Eddy Covariance Training Course
by LI-COR in conjunction with OzFlux

I. Objective

- ➢ To understand eddy covariance theory, experimental design and applications
- ➢ To understand operation theories of gas analyzer and sonic anemometer
- ➢ To be able to set up and operate eddy covariance systems
- ➢ To be able to process raw flux data with EddyPro

II. Time

July 2 – 5, 2013; Tuesday – Friday (mornings).
(OzFlux Data Processing workshop in the afternoons).

III. Location

James Cook University, Cairns, Australia

IV. Class Schedule

July 2, Tuesday

9:00 – 9:10 Opening remarks
9:10 – 10:30 Eddy covariance theory
10:30 – 10:45 Break
10:45 – 12:00 Eddy covariance experiment design
  - Concept of flux footprint and fetch requirement
  - Designing and implementation of eddy covariance experiment

July 3, Wednesday

9:00 – 10:00 Operation theories of gas analyzers and sonic anemometer
10:00 – 10:45 Biomet (biological and meteorological) measurements and sensors
  - The need for Biomet data, Energy balance closure, Sensors and station
10:45 – 11:00 Break
11:00 – 12:00 Instrument Integration and Deployment

July 4, Thursday

9:00 – 10:45 Hands-on installation of an eddy covariance system
  - Instrument mounting and positioning, Wiring and system integration
10:45 – 11:00 Break
11:00 – 12:00 Software, calibration, and maintenance of eddy covariance systems
  - Software overview, Operation & data collection, Maintenance & troubleshooting

July 5, Friday

9:00 – 10:00 Data processing overview
  - Data processing overview & procedures (including correction implementation)
  - Introduction to EddyPro
10:00 – 10:30 EddyPro and File Viewer software installations and sample data
  - Software installation, Sample data preparation, File Viewer demonstration
10:30 – 10:45 Break
10:45 – 11:15 Hands-on GHG data processing
11:15 – 12:00   Explanations on EddyPro outputs