



Maintenance requirements for a global distributed research infrastructure

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IAGOS aims for a precise data base of measured atmospheric properties with global coverage. The implementation of highly sophisticated analytical instruments aboard a fleet of civil passenger aircraft is a unique approach to achieve worldwide and frequent measurements.

The operation of scientific instruments within the highly controlled environment of civil aviation with stringent safety restrictions requires the development of appropriate QA/QC processes. The poster presents a maintenance management system that combines high data quality standards with routine aircraft operation. For this purpose, a maintenance center will be developed in IAGOS that organizes the world-wide logistics and ensures airworthiness approvals of the operated instruments and spare parts, whereas the instruments themselves will be maintained and calibrated by scientific institutes in order to achieve the best possible data quality.