

Soil Carbon & Nitrogen Cycling Cross-Cutting Group – GRA & associated projects

2nd workshop 'Model inter-comparison on agricultural GHG emissions'

Lory Student Center, Colorado State University, Fort Collins, USA.

2-4 March 2015



Overview & Meeting Summary

The 2nd edition of the workshop '*Model inter-comparison on agricultural GHG emissions*' was held in Fort Collins (Colorado, USA) from 2-4 March 2015. It has been organized under the umbrella of the *Soil C&N cycling cross-cutting group* (SCNC) of the Global Research Alliance (GRA) and in association with 4 projects co-funded by FACCE-JPI (CN-MIP, CometGlobal, MAGNET and Models4Pastures).

The workshop has been attended by 30 participants from 8 countries (Australia, Canada, France, Italy, New Zealand, Switzerland, UK, USA) with representatives of 13 modeling teams contributing to the exercise and 5 data providers.

The main objectives of the workshop were to have an update of progress on the model benchmarking & intercomparison activity, one of the major SCNC group activities for agricultural GHG emissions, to facilitate interactions through group discussions and to establish a publication strategy.

The workshop was followed by two annual projects meetings (CN-MIP and Models4Pastures), from 4-6 March 2015.

MEETING OUTCOMES

The workshop achieved the following outcomes:

- Update of progress of the intercomparison and benchmarking activity.
- Overview, discussion and agreements on technical issues within the blind test: SOC, NEE, grassland production, results reporting, N2O analysis.
- Presentation of results from steps 1 and 2 regarding comparisons of observed vs. simulated productivity data of crops and grasslands.
- Discussion on modellers needs in terms of data delivery and agreement for next steps.
- Presentation of the model survey aiming at the description of model capabilities (within CN-MIP project).
- Statement of work for model calibration: presentation and agreement on model calibration rules for steps 3, 4 and 5.
- Working group sessions & agreements on publication strategy and timeline.

OTHER

- A report with detailed information on agreements and discussions points is available for the participants to the blind test. Please contact fiona.ehrhardt@paris.inra.fr.
- The inter-comparison exercise has been presented at the Climate Smart Agriculture Conference, held in Montpellier from 16-18 March 2015, in the frame of the Session L3.1: Climate adaptation and mitigation services. PDF abstract here : [CSA_Ehrhardt et al \(2015\) An international intercomparison and benchmarking of crop and pasture models.pdf](#)
- A meeting of the Soil C&N Group is planned in Lodi (Italy) on the 25th June 2014, following the annual LRG meeting. It will be dedicated to strengthen links between LRG and SCNC GRA groups, focusing on grassland and soil carbon sequestration in the frame of global initiatives.

For more information or to find out who your in-country Alliance Soil C&N cycling cross-cutting Group representative is, please contact the Alliance Secretariat (secretariat@globalresearchalliance.org) or visit www.globalresearchalliance.org.