Current status of Real Time processing:

• Currently have 16 live BGC floats, mostly oxygen sensors
• Total of 77 BGC floats deployed
• All BGC floats are processed in Real Time
• BGC-Data, including both raw and derived parameters, is delivered to GDACs in format version 3.1 BR files

Data QC:

• DOXY data and TEMP_DOXY data goes through RTQC procedures but is not calibrated in RT
• DOXY data is calibrated in DMQC
• Other BGC data is not QCd in our routine RT processing, but final parameters are derived from the raw variables in RT
• BD files delivered to GDACs – DOXY is Dmode, others Rmode
BGC floats and sensors deployed to date:

- Aanderaa optode 3830 (DOXY)
- Aanderaa optode 4330 (DOXY)
- Seabird 63 optode (DOXY)
- Seabird 43F IDO (DOXY)
- CROVER transmissometer (CP650)
- MCOMS FLBB2 (CHLA, BBP700 and BBP532)
- MCOMS FLBBCD (CHLA, BBP700, CDOM)
- ECO-BB3 (BBP470, BBP532, BBP700)
- SUNA (NITRATE)
- Satlantic OCR-I (UP_RADIANCE412, 443, 490, 555 and PAR)
- Satlantic OCR-R (DOWN_IRRADIANCE412, 443, 490 and 555)
- SEAFET (pH)
Responsibilities:

RT processing:
• Rebecca Cowley, Jenny Lovell (CSIRO)
• Lisa Krummel (BoM)

DM processing:
• Esmee van Wijk, Catriona Johnson, Jenny Lovell, Tatiana Rykova, Annie Wong, Dirk Slawinski (CSIRO), TBA (UTas)

IMOS Facility Leaders:
• Tom Trull (CSIRO), Peter Strutton (UTas), formerly Nick Hardman-Mountford (CSIRO)
  – Co-Leaders of BGC Argo sub-facility
• Peter Oke (CSIRO)
  – Leader of Argo Facility
IMOS BGC Argo Sub-Facility

- 3 year funding, $2M (AUD), beginning early 2019
- Deployment and RT processing integrated with core program managed by CSIRO
- Project will engage a new full-time employee (UTas)
- DMQC capability to be enhanced
  - Currently DOXY can be done, integrated with core DMQC
  - Community tools are the preferred option for DMQC of all BGC parameters
- Sensors: Aspiring to O$_2$, pH, NO$_3$, chl flr, backscatter and irradiance
  - May need to compromise between sensor suite and number of floats
- Deployment priorities to enhance the BGC array and contribute to core Argo
  - Tasman Sea and southern East Australia Current
  - Southern Ocean
DM software DOXY calibration
Based on Takeshita (2013)

Gain and/or Offset

Fit Options
- Ascent rate
- Depth range
- Mixed layer?
- Winter filter
  - Select months e.g. [May-Oct]

Float Climatology

Climatology surfaces
BGC float data plotter
RT raw data plots
Thanks! Questions?