

1988-89

199

Dec 3-4 Stephenson, Sorensen & Padilla. Stephenson wired up hand paddle for downstairs in afternoon. Set up mini-video camera on 18" videotaped Mars. Seeing fair. Also setup on Jupiter, M42, M31 and the Double Cluster. Paddle worked great downstairs for guiding in comfort!

Dec 14-15 Poyer, Tom Cave, Connie Chrones, Barrett Duff.
37°F 47% Broken sky. Mars, but poor seeing. Did
SW wind visual variables. U Gem up. Started snowing
at 7:00 A.M. - We left in a hurry - no problem
getting out - but steep parts of road slippery.

Jan 10-11 Hello/good bye
J. Child here for asteroid photos, but
clouded over 20 min after I got here!
Storm on the way in, so I will ski back
out. All seems ok here, plenty of snow!
Toilet is great!

Jan 11-12 J. Child here again. Better! Cold but beautiful
night. Good seeing, but not very dark. Asteroid
~~10°F~~ confirmation photos for E. Helin. Telescope is
8°F working well and all ok. Some snow interfering
with dome rotation. Surprisingly little wind -
very calm here, but 70 mph winds at Outatio!

Jan 14-15 Jack & Maren Child here for asteroid & comet
16° photog. for E. Helin Card night, except for 9th moon.
6.5% Several photos of new ~~thorae~~ asteroid for 60, plus
photo of 1989 Helin-Roman 241. Everything in perfect
working order. Have really enjoyed being here these three
nights. This is a special place and has brought
me much peace and tranquility. Note: toilet disturbs
seeing when dome is facing south.

Feb. 1, 89 Poyer alone. Skied and hiked in - 2½ hours.
 Strong SW wind Too many melted spots to ski all the way,
 Partly cloudy but my new X-country skis are great.
 Did some variables, Mr. Vul'87 starting to fad again.
 SEEING VERY POOR! Photographed Per. Bob Evans new supernova in M66.
 It is about mag. 12.3. Fog kept forming briefly during the night after midnight, relative humidity went from 60% to 93%. Temp. to 22°F, strong SW wind all night and continued till I left on skis about noon Feb. 2. All OK in the dome. Out at 2:40 P.M. Hard going.

April 1, 1989 Stephenson, Webb, Rafferty - stopped by to 55°F (1 P.M.)
 Replace R.A. Slue Control box. No damage
 No Clouds From winter storms, everything looks operational.
 No Wind The Control box for eyepiece rotation is now at the base of the pedestal.

April 5-6 Poyer and Marty Poissant. Clear but bright night.
 45% 46°F Photographed M66 supernova at 15.0 mag. now.
 slight NE M51, M81-82. Seeing about average.
 wind flow

April 6-7 Poyer and Marty. Beautiful sunset and 24 hr. old
 43% 50°F moon crescent. Marty did time-lapse movie of it all.
 NO WIND Finished M81-82 telescope set. Good seeing.
 Hate to leave this beautiful weather for the 100°F + down below!

April 12-13 Poyer alone. Broken clouds. N.O. for photography.
 32% 42°F Did visuals on some interesting guys.
 NE breezes AX Per - up again at 10.9
 SS AVR - 13.0
 SN 89B 14.7
 Mr Vul 87 14.1 - this is brightening again!
 I tried out the video set-up - could track downstars on 11th mag. star, full aperture.

1989

I didn't have time to make prime focus set-up, but with care we should be able to track on 10th mag. or brighter. Image intensifier didn't seem to get stars much fainter than visual?

April 15-16 Jack & Karen Child w/Friends Neal & Shelly Betz (& children)
50°, windy High clouds, but observed moon & Jupiter. Poor seeing (2-3).
Beautiful weather. Sounded & painted East Deck.
Everything is A-OK.

April 22-23 Padilla & Sorenson. Cold & windy evenings. Set up scope to test 2 ccd cameras. Set camera at prime focus & also tried setting up with 4x5 camera through off-axis guider. Set on Jupiter in early eve. Seeing poor.

April 26-27 Poyer alone. Did variables early eve. Then tried
65% 22°F out Sorenson's SONY midget camera for guiding
light West wind a tricolor set of M51. Camera alone will only
SEEING GOOD pick up naked-eye stars on off-axis prism.
Camera + image-intensifier can go to 8th mag.
not faint enough for many fields - we need a
more sensitive camera! I did just barely
get a usable star and guided one plate of M51.
It was comfortable down stairs in view of the COLD.
We are on the way!

Supernova 89B is down to 15.4.

hr. Vul 87 is back up to 13.9.

(2 beds' linens down for laundering)

April 28-30 Padilla & Sorenson. Set up to test more video cameras.
Many high clouds all evening. Image intensifier
is necessary for faint stars. Cameras by themselves
don't seem to be sensitive enough.

202

1989

May 1-2, '89 Boyer alone. Finished last 2 plates of M51, tricolor set.
 45% 45°F Guided downstairs and watched all the late-late shows.
 slight W wind. Blue plate of 4-27 came out perfect!
 Mr. Vul 87 still holding in 13.7 mag.

5/21/89 Goff here. Have the turret with me for
 modification to install 40mm eyepiece.

5/27-28 J. & M. Child for photos of new Apollo
 WIND, WIND & WIND asteroid (Helix) 1989 JA. Observatory OK.

5/30 Turret returned w/ 40mm. The holder
 for the 40mm has a small set screw to
 adjust the sliding tension. It has a teflon
 button in it, so be careful if you have to
 remove the eyepiece that the button doesn't
 get lost.

W. Goff

June 1-2 Boyer, Stephenson, Sorensen, Padilla, Scoville, and Ranger
 47% 46°F Joanne Webb. Tried out Steve Golden's
 some W wind computer, and normal (straight thru) CCD camera.
 Needed image intensifier - got to 13^s mag.
 Very useful for guiding to 8th mag. downstairs.
 Did some visual variables. 2 plates of V404 Cyg.
 Scoville's first video guiding!

May 31 - June 1 Ford & Scoville. No wind shy ca
 0.8, Temp. 54°. Obs'g vars. ^{from} ca. 11 PM till
 dawn like: PD 9 est's, CES 11 est's.

June 1-2. Scoville & Goff. Obs'g vars.; CES 6 est's.
 Goff ca. 4 est's.

1989

203

June 2-3. Scovil, Ford, Goff. Obs'g var's ca. 9:45 PM PST till 10:50 PM. Winds too strong to continue. FD est's = 3, all sanctum. Temp. 56°, poor seeing. Scovil est's

June 3-4. Scovil, Ford, Bilodeau. Temp. 50°, light wind, increasing to too much by 1:30 AM PDST. Scovil est's = 14, (till dawn) FD est's = 3 (quiet ca 1:30).

June 4-5. Ford, Scovil, Goff. Obs'g var's: FD est's = 8; Scovil est's = 13. Obs'g (for only second time) newly mounted 40mm. low power eyepiece mounted on eyepiece turret - a vast improvement over original low-power eyepiece. Obs'g stopped by dawn lite 4 AM (ca.) PDST. Temp. 48° - 38° - cold! Light wind at end of obs'g, heavy wind earlier.

June 5-6. Scovil alone. Var's est's = 12. Obs'g till dawn lite June 6.

June 6-7. Ford, Scovil, Goff (until midnite). Var's: FD = 13; Scovil = 14. Sky = ca. 0.8 Stopped by dawn lite 3:55 AM PDST Temp. ca. 50°. Crescent moon, W

June 7-8. Scovil alone. Var's est's = 16. Obs'd till dawn lite.

June 8-9. Scovil + Ford + Goff. Scovil est's = 19 (till dawn lite); FD est's = 2 (till midnite only); Goff est's = 2. (till midnite only). Temp. 55°, no wind, moon crescent W. Sky muggy, ca. 0.7. Mounted old G-T. finder, used for first time.

204

1989

1989

June 9-10. Ford, Scovill, after moonset, ca. 11 PM PDST. Temp. 58° , very light to zero wind. FD ext's = 10; Scovill ext's = 12. Obs'd till dawn like 3:50 AM PDST. Good sky & seeing fair.

June 29-30 Observed Saturn under poor to very poor "Seeing" FR Royer Rigid up video camera for coming Sun-Mond July 2-3 occultation of 35 Sagittarius - Sky exceptionally clear and dark - FR Royer observed two variable stars, those present - FR Royer, Tom Care, Dr Barnett Duff, Connie Chrones - Observed until 1 AM PDT.

July 23* Padilla, Sorenson, Golden, Stephenson & Webb. Set up for video recording of Saturn occultation of 5 mag. star. Used black & white CCD camera. Was a spectacular event watching the star fade & brighten unexpectedly in going through the rings! A few high cirrus did go by during the evening & seeing was variable - from excellent to poor. Also, some light wind later in the evening.

July 12-13 Royer + Medderhof. Visual and two plates of And. Galaxy. Transparency excellent, seeing fair. Some SW wind in early evening. Checked out possibility of mounting cage rotor motor on solid part of tube - but not possible since it cannot turn cage there. Chain would have to encircle cage directly - not worth the trouble. Reinforced cage rotor with steel strap, it works fine.

- July 22 Poyer, Stevenson, Sorenson, Padilla, Webb.
Removed 18" mirror for re-aluminizing -
went very easily. 2 hour job.
- Aug. 1-2 Poyer, Tom Cave, Connie Chones. Reinstalled
25% 55°F mirror. You need 3 beer-cans - 16oz.
SW wind to move mirror in and out of cell - will
store them in mirror box. Also big wooden
box in dome necessary to receive cell from
scope. There is a noticeable difference in image
brightness and limiting mag. - can get to 16th OK.
- Aug. 2-3 Poyer - Cave - Chones. 1 plate of SN in M58, ^{~13.0}
25% 55°F Visual of Saturn and deep sky objects - they look
SW Wind better now! Transparency good, seeing fair.
- Aug. 3-4 Poyer alone. Did tricolor of M17.
25% 52°F Did tricolor of Cygnus Loop with 4" f5 outside,
SW wind Super night for transparency - seeing fair.
dying about Saw 3 Perseids, one behind me - it was a fireball that
midnight lit up whole area, and left a broad train.
Saw Comet Broosen - meteor of about 7th mag.
Coma only - no tail yet. Looks promising next month.
Looked for fading of SEB on Jupiter - but
seeing terrible that low - could only make out
one belt, though.
- Aug. 4-5 Poyer, Padilla, Sorenson. Did variables visually.
52% 58°F One plate of M17 just before alto-cumuli
drifted in from SW. We noted improved brightness
and contrast with new coating.

1989

8/5/89

Off here with Todd Dwyer and Gene Purdick from R.A.S. Lots of clouds in and out, seeing was poor, couldn't do much.

Aug 16/17 FR Royce, TOM CAVE - FR Royce obtained 28 RAH 8 Plates of the Eclipsed Moon Rising 52°F low Seeing (HSA) 2-5 at best observed Saturn with 375X on 18" seeing same flashes of fine detail at 3 AM UT - FR Royce obtained two (2) Position plates of new asteroid which will pass Earth at about 2 Million Miles on Aug 24-25 - 1 Plate of Comet Borisen-Metcalf - WSH seeing had been Betbi

8/27/89 Off here with Bob Stephens for visuals, good night, excellent seeing.

Aug. 30-31 Royce, Ron Blandford, Ryan Seity.
30% 50°F Used 5" guide scope + CCD camera and guided SW moderate downstairis - good to 7th magnitude. Guided by wind the boys! Did NBC 6888 - tricolor, 2 plates of And. Gal. for nova patrol. V 371 Ori for new chart, first 2 plates of Comet Borisen-Metcalf. It is very blue-green in the head - long, thin ion tail. Not quite naked-eye - about 6th mag.

Sept. 3-4 Royce, Jim and Paulette Smith and 23% 55°F 3 children. Did visuals early P.M. slight SW low WIND Up at 3:30 A.M. for the comet. Very stellar - had binocular object, since head is very small. Still blue-green, and stronger ion tail. Did color-separation plates of it.

1989

207

Sept. 13-14 Royer alone. Almost full moon, but excellent
 NO WIND transparency and fair seeing. Did visual obs. of variables.
 38% 50°F Also quick tricolor plate set of Comet Borissen-Metcalf.
 It is now into dawn light, but still a nice
 sight - the head has shrunk to 2-3' of arc

Sept 16 Stephenson, Webb - stopped by to make
 wiring schematic of Cage Rotator

Sept. 27-28 Royer alone. M 31 plates for nova search.
 55% 50°F Seeing poor - some clouds and haze.
 NO WIND Guided off-axis CCD camera - worked well!

Oct. 11-12 Royer alone. Did some visual obs.
 47% 45° Painted base of dome, since I can't get
 NO WIND a contractor up here - am still waiting
 CLOUDS on a time for spraying dome interior!
 At least I checked outside weathering.

Oct 18-19 FR Royer, C. Chrusca, T. Care - Painted inside of
 47°F Dome, observed and photo new comet, observed
 43% NO Saturn, "Seeing fair" - FR Royer Observed some.
 WIND Variable other

Oct. 25-26 Royer, Painted dome is 'dark' - works well.
 20°F 85% Did photography. Strong winds early eve -
 died down by midnight. Clear, but sky very bright.

Nov. 1-2 Royer. Clear and cold - no wind. Did variables,
 50% 25°F and photography. Hv. Sct 89 at 12.0 - is varying
 NO WIND quite a bit. Photoed Comet 89r in morning sky,
 $\frac{1}{2}^\circ$ ion tail - not too spectacular yet.
 Replaced small diagonal - it is now enhanced
 aluminum coated 96% in blue light - 94% in red.

208

R89

Nov 4

Pedilla, Sorensen, Stephenson & Rafferty. Usual observing. Clear, but cold & windy. Transparency fair, seeing poor.

Nov. 7-8

55% 33°F

NO WIND

Poyer. Did visual variable observations in early P.M. Transparency and seeing good. Could easily reach into 15th mag. even with 1st quarter moon - new coatings are evident. Old nova Vul 87 still hanging in there at about 14th mag. - a strange one!

Photographed Comet 89r (~~89~~ OKAZAKI-LEVY-RUDENKO) in morning sky - not naked eye yet, and no tail visible in 7x50. Probably about 6th mag., with mostly an ion tail, very blue in scope.

Nov. 29-30

20°F 53%

some breezes

Poyer. Did visuals of variables - Mr. St. 89-12.4 RC&B at 6.5 - still not fully recovered. Did photos of M 31 - TV guided. 2 photos of comet Okayaki - Levy - Rudenko. Not naked-eye about 6.0 mag. and moving rapidly south.

Sky is awfully bright - there is an EAST-wind condition, and city lights on both sides of the mountain are reflecting from air - some dust.

Dec. 2-3

30°F 50%

5 knots breeze

Webb and Stephenson - Photographed M 31, M 41/42 using 8" scope. Very cold going. 18" scope was not set up. The lights were on at the ski-lift - unfortunately.

Dec. 9

Stephenson and Webb. Came up to work on cage drive. Have taken motor-controller home, to complete work. Controller will be reinstalled next Saturday Dec. 16. In. Stephenson.

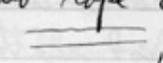
1989

209

Dec. 16
26°F 35%
R.H.

Stephenson - finished work on cage rotation.
Cage motor can now be controlled from the Master Control Box at the base of the pedestal, or at the orange colored control paddle that also controls R.A. slew. ON-OFF switch on master control box must be on to activate system.
Visual and photo of Jupiter. Jn. 5.

Dec. 19-20
24°F 41%
some NE
breezes

Poyer. Clear, E wind condition.
Did visual variable stars in early P.M., μ Cent. 89 at 12.8
o Ceti at 4.5, U GEM at 9.3.
Did video tape of Jupiter, SEB looks like a train track , 2 thin dark lines.
Photographed Comet 89a1 (lots of comets this year), Roseth - Brewington at 3.5 mag. - naked eye, but in dawn light. About 1° tail in binoculars.
THANK YOU JOHN STEPHENSON for the beautiful cage - rotation control job!

Dec. 26-27
34°F 50%

Poyer, Padilla, Sorensen. Cloudy.
in A.M. - R.G.B. 6.2. Looked for comet 89a1 in dawn light - but clouds in the way. It is gone after today.

Dec. 27-28
28°F 50%
SW wind
strong

Poyer, Padilla, Sorensen. Clearing + strong SW wind.
Did 2 plates using image-intensifier in off-axis mode - worked well with 6 mm eyepiece.
Guided downstairs in comfort as wind increased, and watch "Back to the Future" on VCR!

Dec. 28-29
18°F 80%
no wind

Poyer and Padilla. Light snow earlier today. Clear most of night. 2 more plates of Orion neb.
Not too impressed with image-intensifier - doesn't get very faint even at full 18" aperture in 10th Mag.
Left in a hurry as snow began falling at 8:00 A.M.
The road was icy - but 1" powder on top made traction.