Observation and assimilation interface

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Observations and assimilation interface

Met Office

Current

- Stochastic physics (for ensemble generation) - Andrea Storto (CNR) is working on this

- Make the NEMO obs interface more generic (David Ford) Motivated by biogeochemical data. Associated:

  - Assim interface for SI3 for sea-ice concentration and thickness, Observation operator for surface velocity data, Improvements related to SLA data and other fixes.

Future

- Developments that may aid in ensemble and ensemble DA (I/O servers?/utilities?)

- Making more use of the observation operator and evidence from obs minus model differences (validation)

  - Offline obs operator used? Plotting utilities update (the latest version of dataplot is in the NEMOVAR repo only)

- Interface to JEDI

  - I'm starting work on doing ocean DA with JEDI. This is 3DVar so an interface to NEMO is not needed yet. dealing with ODB observations/model feedback might be a useful. Also setting up grids.

- Adjoint / tangent linear (for 4DVar/Extended Kalman Filter …).

- Minor things. Maintaining the utilities (I think obstools are currently broken). Updating the documentation.