**Summary of processing**

CV\_Data: Data from JASMIN

All have GUI to remove dates (MARTYN?)

**O3**

Data comes from CV as daily files, collated and monthly files produced.

Some processing is done automatically. Uses remove date GUI but often not complete due to workload and this is done retrospectively (or not at all).

Daily NRT automated and then sent manually to GAW.

End of month manual look, check flagged data, check zero data for error and prepare netCDF files ‘manually’. (KATIE)

CV\_output: Daily CVO\* (hourly averaged) and monthly mmm.prc (minute data flagged)

STATUS: Data until Dec2018 is submitted to WDCRG.

Data until end July 2019 is submitted as netCDF to CEDA.

Does historical data need adjustment?

Look at when we had duplicate instruments running (MARTYN)

Need to use ‘Remove date’ GUI more.

**CO**

Data comes from 6 hourly files, collated and monthly files produced.

Some processing is done automatically. Uses remove date GUI but often not complete due to workload and this is done retrospectively (or not at all).

CV\_output: Daily CVO\* (hourly averaged) and monthly mmm.prc (minute data flagged) Monthly file with calibration and zero data removed.

Also get calibration info, 200ppb level, 500ppb level and zero data

Output data is checked, remove extra data according to greenhouse gas data etc.

Check calibration data, apply offset correction.

Calibration cylinders prone to drift, upwards around 2 ppb/year. KATIE

STATUS: Data until Dec2018 is submitted to WDCRG and WDCGG with just offset applied. Is it in CEDA? netCDF needs a bit of work.

Need to check latest calibration information.

New cylinder due any day (mid-October 2019)

Old cylinder would be returned to US.

Issue with zeroing at the moment, need to check zero trap material-will send more soon.

Water correction not good enough on system, evaluating it now.

**10m Met**

Current.csv, separated into monthly files,

Checked alongside 30m data, ‘bad’ data removed manually (MARTYN). Prepared as monthly NA/netCDF files manually.

**30m Met**

Data comes as daily files, collated into monthly ones using a python script (not yet automated-MARTYN).

Compared to 10m, ‘bad data’ removed manually. Prepared as monthly NA/ netCDF files manually.

**Halocarbons**

Data automatically into GC-WERKS

Peaks need to be checked, GUI filled in.

Generation of peak areas, matched to sample times, ports is automated.

Calibrations currently not being applied automatically (MARTYN) and so are applied forward. In some cases need to be applied as interpolated values…

Comparison of concentrations calculated using NOAA and SX.

SX concentrations verified by NOAA, data over time.

Stability of system evaluated daily.

STATUS: Concentration data worked up as described above but needs checking. Also some data needs to be removed according to CCl4 data. If above/below a threshold (<60ppt, >85ppt?), remove or apply different calibration.

New SX needed as current doesn’t contain everything, using NOAA more frequently.

ALSO, need to sort out air issue by adding a new valve…

No data is yet in archives,

**SO2**

Data comes in as daily files, 30 minute zero data is applied.

SO2 into daily NRT files for GAW

Collated into monthly files

Check data, manually check/apply calibrations. In time this would be automated.

Currently we don’t submit this data to the archives.

More work needed on calibrations.

**CO2/CH4**

Data follows same as CO, monthly files created but no calibration data has yet been applied.

STATUS: Waiting on a new NOAA calibration standard for CO2/CH4.

Need to purchase more working standards?

Check MPI data.

**Spec-Rad**

Data

No processing yet in place.

STATUS: Code exists and needs to be applied to raw data to get final data.

Calibration due, have brought instrument back to be checked.

**PAN**

No processing yet in place.

Merge created from CEDA archived data but not working well at moment as data not getting submitted there. NOxy and VOCS in WDCRG only? Halocarbons, SO2 not yet in any archive.

How to go forward with merge….?