

ACAM Working Group on Data Sharing (WG1)

Status of the working group:

Current list of group members:

Brice Barret (CNRS)

Gao Chen (NASA Langley)

Jim Crawford (NASA Langley)

Klaus Gottschaldt (DLR)

Mark Lawrence (IASS)

Prabir Patra (JAMSTEC)

M. Venkat Ratnam (NARL)

Eri Saikawa (Emory University)

Hans Schlager (DLR)

Ranjit K Sinha (Daylabagh Educational Inst.) **Manoj K Srivastava** (Banaras Hindu Univ.)

Hiroshi Tanimoto (NIES)

Jean-Paul Vernier (NASA Langley)

Jianchun Bian (IAP)

Cathy Clerbaux (LATMOS/CNRS)

Robert Damadeo (NASA Langley)

Pawan Gupta (NASA Goddard)

Manish Naja (ARIES)

Anjum Rasheed (CCRD)

Maheswar Rupakheti (IASS)

Michelle Santee (JPL)

Imran Shahid (Inst. of Space Tech.
Islamabad)

Anne Thompson (NASA Goddard)

Bob Yokelson (University of Montana)

Co-leads of WG1:

Gabriele Stiller (KIT, Germany) – gabriele.stiller@kit.edu

Vinayak Sinha (IISER, India) – vsinha@iisermohali.ac.in

New: Klaus Gottschaldt (DLR, Germany) – klaus-dirk.gottschaldt@dlr.de

ACAM Working Group on Data Sharing (WG1)

- Website established (many thanks to Klaus Gottschaldt!)
- First instrument/campaign-related sub-websites included

Aircraft measurements: ARFI, [ESMVal](#), INDOEX, OMO, OP3, SHIVA, SusKat

Balloon soundings: ASM soundings, SHADOZ, TAPTO

Ground-based measurements: IISER Mohali, Malaysia-Mead, NAMaSTE, SusKat

Long-term records: CARIBIC, IAGOS-MOZAIC

Satellite data records: ACE-FTS, [MIPAS](#), IASI/MetOP, IASI-SOFRID, [MLS](#), SAGE
(in blue: information and links to data available via ACAM WG1 website)

https://www.pa.op.dlr.de/ACAM_WG1/

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Future Actions:

- Please contribute with your data! And a short description for the web site!
Those listed on the website already -- and new ones!
- What can we do to remove problems/obstacles that prevent you from listing your data?
Please note: there is no common data protocol, every providing partner can define the conditions for data access individually
- Your comments, opinion, recommendations to the activity and/or the web site?
- Data users: please have a look and contact the PIs of the groups if you find data useful for your study!

https://www.pa.op.dlr.de/ACAM_WG1/

ACAM Working Group on Data Sharing

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About

ACAM (Atmospheric Composition and the Asian Monsoon) is a [SPARC/IGAC](#) jointly sponsored activity. This working group on data sharing (WG1) addresses the following tasks:

- Identify relevant observational datasets for the study of the Asian monsoon
- Organize data sharing
- Improve online access to observational datasets

Please browse categories for an overview, or navigate directly to one of the datasets for more details (where available):

- **Aircraft measurements:** ARFI, [ESMVal](#), INDOEX, OMO, OP3, SHIVA, SusKat
- **Balloon soundings:** ASM soundings, SHADOZ, TAPTO
- **Ground-based measurements:** IISER Mohali, Malaysia-Mead, NAMaSTE, SusKat
- **Long-term records:** CARIBIC, IAGOS-MOZAIC
- **Satellite data records:** ACE-FTS, [MIPAS](#), IASI/MetOp, IASI-SOFRID, [MLS](#), SAGE

If you feel that a dataset relevant for ACAM is missing and should be added to the list, please contact us.



Contacts

Gabriele Stiller (KIT, Germany) - ACAM Scientific Steering Group member and data sharing WG lead
Vinayak Sinha (IISER, India) - ACAM Scientific Steering Group member and data sharing WG lead

Satellite data records

ACE-FTS

Point of contact:

Temporal coverage:

Altitude coverage:

Horizontal sampling:

Altitude resolution:

Products:

Further information:



MLS

Point of contact: Michelle L. Santee

Temporal coverage: August 2004 - present

Altitude coverage: 316-0.02 hPa, depending on the data product (see [MLS Data](#)

[Quality and Description Document](#))

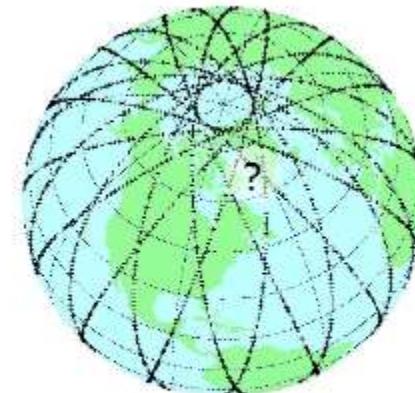
Horizontal sampling: The along-track separation between adjacent retrieved profiles is 1.5° great-circle angle (~165 km), whereas the longitudinal separation of MLS measurements, set by the Aura orbit, is 10°-20° over low and middle latitudes

Altitude resolution: ~2.5-5 km, depending on the data product (see [MLS Data](#)
[Quality and Description Document](#))

Products: Various trace gases (e.g., H₂O, CO, O₃, HNO₃, CH₃Cl, CH₃CN, CH₃OH, HCl, HCN, N₂O, ClO, SO₂), cloud ice water content (IWC), geopotential height (GPH), temperature

Publications: [relevant for ACAM, general](#)

Further information: [This portal](#), [MLS homepage](#), [Data](#)



Aura MLS data for studies within ACAM

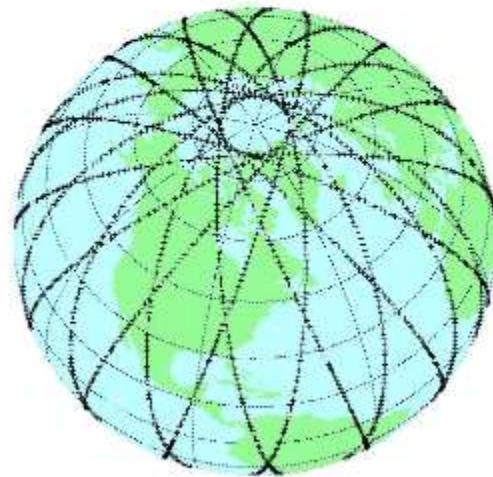
Point of contact

Michelle Santee

Access to Aura MLS Level 2 data

Information about and access to Aura MLS Level 2 can be obtained through the [MLS homepage](#). MLS data can also be ordered directly through the NASA Goddard Space Flight Center Earth Sciences (GES) Data and Information Services Center (DISC).

The MLS Level 2 data are provided in HDF-EOS version 5 format. The current data version is v4 (the fourth "public release" of the Aura MLS measurements). In v4, "standard" products include vertical profiles of the abundances of BrO, CH₃Cl, CH₃CN, CH₃OH, ClO, CO, H₂O, HCl, HCN, HNO₃, HO₂, HOCl, N₂O, O₃, OH, and SO₂, along with temperature, ~~discussions of the instrument averaging kernels, guidance for comparisons with high vertical resolution data sets, and other caveats can be found in the MLS v4 Data Quality Document.~~



Daily global coverage of Aura MLS observations

References

For MLS data in general: <https://mls.jpl.nasa.gov>

[Selected publications relevant to ACAM](#)



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Selected ACAM-related Aura MLS publications

- **Convective outflow of South Asian pollution: A global CTM simulation compared with EOS MLS observations**
Li, Q.B., J.H. Jiang, D.L. Wu, W.G. Read, N.J. Livesey, J.W. Waters, Y. Zhang, B. Wang, M.J. Filipiak, C.P. Davis, S. Turquety, S. Wu, R.J. Park, R.M. Yantosca, and D.J. Jacob
Geophys. Res. Lett. 32, L14826, doi:10.1029/2005GL022762, 2005.
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- **A comprehensive overview of the climatological composition of the Asian summer monsoon anticyclone based on 10 years of Aura Microwave Limb Sounder measurements**
Santee, M.L., G.L. Manney, N.J. Livesey, M.J. Schwartz, J.L. Neu, and W.G. Read
J. Geophys. Res. Atmos., 2016JD026408, in review, 2017.

A general list (i.e. not pre-selected according to relevance for ACAM) of Aura MLS publications is available here:
<https://mls.jpl.nasa.gov/publications.php>



Contacts

Gabriele Stiller (KIT, Germany)
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Impressum