

Trace gas and aerosol data sets from DLR aircraft campaigns - of use for validation in GEMS?

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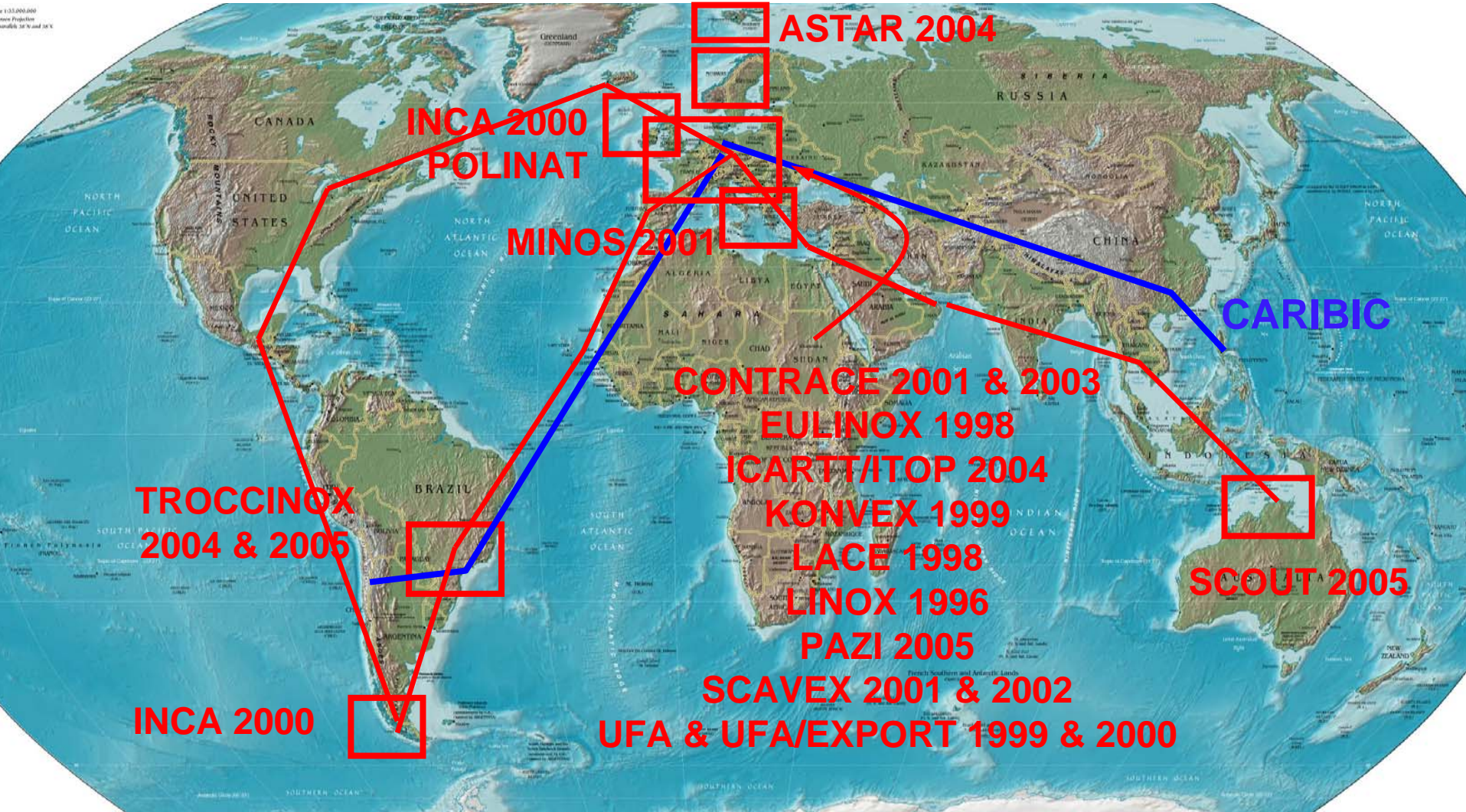
Trace gas & aerosol in situ measurements with the DLR Falcon



- altitude range: up to 12 km (190 hPa), FT & UT!
- data sets from different experiments / different regions: mainly mid-latitudes, but also polar, tropics, ferry flights
- limited temporal representativeness: (an "average" campaign: 3-4 weeks, 30-60 flight hours, 8-12 flights)
- but: accurate measurements, high vertical resolution

Falcon in situ measurements (data not for all campaigns available)	
trace gases	humidity, CO, ozone, NO/NO _y , CO ₂
aerosol	number concentration (ultrafine, Aitken, accumulation mode), number size distribution, non-volatile particle fraction, (absorption coefficient)
cloud microphysics	number density, size distribution, extinction
atmospheric state	temperature, pressure, wind, aircraft position

Aircraft measurement campaigns with DLR participation





- INTRODUCTION

- PROJECTS
(by name)

- CAMPAIGNS
(by time)

- MEASURED
PROPERTIES

- DATA
AVAILABILITY

- CONTACT

List of projects with aircraft campaigns

The following table lists major research projects which included one (or more) aircraft field campaign(s) to measure atmospheric properties.

Click on the project name to obtain further information on the field campaigns (including measured properties).

PROJECT	CAMPAIGN	DATE START	DATE END	MEASUREMENT REGION
CONTRACE	CONTRACE-1 CONTRACE-2	14-Nov-2001 09-Jul-2003	27-Nov-2001 25-Jul-2003	Central Europe Central Europe
EULINOX	EULINOX	01-Jul-1998	21-Jul-1998	Central Europe
ICARTT	ITOP	02-Jul-2004	03-Aug-2004	Western Europe
INCA	INCA-SH INCA-NH	09-Mrz-2000 20-Sep-2000	20-Apr-2000 13-Okt-2000	Southern Chile + trans-Atlantic transfer Scotland + Eastern North Atlantic
KONVEX	KONVEX	08-Jul-1999	29-Jul-1999	Central Europe
LACE 98	LACE-98	31-Jul-1998	15-Aug-1998	Central Europe (Berlin area)
LINOX	LINOX	19-Jul-1996	02-Aug-1996	Central Europe
MINOS	MINOS	01-Aug-2001	22-Aug-2001	Eastern Mediterranean
PAZI	PAZI-LAUNCH	05-Sep-2005	28-Sep-2005	Germany
POLINAT	POLINAT-1994 POLINAT-1995	01-Nov-1994 15-Jun-1995	30-Nov-1994 15-Jul-1995	Eastern North Atlantic Eastern North Atlantic
POLINAT-2	POLINAT-2	15-Sep-1997	15-Okt-1997	Eastern North Atlantic
SCAVEX/TROPOSAT	SCAVEX-2001a SCAVEX-2002a SCAVEX-2002b	05-Apr-2001 11-Apr-2002 12-Nov-2002	04-Mai-2001 24-Apr-2002 19-Nov-2002	Central Europe Central Europe Central Europe
TROCCINOX	TROCCINOX-2004 TROCCINOX-2005	30-Jan-2004 18-Jan-2005	15-Mrz-2004 28-Feb-2005	Brazil + trans-Atlantic transfer Brazil + trans-Atlantic transfer
TROLL	ASTAR-2004	14-Mai-2004	07-Jun-2004	Arctic (Svalbard)
UFA	UFA	01-Sep-1999	30-Sep-1999	Central Europe
UFA/EXPORT/STAAARTE	UFA/EXPORT/STAAARTE	19-Jul-2000	10-Aug-2000	Central Europe

