Change log for GHG forecast o-suite CY45R1 (gznv)

The CAMS forecast e-suite (experiment **gznv**) was started on 2018-06-01 based on IFS CY45R1 to couple the new the GHG analysis experiment (gwx3) running 4-days behind real time and the high resolution cyclic forecast run. This new experiment benefits from a couple of bug fixes in the modelled biogenic fluxes which result in an improved seasonal cycle in the northern hemisphere and some degradation in the tropics.

Main features are:

- The experiment was initialized from the GHG analysis experiment gwx3.
- The coupling with the analysis is done by merging the 4-day forecast from GHG delayed analysis experiment and the cyclic high resolution forecast.
- Resolution: Tco1279 (9km) and 137 vertical levels
- 5-day forecast from 00UTC
- IFS cycle 45R1
- Coupled to CTESSEL Net Ecosystem Exchange surface fluxes.
- EDGARv4.2FT2010 anthropogenic emissions - scaled from 2011 with estimated and climatological trends for CO2.
- GFASv1.2 fire emissions
- Takahashi et al. (2009) CO2 air-sea CO2 flux climatology.
- IFS model resolution Tco1279L137
- operational meteorological analysis resolution
- branch: paf_CY45R1_paf_CY45R1_GHG_CARBONTRAC_bugfixes
- New tracer mass fixer: Diamantakis and Agusti-Panareda (2017) with BETA value of 2.

Changes introduced during production affecting the quality of the products

real date	exp date	description of change
20191106	20191101	Experiment has been set to run in cyclic mode because GHG analysis (gwx3) was not available in near-real-time (technical problem)
20191126	20191126	Experiment has been reverted to nudging the initial conditions of the forecast with GHG analysis (gwx3) after it caught up in NRT (4 days behind RT)

Flux updates

real date	expdate	description of change
20180815	20180730	CH4 flux bug fix associated with the temporal interpolation of monthly mean fluxes affecting second half of December.