





Progress on digitising Portuguese and Chilean surface data plus Spanish pilot balloon data

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WP3 – Earth Systems Observations

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

✓ D3.1 Data catalogue	Month 6
✓ D3.2 Priorities for data rescue	Month 6
D3.3 Metadatabase update (new)	Month 36 (48)
D3.4 In-situ data for reanalysis	Month 24 (36)
D3.5 In-situ data (other)	Month 30 (42)
D3.6 Quality controled version of D3.4	Month 36 (48)
D3.7 Quality controled version of D3.5	Month 33 (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 ERA-CLIM2 Global Registry

- 1 Data rescue of Portuguese former colonies Angola, Mozambique and Macao sub-daily surface data; Continental Portugal and Isles + South China Sea
- 2M station days have been imaged (100%), 95% digitised, of which 37% are still in raw format, missing QC and final formatting – Total for ERA-CLIM and ERA-CLIM2
- Angola Anuários (10 stations) 1937 -1974 already imaged and digitised for 1947-1974 (missing QC and final formatting)
- Mozambique Anuários (9 stations) 1909-1960 imaged; 1909-1914 is digitised and 1947-1960 is being digitised – OCR raw format
- Macao (South China Sea Rob Allan METO collaboration) 1894-1914 temperature, wind and relative humidity - Completed (typing) awaiting QC and final formatting
- All Portuguese ex-colonies 1915-1947 supplied to project and ISPD; Portugal and Isles (1863-1946) digitised, and partly supplied. South China Sea (1900-1935) formatted and supplied.

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



3 - Recovery of Chilean surface and maritime data

Existing Records

Surface Stations
43 stations

Ship Logs
58 ships

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)

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

Not all stations have data in this period;

Frequently miss some variables like Td, MSL Pressure and Relative Humidity Frequently miss some variables

Inventory completed

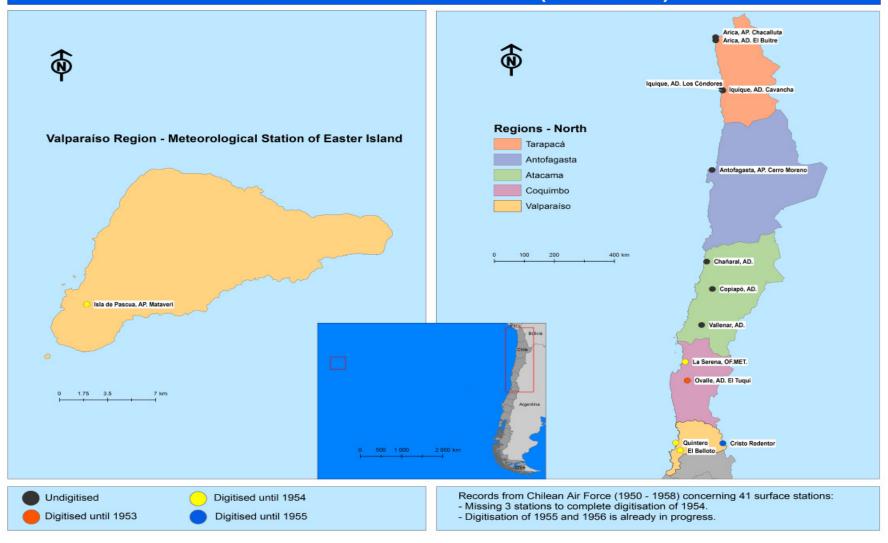
Digitisation priority given to 1955 to 1957
Typing

Digitisation of Surface data 1950-1958 is progressing. 1950 to 1953 completed. 1954 almost finished, 1955 started digitisation - Typing. Priority to longer records.

Point of situation - Digitization of surface data from Chile (1950-1958) 1950 1951 1952 1953 1954 1955 1956 1957 1958 Period Altar Palma Andrea Marcel Ancel Ancel Ancel Ancel In Progress Undigitized In Progress Undigitized No data Anter surva Ant												
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Easter Island + Northern region

Surface Stations of Chile (1950 - 1958)

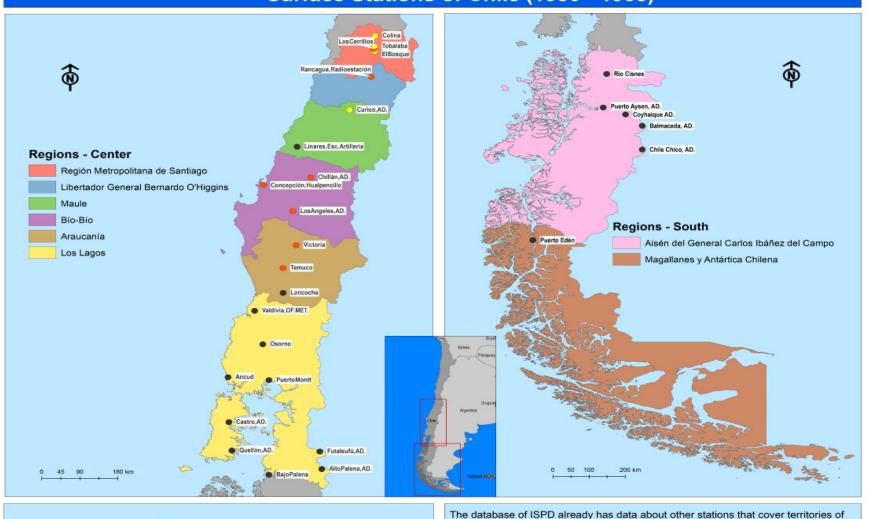


Undigitised

Digitised until 1953

Central and Southern regions

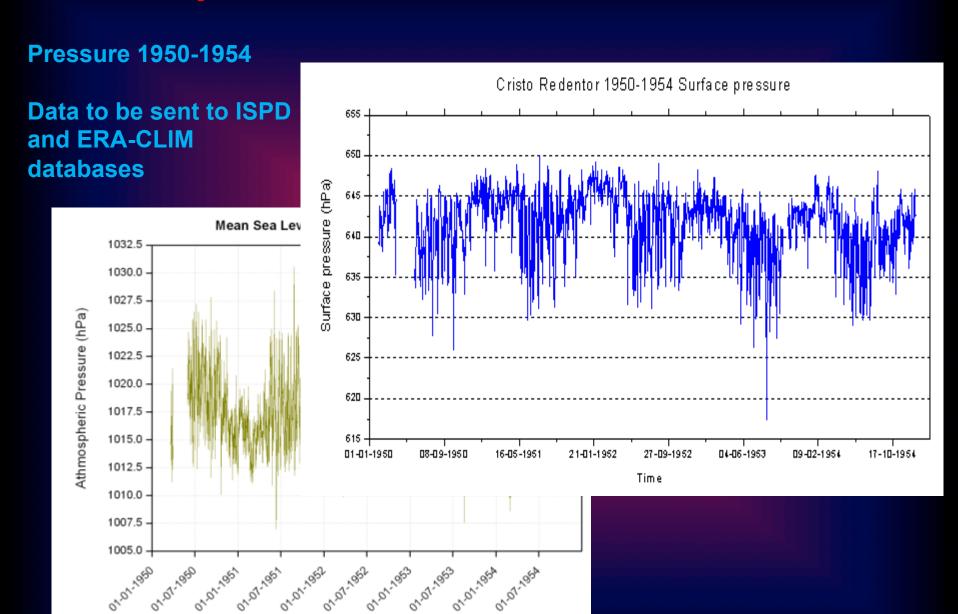
Surface Stations of Chile (1950 - 1958)



and several Pacific Islands.

Digitised until 1954

Chile that aren't covered by the stations represented here, like the Chilean Antarctica



Quality Control and Metadata verification Common errors encountered in the records

Maximum Temperature < Air Temperature Dew Point Temperature > Air Temperature

Different values for Td and T in the repetition columns

T = Td and Relative Humidity < 100%

Very high or low values for MSL Pressure - outliers

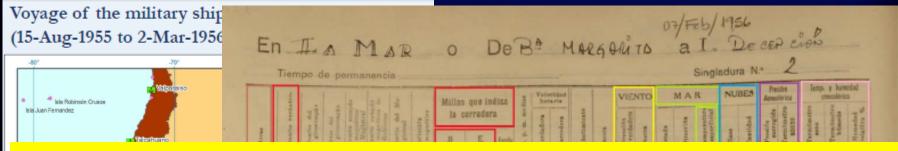
Coded values are useful for determining or confirming observed values

Lack of written observed values when coded values are present

Discrepancies between observations and coded values, observed values are chosen

3 - Recovery of Chilean maritime data

SERIES of 64 SHIP LOGS: 1955 - 1957

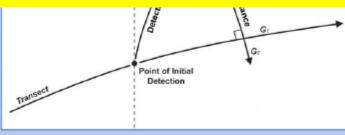


All FFCUL Chilean data rescue work for ERA-CLIM2 has been presented at ICSHMO2015 and ACRE2015 in Santiago de Chile October 2015

Contact was made with DMC (MeteoChile) and several metadata aspects were discussed



que indica la corredera .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.



Surface data being rescued, digitised and formatted by FFCUL in ERA-CLIM and ERA-CLIM2



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

