

Description of parameters of meteor trajectories

Name of file:

single_station_table_StationID_CameraNumber.csv

Columns:

- mjd - Modified Julian Date of trajectory first point;
- sol - solar longitude of trajectory first point, deg;
- isot - UTC of trajectory first point in ISO 8601 format;
- dur_sec - duration of observed trajectory;
- frames - number of half-frames;
- infield - denotes whether the meteor entered or left the field of view. '0' = started and ended outside the field of view, '1' = started outside but ended inside, '2' = started inside but ended outside, '3' = both start and end are inside the field of view;
- Xb, Xe, Yb, Ye - coordinates of start and end points of trajectory in pixels;
- pix_len - trajectory length in pixels;
- Asum, Bav, Theta - parameters of trajectory as ellipse detected by SExtractor (semimajor and semiminor axes and orientation angle);
- Rab_deg, Hab_deg, Deb_deg, Rae_deg, Hae_deg, Dee_deg - equatorial coordinates (right ascension, hour angle, declination) of trajectory start and end points;
- da1_deg, da2_deg - errors of trajectory equatorial coordinates measurement (right ascension, declination);
- sumFlux, errFlux - total brightness of detected trajectory pixels and its error;
- mag_int, mag_max, errmag - integral magnitude of detected trajectory, magnitude in maximum of lightcurve, error of measurement;
- L_deg, HW_deg, dL_deg, dHW_deg - angular length and half-width of trajectory and their errors;
- PoleRa_deg, PoleHa_deg, PoleDe_deg, errPoleRa_deg, errPoleHa_deg, errPoleDe_deg - equatorial coordinates (right ascension, hour angle, declination) of large circle pole of meteor trajectory;
- w_av_degps, w_med_degps, w_max_degps, w_sd_degps - meteor angular velocities: average value, median, maximum, standard deviation;
- n_refstar - number of matched reference stars;
- ref_dra_deg, ref_dde_deg, ref_dmag - errors of reference stars measurement (right ascension, declination, magnitude).

Stations' locations:

SAC:

latitude = 46.971594 deg

longitude = 31.973039 deg

altitude = 71.0 m

BAS:

latitude = 46.871598 deg

longitude = 32.018309 deg

altitude = 50.0 m