

Spectrum Lab - Conditional Action Script for Meteor Analysis

Wolfgang Kaufmann, 2015 (based on a script of Simon Dawes)

When detecting a meteor the script takes a bitmap-screenshot of the waterfall display and records a sound-file (important: activate the pretrigger function of Spectrum Lab). It also can capture the plot-window if enabled.

To adapt the script to your needs here a short description of its parameters :

Line 4: THRESHOLD (signal strength in dB above noise) triggers the detection: adapt to your receiving system / TSMALL (signal strength in dB above noise) stops tracking of the fading meteor signal: adapt to your receiving system / NLOW, NHIGH: frequency span of noise measurement (it is broader than the frequency span for meteor detection to guarantee good signal difference even with fast and strong Doppler shifted meteor signals / LOW, HIGH frequency span for detecting meteors (to keep out interference this span should be as narrow as possible).

Line 6: SCRCONST (time in s) determines when a screen capture is taken after a meteor detection (depends on how fast your scrolling speed is).

Line 8: DIR holds the path of file storage (must be adapted to your system).

timer1: determines the time span in seconds after which a screen shot is taken (in my case I choose a scrolling speed that displays 1 min of reception).

timer2: determines the time span in seconds after which the sound-recording is stopped.

timer3: determines the time span in seconds after which a notification will be printed on the screen containing the parameter of the detected meteor.