

PACE

# Uncertainties Working group

Monday April 26<sup>th</sup> , 2021

# Uncertainties WG report

## Goal 1

Provide common definitions, terminology, and metrics

## Goal 2

Provide recipes to the SAT on uncertainties propagation, validation, etc.

## Goal 3

Define major gaps in uncertainty budgets pre- and post- launch

# Report outline

- ✓ Definitions and terminology
- ✓ Uncertainties sources
- ✓ Recipes for propagation of uncertainty estimates from level 1 to level 2
- ✓ Recipes to assess level 2 uncertainty estimates
- ✓ Recipes and common metrics for evaluating retrieval performance in validation
- ✓ Gaps in uncertainty budgets
- ✓ Where quantitative uncertainty propagation/uncertainty estimation breaks down
- ✓ Limitations of and uncertainties in lab/field data for algorithm development (e.g. OCX or GIOP algorithms)
- ✓ Limitations of and uncertainties in field data for validation (e.g. Rrs, AERONET...)
- ✓ Towards level 3 uncertainty estimates

# Workflow

- Suggest to discuss two subtopics every months.
- Few of us will take the lead on the report writing and share the report with the group for revisions/edits once a month.
- 1-year timeline for the report?