

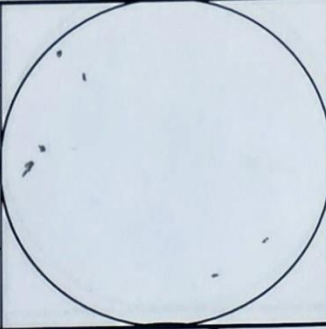
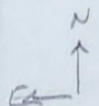
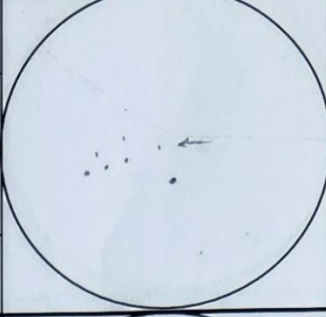
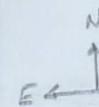
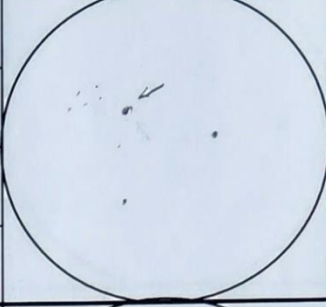
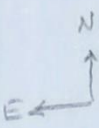

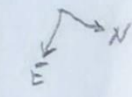
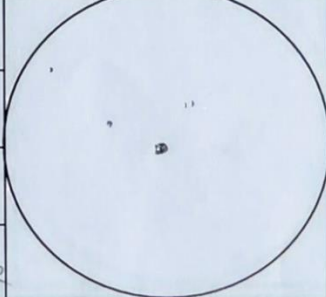
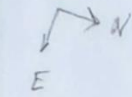
## **Mike Hotka's Solar Neighborhood 30 Binocular Observations**

I have observed 30 Solar Neighborhood stars with my 8x50 binoculars from various locations in Colorado.

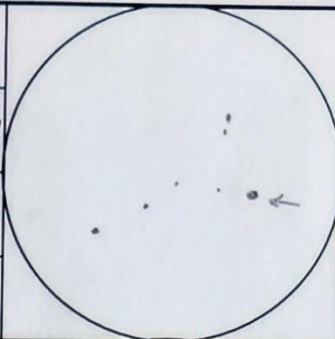
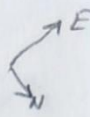
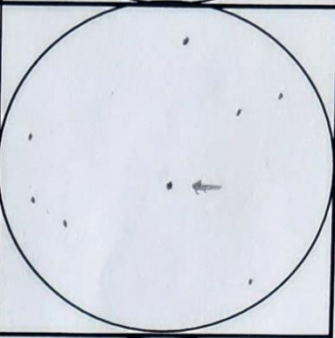
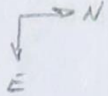
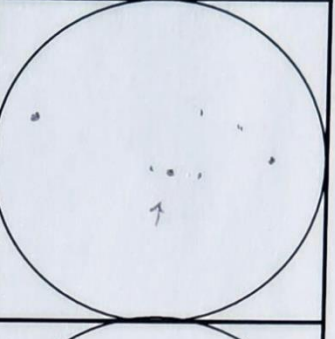
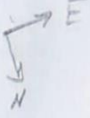

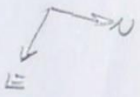


I am a member of the Longmont Astronomical Society. Please have my name read Michael A. Hotka on my certificate.

My 30 binocular observations are on the following pages.

Stars of the Solar Neighborhood Observation Log

AL # 288	Name	Constellation	Vmag	Distance ly		
	12 Oph	Oph	5.77	32.25		
	Star Type	Location	Latitude	Longitude		
	K1	Near Deer Trail, CO	N 39° 38.6'	W 103° 55.7'		
Date	Transp SQM or Transp NELM		Seeing			
9/23/22	Good		Good			
Time	Instrument and magnification		Color			
7:44 P	10x50 Binos		Blue-white			
AL # 4	Name	Constellation	Vmag	Distance ly		
	Barnard's Star	Oph	9.51	5.96		
	Star Type	Location	Latitude	Longitude		
	M3.5	Near Deer Trail, CO	39° 38.6'	W 103° 55.7'		
Date	Transp SQM or Transp NELM		Seeing			
9/23/22	Good		Good			
Time	Instrument and magnification		Color			
8:25 P	10x50 Binos		Reddish			
AL # 66	Name	Constellation	Vmag	Distance ly		
	70 Oph	Oph	4.03	16.67		
	Star Type	Location	Latitude	Longitude		
	K9	Near Deer Trail, CO	39° 38.6'	W 103° 55.7'		
Date	Transp SQM or Transp NELM		Seeing			
9/23/22	Good		Good			
Time	Instrument and magnification		Color			
8:31 P	10x15 Binos		Bluewhite			
AL # 124	Name	Constellation	Vmag	Distance ly		
	xi Boo	Boo	4.68	22.02		
	Star Type	Location	Latitude	Longitude		
	G7	Near Deer Trail, CO	39° 38.6'	W 103° 55.7'		
Date	Transp SQM or Transp NELM		Seeing			
9/23/22	Good		Good			
Time	Instrument and magnification		Color			
8:41	10x50 Binos		white			
AL # 159	Name	Constellation	Vmag	Distance ly		
	Vega	Lyr	0.03	25.03		
	Star Type	Location	Latitude	Longitude		
	A0	Near Deer Trail, CO	39° 38.6'	W 103° 55.7'		
Date	Transp SQM or Transp NELM		Seeing			
9/23/22	Good		Good			
Time	Instrument and magnification		Color			
8:57 P	10x50 Binos		Blue White			

Stars of the Solar Neighborhood Observation Log

175	Name	Chi Dra	Constellation	Dra	Vmag	3.58	Distance ly	26.27			
	Star Type	F7	Location	Near Deer Trail, CO	Latitude	39° 38.6'	Longitude	w 103° 55.7'			
	Date	9/23/22	Transp SQM or Transp NELM		Good		Seeing				Good
	Time	9:12P	Instrument and magnification		10x50 Binocs		Color				Blue white
191	Name	Mu Her	Constellation	Her	Vmag	3.42	Distance ly	27.18			
	Star Type	G5	Location	Near Deer Trail, CO	Latitude	39° 38.6'	Longitude	w 103° 55.7'			
	Date	9/23/22	Transp SQM or Transp NELM		Good		Seeing				Good
	Time	9:21P	Instrument and magnification		10x50 Binocs		Color				Blue white
79	Name	Abafi	Constellation	Sig Dra	Vmag	4.68	Distance ly	18.79			
	Star Type	G9	Location	Near Deer Trail, CO	Latitude	39° 38.6'	Longitude	w 103° 55.7'			
	Date	9/23/22	Transp SQM or Transp NELM		Good		Seeing				Good
	Time	9:35P	Instrument and magnification		10x50 Binocs		Color				Blue white
68	Name	Altair	Constellation	Aql	Vmag	0.76	Distance ly	16.72			
	Star Type	A7	Location	Near Deer Trail, CO	Latitude	39° 38.6'	Longitude	w 103° 55.7'			
	Date	9/23/22	Transp SQM or Transp NELM		Good		Seeing				Good
	Time	9:47	Instrument and magnification		10x50 Binocs		Color				Blue white
148	Name	Fomalhaut	Constellation	PSA	Vmag	1.16	Distance ly	25.11			
	Star Type	A4	Location	Near Deer Trail, CO	Latitude	39° 38.6'	Longitude	w 103° 55.7'			
	Date	9/23/22	Transp SQM or Transp NELM		OK		Seeing				OK
	Time	9:59P	Instrument and magnification		10x50 Binocs		Color				Blue white

Stars of the Solar Neighborhood Observation Log

89	Name	Achird	Constellation	Eta Cas	Vmag	3.44	Distance ly	19.31		
	Star Type	FG	Location	Near Deer Trail, CO	Latitude	39° 38.6'	Longitude	W 103° 55.7'		
	Date	9/23/22	Transp SQM or Transp NELM	Good	Seeing	Good				
	Time	10:08	Instrument and magnification	10x50 Binocs	Color	Blue white				
	AL #	Name	Constellation	Vmag	Distance ly					
37	Name	Tau Cet	Constellation	Cet	Vmag	3.50	Distance ly	11.91		
	Star Type	GS.5	Location	Near Deer Trail, CO	Latitude	39° 38.6'	Longitude	W 103° 55.7'		
	Date	9/23/22	Transp SQM or Transp NELM	OK	Seeing	OK				
	Time	10:18	Instrument and magnification	10x50 Binocs	Color	White				
	AL #	Name	Constellation	Vmag	Distance ly					
17	Name	61 Cyg	Constellation	Cyg	Vmag	5.21	Distance ly	11.40		
	Star Type	K5	Location	Near Deer Trail, CO	Latitude	39° 38.6'	Longitude	W 103° 55.7'		
	Date	9/23/22	Transp SQM or Transp NELM	Good	Seeing	Good				
	Time	10:34	Instrument and magnification	10x50 Binocs	Color	Blue White				
	AL #	Name	Constellation	Vmag	Distance ly					
91	Name	36 Oph	Constellation	Oph	Vmag	5.05	Distance ly	19.39		
	Star Type	M3	Location	Berthoud, CO	Latitude	40.31°	Longitude	W 105.08°		
	Date	10/5/22	Transp SQM or Transp NELM	Good	Seeing	Good				
	Time	7:23	Instrument and magnification	10x50 Binocs	Color	White				
	AL #	Name	Constellation	Vmag	Distance ly					
293	Name	HD 151288	Constellation	Oph	Vmag	8.11	Distance ly	32.1		
	Star Type	K5	Location	Berthoud, CO	Latitude	40.31°	Longitude	W 105.08°		
	Date	10/5/22	Transp SQM or Transp NELM	Good	Seeing	Good				
	Time	8:06	Instrument and magnification	10x50 Binocs	Color	White				
	AL #	Name	Constellation	Vmag	Distance ly					


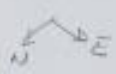


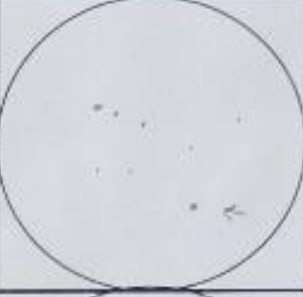





Stars of the Solar Neighborhood Observation Log

170	Name	Constellation	Vmag	Distance ly	
	Star Type	Location	Latitude	Longitude	
	Date	Transp SQM or Transp NELM		Seeing	
	Time	Instrument and magnification		Color	
	Tabit	Ori	3.19	26.16	
	F6	Aurora, CO	39.7°	w 104.8°	
	10/11/22	Good		Good	
	4:39	8x50 Binos		Red	
214	Name	Constellation	Vmag	Distance ly	
	Star Type	Location	Latitude	Longitude	
	Date	Transp SQM or Transp NELM		Seeing	
	Time	Instrument and magnification		Color	
	Chi Ori	Ori	4.4	28.36	
	G0	Aurora, CO	39.7°	w 104.8°	
	10/11/22	Good		Good	
	4:44	8x50 Binos		White	
236	Name	Constellation	Vmag	Distance ly	
	Star Type	Location	Latitude	Longitude	
	Date	Transp SQM or Transp NELM		Seeing	
	Time	Instrument and magnification		Color	
	Gamma Lep	Lep	3.6	29.03	
	F6.5	Aurora, CO	39.7°	w 104.8°	
	10/11/22	Good		Good	
	4:53	8x50 Binos		Off white	
7	Name	Constellation	Vmag	Distance ly	
	Star Type	Location	Latitude	Longitude	
	Date	Transp SQM or Transp NELM		Seeing	
	Time	Instrument and magnification		Color	
	Sirius	CMa	-1.46	8.6	
	A1	Aurora, CO	39.7°	w 104.8°	
	10/11/22	OK		OK	
	6:03	8x50 Binos		White	
19	Name	Constellation	Vmag	Distance ly	
	Star Type	Location	Latitude	Longitude	
	Date	Transp SQM or Transp NELM		Seeing	
	Time	Instrument and magnification		Color	
	Procyon	CMi	0.37	11.46	
	F5	Aurora, CO	39.7°	w 104.8°	
	10/11/22	OK		OK	
	6:10	8x50 Binos		White	

Stars of the Solar Neighborhood Observation Log

243	Name	Constellation	Vmag	Distance ly	
	Rana	Eri	3.54	29.63	
	Star Type	Location	Latitude	Longitude	
	K0	Brownfield, CO	39.9°	w 105.08°	
	Date	Transp SQM or Transp NELM		Seeing	
10/18/22	OK		OK		
Time	Instrument and magnification		Color		
5:36	8x50 Binos		White		
13	Name	Constellation	Vmag	Distance ly	
	Epsilon Eri	Eri	3.73	10.5	
	Star Type	Location	Latitude	Longitude	
	K2	Brownfield, CO	39.9°	w 105.08°	
	Date	Transp SQM or Transp NELM		Seeing	
10/18/22	OK		OK		
Time	Instrument and magnification		Color		
5:39	8x50 Binos		White		
60	Name	Constellation	Vmag	Distance ly	
	Kied	Eri	4.43	16.33	
	Star Type	Location	Latitude	Longitude	
	K0.5	Brownfield, CO	39.9°	w 105.08°	
	Date	Transp SQM or Transp NELM		Seeing	
10/19/22	OK		OK		
Time	Instrument and magnification		Color		
5:32	8x50 Binos		White		
225	Name	Constellation	Vmag	Distance ly	
	HD 192310 HR 7722	Cep	5.72	28.73	
	Star Type	Location	Latitude	Longitude	
	K2	Deer Trail, CO	39° 37.6'	w 103° 55.7'	
	Date	Transp SQM or Transp NELM		Seeing	
10/19/22	Very Good		Very Good		
Time	Instrument and magnification		Color		
19:17	8x50 Binos		Reddish		
34	Name	Constellation	Vmag	Distance ly	
	Krugers 60	Cep	9.79	13.07	
	Star Type	Location	Latitude	Longitude	
	M3	Deer Trail, CO	39° 38.4'	w 103° 55.7'	
	Date	Transp SQM or Transp NELM		Seeing	
10/19/22	Very Good		Very Good		
Time	Instrument and magnification		Color		
19:38	8x50 Binos		Orangeish		

Stars of the Solar Neighborhood Observation Log

151	Name	Constellation	Vmag	Distance ly	
	Mu Cas	Cas	5.17	25.02	
	Star Type	Location	Latitude	Longitude	
	G5	Deer Trail, CO	39° 38.6'	w 103° 55.7'	
Date	Transp SQM or Transp NELM		Seeing		
10/19/22	Very Good		Very Good		
Time	Instrument and magnification		Color		
19:44	8x50 Binocs		Pale White		
157	Name	Constellation	Vmag	Distance ly	
	107 Psc	Psc	5.24	24.92	
	Star Type	Location	Latitude	Longitude	
	K0	Deer Trail, CO	39° 38.6'	w 103° 55.7'	
Date	Transp SQM or Transp NELM		Seeing		
10/19/22	Very Good		Very Good		
Time	Instrument and magnification		Color		
20:04	8x50 Binocs		Reddish		
145	Name HD 4628	Constellation	Vmag	Distance ly	
	K2.5	Psc	5.74	24.24	
	Star Type	Location	Latitude	Longitude	
	K2.5	Deer Trail, CO	39° 38.6'	w 103° 55.7'	
Date	Transp SQM or Transp NELM		Seeing		
10/19/22	Very Good		Very Good		
Time	Instrument and magnification		Color		
20:21	8x50 Binocs		Orange		
333	Name GS 867	Constellation	Vmag	Distance ly	
	FK AGR	Agr	9.08	29.01	
	Star Type	Location	Latitude	Longitude	
	M2c	Deer Trail, CO	39° 38.6'	w 103° 55.7'	
Date	Transp SQM or Transp NELM		Seeing		
10/19/22	Very Good		Very Good		
Time	Instrument and magnification		Color		
20:50	8x50 Binocs		Pale White		
139	Name HD 1660A	Constellation	Vmag	Distance ly	
	HR 753	Cet	5.83	23.57	
	Star Type	Location	Latitude	Longitude	
	K3	Deer Trail, CO	39° 38.6'	w 103° 55.7'	
Date	Transp SQM or Transp NELM		Seeing		
10/19/22	Very Good		Very Good		
Time	Instrument and magnification		Color		
21:02	8x50 Binocs		Light Orange-ish		