DDWG Quarterly Report - 20200901

With information from the period June 5 to August 31 2020

Contributors

Name	Institution
Kevin Krieger	USASK
Paul Breen	BAS

General Announcements

1. DDWG Github repository is now being used to keep track of DDWG tasks, issues, past reports, etc.
2. VT had a very short downtime during the last week of August
3. USASK worked with BAS and Compute Canada to set up rsync access to `cedar.computecanada.ca` for Paul Breen. Paul is now syncing data directly from the filesystem via `rsync`.
4. Several issues worked through to block files, see github issues list for details
5. Globus sync script updated to work with Windows as well as Linux.
6. FITACF 3.0 files no longer shared
7. Temporary mirror decommissioned
8. 2194 old DAT files retrieved from optical media and placed on mirror
9. Failed files made available on mirror, as well as a master list of failed files
10. Master list of updated files made available on mirror
11. Paul Breen working to sync data from all radars' data managers. Status is:

Complete	Radar	Contact	Status
	ADE	Bill Bristow	Script written but not called via cron as radar status is uncertain
	ADW	Bill Bristow	Script written but not called via cron as radar status is uncertain
	BKS	Kevin Sterne	Contacted - awaiting account details
✔	CLY	Kevin Krieger	Transferring data
	CVE	Simon Shepherd	Contacted - awaiting account details
	CVW	Simon Shepherd	Contacted - awaiting account details
	FHE	Kevin Sterne	Contacted - awaiting account details
	FHW	Kevin Sterne	Contacted - awaiting account details
	GBR	Kevin Sterne	Contacted - awaiting account details
✔	INV	Kevin Krieger	Transferring data
	KAP	Kevin Sterne	Contacted - awaiting account details
✔	KOD	Bill Bristow	Transferring data
	KSR	Bill Bristow	Script written but not called via cron as data currently acquired from NICT
✔	MCM	Bill Bristow	Transferring data
✔	PGR	Kevin Krieger	Transferring data
✔	RKN	Kevin Krieger	Transferring data
✔	SAS	Kevin Krieger	Transferring data
✔	SPS	Bill Bristow	Transferring data

Complete	Radar	Contact	Status
	WAL	Alex Chartier	Data will be pushed to us. Likely to be setup November 2020

Issues Encountered

1. The hard drive that was being used to hold RAWACF files before being placed on the mirror failed on August 28 between 18:27 and 20:03 UTC. Files lost include some files from VT and some from BAS that are recoverable.
2. The inode quota (how many files we can own) of 10M files has been reached on `cedar`, some files were removed to make space, but future applications to Compute Canada should have inode requirements.

Help requested

1. Help requested from DAWG to provide software tools to fix files with outstanding issues, such as these san files
    1. lagfr_fix can be adapted to fix parameters in a file
    2. test_raw can be used to check integrity of files (although pydarn and backscatter do this as well and are already being used)
2. Help requested from DPTF to provide guidance on the following:
    1. Define who is responsible for fixing files - Answer was PI group
    2. Define what file types DDWG is responsible for - Answer was RAWACF and DAT only
3. Help requested from DSWG to:
    1. Define data product levels (level 0, level 1, etc). Operating under the assumption that level 1 is DAT and RAWACF
    2. Categories for blocking files to be added level 1 standard documentation
4. Help requested to retrieve files from old optical media where the USASK disc was damaged. Responses from several groups allowed USASK to retrieve the rest of the files.

Outstanding Tasks

1. Send emails to all data managers to perform gaps resolution (September)
2. Send emails to all data managers with a list of files from their radar(s) that have failed a bz2 check or dmap consistency check (September)
3. Set up a holding directory on a RAID array to replace the failed hard drive. (September)
4. Move dat-to-rawacf files out of the main distribution and into a parallel directory (September)