

CEOS WGCV and GOF-C-GOLD Global Vegetation Continuous Fields Validation Workshop

The overall objective of this meeting is to present and discuss approaches to validating sub-pixel vegetation cover estimates (VCF) for use both as one-time map layers and as multi-temporal change products. The workshop is a continuation of ongoing initiatives and previous workshops of the Workgroup on Calibration and Validation (WGCV) of the Committee of Earth Observation Satellites and the Global Observations of Forest Cover and Land Dynamics (GOF-C-GOLD) to evolve standards for land characterization and validation of map products, and foster their implementation towards operational terrestrial observations.

Key issues to be discussed are:

- Concepts and developments in VCF mapping
- VCF validation requirements and approaches
- Scaling of VCF information (in situ – global)
- Link between VCF and other approaches in land cover mapping and validation
- Users of VCF products; their role and requirements for validation
- Concepts for implementing an operational validation framework

The goal is develop consensus from the science community, producers and users of VCF products on the most suitable approaches for their validation and how such concepts could be put into operational practice.

Researchers directly involved in VCF mapping and validation science in this area are invited to present their findings and to discuss the development of improved methods. Users of VCF maps are urged to participate as well to discuss how errors in the map layers impact their science applications. The meeting is to be held October 27 and 28, 2005 at the Geographic Information Science Center of Excellence in Wecota Hall 100 on the campus of South Dakota State University. SDSU is located in Brookings, South Dakota, 50 miles north of Sioux Falls on Interstate 29. This workshop is being held the week of the USGS PECORA meeting in Sioux Falls from October 23 to 27 in order to create some travel efficiencies for those interested in attending both events.

Preliminary Agenda

Thursday, October 27

8:30 Introduction – Goal of the workshop - developing and codifying a VCF validation methodology - Matt Hansen, South Dakota State University

9:00 Defining continuous fields – John Townshend, U. of Maryland

9:30 Setting validation objectives – Tom Loveland, USGS EROS

10:00 Break

10:30 Approaches to validation – Jeff Morisette, NASA Goddard

11:00 Using existing information sources for validation – replacement for Giles Foody, U. of Southampton

11:30 Deriving field-level cover estimates – Matt Hansen, South Dakota State University

12:00 Lunch

1:30 Scaling of validation information – Warren Cohen, USFS

2:00 Sampling – Steve Stehman, State University of New York

2:30 Validating global land cover classifications – lessons learned –Mark Friedl and P. Mayaux, Boston University and JRC

- 3:30 Linking continuous fields with fine-scale land cover data (John Latham or Antonio di Gregorio UN/FAO)
- 4:00 VCF in the context of international harmonization/validation initiatives (Martin Herold - GOFCC-GOLD)

Friday, October 28, 2005

- 9:00 User presentations continued
- 10:00 Break-out groups
- 1) codifying best practices for validating single-date maps
 - 2) codifying best practices for validating time-series change maps
 - 3) Develop implementation framework for operational validation of land cover information
- 12:00 Lunch
- 1:00 Presentation and discussion
- 3:00 Wrap-up