

Comments/ questions/ ideas/ ERA-CLIM2

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- In general progress is very good and even exceeds the expectations made by the Expert Group on Climate Change in 2011
 - ERA-20C and CERA-20C
 - Access to data
 - ERA5 in progress
 - CERA-SAT implemented
 - Biogeochemical reanalysis
 - Carbon reanalysis
 - Future coupling methods progressing well including SST, Sea-ice assimilations
- Observation rescue and reprocessing progressing well
 - Conventional data including snow cover
(Single observations important in historical periods)
 - RTTOV developments
 - Satellite data reprocessing and rescue by EUMETSAT
 - Early satellite records prepared
 - This unique activity should be maintained
- Quantifying/ reducing uncertainties
- Future aspects
 - Preparation of the ERA6 reanalysis system
 - Integration of the all new data-assimilation components
 - Extensive test program during selected modern and pre-satellite periods: hydrological cycle, river runoff, major historical storms, stratospheric warmings, El-Ninos, tropical cyclones, fluxes over Arctic areas, QBO (+stratosphere in general) and the performance of the new observations

Perform impact studies

Document the strengths and weaknesses

- Sharing responsibilities for quality assessments between ECMWF, data producers, expert groups and Copernicus team during the experimentation and the production with occasional end-to-end tests
 - Monitoring of bias corrections systematically
 - Radiosondes
 - Radiances
 - Other datatypes
 - Compare with other reanalysis centers
 - Observation feedback data for wider use
 - System maintenance
 - Recommendations for the users: Which Reanalysis to use
 - Utilities for the users
 - Map products? Also Ocean+atmosphere
 - Time series of observations and products?
 - Resources?
 - Funding!
- Strategy for the preparation of ERA6 and the future beyond ERA6
 - Reanalysis will always be a huge effort.
 - List of acronyms with a one line explanation/ period