

Highlights:

- Seven different parameters to be validated were discussed (Cloud-discrimination, layering, extinction/backscatter/AOD (355, 670, 865), depolarization, lidar ratio, Angstrom, aerosol typing)

Recommendations:

- If possible, upgrade Lidar systems to 355nm (incl. depol.) for validation of EarthCARE & Aeolus.
- Other wavelength (532, 1064nm) can be used for many comparisons, however take care and describe how the wavelength conversion is performed.
- Having early info on the orbit will advise on network design; setup of specific stations
- Campaign data sets can already be used for validation exercises (i.e. HSRL-2, 2021 Tropical Campaign, NARVAL/NARPEX, STRATEOL, A-LIFE, LOAC).

Further Improvements and needs:

- HETEAC is the aerosol model used by the L2 algorithms and needs validation (before launch; esp. airborne in-situ). There is need for information on HETEAC, a description will be provided soon.
- Common practice has to be documented and shared as well as how the retrievals/profiles were compared; i.e. QC can be linked to ACTRIS practice if not defined yet.
- L2 algorithm publications will be ready by mid 2022