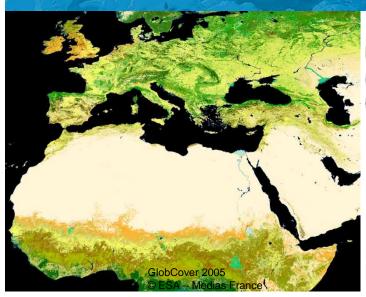


→ CLIMATE CHANGE INITIATIVE

Land Cover CCI Newsletter

Issue n. 1 November 2010





In this issue:

- Land Cover CCI project description
- Land Cover CCI project team
- User requirements survey

Land Cover CCI project description

The Land Cover CCI project aims to design a prototype system delivering a global land product in a consistent way over years and from various EO instruments. Building upon the ESA-GlobCover experiences, this global land cover information is specifically targeting the needs of the climate change community.

The Land Cover objective is to critically revisit the land cover concept itself and all algorithms required for the generation of a global land product in the light of the Global Climate Observing System (GCOS) requirements. The project will benefit from all ESA and Member States missions providing near daily global surface reflectance observation at moderate spatial resolution (ENVISAT MERIS FR & RR, SPOT VEGETATION).

The contribution of ESA SAR sensors will also be investigated to tackle specific land cover discrimination issues. From an extensive user requirements analysis, detailed specifications of the global land cover product are currently defined building on the LCCS. Capitalizing on the GlobCover, GLC2000, GlobAlbedo and GlobCorine experiences, three global land cover maps are planned for the years 2000, 2005 and 2010.

The product accuracy will be estimated thanks to an independent validation process and the error propagation will be closely monitored. In addition, three climate modelers will quantitatively assess relevance and usefulness of the delivered information for their models.

www.esa-landcover-cci.org dup.esrin.esa.it/projects/summaryp68.asp www.esa.int/due/ionia/globcover/



Land Cover CCI project team

The Land Cover CCI consortium gathers European experts from the Earth Obervation, Climate Research and System Engineering communities

The Land Cover CCI Consortium is composed of three pillars:

- EO Science Team, led by the Université catholique de Louvain, and composed of Brockmann Consult, University of Jena, the Joint Research Center, Wageningen University.
- Climate Research Group, led by Wageningen University and composed of the Max Planck Institute of Meterology, Germany, le Laboratoire des Sciences du Climat et de l'Environnement and the Met Office-Hadley Center
- System Engineering, led by Brockmann Consult.

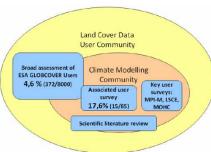


From left to right: René Michaelis, Lammert Kooistra, Olaf Krüger, Philippe Peylin, Iryna Khlystova, Kerstin Traut, Alex Loew, Liubava Badak, Grit Kirches, Martin Böttcher, Maurizio Santoro, Sophie Bontemps, Stefan Hagemann, Olivier Arino (ESA Technical Officer), Carsten Brockmann, Pierre Defourny (Science Leader), Dimitri Lederer (Project Manager), Martin Herold

User requirements survey

In the first stage of the Land Cover CCI project, a user requirements analysis has been conducted to derive the specifications for a new global land cover product that will address the needs of key-users from the climate modeling community.

As part of the requirements analysis, a user consultation mechanism was set-up at the start of the project to actively involve different climate modelling groups. To this aim surveys were addressed to different type of users: 1) a group of keyusers, most of them also participating in CMUG, 2) associated climate users who are involved in the development of key climate relevant models and 3) the broad land cover data user community reflected in the scientific literature and represented by users of the ESA GlobCover product.



Concept of user communities and activities to assess land cover requirements of general land cover user and climate modelling communities.

The outcome of the user requirements assessment shows that although the range of requirements coming from the climate modelling community is broad, there is a good match among the requirements coming from different user groups and the broader requirements derived from GCOS. CMUG and other relevant international panels. The significant findings from this user requirements assessment will be used as input for the product specification of the next generation Global Land Cover dataset which will be developed within this project.