Photosynthesis, Flux Tower Data and Spectroscopy: Spring Break 2013

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Study Area

- Southern California
- Climate Gradient
  - Desert
  - Grassland
  - Coastal Sage
  - Oak-Pine Forest
  - Agriculture
Methods

- **Airborne Visible InfraRed Imaging Spectrometer**
  - NASA ER-2
- **Gas exchange on leaves**
- **Spectroscopy at the leaf and canopy level**
Projected results

• Generate photosynthesis maps
• Motivation for implementing Hyper Spectral camera on future satellites
  – Gather information on a regional/global scale
Impacts

• Land cover change
  – Examine how such change influences local carbon cycle via change in vegetation

• Climate Impacts
  – Allow for understanding regional and global changes in carbon cycle through changes in forest canopies under changing climate

• Such data will assist in better climate models