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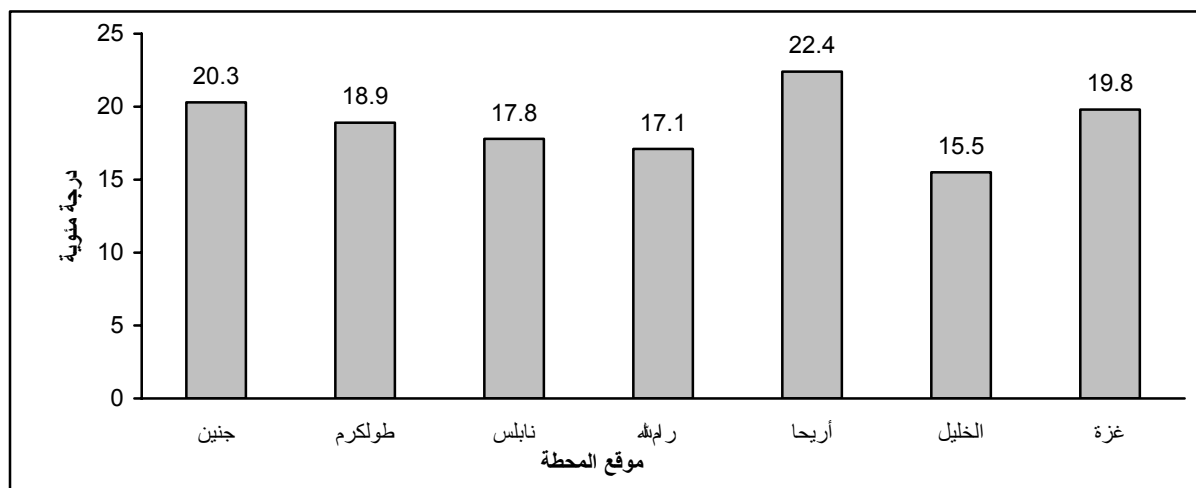
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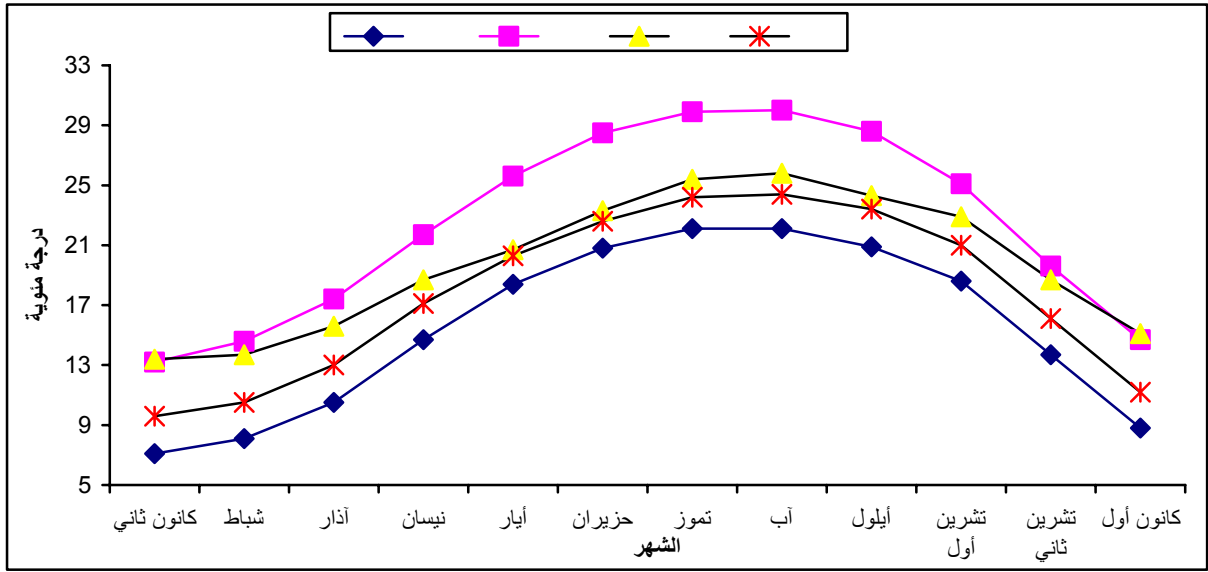
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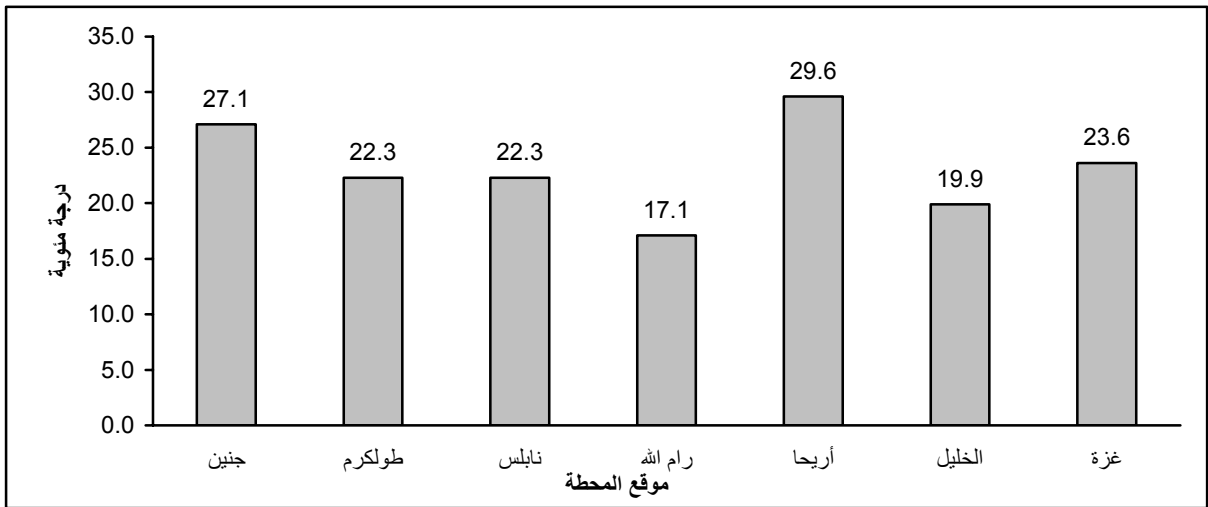
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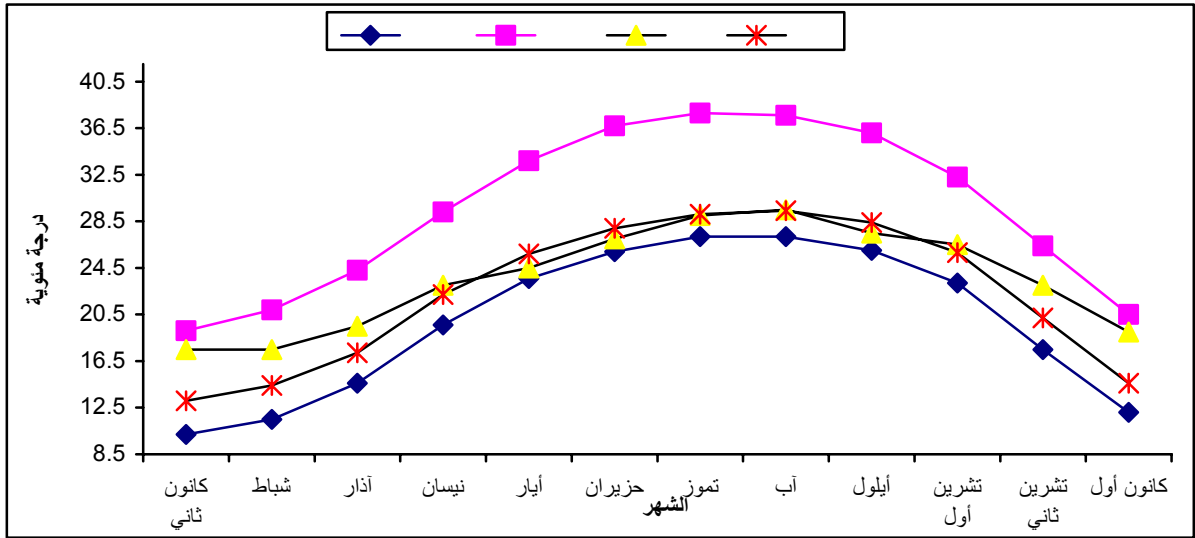
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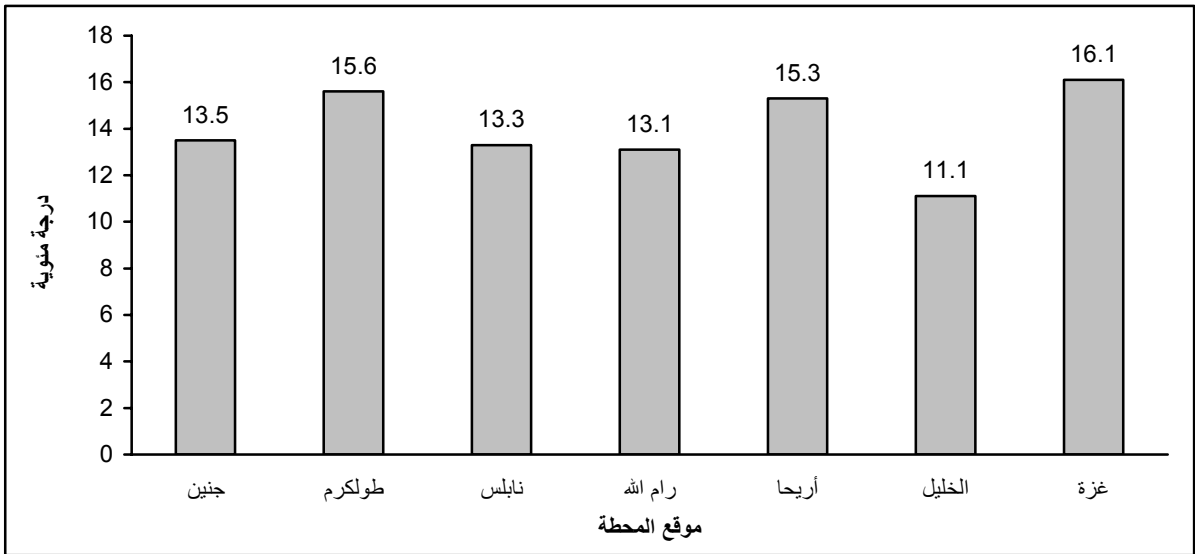
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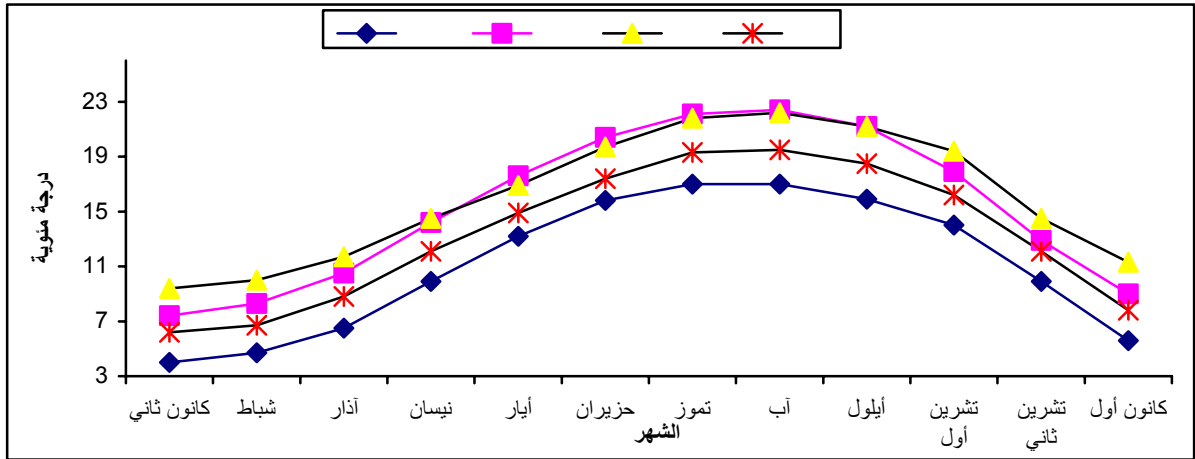
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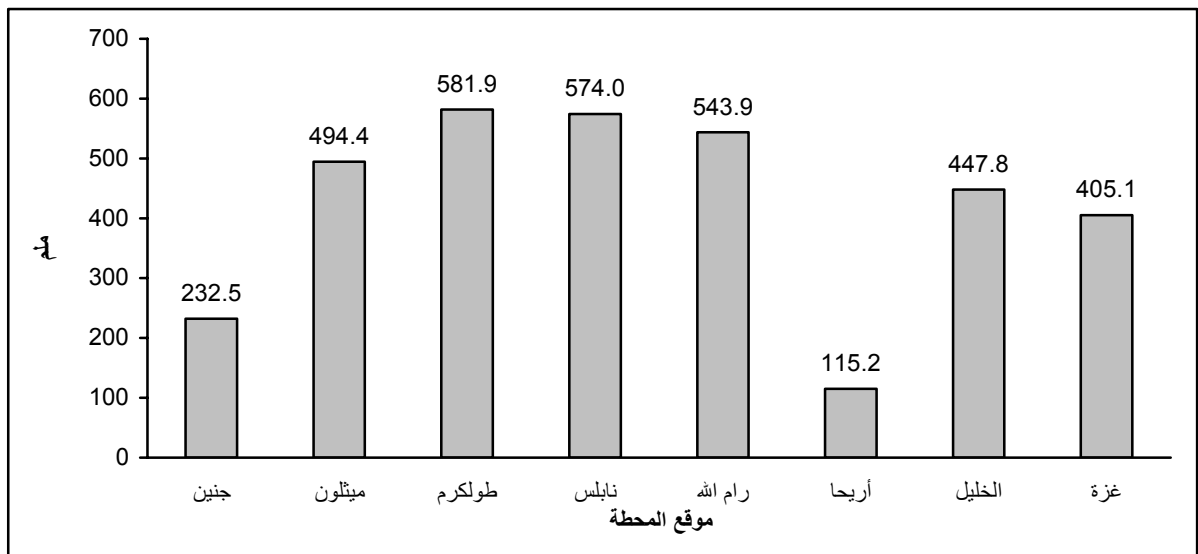
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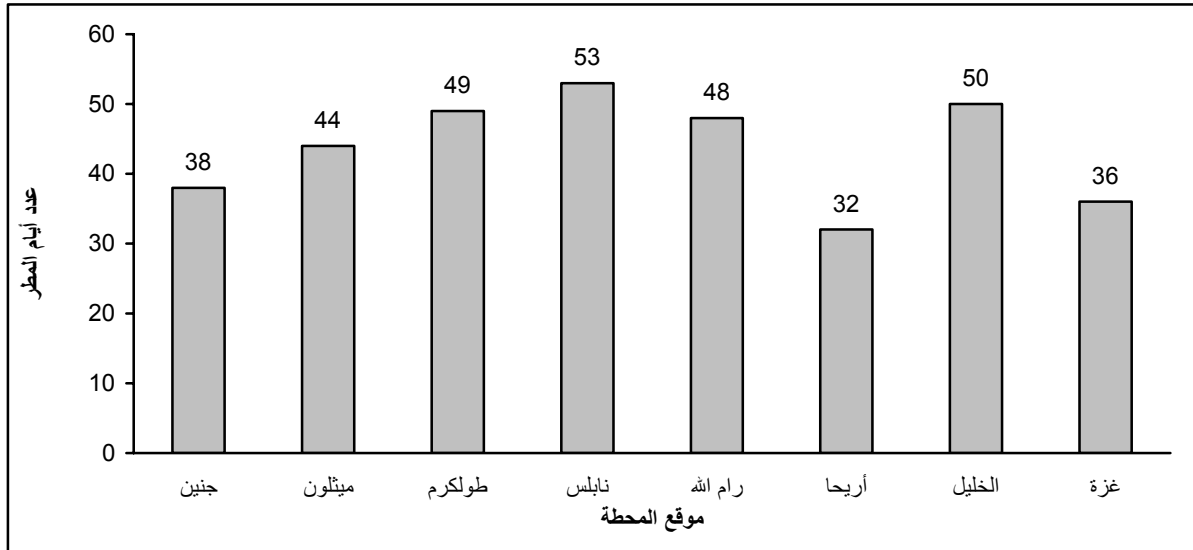
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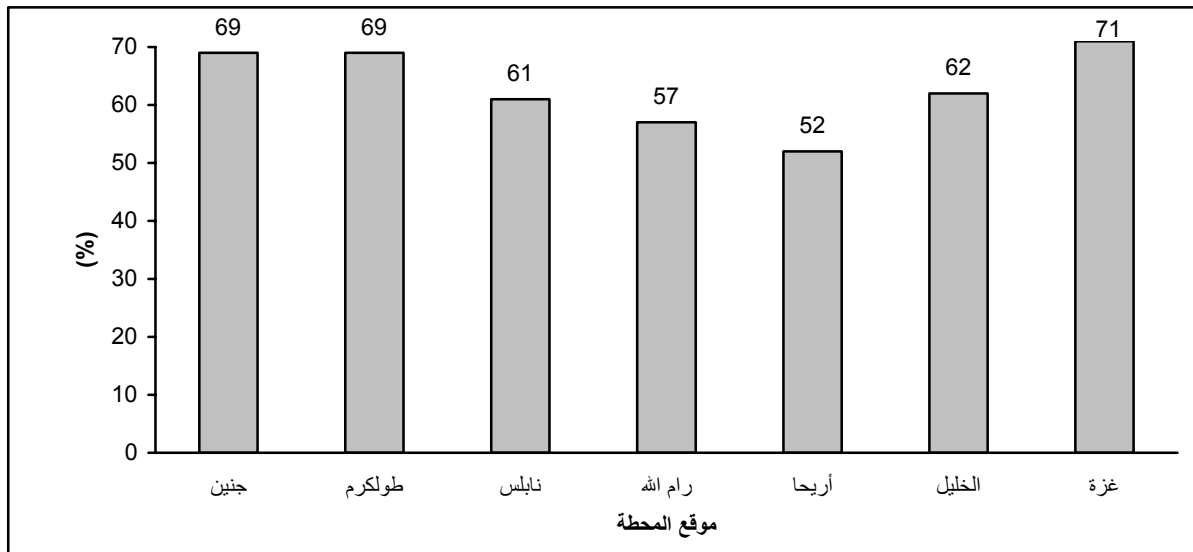
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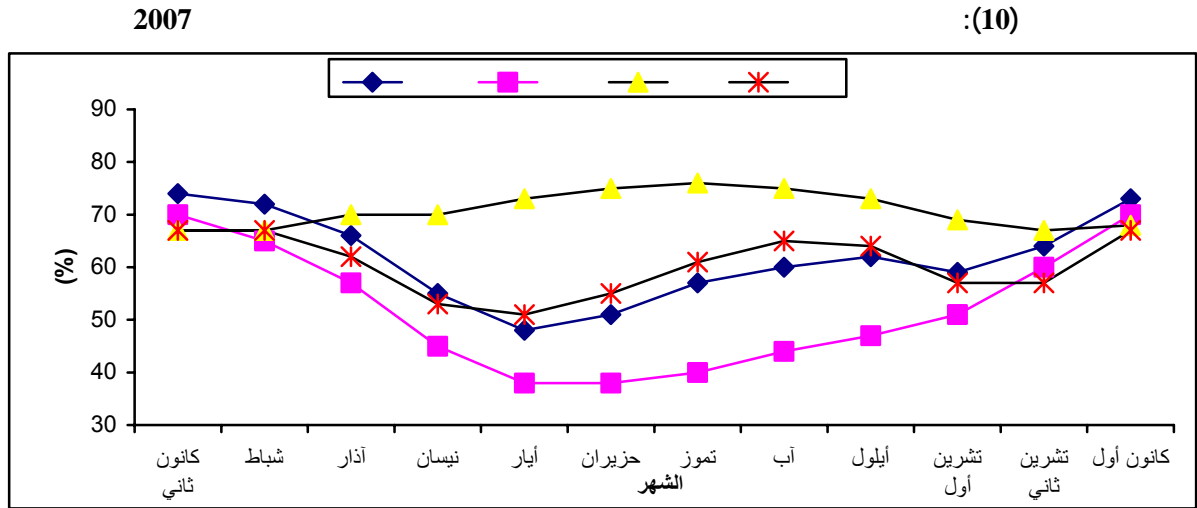


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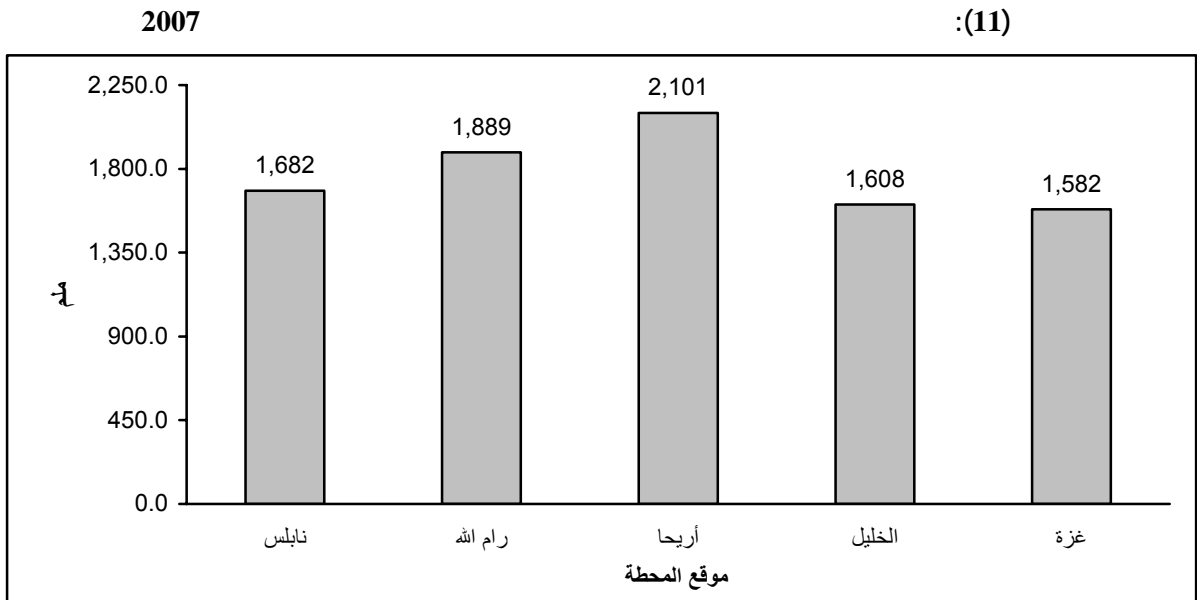
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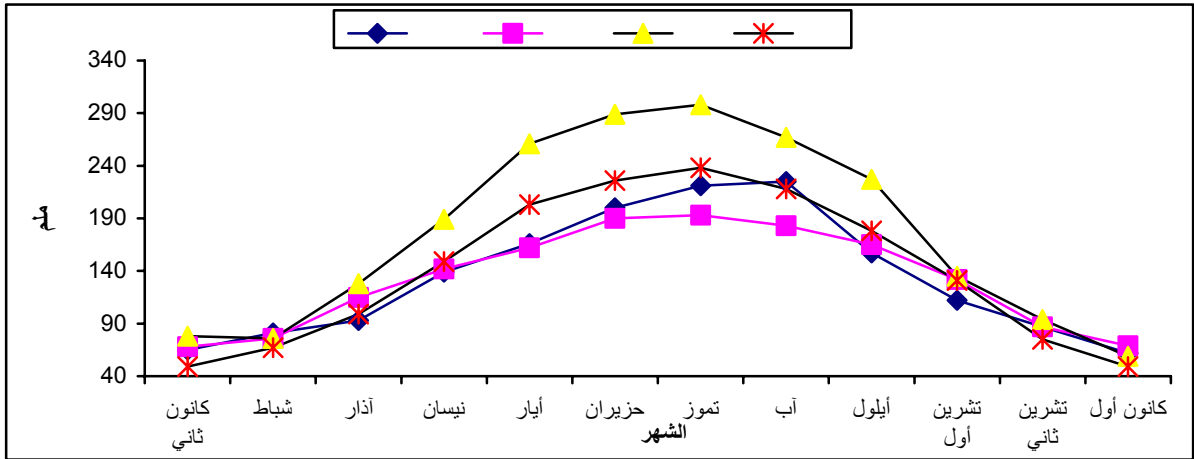
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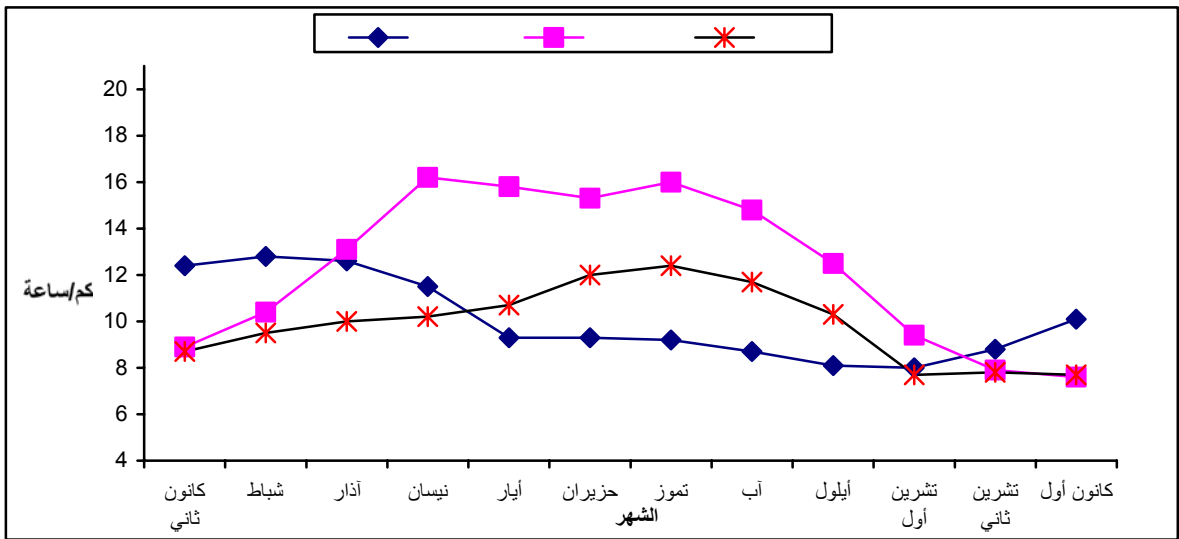
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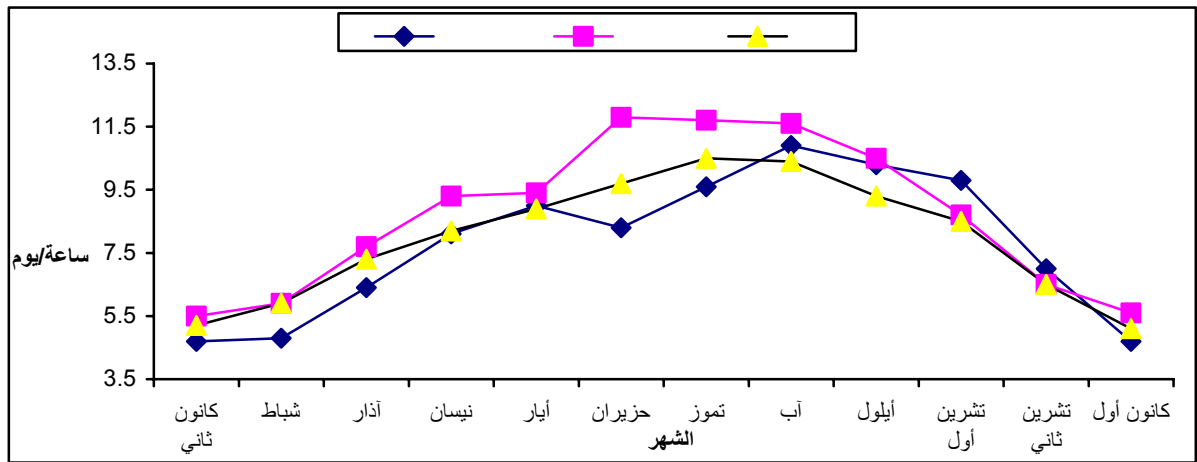
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Tables

(°) 2007-1997 1995-1975

:1

Table 1: Mean of Air Temperatures in the Palestinian Territory by Year and Station Location, 1975-1995, 1997-2007 (C°)

Station Location	Year											
	2007	2006	2005	2004	2003	2002	2001	2000	1999	1998	1997	1995 -1975
Jenin	20.3	..	20.3	20.1	20.2	..	21.7	20.2	21.0	21.1	19.1	..
Meithalun	..	..	20.5	20.7	20.7	..	18.8	20.3	19.8	18.5	16.6	..
Tulkarm	18.9	..	23.1	22.8	..	..	21.8	22.3	21.9	21.3	18.9	19.8
Nablus	17.8	..	18.0	18.1	18.4	..	18.7	17.5	18.5	19.0	16.8	17.6
Ramallah	17.1	..	..	..	17.0	..	17.1	..	..	17.7	16.0	17.2
Jericho	22.4	..	23.4	23.5	23.6	..	24.0	23.2	23.8	23.9	21.3	22.7
Hebron	15.5	..	16.7	16.6	16.3	..	16.5	14.6	16.4	16.6	14.5	15.4
Gaza	19.8	..	21.0	20.8	20.8	..	21.1	20.5	21.0	21.1	18.9	20.6

(°) 2007-1997 1995-1975

:2

Table 2: Mean of Maximum Air Temperatures in the Palestinian Territory by Year and Station Location, 1975-1995, 1997-2007 (C°)

Station Location	Year											
	2007	2006	2005	2004	2003	2002	2001	2000	1999	1998	1997	1995 -1975
Jenin	27.1	..	25.6	25.8	26.6	..	25.6	25.5	26.5	26.3	23.8	..
Meithalun	..	..	25.3	25.0	25.7	..	25.2	24.5	25.4	25.0	22.8	..
Tulkarm	22.3	..	26.3	26.3	..	..	26.9	25.6	26.7	26.6	24.1	25.7
Nablus	22.3	..	22.9	23.0	22.1	..	23.7	22.8	23.8	23.4	21.0	21.6
Ramallah	17.1	..	..	..	21.8	..	21.7	..	..	22.6	19.3	21.1
Jericho	29.6	..	30.3	30.3	30.5	..	30.8	30.1	30.9	30.8	27.5	29.6
Hebron	19.9	..	21.0	20.9	20.8	..	20.9	19.7	20.7	22.3	18.2	19.6
Gaza	23.6	..	23.6	23.6	23.5	..	24.0	23.4	24.1	24.7	22.1	27.2

(°) 2007-1997 1995-1975

:3

Table 3: Mean of Minimum Air Temperatures in the Palestinian Territory by Year and Station Location, 1975-1995, 1997-2007 (C°)

Station Location	Year											
	2007	2006	2005	2004	2003	2002	2001	2000	1999	1998	1997	1995 -1975
Jenin	13.5	..	16.0	15.7	14.1	..	16.5	15.7	16.2	16.4	14.4	..
Meithalun	..	..	12.9	12.5	12.7	..	12.3	11.9	12.1	12.1	10.4	..
Tulkarm	15.6	..	16.0	15.8	..	..	16.7	16.0	16.2	16.1	14.4	13.9
Nablus	13.3	..	14.3	14.1	14.1	..	14.8	14.0	14.3	14.6	13.4	13.6
Ramallah	13.1	..	..	..	14.4	..	13.4	..	..	12.9	13.6	13.1
Jericho	15.3	..	16.2	16.5	16.9	..	16.8	16.4	16.9	17.0	15.9	15.7
Hebron	11.1	..	12.3	12.3	12.6	..	12.7	11.8	12.7	12.6	11.5	11.2
Gaza	16.1	..	17.7	17.5	17.4	..	17.9	17.0	17.5	17.5	16.8	14.0

() 2007-1997

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Table 4: Annual Rainfall Quantity in the Palestinian Territory by Year and Station Location, 1997-2007 (mm)

Station Location	Year											
	2007	2006	2005	2004	2003	2002	2001	2000	1999	1998	1997	
Jenin	232.5	..	431.1	424.8	649.3	..	311.8	477.6	237.4	388.0	653.6	
Meithalun	494.4	..	519.2	521.3	788.2	..	451.4	673.3	273.3	559.3	741.2	
Tulkarm	581.9	..	585.8	547.3	770.2	..	557.9	784.4	290.0	531.3	918.4	
Nablus	574.0	..	790.5	638.5	942.7	..	505.0	835.3	343.2	556.7	828.3	
Ramallah	543.9	..	..	..	654.2	..	364.8	..	..	302.2	596.7
Jericho	115.2	..	117.0	128.5	194.0	..	148.4	152.8	48.7	90.1	224.6	
Hebron	447.8	..	475.9	570.8	538.7	..	520.1	681.8	243.4	328.2	586.8	
Gaza	405.1	..	260.5	408.3	524.8	..	436.7	563.3	196.5	241.1	353.8	

2007-1997

:5

Table 5: Number of Rainfall Days in the Palestinian Territory by Year and Station Location, 1997-2007

Station Location	Year										
	2007	2006	2005	2004	2003	2002	2001	2000	1999	1998	1997
Jenin	38	..	55	51	64	..	38	48	35	49	74
Meithalun	44	..	50	45	56	..	45	55	34	54	64
Tulkarm	49	..	51	50	..	..	44	61	39	62	77
Nablus	53	..	56	58	64	..	49	61	42	68	62
Ramallah	48	..	..	..	48	..	35	..	..	32	59
Jericho	32	..	36	35	41	..	24	32	23	32	50
Hebron	50	..	46	42	49	..	48	54	31	40	54
Gaza	36	..	38	46	51	..	..	52	34	34	50

(%) 2007-1997 1983-1969

:6

Table 6: Mean Relative Humidity in the Palestinian Territory by Year and Station Location, 1969-1983, 1997-2007 (%)

Station Location	Year											
	2007	2006	2005	2004	2003	2002	2001	2000	1999	1998	1997	1983 -1969
Jenin	69	..	65	65	65	..	64	67	63	63	57	..
Meithalun	..	..	59	64	64	..	62	61	58	61	55	61
Tulkarm	69	..	60	62	..	..	66	67	64	63	64	63
Nablus	61	..	60	61	62	..	63	64	61	61	55	61
Ramallah	57	..	..	..	70	..	68	..	..	59	51	57
Jericho	52	..	53	53	55	..	52	53	51	55	51	52
Hebron	62	..	60	66	66	..	58	61	57	59	51	62
Gaza	71	..	66	67	67	..	69	70	71	69	61	..

() 2007-1997 1984-1973

:7

Table 7: Evaporation Quantity in the Palestinian Territory by Year and Station Location, 1973-1984, 1997-2007 (mm)

Station Location	Year											
	2007	2006	2005	2004	2003	2002	2001	2000	1999	1998	1997	1984 -1973
Jenin	..	..	1,932.2	1,943.9	1,737.0	..	..	1,983.8	2,049.0	2,006.4	1,987.0	..
Meithalun	..	..	..	..	..	..	1,558.4	1,654.1	1,646.0	1,433.2	1,499.0	1,753.0
Tulkarm	..	..	..	..	..	..	..	1,766.9	1,468.0	1,245.4	..	1,633.0
Nablus	1682.0	..	1,991.3	1,981.8	1,808.3	..	1,869.1	1,853.5	1,884.3	1,986.0	1,878.0	1,681.0
Ramallah	1889.0	..	..	..	2,093.1	..	..	..	..	2,077.1	1,976.0	1,874.0
Jericho	2101.0	..	2,085.3	2,110.7	2,227.0	..	2,112.3	2,047.8	2,113.0	2,074.0	1,974.0	2,342.0
Hebron	1608.0	..	2,046.9	1,974.3	1,828.3	..	1,865.7	1,788.4	1,970.0	2,077.2	1,673.0	1,681.0
Gaza	1582.0	..	1,542.8	1,697.9	1,582.9	..	1,908.9	1,635.5	1,645.0	1,671.9	1,603.0	..

(/) 2007-1997

:8

Table 8: Mean Wind Speed in the Palestinian Territory by Year and Station Location, 1997-2007 (km\hour)

Station Location	Year											
	2007	2006	2005	2004	2003	2002	2001	2000	1999	1998	1997	
Jenin	7.8	..	3.4	3.8	5.4	..	7.9	8.3	9.0	3.9	5.3	
Meithalun	..	..	1.7	2.2	4.8	..	3.0	3.0	7.2	3.1	3.5
Tulkarm	3.4	..	3.5	3.5	..	..	3.8	4.0	7.0	4.0	6.0
Nablus	9.9	..	8.7	8.8	8.0	..	11.2	10.0	11.2	5.5	10.7	
Ramallah	17.3	..	..	..	7.8	..	..	..	..	5.0	18.0
Jericho	12.3	..	7.0	7.0	8.1	..	7.4	7.5	6.7	3.3	8.8	
Hebron	10.1	..	12.1	10.4	8.6	..	12.5	12.8	6.4	5.1	12.0	
Gaza	..	..	8.4	10.4	10.3	..	12.0	10.5	8.2	10.2	12.9

(°) 2007

:9

Table 9: Mean of Air Temperature in the Palestinian Territory by Month and Station Location, 2007 (C°)

Month	Station Location							
	Gaza	Hebron	Jericho	Ramallah	Nablus	Tulkarm	Meithalun	Jenin
January	13.4	7.1	13.2	8.7	9.6	10.9	..	12.1
February	13.7	8.1	14.6	9.9	10.5	11.2	..	12.6
March	15.6	10.5	17.4	12.3	13.0	13.7	..	15.1
April	18.7	14.7	21.7	15.6	17.1	17.6	..	19.7
May	20.7	18.4	25.6	20.0	20.3	20.2	..	22.5
June	23.3	20.8	28.5	22.5	22.6	23.3	..	25.1
July	25.4	22.1	29.9	23.6	24.2	25.5	..	26.6
August	25.8	22.1	30.0	23.8	24.4	26.1	..	27.6
September	24.3	20.9	28.6	22.8	23.4	24.7	..	26.5
October	22.9	18.6	25.1	20.4	21.0	23.0	..	23.3
November	18.7	13.7	19.6	15.5	16.1	17.5	..	18.4
December	15.1	8.8	14.7	10.6	11.2	13.2	..	13.7
Annual Mean	19.8	15.5	22.4	17.1	17.8	18.9	..	20.3

(°) 2007

:10

Table 10: Mean of Maximum Air Temperature in the Palestinian Territory by Month and Station Location, 2007 (C°)

Month	Station Location							
	Gaza	Hebron	Jericho	Ramallah	Nablus	Tulkarm	Meithalun	Jenin
January	17.5	10.2	19.1	8.7	13.1	13.3	..	17.4
February	17.5	11.5	20.9	9.9	14.4	13.8	..	18.2
March	19.5	14.6	24.3	12.3	17.2	16.7	..	21.6
April	23.0	19.6	29.3	15.6	22.2	21.5	..	28.3
May	24.5	23.6	33.7	20.0	25.7	24.6	..	31.0
June	27.0	25.9	36.7	22.5	27.9	27.2	..	32.9
July	29.0	27.2	37.8	23.6	29.1	29.0	..	33.6
August	29.5	27.2	37.6	23.8	29.4	29.6	..	34.2
September	27.5	26.0	36.1	22.8	28.4	28.2	..	33.2
October	26.5	23.2	32.3	20.4	25.8	26.8	..	30.6
November	23.0	17.5	26.4	15.5	20.2	20.8	..	25.0
December	19.0	12.1	20.5	10.6	14.6	15.9	..	18.8
Annual Mean	23.6	19.9	29.6	17.1	22.3	22.3	..	27.1

(°) 2007

:11

Table 11: Mean of Minimum Air Temperature in the Palestinian Territory by Month and Station Location, 2007 (C°)

Month	Station Location							
	Gaza	Hebron	Jericho	Ramallah	Nablus	Tulkarm	Meithalun	Jenin
January	9.4	4.0	7.4	6.1	6.2	8.6	..	6.8
February	10.0	4.7	8.3	6.9	6.7	8.7	..	7.1
March	11.7	6.5	10.5	8.7	8.8	10.8	..	8.6
April	14.5	9.9	14.2	10.3	12.1	13.8	..	11.2
May	16.9	13.2	17.6	15.3	14.9	15.9	..	14.0
June	19.7	15.8	20.4	17.7	17.4	19.4	..	17.3
July	21.8	17.0	22.1	18.9	19.3	22.1	..	19.6
August	22.2	17.0	22.4	19.0	19.5	22.7	..	21.1
September	21.2	15.9	21.2	18.1	18.5	21.2	..	19.8
October	19.4	14.0	17.9	16.4	16.2	19.2	..	16.1
November	14.5	9.9	12.9	12.3	12.1	14.3	..	11.8
December	11.3	5.6	9.0	8.0	7.8	10.6	..	8.7
Annual Mean	16.1	11.1	15.3	13.1	13.3	15.6	..	13.5

(°) 2007

:12

Table 12: Absolute Minimum Air Temperature in the Palestinian Territory by Month and Station Location, 2007 (C°)

Month	Station Location							
	Gaza	Hebron	Jericho	Ramallah	Nablus	Tulkarm	Meithalun	Jenin
January	2.0	-1.0	0.2	-4.1	6.2	4.2	..	2.0
February	2.6	-3.0	-0.4	-3.4	6.7	4.8	..	1.0
March	3.6	-0.5	2.8	1.0	8.8	7.2	..	5.0
April	7.4	1.0	2.4	0.2	12.1	9.6	..	3.4
May	11.4	6.5	10.4	4.6	14.9	12.6	..	12.8
June	14.8	10.0	15.4	9.0	17.4	16.1	..	17.0
July	18.5	13.0	18.0	13.6	19.3	18.5	..	21.4
August	19.2	12.0	19.0	14.4	19.5	20.3	..	21.0
September	16.2	12.0	13.2	8.6	18.5	18.5	..	17.8
October	12.2	9.0	11.4	8.5	16.2	14.9	..	11.0
November	7.5	2.0	4.2	0.2	12.1	10.8	..	11.0
December	3.4	-0.4	2.1	-1.0	7.8	7.3	..	6.0

(°) 2007

:13

Table 13: Absolute Maximum Air Temperature in the Palestinian Territory by Month and Station Location, 2007 (C°)

Month	Station Location							
	Gaza	Hebron	Jericho	Ramallah	Nablus	Tulkarm	Meithalun	Jenin
January	31.2	21.4	25.0	20.2	22.9	20.0	..	25.0
February	34.4	21.0	27.6	21.8	28.1	20.7	..	26.0
March	34.8	23.6	33.8	26.3	30.4	23.0	..	26.8
April	41.2	32.6	41.4	34.5	35.0	31.0	..	38.6
May	43.5	34.0	46.4	38.0	38.6	32.0	..	40.4
June	40.0	33.5	45.0	36.8	38.0	31.0	..	37.6
July	36.0	38.0	44.0	35.6	38.1	36.9	..	37.0
August	32.8	33.4	45.6	37.3	38.6	34.0	..	35.8
September	38.8	34.6	43.4	37.2	38.8	33.2	..	37.0
October	37.4	31.6	40.6	32.7	35.3	32.5	..	39.0
November	35.4	31.6	34.8	27.2	30.7	27.7	..	29.0
December	31.6	22.0	28.8	26.5	28.0	22.3	..	25.4

() 2007

:14

Table 14: Rainfall Quantity in the Palestinian Territory by Month and Station Location, 2007 (mm)

Month	Station Location							
	Gaza	Hebron	Jericho	Ramallah	Nablus	Tulkarm	Meithalun	Jenin
January	159.5	153.1	23.5	81.2	105.6	102.0	102.0	30.1
February	98.8	109.0	22.5	130.4	174.9	162.0	142.4	53.3
March	69.7	103.2	26.4	146.1	116.6	74.3	88.7	51.9
April	0.5	9.4	8.2	5.0	8.2	3.7	18.1	4.0
May	0.8	5.8	0.0	16.2	4.9	8.5	0.0	0.0
June	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
July	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
August	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
September	0.0	0.0	0.0	0.0	0.0	0.6	0.0	0.0
October	1.0	0.0	0.2	1.0	0.1	0.5	0.0	0.0
November	43.1	23.4	19.9	106.5	85.3	148.3	66.7	70.5
December	31.7	43.9	14.5	57.5	78.4	82.0	78.5	22.7
Total	405.1	447.8	115.2	543.9	574	581.9	494.4	232.5

2007

:15

Table 15: Number of Rainfall Days in the Palestinian Territory by Month and Station Location, 2007

Month	Station Location							
	Gaza	Hebron	Jericho	Ramallah	Nablus	Tulkarm	Meithalun	Jenin
January	8	9	8	6	7	8	9	4
February	10	16	10	14	14	14	13	15
March	8	8	5	8	7	6	5	7
April	1	4	1	4	4	2	3	2
May	1	2	0	3	5	4	0	0
June	0	0	0	0	0	0	0	0
July	0	0	0	0	0	0	0	0
August	0	0	0	0	0	0	0	0
September	0	0	0	0	0	2	0	0
October	1	0	1	1	1	1	0	0
November	3	4	3	4	6	6	6	4
December	4	7	4	8	9	6	8	6
Annual Mean	36	50	32	48	53	49	44	38

() 2007

:16

Table 16: Maximum Daily Rainfall in the Palestinian Territory by Month and Station Location, 2007 (mm)

Month	Station Location							
	Gaza	Hebron	Jericho	Ramallah	Nablus	Tulkarm	Meithalun	Jenin
January	92.8	46.0	8.1	52.3	43.3	..	35.5	20.8
February	30.9	32.2	5.7	28.6	38.0	..	37.7	23.2
March	20.9	47.2	9.9	56.8	41.8	..	37.2	18.8
April	0.5	7.2	8.2	3.1	5.2	..	11.0	3.2
May	0.8	4.4	0.0	11.9	2.5	..	0.0	0.0
June	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
July	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
August	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
September	0.0	0.0	0.0	0.0	0.0	..	0.0	0.0
October	1.0	0.0	0.2	1.0	0.1	..	0.0	0.0
November	32.5	14.8	14.4	64.3	31.5	..	27.2	36.7
December	23.1	14.5	8.0	16.4	25.7	..	28.6	17.5

(%) 2007

:17

Table 17: Mean Relative Humidity in the Palestinian Territory by Month and Station Location, 2007 (%)

Month	Station Location							
	Gaza	Hebron	Jericho	Ramallah	Nablus	Tulkarm	Meithalun	Jenin
January	67	74	70	67	67	72	..	80
February	67	72	65	66	67	76	..	84
March	70	66	57	59	62	75	..	76
April	70	55	45	50	53	65	..	67
May	73	48	38	45	51	62	..	60
June	75	51	39	48	55	69	..	63
July	76	57	40	53	61	68	..	63
August	75	60	44	57	65	74	..	65
September	73	62	47	58	64	70	..	64
October	69	59	51	56	57	67	..	65
November	67	64	60	59	57	64	..	66
December	68	73	70	66	67	71	..	74
Annual Mean	71	62	52	57	61	69	..	69

(%) 2007

:18

Table 18: Absolute Maximum Relative Humidity in the Palestinian Territory by Month and Station Location, 2007 (%)

Month	Station Location							
	Gaza	Hebron	Jericho	Ramallah	Nablus	Tulkarm	Meithalun	Jenin
January	86	97	72	100	88	84	88	78
February	81	100	79	100	94	87	90	80
March	80	100	76	100	90	74	90	76
April	84	98	61	100	90	76	83	76
May	81	91	65	95	77	72	79	79
June	78	88	54	94	73	64	71	79
July	79	80	51	89	72	65	70	69
August	76	82	54	92	74	67	67	72
September	77	89	60	95	74	68	72	72
October	81	88	64	93	78	71	70	75
November	73	97	82	99	91	91	91	89
December	70	100	82	100	88	75	89	89

(%) 2007

:19

Table 19: Absolute Minimum Relative Humidity in the Palestinian Territory by Month and Station Location, 2007 (%)

Month	Station Location							
	Gaza	Hebron	Jericho	Ramallah	Nablus	Tulkarm	Meithalun	Jenin
January	59	40	50	45	42	41	41	42
February	51	34	51	51	47	44	34	57
March	33	33	39	39	31	46	33	47
April	39	29	27	33	35	29	31	40
May	30	24	27	22	25	42	26	33
June	65	23	26	31	28	28	32	38
July	63	26	29	28	34	47	30	48
August	60	27	32	33	33	54	44	49
September	60	49	44	64	54	48	53	57
October	55	27	41	30	27	27	24	42
November	29	20	42	27	29	31	32	32
December	43	36	46	40	35	35	38	51

() 2007

:20

Table 20: Evaporation Quantity in the Palestinian Territory by Month and Station Location, 2007 (mm)

Month	Station Location							
	Gaza	Hebron	Jericho	Ramallah	Nablus	Tulkarm	Meithalun	Jenin
January	68	65	78	110	49	..	..	..
February	76	81	76	104	67	..	..	..
March	115	93	128	157	99	..	..	..
April	142	139	189	195	149	..	..	..
May	162	166	261	238	203	..	..	..
June	190	200	289	232	226	..	..	..
July	193	221	298	252	238	..	..	..
August	183	225	267	228	218	..	..	..
September	165	157	227	127	178	..	..	..
October	132	112	135	128	131	..	..	..
November	87	87	94	63	75	..	..	..
December	69	62	59	55	49	..	..	..
Total	1,582	1,608	2,101	1,889	1,682	..	..	..

(/) 2007

:21

Table 21: Mean Wind Speed in the Palestinian Territory by Month and Station Location, 2007 (km\hour)

Month	Station Location							
	Gaza	Hebron	Jericho	Ramallah	Nablus	Tulkarm	Meithalun	Jenin
January	..	12.4	8.9	16.3	8.7	4.3	..	7.5
February	..	12.8	10.4	18.0	9.5	4.1	..	7.9
March	..	12.6	13.1	18.4	10.0	3.8	..	7.9
April	..	11.5	16.2	18.5	10.2	3.4	..	7.9
May	..	9.3	15.8	18.0	10.7	3.3	..	9.0
June	..	9.3	15.3	19.4	12.0	2.9	..	9.4
July	..	9.2	16.0	20.4	12.4	2.9	..	9.7
August	..	8.7	14.8	18.6	11.7	2.7	..	8.6
September	..	8.1	12.5	17.0	10.3	2.6	..	7.2
October	..	8.0	9.4	13.0	7.7	2.9	..	5.4
November	..	8.8	7.9	14.1	7.8	3.8	..	6.1
December	..	10.1	7.6	16.0	7.7	4.0	..	7.5
Annual Mean	..	10.1	12.3	17.3	9.9	3.4	..	7.8

(/) 2007

:22

Table 22: Wind Gust Speed in the Palestinian Territory by Month and Station Location, 2007 (km\hour)

Month	Station Location							
	Gaza	Hebron	Jericho	Ramallah	Nablus	Tulkarm	Meithalun	Jenin
January	25.0	21.0	18.2	18.5	12.0	18.0	2.6	3.8
February	18.0	20.0	15.7	20.7	13.0	13.0	3.2	4.4
March	20.0	17.0	18.0	20.0	11.0	9.0	6.8	3.8
April	13.0	12.0	21.1	21.0	12.0	19.0	5.6	4.7
May	12.0	9.0	17.0	19.0	10.4	13.0	6.0	13.0
June	14.0	8.0	17.2	17.0	14.0	9.0	5.2	15.0
July	12.0	8.0	15.5	18.5	11.0	9.0	8.8	18.0
August	14.0	7.0	13.7	14.5	9.0	7.0	8.8	12.4
September	14.0	8.0	13.5	14.5	13.0	7.0	10.2	11.5
October	16.0	7.0	12.0	13.8	12.0	8.0	8.0	9.0
November	26.0	9.0	9.4	15.0	12.0	9.0	8.8	16.4
December	18.0	10.0	19.0	14.5	15.0	15.0	10.6	14.0

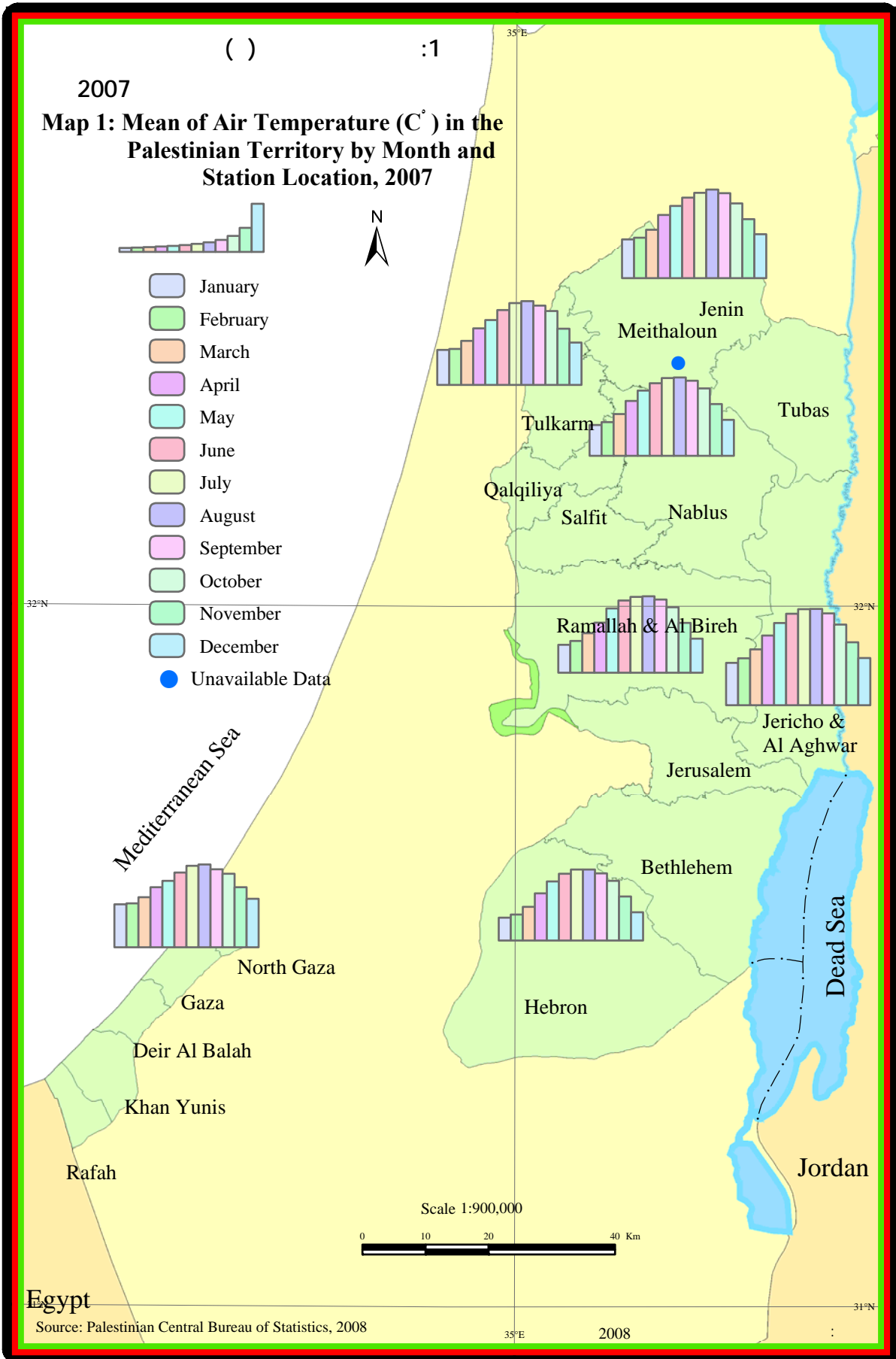
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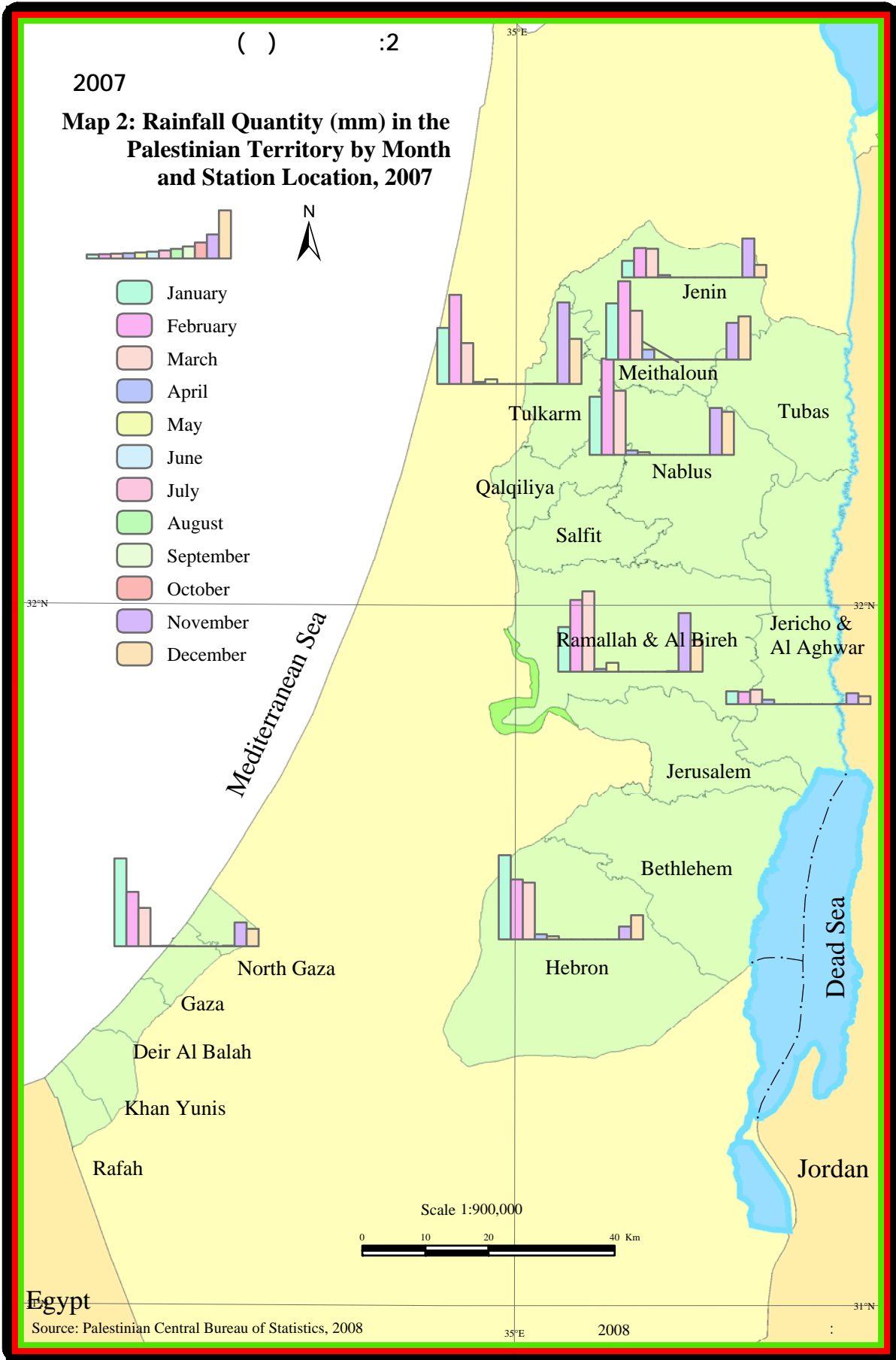
Month	Station Location							
	Gaza	Hebron	Jericho	Ramallah	Nablus	Tulkarm	Meithalun	Jenin
January	5.2	4.7	5.5	5.4	4.7	..	..	5.4
February	5.9	4.8	5.9	7.1	4.8	..	..	5.6
March	7.3	6.4	7.7	7.4	6.4	..	..	6.8
April	8.2	8.1	9.3	9.4	8.2	..	..	7.8
May	8.9	9.0	9.4	11.4	8.9	..	..	9.7
June	9.7	8.3	11.8	12.4	8.4	..	..	11.3
July	10.5	9.6	11.7	12.1	9.6	..	..	11.1
August	10.4	10.9	11.6	11.8	10.9	..	..	10.0
September	9.3	10.3	10.5	10.1	10.2	..	..	9.1
October	8.5	9.8	8.7	7.3	9.8	..	..	8.1
November	6.5	7.0	6.5	6.5	7.0	..	..	6.8
December	5.1	4.7	5.6	5.9	4.5	..	..	5.4
Annual Mean	8.0	7.8	8.7	8.9	7.8	..	..	8.1

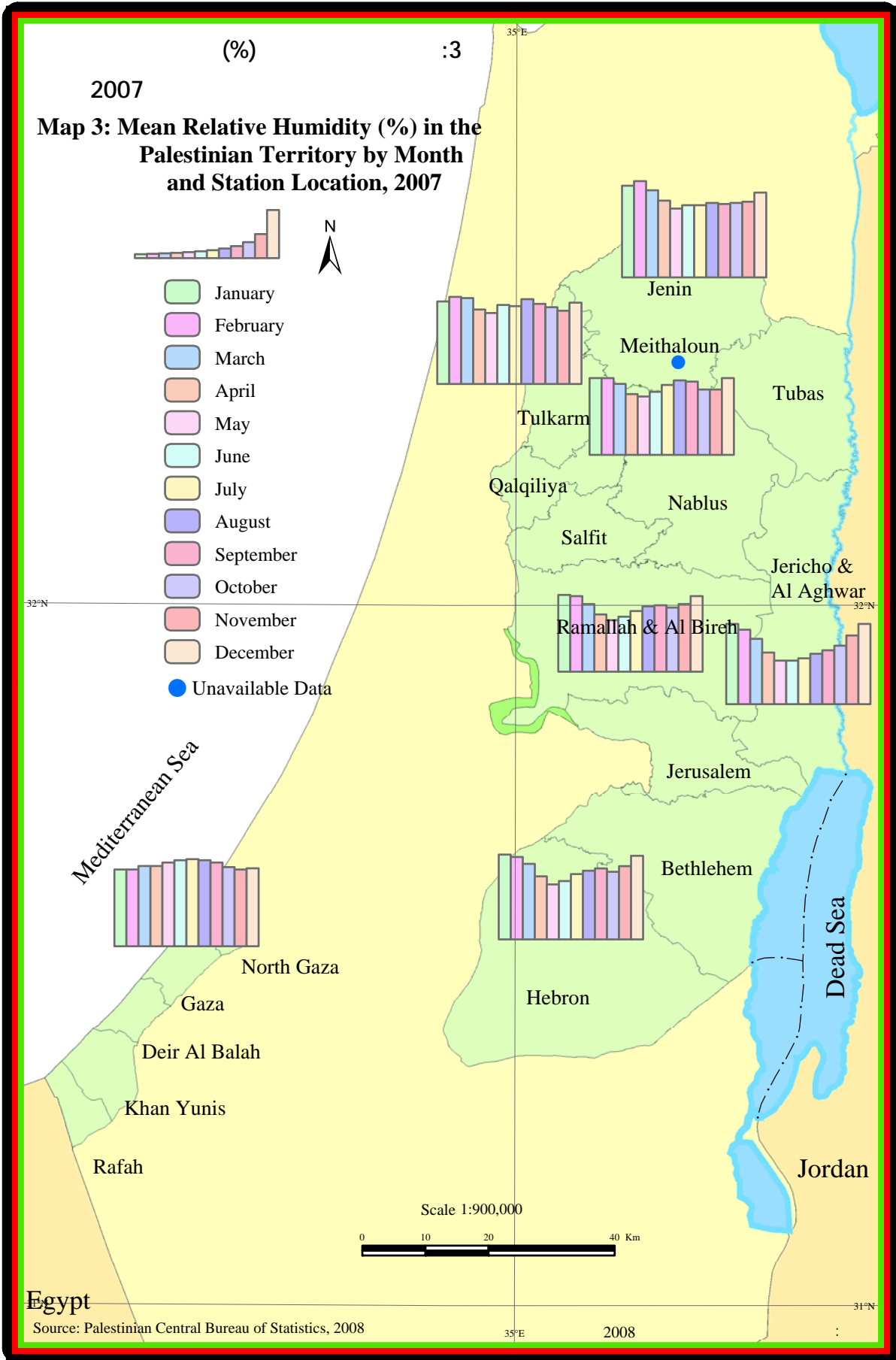
Table 24: Mean Atmospheric Pressure for Some Stations in the Palestinian Territory by Month and Station Location, 2007 (mbar)

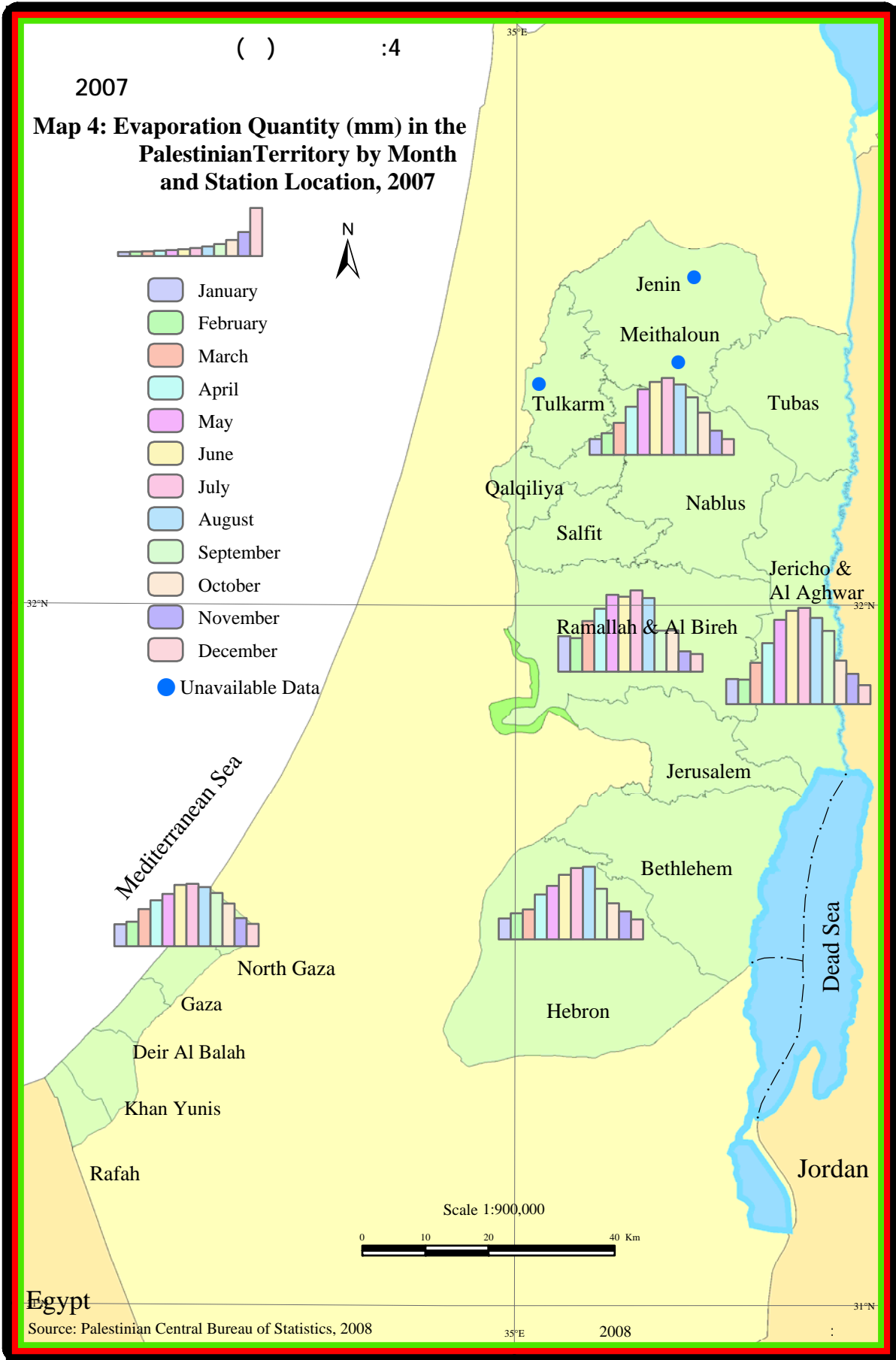
Month	Station Location							
	Gaza	Hebron	Jericho	Ramallah	Nablus	Tulkarm	Meithalun	Jenin
January	1,016	903	1,048	924	953	..	..	..
February	1,016	902	1,046	923	952	..	..	..
March	1,013	901	1,044	922	951	..	..	..
April	1,012	901	1,041	921	949	..	..	..
May	1,011	901	1,040	922	948	..	..	..
June	1,009	900	1,037	921	946	..	..	..
July	1,006	899	1,034	919	944	..	..	..
August	1,008	899	1,035	919	945	..	..	..
September	1,011	902	1,039	922	948	..	..	..
October	1,013	903	1,042	924	951	..	..	..
November	1,014	904	1,046	925	953	..	..	..
December	1,017	904	1,048	925	953	..	..	..
Annual Mean	1,012	902	1,042	922	949	..	..	..

Maps











**Palestinian National Authority
Palestinian Central Bureau of Statistics**

**Meteorological Conditions in the Palestinian Territory
Annual Report 2007**

July, 2008

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Preface

Pcbs is pleased to realse this specialized satatistical report on the Meteorological Conditions in the Palestinian Territory. This report has been prepered in accordance within the framework of our official efforts for creating and establishing the National Statistical System, and providing the necessary statsitics to Palestinian policy-planner and decision-makers in water, environemt and natural resources sector.

Meteorological statistics form one of the most important parts of the environmental statistics. In addition to its importance for studying and providing data on climatic changes, there is a strong relationship with the statistics of air quality and its pollution, energy statistics and water statistics. This implies availabilizing precise and comprehensive data for the climatic conditions in the Palestinian Territory.

PCBS established a special program for environment statistics, that aims at building and updating a comprehensive and accurate statistical database about all environmental subjects. This program aims to provide statistical data as a tool to control the environmental status in the Palestinian Territory.

Recent years witnessed more attention to environment and climate statistics at the international and regional levels due to the changes taking places in environment and natural recourses. Therefore, measurement and monitoring environment and meteorological indicators became an important issue at the national, regional and international levels.

This report is one of a series of expected reports to be published by the PCBS on the environment according to the Submaster Plan for the Environment Statistics Department. This report presents the most important indicators of meteorology provided by the Meteorological Directorate at the Ministry of Transport.

This report concentrates on the variables of rainfall, temperature, relative humidity, solar radiation, wind, pressure and the amount of evaporation.

PCBS hopes that the findings of this report will contribute to improve the environmental status and stop the random depletion of natural resources, as well as help the Palestinian policy-planner and decision-makers in development and planning processes.

July, 2008

Luay Shabaneh, Ph.D
President

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Executive Summary

The main findings of the time series indicate that the annual mean of air temperature over the period 1975-1996 is between 15.4 centigrade degrees in Hebron Station, and 22.7 in Jericho Station. While the annual mean for 2007 ranges between 15.5 centigrade degrees in Hebron Station and 22.4 centigrade degrees in Jericho Station.

The main findings of the time series indicate that the annual mean of rainfall was between 48.7 mm in Jericho Station in 1999, and 942.7 mm in Nablus Station in 2003. The quantities of rainfall ranges between 115.2 mm in Jericho Station and 574 mm in Nablus Station 2007.

The main findings of the time series indicate that the annual mean of relative humidity over the period 1969-1983 was 52% in Jericho Station, while it approaches 63% in Tulkarm Station. While in 2007, the annual mean of relative humidity was between 52% in Jericho Station and 71% in Gaza Station.

The main findings of the time series indicate that Tulkarm Station has the lowest annual mean of evaporation over the period 1973-1984 as it approaches 1,633 mm, while Jericho Station has the highest annual mean of evaporation as it approaches 2,342 mm for the same period. But for 2007 the quantity of evaporation was between 1,582 mm in Gaza Station and 2,101 mm in Jericho Station.

The data of 2007 indicates that the lowest annual mean of wind speed was 2.6 km/hour in Tulkarem Station at September, while the highest annual mean was 20.4 km/hour in Ramallah Station at July.

The data of 2007 indicates that the highest duration mean of sunshine was 12.4 hour/day in Ramallah Station on June, while the lowest duration mean of sunshine was 4.5 hour/day in Nablus Station on December.

Chapter One

Introduction

This report provides statistical data on the main meteorological indicators in the Palestinian Territory, based on the administrative records from the Palestinian Ministry of Transport. It provides basic statistical aspects of meteorology, including rainfall, temperature, relative humidity, wind, evaporation solar radiation and pressure. A special questionnaire was designed to collect the data from the meteorological Stations through the Ministry of Transport. The questionnaire covered the following items:

1. Rainfall: quantities and rainfall days.
2. Temperature: mean, maximum, minimum and absolute values.
3. Relative humidity: mean and absolute values.
4. Total amount of evaporation, wind speed, sunshine duration and pressure.

This report consists of five chapters: the first chapter presents the report objectives and the report structure, the second chapter describes the definitions and explanations and the third chapter briefly describes the main findings, while the fourth chapter presents the methodology used in the report, consisting the form design, fieldwork operations and data processing, the last chapter includes an assessment of data quality and technical notes

Chapter Two

Concepts and Definitions

Atmospheric Pressure (Barometric Pressure):

It is defined as the weight of the air column laying on unit area at any point on the earth surface, measured in dyne/ cm² or Newton /m². Millibar (bar: pressure of 10⁶dyne/ cm²) is the common unit. It is measured by using barometer or barograph instruments. At sea level, the atmospheric pressure is 76 cm Hg or 1013.25 millibars.

Climate:

Conditions of the atmosphere at a particular location (microclimate) or region over a long period of time. It is the long –term summation of atmospheric elements- such as solar radiation, temperature, humidity, precipitation type (frequency and amount), atmospheric pressure, and wind (speed and direction), and their variation.

Climatological Statistics:

Statistics dealing with long – term weather conditions.

Evaporation:

Transformation of liquid water to invisible gas is known as water vapor by the effect of heat and the process is called evaporation. The rate of evaporation is defined as the size of liquid water that is evaporated from a unit area per unit time. It is expressed as the depth of water in (mm) that would be potentially lost during the time period (24-hour) from the total area.

Rain:

Water falling from the atmosphere and deposited on land or water surfaces.

mm "Rain "

1 liter of water falling on 1 m² area.

Rain day:

The day in which the quantity of rain is 0.01 inch or more.

Relative Humidity:

The percentage of the quantity of water vapor in the atmosphere to the quantity of vapor needed for saturated state.

Solar Radiation:

The energy radiated from the sun to the earth surface. It is responsible for all climatic changes in the atmosphere. The intensity of radiation is measured by the actenometer and sunshine duration is measured by the sunshine recorder instrument (Kampel Stock).

Temperature:

Is the degree of hotness or coldness of body or an environment. The temperature is measured by the thermometer; the unit is either Celsius or Fahrenheit.

Weather:

Day-to-day or sometimes even instantaneous changes of atmospheric conditions over a given place or area. In contrast, climate encompasses the statistical ensemble of all weather conditions during along period of time over that place or area. Atmospheric conditions are measured by the meteorological parameters of air temperature, barometric pressure, wind velocity, humidity, clouds and precipitation.

Wind:

The vertical movement of air between two places with different atmospheric pressures.

Symbol used in the tables:

.. : Data not available

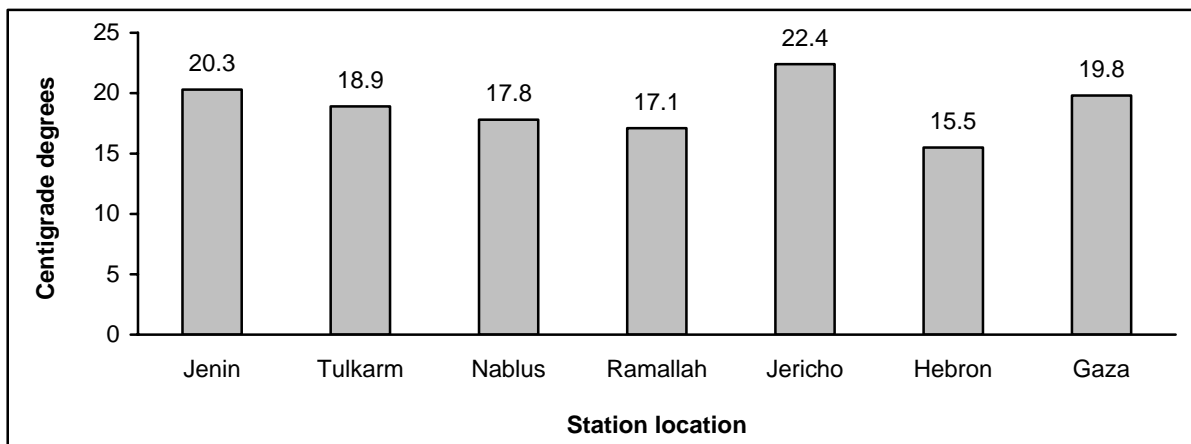
Main Findings

This section presents the main findings of report, including the main indicators of the meteorological reality in the Palestinian Territory.

3.1 Temperature

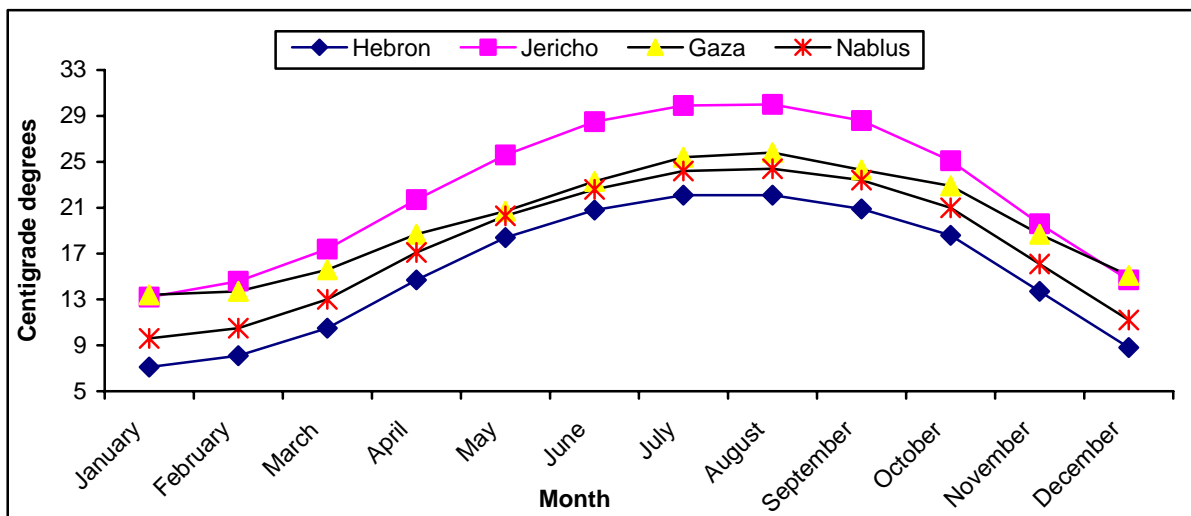
The main findings of the time series indicate that the annual mean of air temperature over the period 1975-1996 is between 15.4 centigrade degrees in Hebron Station, and 22.7 in Jericho Station. While the annual mean for 2007 ranges between 15.5 centigrade degrees in Hebron Station and 22.4 centigrade degrees in Jericho Station.

Figure 1: Annual Mean of Air Temperature in the Palestinian Territory by Station Location, 2007



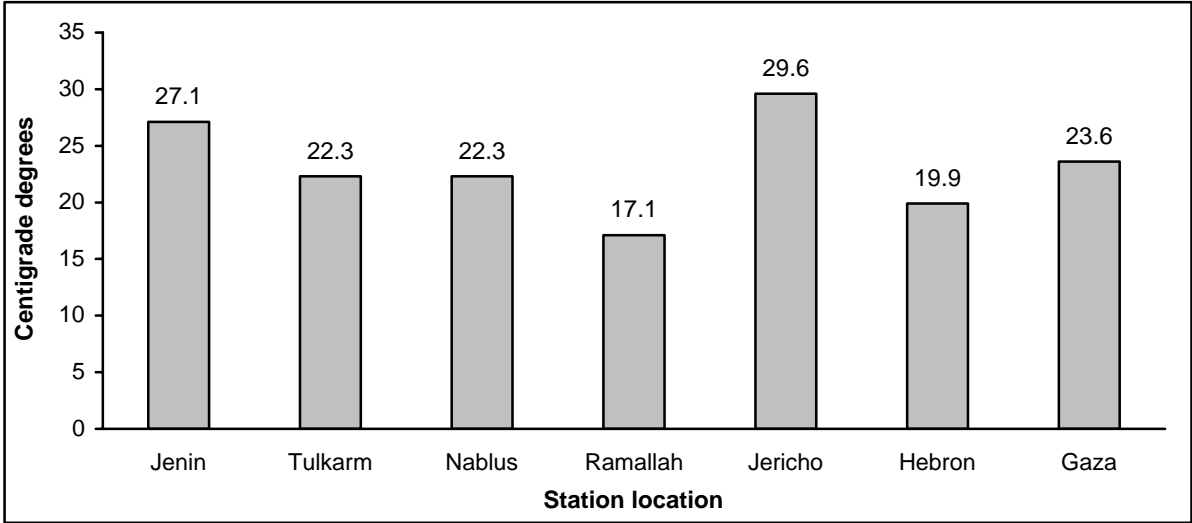
For the year 2007, the main findings indicate that January was the coldest month of the year, in which the lowest recorded monthly mean was 7.1 centigrade degrees in Hebron Station. And August was the hottest month of the year, in which the highest recorded monthly mean was 30.0 centigrade degrees in Jericho Station.

Figure 2: Mean of Air Temperature in the Palestinian Territory by Month for Some Stations, 2007



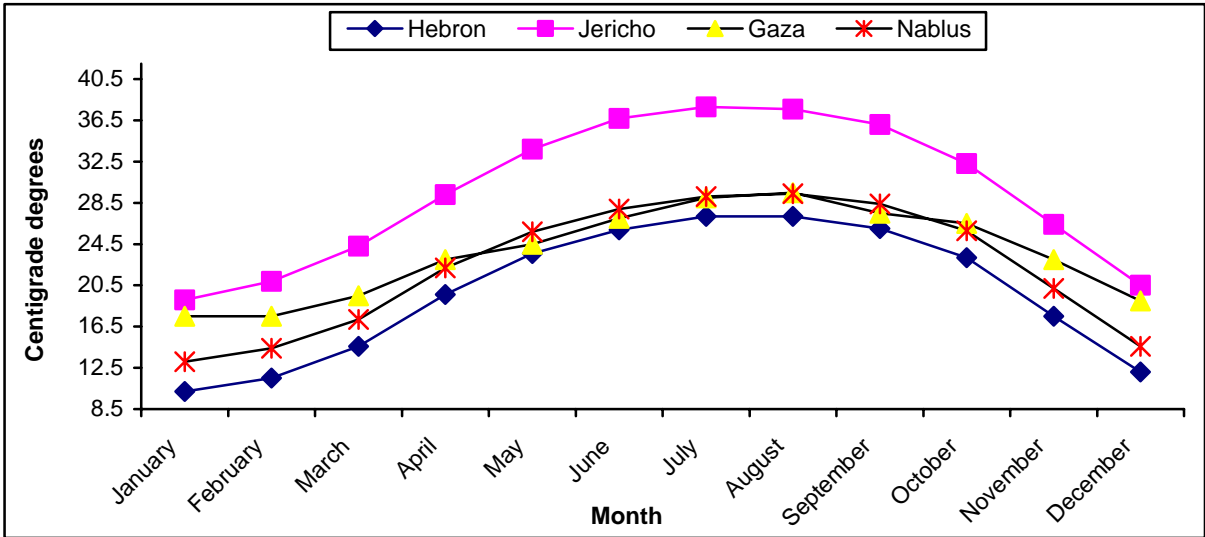
The main findings of the time series indicate that the annual mean of maximum air temperature over the period 1975-1996 is between 19.6 centigrade degrees in Hebron Station, and 29.6 in Jericho Station. The annual mean reaches 17.1 centigrade degrees in Ramallah Station and 29.6 centigrade degrees in Jericho Station in 2007.

Figure 3: Annual Mean of Maximum Air Temperature in the Palestinian Territory by Station Location, 2007



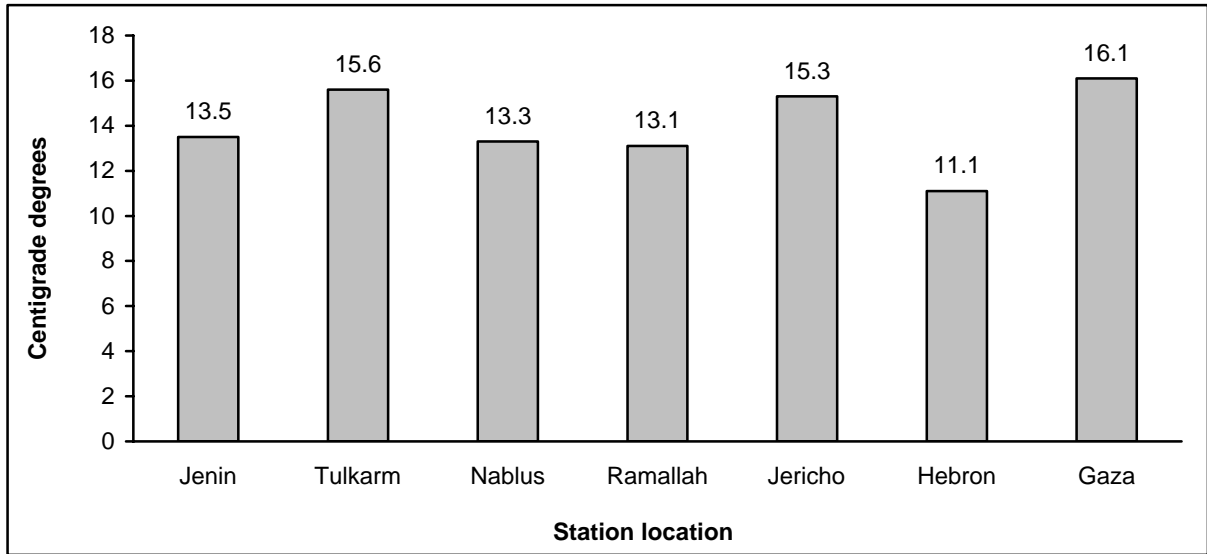
The data of 2007 indicates that the lowest value for the monthly mean of maximum air temperature was 8.7 centigrade degrees in Ramallah Station at January, while the highest value for the monthly mean of maximum air temperature was 37.8 centigrade degrees in Jericho Station at July.

Figure 4: Mean of Maximum Air Temperature in the Palestinian Territory by Month for Some Stations, 2007



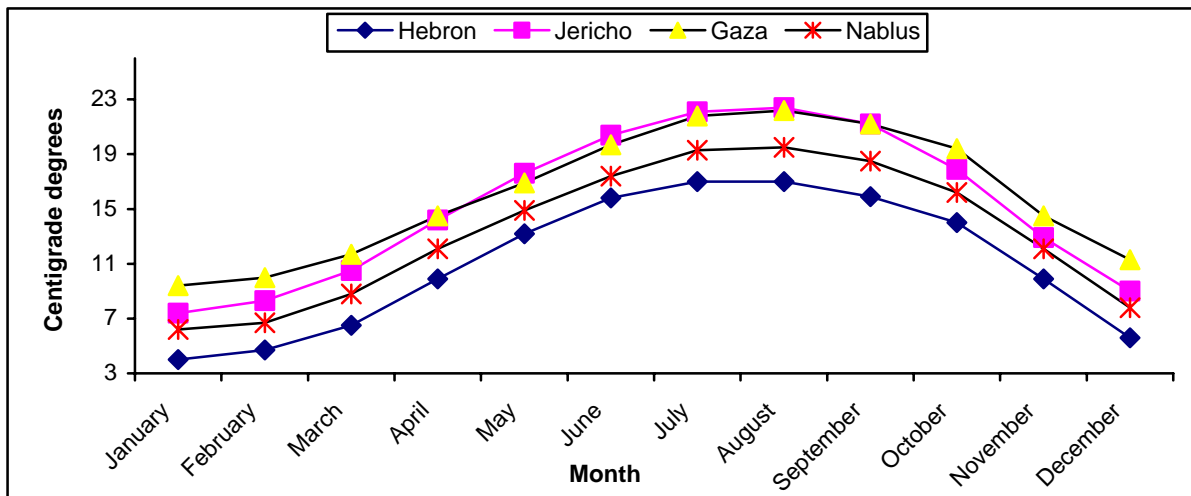
The main findings of the time series indicate that the annual mean of minimum air temperature over the period 1975-1996 is between 11.2 centigrade degrees in Hebron Station and 15.7 in Jericho Station. The annual mean of minimum air temperature ranges between 11.1 centigrade degrees in Hebron Station and 16.1 in Gaza Station in 2007.

Figure 5: Annual Mean of Minimum Air Temperature in the Palestinian Territory by Station Location, 2007



The data of 2007 indicates that the lowest monthly mean of minimum air temperature was 4.0 centigrade degrees in Hebron Station at January, while the highest monthly mean of minimum air temperature was 22.4 centigrade degrees in Jericho Station at August.

Figure 6: Mean of Minimum Air Temperature in the Palestinian Territory by Month for Some Stations, 2007

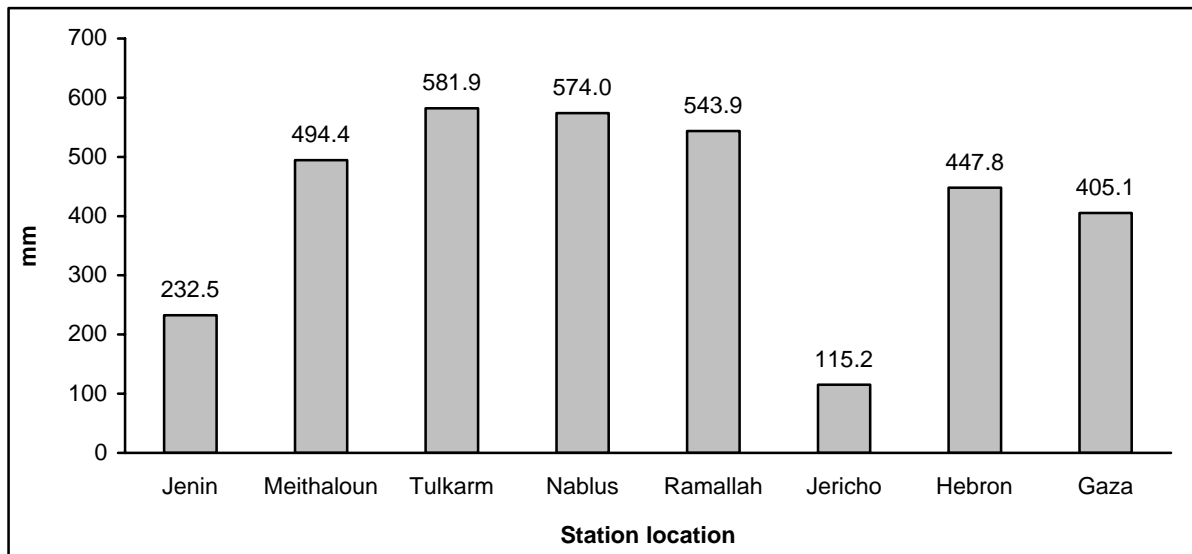


For absolute minimum air temperature in 2007, the lowest value was -4.1 centigrade degrees in Ramallah Station at December, while the highest value of absolute maximum air temperature was 46.4 in Jericho Station at May.

3.2 Rainfall

The main findings of the time series indicate that the annual mean of rainfall was between 48.7 mm in Jericho Station in 1999, and 942.7 mm in Nablus Station in 2003.

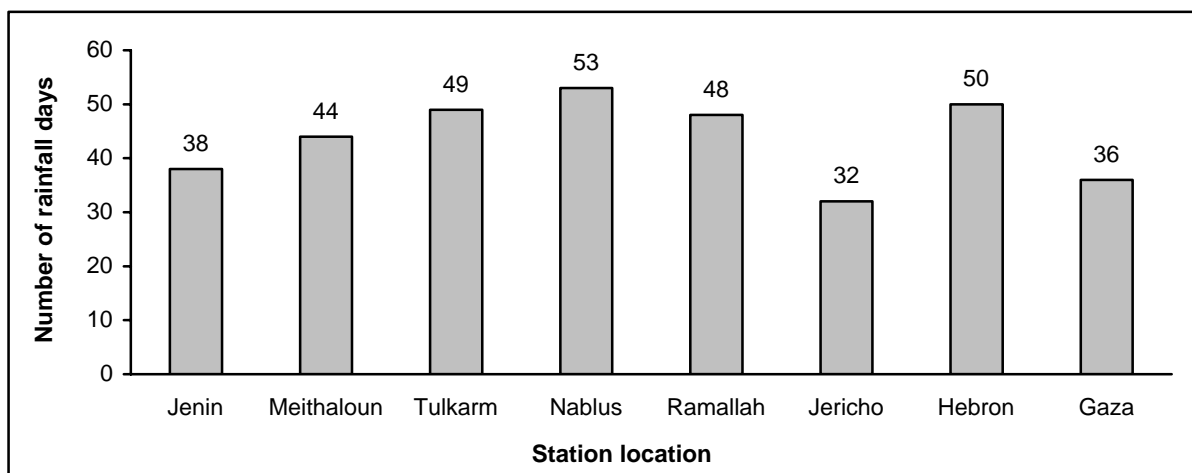
Figure 7: Annual Quantity of Rainfall in the Palestinian Territory by Station Location, 2007



The data of 2007 indicates that February has the highest rainfall quantity, while the quantity of rainfall decreased in May. As in the summer months, the summer of 2007 has no rainfall. The quantities of rainfall ranges between 574.0 mm in Nablus Station and 115.2 mm in Jericho Station.

There is variation in the number of rainfall days in the Stations, the highest number of rainfall days was 53 days in Nablus Station for 2007. And the highest daily rainfall quantity was 92.8 mm in the Gaza Station .

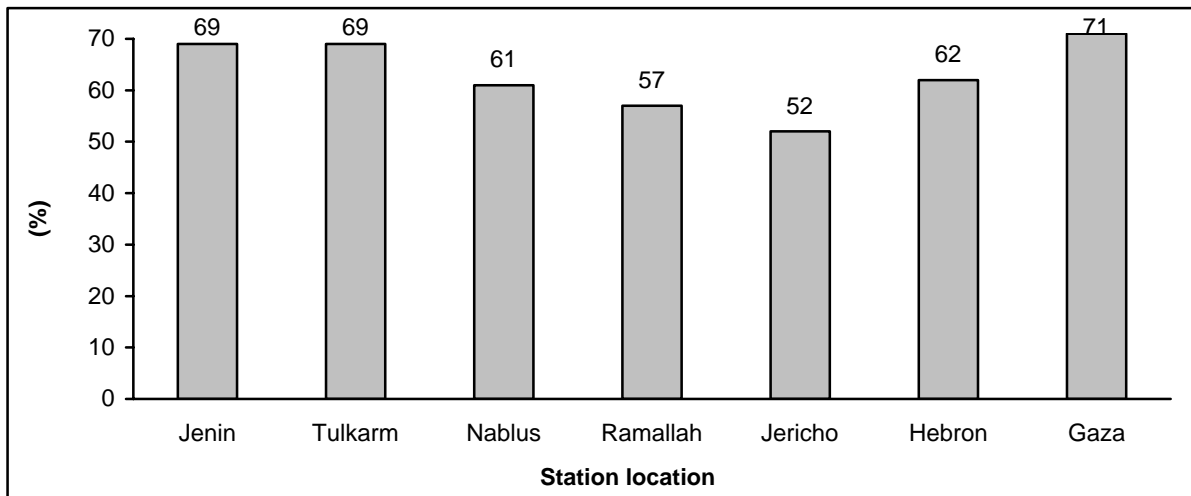
Figure 8: Number of Rainfall days in the Palestinian Territory by Station Location, 2007



3.3 Relative Humidity

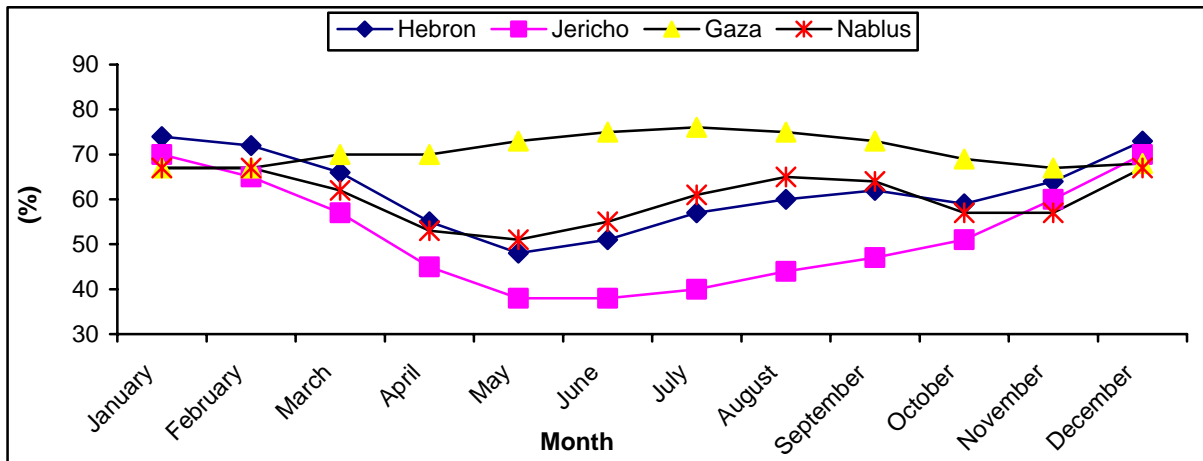
The main findings of the time series indicate that the annual mean of relative humidity over the period 1969-1983 was 52% in Jericho Station, while it approaches 63% in Tulkarm Station. While in 2007, the annual mean of relative humidity was between 52% in Jericho Station and 71% in Gaza Station.

Figure 9: Annual Mean of Relative Humidity in the Palestinian Territory by Station Location, 2007



The data of 2007 indicates that the annual mean of relative humidity decreased in May to 38% in Jericho Station, and increased in February to 84% in Jenin Station. For the extreme maximum relative humidity, the highest value was 100% registered for (January – April) in Ramallah Station and the value was 100% registered for (February and March) in Hebron Station, while the lowest value of the extreme minimum relative humidity was 24% in Meithalun Station.

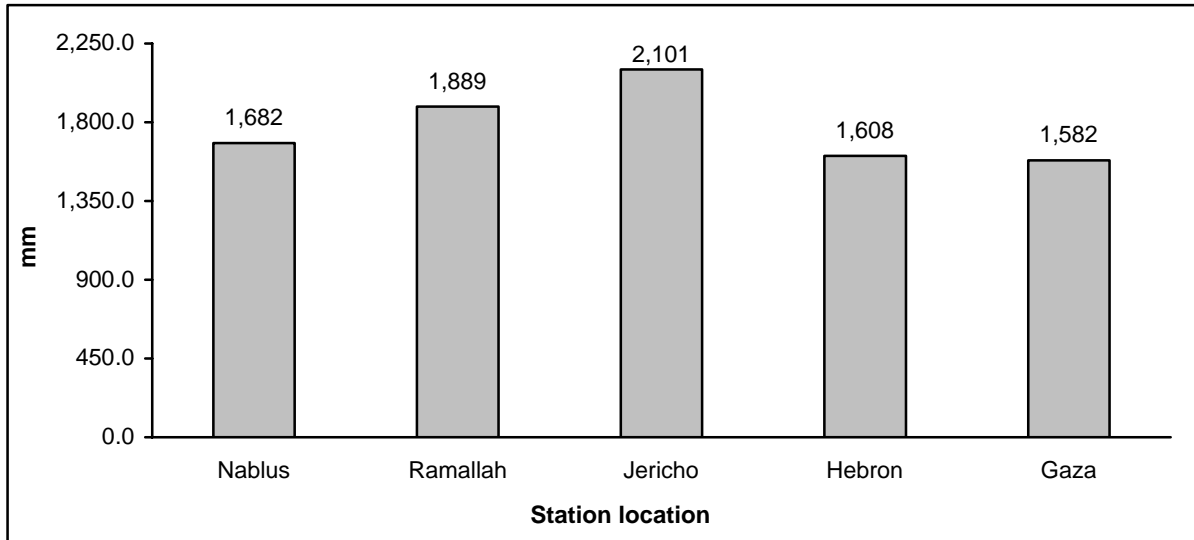
Figure 10: Mean of Relative Humidity in the Palestinian Territory by Month for Some Stations, 2007



3.4 Evaporation

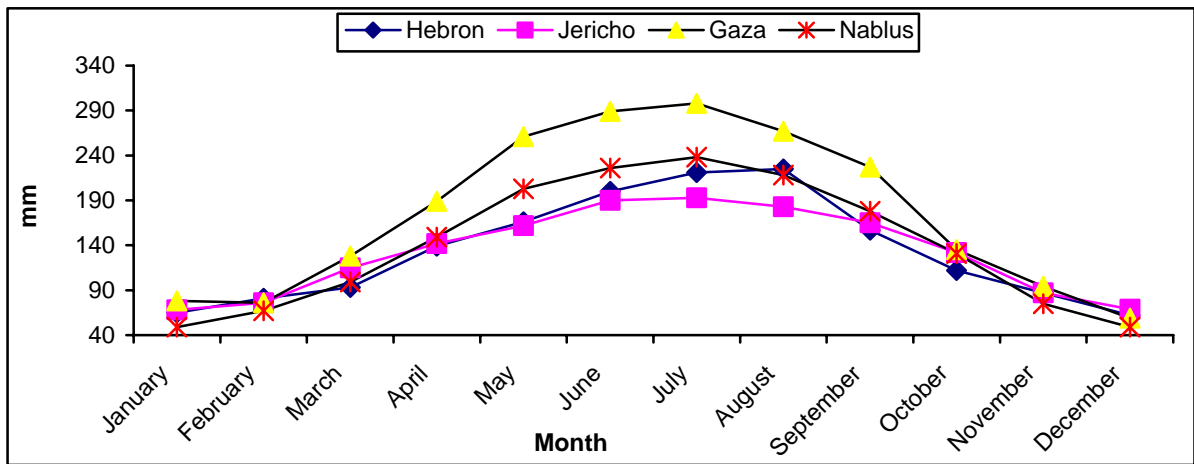
The main findings of the time series indicate that Tulkarm Station has the lowest annual mean of evaporation over the period 1973-1984 as it approaches 1,633 mm, while Jericho Station has the highest annual mean of evaporation as it approaches 2,342 mm for the same period. But for 2007 the quantity of evaporation was between 1,582 mm in Gaza Station and 2,101 mm in Jericho Station.

Figure 11: Annual Quantity of Evaporation in the Palestinian Territory by Station Location, 2007



The data of 2007 indicates that the annual mean of quantity of evaporation decrease in December and January to 49 mm in Nablus Station, and increase in July to 298 mm in Jericho Station.

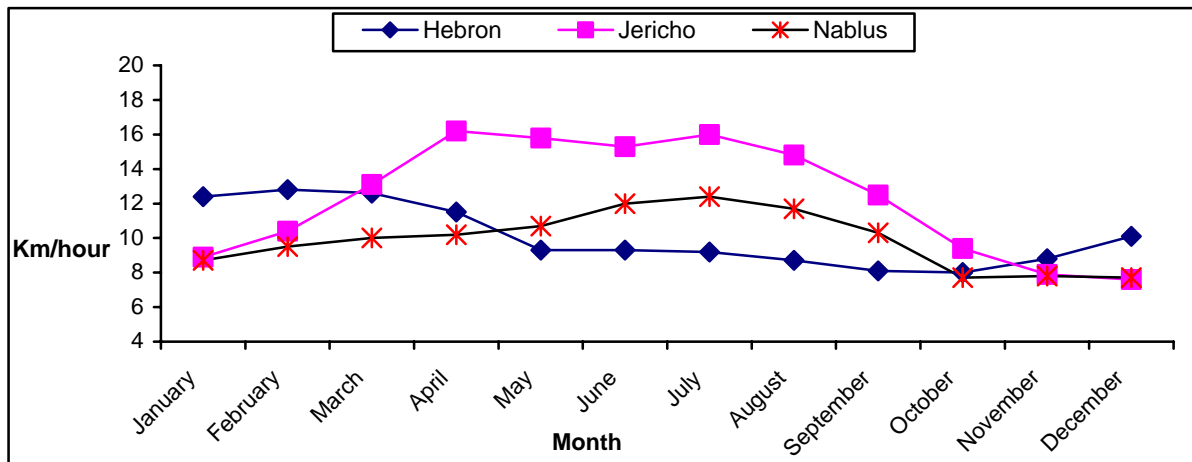
Figure 12: Quantity of Evaporation in the Palestinian Territory by Month for some Stations, 2007



3.5 Wind Speed

The data of 2007 indicates that the lowest annual mean of wind speed was 2.6 km/hour in Tulkarem Station at September, while the highest annual mean was 20.4 km/hour in Ramallah Station at July.

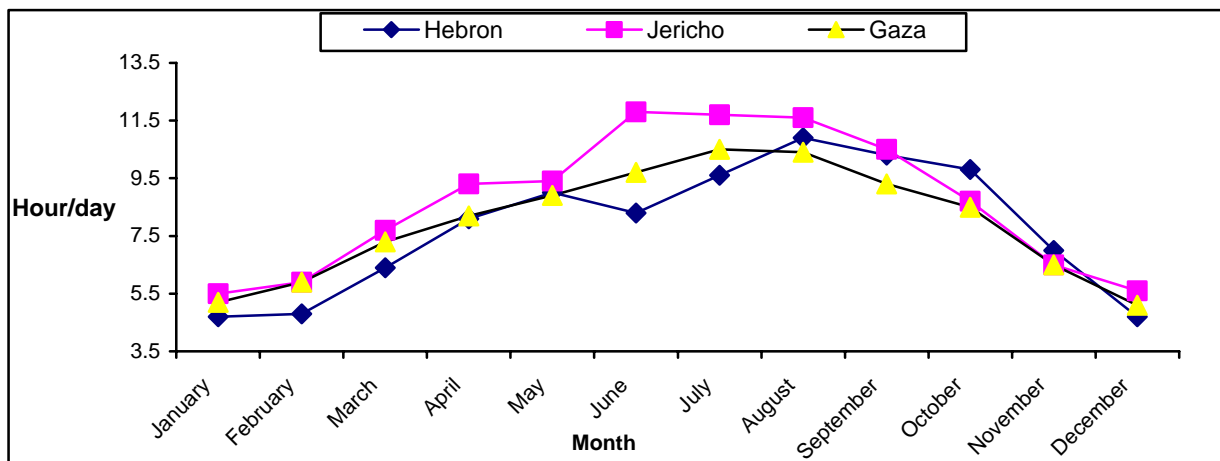
Figure 13: Mean of Wind Speed in the Palestinian Territory by Month for Some Stations, 2007



3.6 Sunshine Duration

The data of 2007 indicates that the highest duration mean of sunshine was 12.4 hour/day in Ramallah Station at June, while the lowest duration mean of sunshine was 4.5 hour/day in Nablus Station at December.

Figure 14: Mean of Sunshine Duration in the Palestinian Territory by Month for Some Stations, 2007



3.7 Atmospheric Pressure

The data of 2007 indicates that the highest mean of pressure was 1,048 mbar in Jericho Station at December and January, while the lowest was 899 mbar in Hebron Station at July and August.

Chapter Four

Methodology

4.1 Form

A form was designed to collect the climatic data. The form was designed to cover all the available climatic indicators and includes identification for the Stations and the variables of rainfall, temperature, wind, evaporation, relative humidity, sunshine radiation, and pressure.

4.2 Field Operations

The data was collected by the follow up of the Fieldwork Directorate and Meteorological Office in the Ministry of Transport. The forms were filled from administrative records of the climatic Stations. These Stations are located in Jenin, Meithalun in Jenin Governorate, Tulkarm, Nablus, Ramallah, Jericho, Hebron, and Gaza.

The methodology (in meteorological Station) for measuring the different meteorological indicators was as following:

1. Measuring of temperature by using the Thermometer instrument.
2. Measuring of relative humidity by using the Hectometer instrument.
3. Measuring of wind speed by using the Anemometer instrument.
4. Measuring of sunshine duration by using the sunshine recorder (Kampel Stock) instrument.
5. Measuring of pressure by using the Parameter instrument.

The results of filling the forms were as follows:

- The data of temperature and rainfall was completely filled for all Stations.
- The data of quantity of evaporation was not filled for Meithalun and Tulkarm Stations.
- The data of sunshine duration was not filled for Jenin, Meithalun, Tulkarm, and Nablus Stations, as there are no instruments in these Stations.
- The data of pressure was not filled for Meithalun, Tulkarm Stations, as there are no instruments in these Stations.

4.3 Data processing

This phase included the following activities:

- Checking the filled forms.
- Developing a data entry program and implementing data entry.
- Post-data entry editing.
- Data cleaning.
- Tabulation of data.

Chapter Five

Data Quality

5.1 Accuracy of the Data

Two types of errors affected the quality of the report's data, sampling and non sampling errors. Sampling errors are measurable and very limited in this report, because the study covered all meteorological Stations in the Palestinian Territory. The non-sampling errors could not be determined easily, due to the diversity of sources (e.g. the interviewers, respondents, editors, coders, data entry operators...etc). To minimize such errors data was edited before and after the entry process.

Comprehensiveness

The main aim of publishing annual reports about climatic conditions is to create and update the time series data of the meteorological indicators in the Palestinian Territory. The report has no data about all meteorological indicators for the past years. The report mainly includes the meteorological data for 2007. The Meteorological Office in the Ministry of Transport is still in the establishing stage, so until now there is no normal average for the Palestinian Territory. The available data does not cover all governorates of the Palestinian Territory, because there are no meteorological Stations in all governorates of the Palestinian Territory.

5.2 Comparison of the Data

Some comparisons were applied to data with the previous annual reports of metrological reports of the years 1998, 2003, 2004, and 2005 which indicate some reasonable matching between the results of that reports.

5.3 Special Technical Notes

1. There are data gaps for some indicators mostly due to the lack of instruments.
2. There is no data about the Meithalun Station to some indicators.
3. There are data gaps for time series.
4. There is no time series data for some Stations.
5. Geographical distribution of Stations may be not representative for all the Palestinian Territory.

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