

## A Minimalist Operating Mode for UKIRT

### **Introduction**

In December 2009, following a re-prioritisation exercise, STFC announced their science programme for the next 5 years. Regrettably, UKIRT was ranked as a low priority in this exercise, and in addition the UKIRT Planet Finder project was not approved. STFC's announcement therefore called for a "managed withdrawal" from UKIRT.

I am pleased to announce that I have developed a low-cost operating mode for UKIRT, known as "minimalist mode". This new operating mode was approved by the UKIRT Board and will be adopted on 1<sup>st</sup> January 2011. STFC have endorsed the change of mode and have agreed to continue supporting UKIRT until at least 31<sup>st</sup> March 2012.

The primary objective of minimalist mode is to ensure the expeditious completion of the UKIDSS programme, and the JAC mission statement has been changed to reflect this. The new mission statement is as follows:

*The Joint Astronomy Centre provides services and support:*

- *to enable community and staff astronomers to undertake top-quality, front-line international-class research using the James Clerk Maxwell Telescope (JCMT);*
- *to develop the JCMT in order to maintain its position as the most advanced observatory of its kind in the world;*
- *to operate the United Kingdom Infrared Telescope (UKIRT) in a streamlined mode so as to expeditiously complete the world-leading UKIDSS programme, plus other programmes as resources permit;*
- *to operate both facilities in the most cost-effective and efficient manner on behalf of the funding agencies; and*
- *to be responsive to the changing needs of the contributing organisations.*

### **Minimalist Operating Mode**

UK time on UKIRT will be committed primarily to UKIDSS, with the WFCAM Transit Survey as the backup for poor-weather and empty-queue situations. Resources, including staffing levels, have been estimated accordingly. It may, however, be possible to continue with some other UK programmes (campaigns, some TAG-approved long-term projects) if their support requirements are such that they can be accommodated within the established resource envelope. This will be assessed as part of the implementation process and will necessarily be limited to projects which already exist. There will be no open or service time, and hence no calls for proposals and no requirement for a TAG, after semester 10B.

All UKIRT observing will be undertaken remotely from the JAC by the Telescope System Specialists (TSSs). There will be no visiting observers, other than in exceptional cases.

UKIRT will be opened and started each evening by the JCMT observing team (TSS and visiting observer) in communication with the TSS in Hilo. Observing hours at UKIRT will therefore be constrained by the JCMT observing schedule. At times when the JCMT is closed for engineering work, other *ad hoc* arrangements will be put in place. Remote startup of the observatory is not envisaged.

The JCMT observing team will not normally visit UKIRT during the night to respond to faults (except in emergency situations). Under controlled conditions, however, limited mobilisation of the JCMT observing team to intervene in UKIRT observing may be permitted.

There will be no operational or development projects for UKIRT. Daytime technical support for UKIRT operations will be provided on a best-efforts basis only. The needs of the JCMT will take priority. JAC staff resources will in general not be reserved for the support of UKIRT operations.

## **Implementation**

A technical implementation plan for the minimalist operating mode is being developed by the Head of UKIRT Operations in conjunction with the Chief Engineer and the Head of Software. The objective is to have a fully-commissioned minimalist operating mode ready for adoption on 1<sup>st</sup> January 2011.

The cost savings arising from this change of mode are both substantial and necessary. Staffing numbers at the JAC will be reduced significantly and the necessary changes are underway.

## **Conclusion**

The minimalist operating model described above is both viable and fit-for-purpose: it will enable the continuation of UKIDSS observations so that the programme can be completed expeditiously, consistent with the JAC's revised mission statement and within the envelope of funds available from STFC. The low-cost mode of operation is enabled primarily by (a) a streamlining of the science programme to focus on a few well-established, large-scale programmes, (b) the cessation of all facility development activity, and (c) the adoption of remote observing.

*Professor Gary Davis,  
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