

Optical and Infrared Astronomy Committee (OIRAC) Report to the CASCA Board, Nov, 2006

Submitted by M. Balogh on behalf of the OIRAC.

1 Reformation

OIRAC has traditionally served CASCA and the broader Canadian community by providing an independent voice for Canadian researchers in describing the evolving needs of the community and the formation of CASCA policy. Its opinions have been sought in establishing priorities within the field, particularly during the planning of new national facilities. Due to unfortunate timing, the terms of all previous OIRAC members expired simultaneously, and the committee ceased to exist for about a year (the last OIRAC report available is from March, 2004). A new chair, M. Balogh, was chosen in May 2006.

The first important task has been to form a new committee, with staggered terms, selected to represent the breadth of observational research in this wavelength domain and to speak with one voice on issues which affect the capacity of such researchers to carry out their mission in an environment of international competition. The chair submitted names of eight people to form a new committee, and at the CASCA meeting in June 2006, five of these people were chosen by the board to form the new OIRAC. The current membership is:

M. Balogh (Waterloo, 3 years)
P. Bergeron (Montreal, 3 years)
D. Welch (McMaster, 2 years)
T. Davidge (NRC, 2 years)
J. Hutchings (NRC, 1 year)
B. Gladman (UBC, 1 year)

Terms listed are from May 2006. John Hutchings served on the last OIRAC incarnation, and he agreed to sit for another year to help provide some continuity.

2 Recent OIRAC activities

- A web page has been created to provide links, news and information regarding OIRAC's activities, at <http://astro.uwaterloo.ca/OIRAC/>. This is closely modeled on the Radio Astronomy Committee's web page, and includes links to newsletters and committee reports for OIR facilities, where available.
- **The role of OIRAC:** Early email discussions among OIRAC members have focused on how to define the role of this committee in order to maximize its impact. It is clear that each project in our purview (see section 3, below) has its own committee(s), and we should be providing a balanced overview, with high-level suggestions and ideas. The prevailing feeling among the present committee is that this kind of overview would best

be served by a committee that covers ground-based astronomy over all wavelengths. The division between optical/IR and sub-mm/radio astronomy has become increasingly blurred. It is now no longer practical for a wavelength-specific committee to provide a broad overview, as most large projects require multi-wavelength data, and our many observational facilities are interdependent.

The JCSA was raised as an example of a highly successful committee, which oversees all space-based facilities, independent of wavelength. We have therefore begun discussing the advantages of forming a similar oversight Committee for Ground Based Astronomy (CGBA). This would not require technical expertise of the individual facilities, which are covered by their own committees. Where necessary, CGBA could be responsible for forming working groups of technical experts to address specific issues.

In practical terms, this would mean dropping space-based OIR facilities such as JWST from OIRAC's purview. More critically, it requires a merging with the Radio Astronomy Committee (RAC), which currently oversees five ground-based facilities, and four space-based ones. Discussions have begun with the RAC; no consensus has been reached, but these discussions are still at an early stage.

Feedback from the CASCA board and the general community on the role of OIRAC, and the possibility of a CGBA in particular, is welcome.

3 Report on facilities

Currently, we take one of our major roles to be keeping track of activities and changes at various OIR facilities, both extant and planned, so that we can best represent their place in the Canadian astronomical research armory. The following is a list of ground-based optical and infrared facilities that we include in this overview. We have not included space-based projects (although we will keep in touch with their progress), since these are well overseen by the JCSA.

- National Facilities
 - Thirty Metre Telescope
 - Canada-France-Hawaii Telescope
 - Gemini Telescopes
 - Dominion Astrophysical Observatory
- Institutional facilities (> 1 m diameter)
 - Mont-Mégantic Observatory
 - Rothney Astrophysical Observatory
 - Magellan telescopes
 - David Dunlap Observatory
 - Elginfield Observatory

- We also consider the role played by the numerous, small (< 1 m diameter) telescopes at institutions throughout Canada, including
 - Burke-Gaffney Observatory (St. Mary’s)
 - UBC Observatory
 - Helen Sawyer Hogg Observatory
 - University of Saskatchewan Observatory
 - Gordon MacMillan Southam Observatory
 - York University Observatory
 - Climenhaga Observatory (Victoria)
 - Devon Astronomical Observatory (Edmonton)
 - Gustav Bakos Observatory (Waterloo)
 - l’Observatoire Milton-East (Roxton Pond)

Since it has been more than two years since the last OIRAC report, we feel it will be useful to review the status of these facilities over the next year. We have begun to collect status reports from some of the larger observatories in this list. These reports will be posted on the OIRAC web page as they are received. Currently, reports are available for Gemini, Mont-Mégantic, and DAO.

4 Optical and Infrared Activities

In addition to the specific facilities listed in the previous section, we are also closely following development of various projects of interest to the OIR community, including:

- **CFHT Legacy Survey:** This is the largest national optical survey currently underway, and is overseen by its own committee. OIRAC will keep track of developments and progress with this survey, in light of other and future activities.
- **Arctic site testing:** This is a significant effort and of interest to OIR and even UV observations. The first year’s data is expected in 2007, subject to support from Natural Resources Canada. We will be following this closely as a strategic activity.
- **Long range plan:** OIRAC will keep focus on the LRP and its progress, including challenges for funding and keeping to schedule. We will pay particular attention to budget balances between large projects like TMT, and smaller facilities. Future OIRAC activities will include improving synergy with the RAC and JCSA, and collecting statistics on Canadian telescope usage, publications, operations, and archives.