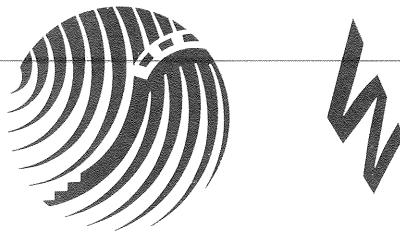


# Synoptic and climatic data for agro-ecological research

## The AB-MET database

W. Stol

cabo-dlo



= INTGRL (WLV)  
= INTGRL (WL)  
= INTGRL (WS)  
= INTGRL (W)  
= INTGRL (F)  
= INTGRL (E)  
= INTGRL (I)  
= INTGRL (TNTGRL)

SO  
SRT  
EAI  
LAI  
DVS

$$\frac{d}{dt} \left( \frac{1}{2} \| \theta(t) - \theta^* \|_{\frac{1}{2} I + \frac{1}{2} \theta^* \theta^*}^2 \right) \leq -L \frac{\gamma_1}{\gamma_2} \| \theta(t) - \theta^* \|_{\frac{1}{2} I + \frac{1}{2} \theta^* \theta^*}^2$$

where  $L = \max_{t \in [0, T]} \| A(t) \|$ .

# **Synoptic and climatic data for agro-ecological research**

The AB-MET database

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## **Simulation Reports CABO-TT**

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The aim of DLO is to generate knowledge and develop expertise for implementing the agricultural policies of the Dutch government, for strengthening the agricultural industry, for planning and management of rural areas and for the protection of the environment. At AB-DLO experiments and computer models are used in fundamental and strategic research on plants. The results are used to:

- achieve optimal and sustainable plant production systems;
- find new agricultural products and improve product quality;
- enhance nature and environmental quality in the countryside.

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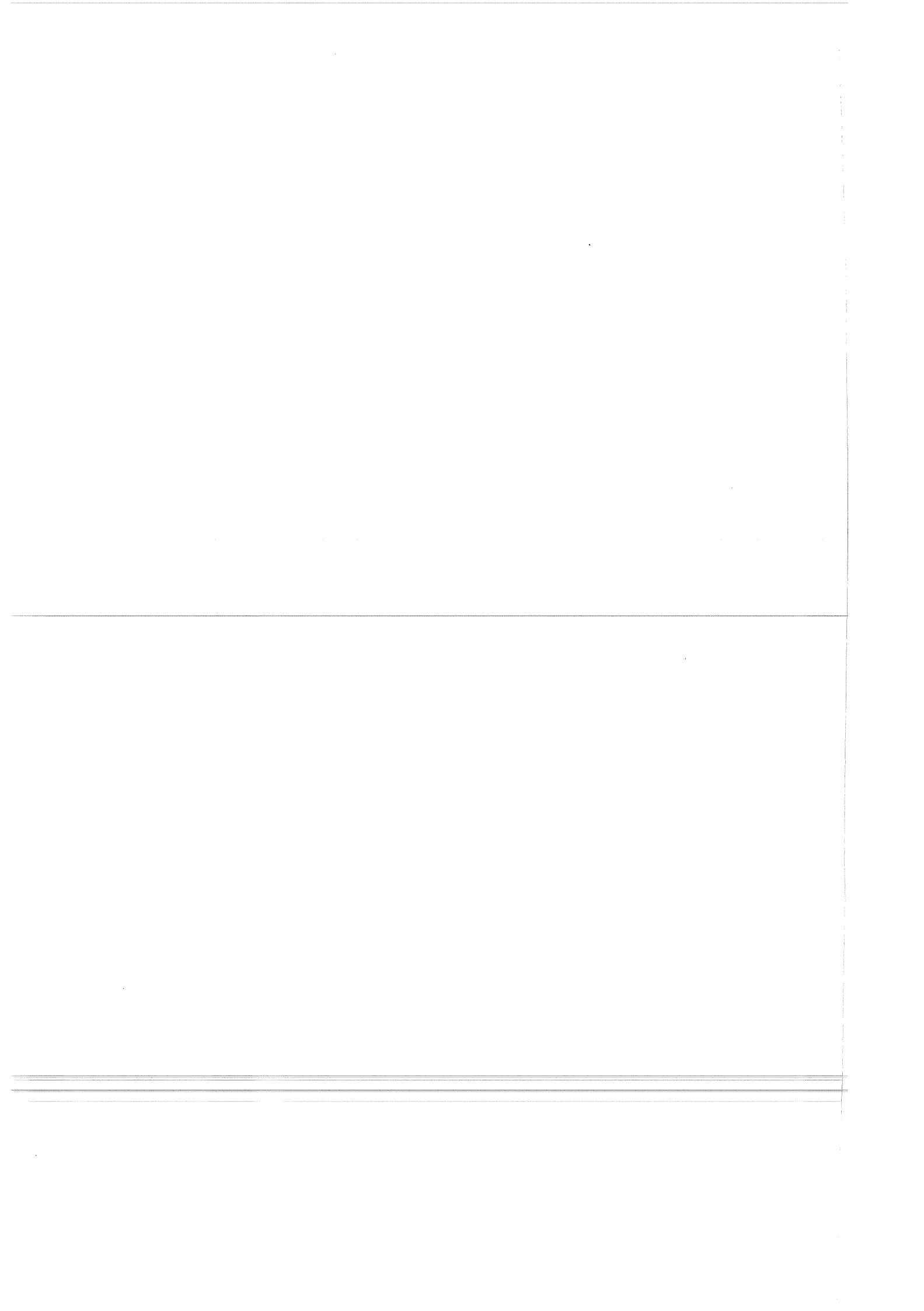
## **Preface**

The author would like to thank Rik Leemans from the Dutch National Institute for Public Health and Environmental Protection (RIVM) for supplying the Müller database. R. Gommes, Agroclimate Unit of FAO is acknowledged for supplying the FAO climate database. R.N. Gonesh revised a large number of data files. Kees Rappoldt and Daniel van Kraalingen supplied useful software of the TTUTIL library. Herman van Keulen and Daniel van Kraalingen gave constructive criticism.

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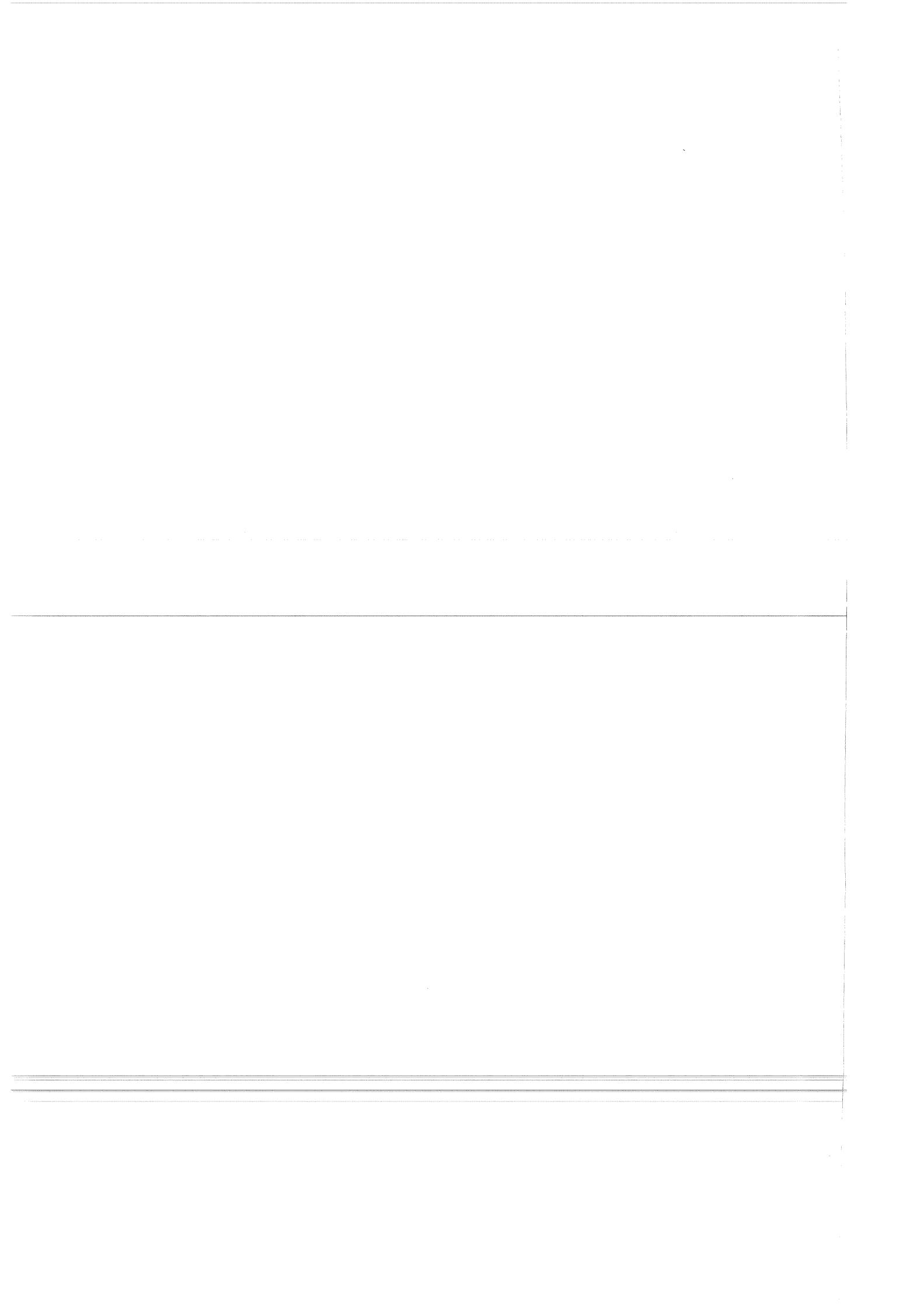
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Appendix I: International standard codes for names of countries (ISO 3166)      3 pp.



# 1 Introduction

The objective of this report is to describe the contents of the AB-MET database developed within research project number 839 'Increasing the accessibility of meteorological data for crop growth simulation and agro-ecological research' of the Research Institute for Agrobiology and Soil Fertility (AB-DLO). The project's objective is to supply in an efficient way meteorological data to Simulation and Systems Analysis (SSA) research. One of the products developed is a weather information system that provides in a simple and standardized way access to both daily historical data and monthly average climatic data. The weather information system consists of two parts: a computer program that facilitates access to weather data (van Kraalingen et al., 1990) and weather data files within the AB-MET database. The weather information system is among others already part of three programs used in the application of SSA in agricultural research: the FORTRAN Simulation Environment by van Kraalingen (1991), FORTRAN Simulation Translator by van Kraalingen et al. (1993) and of the SARP-shell, an environment for crop growth simulation developed by Riethoven (1993) as an aid in introducing SSA research and could also be used in other programs.

The AB-MET database consists of a set of both climate and synoptic data (1865 files) collected within projects of the Research Institute for Agrobiology and Soil Fertility (AB-DLO) and the Department of Theoretical Production Ecology (WAU). In addition, two sets of climate data have been added, one with a good global coverage composed at the university of Trier, Müller (1982, 1987) (977 files) and one with a good coverage of developing countries originating from the agrometeorology unit of the Food and Agriculture Organization of the United Nations (FAO, 1974, 1985, 1987, Gommes, 1990) (3261 files).

The development of a research database as this one is not trivial, it is an indispensable tool for agro-ecological research within AB-DLO. Synoptic data are used in experimental research as a reference for average values and as input data for simulation models of agricultural production. Studies on agro-ecological characterization of rice cropping systems in the SARP network will profit from the climatic data of South-East Asia. The synoptic dataset holds large numbers of daily precipitation series of West-Africa suitable for use in studies on the effect of nutrient application and rainfall variability on crop production within the PSS project. Research projects on sustainability of world food supply and agro-ecological characterization for potato production (Stol et al., 1991) have profited already from the global climate data sets.

Research-workers of AB-DLO, the department of Theoretical Production Ecology and the international research networks SARP and PSS can use the AB-MET database, provided the original source of the data is acknowledged. Please give credit when publishing research that uses data from this archive. AB-DLO will not distribute the datasets of FAO and Müller to others due to agreements with the suppliers. Independent development of a large meteo database with global coverage is not a goal of AB-DLO. We will rely for that on other international organisations like FAO. AB-DLO will develop and maintain appropriate interfaces towards international standards, e.g. WMO's CLICOM-export format.

This technical report shows from which meteorological stations data are available and how to retrieve them from the database. For each set of data the origin and the procedures used to check and convert the data for inclusion in the database are described. If available in the datafiles, the system provides daily values for the following weather data:

Name	Unit
Global radiation (daily total)	$\text{kJ m}^{-2} \text{d}^{-1}$
Minimum air temperature	degrees Celcius
Maximum air temperature	degrees Celcius
Vapour pressure	kPa
Wind speed (daily average)	$\text{m s}^{-1}$
Precipitation (daily total)	$\text{mm d}^{-1}$

The user-manual of the CABO/TPE weather system (van Kraalingen et al., 1990) explains extensively how to use meteorological data from within models using the subroutines STINFO and WEATHR.

## 2 AB's collection of meteorological data

### 2.1 Origin of data

This section gives information about the origin of the data stored. It includes the main sources of information. The AB collection contains both climate and synoptic data files, in total 1865 (March 1994).

The weather information system started in 1988 with 205 data files ('station-year' combinations) that were extracted from the former CABO-SOW Meteo Information System CASMIS (Uithol, 1987).

The frequently used datasets of Wageningen (NLD1) and Swifterbant (NLD2) originate from the Department of Meteorology of Wageningen Agricultural University (Anonymous, 1993). In addition the database contains also a set of monthly average climatic data of 115 meteorological stations with a reasonable coverage of Europe that originates from the study 'Crop production potential of rural areas within the European Communities' carried out by the Winand Staring Centre in Wageningen (Reinds et al., 1992). The body of the collection is the large daily precipitation series of Niger (de Bruin et al., 1992) and Mali (Veeneklaas et al., 1991). Other important suppliers of data in alphabetical order are (between brackets number of files):

- ARO, Bet Dagan, Israel (22),
- ASECNA, Niamey, Niger (809),
- CIEH, Bamako, Mali (201),
- DSIR, Crop Research, New Zealand (66),
- ICARDA, Aleppo, Syria (36),
- ICRISAT, Hyderabad, India (19),
- INRA, Bioclimatologie, Grignon, France (21),
- IRRI, Climate Unit, Manila, Philippines (50),
- KNMI, de Bilt, Netherlands (39),
- NIFOR, Benin City, Nigeria (50),
- PAGV, Lelystad, Netherlands (6),
- IRRI/WMO, 'Rice/Weather network', Manila, Philippines (40).

### 2.2 Conversion and quality control

The following procedure checks the station information. The name of a meteorological station, its latitude, longitude and elevation are checked against the contents of 14425 data records in the Master Station Library (Stern, 1993). When found in this database, location data are checked and the program writes the WMO station index number into the file header. The file header holds longitude (East, West) and latitude (North, South) of the location in degrees and minutes and elevation in meters. The location parameter line of the data file contains longitude and latitude in decimal degrees. Locations West of Greenwich and in the Southern Hemisphere have negative values for longitude and latitude, respectively. The official name of

the country in English used in the file header and the alphanumeric code used in the filename follow the International Standard ISO 3166 (Anonymous, 1988).

In the data files, missing data have the value -99. The weather information system tries to substitute missing data with values calculated by linear interpolation of measured data, for all elements, except precipitation. Monthly climate data are assigned to day numbers in the middle of the months, intermediate values are derived by means of linear interpolation. To ensure smooth transition at the turning of the year within climate data files, two records are inserted at day 1 and 365, respectively. The data of these records are calculated by linear interpolation from the December and January normals.

All data files contain data elements in standardized units: irradiation in  $\text{kJ m}^{-2} \text{d}^{-1}$  or alternatively sunshine duration in  $\text{h d}^{-1}$ , minimum temperature in degrees Celsius, maximum temperature in degrees Celsius, vapour pressure in kPa, mean wind speed in  $\text{m s}^{-1}$  and precipitation in  $\text{mm d}^{-1}$ .

A procedure for quality control checks most of the data files, and alerts when:

- longitude is below -180 or exceeds 180 degrees,
- latitude is below -90 or exceeds 90 degrees,
- elevation is below -30 or exceeds 5000 m (!),
- day numbers are not between 1 and 366,
- both global radiation and sunshine duration are absent,
- global radiation, sunshine duration, vapour pressure, wind speed or rainfall are negative,
- sunshine duration exceeds actual daylength by more than 5%,
- daily atmospheric transmission coefficient is below 0.1 or exceeds 0.85 (Spitters et al., 1986),
- minimum temperature exceeds maximum temperature,
- minimum temperature is below -35 °C or exceeds 35 °C,
- maximum temperature is below -25 °C or exceeds 50 °C,
- actual vapour pressure is below 10% of the saturated vapour pressure calculated from the mean daily temperature with the Goff-Gratch formula (List, 1951), checked through subroutine ESAT2 or exceeds the saturated vapour pressure with more than 10%,
- wind speed exceeds 20  $\text{m s}^{-1}$ ,
- rainfall exceeds 200  $\text{mm d}^{-1}$ .

## 2.3 Contents of AB's collection of meteorological data

**Table 1**

For each meteorological station the table stores: country name, station name, alfa-3 code of country, station number, longitude, latitude, elevation, availability of climatic data (+/-), number of years and first and last year of synoptic observations in the database.



Country name	Station name	Code Sn	Longitude	Latitude	Elevation	Clim.	Synoptic
Austria	Wien	AUT 1	16 00 E	48 00 N	200 m.	-	2: 1985-1986
Bangladesh	Joydevpur	BGD 1	90 26 E	23 54 N	8 m.	-	3: 1983-1986
Belgium	Uccle	BEL 1	04 21 E	50 48 N	104 m.	+	3: 1985-1987
China	Nanjing	CHN 1	118 47 E	32 03 N	17 m.	-	2: 1983-1984
Colombia	Palmira	COL 1	76 19 W	03 31 S	1006 m.	-	4: 1983-1986
Cyprus	Akhelia	CYP 1	32 29 E	34 44 N	45 m.	-	2: 1985-1986
Denmark	Thorshavn	DNX 1	06 46 E	62 01 N	39 m.	+	-
Denmark	Alborg	DNX 2	09 52 E	57 06 N	3 m.	+	-
Denmark	Copenhagen	DNX 3	12 33 E	55 41 N	9 m.	+	-
Denmark	Roskilde	DNX 4	12 00 E	55 30 N	Unknown	-	2: 1985-1986
Egypt	Sakha	EGY 1	30 55 E	31 05 N	Unknown	-	1: 1984
Finland	Jokioinen	FIN 1	23 30 E	60 49 N	103 m.	-	3: 1974-1976
France	Marseille/Marigna	FRA 1	05 14 E	43 27 N	36 m.	+	-
France	Nice/Cote Dazur	FRA 2	07 12 E	43 39 N	10 m.	+	-
France	Perpignan	FRA 3	02 52 E	42 44 N	48 m.	+	-
France	Ajaccio/Campo Oro	FRA 4	08 48 E	41 55 N	9 m.	+	-
France	Le Puy en Velay	FRA 6	03 30 E	45 00 N	714 m.	+	-
France	Biarritz	FRA 7	01 32 E	43 28 N	71 m.	+	-
France	Les Escaldes	FRA 8	01 18 E	42 18 N	1080 m.	+	-
France	Brest/Guipavas	FRA 9	04 25 W	48 27 N	103 m.	+	-
France	Trappes	FRA 10	02 01 E	48 46 N	168 m.	+	-
France	Paris/Le Bourget	FRA 11	02 27 E	48 58 N	65 m.	+	-
France	Nancy/Essey	FRA 12	06 13 E	48 41 N	217 m.	+	-
France	Strasbourg/Entzheim	FRA 13	07 38 E	48 33 N	154 m.	+	-
France	Nantes	FRA 14	01 36 W	47 10 N	27 m.	+	-
France	Bourges	FRA 15	02 22 E	47 04 N	166 m.	+	-
France	Dijon	FRA 16	05 05 E	47 16 N	227 m.	+	-
France	Limoges/Bellegarde	FRA 17	01 11 E	45 52 N	402 m.	+	-
France	Lyon/Bron	FRA 18	04 57 E	45 43 N	201 m.	+	-
France	Bordeaux/Merignac	FRA 19	00 42 W	44 50 N	61 m.	+	-
France	Toulouse/Blagnac	FRA 20	01 22 E	43 38 N	153 m.	+	-
France	Nimes/Courbessac	FRA 21	04 24 E	43 52 N	62 m.	+	-
France	La Miniere (Versailles)	FRA 22	02 02 E	48 27 N	168 m.	-	2: 1983-1984
France	Grignon (Versailles)	FRA 23	01 33 E	48 30 N	168 m.	-	2: 1985-1987
France	Le Rheu (Rennes)	FRA 24	01 44 W	48 04 N	37 m.	-	2: 1987-1988
France	Dijon	FRA 25	05 05 E	47 16 N	227 m.	-	2: 1985-1986
France	La Revanche-Lectoure	FRA 26	00 38 E	43 56 N	Unknown	-	4: 1986-1989
France	Ouges MN	FRA 27	05 05 E	47 16 N	219 m.	-	7: 1983-1989
France	Baigneux Les Juifs	FRA 28	05 05 E	47 16 N	410 m.	-	7: 1983-1989
Germany	Schleswig	DEU 1	09 33 E	54 32 N	48 m.	+	-
Germany	Hamburg/Fuhlsbuttel	DEU 2	10 00 E	53 38 N	16 m.	+	-
Germany	Emden-Nesserland	DEU 3	07 12 E	53 18 N	1 m.	+	-
Germany	Hannover	DEU 4	09 42 E	52 28 N	54 m.	+	-
Germany	Berlin/Tempelhof	DEU 5	13 24 E	52 28 N	49 m.	+	-
Germany	Essen/Mulheim	DEU 6	06 58 E	51 24 N	161 m.	+	-
Germany	Kassel	DEU 7	09 27 E	51 18 N	233 m.	+	-
Germany	Geisenheim	DEU 8	07 57 E	49 59 N	120 m.	+	-
Germany	Stuttgart/Schnarren	DEU 9	09 12 E	48 50 N	311 m.	+	-
Germany	Nurnberg	DEU 10	11 05 E	49 30 N	312 m.	+	-
Germany	Munich/Riem	DEU 11	11 42 E	40 08 N	529 m.	+	-
Germany	Zugspitze Mountain	DEU 12	10 59 E	47 25 N	2962 m.	+	-
Germany	Kahler Asten	DEU 13	08 29 E	51 11 N	859 m.	+	-
Germany	Feldberg	DEU 14	08 00 E	47 53 N	1493 m.	+	-
Germany	Kiel	DEU 15	10 12 E	54 19 N	31 m.	+	4: 1983-1986
Germany	Gottingen	DEU 16	08 30 E	50 30 N	200 m.	-	2: 1985-1986

Country name	Station name	Code Sn	Longitude	Latitude	Elevation	Clm.	Synoptic
Germany	Hohenheim	DEU 17	08 00 E	49 00 N	400 m.	-	2: 1985-1986
Greece	Thessaloniki/Mikra	GRC 1	22 58 E	40 31 N	4 m.	+	-
Greece	Kerkira	GRC 2	19 55 E	39 37 N	4 m.	+	-
Greece	Athens	GRC 3	23 43 E	37 58 N	107 m.	+	-
Greece	Athens/Hellenkion	GRC 4	23 44 E	37 54 N	15 m.	+	-
Greece	Kalamath	GRC 5	22 01 E	37 04 N	8 m.	+	-
Greece	Iraklion	GRC 6	25 11 E	35 20 N	39 m.	+	-
Greece	Kawala	GRC 7	24 18 E	40 36 N	27 m.	+	-
Greece	Trikala	GRC 8	21 46 E	39 33 N	116 m.	+	-
Greece	Larissa	GRC 9	22 25 E	39 38 N	74 m.	+	-
India	Patancheru	IND 1	78 28 E	17 27 N	21 m.	-	10: 1975-1984
India	Bijapur	IND 2	75 43 E	16 49 N	594 m.	-	10: 1971-1980
India	Coimbatore	IND 3	77 09 E	11 02 N	431 m.	-	3: 1983-1985
India	Cuttack	IND 4	86 00 E	20 30 N	23 m.	-	3: 1983-1985
India	Hyderabad	IND 5	78 26 E	17 25 N	545 m.	-	2: 1983-1984
India	Kapurthala	IND 6	75 52 E	30 56 N	247 m.	-	3: 1983-1985
India	Pattambi	IND 7	76 12 E	10 48 N	25 m.	-	3: 1983-1985
Indonesia	Muara	IDN 1	106 47 E	06 36 S	240 m.	-	2: 1983-1984
Indonesia	Sukamandi	IDN 2	107 45 E	06 15 S	7 m.	-	3: 1983-1985
Indonesia	Bah Lias	IDN 3	099 20 E	03 11 N	30 m.	-	3: 1989-1991
Ireland	Belfast/Aldergrove	IRL 1	06 13 W	54 39 N	81 m.	+	-
Ireland	Valentia Observatory	IRL 2	10 15 W	51 56 N	14 m.	+	-
Ireland	Cork Airport	IRL 3	08 29 W	51 51 N	162 m.	+	-
Ireland	Shannon Airport	IRL 4	08 55 W	52 42 N	20 m.	+	-
Ireland	Dublin Airport	IRL 5	06 15 W	53 26 N	85 m.	+	-
Ireland	Belmullet Peninsula	IRL 6	10 00 W	54 14 N	10 m.	+	-
Ireland	Malin Head	IRL 7	07 20 W	55 22 N	25 m.	+	-
Ireland	Carlow	IRL 8	06 00 W	53 00 N	80 m.	-	2: 1985-1986
Israel	Gilat	ISR 1	43 40 E	31 20 N	150 m.	-	23: 1962-1984
Israel	Bet Dagan	ISR 2	34 49 E	32 00 N	30 m.	-	1: 1988
Italy	Milano/Linate	ITA 1	09 17 E	45 26 N	103 m.	+	-
Italy	Villafranca	ITA 2	10 52 E	45 23 N	68 m.	+	-
Italy	Venezia/Tessera	ITA 3	12 20 E	45 30 N	6 m.	+	-
Italy	Trieste	ITA 4	13 45 E	45 39 N	20 m.	+	-
Italy	Pisa	ITA 5	10 23 E	43 41 N	1 m.	+	-
Italy	Pescara	ITA 6	14 12 E	42 26 N	11 m.	+	-
Italy	Rome/Fiumicino	ITA 7	12 14 E	41 48 N	3 m.	+	-
Italy	Napoli	ITA 8	14 18 E	40 53 N	88 m.	+	-
Italy	Brindisi/Casale	ITA 9	17 57 E	40 39 N	10 m.	+	-
Italy	Messina	ITA 10	15 33 E	38 12 N	51 m.	+	-
Italy	Trapani/Birgi	ITA 11	12 30 E	37 55 N	7 m.	+	-
Italy	Catania/Fontanarosa	ITA 12	15 03 E	37 28 N	17 m.	+	-
Italy	Alghero	ITA 13	08 17 E	40 38 N	23 m.	+	-
Italy	Cagliari/Elmas	ITA 14	09 03 E	39 15 N	1 m.	+	-
Italy	Rivoltto	ITA 15	13 02 E	45 59 N	53 m.	+	-
Italy	Ancona	ITA 16	13 18 E	43 36 N	104 m.	+	-
Italy	L'Aquila	ITA 17	13 12 E	42 12 N	735 m.	+	-
Italy	Foggia/Gino Lisa	ITA 18	15 32 E	41 26 N	80 m.	+	-
Italy	Potenza	ITA 19	15 48 E	40 38 N	843 m.	+	-
Italy	Policoro	ITA 20	16 25 E	40 07 N	10 m.	-	3: 1986-1988
Kenya	Ahero	KEN 1	34 36 E	00 09 S	1200 m.	-	1: 1986
Luxembourg	Clerveaux/Clerf	LUX 1	06 01 E	50 03 N	454 m.	+	-
Luxembourg	Luxembourg/Findel	LUX 2	06 13 E	49 36 N	330 m.	+	-
Mali	Niono	MLI 1	05 58 W	14 16 N	275 m.	-	20: 1950-1979
Mali	Mopti	MLI 2	04 06 W	14 31 N	272 m.	+	31: 1959-1989
Mali	Bankass	MLI 3	03 31 W	14 04 N	294 m.	-	30: 1959-1988

Country name	Station name	Code Sn	Longitude	Latitude	Elevation	Clm.	Synoptic
Mali	Koro	MLI 4	03 04 W	14 04 N	253 m.	-	30: 1959-1988
Mali	Djenne	MLI 5	04 34 W	13 54 N	278 m.	-	30: 1959-1988
Mali	Douentza	MLI 6	02 57 W	14 59 N	305 m.	-	30: 1959-1988
Mali	Hombori	MLI 7	01 42 W	15 17 N	287 m.	-	30: 1959-1988
Mali	Niafunke	MLI 8	03 42 W	15 49 N	261 m.	-	30: 1959-1988
Mali	Saraferé	MLI 9	03 42 W	15 49 N	261 m.	-	9: 1953-1988
Mali	Tonka	MLI 10	03 45 E	16 08 N	262 m.	-	2: 1961-1962
Mali	Samanko	MLI 11	08 00 E	12 30 N	345 m.	-	3: 1984-1986
Mali	Samanko	MLI 12	08 00 E	12 30 N	345 m.	-	4: 1983-1986
Mali	Nioro du Sahel	MLI 13	09 21 W	15 14 N	237 m.	-	46: 1919-1965
Mali	Banamba	MLI 14	07 27 W	13 33 N	379 m.	-	12: 1935-1965
Mali	Goundam	MLI 15	03 40 W	16 25 N	269 m.	-	12: 1928-1961
Mali	Kabara	MLI 16	02 59 W	16 42 N	267 m.	-	12: 1930-1965
Mali	Mourdiah	MLI 17	07 28 W	14 28 N	314 m.	-	12: 1930-1963
Mali	Nara	MLI 18	07 17 W	15 10 N	263 m.	-	8: 1941-1964
Mali	Sikasso	MLI 19	05 41 W	11 21 N	374 m.	-	4: 1942-1959
Mali	Sokolo	MLI 20	06 08 W	14 44 N	273 m.	-	4: 1953-1958
Mali	Sotuba	MLI 21	07 56 W	12 39 N	320 m.	-	8: 1953-1965
Nepal	Parwanipur	NPL 1	84 35 E	27 02 N	115 m.	-	2: 1983-1984
Netherlands	Wageningen (Haarweg)	NLD 1	05 40 E	51 58 N	7 m.	+	40: 1954-1993
Netherlands	Swifterbant	NLD 2	05 38 E	52 34 N	-4 m.	-	16: 1974-1989
Netherlands	De Kooy	NLD 3	04 47 E	52 55 N	14 m.	-	12: 1974-1985
Netherlands	De Bilt	NLD 4	05 11 E	52 06 N	4 m.	+	30: 1959-1988
Netherlands	Zuid Limburg/Beek	NLD 5	05 47 E	50 55 N	116 m.	-	2: 1987-1988
Netherlands	Groningen/Eelde	NLD 6	06 35 E	53 08 N	4 m.	-	4: 1987-1992
Netherlands	Lelystad	NLD 7	05 27 E	52 31 N	-4 m.	-	7: 1987-1993
Netherlands	Valthermond	NLD 8	06 00 E	53 00 N	Unknown	-	1: 1988
Netherlands	Randwijk	NLD 9	05 43 E	51 57 N	6 m.	-	19: 1974-1992
Netherlands	Vredepeel	NLD 10	05 30 E	50 30 N	21 m.	-	2: 1986-1987
Netherlands	Vlissingen	NLD 11	03 36 E	51 27 N	10 m.	-	4: 1971-1988
Netherlands	Wieringerwerf	NLD 12	05 05 E	52 45 N	-4.5 m.	-	2: 1992-1993
Netherlands	Wageningen (Droevendaal)	NLD 13	05 40 E	51 58 N	8 m.	-	19: 1975-1993
New Zealand	Lincoln	NZL 1	172 30 E	43 38 S	11 m.	-	4: 1984-1987
New Zealand	Ohakea	NZL 2	175 22 E	40 12 S	52 m.	-	16: 1972-1990
New Zealand	Aorangi (Manawatu)	NZL 3	175 28 E	40 20 S	15 m.	-	20: 1972-1991
New Zealand	Christchurch	NZL 4	172 32 E	43 29 S	30 m.	-	13: 1972-1984
New Zealand	Gore	NZL 5	168 56 E	46 06 S	70 m.	-	14: 1972-1984
Niger	Tillabery	NER 1	01 27 E	14 12 N	210 m.	-	64: 1923-1989
Niger	Niamey	NER 2	02 10 E	13 29 N	227 m.	-	46: 1944-1989
Niger	Gaya	NER 3	03 27 E	11 53 N	203 m.	-	55: 1932-1989
Niger	Tahoua	NER 4	05 15 E	14 54 N	391 m.	-	64: 1922-1989
Niger	Birni N'Konni	NER 5	05 15 E	13 48 N	273 m.	-	55: 1934-1989
Niger	Keita	NER 6	05 46 E	14 44 N	450 m.	-	27: 1955-1989
Niger	Maradi-Aeroport	NER 7	07 05 E	13 28 N	373 m.	-	57: 1933-1989
Niger	Agadez South	NER 8	07 59 E	16 58 N	502 m.	-	66: 1922-1989
Niger	Zinder-Aeroport	NER 9	08 59 E	13 47 N	453 m.	-	45: 1945-1989
Niger	Magaria	NER 10	08 56 E	12 59 N	403 m.	-	48: 1938-1989
Niger	Maine Soroa	NER 11	11 59 E	13 14 N	337 m.	-	54: 1936-1989
Niger	Diffa	NER 12	12 47 E	13 25 N	305 m.	-	36: 1951-1989
Niger	Bilma	NER 13	12 55 E	18 41 N	357 m.	-	66: 1923-1989
Niger	N'Guigmy	NER 14	13 07 E	14 15 N	286 m.	-	66: 1921-1989
Niger	Chikal	NER 15	03 28 E	14 16 N	300 m.	-	10: 1980-1989
Niger	Goure	NER 16	10 18 E	13 59 N	460 m.	-	51: 1936-1989
Nigeria	Samaru	NGA 1	07 38 E	11 11 N	686 m.	-	5: 1980-1984
Nigeria	Benin City	NGA 2	05 40 E	06 30 N	79 m.	-	30: 1940-1973

Country name	Station name	Code	Sn	Longitude	Latitude	Elevation	Clim.	Synoptic
Pakistan	Dokri	PAK	1	68 00 E	27 50 N	30 m.	-	1: 1986
Papua Nw. Guinea	Dami	PNG	1	150 00 E	05 30 S	5 m.	-	17: 1970-1988
Papua Nw. Guinea	Higaturu	PNG	2	148 00 E	09 00 S	10 m.	-	7: 1981-1988
Peru	San Camilo	PER	1	71 11 W	16 42 S	1300 m.	-	2: 1981-1982
Philippines	IRRI wet station site	PHL	1	121 15 E	14 11 N	21 m.	-	15: 1979-1993
Philippines	IRRI dry station site	PHL	2	121 15 E	14 13 N	23 m.	-	15: 1979-1993
Philippines	Masapang	PHL	3	121 15 E	14 10 N	Unknown	-	1: 1984
Philippines	Los Banos	PHL	4	121 15 E	14 10 N	21 m.	-	26: 1959-1984
Portugal	Santa Maria Island	PRT	1	25 10 W	36 58 N	100 m.	+	-
Portugal	Lisbon/Portela	PRT	2	09 08 W	38 47 N	123 m.	+	-
Portugal	Porto/Pedras Ruba	PRT	3	08 41 W	41 14 N	73 m.	+	-
Portugal	Faro	PRT	4	07 58 W	37 01 N	4 m.	+	-
Portugal	Beja	PRT	5	07 52 W	38 01 N	247 m.	+	-
Portugal	Penhas Douradas	PRT	6	07 33 W	40 25 N	1388 m.	+	-
Portugal	Braganca	PRT	7	06 44 W	41 48 N	692 m.	+	-
Portugal	Ponta Delgada/Norde	PRT	8	25 42 W	37 44 N	72 m.	+	-
Romania	Brasov	ROM	1	25 35 E	45 38 N	538 m.	-	8: 1978-1985
Senegal	Nioro du Rip	SEN	1	08 00 W	12 30 N	345 m.	-	1: 1988
Korea, Rep. of	Milyang	KOR	1	128 44 E	35 29 N	12 m.	-	2: 1983-1984
Korea, Rep. of	Suweon	KOR	2	126 59 E	37 16 N	37 m.	-	2: 1983-1984
Spain	La Coruna City	ESP	1	08 25 W	43 22 N	67 m.	+	-
Spain	Valladolid	ESP	2	04 46 E	41 39 N	735 m.	+	-
Spain	Madrid/Retiro	ESP	3	03 42 E	40 24 N	657 m.	+	-
Spain	Mahon/Menorca Isl.	ESP	4	04 14 E	39 52 N	82 m.	+	-
Spain	Talavera Ab/Badajoz	ESP	5	06 49 W	38 53 N	192 m.	+	-
Spain	Barcelona City	ESP	6	02 08 E	41 42 N	176 m.	+	-
Spain	Palma de Mallorca	ESP	7	02 37 E	39 33 N	6 m.	+	-
Spain	Santander City	ESP	9	03 49 E	43 28 N	65 m.	+	-
Spain	Leon/Virgen Camino	ESP	10	05 39 W	42 35 N	914 m.	+	-
Spain	Soria	ESP	11	02 28 W	41 46 N	1083 m.	+	-
Spain	Zaragoza	ESP	12	01 01 W	41 40 N	258 m.	+	-
Spain	Ciudad Real (City)	ESP	13	03 55 W	38 59 N	629 m.	+	-
Spain	Alcantarilla	ESP	14	01 14 W	37 57 N	75 m.	+	-
Spain	Cordoba Airport	ESP	15	04 50 W	37 51 N	92 m.	+	-
Spain	Granada Airport	ESP	16	03 47 W	37 11 N	559 m.	+	-
Spain	Malaga	ESP	17	04 29 W	36 40 N	7 m.	+	-
Spain	Madrid University	ESP	18	03 43 W	40 27 N	669 m.	-	2: 1987-1988
Spain	San Esteban De Gomaz	ESP	19	03 18 W	41 36 N	Unknown	-	1: 1988
Sri Lanka	Paranthan	LKA	1	79 59 E	08 59 N	4 m.	-	3: 1983-1985
Switzerland	Santis	CHE	1	09 20 E	47 12 N	2500 m.	+	-
Syrian Arab Republic	Breda	SYR	1	37 10 E	35 56 N	300 m.	-	8: 1980-1988
Syrian Arab Republic	Ghreriffe	SYR	2	37 15 E	35 50 N	325 m.	-	2: 1985-1986
Syrian Arab Republic	Jindiress	SYR	3	36 44 E	46 24 N	210 m.	-	7: 1980-1986
Syrian Arab Republic	Kafr Antoon	SYR	4	37 02 E	36 32 N	500 m.	-	4: 1980-1983
Syrian Arab Republic	Khanasser	SYR	5	37 33 E	35 46 N	335 m.	-	7: 1980-1986
Syrian Arab Republic	Tel Hadya	SYR	6	36 56 E	36 01 N	284 m.	-	11: 1978-1990
Syrian Arab Republic	Homs	SYR	7	36 43 E	34 45 N	485 m.	-	3: 1988-1990
Syrian Arab Republic	Izra'a	SYR	8	36 14 E	32 52 N	700 m.	-	3: 1988-1990
Taiwan	Pingtun South	TWN	1	120 28 E	22 41 N	24 m.	-	3: 1983-1985
Thailand	Sanpatong	THA	1	98 57 E	18 45 N	312 m.	-	4: 1983-1986
Tunisia	Saida	TUN	1	09 00 E	34 52 N	770 m.	-	2: 1988-1989
United Kingdom	Lerwick/Shetland Is	GBR	2	01 11 E	60 08 N	84 m.	+	-
United Kingdom	Stornoway	GBR	3	06 19 W	58 13 N	13 m.	+	-
United Kingdom	Aberdeen/Dyce	GBR	4	02 13 W	57 12 N	65 m.	+	-
United Kingdom	Tiree Island	GBR	5	06 53 W	56 30 N	12 m.	+	-
United Kingdom	Edinburgh/Royal Obs.	GBR	6	03 24 W	56 00 N	35 m.	+	-

Country name	Station name	Code	Sn	Longitude	Latitude	Elevation	Clim.	Synoptic
United Kingdom	Eskdalemuir	GBR	7	03 12 E	55 19 N	242 m.	+	-
United Kingdom	Valley Raf	GBR	8	04 32 W	53 15 N	11 m.	+	-
United Kingdom	Manchester Intl	GBR	9	02 16 W	53 21 N	77 m.	+	-
United Kingdom	Waddington	GBR	10	00 31 W	53 10 N	70 m.	+	-
United Kingdom	Birmingham Airport	GBR	11	01 44 W	52 27 N	Unknown	+	-
United Kingdom	Cardiff-Wales Airport	GBR	12	03 21 W	51 24 N	67 m.	+	-
United Kingdom	London/Gatwick Arpt	GBR	13	00 11 W	51 09 N	62 m.	+	-
United Kingdom	Plymouth/Mountbatte	GBR	14	04 07 W	50 21 N	27 m.	+	-
United Kingdom	Bournemouth Airport	GBR	15	01 50 W	50 47 N	11 m.	+	-
United Kingdom	Cambridge	GBR	16	00 11 E	52 12 N	15 m.	-	4: 1985-1988
United Kingdom	Sutton Bonington	GBR	17	01 15 W	53 08 N	Unknown	-	6: 1980-1985
United Kingdom	Mlynefield	GBR	18	03 00 E	56 25 N	30 m.	-	3: 1985-1987
United Kingdom	Invergowree	GBR	19	03 00 W	56 30 N	36 m.	-	4: 1984-1987
United States	Hancock/Wisconsin	USA	1	89 30 W	44 00 N	300 m.	-	3: 1985-1987
United States	Bakersfield/California	USA	2	119 00 W	35 18 N	150 m.	-	1: 1988
United States	Davis/California	USA	3	Unknown	38 30 N	50 m.	+	-
United States	Ithaca/New York	USA	4	76 30 W	42 30 N	300 m.	-	1: 1987
United States	Tulelake/California	USA	5	121 29 W	41 36 N	1400 m.	-	1: 1988



## 3 Standard stations for vegetation science according to Müller

### 3.1 Origin of data

The source of these data is the Müller database, a global set of long-term monthly mean values of weather variables (Müller, 1982, 1987). Leemans and Cramer (1991) used a subset of 977 out of the 1178 stations listed in Müller's publication as core data for their IIASA database. We used that subset here. The AB-MET database uses 6 data elements out of 16 that cover a complete set of information in the Müller database. The 16 data elements include:

- mean daily temperature in °C,
- mean daily maximum temperature in °C,
- mean daily minimum temperature in °C,
- absolute maximum temperature in °C,
- absolute minimum temperature in °C,
- mean relative humidity in %,
- mean monthly precipitation in mm,
- maximum monthly precipitation in mm,
- minimum monthly precipitation in mm,
- maximum precipitation in 24 hours in mm,
- number of days with more than 0.1 mm precipitation,
- sunshine duration in h,
- total radiation in langleys  $d^{-1}$ ,
- potential evapotranspiration according to Thornthwaite in  $mm\ d^{-1}$ ,
- mean wind speed in  $m\ s^{-1}$ ,
- mean predominant wind direction.

For a number of stations not all of these data were available. Along with the data, the length of the period of observations is given for each element. For most stations the series of observations cover the period 1931-1960. Data collected during the sixties and seventies have a time-span shorter than 30 year. The climate classification according to Köppen and Troll and Paffen is also available.

### 3.2 Conversion and quality control

The procedure for conversion and quality control is comparable to the one used for the previous dataset. The conversion program creates for each station a file in standardized format with file extension 000. The file header contains the station and country name, its longitude, latitude and elevation. Additionally, the program writes the climate classification according to Köppen (Landsberg, 1945, Bartholomew et al., 1988) in the comment field. Section 2.2 describes treatment of monthly climate data in the weather information system to generate daily values. Missing data in the data files have the value -99. If data on global radiation are missing, the weather information system can make an estimate on the basis of sunshine duration with the Ångström formula. The weather datafile then should contain two site-specific regression parameters,  $r_a$  and  $r_b$ , for that

formula. These parameters were estimated using Köppen's climate classification in combination with values by FAO (Frère and Popov, 1979, Berkhouwt and van Keulen, 1986). Table 2 shows the results. Another source of information is the review on  $r_a$  and  $r_b$  values by Martínez-Lozana et al. (1984).

Table 2. Relation between the Köppen climate classification and the value of the regression parameters  $r_a$  and  $r_b$  used in the Ångström formula.

<b>Köppen Climate classification</b>	<b>Symbol</b>	<b><math>r_a</math></b>	<b><math>r_b</math></b>
Rain forest	Af	0.29	0.42
Savanna	Aw	0.29	0.42
Steppe	Bs	0.25	0.45
Desert	BW	0.25	0.45
Moderate, oceanic	Cf	0.18	0.55
Moderate, winter dry	Cw	0.18	0.55
Moderate, summer dry	Cs	0.18	0.55
Oceanic boreal	Df	0.18	0.55
Continental boreal	Dw	0.18	0.55
Tundra	ET	0.18	0.55
Eternal frost	EF	0.18	0.55

Unit conversions and other assumptions are explained briefly. Multiplication with 41.868 (Schurer et al., 1992) converts global radiation data from langleys  $d^{-1}$  to  $\text{kJ m}^{-2} d^{-1}$ . When daily minimum and maximum temperature are missing while mean daily temperature is available, both minimum and maximum temperature are assigned that value. In most of the models of AB-DLO the calculated mean daily temperature will then be correct. Actual vapour pressure is the product of relative humidity divided by 100 and saturated vapour pressure. The Goff-Gratch formula (List, 1951) defines the saturated vapour pressure. The ESAT2 subroutine by van Kraalingen is an implementation of this formula, valid in the range of -50 to 100 degrees Celsius. Input to this subroutine is either directly the mean daily temperature or the mean of daily minimum and maximum temperature. Division by 10 converts mean vapour pressure from mbar to kPa. The program truncates mean monthly precipitation in millimetres to whole numbers, and converts sunshine duration in hours per month to a daily sum by dividing by the number of days per month. All data files contain data elements in standardized units: irradiation in  $\text{kJ m}^{-2} d^{-1}$  or alternatively sunshine duration in  $\text{h d}^{-1}$ , minimum temperature in degrees Celsius, maximum temperature in degrees Celsius, vapour pressure in kPa, mean wind speed in  $\text{m s}^{-1}$  and precipitation in  $\text{mm d}^{-1}$ .

### 3.3 Contents of the Müller database for Vegetation Science

**Table 3**

For each meteorological station the table stores: country name, station name, alfa-3 code of country, station number, longitude, latitude and elevation.

The last six columns represent the availability of the elements radiation (rd), daily minimum temperature (tm), daily maximum temperature (tx), vapour pressure (vp), wind speed (wn) and precipitation (rn). The markers represent that elements are not available (-), partially available (.) or completely available (+).



Country name	Station name	Code	Sn	Longitude	Latitude	Elevation	rd	tm	tx	vp	wn	rn
Afghanistan	Herat	AFG	20	062 13 E	34 18 N	964 m.	+	+	+	+	+	+
Afghanistan	Kabul	AFG	21	069 13 E	34 33 N	1791 m.	+	+	+	+	+	+
Afghanistan	South Salang	AFG	22	069 04 E	35 18 N	3172 m.	+	+	+	+	+	+
Afghanistan	Qandahar	AFG	23	065 51 E	31 30 N	1010 m.	+	+	+	+	+	+
Albania	Tirane	ALB	1	019 48 E	41 18 N	114 m.	+	+	+	+	+	+
Algeria	Marrakech	DZA	23	008 01 W	31 36 N	460 m.	+	+	+	+	+	+
Algeria	Oran	DZA	24	000 39 W	35 44 N	11 m.	+	+	+	+	+	+
Algeria	Algiers	DZA	25	030 03 E	36 46 N	60 m.	+	+	+	+	+	+
Algeria	Zaouia el Kahla	DZA	26	006 42 E	28 06 N	373 m.	+	+	+	-	-	+
Algeria	Tindouf	DZA	27	008 08 E	27 43 N	600 m.	-	+	+	-	-	+
Algeria	Adrar	DZA	28	000 20 E	27 52 N	258 m.	-	+	+	-	-	+
Algeria	Tamanrasset	DZA	29	005 31 E	22 42 N	1405 m.	+	+	+	+	-	+
Andorra	Les Escaldes	AND	1	001 31 E	42 30 N	1080 m.	-	+	+	-	-	+
Angola	Cabinda	AGO	19	012 11 E	05 33 S	20 m.	+	+	+	+	-	+
Angola	Luanda	AGO	20	013 13 E	08 49 S	45 m.	+	+	+	+	+	+
Angola	Teixeira de Sousa	AGO	21	022 13 E	10 43 S	1100 m.	-	+	+	+	-	+
Angola	Nova Lisboa	AGO	22	015 45 E	12 48 S	1700 m.	+	+	+	+	+	+
Angola	Cangamba	AGO	23	019 52 E	13 41 S	1325 m.	-	+	+	+	-	+
Angola	Mupa	AGO	24	015 53 E	16 07 S	1215 m.	-	+	+	-	-	+
Antarctica	South Pole	ATA	1	000 00 E	90 00 S	2800 m.	.	+	+	-	+	-
Antarctica	Plateau Station	ATA	2	040 30 E	79 15 S	3625 m.	-	+	+	-	+	-
Antarctica	Wostok	ATA	3	106 48 E	78 28 S	3488 m.	.	+	+	.	+	-
Antarctica	General Belgrano	ATA	4	038 48 W	77 58 S	50 m.	-	+	+	-	+	-
Antarctica	McMurdo	ATA	5	166 44 E	77 53 S	24 m.	-	+	+	-	+	-
Antarctica	Halley Bay	ATA	6	026 39 W	75 30 S	30 m.	.	+	+	-	+	-
Antarctica	Novolazarewskaja	ATA	7	011 49 E	70 46 S	87 m.	.	+	+	+	+	-
Antarctica	Norway Station	ATA	8	003 32 W	70 30 S	56 m.	+	+	+	+	+	-
Antarctica	Syowa Base	ATA	9	039 35 E	69 00 S	15 m.	.	+	+	+	+	-
Antarctica	Mawson	ATA	10	062 53 E	67 36 S	8 m.	+	+	+	-	+	-
Antarctica	Dumont d'Urville	ATA	11	140 00 E	66 42 S	41 m.	+	+	+	-	+	-
Antarctica	Mirnyj	ATA	12	093 01 E	66 33 S	30 m.	.	+	+	+	+	-
Antarctica	Argentine Island	ATA	13	064 15 W	65 15 S	11 m.	-	+	+	+	+	-
Antarctica	Wilkes	ATA	14	110 35 E	66 15 S	12 m.	-	+	+	-	+	-
Antarctica	Hope Bay	ATA	15	056 59 W	63 24 S	11 m.	-	+	+	+	+	-
Antarctica	Orkadas	ATA	16	044 44 W	60 44 S	4 m.	+	+	+	-	+	+
Argentina	Los Lomitas	ARG	97	060 35 W	24 42 S	130 m.	+	+	+	+	+	+
Argentina	La Quiaca	ARG	98	065 36 W	22 06 S	3459 m.	+	+	+	+	+	+
Argentina	Salta	ARG	99	065 29 W	24 51 S	1226 m.	+	+	+	+	+	+
Argentina	Sn. Miguel de Tucuman	ARG	100	065 12 W	26 48 S	481 m.	+	+	+	+	+	+
Argentina	Corrientes	ARG	101	058 49 W	27 28 S	60 m.	+	+	+	+	+	+
Argentina	Posadas	ARG	102	055 56 W	27 25 S	136 m.	+	+	+	+	+	+
Argentina	Santiago del Estero	ARG	103	064 18 W	27 46 S	199 m.	+	+	+	+	+	+
Argentina	Catamarca	ARG	104	065 46 W	28 26 S	547 m.	-	+	+	+	+	+
Argentina	San Juan	ARG	105	068 33 W	31 36 S	630 m.	+	+	+	+	+	+
Argentina	Cordoba	ARG	106	064 11 W	31 24 S	425 m.	+	+	+	+	+	+
Argentina	Concordia	ARG	107	058 02 W	31 23 S	38 m.	+	+	+	+	+	+
Argentina	Santa Fe	ARG	108	061 57 W	31 31 S	88 m.	+	+	+	+	+	+
Argentina	Cristo Redentor	ARG	109	070 05 W	32 50 S	3829 m.	-	+	+	-	+	+
Argentina	Mendoza	ARG	110	068 50 W	32 53 S	769 m.	+	+	+	+	+	+
Argentina	San Luis	ARG	111	066 21 W	33 16 S	716 m.	-	+	+	+	+	+
Argentina	Rosario	ARG	112	060 47 W	32 55 S	27 m.	+	+	+	+	+	+
Argentina	Buenos Aires	ARG	113	058 29 W	34 35 S	25 m.	+	+	+	+	+	+
Argentina	Macachin	ARG	114	063 41 W	37 08 S	142 m.	+	+	+	+	+	+
Argentina	Chos Malal	ARG	115	070 17 W	37 23 S	848 m.	+	+	+	+	+	+
Argentina	Mar del Plaza	ARG	116	057 33 W	38 08 S	14 m.	+	+	+	+	+	+

Country name	Station name	Code Sn	Longitude	Latitude	Elevation	rd	tm	tx	vp	wn	rn
Argentina	Cipoletti	ARG 117	067 59 W	38 57 S	265 m.	+	+	+	+	+	+
Argentina	Sn. Carlos de Bariloche	ARG 118	071 10 W	41 06 S	836 m.	+	+	+	+	+	+
Argentina	Trelew	ARG 119	065 18 W	43 14 S	39 m.	+	+	+	+	+	+
Argentina	Sarmiento	ARG 120	069 08 W	45 35 S	266 m.	+	+	+	+	+	+
Argentina	Comodora Rivadavia	ARG 121	067 30 W	45 47 S	60 m.	+	+	+	+	+	+
Argentina	Santa Cruz	ARG 122	068 32 W	50 01 S	12 m.	+	+	+	+	+	+
Argentina	Ushuaia	ARG 123	068 19 W	54 48 S	6 m.	+	+	+	+	+	+
Australia	Thursday Island	AUT 1	142 12 E	10 34 S	5 m.	-	+	+	+	+	+
Australia	Coen	AUT 2	143 12 E	13 57 S	600 m.	+	+	+	+	-	+
Australia	Darwin	AUT 3	130 51 E	12 28 S	30 m.	+	+	+	+	+	+
Australia	Wyndham	AUT 4	128 07 E	15 27 S	7 m.	-	+	+	+	+	+
Australia	Townsville	AUT 5	146 51 E	19 14 S	22 m.	+	+	+	+	+	+
Australia	Willis Islets	AUT 6	149 59 E	16 18 S	9 m.	+	+	+	+	+	+
Australia	Normanton	AUT 7	141 05 E	17 39 S	10 m.	-	+	+	+	+	+
Australia	Broome	AUT 8	122 15 E	17 57 S	11 m.	-	+	+	+	+	+
Australia	Halls Creek	AUT 9	127 46 E	18 13 S	374 m.	+	+	+	+	-	+
Australia	Cloncurry	AUT 10	140 30 E	20 43 S	193 m.	-	+	+	-	+	+
Australia	Charleville	AUT 11	146 13 E	26 25 S	294 m.	-	+	+	-	+	+
Australia	Geraldton	AUT 12	114 36 E	28 45 S	4 m.	-	+	+	+	+	+
Australia	Bourke	AUT 13	145 58 E	30 13 S	110 m.	-	+	+	-	+	+
Australia	Hay	AUT 14	144 56 E	34 30 S	94 m.	-	+	+	-	+	+
Australia	Adelaide	AUT 15	138 35 E	34 56 S	43 m.	+	+	+	+	+	+
Australia	Eyre	AUT 16	126 22 E	32 14 S	5 m.	-	+	+	+	+	+
Australia	Onslow	AUT 17	114 57 E	21 43 S	4 m.	-	+	+	+	+	+
Australia	Tennant Creek	AUT 18	134 13 E	19 34 S	327 m.	-	+	+	-	+	+
Australia	Alice Springs	AUT 19	133 53 E	23 42 S	579 m.	+	+	+	+	+	+
Australia	Mundiwindi	AUT 20	120 09 E	23 52 S	408 m.	+	+	+	-	+	+
Australia	Wiluna	AUT 21	120 15 E	26 37 S	518 m.	-	+	+	-	+	+
Australia	Giles	AUT 22	128 17 E	25 02 S	580 m.	+	+	+	+	+	+
Australia	Windorah	AUT 23	142 36 E	25 26 S	119 m.	-	+	+	-	+	+
Australia	Yalgoo	AUT 24	116 41 E	28 21 S	318 m.	+	+	+	-	+	+
Australia	Tarcoola	AUT 25	134 34 E	30 42 S	120 m.	+	+	+	-	+	+
Australia	Farina	AUT 26	138 08 E	30 05 S	93 m.	+	+	+	-	+	+
Australia	Kalgoorlie	AUT 27	121 30 E	30 45 S	380 m.	+	+	+	-	+	+
Australia	Broken Hill	AUT 28	141 28 E	31 57 S	305 m.	-	+	+	-	+	+
Australia	Port Augusta	AUT 29	137 45 E	32 29 S	6 m.	-	+	+	+	+	+
Australia	Perth	AUT 30	115 51 E	37 57 S	60 m.	+	+	+	+	+	+
Australia	Albany	AUT 31	117 55 E	35 02 S	13 m.	+	+	+	+	+	+
Australia	Esperance	AUT 32	121 55 E	33 50 S	4 m.	-	+	+	+	+	+
Australia	Rockhampton	AUT 33	150 30 E	23 24 S	11 m.	-	+	+	+	+	+
Australia	Brisbane	AUT 34	153 02 E	27 28 S	42 m.	+	+	+	+	+	+
Australia	Armidale	AUT 35	151 38 E	30 39 S	1015 m.	-	+	+	-	+	+
Australia	Lord Howe Island	AUT 36	159 07 E	31 31 S	5 m.	-	+	+	+	+	+
Australia	Sydney	AUT 37	151 31 E	33 51 S	42 m.	+	+	+	+	+	+
Australia	Canberra	AUT 38	149 08 E	35 17 S	559 m.	+	+	+	+	+	+
Australia	Mount Gambier	AUT 39	140 46 E	37 50 S	65 m.	-	+	+	+	+	+
Australia	Melbourne	AUT 40	144 58 E	37 49 S	35 m.	+	+	+	+	+	+
Australia	Launceston Tasmania	AUT 41	147 10 E	41 27 S	81 m.	-	+	+	+	+	+
Australia	Hobart	AUT 42	147 20 E	42 53 S	54 m.	+	+	+	+	+	+
Australia	Norfolk Island	AUT 43	167 59 E	29 04 S	106 m.	-	+	+	+	-	+
Austria	Wien	AUT 2	016 22 E	48 15 N	203 m.	+	+	+	+	+	+
Austria	Salzburg	AUT 3	013 00 E	47 48 N	435 m.	+	+	+	+	+	+
Austria	Innsbruck	AUT 4	011 24 E	47 16 N	582 m.	+	+	+	+	+	+
Austria	Sonnblick	AUT 5	012 57 E	47 03 N	3107 m.	+	+	+	+	+	+
Austria	Graz	AUT 6	015 27 E	46 59 N	342 m.	+	+	+	+	+	+

Country name	Station name	Code Sn	Longitude	Latitude	Elevation	rd	tm	tx	vp	wn	rn
Bahamas	Nassau	BHS 2	077 28 W	25 03 N	3 m.	+	+	+	+	-	+
Bahrain	Al-Manamah	BHR 2	050 30 E	26 12 N	5 m.	+	+	+	+	+	+
Bangladesh	Narayanganj	BGD 19	090 30 E	23 37 N	8 m.	+	+	+	+	-	+
Bangladesh	Chittagong	BGD 20	091 50 E	22 21 N	27 m.	-	+	+	+	.	+
Barbados	Bridgetown	BRB 2	059 36 W	13 08 N	55 m.	-	+	+	+	+	+
Belgium	Brussels	BEL 5	004 21 E	50 48 N	100 m.	+	+	+	+	+	+
Belgium	Botrange	BEL 6	006 06 E	50 30 N	694 m.	-	+	+	+	+	+
Belize	Belize	BLZ 2	088 11 W	17 31 N	5 m.	-	+	+	+	-	+
Benin	Kandi	BEN 7	002 56 E	11 08 N	290 m.	+	+	+	-	-	+
Benin	Cotonou	BEN 8	002 26 E	06 21 N	10 m.	+	+	+	+	+	+
Bhutan	Yatung	BTN 1	088 55 E	27 29 N	2987 m.	-	+	+	+	-	+
Bolivia	Apolo	BOL 37	068 30 W	14 43 S	1382 m.	-	+	+	-	+	+
Bolivia	La Paz	BOL 38	068 08 W	16 30 S	3632 m.	+	+	+	+	+	+
Bolivia	Santa Cruz	BOL 39	063 11 W	17 47 N	437 m.	-	+	+	-	+	+
Bolivia	Oruro	BOL 40	067 07 W	17 58 S	3708 m.	-	+	+	-	+	+
Bolivia	Yacuiba	BOL 41	063 43 W	22 01 S	580 m.	-	+	+	-	+	+
Botswana	Maun	BWA 9	023 25 E	19 59 S	942 m.	+	+	+	+	+	+
Botswana	Ghanzi	BWA 10	021 39 E	21 42 S	1131 m.	+	+	+	-	-	+
Botswana	Mahalatswe	BWA 11	026 48 E	23 04 S	1001 m.	-	+	+	-	-	+
Botswana	Gaborone	BWA 12	025 55 E	24 45 S	1007 m.	-	+	+	-	-	+
Brazil	Uaupes	BRA 205	067 05 W	00 08 S	85 m.	+	+	+	+	+	+
Brazil	Manuas	BRA 206	060 01 W	03 08 S	48 m.	+	+	+	+	+	+
Brazil	Santarem	BRA 207	054 42 W	02 25 S	20 m.	+	+	+	+	+	+
Brazil	Belem	BRA 208	048 27 W	01 28 S	24 m.	+	+	+	+	+	+
Brazil	Sao Luiz	BRA 209	044 17 W	02 32 S	20 m.	-	+	+	+	-	+
Brazil	Barra do Corda	BRA 210	045 16 W	05 30 S	81 m.	+	+	+	+	+	+
Brazil	Quixeramobim	BRA 211	039 18 W	05 12 S	198 m.	+	+	+	-	+	+
Brazil	Alto Tapajos	BRA 212	057 30 W	07 20 S	140 m.	+	+	+	-	+	+
Brazil	Sena Madureira	BRA 213	068 40 W	09 08 S	135 m.	-	+	+	+	+	+
Brazil	Conceido de Araguaia	BRA 214	049 12 W	08 15 S	16 m.	-	+	+	+	-	+
Brazil	Recife (Olinda)	BRA 215	034 51 W	08 01 S	57 m.	+	+	+	+	+	+
Brazil	Remanso	BRA 216	042 04 W	09 41 S	411 m.	-	+	+	-	+	+
Brazil	Monte Santo	BRA 217	039 18 W	10 27 S	545 m.	-	+	+	+	-	+
Brazil	Porto Nacional	BRA 218	048 43 E	10 31 S	237 m.	+	+	+	-	+	+
Brazil	Ibipetuba	BRA 219	044 31 W	11 01 S	436 m.	-	+	+	-	+	+
Brazil	Salvador	BRA 220	038 41 W	12 55 S	45 m.	+	+	+	+	+	+
Brazil	Caetite	BRA 221	042 37 W	14 03 S	878 m.	+	+	+	+	+	+
Brazil	Brasilia	BRA 222	047 18 W	15 32 S	910 m.	-	+	+	+	-	+
Brazil	Formosa	BRA 223	047 18 W	15 32 S	912 m.	+	+	+	-	+	+
Brazil	Cuiaba	BRA 224	056 06 W	15 35 S	171 m.	+	+	+	-	+	+
Brazil	Corumba	BRA 225	057 39 W	19 00 S	138 m.	+	+	+	-	+	+
Brazil	Catalao	BRA 226	047 58 W	18 10 S	830 m.	-	+	+	+	-	+
Brazil	Belo Horizonte	BRA 227	043 56 W	19 56 S	915 m.	+	+	+	+	+	+
Brazil	Vitoria	BRA 228	040 20 W	20 19 S	31 m.	+	+	+	-	+	+
Brazil	Tres Lagoas	BRA 229	051 42 W	20 47 S	312 m.	+	+	+	+	+	+
Brazil	Bela Vista	BRA 230	055 38 W	22 32 S	160 m.	-	+	+	-	+	+
Brazil	Campinas	BRA 231	047 05 W	22 53 S	663 m.	+	+	+	-	+	+
Brazil	Rio de Janeiro	BRA 232	043 10 W	22 54 S	31 m.	+	+	+	+	+	+
Brazil	Curitiba	BRA 233	049 16 W	25 26 S	949 m.	+	+	+	-	+	+
Brazil	Guarapuava	BRA 234	051 28 W	25 24 S	1095 m.	-	+	+	+	-	+
Brazil	Alegrete	BRA 235	055 47 W	29 46 S	104 m.	+	+	+	-	+	+
Brazil	Porto Alegre	BRA 236	051 13 W	30 02 S	10 m.	+	+	+	+	+	+
Bulgaria	Pleven	BGR 1	024 35 E	43 36 N	110 m.	+	+	+	+	+	+
Bulgaria	Varna	BGR 2	027 55 E	43 12 N	3 m.	+	+	+	+	+	+
Bulgaria	Sofia	BGR 3	023 20 E	42 42 N	550 m.	+	+	+	+	+	+

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Bulgaria	Plovdiv	BGR	4	024 45 E	42 09 N	160 m.	+	+	+	+	-	+
Burkina Faso	Ouagadougou	BFA	8	001 31 W	12 22 N	300 m.	+	+	+	+	+	+
Burkina Faso	Bobo Dioulasso	BFA	9	004 15 W	11 10 N	435 m.	+	+	+	+	+	+
Burma	Bhamo	BUR	35	097 17 E	24 16 N	118 m.	-	+	+	+	-	+
Burma	Lashio	BUR	36	097 51 E	22 58 N	854 m.	-	+	+	+	-	+
Burma	Mandalay	BUR	37	096 06 E	21 59 N	77 m.	-	+	+	+	-	+
Burma	Akyab	BUR	38	092 55 E	20 08 N	9 m.	-	+	+	+	-	+
Burma	Rangoon	BUR	39	096 11 E	16 46 N	5 m.	+	+	+	+	-	+
Burma	Diamond Island	BUR	40	094 19 E	15 51 N	12 m.	-	+	+	+	-	+
Burma	Tavoy	BUR	41	098 18 E	14 07 N	6 m.	-	+	+	+	-	+
Burma	Mergui	BUR	42	098 36 E	12 26 N	20 m.	-	+	+	+	-	+
Burundi	Kisozi	BDI	5	029 41 E	03 33 S	2155 m.	+	+	+	+	+	+
Burundi	Bujumbura	BDI	6	029 21 E	03 23 S	805 m.	+	+	+	+	+	+
Kampuchea, Dem.	Stung Treng	KHM	8	105 58 E	13 31 N	51 m.	-	+	+	+	+	+
Kampuchea, Dem.	Batdambang	KHM	9	103 12 E	13 06 N	22 m.	-	+	+	+	+	+
Kampuchea, Dem.	Phnum Penh	KHM	10	104 55 E	11 33 N	10 m.	+	+	+	+	+	+
Cameroon	Garoua	CMR	11	013 23 E	09 20 N	249 m.	+	+	+	-	-	+
Cameroon	Batouri	CMR	12	014 24 E	04 35 N	650 m.	+	+	+	+	+	+
Cameroon	Douala	CMR	13	009 43 E	04 01 N	11 m.	+	+	+	+	+	+
Canada	Isachsen	CAN	1	103 32 W	78 47 N	25 m.	-	+	+	-	+	+
Canada	Mould Bay	CAN	2	119 20 W	76 14 N	15 m.	-	+	+	-	+	+
Canada	Resolute	CAN	3	094 54 W	74 41 N	18 m.	+	+	+	+	+	+
Canada	Sachs Harbour	CAN	4	124 44 W	71 57 N	84 m.	+	+	+	-	+	+
Canada	Baker Lake	CAN	5	096 00 W	64 18 N	4 m.	-	+	+	-	+	+
Canada	Coral Harbour	CAN	6	083 22 W	64 12 N	18 m.	-	+	+	-	+	+
Canada	Frobisher Bay	CAN	7	068 33 W	63 45 N	7 m.	+	+	+	+	+	+
Canada	Port Harrison	CAN	8	078 08 W	58 27 N	6 m.	+	+	+	.	+	+
Canada	Aklavik	CAN	9	134 50 W	68 14 N	10 m.	+	+	+	.	+	+
Canada	Norman Wells	CAN	10	126 48 W	65 17 N	20 m.	-	+	+	+	+	+
Canada	Yellowknife	CAN	11	114 20 W	62 28 N	215 m.	-	+	+	.	+	+
Canada	Whitehorse	CAN	12	135 04 W	60 43 N	2128 m.	+	+	+	+	+	+
Canada	Fort Smith	CAN	13	111 58 W	60 01 N	62 m.	+	+	+	.	+	+
Canada	Fort Nelson	CAN	14	122 35 W	58 50 N	114 m.	-	+	+	+	+	+
Canada	Churchill	CAN	15	094 04 W	58 45 N	11 m.	+	+	+	.	+	+
Canada	Prince Rupert	CAN	16	130 23 W	54 17 N	16 m.	+	+	+	+	+	+
Canada	Prince George	CAN	17	122 41 W	53 53 N	206 m.	+	+	+	+	+	+
Canada	Trout Lake	CAN	18	089 52 W	53 50 N	67 m.	-	+	+	+	+	+
Canada	Edmonton	CAN	19	113 31 W	53 34 N	206 m.	+	+	+	+	+	+
Canada	The Pas	CAN	20	101 06 W	53 58 N	83 m.	+	+	+	+	+	+
Canada	Goose Bay	CAN	21	060 25 W	53 19 N	13 m.	+	+	+	+	+	+
Canada	Calgary	CAN	22	114 01 W	51 06 N	329 m.	+	+	+	+	+	+
Canada	Saskatoon	CAN	23	106 38 W	52 08 N	157 m.	+	+	+	+	+	+
Canada	Regina	CAN	24	104 40 W	50 26 N	175 m.	+	+	+	+	+	+
Canada	Fort-Chimo	CAN	25	066 25 W	58 06 N	11 m.	-	+	+	-	+	+
Canada	Vancouver	CAN	26	123 10 W	49 11 N	2 m.	+	+	+	+	+	+
Canada	Lethbridge	CAN	27	112 48 W	49 38 N	280 m.	+	+	+	+	+	+
Canada	Winnipeg	CAN	28	097 15 W	49 54 N	254 m.	+	+	+	+	+	+
Canada	kaspuskasing	CAN	29	082 28 W	49 25 N	70 m.	+	+	+	+	+	+
Canada	St.John's	CAN	30	052 45 W	47 37 N	43 m.	+	+	+	+	+	+
Canada	Quebec	CAN	31	071 23 W	46 48 N	23 m.	+	+	+	+	+	+
Canada	Ottawa	CAN	32	075 40 W	45 19 N	38 m.	+	+	+	+	+	+
Canada	Montreal	CAN	33	073 35 W	45 30 N	17 m.	+	+	+	+	+	+
Canada	Saint John	CAN	34	065 33 W	45 19 N	326 m.	+	+	+	+	+	+
Canada	Halifax	CAN	35	063 34 W	44 39 N	8 m.	+	+	+	+	+	+
Canada	Toronto	CAN	36	079 24 W	43 40 N	35 m.	+	+	+	+	+	+

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Centr. Afr. Republic	Birao	CAF 10	022 47 E	10 17 N	465 m.	-	+	+	+	-	+
Centr. Afr. Republic	Bria	CAF 11	021 59 E	06 32 N	584 m.	-	+	+	+	-	+
Centr. Afr. Republic	Bouar	CAF 12	015 35 E	05 56 N	929 m.	-	+	+	+	-	+
Centr. Afr. Republic	Bangui	CAF 13	018 34 E	04 22 N	385 m.	+	+	+	+	-	+
Chad	Largeau	TCD 13	019 10 E	18 00 N	233 m.	-	+	+	+	+	+
Chad	Abeche	TCD 14	020 51 E	13 51 N	550 m.	+	+	+	+	+	+
Chad	Ndjamena	TCD 15	015 02 E	12 08 N	295 m.	+	+	+	+	-	+
Chad	Moundou	TCD 16	016 04 E	08 37 N	420 m.	+	+	+	+	+	+
Chile	Arica	CHL 36	070 22 W	18 28 S	29 m.	+	+	+	+	+	+
Chile	Iquique	CHL 37	070 11 W	20 22 S	9 m.	-	+	+	-	+	+
Chile	Antofagasta	CHL 38	070 28 W	23 26 S	119 m.	+	+	+	+	+	+
Chile	La Serena	CHL 39	071 15 W	29 54 S	35 m.	-	+	+	-	+	+
Chile	Valparaiso	CHL 40	071 38 W	33 01 S	41 m.	+	+	+	+	+	+
Chile	Santiago	CHL 41	070 42 W	33 27 S	520 m.	+	+	+	+	+	+
Chile	Concepcion	CHL 42	073 03 W	36 40 S	15 m.	+	+	+	-	+	+
Chile	Valdivia	CHL 43	073 14 W	39 48 S	9 m.	+	+	+	+	+	+
Chile	Puerto Montt	CHL 44	072 57 W	41 28 S	13 m.	-	+	+	-	+	+
Chile	San Pedro	CHL 45	074 55 W	47 43 S	22 m.	-	+	+	-	+	+
Chile	Los Evangelistas	CHL 46	076 06 W	52 24 S	55 m.	-	+	+	+	+	+
Chile	Punta Arenas	CHL 47	070 54 W	53 10 S	8 m.	-	+	+	+	+	+
China	Kucha	CHN 154	083 06 E	41 40 N	970 m.	-	+	+	-	-	+
China	Batou	CHN 155	109 50 E	40 34 N	1044 m.	+	+	+	+	+	+
China	Jiuquan	CHN 156	098 34 E	39 46 N	1006 m.	-	+	+	-	-	+
China	Kashgar	CHN 157	076 07 E	39 24 N	1309 m.	-	+	+	+	-	+
China	Taiyuan	CHN 158	112 34 E	37 55 N	782 m.	+	+	+	+	+	+
China	Xining	CHN 159	101 55 E	36 35 N	2244 m.	+	+	+	+	+	+
China	Lanzhou	CHN 160	103 59 E	36 01 N	1508 m.	+	+	+	+	+	+
China	Haerbin	CHN 161	126 38 E	45 45 N	143 m.	+	+	+	+	+	+
China	Changchun	CHN 162	125 20 E	43 52 N	216 m.	+	+	+	+	+	+
China	Urumchi	CHN 163	087 37 E	43 47 N	913 m.	+	+	+	+	+	+
China	Shenyang	CHN 164	123 26 E	41 46 N	416 m.	+	+	+	+	+	+
China	Peking	CHN 165	116 19 E	39 57 N	52 m.	+	+	+	+	+	+
China	Tientsin	CHN 166	117 10 E	39 06 N	3 m.	+	+	+	+	+	+
China	Lueda	CHN 167	121 38 E	38 54 N	96 m.	+	+	+	+	+	+
China	Jinan	CHN 168	116 58 E	36 41 N	55 m.	+	+	+	+	+	+
China	Tsingtao	CHN 169	120 19 E	36 04 N	77 m.	+	+	+	+	+	+
China	Xuzhou	CHN 170	117 10 E	34 17 N	3 m.	-	+	+	+	-	+
China	Changdu	CHN 171	096 59 E	31 11 N	3200 m.	+	+	+	+	+	+
China	Chengdu	CHN 172	104 04 E	30 40 N	498 m.	+	+	+	+	+	+
China	Lasa	CHN 173	091 07 E	29 40 N	3685 m.	-	+	+	+	-	+
China	Chongqing	CHN 174	106 33 E	29 30 N	261 m.	+	+	+	+	+	+
China	Canton	CHN 175	113 13 E	23 00 N	18 m.	+	+	+	+	+	+
China	Xi'an	CHN 176	108 35 E	34 15 N	412 m.	+	+	+	+	+	+
China	Nanking	CHN 177	118 47 E	32 04 N	62 m.	+	+	+	+	+	+
China	Shanghai	CHN 178	121 26 E	31 12 N	5 m.	+	+	+	+	+	+
China	Wuhan	CHN 179	114 17 E	30 33 N	23 m.	+	+	+	+	+	+
China	Nanchang	CHN 180	115 58 E	28 40 N	49 m.	+	+	+	+	+	+
China	Changsha	CHN 181	112 50 E	28 15 N	48 m.	+	+	+	+	+	+
China	Wenzhou	CHN 182	120 49 E	28 01 N	5 m.	+	+	+	+	+	+
China	Guizhou	CHN 183	106 42 E	26 34 N	1071 m.	+	+	+	+	+	+
China	Guilin	CHN 184	110 10 E	25 15 N	167 m.	+	+	+	+	+	+
China	Kunming	CHN 185	102 43 E	25 02 N	1893 m.	+	+	+	+	+	+
China	Amoy	CHN 186	118 04 E	24 27 N	41 m.	+	+	+	+	+	+
China	Nanning	CHN 187	108 18 E	22 48 N	75 m.	+	+	+	+	+	+
China	Hainandao Island	CHN 188	109 32 E	18 14 N	2 m.	+	+	+	+	+	+

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Colombia	Barranquilla	COL 37	074 47 W	10 41 N	13 m.	-	+	+	+	+	+
Colombia	Turbo	COL 38	076 44 W	08 06 N	2 m.	-	+	+	+	+	+
Colombia	Barrancabermeja	COL 39	073 52 W	07 04 N	107 m.	-	+	+	+	-	+
Colombia	Arauca	COL 40	070 40 W	07 04 N	122 m.	-	+	+	+	-	+
Colombia	Bogota	COL 41	074 05 W	04 38 N	2556 m.	+	+	+	+	-	+
Colombia	Andagoya	COL 42	076 40 W	05 06 N	65 m.	-	+	+	+	-	+
Colombia	Villavicencio	COL 43	073 36 W	04 09 N	423 m.	-	+	+	+	-	+
Colombia	Popayan	COL 44	076 35 W	02 27 N	1789 m.	+	+	+	-	-	+
Colombia	Tumaco	COL 45	078 47 W	01 49 N	4 m.	-	+	+	+	-	+
Costa Rica	San Jose	CRI 16	084 08 W	09 56 N	1120 m.	+	+	+	+	-	+
Cuba	Havana	CUB 6	082 21 W	23 08 N	24 m.	-	+	+	+	-	+
Cuba	Cienfuegos	CUB 7	080 27 W	22 09 N	30 m.	-	+	+	+	-	+
Cyprus	Nicosia	CYP 30	033 17 E	35 09 N	218 m.	+	+	+	+	+	+
Czechoslovakia	Praha	CSK 1	014 25 E	50 05 N	197 m.	+	+	+	+	-	+
Czechoslovakia	Presov	CSK 2	021 15 E	49 00 N	270 m.	+	+	+	+	+	+
Czechoslovakia	Ceske Budejovice	CSK 3	014 28 E	48 59 N	383 m.	+	+	+	+	-	+
Denmark	Hoyvik	DNK 5	006 45 W	62 02 N	20 m.	+	+	+	+	-	+
Denmark	Tylstrup	DNK 6	009 57 E	57 11 N	13 m.	+	+	+	+	+	+
Denmark	Studsgaard	DNK 7	008 55 E	56 05 N	54 m.	+	+	+	+	-	+
Denmark	Copenhagen	DNK 8	012 33 E	55 41 N	9 m.	+	+	+	+	+	+
Denmark	Sandvig	DNK 9	014 47 E	55 17 N	11 m.	+	+	+	+	-	+
Dom. Republic	Santa Domingo	DOM 12	069 54 W	18 29 N	19 m.	+	+	+	+	+	+
Ecuador	Puerto Baquerizo Moreno	ECU 49	089 37 W	00 54 S	6 m.	+	+	+	+	+	+
Ecuador	Quito	ECU 50	078 30 W	00 13 S	2818 m.	+	+	+	+	+	+
Ecuador	Pichilingue	ECU 51	079 29 W	01 06 S	73 m.	+	+	+	+	+	+
Ecuador	Puyo	ECU 52	077 54 W	01 35 S	950 m.	+	+	+	+	+	+
Ecuador	Gauyaquil	ECU 53	079 53 W	02 12 S	6 m.	+	+	+	+	+	+
Egypt	As-Sallum	EGY 30	025 11 E	31 53 N	170 m.	+	+	+	+	+	+
Egypt	Alexandria	EGY 31	029 51 E	31 12 N	7 m.	+	+	+	+	+	+
Egypt	Al-Qahira (Cairo)	EGY 32	031 34 E	30 08 N	95 m.	+	+	+	+	+	+
Egypt	Al-Qusayr	EGY 33	034 18 E	26 08 N	10 m.	-	+	+	+	+	+
Egypt	Al-Uqsur (Luxor)	EGY 34	032 42 E	25 40 N	95 m.	-	+	+	+	+	+
Egypt	Mut	EGY 35	029 00 E	25 29 N	110 m.	-	+	+	+	+	+
El Salvador	San Salvador	SLV 19	089 12 W	13 43 N	700 m.	+	+	+	+	+	+
Equatorial Guinea	Santa Isable	GNQ 3	008 46 E	03 46 N	12 m.	+	+	+	+	+	+
Ethiopia	Asmara	ETH 143	038 55 E	15 17 N	2300 m.	-	+	+	+	-	+
Ethiopia	Harar	ETH 144	036 51 E	09 39 N	1750 m.	+	+	+	+	+	+
Ethiopia	Addis Abeba	ETH 145	038 45 E	09 02 N	2450 m.	+	+	+	+	+	+
Ethiopia	Jima	ETH 146	036 51 E	07 39 N	1750 m.	.	+	+	+	.	+
Ethiopia	Negelli	ETH 147	039 26 E	05 07 N	1500 m.	-	+	+	+	-	+
Fiji	Suva (Viti Levu)	FJI 1	178 26 E	18 08 S	6 m.	+	+	+	+	-	+
Finland	Sodankylae	FIN 2	026 36 E	67 22 N	178 m.	+	+	+	+	+	+
Finland	Oulu	FIN 3	025 29 E	65 01 N	17 m.	+	+	+	+	-	+
Finland	Kajaani	FIN 4	027 41 E	64 17 N	134 m.	+	+	+	+	-	+
Finland	Vaasa	FIN 5	021 46 E	63 03 N	6 m.	+	+	+	+	+	+
Finland	Punkaharju	FIN 6	029 17 E	61 48 N	88 m.	-	+	+	+	-	+
Finland	Tampere	FIN 7	023 46 E	61 28 N	84 m.	-	+	+	+	-	+
Finland	Helsinki	FIN 8	024 55 E	60 12 N	45 m.	+	+	+	+	+	+
Finland	Mariahamn	FIN 9	019 54 E	60 07 N	4 m.	-	+	+	+	-	+
France	Cherbourg	FRA 73	001 38 W	49 39 N	8 m.	+	+	+	+	-	+
France	Reims	FRA 74	004 02 E	49 18 N	94 m.	+	+	+	+	-	+
France	Paris (Le Bourget)	FRA 75	002 27 E	48 58 N	52 m.	-	+	+	-	+	+
France	Montsouris	FRA 76	002 20 E	48 49 N	75 m.	-	+	+	+	-	-
France	St Maur	FRA 77	002 30 E	48 49 N	50 m.	+	-	-	-	-	-
France	Strasbourg	FRA 78	007 38 E	48 33 N	149 m.	+	+	+	+	+	+

Country name	Station name	Code Sn	Longitude	Latitude	Elevation	rd	tm	tx	vp	wn	rn
France	Brest	FRA 79	004 25 W	48 27 N	98 m.	+	+	+	+	+	+
France	Rennes	FRA 80	001 43 W	48 04 N	35 m.	+	+	+	+	-	+
France	Tours	FRA 81	000 46 E	47 25 N	98 m.	+	+	+	+	+	+
France	Dijon	FRA 82	005 06 E	47 16 N	220 m.	+	+	+	+	+	+
France	Nantes	FRA 83	001 37 W	47 10 N	26 m.	+	+	+	+	+	+
France	Limoges	FRA 84	001 17 E	45 49 N	282 m.	+	+	+	+	+	+
France	Clermont-Ferrand	FRA 85	003 09 E	45 48 N	329 m.	+	+	+	+	+	+
France	Lyon	FRA 86	004 57 E	45 43 N	200 m.	+	+	+	+	+	+
France	Grenoble	FRA 87	005 44 E	45 10 N	233 m.	+	+	+	+	-	+
France	Bordeaux	FRA 88	000 42 W	44 50 N	47 m.	+	+	+	+	+	+
France	Toulouse	FRA 89	001 22 E	43 37 N	151 m.	+	+	+	+	+	+
France	Marseille	FRA 90	005 13 E	43 27 N	3 m.	+	+	+	+	+	+
France	Pic de Midi	FRA 91	000 09 E	42 56 N	2860 m.	+	+	+	+	-	+
France	Perpignan	FRA 92	002 52 E	42 44 N	43 m.	+	+	+	+	+	+
France	Bastia Corsica	FRA 93	009 29 E	42 33 N	10 m.	+	+	+	-	+	+
France	Guadeloupe	FRA 94	061 31 W	16 15 N	7 m.	+	+	+	-	+	+
France	Martinique	FRA 95	061 12 W	14 35 N	144 m.	+	+	+	+	+	+
France	Kerguelen	FRA 96	069 53 E	49 25 S	16 m.	-	+	+	-	+	+
French Guiana	Maripasoula	GUF 4	054 02 W	03 38 N	104 m.	+	+	+	-	+	+
French Guiana	Cayenne	GUF 5	052 22 W	04 50 N	8 m.	+	+	+	-	+	+
Gabon	Mitzic	GAB 10	011 34 E	00 47 N	580 m.	-	+	+	-	+	+
Gabon	Libreville	GAB 11	009 25 E	00 27 N	12 m.	+	+	+	+	+	+
Germany	Helgoland	DEU 18	007 54 E	54 11 N	4 m.	+	+	+	-	+	+
Germany	Hamburg	DEU 19	010 00 E	53 38 N	14 m.	+	+	+	+	+	+
Germany	Luechow	DEU 20	011 10 E	52 58 N	21 m.	+	+	+	-	+	+
Germany	Berlin Dahlem	DEU 21	013 18 E	52 28 N	51 m.	+	+	+	+	+	+
Germany	Hannover-Langenhagen	DEU 22	009 43 E	52 20 N	53 m.	+	+	+	-	+	+
Germany	Essen	DEU 23	006 58 E	51 24 N	154 m.	+	+	+	-	+	+
Germany	Kassel	DEU 24	009 29 E	51 19 N	158 m.	+	+	+	-	+	+
Germany	Bad Ems	DEU 25	007 43 E	50 20 N	77 m.	-	+	+	-	+	+
Germany	Hof	DEU 26	011 53 E	50 19 N	567 m.	+	+	+	-	+	+
Germany	Frankfurt	DEU 27	008 39 E	50 07 N	103 m.	+	+	+	-	+	+
Germany	Trier	DEU 28	006 40 E	49 45 N	265 m.	+	+	+	+	+	+
Germany	Nuernburg	DEU 29	011 06 E	49 30 N	310 m.	+	+	+	-	+	+
Germany	Neustad	DEU 30	008 08 E	49 22 N	161 m.	+	+	+	+	+	+
Germany	Regensburg	DEU 31	012 04 E	49 01 N	376 m.	+	+	+	-	+	+
Germany	Stuttgart	DEU 32	009 12 E	48 42 N	401 m.	+	+	+	-	+	+
Germany	Munich	DEU 33	011 42 E	48 09 N	527 m.	+	+	+	-	+	+
Germany	Friedrichshafen	DEU 34	009 30 E	47 40 N	401 m.	+	+	+	-	+	+
Germany	Zugspitze	DEU 35	010 59 E	47 23 N	2960 m.	+	+	+	-	+	+
Germany	Greifswald	DEU 36	013 27 E	54 06 N	2 m.	+	+	+	+	+	+
Germany	Brocken Harz	DEU 37	010 37 E	51 48 N	1142 m.	+	+	+	+	+	+
Germany	Dresden	DEU 38	013 41 E	51 07 N	246 m.	+	+	+	+	+	+
Germany	Erfurt	DEU 39	010 58 E	50 59 N	315 m.	+	+	+	+	+	+
Ghana	Tamale	GHA 17	000 53 W	09 25 N	201 m.	+	+	+	-	+	+
Ghana	Accra	GHA 18	000 12 W	05 36 N	65 m.	+	+	+	-	+	+
Greece	Alexandroupolis	GRC 30	025 53 E	40 51 N	7 m.	-	+	+	-	+	+
Greece	Salonika	GRC 31	023 07 E	40 39 N	2 m.	+	+	+	-	+	+
Greece	Limnos	GRC 32	025 04 E	39 53 N	2 m.	-	+	+	-	+	+
Greece	Kerkira	GRC 33	019 55 E	39 37 N	25 m.	-	+	+	-	+	+
Greece	Trikkala	GRC 34	021 46 E	39 33 N	149 m.	-	+	+	-	+	+
Greece	Athens	GRC 35	023 43 E	37 58 N	107 m.	+	+	+	+	+	+
Greece	Tripolis	GRC 36	022 21 E	37 31 N	661 m.	-	+	+	-	+	+
Greece	Naxos	GRC 37	025 25 E	37 06 N	3 m.	-	+	+	-	+	+
Greece	Iraklion	GRC 38	025 08 E	35 21 N	29 m.	-	+	+	-	+	+

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Greenland	Myggbukta	GRL 1	021 34 W	73 29 N	2 m.	-	+	+	-	+	+
Greenland	Upernivik	GRL 2	056 10 W	72 47 N	35 m.	-	+	+	-	+	+
Greenland	Umanak	GRL 3	052 07 W	70 41 N	8 m.	-	+	+	-	+	+
Greenland	Scoresbysund	GRL 4	021 58 W	70 25 N	17 m.	-	+	+	-	+	+
Greenland	Godhavn	GRL 5	053 31 W	69 14 N	11 m.	-	+	+	-	-	+
Greenland	Jakobshavn	GRL 6	051 05 W	69 13 N	31 m.	-	+	+	-	+	+
Greenland	Angmagssalik	GRL 7	037 39 W	65 37 N	29 m.	-	+	+	-	+	+
Greenland	Godthaab	GRL 8	051 45 W	64 10 N	20 m.	-	+	+	-	+	+
Greenland	Ivigtut	GRL 9	048 10 W	61 12 N	30 m.	-	+	+	-	+	+
Greenland	Nanortalik	GRL 10	045 11 W	60 08 N	7 m.	-	+	+	-	+	+
Guatemala	Guatemala-city	GTM 27	090 16 W	15 29 N	1300 m.	-	+	+	+	-	+
Guinea	Rabaul (New Britain)	GIN 4	152 15 E	04 13 S	13 m.	-	+	+	-	-	+
Guinea	Conakry	GIN 5	013 43 W	09 31 N	17 m.	+	+	+	+	+	+
Guyana	Georgetown	GUY 7	058 08 W	06 48 N	2 m.	+	+	+	+	+	+
Guyana	Saint Ignatius	GUY 8	059 48 W	03 21 N	99 m.	-	+	+	+	-	+
Honduras	Swan Islands	HND 17	083 56 W	17 24 N	9 m.	+	+	+	+	+	+
Honduras	Tela	HND 18	087 29 W	15 43 N	3 m.	-	+	+	-	+	+
Honduras	Tegucigalpa	HND 19	087 13 W	14 04 N	1007 m.	-	+	+	+	+	+
Hungary	Debrecen	HUN 1	021 37 E	47 33 N	123 m.	+	+	+	+	+	+
Hungary	Budapest	HUN 2	019 02 E	47 31 N	120 m.	+	+	+	+	+	+
Hungary	Pecs	HUN 3	018 15 E	46 05 N	141 m.	+	+	+	+	+	+
Iceland	Akureyri	ISL 1	018 15 W	65 41 N	7 m.	+	+	+	+	-	+
Iceland	Hallormsstadur	ISL 2	014 39 W	65 05 N	40 m.	+	+	+	+	-	+
Iceland	Reykjavik	ISL 3	021 56 W	64 08 N	18 m.	+	+	+	+	-	+
India	Simla	IND 169	077 10 E	31 06 N	2202 m.	-	+	+	+	+	+
India	Darjeeling	IND 170	088 16 E	27 03 N	2127 m.	-	+	+	+	+	+
India	Kanpur	IND 171	080 21 E	26 28 N	127 m.	-	+	+	+	+	+
India	Patna	IND 172	085 10 E	25 37 N	53 m.	+	+	+	+	+	+
India	Allahabad	IND 173	081 44 E	25 17 N	98 m.	+	+	+	+	+	+
India	Jabalpur	IND 174	079 59 E	23 11 N	393 m.	-	+	+	+	+	+
India	New Dehli	IND 175	077 12 E	28 35 N	218 m.	+	+	+	+	+	+
India	Ahmadabad	IND 176	072 38 E	23 04 N	55 m.	+	+	+	+	+	+
India	Veraval	IND 177	070 22 E	20 55 N	8 m.	-	+	+	+	+	+
India	Poona	IND 178	073 51 E	18 32 N	559 m.	+	+	+	+	+	+
India	Hyderabad	IND 179	078 27 E	17 26 N	542 m.	+	+	+	+	+	+
India	Sholapur	IND 180	075 54 E	17 40 N	479 m.	-	+	+	+	+	+
India	Bellary	IND 181	076 51 E	15 09 N	449 m.	+	+	+	+	+	+
India	Leh	IND 182	077 34 E	34 09 N	3506 m.	-	+	+	+	+	+
India	Birkner	IND 183	073 18 E	28 00 N	224 m.	-	+	+	+	+	+
India	Jodhpur	IND 184	073 01 E	26 18 N	238 m.	+	+	+	+	+	+
India	Dwarka	IND 185	069 05 E	22 22 N	11 m.	-	+	+	+	+	+
India	Jamshedpur	IND 186	086 11 E	22 49 N	129 m.	-	+	+	+	+	+
India	Indore	IND 187	075 54 E	22 43 N	556 m.	-	+	+	+	+	+
India	Calcutta	IND 188	088 20 E	22 32 N	6 m.	+	+	+	+	+	+
India	Raipur	IND 189	081 39 E	21 14 N	296 m.	-	+	+	+	+	+
India	Surat	IND 190	072 50 E	21 12 N	12 m.	+	+	+	+	+	+
India	Nagpur	IND 191	079 09 E	21 09 N	312 m.	+	+	+	+	-	+
India	Puri	IND 192	085 49 E	19 48 N	6 m.	-	+	+	+	+	+
India	Jagdalpur	IND 193	082 02 E	19 05 N	553 m.	-	+	+	+	+	+
India	Bombay	IND 194	072 49 E	18 54 N	11 m.	+	+	+	+	+	+
India	Vishakhapatnam	IND 195	083 18 E	17 42 N	38 m.	+	+	+	+	+	+
India	Kakinada	IND 196	082 14 E	16 57 N	8 m.	-	+	+	+	+	+
India	Bangalore	IND 197	077 37 E	12 57 N	920 m.	+	+	+	+	+	+
India	Madras	IND 198	080 15 E	13 04 N	16 m.	+	+	+	+	+	+
India	Amindivi Islands	IND 199	072 44 E	11 07 N	4 m.	-	+	+	+	+	+

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India	Nagappattinam	IND 200	079 51 E	10 46 N	9 m.	-	+	+	+	+	+
India	Trivadrum	IND 201	076 57 E	08 29 N	61 m.	+	+	+	+	+	+
India	Tezpur	IND 202	092 47 E	26 37 N	79 m.	-	+	+	+	+	+
India	Dibrugarh	IND 203	094 55 E	27 28 N	108 m.	-	+	+	+	+	+
India	Dhubri	IND 204	089 59 E	26 01 N	35 m.	-	+	+	+	+	+
India	Cherrapunji	IND 205	091 44 E	25 15 N	1313 m.	-	+	+	+	+	+
India	Marmagoa	IND 206	073 47 E	15 25 N	62 m.	+	+	+	+	+	+
India	Mangalore	IND 207	074 51 E	12 52 N	22 m.	+	+	+	+	+	+
India	Port Blair	IND 208	092 43 E	11 40 N	80 m.	+	+	+	+	+	+
India	Cochin	IND 209	076 14 E	09 58 N	3 m.	-	+	+	+	-	+
India	Car Nicobar	IND 210	092 48 E	09 15 N	8 m.	-	+	+	+	-	+
India	Pamban Island	IND 211	079 18 E	09 16 N	11 m.	-	+	+	+	+	+
India	Srinagar (Kashmir)	IND 212	074 50 E	34 05 N	1586 m.	+	+	+	+	+	+
India	Kodaikanal	IND 213	077 28 E	10 14 N	2343 m.	+	+	+	+	+	+
Indonesia	Manokwari	IDN 48	134 05 E	00 52 S	19 m.	+	+	+	+	-	+
Indonesia	Tarakan (Borneo)	IDN 49	117 36 E	03 19 N	12 m.	+	+	+	+	-	+
Indonesia	Takingeun (Sumatra)	IDN 50	095 50 E	04 40 N	1205 m.	+	+	+	+	-	+
Indonesia	Medan (Sumatra)	IDN 51	098 41 E	03 35 N	23 m.	+	+	+	+	-	+
Indonesia	Manado (Celebes)	IDN 52	124 50 E	01 30 N	2 m.	+	+	+	+	-	+
Indonesia	Pontianak (Borneo)	IDN 53	109 20 E	00 01 S	3 m.	+	+	+	+	-	+
Indonesia	Padang (Sumatra)	IDN 54	100 22 E	00 56 S	7 m.	+	+	+	+	-	+
Indonesia	Balikpapan (Borneo)	IDN 55	116 51 E	01 17 S	7 m.	-	+	+	+	-	+
Indonesia	Tandjungpandan (Belitung)	IDN 56	107 39 E	02 45 S	3 m.	-	+	+	+	-	+
Indonesia	Ambon (Moluccas)	IDN 57	128 10 E	03 42 S	4 m.	+	+	+	+	-	+
Indonesia	Makasar (Celebes)	IDN 58	119 28 E	05 08 S	2 m.	+	+	+	+	+	+
Indonesia	Djakarta (Java)	IDN 59	106 50 E	06 11 S	8 m.	+	+	+	+	+	+
Indonesia	Surabaja (Java)	IDN 60	112 55 E	07 38 S	5 m.	+	+	+	+	+	+
Indonesia	Surakarta (Java)	IDN 61	110 36 E	07 45 S	150 m.	-	+	+	+	-	+
Indonesia	Tombora (Sumbawa)	IDN 62	117 50 E	08 12 S	500 m.	+	+	+	-	-	+
Indonesia	Kupang (Timor)	IDN 63	123 34 E	10 10 S	45 m.	+	+	+	+	-	+
Iran	Mashhad	IRN 47	059 36 E	36 17 N	946 m.	+	+	+	+	+	+
Iran	Tehran	IRN 48	051 25 E	35 41 N	1220 m.	+	+	+	+	-	+
Iran	Kermanshah	IRN 49	047 06 E	34 21 N	1306 m.	+	+	+	+	-	+
Iran	Esfahan	IRN 50	051 44 E	32 23 N	1773 m.	+	+	+	+	-	+
Iran	Seistan	IRN 51	061 30 E	31 00 N	610 m.	-	+	+	+	-	+
Iran	Abadan	IRN 52	048 16 E	30 21 N	2 m.	+	+	+	+	-	+
Iran	Kerman	IRN 53	057 05 E	30 21 N	1859 m.	+	+	+	+	-	+
Iran	Busher	IRN 54	050 49 E	28 59 N	4 m.	+	+	+	+	+	+
Iran	Bandar'Abbas	IRN 55	051 17 E	27 11 N	9 m.	+	+	+	+	-	+
Iran	Chad Bahar	IRN 56	060 37 E	25 17 N	8 m.	-	+	+	+	-	+
Iraq	Ar-Rutbah	IRQ 21	040 17 E	33 02 N	946 m.	-	+	+	+	-	+
Iraq	Baghdad	IRQ 22	044 24 E	33 20 N	34 m.	+	+	+	+	-	+
Ireland	Malin head	IRL 9	007 20 W	55 22 N	20 m.	+	+	+	+	-	+
Ireland	Belmullet	IRL 10	010 00 W	54 14 N	9 m.	+	+	+	+	-	+
Ireland	Dublin	IRL 11	006 15 W	53 26 N	68 m.	+	+	+	+	-	+
Ireland	Kilkenny	IRL 12	007 16 W	52 40 N	67 m.	+	+	+	+	-	+
Ireland	Valentia	IRL 13	010 15 W	51 56 N	9 m.	+	+	+	+	-	+
Israel	Hefa	ISR 10	034 59 E	32 48 N	10 m.	+	+	+	+	-	+
Israel	Jerusalem	ISR 11	035 13 E	31 47 N	757 m.	+	+	+	+	-	+
Israel	Elat	ISR 12	034 57 E	29 33 N	2 m.	+	+	+	+	-	+
Italy	Bolzano	ITA 81	011 21 E	46 30 N	271 m.	+	+	+	+	-	+
Italy	Trieste	ITA 82	013 46 E	45 39 N	11 m.	+	+	+	+	-	+
Italy	Milan	ITA 83	009 11 E	45 28 N	147 m.	+	+	+	+	-	+
Italy	Venice	ITA 84	012 19 E	45 27 N	1 m.	+	+	+	+	-	+
Italy	Genoa	ITA 85	008 55 E	44 25 N	54 m.	+	+	+	+	+	+

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Italy	Florence	ITA 86	011 15 E	43 46 N	76 m.	+	+	+	+	-	+
Italy	Ancona	ITA 87	013 31 E	43 37 N	17 m.	+	+	+	+	-	+
Italy	Rome	ITA 88	012 29 E	41 54 N	46 m.	+	+	+	+	-	+
Italy	Foggia	ITA 89	015 33 E	41 28 N	74 m.	+	+	+	+	-	+
Italy	Naples	ITA 90	014 15 E	40 51 N	25 m.	+	+	+	+	-	+
Italy	Potenza	ITA 91	015 48 E	40 38 N	826 m.	-	+	+	+	-	+
Italy	Taranto	ITA 92	017 13 E	40 28 N	16 m.	+	+	+	+	-	+
Italy	Cagliari Sardinia	ITA 93	009 06 E	39 13 N	75 m.	+	+	+	+	-	+
Italy	Messina	ITA 94	015 33 E	38 12 N	54 m.	+	+	+	+	-	+
Italy	Palermo	ITA 95	013 21 E	38 07 N	71 m.	+	+	+	+	-	+
Italy	Caltanissetta	ITA 96	014 04 E	37 29 N	570 m.	-	+	+	+	-	+
Cote d'Ivoire	Bouake	CIV 11	005 00 W	07 42 N	365 m.	+	+	+	+	+	+
Cote d'Ivoire	Abidjan	CIV 12	003 56 W	05 15 N	7 m.	+	+	+	+	+	+
Jamaica	Kingston	JAM 8	076 48 W	17 58 N	35 m.	+	+	+	+	+	+
Japan	Wakkanai	JPN 140	141 41 E	45 25 N	2 m.	+	+	+	+	+	+
Japan	Sapporo	JPN 141	141 20 E	43 03 N	17 m.	+	+	+	+	+	+
Japan	Aomori	JPN 142	140 47 E	40 49 N	4 m.	+	+	+	-	+	+
Japan	Sendai	JPN 143	140 54 E	38 16 N	38 m.	+	+	+	-	+	+
Japan	Niigata	JPN 144	139 03 E	37 55 N	2 m.	+	+	+	+	+	+
Japan	Kanazawa	JPN 145	136 39 E	36 33 N	27 m.	+	+	+	-	+	+
Japan	Tokyo	JPN 146	139 46 E	35 41 N	4 m.	+	+	+	+	+	+
Japan	Nagoya	JPN 147	136 58 E	35 10 N	51 m.	+	+	+	-	+	+
Japan	Osaka	JPN 148	135 32 E	34 39 N	7 m.	+	+	+	+	+	+
Japan	Hiroshima	JPN 149	132 26 E	34 22 N	29 m.	+	+	+	+	+	+
Japan	Kochi	JPN 150	133 33 E	33 34 N	1 m.	+	+	+	-	+	+
Japan	Nagasaki	JPN 151	129 52 E	32 44 N	27 m.	+	+	+	+	-	+
Japan	Kagoshima	JPN 152	130 33 E	31 34 N	5 m.	+	+	+	+	+	+
Japan	Okinawa	JPN 153	127 41 E	26 14 N	36 m.	+	+	+	+	+	+
Jordan	Amman	JOR 29	035 57 E	31 57 N	777 m.	+	+	+	+	-	+
Kenya	Marsabit	KEN 47	037 59 E	02 05 N	1433 m.	-	+	+	-	-	+
Kenya	Garissa	KEN 48	039 38 E	00 29 S	128 m.	-	+	+	+	+	+
Kenya	Dagoretti near Nairobi	KEN 49	036 45 E	01 18 S	1798 m.	+	+	+	+	+	+
Kenya	Mombassa	KEN 50	039 37 E	04 02 S	55 m.	+	+	+	+	+	+
Kuwait	Al-Kuwayt	KWT 3	048 00 E	29 21 N	5 m.	+	+	+	+	-	+
Lao PDR	Louang Prabang	LAO 5	102 08 E	19 53 N	287 m.	-	+	+	+	+	+
Lao PDR	Vientiane	LAO 6	102 36 E	17 59 N	162 m.	+	+	+	+	+	+
Lebanon	Bayrut	LBN 17	035 28 E	33 54 N	34 m.	+	+	+	+	+	+
Lesotho	Mokhotlong	LSO 10	029 05 E	29 17 S	2375 m.	-	+	+	-	-	+
Liberia	Monrovia	LBR 7	010 45 W	06 18 N	25 m.	+	+	+	+	+	+
Libyan Arab Jam.	Tripoli	LBY 18	013 11 E	32 54 N	20 m.	+	+	+	+	+	+
Libyan Arab Jam.	Surt	LBY 19	016 35 E	31 12 N	20 m.	+	+	+	+	+	+
Libyan Arab Jam.	Banghazi	LBY 20	020 04 E	32 06 N	25 m.	+	+	+	-	+	+
Libyan Arab Jam.	Darnah	LBY 21	022 38 E	32 49 N	7 m.	+	+	+	+	+	+
Libyan Arab Jam.	Ghudamis	LBY 22	009 40 E	30 08 N	360 m.	-	+	+	+	+	+
Libyan Arab Jam.	Sabahah	LBY 23	014 28 E	27 10 N	444 m.	-	+	+	-	-	+
Libyan Arab Jam.	Cufra	LBY 24	023 20 E	24 13 N	381 m.	+	+	+	+	+	+
Luxembourg	Luxembourg city	LUX 4	006 03 E	49 37 N	334 m.	+	+	+	+	-	+
Madagascar	Diego-Suarez	MDG 15	049 18 E	12 21 S	105 m.	+	+	+	+	+	+
Madagascar	Majunga	MDG 16	046 20 E	15 40 S	22 m.	+	+	+	+	+	+
Madagascar	Tamatava	MDG 17	049 24 E	18 07 S	5 m.	+	+	+	+	+	+
Madagascar	Tananarive	MDG 18	047 32 E	18 54 S	1310 m.	+	+	+	+	+	+
Madagascar	Tulear	MDG 19	043 44 E	23 23 S	9 m.	+	+	+	+	+	+
Madagascar	Fort-Dauphin	MDG 20	046 58 E	25 02 S	7 m.	+	+	+	+	+	+
Malawi	Karnoga	MWI 11	033 56 E	09 56 S	482 m.	+	+	+	+	+	+
Malawi	Lilongwe	MWI 12	033 42 E	13 58 S	1134 m.	+	+	+	+	+	+

Country name	Station name	Code Sn	Longitude	Latitude	Elevation	rd	tm	tx	vp	wn	rn
Malawi	Blantyre	MWI 13	034 58 E	15 41 S	766 m.	+	+	+	+	+	+
Malaysia	Sandakan (Borneo)	MYS 38	118 07 E	05 50 N	46 m.	+	+	+	-	+	
Malaysia	Pinang	MYS 39	100 12 E	05 25 N	5 m.	+	+	+	-	+	
Malaysia	Kuala Trengganu	MYS 40	103 08 E	05 20 N	32 m.	+	+	+	-	+	
Malaysia	Cameron Highlands	MYS 41	101 23 E	04 28 N	1448 m.	+	+	+	-	+	
Malaysia	Malacca	MYS 42	102 16 E	02 12 N	45 m.	+	+	+	-	+	
Malaysia	Kuching (Borneo)	MYS 43	110 20 E	01 29 N	26 m.	+	+	+	-	+	
Malaysia	Pulau Labuan	MYS 44	115 16 E	05 17 N	18 m.	+	+	+	-	+	
Mali	Tessalit	MLI 40	000 59 E	20 12 N	520 m.	+	+	+	+	+	
Mali	Gao	MLI 41	000 03 W	16 16 N	270 m.	+	+	+	+	+	
Mali	Mopti	MLI 42	004 12 E	14 30 N	280 m.	+	+	+	+	+	
Mali	Kayes	MLI 43	011 26 E	14 26 N	30 m.	+	+	+	+	+	
Mali	Bougouni	MLI 44	007 30 W	11 25 N	370 m.	-	+	+	-	+	
Malta	Valetta	MLT 1	014 31 E	35 54 N	70 m.	+	+	+	-	+	
Mauritania	Nouadhibou	MRT 14	017 03 W	20 56 N	4 m.	+	+	+	+	+	
Mauritania	Atar	MRT 15	013 04 W	20 31 N	225 m.	+	+	+	+	+	
Mauritania	Nouakchott	MRT 16	015 36 W	18 07 N	21 m.	+	+	+	+	+	
Mauritania	Nema	MRT 17	007 16 W	16 36 N	265 m.	+	+	+	+	+	
Mexico	Guaymas	MEX 56	110 53 W	27 55 N	4 m.	+	+	+	+	+	
Mexico	La Paz	MEX 57	110 18 W	24 10 N	18 m.	-	+	+	+	+	
Mexico	Monterrey	MEX 58	100 18 W	25 40 N	534 m.	+	+	+	+	+	
Mexico	Mazatlan	MEX 59	106 25 W	23 11 N	78 m.	+	+	+	+	+	
Mexico	Tampico	MEX 60	097 51 W	22 12 N	73 m.	-	+	+	-	+	
Mexico	Guanajuato	MEX 61	101 15 W	21 12 N	2037 m.	+	+	+	-	+	
Mexico	Merida	MEX 62	089 38 W	20 58 N	22 m.	+	+	+	+	+	
Mexico	Guadalajara	MEX 63	103 20 W	20 41 N	1589 m.	+	+	+	-	+	
Mexico	Isla de Cozumel	MEX 64	086 57 W	20 31 N	3 m.	-	+	+	-	+	
Mexico	Mexico City	MEX 65	099 12 W	19 24 N	2485 m.	+	+	+	-	+	
Mexico	Acapulco	MEX 66	099 56 W	16 50 N	3 m.	+	+	+	+	+	
Mexico	Salina Cruz	MEX 67	095 12 W	16 12 N	56 m.	+	+	+	+	+	
Micronesia	Saipan	FSM 1	145 46 E	15 14 N	222 m.	-	+	+	-	+	
Monaco	Monaco	MCO 1	007 25 E	43 43 N	55 m.	+	+	+	-	+	
Mongolia	Ulan-bator	MNG 1	106 50 E	47 55 N	1325 m.	-	+	+	-	+	
Morocco	Casablanca	MUS 14	007 40 W	33 34 N	49 m.	-	+	+	+	+	
Morocco	Rabat	MUS 15	006 40 W	34 03 N	75 m.	+	+	+	+	+	
Morocco	Tanger	MUS 16	005 54 W	35 43 N	15 m.	-	+	+	+	+	
Morocco	Oujda	MUS 17	001 56 W	34 47 N	470 m.	-	+	+	-	+	
Mozambique	Nova Freixa	MOZ110	036 52 E	14 48 S	587 m.	+	+	+	-	+	
Mozambique	Mossuril	MOZ111	040 40 E	14 57 S	15 m.	+	+	+	-	+	
Mozambique	Beira	MOZ112	034 51 E	19 50 S	8 m.	+	+	+	+	+	
Mozambique	Maputo	MOZ113	032 36 E	25 58 S	64 m.	+	+	+	-	+	
Namibia	Tsumeb	NAM 7	017 43 E	19 14 S	1311 m.	+	+	+	-	+	
Namibia	Windhoek	NAM 8	017 06 E	22 34 S	1728 m.	+	+	+	+	+	
Namibia	Swakopmund	NAM 9	014 31 E	22 41 S	12 m.	+	+	+	-	+	
Namibia	Luderitz	NAM 10	015 06 E	26 38 S	23 m.	+	+	+	-	+	
Namibia	Keetmansdorp	NAM 11	018 07 E	26 34 S	1066 m.	+	+	+	+	+	
Nauru	Nauru	NRU 1	166 55 E	00 32 S	27 m.	-	+	+	-	+	
Nepal	Katmandu	NPL 35	085 12 E	27 42 N	1337 m.	+	+	+	+	+	
Nepal	Pokhara Airport	NPL 36	084 00 E	28 13 N	827 m.	-	+	+	-	+	
Netherlands	Eelde	NLD 14	006 35 E	53 08 N	5 m.	+	+	+	+	+	
Netherlands	Den Helder	NLD 15	004 45 E	52 58 N	6 m.	+	+	+	+	+	
Netherlands	De Bilt	NLD 16	005 11 E	52 06 N	3 m.	+	+	+	+	+	
Netherlands Antilles	Curacao	ATG 6	068 58 W	12 12 N	8 m.	+	+	+	-	+	
New Zealand	Auckland	NZL 6	174 46 E	36 51 S	49 m.	+	+	+	+	+	
New Zealand	Tauranga	NZL 7	176 12 E	37 40 N	4 m.	+	+	+	-	+	

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New Zealand	New Plymouth	NZL	8	174 05 E	39 04 S	49 m.	+	+	+	+	+	+
New Zealand	Wellington	NZL	9	174 46 E	41 17 S	126 m.	+	+	+	+	+	+
New Zealand	Dunedin	NZL	10	170 31 E	45 55 S	2 m.	+	+	+	+	+	+
New Zealand	Tonggareva	NZL	11	158 03 E	09 01 S	2 m.	-	+	+	+	-	+
Nicaragua	Managua	NIC	2	086 11 W	12 08 N	56 m.	+	+	+	+	+	+
Niger	Bilma	NER	28	013 23 E	18 39 N	355 m.	+	+	+	+	+	+
Niger	Zinder	NER	29	008 59 E	13 48 N	510 m.	+	+	+	+	+	+
Niger	Niamey	NER	30	002 07 E	13 30 N	220 m.	+	+	+	+	+	+
Nigeria	Sokoto	NGA	26	005 15 E	13 01 N	345 m.	+	+	+	+	-	+
Nigeria	Kano	NGA	27	008 32 E	12 03 N	470 m.	+	+	+	+	-	+
Nigeria	Maiduguri	NGA	28	013 05 E	11 51 N	350 m.	+	+	+	+	-	+
Nigeria	Jos	NGA	29	008 54 E	09 52 N	1260 m.	+	+	+	+	-	+
Nigeria	Makurdi	NGA	30	008 35 E	07 42 N	111 m.	+	+	+	+	-	+
Nigeria	Enugu	NGA	31	007 33 E	06 38 N	140 m.	+	+	+	+	-	+
Nigeria	Lagos	NGA	32	003 24 E	06 27 N	3 m.	+	+	+	+	-	+
North Korea	Wonsan	PRK	1	127 26 E	39 11 N	35 m.	+	+	+	+	-	+
North Korea	P'yongyang	PRK	2	125 49 E	39 01 N	27 m.	+	+	+	+	-	+
Norway	Isfjord Radio	NOR	1	013 38 E	78 08 N	9 m.	-	+	+	+	+	+
Norway	Bjoernoeya	NOR	2	019 01 E	74 31 N	14 m.	-	+	+	+	+	+
Norway	Jan Mayen	NOR	3	008 20 W	70 59 N	23 m.	-	+	+	+	-	+
Norway	Vardoe	NOR	4	031 06 E	70 22 N	10 m.	-	+	+	+	-	+
Norway	Tromsoe	NOR	5	018 57 E	69 36 N	115 m.	+	+	+	+	+	+
Norway	Mo i Rana	NOR	6	014 08 E	66 21 N	20 m.	-	+	+	+	-	+
Norway	Trondheim	NOR	7	010 27 E	63 25 N	133 m.	+	+	+	+	-	+
Norway	Dombaaas	NOR	8	009 07 E	62 04 N	643 m.	-	+	+	+	-	+
Norway	Lillehammer	NOR	9	010 26 E	61 06 N	226 m.	-	+	+	+	-	+
Norway	Bergen	NOR	10	005 19 E	60 12 N	45 m.	+	+	+	+	+	+
Norway	Oslo	NOR	11	010 44 E	59 56 N	96 m.	+	+	+	+	+	+
Norway	Dalen	NOR	12	008 00 E	59 27 N	77 m.	-	+	+	+	-	+
Norway	Kristiansand	NOR	13	007 59 E	58 10 N	23 m.	-	+	+	+	-	+
Oman	Salalah	OMN	7	054 06 E	17 03 N	17 m.	-	+	+	+	-	+
Oman	Al-Masirah	OMN	8	058 54 E	20 41 N	16 m.	-	+	+	+	-	+
Oman	Masqat	OMN	9	058 35 E	23 37 N	5 m.	+	+	+	+	-	+
Pakistan	Peshawar	PAK	26	071 34 E	34 01 N	354 m.	+	+	+	+	+	+
Pakistan	Lahore	PAK	27	074 20 E	31 35 N	214 m.	+	+	+	+	+	+
Pakistan	Multan	PAK	28	071 31 E	31 12 N	126 m.	-	+	+	+	+	+
Pakistan	Quetta	PAK	29	067 01 E	30 10 N	1730 m.	+	+	+	+	+	+
Pakistan	Hyderabad	PAK	30	068 25 E	25 23 N	29 m.	-	+	+	+	+	+
Pakistan	Karachi	PAK	31	066 59 E	24 48 N	4 m.	+	+	+	+	+	+
Panama	Cristobal	PAN	14	079 55 W	09 21 N	12 m.	+	+	+	+	+	+
Panama	Balboa	PAN	15	079 33 W	08 58 N	31 m.	+	+	+	+	+	+
Panama	Jaque	PAN	16	078 10 W	07 32 N	5 m.	-	+	+	-	-	+
Papua-New Guinea	Madang	PNG	11	145 45 E	05 14 S	6 m.	+	+	+	+	-	+
Papua-New Guinea	Kikori	PNG	12	144 11 E	07 17 S	24 m.	-	+	+	+	-	+
Papua-New Guinea	Daru	PNG	13	143 12 E	09 04 S	8 m.	-	+	+	+	-	+
Papua-New Guinea	Samarai	PNG	14	150 40 E	10 37 S	6 m.	-	+	+	+	-	+
Papua-New Guinea	Bwagaoia	PNG	15	152 50 E	10 44 S	30 m.	-	+	+	+	-	+
Paraguay	Mariscal-Estigarribia	PRY	13	060 36 W	22 01 S	181 m.	-	+	+	+	+	+
Paraguay	Puerto Casado	PRY	14	057 52 W	22 17 S	87 m.	-	+	+	+	+	+
Paraguay	Asuncion	PRY	15	057 38 W	25 16 S	64 m.	+	+	+	+	+	+
Paraguay	Puerto Presidento Franco	PRY	16	054 34 W	25 36 S	125 m.	-	+	+	+	+	+
Yemen, Democratic	Kamaran Island	YMD	6	042 37 E	15 20 N	6 m.	-	+	+	+	-	+
Yemen, Democratic	Riyan	YMD	7	049 23 E	14 39 N	25 m.	-	+	+	+	-	+
Yemen, Democratic	Khormaksar	YMD	8	045 01 E	12 50 N	7 m.	+	+	+	+	-	+
Yemen, Democratic	Barim island	YMD	9	043 24 E	12 39 N	27 m.	-	+	+	+	-	+

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Peru	Iquitos	PER	61	073 20 W	03 46 S	104 m.	-	+	+	+	+	+
Peru	Chiclayo	PER	62	079 50 W	06 47 S	31 m.	-	+	+	+	+	+
Peru	Cajamarca	PER	63	078 28 W	07 08 S	2621 m.	-	+	+	+	+	+
Peru	Tingo Maria	PER	64	075 57 W	09 08 S	665 m.	+	+	+	+	+	+
Peru	Lima	PER	65	077 07 W	12 00 S	11 m.	+	+	+	+	+	+
Peru	Huancayo	PER	66	075 20 W	12 07 S	3380 m.	+	+	+	+	-	+
Peru	Puerto Maldonado	PER	67	069 12 W	12 38 S	256 m.	-	+	+	+	+	+
Peru	Cuzco	PER	68	071 59 W	13 33 S	3312 m.	+	+	+	+	+	+
Peru	San Juan	PER	69	075 12 W	15 22 S	30 m.	-	+	+	+	+	+
Peru	Arequipa	PER	70	071 33 W	16 19 S	2525 m.	-	+	+	+	+	+
Philippines	Aparri	PHL	57	121 38 E	18 22 N	4 m.	-	+	+	+	+	+
Philippines	Baguio	PHL	58	120 36 E	16 25 N	1482 m.	-	+	+	+	+	+
Philippines	Manila	PHL	59	120 59 E	14 35 N	16 m.	+	+	+	+	+	+
Philippines	Legazpi	PHL	60	123 44 E	13 08 N	19 m.	-	+	+	+	+	+
Philippines	Iloilo	PHL	61	122 34 E	10 42 N	14 m.	-	+	+	+	+	+
Philippines	Davao	PHL	62	125 36 E	07 04 N	20 m.	-	+	+	+	+	+
Philippines	Zamboanga	PHL	63	122 04 E	06 54 N	6 m.	-	+	+	+	+	+
Poland	Gdynia	POL	1	018 33 E	54 31 N	15 m.	+	+	+	+	+	+
Poland	Suwalki	POL	2	022 55 E	54 06 N	170 m.	+	+	+	+	+	+
Poland	Poznan	POL	3	016 50 E	52 25 N	92 m.	+	+	+	+	+	+
Poland	Warsaw	POL	4	020 59 E	52 09 N	107 m.	+	+	+	+	+	+
Poland	Breslau	POL	5	016 59 E	51 08 N	119 m.	+	+	+	+	+	+
Poland	Zamosc	POL	6	023 15 E	50 44 N	219 m.	+	+	+	-	+	+
Poland	Krakow	POL	7	020 01 E	50 05 N	213 m.	+	+	+	-	+	+
Portugal	Dili (Timor)	PRT	11	125 35 E	08 35 S	0 m.	+	+	+	+	-	+
Portugal	Braganca	PRT	12	006 46 W	41 49 N	720 m.	+	+	+	+	-	+
Portugal	Porto	PRT	13	008 36 W	41 08 N	95 m.	+	+	+	+	+	+
Portugal	Coimbra	PRT	14	008 25 W	40 12 N	141 m.	+	+	+	+	-	+
Portugal	Campo Major	PRT	15	007 04 W	39 01 N	280 m.	+	+	+	-	+	+
Portugal	Lisboa	PRT	16	009 09 W	38 43 N	77 m.	+	+	+	+	+	+
Portugal	Ponta Delgada Az	PRT	17	025 40 W	34 45 N	35 m.	+	+	+	+	-	+
Portugal	Praia de Rocha	PRT	18	008 32 W	37 07 N	19 m.	+	+	+	-	+	+
Romania	Iasi	ROM	2	027 36 E	47 10 N	101 m.	+	+	+	+	-	+
Romania	Clui	ROM	3	023 42 E	46 47 N	313 m.	+	+	+	+	-	+
Romania	Timisoara	ROM	4	021 13 E	45 47 N	90 m.	-	+	+	+	+	+
Romania	Sibiu	ROM	5	024 09 E	45 47 N	407 m.	+	+	+	+	-	+
Romania	Bucharest	ROM	6	026 06 E	44 25 N	82 m.	+	+	+	+	+	+
Saudi Arabia	Ha'il	SAU	23	042 02 E	27 30 N	971 m.	-	+	+	+	-	+
Saudi Arabia	Ar-Riyad	SAU	24	046 42 E	24 39 N	591 m.	-	+	+	+	-	+
Saudi Arabia	Jidda	SAU	25	039 10 E	21 28 N	6 m.	-	+	+	+	+	+
Senegal	Dakar	SEN	16	017 30 W	14 44 N	23 m.	+	+	+	+	+	+
Senegal	Ziguinchor	SEN	17	016 16 W	13 35 N	10 m.	+	+	+	+	+	+
Senegal	Mamou	SEN	18	012 04 W	10 22 N	730 m.	-	+	+	+	+	+
Sierra Leone	Freetown	SLE	7	013 12 W	08 37 N	20 m.	+	+	+	+	+	+
Singapore	Singapore	SGP	2	103 50 E	01 18 N	10 m.	+	+	+	+	-	+
Somalia	Djibouti	SOM	25	043 09 E	11 36 N	7 m.	+	+	+	+	-	+
Somalia	Berbera	SOM	26	045 02 E	10 26 N	8 m.	-	+	+	+	-	+
Somalia	Hargeysa	SOM	27	044 06 E	09 31 N	1370 m.	-	+	+	+	-	+
Somalia	Mogadishu	SOM	28	045 21 E	02 02 N	17 m.	+	+	+	+	+	+
South Africa	Messina	ZAF	44	030 03 E	22 20 S	549 m.	+	+	+	+	-	+
South Africa	Pietersburg	ZAF	45	029 27 E	23 51 S	1230 m.	+	+	+	+	+	+
South Africa	Upington	ZAF	46	021 16 E	28 26 S	809 m.	+	+	+	+	+	+
South Africa	Kimberly	ZAF	47	024 46 E	28 48 S	1197 m.	+	+	+	+	+	+
South Africa	Durban	ZAF	48	031 02 E	29 50 S	5 m.	+	+	+	+	+	+
South Africa	East London	ZAF	49	027 52 E	33 02 S	125 m.	+	+	+	+	+	+

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South Africa	Kaapstad	ZAF	50	018 32 E	33 54 S	17 m.	+	+	+	+	+	+
South Africa	Port Elisabeth	ZAF	51	025 36 E	33 58 S	58 m.	+	+	+	+	+	+
South Africa	Oudtshoorn	ZAF	52	022 12 E	33 35 S	335 m.	-	+	+	+	-	+
Korea, Rep. of	Seoul	KOR	12	126 58 E	37 34 N	86 m.	+	+	+	+	-	+
Korea, Rep. of	Pusan	KOR	13	129 02 E	35 06 N	69 m.	+	+	+	+	-	+
Spain	Santander	ESP	82	003 49 W	43 48 N	68 m.	+	+	+	+	+	+
Spain	La Coruna	ESP	83	008 25 W	43 22 N	67 m.	+	+	+	+	+	+
Spain	Valladolid	ESP	84	004 43 W	41 39 N	715 m.	+	+	+	+	+	+
Spain	Zaragoza	ESP	85	000 53 W	41 39 N	237 m.	+	+	+	+	-	+
Spain	Barcelona	ESP	86	002 09 E	41 24 N	95 m.	+	+	+	+	+	+
Spain	Madrid	ESP	87	003 41 W	40 25 N	667 m.	+	+	+	+	+	+
Spain	Palma	ESP	88	002 39 E	39 33 N	28 m.	+	+	+	+	+	+
Spain	Valencia	ESP	89	000 23 W	39 29 N	13 m.	+	+	+	+	-	+
Spain	Ciudad Real	ESP	90	003 56 W	38 59 N	628 m.	+	+	+	+	-	+
Spain	Murcia	ESP	91	001 08 W	37 59 N	44 m.	+	+	+	-	-	+
Spain	Sevilla	ESP	92	006 00 W	37 24 N	30 m.	+	+	+	+	+	+
Spain	Granada	ESP	93	003 35 W	37 09 N	689 m.	+	+	+	+	-	+
Spain	Almeria	ESP	94	002 28 W	36 50 N	7 m.	+	+	+	+	+	+
Spain	Las Palmas	ESP	95	015 28 W	28 11 N	6 m.	-	+	+	+	-	+
Sri Lanka	Trincomalee	LKA	16	081 15 E	08 35 N	7 m.	+	+	+	+	+	+
Sri Lanka	Nuwara-Eliya	LKA	17	080 46 E	06 58 N	1880 m.	+	+	+	+	+	+
Sri Lanka	Colombo	LKA	18	079 52 E	06 54 N	7 m.	+	+	+	+	+	+
St Helena	Jamestown	SHN	1	005 43 W	15 55 S	12 m.	-	+	+	+	-	+
Sudan	Port Sudan	SDN	64	037 13 E	19 35 N	5 m.	+	+	+	+	+	+
Sudan	Dunqulah	SDN	65	030 29 E	19 10 N	225 m.	-	+	+	-	-	+
Sudan	Khartoum	SDN	66	032 32 E	15 36 N	380 m.	+	+	+	+	+	+
Sudan	Al-Fashir	SDN	67	025 21 E	13 38 N	730 m.	+	+	+	-	-	+
Sudan	Al-Ubayyid	SDN	68	030 14 E	13 11 N	585 m.	+	+	+	-	-	+
Sudan	Ar-Rusayris	SDN	69	034 23 E	11 51 N	465 m.	-	+	+	+	-	+
Sudan	Malakal	SDN	70	031 39 E	09 33 N	385 m.	+	+	+	+	+	+
Sudan	Waw	SDN	71	028 03 E	07 42 N	440 m.	+	+	+	+	+	+
Sudan	Source Yubo	SDN	72	027 15 E	05 24 N	509 m.	-	+	+	+	-	+
Sudan	Juba	SDN	73	031 37 E	04 51 N	460 m.	+	+	+	+	+	+
Surinam	Paramaribo	SUR	5	055 10 W	05 51 N	3 m.	+	+	+	+	+	+
Surinam	Tafelberg	SUR	6	056 03 W	03 47 N	344 m.	-	+	+	+	+	+
Sweden	Haparanda	SWE	1	024 09 E	65 50 N	7 m.	+	+	+	+	-	+
Sweden	Stensele	SWE	2	017 10 E	65 04 N	330 m.	-	+	+	+	-	+
Sweden	Oestersund	SWE	3	014 40 E	63 10 N	328 m.	+	+	+	+	+	+
Sweden	Haernoesand	SWE	4	017 57 E	62 28 N	8 m.	+	+	+	+	+	+
Sweden	Karlstad	SWE	5	013 28 E	59 22 N	47 m.	+	+	+	+	-	+
Sweden	Stockholm	SWE	6	018 04 E	59 21 N	44 m.	+	+	+	+	+	+
Sweden	Joenkoeping	SWE	7	014 11 E	57 46 N	92 m.	+	+	+	-	+	
Sweden	Gothenborg	SWE	8	011 58 E	57 42 N	31 m.	+	+	+	+	+	+
Sweden	Visby	SWE	9	018 18 E	57 39 N	28 m.	+	+	+	+	-	+
Sweden	Kalmar	SWE	10	016 23 E	56 39 N	12 m.	+	+	+	+	-	+
Sweden	Malmoe	SWE	11	013 03 E	55 26 N	8 m.	+	+	+	+	-	+
Switzerland	Geneve	CHE	4	006 09 E	46 12 N	405 m.	+	+	+	+	+	+
Switzerland	Lugano	CHE	5	008 58 E	46 00 N	276 m.	+	+	+	+	+	+
Switzerland	Zuerich	CHE	2	008 34 E	47 23 N	569 m.	+	+	+	+	+	+
Switzerland	Saentis	CHE	3	009 20 E	47 15 N	2500 m.	+	+	+	+	+	+
Syrian Arab Republic	Aleppo	SYR	54	037 08 E	36 14 N	390 m.	+	+	+	+	-	+
Syrian Arab Republic	Dayr az-Zwar	SYR	55	040 09 E	35 21 N	213 m.	-	+	+	+	-	+
Syrian Arab Republic	Damascus	SYR	56	036 20 E	33 30 N	720 m.	+	+	+	+	-	+
Taiwan	T'aipei	TWN	2	121 31 E	25 02 N	8 m.	+	+	+	+	+	+
Taiwan	Tainan	TWN	3	120 13 E	23 00 N	13 m.	+	+	+	+	+	+









## 4 Agroclimatological data of FAO

### 4.1 Origin of data

This dataset originates from MANAGE an acronym for Monthly Averages and Normals for Agriculture and the Global Environment. MANAGE is one out of five data systems under AMDASS, AgroMeteorological Data SystemS (Gommes, 1992). Origin of this database is the FAOCLIM diskette that covers the core data from MANAGE, 3267 stations, as published by FAO (1984, 1985, 1987). Our weather information requires 6 data elements out of 11 that form a complete set of information in the MANAGE database. The full set of data elements includes:

- mean monthly precipitation total in mm,
- mean daily maximum temperature in °C,
- mean daily minimum temperature in °C,
- mean daily temperature in °C,
- mean daily water vapour pressure in hPa (mbar),
- mean wind speed in  $m s^{-1}$ ,
- relative sunshine fraction in %,
- global incoming radiation in langley  $d^{-1}$ ,
- mean monthly evapotranspiration total according to Penman in mm,
- mean monthly day-time temperature in °C,
- mean monthly night-time temperature in °C.

For a number of stations not all of these data were available. Along with the data, the length of the period of observations is given for each element. For most stations the series of observations cover the period 1931-1960. Data collected during the sixties and seventies have a time-span shorter than 30 year.

### 4.2 Conversion and quality control

The individual FAO data files were sorted in ascending order using the WMO station index number. The conversion program combines then per station data out of 7 files into single files. A check on each separate record for equal station index number ensures that data will not be mixed. The program creates for the MANAGE database 3267 files (file extension 000) in standardized format. The file header contains the station and country name, its longitude, latitude, elevation and the WMO station index number. The file header represents longitude (East, West) and latitude (North, South) of the location in degrees and minutes and elevation in meters, whereas the location parameter line represents longitude and latitude in decimal degrees.

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Section 2.2 describes treatment of monthly climate data in the weather information system to generate daily values. Missing data in the data files have the value -99. Global radiation was multiplied with 41.868 to convert from langley per day to  $kJ m^{-2} d^{-1}$ . The program divides mean monthly vapour pressure by 10 to convert from mbar to kPa. All data files contain data elements in standardized units: irradiation in  $kJ m^{-2} d^{-1}$  or alternatively sunshine duration in

$\text{h d}^{-1}$ , minimum temperature in degrees Celsius, maximum temperature in degrees Celsius, vapour pressure in kPa, mean wind speed in  $\text{m s}^{-1}$  and precipitation in  $\text{mm d}^{-1}$ .

### 4.3 Contents of the database with agroclimatological data of FAO

**Table 4**

For each meteorological station the table stores: country name, station name, alfa-3 code of country, station number, longitude, latitude and elevation.

The last six columns represent the availability of the elements radiation (rd), daily minimum temperature (tm), daily maximum temperature (tx), vapour pressure (vp), wind speed (wn) and precipitation (rn). The markers represent that elements are not available (-), partially available (.) or completely available (+).

Yankee dialect

of Boston

Country name	Station name	Code	Sn	Longitude	Latitude	Elevation	rd	tm	tx	vp	wn	rn
Afghanistan	Faizabad	AFG	1	070 31 E	37 07 N	1200 m.	+	+	+	+	+	+
Afghanistan	Shebirghan	AFG	2	065 43 E	36 40 N	360 m.	+	+	+	+	+	+
Afghanistan	Mazari-Sharif	AFG	3	067 12 E	36 42 N	378 m.	+	+	+	+	+	+
Afghanistan	Kunduz	AFG	4	068 55 E	36 40 N	433 m.	+	+	+	+	+	+
Afghanistan	Baghlan	AFG	5	068 45 E	36 12 N	510 m.	+	+	+	+	+	+
Afghanistan	Maimana	AFG	6	064 45 E	35 55 N	815 m.	+	+	+	+	+	+
Afghanistan	Jabul-Saraj	AFG	7	069 15 E	35 08 N	1630 m.	+	+	+	+	+	+
Afghanistan	Herat	AFG	8	063 13 E	34 13 N	964 m.	+	+	+	+	+	+
Afghanistan	Qadis	AFG	9	063 25 E	34 48 N	1280 m.	+	+	+	+	+	+
Afghanistan	Ghelmin	AFG	10	065 18 E	34 53 N	2070 m.	+	+	+	+	+	+
Afghanistan	Lal	AFG	11	066 18 E	34 30 N	2800 m.	+	+	+	+	+	+
Afghanistan	Kaboul	AFG	12	069 13 E	34 33 N	1791 m.	+	+	+	+	+	+
Afghanistan	Karizimir	AFG	13	069 03 E	34 38 N	1905 m.	+	+	+	+	+	+
Afghanistan	Jalalabad	AFG	14	070 28 E	34 26 N	580 m.	+	+	+	+	+	+
Afghanistan	Ghazni	AFG	15	068 25 E	33 32 N	2183 m.	+	+	+	+	+	+
Afghanistan	Khost	AFG	16	069 57 E	33 21 N	1146 m.	+	+	+	+	+	+
Afghanistan	Farah	AFG	17	062 09 E	32 21 N	660 m.	+	+	+	+	+	+
Afghanistan	Bust	AFG	18	064 22 E	31 33 N	780 m.	+	+	+	+	+	+
Afghanistan	Kandahar	AFG	19	065 51 E	31 30 N	1010 m.	+	+	+	+	+	+
Algeria	Skikda	DZA	1	006 57 E	36 56 N	7 m.	+	+	+	+	+	+
Algeria	Annaba	DZA	2	007 49 E	36 50 N	4 m.	+	+	+	+	+	+
Algeria	Alger	DZA	3	003 03 E	36 46 N	60 m.	+	+	+	+	+	+
Algeria	Constantine	DZA	4	006 37 E	36 17 N	694 m.	+	+	+	+	+	+
Algeria	Setif	DZA	5	005 25 E	36 11 N	1081 m.	+	+	+	+	+	+
Algeria	Tebessa	DZA	6	008 08 E	35 29 N	813 m.	+	+	+	+	+	+
Algeria	Oran	DZA	7	000 39 W	35 44 N	11 m.	+	+	+	+	+	+
Algeria	Sidi Bel Abbes	DZA	8	000 38 W	35 11 N	486 m.	+	+	+	+	+	+
Algeria	Biskra	DZA	9	005 44 E	34 51 N	122 m.	+	+	+	+	+	+
Algeria	Djelfa	DZA	10	003 15 E	34 41 N	1144 m.	+	+	+	+	+	+
Algeria	Laghouat	DZA	11	002 56 E	33 46 N	765 m.	+	+	+	+	+	+
Algeria	Touggourt	DZA	12	006 04 E	33 07 N	69 m.	+	+	+	+	+	+
Algeria	Ain Sefra	DZA	13	000 36 W	32 45 N	1072 m.	+	+	+	+	+	+
Algeria	Ghardaia	DZA	14	003 49 E	32 23 N	450 m.	+	+	+	+	+	+
Algeria	Bechar	DZA	15	002 14 W	31 37 N	773 m.	+	+	+	+	+	+
Algeria	Ouargla	DZA	16	005 24 E	31 57 N	141 m.	+	+	+	+	+	+
Algeria	El Golea	DZA	17	002 52 E	30 34 N	397 m.	+	+	+	+	+	+
Algeria	Adrar	DZA	18	000 17 W	27 53 N	263 m.	+	+	+	+	+	+
Algeria	In Salah	DZA	19	002 28 E	27 12 N	293 m.	+	+	+	+	+	+
Algeria	Tindouf	DZA	20	008 08 W	27 40 N	431 m.	+	+	+	+	+	+
Algeria	Djanet	DZA	21	009 28 E	24 33 N	1054 m.	+	+	+	+	+	+
Algeria	Tamanrasset	DZA	22	005 31 E	22 47 N	1378 m.	+	+	+	+	+	+
Angola	Cabinda	AGO	1	012 11 E	05 33 S	20 m.	+	+	+	+	+	+
Angola	Soyo	AGO	2	012 21 E	06 07 S	1 m.	+	+	+	+	+	+
Angola	Sunginge	AGO	3	016 47 E	08 46 S	630 m.	+	+	+	+	+	+
Angola	Luanda	AGO	4	013 14 E	08 51 S	70 m.	+	+	+	+	+	+
Angola	Ndalatando	AGO	5	014 57 E	09 19 S	690 m.	+	+	+	+	+	+
Angola	Malanje	AGO	6	016 22 E	09 33 S	1142 m.	+	+	+	+	+	+
Angola	Saurimo	AGO	7	020 24 E	09 39 S	1080 m.	+	+	+	+	+	+
Angola	Nova Gaia	AGO	8	017 33 E	10 04 S	1260 m.	+	+	+	+	+	+
Angola	Luena	AGO	9	019 55 E	11 47 S	1357 m.	+	+	+	+	+	+
Angola	Luau	AGO	10	022 15 E	10 43 S	1100 m.	+	+	+	+	+	+
Angola	Lobito	AGO	11	013 32 E	12 22 S	3 m.	+	+	+	+	+	+
Angola	Huambo	AGO	12	015 45 E	12 48 S	1700 m.	+	+	+	+	+	+
Angola	Cuemba	AGO	13	018 05 E	12 08 S	1300 m.	+	+	+	+	+	+
Angola	Chitembo	AGO	14	016 46 E	13 32 S	1500 m.	+	+	+	+	+	+

Country name	Station name	Code	Sn	Longitude	Latitude	Elevation	rd	tm	tx	vp	wn	rn
Angola	Lubango	AGO	15	013 34 E	14 56 S	1758 m.	+	+	+	+	+	+
Angola	Menongue	AGO	16	017 41 E	14 39 S	1343 m.	+	+	+	+	+	+
Angola	Mocamedes	AGO	17	012 09 E	15 12 S	45 m.	+	+	+	+	+	+
Angola	Ngiva	AGO	18	015 44 E	17 05 S	1109 m.	+	+	+	+	+	+
Antigua and Barbuda	Coolidge A.p.	ATG	1	061 47 W	17 07 N	10 m.	+	+	+	+	+	+
Argentina	La Quiaca	ARG	1	065 36 W	22 06 S	3459 m.	+	+	+	+	+	+
Argentina	S. Salvador De Jujuy	ARG	2	065 18 W	24 11 S	1303 m.	+	+	+	+	+	+
Argentina	Salta	ARG	3	065 29 W	24 51 S	1226 m.	+	+	+	+	+	+
Argentina	Coronel Moldes	ARG	4	065 29 W	25 16 S	1143 m.	+	+	+	+	+	+
Argentina	Rivadavia	ARG	5	062 54 W	24 10 S	205 m.	+	+	+	+	+	+
Argentina	Las Lomitas	ARG	6	060 35 W	24 42 S	130 m.	+	+	+	+	+	+
Argentina	Tacaagle	ARG	7	058 49 W	24 58 S	87 m.	+	+	+	+	+	+
Argentina	Tucuman	ARG	8	065 12 W	26 48 S	481 m.	+	+	+	+	+	+
Argentina	Campo Gallo	ARG	9	062 51 W	26 35 S	190 m.	+	+	+	+	+	+
Argentina	Andalgala	ARG	10	066 19 W	27 35 S	1072 m.	+	+	+	+	+	+
Argentina	La Cocha	ARG	11	065 34 W	27 47 S	443 m.	+	+	+	+	+	+
Argentina	Santiago Del Estero	ARG	12	064 18 W	27 46 S	199 m.	+	+	+	+	+	+
Argentina	Pr.oque Saenz	ARG	13	060 27 W	26 49 S	92 m.	+	+	+	+	+	+
Argentina	Formosa	ARG	14	058 14 W	26 12 S	60 m.	+	+	+	+	+	+
Argentina	Iguazu	ARG	15	054 27 W	25 41 S	179 m.	+	+	+	+	+	+
Argentina	Corrientes	ARG	16	058 46 W	27 27 S	62 m.	+	+	+	+	+	+
Argentina	Gen Paz	ARG	17	057 38 W	27 45 S	74 m.	+	+	+	+	+	+
Argentina	Posadas	ARG	18	055 58 W	27 22 S	133 m.	+	+	+	+	+	+
Argentina	Tinogasta	ARG	19	067 34 W	28 04 S	1201 m.	+	+	+	+	+	+
Argentina	Punta Del Agua	ARG	20	068 39 W	28 38 S	2600 m.	+	+	+	+	+	+
Argentina	Chilecito	ARG	21	067 31 W	29 10 S	1146 m.	+	+	+	+	+	+
Argentina	Laioja	ARG	22	066 49 W	29 23 S	430 m.	+	+	+	+	+	+
Argentina	Catamarca	ARG	23	065 46 W	28 36 S	454 m.	+	+	+	+	+	+
Argentina	Anatuya	ARG	24	062 50 W	28 28 S	108 m.	+	+	+	+	+	+
Argentina	Vil. Mariaio Seco	ARG	25	063 41 W	29 54 S	341 m.	+	+	+	+	+	+
Argentina	Ceres	ARG	26	061 57 W	29 53 S	88 m.	+	+	+	+	+	+
Argentina	Goya	ARG	27	059 16 W	29 08 S	36 m.	+	+	+	+	+	+
Argentina	Mercedes	ARG	28	058 04 W	29 14 S	107 m.	+	+	+	+	+	+
Argentina	Vera	ARG	29	060 13 W	29 28 S	59 m.	+	+	+	+	+	+
Argentina	Monte Caseros	ARG	30	057 39 W	30 16 S	53 m.	+	+	+	+	+	+
Argentina	Jachal	ARG	31	068 45 W	30 15 S	1165 m.	+	+	+	+	+	+
Argentina	San Juan	ARG	32	068 25 W	31 34 S	598 m.	+	+	+	+	+	+
Argentina	Cepes	ARG	33	066 36 W	31 20 S	658 m.	+	+	+	+	+	+
Argentina	Villa Dolores	ARG	34	065 08 W	31 57 S	569 m.	+	+	+	+	+	+
Argentina	Cordoba	ARG	35	064 13 W	31 19 S	474 m.	+	+	+	+	+	+
Argentina	Pilar Observat	ARG	36	063 53 W	31 40 S	338 m.	+	+	+	+	+	+
Argentina	Bell Ville	ARG	37	062 41 W	32 38 S	130 m.	+	+	+	+	+	+
Argentina	Marcos Juarez	ARG	38	062 07 W	32 42 S	112 m.	+	+	+	+	+	+
Argentina	Rafaela	ARG	39	061 33 W	31 11 S	100 m.	+	+	+	+	+	+
Argentina	Parana	ARG	40	060 29 W	31 47 S	67 m.	+	+	+	+	+	+
Argentina	Concordia	ARG	41	058 02 W	31 23 S	38 m.	+	+	+	+	+	+
Argentina	Cristoedentor	ARG	42	070 05 W	32 50 S	3829 m.	+	+	+	+	+	+
Argentina	San Carlos	ARG	43	069 02 W	33 46 S	940 m.	+	+	+	+	+	+
Argentina	Puente Del Inca	ARG	44	069 54 W	32 49 S	2720 m.	+	+	+	+	+	+
Argentina	Mendoza	ARG	45	068 50 W	32 53 S	769 m.	+	+	+	+	+	+
Argentina	La Paz	ARG	46	067 33 W	33 28 S	506 m.	+	+	+	+	+	+
Argentina	San Luis	ARG	47	066 21 W	33 16 S	713 m.	+	+	+	+	+	+
Argentina	Villaeynolds	ARG	48	065 23 W	33 44 S	484 m.	+	+	+	+	+	+
Argentina	Rosario	ARG	49	060 47 W	32 55 S	25 m.	+	+	+	+	+	+
Argentina	Gualeguay	ARG	50	059 18 W	33 08 S	13 m.	+	+	+	+	+	+

Country name	Station name	Code	Sn	Longitude	Latitude	Elevation	rd	tm	tx	vp	wn	rn
Argentina	Sanafael	ARG	51	068 24 W	34 35 S	746 m.	+	+	+	+	+	+
Argentina	Colonia Alvear	ARG	52	067 39 W	35 00 S	465 m.	+	+	+	+	+	+
Argentina	Union	ARG	53	065 57 W	35 09 S	372 m.	+	+	+	+	+	+
Argentina	Laboulaye	ARG	54	063 22 W	34 08 S	137 m.	+	+	+	+	+	+
Argentina	Junin	ARG	55	060 57 W	34 33 S	81 m.	+	+	+	+	+	+
Argentina	Pehuajo	ARG	56	061 54 W	35 49 S	87 m.	+	+	+	+	+	+
Argentina	Las Flores	ARG	57	059 06 W	36 02 S	34 m.	+	+	+	+	+	+
Argentina	Buenos Aires O.c.	ARG	58	058 29 W	34 35 S	25 m.	+	+	+	+	+	+
Argentina	Santa Isabel	ARG	59	066 55 W	36 16 S	320 m.	+	+	+	+	+	+
Argentina	Chos Malal	ARG	60	070 17 W	37 23 S	848 m.	+	+	+	+	+	+
Argentina	Santaosa	ARG	61	064 16 W	36 34 S	189 m.	+	+	+	+	+	+
Argentina	Coronel Suares	ARG	62	061 53 W	37 26 S	231 m.	+	+	+	+	+	+
Argentina	Azul	ARG	63	059 50 W	36 44 S	132 m.	+	+	+	+	+	+
Argentina	Dolores	ARG	64	057 44 W	36 21 S	9 m.	+	+	+	+	+	+
Argentina	Macachin	ARG	65	063 41 W	37 08 S	142 m.	+	+	+	+	+	+
Argentina	Barrow	ARG	66	060 15 W	38 19 S	120 m.	+	+	+	+	+	+
Argentina	Balcarce	ARG	67	058 15 W	37 51 S	113 m.	+	+	+	+	+	+
Argentina	Mar Del Plata	ARG	68	057 33 W	38 03 S	5 m.	+	+	+	+	+	+
Argentina	Las Lajas	ARG	69	070 23 W	38 32 S	713 m.	+	+	+	+	+	+
Argentina	Cutral Co	ARG	70	069 13 W	38 57 S	612 m.	+	+	+	+	+	+
Argentina	Cipolletti	ARG	71	067 59 W	38 57 S	265 m.	+	+	+	+	+	+
Argentina	Choele-Chuel	ARG	72	065 39 W	39 17 S	131 m.	+	+	+	+	+	+
Argentina	Bahia Blanca	ARG	73	062 11 W	38 44 S	83 m.	+	+	+	+	+	+
Argentina	S. Carlos Bariloche	ARG	74	071 10 W	41 09 S	840 m.	+	+	+	+	+	+
Argentina	El Bolson	ARG	75	071 33 W	41 56 S	310 m.	+	+	+	+	+	+
Argentina	Maquinchao	ARG	76	068 44 W	41 15 S	888 m.	+	+	+	+	+	+
Argentina	San Antonio Oeste	ARG	77	064 57 W	40 44 S	7 m.	+	+	+	+	+	+
Argentina	Patagones	ARG	78	062 59 W	40 47 S	40 m.	+	+	+	+	+	+
Argentina	Esquel	ARG	79	071 09 W	42 54 S	785 m.	+	+	+	+	+	+
Argentina	Faro Punta Delgada	ARG	80	063 38 W	42 46 S	54 m.	+	+	+	+	+	+
Argentina	Trelew	ARG	81	065 19 W	43 14 S	39 m.	+	+	+	+	+	+
Argentina	Perito Moreno	ARG	82	071 01 W	46 31 S	429 m.	+	+	+	+	+	+
Argentina	Sarmiento	ARG	83	069 08 W	45 35 S	266 m.	+	+	+	+	+	+
Argentina	Comodoro Rivadavia	ARG	84	067 30 W	45 47 S	46 m.	+	+	+	+	+	+
Argentina	Camarones	ARG	85	065 42 W	44 49 S	34 m.	+	+	+	+	+	+
Argentina	Faro Capo Blanco	ARG	86	065 46 W	47 12 S	39 m.	+	+	+	+	+	+
Argentina	Gobernador Gregores	ARG	87	070 10 W	48 47 S	358 m.	+	+	+	+	+	+
Argentina	Lago Argentino	ARG	88	072 18 W	50 20 S	220 m.	+	+	+	+	+	+
Argentina	San Julian	ARG	89	067 47 W	49 19 S	52 m.	+	+	+	+	+	+
Argentina	Puerto Santa Cruz	ARG	90	068 34 W	50 01 S	111 m.	+	+	+	+	+	+
Argentina	Cerro Fitzoy	ARG	91	072 54 W	49 20 S	420 m.	+	+	+	+	+	+
Argentina	Rio Gallegos	ARG	92	069 17 W	51 37 S	19 m.	+	+	+	+	+	+
Argentina	El Turbio	ARG	93	072 09 W	51 41 S	184 m.	+	+	+	+	+	+
Argentina	Faro Cabo Virgenes	ARG	94	068 21 W	52 20 S	24 m.	+	+	+	+	+	+
Argentina	Rio Grande	ARG	95	067 47 W	53 48 S	22 m.	+	+	+	+	+	+
Argentina	Ushuaia	ARG	96	068 19 W	54 48 S	14 m.	+	+	+	+	+	+
Bahamas	Nassau	BHS	1	077 28 W	25 03 N	3 m.	+	+	+	+	+	+
Bahrain	Bahrain-Muharraq	BHR	1	050 37 E	26 16 N	2 m.	+	+	+	+	+	+
Bangladesh	Dinajpur	BGD	2	088 41 E	25 39 N	37 m.	+	+	+	+	+	+
Bangladesh	Bogra	BGD	3	089 22 E	24 51 N	18 m.	+	+	+	+	+	+
Bangladesh	Mymensingh	BGD	4	090 26 E	24 43 N	19 m.	+	+	+	+	+	+
Bangladesh	Sylhet	BGD	5	091 53 E	24 54 N	34 m.	+	+	+	+	+	+
Bangladesh	Sirajganj	BGD	6	089 42 E	24 27 N	15 m.	+	+	+	+	+	+
Bangladesh	Srimangal	BGD	7	091 44 E	24 18 N	22 m.	+	+	+	+	+	+
Bangladesh	Dacca Tejgaon	BGD	8	090 23 E	23 46 N	8 m.	+	+	+	+	+	+

Country name	Station name	Code	Sn	Longitude	Latitude	Elevation	rd	tm	tx	vp	wn	rn
Bangladesh	Faridpur	BGD	9	089 51 E	23 36 N	8 m.	+	+	+	+	+	+
Bangladesh	Narayanganj	BGD	10	090 13 E	23 37 N	8 m.	+	+	+	+	+	+
Bangladesh	Comilla	BGD	11	091 11 E	23 26 N	9 m.	+	+	+	+	+	+
Bangladesh	Jessore	BGD	12	089 10 E	23 11 N	6 m.	+	+	+	+	+	+
Bangladesh	Khulna	BGD	13	089 32 E	22 47 N	3 m.	+	+	+	+	+	+
Bangladesh	Bakerganj-Barisal	BGD	14	090 22 E	22 45 N	4 m.	+	+	+	+	+	+
Bangladesh	Noakhali	BGD	15	091 07 E	22 51 N	10 m.	+	+	+	+	+	+
Bangladesh	Majjidcourt	BGD	16	091 06 E	22 52 N	5 m.	+	+	+	+	+	+
Bangladesh	Chittagong	BGD	17	091 49 E	21 21 N	34 m.	+	+	+	+	+	+
Bangladesh	Cox's Bazar	BGD	18	091 58 E	21 26 N	4 m.	+	+	+	+	+	+
Barbados	Bridgetown	BRB	1	059 36 W	13 08 N	55 m.	+	+	+	+	+	+
Belgium	Ostende	BEL	2	002 55 E	51 14 N	10 m.	+	+	+	+	+	+
Belgium	Uccle-Bruxelles	BEL	3	004 21 E	50 48 N	100 m.	+	+	+	+	+	+
Belgium	Botrange	BEL	4	006 06 E	50 30 N	694 m.	+	+	+	+	+	+
Belize	Belize	BLZ	1	088 10 W	17 29 N	5 m.	+	+	+	+	+	+
Benin	Kandi	BEN	1	002 56 E	11 08 N	292 m.	+	+	+	+	+	+
Benin	Natitingou	BEN	2	001 23 E	10 19 N	461 m.	+	+	+	+	+	+
Benin	Parakou	BEN	3	002 37 E	09 21 N	393 m.	+	+	+	+	+	+
Benin	Save	BEN	4	002 26 E	07 59 N	200 m.	+	+	+	+	+	+
Benin	Bohicon	BEN	5	002 04 E	07 10 N	167 m.	+	+	+	+	+	+
Benin	Cotonou	BEN	6	002 23 E	06 21 N	9 m.	+	+	+	+	+	+
Bermuda	Hamilton	BMU	1	064 46 W	32 17 N	46 m.	+	+	+	+	+	+
Bolivia	Guayaramerin	BOL	1	065 21 W	10 47 S	171 m.	+	+	+	+	+	+
Bolivia	Cobija	BOL	2	068 52 W	11 05 S	252 m.	+	+	+	+	+	+
Bolivia	Riberalta	BOL	3	066 07 W	11 01 S	135 m.	+	+	+	+	+	+
Bolivia	San Joaquin	BOL	4	064 40 W	13 04 S	140 m.	+	+	+	+	+	+
Bolivia	Magdalena	BOL	5	064 09 W	13 20 S	141 m.	+	+	+	+	+	+
Bolivia	Santa Ana	BOL	6	065 35 W	13 43 S	144 m.	+	+	+	+	+	+
Bolivia	Rurrenabaque	BOL	7	067 29 W	14 29 S	202 m.	+	+	+	+	+	+
Bolivia	Apolo	BOL	8	068 30 W	14 43 S	1383 m.	+	+	+	+	+	+
Bolivia	Trinidad	BOL	9	064 48 W	14 51 S	157 m.	+	+	+	+	+	+
Bolivia	San Borja	BOL	10	066 35 W	14 49 S	226 m.	+	+	+	+	+	+
Bolivia	El Belen	BOL	11	068 41 W	16 03 S	3820 m.	+	+	+	+	+	+
Bolivia	Concepcion	BOL	12	062 06 W	16 15 S	497 m.	+	+	+	+	+	+
Bolivia	Chulumani	BOL	13	067 30 W	16 22 S	1580 m.	+	+	+	+	+	+
Bolivia	La Paz-El Alto	BOL	14	068 11 W	16 31 S	4107 m.	+	+	+	+	+	+
Bolivia	La Paz Central	BOL	15	068 08 W	16 30 S	3632 m.	+	+	+	+	+	+
Bolivia	Todos Santos	BOL	16	065 08 W	16 48 S	300 m.	+	+	+	+	+	+
Bolivia	S. Ignacio Velasco	BOL	17	060 57 W	16 22 S	413 m.	+	+	+	+	+	+
Bolivia	San Juan	BOL	18	059 55 W	17 20 S	350 m.	+	+	+	+	+	+
Bolivia	Patacamaya	BOL	19	067 55 W	17 12 S	3789 m.	+	+	+	+	+	+
Bolivia	Cochabamba	BOL	20	066 06 W	17 27 S	2548 m.	+	+	+	+	+	+
Bolivia	Charana	BOL	21	069 27 W	17 35 S	4057 m.	+	+	+	+	+	+
Bolivia	Totoro	BOL	22	065 09 W	17 41 S	2789 m.	+	+	+	+	+	+
Bolivia	Oruro	BOL	23	067 06 W	17 58 S	3708 m.	+	+	+	+	+	+
Bolivia	Santa Cruz	BOL	24	063 10 W	17 48 S	414 m.	+	+	+	+	+	+
Bolivia	San Jose	BOL	25	060 45 W	17 50 S	284 m.	+	+	+	+	+	+
Bolivia	Porto Viehlo	BOL	26	063 03 W	18 42 S	300 m.	+	+	+	+	+	+
Bolivia	Robore	BOL	27	059 45 W	18 19 S	265 m.	+	+	+	+	+	+
Bolivia	Padilla	BOL	28	064 20 W	19 19 S	2130 m.	+	+	+	+	+	+
Bolivia	Sacre	BOL	29	065 17 W	19 03 S	2750 m.	+	+	+	+	+	+
Bolivia	Challapata	BOL	30	066 46 W	18 52 S	3720 m.	+	+	+	+	+	+
Bolivia	Puna	BOL	31	065 28 W	19 45 S	3420 m.	+	+	+	+	+	+
Bolivia	Camiri	BOL	32	063 34 W	20 03 S	810 m.	+	+	+	+	+	+
Bolivia	Oploca	BOL	33	065 46 W	21 19 S	3120 m.	+	+	+	+	+	+

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Bolivia	Tarija	BOL	34	064 43 W	21 32 S	1875 m.	+	+	+	+	+	+
Bolivia	Yacuiba	BOL	35	063 42 W	22 01 S	580 m.	+	+	+	+	+	+
Bolivia	Villazon	BOL	36	065 35 W	22 05 S	3460 m.	+	+	+	+	+	+
Botswana	Ghanzi	BWA	1	021 39 E	21 42 S	1131 m.	+	+	+	+	+	+
Botswana	Shakawe	BWA	2	021 51 E	18 22 S	1000 m.	+	+	+	+	+	+
Botswana	Maun	BWA	3	023 25 E	19 59 S	945 m.	+	+	+	+	+	+
Botswana	Francistown	BWA	4	027 30 E	21 13 S	1000 m.	+	+	+	+	+	+
Botswana	Mahalapye	BWA	5	028 48 E	23 05 S	1006 m.	+	+	+	+	+	+
Botswana	Tshane	BWA	6	021 53 E	24 01 S	1100 m.	+	+	+	+	+	+
Botswana	Gaberone	BWA	7	025 55 E	24 40 S	980 m.	+	+	+	+	+	+
Botswana	Tsabong	BWA	8	022 27 E	26 03 S	962 m.	+	+	+	+	+	+
Brazil	Oiapoque	BRA	1	051 50 W	03 50 N	39 m.	+	+	+	+	+	+
Brazil	Boa Vista	BRA	2	060 39 W	02 49 N	90 m.	+	+	+	+	+	+
Brazil	Iauarete	BRA	3	069 12 W	00 37 N	120 m.	+	+	+	+	+	+
Brazil	Macapa	BRA	4	051 03 W	00 02 N	15 m.	+	+	+	+	+	+
Brazil	Taracua	BRA	5	068 14 W	00 04 N	105 m.	+	+	+	+	+	+
Brazil	Uaupes	BRA	6	067 05 W	00 08 N	90 m.	+	+	+	+	+	+
Brazil	Barcelos	BRA	7	062 56 W	00 59 S	41 m.	+	+	+	+	+	+
Brazil	Soure	BRA	8	048 33 W	00 40 S	11 m.	+	+	+	+	+	+
Brazil	Belem	BRA	9	048 28 W	01 27 S	24 m.	+	+	+	+	+	+
Brazil	Turiacu	BRA	10	045 24 W	01 43 S	44 m.	+	+	+	+	+	+
Brazil	Fonte Boa	BRA	11	066 10 W	02 32 S	55 m.	+	+	+	+	+	+
Brazil	Parintins	BRA	12	056 44 W	02 38 S	30 m.	+	+	+	+	+	+
Brazil	Taperinha-Santarem	BRA	13	054 43 W	02 26 S	72 m.	+	+	+	+	+	+
Brazil	Sao Bento	BRA	14	044 42 W	02 40 S	10 m.	+	+	+	+	+	+
Brazil	Sao Luiz	BRA	15	044 17 W	02 32 S	51 m.	+	+	+	+	+	+
Brazil	Luis Correia	BRA	16	041 39 W	02 52 S	10 m.	+	+	+	+	+	+
Brazil	Manaus	BRA	17	060 01 W	03 08 S	72 m.	+	+	+	+	+	+
Brazil	Altamira	BRA	18	052 12 W	03 12 S	74 m.	+	+	+	+	+	+
Brazil	Clevelandia	BRA	19	051 49 W	03 48 S	1 m.	+	+	+	+	+	+
Brazil	Porto	BRA	20	042 42 W	03 53 S	32 m.	+	+	+	+	+	+
Brazil	Sobral	BRA	21	040 21 W	03 42 S	83 m.	+	+	+	+	+	+
Brazil	Fortaleza	BRA	22	038 33 W	03 44 S	19 m.	+	+	+	+	+	+
Brazil	Benjamin Constant	BRA	23	070 02 W	04 23 S	80 m.	+	+	+	+	+	+
Brazil	Carauari	BRA	24	066 54 W	04 57 S	81 m.	+	+	+	+	+	+
Brazil	Coari	BRA	25	063 05 W	04 05 S	48 m.	+	+	+	+	+	+
Brazil	Caxias	BRA	26	043 20 W	04 51 S	103 m.	+	+	+	+	+	+
Brazil	Barras	BRA	27	042 17 W	04 14 S	75 m.	+	+	+	+	+	+
Brazil	Paulistana	BRA	28	041 27 W	04 24 S	580 m.	+	+	+	+	+	+
Brazil	Guaramiranga	BRA	29	039 00 W	04 17 S	870 m.	+	+	+	+	+	+
Brazil	Quixada	BRA	30	039 00 W	04 57 S	179 m.	+	+	+	+	+	+
Brazil	Areia Branca	BRA	31	037 07 W	04 56 S	5 m.	+	+	+	+	+	+
Brazil	Manicore	BRA	32	061 18 W	05 49 S	50 m.	+	+	+	+	+	+
Brazil	Maraba	BRA	33	049 09 W	05 21 S	102 m.	+	+	+	+	+	+
Brazil	Imperatriz	BRA	34	047 35 W	05 34 S	123 m.	+	+	+	+	+	+
Brazil	Grajau	BRA	35	046 28 W	05 49 S	163 m.	+	+	+	+	+	+
Brazil	Barra Do Corda	BRA	36	045 16 W	05 30 S	153 m.	+	+	+	+	+	+
Brazil	Teresina	BRA	37	042 49 W	05 03 S	69 m.	+	+	+	+	+	+
Brazil	Quixeramobim	BRA	38	039 18 W	05 12 S	211 m.	+	+	+	+	+	+
Brazil	Caraubas	BRA	39	037 33 W	05 46 S	146 m.	+	+	+	+	+	+
Brazil	Angicos	BRA	40	036 35 W	05 39 S	109 m.	+	+	+	+	+	+
Brazil	Natal	BRA	41	035 15 W	05 55 S	49 m.	+	+	+	+	+	+
Brazil	Eirunepe	BRA	42	069 52 W	06 40 S	104 m.	+	+	+	+	+	+
Brazil	Tocantinopolis	BRA	43	047 25 W	06 18 S	131 m.	+	+	+	+	+	+
Brazil	Floriano	BRA	44	043 01 W	06 46 S	123 m.	+	+	+	+	+	+

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Brazil	Amarante	BRA	45	042 50 W	06 14 S	200 m.	+	+	+	+	+	+
Brazil	Iguatu	BRA	46	039 18 W	06 22 S	216 m.	+	+	+	+	+	+
Brazil	Alexandria	BRA	47	038 00 W	06 24 S	315 m.	+	+	+	+	+	+
Brazil	Caico	BRA	48	037 05 W	06 26 S	143 m.	+	+	+	+	+	+
Brazil	Santa Cruz	BRA	49	036 00 W	06 13 S	240 m.	+	+	+	+	+	+
Brazil	Guarabira	BRA	50	035 28 W	06 51 S	100 m.	+	+	+	+	+	+
Brazil	Cruzeiro Do Sul	BRA	51	072 40 W	07 38 S	170 m.	+	+	+	+	+	+
Brazil	Labrea	BRA	52	064 50 W	07 15 S	60 m.	+	+	+	+	+	+
Brazil	Humaita	BRA	53	063 00 W	07 31 S	50 m.	+	+	+	+	+	+
Brazil	Alto Tapajos	BRA	54	057 31 W	07 21 S	140 m.	+	+	+	+	+	+
Brazil	Sao Felix	BRA	55	052 10 W	07 00 S	100 m.	+	+	+	+	+	+
Brazil	Carolina	BRA	56	047 28 W	07 20 S	192 m.	+	+	+	+	+	+
Brazil	Simplicio Mendes	BRA	57	041 54 W	07 50 S	319 m.	+	+	+	+	+	+
Brazil	Jaicos	BRA	58	041 07 W	07 21 S	255 m.	+	+	+	+	+	+
Brazil	Araripina	BRA	59	040 34 W	07 32 S	620 m.	+	+	+	+	+	+
Brazil	Ouricuri	BRA	60	040 03 W	07 52 S	432 m.	+	+	+	+	+	+
Brazil	Afogados Da Ingá	BRA	61	037 38 W	07 44 S	525 m.	+	+	+	+	+	+
Brazil	Campina Grande	BRA	62	035 53 W	07 13 S	560 m.	+	+	+	+	+	+
Brazil	Joao Pessoa	BRA	63	034 52 W	07 06 S	7 m.	+	+	+	+	+	+
Brazil	Porto Velho	BRA	64	063 55 W	08 46 S	95 m.	+	+	+	+	+	+
Brazil	Conceicao Do Araguaia	BRA	65	049 12 W	08 15 S	160 m.	+	+	+	+	+	+
Brazil	Sao Joao Do Piaui	BRA	66	042 15 W	08 21 S	235 m.	+	+	+	+	+	+
Brazil	Floresta	BRA	67	038 34 W	08 34 S	317 m.	+	+	+	+	+	+
Brazil	Arcoverde	BRA	68	037 03 W	08 25 S	663 m.	+	+	+	+	+	+
Brazil	Belem Do S.francisco	BRA	69	038 57 W	08 45 S	305 m.	+	+	+	+	+	+
Brazil	Garanhuns	BRA	70	036 31 W	08 53 S	822 m.	+	+	+	+	+	+
Brazil	Barreiros	BRA	71	035 15 W	08 48 S	17 m.	+	+	+	+	+	+
Brazil	Caruaru	BRA	72	038 58 W	08 17 S	529 m.	+	+	+	+	+	+
Brazil	Olinda-Recife	BRA	73	034 51 W	08 01 S	57 m.	+	+	+	+	+	+
Brazil	Sena Madureira	BRA	74	068 40 W	09 08 S	135 m.	+	+	+	+	+	+
Brazil	Cachimbo	BRA	75	054 54 W	09 22 S	432 m.	+	+	+	+	+	+
Brazil	Bom Jesus	BRA	76	044 07 W	09 06 S	331 m.	+	+	+	+	+	+
Brazil	Remanso	BRA	77	042 06 W	09 38 S	400 m.	+	+	+	+	+	+
Brazil	Petrolina	BRA	78	040 29 W	09 23 S	370 m.	+	+	+	+	+	+
Brazil	Paulo Alfonso	BRA	79	038 13 W	09 24 S	249 m.	+	+	+	+	+	+
Brazil	Bom Conselho	BRA	80	036 40 W	09 09 S	654 m.	+	+	+	+	+	+
Brazil	Maceio	BRA	81	035 42 W	09 40 S	43 m.	+	+	+	+	+	+
Brazil	Porto Nacional	BRA	82	048 43 W	10 31 S	250 m.	+	+	+	+	+	+
Brazil	Central Plateau	BRA	83	051 00 W	11 30 S	304 m.	+	+	+	+	+	+
Brazil	Rondonia	BRA	84	062 00 W	11 00 S	130 m.	+	+	+	+	+	+
Brazil	Staita-Ibipetuba	BRA	85	044 31 W	11 01 S	434 m.	+	+	+	+	+	+
Brazil	Monte Santo	BRA	86	039 18 W	10 26 S	464 m.	+	+	+	+	+	+
Brazil	Aracaju	BRA	87	037 03 W	10 55 S	6 m.	+	+	+	+	+	+
Brazil	Propria	BRA	88	036 52 W	10 12 S	19 m.	+	+	+	+	+	+
Brazil	Barra	BRA	89	043 10 W	11 05 S	403 m.	+	+	+	+	+	+
Brazil	Morro Do Chapeu	BRA	90	041 09 W	11 33 S	1005 m.	+	+	+	+	+	+
Brazil	Jacobina	BRA	91	040 28 W	11 11 S	484 m.	+	+	+	+	+	+
Brazil	Vilhena	BRA	92	060 08 W	12 44 S	650 m.	+	+	+	+	+	+
Brazil	Rio Xingu	BRA	93	053 24 W	12 00 S	300 m.	+	+	+	+	+	+
Brazil	Parana	BRA	94	047 47 W	12 33 S	275 m.	+	+	+	+	+	+
Brazil	Taguatinga	BRA	95	046 26 W	12 16 S	660 m.	+	+	+	+	+	+
Brazil	Barreiras	BRA	96	045 00 W	12 09 S	440 m.	+	+	+	+	+	+
Brazil	Rio Branco	BRA	97	043 12 W	12 40 S	420 m.	+	+	+	+	+	+
Brazil	Paratinga	BRA	98	043 10 W	12 40 S	421 m.	+	+	+	+	+	+
Brazil	Salvador	BRA	99	038 20 W	12 54 S	6 m.	+	+	+	+	+	+

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Brazil	Utariiti	BRA 100	058 17 W	13 02 S	385 m.	+	+	+	+	+	+
Brazil	Vera	BRA 101	056 30 W	12 12 S	415 m.	+	+	+	+	+	+
Brazil	Caetite	BRA 102	042 37 W	14 03 S	882 m.	+	+	+	+	+	+
Brazil	Ilheus	BRA 103	039 04 W	14 48 S	60 m.	+	+	+	+	+	+
Brazil	Engenho De Dentro	BRA 104	056 21 W	15 09 S	153 m.	+	+	+	+	+	+
Brazil	Cuiaba	BRA 105	056 07 W	15 35 S	179 m.	+	+	+	+	+	+
Brazil	Presidente Murtinho	BRA 106	053 54 W	15 37 S	551 m.	+	+	+	+	+	+
Brazil	Meruri Santa Cruz	BRA 107	052 45 W	15 43 S	416 m.	+	+	+	+	+	+
Brazil	Goias	BRA 108	050 08 W	15 55 S	495 m.	+	+	+	+	+	+
Brazil	Pirenopolis	BRA 109	048 58 W	15 51 S	730 m.	+	+	+	+	+	+
Brazil	Formosa	BRA 110	047 20 W	15 32 S	912 m.	+	+	+	+	+	+
Brazil	Sao Francisco	BRA 111	044 51 W	15 57 S	439 m.	+	+	+	+	+	+
Brazil	Januaria	BRA 112	044 22 W	15 26 S	473 m.	+	+	+	+	+	+
Brazil	Monte Azul	BRA 113	042 53 W	15 09 S	605 m.	+	+	+	+	+	+
Brazil	Pedra Azul	BRA 114	041 17 W	16 00 S	649 m.	+	+	+	+	+	+
Brazil	Caceres	BRA 115	057 41 W	16 03 S	118 m.	+	+	+	+	+	+
Brazil	Goiania	BRA 116	049 17 W	16 41 S	729 m.	+	+	+	+	+	+
Brazil	Luziana	BRA 117	047 55 W	16 15 S	957 m.	+	+	+	+	+	+
Brazil	Montes Claros	BRA 118	043 52 W	16 43 S	647 m.	+	+	+	+	+	+
Brazil	Grao Mogol	BRA 119	042 55 W	16 33 S	930 m.	+	+	+	+	+	+
Brazil	Aracuai	BRA 120	041 59 W	16 51 S	284 m.	+	+	+	+	+	+
Brazil	Almenara	BRA 121	040 41 W	16 10 S	183 m.	+	+	+	+	+	+
Brazil	Paracatu	BRA 122	046 53 W	17 13 S	712 m.	+	+	+	+	+	+
Brazil	Pirapora	BRA 123	044 57 W	17 21 S	505 m.	+	+	+	+	+	+
Brazil	Teofilo Otoni	BRA 124	041 30 W	17 51 S	356 m.	+	+	+	+	+	+
Brazil	Caravelas	BRA 125	039 15 W	17 44 S	4 m.	+	+	+	+	+	+
Brazil	Monte Alegre Minas	BRA 126	048 51 W	18 51 S	755 m.	+	+	+	+	+	+
Brazil	Catalao	BRA 127	047 58 W	18 10 S	857 m.	+	+	+	+	+	+
Brazil	Curvelo	BRA 128	044 26 W	18 46 S	616 m.	+	+	+	+	+	+
Brazil	Diamantina	BRA 129	043 36 W	18 14 S	1297 m.	+	+	+	+	+	+
Brazil	Conceicao Barra	BRA 130	039 39 W	18 36 S	3 m.	+	+	+	+	+	+
Brazil	Corumba	BRA 131	057 39 W	19 00 S	130 m.	+	+	+	+	+	+
Brazil	Conc. Do Mato Dentro	BRA 132	043 25 W	19 01 S	674 m.	+	+	+	+	+	+
Brazil	Frutal	BRA 133	048 56 W	20 02 S	543 m.	+	+	+	+	+	+
Brazil	Uberaba	BRA 134	047 55 W	19 45 S	743 m.	+	+	+	+	+	+
Brazil	Araxa	BRA 135	046 56 W	19 34 S	1004 m.	+	+	+	+	+	+
Brazil	Itabira	BRA 136	043 12 W	19 36 S	825 m.	+	+	+	+	+	+
Brazil	Belo Horizonte	BRA 137	043 56 W	19 50 S	850 m.	+	+	+	+	+	+
Brazil	Caratinga	BRA 138	042 09 W	19 48 S	609 m.	+	+	+	+	+	+
Brazil	Aquidauna	BRA 139	055 48 W	20 27 S	151 m.	+	+	+	+	+	+
Brazil	Campo Grande	BRA 140	054 40 W	20 28 S	560 m.	+	+	+	+	+	+
Brazil	Tres Lagoas	BRA 141	051 38 W	20 47 S	312 m.	+	+	+	+	+	+
Brazil	Franca	BRA 142	047 26 W	20 33 S	1026 m.	+	+	+	+	+	+
Brazil	Ouro Preto	BRA 143	043 28 W	20 22 S	1109 m.	+	+	+	+	+	+
Brazil	Vitoria	BRA 144	040 20 W	20 19 S	36 m.	+	+	+	+	+	+
Brazil	Ribeirao Preto	BRA 145	047 43 W	21 11 S	621 m.	+	+	+	+	+	+
Brazil	Pocos De Caldas	BRA 146	046 33 W	21 46 S	1188 m.	+	+	+	+	+	+
Brazil	Tres Coracoes	BRA 147	045 15 W	21 42 S	892 m.	+	+	+	+	+	+
Brazil	Itajuba	BRA 148	045 27 W	22 15 S	839 m.	+	+	+	+	+	+
Brazil	Lavras	BRA 149	045 00 W	21 14 S	910 m.	+	+	+	+	+	+
Brazil	Barbacena	BRA 150	043 46 W	21 15 S	1171 m.	+	+	+	+	+	+
Brazil	Muriae	BRA 151	042 21 W	21 07 S	239 m.	+	+	+	+	+	+
Brazil	Santos Dumont	BRA 152	043 33 W	21 27 S	907 m.	+	+	+	+	+	+
Brazil	Leopoldina	BRA 153	042 37 W	21 31 S	267 m.	+	+	+	+	+	+
Brazil	Carmo	BRA 154	042 36 W	21 54 S	340 m.	+	+	+	+	+	+

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Brazil	Itaperuna	BRA 155	041 53 W	21 12 S	123 m.	+	+	+	+	+	+
Brazil	Campos	BRA 156	041 20 W	21 45 S	11 m.	+	+	+	+	+	+
Brazil	Barra Itabapoana	BRA 157	040 58 W	21 18 S	3 m.	+	+	+	+	+	+
Brazil	Bela Vista	BRA 158	055 37 W	22 31 S	649 m.	+	+	+	+	+	+
Brazil	Ponta Pora	BRA 159	055 44 W	22 32 S	650 m.	+	+	+	+	+	+
Brazil	Bangu	BRA 160	043 27 W	22 51 S	39 m.	+	+	+	+	+	+
Brazil	Bauru	BRA 161	049 04 W	22 19 S	590 m.	+	+	+	+	+	+
Brazil	Piracicaba	BRA 162	047 37 W	22 42 S	555 m.	+	+	+	+	+	+
Brazil	Campinas	BRA 163	047 05 W	22 54 S	669 m.	+	+	+	+	+	+
Brazil	Sao Lourenco	BRA 164	045 01 W	22 06 S	900 m.	+	+	+	+	+	+
Brazil	Bandeirantes	BRA 165	044 27 W	22 36 S	531 m.	+	+	+	+	+	+
Brazil	Nova Friburgo	BRA 166	042 32 W	22 17 S	856 m.	+	+	+	+	+	+
Brazil	Rio De Janeiro	BRA 167	043 10 W	22 54 S	31 m.	+	+	+	+	+	+
Brazil	Macae	BRA 168	041 48 W	22 21 S	2 m.	+	+	+	+	+	+
Brazil	Umuarama	BRA 169	053 16 W	23 43 S	480 m.	+	+	+	+	+	+
Brazil	Londrina	BRA 170	051 11 W	23 23 S	566 m.	+	+	+	+	+	+
Brazil	Maringa	BRA 171	051 57 W	23 25 S	542 m.	+	+	+	+	+	+
Brazil	Avare	BRA 172	048 55 W	23 06 S	793 m.	+	+	+	+	+	+
Brazil	Guaira	BRA 173	054 15 W	24 05 S	231 m.	+	+	+	+	+	+
Brazil	Sao Paulo	BRA 174	046 37 W	23 30 S	795 m.	+	+	+	+	+	+
Brazil	Santos	BRA 175	046 20 W	23 56 S	16 m.	+	+	+	+	+	+
Brazil	Ivai	BRA 176	050 50 W	24 24 S	808 m.	+	+	+	+	+	+
Brazil	Castro	BRA 177	050 00 W	24 47 S	1009 m.	+	+	+	+	+	+
Brazil	Jaguariaiva	BRA 178	049 42 W	24 15 S	923 m.	+	+	+	+	+	+
Brazil	Iguape	BRA 179	047 33 W	24 43 S	3 m.	+	+	+	+	+	+
Brazil	Quedas Do Iguacu	BRA 180	053 00 W	25 30 S	514 m.	+	+	+	+	+	+
Brazil	Cascavel	BRA 181	053 25 W	24 55 S	760 m.	+	+	+	+	+	+
Brazil	Guarapuava	BRA 182	051 30 W	25 54 S	1024 m.	+	+	+	+	+	+
Brazil	Irati	BRA 183	050 38 W	25 28 S	837 m.	+	+	+	+	+	+
Brazil	Ponta Grossa	BRA 184	050 10 W	25 06 S	868 m.	+	+	+	+	+	+
Brazil	Rio Negro	BRA 185	049 29 W	25 09 S	892 m.	+	+	+	+	+	+
Brazil	Curitiba	BRA 186	049 16 W	25 26 S	923 m.	+	+	+	+	+	+
Brazil	Paranagua	BRA 187	048 31 W	25 31 S	4 m.	+	+	+	+	+	+
Brazil	Xanxere	BRA 188	052 24 W	26 51 S	790 m.	+	+	+	+	+	+
Brazil	Blumenau	BRA 189	049 03 W	26 54 S	14 m.	+	+	+	+	+	+
Brazil	Lages	BRA 190	050 20 W	27 49 S	937 m.	+	+	+	+	+	+
Brazil	Brusque	BRA 191	048 56 W	27 06 S	24 m.	+	+	+	+	+	+
Brazil	Florianopolis	BRA 192	048 28 W	27 34 S	2 m.	+	+	+	+	+	+
Brazil	Sao Luis Gonzaga	BRA 193	055 01 W	28 24 S	260 m.	+	+	+	+	+	+
Brazil	Cruz Alta	BRA 194	053 37 W	28 38 S	464 m.	+	+	+	+	+	+
Brazil	Passo Fundo	BRA 195	052 24 W	28 15 S	684 m.	+	+	+	+	+	+
Brazil	Uruguiana	BRA 196	057 05 W	29 45 S	62 m.	+	+	+	+	+	+
Brazil	Alegrete	BRA 197	055 31 W	29 41 S	121 m.	+	+	+	+	+	+
Brazil	Santa Maria	BRA 198	053 42 W	29 42 S	95 m.	+	+	+	+	+	+
Brazil	Caxias Do Sul	BRA 199	051 12 W	29 10 S	759 m.	+	+	+	+	+	+
Brazil	Encruzilhada Do Sul	BRA 200	052 31 W	30 32 S	428 m.	+	+	+	+	+	+
Brazil	Porto Alegre	BRA 201	051 13 W	30 01 S	47 m.	+	+	+	+	+	+
Brazil	Bage	BRA 202	054-06 W	31 20 S	217 m.	+	+	+	+	+	+
Brazil	Pelotas	BRA 203	052 21 W	31 52 S	13 m.	+	+	+	+	+	+
Brazil	S. Vitoria Do Palmar	BRA 204	053 21 W	33 31 S	24 m.	+	+	+	+	+	+
British Virgin Islands	Paraquito B. Tortola	VGB 1	064 35 W	18 25 N	15 m.	+	+	+	+	+	+
Burkina Faso	Dori	BFA 1	000 03 W	14 02 N	277 m.	+	+	+	+	+	+
Burkina Faso	Ouahigouya	BFA 2	002 26 W	13 35 N	324 m.	+	+	+	+	+	+
Burkina Faso	Ouagadougou	BFA 3	001 31 W	12 21 N	306 m.	+	+	+	+	+	+
Burkina Faso	Fada N'gourma	BFA 4	000 21 E	12 04 N	309 m.	+	+	+	+	+	+

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Burkina Faso	Bobo-Dioulasso	BFA	5	004 18 W	11 10 N	460 m.	+	+	+	+	+	+
Burkina Faso	Boromo	BFA	6	002 55 W	11 40 N	271 m.	+	+	+	+	+	+
Burkina Faso	Gaoua	BFA	7	003 11 W	10 20 N	335 m.	+	+	+	+	+	+
Burma	Putao	BUR	1	097 25 E	27 20 N	409 m.	+	+	+	+	+	+
Burma	Myitkyna	BUR	2	097 24 E	25 22 N	145 m.	+	+	+	+	+	+
Burma	Katha	BUR	3	096 20 E	24 10 N	113 m.	+	+	+	+	+	+
Burma	Bhamo	BUR	4	097 12 E	24 16 N	111 m.	+	+	+	+	+	+
Burma	Falam	BUR	5	093 41 E	22 55 N	1372 m.	+	+	+	+	+	+
Burma	Lashio	BUR	6	097 45 E	22 56 N	747 m.	+	+	+	+	+	+
Burma	Monywa	BUR	7	095 08 E	22 06 N	81 m.	+	+	+	+	+	+
Burma	Mandalay	BUR	8	096 06 E	21 59 N	74 m.	+	+	+	+	+	+
Burma	Maymyo	BUR	9	096 28 E	22 01 N	1078 m.	+	+	+	+	+	+
Burma	Meiktila	BUR	10	095 50 E	20 50 N	214 m.	+	+	+	+	+	+
Burma	Taunggyi	BUR	11	097 03 E	20 47 N	1436 m.	+	+	+	+	+	+
Burma	Sittwe-Akyab	BUR	12	092 53 E	20 08 N	4 m.	+	+	+	+	+	+
Burma	Minbu	BUR	13	094 53 E	20 10 N	51 m.	+	+	+	+	+	+
Burma	Yamethin	BUR	14	096 09 E	20 25 N	199 m.	+	+	+	+	+	+
Burma	Kyaukpyu	BUR	15	093 33 E	19 25 N	5 m.	+	+	+	+	+	+
Burma	Pyinmana	BUR	16	096 13 E	19 43 N	101 m.	+	+	+	+	+	+
Burma	Loikaw	BUR	17	097 13 E	19 41 N	895 m.	+	+	+	+	+	+
Burma	Prome	BUR	18	095 13 E	18 48 N	58 m.	+	+	+	+	+	+
Burma	Toungoo	BUR	19	096 28 E	18 55 N	47 m.	+	+	+	+	+	+
Burma	Sandoway	BUR	20	094 21 E	18 28 N	9 m.	+	+	+	+	+	+
Burma	Henzada	BUR	21	095 25 E	17 40 N	26 m.	+	+	+	+	+	+
Burma	Tharrawady	BUR	22	095 48 E	17 38 N	15 m.	+	+	+	+	+	+
Burma	Hmawbi	BUR	23	096 04 E	17 06 N	28 m.	+	+	+	+	+	+
Burma	Pegu	BUR	24	096 30 E	17 20 N	15 m.	+	+	+	+	+	+
Burma	Bassein	BUR	25	094 46 E	16 46 N	9 m.	+	+	+	+	+	+
Burma	Maubin	BUR	26	095 39 E	16 44 N	3 m.	+	+	+	+	+	+
Burma	Rangoon-Mingaladon	BUR	27	096 11 E	16 54 N	28 m.	+	+	+	+	+	+
Burma	Rangoon-Kaba.aye	BUR	28	096 10 E	16 46 N	14 m.	+	+	+	+	+	+
Burma	Pa-An	BUR	29	097 40 E	16 45 N	9 m.	+	+	+	+	+	+
Burma	Moulmein	BUR	30	097 37 E	16 30 N	21 m.	+	+	+	+	+	+
Burma	Kyaikkami-Amherst	BUR	31	097 30 E	16 04 N	5 m.	+	+	+	+	+	+
Burma	Tavoy	BUR	32	098 13 E	14 06 N	16 m.	+	+	+	+	+	+
Burma	Mergui	BUR	33	098 36 E	12 26 N	36 m.	+	+	+	+	+	+
Burma	Victoria Point	BUR	34	098 35 E	09 58 N	46 m.	+	+	+	+	+	+
Burundi	Bujumbura	BDI	1	029 21 E	03 23 S	783 m.	+	+	+	+	+	+
Burundi	Kisozi-Colline	BDI	2	029 41 E	03 33 S	2155 m.	+	+	+	+	+	+
Burundi	Luvironza	BDI	3	030 00 E	03 43 S	1850 m.	+	+	+	+	+	+
Burundi	Musasa-Plateau	BDI	4	030 21 E	03 39 S	1260 m.	+	+	+	+	+	+
Cameroon	Maroua	CMR	1	014 15 E	10 27 N	422 m.	+	+	+	+	+	+
Cameroon	Kaele	CMR	2	014 27 E	10 05 N	389 m.	+	+	+	+	+	+
Cameroon	Garoua	CMR	3	013 23 E	09 20 N	244 m.	+	+	+	+	+	+
Cameroon	Ngaoundere	CMR	4	013 34 E	07 21 N	1104 m.	+	+	+	+	+	+
Cameroon	Koundja	CMR	5	010 45 E	05 39 N	1210 m.	+	+	+	+	+	+
Cameroon	Douala	CMR	6	009 44 E	04 00 N	9 m.	+	+	+	+	+	+
Cameroon	Batouri	CMR	7	014 22 E	04 28 N	656 m.	+	+	+	+	+	+
Cameroon	Yaounde	CMR	8	011 31 E	03 50 N	760 m.	+	+	+	+	+	+
Cameroon	Lomie	CMR	9	013 37 E	03 09 N	624 m.	+	+	+	+	+	+
Cameroon	Kribi	CMR	10	009 54 E	02 57 N	16 m.	+	+	+	+	+	+
Cape Verde	Ponta Do Sol S.antao	CPV	1	025 06 W	17 12 N	16 m.	+	+	+	+	+	+
Cape Verde	Mindelo S. Vincente	CPV	2	025 00 W	16 53 N	2 m.	+	+	+	+	+	+
Cape Verde	Praia Sao Tiago	CPV	3	023 31 W	14 54 N	27 m.	+	+	+	+	+	+
Cayman Islands	West Bay-Grand C.	CYM	1	081 24 W	19 22 N	20 m.	+	+	+	+	+	+

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Centr. Afr. Republic	Berberati	CAF	1	015 48 E	04 15 N	583 m.	+	+	+	+	+	+
Centr. Afr. Republic	Bouar	CAF	2	015 38 E	05 58 N	1020 m.	+	+	+	+	+	+
Centr. Afr. Republic	Bossangoa	CAF	3	017 26 E	06 29 N	465 m.	+	+	+	+	+	+
Centr. Afr. Republic	Bangui	CAF	4	018 31 E	04 24 N	366 m.	+	+	+	+	+	+
Centr. Afr. Republic	N'dele	CAF	5	020 39 E	08 24 N	510 m.	+	+	+	+	+	+
Centr. Afr. Republic	Bria	CAF	6	021 59 E	06 32 N	584 m.	+	+	+	+	+	+
Centr. Afr. Republic	Bangassou	CAF	7	022 50 E	04 44 N	500 m.	+	+	+	+	+	+
Centr. Afr. Republic	Birao	CAF	8	022 47 E	10 17 N	464 m.	+	+	+	+	+	+
Centr. Afr. Republic	Bambari	CAF	9	020 39 E	05 51 N	475 m.	+	+	+	+	+	+
Chad	N'djamena	TCD	1	015 02 E	12 08 N	295 m.	+	+	+	+	+	+
Chad	Bol	TCD	2	014 44 E	13 26 N	291 m.	+	+	+	+	+	+
Chad	Boussou	TCD	3	016 43 E	10 29 N	336 m.	+	+	+	+	+	+
Chad	Moundou	TCD	4	016 04 E	08 37 N	422 m.	+	+	+	+	+	+
Chad	Bokoro	TCD	5	017 03 E	12 23 N	301 m.	+	+	+	+	+	+
Chad	Pala	TCD	6	014 55 E	09 22 N	455 m.	+	+	+	+	+	+
Chad	Sarh	TCD	7	018 23 E	09 09 N	365 m.	+	+	+	+	+	+
Chad	Ati	TCD	8	018 19 E	13 13 N	334 m.	+	+	+	+	+	+
Chad	Faya-Largeau	TCD	9	019 10 E	18 00 N	234 m.	+	+	+	+	+	+
Chad	Am Timan	TCD	10	020 17 E	11 02 N	436 m.	+	+	+	+	+	+
Chad	Abeche	TCD	11	020 51 E	13 51 N	549 m.	+	+	+	+	+	+
Chad	Mongo	TCD	12	018 41 E	12 11 N	428 m.	+	+	+	+	+	+
Chile	Arica	CHL	1	070 19 W	18 29 S	100 m.	+	+	+	+	+	+
Chile	Iquique	CHL	2	070 05 W	20 10 S	5 m.	+	+	+	+	+	+
Chile	Antofagasta	CHL	3	070 26 W	23 26 S	137 m.	+	+	+	+	+	+
Chile	Refresco	CHL	4	069 52 W	25 19 S	1850 m.	+	+	+	+	+	+
Chile	Potrerillos	CHL	5	069 27 W	26 30 S	2850 m.	+	+	+	+	+	+
Chile	Caldera	CHL	6	070 51 W	27 03 S	14 m.	+	+	+	+	+	+
Chile	Mataveri-Pascua Is	CHL	7	109 26 W	27 10 S	41 m.	+	+	+	+	+	+
Chile	La Serena	CHL	8	071 15 W	29 54 S	169 m.	+	+	+	+	+	+
Chile	Los Andes	CHL	9	070 37 W	32 50 S	816 m.	+	+	+	+	+	+
Chile	Quillota	CHL	10	071 16 W	32 53 S	120 m.	+	+	+	+	+	+
Chile	Valparaiso-P.angeles	CHL	11	071 38 W	33 02 S	41 m.	+	+	+	+	+	+
Chile	Santiago	CHL	12	070 42 W	33 27 S	520 m.	+	+	+	+	+	+
Chile	La Platina	CHL	13	070 37 W	33 33 S	625 m.	+	+	+	+	+	+
Chile	Isla Juan Fernandez	CHL	14	078 49 W	33 37 S	6 m.	+	+	+	+	+	+
Chile	El Teniente	CHL	15	070 22 W	34 06 S	2134 m.	+	+	+	+	+	+
Chile	San Fernando	CHL	16	071 00 W	34 35 S	350 m.	+	+	+	+	+	+
Chile	Talca	CHL	17	071 40 W	35 26 S	97 m.	+	+	+	+	+	+
Chile	Punta Tumbes	CHL	18	073 06 W	36 37 S	120 m.	+	+	+	+	+	+
Chile	Concepcion	CHL	19	073 03 W	39 49 S	15 m.	+	+	+	+	+	+
Chile	Contulmo	CHL	20	073 13 W	38 02 S	30 m.	+	+	+	+	+	+
Chile	Traiguen	CHL	21	072 40 W	38 15 S	177 m.	+	+	+	+	+	+
Chile	Lonquimay	CHL	22	071 15 W	38 26 S	900 m.	+	+	+	+	+	+
Chile	Temuco	CHL	23	072 39 W	38 46 S	114 m.	+	+	+	+	+	+
Chile	Valdivia	CHL	24	073 04 W	39 41 S	53 m.	+	+	+	+	+	+
Chile	Puerto Montt	CHL	25	072 56 W	41 28 S	110 m.	+	+	+	+	+	+
Chile	Punta Corona	CHL	26	073 52 W	41 47 S	56 m.	+	+	+	+	+	+
Chile	Isla De Guafo	CHL	27	074 45 W	43 34 S	140 m.	+	+	+	+	+	+
Chile	Puerto Aysen	CHL	28	072 42 W	45 24 S	10 m.	+	+	+	+	+	+
Chile	Caboaper	CHL	29	075 35 W	46 50 S	40 m.	+	+	+	+	+	+
Chile	Isla San Pedro	CHL	30	074 55 W	47 43 S	22 m.	+	+	+	+	+	+
Chile	Puerto Bories	CHL	31	072 31 W	51 42 S	22 m.	+	+	+	+	+	+
Chile	Punta Dungeness	CHL	32	068 26 W	52 24 S	5 m.	+	+	+	+	+	+
Chile	Is. Evangelistas	CHL	33	075 06 W	52 24 S	52 m.	+	+	+	+	+	+
Chile	Punta Arenas	CHL	34	070 51 W	53 02 S	33 m.	+	+	+	+	+	+

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Chile	Cabo San Isidro	CHL	35	070 58 W	53 47 S	20 m.	+	+	+	+	+	+
China	Mohe	CHN	2	122 22 E	53 28 N	297 m.	+	+	+	+	+	+
China	Huma	CHN	3	126 39 E	51 43 N	177 m.	+	+	+	+	+	+
China	Hailar	CHN	4	119 45 E	49 13 N	613 m.	+	+	+	+	+	+
China	Nenjiang	CHN	5	125 14 E	49 10 N	243 m.	+	+	+	+	+	+
China	Bugt-Pokotu	CHN	6	121 55 E	48 46 N	739 m.	+	+	+	+	+	+
China	Keshan	CHN	7	125 53 E	48 03 N	237 m.	+	+	+	+	+	+
China	Arxan	CHN	8	119 57 E	47 10 N	1028 m.	+	+	+	+	+	+
China	Qiqihar	CHN	9	123 55 E	47 23 N	146 m.	+	+	+	+	+	+
China	Hailun	CHN	10	126 58 E	47 26 N	240 m.	+	+	+	+	+	+
China	Fujin	CHN	11	131 59 E	47 14 N	65 m.	+	+	+	+	+	+
China	Qian Gorlos	CHN	12	124 50 E	45 07 N	138 m.	+	+	+	+	+	+
China	Harbin	CHN	13	126 46 E	45 45 N	143 m.	+	+	+	+	+	+
China	Tonghe	CHN	14	128 44 E	45 58 N	110 m.	+	+	+	+	+	+
China	Jixi	CHN	15	130 57 E	45 17 N	233 m.	+	+	+	+	+	+
China	Fuyun	CHN	16	089 31 E	46 59 N	827 m.	+	+	+	+	+	+
China	Hoboksar	CHN	17	085 43 E	46 47 N	1294 m.	+	+	+	+	+	+
China	Jinghe	CHN	18	082 54 E	44 37 N	321 m.	+	+	+	+	+	+
China	Yining	CHN	19	081 20 E	43 57 N	663 m.	+	+	+	+	+	+
China	Urumqi	CHN	20	087 37 E	43 47 N	919 m.	+	+	+	+	+	+
China	Turpan	CHN	21	089 12 E	42 56 N	37 m.	+	+	+	+	+	+
China	Kuqa	CHN	22	082 57 E	41 43 N	1100 m.	+	+	+	+	+	+
China	Kashi	CHN	23	075 59 E	39 28 N	1291 m.	+	+	+	+	+	+
China	Ruoqiang	CHN	24	088 10 E	39 02 N	889 m.	+	+	+	+	+	+
China	Hotan	CHN	25	079 56 E	37 08 N	1375 m.	+	+	+	+	+	+
China	Hami	CHN	26	093 31 E	42 49 N	739 m.	+	+	+	+	+	+
China	Ejin Qi	CHN	27	101 04 E	41 57 N	941 m.	+	+	+	+	+	+
China	Dunhuang	CHN	28	094 41 E	40 09 N	1140 m.	+	+	+	+	+	+
China	Jiuquan	CHN	29	098 29 E	39 46 N	1478 m.	+	+	+	+	+	+
China	Minqin	CHN	30	103 05 E	38 38 N	1367 m.	+	+	+	+	+	+
China	Dulan	CHN	31	098 06 E	36 18 N	3192 m.	+	+	+	+	+	+
China	Lanzhou	CHN	32	103 53 E	36 03 N	1518 m.	+	+	+	+	+	+
China	Erenhot	CHN	33	112 00 E	43 39 N	966 m.	+	+	+	+	+	+
China	Jurh	CHN	34	112 54 E	42 24 N	1151 m.	+	+	+	+	+	+
China	Haliut	CHN	35	108 31 E	41 34 N	1290 m.	+	+	+	+	+	+
China	Huhhot	CHN	36	111 41 E	40 49 N	1063 m.	+	+	+	+	+	+
China	Datong	CHN	37	113 20 E	40 06 N	1068 m.	+	+	+	+	+	+
China	Jartai	CHN	38	105 45 E	39 47 N	1033 m.	+	+	+	+	+	+
China	Yu xian	CHN	39	114 34 E	39 50 N	910 m.	+	+	+	+	+	+
China	Yinchuan	CHN	40	106 13 E	38 29 N	1112 m.	+	+	+	+	+	+
China	Yulin	CHN	41	109 42 E	38 14 N	1058 m.	+	+	+	+	+	+
China	Yuanping	CHN	42	112 42 E	38 45 N	838 m.	+	+	+	+	+	+
China	Shijiazhuang	CHN	43	114 25 E	38 02 N	81 m.	+	+	+	+	+	+
China	Yanchi	CHN	44	107 24 E	37 47 N	1349 m.	+	+	+	+	+	+
China	Mizhi	CHN	45	110 10 E	37 41 N	872 m.	+	+	+	+	+	+
China	Taiyuan	CHN	46	112 33 E	37 47 N	778 m.	+	+	+	+	+	+
China	Xingtai	CHN	47	114 30 E	37 04 N	78 m.	+	+	+	+	+	+
China	Gulon	CHN	48	114 59 E	37 14 N	31 m.	+	+	+	+	+	+
China	Yan'an	CHN	49	109 30 E	36 36 N	958 m.	+	+	+	+	+	+
China	Handan	CHN	50	114 30 E	36 36 N	57 m.	+	+	+	+	+	+
China	Quzhou	CHN	51	114 56 E	36 45 N	39 m.	+	+	+	+	+	+
China	Jiexiu	CHN	52	111 56 E	37 03 N	750 m.	+	+	+	+	+	+
China	Qianghe	CHN	53	115 32 E	37 05 N	31 m.	+	+	+	+	+	+
China	Pingliang	CHN	54	106 40 E	35 33 N	1348 m.	+	+	+	+	+	+
China	Xi Ujimqin Qi	CHN	55	117 36 E	44 35 N	997 m.	+	+	+	+	+	+

Country name	Station name	Code Sn	Longitude	Latitude	Elevation	rd	tm	tx	vp	wn	rn
China	Jarud Qi	CHN 56	120 54 E	44 34 N	266 m.	+	+	+	+	+	+
China	Mudanjiang	CHN 57	129 36 E	44 34 N	241 m.	+	+	+	+	+	+
China	Xilin Hot	CHN 58	116 04 E	43 57 N	990 m.	+	+	+	+	+	+
China	Linxi	CHN 59	118 04 E	43 36 N	800 m.	+	+	+	+	+	+
China	Tongliao	CHN 60	122 16 E	43 36 N	179 m.	+	+	+	+	+	+
China	Siping	CHN 61	124 20 E	43 11 N	164 m.	+	+	+	+	+	+
China	Changchun	CHN 62	125 13 E	43 54 N	238 m.	+	+	+	+	+	+
China	Duolun	CHN 63	116 28 E	42 11 N	1247 m.	+	+	+	+	+	+
China	Chifeng	CHN 64	118 58 E	42 16 N	572 m.	+	+	+	+	+	+
China	Weichang	CHN 65	117 45 E	41 56 N	842 m.	+	+	+	+	+	+
China	Jinzhou	CHN 66	121 07 E	41 08 N	70 m.	+	+	+	+	+	+
China	Shenyang	CHN 67	123 26 E	41 46 N	43 m.	+	+	+	+	+	+
China	Linjiang	CHN 68	126 55 E	41 43 N	333 m.	+	+	+	+	+	+
China	Zhangjiakou	CHN 69	114 53 E	40 47 N	724 m.	+	+	+	+	+	+
China	Chengde	CHN 70	117 56 E	40 58 N	375 m.	+	+	+	+	+	+
China	Yingkou	CHN 71	122 12 E	40 40 N	4 m.	+	+	+	+	+	+
China	Beijing	CHN 72	116 17 E	39 56 N	55 m.	+	+	+	+	+	+
China	Tianjin	CHN 73	117 10 E	39 06 N	3 m.	+	+	+	+	+	+
China	Tangshan	CHN 74	118 09 E	39 40 N	29 m.	+	+	+	+	+	+
China	Baoting	CHN 75	115 34 E	38 51 N	17 m.	+	+	+	+	+	+
China	Cangzhou	CHN 76	116 50 E	38 20 N	11 m.	+	+	+	+	+	+
China	Dalian	CHN 77	121 38 E	38 54 N	96 m.	+	+	+	+	+	+
China	Jiangzhuo	CHN 78	113 57 E	37 10 N	490 m.	+	+	+	+	+	+
China	Dezhou	CHN 79	116 19 E	37 26 N	21 m.	+	+	+	+	+	+
China	Huimin	CHN 80	117 32 E	37 30 N	11 m.	+	+	+	+	+	+
China	Yentai	CHN 81	121 30 E	37 34 N	25 m.	+	+	+	+	+	+
China	Wei Hai	CHN 82	122 06 E	37 30 N	13 m.	+	+	+	+	+	+
China	Wuan	CHN 83	114 15 E	36 41 N	219 m.	+	+	+	+	+	+
China	Shexiang	CHN 84	113 46 E	36 31 N	470 m.	+	+	+	+	+	+
China	Jinan	CHN 85	116 59 E	36 41 N	55 m.	+	+	+	+	+	+
China	Taishan	CHN 86	117 06 E	36 15 N	1534 m.	+	+	+	+	+	+
China	Linchu	CHN 87	118 32 E	36 30 N	150 m.	+	+	+	+	+	+
China	Weifang	CHN 88	119 05 E	36 42 N	51 m.	+	+	+	+	+	+
China	Qingdao	CHN 89	120 20 E	36 04 N	77 m.	+	+	+	+	+	+
China	Yanzhou	CHN 90	116 51 E	35 34 N	52 m.	+	+	+	+	+	+
China	Linyi	CHN 91	118 21 E	35 03 N	86 m.	+	+	+	+	+	+
China	Nagqu	CHN 92	092 04 E	31 29 N	4508 m.	+	+	+	+	+	+
China	Lhasa	CHN 93	091 08 E	29 40 N	3650 m.	+	+	+	+	+	+
China	Pagri	CHN 94	089 05 E	27 44 N	4301 m.	+	+	+	+	+	+
China	Yushu	CHN 95	097 01 E	33 01 N	3682 m.	+	+	+	+	+	+
China	Qamdo	CHN 96	097 10 E	31 09 N	3307 m.	+	+	+	+	+	+
China	Chengdu	CHN 97	104 01 E	30 40 N	508 m.	+	+	+	+	+	+
China	Deqen	CHN 98	098 54 E	28 30 N	3488 m.	+	+	+	+	+	+
China	Xichang	CHN 99	102 16 E	27 54 N	1599 m.	+	+	+	+	+	+
China	Tengchong	CHN 100	098 29 E	25 07 N	1649 m.	+	+	+	+	+	+
China	Kunming	CHN 101	102 41 E	25 01 N	1893 m.	+	+	+	+	+	+
China	Simao	CHN 102	101 24 E	22 40 N	1303 m.	+	+	+	+	+	+
China	Mengzi	CHN 103	103 23 E	23 23 N	1302 m.	+	+	+	+	+	+
China	Tianshui	CHN 104	105 45 E	34 35 N	1143 m.	+	+	+	+	+	+
China	Xi'an	CHN 105	108 56 E	34 18 N	397 m.	+	+	+	+	+	+
China	Lushi	CHN 106	111 02 E	34 03 N	570 m.	+	+	+	+	+	+
China	Hanzhong	CHN 107	107 02 E	33 04 N	508 m.	+	+	+	+	+	+
China	Wanyuan	CHN 108	108 02 E	32 04 N	674 m.	+	+	+	+	+	+
China	Guanghua	CHN 109	111 40 E	32 23 N	91 m.	+	+	+	+	+	+
China	Xinyang	CHN 110	114 03 E	32 08 N	115 m.	+	+	+	+	+	+

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China	Nanchong	CHN 111	106 05 E	30 48 N	300 m.	+	+	+	+	+	+
China	Enshi	CHN 112	109 28 E	30 17 N	438 m.	+	+	+	+	+	+
China	Yichang	CHN 113	111 18 E	30 42 N	134 m.	+	+	+	+	+	+
China	Wuhan	CHN 114	114 08 E	30 37 N	23 m.	+	+	+	+	+	+
China	Chongqing	CHN 115	106 29 E	29 31 N	351 m.	+	+	+	+	+	+
China	Changsha	CHN 116	113 05 E	28 12 N	46 m.	+	+	+	+	+	+
China	Zhijiang	CHN 117	109 41 E	27 27 N	273 m.	+	+	+	+	+	+
China	Guiyang	CHN 118	106 43 E	26 35 N	1074 m.	+	+	+	+	+	+
China	Lingling	CHN 119	111 37 E	26 14 N	174 m.	+	+	+	+	+	+
China	Xingren	CHN 120	105 11 E	25 26 N	1379 m.	+	+	+	+	+	+
China	Guilin	CHN 121	110 18 E	25 20 N	167 m.	+	+	+	+	+	+
China	Ganzhou	CHN 122	114 57 E	25 51 N	125 m.	+	+	+	+	+	+
China	Xuzhou	CHN 123	117 09 E	34 17 N	43 m.	+	+	+	+	+	+
China	Boxian	CHN 124	115 46 E	33 53 N	42 m.	+	+	+	+	+	+
China	Qingjiang	CHN 125	119 02 E	33 36 N	16 m.	+	+	+	+	+	+
China	Nanjing	CHN 126	118 48 E	32 00 N	8 m.	+	+	+	+	+	+
China	Dongtai	CHN 127	120 19 E	32 52 N	5 m.	+	+	+	+	+	+
China	Huoshan	CHN 128	116 20 E	31 24 N	68 m.	+	+	+	+	+	+
China	Hefei	CHN 129	117 14 E	31 52 N	36 m.	+	+	+	+	+	+
China	Wuhu	CHN 130	118 21 E	31 20 N	16 m.	+	+	+	+	+	+
China	Shanghai	CHN 131	121 26 E	31 10 N	5 m.	+	+	+	+	+	+
China	Anqing	CHN 132	117 03 E	30 32 N	20 m.	+	+	+	+	+	+
China	Hangzhou	CHN 133	120 10 E	30 14 N	45 m.	+	+	+	+	+	+
China	Dinghai	CHN 134	122 07 E	30 02 N	37 m.	+	+	+	+	+	+
China	Jingdezhen	CHN 135	117 12 E	29 18 N	60 m.	+	+	+	+	+	+
China	Nanchang	CHN 136	115 55 E	28 36 N	50 m.	+	+	+	+	+	+
China	Chi Chiang	CHN 137	116 08 E	29 45 N	50 m.	+	+	+	+	+	+
China	Wenzhou	CHN 138	120 40 E	28 01 N	5 m.	+	+	+	+	+	+
China	Nancheng	CHN 139	116 39 E	27 35 N	82 m.	+	+	+	+	+	+
China	Fuzhou	CHN 140	119 17 E	26 05 N	85 m.	+	+	+	+	+	+
China	Yong'an	CHN 141	117 21 E	25 58 N	204 m.	+	+	+	+	+	+
China	Taibei	CHN 142	121 31 E	25 02 N	9 m.	+	+	+	+	+	+
China	Shaoguan	CHN 143	113 35 E	24 48 N	68 m.	+	+	+	+	+	+
China	Taizhong	CHN 144	120 41 E	24 09 N	78 m.	+	+	+	+	+	+
China	Bose	CHN 145	106 36 E	23 54 N	176 m.	+	+	+	+	+	+
China	Wuzhou	CHN 146	111 18 E	23 29 N	120 m.	+	+	+	+	+	+
China	Guangzhou	CHN 147	113 19 E	23 08 N	18 m.	+	+	+	+	+	+
China	Shantou	CHN 148	116 41 E	23 24 N	4 m.	+	+	+	+	+	+
China	Nanning	CHN 149	108 21 E	22 49 N	75 m.	+	+	+	+	+	+
China	Hengchun	CHN 150	120 45 E	22 00 N	24 m.	+	+	+	+	+	+
China	Beihai	CHN 151	109 06 E	21 29 N	16 m.	+	+	+	+	+	+
China	Yangjiang	CHN 152	111 58 E	21 52 N	22 m.	+	+	+	+	+	+
China	Haikou	CHN 153	110 21 E	20 02 N	15 m.	+	+	+	+	+	+
Colombia	Uribia	COL 2	074 14 W	11 44 N	23 m.	+	+	+	+	+	+
Colombia	Barranquilla	COL 3	074 46 W	10 54 N	14 m.	+	+	+	+	+	+
Colombia	Turbo	COL 4	076 44 W	08 07 N	1 m.	+	+	+	+	+	+
Colombia	Monteria	COL 5	075 51 W	08 49 N	20 m.	+	+	+	+	+	+
Colombia	Caceres	COL 6	075 20 W	07 24 N	149 m.	+	+	+	+	+	+
Colombia	Otu	COL 7	074 43 W	07 00 N	630 m.	+	+	+	+	+	+
Colombia	Barranca Bermeja	COL 8	073 48 W	07 01 N	126 m.	+	+	+	+	+	+
Colombia	Salazar	COL 9	072 49 W	07 43 N	999 m.	+	+	+	+	+	+
Colombia	Blonay-Chinacota	COL 10	072 38 W	07 35 N	1235 m.	+	+	+	+	+	+
Colombia	Arauca	COL 11	070 44 W	07 04 N	122 m.	+	+	+	+	+	+
Colombia	Medellin	COL 12	075 36 W	06 13 N	1498 m.	+	+	+	+	+	+
Colombia	Medellin Agro	COL 13	075 35 W	06 16 N	1475 m.	+	+	+	+	+	+

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Colombia	San Vincente	COL	14	073 26 W	06 52 N	1200 m.	+	+	+	+	+	+
Colombia	Quibdo	COL	15	076 40 W	05 42 N	43 m.	+	+	+	+	+	+
Colombia	Andagoya	COL	16	076 40 W	05 06 N	65 m.	+	+	+	+	+	+
Colombia	Sonson	COL	17	075 18 W	05 43 N	2350 m.	+	+	+	+	+	+
Colombia	Tunguavita-Boyaca	COL	18	073 05 W	05 45 N	2540 m.	+	+	+	+	+	+
Colombia	Espinal	COL	19	074 53 W	04 09 N	322 m.	+	+	+	+	+	+
Colombia	Sevilla	COL	20	075 57 W	04 16 N	1650 m.	+	+	+	+	+	+
Colombia	Ibague Chapeton	COL	21	075 09 W	04 26 N	1300 m.	+	+	+	+	+	+
Colombia	Libano	COL	22	075 04 W	04 54 N	1495 m.	+	+	+	+	+	+
Colombia	Anolaima	COL	23	074 29 W	04 45 N	1726 m.	+	+	+	+	+	+
Colombia	Tibacuy	COL	24	074 27 W	04 21 N	1550 m.	+	+	+	+	+	+
Colombia	Bogota	COL	25	074 08 W	04 42 N	2547 m.	+	+	+	+	+	+
Colombia	Usme Exp. Papa	COL	26	074 07 W	04 21 N	3120 m.	+	+	+	+	+	+
Colombia	Villavicencio	COL	27	073 37 W	04 10 N	423 m.	+	+	+	+	+	+
Colombia	Carimagua	COL	28	071 09 W	04 01 N	200 m.	+	+	+	+	+	+
Colombia	Palmira	COL	29	076 19 W	03 31 N	1006 m.	+	+	+	+	+	+
Colombia	Miranda	COL	30	076 15 W	03 19 N	1200 m.	+	+	+	+	+	+
Colombia	Santander Quilic	COL	31	076 30 W	03 06 N	990 m.	+	+	+	+	+	+
Colombia	Laureles	COL	32	074 54 W	03 08 N	2100 m.	+	+	+	+	+	+
Colombia	La Florida	COL	33	076 36 W	02 28 N	1730 m.	+	+	+	+	+	+
Colombia	Chinchina	COL	34	075 36 W	04 56 N	1360 m.	+	+	+	+	+	+
Colombia	Tumaco	COL	35	078 45 W	01 49 N	3 m.	+	+	+	+	+	+
Colombia	Pasto Obonuco	COL	36	077 16 W	01 13 N	2700 m.	+	+	+	+	+	+
Comoros	Moroni	COM	1	043 15 E	11 41 S	59 m.	+	+	+	+	+	+
Comoros	Mutsamudu	COM	2	044 25 E	12 10 S	70 m.	+	+	+	+	+	+
Comoros	Dzaoudzi	COM	3	045 17 E	12 48 S	7 m.	+	+	+	+	+	+
Congo	Pointe Noire	COG	1	011 54 E	04 49 S	17 m.	+	+	+	+	+	+
Congo	Loubomo	COG	2	012 42 E	04 12 S	330 m.	+	+	+	+	+	+
Congo	Mouyondzi	COG	3	013 55 E	03 59 S	512 m.	+	+	+	+	+	+
Congo	Brazzaville	COG	4	015 15 E	04 15 S	316 m.	+	+	+	+	+	+
Congo	M'pouya	COG	5	016 13 E	02 37 S	312 m.	+	+	+	+	+	+
Congo	Djambala	COG	6	014 46 E	02 32 S	790 m.	+	+	+	+	+	+
Congo	Makoua	COG	7	015 35 E	00 01 N	379 m.	+	+	+	+	+	+
Congo	Ouesso	COG	8	016 03 E	01 37 N	352 m.	+	+	+	+	+	+
Congo	Impfondo	COG	9	018 04 E	01 37 N	326 m.	+	+	+	+	+	+
Costa Rica	Nicoya	CRI	1	085 27 W	10 09 N	120 m.	+	+	+	+	+	+
Costa Rica	La Pinera	CRI	2	083 20 W	09 11 N	350 m.	+	+	+	+	+	+
Costa Rica	Pacayas	CRI	3	083 49 W	09 55 N	1735 m.	+	+	+	+	+	+
Costa Rica	Coliblanco	CRI	4	083 48 W	09 57 N	2200 m.	+	+	+	+	+	+
Costa Rica	Fabio Baudrit	CRI	5	084 16 W	10 01 N	840 m.	+	+	+	+	+	+
Costa Rica	Puntarenas	CRI	6	084 50 W	09 58 N	3 m.	+	+	+	+	+	+
Costa Rica	San Jose	CRI	7	084 04 W	09 55 N	1171 m.	+	+	+	+	+	+
Costa Rica	Hacienda El Carmen	CRI	8	083 29 W	10 12 N	15 m.	+	+	+	+	+	+
Costa Rica	Taboga	CRI	9	085 09 W	10 21 N	40 m.	+	+	+	+	+	+
Costa Rica	Limon	CRI	10	083 03 W	10 00 N	5 m.	+	+	+	+	+	+
Costa Rica	Turrialba lica	CRI	11	083 38 W	09 53 N	602 m.	+	+	+	+	+	+
Costa Rica	San Isidro Gener.	CRI	12	083 42 W	09 21 N	702 m.	+	+	+	+	+	+
Costa Rica	Palmar Sur	CRI	13	083 28 W	08 57 N	16 m.	+	+	+	+	+	+
Costa Rica	Ciudad Quesada	CRI	14	084 25 W	10 19 N	650 m.	+	+	+	+	+	+
Costa Rica	Liberia	CRI	15	085 32 W	10 36 N	85 m.	+	+	+	+	+	+
Cote d'Ivoire	Odienne	CIV	1	007 34 W	09 30 N	421 m.	+	+	+	+	+	+
Cote d'Ivoire	Korhogo	CIV	2	005 37 W	09 25 N	382 m.	+	+	+	+	+	+
Cote d'Ivoire	Ferkesse Dougou	CIV	3	005 05 W	09 37 N	350 m.	+	+	+	+	+	+
Cote d'Ivoire	Bondoukou	CIV	4	002 47 W	08 03 N	371 m.	+	+	+	+	+	+
Cote d'Ivoire	Man	CIV	5	007 31 W	07 23 N	340 m.	+	+	+	+	+	+

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Cote d'Ivoire	Bouake	CIV	6	005 04 W	07 44 N	376 m.	+	+	+	+	+	+
Cote d'Ivoire	Gagnoa	CIV	7	005 57 W	06 08 N	214 m.	+	+	+	+	+	+
Cote d'Ivoire	Abidjan	CIV	8	003 56 W	05 15 N	6 m.	+	+	+	+	+	+
Cote d'Ivoire	Tabou	CIV	9	007 22 W	04 25 N	10 m.	+	+	+	+	+	+
Cote d'Ivoire	Sassandra	CIV	10	006 05 W	04 57 N	62 m.	+	+	+	+	+	+
Cuba	Cienfuegos	CUB	1	080 24 W	22 09 N	39 m.	+	+	+	+	+	+
Cuba	Camaguey	CUB	2	077 51 W	21 25 N	118 m.	+	+	+	+	+	+
Cuba	Pasoeal	CUB	3	083 18 W	22 34 N	44 m.	+	+	+	+	+	+
Cuba	Habana	CUB	4	082 21 W	23 10 N	50 m.	+	+	+	+	+	+
Cuba	Punta Maisi	CUB	5	074 09 W	20 15 N	10 m.	+	+	+	+	+	+
Cyprus	Paphos Kato	CYP	2	032 29 E	34 43 N	11 m.	+	+	+	+	+	+
Cyprus	Akhelia	CYP	3	032 29 E	34 44 N	45 m.	+	+	+	+	+	+
Cyprus	Akrades	CYP	4	034 10 E	35 29 N	150 m.	+	+	+	+	+	+
Cyprus	Ayia Irini	CYP	5	032 57 E	35 18 N	60 m.	+	+	+	+	+	+
Cyprus	Ayios Merkourios	CYP	6	032 33 E	35 02 N	260 m.	+	+	+	+	+	+
Cyprus	Halevga	CYP	7	033 32 E	35 17 N	640 m.	+	+	+	+	+	+
Cyprus	Athalassa Ari	CYP	8	033 24 E	35 09 N	162 m.	+	+	+	+	+	+
Cyprus	Nicosia	CYP	9	033 21 E	35 09 N	160 m.	+	+	+	+	+	+
Cyprus	Larnaca Airport	CYP	10	033 38 E	34 53 N	2 m.	+	+	+	+	+	+
Cyprus	Kalavassos Mine	CYP	11	033 16 E	34 47 N	60 m.	+	+	+	+	+	+
Cyprus	Ayios Nicolaos	CYP	12	033 55 E	35 05 N	30 m.	+	+	+	+	+	+
Cyprus	Famagusta	CYP	13	033 57 E	35 07 N	20 m.	+	+	+	+	+	+
Cyprus	Kornos	CYP	14	033 25 E	34 54 N	340 m.	+	+	+	+	+	+
Cyprus	Kyrenia	CYP	15	033 19 E	35 20 N	20 m.	+	+	+	+	+	+
Cyprus	Lefkara Dam	CYP	16	033 18 E	34 54 N	420 m.	+	+	+	+	+	+
Cyprus	Limassol	CYP	17	033 02 E	34 40 N	10 m.	+	+	+	+	+	+
Cyprus	Limnitis Saw-Mill	CYP	18	032 43 E	35 05 N	260 m.	+	+	+	+	+	+
Cyprus	Yerolakkos	CYP	19	033 15 E	35 10 N	180 m.	+	+	+	+	+	+
Cyprus	Morphou G.f.	CYP	20	033 00 E	35 11 N	45 m.	+	+	+	+	+	+
Cyprus	Panayia Bridge	CYP	21	033 05 E	35 01 N	440 m.	+	+	+	+	+	+
Cyprus	Panayia Pano	CYP	22	032 38 E	34 55 N	820 m.	+	+	+	+	+	+
Cyprus	Pano Amiandos Mines	CYP	23	032 55 E	34 55 N	1290 m.	+	+	+	+	+	+
Cyprus	Phassouri Plts.	CYP	24	032 57 E	34 38 N	15 m.	+	+	+	+	+	+
Cyprus	Saittas N.g.	CYP	25	032 55 E	34 52 N	640 m.	+	+	+	+	+	+
Cyprus	Prodromos	CYP	26	032 50 E	34 57 N	1380 m.	+	+	+	+	+	+
Cyprus	Platania	CYP	27	032 55 E	34 57 N	1120 m.	+	+	+	+	+	+
Cyprus	Stavros Psokas	CYP	28	032 38 E	35 01 N	780 m.	+	+	+	+	+	+
Cyprus	Trikoukkia N.g.	CYP	29	032 50 E	34 56 N	1340 m.	+	+	+	+	+	+
Djibouti	Djibouti-Serpent	DJI	1	043 09 E	11 36 N	7 m.	+	+	+	+	+	+
Dom. Republic	Puerto Plata	DOM	1	070 42 W	19 49 N	2 m.	+	+	+	+	+	+
Dom. Republic	Santiago	DOM	2	070 42 W	19 27 N	186 m.	+	+	+	+	+	+
Dom. Republic	S. Francisco Macoris	DOM	3	070 15 W	19 17 N	110 m.	+	+	+	+	+	+
Dom. Republic	La Vega	DOM	4	070 32 W	19 13 N	97 m.	+	+	+	+	+	+
Dom. Republic	Sabana De La Mar	DOM	5	069 25 W	19 03 N	3 m.	+	+	+	+	+	+
Dom. Republic	S.juan De La Maguana	DOM	6	071 14 W	18 48 N	415 m.	+	+	+	+	+	+
Dom. Republic	Constanza	DOM	7	070 44 W	18 54 N	1164 m.	+	+	+	+	+	+
Dom. Republic	Bayaguana	DOM	8	069 38 W	18 45 N	61 m.	+	+	+	+	+	+
Dom. Republic	Barahona	DOM	9	071 06 W	18 12 N	10 m.	+	+	+	+	+	+
Dom. Republic	San Cristobal	DOM	10	070 06 W	18 25 N	44 m.	+	+	+	+	+	+
Dom. Republic	Santo Domingo	DOM	11	069 55 W	18 29 N	47 m.	+	+	+	+	+	+
Dominica	Roseau	DMA	1	061 24 W	15 18 N	18 m.	+	+	+	+	+	+
East Timor	Ocussi	TMP	1	124 23 E	09 12 S	5 m.	+	+	+	+	+	+
East Timor	Dili	TMP	2	125 35 E	08 34 S	4 m.	+	+	+	+	+	+
East Timor	Fazenda Algarve	TMP	3	125 21 E	08 40 S	916 m.	+	+	+	+	+	+
East Timor	Viqueque	TMP	4	126 22 E	08 52 S	46 m.	+	+	+	+	+	+

Country name	Station name	Code	Sn	Longitude	Latitude	Elevation	rd	tm	tx	vp	wn	rn
East Timor	Baucau	TMP	5	126 27 E	08 28 S	512 m.	+	+	+	+	+	+
Ecuador	Seymor Airp-Gal.	ECU	1	090 16 W	00 27 S	16 m.	+	+	+	+	+	+
Ecuador	Bellavista-Gal.	ECU	2	010 21 W	00 42 S	194 m.	+	+	+	+	+	+
Ecuador	P. Baquerizo-Gal.	ECU	3	089 36 W	00 54 S	6 m.	+	+	+	+	+	+
Ecuador	El Progreso-Gal.	ECU	4	089 33 W	00 54 S	250 m.	+	+	+	+	+	+
Ecuador	San Lorenzo	ECU	5	078 49 W	01 15 N	6 m.	+	+	+	+	+	+
Ecuador	Esmeraldas	ECU	6	079 36 W	00 57 N	6 m.	+	+	+	+	+	+
Ecuador	Tulcan	ECU	7	077 42 W	00 49 N	2950 m.	+	+	+	+	+	+
Ecuador	San Gab	ECU	8	077 49 W	00 36 N	2860 m.	+	+	+	+	+	+
Ecuador	El Angel	ECU	9	077 56 W	00 37 N	3055 m.	+	+	+	+	+	+
Ecuador	Ibarra	ECU	10	078 08 W	00 21 N	2228 m.	+	+	+	+	+	+
Ecuador	Putumayo	ECU	11	075 51 W	00 06 N	230 m.	+	+	+	+	+	+
Ecuador	Otavalo	ECU	12	078 15 W	00 13 N	2556 m.	+	+	+	+	+	+
Ecuador	Santo Domingo	ECU	13	079 12 W	00 15 S	660 m.	+	+	+	+	+	+
Ecuador	Quito	ECU	14	078 29 W	00 09 S	2811 m.	+	+	+	+	+	+
Ecuador	Papa Llacta	ECU	15	078 04 W	00 19 S	3160 m.	+	+	+	+	+	+
Ecuador	Uyumbichio	ECU	16	078 30 W	00 24 S	2725 m.	+	+	+	+	+	+
Ecuador	Izobamba	ECU	17	078 33 W	00 22 S	3058 m.	+	+	+	+	+	+
Ecuador	Cotopaxi	ECU	18	078 33 W	00 42 S	3590 m.	+	+	+	+	+	+
Ecuador	Limoncocha	ECU	19	076 36 W	00 24 S	219 m.	+	+	+	+	+	+
Ecuador	Arenillas	ECU	20	080 04 W	00 33 S	15 m.	+	+	+	+	+	+
Ecuador	Bahia De Caraquez	ECU	21	080 24 W	00 35 S	3 m.	+	+	+	+	+	+
Ecuador	Manta	ECU	22	080 41 W	00 57 S	13 m.	+	+	+	+	+	+
Ecuador	Latacunga	ECU	23	078 37 W	00 55 S	2785 m.	+	+	+	+	+	+
Ecuador	Tiputini	ECU	24	075 31 W	00 47 S	220 m.	+	+	+	+	+	+
Ecuador	Tena	ECU	25	077 48 W	00 58 S	527 m.	+	+	+	+	+	+
Ecuador	Portoviejo	ECU	26	080 26 W	01 02 S	44 m.	+	+	+	+	+	+
Ecuador	Pichilingue	ECU	27	079 28 W	01 06 S	73 m.	+	+	+	+	+	+
Ecuador	Balzar C.robusta	ECU	28	079 42 W	01 09 S	40 m.	+	+	+	+	+	+
Ecuador	Banos	ECU	29	078 24 W	01 24 S	1843 m.	+	+	+	+	+	+
Ecuador	Pillaro	ECU	30	078 33 W	01 09 S	2805 m.	+	+	+	+	+	+
Ecuador	Ambato	ECU	31	078 38 W	01 17 S	2540 m.	+	+	+	+	+	+
Ecuador	Patate	ECU	32	078 30 W	01 18 S	2360 m.	+	+	+	+	+	+
Ecuador	Riobamba	ECU	33	078 40 W	01 38 S	2796 m.	+	+	+	+	+	+
Ecuador	El Puyo	ECU	34	077 57 W	01 30 S	950 m.	+	+	+	+	+	+
Ecuador	Isabel Maria	ECU	35	079 33 W	01 48 S	7 m.	+	+	+	+	+	+
Ecuador	Sangay	ECU	36	077 54 W	01 51 S	970 m.	+	+	+	+	+	+
Ecuador	Ancon	ECU	37	080 51 W	02 19 S	6 m.	+	+	+	+	+	+
Ecuador	Milagro	ECU	38	079 36 W	02 07 S	13 m.	+	+	+	+	+	+
Ecuador	Guayaquil	ECU	39	079 53 W	02 09 S	9 m.	+	+	+	+	+	+
Ecuador	Daule	ECU	40	079 57 W	01 51 S	20 m.	+	+	+	+	+	+
Ecuador	Taisha	ECU	41	077 30 W	02 22 S	511 m.	+	+	+	+	+	+
Ecuador	Canar	ECU	42	078 56 W	02 33 S	3120 m.	+	+	+	+	+	+
Ecuador	Cuencaicaurete	ECU	43	078 57 W	02 51 S	2562 m.	+	+	+	+	+	+
Ecuador	Machala	ECU	44	079 58 W	03 15 S	4 m.	+	+	+	+	+	+
Ecuador	Santa Isabel	ECU	45	079 20 W	03 20 S	1598 m.	+	+	+	+	+	+
Ecuador	La Argelia-Loja	ECU	46	079 12 W	04 00 S	2040 m.	+	+	+	+	+	+
Ecuador	Cariamanga	ECU	47	079 33 W	04 18 S	1950 m.	+	+	+	+	+	+
Ecuador	Macara	ECU	48	079 56 W	04 22 S	430 m.	+	+	+	+	+	+
Egypt	Salloum	EGY	2	025 11 E	31 32 N	6 m.	+	+	+	+	+	+
Egypt	Sidi Barrani	EGY	3	025 58 E	31 38 N	23 m.	+	+	+	+	+	+
Egypt	Mersa Matruh	EGY	4	027 13 E	31 20 N	30 m.	+	+	+	+	+	+
Egypt	Dabaa	EGY	5	028 28 E	30 56 N	18 m.	+	+	+	+	+	+
Egypt	Borg El Arab	EGY	6	029 33 E	30 54 N	20 m.	+	+	+	+	+	+
Egypt	Alexandria	EGY	7	029 57 E	31 22 N	32 m.	+	+	+	+	+	+

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Egypt	Baltim	EGY	8	031 06 E	31 33 N	2 m.	+	+	+	+	+	+
Egypt	Mansoura	EGY	9	031 23 E	31 03 N	30 m.	+	+	+	+	+	+
Egypt	Port Said	EGY	10	032 18 E	31 17 N	6 m.	+	+	+	+	+	+
Egypt	Sakha	EGY	11	030 57 E	31 07 N	20 m.	+	+	+	+	+	+
Egypt	Tahrir	EGY	12	030 42 E	30 39 N	20 m.	+	+	+	+	+	+
Egypt	Gemmeiza	EGY	13	031 07 E	30 43 N	20 m.	+	+	+	+	+	+
Egypt	Bilbeis	EGY	14	031 35 E	30 24 N	20 m.	+	+	+	+	+	+
Egypt	Ismailia	EGY	15	030 26 E	30 35 N	20 m.	+	+	+	+	+	+
Egypt	Giza	EGY	16	031 13 E	30 03 N	19 m.	+	+	+	+	+	+
Egypt	Helwan	EGY	17	031 20 E	29 52 N	141 m.	+	+	+	+	+	+
Egypt	Benisuef	EGY	18	031 06 E	29 04 N	28 m.	+	+	+	+	+	+
Egypt	Bahariya	EGY	19	028 54 E	28 20 N	20 m.	+	+	+	+	+	+
Egypt	Minya	EGY	20	030 44 E	28 05 N	40 m.	+	+	+	+	+	+
Egypt	Mallawi	EGY	21	030 45 E	27 42 N	20 m.	+	+	+	+	+	+
Egypt	Asyut	EGY	22	031 01 E	27 03 N	70 m.	+	+	+	+	+	+
Egypt	Sohag	EGY	23	031 42 E	26 34 N	61 m.	+	+	+	+	+	+
Egypt	Shandaweelel	EGY	24	031 38 E	26 26 N	60 m.	+	+	+	+	+	+
Egypt	Kom Ombo	EGY	25	032 56 E	24 29 N	102 m.	+	+	+	+	+	+
Egypt	Aswan	EGY	26	032 53 E	24 02 N	200 m.	+	+	+	+	+	+
Egypt	Siwa	EGY	27	025 29 E	29 12 N	-13 m.	+	+	+	+	+	+
Egypt	Dakhla	EGY	28	029 00 E	25 29 N	111 m.	+	+	+	+	+	+
Egypt	Kharga	EGY	29	030 32 E	25 27 N	73 m.	+	+	+	+	+	+
El Salvador	Acajutla	SLV	1	089 50 W	13 34 N	15 m.	+	+	+	+	+	+
El Salvador	San Andres	SLV	2	089 24 W	13 48 N	460 m.	+	+	+	+	+	+
El Salvador	Los Andes	SLV	3	089 39 W	13 53 N	1770 m.	+	+	+	+	+	+
El Salvador	Ahuachapan	SLV	4	089 51 W	13 56 N	725 m.	+	+	+	+	+	+
El Salvador	Planes De Montecrist	SLV	5	089 21 W	14 23 N	1851 m.	+	+	+	+	+	+
El Salvador	Santa Ana	SLV	6	089 34 W	13 59 N	725 m.	+	+	+	+	+	+
El Salvador	Nueva Concepcion	SLV	7	089 17 W	14 07 N	320 m.	+	+	+	+	+	+
El Salvador	Santa Cruz Porrillo	SLV	8	088 48 W	13 26 N	30 m.	+	+	+	+	+	+
El Salvador	Santiago De Maria	SLV	9	088 28 W	13 29 N	920 m.	+	+	+	+	+	+
El Salvador	El Papalon	SLV	10	088 07 W	13 26 N	80 m.	+	+	+	+	+	+
El Salvador	San Francisco Gotera	SLV	11	088 06 W	13 41 N	250 m.	+	+	+	+	+	+
El Salvador	Izalco	SLV	12	089 42 W	13 46 N	390 m.	+	+	+	+	+	+
El Salvador	San Salvador	SLV	13	089 12 W	13 43 N	698 m.	+	+	+	+	+	+
El Salvador	La Carrera	SLV	14	088 31 W	13 19 N	75 m.	+	+	+	+	+	+
El Salvador	Chorrera Del Guayabo	SLV	15	088 45 W	13 59 N	190 m.	+	+	+	+	+	+
El Salvador	Santa Tecla	SLV	16	089 33 W	13 40 N	965 m.	+	+	+	+	+	+
El Salvador	San Miguel	SLV	17	088 07 W	13 27 N	80 m.	+	+	+	+	+	+
El Salvador	La Union	SLV	18	087 52 W	13 19 N	95 m.	+	+	+	+	+	+
Equatorial Guinea	Malabo	GNQ	1	008 46 E	03 45 N	56 m.	+	+	+	+	+	+
Equatorial Guinea	Bata	GNQ	2	009 48 E	01 54 N	8 m.	+	+	+	+	+	+
Ethiopia	Nakfa	ETH	1	038 20 E	16 40 N	1676 m.	+	+	+	+	+	+
Ethiopia	Akordat	ETH	2	037 53 E	15 33 N	626 m.	+	+	+	+	+	+
Ethiopia	Keren	ETH	3	038 26 E	15 45 N	1460 m.	+	+	+	+	+	+
Ethiopia	Faghenya-M. Zagher	ETH	4	038 54 E	15 33 N	1760 m.	+	+	+	+	+	+
Ethiopia	Asmara	ETH	5	038 55 E	15 17 N	2325 m.	+	+	+	+	+	+
Ethiopia	Massawa	ETH	6	039 27 E	15 37 N	10 m.	+	+	+	+	+	+
Ethiopia	Adi Keyih	ETH	7	039 20 E	14 50 N	2490 m.	+	+	+	+	+	+
Ethiopia	Adigrat	ETH	8	039 27 E	14 16 N	2457 m.	+	+	+	+	+	+
Ethiopia	Adi Ugri	ETH	9	038 49 E	14 53 N	2022 m.	+	+	+	+	+	+
Ethiopia	Humera	ETH	10	036 35 E	14 10 N	550 m.	+	+	+	+	+	+
Ethiopia	Adwa	ETH	11	038 54 E	14 10 N	1980 m.	+	+	+	+	+	+
Ethiopia	Indaselasie	ETH	12	038 16 E	14 06 N	1913 m.	+	+	+	+	+	+
Ethiopia	Sheraro	ETH	13	037 58 E	14 24 N	1500 m.	+	+	+	+	+	+

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Ethiopia	Tekeze Bridge	ETH	14	038 15 E	13 46 N	850 m.	+	+	+	+	+	+
Ethiopia	Abiy Adi	ETH	15	039 01 E	13 32 N	1870 m.	+	+	+	+	+	+
Ethiopia	Mota	ETH	16	037 55 E	11 05 N	2400 m.	+	+	+	+	+	+
Ethiopia	Metema	ETH	17	036 04 E	12 57 N	803 m.	+	+	+	+	+	+
Ethiopia	Maichew	ETH	18	039 32 E	12 46 N	2380 m.	+	+	+	+	+	+
Ethiopia	Aikel-Chilga	ETH	19	037 03 E	12 31 N	2150 m.	+	+	+	+	+	+
Ethiopia	Kola Diba	ETH	20	037 14 E	12 20 N	2150 m.	+	+	+	+	+	+
Ethiopia	Addis Zemen	ETH	21	037 52 E	12 07 N	2020 m.	+	+	+	+	+	+
Ethiopia	Debre Tabor	ETH	22	038 02 E	11 53 N	2410 m.	+	+	+	+	+	+
Ethiopia	Waldia	ETH	23	039 36 E	11 49 N	1960 m.	+	+	+	+	+	+
Ethiopia	Zegie	ETH	24	037 14 E	11 49 N	1820 m.	+	+	+	+	+	+
Ethiopia	Dangila	ETH	25	036 55 E	11 17 N	2180 m.	+	+	+	+	+	+
Ethiopia	Bati	ETH	26	040 03 E	11 13 N	1660 m.	+	+	+	+	+	+
Ethiopia	Dese	ETH	27	039 40 E	11 10 N	2540 m.	+	+	+	+	+	+
Ethiopia	Debivar	ETH	28	037 56 E	13 14 N	2800 m.	+	+	+	+	+	+
Ethiopia	Barentu	ETH	29	037 36 E	15 10 N	980 m.	+	+	+	+	+	+
Ethiopia	Teseney	ETH	30	036 40 E	15 07 N	585 m.	+	+	+	+	+	+
Ethiopia	Dabat	ETH	31	037 46 E	13 00 N	2685 m.	+	+	+	+	+	+
Ethiopia	Mekele	ETH	32	039 29 E	13 30 N	2212 m.	+	+	+	+	+	+
Ethiopia	Gonder	ETH	33	037 26 E	12 32 N	2270 m.	+	+	+	+	+	+
Ethiopia	Bahirdar	ETH	34	037 24 E	11 36 N	1890 m.	+	+	+	+	+	+
Ethiopia	Kombolcha	ETH	35	039 45 E	11 05 N	1903 m.	+	+	+	+	+	+
Ethiopia	Debre Markos	ETH	36	037 43 E	10 21 N	2440 m.	+	+	+	+	+	+
Ethiopia	Alamata	ETH	37	039 41 E	12 31 N	2200 m.	+	+	+	+	+	+
Ethiopia	Gorgora	ETH	38	037 18 E	12 15 N	1840 m.	+	+	+	+	+	+
Ethiopia	Chagni-Metekel	ETH	39	036 26 E	10 55 N	1720 m.	+	+	+	+	+	+
Ethiopia	Chefa	ETH	40	039 50 E	10 54 N	1600 m.	+	+	+	+	+	+
Ethiopia	Kurmuk	ETH	41	034 23 E	10 33 N	600 m.	+	+	+	+	+	+
Ethiopia	Gewani	ETH	42	040 38 E	10 05 N	625 m.	+	+	+	+	+	+
Ethiopia	Alem Ketema	ETH	43	039 18 E	10 05 N	1950 m.	+	+	+	+	+	+
Ethiopia	Asosa	ETH	44	034 31 E	10 04 N	1750 m.	+	+	+	+	+	+
Ethiopia	Filiklik	ETH	45	038 13 E	10 03 N	1800 m.	+	+	+	+	+	+
Ethiopia	Goha Tsion	ETH	46	038 14 E	10 02 N	2550 m.	+	+	+	+	+	+
Ethiopia	Robi	ETH	47	039 59 E	10 01 N	1300 m.	+	+	+	+	+	+
Ethiopia	Fiche	ETH	48	038 45 E	09 48 N	2800 m.	+	+	+	+	+	+
Ethiopia	Mendi	ETH	49	035 05 E	09 47 N	1650 m.	+	+	+	+	+	+
Ethiopia	Bambesi	ETH	50	034 44 E	09 45 N	1450 m.	+	+	+	+	+	+
Ethiopia	Debre Birhan	ETH	51	039 30 E	09 38 N	2820 m.	+	+	+	+	+	+
Ethiopia	Fincha	ETH	52	037 23 E	09 32 N	2320 m.	+	+	+	+	+	+
Ethiopia	Nejo	ETH	53	035 29 E	09 30 N	1800 m.	+	+	+	+	+	+
Ethiopia	Melka Werer-Ambibara	ETH	54	040 23 E	09 28 N	737 m.	+	+	+	+	+	+
Ethiopia	Alemaya	ETH	55	042 03 E	09 26 N	2125 m.	+	+	+	+	+	+
Ethiopia	Begi	ETH	56	034 32 E	09 21 N	1722 m.	+	+	+	+	+	+
Ethiopia	Grawa	ETH	57	041 50 E	09 08 N	2250 m.	+	+	+	+	+	+
Ethiopia	Bako Shewa	ETH	58	037 05 E	09 07 N	1590 m.	+	+	+	+	+	+
Ethiopia	Gimbi	ETH	59	035 47 E	09 05 N	1870 m.	+	+	+	+	+	+
Ethiopia	Didesa	ETH	60	036 06 E	09 00 N	1200 m.	+	+	+	+	+	+
Ethiopia	Gidami	ETH	61	034 35 E	08 58 N	2040 m.	+	+	+	+	+	+
Ethiopia	Ambo-Hagere Hiwot	ETH	62	037 52 E	08 58 N	2080 m.	+	+	+	+	+	+
Ethiopia	Yubdo	ETH	63	035 27 E	08 57 N	1520 m.	+	+	+	+	+	+
Ethiopia	Metehara	ETH	64	039 59 E	08 52 N	951 m.	+	+	+	+	+	+
Ethiopia	Akaki	ETH	65	038 47 E	08 52 N	2100 m.	+	+	+	+	+	+
Ethiopia	Midagaloloa	ETH	66	042 07 E	08 47 N	1428 m.	+	+	+	+	+	+
Ethiopia	Arjo	ETH	67	036 30 E	08 45 N	2565 m.	+	+	+	+	+	+
Ethiopia	Mojo-Bery	ETH	68	039 09 E	08 37 N	1880 m.	+	+	+	+	+	+

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Ethiopia	Nazareth	ETH	69	039 17 E	08 33 N	1622 m.	+	+	+	+	+	+
Ethiopia	Weliso-Ghion	ETH	70	037 59 E	08 33 N	1960 m.	+	+	+	+	+	+
Ethiopia	Dembi Dolo	ETH	71	034 46 E	08 30 N	1850 m.	+	+	+	+	+	+
Ethiopia	Atnago	ETH	72	036 57 E	08 29 N	2000 m.	+	+	+	+	+	+
Ethiopia	Bedele	ETH	73	036 23 E	08 27 N	2090 m.	+	+	+	+	+	+
Ethiopia	Wenji	ETH	74	039 15 E	08 25 N	1540 m.	+	+	+	+	+	+
Ethiopia	Koka Dam	ETH	75	039 10 E	08 25 N	1650 m.	+	+	+	+	+	+
Ethiopia	Metu	ETH	76	035 35 E	08 19 N	1940 m.	+	+	+	+	+	+
Ethiopia	Bure	ETH	77	035 06 E	08 17 N	1600 m.	+	+	+	+	+	+
Ethiopia	Gambela	ETH	78	034 35 E	08 15 N	480 m.	+	+	+	+	+	+
Ethiopia	Poko	ETH	79	034 25 E	08 15 N	560 m.	+	+	+	+	+	+
Ethiopia	Jima	ETH	80	036 50 E	07 40 N	1577 m.	+	+	+	+	+	+
Ethiopia	Gore	ETH	81	035 33 E	08 10 N	2130 m.	+	+	+	+	+	+
Ethiopia	Itang	ETH	82	034 15 E	08 10 N	550 m.	+	+	+	+	+	+
Ethiopia	Dixis	ETH	83	039 35 E	08 08 N	2600 m.	+	+	+	+	+	+
Ethiopia	Kulumsa	ETH	84	039 08 E	08 08 N	2600 m.	+	+	+	+	+	+
Ethiopia	Butajira	ETH	85	038 27 E	08 07 N	2100 m.	+	+	+	+	+	+
Ethiopia	Ogelcho	ETH	86	039 02 E	08 04 N	1800 m.	+	+	+	+	+	+
Ethiopia	Ziway	ETH	87	038 45 E	08 00 N	1640 m.	+	+	+	+	+	+
Ethiopia	Asela	ETH	88	039 08 E	07 52 N	2450 m.	+	+	+	+	+	+
Ethiopia	Agaro	ETH	89	036 38 E	07 51 N	1560 m.	+	+	+	+	+	+
Ethiopia	Ticho	ETH	90	039 32 E	07 49 N	2800 m.	+	+	+	+	+	+
Ethiopia	Abobo	ETH	91	034 24 E	07 48 N	530 m.	+	+	+	+	+	+
Ethiopia	Asendabo	ETH	92	037 14 E	07 44 N	1870 m.	+	+	+	+	+	+
Ethiopia	Munesa	ETH	93	038 54 E	07 35 N	2550 m.	+	+	+	+	+	+
Ethiopia	Langano	ETH	94	038 40 E	07 35 N	1600 m.	+	+	+	+	+	+
Ethiopia	Hosaina	ETH	95	037 50 E	07 35 N	2290 m.	+	+	+	+	+	+
Ethiopia	Addis Ababa-obs.	ETH	96	038 45 E	09 02 N	2408 m.	+	+	+	+	+	+
Ethiopia	Alaba Kolito	ETH	97	038 06 E	07 22 N	1850 m.	+	+	+	+	+	+
Ethiopia	Awash	ETH	98	040 09 E	08 59 N	916 m.	+	+	+	+	+	+
Ethiopia	Bokoji	ETH	99	039 15 E	07 32 N	2850 m.	+	+	+	+	+	+
Ethiopia	Hamaro	ETH	100	042 13 E	07 22 N	750 m.	+	+	+	+	+	+
Ethiopia	Debre Zeit	ETH	101	039 02 E	08 44 N	1900 m.	+	+	+	+	+	+
Ethiopia	Wush Wush	ETH	102	036 11 E	07 16 N	1950 m.	+	+	+	+	+	+
Ethiopia	Kuyera	ETH	103	038 40 E	07 15 N	2010 m.	+	+	+	+	+	+
Ethiopia	Awasa	ETH	104	038 30 E	07 04 N	1750 m.	+	+	+	+	+	+
Ethiopia	Tepi	ETH	105	035 15 E	07 05 N	1200 m.	+	+	+	+	+	+
Ethiopia	Wendo-Chabicha-genet	ETH	106	038 35 E	07 10 N	1880 m.	+	+	+	+	+	+
Ethiopia	Kofele	ETH	107	038 47 E	07 04 N	2680 m.	+	+	+	+	+	+
Ethiopia	Nekemte	ETH	108	036 36 E	09 03 N	2005 m.	+	+	+	+	+	+
Ethiopia	Guder	ETH	109	037 47 E	08 57 N	2002 m.	+	+	+	+	+	+
Ethiopia	Harer	ETH	110	042 07 E	09 12 N	1856 m.	+	+	+	+	+	+
Ethiopia	Dire Dawa	ETH	111	041 52 E	09 36 N	1210 m.	+	+	+	+	+	+
Ethiopia	Jijiga	ETH	112	042 43 E	09 20 N	1644 m.	+	+	+	+	+	+
Ethiopia	Goba	ETH	113	040 00 E	07 01 N	2700 m.	+	+	+	+	+	+
Ethiopia	Gorrahei	ETH	114	044 20 E	06 36 N	550 m.	+	+	+	+	+	+
Ethiopia	Degehabur	ETH	115	043 33 E	08 09 N	1000 m.	+	+	+	+	+	+
Ethiopia	Gode	ETH	116	043 35 E	06 06 N	320 m.	+	+	+	+	+	+
Ethiopia	Adaba	ETH	117	039 24 E	07 01 N	2485 m.	+	+	+	+	+	+
Ethiopia	Bonga	ETH	118	036 17 E	07 13 N	1725 m.	+	+	+	+	+	+
Ethiopia	Dodola	ETH	119	039 11 E	06 58 N	2540 m.	+	+	+	+	+	+
Ethiopia	Sodo	ETH	120	037 43 E	06 50 N	2020 m.	+	+	+	+	+	+
Ethiopia	Yirgalem	ETH	121	038 23 E	06 45 N	1835 m.	+	+	+	+	+	+
Ethiopia	Kebri Dehar	ETH	122	044 18 E	06 40 N	450 m.	+	+	+	+	+	+
Ethiopia	Bilate	ETH	123	037 58 E	06 39 N	1200 m.	+	+	+	+	+	+

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Ethiopia	Wendo-Aleta	ETH 124	038 25 E	06 35 N	1860 m.	+	+	+	+	+	+
Ethiopia	Hagere Selam	ETH 125	038 31 E	06 28 N	2840 m.	+	+	+	+	+	+
Ethiopia	Dila	ETH 126	038 18 E	06 25 N	1670 m.	+	+	+	+	+	+
Ethiopia	Mierab Abaya	ETH 127	037 50 E	06 20 N	1290 m.	+	+	+	+	+	+
Ethiopia	Felege Neway	ETH 128	036 52 E	06 18 N	1360 m.	+	+	+	+	+	+
Ethiopia	Chencha	ETH 129	037 37 E	06 15 N	2580 m.	+	+	+	+	+	+
Ethiopia	Yirga Chefe	ETH 130	038 15 E	06 14 N	1925 m.	+	+	+	+	+	+
Ethiopia	Bulki	ETH 131	036 32 E	06 11 N	2600 m.	+	+	+	+	+	+
Ethiopia	Arbaminch	ETH 132	037 38 E	06 05 N	1290 m.	+	+	+	+	+	+
Ethiopia	Adola-Kibremengist	ETH 133	039 05 E	05 55 N	2170 m.	+	+	+	+	+	+
Ethiopia	Bako Jinka	ETH 134	036 38 E	05 50 N	1430 m.	+	+	+	+	+	+
Ethiopia	Hagere Mariam	ETH 135	038 15 E	05 38 N	2000 m.	+	+	+	+	+	+
Ethiopia	Gidole	ETH 136	037 29 E	05 37 N	2550 m.	+	+	+	+	+	+
Ethiopia	Burji	ETH 137	037 56 E	05 24 N	1960 m.	+	+	+	+	+	+
Ethiopia	Negele	ETH 138	039 45 E	05 17 N	1444 m.	+	+	+	+	+	+
Ethiopia	Konso-Bekwele	ETH 139	037 35 E	05 15 N	1460 m.	+	+	+	+	+	+
Ethiopia	Yabelo	ETH 140	038 06 E	04 53 N	1740 m.	+	+	+	+	+	+
Ethiopia	Mega	ETH 141	038 20 E	04 05 N	2215 m.	+	+	+	+	+	+
Ethiopia	Moyale	ETH 142	039 03 E	03 32 N	1110 m.	+	+	+	+	+	+
Falkland Islands	Stanley	FLK 1	057 52 W	51 42 S	51 m.	+	+	+	+	+	+
France	Boulogne Sur Mer	FRA 29	001 36 E	50 44 N	70 m.	+	+	+	+	+	+
France	Lille	FRA 30	003 06 E	50 34 N	44 m.	+	+	+	+	+	+
France	Cherbourg	FRA 31	001 38 W	49 39 N	8 m.	+	+	+	+	+	+
France	Caen	FRA 32	000 25 W	49 10 N	66 m.	+	+	+	+	+	+
France	Rouen	FRA 33	001 03 E	49 23 N	68 m.	+	+	+	+	+	+
France	Reims	FRA 34	004 02 E	49 18 N	94 m.	+	+	+	+	+	+
France	Brest Guipavas	FRA 35	004 25 E	48 27 N	98 m.	+	+	+	+	+	+
France	Dinard	FRA 36	002 50 E	48 36 N	63 m.	+	+	+	+	+	+
France	Rennes	FRA 37	001 43 W	48 04 N	35 m.	+	+	+	+	+	+
France	Alencon	FRA 38	000 06 E	48 27 N	140 m.	+	+	+	+	+	+
France	Paris Montsouris	FRA 39	002 20 E	48 49 N	75 m.	+	+	+	+	+	+
France	Nancy Essey	FRA 40	006 14 E	48 42 N	212 m.	+	+	+	+	+	+
France	Strasbourg	FRA 41	007 38 E	48 33 N	149 m.	+	+	+	+	+	+
France	Nantes	FRA 42	001 33 W	47 15 N	41 m.	+	+	+	+	+	+
France	Le Mans	FRA 43	000 12 E	47 56 N	52 m.	+	+	+	+	+	+
France	Tours St Symphorien	FRA 44	000 42 E	47 25 N	96 m.	+	+	+	+	+	+
France	Orleans	FRA 45	001 45 E	47 59 N	125 m.	+	+	+	+	+	+
France	Nevers	FRA 46	003 06 E	47 00 N	176 m.	+	+	+	+	+	+
France	Auxerre	FRA 47	003 33 E	47 48 N	207 m.	+	+	+	+	+	+
France	Dijon	FRA 48	005 06 E	47 16 N	220 m.	+	+	+	+	+	+
France	Belfort	FRA 49	006 52 E	47 38 N	422 m.	+	+	+	+	+	+
France	Laochelle	FRA 50	001 10 W	46 09 N	1 m.	+	+	+	+	+	+
France	Poitiers	FRA 51	000 19 E	46 35 N	118 m.	+	+	+	+	+	+
France	Limoges	FRA 52	001 17 E	45 49 N	282 m.	+	+	+	+	+	+
France	Clermont Ferrand	FRA 53	003 09 E	45 48 N	329 m.	+	+	+	+	+	+
France	Le Puy Chadrac	FRA 54	003 54 E	45 03 N	714 m.	+	+	+	+	+	+
France	Lyon-Bron	FRA 55	004 57 E	45 43 N	200 m.	+	+	+	+	+	+
France	Grenoble	FRA 56	005 44 E	45 10 N	223 m.	+	+	+	+	+	+
France	Bordeaux	FRA 57	000 42 W	44 50 N	46 m.	+	+	+	+	+	+
France	Agen	FRA 58	000 36 E	44 11 N	59 m.	+	+	+	+	+	+
France	Gourdon	FRA 59	001 23 E	44 45 N	205 m.	+	+	+	+	+	+
France	Millau	FRA 60	003 03 E	44 06 N	409 m.	+	+	+	+	+	+
France	Montelimar	FRA 61	004 44 E	44 35 N	73 m.	+	+	+	+	+	+
France	Embrun	FRA 62	006 30 E	44 34 N	871 m.	+	+	+	+	+	+
France	Biarritz	FRA 63	001 32 W	43 28 N	69 m.	+	+	+	+	+	+

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France	Toulouse Blagnac	FRA	64	001 22 E	43 37 N	151 m.	+	+	+	+	+	+
France	Carcassonne	FRA	65	002 20 E	43 13 N	123 m.	+	+	+	+	+	+
France	Montpellier	FRA	66	003 58 E	43 35 N	5 m.	+	+	+	+	+	+
France	Marignane-Marseille	FRA	67	005 13 E	43 27 N	4 m.	+	+	+	+	+	+
France	Toulon	FRA	68	005 55 E	43 06 N	28 m.	+	+	+	+	+	+
France	Cannes	FRA	69	006 57 E	43 33 N	3 m.	+	+	+	+	+	+
France	Nice	FRA	70	007 12 E	43 39 N	5 m.	+	+	+	+	+	+
France	Perpignan	FRA	71	002 52 E	42 44 N	43 m.	+	+	+	+	+	+
France	Ajaccio	FRA	72	008 48 E	41 55 N	4 m.	+	+	+	+	+	+
French Guiana	Cayenneochambeau	GUF	1	052 22 W	04 50 N	9 m.	+	+	+	+	+	+
French Guiana	Camopi	GUF	2	052 12 W	03 09 N	61 m.	+	+	+	+	+	+
French Guiana	Maripasoula	GUF	3	054 02 W	03 38 N	104 m.	+	+	+	+	+	+
Gabon	Libreville	GAB	1	009 25 E	00 27 N	15 m.	+	+	+	+	+	+
Gabon	Port Gentil	GAB	2	008 45 E	00 42 S	4 m.	+	+	+	+	+	+
Gabon	Coco Beach	GAB	3	009 36 E	01 00 N	13 m.	+	+	+	+	+	+
Gabon	Tchibanga	GAB	4	011 01 E	02 51 S	79 m.	+	+	+	+	+	+
Gabon	Bitam	GAB	5	011 29 E	02 05 N	599 m.	+	+	+	+	+	+
Gabon	Lambarene	GAB	6	010 14 E	00 43 S	26 m.	+	+	+	+	+	+
Gabon	Makokou	GAB	7	012 52 E	00 34 N	515 m.	+	+	+	+	+	+
Gabon	Lastourville	GAB	8	012 43 E	00 50 S	485 m.	+	+	+	+	+	+
Gabon	Franceville	GAB	9	013 34 E	01 36 S	426 m.	+	+	+	+	+	+
Gambia	Yundum-Airport	GMB	1	016 48 W	13 21 N	26 m.	+	+	+	+	+	+
Gambia	Georgetown	GMB	2	015 46 W	13 32 N	1 m.	+	+	+	+	+	+
Gambia	Sapu	GMB	3	015 56 W	13 34 N	2 m.	+	+	+	+	+	+
Gambia	Basse	GMB	4	014 13 W	13 19 N	14 m.	+	+	+	+	+	+
Gambia	Jenoi	GMB	5	015 34 W	13 29 N	11 m.	+	+	+	+	+	+
Ghana	Navrongo	GHA	1	001 06 W	10 54 N	201 m.	+	+	+	+	+	+
Ghana	Wa	GHA	2	002 30 W	10 03 N	322 m.	+	+	+	+	+	+
Ghana	Bole	GHA	3	002 29 W	09 02 N	301 m.	+	+	+	+	+	+
Ghana	Tamale	GHA	4	000 51 W	09 30 N	173 m.	+	+	+	+	+	+
Ghana	Yendi	GHA	5	000 01 W	09 27 N	195 m.	+	+	+	+	+	+
Ghana	Wenchi	GHA	6	002 06 W	07 45 N	339 m.	+	+	+	+	+	+
Ghana	Kete Krachi	GHA	7	000 02 W	07 49 N	122 m.	+	+	+	+	+	+
Ghana	Kumasi	GHA	8	001 36 W	06 43 N	287 m.	+	+	+	+	+	+
Ghana	Sefwi Bekwai	GHA	9	001 20 W	06 12 N	172 m.	+	+	+	+	+	+
Ghana	Hon	GHA	10	000 28 E	06 36 N	158 m.	+	+	+	+	+	+
Ghana	Akuse	GHA	11	000 07 E	06 06 N	17 m.	+	+	+	+	+	+
Ghana	Axim	GHA	12	002 14 W	04 52 N	38 m.	+	+	+	+	+	+
Ghana	Takoradi	GHA	13	001 46 W	04 53 N	5 m.	+	+	+	+	+	+
Ghana	Salt Pond	GHA	14	001 04 W	05 12 N	44 m.	+	+	+	+	+	+
Ghana	Accra	GHA	15	000 10 W	05 36 N	68 m.	+	+	+	+	+	+
Ghana	Ada	GHA	16	000 38 E	05 47 N	5 m.	+	+	+	+	+	+
Greece	Thessaloniki	GRC	10	022 57 E	40 37 N	25 m.	+	+	+	+	+	+
Greece	Kavala	GRC	11	024 25 E	40 56 N	60 m.	+	+	+	+	+	+
Greece	Alexandroupolis	GRC	12	025 53 E	40 51 N	7 m.	+	+	+	+	+	+
Greece	Kerkira	GRC	13	019 55 E	39 37 N	2 m.	+	+	+	+	+	+
Greece	Trikkala	GRC	14	021 46 E	39 33 N	116 m.	+	+	+	+	+	+
Greece	Larissa	GRC	15	022 25 E	39 38 N	75 m.	+	+	+	+	+	+
Greece	Limnos	GRC	16	025 04 E	39 53 N	2 m.	+	+	+	+	+	+
Greece	Mitilini	GRC	17	026 33 E	39 06 N	2 m.	+	+	+	+	+	+
Greece	Lamia	GRC	18	022 26 E	38 54 N	144 m.	+	+	+	+	+	+
Greece	Araxos	GRC	19	021 25 E	38 10 N	15 m.	+	+	+	+	+	+
Greece	Patrai	GRC	20	021 44 E	38 15 N	1 m.	+	+	+	+	+	+
Greece	Khios	GRC	21	026 09 E	38 22 N	7 m.	+	+	+	+	+	+
Greece	Athens	GRC	22	023 43 E	37 58 N	15 m.	+	+	+	+	+	+

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Greece	Zakinthos	GRC 23	020 53 E	37 47 N	1 m.	+	+	+	+	+	+
Greece	Samos	GRC 24	027 00 E	37 44 N	49 m.	+	+	+	+	+	+
Greece	Naxos	GRC 25	025 24 E	37 06 N	3 m.	+	+	+	+	+	+
Greece	Methoni	GRC 26	021 42 E	36 50 N	33 m.	+	+	+	+	+	+
Greece	Khania	GRC 27	024 02 E	35 30 N	62 m.	+	+	+	+	+	+
Greece	Rhodos	GRC 28	028 07 E	36 23 N	37 m.	+	+	+	+	+	+
Greece	Hiraklion	GRC 29	025 11 E	35 20 N	39 m.	+	+	+	+	+	+
Guadeloupe	P.te A Pitre-Raizet	GLP 1	061 32 W	16 16 N	11 m.	+	+	+	+	+	+
Guatamala	Flores	GTM 1	089 53 W	16 55 N	115 m.	+	+	+	+	+	+
Guatamala	Santa Margarita	GTM 2	091 00 W	14 30 N	1099 m.	+	+	+	+	+	+
Guatamala	Pena Plata	GTM 3	091 04 W	14 27 N	619 m.	+	+	+	+	+	+
Guatamala	Asuncion Mita	GTM 4	089 41 W	14 19 N	478 m.	+	+	+	+	+	+
Guatamala	Cuilapa	GTM 5	090 18 W	14 15 N	892 m.	+	+	+	+	+	+
Guatamala	La Morena	GTM 6	090 21 W	14 09 N	739 m.	+	+	+	+	+	+
Guatamala	Huenuetenango	GTM 7	091 28 W	15 19 N	1901 m.	+	+	+	+	+	+
Guatamala	Montelimar	GTM 8	092 01 W	14 55 N	759 m.	+	+	+	+	+	+
Guatamala	Creek	GTM 9	088 57 W	15 18 N	54 m.	+	+	+	+	+	+
Guatamala	Panneer Playitas	GTM 10	088 48 W	15 21 N	58 m.	+	+	+	+	+	+
Guatamala	Coban	GTM 11	090 19 W	15 29 N	1316 m.	+	+	+	+	+	+
Guatamala	Quirigua	GTM 12	089 03 W	15 15 N	72 m.	+	+	+	+	+	+
Guatamala	Sanarate	GTM 13	090 12 W	14 46 N	811 m.	+	+	+	+	+	+
Guatamala	La Moka	GTM 14	091 45 W	14 45 N	1079 m.	+	+	+	+	+	+
Guatamala	Beliz	GTM 15	090 37 W	14 39 N	839 m.	+	+	+	+	+	+
Guatamala	Labor Ovalle	GTM 16	091 30 W	14 51 N	2399 m.	+	+	+	+	+	+
Guatamala	Puerto Barrios	GTM 17	088 36 W	15 43 N	1 m.	+	+	+	+	+	+
Guatamala	La Fragua	GTM 18	089 32 W	14 56 N	190 m.	+	+	+	+	+	+
Guatamala	Guatemala C.-o.n.	GTM 19	090 31 W	14 35 N	1502 m.	+	+	+	+	+	+
Guatamala	Patzulin	GTM 20	091 25 W	14 39 N	1199 m.	+	+	+	+	+	+
Guatamala	Castaneda	GTM 21	089 25 W	14 37 N	649 m.	+	+	+	+	+	+
Guatamala	El Pito Chocola	GTM 22	091 24 W	14 36 N	970 m.	+	+	+	+	+	+
Guatamala	Florencia	GTM 23	090 40 W	14 33 N	1979 m.	+	+	+	+	+	+
Guatamala	Los Brillantes	GTM 24	091 36 W	14 32 N	345 m.	+	+	+	+	+	+
Guatamala	San Jose	GTM 25	090 49 W	13 55 N	2 m.	+	+	+	+	+	+
Guatamala	Montufar.h.	GTM 26	090 07 W	13 47 N	10 m.	+	+	+	+	+	+
Guinea	Mamou	GIN 1	012 05 W	10 22 N	784 m.	+	+	+	+	+	+
Guinea	Kouroussa	GIN 2	009 15 W	10 39 N	372 m.	+	+	+	+	+	+
Guinea	Conakry	GIN 3	013 37 W	09 34 N	49 m.	+	+	+	+	+	+
Guinea-Bissau	Catio	GNB 1	015 16 W	11 17 N	18 m.	+	+	+	+	+	+
Guinea-Bissau	Buba	GNB 2	015 05 W	11 18 N	30 m.	+	+	+	+	+	+
Guinea-Bissau	Bissau	GNB 3	015 39 W	11 53 N	36 m.	+	+	+	+	+	+
Guinea-Bissau	Bolama	GNB 4	015 29 W	11 35 N	20 m.	+	+	+	+	+	+
Guinea-Bissau	Nova Lamego	GNB 5	014 14 W	12 17 N	83 m.	+	+	+	+	+	+
Guyana	Georgetown	GUY 1	058 09 W	06 48 N	2 m.	+	+	+	+	+	+
Guyana	New Amsterdam	GUY 2	057 31 W	06 15 N	2 m.	+	+	+	+	+	+
Guyana	St Ignatius-Lethem	GUY 3	059 48 W	03 22 N	82 m.	+	+	+	+	+	+
Guyana	Ebini L. S.	GUY 4	057 47 W	05 34 N	28 m.	+	+	+	+	+	+
Guyana	Potaro	GUY 5	059 04 W	05 19 N	100 m.	+	+	+	+	+	+
Guyana	Mabaruma	GUY 6	059 47 W	08 12 N	50 m.	+	+	+	+	+	+
Haiti	Port De Paix	HTI 1	072 50 W	19 56 N	6 m.	+	+	+	+	+	+
Haiti	Jeanabel	HTI 2	073 12 W	19 51 N	80 m.	+	+	+	+	+	+
Haiti	Limbe	HTI 3	072 24 W	19 42 N	20 m.	+	+	+	+	+	+
Haiti	Cap Haitien	HTI 4	072 13 W	19 45 N	3 m.	+	+	+	+	+	+
Haiti	Limonade	HTI 5	072 05 W	19 43 N	10 m.	+	+	+	+	+	+
Haiti	G.iviere Du Nord	HTI 6	072 10 W	19 34 N	60 m.	+	+	+	+	+	+
Haiti	Trou Du Nord	HTI 7	072 10 W	19 37 N	25 m.	+	+	+	+	+	+

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Haiti	Marmelade	HTI	8	072 22 W	19 31 N	750 m.	+	+	+	+	+	+
Haiti	Staphael	HTI	9	072 12 W	19 26 N	370 m.	+	+	+	+	+	+
Haiti	Vallieres	HTI	10	071 55 W	19 26 N	450 m.	+	+	+	+	+	+
Haiti	Gonaives	HTI	11	072 41 W	19 27 N	5 m.	+	+	+	+	+	+
Haiti	Hinche	HTI	12	072 00 W	19 09 N	260 m.	+	+	+	+	+	+
Haiti	Mirebalais	HTI	13	072 06 W	18 50 N	120 m.	+	+	+	+	+	+
Haiti	Jeremie	HTI	14	074 10 W	18 40 N	57 m.	+	+	+	+	+	+
Haiti	Damien	HTI	15	072 17 W	18 36 N	18 m.	+	+	+	+	+	+
Haiti	Kenscoff	HTI	16	072 17 W	18 27 N	1400 m.	+	+	+	+	+	+
Haiti	Beaumont	HTI	17	073 57 W	18 29 N	650 m.	+	+	+	+	+	+
Haiti	Fond Des Negres	HTI	18	073 13 W	18 22 N	300 m.	+	+	+	+	+	+
Haiti	Seguin	HTI	19	072 14 W	18 19 N	1680 m.	+	+	+	+	+	+
Haiti	Les Cayes	HTI	20	073 47 W	18 16 N	49 m.	+	+	+	+	+	+
Honduras	Isla Del Cisne	HND	1	083 56 W	17 24 N	9 m.	+	+	+	+	+	+
Honduras	Guanaja-Isla	HND	2	085 55 W	16 28 N	2 m.	+	+	+	+	+	+
Honduras	La Ceiba	HND	3	086 52 W	15 44 N	26 m.	+	+	+	+	+	+
Honduras	Tela	HND	4	087 29 W	15 43 N	3 m.	+	+	+	+	+	+
Honduras	La Mesa	HND	5	087 56 W	15 26 N	31 m.	+	+	+	+	+	+
Honduras	Olanchito	HND	6	086 34 W	15 31 N	150 m.	+	+	+	+	+	+
Honduras	Quimistan	HND	7	088 24 W	15 21 N	190 m.	+	+	+	+	+	+
Honduras	Puerto Lempira	HND	8	083 37 W	15 13 N	13 m.	+	+	+	+	+	+
Honduras	Victoria	HND	9	087 23 W	14 56 N	360 m.	+	+	+	+	+	+
Honduras	Catacamas	HND	10	085 56 W	14 54 N	442 m.	+	+	+	+	+	+
Honduras	Santaosa De Copan	HND	11	088 47 W	14 47 N	1079 m.	+	+	+	+	+	+
Honduras	Playitas	HND	12	087 42 W	14 26 N	595 m.	+	+	+	+	+	+
Honduras	Villa Ahumada	HND	13	086 34 W	14 02 N	700 m.	+	+	+	+	+	+
Honduras	Tegucigalpa Apto	HND	14	087 13 W	14 03 N	1000 m.	+	+	+	+	+	+
Honduras	Nacaome	HND	15	087 30 W	13 32 N	35 m.	+	+	+	+	+	+
Honduras	Choluteca	HND	16	087 12 W	13 18 N	48 m.	+	+	+	+	+	+
Hong Kong	Hong Kong-Royal Obs.	HKG	1	114 10 E	22 18 N	32 m.	+	+	+	+	+	+
India	Srinagar	IND	8	074 50 E	34 05 N	1586 m.	+	+	+	+	+	+
India	Leh	IND	9	077 34 E	34 09 N	3514 m.	+	+	+	+	+	+
India	Jammu	IND	10	074 50 E	32 40 N	366 m.	+	+	+	+	+	+
India	Amritsar	IND	11	074 52 E	31 38 N	234 m.	+	+	+	+	+	+
India	Simla	IND	12	077 10 E	31 06 N	2202 m.	+	+	+	+	+	+
India	Ludhiana	IND	13	075 52 E	30 56 N	247 m.	+	+	+	+	+	+
India	Ambala	IND	14	076 46 E	30 23 N	272 m.	+	+	+	+	+	+
India	Dehra Dun	IND	15	078 02 E	30 19 N	682 m.	+	+	+	+	+	+
India	Mussoorie	IND	16	078 05 E	30 27 N	2042 m.	+	+	+	+	+	+
India	Ganganagar	IND	17	073 53 E	29 55 N	177 m.	+	+	+	+	+	+
India	Hissar	IND	18	075 44 E	29 10 N	221 m.	+	+	+	+	+	+
India	Roorkee	IND	19	077 53 E	29 51 N	274 m.	+	+	+	+	+	+
India	Mukteswar-Kumaon	IND	20	079 39 E	29 28 N	2311 m.	+	+	+	+	+	+
India	Bikaner	IND	21	073 18 E	28 00 N	224 m.	+	+	+	+	+	+
India	New Delhi-Safdarjang	IND	22	077 12 E	28 35 N	216 m.	+	+	+	+	+	+
India	Bareilly	IND	23	079 24 E	28 22 N	173 m.	+	+	+	+	+	+
India	Phalodi	IND	24	072 22 E	27 08 N	234 m.	+	+	+	+	+	+
India	Agra	IND	25	078 02 E	27 10 N	169 m.	+	+	+	+	+	+
India	Aligarh	IND	26	078 04 E	27 53 N	187 m.	+	+	+	+	+	+
India	Mainpuri	IND	27	079 03 E	27 14 N	157 m.	+	+	+	+	+	+
India	Bahraich	IND	28	081 36 E	27 34 N	124 m.	+	+	+	+	+	+
India	Gonda	IND	29	081 58 E	27 08 N	110 m.	+	+	+	+	+	+
India	Darjeeling	IND	30	088 16 E	27 03 N	2127 m.	+	+	+	+	+	+
India	Kalimpong	IND	31	088 28 E	27 04 N	1209 m.	+	+	+	+	+	+
India	Sibsagar	IND	32	094 38 E	26 59 N	97 m.	+	+	+	+	+	+

Country name	Station name	Code Sn	Longitude	Latitude	Elevation	rd	tm	tx	vp	wn	rn
India	Dibrugarh	IND 33	095 01 E	27 29 N	110 m.	+	+	+	+	+	+
India	Jodhpur	IND 34	073 01 E	26 18 N	224 m.	+	+	+	+	+	+
India	Ajmer	IND 35	074 37 E	26 27 N	486 m.	+	+	+	+	+	+
India	Jaipur-Sanganer	IND 36	075 48 E	26 49 N	390 m.	+	+	+	+	+	+
India	Gwalior	IND 37	078 15 E	26 14 N	207 m.	+	+	+	+	+	+
India	Kanpur Air Fld	IND 38	080 22 E	26 26 N	126 m.	+	+	+	+	+	+
India	Lucknow	IND 39	080 56 E	26 52 N	111 m.	+	+	+	+	+	+
India	Gorakhpur	IND 40	083 22 E	26 45 N	77 m.	+	+	+	+	+	+
India	Motihari	IND 41	084 55 E	26 40 N	66 m.	+	+	+	+	+	+
India	Darbhanga	IND 42	085 54 E	26 10 N	49 m.	+	+	+	+	+	+
India	Jalpaiguri	IND 43	088 43 E	26 32 N	83 m.	+	+	+	+	+	+
India	Dhubri	IND 44	089 59 E	26 01 N	35 m.	+	+	+	+	+	+
India	Gauhati	IND 45	091 35 E	26 06 N	54 m.	+	+	+	+	+	+
India	Tezpur	IND 46	092 47 E	26 37 N	79 m.	+	+	+	+	+	+
India	Barmer	IND 47	071 23 E	25 45 N	194 m.	+	+	+	+	+	+
India	Kota	IND 48	075 51 E	25 11 N	257 m.	+	+	+	+	+	+
India	Jhansi	IND 49	078 35 E	25 27 N	251 m.	+	+	+	+	+	+
India	Mowgong	IND 50	079 27 E	25 04 N	229 m.	+	+	+	+	+	+
India	Fatehpur	IND 51	080 50 E	25 56 N	114 m.	+	+	+	+	+	+
India	Allababad	IND 52	081 44 E	25 27 N	98 m.	+	+	+	+	+	+
India	Varanasi-Babatpur	IND 53	082 52 E	25 27 N	85 m.	+	+	+	+	+	+
India	Patna	IND 54	085 10 E	25 37 N	53 m.	+	+	+	+	+	+
India	Sabaur	IND 55	087 04 E	25 14 N	37 m.	+	+	+	+	+	+
India	Purnea	IND 56	087 28 E	25 16 N	38 m.	+	+	+	+	+	+
India	Malda	IND 57	088 08 E	25 02 N	31 m.	+	+	+	+	+	+
India	Cherrapunji	IND 58	091 44 E	25 15 N	1313 m.	+	+	+	+	+	+
India	Shillong	IND 59	091 53 E	25 34 N	1598 m.	+	+	+	+	+	+
India	Lumding	IND 60	093 11 E	25 45 N	149 m.	+	+	+	+	+	+
India	Mount Abu	IND 61	072 43 E	24 36 N	1195 m.	+	+	+	+	+	+
India	Nimach	IND 62	074 54 E	24 28 N	496 m.	+	+	+	+	+	+
India	Jhalawar	IND 63	076 10 E	24 32 N	321 m.	+	+	+	+	+	+
India	Guna	IND 64	077 19 E	24 39 N	478 m.	+	+	+	+	+	+
India	Satna	IND 65	080 50 E	24 34 N	317 m.	+	+	+	+	+	+
India	Daltonganj	IND 66	084 04 E	24 03 N	221 m.	+	+	+	+	+	+
India	Gaya	IND 67	084 57 E	24 45 N	116 m.	+	+	+	+	+	+
India	Dumka	IND 68	087 15 E	24 16 N	149 m.	+	+	+	+	+	+
India	Berhampore	IND 69	088 16 E	24 08 N	19 m.	+	+	+	+	+	+
India	Silchar	IND 70	092 48 E	24 49 N	29 m.	+	+	+	+	+	+
India	Bhuj-Rudramata	IND 71	069 40 E	23 15 N	80 m.	+	+	+	+	+	+
India	Ahmadabad	IND 72	072 38 E	23 04 N	55 m.	+	+	+	+	+	+
India	Bhopal-Bairagarh	IND 73	077 21 E	23 17 N	523 m.	+	+	+	+	+	+
India	Sagar	IND 74	078 45 E	23 51 N	551 m.	+	+	+	+	+	+
India	Jabalpur	IND 75	079 57 E	23 12 N	393 m.	+	+	+	+	+	+
India	Umaria	IND 76	080 53 E	23 32 N	459 m.	+	+	+	+	+	+
India	Hazaribagh	IND 77	085 22 E	23 59 N	611 m.	+	+	+	+	+	+
India	Ranchi	IND 78	085 24 E	23 26 N	655 m.	+	+	+	+	+	+
India	Asansol	IND 79	086 59 E	23 41 N	126 m.	+	+	+	+	+	+
India	Dhambad	IND 80	086 26 E	23 47 N	257 m.	+	+	+	+	+	+
India	Burdwan	IND 81	087 51 E	23 14 N	32 m.	+	+	+	+	+	+
India	Krishnanagar	IND 82	088 31 E	23 24 N	15 m.	+	+	+	+	+	+
India	Dwarka	IND 83	069 05 E	22 22 N	11 m.	+	+	+	+	+	+
India	Jamnagar-Aero	IND 84	070 02 E	22 27 N	20 m.	+	+	+	+	+	+
India	Rajkot	IND 85	070 47 E	22 18 N	138 m.	+	+	+	+	+	+
India	Baroda	IND 86	073 15 E	22 18 N	34 m.	+	+	+	+	+	+
India	Dohad	IND 87	074 16 E	22 50 N	333 m.	+	+	+	+	+	+

Country name	Station name	Code Sn	Longitude	Latitude	Elevation	rd	tm	tx	vn	rn
India	Indore	IND 88	075 48 E	22 43 N	567 m.	+	+	+	+	+
India	Hoshangabad	IND 89	077 46 E	22 46 N	302 m.	+	+	+	+	+
India	Pachmarhi	IND 90	078 26 E	22 28 N	1075 m.	+	+	+	+	+
India	Seoni	IND 91	079 33 E	22 05 N	619 m.	+	+	+	+	+
India	Pendra	IND 92	081 54 E	22 46 N	625 m.	+	+	+	+	+
India	Chaibasa	IND 93	085 49 E	22 33 N	226 m.	+	+	+	+	+
India	Jamsshedpur	IND 94	086 11 E	22 49 N	129 m.	+	+	+	+	+
India	Midnapore	IND 95	087 19 E	22 25 N	45 m.	+	+	+	+	+
India	Calcutta-Alipore	IND 96	088 20 E	22 32 N	6 m.	+	+	+	+	+
India	Calcutta-Dum Dum	IND 97	088 27 E	22 39 N	6 m.	+	+	+	+	+
India	Bhaunagar-Aero	IND 98	072 11 E	21 45 N	11 m.	+	+	+	+	+
India	Surat	IND 99	072 50 E	21 12 N	12 m.	+	+	+	+	+
India	Jalgaon	IND 100	075 34 E	21 03 N	201 m.	+	+	+	+	+
India	Khandwa	IND 101	076 22 E	21 50 N	318 m.	+	+	+	+	+
India	Raipur	IND 102	081 39 E	21 14 N	298 m.	+	+	+	+	+
India	Sambalpur	IND 103	083 58 E	21 28 N	148 m.	+	+	+	+	+
India	Balasore	IND 104	086 56 E	21 31 N	20 m.	+	+	+	+	+
India	Sagar Island	IND 105	088 03 E	21 39 N	3 m.	+	+	+	+	+
India	Veraval	IND 106	070 22 E	20 54 N	8 m.	+	+	+	+	+
India	Malegaon	IND 107	074 32 E	20 33 N	437 m.	+	+	+	+	+
India	Akola	IND 108	077 02 E	20 42 N	282 m.	+	+	+	+	+
India	Amraoti	IND 109	077 47 E	20 56 N	370 m.	+	+	+	+	+
India	Kanker	IND 110	081 29 E	20 16 N	402 m.	+	+	+	+	+
India	Angul	IND 111	085 06 E	20 50 N	139 m.	+	+	+	+	+
India	Cuttack	IND 112	085 56 E	20 28 N	27 m.	+	+	+	+	+
India	Chandbali	IND 113	086 44 E	20 47 N	6 m.	+	+	+	+	+
India	Ahmadnagar	IND 114	074 48 E	19 05 N	657 m.	+	+	+	+	+
India	Aurangabad	IND 115	075 20 E	19 53 N	581 m.	+	+	+	+	+
India	Chandrapur	IND 116	079 18 E	19 58 N	193 m.	+	+	+	+	+
India	Jagdalpur	IND 117	082 02 E	19 05 N	553 m.	+	+	+	+	+
India	Gopalpur	IND 118	084 53 E	19 16 N	17 m.	+	+	+	+	+
India	Puri	IND 119	085 49 E	19 48 N	6 m.	+	+	+	+	+
India	Bombay	IND 120	072 49 E	18 54 N	11 m.	+	+	+	+	+
India	Alibag	IND 121	072 52 E	18 38 N	7 m.	+	+	+	+	+
India	Poona	IND 122	073 51 E	18 32 N	559 m.	+	+	+	+	+
India	Nizamabad	IND 123	078 06 E	18 40 N	381 m.	+	+	+	+	+
India	Hanamkonda	IND 124	079 34 E	19 01 N	269 m.	+	+	+	+	+
India	Kalingapatnam	IND 125	084 08 E	18 20 N	6 m.	+	+	+	+	+
India	Mahabaleshwar	IND 126	073 40 E	17 56 N	1382 m.	+	+	+	+	+
India	Sholapur	IND 127	075 54 E	17 40 N	479 m.	+	+	+	+	+
India	Gulbarga	IND 128	076 51 E	17 21 N	458 m.	+	+	+	+	+
India	Bidar	IND 129	077 32 E	17 55 N	664 m.	+	+	+	+	+
India	Hyderabad	IND 130	078 28 E	17 27 N	545 m.	+	+	+	+	+
India	Vishakhapatnam	IND 131	083 14 E	17 43 N	3 m.	+	+	+	+	+
India	Miraj-Sangli	IND 132	074 41 E	16 49 N	554 m.	+	+	+	+	+
India	Bijapur	IND 133	075 43 E	16 49 N	594 m.	+	+	+	+	+
India	Raichor	IND 134	077 21 E	16 12 N	400 m.	+	+	+	+	+
India	Rentachintala	IND 135	079 33 E	16 33 N	106 m.	+	+	+	+	+
India	Machilipatnam	IND 136	081 09 E	16 12 N	3 m.	+	+	+	+	+
India	Kakinada	IND 137	082 14 E	16 57 N	8 m.	+	+	+	+	+
India	Marmugao	IND 138	073 47 E	15 25 N	62 m.	+	+	+	+	+
India	Belgaum	IND 139	074 32 E	15 51 N	753 m.	+	+	+	+	+
India	Gadag	IND 140	075 38 E	15 25 N	650 m.	+	+	+	+	+
India	Bellary	IND 141	076 51 E	15 09 N	449 m.	+	+	+	+	+
India	Kurnool	IND 142	078 04 E	15 50 N	281 m.	+	+	+	+	+

Country name	Station name	Code Sn	Longitude	Latitude	Elevation	rd	tm	tx	vp	wn	rn
India	Honavar	IND 143	074 27 E	14 17 N	29 m.	+	+	+	+	+	+
India	Chitradurga	IND 144	076 26 E	14 14 N	733 m.	+	+	+	+	+	+
India	Cuddapah	IND 145	078 50 E	14 29 N	130 m.	+	+	+	+	+	+
India	Nellore	IND 146	079 59 E	14 27 N	20 m.	+	+	+	+	+	+
India	Balehonnur	IND 147	075 27 E	13 22 N	889 m.	+	+	+	+	+	+
India	Hassan	IND 148	076 09 E	13 00 N	960 m.	+	+	+	+	+	+
India	Madras-Minambakkam	IND 149	080 11 E	13 00 N	16 m.	+	+	+	+	+	+
India	Mangalore	IND 150	074 51 E	12 52 N	22 m.	+	+	+	+	+	+
India	Mercara	IND 151	075 44 E	12 25 N	1152 m.	+	+	+	+	+	+
India	Mysore	IND 152	076 42 E	12 18 N	767 m.	+	+	+	+	+	+
India	Bangalore	IND 153	077 35 E	12 58 N	921 m.	+	+	+	+	+	+
India	Vellore	IND 154	079 09 E	12 55 N	214 m.	+	+	+	+	+	+
India	Amini	IND 155	072 44 E	11 07 N	4 m.	+	+	+	+	+	+
India	Kozhikode-Calicut	IND 156	075 47 E	11 15 N	5 m.	+	+	+	+	+	+
India	Coonoor	IND 157	076 48 E	11 21 N	1747 m.	+	+	+	+	+	+
India	Coimbatore	IND 158	078 58 E	11 00 N	409 m.	+	+	+	+	+	+
India	Salem	IND 159	078 10 E	11 39 N	278 m.	+	+	+	+	+	+
India	Cuddalore	IND 160	079 46 E	11 46 N	12 m.	+	+	+	+	+	+
India	Kodaikanal	IND 161	077 28 E	10 14 N	2343 m.	+	+	+	+	+	+
India	Tiruchchirapalli	IND 162	078 43 E	10 46 N	88 m.	+	+	+	+	+	+
India	Nagappattinam	IND 163	079 51 E	10 46 N	9 m.	+	+	+	+	+	+
India	Cochin	IND 164	076 14 E	09 58 N	3 m.	+	+	+	+	+	+
India	Madurai	IND 165	078 07 E	09 55 N	133 m.	+	+	+	+	+	+
India	Pamban	IND 166	079 18 E	09 16 N	11 m.	+	+	+	+	+	+
India	Minicoy	IND 167	073 00 E	08 18 N	2 m.	+	+	+	+	+	+
India	Trivandrum	IND 168	076 57 E	08 29 N	64 m.	+	+	+	+	+	+
Indonesia	Sabang	IDN 4	095 19 E	05 52 N	126 m.	+	+	+	+	+	+
Indonesia	Medan	IDN 5	098 41 E	03 34 N	25 m.	+	+	+	+	+	+
Indonesia	Fort De Kock	IDN 6	100 22 E	00 18 S	920 m.	+	+	+	+	+	+
Indonesia	Padang	IDN 7	100 21 E	00 53 S	3 m.	+	+	+	+	+	+
Indonesia	Palembang	IDN 8	104 42 E	02 54 S	10 m.	+	+	+	+	+	+
Indonesia	Pangkalpinang	IDN 9	106 08 E	02 10 S	33 m.	+	+	+	+	+	+
Indonesia	Buluh Tumbang	IDN 10	107 45 E	02 45 S	44 m.	+	+	+	+	+	+
Indonesia	Tarakan	IDN 11	117 34 E	03 20 N	6 m.	+	+	+	+	+	+
Indonesia	Pontianak	IDN 12	109 24 E	00 09 S	3 m.	+	+	+	+	+	+
Indonesia	Balikpapan	IDN 13	116 54 E	01 16 S	3 m.	+	+	+	+	+	+
Indonesia	Banjarmasin	IDN 14	114 45 E	03 26 N	20 m.	+	+	+	+	+	+
Indonesia	Curug-Budiarto	IDN 15	106 39 E	06 14 S	46 m.	+	+	+	+	+	+
Indonesia	Jakarta	IDN 16	106 50 E	06 11 S	8 m.	+	+	+	+	+	+
Indonesia	Bogor	IDN 17	106 45 E	06 30 S	250 m.	+	+	+	+	+	+
Indonesia	Tjipetir	IDN 18	106 41 E	06 52 S	570 m.	+	+	+	+	+	+
Indonesia	Pangerango	IDN 19	106 58 E	06 45 S	3023 m.	+	+	+	+	+	+
Indonesia	Rarahan	IDN 20	107 01 E	06 45 S	1400 m.	+	+	+	+	+	+
Indonesia	Gunungosa	IDN 21	107 04 E	07 00 S	1022 m.	+	+	+	+	+	+
Indonesia	Lembang	IDN 22	107 37 E	06 50 S	1300 m.	+	+	+	+	+	+
Indonesia	Bandung	IDN 23	107 36 E	06 53 S	791 m.	+	+	+	+	+	+
Indonesia	Dieng-Plateau	IDN 24	109 54 E	07 13 S	2062 m.	+	+	+	+	+	+
Indonesia	Karanganjar	IDN 25	109 34 E	07 34 S	13 m.	+	+	+	+	+	+
Indonesia	Magelang	IDN 26	110 14 E	07 29 S	380 m.	+	+	+	+	+	+
Indonesia	Semarang	IDN 27	110 25 E	06 58 S	3 m.	+	+	+	+	+	+
Indonesia	Sawahan	IDN 28	110 55 E	07 07 S	25 m.	+	+	+	+	+	+
Indonesia	Surabaya	IDN 29	112 43 E	07 13 S	3 m.	+	+	+	+	+	+
Indonesia	Tosari	IDN 30	112 55 E	07 53 S	1735 m.	+	+	+	+	+	+
Indonesia	Pasuruan	IDN 31	112 55 E	07 38 S	5 m.	+	+	+	+	+	+
Indonesia	Djember	IDN 32	113 44 E	08 09 S	83 m.	+	+	+	+	+	+

Country name	Station name	Code	Sn	Longitude	Latitude	Elevation	rd	tm	tx	vp	wn	rn
Indonesia	Tamansari	IDN	33	114 17 E	08 10 S	590 m.	+	+	+	+	+	+
Indonesia	Rogodjampi	IDN	34	114 18 E	08 19 S	89 m.	+	+	+	+	+	+
Indonesia	Kawah-Idjen	IDN	35	114 14 E	08 41 S	2200 m.	+	+	+	+	+	+
Indonesia	Manado	IDN	36	124 55 E	01 32 N	13 m.	+	+	+	+	+	+
Indonesia	Ujung Padang	IDN	37	119 33 E	05 04 S	14 m.	+	+	+	+	+	+
Indonesia	Den Pasar	IDN	38	115 10 E	08 45 S	1 m.	+	+	+	+	+	+
Indonesia	Tambora	IDN	39	117 50 E	08 12 S	500 m.	+	+	+	+	+	+
Indonesia	Waingapu	IDN	40	120 20 E	09 40 S	12 m.	+	+	+	+	+	+
Indonesia	Kupang	IDN	41	123 40 E	10 10 S	45 m.	+	+	+	+	+	+
Indonesia	Sorong	IDN	42	131 07 E	00 56 S	3 m.	+	+	+	+	+	+
Indonesia	Manokwari	IDN	43	134 03 E	00 53 S	3 m.	+	+	+	+	+	+
Indonesia	Biak-Mokmer	IDN	44	136 07 E	01 11 S	11 m.	+	+	+	+	+	+
Indonesia	Jayapura	IDN	45	140 29 E	02 34 S	99 m.	+	+	+	+	+	+
Indonesia	Ambon	IDN	46	128 05 E	03 42 S	12 m.	+	+	+	+	+	+
Indonesia	Kaimana	IDN	47	133 45 E	03 40 S	3 m.	+	+	+	+	+	+
Iran	Khoy	IRN	1	044 58 E	38 33 N	1107 m.	+	+	+	+	+	+
Iran	Tabriz	IRN	2	046 17 E	38 05 N	1367 m.	+	+	+	+	+	+
Iran	Orumieh	IRN	3	045 05 E	37 32 N	1297 m.	+	+	+	+	+	+
Iran	Anzali	IRN	4	049 28 E	37 28 N	-23 m.	+	+	+	+	+	+
Iran	Rasht	IRN	5	049 36 E	37 15 N	-7 m.	+	+	+	+	+	+
Iran	Saghez	IRN	6	046 16 E	36 15 N	1493 m.	+	+	+	+	+	+
Iran	Zanjan	IRN	7	048 29 E	36 41 N	1663 m.	+	+	+	+	+	+
Iran	Ghazvin	IRN	8	050.00 E	36 15 N	1278 m.	+	+	+	+	+	+
Iran	Ramsar	IRN	9	050 40 E	36 54 N	-20 m.	+	+	+	+	+	+
Iran	Babul Sar	IRN	10	052 39 E	36 43 N	-21 m.	+	+	+	+	+	+
Iran	Gorgan	IRN	11	054 28 E	36 49 N	155 m.	+	+	+	+	+	+
Iran	Shahroud	IRN	12	055 02 E	36 25 N	1345 m.	+	+	+	+	+	+
Iran	Sabzevar	IRN	13	057 40 E	36 13 N	941 m.	+	+	+	+	+	+
Iran	Mashhad	IRN	14	059 38 E	36 16 N	989 m.	+	+	+	+	+	+
Iran	Kashafrud	IRN	15	060 50 E	35 59 N	584 m.	+	+	+	+	+	+
Iran	Sanandaj	IRN	16	047 00 E	35 20 N	1373 m.	+	+	+	+	+	+
Iran	Teheran Mehrabad	IRN	17	051 19 E	35 41 N	1191 m.	+	+	+	+	+	+
Iran	Varamin	IRN	18	051 41 E	35 21 N	950 m.	+	+	+	+	+	+
Iran	Garmsar	IRN	19	052 10 E	35 15 N	900 m.	+	+	+	+	+	+
Iran	Semnan	IRN	20	053 23 E	35 33 N	1171 m.	+	+	+	+	+	+
Iran	Torbat Heydarieh	IRN	21	059 13 E	35 16 N	1333 m.	+	+	+	+	+	+
Iran	Bakhtaran	IRN	22	047 07 E	34 16 N	1322 m.	+	+	+	+	+	+
Iran	Nowjeh	IRN	23	048 43 E	35 12 N	1644 m.	+	+	+	+	+	+
Iran	Arak	IRN	24	049 24 E	34 06 N	1720 m.	+	+	+	+	+	+
Iran	Khoramabad	IRN	25	048 18 E	33 30 N	1125 m.	+	+	+	+	+	+
Iran	Kashan	IRN	26	051 27 E	33 59 N	982 m.	+	+	+	+	+	+
Iran	Tabass	IRN	27	056 54 E	33 36 N	691 m.	+	+	+	+	+	+
Iran	Dezful	IRN	28	048 23 E	32 24 N	143 m.	+	+	+	+	+	+
Iran	Shahre-Kord	IRN	29	050 51 E	32 19 N	2078 m.	+	+	+	+	+	+
Iran	Esfahan	IRN	30	051 40 E	32 37 N	1590 m.	+	+	+	+	+	+
Iran	Birjand	IRN	31	059 12 E	32 52 N	1491 m.	+	+	+	+	+	+
Iran	Ahwaz	IRN	32	048 40 E	31 20 N	20 m.	+	+	+	+	+	+
Iran	Yazd	IRN	33	054 24 E	31 54 N	1230 m.	+	+	+	+	+	+
Iran	Zabol	IRN	34	061 29 E	31 20 N	489 m.	+	+	+	+	+	+
Iran	Abadan	IRN	35	048 15 E	30 22 N	11 m.	+	+	+	+	+	+
Iran	Kerman	IRN	36	056 58 E	30 15 N	1748 m.	+	+	+	+	+	+
Iran	Shiraz	IRN	37	052 35 E	29 32 N	1486 m.	+	+	+	+	+	+
Iran	Bam	IRN	38	058 24 E	29 06 N	1067 m.	+	+	+	+	+	+
Iran	Zahedan	IRN	39	060 53 E	29 28 N	1370 m.	+	+	+	+	+	+
Iran	Bushehr	IRN	40	050 50 E	28 59 N	19 m.	+	+	+	+	+	+

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Iran	Fasa	IRN	41	053 41 E	28 58 N	1383 m.	+	+	+	+	+	+
Iran	Bandar-Abbas	IRN	42	056 22 E	27 13 N	10 m.	+	+	+	+	+	+
Iran	Iran Shahr	IRN	43	060 42 E	27 12 N	591 m.	+	+	+	+	+	+
Iran	Bandar Lengeh	IRN	44	054 50 E	26 35 N	14 m.	+	+	+	+	+	+
Iran	Jask	IRN	45	057 46 E	25 38 N	4 m.	+	+	+	+	+	+
Iran	Chahbahar	IRN	46	060 45 E	25 25 N	6 m.	+	+	+	+	+	+
Iraq	Sinjar	IRQ	1	041 50 E	36 19 N	476 m.	+	+	+	+	+	+
Iraq	Mosul	IRQ	2	043 09 E	36 19 N	223 m.	+	+	+	+	+	+
Iraq	Salahaddin	IRQ	3	044 13 E	36 37 N	1088 m.	+	+	+	+	+	+
Iraq	Kirkuk	IRQ	4	044 24 E	35 28 N	331 m.	+	+	+	+	+	+
Iraq	Sulaimaniya	IRQ	5	045 27 E	35 33 N	853 m.	+	+	+	+	+	+
Iraq	Ana	IRQ	6	041 57 E	34 28 N	150 m.	+	+	+	+	+	+
Iraq	Haditha	IRQ	7	042 22 E	34 04 N	140 m.	+	+	+	+	+	+
Iraq	Khanaqin	IRQ	8	045 26 E	34 18 N	202 m.	+	+	+	+	+	+
Iraq	Rutbah	IRQ	9	040 17 E	33 02 N	615 m.	+	+	+	+	+	+
Iraq	Habbaniya	IRQ	10	043 34 E	33 22 N	44 m.	+	+	+	+	+	+
Iraq	Baghdad	IRQ	11	044 14 E	33 14 N	34 m.	+	+	+	+	+	+
Iraq	Nukhaib	IRQ	12	042 15 E	32 02 N	305 m.	+	+	+	+	+	+
Iraq	Kut Al Hai	IRQ	13	046 03 E	32 10 N	15 m.	+	+	+	+	+	+
Iraq	Najaf	IRQ	14	044 19 E	31 59 N	32 m.	+	+	+	+	+	+
Iraq	Diwaniya	IRQ	15	044 59 E	31 59 N	20 m.	+	+	+	+	+	+
Iraq	Samawa	IRQ	16	045 16 E	31 18 N	6 m.	+	+	+	+	+	+
Iraq	Nasiriyah	IRQ	17	046 14 E	31 05 N	3 m.	+	+	+	+	+	+
Iraq	Amara	IRQ	18	047 10 E	31 51 N	9 m.	+	+	+	+	+	+
Iraq	Shaibah	IRQ	19	047 35 E	30 25 N	2 m.	+	+	+	+	+	+
Iraq	Basrah	IRQ	20	047 47 E	30 34 N	2 m.	+	+	+	+	+	+
Israel	Har Kenaan	ISR	3	035 30 E	32 58 N	934 m.	+	+	+	+	+	+
Israel	Deganya Alef	ISR	4	035 32 E	32 42 N	-210 m.	+	+	+	+	+	+
Israel	Bet-Dagan	ISR	5	034 49 E	32 00 N	30 m.	+	+	+	+	+	+
Israel	Lod Airport	ISR	6	034 54 E	32 00 N	40 m.	+	+	+	+	+	+
Israel	Jerusalem	ISR	7	035 13 E	31 47 N	809 m.	+	+	+	+	+	+
Israel	Beer Sheva	ISR	8	034 48 E	31 15 N	280 m.	+	+	+	+	+	+
Israel	Eilat	ISR	9	034 57 E	29 33 N	12 m.	+	+	+	+	+	+
Italy	Bolzano	ITA	21	011 21 E	46 30 N	271 m.	+	+	+	+	+	+
Italy	Trento	ITA	22	011 05 E	46 05 N	200 m.	+	+	+	+	+	+
Italy	Dobbiaco	ITA	23	012 13 E	46 44 N	1222 m.	+	+	+	+	+	+
Italy	Sondrio	ITA	24	009 55 E	46 10 N	300 m.	+	+	+	+	+	+
Italy	Tarvisio	ITA	25	013 35 E	46 30 N	751 m.	+	+	+	+	+	+
Italy	Udine	ITA	26	013 14 E	46 04 N	116 m.	+	+	+	+	+	+
Italy	Torino	ITA	27	007 40 E	45 05 N	238 m.	+	+	+	+	+	+
Italy	Bergamo	ITA	28	009 42 E	45 40 N	238 m.	+	+	+	+	+	+
Italy	Milano	ITA	29	009 11 E	45 28 N	121 m.	+	+	+	+	+	+
Italy	Piacenza	ITA	30	009 44 E	44 55 N	138 m.	+	+	+	+	+	+
Italy	Verona	ITA	31	010 59 E	45 26 N	60 m.	+	+	+	+	+	+
Italy	Padova	ITA	32	010 51 E	45 24 N	14 m.	+	+	+	+	+	+
Italy	Venezia	ITA	33	012 19 E	45 27 N	1 m.	+	+	+	+	+	+
Italy	Trieste	ITA	34	013 46 E	45 39 N	11 m.	+	+	+	+	+	+
Italy	Sanemo	ITA	35	007 47 E	43 49 N	9 m.	+	+	+	+	+	+
Italy	Govone-Asti	ITA	36	008 06 E	44 48 N	300 m.	+	+	+	+	+	+
Italy	Genova	ITA	37	008 55 E	44 25 N	21 m.	+	+	+	+	+	+
Italy	Parma	ITA	38	010 19 E	44 48 N	57 m.	+	+	+	+	+	+
Italy	Ferrara	ITA	39	011 37 E	44 49 N	9 m.	+	+	+	+	+	+
Italy	Bologna	ITA	40	011 21 E	44 30 N	60 m.	+	+	+	+	+	+
Italy	Rimini	ITA	41	012 20 E	44 03 N	2 m.	+	+	+	+	+	+
Italy	Pisa	ITA	42	010 24 E	46 42 N	6 m.	+	+	+	+	+	+

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Italy	Firenze	ITA	43	011 15 E	43 46 N	51 m.	+	+	+	+	+	+
Italy	Siena	ITA	44	011 20 E	43 31 N	348 m.	+	+	+	+	+	+
Italy	Perugia	ITA	45	012 21 E	43 07 N	493 m.	+	+	+	+	+	+
Italy	Ancona	ITA	46	013 31 E	43 37 N	105 m.	+	+	+	+	+	+
Italy	Civitavecchia	ITA	47	011 50 E	42 02 N	4 m.	+	+	+	+	+	+
Italy	Pescara	ITA	48	014 12 E	42 28 N	13 m.	+	+	+	+	+	+
Italy	L'aquila	ITA	49	013 24 E	42 21 N	735 m.	+	+	+	+	+	+
Italy	Termoli	ITA	50	015 00 E	42 00 N	21 m.	+	+	+	+	+	+
Italy	Roma-Coll.romano	ITA	51	012 29 E	41 54 N	17 m.	+	+	+	+	+	+
Italy	Roma-Ciampino	ITA	52	012 35 E	41 48 N	101 m.	+	+	+	+	+	+
Italy	Foggia	ITA	53	015 33 E	41 28 N	74 m.	+	+	+	+	+	+
Italy	Vieste	ITA	54	016 11 E	41 53 N	67 m.	+	+	+	+	+	+
Italy	Bari	ITA	55	016 47 E	41 08 N	12 m.	+	+	+	+	+	+
Italy	Ponza	ITA	56	012 57 E	40 51 N	185 m.	+	+	+	+	+	+
Italy	Napoli	ITA	57	014 17 E	40 53 N	110 m.	+	+	+	+	+	+
Italy	Potenza	ITA	58	014 46 E	40 38 N	823 m.	+	+	+	+	+	+
Italy	Capo Palinuro	ITA	59	015 17 E	40 01 N	185 m.	+	+	+	+	+	+
Italy	Latronico	ITA	60	016 00 E	40 05 N	896 m.	+	+	+	+	+	+
Italy	Brindisi	ITA	61	017 56 E	40 38 N	28 m.	+	+	+	+	+	+
Italy	Lecce	ITA	62	018 09 E	40 14 N	60 m.	+	+	+	+	+	+
Italy	Palascia	ITA	63	018 30 E	40 07 N	90 m.	+	+	+	+	+	+
Italy	Calo Pezzatti	ITA	64	016 48 E	39 34 N	180 m.	+	+	+	+	+	+
Italy	Taranto	ITA	65	017 14 E	40 28 N	15 m.	+	+	+	+	+	+
Italy	Crotone	ITA	66	017 08 E	39 05 N	6 m.	+	+	+	+	+	+
Italy	Sta Maria Di Leuca	ITA	67	018 21 E	39 49 N	110 m.	+	+	+	+	+	+
Italy	Caraffa Di Catanzaro	ITA	68	016 29 E	38 53 N	363 m.	+	+	+	+	+	+
Italy	Palermo	ITA	69	013 19 E	38 06 N	31 m.	+	+	+	+	+	+
Italy	Messina	ITA	70	015 33 E	38 12 N	54 m.	+	+	+	+	+	+
Italy	Trapani	ITA	71	012 30 E	38 01 N	15 m.	+	+	+	+	+	+
Italy	Enna	ITA	72	014 17 E	37 34 N	950 m.	+	+	+	+	+	+
Italy	Catania	ITA	73	015 06 E	37 30 N	45 m.	+	+	+	+	+	+
Italy	Siracusa	ITA	74	015 15 E	37 10 N	50 m.	+	+	+	+	+	+
Italy	Cozzo Spadaro	ITA	75	015 08 E	36 41 N	46 m.	+	+	+	+	+	+
Italy	Guardavecchia	ITA	76	009 24 E	41 13 N	159 m.	+	+	+	+	+	+
Italy	Alghero	ITA	77	008 17 E	40 38 N	40 m.	+	+	+	+	+	+
Italy	Macomer	ITA	78	008 47 E	40 16 N	572 m.	+	+	+	+	+	+
Italy	Tempio Pausania	ITA	79	009 06 E	40 54 N	558 m.	+	+	+	+	+	+
Italy	Cagliari-Elmas	ITA	80	009 03 E	39 15 N	7 m.	+	+	+	+	+	+
Jamaica	Negril Pt. Lh.	JAM	1	078 22 W	18 15 N	9 m.	+	+	+	+	+	+
Jamaica	Montego Bay	JAM	2	077 55 W	18 30 N	1 m.	+	+	+	+	+	+
Jamaica	Worthy Park	JAM	3	077 09 W	18 08 N	411 m.	+	+	+	+	+	+
Jamaica	Mandeville	JAM	4	077 32 W	18 03 N	700 m.	+	+	+	+	+	+
Jamaica	Palisadoes Airp.	JAM	5	076 47 W	17 56 N	3 m.	+	+	+	+	+	+
Jamaica	Kingston	JAM	6	076 48 W	17 58 N	8 m.	+	+	+	+	+	+
Jamaica	Morant Point	JAM	7	076 11 W	17 55 N	2 m.	+	+	+	+	+	+
Japan	Wakkana	JPN	1	141 41 E	45 25 N	3 m.	+	+	+	+	+	+
Japan	Kitamiesashi	JPN	2	142 35 E	44 56 N	7 m.	+	+	+	+	+	+
Japan	Haboro	JPN	3	141 42 E	44 22 N	8 m.	+	+	+	+	+	+
Japan	Omu	JPN	4	142 58 E	44 35 N	14 m.	+	+	+	+	+	+
Japan	Rumoi	JPN	5	141 38 E	43 57 N	22 m.	+	+	+	+	+	+
Japan	Asahikawa	JPN	6	142 22 E	43 46 N	112 m.	+	+	+	+	+	+
Japan	Abashiri	JPN	7	144 17 E	44 01 N	38 m.	+	+	+	+	+	+
Japan	Otaru	JPN	8	141 01 E	43 11 N	24 m.	+	+	+	+	+	+
Japan	Sapporo	JPN	9	141 20 E	43 03 N	17 m.	+	+	+	+	+	+
Japan	Iwamizawa	JPN	10	141 47 E	43 13 N	42 m.	+	+	+	+	+	+

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Japan	Obihiro	JPN	11	143 13 E	42 55 N	39 m.	+	+	+	+	+	+
Japan	Kushiro	JPN	12	144 24 E	42 59 N	32 m.	+	+	+	+	+	+
Japan	Nemuro	JPN	13	145 35 E	43 20 N	26 m.	+	+	+	+	+	+
Japan	Suttsu	JPN	14	140 14 E	42 47 N	16 m.	+	+	+	+	+	+
Japan	Muroran	JPN	15	140 59 E	42 19 N	43 m.	+	+	+	+	+	+
Japan	Tomakomai	JPN	16	141 35 E	42 38 N	6 m.	+	+	+	+	+	+
Japan	Urakawa	JPN	17	142 47 E	42 10 N	34 m.	+	+	+	+	+	+
Japan	Esashi	JPN	18	140 08 E	41 52 N	12 m.	+	+	+	+	+	+
Japan	Hakodate	JPN	19	140 45 E	41 49 N	33 m.	+	+	+	+	+	+
Japan	Kutchan	JPN	20	140 45 E	42 54 N	174 m.	+	+	+	+	+	+
Japan	Mombetsu	JPN	21	143 22 E	44 21 N	16 m.	+	+	+	+	+	+
Japan	Hiroo	JPN	22	143 19 E	42 18 N	32 m.	+	+	+	+	+	+
Japan	Shinjo	JPN	23	140 18 E	38 45 N	94 m.	+	+	+	+	+	+
Japan	Wakamatsu	JPN	24	139 55 E	37 29 N	212 m.	+	+	+	+	+	+
Japan	Fukaura	JPN	25	139 56 E	40 39 N	66 m.	+	+	+	+	+	+
Japan	Aomori	JPN	26	140 47 E	40 49 N	4 m.	+	+	+	+	+	+
Japan	Hachinohe	JPN	27	141 32 E	40 32 N	27 m.	+	+	+	+	+	+
Japan	Akita	JPN	28	140 06 E	39 43 N	9 m.	+	+	+	+	+	+
Japan	Morioka	JPN	29	141 10 E	39 42 N	155 m.	+	+	+	+	+	+
Japan	Miyako	JPN	30	141 58 E	39 39 N	43 m.	+	+	+	+	+	+
Japan	Sakata	JPN	31	139 50 E	38 54 N	3 m.	+	+	+	+	+	+
Japan	Yamagata	JPN	32	140 21 E	38 15 N	153 m.	+	+	+	+	+	+
Japan	Sendai	JPN	33	140 54 E	38 16 N	39 m.	+	+	+	+	+	+
Japan	Ishinomaki	JPN	34	141 18 E	38 26 N	43 m.	+	+	+	+	+	+
Japan	Fukushima	JPN	35	140 28 E	37 45 N	67 m.	+	+	+	+	+	+
Japan	Shirakawa	JPN	36	140 13 E	37 07 N	354 m.	+	+	+	+	+	+
Japan	Onahama	JPN	37	140 54 E	36 57 N	3 m.	+	+	+	+	+	+
Japan	Wajima	JPN	38	136 54 E	37 23 N	5 m.	+	+	+	+	+	+
Japan	Aikawa	JPN	39	138 15 E	38 01 N	35 m.	+	+	+	+	+	+
Japan	Niigata	JPN	40	139 03 E	37 55 N	2 m.	+	+	+	+	+	+
Japan	Kanazawa	JPN	41	136 39 E	36 33 N	26 m.	+	+	+	+	+	+
Japan	Fushiki	JPN	42	137 03 E	36 47 N	12 m.	+	+	+	+	+	+
Japan	Toyama	JPN	43	137 12 E	36 42 N	9 m.	+	+	+	+	+	+
Japan	Nagano	JPN	44	138 12 E	36 40 N	418 m.	+	+	+	+	+	+
Japan	Takada	JPN	45	138 15 E	37 06 N	13 m.	+	+	+	+	+	+
Japan	Utsunomiya	JPN	46	139 50 E	36 33 N	119 m.	+	+	+	+	+	+
Japan	Fukui	JPN	47	136 14 E	36 03 N	9 m.	+	+	+	+	+	+
Japan	Takayama	JPN	48	137 15 E	36 09 N	560 m.	+	+	+	+	+	+
Japan	Matsumoto	JPN	49	137 58 E	36 15 N	610 m.	+	+	+	+	+	+
Japan	Suwa	JPN	50	138 07 E	36 03 N	760 m.	+	+	+	+	+	+
Japan	Karuizawa	JPN	51	138 33 E	36 20 N	999 m.	+	+	+	+	+	+
Japan	Maebashi	JPN	52	139 04 E	36 24 N	112 m.	+	+	+	+	+	+
Japan	Kumagaya	JPN	53	139 23 E	36 09 N	30 m.	+	+	+	+	+	+
Japan	Mito	JPN	54	140 28 E	36 23 N	29 m.	+	+	+	+	+	+
Japan	Tsuruga	JPN	55	136 04 E	35 39 N	2 m.	+	+	+	+	+	+
Japan	Gifu	JPN	56	136 46 E	35 24 N	13 m.	+	+	+	+	+	+
Japan	Nagoya	JPN	57	136 58 E	35 10 N	51 m.	+	+	+	+	+	+
Japan	Iida	JPN	58	137 50 E	35 31 N	482 m.	+	+	+	+	+	+
Japan	Kofu	JPN	59	138 33 E	35 40 N	272 m.	+	+	+	+	+	+
Japan	Kawaguchiko	JPN	60	138 46 E	35 30 N	860 m.	+	+	+	+	+	+
Japan	Chichibu	JPN	61	139 05 E	35 59 N	218 m.	+	+	+	+	+	+
Japan	Choshi	JPN	62	140 51 E	35 43 N	27 m.	+	+	+	+	+	+
Japan	Ueno	JPN	63	136 09 E	34 46 N	159 m.	+	+	+	+	+	+
Japan	Tsu	JPN	64	136 31 E	34 42 N	2 m.	+	+	+	+	+	+
Japan	Irako	JPN	65	137 05 E	34 38 N	6 m.	+	+	+	+	+	+

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Japan	Hamamatsu	JPN	66	137 43 E	34 42 N	32 m.	+	+	+	+	+	+
Japan	Omaezaki	JPN	67	138 13 E	34 36 N	45 m.	+	+	+	+	+	+
Japan	Shizuoka	JPN	68	138 24 E	34 58 N	14 m.	+	+	+	+	+	+
Japan	Mishima	JPN	69	138 56 E	35 07 N	20 m.	+	+	+	+	+	+
Japan	Tokyo	JPN	70	139 46 E	35 41 N	5 m.	+	+	+	+	+	+
Japan	Owase	JPN	71	136 12 E	34 04 N	15 m.	+	+	+	+	+	+
Japan	Irozaki	JPN	72	138 51 E	34 36 N	55 m.	+	+	+	+	+	+
Japan	Ajiro	JPN	73	138 06 E	35 03 N	67 m.	+	+	+	+	+	+
Japan	Yokohama	JPN	74	139 39 E	35 26 N	39 m.	+	+	+	+	+	+
Japan	Katsuura	JPN	75	140 19 E	35 09 N	12 m.	+	+	+	+	+	+
Japan	Oshima	JPN	76	139 23 E	34 46 N	190 m.	+	+	+	+	+	+
Japan	Miyakejima	JPN	77	139 31 E	34 07 N	36 m.	+	+	+	+	+	+
Japan	Hachijojima	JPN	78	139 47 E	33 06 N	79 m.	+	+	+	+	+	+
Japan	Nikko	JPN	79	139 30 E	36 44 N	1292 m.	+	+	+	+	+	+
Japan	Saigo	JPN	80	133 20 E	36 12 N	27 m.	+	+	+	+	+	+
Japan	Matsue	JPN	81	133 04 E	35 27 N	17 m.	+	+	+	+	+	+
Japan	Sakai	JPN	82	133 14 E	35 33 N	2 m.	+	+	+	+	+	+
Japan	Yonago	JPN	83	133 21 E	35 26 N	6 m.	+	+	+	+	+	+
Japan	Tottori	JPN	84	134 14 E	35 29 N	17 m.	+	+	+	+	+	+
Japan	Toyooka	JPN	85	134 49 E	35 32 N	4 m.	+	+	+	+	+	+
Japan	Hagi	JPN	86	131 24 E	34 25 N	6 m.	+	+	+	+	+	+
Japan	Hamada	JPN	87	132 04 E	34 54 N	20 m.	+	+	+	+	+	+
Japan	Tsuyama	JPN	88	134 01 E	35 04 N	145 m.	+	+	+	+	+	+
Japan	Kyoto	JPN	89	135 44 E	35 01 N	41 m.	+	+	+	+	+	+
Japan	Hikone	JPN	90	136 15 E	35 16 N	87 m.	+	+	+	+	+	+
Japan	Shimonoseki	JPN	91	130 56 E	33 57 N	19 m.	+	+	+	+	+	+
Japan	Hiroshima	JPN	92	132 26 E	34 22 N	29 m.	+	+	+	+	+	+
Japan	Kure	JPN	93	132 33 E	34 14 N	4 m.	+	+	+	+	+	+
Japan	Fukuyama	JPN	94	133 15 E	34 27 N	2 m.	+	+	+	+	+	+
Japan	Okayama	JPN	95	133 55 E	34 39 N	3 m.	+	+	+	+	+	+
Japan	Himeji	JPN	96	134 40 E	34 50 N	38 m.	+	+	+	+	+	+
Japan	Kobe	JPN	97	135 11 E	34 41 N	58 m.	+	+	+	+	+	+
Japan	Osaka	JPN	98	135 31 E	34 41 N	23 m.	+	+	+	+	+	+
Japan	Sumoto	JPN	99	134 54 E	34 20 N	109 m.	+	+	+	+	+	+
Japan	Wakayama	JPN	100	135 10 E	34 14 N	14 m.	+	+	+	+	+	+
Japan	Shionomisaki	JPN	101	135 46 E	33 27 N	73 m.	+	+	+	+	+	+
Japan	Nara	JPN	102	135 50 E	34 41 N	105 m.	+	+	+	+	+	+
Japan	Izuhara	JPN	103	129 18 E	34 12 N	21 m.	+	+	+	+	+	+
Japan	Hirado	JPN	104	129 33 E	33 22 N	58 m.	+	+	+	+	+	+
Japan	Fukuoka	JPN	105	130 23 E	33 35 N	2 m.	+	+	+	+	+	+
Japan	Iizuka	JPN	106	130 42 E	33 39 N	37 m.	+	+	+	+	+	+
Japan	Sasebo	JPN	107	029 44 E	33 09 N	17 m.	+	+	+	+	+	+
Japan	Saga	JPN	108	130 18 E	33 15 N	4 m.	+	+	+	+	+	+
Japan	Hita	JPN	109	130 56 E	33 19 N	83 m.	+	+	+	+	+	+
Japan	Oita	JPN	110	131 37 E	33 14 N	5 m.	+	+	+	+	+	+
Japan	Nagasaki	JPN	111	129 52 E	32 44 N	27 m.	+	+	+	+	+	+
Japan	Kumamoto	JPN	112	130 43 E	32 49 N	38 m.	+	+	+	+	+	+
Japan	Asosan	JPN	113	131 05 E	32 53 N	1143 m.	+	+	+	+	+	+
Japan	Noeoka	JPN	114	131 40 E	32 35 N	19 m.	+	+	+	+	+	+
Japan	Akune	JPN	115	130 12 E	32 01 N	40 m.	+	+	+	+	+	+
Japan	Hitoyoshi	JPN	116	130 45 E	32 13 N	146 m.	+	+	+	+	+	+
Japan	Kagoshima	JPN	117	130 33 E	31 34 N	5 m.	+	+	+	+	+	+
Japan	Miyakonojo	JPN	118	131 05 E	31 44 N	154 m.	+	+	+	+	+	+
Japan	Miyazaki	JPN	119	131 25 E	31 55 N	7 m.	+	+	+	+	+	+
Japan	Makurazaki	JPN	120	130 18 E	31 16 N	30 m.	+	+	+	+	+	+

Country name	Station name	Code Sn	Longitude	Latitude	Elevation	rd	tm	tx	vp	wn	rn
Japan	Aburatsu	JPN 121	131 25 E	31 34 N	3 m.	+	+	+	+	+	+
Japan	Tanegashima	JPN 122	131 00 E	30 44 N	17 m.	+	+	+	+	+	+
Japan	Ushibuka	JPN 123	130 02 E	32 12 N	3 m.	+	+	+	+	+	+
Japan	Fukue	JPN 124	128 50 E	32 42 N	26 m.	+	+	+	+	+	+
Japan	Matsuyama	JPN 125	132 47 E	33 50 N	32 m.	+	+	+	+	+	+
Japan	Tadotsu	JPN 126	133 45 E	34 16 N	4 m.	+	+	+	+	+	+
Japan	Takamatsu	JPN 127	134 03 E	34 19 N	9 m.	+	+	+	+	+	+
Japan	Uwajima	JPN 128	132 33 E	33 14 N	43 m.	+	+	+	+	+	+
Japan	Kochi	JPN 129	133 32 E	33 33 N	2 m.	+	+	+	+	+	+
Japan	Sukumo	JPN 130	132 42 E	32 55 N	47 m.	+	+	+	+	+	+
Japan	Shimizu-Ashizuri	JPN 131	133 01 E	32 43 N	31 m.	+	+	+	+	+	+
Japan	Muruotomisaki	JPN 132	134 11 E	33 15 N	185 m.	+	+	+	+	+	+
Japan	Naze	JPN 133	129 30 E	28 23 N	3 m.	+	+	+	+	+	+
Japan	Yonagunijima	JPN 134	123 01 E	24 28 N	30 m.	+	+	+	+	+	+
Japan	Ishigakijima	JPN 135	124 10 E	24 20 N	6 m.	+	+	+	+	+	+
Japan	Miyakojima	JPN 136	125 17 E	24 47 N	40 m.	+	+	+	+	+	+
Japan	Kumejima	JPN 137	126 48 E	26 20 N	5 m.	+	+	+	+	+	+
Japan	Naha-Okinawa	JPN 138	127 41 E	26 14 N	35 m.	+	+	+	+	+	+
Japan	Minamidaitojima	JPN 139	131 14 E	25 50 N	15 m.	+	+	+	+	+	+
Jordan	H 4	JOR 1	038 12 E	32 20 N	686 m.	+	+	+	+	+	+
Jordan	Irbid	JOR 2	035 51 E	32 33 N	618 m.	+	+	+	+	+	+
Jordan	H 5	JOR 3	037 08 E	32 12 N	668 m.	+	+	+	+	+	+
Jordan	Wadi Dhuleil	JOR 4	036 17 E	32 09 N	580 m.	+	+	+	+	+	+
Jordan	Mafraq	JOR 5	036 15 E	32 22 N	686 m.	+	+	+	+	+	+
Jordan	Amman Airport	JOR 6	035 59 E	31 59 N	766 m.	+	+	+	+	+	+
Jordan	Tulkarm	JOR 7	035 01 E	32 19 N	80 m.	+	+	+	+	+	+
Jordan	Deir Alla	JOR 8	035 37 E	32 12 N	-224 m.	+	+	+	+	+	+
Jordan	Baqura	JOR 9	035 37 E	32 38 N	-197 m.	+	+	+	+	+	+
Jordan	Beit Qad 'jenin'	JOR 10	035 21 E	32 28 N	-190 m.	+	+	+	+	+	+
Jordan	Wadi Faria	JOR 11	035 30 E	32 08 N	-198 m.	+	+	+	+	+	+
Jordan	Wadi Yabis	JOR 12	035 35 E	32 24 N	-200 m.	+	+	+	+	+	+
Jordan	Jericho Airport	JOR 13	035 30 E	31 52 N	-276 m.	+	+	+	+	+	+
Jordan	Zerqa	JOR 14	036 07 E	32 05 N	555 m.	+	+	+	+	+	+
Jordan	Wadi Wala	JOR 15	035 47 E	31 33 N	450 m.	+	+	+	+	+	+
Jordan	Jubeiha	JOR 16	035 52 E	31 02 N	980 m.	+	+	+	+	+	+
Jordan	Al Arroub	JOR 17	035 07 E	31 36 N	960 m.	+	+	+	+	+	+
Jordan	Azraq	JOR 18	036 49 E	31 48 N	533 m.	+	+	+	+	+	+
Jordan	Er-Rabbah	JOR 19	035 45 E	31 16 N	920 m.	+	+	+	+	+	+
Jordan	Jiza	JOR 20	035 58 E	31 42 N	705 m.	+	+	+	+	+	+
Jordan	El Jafer	JOR 21	036 08 E	30 17 N	865 m.	+	+	+	+	+	+
Jordan	El Quren	JOR 22	035 28 E	30 06 N	1510 m.	+	+	+	+	+	+
Jordan	El Tafila	JOR 23	035 36 E	30 50 N	1000 m.	+	+	+	+	+	+
Jordan	El Shoubak	JOR 24	035 32 E	30 30 N	1365 m.	+	+	+	+	+	+
Jordan	Ma'an Airport	JOR 25	035 47 E	31 10 N	1069 m.	+	+	+	+	+	+
Jordan	Aqaba Airport	JOR 26	035 01 E	29 38 N	53 m.	+	+	+	+	+	+
Jordan	Aqaba Port	JOR 27	034 59 E	29 29 N	2 m.	+	+	+	+	+	+
Jordan	Rum	JOR 28	035 25 E	29 35 N	952 m.	+	+	+	+	+	+
Kampuchea, Dem.	Battambang	KHM 1	103 12 E	13 06 N	13 m.	+	+	+	+	+	+
Kampuchea, Dem.	Siemreap	KHM 2	103 51 E	13 22 N	15 m.	+	+	+	+	+	+
Kampuchea, Dem.	Kratie	KHM 3	106 01 E	12 29 N	24 m.	+	+	+	+	+	+
Kampuchea, Dem.	Stung Treng	KHM 4	105 58 E	13 31 N	56 m.	+	+	+	+	+	+
Kampuchea, Dem.	Kampot	KHM 5	104 13 E	10 37 N	5 m.	+	+	+	+	+	+
Kampuchea, Dem.	Phnom-Penh-Pochenton	KHM 6	104 51 E	11 33 N	10 m.	+	+	+	+	+	+
Kampuchea, Dem.	Kompong Cham	KHM 7	105 27 E	12 00 N	16 m.	+	+	+	+	+	+
Kenya	Lokitaung	KEN 2	035 45 E	04 15 N	730 m.	+	+	+	+	+	+

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Kenya	Lodwar	KEN	3	035 37 E	03 07 N	515 m.	+	+	+	+	+	+
Kenya	Moyale	KEN	4	039 03 E	03 32 N	1097 m.	+	+	+	+	+	+
Kenya	Mandera	KEN	5	041 52 E	03 56 N	331 m.	+	+	+	+	+	+
Kenya	Marsabit	KEN	6	037 54 E	02 18 N	1345 m.	+	+	+	+	+	+
Kenya	Kitale-Airport	KEN	7	035 00 E	01 01 N	1875 m.	+	+	+	+	+	+
Kenya	Kapenguria	KEN	8	035 06 E	01 14 N	2134 m.	+	+	+	+	+	+
Kenya	Maralal	KEN	9	036 42 E	01 05 N	1950 m.	+	+	+	+	+	+
Kenya	Habaswein	KEN	10	039 30 E	01 02 N	200 m.	+	+	+	+	+	+
Kenya	Wajir	KEN	11	040 04 E	01 45 N	244 m.	+	+	+	+	+	+
Kenya	Eldoret	KEN	12	035 17 E	00 32 N	2133 m.	+	+	+	+	+	+
Kenya	Marigat	KEN	13	036 02 E	00 30 N	1000 m.	+	+	+	+	+	+
Kenya	Rumuruti-d.c.	KEN	14	036 33 E	00 16 N	1770 m.	+	+	+	+	+	+
Kenya	Isiolo	KEN	15	037 35 E	00 21 N	1104 m.	+	+	+	+	+	+
Kenya	Nanyuki	KEN	16	037 04 E	00 01 N	1946 m.	+	+	+	+	+	+
Kenya	Equator	KEN	17	035 33 E	00 01 S	2762 m.	+	+	+	+	+	+
Kenya	Kisumu	KEN	18	034 45 E	00 06 S	1146 m.	+	+	+	+	+	+
Kenya	Subukia	KEN	19	036 09 E	00 02 S	2100 m.	+	+	+	+	+	+
Kenya	Molo Pijr	KEN	20	035 44 E	00 14 S	2499 m.	+	+	+	+	+	+
Kenya	Nakuru-d.c.	KEN	21	036 04 E	00 16 S	1872 m.	+	+	+	+	+	+
Kenya	Nakuru-Airfield	KEN	22	036 09 E	00 18 S	1890 m.	+	+	+	+	+	+
Kenya	Naivasha	KEN	23	036 26 E	00 43 S	1900 m.	+	+	+	+	+	+
Kenya	Kericho	KEN	24	035 07 E	00 35 N	2070 m.	+	+	+	+	+	+
Kenya	Garissa	KEN	25	039 38 E	00 28 S	147 m.	+	+	+	+	+	+
Kenya	South Kinangop	KEN	26	036 40 E	00 45 S	2600 m.	+	+	+	+	+	+
Kenya	Masara Mine	KEN	27	034 15 E	01 01 S	1200 m.	+	+	+	+	+	+
Kenya	Thika	KEN	28	037 06 E	01 01 S	1463 m.	+	+	+	+	+	+
Kenya	Muguga	KEN	29	036 38 E	01 13 S	2096 m.	+	+	+	+	+	+
Kenya	Kiambu	KEN	30	036 49 E	01 12 S	1731 m.	+	+	+	+	+	+
Kenya	Narok	KEN	31	035 50 E	01 08 S	1890 m.	+	+	+	+	+	+
Kenya	Magadi	KEN	32	036 17 E	01 53 S	622 m.	+	+	+	+	+	+
Kenya	Nairobi-Airport	KEN	33	036 55 E	01 19 S	1624 m.	+	+	+	+	+	+
Kenya	Nairobi-Dag. Corner	KEN	34	036 45 E	01 18 S	1798 m.	+	+	+	+	+	+
Kenya	Kabete Lab.	KEN	35	036 46 E	01 15 S	1820 m.	+	+	+	+	+	+
Kenya	Kabete Ob.	KEN	36	036 45 E	01 16 S	1820 m.	+	+	+	+	+	+
Kenya	Kitui-Agric	KEN	37	038 01 E	01 22 S	1090 m.	+	+	+	+	+	+
Kenya	Galole	KEN	38	040 02 E	01 30 S	100 m.	+	+	+	+	+	+
Kenya	Machakos School	KEN	39	037 17 E	01 31 S	1680 m.	+	+	+	+	+	+
Kenya	Loitokitok D.c.	KEN	40	037 31 E	02 56 S	1845 m.	+	+	+	+	+	+
Kenya	Makindu	KEN	41	037 50 E	02 17 S	1000 m.	+	+	+	+	+	+
Kenya	Lamu	KEN	42	040 54 E	02 16 S	30 m.	+	+	+	+	+	+
Kenya	Voi	KEN	43	038 34 E	03 24 S	579 m.	+	+	+	+	+	+
Kenya	Malindi	KEN	44	040 06 E	03 14 S	20 m.	+	+	+	+	+	+
Kenya	Mombasa-Port	KEN	45	039 37 E	04 02 S	55 m.	+	+	+	+	+	+
Kenya	Mombasa-Town	KEN	46	039 39 E	04 03 S	16 m.	+	+	+	+	+	+
Korea, Rep. of	Kangnung	KOR	3	128 54 E	37 45 N	26 m.	+	+	+	+	+	+
Korea, Rep. of	Seoul	KOR	4	126 58 E	37 34 N	86 m.	+	+	+	+	+	+
Korea, Rep. of	Incheon	KOR	5	126 38 E	37 29 N	69 m.	+	+	+	+	+	+
Korea, Rep. of	Taejon	KOR	6	127 24 E	36 18 N	77 m.	+	+	+	+	+	+
Korea, Rep. of	Taegu	KOR	7	128 37 E	35 53 N	58 m.	+	+	+	+	+	+
Korea, Rep. of	Chonju	KOR	8	127 09 E	35 49 N	51 m.	+	+	+	+	+	+
Korea, Rep. of	Pusan	KOR	9	129 02 E	35 06 N	69 m.	+	+	+	+	+	+
Korea, Rep. of	Mokp'o	KOR	10	126 23 E	34 47 N	53 m.	+	+	+	+	+	+
Korea, Rep. of	Cheju	KOR	11	126 32 E	33 31 N	22 m.	+	+	+	+	+	+
Kuwait	Shuwaikh	KWT	1	048 03 E	29 20 N	11 m.	+	+	+	+	+	+
Kuwait	Kuwait I.a.p.	KWT	2	047 59 E	29 13 N	55 m.	+	+	+	+	+	+

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Lao PDR	Luang Prabang	LAO	1	102 08 E	19 53 N	306 m.	+	+	+	+	+	+
Lao PDR	Vientiane	LAO	2	102 34 E	17 57 N	172 m.	+	+	+	+	+	+
Lao PDR	Seno-Savannakhet	LAO	3	105 00 E	16 40 N	184 m.	+	+	+	+	+	+
Lao PDR	Pakse	LAO	4	105 47 E	15 09 N	101 m.	+	+	+	+	+	+
Lebanon	Beyrouth-Khalde	LBN	1	035 29 E	33 49 N	29 m.	+	+	+	+	+	+
Lebanon	Beyrouth-Un.Amer	LBN	2	035 29 E	33 54 N	35 m.	+	+	+	+	+	+
Lebanon	Rayak	LBN	3	036 00 E	33 51 N	922 m.	+	+	+	+	+	+
Lebanon	Tripoli-Mina	LBN	4	035 48 E	34 27 N	6 m.	+	+	+	+	+	+
Lebanon	Merjayoun	LBN	5	035 35 E	33 22 N	773 m.	+	+	+	+	+	+
Lebanon	Les Cedres	LBN	6	036 03 E	34 15 N	1916 m.	+	+	+	+	+	+
Lebanon	Chlifa	LBN	7	036 04 E	34 05 N	1000 m.	+	+	+	+	+	+
Lebanon	Bhamdoun	LBN	8	035 38 E	33 47 N	1130 m.	+	+	+	+	+	+
Lebanon	Dahr Baidar	LBN	9	035 46 E	33 49 N	1524 m.	+	+	+	+	+	+
Lebanon	Ksara	LBN	10	035 49 E	33 49 N	918 m.	+	+	+	+	+	+
Lebanon	Tell-Amara	LBN	11	035 59 E	33 51 N	905 m.	+	+	+	+	+	+
Lebanon	Abde	LBN	12	036 00 E	34 31 N	15 m.	+	+	+	+	+	+
Lebanon	Qlaiaat-Aeroport	LBN	13	036 00 E	34 35 N	6 m.	+	+	+	+	+	+
Lebanon	Ain-Ebel	LBN	14	035 24 E	33 07 N	765 m.	+	+	+	+	+	+
Lebanon	Alma-Chaab	LBN	15	035 11 E	33 06 N	385 m.	+	+	+	+	+	+
Lebanon	Tyr	LBN	16	035 12 E	33 16 N	5 m.	+	+	+	+	+	+
Lesotho	Maseru	LSO	1	027 29 E	29 12 S	1510 m.	+	+	+	+	+	+
Lesotho	Mokhotlong	LSO	2	029 05 E	29 17 S	2230 m.	+	+	+	+	+	+
Lesotho	Leribe-Maputsoe	LSO	3	028 03 E	28 53 S	1670 m.	+	+	+	+	+	+
Lesotho	Teyateyaneng	LSO	4	027 44 E	29 09 S	1690 m.	+	+	+	+	+	+
Lesotho	Butha Buthe	LSO	5	028 15 E	28 46 S	1680 m.	+	+	+	+	+	+
Lesotho	Oxbow	LSO	6	028 37 E	28 43 S	2650 m.	+	+	+	+	+	+
Lesotho	Quthing	LSO	7	027 43 E	30 25 S	1650 m.	+	+	+	+	+	+
Lesotho	Mohale's Hoek	LSO	8	027 28 E	30 09 S	1620 m.	+	+	+	+	+	+
Lesotho	Thaba Tseka	LSO	9	028 37 E	29 30 S	2160 m.	+	+	+	+	+	+
Liberia	Voinjama	LBR	1	009 45 W	08 25 N	300 m.	+	+	+	+	+	+
Liberia	Monrovia	LBR	2	010 45 W	06 20 N	12 m.	+	+	+	+	+	+
Liberia	Harbel	LBR	3	010 20 W	06 20 N	150 m.	+	+	+	+	+	+
Liberia	Suakoko	LBR	4	009 35 W	07 00 N	150 m.	+	+	+	+	+	+
Liberia	Sakleipie	LBR	5	008 45 W	07 00 N	300 m.	+	+	+	+	+	+
Liberia	Greenville	LBR	6	009 05 W	05 10 N	5 m.	+	+	+	+	+	+
Libyan Arab Jam.	Nalut	LBY	1	010 59 E	31 52 N	620 m.	+	+	+	+	+	+
Libyan Arab Jam.	Zuara	LBY	2	012 05 E	32 55 N	3 m.	+	+	+	+	+	+
Libyan Arab Jam.	Tripoli-met	LBY	3	013 11 E	32 54 N	20 m.	+	+	+	+	+	+
Libyan Arab Jam.	Misurata	LBY	4	015 06 E	32 25 N	6 m.	+	+	+	+	+	+
Libyan Arab Jam.	Sirte	LBY	5	016 35 E	31 12 N	22 m.	+	+	+	+	+	+
Libyan Arab Jam.	Benina	LBY	6	020 16 E	32 05 N	132 m.	+	+	+	+	+	+
Libyan Arab Jam.	Agedabia	LBY	7	020 10 E	30 43 N	6 m.	+	+	+	+	+	+
Libyan Arab Jam.	Shahat	LBY	8	021 51 E	32 49 N	625 m.	+	+	+	+	+	+
Libyan Arab Jam.	Derna	LBY	9	022 38 E	32 44 N	9 m.	+	+	+	+	+	+
Libyan Arab Jam.	Jamal Abdel Nasser	LBY	10	023 55 E	31 51 N	155 m.	+	+	+	+	+	+
Libyan Arab Jam.	Ghadames	LBY	11	009 30 E	30 08 N	338 m.	+	+	+	+	+	+
Libyan Arab Jam.	Sebha	LBY	12	014 26 E	27 01 N	434 m.	+	+	+	+	+	+
Libyan Arab Jam.	Hon	LBY	13	015 57 E	29 08 N	261 m.	+	+	+	+	+	+
Libyan Arab Jam.	Gialo	LBY	14	021 34 E	29 02 N	62 m.	+	+	+	+	+	+
Libyan Arab Jam.	Giarabub	LBY	15	024 32 E	29 45 N	-1 m.	+	+	+	+	+	+
Libyan Arab Jam.	Tazerbo	LBY	16	021 08 E	25 48 N	260 m.	+	+	+	+	+	+
Libyan Arab Jam.	Kufra	LBY	17	023 18 E	24 13 N	418 m.	+	+	+	+	+	+
Luxembourg	Luxembourg	LUX	3	006 03 E	49 37 N	330 m.	+	+	+	+	+	+
Macau	Macau	MAC	1	113 33 E	22 12 N	57 m.	+	+	+	+	+	+
Madagascar	Antseranana	MDG	1	049 18 E	12 21 S	105 m.	+	+	+	+	+	+

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Madagascar	Fascene	MDG 2	048 19 E	13 19 S	10 m.	+	+	+	+	+	+
Madagascar	Analalava	MDG 3	047 46 E	14 38 S	57 m.	+	+	+	+	+	+
Madagascar	Antalahala	MDG 4	050 15 E	14 53 S	88 m.	+	+	+	+	+	+
Madagascar	Mahajanga	MDG 5	046 21 E	15 40 S	18 m.	+	+	+	+	+	+
Madagascar	Lac Alaotra	MDG 6	048 30 E	17 45 S	770 m.	+	+	+	+	+	+
Madagascar	Maintirano	MDG 7	044 02 E	18 03 S	23 m.	+	+	+	+	+	+
Madagascar	Antananarivo	MDG 8	047 32 E	18 54 S	1310 m.	+	+	+	+	+	+
Madagascar	Toamasina	MDG 9	049 24 E	18 07 S	5 m.	+	+	+	+	+	+
Madagascar	Morondava	MDG 10	044 19 E	20 17 S	8 m.	+	+	+	+	+	+
Madagascar	Fianarantsoa	MDG 11	047 06 E	21 27 S	1109 m.	+	+	+	+	+	+
Madagascar	Mananjary	MDG 12	048 22 E	21 12 S	6 m.	+	+	+	+	+	+
Madagascar	Toliara	MDG 13	043 44 E	23 23 S	8 m.	+	+	+	+	+	+
Madagascar	Fort Dauphin	MDG 14	046 57 E	25 02 S	9 m.	+	+	+	+	+	+
Malawi	Chitipa	MWI 1	033 16 E	09 42 S	1278 m.	+	+	+	+	+	+
Malawi	Karonga	MWI 2	033 53 E	09 57 S	529 m.	+	+	+	+	+	+
Malawi	Mzimba	MWI 3	033 37 E	11 53 S	1350 m.	+	+	+	+	+	+
Malawi	Mzuzu	MWI 4	033 53 E	11 27 S	1253 m.	+	+	+	+	+	+
Malawi	Nkhata Bay	MWI 5	034 18 E	11 36 S	480 m.	+	+	+	+	+	+
Malawi	Chitedzi	MWI 6	033 38 E	13 59 S	1149 m.	+	+	+	+	+	+
Malawi	Lilongwe	MWI 7	033 42 E	13 58 S	1136 m.	+	+	+	+	+	+
Malawi	Chileka	MWI 8	034 58 E	15 41 S	767 m.	+	+	+	+	+	+
Malawi	Mulanje	MWI 9	035 40 E	16 05 S	628 m.	+	+	+	+	+	+
Malawi	Bvumbwe	MWI 10	035 04 E	15 55 S	1146 m.	+	+	+	+	+	+
Malaysia	Penang	MYS 1	100 16 E	05 18 N	4 m.	+	+	+	+	+	+
Malaysia	Alor Star	MYS 2	100 24 E	06 12 N	5 m.	+	+	+	+	+	+
Malaysia	Kangar	MYS 3	100 12 E	06 26 N	3 m.	+	+	+	+	+	+
Malaysia	Kota Bharu	MYS 4	102 17 E	06 10 N	5 m.	+	+	+	+	+	+
Malaysia	Baling	MYS 5	100 55 E	05 41 N	52 m.	+	+	+	+	+	+
Malaysia	Sungei Patani	MYS 6	100 30 E	05 39 N	8 m.	+	+	+	+	+	+
Malaysia	Kulim	MYS 7	100 34 E	05 23 N	32 m.	+	+	+	+	+	+
Malaysia	Kuala Trengganu	MYS 8	103 08 E	05 20 N	34 m.	+	+	+	+	+	+
Malaysia	Sitiawan	MYS 9	100 42 E	04 13 N	7 m.	+	+	+	+	+	+
Malaysia	Taiping	MYS 10	100 44 E	04 52 N	18 m.	+	+	+	+	+	+
Malaysia	Kuala Kangsar	MYS 11	100 56 E	04 46 N	39 m.	+	+	+	+	+	+
Malaysia	Maxwell's Hill	MYS 12	100 48 E	04 52 N	1037 m.	+	+	+	+	+	+
Malaysia	Ipoh	MYS 13	101 06 E	04 34 N	39 m.	+	+	+	+	+	+
Malaysia	Batu Gajah	MYS 14	101 02 E	04 28 N	34 m.	+	+	+	+	+	+
Malaysia	Cameron Highlands	MYS 15	101 23 E	04 28 N	1471 m.	+	+	+	+	+	+
Malaysia	Tapah	MYS 16	101 16 E	04 12 N	35 m.	+	+	+	+	+	+
Malaysia	Teluk Anson	MYS 17	101 01 E	04 02 N	3 m.	+	+	+	+	+	+
Malaysia	Kuala Lumpur	MYS 18	101 33 E	03 07 N	17 m.	+	+	+	+	+	+
Malaysia	Kepong	MYS 19	101 38 E	03 14 N	97 m.	+	+	+	+	+	+
Malaysia	Raub	MYS 20	101 51 E	03 47 N	157 m.	+	+	+	+	+	+
Malaysia	Kuantan	MYS 21	103 13 E	03 47 N	16 m.	+	+	+	+	+	+
Malaysia	Kuala Kubu Bharu	MYS 22	101 39 E	03 34 N	61 m.	+	+	+	+	+	+
Malaysia	Bentong	MYS 23	101 55 E	03 31 N	96 m.	+	+	+	+	+	+
Malaysia	Kajang	MYS 24	101 47 E	03 00 N	40 m.	+	+	+	+	+	+
Malaysia	Port Dickson	MYS 25	101 48 E	02 32 N	9 m.	+	+	+	+	+	+
Malaysia	Tampin	MYS 26	102 14 E	02 28 N	61 m.	+	+	+	+	+	+
Malaysia	Malacca	MYS 27	102 15 E	02 16 N	7 m.	+	+	+	+	+	+
Malaysia	Muar	MYS 28	102 34 E	02 03 N	6 m.	+	+	+	+	+	+
Malaysia	Mersing	MYS 29	103 50 E	02 27 N	45 m.	+	+	+	+	+	+
Malaysia	Johore Bharu	MYS 30	103 40 E	01 38 N	37 m.	+	+	+	+	+	+
Malaysia	Kuching	MYS 31	110 20 E	01 29 N	27 m.	+	+	+	+	+	+
Malaysia	Sibu	MYS 32	111 50 E	02 20 N	8 m.	+	+	+	+	+	+

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Malaysia	Bintulu	MYS 33	113 02 E	03 12 N	5 m.	+	+	+	+	+	+
Malaysia	Miri	MYS 34	113 59 E	04 20 N	17 m.	+	+	+	+	+	+
Malaysia	Labuan	MYS 35	115 15 E	05 18 N	30 m.	+	+	+	+	+	+
Malaysia	Kota Kinabalu	MYS 36	116 03 E	05 56 N	3 m.	+	+	+	+	+	+
Malaysia	Sandakan	MYS 37	118 04 E	05 54 N	12 m.	+	+	+	+	+	+
Maldives	Male	MDV 1	073 32 E	04 12 N	2 m.	+	+	+	+	+	+
Mali	Tessalit	MLI 22	000 59 E	20 12 N	491 m.	+	+	+	+	+	+
Mali	Kidal	MLI 23	001 21 E	18 26 N	459 m.	+	+	+	+	+	+
Mali	Tombouctou	MLI 24	003 00 W	16 44 N	264 m.	+	+	+	+	+	+
Mali	Gao	MLI 25	000 03 W	16 16 N	260 m.	+	+	+	+	+	+
Mali	Nioro Du Sahel	MLI 26	009 21 W	15 14 N	237 m.	+	+	+	+	+	+
Mali	Hombori	MLI 27	001 41 W	15 20 N	288 m.	+	+	+	+	+	+
Mali	Menaka	MLI 28	002 13 E	15 52 N	278 m.	+	+	+	+	+	+
Mali	Same	MLI 29	011 35 W	14 29 N	39 m.	+	+	+	+	+	+
Mali	Kayes	MLI 30	011 26 W	14 26 N	47 m.	+	+	+	+	+	+
Mali	Mopti	MLI 31	004 06 W	14 31 N	272 m.	+	+	+	+	+	+
Mali	Kita	MLI 32	009 28 W	13 04 N	333 m.	+	+	+	+	+	+
Mali	Segou	MLI 33	006 09 W	13 24 N	289 m.	+	+	+	+	+	+
Mali	San	MLI 34	004 50 W	13 20 N	284 m.	+	+	+	+	+	+
Mali	Kenieba	MLI 35	011 14 W	12 51 N	132 m.	+	+	+	+	+	+
Mali	Bamako	MLI 36	008 02 W	12 38 N	332 m.	+	+	+	+	+	+
Mali	Koutiala	MLI 37	005 28 W	12 23 N	367 m.	+	+	+	+	+	+
Mali	Bougouni	MLI 38	007 30 W	11 25 N	351 m.	+	+	+	+	+	+
Mali	Sikasso	MLI 39	005 41 W	11 21 N	375 m.	+	+	+	+	+	+
Martinique	Fort De France	MTQ 1	061 04 W	14 37 N	144 m.	+	+	+	+	+	+
Martinique	Lamentin	MTQ 2	061 00 W	14 36 N	4 m.	+	+	+	+	+	+
Mauritania	Bir-Mogharein	MRT 1	011 37 W	25 14 N	360 m.	+	+	+	+	+	+
Mauritania	F'derik	MRT 2	012 42 W	22 41 N	298 m.	+	+	+	+	+	+
Mauritania	Nouadhibou	MRT 3	017 02 W	20 56 N	3 m.	+	+	+	+	+	+
Mauritania	Atar	MRT 4	013 04 W	20 31 N	224 m.	+	+	+	+	+	+
Mauritania	Akjoujt	MRT 5	014 22 W	19 45 N	120 m.	+	+	+	+	+	+
Mauritania	Nouakchott	MRT 6	015 57 W	18 06 N	3 m.	+	+	+	+	+	+
Mauritania	Tidjikja	MRT 7	011 26 W	18 34 N	402 m.	+	+	+	+	+	+
Mauritania	Boutilimit	MRT 8	014 41 W	17 32 N	75 m.	+	+	+	+	+	+
Mauritania	Rosso	MRT 9	015 49 W	16 30 N	6 m.	+	+	+	+	+	+
Mauritania	Kaedi	MRT 10	013 31 W	16 09 N	18 m.	+	+	+	+	+	+
Mauritania	Nema	MRT 11	007 16 W	16 36 N	269 m.	+	+	+	+	+	+
Mauritania	Kiffa	MRT 12	011 24 W	16 38 N	115 m.	+	+	+	+	+	+
Mauritania	Aioun-El-Atrouss	MRT 13	009 36 W	16 42 N	223 m.	+	+	+	+	+	+
Mauritius	Plaisance	MUS 1	057 40 E	20 26 S	57 m.	+	+	+	+	+	+
Mauritius	Union Flacq	MUS 2	057 41 E	20 12 S	146 m.	+	+	+	+	+	+
Mauritius	Vacoas	MUS 3	057 30 E	20 18 S	424 m.	+	+	+	+	+	+
Mauritius	Pamplemousses	MUS 4	057 34 E	20 06 S	79 m.	+	+	+	+	+	+
Mexico	Ensenada	MEX 1	116 38 W	31 51 N	13 m.	+	+	+	+	+	+
Mexico	Isla Guadalupe	MEX 2	118 19 W	29 10 N	6 m.	+	+	+	+	+	+
Mexico	Hermosillo	MEX 3	110 58 W	29 04 N	237 m.	+	+	+	+	+	+
Mexico	Chihuahua	MEX 4	106 05 W	28 38 N	1423 m.	+	+	+	+	+	+
Mexico	Piedras Negras	MEX 5	100 31 W	28 42 N	220 m.	+	+	+	+	+	+
Mexico	Guaymas	MEX 6	110 54 W	27 55 N	44 m.	+	+	+	+	+	+
Mexico	Monclova	MEX 7	101 25 W	26 53 N	591 m.	+	+	+	+	+	+
Mexico	Ciudad Lerdo	MEX 8	103 31 W	25 32 N	1135 m.	+	+	+	+	+	+
Mexico	Torreón	MEX 9	103 27 W	25 32 N	1013 m.	+	+	+	+	+	+
Mexico	Saltillo	MEX 10	100 59 W	25 27 N	1609 m.	+	+	+	+	+	+
Mexico	Monterrey	MEX 11	100 18 W	25 40 N	538 m.	+	+	+	+	+	+
Mexico	Puerto Cortes	MEX 12	111 52 W	24 26 N	5 m.	+	+	+	+	+	+

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Mexico	La Paz	MEX 13	110 25 W	24 10 N	10 m.	+	+	+	+	+	+
Mexico	Culiaca	MEX 14	107 24 W	24 49 N	84 m.	+	+	+	+	+	+
Mexico	Durango	MEX 15	104 40 W	24 02 N	1889 m.	+	+	+	+	+	+
Mexico	Mazatlan	MEX 16	106 25 W	23 12 N	3 m.	+	+	+	+	+	+
Mexico	Soto La Marina	MEX 17	098 12 W	23 46 N	25 m.	+	+	+	+	+	+
Mexico	Huejucar	MEX 18	103 12 W	22 21 N	1932 m.	+	+	+	+	+	+
Mexico	La Bufa Zacatecas	MEX 19	102 34 W	22 47 N	2612 m.	+	+	+	+	+	+
Mexico	S. Luis Potosi	MEX 20	100 59 W	22 09 N	1877 m.	+	+	+	+	+	+
Mexico	Tampico	MEX 21	097 51 W	22 13 N	12 m.	+	+	+	+	+	+
Mexico	Tepic	MEX 22	104 54 W	21 31 N	915 m.	+	+	+	+	+	+
Mexico	Aguascalientes	MEX 23	102 18 W	21 53 N	1908 m.	+	+	+	+	+	+
Mexico	Lagos De Moreno	MEX 24	101 55 W	21 21 N	1942 m.	+	+	+	+	+	+
Mexico	Leon	MEX 25	101 41 W	21 07 N	1885 m.	+	+	+	+	+	+
Mexico	Guanajuato	MEX 26	101 15 W	21 01 N	2050 m.	+	+	+	+	+	+
Mexico	Rioverde	MEX 27	100 00 W	21 56 N	987 m.	+	+	+	+	+	+
Mexico	Progreso	MEX 28	089 39 W	21 18 N	8 m.	+	+	+	+	+	+
Mexico	Guadalajara	MEX 29	103 23 W	20 40 N	1589 m.	+	+	+	+	+	+
Mexico	Queretaro	MEX 30	100 23 W	20 36 N	1842 m.	+	+	+	+	+	+
Mexico	Pachuca	MEX 31	098 44 W	20 08 N	2426 m.	+	+	+	+	+	+
Mexico	Tulancingo	MEX 32	098 22 W	20 05 N	2222 m.	+	+	+	+	+	+
Mexico	Merida	MEX 33	089 39 W	20 59 N	9 m.	+	+	+	+	+	+
Mexico	Cozumel Isla	MEX 34	086 57 W	20 31 N	3 m.	+	+	+	+	+	+
Mexico	Manzanillo	MEX 35	104 17 W	19 03 N	8 m.	+	+	+	+	+	+
Mexico	Colima	MEX 36	103 43 W	19 14 N	494 m.	+	+	+	+	+	+
Mexico	Morelia	MEX 37	101 11 W	19 42 N	1941 m.	+	+	+	+	+	+
Mexico	Toluca	MEX 38	099 40 W	19 18 N	2680 m.	+	+	+	+	+	+
Mexico	Chapingo	MEX 39	098 54 W	19 29 N	2250 m.	+	+	+	+	+	+
Mexico	Mexico C. Tacubaya	MEX 40	099 12 W	19 24 N	2308 m.	+	+	+	+	+	+
Mexico	Tlaxcala	MEX 41	098 14 W	19 19 N	2252 m.	+	+	+	+	+	+
Mexico	Puebla	MEX 42	098 12 W	19 02 N	2162 m.	+	+	+	+	+	+
Mexico	Jalapa Enriquez	MEX 43	096 55 W	19 32 N	1427 m.	+	+	+	+	+	+
Mexico	Veracruz	MEX 44	096 08 W	19 12 N	16 m.	+	+	+	+	+	+
Mexico	Campeche	MEX 45	090 33 W	19 51 N	5 m.	+	+	+	+	+	+
Mexico	Orizaba	MEX 46	097 06 W	18 51 N	1284 m.	+	+	+	+	+	+
Mexico	Heroica Cordoba	MEX 47	096 56 W	18 54 N	924 m.	+	+	+	+	+	+
Mexico	Chilpancingo	MEX 48	099 30 W	17 33 N	1360 m.	+	+	+	+	+	+
Mexico	Oaxaca De Juarez	MEX 49	096 43 W	17 04 N	1550 m.	+	+	+	+	+	+
Mexico	Acapulco De Juarez	MEX 50	099 56 W	16 50 N	28 m.	+	+	+	+	+	+
Mexico	Salina Cruz	MEX 51	095 12 W	16 10 N	6 m.	+	+	+	+	+	+
Mexico	Tuxtla Gutierrez	MEX 52	093 07 W	16 45 N	528 m.	+	+	+	+	+	+
Mexico	St Cristobal De L.C.	MEX 53	092 38 W	16 44 N	2276 m.	+	+	+	+	+	+
Mexico	Comitan	MEX 54	092 08 W	16 15 N	1530 m.	+	+	+	+	+	+
Mexico	Tapachula	MEX 55	092 16 W	14 55 N	182 m.	+	+	+	+	+	+
Montserrat	Plymouth	MSR 1	062 13 W	16 43 N	40 m.	+	+	+	+	+	+
Morocco	Sidi Ifni	MUS 1	010 11 W	29 22 N	66 m.	+	+	+	+	+	+
Morocco	Tanger	MUS 2	005 54 W	35 44 N	21 m.	+	+	+	+	+	+
Morocco	Oujda	MUS 3	001 56 W	34 47 N	470 m.	+	+	+	+	+	+
Morocco	Rabat	MUS 4	006 46 W	34 03 N	75 m.	+	+	+	+	+	+
Morocco	Meknes	MUS 5	005 32 W	33 53 N	549 m.	+	+	+	+	+	+
Morocco	Casablanca	MUS 6	007 40 W	33 34 N	62 m.	+	+	+	+	+	+
Morocco	Ifrane	MUS 7	005 10 W	33 30 N	1665 m.	+	+	+	+	+	+
Morocco	Kasba Tadla	MUS 8	006 16 W	32 36 N	507 m.	+	+	+	+	+	+
Morocco	Marrakech	MUS 9	008 02 W	31 37 N	466 m.	+	+	+	+	+	+
Morocco	Agadir	MUS 10	009 34 W	30 23 N	23 m.	+	+	+	+	+	+
Morocco	Ouarzazate	MUS 11	006 54 W	30 56 N	1140 m.	+	+	+	+	+	+

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Morocco	Tan-Tan	MUS 12	011 09 W	28 27 N	200 m.	+	+	+	+	+	+
Morocco	Cabo Jubi	MUS 13	013 00 W	27 58 N	60 m.	+	+	+	+	+	+
Mozambique	Palma	MOZ 1	040 30 E	10 46 S	60 m.	+	+	+	+	+	+
Mozambique	Mueda	MOZ 2	039 33 E	11 40 S	847 m.	+	+	+	+	+	+
Mozambique	Mocimboa Da Praia	MOZ 3	040 22 E	11 21 S	27 m.	+	+	+	+	+	+
Mozambique	Cobue	MOZ 4	034 46 E	12 08 S	502 m.	+	+	+	+	+	+
Mozambique	Maniamba	MOZ 5	034 59 E	12 46 S	1093 m.	+	+	+	+	+	+
Mozambique	Mecula	MOZ 6	037 37 E	12 06 S	1110 m.	+	+	+	+	+	+
Mozambique	Ancuabe	MOZ 7	039 51 E	12 58 S	349 m.	+	+	+	+	+	+
Mozambique	Macomia	MOZ 8	040 08 E	12 15 S	343 m.	+	+	+	+	+	+
Mozambique	Quissanga	MOZ 9	040 24 E	12 26 S	42 m.	+	+	+	+	+	+
Mozambique	Pemba	MOZ 10	040 30 E	12 58 S	50 m.	+	+	+	+	+	+
Mozambique	Lichinga	MOZ 11	035 15 E	13 17 S	1364 m.	+	+	+	+	+	+
Mozambique	Massangulo-Missao	MOZ 12	035 26 E	13 53 S	1110 m.	+	+	+	+	+	+
Mozambique	Maua	MOZ 13	037 10 E	13 52 S	594 m.	+	+	+	+	+	+
Mozambique	Marrupa	MOZ 14	037 33 E	13 14 S	838 m.	+	+	+	+	+	+
Mozambique	Nungo	MOZ 15	037 46 E	13 25 S	610 m.	+	+	+	+	+	+
Mozambique	Montepuez	MOZ 16	039 02 E	13 08 S	534 m.	+	+	+	+	+	+
Mozambique	Namuno	MOZ 17	038 49 E	13 37 S	495 m.	+	+	+	+	+	+
Mozambique	Meloco	MOZ 18	039 10 E	13 29 S	438 m.	+	+	+	+	+	+
Mozambique	Namapa	MOZ 19	039 50 E	13 43 S	200 m.	+	+	+	+	+	+
Mozambique	Mecufi	MOZ 20	040 34 E	13 17 S	10 m.	+	+	+	+	+	+
Mozambique	Vila Vasco De Gama	MOZ 21	032 16 E	14 54 S	1170 m.	+	+	+	+	+	+
Mozambique	Cuamba	MOZ 22	036 52 E	14 48 S	588 m.	+	+	+	+	+	+
Mozambique	Vila Gamito	MOZ 23	032 59 E	14 10 S	958 m.	+	+	+	+	+	+
Mozambique	Furancungo	MOZ 24	033 36 E	14 54 S	1260 m.	+	+	+	+	+	+
Mozambique	Ulongwe	MOZ 25	034 22 E	14 44 S	1270 m.	+	+	+	+	+	+
Mozambique	Mutuali	MOZ 26	037 03 E	14 53 S	570 m.	+	+	+	+	+	+
Mozambique	Malema	MOZ 27	037 25 E	14 57 S	625 m.	+	+	+	+	+	+
Mozambique	Ribaue	MOZ 28	038 16 E	14 59 S	535 m.	+	+	+	+	+	+
Mozambique	Nampula	MOZ 29	039 17 E	15 06 S	441 m.	+	+	+	+	+	+
Mozambique	Muite	MOZ 30	039 02 E	14 02 S	400 m.	+	+	+	+	+	+
Mozambique	Meconta	MOZ 31	039 51 E	14 59 S	235 m.	+	+	+	+	+	+
Mozambique	Mossuril	MOZ 32	040 40 E	14 57 S	15 m.	+	+	+	+	+	+
Mozambique	Alto Molicue	MOZ 33	037 41 E	15 38 S	563 m.	+	+	+	+	+	+
Mozambique	Zumbo	MOZ 34	030 26 E	15 37 S	340 m.	+	+	+	+	+	+
Mozambique	Memba	MOZ 35	040 32 E	14 11 S	14 m.	+	+	+	+	+	+
Mozambique	Chicoa	MOZ 36	032 21 E	15 36 S	274 m.	+	+	+	+	+	+
Mozambique	Fingoe	MOZ 37	031 53 E	15 10 S	857 m.	+	+	+	+	+	+
Mozambique	Cazula	MOZ 38	033 38 E	15 24 S	597 m.	+	+	+	+	+	+
Mozambique	Lioma	MOZ 39	036 46 E	15 09 S	736 m.	+	+	+	+	+	+
Mozambique	Namarroii	MOZ 40	036 52 E	15 57 S	603 m.	+	+	+	+	+	+
Mozambique	Gurue	MOZ 41	036 59 E	15 30 S	734 m.	+	+	+	+	+	+
Mozambique	Nametil	MOZ 42	039 21 E	15 43 S	171 m.	+	+	+	+	+	+
Mozambique	Mogincual	MOZ 43	040 45 E	15 34 S	35 m.	+	+	+	+	+	+
Mozambique	Tete	MOZ 44	033 35 E	16 11 S	149 m.	+	+	+	+	+	+
Mozambique	Milange	MOZ 45	035 47 E	16 06 S	745 m.	+	+	+	+	+	+
Mozambique	Tacuane-Madal	MOZ 46	036 22 E	16 21 S	400 m.	+	+	+	+	+	+
Mozambique	Lugela	MOZ 47	036 45 E	16 26 S	293 m.	+	+	+	+	+	+
Mozambique	Mocuba	MOZ 48	036 59 E	16 50 S	134 m.	+	+	+	+	+	+
Mozambique	Errego-Ile	MOZ 49	037 11 E	16 02 S	533 m.	+	+	+	+	+	+
Mozambique	Moma	MOZ 50	039 13 E	16 46 S	4 m.	+	+	+	+	+	+
Mozambique	Angoche	MOZ 51	039 54 E	16 13 S	61 m.	+	+	+	+	+	+
Mozambique	Mungari	MOZ 52	033 33 E	17 10 S	535 m.	+	+	+	+	+	+
Mozambique	Chiou-Chemba	MOZ 53	034 49 E	17 14 S	100 m.	+	+	+	+	+	+

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Mozambique	Mopeia	MOZ 54	034 52 E	17 59 S	51 m.	+	+	+	+	+	+
Mozambique	Caja	MOZ 55	035 20 E	17 50 S	30 m.	+	+	+	+	+	+
Mozambique	Morrumbala	MOZ 56	035 35 E	17 20 S	417 m.	+	+	+	+	+	+
Mozambique	Mutarara	MOZ 57	035 03 E	17 23 S	88 m.	+	+	+	+	+	+
Mozambique	Namacurra	MOZ 58	037 01 E	17 30 S	50 m.	+	+	+	+	+	+
Mozambique	Maganja	MOZ 59	037 32 E	17 18 S	70 m.	+	+	+	+	+	+
Mozambique	Quelimane	MOZ 60	036 53 E	17 53 S	16 m.	+	+	+	+	+	+
Mozambique	Pebane	MOZ 61	038 09 E	17 16 S	25 m.	+	+	+	+	+	+
Mozambique	Manica	MOZ 62	032 52 E	18 56 S	723 m.	+	+	+	+	+	+
Mozambique	Catandica	MOZ 63	033 10 E	18 04 S	611 m.	+	+	+	+	+	+
Mozambique	Inhaminga	MOZ 64	035 00 E	18 24 S	316 m.	+	+	+	+	+	+
Mozambique	Marromeu	MOZ 65	035 56 E	18 18 S	20 m.	+	+	+	+	+	+
Mozambique	Chinde	MOZ 66	036 28 E	18 35 S	4 m.	+	+	+	+	+	+
Mozambique	Sussundenga	MOZ 67	033 13 E	19 20 S	635 m.	+	+	+	+	+	+
Mozambique	Messambuzi	MOZ 68	032 55 E	19 30 S	906 m.	+	+	+	+	+	+
Mozambique	Chimoio	MOZ 69	033 28 E	19 07 S	732 m.	+	+	+	+	+	+
Mozambique	Vila Machado	MOZ 70	034 12 E	19 16 S	57 m.	+	+	+	+	+	+
Mozambique	Beira-Observatorio	MOZ 71	034 51 E	19 50 S	7 m.	+	+	+	+	+	+
Mozambique	Espungabera	MOZ 72	032 46 E	20 28 S	824 m.	+	+	+	+	+	+
Mozambique	Nova Sofala	MOZ 73	034 44 E	20 09 S	10 m.	+	+	+	+	+	+
Mozambique	Mambone	MOZ 74	035 01 E	20 59 S	4 m.	+	+	+	+	+	+
Mozambique	Massanguena	MOZ 75	032 58 E	21 33 S	136 m.	+	+	+	+	+	+
Mozambique	Pafuri	MOZ 76	031 20 E	22 27 S	290 m.	+	+	+	+	+	+
Mozambique	Chicualacuala	MOZ 77	031 41 E	22 05 S	452 m.	+	+	+	+	+	+
Mozambique	Mapai	MOZ 78	032 03 E	22 44 S	254 m.	+	+	+	+	+	+
Mozambique	Chigubo	MOZ 79	033 31 E	22 50 S	102 m.	+	+	+	+	+	+
Mozambique	Mabote	MOZ 80	034 07 E	22 03 S	143 m.	+	+	+	+	+	+
Mozambique	Vilanculos	MOZ 81	035 19 E	22 00 S	20 m.	+	+	+	+	+	+
Mozambique	Funhalouro	MOZ 82	034 23 E	23 05 S	116 m.	+	+	+	+	+	+
Mozambique	Massinga	MOZ 83	035 24 E	23 19 S	109 m.	+	+	+	+	+	+
Mozambique	Inhambane	MOZ 84	035 23 E	23 52 S	14 m.	+	+	+	+	+	+
Mozambique	Chokue	MOZ 85	033 00 E	24 32 S	33 m.	+	+	+	+	+	+
Mozambique	Chibuto	MOZ 86	033 32 E	24 41 S	90 m.	+	+	+	+	+	+
Mozambique	Maniquenique	MOZ 87	033 02 E	24 44 S	13 m.	+	+	+	+	+	+
Mozambique	Manjacaze	MOZ 88	033 53 E	24 43 S	65 m.	+	+	+	+	+	+
Mozambique	Quissico	MOZ 89	034 45 E	24 43 S	147 m.	+	+	+	+	+	+
Mozambique	Panda	MOZ 90	034 43 E	24 03 S	150 m.	+	+	+	+	+	+
Mozambique	Inharrime	MOZ 91	035 01 E	24 49 S	43 m.	+	+	+	+	+	+
Mozambique	Nhacoongo	MOZ 92	035 11 E	24 18 S	30 m.	+	+	+	+	+	+
Mozambique	Ressano Garcia	MOZ 93	031 59 E	25 36 S	145 m.	+	+	+	+	+	+
Mozambique	Xai Xai	MOZ 94	033 38 E	25 03 S	4 m.	+	+	+	+	+	+
Mozambique	Chobela	MOZ 95	032 44 E	25 00 S	40 m.	+	+	+	+	+	+
Mozambique	Macia	MOZ 96	033 06 E	25 02 S	56 m.	+	+	+	+	+	+
Mozambique	Namaacha	MOZ 97	032 01 E	25 29 S	523 m.	+	+	+	+	+	+
Mozambique	Maputo Observatorio	MOZ 98	032 36 E	25 58 S	60 m.	+	+	+	+	+	+
Mozambique	Manhica	MOZ 99	032 48 E	25 24 S	35 m.	+	+	+	+	+	+
Mozambique	Moamba	MOZ100	032 14 E	25 36 S	110 m.	+	+	+	+	+	+
Mozambique	Goba-Fronteira	MOZ101	032 06 E	26 15 S	418 m.	+	+	+	+	+	+
Mozambique	Changalane	MOZ102	032 11 E	26 18 S	100 m.	+	+	+	+	+	+
Mozambique	Umbeluzi	MOZ103	032 23 E	26 03 S	12 m.	+	+	+	+	+	+
Mozambique	Bela Vista-Maputo	MOZ104	032 41 E	26 20 S	15 m.	+	+	+	+	+	+
Mozambique	Inhaca	MOZ105	032 56 E	26 02 S	27 m.	+	+	+	+	+	+
Mozambique	Catuane	MOZ106	032 17 E	26 50 S	37 m.	+	+	+	+	+	+
Mozambique	Zitundo	MOZ107	032 50 E	26 45 S	71 m.	+	+	+	+	+	+
Mozambique	Guija	MOZ108	033 00 E	24 32 S	33 m.	+	+	+	+	+	+

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Mozambique	Mazeminhana	MOZ109	032 15 E	26 27 S	60 m.	+	+	+	+	+	+
Namibia	Tsumeb	NAM 1	017 43 E	19 14 S	1311 m.	+	+	+	+	+	+
Namibia	Swakopmund	NAM 2	014 31 E	22 41 S	12 m.	+	+	+	+	+	+
Namibia	Windhoek	NAM 3	017 06 E	22 34 S	1728 m.	+	+	+	+	+	+
Namibia	Gobabis	NAM 4	018 58 E	22 28 S	1445 m.	+	+	+	+	+	+
Namibia	Luderitz Bay	NAM 5	015 06 E	26 38 S	23 m.	+	+	+	+	+	+
Namibia	Keetmanshoop	NAM 6	018 07 E	26 32 S	1067 m.	+	+	+	+	+	+
Nepal	Dadeldhura	NPL 2	080 35 E	29 18 N	1865 m.	+	+	+	+	+	+
Nepal	Mahendra Nagar	NPL 3	080 13 E	29 02 N	176 m.	+	+	+	+	+	+
Nepal	Khajura-Nepalganj	NPL 4	081 34 E	28 06 N	190 m.	+	+	+	+	+	+
Nepal	Gularia	NPL 5	081 21 E	28 10 N	215 m.	+	+	+	+	+	+
Nepal	Tulsipur	NPL 6	082 18 E	28 08 N	725 m.	+	+	+	+	+	+
Nepal	Surkhet	NPL 7	081 37 E	28 36 N	720 m.	+	+	+	+	+	+
Nepal	Jumla	NPL 8	082 10 E	29 17 N	2300 m.	+	+	+	+	+	+
Nepal	Dhungadhi	NPL 9	080 36 E	28 41 N	167 m.	+	+	+	+	+	+
Nepal	Lumia	NPL 10	083 48 E	28 18 N	1642 m.	+	+	+	+	+	+
Nepal	Pokhara Airport	NPL 11	084 00 E	28 13 N	827 m.	+	+	+	+	+	+
Nepal	Parwanipur	NPL 12	084 58 E	27 04 N	115 m.	+	+	+	+	+	+
Nepal	Taulihawa	NPL 13	083 04 E	27 33 N	94 m.	+	+	+	+	+	+
Nepal	Bhairawa Agri	NPL 14	083 28 E	27 32 N	120 m.	+	+	+	+	+	+
Nepal	Bhairawa	NPL 15	083 27 E	27 31 N	109 m.	+	+	+	+	+	+
Nepal	Simara Airport	NPL 16	084 59 E	27 10 N	137 m.	+	+	+	+	+	+
Nepal	Bhaktapur	NPL 17	085 26 E	27 40 N	1330 m.	+	+	+	+	+	+
Nepal	Kathmandu Airport	NPL 18	085 22 E	27 42 N	1367 m.	+	+	+	+	+	+
Nepal	Butwal	NPL 19	083 28 E	27 42 N	205 m.	+	+	+	+	+	+
Nepal	Tansen	NPL 20	083 32 E	27 52 N	1067 m.	+	+	+	+	+	+
Nepal	Okhaldhunga	NPL 21	086 30 E	27 18 N	1720 m.	+	+	+	+	+	+
Nepal	Bhojpur	NPL 22	087 03 E	27 11 N	1595 m.	+	+	+	+	+	+
Nepal	Khumaltar	NPL 23	085 20 E	27 39 N	1350 m.	+	+	+	+	+	+
Nepal	Rampur	NPL 24	084 25 E	27 37 N	256 m.	+	+	+	+	+	+
Nepal	Hetauda	NPL 25	085 03 E	27 26 N	466 m.	+	+	+	+	+	+
Nepal	Dhulikhel	NPL 26	085 33 E	27 37 N	1552 m.	+	+	+	+	+	+
Nepal	Taplejung	NPL 27	087 40 E	27 21 N	1732 m.	+	+	+	+	+	+
Nepal	Dhankuta	NPL 28	087 21 E	26 59 N	1445 m.	+	+	+	+	+	+
Nepal	Biratnagar	NPL 29	087 16 E	26 29 N	72 m.	+	+	+	+	+	+
Nepal	Tarahawa	NPL 30	087 16 E	26 42 N	200 m.	+	+	+	+	+	+
Nepal	Chandragadhi	NPL 31	088 03 E	26 34 N	120 m.	+	+	+	+	+	+
Nepal	Siraha	NPL 32	086 13 E	26 39 N	102 m.	+	+	+	+	+	+
Nepal	Dharan Bazar	NPL 33	087 17 E	26 49 N	444 m.	+	+	+	+	+	+
Nepal	Hardinath	NPL 34	085 59 E	26 46 N	93 m.	+	+	+	+	+	+
Neth. Antilles	Juliana St. Maarten	ATG 1	063 07 W	18 03 N	4 m.	+	+	+	+	+	+
Neth. Antilles	Oranjestad St.eustat	ATG 2	062 59 W	17 29 N	38 m.	+	+	+	+	+	+
Neth. Antilles	Beatrix Airp. Aruba	ATG 3	070 01 W	12 30 N	18 m.	+	+	+	+	+	+
Neth. Antilles	Hato Airport Curacao	ATG 4	068 58 W	12 12 N	8 m.	+	+	+	+	+	+
Neth. Antilles	Flamingo Air Bonaire	ATG 5	068 17 W	12 08 N	3 m.	+	+	+	+	+	+
Nicaragua	Managua	NIC 1	086 11 W	12 07 N	53 m.	+	+	+	+	+	+
Niger	Bilma	NER 17	012 55 E	18 41 N	335 m.	+	+	+	+	+	+
Niger	Agadez	NER 18	007 59 E	16 58 N	503 m.	+	+	+	+	+	+
Niger	Tillabery	NER 19	001 27 E	14 12 N	210 m.	+	+	+	+	+	+
Niger	Tahoua	NER 20	005 15 E	14 54 N	387 m.	+	+	+	+	+	+
Niger	N'guigmi	NER 21	013 07 E	14 15 N	286 m.	+	+	+	+	+	+
Niger	Niamey	NER 22	002 10 E	13 29 N	224 m.	+	+	+	+	+	+
Niger	Birni N'konni	NER 23	005 15 E	13 48 N	274 m.	+	+	+	+	+	+
Niger	Maradi	NER 24	007 05 E	13 28 N	372 m.	+	+	+	+	+	+
Niger	Zinder	NER 25	008 59 E	13 47 N	453 m.	+	+	+	+	+	+

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Niger	Maine Soroa	NER 26	011 59 E	13 14 N	339 m.	+	+	+	+	+	+
Niger	Gaya	NER 27	003 27 E	11 53 N	203 m.	+	+	+	+	+	+
Nigeria	Yelwa	NGA 3	004 45 E	10 53 N	244 m.	+	+	+	+	+	+
Nigeria	Sokoto	NGA 4	005 15 E	13 01 N	302 m.	+	+	+	+	+	+
Nigeria	Gusau	NGA 5	006 42 E	12 10 N	463 m.	+	+	+	+	+	+
Nigeria	Kaduna	NGA 6	007 27 E	10 36 N	645 m.	+	+	+	+	+	+
Nigeria	Katsina	NGA 7	007 41 E	13 01 N	517 m.	+	+	+	+	+	+
Nigeria	Samaru	NGA 8	007 35 E	11 11 N	685 m.	+	+	+	+	+	+
Nigeria	Kano	NGA 9	008 32 E	12 03 N	476 m.	+	+	+	+	+	+
Nigeria	Bauchi	NGA 10	009 49 E	10 17 N	591 m.	+	+	+	+	+	+
Nigeria	Nguru	NGA 11	010 28 E	12 53 N	343 m.	+	+	+	+	+	+
Nigeria	Potiskum	NGA 12	011 02 E	11 42 N	415 m.	+	+	+	+	+	+
Nigeria	Maiduguri	NGA 13	013 05 E	11 51 N	354 m.	+	+	+	+	+	+
Nigeria	Ilorin	NGA 14	004 35 E	08 29 N	308 m.	+	+	+	+	+	+
Nigeria	Minna	NGA 15	006 32 E	09 37 N	262 m.	+	+	+	+	+	+
Nigeria	Jos	NGA 16	008 54 E	09 52 N	1295 m.	+	+	+	+	+	+
Nigeria	Ibi	NGA 17	009 45 E	08 11 N	111 m.	+	+	+	+	+	+
Nigeria	Yola	NGA 18	012 28 E	09 14 N	191 m.	+	+	+	+	+	+
Nigeria	Lagos-Ikeja	NGA 19	003 24 E	06 27 N	38 m.	+	+	+	+	+	+
Nigeria	Ibadan	NGA 20	003 54 E	07 26 N	228 m.	+	+	+	+	+	+
Nigeria	Benin	NGA 21	005 36 E	06 19 N	79 m.	+	+	+	+	+	+
Nigeria	Lokoja	NGA 22	006 44 E	07 48 N	41 m.	+	+	+	+	+	+
Nigeria	Port Harcourt	NGA 23	007 01 E	04 51 N	18 m.	+	+	+	+	+	+
Nigeria	Enugu	NGA 24	007 33 E	06 28 N	140 m.	+	+	+	+	+	+
Nigeria	Makurdi	NGA 25	008 37 E	07 41 N	97 m.	+	+	+	+	+	+
Oman	Sohar-Majis	OMN 1	056 38 E	24 28 N	4 m.	+	+	+	+	+	+
Oman	Seeb I.a.p.	OMN 2	058 17 E	23 35 N	15 m.	+	+	+	+	+	+
Oman	Sur	OMN 3	059 31 E	22 35 N	5 m.	+	+	+	+	+	+
Oman	Masirah	OMN 4	058 54 E	20 40 N	19 m.	+	+	+	+	+	+
Oman	Thumrait	OMN 5	054 02 E	17 40 N	467 m.	+	+	+	+	+	+
Oman	Salalah	OMN 6	054 05 E	17 02 N	22 m.	+	+	+	+	+	+
Pakistan	Gupis	PAK 2	073 24 E	36 10 N	2156 m.	+	+	+	+	+	+
Pakistan	Gilgit	PAK 3	074 23 E	35 53 N	1482 m.	+	+	+	+	+	+
Pakistan	Chilas	PAK 4	074 07 E	32 25 N	1250 m.	+	+	+	+	+	+
Pakistan	Astore	PAK 5	074 54 E	35 22 N	2168 m.	+	+	+	+	+	+
Pakistan	Skarou	PAK 6	075 37 E	35 18 N	2181 m.	+	+	+	+	+	+
Pakistan	Peshawar	PAK 7	071 33 E	34 00 N	359 m.	+	+	+	+	+	+
Pakistan	Parachinar	PAK 8	070 05 E	33 52 N	1725 m.	+	+	+	+	+	+
Pakistan	Chaklala-Islamabad	PAK 9	073 06 E	33 37 N	508 m.	+	+	+	+	+	+
Pakistan	Sargodha	PAK 10	072 40 E	32 03 N	187 m.	+	+	+	+	+	+
Pakistan	Zhob	PAK 11	069 28 E	31 21 N	1407 m.	+	+	+	+	+	+
Pakistan	Dera Ismail Khan	PAK 12	070 55 E	31 49 N	172 m.	+	+	+	+	+	+
Pakistan	Lyallpur-Faisalabad	PAK 13	073 04 E	31 26 N	184 m.	+	+	+	+	+	+
Pakistan	Lahore City	PAK 14	074 20 E	31 33 N	214 m.	+	+	+	+	+	+
Pakistan	Chaman	PAK 15	066 27 E	30 55 N	1314 m.	+	+	+	+	+	+
Pakistan	Quetta	PAK 16	066 55 E	30 16 N	1620 m.	+	+	+	+	+	+
Pakistan	Multan	PAK 17	071 26 E	30 12 N	123 m.	+	+	+	+	+	+
Pakistan	Kalat	PAK 18	066 35 E	29 02 N	2017 m.	+	+	+	+	+	+
Pakistan	Nokkundi	PAK 19	062 45 E	28 49 N	681 m.	+	+	+	+	+	+
Pakistan	Dalbandin	PAK 20	064 24 E	28 53 N	850 m.	+	+	+	+	+	+
Pakistan	Jacobabad	PAK 21	068 28 E	28 18 N	56 m.	+	+	+	+	+	+
Pakistan	Nawabshah	PAK 22	068 22 E	26 15 N	38 m.	+	+	+	+	+	+
Pakistan	Hyderabad	PAK 23	068 25 E	25 23 N	28 m.	+	+	+	+	+	+
Pakistan	Karachi Airport	PAK 24	067 08 E	24 54 N	22 m.	+	+	+	+	+	+
Pakistan	Karachi-Manora	PAK 25	066 59 E	24 48 N	4 m.	+	+	+	+	+	+

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Panama	Tocumen	PAN	1	079 22 W	09 03 N	14 m.	+	+	+	+	+	+
Panama	David	PAN	2	082 25 W	08 24 N	27 m.	+	+	+	+	+	+
Panama	Santiago	PAN	3	080 57 W	08 05 N	80 m.	+	+	+	+	+	+
Panama	Cristobal	PAN	4	079 55 W	09 21 N	12 m.	+	+	+	+	+	+
Panama	Balboa	PAN	5	079 33 W	08 58 N	31 m.	+	+	+	+	+	+
Panama	Jaque	PAN	6	078 10 W	07 32 N	5 m.	+	+	+	+	+	+
Panama	Los Santos	PAN	7	080 25 W	07 57 N	16 m.	+	+	+	+	+	+
Panama	Ingenio Santaosa	PAN	8	080 40 W	08 11 N	26 m.	+	+	+	+	+	+
Panama	Ingenio La Victoria	PAN	9	080 48 W	08 12 N	30 m.	+	+	+	+	+	+
Panama	Anton	PAN	10	080 16 W	08 23 N	33 m.	+	+	+	+	+	+
Panama	Bajo Grande	PAN	11	082 33 W	08 51 N	2300 m.	+	+	+	+	+	+
Panama	Icacal	PAN	12	080 09 W	09 12 N	11 m.	+	+	+	+	+	+
Panama	Bocas	PAN	13	082 15 W	09 20 N	2 m.	+	+	+	+	+	+
Papua New Guinea	Madang	PNG	3	145 47 E	05 13 S	4 m.	+	+	+	+	+	+
Papua New Guinea	Goroka	PNG	4	145 23 E	06 04 S	1565 m.	+	+	+	+	+	+
Papua New Guinea	Lae	PNG	5	147 00 E	06 44 S	8 m.	+	+	+	+	+	+
Papua New Guinea	Port Moresby	PNG	6	147 12 E	09 27 S	28 m.	+	+	+	+	+	+
Papua New Guinea	Momote	PNG	7	147 25 E	02 03 S	4 m.	+	+	+	+	+	+
Papua New Guinea	Kavieng	PNG	8	150 49 E	02 34 S	10 m.	+	+	+	+	+	+
Papua New Guinea	Rabaul	PNG	9	152 12 E	04 13 S	4 m.	+	+	+	+	+	+
Papua New Guinea	Kieta-Aropia	PNG	10	155 43 E	06 19 S	3 m.	+	+	+	+	+	+
Paraguay	Nueva Asuncion	PRY	1	061 55 W	20 43 S	315 m.	+	+	+	+	+	+
Paraguay	Bahia Negra	PRY	2	058 10 W	20 13 S	92 m.	+	+	+	+	+	+
Paraguay	Mar. Estigarribia	PRY	3	060 36 W	22 01 S	181 m.	+	+	+	+	+	+
Paraguay	Puerto Casado	PRY	4	057 52 W	22 17 S	87 m.	+	+	+	+	+	+
Paraguay	Pedro J. Caballero	PRY	5	055 39 W	22 35 S	614 m.	+	+	+	+	+	+
Paraguay	Mision Inglesa	PRY	6	058 24 W	23 22 S	110 m.	+	+	+	+	+	+
Paraguay	Concepcion	PRY	7	057 18 W	23 25 S	74 m.	+	+	+	+	+	+
Paraguay	Itacurubi	PRY	8	057 01 W	24 27 S	130 m.	+	+	+	+	+	+
Paraguay	Asuncion	PRY	9	057 38 W	25 16 S	101 m.	+	+	+	+	+	+
Paraguay	Pto Pres. Stroessner	PRY	10	054 36 W	25 32 S	196 m.	+	+	+	+	+	+
Paraguay	S.juan Bautista Mis.	PRY	11	057 09 W	26 40 S	126 m.	+	+	+	+	+	+
Paraguay	Encarnacion	PRY	12	055 50 W	27 20 S	91 m.	+	+	+	+	+	+
Peru	Iquitos	PER	2	073 15 W	03 45 S	125 m.	+	+	+	+	+	+
Peru	Muyuy	PER	3	073 12 W	03 53 S	80 m.	+	+	+	+	+	+
Peru	Quistococha	PER	4	073 16 W	03 49 S	150 m.	+	+	+	+	+	+
Peru	Zungarococha	PER	5	073 14 W	03 44 S	122 m.	+	+	+	+	+	+
Peru	Guayabamba	PER	6	075 14 W	03 44 S	100 m.	+	+	+	+	+	+
Peru	Requena	PER	7	073 51 W	05 03 S	200 m.	+	+	+	+	+	+
Peru	Huancabamba	PER	8	079 22 W	05 14 S	1952 m.	+	+	+	+	+	+
Peru	Moyobamba	PER	9	076 58 W	06 02 S	832 m.	+	+	+	+	+	+
Peru	Chachapoyas	PER	10	077 50 W	06 13 S	2435 m.	+	+	+	+	+	+
Peru	Chiclayo	PER	11	079 50 W	06 47 S	34 m.	+	+	+	+	+	+
Peru	Lambayeque	PER	12	079 53 W	06 41 S	27 m.	+	+	+	+	+	+
Peru	Tarapoto	PER	13	076 23 W	06 27 S	282 m.	+	+	+	+	+	+
Peru	Casa Grande	PER	14	079 10 W	07 40 S	157 m.	+	+	+	+	+	+
Peru	Cajamarca	PER	15	078 28 W	07 08 S	2620 m.	+	+	+	+	+	+
Peru	Limon Carro	PER	16	079 26 W	07 19 S	130 m.	+	+	+	+	+	+
Peru	Trujillo	PER	17	079 02 W	08 06 S	26 m.	+	+	+	+	+	+
Peru	Pucallpa	PER	18	074 36 W	08 25 S	148 m.	+	+	+	+	+	+
Peru	Jurac	PER	19	075 40 W	08 50 S	420 m.	+	+	+	+	+	+
Peru	Tingo Maria	PER	20	075 57 W	09 08 S	665 m.	+	+	+	+	+	+
Peru	Huaraz	PER	21	077 31 W	09 30 S	3050 m.	+	+	+	+	+	+
Peru	Huanuco	PER	22	076 45 W	09 54 S	1859 m.	+	+	+	+	+	+
Peru	Cerro De Pasco	PER	23	076 10 W	10 45 S	4400 m.	+	+	+	+	+	+

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Peru	Sanamon	PER 24	075 18 W	11 08 S	800 m.	+	+	+	+	+	+
Peru	Fundo Iberia	PER 25	069 34 W	11 20 S	180 m.	+	+	+	+	+	+
Peru	Las Zorras	PER 26	078 03 W	10 17 S	100 m.	+	+	+	+	+	+
Peru	Lampas Bajo	PER 27	077 22 W	10 04 S	3950 m.	+	+	+	+	+	+
Peru	La Oroya	PER 28	075 56 W	11 33 S	3750 m.	+	+	+	+	+	+
Peru	Jauja	PER 29	075 30 W	11 47 S	3387 m.	+	+	+	+	+	+
Peru	Lima	PER 30	077 01 W	12 01 S	136 m.	+	+	+	+	+	+
Peru	La Molina	PER 31	076 57 W	12 05 S	251 m.	+	+	+	+	+	+
Peru	Huancayo	PER 32	075 20 W	12 02 S	3350 m.	+	+	+	+	+	+
Peru	Puerto Maldonado	PER 33	069 12 W	12 38 S	265 m.	+	+	+	+	+	+
Peru	Quillabamba	PER 34	072 43 W	12 50 S	1660 m.	+	+	+	+	+	+
Peru	Accnocolcha	PER 35	075 12 W	13 03 S	4520 m.	+	+	+	+	+	+
Peru	Huamanga	PER 36	074 13 W	13 09 S	2761 m.	+	+	+	+	+	+
Peru	Quincemil	PER 37	070 40 W	13 16 S	634 m.	+	+	+	+	+	+
Peru	Pacococha	PER 38	075 16 W	13 12 S	4356 m.	+	+	+	+	+	+
Peru	Abancay	PER 39	072 53 W	13 38 S	2398 m.	+	+	+	+	+	+
Peru	Cuzco-Kayra	PER 40	071 59 W	13 33 S	3349 m.	+	+	+	+	+	+
Peru	Hacienda Manrique	PER 41	076 02 W	13 42 S	180 m.	+	+	+	+	+	+
Peru	Pisco	PER 42	076 17 W	13 45 S	6 m.	+	+	+	+	+	+
Peru	Copara	PER 43	074 55 W	14 59 S	620 m.	+	+	+	+	+	+
Peru	Chuquibambilla	PER 44	070 43 W	14 47 S	3910 m.	+	+	+	+	+	+
Peru	Caylloma	PER 45	071 46 W	15 11 S	4320 m.	+	+	+	+	+	+
Peru	Sibayo	PER 46	071 27 W	15 29 S	3847 m.	+	+	+	+	+	+
Peru	San Juan	PER 47	075 10 W	15 23 S	60 m.	+	+	+	+	+	+
Peru	Cuenca Verde	PER 48	070 49 W	15 29 S	4260 m.	+	+	+	+	+	+
Peru	Huaraya-Moho	PER 49	069 30 W	15 21 S	3890 m.	+	+	+	+	+	+
Peru	Capachica	PER 50	069 50 W	15 38 S	3868 m.	+	+	+	+	+	+
Peru	Puno Granja Salcedo	PER 51	070 01 W	15 20 S	3852 m.	+	+	+	+	+	+
Peru	Punta Atico	PER 52	073 42 W	16 14 S	25 m.	+	+	+	+	+	+
Peru	Arequipa	PER 53	071 33 W	16 19 S	2524 m.	+	+	+	+	+	+
Peru	July	PER 54	069 26 W	16 12 S	3852 m.	+	+	+	+	+	+
Peru	Vitor	PER 55	071 48 W	16 27 S	1552 m.	+	+	+	+	+	+
Peru	Pampa De Majes	PER 56	072 10 W	16 21 S	1433 m.	+	+	+	+	+	+
Peru	Desaguadero	PER 57	069 00 W	16 39 S	3850 m.	+	+	+	+	+	+
Peru	Paucarani	PER 58	069 46 W	17 32 S	4541 m.	+	+	+	+	+	+
Peru	Mollendo	PER 59	076 06 W	17 00 S	24 m.	+	+	+	+	+	+
Peru	Tacna	PER 60	070 18 W	18 04 S	452 m.	+	+	+	+	+	+
Philippines	Calayan	PHL 5	121 28 E	19 16 N	13 m.	+	+	+	+	+	+
Philippines	Basco	PHL 6	121 58 E	20 27 N	11 m.	+	+	+	+	+	+
Philippines	Vigan	PHL 7	120 23 E	17 34 N	33 m.	+	+	+	+	+	+
Philippines	Laoag	PHL 8	120 32 E	18 11 N	5 m.	+	+	+	+	+	+
Philippines	Aparri	PHL 9	121 38 E	18 22 N	4 m.	+	+	+	+	+	+
Philippines	Tuguegarao	PHL 10	121 44 E	17 37 N	24 m.	+	+	+	+	+	+
Philippines	Iba	PHL 11	119 59 E	15 20 N	5 m.	+	+	+	+	+	+
Philippines	Dagupan	PHL 12	120 20 E	16 03 N	2 m.	+	+	+	+	+	+
Philippines	Baguio	PHL 13	120 36 E	16 25 N	1501 m.	+	+	+	+	+	+
Philippines	Cabanatuan	PHL 14	120 58 E	15 29 N	32 m.	+	+	+	+	+	+
Philippines	Baler	PHL 15	121 34 E	15 45 N	6 m.	+	+	+	+	+	+
Philippines	Casiguran	PHL 16	122 08 E	16 17 N	4 m.	+	+	+	+	+	+
Philippines	Los Banos	PHL 17	121 15 E	14 10 N	23 m.	+	+	+	+	+	+
Philippines	Port Area Manila	PHL 18	120 59 E	14 35 N	15 m.	+	+	+	+	+	+
Philippines	Tayabas	PHL 19	121 35 E	14 03 N	158 m.	+	+	+	+	+	+
Philippines	Sangley	PHL 20	012 55 E	14 30 N	4 m.	+	+	+	+	+	+
Philippines	Manila-Airport	PHL 21	121 00 E	14 31 N	15 m.	+	+	+	+	+	+
Philippines	Calapan	PHL 22	121 11 E	13 25 N	40 m.	+	+	+	+	+	+

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Philippines	Ambulong	PHL	23	121 04 E	14 05 N	11 m.	+	+	+	+	+	+
Philippines	Infanta	PHL	24	121 40 E	14 45 N	5 m.	+	+	+	+	+	+
Philippines	Alabat	PHL	25	122 01 E	14 06 N	1 m.	+	+	+	+	+	+
Philippines	Aurora	PHL	26	122 31 E	13 21 N	4 m.	+	+	+	+	+	+
Philippines	Lucena	PHL	27	121 37 E	13 56 N	157 m.	+	+	+	+	+	+
Philippines	Daet	PHL	28	122 57 E	14 07 N	4 m.	+	+	+	+	+	+
Philippines	Legaspi	PHL	29	123 44 E	13 08 N	19 m.	+	+	+	+	+	+
Philippines	Virac	PHL	30	124 14 E	13 35 N	6 m.	+	+	+	+	+	+
Philippines	Coron	PHL	31	120 12 E	12 00 N	14 m.	+	+	+	+	+	+
Philippines	Romblon	PHL	32	122 16 E	12 35 N	47 m.	+	+	+	+	+	+
Philippines	Roxas	PHL	33	122 45 E	11 35 N	3 m.	+	+	+	+	+	+
Philippines	Masbate	PHL	34	123 37 E	12 22 N	11 m.	+	+	+	+	+	+
Philippines	Catarman	PHL	35	124 38 E	12 29 N	6 m.	+	+	+	+	+	+
Philippines	Catbalogan	PHL	36	124 53 E	11 47 N	5 m.	+	+	+	+	+	+
Philippines	Tacloban	PHL	37	125 00 E	11 15 N	21 m.	+	+	+	+	+	+
Philippines	Borongan	PHL	38	125 26 E	11 37 N	7 m.	+	+	+	+	+	+
Philippines	Guian	PHL	39	125 44 E	11 02 N	60 m.	+	+	+	+	+	+
Philippines	Puerto Princesa	PHL	40	118 44 E	09 45 N	16 m.	+	+	+	+	+	+
Philippines	Cuyo	PHL	41	121 02 E	10 51 N	4 m.	+	+	+	+	+	+
Philippines	Iloilo	PHL	42	122 34 E	10 42 N	14 m.	+	+	+	+	+	+
Philippines	Damaguete	PHL	43	123 18 E	09 18 N	6 m.	+	+	+	+	+	+
Philippines	Tagbilaran	PHL	44	123 52 E	09 38 N	6 m.	+	+	+	+	+	+
Philippines	Cebu	PHL	45	123 54 E	10 20 N	35 m.	+	+	+	+	+	+
Philippines	Mactan	PHL	46	123 58 E	10 18 N	9 m.	+	+	+	+	+	+
Philippines	Maasin	PHL	47	124 50 E	10 08 N	19 m.	+	+	+	+	+	+
Philippines	Surigao	PHL	48	125 30 E	09 48 N	21 m.	+	+	+	+	+	+
Philippines	Dipolog	PHL	49	123 21 E	08 36 N	5 m.	+	+	+	+	+	+
Philippines	Cagayan De Oro	PHL	50	124 38 E	08 29 N	6 m.	+	+	+	+	+	+
Philippines	Malaybalay	PHL	51	125 05 E	08 09 N	627 m.	+	+	+	+	+	+
Philippines	Davao	PHL	52	125 36 E	07 04 N	20 m.	+	+	+	+	+	+
Philippines	Hinatuan	PHL	53	126 20 E	08 26 N	3 m.	+	+	+	+	+	+
Philippines	Jolo	PHL	54	121 00 E	06 03 N	13 m.	+	+	+	+	+	+
Philippines	Zamboanga	PHL	55	122 05 E	06 54 N	6 m.	+	+	+	+	+	+
Philippines	General Santos	PHL	56	125 11 E	06 07 N	15 m.	+	+	+	+	+	+
Portugal	Porto-S. Rra Pilar	PRT	8	008 36 W	41 08 N	95 m.	+	+	+	+	+	+
Portugal	Braganca	PRT	9	006 46 W	41 49 N	720 m.	+	+	+	+	+	+
Portugal	Melgaco	PRT	10	008 16 W	42 07 N	235 m.	+	+	+	+	+	+
Puerto Rico	San Juan	PRI	1	066 00 W	18 26 N	19 m.	+	+	+	+	+	+
Qatar	Doha I.a.p.	QAT	1	051 34 E	25 15 N	11 m.	+	+	+	+	+	+
Rwanda	Rubona-Colline	RWA	1	029 46 E	02 29 S	1706 m.	+	+	+	+	+	+
Rwanda	Gabiro	RWA	2	030 24 E	01 32 S	1472 m.	+	+	+	+	+	+
Saint Lucia	Soufriere	LCA	1	061 00 W	14 01 N	2 m.	+	+	+	+	+	+
Sao Tome Principe	Sao Tome A.p.	STP	1	006 43 E	00 23 N	13 m.	+	+	+	+	+	+
Sao Tome Principe	Santo Antonio	STP	2	007 25 E	01 39 N	5 m.	+	+	+	+	+	+
Saudi Arabia	Turaif	SAU	1	038 40 E	31 41 N	818 m.	+	+	+	+	+	+
Saudi Arabia	Al Jouf	SAU	2	040 06 E	29 47 N	671 m.	+	+	+	+	+	+
Saudi Arabia	Rafha	SAU	3	043 29 E	29 38 N	447 m.	+	+	+	+	+	+
Saudi Arabia	Hafr Al-Batin	SAU	4	046 07 E	28 20 N	360 m.	+	+	+	+	+	+
Saudi Arabia	Tabuk	SAU	5	036 38 E	28 22 N	776 m.	+	+	+	+	+	+
Saudi Arabia	Hail	SAU	6	041 41 E	27 26 N	1013 m.	+	+	+	+	+	+
Saudi Arabia	Wejh	SAU	7	036 28 E	26 12 N	21 m.	+	+	+	+	+	+
Saudi Arabia	Gassim	SAU	8	043 46 E	26 18 N	650 m.	+	+	+	+	+	+
Saudi Arabia	Qatif	SAU	9	050 00 E	26 30 N	5 m.	+	+	+	+	+	+
Saudi Arabia	Dhahran	SAU	10	050 10 E	26 16 N	17 m.	+	+	+	+	+	+
Saudi Arabia	Medina	SAU	11	039 42 E	24 33 N	636 m.	+	+	+	+	+	+

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Saudi Arabia	Riyadh	SAU	12	046 44 E	24 42 N	611 m.	+	+	+	+	+	+
Saudi Arabia	Yenbo	SAU	13	038 04 E	24 09 N	6 m.	+	+	+	+	+	+
Saudi Arabia	Jeddah	SAU	14	039 12 E	21 30 N	17 m.	+	+	+	+	+	+
Saudi Arabia	Taif	SAU	15	040 33 E	21 29 N	1454 m.	+	+	+	+	+	+
Saudi Arabia	Sulayel	SAU	16	045 37 E	20 28 N	614 m.	+	+	+	+	+	+
Saudi Arabia	Bisha	SAU	17	042 37 E	19 59 N	1163 m.	+	+	+	+	+	+
Saudi Arabia	Kwash	SAU	18	041 53 E	19 00 N	350 m.	+	+	+	+	+	+
Saudi Arabia	Abha	SAU	19	042 39 E	18 14 N	2093 m.	+	+	+	+	+	+
Saudi Arabia	Khamis Mushait	SAU	20	042 48 E	18 18 N	2057 m.	+	+	+	+	+	+
Saudi Arabia	Nejran	SAU	21	044 26 E	17 37 N	1210 m.	+	+	+	+	+	+
Saudi Arabia	Gizan	SAU	22	042 35 E	16 54 N	3 m.	+	+	+	+	+	+
Senegal	St Louis	SEN	2	016 27 W	16 03 N	4 m.	+	+	+	+	+	+
Senegal	Guede	SEN	3	014 47 W	16 32 N	8 m.	+	+	+	+	+	+
Senegal	Podor	SEN	4	014 58 W	16 39 N	7 m.	+	+	+	+	+	+
Senegal	Linguere	SEN	5	015 07 W	15 23 N	21 m.	+	+	+	+	+	+
Senegal	Matam	SEN	6	013 15 W	15 39 N	17 m.	+	+	+	+	+	+
Senegal	Dakar-Yoff	SEN	7	017 30 W	14 44 N	24 m.	+	+	+	+	+	+
Senegal	Thies	SEN	8	016 57 W	14 48 N	76 m.	+	+	+	+	+	+
Senegal	C.r.a. Bambey	SEN	9	016 28 W	14 42 N	17 m.	+	+	+	+	+	+
Senegal	Diourbel	SEN	10	016 14 W	14 39 N	9 m.	+	+	+	+	+	+
Senegal	Kaolack	SEN	11	016 04 W	14 08 N	7 m.	+	+	+	+	+	+
Senegal	Tambacounda	SEN	12	013 41 W	13 46 N	50 m.	+	+	+	+	+	+
Senegal	Ziguinchor	SEN	13	016 16 W	12 33 N	23 m.	+	+	+	+	+	+
Senegal	Kolda	SEN	14	014 58 W	12 53 N	10 m.	+	+	+	+	+	+
Senegal	Kedougou	SEN	15	012 13 W	12 34 N	167 m.	+	+	+	+	+	+
Seychelles	Mahe	SYC	1	055 31 E	04 40 S	3 m.	+	+	+	+	+	+
Sierra Leone	Lungi	SLE	1	013 12 W	08 37 N	27 m.	+	+	+	+	+	+
Sierra Leone	Freetown-Falcon B	SLE	2	013 14 W	08 30 N	11 m.	+	+	+	+	+	+
Sierra Leone	Bonthe	SLE	3	012 30 W	07 32 N	8 m.	+	+	+	+	+	+
Sierra Leone	Bol	SLE	4	011 46 W	07 57 N	93 m.	+	+	+	+	+	+
Sierra Leone	Kabala	SLE	5	011 33 W	09 35 N	464 m.	+	+	+	+	+	+
Sierra Leone	Daru	SLE	6	010 51 W	07 59 N	186 m.	+	+	+	+	+	+
Singapore	Singapore	SGP	1	103 55 E	01 22 N	18 m.	+	+	+	+	+	+
Somalia	Berbera	SOM	1	045 01 E	10 25 N	8 m.	+	+	+	+	+	+
Somalia	Hargeisa	SOM	2	044 05 E	09 30 N	1326 m.	+	+	+	+	+	+
Somalia	Bosaso	SOM	3	049 11 E	11 17 N	2 m.	+	+	+	+	+	+
Somalia	Scusciuban	SOM	4	050 14 E	10 18 N	344 m.	+	+	+	+	+	+
Somalia	Gardo	SOM	5	049 05 E	09 31 N	812 m.	+	+	+	+	+	+
Somalia	Galcaio	SOM	6	047 16 E	06 51 N	302 m.	+	+	+	+	+	+
Somalia	Obbia	SOM	7	048 34 E	05 20 N	12 m.	+	+	+	+	+	+
Somalia	El-Bur	SOM	8	046 37 E	04 42 N	175 m.	+	+	+	+	+	+
Somalia	Belet Uen	SOM	9	045 13 E	04 42 N	173 m.	+	+	+	+	+	+
Somalia	Hoddur	SOM	10	043 52 E	04 11 N	497 m.	+	+	+	+	+	+
Somalia	Bulo Burti	SOM	11	045 34 E	03 15 N	158 m.	+	+	+	+	+	+
Somalia	Iscia Baidoa	SOM	12	043 40 E	03 08 N	487 m.	+	+	+	+	+	+
Somalia	Lug Ganane	SOM	13	042 35 E	03 45 N	193 m.	+	+	+	+	+	+
Somalia	Bardera	SOM	14	042 18 E	02 21 N	118 m.	+	+	+	+	+	+
Somalia	Afgoi	SOM	15	045 08 E	02 09 N	83 m.	+	+	+	+	+	+
Somalia	Giohar	SOM	16	045 30 E	02 46 N	108 m.	+	+	+	+	+	+
Somalia	Mogadiscio	SOM	17	045 21 E	02 02 N	9 m.	+	+	+	+	+	+
Somalia	Genale	SOM	18	044 45 E	01 50 N	69 m.	+	+	+	+	+	+
Somalia	El Mugne	SOM	19	044 46 E	01 43 N	12 m.	+	+	+	+	+	+
Somalia	Brava	SOM	20	044 02 E	01 06 N	6 m.	+	+	+	+	+	+
Somalia	Afrmadu	SOM	21	042 04 E	00 31 N	29 m.	+	+	+	+	+	+
Somalia	Alessandra	SOM	22	042 46 E	00 30 N	24 m.	+	+	+	+	+	+

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Somalia	Kisimaio	SOM 23	042 26 E	00 22 S	10 m.	+	+	+	+	+	+
Somalia	Jonte	SOM 24	042 28 E	00 20 S	8 m.	+	+	+	+	+	+
South Africa	Messina	ZAF 1	030 03 E	22 20 S	549 m.	+	+	+	+	+	+
South Africa	Pietersburg	ZAF 2	029 27 E	23 52 S	1230 m.	+	+	+	+	+	+
South Africa	Punda Milia	ZAF 3	031 01 E	22 41 S	462 m.	+	+	+	+	+	+
South Africa	Thabazimbi	ZAF 4	027 24 E	24 37 S	1028 m.	+	+	+	+	+	+
South Africa	Zeerust	ZAF 5	026 05 E	25 33 S	1207 m.	+	+	+	+	+	+
South Africa	Pretoria	ZAF 6	028 11 E	25 44 S	1326 m.	+	+	+	+	+	+
South Africa	Germiston	ZAF 7	028 09 E	26 15 S	1665 m.	+	+	+	+	+	+
South Africa	Nelspruit	ZAF 8	030 58 E	25 27 S	665 m.	+	+	+	+	+	+
South Africa	Bethal	ZAF 9	029 28 E	26 27 S	1640 m.	+	+	+	+	+	+
South Africa	Kuruman	ZAF 10	023 26 E	27 28 S	1300 m.	+	+	+	+	+	+
South Africa	Potchefstroom	ZAF 11	027 04 E	26 44 S	1352 m.	+	+	+	+	+	+
South Africa	Kroonstad	ZAF 12	027 14 E	27 40 S	1348 m.	+	+	+	+	+	+
South Africa	Johannesburg	ZAF 13	028 03 E	26 12 S	1753 m.	+	+	+	+	+	+
South Africa	Newcastle	ZAF 14	029 56 E	27 45 S	1199 m.	+	+	+	+	+	+
South Africa	Alexander Bay	ZAF 15	016 32 E	28 34 S	21 m.	+	+	+	+	+	+
South Africa	Poffadder	ZAF 16	019 23 E	29 08 S	994 m.	+	+	+	+	+	+
South Africa	Postmasburg	ZAF 17	023 00 E	28 18 S	1324 m.	+	+	+	+	+	+
South Africa	Upington	ZAF 18	021 16 E	28 26 S	809 m.	+	+	+	+	+	+
South Africa	Kimberley	ZAF 19	024 46 E	28 48 S	1204 m.	+	+	+	+	+	+
South Africa	Bloemfontein	ZAF 20	026 11 E	29 07 S	1422 m.	+	+	+	+	+	+
South Africa	Estcourt	ZAF 21	029 52 E	29 01 S	1180 m.	+	+	+	+	+	+
South Africa	Melmoth	ZAF 22	031 24 E	28 35 S	770 m.	+	+	+	+	+	+
South Africa	Cape St. Lucia	ZAF 23	032 24 E	28 30 S	111 m.	+	+	+	+	+	+
South Africa	Okiep	ZAF 24	017 52 E	28 36 S	927 m.	+	+	+	+	+	+
South Africa	Prieska	ZAF 25	022 45 E	29 40 S	933 m.	+	+	+	+	+	+
South Africa	De Aar	ZAF 26	024 01 E	30 39 S	1243 m.	+	+	+	+	+	+
South Africa	Wepener	ZAF 27	027 02 E	29 44 S	1440 m.	+	+	+	+	+	+
South Africa	Kokstad	ZAF 28	029 25 E	30 32 S	1305 m.	+	+	+	+	+	+
South Africa	Durban	ZAF 29	030 57 E	29 58 S	8 m.	+	+	+	+	+	+
South Africa	Calvinia	ZAF 30	019 46 E	31 28 S	981 m.	+	+	+	+	+	+
South Africa	Klaver	ZAF 31	018 37 E	31 47 S	42 m.	+	+	+	+	+	+
South Africa	Grootfontein	ZAF 32	025 02 E	31 29 S	1263 m.	+	+	+	+	+	+
South Africa	Queenstown	ZAF 33	026 53 E	31 53 S	1077 m.	+	+	+	+	+	+
South Africa	Umtata	ZAF 34	028 47 E	31 35 S	696 m.	+	+	+	+	+	+
South Africa	Sutherland	ZAF 35	020 40 E	32 23 S	1456 m.	+	+	+	+	+	+
South Africa	Beaufort-West	ZAF 36	022 35 E	32 21 S	857 m.	+	+	+	+	+	+
South Africa	Jansenville	ZAF 37	024 40 E	32 56 S	442 m.	+	+	+	+	+	+
South Africa	Cape Town	ZAF 38	018 32 E	33 54 S	17 m.	+	+	+	+	+	+
South Africa	Oudtshoorn	ZAF 39	022 12 E	33 35 S	335 m.	+	+	+	+	+	+
South Africa	Montagu	ZAF 40	020 07 E	33 47 S	223 m.	+	+	+	+	+	+
South Africa	George	ZAF 41	022 25 E	33 58 S	221 m.	+	+	+	+	+	+
South Africa	Port Elizabeth	ZAF 42	025 36 E	33 59 S	58 m.	+	+	+	+	+	+
South Africa	East London	ZAF 43	027 52 E	33 02 S	125 m.	+	+	+	+	+	+
Spain	La Coruna	ESP 20	008 25 W	43 22 N	58 m.	+	+	+	+	+	+
Spain	Gijon	ESP 21	005 50 W	43 33 N	29 m.	+	+	+	+	+	+
Spain	Oviedo	ESP 22	005 52 W	43 21 N	337 m.	+	+	+	+	+	+
Spain	Santander	ESP 23	003 49 W	43 28 N	66 m.	+	+	+	+	+	+
Spain	Sondica-Bilbao	ESP 24	002 56 W	43 18 N	40 m.	+	+	+	+	+	+
Spain	Finisterre	ESP 25	009 16 W	42 53 N	146 m.	+	+	+	+	+	+
Spain	Santiago	ESP 26	008 26 W	42 54 N	370 m.	+	+	+	+	+	+
Spain	Pontevedra	ESP 27	008 39 W	42 26 N	19 m.	+	+	+	+	+	+
Spain	Vigo	ESP 28	008 43 W	42 14 N	45 m.	+	+	+	+	+	+
Spain	Orense	ESP 29	007 52 W	42 20 N	127 m.	+	+	+	+	+	+

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Spain	Leon-Virg.del Camino	ESP	30	005 39 W	42 35 N	913 m.	+	+	+	+	+	+
Spain	Palencia	ESP	31	004 32 W	42 01 N	750 m.	+	+	+	+	+	+
Spain	Burgos	ESP	32	003 42 W	42 20 N	854 m.	+	+	+	+	+	+
Spain	Logrono	ESP	33	002 27 W	42 29 N	380 m.	+	+	+	+	+	+
Spain	Pamplona	ESP	34	001 30 W	42 49 N	466 m.	+	+	+	+	+	+
Spain	Huesca	ESP	35	000 20 W	42 05 N	550 m.	+	+	+	+	+	+
Spain	Zamora	ESP	36	005 44 W	41 30 N	665 m.	+	+	+	+	+	+
Spain	Valladolid	ESP	37	004 43 W	41 30 N	695 m.	+	+	+	+	+	+
Spain	Soria	ESP	38	002 28 W	41 46 N	1080 m.	+	+	+	+	+	+
Spain	Zaragoza	ESP	39	000 53 W	41 39 N	237 m.	+	+	+	+	+	+
Spain	Lerida	ESP	40	000 38 E	41 37 N	203 m.	+	+	+	+	+	+
Spain	Tarragona	ESP	41	001 15 E	41 07 N	65 m.	+	+	+	+	+	+
Spain	Barcelona	ESP	42	002 09 E	41 24 N	93 m.	+	+	+	+	+	+
Spain	Gerona	ESP	43	002 50 E	41 59 N	96 m.	+	+	+	+	+	+
Spain	Cabo Bagur	ESP	44	003 15 E	41 57 N	110 m.	+	+	+	+	+	+
Spain	Salamanca	ESP	45	005 40 W	40 58 N	805 m.	+	+	+	+	+	+
Spain	Avila	ESP	46	004 42 W	40 39 N	1128 m.	+	+	+	+	+	+
Spain	Segovia	ESP	47	004 08 W	40 57 N	1015 m.	+	+	+	+	+	+
Spain	Barajas	ESP	48	003 35 W	40 27 N	600 m.	+	+	+	+	+	+
Spain	Madrid	ESP	49	003 41 W	40 25 N	667 m.	+	+	+	+	+	+
Spain	Guadalajara	ESP	50	003 10 W	40 38 N	730 m.	+	+	+	+	+	+
Spain	Cuenca	ESP	51	002 08 W	40 04 N	944 m.	+	+	+	+	+	+
Spain	Calamocha	ESP	52	001 18 W	40 52 N	933 m.	+	+	+	+	+	+
Spain	Teruel	ESP	53	001 06 W	40 20 N	916 m.	+	+	+	+	+	+
Spain	Tortosa	ESP	54	000 30 E	40 49 N	44 m.	+	+	+	+	+	+
Spain	Caceres	ESP	55	006 22 W	39 29 N	460 m.	+	+	+	+	+	+
Spain	Toledo	ESP	56	004 02 W	39 52 N	539 m.	+	+	+	+	+	+
Spain	Valencia	ESP	57	000 23 W	39 29 N	13 m.	+	+	+	+	+	+
Spain	Castellon	ESP	58	000 04 W	39 57 N	49 m.	+	+	+	+	+	+
Spain	Palma	ESP	59	002 39 E	39 33 N	10 m.	+	+	+	+	+	+
Spain	Mahon-Menorca	ESP	60	004 15 E	39 52 N	82 m.	+	+	+	+	+	+
Spain	Badajoz	ESP	61	006 58 W	38 53 N	198 m.	+	+	+	+	+	+
Spain	Ciudadreal	ESP	62	003 56 W	38 59 N	628 m.	+	+	+	+	+	+
Spain	Alicante	ESP	63	000 30 W	38 22 N	81 m.	+	+	+	+	+	+
Spain	Denia	ESP	64	000 06 E	38 50 N	15 m.	+	+	+	+	+	+
Spain	Ibiza-Iviza	ESP	65	001 22 W	38 52 N	7 m.	+	+	+	+	+	+
Spain	Huelva	ESP	66	006 57 W	37 15 N	19 m.	+	+	+	+	+	+
Spain	Sevilla	ESP	67	006 00 W	37 22 N	9 m.	+	+	+	+	+	+
Spain	Cordoba	ESP	68	004 50 W	37 51 N	91 m.	+	+	+	+	+	+
Spain	Jaen	ESP	69	003 48 W	37 48 N	510 m.	+	+	+	+	+	+
Spain	Granada	ESP	70	003 35 W	37 09 N	689 m.	+	+	+	+	+	+
Spain	Murcia	ESP	71	001 08 W	37 59 N	44 m.	+	+	+	+	+	+
Spain	Jerez De La Frontera	ESP	72	006 04 W	36 45 N	29 m.	+	+	+	+	+	+
Spain	Cadiz-P.to S.maría	ESP	73	006 18 W	36 32 N	19 m.	+	+	+	+	+	+
Spain	San Fernando	ESP	74	006 12 W	36 28 N	28 m.	+	+	+	+	+	+
Spain	Malaga	ESP	75	004 25 W	36 43 N	33 m.	+	+	+	+	+	+
Spain	Almeria	ESP	76	002 28 W	36 50 N	6 m.	+	+	+	+	+	+
Spain	Algesiras	ESP	77	005 40 W	36 09 N	20 m.	+	+	+	+	+	+
Spain	Funchal	ESP	78	016 54 W	32 38 N	56 m.	+	+	+	+	+	+
Spain	Sta Cruz De Tenerife	ESP	79	016 15 W	28 28 N	46 m.	+	+	+	+	+	+
Spain	La Luz Y Las Palmas	ESP	80	015 25 W	28 08 N	6 m.	+	+	+	+	+	+
Spain	Arrecife	ESP	81	013 11 W	28 55 N	10 m.	+	+	+	+	+	+
Sri Lanka	Jaffna	LKA	2	080 01 E	09 39 N	3 m.	+	+	+	+	+	+
Sri Lanka	Mannar	LKA	3	079 55 E	08 59 N	3 m.	+	+	+	+	+	+
Sri Lanka	Vavuniya	LKA	4	080 30 E	08 45 N	98 m.	+	+	+	+	+	+

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Sri Lanka	Trincomalee	LKA	5	081 15 E	08 35 N	3 m.	+	+	+	+	+	+
Sri Lanka	Puttalam	LKA	6	079 50 E	08 02 N	2 m.	+	+	+	+	+	+
Sri Lanka	Batticaloa	LKA	7	081 42 E	07 43 N	5 m.	+	+	+	+	+	+
Sri Lanka	Kandy	LKA	8	080 38 E	07 20 N	479 m.	+	+	+	+	+	+
Sri Lanka	Colombo	LKA	9	079 52 E	06 54 N	7 m.	+	+	+	+	+	+
Sri Lanka	Ratmalana	LKA	10	079 53 E	06 49 N	5 m.	+	+	+	+	+	+
Sri Lanka	Nuwara Eliya	LKA	11	080 46 E	06 58 N	1880 m.	+	+	+	+	+	+
Sri Lanka	Ratnapura	LKA	12	080 24 E	06 41 N	34 m.	+	+	+	+	+	+
Sri Lanka	Badulla	LKA	13	081 03 E	06 59 N	667 m.	+	+	+	+	+	+
Sri Lanka	Galle	LKA	14	080 13 E	06 02 N	9 m.	+	+	+	+	+	+
Sri Lanka	Hambantota	LKA	15	081 08 E	06 07 N	18 m.	+	+	+	+	+	+
St. Kitts and Nevis	La Guerite	KNA	1	062 45 W	17 20 N	48 m.	+	+	+	+	+	+
Sudan	Wadi Halfa	SDN	1	031 20 E	21 55 N	183 m.	+	+	+	+	+	+
Sudan	Dongonab	SDN	2	037 08 E	21 06 N	5 m.	+	+	+	+	+	+
Sudan	Abu Hamed	SDN	3	033 19 E	19 32 N	312 m.	+	+	+	+	+	+
Sudan	Port Sudan	SDN	4	037 13 E	19 35 N	2 m.	+	+	+	+	+	+
Sudan	Dongola	SDN	5	030 29 E	19 10 N	226 m.	+	+	+	+	+	+
Sudan	Karima	SDN	6	031 51 E	18 33 N	249 m.	+	+	+	+	+	+
Sudan	Gebeit	SDN	7	036 50 E	18 57 N	796 m.	+	+	+	+	+	+
Sudan	Haiya	SDN	8	036 22 E	18 20 N	640 m.	+	+	+	+	+	+
Sudan	Tokar	SDN	9	037 44 E	18 26 N	19 m.	+	+	+	+	+	+
Sudan	Atbara	SDN	10	033 58 E	17 42 N	345 m.	+	+	+	+	+	+
Sudan	Derudeb	SDN	11	036 06 E	17 33 N	518 m.	+	+	+	+	+	+
Sudan	Shendi	SDN	12	033 26 E	16 42 N	360 m.	+	+	+	+	+	+
Sudan	Shambat	SDN	13	032 32 E	15 40 N	380 m.	+	+	+	+	+	+
Sudan	Khartoum	SDN	14	032 33 E	15 36 N	380 m.	+	+	+	+	+	+
Sudan	Aroma	SDN	15	036 09 E	15 50 N	431 m.	+	+	+	+	+	+
Sudan	Kassala	SDN	16	036 24 E	15 28 N	500 m.	+	+	+	+	+	+
Sudan	Halfa El Gedida	SDN	17	035 36 E	15 19 N	451 m.	+	+	+	+	+	+
Sudan	Kutum	SDN	18	024 40 E	14 21 N	1160 m.	+	+	+	+	+	+
Sudan	Ourashi	SDN	19	033 17 E	14 45 N	440 m.	+	+	+	+	+	+
Sudan	Ed-Dueim	SDN	20	032 20 E	14 00 N	378 m.	+	+	+	+	+	+
Sudan	Wad Medani	SDN	21	033 29 E	14 24 N	408 m.	+	+	+	+	+	+
Sudan	Gedaref	SDN	22	035 24 E	14 02 N	599 m.	+	+	+	+	+	+
Sudan	El Fasher	SDN	23	025 20 E	13 37 N	730 m.	+	+	+	+	+	+
Sudan	Sennar	SDN	24	033 37 E	13 33 N	418 m.	+	+	+	+	+	+
Sudan	Doka	SDN	25	035 46 E	13 31 N	500 m.	+	+	+	+	+	+
Sudan	Geneina	SDN	26	022 27 E	13 29 N	805 m.	+	+	+	+	+	+
Sudan	El Obeid	SDN	27	030 14 E	13 10 N	570 m.	+	+	+	+	+	+
Sudan	Kosti	SDN	28	032 40 E	13 10 N	381 m.	+	+	+	+	+	+
Sudan	Singa	SDN	29	033 57 E	13 09 N	430 m.	+	+	+	+	+	+
Sudan	Nierteti	SDN	30	024 04 E	12 58 N	1000 m.	+	+	+	+	+	+
Sudan	Murundo	SDN	31	023 09 E	12 49 N	800 m.	+	+	+	+	+	+
Sudan	Zalingei	SDN	32	023 29 E	12 54 N	900 m.	+	+	+	+	+	+
Sudan	En Nahud	SDN	33	028 26 E	12 42 N	564 m.	+	+	+	+	+	+
Sudan	Dereisa	SDN	34	022 46 E	12 41 N	750 m.	+	+	+	+	+	+
Sudan	Kass	SDN	35	024 16 E	12 31 N	800 m.	+	+	+	+	+	+
Sudan	Nyala	SDN	36	024 53 E	12 03 N	674 m.	+	+	+	+	+	+
Sudan	Abu Na'ama	SDN	37	034 08 E	12 44 N	445 m.	+	+	+	+	+	+
Sudan	Mukgur	SDN	38	023 17 E	11 57 N	650 m.	+	+	+	+	+	+
Sudan	Renk	SDN	39	032 47 E	11 45 N	382 m.	+	+	+	+	+	+
Sudan	Rashad	SDN	40	031 03 E	11 52 N	855 m.	+	+	+	+	+	+
Sudan	Damazine	SDN	41	034 23 E	11 47 N	470 m.	+	+	+	+	+	+
Sudan	Ghazala Gawzat	SDN	42	026 27 E	11 28 N	480 m.	+	+	+	+	+	+
Sudan	Kadugli	SDN	43	029 43 E	11 00 N	499 m.	+	+	+	+	+	+

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Sudan	Kurmuk	SDN 44	034 17 E	10 33 N	690 m.	+	+	+	+	+	+
Sudan	Malakal	SDN 45	031 39 E	09 33 N	388 m.	+	+	+	+	+	+
Sudan	Aweil	SDN 46	027 24 E	08 46 N	415 m.	+	+	+	+	+	+
Sudan	Bentiu	SDN 47	029 48 E	09 14 N	389 m.	+	+	+	+	+	+
Sudan	Na'sir	SDN 48	035 04 E	08 37 N	400 m.	+	+	+	+	+	+
Sudan	Raga	SDN 49	025 41 E	08 28 N	545 m.	+	+	+	+	+	+
Sudan	Wau	SDN 50	028 01 E	07 42 N	438 m.	+	+	+	+	+	+
Sudan	Akobo	SDN 51	033 01 E	07 47 N	400 m.	+	+	+	+	+	+
Sudan	Tonj	SDN 52	028 45 E	07 16 N	429 m.	+	+	+	+	+	+
Sudan	Rumbek	SDN 53	029 42 E	06 48 N	420 m.	+	+	+	+	+	+
Sudan	Pibor	SDN 54	033 08 E	06 48 N	410 m.	+	+	+	+	+	+
Sudan	Bor	SDN 55	031 33 E	06 12 N	420 m.	+	+	+	+	+	+
Sudan	Li Yubu	SDN 56	027 15 E	05 24 N	715 m.	+	+	+	+	+	+
Sudan	Maridi	SDN 57	029 28 E	04 35 N	750 m.	+	+	+	+	+	+
Sudan	Yambio	SDN 58	028 24 E	04 34 N	650 m.	+	+	+	+	+	+
Sudan	Juba	SDN 59	031 36 E	04 52 N	457 m.	+	+	+	+	+	+
Sudan	Torit	SDN 60	032 33 E	04 25 N	625 m.	+	+	+	+	+	+
Sudan	Nagishot	SDN 61	033 34 E	04 16 N	1980 m.	+	+	+	+	+	+
Sudan	Yei	SDN 62	030 40 E	04 05 N	830 m.	+	+	+	+	+	+
Sudan	Katrie	SDN 63	032 47 E	04 02 N	1000 m.	+	+	+	+	+	+
Suriname	Nieuw Nickerie	SUR 1	057 02 W	05 57 N	4 m.	+	+	+	+	+	+
Suriname	Paramaribo	SUR 2	055 10 W	05 51 N	3 m.	+	+	+	+	+	+
Suriname	Tafelberg	SUR 3	056 09 W	03 47 N	344 m.	+	+	+	+	+	+
Suriname	Sipaliwini	SUR 4	056 07 W	02 02 N	243 m.	+	+	+	+	+	+
Swaziland	Big Bend	SWZ 1	031 35 E	26 51 S	120 m.	+	+	+	+	+	+
Swaziland	Malkerns	SWZ 2	031 09 E	26 33 S	786 m.	+	+	+	+	+	+
Swaziland	Mbabane	SWZ 3	031 08 E	26 19 S	1163 m.	+	+	+	+	+	+
Swaziland	Nhulume	SWZ 4	031 50 E	26 02 S	272 m.	+	+	+	+	+	+
Syrian Arab Rep.	Qamishli	SYR 9	041 13 E	37 03 N	452 m.	+	+	+	+	+	+
Syrian Arab Rep.	Derbassiyen	SYR 10	040 38 E	37 05 N	430 m.	+	+	+	+	+	+
Syrian Arab Rep.	Qarachock	SYR 11	042 14 E	37 03 N	475 m.	+	+	+	+	+	+
Syrian Arab Rep.	Jarablus	SYR 12	038 00 E	36 49 N	351 m.	+	+	+	+	+	+
Syrian Arab Rep.	Aleppo	SYR 13	037 13 E	36 11 N	390 m.	+	+	+	+	+	+
Syrian Arab Rep.	Izaz	SYR 14	037 03 E	36 35 N	555 m.	+	+	+	+	+	+
Syrian Arab Rep.	Tel Abiad	SYR 15	038 57 E	36 42 N	348 m.	+	+	+	+	+	+
Syrian Arab Rep.	Messelmiyah	SYR 16	037 13 E	36 20 N	425 m.	+	+	+	+	+	+
Syrian Arab Rep.	El Khafseh	SYR 17	038 04 E	36 12 N	337 m.	+	+	+	+	+	+
Syrian Arab Rep.	Hassakeh	SYR 18	040 45 E	36 30 N	295 m.	+	+	+	+	+	+
Syrian Arab Rep.	Idleb	SYR 19	036 37 E	35 56 N	452 m.	+	+	+	+	+	+
Syrian Arab Rep.	Salamiyah	SYR 20	037 02 E	35 00 N	480 m.	+	+	+	+	+	+
Syrian Arab Rep.	Bouka	SYR 21	035 48 E	35 32 N	50 m.	+	+	+	+	+	+
Syrian Arab Rep.	Lattakia	SYR 22	035 46 E	35 32 N	7 m.	+	+	+	+	+	+
Syrian Arab Rep.	Mina El Beida	SYR 23	035 45 E	35 33 N	8 m.	+	+	+	+	+	+
Syrian Arab Rep.	Hawret Amoureen	SYR 24	036 22 E	35 19 N	175 m.	+	+	+	+	+	+
Syrian Arab Rep.	Slenfeh	SYR 25	036 11 E	35 36 N	1100 m.	+	+	+	+	+	+
Syrian Arab Rep.	Hama	SYR 26	036 43 E	35 08 N	309 m.	+	+	+	+	+	+
Syrian Arab Rep.	El Jeed	SYR 27	036 19 E	35 33 N	165 m.	+	+	+	+	+	+
Syrian Arab Rep.	Jisr El Shoggour	SYR 28	036 19 E	35 49 N	200 m.	+	+	+	+	+	+
Syrian Arab Rep.	Bailaneh	SYR 29	038 43 E	35 55 N	268 m.	+	+	+	+	+	+
Syrian Arab Rep.	Raqqa	SYR 30	039 01 E	35 56 N	245 m.	+	+	+	+	+	+
Syrian Arab Rep.	Jooreen	SYR 31	036 15 E	35 36 N	500 m.	+	+	+	+	+	+
Syrian Arab Rep.	Ein El Kroum	SYR 32	036 15 E	35 18 N	550 m.	+	+	+	+	+	+
Syrian Arab Rep.	Deir Ezzor	SYR 33	040 09 E	35 19 N	212 m.	+	+	+	+	+	+
Syrian Arab Rep.	Tartous	SYR 34	035 53 E	34 53 N	5 m.	+	+	+	+	+	+
Syrian Arab Rep.	Homs	SYR 35	036 43 E	34 45 N	483 m.	+	+	+	+	+	+

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Syrian Arab Rep.	Palmyra	SYR	36	038 18 E	34 33 N	404 m.	+	+	+	+	+	+
Syrian Arab Rep.	Safita	SYR	37	036 08 E	34 49 N	353 m.	+	+	+	+	+	+
Syrian Arab Rep.	Qattineh	SYR	38	036 38 E	34 40 N	500 m.	+	+	+	+	+	+
Syrian Arab Rep.	Abu Kamal	SYR	39	040 55 E	34 25 N	180 m.	+	+	+	+	+	+
Syrian Arab Rep.	Damascus	SYR	40	036 14 E	33 29 N	729 m.	+	+	+	+	+	+
Syrian Arab Rep.	Damascus-Airport	SYR	41	036 31 E	33 25 N	611 m.	+	+	+	+	+	+
Syrian Arab Rep.	Sarghaia	SYR	42	036 10 E	33 48 N	1400 m.	+	+	+	+	+	+
Syrian Arab Rep.	Zabadani	SYR	43	036 07 E	33 43 N	1200 m.	+	+	+	+	+	+
Syrian Arab Rep.	Nabk	SYR	44	036 43 E	34 02 N	1330 m.	+	+	+	+	+	+
Syrian Arab Rep.	Sababiar	SYR	45	037 41 E	33 47 N	820 m.	+	+	+	+	+	+
Syrian Arab Rep.	Kharabo	SYR	46	036 28 E	33 30 N	620 m.	+	+	+	+	+	+
Syrian Arab Rep.	Jabal Ettanf	SYR	47	038 40 E	33 29 N	722 m.	+	+	+	+	+	+
Syrian Arab Rep.	Kuneitra	SYR	48	035 49 E	33 07 N	941 m.	+	+	+	+	+	+
Syrian Arab Rep.	Fiq	SYR	49	035 42 E	32 46 N	349 m.	+	+	+	+	+	+
Syrian Arab Rep.	Izra	SYR	50	036 15 E	32 51 N	575 m.	+	+	+	+	+	+
Syrian Arab Rep.	Salkhad	SYR	51	036 42 E	32 29 N	1447 m.	+	+	+	+	+	+
Syrian Arab Rep.	Sweida	SYR	52	036 35 E	32 42 N	997 m.	+	+	+	+	+	+
Syrian Arab Rep.	Tel Shehab	SYR	53	035 59 E	32 42 N	399 m.	+	+	+	+	+	+
Tanzania, Rep. of	Bukoba	TZA	1	031 49 E	01 20 S	1137 m.	+	+	+	+	+	+
Tanzania, Rep. of	Musoma	TZA	2	033 48 E	01 30 S	1147 m.	+	+	+	+	+	+
Tanzania, Rep. of	Loliondo	TZA	3	035 37 E	02 03 S	2100 m.	+	+	+	+	+	+
Tanzania, Rep. of	Biharamulo	TZA	4	031 19 E	02 38 S	1480 m.	+	+	+	+	+	+
Tanzania, Rep. of	Mwanza Airfield	TZA	5	032 55 E	02 28 S	1140 m.	+	+	+	+	+	+
Tanzania, Rep. of	Ngorongoro	TZA	6	035 27 E	03 12 S	2400 m.	+	+	+	+	+	+
Tanzania, Rep. of	Lyamungu	TZA	7	037 15 E	03 14 S	1250 m.	+	+	+	+	+	+
Tanzania, Rep. of	Arusha Airfield	TZA	8	036 37 E	03 20 S	1387 m.	+	+	+	+	+	+
Tanzania, Rep. of	Moshi	TZA	9	037 20 E	03 21 S	831 m.	+	+	+	+	+	+
Tanzania, Rep. of	Mbulu	TZA	10	035 33 E	03 52 S	1530 m.	+	+	+	+	+	+
Tanzania, Rep. of	Kigoma	TZA	11	029 38 E	04 53 S	885 m.	+	+	+	+	+	+
Tanzania, Rep. of	Same	TZA	12	037 43 E	04 05 S	872 m.	+	+	+	+	+	+
Tanzania, Rep. of	Mombo	TZA	13	038 14 E	04 55 S	1070 m.	+	+	+	+	+	+
Tanzania, Rep. of	Kondoa	TZA	14	035 48 E	04 55 S	1386 m.	+	+	+	+	+	+
Tanzania, Rep. of	Urambo	TZA	15	032 03 E	05 04 S	1106 m.	+	+	+	+	+	+
Tanzania, Rep. of	Tabora Airport	TZA	16	032 50 E	05 05 S	1190 m.	+	+	+	+	+	+
Tanzania, Rep. of	Tabora Observatory	TZA	17	032 49 E	05 02 S	1265 m.	+	+	+	+	+	+
Tanzania, Rep. of	Ngomeni	TZA	18	038 54 E	05 09 S	180 m.	+	+	+	+	+	+
Tanzania, Rep. of	Tanga Airfield	TZA	19	039 04 E	05 05 S	35 m.	+	+	+	+	+	+
Tanzania, Rep. of	Pemba-Weti	TZA	20	039 49 E	05 15 S	20 m.	+	+	+	+	+	+
Tanzania, Rep. of	Amania	TZA	21	038 38 E	05 06 S	911 m.	+	+	+	+	+	+
Tanzania, Rep. of	Dodoma	TZA	22	035 46 E	06 10 S	1120 m.	+	+	+	+	+	+
Tanzania, Rep. of	Kongwa	TZA	23	036 25 E	06 12 S	1021 m.	+	+	+	+	+	+
Tanzania, Rep. of	Ilonga	TZA	24	037 02 E	06 46 S	500 m.	+	+	+	+	+	+
Tanzania, Rep. of	Morogoro	TZA	25	037 39 E	06 50 S	526 m.	+	+	+	+	+	+
Tanzania, Rep. of	Zanzibar Kisauni	TZA	26	039 13 E	06 13 S	15 m.	+	+	+	+	+	+
Tanzania, Rep. of	Muze	TZA	27	031 33 E	07 40 S	810 m.	+	+	+	+	+	+
Tanzania, Rep. of	Sumbawanga	TZA	28	031 36 E	07 57 S	1710 m.	+	+	+	+	+	+
Tanzania, Rep. of	Iringa-Nduli	TZA	29	035 45 E	07 40 S	1428 m.	+	+	+	+	+	+
Tanzania, Rep. of	Kilombero	TZA	30	037 00 E	07 40 S	300 m.	+	+	+	+	+	+
Tanzania, Rep. of	Ubungo-Dar	TZA	31	039 12 E	06 47 S	60 m.	+	+	+	+	+	+
Tanzania, Rep. of	Dar Es Salaam	TZA	32	039 18 E	06 50 S	14 m.	+	+	+	+	+	+
Tanzania, Rep. of	Mafia-Kilindoni	TZA	33	039 40 E	07 55 S	21 m.	+	+	+	+	+	+
Tanzania, Rep. of	Sao Hill	TZA	34	035 12 E	08 20 S	1981 m.	+	+	+	+	+	+
Tanzania, Rep. of	Lumeno	TZA	35	036 37 E	08 10 S	270 m.	+	+	+	+	+	+
Tanzania, Rep. of	Kilwa Kivinje	TZA	36	039 25 E	08 45 S	10 m.	+	+	+	+	+	+
Tanzania, Rep. of	Chunya	TZA	37	033 26 E	08 32 S	1500 m.	+	+	+	+	+	+

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Tanzania, Rep. of	Mbeya Airfield	TZA 38	033 28 E	08 56 S	1707 m.	+	+	+	+	+	+
Tanzania, Rep. of	Igawa	TZA 39	034 23 E	08 46 S	1070 m.	+	+	+	+	+	+
Tanzania, Rep. of	Njombe	TZA 40	034 45 E	09 25 S	1890 m.	+	+	+	+	+	+
Tanzania, Rep. of	Igeri	TZA 41	034 40 E	09 40 S	2250 m.	+	+	+	+	+	+
Tanzania, Rep. of	Songea Airport	TZA 42	035 35 E	10 41 S	1067 m.	+	+	+	+	+	+
Tanzania, Rep. of	Songea Town	TZA 43	035 40 E	10 41 S	1153 m.	+	+	+	+	+	+
Tanzania, Rep. of	Lindi	TZA 44	039 42 E	10 00 S	41 m.	+	+	+	+	+	+
Tanzania, Rep. of	Nachingwea	TZA 45	038 45 E	10 21 S	465 m.	+	+	+	+	+	+
Tanzania, Rep. of	Mtwara	TZA 46	040 11 E	10 16 S	113 m.	+	+	+	+	+	+
Thailand	Mae Hong Son	THA 2	097 50 E	19 18 N	269 m.	+	+	+	+	+	+
Thailand	Chiangai	THA 3	099 50 E	19 55 N	395 m.	+	+	+	+	+	+
Thailand	Khun Yuam	THA 4	097 40 E	18 45 N	560 m.	+	+	+	+	+	+
Thailand	Mae Sariang	THA 5	097 56 E	18 10 N	213 m.	+	+	+	+	+	+
Thailand	Chiang Mai	THA 6	098 59 E	18 47 N	312 m.	+	+	+	+	+	+
Thailand	Lampang	THA 7	099 31 E	18 17 N	241 m.	+	+	+	+	+	+
Thailand	Phrae	THA 8	100 10 E	18 10 N	162 m.	+	+	+	+	+	+
Thailand	Nan	THA 9	100 46 E	18 46 N	200 m.	+	+	+	+	+	+
Thailand	Mae Cho	THA 10	099 00 E	18 54 N	317 m.	+	+	+	+	+	+
Thailand	Uttaradit	THA 11	100 06 E	17 37 N	63 m.	+	+	+	+	+	+
Thailand	Loei	THA 12	101 44 E	17 27 N	253 m.	+	+	+	+	+	+
Thailand	Udon Thani	THA 13	102 48 E	17 23 N	177 m.	+	+	+	+	+	+
Thailand	Sakhon Nakhon	THA 14	104 08 E	17 09 N	172 m.	+	+	+	+	+	+
Thailand	Nakhon Phanom	THA 15	104 47 E	17 25 N	140 m.	+	+	+	+	+	+
Thailand	Si Samrong	THA 16	099 48 E	17 12 N	54 m.	+	+	+	+	+	+
Thailand	Mae Sot	THA 17	098 33 E	16 40 N	210 m.	+	+	+	+	+	+
Thailand	Tak	THA 18	099 09 E	16 53 N	115 m.	+	+	+	+	+	+
Thailand	Phumipol Dam	THA 19	099 03 E	17 14 N	161 m.	+	+	+	+	+	+
Thailand	Phitsanulok	THA 20	100 16 E	16 49 N	44 m.	+	+	+	+	+	+
Thailand	Phetchabun	THA 21	101 09 E	16 26 N	118 m.	+	+	+	+	+	+
Thailand	Khon Kaen	THA 22	102 50 E	16 26 N	165 m.	+	+	+	+	+	+
Thailand	Mukdahan	THA 23	104 43 E	16 32 N	138 m.	+	+	+	+	+	+
Thailand	Nakhon Sawan	THA 24	100 10 E	15 48 N	28 m.	+	+	+	+	+	+
Thailand	Chaiyaphum	THA 25	102 02 E	15 48 N	182 m.	+	+	+	+	+	+
Thailand	Tha Phra	THA 26	102 48 E	16 18 N	166 m.	+	+	+	+	+	+
Thailand	Roi Et	THA 27	103 41 E	16 03 N	140 m.	+	+	+	+	+	+
Thailand	Ubonratchathani	THA 28	104 52 E	15 15 N	123 m.	+	+	+	+	+	+
Thailand	Tak Fah	THA 29	100 30 E	15 18 N	87 m.	+	+	+	+	+	+
Thailand	Chai Nat	THA 30	100 12 E	15 00 N	15 m.	+	+	+	+	+	+
Thailand	Suphan Buri	THA 31	100 08 E	14 29 N	7 m.	+	+	+	+	+	+
Thailand	Lop Buri	THA 32	100 37 E	14 48 N	14 m.	+	+	+	+	+	+
Thailand	Sap Muang	THA 33	101 04 E	14 07 N	283 m.	+	+	+	+	+	+
Thailand	Prachin Buri	THA 34	101 22 E	14 03 N	5 m.	+	+	+	+	+	+
Thailand	Nakhonratchasima	THA 35	102 05 E	14 58 N	188 m.	+	+	+	+	+	+
Thailand	Surin	THA 36	103 30 E	14 53 N	145 m.	+	+	+	+	+	+
Thailand	Pak Chong	THA 37	101 24 E	14 42 N	356 m.	+	+	+	+	+	+
Thailand	U Thong	THA 38	099 48 E	14 18 N	6 m.	+	+	+	+	+	+
Thailand	Kanchanaburi	THA 39	099 32 E	14 01 N	28 m.	+	+	+	+	+	+
Thailand	Phra Nakhon	THA 40	100 30 E	13 44 N	3 m.	+	+	+	+	+	+
Thailand	Bangkok	THA 41	100 30 E	13 44 N	2 m.	+	+	+	+	+	+
Thailand	Don Muang	THA 42	100 36 E	13 55 N	12 m.	+	+	+	+	+	+
Thailand	Bang Khen	THA 43	100 36 E	13 48 N	4 m.	+	+	+	+	+	+
Thailand	Bang Na	THA 44	100 36 E	13 36 N	3 m.	+	+	+	+	+	+
Thailand	Chonburi	THA 45	100 59 E	13 22 N	3 m.	+	+	+	+	+	+
Thailand	Koh Sichang	THA 46	100 48 E	13 10 N	25 m.	+	+	+	+	+	+
Thailand	Aranyaphrathet	THA 47	102 35 E	13 42 N	47 m.	+	+	+	+	+	+

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Thailand	Hua Hin	THA 48	099 57 E	12 35 N	5 m.	+	+	+	+	+	+
Thailand	Huai Pong	THA 49	101 00 E	12 42 N	43 m.	+	+	+	+	+	+
Thailand	Sattahip	THA 50	100 59 E	12 41 N	16 m.	+	+	+	+	+	+
Thailand	Pliu	THA 51	102 12 E	12 30 N	22 m.	+	+	+	+	+	+
Thailand	Chantaburi	THA 52	102 07 E	12 36 N	4 m.	+	+	+	+	+	+
Thailand	Prachuap Khiri Khan	THA 53	099 48 E	11 48 N	4 m.	+	+	+	+	+	+
Thailand	Klong Yai	THA 54	102 53 E	11 47 N	6 m.	+	+	+	+	+	+
Thailand	Chumphon	THA 55	099 11 E	10 29 N	3 m.	+	+	+	+	+	+
Thailand	Sawi	THA 56	099 00 E	10 18 N	14 m.	+	+	+	+	+	+
Thailand	Ranong	THA 57	098 38 E	09 58 N	6 m.	+	+	+	+	+	+
Thailand	Surat Thani	THA 58	099 21 E	09 07 N	10 m.	+	+	+	+	+	+
Thailand	Nakhon Si Thammarat	THA 59	099 58 E	08 28 N	7 m.	+	+	+	+	+	+
Thailand	Ban Don	THA 60	099 18 E	09 08 N	10 m.	+	+	+	+	+	+
Thailand	Phuket	THA 61	098 24 E	07 53 N	3 m.	+	+	+	+	+	+
Thailand	Trang	THA 62	099 38 E	07 31 N	14 m.	+	+	+	+	+	+
Thailand	Songkhla	THA 63	100 36 E	07 12 N	5 m.	+	+	+	+	+	+
Thailand	Kho Hong	THA 64	100 30 E	07 00 N	7 m.	+	+	+	+	+	+
Thailand	Narathiwat	THA 65	101 49 E	06 25 N	4 m.	+	+	+	+	+	+
Togo	Mango	TGO 1	000 28 E	10 22 N	146 m.	+	+	+	+	+	+
Togo	Sokode	TGO 2	001 08 E	08 39 N	403 m.	+	+	+	+	+	+
Togo	Atakpame	TGO 3	001 07 E	07 35 N	402 m.	+	+	+	+	+	+
Togo	Lome	TGO 4	001 15 E	06 10 N	25 m.	+	+	+	+	+	+
Trinidad and Tobago	Crown Point A.tobago	TTO 1	060 50 W	11 09 N	9 m.	+	+	+	+	+	+
Trinidad and Tobago	Piarco Airport	TTO 2	061 21 W	10 37 N	12 m.	+	+	+	+	+	+
Trinidad and Tobago	St Clair	TTO 3	061 31 W	10 40 N	20 m.	+	+	+	+	+	+
Tunisia	Tabarka	TUN 2	008 45 E	36 57 N	4 m.	+	+	+	+	+	+
Tunisia	Bizerte	TUN 3	009 49 E	37 14 N	3 m.	+	+	+	+	+	+
Tunisia	Tunis Carthage	TUN 4	010 14 E	36 50 N	4 m.	+	+	+	+	+	+
Tunisia	Cherfech	TUN 5	010 03 E	36 50 N	5 m.	+	+	+	+	+	+
Tunisia	Kelibia	TUN 6	011 05 E	36 51 N	82 m.	+	+	+	+	+	+
Tunisia	Jendouba	TUN 7	008 48 E	36 29 N	144 m.	+	+	+	+	+	+
Tunisia	Kairouan	TUN 8	010 06 E	35 40 N	68 m.	+	+	+	+	+	+
Tunisia	Messaoudia	TUN 9	010 06 E	35 40 N	70 m.	+	+	+	+	+	+
Tunisia	Monastir-Skanes	TUN 10	010 45 E	35 40 N	3 m.	+	+	+	+	+	+
Tunisia	Hendi Zitoun	TUN 11	010 07 E	35 51 N	74 m.	+	+	+	+	+	+
Tunisia	Gafsa	TUN 12	008 49 E	34 25 N	314 m.	+	+	+	+	+	+
Tunisia	Ksarheriss	TUN 13	009 50 E	34 39 N	25 m.	+	+	+	+	+	+
Tunisia	Nakta	TUN 14	010 30 E	34 39 N	25 m.	+	+	+	+	+	+
Tunisia	Sfax El-Maou	TUN 15	010 41 E	34 43 N	23 m.	+	+	+	+	+	+
Tunisia	Chott Mariem	TUN 16	010 33 E	35 55 N	15 m.	+	+	+	+	+	+
Tunisia	Tozeur	TUN 17	008 10 E	33 55 N	51 m.	+	+	+	+	+	+
Tunisia	Gabes	TUN 18	010 06 E	33 53 N	5 m.	+	+	+	+	+	+
Tunisia	Jerba	TUN 19	010 47 E	33 35 N	6 m.	+	+	+	+	+	+
Tunisia	Remada	TUN 20	010 24 E	32 19 N	301 m.	+	+	+	+	+	+
Turkey	Akcakoca	TUR 1	031 08 E	41 07 N	20 m.	+	+	+	+	+	+
Turkey	Sile	TUR 2	029 36 E	41 10 N	31 m.	+	+	+	+	+	+
Turkey	Ereglisi	TUR 3	031 25 E	41 17 N	2 m.	+	+	+	+	+	+
Turkey	Zonguldak	TUR 4	031 48 E	41 27 N	136 m.	+	+	+	+	+	+
Turkey	Inebolu	TUR 5	033 47 E	41 59 N	64 m.	+	+	+	+	+	+
Turkey	Sinop	TUR 6	035 10 E	42 02 N	32 m.	+	+	+	+	+	+
Turkey	Samsun	TUR 7	036 20 E	41 17 N	4 m.	+	+	+	+	+	+
Turkey	Unye	TUR 8	037 18 E	41 09 N	20 m.	+	+	+	+	+	+
Turkey	Akcaabat	TUR 9	039 35 E	41 02 N	10 m.	+	+	+	+	+	+
Turkey	Trabzon	TUR 10	039 43 E	41 00 N	35 m.	+	+	+	+	+	+
Turkey	Rize	TUR 11	040 30 E	41 02 N	4 m.	+	+	+	+	+	+

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Turkey	Artvin	TUR 12	041 49 E	41 10 N	597 m.	+	+	+	+	+	+
Turkey	Ardahan	TUR 13	042 42 E	41 08 N	1829 m.	+	+	+	+	+	+
Turkey	Bilecik	TUR 14	029 58 E	40 09 N	526 m.	+	+	+	+	+	+
Turkey	Edirne	TUR 15	026 34 E	41 40 N	48 m.	+	+	+	+	+	+
Turkey	Alpullu	TUR 16	027 08 E	41 22 N	70 m.	+	+	+	+	+	+
Turkey	Kiriklareli	TUR 17	027 13 E	41 44 N	232 m.	+	+	+	+	+	+
Turkey	Luleburgaz	TUR 18	027 25 E	41 24 N	46 m.	+	+	+	+	+	+
Turkey	Corlu	TUR 19	027 48 E	41 09 N	183 m.	+	+	+	+	+	+
Turkey	Kumkoy	TUR 20	029 00 E	41 18 N	30 m.	+	+	+	+	+	+
Turkey	Tekirdag	TUR 21	027 29 E	40 59 N	4 m.	+	+	+	+	+	+
Turkey	Bahcekoy Orman	TUR 22	029 03 E	41 09 N	129 m.	+	+	+	+	+	+
Turkey	Florya	TUR 23	028 48 E	40 59 N	34 m.	+	+	+	+	+	+
Turkey	Sariyer	TUR 24	029 04 E	41 07 N	56 m.	+	+	+	+	+	+
Turkey	Istanbul-Goztepe	TUR 25	029 05 E	40 58 N	40 m.	+	+	+	+	+	+
Turkey	Kartal	TUR 26	029 11 E	40 54 N	27 m.	+	+	+	+	+	+
Turkey	Yalova	TUR 27	029 16 E	40 39 N	2 m.	+	+	+	+	+	+
Turkey	Golcuk	TUR 28	029 50 E	40 40 N	16 m.	+	+	+	+	+	+
Turkey	Kocaeli	TUR 29	029 54 E	40 46 N	76 m.	+	+	+	+	+	+
Turkey	Geyve	TUR 30	030 19 E	40 31 N	100 m.	+	+	+	+	+	+
Turkey	Adapazari	TUR 31	030 25 E	40 47 N	30 m.	+	+	+	+	+	+
Turkey	Bolu	TUR 32	031 36 E	40 44 N	742 m.	+	+	+	+	+	+
Turkey	Duzce	TUR 33	031 12 E	40 55 N	120 m.	+	+	+	+	+	+
Turkey	Kastamonu	TUR 34	033 46 E	41 22 N	799 m.	+	+	+	+	+	+
Turkey	Bozkurt	TUR 35	034 02 E	41 58 N	167 m.	+	+	+	+	+	+
Turkey	Merzifon	TUR 36	035 35 E	40 51 N	545 m.	+	+	+	+	+	+
Turkey	Corum	TUR 37	034 58 E	40 33 N	837 m.	+	+	+	+	+	+
Turkey	Cankiri	TUR 38	033 37 E	40 36 N	751 m.	+	+	+	+	+	+
Turkey	Cubuk	TUR 39	033 02 E	40 14 N	940 m.	+	+	+	+	+	+
Turkey	Sivas	TUR 40	037 01 E	39 45 N	1285 m.	+	+	+	+	+	+
Turkey	Zara	TUR 41	037 46 E	39 55 N	1348 m.	+	+	+	+	+	+
Turkey	Erzincan	TUR 42	039 30 E	39 44 N	1215 m.	+	+	+	+	+	+
Turkey	Erzurum	TUR 43	041 16 E	39 55 N	1756 m.	+	+	+	+	+	+
Turkey	Kars	TUR 44	043 05 E	40 36 N	1775 m.	+	+	+	+	+	+
Turkey	Divrigi	TUR 45	038 08 E	39 22 N	1250 m.	+	+	+	+	+	+
Turkey	Gokceada	TUR 46	025 54 E	40 11 N	72 m.	+	+	+	+	+	+
Turkey	Ipsala	TUR 47	026 23 E	40 55 N	10 m.	+	+	+	+	+	+
Turkey	Canakkale	TUR 48	026 24 E	40 08 N	3 m.	+	+	+	+	+	+
Turkey	Bandirma	TUR 49	027 58 E	40 19 N	51 m.	+	+	+	+	+	+
Turkey	Bursa	TUR 50	029 04 E	40 11 N	100 m.	+	+	+	+	+	+
Turkey	Beypazarı	TUR 51	031 56 E	40 10 N	682 m.	+	+	+	+	+	+
Turkey	Eskisehir	TUR 52	030 34 E	39 47 N	785 m.	+	+	+	+	+	+
Turkey	Esenboga	TUR 53	032 59 E	40 07 N	953 m.	+	+	+	+	+	+
Turkey	Ankara-Central	TUR 54	032 53 E	39 57 N	894 m.	+	+	+	+	+	+
Turkey	Tokat	TUR 55	036 34 E	40 18 N	608 m.	+	+	+	+	+	+
Turkey	Mesudiye	TUR 56	037 46 E	40 28 N	1050 m.	+	+	+	+	+	+
Turkey	Ordu	TUR 57	037 52 E	40 59 N	4 m.	+	+	+	+	+	+
Turkey	Giresun	TUR 58	038 24 E	40 55 N	38 m.	+	+	+	+	+	+
Turkey	Gumushane	TUR 59	039 27 E	40 27 N	1219 m.	+	+	+	+	+	+
Turkey	Tunceli	TUR 60	039 32 E	39 06 N	979 m.	+	+	+	+	+	+
Turkey	Bayburt	TUR 61	040 15 E	40 16 N	1550 m.	+	+	+	+	+	+
Turkey	Sarikamis	TUR 62	042 31 E	40 18 N	2092 m.	+	+	+	+	+	+
Turkey	Tortum	TUR 63	041 34 E	40 18 N	1550 m.	+	+	+	+	+	+
Turkey	Bozcaada	TUR 64	026 02 E	39 48 N	10 m.	+	+	+	+	+	+
Turkey	Bayramic	TUR 65	026 33 E	39 47 N	70 m.	+	+	+	+	+	+
Turkey	Ayvalik	TUR 66	026 41 E	39 19 N	4 m.	+	+	+	+	+	+

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Turkey	Edremit	TUR	67	027 01 E	39 35 N	21 m.	+	+	+	+	+	+
Turkey	Bergama	TUR	68	027 11 E	39 07 N	45 m.	+	+	+	+	+	+
Turkey	Balike Sir	TUR	69	027 55 E	39 37 N	101 m.	+	+	+	+	+	+
Turkey	Dursunbey	TUR	70	028 37 E	39 35 N	625 m.	+	+	+	+	+	+
Turkey	Kutahya	TUR	71	029 58 E	39 24 N	969 m.	+	+	+	+	+	+
Turkey	Bozuyuk	TUR	72	030 03 E	39 55 N	740 m.	+	+	+	+	+	+
Turkey	Emirdag	TUR	73	031 10 E	39 02 N	945 m.	+	+	+	+	+	+
Turkey	Sivrihisar	TUR	74	031 33 E	39 27 N	1070 m.	+	+	+	+	+	+
Turkey	Polatli	TUR	75	032 08 E	39 35 N	875 m.	+	+	+	+	+	+
Turkey	Polatli Duc	TUR	76	032 09 E	39 10 N	875 m.	+	+	+	+	+	+
Turkey	Etimesgut	TUR	77	034 41 E	39 57 N	808 m.	+	+	+	+	+	+
Turkey	Yozgat	TUR	78	034 49 E	39 50 N	1298 m.	+	+	+	+	+	+
Turkey	Kirsehir	TUR	79	034 10 E	39 08 N	995 m.	+	+	+	+	+	+
Turkey	Keles	TUR	80	029 13 E	39 54 N	1000 m.	+	+	+	+	+	+
Turkey	Gemerek	TUR	81	036 03 E	39 10 N	1171 m.	+	+	+	+	+	+
Turkey	Ceylanpinar	TUR	82	036 50 E	39 55 N	398 m.	+	+	+	+	+	+
Turkey	Karakose	TUR	83	043 03 E	39 45 N	1632 m.	+	+	+	+	+	+
Turkey	Igdir	TUR	84	044 02 E	39 56 N	858 m.	+	+	+	+	+	+
Turkey	Dogubeyazit	TUR	85	044 08 E	39 31 N	1585 m.	+	+	+	+	+	+
Turkey	Dil-Igdir	TUR	86	044 35 E	39 47 N	824 m.	+	+	+	+	+	+
Turkey	Bitlis	TUR	87	042 06 E	38 22 N	1559 m.	+	+	+	+	+	+
Turkey	Ercis	TUR	88	043 18 E	38 58 N	1775 m.	+	+	+	+	+	+
Turkey	Van	TUR	89	043 19 E	38 27 N	1667 m.	+	+	+	+	+	+
Turkey	Baskale	TUR	90	044 01 E	38 03 N	2400 m.	+	+	+	+	+	+
Turkey	Dikili	TUR	91	028 52 E	39 03 N	3 m.	+	+	+	+	+	+
Turkey	Siniav	TUR	92	028 59 E	39 05 N	850 m.	+	+	+	+	+	+
Turkey	Manisa	TUR	93	027 26 E	38 42 N	71 m.	+	+	+	+	+	+
Turkey	Akhisar	TUR	94	027 51 E	38 55 N	93 m.	+	+	+	+	+	+
Turkey	Usak	TUR	95	029 25 E	38 40 N	919 m.	+	+	+	+	+	+
Turkey	Afyon	TUR	96	030 32 E	38 45 N	1034 m.	+	+	+	+	+	+
Turkey	Nevsehir	TUR	97	034 40 E	38 35 N	1260 m.	+	+	+	+	+	+
Turkey	Aksehir	TUR	98	031 23 E	38 21 N	1070 m.	+	+	+	+	+	+
Turkey	Cihanbeyli	TUR	99	032 57 E	38 40 N	969 m.	+	+	+	+	+	+
Turkey	Kayseri	TUR	100	035 29 E	38 47 N	1053 m.	+	+	+	+	+	+
Turkey	Aksaray	TUR	101	034 03 E	38 23 N	980 m.	+	+	+	+	+	+
Turkey	Develi	TUR	102	035 30 E	38 23 N	1180 m.	+	+	+	+	+	+
Turkey	Mus	TUR	103	041 31 E	38 44 N	1283 m.	+	+	+	+	+	+
Turkey	Goksun	TUR	104	036 30 E	38 02 N	1340 m.	+	+	+	+	+	+
Turkey	Malatya	TUR	105	038 05 E	38 26 N	849 m.	+	+	+	+	+	+
Turkey	Elbistan	TUR	106	037 12 E	38 12 N	1150 m.	+	+	+	+	+	+
Turkey	Elazig	TUR	107	039 17 E	38 36 N	882 m.	+	+	+	+	+	+
Turkey	Ergani	TUR	108	039 46 E	38 18 N	1100 m.	+	+	+	+	+	+
Turkey	Bingol	TUR	109	040 30 E	38 52 N	1177 m.	+	+	+	+	+	+
Turkey	Solhan	TUR	110	041 04 E	38 56 N	1395 m.	+	+	+	+	+	+
Turkey	Siirt	TUR	111	042 00 E	37 56 N	895 m.	+	+	+	+	+	+
Turkey	Menemen	TUR	112	027 05 E	38 35 N	20 m.	+	+	+	+	+	+
Turkey	Bornova	TUR	113	027 15 E	38 28 N	27 m.	+	+	+	+	+	+
Turkey	Izmir	TUR	114	027 10 E	38 26 N	25 m.	+	+	+	+	+	+
Turkey	Odemis	TUR	115	027 59 E	38 16 N	122 m.	+	+	+	+	+	+
Turkey	Cesme	TUR	116	028 19 E	38 18 N	150 m.	+	+	+	+	+	+
Turkey	Kusadasi	TUR	117	027 12 E	37 50 N	22 m.	+	+	+	+	+	+
Turkey	Aydin	TUR	118	027 51 E	37 51 N	57 m.	+	+	+	+	+	+
Turkey	Denizli	TUR	119	029 05 E	37 47 N	428 m.	+	+	+	+	+	+
Turkey	Burdur	TUR	120	030 20 E	37 40 N	967 m.	+	+	+	+	+	+
Turkey	Isparta	TUR	121	030 33 E	37 45 N	997 m.	+	+	+	+	+	+

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Turkey	Beysehir	TUR 122	031 44 E	37 41 N	1129 m.	+	+	+	+	+	+
Turkey	Konya	TUR 123	032 33 E	37 58 N	1032 m.	+	+	+	+	+	+
Turkey	Karanian	TUR 124	033 14 E	37 11 N	1025 m.	+	+	+	+	+	+
Turkey	Karapinar	TUR 125	033 32 E	37 41 N	1004 m.	+	+	+	+	+	+
Turkey	Eregli	TUR 126	034 04 E	37 30 N	1044 m.	+	+	+	+	+	+
Turkey	Islahiye	TUR 127	033 36 E	37 03 N	518 m.	+	+	+	+	+	+
Turkey	Ulukista	TUR 128	034 29 E	37 33 N	1451 m.	+	+	+	+	+	+
Turkey	Nigde	TUR 129	034 40 E	37 59 N	1208 m.	+	+	+	+	+	+
Turkey	Karaasali	TUR 130	035 02 E	37 16 N	230 m.	+	+	+	+	+	+
Turkey	Kahramanmaras	TUR 131	036 56 E	37 36 N	549 m.	+	+	+	+	+	+
Turkey	Gaziantep	TUR 132	037 22 E	37 05 N	855 m.	+	+	+	+	+	+
Turkey	Birecik	TUR 133	037 58 E	37 02 N	347 m.	+	+	+	+	+	+
Turkey	Adiyaman	TUR 134	038 17 E	37 45 N	678 m.	+	+	+	+	+	+
Turkey	Urfa	TUR 135	038 46 E	37 08 N	547 m.	+	+	+	+	+	+
Turkey	Siverek	TUR 136	039 19 E	37 45 N	801 m.	+	+	+	+	+	+
Turkey	Diyarbakir	TUR 137	040 11 E	37 53 N	686 m.	+	+	+	+	+	+
Turkey	Mardin	TUR 138	040 44 E	37 18 N	1080 m.	+	+	+	+	+	+
Turkey	Hakkari	TUR 139	043 46 E	37 34 N	1720 m.	+	+	+	+	+	+
Turkey	Cizre	TUR 140	042 11 E	37 19 N	400 m.	+	+	+	+	+	+
Turkey	Bodrum	TUR 141	027 25 E	37 02 N	27 m.	+	+	+	+	+	+
Turkey	Milas	TUR 142	027 48 E	37 18 N	45 m.	+	+	+	+	+	+
Turkey	Mugla	TUR 143	028 21 E	37 12 N	646 m.	+	+	+	+	+	+
Turkey	Nazilli	TUR 144	028 20 E	37 54 N	60 m.	+	+	+	+	+	+
Turkey	Fethiye	TUR 145	029 06 E	36 37 N	3 m.	+	+	+	+	+	+
Turkey	Elmali	TUR 146	029 55 E	36 45 N	1113 m.	+	+	+	+	+	+
Turkey	Antalya	TUR 147	030 44 E	36 42 N	50 m.	+	+	+	+	+	+
Turkey	Alanya	TUR 148	032 01 E	36 33 N	7 m.	+	+	+	+	+	+
Turkey	Hadim	TUR 149	032 29 E	36 59 N	1500 m.	+	+	+	+	+	+
Turkey	Anamur	TUR 150	032 50 E	36 06 N	3 m.	+	+	+	+	+	+
Turkey	Silifke	TUR 151	033 56 E	36 22 N	15 m.	+	+	+	+	+	+
Turkey	Mersin	TUR 152	034 36 E	36 49 N	5 m.	+	+	+	+	+	+
Turkey	Adana	TUR 153	035 25 E	37 00 N	73 m.	+	+	+	+	+	+
Turkey	Iskenderun	TUR 154	036 10 E	36 35 N	3 m.	+	+	+	+	+	+
Turkey	Antakya	TUR 155	036 07 E	36 15 N	100 m.	+	+	+	+	+	+
Turkey	Dortyol	TUR 156	036 10 E	36 53 N	28 m.	+	+	+	+	+	+
Turkey	Kilis	TUR 157	037 05 E	36 44 N	638 m.	+	+	+	+	+	+
Turkey	Akkakale	TUR 158	038 58 E	36 42 N	375 m.	+	+	+	+	+	+
Turks Caicos Islands	Grand Turk Island	TCA 1	071 09 W	21 27 N	8 m.	+	+	+	+	+	+
Uganda	Arua	UGA 1	030 55 E	03 03 N	1211 m.	+	+	+	+	+	+
Uganda	Kitgum	UGA 2	032 53 E	03 17 N	937 m.	+	+	+	+	+	+
Uganda	Gulu	UGA 3	032 20 E	02 45 N	1105 m.	+	+	+	+	+	+
Uganda	Moroto	UGA 4	034 46 E	02 33 N	1347 m.	+	+	+	+	+	+
Uganda	Lira	UGA 5	032 54 E	02 15 N	1085 m.	+	+	+	+	+	+
Uganda	Butiaba	UGA 6	031 20 E	01 50 N	621 m.	+	+	+	+	+	+
Uganda	Masindi	UGA 7	031 43 E	01 41 N	1147 m.	+	+	+	+	+	+
Uganda	Hoima	UGA 8	031 22 E	01 26 N	1158 m.	+	+	+	+	+	+
Uganda	Soroti	UGA 9	033 37 E	01 43 N	1123 m.	+	+	+	+	+	+
Uganda	Mbale	UGA 10	034 09 E	01 06 N	3411 m.	+	+	+	+	+	+
Uganda	Fort Portal	UGA 11	030 17 E	00 40 N	1539 m.	+	+	+	+	+	+
Uganda	Mubende	UGA 12	031 22 E	00 35 N	1553 m.	+	+	+	+	+	+
Uganda	Mpanga	UGA 13	032 18 E	00 12 N	1250 m.	+	+	+	+	+	+
Uganda	Namulonge	UGA 14	032 37 E	00 32 N	1148 m.	+	+	+	+	+	+
Uganda	Kampala-Kololo	UGA 15	032 37 E	00 19 N	1140 m.	+	+	+	+	+	+
Uganda	Jinja	UGA 16	033 11 E	00 27 N	1173 m.	+	+	+	+	+	+
Uganda	Tororo	UGA 17	034 10 E	00 41 N	1171 m.	+	+	+	+	+	+

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Uganda	Mbarara	UGA 18	030 39 E	00 37 S	1413 m.	+	+	+	+	+	+
Uganda	Orichinga	UGA 19	030 47 E	00 52 S	1280 m.	+	+	+	+	+	+
Uganda	Entebbe	UGA 20	032 27 E	00 03 N	1155 m.	+	+	+	+	+	+
Uganda	Kabale	UGA 21	029 59 E	01 15 S	1869 m.	+	+	+	+	+	+
United Arab Emirates	Dubai	ARE 1	055 20 E	25 15 N	8 m.	+	+	+	+	+	+
Uruguay	Artigas	URY 1	056 30 W	30 23 S	121 m.	+	+	+	+	+	+
Uruguay	Rivera	URY 2	055 32 W	30 53 S	242 m.	+	+	+	+	+	+
Uruguay	Salto	URY 3	057 57 W	31 23 S	34 m.	+	+	+	+	+	+
Uruguay	Paysandu	URY 4	058 05 W	32 20 S	52 m.	+	+	+	+	+	+
Uruguay	Cerro Largo	URY 5	054 15 W	32 22 S	94 m.	+	+	+	+	+	+
Uruguay	Paso De Los Toros	URY 6	056 31 W	32 48 S	75 m.	+	+	+	+	+	+
Uruguay	Treinta Y Tres	URY 7	054 23 W	33 13 S	46 m.	+	+	+	+	+	+
Uruguay	Soriano	URY 8	058 04 W	33 15 S	22 m.	+	+	+	+	+	+
Uruguay	Lavalleja	URY 9	055 14 W	34 23 S	133 m.	+	+	+	+	+	+
Uruguay	San Jose	URY 10	056 43 W	34 21 S	41 m.	+	+	+	+	+	+
Uruguay	Colonia	URY 11	057 50 W	34 27 S	23 m.	+	+	+	+	+	+
Uruguay	Rocha	URY 12	054 18 W	34 29 S	18 m.	+	+	+	+	+	+
Uruguay	Montevideo Prado	URY 13	056 12 W	34 51 S	16 m.	+	+	+	+	+	+
Uruguay	Punta Del Este	URY 14	054 57 W	34 58 S	16 m.	+	+	+	+	+	+
Venezuela	Coro	VEN 1	069 41 W	11 25 N	16 m.	+	+	+	+	+	+
Venezuela	Las Piedras	VEN 2	070 12 W	11 40 N	10 m.	+	+	+	+	+	+
Venezuela	Yaritagua	VEN 3	069 03 W	10 03 N	320 m.	+	+	+	+	+	+
Venezuela	Valencia	VEN 4	068 00 W	10 10 N	463 m.	+	+	+	+	+	+
Venezuela	Barquisimeto	VEN 5	069 18 W	10 04 N	590 m.	+	+	+	+	+	+
Venezuela	Bancos D. S. Pedro	VEN 6	067 33 W	08 43 N	95 m.	+	+	+	+	+	+
Venezuela	Maracay	VEN 7	067 39 W	10 15 N	437 m.	+	+	+	+	+	+
Venezuela	Tovar	VEN 8	067 17 W	10 25 N	1790 m.	+	+	+	+	+	+
Venezuela	Maiquetia-a.p.	VEN 9	066 59 W	10 16 N	43 m.	+	+	+	+	+	+
Venezuela	Caracas	VEN 10	066 53 W	10 30 N	835 m.	+	+	+	+	+	+
Venezuela	Maracay C.i.a.	VEN 11	067 37 W	10 15 N	450 m.	+	+	+	+	+	+
Venezuela	El Limon	VEN 12	067 39 W	10 18 N	460 m.	+	+	+	+	+	+
Venezuela	Barcelona	VEN 13	064 41 W	10 07 N	7 m.	+	+	+	+	+	+
Venezuela	Caucagua	VEN 14	066 21 W	10 16 N	60 m.	+	+	+	+	+	+
Venezuela	Caripe	VEN 15	063 33 W	10 09 N	870 m.	+	+	+	+	+	+
Venezuela	Guiria	VEN 16	062 18 W	10 35 N	8 m.	+	+	+	+	+	+
Venezuela	Mene Grande	VEN 17	070 56 W	09 49 N	27 m.	+	+	+	+	+	+
Venezuela	Sanare	VEN 18	069 39 W	09 43 N	1350 m.	+	+	+	+	+	+
Venezuela	Turen	VEN 19	069 04 W	09 15 N	215 m.	+	+	+	+	+	+
Venezuela	Calabozo	VEN 20	067 24 W	08 56 N	106 m.	+	+	+	+	+	+
Venezuela	Bailadores	VEN 21	071 48 W	08 15 N	1750 m.	+	+	+	+	+	+
Venezuela	Merida	VEN 22	071 09 W	08 36 N	1495 m.	+	+	+	+	+	+
Venezuela	Mucuchies	VEN 23	070 55 W	08 44 N	2980 m.	+	+	+	+	+	+
Venezuela	Ciudad Bolivar	VEN 24	063 33 W	08 09 N	43 m.	+	+	+	+	+	+
Venezuela	Bramon	VEN 25	072 24 W	07 39 N	1105 m.	+	+	+	+	+	+
Venezuela	San Antonio	VEN 26	072 27 W	07 51 N	378 m.	+	+	+	+	+	+
Venezuela	S. Fernando De Apure	VEN 27	067 25 W	07 54 N	47 m.	+	+	+	+	+	+
Venezuela	Tumeremo	VEN 28	061 27 W	07 18 N	181 m.	+	+	+	+	+	+
Venezuela	Puerto Ayacucho	VEN 29	067 30 W	05 36 N	73 m.	+	+	+	+	+	+
Venezuela	S.ta Elena De Vairen	VEN 30	061 07 W	04 36 N	907 m.	+	+	+	+	+	+
Venezuela	S. Carlo-Rio Negro	VEN 31	067 03 W	01 54 N	65 m.	+	+	+	+	+	+
Venezuela	Maracaibo	VEN 32	071 36 W	10 39 N	40 m.	+	+	+	+	+	+
Viet Nam	Hanoi	VNM 1	105 48 E	21 01 N	6 m.	+	+	+	+	+	+
Viet Nam	Quang Tri	VNM 2	107 11 E	16 44 N	8 m.	+	+	+	+	+	+
Viet Nam	Da Nang	VNM 3	108 11 E	16 02 N	7 m.	+	+	+	+	+	+
Viet Nam	Hoang Sa	VNM 4	107 37 E	16 33 N	6 m.	+	+	+	+	+	+

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Viet Nam	Qui Nhon	VNM	5	109 13 E	13 46 N	6 m.	+	+	+	+	+	+
Viet Nam	Nha Trang	VNM	6	109 12 E	12 15 N	10 m.	+	+	+	+	+	+
Viet Nam	Ho Chi Minh Ville	VNM	7	106 40 E	10 49 N	19 m.	+	+	+	+	+	+
Viet Nam	Vung-Tau	VNM	8	107 05 E	10 20 N	175 m.	+	+	+	+	+	+
Viet Nam	Ha Tien	VNM	9	104 29 E	10 23 N	4 m.	+	+	+	+	+	+
Western Sahara	El Aaiun	ESH	1	013 12 W	27 09 N	63 m.	+	+	+	+	+	+
Western Sahara	Villa Cisneros	ESH	2	015 52 W	23 42 N	10 m.	+	+	+	+	+	+
Yemen	Sana'a	YEM	1	044 11 E	15 31 N	2206 m.	+	+	+	+	+	+
Yemen	Amran Minjida	YEM	2	044 58 E	15 44 N	2100 m.	+	+	+	+	+	+
Yemen	Jumeisha	YEM	3	043 04 E	14 43 N	38 m.	+	+	+	+	+	+
Yemen	Mabar Montane Plains	YEM	4	044 17 E	14 48 N	2400 m.	+	+	+	+	+	+
Yemen	Hodeidah	YEM	5	042 59 E	14 45 N	33 m.	+	+	+	+	+	+
Yemen	Wadi Zabid	YEM	6	043 25 E	14 10 N	240 m.	+	+	+	+	+	+
Yemen	Taiz	YEM	7	043 57 E	13 35 N	1400 m.	+	+	+	+	+	+
Yemen, Dem.	Riyan	YMD	1	049 15 E	14 35 N	25 m.	+	+	+	+	+	+
Yemen, Dem.	Lahaj	YMD	2	045 00 E	13 10 N	200 m.	+	+	+	+	+	+
Yemen, Dem.	El-Kodesearch C.	YMD	3	045 20 E	13 05 N	15 m.	+	+	+	+	+	+
Yemen, Dem.	Aden-Khormaksar	YMD	4	045 02 E	12 50 N	3 m.	+	+	+	+	+	+
Yemen, Dem.	Socotra	YMD	5	053 54 E	12 38 N	45 m.	+	+	+	+	+	+
Yugoslavia	Ljubjana-Bezigrad	YUG	1	014 31 E	46 04 N	299 m.	+	+	+	+	+	+
Yugoslavia	Maribor-Tezno	YUG	2	015 39 E	46 32 N	275 m.	+	+	+	+	+	+
Yugoslavia	Rijeka	YUG	3	014 28 E	45 20 N	104 m.	+	+	+	+	+	+
Yugoslavia	Crikvenica	YUG	4	014 42 E	45 10 N	4 m.	+	+	+	+	+	+
Yugoslavia	Zagreb-Gric	YUG	5	015 59 E	45 49 N	157 m.	+	+	+	+	+	+
Yugoslavia	Slavonski Brod	YUG	6	018 01 E	45 09 N	95 m.	+	+	+	+	+	+
Yugoslavia	Osijek	YUG	7	018 41 E	45 33 N	90 m.	+	+	+	+	+	+
Yugoslavia	Novi Sad-Rimski Sanc	YUG	8	019 51 E	45 20 N	84 m.	+	+	+	+	+	+
Yugoslavia	Gospic	YUG	9	015 23 E	44 32 N	566 m.	+	+	+	+	+	+
Yugoslavia	Banja Luka	YUG	10	017 13 E	44 47 N	153 m.	+	+	+	+	+	+
Yugoslavia	Beograd	YUG	11	020 28 E	44 48 N	132 m.	+	+	+	+	+	+
Yugoslavia	Sibenik	YUG	12	015 45 E	43 44 N	77 m.	+	+	+	+	+	+
Yugoslavia	Split-Marjan	YUG	13	016 26 E	43 31 N	125 m.	+	+	+	+	+	+
Yugoslavia	Mostar	YUG	14	017 49 E	43 20 N	99 m.	+	+	+	+	+	+
Yugoslavia	Sarajevo	YUG	15	018 26 E	43 52 N	630 m.	+	+	+	+	+	+
Yugoslavia	Kraljevo	YUG	16	020 41 E	43 44 N	225 m.	+	+	+	+	+	+
Yugoslavia	Nis	YUG	17	021 54 E	43 20 N	201 m.	+	+	+	+	+	+
Yugoslavia	Dubrovnik	YUG	18	018 06 E	42 39 N	49 m.	+	+	+	+	+	+
Yugoslavia	Titograd-Podgorica	YUG	19	019 17 E	42 26 N	52 m.	+	+	+	+	+	+
Yugoslavia	Bitola	YUG	20	021 22 E	41 03 N	587 m.	+	+	+	+	+	+
Yugoslavia	Skopje	YUG	21	021 28 E	41 59 N	240 m.	+	+	+	+	+	+
Zaire	Eala	ZAR	1	018 18 E	00 03 N	350 m.	+	+	+	+	+	+
Zaire	Mbandaka	ZAR	2	018 16 E	00 03 N	317 m.	+	+	+	+	+	+
Zaire	Gemena	ZAR	3	019 47 E	03 17 N	446 m.	+	+	+	+	+	+
Zaire	Boketa	ZAR	4	019 46 E	03 11 N	475 m.	+	+	+	+	+	+
Zaire	Basankusu	ZAR	5	019 48 E	01 13 N	353 m.	+	+	+	+	+	+
Zaire	Binga	ZAR	6	020 30 E	02 18 N	400 m.	+	+	+	+	+	+
Zaire	Lisala	ZAR	7	021 34 E	02 19 N	463 m.	+	+	+	+	+	+
Zaire	Libenge	ZAR	8	018 38 E	03 38 N	359 m.	+	+	+	+	+	+
Zaire	Bumba	ZAR	9	022 33 E	02 11 N	361 m.	+	+	+	+	+	+
Zaire	Yaligimba	ZAR	10	022 51 E	02 17 N	435 m.	+	+	+	+	+	+
Zaire	Basoko	ZAR	11	023 36 E	01 15 N	366 m.	+	+	+	+	+	+
Zaire	Loeka	ZAR	12	022 42 E	02 12 N	380 m.	+	+	+	+	+	+
Zaire	Bongabo	ZAR	13	020 32 E	03 06 N	450 m.	+	+	+	+	+	+
Zaire	Buta	ZAR	14	024 47 E	02 50 N	410 m.	+	+	+	+	+	+
Zaire	Yangambi E.c.p.	ZAR	15	024 31 E	00 53 N	491 m.	+	+	+	+	+	+

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Zaire	Yangambi Km 5	ZAR	16	024 29 E	00 49 N	470 m.	+	+	+	+	+	+
Zaire	Kisangani	ZAR	17	025 11 E	00 31 N	396 m.	+	+	+	+	+	+
Zaire	Bambesa	ZAR	18	025 43 E	03 27 N	621 m.	+	+	+	+	+	+
Zaire	Tukpwo	ZAR	19	025 55 E	04 27 N	704 m.	+	+	+	+	+	+
Zaire	Bafwasende	ZAR	20	027 28 E	01 05 N	524 m.	+	+	+	+	+	+
Zaire	Isiro	ZAR	21	027 39 E	02 46 N	764 m.	+	+	+	+	+	+
Zaire	Magombo	ZAR	22	027 54 E	03 42 N	705 m.	+	+	+	+	+	+
Zaire	Irumu	ZAR	23	029 52 E	01 27 N	955 m.	+	+	+	+	+	+
Zaire	Butembo	ZAR	24	029 16 E	00 08 N	1840 m.	+	+	+	+	+	+
Zaire	Watsa	ZAR	25	029 30 E	03 04 N	1008 m.	+	+	+	+	+	+
Zaire	Mont Delele	ZAR	26	029 47 E	04 22 N	900 m.	+	+	+	+	+	+
Zaire	Bunia	ZAR	27	030 13 E	01 30 N	1239 m.	+	+	+	+	+	+
Zaire	Nioka-Drusi	ZAR	28	030 39 E	02 09 N	1678 m.	+	+	+	+	+	+
Zaire	Mont Hawa	ZAR	29	030 45 E	02 49 N	1350 m.	+	+	+	+	+	+
Zaire	Lukolela	ZAR	30	017 10 E	01 04 S	318 m.	+	+	+	+	+	+
Zaire	Bandundu	ZAR	31	017 21 E	03 18 S	324 m.	+	+	+	+	+	+
Zaire	Inongo	ZAR	32	018 16 E	01 58 S	299 m.	+	+	+	+	+	+
Zaire	Boende	ZAR	33	020 51 E	00 13 S	351 m.	+	+	+	+	+	+
Zaire	Bokondji	ZAR	34	021 26 E	00 43 S	365 m.	+	+	+	+	+	+
Zaire	Lomela	ZAR	35	023 17 E	02 18 S	427 m.	+	+	+	+	+	+
Zaire	Lodja	ZAR	36	023 28 E	03 29 S	479 m.	+	+	+	+	+	+
Zaire	Mukumari	ZAR	37	023 11 E	02 50 S	535 m.	+	+	+	+	+	+
Zaire	Opala	ZAR	38	024 21 E	00 35 S	398 m.	+	+	+	+	+	+
Zaire	Kindu	ZAR	39	025 55 E	02 57 S	497 m.	+	+	+	+	+	+
Zaire	Mutsora	ZAR	40	029 44 E	00 19 N	1330 m.	+	+	+	+	+	+
Zaire	N'dihira	ZAR	41	029 10 E	00 16 S	2190 m.	+	+	+	+	+	+
Zaire	Rwindi	ZAR	42	029 17 E	00 47 S	1040 m.	+	+	+	+	+	+
Zaire	Rumangabo	ZAR	43	029 22 E	01 21 S	1620 m.	+	+	+	+	+	+
Zaire	Lubarika	ZAR	44	028 57 E	02 50 S	980 m.	+	+	+	+	+	+
Zaire	Mulungu-Molehe	ZAR	45	028 47 E	02 18 S	1731 m.	+	+	+	+	+	+
Zaire	Mulungu-Tshibinda	ZAR	46	028 45 E	02 19 S	2055 m.	+	+	+	+	+	+
Zaire	Mulungu Nyamunyunge	ZAR	47	028 48 E	02 18 S	1703 m.	+	+	+	+	+	+
Zaire	Bukavu	ZAR	48	028 52 E	02 31 S	1612 m.	+	+	+	+	+	+
Zaire	Mulungu Bukulumisa	ZAR	49	028 43 E	02 20 S	2378 m.	+	+	+	+	+	+
Zaire	Goma	ZAR	50	029 14 E	01 41 S	1552 m.	+	+	+	+	+	+
Zaire	Banana	ZAR	51	012 35 E	06 00 S	2 m.	+	+	+	+	+	+
Zaire	Gimbi-Plateau	ZAR	52	013 22 E	05 31 S	480 m.	+	+	+	+	+	+
Zaire	Luki-Plateau	ZAR	53	013 06 E	05 37 S	350 m.	+	+	+	+	+	+
Zaire	Kinshasa	ZAR	54	015 22 E	04 22 S	310 m.	+	+	+	+	+	+
Zaire	M'vuazi-Poste	ZAR	55	014 54 E	05 27 S	505 m.	+	+	+	+	+	+
Zaire	Kondo	ZAR	56	012 58 E	05 34 S	230 m.	+	+	+	+	+	+
Zaire	Kinshasa-Binza	ZAR	57	015 15 E	04 22 S	440 m.	+	+	+	+	+	+
Zaire	Kiyaka-Plateau	ZAR	58	018 57 E	05 16 S	739 m.	+	+	+	+	+	+
Zaire	Kikwit	ZAR	59	018 48 E	05 02 S	449 m.	+	+	+	+	+	+
Zaire	Kutubongo	ZAR	60	019 53 E	04 37 S	550 m.	+	+	+	+	+	+
Zaire	Ilebo	ZAR	61	020 35 E	04 20 S	420 m.	+	+	+	+	+	+
Zaire	Mutombo-Yamfu	ZAR	62	016 22 E	05 19 S	700 m.	+	+	+	+	+	+
Zaire	Tshikapa	ZAR	63	020 51 E	06 25 S	481 m.	+	+	+	+	+	+
Zaire	Bena-longo	ZAR	64	021 40 E	04 51 S	578 m.	+	+	+	+	+	+
Zaire	Kananga	ZAR	65	022 25 E	05 53 S	657 m.	+	+	+	+	+	+
Zaire	Gandajika	ZAR	66	023 57 E	06 45 S	780 m.	+	+	+	+	+	+
Zaire	Lusambo	ZAR	67	023 26 E	04 58 S	424 m.	+	+	+	+	+	+
Zaire	Mbiji-Mayi	ZAR	68	023 37 E	06 10 S	677 m.	+	+	+	+	+	+
Zaire	Luputa	ZAR	69	023 44 E	07 08 S	877 m.	+	+	+	+	+	+
Zaire	Kaniama	ZAR	70	024 09 E	07 25 S	949 m.	+	+	+	+	+	+

Country name	Station name	Code	Sn	Longitude	Latitude	Elevation	rd	tm	tx	vp	wn	rn
Zaire	Kibangula	ZAR	71	027 04 E	04 52 S	685 m.	+	+	+	+	+	+
Zaire	Lubao	ZAR	72	025 45 E	05 18 S	694 m.	+	+	+	+	+	+
Zaire	Kongolo	ZAR	73	027 00 E	05 21 S	561 m.	+	+	+	+	+	+
Zaire	Manono	ZAR	74	027 26 E	07 17 S	633 m.	+	+	+	+	+	+
Zaire	Kalemie	ZAR	75	029 11 E	05 53 S	776 m.	+	+	+	+	+	+
Zaire	Kamina-Base	ZAR	76	025 15 E	08 38 S	1106 m.	+	+	+	+	+	+
Zaire	Kamina	ZAR	77	025 00 E	08 44 S	1105 m.	+	+	+	+	+	+
Zaire	Kolwezi	ZAR	78	025 28 E	10 45 S	1526 m.	+	+	+	+	+	+
Zaire	Mitwaba	ZAR	79	027 20 E	08 56 S	1579 m.	+	+	+	+	+	+
Zaire	Simama	ZAR	80	027 01 E	09 37 S	852 m.	+	+	+	+	+	+
Zaire	Lubumbashi Luano	ZAR	81	027 29 E	11 40 S	1298 m.	+	+	+	+	+	+
Zaire	Kisanga-Plateau	ZAR	82	027 25 E	11 44 S	1187 m.	+	+	+	+	+	+
Zambia	Kawambwa	ZMB	1	029 05 E	09 48 S	1324 m.	+	+	+	+	+	+
Zambia	Mbala	ZMB	2	031 20 E	08 51 S	1673 m.	+	+	+	+	+	+
Zambia	Mwinilunga	ZMB	3	024 26 E	11 45 S	1363 m.	+	+	+	+	+	+
Zambia	Mansa	ZMB	4	028 51 E	11 06 S	1259 m.	+	+	+	+	+	+
Zambia	Samfya	ZMB	5	029 32 E	11 21 S	1172 m.	+	+	+	+	+	+
Zambia	Kasama	ZMB	6	031 08 E	10 13 S	1384 m.	+	+	+	+	+	+
Zambia	Mpika	ZMB	7	031 36 E	11 54 S	1402 m.	+	+	+	+	+	+
Zambia	Zambezi	ZMB	8	023 07 E	13 32 S	1078 m.	+	+	+	+	+	+
Zambia	Kasempa	ZMB	9	025 51 E	13 32 S	1234 m.	+	+	+	+	+	+
Zambia	Kabompo	ZMB	10	024 12 E	13 36 S	1075 m.	+	+	+	+	+	+
Zambia	Solwezi	ZMB	11	026 23 E	12 11 S	1386 m.	+	+	+	+	+	+
Zambia	Ndola	ZMB	12	028 39 E	13 00 S	1270 m.	+	+	+	+	+	+
Zambia	Serenje	ZMB	13	030 13 E	13 14 S	1384 m.	+	+	+	+	+	+
Zambia	Chipata	ZMB	14	032 35 E	13 33 S	1032 m.	+	+	+	+	+	+
Zambia	Lundazi	ZMB	15	033 12 E	12 17 S	1143 m.	+	+	+	+	+	+
Zambia	Mongu	ZMB	16	023 09 E	15 15 S	1053 m.	+	+	+	+	+	+
Zambia	Kaoma	ZMB	17	024 48 E	14 48 S	1213 m.	+	+	+	+	+	+
Zambia	Kafue Polder	ZMB	18	027 55 E	15 46 S	987 m.	+	+	+	+	+	+
Zambia	Kabwe	ZMB	19	028 28 E	14 27 S	1207 m.	+	+	+	+	+	+
Zambia	Lusaka C.a.	ZMB	20	028 19 E	15 25 S	1280 m.	+	+	+	+	+	+
Zambia	Petauke	ZMB	21	031 17 E	14 15 S	1036 m.	+	+	+	+	+	+
Zambia	Sesheke	ZMB	22	024 18 E	17 28 S	951 m.	+	+	+	+	+	+
Zambia	Livingstone A.p.	ZMB	23	025 49 E	17 49 S	986 m.	+	+	+	+	+	+
Zambia	Choma	ZMB	24	027 04 E	16 51 S	1210 m.	+	+	+	+	+	+
Zimbabwe	Chirundu Sugar Est.	ZWE	1	028 54 E	16 00 S	392 m.	+	+	+	+	+	+
Zimbabwe	Kariba Airport	ZWE	2	028 53 E	16 31 S	518 m.	+	+	+	+	+	+
Zimbabwe	Karoi	ZWE	3	029 37 E	16 50 S	1344 m.	+	+	+	+	+	+
Zimbabwe	Harare	ZWE	4	031 01 E	17 50 S	1472 m.	+	+	+	+	+	+
Zimbabwe	Mount Darwin	ZWE	5	031 35 E	16 47 S	966 m.	+	+	+	+	+	+
Zimbabwe	Umvukwes	ZWE	6	030 51 E	17 02 S	1481 m.	+	+	+	+	+	+
Zimbabwe	Trelawneyes. Stat.	ZWE	7	030 20 E	17 35 S	1326 m.	+	+	+	+	+	+
Zimbabwe	Henderson	ZWE	8	030 58 E	17 35 S	1292 m.	+	+	+	+	+	+
Zimbabwe	Binga	ZWE	9	027 20 E	17 37 S	617 m.	+	+	+	+	+	+
Zimbabwe	Victoria Falls Airp.	ZWE	10	025 51 E	18 06 S	1062 m.	+	+	+	+	+	+
Zimbabwe	Wankie	ZWE	11	026 30 E	18 22 S	782 m.	+	+	+	+	+	+
Zimbabwe	Chibero	ZWE	12	030 40 E	18 06 S	1335 m.	+	+	+	+	+	+
Zimbabwe	Marandellas. St.	ZWE	13	031 30 E	18 10 S	1646 m.	+	+	+	+	+	+
Zimbabwe	Inyanga Exp. Stat.	ZWE	14	032 45 E	18 17 S	1878 m.	+	+	+	+	+	+
Zimbabwe	Gatooma Cotton.i.	ZWE	15	029 53 E	18 19 S	1157 m.	+	+	+	+	+	+
Zimbabwe	Wankie Main Camp	ZWE	16	026 57 E	18 44 S	1077 m.	+	+	+	+	+	+
Zimbabwe	Gokwe	ZWE	17	028 56 E	18 13 S	1282 m.	+	+	+	+	+	+
Zimbabwe	Kwekwe	ZWE	18	029 50 E	18 56 S	1215 m.	+	+	+	+	+	+
Zimbabwe	Gweru	ZWE	19	029 51 E	19 27 S	1429 m.	+	+	+	+	+	+

Country name	Station name	Code Sn	Longitude	Latitude	Elevation	rd	tm	tx	vp	wn	rn
Zimbabwe	Tjolotjo	ZWE 20	027 46 E	19 45 S	1100 m.	+	+	+	+	+	+
Zimbabwe	Nyanyadzi	ZWE 21	032 25 E	19 45 S	530 m.	+	+	+	+	+	+
Zimbabwe	Nyamandhlovu Exp.st.	ZWE 22	028 11 E	19 57 S	1219 m.	+	+	+	+	+	+
Zimbabwe	Grandeef	ZWE 23	032 27 E	18 59 S	1018 m.	+	+	+	+	+	+
Zimbabwe	Umtali	ZWE 24	032 40 E	18 58 S	1119 m.	+	+	+	+	+	+
Zimbabwe	Enkeldoorn	ZWE 25	030 53 E	19 02 S	1459 m.	+	+	+	+	+	+
Zimbabwe	Makoholi	ZWE 26	030 47 E	19 50 S	1204 m.	+	+	+	+	+	+
Zimbabwe	Gwaai	ZWE 27	027 42 E	19 17 S	999 m.	+	+	+	+	+	+
Zimbabwe	Bulawayo	ZWE 28	028 37 E	20 09 S	1344 m.	+	+	+	+	+	+
Zimbabwe	West Nicholson	ZWE 29	029 22 E	21 03 S	861 m.	+	+	+	+	+	+
Zimbabwe	Nyanda	ZWE 30	030 52 E	20 04 S	1095 m.	+	+	+	+	+	+
Zimbabwe	Chipinge	ZWE 31	032 37 E	20 12 S	1132 m.	+	+	+	+	+	+
Zimbabwe	Sabi Valley Exp.st.	ZWE 32	032 20 E	20 21 S	448 m.	+	+	+	+	+	+
Zimbabwe	Motopos Nursery	ZWE 33	028 30 E	20 23 S	1347 m.	+	+	+	+	+	+
Zimbabwe	Triangle Hill	ZWE 34	031 22 E	20 57 S	421 m.	+	+	+	+	+	+
Zimbabwe	Beitbridge	ZWE 35	030 00 E	22 13 S	457 m.	+	+	+	+	+	+

## 5 Retrieving data

The data files are available on the central computer of AB-DLO, location Wageningen. The directory with the 'logical name' *weather\_data* stores the data. The computer sets this logical name automatically to anyone who logs on. With this logical name information is retrieved from three directories. The directory *disk\$userdisk:[meteo.data]* that stores the collection meteorological data of AB-DLO, the directory *disk\$userdisk:[meteo.muller]* with Müller's data and *disk\$userdisk:[meteo.fao]* with the data of FAO.

One can search for specific files by typing the VMS-command *dir* ;

```
$ dir weather_data:nld1.* <return>
```

This command shows for example which files exist from the meteorological station encoded with number 1 in the Netherlands. This can be helpful to check whether a series of synoptic observations is complete.

To examine the contents of a specific file, for example *nld1.993*, type the VMS-command *type* ;

```
$ type weather_data:nld1.993 <return>
```

Using models on the central computer of AB-DLO it is preferable, however, to call weather data files directly from the directory *weather\_data* instead of copying data files into your default directory. Advantages are that your work deals with the most recent information and that storage devices are efficiently used.

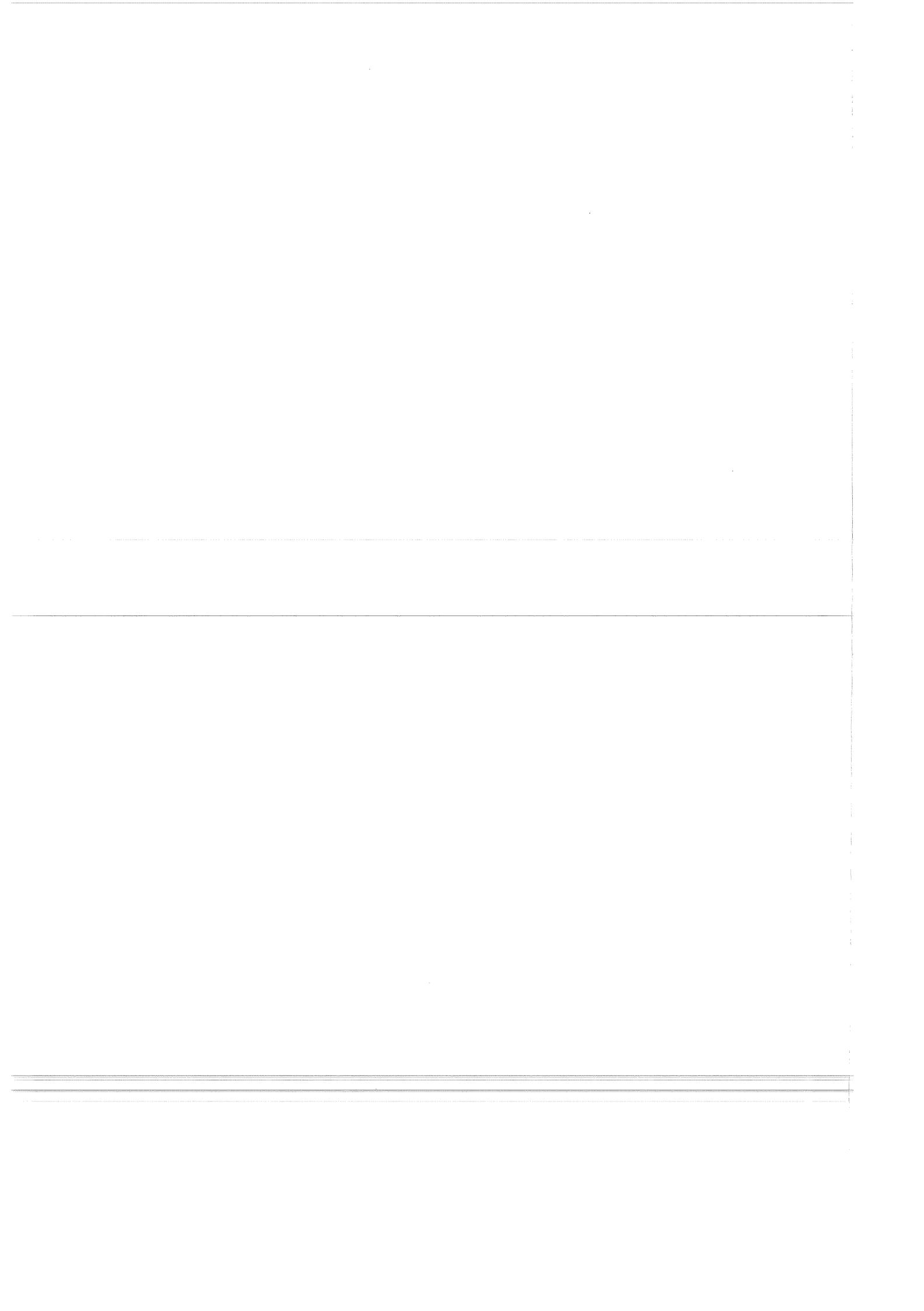


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## Appendix I: International standard codes for names of countries (ISO 3166)

<b>Alpha-3 code Country name</b>		<b>Alpha-3 code Country name</b>	
ABW	Aruba	CMR	Cameroon
AFG	Afghanistan	COG	Congo
AGO	Angola	COK	Cook Islands
AIA	Anguilla	COL	Colombia
ALB	Albania	COM	Comoros
AND	Andorra	CPV	Cape Verde
ANT	Netherlands Antilles	CRI	Costa Rica
ARE	United Arab Emirates	CSK	Czechoslovakia
ARG	Argentina	CUB	Cuba
ASM	American Samoa	CXR	Christmas Islands
ATA	Antarctica	CYM	Cayman Islands
ATF	French Southern Territories	CYP	Cyprus
ATG	Antigua and Barbuda	DEU	Germany
AUS	Australia	DJI	Djibouti
AUT	Austria	DMA	Dominica
BDI	Burundi	DNK	Denmark
BEL	Belgium	DOM	Dominican Republic
BEN	Benin	DZA	Algeria
BFA	Burkina Faso	ECU	Ecuador
BGD	Bangladesh	EGY	Egypt
BGR	Bulgaria	ESH	Western Sahara
BHR	Bahrain	ESP	Spain
BHS	Bahamas	ETH	Ethiopia
BLZ	Belize	FIN	Finland
BMU	Bermuda	FJI	Fiji
BOL	Bolivia	FLK	Falkland Islands (Malvinas)
BRA	Brazil	FRA	France
BRB	Barbados	FRO	Faroe Islands
BRN	Brunei Darussalam	FSM	Micronesia
BTN	Bhutan	GAB	Gabon
BUR	Burma	GBR	United Kingdom
BVT	Bouvet Island	GHA	Ghana
BWA	Botswana	GIB	Gibraltar
BYS	Byelorussian SSR	GIN	Guinea
CAF	Central African Republic	GLP	Guadeloupe
CAN	Canada	GMB	Gambia
CCK	Cocos (Keeling) Islands	GNB	Guinea-Bissau
CHE	Switzerland	GNQ	Equatorial Guinea
CHL	Chile	GRC	Greece
CHN	China	GRD	Grenada
CIV	Côte d'Ivoire	GRL	Greenland

<b>Alpha-3 code</b>	<b>Country name</b>	<b>Alpha-3 code</b>	<b>Country name</b>
GTM	Guatemala	MOZ	Mozambique
GUF	French Guiana	MRT	Mauritania
GUM	Guam	MSR	Montserrat
GUY	Guyana	MTQ	Martinique
HKG	Hong Kong	MUS	Mauritius
HMD	Heard and Mc Donald Isl.	MWI	Malawi
HND	Honduras	MYS	Malaysia
HTI	Haiti	NAM	Namibia
HUN	Hungary	NCL	New Caledonia
IDN	Indonesia	NER	Niger
IND	India	NFK	Norfolk Island
IOT	British Indian Ocean Territ.	NGA	Nigeria
IRL	Ireland	NIC	Nicaragua
IRN	Iran	NIU	Niue
IRQ	Iraq	NLD	Netherlands
ISL	Iceland	NOR	Norway
ISR	Israel	NPL	Nepal
ITA	Italy	NRU	Nauru
JAM	Jamaica	NTZ	Neutral Zone
JOR	Jordan	NZL	New Zealand
JPN	Japan	OMN	Oman
KEN	Kenya	PAK	Pakistan
KHM	Kampuchea, Democratic	PAN	Panama
KIR	Kiribati	PCN	Pitcairn
KNA	Saint Kitts and Nevis	PER	Peru
KOR	Korea, Republic of	PHL	Philippines
KWT	Kuwait	PLW	Palau
LAO	Lao People's Dem. Rep.	PNG	Papua New Guinea
LBN	Lebanon	POL	Poland
LBR	Liberia	PRI	Puerto Rico
LBY	Libyan Arab Jamahiriya	PRK	Korea, Dem.Peoples Rep. of
LCA	Saint Lucia	PRT	Portugal
LIE	Liechtenstein	PRY	Paraguay
LKA	Sri Lanka	PYF	French Polynesia
LSO	Lesotho	QAT	Qatar
LUX	Luxembourg	REU	Réunion
MAC	Macau	ROM	Romania
MAR	Morocco	RWA	Rwanda
MCO	Monaco	SAU	Saudi Arabia
MDG	Madagascar	SDN	Sudan
MDV	Maldives	SEN	Senegal
MEX	Mexico	SGP	Singapore
MHL	Marshall Islands	SHN	St. Helena
MLI	Mali	SJM	Svalbard and Jan-Mayen Isl.
MLT	Malta	SLB	Solomon Islands
MNG	Mongolia	SLE	Sierra Leone
MNP	Northern Mariana Islands	SLV	El Salvador

<b>Alpha-3 code</b>	<b>Country name</b>	<b>Alpha-3 code</b>	<b>Country name</b>
SMR	San Marino	TZA	Tanzania, United Rep. of
SOM	Somalia	UGA	Uganda
SPM	St. Pierre and Miquelon	UKR	Ukrainian SSR
STP	Sao Tome and Principe	UMI	United States Min. Outl. Isl.
SUN	USSR	URY	Uruguay
SUR	Suriname	USA	United States
SWE	Sweden	VAT	Vatican City State
SWZ	Swaziland	VCT	Snt. Vincent and Grenadines
SYC	Seychelles	VEN	Venezuela
SYR	Syrian Arab Republic	VGB	Virgin Islands (British)
TCA	Turks and Caicos Islands	VIR	Virgin Islands (US)
TCD	Chad	VNM	Viet Nam
TGO	Togo	VUT	Vanuatu
THA	Thailand	WLF	Wallis and Futuna Islands
TKL	Tokelau	WSM	Samoa
TMP	East Timor	YEM	Yemen
TON	Tonga	YMD	Yemen, Democratic
TT0	Trinidad and Tobago	YUG	Yugoslavia
TUN	Tunisia	ZAF	South Africa
TUR	Turkey	ZAR	Zaire
TUV	Tuvalu	ZMB	Zambia
TWN	Taiwan, Province of China	ZWE	Zimbabwe

