



## BACKGROUND



NCAR/EOL regularly submits QC'ed radiosonde and dropsonde data to the Global Telecommunications System (GTS) for real-time data assimilation by global operational models and others. These data come from NCAR operated systems as well as those operated by universities and other government agencies.

## METHODS

In order for data to be transmitted it must be: 1) quality controlled, 2) coded into the BUFR format and 3) contain the correct WMO product headers for transmission through the NWS Gateway.

NCAR/EOL works with the NWS Gateway team to verify the proper headers for a field campaign and then works with operators of Vaisala, I-MET and GRAW stations to help them configure their software settings to produce a properly formatted file with the correct headers.

## WORKFLOW

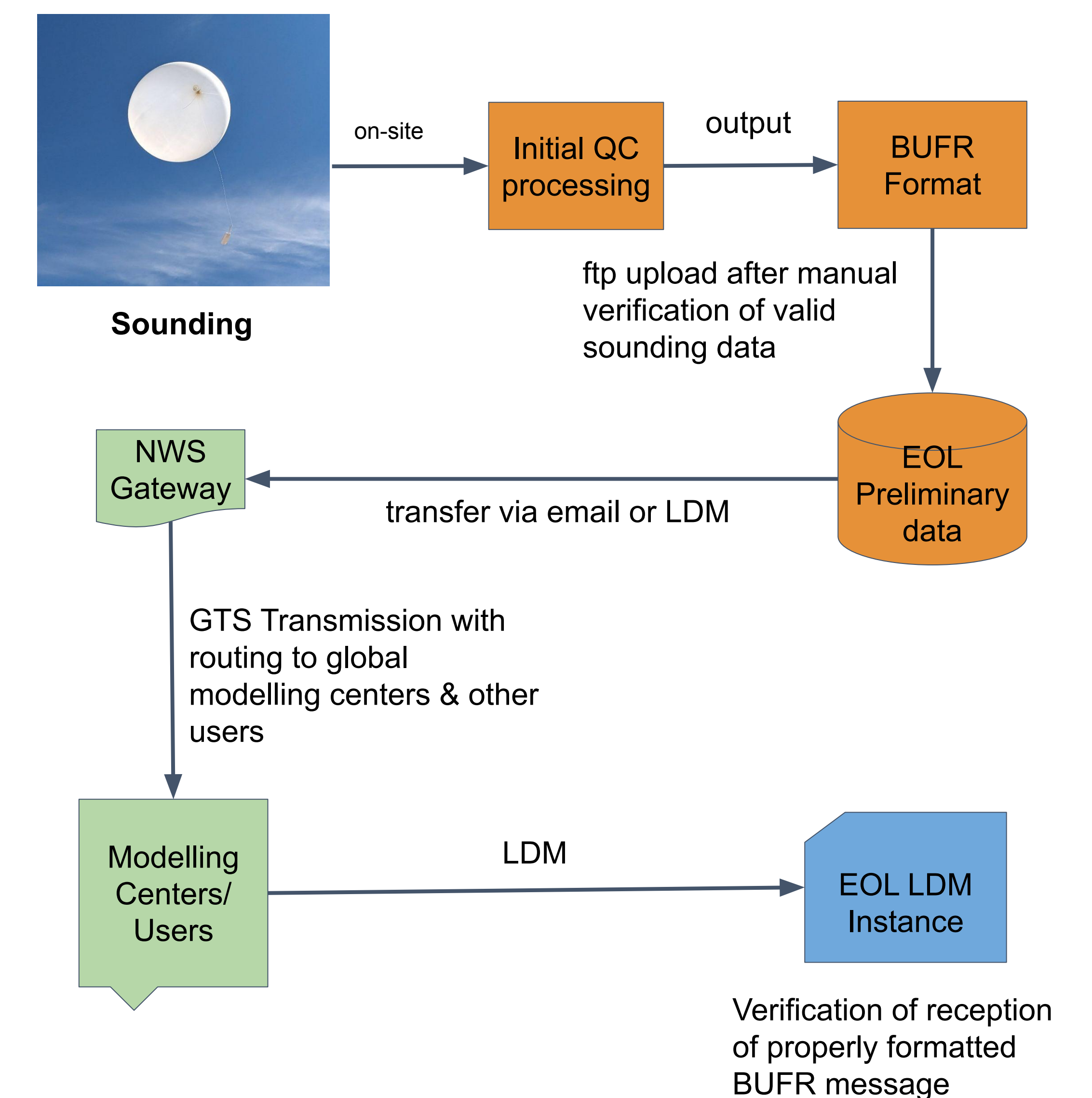


Fig. 1 Data Transfer schematic

## CAMPAIGNS

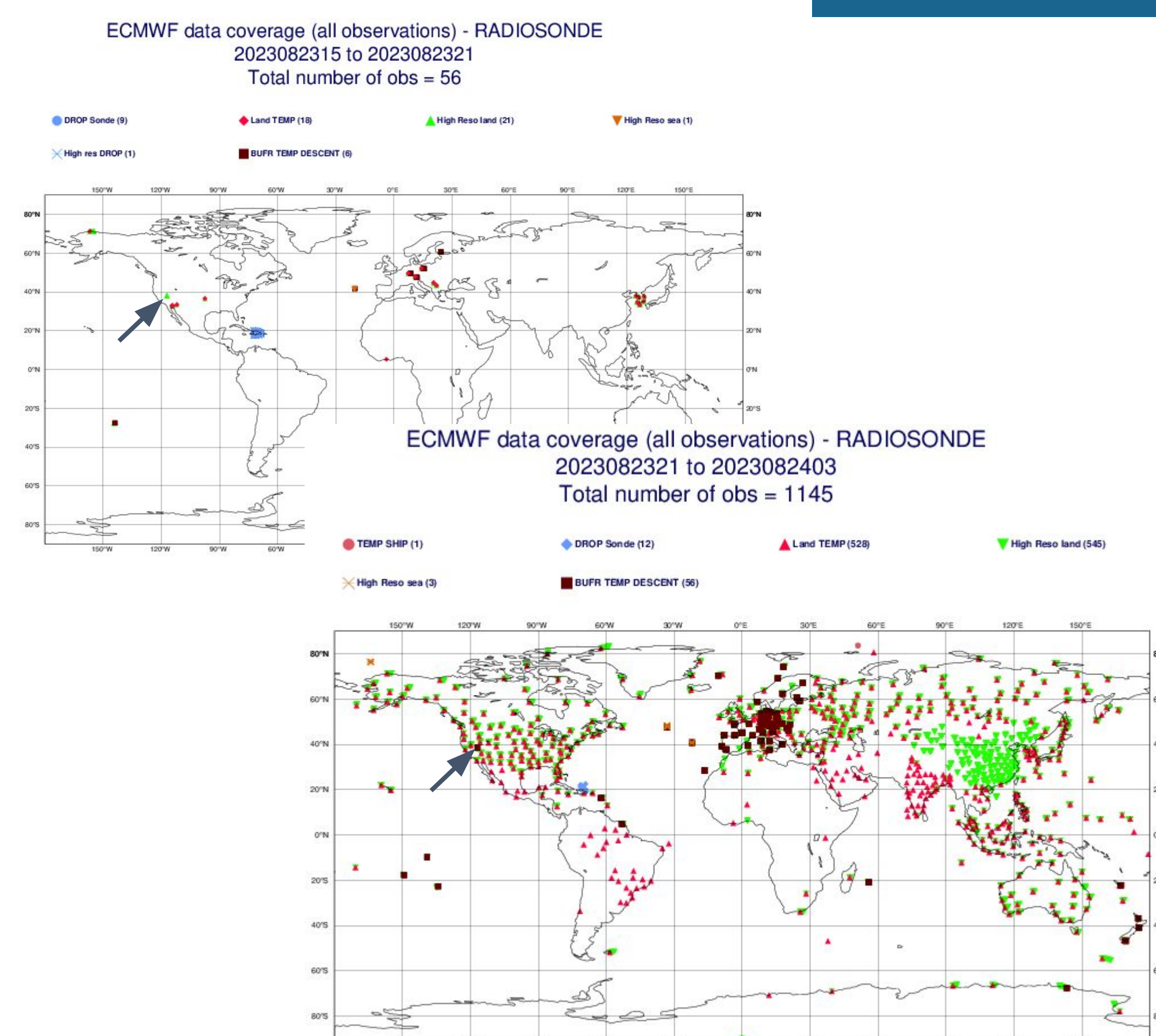


Fig. 2 Global Data Assimilation at ECMWF example

Sounding data can be transmitted for campaigns whether they are funded by NSF (M2HATS), NASA (CEPEX), NOAA (VORTEX-SE) or internationally (OTREC).

### M2HATS Sounding Data

Sounding data can be transmitted at any time as shown by the 18 UTC Sounding from Tonapah, NV at upper left. In addition, both the ascent and descent portions of the sounding can be transmitted as illustrated at lower left from the same location during the Multi-point Monin-Obukhov similarity horizontal array turbulence study (M2HATS field campaign).

## SUMMARY

Whether you are using NCAR instrumentation or your university based commercial system, NCAR/EOL can assist field project investigators with getting radiosonde data into the world-wide GTS in real-time.



## ACKNOWLEDGMENTS

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