FLIR camera test winter 2006

Introduction

1. The objective is to record solar and lamp spectra at the same position as the Rockwell camera in a SPINOR setup to check for ability to flat field and sensitivity relative to the Rockwell.

Setup

1. Connect the camera to a computer of choice, either Harry or a NSO machine. The camera connects to the computer via an Ethernet cable and a USB cable. Recommended Ethernet speed is 1000BT (Harry has 100BT).
2. Learn how to drive the FLIR application so that single 50msec exposures can be recorded onto disk in raw format.
3. Use the SPINOR setup for the Pietarila/Judge observing run
4. There is no need for the ASP computers, cameras, or modulator.
5. The SPINOR beam splitter needs to be installed behind the slit if not already
6. Adjust the 'L' fold mirror to put light on the grating if not already
7. Continue to use the 308.57l/mm grating at the same incidence angle as used for the observing run, 56.35º.
8. Remove the Rockwell camera from the HSG with great care. Remove and set aside the 1.5648μm pre-filter. Cover the camera entrance window with the translucent plastic hemispheric cover. Refer to the observing plan on the web for all the Rockwell items to pack.
9. Place the FLIR camera on a mount sideways so the long axis is vertical
10. Put the 1.56μm filter immediately in front of the entrance window of the camera. If it arrived with a lens, remove it.
11. Check that the slit width is 50μm
12. Adjust the camera position in focus until lines are sharp. It is OK to adjust the grating angle to center the 1.5648μm line.

Measurements

1. Record a couple of images on the Sun at 50msec exposure time.
2. Record a couple of dark images at the same exposure time.
3. Insert the calibration lamp, set the slit width to 1500 m and record a couple of images
4. Move the data to some place accessible

Comments

1. David Elmore 303 497 1580 (303 669 7264 mobile)