



MOZAIC Monitoring of Ozone, Water Vapour, Carbon Monoxide and Nitrogen Oxides aboard Airbus In-service Aircraft

<http://www.obs-mip/mozaic>



Lufthansa D-AIGI
Data since 11.8.1994
7397 flights = 25,0%
MOZAIC restored Oct. 2010

MOZAIC, the precursor of IAGOS, was launched in 1993 by AIRBUS, CNRS, Météo France, FZJ and several European airlines as an EU-funded research project. Autonomous scientific instruments were installed on five AIRBUS A340 aircraft operated by Lufthansa (2), Air France, Sabena, and Austrian to monitor the atmosphere day by day. Starting with ozone and humidity sensors, the equipment was expanded in 2001 for measurements of carbon monoxide and nitrogen oxides.

We thank the Airlines for their continuous support!



Air France F-GLZG
Data 1.8.1994 - 19.12.2004
4554 flights = 15,4%
Operation terminated



Lufthansa D-AIGF
Data since 1.8.1994
6959 flights = 23,5%
MOZAIC restored Sep. 2010



Austrian OE-LAG
Data 5.3.1995 - 29.10.2006
5091 flights = 17,2%
Operation terminated



Air Namibia V5-NME
Data since 30.11.2005
734 flights = 2,5%
MOZAIC restored Oct. 2010



Lufthansa D-AIMG
Data 4.4.03 - 22.11.05
1287 flights = 4,3%



Sabena
3.8.1994 - 22.2.2002
3601 flights = 12,2%



Left: MOZAIC Rack with O₃ and CO analysers, data acquisition, pumps and power supply.
Bottom: MOZAIC NO_y analyser



MOZAIC Database (1994-2007):

- 29623 flights with data
- Ozone and water vapour since 1994
- Nitrogen oxides since 2001 (on 1 a/c)
- Carbon Monoxide since 2002 on all a/c

Future (since October 2010):

- Systems restored on 3 aircraft: Lufthansa D-AIGF & D-AIGI; Air Namibia
- Now operated under IAGOS