

## **SIBERIA-II – Multi-product and Multi-sensor Validation Strategies in the context of GLOBCARBON, GLOBCOVER and GOFC-GOLD**

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A major task of SIBERIA-II is the accuracy assessment and validation of all algorithms and the products used for greenhouse gas accounting. The term accuracy assessment is widely used with varying definitions. A rigorous definition is that accuracy quantifies the systematic error (bias) between a measurement or estimate and the true value. Precision is defined as a measure that quantifies the random error of a measurement or estimate, i.e. the random deviation of the measurement from the true mean. Both error types have effects on the full greenhouse gas accounting (FGA). The SIBERIA-II project agreed on an overall accuracy assessment policy, a set of statistical techniques to be employed, and the setting up of an extensive test area network. This presentation describes the spatial, temporal and spectral characteristics of all EO products, and identifies the main error sources. SIBERIA-II's results are being validated with one of the largest and up-to-date ground truth data bases existing, a GIS which contains 70 test areas distributed over 7 bio-climatic zones for a region with over 3 Mio sqkm. Each test area ranges from 40,000 to 150,000 ha and includes 700 to 7,000 primary land cover polygons. Therefore, SIBERIA-II's validation is of high relevance to other large-scale projects and programmes.<BR>