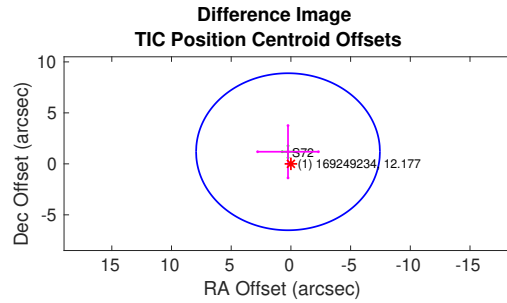
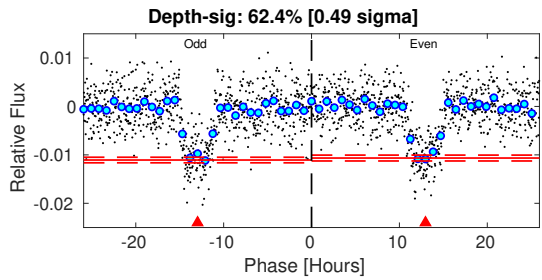
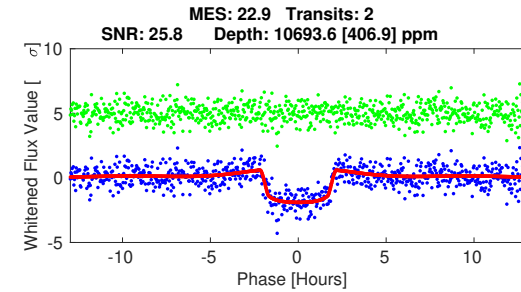
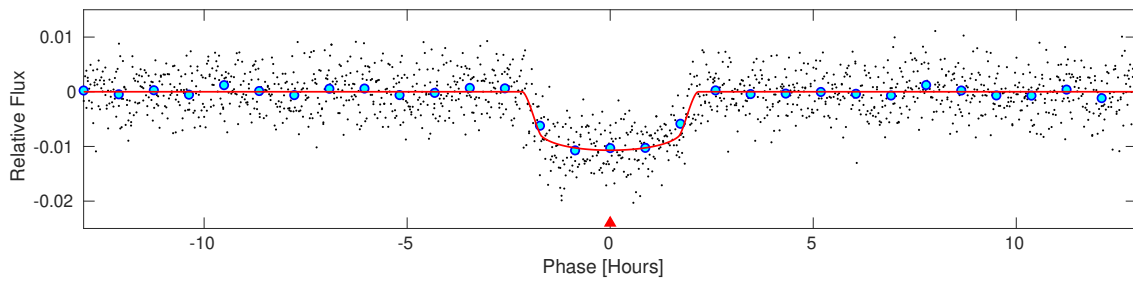
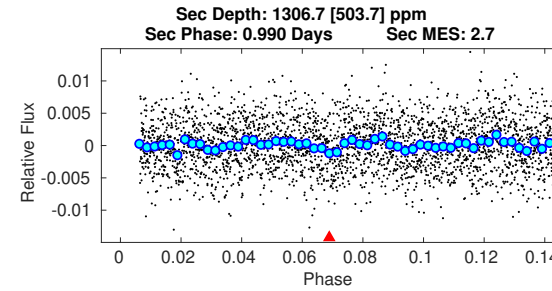
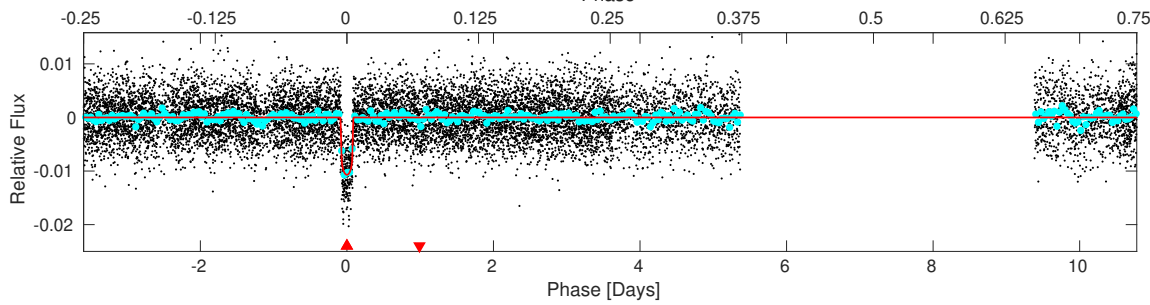
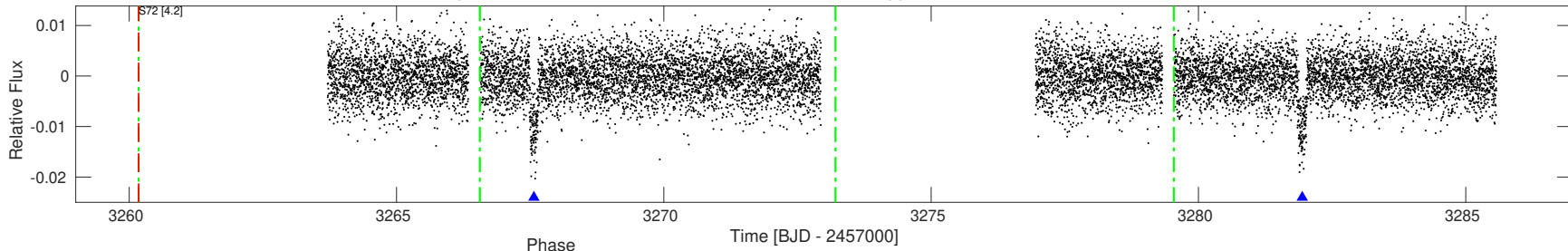


TIC: 169249234 Candidate: 1 of 1 Period: 14.372 d  
 TOI: 2524 Corr: No Ephemeris Match

Tmag: 12.18 R\*: 1.19 Rs Teff: 5758.3 K Logg: 4.30 M/H: 0.130 Rho: 0.616



DV Fit Results:

Period = 14.37232 [0.00249] d  
 Epoch = 3267.5695 [0.0018] BTJD  
 Rp/R\* = 0.0973 [0.0036]  
 a/R\* = 25.69 [4.07]  
 b = 0.43 [0.31]  
 Seff = 101.62 [16.31]  
 Teq = 810 [32] K  
 Rp = 12.61 [0.83] Re  
 a = 0.1169 [0.0084] AU  
 Rho = 1.102 [0.524]  
 Ag = 61.81 [25.56] [2.38 sigma]  
 Tp = 3510 [354] K [7.59 sigma]

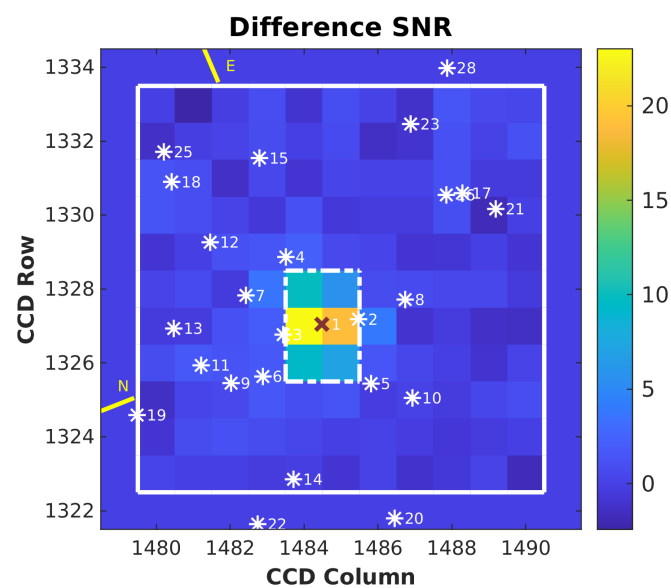
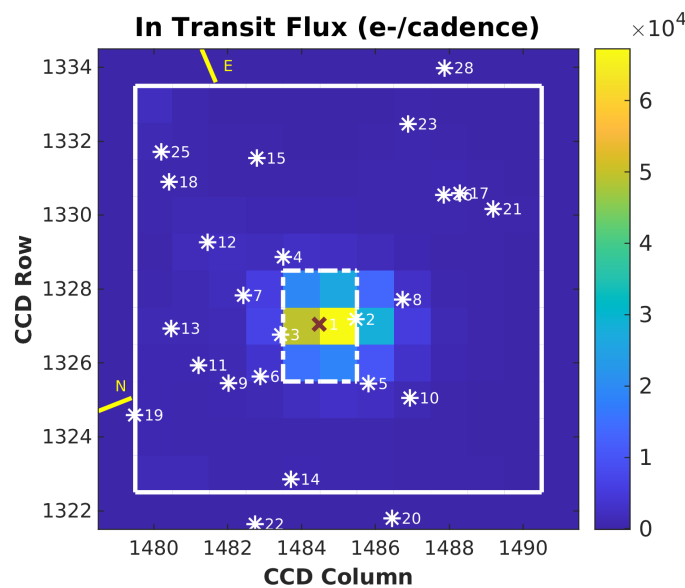
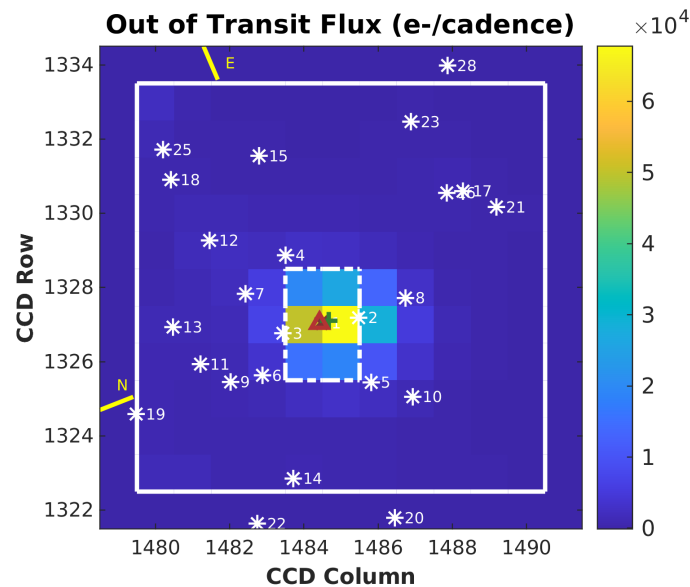
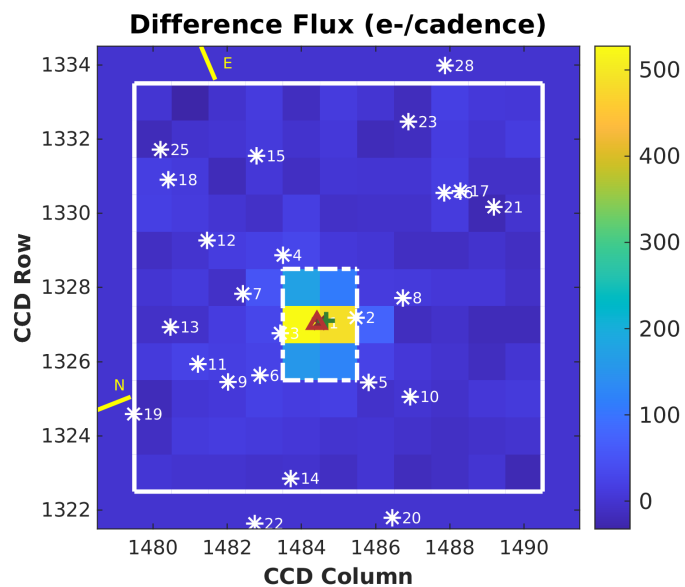
DV Diagnostic Results:

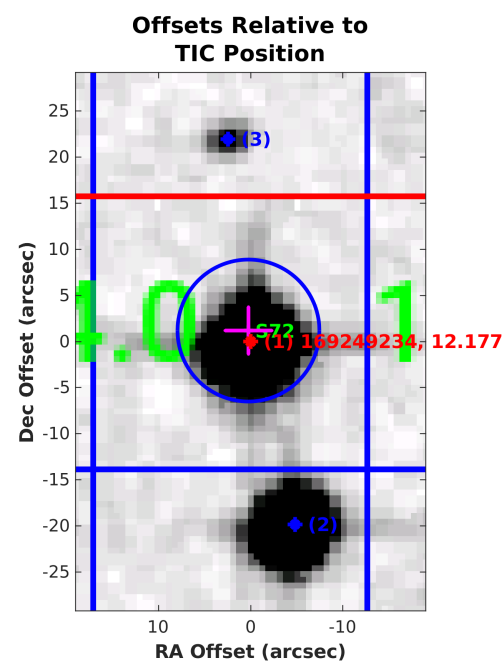
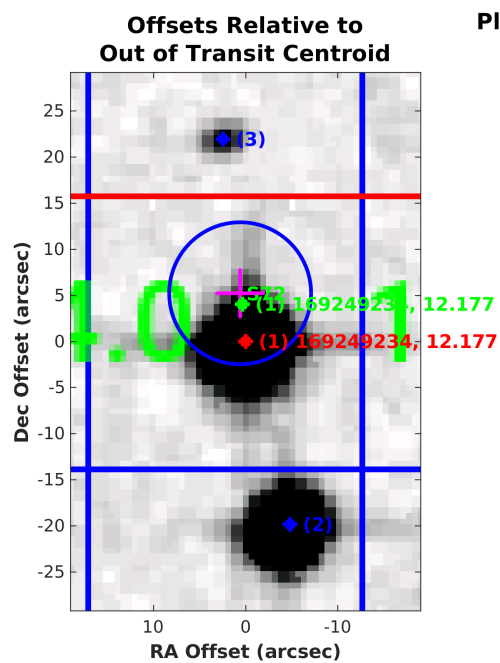
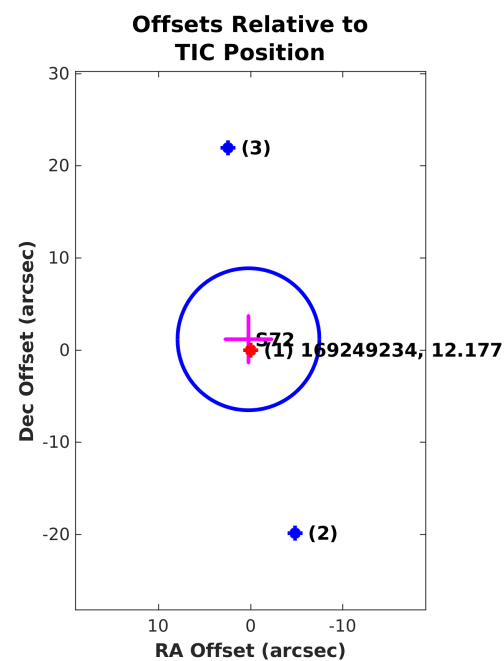
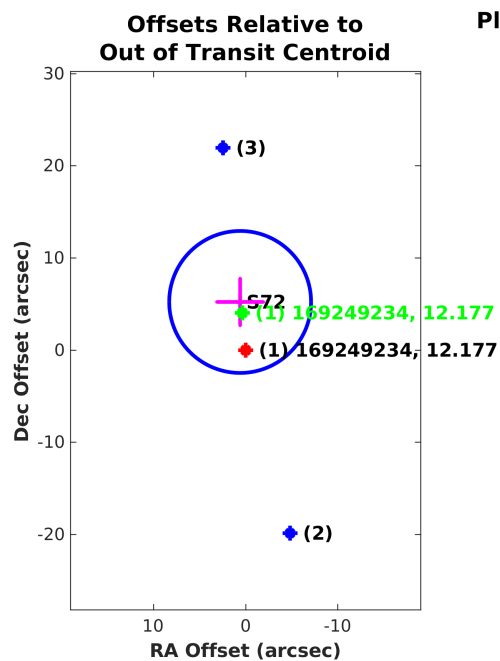
ShortPeriod-sig: N/A  
 LongPeriod-sig: N/A  
 ModelChiSquare2-sig: 37.8%  
 ModelChiSquareGof-sig: 100.0%  
 Bootstrap-pfa: 3.92e-207  
 GhostDiagnostic-chr: 4.505  
 OotOffset-rm: 5.267 arcsec [2.05 sigma]  
 TicOffset-rm: 1.212 arcsec [0.47 sigma]  
 OotOffset-tot: 1  
 TicOffset-tot: 1  
 DiffImageQuality-fgm: 1.00 [1/1]  
 DiffImageOverlap-fno: 1.00 [1/1]

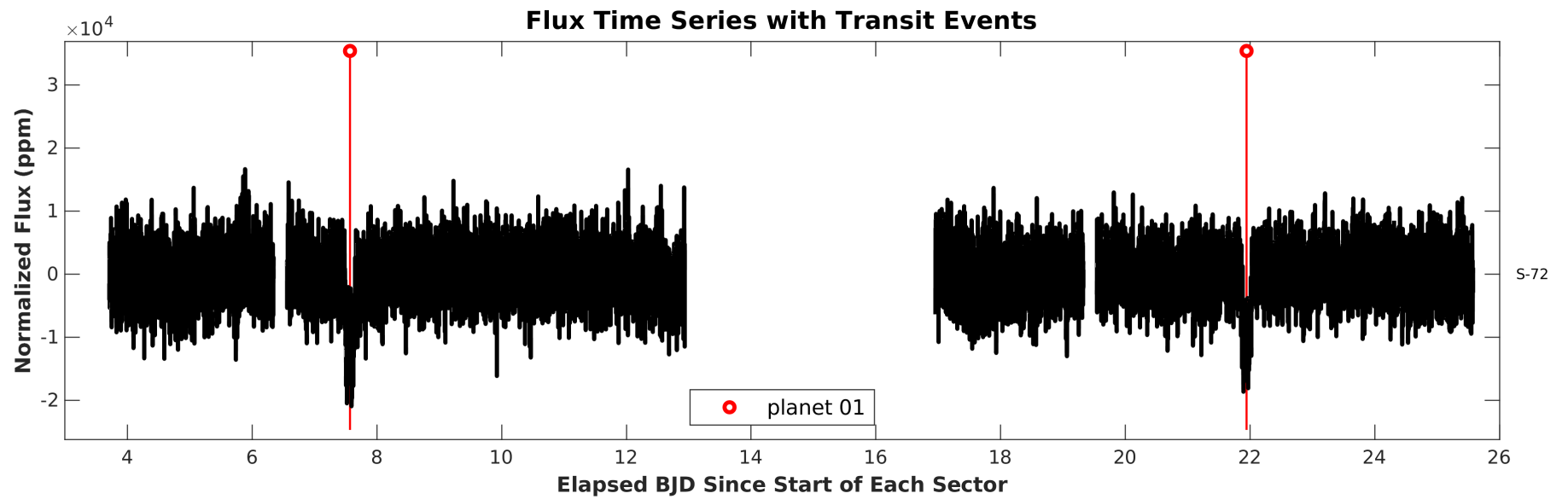
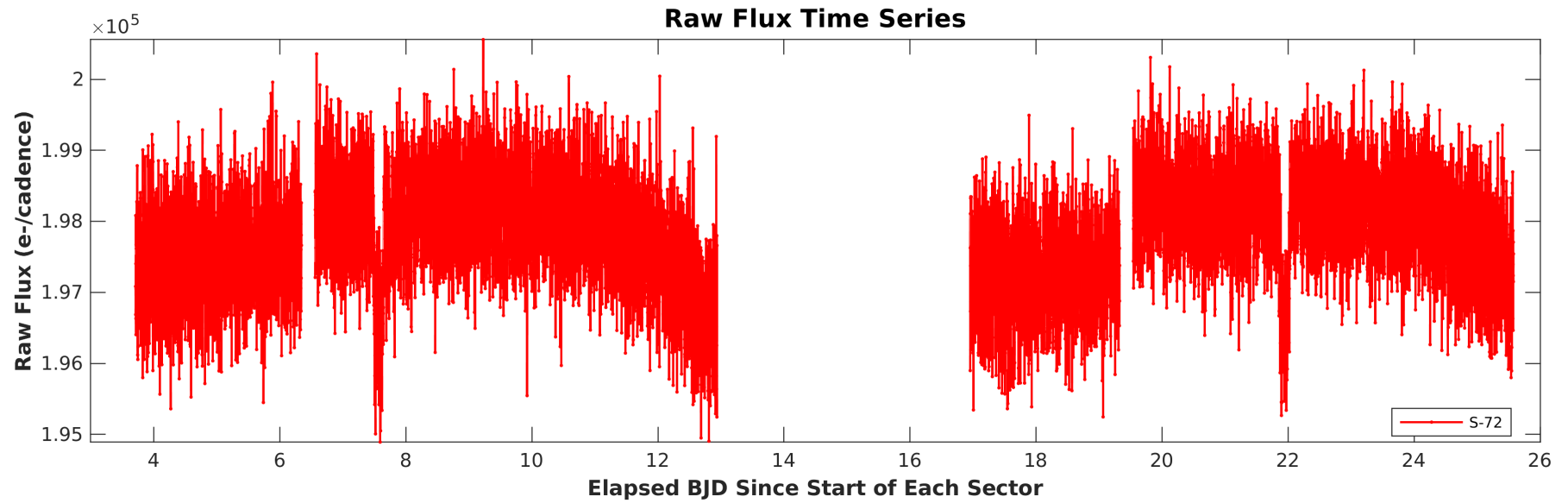
Software Revision: spoc-5.0.103-20231116 -- Cadence Type: TARGET (2.0-min) -- Date Generated: 09-Dec-2023 17:34:21 Z

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

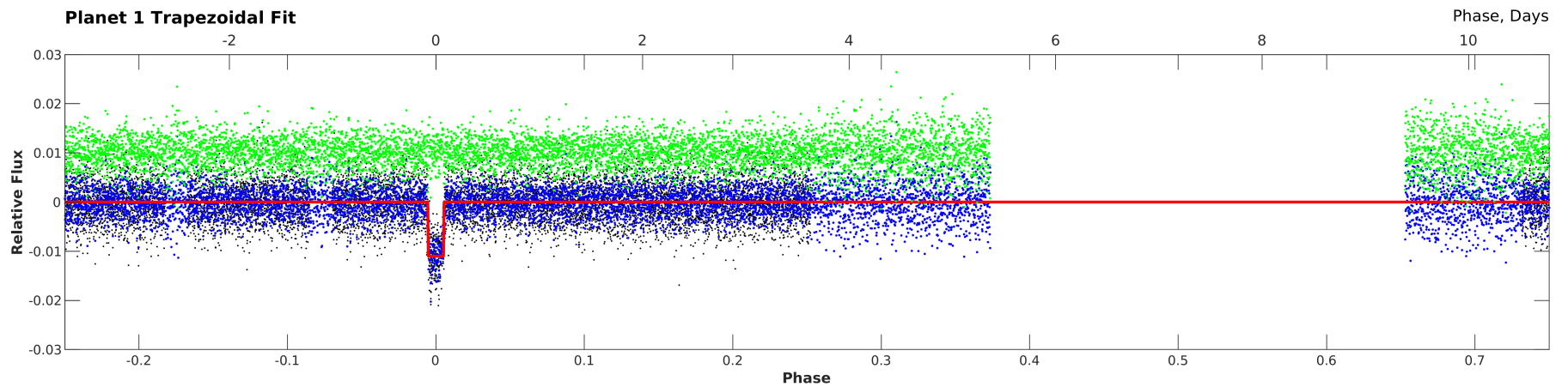
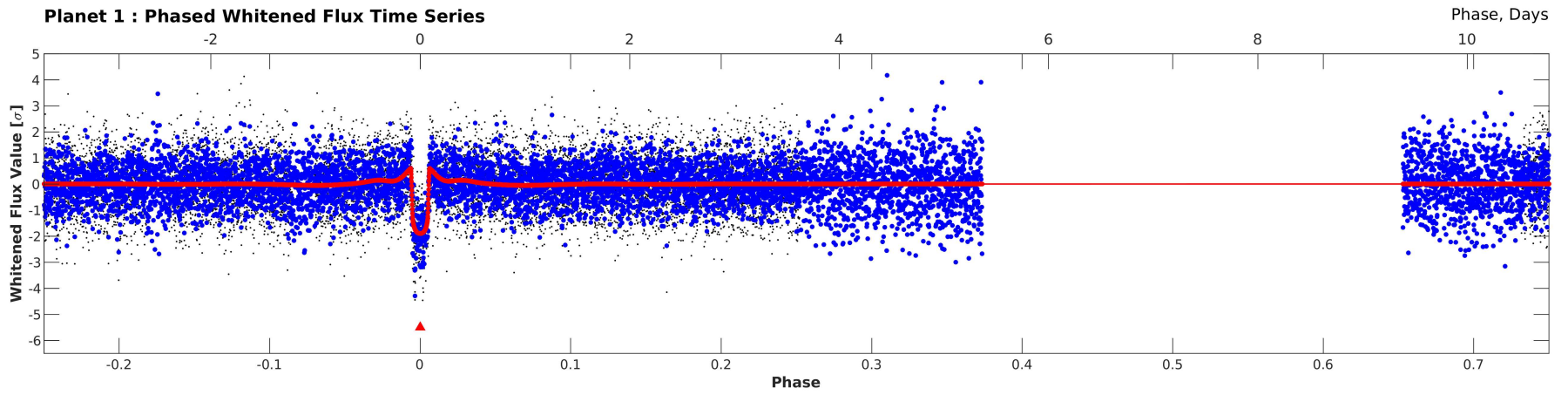
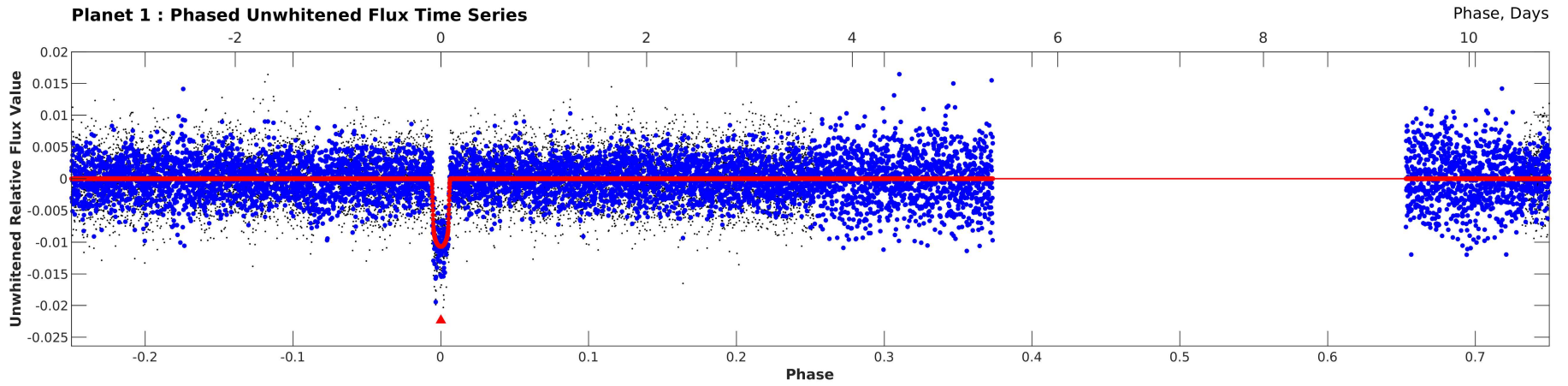
**Planet Candidate 1 / Sector 72 / Target Pixel Table 421**





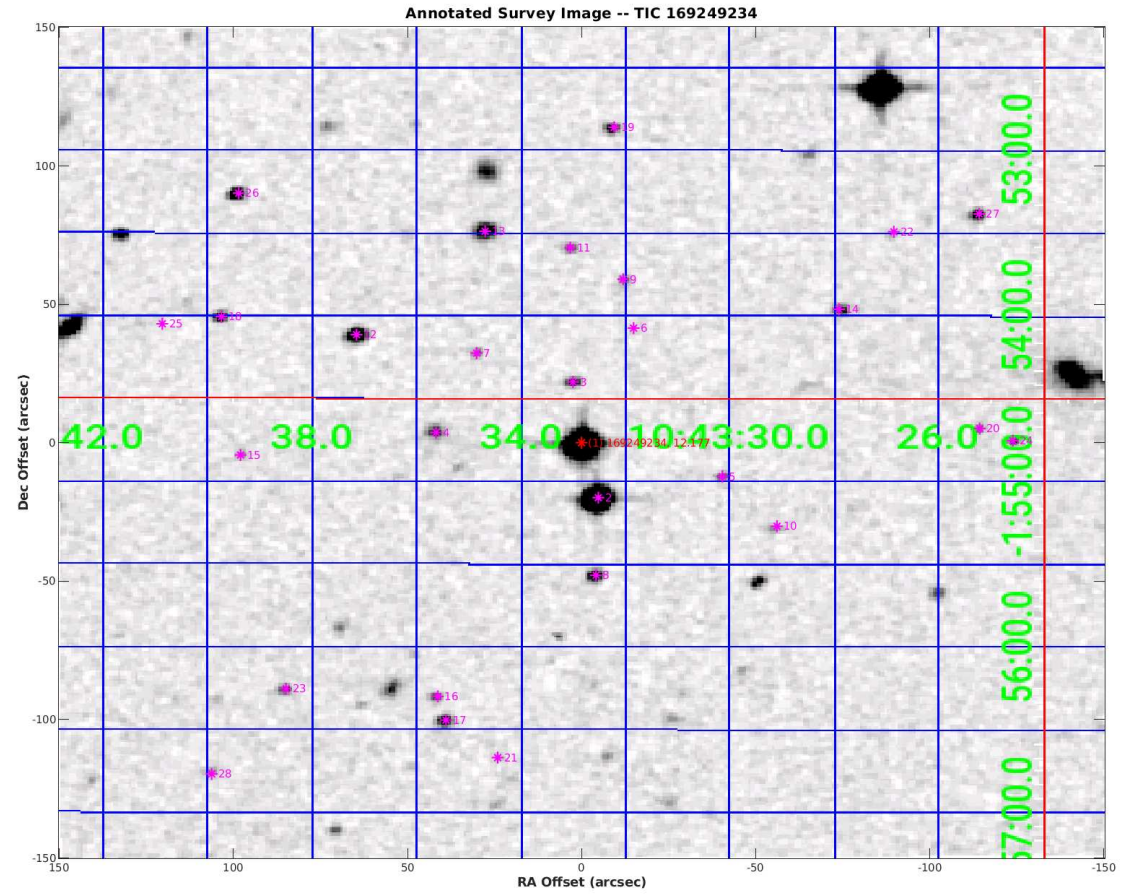






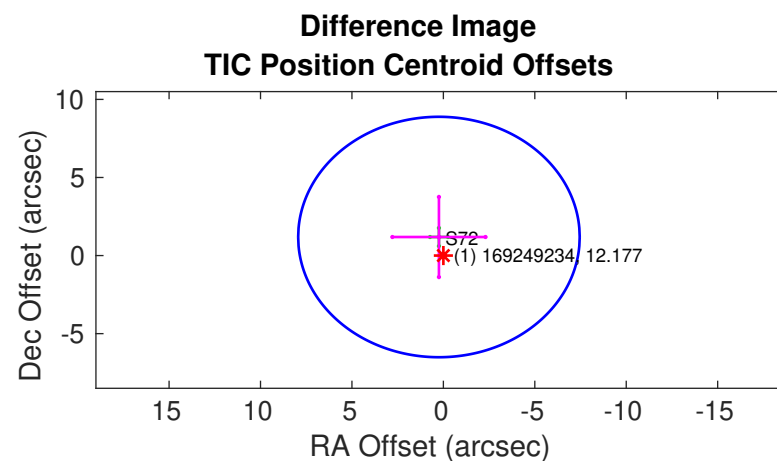
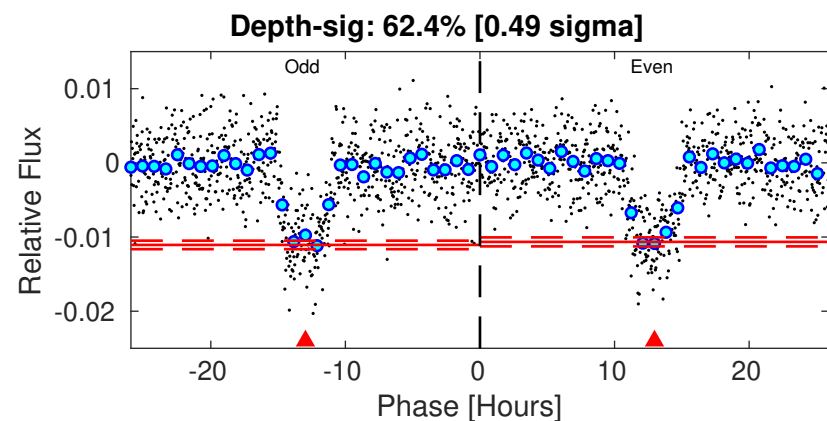
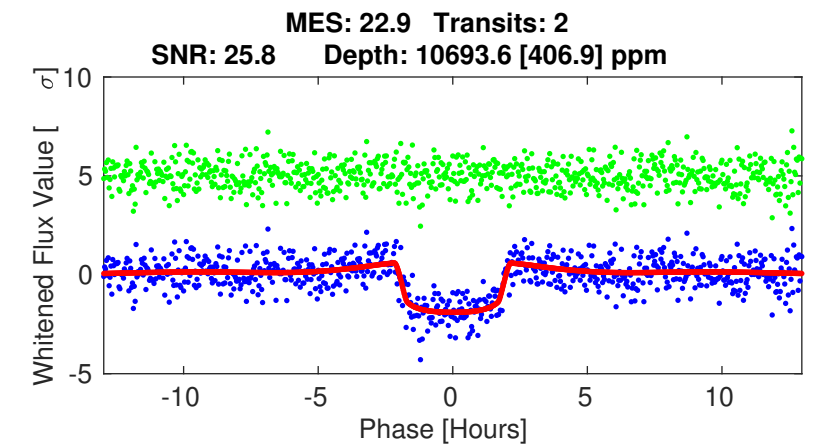
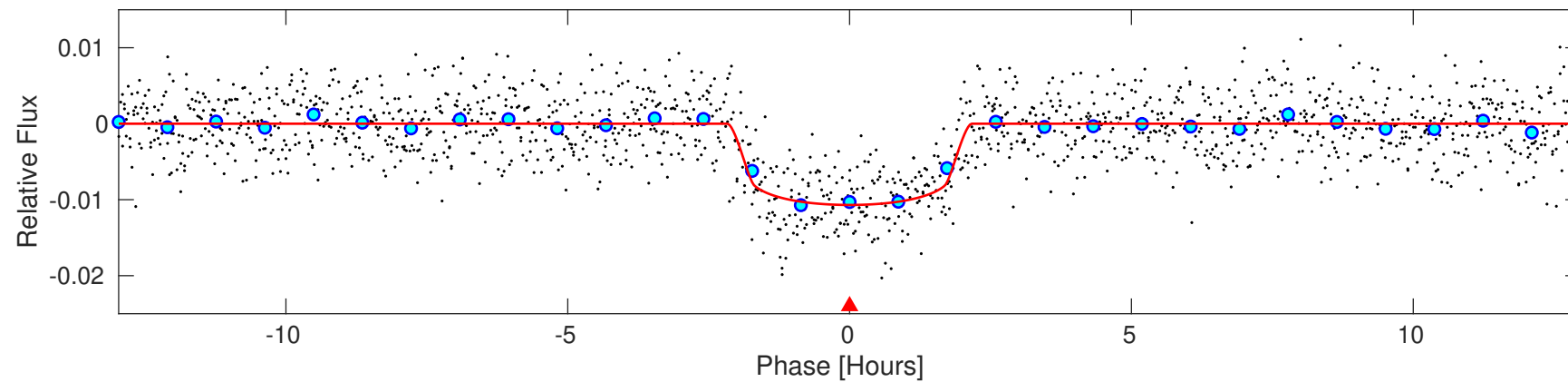
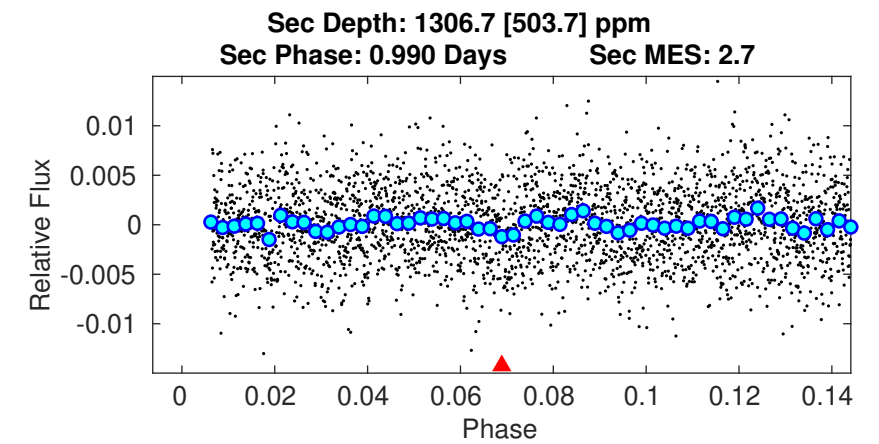
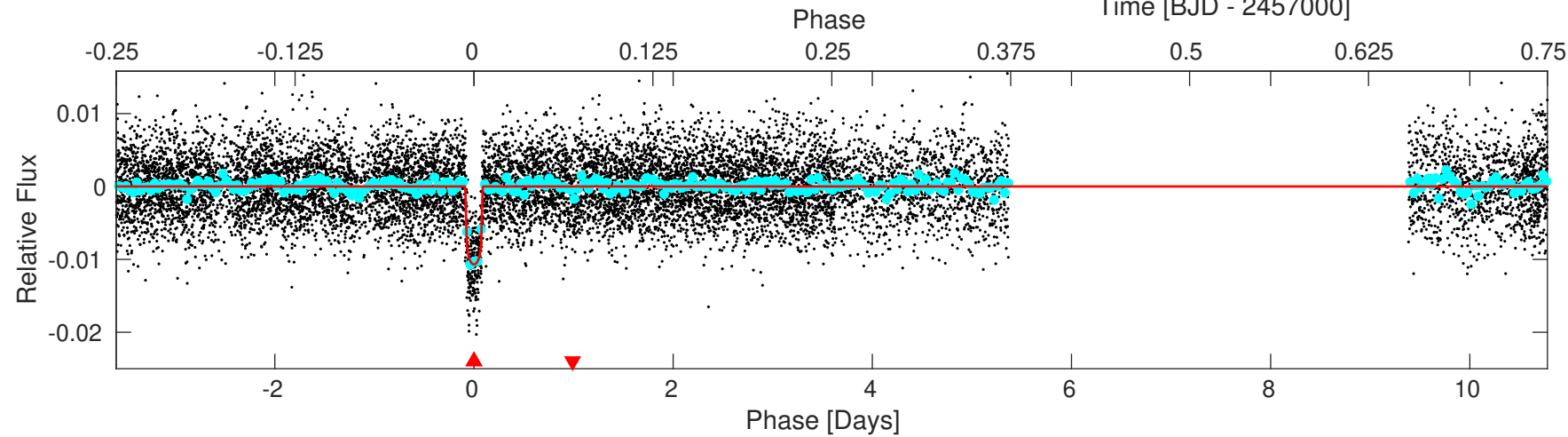
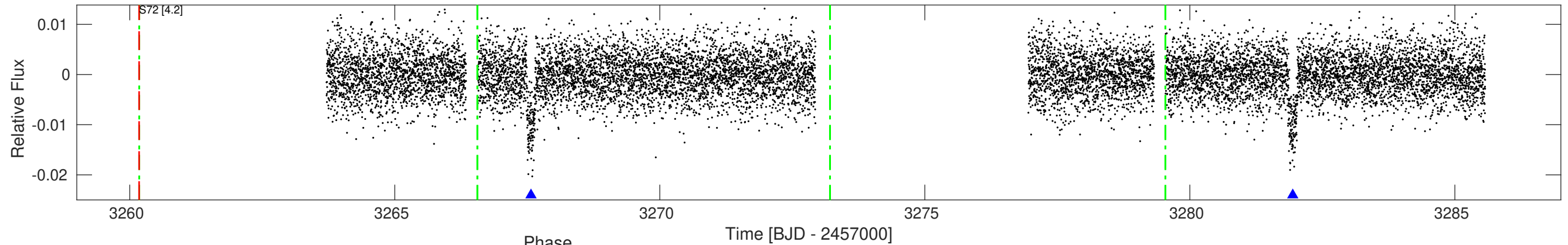
Stellar Distance Table

Index	TIC ID	TESS Mag	Distance (arcsec)
1	0000000169249234	12.18	0.00
2	0000000169249237	12.99	20.42
3	0000000902975470	18.23	22.09
4	0000000169249233	17.79	41.95
5	0000000902975469	19.17	42.23
6	0000000903007151	20.58	44.02
7	0000000902975477	19.40	44.23
8	0000000169249240	17.57	48.06
9	0000000903007152	19.60	60.24
10	0000000169249238	18.94	63.73
11	0000000903007153	19.42	70.51
12	0000000169249229	16.15	75.49
13	0000000169249224	17.33	81.24
14	0000000169249226	18.41	88.23
15	0000000169249235	18.64	98.05
16	0000000902975467	19.33	100.51
17	0000000169249241	17.77	107.50
18	0000000902975475	17.86	113.01
19	0000000169249221	17.14	114.30
20	0000000903007144	18.91	114.48
21	0000000902975466	20.39	116.29
22	0000000903007145	20.67	117.70
23	0000000902975464	18.30	122.92
24	0000000903007143	19.02	123.89
25	0000000169249227	16.75	127.87
26	0000000169249222	17.23	133.49
27	0000000169249223	16.83	140.97
28	0000000902975465	20.22	160.02



Distances are corrected for proper motion. This table may not contain all of the objects shown.

Tmag: 12.18 R\*: 1.19 Rs Teff: 5758.3 K Logg: 4.30 M/H: 0.130 Rho: 0.616



DV Fit Results:

Period = 14.37232 [0.00249] d  
Epoch = 3267.5695 [0.0018] BTJD  
Rp/R\* = 0.0973 [0.0036]  
a/R\* = 25.69 [4.07]  
b = 0.43 [0.31]  
Seff = 101.62 [16.31]  
Teq = 810 [32] K  
Rp = 12.61 [0.83] Re  
a = 0.1169 [0.0084] AU  
Rho = 1.102 [0.524]  
Ag = 61.81 [25.56] [2.38 sigma]  
Tp = 3510 [354] K [7.59 sigma]

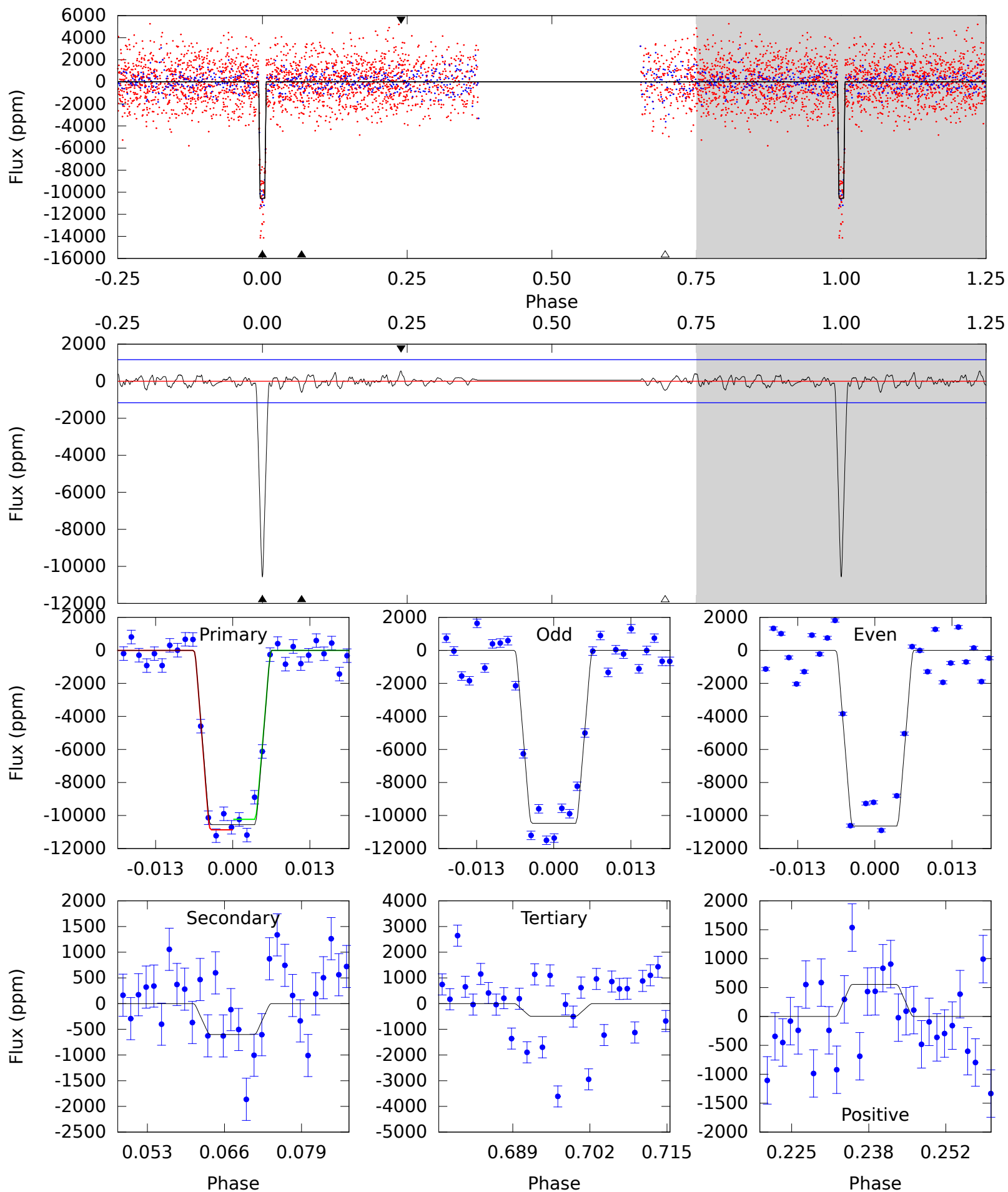
DV Diagnostic Results:

ShortPeriod-sig: N/A  
LongPeriod-sig: N/A  
ModelChiSquare2-sig: 37.8%  
ModelChiSquareGof-sig: 100.0%  
Bootstrap-pfa: 3.92e-207  
GhostDiagnostic-chr: 4.505  
OotOffset-rm: 5.267 arcsec [2.05 sigma]  
TicOffset-rm: 1.212 arcsec [0.47 sigma]  
OotOffset-tot: 1  
TicOffset-tot: 1  
DiffImageQuality-fgm: 1.00 [1/1]  
DiffImageOverlap-fno: 1.00 [1/1]



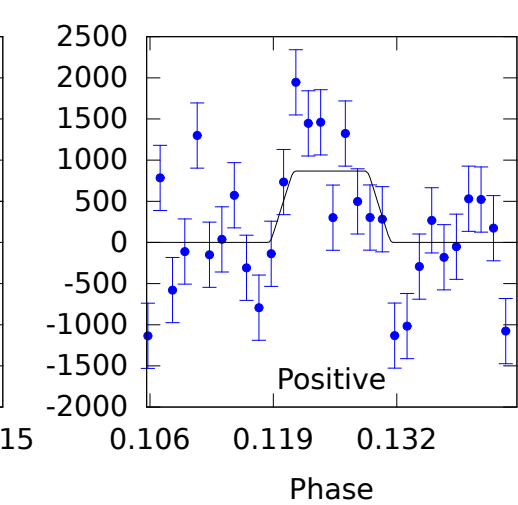
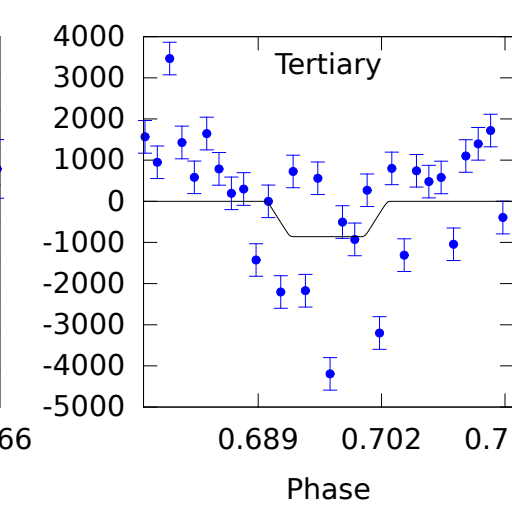
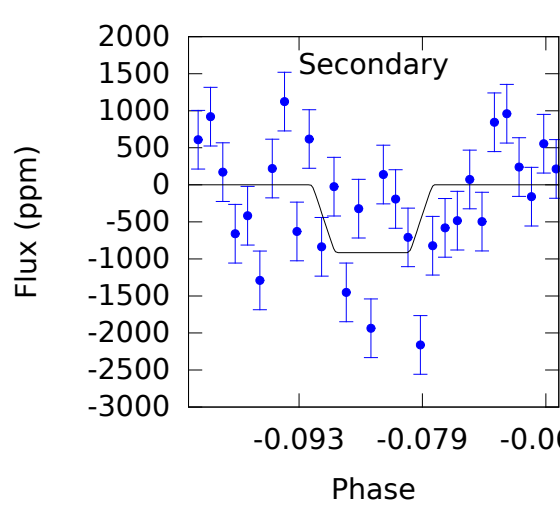
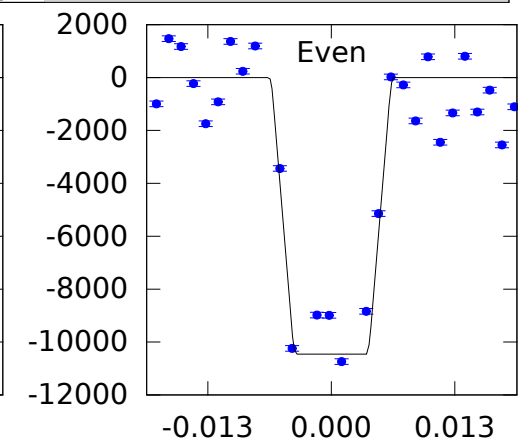
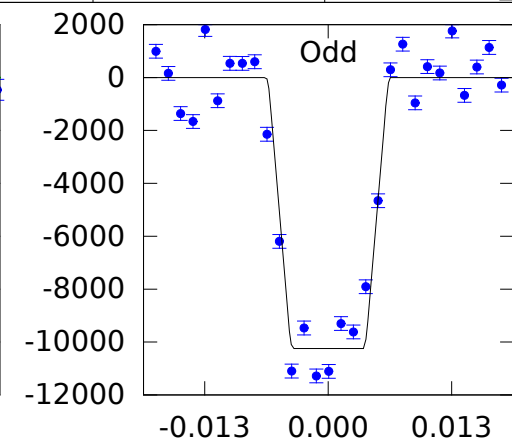
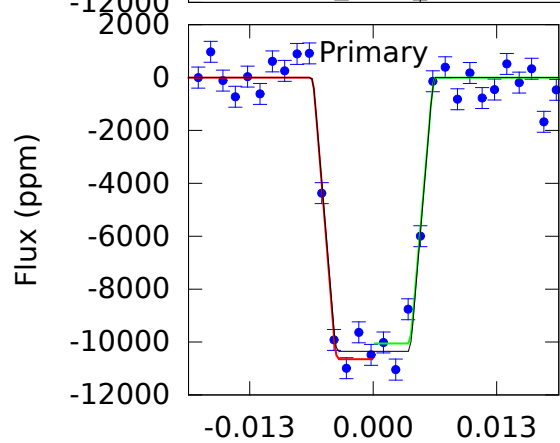
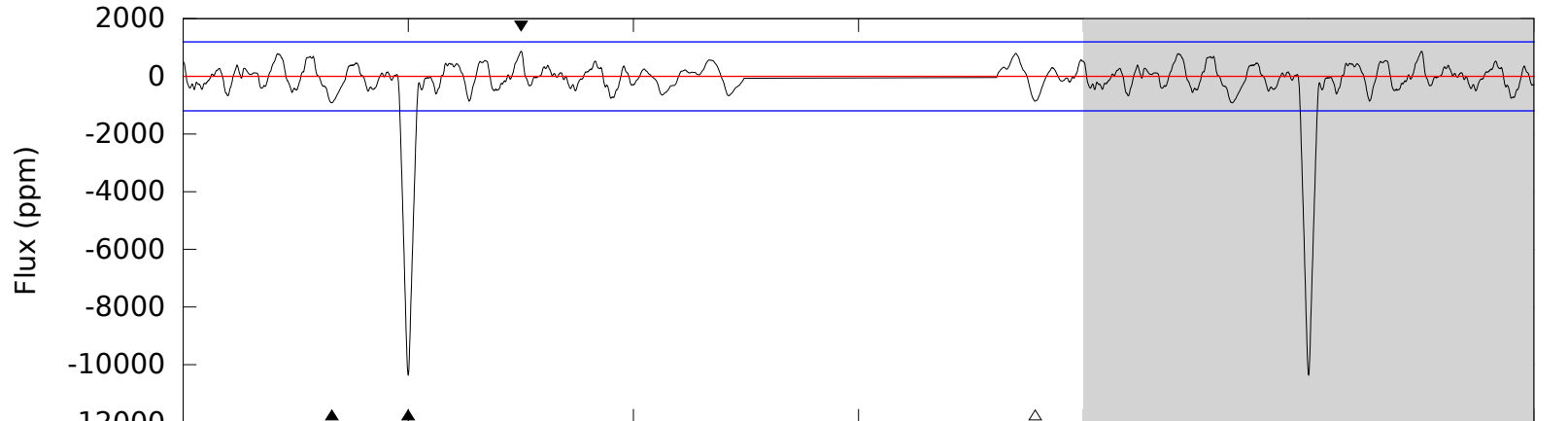
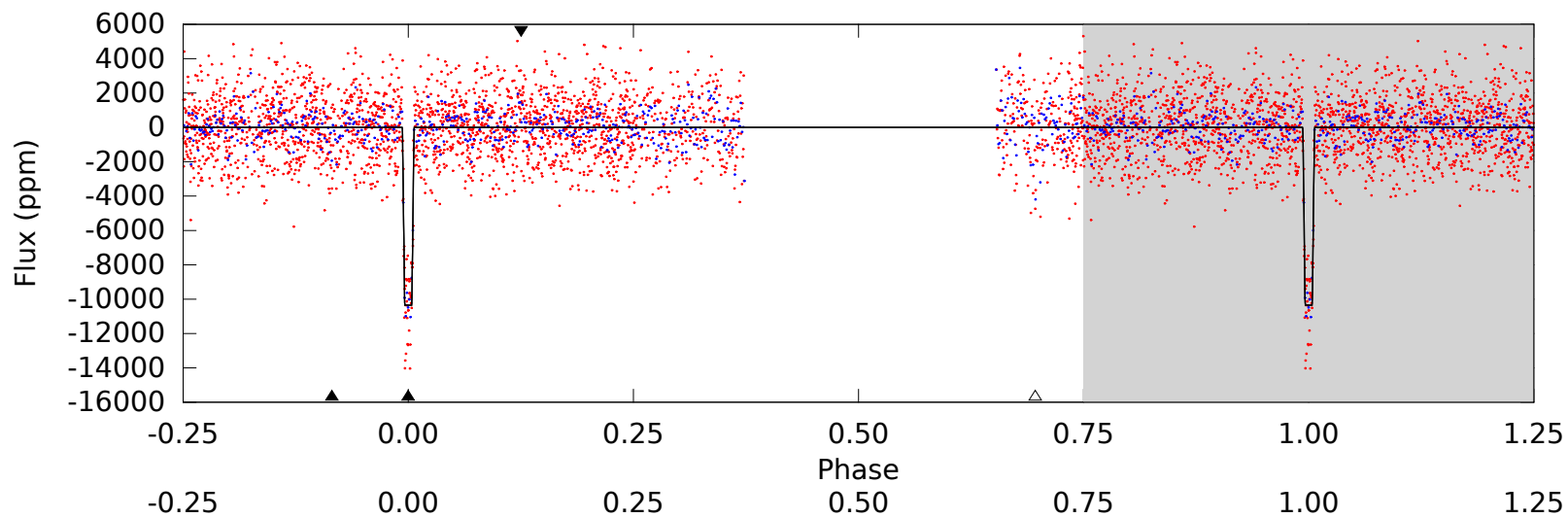
# Tier 1 0000000169249234<sub>0</sub>1, P = 14.372319 Days, E = 3253.197082 Days

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
45.1	2.57	2.12	2.37	4.97	2.48	0.81	43.0	42.8	0.46	0.20	0.36	1.00	0.05	1.37

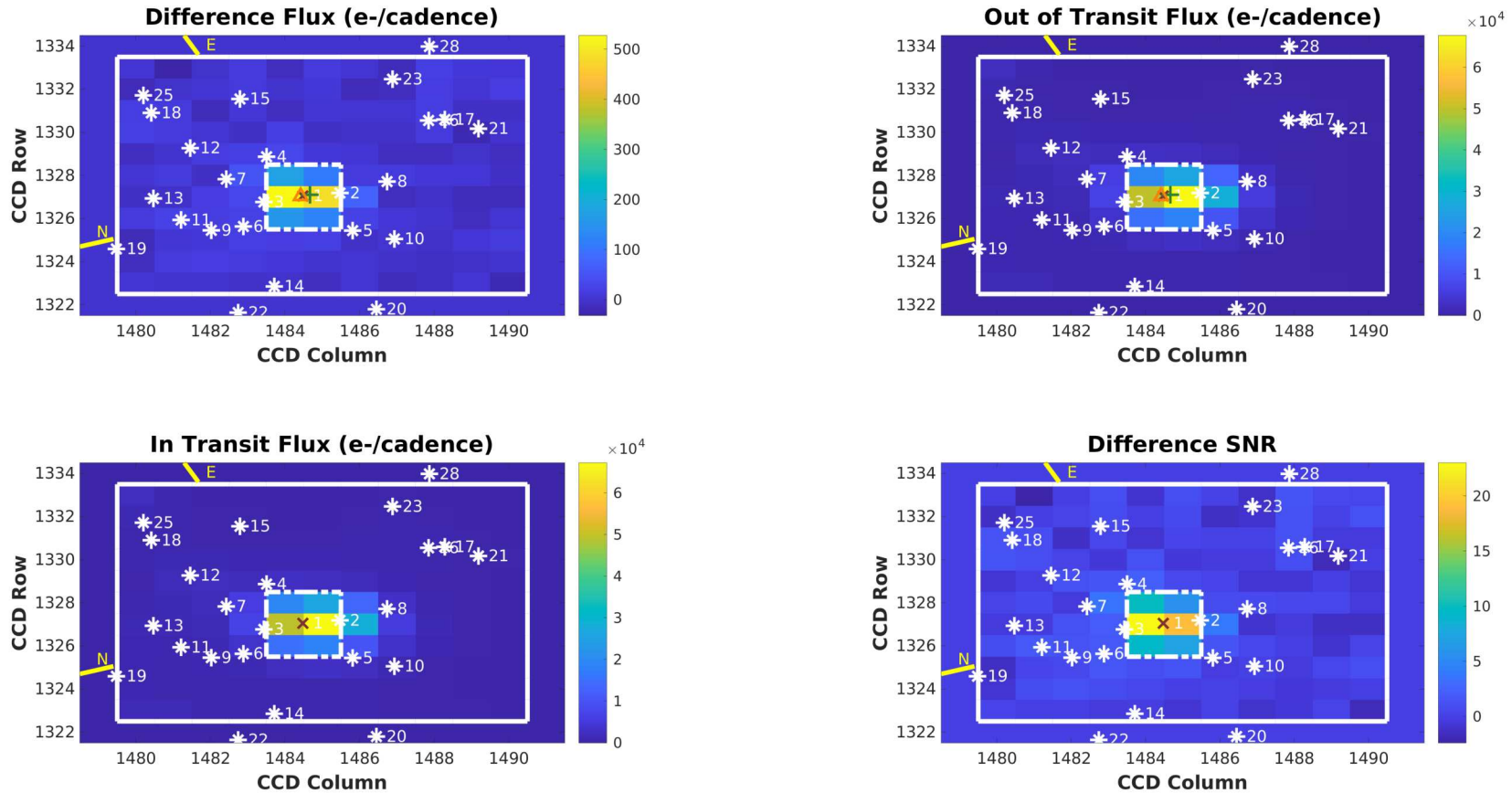


# Tier 1 0000000169249234<sub>0</sub>1, P = 14.372319 Days, E = 3253.197300 Days

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
43.1	3.81	3.58	3.61	4.97	2.48	1.47	39.5	39.4	0.23	0.20	0.44	1.00	0.08	1.24



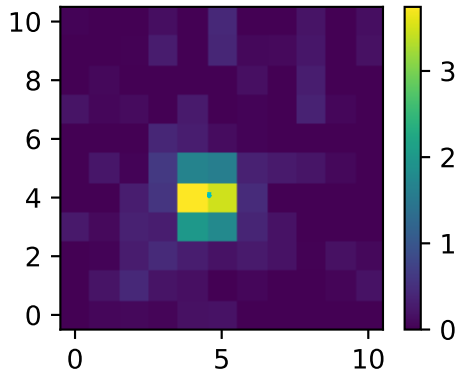
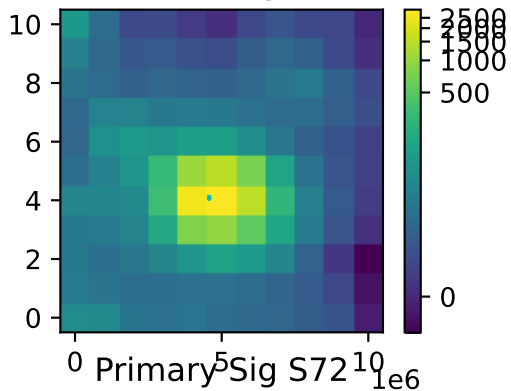
**Difference Image**  
**Planet Candidate 1 / Sector 72 / Target Pixel Table 421**



Difference image for target 169249234, planet candidate 1, sector 72, target pixel table 421. 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 and in-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. Number of transits = 2; number of valid in-transit cadences = 205; number of in-transit cadence gaps = 0; number of valid out-of-transit cadences = 534; number of out-of-transit cadence gaps = 0. Difference image quality metric = 0.98 (good).

Open `./planet-01/difference-image/0000000169249234-01-difference-image-72-421.fig`

Median Image S72



# Using TIC: 169249234

Tier 1

Using TIC catalog position 160.886801 -1.912719 [J2000.0; epoch 2000.0]

Predicted GAIA position 160.886843 -1.912698 [J2000.0; epoch 2015.5]

2MASS J10433283-0154457 From TIC

6 TIC entries within 60.0 arcsec of target 169249234

169249237 Sep [arcsec]: 20.211 Tmag: 12.99 Teff: 6174.0 Logg: 4.10 Rs[Rsun]: 1.61  
902975470 Sep [arcsec]: 22.336 Tmag: 18.23 Teff: 5024.0 Logg: 4.85 Rs[Rsun]: 0.57  
902975469 Sep [arcsec]: 41.999 Tmag: 19.17 Teff: 0.0 Logg: 0.00 Rs[Rsun]: 0.00  
169249233 Sep [arcsec]: 42.196 Tmag: 17.79 Teff: 0.0 Logg: 0.00 Rs[Rsun]: 0.00  
902975477 Sep [arcsec]: 44.568 Tmag: 19.40 Teff: 0.0 Logg: 0.00 Rs[Rsun]: 0.00  
169249240 Sep [arcsec]: 47.959 Tmag: 17.57 Teff: 4270.0 Logg: 4.68 Rs[Rsun]: 0.62

## TIC Hosts TOIs

2524.01

## Target Parameters

Catalog	Tmag/Rpmag	Teff	Logg	Rstar	Mstar
TIC	12.1772	5758.3±135.6	4.30±0.08	1.19± 0.1	1.03± 0.12
GAIA DR2	12.127	5704.7±202.4	...	1.18± 0.1	...

Other GAIA G: 12.62 Bp: 12.98 AbsG: 4.20 (Bp-Rp)o: 0.760 AstroGOF: 2.89 AstroExNoiSig: 0.00

## 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

[https://mast.stsci.edu/api/v0/download/file?uri=mast:HLSP/tess-spoc/s0045/target/0000/0001/6924/9234/hlsp\\_tess-spoc\\_tess\\_phot\\_0000000169249234-s0045-s0045\\_tess\\_v1\\_dvm.pdf](https://mast.stsci.edu/api/v0/download/file?uri=mast:HLSP/tess-spoc/s0045/target/0000/0001/6924/9234/hlsp_tess-spoc_tess_phot_0000000169249234-s0045-s0045_tess_v1_dvm.pdf)  
[https://mast.stsci.edu/api/v0/download/file?uri=mast:HLSP/tess-spoc/s0045/target/0000/0001/6924/9234/hlsp\\_tess-spoc\\_tess\\_phot\\_0000000169249234-s0045-s0045\\_tess\\_v1\\_dvs-01.pdf](https://mast.stsci.edu/api/v0/download/file?uri=mast:HLSP/tess-spoc/s0045/target/0000/0001/6924/9234/hlsp_tess-spoc_tess_phot_0000000169249234-s0045-s0045_tess_v1_dvs-01.pdf)  
[https://mast.stsci.edu/api/v0/download/file?uri=mast:HLSP/tess-spoc/s0045/target/0000/0001/6924/9234/hlsp\\_tess-spoc\\_tess\\_phot\\_0000000169249234-s0045-s0045\\_tess\\_v1\\_dvr.pdf](https://mast.stsci.edu/api/v0/download/file?uri=mast:HLSP/tess-spoc/s0045/target/0000/0001/6924/9234/hlsp_tess-spoc_tess_phot_0000000169249234-s0045-s0045_tess_v1_dvr.pdf)  
[https://mast.stsci.edu/api/v0/download/file?uri=mast:HLSP/tess-spoc/s0046/target/0000/0001/6924/9234/hlsp\\_tess-spoc\\_tess\\_phot\\_0000000169249234-s0046-s0046\\_tess\\_v1\\_dvm.pdf](https://mast.stsci.edu/api/v0/download/file?uri=mast:HLSP/tess-spoc/s0046/target/0000/0001/6924/9234/hlsp_tess-spoc_tess_phot_0000000169249234-s0046-s0046_tess_v1_dvm.pdf)  
[https://mast.stsci.edu/api/v0/download/file?uri=mast:HLSP/tess-spoc/s0046/target/0000/0001/6924/9234/hlsp\\_tess-spoc\\_tess\\_phot\\_0000000169249234-s0046-s0046\\_tess\\_v1\\_dvs-01.pdf](https://mast.stsci.edu/api/v0/download/file?uri=mast:HLSP/tess-spoc/s0046/target/0000/0001/6924/9234/hlsp_tess-spoc_tess_phot_0000000169249234-s0046-s0046_tess_v1_dvs-01.pdf)  
[https://mast.stsci.edu/api/v0/download/file?uri=mast:HLSP/tess-spoc/s0046/target/0000/0001/6924/9234/hlsp\\_tess-spoc\\_tess\\_phot\\_0000000169249234-s0046-s0046\\_tess\\_v1\\_dvr.pdf](https://mast.stsci.edu/api/v0/download/file?uri=mast:HLSP/tess-spoc/s0046/target/0000/0001/6924/9234/hlsp_tess-spoc_tess_phot_0000000169249234-s0046-s0046_tess_v1_dvr.pdf)  
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[https://mast.stsci.edu/api/v0/download/file?uri=mast:HLSP/tess-spoc/s0062/target/0000/0001/6924/9234/hlsp\\_tess-spoc\\_tess\\_phot\\_0000000169249234-s0062-s0062\\_tess\\_v1\\_dvs-01.pdf](https://mast.stsci.edu/api/v0/download/file?uri=mast:HLSP/tess-spoc/s0062/target/0000/0001/6924/9234/hlsp_tess-spoc_tess_phot_0000000169249234-s0062-s0062_tess_v1_dvs-01.pdf)  
[https://mast.stsci.edu/api/v0/download/file?uri=mast:HLSP/tess-spoc/s0062/target/0000/0001/6924/9234/hlsp\\_tess-spoc\\_tess\\_phot\\_0000000169249234-s0062-s0062\\_tess\\_v1\\_dvr.pdf](https://mast.stsci.edu/api/v0/download/file?uri=mast:HLSP/tess-spoc/s0062/target/0000/0001/6924/9234/hlsp_tess-spoc_tess_phot_0000000169249234-s0062-s0062_tess_v1_dvr.pdf)  
[https://mast.stsci.edu/api/v0/download/file?uri=mast:TESS/product/tess2018206190142-s0001-s0065-0000000169249234-00734\\_dvr.pdf](https://mast.stsci.edu/api/v0/download/file?uri=mast:TESS/product/tess2018206190142-s0001-s0065-0000000169249234-00734_dvr.pdf)  
[https://mast.stsci.edu/api/v0/download/file?uri=mast:TESS/product/tess2018206190142-s0001-s0065-0000000169249234-00734\\_dvm.pdf](https://mast.stsci.edu/api/v0/download/file?uri=mast:TESS/product/tess2018206190142-s0001-s0065-0000000169249234-00734_dvm.pdf)  
[https://mast.stsci.edu/api/v0/download/file?uri=mast:TESS/product/tess2018206190142-s0001-s0065-0000000169249234-00734\\_dvr.pdf](https://mast.stsci.edu/api/v0/download/file?uri=mast:TESS/product/tess2018206190142-s0001-s0065-0000000169249234-00734_dvr.pdf)



# Tier 1

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