ID de Contribution: **97** Type: **Non spécifié**

In-service Aircraft for a Global Observing system - European Research Infrastructure (IAGOS-ERI)

IAGOS-ERI is one of the environmental projects on the ESFRI Roadmap for developing European Research Infrastructures. The goal is to develop a sustainable distributed infrastructure for global observations of atmospheric composition from in-service aircraft. This will be achieved by installing autonomous instrument packages aboard 10-20 longrange aircraft of internationally operating airlines. IAGOS-ERI will provide high quality in-situ observations of greenhouse gases and reactive gases, aerosol, and cloud particles in the tropopause region, which is not adequately resolved by remote sensing from space and, on the other hand is one of the most sensitive regions for climate change. At the same time, IAGOS-ERI will provide detailed vertical profiles in the troposphere, which are of paramount importance for predicting changes in local and regional air quality and its causes.
One of the goals is the implementation of IAGOS-ERI into the global observing system established by WMO-GAW within GEO/GEOSS.

IAGOS-ERI is the only infrastructure in Europe for regular global observations of the atmosphere from in-service aircraft. It draws on the scientific and technological experience gained within the research projects MOZAIC (Measurement of Ozone and Water Vapour on Airbus in-service Aircraft), as part of the EC framework programmes 4 and 5 and CARIBIC (Civil Aircraft for the Regular investigation of the Atmosphere Based on an Instrument Container). MOZAIC ended in February 2004 having provided almost ten years of high quality data - about 20,000 long-haul transects in the upper troposphere and lowermost stratosphere (UTLS) and 40,000 vertical profiles.
A similar project (CONTRAIL: Comprehensive Observation Network for TRace gases by AIrLiners) has been established in Japan.

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