

Samples of frequent disruption of my dark sky objects imaging sequences from satellite crossings.

Starlink Satellite crossings; All sky image.  
Mathon, 2010-04-14. 30s. ISO1600 F/4.5



All sky camera, SQM  
enclosure, and general sky  
camera platform, Mathon  
observatory



The Telescope equipment consists of a 0.3 metre aperture F/7 auto guided Ritchey Chretien autoguided telescope Paramount ME mount , Atik Horizon CMOS camera and 7 filter wheel. (also a Mead RC 12 ins F/10 on a AP1200 mount, not shown)



Piggyback on the RCOS, is a Canon D60a camera and 300mm FL x2 with 60Da camera.



The 3° field of view 300 x2 mm fl 60Da camera system is typically picking up satellite crossings in most directions south of zenith an hour or so before dawn, of up to 3 per frame of a typical sequential 120 second exposures, increasing to about 20% of frames.

The RC main telescope with its 0.6° field of view also has satellite crossings in the colour filter sequential 60 second exposures.

In the last two years, the number of camera frames in the hours before dawn have increasing number of satellite crossings in many of the exposures.



Satellite crossings; 2022-04-03 M51 120 sec exposure.(3 deg. Fov)

600mm FL lens F/5.6, ISO 1600. inc. main telescope (0.6 deg. Fov) exposing simultaneously.





Satellite crossings; 2022-04-03 M51 120 sec exposure.  
600mm FL lens F/5.6, ISO 1600.





Satellite crossings; 2021-03-18 IMG\_9496  
cs Pinwheel galaxy 120 sec exposure.  
600mm FL lens F/5.6, ISO 1600.



Satellite crossings; galaxy M96 120 sec exposure.  
600mm FL lens F/5.6, ISO 1600.





Satellite crossings; 2021-03-22 IMG\_9551 NGC 4565 cs sats.  
galaxy 120 sec exposure.

600mm FL lens F/5.6, ISO 1600.



Satellite crossings; galaxy Herring 120 sec exposure.

600mm FL lens F/5.6, ISO 1600.





Satellite crossings; M13 GC 120 sec exposure.

600mm FL lens F/5.6, ISO 1600.



Satellite crossings; 2022-04-03 120 sec exposure.

600mm FL lens F/5.6, ISO 1600.

Soon, all exposures over a few seconds at the time of night will have to be rejected from processing; it is a massive environmental pollution source exponentially affecting all of us monitoring the sky.

