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# The Moon's path

ANTHONY AYIOMAMITIS

*Gentlemen,*

I would like to present you with a photo sequence which I am 99.9999% certain is the first of its kind (multiple internet searches failed to yield any similar photo).

The period 2005-2007 is particularly interesting, for it represents the end of the current Saros cycle and allows for some very creative, interesting and educational photography in relation to the moon and its highly variable position in the sky and, more specifically, its position above and below the ecliptic during the SAME synodic month.

Please find attached a digital mosaic based on the rising sun and moon during the past two weeks. To be more precise, late last week was particularly special since it represented one of the major lunar standstills for the current Saros cycle and which I exploited by capturing the rising third-quarter moon as a time series using exposures spaced

five minutes apart. This technique was put into action once again later with the rising sun (and the ecliptic) so as to capture the maximum deviation possible in the declination between the sun and moon and which is possible and occurs only at the end of each Saros cycle. Of course, the third part of the puzzle is the greatest declination of the moon below the ecliptic DURING the same synodic month and which was successfully captured two weeks earlier (the afternoon sun was somewhat challenging in capturing the nearly first-quarter moon).

Although the moon generally hugs the ecliptic and follows the sun across the sky, the tilt in the earth's axis of rotation (23.45 degrees) coupled with a similar tilt in the moon's axis of rotation (5.1 degrees) relative to the same ecliptic lead to a possible maximum net tilt of 28.55 degrees for the moon and which dramatically impacts its rising and set-

ting declinations in relation to the sun (and the ecliptic).

In order to capture the maximum possible declination of the moon above and below the ecliptic (the rising sun is included as a reference for the ecliptic) and which ranges over 70 degrees in azimuth (!), a wideangle lens had to be employed to make the imaging of this phenomenon even feasible.

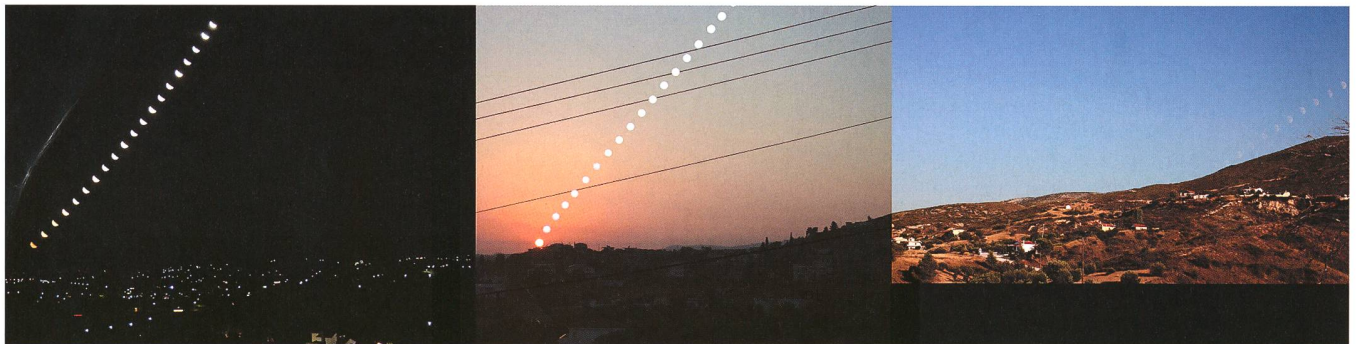
I also plan to pursue a similar project in nine years' time (mid-Saros) and during the minor lunar standstill which will complement this particular photo very well.

I apologize for the untimely electrical wires in the middle portion of the image and which are missing from the right portion. The local electrical company decided to expand the electrical facilities in the area at the most inopportune time (mid-project for me) and I could not convince them to wait a week for my project to come to completion (they had quite a laugh at my request ... and project). Thank you for your consideration and best wishes from Greece.

ANTHONY AYIOMAMITIS

Agapis 2

NEA PALATAIA-OROPOU 19015 - GREECE



# Partielle Mondfinsternis

KLAUS OBERLI

Zuerst verdeckte eine dunkle Wolkenwand mit einzelnen, von Blitzen erhellten Gewitterwolken, die Sicht auf den Mond. Nach geduldigem Warten öffnete sich kurz nach 21 Uhr eine Wolkenlücke und gab langsam für ca. 10 Minuten die Sicht auf den verfinsterten Mond frei.

KLAUS OBERLI, Weidenrain 5, CH-3084 Wabern

Canon EOS 300D+200mm f:5,6 1/6 sec. bei 1600 ASA.



Canon EOS 300D+500mm f:8 1/200 sec. bei 1600 ASA.

