

Title :	Assessing local variation in fluxes and impacts	
Time :	26 October – 11.00 – 12.00	
Chair :	Mark Theobald / Albert Bleeker	UPM / ECN
Attendees :	Massimo Vieno Gert Jan Reinds Mark Sutton Chris Evans Raia Massad Benjamin Loubet	CEH Alterra CEH CEH INRA INRA
Minutes by :	Albert Bleeker/ Mark Theobald	ECN

Aim Look in more detail at the interactions between WP8 and WP17, more specifically about the common datasets and timing.

Presentations

There was a presentation by Pierre Cellier on 'Nitroscape in Eclairé'.

Topics discussed with Issue, decisions/conclusions and actions

We mainly discussed the common datasets:

Landuse / Vegetation / Soil data

EMEP4UK uses MODIS derived landuse data as a basis at a resolution of 1x1 – with possibility of adjusting the landuse categories to match the typical landscape information. However, there is a change of losing consistency when using two different datasets for e.g. meteorology and/or chemistry

For the thresholds calculations, another dataset is used – based on 25x25 data, aggregated to 250x250 m.

Current plan is to get to different resolutions with respect to the critical loads (250x250, 1x1, 5x5). Decisions are needed however, on how to process these CL maps. One way is simply upscaling the information from the high resolution to lower resolutions. The other way is recalculating the CL map on basis of lower resolution maps on e.g. soil, vegetation maps.

Landcover and soil data is available. Vegetation data is however a challenge. Question to be answered: Are we after broad habitat type maps or species specific maps. Ideally we are after both, but this might be difficult to achieve. We have to take into account that no budgets are allocated to further surveys. This means that we have work on what we have available. One suggestion was to use "Common Standards Monitoring" data to identify species that would potentially be positively or negatively impacted upon for the habitat types in the Scottish landscape.

For the Netherlands we have so-called 'nature targets'. We need to look into the availability of 'nature' in the NFW. We might be forced to move around within the NFW area to find a 5x5 km spot that contains relevant vegetation information in order to build the critical loads on.

Action: find out about the status of available vegetation data for the two landscapes (Chris Evans – Scotland; Gert Jan / Albert – NFW, Netherlands)

Climate/Meteorological data

We have no real issues with respect to the climate/meteorological data, since it looks like there is more effect to be expected from changing emission levels as a consequence of the changing climate.

However, we have to be aware that we are actually looking at the effect of air quality on vegetation in a changing climate. This thus holds for both the dose (concentration / deposition) and the response (critical loads).

We have to be clear on how climate will be included in the different WPs.

Timing:

Overview from Pierre about the current status of NitroScape.

Work under progress:

- Stabilisation of NitroScape (problem with Fortran compiler): spring 2012
- Using OPS: agreed for NitroEurope job: under progress
- Application to real landscapes (FR, DK, ...): first test spring 2012/full test end 2012
- Fulfill the test of FASSET
- Integrate other models for non-cropland ecosystems (grassland, forest, wetland) – Landscape DNDC?: End of 2012

Timeline:

Application to Eclaire landscapes (SC, NL): ????

Portability of NitroScape: End 2013

There was a suggestion from Mark Sutton on exploring the possibility of getting staff to Garmisch. They need personnel in order to quickly get DNDC up and running, while there seems to be funding available.

Another remark – instead of applying the NitroScape system to the French and Danish landscape, rather go for Scotland and NFW first, since there lies the priority in the context of ECLAIRE.

We shortly discussed possible risks with respect to the NitroScape version of the OPS model. It will be explored in some more detail what possible risks there may be (also for future applications of NitroScape).

As a way out with respect to the delivery of detailed depositions from WP8 to WP17, we consider using the OPS model outside the NitroScape – by doing that, we are not dependent on the finalisation of NitroScape.

Decisions

Action	Due	Who
Check status of available nature areas in Scottish landscape and availability of vegetation data	End of year	Chris Evans
Check status of available nature areas in NFW	End of year	Gert Jan Reinds / Albert Bleeker
Depending on availability of nature in NFW, find alternative 5x5 block within NFW region	asap	Gert Jan Reinds / Albert Bleeker
Check status of OPS for NitroScape	End of year	Pierre Cellier