

KIC 011804952

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})
011804952-01	OBS	8066.01	36.319329	155.941848	401.1	2.791	7.1	7.1	12.39	5008	27.92	934.87

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
011804952-01	OBS	FP	0.20	1	0	0	0	MOD_NONUNIQ_ALT

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

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

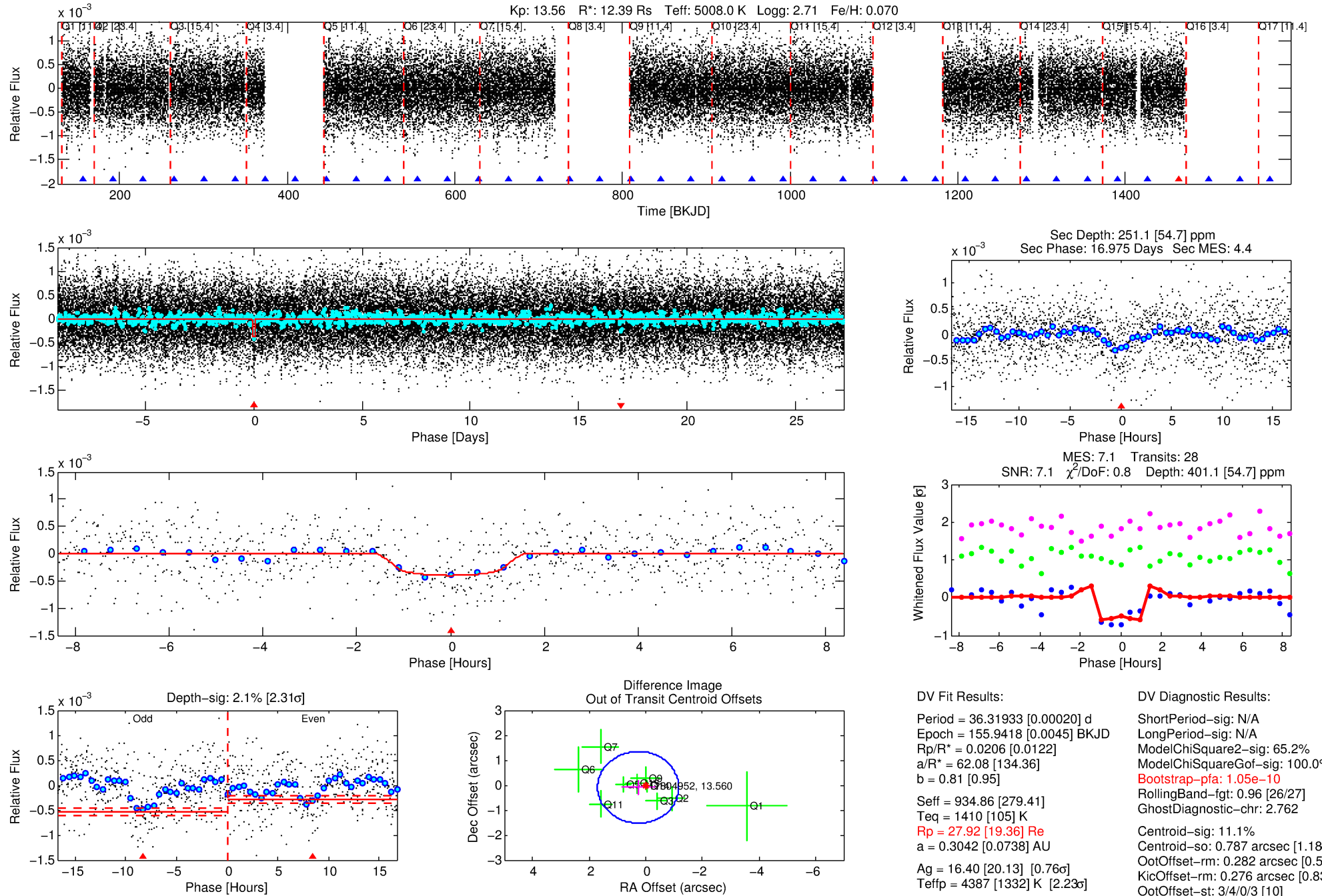
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 011804952-01

No Significant Match Found

DV One-Page Summary

KIC: 11804952 Candidate: 1 of 1 Period: 36.319 d



DV Fit Results:

Period = 36.31933 [0.00020] d
Epoch = 155.9418 [0.0045] BKJD
Rp/R* = 0.0206 [0.0122]
a/R* = 62.08 [134.36]
b = 0.81 [0.95]
Seff = 934.86 [279.41]
Teff = 1410 [105] K
Rp = 27.92 [19.36] Re
a = 0.3042 [0.0738] AU
Ag = 16.40 [20.13] [0.76 σ]
Teffp = 4387 [1332] K [2.23 σ]

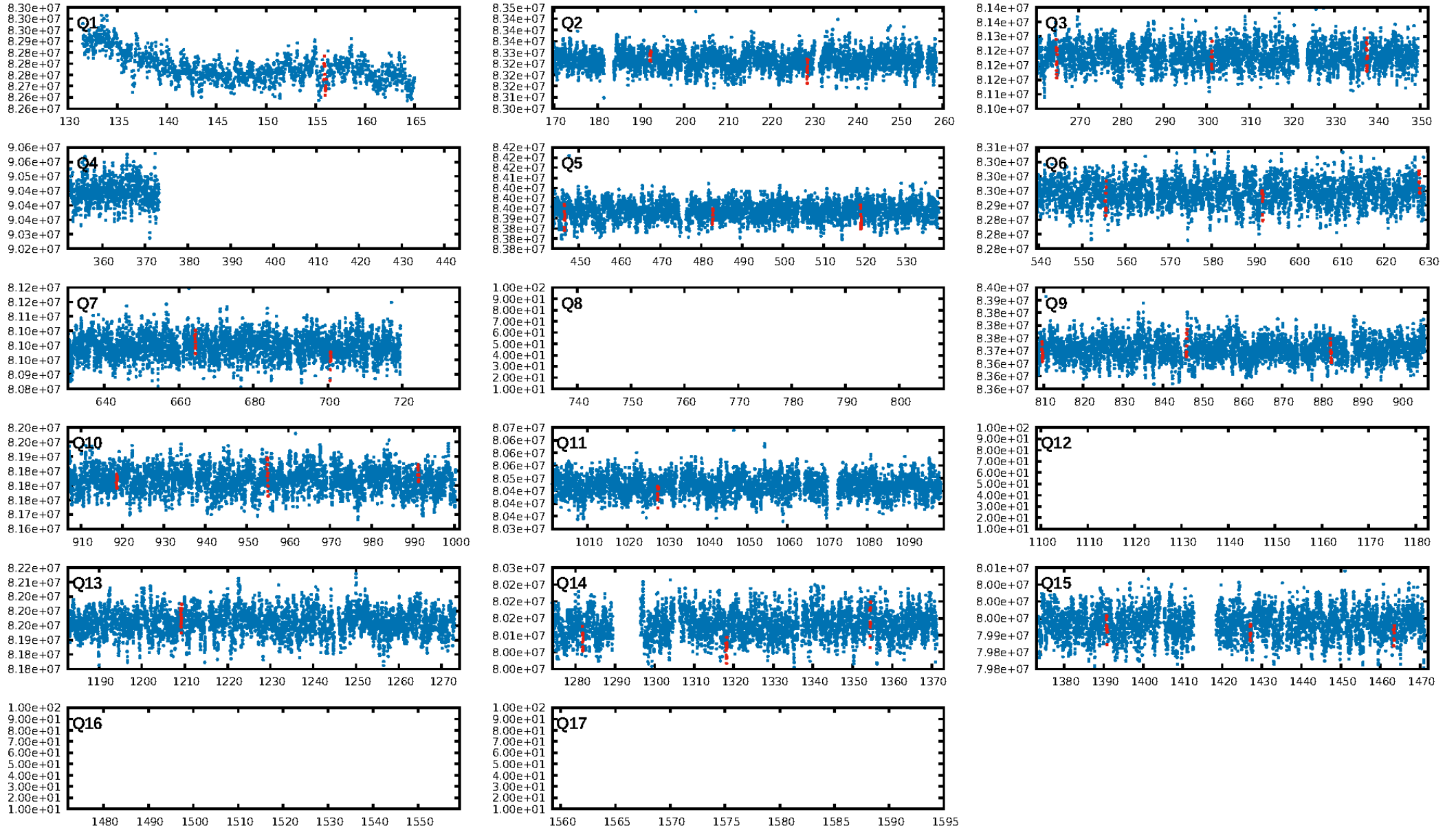
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: 65.2%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: 1.05e-10
RollingBand-fgt: 0.96 [26/27]
GhostDiagnostic-chr: 2.762
Centroid-sig: 11.1%
Centroid-so: 0.787 arcsec [1.18 σ]
OotOffset-rm: 0.282 arcsec [0.59 σ]
KicOffset-rm: 0.276 arcsec [0.83 σ]
OotOffset-st: 3/4/0/3 [10]
KicOffset-st: 3/4/0/3 [10]
DiffImageQuality-fgm: 0.70 [7/10]
DiffImageOverlap-fno: 1.00 [12/12]

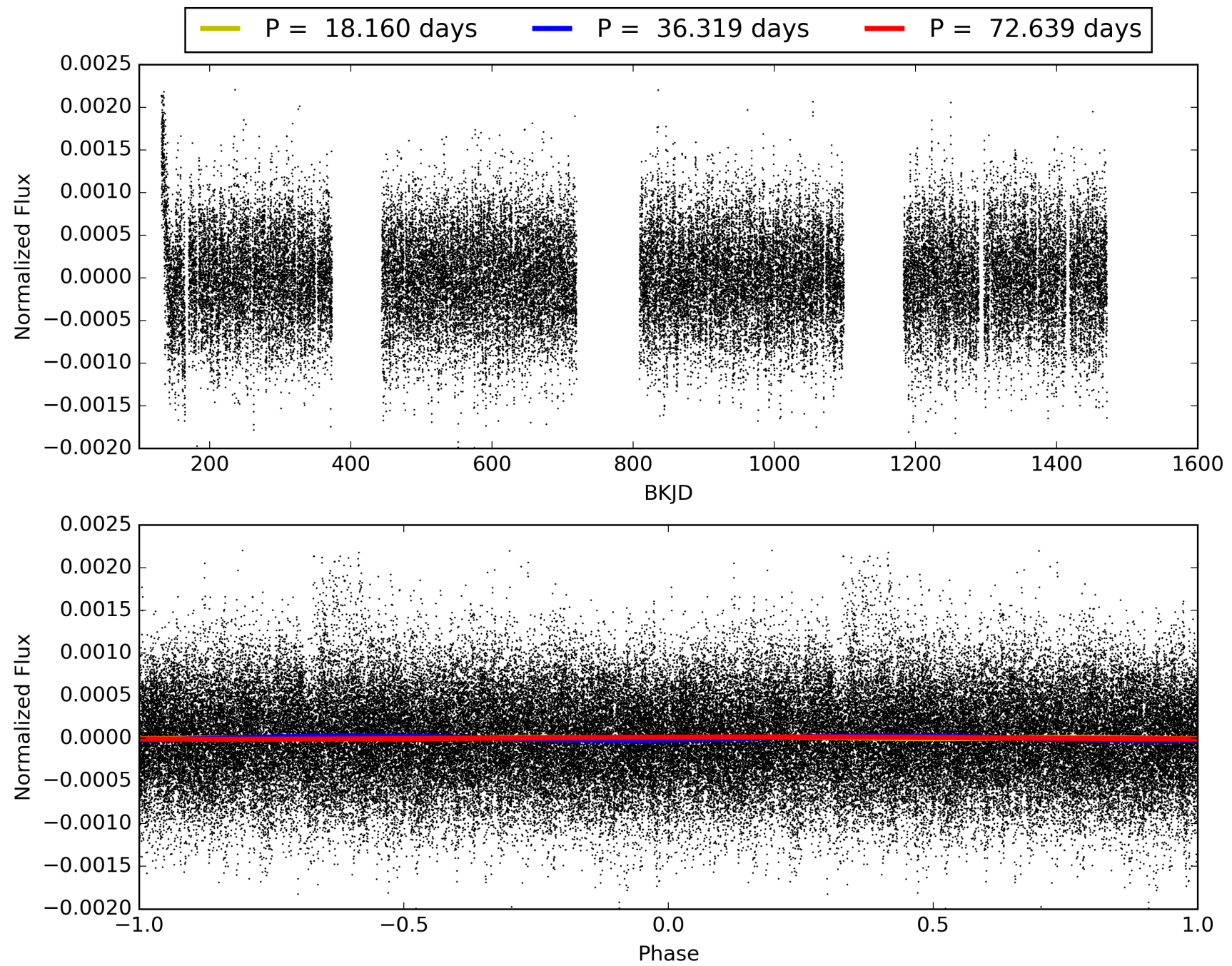
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 31-Jan-2016 22:51:04 Z

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

TCE 011804952-01, PDC Light Curves

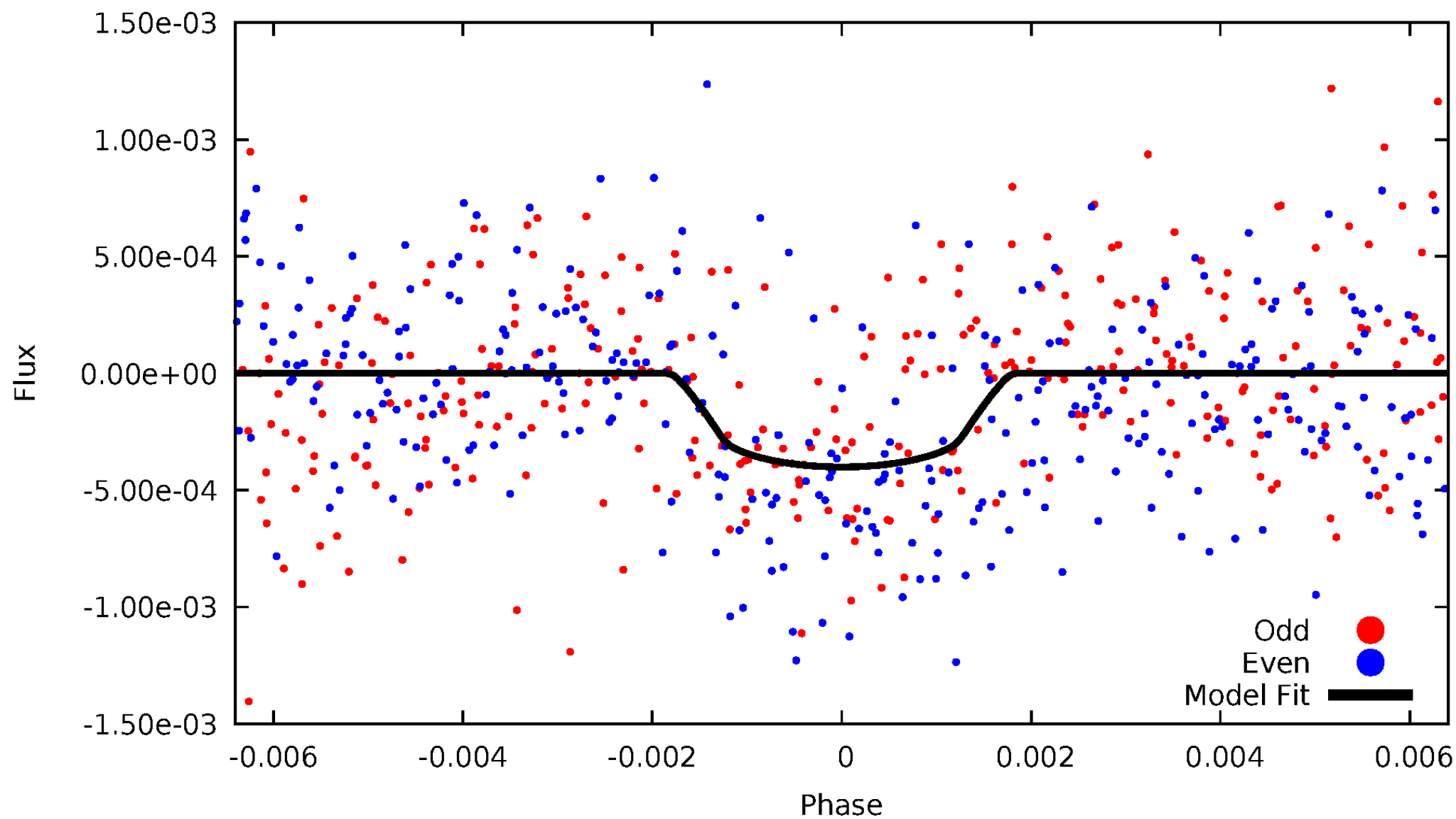


TCE 011804952-01



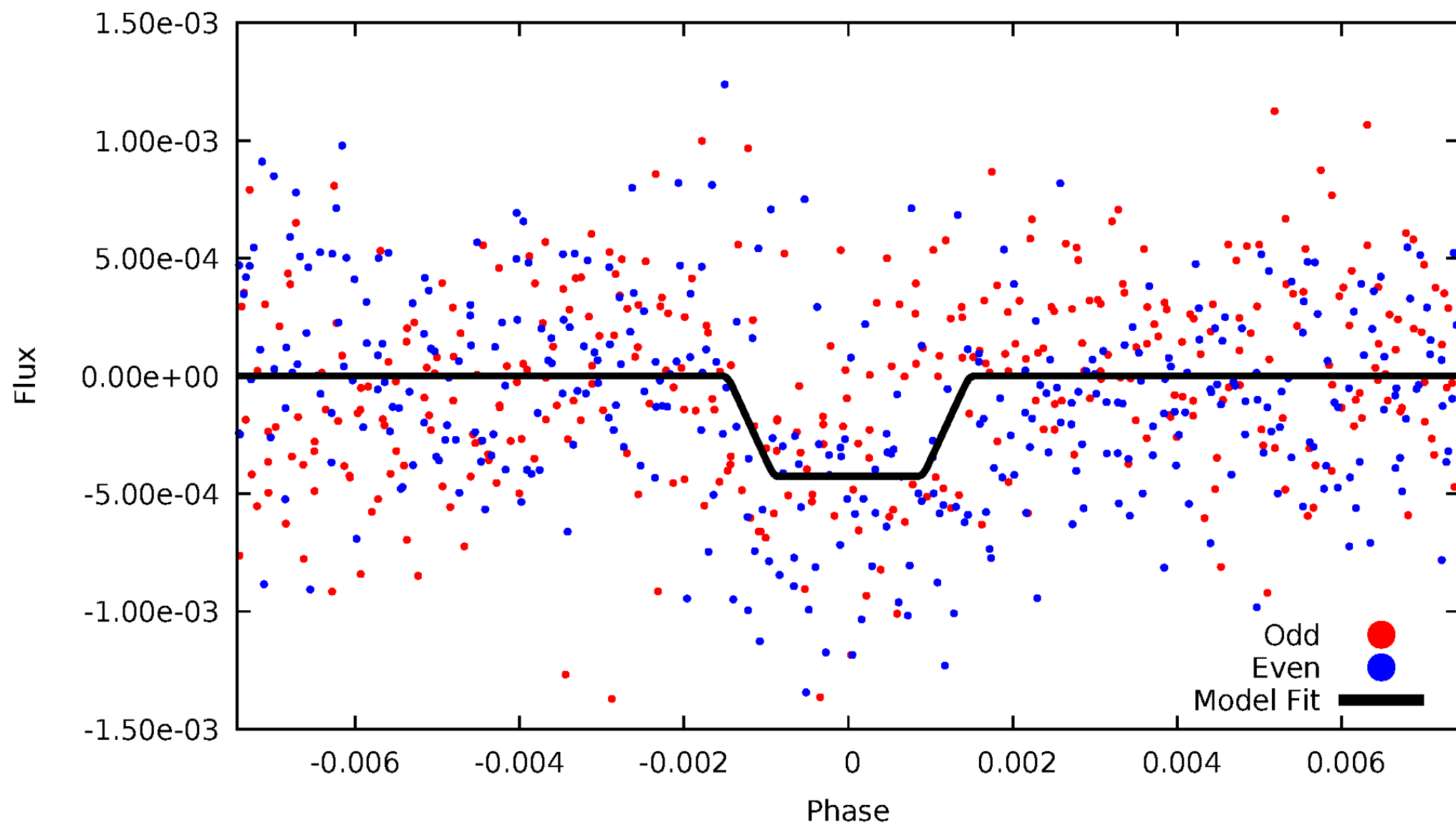
DV Odd/Even

TCE 011804952-01

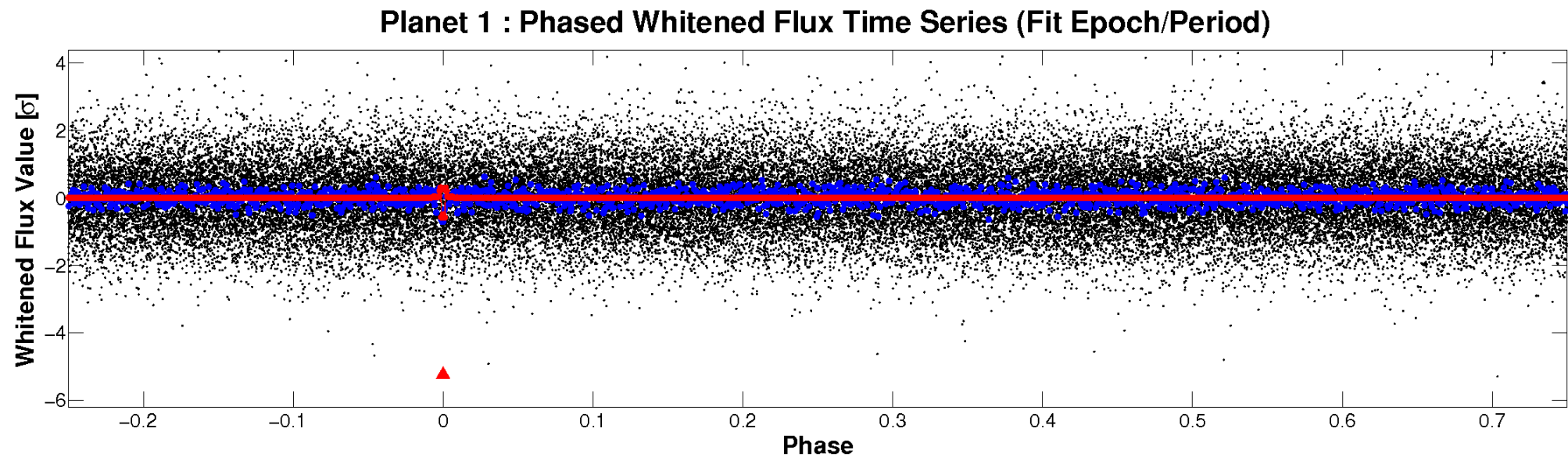
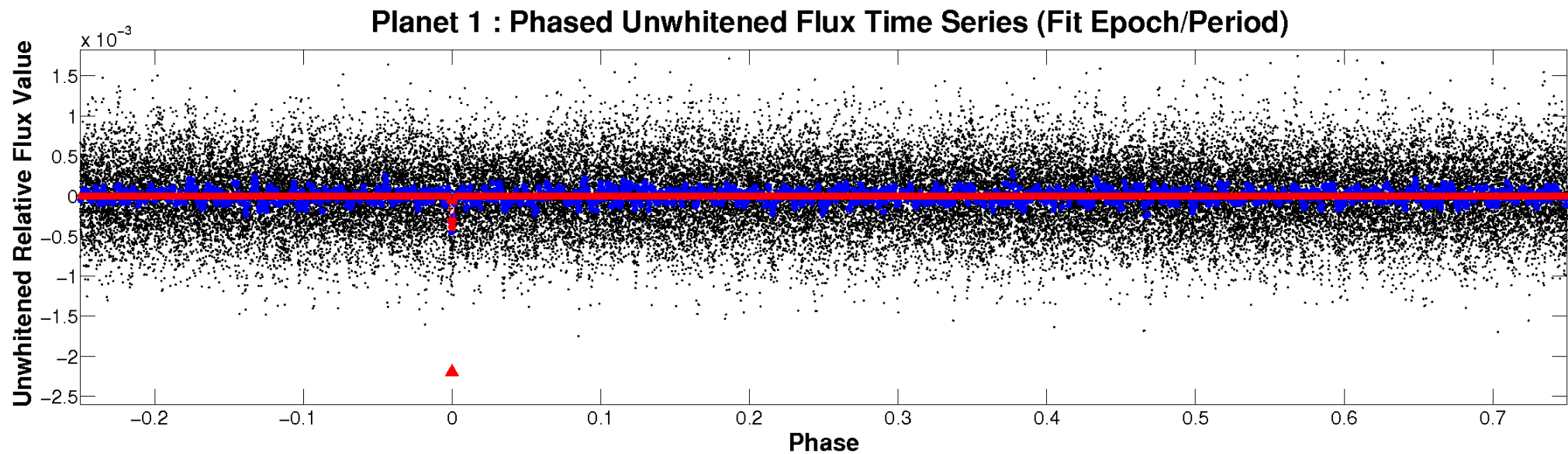


ALT Odd/Even

TCE 011804952-01

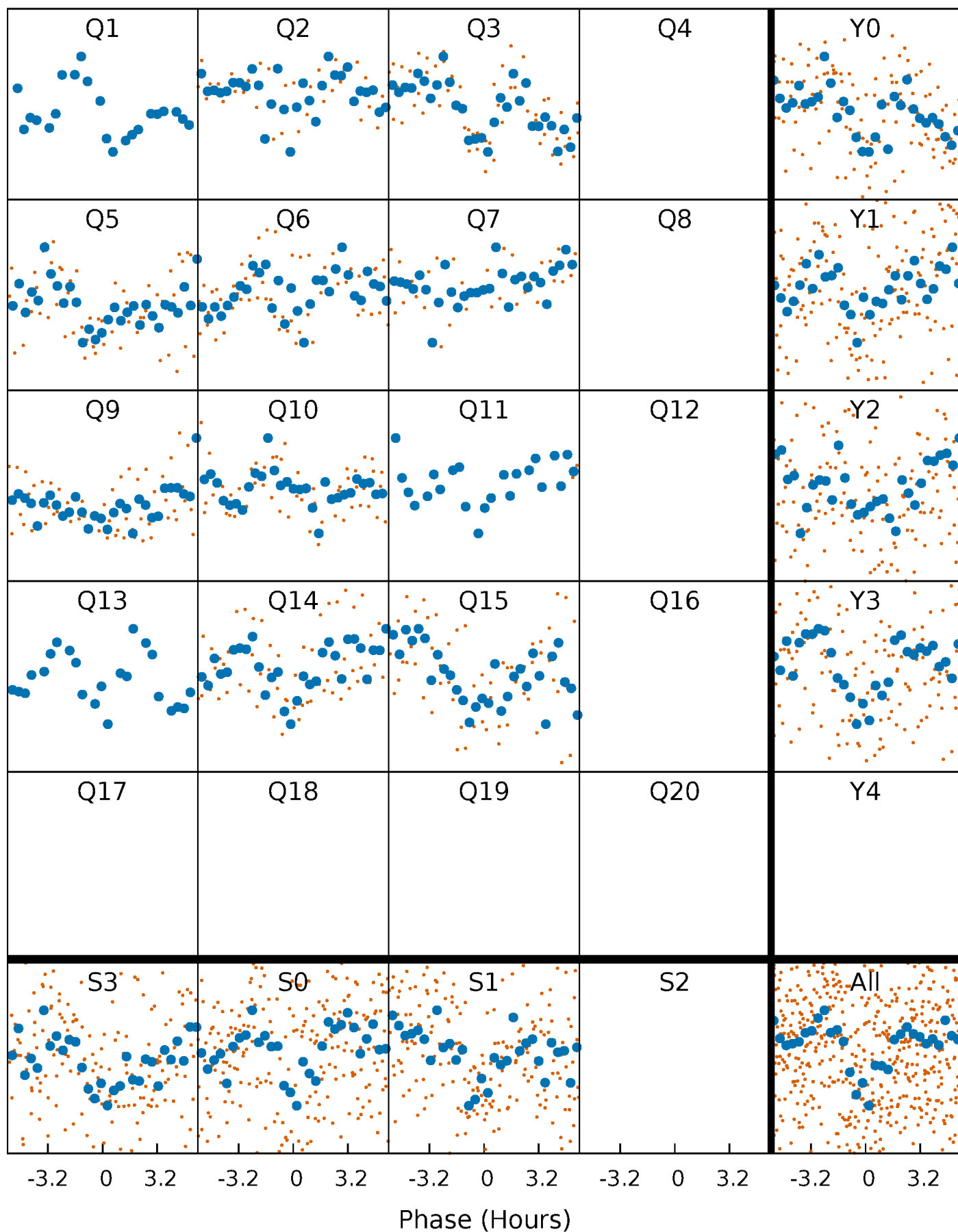


Non-Whitened Vs. Whitened Light Curve



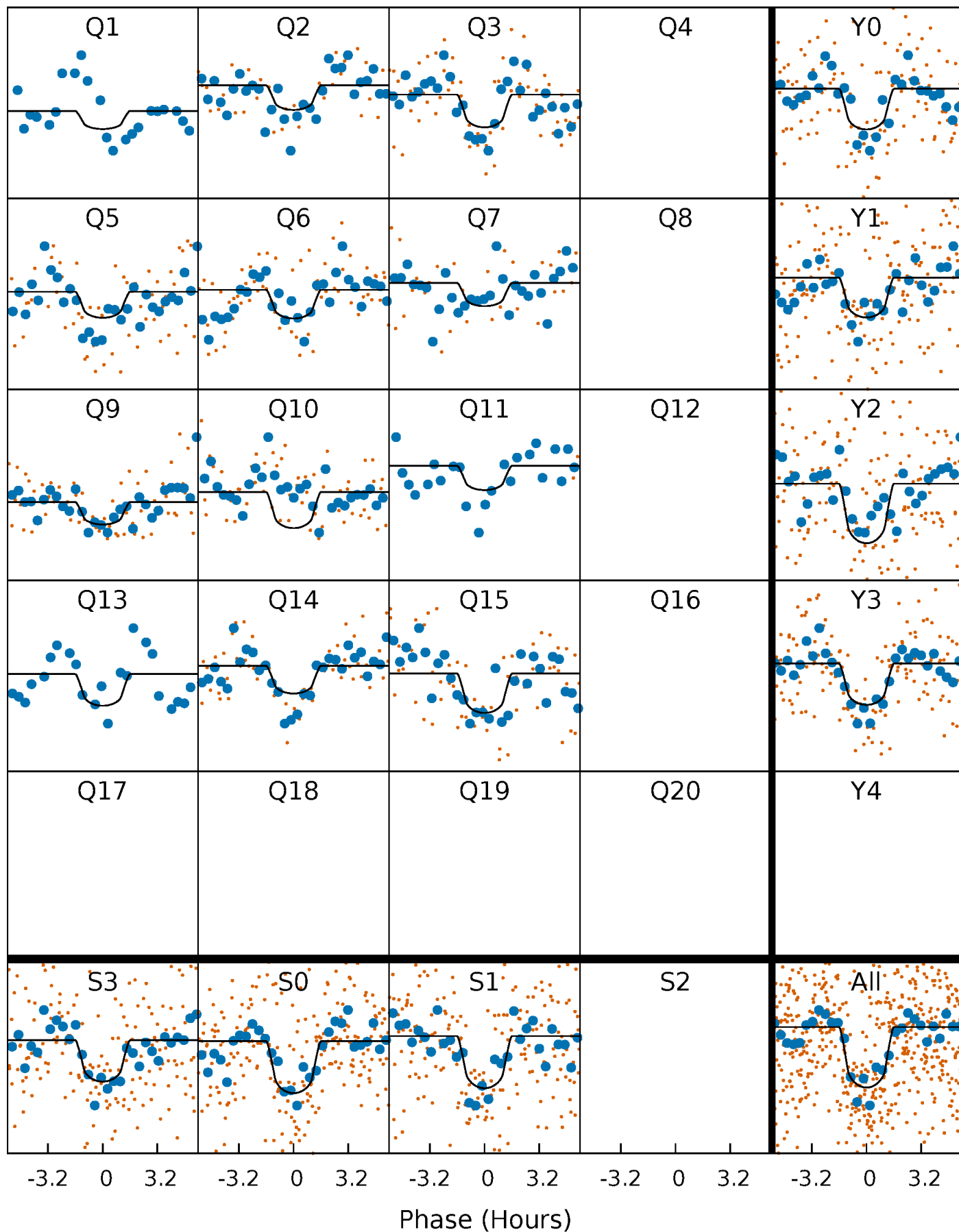
PDC Quarter-Phased Transit Curves

TCE 011804952-01 P= 36.319329 Days $T_0=155.941848$ (BKJD)



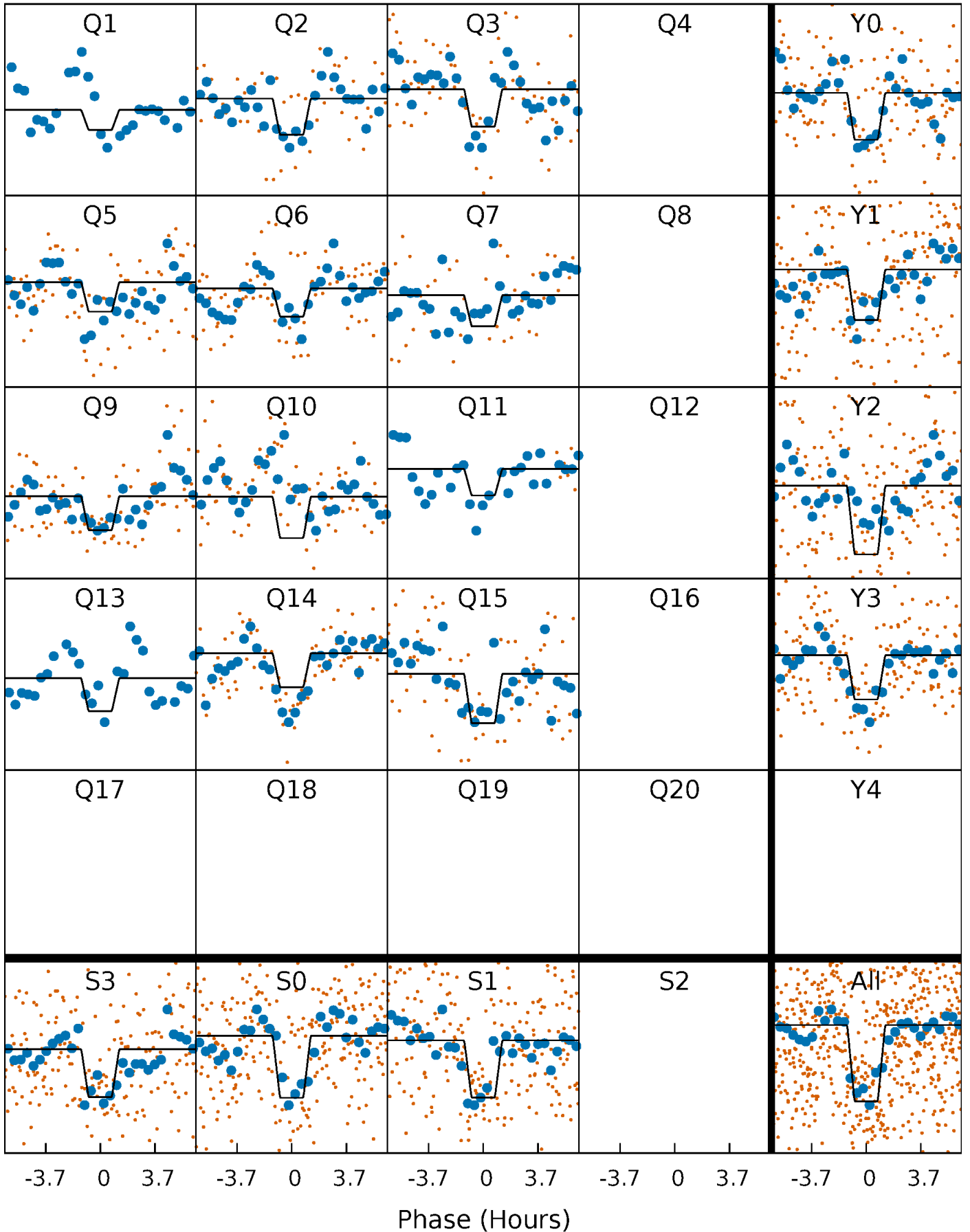
DV Quarter-Phased Transit Curves

TCE 011804952-01 P= 36.319329 Days $T_0=155.941848$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

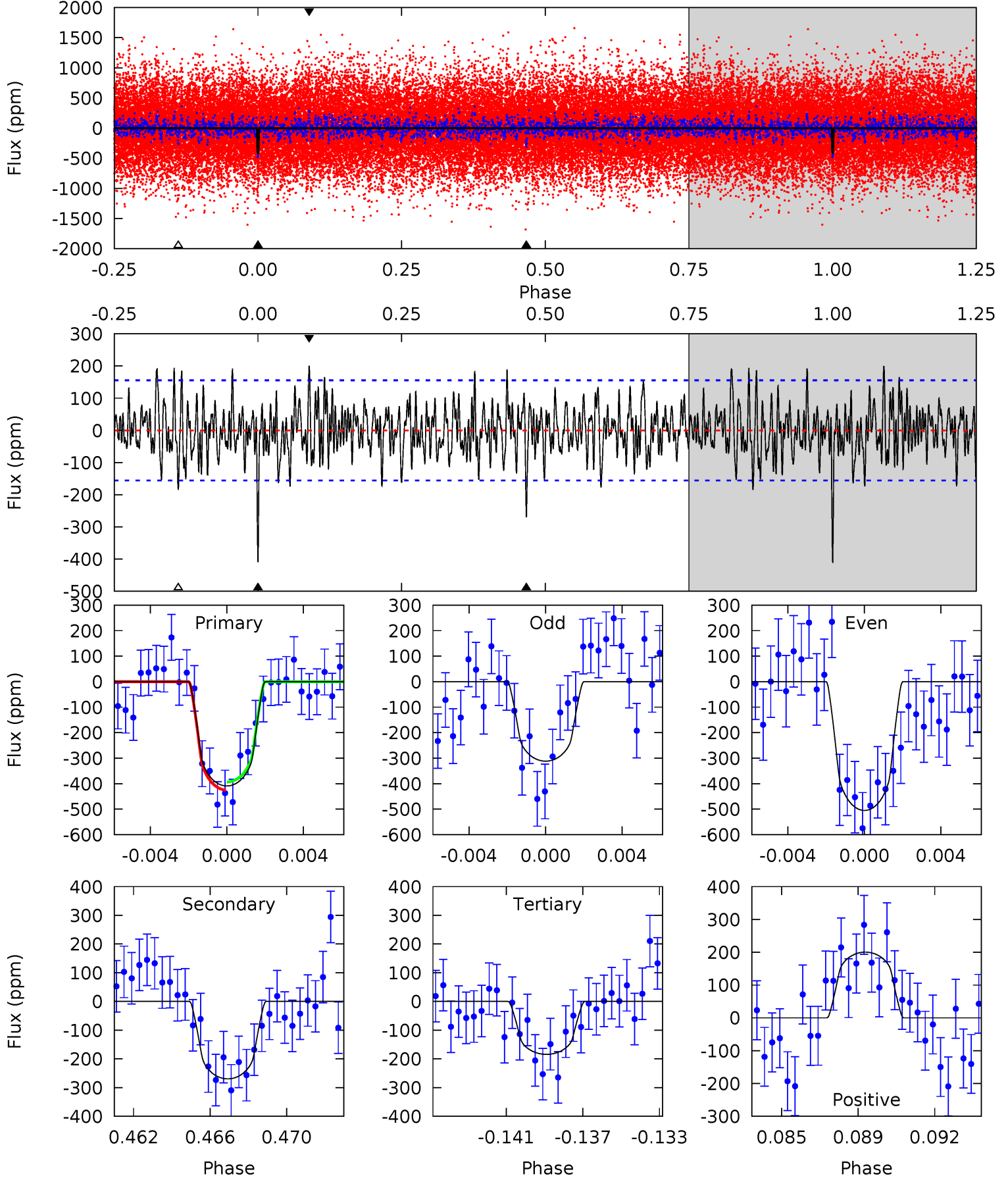
TCE 011804952-01 P= 36.319150 Days $T_0=155.944839$ (BKJD)



DV Model-Shift Uniqueness Test

011804952-01, P = 36.319329 Days, E = 119.622519 Days

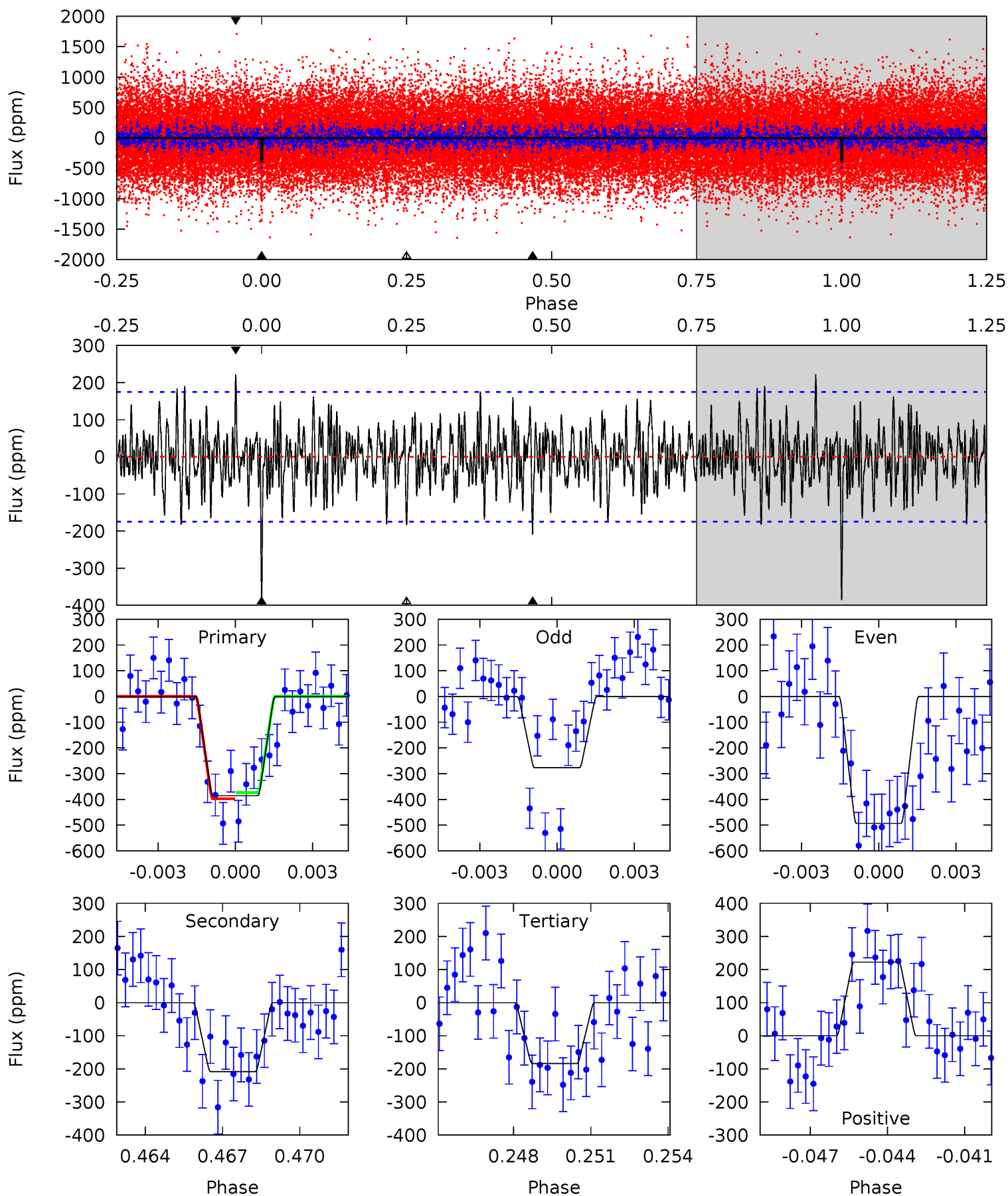
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
13.7	9.05	6.18	6.72	5.21	2.90	2.15	7.54	7.00	2.86	2.32	3.25	0.84	0.33	0.53



Alt Model-Shift Uniqueness Test

011804952-01, P = 36.319150 Days, E = 119.625689 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
11.6	6.26	5.53	6.69	5.26	2.97	1.87	6.08	4.91	0.74	-0.43	3.27	0.97	0.37	0.36



Stellar Parameters For KIC 011804952

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	5008^{+50}_{-213}	$2.706^{+0.030}_{-0.030}$	$0.070^{+0.250}_{-0.450}$	$12.390^{+0.498}_{-4.486}$	$2.844^{+0.086}_{-1.629}$	$0.002^{+0.001}_{-0.000}$
	+1%/-4%	+1%/-1%	+357%/-643%	+4%/-36%	+3%/-57%	+60%/-10%
Source	PHO1	AST9	KIC0	DSEP		

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

Secondary Eclipse Parameters for KIC 011804952-01 / KOI 8066.01

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-270 ± 30	$28.97^{+15.34}_{-14.69}$	1968^{+36}_{-87}	4413^{+1577}_{-652}	16^{+49}_{-9}
Alt.	-208 ± 33	$28.74^{+15.07}_{-15.14}$	1969^{+36}_{-93}	4219^{+1517}_{-596}	13^{+42}_{-8}

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 $A_{\text{obs}} \gg 1.0$

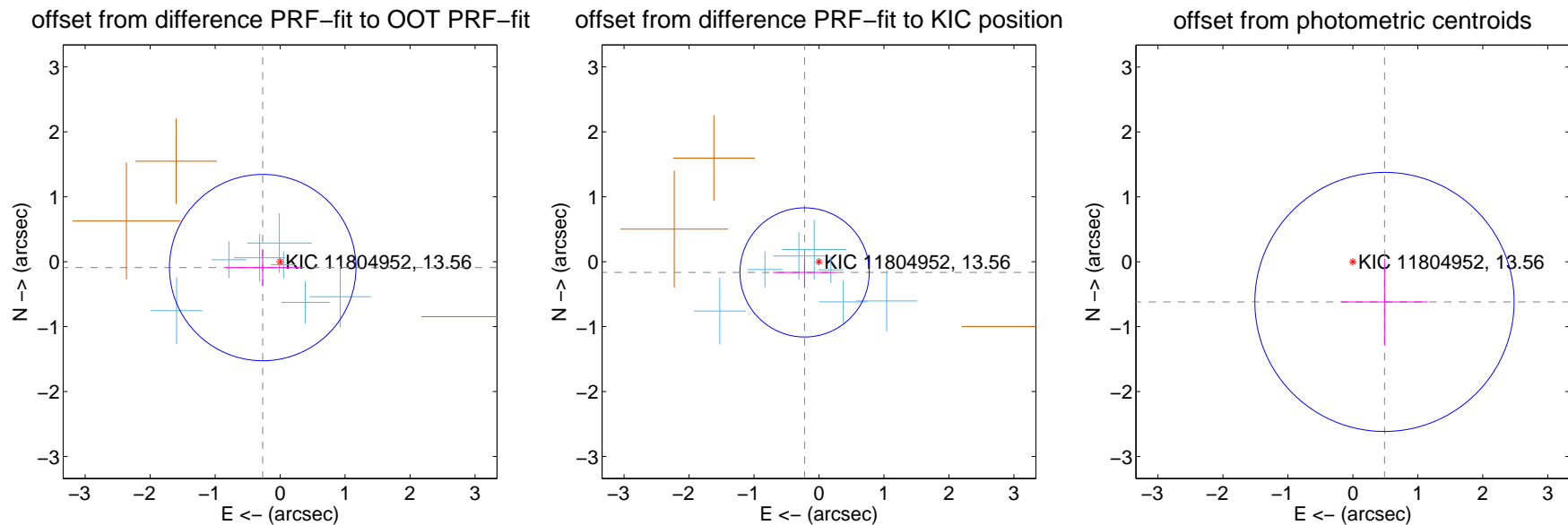
DV Centroid Data

Supplemental centroid analysis for 011804952-01. Kepler magnitude: 13.56. Transit SNR 7.11

There are 7 quarters with good PRF difference image offsets

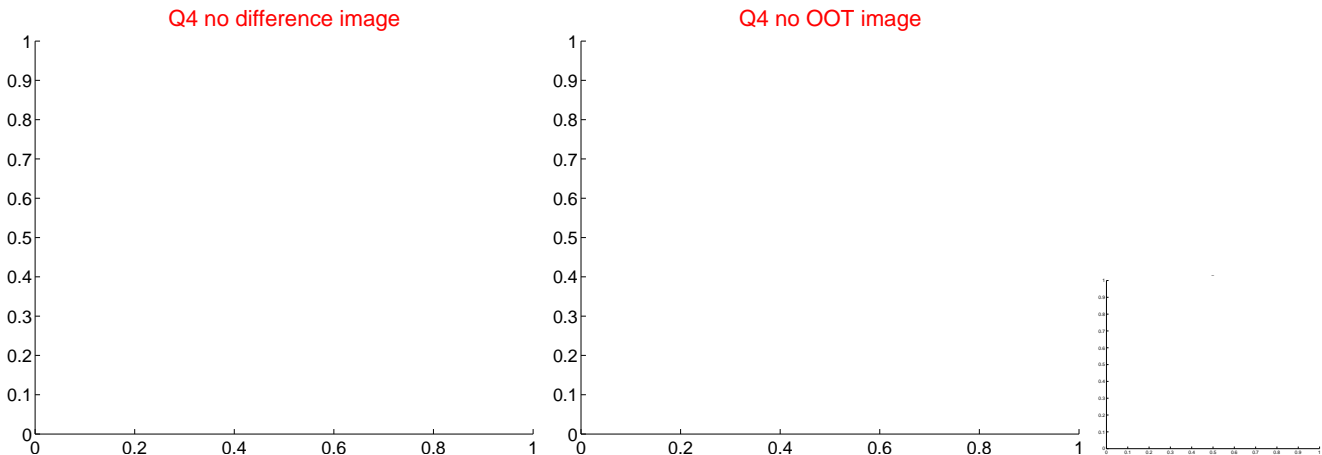
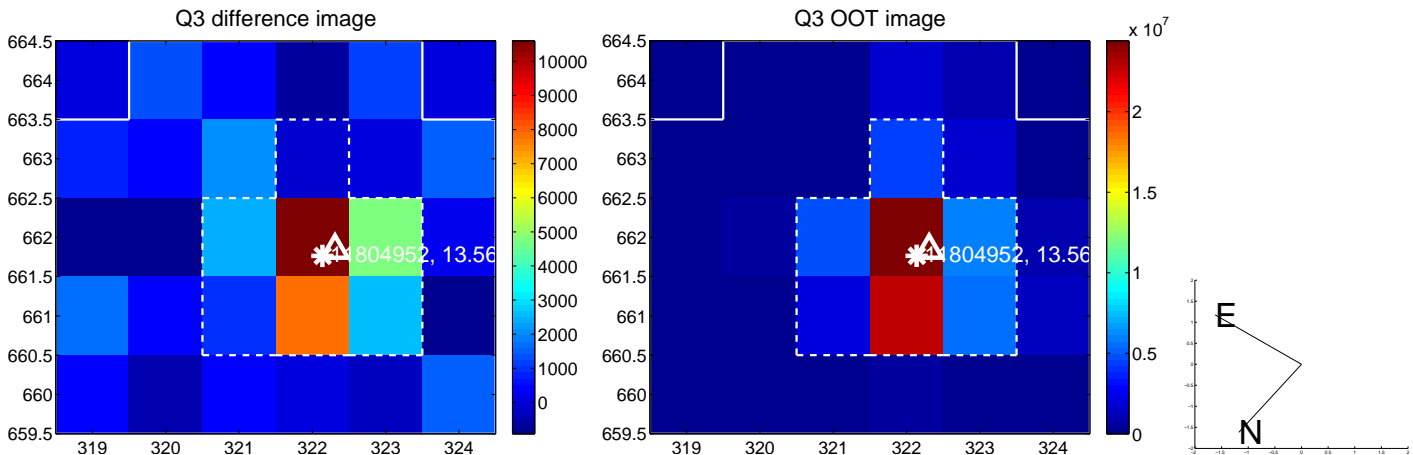
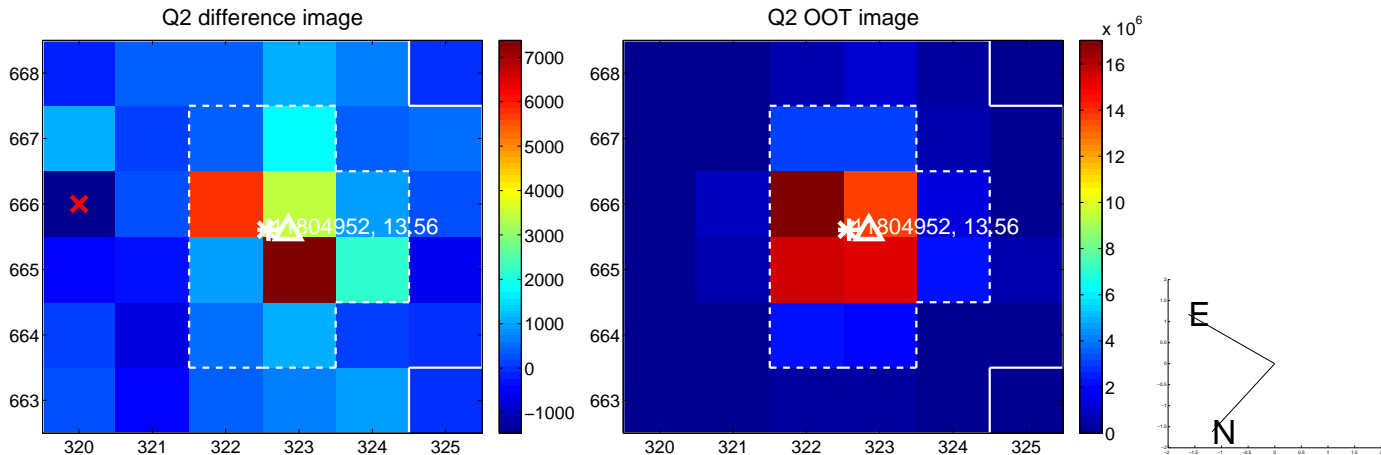
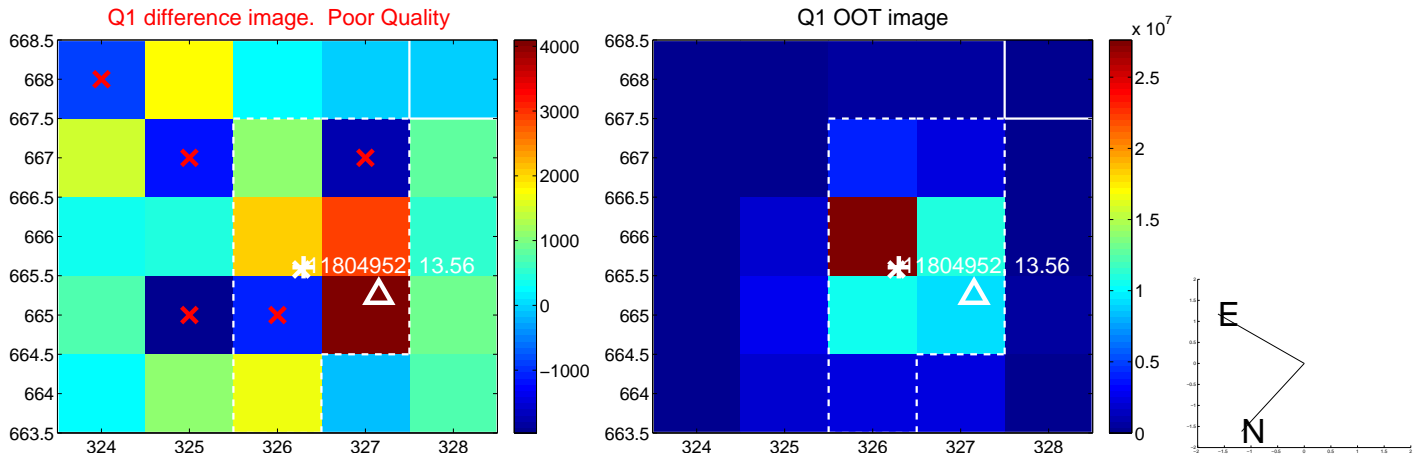
The direct PRF centroid is offset from the target star catalog position by about 0.03 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.282 ± 0.478	0.59	0.267 ± 0.570	-0.091 ± 0.280
PRF-fit source offset from KIC position	0.276 ± 0.332	0.83	0.221 ± 0.485	-0.165 ± 0.234
photometric centroid source offset	0.79 ± 0.67	1.18	-0.49 ± 0.67	-0.62 ± 0.66

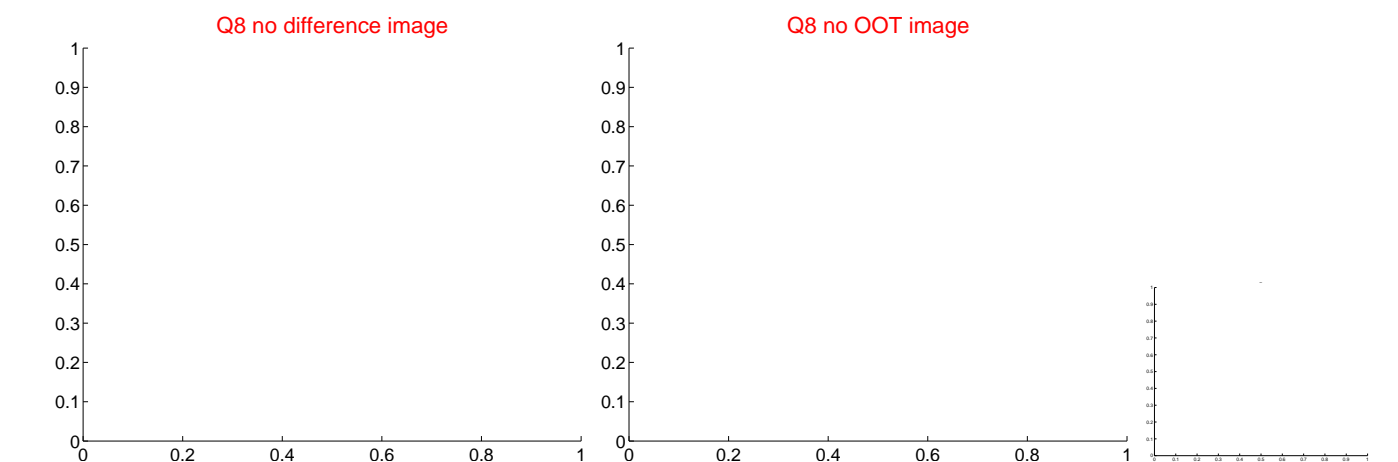
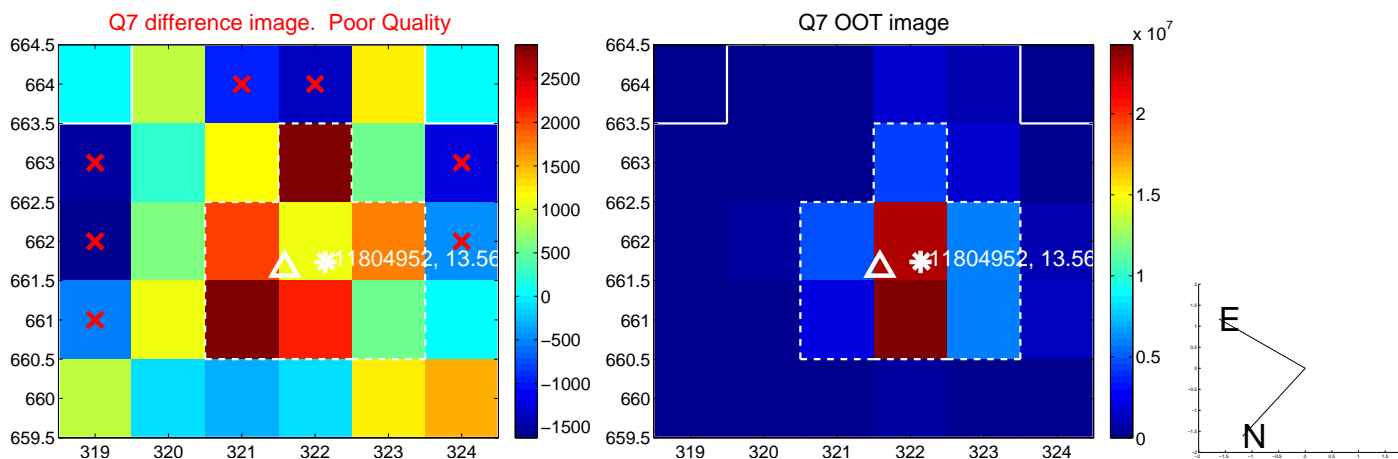
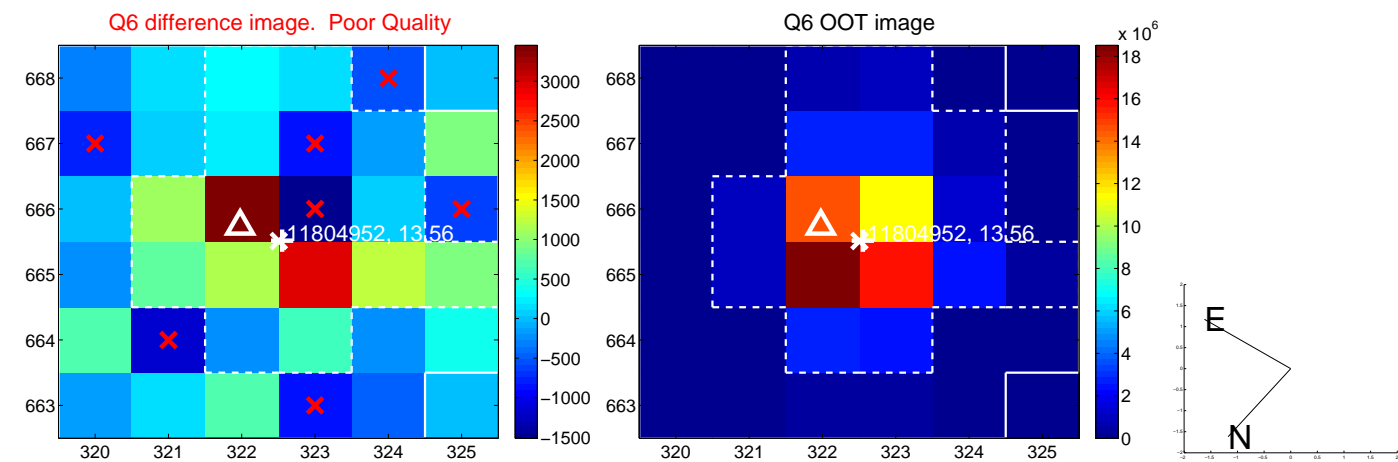
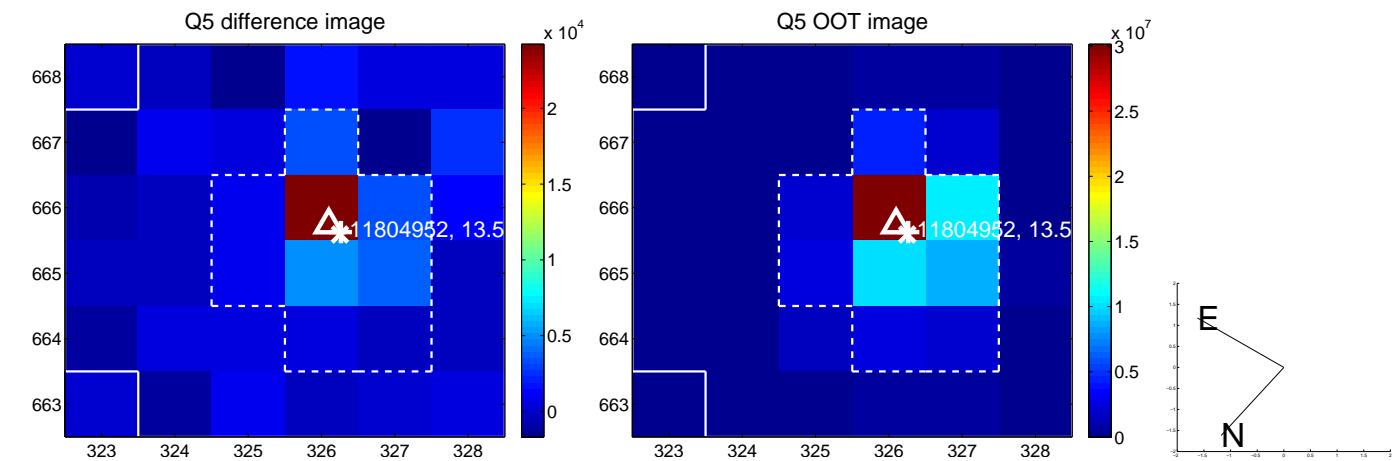


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets**; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- 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.

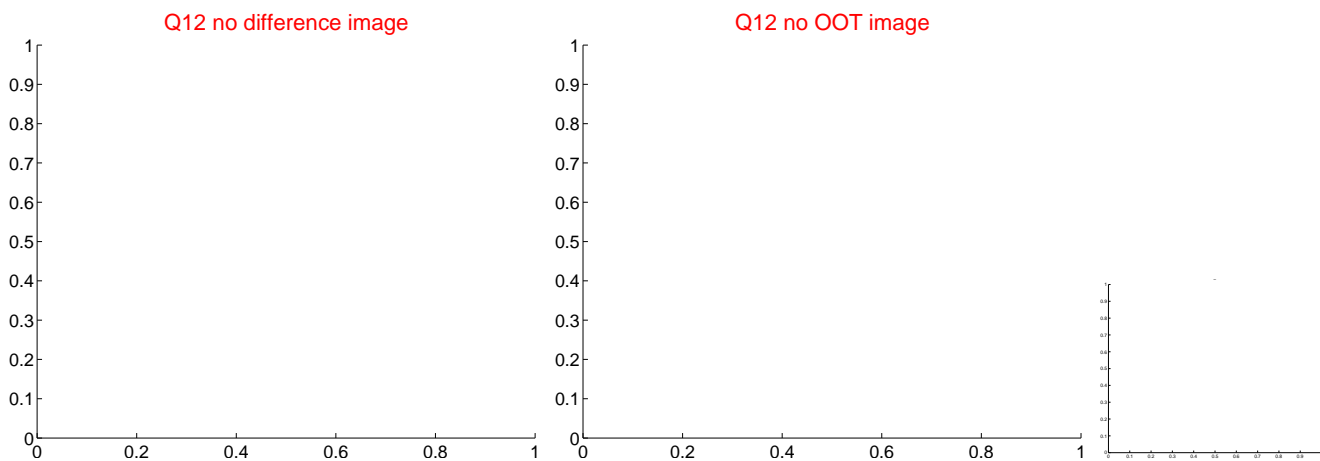
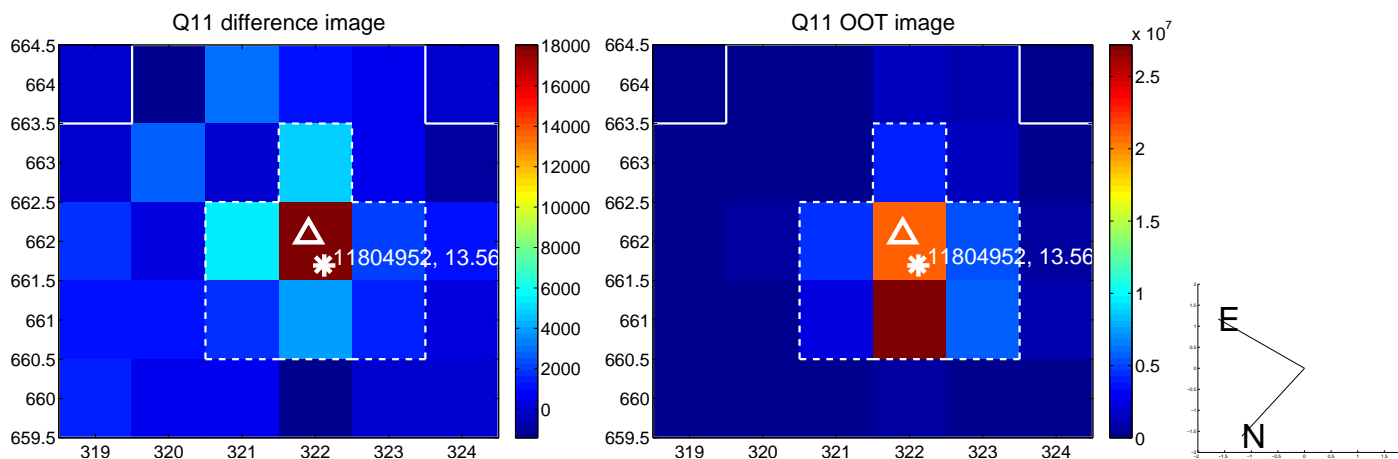
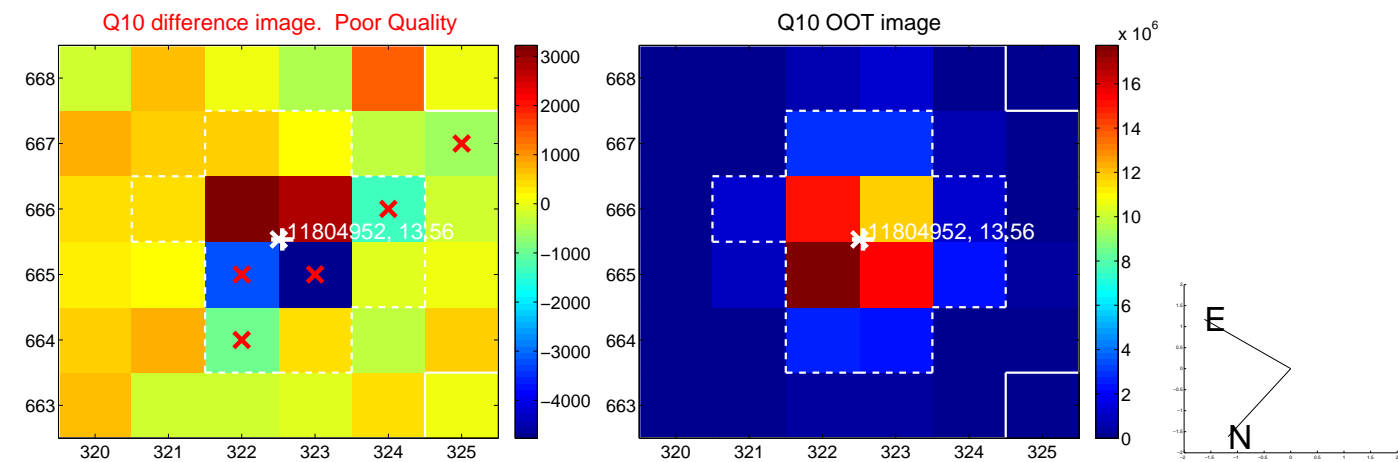
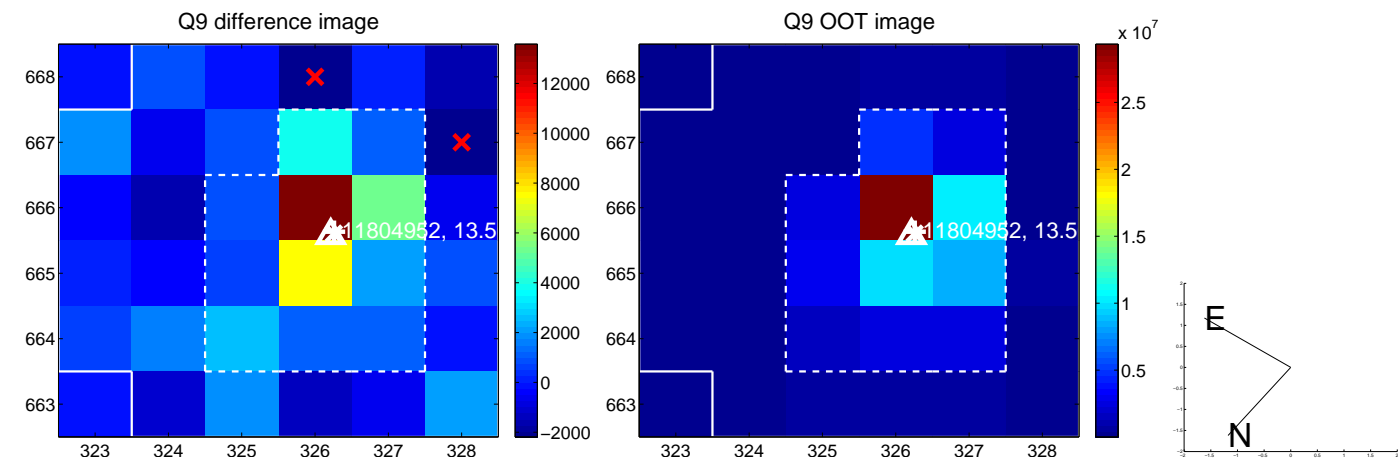
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



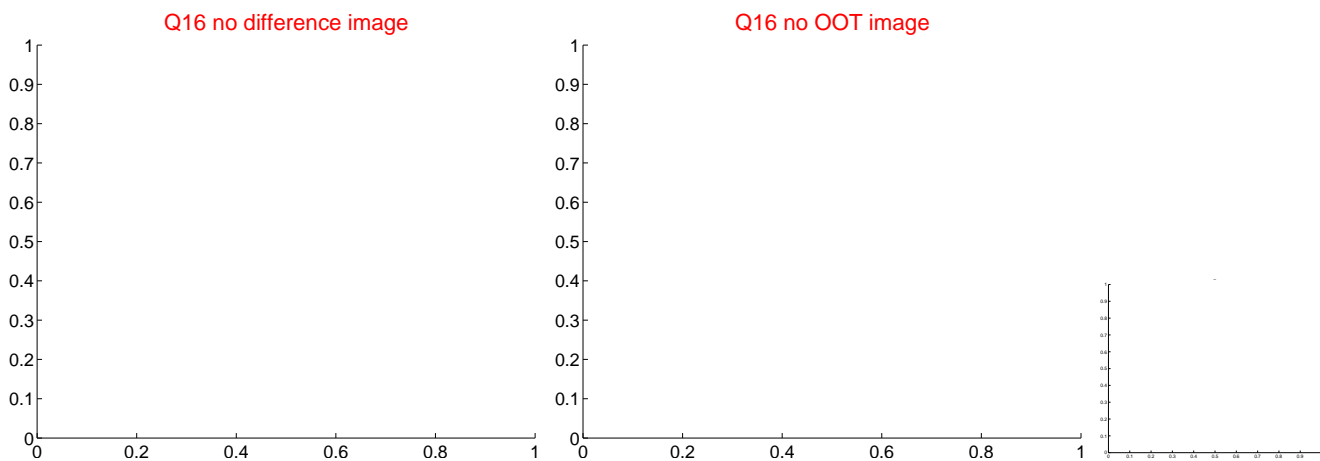
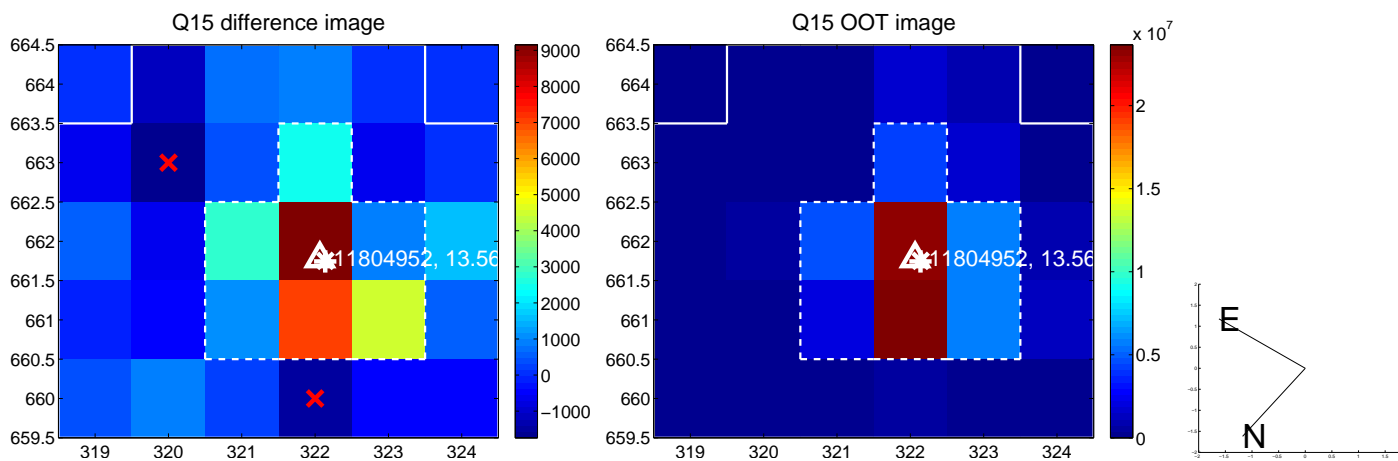
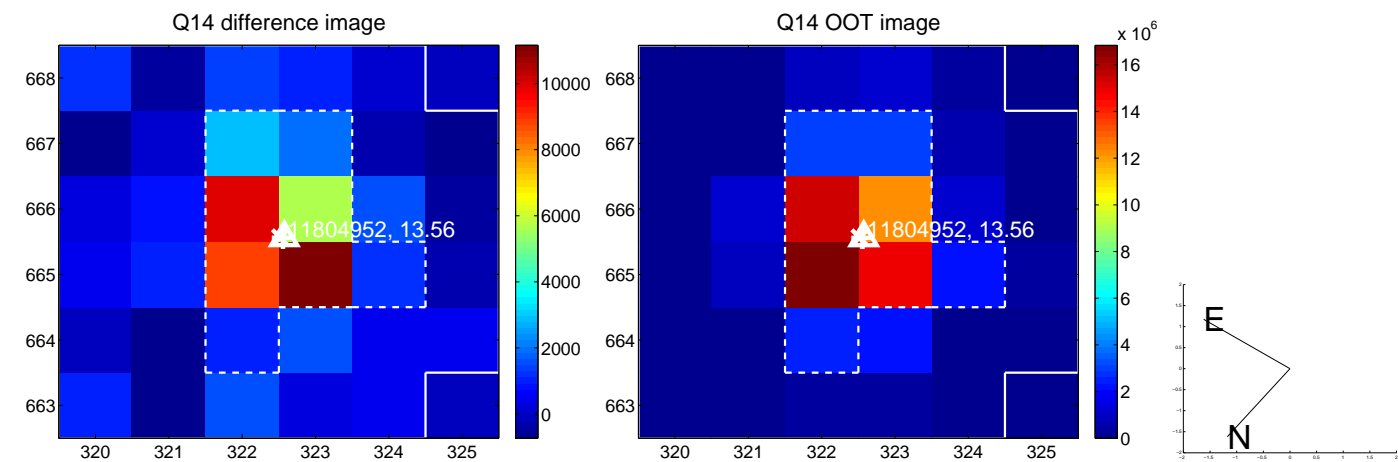
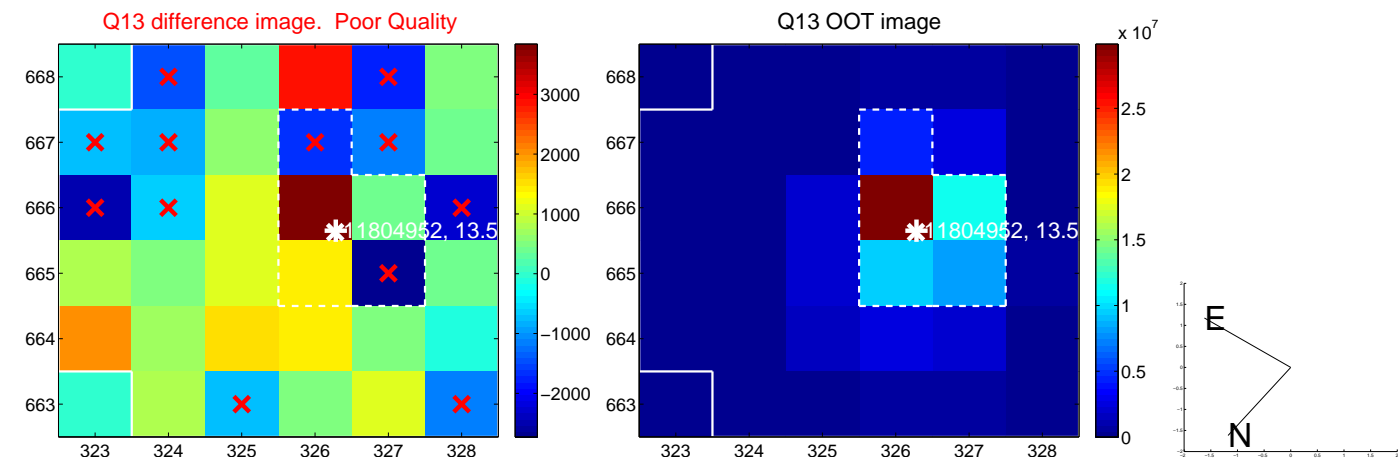
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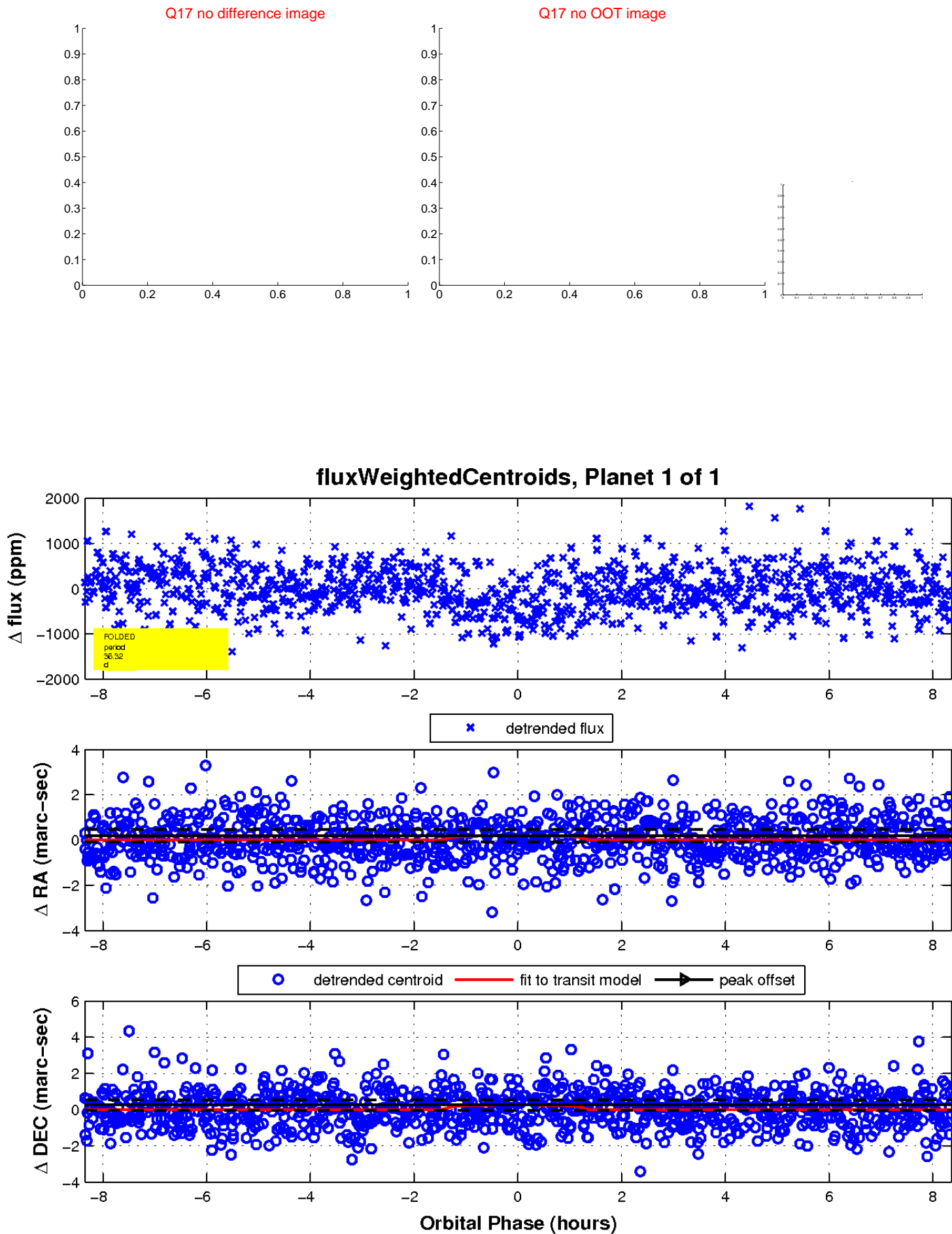
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UKIRT Image

Declination

