

# NASA EXOPLANET ARCHIVE

## NASA EXOPLANET SCIENCE INSTITUTE

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### TESS Objects of Interest Table Data Columns

The TESS Objects of Interest (TOI) table lists parameters currently available for the objects of interest identified by the Transiting Exoplanet Survey Satellite Project. These parameters are displayed in the [TOI interactive table](#).

The TOI list on the NASA Exoplanet Archive is updated approximately once a week based on the ExoFOP TOI list. Because the TOIs, and their associated parameters, are continually being updated by the Project and Community on the [ExoFOP site](#), the Exoplanet Archive list may be slightly out of sync with the ExoFOP.

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#### TESS Identification Columns

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Database Column Name	Table Label	Description	Uncertainties Column (positive +) (negative -)	Limit Column
toi†	TESS Object of Interest	A number used to identify and track a TESS Object of Interest (TOI). TOIs are identified and numbered by the TESS Project. A TOI name has an integer and a decimal part of the format TOI-NNNNN.DD. The integer part designates the target star; the two-digit decimal part identifies a unique transiting object associated with that star.		
toipfx	TESS Object of Interest Prefix	The integer portion of the TOI Identifier, designating the target star. (See toi description above.)		
tid†	TESS Input Catalog ID	Target identification number, as listed in the <a href="#">TESS Input Catalog (TIC)</a> .		
ctoi_alias	Community TESS Object of Interest Alias	A number used to track and identify objects of interest identified by the TESS project and by the community. This number has an integer and a decimal part, where the integer is the TESS Input Catalog (TIC) ID of the target star, and the two-digit decimal part identifies		

		a unique transiting object associated with that star.		
pl_pnum	Number of Planet Candidates	Number of planet candidates in the planetary system.		
tfopwg_dispt†	TFOPWG Disposition	TESS Follow-up Observing Program Working Group (TFOPWG) Disposition:  <b>APC</b> =ambiguous planetary candidate <b>CP</b> =confirmed planet <b>FA</b> =false alarm <b>FP</b> =false positive <b>KP</b> =known planet <b>PC</b> =planetary candidate		

† Default column: these columns display in the interactive table when the table is first loaded, and when **Reset Filters** is clicked.

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### Position Columns

Database Column Name	Table Label	Description	Uncertainties Column (positive +) (negative -)	Limit Column
rastr†	RA [sexagesimal]	Right ascension of the planetary system in sexagesimal.	(+) rastrerr1 (-) rastrerr2	
ra	RA [deg]	Right Ascension of the planetary system in decimal degrees.		
decstr†	Dec [sexagesimal]	Declination of the planetary system in sexagesimal.	(+) decstrerr1 (-) decstrerr2	
dec	Dec [deg]	Declination of the planetary system in decimal degrees.		
st_pmra†	PMRA [mas/yr]	Angular change in right ascension over time as seen from the center of mass of the Solar System.	(+) st_pmraerr1 (-) st_pmraerr2	st_pmrallim
st_pmdec†	PMDec [mas/yr]	Angular change in declination over time as seen from the center of mass of the Solar System.	(+) st_pmdecerr1 (-) st_pmdecerr2	st_pmdeclim

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### Planet Properties Columns

Database Column Name	Table Label	Description	Uncertainties Column (positive +) (negative -)	Limit Column
pl_tranmid†	Planet Transit Midpoint [BJD]	The time given by the average of the time the planet begins to cross the stellar limb and the time the planet finishes crossing the stellar limb.	(+) pl_tranmiderr1 (-) pl_tranmiderr2	pl_tranmidlim

pl_orbper†	Planet Orbital Period [days]	Time the planet takes to make a complete orbit around the host star or system.	(+) pl_orbpererr1 (-) pl_orbpererr2	pl_orbperlim
pl_trandurh†	Planet Transit Duration [hours]	The length of time from the moment the planet begins to cross the stellar limb to the moment the planet finishes crossing the stellar limb.	(+) pl_trandurherr1 (-) pl_trandurherr2	pl_trandurhlim
pl_trandep†	Planet Transit Depth [ppm]	The size of the relative flux decrement caused by the orbiting body transiting in front of the star.	(+) pl_trandeperr1 (-) pl_trandeperr2	pl_trandeplim
pl_rade†	Planet Radius [R_Earth]	Length of a line segment from the center of the planet to its surface, measured in units of radius of the Earth.	(+) pl_radeerr1 (-) pl_radeerr2	pl_radelim
pl_insolt†	Planet Insolation [Earth flux]	Insolation flux is the measure of the amount of stellar radiation received by the planet in units relative to that measured from the Earth from the Sun.	(+) pl_insolerr1 (-) pl_insolerr2	pl_insollim
pl_eqt†	Planet Equilibrium Temperature [K]	The equilibrium temperature of the planet as modeled by a black body heated only by its host star.	(+) pl_eqterr1 (-) pl_eqterr2	pl_eqtlim

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## Stellar Properties Columns

Database Column Name	Table Label	Description	Uncertainties Column (positive +) (negative -)	Limit Column
st_tmag†	TESS Magnitude	Brightness of the host star as measured using the TESS-band in units of magnitudes as reported in the TESS Input Catalog.	(+) st_tmagerr1 (-) st_tmagerr2	st_tmaglim
st_dist†	Stellar Distance [pc]	Distance to the planetary system in units of parsecs as reported in the TESS Input Catalog.	(+) st_disterr1 (-) st_disterr2	st_distlim
st_teff†	Stellar Effective Temperature [K]	Stellar effective temperature value as reported in the TESS Input Catalog.	(+) st_tefferr1 (-) st_tefferr2	st_tefflim
st_logg†	Stellar log(g) [cm/s**2]	Gravitational acceleration experienced at the stellar surface as reported in the TESS Input Catalog.	(+) st_loggerr1 (-) st_loggerr2	st_logglim
st_rad†	Stellar Radius [R_Sun]	Length of a line segment from the	(+) st_raderr1	st_radlim

		center of the star to its surface, measured in units of radius of the Sun as reported in the TESS Input Catalog.	(-) st_raderr2	
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Dates Columns

Database Column Name	Table Label	Description	Uncertainties Column (positive +) (negative -)	Limit Column
toi_created†	TOI Creation Date	Date on which the TESS Project identified the Object of Interest.		
rowupdate†	Date of Last Update	Date of last update of the planet parameters.		

Last updated: 22 September 2025



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