

country	latitude_
Afghanistan	34.565
Akrotiri and Dhekelia	34.61667
Albania	41.312
Algeria	36.72
American Samoa	-14.307
Andorra	42.546
Angola	-8.843
Anguilla	18.25
Antigua and Barbuda	17.072
Argentina	-36.676
Armenia	40.254
Aruba	12.513
Australia	-32.219
Austria	48.231
Azerbaijan	40.352
Bahamas	24.7
Bahrain	26.024
Bangladesh	23.88
Barbados	13.179
Belarus	53.54709
Belgium	50.837
Belize	17.843
Benin	6.364
Bermuda	32.217
Bhutan	27.479
Bolivia	-15.19
Bosnia and Herzegovina	44.17501
Botswana	-21.536
Brazil	-19.557
British Virgin Islands	18.5
Brunei	4.501
Bulgaria	42.073
Burkina Faso	12.049
Burundi	-3.365

Cambodia	12.026
Cameroon	10.73
Canada	43.727
Cape Verde	15.091
Cayman Islands	19.319
Central African Rep.	4.331
Chad	10.377
Channel Islands	49.217
Chile	-33.554
China	29.561
Christmas Island	-10.5
Cocos Island	-12.5
Colombia	4.788
Comoros	-11.671
Congo, Dem. Rep.	-2.92028
Congo, Rep.	-3.684
Cook Islands	-21.2333
Costa Rica	9.941
Cote d'Ivoire	5.496
Croatia	45.11008
Cuba	23.084
Cyprus	35.081
Czech Rep.	49.77929
Denmark	55.718
Djibouti	11.505
Dominica	15.433
Dominican Rep.	18.561
East Germany	
Ecuador	-2.062
Egypt	29.996
El Salvador	13.775

Equatorial Guinea	2.326
Eritrea	15.312
Estonia	58.685
Ethiopia	9.007
Faeroe Islands	62
Falkland Islands (Malvinas)	-51.75
Fiji	-17.827
Finland	60.212
France	48.857
French Guiana	3.988
French Polynesia	-17.666
Gabon	0.372
Gambia	13.257
Georgia	42.034
Germany	48.161
Ghana	6.694
Gibraltar	36.13333
Greece	38.058
Greenland	64.217
Grenada	12.115
Guadelou pe	16.163
Guam	13.44
Guatemal a	14.622
Guernsey	49.46667
Guinea	11.671
Guinea- Bissau	12.262
Guyana	5.761
Haiti	18.932
Holy See	41.9
Honduras	14.194
Hong Kong, China	22.704
Hungary	47.419
Iceland	63.892
India	25.274
Indonesia	-6.562
Iran	35.38
Iraq	33.314

Ireland	54.611
Isle of Man	54.225
Israel	32.084
Italy	45.415
Jamaica	18.055
Japan	35.712
Jersey	49.25
Jordan	31.602
Kazakhstan	44.308
Kenya	-0.513
Kiribati	1.847
Korea, Dem. Rep.	39.527
Korea, Rep.	37.553
Kosovo	42.58333
Kuwait	29.326
Kyrgyzstan	41.4894
Laos	16.547
Latvia	56.858
Lebanon	34.111
Lesotho	-29.595
Liberia	6.385
Libya	32.607
Liechtenstein	47.141
Lithuania	55.318
Luxembourg	49.78
Macao, China	22.506
Macedonia, FYR	41.57381
Madagascar	-18.958
Malawi	-15.811
Malaysia	3.269
Maldives	3.25
Mali	12.508
Malta	35.887
Marshall Islands	9
Martinique	14.654
Mauritania	17.925

Mauritius	-20.232
Mayotte	-12.8333
Mexico	16.759
Micronesia, Fed. Sts.	7.357
Moldova	47.166
Monaco	43.746
Mongolia	47.493
Montenegro	42.78899
Montserrat	16.75
Morocco	33.593
Mozambique	-18.499
Myanmar	17.679
Namibia	-17.979
Nauru	-0.53333
Nepal	27.712
Netherlands	51.874
Netherlands Antilles	12.192
New Caledonia	-21.329
New Zealand	-36.892
Nicaragua	12.211
Niger	13.876
Nigeria	6.543
Niue	-19.0333
Norfolk Island	-29.0333
Northern Mariana Islands	15.178
Norway	59.977
Oman	20.445
Pakistan	31.173
Palau	7.5
Panama	9.206
Papua New Guinea	-6.6
Paraguay	-25.583
Peru	-11.794

Philippine s	13.922
Pitcairn	-25.0667
Poland	50.244
Portugal	38.816
Puerto Rico	18.225
Qatar	25.309
Reunion	-20.954
Romania	44.526
Russia	55.675
Rwanda	-2.032
Saint Barthélem y	17.9
Saint Helena	-15.95
Saint Kitts and Nevis	17.327
Saint Lucia	13.898
Saint Martin	18.08333
Saint Vincent and the Grenadine s	13.254
Saint- Pierre-et- Miquelon	46.83333
Samoa	-13.633
San Marino	43.76667
Sao Tome and Principe	1
Saudi Arabia	23.069
Senegal	14.772
Serbia	44.04673
Seychelle s	-4.664
Sierra Leone	8.701
Singapore	1.355
Slovak Republic	48.78538
Slovenia	46.1279

Solomon Islands	-9.625
Somalia	10.633
South Africa	-29.13
Spain	37.398
Sri Lanka	6.868
Sudan	14.043
Suriname	5.605
Svalbard	78
Swaziland	-26.545
Sweden	59.278
Switzerland	47.408
Syria	33.458
Taiwan	23.64485
Tajikistan	37.806
Tanzania	-2.154
Thailand	13.77
Timor-Leste	-8.83333
Togo	6.194
Tokelau	-9
Tonga	-21.173
Trinidad and Tobago	10.418
Tunisia	36.816
Turkey	41.202
Turkmenistan	39.12938
Turks and Caicos Islands	21.75
Tuvalu	-8
Uganda	0.228
Ukraine	50.281
United Arab Emirates	23.39
United Kingdom	51.51
United States	34.36
Uruguay	-34.822
USSR	
Uzbekistan	41.272

Wallis et Futuna	-13.3
Vanuatu	-15.233
Venezuela	9.843
West Bank and Gaza	31.41667
West Germany Western Sahara	24.61913
Vietnam	10.798
Virgin Islands (U.S.)	17.736
Yemen, Rep.	15.228
Yugoslavi a	
Zambia	-12.942
Zimbabwe	-17.876
Åland	60

country	latitude_1900
Afghanistan	34.565
Akrotiri and Dhekelia	34.61667
Albania	41.312
Algeria	36.72
American Samoa	-14.307
Andorra	42.546
Angola	-8.843
Anguilla	18.25
Antigua and Barbuda	17.072
Argentina	-36.676
Armenia	40.254
Aruba	12.513
Australia	-32.219
Austria	48.231
Azerbaijan	40.352
Bahamas	24.7
Bahrain	26.024
Bangladesh	23.88
Barbados	13.179
Belarus	53.54709
Belgium	50.837
Belize	17.843
Benin	6.364
Bermuda	32.217
Bhutan	27.479
Bolivia	-15.19
Bosnia and Herzegovina	44.17501
Botswana	-21.536
Brazil	-19.557
British Virgin Islands	18.5
Brunei	4.501
Bulgaria	42.073
Burkina Faso	12.049
Burundi	-3.365
Cambodia	12.026
Cameroon	10.73

Canada	43.727
Cape Verde	15.091
Cayman Islands	19.319
Central African Rep.	4.331
Chad	10.377
Channel Islands	49.217
Chile	-33.554
China	29.561
Christmas Island	-10.5
Cocos Island	-12.5
Colombia	4.788
Comoros	-11.671
Congo, Dem. Rep.	-2.920276
Congo, Rep.	-3.684
Cook Islands	-21.23333
Costa Rica	9.941
Cote d'Ivoire	5.496
Croatia	45.11008
Cuba	23.084
Cyprus	35.081
Czech Rep.	49.77929
Denmark	55.718
Djibouti	11.505
Dominica	15.433
Dominican Rep.	18.561
East Germany	
Ecuador	-2.062
Egypt	29.996
El Salvador	13.775
Equatorial Guinea	2.326
Eritrea	15.312
Estonia	58.685
Ethiopia	9.007
Faeroe Islands	62

Falkland Islands (Malvinas)	-51.75
Fiji	-17.827
Finland	60.212
France	48.857
French Guiana	3.988
French Polynesia	-17.666
Gabon	0.372
Gambia	13.257
Georgia	42.034
Germany	48.161
Ghana	6.694
Gibraltar	36.13333
Greece	38.058
Greenland	64.217
Grenada	12.115
Guadeloupe	16.163
Guam	13.44
Guatemala	14.622
Guernsey	49.46667
Guinea	11.671
Guinea-Bissau	12.262
Guyana	5.761
Haiti	18.932
Holy See	41.9
Honduras	14.194
Hong Kong, China	22.704
Hungary	47.419
Iceland	63.892
India	25.274
Indonesia	-6.562
Iran	35.38
Iraq	33.314
Ireland	54.611
Isle of Man	54.225
Israel	32.084
Italy	45.415
Jamaica	18.055
Japan	35.712
Jersey	49.25
Jordan	31.602

Kazakhstan	44.308
Kenya	-0.513
Kiribati	1.847
Korea, Dem. Rep.	39.527
Korea, Rep.	37.553
Kosovo	42.58333
Kuwait	29.326
Kyrgyzstan	41.4894
Laos	16.547
Latvia	56.858
Lebanon	34.111
Lesotho	-29.595
Liberia	6.385
Libya	32.607
Liechtenstein	47.141
Lithuania	55.318
Luxembourg	49.78
Macao, China	22.506
Macedonia, FYR	41.57381
Madagascar	-18.958
Malawi	-15.811
Malaysia	3.269
Maldives	3.25
Mali	12.508
Malta	35.887
Marshall Islands	9
Martinique	14.654
Mauritania	17.925
Mauritius	-20.232
Mayotte	-12.83333
Mexico	16.759
Micronesia, Fed. Sts.	7.357
Moldova	47.166
Monaco	43.746
Mongolia	47.493
Montenegro	42.78899
Montserrat	16.75

Morocco	33.593
Mozambique	-18.499
Myanmar	17.679
Namibia	-17.979
Nauru	-0.533333
Nepal	27.712
Netherlands	51.874
Netherlands Antilles	12.192
New Caledonia	-21.329
New Zealand	-36.892
Nicaragua	12.211
Niger	13.876
Nigeria	6.543
Niue	-19.03333
Norfolk Island	-29.03333
Northern Mariana Islands	15.178
Norway	59.977
Oman	20.445
Pakistan	31.173
Palau	7.5
Panama	9.206
Papua New Guinea	-6.6
Paraguay	-25.583
Peru	-11.794
Philippines	13.922
Pitcairn	-25.06667
Poland	50.244
Portugal	38.816
Puerto Rico	18.225
Qatar	25.309
Reunion	-20.954
Romania	44.526
Russia	55.675
Rwanda	-2.032
Saint Barthélemy	17.9
Saint Helena	-15.95

Saint Kitts and Nevis	17.327
Saint Lucia	13.898
Saint Martin	18.08333
Saint Vincent and the Grenadine s	13.254
Saint- Pierre-et- Miquelon	46.83333
Samoa	-13.633
San Marino	43.76667
Sao Tome and Principe	1
Saudi Arabia	23.069
Senegal	14.772
Serbia	44.04673
Seychelles	-4.664
Sierra Leone	8.701
Singapore	1.355
Slovak Republic	48.78538
Slovenia	46.1279
Solomon Islands	-9.625
Somalia	10.633
South Africa	-29.13
Spain	37.398
Sri Lanka	6.868
Sudan	14.043
Suriname	5.605
Svalbard	78
Swaziland	-26.545
Sweden	59.278
Switzerlan d	47.408
Syria	33.458
Taiwan	23.64485
Tajikistan	37.806
Tanzania	-2.154
Thailand	13.77

Timor- Leste	-8.833333
Togo	6.194
Tokelau	-9
Tonga	-21.173
Trinidad and Tobago	10.418
Tunisia	36.816
Turkey	41.202
Turkmenis tan	39.12938
Turks and Caicos Islands	21.75
Tuvalu	-8
Uganda	0.228
Ukraine	50.281
United Arab Emirates	23.39
United Kingdom	51.51
United States	34.36
Uruguay	-34.822
USSR	
Uzbekista n	41.272
Wallis et Futuna	-13.3
Vanuatu	-15.233
Venezuela	9.843
West Bank and Gaza	31.41667
West Germany	
Western Sahara	24.61913
Vietnam	10.798
Virgin Islands (U.S.)	17.736
Yemen, Rep.	15.228
Yugoslavi a	
Zambia	-12.942
Zimbabwe	-17.876
Åland	60

Afghanistan	34.565
Akrotiri and Dhekelia	34.6166667
Albania	41.312
Algeria	36.72
American Samoa	-14.307
Andorra	42.546
Angola	-8.843
Anguilla	18.25
Antigua and Barbuda	17.072
Argentina	-36.676
Armenia	40.254
Aruba	12.513
Australia	-32.219
Austria	48.231
Azerbaijan	40.352
Bahamas	24.7
Bahrain	26.024
Bangladesh	23.88
Barbados	13.179
Belarus	53.54709
Belgium	50.837
Belize	17.843
Benin	6.364
Bermuda	32.217
Bhutan	27.479
Bolivia	-15.19
Bosnia and Herzegovina	44.17501
Botswana	-21.536
Brazil	-19.557
British Virgin Islands	18.5
Brunei	4.501
Bulgaria	42.073
Burkina Faso	12.049
Burundi	-3.365
Cambodia	12.026
Cameroon	10.73
Canada	43.727
Cape Verde	15.091
Cayman Islands	19.319
Central African Rep.	4.331
Chad	10.377
Channel Islands	49.217
Chile	-33.554
China	29.561

Christmas Island	-10.5
Cocos Island	-12.5
Colombia	4.788
Comoros	-11.671
Congo, Dem. Rep.	-2.920276
Congo, Rep.	-3.684
Cook Islands	-21.233333
Costa Rica	9.941
Cote d'Ivoire	5.496
Croatia	45.11008
Cuba	23.084
Cyprus	35.081
Czech Rep.	49.77929
Denmark	55.718
Djibouti	11.505
Dominica	15.433
Dominican Rep.	18.561
East Germany	
Ecuador	-2.062
Egypt	29.996
El Salvador	13.775
Equatorial Guinea	2.326
Eritrea	15.312
Estonia	58.685
Ethiopia	9.007
Faeroe Islands	62
Falkland Islands (Malvinas)	-51.75
Fiji	-17.827
Finland	60.212
France	48.857
French Guiana	3.988
French Polynesia	-17.666
Gabon	0.372
Gambia	13.257
Georgia	42.034
Germany	48.161
Ghana	6.694
Gibraltar	36.133333
Greece	38.058
Greenland	64.217
Grenada	12.115
Guadeloupe	16.163

Guam	13.44
Guatemala	14.622
Guernsey	49.4666667
Guinea	11.671
Guinea-Bissau	12.262
Guyana	5.761
Haiti	18.932
Holy See	41.9
Honduras	14.194
Hong Kong, China	22.704
Hungary	47.419
Iceland	63.892
India	25.274
Indonesia	-6.562
Iran	35.38
Iraq	33.314
Ireland	54.611
Isle of Man	54.225
Israel	32.084
Italy	45.415
Jamaica	18.055
Japan	35.712
Jersey	49.25
Jordan	31.602
Kazakhstan	44.308
Kenya	-0.513
Kiribati	1.847
Korea, Dem. Rep.	39.527
Korea, Rep.	37.553
Kosovo	42.5833333
Kuwait	29.326
Kyrgyzstan	41.4894
Laos	16.547
Latvia	56.858
Lebanon	34.111
Lesotho	-29.595
Liberia	6.385
Libya	32.607
Liechtenstein	47.141
Lithuania	55.318
Luxembourg	49.78
Macao, China	22.506
Macedonia, FYR	41.57381
Madagascar	-18.958
Malawi	-15.811
Malaysia	3.269
Maldives	3.25

Mali	12.508
Malta	35.887
Marshall Islands	9
Martinique	14.654
Mauritania	17.925
Mauritius	-20.232
Mayotte	-12.833333
Mexico	16.759
Micronesia, Fed. Sts.	7.357
Moldova	47.166
Monaco	43.746
Mongolia	47.493
Montenegro	42.78899
Montserrat	16.75
Morocco	33.593
Mozambique	-18.499
Myanmar	17.679
Namibia	-17.979
Nauru	-0.5333333
Nepal	27.712
Netherlands	51.874
Netherlands Antilles	12.192
New Caledonia	-21.329
New Zealand	-36.892
Nicaragua	12.211
Niger	13.876
Nigeria	6.543
Niue	-19.033333
Norfolk Island	-29.033333
Northern Mariana Islands	15.178
Norway	59.977
Oman	20.445
Pakistan	31.173
Palau	7.5
Panama	9.206
Papua New Guinea	-6.6
Paraguay	-25.583
Peru	-11.794
Philippines	13.922
Pitcairn	-25.066667
Poland	50.244
Portugal	38.816
Puerto Rico	18.225
Qatar	25.309

Reunion	-20.954
Romania	44.526
Russia	55.675
Rwanda	-2.032
Saint Barthélemy	17.9
Saint Helena	-15.95
Saint Kitts and Nevis	17.327
Saint Lucia	13.898
Saint Martin	18.0833333
Saint Vincent and the Grenadines	13.254
Saint-Pierre-et- Miquelon	46.8333333
Samoa	-13.633
San Marino	43.7666667
Sao Tome and Principe	1
Saudi Arabia	23.069
Senegal	14.772
Serbia	44.04673
Seychelles	-4.664
Sierra Leone	8.701
Singapore	1.355
Slovak Republic	48.78538
Slovenia	46.1279
Solomon Islands	-9.625
Somalia	10.633
South Africa	-29.13
Spain	37.398
Sri Lanka	6.868
Sudan	14.043
Suriname	5.605
Svalbard	78
Swaziland	-26.545
Sweden	59.278
Switzerland	47.408
Syria	33.458
Taiwan	23.64485
Tajikistan	37.806
Tanzania	-2.154
Thailand	13.77
Timor-Leste	-8.8333333
Togo	6.194
Tokelau	-9
Tonga	-21.173
Trinidad and Tobago	10.418

Tunisia	36.816
Turkey	41.202
Turkmenistan	39.12938
Turks and Caicos Islands	21.75
Tuvalu	-8
Uganda	0.228
Ukraine	50.281
United Arab Emirates	23.39
United Kingdom	51.51
United States	34.36
Uruguay	-34.822
USSR	
Uzbekistan	41.272
Wallis et Futuna	-13.3
Vanuatu	-15.233
Venezuela	9.843
West Bank and Gaza	31.4166667
West Germany	
Western Sahara	24.61913
Vietnam	10.798
Virgin Islands (U.S.)	17.736
Yemen, Rep.	15.228
Yugoslavia	
Zambia	-12.942
Zimbabwe	-17.876
Åland	60