THE UNIVERSITY OF NEW SOUTH WALES

Dr Craig Kulesa University of Arizona 933 North Cherry Ave Tucson, AZ 85721

20 January 2010

Dear Craig



Modular PLATO for Ridge A

This is to reaffirm our commitment to the construction of a modular PLATO for deployment to Ridge A by NSF Twin Otter aircraft, as part of our on-going collaboration with your group at the University of Arizona in Antarctic site-characterisation and THz astronomy. We are expecting to receive AUD520k (approx USD480k) from Australian sources to contribute to this project.

The key Faculty personnel at the University of New South Wales are:

- Professor Michael Ashley
- Associate Professor Michael Burton
- Professor John Storey

In addition, Dr Jon Lawrence, who is now at Macquarie University/Anglo-Australian Observatory continues as a PI on the PLATO program. We are also employing several engineers this year, and a number of students will also contribute at various levels.

We have requested AUD520k from the Australian Department of Innovation, Industry, Science and Research (via Astronomy Australia Limited), to build the modular PLATO for Ridge A, and have received preliminary approval. I have attached some documents that describe the present situation:

- A letter from the Chair of Astronomy Australia Limited (AAL) that I received late last year in response to the call for expressions of interest
- A printout from the AAL web page (accessed 20 Jan 2010).

To clarify: AAL has been granted an allocation of AUD10.2M from the Australian Department of Innovation, Industry, Science and Research to fund astronomical infrastructure projects during 2001 – 12. We requested several items from this fund, not all of which were approved, but the "Modular PLATO for Ridge A with THz capability" was one that was approved, receiving a ranking of "1". The Rank 1 requests (across all projects) total AUD10.2M, and thus the expectation at this stage is that all will receive full funding.

That the "Modular PLATO for Ridge A" proposal received top ranking from AAL is an indication of the importance placed on this work, and the confidence the AAL has in us to continue in this very successful collaboration with you and your team. The next step is for us to flesh out a more detailed agreement, and to open a dialog with the NSF on deployment options.

Our site testing work over the past decade has led to the inescapable conclusion that the Antarctic plateau offers quite exceptional observing conditions, particularly in the far-infrared and sub-millimetre. The recent, thorough study¹ of all available ground-based and satellite data, combined with current meteorological models, leads us to believe that Dome A and F, along with Dome C, are the best established sites in Antarctica for astronomy. However, a still better site (especially for terahertz observations) appears to exist some 150 km from Dome A at the place we that we have simply called *Ridge A*.

The success of your preHEAT experiment on PLATO at Dome A has been quite stunning, and we look forward to continuing this very productive collaboration at the ultimate site on the Antarctic continent.

Best wishes,

Professor John Storey

John Morey

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¹ Saunders et al 2009, Publ. Astron. Soc. Pacific, 121, 976