

Lunar Meteor Campaign Schedule / Observing Plan for 2007

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This form outlines the plan to monitor the moon on a regular basis outside normal annual showers. This is in support of sustained campaigns to do the same, and to enable them to better add confidence to their impact candidates. Each month, for up to two weeks per month, we are coordinating observations of the Earthshine portion of the moon for background (including the minor showers when they fall during this time) meteor impact flux. A typical run of observations starts three days after New Moon and continues until two days after First Quarter. The run resumes two days prior to Last Quarter and continues until three days prior to New Moon. Observations of the moon during annual showers typically start when the background ZHR rises above 10 and continues until it falls back below 10. During the monthly campaign, much of the annual shower activity will be absorbed into the earthshine activity.

MO	NM	A	FQ	B	FM	C	LQ	D
Jan '07	18	22	25	27	3	9	11	15
Feb	17	21	24	26	2	8	10	14
Mar	18	21	25	27	3	9	11	15
Apr	17	20	24	26	2	8	10	14
May	16	19	23	25	2,31	18	10	12
Jun	14	17	22	24	30	6	8	11
Jul	14	17	22	24	29	5	7	11
Aug	12	15	20	22	28	3	5	8
Sep	11	15	19	21	26	1	3	7
Oct	11	15	19	21	26	1,30	3	8
Nov	6	← Date of Maximum for the S. Taurid annual Shower						
Nov	9	13	17	19	24	29	1	6
Nov	18	← Date of Maximum for the annual Leonid Shower						
Dec	9	13	17	19	23	29	1,31	6
Dec	14	← Date of Maximum for the annual Geminid Shower						
Jan '08	4	← Date of Maximum for the annual Quadrantid Shower						
Jan '08	8	12	16	18	22	29	31	5

The table above summarizes the observing plan of the Lunar Meteoritic Impact Search program. Each row corresponds to one month of Earthshine observations. The abbreviations in the top row are as follows:

NM = Date of New Moon

A = First day of evening Earthshine observing run

FQ = Date of First Quarter Moon

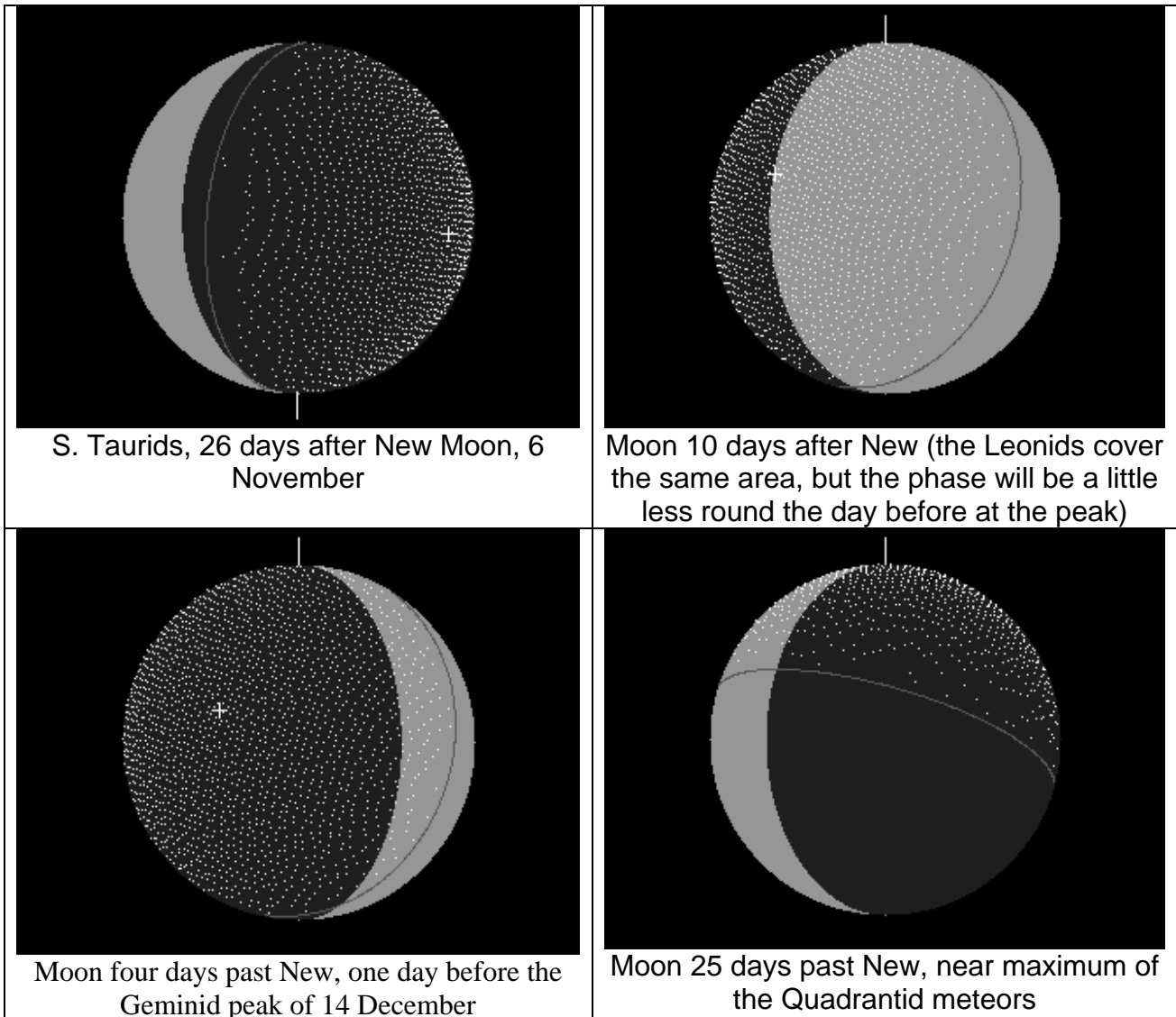
B = Last day of evening Earthshine observing run

C = First day of morning Earthshine observing run

LQ = Date of Last Quarter Moon

D = Last date of morning Earthshine run.

In 2007, there are only three major showers during which the moon is favorably placed, plus a fourth in early 2008. One row is dedicated to each of the major shower events. Below are impact plots, generated by Peter S. Gural, showing the geometric configuration near the day of shower maximum. The light gray represents the sunlit (moon phase) portion, and the dark gray, the dark or Earthlit portion. The curving solid line represents the limit of impacts and the dots represent the region of impacts. The “+” sign seen on some of these plots is the sub-Radiant point on the moon; that is, where on the Moon’s surface the shower’s radiant would be at the zenith for any watching astronaut.



Any questions concerning this plan can be directed to the Coordinator, Mr. Brian Cudnik, at cudnik@sbcglobal.net.