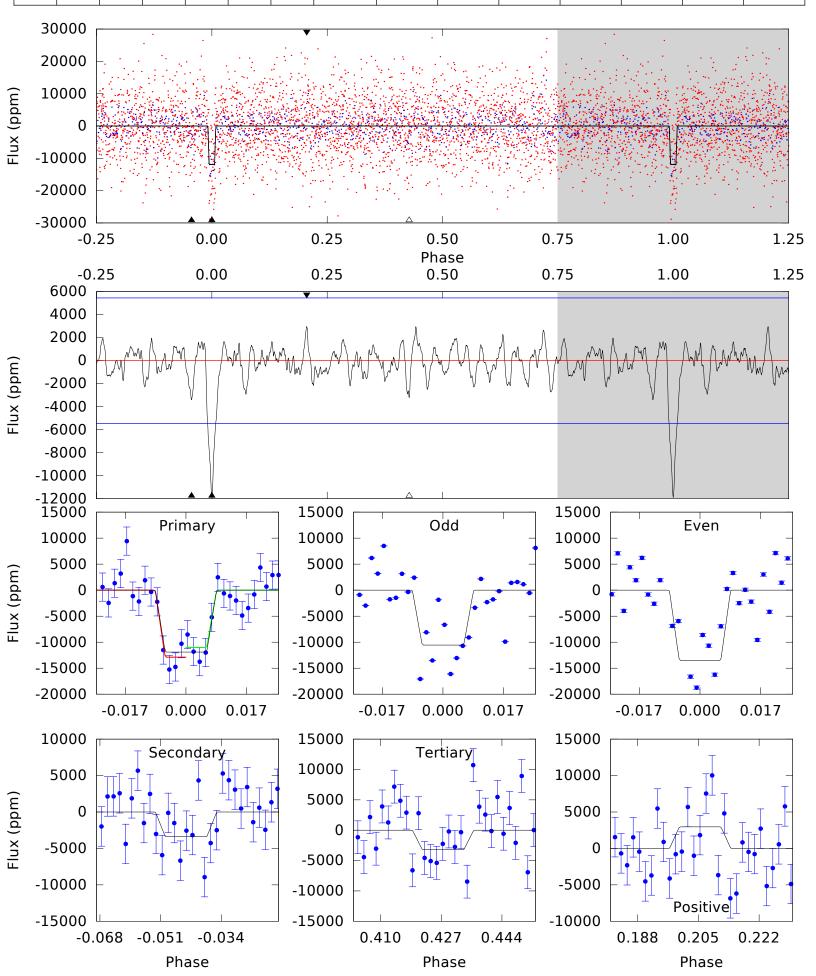


Software Revision: spoc-4.0.13-20191205 -- Date Generated: 17-Jan-2020 14:21:42 Z

This Data Validation Report Summary was produced in the TESS Science Processing Operations Center Pipeline at NASA Ames Research Center

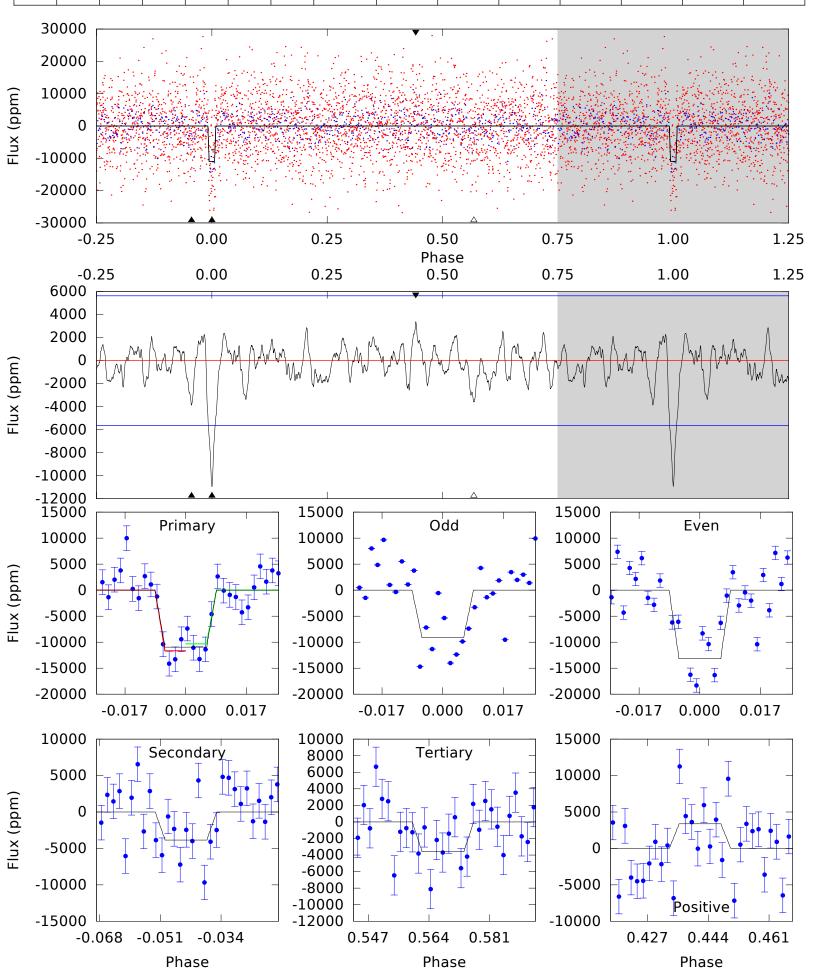
## $0000000470381900_01$ , P = 2.500715 Days, E = 1814.195930 Days

Pri	Sec	Ter	Pos	FA <sub>1</sub>	FA <sub>2</sub>	F <sub>Red</sub>	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
10.8	3.07	2.90	2.67	4.92	2.38	0.99	7.85	8.08	0.17	0.40	1.36	1.00	0.20	0.85

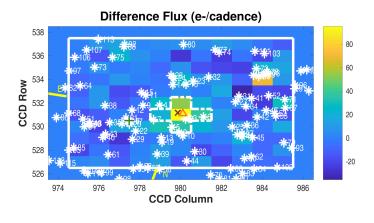


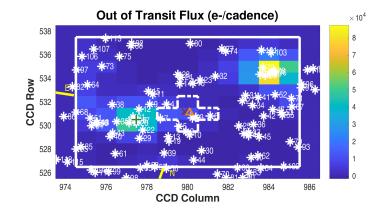
## $0000000470381900_01$ , P = 2.500715 Days, E = 1814.195891 Days

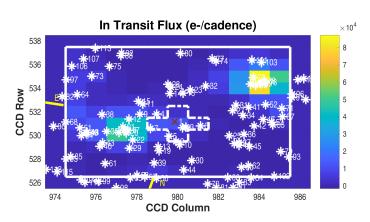
Pri	Sec	Ter	Pos	FA <sub>1</sub>	FA <sub>2</sub>	F <sub>Red</sub>	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
9.57	3.37	3.14	2.95	4.92	2.38	1.08	6.43	6.62	0.23	0.42	1.81	1.10	0.24	0.58

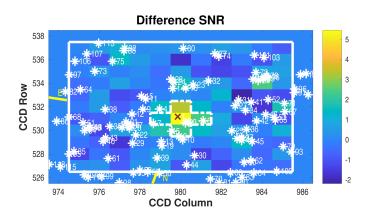


Difference Image Planet Candidate 1 / Sector 19 / Target Pixel Table 184



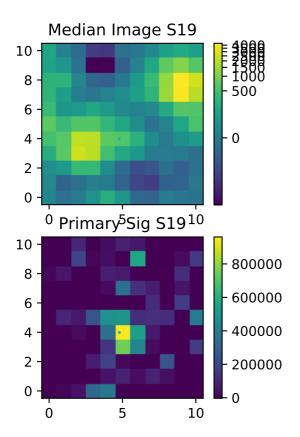






Difference image for target 470381900, planet candidate 1, sector 19, target pixel table 184. Upper left: difference between mean flux out-of-transit and in-transit; upper right: mean out-of-transit flux; lower left: mean in-transit flux; lower right: difference between mean flux out-of-transit after normalizing by the uncertainty in the difference for each pixel. The optimal aperture is outlined with a white dash-dotted line in each panel and the target mask is outlined with a solid white line. Symbol key: x: target position from TIC RA and Dec converted to CCD coordinates via motion polynomials; \*: position of nearby TIC objects converted to CCD coordinates via motion polynomials; +: PRF-fit location of target from out-of-transit image; triangle: PRF-fit location of transit source from the difference image. Number of transits = 9; number of valid in-transit cadences = 201; number of in-transit cadence gaps = 2; number of valid out-of-transit cadences = 592; number of out-of-transit cadence gaps = 11. Difference image quality metric = 0.64 (not good).

Open ./planet-01/difference-image/000000470381900-01-difference-image-19-184.fig



# Using TIC: 470381900

Using TIC catalog position 65.280563 48.819914 [J2000.0; epoch 2000.0]

Predicted GAIA position 65.280648 48.819831 [J2000.0; epoch 2015.5]

2MASS J04210733+4849116 From TIC

#### 35 TIC entries within 60.0 arcsec of target 470381900

```
470381907 Sep [arcsec]: 12.248 Tmag: 17.69 Teff: 6264.0 Logg: 3.93 Rs[Rsun]: 1.99
667421445 Sep [arcsec]: 13.967 Tmag: 17.95 Teff: 5520.0 Logg: 4.07 Rs[Rsun]: 1.50
667421451 Sep [arcsec]: 20.007 Tmag: 19.48 Teff: 0.0 Logg: 0.00 Rs[Rsun]: 0.00
470381897 Sep [arcsec]: 22.316 Tmag: 15.96 Teff: 5710.0 Logg: 3.36 Rs[Rsun]: 3.50
667421460 Sep [arcsec]: 25.168 Tmag: 19.06 Teff: 5364.0 Logg: 4.67 Rs[Rsun]: 0.74
470381901 Sep [arcsec]: 26.215 Tmag: 15.27 Teff: 0.0 Logg: 0.00 Rs[Rsun]: 0.00
470381912 Sep [arcsec]: 27.409 Tmag: 14.97 Teff: 5222.0 Logg: 3.93 Rs[Rsun]: 1.70
667421453 Sep [arcsec]: 33.243 Tmag: 18.98 Teff: 0.0 Logg: 0.00 Rs[Rsun]: 0.00
667421455 Sep [arcsec]: 36.528 Tmag: 19.47 Teff: 0.0 Logg: 0.00 Rs[Rsun]: 0.00
470381899 Sep [arcsec]: 37.104 Tmag: 15.25 Teff: 4504.0 Logg: 0.00 Rs[Rsun]: 9.19
667421457 Sep [arcsec]: 37.162 Tmag: 19.93 Teff: 0.0 Logg: 0.00 Rs[Rsun]: 0.00
667421454 Sep [arcsec]: 39.174 Tmag: 18.92 Teff: 0.0 Logg: 0.00 Rs[Rsun]: 0.00
470381889 Sep [arcsec]: 43.708 Tmag: 16.53 Teff: 6251.0 Logg: 4.03 Rs[Rsun]: 1.77
667421449 Sep [arcsec]: 45.736 Tmag: 19.50 Teff: 0.0 Logg: 0.00 Rs[Rsun]: 0.00
470381933 Sep [arcsec]: 45.887 Tmag: 18.82 Teff: 5226.0 Logg: 4.73 Rs[Rsun]: 0.67
470381905 Sep [arcsec]: 46.156 Tmag: 18.25 Teff: 3674.0 Logg: 4.97 Rs[Rsun]: 0.40
667421456 Sep [arcsec]: 47.856 Tmag: 19.53 Teff: 0.0 Logg: 0.00 Rs[Rsun]: 0.00
470381877 Sep [arcsec]: 48.407 Tmag: 18.47 Teff: 5476.0 Logg: 4.54 Rs[Rsun]: 0.87
666709106 Sep [arcsec]: 48.911 Tmag: 19.25 Teff: 0.0 Logg: 0.00 Rs[Rsun]: 0.00
666709113 Sep [arcsec]: 49.559 Tmag: 19.19 Teff: 0.0 Logg: 0.00 Rs[Rsun]: 0.00
```

#### No TOIs associated with TIC at ExoFop

#### **Target Parameters**

Catalog	Tmag/Rpmag	Teff	Logg	Rstar	Mstar
TIC	13.9664	3181.0±157.0	4.95±0.01	0.28± 0.0	0.25± 0.02
GAIA DR2	14.062	4007.2±276.4		0.00± 0.0	

Other GAIA G: 15.33 Bp: 17.07 AbsG: 10.91 (Bp-Rp)o: 2.795 AstroGOF: 24.49 AstroExNoiSig: 33.94

## **Target Links**

ExoFOP
Simbad
Vizier
MAST TESS Data Holdings
IRSA Finderchart
ESO Data Archive Holdings
TESScut TPF Download
GAIA DR2 60" Cone Search @MAST

### NASA Ames SPOC DV Results Available at MAST

No DV Results for this target at MAST