

# Run summary for CERN November'15 SiWECAL TB

- Rdata, Excel, and GoogleDocs versions

attached to the Twiki page about SiWAnalysis

<https://docs.google.com/spreadsheets/d/1pJOnNK9arqM4L1Mf3qj4t0BjWlaCDCRXLOkkZOYP-Qc/edit?usp=sharing>

- Mistakes are possible!!!
- Read TB elog and shift summaries for more details

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- In total we have 476 runs with data (regardless quality) with e+, pi+, mu+ (15...150GeV)
- Different detector configurations were tested:
  1. with/without absorber inside and before the detector
  2. different thresholds for slabs or chips (check configuration file for every run)
  3. turned detector
  4. DIF0->off, DIF1,2,3->DIF0,1,2 before run 77
  5. Few runs were affected by problems with CCC<—>Zedboard cable connection

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## 1. From default elog output (Frederic's variables):

```
run <- run number
start_time <- start of the run
stop_time <- stop of the run
nb_data_pkts <- number of transferred data packets
nb_lost_pkts <- number of lost packets
bytes_on_dsk <- size of run (all packets without header)
nb_spills <- number of spills
cur_spill <- current spill
nb_evts <-
nb_hits <-
run_duration_min <- run duration in minutes
```

## 2. From elog comments and run summaries:

```
energy <- energy of the beam
particle <- main particle in the beam
Absorber <- what was inside and before the detector
Angle<-information about rotation of the detector
Useful.Run <- run marked as useful in the beam
summary
Run.Quality <- TRUE (run duration>5min), FALSE (run
duration<5min), NA (elog entry was deleted, but data
can be good)
General_comment <- information about setup which is
valid for next few runs
comment1 <- information about current run
comment2 <- information about current run
```

## 3. Data quality characteristics:

```
evts.dif0 <- number of events per dif0
Nhits.dif0 <- number of hit per dif0
evts.dif1
Nhits.dif1
evts.dif2
Nhits.dif2
```

## 4. Other information:

- A. There were some mistakes with elog (with absence of entry about run ), so sometimes there was good run but quality listed as NA
- B. Sometimes shifters didn't write shift summary, so I would recommend to analyse all long runs
- C. Muon runs during the night were collected without shifters and sometimes without summary