



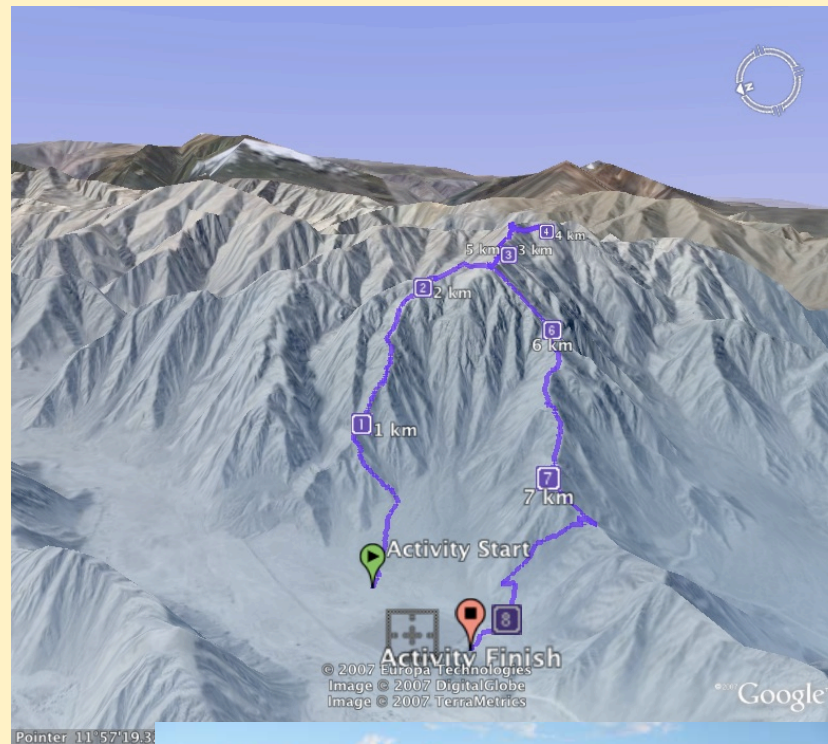
The Meri-Hill Optical Observatory

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Optical Activities in Peru

- FPI at Arequipa
- SOFDI at Huancayo (see. A. Gerrard's report)
- Optics at JRO
 - Where: MeriHill
 - What:
 - mini FPI (J. Meriwether/Clemson)
 - Imager (G. Swenson/UIUC)
 - When: This summer



Where?



Status

- Electricity: 3 kW line already installed
- Building: under construction
- FPI equipment: on its way
- Imager equipment: end of summer
- Internet: Wireless link
- First light: Expected by the end of July

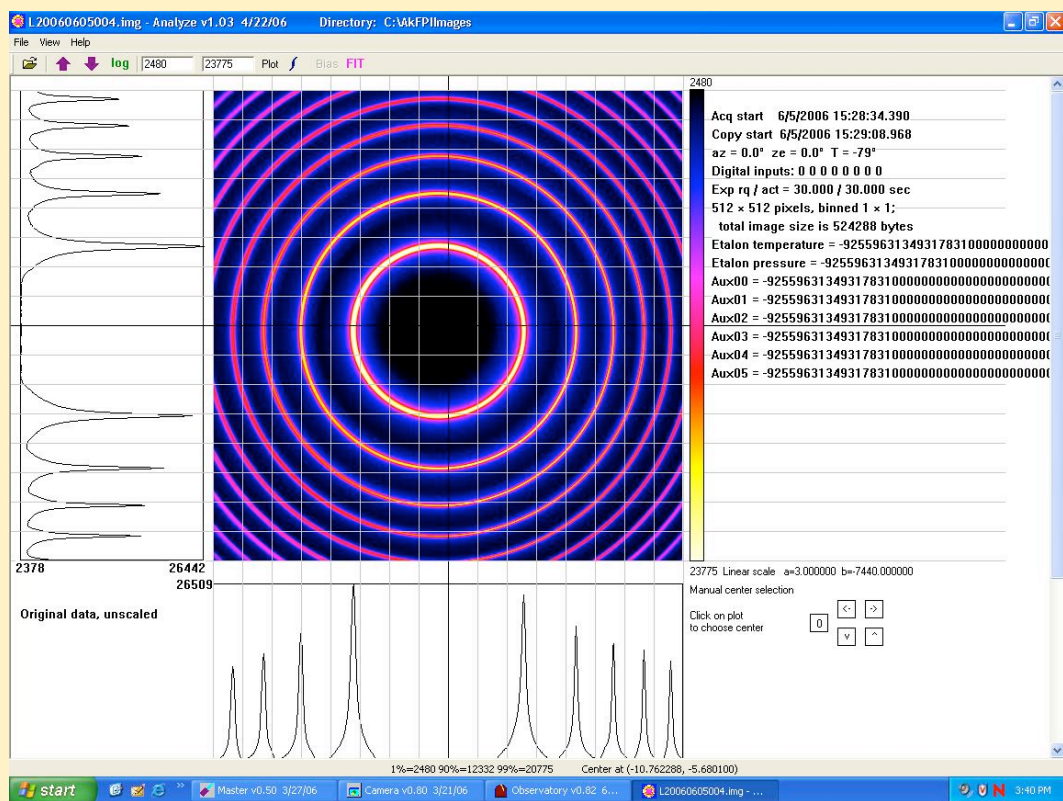


MeriHill Observatory

The JRO Fabry-Perot interferometer

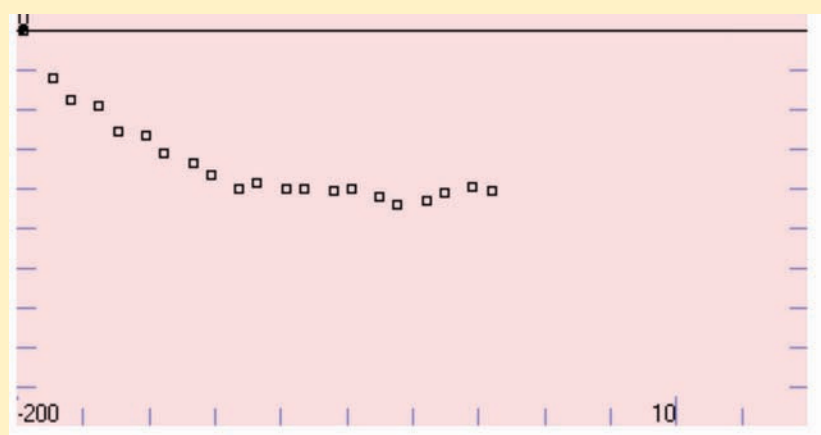


Student support helpful in construction and testing of FPI instrument. Also invaluable for analysis of observations.



A laser image showing the response of the JRO interferometer to the 632.8 nm HeNe laser line.

Spacer gap is 1.5 cm,
Focal length 50 cm
4 orders



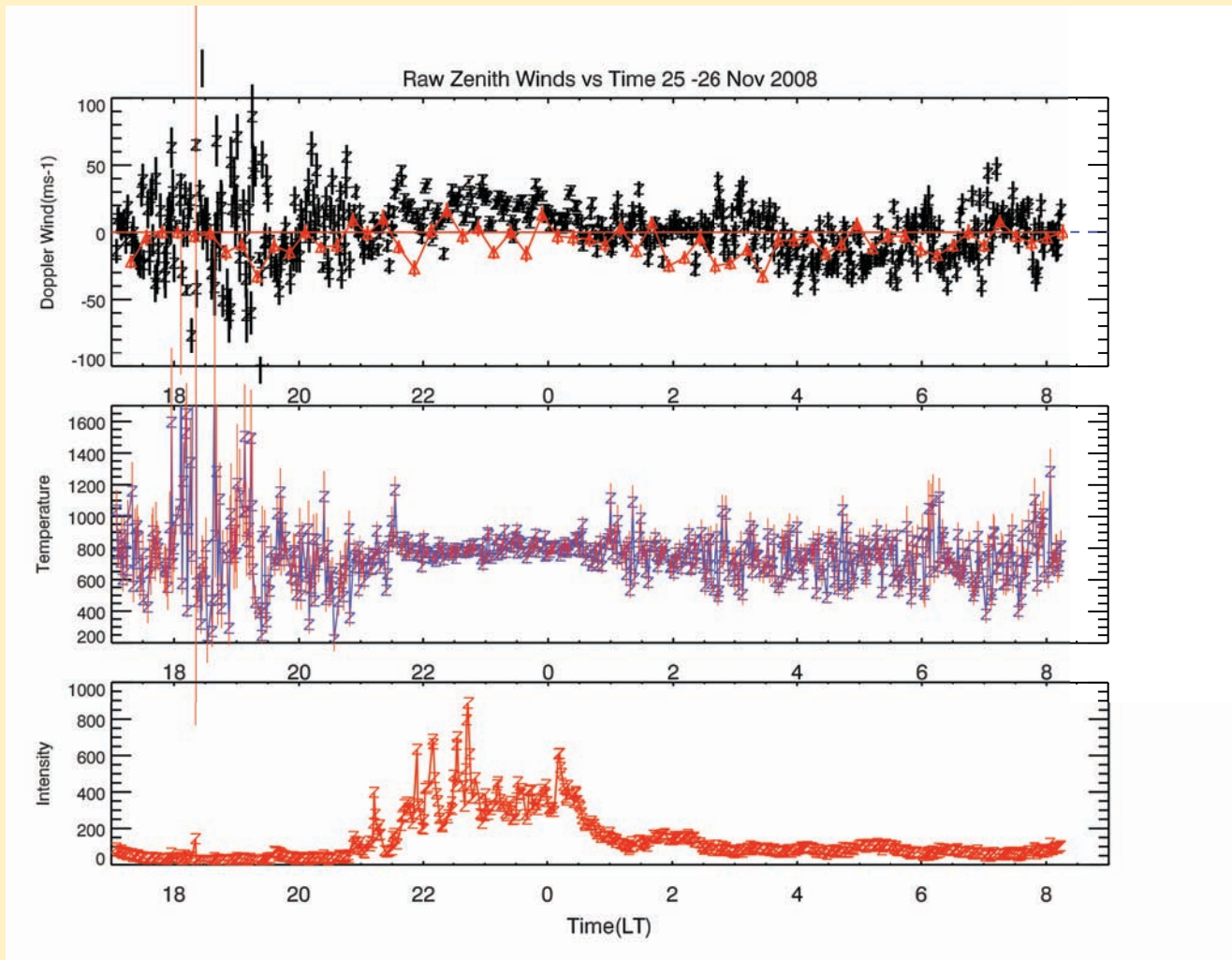
Long term drift study over 7 hours
Illustrating interferometer stability-

Real time analysis shows drift of 200 ms-1 over 7 hours- stable after 3 hrs.

Note- no thermal controller active during this nighttime run.



All packed – ready to go!



Example of vertical wind results (1 min exposure times) seen for an identical instrument at Poker – illustrates quality of data to be expected from JRO

