

KIC 011337566

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})
011337566-01	OBS	2632.01	7.128153	136.881019	48.4	5.957	16.4	17.0	1.99	6311	1.78	841.66

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
011337566-01	OBS	PC	1.00	0	0	0	0	CENT_SATURATED

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.

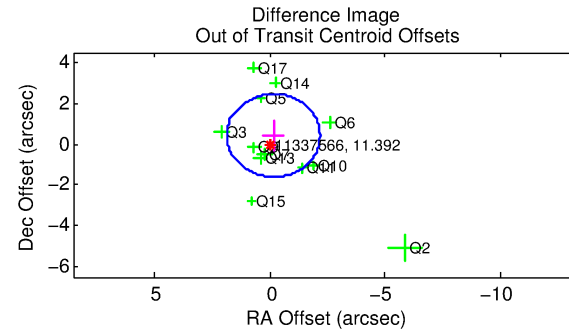
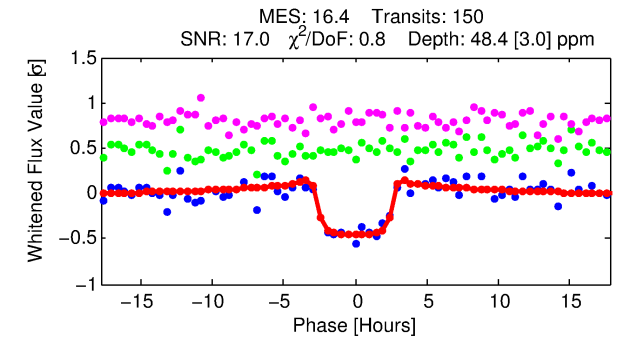
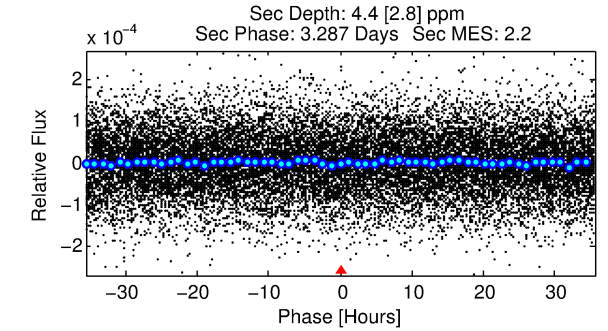
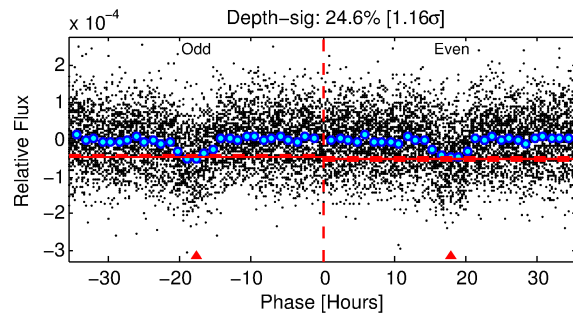
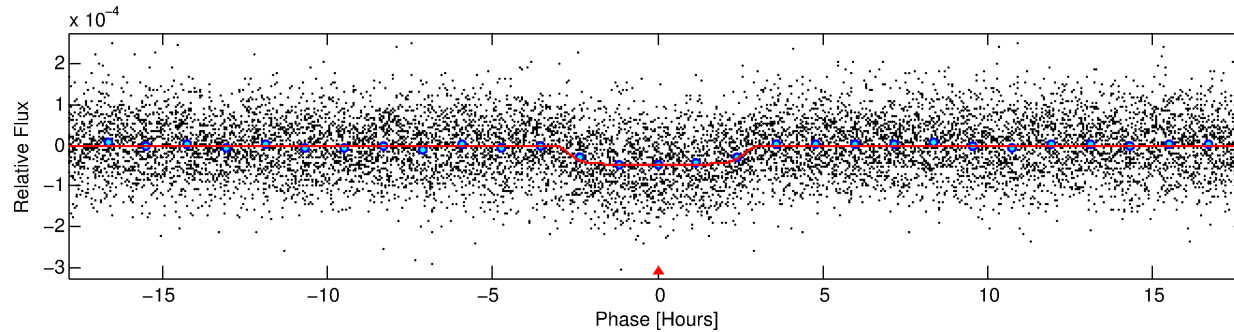
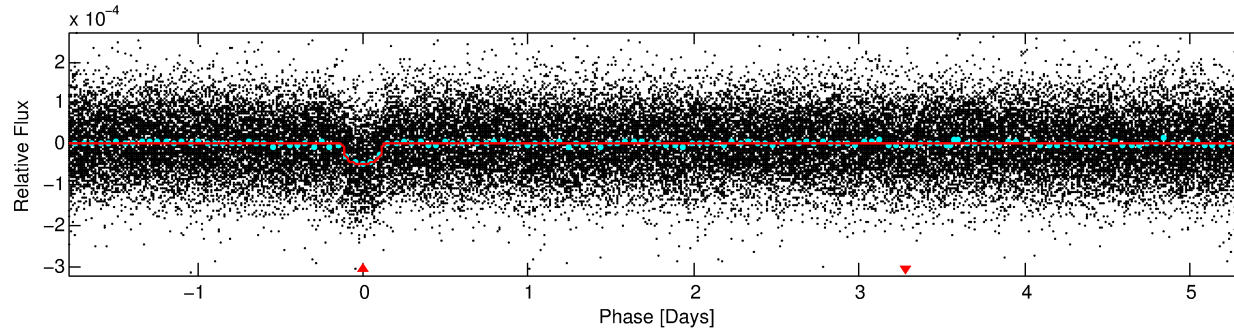
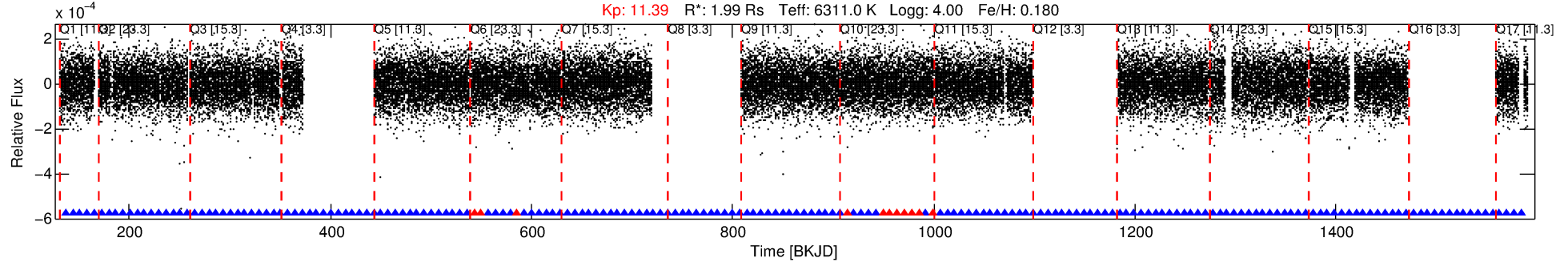
Ephemeris Match Information For 011337566-01

No Significant Match Found

DV One-Page Summary

KIC: 11337566 Candidate: 1 of 1 Period: 7.128 d
KOI: K02632.01 Corr: 0.971

Kp: 11.39 R*: 1.99 Rs Teff: 6311.0 K Logg: 4.00 Fe/H: 0.180



DV Fit Results:

Period = 7.12815 [0.00005] d
Epoch = 136.8810 [0.0046] BKJD
Rp/R* = 0.0082 [0.0005]
a/R* = 2.87 [0.79]
b = 0.96 [0.02]
Seff = 841.66 [287.95]
Teq = 1373 [117] K
Rp = 1.78 [0.46] Re
a = 0.0819 [0.0180] AU
Ag = 5.12 [3.80] [1.08σ]
Teffp = 3194 [534] K [3.33σ]

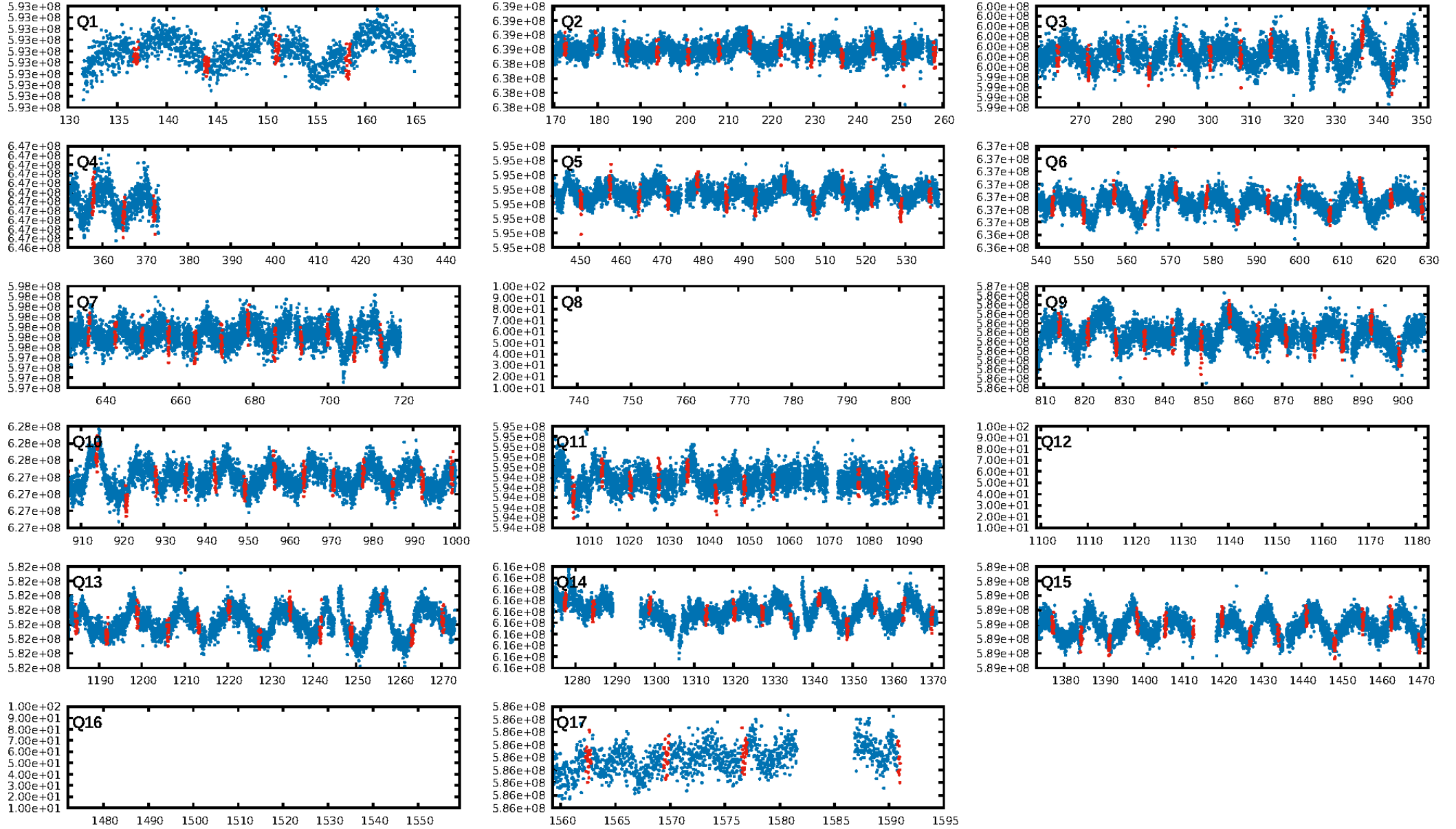
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: 93.7%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: 4.67e-56
RollingBand-fgt: 0.92 [128/139]
GhostDiagnostic-chr: 4.294
Centroid-sig: 18.5%
Centroid-so: 0.500 arcsec [0.83σ]
OotOffset-rm: 0.456 arcsec [0.68σ]
KicOffset-rm: 0.444 arcsec [0.64σ]
OotOffset-st: 4/4/0/4 [12]
KicOffset-st: 4/4/0/4 [12]
DiffImageQuality-fgm: 0.75 [9/12]
DiffImageOverlap-fno: 1.00 [14/14]

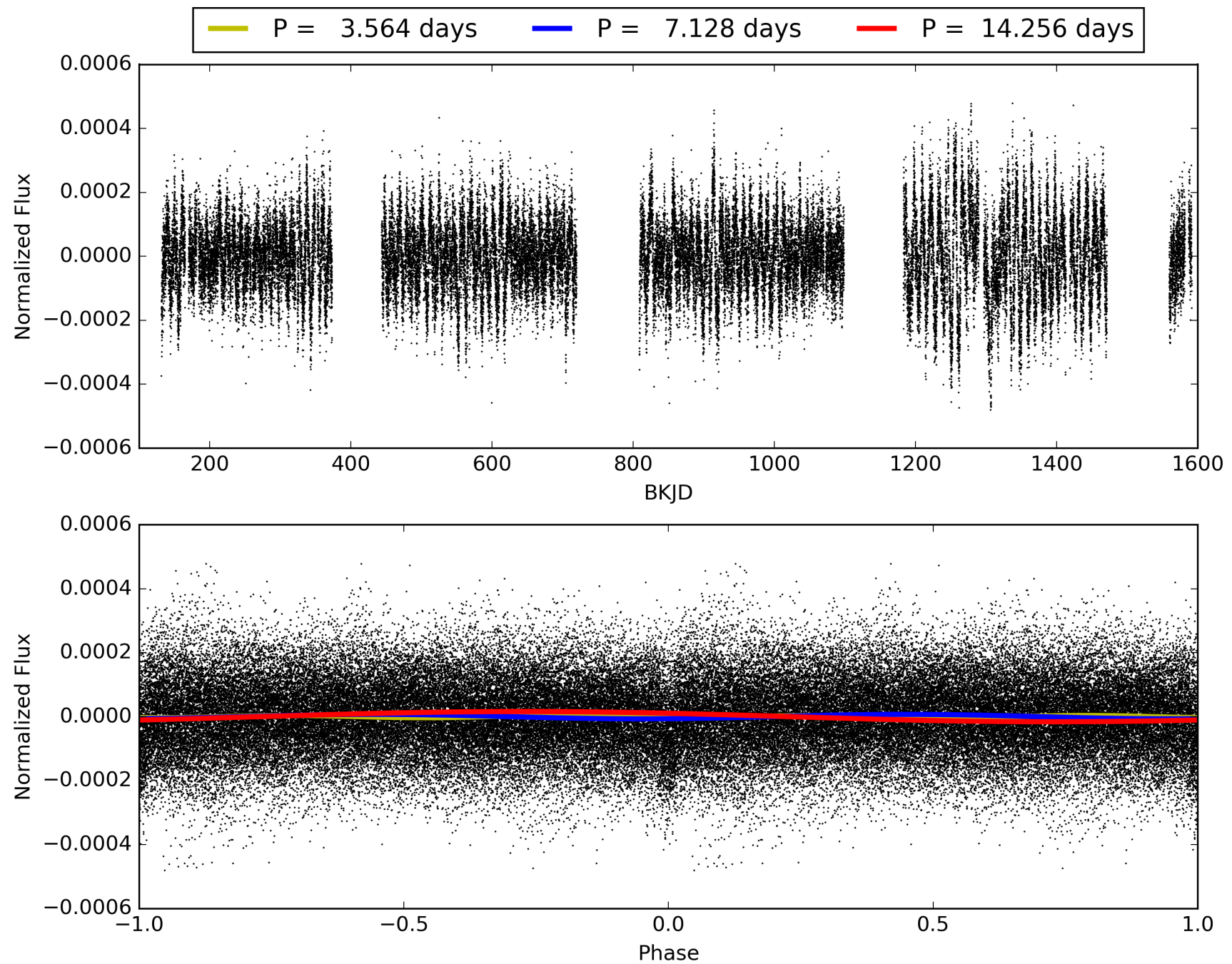
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 28-Jan-2016 21:04:26 Z

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

TCE 011337566-01, PDC Light Curves

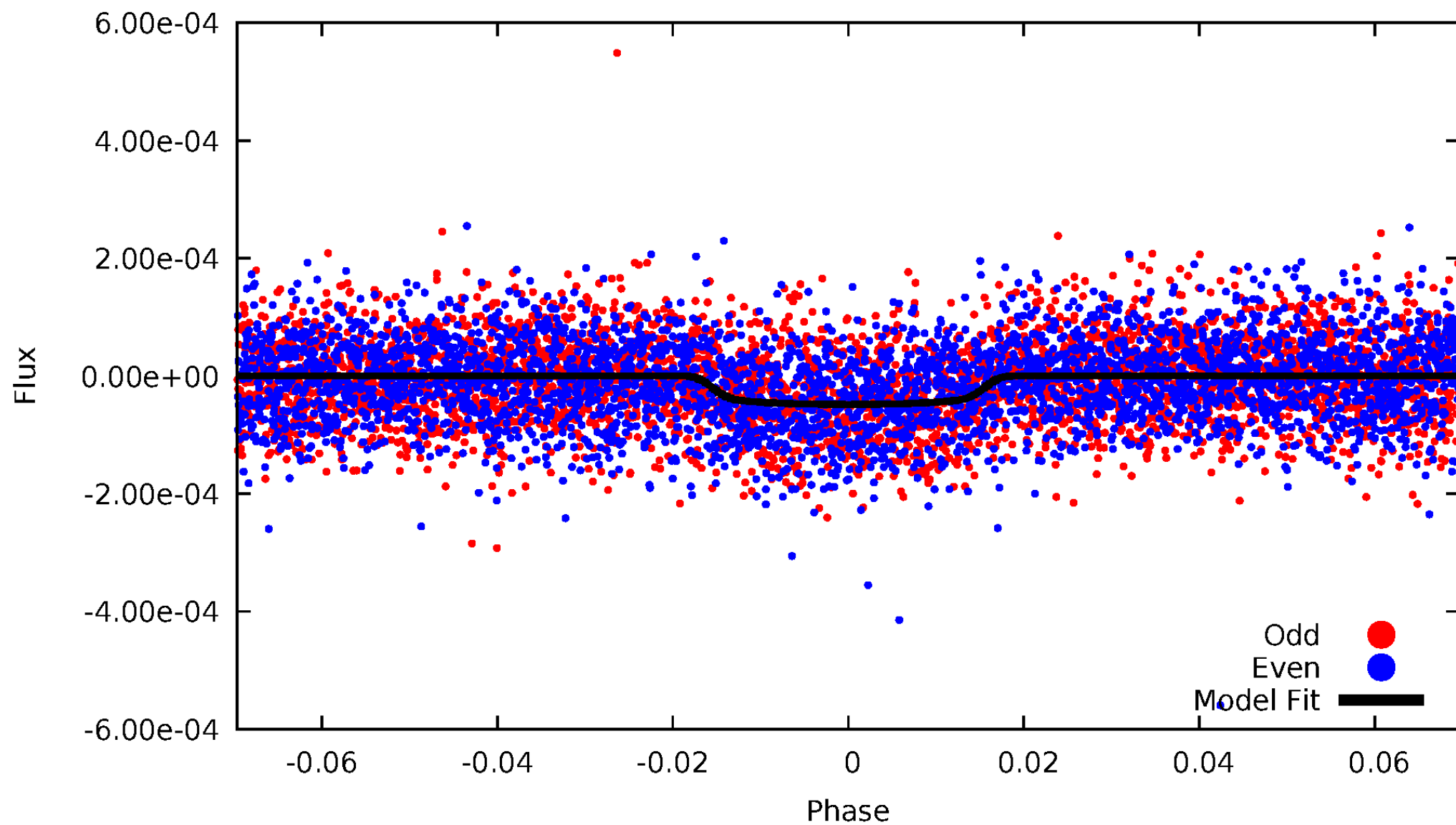


TCE 011337566-01



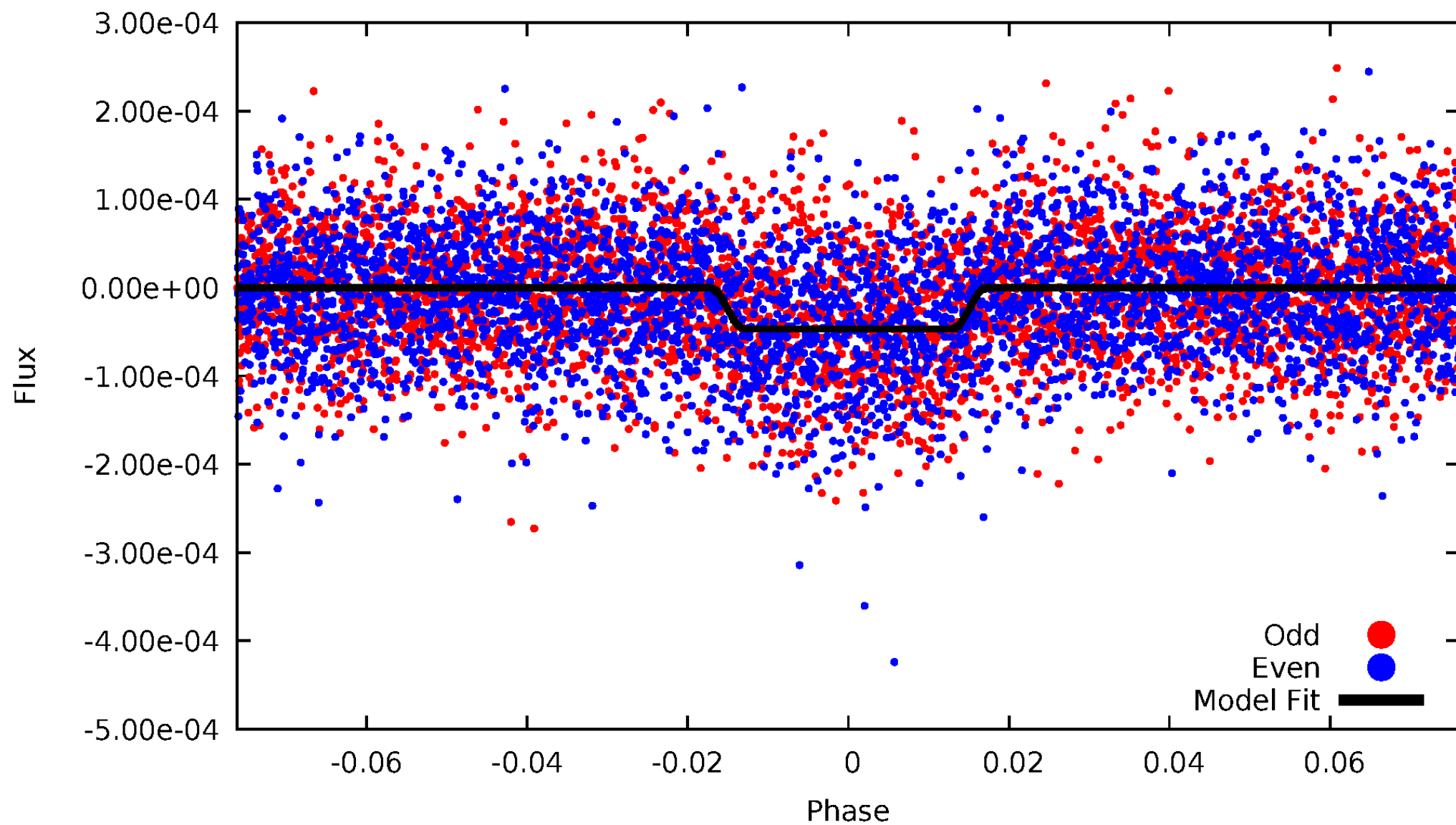
DV Odd/Even

TCE 011337566-01



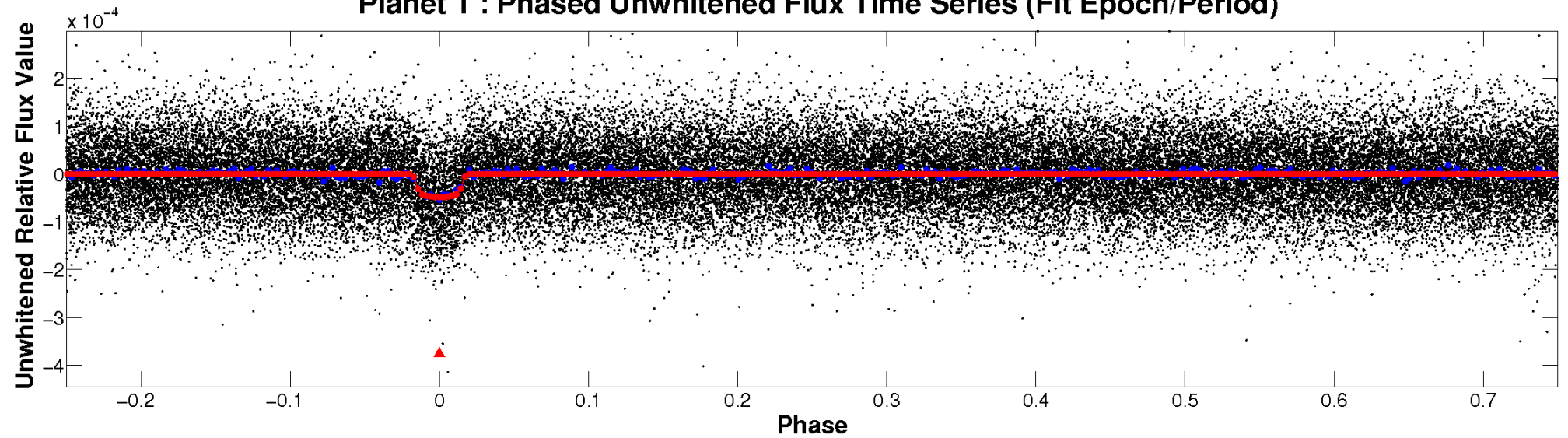
ALT Odd/Even

TCE 011337566-01

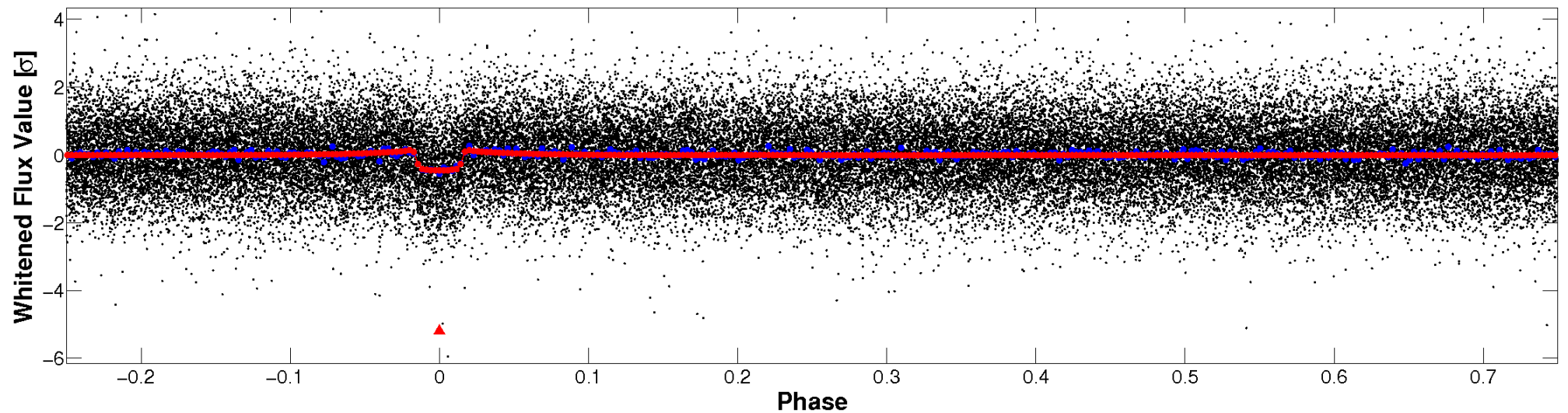


Non-Whitened Vs. Whitened Light Curve

Planet 1 : Phased Unwhitened Flux Time Series (Fit Epoch/Period)

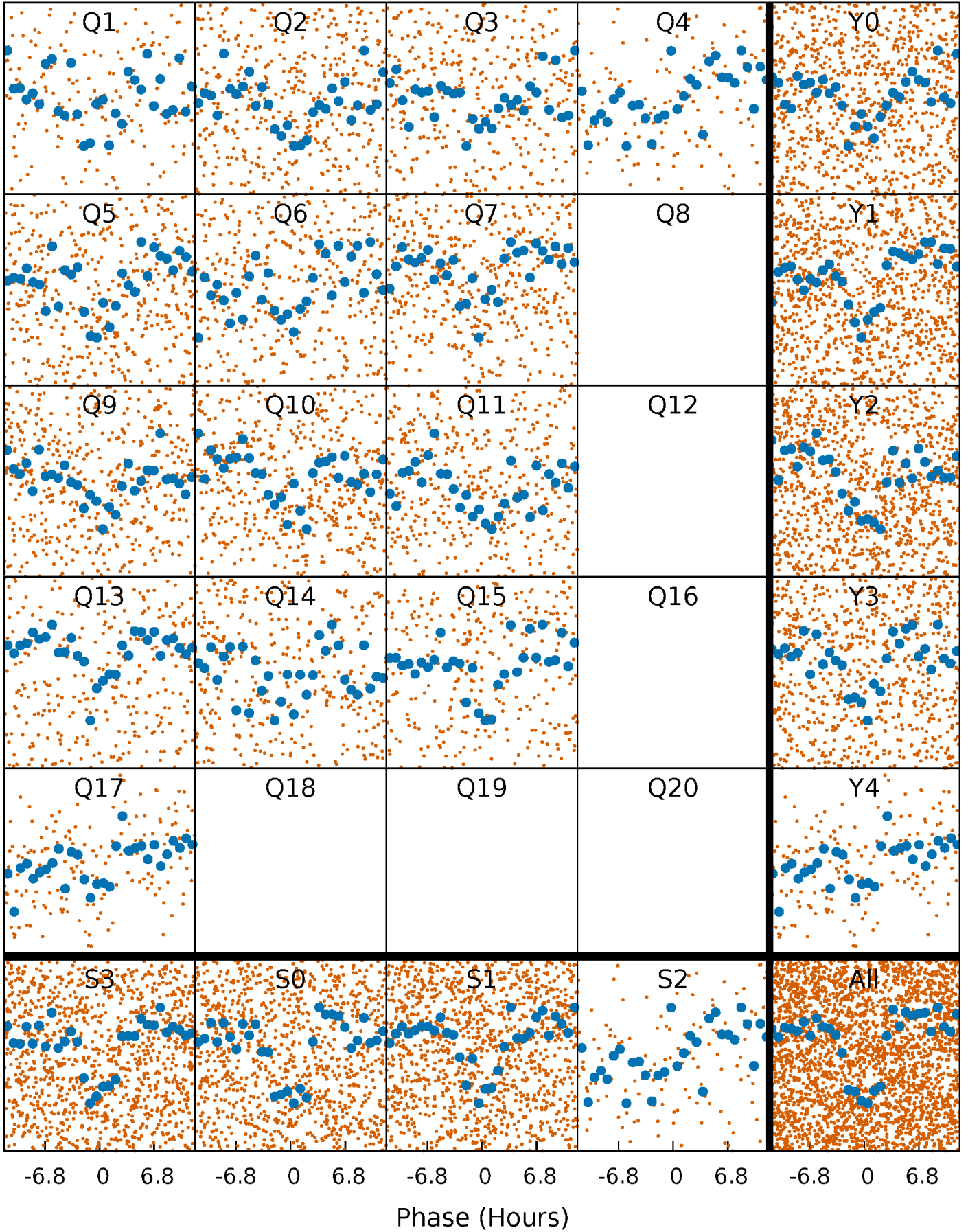


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



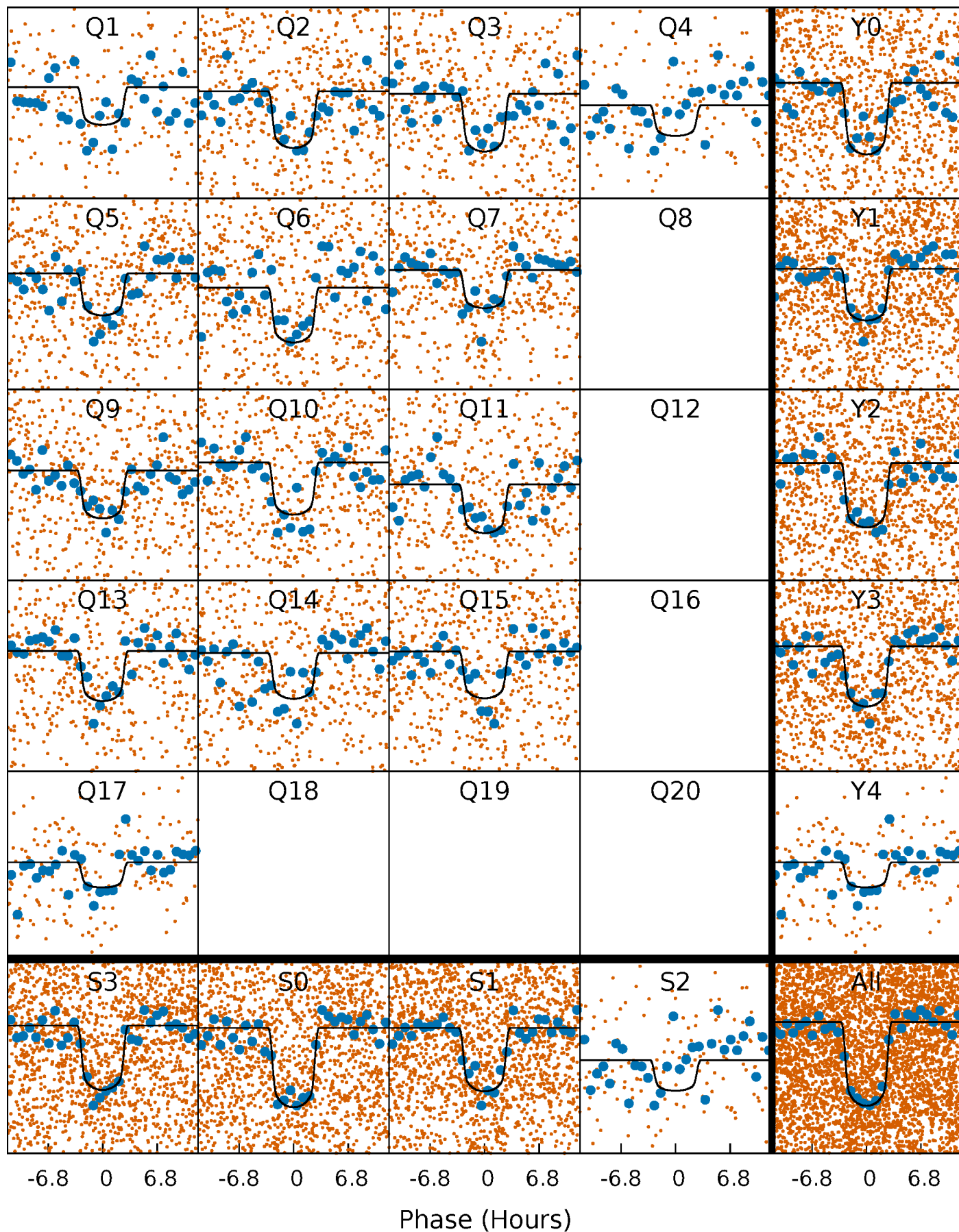
PDC Quarter-Phased Transit Curves

TCE 011337566-01 P= 7.128153 Days $T_0=136.881019$ (BKJD)



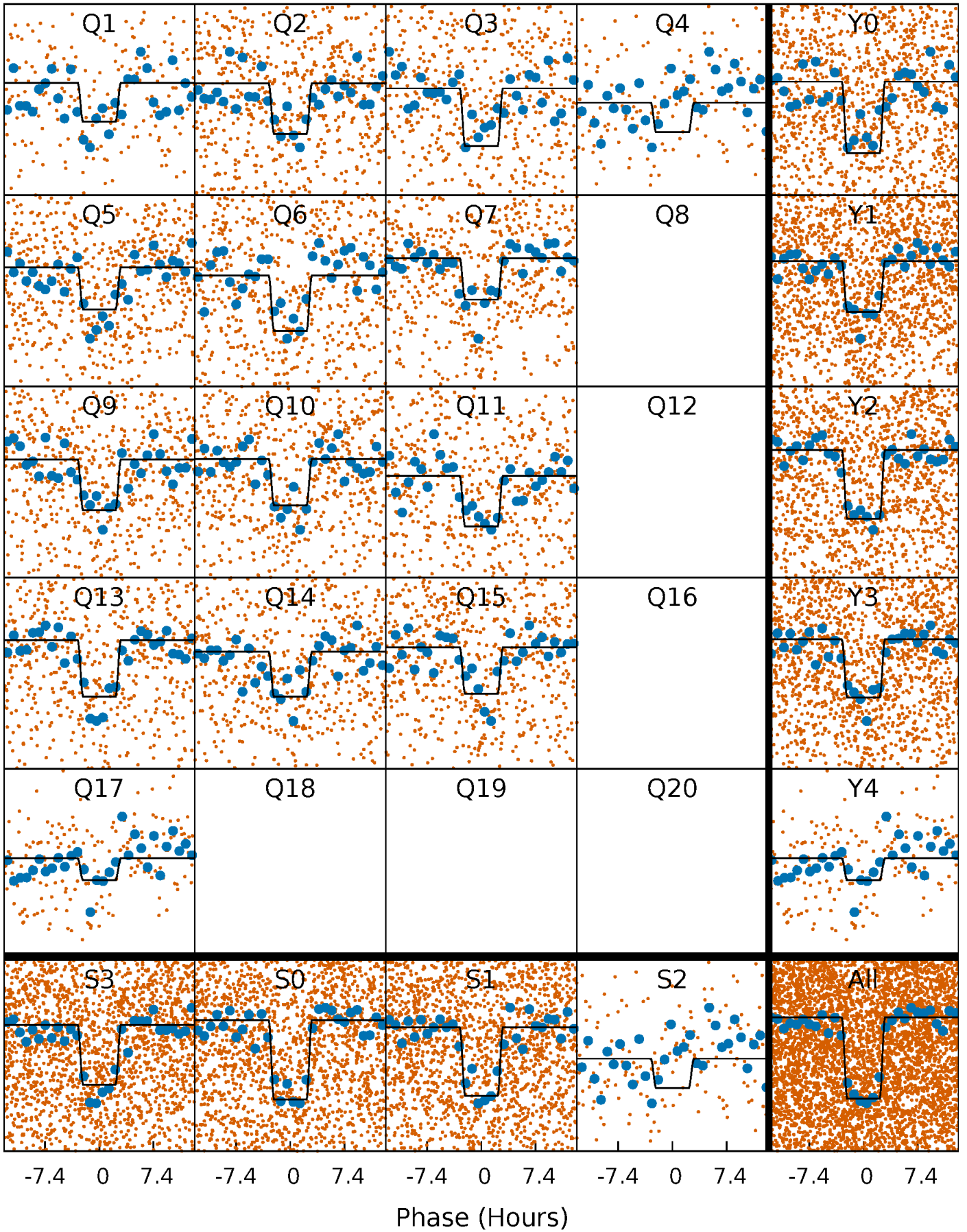
DV Quarter-Phased Transit Curves

TCE 011337566-01 P= 7.128153 Days $T_0=136.881019$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

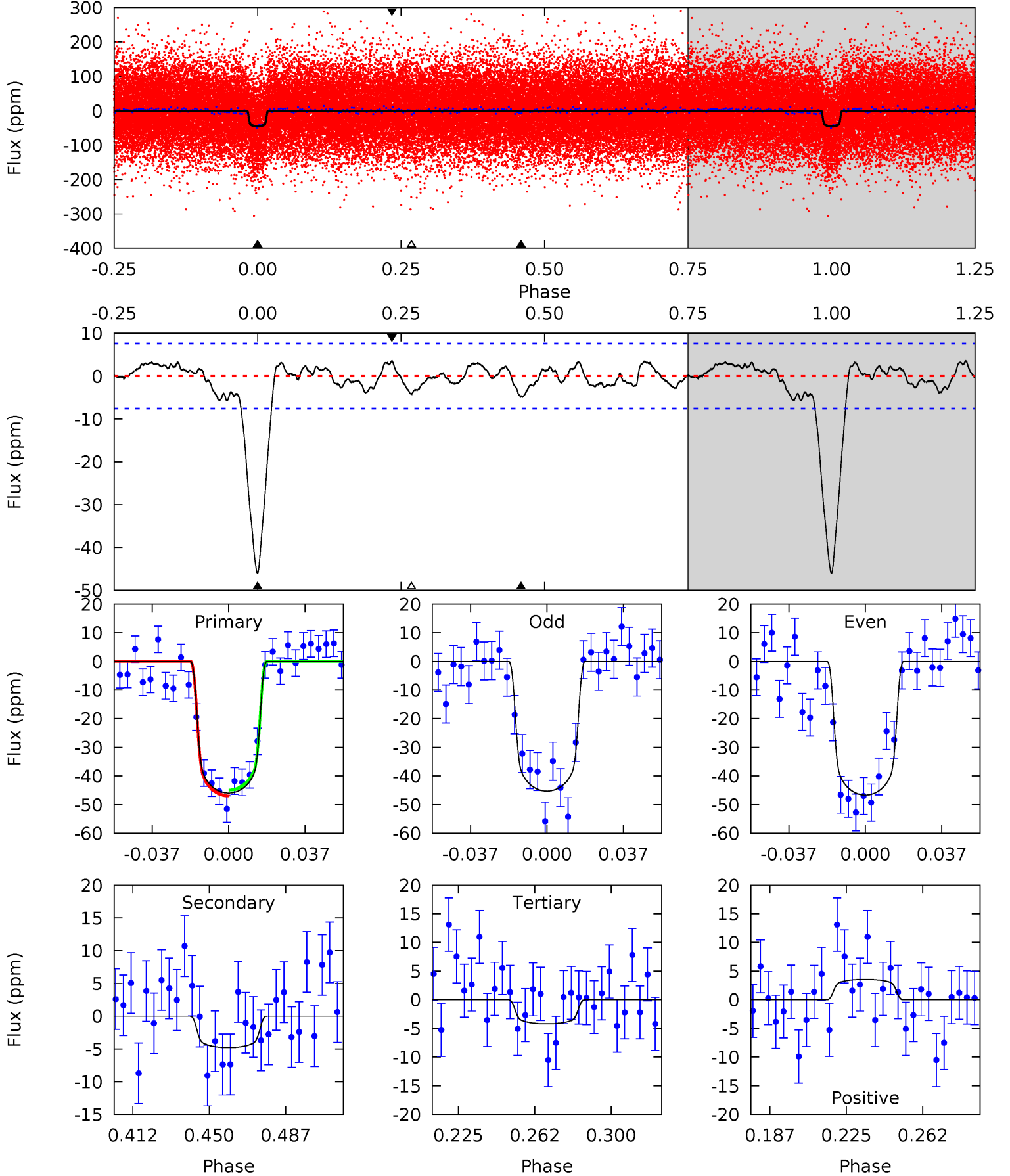
TCE 011337566-01 P= 7.128103 Days $T_0=136.883593$ (BKJD)



DV Model-Shift Uniqueness Test

011337566-01, P = 7.128153 Days, E = 129.752866 Days

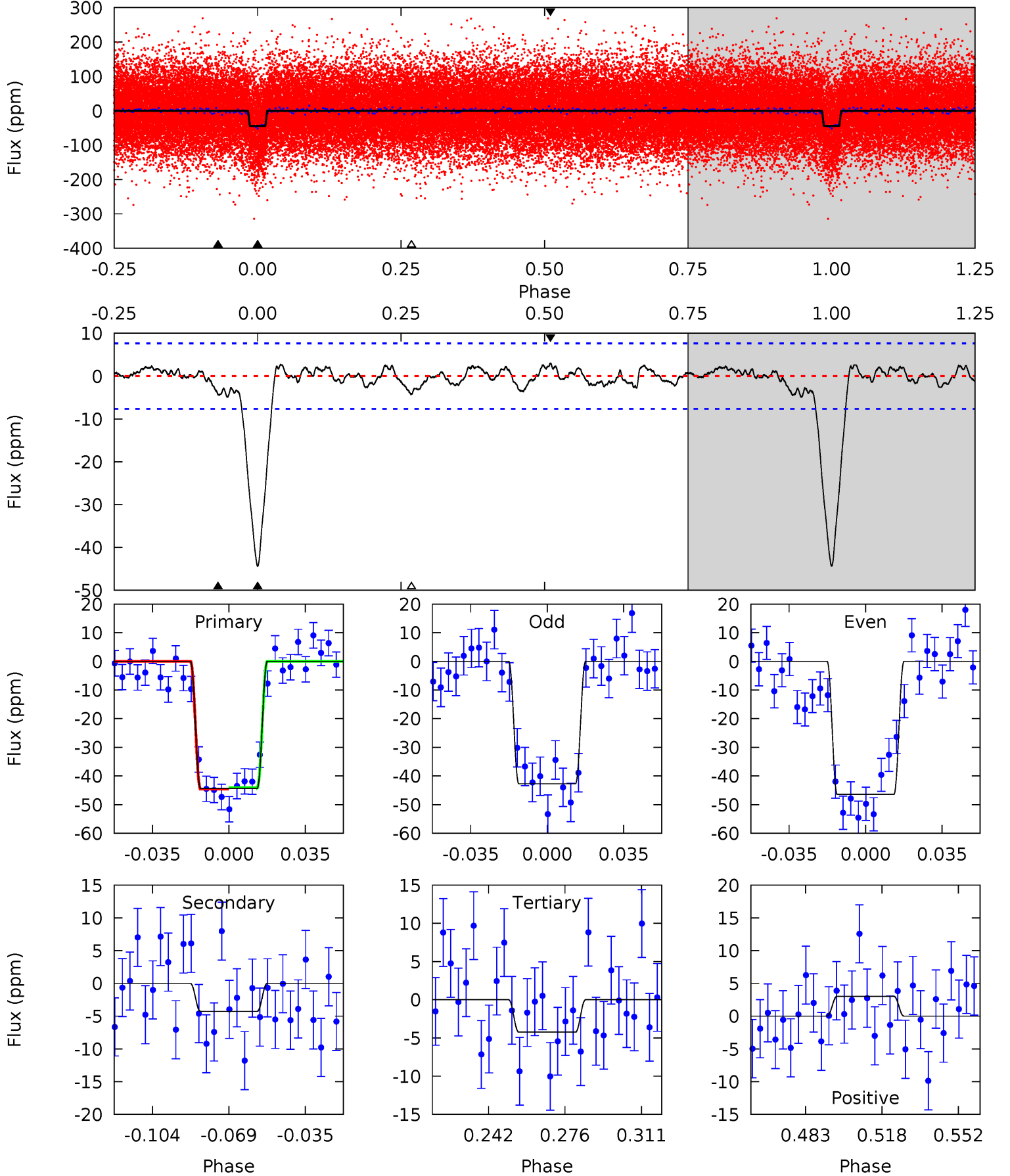
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
28.8	3.02	2.63	2.24	4.77	2.08	1.32	26.2	26.6	0.39	0.78	0.43	1.04	0.07	0.63



Alt Model-Shift Uniqueness Test

011337566-01, P = 7.128103 Days, E = 129.755490 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
27.7	2.67	2.65	1.89	4.78	2.11	0.94	25.1	25.8	0.03	0.78	1.16	1.03	0.06	0.15



Stellar Parameters For KIC 011337566

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	M (M_{\odot})	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	6311^{+113}_{-126}	$3.998^{+0.188}_{-0.116}$	$0.180^{+0.150}_{-0.150}$	$1.994^{+0.371}_{-0.495}$	$1.443^{+0.138}_{-0.185}$	$0.256^{+0.275}_{-0.092}$
	+2%/-2%	+5%/-3%	+83%/-83%	+19%/-25%	+10%/-13%	+107%/-36%
Source	SPE59	SPE59	SPE59	DSEP		

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

Secondary Eclipse Parameters for KIC 011337566-01 / KOI 2632.01

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-5 ± 2	$1.74^{+0.25}_{-0.23}$	1906^{+103}_{-120}	3648^{+225}_{-269}	$5.707^{+3.023}_{-2.219}$
Alt.	-4 ± 2	$1.47^{+0.19}_{-0.21}$	1914^{+106}_{-126}	3795^{+273}_{-299}	$7.021^{+3.762}_{-2.685}$

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

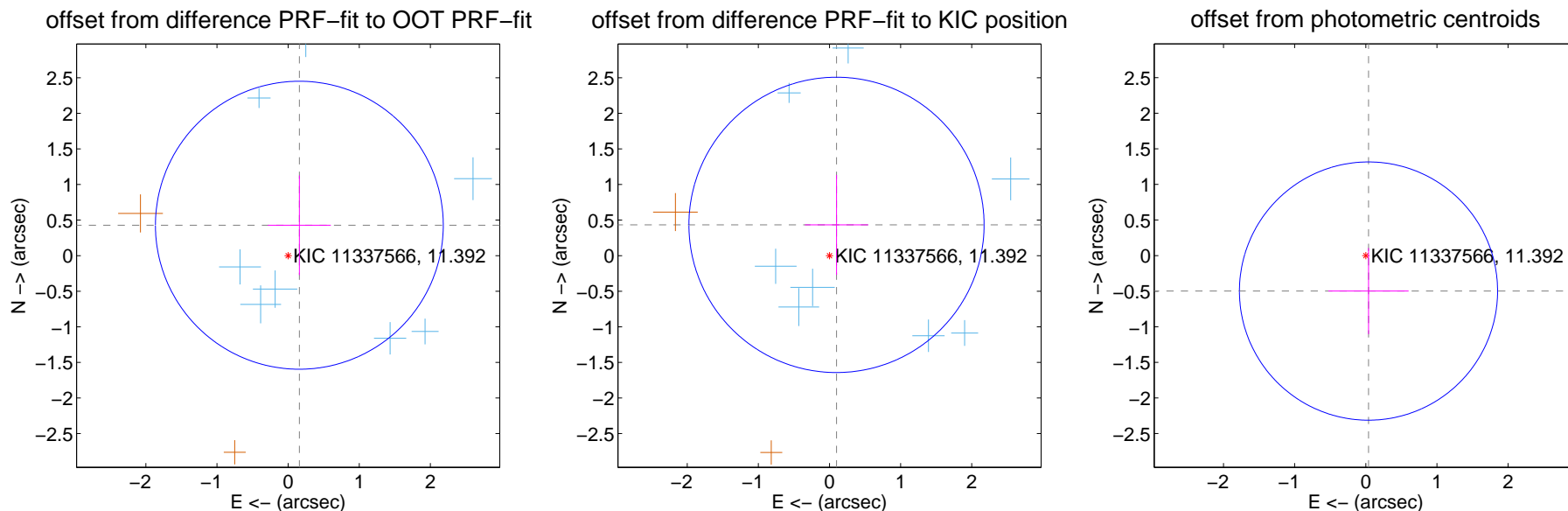
DV Centroid Data

Supplemental centroid analysis for 011337566-01. **Kepler magnitude: 11.39.** Transit SNR 16.98

There are 9 quarters with good PRF difference image offsets

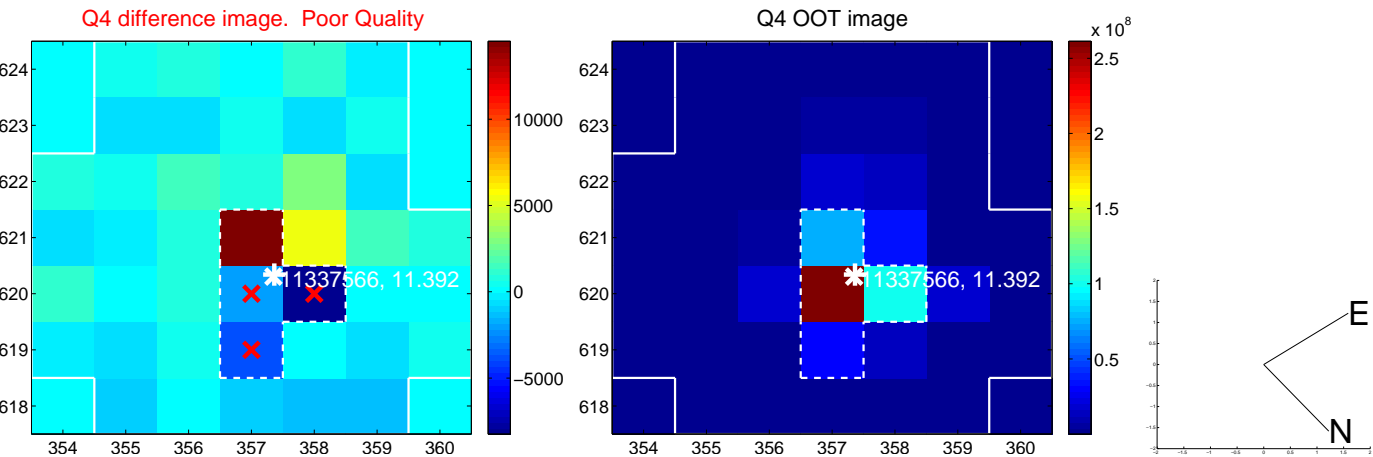
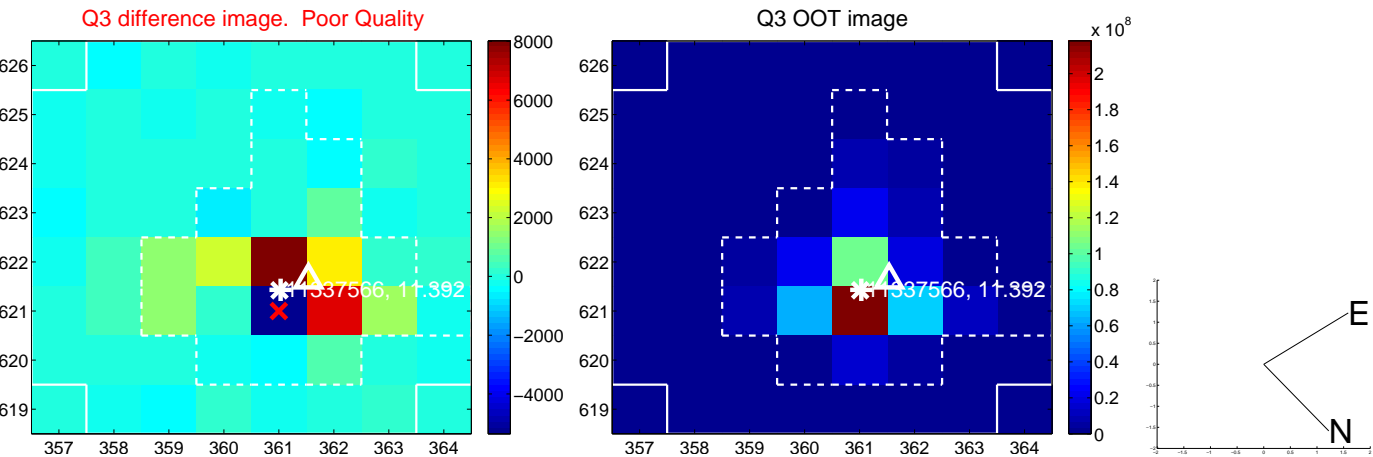
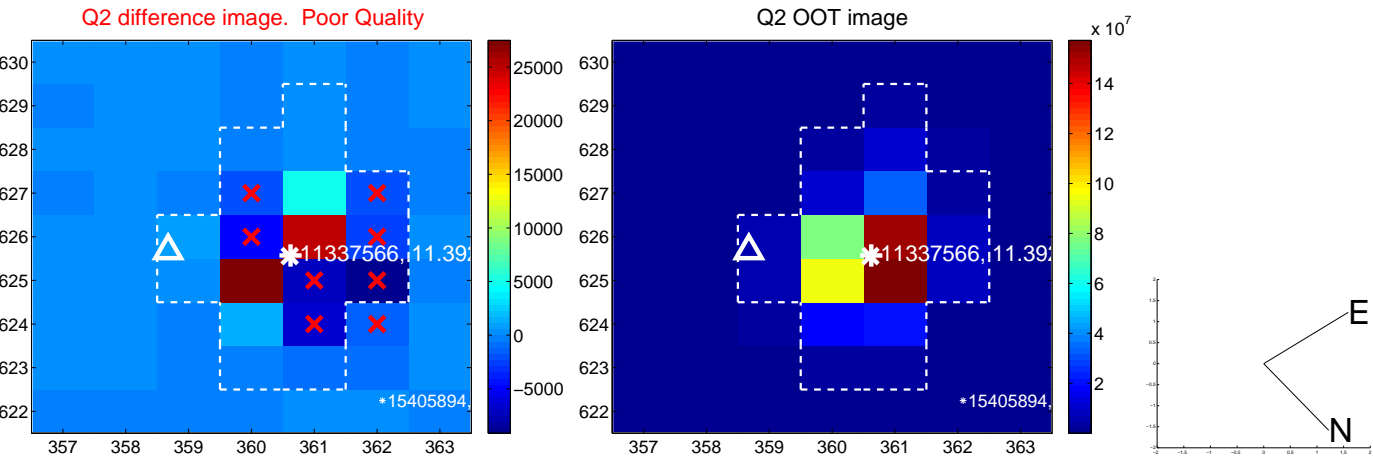
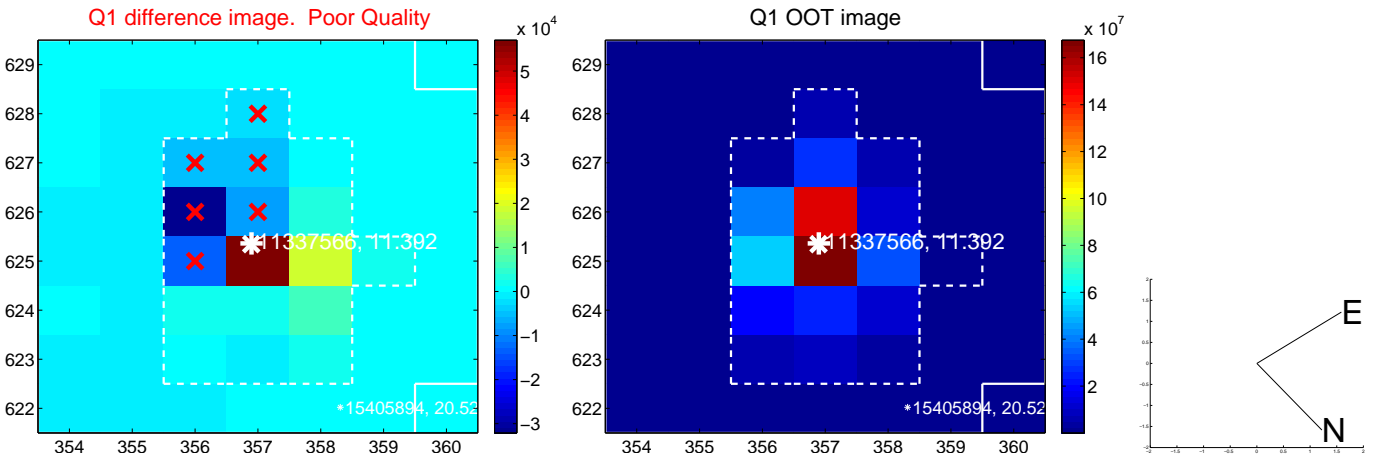
The direct PRF centroid is offset from the target star catalog position by about 0.04 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.456 ± 0.675	0.68	-0.158 ± 0.443	0.428 ± 0.700
PRF-fit source offset from KIC position	0.444 ± 0.692	0.64	-0.099 ± 0.445	0.432 ± 0.702
photometric centroid source offset	0.50 ± 0.60	0.83	-0.04 ± 0.56	-0.50 ± 0.61

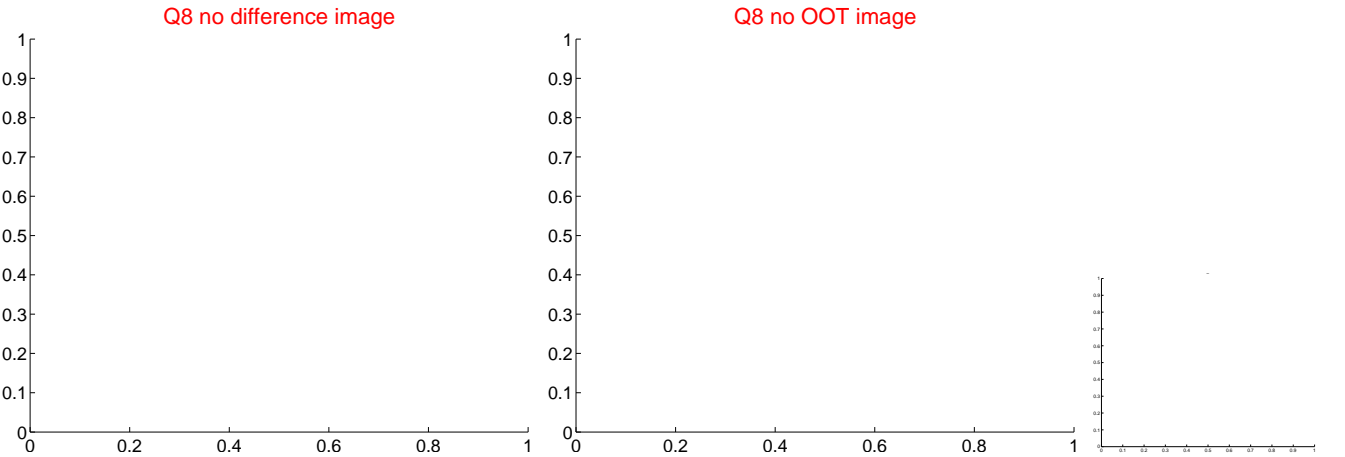
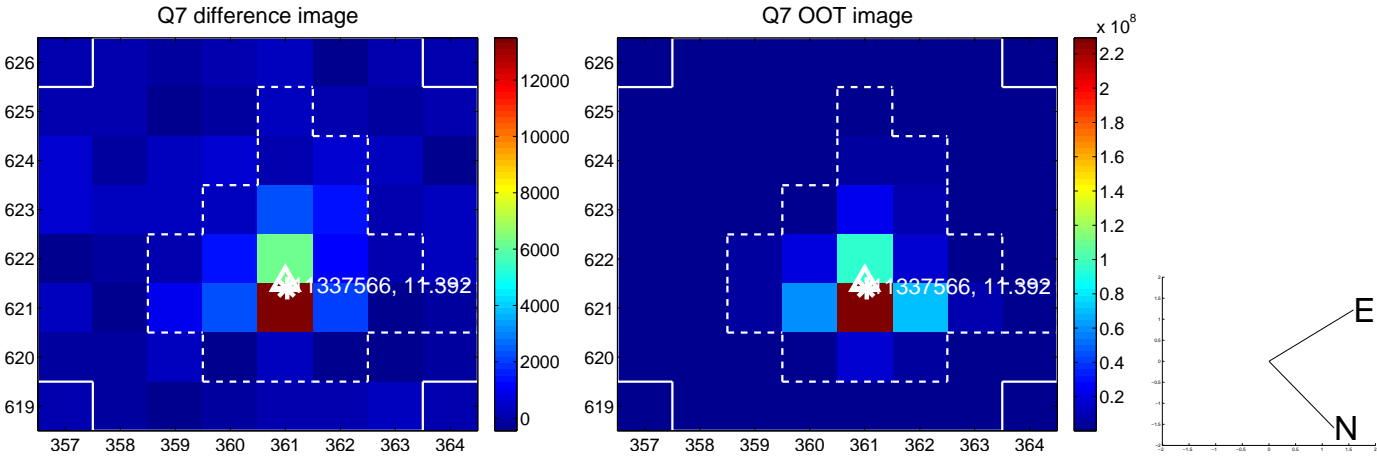
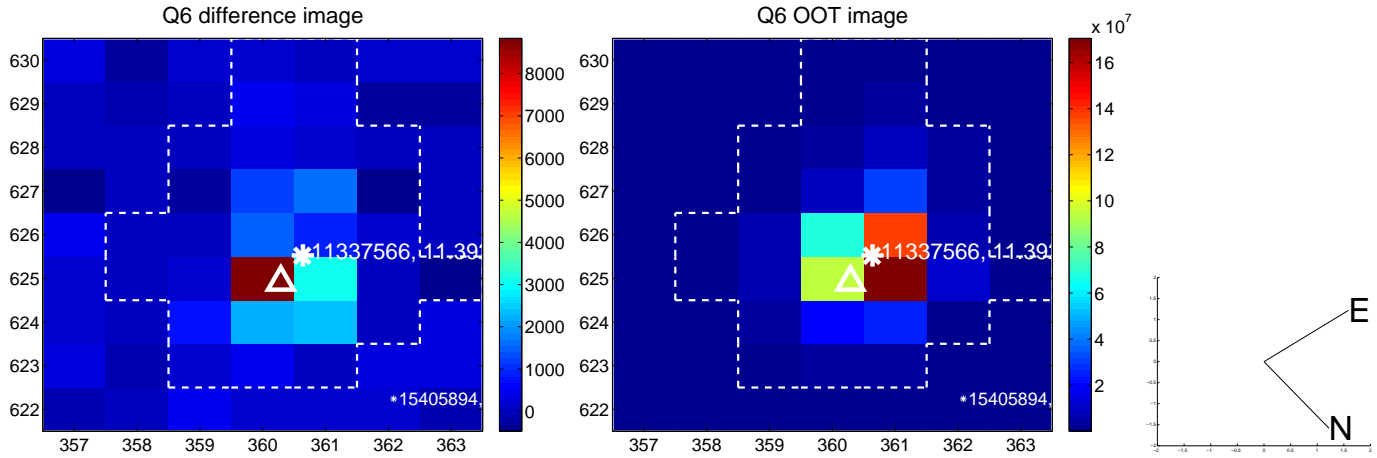
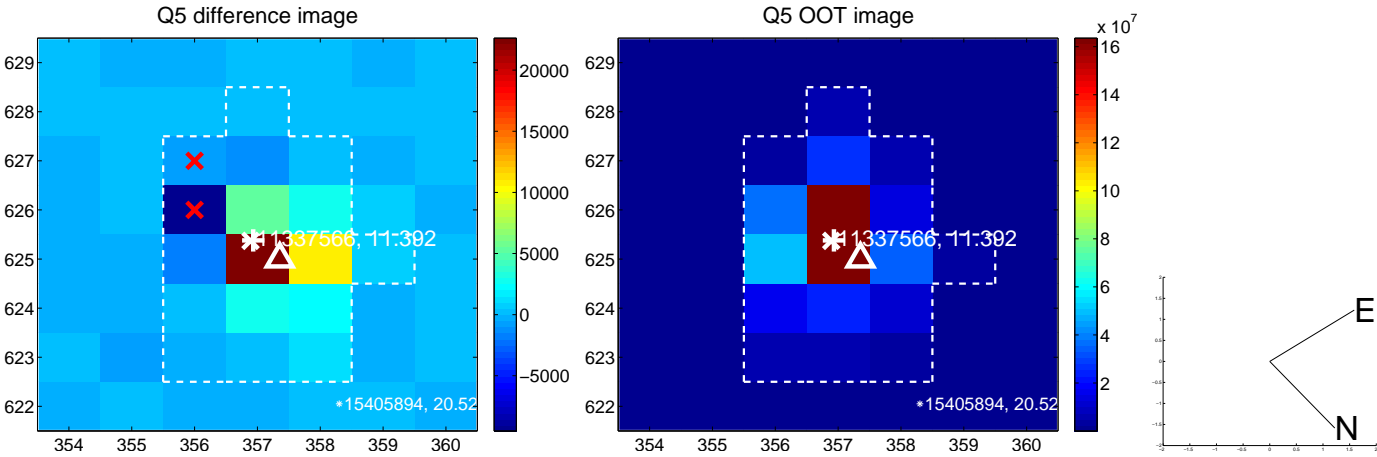


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets**; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

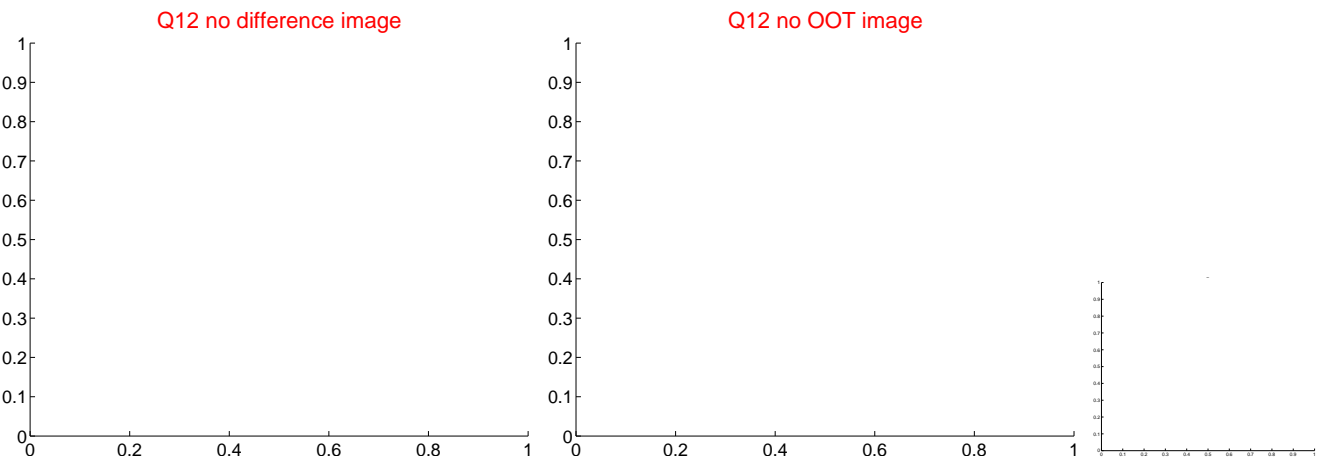
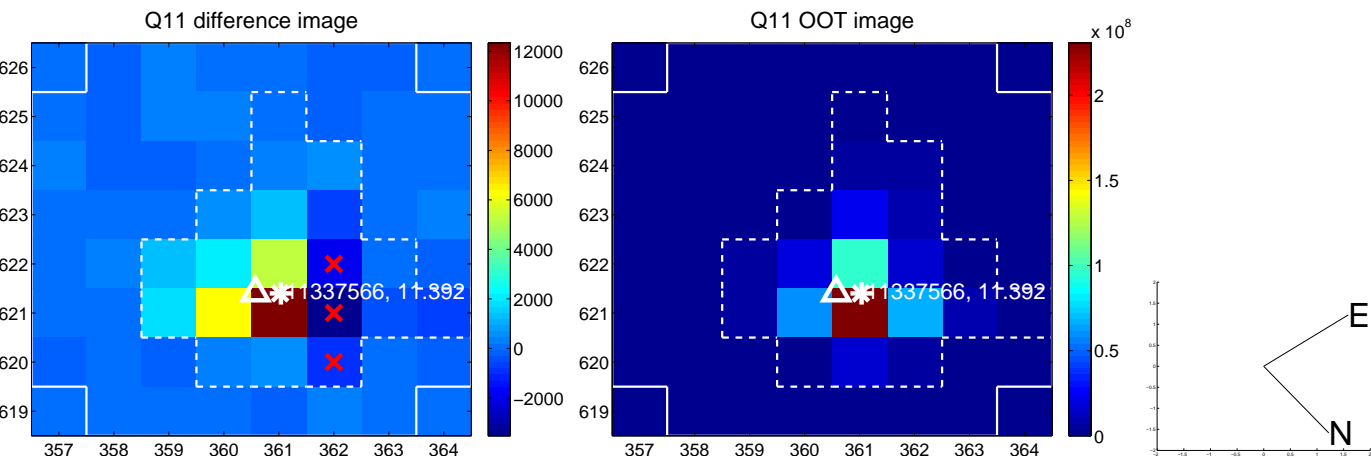
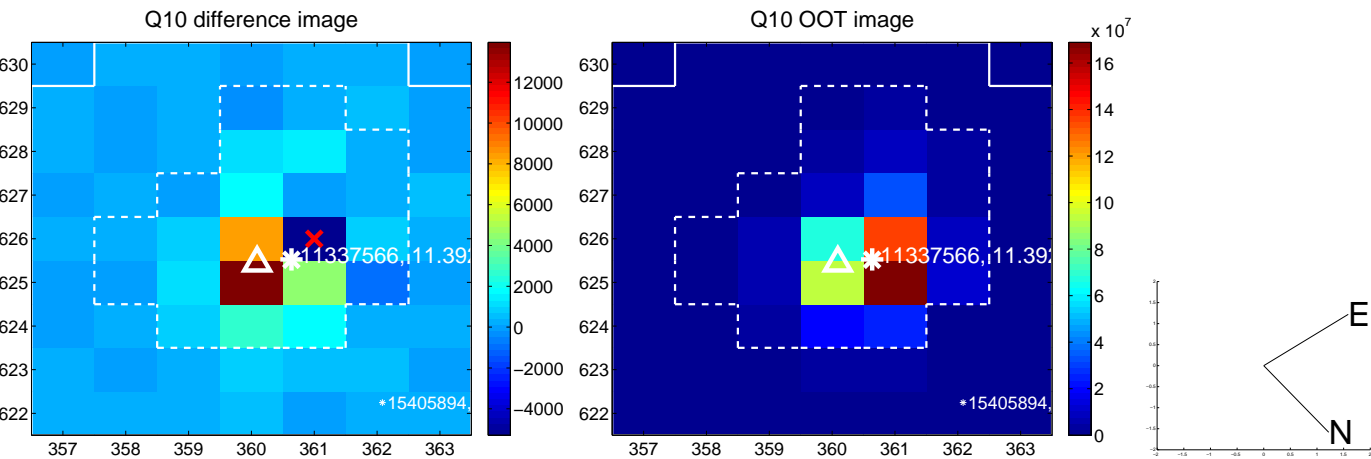
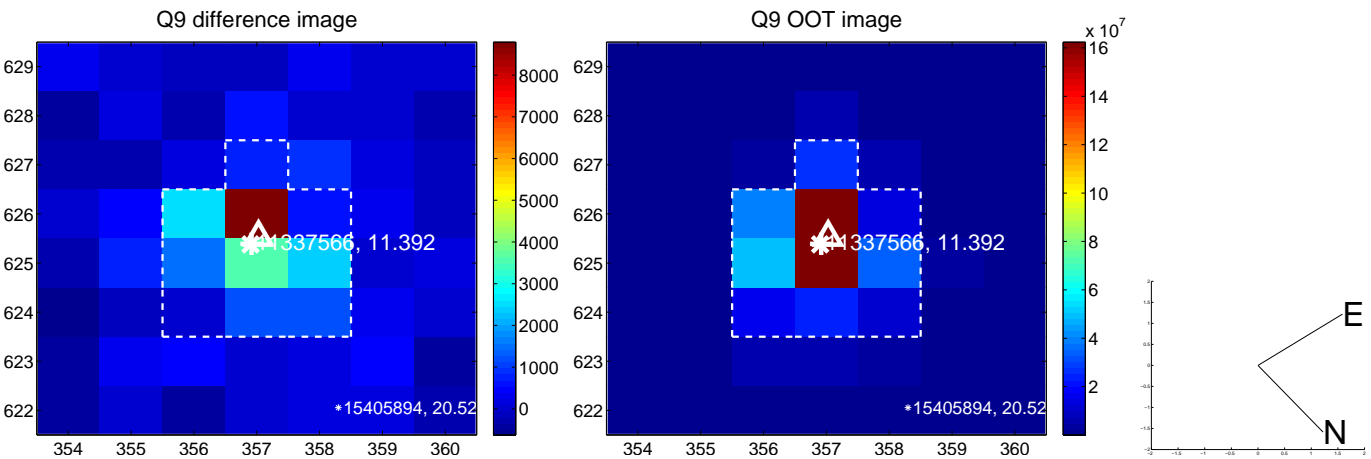
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



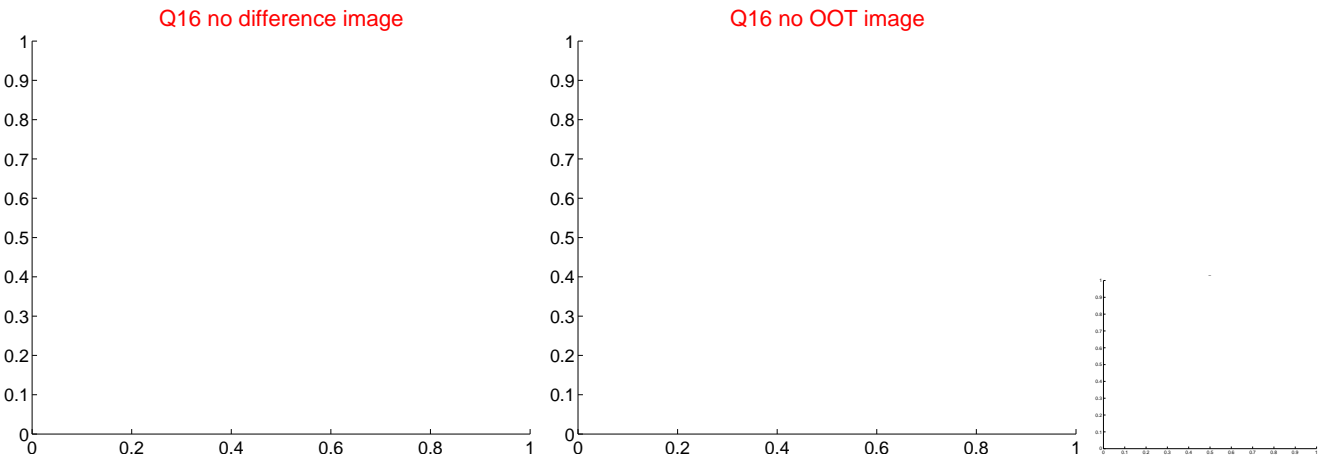
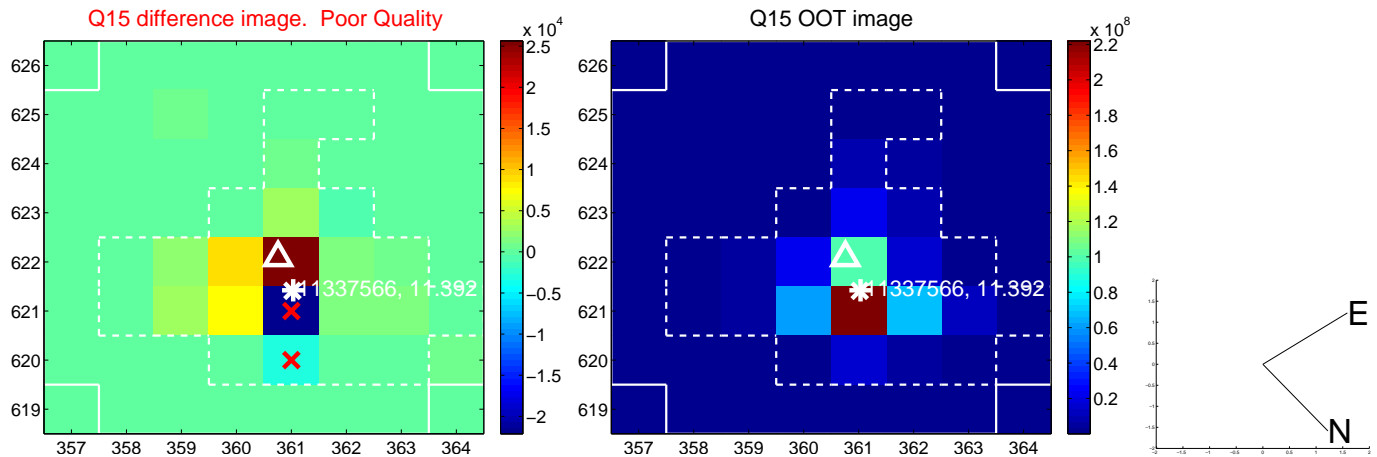
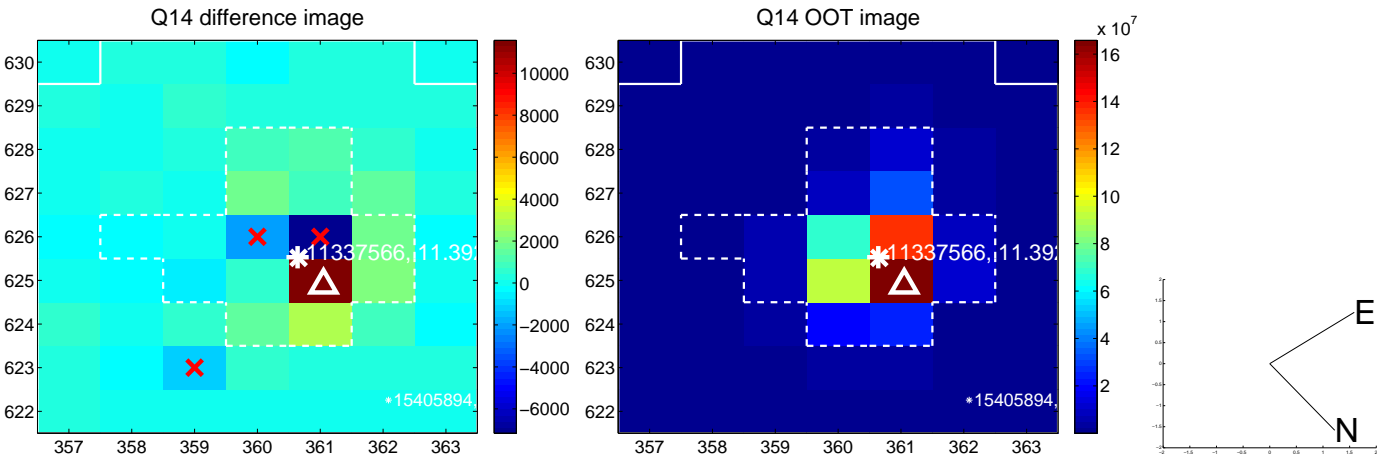
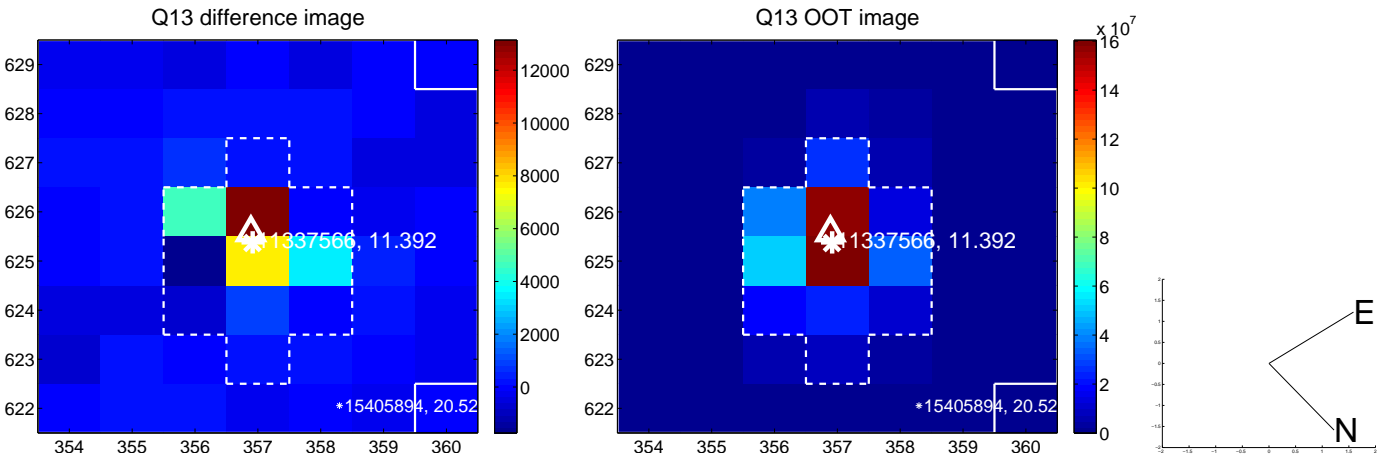
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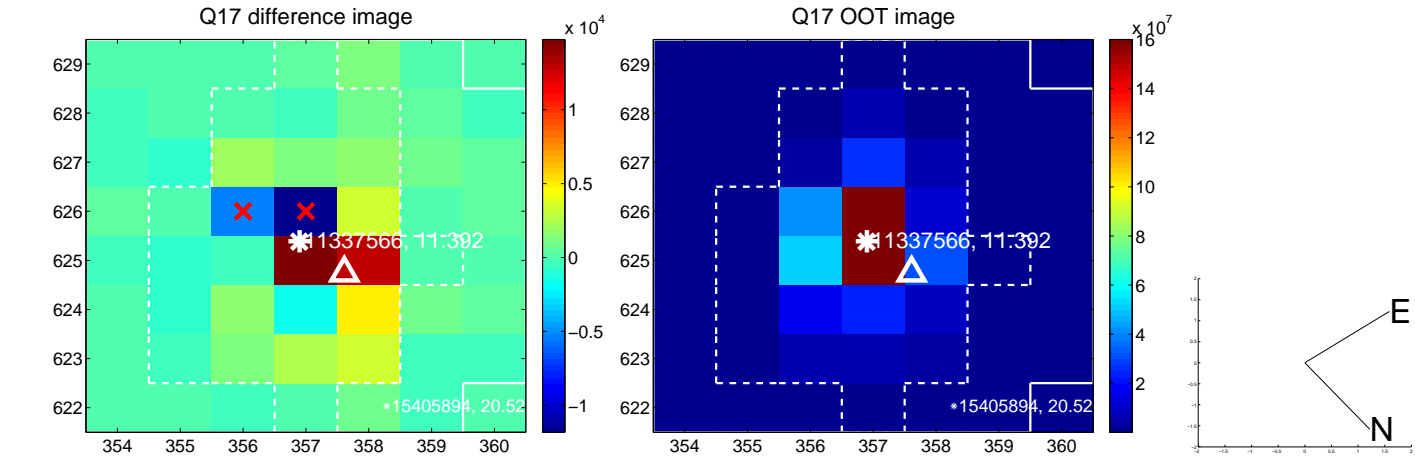
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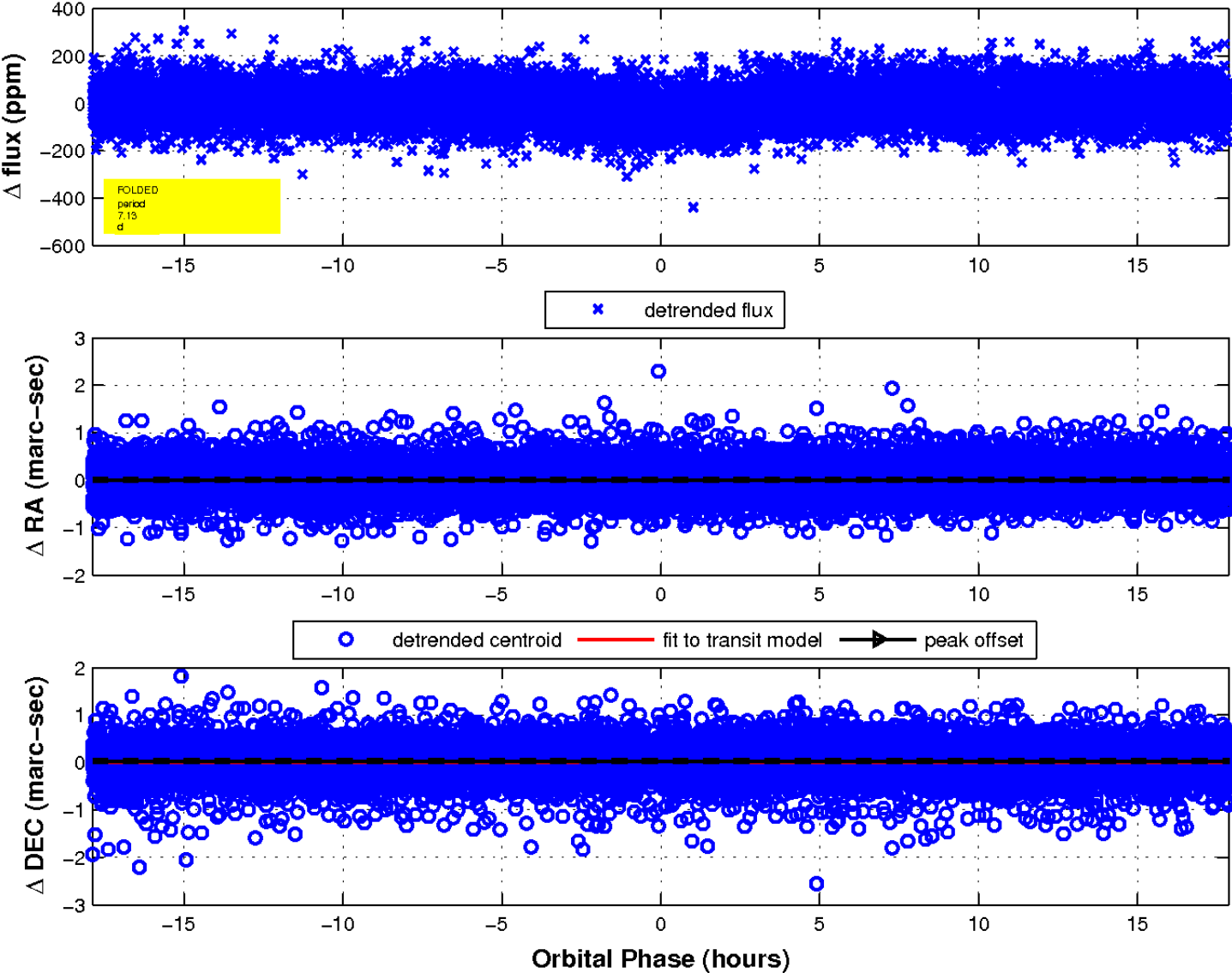
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white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



fluxWeightedCentroids, Planet 1 of 1



UKIRT Image

