

92
1976

Dec. 15 Marcaro + Royer. Clear night - some gusts of East
16 Wind 36-30° F 45% humidity

Did tri-color plates 18" and 4" of
Bubble Neb. NGC 7635 with autoguider. No
problems! Seeing only fair.

Dec. 21 Royer and Father Frank Ribotta. Redid red plates
22 on Bubble Nebula due to dec. drift on
1976 previous plates. I think dec. relay got hung up
on previous long exposure. Seemed to be OK now
after adjustment. Went 100 min. Slight E wind
50% humidity 30° to 24° F No clouds. Seeing fair.

Bubble Neb. r.a. 23:25 dec. 60°55'

Blue = 48 min. Yellow = 54 min. Red = 100 min.

focus 45 focus 48 focus 6
long exposure shifted due to loose cables hitting sensor!

Dec. 27 Royer, Mc Hale hrs., Jerry Zimmer. Tricolor of Orion Neb.

28 r.a. 5:33 dec. -3:30

blue = 40 min focus 46 temp. 30° F

yellow = 46 min focus 49 45% hum.

Red = 75 min focus 8 some E. wind

Dec. 28 Royer + Padilla - Clouded out - Had set up

29 to do Monoceros tri-color as Orion

r.a. 6:28 dec. +9:40

— II —

1977

Feb. 9 Royer + Padilla. Happy New Year! Walked and skied
10 in over patchy snow cover - took 1 hour. Building
high-curvis clouds allowed no work tonight.
Everything in good shape - no leaks!

Feb. 16 Royer + guests - Jim Kertz, Sue Somers,
17 Jerry Will, Robert Mottel, Lisa Moscette

1977

Hiked in over melting snow packs - 1 hour. Warm - clear night with no high cirrus, but sky seemed very bright. Did tricolor with 18" + 4" astrophotograph of AE Aurigae and associated IC 405 emission nebulae. Took from 8:30 to 12:45. All systems worked perfectly. Used barbs. 50° F 45% humidity.

March 17

18

19

Father Royer, Jeff Macosse, Dave Domenici
 Chris Krustoff
 Vera DiBenedetto
 Jerry Hell
 Anna Kert

Stayed at W/W house last night due to snow-storm. Hiked in today over several inches of powder. Cloudless day.

Did tricolor on Monoceros nebulosity right at end of twilight. Clear - breezy 28° to 15° F. 60% to 90% humidity.

Did short tricolor of Saturn + Beehive Cluster. Set to do P Oph area at 1:30 A.M., but rising humidity reduced transparency toward horizon drastically. Scratched that.

Things to be done. Prime focus blue plate unfiltered 1 hour of AE Aur. Center on photograph in Burnham's book R.A. 5:12' + 34:20 Othe blue plate ruined due to primary mirror shifting - I corrected that with more gasket material in cell.

P Oph should be centered on R.A. 16:22 - 23:20' Orient camera E-W.

098 + 29 75 min.

IIaD + w8 50 min.

IIaO + w2B 40 min.

April 13 Royer and crew, Mike Peter, Ron and Rick Michaels.

14 Road is open! Snow mostly gone. Windy and partly cloudy night - seeing 0. Looked at Jupiter and Saturn - belts hardly visible.

94
1977

April 14 Royer and same crew. Clear + steady + no wind all night. Photographed:

40° F Beehive + Saturn 4" f5

50% humidity AE Aurigae 4" and 18"

RZ Leonis photovisual 18" + 4" 50 min. exposures.

P Oph in yellow 4" f5 - also red exposure, but had to cut exposure short due to pier.

April 16 Royer + Crew + Steve Padilla. Clear + no wind
46° F
50%
Photographed RR Cancer field, and completed P Oph tri-color set. All systems OK.

April 19-20 Royer + Crew - Marty + Roger Poissant, Allen Krupskij
Clear - no wind - 40 - 32° F, 45% relative Humidity
Betic blue plates of AE Aur. + nebulosity. - one hour.
Looked at Jupiter + Saturn - seeing average.
Did tri-color of whole tail of Scorpio. All systems OK

April 20 Royer + Crew as above. Jack Child of Orange Co. Astronomers
joined us for prime focus photography for supernova
search atlas.

40° F
45% hum
some wind in morning. High Cirrus objectionable at red exposure.

very light transverse
poor

Child did NGC 4826, 4725, 4736

10 min - 103 a/o unfiltered

Autograph of NGC 4725 region, blue plate - 20 min.
All systems + autoguider performed OK. Guider would
not guide on NGC 4725 - 10th mag. We tried!

May 18 Royer + Jack Child. Hiked in over 2 ft.
snow drifts. Partly cloudy 70% humidity
32° F. Moderate W wind. Started galaxy
photos - autoguider high voltage failed -
pilot lights go out with each 100 V increase.
Help Charlie. Finished manually. Increasing
clouds to dawn. One color shot of Venus + Mars

through the clouds. Jack improved TV aerial, so got something done.

June 9. Ford, Carpenter. Converted from photographic to visual set-up (removed guile refr. + Roger astrophotographic camera, balanced telescope for visual).

June 11-12 Ford, Bilodeau. Sky transparency good, seeing poor. Opened dome 10:40 PM PDST. Temp. 57°-51°. Light wind. Worked exclusively on sky-checks of new charts, and identification confirmations, using prelim. sketches + photographs. Obsns: FD = 11 fields, including 8 Sanctum vars.; Bilodeau = 12, including FD's + binocular est. on S Cep. Closed dome, 2:12 AM PDST June 12.

June 13-14 Ford, alone. Transparency good, seeing fair. Temp. 52°-48°. Opened dome 9:30 PM PDST. Moderately high wind, from W.; could work only in sky E. of meridian. Obs'd 7 newly plotted fields for sky-chk and ID of vars; then 11 vars listed as ft. currently. Total est's = 18, including 12 sanctums. Closed dome 01:40 AM PDST June 14. All equipment OK.

June 14-15 Ford, Carpenter. Opened dome 9:45 PM PDST. Good transpy, fair seeing. Temp 54°-50°. No wind at first, but increasing to troublesome by time of stopping obs'g 01:05 AM PDST June 15. Var. Star est's: FD = 8, including 7 Sanctums; CE = 4, all Sanctum. All equipment working OK.

June 15 8:30-9:30 PM PDST. Roger, Padilla. Opened dome, converted telescope to photographic set up, prepared for night's work (all photography).

96
1977

June 15-16 Royer, Pacella, Ford, Carpenter assisting. Took following photos w/ Royer astrophotographic camera + 18" focal-plane camera + 35 mm. wide-angle camera (color film):
Var. & fields for: UZ Her, SV Sco,
TW Sgr; HT Cyg. All hand-
guided; - (Kowal auto-guided temporarily not
working). Royer, Pacella stopped by dawn late
ca 4:00 AM PDST June 16th. Sky good, seeing
good, temp's 58°-52°, wind up toward dawn.

June 16-17 Ford, alone. Opened dome, 12 minute PDST.
Troublesome wind, could work only E. & S.E. sky.
Temp. 60°-54°. Seeing poor, transp'y fair.
Obs'd 4 new fields for chart-check + 9
scheduled faint vars, for total = 13 estimates,
including 9 Sanctums. Closed dome 3:15 AM
PDST June 17th. All equipment OK.

June 17-18 Ford, Bibdeau. Opened dome 10:40 PM PDST,
light wind, increasing. temp 60°-52°. Seeing poor
to fair, transp'y fair. Obsns: 7 new chart ID checks;
7 ft. list vars, including (over-all) 8 sanctums.
Closed dome 2:00 AM PDST June 18. At 1:50
AM (±) while sky lit up momentarily by light
from apparent fireball, to W. Did not see the
fireball, since we were in the dome at the time.

July 18-19 Ford, alone. Opened dome 11:30 PM PDST. Good
sky, light wind, not troublesome. Seeing & transp'y
fair. temps 50°-48°. Obs'd total of 13 ft.
list vars, including 8 sanctums. Closed dome
2:45 AM PDST June 19. All equipment
working OK.

1977

97

~~July~~ Ford, Annual. By all counts, one of the best nights on record, after a day (June 20) which was mostly cloudy and looked as tho the ensuing night would be likewise. No wind, temp. 61° - 54° , seeing excellent even w/ high-power eyepieces, transparency very good; crescent moon, setting. Obsns: FD total = 27 est's including 13 saturns; Annual total = 19, w/ 11 saturns. Good views of ~~Jupiter~~^{Venus} in AM sky, just before closing dome 03:35 PDST June 21. A truly gorgeous night!

June 24-25 Ford, w/ visitor Robert Herrup from L.A. Opened up ca. 10 PM PDST, viewed M13 + R Scuti + T Del fields, "demo" only for Herrup's benefit. Made est's on W Her (M13 field) + R Sct + T Del. ~~Closed~~ First open moon in sky. Temp. 58° . Light wind. Closed dome 00:30 AM PDST June 25.

June 25 Ford, w/ workman to cut weeds around bldg. 10-12 AM Job completed ca. noon. June 25th. Brought trash can down to W/W house, emptied it.

June 25-26 Ford, Bilodeau. Opened dome 00:15 AM PDST June 26; Gibbous moon, setting. Obsns: FD total = 12 estimates including 6 saturns; Belodeau total 13 est's, 6 saturns. Temp. 64° - 60° ; light wind no problem; seeing fair, transparency poor. A very comfortable night for obsq. Closed dome at dawn late, 04:20 AM PDST June 26.

June 27 Ford, alone. Secured telescope + obsly for "long term leaving". All power off except for elec. clock.

98
1977

- July 13 14 Roger and assistants, Chuck + Bill Mc Hale, Hector Arellano, Larry Mayer, and John Dodin. Perfect evening, some SW wind, 60°F 42% humidity. Opened with visitors from Santa Teresita Pines Camp - cf. guest book entry. Explained programs, and viewed B Leo and M8.
- Did blue and green plates of Mid-Scorpio and Cygnus loop area. Plan to do reds next night. Autoguider still under repair - so assistants spelled Father Roger guiding. Tracking was as good as ever seen.
- Did R Ps A for better chart - photovisual prime focus plate only.
- July 14 15 Repeat of last night - same clear conditions, etc. SW wind stronger. Hosted another group of girls from Camp Teresita Pines. Saw Saturn in evening twilight, M13, M8.
- Finished red plates of Mid-Scorpio, and Cygnus Loop. Scope tracking very good.
- July 17 Beldorean & Jans - 12:30 - 1:00 P.M. P.D.T.
Inspected bldg. all equipment OK.
- July 17 18 Beldorean - 7:30 P.M. to 3:28 A.M. (PST); No moon; Temp: 74°-62°; Wind out of the S.W. until 12:30, then tapered off to nothing; Clouds scattered on and off most of the night, had to look thru the "holes"; Seeing: Poor. Had some trouble with the circles, and wind, and clouds, etc. until 1:00 and then had two hours (approx) of easy observing. Totals 23 estimates with 9 sanctuums - faintest for night ~16.2 [184243 RW L+R].
- DISNEY
MOUSEKETEER
- July 20 21 Roger, Chris Mc Hale, Scott Craig, Andy Toth
Hosted Camp Teresita early evening - looked at waxing crescent moon. Signed many autographs.
- 60°F 45% Did trials of Barnard's 5 in Oph. and Dumbbell area in Ursa Major. Andy Toth tried out 7" f/4 Astro-Ektar. Some SW wind.
- Seeing better as night went on. Much glare to south.

1977

Nice tame rattlesnake was sitting next to John - much trouble getting him to move off!
her

July 21 Royer, Mc Hale, Craig, and Jack Child.
 22 Hosted again another group from Camp. Looked at moon, timed 2 occultations.
 60°F 45%
 very little wind Still much haze + glare to south. Photographed all night till dawn after moon-set. Jack Child did some hyper sensitized color emulsions at prime focus + on astrophotograph. - Good night.

July 22-23 Very nice night - no haze, dark sky 60°F 45% R.H.
 Finished TRI-COLOR for Royer; shot M57 and M31 w/4h hydrogen-sensitized Fujichrome. Also shot M31 with astrophotograph. J. Child Telescope tracking very well.

August 2 Royer and guests for visual observing. Moon + other objects
 3 Much high-circus, poor seeing. Made adjustments on astrophotograph lens spacing. Left astrophotograph at best possible focus. Left photo set-up - not knowing future use. Pleasant stay.

Aug 6 J Child for his. observ. & photography. Very
 7 Windy, early moonrise. Photo vic. Nova Lygnus for astrophotograph test.
 63°
 45%

August 12 Marcaio, Pieroth, Grover: Arrived 7:00 P.D.S.T.
 opened dome temp 76°F. Visual observing all night. Seeing 3-4 Bright sky, no wind. closed dome at 5:30. temp 70°

August 13 Marcaio, Pieroth, Grover: Visual Observing all night. Seeing 1. S.W. wind.
good night!!

100

1977

? Aug.

C. Carpenter + W. M. Crayen were here July 18.
Excellent nite. Observed Galaxies + Distant Nebula,
mostly - Left 2:30 A

Aug. 31
Sept. 1

Macario, Frank Ribotta, Roger. Moonrise at
end of astn. twilight - photographed same.
Visual estimates of R G.B. 13.5 and R Y Lgr 8.1
to bed at 11:30 to do Baden-Powell in
A.M. - Clear - some SW wind 55% 56°F.

Sept 7

Macario; Arrived at 1:00 am opened dome @ 1:15
temp 68°, 52% worked variable till morning;
seeing 3-1, no wind, transparency very good,
made 14 estimates, no clouds, closed dome
at 5:00 am temp 60°, 56%. Everything working fine.

Sept 7/8

Macario, Opened dome at 7:00 temp 80° - 52%
some SW wind. Seeing 2-3, no clouds, brighter
sky than last night, transparency was down
a little bit from last nite too, Made 26
estimates 10 were sanctums. Closed dome at 5:15 P.D.T.
temp 60° - 57%.

Sept 8/9

Macario, Opened dome at 5:15 temp 78° - 48%.
Closed dome @ 6:45 No Observations.
Everything in good working order. order.

Sept. 14
15

Royer, Macario, MacSween and Poissant, Roger
Tricolor of Veil nebula, and Calif. nebula.
Between sets looked at show objts for Gene Segal and
guests. 50°F 45% - normal SW wind
Seeing fair, transparency fair.

Note - Mounted Macario solar filter into scope
cover. Take care in uncovering scope.
Magnificent view of very extensive sunspot group

1977

on solar meridian. Naked eye group. Excellent resolution

Sept 15/16 Marcaio, Brines arrived 9.00 P.O.T. Very strong wind from S.W. + high clouds. Opened dome at 11:30, 48° , 46% visual observing till 1:00 closed dome because of -0 seeing and wind just too strong to work 42° , 46%

Sept 16 Marcaio, Brines Solar observing with filter took five exposure ^{over 1 hr} at $\frac{1}{350}$ " seeing! with S.W. wind. Everything ran OK.

Sept 17/18 Jack Child, John Sanford. Beautiful night! Low 42° , 60% RH. Most of night devoted to photog. at prime focus of 18". Shot NGC 6888, 253 and M.31. Sky clear all night, no wind. Telescope and equip. working very well.

Photographed Comet Kohler, 1977m in Corona Borealis with Astrophraph, (12 min 098) and at prime focus. Searched for 1977l, (Chernykh) but could not find. Jr.s.

Sept. 21 Royer and Marcaio. Comet Kohler - photographed poorly - no stellar nucleus. Finished tricolor of Calif. Neb. in Perseus. Marcaio suspected supernova in NGC 1275 $60''$ NE of nucleus 13.7 mag. Took photo - will verify. All OK (No Results!!)

Sept 24-25 Padilla and Sorenson. Visual observing until 2 am. Strong southwest wind + poor seeing. Used solar filter to observe sun.

Oct. 5-6 Royer, Maloney, Skinner bros. ^{Brian} Warm, cloudy, windy. Did photos, 35 mm, of sunset and midnight moonrise through the clouds. Tweaked in polar axis alignment a couple of minutes of arc, and shot test photo though

102

1977

break in clouds. All ok.

~~Oct 7~~

Oct 7-8

50° RH 50% @ 2am

J. Child, Dick Nordrum

High clouds all night

Did get good view of Comet KOHLER earlier:

No Tail visible, difficult to estimate magnitude
due to high clouds & sky brightness in west
but probably about 7-8th magnitude. Visible
in 10x80 Finder.

3:30 - Jupiter superb! (for about 10 minutes)

Oct 8-9

48° RH 80%

J. Child

Great night - Dark & Clear light wind towards north

Viewed Comet KOHLER again. Fairly bright, no tail

but nucleus seemed off-center. Took photo w/098

Seeing fair to good, transparency very good.

Photographed NGC 1275, Jupiter, Moon, and M31

Oct 9-10

Another SPLENDID night! not quite as dark..

48° RH 50% : Took another plate of comet KOHLER,
then spent rest of night taking photos of objects
for supernovae atlas. Got 87 objects, so night
was very productive.

And, after a weekend as nice as this, I'd
like to thank those who have so graciously allowed
me to use this Facility!

Everything A-OK 2:30 PM 10/10/77

Did notice some rust on top of dome door when
dome was open.

Oct. 12

13

Macario and guests to observe partial solar eclipse.
Photographed one frame per 5 min through solar filter
on 18". ED 200 500 and 1000/sec. and 250/sec. near limb.
Painted 18" cap + filter cover. — Roger arrived

1977

in P.M. - worked though night on tricolor sets:
 50°F 1. photograph 21:37 hrs. and +57°15 sec.
 45% 2. M 33 at prime focus. ~~Guider~~ Guided well
 No wind, transparency + seeing both good
 R CRB 154428 @ 12.3, RY Sgr 191033 @ 10.3

Oct 14/15 Beau.tiful night - LA fogged in Jack Child
 50° 45% Took photographs with WR 20 & WR 8 at prime focus
 of 18" to determine effect on exposure time.

Oct 15/16 Jack Child / John Sanford
 Photographed 11 NGC objects for supernova catalog
 with 18". Also photographed Stephan's Quintet.
 Another beau.tiful night - no wind, very steady about 5am
 observed Jupiter, Saturn, Mars - good detail on Jupiter

Slow motion dec intermittent (south?) - Finally stopped.
 Wire loose in control box. RA intermittent also (slow-motion).
 Cleaned & painted some rusty areas on dome door

Oct. 19 Marcaro, Rojo, Padilla, and guests Chris McHale and Randy Galarowski
 20 1st snow early evening, turning to rain. Cleared suddenly
 40°F about 1:00 A.M. Did tricolor 18" p? of Orion Nebula.
 90% hum. Marcaro did 6 variables. No wind - seeing improved
 markedly during night - dawn light view of planets
 Jup. + Sat. superb.

Oct 24/25 Marcaro, Padilla observed variables through
 high cirrus 15 observations. Some S.W. wind, seeing
 2-3 temp 45° closed dome @ 1:00 P.D.T. heading
 for home. "Good Night all."

Nov. 5 Ford, Jack Child. High winds, no obs'g. Worked on
 testing auto-guider for phot'y. Left obs'g ca. 11 PM
 PST.

104

1977

Nov. 6-7 Ford, Carpenter. Sky OK, seeing fair. Obs'd (FD) total = 17 vars, including 10 Sanctums. Temp, 34° , no wind. Stopped, 01:15 AM PST Nov. 7.

Nov. 7-8 Ford, Carpenter. Good sky no wind, Seeing fair Temp. 43° - 41° . Opened up ca. 9:30 PM PST. Obs'd total (FD) of 19 vars, including 12 Sanctums. All equipment working OK for visual work. Closed dome 2:45 AM PST Nov. 8, hazy spots in sky.

Nov. 9-10 Ford, Royer, Carpenter, Padilla. First half of night, all visual work, Sky very good, seeing fair, Temp. 43° - 38° , some wind toward end of obs'g (visual). Total vars. obs'd (FD) = 18 including 7 Sanctums + 3 new chart checks. Second half of night = all photographic, Royer alone. Photo'd second part of ^{mild} color neg. for Orion Nebula + new chart field = QS Ori for chart program. Royer worked thru till dawn lit, ca. 5:15 AM PST Nov. 10.

Nov. 11-12 Ford, Bilodeau. Good sky, fair seeing, light wind, comfortable obs'g at sleep. 48° - 44° . Obs'd total (FD) of 22 vars. including 14 Sanctums + 5 chart checks. Stopped obs'g at 04:30 AM PST Nov. 12.

Nov. 12-13 Ford, Bilodeau. Opened dome 10:20 PM PST. Total vars. obs'd (FD) = 17 including 9 Sanctums + 2 chart obs. Temp. 52° - 48° (mild!), no wind. Closed dome 01:30 AM PST Nov. 13 after looks at Jupiter w/ only fair seeing.

1977

105

Nov. 13-14 Bilodeau, alone. 7:45 P.M. - 3:45 A.M. (P.S.T.)

Temp: 47° - 34° ; No wind; Transparency good;
Seeing fair. No moon. 23 estimators, including
18 sanctums. 2 chart checks.

Nov. 14-15 Ford, Anna, Bilodeau. Hazy sky slowly clearing,
OK by midnite PST. Obs'd total of 24 vars (FD),
including 11 sanctums. Chart checking on 3 stars. Temp.
 50° - 46° , no wind. Seeing fair, transparency good.
Closed dome 03:00 AM PST Nov. 15.

Nov. ~~15-16~~ 15-16 Ford, alone. Very good sky, Temp. 52° , no wind.
Crescent moon, already set. Total vars obs'd = 15
including 5 sanctums. Seeing fair. Closed dome
05:15 AM, dawn lite, Nov. 16 PST.

Nov. 16-17 Ford, Bilodeau, Child, Royer, Marcario. Fair
sky, poor seeing, haze clearing completely by 11 PM
PST. Visual obsns: 11 total (FD), including 5
sanctums, 3 chart cks. Crescent moon, setting during
obs'g. Temp 50° - 46° . Photographic work:
(Royer, Child, Marcario), second half of night,
starting ca. 1:30 AM Nov. 17. New photos at
18" prime focus, for new charts: BS Aur; QS Ori;
also tri-color photos w/ Royer astrophotograph camera.
Closed dome ca 5:30 AM PST Nov. 17, after
repairs made to obs'g ladder including installation
of new set of casters for same.

Nov. 18. Ford, Bilodeau. 2:30 - 3:45 AM PST. Further
work on ladder, installed ca. 40 new var star
charts in file cabinet, viewed the sun thru
Marcario's filter on "pie plate" of telescope
tube cover. Only 3 spots visible, hazy sky.

106
1977

Nov. 28 Ford. Closed up dome, telescope, + obs by
for long-term leaving. 1:30 PM.

Dec. 7 Roger, Marty Poissant, Randy Gabowski, Tina Pisey
8 18° and 4' tricolor of Crab Nebula.

Auto-guider did not work - stuck closed in dec.
Guider manually. 40°F 45% SW strong wind
easing toward morning. Seeing poor. Transparency good.
Tina vacuumed all downstairs. Thanks!

Dec 10/11 Jack Child 38° 45%

Replaced burned out component in autoguider. It worked
until it was physically connected to telescope, then
burned out again. I suspect a grounding problem.
Pretty good night - some occasional ~~scattered~~ high clouds
but seeing was not bad. Photographed NOC objects
for supernovae atlas

Dec. 14 Roger and Marario. Began eyepiece projection all
night sequence of Jupiter. Gave up after 2 hours
because of very poor seeing. Did one astrophotograph
42°F 55% plate of upper Orion.
windy, ^{2W} strong

JAN 1-2 1978! HAPPY NEW YEAR!

Jack Child - 32° 70% RH

Scattered high clouds - but clear and
steady for about $\frac{1}{2}$ of night. Took
some pictures with Auto-guider. It
sounds like its working ok - pictures will tell.
Discovered that POLARITY is wrong on most
of upstairs wall sockets - could be dangerous!
Lights from Holiday Inn on Abe night. Bright
and very noticeable from here.