

A close-up photograph of a dart hitting the bullseye of a target. The target is circular with a yellow center (bullseye) and concentric rings of red, green, and blue. The dart is silver with a white feather fletching. The background is a light beige color.

# **Keck Participation in the TSIP Process**

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# TSIP Background

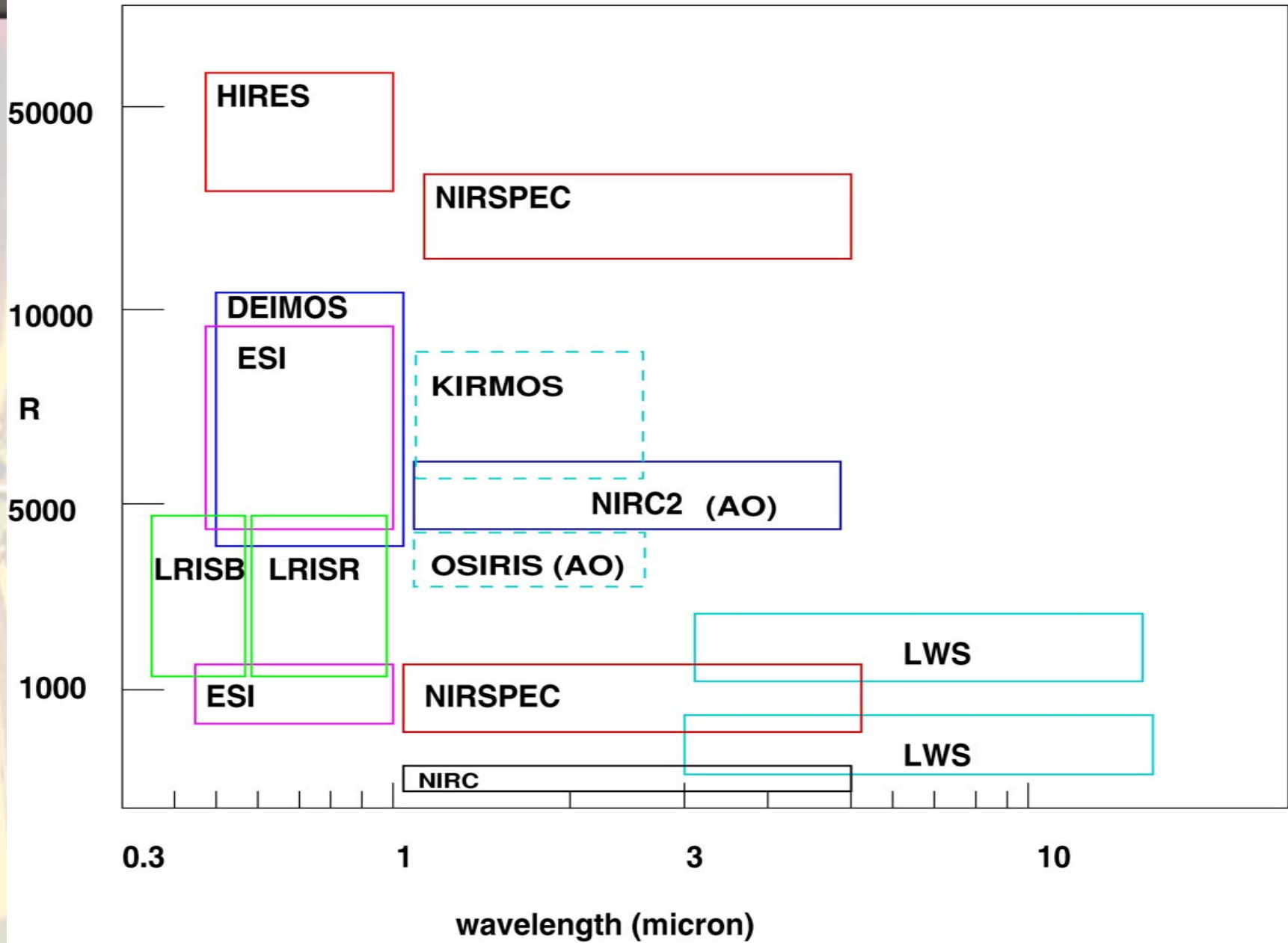
- NSF partially funds instrument development at Keck (e.g. OSIRIS; see Sean Adkins' talk).
- In return, the national community gains access to the Keck telescopes.
- TSIP representatives participate in instrument reviews.
- NOAO handles the logistics of telescope proposals, time assignment, etc.

# TSIP as a Win-Win Program

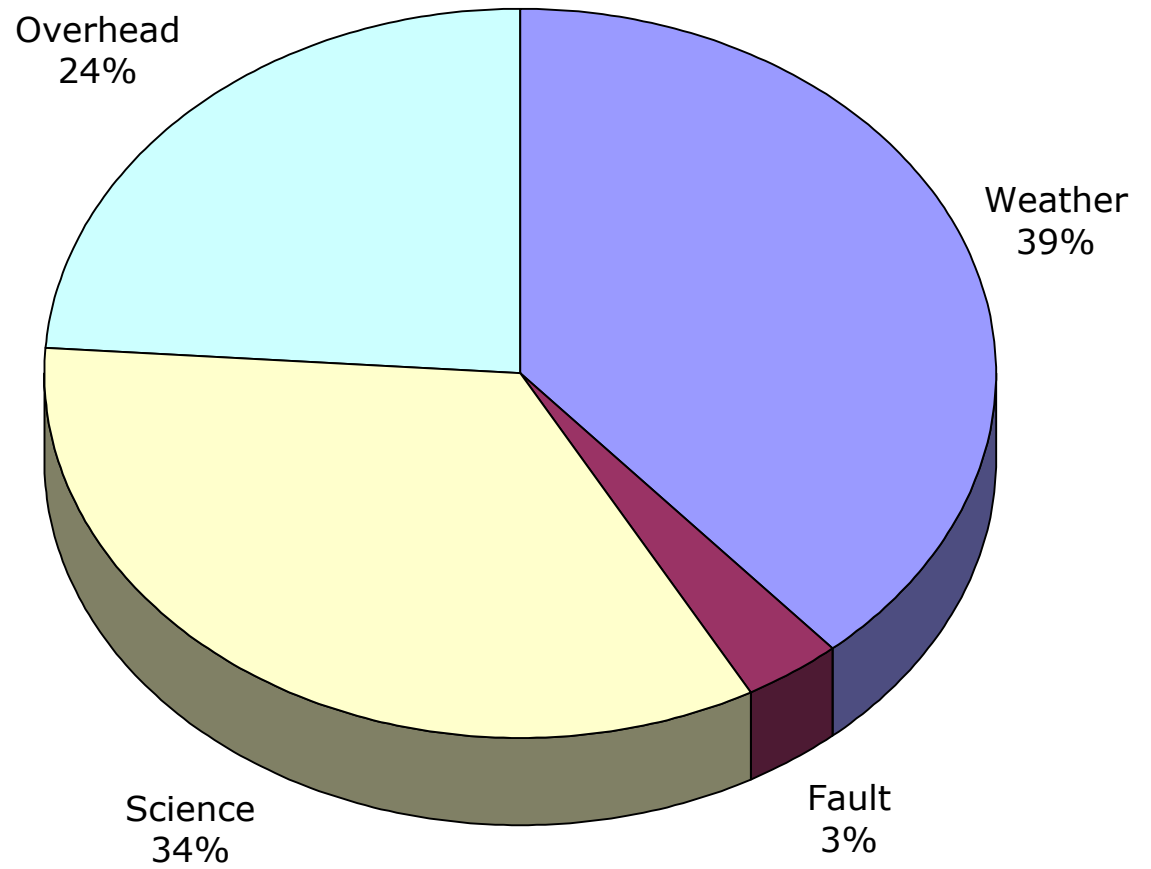
- TSIP benefits the general astronomical community by allowing them access to the largest optical/infrared telescopes on Earth.
- Keck benefits
  - better state-of-the-art instrumentation,
  - exposure to a wider cross-section of astronomers,
  - improved support for all observers.

# TSIP Science

- From Feb. 2003 through Mar. 2004, 29 nights in 18 separate projects.
- All eight Keck instruments used, from optical to mid-IR.
- Projects range from spectroscopy of Europa, through gravity effects in brown dwarf spectra, all the way out to IGM enrichment at the end of the reionization era.
- Bad luck! Seven nights completely lost to weather, another six severely affected.



## TSIP Observing at Keck



# Quotable feedback

- “The sensitivity of the whole system was most impressive, allowing us to basically complete this part of our project in a single run.” —Drinkwater
- “Even with the poor weather, the data we did get was excellent, and the support/help we received (Wirth, et al.) great.” —Januzzi
- “Although imaging was not our primary objective, we were very impressed by the high quality of the images.”  
—Mastrapa