

# **K&C Product Delivery Report and Schedule for 2010**

**Paul Siqueira**  
**University of Massachusetts**

## K&C deliverables

### Papers and Reports

#### 1. Published (please provide PDF file)

- K&C Phase-1 report
- “Significant finding” on K&C Wiki
- *Ahmed, Siqueira, Hensley, Chapman and Bergen, “A Survey of Temporal Decorrelation from Spaceborne L-band Repeat-pass InSAR,” accepted, Rem. Sens. Env., 2010.*

#### 2. Submitted/in preparation

- *Yes, this project needs to publish more...!*
- *Recent ground validation and analysis over the Harvard Forest*
- *Injune analysis with Richard Lucas.*

## K&C deliverables

### Data sets and Thematic products (mosaics, classification maps etc.)

#### 1. Completed and Delivered to JAXA

- *The product for this task was to be the analysis and application of interferometric correlation for measuring vegetation structural characteristics. To achieve a quantitative measure, first and foremost was to better understand the effects of temporal decorrelation. This was done and is reflected in the publication in RSE. Temporal decorrelation dominates the errors associated with correlation estimates. Because it is quantitatively unpredictable (closely associated with weather events), it therefore impairs the relationship between correlation and structure.*
- *The recommendation is to not rely on repeat-pass interferometry for measuring coherence and then estimating structure. A tandem or companion passive receiver satellite is recommended... understandably, this will impact cost considerably.*

## K&C deliverables

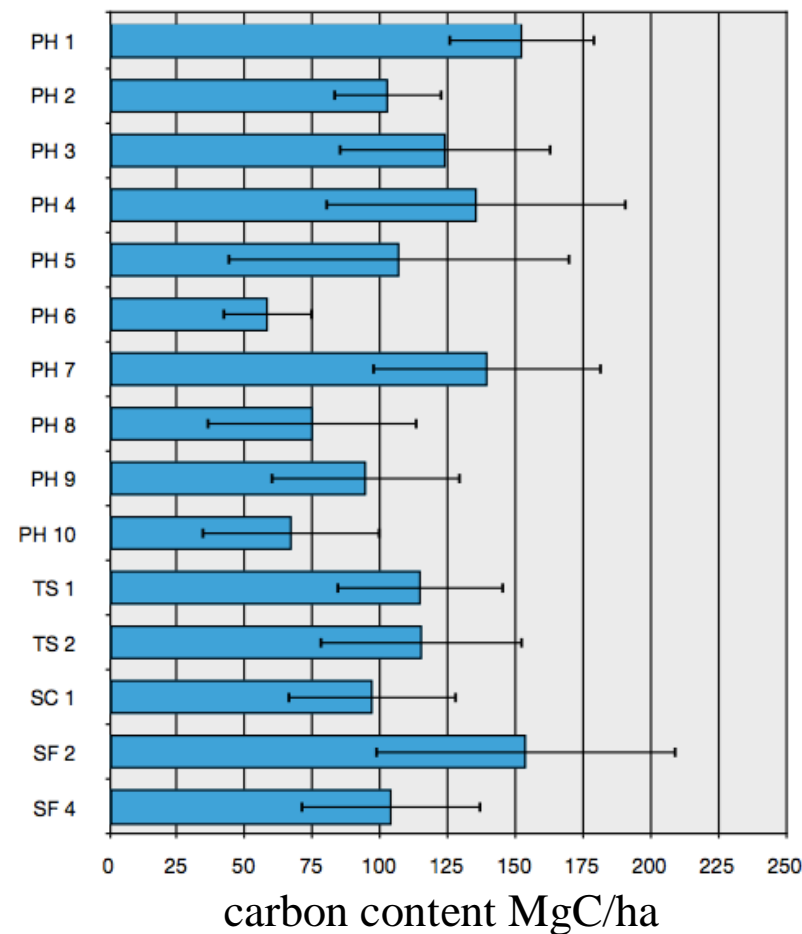
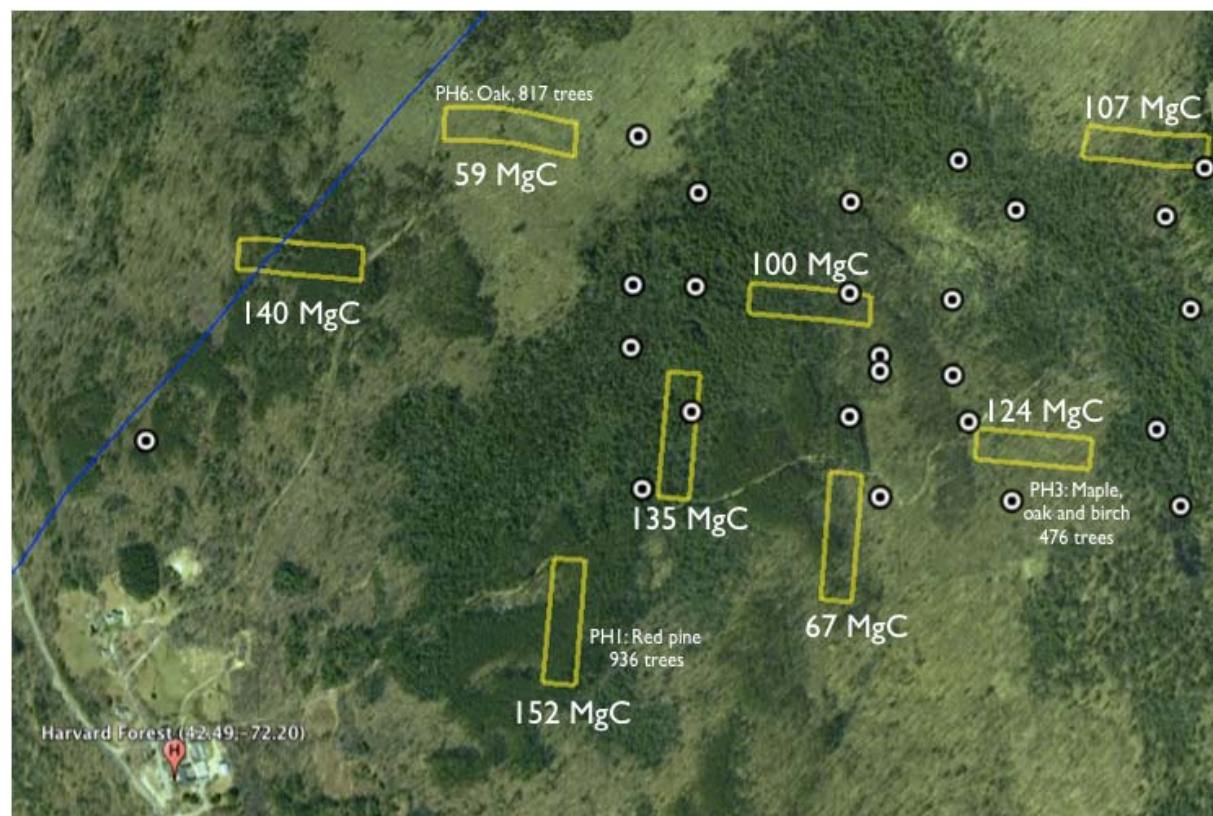
### Data sets and Thematic products (mosaics, classification maps etc.)

#### 3. To be completed during 2010

- *K&C Booklet contribution with latest results (during KC#13)*
- *Create correlation and differential interferometry mosaics for the Northeast region in the US and for Queensland in Australia, of the “best” available interferometric data from ALOS.*
- *... and*



- Fifteen, one-hectare ground validation plots (species, DBH, and alive/dead)
- Two dates of full waveform lidar (LVIS) data
- Terrestrial laser scanning of selected sites
- repeat-pass UAVSAR data (30 minutes to 11 days)



- Fifteen, one-hectare ground validation plots (species, DBH, and alive/dead)
- Two dates of full waveform lidar (LVIS) data
- Terrestrial laser scanning of selected sites
- Repeat-pass UAVSAR data (30 minutes to 11 days)

