

GEMENID METEOR SHOWER

Visual Meteor Observing Form

Date: 2022(Yr) 12 (Mon) 14 (Day) Begin: 6 h 00 m End: 10 h 15 m ^{11:00 am to 5:45 am local time} UT

Location: Long. = 82° 36' 18.92" W. Lat. = 27° 20' 57.70" N. Elevation = 5 m

Observer: Gregory J. Shanos Place: Longboat Key (Sarasota) Florida USA

Percent Cloudy: 0% @ 6h 00m ^{UT} 0% @ 6h 50m ^{UT} 0% @ 7h 25m ^{UT} 100% @ 10h 15m ^{UT}

Direction Facing & Altitude: 83° facing ^{UT} 70° @ 6h 00m 250° facing ^{UT} 80° @ 8h 00m 280° ^{UT} 70° @ 9h 00m 280° ^{UT} 50° @ 10h 00m ^{UT}

Sky Conditions: Perfectly clear @ 6h 00m ^{UT} Overcast Fog @ 10h 15m ^{UT}

Overcast w/ fast @ 6h 50m ^{UT} @ : moving fog

Clear resume @ 7h 25m ^{UT} @ : observations

Breaks: 6h 50m - 7h 25m ^{UT} (completely overcast) 9h 00m - 9h 20m ^{UT}

Comments: Hazy & humid with a 70% waning gibbous moon illuminating the sky. Rapidly moving patches of fog throughout the night causing minimal interference. Slight constant wind throughout the night.

Number	Time UT	Magnitude	Type	Color	Speed	Train	Comments
1	6h 01m	+2	G	white	slow	no	
2	6h 06m	+3	G	white	slow	no	
3	6h 07m	+3	G	white	swift	no	
4	6h 12m	+2	G	white	slow	no	bright flash
5	6h 23m	+1	G	white	swift	no	
6	6h 26m	+2	G	white	swift	no	very fast
7	6h 29m	+2	G	white	medium	yes	train visible
8	6h 32m	+1	G	white	swift	no	
9	6h 33m	+3	G	white	swift	no	
10	6h 34m	+3	G	white	swift	no	
11	6h 35m	+2	G	white	swift	no	
12	6h 36m	0	G	white	medium	no	bright
13	6h 37m	+1	G	white	medium	no	

Weather at start of observation 5h 50m ^{UT}
 Temp: 66.7 °F
 Humidity: 92%
 Dew pt: 64.4 °F
 Feel like: 66.7 °F
 Barometer: 30.04 in Hg
 Wind: NW @ 0-5 mph

Weather conditions at end of observation
 Temp: 65.1 °F
 Humidity: 97%
 Dew pt: 64.2 °F
 Feels like: 65.1 °F
 Barometer: 30.00 in Hg
 Wind: 5-10 mph from the ESE

Number	Time UT	Magnitude	Type	Color	Speed	Train	Comments
14	6h 41m	+3	S	white	slow	no	sporadic
15	6h 42m	+2	G	white	fast	no	
16	7h 26m	+3	G	white	medium	no	
17	7h 31m	+1	G	white	medium	no	
18	7h 46m	+3	G	white	medium	no	faint
19	7h 53m	+2	G	white	fast	no	
20	7h 53m	+1	G	white	fast	no	
21	8h 05m	+2	G	white	fast	no	
22	8h 06m	+3	G	white	medium	no	
23	8h 07m	+3	G	white	medium	no	
24	8h 08m	0	G	white	medium	no	} almost simultaneous
25	8h 08m	0	G	white	medium	no	
26	8h 10m	-1	G	yellow	medium	yes	first fireball!
27	8h 11m	+3	G	white	fast	no	
28	8h 13m	-1	S	yellow	medium	yes	fireball - sporadic toward the red out
29	8h 22m	+1	G	white	swift	no	
30	8h 22m	+2	G	white	swift	no	
31	8h 25m	+2	G	white	medium	no	
32	8h 43m	+3	G	white	swift	no	faint
33	8h 45m	+2	G	white	medium	no	
34	8h 47m	+3	G	white	medium	no	faint
35	8h 56m	+2	G	white	medium	no	
36	8h 58m	+2	G	white	fast swift	no	
37	9h 21m	+2	G	white	swift	no	
38	9h 25m	+2	G	white	swift	no	
39	9h 26m	+1	G	white	swift	no	
40	9h 27m	+2	G	white	swift	no	
41	9h 30m	+1	G	white	slow	no	
42	9h 33m	+3	G	white	fast	no	
43	9h 34m	+2	G	white	swift	no	

Number	Time UT	Magnitude	Type	Color	Speed	Train	Comments	
44	9h36m	+2	G	white	Fast	no		
45	9h40m	+3	G	white	swift	no	Faint	
46	9h46m	0	G	white	medium	slight	bright	
47	9h53m	+2	G	white	medium	slight		
48	9h55m	+2	G	white	medium	no	Flash - coming right at you.	
49	9h59m	+2	G	white	swift	no	} almost simultaneous	
50	9h59m	+1	G	white	swift	no		
51	10h02m	-2	G	yellow	Fast	yes	Fireball - bright in Mars	
52	10h02m	+3	G	white	medium	no	Faint - near radiant	
53	10h14m	+2	G	white	medium	yes	Slight train visible	
54								
55								
56			COMPLETELY OVERCAST					
57			UNTIL TWILIGHT					
58			AT 11h00m UT					
29			6:00am local time					
30								
31								
32			END OF OBSERVATIONS					
33								
34								
35			Weather report was from my personal					
36			weather station; Ambient Weather model					
37			Falcon WS-8480					
38								
39								
40								
41								
42								
43								

Summary

Total meteors observed: 53

Total Comets observed: 51

Total Sporadics observed: 2

Total fireballs observed: 3 (all were yellow)
in color