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To load the trajectory summary files programmatically in Python, consider using the

`loadTrajectorySummaryFast` function from [WesternMeteorPyLib](#):

<https://github.com/wmpg/WesternMeteorPyLib/blob/master/wmpl/Formats/WmplTrajectorySummary.py>

Description of columns:

Name	Description
Unique trajectory identifier	A 20-character string containing the beginning time (rounded to seconds) and a truncated MD5 hash encoding the trajectory position.
Beginning Julian date	Julian date of the beginning of the meteor.
Beginning UTC Time	UTC time of the beginning of the meteor.
IAU No	IAU shower number, see https://www.ta3.sk/IAUC22DB/MDC2022/Roje/roje_lista.php . Sporadic meteors have a code -1.
IAU code	Three-letter IAU shower code. Sporadic meteors have a code "...".
Sol lon (deg)	Solar longitude of the beginning of the meteor.
App LST (deg)	Apparent local sidereal time of the beginning of the meteor.
RAgeo (deg)	Geocentric right ascension in the J2000 epoch.
+/- sigma	One sigma error (repeated for every previous value).
DECgeo (deg)	Geocentric declination in the J2000 epoch.
LAMgeo (deg)	Geocentric ecliptic longitude in the J2000 epoch.
BETgeo (deg)	Geocentric ecliptic latitude in the J2000 epoch.
Vgeo (km/s)	Geocentric velocity.
LAMhel (deg)	Heliocentric ecliptic longitude in the J2000 epoch.
BETHel (deg)	Heliocentric ecliptic latitude in the J2000 epoch.
Vhel (km/s)	Heliocentric velocity.
a (AU)	Semi-major axis.
e	Eccentricity.
i (deg)	Inclination.
peri (deg)	Argument of perihelion.
node (deg)	Ascending node.
Pi (deg)	Longitude of perihelion.
b (deg)	Latitude of perihelion.
q (AU)	Perihelion distance.

f (deg)	True anomaly at the beginning of the meteor.
M (deg)	Mean anomaly.
Q (AU)	Aphelion distance.
n (deg/day)	Mean motion in the orbit.
T	Orbital period.
TisserandJ	Tisserand's parameter with respect to Jupiter.
RAapp (deg)	Apparent ground-fixed radiant right ascension in the epoch of date.
DECapp (deg)	Apparent ground-fixed radiant declination in the epoch of date.
Azim +E of N (deg)	Apparent ground-fixed radiant azimuth (+east of due north convention).
Elev (deg)	Apparent ground-fixed radiant elevation (i.e. entry angle).
Vinit (km/s)	Apparent ground-fixed initial velocity.
Vavg (km/s)	Apparent ground-fixed average velocity.
LatBeg +N (deg)	Latitude of the beginning of the meteor.
LonBeg +E (deg)	Longitude of the beginning of the meteor.
HtBeg (km)	Begin height of the meteor (above the WGS84 ellipsoid).
LatEnd +N (deg)	Latitude of the meteor end.
LonEnd +E (deg)	Longitude of the meteor end.
HtEnd (km)	End height of the meteor (above the WGS84 ellipsoid).
Duration (sec)	Observed meteor duration.
Peak AbsMag	Peak magnitude normalized to the range of 100 km.
Peak Ht (km)	Height at which with peak magnitude occured.
F param	The F parameter defined as (HtBeg – PeakHt)/(HtBeg - HtEnd)
Mass, tau = 0.7% (kg)	Mass in kilograms computed with a dimensionless luminous efficiency of 0.7%.
Qc (deg)	Maximum convergence angle between all stations that observed the meteor.
MedianFitErr (arcsec)	Median angular trajectory fit errors in arc seconds.
Beg in FOV	Beginning of the meteor observed by at least one camera.
End in FOV	Ending of the meteor observed by at least one camera.
Num stat	Number of stations which observed the meteor.
Participating stations	Station codes of stations which observed the meteor.