**Common Tasks in PuTTY and IDL**

Amos = i6 TPol = i2 Troi = i1 Spock=o1

For all of these tasks, you’ll have to log into PulseSecure and log into the SIL account on PuTTY to utilize IDL. Some of these tasks require you to log into a personal account on PuTTY. Here’s a map of most used pathways:

ROOT

Home/CCG projects

Personal SIL CH4C13 CO2c13

IDL (code) cals Flask

tanks Inst. ID(I6, etc.) SB

Raw sessions transfer Tank code

csv\_files

**To transfer run files from the lab to the NOAA database:**

On the instruments computer…

Log in to pulse secure and open FileZilla

Log in to FileZilla with: vortex.cmdl.noaa.gov, SIL, password, port 22

From here, focus on the command bar on the right side of the window.

Type “/projects” and press enter. This will automatically change to “/nfs/ccg”

Add on to this: /co2c13(OR whatever species)/flask/i2(OR i6 OR i1 etc.)/transfer/csv\_files

The lower right side of the screen should now list csv files of the runs from whatever instrument you typed

On the left side of the window, find the csv files for your instrument, and drag the new ones from the left side to the right side

Make sure they load before exiting out

On your own computer…

Log in into pulse secure and PuTTY

NOTE: in PuTTY, if at any time you want to see what files and directories are in the present directory, type “ls”. “cd” stands for change directory, and is used to change directories. “cd ..” moves you back a single directory. “nedit” opens files.

Type: cd / -> cd projects -> cd co2c13(OR whatever species)-> cd flask -> cd i6 (OR i2 OR i1) -> cd transfer -> cd csv\_files

A faster way to type this is: cd projects/co2c13/flask/i6/transfer/csv\_files

Type “ls” to see the run numbers that have been transferred to the csv\_files folder

Once you can see that the new run numbers have indeed been transferred, open IDL using the command “idlccg &”. The “&” symbol just makes it so you can continue working in the PuTTY window as you use the Xming/IDL window.

In the new IDL window, type “transfer\_co2c13(OR ch4c13 OR whatever species),file=’000999\_i6’

The data on the file will download onto the screen, this takes a minute or two. From here you can see flags, pair differences, flasks, and values of the run.

If you receive an error message, return to PuTTY and type “nedit \*000555\*” and manually change the lines that are causing the error message.

**To update or add a tank to the system:**

In PuTTY: cd /projects/co2c13(OR whatever species)/flask/sb

Nedit reference\_external.co2c13 &

This will open up a window with a list of tanks

Pull up an internet browser and type in omi.cmdl.noaa.gov/refgas

Type in your tank number and take down the most recent filling information and co2 and n2o value from the calibration summary

At the base of the list of tanks, add in the new tank with the format:

Tank no. fill year fill month fill day lettercode(a, b, c, d..) use code co2 n20 -99.999….

Finally, save before closing the window.

**To update or add SIL flasks to the system:**

In PuTTY: cd projects/co2c13/flask/sb

Nedit sil\_eventnum.txt &

At the base of the list, add your new fill date in the following format:

Number(SIL02936) SIL FLASKCODE(879-91, etc.) method year month day -999.9 -999.9

Finally, save before closing the window.

**To flag a flask:**

In PuTTY: cd /ccg/bin

Then enter: ./pydv &

This will open a data viewer, select flask flagging.

In the flask flagging window, select file -> get data

Select the correct sampling site, select the measurement parameter, and the time frame, and click OK

Then click on the flask that needs to be flagged, and right click over the flag (…) letter code, and add (or remove) the flag.

Session builder website: om.cmdl.noaa.gov/sb/

**To get to tank view code:**

/home/ccg/sil/idl

Nedit tank\_view.pro

**To get tank run data to make tank reports:**

Cd /projects/co2c13/cals/external\_cyl

Nedit \*TANK\* to check all the data and delete out bad runs.

In IDL, tank\_view, tank=’TANK’, breakstart=2018, savegraphs=1 (have had the instance where you need to add date, i.e. tank\_view,tank=’AL47145’,filldate=03022017’ (mmddyyyy). Just get fill date from external\_cyl. If its methane, tank\_view,tank=’TANK’, spec=’ch4c13’

To just view graph, stop after tank: tank\_view, tank=’TANK’

You’ll encounter a stop, type .c to continue

AFTER THIS, in PuTTy:

cd/stats

Ls \*TANK\*

Nedit \*TANK\*

Copy paste into word or pull the file from FileZilla onto computer folders. Also, pull graph from FileZilla. Use all of this info to fill out the tank report.

If the tank\_view command is not working, check the file and then compile it in IDL like this:

.r tank\_view

**To pull up the code that makes the run processing work:**

Cd /home/ccg/sil/idl/sil\_proc\_co2c13.pro

**To delete SIL flask runs that were crappy:**

Cd /home/ccg/sil/silflasks

Nedit silflasks.co2c13

**To get to n2o and co2 code:**

Cd /home/ccg/sil/idl

Nedit defaultco2.pro or defaultn2o.pro

Nedit \*.r transfer\_co2iso\*

**N2o values:**

Cd /home/ccg/sil/idl

In IDL

defaultn2o,yr=2012,mo=01,dy=04

Print,n2otemp

Print,site

Ccg\_dec2date,2018.125,yr,mo,dy,hr,mn

Print,mo

Print,dy etc.

defaultn2o,decdate=2018.542

Print,n2o temp

Print,n2o. arr/flag/value

**To check out flask data graphically:**

Code lives in plot\_sitedata\_qaqc.pro

To show all plots: plot\_sitedata\_qaqc

.c (continue)

.c (continue)

Etc.

To get a plot for a specific site:

Plot\_sitedata\_qaqc,site=’mlo’,savegraph=1 or 0

To convert image to png format:

Convert spo.all.co2c13.psc spo.all.co2c13.png

**To see graph color and symbol options:**

Ccg\_ex\_eymbol

Ccg\_ex\_color

**In IDL to get flask pressure data:**

Find\_flaskpressures,site=’alt’,getdata=0

.c to move through different graphs.

**Let’s check out some tank graphs, via personal account:**

Plottank\_refstats,tank=’LOFN-001’

You can find a tank list in cals.

**Gotta put in a new STD/REF tank?**

Cd /projects/co2c13/flask/sb

Nedit reference.co2c13