

the Atlantic Ocean through Angola, Zambia, Zimbabwe, Mozambique, across Madagascar to the Indian Ocean. Eclipse chasers want long totality and good weather. Jay Anderson of Environment Canada analyzes weather data and satellite images to predict weather prospects for eclipses. Prospects were great for the coast of Madagascar, totality was 2:22 long, and political strife was not a factor. Archer left at 5AM on June 17 and flew 5 hours from San Diego to NY. He had a 6 hour layover then 6 hours to Paris. He sat 8 hours, then flew 10 hours to the Madagascan capital, then on June 19 made the final hour in a DeHavilland Twin Otter to Morombe. Would he again travel 39 hours for a 2 minute event? No doubt, there is nothing on Earth like a total solar eclipse. The beach was a great spot. It attracted veterans of 6-8 eclipses. The Southern Milky Way with Sagittarius was glorious overhead, and there was no battle with lingering twilight as in the North. There was good observing at 6PM, and by 1/2 hour after sunset, the Milky Way was casting shadows. Still tired on eclipse day, he noted first contact and most of the partial phases did not change the ambient light much. It relentlessly got darker and darker, and finally cooled off as the Sun was nearly covered. Sharp-eyed viewers could detect some corona before total eclipse. There was a great Diamond Ring effect, and then a huge corona was revealed, with streamers everywhere. Prominences were abundant.. He lost it and was screaming, the experience was too emotional and visceral. He ran a roll of film through the camera over 2 minutes, being careful not to spend too long peering in the viewfinder. The view in binoculars was the best. The 13 degree elevation made the view very comfortable. The unaided eye view was also good, watching the shadow approach, stars appearing. Jupiter, Canopus and Sirius were obvious. One veteran observer watched it all through 100mm Miyauchi binoculars and snapped at anyone who got too close. Archer was careful to capture the 3rd contact ring, and watched the Sun set before 4th contact. He was treated to a green flash. Voyagers are plotting the next eclipse trip for Africa in December 2002, another 2 minutes of totality. Jay Anderson is heading to Australia, for 5 seconds of totality at sunset, a new wrinkle for him. Madagascar was extremely interesting. The jet from Paris landed in Tananarive, among piles of old airplanes, Antonov helicopters and long-grounded MIGs. The tiny terminal there dwarfed the building at their next stop, and at the coast they found shelters of palm fronds. Pilots were very good at setting their planes down. The planes had a few missing rivets. One pilot was inspecting a part closely, and Archer's wife offered some duct tape. He pointed and she looked closer . . . it was already duct taped. The culture and language arrived from Borneo 1500 years ago. The language shows a flagrant disregard for syllables. There is some African influence on the West coast. There are 6 sections to the country, and 15 million people. Fuel is charcoal, and forests are now 90% cut. The south of the island straddles the Tropic of Capricorn, west is arid, east is tropical. The west can go a year without rain, and is home to Baobab trees, bottles with branches. The animal life is unique, including 23 species of lemurs. These most primitive primates are like cats with hands. Ring-tail lemurs would sit on the porch and beg.

The aye-aye is a carnivorous lemur which pokes a bony finger into trees to retrieve insects. Archer's crazy guide Julian held it a bit too close, and got a finger stuck in his chest. Archer also saw dancing lemurs, indry lemurs, and a mouse lemur. These otherworldly memories play to the tune of a tubular zither. For eclipse and lemur views see photos by Vic & Jen Winter:
www.icstars.com/mad

WUTS 2001 by Dave Dunn

After getting a later than planned start I headed up to Foxpark Thursday early evening. Driving towards Jelm mountain I was treated to a intense lightning storm that I would soon find out passed over the observing site shortly before my arrival. Having planned to setup in the front field I had asked Steve L. to save me a spot, good thing too as I was able to squeeze into one of the last slots on the north side. It seems like we always have one night of heavy dew to contend with and Thursday was the night. Knowing it would be a short night anyway I limited my observing to the "ole favorites" which at Foxpark take on a whole new persona due to the darker, more transparent skies. I always manage to discover something new about an object at this site. Friday was spent locating friends that had arrived before I did Thursday and finishing setting up my campsite. The list for the trip to the WIRO observatory had filled up quickly and I decide to pass on going to give my spot to someone else, I did get to go last year and those images are still vivid in my mind. There was a BRIGHT fireball that I just caught as it fell behind the trees. The seeing was very good from 11:00pm till 2:00am then softened up. Most of the night was spent chasing down PN. These are some of my favorite objects to view from Foxpark due to the great conditions. Also observed were Uranus and Neptune, if I would have been thinking and caught Pluto I could have logged 7 planets Fri. night/ Sat. morning as I had gotten up at dawn and stepped outside to see Saturn, Jupiter and Venus before sunrise. Saturday had the usual feeding frenzy at the swap table then we were treated to 3 great speakers who gave speeches on the Deep Impact project, the Sloan Digital Survey and a talk on Mayan astronomy. Many great door prizes were handed out then everyone prepared for the nights observing. Some rather ominous clouds moved in at sunset that were attempting to thwart our plan for the evening. Feeling that drastic measures needed to be taken I attached a flash strobe to my scope and began blasting clouds out of the sky. Must have worked, by 10:30 most of the sky was clear. The one challenge of the night for me was Minkowski's Butterfly, unfortunately several folks decide to leave during the night which really hindered any chance of achieving and maintaining dark adaption. I did manage after 30 minutes of searching and dodging clouds I felt I had found it, in the process of changing to a higher power eyepiece a car in my line of sight blasted me with its backup lights. That was the last straw for me so I packed up my scope and decided to mooch views the rest of the evening with the help of some friendly spirits :-). Conditions finally did improve dramatically by 1:00am, did manage to hunt down some

galaxy clusters in Perseus. Arp 229 & 331 showed up to 9 faint galaxies. All in all a fun weekend out under the stars (except for the heavy vehicle traffic after dark, Marty?) and unfortunately the end of a great run of summer observing at Foxpark. Thought 9 nights this year should hold me off till next season.

See ya at Cactus Flats next new moon.

DD

See photos at:

<http://users.sisna.com/mcurran/11wuts/11wuts.html>

Forwarded from Susan Caplan

Night skies obscured by light pollution

-ABC News (Associated Press) and Nature Science Update Meandering canals, crumbling houses and graceful bridges all make Venice a magnet for couples seeking romance. But the Italian city's attention to details such as mood lighting makes it different in one more way -- it's one of the few cities where people can still see the Milky Way at night. According to the first world atlas of light pollution, being published in the Monthly Notices of the Royal Astronomical Society, more than 80 percent of people living in the United States experience no real night at all, seeing a few dozen stars if they are lucky instead of the more than 2,000 visible from unpopulated areas. Scientists from the University of Padua, Italy and the United States' National Oceanic and Atmospheric

Administration used global satellite measurements of light glowing from the top of the Earth's atmosphere to compile their data. They say that without more restrictions on artificial lighting, the luminous fog that now envelops much of the world could destroy the darkness around remote ground-based astronomical observatories in as few as 25 years.

Susan Caplan, Physical Scientist (Air Quality)

Local Astronomy Internet Group

"Astro-Colorado" is a Yahoo Group moderated by NCAS member Dave Larison intended to serve popular astronomy interests in the region. The site can also be used as a supplement to the NCAS webpage for announcements, discussions, and file uploads. Anyone can view the page contents, but only list members may post.

See: <http://groups.yahoo.com/group/astro-colo>

Software For Sale SkyMap Pro version 4. \$25

By Chris Marriot of the UK. Includes printed manual. Current version is Seven which goes for \$95 these days. Randy Moench, 7348 Poudre Canyon Hwy, Bellvue CO 970-491-8429

Best Looks

Moon Occults Saturn 9/10
By Jupiter 9/12
Mercury In SW, eves, by Spica 9/19
Venus In predawn E sky, by Moon 9/15
Mars Bright all month in Sagittarius
Jupiter & Saturn In E at dawn
Uranus & Neptune Evenings in Capricornus

Lunar Occulation of Saturn September 10

Saturn will disappear on the Moon's bright limb about 6:25AM, a bit before sunrise, and reappears about 7:45AM. A telescope will likely be needed to see these events in daylight, and a polarizing or red filter can help by darkening the sky.

A Few Iridium Flares

Calculated for Lemay and Trilby, Ft Collins

Date	LocalTime	(Mag)	Alt.	Azimuth
04 Sep	20:59:21	-8	53	105 (ESE)

From:

Dan Laszlo
2001 S Shields St Building H
Fort Collins CO 80525

TO:

International Space Station Passes for Loveland-Fort Collins September 2001

Date	Mag	Starts			Max. Altitude			Ends		
		Time	Alt	Az	Time	Alt	Az	Time	Alt	Az
07 Sep	2.6	05:29:17	10	SE	05:29:50	10	SE	05:30:24	10	ESE
08 Sep	0.3	06:06:46	10	SSW	06:09:50	46	SE	06:12:54	10	ENE
09 Sep	1.5	05:12:09	13	S	05:14:06	22	SE	05:16:37	10	E
10 Sep	-0.6	05:51:17	12	WSW	05:54:09	80	NW	05:57:21	10	NE
11 Sep	0.1	04:57:50	42	SSE	04:58:14	45	SE	05:01:18	10	ENE
12 Sep	2.6	04:04:15	13	E	04:04:15	13	E	04:04:50	10	E
12 Sep	0.1	05:36:41	21	W	05:38:22	40	NNW	05:41:25	10	NE
13 Sep	0.3	04:42:58	49	NE	04:42:58	49	NE	04:45:25	10	NE
14 Sep	3.1	03:49:09	10	ENE	03:49:09	10	ENE	03:49:11	10	ENE
14 Sep	1.0	05:21:34	22	NW	05:22:27	25	NNW	05:25:10	10	NNE
15 Sep	1.7	04:27:39	23	NNE	04:27:39	23	NNE	04:29:09	10	NE
15 Sep	1.9	06:01:14	10	NW	06:02:57	14	NNW	06:04:40	10	NNE
16 Sep	1.6	05:06:03	17	NNW	05:06:23	18	NNW	05:08:38	10	NNE
17 Sep	2.6	04:11:59	14	NNE	04:11:59	14	NNE	04:12:34	10	NE
17 Sep	2.2	05:45:35	10	NNW	05:46:53	12	N 0	5:48:10	10	NNE
18 Sep	2.0	04:50:15	14	N	04:50:15	14	N	04:51:54	10	NNE
19 Sep	2.3	05:29:26	10	NNW	05:30:36	11	N	05:31:46	10	NNE
20 Sep	2.4	04:34:14	12	N	04:34:14	12	N	04:35:04	10	NNE
20 Sep	2.1	06:09:00	10	NNW	06:10:58	15	NNE	06:12:56	10	NE
21 Sep	2.3	05:12:38	10	NNW	05:14:06	12	N	05:15:33	10	NE
22 Sep	2.7	04:18:09	10	NNE	04:18:09	10	NNE	04:18:18	10	NNE
22 Sep	1.8	05:51:48	10	NNW	05:54:16	20	NNE	05:56:43	10	ENE
23 Sep	2.2	04:56:18	13	N	04:57:20	15	NNE	04:59:16	10	NE
24 Sep	1.2	05:34:30	11	NW	05:37:15	29	NNE	05:40:06	10	E
25 Sep	1.9	04:40:23	19	NNE	04:40:23	19	NNE	04:42:42	10	ENE
25 Sep	-0.7	06:13:35	10	NW	06:16:45	75	SW	06:19:56	10	SE
26 Sep	0.2	05:18:45	31	NNW	05:19:56	50	NNE	05:23:03	10	ESE
27 Sep	2.5	04:24:51	16	ENE	04:24:51	16	ENE	04:25:46	10	E
27 Sep	0.1	05:57:15	18	W	05:59:09	35	SW	06:02:05	10	SSE
28 Sep	0.6	05:03:29	36	SE	05:03:29	36	SE	05:05:29	10	SE
29 Sep	1.4	05:42:16	16	SSW	05:42:16	16	SSW	05:43:29	10	S