

November 12, 2006

Dear Scott,

I think I have completed the 36 hours of meteor observing for the Meteor Observing Club. If you agree, please have my name read as Michael A. Hotka on the certificate and I am a member of the Boulder Astronomy & Space Society.

Please send my certificate and award pin to our club's ALCOR representative, Bill Travis, so he can present it to me at a future club meeting. Bill's USMail address is:

Bill Travis
8059 Kincross Way
Boulder, CO 80301

Thank you for this eye opening club. I usually only watch the Persied meteor shower and now I have watcher other meteor showers. I plan to watch these others yearly, as I do the Persieds.

Thank you.

Mike Hotka

Visual Meteor Observing Form.

Date: 2004 (Year) 8 (Month) 11 (Day) Begin: 10 h 30 m End: 2 h 30 m (A)

Location: Long. = 105.6° W. Lat. = 41.5° N. Elevation = 2545 m (8380 ft)

Observer: Michael Hotka Place: Fox Park, WY

Percent Cloudy: 0%@ 10:30 - 0%@ 2:30 %@ : %@ : %@ :

Direction Facing & Altitude: SW-60°@ 10:30 S-60°@ 12:00 SE-60°@ 1:00

Sky Conditions: Great all Night @ : Light Dew @ 1:00A

_____ @ : _____ @ :

_____ @ : _____ @ :

Breaks: Couple of 5 minute breaks

Comments: Awesome Display -

Number	Time	Magnitude	Type	Color	Speed	Train	Comments
1							
2							
3							
4							
5							
6							
7							
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12							
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14							
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17							
18							
19							

While at Weekend Under the Stars, in Fox Park, WY from August 10 through August 13, 2004, I laid out on the evening of August 11-12, 2004 to watch the Persied Meteor Shower from a dark, moonless sky. I started by watching basically overhead in a southwesterly direction. From about 10:30 PM to Midnight, the meteor activity was sporadic.

There were times when you saw several nice long streaks of meteors, about once a minute, and then you would wait 10 minutes without seeing one. A couple of the ones that were in the eastern sky, shooting across Aquila left burning smoke trails, which persisted for several seconds. Once I saw two short, fast meteors, one right after the other on the same track, shoot overhead from the northeast to a southwestern direction.

About midnight, I saw a piece of space debris enter the atmosphere. It started in the west, in Ophiuchus, and went straight east, ending in the Great Square of Pegasus. It was not a meteor streak, but a burning, that left "sparks" trailing it, and it broke into two pieces overhead, with both continuing to burn until they went out. It had a corkscrew tumble to it and the "sparks" it left reminded me of some of the 4th of July aerial bombs they shoot up that you can watch them climb in the sky for they leave this trail of sparks.

By 1:00 AM, the meteor count had really dropped off. The meteors were few and far between. These were much faster, with much shorter streaks. They were there and then gone. I didn't notice any smoke trails from these. By 2:30 AM, I was falling asleep so I called it quits.

For the most part, I saw some awesome meteors shoot across the Wyoming skies. That piece of space debris was very cool. But I was disappointed in the meteor counts for the 2004 Persieds. Being in dark, clear skies, I had hoped for more.

The following night, the 12-13, the meteor count was way down, so I went back to my telescopic observing and watch some as I happened to be looking up when they entered the atmosphere.

Visual Meteor Observing Form.

Date: 2004 (Year) 11 (Month) 3 (Day) Begin: 18 h 30 m End: 21 h 30 m ()

Location: Long. = 104.97 W. Lat. = 40.25 N. Elevation = 1524 m
(5001')

Observer: Mike Hotler Place: Near Mead, CO

Percent Cloudy: 0 % @ 18:30 0 % @ 21:30 ___ % @ ___ : ___ ___ % @ ___ : ___

Direction Facing & Altitude: W @ 18:30 S @ 21:00 ___ @ ___ :

Sky Conditions: Clear & Calm @ 18:30 Better @ 19:00
Good @ 19:30 Good @ 20:00
Softer @ 21:00 Same as 21:00 @ 21:30

Breaks: None

Comments: During Taurid Meteor Shower

Number	Time	Magnitude	Type	Color	Speed	Train	Comments
1	18:51	2	Taurid	white	Fast	None	thru Corona Borealis
2	21:15	-4	Fireball	white	Slow	None	From Peg → near S hor
3							Bright Fireball
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							

W
↓
horizon
2011

Visual Meteor Observing Form.

Date: 2004 (Year) 12 (Month) 14 (Day) Begin: 19 h 30 m End: 19 h 00 m ()

Location: Long. = _____ W. Lat. = _____ N. Elevation = 5200 ^{ft} m

Observer: Mike Hotlee Place: Back yard

Percent Cloudy: 30% @ 19:30 100% @ 20:30 % @ ____:____ % @ ____:____ % @ ____:____

Direction Facing & Altitude: ^{Overhead} to NE @ 19:30 @ ____:____ @ ____:____

Sky Conditions: High Haze in NE @ 19:30 @ ____:____

_____ @ ____:____ _____ @ ____:____

_____ @ ____:____ _____ @ ____:____

Breaks: None

Comments: Sat out day after Geminid max. Didn't see any meteors. NE pretty free of clouds. By 8:30 PM, sky totally overcast as it was previous night during Geminid max.

Number	Time	Magnitude	Type	Color	Speed	Train	Comments
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							

Visual Meteor Observing Form

Date: 2005 (Yr) 8 (Mon) 6 (Day) Begin: 10 h 15 m End: 10 h 45 m

Location: Long. = 91.58° W. Lat. = 41.68° N. Elevation = 500 m ft

Observer: Mike Hotlea Place: Coralville, IA

Percent Cloudy: 0%@ All ___%@ ___:___ %@ ___:___ %@ ___:___ %@ ___:___

Direction Facing & Altitude: NW@ All ___ @ ___:___ ___ @ ___:___

Sky Conditions: Clear w/Humidity @ All ___ @ ___:___

___ @ ___:___ ___ @ ___:___

___ @ ___:___ ___ @ ___:___

Breaks: None

Comments: _____

Number	Time	Magnitude	Type	Color	Speed	Train	Comments
1	10:18P	-8	PER	White	Slow	3"	long, Slow, Bright
2	10:27P	3	Non	"	Fast	None	Short & Fast
3	10:38P	3	Non	"	Fast	"	" "
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							

Visual Meteor Observing Form

Date: 2005 (Yr) 8 (Mon) 7 (Day) Begin: 9 h 15 m End: 00 h 06 m

Location: Long. = 91.58° W. Lat. = 41.68° N. Elevation = 500 m ft

Observer: Mike Hottel Place: Coralville, IA

Percent Cloudy: 0%@ All %@ : %@ : %@ : %@ :

Direction Facing & Altitude: W @ 9:15 NE @ 11:00 @ :

Sky Conditions: Clear w/ humidity @ All @ :

 @ : @ :

 @ : @ :

Breaks: 2-5 minute bathroom breaks

Comments:

Number	Time	Magnitude	Type	Color	Speed	Train	Comments
1	9:28P	-8	Non	White	Fast	None	Short, Bright, Fast
2	9:43P	3	"	"	"	"	Short, Dim, Fast
3	9:45P	2	"	"	"	"	" " "
4	10:58P	2	PER	"	"	"	Med long, dim, Fast
5	11:00P	-4	"	"	Slow	1"	Slow
6	11:30P	2	"	"	Fast	None	long, very fast, very dim
7	11:50P	-8	"	"	"	4"	Short, Bright, Right thru Cass.
8	11:53P	3	"	"	"	None	Short, Faint
9	11:59P	3	Non	"	"	"	" "
10	12:06A	1	Non	"	Slow	"	Very Short
11							
12							
13							

Visual Meteor Observing Form

Date: 2005 (Yr) 8 (Mon) 10 (Day) Begin: 9 h 00 m End: 11 h 30 m

Location: Long. = 91.58° W. Lat. = 41.68° N. Elevation = 500 m^{ft.}

Observer: Mike Hotten Place: Coralville, IA

Percent Cloudy: 0%@ 9:00 0%@ 11:00 100%@ 11:45 %@ : %@ :

Direction Facing & Altitude: N-60° @ A:1 @ : @ :

Sky Conditions: Clear @ 9:00 Clear @ 11:00

Overcast - came in fast from W. @ 11:45 @ :

@ : @ :

Breaks: None

Comments: _____

Number	Time	Magnitude	Type	Color	Speed	Train	Comments
1	9:56P	-8	PER	White	Fast	2"	Short
2	10:23P	-8	PER	"	Medium	2"	Long
3	10:33P	-8	PER	"	Med.	2"	Long
4	10:37P	-5	"	"	Med		Short
5	10:41P	-5	"	"	Fast	2"	Medium
6	10:43P	1-2	NON	"	Fast	None	Short
7	11:11P	1	NON	"	Fast	"	Medium
8	11:13P	1	NON	"	Fast	"	Medium
9							
10							
11							
12							
13							

Visual Meteor Observing Form

Date: 2005 (Yr) 8 (Mon) 12 (Day) Begin: 4 h 00 m End: 5 h 05 m

Location: Long. = 91.58° W. Lat. = 41.68° N. Elevation = 500 m ft

Observer: Mike Hotter Place: Coralville, IA

Percent Cloudy: 50% @ 4:00 90% @ 5:00 % @ : : % @ : : % @ : :

Direction Facing & Altitude: N-60° @ All @ : : @ : :

Sky Conditions: Poor - High Haze @ 4:00 Approach Total @ 5:00
Overcast

@ : : @ : :

@ : : @ : :

Breaks: None

Comments: Looked thru sucker holes to see meteors.

4AM overhead → North clear, with high haze.

Steadily closed down up to 5AM when I was looking thru

hole in clouds in North only.

Number	Time	Magnitude	Type	Color	Speed	Train	Comments
1	4:11A	1	Non	White	Fast	None	Short
2	4:12A	-5	PER	"	Medium	None	Long
3	4:15A	0	"	"	Fast	"	Short
4	4:18A	2	"	"	Fast	"	Short
5	4:19A	1	"	"	Fast	"	Long
6	4:34A	1	"	White	Fast	None	Short
7	4:37A	2	"	"	"	"	"
8	4:40A	2-3	"	"	"	"	"
9	4:41A	-5	"	"	"	"	"
10	4:42A	1	"	"	"	"	"
11	4:48A	2	"	"	"	"	Med. Long
12	4:55A	-8	"	"	Fast	"	double brightening, Med. Long
13							

Visual Meteor Observing Form

Date: 2006 (Yr) 6 (Mon) 13 (Day) Begin: 22 h 30 m End: 23 h 00 m

Location: Long. = 105.1° W. Lat. = 39.92° N. Elevation = 5300 mst

Observer: Mike Kotka Place: Backyard, Brownfield, CO

Percent Cloudy: 0%@ 10:30 %@ : %@ : %@ : %@ :

Direction Facing & Altitude: E @ 10:30 @ : @ :

Sky Conditions: Clear, Calm @ 10:30 @ :

@ : @ :

@ : @ :

Breaks: _____

Comments: Sitting in backyard waiting for son to come home

Number	Time	Magnitude	Type	Color	Speed	Train	Comments
1	10:48P	-10		White	Slow	Short	Very Bright left smoke trail
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							

Visual Meteor Observing Form

Date: 2006 (Yr) 8 (Mon) 10 (Day) Begin: 21 h 30 m End: 22 h 40 m

Location: Long. = 105.1° W. Lat. = 39.9° N. Elevation = 5300 ^{ft} m

Observer: Mike Notlea Place: My Backyard, Bloomfield, CO

Percent Cloudy: 0%@21:30 0%@22:40 %@ : : %@ : : %@ : :

Direction Facing & Altitude: WNW @ 21:30 @ : @ :

Sky Conditions: Clear + post Full Moon @ 21:30 @ :

 @ : @ :

 @ : @ :

Breaks: 1 10 minute to eat ice cream.

Comments: I was disappointed to see only 2 in 1 hr. Tonight might be the clearest night of next 2 for this year's period.

Number	Time	Magnitude	Type	Color	Speed	Train	Comments
1	21:52	2nd	Not	White	Fast	none	Short streak
2	22:04	3rd	Per	White	Fast	none	Medium long
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							

Visual Meteor Observing Form

Date: 2006 (Yr) 8 (Mon) 11 (Day) Begin: 21 h 00 m End: 23 h 30 m

Location: Long. = 105.1° W. Lat. = 39.9° N. Elevation = 5300 ^{ft} m

Observer: Mike Hotka Place: Backyard, Broomfield, CO

Percent Cloudy: 75%@21:00 50%@22:00 10%@23:00 100%@23:30 %@ : :

Direction Facing & Altitude: WNW@21:00 N @ 23:00 @ : :

Sky Conditions: Nice large holes ^{Plunging up} @ 21:00 @ : :
in clouds

@ : : @ : :

@ : : @ : :

Breaks: None

Comments: Was nice until clouds rolled in.

Number	Time	Magnitude	Type	Color	Speed	Train	Comments
1	21:33	-0.0	PER	White	Fast	None	Short
2	22:10	-3 or -4	PER	White	Slow	1 sec	Long, Nice. ^{Double Brightening}
3	22:19	-4	PER	Greenish	Slow	None	Short
4	22:22	-1.0	PER	White	Slow	None	Medium Long
5	22:33	-4	PER	White	Fast	6 sec	Long distance, Nice
6	22:55	1.0	PER	White	Fast	1 sec	Long
7	23:08	-4	PER	White	Fast	2 sec	Long Streak
8	23:23	-1	PER	White	Fast	None	Short
9							
10							
11							
12							
13							

Visual Meteor Observing Form

Date: 2006 (Yr) 8 (Mon) 12 (Day) Begin: 21 h 30 m End: 24 h 00 m

Location: Long. = 105.1° W. Lat. = 39.9° N. Elevation = 5300 ^{ft} m

Observer: Mike Horton Place: Backyard, Broomfield, CO

Percent Cloudy: 50% @ 21:30 70% @ 23:30 100% @ 24:00 % @ : % @ :

Direction Facing & Altitude: WNW @ 21:30 N @ 23:00 @ :

Sky Conditions: Thin Clouds w/ large @ 21:30 Total Overcast @ 24:00
holes

@ : @ :

@ : @ :

Breaks: None

Comments: Sky was hazy but nice holes to see meteors
through.

Number	Time	Magnitude	Type	Color	Speed	Train	Comments
1	22:05	1.0	PER	white	Slow	None	Short streak
2	22:50	1 or 2	PER	white	Fast	None	Long streak
3	23:12	1.0	PER	white	Fast	None	Short
4	23:13	2.0	PER	white	Fast	None	Medium Long
5	23:35	-2 or -3	PER	white	Fast	None	Medium Long
6	23:41	-2	PER	white	Fast	None	Short
7							
8							
9							
10							
11							
12							
13							

Visual Meteor Observing Form

Date: 2006 (Yr) 8 (Mon) 13 (Day) Begin: 1 h 15 m End: 3 h 00 m

Location: Long. = 105.1° W. Lat. = 39.9° N. Elevation = 5300 ^{ft} m

Observer: Mike Hotka Place: Backyard, Broomfield, CO

Percent Cloudy: 0% @ 1:15 60% @ 3:00 % @ : : % @ : : % @ : :

Direction Facing & Altitude: N @ 1:15 NNE @ 2:30 @ : :

Sky Conditions: Clear, very hazy @ 1:15 Rapidly Becoming Cloudy @ 3:00

_____ @ : : _____ @ : :

_____ @ : : _____ @ : :

Breaks: None

Comments: Thought I would see more, but haze and Moon too much. Clouds rapidly approaching from west @ 3:00AM.

Number	Time	Magnitude	Type	Color	Speed	Train	Comments
1	1:26	1.0	PER	white	Fast	None	Long streak
2	1:40	0.0	PER	white	Fast	None	Short, little blip
3	1:43	1 or 2	PER	White	Fast	None	Medium Long Streak
4	1:43	1 or 2	PER	White	Fast	None	Medium Long, followed above or right behind it
5	2:12	2	PER	White	Fast	None	Short
6	2:29	0.0	PER	White	Very Fast	None	Medium Long
7	2:43	2.0	Not PER	Light Blue	Fast	None	triple brightened. Medium Long. Went S → W Not PER
8	2:44	0 to -1	PER	White	Fast	None	Short
9	2:46	-2	PER	White	Slower	None	Medium Long
10	2:51	2.0	PER	White	Fast	None	Medium Long
11	2:53	2.0	PER	White	Very Fast	None	Very Faint Medium Long
12							
13							

Visual Meteor Observing Form

Date: 06 (Yr) 09 (Mon) 30 (Day) Begin: 4 h 00 m End: 4 h 30 m

Location: Long. = 104.32° W. Lat. = 40.62° N. Elevation = 4864 m

Observer: Mike Hotka Place: Crow Valley Campground

Percent Cloudy: 0%@ 4:00 0%@ 4:30 %@ : %@ : %@ :

Direction Facing & Altitude: NE @ 4:00 @ : @ :

Sky Conditions: Perfect!! @ 4:00 @ :

@ : @ :

@ : @ :

Breaks: None.

Comments: Was out observing & saw meteors all night. 2 shot thru FOV w/1 leaving a smoke train. At end of night, I concentrated on meteors & saw 2 nice ones.

Number	Time	Magnitude	Type	Color	Speed	Train	Comments
1	4:08A	-6	Orionid	white	Fast	None	Short & bright
2	4:21A	-2	Orionid	white	Fast	1/2 sec	Long & Fast
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							

Visual Meteor Observing Form

Date: 06 (Yr) 10 (Mon) 18 (Day) Begin: 21 h 00 m End: 22 h 00 m

Location: Long. = 105.1 W. Lat. = 39.9 N. Elevation = 5396 ^{ft} ~~m~~

Observer: Mike Notba Place: My Backyard, Bloomfield, CO

Percent Cloudy: 0%@ 21:00 0%@ 22:00 %@ : %@ : %@ :

Direction Facing & Altitude: SE @ 21:00 SE @ 22:00 @ :

Sky Conditions: Clear all Night @ : Transparency OK @ :

Seeing Good @ : Wind Calm @ :

Temp Cool @ : @ :

Breaks: None

Comments: Go to bed & wakeup in early Morning

Number	Time	Magnitude	Type	Color	Speed	Train	Comments
1	9:41	2	Orionid	White	Fast	None	Short
2	9:42	2	Orionid	White	Fast	None	Short - In same part of Sky
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							

Visual Meteor Observing Form

Date: 06 (Yr) 10 (Mon) 19 (Day) Begin: 01 h 20 m End: 04 h 33 m

Location: Long. = 105.1 W. Lat. = 39.9 N. Elevation = 5396 ^{Pt} m

Observer: Mike Hotka Place: My Backyard

Percent Cloudy: 0%@01:20 0%@04:33 %@ : : %@ : : %@ : :

Direction Facing & Altitude: SE @01:20 SE @04:33 @ : :

Sky Conditions: Clear all Morning@ : : Transparency ^{Good} ~~OK~~ @ : :

Seeing Good @ : : Wind Calm @ : :

Temp Cold 25° @4:33 @ : :

Breaks: 5 minute at 3:20 AM

Comments: Orionids stay close to Radiant Point which is above constellation

Number	Time	Magnitude	Type	Color	Speed	Train	Comments
1	1:30	2 or 3	Non	White	Fast	None	Short
2	1:39	3	Orionid	White	Fast	None	Short, Faint.
3	1:46	-2	Orionid	White	Fast	5 sec	Bearty, Long Trail
4	1:56	3	Orionid	White	Fast	None	Short, Faint
5	2:04	1	Orionid	White	Medium	2 sec	Short.
6	2:05	2	Orionid	White	Fast	1 sec	Long Trail
7	2:09	2	Orionid	White	Very Fast	None	Short & Dim.
8	2:19	-3	Orionid	Blue white	Fast	3 sec	Long & Bright
9	2:29	2	Orionid	White	Fast	None	Short
10	2:33	1	Orionid	White	Medium	None	Long Trail
11	2:53	0	Orionid	White	Medium	None	Short
12	2:55	2	Orionid	White	Medium	None	Short
13	3:00	3	Non.	White	Fast	None	Medium Long Trail

Number	Time	Magnitude	Type	Color	Speed	Train	Comments
14	3:11	0 or -1	Blue White	Orionid	Medium	3 sec	Medium Long.
15	3:31	0 or -1	Blue Green	Orionid	Medium	2 sec	Medium Long. 1st one headed South tonight.
16	3:35	0	White	Orionid	Fast	2 sec	Short
17	3:35	-2	Blue Green	None	Medium	None	Headed E along southern horizon. More point of light than streak.
18	3:41	3	White	Orionid	Medium	2 sec	More of smoke trail than streak.
19	3:43	3	White	Orionid	Medium	2 sec	same as 18. Very short
20	3:47	-4	Bluish	Orionid	Fast	5 sec	Very Long Streak East of Night
21	3:52	3	White	{	Fast	None	Medium Long Trail.
22	4:07	2	White	}	Fast	2 sec	Short
23	4:10	0	Blue Green	}	Medium	2 sec	Short
24	4:11	2	White	}	Fast	None	Medium Long
25	4:18	2	White	}	Fast	1/2 sec	Medium Long
26	4:21	4	White	}	Fast	None	Medium Long. Just a glow.
27	4:24	2	White	}	Fast	None	Short
28	4:33	1	White	v	Fast	2 sec	Medium Long
29							
30							
31							
32							
33							
34							
35							
36							
37							
38							
39							
40							
41							
42							
43							

Visual Meteor Observing Form

Date: 2006 (Yr) 10 (Mon) 19 (Day) Begin: 21 h 00 m End: 22 h 00 m

Location: Long. = 105.1 W. Lat. = 39.9 N. Elevation = 5396 ^{ft} m

Observer: Mike Place: My Driveway, Broomfield, CO

Percent Cloudy: 40%@21:00 20%@21:30 75%@22:00 %@ : %@ :

Direction Facing & Altitude: E @ 21:00 NE@22:00 @ :

Sky Conditions: Clear to NE, clouds receded for a bit, then returned
w/ vengeance. @ : @ :

@ : @ :

Calm, Cool @ : @ :

Breaks: None.

Comments: This is definitely an early morning shower.
I had planned to sit here until 2 AM but
the clouds had different ideas.

Number	Time	Magnitude	Type	Color	Speed	Train	Comments
1	9:39	2	White	Orionid	Fast	None	Short
2	9:43	1	White	Orionid	Medium	None	Medium trail
3	9:49	2	White	Non Orionid	Medium	None	Long tail
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							

Visual Meteor Observing Form

Date: 2006 (Yr) 10 (Mon) 21 (Day) Begin: 23 h 30 m End: 3 h 52 m

Location: Long. = 105.1° W. Lat. = 39.9° N. Elevation = 5396 m ^{ft}

Observer: Mike Hotka Place: My Driveway, Bloomfield, CO

Percent Cloudy: 0%@ 23:30 10%@ 1:30 25%@ 3:25 50%@ 3:40 90%@ 3:52

Direction Facing & Altitude: ESE @ 23:30 S @ 2:00 @ : :

Sky Conditions: Good, 32°, Light wind @ 23:30 Seeing OK, All Night @ :

High Thin Drifting ^{Clouds} @ 1:08 Thick Clouds ^{From NE} Starting @ 3:20

@ : @ :

Breaks: 1 short bathroom break @ 2:00 AM

Comments: Orionids tonight sporadic & long trails. Some ^{thin} clouds drifted by all night. By 3:00 AM, meteors were very few. Not like last Thursday morning. Majority of meteors tonight going E → W. Nice Burst @ 2:20 AM lasting about 4 minutes.

Number	Time	Magnitude	Type	Color	Speed	Train	Comments	
1	23:56	-4	Orionid	Blue white	Slow	1 sec	Long, Nice.	
2	00:10	1	}	white	Medium	3 sec	Medium Long.	
3	00:18	2			Fast	None	Short	
4	00:25	1			Fast	None	Medium Long	
5	00:31	2 or 3			↓	Slow	1 sec	Medium Long. Going opp. Direction.
6	00:40	1			None	Medium	None	Medium Long
7	00:41	0			Orionid	Fast	1 sec	Medium Long
8	00:44	2			↓	Fast	None	Short
9	00:54	2			↓	Fast	None	Short
10	1:08	1			↓	Fast	None	Medium Long
11	1:09	1			↓	Fast	2 sec	Long
12	1:14	2			↓	Very Fast	1 sec	Short
13	1:15	1			↓	Medium	1 sec	Medium Long

Number	Time	Magnitude	Type	Color	Speed	Train	Comments
14	1:22	1	Orionid	White	Fast	None	Long
15	1:30	2	}	}	Fast	5-6 Sec	Short - Smoke Trail only
16	1:47	1			Fast	None	
17	1:49	1	↓	}	Medium	2 sec	Medium Long
18	2:02	2	Non		Fast	None	Short
19	2:04	3	Orionid	}	Fast	None	Medium Long
20	2:10	-1	}		Fast	2 sec	Long
21	2:10	2		↓	Very Fast	1/2 sec	Medium Long
22	2:16	-1	}	Blue white	Fast	4 sec	Long
23	2:20	-2		white	Fast	6 sec	Long
24	2:20	1	}	}	Fast	2 sec	Medium Long
25	2:21	0			↓	Fast	3 sec
26	2:22	-2	}	Blue white	Fast	3 sec	Medium Long
27	2:23	2		white	Fast	None	Medium Long
28	2:23	2	}	}	Fast	None	Medium Long
29	2:30	1			Fast	None	Short
30	2:43	0	}	}	Fast	3 sec	Long
31	2:43	2			Fast	2 sec	Medium Long
32	2:45	1	↓	}	Fast	None	Short
33	2:49	2	Non		Fast	None	Short
34	2:49	1	Orionid	}	Fast	None	Short
35	2:55	2	↓		Fast	None	Short
36	2:58	-1	}	Blue white	Fast	3 sec	Medium Long
37	3:00	3		white	Fast	None	Medium Long
38	3:11	3	}	}	Fast	}	Long
39	3:23	1			Fast		Short
40	3:24	2	}	}	Very Fast	}	Medium Long. Like a Blip.
41	3:30	2			Very Fast		Medium Long
42	3:32	2	↓	↓	Fast	↓	Medium Long
43							

} 2 one right after the other

} one right after the other, on same track

Visual Meteor Observing Form

Date: ___ (Yr) 10 (Mon) 24 (Day) Begin: 00 h 45 m End: 01 h 45 m

Location: Long. = 104.3° W. Lat. = 40.6° N. Elevation = 4864^{ft} m

Observer: Mike Hotka Place: Biggsdale, CO

Percent Cloudy: 0%@ 00:45 0%@ 1:45 %@ : : %@ : :

Direction Facing & Altitude: SE @ 00:45 S @ 1:06 @ : :

Sky Conditions: Superb!!! @ : : @ : :

_____ @ : : _____ @ : :

_____ @ : : _____ @ : :

Breaks: None

Comments: Took a break from observing for Orionids were active all night.

Number	Time	Magnitude	Type	Color	Speed	Train	Comments	
1	00:45	1	Orionid	white	Fast	2 sec	Medium Long	
2	00:52	2	Non Orionid	white	Fast	None	Short	
3	00:58	-4	Orionid	Blue white	Fast	5 sec	Long. Beauty!	
4	1:00	3	}	white	Fast	None	Short Tail.	
5	1:02	2		white	Fast	None	Short	
6	1:03	-1		Blue white	Fast	2 sec	Medium Long	
7	1:05	2		white	Fast	None	Short	
8	1:06	-2		Blue white	Fast	4 sec	Long	
9	1:08	1		white	Fast	None	Medium Long.	
10	1:13	2		↓	white	Very Fast	None	Medium Long. Just a blip.
11	1:14	3		Non Orionid	}	Fast	None	Short.
12	1:16	2		Non Orionid	}	Fast	None	Short
13	1:16	0		Orionid	↓	Fast	1 sec	Short

Number	Time	Magnitude	Type	Color	Speed	Train	Comments
14	1:18	1	Orionid	Blue white	Fast	3sec	Short
15	1:28	3	}	White	Fast	None	Short
16	1:29	3		White	Fast	None	Medium Long
17	1:30	2		White	Fast	None	Short
18	1:33	-1		Blue white	Fast	3sec	Medium Long
19	1:34	2	}	White	Fast	None	Short. On Horizon in E.
20	1:38	2		White	Fast	None	Short
21	1:45	1	↓	Blue white	Fast	2sec	Short
22							
23							
24							
25							
26							
27							
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40							
41							
42							
43							

Visual Meteor Observing Form

Date: 2006 (Yr) 11 (Mon) 10 (Day) Begin: 18 h 30 m End: 21 h 30 m

Location: Long. = 105.1° W. Lat. = 39.9° N. Elevation = 5396m^{pt}

Observer: Mike Hotka Place: Broomfield, CO - My Driveway

Percent Cloudy: 0%@ 18:30 0%@ 21:30 %@ : : %@ : : %@ : :

Direction Facing & Altitude: E @ 18:30 E @ 21:30 @ : :

Sky Conditions: Clear & Breezy @ 18:30 Clear & Calm @ 19:30

Clear & Cold 25° @ 21:30 @ : :

@ : : @ : :

Breaks: 2 Short pottie Breaks

Comments: 2 incredible Taurids seen. Tons of airplanes w/ Blinking lights flew over all night. Thought I saw several faint ones, but was unsure so I didn't log them.

Number	Time	Magnitude	Type	Color	Speed	Train	Comments
							Spectacular!!
1	7:23	-8	Taurid	Blue white	Very Slow	None	3 Distinct Brightenings - lasted over 6 sec.
2	8:05	2	Non Taurid	White	Slow	None	Short
3	8:12	-2	Taurid	Blue white	Very Slow	None	Very Long
4	8:35	3	Non Taurid	White	Fast	None	Short
5	9:23	3	Possible Taurid	White	Fast	None	Short
6							
7							
8							
9							
10							
11							
12							
13							

30° long.