Title :	Interlinkages C2 and C4
Time :	Tuesday: 16.00-18.00
Chair :	Wim de Vries (Almut Arneth)
Attendees :	Till Spranger, Magnus Anger, Marthijn Schaap, Adrian Leip, Gert Jan Reinds, Almut Arneth, Massimo Vienno, Dg Augustin, Rasmus Houburg, Frank Dentener, Max Posch, Pierre Celier, Stefan Reis, Pierre Cellier, Klaus Butterbach Bahl, Albert Bleeker, Mark Sutton (part time).
Minutes by :	Max Posch/Wim de Vries

Aim

Brief description/discussion of interlinkages WP4.1-WP4.3 (modelling carbon sequestration, species change, critical load exceedance) and WP2.3 (modelling air pollution exposure):

- Information needs by C2 and C4 models and database harmonization
- Simulation protocol and scenarios
- Agenda of meeting in month 6 and potential participants

Topics discussed with Issue, decisions/conclusions and actions

Interaction WP8 and 17: presentation by M Theobald.

Model application/simulation protocol and databases for C2 and C4 models

Issue:	There is a need for a model application or simulation protocol for Atmospheric models (TCMs) and Response models (DGVMs and DSVMs): Decision: Make template for model inputs/outputs and a separate model application/simulation protocol with following Issues: - Model inputs and, esp., outputs: resolution, units, type of 'scenarios' (single drivers vs. real scenarios) - Get info on soil, land cover, historic climate (1900/50/80–2050/2100)!. Might be different for sub-grid studies and European applications.
Actions:	-Get list of characteristics (potential outputs) and contact person for each model (Almut) -Make template with specification of I-O, spatial and temporal resolution of DGVMs and DSVMs (Allesandro and Almut/Wim) - Give overview of CTMs based on alternative template (Martijn Schaap) Martijn sends around common output formats for atmospheric community as a starting point. Includes description of (i) Common units for I-O from emission to exposure to response models and (ii) Spatial and temporal resolution used for modeling and presentation

Related comments

- Ecosystem modelers: when presenting an ensemble comparison, we can show mean/min-max etc. of all 6 models (DGVMs and DSVMs).
- Timing issues! Start with 'simplified', existing databases and models for gaining experience …[air pollutants: RCPs not so good; use EEA/IIASA scenarios from X-project]
- There are previous protocols which could be used as template, i.e. NitroEurope for DGVMs and DSVMs and also an existing tools for atmospheric models (basis for template Martijn Schaap).

Present information on contact persons
- Atmospheric models (TCMs): WP6/WP7: 6 CTMs: EMEP (Dave Simpson), TM5 (frank Dentener), EURAD, LOTOS, LMDz-ORCHIDEE(g), MATCH
- Response models (DGVMs and DSVMs): WP14/15: 4 DGVMs: CLM-CN (Alessandro Cescatti), Jules (Lina Mercado), LPJ Guess (Almut), O-CN (Soenke Zaehle) and 2 DSVMs: VSD+-FORSPACE (Gert Jan Reinds) and Jules-MADOC (Chris Evans)

Scenarios
Issue   Definition of scenarios
Decision   Describe common input scenarios: 2-3 driving scenario studies
                 Furthermore What-if sensitivity scenarios
Action   Define common set for ensemble application: lead by Wilfried

Month 6 meeting
Issue: Meeting
Decision   Before the meeting we will prepare documents on (i) input-outputs of models and databases used to enable harmonization, (ii) a simulation protocol, including information on scenarios to be applied

Topics of meeting is sitting together to finalize documents on all aspects. Participants meeting are experts related to
- CTMs WP6/7
- DGVM WP14
- DSVM WP14 and 15
- Critical loads: WP16
- Zooming group: WP8 and WP17
- Scenarios
- Database harmonization

Idea is Get started with one type of model approach for learning by doing.

Actions

Action	Due	Who
Make a template on input data and output data, with their spatial and temporal extent and resolution, and databases used by the various involved models	November	Wim/ Almut a.o.
Schedule a meeting on application protocol Have meeting begin next year	November Feb/March 2012	Almut (meeting for all involved modellers)
Write a model application protocol with scenarios and information on resolution of presenting results	Begin 2012	Almut/Wim, Allesandro, a.o. with Wilfried Winiwarter