

Phytosociological Research Center

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Worldwide Bioclimatic Classification System

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(Adapted to Synoptical Table 30/08/2017)

BAGHDAD WEST (IRAQ)

Altitude: 34 m.

Latitude: 33°19'N Longitude: 44°21'E

Temperature observation period.: 1980-1994 (15)

Rainfall observation period....: 1984-1994 (11)

(C/mm)	Ti	Mi	mi	M'i	m'i	Pi	EPI
Jan.	10.00	16.11	3.89	22.78	-6.11	26.4	6.94
Feb.	12.22	18.33	6.11	27.78	-5.00	33.3	12.18
Mar.	16.11	22.78	9.44	32.22	-2.78	21.6	32.70
Apr.	22.22	29.44	15.00	42.22	3.89	6.9	88.48
May.	28.34	36.67	20.00	45.00	10.00	1.3	178.77
Jun.	32.22	41.11	23.33	48.33	16.11	0.0	215.73
Jul.	34.73	43.89	25.56	48.89	18.89	0.0	243.66
Aug.	34.17	43.33	25.00	48.89	18.89	0.0	226.42
Sep.	30.84	40.00	21.67	45.56	14.44	0.3	175.34
Oct.	25.28	33.89	16.67	41.11	6.67	0.8	114.77
Nov.	17.23	23.89	10.56	35.00	-2.78	27.9	33.61
Dec.	11.67	17.22	6.11	25.00	-3.89	25.9	10.65
Year	22.92	30.56	15.28	38.56	5.69	144	1339.2

BIOCLIMATIC INDICES AND DIAGNOSIS

Thermicity index.....(It):	429
Compensated thermicity index.....(Itc):	500
Simple continentality index.....(Ic):	24.7
Diurnality index.....(Id):	18.3
Annual ombrothermic index.....(Io):	0.53
Monthly estival ombrothermic index.....(Ios1):	No
Bimonthly estival ombrothermic index.....(Ios2):	No
Three monthly estival ombrothermic index.....(Ios3):	No
Four monthly estival ombrothermic index.....(Ios4):	0.01
Annual ombro-evaporation index.....(Ioe):	0.02
Annual positive temperature.....(Tp):	2750
Annual negative temperature.....(Tn):	0
Estival temperature.....(Ts):	1011
Positive precipitation.....(Pp):	144

N. of	P>4T	P:2T-4T	PT-2T	P<T	T<0
Months	0	3	2	7	0

Latitudinal Belt...: Subtropical

Continentality.....: Continental - High Subcontinental

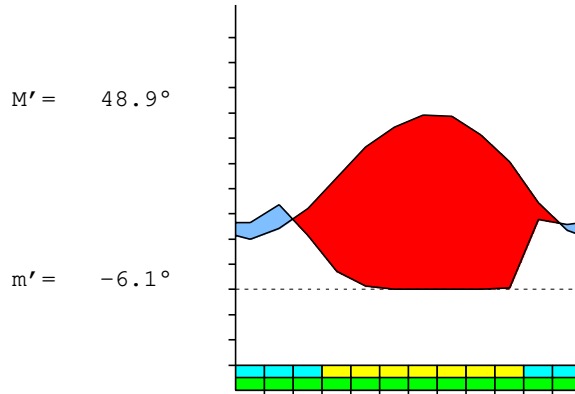
Bioclimate.....: MEDITERRANEAN DESERTIC-CONTINENTAL

Bioclimatic Belt...: LOW INFRAMEDITERRANEAN LOW ARID

BAGHDAD WEST (IRAQ)

34 m

P= 144 33° 19'N 44° 21'E 15/11 y.
 T= 22.9° Ic= 24.7 Tp= 2750 Tn= 0
 m= 3.9° M= 16.1° Itc= 500 Io= 0.5



MEDITERRANEAN DESERTIC-CONTINENTAL
 LOW INFRAMEDITERRANEAN LOW ARID

WATER INDEX CARD

BAGHDAD WEST (IRAQ)

Altitude: 34 m.

Latitude: 33° 19'N

(C/mm)	T	PE	P	VR	R	RE	DF	SP	DR	HC
Jan.	10.0	7	26	19	35	7	0	0	0	2.8
Feb.	12.2	12	33	21	56	12	0	0	0	1.7
Mar.	16.1	33	22	-11	45	33	0	0	0	-0.3
Apr.	22.2	88	7	-45	0	52	37	0	0	-0.9
May.	28.3	179	1	0	0	1	177	0	0	-0.9
Jun.	32.2	216	0	0	0	0	216	0	0	-1.0
Jul.	34.7	244	0	0	0	0	244	0	0	-1.0
Aug.	34.2	226	0	0	0	0	226	0	0	-1.0
Sep.	30.8	175	0	0	0	0	175	0	0	-0.9
Oct.	25.3	115	1	0	0	1	114	0	0	-0.9
Nov.	17.2	34	28	0	0	28	6	0	0	-0.1
Dec.	11.7	11	26	15	15	11	0	0	0	1.4
Year	22.9	1339	144	*	*	144	1195	0	0	*

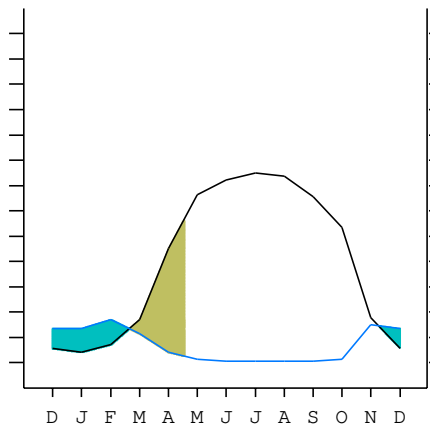
R = Reserve VR = Variation of the reserve RE = Real evapotranspiration
 DR = Drainage HC = Humidity coefficient DF = Deficit SP = Superavit

BAGHDAD WEST (IRAQ)

33°19'N 44°21'E 34 m 15/11 y.

T= 22.9 Ic= 24.7 MEDITERRANEAN DESERTIC-CONTINENTAL
 m= 3.9 Tp= 2750 LOW INFRAMEDITERRANEAN
 M= 16.1 Tn= 0 LOW ARID
 M' = 48.9 Itc= 500
 m' = -6.1 Io= 0.5
 P= 144 mm ———
 PE= 1339 mm ———

Imbibing	9 Nov.
Saturation	20 Feb.
Reserve Use	17 Apr.
Deficit	



BAGHDAD WEST (IRAQ)

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SUMMARY OF RIVAS-MARTINEZ CLASSIFICATION

Continental Index [C2b]
 + Type: C. Continental
 + Subtype: 2. Subcontinental
 + Variant: b. High

Thermic types [A3.A2]
 + Latitudinal zone: A. Warm
 + Latitudinal belt: 3. Subtropical
 + Thermic type: A. Warm
 + Thermic subtype: 2. Warm

Bioclimatic types [B3.1b.3b]
 + Macrobioclimate: B. MEDITERRANEAN
 + Bioclimate: 3. DESERTIC-CONTINENTAL
 + Bioclimatic variant ..:
 + Thermic type.....: 1. INFRAMEDITERRANEAN
 + Thermic subtype.....: b. LOW
 + Ombrothermic type ...: 3. ARID
 + Ombrothermic subtype : b. LOW

Bioclimatic Classification: Mexo.Ime.Ari

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PRECIPITATION PARAMETERS

Warmest semester of the year.....(Pss): 2
 Coldest semester of the year.....(Psw): 142
 Warmest four months period of the year.....(Pcm1): 0
 Following warmest four months period.....(Pcm2): 81
 Positive precipitation dryest 3 months.....(Ppd): 0
 Positive precipitation dryest 2 months.....(Ppd2): 0
 Positive precipitation dryest 1 month.....(Ppd1): 0
 Positive precipitation warmest 3 months.....(Pps): 0
 Positive precipitation warmest 2 months.....(Pps2): 0
 Positive precipitation warmest 1 month.....(Pps1): 0
 Positive precipitation coldest 3 months.....(Ppw): 86
 Positive precipitation coldest 2 months.....(Ppw2): 52
 Positive precipitation coldest 1 month.....(Ppw1): 26

Seasons	Winter Tr1-W	Spring Tr2-P	Summer Tr3-S	Automn Tr4-F
Rainfall	85	29	0	29

Seasonal rainfall rhythms: W > P > F > S

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TEMPERATURE PARAMETERS

Average warmest month [T].....(Tmax): 34.7
 Average coldest month [T].....(Tmin): 10.0
 Maximum temp. warmest month [M].....(Tmmax): 43.9
 Minimum temp. coldest month [m].....(Tmmin): 3.9
 Absolute Max.temp. warmest month [M'].....(Tamax): 48.9
 Absolute Min.temp. coldest month [m'].....(Tamin): -6.1
 First warmest contrasted month [M].....(Tcmax): 43.9 (7)
 First coldest contrasted month [m].....(Tcmin): 25.6 (7)
 Estival temperature.....(Ts): 1011
 Positive temperature dryest 3 months.....(Tpd): 1011
 Positive temperature dryest 2 months.....(Tpd2): 670
 Positive temperature dryest 1 month.....(Tpd1): 322
 Positive temperature warmest 3 months.....(Tps): 1011
 Positive temperature warmest 2 months.....(Tps2): 689
 Positive temperature warmest 1 month.....(Tps1): 347
 Positive temperature coldest 3 months.....(Tpw): 339
 Positive temperature coldest 2 months.....(Tpw2): 217
 Positive temperature coldest 1 month.....(Tpw1): 100

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SEASONAL PARAMETERS

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Warmest semester...(Sms)					o	o	o	o	o	o		
Dryest semester....(Smd)					o	o	o	o	o	o		
Warmest 4 months...(Cm1)						o	o	o	o			
Dryest 4 months....(Cmd)						o	o	o	o			
Vegetation Activity(Pav)	o	o	o	o	o	o	o	o	o	o	o	o
Ultragelid...[M' <=0] (Pf)												
Hypergelid...[M <=0] (Pf)												
Gelid.....[T <=0] (Pf)												
Subgelid.....[m <=0] (Pf)												
Pregelid.....[m' <=0] (Pf)	o	o	o								o	o
Agelid.....[m' > 0] (Pf)				o	o	o	o	o	o	o		
HiperAgelid..[all>0] (Pf)				o	o	o	o	o	o	o		

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OMBROTHERMIC PARAMETERS

Annual aridity index.[PE/P].....(Iar): 9.27
 Mediterranean index of July.[PE/P].....(Im1): No
 Mediterranean index of July & August.....(Im2): No
 Mediterranean index of June, July & August....(Im3): No

Months	Dec.	Jan.	Feb.	Mar.	Apr.	May.	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.
Pp(x10)	259	264	333	216	69	13	0	0	0	3	8	279
Tp	117	100	122	161	222	283	322	347	342	308	253	172
Io (Iom)	2.22	2.64	2.73	1.34	0.31	0.05	0.00	0.00	0.00	0.01	0.03	1.62
Seasons	Winter			Spring			Summer			Autumn		
Pp(x10)/Tp	856 / 339			298 / 667			0 / 1011			290 / 734		
Io (Iot)	2.526			0.447			0.000			0.395		
Semesters	December-May						June-November					
Pp(x10)/Tp	1154 / 1006						290 / 1745					
Io (Iosm)	1.148						0.166					

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Aridity Value Index (AVI)

[10xPP/TP=IO]: 1444/2750=0.53 **There is No Yearly Aridity**

Months	Dec.	Jan.	Feb.	Mar.	Apr.	May.	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.
Pp [P*10]	259	264	333	216	69	13	0	0	0	3	8	279
Tp [T*10]	117	100	122	161	222	283	322	347	342	308	253	172
Iom [Pp/Tp]	222	264	273	134	31	5	0	0	0	1	3	162
Avm [200-Iom]	***	***	***	66	169	195	200	200	200	199	197	38
Seasons	Winter			Spring			Summer			Autumn		
Pp / Tp	856 / 339			298 / 667			0 / 1011			290 / 734		
Iot [Pp/Tp]	253			45			0			40		
Avs E[Avm<200]	***			430			600			434		
Lower ultrahyperarid [7]							Upper hyperarid [1]					
Weak lower arid [2]							Weak lower semiarid [1]					
Strong upper semiarid [1]												

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BIOCLIMATIC INDICES I

CI of Supan (1884) [Tmax-Tmin]	(Sp):	24.73
CI of Gorezinski (1920) [1.7*Sp/sin(Lat)-20.4]		56.14
CI of Conrad (1946) [1.7*Sp/sin(Lat+10)-14]		47.28
+ Subcontinental (40<CI<60)		
CI of Currey (1974) [CI=Sp/(1+Lat/3)]		2.04
+ Continental (1.7<CI<2.3)		
Rainfall Index of Lang (1925) [R=P/T]		6.30
+ Steppic (40>R>0)		
Aridity Index of Martonne (1926) [Ia=P/(T+10)]		4.39
+ Extremely arid -desert- (5>Ia>0)		
I of Emberger (1930) [Q=100*P/(Tmmax ² -Tmmin ²)]		7.56
+ Arid (30>Q>0)		
I of Dantin & Revenga (1940) [DR=100*T/P]		15.87
+ Extremely arid (DR>6)		
Aridity Index of UNEP [I=P/PE]		0.11
+ Arid (0.2>Im>0.05)		
Potential Erosion I of Fournier (1960) [K=Pi ² /P]		7.68
+ Very low (K<60)		

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BIOCLIMATIC INDICES II

Bioclimatic classification of Gaussen & Bagnouls (1957)
 + Climate

- + Climate
- + Region
- + Thermic type: 2. Macrothermic

Thornthwaite (1948)												
	Jan.	Feb.	Mar.	Apr.	May.	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
P-E ratio	0.13	0.15	0.08	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.11	0.12
T-E ratio	4.50	5.50	7.25	10.00	12.75	14.50	15.63	15.38	13.88	11.38	7.75	5.25
Precipitation-effectiveness: 6.16						Temperature-efficiency						123.76
Moisture Index [MI=100*(P-PE)/PE]												-89.22
+ E.Dry (-110<MI<-66.7)												
Index of dryness [DI=100*d/PE]												89.21
+ Strong deficit (33.3<DI)												
Index of humidity [HI=100*s/PE]												0.00
+ No surplus (0<HI<10)												
Potential Evapotranspiration PE												1339.25
+ Forth mesothermic (997<PE<1440)												

