

National Park Service - Island Astronomy Institute

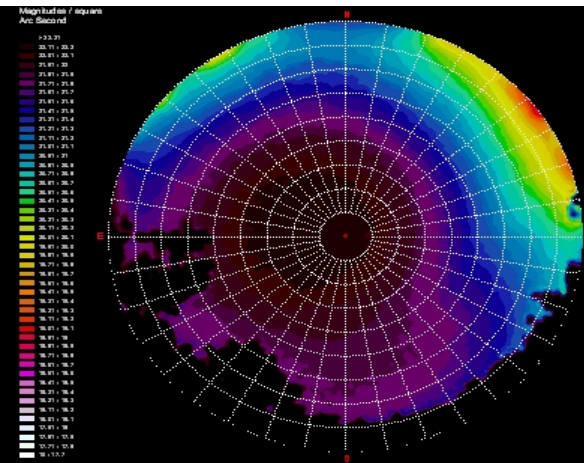
Night Sky Quality Monitoring Report



Report date: 5/2/2008 by: Jim Cormier

PARK:	Acadia National Park	EQUIPMENT:	Maxcam#2 35mm, Bessell V Band#6084
SITE NAME:	Schoodic Head Overlook	OBSERVERS:	Jim Cormier
LONGITUDE:	-68.0525	AIR TEMP (°F):	41
LATITUDE:	44.3514	REL HUMID (%):	55
ELEVATION (m):	130	WIND SP (mph):	5
DATE (UT):	May 2, 2008	CCD TEMP (°C):	-10
TIME START (UT):	1:37:33	EXP (seconds):	10
DATA QUALITY:	Very Good	BORTLE CLASS:	3
		ZLM:	7.2

NARRATIVE: Site view is open to the north with an all encompassing view from west to east. All major light pollution sources in the region are visible. One very bright light coming from Winter Harbor is particularly bothersome. Lights from Jackson Laboratory were partially blocked by a nearby tree. The view overhead and to the south and east are magnificent though partially blocked by tree canopy. SQM readings averaged 21.86 mags/sq arcsec. Transparency was average, but stars beyond 7th magnitude were observed. Breathtaking views of the Milky Way were seen with numerous structures visible, including the "Prancing Horse" and the Milky Way's bulge into Ophiuchus. This was the case even though the Milky Way was only 45 degrees above the horizon.



SKY BRIGHTNESS DATA

Data Set Number	Time (UT)	Extinction coefficient (mag/air-mass)	Std Err Y Extinction Stars (mags)	Zenith (mag/sq arc-sec)	Whole Sky (mags)	Sky Above 20° Altitude (mags)	Brightest (mag/sq arc-sec)	Darkest (mag/sq arc-sec)	Link to Sky Maps
1st Start	1:37:33			22.13					PAN
End	2:07:20	0.286	0.047	22.18	-7.01	-6.32	19.11	23.81	HEMI
2nd Start	2:24:23			22.26					PAN
End	2:54:11	0.307	0.044	22.24	-6.95	-6.26	19.17	23.87	HEMI
3rd Start	3:11:13			22.27					PAN
End	3:41:02	0.319	0.044	22.28	-6.91	-6.23	19.28	23.91	HEMI
4th Start	3:58:04			22.33					PAN
End	4:27:54	0.307	0.047	22.30	-6.88	-6.21	19.34	23.84	HEMI
5th Start	4:44:56			22.34					PAN
End	5:14:44	0.310	0.046	22.30	-6.86	-6.21	19.39	23.86	HEMI
6th Start	5:31:46			22.31					PAN
End	6:01:35	0.301	0.047	22.28	-6.88	-6.24	19.40	23.86	HEMI

LIGHT DOME DATA

City	Distance (km)	Azimuth	1st Data Set Brightness (mags)
Bar Harbor	13	285.3	-4.01
Ellsworth	44	306.6	-4.17
Winter Harbor	5	333.3	-3.58
Milbridge	25	33.7	-1.78
Machias	60	48.9	-0.77
Total			-5.38

