- **Investigator**:*
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    - o **Email:** chris.sabine@noaa.gov
- **Dataset_Info**:*
    - o Dataset_ID*:   TAO140W_0N_May2007_Nov2007
    - o **Submission_Dates**:*
        - Initial_Submission: 20101108   (YYYYMMDD)
        - Revised_Submission: (YYYYMMDD)
- **Cruise_Info**:*
    - o **Experiment**:
        - Experiment_Name*:
        - **Cruise**:(-)
            - Cruise_ID: (EXPOCODE)
            - Section: (Leg)
            - **Geographical_Coverage**:*
                - Geographical_Region:
                - **Bounds**:
                    - Westernmost_Longitude:
                      Enter decimal fractions of degrees:
                      or Degrees, Minutes, Seconds:
                    - Easternmost_Longitude:
                      Enter decimal fractions of degrees: -139.88 (+ = E, - = W)
                      or Degrees, Minutes, Seconds:
                    - Northernmost_Latitude:
                      Enter decimal fractions of degrees:+0.00 (+ = N, - = S)
                    - Southernmost_Latitude:
                      Enter decimal fractions of degrees:
            - **Temporal_Coverage**:
                - Start_Date: 20070531   (YYYYMMDD)
                - End_Date: 20071120   (YYYYMMDD)
    - o **Vessel**:* Mooring platform
        - Vessel_Name:
        - Vessel_ID:
        - Country:
        - Vessel_Owner:
- **Variables_Info**:*
    - o **Variable**:
        - Variable_Name and Description*:
- xCO_2 SW (wet) (umol/mol) - Mole fraction of CO_2 in air in equilibrium with the seawater at sea surface temperature and measured humidity.

- CO2 SW QF – Quality Flag for xCO_2 SW (wet).

- H_2O SW (mmol/mol) - Mole fraction of H_2O in air from equilibrator .

- xCO_2 Air (wet) (umol/mol) - Mole fraction of CO_2 in air from airblock, 4 feet above the sea surface at measured humidity.

- CO2 Air QF – Quality Flag for xCO_2 Air (wet)

- H_2O Air (mmol/mol) - Mole fraction of H_2O in air from airblock, 4 feet above the sea surface.

- Licor Atm Pressure (hPa) – Atmospheric pressure at the airblock, 4 feet above the sea surface

- Licor Temp (C) – Temperature of the Infrared Licor 820 in degrees Celsius

- % O_2 - The percent oxygen of the surface seawater divided by the percent oxygen of the atmosphere at 4 feet above the sea surface. Disclaimer: The oxygen measurement is made in the equilibrated air. We have found that the oxygen does not come to complete equilibrium so any rapid changes in oxygen do not get properly captured using this system. Therefore, we tend to use the oxygen data only as a qualitative sense of the biology. It is not a quantitative measure.

- SST (C) - Sea Surface Temperature collected by NOAA/PMEL/TAO provide internally recorded SST data at 10 minute resolution. The sea surface temperature collected during the equilibration period is reported in this dataset. NOAA/PMEL/TAO advises to check the TAO site at the time of use for the most accurate data available.

- Salinity - Sea Surface Salinity collected by NOAA/PMEL/TAO. Papa records conductivity data at 10 minute intervals and then computes hourly averaged salinity during post-processing. The salinity reported during the equilibration period is reported in this dataset. NOAA/PMEL/TAO advises to check the TAO site at the time of use for the most accurate data available.

- xCO_2 SW (dry) (umol/mol) – Mole fraction of CO_2 in air in equilibrium with the seawater at sea surface temperature (dry air).

- xCO_2 Air (dry) (umol/mol) – Mole fraction of CO_2 in air at the airblock, 4 feet above the sea surface (dry air).

- fCO_2 SW (sat) uatm – Fugacity of CO_2 in air in equilibrium with the seawater at sea surface temperature (100% humidity). Since the measurements are taken at the sea surface, warming calculations are not necessary.

- fCO_2 Air (sat) uatm – Fugacity of CO_2 in air at the airblock, 4 feet above the sea surface (100% humidity).

- $dfCO_2$ – Difference of the fugacity of the CO_2 in seawater and the fugacity of the CO_2 in air (fCO_2 SW - fCO_2 Air).

- **Method_Description:***
    - **Equilibrator_Design**:
        - Equilibrator_Type: (show pick list)   Bubble Equilibrator
        - Equilibrator_Volume: (L)   N/A
        - Water_Flow_Rate: (L/min)   N/A
        - Headspace_Gas_Flow_Rate: (L/min)   ~600 cc/min
        - Vented: (show pick list)   Yes
    - Measurement_Method: Absolute, non-dispersive infrared (NDIR) gas analyzer

    - Manufacturer_of_Calibration_Gas: NOAA Earth System Research Laboratory (ESRL)

    - **CO_2_Sensors**:
        - **CO_2_Sensor**:
            - Manufacturer: Licor
            - Model: Environmental_Control: LI-820
            - Resolution: 0.01 ppm
            - Uncertainty: < 2.5% of reading with 14 cm bench (stated) <1.5 ppm determined in lab
            - CO_2_Sensor_Calibration: (For each calibration gas, document traceability to an internationally recognized scale, including date and place of last calibration. Include uncertainty of assigned value.)
                At the beginning of each sample, the instrument self-calibrates using a zero and high standard. The zero standard is generated by cycling a small amount of air through a soda lime chamber. The high standard is from a cylinder of calibrated standard reference gas, 535.71 umol/mol, from ESRL. ESRL

standards are traceable to WMO x93 scale with a stated reproducibility of 0.06 micromole/mole.

- o **Other_Sensors**:   Oxygen Sensor
    - ▪ Manufacturer: Maxtec
    - ▪ Model: Max-250
    - ▪ Resolution: 0.01 %
    - ▪ Uncert-ainty: ± 2.0% Full Scale over operating temperature range

      ± 1.0% Full Scale @ constant temperature and pressure
    - ▪ Calibration: (For each sensor of pressure, temperature, and salinity, document traceability to an internationally recognized scale, including date and place of last calibration.)
      Factory calibrated before purchase. Recalibrated to sea level atmospheric air every 7 days.

- o **Other_Sensors**:   Humidity Sensor
    - ▪ Manufacturer: Sensirion
    - ▪ Model: SHT71
    - ▪ Resolution: 0.01 %
    - ▪ Uncertainty: Measurement range: 0-100% RH
      Absolute. RH accuracy: +/- 3% RH (20-80% RH)
      Repeatability RH: +/- 0.1% RH
    - ▪ Calibration: (For each sensor of pressure, temperature, and salinity, document traceability to an internationally recognized scale, including date and place of last calibration.)
      Factory calibrated before purchase.

- o Method_References: (Publication(s) describing method)

Sabine, C. (2005): High-resolution ocean and atmosphere pCO_2 time-series measurements. The State of the Ocean and the Ocean Observing System for Climate, Annual Report, Fiscal Year 2004, NOAA/OGP/Office of Climate Observation, Section 3.32a, 246–253.

- Additional Information

- All measurements are at sea surface temperature and atmospheric pressure.

- During the equilibration cycle, a closed loop of air equilibrates with seawater for 10 minutes. Once the equilibration period is complete, the pump stops and the system opens to the atmosphere allowing the pressure to equilibrate with atmospheric pressure. Measurements are recorded for 30 seconds at 2 hertz and then averaged.

- During the air cycle, fresh air is pumped through the detector for 1 minute. Once the pump stops, the system opens to the atmosphere allowing the pressure to equilibrate with atmospheric pressure. Measurements are recorded for 30 seconds at 2 hertz and then averaged.

- The gas streams for both the air cycle and equilibrator cycle are partially dried before entering the detector. The values listed as wet xCO_2 generally have relative humidity levels ranging from 40 to 80 percent. The humidity levels increase over the course of a deployment.

- Sampling occurs every 3 hours. The infrared detector is calibrated at the beginning of every sampling period. Averaged data and standard deviations for each measurement are transmitted back daily.

- To calculate the dry measurements, the water mole fraction in the Licor detector must be known. A relative humidity sensor is located immediately downstream of the detector.

- As part of the QC process, each data set is compared with the Marine Boundary Layer (MBL) data from GlobalView-CO_2. The CO2 air data from this deployment, May 2007 to Nov 2007, were 0.2 ± 1.2 umol/mol on average of the MBL data and therefore no correction was applied to air and sea water data.

GLOBALVIEW-CO $_2$: Cooperative Atmospheric Data Integration Project - Carbon Dioxide. CD-ROM, NOAA ESRL, Boulder, Colorado [Also available on Internet via anonymous FTP to ftp.cmdl.noaa.gov, Path: ccg/co2/GLOBALVIEW], 2010

-During the QC process, an adjustment to the Licor pressure is also made based on each sensor's bias to barometric pressure as measured in the lab. We have not yet run this test on this system.

- There is no data between 31 July 2007 and 30 Sep 2007 because the equilibrator was bent during this time period probably due to vandalism or high wave action. Data begins again when the equilibrator was fixed on 30 Sep 2007.

- Deployment ended when the buoy went adrift on 20 Nov 2007.

- No data = -9.999 or -999

- Data_set_References: (Publication(s) describing data set)   None

- Citation: (How to cite this data set)   Sabine, C. 2007. High-resolution ocean and atmosphere pCO2 time-series measurements from mooring TAO140W.
- **Data_Set_Link**:
  - URL*: http://www.pmel.noaa.gov/co2/moorings/eq_pco2/eq_pco2.htm
  - Label*:PMEL CO2 Group – TAO140W mooring

  - Link_Note: (Optional instructions or remarks)**(m s t)**

        Quality Flags definitions:

2 = Acceptable measurement;
3 = Questionable measurement;
4 = Bad measurement
5 = Not reported;
9 = Sample not drown for this measurement from this bottle.

Quality Flag Log for this dataset.

Date	Measurement	Value (Dry)	Flag	Comments
6/1/2007 0:16	xCO2_SW	483.3207163	4	instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
6/1/2007 0:16	xCO2_Air	377.9826537	4	instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
6/2/2007 0:16	xCO2_SW	481.0344198	4	instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
6/2/2007 0:16	xCO2_Air	377.1827949	4	instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
6/2/2007 21:16	xCO2_SW	480.735657	4	instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
6/2/2007 21:16	xCO2_Air	376.1388868	4	instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag

6/3/2007 0:16   xCO2_SW   484.2659012   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
6/3/2007 0:16   xCO2_Air   377.3535116   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
6/3/2007 21:16 xCO2_SW   479.6511666   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
6/3/2007 21:16 xCO2_Air   376.1610052   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
6/4/2007 0:16   xCO2_SW   480.2518149   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
6/4/2007 0:16   xCO2_Air   376.8200615   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
6/5/2007 0:16   xCO2_SW   481.700658   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
6/5/2007 0:16   xCO2_Air   379.7440285   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
6/5/2007 21:16 xCO2_SW   480.8148255   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
6/5/2007 21:16 xCO2_Air   374.3795566   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
6/6/2007 0:16   xCO2_SW   480.6956114   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
6/6/2007 0:16   xCO2_Air   376.9687321   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
6/6/2007 21:16 xCO2_SW   484.9295573   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
6/6/2007 21:16 xCO2_Air   377.7602877   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
6/7/2007 0:16   xCO2_SW   488.0920024   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
6/7/2007 0:16   xCO2_Air   377.9583679   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
6/8/2007 0:16   xCO2_SW   476.9744565   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
6/8/2007 0:16   xCO2_Air   379.2431367   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
6/9/2007 0:16   xCO2_SW   470.8344247   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
6/9/2007 0:16   xCO2_Air   377.1405432   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
6/9/2007 21:16 xCO2_SW   477.7717837   3   CO2 data submitted was adjusted by + 2 ppm b/c zero calibration was off as predicted by change in Licor temperature
6/9/2007 21:16 xCO2_Air   382.4973397   3   CO2 data submitted was adjusted by + 2 ppm b/c zero calibration was off as predicted by change in Licor temperature
6/11/2007 21:16   xCO2_SW   474.39675   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
6/11/2007 21:16   xCO2_Air   376.7980142   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
6/12/2007 21:16   xCO2_SW   477.9319199   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
6/12/2007 21:16   xCO2_Air   376.4418951   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
6/13/2007 0:16 xCO2_SW   481.4856995   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
6/13/2007 0:16 xCO2_Air   380.4627198   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
6/15/2007 0:16 xCO2_SW   478.8142825   3   CO2 data submitted was adjusted by - 2 ppm b/c zero calibration was off as predicted by change in Licor temperature

6/15/2007 0:16 xCO2_Air   383.1769045   3   CO2 data submitted was adjusted by - 2 ppm b/c zero calibration was off as predicted by change in Licor temperature

6/16/2007 0:16 xCO2_SW   470.6345071   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag

6/16/2007 0:16 xCO2_Air   375.8777468   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag

6/16/2007 6:16 xCO2_SW   479.2576372   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag

6/16/2007 6:16 xCO2_Air   376.6629722   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag

6/17/2007 0:16 xCO2_SW   472.2200098   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag

6/17/2007 0:16 xCO2_Air   376.2081335   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag

6/18/2007 0:16 xCO2_SW   479.7001652   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag

6/18/2007 0:16 xCO2_Air   376.3398994   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag

6/18/2007 18:16   xCO2_SW   475.3756484   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag

6/18/2007 18:16   xCO2_Air   373.3430915   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag

6/18/2007 21:16   xCO2_SW   479.8639686   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag

6/18/2007 21:16   xCO2_Air   376.9978768   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag

6/19/2007 0:16 xCO2_SW   477.3982917   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag

6/19/2007 0:16 xCO2_Air   376.0230422   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag

6/19/2007 18:16   xCO2_SW   478.9010859   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag

6/19/2007 18:16   xCO2_Air   375.2009219   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag

6/19/2007 21:16   xCO2_SW   483.5667422   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag

6/19/2007 21:16   xCO2_Air   378.2974157   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag

6/20/2007 0:16 xCO2_SW   481.6454618   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag

6/20/2007 0:16 xCO2_Air   377.4299178   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag

6/20/2007 18:16   xCO2_SW   476.0611674   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag

6/20/2007 18:16   xCO2_Air   378.810565   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag

6/22/2007 0:16 xCO2_SW   478.354806   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag

6/22/2007 0:16 xCO2_Air   376.2937671   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag

6/22/2007 21:16   xCO2_SW   471.9117802   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag

6/22/2007 21:16   xCO2_Air   373.7681842   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag

6/23/2007 0:16 xCO2_SW   476.3362635   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag

6/23/2007 0:16 xCO2_Air   377.7305061   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag

6/23/2007 21:16 xCO2_SW 477.8279226 4 instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag

6/23/2007 21:16 xCO2_Air 376.8820639 4 instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag

6/24/2007 0:16 xCO2_SW 480.0924357 4 instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag

6/24/2007 0:16 xCO2_Air 377.9726909 4 instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag

6/26/2007 0:16 xCO2_SW 479.0300491 4 instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag

6/26/2007 0:16 xCO2_Air 377.8541315 4 instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag

6/26/2007 12:16 xCO2_SW 490.849632 3 CO2 data submitted was adjusted by - 2 ppm b/c zero and span calibration were off as predicted by change in Licor temperature

6/26/2007 12:16 xCO2_Air 383.4363409 3 CO2 data submitted was adjusted by - 2 ppm b/c zero and span calibration were off as predicted by change in Licor temperature

6/27/2007 0:16 xCO2_SW 482.2395498 4 instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag

6/27/2007 0:16 xCO2_Air 379.6436478 4 instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag

6/27/2007 18:16 xCO2_SW 477.7280486 4 instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag

6/27/2007 18:16 xCO2_Air 375.6681119 4 instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag

6/28/2007 18:16 xCO2_SW 478.9655596 4 instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag

6/28/2007 18:16 xCO2_Air 375.9344735 4 instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag

6/28/2007 21:16 xCO2_SW 475.7202898 4 instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag

6/28/2007 21:16 xCO2_Air 373.733766 4 instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag

6/29/2007 0:16 xCO2_SW 479.4926225 4 instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag

6/29/2007 0:16 xCO2_Air 376.8105118 4 instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag

6/29/2007 18:16 xCO2_SW 474.8444915 4 instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag

6/29/2007 18:16 xCO2_Air 372.3151031 4 instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag

6/29/2007 21:16 xCO2_SW 477.0002379 4 instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag

6/29/2007 21:16 xCO2_Air 373.1754115 4 instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag

6/30/2007 0:16 xCO2_SW 481.8152402 4 instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag

6/30/2007 0:16 xCO2_Air 375.0139035 4 instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag

6/30/2007 18:16 xCO2_SW 475.1415429 4 instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag

6/30/2007 18:16 xCO2_Air 372.6491284 4 instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag

7/1/2007 18:16 xCO2_SW 479.0123356 4 instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag

7/1/2007 18:16 xCO2_Air 374.9658035 4 instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag

7/2/2007 18:16 xCO2_SW 482.7442441 4 instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag

7/2/2007 18:16 xCO2_Air   378.4941632   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
7/3/2007 18:16 xCO2_SW   488.8415297   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
7/3/2007 18:16 xCO2_Air   374.8724784   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
7/3/2007 21:16 xCO2_SW   486.9605628   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
7/3/2007 21:16 xCO2_Air   372.0834826   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
7/4/2007 18:16 xCO2_SW   478.9410282   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
7/4/2007 18:16 xCO2_Air   370.6604874   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
7/4/2007 21:16 xCO2_SW   486.888098   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
7/4/2007 21:16 xCO2_Air   376.9690104   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
7/5/2007 18:16 xCO2_SW   478.6970248   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
7/5/2007 18:16 xCO2_Air   372.8161082   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
7/5/2007 21:16 xCO2_SW   485.3262679   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
7/5/2007 21:16 xCO2_Air   377.3844204   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
7/6/2007 0:16   xCO2_SW   488.5705023   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
7/6/2007 0:16   xCO2_Air   376.1726191   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
7/6/2007 18:16 xCO2_SW   479.2000047   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
7/6/2007 18:16 xCO2_Air   373.9983082   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
7/6/2007 21:16 xCO2_SW   495.3540196   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
7/6/2007 21:16 xCO2_Air   377.6110508   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
7/7/2007 18:16 xCO2_SW   483.8226456   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
7/7/2007 18:16 xCO2_Air   372.9987088   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
7/8/2007 18:16 xCO2_SW   493.1172941   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
7/8/2007 18:16 xCO2_Air   379.7585082   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
7/10/2007 18:16   xCO2_SW   470.213854   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
7/10/2007 18:16   xCO2_Air   376.4619889   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
7/11/2007 18:16   xCO2_SW   475.5265657   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
7/11/2007 18:16   xCO2_Air   373.2488981   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
7/11/2007 21:16   xCO2_SW   493.3643559   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
7/11/2007 21:16   xCO2_Air   380.0381644   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag

7/12/2007 0:16 xCO2_SW 491.4174989 4 instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
7/12/2007 0:16 xCO2_Air 371.7208893 4 instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
7/12/2007 18:16 xCO2_SW 481.7358791 4 instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
7/12/2007 18:16 xCO2_Air 376.9767711 4 instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
7/13/2007 3:16 xCO2_SW 495.8717128 4 instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
7/13/2007 3:16 xCO2_Air 375.9570079 4 instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
7/13/2007 18:16 xCO2_SW 478.1293302 4 instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
7/13/2007 18:16 xCO2_Air 378.397933 4 instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
7/14/2007 0:16 xCO2_SW 489.2597973 4 instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
7/14/2007 0:16 xCO2_Air 380.2293988 4 instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
7/14/2007 18:16 xCO2_SW 476.932674 4 instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
7/14/2007 18:16 xCO2_Air 376.9080968 4 instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
7/15/2007 18:16 xCO2_SW 478.9791584 4 instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
7/15/2007 18:16 xCO2_Air 376.1812907 4 instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
7/16/2007 0:16 xCO2_SW 499.6054104 4 instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
7/16/2007 0:16 xCO2_Air 379.9270649 4 instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
7/16/2007 18:16 xCO2_SW 486.1435677 4 instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
7/16/2007 18:16 xCO2_Air 378.2771213 4 instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
7/16/2007 21:16 xCO2_SW 490.0838732 4 instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
7/16/2007 21:16 xCO2_Air 378.3552843 4 instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
7/17/2007 18:16 xCO2_SW 475.4136705 4 instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
7/17/2007 18:16 xCO2_Air 378.9817133 4 instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
7/17/2007 21:16 xCO2_SW 476.0490709 4 instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
7/17/2007 21:16 xCO2_Air 379.1742958 4 instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
7/18/2007 0:16 xCO2_SW 475.1573082 4 instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
7/18/2007 0:16 xCO2_Air 378.9188031 4 instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
7/18/2007 21:16 xCO2_SW 472.7599456 4 instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
7/18/2007 21:16 xCO2_Air 379.213223 4 instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
7/19/2007 0:16 xCO2_SW 470.6156213 4 instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag

7/19/2007 0:16 xCO2_Air   377.0503321   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag

7/21/2007 0:16 xCO2_SW   478.8904349   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag

7/21/2007 0:16 xCO2_Air   378.1554617   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag

7/21/2007 18:16   xCO2_SW   478.1469221   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag

7/21/2007 18:16   xCO2_Air   379.6102145   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag

7/22/2007 0:16 xCO2_SW   480.5912457   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag

7/22/2007 0:16 xCO2_Air   379.0527914   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag

7/22/2007 3:16 xCO2_SW   487.8386431   3   CO2 data submitted was adjusted by + 2 ppm b/c zero calibration was off as predicted by change in Licor temperature

7/22/2007 3:16 xCO2_Air   382.5161125   3   CO2 data submitted was adjusted by + 2 ppm b/c zero calibration was off as predicted by change in Licor temperature

7/22/2007 18:16   xCO2_SW   476.4676125   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag

7/22/2007 18:16   xCO2_Air   379.4926563   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag

7/22/2007 21:16   xCO2_SW   473.1398722   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag

7/22/2007 21:16   xCO2_Air   376.884705   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag

7/23/2007 0:16 xCO2_SW   468.6871491   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag

7/23/2007 0:16 xCO2_Air   374.3898964   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag

7/23/2007 18:16   xCO2_SW   475.4192766   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag

7/23/2007 18:16   xCO2_Air   378.9287404   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag

7/23/2007 21:16   xCO2_SW   472.6980266   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag

7/23/2007 21:16   xCO2_Air   379.128819   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag

7/24/2007 0:16 xCO2_SW   468.9706728   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag

7/24/2007 0:16 xCO2_Air   376.7143416   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag

7/26/2007 0:16 xCO2_SW   469.9405073   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag

7/26/2007 0:16 xCO2_Air   378.65255   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag

7/26/2007 18:16   xCO2_SW   475.4986692   3   CO2 data submitted was adjusted by + 2 ppm b/c zero calibration was off as predicted by change in Licor temperature

7/26/2007 18:16   xCO2_Air   383.5726002   3   CO2 data submitted was adjusted by + 2 ppm b/c zero calibration was off as predicted by change in Licor temperature

7/26/2007 21:16   xCO2_SW   466.2048898   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag

7/26/2007 21:16   xCO2_Air   376.8030305   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag

7/27/2007 0:16 xCO2_SW   469.4584998   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag

7/27/2007 0:16 xCO2_Air   379.872276   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag

7/28/2007 18:16   xCO2_SW   488.8471398   3   CO2 data submitted was adjusted by + 2 ppm b/c zero calibration was off as predicted by change in Licor temperature

7/28/2007 18:16   xCO2_Air   381.4357657   3   CO2 data submitted was adjusted by + 2 ppm b/c zero calibration was off as predicted by change in Licor temperature

10/1/2007 1:19 xCO2_SW   491.5602115   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag

10/1/2007 1:19 xCO2_Air   377.372253   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag

10/1/2007 18:16   xCO2_SW   482.2368576   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag

10/1/2007 18:16   xCO2_Air   373.4804437   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag

10/1/2007 21:16   xCO2_SW   482.9510107   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag

10/1/2007 21:16   xCO2_Air   375.559478   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag

10/2/2007 0:16 xCO2_SW   481.7191621   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag

10/2/2007 0:16 xCO2_Air   374.7842073   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag

10/2/2007 21:16   xCO2_SW   489.7834084   3   CO2 data submitted was adjusted by - 4 ppm b/c zero calibration was off as predicted by change in Licor temperature

10/2/2007 21:16   xCO2_Air   383.9396541   3   CO2 data submitted was adjusted by - 4 ppm b/c zero calibration was off as predicted by change in Licor temperature

10/3/2007 18:16   xCO2_SW   484.6212575   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag

10/3/2007 18:16   xCO2_Air   374.5862643   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag

10/3/2007 21:16   xCO2_SW   488.7462444   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag

10/3/2007 21:16   xCO2_Air   374.8763963   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag

10/4/2007 0:16 xCO2_SW   491.53901   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag

10/4/2007 0:16 xCO2_Air   375.0326017   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag

10/4/2007 18:16   xCO2_SW   482.8171237   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag

10/4/2007 18:16   xCO2_Air   369.9822802   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag

10/4/2007 21:16   xCO2_SW   490.671559   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag

10/4/2007 21:16   xCO2_Air   376.1197855   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag

10/5/2007 0:16 xCO2_SW   493.4918573   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag

10/5/2007 0:16 xCO2_Air   377.4558653   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag

10/5/2007 12:16   xCO2_SW   491.8341992   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag

10/5/2007 12:16   xCO2_Air   378.1467033   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag

10/5/2007 18:16   xCO2_SW   487.4886617   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag

10/5/2007 18:16   xCO2_Air   375.5360958   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag

10/5/2007 21:16   xCO2_SW   491.2559335   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag

10/5/2007 21:16 xCO2_Air 378.1915904 4 instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
10/6/2007 0:16 xCO2_SW 494.1254514 4 instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
10/6/2007 0:16 xCO2_Air 378.7755415 4 instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
10/6/2007 18:16 xCO2_SW 488.5312392 4 instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
10/6/2007 18:16 xCO2_Air 376.4060271 4 instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
10/6/2007 21:16 xCO2_SW 490.7460836 4 instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
10/6/2007 21:16 xCO2_Air 377.5680217 4 instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
10/7/2007 0:16 xCO2_SW 495.0635972 4 instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
10/7/2007 0:16 xCO2_Air 379.1141371 4 instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
10/7/2007 18:16 xCO2_SW 493.457661 4 instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
10/7/2007 18:16 xCO2_Air 374.3138763 4 instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
10/7/2007 21:16 xCO2_SW 489.3638087 4 instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
10/7/2007 21:16 xCO2_Air 367.3557367 4 instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
10/8/2007 18:16 xCO2_SW 491.8328214 4 instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
10/8/2007 18:16 xCO2_Air 375.0976164 4 instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
10/8/2007 21:16 xCO2_SW 493.8006117 4 instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
10/8/2007 21:16 xCO2_Air 377.1340895 4 instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
10/9/2007 18:16 xCO2_SW 496.267437 4 instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
10/9/2007 18:16 xCO2_Air 373.033975 4 instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
10/9/2007 21:16 xCO2_SW 502.837261 4 instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
10/9/2007 21:16 xCO2_Air 379.6844416 4 instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
10/10/2007 18:16 xCO2_SW 499.1207692 4 instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
10/10/2007 18:16 xCO2_Air 372.6256316 4 instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
10/10/2007 21:16 xCO2_SW 506.4596871 4 instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
10/10/2007 21:16 xCO2_Air 378.2965005 4 instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
10/11/2007 18:16 xCO2_SW 500.2381657 4 instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
10/11/2007 18:16 xCO2_Air 371.5599006 4 instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
10/11/2007 21:16 xCO2_SW 513.6117913 4 instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
10/11/2007 21:16 xCO2_Air 378.0419719 4 instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag

10/12/2007 18:16   xCO2_SW   492.4343874   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
10/12/2007 18:16   xCO2_Air   370.9944695   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
10/12/2007 21:16   xCO2_SW   507.3075387   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
10/12/2007 21:16   xCO2_Air   376.9390295   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
10/13/2007 18:16   xCO2_SW   501.2103575   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
10/13/2007 18:16   xCO2_Air   374.8050598   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
10/13/2007 21:16   xCO2_SW   505.001688   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
10/13/2007 21:16   xCO2_Air   377.972483   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
10/14/2007 18:16   xCO2_SW   502.0957614   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
10/14/2007 18:16   xCO2_Air   377.3367321   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
10/14/2007 21:16   xCO2_SW   507.9814695   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
10/14/2007 21:16   xCO2_Air   380.4118008   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
10/15/2007 18:16   xCO2_SW   501.7776612   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
10/15/2007 18:16   xCO2_Air   372.4424779   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
10/15/2007 21:16   xCO2_SW   505.4884714   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
10/15/2007 21:16   xCO2_Air   365.0235247   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
10/16/2007 0:16   xCO2_SW   519.0973211   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
10/16/2007 0:16   xCO2_Air   380.1066472   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
10/16/2007 18:16   xCO2_SW   497.7588389   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
10/16/2007 18:16   xCO2_Air   371.761006   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
10/16/2007 21:16   xCO2_SW   510.4642817   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
10/16/2007 21:16   xCO2_Air   365.9402786   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
10/17/2007 0:16   xCO2_SW   523.0124056   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
10/17/2007 0:16   xCO2_Air   379.2930208   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
10/17/2007 18:16   xCO2_SW   505.3235525   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
10/17/2007 18:16   xCO2_Air   370.5306714   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
10/17/2007 21:16   xCO2_SW   515.3623148   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
10/17/2007 21:16   xCO2_Air   370.1314419   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
10/18/2007 0:16   xCO2_SW   512.7491947   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag

10/18/2007 0:16   xCO2_Air   377.0085791   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
10/18/2007 18:16   xCO2_SW   493.7239274   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
10/18/2007 18:16   xCO2_Air   372.7029434   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
10/18/2007 21:16   xCO2_SW   506.2281523   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
10/18/2007 21:16   xCO2_Air   370.736539   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
10/19/2007 0:16   xCO2_SW   520.607484   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
10/19/2007 0:16   xCO2_Air   380.5887852   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
10/19/2007 18:16   xCO2_SW   492.787176   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
10/19/2007 18:16   xCO2_Air   376.8062182   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
10/19/2007 21:16   xCO2_SW   501.1638998   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
10/19/2007 21:16   xCO2_Air   379.4159387   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
10/20/2007 0:16   xCO2_SW   507.1352602   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
10/20/2007 0:16   xCO2_Air   379.302103   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
10/20/2007 18:16   xCO2_SW   494.3460852   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
10/20/2007 18:16   xCO2_Air   375.6014962   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
10/20/2007 21:16   xCO2_SW   501.33943   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
10/20/2007 21:16   xCO2_Air   376.6461044   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
10/21/2007 0:16   xCO2_SW   524.786551   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
10/21/2007 0:16   xCO2_Air   379.417303   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
10/21/2007 18:16   xCO2_SW   493.0782674   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
10/21/2007 18:16   xCO2_Air   373.3347751   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
10/21/2007 21:16   xCO2_SW   498.9228823   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
10/21/2007 21:16   xCO2_Air   374.3063733   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
10/22/2007 18:16   xCO2_SW   478.0671273   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
10/22/2007 18:16   xCO2_Air   371.9706282   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
10/22/2007 21:16   xCO2_SW   500.3772905   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
10/22/2007 21:16   xCO2_Air   374.0302649   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
10/23/2007 18:16   xCO2_SW   494.6075239   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
10/23/2007 18:16   xCO2_Air   376.1842367   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag

10/23/2007 21:16   xCO2_SW   496.9522095   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
10/23/2007 21:16   xCO2_Air   374.0536698   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
10/24/2007 18:16   xCO2_SW   484.4443857   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
10/24/2007 18:16   xCO2_Air   375.4356798   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
10/25/2007 18:16   xCO2_SW   485.1788485   3   CO2 data submitted was adjusted by - 2 ppm b/c zero calibration was off as predicted by change in Licor temperature
10/25/2007 18:16   xCO2_Air   384.4315377   3   CO2 data submitted was adjusted by - 2 ppm b/c zero calibration was off as predicted by change in Licor temperature
10/27/2007 18:16   xCO2_SW   457.4674224   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
10/27/2007 18:16   xCO2_Air   375.7198175   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
10/27/2007 21:16   xCO2_SW   467.8326355   3   CO2 data submitted was adjusted by - 2 ppm b/c zero calibration was off as predicted by change in Licor temperature
10/27/2007 21:16   xCO2_Air   384.0465447   3   CO2 data submitted was adjusted by - 2 ppm b/c zero calibration was off as predicted by change in Licor temperature
10/30/2007 18:16   xCO2_SW   460.582302   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
10/30/2007 18:16   xCO2_Air   377.1720524   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
10/31/2007 18:16   xCO2_SW   469.1382571   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
10/31/2007 18:16   xCO2_Air   376.5279043   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
10/31/2007 21:16   xCO2_SW   464.4087826   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
10/31/2007 21:16   xCO2_Air   373.5682336   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
11/1/2007 0:16 xCO2_SW   482.7742811   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
11/1/2007 0:16 xCO2_Air   375.2802519   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
11/1/2007 18:16   xCO2_SW   465.2157877   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
11/1/2007 18:16   xCO2_Air   373.8130686   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
11/1/2007 21:16   xCO2_SW   473.9009117   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
11/1/2007 21:16   xCO2_Air   372.2612593   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
11/2/2007 0:16 xCO2_SW   490.8754686   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
11/2/2007 0:16 xCO2_Air   374.8986798   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
11/2/2007 18:16   xCO2_SW   467.91722   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
11/2/2007 18:16   xCO2_Air   368.2567709   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
11/2/2007 21:16   xCO2_SW   477.791711   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
11/2/2007 21:16   xCO2_Air   372.9216873   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
11/3/2007 0:16 xCO2_SW   482.2688094   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag

11/3/2007 0:16 xCO2_Air   374.8602936   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag

11/3/2007 6:16 xCO2_SW   482.0326556   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag

11/3/2007 6:16 xCO2_Air   378.5156918   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag

11/3/2007 15:16   xCO2_SW   485.0310762   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag

11/3/2007 15:16   xCO2_Air   377.3576245   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag

11/3/2007 18:16   xCO2_SW   480.0108389   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag

11/3/2007 18:16   xCO2_Air   372.929481   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag

11/3/2007 21:16   xCO2_SW   481.5460377   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag

11/3/2007 21:16   xCO2_Air   371.1781662   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag

11/4/2007 0:16 xCO2_SW   483.9488123   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag

11/4/2007 0:16 xCO2_Air   371.760179   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag

11/4/2007 9:16 xCO2_SW   481.3913344   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag

11/4/2007 9:16 xCO2_Air   374.7510335   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag

11/4/2007 15:16   xCO2_SW   486.3393598   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag

11/4/2007 15:16   xCO2_Air   378.8276869   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag

11/4/2007 18:16   xCO2_SW   478.3262131   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag

11/4/2007 18:16   xCO2_Air   372.2305088   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag

11/4/2007 21:16   xCO2_SW   480.0587412   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag

11/4/2007 21:16   xCO2_Air   371.7907248   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag

11/5/2007 0:16 xCO2_SW   483.0909513   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag

11/5/2007 0:16 xCO2_Air   372.666204   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag

11/5/2007 12:16   xCO2_SW   489.9506259   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag

11/5/2007 12:16   xCO2_Air   376.9660347   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag

11/5/2007 15:16   xCO2_SW   490.3328424   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag

11/5/2007 15:16   xCO2_Air   375.7068554   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag

11/5/2007 18:16   xCO2_SW   485.1423648   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag

11/5/2007 18:16   xCO2_Air   371.390038   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag

11/5/2007 21:16   xCO2_SW   486.1316939   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag

11/5/2007 21:16   xCO2_Air   367.936966   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag

11/6/2007 0:16 xCO2_SW   482.547779   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
11/6/2007 0:16 xCO2_Air   365.6607068   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
11/6/2007 3:16 xCO2_SW   490.2162474   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
11/6/2007 3:16 xCO2_Air   373.0212092   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
11/6/2007 12:16   xCO2_SW   495.5052908   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
11/6/2007 12:16   xCO2_Air   380.0057484   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
11/6/2007 15:16   xCO2_SW   491.8213521   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
11/6/2007 15:16   xCO2_Air   376.3055859   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
11/6/2007 18:16   xCO2_SW   485.1264356   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
11/6/2007 18:16   xCO2_Air   371.9335375   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
11/6/2007 21:16   xCO2_SW   485.55008   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
11/6/2007 21:16   xCO2_Air   370.5835571   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
11/7/2007 0:16 xCO2_SW   483.8156045   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
11/7/2007 0:16 xCO2_Air   367.2449575   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
11/7/2007 3:16 xCO2_SW   491.0249434   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
11/7/2007 3:16 xCO2_Air   374.5628814   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
11/7/2007 6:16 xCO2_SW   496.7528798   3   CO2 data submitted was adjusted by - 3 ppm b/c zero calibration was off as predicted by change in Licor temperature
11/7/2007 6:16 xCO2_Air   382.7522226   3   CO2 data submitted was adjusted by - 3 ppm b/c zero calibration was off as predicted by change in Licor temperature
11/7/2007 15:16   xCO2_SW   488.168625   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
11/7/2007 15:16   xCO2_Air   375.0129281   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
11/7/2007 18:16   xCO2_SW   482.4630724   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
11/7/2007 18:16   xCO2_Air   370.5955448   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
11/7/2007 21:16   xCO2_SW   481.8529972   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
11/7/2007 21:16   xCO2_Air   366.0109933   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
11/8/2007 0:16 xCO2_SW   487.0390456   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
11/8/2007 0:16 xCO2_Air   369.4661045   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
11/8/2007 18:16   xCO2_SW   476.3595077   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
11/8/2007 18:16   xCO2_Air   368.8537332   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
11/8/2007 21:16   xCO2_SW   480.4848954   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag

11/8/2007 21:16　　　xCO2_Air　　369.9065201　4　　instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag

11/9/2007 0:16　xCO2_SW　　481.0973239　4　　instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag

11/9/2007 0:16　xCO2_Air　　376.1737041　4　　instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag

11/9/2007 12:16　　　xCO2_SW　　490.5337699　3　　CO2 data submitted was adjusted by - 2 ppm b/c zero calibration was off as predicted by change in Licor temperature

11/9/2007 12:16　　　xCO2_Air　　385.2641897　3　　CO2 data submitted was adjusted by - 2 ppm b/c zero calibration was off as predicted by change in Licor temperature

11/9/2007 18:16　　　xCO2_SW　　482.9849039　4　　instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag

11/9/2007 18:16　　　xCO2_Air　　373.482467　4　　instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag

11/10/2007 18:16　　　xCO2_SW　　478.8120258　4　　instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag

11/10/2007 18:16　　　xCO2_Air　　371.2739578　4　　instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag

11/10/2007 21:16　　　xCO2_SW　　481.0224523　4　　instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag

11/10/2007 21:16　　　xCO2_Air　　371.2167182　4　　instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag

11/11/2007 0:16　　　xCO2_SW　　484.6645967　4　　instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag

11/11/2007 0:16　　　xCO2_Air　　375.7368584　4　　instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag

11/11/2007 18:16　　　xCO2_SW　　479.1448355　4　　instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag

11/11/2007 18:16　　　xCO2_Air　　372.7386834　4　　instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag

11/11/2007 21:16　　　xCO2_SW　　477.2990931　4　　instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag

11/11/2007 21:16　　　xCO2_Air　　374.7951429　4　　instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag

11/12/2007 0:16　　　xCO2_SW　　491.0804748　4　　instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag

11/12/2007 0:16　　　xCO2_Air　　379.9683253　4　　instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag

11/12/2007 18:16　　　xCO2_SW　　481.5771247　4　　instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag

11/12/2007 18:16　　　xCO2_Air　　370.0951508　4　　instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag

11/12/2007 21:16　　　xCO2_SW　　475.8587469　4　　instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag

11/12/2007 21:16　　　xCO2_Air　　368.0661937　4　　instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag

11/13/2007 0:16　　　xCO2_SW　　481.5527266　4　　instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag

11/13/2007 0:16　　　xCO2_Air　　373.7606451　4　　instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag

11/13/2007 18:16　　　xCO2_SW　　479.5516924　4　　instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag

11/13/2007 18:16　　　xCO2_Air　　375.4428608　4　　instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag

11/13/2007 21:16　　　xCO2_SW　　482.1479318　4　　instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag

11/13/2007 21:16　　　xCO2_Air　　375.6459873　4　　instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag

11/14/2007 18:16   xCO2_SW   467.5714877   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
11/14/2007 18:16   xCO2_Air   365.7231256   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
11/14/2007 21:16   xCO2_SW   479.819812   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
11/14/2007 21:16   xCO2_Air   375.2045773   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
11/15/2007 18:16   xCO2_SW   479.3982767   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
11/15/2007 18:16   xCO2_Air   375.2025306   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
11/15/2007 21:16   xCO2_SW   480.9999912   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
11/15/2007 21:16   xCO2_Air   372.3243697   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
11/16/2007 0:16   xCO2_SW   487.9194309   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
11/16/2007 0:16   xCO2_Air   377.486815   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
11/16/2007 18:16   xCO2_SW   486.8494767   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
11/16/2007 18:16   xCO2_Air   374.312344   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
11/16/2007 21:16   xCO2_SW   491.1642468   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
11/16/2007 21:16   xCO2_Air   374.1655265   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
11/17/2007 18:16   xCO2_SW   496.7226775   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
11/17/2007 18:16   xCO2_Air   376.7414225   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
11/17/2007 21:16   xCO2_SW   497.183472   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
11/17/2007 21:16   xCO2_Air   376.254266   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
11/18/2007 0:16   xCO2_SW   502.8077956   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
11/18/2007 0:16   xCO2_Air   376.0633018   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
11/18/2007 18:16   xCO2_SW   501.6014099   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
11/18/2007 18:16   xCO2_Air   376.6095377   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
11/18/2007 21:16   xCO2_SW   506.6952178   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
11/18/2007 21:16   xCO2_Air   374.7432056   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
11/19/2007 0:16   xCO2_SW   521.5114958   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
11/19/2007 0:16   xCO2_Air   373.743668   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
11/19/2007 18:16   xCO2_SW   507.4899686   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
11/19/2007 18:16   xCO2_Air   374.1754432   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag
11/19/2007 21:16   xCO2_SW   546.9630993   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag

11/19/2007 21:16   xCO2_Air   375.0022794   4   instrument reading low on some cycles - when CO2 air was < 375 umol/mol, CO2 air and sw data was given a 4 flag