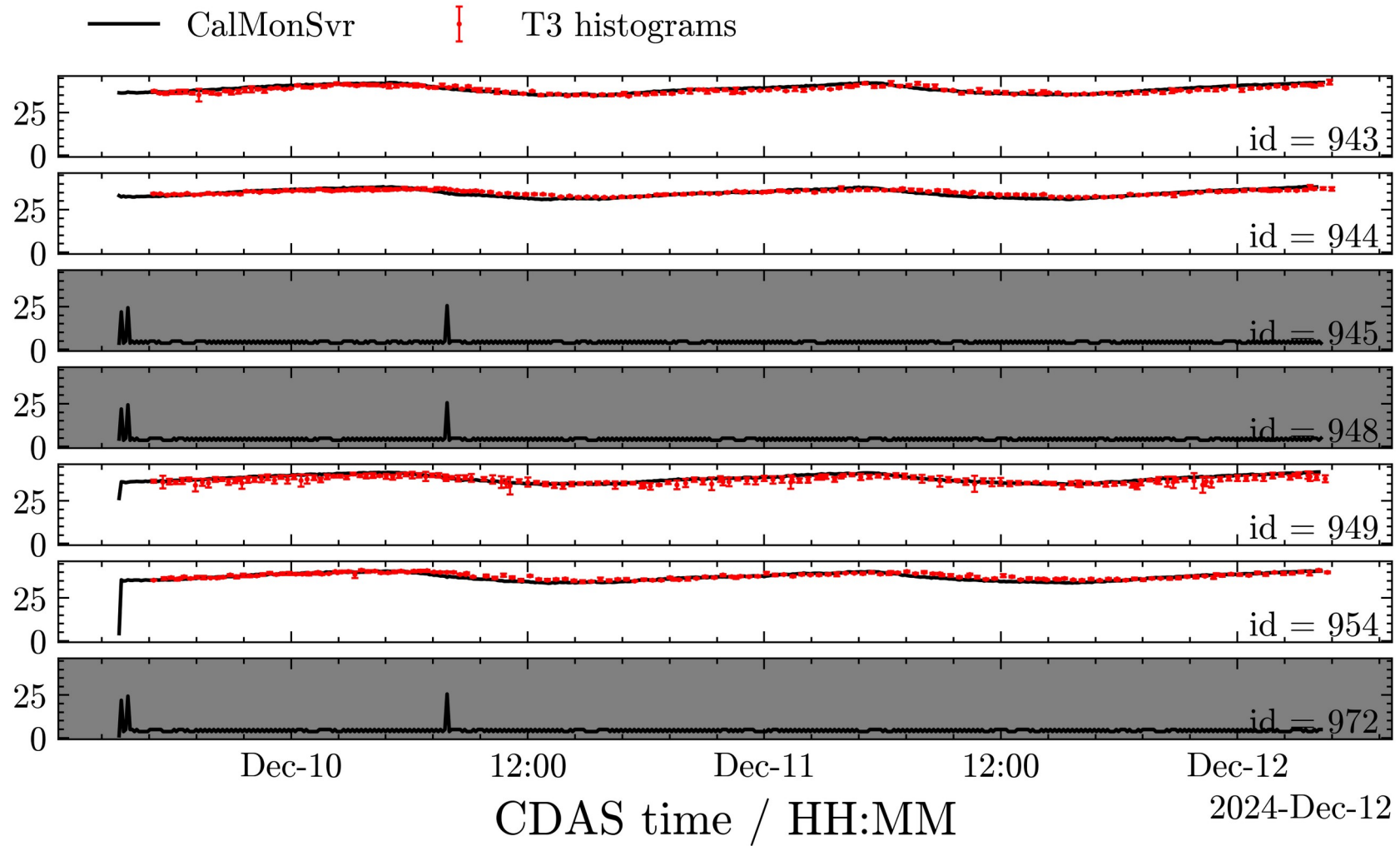
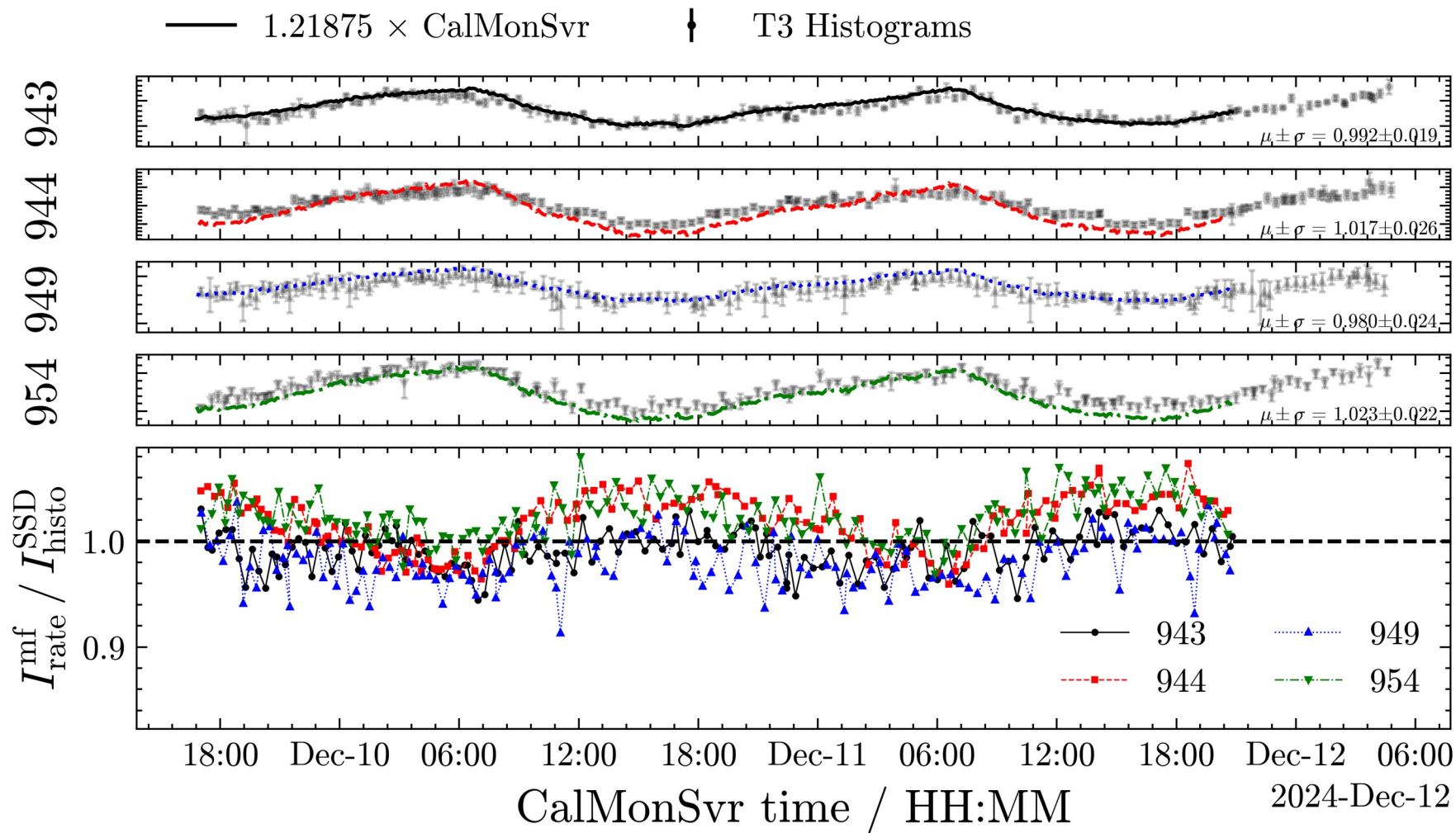


# SSD online calib.

# Implementation in CDAS

Paul Filip





# SSD online calib in CDAS

## CDAS side

```
do{
    pack_size=msg_unpack_get_data(&pack,
                                  &pack_type,&pack_version,pack_buff,65536);
    if(0<=pack_size){
        switch(pack_type){
            case(CALMON_PACK_MONIT):
                MrUUBCalibMonit_monit(monit, pack_version, pack_size, pack_buff,
                                      lsId);
                break;
            case(CALMON_PACK_CALIB):
                MrUUBCalibMonit_calib(calib, pack_version, pack_size, pack_buff);
                break;
            //case(CALMON_PACK_RD):
            //    printf("rd\n");
            //    MrUUBCalibMonit_Rd(rd, pack_version, pack_size, pack_buff);
            //    break;
            //case(CALMON_PACK_SYSTEM):
            //    printf("sys\n");
            //    MrUUBCalibMonit_System(sys, pack_version, pack_size, pack_buff);
            //    break;
            //case(CALMON_PACK_EXTRA):
            //    printf("extra\n");
            //    MrUUBCalibMonit_Extra(extra, pack_version, pack_size, pack_buff);
            //    break;
            default:
                printf("unkwon pack. Type,version,size=%d %d %d\n",
                      pack_type,pack_version,pack_size);

                unknown_pack.add_msg(pack_type,pack_version,pack_size,
                                    (char *)pack_buff);
                break;
        }
    }
}
```

## UUB DAQ side

```
nb=calmonsvr_pack_gps_sync_info(buff);
if(0<nb){
    msg_pack_add(gl.pack, nb, CALMON_PACK_SYNC , 1, buff);
}

nb=calmonsvr_pack_rd(buff);
if(0<nb){
    msg_pack_add(gl.pack, nb, CALMON_PACK_RD , 1, buff);
}

nb=calmonsvr_pack_system(buff); /*FIXME: returnning 0 right now */
if(0<nb){
    msg_pack_add(gl.pack, nb, CALMON_PACK_SYSTEM , 1, buff);
}

nb=calmonsvr_pack_muonfill_calib(buff);
if(0<nb){
    msg_pack_add(gl.pack, nb, CALMON_PACK_MUONFILL_CALIB, 2, buff);
}

nb=calmonsvr_pack_extra(buff); /*FIXME: returnning 0 right now */
if(0<nb){
    msg_pack_add(gl.pack, nb, CALMON_PACK_EXTRA , 1, buff);
}
```

```

from utils.Auger.SD import Monit

monit = Monit(2024, 12, 7)
monit.keys()

✓ 0.1s

15:38:10 ( +555.3s) [INFO ] -- received 1 file(s) as input
15:38:10 ( +111ms) [INFO ] -- View monit keys with self.keys()
-
"fCalibration": {
  "fVersion": "fCalibration/fCalibration.fVersion",
  "fIsCalibration": "fCalibration/fCalibration.fIsCalibration",
  "fVersion2": "fCalibration/fCalibration.fVersion2",
  "fTubeMask": "fCalibration/fCalibration.fTubeMask",
  "fStartSecond": "fCalibration/fCalibration.fStartSecond",
  "fEndSecond": "fCalibration/fCalibration.fEndSecond",
  "fT1": "fCalibration/fCalibration.fT1",
  "fT2": "fCalibration/fCalibration.fT2",
  "fTotRate": "fCalibration/fCalibration.fTotRate",
  "fTotD": "fCalibration/fCalibration.fTotD",
  "fMops": "fCalibration/fCalibration.fMops",
  "fPast": "fCalibration/fCalibration.fPast[3]",
  "fAnode": "fCalibration/fCalibration.fAnode[3]",
  "fVarianceDynode": "fCalibration/fCalibration.fVarianceDynode[3]",
  "fDynode": "fCalibration/fCalibration.fDynode[3]",
  "fVarianceAnode": "fCalibration/fCalibration.fVarianceAnode[3]",
  "fUBase[4]": "fCalibration/fCalibration.fUBase[4]",
  "fVarianceUBase[4]": "fCalibration/fCalibration.fVarianceUBase[4]",
  "f70HzRate": "fCalibration/fCalibration.f70HzRate[3]",
  "fTriggerDA": "fCalibration/fCalibration.fTriggerDA[3]",
  "fDynodeAnode": "fCalibration/fCalibration.fDynodeAnode[3]",
  "fVarianceDynodeAnode": "fCalibration/fCalibration.fVarianceDynodeAnode[3]",
  "fDynodeAnodeDt": "fCalibration/fCalibration.fDynodeAnodeDt[3]",
  "fVarianceDynodeAnodeDt": "fCalibration/fCalibration.fVarianceDynodeAnodeDt[3]",
  "fDynodeAnodeChi2": "fCalibration/fCalibration.fDynodeAnodeChi2[3]",
  "fArea": "fCalibration/fCalibration.fArea[3]",
  "fPeak": "fCalibration/fCalibration.fPeak[3]",
  "fListOfMembers": "fCalibration/fCalibration.fListOfMembers"
}

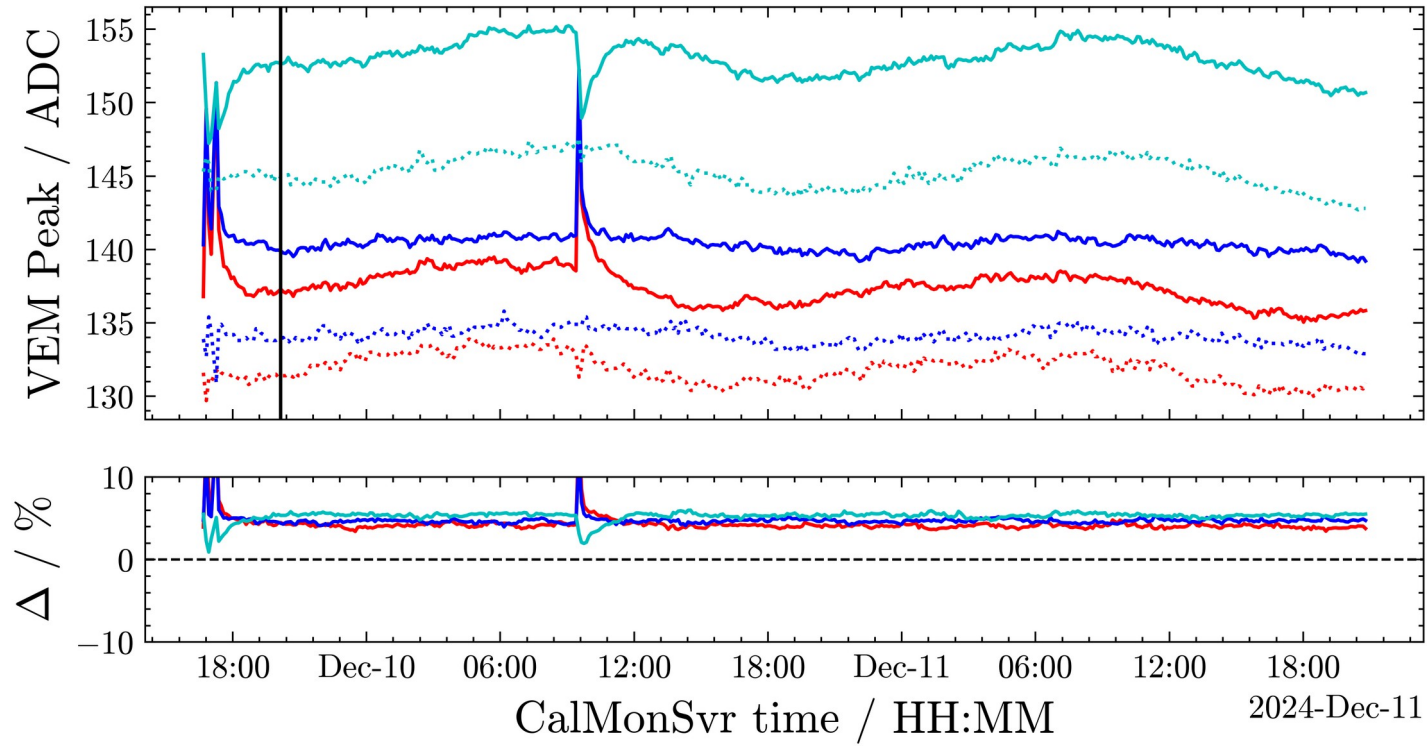
```

# What data to put where?

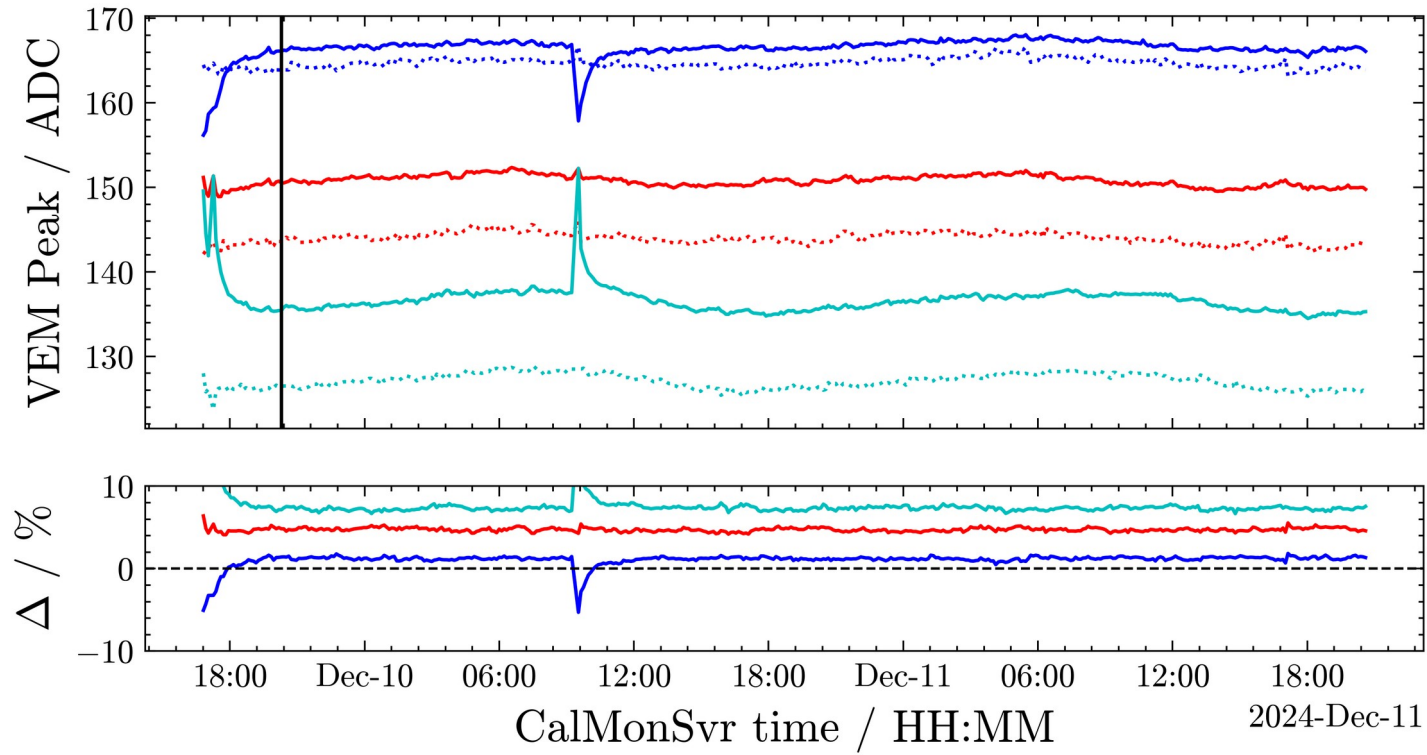
Currently only Peak[4] is sent

# Backup

station = 943

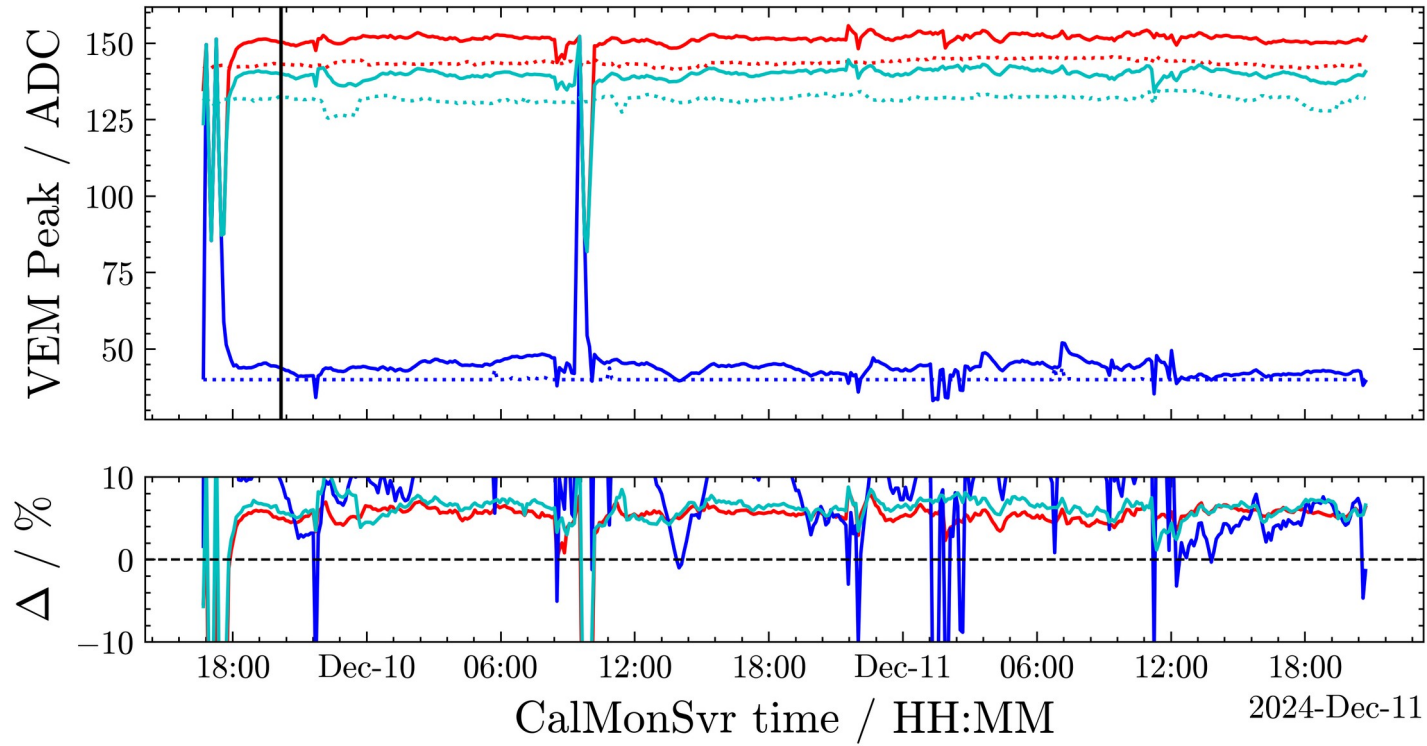


station = 944





station = 949



station = 954

