MONSOON Project @ CTIO

Gustavo Rahmer
ETS - CTIO
CTIO involvement in MONSOON

- Early stages (pre-PDR)
  - Collaboration in core documents
  - DHE Backplane ICD
- Development stage (post-PDR)
  - IR Clock&Bias Board: design, assembly and tests
  - CCD 8-channels Acquisition Board: design ready
  - Lab system for a Hawaii-2 mux
- Next on the horizon
  - MONSOON CCD Lab System in La Serena
CTIO resources for MONSOON

- Gustavo Rahmer (EE): 100%
- Ricardo Schmidt (EE): 10% (consultant)
- Michael Warner (EE): 10% (consultant)
- Electronic Technician: 50% (when needed)
CTIO Lab System

- PC 1GHz, 512Mb RAM, 10Gb HDD, Linux
- Systran SL100 Fiber link: PCI to CMC
- Detector Head Electronics:
  - Master Control Board
  - IR Acquisition Board (36 ch)
  - IR Clock&Bias Board
- Xilinx Development Tool in laptop
  - In-System Programming link
CTIO Lab System - DHE
CTIO Lab System – Board Tests
CTIO Lab System – Board Assembly
CTIO Lab System – Test Setup
MONSOON South Demonstration

- Hawaii-2 bare mux:
  - loan from ISPI project
  - had been characterized using SDSU controller
  - 4 channels @ 330 Kpix/s
- Goal: verify functionality, produce an image
- Sequencer patterns were translated from actual patterns used in ISPI
- First light obtained in September 5 (3 weeks after Aladdin@Tucson)
System Demonstration – First Light
System Demonstration – First Light