THE INTERNATIONAL SURFACE PRESSURE DATABANK VERSION 4: Data Access and User Services

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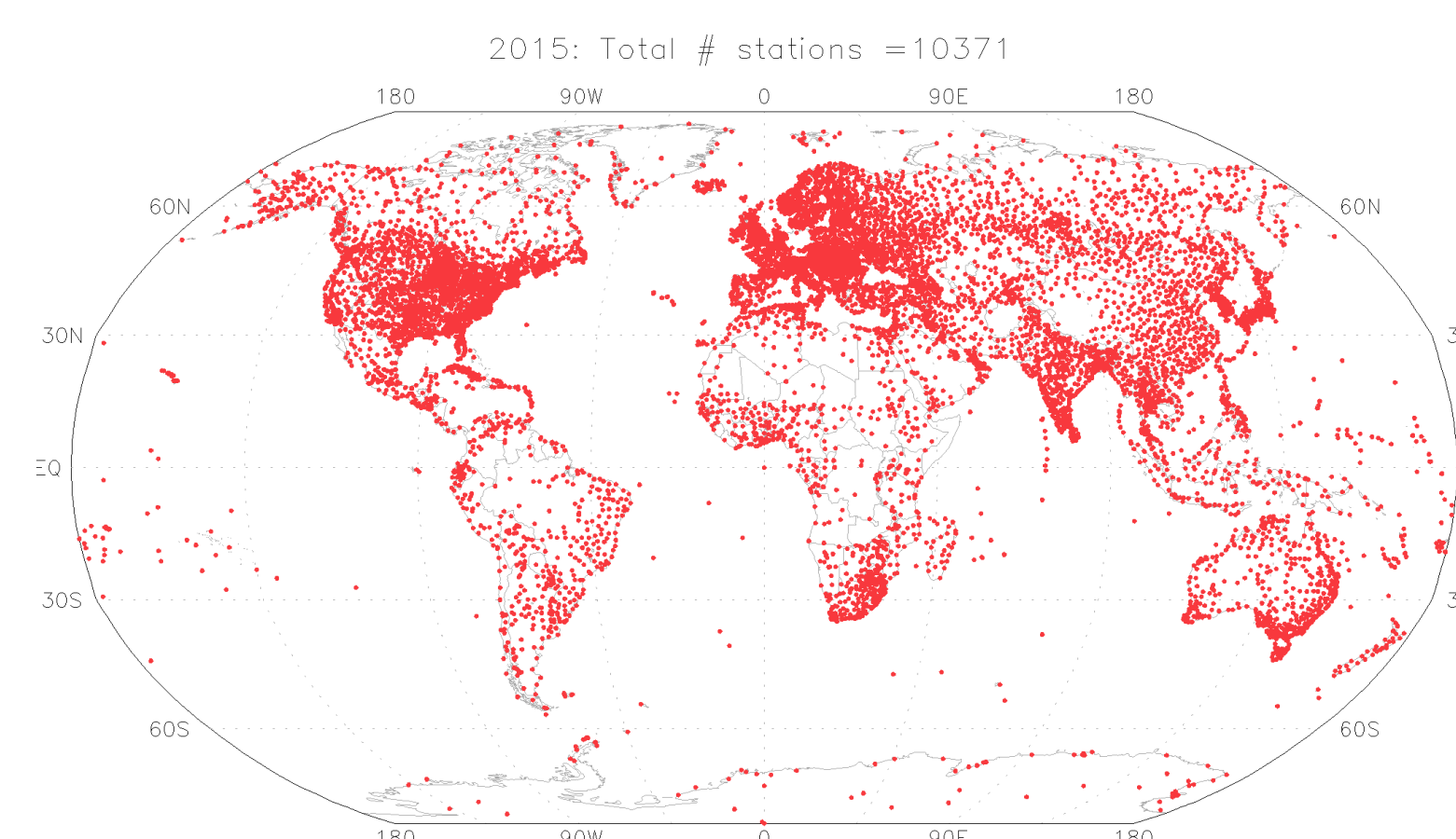[1]National Center for Atmospheric Research, [2]CIRES/University of Colorado and NOAA/ESRL/PSD

BACKGROUND

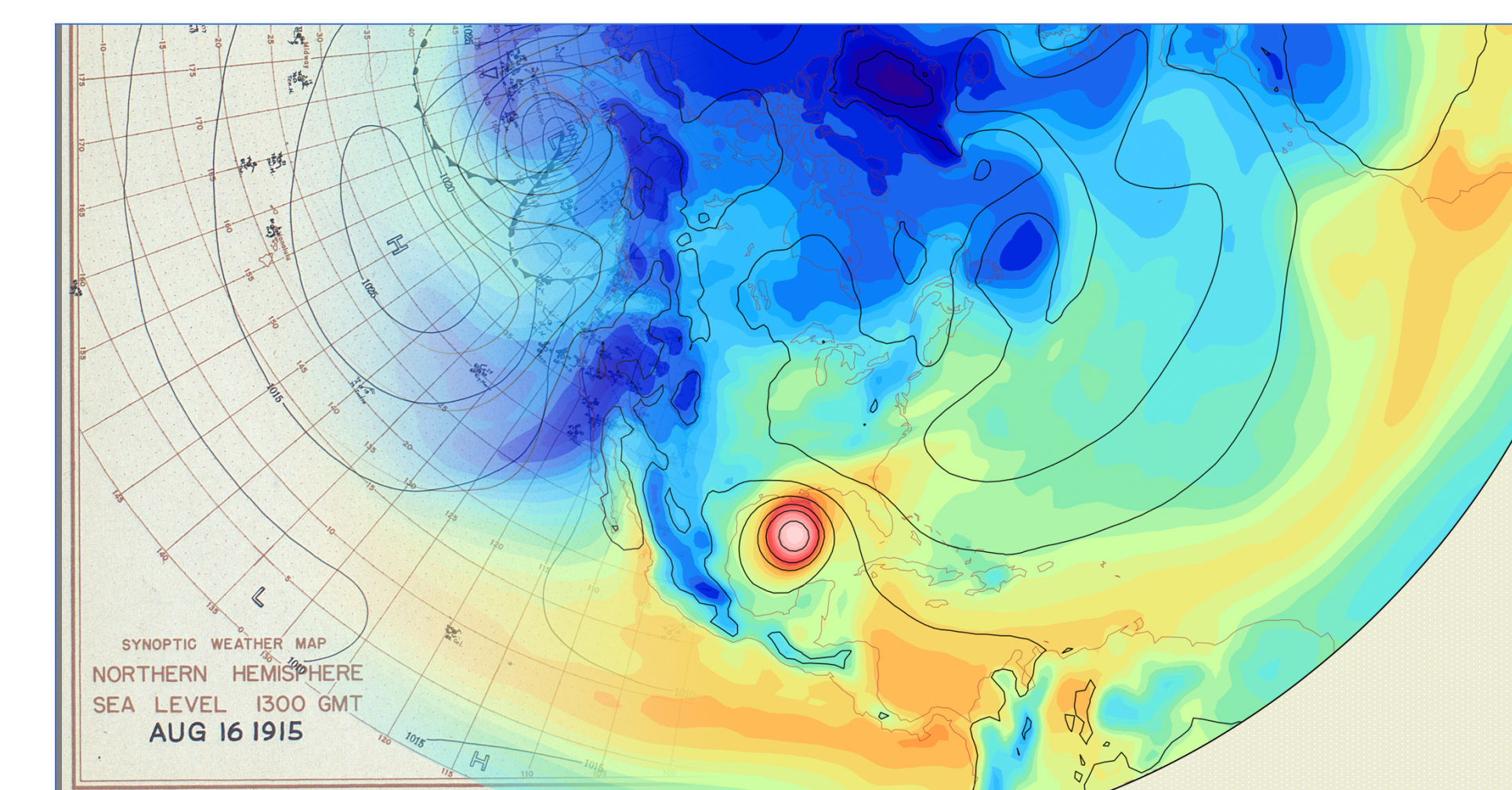### Over 200 years of historical pressure observations

The International Surface Pressure Databank (ISPD) is the world's largest collection of pressure observations. It is gathered through international cooperation with data recovery facilitated by the ACRE initiative and other contributing organizations. Version 4 of the ISPD has been released and is available from the Research Data Archive (RDA; *rda.ucar.edu*) at the National Center for Atmospheric Research (NCAR).

OVERVIEW

2015: Total # stations =10371

- Data period: 1806–2015
- Station observations from national & international collections (e.g. International Surface Database, ISD)
- Marine observations from ICOADS
- Tropical cyclone best track reports from IBTrACS

20th CENTURY REANALYSIS

- ISPD v4 is used as the observational input to the 20th Century Reanalysis version 3 (20CRv3)
- 20CRv3 assimilation feedback is included in all ISPD v4 records
- Assimilation & quality control indicators, bias, error variances, etc.

USER SERVICES

Data file downloads

- HDF-5 format, hourly files
- Globus transfer
- Web download (cURL, wget)

Regional & temporal subsetting

- Users may request subsets of ISPD observations for a specific station, region, and time period of interest
- Delayed mode processing at NCAR
- ASCII output

DATA ACCESS

https://doi.org/10.5065/9EYR-TY90

- HDF-5 documentation
- Detailed metadata inspection
- Data citation service
- Usage metrics