ForestHype – Project Part "Biodiversity"

Objectives:

- Extraction of parameters for indicating biodiversity from imaging spectroscopy data
- The methodologies for this task are classification and radiative transfer modelling

Duration :

01.07.2010 – 30.06.2013

Products / Parameters:

- Phenological stages of the leaf are index (LAI) for deciduous forest types in relation to multitemporal satellite information (see figure)
- Imaging spectroscopy from narrow range forest canopies (5 to 10m) of 5 tree types with crane measurements
- NATURA 2000 parameters of conservation status (e.g. forest development stages)





Plot of the LAI (Li-COR) in relation to the NDVI (RapidEye) per day of year



ForestHype – Project Part "Biodiversity"

Added Value (quantitative /qualitative):

- qualitative parameters (conservation status) of NATURA 2000 monitoring can be derived
- Information about active biomass of floodplain forest via the Leaf area index

Potential involved User Organisation:

 Potential user organisations are environmental agencies (federal and national)

Additional:

- Forest within the DLR long-term observation area DEMMIN and TERENO north-east test site
- IS-data from AISA (Eagle Hawk) in June and September 2011 and monthly RapidEye imagery



Crane measurement platform for spectral measurements

Contact information:

Dr. Michael Förster Dipl.-Ing. Anne Clasen Technische Universität Berlin Institut for landscape architecture and environmental planning Geoinformation in environmental planning <u>michael.foerster@tu-berlin.de</u> Anne.clasen@tu-berlin.de Tel. ++49-30 314 72798

