



# The SIMPLE interface for PACS processing and photometry

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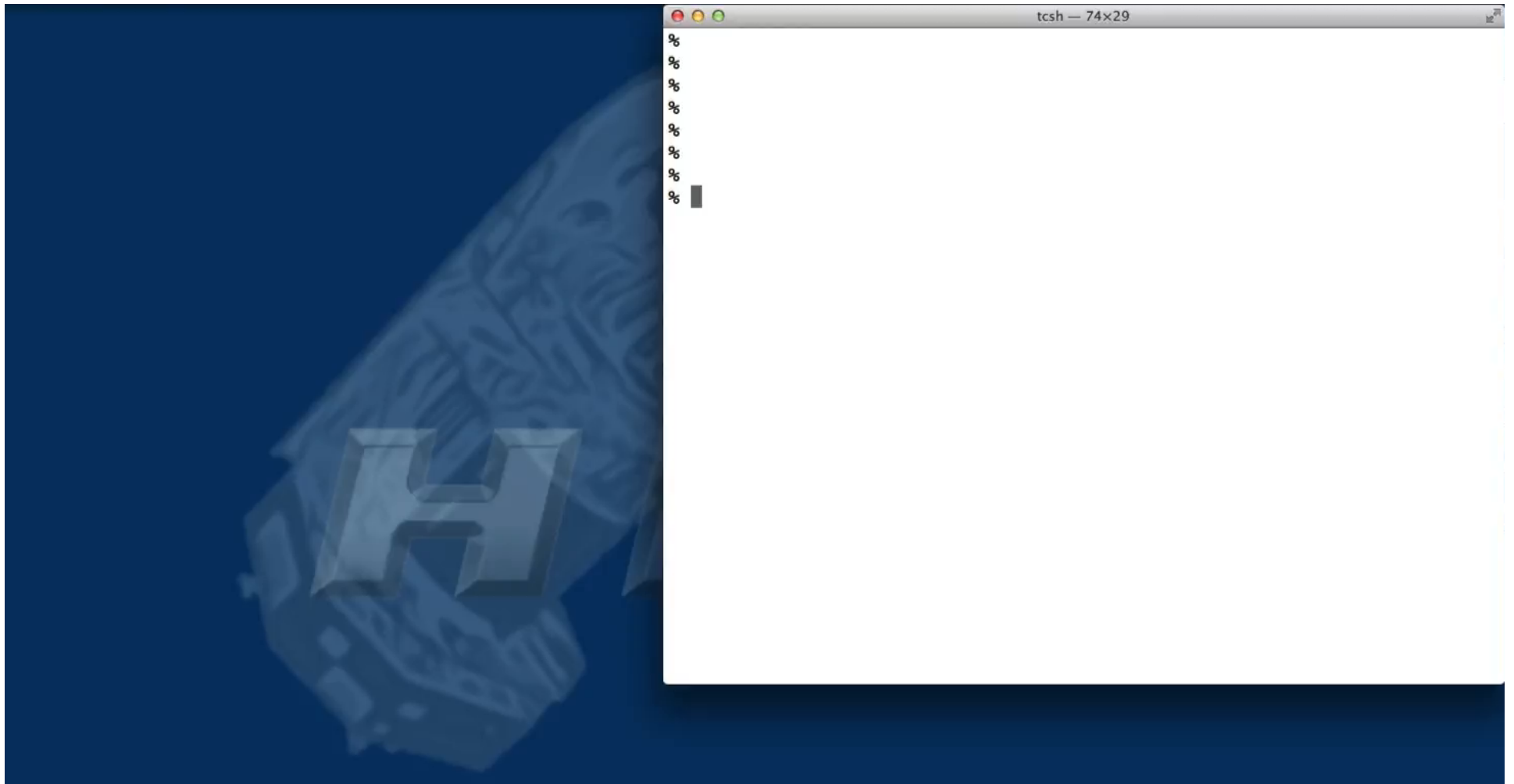
# Motivation for a simplified interface to PACS ipipe mapmaking scripts

- RAM needs force users from their desktops/laptops to remote machines
- Scripts require much editing depending on the science needs
- The user must perform many manual steps to complete their analysis
- HIPE has a steep learning curve

# The SIMPLE interface has several key benefits

- User is guided through the options
  - Depending on science case
- Suitable for slow network connections to remote machines
  - Minimal graphics and editing scripts
- Concatenate several processing and analysis steps
  - E.g. data reduction and photometry

The SIMPLE demo shows examples for the bright source ipipe script



# The implementation strategy meets a wide range of user needs

- Controller script in Python
  - Can be local or on remote machine
  - Lightweight, easy to install
  - Scientific capabilities (AstroPy)
  - Easy to add GUIs or other data viewers
- HIPE on remote machine
  - NHSC handles installation
  - Virtualized: freeze Java, OS etc
  - Data access is handled automatically
- Extends naturally to tools outside HIPE
  - 3<sup>rd</sup> party mapmakers
  - Ds9, SExtractor, AstroPy, etc.

# SIMPLE will be rolled out in stages

- Beta & first version in Sept/Oct
  - Bright source and deep field ipipe scripts
  - Command-line interface and batch mode
  - Aperture photometry and source extraction
  - Everything on NHSC remote machine
- Second release
  - MADMap
  - JScanam
  - Controller script on user's local machine