

Recommendations

Air Quality

S5p/TROPOMI session

ATMOS 2015

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Recommendations AQ & S5p/TROPOMI

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- **Recommendation 1:** ESA should take care to fund, or help to fund, validation activities needed for S5p/TROPOMI for
 - level 1 & 2 data products
 - auxiliary data
 - modelling efforts for the validationValidation measurements include continuous ground based column and profile measurements, not only specific campaigns.
- **Recommendation 2:** ESA should take care that level 1 and level 2 NRT and off-line data are easily accessible for the scientific user for the complete measurement period of the instrument.
- **Recommendation 3:** ESA is recommended to facilitate a scientific data analyses center where the satellite data are archived (see NASA TLMCF system for OMI/Aura) and where scientists can run analysis (bring the software to the data). The H2020 EU big data calls might be a way to facilitate this.

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- **Recommendation 4:** The level 1b and calibration effort for the sentinel missions S4 and S5 should be performed with a one-team approach, as successfully done in sentinel 5p/TROPOMI.
- **Recommendation 5:** Current Sentinel-5 performance suggests a lot of incompliances with the instrument requirements. The experience in S5p/TROPOMI and other previous missions should be extensively used to improve on this situation. In general care should be taken that existing experience from previous missions is used for future missions.
- **Recommendation 6:** The community should aim at consistent algorithms for the S4, S5p, S5 level 1 and 2 etc. data processing and take advantage of the existing data processing algorithms for S5p and earlier missions.

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- **Recommendation 7:** Campaign results should be brought in a format that is usable for the modeling community at large (AQ and climate), in order to enhance scientific impact. Co-operations should be established in an early phase.
- **Recommendation 8:** The CCI program should be extended to ozone and aerosol precursors. Existing CCI data sets and projects should be continued.
- **Recommendation 9:** ESA should continue with the active inclusion of third party missions and non-ESA missions in programs they have, such as the CCI effort.
- **Recommendation 10:** ESA and EUMETSAT should coordinate to avoid duplication in making third party data available for the users.
- **Recommendations 11:** ESA should establish links to the TEMPO and GEMS groups to ensure early data access for European data users and S4 groups.
- **Recommendations 12:** ESA should continue the validation data base created for ENVISAT.