

WMO GRIDDED BINARY FORMAT

IN USE FOR EXCHANGING DATA IN WWW

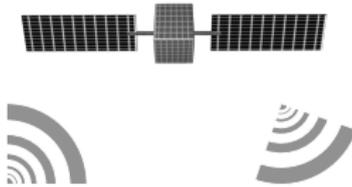
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Standardized by the World Meteorological Organization's Commission for Basic Systems

- GRIB edition 0, 1985: development and experimental use of GRIB (my claim)
- GRIB edition 1, 1994: heavily used by NWP forecast centers (table chaos), still an ICAO requirement
- GRIB edition 2, 2003: strong emphasize on handling discipline (try to synchronize with Climate-community, thinking/evaluation of netCDF)
- GRIB edition 3, in preparation since 2009



WMO forecast centres



Regional weather forecast services

- Minimum entropy — LOSSY! (a plugin for HDF5 exists since 2009)
- PNG
- JPEG2000
- on top of minimum entropy encoding one can use a CCSDS compression (new implementation: libaes, old one with bad license: szip)

- Primary focus of GRIB: distribution of data for visualization (via satellite link)
- For simplicity reasons: used for archiving of operational data
- Lossy compression level selected on closed budgets with some margin and performance considerations (8, 16, 24 bit, all but NCEP)

Most miserable failing communities

No common data model by

- WMO organized NWP centers and
- the Climate community (WCRP?).