**Instructions of SAR Batch Processing**

Assuming there are 16 folders d0…d15 in the /media/radarops/ directory. A folder stores data for the corresponding channel. The format of the file name is 20190723\_171203\_VHF\_Radar\_Greenland\_2019\_Ch4\_0006.mat, where the red string can be arbitrarily changed, and the yellow string is Ch or Channel.

The steps to run oneKey.sh.

Step 0: Convert plain text files in DOS/MAC format to UNIX format.

dos2unix ./\*.sh

Step 1: Change permission to allow execution of all bash shell scripts:

chmod +x ./\*.sh

Step2: Run oneKey.sh

./oneKey.sh

Step3:

A close up of a screen

Description automatically generated

Selecting 1 means using the default setting: processing data from d0 to d7, d8 to d15 in /media/radarops/.

Selecting 2 means using user-defined settings: you need to enter 5 parameters separated by spaces. The first parameter: the data directory; the second parameter: the first reference directory; The third parameter: the second reference directory. 3rd, 4th parameter: the number of channels.

A screen shot of a social media post

Description automatically generated

For example, processing the data in d0 to d3, d8 to d12 in the /media/radarops/ directory.

Step4:

A close up of a screen

Description automatically generated

Selecting 1 means assuming that the size of each .mat file is 1GB in default.

Selecting 2 means the user enters the actual file size. For example, the below actual size of each .mat file is 2GB.

A picture containing indoor, wall

Description automatically generated

Step5:

A close up of a black background

Description automatically generated

Selecting 1 means using the default setting: 100 files per batch, and file index starting from 0000.

Selecting 2 means that the user adjusts according to the actual situation: you need to enter 2 parameters separated by spaces. The first parameter: The number of files processed per batch; The second parameter: the index of the first file.

A close up of a black background

Description automatically generated

For example: Processing 50 files per batch, and the first file index starts from 0003.

**Instructions of ADR Batch Processing**

Assumptions

* Every timestamp should include an xml file. If it’s missing, the files in this timestamp won’t be added to the job list.
* Only the \*.dat files that don’t have a corresponding \*.mat file will be added to the the joblist. If you want to change this, please edit line #49:

local mat\_equiv=${curr\_file/.dat/.mat} change this to =>

local mat\_equiv=${curr\_file/.dat/.fat}

If using -s option, please edit line #85:

mat\_equiv=${each/.dat/.mat} change this to =>

mat\_equiv=${each/.dat/.fat}

* The new joblist is always created in the “field” directory, so please make sure a folder named “field” exists. If you want to change the folder or path it gets stored in, please edit line #160 or line #91 when using the -s option.

>> field/new\_joblist.txt change this to

>> your\_path/new\_joblist.txt

* All these edits will have to be made in job\_dispatcher\_v4.sh. In most cases, these edits shouldn’t be necessary.

Arena/ADR conversion

* Make sure you’re on the “radarops” home directory. There should be a folder named field in the directory.
* cd into field. Everything relating to adr conversion will take place in this folder

Step 0: Change permission to allow execution of all bash shell scripts:

chmod +x \*.sh

Step 1: Generate new\_joblist.txt using job\_dispatcher\_v4.sh. It takes in a parameter, the parent directory of all the drives.

./job\_dispatcher\_v4.sh /media/radarops {note how there’s no slash after radarops. This is crucial.

Note: if you just want to process files in a single folder, use command with “-s” option:

./job\_dispatcher\_v4.sh your\_folder\_path -s

Step 2: Now that new\_joblist.txt has been created, start the ADR conversion using ParallelRunScript. It takes in 2 parameters, # of threads and joblist.

./ParallelRunScript.sh 32 new\_joblist.txt

Final Step: The .dat to .mat conversion should now be done. All the .mat files will be found in the same directory as the .dat files.

ADR Timing

1 TB in 45 minutes. Tested on the field server.