

# Tracker Quick-Look Operator Manual

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## 1 Tracker Quick-Look Programs

List of programs for automatic Quick-Look of tracker:

- BASIC LEVEL
  1. **TrkCalibQLookBasic**    Basic Tracker calibration data analysis
  2. **TrackerQLookBasic**    Basic Tracker physics data analysis
  
- EXPERT LEVEL
  3. **TrkCalibQLookExpert**    More detailed Tracker calibration data analysis
  4. **TrackerQLookExpert**    More detailed Tracker physics data analysis

The operator have to look only the BASIC LEVEL output to take an action.

## 2 BASIC LEVEL

### 2.1 TrkCalibQLookBasic

Produces one or more files (jpg,gif,ps or pdf) depending on the amount of errors and the chosen output format:

- ◆ **Description:** The program verifies if the calibration is good, by checking the calibration packet crc, the calibration flag and by comparing the mean value for sigma and pedestal with some reference values.
- ◆ **NOMINAL:** all crc and flag values are zero and the mean value of sigma and pedestal are within the limits.
- ◆ **STANDARD:** Neither calibration errors nor warnings are found; a black writing sais “OK”.  
➔ NO ACTION to be taken.

```
TrkCalibQLook_BASIC   File: DW_050522_00200                               CALIBRATION REPORT pag1
***** CALIBRATION pkt 1 *****
>>>>>> CalibTrk1 at OBT: 3004891 -----> OK
>>>>>> CalibTrk2 at OBT: 3005301 -----> OK
*****
```

figure 1: Example of a good calibration packet

- ◆ **NON-STANDARD:** some red writings indicate which problem occurred.  
➔ ACTION: call specialist.

```
TrkCalibQLookBasic   File: DW_051102_00300                               CALIBRATION REPORT pag3
*****
ERROR >>> CALIBRATION pkt 6 -->CalibTrk1 at OBT: 2706531 --> cal_flag[12]= 3
*****
ERROR >>> CALIBRATION pkt 7 -->CalibTrk2 at OBT: 2729509 --> cal_flag[1]= 3
*****
ERROR >>> CALIBRATION pkt 7 -->CalibTrk1 at OBT: 2729099 --> cal_flag[2]= 3
*****
ERROR >>> CALIBRATION pkt 7 -->CalibTrk2 at OBT: 2729509 --> cal_flag[3]= 3
*****
ERROR >>> CALIBRATION pkt 7 -->CalibTrk1 at OBT: 2729099 --> cal_flag[4]= 3
*****
```

figure 2: Example of an error condition

```
TrkCalibQLookBasic   File: DW_051102_00300                               CALIBRATION REPORT pag1
*****
WARNING >>> CALIBRATION pkt 1 -->CalibTrk2 at OBT: 2067897-->DSP 7 -VA1 11-12 --> <PED>= 64.8938
*****
WARNING >>> CALIBRATION pkt 1 -->CalibTrk2 at OBT: 2067897-->DSP 7 -VA1 21-22 --> <PED>= 65.4446
*****
WARNING >>> CALIBRATION pkt 1 -->CalibTrk1 at OBT: 2067498-->DSP 8 -VA1 19-20 --> <SIG>= 20.5732
*****
```

figure 3: Example of a warning condition due to anomalous sigmas and pedestals

## 2.2 TrackerQLookBasic

Produces one file (jpg,gif,ps or pdf):

- ◆ **Description:** Plot of data-length versus OBT for each DSP; The start time of each run is indicated by vertical lines together with the type of calibration which is associated to the run (D = default calibration, 1= on-line normal calibration or 2 = on-line special calibration).
- ◆ **NOMINAL:** the value in the graph must be below the lower horizontal line or above the higher horizontal line.
- ◆ **STANDARD:** less then 1% of the values are in the forbidden zone for each DSP. The picture is black and white.
- ➔ NO ACTION to be taken.
- ◆ **NON-STANDARD:** more then 1% of the values are in the forbidden zone for one or more DSP. The corresponding pad is red.
- ➔ ACTION: call specialist.

