

ICOADS Release 3.0: New Relevance and Support for Reanalyses

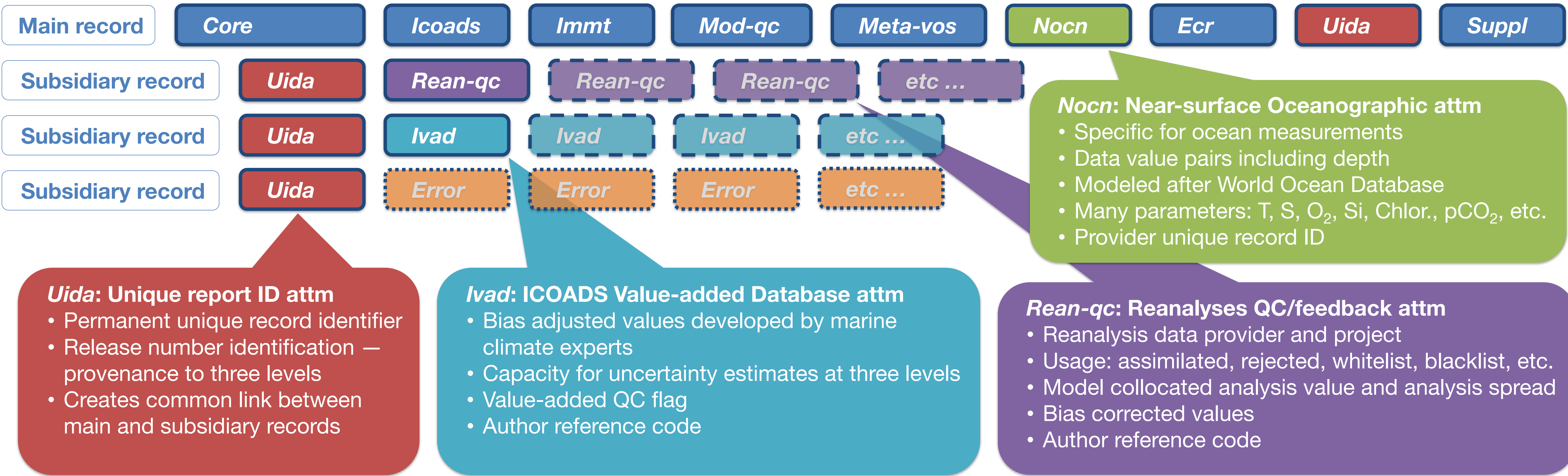
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Background

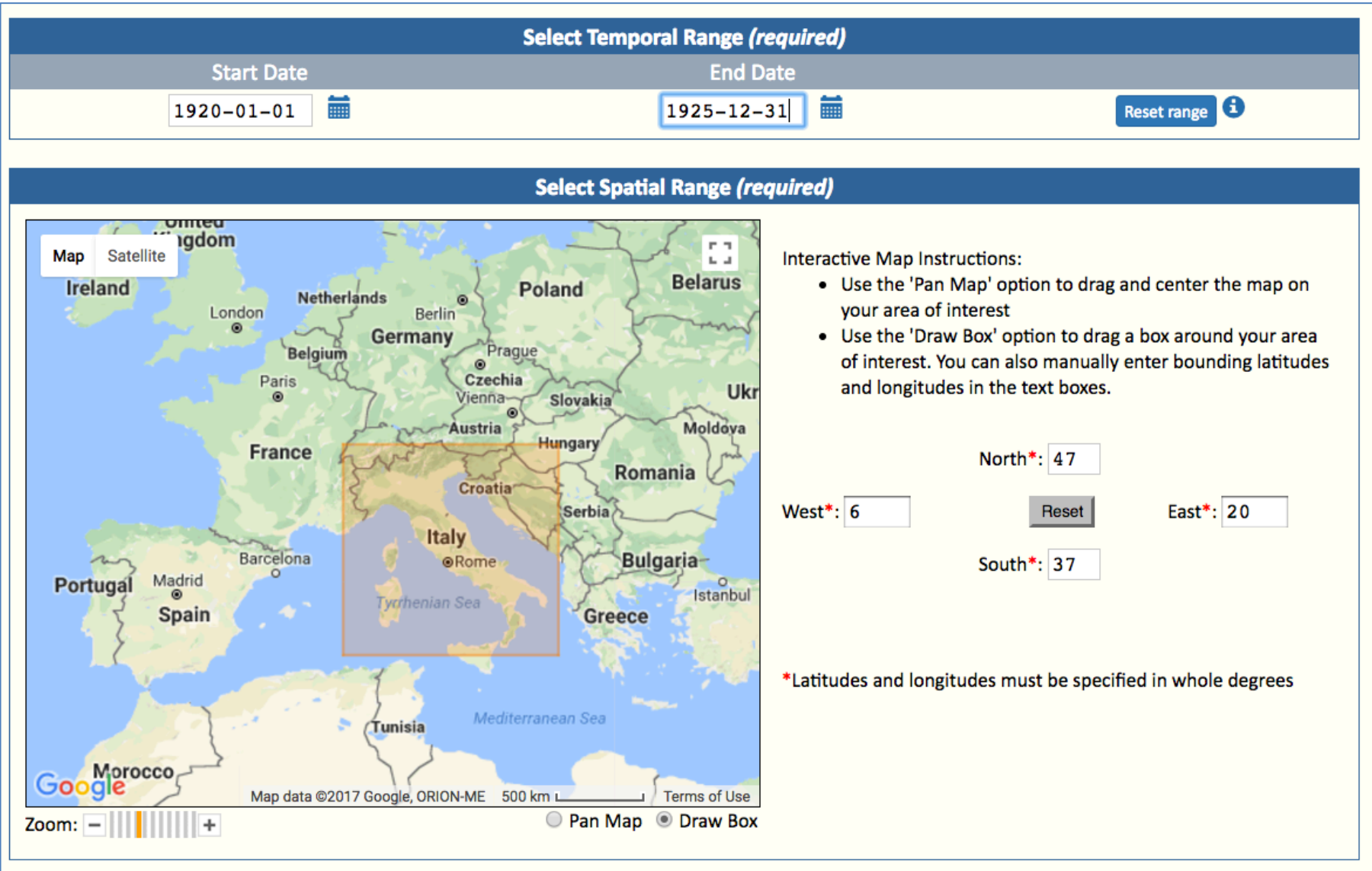
The International Comprehensive Ocean-Atmosphere Data Set (ICOADS) Release 3.0 is a foundational open access observational archive that further supports reanalysis studies and captures significant components of the data life cycle. For more information about the data and metadata characteristics of ICOADS, see the companion poster “ICOADS Release 3.0: Data characteristics and future priorities” (E. Freeman)

IMMA1 format: multi-line linked report supports record tracking, user feedback, and feature growth



Data products

- NCAR**
- Release 3.0.0: Main records only
 - Release 3.1.0: Main records plus subsidiary records
 - Release 3.0.1: GTS Near real time
 - Monthly summary products
 - Standard, enhanced, and user-defined trimming options
 - User interface for subsetting and quality flag application



- NOAA/NCEI**
- Enhanced trimmed and untrimmed observations
 - NetCDF-4 archive

- NOAA/ESRL/PSD**
- Monthly summary statistics (NetCDF)
 - User interface for subsetting and visualization

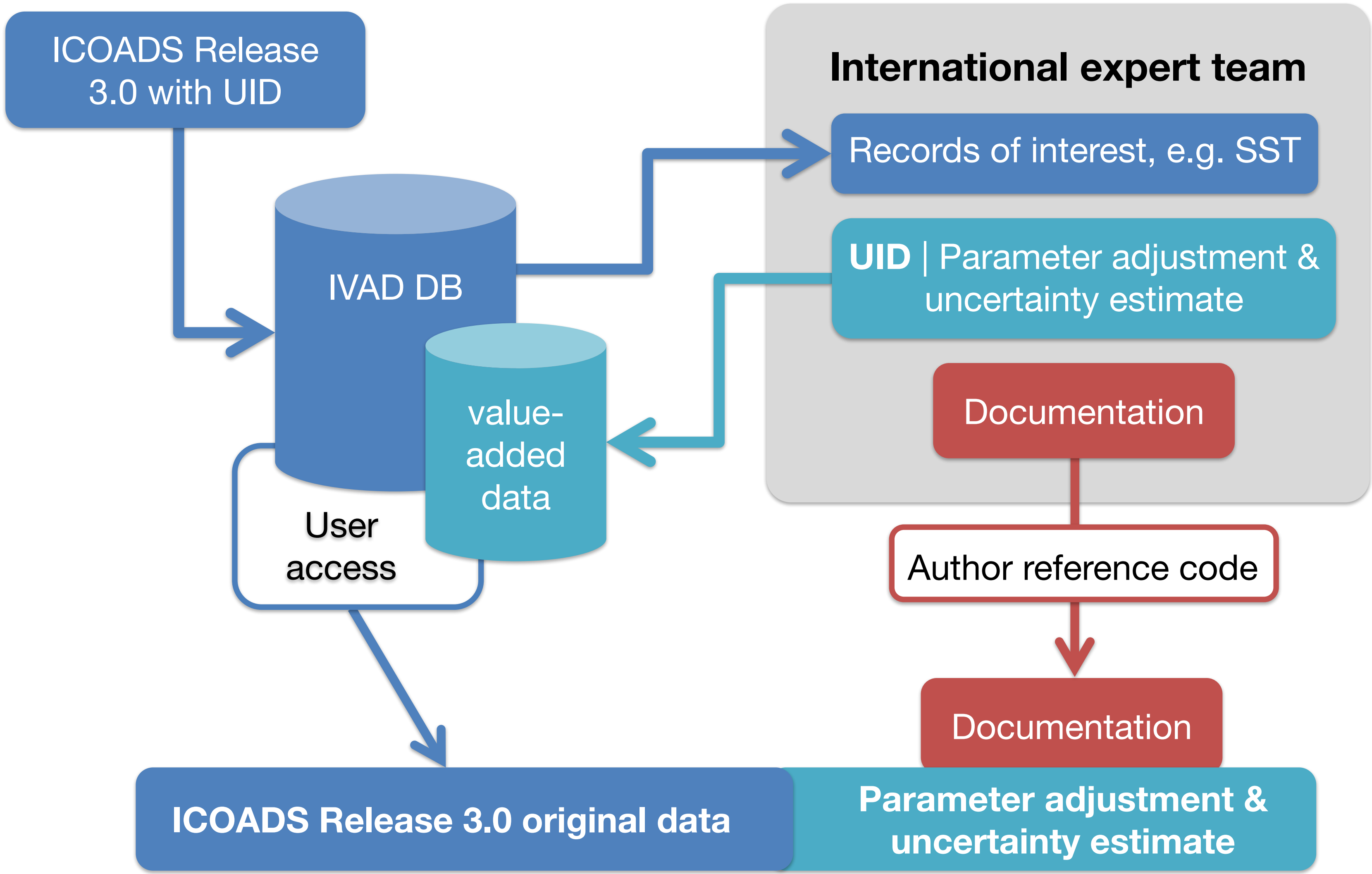
🔗 **Data access**
NOAA/NCEI: icoads.noaa.gov
NCAR: rda.ucar.edu/datasets/ds548.0

🔗 **IMMA1 documentation**
icoads.noaa.gov/e-doc/imma/R3.0-imma1.pdf

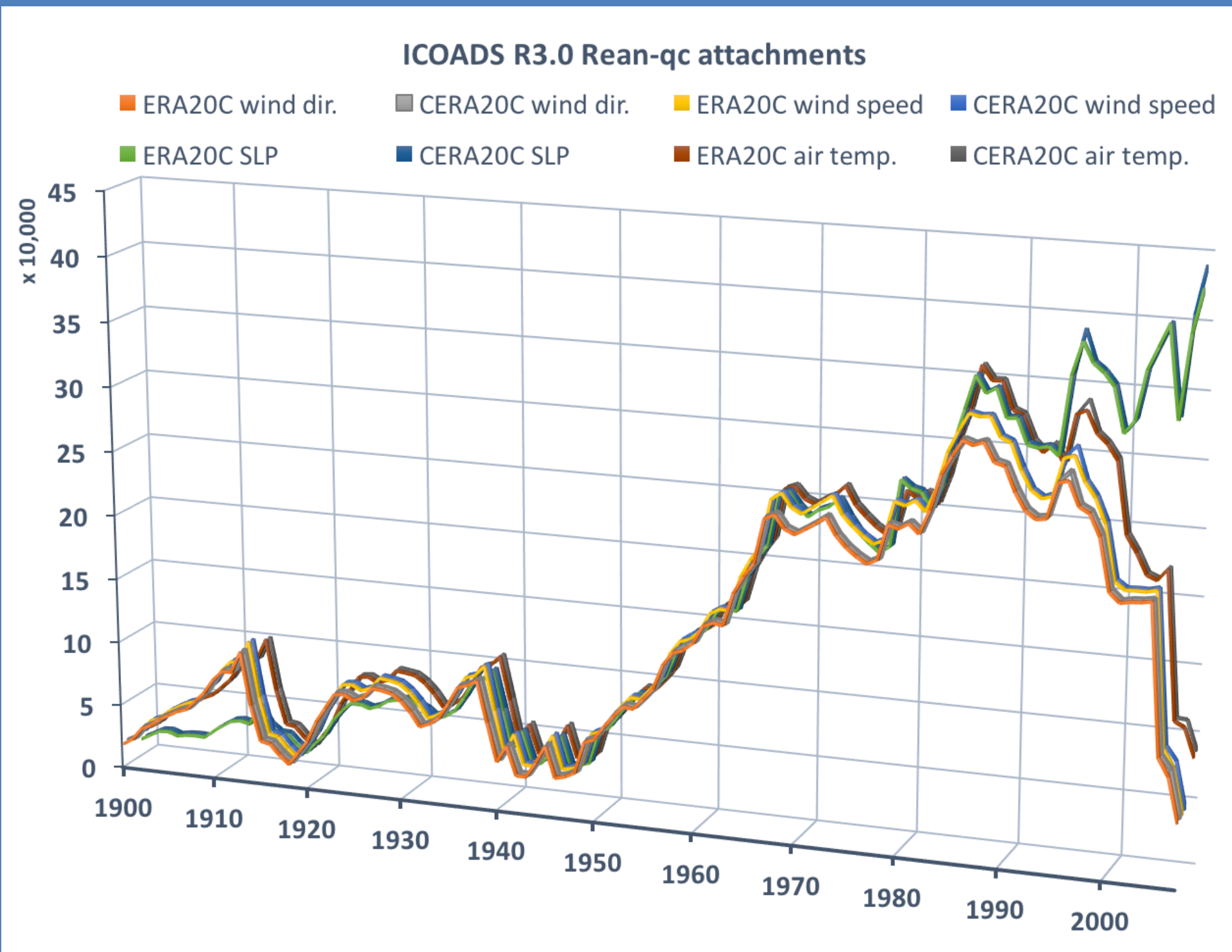
Citation
Freeman, E., Woodruff, S. D., Worley, S. J., Lubker, S. J., Kent, E. C., Angel, W. E., Berry, D. I., Brohan, P., Eastman, R., Gates, L., Gloeden, W., Ji, Z., Lawrimore, J., Rayner, N. A., Rosenhagen, G. and Smith, S. R., 2017: ICOADS Release 3.0: a major update to the historical marine climate record. *Int. J. Climatol.*, **37**, 2211-2232 (DOI: 10.1002/joc.4775)

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ICOADS Value-added database (IVAD DB): Data flow, feedback management, and user access



Additional Ivad & Rean-qc submissions are welcomed and encouraged! – Contact the ICOADS team at NCAR for details



Current Ivad & Rean-qc attms

- Berry et al. (2004) air temperature adjustment
- Smith et al. (2015) Beaufort wind adjustment
- ECMWF ERA-20C feedback
- ECMWF CERA-20C feedback

Potential future Ivad & Rean-qc attms

- FSU Atlantic marine wind indices (S. Smith)
- ECMWF ERA-5 feedback (?)

