**Minutes TM5 Steering Committee meeting 17-1-2017**

Participants: Maarten Krol (MK), Maria Kanakidou (MKa), Andy Jacobson (AJ), Twan van Noije (TvN), Wouter Peters (WP), Philippe Le Sager (PLS), Arjo Segers (AJ), Sander Houweling (SH)

**Agenda:**

* Action items last time
* New action items
* New Projects
* Next meeting

**1) Action items last time**

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| Action # | Title | Responsible |
| 1.4 | HO2 uptake recommendation. To continue under new action item for IFS+TM5 chemistry development | MK + Stelios |
| 1.10 | Kz for (diffus files on 1x1). | PB + AS |
| 4.5 | Bug diffusion: info to TM5-4DVAR. Has also TM5-MP and TM5-zoom been updated?? | AS |
| 4.6 | Jason’s chemistry changes: benchmarked?Then tag the version | FB + PLS |
| 5.1 | Distribute PDF file with TM5-MP documentation to some new users and get feedback | PLS |
| 5.2 | Send this PDF file to Maarten and place online at sourceforge website | PLS+MK |
| 5.3 | Distribute list of pros/cons for KPP to Maarten and other users, start exploring possibilities for an inter comparison with current EBI solver | PLS+MK |
| 5.4 | Take initiative to start using and testing the TM5-online (IFS+TM5+OASIS within EC-Earth with nudging) system | WP+TvN |
| 5.5 | Make a small test with uncompressed and compressed reading times of NetCDF4 meteo | PLS |
| 5.6 | Check date when meteo production went straight to NetCDF4, resolve possible differences with conversion of HDF5 that was done before that time | PLS |
| 5.7 | Report back on possibilities for XIOS server in TM5 after recent EC-Earth meeting, gain first experience and report back | TB and PLS |

1.4: Keep open, Stelios is working on this (Stelios, MK)

1.10: Keep open, Philippe is processing several years of diffuse files, Sourish and Sander test it in TM5 (Sourish, Sander)

4.5: Open (action on AS & PLS). AJ: zoom code is not fixed yet.

4.6: Paper in GMD, action closed

5.1: WP: New student Lars Kilaars will start working with TM5mp and will provide feedback to PLS on its documentation.

5.2: PLS will send again.

5.3: Stelios and Vincent will port TM5 chemistry to KPP.

5.4: WP: Lars Kilaars will work on this (IFS + TM5mp) – can be removed from action list

5.5 & 5.6: Results of tests were presented by PLS. Netcdf4-classic compression L1 comes out as the best option (fast and easy to implement). A discussion follows about differences between netcdf meteo generated by NOAA, and available on the EC archive (presented by AJ). It is decided to switch to Netcdf4-classic compression L1 for new meteo, and to invest some time in analysis the cause of the problem with the existing meteo. Options are: difference between netcdf files that were generated from HDF or from Grib. The 10 day cycle in errors between netcdf versions may hint at a problem with the tarring of ECMWF files. This action is replaced by two new actions: 6.1) analysis of existing meteo, 6.2) processing of new meteo.

5.7: Keep open (Tommi Bergman will work on it)

**2) New action list**

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| Action # | Title | Responsible |
| 1.4 | HO2 uptake recommendation. To continue under new action item for IFS+TM5 chemistry development | MK + Stelios |
| 1.10 | Kz for (diffus files on 1x1). | PLS+SB+SH |
| 4.5 | Bug diffusion: correct TM5-4DVAR, TM5-MP, TM5-zoom | AS+PLS |
| 5.1 | Lars Kilaars will play guinea pig on TMmp documentation – feedback to PLS | PLS+WP+LK |
| 5.2 | Send (again) documentation PDF to Maarten and place online at sourceforge website | PLS+MK |
| 5.7 | Analyze possibilities for XIOS server in TM5  | TB+PLS |
| 6.1 | NETCDF / HDF meteo inconsistency: try to figure out what causes this + implications for (re)processing.  | PLS |
| 6.2 | Switch the processing of new meteo to netcdf-classic compression level 1 | PLS |
| 6.3 | Introduce/test KPP for automating gas phase and aqueous phase chemistry development in TM5  | MK+Stelios+ Vincent |

**3) New projects**

SRON/MAQ: Involved in two new H2020 consortia for operational greenhouse gas monitoring (Lead by LSCE and ECMWF), submission March 2017.

KNMI: Project funded for CH4 inverse modelling (using DESCO, Ronald van der A)

TNO: Currently working on CAMS

Crete: BACCUS, CCN Ice nuclei modeling

NOAA: Positions Sourish, Andy may get under pressure under Trump.

Wouter: Coupled Carbon-Climate modelling, continuation of 13C and SiF (improved GOME-2 algorithm). Ingrid vd Laan moved to IMAU. Open position for the carbon portal.

Maarten: MIF stratospheric Sulphur (NWO open round). Stijn: OH, 13CH4, MCF modeling.

**4) Next meeting**

Wageningen, 20-21 November 2017