

# meteoblue point DATA

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## 0 Summary

### 0.1 p☀int local weather forecast

meteoblue produces local high precision weather forecasts for every place in the world using p☀int technology. The forecasts are made for minimum 6 days, in hourly resolution and with many parameters and are available as images (IMaGes) and Data (DATA) .

### 0.2 p☀intFTP and p☀intPRO

p☀int DATA can be accessed as datasets over FTP (File Transfer Protocol), Web-Services (p☀intPROpull) and as Website (p☀intPROport).

### 0.3 What is DATA?

DATA are sets of weather parameters, which are updated (several times) daily for (a) defined (set of) place(s) and transferred as .txt, .csv, XML or JSON file.

The selection is made by:

1. Parameter;
2. Forecast interval (Hours, days)
3. Forecast range (usually 1-14 days)
4. Update frequency;
5. Transmission format

Forecast locations can selected (and aggregated into "Groups") using 3 options:

1. Selection from the meteoblue GLS (Global Location Search);
2. Addition to the meteoblue GLS (Global Location Search);
3. Location list from Client (with precise location details)

Most DATA are available for all locations worldwide. The selection is made through:

- "Access" = Transmission type = FTP or PRO.
- "Groups" = Selection of locations.
- "BLOOS" = Sets of parameters, forecast interval and forecast range.
- "Modules" = BLOOS with defined "groups" of locations and transmission format

### 0.4 Overview

The following specification gives an overview of available datasets and the selection procedure.

## 1 Location selection

### 1.1 Procedure

The locations are selected with the GLS on [www.meteoblue.com](http://www.meteoblue.com) or in p☀intPRO. Alternatively, a location list can be submitted. Forms are provided on request.

### 1.2 Requirements

For a good weather forecast, the location data has to fulfill the following requirements:

1. Precise position, defined by geographic coordinates.
2. Precise altitude, in meter above sea level (m asl);
3. Time zone (for timestamping of the weather forecast);
4. Identification (for referral of the weather data).

A meteoblue weather forecast always contains precise information about these 4 points.

## 2 DATA BLOOS

### 2.1 What is a DATA "BLOO"?

meteoblue groups the available data in packs for different users, called "**BLOOS**", which are defined through:

1. Format: for DATA there are .csv xml JSON, as well as .txt (for FTP)
2. Parameter: there are up to 30 parameters in one **BLOO**.
3. Forecast interval (FCI): 1 hour, 3- 6- or 8- hours, as well as 24 hours (=day)
4. Forecast range (FCR), usually 1, 3, 5, 7 or 14 days.

The **BLOOS** are differentiated through names.

### 2.2 Naming of DATA "BLOOS"

The **BLOOS** names are composed as: **Type\_Content\_FCinterval\_FCrange**  
TYPE.

- data: Output in .csv Format.
- xml: Output in .xml Strings.

CONTENT:

- SHORT most simple dataset
- SIMPLE: base dataset
- SIMPLE PR: base dataset + precipitation
- PRO: extended dataset
- PRO PR: extended dataset + precipitation

FORECAST INTERVAL:

- 01h = 1 hour
- 03h = 3 hours
- day = 24 hours

FORECAST RANGE

- 01d = 1 day
- 03d = 3 days
- 05d = 5 days
- 07d = 7 days
- 14d = 14 days

## 3 DATA BLOO overview

### 3.1 Table with all BLOOS

#	BLOO Name <sup>1)</sup>	Type <sup>2)</sup>	Content <sup>3)</sup>	Period <sup>4)</sup>	Interval <sup>5)</sup>	Comment
1.	data_SIMPLE_day_14d	html	5	14	24	14-day daily
2.	data_SIMPLE_PR_day_14d	html	7	14	24	
3.	data_SIMPLE_01h_07d	html	5	7	1	7 days hourly
4.	data_SIMPLE_day_07d	html	5	7	24	the "simple" one
5.	data_SIMPLE_PR_day_07d	html	7	7	24	
6.	data_SIMPLE_PR_01h_07d	html	7	7	1	
7.	data_PRO_01h_07d	html	15	7	1	
8.	data_PRO_03h_07d	html	15	7	3	
9.	xml_SIMPLE_day_07d	xml		7	24	
10.	xml_SIMPLE_01h_07d	xml		7	1	
11.						

## 4 BLOO Examples

### 4.1 data\_SIMPLE\_day\_07d

name;latitude;longitude;height (m.asl.);country;timezone;utc-timedifferecne;sunrise;sunset; local date;local weekday;tmin(C);tmax(C);max windspeed(km/h);dominant winddirection from S=1 to SE=8;day-picto-code; Sucre;66.13°W;21.62°S ;4207;;BOT;UTC--4.0;05:35;18:49; 20091130;Mon; 2; 16; 25;6;7; 20091201;Tue; 6; 16; 20;7;7; 20091202;Wed; 4; 16; 32;6;7; 20091203;Thu; 5; 16; 31;7;8; 20091204;Fri; 4; 17; 27;7;8; 20091205;Sat; 0; 17; 18;3;2;

### 4.2 data\_SIMPLE\_PR\_day\_07d

name;latitude;longitude;height (m.asl.);country;timezone;utc-timedifferecne;sunrise;sunset; local date;local weekday;tmin(C);tmax(C);max windspeed(km/h);dominant winddirection from S=1 to SE=8;day-picto-code;precip amount(mm);precip probability(%) Sucre;66.13°W;21.62°S ; 4207;;BOT;UTC--4.0;05:35;18:49; 20091130;Mon; 2; 16; 25;6;7; 8.3; 77; 20091201;Tue; 6; 16; 20;7;7; 6.9; 72; 20091202;Wed; 4; 16; 32;6;7; 2.2; 65; 20091203;Thu; 5; 16; 31;7;8; 10.7; 90; 20091204;Fri; 4; 17; 27;7;8; 6.4; 80; 20091205;Sat; 0; 17; 18;3;2; 0.0; 15;

### 4.3 data\_SIMPLE\_day\_14d

name;latitude;longitude;height (m.asl.);country;timezone;utc-timedifferecne;sunrise;sunset; local date;local weekday;tmin(C);tmax(C);max windspeed(km/h);dominant winddirection from S=1 to SE=8;day-picto-code; Sucre;66.13°W;21.62°S ;4207;;BOT;UTC--4.0;05:35;18:49; 20091130;Mon; 2; 16; 25;6;7; 20091201;Tue; 6; 16; 20;7;7; 20091202;Wed; 4; 16; 32;6;7; 20091203;Thu; 5; 16; 31;7;8; 20091204;Fri; 4; 17; 27;7;8; 20091205;Sat; 0; 17; 18;3;2; 20091206;Sun; 2; 17; 21;6;7; 20091207;Mon; 2; 16; 23;6;7; 20091208;Tue; 3; 17; 25;6;7; 20091209;Wed; 3; 16; 24;6;7; 20091210;Thu; 3; 15; 22;6;7; 20091211;Fri; 4; 16; 18;6;7; 20091212;Sat; 3; 17; 19;6;7; 20091213;Sun; 3; 17; 22;6;7;

### 4.4 data\_SIMPLE\_PR\_day\_14d

name;latitude;longitude;height (m.asl.);country;timezone;utc-timedifferecne;sunrise;sunset; local date;local weekday;tmin(C);tmax(C);max windspeed(km/h);dominant winddirection from S=1 to SE=8;day-picto-code;precip amount(mm);precip probability(%) Sucre;66.13°W;21.62°S ; 4207;;BOT;UTC--4.0;05:35;18:49; 20091130;Mon; 2; 16; 25;6;7; 8.3; 77; 20091201;Tue; 6; 16; 20;7;7; 6.9; 72; 20091202;Wed; 4; 16; 32;6;7; 2.2; 65; 20091203;Thu; 5; 16; 31;7;8; 10.7; 90; 20091204;Fri; 4; 17; 27;7;8; 6.4; 80; 20091205;Sat; 0; 17; 18;3;2; 0.1; 21; 20091206;Sun; 2; 17; 21;6;7; 0.4; 26; 20091207;Mon; 2; 16; 23;6;7; 1.5; 55; 20091208;Tue; 3; 17; 25;6;7; 2.1; 81; 20091209;Wed; 3; 16; 24;6;7; 9.8; 91; 20091210;Thu; 3; 15; 22;6;7; 14.4; 88; 20091211;Fri; 4; 16; 18;6;7; 10.9; 71; 20091212;Sat; 3; 17; 19;6;7; 6.4; 62; 20091213;Sun; 3; 17; 22;6;7; 2.9; 61;

### 4.5 data\_SIMPLE\_06h\_07d

id;name;latitude;longitude;height (m.asl.);country;timezone;utc-timedifferecne;sunrise;sunset; local date;local weekday;tmin(C);tmax(C);wspeed(km/h);dominant wdir(class);mean cloud cover(%);precipitation(mm);probabiliy of precip(%);day-picto-code; ;Sucre;66.13°W;21.62°S ; 4207;;BOT;UTC--4.0;05:35;18:49; 20091130;Mon;20-23; 6; 10; 16; 3; 0; 0.0; 39;1; 20091130;Mon;00-05; 2; 5; 16; 2; 0; 0.0; 39;1; 20091201;Tue;06-11; 2; 14; 22; 8; 2; 0.0; 39;1; 20091201;Tue;12-17; 13; 16; 24; 6; 55; 2.6; 73;7; 20091201;Tue;18-23; 8; 12; 25; 6;100; 5.7; 77;6; 20091201;Tue;00-05; 6; 8; 13; 7;100; 5.5; 77;6; 20091202;Wed;06-11; 6; 12; 12; 1; 60; 1.1; 71;7; 20091202;Wed;12-17; 13; 16; 20; 7; 40; 0.3; 45;7; 20091202;Wed;18-23; 7; 12; 19; 6; 61; 0.0; 46;2; 20091202;Wed;00-05; 4; 7; 9; 7; 42; 0.1; 46;2; 20091203;Thu;06-11; 4; 13; 14; 2; 6; 0.0; 29;1; 20091203;Thu;12-17; 14; 16; 31; 7; 31; 0.0; 33;2; 20091203;Thu;18-23; 7; 13; 32; 6; 91; 2.1; 65;7; 20091203;Thu;00-05; 5; 7; 14; 7; 50; 1.7; 68;7; 20091204;Fri;06-11; 5; 12; 6; 1; 22; 0.0; 54;2; 20091204;Fri;12-17; 13; 16; 31; 6; 24; 1.0; 67;8; 20091204;Fri;18-23; 5; 11; 31; 7; 92; 8.0; 90;8; 20091204;Fri;00-05; 4; 5; 15; 7; 52; 0.2; 90;2; 20091205;Sat;06-11; 4; 12; 12; 3; 14; 0.0; 52;2; 20091205;Sat;12-17; 13; 17; 22; 5; 47; 1.8; 48;8; 20091205;Sat;18-23; 4; 13; 27; 7;

66; 4.4; 80;7; 20091205;Sat;00-05; 0; 4; 12; 3; 32; 0.0; 80;2; 20091206;Sun;06-11; 0; 14; 18; 2; 0; 0.0; 15;1; 20091206;Sun;12-17; 15; 17; 18; 3; 0; 0.0; 3;1;

#### 4.6 data\_PRO\_03h\_07d

name;latitude;longitude;height (m.asl.);country;timezone;utc-timedifference;sunrise;sunset local date;weekday;local time;temperature(C);feeledTemperature(C);windspeed(km/h);winddirection(degr);wind gust(km/h);low clouds(%);medium clouds(%);high clouds(%);precipitation(mm);probability of Precip(%);snowFraction;sea level pressure(hPa);relative humidity(%);CAPE;picto-code  
 Sucre;66.13°W;21.62°S ;4207;;BOT;UTC--4.0;05:35;18:49; 29.11.2009;Sun;20; 10.3; 7.0; 14;317; 16; 0; 0; 0.0; 39;0.0;1007; 83; 264;1; 29.11.2009;Sun;23; 5.7; 1.1; 16;286; 27; 0; 0; 11; 0.0; 38;0.0;1013; 84; 206;1; 30.11.2009;Mon;02; 3.5; -1.8; 15;238; 30; 0; 0; 0.0; 39;0.0;1014; 65; 0;1; 30.11.2009;Mon;05; 2.1; -2.9; 11;234; 14; 0; 0; 0.0; 38;0.0;1017; 58; 0;1; 30.11.2009;Mon;08; 9.6; 3.4; 17;145; 17; 0; 0; 0.0; 25;0.0;1013; 31; 0;1; 30.11.2009;Mon;11; 13.7; 8.0; 18; 96; 18; 0; 15; 0; 0.0; 30;0.0;1010; 35; 0;1; 30.11.2009;Mon;14; 16.3; 11.1; 19; 66; 27; 0; 36; 21; 0.0; 45;0.0;1005; 41; 492;5; 30.11.2009;Mon;17; 13.3; 7.5; 23; 45; 24; 0;100;100; 2.6; 73;0.0;1006; 56; 656;23; 30.11.2009;Mon;20; 9.5; 4.5; 22; 37; 31; 0;100;100; 3.2; 75;0.0;1011; 85; 534;23; 30.11.2009;Mon;23; 8.0; 4.5; 14; 50; 24; 42;100;100; 2.5; 77;0.0;1.....

#### 4.7 data\_SIMPLE\_01h\_07d

name;latitude;longitude;height (m.asl.);country;timezone;utc-timedifference;sunrise;sunset local date;weekday;local time;temperature(C);windspeed(km/h);winddirection from S=1 to SE=8;relative humidity(%);picto-code  
 Sucre;66.13°W;21.62°S ;4207;;BOT;UTC--4.0;05:35;18:50; 30.11.2009;Mon;08; 9.1; 6;8; 47;1; 30.11.2009;Mon;09; 12.5; 13;7; 25;1; 30.11.2009;Mon;10; 13.9; 20;7; 27;1; 30.11.2009;Mon;11; 15.6; 24;7; 33;6; 30.11.2009;Mon;12; 15.6; 29;6; 45;9; 30.11.2009;Mon;13; 13.3; 31;6; 62;31; 30.11.2009;Mon;14; 13.6; 29;6; 62;33; 30.11.2009;Mon;15; 11.9; 26;6; 64;22; 30.11.2009;Mon;16; 12.5; 24;6; 60;6; 30.11.2009;Mon;17; 11.3; 22;6; 63;6; 30.11.2009;Mon;18; 10.7; 23;6; 65;6; 30.11.2009;Mon;19; 9.8; 24;6; 71;22; 30.11.2009;Mon;20; 8.9; 23;6; 78;22; 30.11.2009;Mon;21; 8.3; 19;6; 82;22; 30.11.2009;Mon;22; 7.9; 16;6; 84;22; 30.11.2009;Mon;23; 7.5; 14;6; 87;22; 01.12.2009;Tue;00; 7.1; 13;6; 89;22; 01.12.2009;Tue;01; 6.8; 11;7; 92;22; 01.12.2009;Tue;02; 6.7; 10;7; 93;33; 01.12.2009;Tue;03; 6.5; 10;6; 94;33; 01.12.2009;Tue;04; 6.4; 8;7; 94;33; 01.12.2009;Tue;05; 6.3; 7;7; 94;33; 01.12.2009;Tue;06; 6.4; 6;7; 94;33; 01.12.2009;Tue;07; 6.6; 5;7; 92;22; 01.12.2009;Tue;08; 6.9; 2;7; 87;22; 01.12.2009;Tue;09; 8.2; 3;4; 75;22; 01.12.2009;Tue;10; 10.1; 2;4; 64;33; 01.12.2009;Tue;11; 10.2; 0;2; 60;22; 01.12.2009;Tue;12; 11.6; 3;8; 54;22; 01.12.2009;Tue;13; 12.4; 5;8; 51;5; 01.12.2009;Tue;14; 12.6; 8;7; 51;31; 01.12.2009;Tue;15; 12.5; 12;7; 53;31...

#### 4.8 data\_SIMPLE\_PR\_01h\_07d

name;latitude;longitude;height (m.asl.);country;timezone;utc-timedifference;sunrise;sunset local date;weekday;local time;temperature(C);windspeed(km/h);winddirection from S=1 to SE=8;relative humidity(%);picto-code;precip amount(mm);precip probability(%);  
 Sucre;66.13°W;21.62°S ;4207;;BOT;UTC--4.0;05:35;18:50; 30.11.2009;Mon;08; 9.1; 6;8; 47;1; 0.0;-499; 30.11.2009;Mon;09; 12.5; 13;7; 25;1; 0.0;-499; 30.11.2009;Mon;10; 13.9; 20;7; 27;1; 0.0;-499; 30.11.2009;Mon;11; 15.6; 24;7; 33;6; 0.0;-499; 30.11.2009;Mon;12; 15.6; 29;6; 45;9; 0.1;-499; 30.11.2009;Mon;13; 13.3; 31;6; 62;31; 0.7;-493; 30.11.2009;Mon;14; 13.6; 29;6; 62;33; 0.5;-488; 30.11.2009;Mon;15; 11.9; 26;6; 64;22; 0.2;-482; 30.11.2009;Mon;16; 12.5; 24;6; 60;6; 0.1;-478; 30.11.2009;Mon;17; 11.3; 22;6; 63;6; 0.2;-478; 30.11.2009;Mon;18; 10.7; 23;6; 65;6; 0.3;-469; 30.11.2009;Mon;19; 9.8; 24;6; 71;22; 0.2;-485; 30.11.2009;Mon;20; 8.9; 23;6; 78;22; 0.2; 46; 30.11.2009;Mon;21; 8.3; 19;6; 82;22; 0.1; 37; 30.11.2009;Mon;22; 7.9; 16;6; 84;22; 0.0; 43; 30.11.2009;Mon;23; 7.5; 14;6; 87;22; 0.0; 44; 01.12.2009;Tue;00; 7.1; 13;6; 89;22; 0.1; 38; 01.12.2009;Tue;01; 6.8; 11;7; 92;22; 0.2; 31; 01.12.2009;Tue;02; 6.7; 10;7; 93;33; 0.4; 4...

#### 4.9 data\_PRO\_01h\_07d

name;latitude;longitude;height (m.asl.);country;timezone;utc-timedifference;sunrise;sunset local date;weekday;local time;temperature(C);feeledTemperature(C);windspeed(km/h);winddirection(degr);wind

gust(km/h);low clouds(%);medium clouds(%);high clouds(%);precipitation(mm);probability of Precip(%);snowFraction;sea level pressure(hPa);relative humidity(%);CAPE;picto-code Sucre;66.13°W;21.62°S ;4207;;BOT;UTC--4.0;05:35;18:50; 30.11.2009;Mon;08; 9.1; 5.7; 6;149; 6; 0; 0; 0; 0.0;\*\*\*;0.0;1012; 47; 0;1; 30.11.2009;Mon;09; 12.5; 7.0; 13;102; 14; 0; 0; 0; 0.0;\*\*\*;0.0;1011; 25; 0;1; 30.11.2009;Mon;10; 13.9; 7.3; 20; 82; 21; 0; 0; 4; 0.0;\*\*\*;0.0;1009; 27; 0;1; 30.11.2009;Mon;11; 15.6; 8.7; 24; 72; 25; 0; 33; 93; 0.0;\*\*\*;0.0;1008; 33; 0;6; 30.11.2009;Mon;12; 15.6; 8.4; 29; 66; 30; 0; 51; 99; 0.1;\*\*\*;0.0;1009; 45; 266;9; 30.11.2009;Mon;13; 13.3; 6.3; 31; 64; 31; 0; 60; 88; 0.7;\*\*\*;0.0;1010; 62; 527;31; 30.11.2009;Mon;14; 13.6; 7.1; 29; 54; 29; 0; 94;100; 0.5;\*\*\*;0.0;1009; 62; 552;33...

#### 4.10 snowFEED\_01h\_06d

id;name;latitude;longitude;height (m.asl.);country;timezone;utc-timedifference;sunrise;sunset local date;weekday;local time;snow depth(m);acc. snowfall(kg/m2);acc snowmelt(kg/m2);freezing level height(m asl); ;Sucre;66.13°W;21.62°S ;4207;;BOT;UTC--4.0;05:35;18:50; 30.11.2009;Mon;08; 0.00; 0.000; 0.000; 5461; 30.11.2009;Mon;09; 0.00; 0.000; 0.000; 5424; 30.11.2009;Mon;10; 0.00; 0.000; 0.000; 5316; 30.11.2009;Mon;11; 0.00; 0.000; 0.000; 5288; 30.11.2009;Mon;12; 0.00; 0.000; 0.000; 5259; 30.11.2009;Mon;13; 0.00; 0.000; 0.000; 5318; 30.11.2009;Mon;14; 0.00; 0.000; 0.000; 5406; 30.11.2009;Mon;15; 0.00; 0.000; 0.000; 5432; 30.11.2009;Mon;16; 0.00; 0.000; 0.000; 5479; 30.11.2009;Mon;17; 0.00; 0.000; 0.000; 5465; 30.11.2009;Mon;18; 0.00; 0.000; 0.000; 5435; 30.11.2009;Mon;19; 0.00; 0.000; 0.000; 5373; 30.11.2009;Mon;20; 0.00; 0.000; 0.000; 5344; 30.11.2009;Mon;21; 0.00; 0.000; 0.000; 5326; 30.11.2009;Mon;22; 0.00; 0.000; 0.000; 5271; 30.11.2009;Mon;23; 0.00; 0.000; 0.000; 5190; .....

### 5 Parameters

#### 5.1 Description

Abbreviation	Description	Units
Td	Dewpoint (2 m a.g.)	Degrees Celsius
Ld	Air pressure (sea level)	hPa
RH	Relative Humidity	Percent
N	Total cloud cover	Percent
Nrt	Precipitation type	Code 0 (rain), 1 (snow), 2 (freezing rain), 3 (hail) (thresh
RgW	Precipitation probability	Percent
Rg	Precipitation amount total	mm
WDIR10m	Wind direction 10m above ground wind	Degrees 0-360
WDIRtext10m	Wind direction 10m above ground wind	as text (S=1,SW=2,W=3,NW=4,N=5,NE=6, E=7, SE=8)
LOWCLD	cloud fraction (%) of low clouds	Percent
MIDCLD	cloud fraction (%) of mid clouds	Percent
HIHCLD	cloud fraction (%) of high clouds	Percent
WSPEED10mKp	Wind strength 10 m above ground Kilometers per Hour	km/h
CAPE	Convective available potential energy (J/kg)	Convective available potential energy (J/kg)
PICTOCODE	Weather type description -	pictogram code
TEMPfeel	Felt temperature	°C

## 5.2 Table of parameters

Meteorological Forecast Data	Units	Forecast	Format	Forecast
Air Temperature (2m a.g.)	Degrees Celsius	hourly	F6.1	Per date
Dewpoint (2m a.g.)	Degrees Celsius	hourly	F6.1	Per date
Air pressure (sea level)	hPa	hourly	I4	At full hour
Relative Humidity	Percent	hourly	I3	At full hour
Visibility	km	hourly	F6.1	At full hour
Total cloud cover	Percent	hourly	I3	At full hour
Sky cover without clouds	Eighths	hourly	I1	Instantaneous
Wind strength	m s-1	hourly	F6.1	At full hour
Wind strength	Beaufort	hourly	I2	Instantaneous
Wind direction	Degrees	hourly	I3	At full hour
Wind gusts	m s-1	hourly	F6.1	last hour
Relative amount of sunshine	Percent of potential RAD	hourly	I3	last hour
Absolute amount of sunshine	min (0,10,20,30,40,50,60)	hourly	I3	last hour
Global radiation	W m-2	hourly	I4	last hour
Relative radiation	direct Radiation h-1	hourly	I4	last hour
Average global radiation	W m-2	hourly	I4	last hour
Precipitation type	rain, snow, freezerain, ice, hail	hourly	I2	last hour
Precipitation probability	Percent	hourly	I3	last hour
Precipitation amount in minutes	Minutes	hourly	I3	last hour
Rainfall quantity	mm	hourly	F6.1	last hour
Convective precipitation	mm	hourly	F6.1	last hour
Grid cell (frontal) precipitation	mm	hourly	F6.1	last hour
Probability of showers	Percent	hourly	I3	last hour
Probability of thunderstorms	Percent	hourly	I3	last hour
Amount of humidity > 90%	Minutes	hourly	I2	last hour
Soil temperature 2cm depth	Degrees Celsius	hourly	F6.1	
Soil temperature 20cm depth	Degrees Celsius	hourly	F6.1	
actual Evapotranspiration	mm	Hourly	I3	
Maximum Temp 2m a.g.	Degrees Celsius	daily	F6.1	last 12 h
Minimum Temp 2m a.g.	Degrees Celsius	daily	F6.1	last 12 h
Minimum Temp 5cm a.g.	Degrees Celsius	daily	F6.1	last 12 h
Sunshine time	Minutes	hourly	I2	last hour

## 6 Metadata

### 6.1 Time zones

All data are shown in local time (except if otherwise indicated in the Metadata). Examples for 3 different cities:

- Lisbon (Portugal): WET (Western European Time); UTC +0
- Los Angeles (USA): PDT (Pacific Daylight Time); UTC -7
- Adelaide (Australia): CST(Central Daylight Time); UTC +10.5

### 6.2 Update

The files begin with the first hour of the forecast run (except when otherwise specified). This is always some hours earlier than the time point of the data transmission (Update). The time point of the update is not reported separately, because it can vary slightly and does not influence the quality of the forecast.

With FTP transmission, the time of the file saving corresponds approximately to the Update time.

## **7 Transmission**

### **7.1 FTP**

Per FTP server as .txt or csv. files

### **7.2 PULL DATA**

As DATA Webservice, over p☀intPRO interface, for automated download.

### **7.3 PORT DATA display**

As web display, over the p☀intPRO interface, for manual download

### **7.4 .xml**

As .xml feed, for automated download and custom integration into your website.

### **7.5 Other formats**

Other formats are available on request.

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