

KIC 001297272

Q1-17 DR25 TCE Parameters

TCE	Run Type	KOI?	Period (Days)	Epoch (BKJD)	Depth (ppm)	Duration (Hours)	MES	SNR	R_{\star} (R_{\odot})	T_{\star} (K)	R_p (R_{\oplus})	S_p (S_{\oplus})
001297272-01	OBS	No	197.902293	328.608536	1238.7	4.875	7.7	7.3	14.56	4830	52.89	149.10

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
001297272-01	OBS	FP	0.00	1	0	0	0	LPP_DV—MOD_NONUNIQ_ALT—INCONSISTENT_TRANS

Notes: OBS = Observed. INJ = Injected. INV = Inverted. SCR = Scrambled.

N = Not Transit-Like. S = Stellar Eclipse. C = Centroid Offset. E = Ephemeris Match.

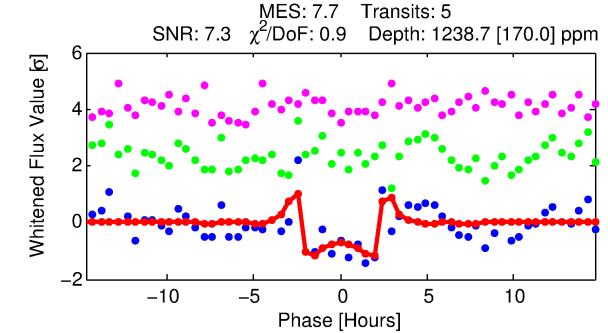
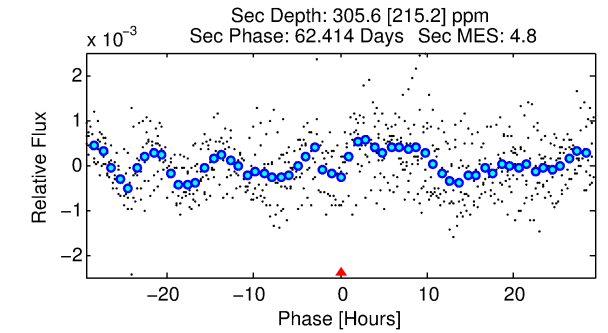
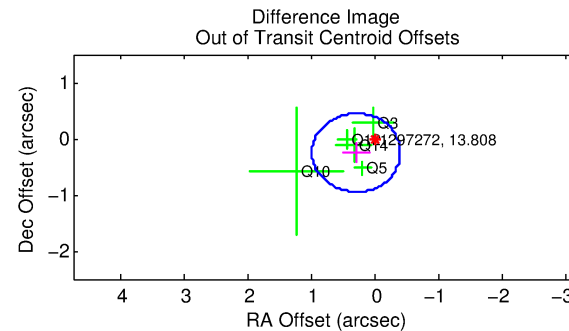
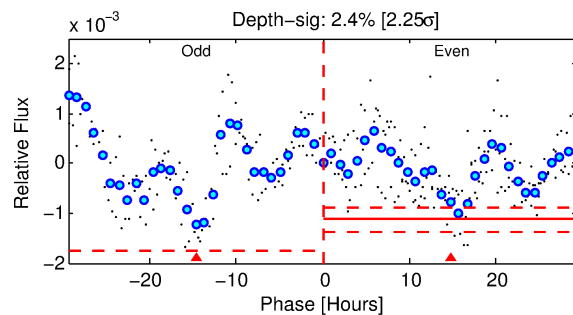
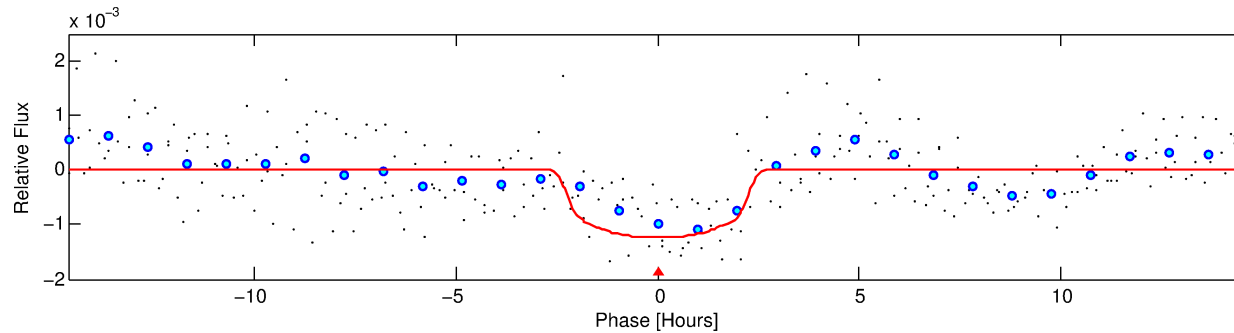
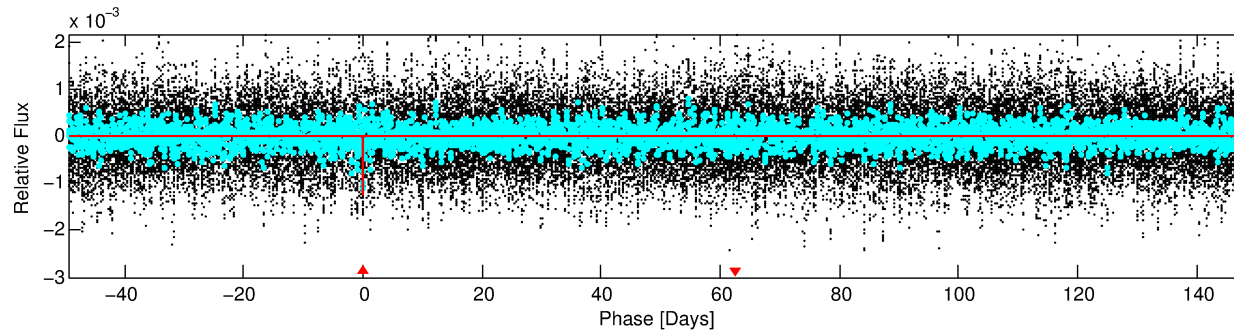
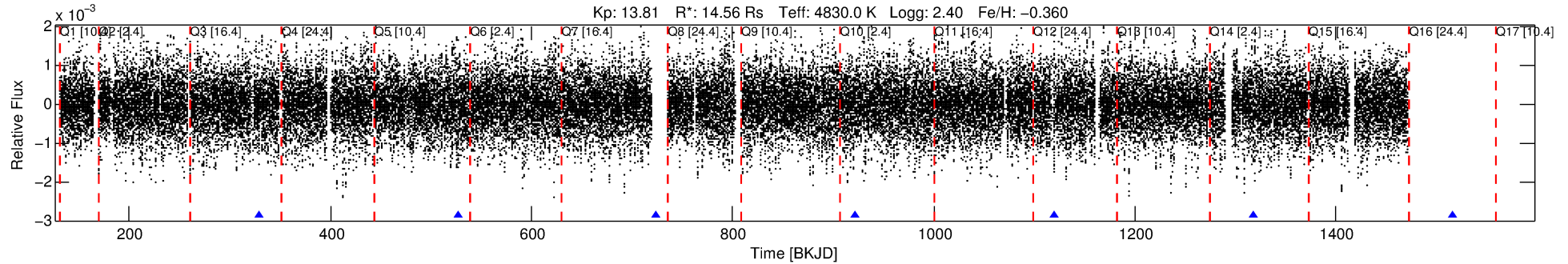
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 001297272-01

No Significant Match Found

DV One-Page Summary

KIC: 1297272 Candidate: 1 of 1 Period: 197.902 d



DV Fit Results:

Period = 197.90229 [0.00153] d
Epoch = 328.6085 [0.0055] BKJD
Rp/R* = 0.0333 [0.0148]
a/R* = 261.05 [393.53]
b = 0.60 [1.64]
Seff = 149.10 [27.42]
Teq = 891 [41] K
Rp = 52.89 [26.57] Re
a = 0.8325 [0.1317] AU
Ag = 41.65 [47.73] [0.85 σ]
Teffp = 3500 [995] K [2.62 σ]

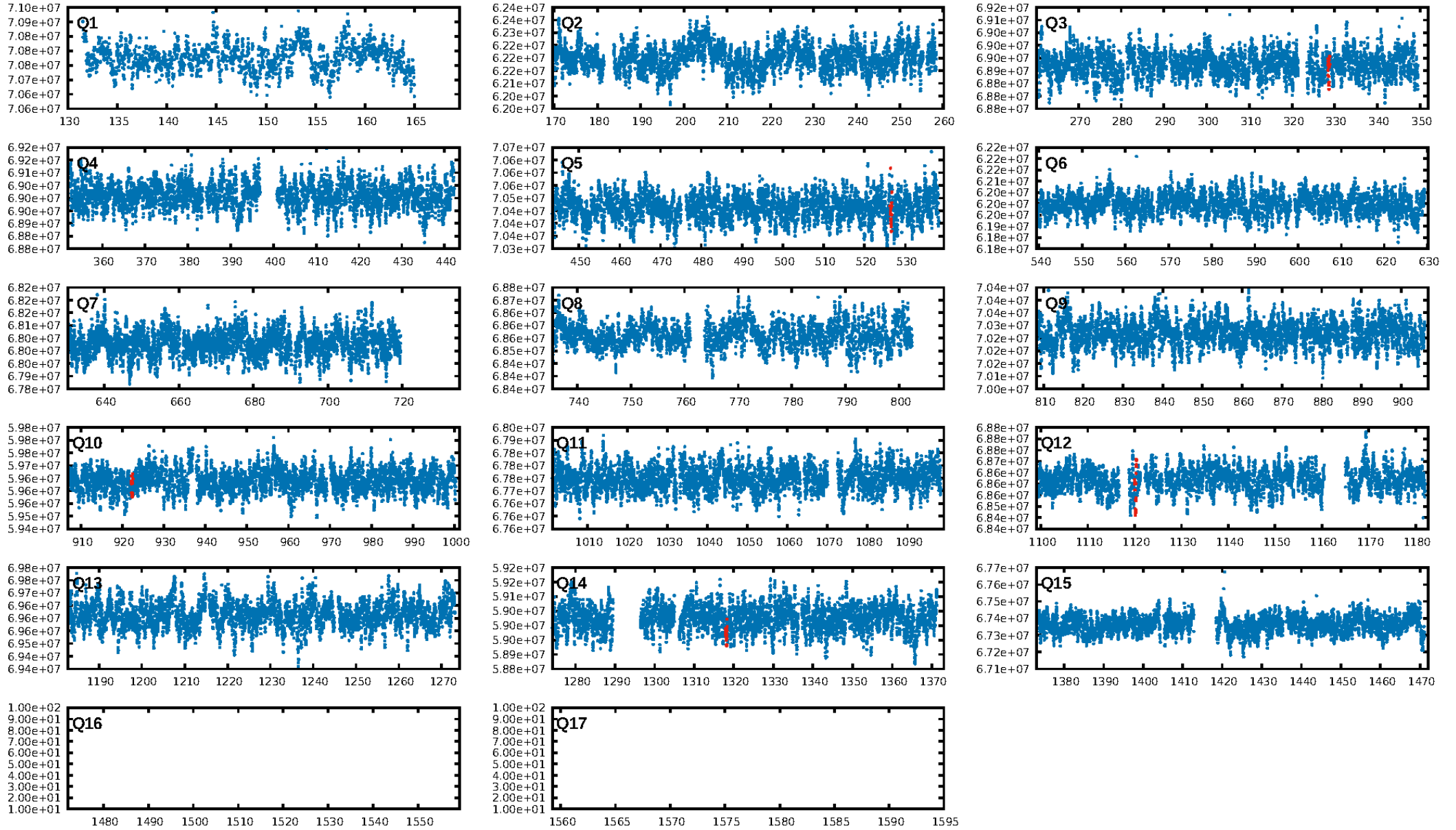
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: 21.1%
ModelChiSquareGof-sig: 99.8%
Bootstrap-pfa: 1.01e-11
RollingBand-fgt: 1.00 [5/5]
GhostDiagnostic-chr: 2.481
Centroid-sig: 17.3%
Centroid-so: 1.430 arcsec [2.73 σ]
OotOffset-rm: 0.393 arcsec [1.69 σ]
OotOffset-st: 2/1/1/1 [5]
KicOffset-rm: 0.351 arcsec [1.45 σ]
KicOffset-st: 2/1/1/1 [5]
DiffImageQuality-fgm: 1.00 [5/5]
DiffImageOverlap-fno: 1.00 [5/5]

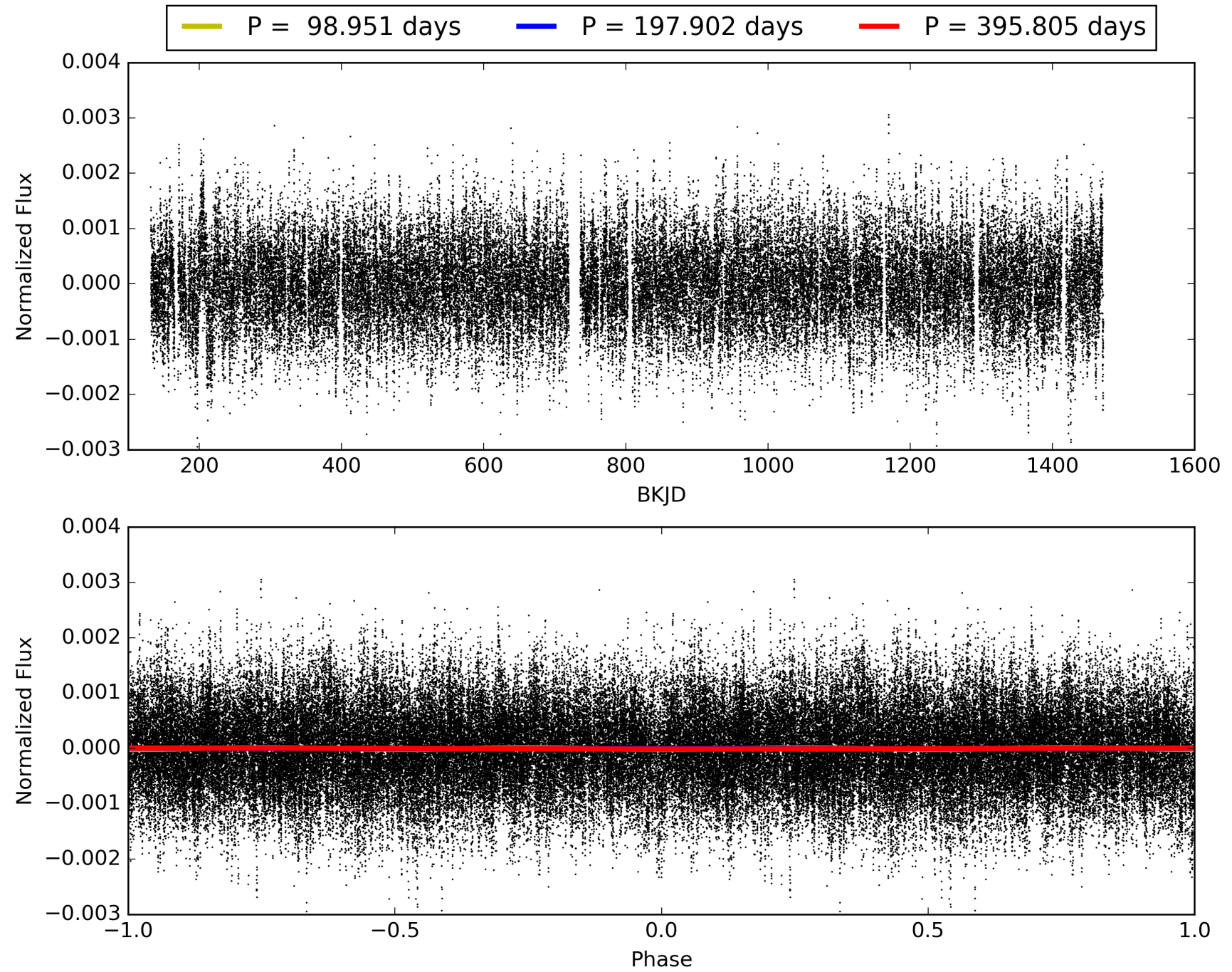
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 31-Jan-2016 15:36:35 Z

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

TCE 001297272-01, PDC Light Curves

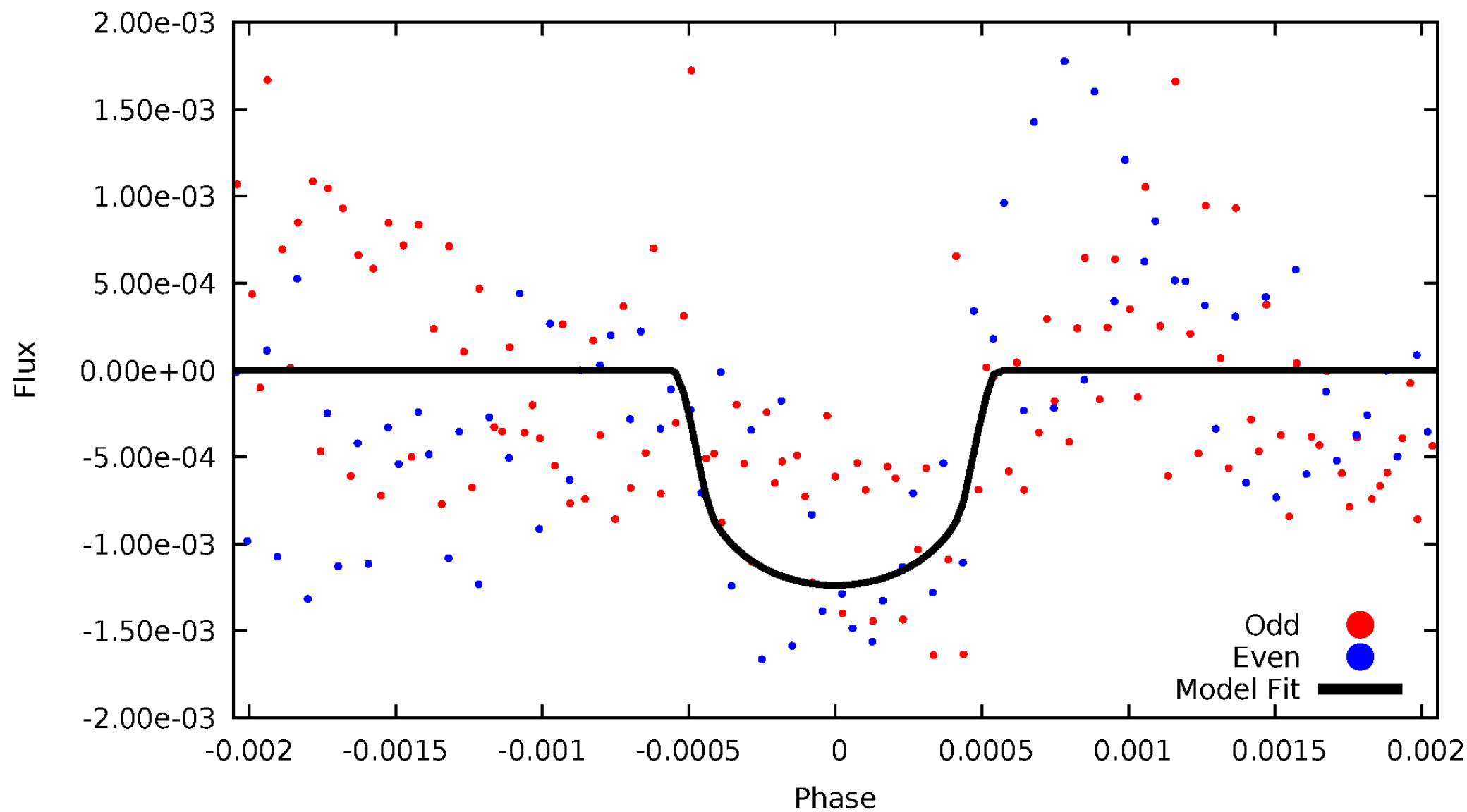


TCE 001297272-01



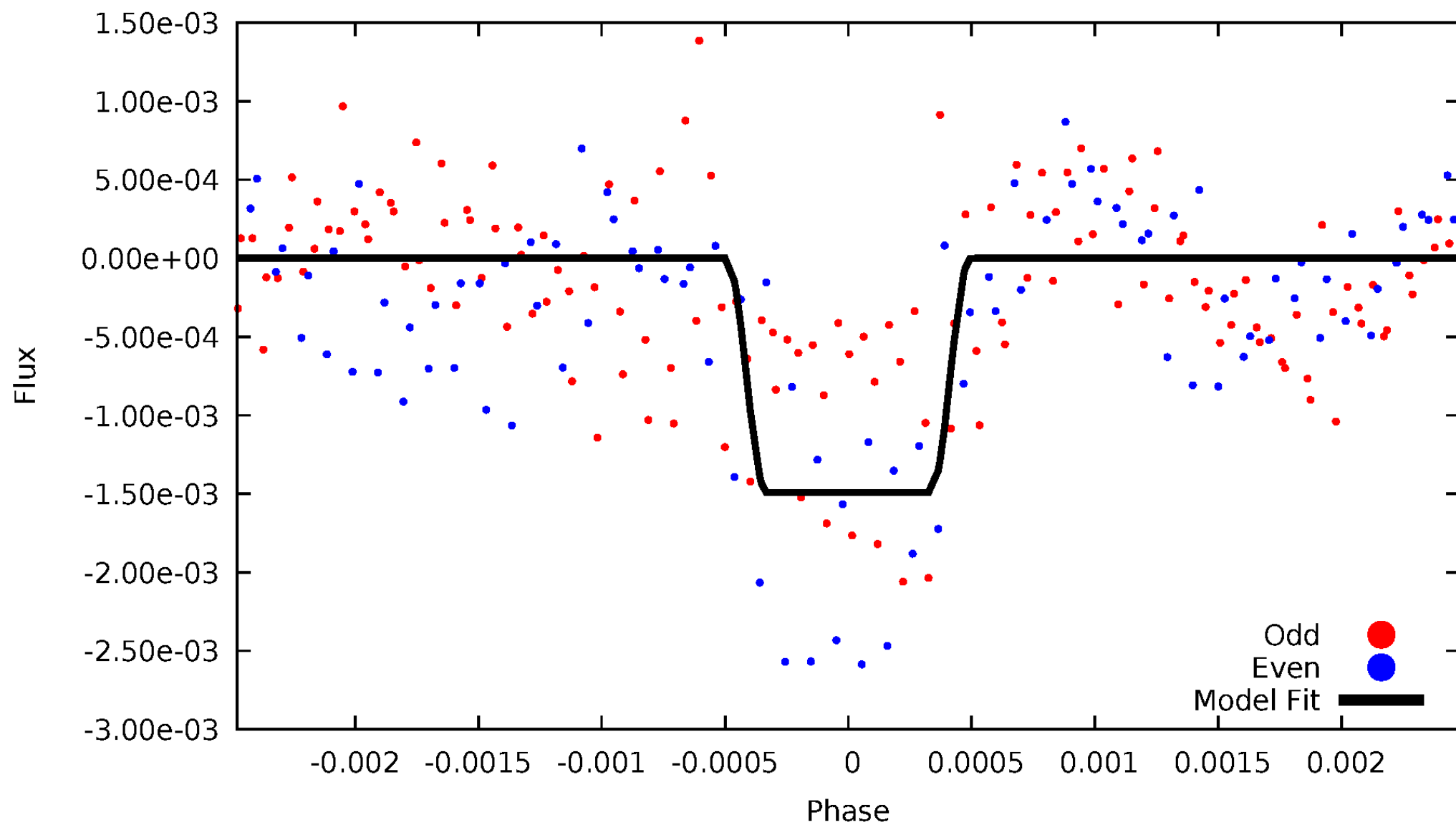
DV Odd/Even

TCE 001297272-01

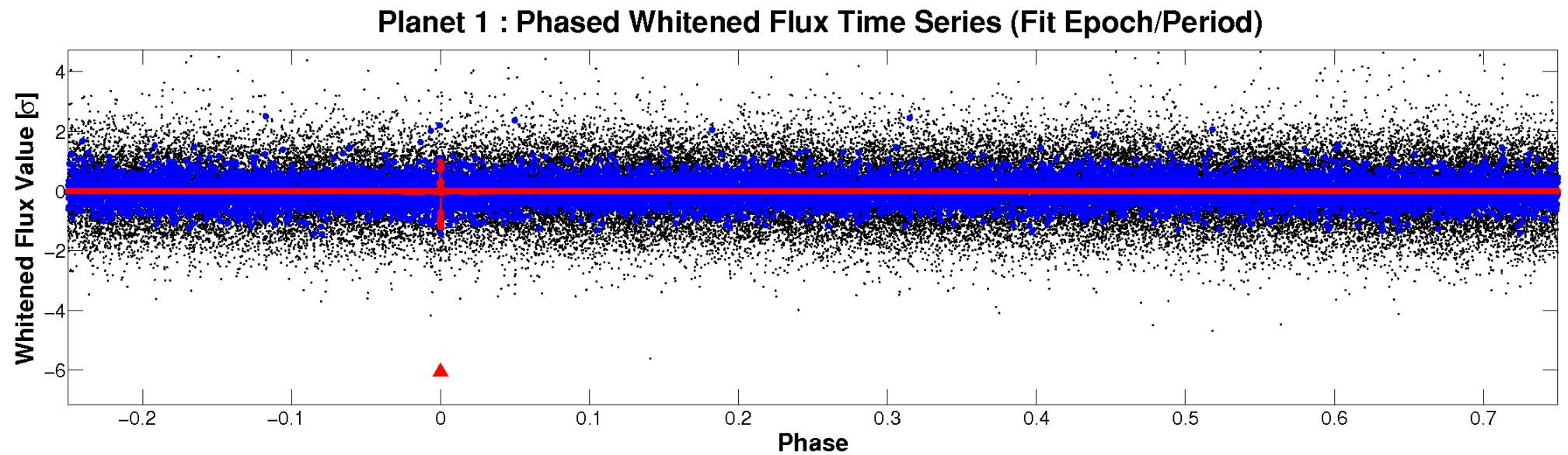
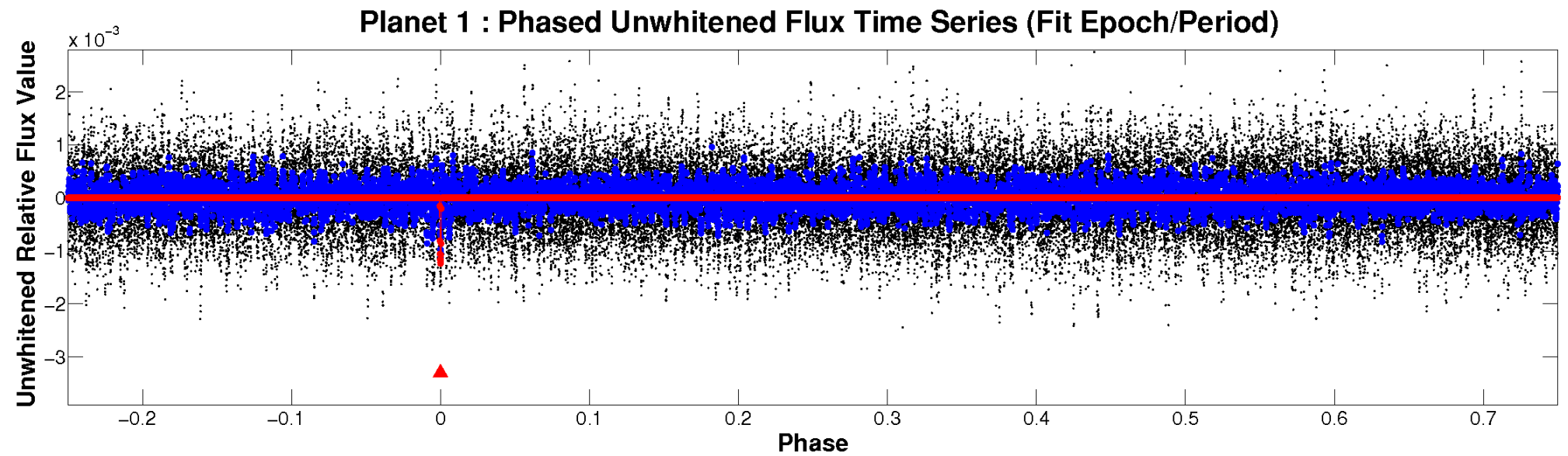


ALT Odd/Even

TCE 001297272-01

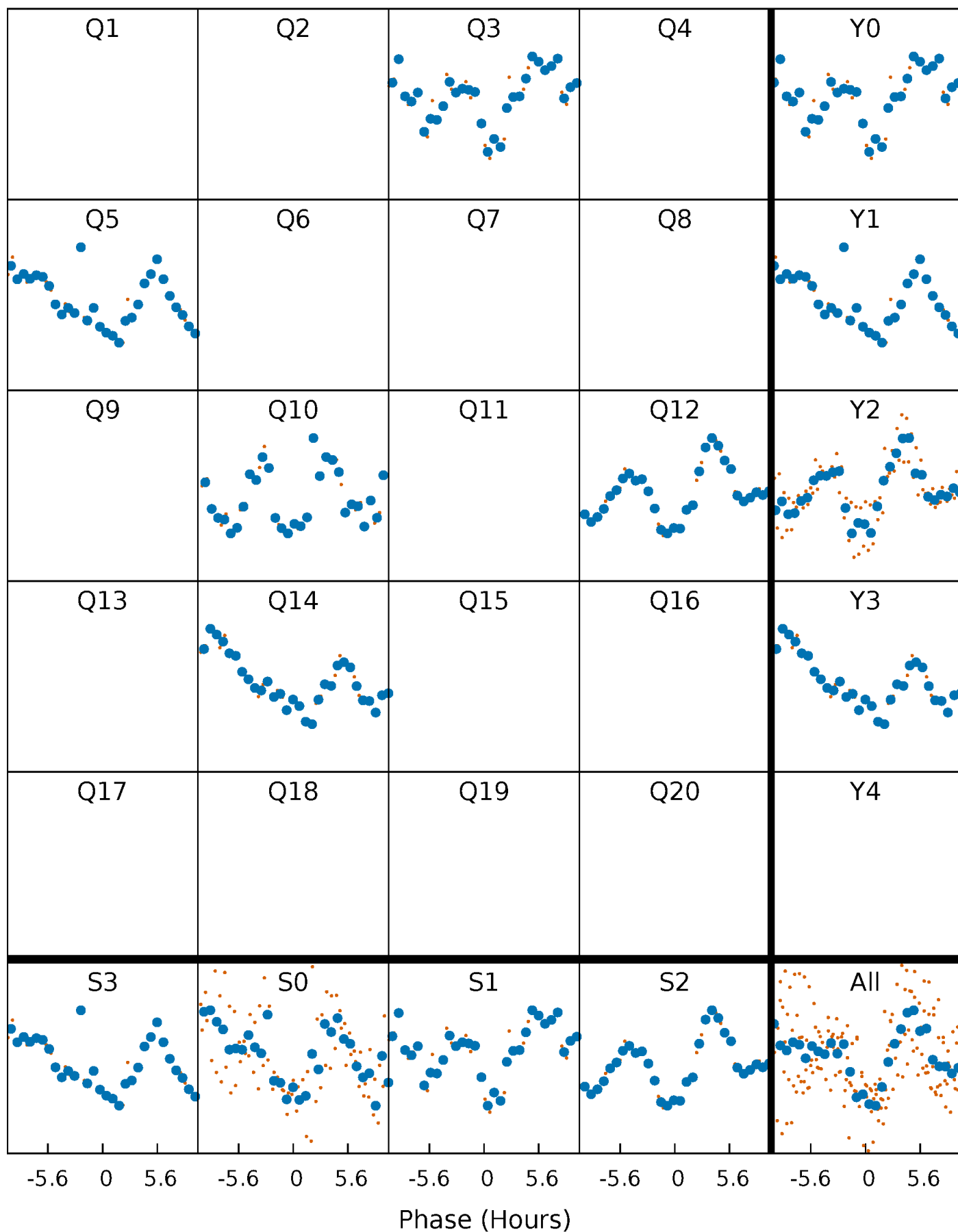


Non-Whitened Vs. Whitened Light Curve



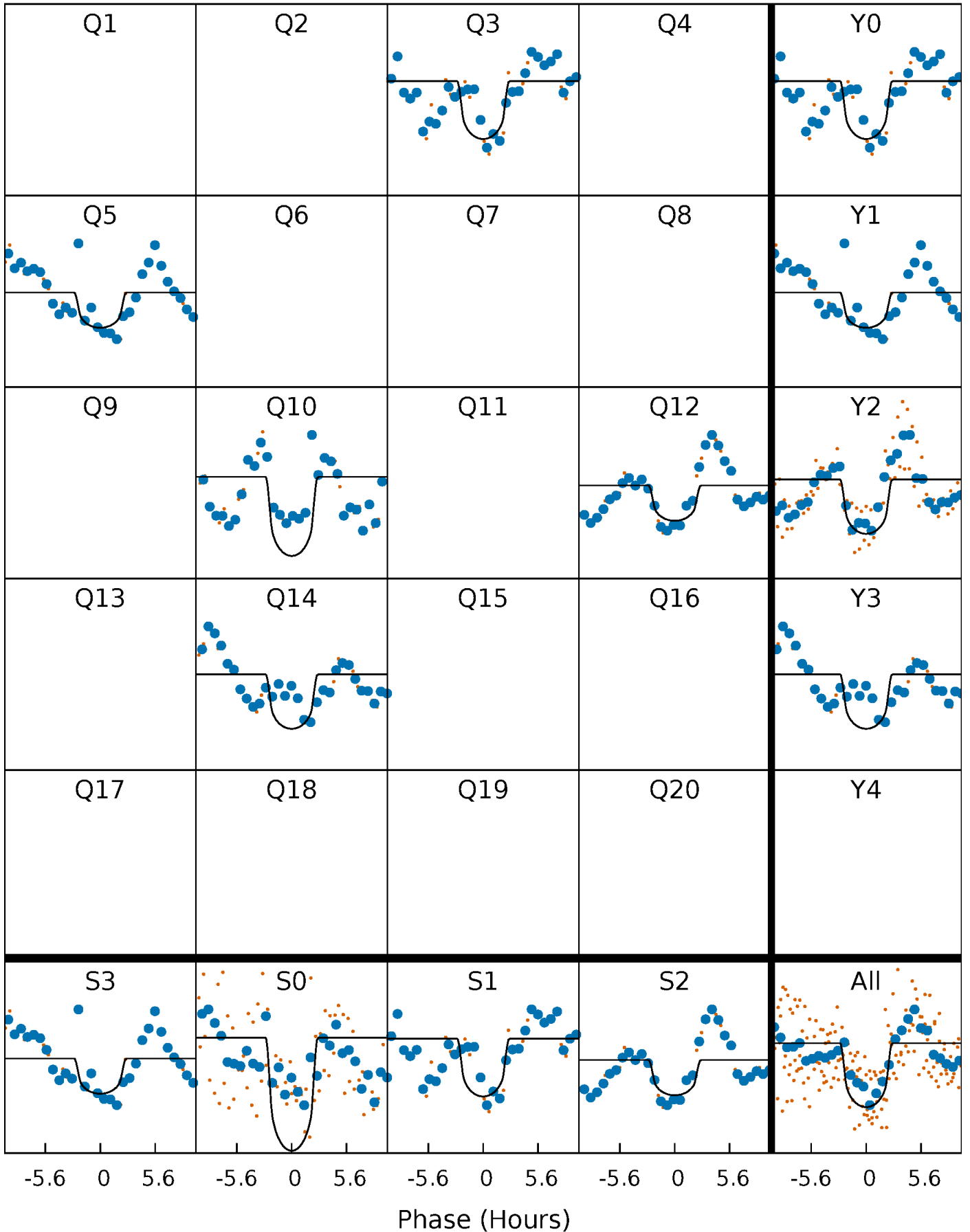
PDC Quarter-Phased Transit Curves

TCE 001297272-01 P=197.902293 Days $T_0=328.608536$ (BKJD)



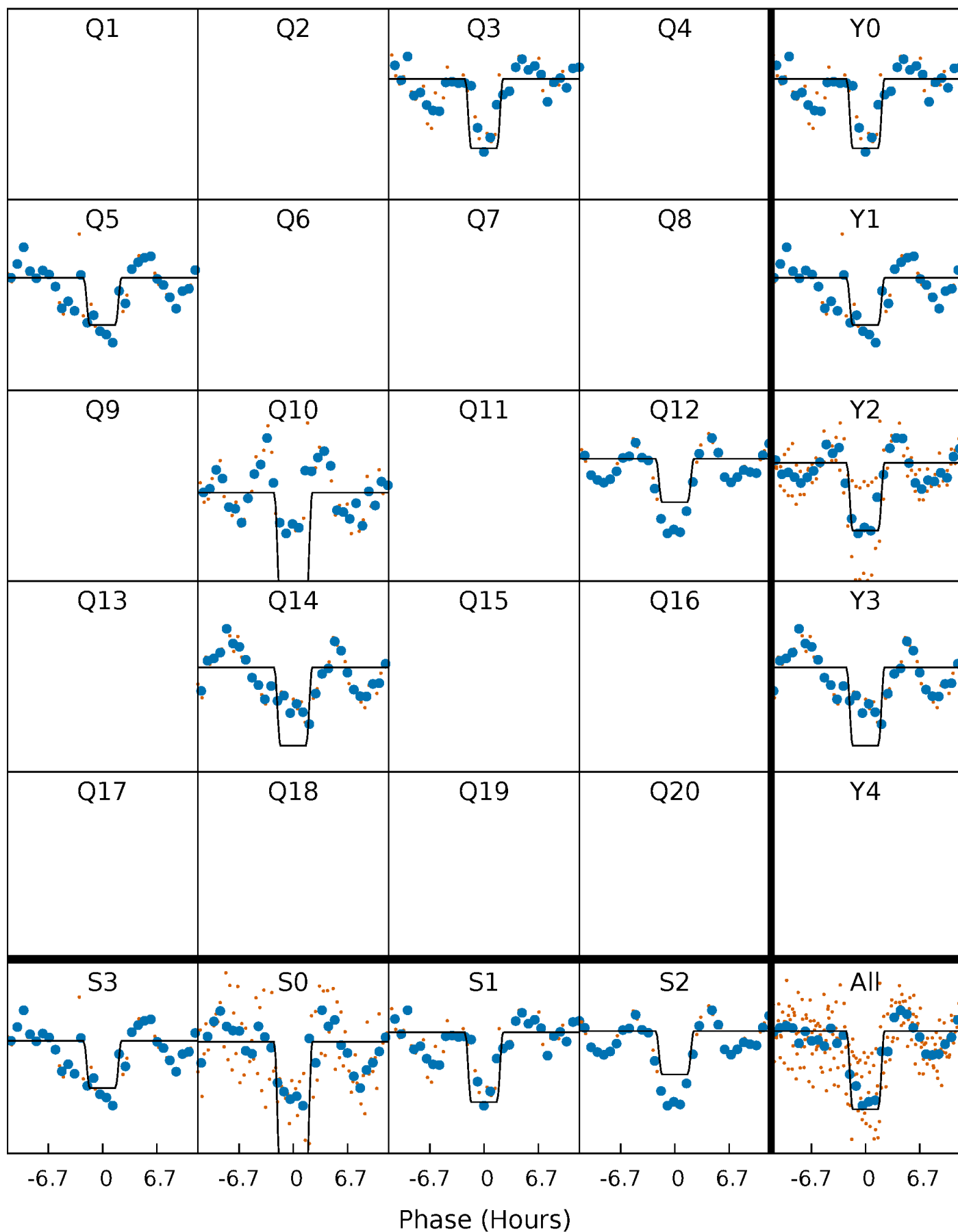
DV Quarter-Phased Transit Curves

TCE 001297272-01 P=197.902293 Days $T_0=328.608536$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

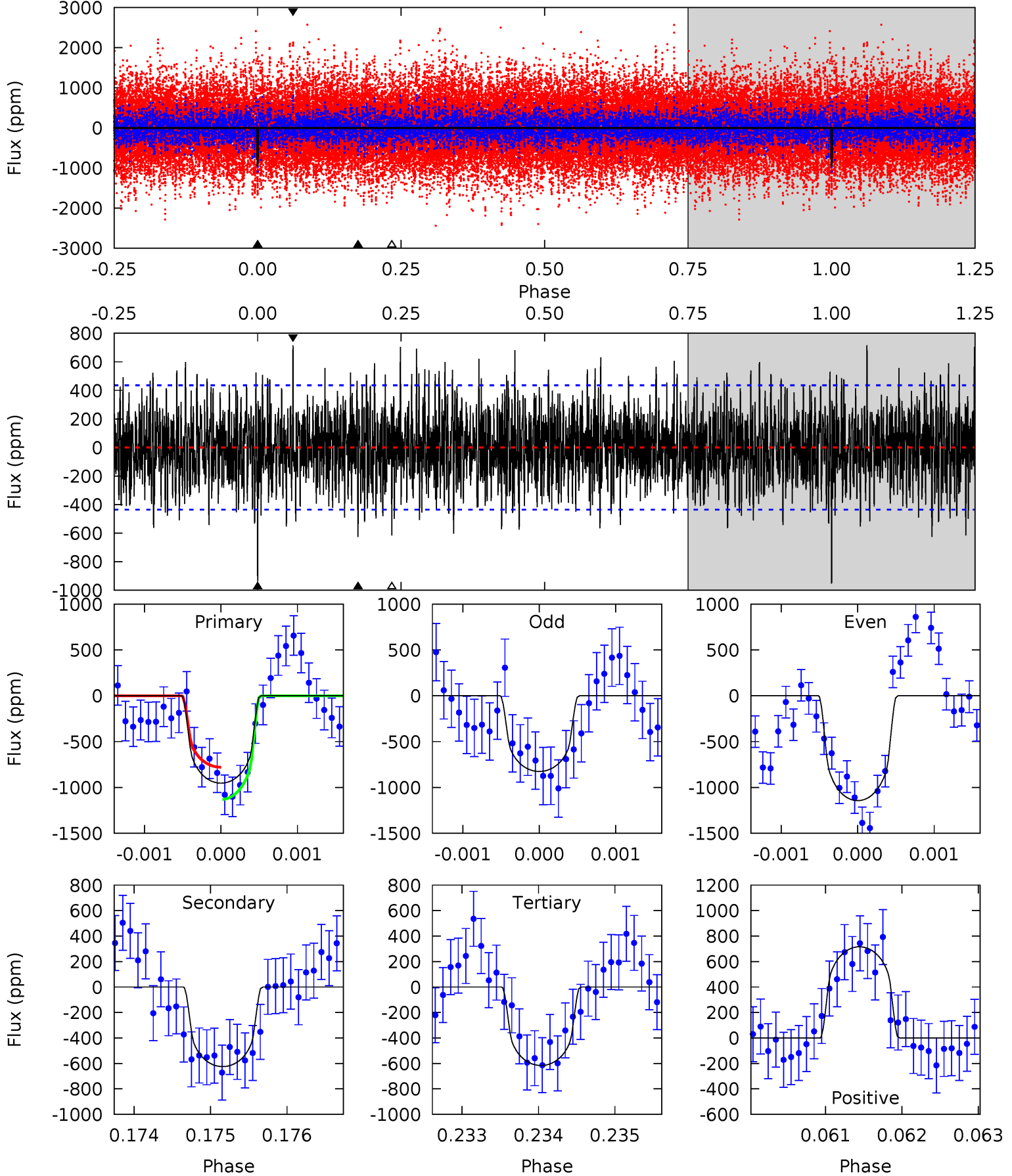
TCE 001297272-01 P=197.895185 Days $T_0=328.637841$ (BKJD)



DV Model-Shift Uniqueness Test

001297272-01, P = 197.902293 Days, E = 130.706243 Days

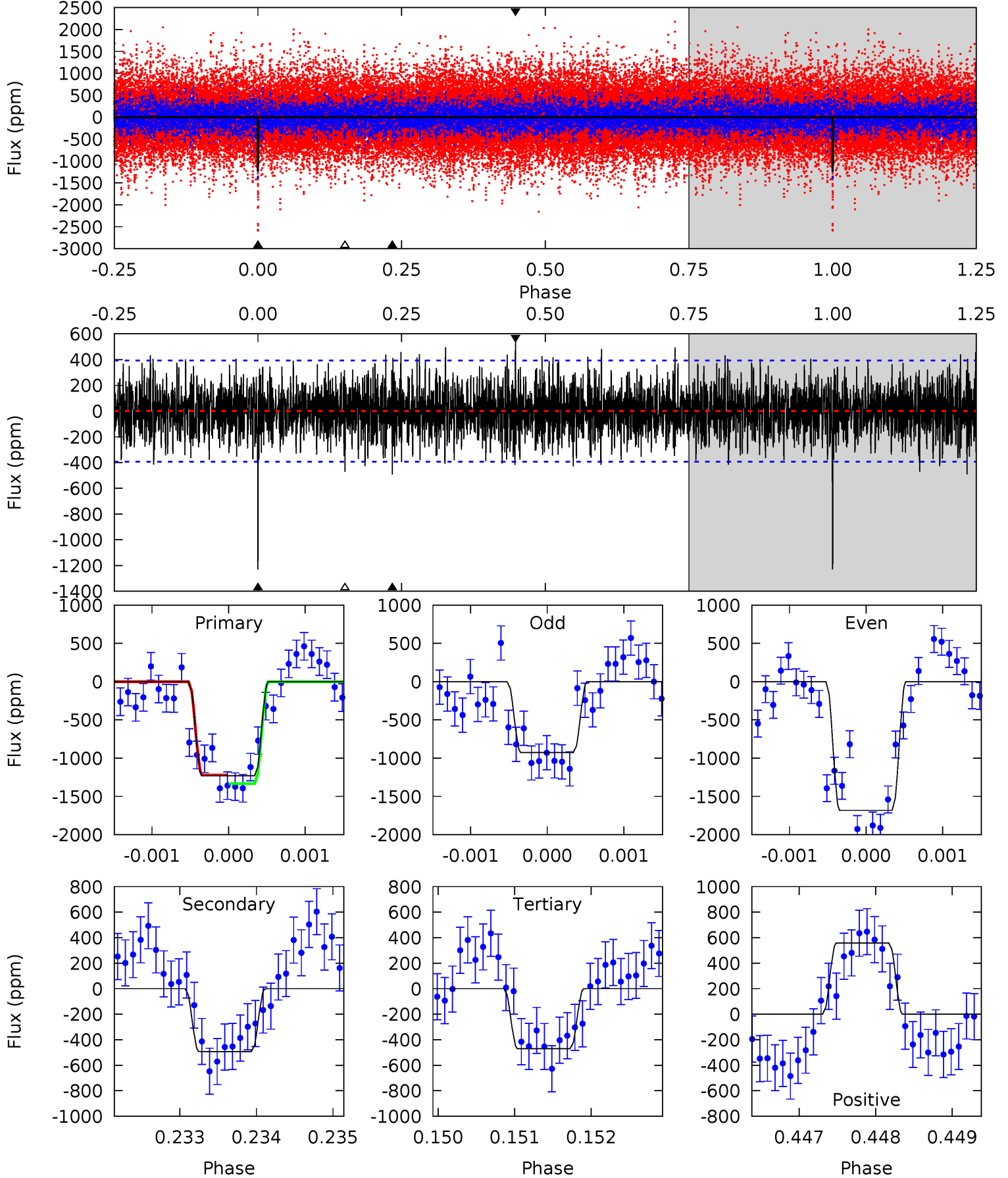
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
11.9	7.80	7.69	8.93	5.44	3.27	2.54	4.21	2.96	0.11	-1.14	1.95	0.98	0.43	2.19



Alt Model-Shift Uniqueness Test

001297272-01, P = 197.895185 Days, E = 130.742656 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
17.1	6.84	6.53	7.75	5.46	3.30	2.04	10.6	9.33	0.31	-0.91	5.23	1.24	0.31	0.78



Stellar Parameters For KIC 001297272

	$T_{\text{eff}}(K)$	$\log(g)$	$[\text{Fe}/\text{H}]$	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	4830^{+35}_{-100}	$2.405^{+0.030}_{-0.033}$	$-0.360^{+0.100}_{-0.200}$	$14.558^{+0.602}_{-3.411}$	$1.965^{+0.089}_{-0.849}$	$0.001^{+0.000}_{-0.000}$
	+1%/-2%	+1%/-1%	+28%/-56%	+4%/-23%	+5%/-43%	+34%/-7%
Source	SPE68	AST9	SPE68	DSEP		

KIC = Kepler Input Catalog; PHO = Photometry; SPE = Spectroscopy; AST = Asteroseismology
 TRA = Transits; DESP = Dartmouth Models; MULT = Multiple Models

Secondary Eclipse Parameters for KIC 001297272-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-625 ± 80	$52.55^{+24.11}_{-22.10}$	1244^{+20}_{-32}	4261^{+1088}_{-506}	84^{+169}_{-43}
Alt.	-492 ± 72	$60.39^{+23.75}_{-22.20}$	1244^{+20}_{-32}	3888^{+748}_{-396}	50^{+78}_{-24}

T_{max} = Theoretical Maximum Planetary Temperature

T_{obs} = Observed Planetary Temperature (Assuming A=0.3)

A_{obs} = Observed Albedo (Assuming T=0)

If a secondary eclipse is present, the system is likely an EB if $T_{\text{obs}} \gg T_{\text{max}}$ AND $A_{\text{obs}} \gg 1.0$

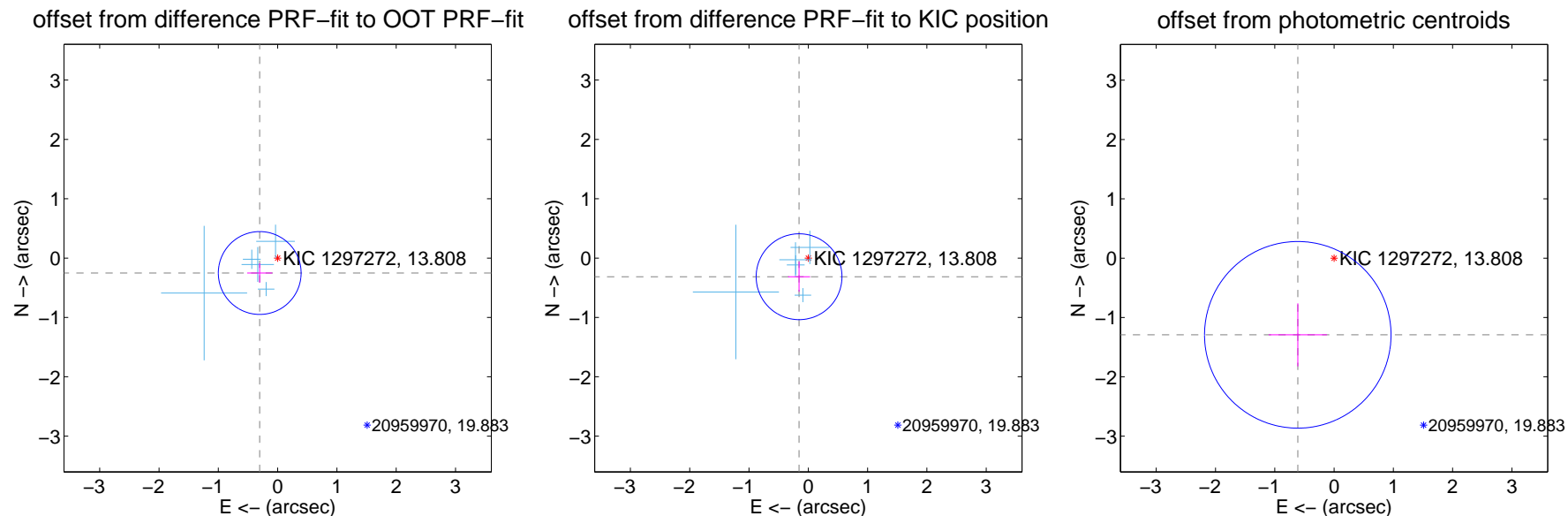
DV Centroid Data

Supplemental centroid analysis for 001297272-01. Kepler magnitude: 13.81. Transit SNR 7.29

There are 5 quarters with good PRF difference image offsets

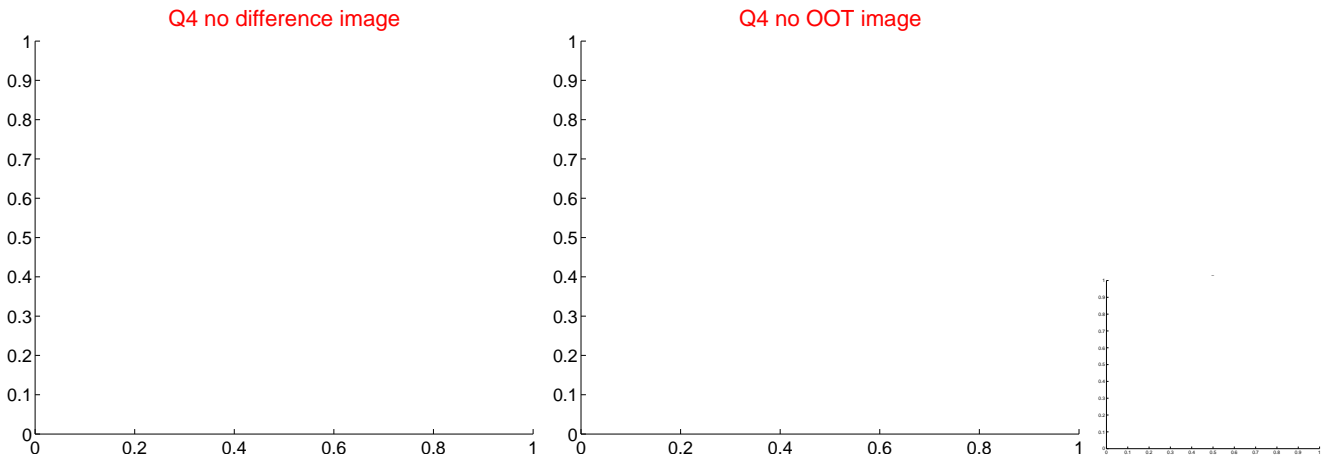
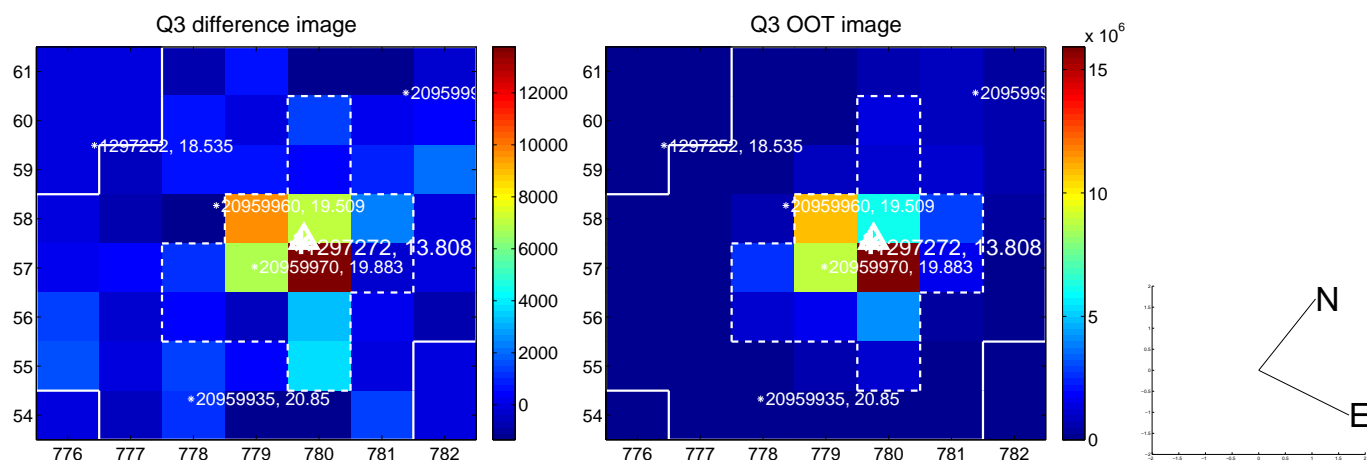
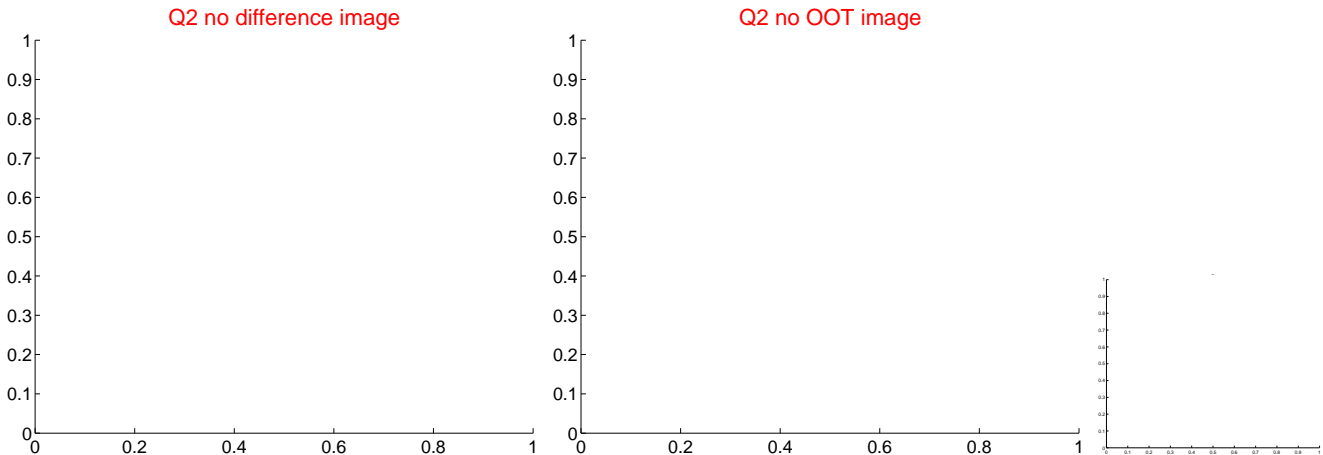
The direct PRF centroid is offset from the target star catalog position by about 0.14 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.393 ± 0.233	1.69	0.302 ± 0.213	-0.251 ± 0.163
PRF-fit source offset from KIC position	0.351 ± 0.241	1.45	0.156 ± 0.185	-0.314 ± 0.253
photometric centroid source offset	1.43 ± 0.52	2.73	0.61 ± 0.49	-1.29 ± 0.53

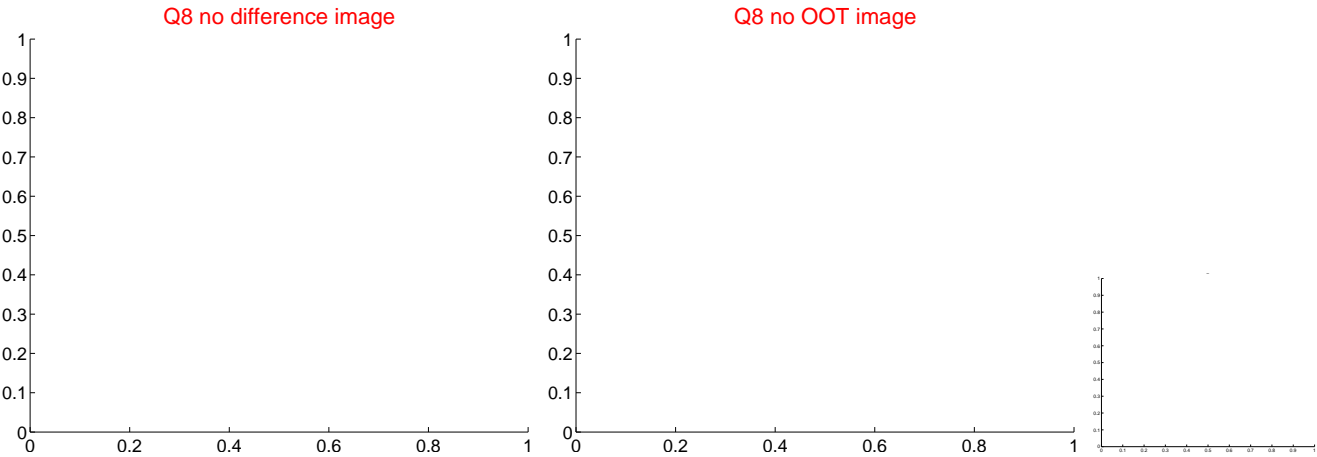
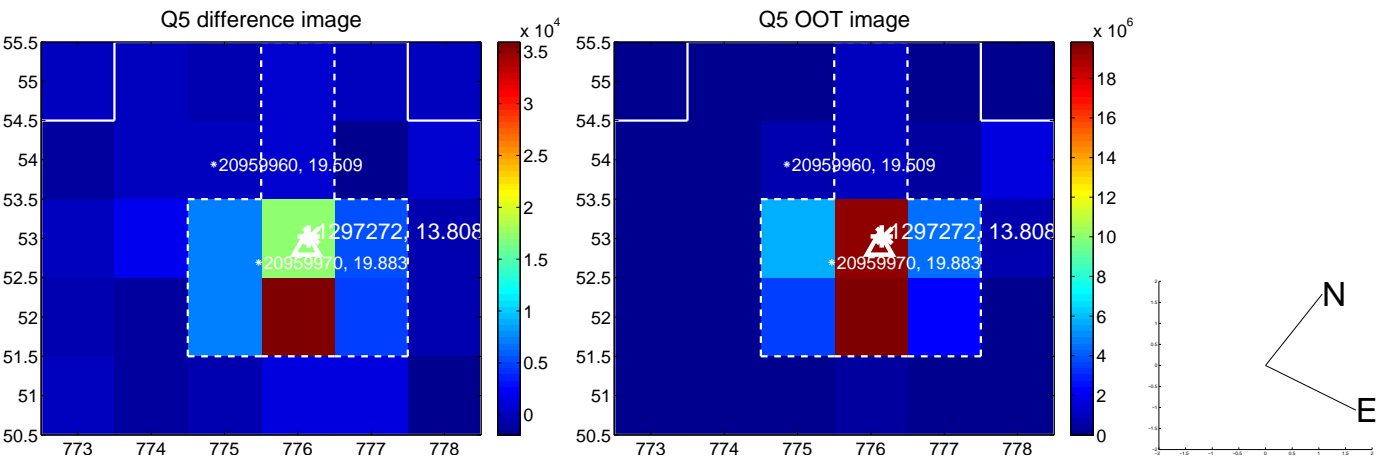


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses:** good quarterly centroid offsets; **Vermillion crosses:** bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ . Red *: target star. Blue *: Other stars. Text next to a star gives its KIC ID and kepmag. KIC IDs > 15,000,000 are from the UKIRT catalog.

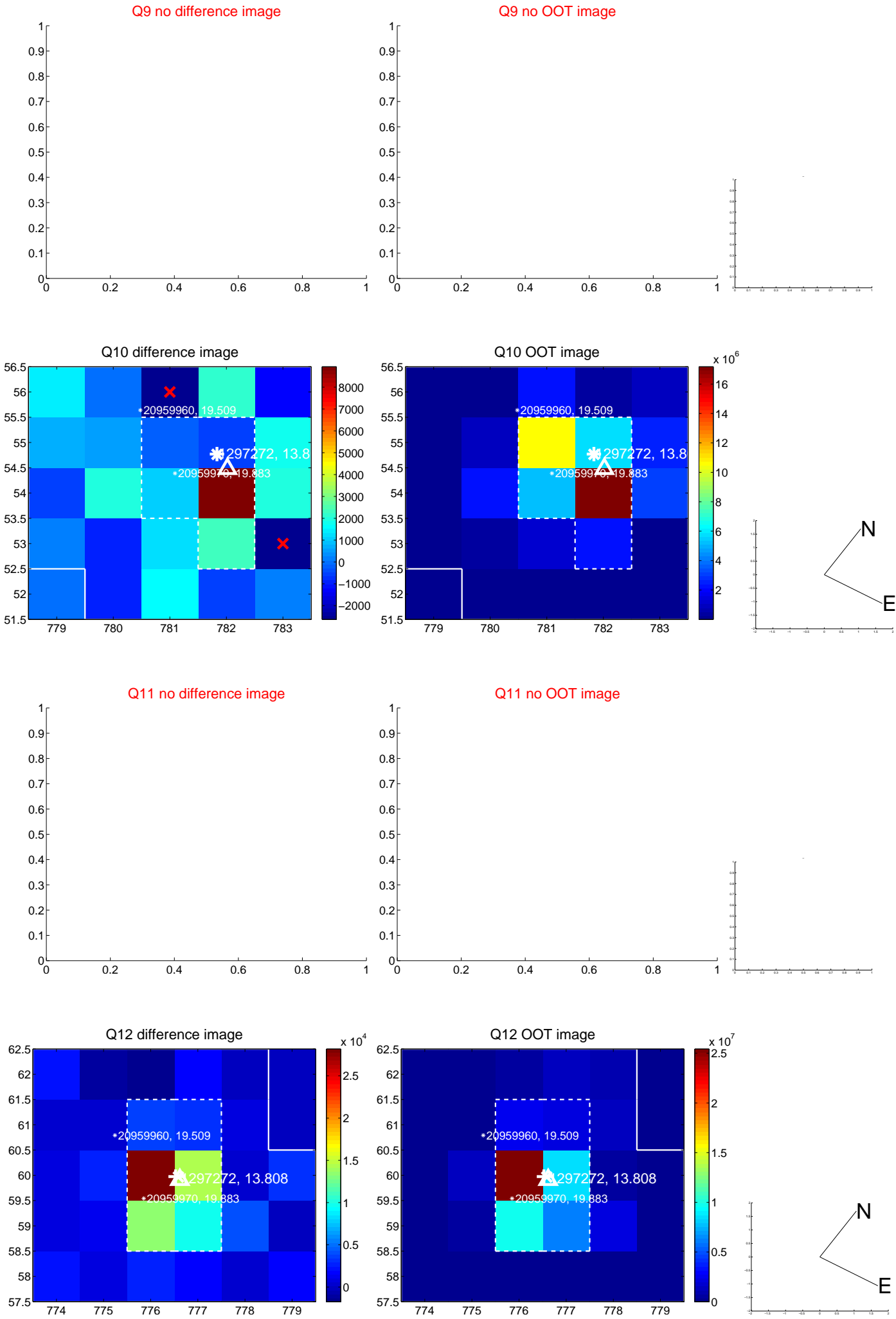
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value



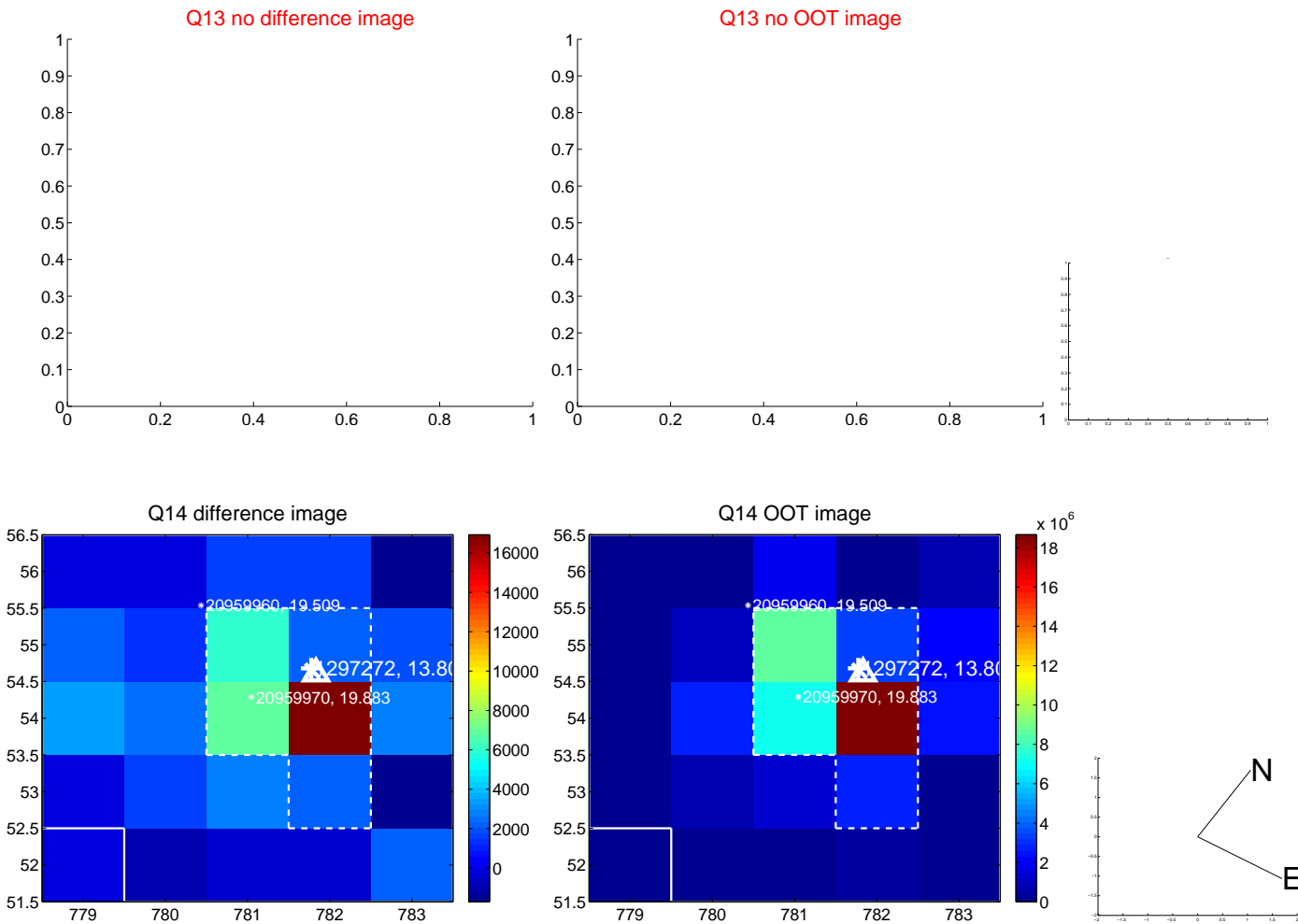
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



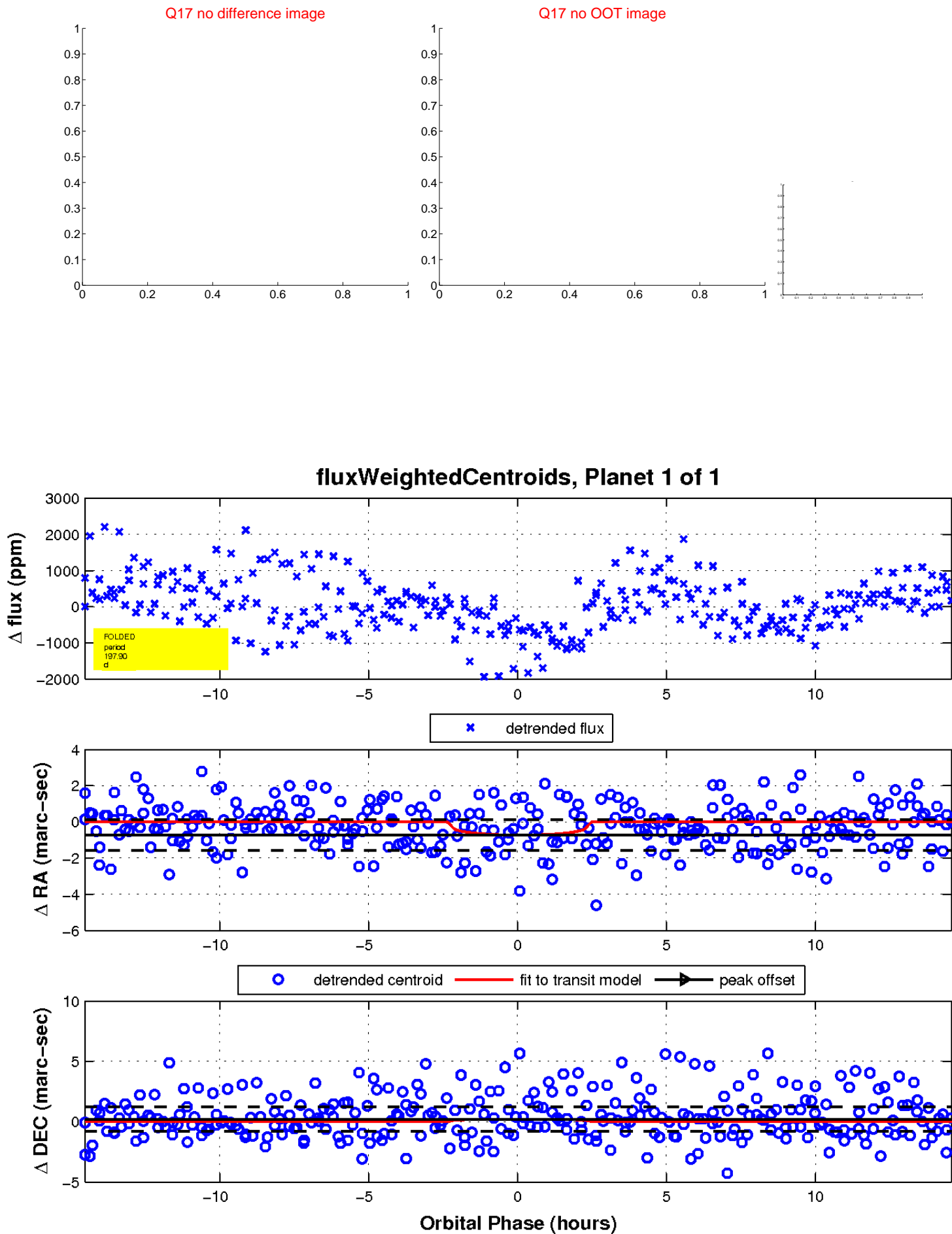
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination

