BOSS and FROUIN
Radiative products for the PACE era

<u>Objective:</u> Provide legacy radiative products + novel radiative products that are *useful*, state-of-the-art, validated and with known uncertainties on a pixel-by-pixel basis.

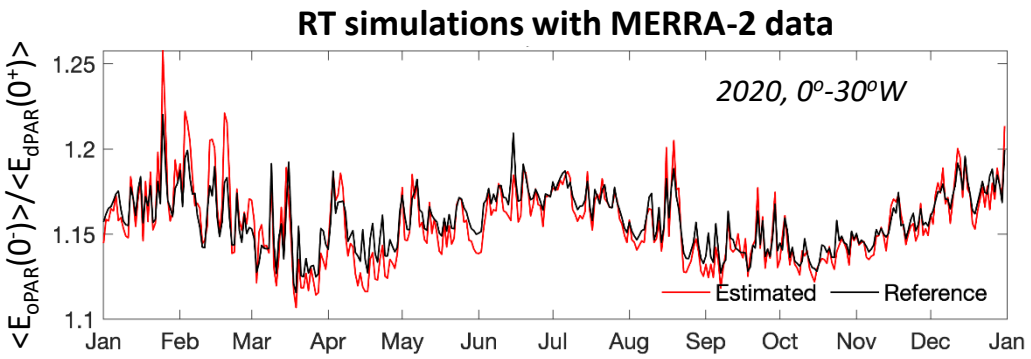
Useful ← based on inputs from likely users.

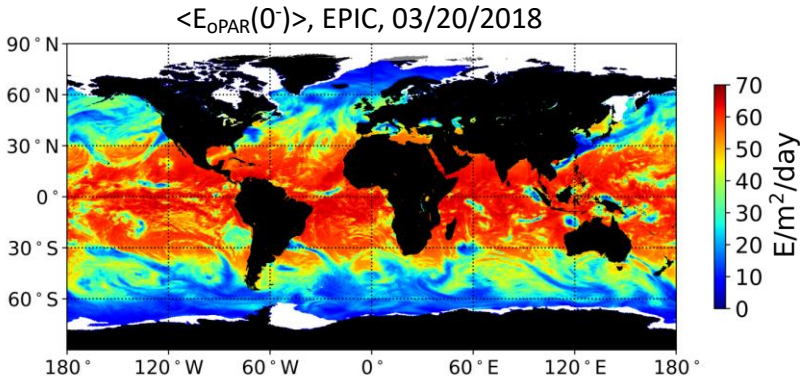
<u>Deliverables:</u>

- Level 2 & 3 $E_d(\lambda)$, $E_0(\lambda)$ & $A_s(\lambda)$ at $z=0^+$ and z= 0- from 400-700nm every 5nm at satellite passage and daily-integrated.
- Band integrated PAR (400-700) and UVA(340-400) flux.
- Sub-surface radiative quantities or k-functions to compute them.
- Associated pixel-by-pixel uncertainties.

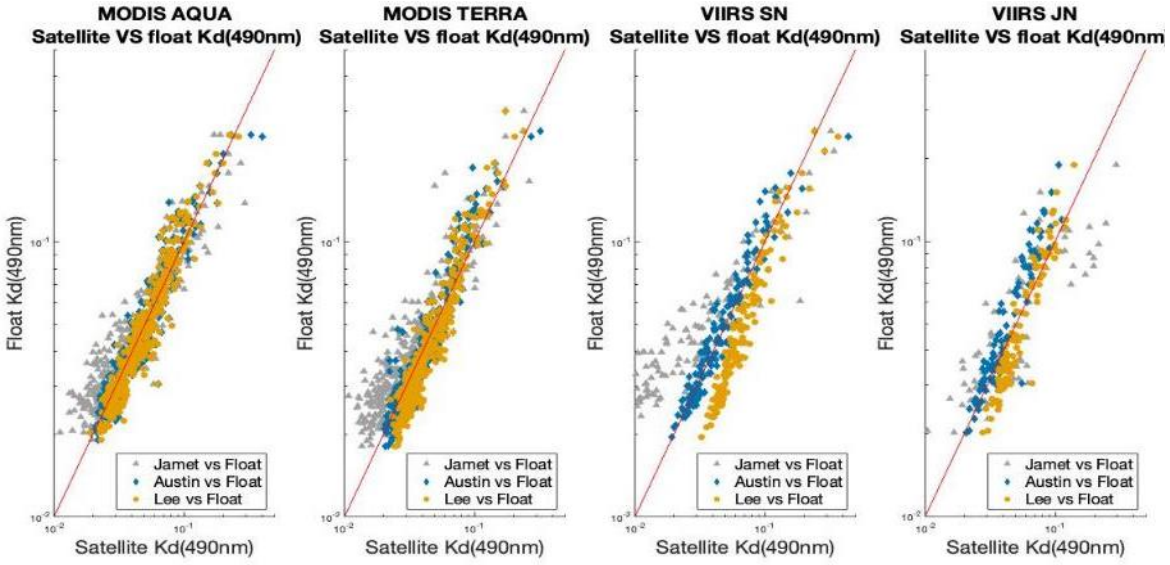
Results since our last meeting

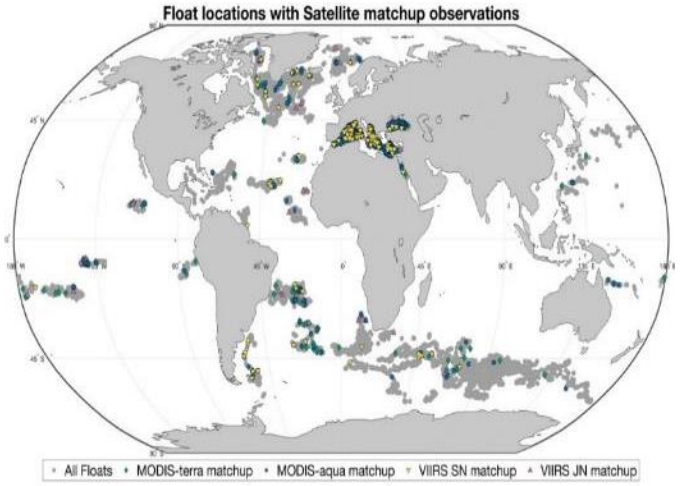
- Developed preliminary algorithms to estimate daily mean $E_d(\lambda,0^+)$, $E_d(\lambda,0^-)$, $E_0(\lambda,0^-)$ and PAR-integrated fluxes from PACE observations at 5 nm resolution. Applied/tested algorithms to EPIC DSCOVR imagery.





- Evaluated K_d algorithms:





Synergies with other groups

Stramski/Loisel:

Output of Hydrolight runs.

Test use of hyperspectral IOPs in algorithm for AOPs.

Westberry and others:

Phytoplankton absorption of PAR (APAR).

All team: measurements of radiative quantities and AOPs to test products with.