

## Standard operating procedure (SOP), Mangrove Flux Tower

- from Vic Engel
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- 1) Is the power off?
  - a. Yes – turn off inverter. Turn back on.
  - b. No – Then proceed.
- 2) After power is restored
  - a. Run LabView (from the start menu) – everglades.new
    - i. Hit green arrow in top left corner
    - ii. Working with right panel (Eddy 2 system)
  - b. Com ports for LiCor and Gill Windmaster Pro
    - i. If Gill values in LabView are bad:
      1. Switch Gill cable to either 4 or 7. Select port in LabView, and run program. Look for valid numbers for u, v, and w.
    - ii. If no LiCor read out:
      1. Flip kill switch (grey box in battery housing unit)
      2. Pause before turning back on
      3. May need to run LiCor software program if still no read out in LabView.
  - c. Com ports for logger\_1 and logger\_2
    - i. Start LabView program (Com ports should be 5 and 6)
    - ii. Hit LabView start button. Then hit 2<sup>nd</sup> button middle left in the program view.
    - iii. Wait for the display to update (after several minutes)
    - iv. Also, look for the counter to start on the main page.
- 3) When batteries are low
  - a. Any volt meter reading of 12V or below is a bad sign. In fact, the batteries should hold a charge of 13+ V under normal daytime operating conditions.
  - b. Check the charge controller and load controller
    - i. Both should be fully operational
    - ii. If one of the controllers went bad, then voltage could be low.
      1. Replace controller. If one controller is operational, use it as a charge controller until repairs are made.
      2. Load should be disconnected.