ACAM Working Group 3 – Field Campaigns

Co-Leads:
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Goals
• to collect information on ACAM-related field activities
• to set up a platform for information exchange amongst ACAM-partners and other scientists interested in ACAM-related field campaigns
• to develop ideas and concepts for future field campaigns
• to promote the coordination between various field activities

Previous Activities
• Start to build-up WG (currently 35 members)
• Compilation of ACAM-related field activities (on-going)
Planned field activities (cover summer and winter monsoon periods)

- **Aircraft campaigns** (OMO, StratoClim, Monsoon, EmeRGe; IAGOS/CARIBIC)
- **Balloon soundings** (SWOP China, BATAL India)
- **Ship measurements** (Japan to SE Asia)
- **Ground-based measurements** (ACAM countries)

**Aircraft campaigns** (acronym, aircraft, date, contact)

- **OMO** (Oxidation Mechanism Observations), HALO, July/Aug 2015, Contact: Jos Lelieveld, Hardwig Harder MPI-C, Andreas Wahner, FZJ
- **StratoClim** (Stratospheric and upper tropospheric processes for better climate predictions), Geophysica, summer 2016), Contact: Markus Rex, AWI
- **MONSOON**, FAAM-BAe146, summer 2016, Contact: Hugh Coe, U Manchester
- **EMeRGe** (Effect of Megacities on the Transport and Transformation of Pollutants on the Regional and Global Scale), HALO, 2017/2018, Contact: John Burrows, Lola Andrés Hernández, U Bremen
- **IAGOS/CARIBIC**, In-service aircraft, continuous observations, Contact: Andreas Petzold (FZJ) /Andreas Zahn (KIT)
Topics of airborne measurements

• Large-scale ASM impact (outflow from anticyclone, transport into stratosphere)
• TTL and ATAL sampling (chemistry, aerosol formation and properties)
• Convection probing (aerosol pollution-cloud interaction, cloud μ-physics, particle formation in/out of clouds, convective outflow, wet removal of gases and particles, LNOx)
• Sampling of TP region (cirrus & sub-visible cirrus water vapor, NAT-type layers)
Discussion points

• Compilation of ACAM-related field activities: „living document“
  (please email to bjc@mail.iap.ac.cn, hans.schlager@dr.de)

• Areas of WG3 cooperations:
  - development of measurement concepts
  - logistics
  - measurement QA/QC issues, intercalibrations
  - coordination of observations
  - data analysis

• Possibilities to link measurements: Lagrangian experiments

• Registration as WG3 member, proposal: via ACAM main Website