

Minutes of the ISSI International Team (IT) annual meeting

Date: 26-28 September 2023

In-person participation: P. Chen, D. Dionisi, P. di Girolamo, Y. Hu, C. Jamet, X. Lu, I.S. Stachlewska, S. Vadakke-Chanat, S. Zhang, Z. Zhang

Virtual participation : D. Liu, Y. Zhou

The first day were mostly dedicated to presentations to the members of the International Team (IT). These presentations provided updates on their work related to the IT. Three early career scientists are now part of the IT. They presented their background and their interests for being involved in the IT. The last part of the first day was about the breakout workshop at the next International Ocean Color symposium organized by C. Jamet, D. Dionisi and P. Chen. The organizers chaired the purpose of this breakout workshop and a discussion took place.

ACTION: To organize a virtual meeting the week before the IOCS conference to organize the breakout workshop and to provide a collective message to the community.

The second day was focused on the review paper on oceanic lidar algorithms. This review paper was an action decided during the kick-off meeting. The participants were split into two groups: one group working on HSRL and the second one on elastic lidar. The main purpose was to complete the references list provided by D. Dionisi and C. Jamet and then to complete a table summarizing the main characteristics, hypothesis and limits of each algorithm. This work would be the basis of the review paper. The review paper will only focus on the estimation of the particulate back-scattering parameter and the diffuse attenuation coefficient.

ACTION: To provide a detailed table of contents to the participants by mid-November (C. Jamet and D. Dionisi)

ACTION: To work on the review paper by sub-groups (same as defined during the meeting) to write sections of the review paper

ACTION: To have a first draft by March 2024

The third day was dedicated to diverse topics.

The first topic was about the validation protocol. S. Vadakke-Chanat and P. Chen published separate articles on validation protocol. The conclusions are a bit different as well as the protocols. Discussion occurred for converging to a universal protocol.

ACTION: S. Vadakke-Chanat will visit P. Chen for a couple of weeks early 2024.

The second topic was about two potential papers. Indeed, during the second day, two issues arose. The first one is about glossary. The atmospheric and oceanic communities do not use the same words for the same parameters. This limits the potential interaction between both communities. One idea is to publish an article about glossary and summarizing the symbols and definitions about scattering and attenuation linked to lidar.

ACTION: S. Zhang will lead this paper with the help of the entire IT.

The third topic was about the CALIGOLA mission. P. di Girolamo showed the status of the mission. It is in Phase A. Discussion with NASA started just after the kick-off meeting of the IT. NASA sent a letter of intention to participate to CALIGOLA. C. Jamet mentioned that he would ask CNES for a participation. Then the IT talked about the roadmap. The roadmap will be the focus of the final year of the IT.

ACTION: C. Jamet to contact CNES for possible involvement in CALIGOLA

→ ACTION DONE: C. Jamet mentioned CALIGOLA in a call of idea for new mission from CNES. He submitted a proposal for a space-borne oceanic lidar with linked to CALIGOLA. CNES has its five-year survey in October 2024.

ACTION: Next meeting will take place in Bern from 2nd to 5th of April, 2024

ACTION: The final meeting will take place in Beijing late 2024 (November/December)

AGENDA

Tuesday 26 September 2023

13:30-14:00 : Arrival

14:00-14:10 : Presentation of the goal of the meeting and the international team (C. Jamet, D. Dionisi)

14:10-14:20 : Brief presentation of latest activities (D. Liu)

14:20-14:30 : Brief presentation of latest activities (Y. Zhou)

14:30-14:40 : Brief presentation of latest activities (P. Chen)

14:40-14:50 : Brief presentation of latest activities (X. Lu)

14:50-15:00 : Brief presentation of latest activities (Y. Hu)

15:10-15:25 : Brief presentation of latest activities (S. Zhang)

15:25-15:40 : Brief presentation of latest activities (Z. Zhang)

15:40-15:55 : Coffee break

15:55-16:10 : Brief presentation of latest activities (S. Vadakke-Chanat)

16:10-16:20 : Brief presentation of latest activities (P. di Girolamo)

16:20-16:30 : Brief presentation of latest activities (I. Stachlewska)

16:30-16:40 : Brief presentation of latest activities (D. Dionisi)

16:40-17:10 : Discussion about the breakout session at the IOCS meeting (C. Jamet, D. Dionisi, P. Chen)

17:10-17:30 : Wrap-up and general discussions about the International team

17:30-18:30 : Presentation of the WP1 : Review of oceanic lidar algorithms

20:00 : Group dinner (location TBD)

Wednesday 27 September 2023

09:00-10:30 : Working group on the review

10:30-10:45 : Coffee break

10:45-12:30 : Working group on the review

12:30-14:00 : Lunch (outside)

14:00-14:15 : Discussion about the work of the working group

14:15-16:00 : Working group on the review

16:00-16:15 : Coffee break

16:15-17:30 : Working group on the review

17:30-18:00 : Discussion about the work of the working group

20:00 : Group dinner (location TBD)

Thursday 28 September 2023

09:00-10:00: Discussion about the validation protocol (P. Chen, C. Jamet, S. Vadakke-Chanat, Z. Zhang)

10:00-10:30 : Glossary paper (fluorescence paper)

10:30-11:15 : Scientific Roadmap : where to go next, link with GALIGOLA space mission (C. Jamet, D. Dionisi, P. di Girolamo, Y. Hu)

11:15-11:30 : Coffee break

11:30-12:15 : Planning of the next and final meeting in Beijing and the work for the final year

12:15-12:45 : wrap-up and conclusions