



The new IAGOS Database Portal

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IAGOS (In-service Aircraft for a Global Observing System) is a European Research Infrastructure which aims at the provision of long-term, regular and spatially resolved in situ observations of the atmospheric composition. IAGOS observation systems are deployed on a fleet of commercial aircraft. The IAGOS database is an essential part of the global atmospheric monitoring network. It contains IAGOS-core data and IAGOS-CARIBIC (Civil Aircraft for the Regular Investigation of the Atmosphere Based on an Instrument Container) data. The IAGOS Database Portal (<http://www.iagos.fr>, damien.boulanger@obs-mip.fr) is part of the French atmospheric chemistry data center AERIS (<http://www.aeris-data.fr>).

The new IAGOS Database Portal has been released in December 2015. The main improvement is the interoperability implementation with international portals or other databases in order to improve IAGOS data discovery. In the frame of the IGAS project (IAGOS for the Copernicus Atmospheric Service), a data network has been setup. It is composed of three data centers: the IAGOS database in Toulouse; the HALO research aircraft database at DLR (<https://halo-db.pa.op.dlr.de>); and the CAMS data center in Jülich (<http://join.iek.fz-juelich.de>). The CAMS (Copernicus Atmospheric Monitoring Service) project is a prominent user of the IGAS data network.

The new portal provides improved and new services such as the download in NetCDF or NASA Ames formats, plotting tools (maps, time series, vertical profiles, etc.) and user management. Added value products are available on the portal: back trajectories, origin of air masses, co-location with satellite data, etc. The link with the CAMS data center, through JOIN (Jülich OWS Interface), allows to combine model outputs with IAGOS data for inter-comparison. Finally IAGOS metadata has been standardized (ISO 19115) and now provides complete information about data traceability and quality.