C3S Observations – commentary

Martin Juckes, July 3rd

The meeting ran for 4 days, with presentations in the mornings and working group discussions in the afternoon. The presentations were primarily from institutional (e.g. from EUMETSAT, EUMETNET, NOAA) and programme (e.g. from ESA CCI) representatives. CLIPC was represented in a poster session.

The report from EUMETNET emphasised that there is no immediate prospect of the relaxation of access restrictions to in situ observations until an alternative funding stream for the maintenance of the observation networks is in place. All European meteorological observations will be made available to C3S, but some will be under a restrictive license prohibiting their redistribution.

It was noted that tests in ERA-CLIM2 have shown that the omission of restricted data from the climate re-analysis does not significantly affect its quality: so the final product will only include observations which can be distributed freely with the product.

The advantages of regional re-analysis were discussed, including better treatment of observations in coastal and mountainous regions (global climate re-analysis has do be done at a significantly lower spatial resolution than current operational analysis and forecast systems, but regional re-analysis can achieve the spatial scale of operational analysis over time periods relevant for climate.

Availability of surface observations

(post meeting interpretation)

There was no discussion of alternative funding streams for observational networks at the meeting. A paper contributed by PRIMET to the 7th EEGov conference (2009) gives a good overview of the expected positive benefits[#]. The PRIMET paper does not, however, cover the issue of winners and losers: the national treasury would win, the meteorological services and/or their funding ministries would lose. Moving some of the predicted gains from the treasury into the spending ministries would be a conceptually easy solution, but does not necessarily fit with existing budget management structures. The UK has moved to a national policy of open data: this decision was a national one, influenced by considerations extending far beyond meteorology.

#: http://www.primet.org/ckfinder/userfiles/files/PSI%20in %20European%20Meteorology%20-%20an%20unfulfilled %20potential distribn%20copy.pdf

There was a comment on the importance of sub-surface temperature observations as a critical input for seasonal forecasts.

Considerable discussion on data rescue, with a focus on data rescue to support climate re-analysis. The need for longer term climate records was also noted.

The CORE-CLIMAX maturity matrix featured in many discussions and will clearly feature in the C3S data assessment process. The need for further adjustments, particularly to ensure that the categories are appropriately defined for in situ observations, was noted. Further development of the matrix is being supported by the H2020 GAIA Clim

(http://www.nersc.no/project/horizon-2020-gaia-clim) project.

It emerged that there is a requirement to support a comprehensive capability for core Essential Climate Variables, even if high quality products are currently available at no cost from programmes outside Europe (in order to guarantee continuity of supply and necessary expertise).

The afternoon discussions took place in 3 working groups, each of which discussed all aspects of the workshop programme. Their discussions and recommendations were reviewed in a final plenary session and will be published as a workshop report.