PACE SAT polarimetry sub-group meeting notes, November 9, 2020

Note: the primary focus of this meeting was to be a presentation by Bertrand Fougnie (EUMETSAT) to discuss 3MI observations. Due to technical difficulties, aspect of the meeting has been postponed. We will try again on Monday, November 30th at 13:00 EST.

For this reason, these notes are short.

- Jeremy Werdell and Amir Ibrahim are proposing a special issue of Frontiers of Remote Sensing entitled (something similar to): "Polarization of light as a tool for characterizing different facets of the atmosphere – ocean system". This will be an ideal location for SAT members to submit the results of their work, which was an approach we took with the previous SAT. However, Frontiers would like a list of potential authors, which may come from this mailing list. In a quick poll, at least 13 meeting participants said they might be interested in participating.
- Jeremy gave a brief project update. For COVID related reasons, the launch date for PACE will be delayed. The details are not yet finalized, but this may be 6 to 12 months, and there certainly won't be a 2022 launch.
- Vanderlei Martins (UMBC, HARP2). Not much new to report. There are COVID related delays, but nothing affecting launch schedule.
- Otto Hasekamp (SRON, SPEXone). SPEXone is preparing for a calibration campaign, there was a small delay for board computer software. This should begin in 2-3 weeks.
- Guangliang Fu (SRON, SPEXone) has created a test SPEXone file in Level 1C format. It will be made available to the public by the PACE project science group soon.
- Bertrand Fougnie (EUMETSAT): impact of expected 3MI observation geometry on aerosol retrieval capability *postponed. See related publication: Fougnie, B., Chimot, J., Vázquez-Navarro, M., Marbach, T., and Bojkov, B.: Aerosol retrieval from space -- how does geometry of acquisition impact our ability to characterize aerosol properties, J. Quant. Spectrosc. Ra., 256, 107304 , https://doi.org/https://doi.org/10.1016/j.jqsrt.2020.107304, 2020.*
- Bastiaan van Diedenhoven presented similar studies regarding the impacts of measurement geometry on observation capability. This is in collaboration with Sabrina Thompson (GSFC/UMBC), and primarily supported by A-CCP. Also see upcoming AGU presentation: https://agu.confex.com/agu/fm20/prelim.cgi/Paper/757072

Meeting announcement

Hello PACE polarimetry team!

I'd like to send an update about our next PACE polarimetry group meeting, which is still scheduled for **Monday, November 9th at 2pm US Eastern time**.

We are fortunate that **Bertrand Fougnie** has agreed to speak with us. Bertrand works with the planned 3MI (Multi-Viewing Multi-Channel Multi-Polarisation Imaging) instrument at EUMETSAT. He has a recent

publication (attached) about the impact of observation geometry on aerosol retrieval ability which he will discuss. These issues will be very important for the PACE polarimeters as well. In a more general sense, I would like to have a more regular dialog with the 3MI team because of the similarities in our mission characteristics, and the considerable heritage that team has with POLDER.

Also, the teams meeting link should be attached now.

Thanks!
Kirk