Mosaics of Comet 9P/Tempel 1 Images from July 2005

Provider: B. Mueller

Reviewer: M.S.P. Kelley

Overview

- KPNO 4 m + MOSAIC.

- R-band and HB filter set.

- Images of Tempel 1, standard stars, and instrument calibrations.

Calibration

- Not all images can be calibrated, but most are bias and flat field corrected.

- Tables of conversions to flux density are provided.

- (Lien) FILTER_NAME should be names, rather than numbers (numbers belong in FILTER_NUMBER, if needed).

Targets

- Standard star (x, y) positions provided in tables.

  - Comet is readily identifiable, but not always trivial to centroid.

- Reduced images of the comet are extractions around it.

(Lien) Logs are postscript, what about ASCII versions?

(Lien?) Note, my tools cut off the edge. Is this an issue with the file?

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Date 07/03/05   Observers Farnham   Telescope KPNO   Scale 0.26   CCD Mosaic-1   Gain 2.00

Filters: 1 U   2 z   3 V   4 R   5 I   6 hboh1   7 hbuvc1   8 hbcn1   9 hbc31   10 hbbc1   11 hbc21   12 hbgc1   13 hbvc1   14 hbco1

Program

| Disk Image	Title	Filt	Exp Time	UT Start	Hour Angle	Air Mass	Focus	FW HM	Comments
b050703_001	Dome Flat C3	hbc31	15.0	23:07	+0:00	1.525			
b050703_002	Dome Flat C3	hbc31	15.0	23:12	+0:00	1.525			
b050703_003	Dome Flat C3	hbc31	15.0	23:15	+0:00	1.525			
b050703_004	Dome Flat C3	hbc31	15.0	23:18	+0:00	1.525			
b050703_005	Dome Flat C3	hbc31	15.0	23:21	+0:00	1.525			
b050703_006	Dome Flat RC	hbvc1	12.0	23:26	+0:00	1.525			
b050703_007	Dome Flat RC	hbvc1	12.0	23:30	+0:00	1.525			
b050703_008	Dome Flat RC	hbvc1	12.0	23:32	+0:00	1.525			
b050703_009	Dome Flat RC	hbvc1	12.0	23:35	+0:00	1.525			
b050703_010	Dome Flat RC	hbvc1	12.0	23:38	+0:00	1.525			
b050703_011	Dome Flat V	V	12.0	23:50	+0:00	1.525			
b050703_012	Dome Flat V	V	12.0	23:54	+0:00	1.525			
b050703_013	Dome Flat V	V	12.0	23:56	+0:00	1.525			
b050703_014	Dome Flat V	V	12.0	23:59	+0:00	1.525			
b050703_015	Dome Flat V	V	12.0	0:02	+0:00	1.525			
b050703_016	Dome Flat CN	hbcn1	20.0	0:22	+0:00	1.525			
b050703_017	Dome Flat CN	hbcn1	20.0	0:25	+0:00	1.525			
b050703_018	Dome Flat CN	hbcn1	20.0	0:28	+0:00	1.525			
b050703_019	Dome Flat CN	hbcn1	20.0	0:31	+0:00	1.525			

(Lien) Not all images are tracked at the comet rates, but dataset.cat says otherwise.
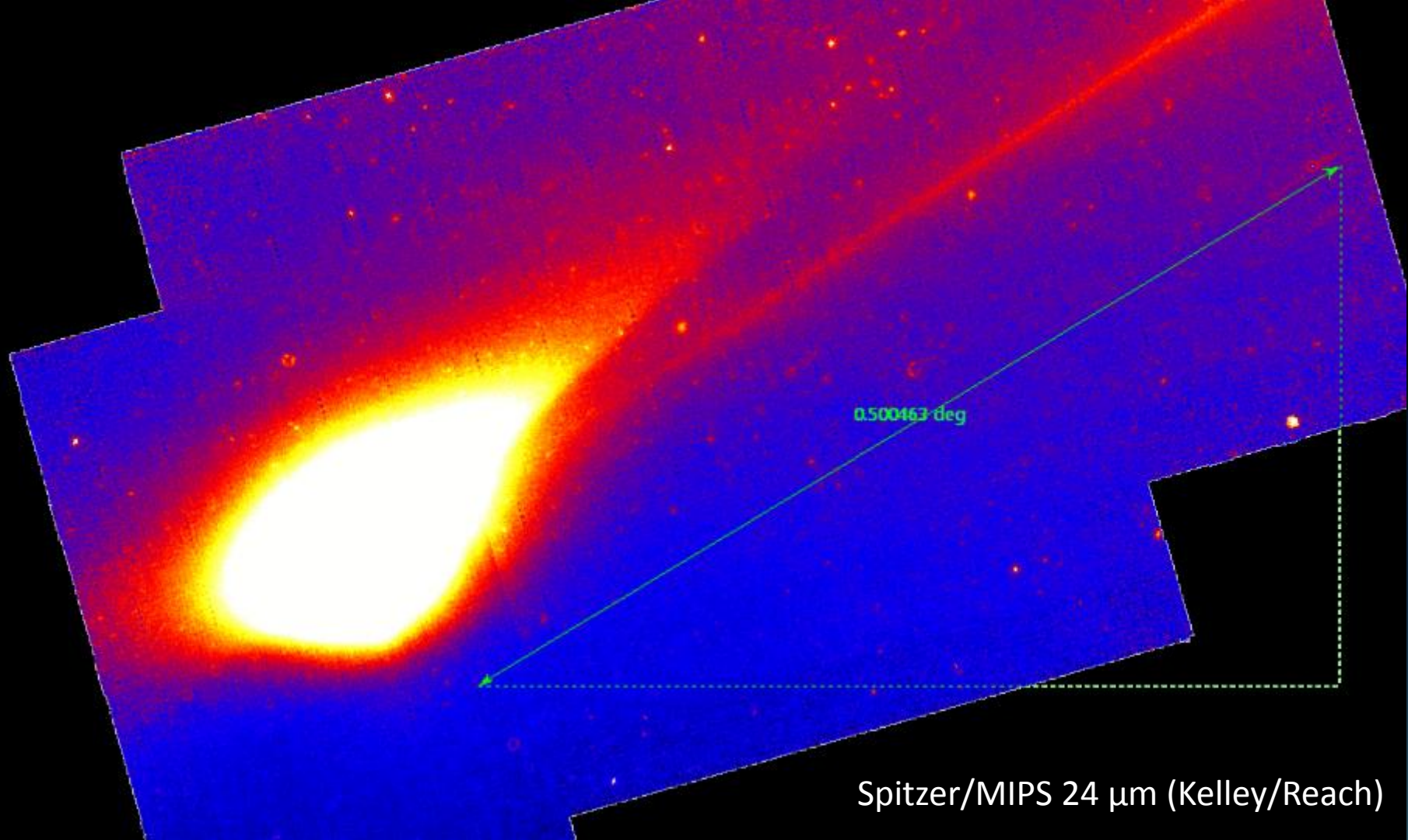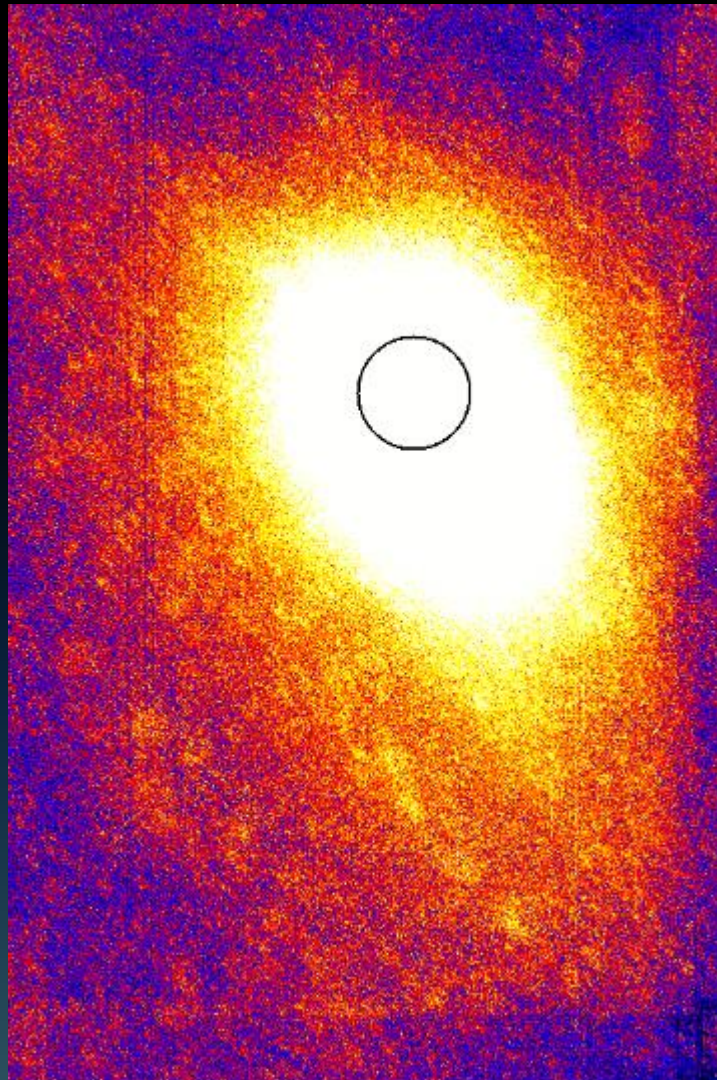
Two images from Jul 3rd:
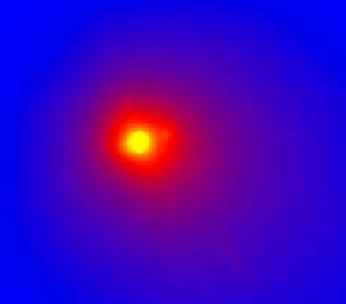
Tracking 240 s
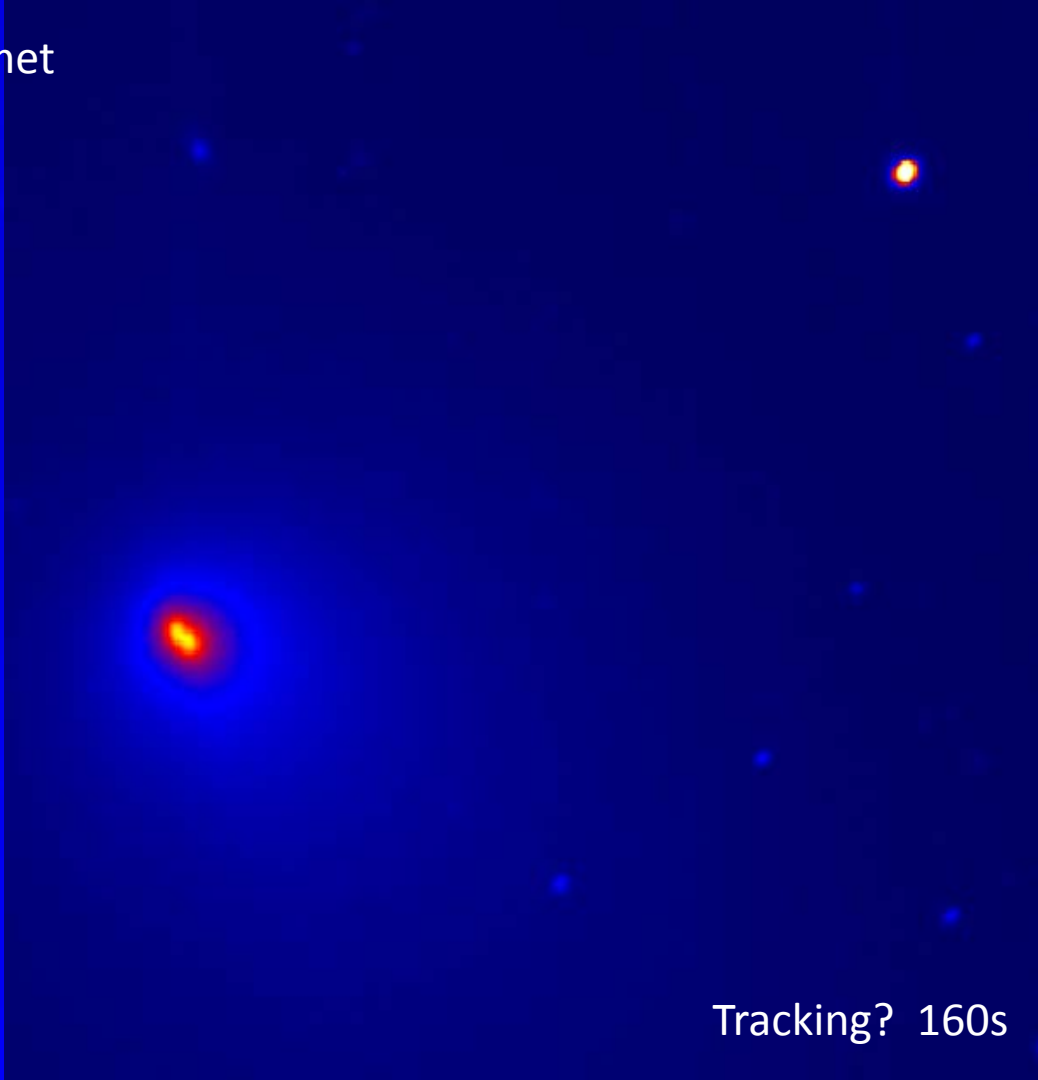
Tracking? 160s

Data exercise

- Combine all R-band images into a deep mosaic:

  – Remove image background.

  – Align and coadd.

- Can we find the comet's dust trail?

0.500463 deg

Spitzer/MIPS 24 μm (Kelley/Reach)

Median combination of all useful reduced mosaic images.

(Note the image long dimension is 13 arcmin).

Summary

- Straightforward dataset with few critical liens.

  - Other liens and minor comments are noted in my review write up.

- I consider it certifiable.