	66.9	22.8	37.3	11.3	22.6	33.6	48.1	36.0	119.0	464.5
Mean	77.7	62.1	64.0	53.7	53.0	37.9	17.8	12.4	20.7	42.5	52.7	94.7	586.4
P50%	74.8	59.8	61.7	51.7	51.1	36.5	17.2	11.9	20.0	41.0	50.8	91.2	564.8
P80%	64.9	51.9	53.5	44.9	44.3	31.7	14.9	10.4	17.3	35.5	44.1	79.2	490.2
P90%	61.0	48.7	50.2	42.1	41.6	29.7	14.0	9.7	16.3	33.4	41.4	74.3	460.1

Table 1.43 Monthly Rainfall between 1960 and 1990, Station: Usak, Station No.:188

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
1960	131.0	82.0	44.3	66.3	35.6	27.6			2.3	2.3	116.8	256.5	763.7
1961	170.8	75.3	8.6	53.6	25.2	30.2		3.5	2.8	17.9	51.8	94.1	533.8
1962	49.1	140.7	119.4	40.3	1.8	3.9	2.3		16.4	66.0	141.5	268.2	849.6
1963	130.3	125.7	51.8	22.8	27.5				0.3	78.8	33.3	121.9	592.4
1964	45.3	79.6	144.8	3.8	8.4	0.0		5.7	65.3	0.2	46.2	206.2	605.5
1965	59.7	253.0	32.2	81.8	80.7	0.0		0.0		13.1	129.7	250.9	901.1
1966	266.9	31.1	160.6	14.3	16.7	8.9		24.8	26.4	1.4	94.7	314.3	960.1
1967	179.4	40.4	38.1	76.7	10.8	0.3			1.7	20.4	23.2	110.3	501.3
1968	324.1	75.6	64.6	10.8	7.9	4.7		12.1	14.3	26.3	49.4	75.6	665.4
1969	142.6	96.4	50.3	66.1	16.8	11.5	13.2		0.1	0.9	10.4	256.0	664.3
1970	114.1	201.5	45.3	32.6	25.0	3.8	0.7			60.2	41.6	88.4	613.2
1971	83.9	145.0	200.6	49.3	29.9	5.5	2.7	0.1	2.9	30.6	147.8	67.9	766.2
1972	57.5	65.2	43.5	94.6	28.0	0.3	0.1	9.7	13.1	145.3	46.7	1.6	505.6
1973	131.2	189.0	134.0	39.9	0.1	3.8	2.1	2.4	4.6	28.1	36.7	68.1	640.0
1974	18.5	79.3	137.1	22.4	14.8	0.4	0.2	0.8	4.7	35.0	152.1	171.4	636.7
1975	170.9	30.4	65.6	22.2	36.0	23.2	0.3	1.7	5.1	41.3	95.8	76.3	568.8
1976	50.0	109.8	78.5	79.0	19.2	7.3	23.9	12.0	4.8	118.5	91.8	105.5	700.3
1977	71.6	60.0	23.5	22.5	7.8	9.3	0.1		33.2	36.1	65.9	72.5	402.5
1978	137.1	160.2	121.2	107.2	23.5	8.6			61.0	37.1	40.0	14.7	710.6
1979	180.3	71.2	36.1	30.8	72.5	9.3				22.7	168.1	95.2	686.2
1980	145.7	12.1	81.2	51.0	22.3	14.4	4.1		0.1	1.6	75.4	120.8	528.7
1981	202.0	33.5	57.0	16.5	18.8				8.7	17.9	126.7	258.6	739.7
1982	54.4	59.6	47.9	61.9	60.3	0.1	1.7	1.1		44.8	38.1	159.4	529.3
1983	51.6	104.5	7.0	32.4	37.3	5.1	9.7	1.6	2.2	12.7	142.4	125.6	532.1
1984	196.3	97.0	145.0	76.8	0.5	0.6	0.5	0.2	0.4		113.4	42.3	673.0
1985	152.2	48.7	94.5	4.6	17.1					32.8	126.2	22.2	498.3
1986	160.1	132.9	34.2	46.6	11.5	5.7				8.3	13.3	112.0	524.6
1987	82.7	31.9	66.6	48.5	29.1	10.3	0.1	0.6	16.1	22.0	51.8	59.3	419.0
1988	13.8	58.0	111.3	78.0	31.6	13.0	14.6	1.0	2.0	40.7	104.4	61.1	529.5
1989	5.5	16.9	35.1	0.1	49.1	3.1	30.3	0.4	0.0	68.4	116.6	94.9	420.4
1990	5.4	41.3	10.6	61.6	45.8	22.4	18.7	10.1	29.6	31.2	37.6	143.2	457.5
Mean	115.6	88.6	73.9	45.6	26.2	8.3	7.0	4.9	12.7	35.4	81.6	126.3	616.8
P50%	113.5	87.0	72.5	44.8	25.7	8.2	6.8	4.8	12.5	34.8	80.1	124.0	605.6
P80%	93.9	72.0	60.0	37.1	21.3	6.8	5.7	4.0	10.3	28.8	66.2	102.6	500.9
P90%	84.8	65.0	54.2	33.5	19.2	6.1	5.1	3.6	9.3	26.0	59.8	92.7	452.5

Table 1.44 Monthly Rainfall between 1960 and 1990, Station: Kirsehir, Station No.:160

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
1960	24.0	46.2	38.3	84.0	45.4	54.7	4.1		5.2	6.9	22.4	27.8	359.0
1961	49.8	79.5	27.7	10.0	17.8	55.0			20.4	14.3	9.3	87.3	371.1
1962	26.9	26.1	20.8	12.5	52.3	0.2		0.0	4.3	61.8	15.2	88.5	308.6
1963	101.4	46.2	36.0	50.3	66.3	48.5	0.3		30.0	25.2	2.1	28.8	435.1
1964	3.6	85.1	74.2	16.7	43.9	58.1	2.2	0.5	7.1		18.8	50.0	360.2
1965	11.7	35.5	70.4	38.0	31.2	15.5		6.8	0.5	18.4	56.3	54.5	338.8
1966	145.8	6.6	51.8	41.0	27.3	39.3	32.9	16.1	1.8	2.5	41.3	77.5	483.9
1967	30.2	23.4	61.4	72.1	68.6	20.3		0.0	3.9	17.7	68.2	47.7	413.5
1968	80.2	33.7	53.4	21.9	46.2	31.1		0.3	31.2	20.2	48.9	60.2	427.3
1969	60.7	93.3	34.2	63.8	58.1	54.8	1.5	1.6	14.6	2.5	35.8	76.7	497.6
1970	62.6	76.8	36.5	8.3	13.0	88.8			6.3	34.8	44.3	70.9	442.3
1971	20.1	37.2	32.5	58.7	46.6	27.1	3.2	16.7	8.1	10.0	34.8	25.1	320.1
1972	17.9	51.4	4.8	60.0	37.9	82.0	39.6	6.2	5.1	40.0	19.9	5.6	360.4
1973	11.8	7.4	26.4	53.9	56.3	17.0	7.1	34.7	6.7	2.9	12.9	17.1	254.2
1974	33.9	23.2	42.4	27.6	33.7	5.8	3.2	5.4	14.7	20.4	11.0	79.8	301.1
1975	23.7	29.1	33.3	93.1	81.8	94.2	1.0	3.2		12.7	18.7	55.6	446.4
1976	63.2	19.6	17.1	52.7	96.3	19.6		0.1	11.6	63.8	45.8	47.0	436.8
1977	45.4	16.2	57.4	75.3	37.5	18.2	6.0		17.5	59.8	12.4	38.4	384.1
1978	66.3	65.7	35.5	65.0	6.9	3.8	0.0	1.9	29.3	34.3	0.8	59.3	368.8
1979	80.1	35.3	34.3	33.0	15.2	25.3	7.4	0.1	21.1	44.6	51.3	32.9	380.6
1980	67.6	30.4	79.3	55.8	85.1	23.2	3.1	1.0	24.4	26.5	51.2	33.0	480.5
1981	72.3	40.3	39.2	23.5	64.4	42.5	13.5	0.4	1.3	15.3	19.8	79.2	411.7
1982	40.7	11.2	23.5	53.5	39.7	67.0	8.2	0.4		12.0	3.8	31.2	291.2
1983	21.1	46.8	21.7	42.3	45.0	21.5	7.9	1.7	9.1	37.0	93.9	29.9	377.9
1984	39.0	15.6	35.0	67.0	16.7	1.8	7.0	3.3		0.1	27.0	54.2	266.7
1985	74.3	62.4	39.4	40.1	50.1	3.5	6.9	0.4	11.3	65.3	113.5	38.8	506.0
1986	66.4	25.7	8.4	21.5	27.9	42.2	1.5		32.5	1.3	58.0	45.6	321.0
1987	62.2	44.7	44.3	32.0	31.7	87.0	23.1	1.9		74.4	71.4	79.2	541.9
1988	14.3	50.1	49.6	31.2	29.1	32.4	12.0	0.1	6.3	53.4	92.1	56.4	427.0
1989	32.3	11.4	19.5	35.9	43.5	8.3	0.3		0.1	30.7	111.5	35.5	329.0
1990	31.7	23.1	7.2	57.8	51.4	35.6	14.7	1.1	18.7	11.4	11.2	68.8	332.7
Mean	47.1	38.7	37.3	44.8	44.1	36.3	8.6	4.3	12.7	27.3	39.5	51.0	386.3
P50%	46.1	37.8	36.4	43.8	43.1	35.5	8.4	4.2	12.4	26.7	38.6	49.9	377.7
P80%	39.4	32.3	31.1	37.4	36.8	30.3	7.2	3.6	10.6	22.8	33.0	42.7	322.8
P90%	36.4	29.9	28.8	34.6	34.0	28.0	6.6	3.3	9.8	21.1	30.5	39.4	298.3

Table 1.45 Monthly Rainfall between 1960 and 1990, Station: Yozgat, Station No.:140

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
1960	63.6	57.7	67.6	85.0	57.3	56.8	17.6	1.0	9.4	11.1	45.6	41.1	513.8
1961	86.6	108.2	64.6	42.7	20.7	48.8	0.2	0.6	13.2	21.6	34.0	119.8	561.0
1962	60.6	57.9	49.6	36.5	43.5	2.5	1.7	1.1	12.2	27.1	30.6	186.6	509.9
1963	145.3	83.5	54.5	89.0	101.0	12.7	14.6		31.1	41.0	4.2	60.5	637.4
1964	13.8	134.4	70.1	11.8	48.3	121.3	8.0	0.4	26.8	1.8	56.7	69.5	562.9
1965	24.8	102.5	66.8	54.3	49.0	24.3	0.3	3.4	0.0	25.8	54.4	123.9	529.5
1966	177.0	12.2	91.2	86.1	40.9	39.2	20.4	19.0	1.7	5.2	28.1	145.8	666.8
1967	62.9	28.6	134.8	70.5	76.7	27.6		0.4	11.1	20.5	101.5	84.9	619.5
1968	117.4	73.6	77.6	27.1	115.6	20.4	0.8	6.8	48.2	20.8	42.5	61.6	612.4
1969	83.2	101.1	72.4	91.3	53.9	58.9	2.8	0.4	0.3	20.3	48.9	67.4	600.9
1970	77.2	141.1	39.3	23.9	35.1	28.3	0.7	4.7	17.9	61.7	46.5	72.2	548.6
1971	13.7	39.5	99.8	95.0	39.1	45.2	7.2	44.1	33.5	31.8	75.6	95.9	620.4
1972	23.5	57.1	12.8	55.1	54.2	60.9	52.9	0.9	14.6	56.3	25.0	11.2	424.5
1973	17.2	24.2	59.7	80.6	72.2	42.4	3.6	4.1	0.8	10.9	26.0	49.3	391.0
1974	57.3	23.0	45.3	45.2	62.2	4.4	6.7	7.8	52.5	18.0	16.9	104.7	444.0
1975	34.3	41.4	73.4	136.6	134.7	60.6	2.7	18.9	3.9	22.0	30.4	74.8	633.7
1976	96.8	59.5	25.4	81.2	46.5	18.7	4.2	1.1	11.8	71.1	80.6	53.2	550.1
1977	34.7	26.5	80.8	87.3	53.4	32.9	2.7		22.4	57.0	32.4	51.1	481.2
1978	104.5	93.2	57.3	83.0	8.2	5.6	6.4		23.1	35.6	4.6	60.6	482.1
1979	145.5	73.9	29.6	36.0	82.6	28.0	17.9	1.0	34.4	41.3	70.9	56.7	617.8
1980	107.8	43.1	76.5	83.2	127.1	24.0	2.5	0.6	9.5	37.9	122.4	91.3	725.9
1981	97.7	58.1	107.6	39.2	50.6	87.7	66.1	1.0	9.4	22.4	42.1	133.4	715.3
1982	83.6	22.3	61.5	85.5	57.2	47.9	22.1	13.0	4.2	14.2	15.5	43.2	470.2
1983	66.5	192.3	62.9	54.1	72.6	42.8	47.4	9.8	9.2	87.9	164.9	47.8	858.2
1984	59.8	37.2	66.2	133.8	37.1	21.3	6.9	12.1		0.0	33.9	63.1	471.4
1985	106.0	112.2	47.1	50.1	111.4	6.5	8.1	6.1		109.4	123.7	80.0	760.6
1986	79.1	56.3	11.5	53.0	72.7	103.9	7.9		28.1	7.1	64.2	78.5	562.3
1987	120.8	70.7	104.7	79.4	39.2	73.9	29.1	12.8		35.5	67.0	159.3	792.4
1988	27.3	86.3	74.4	30.4	36.3	97.9	34.6		9.0	73.0	108.4	57.8	635.4
1989	35.5	25.2	28.4	45.7	55.6	27.1	2.8	1.0	8.8	52.5	171.8	54.1	508.5
1990	52.6	37.7	25.9	93.8	83.5	27.5	13.7	2.6	22.0	13.6	27.6	100.9	501.4
Mean	73.4	67.1	62.6	66.7	62.5	41.9	13.8	6.7	16.8	34.0	58.0	80.7	580.9
P50%	72.6	66.3	61.8	65.9	61.8	41.4	13.6	6.6	16.6	33.6	57.3	79.7	574.1
P80%	61.8	56.5	52.7	56.1	52.6	35.3	11.6	5.7	14.1	28.6	48.8	67.9	489.1
P90%	56.7	51.8	48.3	51.5	48.3	32.4	10.6	5.2	12.9	26.3	44.8	62.3	448.6

Table1.46 Monthly Rainfall between 1960 and 1990, Station: Bilecik, Station No.:122

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
1960	66.0	44.1	65.9	39.6	49.2	31.4	16.4	31.2	10.1	14.0	15.9	72.2	456.0
1961	39.0	28.3	30.1	31.2	24.2	70.5	12.8	0.0	10.8	28.7	22.6	22.4	320.6
1962	21.8	69.3	55.4	54.2	11.9	2.7	8.6		18.7	96.7	24.1	158.0	521.4
1963	112.5	32.2	37.9	41.6	74.1	16.7	31.9	0.0	21.1	33.7	24.6	89.3	515.6
1964	9.7	25.7	59.9	32.6	20.5	29.7	6.6	7.0	70.0	1.5	54.5	72.3	390.0
1965	13.3	56.0	45.0	75.1	111.5	16.1	54.0	12.2	0.0	9.9	44.4	42.2	479.7
1966	43.8	20.9	91.6	57.0	37.5	37.6	2.4	44.4	11.5	5.0	14.6	39.4	405.7
1967	52.5	35.3	46.6	45.5	55.2	27.7	19.4	5.7	3.1	12.1	35.5	46.4	385.0
1968	112.3	46.7	70.3	65.4	25.5	60.2	1.0	38.5	40.6	43.2	63.6	57.4	624.7
1969	59.0	42.5	28.1	34.8	47.4	56.4	4.1		0.0	6.2	29.5	77.0	385.0
1970	62.6	135.1	61.8	26.1	86.6	26.0	6.8	2.1	52.1	60.7	37.3	52.9	610.1
1971	44.2	14.4	76.5	43.3	77.8	49.7	14.8	6.5	44.0	36.1	29.9	78.9	516.1
1972	19.4	16.9	23.8	58.8	46.9	130.7	53.1	20.4	65.0	53.7	20.2	1.8	510.7
1973	10.0	38.7	24.5	52.4	15.3	24.8	32.9	3.3	1.1	57.0	39.8	60.0	359.8
1974	19.4	35.4	30.6	59.3	50.6	48.5	4.4	68.4	17.7	7.7	52.3	43.8	438.1
1975	62.6	45.4	50.6	37.7	95.9	65.3	0.3	38.1	6.9	24.9	39.2	56.6	523.5
1976	50.6	28.4	21.6	31.8	61.7	13.0	8.5	33.5	11.2	60.1	22.4	74.0	416.8
1977	17.0	19.7	39.9	44.4	14.0	30.6	1.1	6.7	14.2	49.7	62.7	62.0	362.0
1978	93.5	39.3	48.0	33.0	19.0	9.9	1.3	5.8	27.2	48.0	6.1	86.1	417.2
1979	83.6	39.4	34.1	25.4	113.6	19.2	11.6	4.6	21.1	28.5	39.9	42.6	463.6
1980	67.5	33.6	74.5	21.2	38.1	50.4	3.0	15.5	23.1	27.8	70.6	52.3	477.6
1981	74.0	47.2	40.3	9.1	62.5	32.9	56.0	12.3	30.0	49.6	18.4	108.7	541.0
1982	65.7	22.3	32.3	70.5	118.5	2.7	21.0	28.8	11.9	22.8	7.6	25.7	429.8
1983	33.3	43.0	5.0	24.1	46.0	83.7	55.7	4.4	7.6	30.4	76.2	36.0	445.4
1984	30.1	45.4	56.2	64.0	49.4	12.5	105.8	13.5		6.8	35.1	5.7	424.5
1985	70.6	49.0	21.8	37.0	21.8	18.2	13.3	0.3	0.2	42.8	56.2	51.1	382.3
1986	62.8	41.1	4.8	16.1	46.5	43.7	6.4	0.2	9.8	24.8	19.6	91.6	367.4
1987	120.3	22.6	75.9	40.3	46.3	28.6	7.1	8.1	0.3	37.2	47.3	67.2	501.2
1988	17.2	39.8	44.4	28.7	34.0	34.5	43.5	2.7	3.4	52.1	31.6	50.5	382.4
1989	21.7	9.7	13.4	7.5	31.5	46.2	16.8	15.2	15.7	111.6	87.8	61.3	438.4
1990	16.6	33.2	40.2	41.6	22.8	20.8	5.3	0.3	45.1	36.7	35.1	40.0	337.7
Mean	50.7	38.7	43.6	40.3	50.2	36.8	20.2	14.8	19.8	36.1	37.6	58.9	446.1
P50%	50.4	38.5	43.3	40.0	49.8	36.5	20.0	14.7	19.6	35.9	37.3	58.5	442.9
P80%	43.6	33.3	37.5	34.7	43.2	31.7	17.4	12.7	17.0	31.1	32.3	50.6	383.7
P90%	40.3	30.8	34.6	32.0	39.9	29.3	16.1	11.8	15.7	28.7	29.9	46.8	354.6

Table1.47 Monthly Rainfall between 1960 and 1990, Station: Corum, Station No.:84

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
1960	29.6	38.3	50.0	44.4	51.8	49.6	12.1	10.3	4.2	11.3	35.7	23.7	361.0
1961	39.7	55.9	34.0	34.1	55.5	103.1	25.8	2.6	24.7	13.0	14.1	78.8	481.3
1962	48.3	49.6	35.2	39.5	34.4	13.1	6.8	0.2	16.6	38.1	11.0	127.7	420.5
1963	58.0	36.8	36.0	40.0	47.9	15.8	6.3	3.4	25.1	34.2	16.9	43.6	364.0
1964	4.3	46.4	40.8	15.5	59.5	63.7	11.5	2.2	22.3	0.4	35.6	23.0	325.2
1965	25.9	53.7	43.4	20.9	61.1	50.9	19.3	18.3		17.1	69.5	45.1	425.2
1966	88.9	6.1	37.7	64.2	45.6	19.6	8.6	45.5	12.6	0.1	15.4	58.1	402.4
1967	24.9	21.6	69.1	74.4	100.5	110.5	0.8	4.6	18.2	17.1	64.2	37.9	543.8
1968	77.2	21.9	54.1	34.7	37.8	39.7	14.6	19.4	41.4	21.4	25.0	31.8	419.0
1969	50.6	48.8	29.2	87.4	44.9	70.2	1.8		15.6	8.4	56.7	48.5	462.1
1970	57.6	56.9	35.9	10.7	24.3	26.4	2.7	2.0	28.9	85.8	18.7	55.5	405.4
1971	4.9	12.2	38.6	83.9	81.6	80.4	39.5	11.9	24.7	34.8	52.7	67.7	532.9
1972	21.3	34.0	5.9	38.9	56.2	125.9	54.7	18.2	62.5	54.2	15.0	14.9	501.7
1973	12.1	18.1	62.0	62.9	36.0	45.8	9.4	1.5	3.8	9.0	38.4	23.4	324.4
1974	14.1	17.8	29.3	65.2	92.5	44.4	24.1	50.5	6.3	3.5	6.4	81.6	435.7
1975	42.9	18.0	47.2	91.3	81.8	47.4	5.7	9.2	15.9	31.9	22.0	63.4	476.7
1976	49.4	17.1	16.4	50.0	56.7	36.7	23.4	3.8	6.6	42.0	41.8	29.7	373.5
1977	17.9	25.3	56.3	82.3	122.3	44.3	22.2	1.0	36.5	33.6	13.5	47.2	502.4
1978	57.5	51.4	33.9	95.1	14.8	9.5	2.9	9.8	38.0	66.9	1.5	51.9	433.2
1979	66.0	38.1	24.8	30.0	22.8	48.7	37.0	80.1	37.0	35.3	45.8	46.9	512.5
1980	86.4	18.2	44.1	85.1	72.9	32.1	11.9	0.2	22.8	23.1	62.8	51.7	511.3
1981	68.8	36.4	38.0	22.9	66.4	58.2	21.9	19.7	27.3	26.3	49.0	47.2	482.1
1982	31.4	15.9	45.2	69.4	43.5	27.4	30.1	3.2	1.1	12.5	14.7	30.3	324.7
1983	53.0	32.3	23.5	67.3	72.4	63.1	61.7	29.6	15.0	41.5	101.0	46.3	606.7
1984	26.9	18.2	23.5	96.0	51.3	21.1	8.5	20.1	4.0	0.4	23.6	15.0	310.6
1985	38.0	38.5	17.3	40.1	116.7	9.1	19.3	16.4	5.6	96.1	44.8	36.2	478.1
1986	45.7	27.6	0.9	17.8	54.9	56.7	0.1		59.7	7.5	21.5	80.1	372.5
1987	90.0	41.5	55.1	52.2	38.4	74.2	22.4	8.8		7.5	29.3	75.2	494.6
1988	16.6	54.1	52.0	40.8	93.9	68.3	60.3		1.3	93.9	68.3	36.8	588.3
1989	13.3	16.9	39.0	25.4	78.2	72.9	19.8	9.5	7.4	40.7	101.9	42.0	467.0
1990	20.5	9.9	12.8	72.3	84.9	48.7	7.8	5.7	33.3	17.0	12.8	84.0	409.7
Mean	41.5	31.5	36.5	53.4	61.4	50.9	19.1	14.6	21.3	29.8	36.4	49.8	443.5
P50%	40.5	30.8	35.7	52.2	60.0	49.8	18.7	14.2	20.8	29.2	35.6	48.7	433.6
P80%	35.1	26.7	30.9	45.2	52.0	43.1	16.2	12.3	18.0	25.2	30.8	42.2	375.4
P90%	32.7	24.8	28.8	42.1	48.4	40.1	15.1	11.5	16.8	23.5	28.7	39.3	349.5

Table1.48 Monthly Rainfall between 1960 and 1990, Station: Konya meyden, No.:244

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
1960	21.5	17.3	55.6	25.4	37.1	44.1	3.5	0.1	11.7	11.7	6.1	22.2	257.3
1961	14.7	76.7	43.4	5.6	7.3	5.8	0.1		5.5	21.3	26.6	69.8	276.8
1962	8.6	36.7	14.5	20.2	49.3	0.0		0.0	13.9	44.0	2.6	56.4	246.2
1963	40.3	25.9	16.5	40.5	122.2	32.4	7.9		5.7	39.4	32.2	9.2	372.2
1964	8.7	51.7	50.3	2.8	32.6	60.5	2.5	1.6	0.2	4.6	38.2	64.2	317.9
1965	36.6	42.9	20.9	23.1	32.0	13.6	3.4	2.9		13.6	16.5	59.9	265.4
1966	65.8	22.3	37.0	20.5	21.3	6.8	11.4	11.9	32.1	0.0	12.8	88.8	330.7
1967	20.1	19.8	29.1	24.9	104.1	6.6	0.6	1.2	6.7	5.8	55.6	39.5	314.0
1968	73.8	60.0	27.2	12.7	56.7	21.4	2.2	16.4	71.9	59.6	73.7	69.3	544.9
1969	97.3	44.9	38.9	16.7	66.4	15.5	5.0	7.2	7.6	16.2	28.2	94.1	438.0
1970	35.0	23.4	17.5	1.6	26.2	32.5	35.9	0.0	10.2	53.9	36.2	46.1	318.5
1971	15.1	26.0	43.3	39.0	40.6	34.6	1.0	31.1	0.7	11.6	32.9	36.9	312.8
1972	21.5	44.1	9.5	52.4	33.8	59.7	18.1	23.0	3.5	28.0	8.9	4.1	306.6
1973	4.8	8.8	25.7	15.6	58.0	47.5	0.8		0.4	10.6	5.4	13.7	191.3
1974	25.1	18.8	20.8	21.9	23.8	11.1	0.0	7.2	12.5	59.0	6.4	59.6	266.2
1975	73.6	63.4	25.6	67.5	89.9	33.1	3.8	3.8	0.0	61.3	31.6	45.9	499.5
1976	54.9	20.1	40.5	36.6	47.2	18.0	12.7	4.6	7.9	88.7	30.4	40.6	402.2
1977	50.1	21.1	11.0	87.1	71.7	18.1	7.0		29.6	25.3	0.0	51.5	372.5
1978	65.9	31.6	30.7	23.9	8.3	17.2	0.0		27.0	37.9	0.1	54.9	297.5
1979	47.0	19.7	18.0	35.8	48.5	32.9	9.0	2.0	0.7	30.7	56.9	30.2	331.4
1980	33.3	33.0	42.0	73.5	57.6	21.2	0.8		3.9	69.7	33.9	15.9	384.8
1981	112.2	32.5	19.3	18.2	40.7	23.5	13.9	0.3	0.0	10.2	15.1	51.2	337.1
1982	42.1	14.5	45.5	45.4	69.9	37.7	12.7	14.3	0.5	26.0	14.5	48.7	371.8
1983	21.5	36.9	36.3	30.2	59.5	32.3	0.2	25.2	8.0	21.0	37.5	44.4	353.0
1984	31.8	33.1	39.8	48.4	25.9	1.9	1.6	11.0		0.3	31.0	25.9	250.7
1985	35.6	30.0	36.5	24.9	56.7	12.9	4.2	0.2	3.8	69.0	71.3	26.8	371.9
1986	33.1	30.0	12.1	39.9	83.3	20.8	0.0		25.5	0.0	60.5	48.6	353.8
1987	63.9	30.4	68.6	23.9	10.8	30.6	27.5			30.7	58.1	48.1	392.6
1988	4.3	34.7	26.7	75.6	56.1	18.1	26.8	0.4	3.0	49.5	65.1	11.8	372.1
1989	19.6	0.7	14.2	4.6	32.1	7.8		1.0	0.3	37.2	70.8	14.3	202.6
1990	9.2	24.9	3.0	17.1	41.4	8.0	0.2		25.7	27.3	22.5	51.7	231.0
Mean	38.3	31.5	29.7	31.5	48.7	23.4	7.3	7.5	11.4	31.1	31.7	43.4	331.7
P50%	37.1	30.5	28.8	30.5	47.2	22.7	7.1	7.3	11.0	30.1	30.7	42.0	321.3
P80%	30.5	25.0	23.6	25.0	38.8	18.6	5.8	6.0	9.1	24.7	25.2	34.5	263.9
P90%	27.6	22.7	21.4	22.7	35.1	16.9	5.3	5.4	8.2	22.4	22.8	31.2	238.9

Table1.49 Monthly Rainfall between 1960 and 1990, Station: Aksatay, Station No.:834

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
1960	29.0	68.7	60.6	78.0	52.5	36.6		1.3	1.6	8.0	20.3	17.8	374.4
1961	37.3	47.2	29.5	11.2	22.0	19.6			17.0	6.3	12.0	89.7	291.8
1962	11.2	41.2	13.9	5.4	16.1				3.9	21.5	18.8	29.0	161.0
1963	69.4	65.7	56.7	81.3	78.7	34.6	3.5		11.1	20.6	30.3	25.1	477.0
1964	6.5	53.2	84.2	15.2	48.5	83.4	2.8	0.1	0.6	0.0	28.2	51.3	374.0
1965	14.8	58.6	62.8	54.1	38.7	8.3		2.0	0.0	15.0	57.2	72.4	383.9
1966	82.8	27.9	40.5	50.6	17.7	3.5	20.2	3.8	6.2	2.1	33.7	71.2	360.2
1967	37.0	28.0	65.0	48.1	32.0	8.7	0.8	0.0	0.5	40.5	50.1	28.1	338.8
1968	47.0	34.8	57.7	8.4	19.6	20.8		11.5	17.7	24.3	51.4	32.9	326.1
1969	45.8	65.1	39.1	68.9	38.8	9.9	2.8	2.5	13.6	10.6	31.5	42.1	370.7
1970	38.1	33.9	31.9	7.4	18.3	50.6	1.9	2.0	14.6	41.4	16.3	80.4	336.8
1971	23.3	25.4	34.5	70.3	55.3	40.3	0.2	31.3	1.1	13.6	30.8	23.0	349.1
1972	18.1	61.3	14.8	46.3	37.7	54.3	8.8	0.3	6.9	26.7	35.0	9.5	319.7
1973	13.6	17.3	39.7	50.7	56.5	22.8	3.4		0.0	3.4	15.4	25.0	247.8
1974	26.8	12.7	36.6	49.6	29.7	8.9	3.6	2.7	20.5	15.3	10.8	110.1	327.3
1975	19.9	51.3	53.5	101.4	22.8	21.8	2.6	2.5	1.0	5.8	29.4	44.2	356.2
1976	61.7	34.4	46.8	52.1	33.7	23.6	0.5	1.3	6.8	69.6	20.7	32.4	383.6
1977	52.2	16.1	44.6	94.0	32.9	25.2	3.5		24.2	44.8	3.8	38.6	379.9
1978	65.2	34.5	51.2	41.0	24.0	6.9	0.0		14.1	39.7		32.4	309.0
1979	51.5	29.2	17.8	48.9	40.7	25.3	5.1	0.0	12.7	17.7	43.5	22.2	314.6
1980	54.4	42.3	54.2	32.6	85.1	13.4			5.1	22.0	26.0	20.9	356.0
1981	59.1	31.9	67.5	34.8	51.8	52.8	11.2		1.0	10.9	18.7	82.9	422.6
1982	32.1	19.1	39.8	46.2	28.5	83.2	19.5	1.4	2.0	9.9	15.0	23.2	319.9
1983	26.7	43.5	22.2	43.3	44.6	18.9	1.4	7.2	6.7	39.5	54.6	17.5	326.1
1984	42.3	7.8	29.1	61.7	11.1	12.2	0.4	1.3		0.7	9.9	52.3	228.8
1985	13.5	58.7	38.2	89.4	70.4	13.8	1.2	5.6	1.8	70.1	57.3	45.6	465.6
1986	20.0	36.6	17.4	26.7	69.1	26.9		0.3	6.0	4.0	47.1	37.2	291.3
1987	70.9	56.7	83.6	20.8	14.0	61.1	24.6	0.1		56.8	57.2	60.4	506.2
1988	15.2	36.1	40.6	93.3	60.3	21.3	16.5	0.0	2.6	52.3	64.5	48.5	451.2
1989	22.3	1.4	12.1	43.9	45.7	5.7				16.3	81.4	28.5	257.3
1990	36.2	19.8	13.7	34.2	87.7	21.4	0.9		14.6	6.9	22.9	62.0	320.3
Mean	36.9	37.4	41.9	46.7	41.4	27.9	5.9	3.7	7.6	23.1	33.1	43.8	346.0
P50%	34.7	35.2	39.4	45.8	39.0	26.2	5.5	3.5	7.2	21.7	31.2	41.1	325.4
P80%	29.7	30.2	33.8	39.2	33.4	22.4	4.7	3.0	6.2	18.6	26.7	35.3	278.8
P90%	26.0	28.4	31.8	37.0	31.4	21.1	4.5	2.8	5.8	17.5	25.1	33.2	262.6

Table 1.50 Monthly Rainfall between 1960 and 1990, Station: Karaman, Station No.:932

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
1960	27.4	29.5	67.7	67.6	26.3	34.9	1.8	4.9	3.4	3.1	22.3	29.6	318.5
1961	21.4	61.8	25.3	4.9	28.9	17.7	0.0	0.3	5.9	34.3	21.6	92.9	315.0
1962	9.8	58.8	26.1	27.7	2.3	0.0		0.3	9.3	59.6	4.1	55.4	253.4
1963	53.7	48.4	41.1	25.6	64.2	23.3	2.4		10.7	11.7	17.5	26.2	324.8
1964	19.9	27.9	39.1	22.3	49.1	76.5	2.3	0.0	1.7	0.1	42.5	70.5	351.9
1965	27.0	65.7	24.3	39.8	70.1	15.4	0.0			35.2	34.6	74.2	386.3
1966	63.0	20.5	30.7	10.5	12.8	1.8	2.0	0.0	12.0	2.2	56.9	48.6	261.0
1967	22.6	32.6	65.6	34.0	52.0	10.9	3.6		1.9	19.4	30.6	31.4	304.6
1968	113.4	26.5	42.1	6.1	22.9	22.0	1.2	16.3	24.0	24.5	72.9	77.2	449.1
1969	113.5	22.2	85.1	16.6	56.9	5.8	3.1	0.0	52.7	24.7	41.1	43.2	464.9
1970	48.0	14.7	31.1	15.7	9.5	20.6	20.4	0.0	14.3	38.1	52.2	39.1	303.7
1971	22.6	42.1	23.9	144.1	25.7	17.8	0.0	4.2		22.1	23.7	47.8	374.0
1972	34.1	65.9	23.1	62.7	41.7	17.3	5.6	1.2	3.2	22.9	6.9	1.8	286.4
1973	16.0	39.4	37.9	20.6	29.3	19.0	2.9		4.2	7.7	14.1	21.5	212.6
1974	22.8	10.4	25.5	16.2	29.7	16.9		5.4	6.6	54.1	20.7	73.2	281.5
1975	57.8	89.5	21.1	100.6	55.3	46.4	0.7	6.4		33.1	32.5	70.0	513.4
1976	40.3	37.4	22.4	51.4	68.4	11.8	16.5	4.2	0.4	74.5	66.9	28.5	422.7
1977	73.1	48.3	45.3	125.1	28.9	20.8	1.6		9.3	55.5	0.4	70.0	478.3
1978	69.2	24.7	80.9	27.4	5.0	11.6			18.6	75.8	1.2	30.6	345.0
1979	81.3	10.7	35.6	24.5	29.8	62.8	6.1		0.9	20.5	53.2	52.6	378.0
1980	45.5	54.9	60.2	72.4	69.4	2.8	4.0	3.3	4.8	11.3	43.2	11.7	383.5
1981	113.4	40.0	8.1	13.4	49.5	26.7	16.7		0.4	6.5	26.1	72.0	372.8
1982	47.1	27.1	42.0	54.0	46.7	22.2	0.7	2.6	0.3	19.0	9.2	26.9	297.8
1983	26.7	31.9	47.3	83.1	12.3	24.7	3.0	3.2	6.8	24.6	35.9	34.0	333.5
1984	24.3	16.6	71.3	45.9	9.8	3.2	0.5	4.6		0.2	31.2	34.6	242.2
1985	13.2	47.7	16.1	29.0	20.5	1.6		3.9		83.4	31.0	34.1	280.5
1986	29.5	33.3	3.1	15.0	87.1	18.1	0.5		10.0	3.8	66.2	55.1	321.7
1987	35.9	20.7	71.6	9.2	33.7	25.1	5.4			51.8	57.1	81.3	391.8
1988	3.0	41.5	56.0	60.7	47.2	27.0	11.4		1.2	60.3	29.0	22.4	359.7
1989	37.1	0.7	41.7	12.2	20.6			20.6	0.6	28.6	76.1	18.3	256.5
1990	32.2	34.4	37.6	12.9	46.7	5.9	0.3	11.8	19.3	12.0	31.2	35.8	280.1
Mean	43.4	36.3	40.3	40.4	37.2	20.4	4.3	4.7	8.9	29.7	33.9	45.5	340.2
P50%	42.6	35.7	39.6	39.6	36.5	20.0	4.3	4.6	8.7	29.2	33.3	44.7	333.9
P80%	35.6	29.8	33.0	33.1	30.5	16.7	3.6	3.8	7.3	24.3	27.8	37.3	278.8
P90%	32.3	27.0	30.0	30.0	27.7	15.1	3.2	3.5	6.6	22.1	25.2	33.9	253.1

Table 1.51 Monthly Rainfall between 1960 and 1990, Station: Niğde, Station No.:250

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
1960	16.1	34.6	62.8	103.3	27.0	24.7	3.3	4.5	7.4	15.3	30.5	30.3	359.8
1961	27.2	22.2	33.3	18.2	25.1	17.4	2.4		15.0	5.6	16.3	37.8	220.5
1962	23.7	27.0	10.9	25.3	13.6	18.7		0.0	11.3	30.6	3.2	69.2	233.5
1963	47.8	65.2	28.9	67.2	87.2	18.0	4.4		19.8	22.6	5.8	28.1	395.0
1964	20.3	42.0	91.3	15.9	75.2	26.9	0.2	0.0	7.8	0.3	33.6	26.4	339.9
1965	27.1	53.6	44.3	30.3	80.4	17.0	22.5	0.0	0.7	34.3	40.0	66.9	417.1
1966	63.5	12.8	34.0	29.8	46.1	4.9	0.4	2.9	2.2	4.9	20.6	68.5	290.6
1967	43.7	10.7	38.5	60.7	66.7	19.1		0.0	2.6	48.9	37.9	34.3	363.1
1968	52.7	54.3	29.6	7.2	94.7	71.0	1.0	6.8	11.6	7.3	28.0	59.0	423.2
1969	33.4	55.3	56.5	50.1	85.1	14.2	4.6	3.2	4.9	13.0	40.9	49.9	411.1
1970	23.7	31.7	17.2	12.8	13.2	9.9	0.7		12.9	27.2	16.0	27.6	192.9
1971	17.2	7.4	48.5	78.5	51.1	33.2	0.6	10.9		28.4	22.4	43.1	341.3
1972	19.0	29.8	8.5	41.8	19.7	52.3	5.2	1.1	19.1	23.0	14.6	2.2	236.3
1973	14.4	14.1	16.5	44.3	28.3	34.0	0.0		1.2	3.2	16.9	20.0	192.9
1974	9.9	12.4	28.3	43.6	30.6	0.7		0.8	3.1	25.7	8.7	43.7	207.5
1975	17.0	44.5	13.4	91.9	37.2	32.6	4.6	7.4	0.0	2.9	19.9	37.5	308.9
1976	31.2	30.3	18.0	60.4	71.6	12.8	0.4	2.7	6.6	51.9	15.4	43.8	345.1
1977	20.7	16.3	37.6	98.8	43.7	39.9	18.0		11.8	20.3	0.7	29.4	337.2
1978	57.5	49.1	36.8	65.0	14.7	20.9	0.4	0.0	21.6	64.9		18.8	349.7
1979	49.2	21.5	25.4	42.3	58.9	41.6	11.9	0.6	0.0	10.6	48.0	31.2	341.2
1980	37.5	19.2	82.1	60.0	50.1	14.0	0.5	0.0	3.1	12.2	42.2	22.6	343.5
1981	30.7	52.5	29.5	17.5	95.6	32.2	3.9		6.3	14.6	35.5	68.6	386.9
1982	16.1	34.6	62.8	103.3	27.0	24.7	3.3	4.5	7.4	15.3	30.5	30.3	359.8
1983	39.8	34.6	33.5	34.5	35.7	13.9	7.3	0.0	1.0	36.6	68.6	29.1	334.6
1984	50.2	9.4	39.6	60.2	10.2	7.9	1.4	2.7		8.6	25.9	35.7	251.8
1985	14.6	68.9	21.1	37.6	83.8	1.5	0.1	11.9	0.0	57.2	33.2	37.2	367.1
1986	22.6	41.2	11.2	23.6	112.0	17.5		0.0	12.8	4.1	51.7	26.4	323.1
1987	39.9	34.4	60.5	37.6	40.7	36.3	8.1	0.1		37.2	70.6	89.4	454.8
1988	37.2	70.6	89.4	37.2	70.6	89.4	37.2	70.6	89.4	37.2	70.6	89.4	788.8
1989	4.4	7.7	7.4	19.3	24.4	6.8	0.3	1.0	3.5	25.7	63.3	39.4	203.2
1990	46.5	18.9	8.0	21.9	56.8	20.9	13.2	8.4	21.4	9.2	17.4	45.5	288.1
Mean	30.8	33.1	36.3	46.5	50.9	25.0	5.8	5.6	10.9	22.5	31.0	41.3	335.8
P50%	30.0	32.2	35.3	45.2	49.5	24.3	5.6	5.4	10.6	21.9	30.1	40.2	326.5
P80%	23.1	24.8	27.2	34.8	38.1	18.7	4.3	4.2	8.2	16.9	23.2	31.0	251.8
P90%	20.0	21.5	23.5	30.1	33.0	16.2	3.7	3.6	7.0	14.6	20.1	26.8	217.6

Table1.52 Monthly Rainfall between 1960 and 1990, Station: Kayseri, Station No.:196

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
1960	37.9	45.8	26.6	102.3	21.0	47.3	0.7	1.2	23.0	11.1	41.7	18.0	376.6
1961	19.3	12.6	40.6	50.2	45.0	39.7	6.2		45.2	6.3	31.0	67.1	363.2
1962	16.5	74.8	16.6	48.6	27.0	1.4	0.0	1.0	3.8	27.2	16.1	59.2	292.2
1963	65.0	47.2	71.0	65.7	73.5	49.4	38.7	0.2	38.5	37.4	21.9	27.2	535.7
1964	12.7	44.6	66.2	19.3	65.6	97.3		4.5	26.2	0.4	9.7	51.7	398.2
1965	21.1	53.8	35.1	62.9	46.0	46.3	0.1	0.4	6.5	37.0	65.9	37.7	412.8
1966	52.2	6.6	25.6	34.3	37.7	25.0	5.2	0.8	26.8	9.1	12.3	69.0	304.6
1967	40.3	25.5	64.3	42.3	28.4	27.9	0.0		2.3	23.7	45.7	38.3	338.7
1968	46.8	18.7	47.6	8.0	48.1	42.0	1.2	19.2	48.1	18.9	27.1	21.5	347.2
1969	31.3	70.7	22.9	68.6	25.1	37.5	1.9	2.8	0.7	10.2	28.8	51.0	351.5
1970	31.0	28.1	48.7	8.4	19.5	24.0	8.8	7.5	19.0	52.1	26.5	29.3	302.9
1971	18.6	29.2	33.0	99.1	48.6	48.5	10.6	13.7	9.2	5.1	28.4	66.7	410.7
1972	12.7	20.4	9.4	59.5	48.4	83.4	4.7	0.8	24.3	27.2	22.3	4.0	317.1
1973	14.6	17.2	52.1	73.7	36.2	64.6	4.5		7.3	11.3	25.7	40.5	347.7
1974	28.0	19.2	43.4	49.3	12.9	34.6		3.1	7.2	14.8	23.9	31.7	268.1
1975	23.0	36.3	40.4	133.2	58.5	73.0	6.0	21.9	0.0	2.6	28.8	57.7	481.4
1976	47.1	30.3	15.3	57.2	48.9	10.7	9.5	22.6	23.9	42.0	17.3	28.2	353.0
1977	25.2	12.6	68.2	75.0	58.0	23.3	3.0		13.3	35.9	11.7	45.4	371.6
1978	73.8	29.8	73.7	67.3	19.7	8.0	0.8		46.7	13.3	3.8	33.9	370.8
1979	52.5	41.7	33.6	82.2	64.9	37.1	14.4	0.0	6.2	22.0	78.6	21.8	455.0
1980	71.3	23.0	64.2	43.0	71.5	21.2	0.9	2.7	9.1	16.2	49.7	36.9	409.7
1981	23.5	28.2	38.8	42.9	94.6	40.5	20.2		4.8	22.9	38.1	41.9	396.4
1982	23.7	15.0	39.1	57.4	27.3	17.5	20.7	19.5	7.7	14.9	33.3	41.1	317.2
1983	34.8	35.7	34.3	41.3	58.8	15.5	7.6	0.5	8.9	91.6	60.3	14.9	404.2
1984	24.3	25.0	16.7	85.0	25.3	12.3	18.1	5.0	0.6	5.9	21.0	36.6	275.8
1985	22.2	46.0	26.3	57.0	34.7	22.7	7.1	4.3		72.2	24.7	36.8	356.0
1986	36.5	54.8	8.8	42.1	93.8	54.0		0.3	10.1	13.3	78.3	34.9	426.9
1987	62.4	23.5	56.1	35.7	26.9	81.7	25.3	0.7		84.0	76.8	58.9	532.0
1988	21.4	36.2	57.9	30.9	76.5	164.7	50.0		0.9	94.5	60.1	20.9	614.0
1989	6.1	6.5	28.8	29.8	45.7	12.7	0.2	15.5	2.3	27.7	75.3	30.8	281.4
1990	23.3	23.1	26.1	79.7	115.2	32.1	46.3		17.2	6.7	44.6	41.0	455.3
Mean	32.9	31.7	39.7	56.5	48.5	41.8	11.2	6.4	15.2	27.7	36.4	38.6	382.8
P50%	32.7	31.5	39.5	56.2	48.2	41.6	11.1	6.4	15.1	27.5	36.2	38.4	380.8
P80%	27.4	26.4	33.1	47.0	40.4	34.8	9.3	5.4	12.6	23.0	30.3	32.1	318.6
P90%	24.7	23.8	29.8	42.5	36.4	31.4	8.4	4.8	11.4	20.8	27.4	29.0	287.7

Table1.53 Monthly Rainfall between 1960 and 1990, Station: Nevsehir, Station No.:193

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
1960	28.8	61.6	59.7	71.3	46.7	64.9	9.6	0.3	32.1	8.3	29.8	17.5	430.6
1961	27.3	39.6	42.6	17.4	22.2	10.4	0,0		16.6	10.2	27.8	107.5	321.6
1962	23.4	37.2	29.6	26.8	63.4	0.7	0.2	0.0	2.5	38.4	18.5	48.6	289.3
1963	76.6	49.9	77.6	99.4	83.4	57.0	19.0		16.6	40.7	14.6	35.3	570.1
1964	17.1	75.5	82.7	4.0	70.4	82.4	1.4		5.3	0.5	9.8	43.6	392.7
1965	25.8	63.2	43.6	49.3	84.4	35.5	0.1	0.2	0.1	9.1	62.5	78.3	452.1
1966	73.4	8.0	32.3	66.9	32.8	28.4	7.4	0.0	19.7	8.2	30.0	91.3	398.4
1967	51.8	24.4	99.5	44.7	62.7	17.8	4.0	0.0	0.9	40.2	47.1	41.2	434.3
1968	84.9	41.1	44.3	14.3	74.0	47.6		15.8	26.4	9.6	60.8	32.1	450.9
1969	55.9	66.8	34.8	67.8	21.1	36.5	6.1	2.6	11.4	13.7	30.0	45.4	392.1
1970	17.9	38.9	30.8	13.6	28.1	17.3	3.5		16.5	53.3	13.7	63.5	297.1
1971	24.2	29.1	65.1	91.5	61.5	44.2	1.2	34.3	12.5	17.9	29.8	54.9	466.2
1972	22.1	54.8	23.4	55.0	67.1	112.5	32.4	5.3	8.4	30.1	18.3	3.7	433.1
1973	21.3	17.0	49.4	53.1	59.1	19.6	2.8	0.1	2.9	2.6	28.7	42.6	299.2
1974	36.1	36.4	27.7	64.5	30.7	11.5	0.4	17.5	14.1	11.1	19.2	76.8	346.0
1975	28.0	59.4	44.5	93.1	67.2	23.8	4.1	5.1		0.9	22.2	54.8	403.1
1976	67.5	42.6	39.4	63.1	56.7	23.6	0.8	4.7	15.0	33.0	24.3	46.7	417.4
1977	54.1	32.0	60.4	101.5	46.0	16.7	7.8		20.0	64.3	18.4	59.1	480.3
1978	87.6	36.4	40.6	76.4	26.2	16.2	0.4		47.4	29.0	0.2	39.4	399.8
1979	60.5	42.9	35.0	55.4	52.9	69.5	20.7	0.0	7.6	36.0	35.9	30.2	446.6
1980	57.1	32.5	49.4	64.7	67.1	12.3	1.5		27.7	21.7	33.6	34.6	402.2
1981	46.0	29.7	48.9	25.6	107.2	77.3	9.2	0.4	16.9	28.6	28.3	91.5	509.6
1982	36.8	14.9	38.1	22.9	34.1	53.9	20.5	0.2	11.8	12.4	28.0	42.9	316.5
1983	60.0	61.6	55.6	57.7	43.1	9.6	15.7	5.7	3.5	72.9	52.8	19.0	457.2
1984	62.4	21.6	15.1	116.7	38.5	18.2	3.9	4.1	0.2	3.1	20.6	63.5	367.9
1985	31.8	67.8	45.0	64.4	54.4	6.3	19.4	17.4	0.2	97.6	48.9	50.5	503.7
1986	38.5	54.1	14.0	31.4	107.8	44.0			6.1	5.3	68.0	41.6	410.8
1987	77.5	34.0	60.5	39.3	35.5	12.7	51.6	0.1	0.1	103.0	87.5	87.2	589.0
1988	19.0	46.1	91.3	28.6	44.9	44.7	35.7		0.9	100.4	85.9	38.3	535.8
1989	18.8	11.5	23.3	25.2	67.8	16.4				12.7	92.1	35.0	302.8
1990	39.4	33.4	25.4	38.2	141.9	29.5	8.4		24.2	11.0	29.6	63.4	444.4
Mean	44.2	40.8	46.1	53.0	58.0	34.2	10.7	5.7	12.7	29.9	36.0	51.0	418.1
P50%	43.2	39.8	45.0	51.7	56.6	33.4	10.4	5.6	12.4	29.1	35.1	49.7	407.8
P80%	37.0	34.1	38.5	44.3	48.5	28.6	8.9	4.8	10.6	25.0	30.1	42.6	349.5
P90%	34.3	31.6	35.7	41.1	45.0	26.5	8.3	4.4	9.8	23.1	27.9	39.5	324.0

Table1.54 Monthly Rainfall between 1960 and 1990, Station: Afyon, Station No.:190

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
1960	66.3	74.2	83.5	64.2	73.3	72.9	11.0	1.3	18.3	20.5	19.2	40.2	544.9
1961	25.6	60.5	26.5	41.7	25.7	55.7	34.8	0.0	48.5	52.4	6.2	51.2	428.8
1962	25.4	52.0	36.0	60.1	51.6	10.7	8.8	3.1	32.6	70.9	23.7	92.9	467.8
1963	59.7	46.9	54.8	43.7	165.8	102.6	44.6		16.6	58.1	11.4	12.4	616.6
1964	2.5	32.5	81.3	19.0	43.8	94.0	0.8	0.0	11.4	0.5	36.2	64.0	386.0
1965	19.9	40.6	38.2	40.7	35.6	16.2	8.1	0.1		8.7	29.1	42.6	279.8
1966	52.0	15.4	34.8	15.6	46.6	20.6	15.2	4.4	13.6	8.5	12.2	83.2	322.1
1967	18.1	20.5	26.8	58.9	40.9	5.7	3.5	9.7	11.4	32.9	22.0	43.0	293.4
1968	67.7	38.4	110.7	28.4	26.8	25.5		14.5	50.9	31.4	59.2	68.0	521.5
1969	74.5	48.1	39.6	62.1	48.8	19.6	16.1	0.3	9.7	17.0	34.7	74.7	445.2
1970	35.6	28.0	23.1	26.1	15.4	22.8	38.7	20.5	11.1	39.0	13.4	32.6	306.3
1971	24.5	33.9	61.2	54.9	60.8	28.3	15.4	7.9	38.3	57.4	18.1	52.9	453.6
1972	21.9	29.3	22.4	31.7	31.2	65.4	23.6	47.8	8.5	67.9	17.6	0.3	367.6
1973	7.3	22.9	41.5	27.7	53.9	5.3	3.8	15.5	2.5	55.1	9.1	44.1	288.7
1974	20.9	41.0	32.8	33.8	24.6	3.8	0.0	9.8	14.8	6.4	21.7	28.6	238.2
1975	34.4	39.6	46.0	18.3	78.7	73.3	19.0	15.3	1.3	13.6	55.1	39.1	433.7
1976	65.9	29.1	31.8	65.6	101.9	14.4	68.4	0.6	0.4	74.9	17.9	41.9	512.8
1977	27.6	23.4	15.4	62.9	36.9	32.9	7.6	2.2	32.5	31.6	11.8	34.1	318.9
1978	52.1	73.7	93.8	48.9	19.0	41.8	0.1	0.0	23.8	63.0	1.5	47.0	464.7
1979	53.1	11.3	18.4	41.3	126.7	72.7	0.8	0.2	5.7	44.6	65.5	32.1	472.4
1980	66.4	20.3	37.1	52.8	31.7	12.7	1.2	7.8	35.4	39.9	51.0	51.9	408.2
1981	74.6	23.5	26.1	28.7	29.0	43.4	13.9	12.3	3.2	41.8	31.8	45.8	374.1
1982	31.7	26.3	21.9	57.7	25.5	43.3	22.5	17.5	3.7	27.6	10.0	22.0	309.7
1983	28.1	34.1	33.4	43.6	23.7	76.2	42.1	10.9	13.3	14.7	76.2	51.5	447.8
1984	29.6	41.2	62.0	104.3	41.3	4.7	14.7	15.0	0.5	0.3	33.9	20.8	368.3
1985	68.0	55.7	30.2	28.1	45.1	41.9	0.2	23.0	0.1	53.2	17.5	59.0	422.0
1986	51.8	47.4	8.4	20.6	34.5	25.3	19.6	30.4	44.8	8.8	18.5	68.4	378.5
1987	49.9	43.8	42.6	76.8	30.8	39.2	8.0	23.2		23.3	50.9	63.1	451.6
1988	12.3	48.7	69.5	55.5	29.8	40.6	26.1	2.6	3.9	63.1	57.8	25.6	435.5
1989	5.2	7.5	18.1	11.7	57.3	3.1	15.0	8.4		77.6	93.4	41.7	339.0
1990	12.4	11.8	11.1	51.8	42.5	44.1	9.3	16.0	27.3	30.4	16.9	55.0	328.6
Mean	38.2	36.2	41.3	44.4	48.4	37.4	16.4	10.7	17.3	36.6	30.4	46.1	400.8
P50%	37.1	35.1	40.0	43.1	46.9	36.2	15.9	10.3	16.8	35.5	29.5	44.7	388.5
P80%	30.9	29.3	33.4	35.9	39.1	30.2	13.3	8.6	14.0	29.6	24.6	37.3	324.2
P90%	28.3	26.7	30.5	32.8	35.8	27.6	12.1	7.9	12.8	27.1	22.5	34.1	296.3

Table1.55 Monthly Rainfall between 1960 and 1990, Station: Sivas, Station No.:90

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
1960	43.7	68.8	64.6	122.3	31.6	23.5	3.8	4.4	12.4	7.1	43.4	23.8	405.7
1961	43.3	11.1	37.8	17.3	38.9	46.8	0.2		28.2	5.0	43.3	70.0	298.6
1962	28.0	45.5	26.2	37.8	30.2	0.0	0.5	11.8	0.3	52.3	15.0	75.2	294.8
1963	85.8	42.9	62.9	51.2	101.2	78.0	18.1		38.6	29.7	36.8	20.1	479.5
1964	13.2	57.5	79.2	10.5	39.7	48.4	1.3	5.1	26.4	0.3	38.1	32.2	338.7
1965	17.9	48.5	40.0	66.0	64.7	34.8	11.4		9.6	56.9	60.5	86.0	478.4
1966	60.5	10.1	29.0	49.3	32.8	26.9	2.8	0.1	5.1	6.5	23.4	69.2	255.2
1967	52.9	36.1	54.4	34.0	40.2	58.5		0.0	10.6	56.6	47.2	46.3	383.9
1968	50.1	34.3	40.7	30.5	84.7	31.9		27.1	41.2	37.6	68.9	48.2	445.1
1969	47.1	78.2	33.4	61.0	43.7	70.3	4.8	1.9	16.8	9.6	29.3	66.6	415.6
1970	22.2	53.8	31.3	21.2	49.9	8.3	1.6	0.0	2.7	67.6	44.3	39.0	319.7
1971	8.2	21.2	29.8	87.5	52.9	79.3	2.8	27.2	12.5	15.9	33.6	68.0	430.7
1972	20.6	19.6	26.2	97.2	68.8	66.0	38.8	35.0	23.5	28.0	11.1	3.2	417.4
1973	8.7	24.0	31.5	88.2	38.7	20.8	10.1		2.7	7.2	29.4	23.5	276.1
1974	36.8	18.9	32.8	75.6	42.2	2.0		5.6	57.6	35.3	22.9	67.0	359.9
1975	33.9	38.3	33.4	92.4	79.5	20.7	2.9	6.8	2.7	3.5	26.8	69.0	376.0
1976	66.1	36.0	11.3	75.8	63.3	33.3	5.9	3.3	39.6	47.5	8.0	50.5	374.5
1977	23.1	41.4	86.1	96.9	50.3	35.6	17.3		34.5	18.5	8.1	60.5	449.2
1978	79.2	25.7	82.4	45.8	34.3	19.8	0.4		39.0	31.3	0.2	32.8	311.7
1979	58.5	47.0	21.7	37.7	91.2	48.0	11.3	10.3	8.2	29.1	33.5	23.1	361.1
1980	81.1	17.7	89.0	49.8	139.2	11.8	2.4	0.4	9.3	33.3	49.5	42.3	444.7
1981	28.5	33.8	109.7	24.9	93.2	33.7		0.0	4.2	50.3	48.7	54.2	452.7
1982	51.6	14.3	23.5	85.1	34.9	41.8	17.5	0.9	4.2	9.6	7.9	39.7	279.4
1983	29.8	40.2	50.7	50.6	89.7	44.9	7.5	5.1	10.2	58.0	85.3	20.8	463.0
1984	26.4	20.0	59.5	69.1	40.4	20.5	8.5	0.8	0.8	6.0	14.2	24.2	264.0
1985	67.7	93.3	47.0	61.0	47.5	13.2	2.3	11.3	0.5	66.0	36.2	44.5	422.8
1986	40.5	58.2	8.8	22.7	110.6	31.1	0.2	1.3	35.1	9.7	41.9	43.4	363.0
1987	84.6	37.4	44.8	54.1	42.6	39.2	11.3	2.0		59.9	67.8	68.0	427.1
1988	36.2	47.0	92.8	45.0	52.3	44.9	28.6	0.4	5.8	75.2	62.2	40.4	494.6
1989	12.8	14.7	65.2	25.7	28.4	8.8	24.6	10.4	24.1	40.5	128.4	50.1	420.9
1990	27.5	23.4	3.4	99.2	60.6	54.1	7.3		18.1	16.4	45.9	38.1	366.5
Mean	41.5	37.4	46.7	57.6	58.7	35.4	9.0	7.1	17.5	31.3	39.1	46.4	382.9
P50%	40.1	36.2	45.2	55.7	56.7	34.2	8.7	6.9	16.9	30.3	37.8	44.9	370.4
P80%	34.6	31.2	39.0	48.1	49.0	29.5	7.5	6.0	14.6	26.1	32.6	38.8	319.6
P90%	32.4	29.1	36.4	44.9	45.7	27.6	7.1	5.6	13.6	24.4	30.5	36.2	298.5

Table1.56 Monthly Rainfall between 1960 and 1990, Station: Tokat, Station No.:66

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
1960	49.6	47.0	36.8	116.0	38.5	39.3	4.1	26.5	22.3	12.9	53.8	21.3	468.1
1961	58.6	6.0	36.3	13.1	20.0	75.3	8.1		19.8	4.9	35.4	90.6	368.1
1962	44.3	67.1	19.2	40.6	41.2	8.7	1.1	0.0	14.5	40.8	10.0	92.1	379.6
1963	100.9	41.2	50.7	53.4	50.3	46.0	7.5	1.0	33.7	51.6	23.3	57.2	516.8
1964	12.5	36.0	50.6	46.2	77.1	37.5	2.5	0.3	11.0	7.4	42.9	57.8	381.8
1965	9.8	23.1	27.9	42.1	48.6	19.4	5.6	3.6	7.1	25.8	59.9	77.9	350.8
1966	72.3	14.1	40.4	58.1	35.5	26.8	32.4	4.4	19.4	0.0	39.6	103.0	446.0
1967	56.2	22.9	48.3	32.7	63.5	38.4		0.1	40.1	36.7	80.2	44.2	463.3
1968	67.6	39.6	68.7	22.6	51.5	28.7	1.2	17.9	32.8	28.8	25.4	42.2	427.0
1969	38.4	54.2	23.1	47.3	33.0	47.7			18.3	8.7	41.3	53.9	365.9
1970	25.0	82.7	25.9	19.3	51.1	34.7	0.9	0.0	17.1	34.4	40.4	57.6	389.1
1971	6.0	18.4	42.1	104.5	82.4	34.1	6.6	1.0	9.7	29.0	42.8	68.9	445.5
1972	24.4	21.9	11.0	85.2	36.6	93.1	22.9	0.5	19.3	41.0	17.0	9.1	382.0
1973	7.8	10.5	33.9	67.9	79.6	34.8	1.1	0.0	7.5	8.5	28.3	35.5	315.4
1974	15.7	3.8	37.9	60.8	49.9	2.6	8.3	5.1	24.2	9.0	19.9	96.7	333.9
1975	18.2	29.7	31.1	83.7	43.0	50.0	0.5	2.0	4.9	9.5	19.9	40.5	333.0
1976	69.6	18.4	16.6	25.4	58.0	79.6	5.4	7.4	19.1	67.0	13.1	32.0	411.6
1977	23.4	14.0	86.3	72.4	50.1	61.8	24.5	0.0	15.7	31.1	23.2	25.0	427.5
1978	75.5	45.3	45.2	77.5	23.2	28.7	3.0	0.1	37.2	34.3	1.0	45.0	416.0
1979	116.4	47.6	6.9	30.7	48.7	22.6	68.5	23.0	32.3	25.9	56.4	17.9	496.9
1980	71.0	19.4	67.8	51.6	95.6	9.3		3.2	18.8	25.7	56.1	22.8	441.3
1981	39.6	18.7	85.4	47.9	65.3	28.8	2.7	1.0	14.4	34.1	60.3	45.7	443.9
1982	54.2	32.1	24.6	70.2	54.4	31.6	10.8	7.7	2.0	12.9	7.8	38.6	346.9
1983	25.8	55.5	17.8	23.0	109.4	42.1	17.3	7.3	12.0	74.4	103.9	21.5	510.0
1984	28.8	28.3	33.0	101.4	49.5	16.1	5.9	7.1	0.7	2.5	17.7	22.3	313.3
1985	58.6	68.1	32.9	49.3	51.9	14.5	1.3	14.0		141.1	32.3	53.0	517.0
1986	59.0	42.2	1.7	38.7	82.0	51.5		0.4	16.6	11.4	45.9	62.8	412.2
1987	73.3	34.9	41.5	57.3	16.8	39.3	14.7	6.4		51.0	66.6	88.7	490.5
1988	37.4	44.1	52.3	52.1	42.6	47.3	23.1		8.5	110.0	95.8	42.7	555.9
1989	12.2	15.5	29.9	28.3	57.4	63.7	0.3	0.0	11.5	49.8	113.6	35.5	417.7
1990	19.6	29.4	2.9	103.7	103.3	39.3	21.2	1.9	25.2	25.7	35.5	45.2	452.9
Mean	44.2	33.3	36.4	55.6	55.2	38.5	11.2	5.1	17.8	33.7	42.2	49.9	420.0
P50%	43.6	32.8	35.9	54.8	54.4	38.0	11.0	5.0	17.5	33.3	41.7	49.2	414.3
P80%	38.4	28.9	31.6	48.3	47.9	33.4	9.7	4.4	15.4	29.3	36.7	43.3	364.7
P90%	36.0	27.1	29.6	45.2	44.9	31.3	9.1	4.1	14.5	27.5	34.4	40.6	341.8

Table1.57 Monthly Rainfall between 1960 and 1990, Station: Amasya, Station No.:85

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
1960	48.4	51.3	33.0	78.3	49.6	31.5	4.2	4.5	16.3	10.4	35.6	26.9	391.0
1961	68.7	41.4	50.1	12.8	31.8	48.8	15.9	8.5	23.9	8.1	11.1	71.0	392.1
1962	52.5	59.4	54.2	29.6	28.1	16.7	2.0		24.3	33.8	11.0	78.4	390.0
1963	93.8	38.6	67.0	65.7	50.8	20.3			28.4	54.2	32.2	48.1	499.1
1964	9.5	58.6	38.4	49.7	76.9	33.0	16.5	0.0	7.5	2.7	58.5	29.9	381.2
1965	25.9	73.7	55.1	39.0	53.8	11.2	9.0	25.3	3.8	31.7	61.3	92.7	482.5
1966	114.0	11.9	64.6	80.2	43.3	10.6	15.9	25.6	1.7	1.2	19.5	107.7	496.2
1967	60.2	31.6	103.6	92.4	55.2	68.5		7.5	25.7	16.5	82.3	56.6	600.1
1968	87.7	49.1	65.5	44.9	23.5	41.8	17.5	13.5	66.9	25.2	28.8	56.5	520.9
1969	58.9	91.4	48.1	76.9	35.0	50.8		0.1	10.1	7.2	58.4	58.4	495.3
1970	47.8	82.3	22.8	15.5	16.3	31.4	3.1		35.6	52.7	15.5	72.7	395.7
1971	10.6	13.6	54.6	65.1	52.8	43.5	20.9	1.3	21.6	40.0	44.0	98.6	466.6
1972	24.5	34.1	9.0	58.1	24.8	79.2	28.0	7.6	31.0	53.4	22.0	20.9	392.6
1973	13.3	17.8	55.9	71.0	72.4	33.7	1.1	1.9	2.8	14.5	63.6	48.0	396.0
1974	17.6	5.9	26.3	57.0	72.9	12.9	19.0	6.3	6.1	3.1	18.0	122.4	367.5
1975	41.9	18.2	53.7	91.7	40.0	16.3		4.1	3.1	29.1	22.0	54.4	374.5
1976	102.7	19.3	11.9	35.2	39.2	31.0	8.6	5.6	12.5	45.3	32.1	32.0	375.4
1977	51.8	26.1	80.4	80.4	38.3	35.6	8.9	0.0	14.6	35.1	20.3	45.1	436.6
1978	81.8	42.8	59.3	78.8	15.0	20.2	8.8	1.0	29.0	39.2	0.8	47.3	424.0
1979	96.2	63.5	13.6	23.5	28.2	19.7	59.7	4.7	31.0	13.0	67.0	41.8	461.9
1980	77.2	25.1	64.6	55.5	75.0	26.7		0.0	29.4	29.6	63.4	46.0	492.5
1981	66.1	40.8	64.8	42.1	49.9	32.6	77.5	1.8	17.2	34.2	61.9	55.2	544.3
1982	50.2	27.0	41.8	102.4	38.9	35.8	30.4	13.1	5.6	19.3	8.0	34.3	406.8
1983	51.6	66.6	14.2	28.9	81.0	27.6	51.9	11.4	7.0	86.7	114.7	44.6	586.2
1984	37.4	28.0	52.6	80.4	30.5	26.9	24.4	16.9	0.6	5.1	25.7	36.2	364.7
1985	49.5	38.3	35.6	48.0	48.7	11.4	23.5	3.3	1.4	120.6	29.8	56.4	466.5
1986	41.3	32.7	0.2	30.5	82.3	37.7	0.2		21.4	11.5	17.2	55.3	330.3
1987	84.6	20.4	48.9	65.9	35.5	113.5	8.0	12.7		8.8	39.9	79.9	518.1
1988	25.4	47.4	68.7	35.3	36.2	73.5	43.5	17.0	24.8	139.5	80.9	30.6	622.8
1989	32.5	10.6	16.0	57.1	39.5	34.7	3.5	2.6	17.6	22.4	117.3	30.9	384.7
1990	12.4	22.1	9.2	82.7	87.4	35.3	13.0	2.0	18.2	14.5	9.7	55.6	362.1
Mean	52.8	38.4	44.6	57.2	46.9	35.9	19.8	7.3	18.0	32.5	41.1	55.9	445.7
P50%	52.7	38.3	44.5	57.1	46.8	35.8	19.8	7.3	17.9	32.5	41.0	55.8	444.8
P80%	45.4	33.0	38.4	49.3	40.4	30.9	17.1	6.3	15.5	28.0	35.4	48.2	383.8
P90%	41.8	30.4	35.3	45.3	37.1	28.4	15.7	5.8	14.2	25.7	32.5	44.3	352.7

Table 1.58 Summary of Meteorological Stations (Temperature, Humidity, Wind Velocity, Sunshine Duration)

Agro-ecological Zone		Region	Province	Meteorological Station						Basin	Remarks
				Station	No.	Categ.	Elev.(m)	N.L.	E.L.	Period	
Mediterranean Zone	Marmara	Istanbul	Istanbul	Goztepe	62	SNP,PR,RS	33	40.97	29.08	1929-	Marmara
			Edirne	Edirne	50	SNP,PR	51	41.67	26.57	1926-	Meric
			Kirklareli	Kirklareli	52	SNP,PR	232	41.73	27.23	1929-	Meric
			Kocaeli	Kocaeli	66	PR	76	40.77	29.93	1929-34,37-	Marmara
			Sakarya	Sakarya	69	SNP,PR	30	40.78	30.41	1929-52,54-	Sakarya
			Tekirdag	Tekirdag	56	SNP,PR,SEA	3	40.98	27.55	1930-	Marmara
		Bursa	Bursa	Bursa	116	SNP,PR	100	40.18	29.07	1930-	Susurluk
			Yalova	Yalova	660	PR	4	40.65	29.27	1930-45,57-	Marmara
	Aegean	Izmir	Izmir	Izmir	220	SNP,PR,RS,SEA	29	38.43	27.16	1928-	K.Menderes
			Aydin	Aydin	234	SNP,PR	56	37.85	27.85	1929-	B.Menderes
			Denizli	Denizli	237	SNP,PR	425	37.78	29.08	1929-36,47-	B.Menderes
			Manisa	Manisa	186	SNP,PR,OS	71	38.62	27.43	1929-	Gediz
			Mugla	Mugla	292	SNP,PR	646	37.22	28.37	1926-	West Akdeniz
		Bursa	Balikesir	Balikesir	152	PR	146	39.65	27.87	1937-	Susurluk
			Canakkale	Canakkale	112	SNP,PR,SEA	6	40.13	26.4	1929-35,37-	Marmara
		Antalya	Burdur	Burdur	238	SNP,PR	967	37.67	30.33	1929-31,39-	Burdur
			Isparta	Isparta	240	SNP,PR,RS	997	37.75	30.55	1929-	Antalya
	Mediterranean	Adana	Adana	Adana	351	PR,RS,OS	27	36.98	35.36	1929-	Seyhan
			Icel	Mersin	340	SNP,PR,SEA	3	36.8	34.63	1929-	East Akdeniz
			Hatay	Hatay	984	SNP,PR,SEA	100	36.2	36.17	1940-	Asi
			Osmaniye	Dörtyol	962	PR	28	36.85	36.22	1929-	Asi
		Antalya	Antalya	Antalya	300	PA,SNP,PR,OS,SE	54	36.7	30.73	1949-	Antalya
Black Sea Zone	Black Sea	Trabzon	Trabzon	Trabzon	37	PR,SEA	30	41	39.72	1929-35,37-	East Karadeniz
			Bayburt	Bayburt	686	PR	1584	40.25	40.23	1929-	Coruh
			Giresun	Giresun	34	SNP,PR,SEA	37	40.92	38.38	1929-	East Karadeniz
			Gumushane	Gumushane	88	SNP,PR	1219	40.47	39.47	1929-	East Karadeniz
			Rize	Rize	40	SNP,PR	9	41.03	40.52	1929-	East Karadeniz
			Artvin	Artvin	45	SNP,PR	628	41.18	41.82	1929-32,46-	Coruh
		Kastamonu	Kastamonu	Kastamonu	74	SNP,PR	800	41.37	33.78	1930-	Kizilirmak
			Zonguldak	Zonguldak	22	SNP,PR,SEA	137	41.45	31.8	1931-	West Karadeniz
			Sinop	Sinop	26	SNP,PR	32	42.02	35.17	1979-	West Karadeniz
			Karabuk	Karabük	1064	SM	400	41.2	32.63	1950-52,63-83,93-	West Karadeniz
			Bartin	Bartin	614	PR	30	41.63	32.33	1964-	West Karadeniz
		Samsun	Samsun	Samsun	30	SNP,PR,RS,SEA	4	41.28	36.3	1929-	Yesilirmak
			Ordu	Ordu	33	SNP,PR,RS,SEA	4	40.98	37.9	1929-48,50-	East Karadeniz
Central Anatilan Zone	Central Northern	Ankara	Ankara	Ankara	130	PR,RS,OZ,OS	891	39.95	32.88	1926-	Sakarya
			Bolu	Bolu	70	SNP,PR	743	40.73	31.6	1929-	West Karadeniz
			Cankiri	Cankiri	80	SNP,PR	751	40.6	33.62	1929-34,39-42,47-	Kizilirmak
			Kirikkale	Kirikkale	135	SNP,PR	748	39.85	33.52	1950-58,60-	Kizilirmak
		Eskisehir	Eskisehir	Eskisehir Rur.	3028	SPR	781	39.78	30.52	1956-	Sakarya
			Kutahya	Kutahya	725	PR	969	39.42	29.97	1929-	Sakarya
			Usak	Usak	188	SNP,PR	919	38.68	29.4	1929-	B.Menderes
		Kayseri	Kirsehir	Kirsehir	160	SNP,PR	1007	39.15	34.17	1929-	Kizilirmak
			Yozgat	Yozgat	140	SNP,PR	1298	39.82	34.8	1929-35,38-	Kizilirmak
		Bursa	Bilecik	Bilecik	122	SNP,PR	539	40.15	29.97	1929-	Sakarya
		Samsun	Corum	Corum	84	SNP,PR	776	40.55	34.95	1929-	Yesilirmak
	Central Southern	Konya	Konya	Konya	244	SNP,PR,OS	1031	37.97	32.55	1949-	Konya basin
			Aksaray	Aksaray	834	PR	965	38.38	34.05	1930-31,33-34,36-	Konya basin
			Karaman	Karaman	932	PR	1025	37.18	33.22	1929-	Konya basin
			Nigde	Nigde	250	SNP,PR	1211	37.97	34.68	1935-	Konya basin
		Kayseri	Kayseri	Kayseri	196	PR	1099	38.75	35.48	1929-34,37-	Kizilirmak
			Nevsehir	Nevsehir	193	SNP,PR	1260	38.62	34.7	1956-	Kizilirmak
		Eskisehir	Afyon	Afyon	190	SNP,PR	1034	38.75	30.53	1929-	Akarcay
	Central Eastern	Sival	Sivas	Sivas	90	SNP,PR	1285	39.75	37.02	1929-	Kizilirmak
			Tokat	Tokat	86	SNP,PR	606	40.3	36.57	1929-	Yesilirmak
		Samsun	Amasya	Amasya	85	SNP,PR	412	40.65	35.85	1929-30,37-	Yesilirmak

Note: PR=Principal Station, SM=Small Station, RA=Rainfall Station, RS=Radiosonde, SNP=Sinoptic, SEA=Sea, OZ=Ozone, SPR=Special Principle Station

Table 1.59 Summary of Average Temperature

Agro-ecological Zone		Region	Province	Average Temperature, oC													Remarks
				Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Mean	
Mediterranean Zone	Marmara	Istanbul	Istanbul	5.6	5.6	7.1	11.6	16.4	20.8	23.2	23.2	19.7	15.5	11.6	8.0	14.0	
			Edirne	2.2	3.9	7.2	12.7	17.8	21.9	24.4	23.9	19.6	14.1	9.1	4.5	13.4	
			Kirklareli	2.6	3.9	6.7	12.0	17.0	21.2	23.3	22.6	19.1	13.5	8.9	5.1	13.0	
			Kocaeli	5.9	6.4	8.1	12.7	17.3	21.3	23.2	23.2	20.0	15.7	12.0	8.3	14.5	
			Sakarya	5.8	6.6	8.2	12.7	17.0	21.0	22.7	22.4	19.0	14.8	11.3	8.0	14.1	
			Tekirdag	4.5	5.2	6.9	11.6	16.5	20.9	23.3	23.2	19.7	15.1	11.1	7.2	13.8	
		Bursa	Bursa	5.3	6.2	8.3	13.0	17.6	22.1	24.5	24.1	20.1	15.6	11.2	7.6	14.6	
			Yalova	6.3	3.3	8.1	11.9	16.5	20.8	23.0	22.8	19.4	15.7	11.9	8.7	14.0	
	Aegean	Izmir	Izmir	8.6	9.4	11.3	15.6	20.5	25.1	27.6	27.1	23.4	18.4	14.0	10.4	17.6	
			Aydin	8.0	9.3	11.5	15.7	20.7	25.4	28.1	27.2	23.3	18.1	13.4	9.5	17.5	
			Denizli	5.6	6.8	9.8	14.3	19.1	23.8	26.7	25.9	21.7	16.3	11.2	7.4	15.7	
			Manisa	6.8	8.0	10.4	15.1	20.1	25.0	27.6	27.2	23.1	17.6	12.3	8.4	16.8	
			Mugla	5.4	6.0	8.3	12.5	17.4	22.4	26.0	25.6	21.6	15.8	10.6	7.0	14.9	
		Bursa	Balikesir	4.9	5.9	8.0	13.0	17.8	22.2	24.5	24.2	20.5	15.6	10.8	6.9	14.5	
			Canakkale	6.1	6.6	8.0	12.3	17.3	21.9	24.6	24.4	20.7	15.8	11.8	8.3	14.8	
		Antalya	Burdur	2.5	3.7	6.7	11.6	16.3	20.2	26.2	24.1	19.8	14.1	8.9	4.4	13.2	
			Isparta	1.7	2.7	5.7	10.6	15.4	19.6	23.1	22.8	18.4	12.9	7.7	3.6	12.0	
	Mediterranean	Adana	Adana	9.9	10.4	13.1	17.1	21.4	25.2	27.7	28.1	25.4	21.0	15.1	11.1	18.8	
			Icel	9.5	10.4	12.9	17.1	21.0	24.8	27.5	27.8	25.0	20.2	15.2	11.2	18.6	
			Hatay	8.0	9.8	12.9	17.1	21.0	24.6	26.9	27.5	25.5	20.6	14.2	9.8	18.2	
			Osmaniye	10.1	11.0	13.5	17.4	21.3	24.8	27.3	27.9	25.8	21.5	16.3	11.8	19.1	substituted by Dortyol
		Antalya	Antalya	9.9	10.5	12.6	16.2	20.4	25.0	28.1	27.9	24.7	19.9	15.1	11.5	18.5	
Black Sea Zone	Black Sea	Trabzon	Trabzon	7.3	7.3	8.2	11.6	15.7	20.0	22.6	22.9	20.0	16.3	12.9	9.5	14.5	
			Bayburt	-7.1	-5.4	-3.0	6.8	11.6	15.0	18.8	18.4	14.5	8.8	2.6	-3.4	6.5	
			Giresun	7.1	7.0	7.8	11.1	15.4	19.8	22.4	22.6	19.6	15.9	12.5	9.3	14.2	
			Gumushane	-2.0	-0.5	3.7	9.6	13.8	17.1	19.9	19.8	16.6	11.2	5.2	0.3	9.6	
			Rize	3.7	6.6	7.8	11.3	15.7	19.8	22.2	22.4	19.5	15.8	12.2	8.7	13.8	
			Artvin	2.7	3.8	7.1	12.0	15.9	18.6	20.5	20.6	17.9	13.8	9.2	4.6	12.2	
		Kastamonu	Kastamonu	-1.2	0.6	4.2	9.5	14.1	17.4	20.1	19.7	15.5	10.5	5.3	0.9	9.7	
			Zonguldak	3.0	6.2	7.2	11.0	15.2	19.4	21.6	21.4	18.4	14.9	11.7	8.5	13.2	
			Sinop	6.9	6.6	7.1	10.3	14.6	19.4	22.4	22.6	19.6	15.9	12.6	9.3	13.9	
			Karabuk	2.6	4.8	7.9	12.7	17.1	20.5	23.1	22.8	19.2	14.5	8.5	4.4	13.2	
			Bartin	4.1	4.9	7.1	11.3	15.6	19.5	21.6	21.0	17.4	13.2	9.3	6.0	12.6	
		Samsun	Samsun	6.9	6.8	7.6	11.1	15.0	19.8	22.6	22.6	19.5	15.5	11.9	9.0	14.0	
			Ordu	6.5	6.7	7.7	11.3	15.3	17.8	22.2	22.1	19.0	15.3	11.7	8.9	13.7	
Central Anatlian Zone	Central Northern	Ankara	Ankara	-0.1	1.3	5.4	11.2	15.9	19.8	23.1	23.0	18.4	12.8	7.3	2.3	11.7	
			Bolu	0.3	1.6	4.4	9.4	13.8	17.0	19.4	19.5	15.8	11.5	6.9	2.7	10.2	
			Cankiri	-0.4	0.9	5.5	11.5	16.2	20.2	23.5	22.9	18.0	11.9	5.9	1.6	11.5	
			Kirikkale	0.0	2.5	6.7	12.0	16.5	20.8	23.9	23.4	19.1	13.0	7.0	2.6	12.3	
		Eskisehir	Eskisehir	-0.4	1.3	5.0	10.1	14.8	18.5	21.3	20.9	16.8	11.5	6.2	2.2	10.7	Eskisehir Rural Service
			Kutahya	0.2	1.6	4.7	9.9	14.4	18.0	20.4	20.2	16.3	11.6	6.9	2.5	10.6	
			Usak	2.0	2.9	5.7	10.7	15.6	19.9	23.2	23.3	18.7	13.1	8.0	4.0	12.3	
		Kayseri	Kirsehir	-0.3	1.3	5.0	10.6	15.4	19.5	22.8	22.5	17.9	12.0	6.3	2.0	11.3	
			Yozgat	-2.1	-1.1	2.6	8.2	12.8	16.4	19.2	19.1	15.2	10.0	4.9	0.5	8.8	
		Bursa	Bilecik	2.4	3.6	6.2	11.4	15.9	19.6	21.6	21.5	18.0	13.6	9.0	4.5	12.3	
		Samsun	Corum	-0.5	1.0	4.8	10.5	15.0	18.4	21.0	20.9	17.0	11.8	6.4	1.8	10.7	
	Central Southern	Konya	Konya	-0.2	1.5	5.4	11.1	15.8	19.9	23.2	22.8	18.2	12.3	6.4	1.8	11.5	
			Aksaray	0.8	2.0	6.2	11.3	15.6	19.6	22.9	22.0	17.9	12.2	6.7	2.3	11.6	
			Karaman	0.4	2.0	5.9	11.2	15.4	19.9	23.0	22.3	18.1	12.3	6.9	2.6	11.7	
			Nigde	-0.5	1.0	4.6	10.4	15.0	19.1	22.3	22.0	17.5	11.9	6.2	1.6	10.9	
		Kayseri	Kayseri	-2.1	0.0	4.5	10.5	15.1	19.1	22.4	21.8	17.0	11.4	5.2	0.5	10.5	
			Nevsehir	-0.5	0.8	4.6	9.6	14.1	18.0	21.1	20.6	16.5	11.3	6.3	1.8	10.4	
		Eskisehir	Afyon	0.2	1.6	5.0	10.4	14.9	18.8	21.9	21.8	17.5	12.1	6.9	2.3	11.1	
	Central Eastern	Sivas	Sivas	-3.9	-2.4	2.2	8.7	13.3	16.7	19.6	19.6	15.7	10.5	4.6	-1.0	8.6	
			Tokat	1.8	3.7	7.3	12.4	16.2	19.6	21.8	21.7	18.5	13.3	8.1	3.7	12.3	
		Samsun	Amasya	2.5	4.6	8.4	13.6	17.7	21.4	23.7	23.4	19.7	14.2	8.9	4.8	13.6	

Table 1.60 Summary of Mean Relative Humidity

Agro-ecological Zone		Region	Province	Mean Relative Humidity, %													Remarks
				Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Mean	
Mediterranean Zone	Marmara	Istanbul	Istanbul	79	78	76	73	73	69	69	70	73	77	78	79	74.5	
			Edirne	81	77	73	68	67	62	57	57	63	72	80	83	70.0	
			Kirklareli	80	78	74	69	66	62	59	61	65	72	78	81	70.4	
			Kocaeli	75	74	72	68	68	65	66	67	70	74	74	75	70.7	
			Sakarya	73	72	72	70	71	68	70	71	73	75	73	72	71.7	
			Tekirdag	82	80	79	76	76	71	68	68	72	77	81	82	76.0	
		Bursa	Bursa	74	73	70	70	69	62	58	60	66	72	75	74	68.6	
			Yalova	76	77	77	77	77	75	75	75	76	78	78	76	76.4	
	Aegean	Izmir	Izmir	74	71	68	66	62	55	52	53	58	66	73	75	64.4	
			Aydin	75	71	68	64	59	51	48	51	56	64	72	76	62.9	
			Denizli	74	70	67	62	58	50	46	48	53	62	70	75	61.3	
			Manisa	75	71	66	61	57	48	45	46	51	62	73	76	60.9	
			Mugla	78	74	69	64	59	48	41	42	48	61	74	79	61.4	
		Bursa	Balikesir	82	79	74	69	66	59	56	57	62	70	78	82	69.5	
			Canakkale	79	77	76	74	72	66	62	62	67	73	78	80	72.2	
		Antalya	Burdur	74	71	63	56	54	46	38	38	44	56	66	76	56.8	
			Isparta	76	73	66	61	58	52	45	45	51	62	70	76	61.3	
	Mediterranean	Adana	Adana	66	66	66	69	67	66	68	67	63	60	63	66	65.6	
			Icel	70	71	70	72	72	73	74	72	67	66	67	69	70.3	
			Hatay	75	72	69	68	67	67	69	69	66	65	69	76	69.3	
			Osmaniye	68	68	67	68	68	69	71	68	62	61	62	68	66.7	substituted by Dortyol
		Antalya	Antalya	68	68	66	67	68	61	58	59	58	62	66	67	64.0	
Black Sea Zone	Black Sea	Trabzon	Trabzon	67	68	72	74	78	75	74	73	74	72	69	66	71.8	
			Bayburt	74	74	71	64	61	59	53	51	52	62	71	74	63.8	
			Giresun	69	72	75	78	81	78	77	78	78	78	73	69	75.5	
			Gumushane	67	64	62	59	60	58	58	57	58	63	67	69	61.8	
			Rize	72	73	75	77	79	77	79	80	80	79	76	72	76.6	
			Artvin	64	64	62	61	65	68	72	71	70	66	65	65	66.1	
		Kastamonu	Kastamonu	79	75	69	66	66	64	59	60	65	73	78	81	69.6	
			Zonguldak	70	70	71	72	74	73	73	73	73	74	70	69	71.8	
			Sinop	73	74	77	79	81	78	77	77	76	76	75	73	76.3	
			Karabuk	76	70	66	64	63	59	56	58	62	67	73	76	65.8	
			Bartin	80	78	76	75	75	71	73	76	79	81	80	81	77.1	
		Samsun	Samsun	67	71	78	81	82	77	74	74	75	77	72	67	74.6	
			Ordu	69	72	77	79	80	75	76	76	76	77	72	69	74.8	
Central Anatlian Zone	Central Northern	Ankara	Ankara	78	74	65	59	57	51	44	42	47	58	70	78	60.3	
			Bolu	77	75	72	69	72	71	68	67	70	74	76	78	72.4	
			Cankiri	79	75	68	63	63	59	53	53	60	66	74	80	66.1	
			Kirikkale	76	73	65	60	58	51	45	45	49	59	70	77	60.7	
		Eskisehir	Eskisehir	76	72	66	62	60	56	53	54	56	63	70	77	63.8	Eskisehir Rural Service
			Kutahya	78	75	69	64	64	61	58	58	61	67	74	78	67.3	
			Usak	77	75	70	65	63	55	50	49	54	63	72	78	64.3	
		Kayseri	Kirsehir	78	75	68	62	60	54	48	48	53	63	72	78	63.3	
			Yozgat	77	76	71	65	63	59	55	54	57	63	72	77	65.8	
		Bursa	Bilecik	76	73	69	64	64	61	59	59	62	67	70	76	66.7	
		Samsun	Corum	77	74	68	62	62	58	54	54	58	63	71	78	64.9	
	Central Southern	Konya	Konya	78	74	65	56	56	50	42	42	48	60	72	79	60.3	
			Aksaray	73	70	64	62	58	53	48	49	52	62	69	74	61.2	
			Karaman	77	75	68	61	59	52	46	46	51	63	71	78	62.3	
			Nigde	71	69	62	57	54	48	42	41	46	56	66	71	56.9	
		Kayseri	Kayseri	77	75	70	64	62	57	51	50	55	65	73	78	64.8	
			Nevsehir	71	69	64	58	55	51	46	45	49	57	64	70	58.3	
		Eskisehir	Afyon	79	75	68	62	60	55	49	48	53	64	73	79	63.8	
	Central Eastern	Sivas	Sivas	75	75	70	63	61	57	53	52	55	63	72	77	64.4	
			Tokat	70	70	71	71	71	70	70	74	74	68	64	65	70	69.8
		Samsun	Amasya	69	64	60	58	58	55	54	55	58	64	68	71	61.2	

Table 1.61 Summary of Mean Wind Velocity

Agro-ecological Zone		Region	Province	Mean Wind Velocity, m/sec												Remarks
				Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Mean	
Mediterranean Zone	Marmara	Istanbul	Istanbul	3.2	3.1	3.0	2.7	2.5	2.6	3.0	3.0	2.6	2.5	2.6	3.1	2.8	
			Edirne	2.0	2.2	2.2	1.9	1.6	1.6	1.6	1.6	1.5	1.5	1.6	1.9	1.8	
			Kirklareli	1.2	1.3	1.5	1.6	1.4	1.5	1.8	1.7	1.4	1.1	1.1	1.3	1.4	
			Kocaeli	2.0	2.1	2.0	2.1	2.1	2.0	2.0	1.8	1.6	1.5	1.6	1.9	1.9	
			Sakarya	2.0	2.0	1.7	1.6	1.5	1.5	1.6	1.5	1.2	1.1	1.4	2.0	1.6	
			Tekirdag	3.7	3.5	3.2	2.6	2.3	2.5	2.9	3.1	3.1	3.2	3.1	3.6	3.1	
		Bursa	Bursa	3.1	3.0	2.7	2.3	2.0	2.2	2.6	2.6	2.2	1.9	2.1	2.9	2.5	
			Yalova	2.2	2.2	2.0	1.5	1.4	1.6	1.8	1.8	1.6	1.7	1.8	2.3	1.8	
	Aegean	Izmir	Izmir	3.8	4.0	3.7	3.3	3.0	3.1	3.4	3.2	2.9	2.9	3.2	3.6	3.3	
			Aydin	1.7	1.6	1.6	1.7	1.8	1.9	1.9	1.8	1.5	1.3	1.3	1.6	1.6	
			Denizli	1.4	1.4	1.4	1.3	1.1	1.2	1.2	0.9	0.8	0.8	1.1	1.3	1.2	
			Manisa	2.3	2.5	2.5	2.3	2.0	2.1	2.4	2.4	2.0	1.8	1.8	1.9	2.2	
			Mugla	3.0	3.2	3.2	3.1	2.9	3.5	3.8	3.6	3.2	2.6	2.5	2.9	3.1	
		Bursa	Balikesir	2.4	2.7	2.8	2.3	1.9	2.4	3.4	3.4	2.8	2.2	1.8	2.1	2.5	
			Canakkale	5.3	5.4	4.9	4.3	3.7	3.7	4.3	4.5	4.3	4.4	4.6	5.2	4.6	
		Antalya	Burdur	2.5	2.8	3.0	2.9	2.1	1.8	1.9	1.8	1.8	1.9	2.2	2.3	2.3	
			Isparta	2.1	2.3	2.5	2.4	1.9	1.8	1.9	1.7	1.6	1.5	1.7	1.9	1.9	
	Mediterranean	Adana	Adana	2.2	2.2	2.3	2.3	2.3	2.4	2.6	2.4	2.0	1.6	1.6	1.9	2.2	
			Icel	2.0	2.1	2.2	2.2	2.3	2.6	2.6	2.5	2.2	1.8	1.6	1.9	2.2	
			Hatay	3.2	3.2	3.6	4.1	4.9	6.6	7.7	7.0	5.0	2.9	2.5	2.8	4.5	
			Osmaniye	1.5	1.6	1.7	1.6	1.5	1.6	1.6	1.6	1.6	1.5	1.4	1.4	1.6	substituted by Dortyol
		Antalya	Antalya	3.4	3.5	3.4	3.0	2.7	2.9	2.9	2.8	3.0	2.9	3.0	3.3	3.1	
Black Sea Zone	Black Sea	Trabzon	Trabzon	2.0	2.0	2.0	1.7	1.5	1.6	1.6	1.7	1.9	1.9	1.9	2.0	1.8	
			Bayburt	2.1	2.2	2.5	3.0	2.6	2.3	2.3	2.2	2.1	2.1	2.1	2.2	2.3	
			Giresun	1.4	1.4	1.4	1.2	1.1	1.2	1.1	1.2	1.2	1.1	1.1	1.4	1.2	
			Gumushane	1.2	1.4	1.4	1.3	1.3	1.6	2.0	1.8	1.4	1.0	1.0	1.2	1.4	
			Rize	1.3	1.3	1.2	1.2	1.2	1.3	1.2	1.2	1.3	1.3	1.3	1.3	1.3	
			Artvin	1.0	1.2	1.5	1.4	1.2	1.5	1.8	1.7	1.4	0.9	0.8	0.9	1.3	
		Kastamonu	Kastamonu	1.3	1.5	1.7	1.7	1.4	1.3	1.4	1.3	1.2	1.1	1.2	1.2	1.4	
			Zonguldak	2.8	2.8	2.5	2.2	2.0	2.0	2.0	2.2	2.3	2.4	2.5	2.7	2.4	
			Sinop	4.9	5.3	5.1	4.5	3.8	3.8	4.0	3.9	3.8	3.9	4.1	4.6	4.3	
			Karabuk	0.6	0.8	0.9	1.0	1.0	1.0	0.8	0.8	1.1	0.6	0.4	0.4	0.8	
			Bartin	1.0	1.2	1.5	1.6	1.5	1.5	1.7	1.7	1.5	1.2	1.0	1.0	1.4	
		Samsun	Samsun	4.0	3.2	2.6	2.1	1.8	2.1	2.5	2.5	2.4	2.3	2.6	3.6	2.6	
			Ordu	2.0	1.9	1.8	1.7	1.6	1.9	2.1	2.1	2.1	1.9	1.9	2.0	1.9	
Central Anatlian Zone	Central Northern	Ankara	Ankara	2.2	2.3	2.4	2.4	2.1	2.3	2.7	2.6	2.2	0.2	1.9	2.1	2.1	
			Bolu	1.4	1.6	1.8	1.8	1.6	1.5	1.7	1.7	1.5	1.5	1.5	1.3	1.6	
			Cankiri	1.2	1.4	1.6	1.7	1.5	1.5	1.6	1.4	1.3	1.1	1.0	1.1	1.4	
			Kirikkale	1.2	1.3	1.5	1.6	1.4	1.5	1.8	1.7	1.4	1.1	1.1	1.3	1.4	
		Eskisehir	Eskisehir	2.0	2.2	2.3	2.1	1.5	1.5	1.8	1.6	1.3	1.2	1.6	1.9	1.8	Eskisehir Rural Service
			Kutahya	1.8	2.0	2.1	2.1	1.7	1.5	1.6	1.5	1.4	1.3	1.4	1.7	1.7	
			Usak	2.4	2.6	2.8	2.8	2.4	2.6	3.1	2.8	2.5	2.2	2.0	2.2	2.5	
		Kayseri	Kirsehir	1.8	2.2	2.4	2.3	2.1	2.6	3.4	3.1	2.5	2.1	1.6	1.7	2.3	
			Yozgat	3.7	2.8	2.9	2.9	2.6	2.8	3.7	3.4	2.7	2.3	2.4	2.6	2.9	
		Bursa	Bilecik	3.2	3.3	3.3	3.3	3.1	3.2	3.4	3.3	3.0	2.5	2.6	3.1	3.1	
		Samsun	Corum	1.2	1.6	1.9	2.2	2.0	2.2	3.0	3.0	2.4	1.6	1.2	1.2	2.0	
	Central Southern	Konya	Konya	1.8	2.1	2.4	2.4	2.0	2.2	2.6	2.3	2.0	1.6	1.4	1.6	2.0	
			Aksatav	2.5	2.8	2.9	2.7	2.5	2.6	3.0	2.8	2.4	2.3	2.2	2.4	2.6	
			Karaman	2.6	2.8	2.8	2.8	2.3	2.4	2.6	2.3	2.0	2.0	2.2	2.4	2.4	
			Nigde	3.4	3.6	3.6	3.6	3.2	3.1	3.6	3.4	3.1	2.9	3.0	3.1	3.3	
		Kayseri	Kayseri	1.7	1.9	2.3	2.5	2.1	1.8	1.8	1.7	1.6	1.5	1.4	1.6	1.8	
			Nevsehir	3.0	3.1	3.0	3.0	2.5	2.3	2.4	2.2	2.0	2.2	2.5	2.8	2.6	
		Eskisehir	Afyon	2.7	3.0	3.1	3.0	2.6	2.6	2.6	2.9	2.8	2.4	2.1	2.6	2.7	
	Central Eastern	Sivas	Sivas	1.6	1.8	2.3	2.2	2.0	2.0	2.2	1.9	1.6	1.4	1.3	1.4	1.8	
			Tokat	2.5	2.7	2.9	2.8	2.4	2.4	2.5	2.5	2.2	2.0	2.1	2.3	2.4	
		Samsun	Amasya	1.6	1.8	2.1	2.1	1.9	2.0	2.1	2.1	1.9	1.5	1.5	1.5	1.8	

Table 1.62 Summary of Mean Sunshine Duration

Agro-ecological Zone		Region	Province	Mean Sunshine Duration, hours/day												Remarks
				Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Mean	
Mediterranean Zone	Marmara	Istanbul	Istanbul	2.42	3.25	4.35	6.20	8.40	10.42	11.10	10.38	8.18	5.65	3.68	2.57	6.4	
			Edirne	2.52	3.70	4.70	6.57	8.37	9.70	11.00	10.48	8.22	5.77	3.40	2.43	6.4	
			Kirklareli	2.52	3.70	4.70	6.57	8.37	9.70	11.00	10.48	8.22	5.77	3.40	2.43	6.4	substituted by Edirne
			Kocaeli	2.57	2.97	3.87	5.62	7.48	9.12	9.75	9.33	7.32	4.97	3.68	2.70	5.8	
			Sakarya	2.28	2.55	3.62	4.52	6.32	8.47	8.58	8.57	7.43	4.42	2.78	2.43	5.2	
			Tekirdag	2.65	2.88	3.90	5.48	7.38	8.55	9.67	8.67	7.72	5.25	3.20	2.63	5.7	
		Bursa	Bursa	2.98	3.57	4.35	6.03	8.22	10.27	11.22	10.67	8.38	5.93	4.27	3.10	6.6	
			Yalova	2.00	2.93	4.10	5.60	7.68	9.62	9.67	9.43	7.88	5.07	2.55	1.83	5.7	
	Aegean	Izmir	Izmir	4.10	5.20	6.33	8.02	9.87	11.60	12.32	12.10	10.35	7.58	5.48	4.15	8.1	
			Aydin	4.42	5.05	6.15	7.55	9.05	11.03	11.48	10.98	9.82	7.55	4.92	4.33	7.7	
			Denizli	3.85	4.37	5.70	7.03	9.20	11.22	11.92	11.30	9.62	7.00	5.10	3.63	7.5	
			Manisa	3.07	4.02	5.47	6.70	8.95	11.23	12.03	11.27	9.55	6.70	4.37	2.68	7.2	
			Mugla	3.83	4.88	6.17	7.52	9.27	11.32	12.15	11.58	10.12	7.45	5.40	3.87	7.8	
		Bursa	Balikesir	2.82	3.62	4.55	6.32	8.93	11.17	12.08	11.42	9.07	6.42	4.20	2.65	6.9	
			Canakkale	3.43	4.40	5.47	7.63	9.85	11.48	12.23	11.58	9.28	6.70	4.72	3.38	7.5	
		Antalya	Burdur	3.88	4.77	5.95	6.96	9.12	11.07	12.05	11.22	9.48	7.28	5.42	3.33	7.5	
			Isparta	3.83	4.65	5.88	6.90	8.78	10.78	11.90	11.28	9.87	7.22	5.27	3.47	7.5	
	Mediterranean	Adana	Adana	4.78	5.47	6.12	7.83	9.53	11.07	11.37	11.08	9.48	7.63	6.18	4.63	7.9	
			Icel	4.77	5.48	6.60	7.58	8.57	9.88	9.82	10.05	9.37	8.57	5.62	5.00	7.6	
			Hatay	3.25	4.30	5.90	7.85	9.30	9.97	11.50	10.72	9.98	6.87	4.25	3.10	7.2	
			Osmaniye	4.73	5.50	6.83	8.40	8.82	10.23	9.02	9.22	9.32	7.38	5.78	4.48	7.5	substituted by Dortyol
		Antalya	Antalya	5.15	6.00	6.92	8.18	10.07	11.70	12.27	11.80	10.30	8.20	6.57	4.97	8.5	
Black Sea Zone	Black Sea	Trabzon	Trabzon	2.87	3.42	3.57	4.35	5.55	7.37	5.98	5.93	4.93	4.65	3.75	2.90	4.6	
			Bayburt	2.02	3.88	5.23	6.05	7.45	9.48	10.42	9.93	8.48	6.00	2.93	1.45	6.1	substituted by Gumushane
			Giresun	2.73	3.28	3.50	4.32	5.70	7.52	6.47	6.22	5.48	4.45	3.80	2.77	4.7	substituted by Ordu
			Gumushane	2.02	3.88	5.23	6.05	7.45	9.48	10.42	9.93	8.48	6.00	2.93	1.45	6.1	
			Rize	2.47	3.18	3.60	4.48	5.43	6.77	5.12	5.20	4.82	4.35	3.12	2.37	4.2	
			Artvin	2.28	3.12	4.17	5.87	6.10	6.78	6.00	6.88	6.38	4.55	2.98	2.00	4.8	
		Kastamonu	Kastamonu	2.53	3.77	4.87	5.97	7.58	9.32	10.38	9.93	7.93	5.92	4.00	2.25	6.2	
			Zonguldak	2.40	2.92	4.02	5.22	7.13	9.70	10.45	9.72	7.87	5.35	3.67	2.52	5.9	
			Sinop	2.42	3.17	4.00	5.25	6.95	9.38	10.23	9.22	7.23	5.20	3.58	2.50	5.8	
			Karabuk	2.87	4.08	5.93	6.12	6.53	8.20	10.23	10.58	8.32	5.40	3.78	2.70	6.2	substituted by Cerkes
			Bartin	2.20	2.90	4.55	5.43	6.63	8.80	9.87	9.33	7.47	4.78	2.97	2.25	5.6	
		Samsun	Samsun	2.33	2.58	3.20	3.95	5.90	7.97	8.02	7.68	5.78	4.43	2.88	2.33	4.8	
			Ordu	2.73	3.28	3.50	4.32	5.70	7.52	6.47	6.22	5.48	4.45	3.80	2.77	4.7	
Central Anatlian Zone	Central Northern	Ankara	Ankara	3.05	4.00	5.53	6.93	8.95	10.93	12.17	11.58	9.63	7.17	5.27	2.82	7.3	
			Bolu	2.33	3.13	4.32	5.58	7.32	8.97	9.63	9.35	7.52	5.48	3.77	2.42	5.8	
			Cankiri	2.13	3.17	4.90	5.87	7.80	9.58	10.73	9.93	8.50	6.27	3.68	1.85	6.2	
			Kirikkale	2.97	4.03	6.13	6.78	7.83	10.22	11.48	11.33	9.12	6.12	3.77	2.42	6.9	
		Eskisehir	Eskisehir	2.67	3.70	5.03	6.33	8.55	10.60	11.97	11.13	9.47	6.55	4.30	2.43	6.9	Eskisehir Rural Service
			Kutahya	2.43	3.35	4.60	6.08	7.58	9.48	10.47	9.78	7.77	5.22	3.53	2.22	6.0	
			Usak	4.00	4.88	5.82	7.03	9.13	11.23	12.28	11.87	9.98	7.57	5.45	3.85	7.8	
		Kayseri	Kirsehir	3.12	4.07	5.12	6.67	8.90	10.93	12.08	11.68	9.55	7.05	5.07	3.18	7.3	
			Yozgat	2.95	3.95	5.33	6.17	6.73	9.90	11.07	10.00	9.10	6.65	4.57	3.12	6.6	
		Bursa	Bilecik	3.33	3.57	5.12	5.98	7.92	9.72	10.13	10.18	8.78	5.75	3.85	3.43	6.5	
		Samsun	Corum	2.53	3.63	5.47	6.08	6.78	9.03	9.73	10.03	8.72	5.73	3.43	2.23	6.1	
	Central Southern	Konya	Konya	3.27	4.53	5.78	7.15	9.10	10.95	12.02	11.58	9.70	7.20	5.35	3.22	7.5	
			Aksaray	3.05	4.23	5.83	6.98	9.03	11.38	12.32	11.97	10.32	7.17	5.05	3.35	7.6	
			Karaman	3.60	4.62	6.47	7.87	9.98	12.05	13.03	12.32	10.72	7.67	5.53	3.77	8.1	
			Nigde	3.67	4.67	5.85	6.93	8.78	10.98	12.10	11.57	10.22	7.37	5.13	3.72	7.6	
		Kayseri	Kayseri	3.12	4.18	4.95	6.37	8.43	10.60	12.17	11.67	9.60	7.00	5.02	3.08	7.2	
			Nevsehir	3.22	4.05	5.35	6.45	8.50	10.90	12.12	11.48	9.78	6.77	4.68	3.45	7.2	
		Eskisehir	Afyon	3.15	4.20	5.45	6.87	8.73	10.75	11.72	11.15	9.20	6.77	4.88	2.98	7.2	
	Central Eastern	Sivas	Sivas	2.32	3.30	4.57	6.02	8.00	10.62	12.05	11.30	9.30	6.52	4.17	2.43	6.7	
			Tokat	2.63	3.73	5.52	6.15	6.90	8.47	8.13	9.20	8.77	5.52	3.68	2.30	5.9	
		Samsun	Amasya	2.13	3.20	5.12	5.03	7.07	8.85	9.40	9.48	8.00	4.85	2.87	1.93	5.7	

E-2 Geology and Hydrogeology

Table 2.1 Summary of Geological and Hydrogeological Condition in Turkey

Figure 2.1 Map of Groundwater Research Studies by DSI

Table 2.1 Summary of Geological and Hydrogeological Condition in Turkey

Province	Place-Serial no.	DSI Rep.	Geological Character	Hydrogeological Character	Remarks
Konya	Eregli-Bor (1)	14	The basin consists of Paleozoic aged marble, mica-schist, partial syntectonial gabbro. In south-west: Permo-Caarboniferous aged bituminous lime-stone's. Eocene formations are present around Ereðli town and in south. Principle formation is clay-stone, secondary formations are sand-stone and conglomerate. North-east is oligocene, lithological descriptions are limestone cemented sand stone, limestone and intercalated anhydrites with these formations. Neogene covers a large area in the plain and has placed under alluvium, they represent three facies: lagoonal, volcanic and conglometric.	Aquifer is phreatic in the plain, consisted of sandy, gravely layers of Neogene formations which included interfingering agglomerate and basalt especially in the northeast of the plain. Depths of the wells reaching groundwater varies between 29 to 400 meters, and the discharges between 2 lt/sec to 63 lt/sec.	Extensive salinity problem is an important factor effecting to the safe yield. Safe yield coefficients for each regions are considered separately in accordance to salinity of the areas. There are extensive salinity in different levels and different depth in the aquifers of the plain.
Konya	Altýntekin (2)	18	Oldest formations are Paleozoic aged schist and crystallized dolomitic lime-stone's. Clays and overlying limestone have uplifted due to folding at the end of Paleozoic. Mesozoic aged limestone unconformeablety overlying the Paleozoic formations. Ophiolites are occurred during the fracturing and folding of the uplifted region at the end of the Mesozoic. In the upper Miocene intercalated marl layers with marly limestone are formed. Clay, limestone, sand-stones and conglomerates are deposited in the shallow area of Pliocene. The plain is covered with thin layer of alluvium.	Thickness of the marly limestone of Upper Miocene varies between 30-130 meters in the plain. Alluvium at the south of Fatinhöyük and Boluk lake are in the aquifer characteristics sand, gravel, conglomerate and limestone of Pliocene, are encountered at the vicinities of Biçer, Kýnýk, Çaldere villages in the south-west and the area extending to Çevik and Tekir Yaylasý from Tutup village in south-east, as being an aquifer is not so important. Aquifer of marly limestone of Upper Miocene is extensive in Altýntekin plain.	Water of Boluk lake is not suitable for irrigation due to saltness. Exploitation wells can be drilled in themarly lime-stones of Upper Miocene. Section up to limestone can be isolated and attention could be paid to the decreasing of groundwater table for the drilled shallow wells when the withdrawal of groundwater is started.
Konya	Karaman-Ayrancý-Akcaþehir (3)	31	The oldest formation is the Permo-Carboniferous marbles, forming the bedrock of Akçaþehir plain. The bedrock of Karaman-Ayranci plain is serpentine and limestone of Cretaceous complex. Miocene malrs overlie this complex. Above Miocene marls, Neogene conglomerate, limestone, marl and claystones are extended. Pliocene formations begin with conglomerates. Alluvium is consisted of sand, clay and gravel having a thickness of over 300m. clay is predominated in west and center of the plain.	Paleosoic marbles in Akçaþehir plain and Neogene limestone in Karaman Ayrancý plain form the aquifer. Also Paleosoic marbles are formed the base-rock of Akçaþehir plain. Depths vary between 25-225m. Neogene limestones in Karaman Ayrancý plain have an average thickness of 75m. and the depths of Neogene limestones alters. Deepest point is around Hamidiye-Kýlbasan. Depth of limestone at this area is about 275.	

Konya	Konya-Cumra-Karapýnar (4)	30	All eras from the paleozoic are observed in the investigation area. Paleosoic is represented at Permo-tiassic limestones and discordance on the Paleosoic schist and marbles.	Water bearing formations are Paleozoic marbles, Mesozoic limestone, Neogene limestone, Pliocene formations and sandy, gravely layers of alluvium	Groundwater around the middle of the plain is contaminated by gypsum and salt. Gypsum is found in the Pliocene clay at north to north east of the plain.
Niðde	Niðde-Misli (5)	7	Geological formations in the plain and it's surroundings are alluvium of quaternary age, detritus (clay, sand, gravel) interbedded with tuff, agglomerate and basalt of Neogene age, andesite probably of Eocene age, and Gabbro of Paleozoic age. At the base of the plain Gabbro is situated.	The most promising formation of groundwater is Volcanic Neogene (sand, gravel, tuff, agglomerate, basalt) within fractured andesites which cropout in the west of the plain abundant groundwater may locally included.	Safety yield for Neogene aquifer have been calculated. The depth of the drilled wells which will be sunk in exploitation area would be between 50m. and 100m. in depth and the exploitation yield of these wells would be between 30 and 50 lt/sec/m.
Niðde	Ereðli-Bor (1)	14	*Same as Ereðli-Bor in Konya*		
Karaman	Karaman-Ayrancý-Akcaþehir (3)	31	*Same as Karaman-Ay.-Ak. in Konya*		
Hatay	Asi Havzasý (6)	32	Formations from Paleozoic to end of Quaternary are found. At north; Paleozoic schist such as quartzite and limestones, Cretaceous limestone, conglomerate and green-stone of Mezoic. At south; Eocene limestone, conglomerate, marl and sand stones. At east; Mesozoic limestone, Neogene limestone, conglomerate and marls are encountered in between Kýrýkhan-Fevzipaþa plains. Large tectonic movements durýng the geological periods are observed in the study area.	Springs in the study area are generally fault springs and originatedfrom Mesozoic and Tertiary limestones. Water bearing formations in the plains are limestone and conglomerate of Miocene, basalts, sandy and gravely levels of Plio-Quaternary. Especially, confined and semi-confined aquifers are observed in the study area. Confined aquifer is formed from the results of thick clay covers in the large part of basin and recharge from the side section of the plains. Some of the drilled well are flowing artesian conditions in the study area.	Poor water quality is omitted out from the safe yield during the calculation of annual groundwater exploitation reserve. Groundwater quality is good.
Hatay	Dörtyol-Erzin (7)	25	The eastern part of the plain is composed of senpandines extending fromnorth to the south. Cretaceous limestones is located on the serpantines. In the north and the north west of the area, Miocene sand-stones are observed.	In the common aquifer direction of the water flow is from the north east to south west. In east and middle of the plain, alluvium is more permeable which is transmitting the water into conglomerates.	

Kayseri	Kayseri-Sarmýsaklý (8)	1	Alluviums, alluvial cones, taluses, tuffs, agglomerates and basalts of the Quaternary; gravels, sands, clays, marls, limestones (from place to place volcanic interbedded) andesite, tuffs covering large areas and agglomerates, and basalt of the Neogene are found.	In the plain groundwater is found in a single aquifer. The presence of clay layers of different thickness in Karasazlýk marshes and around Ambarköy at various depths, confine the groundwater. Some of the wells drilled in these areas are flowing artesians.	
Kayseri	Develi-Yeþilhisar (9)	5	Sedimentary, magöatic and metamorphic rocks are found. Sedimentary rocks outcrop in the south east and west parts of the plain. According to the stratigraphical sequence, Plio-Quaternary; consisting of sand, gravel, clay, silt, Neogene limestone, marl, clay, Tertiary layered tuff, agglomerate, flysch, Upper Cretaceous, flysch; Paleozoic crystallized limestones. Magöatic rocks are found in the north east, north and north west of the area and they are mostly of rocks such as basalt and andesite.	Aquifer transmissibility coefficients in the drilled wells have been assessed as 100-1900 cubic meter per day per meter.	Toward the middle of the plain salinity is increased.
Amasya	Aydýnca-Ezine Pazar (10)	74	Foundation is formed of Paleozoic aged clayey schist, chloriteschist and marble. Jura-creaste aged cretase flysch and Uppercreaste aged gravel and clayey celcareous layer. Sandstones of Eocene, gravel and clay of Pliocene and gravel and clay of alluvium.	Main aquifer is the alluvial cones and alluvium of Delicay.	
Eskiþehir	Gölpazarý (11)	29	Formations belong to Mesozoic and Cenozoic. Cretaceous flysch and limestone forming the base, outcrops over a large area. Paleocene flysch overlies Cretaceous discordantly. Tuff which has come up to the surface by Neocene volcanism, extends in the southeast as a thin line. Clay and detritic material belonging to the Quarternary, extends in the stream beds and on the slope of the mountain.	The groundwater bearing formation in the plain is Quaternary alluvium. Confined and unconfined aquifer levels exist in alluvium. Thickness of the unconfined aquifer is between 5-25m. Below the unconfined level an impermeable clay layer overlying a confined aquifer exists. A clay layer of thickness between 20-25m. separates the confined aquifer levels of thickness varying between 20-30m	
Eskiþehir	Eskiþehir ve Ýnönü (12)	40	Schist and limestones of Paleozoic age; flysch; limestone and ophiolite of Mesozoic age; conglomerate and limestone of Tersier-Paleogene age conglomerate, andesite-flysch, tuffite, limestone and basalts of Neogene age; old alluvium of Plio-Quarternary age and new alluvium of Quaternary age.	Most productive aquifers are in the plain are old and new alluviums. Alluvium is composed of gravel, sand and sandy clay.	Groundwater consists certain amount of nitrate place to place above normal and bad to the health due to residual water of Kütahya.

Eskiþehir	Eskiþehir ve Alpu (13)	60	Paleozoic aged schist, marble, Mesozoic aged granadiodrite, phonolite and ophiolite, Cenezoic aged calcerous; conglomerates, agglomerates, tuffits and alluvium are found.	Alluviums are the major aquifers. Their thickness changes between 10-40m. They are formed by gravel, sand sandy clay.	
Afyon	Bakýrçay (14)	50	Oldest formations are paleozoic schist, marbles. The limestones of Permotrias lie down on these schists and marbles with discordance. Neogene is formed of marl, limestone and conglomerates. Gratine is seen in the north part of the area in two points and in the south serpentine is seen in one point.	Te Neogene and Paleozoic limestones contain the phreatic water. The thickness of the alluvium is 100 meters. The Neogene limestones have no aquifer specialists in Bayat plain.	
Afyon	Afyon-Suhut (15)	6	The outcroping formations at the plain and its province are alluvium of Quarternary age, talus and alluvial cones, limestone of Neogene, tuff, tuffite, trachite, agglomerate, limestone of Mesozoic and calkschist chlorite schist, butimious, shale of Paleozoic.	The most important water bearing formation in the investigation area is alluvium. The fissures of hard tuffs and agglomerates under the alluvium also bear the groundwater.	
Afyon	Küçük Sincanlý (16)	24	The Paleozoic quarsites and schist are formed the bedrock at the bottom. Foundation were formed by folding of these; Neogene tuffs, sands, gravels, clay, marl, agglomerated. Neogene formations are represented by clay, marl and sandstone facies in the north west of the plain, other parts by volcanic facies such as tuffs and agglomearates. Trachy andesites is encountered extensively in the drainage area and also basaltic eruptions are occurred at some places.	The Plio-Quarternary sand and gravel together with Neogene sand, gravel and volcanic tuffs formed the main aquifer in the plain. The sand and gravel layers are intercalated with clay layers and together with the underlying tuffs which are bearing the groundwater. The thickness of the groundwater bearing tuffs is between 50 to 200m.	
Afyon	Akarçay (17)	42	Different aged sedimentary, igneous and metamorphic rocks are present. Paleozoic by schist-quartzite and limestone; Mesozoic by limestone; Neogene by complex series, conglomerate-marl-limestone-chart, tuff-tuffit-aglomerate; Plio-Quarternary by conglomerate-clay-sand; Quarternary by alluvium and alluvial cones. Igneous rocks are represented by Neogene aged andesites and basalts.	The aquifer is formed by the alluvial cones (sand and gravel), Plio-Quarternary deposits, Neogene complex series, conglomerate, agglomerate and precipitation filtrates and jions to the groundwater from these formations.	The levels which have bad quality of water are near the Susuz-Beyayasý villages in the north of the Afyon plain.
Afyon	Çöl (18)	16	Oldest formations are Mesozoic limestones. Volcanic intercalated lagoonal Neogene and Quarternary aged alluvium are found on the Mesozois limestone. Beside that tuffites, trachyandesites, agglomerates, diabasis and green stones from volcanic rocks are out cropped in the investigation area.	Water bearing formations in the plain are Quarternary aged alluviums, volcanic aged intercalated lagoonal sediments. Mainly groundwater is found in the volcanic intercalated Neogene aged lagoonal sediments.	

Kütahya	Simav ve Kýravadi (19)	44	Gneiss and mica-schists are Paleozoic age formations. Cretaceous limestone is Mesozoic age formation. Limestone, clay-marl, sandstone and conglomerate are Negene formation. Alluvium, alluvium cone and debris are Quarternary formations. Granite is younger than Paleozoic formation. Rhyodacite, tuff and basalts are Neogene age.	Groundwater bearing formations in the plain are silty, sandy, gravely layers of alluvium and alluvial cones. Thickness of the alluvium aquifer is 40-175m., and thickness of the alluvium cone is 25-100m.	Electrical conductivity, sodium absorption percent values of permanent hardness sodium carbonate in groundwater are increased due to the effect of Eynal and Naþa thermal springs located at the north east of Simav plain. Poor quality groundwater is limited in consideration to water points where values of permanent hardness sodium carbonate is greater than 2.5 meq/l.
Kütahya	Kütahya-Çavdarhisar (20)	58	The Paleozoic schist form the base. The Mesozoic marbles are discordant with paleozoic schist and they are placed on them. The Cenozoic formations (Neogene conglomerate, marl, limestone; pliocene conglomerate, sandy gravely clay and Quarternary sand, gravel and clay levels) are placed on paleozoic and Mesozoic formations with a discordance. The formations are affected from Hercinian and Alpine orogenesis.	The groundwater bearing formation of the plain is limestone level of Neogene. The thickness of limestone changes between 150-180m.	
Kütahya	Altýntaþ (21)	52	Oldest formations are paleozoic schist, marbles and Mesozoic crystalline limestone and ophiolites. These formations form the bedrock. Neogene old conglomerate, limestone banded marl, tuff and limestone are over the bedrock. Neogene formations are interbedded with tuffs in the east and they are formed by conglomerates, marl banded limestones and limestones in the west part of the plain. Pliocene conglomerates, sands, gravels and clays and Quaternary clay, sand and gravels are over the Neogene series.	The main aquifers are Quaternary's sand and gravels and Neogene limestones.	
Burdur	Erli-Irla ve Yazý (22)	36	Mesozoic limestones, ophiolites, Eocene flysch, Miocene conglomerate, clay, sand, gravels and Quarternary alluvium are encountered. The influence of Alpine Orogenesis is seen in the area.	Water bearing formations are generally, Plio-Quarternary sand and gravels, altered zones of serpantine in the ophiolitic series and the upper Cretaceous limestones in the Yazý plain. Plio-Quarternary material have a thickness of about 70-80m and in the middle, it is 120 m. In erli plain aquifer is above 10-20m. level.	The lake waters are highly concentrated with salt and sodium, they are not suitable from drinking and irrigation.

Yzmir	Küçük Menderes (23)	21	Quaternary: Alluvium: clay, silt sand, gravel Tertiary: Neogene: clay, marl, conglomerate, sandstone and limestone Mesozoic: flysch, limestone Paleozoic: marbles, quartzites, schist, gneiss and crystallized limestones.		
Balýkesir	Edremit ve Armutova (24)	63	Oldest formations are paleozoic schist, gneiss, marble and amphibolites. The lower Trias takes place over this formation. Lower Trias formation is formed by low metamorphised meta graywacke, greenschists and granodiorites which cut this formation and the Jura limestones takes place over these formations. Neogene volcanics are seen. Beside those Pliocene marl and conglomerates are placed in the south of the plain. Most important formation is Quarternary alluvium, formed by clay, sand, gravel and coarse gravel and blocks, alluvial cone and talus.	Water bearing formation of the Edremit plain is sand, gravel levels of alluvium and the alluvial cones. The sandstone levels of Neogene includes minimum groundwater in some places. Water bearing formation of the Armutova plain is sand, gravel levels of alluvium.	
Kýrklareli	Ergene Kuzeyi (25)	64	Oldest formations are paleozoic schist. Eocene marl and limestone, Oligocene oolithic limestones, Miocene shales and Pliocene clayey, sandy, gravely formations are located under the schists. Tertiary structures are located over these.	Groundwater are recharged from limestones, feeding the perennial streams.	Holes must be drilled in Oligocene limestones to search the clay layers which affect the spring development in negative way.
Tekirdað	Ergene Kuzeyi (25)	64	*Same as Ergene Kuzeyi in Kýrklareli*		

Note: Place-Serial No. is shown on the map of the following page.

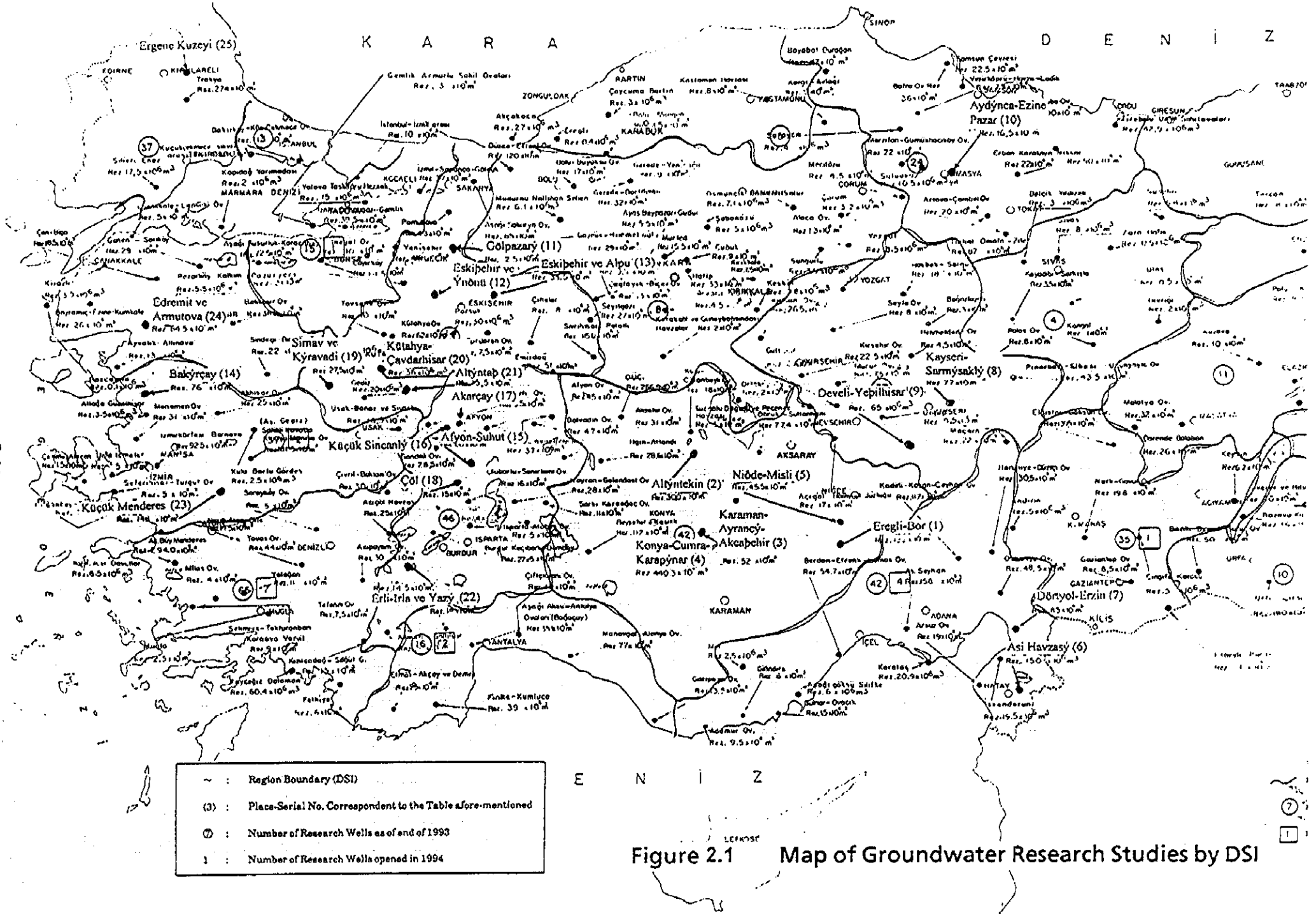

Figure 2.1 Map of Groundwater Research Studies by DSI

E-3 Summary of Irrigation Works in Turkey

Table 3.1 Summary of Irrigation Coverage Province by Province

Agro-ecological Zone		Region	Province	T. Land	Cultivable Land		Fallow Land		Total Planted Area (ha)					Irrigated Area (ha)				Irrigation Ratio (%)				Remarks
				km2	ha	%	ha	%	F. Crop	Fruit	Veg'bl	Total	In'ty, %	F. Crop	Fruit	Veg'bl	Total	F. Crop	Fruit	Veg'bl	Total	
Mediterranean Zone	Marmara	Istanbul	Istanbul	5691	137400	25	5018	4	99045	5729	7107	110881	81	1922	2416	4406	8744	2	42	62	8	
			Edirne	6174	328239	53	190	0	313962	7076	5567	326605	99	36780	1957	3755	42492	12	28	67	13	
			Kirklareli	6378	245463	38	2388	1	229522	4444	3847	237813	97	23320	3778	3262	30360	10	85	85	13	
			Kocaeli	3578	118969	33	8938	8	68091	18863	3781	90735	76	3414	1876	2688	7978	5	10	71	9	
			Sakarya	4821	175378	36	4079	2	91751	70593	5422	167766	96	12194	5553	3831	21578	13	8	71	13	
			Tekirdag	6333	349828	55	705	0	334085	6702	3814	344601	99	15172	304	1411	16887	5	5	37	5	
		Bursa	Bursa	10990	346331	32	15824	5	183871	82186	36026	281863	61	33884	31701	34283	99868	18	51	95	35	
			Yalova																			
	Aegean	Izmir	Izmir	12263	349381	28	6125	2	184068	118956	19724	322747	92	83138	20931	18216	122285	45	18	92	38	
			Aydin	7870	359699	46	5670	2	147350	180513	9702	337565	94	101073	17447	9420	127940	69	10	97	38	
			Denizli	11874	332745	28	30821	9	245568	27701	8152	281421	85	56345	8962	8807	72414	23	32	81	26	
			Manisa	13237	482202	36	20960	4	319014	90500	17759	427273	89	58615	39674	11374	109663	18	44	64	26	
			Mugla	12504	195234	16	3633	2	111958	60230	9776	181965	93	38212	8110	9556	55878	34	13	98	31	
		Bursa	Balikesir	14456	414060	29	18385	4	283511	61709	28071	373291	90	23945	9289	22338	55572	8	15	80	15	
			Canakkale	9950	277548	28	15651	6	183480	36889	18697	239846	86	18186	6340	14746	39272	10	17	89	17	
		Antalya	Burdur	7167	162501	23	14960	9	124268	7275	3535	135078	83	38889	5151	3348	47168	31	71	95	35	
			Isparta	8847	184783	19	18292	11	107450	23596	4390	135436	82	12178	18453	3666	34295	11	78	84	25	
	Mediterranean	Adana	Adana	17562	572603	33	19922	3	487604	27427	28523	543354	95	193426	20774	25811	240011	40	76	91	44	
			Icel	15448	384011	25	61486	16	209021	66610	23226	298757	78	54871	40868	21803	117562	26	61	94	39	
			Hatay	5570	208360	37	2907	1	146980	39693	14938	201611	97	60063	8947	13233	82243	41	23	89	41	
			Osmaniye																			
		Antalya	Antalya	20815	453657	22	84222	19	274647	36796	21779	333222	73	56013	26309	21542	103864	20	71	99	31	
Black Sea Zone	Black Sea	Trabzon	Trabzon	4496	99394	22	0	0	30839	63791	2750	97380	98	17	99	4	120	0	0	0	0	
			Bayburt	3652	87310	24	19647	23	38910	1616	823	41349	47	19886	1606	822	22314	51	99	100	54	
			Giresun	6965	189223	27	12062	6	44899	104589	2824	151912	80	710	1467	1045	3222	2	1	40	2	
			Gumushane	6748	86940	13	17165	20	37082	3948	1410	42440	49	7988	1499	1350	10817	21	38	96	25	
			Rize	3920	59136	15	0	0	2182	53768	1328	57278	97	0	0	0	0	0	0	0	0	
			Artvin	7436	58362	8	3509	6	18834	18609	1672	35115	59	7808	3405	1313	12524	46	21	79	36	
		Kastamonu	Kastamonu	12982	207783	16	32851	16	133418	9283	4396	147099	71	18431	4451	3851	24513	12	48	83	17	
			Zonguldak	8440	183504	28	16576	9	127856	17103	8577	153536	84	840	773	6440	8053	1	5	75	5	
			Sinop	5657	132058	23	19842	15	87206	3274	2584	93064	70	12688	791	1921	15400	15	24	74	17	
			Karabuk																			
			Bartin																			
		Samsun	Samsun	9739	402250	41	22701	6	283632	64875	17492	365999	91	34274	2784	13905	50943	12	4	79	14	
			Ordu	5142	289706	44	1909	1	85771	191058	4521	281351	97	0	5	10	15	0	0	0	0	
Central Anatolian Zone	Central Northern	Ankara	Ankara	25604	696811	39	289223	29	590096	18998	37383	646476	66	33602	13838	14606	62046	6	73	39	9	
			Bolu	10575	222735	21	18724	8	114502	58661	3707	177770	80	16850	5444	3297	25591	15	9	89	14	
			Cankiri	8659	266143	31	60921	23	136081	6794	8490	153365	58	15057	6373	6804	28234	11	94	80	18	
			Kirikkale	4365	214257	49	88493	32	129785	5200	3197	138182	64	9069	1968	2356	13393	7	38	74	10	
		Eskisehir	Eskisehir	13477	522158	39	175058	34	300188	4520	5750	310458	59	79645	3607	5262	88514	27	80	92	29	
			Kutahya	11661	303134	26	57478	19	195613	13452	8094	216159	71	20106	5541	5372	31019	10	41	66	14	
			Usak	5369	212694	39	8155	4	173259	7945	5457	186661	88	8110	2485	2762	13357	5	31	51	7	
		Kayseri	Kirsehir	6501	321438	49	89276	28	196499	5194	1757	205450	64	13456	4361	1499	19316	7	84	85	9	
			Yozgat	13597	659249	48	15944	2	505003	19510	7420	531933	81	35685	11331	7195	54211	7	58	97	10	
		Bursa	Bilecik	4321	100341	23	13344	13	55669	8711	6383	70763	71	2360	2451	5404	10215	4	28	85	14	
		Samsun	Corum	12729	440541	35	84489	19	314022	12134	7416	333572	76	26609	5342	6221	38172	8	44	84	11	
	Central Southern	Konya	Konya	40451	1542796	38	361624	23	1006367	35147	12908	1056422	68	230165	26018	12336	268519	23	74	96	25	
			Aksaray	7626	332359	44	76909	23	195496	9111	3598	208205	63	39151	5733	3172	48056	20	63	88	23	
			Karaman	9163	285217	31	71331	25	178461	17254	2194	197929	69	47512	8996	2041	58549	27	52	93	30	
			Nigde	7831	205027	26	51012	25	104831	16825	3676	125432	61	36206	14271	3338	53815	35	85	91	43	
		Kayseri	Kayseri	16537	509550	31	151285	30	284475	21094	10548	316117	62	46800	15593	8588	70681	16	74	81	22	
			Nevsehir	5540	287875	52	40743	14	191416	27214	10614	229244	80	22651	3847	3781	30279	12	14	36	13	
		Eskisehir	Afyon	14295	486326	34	111944	23	289179	13034	6078	307291	63	54346	9473	5565	69384	19	73	92	23	
	Central Eastern	Sivas	Sivas	28568	694208	24	235476	34	311411	24244	3549	339204	49	29809	23527	3531	56867	10	97	99	17	
			Tokat	9869	264547	27	22532	9	208411	13523	8413	228347	86	53053	10293	8178	71524	26	76	97	31	
		Samsun	Amasya	5452	175067	32	18595	11	137728	4290	4258	146276	84	49403	3282	4135	56820	36	77	97	39	

Source: 1991 General Agricultural Census quoted in Statistical Yearbook of Turkey, 1995

Table 3.2 Summary of Irrigation Sources Province by Province

Agro-ecological Zone	Region	Province		Irrigated Area (ha)				Irrigation Sources(ha)				Irrigation Sources(%)				Remarks
				F. Crop	Fruit	Veg'bl	Total	Well	Artesian	L/S	Dam	Well	Artesian	L/S	Dam	
Mediterranean Zone	Marmara	Istanbul	Istanbul	1922	2416	4408	8744	2037	504	4936	1810	23	6	56	21	L/S=Lakes and Streams
			Edirne	36780	1957	3755	42492	2362	9562	20632	9938	6	23	49	23	
			Kirklareli	23320	3778	3282	30380	2396	3111	12403	12460	8	10	41	41	
			Kocaeli	3414	1878	2688	7978	491	500	5661	1327	6	6	71	17	
			Sakarya	12194	5553	3831	21578	1593	2924	10259	6803	7	14	48	32	
			Tekirdag	15172	304	1411	16887	4407	350	4142	7991	26	2	25	47	
		Bursa	Bursa	33884	31701	34283	99868	9625	23645	31675	34925	10	24	32	35	
			Yalova													
	Aegean	Izmir	Izmir	83138	20931	18216	122285	10641	72819	17803	21223	9	59	15	17	
			Aydin	101073	17447	9420	127940	2337	37404	47832	40368	2	29	37	32	
			Denizli	56845	8962	6607	72414	7906	18713	29900	17896	11	23	41	25	
			Manisa	58615	39674	11374	109663	14348	35029	14786	45502	13	32	13	41	
			Mugla	38212	8110	9556	55878	4507	13778	23517	14077	8	25	42	25	
		Bursa	Balikesir	23945	9289	22338	55572	4652	17915	19282	13725	8	32	35	25	
			Canakkale	18186	6340	14746	39272	3997	16302	11704	7270	10	42	30	19	
		Antalya	Burdur	38669	5151	3348	47168	7404	10078	18017	11670	16	21	38	25	
			Isparta	12176	18453	3666	34295	4411	7000	9926	12958	13	20	29	38	
	Mediterranean	Adana	Adana	193426	20774	26811	240011	17324	7368	37704	177617	7	3	16	74	
			Icel	54871	40888	21803	117562	4295	7285	43844	62140	4	6	37	53	
			Hatay	60063	8947	13233	82243	14583	13690	38305	15665	18	17	47	19	
			Osmaniye													
		Antalya	Antalya	56013	26309	21542	103864	20598	11192	30186	41890	20	11	29	40	
Black Sea Zone	Black Sea	Trabzon	Trabzon	17	99	4	120	0	0	0	122	0	0	0	102	
			Bayburt	19886	1606	822	22314	76	150	17349	4740	0	1	78	21	
			Giresun	710	1467	1046	3222	85	83	2440	654	2	2	76	20	
			Gumushane	7968	1499	1350	10817	521	16	9544	735	5	0	88	7	
			Rize	0	0	0	0	0	0	0	0	-	-	-	-	
			Artvin	7606	3405	1313	12524	214	271	11519	522	2	2	92	4	
		Kastamonu	Kastamonu	18431	4451	3631	24513	1152	266	17958	5140	5	1	73	21	
			Zonguldak	840	773	6440	8053	2469	859	4022	704	31	11	50	9	
			Sinop	12888	791	1921	15400	1001	253	11893	2254	7	2	77	15	
			Karabuk													
			Bartin													
		Samsun	Samsun	34274	2764	13905	50943	12957	18133	15719	4135	25	36	31	8	
			Ordu	0	5	10	15	0	0	9	6	0	0	60	40	
Central Anatilan Zone	Central Northern	Ankara	Ankara	33602	13838	14606	62046	5999	3378	43592	9078	10	5	70	15	
			Bolu	16850	5444	3297	25591	1106	347	10182	13958	4	1	40	55	
			Cankiri	15057	6373	6804	28234	2317	504	17884	7531	8	2	63	27	
			Kirikkale	9069	1968	2356	13393	2342	1080	6639	3332	17	8	50	25	
		Eskisehir	Eskisehir	79645	3607	5262	88514	22965	8083	21748	37719	26	7	25	43	
			Kutahya	20106	5541	5372	31019	2684	6922	14037	7377	9	22	45	24	
			Usak	8110	2485	2762	13357	1860	4004	4721	2773	14	30	35	21	
		Kayseri	Kirsehir	13456	4361	1499	19316	2057	975	10684	5600	11	5	55	29	
			Yozgat	35685	11331	7195	54211	4620	1280	40388	7925	9	2	75	15	
		Bursa	Bilecik	2360	2451	5404	10215	1411	916	4591	3298	14	9	45	32	
		Samsun	Corum	28609	5342	6221	38172	1918	316	32737	3202	5	1	86	8	
	Central Southern	Konya	Konya	230165	26018	12336	268519	98938	18869	73506	77210	37	7	27	29	
			Aksatay	39151	5733	3172	48056	7367	9019	14887	16784	15	19	31	35	
			Karaman	47512	8996	2041	58549	32748	4588	12549	8666	56	8	21	15	
			Nigde	36206	14271	3338	53815	35545	418	15448	2405	66	1	29	4	
		Kayseri	Kayseri	48500	15593	6588	70681	1804	7085	30849	31144	3	10	43	44	
			Nevsehir	22851	3847	3781	30279	5961	5687	9993	2645	30	29	33	9	
		Eskisehir	Afyon	54346	9473	5565	69384	22251	24635	11329	11170	32	36	16	16	
	Central Eastern	Sivas	Sivas	29809	23527	3531	56867	2830	429	47807	6003	5	1	84	11	
			Tokat	53053	10293	8178	71524	2293	2057	26122	41052	3	3	37	57	
		Samsun	Amasya	49403	3282	4136	56820	7312	2323	20315	26871	13	4	36	47	

Source: 1991 General Agricultural Census quoted in Statistical Yearbook of Turkey, 1995

Table 3.3 Summary of Irrigation Carried out by GDRS Province by Province *(Italics Figures shall be scrutinized)*

Agro-ecological Zone		Region	Province	Irrigation Sources(ha)					By GDRS SSIP (ha)				By GDRS SSIP (%)				Remarks
				Well	Artesian	L/S	Dam	Total	G.W.	Stream	Dam	Total	G.W.	Stream	Dam	Total	
Mediterranean Zone	Marmara	Istanbul	Istanbul	2037	504	4936	1810	9287	0	3446	4619	8065	0	70	*255*	87	SSIP=Smal Scale Irrigation Project by GDRS only
			Edirne	2362	9562	20632	9938	42494	4425	3929	3794	12148	37	19	38	29	G.W.=Groundwater
			Kirklareli	2398	3111	12403	12450	30362	4846	4081	4560	13487	88	33	37	44	L/S=Lakes and Streams
			Kocaeli	491	500	5661	1327	7979	120	3409	2952	6481	12	60	*222*	81	
			Sakarya	1593	2924	10259	6803	21579	0	4281	1280	5561	0	42	19	26	Those data were given by GDRS and refered to in
			Tekirdag	4407	350	4142	7991	16890	8460	1699	6198	16357	*178*	41	78	97	Statistical Yearbook of Turkey, and some data show
		Bursa	Bursa	9625	23645	31675	34925	99870	2874	9818	4394	17086	9	31	13	17	discrepancy becase of the percentage more than 100
			Yalova														
	Aegean	Izmir	Izmir	10641	72619	17803	21223	122286	8118	9931	557	18606	10	56	3	15	
			Aydin	2337	37404	47832	40368	127941	1316	5892	0	7208	3	12	0	6	
			Denizli	7906	16713	29900	17896	72415	4457	15011	1292	20760	18	50	7	29	
			Manisa	14348	35029	14786	45502	109665	2620	12988	0	15608	5	88	0	14	
			Mugla	4507	13778	23517	14077	55879	782	20622	225	21629	4	88	2	39	
		Bursa	Balikesir	4652	17915	19282	13725	55574	5220	8743	1972	15935	23	45	14	29	
			Canakkale	3997	16302	11704	7270	39273	319	6616	11366	18301	2	57	*166*	47	
		Antalya	Burdur	7404	10078	18017	11670	47169	5293	12612	955	18860	30	70	8	40	
			Isparta	4411	7000	9926	12958	34295	4132	11076	1781	16989	36	*112*	14	50	
	Mediterranean	Adana	Adana	17324	7368	37704	177617	240013	3446	15631	3124	22201	14	41	2	9	
			Icel	4295	7285	43844	62140	117564	215	20835	1558	22608	2	48	3	19	
			Hatay	14583	13690	38305	15665	82243	12932	9161	268	22361	46	24	2	27	
			Osmaniye														
		Antalya	Antalya	20598	11192	30186	41890	103866	4290	13288	216	17794	13	44	1	17	
Black Sea Zone	Black Sea	Trabzon	Trabzon	0	0	0	122	122	0	1948	0	1948	0	*#DIV/0!*	0	*1597*	
			Bayburt	76	150	17349	4740	22315	0	376	2485	2861	0	2	52	13	
			Giresun	65	63	2440	654	3222	0	3564	340	3904	0	*146*	52	*121*	
			Gumushane	521	18	9544	735	10818	760	21633	478	22871	*141*	*227*	65	*211*	
			Rize	521	18	9544	735	10818	0	0	0	0	0	0	0	0	
			Artivin	214	271	11519	522	12526	0	9484	0	9484	0	82	0	76	
		Kastamonu	Kastamonu	1152	266	17958	5140	24516	2184	15515	437	18136	*154*	86	9	74	
			Zonguldak	2469	859	4022	704	8054	0	4863	7	4870	0	*121*	1	60	
			Sinop	1001	253	11893	2254	15401	0	6469	1653	8122	0	54	73	53	
			Karabuk														
			Bartin														
		Samsun	Samsun	12957	18133	15719	4135	50944	1811	6872	2165	10648	6	42	52	21	
			Ordu	0	0	9	6	15	0	1358	0	1358	0	*15089*	0	*9053*	
Central Anatlian Zone	Central Northern	Ankara	Ankara	5999	3378	43592	9078	62047	455	23955	4682	29092	5	55	52	47	
			Bolu	1106	347	10182	13958	25593	0	8919	170	9089	0	88	1	36	
			Cankiri	2317	504	17884	7531	28236	400	9122	2041	11563	14	51	27	41	
			Kirikkale	2342	1080	6639	3332	13393	0	435	0	435	0	7	0	3	
		Eskisehir	Eskisehir	22965	6083	21748	37719	88515	8149	12514	1870	22533	28	58	5	25	
			Kutahya	2684	6922	14037	7377	31020	5223	6638	2126	13987	54	47	29	45	
			Usak	1860	4004	4721	2773	13358	116	5271	2122	7509	2	*112*	77	56	
		Kayseri	Kirsehir	2057	975	10684	5600	19316	511	5711	5433	11655	17	53	97	60	
			Yozgat	4620	1280	40388	7925	54213	480	23675	7552	31707	8	59	95	58	
		Bursa	Bilecik	1411	916	4591	3298	10216	0	7575	3124	10699	0	*165*	95	*105*	
		Samsun	Corum	1918	316	32737	3202	38173	683	11193	1152	13028	31	34	36	34	
	Central Southern	Konya	Konya	98936	18869	73506	77210	268521	55847	11932	4348	72127	47	16	6	27	
			Aksatay	7367	9019	14887	16784	48057	250	346	2181	2777	2	2	13	6	
			Karaman	32746	4588	12549	8666	58549	1165	582	0	1747	3	5	0	3	
			Nigde	33545	418	15448	2405	51816	12078	11345	1544	24967	36	73	64	48	
		Kayseri	Kayseri	1804	7085	30649	31144	70682	11176	20975	1171	33322	*126*	68	4	47	
			Nevsehir	8981	8687	9993	2645	30286	1323	9746	75	11144	7	98	3	37	
		Eskisehir	Afyon	22251	24635	11329	11170	69385	19194	7591	475	27260	41	67	4	39	
	Central Eastern	Sival	Sivas	2630	429	47807	6003	56869	0	21489	4736	26225	0	45	79	46	
			Tokat	2293	2057	26122	41052	71524	2734	12632	5299	20665	63	48	13	29	
		Samsun	Amasya	7312	2323	20315	26871	56821	6207	9494	4893	20594	64	47	18	36	

Source: 1991 General Agricultural Census Data quoted in Statistical Yearbook of Turkey, 1995 and GDRS's data were given by GDRS headquater.

E-4 Summary of Past Performance of GDRS

Table 4.1 Past Performance by GDRS, ha

year	Irrigation (ha)				Land Improvement (ha)					Credit		Remarks
	Dam	Surface	Groud W	Total	On-farm	Drainge+Rec.	Soil Conserva'	L. Consoli'	Total	Area (ha)	Ratio (%)	
1965	3,715	86,858	0	90,573	104,181	49,524	81,762	456	235,923	41,263	8	
1966	4,528	114,767	109	119,404	109,331	61,793	85,420	1,300	257,844	50,187	8	
1967	5,042	145,686	3,325	154,053	115,572	72,404	87,817	3,258	279,051	60,986	7	
1968	6,628	165,049	13,208	184,885	122,698	83,660	89,790	6,371	302,519	72,933	7	
1969	7,664	184,719	23,622	216,005	132,024	94,403	91,360	11,755	329,542	81,959	7	
1970	7,699	197,913	29,885	235,497	147,202	101,418	93,533	17,942	360,095	90,120	7	
1971	7,800	217,300	39,922	265,022	169,202	105,519	96,693	23,124	394,538	96,863	7	
1972	8,079	242,347	53,012	303,438	187,953	111,035	100,601	28,349	427,938	101,758	7	
1973	9,257	271,048	69,542	349,847	211,378	118,823	105,818	31,527	467,546	108,480	8	
1974	10,729	307,800	81,353	399,882	231,318	125,674	112,128	34,598	503,718	118,333	8	
1975	12,975	336,563	92,568	442,106	255,685	132,778	121,569	36,000	546,032	128,533	8	
1976	19,289	381,323	105,044	505,656	294,937	143,983	134,313	41,217	614,450	140,344	8	
1977	27,714	430,124	119,257	577,095	334,224	161,688	154,563	43,406	693,881	151,746	8	
1978	30,499	449,194	123,929	603,622	351,809	167,280	157,780	47,658	724,526	164,225	8	
1979	37,169	470,622	134,056	641,847	367,648	174,992	180,919	52,149	775,708	175,827	8	
1980	40,803	487,115	144,325	672,243	385,331	182,106	186,496	52,149	806,082	187,046	8	
1981	42,753	522,694	157,860	723,307	408,876	194,373	198,073	56,459	857,781	201,705	8	
1982	50,639	547,225	172,934	770,798	439,519	206,217	210,885	57,045	913,666	223,558	8	
1983	57,365	573,071	184,145	814,581	469,787	222,027	227,157	62,485	981,456	246,641	7	
1984	65,364	606,374	194,496	868,234	508,440	243,965	250,134	65,517	1,068,056	272,627	7	
1985	75,914	633,193	205,166	914,273	548,553	259,527	267,190	67,982	1,143,252	295,838	7	
1986	81,340	657,760	212,669	951,769	596,203	279,206	282,590	72,136	1,230,137	318,038	7	
1987	88,442	682,470	220,977	991,889	634,217	286,912	296,020	79,475	1,296,624	341,911	7	
1988	96,505	697,708	226,160	1,019,373	656,717	291,212	308,372	85,993	1,342,294	362,731	7	
1989	102,762	711,120	231,180	1,045,062	669,828	297,329	318,391	88,748	1,374,296	378,586	6	
1990	104,542	722,955	236,522	1,064,019	698,065	304,832	327,093	102,525	1,432,515	387,431	6	
1991	107,518	741,537	240,420	1,089,475	723,345	308,466	336,453	107,024	1,475,288	397,824	6	
1992	108,838	749,301	243,235	1,101,374	741,219	309,822	341,137	119,452	1,511,630	406,934	6	
1993	112,022	757,570	245,396	1,114,988	775,868	316,300	344,905	148,800	1,585,893	417,380	6	
1994	114,444	761,704	248,243	1,124,391	802,623	317,163	346,767	167,510	1,634,063	426,252	6	
1995	119,807	777,612	248,973	1,146,392	823,365	318,756	349,091	174,345	1,665,547	438,375	6	

Source : Hizmet Uygulamalari Genal Envanteri , Jan. 1, 1996
Note: Land consolidation are is included in on-farm area.

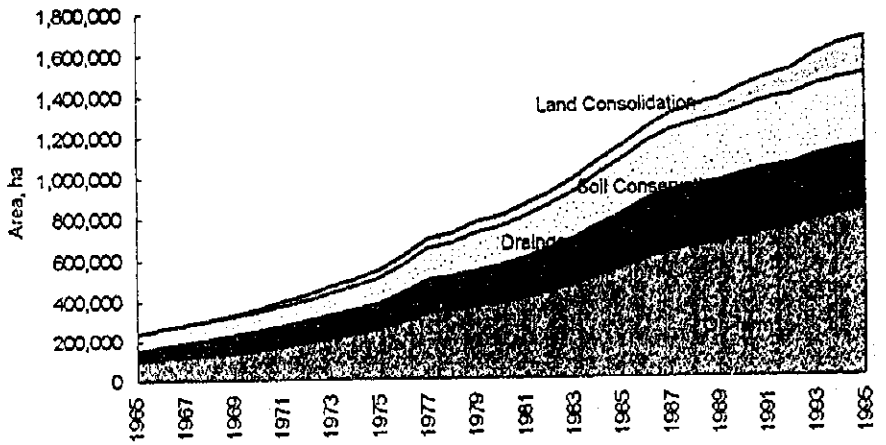

Table 4.7 Past Performance by GORS, ha

Year	Irrigation (ha)				Land improvement (ha)					Credit		Remarks
	Dam	Surface	Groun W	Total	On-farm	Drainge+Rec	Soil Conserva	L Consoli	Total	Area (ha)	Ratio (%)	
1965	3,719	86,858	0	90,578	104,181	49,524	81,762	456	235,923	41,263	8	
1966	4,528	114,767	109	119,404	109,331	61,793	85,420	1,300	257,844	50,187	8	
1967	5,042	145,686	3,325	154,053	115,572	72,404	87,817	3,258	279,051	60,986	7	
1968	6,628	165,049	13,208	184,885	122,698	83,660	89,790	6,371	302,519	72,933	7	
1969	7,664	184,719	23,622	216,005	132,024	94,403	91,350	11,756	329,542	81,959	7	
1970	7,699	197,913	29,885	235,497	147,202	101,418	93,533	17,942	360,095	90,120	7	
1971	7,800	217,300	39,922	265,022	169,202	105,519	96,693	23,124	394,538	96,863	7	
1972	8,079	242,347	53,012	303,438	197,953	111,035	100,601	28,349	427,938	101,758	7	
1973	9,257	271,048	69,542	349,847	211,378	118,823	105,818	31,527	467,546	108,480	8	
1974	10,729	307,800	81,353	399,882	231,318	125,674	112,128	34,598	503,718	118,333	8	
1975	12,975	336,563	92,568	442,106	255,685	132,778	121,569	36,000	546,032	128,533	8	
1976	19,289	381,323	105,044	505,656	294,937	143,983	134,313	41,217	614,450	140,344	8	
1977	27,714	430,124	119,257	577,095	334,224	161,688	154,563	43,406	693,881	151,746	8	
1978	30,499	449,194	123,929	603,622	361,808	167,280	157,780	47,658	724,526	164,225	8	
1979	37,169	470,622	134,056	641,847	367,648	174,992	180,919	52,149	775,708	175,827	8	
1980	40,803	487,115	144,325	672,243	385,331	182,106	186,496	52,149	806,082	187,046	8	
1981	42,753	522,694	157,860	723,307	408,876	194,373	198,073	56,459	857,781	201,705	8	
1982	50,639	547,225	172,934	770,798	439,519	206,217	210,885	57,045	913,666	223,558	8	
1983	57,365	573,071	184,145	814,581	469,787	222,027	227,157	62,485	981,456	246,641	7	
1984	65,364	608,374	194,496	868,234	508,440	243,965	250,134	65,517	1,068,056	272,627	7	
1985	75,914	633,193	205,166	914,273	548,563	259,527	267,190	67,982	1,143,252	295,838	7	
1986	81,340	657,760	212,669	951,769	596,203	279,208	282,590	72,136	1,230,137	318,038	7	
1987	88,442	682,470	220,977	991,889	634,217	286,912	296,020	79,475	1,298,624	341,911	7	
1988	96,505	697,708	226,160	1,019,373	656,717	291,212	308,372	85,993	1,342,294	362,731	7	
1989	102,762	711,120	231,180	1,045,062	669,828	297,329	318,391	88,748	1,374,296	378,586	6	
1990	104,542	722,955	236,522	1,064,019	696,065	304,832	327,093	102,525	1,432,515	387,431	6	
1991	107,518	741,537	240,420	1,089,475	723,345	308,466	336,453	107,024	1,475,288	397,824	6	
1992	108,838	749,301	243,235	1,101,374	741,219	309,822	341,137	119,452	1,511,630	406,934	6	
1993	112,022	757,570	245,396	1,114,988	775,868	316,300	344,905	148,800	1,585,893	417,380	6	
1994	114,444	761,704	248,243	1,124,391	802,523	317,153	346,767	167,510	1,634,063	426,252	6	
1995	119,807	777,612	248,973	1,146,392	823,365	318,756	349,091	174,345	1,665,547	438,375	6	

Source : Hizmet Uygulamalari Genel Envanteri , Jan. 1, 1996

Note: Land consolidation are is included in on-farm area.

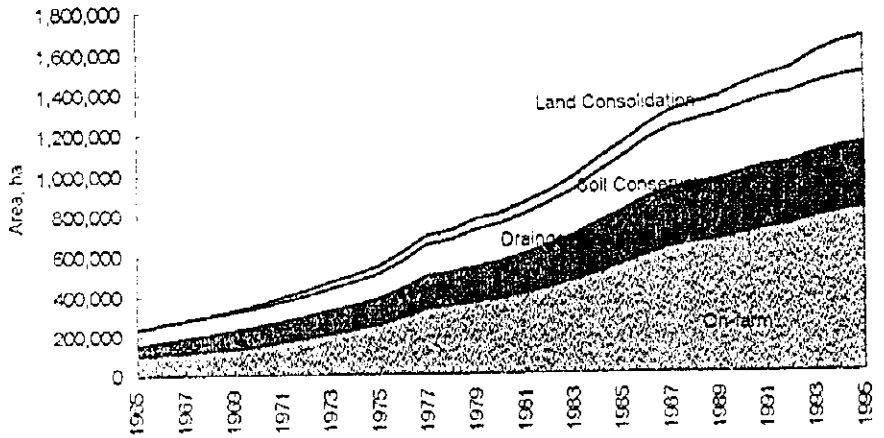

Table 4.2 Overall Works carried out by GDRS as of Jan. 1, 1996

No.	Regional Office	Irrigation			Soil Conservation			On-farm Development			Drainage and Reclamation			L.Consol.	Remarks
		No.	Area (ha)	Area/No.	No.	Area (ha)	Area/No.	No.	Area (ha)	Area/No.	No.	Area (ha)	Area/No.	Area (ha)	
1	Ankara	694	52,047	75	61	18,162	298	11	4,714	429	147	44,523	303	2,538	
2	Konya	927	106,439	115	77	26,221	341	39	98,073	2,515	45	9,616	214	44,579	
3	Adana	1,481	96,725	65	185	54,069	292	65	315,748	4,858	29	5,645	195	850	
4	Kayseri	1,092	85,271	78	171	28,999	170	23	12,203	531	126	27,362	217	335	
5	Sivas	769	48,953	64	64	6,236	97	26	26,538	1,021	51	12,082	237	4,455	
11	Trabzon	776	40,930	53	25	1,183	47	0	0	0	59	19,872	337	0	
12	Samsun	801	44,550	56	68	6,543	96	44	34,806	791	101	26,638	264	620	
13	Kastamonu	541	33,453	62	54	4,687	87	3	460	153	50	10,887	218	212	
14	Eskishehir	780	72,174	93	82	10,402	127	20	27,425	1,371	42	7,818	186	13,468	
15	Antalya	1,002	55,300	55	84	14,784	176	24	20,348	848	26	5,961	229	1,975	
16	Izmir	1,116	85,550	77	311	57,443	185	77	137,169	1,781	156	55,229	354	79,412	
17	Bursa	645	62,379	97	55	3,276	60	23	29,081	1,264	67	30,678	458	18,712	
18	Istanbul	449	60,570	135	32	2,893	90	32	9,136	286	211	50,212	238	4,876	
Total of Above		11,073	844,341	76	1,269	234,896	185	387	715,701	1,849	1,110	306,523	276	172,032	
Total of State		15,537	1,146,392	74	1,615	349,091	216	466	823,355	1,767	1,167	318,756	273	174,345	

Source : Hizmet Uygulamalari Genal Envanteri , Jan. 1, 1996. No. of Dam Irrigation was based on number of dams but not contract.

Table 4.3 Overall Irrigation Related Works carried out by GDRS as of Jan. 1, 1996

No.	Regional Office	Irrigation from Reservoirs			Surface Water Irrigation			Ground Water Irrigation			Total Irrigation Area			Remarks
		No.of Dam	Area (ha)	Area/No.	No.	Area (ha)	Area/No.	No.	Area (ha)	Area/No.	No.	Area (ha)	Area/No.	(No. of Dam Contracts)
1	Ankara	24	6,727	280	664	44,465	67	6	855	143	694	52,047	75	73
2	Konya	24	4,534	189	548	28,090	51	355	73,815	208	927	106,439	115	91
3	Adana	22	5,399	245	1,375	72,301	53	84	19,031	227	1,481	96,725	65	86
4	Kayseri	38	10,691	281	969	61,305	64	95	13,275	140	1,092	85,271	78	112
5	Sivas	46	8,308	181	705	37,861	54	18	2,784	155	769	48,953	64	143
11	Trabzon	10	3,218	322	761	36,952	49	5	760	152	776	40,930	53	34
12	Samsun	37	6,934	187	682	28,772	42	82	8,844	108	801	44,550	56	95
13	Kastamonu	11	2,129	194	517	29,140	56	13	2,184	168	541	33,453	62	37
14	Eskishehir	30	6,023	201	507	31,829	63	243	34,322	141	780	72,174	93	79
15	Antalya	12	3,560	297	824	37,595	46	166	14,145	85	1,002	55,300	55	45
16	Izmir	9	2,074	230	963	65,790	68	144	17,686	123	1,116	85,550	77	31
17	Bursa	51	19,446	381	544	34,744	64	50	8,189	164	645	62,379	97	172
18	Istanbul	112	21,724	194	258	20,727	80	79	18,119	229	449	60,570	135	278
Total of Above		426	100,761	237	9,307	529,571	57	1,340	214,009	160	11,073	844,341	76	1,276
Total of State		502	119,807	239	13,578	777,612	57	1,457	248,973	171	15,537	1,146,392	74	1,484

Source : Hizmet Uygulamalari Genal Envanteri , Jan. 1, 1996

Table 4.4 Overall Land Improvement Related Works carried out by GDRS as of Jan. 1, 1996

No.	Regional Office	Soil Conservation			On-farm Development			Drainage and Reclamation			Land Consolidation			Remarks
		No.	Area (ha)	Area/No.	No.	Area (ha)	Area/No.	No.	Area (ha)	Area/No.			Area (ha)	
1	Ankara	61	18,162	298	11	4,714	429	147	44,523	303			2,538	
2	Konya	77	26,221	341	39	98,073	2,515	45	9,616	214			44,579	
3	Adana	185	54,069	292	65	315,748	4,858	29	5,645	195			850	
4	Kayseri	171	28,999	170	23	12,203	531	126	27,362	217			335	
5	Sivas	64	6,236	97	26	26,538	1,021	51	12,082	237			4,455	
11	Trabzon	25	1,183	47	0	0	0	59	19,872	337			0	
12	Samsun	68	6,543	96	44	34,806	791	101	26,638	264			620	
13	Kastamonu	54	4,687	87	3	460	153	50	10,887	218			212	
14	Eskishehir	82	10,402	127	20	27,425	1,371	42	7,818	186			13,468	
15	Antalya	84	14,784	176	24	20,348	848	26	5,961	229			1,975	
16	Izmir	311	57,443	185	77	137,169	1,781	156	55,229	354			79,412	
17	Bursa	55	3,276	60	23	29,081	1,264	67	30,678	458			18,712	
18	Istanbul	32	2,893	90	32	9,136	286	211	50,212	238			4,876	
Total of Above		1,269	234,896	185	387	715,701	1,849	1,110	306,523	276			172,032	
Total of State		1,615	349,091	216	466	823,355	1,767	1,167	318,756	273			174,345	

Source : Hizmet Uygulamalari Genal Envanteri , Jan. 1, 1996

Table 4.5 Credit Financed, Livestock Ponds and Operating Cooperative as of Jan. 1, 1996

No.	Regional Office	Credit Financed Reclamation			Livestock Watering Ponds			Cooperative	Remarks
		No.	Area (ha)	Area/No.	No.	Big Cattle	Small Cattle	No.	
1	Ankara	3,022	12,601	4	224	122,591	780,137	51	
2	Konya	3,971	30,277	8	11	2,350	40,300	339	
3	Adana	8,724	117,698	13	93	39,149	220,476	93	
4	Kayseri	1,356	7,946	6	35	11,360	97,600	76	
5	Sivas	1,247	5,395	4	8	7,048	15,780	19	
11	Trabzon	3,048	5,342	2	-	-	-	8	
12	Samsun	2,219	11,172	5	57	20,750	193,570	105	
13	Kastamonu	674	2,005	3	9	3,950	16,065	42	
14	Eskisehir	5,445	26,852	5	209	87,981	543,540	239	
15	Antalya	8,053	20,300	3	3	1,391	17,998	206	
16	Izmir	25,171	82,251	3	462	150,168	777,064	194	
17	Bursa	7,669	27,008	4	2	1,450	7,000	76	
18	Istanbul	5,777	37,900	7	180	106,741	432,621	91	
Total of Above		76,376	386,746	5	1,293	554,929	3,142,151	1,539	
Total of State		82,022	438,375	5	2,054	1,063,834	5,475,262	1,611	

Source : Hizmet Uygulamalari Genal Envanteri , Jan. 1, 1996

E-5 Reference Crop Evapotranspiration ETo

Table 5.1 Summary of Crop Reference Evapotranspiration ETo by Modified Penman Method

Table 5.1 Summary of Crop Reference Evapotranspiration ETo by Modified Penman Method

Agro-ecological Zone		Region	Province	Crop Reference Evapotranspiration ETo, mm/day or mm/year												Remarks
				Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total	
Mediterranean Zone	Marmara	Istanbul	Istanbul	0.91	1.13	1.62	2.56	3.63	4.84	5.31	4.80	3.28	1.93	1.28	0.95	984	
			Edirne	0.60	0.98	1.64	2.73	3.82	4.83	5.42	4.85	3.21	1.73	0.86	0.56	954	
			Kirklareli	0.53	0.86	1.51	2.60	3.72	4.71	5.32	4.64	3.09	1.59	0.79	0.53	913	
			Kocaeli	0.87	1.16	1.67	2.69	3.73	4.70	4.96	4.43	3.06	1.78	1.13	0.88	948	
			Sakarya	0.91	1.19	1.63	2.43	3.32	4.33	4.45	4.01	2.80	1.57	1.06	0.96	874	
			Tekirdag	0.81	1.07	1.50	2.38	3.38	4.44	5.11	4.78	3.39	1.99	1.15	0.88	943	
		Bursa	Bursa	1.05	1.33	1.88	2.75	3.83	5.18	5.93	5.33	3.53	2.01	1.22	1.08	1072	
			Yalova	0.90	0.96	1.57	2.32	3.33	4.36	4.59	4.17	2.93	1.74	1.08	0.96	883	
	Aegean	Izmir	Izmir	1.38	1.84	2.53	3.61	4.98	6.56	7.40	6.74	4.85	2.94	1.78	1.35	1402	
			Aydin	0.99	1.43	2.17	3.29	4.60	6.04	6.54	5.77	4.12	2.39	1.29	0.92	1207	
			Denizli	0.86	1.26	2.01	3.04	4.20	5.44	5.90	5.02	5.53	2.01	1.17	0.81	1076	
			Manisa	1.02	1.47	2.25	3.36	4.64	6.22	7.02	6.40	4.47	2.52	1.32	0.92	1270	
			Mugla	1.01	1.42	2.17	3.26	4.57	6.54	7.85	7.17	5.17	2.80	1.42	0.98	1355	
		Bursa	Balikesir	0.75	1.12	1.78	2.83	4.04	5.53	6.51	5.94	4.03	2.20	1.08	0.73	1116	
			Canakkale	1.13	1.44	1.89	2.86	4.10	5.53	6.43	6.06	4.23	2.55	1.54	1.15	1189	
		Antalya	Burdur	0.91	1.31	2.17	3.34	4.34	5.38	6.57	5.66	4.13	2.50	1.45	0.86	1179	
			Isparta	0.79	1.15	1.94	2.97	4.02	5.12	5.93	5.28	3.76	2.12	1.18	0.77	1069	
	Mediterranean	Adana	Adana	1.45	1.80	2.55	3.49	4.69	5.74	6.11	5.76	4.46	2.92	1.75	1.34	1283	
			Icel	1.28	1.66	2.43	3.35	4.30	5.20	5.48	5.33	4.35	2.88	1.66	1.28	1196	
			Hatay	1.28	1.75	2.67	3.87	5.13	6.31	6.96	6.64	5.50	3.27	1.83	1.22	1417	
			Osmaniye	1.21	1.64	2.47	3.48	4.32	5.18	5.13	5.01	4.31	2.87	1.75	1.16	1175	
		Antalya	Antalya	1.69	2.05	2.79	3.64	4.69	6.21	6.94	6.38	5.16	3.40	2.19	1.74	1430	
Black Sea Zone	Black Sea	Trabzon	Trabzon	1.10	1.33	1.65	2.24	2.92	3.86	3.84	3.61	2.74	1.95	1.38	1.16	874	
			Bayburt	0.50	0.71	1.17	2.48	3.46	4.29	5.04	4.58	3.32	1.85	0.92	0.58	883	
			Giresun	0.89	1.10	1.48	2.07	2.83	3.76	3.75	3.40	2.51	1.57	1.02	0.90	771	
			Gumushane	0.60	0.94	1.60	2.55	3.44	4.38	4.93	4.43	3.11	1.64	0.84	0.60	887	
			Rize	0.70	1.04	1.45	2.11	2.85	3.65	3.44	3.15	2.39	1.58	1.01	0.80	737	
			Artvin	0.69	1.03	1.74	2.68	3.27	3.81	3.77	3.62	2.71	1.58	0.88	0.65	806	
		Kastamonu	Kastamonu	0.49	0.82	1.51	2.45	3.36	4.15	4.68	4.11	2.71	1.46	0.72	0.45	822	
			Zonguldak	0.98	1.34	1.70	2.36	3.24	4.30	4.63	4.16	3.03	1.94	1.44	1.21	925	
			Sinop	1.36	1.51	1.68	2.19	2.94	4.14	4.71	4.26	3.19	2.18	1.61	1.44	952	
			Karabuk	0.48	0.91	1.68	2.59	3.40	4.24	4.73	4.32	3.06	1.52	0.66	0.40	854	
			Bartin	0.54	0.86	1.48	2.28	3.13	4.13	4.47	3.87	2.58	1.40	0.75	0.51	794	
		Samsun	Samsun	1.50	1.41	1.50	2.01	2.81	3.93	4.38	4.00	2.86	1.82	1.42	1.52	890	
			Ordu	1.02	1.18	1.48	2.10	2.86	3.67	3.92	3.57	2.69	1.74	1.24	1.06	809	
Central Anatlian Zone	Central Northern	Ankara	Ankara	0.65	0.99	1.84	3.04	4.15	5.38	6.45	5.97	4.06	1.45	1.12	0.66	1092	
			Bolu	0.57	0.88	1.47	2.36	3.20	3.95	4.36	4.00	2.71	1.58	0.87	0.55	809	
			Cankiri	0.51	0.83	1.62	2.69	3.69	4.68	5.39	4.66	3.14	1.67	0.77	0.49	921	
			Kirikkale	0.57	0.94	1.82	2.89	3.81	5.03	5.88	5.31	3.57	1.85	0.91	0.59	1013	
		Eskisehir	Eskisehir	0.66	1.02	1.75	2.73	3.72	4.71	5.41	4.72	3.23	1.77	1.01	0.66	958	
			Kutahya	0.63	0.96	1.63	2.65	3.53	4.39	4.86	4.33	2.98	1.70	0.93	0.64	892	
			Usak	0.79	1.13	1.84	2.92	4.05	5.44	6.47	5.96	4.11	2.31	1.18	0.76	1129	
		Kayseri	Kirsehir	0.63	0.99	1.75	2.88	4.02	5.36	6.58	5.97	3.98	2.41	1.01	0.62	1106	
			Yozgat	0.71	0.89	1.55	2.59	3.44	4.63	5.55	5.03	3.53	2.01	1.06	0.68	967	
		Bursa	Bilecik	0.87	1.21	1.87	2.96	3.98	5.06	5.53	5.16	3.73	2.17	1.35	0.90	1062	
		Samsun	Corum	0.53	0.88	1.65	2.74	3.57	4.63	5.46	5.15	3.54	1.86	0.87	0.52	959	
	Central Southern	Konya	Konya	0.66	1.05	1.91	3.13	4.19	5.41	6.48	5.79	3.99	2.14	1.02	0.63	1112	
			Aksatay	0.84	1.20	2.06	3.07	4.23	5.49	6.46	5.76	4.08	2.29	1.23	0.82	1146	
			Karaman	0.79	1.13	1.99	3.22	4.27	5.61	6.49	5.73	4.05	2.27	1.25	0.78	1147	
			Nigde	0.93	1.26	2.08	3.30	4.44	5.72	6.88	6.35	4.54	2.64	1.44	0.95	1238	
		Kayseri	Kayseri	0.59	0.92	1.66	2.83	3.87	4.91	5.68	4.98	3.47	1.91	0.93	0.58	987	
			Nevsehir	0.88	1.18	1.91	3.01	4.06	5.14	5.91	5.29	3.75	2.28	1.38	0.92	1090	
		Eskisehir	Afyon	0.71	1.08	1.85	3.00	4.05	5.20	5.97	5.69	4.04	2.22	1.12	0.72	1089	
	Central Eastern	Sival	Sivas	0.54	0.78	1.47	2.59	3.61	4.65	5.37	4.78	3.27	1.79	0.86	0.52	923	
			Tokat	0.90	1.23	1.88	2.76	3.55	4.33	4.35	4.19	3.34	2.07	1.30	0.90	939	
		Samsun	Amasya	0.79	1.23	2.09	3.13	3.98	5.00	5.41	4.98	3.55	1.91	1.09	0.76	1035	

E-6 Total and Effective Rainfalls with Probability of 50, 80, 90 %

Table 6.1 Summary of Precipitation with a Probability of 50% by Logarithmic Normal Distribution

Agro-ecological Zone		Region	Province	Precipitation (mm)													Effective Precipitation (mm) by USBR Method												Remarks
				Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total	
Mediterranean Zone	Marmara	Istanbul	Istanbul	98	65	61	49	31	22	19	26	40	69	86	120	686	79	57	53	44	29	21	18	24	37	60	71	91	585	
			Edirne	64	53	54	53	48	45	27	24	37	44	64	72	584	56	47	48	47	43	41	26	23	34	40	56	62	523	
			Kirklareli	66	52	51	49	48	48	22	24	27	45	70	76	578	57	46	46	44	43	43	21	23	25	41	60	64	515	
			Kocaeli	87	66	65	51	44	48	32	45	54	87	83	112	773	72	57	56	46	40	43	30	41	48	72	69	87	661	
			Sakarya	91	71	73	58	46	65	51	48	50	79	82	106	820	75	61	62	51	42	56	45	44	45	66	69	84	700	
			Tekirdag	71	49	53	43	37	38	21	15	30	46	73	86	562	61	44	47	39	34	35	20	15	28	42	63	71	499	
		Bursa	Bursa	89	65	63	61	45	31	17	19	34	56	79	118	676	73	56	55	53	41	29	16	19	32	50	66	90	581	
			Yalova	97	76	70	54	34	32	22	29	55	74	82	123	747	78	65	60	48	32	30	21	27	49	63	68	93	634	
	Aegean	Izmir	Izmir	125	92	71	43	22	9	6	3	14	37	85	149	656	94	75	61	39	21	9	6	3	13	34	70	105	532	
			Aydin	106	93	67	51	27	17	6	5	16	38	69	127	622	84	76	58	46	25	17	6	5	16	35	59	95	521	
			Denizli	89	74	60	48	37	21	15	9	16	36	51	96	552	73	63	53	44	34	20	14	9	16	33	46	77	483	
			Manisa	127	105	85	58	33	17	12	11	18	46	89	160	761	95	83	70	51	31	17	11	11	17	42	73	109	610	
			Mugla	236	181	115	62	42	23	9	11	22	67	132	279	1179	125	115	89	54	38	22	9	11	21	58	97	153	792	
		Bursa	Balikesir	87	63	54	51	42	23	10	9	21	37	77	107	581	72	55	48	46	38	22	10	9	20	34	65	84	504	
			Canakkale	95	65	59	47	31	22	16	8	27	46	85	117	620	77	57	52	42	29	21	16	8	26	41	71	90	530	
		Antalya	Burdur	57	46	43	41	38	25	8	6	14	34	35	57	403	51	42	39	37	35	24	8	6	14	31	32	51	370	
			Isparta	75	70	53	53	47	31	12	10	12	36	45	89	532	64	60	47	47	42	29	12	10	12	33	41	73	471	
	Mediterranean	Adana	Adana	109	85	72	58	43	24	10	9	14	44	69	129	666	85	71	61	51	40	23	10	9	13	40	60	96	558	
			Icel	110	83	59	34	20	7	13	5	9	38	70	124	572	86	69	52	31	19	7	13	5	9	35	60	93	479	
			Hatay	178	154	138	103	76	31	26	17	25	85	102	178	1113	115	107	100	82	65	29	25	16	24	70	81	115	828	
			Osmaniye	110	104	110	104	70	35	18	27	48	95	89	121	930	86	82	86	82	60	32	18	25	43	77	73	92	756	
		Antalya	Antalya	227	178	97	43	27	9	5	2	13	66	125	222	1014	124	115	78	39	26	9	5	2	12	57	94	123	684	
Black Sea Zone	Black Sea	Trabzon	Trabzon	69	55	53	57	51	52	33	42	70	106	89	81	758	60	49	48	50	46	47	31	39	60	83	73	68	653	
			Bayburt	25	24	35	59	65	55	16	14	20	39	35	29	416	23	23	32	52	57	49	16	14	19	36	33	27	381	
			Giresun	123	92	89	83	67	79	76	92	114	158	142	131	1246	93	75	73	70	58	66	64	75	88	108	102	96	969	
			Gumushane	38	31	40	59	70	49	13	12	17	39	41	46	455	35	29	37	52	60	44	12	12	16	36	38	42	413	
			Rize	219	173	146	100	99	124	137	189	221	265	244	233	2150	123	113	104	80	79	93	99	118	123	151	125	124	1333	
			Artvin	80	65	53	58	51	48	24	26	32	54	70	97	659	67	56	47	51	46	43	23	25	30	48	61	78	576	
		Kastamonu	Kastamonu	32	27	33	58	67	65	33	30	27	38	29	36	476	30	26	31	51	58	57	30	29	26	36	27	34	433	
			Zonguldak	123	85	70	60	54	59	62	82	71	93	114	137	1011	93	71	60	53	48	52	54	69	61	76	88	100	824	
			Sinop	71	43	39	38	36	28	30	46	56	81	77	80	624	61	39	36	35	33	27	28	41	50	68	65	67	550	
			Karabuk	30	22	29	43	66	50	22	16	21	23	24	32	380	29	21	27	40	57	45	21	16	20	22	23	30	351	
			Bartin	123	85	70	60	54	59	62	82	71	93	114	137	1011	93	71	60	53	48	52	54	69	61	76	88	100	824	
		Samsun	Samsun	62	52	55	61	48	44	28	34	49	82	88	80	684	54	46	49	54	44	40	26	32	44	69	73	67	598	
			Ordu	97	77	74	69	51	73	69	67	74	122	116	120	1010	78	65	63	60	46	62	59	58	63	92	89	91	827	
Central Anatlian Zone	Central Northern	Ankara	Ankara	46	35	36	47	52	38	14	12	20	27	33	48	408	42	32	34	42	46	35	14	12	19	26	31	43	376	
			Bolu	58	41	47	49	61	52	29	27	28	39	46	67	545	52	38	43	44	54	47	27	25	26	36	41	58	491	
			Cankiri	115	90	71	44	22	8	4	5	12	32	83	130	617	89	74	61	40	21	8	4	5	12	30	69	96	509	
			Kirikkale	42	31	32	44	51	33	12	9	14	27	28	45	368	38	29	30	40	46	30	11	9	14	25	27	41	341	
		Eskisehir	Eskisehir	45	34	41	43	46	36	13	8	13	28	30	52	389	41	32	38	39	41	33	12	8	13	27	28	47	359	
			Kutahya	75	60	62	52	51	36	17	12	20	41	51	91	568	64	53	54	46	46	34	17	12	19	38	46	75	502	
			Usak	114	87	73	45	26	8	7	5	12	35	80	124	615	88	72	62	41	24	8	7	5	12	32	67	93	511	
		Kayseri	Kirsehir	46	38	36	44	43	35	8	4	12	27	39	50	383	42	35	34	40	39	33	8	4	12	25	36	45	353	
			Yozgat	73	66	62	66	62	41	14	7	17	34	57	80	577	62	58	54	57	54	38	13	7	16	31	51	67	508	
		Bursa	Bilecik	50	38	43	40	50	37	20	15	20	36	37	58	445	45	35	40	37	45	34	19	14	19	33	35	52	408	
		Samsun	Corum	41	31	36	52	60	50	19	14	21	29	36	49	436	37	29	33	47	53	45	18	14	20	27	33	44	400	
	Central Southern	Konya	Konya	37	30	29	30	47	23	7	7	11	30	31	42	325	34	29	27	29	43	22	7	7	11	28	29	38	304	
			Aksatay	35	35	39	46	39	26	6	3	7	22	31	41	331	32	33	36	42	36	25	5	3	7	21	29	38	307	
			Karaman	43	36	40	40	36	20	4	5	9	29	33	45	339	39	33	36	36	34	19	4	5	9	27	31	41	315	
			Nigde	30	32	35	45	49	24	6	5	11	22	30	40	330	28	30	33	41	45	23	6	5	10	21	28	37	307	
		Kayseri	Kayseri	33	32	40	56	48	42	11	6	15	28	36	38	385	31	30	36	50	44	38	11	6	15	26	34	35	355	
			Nevsehir	43	40	45	52	57	33	10	6	12	29	35	50	412	39	37	41	46	50	31	10	5	12	27	33	45	377	
		Eskisehir	Afyon	37	35	40	43	47	36	16	10	17	35	30	45	391	34	33	37	39	42	34	15	10	16	33	28	41	362	
	Central Eastern	Sival	Sivas	40	36	45	56	57	34	9	7	17	30	38	45	414	37	34	41	50	50	32	9	7	16	28	35	41	379	
			Tokat	44	33	36	55	54	38	11	5	18	33	42	49	417	40	31	33	49	48	35	11	5	17	31	38	44	382	
		Samsun	Amasya	53	38	45	57	47	36	20	7	18	32	41	56	450	47	35	41	51	42	33	19	7	17	30	38	50	410	

Table 6.2 Summary of Precipitation with a Probability of 80% by Logarithmic Normal Distribution

Agro-ecological Zone		Region	Province	Precipitation (mm)												Effective Precipitation (mm) by USBR Method												Remarks
				Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total	
Mediterranean Zone	Marmara	Istanbul	Istanbul	84	55	52	41	26	19	16	22	34	59	73	102	584	70	49	46	38	25	18	16	21	32	52	63	81	510	
			Edirne	55	45	46	46	41	39	23	21	31	38	55	62	503	49	41	42	41	38	36	22	20	29	35	49	54	457	
			Kirklareli	55	43	42	41	40	39	18	20	22	38	58	63	479	49	39	39	37	36	36	18	19	21	35	51	55	436	
			Kocaeli	74	56	55	44	38	41	28	39	47	75	71	96	664	63	50	49	40	35	38	26	36	42	64	61	78	582	
			Sakarya	81	63	65	51	41	58	45	43	45	70	73	94	729	68	55	56	46	37	51	41	39	41	60	62	76	634	
			Tekirdag	61	42	45	36	32	32	18	13	26	40	63	74	481	54	38	41	34	30	30	17	13	24	37	55	63	435	
		Bursa	Bursa	78	57	55	53	40	27	15	17	30	49	69	103	593	66	50	49	48	36	26	14	16	28	44	60	82	519	
			Yalova	82	65	60	45	29	27	19	24	47	62	69	104	634	69	56	52	41	27	25	18	23	43	55	60	82	552	
	Aegean	Izmir	Izmir	104	77	59	35	18	8	5	3	11	31	70	124	544	82	65	52	33	18	8	5	3	11	29	60	93	458	
			Aydin	90	78	56	43	22	15	5	4	14	32	58	107	524	73	66	50	39	21	14	5	4	13	30	51	84	452	
			Denizli	75	62	50	40	31	17	12	8	14	30	43	80	461	63	54	45	37	29	17	12	8	13	28	39	67	413	
			Manisa	106	87	71	48	28	15	10	9	15	39	74	133	634	83	72	61	43	26	14	9	9	14	36	63	98	530	
			Mugla	193	147	94	51	34	19	7	9	18	55	107	228	962	118	104	76	46	32	18	7	9	17	49	84	124	684	
		Bursa	Balikesir	74	54	46	43	35	19	8	7	18	31	65	91	493	63	48	42	40	33	19	8	7	17	29	57	74	437	
			Canakkale	79	54	49	39	25	18	14	7	23	38	70	97	511	66	48	44	36	24	18	13	7	22	35	60	78	450	
		Antalya	Burdur	48	39	36	34	32	21	7	5	12	28	29	48	340	44	36	33	32	30	21	7	5	11	27	28	43	316	
			Isparta	58	54	41	41	36	24	9	8	10	28	35	69	412	51	48	38	37	34	23	9	7	9	26	32	59	375	
	Mediterranean	Adana	Adana	83	65	55	44	33	18	8	7	10	33	53	96	506	69	56	49	40	31	18	8	7	10	31	47	79	444	
			Icel	86	65	46	26	15	5	10	4	7	30	55	97	447	71	56	42	25	15	5	10	4	7	28	49	78	391	
			Hatay	142	123	111	83	61	25	21	13	20	68	82	143	893	102	93	86	69	54	23	20	13	19	59	69	102	709	
			Osmaniye	90	85	90	85	57	28	15	22	39	78	73	99	763	74	71	74	71	51	27	15	21	36	66	62	79	646	
		Antalya	Antalya	178	140	76	33	21	7	4	2	10	52	98	173	794	115	101	65	31	20	7	4	2	10	46	79	113	592	
Black Sea Zone	Black Sea	Trabzon	Trabzon	63	49	48	51	46	47	30	38	63	96	80	73	686	55	45	44	46	42	43	28	35	55	77	67	63	600	
			Bayburt	21	20	29	49	54	46	13	12	17	33	29	24	346	20	19	27	44	48	42	13	12	16	30	28	23	322	
			Giresun	112	84	81	76	61	72	69	83	104	144	129	119	1132	87	70	68	64	53	61	59	70	82	103	96	91	903	
			Gumushane	33	27	35	51	61	43	11	11	15	34	36	40	395	31	25	32	46	54	39	11	10	14	31	33	37	364	
			Rize	199	157	133	91	90	113	124	172	201	241	222	211	1954	120	108	98	75	74	87	93	113	120	125	123	122	1257	
			Artivin	68	55	45	49	43	41	21	22	27	46	60	82	558	59	49	41	44	39	37	20	21	25	41	53	69	498	
		Kastamonu	Kastamonu	28	24	29	50	58	57	28	27	24	34	25	32	415	27	23	27	45	52	50	27	25	22	31	24	30	382	
			Zonguldak	109	75	61	53	48	52	55	73	63	82	100	121	892	85	64	54	47	43	46	49	62	55	69	80	92	747	
			Sinop	59	35	32	31	30	23	25	38	46	67	64	66	516	52	33	30	29	28	22	23	35	42	58	56	58	466	
			Karabuk	25	19	24	36	55	42	18	14	18	20	20	27	318	24	18	23	34	49	38	18	13	17	19	20	26	298	
			Bartin	109	75	61	53	48	52	55	73	63	82	100	121	892	85	64	54	47	43	46	49	62	55	69	80	92	747	
		Samsun	Samsun	54	45	48	53	42	38	24	29	42	71	77	69	592	48	41	43	47	38	35	23	28	39	61	65	59	528	
			Ordu	87	69	66	62	45	65	61	60	66	109	103	107	901	72	59	57	54	41	57	54	53	57	85	82	84	756	
Central Anatlian Zone	Central Northern	Ankara	Ankara	40	30	31	40	44	32	12	11	17	23	28	41	348	36	28	29	37	40	30	12	10	16	22	27	37	325	
			Bolu	52	36	42	43	54	46	26	24	25	34	40	60	482	46	34	38	40	48	42	24	23	23	32	37	53	440	
			Cankiri	96	75	60	37	19	7	3	4	10	27	69	108	516	78	64	53	34	18	7	3	4	10	25	60	85	441	
			Kirikkale	34	25	26	36	42	27	9	8	12	22	23	37	303	32	24	25	34	38	25	9	7	12	21	22	35	285	
		Eskisehir	Eskisehir	39	30	36	37	40	31	11	7	11	25	26	46	340	36	28	34	34	37	29	11	7	11	23	25	41	317	
			Kutahya	65	52	54	45	44	32	15	10	17	36	44	79	493	57	46	48	41	40	30	14	10	17	33	40	67	443	
			Usak	94	72	60	37	21	7	6	4	10	29	66	103	508	76	62	53	34	20	7	6	4	10	27	57	82	438	
		Kayseri	Kirsehir	39	32	31	37	37	30	7	4	11	23	33	43	327	36	30	29	35	34	28	7	4	10	22	31	39	306	
			Yozgat	62	57	53	56	53	35	12	6	14	29	49	68	492	54	50	47	50	47	33	11	6	14	27	44	59	441	
		Bursa	Bilecik	44	33	37	35	43	32	17	13	17	31	32	51	385	40	31	35	32	39	30	17	12	16	29	30	46	357	
		Samsun	Corum	35	27	31	45	52	43	16	12	18	25	31	42	378	33	25	29	41	47	39	16	12	17	24	29	39	351	
	Central Southern	Konya	Konya	30	25	24	25	39	19	6	6	9	25	25	35	267	29	24	23	24	36	18	6	6	9	24	24	32	253	
			Aksatay	30	30	34	39	33	22	5	3	6	19	27	35	283	28	28	31	36	31	21	5	3	6	18	25	33	266	
			Karaman	36	30	33	33	30	17	4	4	7	24	28	37	283	33	28	31	31	29	16	4	4	7	23	26	35	266	
			Nigde	23	25	27	35	38	19	4	4	8	17	23	31	255	22	24	26	32	35	18	4	4	8	16	22	29	241	
		Kayseri	Kayseri	27	26	33	47	40	35	9	5	13	23	30	32	322	26	25	31	43	37	32	9	5	12	22	28	30	301	
			Nevsehir	37	34	39	44	49	29	9	5	11	25	30	43	353	34	32	36	40	44	27	9	5	10	24	28	39	328	
		Eskisehir	Afyon	31	29	33	36	39	30	13	9	14	30	25	37	326	29	28	31	33	36	28	13	8	14	28	23	35	306	
	Central Eastern	Sival	Sivas	35	31	39	48	49	30	8	6	15	26	33	39	357	32	29	36	43	44	28	7	6	14	25	31	36	331	
			Tokat	38	29	32	48	48	33	10	4	15	29	37	43	367	35	27	30	44	43	31	10	4	15	28	34	40	340	
		Samsun	Amasya	45	33	38	49	40	31	17	6	15	28	35	48	388	41	31	35	44	37	29	16	6	15	26	33	44	359	

Table 6.3 Summary of Precipitation with a Probability of 90% by Logarithmic Normal Distribution

Agro-ecological Zone		Region	Province	Precipitation (mm)												Effective Precipitation (mm) by USBR Method												Remarks
				Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total	
Mediterranean Zone	Marmara	Istanbul	Istanbul	76	51	47	38	24	17	15	20	31	54	67	94	533	65	45	43	35	23	16	14	19	29	48	58	76	472	
			Edirne	50	42	43	42	38	36	21	19	29	34	51	57	461	45	38	39	38	35	33	20	18	27	32	46	50	423	
			Kirklareli	49	38	38	36	35	35	16	18	20	34	52	56	429	44	35	35	34	33	33	16	17	19	31	47	50	395	
			Kocaeli	69	52	51	40	35	38	25	36	43	69	66	89	613	59	47	46	37	32	35	24	33	39	60	57	73	543	
			Sakarya	76	59	61	48	38	54	42	40	42	66	69	89	685	65	52	53	44	35	48	39	37	39	57	59	73	602	
			Tekirdag	56	39	41	34	29	30	16	12	24	37	58	68	443	50	36	38	31	28	28	16	12	22	34	51	59	404	
		Bursa	Bursa	73	53	51	50	37	26	14	16	28	46	65	96	554	62	47	46	45	34	24	13	15	26	42	56	78	490	
			Yalova	75	59	54	41	27	25	17	22	43	57	63	95	578	64	52	48	38	25	23	17	21	39	50	55	77	510	
	Aegean	Izmir	Izmir	95	70	54	33	17	7	5	3	10	28	64	113	499	77	60	48	30	16	7	5	2	10	27	56	88	427	
			Aydin	83	72	52	40	21	13	5	4	13	30	53	99	484	69	62	47	37	20	13	5	4	12	28	48	79	422	
			Denizli	68	57	46	37	28	16	11	7	12	27	39	74	424	59	50	42	34	27	15	11	7	12	26	36	63	383	
			Manisa	96	80	64	44	25	13	9	8	13	35	68	122	578	78	67	56	40	24	13	9	8	13	33	59	92	491	
			Mugla	174	133	85	46	31	17	6	8	16	49	97	206	869	114	98	71	42	29	16	6	8	15	44	78	121	643	
		Bursa	Balikesir	68	49	42	40	33	18	8	7	16	29	60	83	452	59	45	39	37	30	17	7	7	16	27	53	69	405	
			Canakkale	71	49	44	35	23	17	12	6	20	34	64	87	462	61	44	40	32	22	16	12	6	20	32	55	72	412	
		Antalya	Burdur	45	35	33	31	30	20	6	4	11	26	27	44	313	41	33	31	29	28	19	6	4	11	25	26	40	292	
			Isparta	51	47	36	36	32	21	8	7	8	24	30	60	361	46	43	33	33	30	20	8	7	8	23	28	53	332	
	Mediterranean	Adana	Adana	72	56	47	38	28	16	7	6	9	29	46	85	437	61	50	43	35	27	15	7	6	9	27	41	70	391	
			Icel	76	57	41	23	14	5	9	3	6	26	48	86	396	65	51	37	22	13	5	9	3	6	25	44	71	352	
			Hatay	128	111	100	75	55	22	19	12	18	61	74	128	804	95	86	80	63	49	21	18	12	17	54	63	95	655	
			Osmaniye	81	76	81	76	51	25	13	20	35	69	65	88	681	68	65	68	65	46	24	13	19	33	60	57	73	588	
		Antalya	Antalya	158	124	68	30	19	6	3	2	9	46	87	155	707	108	93	59	28	18	6	3	2	9	42	72	107	547	
Black Sea Zone	Black Sea	Trabzon	Trabzon	60	47	46	49	44	45	29	37	60	91	77	70	655	53	43	42	44	40	41	27	34	53	75	65	60	577	
			Bayburt	19	18	26	44	49	41	12	11	15	29	26	22	312	18	17	25	40	44	38	12	10	15	28	25	21	292	
			Giresun	105	79	76	71	57	67	65	79	97	135	122	112	1065	83	66	65	61	51	58	56	66	78	99	92	87	862	
			Gumushane	30	24	32	47	56	39	10	10	14	31	33	37	365	29	23	30	43	50	36	10	10	13	29	31	34	338	
			Rize	190	150	127	87	85	108	119	164	191	230	212	202	1866	118	105	95	72	71	84	91	110	118	124	122	120	1230	
			Artvin	63	51	41	45	40	37	19	20	25	42	55	76	514	55	45	38	41	37	35	18	20	23	39	49	64	464	
		Kastamonu	Kastamonu	26	22	27	47	54	53	26	25	22	31	23	30	386	25	21	25	42	48	47	25	24	21	29	22	28	358	
			Zonguldak	102	71	58	50	45	49	51	68	59	77	94	114	839	81	61	51	45	41	44	46	59	52	65	77	88	710	
			Sinop	54	32	29	29	27	21	22	34	42	61	58	61	471	48	30	28	27	26	20	21	32	39	54	51	53	429	
			Karabuk	23	17	22	33	50	38	17	12	16	18	19	25	290	22	17	21	31	45	35	16	12	16	17	18	23	273	
			Bartin	102	71	58	50	45	49	51	68	59	77	94	114	839	81	61	51	45	41	44	46	59	52	65	77	88	710	
		Samsun	Samsun	49	41	44	49	39	35	22	27	39	66	71	64	546	45	38	40	44	36	33	21	26	36	57	61	55	491	
			Ordu	82	65	62	58	43	61	58	56	62	102	97	101	847	68	57	54	51	39	34	51	50	54	81	78	80	719	
Central Anatlian Zone	Central Northern	Ankara	Ankara	36	27	28	37	41	30	11	10	16	21	26	37	321	34	26	27	34	37	28	11	10	15	20	25	35	301	
			Bolu	49	34	39	41	51	43	24	22	23	32	38	56	454	44	32	36	37	46	40	23	21	22	30	35	50	417	
			Cankiri	88	69	54	34	17	6	3	4	9	24	63	99	471	73	59	49	32	16	6	3	4	9	23	55	79	408	
			Kirikkale	31	23	24	33	38	24	9	7	11	20	21	34	275	29	22	23	31	35	23	8	7	11	19	20	32	260	
		Eskisehir	Eskisehir	37	28	34	35	37	29	10	7	11	23	25	43	317	34	26	31	32	34	27	10	7	10	22	23	39	297	
			Kutahya	61	49	50	42	42	30	14	10	16	33	41	74	462	54	44	45	39	38	28	14	10	16	31	38	63	419	
			Usak	85	65	54	33	19	6	5	4	9	26	60	93	459	70	57	48	31	18	6	5	4	9	25	53	75	402	
		Kayseri	Kirsehir	36	30	29	35	34	28	7	3	10	21	30	39	302	34	28	27	32	32	26	7	3	10	20	29	36	284	
			Yozgat	57	52	48	51	48	32	11	5	13	26	45	62	451	50	46	44	46	44	30	10	5	13	25	41	55	409	
		Bursa	Bilecik	40	31	35	32	40	29	16	12	16	29	30	47	356	37	29	32	30	37	28	16	12	15	27	28	42	332	
		Samsun	Corum	33	25	29	42	48	40	15	11	17	24	29	39	352	31	24	27	39	44	37	15	11	16	22	27	36	328	
	Central Southern	Konya	Konya	26	23	21	23	35	17	5	5	8	22	23	31	242	26	22	20	22	33	16	5	5	8	21	22	29	230	
			Aksatay	28	28	32	37	31	21	4	3	6	18	25	33	267	26	27	30	34	29	20	4	3	6	17	24	31	252	
			Karaman	32	27	30	30	28	15	3	3	7	22	25	34	257	30	26	28	28	26	15	3	3	7	21	24	32	243	
			Nigde	20	21	24	30	33	16	4	4	7	15	20	27	220	19	21	22	28	31	16	4	4	7	14	19	25	210	
		Kayseri	Kayseri	25	24	30	42	36	31	8	5	11	21	27	29	290	23	23	28	39	34	29	8	5	11	20	26	27	274	
			Nevsehir	34	32	36	41	45	27	8	4	10	23	28	39	327	32	30	33	38	41	25	8	4	10	22	26	36	305	
		Eskisehir	Afyon	28	27	31	33	36	28	12	8	13	27	22	34	298	27	25	29	31	33	26	12	8	12	26	21	32	282	
	Central Eastern	Sival	Sivas	32	29	36	45	46	28	7	6	14	24	30	36	333	30	27	34	41	42	26	7	5	13	23	29	34	311	
			Tokat	36	27	30	45	45	31	9	4	14	27	34	41	344	33	26	28	41	41	29	9	4	14	26	32	37	321	
		Samsun	Amasya	42	30	35	45	37	28	16	6	14	26	33	44	356	38	29	33	41	34	27	15	6	14	24	30	40	332	

E-7 Diversion Requirement and Irrigation Potential

Table 7.1 Summary of Diversion Water Requirement

Agro-ecological Zone	Crop Area Gross ha	Probability 50%, '000CUM		Probability 80%, '000CUM		Probability 90%, '000CUM		Remarks
		Net	Gross	Net	Gross	Net	Gross	
Marmara	3,126	12,148	20,246	12,699	21,166	12,980	21,633	
Groundwater	546	2,122	3,536	2,218	3,697	2,267	3,779	
Surface	794	3,086	5,143	3,226	5,376	3,297	5,495	
Dam	1,786	6,940	11,567	7,256	12,093	7,416	12,360	
Aegean	16,783	90,748	151,247	93,989	156,648	95,445	159,075	
Groundwater	6,167	33,346	55,576	34,537	57,561	35,072	58,453	
Surface	5,871	31,745	52,909	32,879	54,798	33,388	55,647	
Dam	4,745	25,657	42,761	26,573	44,288	26,985	44,975	
Mediterranean	15,096	77,798	129,663	81,072	135,120	82,537	137,561	
Groundwater	1,286	6,627	11,045	6,906	11,510	7,031	11,718	
Surface	6,820	35,145	58,575	36,624	61,040	37,286	62,143	
Dam	6,991	36,026	60,043	37,542	62,570	38,220	63,701	
Black Sea	17,526	41,910	69,850	45,504	75,841	47,255	78,758	
Groundwater	3,177	7,598	12,663	8,249	13,749	8,567	14,278	
Surface	13,676	32,705	54,509	35,510	59,184	36,876	61,461	
Dam	672	1,607	2,678	1,745	2,908	1,812	3,020	
Central Northern	17,961	70,904	118,173	73,968	123,280	75,486	125,810	
Groundwater	2,180	8,606	14,343	8,978	14,963	9,162	15,270	
Surface	11,660	46,030	76,716	48,019	80,032	49,004	81,674	
Dam	4,121	16,268	27,114	16,971	28,286	17,320	28,866	
Central Southern	38,336	199,240	332,067	208,179	346,966	212,560	354,267	
Groundwater	16,053	83,431	139,051	87,174	145,290	89,008	148,347	
Surface	14,927	77,579	129,298	81,059	135,099	82,765	137,942	
Dam	7,356	38,231	63,718	39,946	66,577	40,787	67,978	
Central Eastern	15,020	59,547	99,245	61,886	103,144	62,946	104,910	
Groundwater	774	3,069	5,114	3,189	5,315	3,244	5,406	
Surface	13,064	51,792	86,320	53,827	89,712	54,749	91,248	
Dam	1,182	4,686	7,810	4,870	8,117	4,954	8,256	
Total in '000CUM	123,847	552,294	920,490	577,298	962,164	589,209	982,015	
Total in mm		446	743	466	777	476	793	
Percent to P50%		100	100	105	105	107	107	

Table 7.2 Summary of Irrigable Percent in terms of Water Availability

Agro-ecological Zone	Crop Area Gross ha	Probability 50% Irrigable %	Probability 80% Irrigable %	Probability 90% Irrigable %	Remarks
Marmara	3,126	100	100	100	
Groundwater	546	100	100	100	
Surface	794	100	100	100	
Dam	1,786	100	100	100	
Aegean	16,783	92	91	90	
Groundwater	6,167	100	100	100	
Surface	5,871	100	100	100	
Dam	4,745	73	67	65	
Mediterranean	15,096	64	56	53	
Groundwater	1,286	100	100	100	
Surface	6,820	52	40	35	See note
Dam	6,991	69	63	61	
Black Sea	17,526	100	100	100	
Groundwater	3,177	100	100	100	
Surface	13,676	100	100	100	
Dam	672	100	100	100	
Central Northern	17,961	97	84	78	
Groundwater	2,180	100	100	100	
Surface	11,660	100	89	82	See note
Dam	4,121	86	63	54	
Central Southern	38,336	64	62	60	
Groundwater	16,053	100	100	100	
Surface	14,927	12	10	9	See note
Dam	7,356	91	85	79	
Central Eastern	15,020	22	20	19	
Groundwater	774	100	100	100	
Surface	13,064	10	9	8	See note
Dam	1,182	100	92	80	
Overall Percent	123,847	73	70	68	
Percent to P50%		100	95	92	

Note: Because of lack of catchment areas' data, these are not precise.

Table 7.3 Summary of Service Area, Catchment Area and Reservoir relating to Irrigation Project

Agro-ecological Zone		Region	Province	Service Area in ha				Cathm'nt Area in Km2				Reservoir			Surface C.A./S.A. Ratio	Rain. P50% in mm	Remarks
				G.W.	Dam	Surface	Total	G.W.	Dam	Surface	Total	MCM	MCM/S.A in cm	MCM/C.A in cm			
Mediterranean Zone	Marmara	Istanbul	Istanbul													686	
			Edirne													584	
			Kirklareli	435			435									578	
			Kocaeli													773	
			Sakarya													820	
			Tekirdag	111	1,210	204	1,525		420	7	427	7.09	59	2	3	562	
		Bursa	Bursa		369	590	959		10	2,617	2,627	2.22	60	22	444	676	
			Yalova		207		207		6		6	0.97	47	16		747	
	Total			546	1,786	794	3,126	0	436	2,624	3,060	10.28	58	2	331		
	Aegean	Izmir	Izmir	2,666	816	579	4,061		115	24	139	1.50	18	1	4	658	
			Aydin			503	503								0	622	
			Denizli	1,651	532	48	2,231		6	4	10	1.88	35	31	8	552	
			Manisa	15	110	80	205		150	6	156		0	0	8	761	
			Mugla	207	639	757	1,603	8	8	72	88	2.69	42	34	10	1,179	
		Bursa	Balikesir		620	2,596	3,216		11		11	4.09	66	37	0	581	
			Canakkale		373	317	690		17	11,500	11,517	2.38	64	14	3,628	620	
		Antalya	Burdur	1,628	1,568	990	4,185		107		107	8.97	57	8	0	403	
			Isparta		88		88					0.56	64			532	
	Total			6,167	4,745	5,871	16,783	8	414	11,606	12,028	22.06	46	5	198		
	Mediterranean	Adana	Adana	231	2,196	4,461	6,888		57	19	76	13.52	62	24	0	666	
			Icel		3,190	359	3,549		131	1	132	14.30	45	11	0	572	
			Hatay	455	1,379	440	2,273	4,800	34	114	4,948	3.39	25	10	26	1,113	
			Osmaniye													930	
		Antalya	Antalya	599	226	1,561	2,386		6	1,834	1,840	1.58	70	26	118	1,014	
	Total			1,286	6,991	6,820	15,096	4,800	228	1,968	8,996	32.79	47	14	29		
Black Sea Zone	Black Sea	Trabzon	Trabzon			192	192			85	85				44	758	
			Bayburt			1,008	1,008			185	185				18	416	
			Giresun		12	1,079	1,091					0.02	12		0	1,246	
			Gumushane		110	1,650	1,760		16	686	702	1.16	106	7	42	455	
			Rize													2,150	
			Artvin		16	2,678	2,694		1		1	0.11	67	11	0	659	
		Kastamonu	Kastamonu	405	150	1,047	1,602		58	998	1,056	0.91	61	2	95	476	
			Zonguldak	575		516	1,091			1,824	1,824				353	1,011	
			Sinop	2,198	43	637	2,878		4	936	940		0	0	147	624	
			Karabuk			1,745	1,745								0	380	
			Bartin			2,490	2,490			5,601	5,601				225	1,011	
		Samsun	Samsun		341	635	976		13	330	343	1.15	34	9	52	684	
			Ordu													1,010	
	Total			3,177	672	13,676	17,526	0	92	10,645	10,737	3.35	50	4	78		
Central Anatlian Zone	Central Northern	Ankara	Ankara	733	278	4,373	5,435	35,954	22	1,993	37,969	2.14	77	10	46	408	
			Bolu		2,050		2,050		36		36	13.65	67	38		545	
			Cankiri		385	2,343	2,728		40	3,006	3,046	0.20	5	0	128	617	
			Kirikkale	310		1,287	1,597								0	368	
		Eskisehir	Eskisehir	672	172	381	1,225		9	12	21	0.80	46	9	3	389	
			Kutahya	416	444	128	988		20		20	2.38	54	12	0	568	
			Usak		446	36	483		56		56	2.92	65	5	0	615	
		Kayseri	Kirsehir		211		211		16		16	1.50	71	9		383	
			Yozgat													577	
		Bursa	Bilecik		83		83		9		9	0.44	53	5		445	
		Samsun	Corum		52	3,110	3,162		5	1,107	1,112	0.25	48	5	36	436	
	Total			2,180	4,121	11,660	17,961	35,954	212	6,118	42,285	24.28	59	11	52		
	Central Southern	Konya	Konya	8,029	3,680	3,048	14,757		296		296	22.20	61	8	0	325	
			Aksaray	1,238	657	4,399	6,294		380	2,030	2,410	9.56	145	3	46	331	
			Karaman	1,203		1,596	2,799			294	294				18	339	
			Nigde	2,028	2,575	1,709	6,312		134	239	373	1.49	6	1	14	330	
		Kayseri	Kayseri	1,106		3,872	4,978			56	56				1	365	
			Nevsehir	478	444	242	1,164		329		329	2.48	56	1	0	412	
		Eskisehir	Afyon	1,971		62	2,033				0				0	391	
	Total			16,053	7,356	14,927	38,336	0	1,138	2,619	3,758	35.81	49	3	18		
	Central Eastern	Sival	Sivas		880	11,965	12,845		91	961	1,052	6.71	76	7	8	414	
			Tokat		302	201	503		11	159	170	1.00	33	9	79	417	
		Samsun	Amasya	774		898	1,672			143	143				16	450	
	Total			774	1,182	13,064	15,020	0	102	1,263	1,365	7.71	65	8	10		
Grand Total				30,183	26,853	66,812	123,847	40,782	2,622	36,844	80,229	136.27	51	5	55		

Table 7.4 Water Requirement and Diversion Requirement In Marumara with P50% Rainfall

Agro-ecological Zone	Crop		Crop Evapotranspiration ETo & ETcrop, and Diversion Water Requirement												Remarks
			Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total	
Marmara	ETo, mm/day		0.85	1.11	1.62	2.52	3.56	4.70	5.36	4.89	3.36	1.92	1.12	0.90	974	
	Crop Evapotr'n, ETcrop		mm/day													
	Wheat		1.02	1.35	2.03	3.48	5.16	4.93	1.93	0.00	0.00	0.71	0.95	0.84	681	
	Barley		1.02	1.35	2.03	3.48	5.16	4.93	1.93	0.00	0.00	0.71	0.95	0.84	681	
	Maize		0.00	0.00	0.00	0.00	1.99	3.76	4.67	4.50	2.29	0.00	0.00	0.00	534	
	Paddy		0.00	0.00	0.00	0.00	7.52	11.04	15.37	12.76	7.19	0.00	0.00	0.00	1652	
	Beans		0.00	0.00	0.00	0.86	1.92	2.58	4.12	2.93	0.00	0.00	0.00	0.00	382	
	Sugarbeet		0.00	0.00	0.00	1.11	1.71	6.34	6.70	6.11	4.10	1.92	0.00	0.00	856	
	Sunflower		0.00	0.00	0.00	0.76	1.10	1.79	6.37	2.10	1.08	0.00	0.00	0.00	406	
	Cotton		0.00	0.00	0.00	0.00	2.71	4.14	6.80	5.67	1.48	0.67	0.00	0.00	660	
	Vegetables		0.00	0.00	0.00	1.06	2.28	3.85	4.07	2.54	2.15	1.58	0.85	0.00	562	
	Fruits		0.00	0.00	0.00	1.71	2.56	3.76	4.34	3.86	2.49	1.31	0.00	0.00	613	
	Alfalfa		0.00	0.00	0.00	0.00	3.10	4.51	5.14	4.60	2.62	1.19	0.00	0.00	649	
	Others		0.00	0.00	0.00	1.99	2.96	5.12	5.89	5.67	2.65	0.00	0.00	0.00	743	
	Effective Rainfall P50%, mm		65.45	49.44	50.15	44.73	37.51	33.96	18.96	17.98	30.22	45.64	63.81	77.52	535	
	Diversion Water in mm/month															
	Wheat		0.00	0.00	-12.73	-59.60	-122.60	-114.07	-40.82	0.00	0.00	0.00	0.00	0.00	-350	
	Barley		0.00	0.00	-12.73	-59.60	-122.60	-114.07	-40.82	0.00	0.00	0.00	0.00	0.00	-350	
	Maize		0.00	0.00	0.00	0.00	-24.33	-78.83	-132.15	-121.45	-38.34	0.00	0.00	0.00	-395	
	Paddy		0.00	0.00	0.00	0.00	-195.48	-297.34	-457.60	-377.57	-185.54	0.00	0.00	0.00	-1514	
	Beans		0.00	0.00	0.00	0.00	-22.12	-43.58	-108.90	-72.95	0.00	0.00	0.00	0.00	-248	
	Sugarbeet		0.00	0.00	0.00	0.00	-15.49	-156.36	-188.60	-171.46	-92.78	-14.00	0.00	0.00	-639	
	Sunflower		0.00	0.00	0.00	0.00	0.00	-19.62	-178.64	-47.19	-2.04	0.00	0.00	0.00	-247	
	Cotton		0.00	0.00	0.00	0.00	-46.41	-90.10	-191.92	-157.82	-14.14	0.00	0.00	0.00	-500	
	Vegetables		0.00	0.00	0.00	0.00	-33.16	-81.65	-107.24	-60.83	-34.30	-3.26	0.00	0.00	-320	
	Fruits		0.00	0.00	0.00	-6.68	-41.99	-78.83	-115.54	-101.75	-44.39	0.00	0.00	0.00	-389	
	Alfalfa		0.00	0.00	0.00	0.00	-58.56	-101.38	-140.45	-124.48	-48.42	0.00	0.00	0.00	-473	
	Others		0.00	0.00	0.00	-15.00	-54.14	-119.71	-163.70	-157.82	-49.43	0.00	0.00	0.00	-560	
	Diversion Water in '000cum															
	Crop & Area	x 0.864ha														Converted into net area with conversion factor of 0.864
	Wheat	173			-22	-103	-212	-197	-71						-605	
	Barley	0														
	Maize	216					-53	-170	-285	-262	-83				-853	
	Paddy	86					-169	-257	-395	-326	-160				-1308	
	Beans	475					-105	-207	-517	-347					-1176	
	Sugarbeet	864					-134	-1351	-1630	-1481	-802	-121			-5518	
	Sunflower	475						-93	-849	-224	-10				-1176	
	Cotton	0														
	Vegetables	130					-43	-106	-139	-79	-44	-4			-415	
	Fruits	282				-19	-118	-222	-325	-287	-125				-1096	
	Alfalfa	0														
	Others	0														
	Total in Net	2701			-22	-122	-834	-2603	-4212	-3006	-1224	-125			-12148	Total Net Diversion Water
	Total in Gross (/0.6)				-37	-203	-1389	-4339	-7019	-5010	-2040	-209			-20246	Total Gross Diversion Water
	G.W. Related	546			-6	-35	-243	-758	-1226	-875	-356	-36			-3536	'000cum, Area in Gross
	Surface Related	794			-9	-52	-353	-1102	-1783	-1273	-518	-53			-5143	'000cum, Area in Gross
	Dam Related	1786			-21	-116	-794	-2479	-4010	-2863	-1165	-119			-11567	'000cum, Area in Gross
	Total Rainfall	mm/month	77.75	55.83	56.64	49.82	40.90	36.71	19.74	18.72	32.41	50.94	75.12	96.88	611	mm/month
	Runoff (%)	24	18.56	13.32	13.52	11.89	9.76	8.76	4.71	4.47	7.74	12.16	17.93	23.12	146	mm/month
	Surface (CA.km2)	2624	48694	34964	35471	31204	25615	22990	12366	11721	20299	31906	47048	60674	382953	Runoff in '000cum
	Balance		48694	34964	35462	31153	25263	21888	10583	10449	19781	31853	47048	60674	377811	'000cum
	Irrigable percent		100	100	100	100	100	100	100	100	100	100	100	100	100	in %
	Dam(C.A.km2)	436	8091	5810	5894	5185	4256	3820	2055	1948	3373	5302	7817	10082	63631	Runoff in '000cum
	Balance		8091	5810	5873	5069	3463	1341	-1956	-915	2207	5182	7817	10082	52063	
	Stored'000cum	10280	8091	5810	5873	5069	3463	1341			2207	5182	7817	10082	10280	54934
	Balance(%)										(Dam storable runoff) / (Dam capacity)				534	in %
	Released water								-1956	-915					-2871	
	Irrigable percent														100	in %

Table 7.5 Water Requirement and Diversion Requirement in Aegean with P50% Rainfall

Agro-ecological Zone	Crop		Crop Evapotranspiration ETo & ETcrop, and Diversion Water Requirement												Remarks
			Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total	
Aegean	ETo, mm/day		1.01	1.42	2.15	3.24	4.44	5.85	6.79	6.06	4.58	2.51	1.41	0.97	1226	
	Crop Evapotr'n, ETcrop	mm/day														
	Wheat		1.21	1.71	2.69	4.47	6.44	6.14	2.44	0.00	0.00	0.93	1.20	0.91	856	
	Barley		1.21	1.71	2.69	4.47	6.44	6.14	2.44	0.00	0.00	0.93	1.20	0.91	856	
	Maize		0.00	0.00	0.00	0.00	2.49	4.68	6.18	5.58	3.11	0.00	0.00	0.00	675	
	Paddy		0.00	0.00	0.00	0.00	9.37	13.74	19.48	15.82	9.79	0.00	0.00	0.00	2091	
	Beans		0.00	0.00	0.00	1.10	2.40	3.22	5.23	3.64	0.00	0.00	0.00	0.00	479	
	Sugarbeet		0.00	0.00	0.00	1.42	2.13	7.89	8.49	7.58	5.58	2.51	0.00	0.00	1089	
	Sunflower		0.00	0.00	0.00	0.97	1.38	2.22	8.08	2.61	1.46	0.00	0.00	0.00	514	
	Cotton		0.00	0.00	0.00	0.00	3.37	5.15	8.62	7.03	2.01	0.88	0.00	0.00	832	
	Vegetables		0.00	0.00	0.00	1.36	2.84	4.80	5.16	3.15	2.93	2.06	1.08	0.00	714	
	Fruits		0.00	0.00	0.00	2.20	3.20	4.68	5.50	4.79	3.39	1.71	0.00	0.00	779	
	Alfalfa		0.00	0.00	0.00	0.00	3.86	5.61	6.52	5.70	3.57	1.56	0.00	0.00	822	
	Others		0.00	0.00	0.00	2.56	3.69	6.37	7.47	7.03	3.62	0.00	0.00	0.00	940	
	Effective Rainfall P50%, mm		78.04	64.58	54.26	42.60	31.97	18.80	9.16	6.76	16.36	36.05	58.74	87.22	505	
	Diversion Water in mm/month															
	Wheat		0.00	0.00	-29.03	-91.42	-167.63	-165.41	-66.59	0.00	0.00	0.00	0.00	0.00	-520	
	Barley		0.00	0.00	-29.03	-91.42	-167.63	-165.41	-66.59	0.00	0.00	0.00	0.00	0.00	-520	
	Maize		0.00	0.00	0.00	0.00	-45.12	-121.55	-182.33	-166.10	-77.00	0.00	0.00	0.00	-592	
	Paddy		0.00	0.00	0.00	0.00	-258.49	-393.48	-594.77	-483.63	-277.45	0.00	0.00	0.00	-2008	
	Beans		0.00	0.00	0.00	0.00	-42.36	-77.70	-152.87	-105.97	0.00	0.00	0.00	0.00	-379	
	Sugarbeet		0.00	0.00	0.00	-0.13	-34.10	-218.05	-253.87	-228.10	-151.14	-41.75	0.00	0.00	-927	
	Sunflower		0.00	0.00	0.00	0.00	-10.70	-47.87	-241.25	-74.03	-27.57	0.00	0.00	0.00	-401	
	Cotton		0.00	0.00	0.00	0.00	-72.65	-135.59	-258.08	-211.19	-44.05	0.00	0.00	0.00	-722	
	Vegetables		0.00	0.00	0.00	0.00	-56.13	-125.06	-150.76	-90.94	-71.51	-27.75	0.00	0.00	-522	
	Fruits		0.00	0.00	0.00	-23.44	-67.14	-121.55	-161.29	-141.67	-85.23	-16.85	0.00	0.00	-617	
	Alfalfa		0.00	0.00	0.00	0.00	-87.79	-149.63	-192.85	-169.86	-90.73	-12.19	0.00	0.00	-703	
	Others		0.00	0.00	0.00	-34.12	-82.28	-172.43	-222.31	-211.19	-92.10	0.00	0.00	0.00	-814	
	Diversion Water in '000cum															
	Crop & Area	x 0.864ha													-11234	Converted into net area with conversion factor of 0.864
	Wheat	2160			-627	-1975	-3621	-3573	-1438							
	Barley	0														
	Maize	432					-195	-525	-788	-718	-333				-2558	
	Paddy	0														
	Beans	504					-213	-391	-770	-534					-1909	
	Sugarbeet	2160				-3	-737	-4710	-5484	-4927	-3265	-902			-20026	
	Sunflower	86					-9	-41	-208	-64	-24				-347	
	Cotton	1296					-942	-1757	-3345	-2737	-571				-9351	
	Vegetables	3370					-1891	-4214	-5080	-3064	-2409	-935			-17594	
	Fruits	4493				-1053	-3017	-5461	-7246	-6365	-3829	-757			-27729	
	Alfalfa	0														
	Others	0														
	Total in Net	14501			-627	-3031	-10624	-20673	-24359	-18409	-10431	-2594			-90748	Total Net Diversion Water
	Total in Gross (:/0.6)				-1045	-5051	-17707	-34455	-40599	-30681	-17385	-4323			-151247	Total Gross Diversion Water
	G.W. Related	6167			-384	-1856	-6507	-12661	-14918	-11274	-6386	-1589			-55576	'000cum, Area in Gross
	Surface Related	5871			-366	-1767	-6194	-12053	-14202	-10733	-6081	-1512			-52909	'000cum, Area in Gross
	Dam Related	4745			-295	-1428	-5006	-9741	-11478	-8674	-4915	-1222			-42761	'000cum, Area in Gross
	Total Rainfall	mm/month	104.89	80.19	63.01	47.12	34.47	19.64	9.36	6.87	16.97	39.31	70.19	121.33	613	mm/month
	Runoff (%)	26	27.28	20.85	16.38	12.25	8.96	5.11	2.43	1.79	4.41	10.22	18.25	31.55	159	mm/month
	Surface (CA.km2)	11606	316555	242004	190149	142213	104029	59285	28234	20735	51215	118639	211817	366159	1851034	Runoff in '000cum
	Balance		316555	242004	189783	140446	97835	47232	14032	10002	45134	117126	211817	366159	1798125	'000cum
	Irrigable percent		100	100	100	100	100	100	100	100	100	100	100	100	100	in %
	Dam(C.A.km2)	414	11292	8633	6783	5073	3711	2115	1007	740	1827	4232	7556	13061	66029	Runoff in '000cum
	Balance		11292	8633	6487	3645	-1296	-7627	-10471	-7935	-3088	3010	7556	13061	23267	
	Stored'000cum	22060	11292	8633	6487	3645						3010	7556	13061	22060	53683
	Balance(%)										(Dam storable runoff) / (Dam capacity)				243	in %
	Released water						-1296	-7627	-10471	-7935	-3088				-30416	
	Irrigable percent														73	in %

Table 7.6 Water Requirement and Diversion Requirement in Mediteranean with P50% Rainfall

Agro-ecological Zone	Crop		Crop Evapotranspiration ETo & ETcrop, and Diversion Water Requirement												Remarks
			Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total	
Mediteranean	ETo, mm/day		1.42	1.80	2.58	3.54	4.66	5.77	6.22	5.89	4.70	3.04	1.81	1.37	1306	
	Crop Evapotr'n, ETcrop		mm/day													
	Wheat		1.71	2.18	3.22	4.88	6.76	6.06	2.24	0.00	0.00	1.12	1.54	1.29	942	
	Barley		1.71	2.18	3.22	4.88	6.76	6.06	2.24	0.00	0.00	1.12	1.54	1.29	942	
	Maize		0.00	0.00	0.00	0.00	2.61	4.62	5.66	5.42	3.20	0.00	0.00	0.00	659	
	Paddy		0.00	0.00	0.00	0.00	9.84	13.57	17.85	15.37	10.06	0.00	0.00	0.00	2044	
	Beans		0.00	0.00	0.00	1.20	2.52	3.18	4.79	3.53	0.00	0.00	0.00	0.00	467	
	Sugarbeet		0.00	0.00	0.00	1.56	2.24	7.79	7.78	7.36	5.74	3.04	0.00	0.00	1085	
	Sunflower		0.00	0.00	0.00	1.06	1.45	2.19	7.40	2.53	1.50	0.00	0.00	0.00	496	
	Cotton		0.00	0.00	0.00	0.00	3.55	5.08	7.90	6.83	2.07	1.06	0.00	0.00	814	
	Vegetables		0.00	0.00	0.00	1.49	2.99	4.73	4.73	3.06	3.01	2.49	1.38	0.00	729	
	Fruits		0.00	0.00	0.00	2.41	3.36	4.62	5.04	4.65	3.48	2.07	0.00	0.00	784	
	Alfalfa		0.00	0.00	0.00	0.00	4.06	5.54	5.97	5.54	3.67	1.88	0.00	0.00	817	
	Others		0.00	0.00	0.00	2.80	3.87	6.28	6.84	6.83	3.71	0.00	0.00	0.00	928	
	Effective Rainfall P50%, mm		96.02	82.65	67.68	49.17	36.26	17.74	12.10	7.90	13.67	46.23	68.54	102.38	600	
	Diversion Water in mm/month															
	Wheat		0.00	0.00	-32.21	-97.31	-173.41	-164.11	-57.32	0.00	0.00	0.00	0.00	0.00	-524	
	Barley		0.00	0.00	-32.21	-97.31	-173.41	-164.11	-57.32	0.00	0.00	0.00	0.00	0.00	-524	
	Maize		0.00	0.00	0.00	0.00	-44.72	-120.81	-163.39	-160.07	-82.24	0.00	0.00	0.00	-571	
	Paddy		0.00	0.00	0.00	0.00	-268.85	-389.27	-541.39	-468.62	-288.16	0.00	0.00	0.00	-1956	
	Beans		0.00	0.00	0.00	0.00	-41.82	-77.51	-136.39	-101.65	0.00	0.00	0.00	0.00	-357	
	Sugarbeet		0.00	0.00	0.00	0.00	-33.15	-216.07	-228.96	-220.32	-158.40	-47.98	0.00	0.00	-905	
	Sunflower		0.00	0.00	0.00	0.00	-8.57	-48.07	-217.39	-70.61	-31.46	0.00	0.00	0.00	-376	
	Cotton		0.00	0.00	0.00	0.00	-73.64	-134.67	-232.82	-203.89	-48.39	0.00	0.00	0.00	-693	
	Vegetables		0.00	0.00	0.00	0.00	-56.29	-124.28	-134.47	-87.04	-76.59	-31.03	0.00	0.00	-510	
	Fruits		0.00	0.00	0.00	-23.01	-67.85	-120.81	-144.11	-136.34	-90.70	-17.84	0.00	0.00	-601	
	Alfalfa		0.00	0.00	0.00	0.00	-89.54	-148.52	-173.04	-163.72	-96.34	-12.18	0.00	0.00	-683	
	Others		0.00	0.00	0.00	-34.68	-83.76	-171.04	-200.04	-203.89	-97.75	0.00	0.00	0.00	-791	
	Diversion Water in '000cum															
	Crop & Area	x 0.864ha														Converted into net area with conversion factor of 0.864
	Wheat	864			-278	-841	-1498	-1418	-495						-4531	
	Barley	0														
	Maize	2160					-966	-2610	-3529	-3458	-1776				-12339	
	Paddy	0														
	Beans	1054					-441	-817	-1438	-1071					-3767	
	Sugarbeet	86					-29	-187	-198	-190	-137	-41			-782	
	Sunflower	0														
	Cotton	4752					-3499	-6399	-11064	-9689	-2299				-32950	
	Vegetables	1491					-839	-1853	-2005	-1298	-1142	-463			-7601	
	Fruits	2635				-606	-1788	-3184	-3798	-3593	-2390	-470			-15828	
	Alfalfa	0														
	Others	0														
	Total in Net	13043			-278	-1447	-9060	-16468	-22527	-19299	-7745	-974			-77798	Total Net Diversion Water
	Total in Gross (/0.6)				-464	-2412	-15101	-27446	-37544	-32165	-12908	-1624			-129663	Total Gross Diversion Water
	G.W. Related	1286			-40	-205	-1286	-2338	-3198	-2740	-1100	-138			-11045	'000cum, Area in Gross
	Surface Related	6820			-210	-1089	-6822	-12399	-16960	-14530	-5831	-733			-58575	'000cum, Area in Gross
	Dam Related	6991			-215	-1117	-6993	-12710	-17386	-14895	-5977	-752			-60043	'000cum, Area in Gross
	Total Rainfall	mm/month	138.41	109.66	82.75	56.52	40.14	18.60	12.50	8.06	14.12	52.22	83.36	149.86	766	mm/month
	Runoff (%)	48	65.90	52.21	39.40	26.91	19.11	8.86	5.95	3.84	6.72	24.86	39.69	71.35	365	mm/month
	Surface (CA.km2)	1968	129684	102744	77536	52958	37611	17428	11709	7555	13228	48931	78106	140409	717898	Runoff in '000cum
	Balance		129684	102744	77327	51868	30790	5029	-5252	-6975	7397	48197	78106	140409	659324	'000cum
	Irrigable percent		100	100	100	100	100	100	69	52	100	100	100	100	52	in %
	Dam(C.A.km2)	228	15024	11903	8983	6135	4357	2019	1357	875	1532	5669	9049	16267	83171	Runoff in '000cum
	Balance		15024	11903	8768	5019	-2635	-10690	-16029	-14019	-4445	4917	9049	16267	23128	
	Stored'000cum	32790	15024	11903	8768	5019						4917	9049	16267	32790	70947
	Balance(%)										(Dam storable runoff) / (Dam capacity)				216	in %
	Released water						-2635	-10690	-16029	-14019	-4445				-47819	
	Irrigable percent														69	in %

Table 7.7 Water Requirement and Diversion Requirement in Black Sea with P50% Rainfall

Agro-ecological Zone	Crop		Crop Evapotranspiration ETo & ETcrop, and Diversion Water Requirement												Remarks
			Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total	
Black Sea	ETo, mm/day		0.80	1.97	1.59	2.39	3.19	4.10	4.48	4.05	2.90	1.70	1.02	0.81	858	
	Crop Evapotr'n, ETcrop	mm/day														
	Wheat		0.96	1.30	1.98	3.30	4.62	4.31	1.61	0.00	0.00	0.63	0.87	0.76	618	
	Barley		0.96	1.30	1.98	3.30	4.62	4.31	1.61	0.00	0.00	0.63	0.87	0.76	618	
	Maize		0.00	0.00	0.00	0.00	1.78	3.28	4.08	3.73	1.97	0.00	0.00	0.00	455	
	Paddy		0.00	0.00	0.00	0.00	6.72	9.64	12.85	10.58	6.20	0.00	0.00	0.00	1410	
	Beans		0.00	0.00	0.00	0.81	1.72	2.26	3.45	2.43	0.00	0.00	0.00	0.00	328	
	Sugarbeet		0.00	0.00	0.00	1.05	1.53	5.54	5.60	5.07	3.53	1.70	0.00	0.00	734	
	Sunflower		0.00	0.00	0.00	0.72	0.99	1.56	5.33	1.74	0.93	0.00	0.00	0.00	346	
	Cotton		0.00	0.00	0.00	0.00	2.42	3.61	5.69	4.70	1.27	0.59	0.00	0.00	562	
	Vegetables		0.00	0.00	0.00	1.00	2.04	3.36	3.40	2.11	1.85	1.39	0.78	0.00	487	
	Fruits		0.00	0.00	0.00	1.62	2.29	3.28	3.63	3.20	2.14	1.15	0.00	0.00	530	
	Alfalfa		0.00	0.00	0.00	0.00	2.77	3.94	4.30	3.81	2.26	1.05	0.00	0.00	556	
	Others		0.00	0.00	0.00	1.89	2.64	4.47	4.93	4.70	2.29	0.00	0.00	0.00	640	
	Effective Rainfall P50%, mm		59.28	45.97	44.35	49.11	49.17	45.41	32.03	37.72	40.88	56.81	59.61	65.80	586	
	Diversion Water in mm/month															
	Wheat		0.00	0.00	-17.12	-49.76	-94.06	-83.83	-17.96	0.00	0.00	0.00	0.00	0.00	-263	
	Barley		0.00	0.00	-17.12	-49.76	-94.06	-83.83	-17.96	0.00	0.00	0.00	0.00	0.00	-263	
	Maize		0.00	0.00	0.00	0.00	-6.15	-53.06	-94.32	-77.86	-18.21	0.00	0.00	0.00	-250	
	Paddy		0.00	0.00	0.00	0.00	-159.25	-243.85	-366.47	-290.17	-145.08	0.00	0.00	0.00	-1205	
	Beans		0.00	0.00	0.00	0.00	-4.17	-22.28	-74.89	-37.66	0.00	0.00	0.00	0.00	-139	
	Sugarbeet		0.00	0.00	0.00	0.00	0.00	-120.76	-141.53	-119.32	-65.13	0.00	0.00	0.00	-447	
	Sunflower		0.00	0.00	0.00	0.00	0.00	-1.36	-133.20	-16.30	0.00	0.00	0.00	0.00	-151	
	Cotton		0.00	0.00	0.00	0.00	-25.90	-62.90	-144.31	-108.01	0.00	0.00	0.00	0.00	-341	
	Vegetables		0.00	0.00	0.00	0.00	-14.05	-55.52	-73.50	-27.61	-14.73	0.00	0.00	0.00	-185	
	Fruits		0.00	0.00	0.00	0.00	-21.95	-53.06	-80.44	-61.53	-23.42	0.00	0.00	0.00	-240	
	Alfalfa		0.00	0.00	0.00	0.00	-36.77	-72.75	-101.27	-80.37	-26.90	0.00	0.00	0.00	-318	
	Others		0.00	0.00	0.00	-7.49	-32.82	-88.75	-120.71	-109.01	-27.77	0.00	0.00	0.00	-386	
	Diversion Water in '000cum															
	Crop & Area	x 0.864ha														Converted into net area with
	Wheat	1469			-251	-731	-1382	-1231	-264						-3859	conversion factor of 0.864
	Barley	518			-89	-258	-488	-435	-93						-1362	
	Maize	3888					-239	-2063	-3667	-3027	-708				-9704	
	Paddy	605					-963	-1475	-2216	-1755	-877				-7287	
	Beans	864					-36	-193	-647	-325					-1201	
	Sugarbeet	1728						-2087	-2446	-2062	-1125				-7720	
	Sunflower	1728						-23	-2302	-282					-2607	
	Cotton	0														
	Vegetables	4121					-579	-2288	-3029	-1138	-607				-7641	
	Fruits	220					-48	-117	-177	-136	-52				-530	
	Alfalfa	0														
	Others	0														
	Total in Net	15142			-340	-989	-3735	-9911	-14841	-8724	-3369				-41910	Total Net Diversion Water
	Total in Gross (/0.6)				-567	-1648	-6225	-16519	-24736	-14540	-5616				-69850	Total Gross Diversion Water
	G.W. Related	3177			-103	-299	-1128	-2995	-4484	-2636	-1018				-12663	'000cum, Area in Gross
	Surface Related	13676			-442	-1286	-4857	-12891	-19303	-11347	-4382				-54509	'000cum, Area in Gross
	Dam Related	672			-22	-63	-239	-633	-948	-558	-215				-2678	'000cum, Area in Gross
	Total Rainfall	mm/month	72.30	52.73	49.92	55.52	55.61	50.94	35.24	42.89	46.61	68.18	72.70	82.47	685	mm/month
	Runoff (%)	42	30.66	22.37	21.17	23.55	23.59	21.61	14.95	18.19	19.77	28.92	30.83	34.98	291	mm/month
	Surface (CA.km2)	10645	326413	238087	225378	250689	251067	230008	159116	193632	210429	307813	328221	372331	3093182	Runoff in '000cum
	Balance		326413	238087	224935	249403	246209	217117	139813	182285	206046	307813	328221	372331	3038674	'000cum
	Irrigable percent		100	100	100	100	100	100	100	100	100	100	100	100	100	in %
	Dam(C.A.km2)	92	2821	2058	1948	2167	2170	1988	1375	1673	1819	2660	2837	3218	26733	Runoff in '000cum
	Balance		2821	2058	1926	2103	1931	1354	427	1116	1603	2660	2837	3218	24055	
	Stored'000cum	3350	2821	2058	1926	2103	1931	1354	427	1116	1603	2660	2837	3218	3350	24055
	Balance(%)										(Dam storable runoff) / (Dam capacity)				718	in %
	Released water															
	Irrigable percent														100	in %

Table 7.8 Water Requirement and Diversion Requirement In Central Northern with P50% Rainfall

Agro-ecological Zone	Crop		Crop Evapotranspiration ETo & ETcrop, and Diversion Water Requirement												Remarks
			Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total	
Central Northern	ETo, mm/day		0.60	0.93	1.71	2.80	3.77	4.85	5.66	5.16	3.51	1.68	0.96	0.59	984	
	Crop Evapotr'n, ETcrop		mm/day													
	Wheat		0.71	1.13	2.14	3.86	5.47	5.09	2.04	0.00	0.00	0.62	0.82	0.56	682	
	Barley		0.71	1.13	2.14	3.86	5.47	5.09	2.04	0.00	0.00	0.62	0.82	0.56	682	
	Maize		0.00	0.00	0.00	0.00	2.11	3.88	5.16	4.75	2.39	0.00	0.00	0.00	561	
	Paddy		0.00	0.00	0.00	0.00	7.96	11.39	16.26	13.48	7.52	0.00	0.00	0.00	1736	
	Beans		0.00	0.00	0.00	0.95	2.04	2.67	4.36	3.10	0.00	0.00	0.00	0.00	403	
	Sugarbeet		0.00	0.00	0.00	1.23	1.81	6.54	7.08	6.45	4.29	1.68	0.00	0.00	890	
	Sunflower		0.00	0.00	0.00	0.84	1.17	1.84	6.74	2.22	1.12	0.00	0.00	0.00	428	
	Cotton		0.00	0.00	0.00	0.00	2.87	4.27	7.19	5.99	1.55	0.59	0.00	0.00	690	
	Vegetables		0.00	0.00	0.00	1.17	2.41	3.97	4.31	2.69	2.25	1.38	0.73	0.00	578	
	Fruits		0.00	0.00	0.00	1.90	2.72	3.88	4.59	4.08	2.60	1.14	0.00	0.00	640	
	Alfalfa		0.00	0.00	0.00	0.00	3.28	4.65	5.44	4.85	2.74	1.04	0.00	0.00	675	
	Others		0.00	0.00	0.00	2.21	3.13	5.28	6.23	5.99	2.78	0.00	0.00	0.00	784	
	Effective Rainfall P50%, mm		51.39	40.54	40.59	42.78	43.48	32.60	14.10	11.97	17.85	28.73	39.64	56.25	420	
	Diversion Water in mm/month															
	Wheat		0.00	0.00	-25.69	-72.94	-126.02	-120.09	-49.12	0.00	0.00	0.00	0.00	0.00	-394	
	Barley		0.00	0.00	-25.69	-72.94	-126.02	-120.09	-49.12	0.00	0.00	0.00	0.00	0.00	-394	
	Maize		0.00	0.00	0.00	0.00	-21.98	-83.73	-145.71	-135.30	-53.84	0.00	0.00	0.00	-441	
	Paddy		0.00	0.00	0.00	0.00	-203.18	-309.12	-489.91	-405.83	-207.75	0.00	0.00	0.00	-1616	
	Beans		0.00	0.00	0.00	0.00	-19.64	-47.38	-121.12	-84.07	0.00	0.00	0.00	0.00	-272	
	Sugarbeet		0.00	0.00	0.00	0.00	-12.63	-163.71	-205.42	-188.12	-110.76	-23.32	0.00	0.00	-704	
	Sunflower		0.00	0.00	0.00	0.00	0.00	-22.66	-194.88	-56.86	-15.89	0.00	0.00	0.00	-290	
	Cotton		0.00	0.00	0.00	0.00	-45.36	-95.37	-208.93	-173.72	-28.54	0.00	0.00	0.00	-552	
	Vegetables		0.00	0.00	0.00	0.00	-31.33	-86.64	-119.37	-71.27	-49.62	-13.95	0.00	0.00	-372	
	Fruits		0.00	0.00	0.00	-14.24	-40.68	-83.73	-128.15	-114.49	-60.16	-6.66	0.00	0.00	-448	
	Alfalfa		0.00	0.00	0.00	0.00	-58.22	-107.00	-154.49	-136.50	-64.38	-3.54	0.00	0.00	-526	
	Others		0.00	0.00	0.00	-23.47	-53.54	-125.90	-179.08	-173.72	-65.43	0.00	0.00	0.00	-621	
	Diversion Water in '000cum															
	Crop & Area	x 0.864ha														Converted into net area with
	Wheat	4320			-1110	-3151	-5444	-5188	-2122						-17015	conversion factor of 0.864
	Barley	0														
	Maize	0														
	Paddy	112					-228	-347	-550	-456	-233				-1815	
	Beans	1037					-204	-491	-1256	-872					-2822	
	Sugarbeet	3629					-458	-5941	-7454	-6827	-4019	-846			-25546	
	Sunflower	632						-143	-1231	-359	-100				-1833	
	Cotton	0														
	Vegetables	5357					-1678	-4641	-6394	-3818	-2658	-747			-19937	
	Fruits	432				-62	-176	-362	-554	-495	-260	-29			-1936	
	Alfalfa	0														
	Others	0														
	Total In Net	15518			-1110	-3212	-8188	-17113	-19561	-12825	-7271	-1623			-70904	Total Net Diversion Water
	Total in Gross (/0.6)				-1850	-5354	-13647	-28522	-32602	-21376	-12118	-2704			-118173	Total Gross Diversion Water
	G.W. Related	2180			-225	-650	-1656	-3462	-3957	-2594	-1471	-328			-14343	'000cum, Area in Gross
	Surface Related	11660			-1201	-3476	-8860	-18516	-21164	-13877	-7867	-1756			-76716	'000cum, Area in Gross
	Dam Related	4121			-424	-1228	-3131	-6544	-7480	-4904	-2780	-620			-27114	'000cum, Area in Gross
	Total Rainfall	mm/month	60.06	45.63	45.05	47.26	46.52	35.53	14.62	12.35	18.58	30.66	44.26	67.17	470	mm/month
	Runoff (%)	25	14.81	11.26	11.11	11.66	11.97	8.76	3.61	3.05	4.58	7.56	10.92	16.57	116	mm/month
	Surface (CA,km2)	6118	90637	68869	67989	71329	73234	53624	22068	18639	28045	46265	66790	101379	708867	Runoff in '000cum
	Balance		90637	68869	66788	67853	64374	35108	904	4762	20177	44509	66790	101379	632150	'000cum
	Irrigable percent		100	100	100	100	100	100	100	100	100	100	100	100	100	in %
	Dam(C.A,km2)	212	3141	2386	2356	2472	2538	1858	765	646	972	1603	2314	3513	24564	Runoff in '000cum
	Balance		3141	2386	1932	1243	-594	-4686	-6715	-4259	-1809	983	2314	3513	-2550	
	Stored'000cum	24280	3141	2386	1932	1243						983	2314	3513	15512	15512
	Balance(%)										(Dam storable runoff) / (Dam capacity)				64	in %
	Released water						-594	-4686	-6715	-4259	-1809				-18062	
	Irrigable percent														86	in %