# **INT Support Astronomer General Information**

(Cecilia Farina - November 2022)

This document contains information that I would like INT Support Astronomers (INT SAs) to know and to have in hand to re-read whenever they need. All these items will be explained during the training. **This document does not intends to be a full explanation but just a reminder of what was explained.** It is not necessarily complete. If there is any doubt please do not hesitate to ask. Thanks!

#### **INT Staff**

- INT Manager: Lucia Suarez and Cecilia Farina
- INT Deputy Manager: Lilian Dominguez Palmero
- Students Manager: Yeisson Osorio and Lilian Dominguez Palmero
- Students Deputy Manager: Cecilia Farina
- IDS Instrument Specialist: Lucia Suarez
- IDS Deputy Instrument Specialist: Lilian Dominguez Palmero
- WFC Instrument Specialist: Ovidiu Vaduvescu
- WFC Deputy Instrument Specialist: Richard Ashley

#### Possible types of nights at INT

- 1. Normal support night (visitor observers)
- 2. Service observations of regular INT programmes
- 3. D-nights
- 4. CAT-S nights
- 5. Visitor instruments nights
- 6. Nights with setup changes (daytime/nighttime)
- 7. Override programmes

## About the SA Roster

- ★ Every INT SAs will be rostered to be responsible of INT for nights of types 1-6.
- ★ The roster will be done usually by the Student Manager.
- ★ The nights will be assigned to the SAs as fair as possible between the INT SAs. The number of nights, night type and instrument will be taken into account for doing the roster.
- ★ The roster will be done respecting as much as possible the availability and preferences of the SAs. The SAs will be contacted in advance to indicate these.
- ★ If there is a problem with the availability of SAs in certain dates (e.g. Christmas time, new year's eve, etc.) we will try to find solution that is the least inconvenient to everybody trying to compensate the not desirable dates (e.g. the ones that are rostered for Christmas will not be rostered for new year's eve). If that is not possible and we can not reach an agreement we will do a lottery.
- ★ On average everyone would do no more than 4 nights a month (although the actual number of nights every month will vary depending on the availability of SAs each period).

★ Note that this is not exact math and there are several constraints so there probably will be minor roster differences at the end of the year.

### About the Day Support Astronomer

- ★ Every day there should be an INT SA contactable (not necessary in the office but reachable by phone if needed), available at least to go to INT on short notice (until 16:30 hrs of the same day) and do INT visitor support work at the telescope for part of the night. This person is called INT Day Support Astronomer (DSA).
- ★ The DSA cannot be the same as the SA.
- ★ There will be an INT DSA per week.
- ★ The DSA for each week will be assigned when doing the roster (with similar considerations as taken for the roster).

#### Changes in INT roster

- ★ Every change in the INT roster will be agreed in advance between the SAs.
- ★ Changes should be communicated to the Student Manager to update the online schedule (http://catserver.ing.iac.es/schedules/).
- ★ When doing these changes please check that for the same night the DSA and SA is not the same person.
- ★ There is not limitations for the roster changes but for safety reasons eveary sinble change has to be informe to the Student Manager or the Telescope Manager.
- ★ If the PI/observer comments that the SA is not needed at INT, this should be informed to the INT Magager. The PI/observer who does not require support should explicitly write this in an email copied to the INT Manager.
- ★ Please do not forget to cancel dinners and rooms at the residencia if you do not need to go to ORM (ING has to pay for them).

### Details of each kind of night

### 1. Normal support nights (visitor observers)

- ★ These nights have a visitor observer.
- ★ The SA should contact the PI by at least 3 weeks in advance to confirm the setup (and catch up any inconsistency with the current schedule), ask experience and observer contacts, inform the PI about the ING booking forms (http://catserver.ing.iac.es/booking/), etc. There is a contact email model in the WFC and IDS we pages.
- ★ Small changes in the setup with respect of what was requested in the proposal are allowed. Major changes (e.g. a large change in grating resolution for IDS programmes) should be informed to the INT Manager.
- ★ In the afternoon of the first night of the run, the SA will give the introduction and safety information to the observers and stay at the telescope during the initial hours of the night to ensure that everything is working fine and the observer is confident enough to stay alone at the INT. That is, the observer and the telescope are safe and the observer can run the

observations.

- Even if the observer claims to have experience in the INT please remind them the basic and more important tell them all about the safety.
- ★ If for any reason the INT SA considers that the observer cannot be left safely alone at INT then the SA should stay longer (the whole night if necessary). In this case the night will count as a full night. These cases should be communicated to the INT Manager who may consider to send more SAs to support the observers during the subsequent nights.
  - No so extreme cases should be communicate to the WHT Telescope Operator in the same night so when the SAs goes to bed the WHT TO keeps an closer eye on the INT activity.
- ★ Never leave an 'unsafe' observer at the telescope. If you are doubting warn the WHT TO about the situation.
- ★ If the observer does not require support it should be explicitly written in an email which should be sent to the INT Manager.
- ★ If during the first night the dome could not be opened and the observer has not experience at the INT, it might be necessary that the SA stays a second night. Coordinate this with the INT Manager. If the SA cannot do stay an extra night then we will look for volunteers, otherwise it should be done by the DSA.

### 2. Service observations of regular INT programmes

- This scheme started at the INT in 2015 and is described in http://www.ing.iac.es/astronomy/telescopes/int/service\_observations.html).
- It comprises to perform full observing nights for a particular programme.
- If PIs require service you should cc this email to the Student and Telescope Managers.
- When service nights are required, the Student Manager will send an email to INT-SAs asking for volunteers.
- If there are more than one volunteer and all replied on time then we will try to find an agreement about who/how the observations will be covered.
- The observing information for these programmes will be on the web in a form similar the service programmes and a report should be filled in for each night.

### 3. Discretionary nights

- ★ Discretionary nights (so called D nights) are full observing nights (test or service observations from the internal ING queue) with no visitor observer.
- ★ The plan for these nights should be done, a few days in advance, by the INT SAs in charge of the night under the supervision of the Instrument Specialist WFC (Ovidiu Richard) and IDS (Lucia Lilian). In case none of them are present contact the INT Manager.
- ★ Tests for doing these nights will be send by the Instrument Specialist or INT Manager in advanced.
- ★ All observations done in these nights should have associated a service proposal or test request and a corresponding report. If science observations for these nights are requested by email please ask the person who request them to send the request by email to the INT

Manager.

- ★ The observations done in INT D nights (either for test or for Service programmes) have to be reported in the online form: <a href="http://catserver.ing.iac.es/service/report.php?">http://catserver.ing.iac.es/service/report.php?</a> <a href="mailto:actionflag=Create%2FModify+a+Night+Report">actionflag=Create%2FModify+a+Night+Report</a> together night time used. For reporting tests, the instructions should be copied in the report (with the name of the person who request it).
- ★ These nights will count as full nights.
- ★ For publications that use INT data observed in D-nights we encourage the PIs to invite the INT SAs who perform the observations to participate in the publication. In this case, the INT SAs have to include ING as his/her affiliation in the publication. Note that the co-authorship is not a 'hard-condition' and PIs may not do it.
- ★ YOUT, INT SAs are welcome/invited/encouraged send proposals for IDS and WFC for these nights. It is a good practice! Please do not miss this opportunity!

### 4. CAT-S nights.

- ★ These nights belong to the spanish CAT. There a few per semester.
- ★ These nights normally have a visitor observer.
- ★ They can have different programmes for the same night which required instrument setup changes during the night.
- ★ In CAT-S runs of more than one night there will be a SA rostered for every night. It may happend that the SA, after the first night of the run, do not need to go to the INT for the following night (it depends on the programmes the CAT has for the run). Or the SA may need to go only on day time to make an setup change. Usually this is not known until very close to the start of the run.
- ★ Consecutive CAT S nights will be assigned as much as possible fairly between INT SA.
- ★ The contact email for these nights should be sent with cc to INT Manager.
- ★ CAT-S should reply to this email at least 48 hours of the starting the run.
- ★ All CAT-S nights will count as full or normal support nights. depending on the activity the SA did.

#### 5. Visitor instruments nights

- ★ These nights normally do not require support at the INT. But this should be confirmed every time by the PI in teh contact email.
- ★ The SA is for contact and safety information.
- ★ All visitor instrument nights will count as support nights and will be assigned as much as possible fairly between SAs.

### 6. Runs with setup changes

- ★ Generally this is not required at INT.
- ★ The PI should have requested this in the programme or to the INT Manager (although sometimes they inform about this in the contact email and if possible and well justify we try to arrange it).
- ★ Set up changes can take place during daytime or during night time (the latter are even less

- common) depending on the programme.
- ★ Setup changes should be done by the SA of the first night of the run during the day/night agreed with the science team.
- ★ If the SA cannot do it then we look for volunteers, otherwise the DSA will do the change.
- ★ Only minor changes in daytime they can be done by ops-team (e.g. change a single filter on the WFC).
- ★ Daytime changes count as working time similar as when you are working at the office.
- ★ Nighttime changes count as a full support night.
- ★ If you receive this request please before answering the PI inform the INT Manager.

## 7. Override programmes

These are programmes approved by TACs that can request (short) observations to be done during other programmes or D nights.

- ★ There is a chart with the relevant information of active override programmes for each semester <a href="http://www.ing.iac.es/astronomy/observing/overrides.html">http://www.ing.iac.es/astronomy/observing/overrides.html</a>
- ★ Observers of each run should be aware of this and the INT SAs have to inform them.
- ★ A report on the web should be filled in for these observations as soon as possible during the same night of observations (unless the PI has agreed something else with the SA or the visitor observer).

#### Miscellaneous:

- For safety reasons, the SA should send the INT Manager the name and contact email of all the observers (or persons who will be at INT) for the run.
   Email subject: Observers, run CXX, from ZZ to YY.
- All visitor observers (and visitors in general) who stay at INT must sign the afternoon induction sheet.
   Many observers can sign the same paper.
- Observers should communicate the WHT OSA if they leave the telescope before morning twilight. It is also a good practice that INT SA call to WHT OSA when leaving the INT after support.
- Please report any unusual or hazardous situations you see.
- Ask the observers to report to you if they accidentally damage an ING car (you in turn have to report
  this to the INT Manager). Same if happen to you or you see that the car has new damages that you
  do not recall from before, please reported to the INT Manager. You must inform these issues for
  safety reasons.
- Always wear all the safety equipment when handling LN2, and please insis to the observers to do

#### the same.

- Please, for safety, try to avoid being at the INT at night wearing sleepers, or being without shoes in the control room (again is for safety reasons).
- Be sure that you know and understand the emergency procedures and that emergency telephones are visible and easy to find at INT control room. Be clear when you communicate this information to the observers.
- Use the lone worker alarm when you are alone at INT and remind this to the observers.
- After every night a Night log for the night must be created (independently if the telescope was closed or observing or if there are visitor instruments). Use the night log in the following link: http://obslog.ing.iac.es/20221110/INT (for the corresponding night).
- Night logs: Please complete them with good information (e.g write the hours lost by technical problems or weather conditions). Note that the information of the night should be coherent e.g. technical lost in night logs should be similar to the one in the reported in the FR.
- In FR observers should write their name in case we need to contact them for questions about it. INT SAs should log in with their user names to write a FR.
- FR from the night that need to be checked by ops-team during day time should be uploaded in the FR database as early as possible so ops-team can take this into account for the planning of day-time. OPs-team read the FR before 9:00 hrs in the morning.
- Remind the observers that their feedback is important for us.
- INT SAs that need a transport with ops-team according to the car schedule sent in the previous week, are responsible to arrange this with the ops-head (usually via email at least a working day in advance). Please, try as much as possible to be before the agreed time wainting when ops-team picks you up... they will not wait for you.
- Please, in case of faults at the telescope, before attempted to shut down the telescope be sure that
  you have checked other possibilities: stop and take a few minutes to think, look for information and
  try to identify the source of the problem, try easier/different commands, check observing
  instructions in the manuals, check troubleshooters, check previous FRs, ask the WHT TO. Many times
  shutting down the telescope can result in new failures that has nothing to do with the original
  problem.
- Comments on ORM bad weather situations and ING bad weather procedures.