Copernicus FICE 2025

Training on
In situ Ocean Colour Above-Water Radiometry towards Satellite Validation

Group Assignments and Final Presentations

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Group presentations – Saturday

- To finish the course, we ask you to give a small presentation on Saturday morning summarising and reflecting on your work during the last two weeks. 15 minutes or so, points for nice pictures etc. You can do this in small groups of 3 – 4. Organise as you like (similar interests).

- We suggest 3 parts, with various prompt questions (see following slides, don't have to answer them all ;))
  1. **Your experience during field measurements (San Servolo and AAOT)**
     - What you learned about protocols and different instrument deployment
  2. **Running HyperCP and ThoMaS**
     - Work with an existing data set (e.g. San Servolo dock data, or some of the example data). You could also use your own, if you have it.
     - Process in HyperCP (if you can)
     - Process matchups with ThoMaS (maybe not a huge dataset ;)!)
  3. **Achieving FRM quality over your future measurements**
     - How will you use these skills and knowledge?
     - What challenges will you face?
     - How can we help each other?

FINISH BY FRIDAY 4:30PM

Group assignments

Each group will give a final presentation (15 min) at the end of the course – Saturday July 19th, addressing the following points:

1st part: Your experience during the field measurements in San Servolo and AAOT

1. What were the hardest particular things (instrumental, coordination, logistics, cables, weather, etc.) to achieve during the San Servolo field experiment?
   - What unexpected issues took place and how did you circumvent them?
2. What particular roles did each of you take individually during the measurements (e.g. who took pictures, who took field notes, who triggered the casts, etc.)?
3. What measurement protocol recommendations are harder/easier to follow in San Servolo when compared to other sites where you performed in situ radiometry measurements?
4. Was it easier or harder compared to the locations from where you typically measure?
5. What measurement protocol recommendations are harder/easier to follow with TriOS when compared to other instruments with which you performed in situ radiometry measurements?
6. Do you have specific suggestions as regarding measurement protocols/procedures that the OCR community should consider to include in revisits of the protocols and procedures?

Group assignments

Each group will give a final presentation (15 min) at the end of the course – Saturday July 19th, addressing the following points:

2nd part: Running HyperCP and/or ThoMaS with a precursor in situ dataset.

1. Select (in case accessible by any member of your group) a pre-existing data set of **raw measurements** performed with TriOS or SeaBird instruments that you wish to run using HyperCP… and give it a try it out!
   - Discuss preliminary results and challenges faced.
   - Advanced (in case you have your own processing workflow): Compare the results obtained with HyperCP vs. your own processing workflow.
   - Please discuss in advance your selected dataset with the HyperCP instructors (Dirk, Aga, Juan and Hayley).
2. In case you have a specific in situ radiometry dataset (+ Chlorophyll, TSM, etc.) that you wish to use to perform matchups with ThoMaS, give it a try!
   - Discuss preliminary results and challenges faced.
   - Please don't select huge datasets!
   - Advanced: Compare the results obtained with ThoMaS vs. your own matchup workflow.
   - Please discuss in advance your selected dataset with the ThoMaS instructors (Juan and Hayley).

If you don't find a suitable dataset for neither HyperCP nor ThoMaS, please talk to us

Group assignments

Each group will give a final presentation (15 min) at the end of the course – Saturday July 19th, addressing the following points:

3rd part: Achieving "FRM quality" over your future measurements

1. What are the overarching major challenges that each of you and your teams face today to acquire in situ optical measurements back at your home locations?
2. Do you consider that your (past/coming) in situ acquisitions are conforming to the FRM principles? If not:
   - Which are
     1. … the limitations in terms of your instrumental facilities …
     2. … the elements of your acquisition protocol or specific procedures in the field …
     3. … the Quality Control and Quality Assurance steps …

     …. that you think you can re-assess after the course?
   - Is there any specific procedure that you follow that you consider to be specific to your measurement conditions (site/instrumentation/other) and that should be accounted for in the current documentation?
   - How can the OC community (IOCCG, FRM4SOC-2, Consortium, space agencies) help you and your research teams to further achieve FRM standards?
3. Are you planning to use HyperCP and/or ThoMaS to process your in situ data? Regardless if yes or not,
   1. Which were the major challenges you faced when using them?
   2. Are there processing steps in HyperCP/ThoMaS that you would need to tweak for your particular case?
   3. What enhancements do you think that HyperCP and ThoMaS would benefit from?