

Coordinating Global Land Cover Observations as Contribution to GCOS

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Observation of the Earth's land cover at global scale is essential to characterise climate variability and change, and for understanding the causes. Land cover has a direct influence on water and energy exchanges with the atmosphere, and changes greenhouse gas and aerosol sources and sinks. A series of global-scale land cover products, including reference data, has been released over the past decade. However they differ in terms of spatial, and time resolutions, but also in terms of standards which makes product inter-comparison and change assessment difficult, if not impossible. In parallel, specific global-scale products such as tree cover percentage have been published. They aim to support notably monitoring and reporting activities in the context of the recent Climate Agreement. Although these products provide useful information, they do not always meet the needs of some user communities, and proper guidance is often needed to ensure an appropriate use. This presentation will provide an overview of the current state of available global land cover datasets, and discuss possible avenues to overcome the current issues pointed out by different stakeholders (e.g., product inter-comparison, accuracy assessment), in the context of GCOS Implementation Plan.