IAGOS for the GMES Atmospheric Service - Project Update

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What is IAGOS?

Long-term Observations of Climate Change and Air Quality from Instrumented Long-haul Passenger Aircraft

(European Research Infrastructure)
- reactive gases
- greenhouse gases
- aerosols
- cloud particles

Global civil air traffic: potential for synergy

Partners:
- Scientific institutions (D, F, UK, ...)
- Aviation industry
- Meteorological services

IAGOS-ERI annual Meeting, San Lorenzo del Escorial, June 12-14 2013

www.iagos.org
Project overview

- EC funded through FP7 Space (Space Call 5)
- Collaborative Project
- EC contribution 1,999,175 €
- Jan. 1st 2013 - Dec. 31st 2015
- 12 Partners
WP2: Enhancing the IAGOS-GMES link
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- harmonizing and ensuring interoperability of databases
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- developing tools for satellite data applications
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- integrating the data into the atmospheric service

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WP3: Operational data transfer
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WP3: Operational data transfer
- delayed-mode via GSM
- near-real-time via RTTU

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WP3: Operational data transfer

WP4: Evaluation and harmonisation of data quality
WP2: Enhancing the IAGOS-GMES link
WP3: Operational data transfer
WP4: Evaluation and harmonisation of data quality
WP5: Instrument development
WP4: Evaluation and harmonisation of data quality

WP2: Enhancing the IAGOS-GMES link

WP3: Operational data transfer

WP5: Instrument development

Package 1 redesign study to improve system flexibility

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WP3: Operational data transfer

WP4: Evaluation and harmonisation of data quality

WP5: Instrument development

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WP4: Evaluation and harmonisation of data quality

WP2: Enhancing the IAGOS-GMES link

WP3: Operational data transfer

WP5: Instrument development

Development of new chemical mass spectrometer (PTR-MS)

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WP3: Operational data transfer

WP4: Evaluation and harmonisation of data quality

WP5: Instrument development

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WP3: Operational data transfer

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WP4: Evaluation and harmonisation of data quality

WP5: Instrument development

Development of miniature cloud spectrometer (BCPOL)

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Development of particle extinction instrument (PMex)

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Development of photoacoustic instrument to measure total water and water vapour (Hilase-Hygro)

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igas-project.org

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IGAS Activities 2013

- **WP1+7**
  - Kick-off meeting January 2013 at Jena (MPI-BGC)
  - Launch of www.igas-project.org (MPI-BGC)
  - First annual meeting November 12-15 2013 in Utrecht (KNMI,MPI-BGC)

- **WP2**
  - Questionnaire about IGAS tool development circulated (KNMI)
  - workshop on „specifying the requirements for interoperable IAGOS data services“ (D2.1) June 19-20 in Jülich (FZJ)

- **WP4**
  - Splinter meeting tonight (FZJ)
  - 1-day workshop during IGAS annual meeting (FZJ)
IGAS Presentations

- GAW-HTAP Meeting – March 20-22 2013, Geneva
  - IAGOS, IGAS, ADAM, and others: Efforts to make aircraft data available to the community (Valerie Thouret)
- 7th MERLIN SAG meeting - March 20-21 2013, Paris
  - On the use of aircraft data for sensor validation (A. Fix)
- ICOS Annual Meeting - March 25-28 2013, Biarritz
  - IGAS Overview (C. Gerbig)

- Upcoming:
  - Presentation at ESA PV 2013 Conference November 2-4, Frascati, Italy (B. Gautron (UPS) et al.)
  - MACC conference January 27-31 2014
Concluding remarks

- IGAS comes at an appropriate time
  - IAGOS aircraft operational, growing fleet, growing suite of measurements
  - MACC-II until July 2014 (hopefully succeeded by operational phase of Copernicus Atmosphere Service)
- Well balanced consortium (exp./mod., provider/user, countries represented)
- Active SAB (L. Barrie, J. Butler, T. Machida, M. Müller, A. Volz-Thomas)
- IGAS potential to maximize use of IAGOS data streams & enhance IAGOS capabilities
Thank you!