Continuum => C-band => Total Power

(v1 : 22/06/2017)

$: commands to insert in a shell
> : commands to insert in the operatorInput panel

Before observing

1) On nuraghe-mng :

   - Check that all of the 32 containers are active on ACS,
   - the active surface is green on AS,
   - the jlog is opened in order to track possible error messages,
   - the interface of the Meteo client is opened to check the wind velocity in real time (< 60 km/h).

2) On nuraghe-obs1 :

   - Check the presence of the 8 panels :
     - **operatorInput**
     - **AntennaBoss**
     - **GenericBackend**
     - **Mount**
     - **Observatory**
     - **Receivers**
     - **Scheduler**
     - **MinorServo**

   - Upload your shedule and check it :

     $ cd /archive/schedules/[projectID]
     $ scheduleChecker schedulename.scd

Start the observations

In the operatorInput panel :

1) Insert your project number

   > project=[projectID]

2) Initial setup

   > antennaReset

   > setupCCB

3) Select the active surface shape (Shaped configuration for C-band observations)

> asSetup=S

4) Insert the Local Oscillator value (in MHz)

   > setLO=[freq]

5) Select the Total Power backend

   > chooseBackend=BACKENDS/TotalPower

6) Insert the bandwidth (300, 730, 1250 or 2000 MHz) and choose the sample rate (in MHz) :

   > setSection=0,*, [bw],*,*,[sampleRate],*
   > setSection=1,*, [bw],*,*,[sampleRate],*

7) Put the antenna at 45° of elevation and attenuate the signal in order to obtain values between 750 and 1100 counts (linear range of the backend) :

   > goTo=*,45d

   > getTpi

   > setAttenuation=0,[att] with [att] between 0 and 15 dB
   > setAttenuation=1,[att]

   > getTpi

8) Check the tsys (typical values)

   > tsys

9) Begin the schedule by indicating the start scan [N] or subscan [N_n] in the SCD file :

   > startSchedule=[projectID]/[schedulename].scd,[N]

During the observations

1) On nuraghe-obs2, check that the data are written in your project section :

   $ cd /archive/data/[projectID]/

2) Quick-look of the data :

   $ idl
   IDL> .r fitslook
   IDL> fitslook

At the end of the observations

1) Stop the schedule

   > stopSchedule or > haltSchedule

2) Park the minor servo, active surface and antenna

   > goTo=180d,89d
   > servoPark
   > asPark
   > antennaPark

Download the data

$ scp -r [projectID]@nuraghe-obs2:/archive/data/[projectID]/* .