

GlobColour: European Service for Ocean Colour

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<http://www.globcolour.info/>

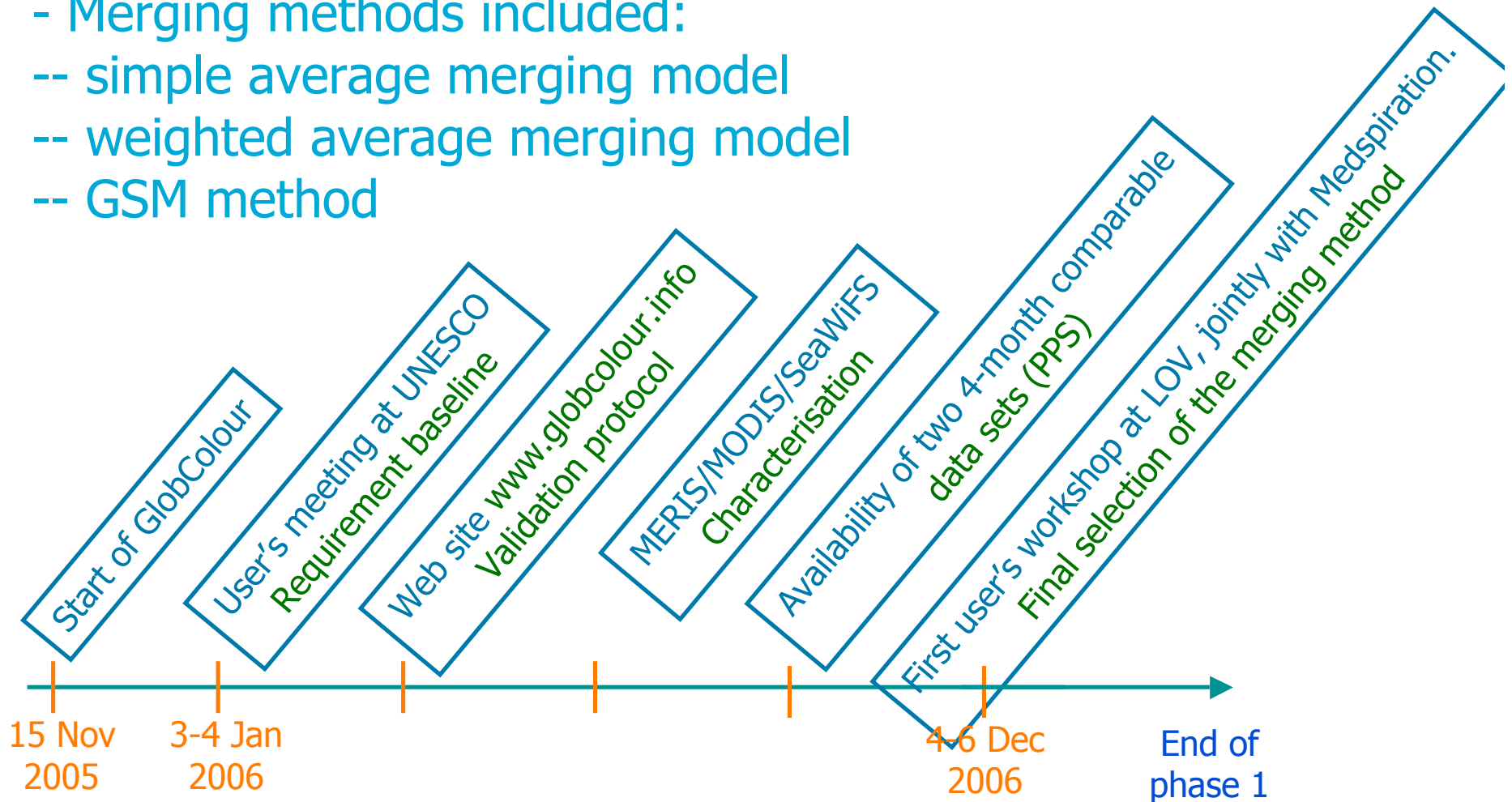


GlobColour aims:

- **Long (10 year) time-series of consistently calibrated and merged global ocean colour information from MERIS, MODIS-Aqua and SeaWiFS.**
- **Capacity to continue the ocean colour service in the future as a near-real time system (SeaWiFS will not be included).**
- **Continual involvement of end-users: currently IOCCG, IOCCP and UK Met Office. Looking to expand prior to 2007 user meeting.**

Phase 1:

- Parosol data not included at present.
- Merging methods included:
 - simple average merging model
 - weighted average merging model
 - GSM method

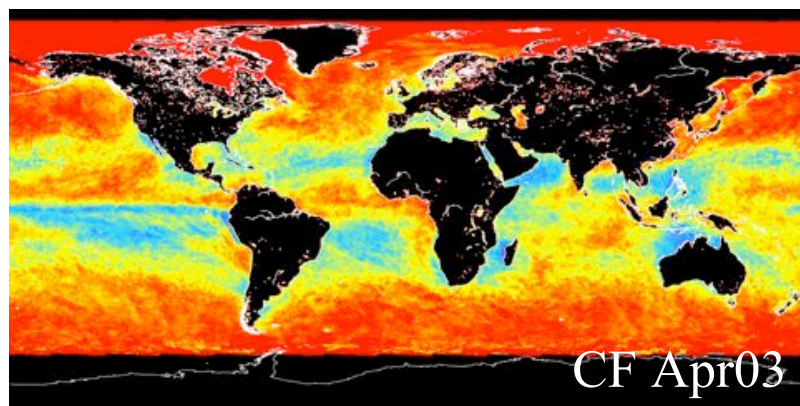
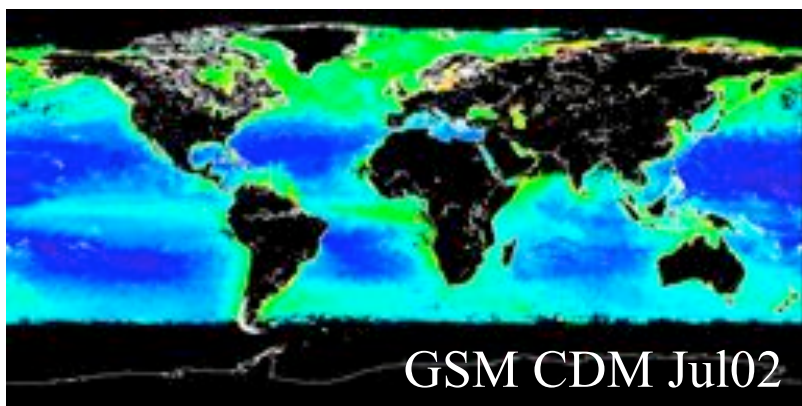
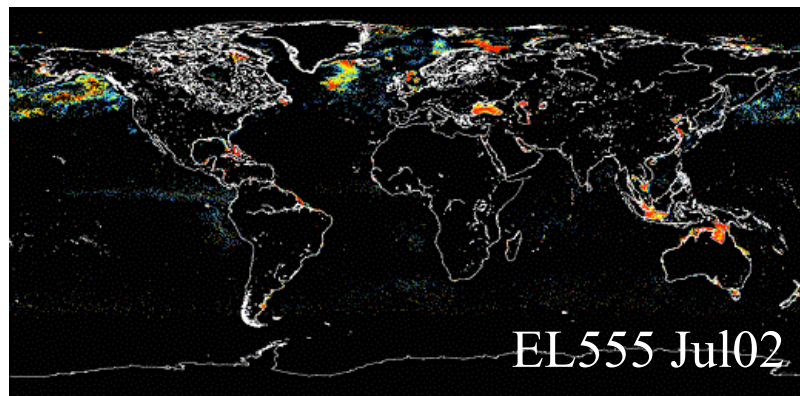
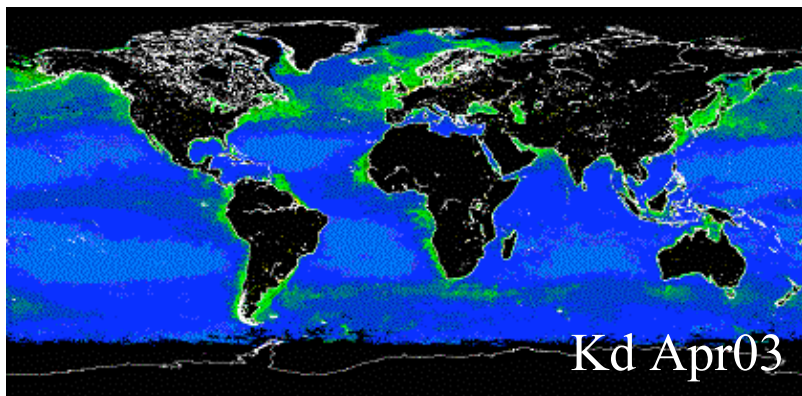


GlobColour outputs

Global ocean colour (Level 3) data set covering 1997-2006 daily, weekly (8-day) and monthly products:

- Chlorophyll-a concentration
- Coloured dissolved and detrital organic matter (CDM)
- Total suspended matter or Particulate back-scattering coefficient
- Diffuse attenuation coefficient (in-water)
- Fully normalised water leaving radiances (available bands)
- Aerosol optical thickness
- Data quality flags
- Cloud fraction
- Error estimates per pixel for each layer

Examples:



Further details: http://www.globcolour.info/CDR_Docs/GlobCOLOUR_PUG_v1.1.pdf

Merging recommendations:

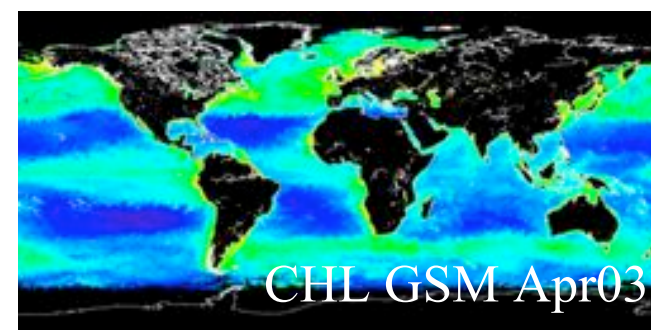
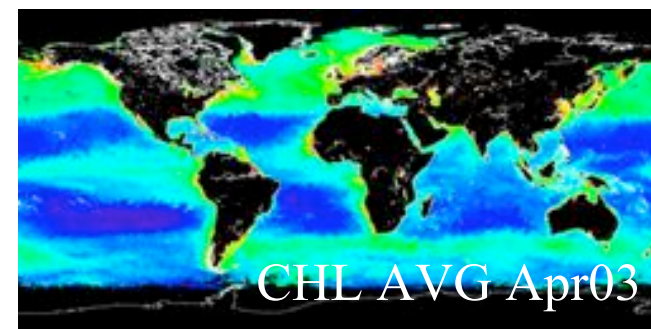
Normalized water-leaving radiances:

- Statistics are slightly better when using the weighted average than the simple average
- Use of the weighted average for the nLw's

Chlorophyll:

- GSM01 provided the best fit to in-situ chlorophyll
- It also has the advantage of providing other products and pixel-by-pixel error bars can be provided in the future

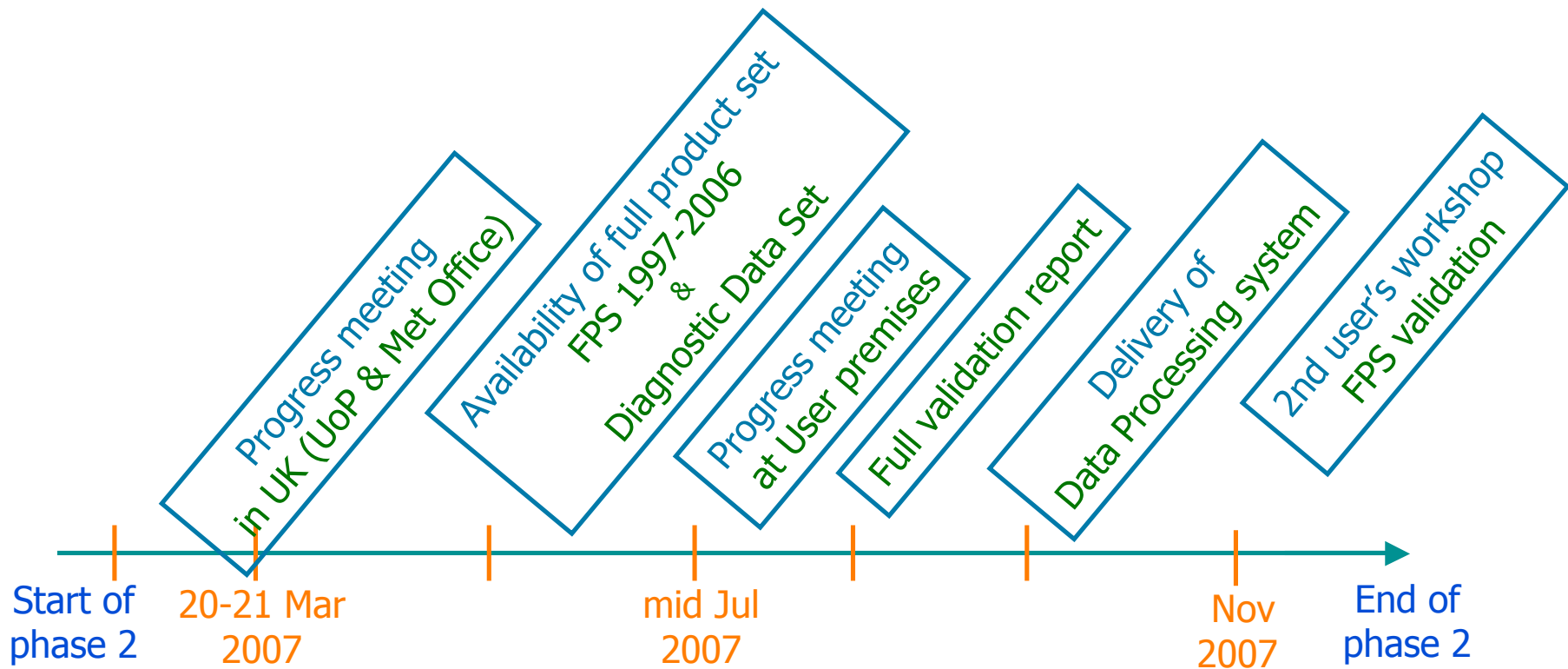
So, for phase 2 of GlobColour, both the weighted average and GSM01 were recommended.



Details in http://www.globcolour.info/CDR_Docs/GlobCOLOUR_PVAR_v1.2.pdf

Phase 2:

- 2nd user's workshop jointly with Medspiration and GlobIce in Norway (Oslo), week of 19th November 2007.





Input from ongoing user consultation:

- New user requirements to be monitored and included as research provides suitable validated methods e.g. PAR, warming depth and PFTs. Also, extension into coastal waters.
- Need to strengthen/broaden the ocean colour community e.g. ocean colour equivalent of GHRSSST? Pursuing links with GHRSSST via European RDAC status.
- New dissemination methods (Google-Earth products: available from the data access page of GlobColour web site).
- Rigour, uniformity and honesty in error statistics – need to develop an operational & centralised quality control approach?
- Development of multi-disciplinary integrated (SST + OC + ...) data sets for model assimilation, seasonal forecasting etc.
- Need to prepare for a probable gap between ENVISAT and Sentinel-3 data supply, and how to manage the impact of this gap on the users.



Access to MERIS data

- Level 3 monthly and daily products: freely available to download via <http://www.enviport.org/meris/globcolour.htm>
- NRT Level 2 RR rolling archive via FTP put transfer: register on-line (<http://eopi.esa.int/LBR>), don't need to submit Cat-1 proposal
- Historical Level 1/2 RR data: registration as above and then MERCI portal (<http://earth.esa.int/resources/catalogues/>)
- Level 1 FR data: requires Cat-1 proposal (submit at <http://eopi.esa.int/Cat1>) and then order via EOLI (<http://earth.esa.int/resources/catalogues/>)