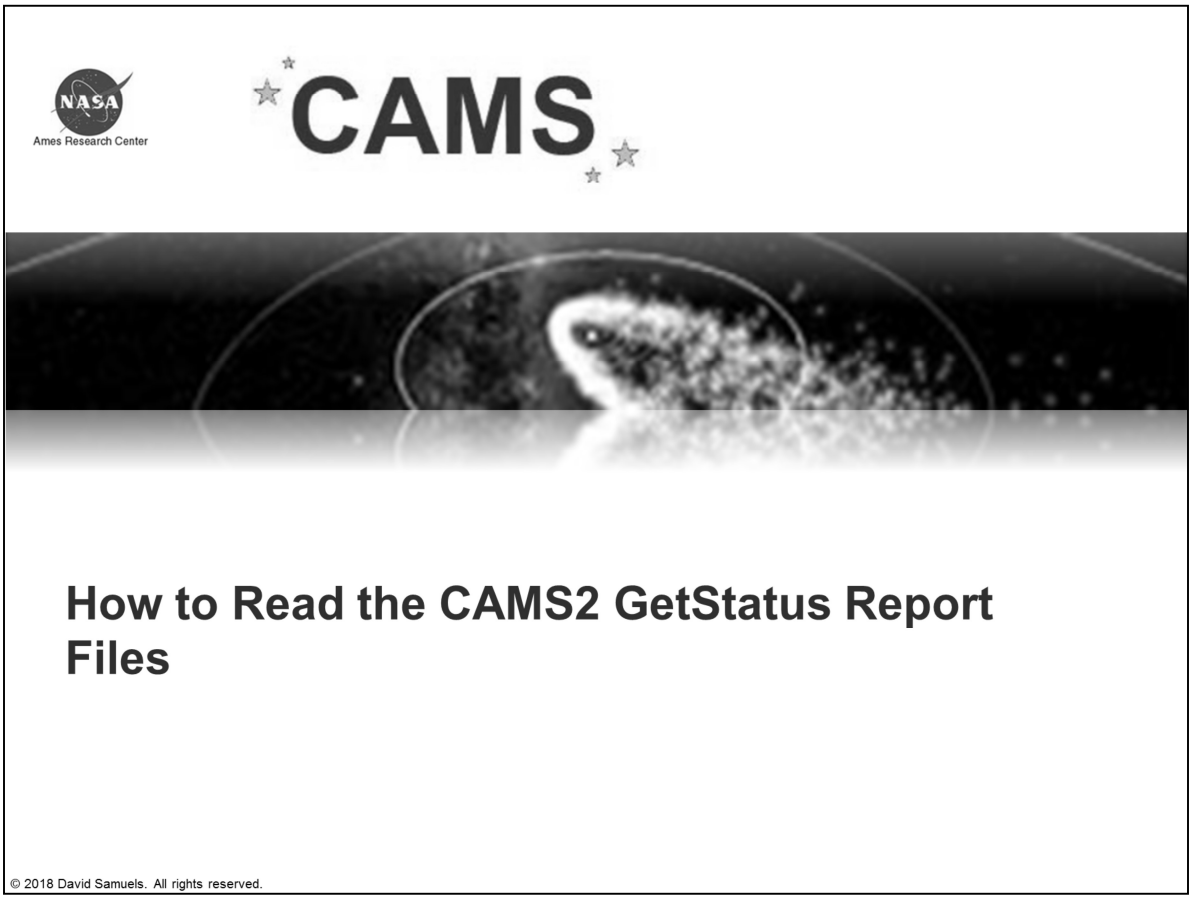

In this presentation, we will explain how to read the CAMS2 GetStatus reports and the status_check reports.

The status reports are only compatible with a CAMS2 system running based on Steve Rau's LaunchCapture and Dave Samuels' upload and archiving scripts.

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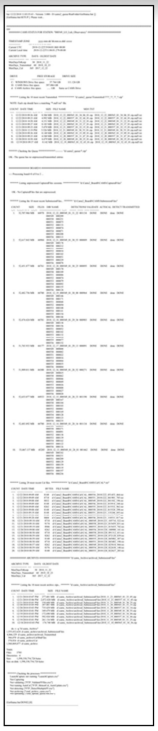
Introduction

- The GetStatus reports try to give a fairly complete picture of the overall status of a CAMS2 system in a quick glance
- Closer study "can" reveal issues that need to be corrected or monitored
- They are automatically uploaded to the NASA server so that they can be viewed from anywhere in the world – even if the station is down
  - It was important to be able to determine when the last time a station reported in and perhaps how long it has been down



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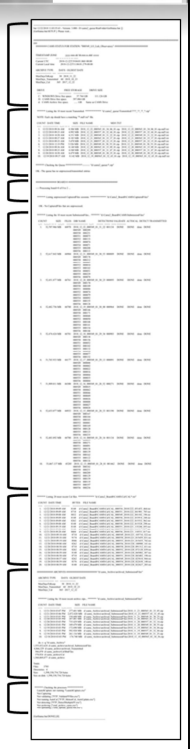
Layout

- The report is laid-out in 8 sections:
  1. **Header** section
  2. **Transmitted** section
  3. **Queue** section
  4. **CapturedFiles** section
     There is one section for each board or CAMS instance
  5. **SubmissionFiles** section
     There is one section for each board or CAMS instance
  6. **CAL files** section
     There is one section for each board or CAMS instance
  7. **Archive** section
  8. **Runtime Status** section



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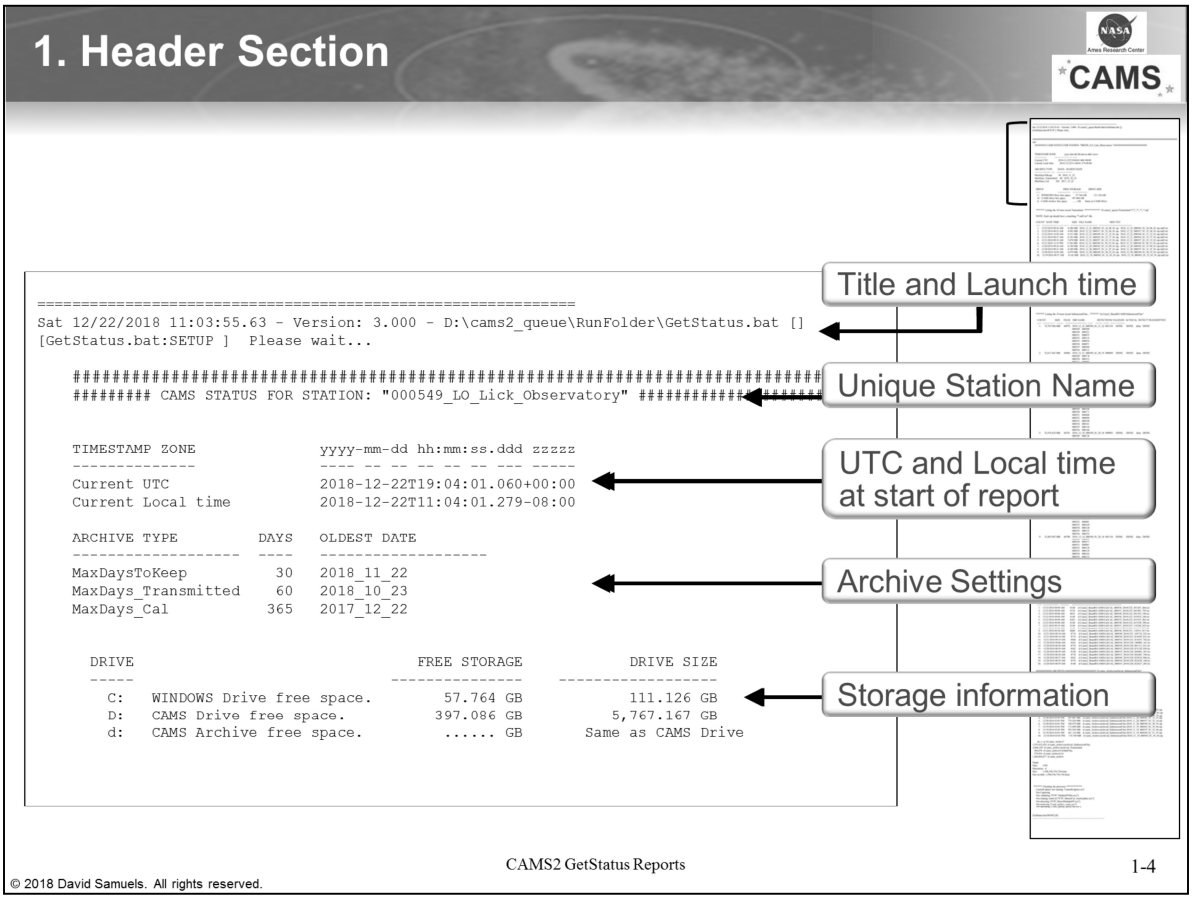

The **Title and Launch time** is a header that is standard with all my batch files. It also shows any command line arguments, however in this case, GetStatus.bat does not require any.

Unique Station Name – The unique station name is a combination of the first camera on the site, plus the last two columns from the CameraSites.txt file for that camera.

UTC and Local time at start of report – This is displayed in universal format. The purpose is to help you know the exact time and date information, both local and UTC, when the report was started.

Archive Settings – This is to show you how much data you should expect to see in the various sections.

Storage Information – This section shows you storage information for three areas. The Windows drive, the CAMS working drive, and the CAMS Archive drive. In some cases, like West Melton, all three are drive C:. In other cases, like Arizona, they have more than 3 drives, but we report on only the CAMS related drives.

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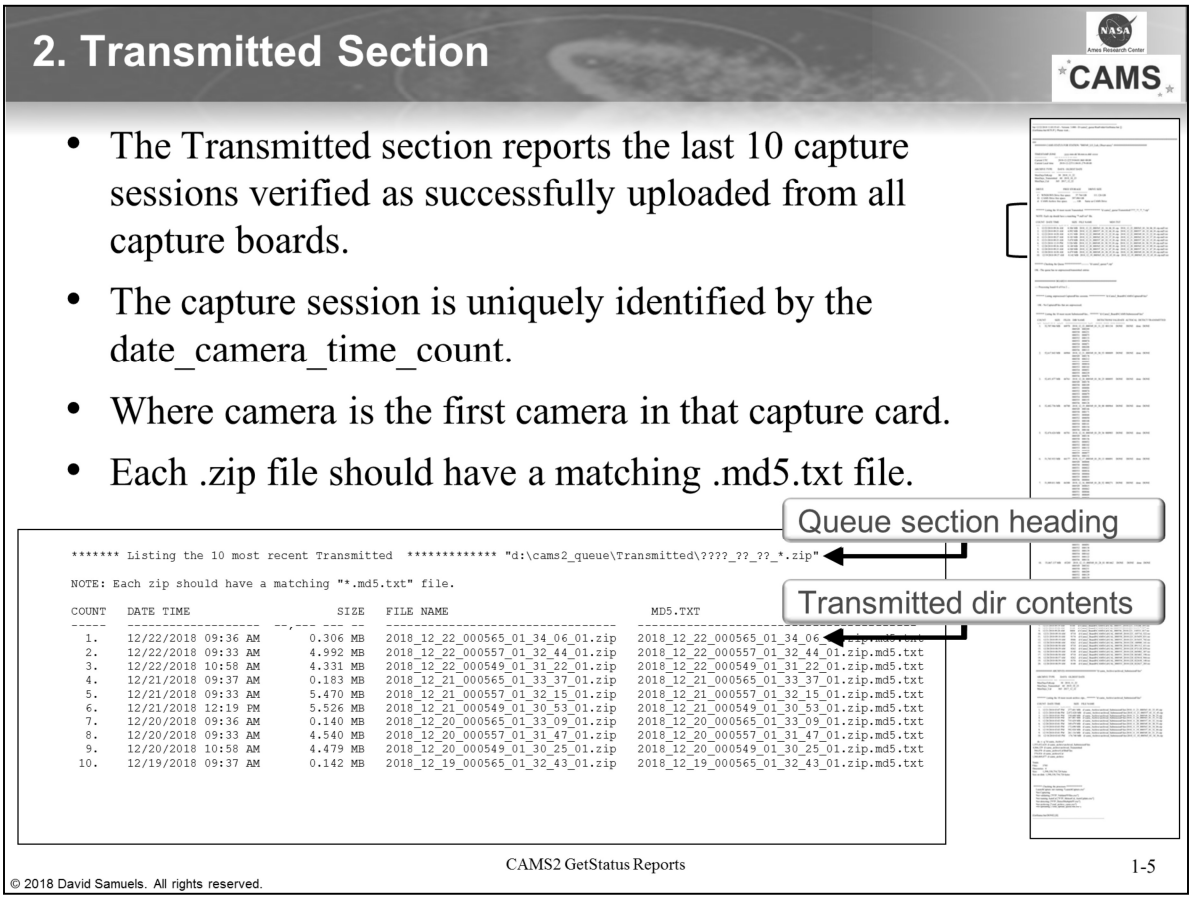

The Queue section is shared between all the CAMS Instances. Therefore, it is considered "global".

The Queue section reports on two parts, the Transmitted dir and the Queue dir. The section heading shows you the exact directory where this information can be found.

Transmitted dir

What you're looking for in this section are (a) That all transmitted File Names have a matching MD5.txt file. (b) the size of the zip files are normal.

Files only get moved to the Transmitted dir "after" a successful upload has been verified as complete and successful. Any failed uploads will remain in the queue and they will be retried.

If a zip file exists in the Transmitted dir without a matching .md5.txt file, then there is some kind of processing error or someone has manually manipulated the files in the directory.

The Date/Time shown are the windows timestamp of the zip file when it was created.

The Size is in MB, which represents the size of the zip file that was uploaded to the server.

Since the Transmitted dir can contain a lot of entries, the report only includes the 10 most recent files in the directory.

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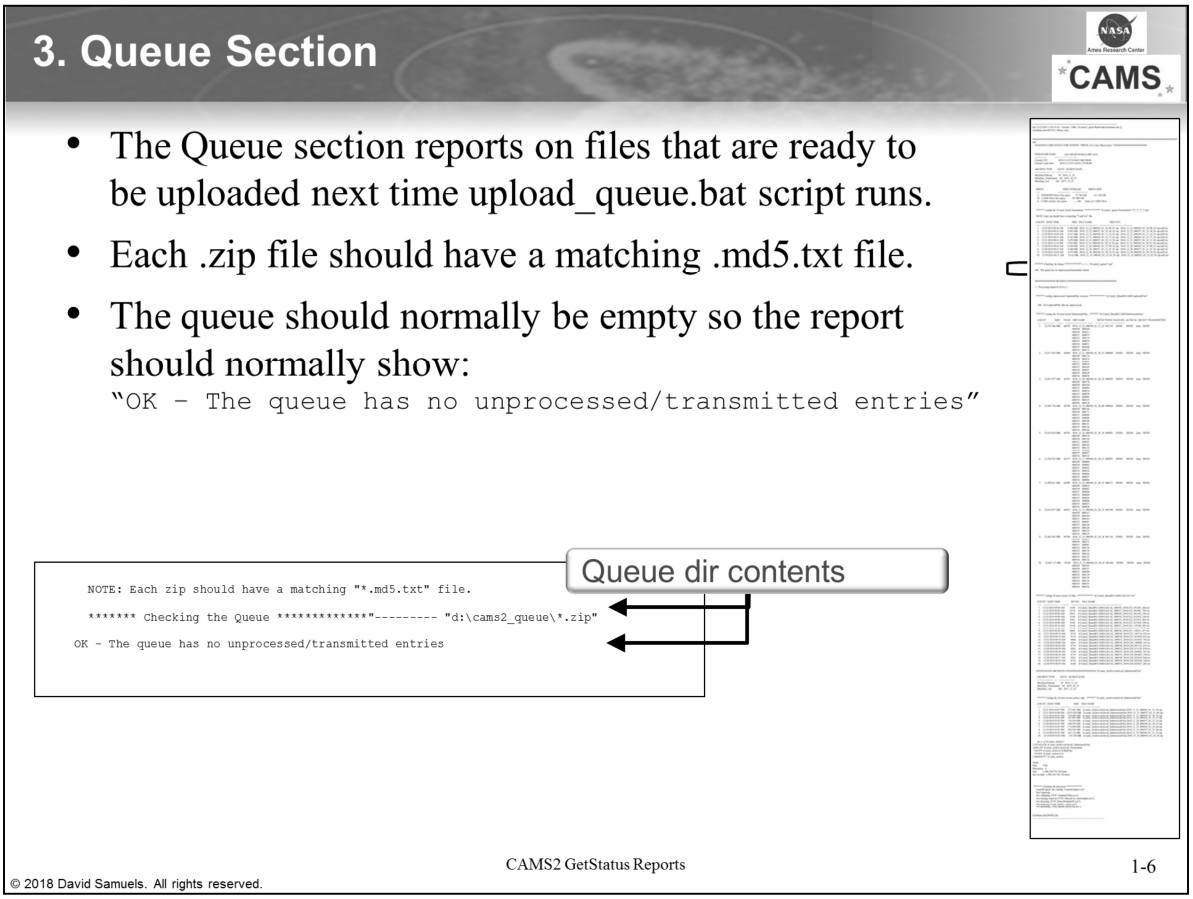

The Queue section is shared between all the CAMS Instances. Therefore, it is considered "global".

The section heading shows you the exact directory where this information can be found.

Queue dir

Files that exist in the queue dir are files that are ready to be uploaded to the server and that will be uploaded the next time the upload_queue.bat script performs its function. It is also possible that, if the upload_queue.bat script is currently running, the file will be uploaded in a few minutes by the currently running upload_queue.bat pass.

The queue directory listing follows the same format as the Transmitted dir format.

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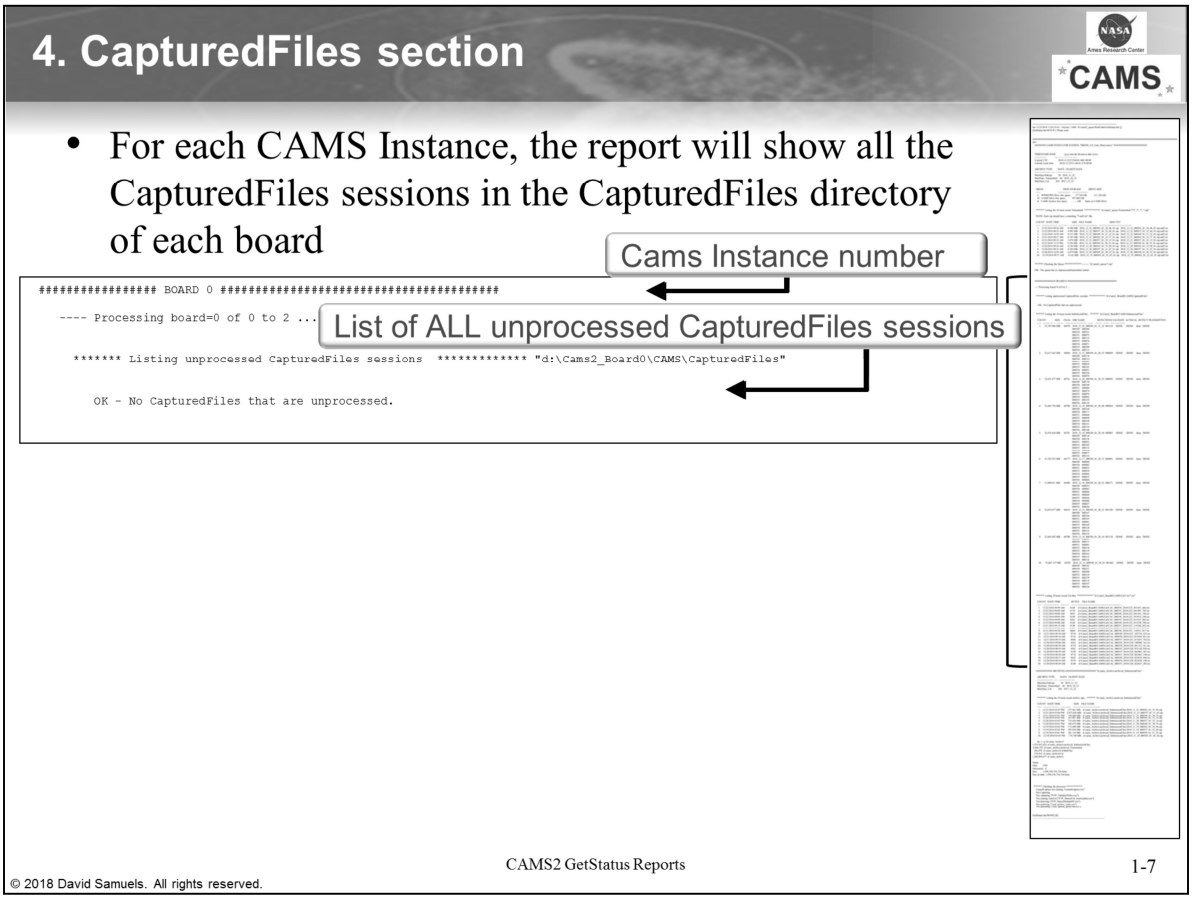

The **CAMS Instance** section has one section of CapturedFiles, SubmissionFiles, and CAL files for each CAMS Instance (or board).

CapturedFiles sessions – Identifies **ALL** Capture sessions for this board that remain unprocessed.

There should be no CapturedFiles sessions unless LaunchCapture is still running. Each CapturedFiles session is "moved" into the SubmissionFiles directory tree when it is processed.

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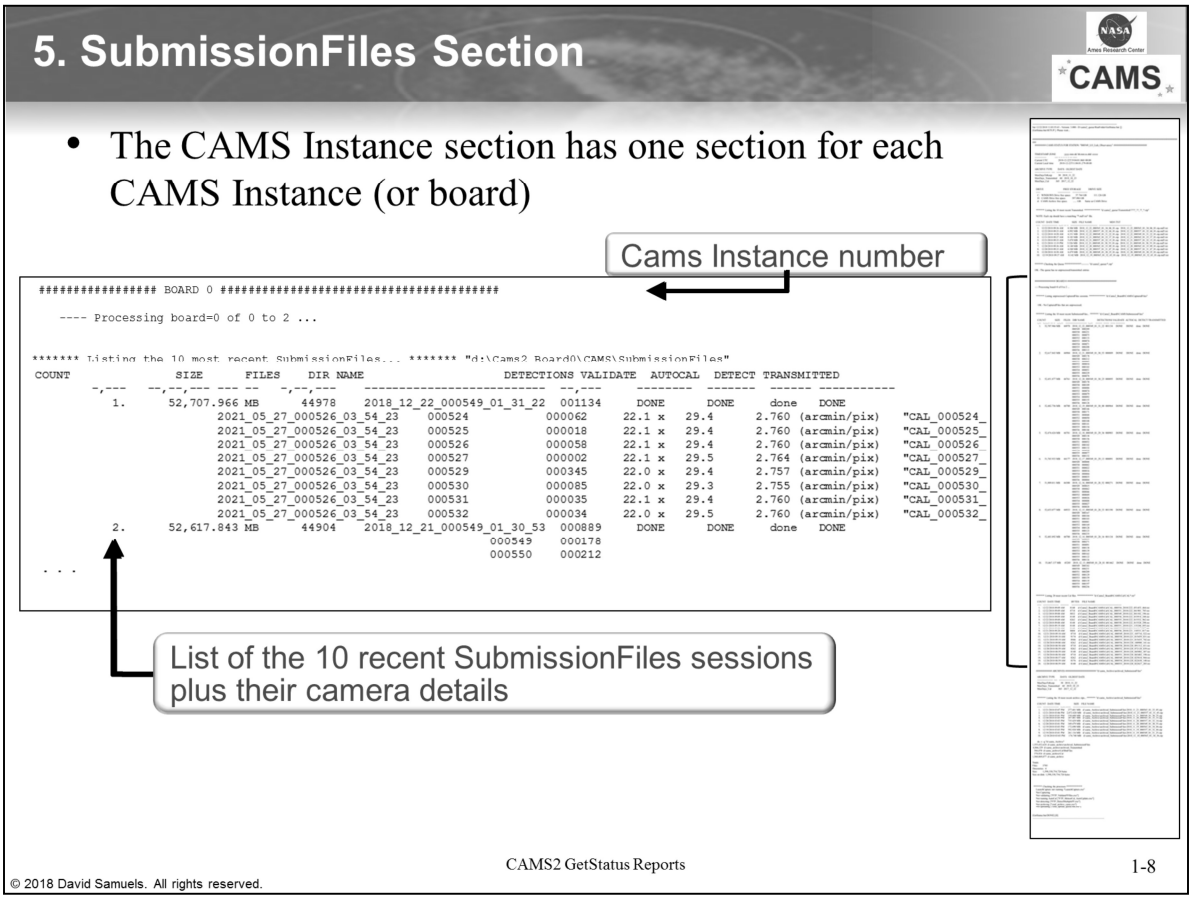

The **CAMS Instance** section has one of these sections for each CAMS Instance (or board). It's divided into 4 sections:

Heading – Identifies the board number

SubmissionFiles sessions – This section shows only the 10 most recent SubmissionFiles sessions. For each session, it shows the size of the entire directory (ArchivedFiles, CapturedFiles, ConfirmedFiles, FTP, and Logs) along with the total number of files under the directory. This is not just the number of FF files, but the total number of files. A higher than normal number here might indicate that there are excessive noisy files in the ArchivedFiles dir. The status fields are as follows:

Detections – This is the number of detections in the detect file, if there is one. The detections are listed as a Total, and then for each camera. An excessively high number of detections can be an indication of a bad camera.
Validate – DONE means that the FTP_ValidateFFfiles.exe tool was run and cleaned up all the corrupt FF files.
AutoCal – DONE means that FTP_MeteorCal_AutoUpdate.exe was not only run, but completed.
Detect – DONE means that FTP_DetectMultipleFF.exe was run and produced a detect file that has updated the Meteor Count field in the top of that file.
Transmitted – DONE means that a zip file with a matching .md5.txt file, which match the date_camera_time of the SubmissionFiles session, are found in the Queue\Transmitted dir. Thus, that session is completed.

Each SubmissionFiles session has a camera details section (see description on the next page).

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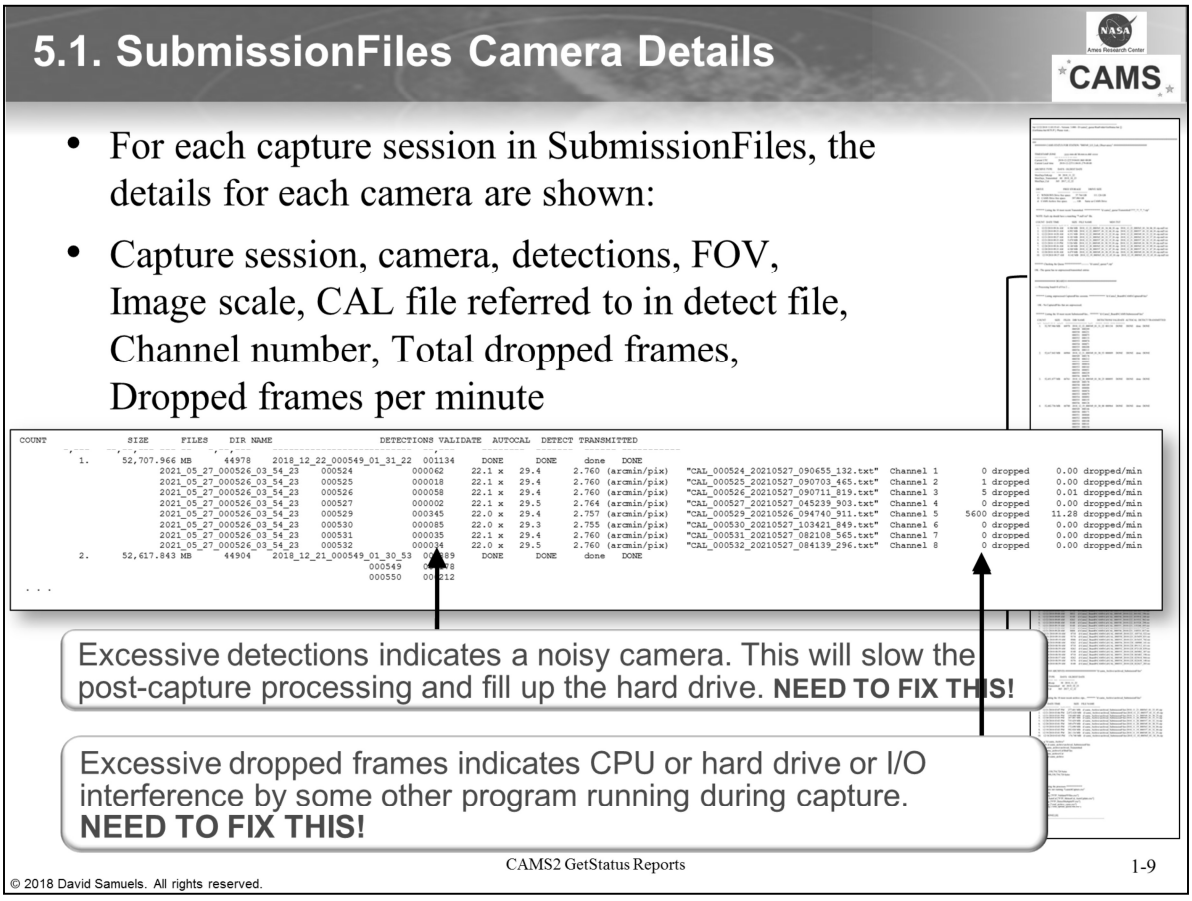

For each SubmissionFiles section, there is a subsection that describes the details for each camera. There are 9 sections/columns for these details:

- **Capture session** – The SubmissionFiles capture session with date_camera_time format to unuiquely identify the session. These should all be the same for each camera.
- **Camera** – The camera number that's being reported. (Extracted from the detect file)
- **Detections** – Detections for this specific camera only. (Calculated from the detect file)
- **FOV** – Field of View in degrees, height by width. (Comes from the specified CAL file)
- **Image Scale** – Image scale in arc minutes per pixel. This should not change from night to night. (Comes from the specified CAL file)
- **CAL File** – CAL file referred to in the detect file. If calibration failed today, it should show a previous date in the CAMS timestamp. (Extracted from the detect file).
- **Channel** – For multi-channel boards, this shows which channel number it was assigned to. (Deduced from CaptureStats.log).
- **Dropped Frames total** – DONE means that FTP_DetectMultipleFF.exe was run and produced a detect file that has updated the Meteor Count field in the top of that file. (Extracted from CaptureStats.log)
- **Dropped Frames per minute** – DONE means that FTP_DetectMultipleFF.exe was run and produced a detect file that has updated the Meteor Count field in the top of that file. (Extracted from CaptureStats.log)

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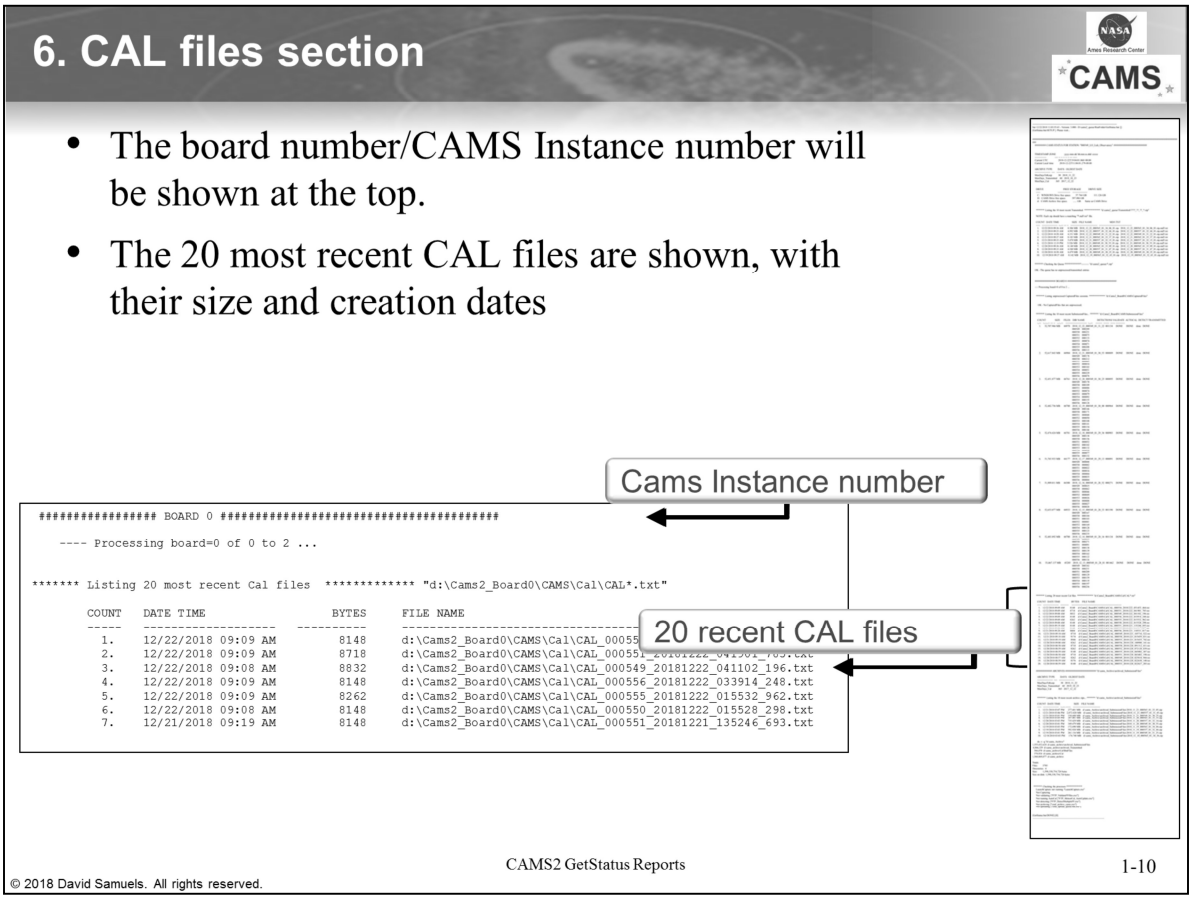

Cal Files section - The Cal File section contain a list of the 20 most recent Cal files in the Cal files directory for this board. For each cal file, we list the windows timestamp, the size in bytes, and the full path to the cal file name. You can see from this section whether some of the cameras have calibrated or not. The size of the Cal file indicates how many n-Stars the cal file used.

One thing you can look for here is when was the last time calibration was successful.

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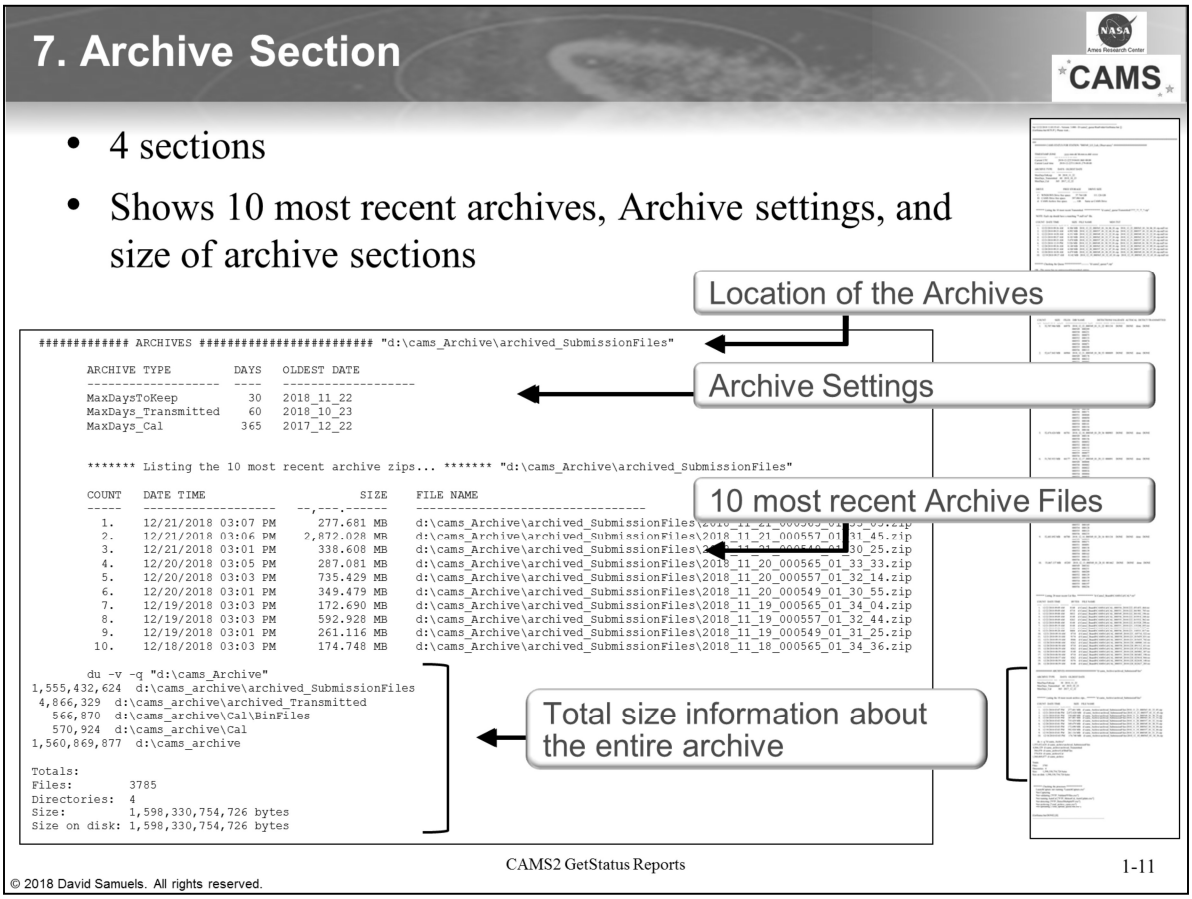

The Archiving section has 4 sections:

1. **Archive directory** location
2. **Archive Settings**
3. **Archived files** - List of the 10 most recent archived files and their size.
4. **Total** size of the entire archive directory

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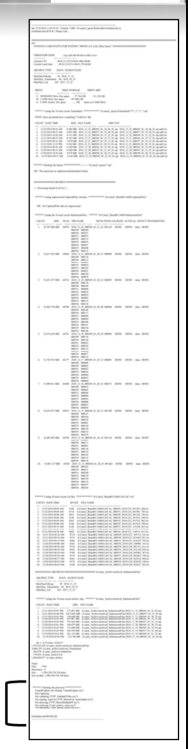
8. Runtime Status section

- Lists the CAMS processes and whether they were running at the time the status report was generated
- Ideally, nothing was running except “uploading”
- If Capturing is running, then it will report on unprocess capture sessions
- If archiving is running, the report will not be complete

```
******* Checking the processes *************
      LaunchCapture not running "LaunchCapture.exe"
      Not Capturing
      Not validating ["FTP_ValidateFFfiles.exe"]
      Not running AutoCal ["FTP_MeteorCal_AutoUpdate.exe"]
      Not detecting ["FTP_DetectMultipleFF.exe"]
      Not archiving ["cmd_archive_cams.exe"]
      Not uploading ["cmd_upload_queue.bat.exe"]


[GetStatus.bat:DONE] [0]
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
```



CAMS2 GetStatus Reports

1-12

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This section lists the running processes. This information can be useful to identify hung LaunchCapture processes or hung detection passes. Each section in here lists the status of one of the 7 phases of a capture session.

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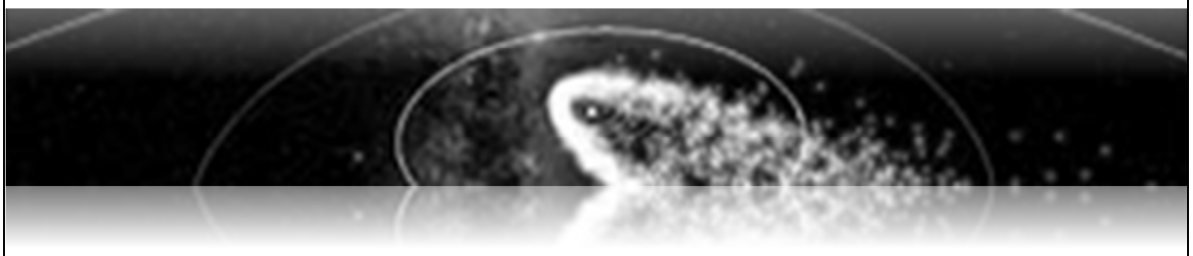

Status Check Reports

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Status Check Reports

- Designed so that site operators or network operators can get a quick snapshot of the status of all their sites
- This script “reads” the GetStatus reports off the server
- Only reports on problem areas
- Some sections have 3 levels of warning:
  WARNING – something to be aware of
  WATCH – probably something to fix or watch closely
  CRITICAL – something you must fix
- It gets the GetStatus reports off the server so that it can check the status on systems that are down

CAMS2 GetStatus Reports 1-14

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How to Run Status_check

- From a …\cams2_queue\RunFolder command prompt
- status_check "..\temp\status" status_check_xxx.txt
  Where: XXX identifies your network
- Example:
  status_check "..\temp\status" "d:\cams2_queue\RunFolder\status_check_cams.txt"
- Produces a status_check_xxx.txt file and status_check_xxx.html file in the queue directory.
- Launches the HTML file in your browser
- All the data comes from GetStatus files from the server, not from your local computer
- The last argument defines the network status check file. It is a file that lists the GetStatus filespec for the first camera for each board at each site

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There are several status check "network" files in the RunFolder, one for each CAMS network. Each contains a list of the first cameras for each board in a site's GetStatus report. You can use wildcards, for example: 004??? for Arkansas, since all their camera numbers are allocated in the 4000 range.

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Status Check HTML file

- Each station starts with “Station: #########”
- The “File” refers to a local copy of the GetStatus report file.
- Clicking on the link opens that GetStatus report for further examination
- Click the Back button in the browser to return to the status_check report
- Examples:

```
Station: ######### CAMS STATUS FOR STATION: "000525_FP_Fremont_Peak" ##############################
  File: 3.000 Total Detections=1059 GetStatus_000525_FP_Fremont_Peak.txt [2021-06-03T09:50:33.185-07:00 2021-06-03T16:50:32.904+00:00 UTC]
    000527  Detections=000029/1059                  ***** EXCESSIVE DROPPED FRAMES 78894 dropped 161.76 dropped/min
```

```
File: 3.000 Total Detections=583 GetStatus_000900_DC_DiscoveryChannel_.txt [2021-06-03T10:17:22.181-07:00 2021-06-03T17:17:22.150+00:00 UTC]

Station: ######### CAMS STATUS FOR STATION: "000916_MH_MarsHill_" ##############################
File: 3.000 Total Detections=1071 GetStatus_000916_MH_MarsHill_.txt [2021-06-03T10:20:22.024-07:00 2021-06-03T17:20:21.993+00:00 UTC]
   000931 Detections=001015/1071 WARNING - CHECK CAMERA NOISE

File: 3.000 Total Detections=1810 GetStatus_000941_ER_Prescott.txt [2021-06-03T09:42:35.564-07:00 2021-06-03T16:42:35.517+00:00 UTC]
File: 3.000 Total Detections=90 GetStatus_000957_MC_Meteor_Crater.txt [2021-06-03T08:26:20.408-07:00 2021-06-03T15:26:20.361+00:00 UTC]
```

1-16

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