## **Re-autocal from cams archives**

I just recorded a 46-minute video that shows how to manually re-autocal sessions from the archives. In the last 16 minutes, I retested the steps for 03/05 and that went pretty quickly.

Here is the video link: <u>http://davesamuels.com/cams/camsupdates/documentation/Re-autocal-from-archive-2023-10-12\_1-16-53.mp4</u>

It's quite large - sorry.

## Steps to re-autocal from cams archives

If all you're after is updating all the calibrations for the session, follow these steps...

- 1. Use Total Commander for these instructions.
- 2. Unzip the selected archive zip file to a submissionfiles directory.
  - In the left pane of Total commander, navigate to the "D:\cams\_Archive\archived\_SubmissionFiles\" directory.
  - To make things easier to search, press Ctrl+S and enter: 2023\_??\_009021\*.zip. This will filter the list so that you don't accidentally process board 1 files - only board 0 files.
  - In the right pane of Total commander, navigate to the "D:\cams2\_board0\CAMS\SubmissionFiles\" directory.
  - In the left pane, hold the right mouse button down on the zip file for the selected session, and then select Extract All.
     The Select a Destination and Extract Files dialog appears.
  - Change the path to: "d:\cams2\_board0\CAMS\SubmissionFiles" (it's not case-sensitive)
  - Click the Extract button. A directory matching the session will appear in the "D:\Cams2\_Board0\CAMS\SubmissionFiles" directory. Also, an Explorer window appears in the target directory.
    - Close that explorer window.

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At this point, you have a directory matching the pre-archive state of that session. However, it's CapturedFiles directory will be devoid of FF\*.bin files. You will need to calibrate from the ArchivedFiles instead.

- In the right pane, navigate to "d:\cams2\_board0\cams\submissionfiles\[session]\ArchivedFiles\[session]", where [session] means the <date>\_<camera>\_<time> or <date>\_<time>.
- 4. **Sort** descending by date, and then **delete** all of the files **except** those that are in the 230000 to 235959 time. We do this because it is 10x faster to autocal. For example, with the 03/01 already successfully calibrated in 10 minutes, for 03/02 it autocal'd in less than a minute when only the 2300 set of files was used.
- 5. Recalibrate the camera for the selected [session].
  - In a command shell, use the CD command to navigate to D:\cams2\_board0\CAMS. This is the directory where the FTP\_meteorcal\_autoupdate.exe is.
    - d: cd \cams2\_board0\cams
  - Press the **Up arrow** if you have run it before. This will enter the command for you and then edit it to match your new source directory. For example, for 03/02/2023 you can do this:

ftp\_meteorcal\_autoupdate.exe -1 50 2.5
d:\cams2\_board0\cams\cal

 $\circ~$  Then use the GUI dialogs to navigate to the FF files directory (which in this case is

d:\cams2\_board0\cams\submissionfiles\2023\_03\_02\_009021\_17\_51\_3 8\archivedfiles\2023\_03\_02\_17\_51\_38). Or, you could type that as the last command line argument. But it's a little more cumbersome. It takes about 1-10 minutes or so.

It also runs much quicker if the cmd.exe window is minimized, or at least mostly covered up.

- 6. Copy the CAL files to the FTP dir.
  - In the right pane of Total commander, navigate to d:\cams2\_board0\cams\submissionfiles\[session]\ftp\
  - In the left pane of Total commander, navigate to d:\cams2\_board0\cal\BinFiles\

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- Press **Ctrl+S**, and enter: **cal\_009??\_20230302\_23\*.\*** to filter the directory for only the cal files for that session.
- Use the **right mouse** click to select (selected files are red) files to copy.
- Press **F5** to copy all the CAL files to the FTP dir.
- 7. Copy the FF\*.bin files that match the cal files to the FTP dir.
  - Press Ctrl+S to filter all the FF\*.bin files for the session by changing the filter to: FF\_009??\_20230302\_23\*.\*
  - Press **F5** to copy all the FF\*.bin files for the session to the FTP folder.
- 8. Copy the FTPdetectinfo file to the FTP directory.
  - Navigate to the d:\cams2\_board0\cams\submissionfiles\[session]\ArchivedFiles\[session]
     directory
  - **sort** descending by date
  - right-click the **FTPdetectinfo\*.tx**t file.
  - Press **F5** to copy the detectinfo file to the FTP directory.
- 9. Update the detectinfo file with the new calibrations:
  - From the d:\cams2\_board0\cams> prompt, enter this command:

ftp\_applycal2detectinfo

Then use the GUI dialog that appears to navigate to the ftpdetectinfo file. In this case, it would be the one in

## "d:\cams2\_board0\cams\submissionfiles\[session]\FTP".

It applies the new cal files to the detect file and it produces a FTPdetectinfo\*<sup>C</sup>.txt file.

 Rename the FTPdetectinfo\*C.txt file to FTPdetectinfo\*.txt and select "Overwrite".

(In Total Commander, you can hold the right-mouse button down on a file name and it will open a popup menu with a Rename option).

At this point, the "d:\cams2\_board0\cams\submissionfiles\[session]\FTP" directory is staged so that the upload\_queue.bat script can package it up and upload it to the nasa FTP server.

- 10. Delete the zip file for the session from the **d:\cams2\_queue\Transmitted** dir. We do this so that it will produce a new zip file for transmission.
- 11. Run the upload\_queue.bat script to perform the upload.

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• From a command shell in d:\cams2\_queue\runfolder, run:

upload\_queue.bat

- 12. Update the archive zip file with the new FTP files.
  - In Total Commander, in the left pane, navigate to "d:\cams\_Archive\archived\_SubmissionFiles".
  - Double-click on the [session].zip file to open the zip file.
  - In the zip file, navigate to the "[session]\FTP" directory.
  - In the right pane, navigate to "d:\cams2\_queue\Transmitted ".
  - Then open the "[session].zip" file.
  - Select all files and click the "F5 Copy" button to copy the FTP files into the archive zip.
- 13. Clean up
  - o In the right pane, navigate to "d:\cams2\_board0\cams\submissionfiles\".
  - Delete the session that you just calibrated.