

The objective of the experiment was to detect a very powerful xenon flash focused on the moon and sent at a rate of three flashes per second.



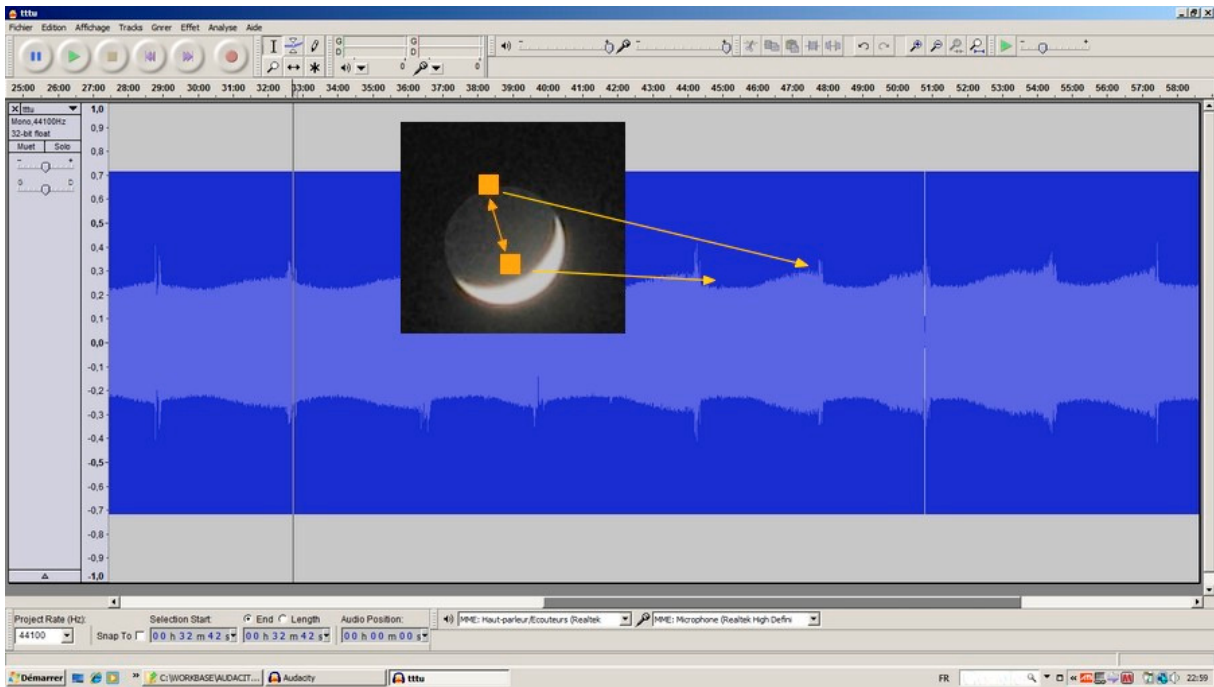
On Wednesday 5/27/09 the conditions were favorable, but a slight halo was around the moon.



The receiver consisted of a 24 cm spherical mirror, a K3PGP photo detector fitted with a low pass infrared filter passing wavelengths above 700 nm.

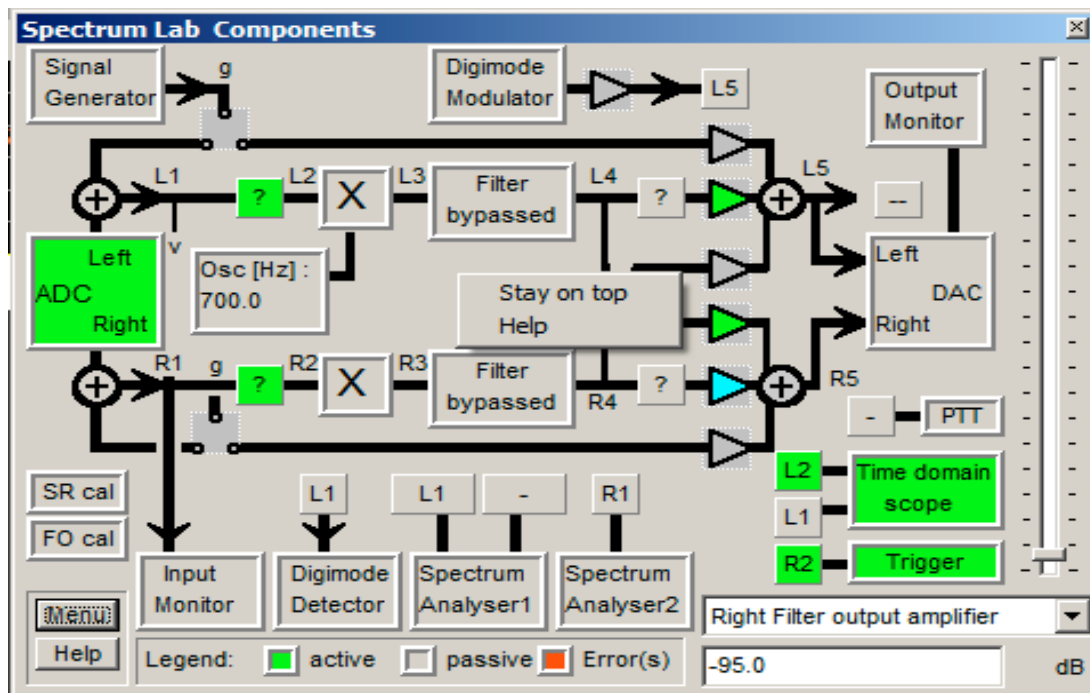


The signal was recorded with Audacity on one of the two stereo channels. The other receives the 1PPS squared referential signal through a 1nF small capacitor just filtering the up and down fronts to the sound card input.

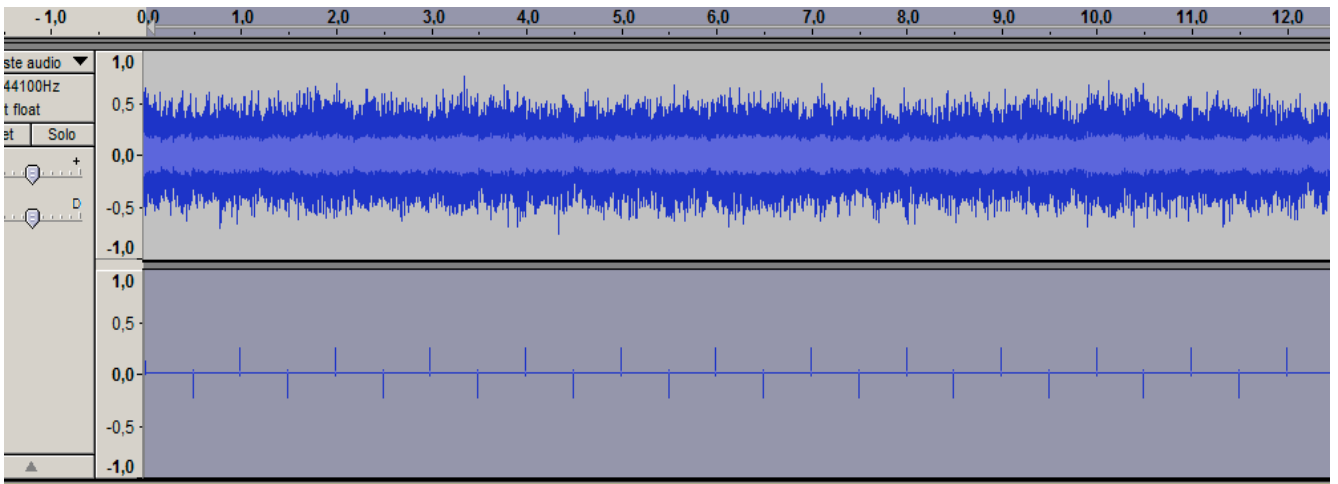


The moon tracking was ensured visually.

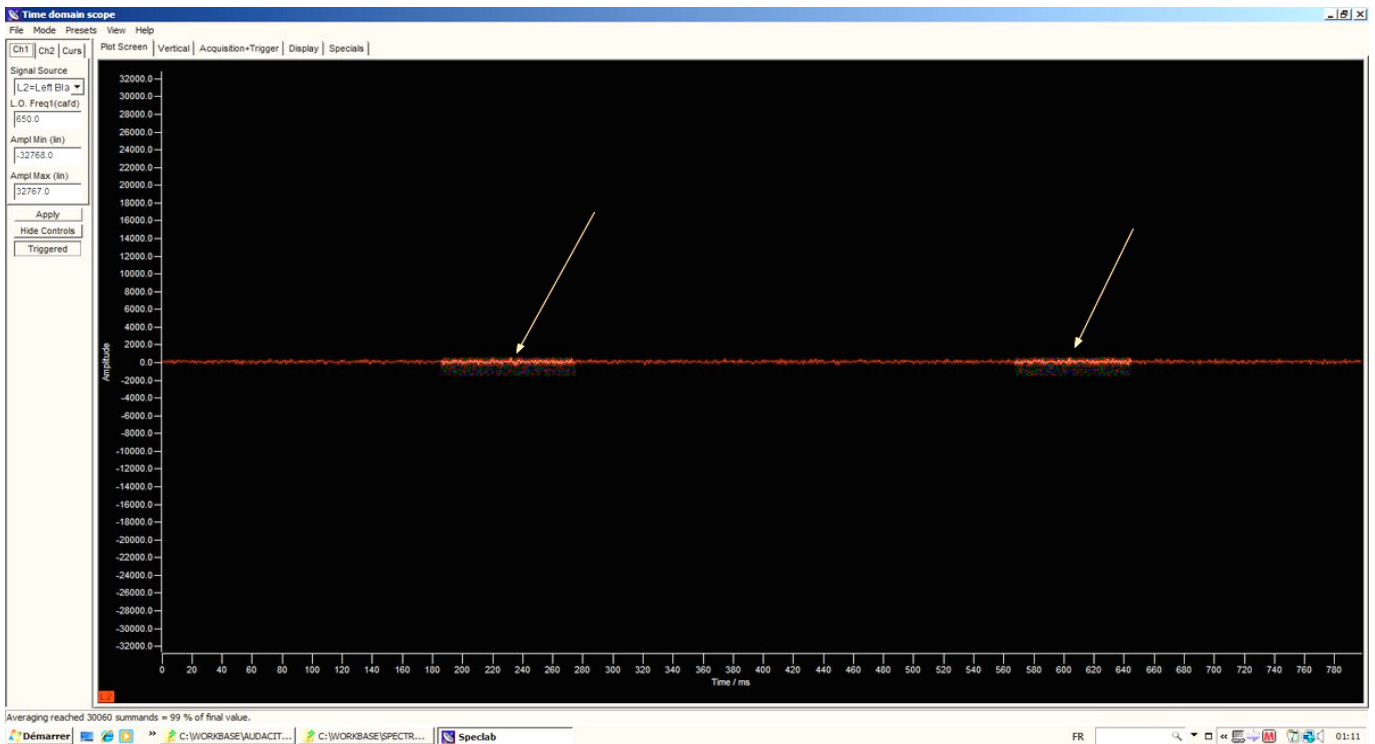
The SD3084 hybrid photodiode was relocated periodically in the vicinity of the sunlit part of the moon to scan the dark surface of the disc.



The attempt of detection is ensured by the "time domain" Spectrum Laboratory program. Synchronization is performed by the 1PPS rising fronts.



The amplitude is integrated into a 32,000 measurements loop per FFT time bin.



After several hours of treatment, it would take much imagination to identify the two points that should highlight the optical pulses?