Points of attention

- ✓ High-resolution observations critical for mesoscale data assimilation:
  - availability, quality control, need for mix of observations, flow-dependency
  - radar, Mode-S, radiosondes
- ✓ Surface:
  Orography/physiography: explore possibilities of higher accuracy local data / new high-resolution datasets
- ✓ OOPS developments
- ✓ Verification/validation: A-H cooperation starting up
- ✓ Joint rolling work plan

Radar data handling and quality control

- Provision of data through Odyssey hub not going to be available anytime soon. Until then: bilateral agreements needed if something to be exchanged sooner => letter to Eumetnet Assembly
  (technical arrangements tbd later)

- Reflectivity/wind data from European radars already provided to the OPERA data hub: level of QC too different to use them directly
  => need to apply “common” QC (as proposed in OPERA)

- Experiments with Baltrad package in local implementations:
  - open source
  - presently not easy to implement locally
  - algorithm for de-aliasing of velocities still missing
  - cleaning not perfect, additional efforts still very much needed!

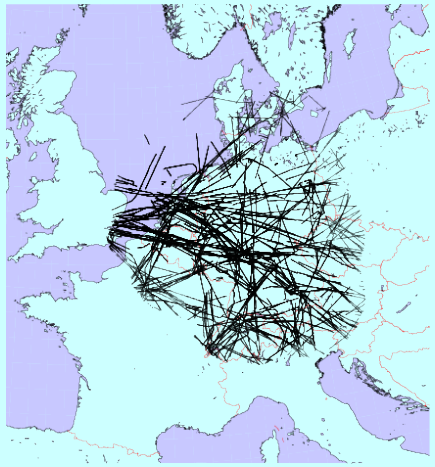
=> “transnational” radar data assimilation not easy, likely to require serious effort

Mode-S observations: a high-density data source nearly ready for real-time exchange

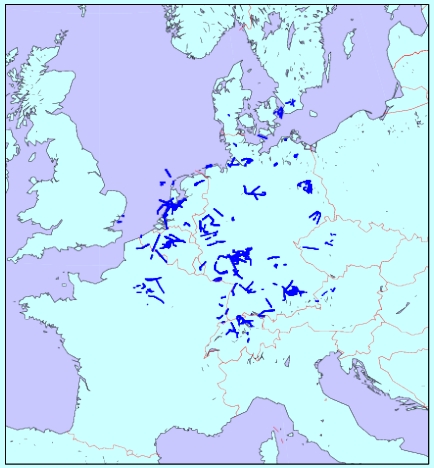
- ✓Observations made by every aircraft for ATC: ff,ddd straightforward to deduce, T with some approximation
- ✓Quality after QC/BC: comparable to radio soundings for ff,ddd, slightly worse for T, but very dense!
- ✓Preliminary observation impact studies: very useful.
- ✓Quality control/bias correction needed, algorithms for this under development
- ✓Discussion ongoing with several ATC centers to arrange real-time data provision (expected latency: <10min) for a large European area. Intention: formal arrangements for free availability of these data to NMS's for official duty. Outcome expected ~summer 2013

Period 2012/08/09 10:00-10:15

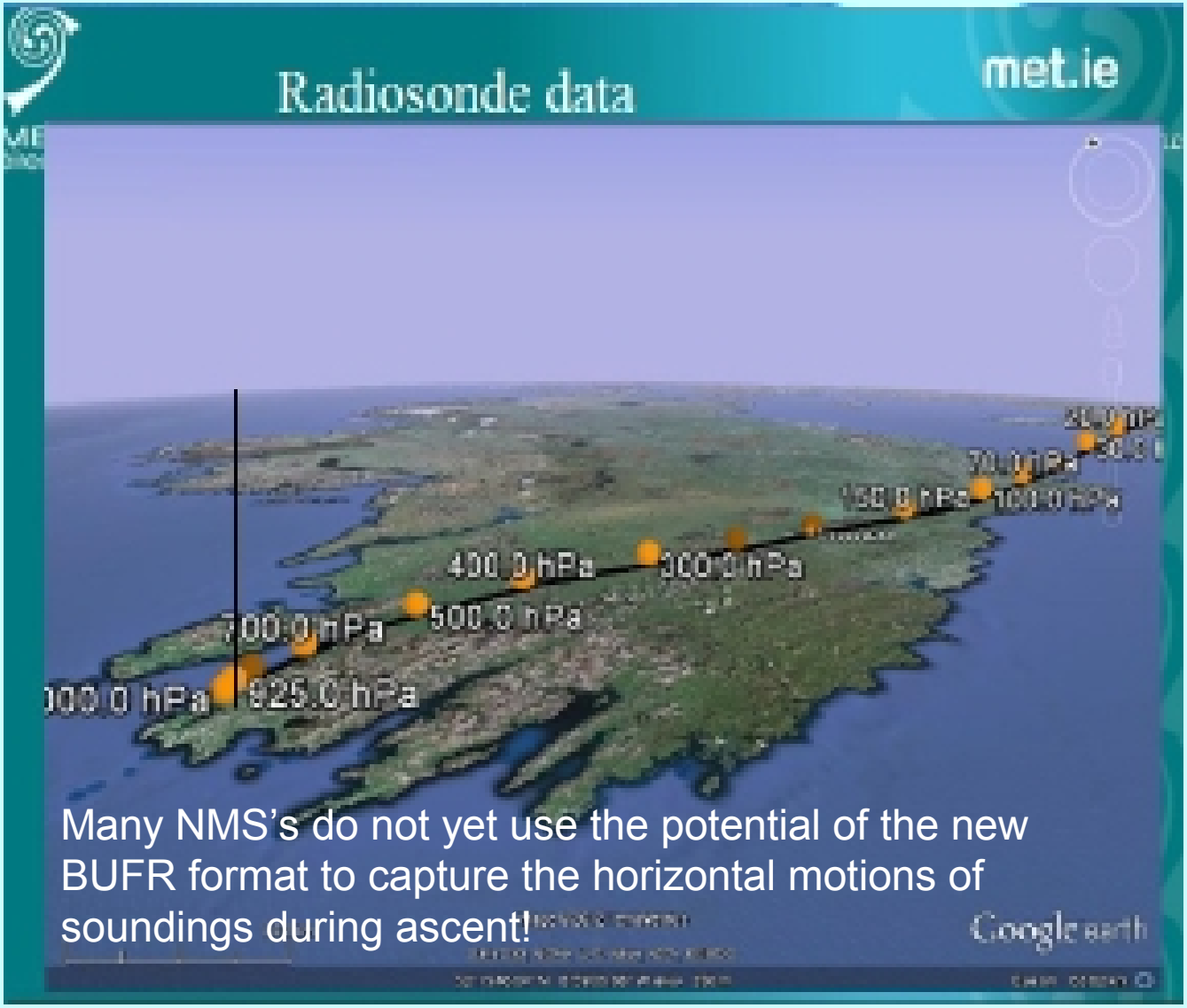
All observations (259135)



Below FL100 (30647)

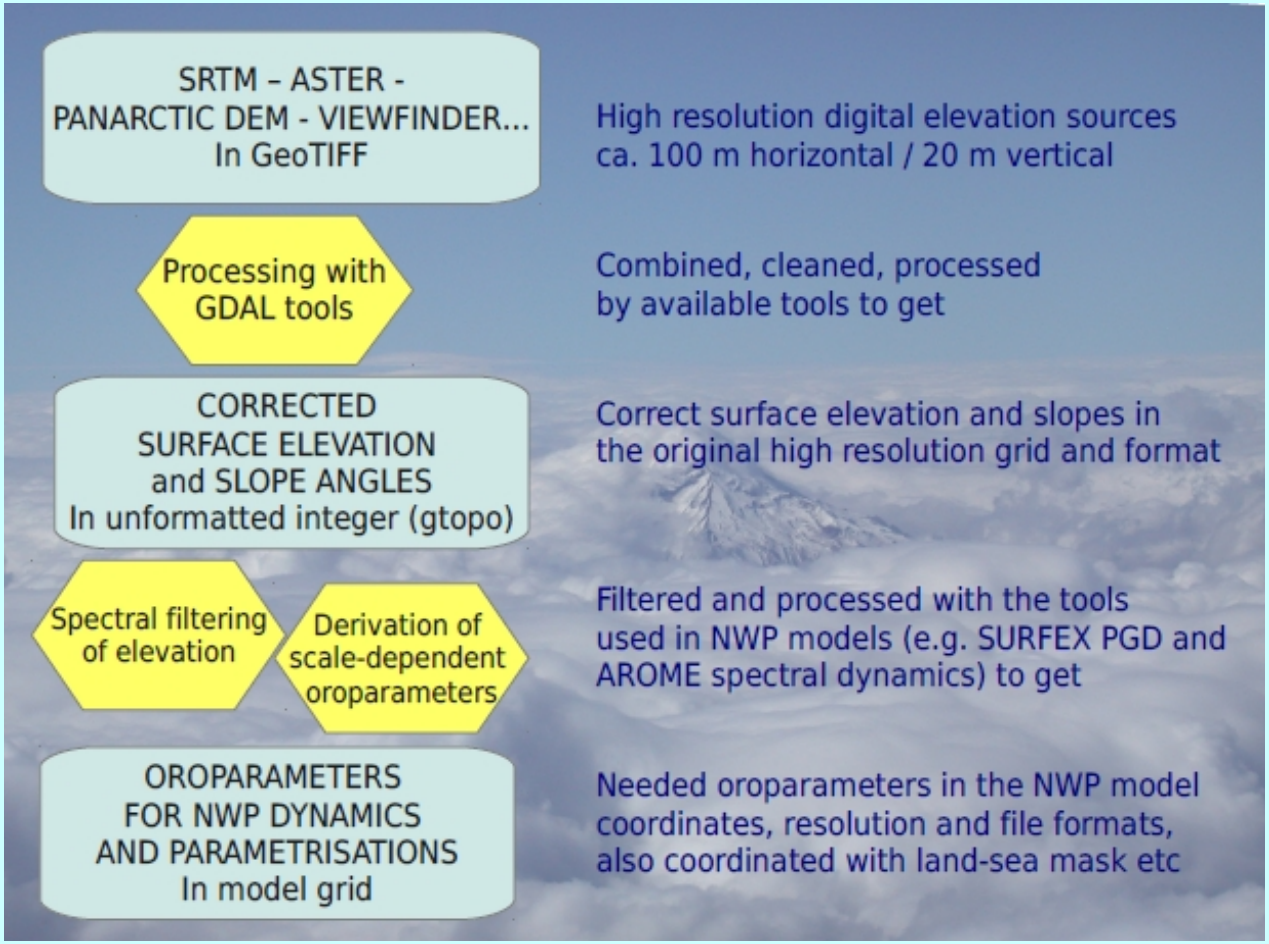


Radio sondes: new BUFR format



Many NMS's do not yet use the potential of the new BUFR format to capture the horizontal motions of soundings during ascent!

Use of very fine resolution data or more accurate local data



Item for joint actions in Surfex Steering Committee?