

Title: The contribution of reanalysis to climate monitoring

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The Copernicus Climate Change Service (C3S) includes in its product portfolio, reanalyses and a climate monitoring facility. These two products are being used to monitor the climate by providing monthly updates on the climate for several ECVs. The monthly updates are posted onto the Copernicus website within a few days of the end of each month. Currently, the main sources of content are the ERA-Interim and ERA5 global reanalyses. The content varies depending on the ECV, but typically includes global and European maps of anomalies for the month and the last year and global and European time series for monthly means and 12 month running means. The post for each month includes a short discussion about the salient points relevant to that month and ECV. The list of ECVs considered, to date, is surface air temperature, sea-ice, precipitation, surface humidity and soil moisture. This presentation will show some of the recent highlights from this climate monitoring, including the record high global surface air temperatures experienced during 2015 and 2016 and illustrated by ERA-Interim.