

Progress report on IOCCG WG "Atmospheric correction over optically-complex waters"

The document presents the work that has been done and achieved since the last IOCCG committee meeting held in Cottestloe Bay in Perth 2017.

The actions that have been taken and occurred are:

- OC-SMART and NeuroVaria have been removed
- POLYMER (Steinmetz et al., 2011) has been added
- Investigation of the simulated dataset
- Creation of a pseudo-netcdf file for the simulated dataset (can be used in SeaDAS)
- Draft of the table of contents of the report
 - Introduction about AC in turbid/coastal waters
 - Presentation of the AC used in the study
 - Description of the datasets
 - Simulated
 - In-situ: AERONET, LOG
 - Images
 - Evaluation using simulated dataset
 - Evaluation using AERONET-OC dataset
 - Evaluation using LOG dataset
 - Evaluation using MODIS-AQUA images
 - Other issues
 - Adjacency effects
 - Absorbing aerosols
 - Conclusion

- Appendix: Results from other projects such as MERIS/S3: ESA case2x project

- Processing with all datasets with AC algorithms

To summarize, at the last IOCCG committee meeting, we were at

ALGORITHM	AERONET-OC DATA	LOG DATA	SIMULATED DATA	SATELLITE IMAGES
STD				
MUMM			N/A	
NIR-SWIR				
UV	In progress	In progress		
SWIRE		In progress	In progress	
ANN Schroeder				
ANN Stamnes				
NeuroVaria				
OC-SMART				
GDE				ONLY ARABIAN SEA

and now, we are here

ALGORITHM	AERONET-OC DATA	LOG DATA	SIMULATED DATA	SATELLITE IMAGES
STD				
MUMM			N/A	
NIR-SWIR				
UV				
SWIRE		In progress		
ANN Schroeder				
ANN Stamnes				
GDE				
POLYMER				

Work to do in 2018:

- Analysis the results on the simulated and in-situ datasets using statistical parameters
- Analysis the results on the in-situ datasets as a function of water types
- Writing the report