Exoplanet Data Features - Detailed Definitions

tfopwg_disp

Beginner: Code for planet status (CP=Confirmed, FP=False Positive, KP=Known, PC=Candidate). Expert: Classification by TESS Follow-up Program.

rastr

Beginner: Star’s position in hours:minutes:seconds. Expert: Right Ascension in sexagesimal notation.

ra

Beginner: Star’s position in degrees. Expert: Right Ascension in decimal degrees.

decstr

Beginner: Star’s up-down position in degrees:minutes:seconds. Expert: Declination in sexagesimal.

dec

Beginner: Star’s up-down position in degrees. Expert: Declination in decimal degrees.

st_pmra

Beginner: How much the star moves sideways across the sky per year. Expert: Proper motion in Right Ascension [mas/yr].

st_pmraerr1

Beginner: Upper measurement error of RA motion. Expert: +1σ uncertainty of proper motion in RA.

st_pmraerr2

Beginner: Lower measurement error of RA motion. Expert: –1σ uncertainty of proper motion in RA.

st_pmralim

Beginner: Flag for whether RA motion value is reliable. Expert: Proper motion RA limit flag.

st_pmdec

Beginner: How much the star moves up-down per year. Expert: Proper motion in Declination [mas/yr].

st_pmdecerr1

Beginner: Upper error for Dec motion. Expert: +1σ uncertainty of proper motion in Dec.

st_pmdecerr2

Beginner: Lower error for Dec motion. Expert: –1σ uncertainty of proper motion in Dec.

st_pmdeclim

Beginner: Flag for whether Dec motion value is reliable. Expert: Proper motion Dec limit flag.

pl_tranmid

Beginner: Time when planet is in front of star. Expert: Transit midpoint [BJD].

pl_tranmiderr1

Beginner: Upper error for transit midpoint. Expert: +1σ uncertainty [BJD].

pl_tranmiderr2

Beginner: Lower error for transit midpoint. Expert: –1σ uncertainty [BJD].

pl_tranmidlim

Beginner: Flag for reliability of transit midpoint. Expert: Transit midpoint limit flag.

pl_orbper

Beginner: Days planet takes to orbit star. Expert: Orbital period [days].

pl_orbpererr1

Beginner: Upper error of orbital period. Expert: +1σ uncertainty [days].

pl_orbpererr2

Beginner: Lower error of orbital period. Expert: –1σ uncertainty [days].

pl_orbperlim

Beginner: Flag for reliability of orbital period. Expert: Orbital period limit flag.

pl_trandurh

Beginner: Hours planet blocks star’s light. Expert: Transit duration [hours].

pl_trandurherr1

Beginner: Upper error of transit duration. Expert: +1σ uncertainty [hours].

pl_trandurherr2

Beginner: Lower error of transit duration. Expert: –1σ uncertainty [hours].

pl_trandurhlim

Beginner: Flag for reliability of transit duration. Expert: Transit duration limit flag.

pl_trandep

Beginner: How much the star dims during transit. Expert: Transit depth [ppm].

pl_trandeperr1

Beginner: Upper error of transit depth. Expert: +1σ uncertainty [ppm].

pl_trandeperr2

Beginner: Lower error of transit depth. Expert: –1σ uncertainty [ppm].

pl_trandeplim

Beginner: Flag for reliability of transit depth. Expert: Transit depth limit flag.

pl_rade

Beginner: Planet’s size compared to Earth. Expert: Planet radius [R_Earth].

pl_radeerr1

Beginner: Upper error of planet radius. Expert: +1σ uncertainty [R_Earth].

pl_radeerr2

Beginner: Lower error of planet radius. Expert: –1σ uncertainty [R_Earth].

pl_radelim

Beginner: Flag for reliability of planet radius. Expert: Planet radius limit flag.

pl_insol

Beginner: How much sunlight the planet gets vs Earth. Expert: Planet insolation [Earth flux].

pl_eqt

Beginner: Estimated surface temperature. Expert: Planet equilibrium temperature [K].

st_tmag

Beginner: Brightness of star as seen by TESS. Expert: TESS magnitude.

st_tmagerr1

Beginner: Upper error for brightness. Expert: +1σ uncertainty of TESS magnitude.

st_tmagerr2

Beginner: Lower error for brightness. Expert: –1σ uncertainty of TESS magnitude.

st_tmaglim

Beginner: Flag for reliability of brightness. Expert: TESS magnitude limit flag.

st_dist

Beginner: Distance to the star in parsecs. Expert: Stellar distance [pc].

st_disterr1

Beginner: Upper error for distance. Expert: +1σ uncertainty [pc].

st_disterr2

Beginner: Lower error for distance. Expert: –1σ uncertainty [pc].

st_distlim

Beginner: Flag for reliability of distance. Expert: Stellar distance limit flag.

st_teff

Beginner: Temperature of the star’s surface. Expert: Effective temperature [K].

st_tefferr1

Beginner: Upper error for temperature. Expert: +1σ uncertainty [K].

st_tefferr2

Beginner: Lower error for temperature. Expert: –1σ uncertainty [K].

st_tefflim

Beginner: Flag for reliability of temperature. Expert: Effective temperature limit flag.

st_logg

Beginner: Strength of star’s surface gravity. Expert: log g [cm/s²].

st_loggerr1

Beginner: Upper error of surface gravity. Expert: +1σ uncertainty [cm/s²].

st_loggerr2

Beginner: Lower error of surface gravity. Expert: –1σ uncertainty [cm/s²].

st_logglim

Beginner: Flag for reliability of surface gravity. Expert: log g limit flag.

st_rad

Beginner: Size of star compared to Sun. Expert: Stellar radius [R_Sun].

st_raderr1

Beginner: Upper error of radius. Expert: +1σ uncertainty [R_Sun].

st_raderr2

Beginner: Lower error of radius. Expert: –1σ uncertainty [R_Sun].

st_radlim

Beginner: Flag for reliability of radius. Expert: Stellar radius limit flag.