

Future Climate Observations Activities of ESA

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Following the successful COP 21 conference in Paris ESA is analysing the new requirements emerging from the final declaration and how space based Earth observation can contribute to fulfil them.

ESA will propose to its Member States an extension of the Climate Change Initiative (CCI) at its Ministerial Council end 2016. The European Commission and ESA have studied future Carbon Monitoring Systems and an operational system is under discussion. Another element is to intensify the implementation of the UN REDD+ effort through the Global Forest Observation Initiative (GFOI). Other concrete activities in support of developing countries and more general in implementing the Climate Treaty are studied.

An important element of future observation systems is to have a long term continuity of all climate relevant variables. The operational European Copernicus system will have 7 satellites in orbit by end 2017 and atmospheric instruments will be added around 2020, followed later by the altimetry missions to ensure long term observations. Additional elements are necessary to secure data continuity like the operational continuation of measurements of sea ice thickness and monitoring changes in the ice sheets that blanket Greenland and Antarctica.