Global Terrestrial Observing System

Update on GEO Work Plan Task CL-06-03:

Key Terrestrial Observations for Climate

User Interface Committee Meeting

1-3 August 2007, Washington
Key Terrestrial Observations for Climate

Develop intergovernmental mechanisms for coordinating terrestrial observations needed for climate studies and forecasting. Develop a framework for the preparation of guidance materials, standards, and reporting guidelines for terrestrial (including land-coast interface) observing systems for climate and associated data, metadata, and products to expand the comprehensiveness of current networks and facilitate exchange of data.
Outputs and Progress


Framework Report

• Focuses on:
  – the required mechanisms to establish such a framework
  – costs of establishing and running
  – mechanisms for the endorsement of standards and guidelines and requirements that would be needed for national endorsement and implementation
  – an analysis of the advantages and disadvantages of different approaches provided to allow the adequate appraisal by the stakeholders

• Report describes three options for establishing a TCF, and compares these from a number of perspectives. It then discusses the implementation issues associated with each option.
Three TCF options

• Option A (intergovernmental): Terrestrial Joint Commission
• Option B (ISO): Terrestrial Committee
• Option C (international): Terrestrial Observations Mechanism
Standards Report - Individual ECV

- T1 River Discharge
- T2 Water Use
- T3 Ground Water
- T4 Lake level
- T5 Snow Cover
- T6 Glaciers and Ice Caps
- T7 Permafrost and Seasonally-Frozen Ground
- T8 Albedo
- T9 Land Cover
- T10 Fraction of absorbed photosynthetically active radiation
- T11 Leaf Area Index
- T12 Biomass
- T13 Fire disturbance
Land Cover Standard

• Definitions and units
• Existing in situ measurement methods and standards
• Existing satellite measurement methods and standards
• Conclusions
• Recommendations
• References
Results of SBSTA 26

• At its 26 Session, the SBSTA agreed to consider the reports, as well as any updates received by the GTOS secretariat, at its 27th session (December 2007) when it considers issues relating to systematic observation.

• SBSTA 26, session 6, Draft conclusions 488kb, v01, May 2007
Next steps

• GTOS will further proceed in the development of the preferred framework mechanism and submit updates to SBSTA 27.