



Updating FFCUL contribution to WP3 (Data Rescue and Global Registry)

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WP3 – Earth Systems Observations

Task 3.1 – Data rescue for in-situ observations, quality control and metadata (112 persons/month)

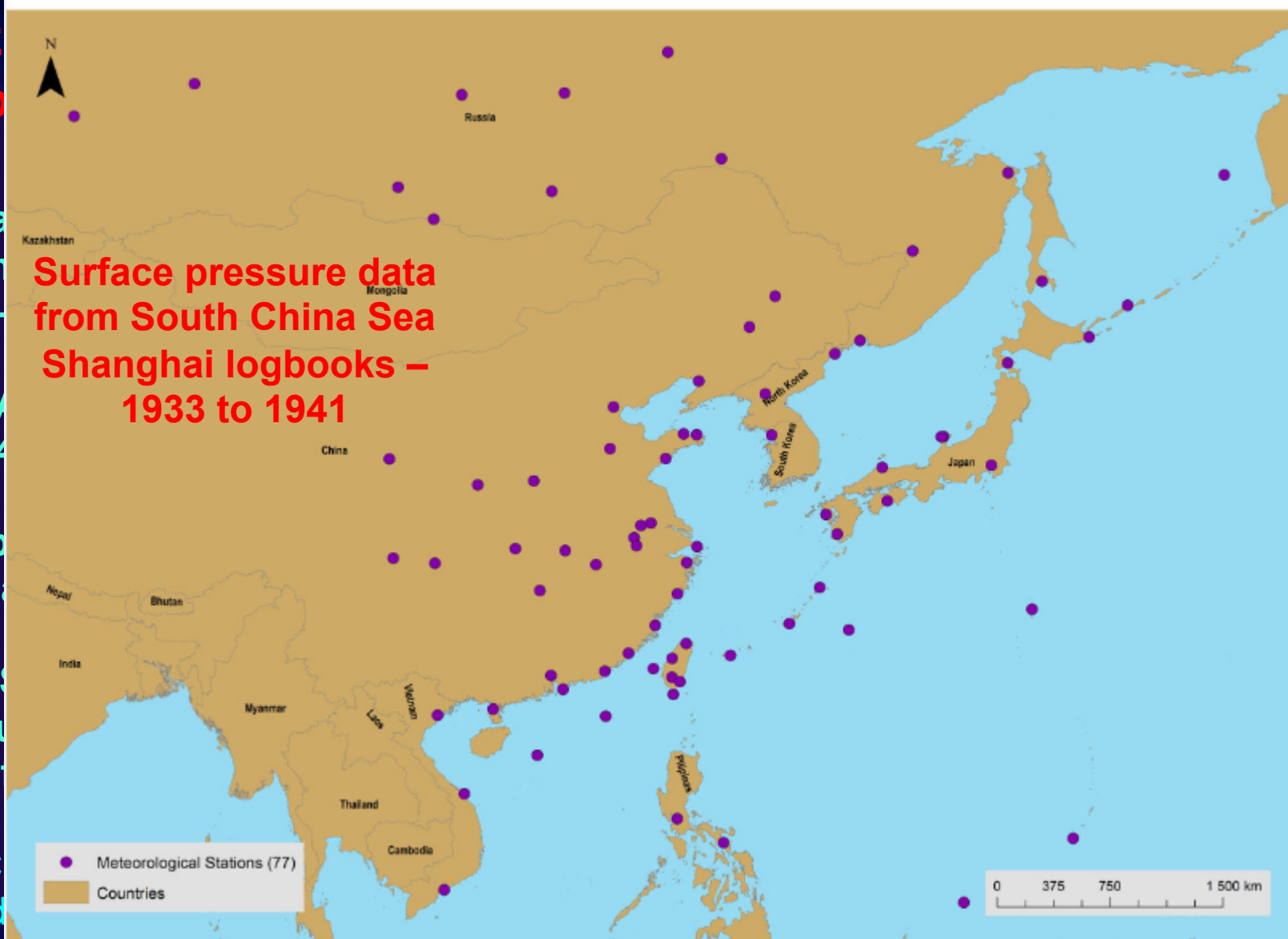
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|--|----------|
| ✓ D3.1 Data catalogue | Month 6 |
| ✓ D3.2 Priorities for data rescue | Month 6 |
| D3.3 Metadatabase update (new) | Month 48 |
| ✓ D3.4 In-situ data for reanalysis | Month 36 |
| D3.5 In-situ data (other) | Month 42 |
| D3.6 Quality controled version of D3.4 | Month 48 |
| D3.7 Quality controled version of D3.5 | Month 48 |

Contents

- 1 - Data rescue of Portuguese former colonies Angola, Mozambique and Macao surface data; Continental Portugal and Isles + South China Sea**
- 2 - Digitisation of early Spanish upper air data**
- 3 - Recovery of Chilean surface and maritime data**
- 4 - QC tests for surface data**
- 5 - ERA-CLIM2 Global Registry**

1 - Data
Mozambique
Colombia

South China Sea Stations (1933-1941)



• 2.2M stations
are still in
and ERA-

• Angola (1947-1974)

• Mozambique
digitised

• Macao (1947-1974)
temperature
and final

• South China
formatted

• All Portuguese ex-colonial
Portugal and Isles (1863-1946) digitised, and partly supplied.

2 - Digitisation of early Spanish upper air data (6 stations)

• 4
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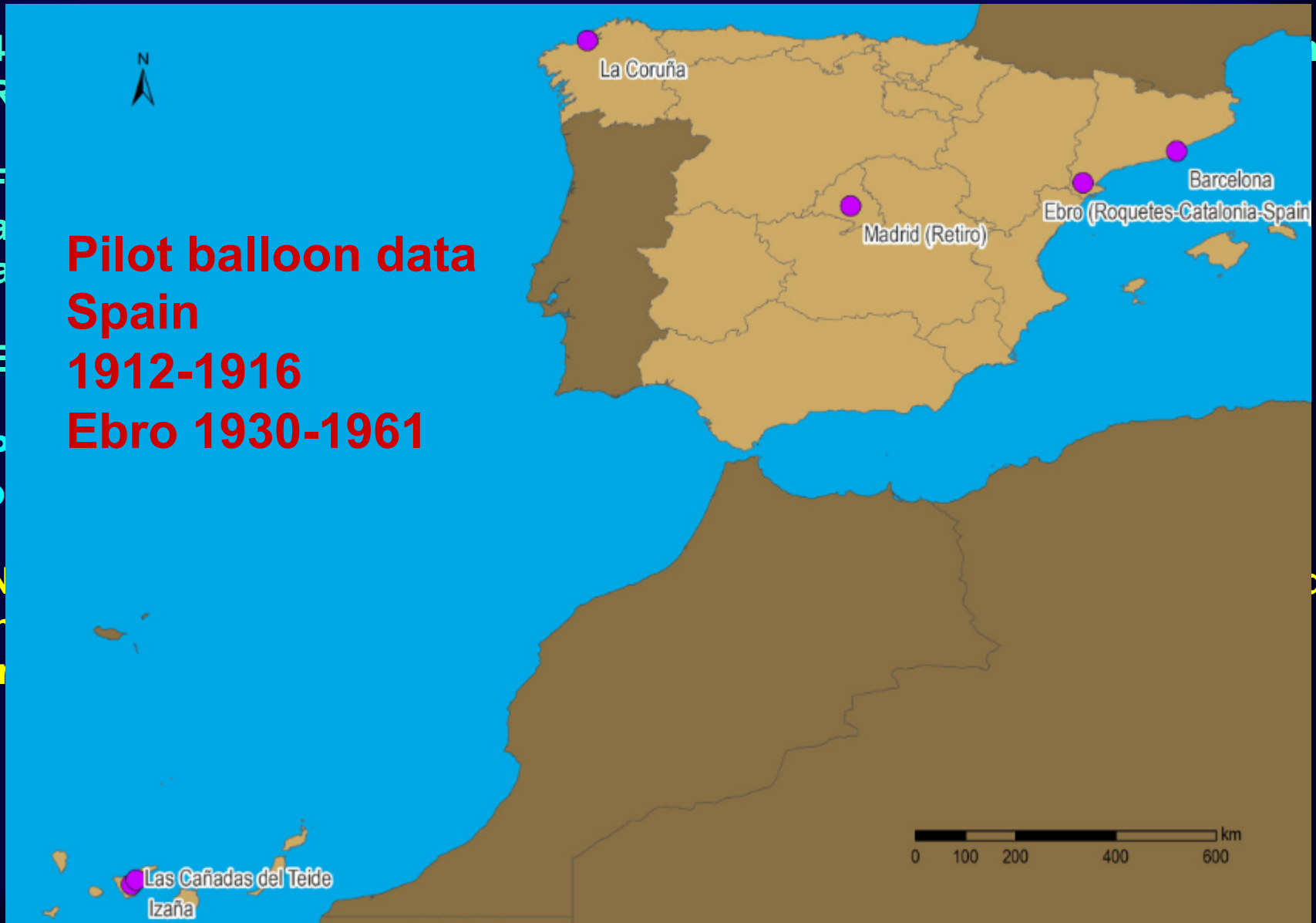
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**Pilot balloon data
Spain
1912-1916
Ebro 1930-1961**



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3 - Recovery of Chilean surface and maritime data

Existing Records

Surface Stations

43 stations

From 1950 to 1958

Records of 41 stations in *.jpg* format from UPAC

From 1959 to 1999

Records of 25 stations in *.xls* format from METEOCHILE (DMC)

Not all stations have data in this period;
Frequently miss some variables like Td, MSL Pressure and Relative Humidity

Frequently miss some variables

Ship Logs

58 ships

From 1861 to 1884

Records of 6 ships with 50 logbooks: 7136 images
From National Maritime Museum of Chile

From 1955 to 1957

Records of 52 ships, 64 logbooks: 10242 images

Inventory completed
Digitisation priority given to 1955 to 1957
Typing

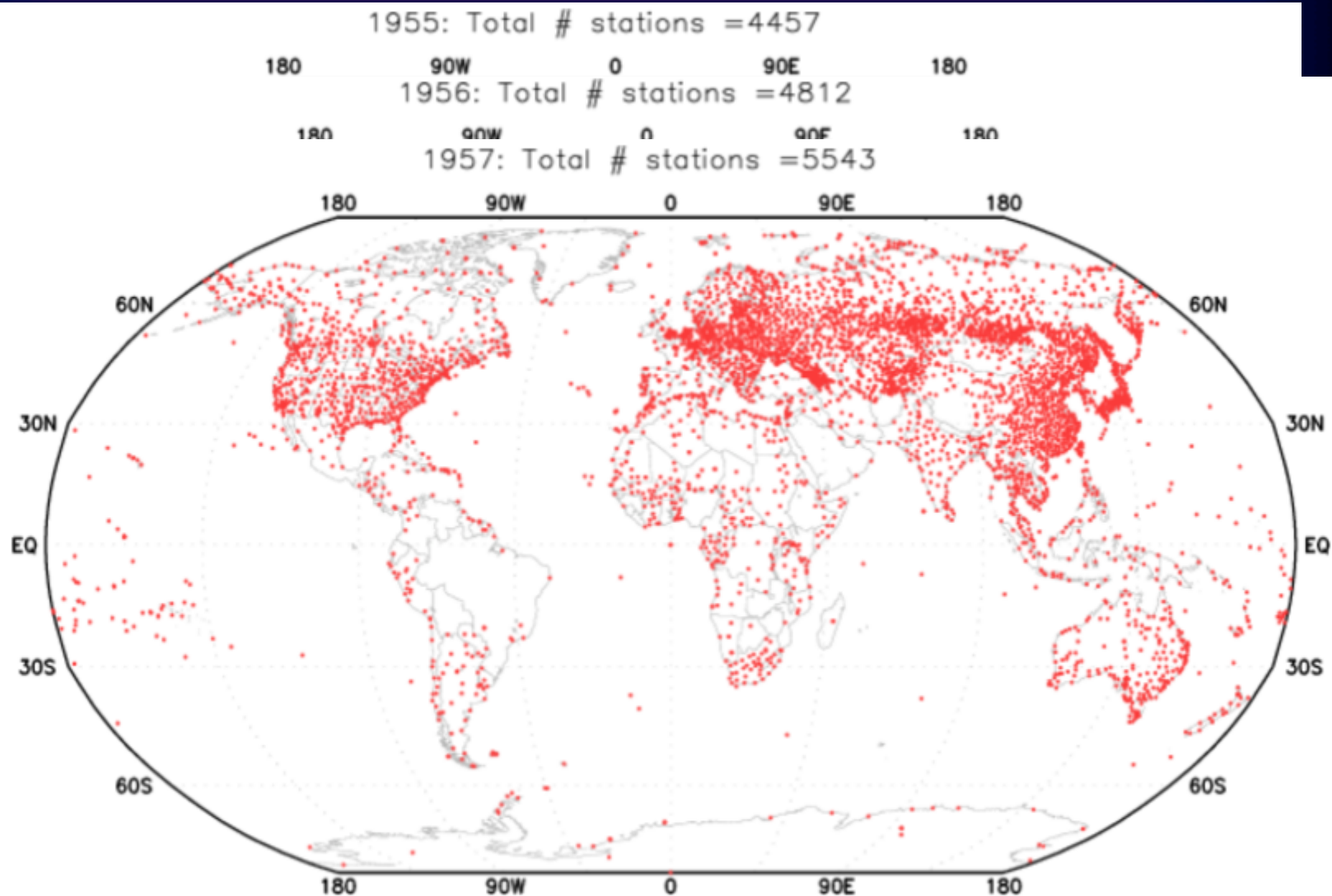
3 - Recovery of Chilean surface data

Digitisation of Surface data 1950-1958 is progressing (55%). 1950 to 1955 completed. 1956,1957 started digitisation - Typing. Priority now to 1956 – year without Chilean data in ISD.

Point of situation - Digitization of surface data from Chile (1950-1958)													
1950	1951	1952	1953	1954	1955	1956	1957	1958	Period				
						Alto Palena	Alto Palena		2 years serie				Digitised
					Ancud	Ancud	Ancud	Ancud	4 years serie				In Progress
						Antofagasta	Antofagasta	Antofagasta	3 years serie				Undigitised
						Arica	Arica	Arica	3 years serie				No data
								Bajo Palena	1 year serie				
						Balmaceda	Balmaceda	Balmaceda	3 years serie				
Belloto	Belloto	Belloto	Belloto	Belloto	Belloto	Belloto	Belloto	Belloto	9 years serie				
						Castro	Castro		3 years serie				
						Chañaral	Chañaral	Chañaral	3 years serie				
						Chile Chico	Chile Chico	Chile Chico	3 years serie				
			Chillán			Chillán	Chillán	Chillán	1+3 years serie				
Colina	Colina	Colina	Colina	Colina	Colina	Colina	Colina	Colina	9 years serie				
			Concepción			Concepción	Concepción		1+3 years serie				
						Copiapó	Copiapó	Copiapó	3 years serie				
						Coyhaique	Coyhaique	Coyhaique	3 years serie				
Cristo Redentor	Cristo Redentor	Cristo Redentor	Cristo Redentor	Cristo Redentor	Cristo Redentor	Cristo Redentor	Cristo Redentor	Cristo Redentor	9 years serie				
Curicó	Curicó	Curicó	Curicó	Curicó	Curicó	Curicó	Curicó	Curicó	2+6 years serie				
						Isla de Pascua	Isla de Pascua	Isla de Pascua	5 years serie				
El Bosque	El Bosque	El Bosque	El Bosque	El Bosque	El Bosque	El Bosque	El Bosque	El Bosque	9 years serie				
						Futaleufu	Futaleufu	Futaleufu	4 years serie				
						Iquique - Cavancha	Iquique - Cavancha	Iquique - Cavancha	4 years serie				
						Iquique - Los Condores	Iquique - Los Condores	Iquique - Los Condores	4 years serie				
			La Serena	La Serena	La Serena	La Serena	La Serena	La Serena	6 years serie				
						Linares	Linares	Linares	3 years serie				
						Loncoche	Loncoche		3 years serie				
			Los Angeles			Los Angeles	Los Angeles	Los Angeles	1+3 years serie				
Los Cerrillos	Los Cerrillos	Los Cerrillos	Los Cerrillos	Los Cerrillos	Los Cerrillos	Los Cerrillos	Los Cerrillos	Los Cerrillos	9 years serie				
						Osorno	Osorno	Osorno	4 years serie				
Ovalle	Ovalle	Ovalle	Ovalle	Ovalle	Ovalle	Ovalle	Ovalle	Ovalle	9 years serie				
						Puerto Aysén	Puerto Aysén	Puerto Aysén	3 years serie				
						Puerto Edén		Puerto Edén	1+1 year serie				
						Puerto Montt	Puerto Montt	Puerto Montt	4 years serie				
						Quellón	Quellón	Quellón	4 years serie				
Quintero	Quintero	Quintero	Quintero	Quintero	Quintero	Quintero	Quintero	Quintero	9 years serie				
Rancagua	Rancagua	Rancagua	Rancagua	Rancagua	Rancagua	Rancagua	Rancagua	Rancagua	9 years serie				
						Río Cisnes	Río Cisnes	Río Cisnes	3 years serie				
			Temuco			Temuco	Temuco	Temuco	1+4 years serie				
				Tobalaba		Tobalaba	Tobalaba	Tobalaba	5 years serie				
				Valdivia		Valdivia	Valdivia	Valdivia	4 years serie				
						Vallenar	Vallenar	Vallenar	3 years serie				
			Victoria			Victoria	Victoria	Victoria	1+4 years serie				
9	9	9	15	12	25	40	39	37	Number of Stations				

3 - Recovery of Chilean surface data

ISPD stations V4 www.reanalysis.org



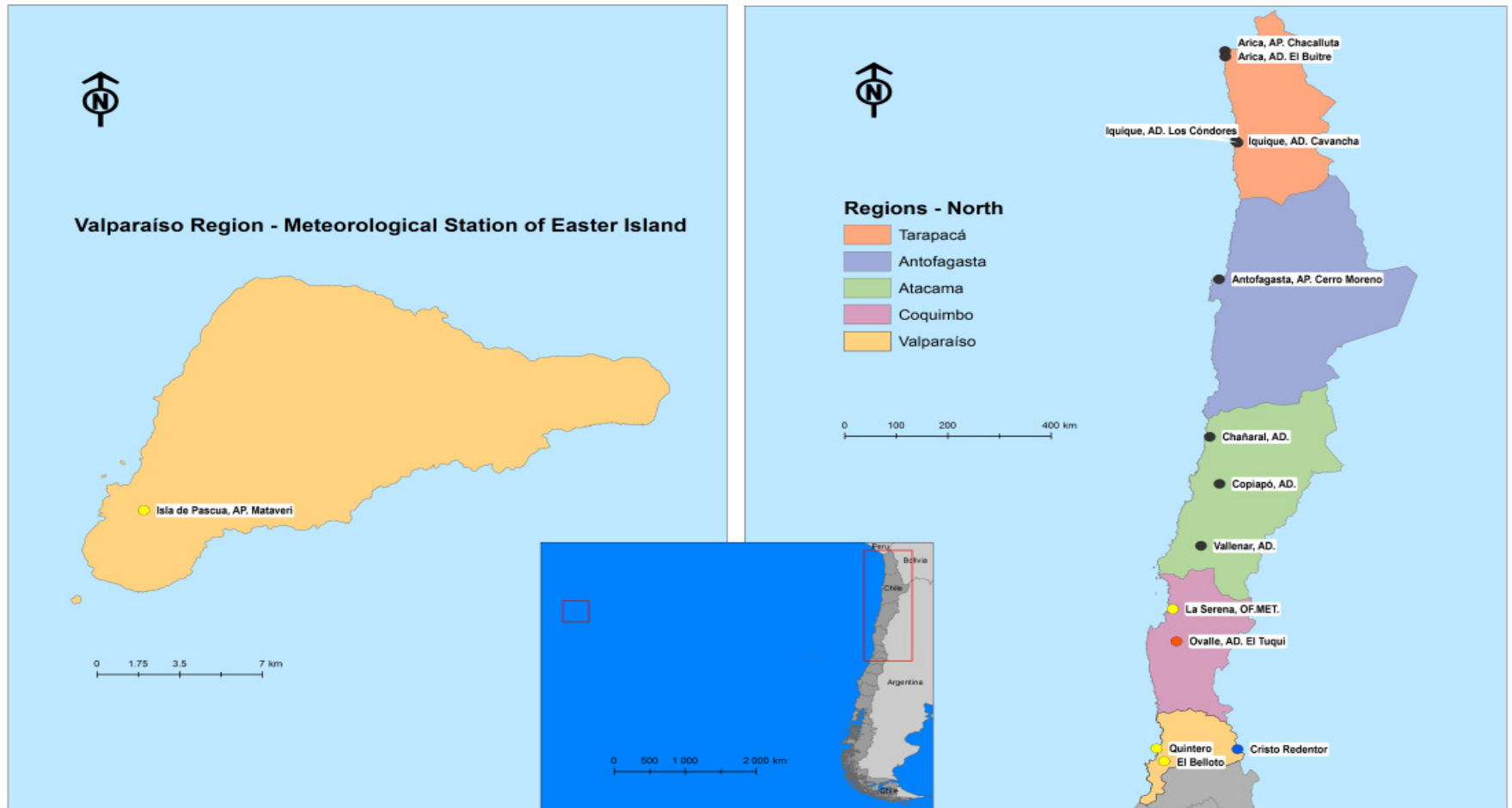
Previous Year | Next Year | (Full Size Plot)

1957

3 - Recovery of Chilean surface data

Easter Island + Northern region

Surface Stations of Chile (1950 - 1958)

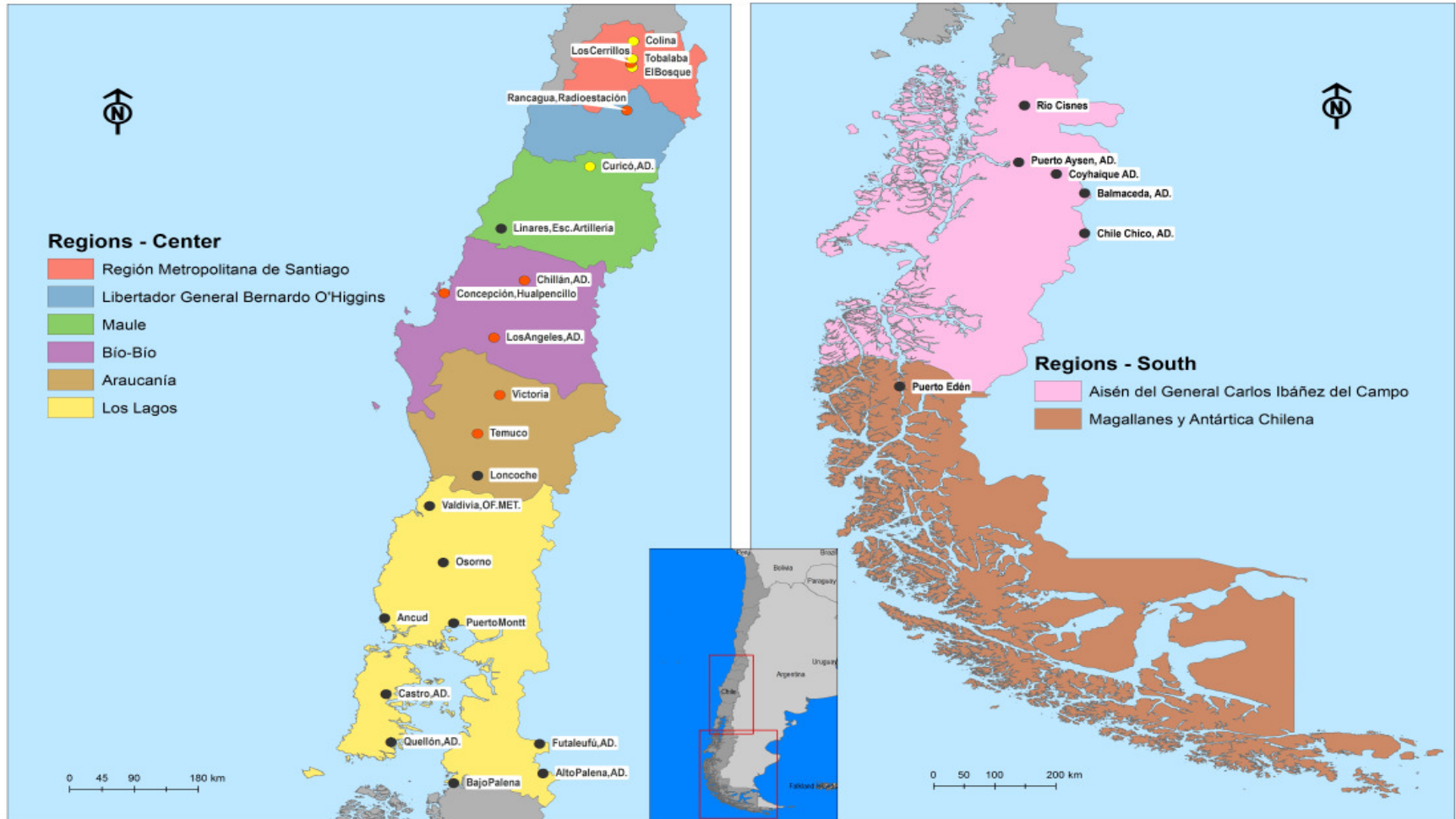


Records from Chilean Air Force (1950 - 1958) concerning 41 surface stations:
- Missing 3 stations to complete digitisation of 1954.
- Digitisation of 1955 and 1956 is already in progress.

3 - Recovery of Chilean surface data

Central and Southern regions

Surface Stations of Chile (1950 - 1958)



The database of ISPD already has data about other stations that cover territories of Chile that aren't covered by the stations represented here, like the Chilean Antarctica and several Pacific Islands.

3 - Recovery of Chilean surface data

Point of situation - Quality Control of surface data from Chile (1950-1958)

1950	1951	1952	1953	1954	1955	1956	1957	1958	Period
						Alto Palena	Alto Palena		2 years serie
					Ancud	Ancud	Ancud	Ancud	4 years serie
						Antofagasta	Antofagasta	Antofagasta	3 years serie
						Arica	Arica	Arica	3 years serie
								Bajo Palena	1 year serie
						Balmaceda	Balmaceda	Balmaceda	3 years serie
Belloto	Belloto	Belloto	Belloto	Belloto	Belloto	Belloto	Belloto	Belloto	9 years serie
						Castro	Castro	Castro	3 years serie
						Chañaral	Chañaral	Chañaral	3 years serie
						Chile Chico	Chile Chico	Chile Chico	3 years serie
			Chillán			Chillán	Chillán	Chillán	1+3 years serie
Colina	Colina	Colina	Colina	Colina	Colina	Colina	Colina	Colina	9 years serie
			Concepción			Concepción	Concepción	Concepción	1+3 years serie
						Copiapó	Copiapó	Copiapó	3 years serie
						Coyhaique	Coyhaique	Coyhaique	3 years serie
Cristo Redentor	Cristo Redentor	Cristo Redentor	Cristo Redentor	Cristo Redentor	Cristo Redentor	Cristo Redentor	Cristo Redentor	Cristo Redentor	9 years serie
Curicó	Curicó	Curicó	Curicó	Curicó	Curicó	Curicó	Curicó	Curicó	2+6 years serie
				Isla de Pascua	Isla de Pascua	Isla de Pascua	Isla de Pascua	Isla de Pascua	5 years serie
El Bosque	El Bosque	El Bosque	El Bosque	El Bosque	El Bosque	El Bosque	El Bosque	El Bosque	9 years serie
						Futaleufu	Futaleufu	Futaleufu	4 years serie
						Iquique - Cavancha	Iquique - Cavancha	Iquique - Cavancha	4 years serie
						Iquique - Los Condores	Iquique - Los Condores	Iquique - Los Condores	4 years serie
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						Linares	Linares	Linares	3 years serie
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Los Cerrillos	Los Cerrillos	Los Cerrillos	Los Cerrillos	Los Cerrillos	Los Cerrillos	Los Cerrillos	Los Cerrillos	Los Cerrillos	9 years serie
					Osorno	Osorno	Osorno	Osorno	4 years serie
Ovalle	Ovalle	Ovalle	Ovalle	Ovalle	Ovalle	Ovalle	Ovalle	Ovalle	9 years serie
						Puerto Aysén	Puerto Aysén	Puerto Aysén	3 years serie
						Puerto Edén		Puerto Edén	1+1 year serie
						Puerto Montt	Puerto Montt	Puerto Montt	4 years serie
						Quellón	Quellón	Quellón	4 years serie
Quintero	Quintero	Quintero	Quintero	Quintero	Quintero	Quintero	Quintero	Quintero	9 years serie
Rancagua	Rancagua	Rancagua	Rancagua	Rancagua	Rancagua	Rancagua	Rancagua	Rancagua	9 years serie
						Rio Cisnes	Rio Cisnes	Rio Cisnes	3 years serie
			Temuco		Temuco	Temuco	Temuco	Temuco	1+4 years serie
				Tobalaba	Tobalaba	Tobalaba	Tobalaba	Tobalaba	5 years serie
					Valdivia	Valdivia	Valdivia	Valdivia	4 years serie
					Vallenar	Vallenar	Vallenar	Vallenar	3 years serie
			Victoria		Victoria	Victoria	Victoria	Victoria	1+4 years serie
9	9	9	15	12	25	40	39	37	Number of Stations

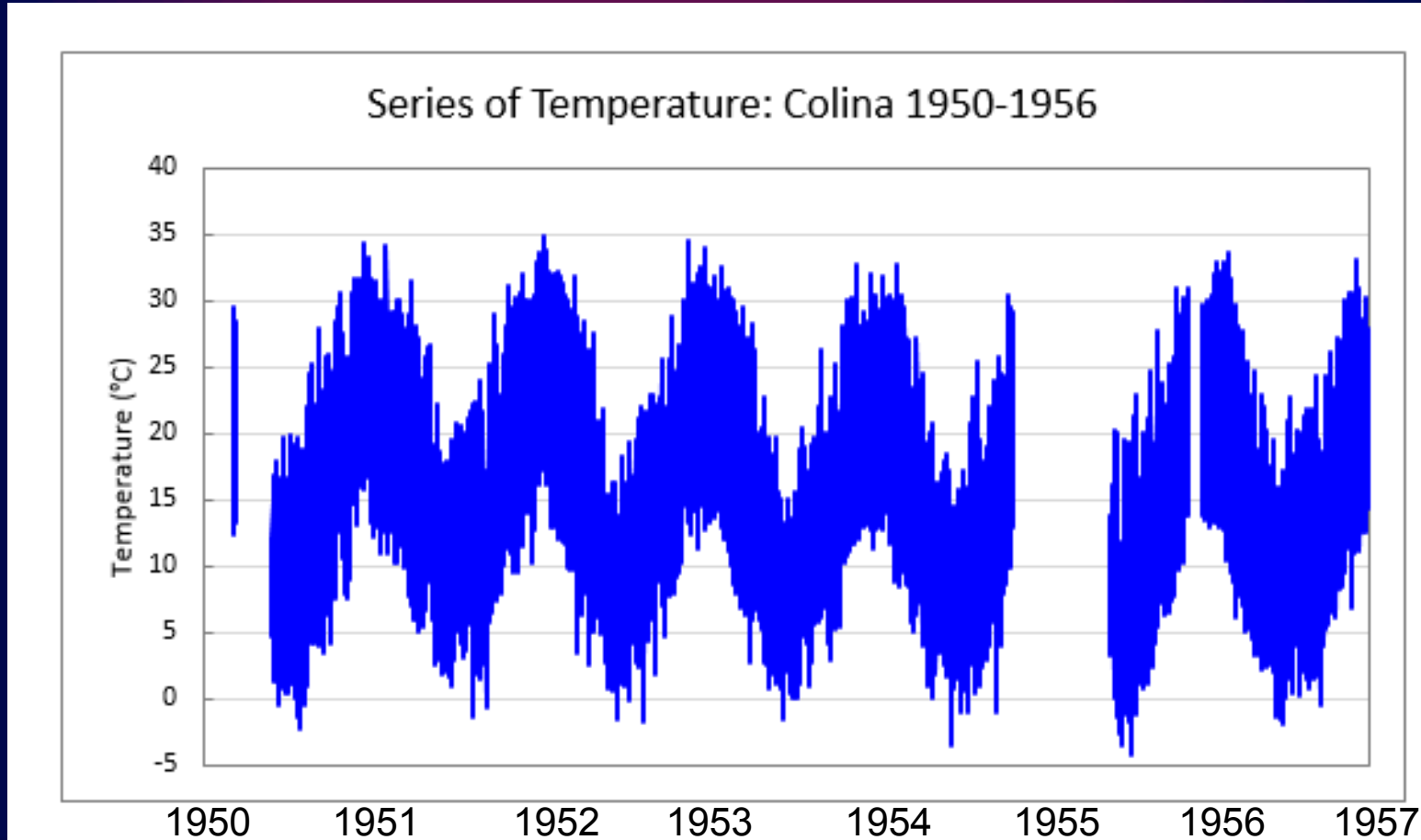
- Missing QC
- Visual QC
- QC1 (After Running Program 1st time)
- QC2 (After Possible Corrections)



3 - Recovery of Chilean surface data

Temperature Colina* 4 times/day 1950-1956

Pressure Data sent to ISPD and to be formatted for ERA-CLIM database



*Colina – Santiago Metropolitan Region – Centre Chile

3 - Recovery of Chilean maritime data

SERIES of 64 SHIP LOGS: 1955 - 1957

Voyage of the military ship
(15-Aug-1955 to 2-Mar-1956)



En LA MAR O De B^a MARGARITA a I. DE CEPCION 07/Feb/1956
Singladura N.^o 2

Tiempo de permanencia

Hora	Rumbo verdadero	Rumbo del giroscopio	Error del giroscopio	Rumbo efectivo magnético	Rumbo efectivo magnético en el día	Desvío del M. general	Variación magnética	Millas que indica la correrada		Velocidad horaria	Fuerza	Dirección verdadera	Fuerza	M. A. R.	NUBES	Presión atmosférica	Temp. ambiente	Temp. superficial	Temp. en altura	Humedad relativa
								B	E											
01	89D	85D	0	/	81.9	0	+21	305.9	180	11.8	W	NNW	4	NONE	U. V. E.	744	1°	1°		
02	85D	81D	0	/	81.9	0	+21	430.6	180	11.3	W	NNW	3	NONE	U. B.	744	1°	1°		

Ship and Route: *Lientur* - From Bahía Margarita to Isla Decepción (Antarctica)

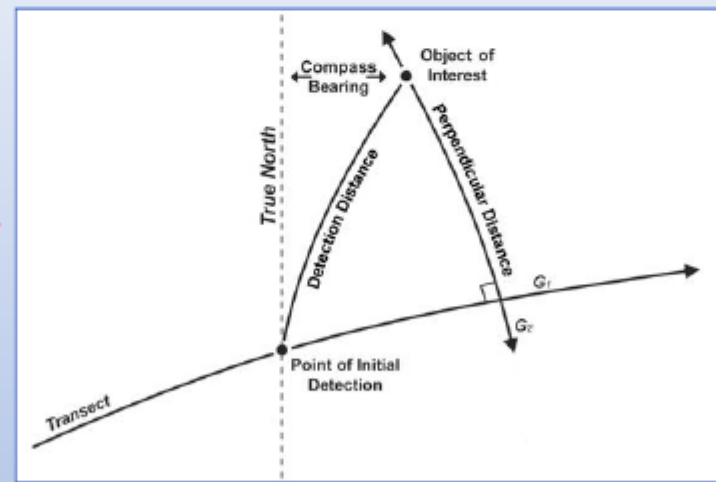
Day: 7th February 1956

Records/Variables: Hours, Ship Directions, Ship Velocities, Wind Direction, Wind Intensity [Beaufort scale], Cloud Cover [type and oktas], Atmospheric Pressure [mbar], Air Temperature [°] and Wet Bulb Temperature [°].

Missing records: Sea Surface Temperature, Adjunct Thermometer Temperature and Relative Humidity.

Records to calculate ships positions:

We have the Direction of the ship relative to True North or Compass Bearing [°] (*Rumbo verdadero*) and the Distance Sailed [nautical miles] (*Millas que indica la correrada .B / E.*), per hour. In a simplified way, with those records and the coordinates of the last port where the ship stayed (initial point), it is possible to estimate successive displacements and positions.



➤ 1° of latitude = 60' ~ 60 nautical miles = 60 × 1852 = 111,12 m

4 - QC tests for surface data

CHECK 1: Gross Error Limit (GEL) – detecting outliers

A set of checks was applied to surface pressure, mslp, wind speed and direction, temperature, cloud cover, relative humidity and precipitation.

Flags used do codify the observations:

- 0 – Correct
- 1 – Erroneous
- 9 – Suspect
- M – Missing QC

MSLPRESSURE : (units=hPa)

A suspected error was flagged when
 $p \leq 870.0$ or $p \geq 1100.0$

TEMPERATURE (T)

Values were considered correct when
 $T \geq -50^{\circ}\text{C}$ and $T \leq 50^{\circ}\text{C}$
outside this interval, they are considered suspect
until more checks are applied

RELATIVE HUMIDITY (RH)

Values are considered correct if
 $\text{RH} > 0\%$ and $\text{RH} \leq 100\%$
If
 $\text{RH} > 100\%$ the value is reset to $\text{RH} = 100\%$???

WIND DIRECTION (dd) and FORCE (ff)

The values were considered correct when

$$dd \geq 0^{\circ} \text{ and } dd \leq 360^{\circ}$$

$$ff \leq 100 \text{ (ms}^{-1}\text{)} = 360 \text{ (km/h)}$$

and the values were flagged as wrong when

$$dd < 0^{\circ} \text{ and } dd > 360^{\circ}$$

$$ff < 0 \text{ (ms}^{-1}\text{)} = 0 \text{ (km/h)}$$

an ff value above 100 ms^{-1} earned a suspicious value flag.

PRECIPITATION (RRR)

If $\text{RRR} < 0$ value is incorrect

$\text{RRR} \geq 0$ value is correct

Threshold for maximum?

CLOUD COVER (N)

Values are considered correct when

$N \geq 0$ and $N \leq 8$ if cloud cover is in oktas

$N=9$ clouds are not visible, ex. in the case of fog

Or $N \geq 0$ and $N \leq 10$ if cloud cover is in tenths

4 - QC tests for surface data

CHECK 3: Internal Consistency (IC)

Internal consistency was checked simultaneously on wind speed and direction; Tmax, Tmin, T and Tdew; precipitation (RRR) and number of hours of precipitation (RRRhr); and on T, Tdew and RH.

1. WIND (dd and ff)

Error (flag=1) if:

- 1) $dd = 0^\circ$ and $ff \neq 0 \text{ ms}^{-1}$
- 2) $dd \neq 0^\circ$ and $ff = 0 \text{ ms}^{-1}$
- 3) $dd = -99.9$ and $ff = 0$ or $ff \leq 5 \text{ ms}^{-1}$

with $dd = -99.9$ being the default value

2. TEMPERATURES (T, Tmax, Tmin, Tdew)

Error (flag=1) if: $T_{\max} < T$ or $T < T_{\min}$
or $T_{\max} < T_{\min}$

Suspicious (flag=9) if $T_{\text{dew}} > T$

3. PRECIPITATION (RRR) AND NUMBER OF PRECIPITATION HOURS (RRRhr)

In case both precipitation and number of hours of precipitation exist:

Error (flag=1) or Suspect (flag=9) if:
 $RRR \neq 0 \text{ mm}$ and $RRRhr = 0 \text{ hours}$ (and vice-versa)

4. SURFACE TEMPERATURE (T), DEW POINT (TDEW) AND RELATIVE HUMIDITY (RH)

Suspicious (flag=9) if

$T = T_{\text{dew}}$ and $RH \neq 100\%$

$T \neq T_{\text{dew}}$ and $RH = 100\%$

$T - T_{\text{dew}} < 0.6^\circ\text{C}$ and $RH < 90\%$

4 - QC tests for surface data

CHECK 4: Time Consistency (TC)

Time consistency checks were implemented for temperatures and pressure.

1. TEMPERATURES T and Tdew

The difference between values separated by a time dt are considered suspicious (flag=9) if

$$|T(t) - T(t-dt)| > Ttol(dt) \quad (1)$$

$$|Tdew(t) - Tdew(t-dt)| > Tdewtol(dt) \quad (2)$$

where Ttol(dt) and Tdewtol(dt) are given by

Parameters	dt				
	1h	2h	3h	6h	12h
Ttol (°C)	4	7	9	15	25
Tdewtol (°C)	4	6	8	12	20
ppptol (hPa)	3	6	9	18	36

2. Pressure Trend (ppp) and Pressure (P)

Pressure trends are considered suspicious (flag=9), with ppptol(dt) given by the previous table if

$$|ppp(t) - ppp(t-dt)| > ppptol(dt)$$

Dtol (hPa)	For mslp (mean sea level)	For station level pressure
a)	1.5	0.5
b)	2.5	1.5

Moreover pressure values are suspicious (flag=9) if:

- $|p(t) - p(t-dt) - ppp(t)| > Dtol$ (for dt = 3h)

- $|p(t) - p(t-dt) - 0.5*ppp(t-dt) - 1.5*ppp(t)| > Dtol$ (for dt = 6h)

5 – ERA-CLIM2 Global Registry

Development of a global registry (Metadata-base) that can list sources of historical meteorological observations useful for Reanalyses, including surface, upper air, maritime and other relevant data

Contains the ERA-CLIM2 inventories with detailed metadata

FFCUL produced a source code in html, php and JavaScript, using the dhtmlxGrid package (ideal for **editable tables** in websites). Much of the previous ERA-CLIM Metadata-base information was retained and the inventories were uploaded and adapted to the new software.

The metadatabase has recently been transferred to SQL to include large inventories such as ISPD (version 4 at the moment).

Access is through user/password **anonymous/anonymous**

It's a searchable and plotable database

eraclim-global-registry.fc.ul.pt/era/index.html the new prototype ERA-CLIM2 metadatabase tool

login

Sign Up Login



Surface Data



Upper Air Data



Moving Upper Air Data



Maritime Data

European Reanalysis of Global Climate Observations 2 - ERACLIM2

Global Inventory of Historical Climate Data

This website holds the archive for the inventory of historically-sourced data from meteorological surface-station observations, upper-air observations and from maritime sources for the ERA-CLIM2 project. The purpose of this website is twofold:

1. To enable researchers who are actively digitising historical weather records to update the online inventory with their progress. The database is instantly backed up, and multiple authors may edit it. As such, the inventory provides a global overview of data to be rescued/imaged and digitised.
2. To allow anyone with an interest in the raw and/or homogenised data to be able to use this inventory to analyse the source of historical climate data sources, and find the link/contact source for the data.

Data Submission Guidelines

Applications

Previous tables in dhtmlxGrid with surface inventory



ws	dir	ps	pst	sat	grass	so	hur	hus	dew	wet	clouc	su	pr	Comment	Level 0	Level 1	Level 2	Level 3	Level 4	Level 5	Link
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<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	gap for the 1969-1970 years	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	gap for the 1969-1970 years	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

11	IDL	66390	Sa da Bandeira	Anoala	13.5	-14.88	1826	01/01/1953	31/12/1974	3	6940	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>						
5	IDL	9999	Lobito	Angola	13.33	-12.37	1	01/01/1953	31/12/1974	3	6940	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	gap for the 1969-1970 years	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6	IDL	66160	Luanda	Angola	13.22	-8.81	42	01/01/1947	31/12/1974	3	9131	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	gap for the 1969-1970 years	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7	IDL	9999	Malange	Angola	16.37	-9.33	1193	01/01/1953	31/12/1974	3	6940	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	gap for the 1969-1970 years	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8	IDL	66407	Mavinga	Angola	20.35	-15.83	1188	01/01/1953	31/12/1974	3	6940	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	gap for the 1969-1970 years	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9	IDL	66422	Mossamedes	Angola	12.15	-15.2	3	01/01/1953	31/12/1974	3	6940	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	gap for the 1969-1970 years	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10	IDL	66318	Nova Lisboa	Angola	15.75	-12.8	1200	01/01/1953	31/12/1974	3	6940	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	gap for the 1969-1970 years	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11	IDL	66390	Sa da Bandeira	Angola	13.5	-14.88	1826	01/01/1953	31/12/1974	3	6940	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	gap for the 1969-1970 years	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

phpMyAdmin is the tool used for building the SQL database, very flexible, allows for insertion of columns

The screenshot shows the phpMyAdmin interface for a local database named 'era_clim_db'. The left sidebar displays a tree view of databases, including 'era_clim_db' with sub-items 'maritime', 'movupairsta', 'surface', 'upairsta', and 'user_id'. The main panel shows the 'Structure' tab for the 'era_clim_db' database, listing five tables: 'maritime', 'movupairsta', 'surface', 'upairsta', and 'user_id'. Each table row includes icons for actions like Browse, Structure, Search, Insert, Empty, and Drop, along with columns for Rows, Type, Collation, Size, and Overhead. Below the table list, there are controls for 'Check all' and 'With selected:'. A 'Create table' button is visible, followed by input fields for 'Name:' and 'Number of columns:' (set to 4). The bottom of the interface shows a 'Console' tab.

Table	Action	Rows	Type	Collation	Size	Overhead
<input type="checkbox"/> maritime	★ Browse Structure Search Insert Empty Drop	114	MyISAM	utf8_unicode_ci	26.9 KiB	-
<input type="checkbox"/> movupairsta	★ Browse Structure Search Insert Empty Drop	101	MyISAM	utf8_unicode_ci	34.5 KiB	-
<input type="checkbox"/> surface	★ Browse Structure Search Insert Empty Drop	84,020	MyISAM	utf8_unicode_ci	13.6 MiB	-
<input type="checkbox"/> upairsta	★ Browse Structure Search Insert Empty Drop	1,764	MyISAM	utf8_unicode_ci	605.7 KiB	-
<input type="checkbox"/> user_id	★ Browse Structure Search Insert Empty Drop	1	MyISAM	utf8_unicode_ci	2.1 KiB	-
5 tables	Sum	86,000	MyISAM	utf8_unicode_ci	14.3 MiB	0 B

ERA-CLIM Metadata-Base (surface stations)



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Date	Time	Estimated Station	Level														Comments	Data											
			Start	End	Resolution	Days	WS	DIR	Ps	Pst	saT	grT	soT	rH	sH	Dew		Wet	CI	Sun	Prec	0	1	2	3	4	5	Link	Position
01/01/1902	31/12/1952	5	18628	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
01/01/1864	31/12/2007	12	52596	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
01/01/1953	31/12/1974	3	6940	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
01/01/1953	31/12/1974	3	6940	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
01/01/1947	31/12/1974	3	9131	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
01/01/1953	31/12/1974	3	6940	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
01/01/1953	31/12/1974	3	6940	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

Clicking at the end of each row of each station will show a map with the station's location (e.g. Wien- Schwechat Airport, where pressure data has been found in ISPD for 1888-2013)

48.12N 16.57E

48°07'12.0"N 16°34'12.0"E
48.120000, 16.570000

Direções

GUARDAR PRÓXIMO ENVIAR PARA O SEU TELEMÓVEL PARTILHAR

Adicionar um local em falta

FLUGHAFEN WIEN-SCHWECHAT

Flughafen Wien

KATHARINENHOF

Dados do mapa ©2017 GeoBasis-DE/BKG (©2009), Google maps.google.at Enviar comentários

Google

Termos de Utilização

2000 pés

It is also possible to plot the Surface stations on Google Earth

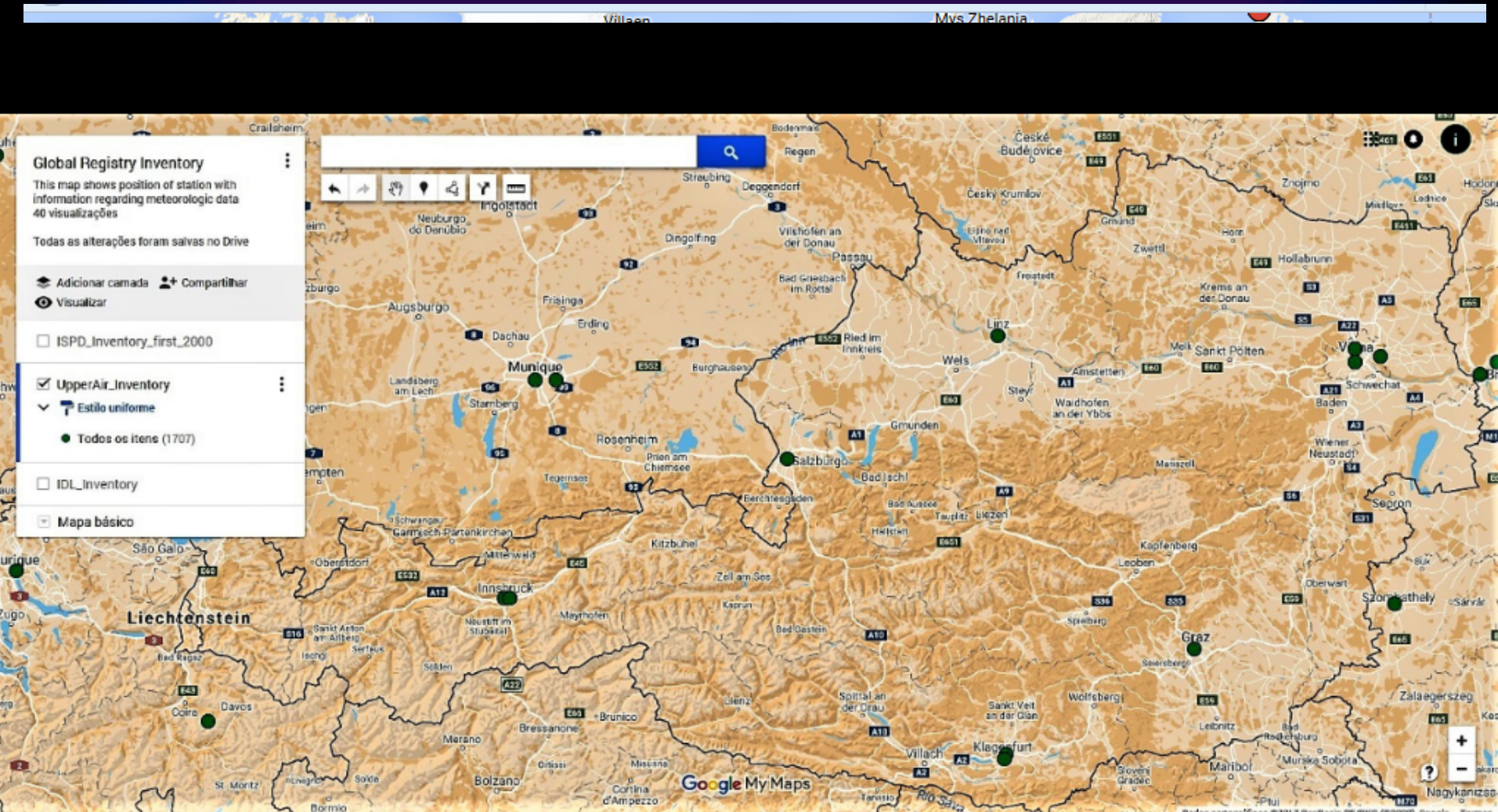
Searching for Wien- Schwechat Airport, pressure data has been found in ISPD for 1888-2013)

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7	ID		Original Arqive	Name	Country	Longitude	Latitude	Altitude	Date		Time Resolution	Estimated Station Days	WS	DIR
	Eraclim	Provider Station							Start	End				
<input type="checkbox"/>	233	5901-11036	ISPD	WIEN/SCHWECHAT-FLUG	Austria	48.12	16.57	190	01/04/1888	31/05/1975	-9999	-9999	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	234	5904-11036	ISPD	WIEN/SCHWECHAT-FLUG	Austria	48.12	16.57	190	10/01/1999	10/01/1999	-9999	-9999	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	8594	110360-99999	ISPD	WIEN/SCHWECHAT-FLUG	Austria	48.12	16.57	193	24/01/1957	13/01/1969	-9999	-9999	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	8595	110360-99999	ISPD	WIEN/SCHWECHAT-FLUG	Austria	48.12	16.55	183	24/02/1973	24/02/1973	-9999	-9999	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	8596	110360-99999	ISPD	WIEN/SCHWECHAT-FLUG	Austria	48.12	16.57	183	26/01/1981	31/12/2013	-9999	-9999	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	8597	110360-99999	ISPD	WIEN/SCHWECHAT-FLUG	Austria	48.12	16.57	190	04/04/1998	04/12/2013	-9999	-9999	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	8598	110360-99999	ISPD	WIEN/SCHWECHAT-FLUG	Austria	48.11	16.56	190	21/08/2001	14/03/2002	-9999	-9999	<input type="checkbox"/>	<input type="checkbox"/>

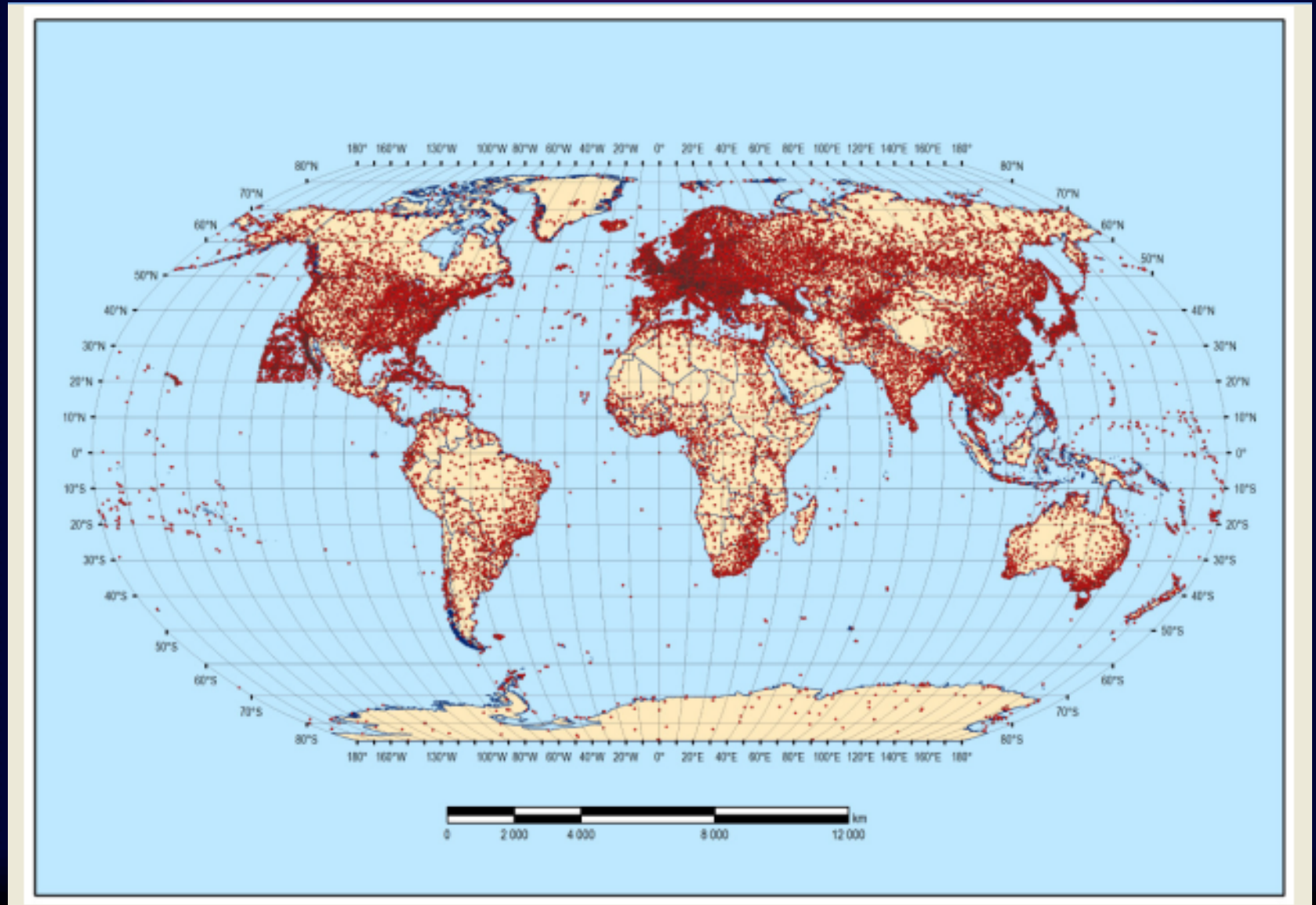
**Crossed searches were possible in the old dhtmlxGrids registry format
We are implementing them in the new SQL database**

Upper air data being rescued, digitised and formatted in ERA-CLIM and ERA-CLIM2 by all partners



All stations included in ISPD version4

We have received their inventory, and have attributed a country to every point (metadata QC tool for lat,lon), so that the listing by country can be performed



Some mistakes of stations location found in the ISPD inventory:

Same name, but different country due to wrong latitude or longitude:

Lon=0° ; lack of minus (-) sign in long; number missing on lat or lon; decimal point mistake

Errors detected so far come from ISD stations, correction leads to including previously rejected data

-98.0500	29.7100	United States	29.71	261.95	NEW BRAUNFELS MUNI	41515	
0.0000	29.7100	Algeria	29.71	0	NEW BRAUNFELS MUNI	41516	Wrong Zero longitude!
-98.0400	29.7100	United States	29.71	261.96	NEW BRAUNFELS MUNI	41517	
-94.7500	31.2400	United States	31.24	265.25	ANGELINA CO	41582	
0.0000	31.2400	Algeria	31.24	0	ANGELINA CO	41583	Wrong Zero longitude!
-94.7500	31.2300	United States	31.23	265.25	ANGELINA CO	41584	
-94.7100	32.3900	United States	32.39	265.29	LONGVIEW	41613	
0.0000	32.3800	Algeria	32.38	0	LONGVIEW	41614	Wrong Zero longitude!
-94.7100	32.3800	United States	32.38	265.29	LONGVIEW	41615	
-97.4300	32.7700	United States	32.77	262.57	FORT WORTH NAS JRB	41916	
-97.4300	2.7700	North Pacific O	2.77	262.57	FORT WORTH NAS	41917	wrong latitude, should be 32.7
-97.4300	32.7800	United States	32.78	262.57	FORT WORTH NAS	41918	
97.0300	32.9000	China	32.9	97.03	DALLAS/ADDISON ARPT	41937	wrong longitude conversion
-96.8300	32.9700	United States	32.97	263.17	DALLAS/ADDISON ARPT	41938	
-96.8700	32.6800	United States	32.68	263.13	DALLAS/REDBIRD ARPT	41939	
-108.5300	39.1200	United States	39.12	251.47	GRAND JUNCTION/WALK	44807	
-10.8500	39.1300	Portugal	39.13	349.15	GRAND JUNCTION/WALK	44808	wrong longitude decimal point in the wrong pl

After finding a USA station in Portugal my fellowshipper was incapable to continue the visual search

should be lon=251.5

ERA-CLIM2 Global Registry

Things to do now – update with latest DARE activities in ERA-CLIM2 by the different partners

Include snow/ice inventories from FMI, RIHMI

Re-Activate crossed searches

Improve interactivity by registered users

We are after the possibility of having the registry portal included in the Climate Change **COPERNICUS** services C3S

Hiring IT personnel for writing code and managing the portal in order to improve quality to state-of-the-art tool.

Visualisation of inventories and plots needs to be improved.

Include in the registry other inventories (ACRE, I-DARE, ISTI, ICA&A, IGRA, MEDARE, UERRA, IEDRO, RECLAIM, updated ISPD, etc.) to add to the existing ones