

Notes C2 discussion:

Participants:

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David Simpson
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Camilla Geels
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Stefan Reis
Martijn Schaap
Raia, Lady from France
Massimo Vieno
Didier Hauglustaine
Pierre Cellier
Dave Fowler
Sue Owen
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Data exchange

David – use other portals (Aerocom, HTAP) for accessing out put of large scale models.

Information exchange & Input/output needs in Eclairé

Prepare lists of output as well as input (in terms of what can be used for improving parameterisation) (incl. a ranking) **ACTION items** almut & WP leaders: get these tables together from within their WPs within the next 3-4 weeks) & include also what is state-of-the art plus a wish list “if you could provide me with this that and the other I could use it” AND also the spatial domain of the output. See ClimAfrica; Marten Schaap also has promised to send me some within a few days. Me to prepare template, circulate to WP leaders in C2, as well as other components?

Action item Stefan/HQ: set up Wiki at CEH for exchange of information

Action item WP leaders: have ca. 6 monthly short telecons to update each other about progress, problems, issues – dep. also on what is decided in overall Eclairé SSC on regular information exchange

Regional climate scenarios

SMHI available for Europe: SRES A1B, one regional model using different GCMs as boundary, from 1960 (SMHI SRES A1b + RCA3x3 GCMs - 1960 – 2100). Climate boundaries, chemical boundaries from Arhus.

Frank: PEGASOS hindcasts, will start spring next year, will interact with HTAP. Hindcasts are global, not European. Aerocom hindcast is available (now at met.no; Michael Schultz is there now) -- **Action item (Almut, David) needs to be communicated to Clare that this is available, spread the word to others!** Frank: HTAP Oliver Waltz past O3 analysis is also somewhat available.

Action item/Frank, David: provide information about Aerosom standardisation of output.

Action item: Frank to send out an email to other WP leaders (to spread in their WP) regarding boundary conditions.

Table: Workshop/simulation protocol etc:

Action item WP leaders: initial list of names for workshop; interact this with WP 15, 21, and with Clare, Wilfried. And also discuss model evaluation strategies. From C2 there would be a need to have two subgroups, one on the global/regional aspects, the other more details on sub-grid – landscape scale – obviously these two need to interact closely

Discuss also: how much value is there in **consistency vs. exploring different scenarios**. Becomes crucial especially when going to finer spatial resolution (i.e., GEIA, EMEP, EDGAR emission etc.). **Action item Stefan** is going to collect what is available in terms of current anthropogenic emission inventories and prepare the goods and bads.

Meteorology, land cover, anthropogenic & biogenic emissions, management/fertiliser etc.

→ link to the “MAP” proposed in WP4 (terrestrial). – prepare this before the workshop, to be discussed and refined (RM also the GAINS discussion in the C4-C5 meeting)—do this also for atmospheric components (David, Frank, Didier?)

→ time: ideally after the PEGASOS meeting in March?

(regional/global) emissions:

NOx emissions – should test different outputs Yienger Levy, Klaus BB (Europe), Orchidee, GUESS, see if there are sensitivities in the system (discuss at workshop).

Question: how to use the different biogenic emissions – should parameterisation be included in the CTMs? Or offline? Or via coupler? How to deal with changing land cover, land use?

How to deal with different biogenic inputs in different models – BVOC, NOx, fire; as offline input, or integral part of models (feedback), or both? Perhaps to be discussed in SSC meetings how feedback studies are to be included in Eclairé?

No-one in the room is dealing with European or global NOx – need to discuss with Klaus (DNDC Europe) possibly to use also Orchidee and LPJ-GUESS

C2 is interested in testing different soil NO emissions

Need **land management scenarios**, fertiliser etc. !

CTMs/intercomparison

Compare CTMs start straight away

WP7 – will collate information about which CTMs are actually contributing to model intercomparison; D at month 18 is the results from the intercomparison. How to bring in new parameterisations into the CTMs, esp regarding the deposition? When should these be included, start with what is coming out from NitroEurope? Will need to be a highly iterative process

General: do we do impacts, or also fully coupled feedback runs?

Landscape, sub-grid

WP8 subgrid variability in EMEP, development of Nitroscape. Combination of nitrogen and climate is not there yet. Finalisation next year w.r.t NitroEurope deliverables. Then changes

w.r.t Eclair. Some time in 2013? **Concern:** how to get the “small scale” people together and work towards a joint model improvement and also new simulations – make a subgroup at the planned workshop? WP8 seems to be very NitroScape concentrated, but there are lots of other groups, so how to best include them? How to deal with sub-grid meteorology? Esp. precipitation? SMHI data would need bias correction to be applied on sub-grid scale? Should people look into other climate data from older EU projects like ALARM, ENSEMBLES?

Arhus: regional scale NH₃ (Europe), haven't solved yet how to deal with agricultural emissions Very sensitive of climate. Will improve these models. For delivery in month 30 the meteorological data is required. Use the SMHI off the shelf data as a start (is currently on 50km). Management? Can have large effects on NH₃ – will also be addressed in NitroScape.

Need **land management scenarios**, fertiliser etc. !

Summary action items:

Action item Stefan/HQ: set up Wiki at CEH for exchange of information

Action item WP leaders: have ca. 6 monthly short telecons to update each other about progress, problems, issues

Action item Frank, David: provide information about Aerosol standardisation of output. Action item Frank to send out an email to other WP leaders (to spread in their WP) regarding boundary conditions.

Action item Stefan: emissions; consistency, EDGAR, RCP, GEA, EMEP, summarise pros+cons

Action item Almut, Frank, Dave, Albert - assess & revise table template (from N-Europe) for compilation about model input and output information across Eclair (contributions also from Wim and others of course)

Action item Dave: PEGASOS -- MEGAN?