Proposal for DMQC chlorophyll processing for BGC-Argo:

a. Smooth profiles.
b. Identify and remove dark and look for history of dark to signs of problem with sensors. Zero all depths where chlorophyll is expected to be zero (below Fchl 'minimum').
c. Perform NPQ for day profiles.
d. Perform a matchup analysis w/ OCR for the year long or more history (potentially use NN and Kd(490)) to obtain an optimal slope parameter or parameters (look for seasonality – if it exists fit for it).
e. Generate OCR consistent 'chl' data.

QC- use bbp near surface to see if chl/C_phyto is consistent with expectation (1/30 to 1/300) within uncertainties.

Alternatively, chlorophyll fields consistent with OCR will be generated outside of the BGC-Argo (e.g. ML depth for Argo).

Approach – have a subcommittee use s-profiles dataset with historical data. Report back.