

# Validation of PACE Mission data, with a focus on the PACE-PAX field campaign

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The recently launched NASA Plankton, Aerosol, Clouds and ocean Ecosystems (PACE) Mission produces ocean color, aerosol, cloud and land surface data products from its three sensors. Some of these products use established ‘heritage’ algorithms, which have continuity with prior and current missions. Others are new, representing recent algorithm development and the unique measurement capability of the PACE sensors. This capability includes multi-angle polarimetry with the SPEXone and HARP2 instruments, and UV-SWIR spectroscopy with the OCI instrument [1]. Validation of all products is required to be approved for standard data processing status and distribution. For these reasons, the PACE validation plan has many components. This includes activities by the PACE Project Science office, contributing PACE instrument teams, a competitively funded PACE Validation Science Team (PVST), and a dedicated field campaign called the PACE Postlaunch Airborne eXperiment (PACE-PAX) [2]. We will provide an overview of these PACE Validation activities and describe how the Science and Applications communities can be further involved.

## References

- [1] Werdell, P. J., Behrenfeld, M. J., Bontempi, P. S., Boss, E., Cairns, B., Davis, G. T., Franz, B. A., Gliese, U. B., Gorman, E. T., Hasekamp, O., Knobelspiesse, K. D., Mannino, A., Martins, J. V., McClain, C. R., Meister, G., and Remer, L. A.: The Plankton, Aerosol, Cloud, Ocean Ecosystem Mission: Status, Science, Advances, *B. Am. Meteorol. Soc.*, 100(9), 1775-1794, <https://doi.org/10.1175/BAMS-D-18-0056.1>, 2019.
- [2] Knobelspiesse, K. D., Cairns, B., Cetinić, I., Craig, S., Franz, B. A., Gao, M., Ibrahim, A., Mannino, A., Sayer, A. M., and Werdell, P. J.: The PACE Postlaunch Airborne eXperiment (PACE-PAX), National Aeronautics and Space Administration, <https://ntrs.nasa.gov/citations/20230008223>, 2023.

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