**The ESA Climate Modelling User Group’s assessment of satellite climate datasets**

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The ESA Climate Change Initiative (CCI) programme has been in operation for over five years now and climate quality satellite datasets are becoming available for 13 Essential Climate Variables (ECVs). The Climate Modelling User Group (CMUG) aims to bring together climate modelers and ocean/atmosphere reanalysis activities with the CCI efforts in order to minimize the time between the dataset production and their use by climate researchers. It does this in a number of ways. Firstly by evaluating the new climate data records to assess if they are ‘fit for purpose’ and reporting back any issues to the teams generating the datasets. CMUG provides an independent quality assurance role here. With CCI Phase 1 data now available the CMUG has started publishing the results of its independent analyses of these data. An assessment by CMUG of the CCI Phase 1 climate data records for several ECVs including sea surface temperature, ocean colour, sea level, soil moisture, land cover, aerosol and ozone datasets will be presented. New results showing consistency between the ECVs from the integrated CMUG assessments and through assimilation experiments will also be shown. These results help to build confidence in the quality of the CCI datasets. Another activity for CMUG is to develop the tools necessary for assessing the CMIP5 climate model predictions using the CCI observational datasets. The results for some ECVs using this ESMVAL tool will be shown. Thirdly the plans for the delivery of these new CCI datasets to the climate research community will also be discussed as will the use of climate modeling, reanalyses and CCI data for emerging climate services.