

Phytosociological Research Center

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Worldwide Bioclimatic Classification System

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(Adapted to Synoptical Table 30/08/2017)

NASIRIYA (IRAQ)

Altitude: 3 m.

Latitude: 31°1'N Longitude: 46°14'E

Temperature observation period.: 1983-1994 (12)

Rainfall observation period....: 1987-1994 (8)

(C/mm)	Ti	Mi	mi	M'i	m'i	Pi	Epi
Jan.	11.39	17.22	5.56	26.11	-5.56	20.3	8.25
Feb.	13.61	20.00	7.22	32.22	-3.89	11.7	14.07
Mar.	17.77	24.44	11.11	33.89	1.67	17.0	39.00
Apr.	23.89	31.11	16.67	42.22	6.11	15.2	105.08
May.	29.45	36.67	22.22	45.56	12.22	4.1	187.75
Jun.	32.78	40.00	25.56	48.33	20.00	0.0	217.34
Jul.	34.45	42.78	26.11	48.89	20.00	0.0	238.96
Aug.	34.45	43.89	25.00	49.44	19.44	0.0	227.01
Sep.	31.95	41.67	22.22	47.78	16.11	0.0	184.49
Oct.	26.39	35.56	17.22	43.89	9.44	4.1	130.96
Nov.	19.17	26.11	12.22	36.11	0.00	29.7	42.44
Dec.	13.34	18.89	7.78	26.11	-5.00	26.9	13.35
Year	24.05	31.53	16.57	40.05	7.55	129	1408.7

BIOCLIMATIC INDICES AND DIAGNOSIS

Thermicity index.....(It):	468
Compensated thermicity index.....(Itc):	514
Simple continentality index.....(Ic):	23.1
Diurnality index.....(Id):	19.4
Annual ombrothermic index.....(Io):	0.45
Monthly estival ombrothermic index.....(Ios1):	No
Bimonthly estival ombrothermic index.....(Ios2):	No
Threemonthly estival ombrothermic index.....(Ios3):	No
Fourmonthly estival ombrothermic index.....(Ios4):	0.03
Annual ombro-evaporation index.....(Ioe):	0.07
Annual positive temperature.....(Tp):	2886
Annual negative temperature.....(Tn):	0
Estival temperature.....(Ts):	1017
Positive precipitation.....(Pp):	129

N. of	P>4T	P:2T-4T	PT-2T	P<T	T<0
Months	0	1	2	9	0

Latitudinal Belt...: Subtropical

Continentalty.....: Continental - Low Subcontinental

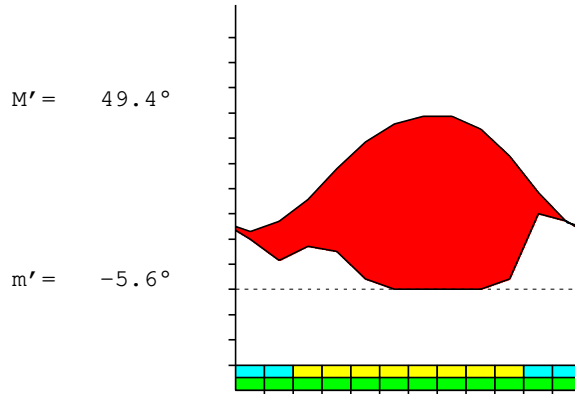
Bioclimate.....: MEDITERRANEAN DESERTIC-CONTINENTAL

Bioclimatic Belt...: LOW INFRAMEDITERRANEAN LOW ARID

NASIRIYA (IRAQ)

3 m

P= 129 31° 1'N 46° 14'E 12/8 y.
 T= 24.1° Ic= 23.1 Tp= 2886 Tn= 0
 m= 5.6° M= 17.2° Itc= 514 Io= 0.4



MEDITERRANEAN DESERTIC-CONTINENTAL
 LOW INFRAMEDITERRANEAN LOW ARID

WATER INDEX CARD

NASIRIYA (IRAQ)

Altitude: 3 m.

Latitude: 31° 1'N

(C/mm)	T	PE	P	VR	R	RE	DF	SP	DR	HC
Jan.	11.4	8	20	12	26	8	0	0	0	1.4
Feb.	13.6	14	12	-2	23	14	0	0	0	-0.1
Mar.	17.8	39	17	-22	1	39	0	0	0	-0.5
Apr.	23.9	105	15	-1	0	16	89	0	0	-0.8
May.	29.5	188	4	0	0	4	184	0	0	-0.9
Jun.	32.8	217	0	0	0	0	217	0	0	-1.0
Jul.	34.5	239	0	0	0	0	239	0	0	-1.0
Aug.	34.5	227	0	0	0	0	227	0	0	-1.0
Sep.	32.0	184	0	0	0	0	184	0	0	-1.0
Oct.	26.4	131	4	0	0	4	127	0	0	-0.9
Nov.	19.2	42	30	0	0	30	13	0	0	-0.3
Dec.	13.3	13	27	14	14	13	0	0	0	1.0
Year	24.1	1409	129	*	*	129	1280	0	0	*

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

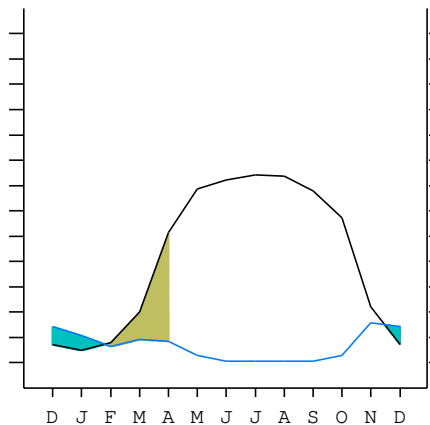
NASIRIYA (IRAQ)

31°1'N 46°14'E

3 m 12/8 y.

T= 24.1 Ic= 23.1 MEDITERRANEAN DESERTIC-CONTINENTAL
 m= 5.6 Tp= 2886 LOW INFRAMEDITERRANEAN
 M= 17.2 Tn= 0 LOW ARID
 M' = 49.4 Itc= 514
 m' = -5.6 Io= 0.4
 P= 129 mm ———
 PE= 1409 mm ———

Imbibing	15 Nov.
Saturation	26 Jan.
Reserve Use	1 Apr.
Deficit	



NASIRIYA (IRAQ)

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SUMMARY OF RIVAS-MARTINEZ CLASSIFICATION

Continental Index [C2a]
+ Type: C. Continental
+ Subtype: 2. Subcontinental
+ Variant: a. Low
Thermic types [A3.A1]
+ Latitudinal zone: A. Warm
+ Latitudinal belt: 3. Subtropical
+ Thermic type: A. Warm
+ Thermic subtype: 1. Torrid
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): 8
Coldest semester of the year.....(Psw): 121
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): 59
Positive precipitation coldest 2 months.....(Ppw2): 47
Positive precipitation coldest 1 month.....(Ppw1): 20

Seasons	Winter Tr1-W	Spring Tr2-P	Summer Tr3-S	Automn Tr4-F
Rainfall	58	36	0	33

Seasonal rainfall rhythms: W > P > F > S

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TEMPERATURE PARAMETERS

Average warmest month [T].....(Tmax): 34.5
Average coldest month [T].....(Tmin): 11.4
Maximum temp. warmest month [M].....(Tmmax): 43.9
Minimum temp. coldest month [m].....(Tmmin): 5.6
Absolute Max.temp. warmest month [M'].....(Tamax): 49.4
Absolute Min.temp. coldest month [m'].....(Tamin): -5.6
First warmest contrasted month [M].....(Tcmax): 41.7 (9)
First coldest contrasted month [m].....(Tcmin): 22.2 (9)
Estival temperature.....(Ts): 1017
Positive temperature dryest 3 months.....(Tpd): 1017
Positive temperature dryest 2 months.....(Tpd2): 672
Positive temperature dryest 1 month.....(Tpd1): 328
Positive temperature warmest 3 months.....(Tps): 1017
Positive temperature warmest 2 months.....(Tps2): 689
Positive temperature warmest 1 month.....(Tps1): 345
Positive temperature coldest 3 months.....(Tpw): 383
Positive temperature coldest 2 months.....(Tpw2): 247
Positive temperature coldest 1 month.....(Tpw1): 114

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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
Agelid.....[m' > 0] (Pf)			o	o	o	o	o	o	o	o		
HiperAgelid..[all>0] (Pf)			o	o	o	o	o	o	o	o		

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OMBROTHERMIC PARAMETERS

Annual aridity index.[PE/P].....(Iar): 10.92
 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)	269	203	117	170	152	41	0	0	0	0	41	297
Tp	133	114	136	178	239	295	328	345	345	320	264	192
Io (Iom)	2.02	1.78	0.86	0.96	0.64	0.14	0.00	0.00	0.00	0.00	0.16	1.55
Seasons	Winter			Spring			Summer			Autumn		
Pp(x10)/Tp	589 / 383			363 / 711			0 / 1017			338 / 775		
Io (Iot)	1.536			0.510			0.000			0.436		
Semesters	December-May						June-November					
Pp(x10)/Tp	952 / 1095						338 / 1792					
Io (Iosm)	0.870						0.189					

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Aridity Value Index (AVI)

[10xPP/TP=IO]: 1290/2886=0.45 **There is No Yearly Aridity**

Months	Dec.	Jan.	Feb.	Mar.	Apr.	May.	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.
Pp [P*10]	269	203	117	170	152	41	0	0	0	0	41	297
Tp [T*10]	133	114	136	178	239	295	328	345	345	320	264	192
Iom [Pp/Tp]	202	178	86	96	64	14	0	0	0	0	16	155
Avm [200-Iom]	***	22	114	104	136	186	200	200	200	200	184	45
Seasons	Winter			Spring			Summer			Autumn		
Pp / Tp	589 / 383			363 / 711			0 / 1017			338 / 775		
Iot [Pp/Tp]	154			51			0			44		
Avs E[Avm<200]	***			427			600			430		
Lower ultrahyperarid [5]						Upper ultrahyperarid [2]						
Weak lower arid [3]						Weak upper arid [2]						
Strong upper semiarid [1]						Weak upper semiarid [1]						

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BIOCLIMATIC INDICES I

CI of Supan (1884) [Tmax-Tmin]	(Sp):	23.06
CI of Gorezinski (1920) [1.7*Sp/sin(Lat)-20.4]		55.68
CI of Conrad (1946) [1.7*Sp/sin(Lat+10)-14]		45.73
+ Subcontinental (40<CI<60)		
CI of Currey (1974) [CI=Sp/(1+Lat/3)]		2.03
+ Continental (1.7<CI<2.3)		
Rainfall Index of Lang (1925) [R=P/T]		5.36
+ Steppic (40>R>0)		
Aridity Index of Martonne (1926) [Ia=P/(T+10)]		3.79
+ Extremely arid -desert- (5>Ia>0)		
I of Emberger (1930) [Q=100*P/(Tmmax ² -Tmmin ²)]		6.81
+ Arid (30>Q>0)		
I of Dantin & Revenga (1940) [DR=100*T/P]		18.65
+ Extremely arid (DR>6)		
Aridity Index of UNEP [I=P/PE]		0.09
+ Arid (0.2>Im>0.05)		
Potential Erosion I of Fournier (1960) [K=Pi ² /P]		6.84
+ Very low (K<60)		

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BIOCLIMATIC INDICES II

Bioclimatic classification of Gaussen & Bagnouls (1957)
 + Climate

- + A. Warm and temperate warm
- + Region
- + 2. Termohemieremic (Subdesertic warm)
- + Thermic type: 1. Megathermic

Thornthwaite (1948)												
	Jan.	Feb.	Mar.	Apr.	May.	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
P-E ratio	0.09	0.05	0.06	0.05	0.01	0.00	0.00	0.00	0.00	0.01	0.11	0.12
T-E ratio	5.13	6.12	8.00	10.75	13.25	14.75	15.50	15.50	14.38	11.88	8.63	6.00
Precipitation-effectiveness: 4.92						Temperature-efficiency						129.89
Moisture Index [MI=100*(P-PE)/PE]												-90.84
+ E.Dry (-110<MI<-66.7)												
Index of dryness [DI=100*d/PE]												90.84
+ Strong deficit (33.3<DI)												
Index of humidity [HI=100*s/PE]												0.00
+ No surplus (0<HI<10)												
Potential Evapotranspiration PE												1408.71
+ Forth mesothermic (997<PE<1440)												

