

Report on the 12th GTC Users Committee Meeting

Held at CALP, Santa Cruz de La Palma
July 13th and 14th, 2015

1. Context and general remarks

The GTC Users Committee (GUC; members listed at the end) was informed of the work carried out to operate, maintain, and develop the telescope and its instrumentation.

We are pleased to hear that several issues raised in the past reports have been addressed and fixed during this semester. In particular, we would like to recognize the following accomplishments by GTC itself or by different teams associated to the GTC:

- We appreciate the continued improvement in the observing facility by the GTC team in the last semesters in spite of lack of personnel and resources.
- We congratulate the GTC public archive team for the effort in the delivery of the GTC raw and reduced data, as well as for their achievement in the world-wide spread of the use of GTC data. We encourage GTC users to help in delivering the reduced products to the community. This will increase the GTC data exploitation and its visibility.
- We are pleased with the progress made by EMIR towards its installation at the telescope. We strongly encourage the EMIR team to commission it before the end of the year.
- We appreciate the decision to keep CanariCam at the telescope until the time EMIR completes all its tests at the ground.
- We welcome the news regarding the delivery of the OSIRIS-MOS reduction pipeline. We urge that it should be made available to the community.
- We congratulate the GTC and the PI for making CIRCE available for users from 2015B.

On top of these positive advances, we also find a few negative issues, namely:

- Although some efforts have been done by the GTC team, the lack of a clear updated and comprehensive instrumental plan available for the community is a major issue. This point comes from previous reports and is reflected in many other issues included in Sect. 3 (such as items a, d, f and j). The committee understands the difficulties that arise for the fulfillment of the time-line due to unanticipated lack of resources and personnel. With the on-going number of instrument replacements, an updated comprehensive instrumental plan plus short updates with minor changes is fundamental for the community to plan realistic scientific projects with the GTC. **We insist in the necessity of maintaining a publicly available, detailed, realistic list of GTC team priorities for the telescope and the distribution of its resources.**
- The GUC is concerned about the possible temporal lack of an independent GTC director, with a full-time dedication to the GTC directorship. The call for a new director was unsuccessful and it will take at least another year to open another call. Pedro Álvarez retires by the end of 2015. As part of the GTC integration in the IAC structure, the IAC director will be temporarily the GTC director until the legal issues are resolved. GUC is worried about the need of an independent GTC director able to attend the GTC necessities (full-time work). This figure of an independent GTC director is essential to

prevent possible conflicts of interest. GUC encourages the IAC to open a call or make offers within the international community to find the most suitable person for the post as soon as possible.

- The GUC is concerned by the continued tension between MEGARA and GTC team, which might affect the final stage of the instrument delivery and commissioning. We understand the underlying cause of this tension is the cut in the MEGARA guaranteed time in exchange of extra budget from the GTC. The sore point is that previous instruments also needed extra budget, which was awarded without the penalty in awarded time. The GUC encourages both teams to solve their differences, adopt a flexible attitude, and get ready for the next phase where mutual collaboration will be critical for the success of the project and of the whole GTC science. In spite of these issues we do acknowledge the good state of the project and look forward to seeing this instrument on the telescope.
- Given that OSIRIS is clearly a key instrument for GTC, GUC requests a clear time-line for the de-commissioning of OSIRIS. The possible improvements to the instrument (see Sect. 3 items c, d and e) should be carried out as soon as possible to benefit from them, well before the instrument is de-commissioned. Since there are a number of very wide-area, high multi-plex MOS instruments on 8m-10m class instruments coming online in the coming years, the GTC community should be able to exploit this instrument at a time when it holds an edge over other telescope+instrument combination.

2. Input from the community

The users' feedback collected by the GUC can be summarized as follows:

- Some OSIRIS users are concerned about the detector performance. We understand that the CCD is in the process of upgrade (Sect. 3).
- There is a specific request to enable the use of narrower slits (slit-width $<1.2''$) in the MOS mode of OSIRIS. **We understand that this is already implemented in the call for 2016A.**
- CanariCam community is interested in having open time for the instrument at least for part of the semester (until EMIR is mounted to the telescope).
- We received concerns about the lack of visible camera when OSIRIS will be temporally de-commissioned. We understand that GTC is thinking in alternatives (Sect. 3).
- We also received suggestions for improving the Phase2, that have been passed to the GTC team. In particular one of the suggestions (reorder or OBs) is not possible, but the rest will be implemented.
- We received with concern the general lack of awareness among the Spanish public in general and the amateur astronomer community in particular, of GTC's achievements or even if working at all. Even less knowledge is expected from non-Spanish community. We encourage the GTC users to advertise their scientific achievements using the GTC data.
- Following previous point, we are also concerned about international astronomy community's general ignorance of the GTC achievements. It is also a matter of concern that even some GTC members have un-precise information about telescope and instrument performance. We encourage the GTC team to promote in different community levels the scientific achievements of the telescope and its instruments.

3. Recommendations

- (a) The instrumentation plan presented during the 9th and 10th GUC meeting and the information updated after the 11th meeting, that includes a report of the instrumentation review panel from 2013¹, which are now available at the webpage² are incomplete and out of date. We think that the GTC community will greatly benefit from having a reliable instrumentation plan, where the time line for the different instruments and their focal stations are made clear. We understand there will be changes due to delays and unexpected situations in this lack of resources epoch, therefore we also suggest to add a regular (biannual) update of the possible changes available in webpage. **We insist that this will be crucial not only for the development and usage of the instruments that are currently foreseen, but also for possible future visitor instruments.**
- (b) An active search of a new GTC director is strongly encouraged. The full-time job that implies the GTC direction requires an independent person from IAC director. We encourage to call within the international community to find the most suitable person as soon as possible.
- (c) GUC strongly supports the change, as soon as possible, of the new detector for OSIRIS, which is far more efficient both in the UV and the NIR ends of the spectrum. The entire panel agreed in this being a high priority, since the new detector will enhance scientific achievements, immediately.
- (d) Although the plans for OSIRIS de-commissioning have changed from last semester, the lack of visible camera in the interval of its de-commissioning is still an issue to resolve. We understood GTC is thinking in a possible temporal solution. We encourage to explore alternatives to cover the OSIRIS unavailability period. **The final solution should be included in the instrumental plan.**
- (e) Although OSIRIS-MOS reduction pipeline is arriving, we support the idea of including links to other available private pipelines, created by the instrument users, in the website. In order to compensate the pipeline providers, and in similar way of other international telescopes, we suggest GTC to offer a reward to best performance pipelines or those pipelines selected as the best by the users.
- (f) Once EMIR arrives, CanariCam will keep sharing the focus with CIRCE. We would like GTC to provide the sharing conditions, policy of interchange between the instruments, to the community. **This should be included in the instrumental plan.**
- (g) The arrival of HORS to GTC is imminent. It should be listed as instrument in the GTC webpage with all necessary details for its use by the community (exposure time calculator, technical details, observing modes, efficiency, etc). One fundamental point is the expected performance of the instrument that should have been provided before. GUC considers efficiency estimations fundamental for any new/visitor instrument and should be included in the initial instrument proposal. Balance between performance and resources expenses should be considered before accepting any new instrument.
- (h) GUC sees no clear policy stated for a new/visitor instrument proposal. GTC should have the paperwork and steps to follow publicly available in the webpages. **The instrumental**

¹http://www.gtc.iac.es/instruments/media/Instrumentation_Review_Panel_Report_2013.pdf

²<http://www.gtc.iac.es/instruments/instrumentation.php>

plan should also be available to state which are the necessities to be covered by new instruments, etc.

- (i) EMIR uses the detector originally assigned to FRIDA, but the replacement detector for FRIDA is still to be found. The current plans indicate a delay of a year to get an appropriate one. Although FRIDA is expected later, the detector should be provided as soon as possible. **FRIDA time-line development should be included in the instrumental plan in order to clarify these issues.**
- (j) A better understanding between the GTC adaptive Optics team and FRIDA team should be established. There is no clear information about the state of both AO or FRIDA, with information not updated for years and no estimated delivery dates. **GUC would like GTC to include the AO updates in the GTC instrumentation plan** and would like FRIDA team to provide updated information.
- (k) GUC would like GTC to provide with a clear commissioning plan of CIRCE new modes. **To be included in the instrumental plan.**
- (l) As in previous reports, GUC would like that GTC creates and maintains a historical archive with the materials provided to the GUC members during the past GUC meetings. It would allow a convenient access to the documentation needed for cross-checking. It would be password protected so that the access is only granted to the current GUC members.
- (m) GUC encourages GTC team to make an effort in the publicity of GTC achievements and performance. To hire a person dedicated to outreach and similar duties could be explored. In similar way, we encourage the community of GTC users to promote GTC goods, when attending conferences, etc.

GUC Members

Giuseppina Battaglia	Instituto de Astrofísica de Canarias
Hervé Bouy	Centro de Astrobiología – CSIC – INTA (did not attend this meeting)
Antonio de Ugarte Postigo	Instituto de Astrofísica de Andalucía
Alberto Fernandez Soto	Instituto de Física de Cantabria
M. Cruz Gálvez Ortiz	Centro de Astrobiología – CSIC – INTA, Chair
Rafael Guzmán	University of Florida
Nicolas Lodieu	Instituto de Astrofísica de Canarias
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