

CDAS/UUB Firmware/T2 Files

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- CDAS problem - 2023/Oct/21
- CDAS problem - 2023/Oct/22
- UUB Firmware upgrade
- About T2 files.

- Starts at 2023/Oct/21 00:44:04 (UTC)
- Looks to be due to lightning.
- In lkLog: “2378 bytes read on fd 10 instead of 11262, disconnecting client”
- lkServer looks to disconnect the client (probably Xb)
- Xb continue to work as it did not happen anything.
- The problem has been identified around in 2023/Oct/23.
- Restart the Xb process at 2023/Oct/23 11:40:24.
- $T2_{stations} \rightarrow \mathbf{Pm} \rightarrow \mathbf{Xb}(\text{look for } T3) \rightarrow \mathbf{lkServer} \rightarrow \mathbf{Pm} \rightarrow T3_{\text{to stations}}$

- looks to start around 18:30 UTC
- communication with BSUs was unstable.
- may be related with CDAS network problem.
- CDAS - needed to be restart few times.
- CDAS machines was almost impossible to access the same time which Observatory network had huge traffic (20:30 UTC). According Ruben, this problem should not affect CDAS network.
- still in investigation
- Now it looks to be working normal.

UUB Firmware (FPGA)

- UUB Firmware update from 17150321 to 17121121.
- It is needed because the RD electronics need newer Firmware.
- It has already sent to most of stations.

- files called “second” and “scaler” at directory: /Raid/var/Ct/2023/10/ are generated by “Xb” process, but was not included in the Mirror.
- The mostly equivalent files “t2”, “t2raw” and “scaler” in directory /Raid/monit/Sd/ were processed from original “second” and “scaler”
- Some few times the original “second” and “scaler” has bad format and generate issues in the generated files “t2”, “t2raw” and “scaler”
- To avoid this problem, it has decided to start to make a copy of original “second” and “scaler”.
- This process starts around August/2023.

- The “second” and “scaler” files are quite big and it could be compressed before transmit by mirror process.
- However the generation of “t2”, “t2raw” and “scaler” need the uncompressed file.
 - mirror script run before the t2 script.
 - a simple approach: uncompress the “second” and “scaler” files a little before they are used.
 - Sometimes the mirror script or the uncompression took too long (suspect).
 - the “t2” was not generated (get length 0).
- “t2” is used to verify if station was working or not.

- move the compression from mirror script to t2 script
- the mirror consider transmission of original “second” and “scaler” only after compression (files name “second...bz2” or “scaler...bz2”)
- The modification done on 2023/Oct/19 (had some errors and did not worked as expected).
- Start to work fine on 2023/Oct/22.
- Need more time to see if there will have additional issues.