GGG2020 at BIRA-IASB

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September 4, 2020

1 Installation

The ggg2020 has been installed in /bira-iasb/projects/FTIR/retrievals/operational/tools/ggg2020.

The hg setting and some preparations

1) hg clone https://parkfalls.gps.caltech.edu/tccon/stable/hg/ggg-stable/ggg2020
2) download miniconda3 here: https://docs.conda.io/en/latest/miniconda.html; then install it
3) add GGGPATH in the .bashrc or .profile

The detail instruction is available at tccon wiki.

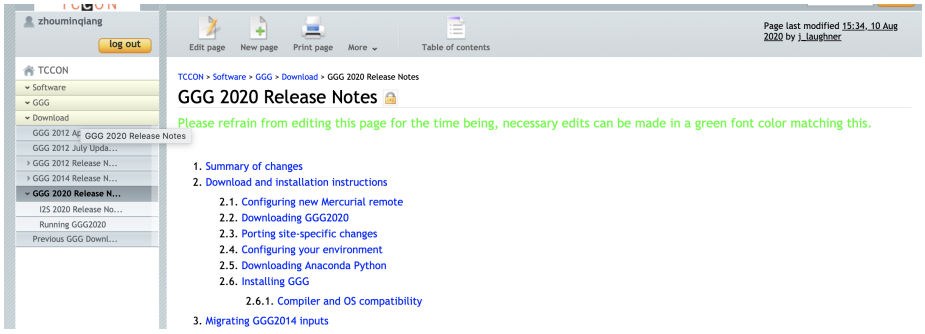

Figure 1: GGG2020 download.

Steps

STEP 1: cd $GGGPATH/install
STEP 2: ./master.sh 4 (you will crash, as you do not have the write to install the python lib in the default folder)
STEP 3: change the install/clone_netcdf_writer.sh
(do not overwrite again as you do not download the tccon_netcdf python code again; I already change the code in the ggg2020/install folder)

STEP 4: change the src/tccon_netcdf (install the python lib to a user defined place: –prefix)
STEP 5: add the prefix folder to install the python lib, for example, ggg2020/python_tool/lib/python3.7/site-packages
STEP 6: cd $GGGPATH/install
Type ./master.sh 4
you need to input Y and N
then check the difference.out
the whole process will take about 20 mins

Other notes

1) GGGPATH should be GGGPATH=/bira-iasb/projects/FTIR/retrievals/operational/tools/ggg2020 instead of GGGPATH=/home/user/projects/FTIR/retrievals/operational/tools/ggg2020
2) for the conda environment, you might need to install some packages:
conda install -c conda-forge mercurial
conda install -c anaconda setuptools
3) in the src/gfit.f
change write(csfilename,'(a14,i6.6,a4)') 'check_md5sums_',pid, –¿ write(csfilename,'(a14,i7.7,a4)') 'check_md5sums_',pid,
in our system the getpid return 7 int instead of 6

1.1 ggg3 at BIRA-IASB

download by git

make a folder, for example, in ftir_op/python/.
git clone https://github.com/zmq814/ggg3_bira.git
you will have ggg3_bira folder where you have

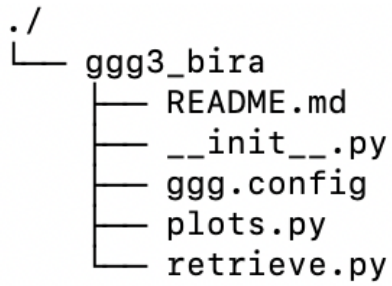

Figure 2: ggg3_bira code.

Run ggg3

The code has been tested with the new PC, ada 1...5 using the 19g pack-

ages
I have define a m19p3geo in the .profile
Step1. in the terminal, INPUT m19p3geo
step2. in the python section, import ggg3_bira.retrieve as r
step3. import datetime as dt
step4. stime = dt.datetime(),etime = dt.datetime(),instrument='bruker125@stdenis'
step5. r.main(instrument,stime,etime)