

KIC 011129258

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})
011129258-01	OBS	2898.01	25.384185	137.773068	569.8	3.664	12.6	13.9	0.99	6137	2.57	42.09

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
011129258-01	OBS	PC	1.00	0	0	0	0	NO_COMMENT

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 011129258-01

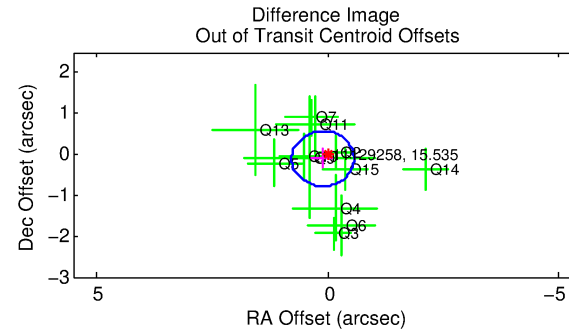
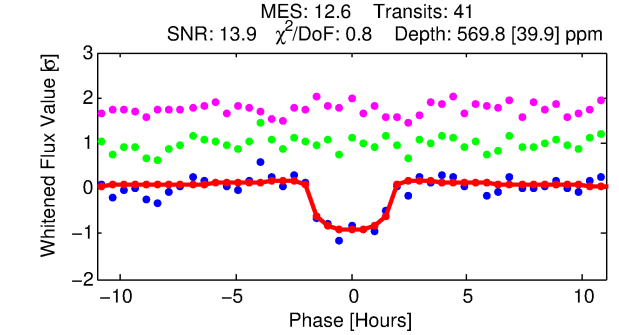
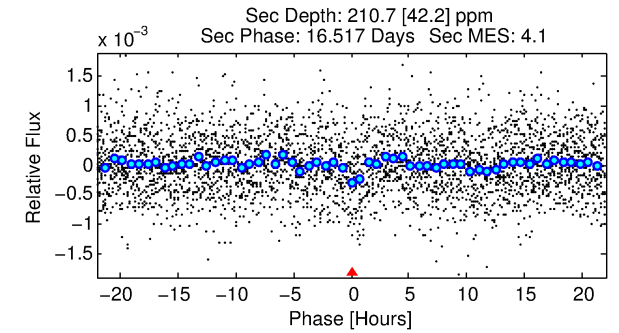
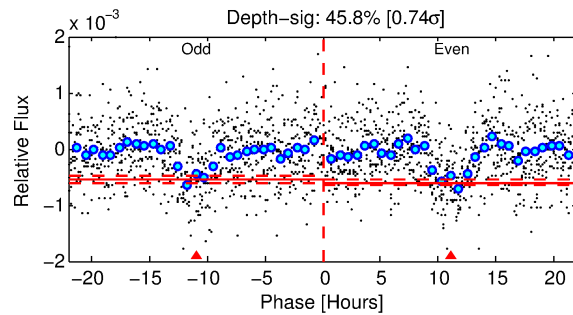
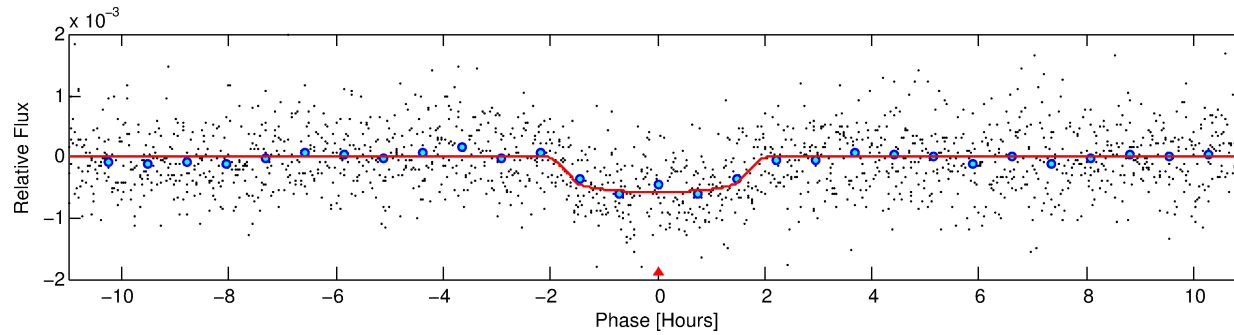
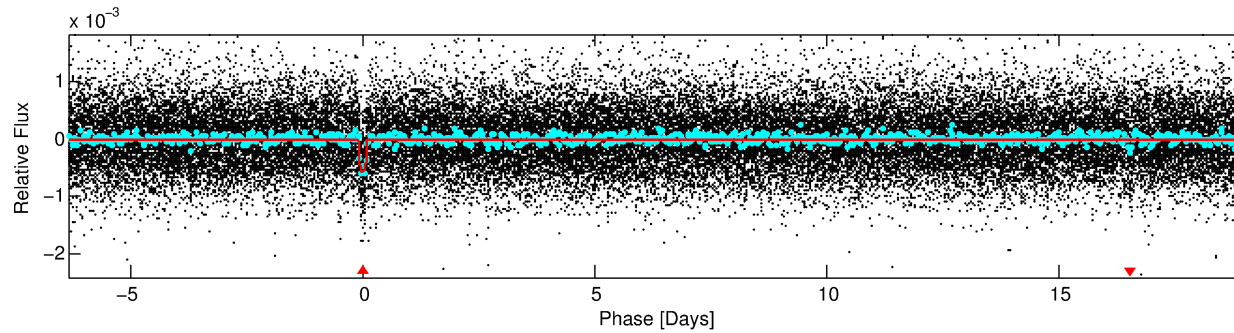
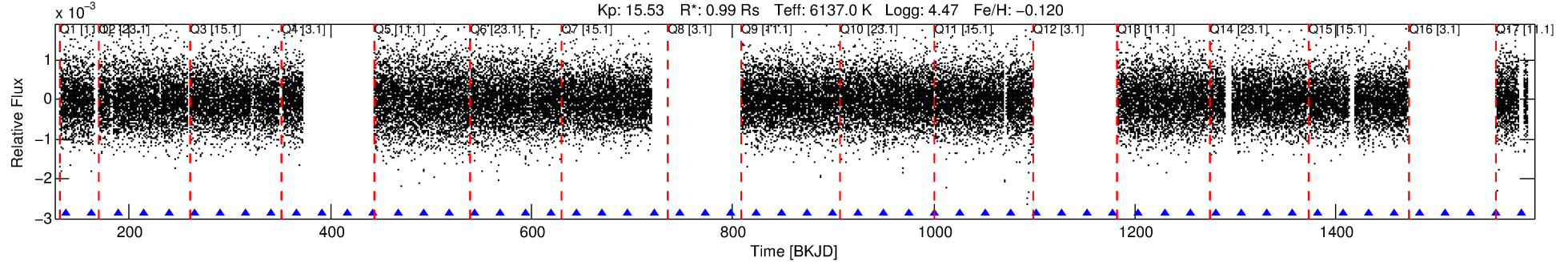
No Significant Match Found

DV One-Page Summary

KIC: 11129258 Candidate: 1 of 1 Period: 25.384 d

KOI: K02898.01 Corr: 0.982

Kp: 15.53 R*: 0.99 Rs Teff: 6137.0 K Logg: 4.47 Fe/H: -0.120



DV Fit Results:

Period = 25.38419 [0.00015] d
Epoch = 137.7731 [0.0048] BKJD
Rp/R* = 0.0237 [0.0111]
a/R* = 37.45 [86.83]
b = 0.74 [1.44]
Seff = 42.09 [17.11]
Teq = 650 [66] K
Rp = 2.57 [1.45] Re
a = 0.1727 [0.0455] AU
Ag = 524.38 [540.82] [0.97σ]
Teffp = 4805 [1163] K [3.57σ]

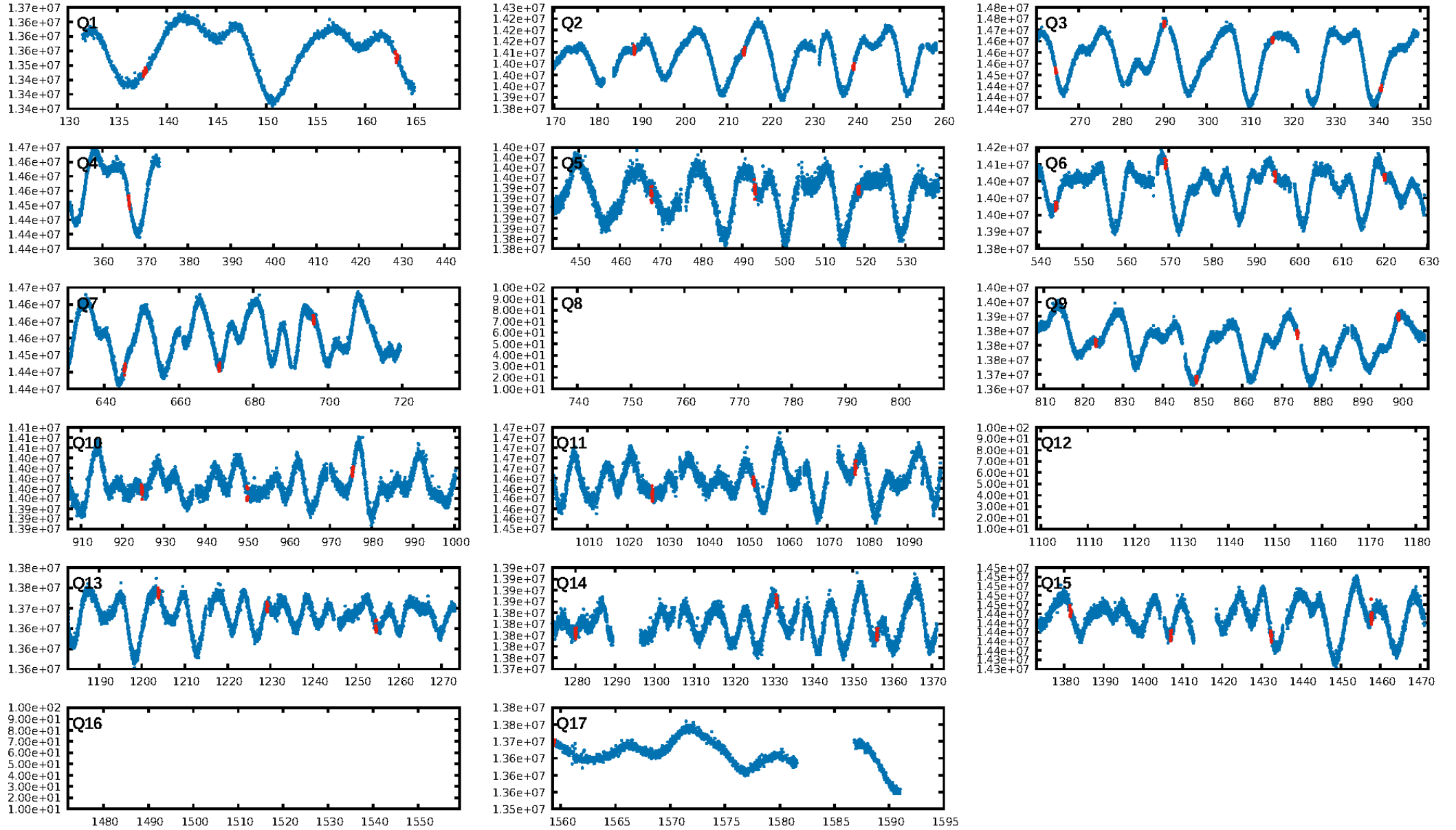
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: 81.7%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: 6.34e-34
RollingBand-fgt: 1.00 [37/37]
GhostDiagnostic-chr: 8.917
Centroid-sig: 84.1%
Centroid-so: 0.648 arcsec [0.68σ]
OotOffset-rm: 0.147 arcsec [0.65σ]
KicOffset-rm: 0.071 arcsec [0.31σ]
OotOffset-st: 4/4/1/3 [12]
KicOffset-st: 4/4/1/3 [12]
DiffImageQuality-fgm: 0.92 [11/12]
DiffImageOverlap-fno: 1.00 [13/13]

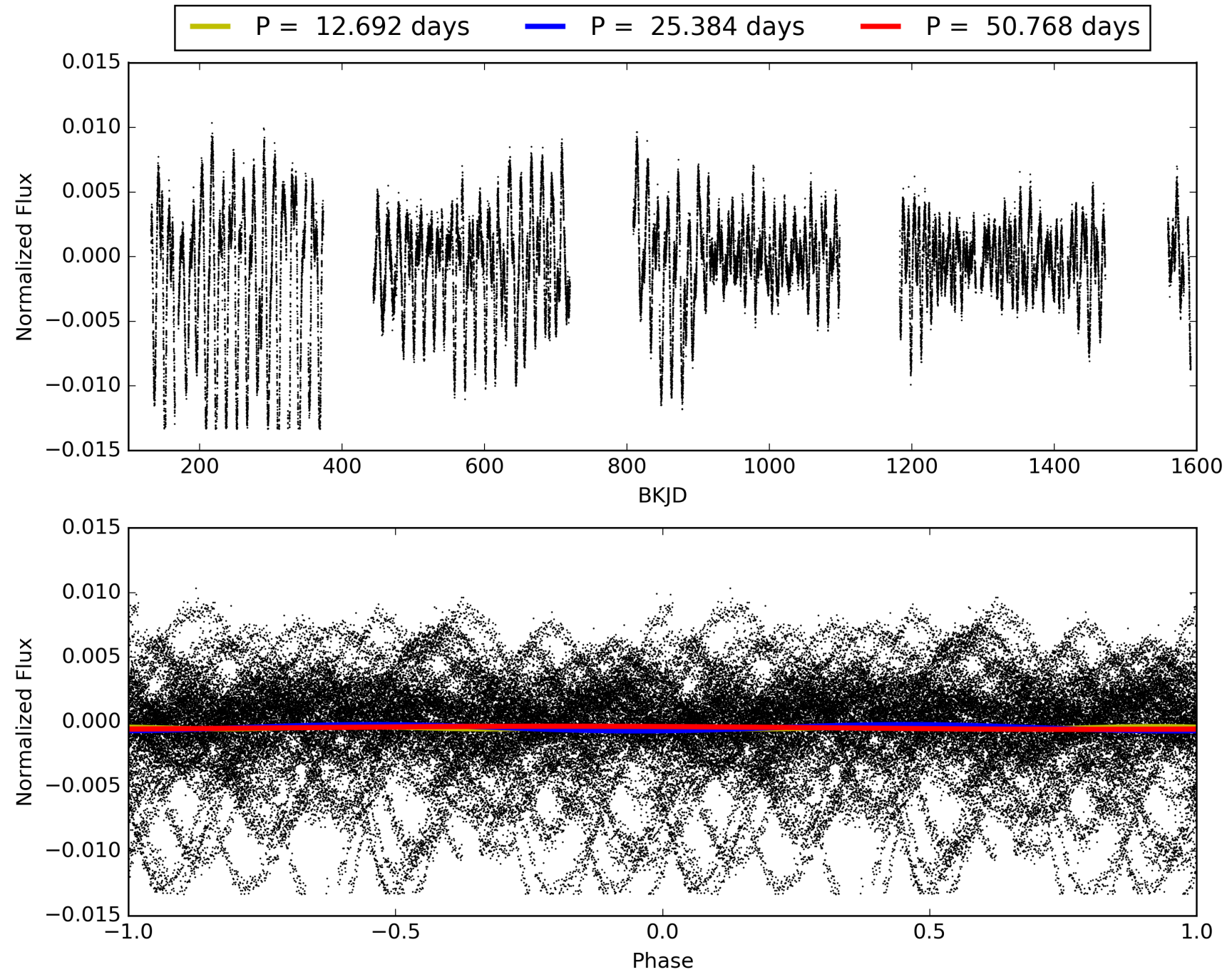
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 28-Jan-2016 20:42:47 Z

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

TCE 011129258-01, PDC Light Curves

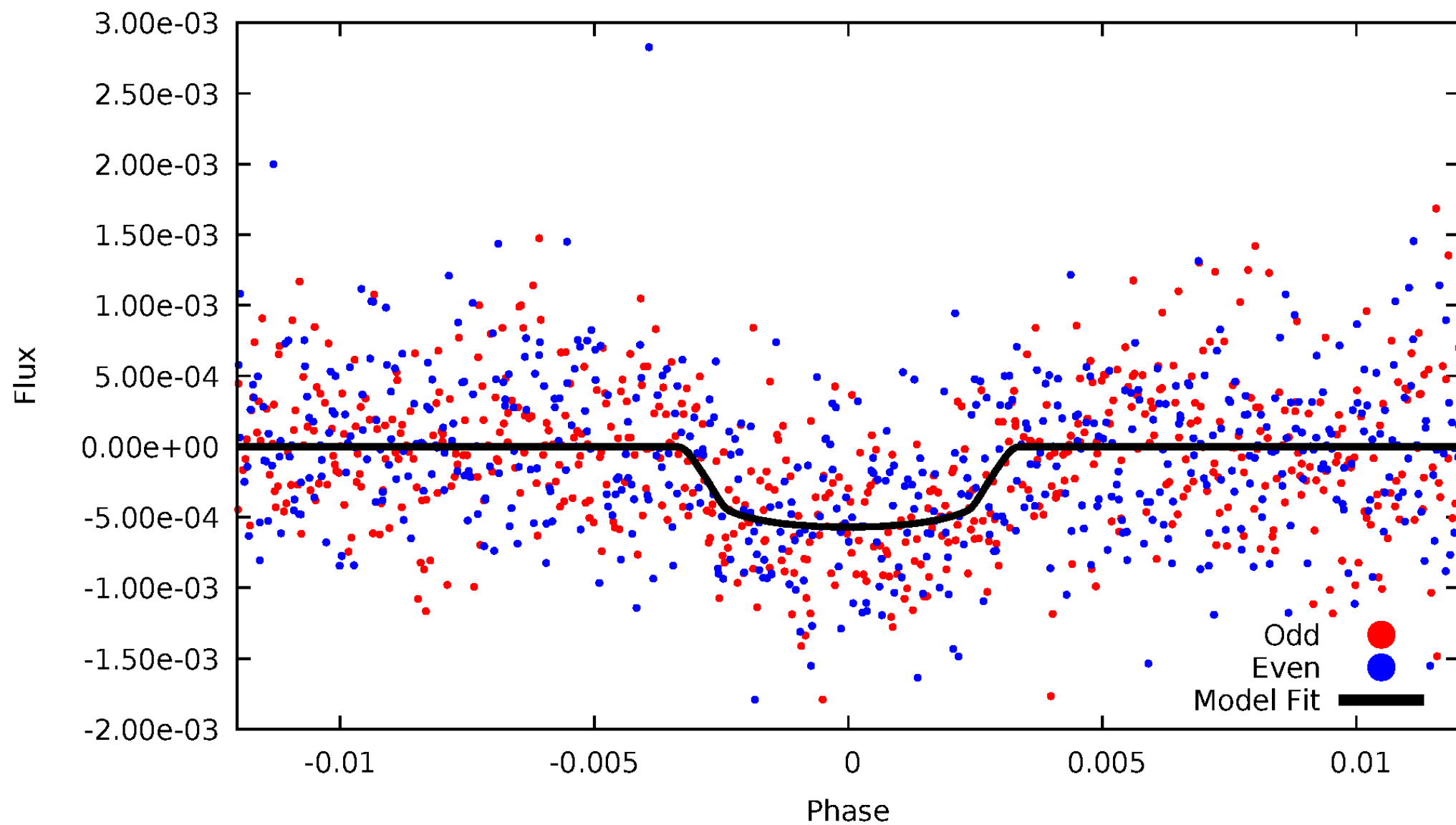


TCE 011129258-01



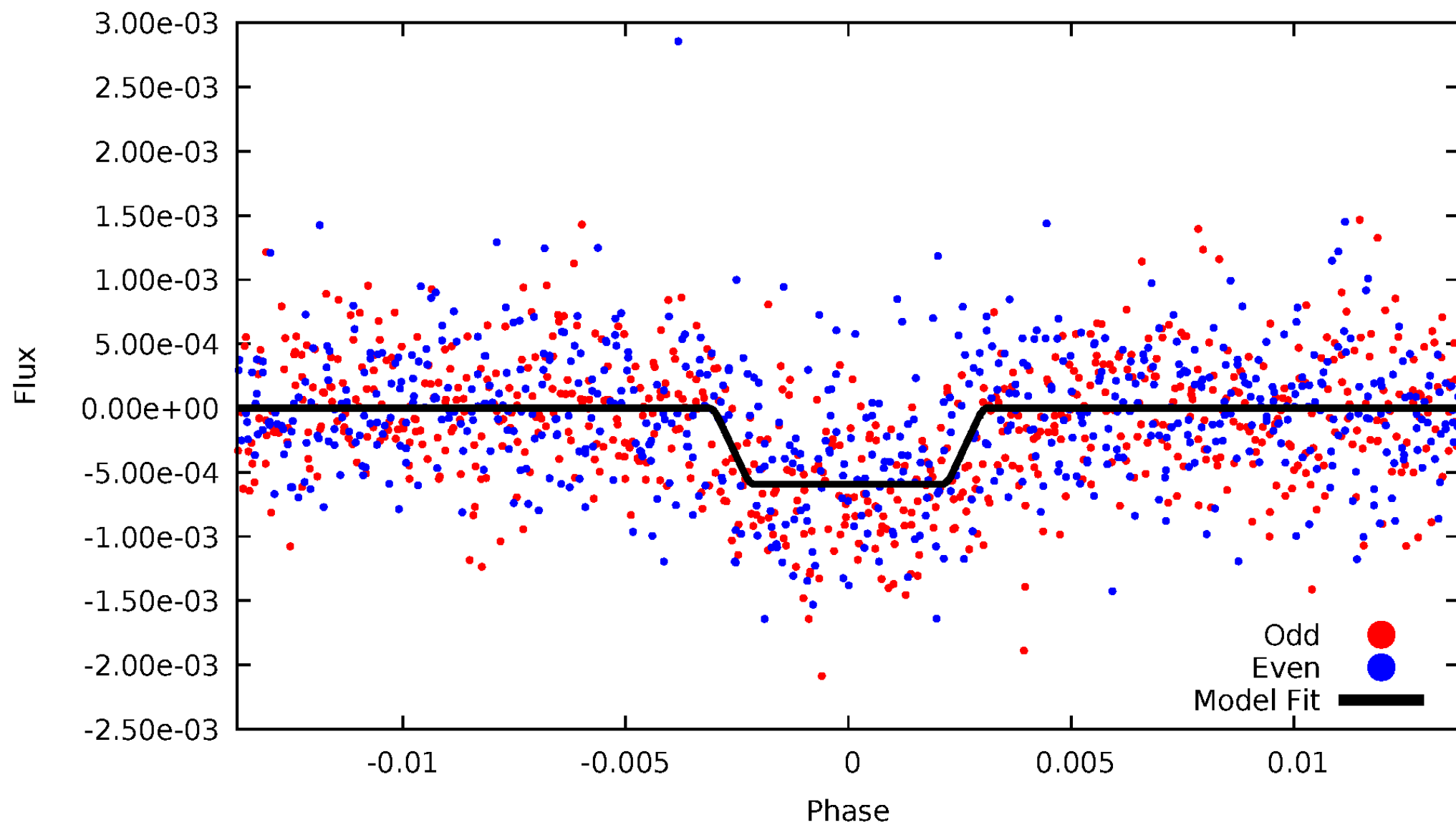
DV Odd/Even

TCE 011129258-01



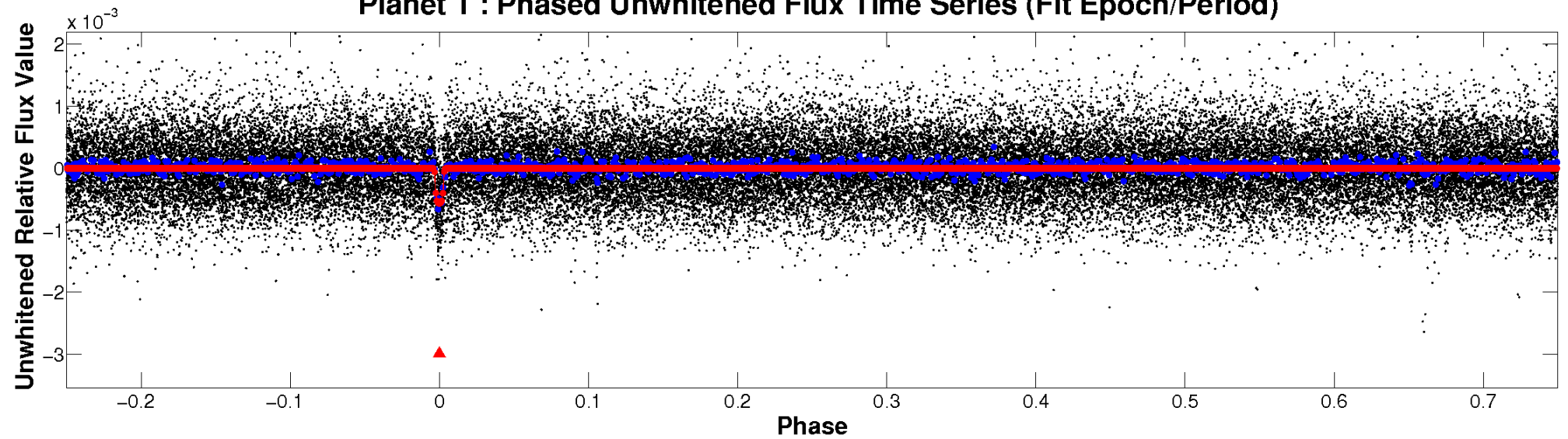
ALT Odd/Even

TCE 011129258-01

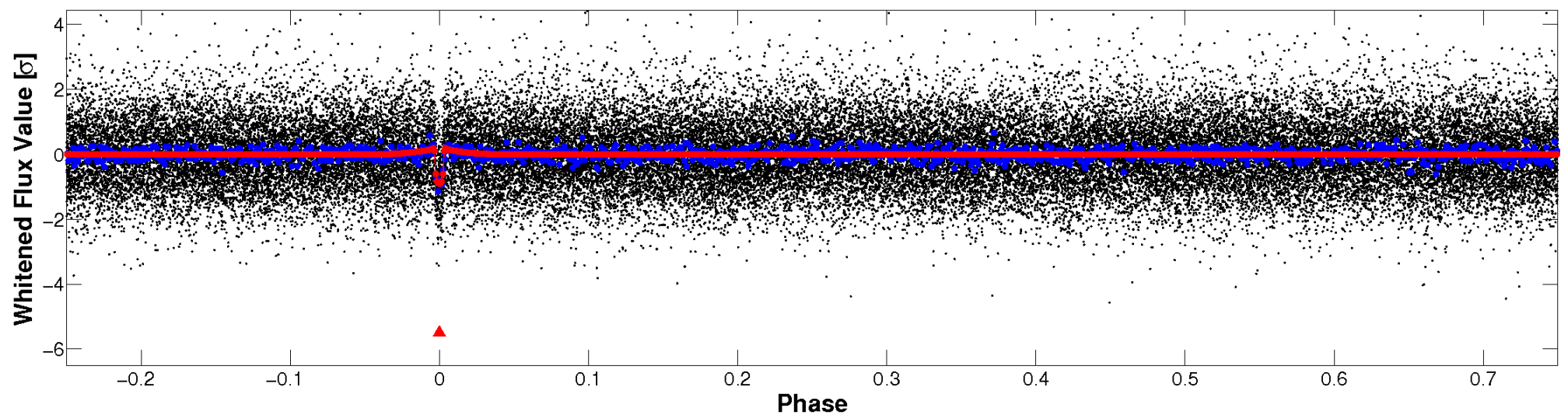


Non-Whitened Vs. Whitened Light Curve

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

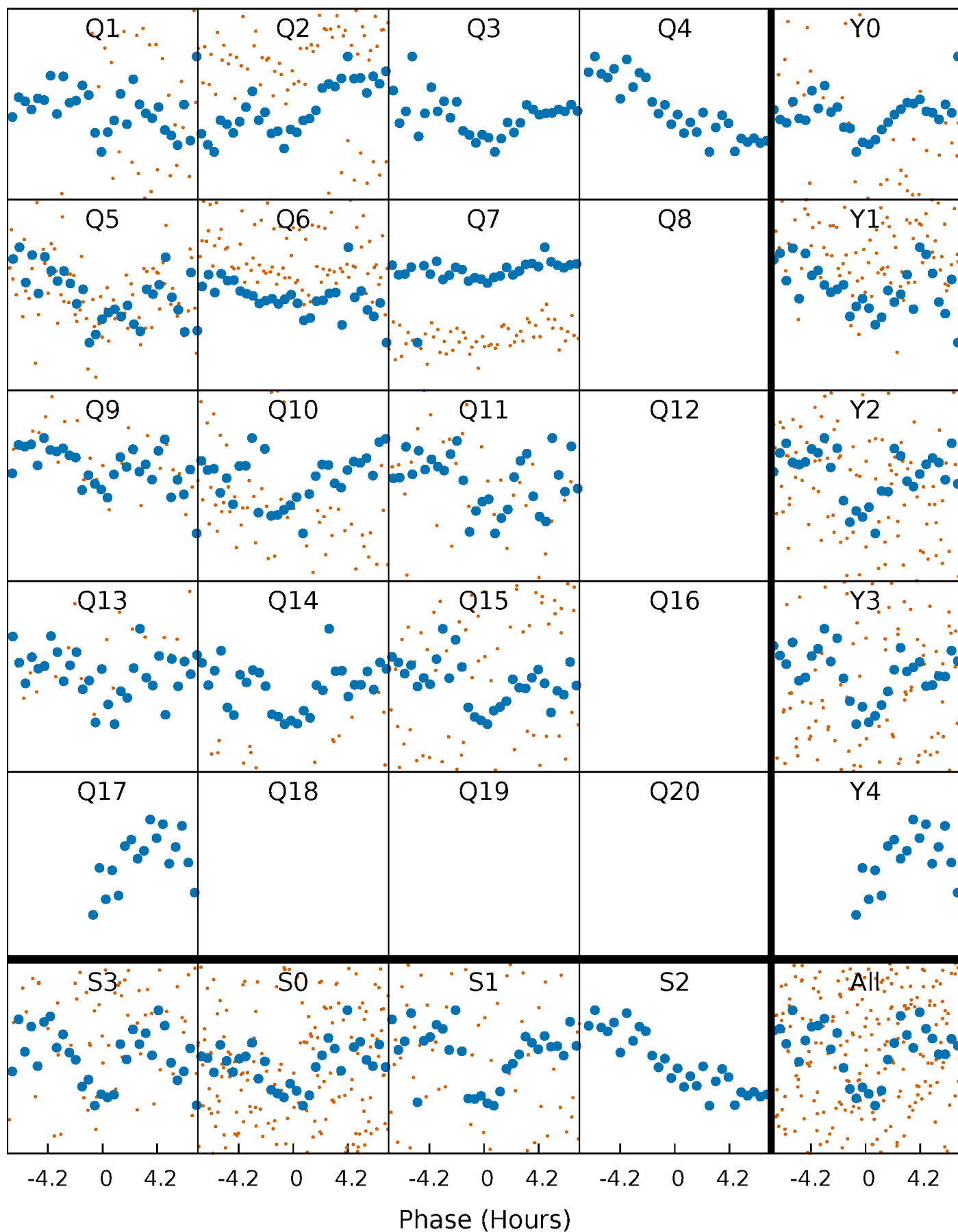


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



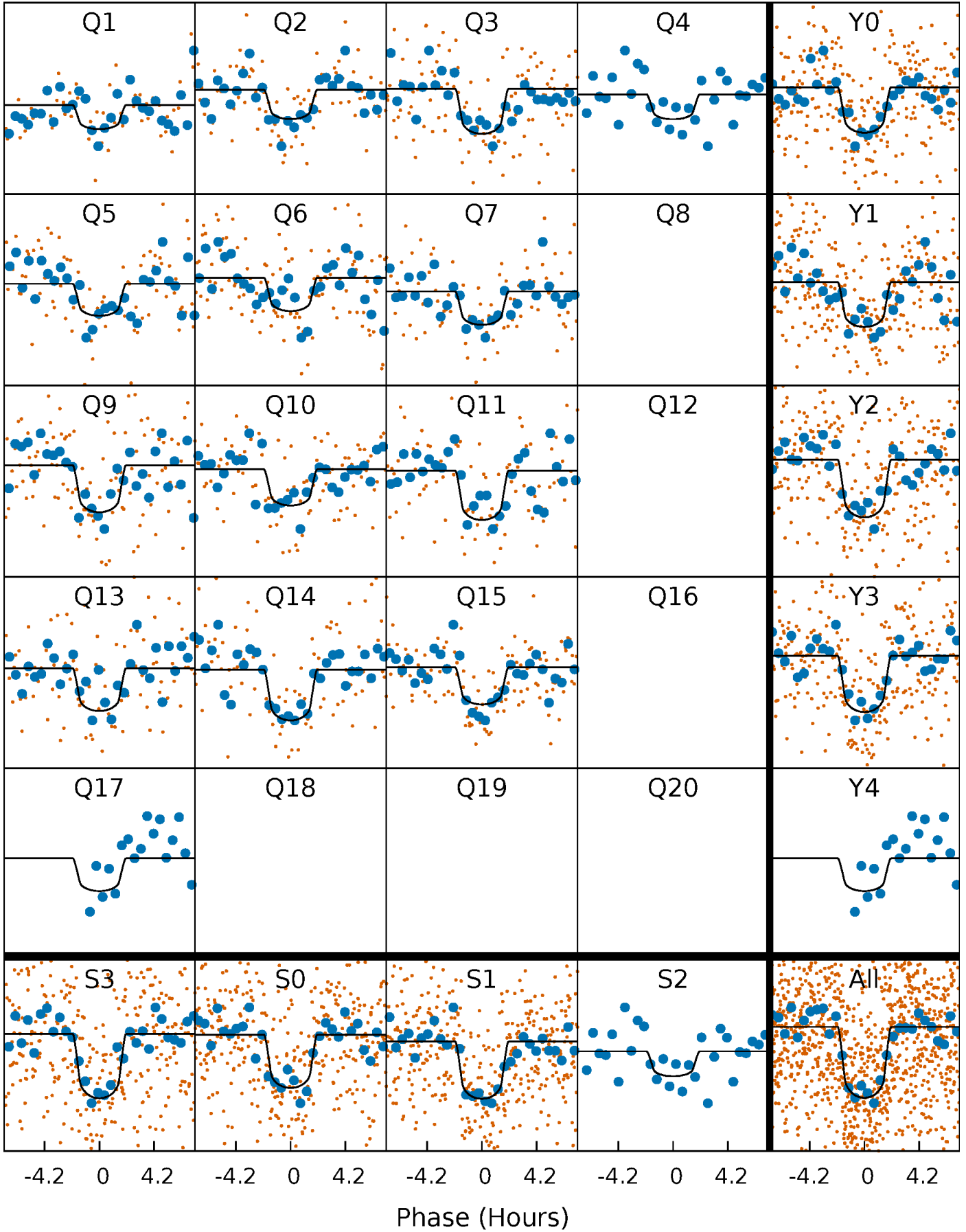
PDC Quarter-Phased Transit Curves

TCE 011129258-01 P= 25.384185 Days $T_0=137.773068$ (BKJD)



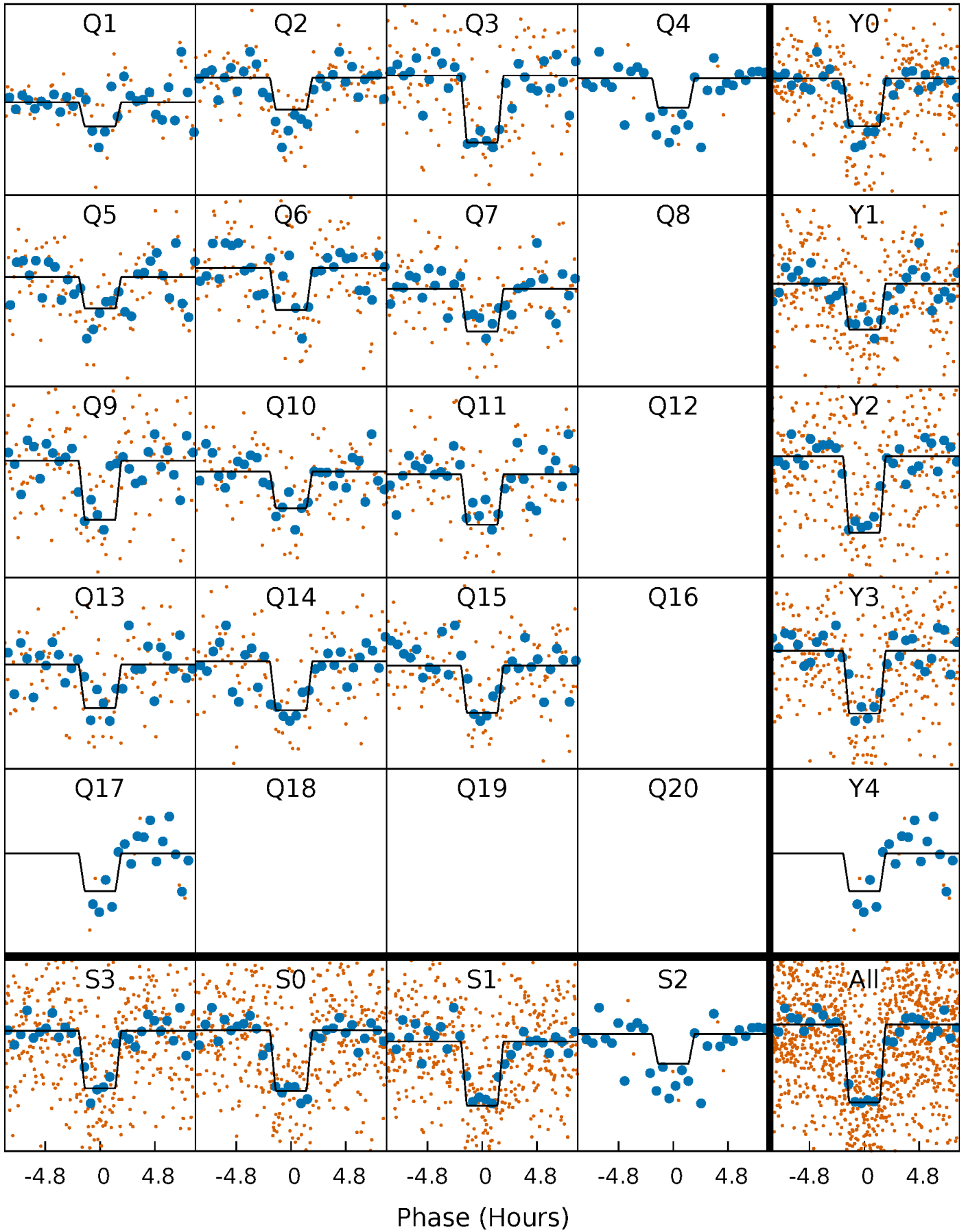
DV Quarter-Phased Transit Curves

TCE 011129258-01 P= 25.384185 Days $T_0=137.773068$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

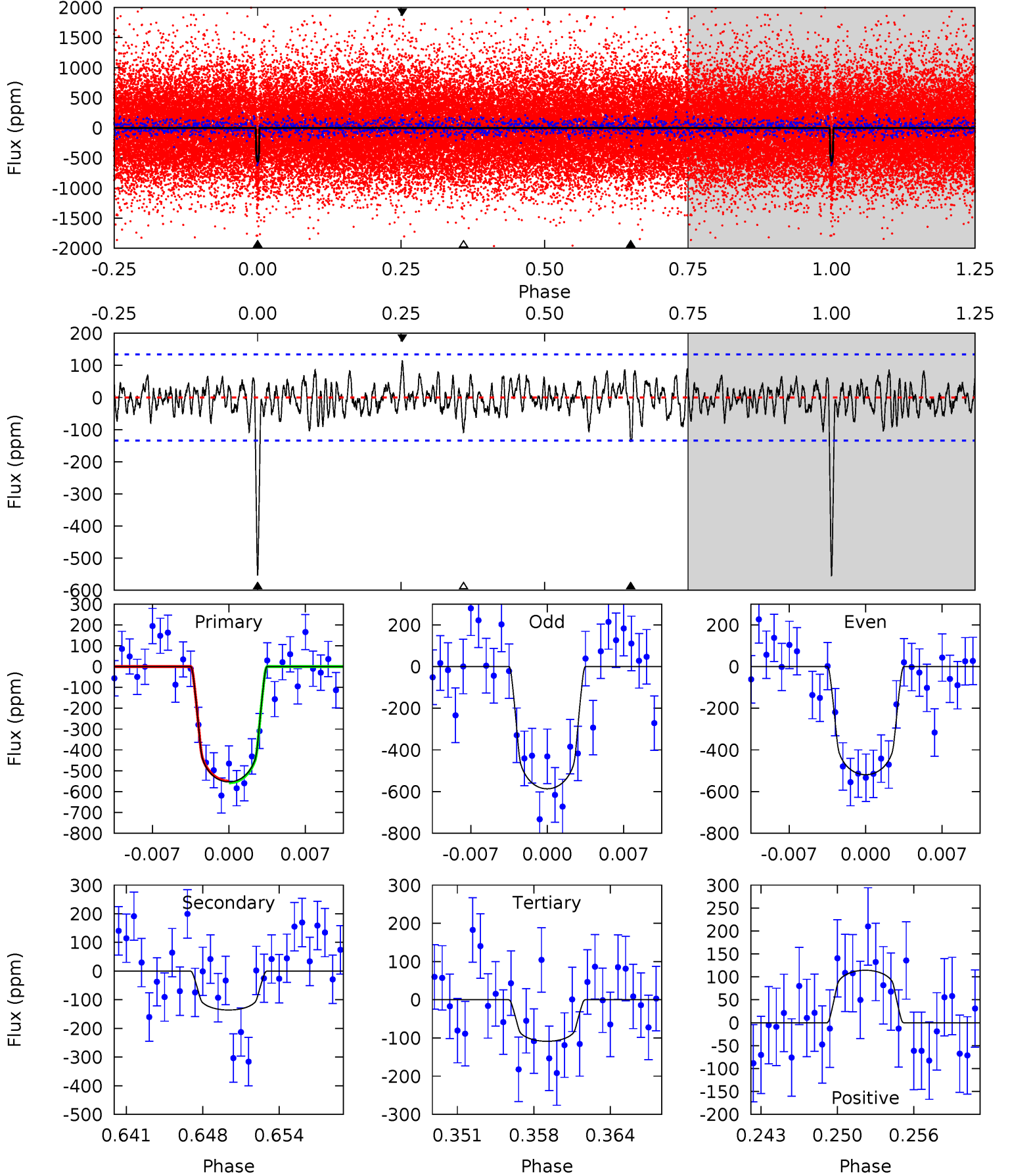
TCE 011129258-01 P= 25.384090 Days $T_0=137.775373$ (BKJD)



DV Model-Shift Uniqueness Test

011129258-01, P = 25.384185 Days, E = 112.388883 Days

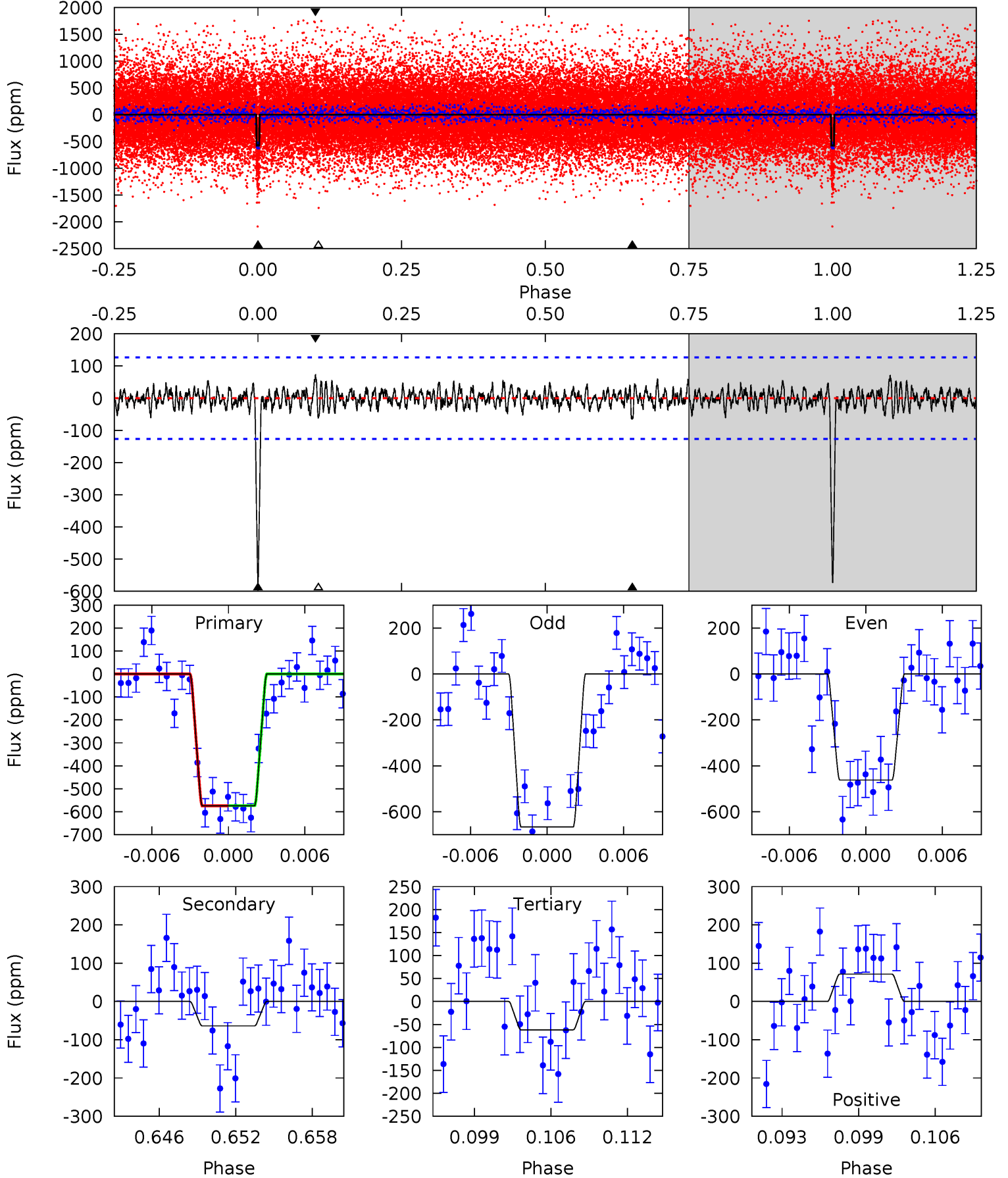
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
21.1	5.17	4.14	4.35	5.10	2.71	1.40	16.9	16.7	1.03	0.82	1.29	0.95	0.17	0.16



Alt Model-Shift Uniqueness Test

011129258-01, P = 25.384090 Days, E = 112.391283 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
23.2	2.58	2.49	2.89	5.12	2.74	0.86	20.7	20.3	0.09	-0.30	4.14	0.96	0.11	0.02



Stellar Parameters For KIC 011129258

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6137^{+171}_{-214}	$4.471^{+0.052}_{-0.208}$	$-0.120^{+0.300}_{-0.300}$	$0.994^{+0.312}_{-0.104}$	$1.067^{+0.137}_{-0.137}$	$1.529^{+0.419}_{-0.790}$
	+3%/-3%	+1%/-5%	+250%/-250%	+31%/-10%	+13%/-13%	+27%/-52%
Source	PHO1	KIC0	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 011129258-01 / KOI 2898.01

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-136 ± 26	$2.75^{+1.16}_{-1.25}$	926^{+72}_{-47}	4458^{+1337}_{-560}	285^{+696}_{-151}
Alt.	-64 ± 25	$2.78^{+1.40}_{-1.32}$	930^{+64}_{-49}	3865^{+1083}_{-542}	130^{+378}_{-78}

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 $T_{obs} \gg T_{max}$ AND $A_{obs} \gg 1.0$

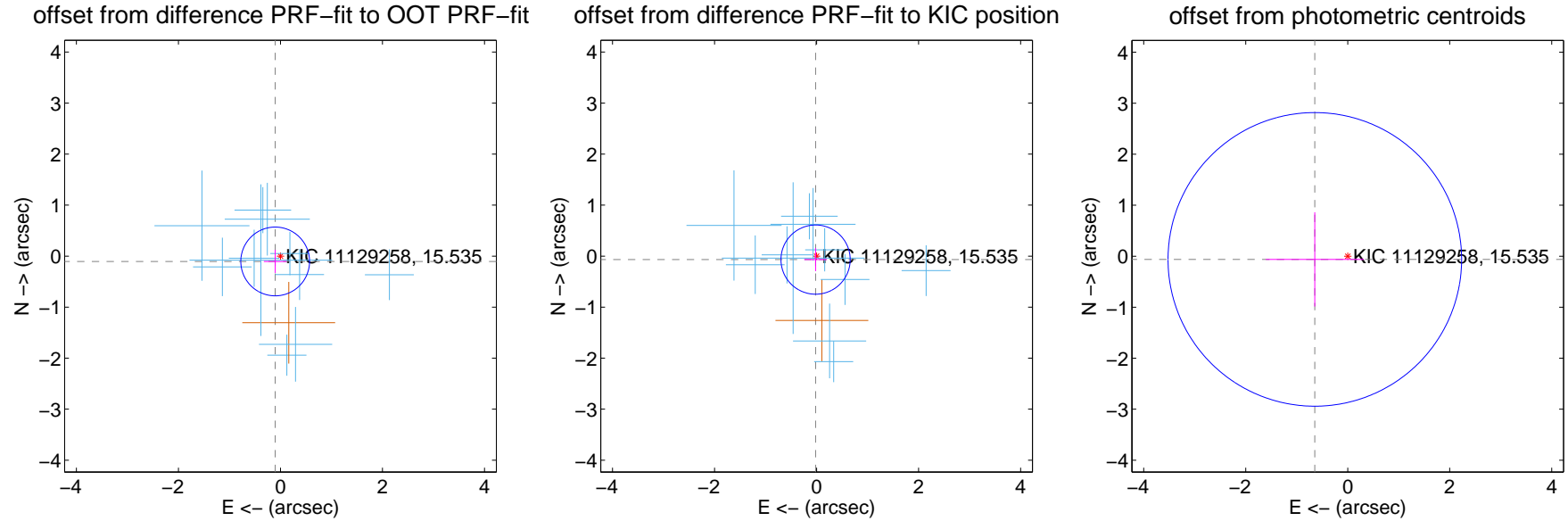
DV Centroid Data

Supplemental centroid analysis for 011129258-01. Kepler magnitude: 15.54. Transit SNR 13.93

There are 11 quarters with good PRF difference image offsets

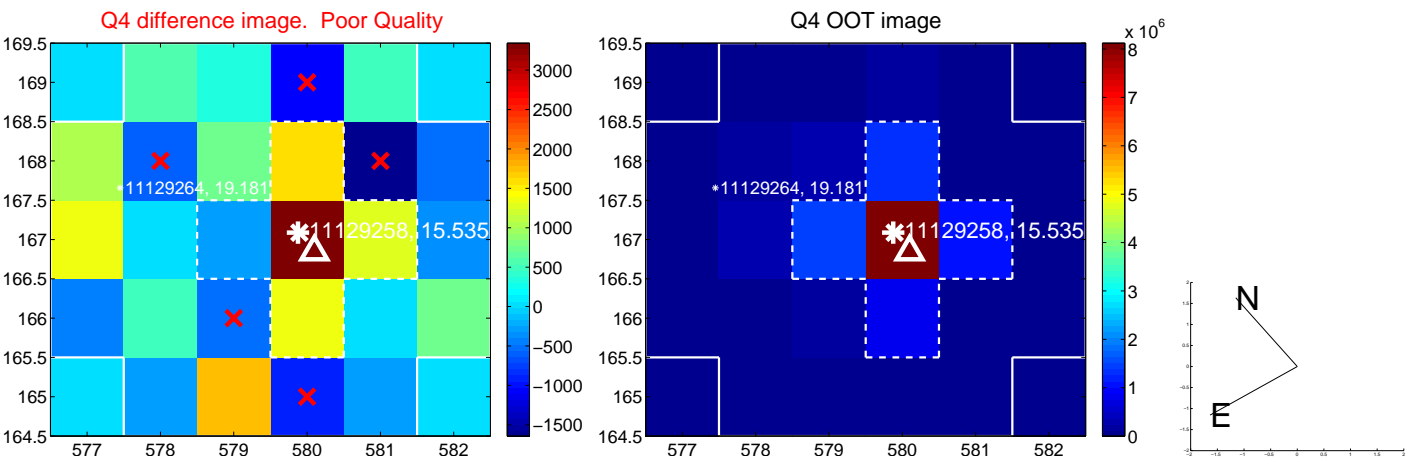
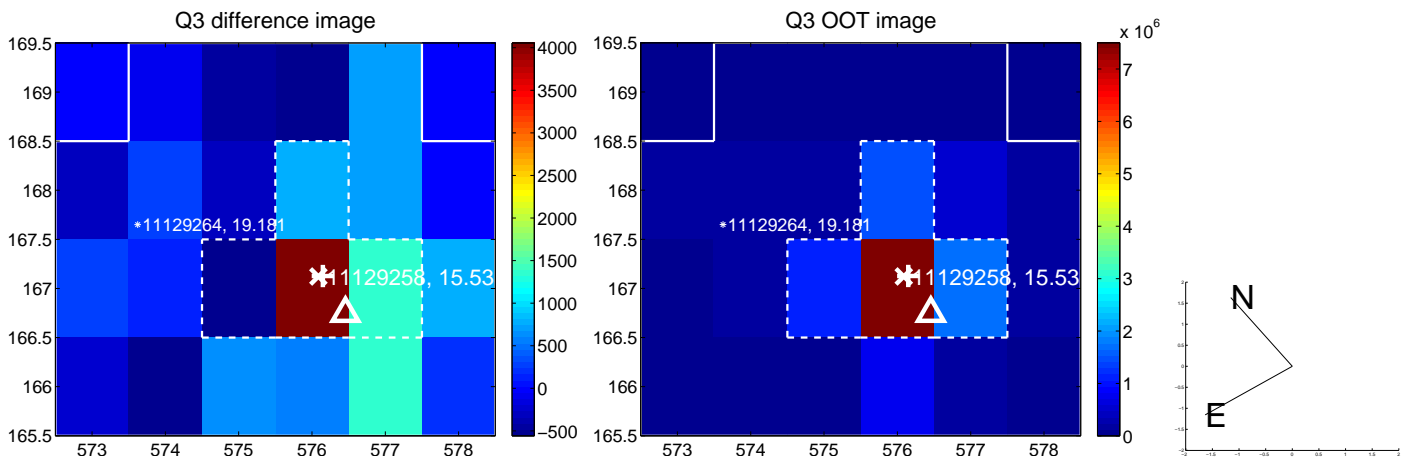
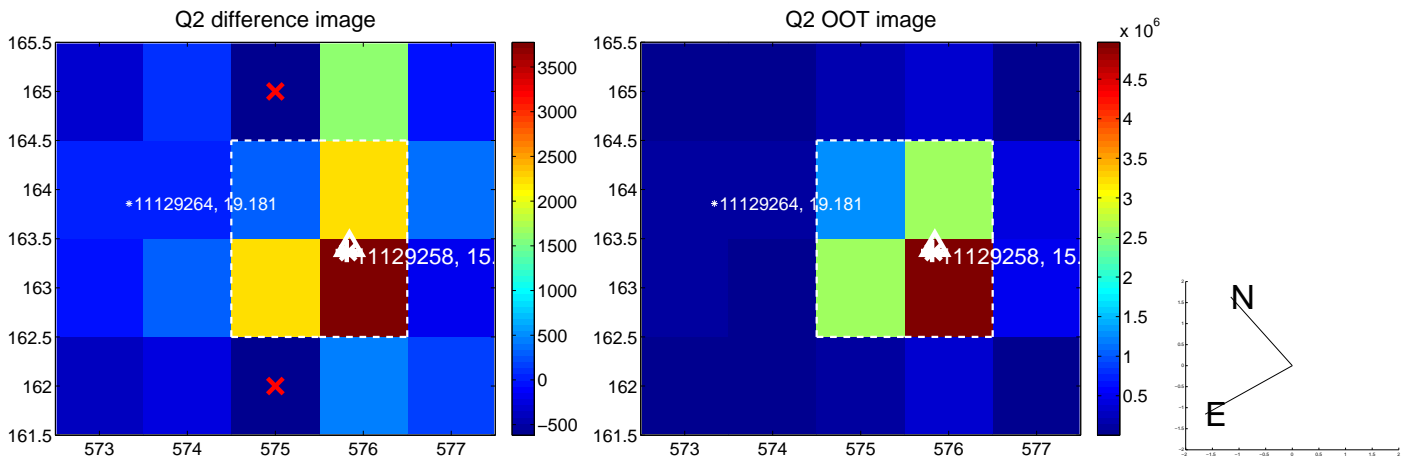
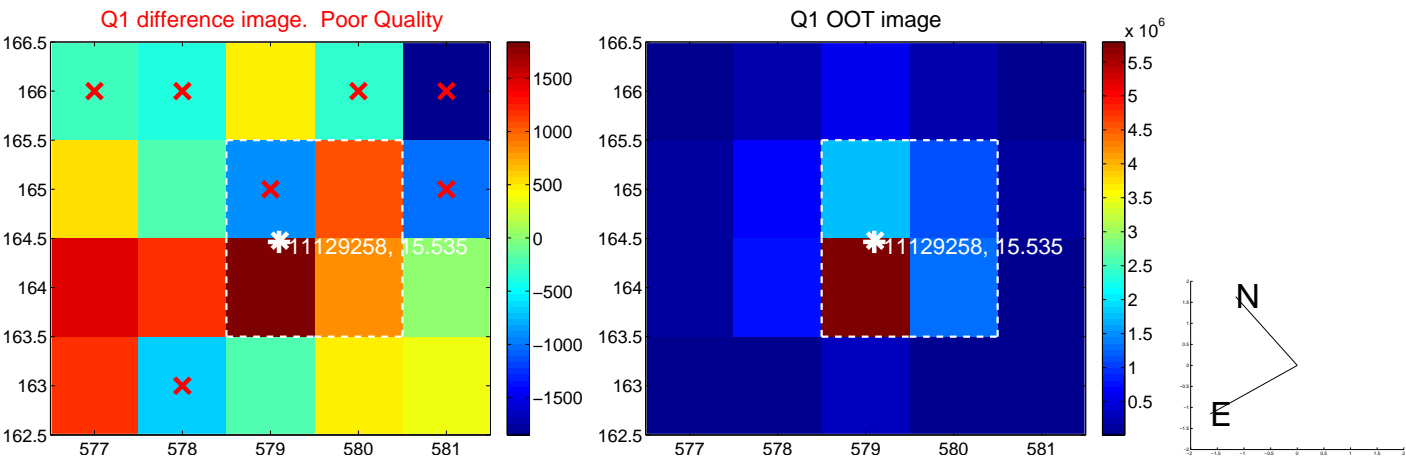
The direct PRF centroid is offset from the target star catalog position by about 0.21 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.147 ± 0.225	0.65	0.103 ± 0.223	-0.104 ± 0.226
PRF-fit source offset from KIC position	0.071 ± 0.226	0.31	0.020 ± 0.223	-0.068 ± 0.226
photometric centroid source offset	0.65 ± 0.96	0.68	0.65 ± 0.96	-0.06 ± 0.92

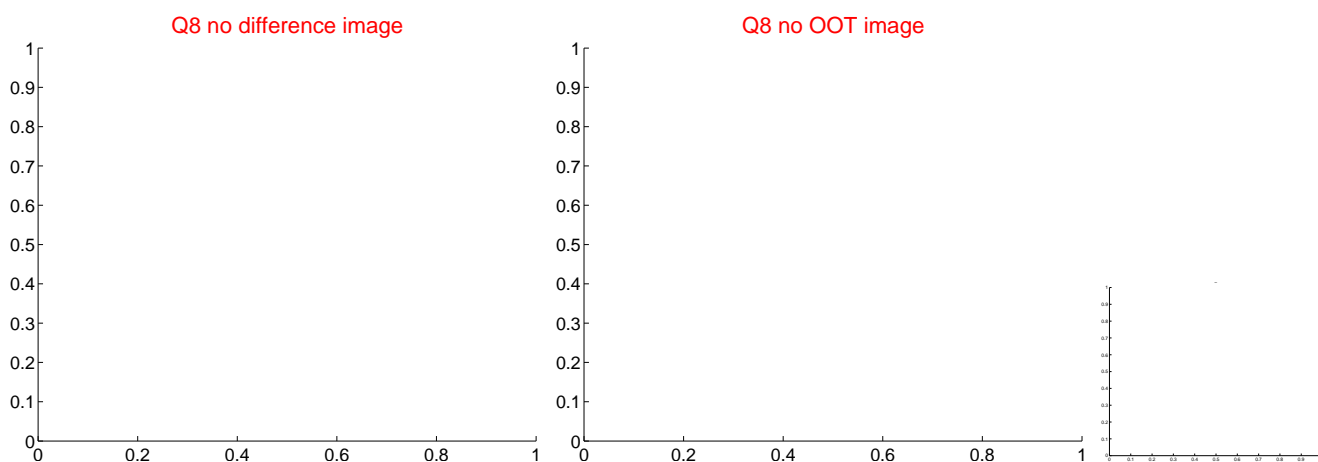
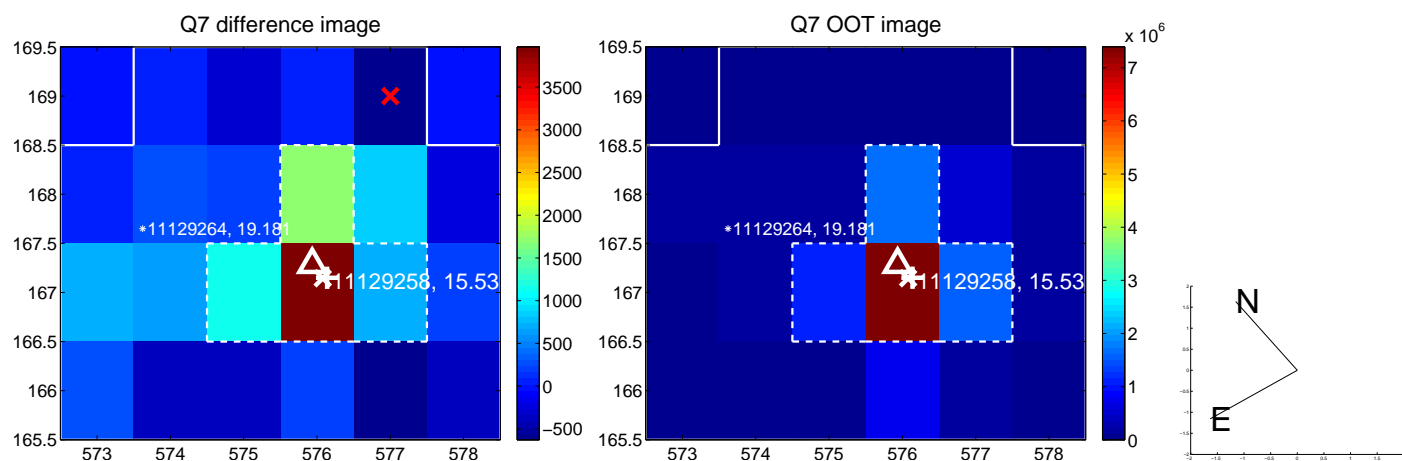
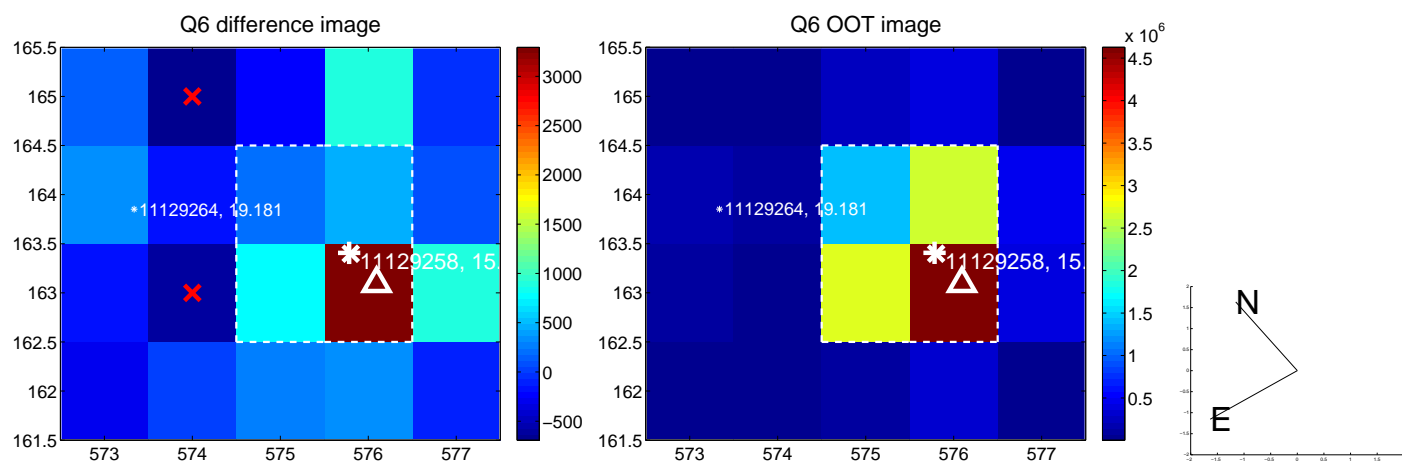
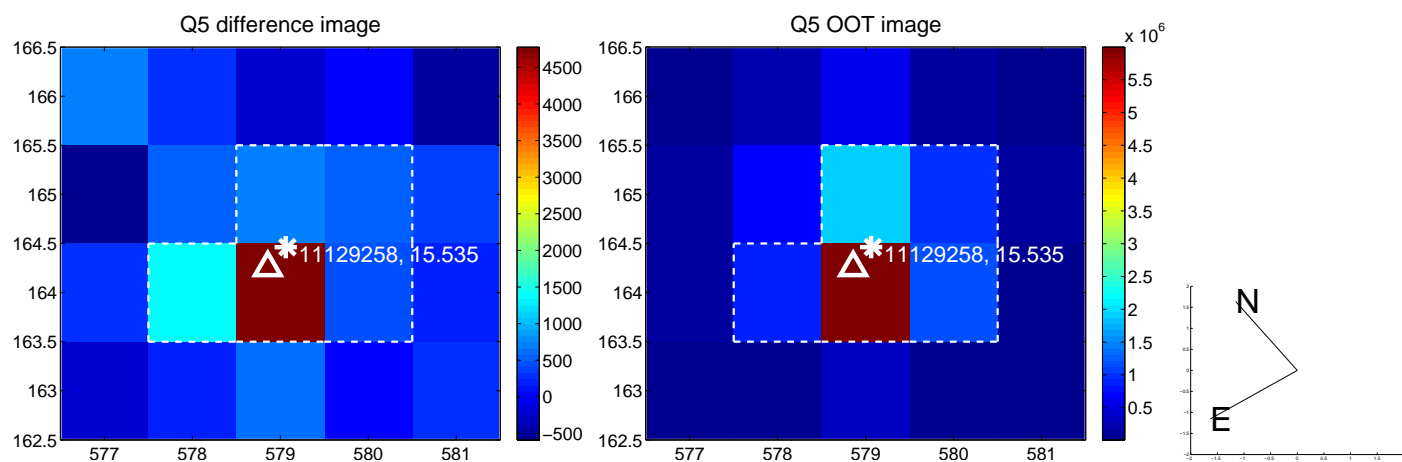


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses:** good quarterly centroid offsets; **Vermillion crosses:** bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

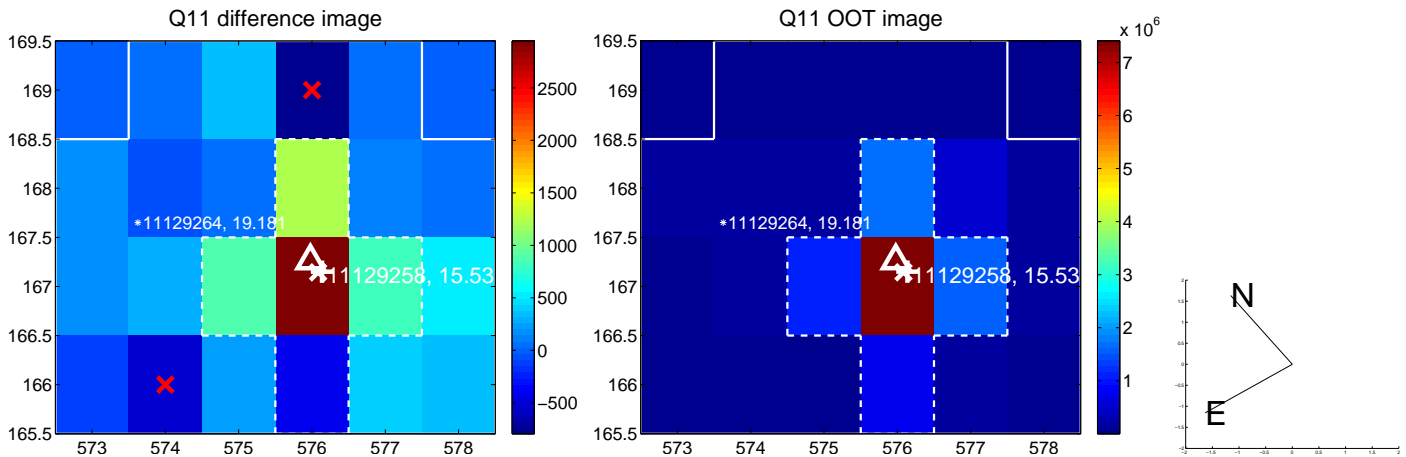
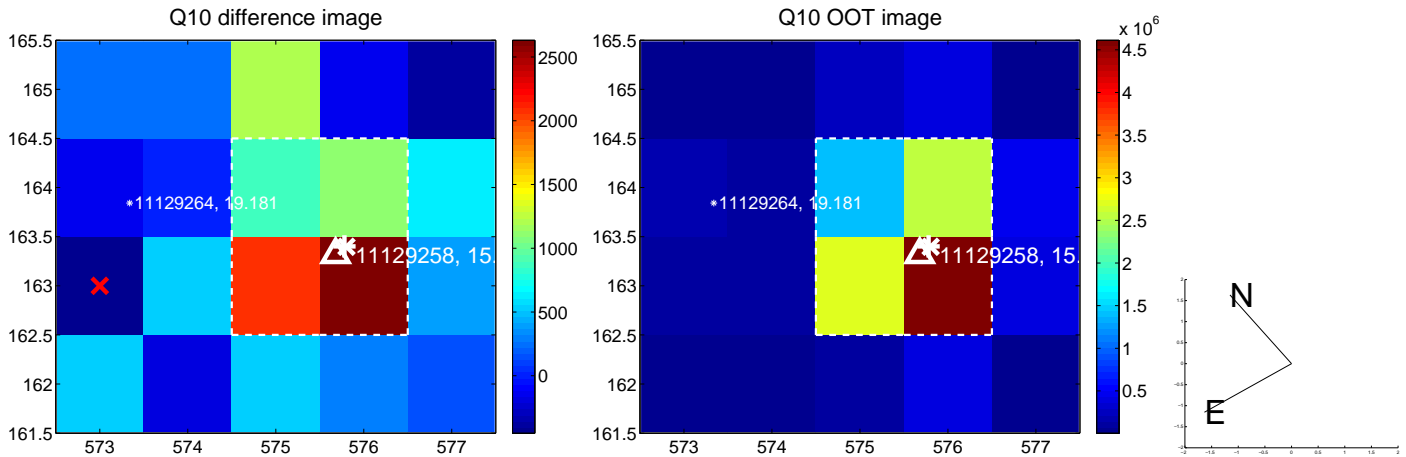
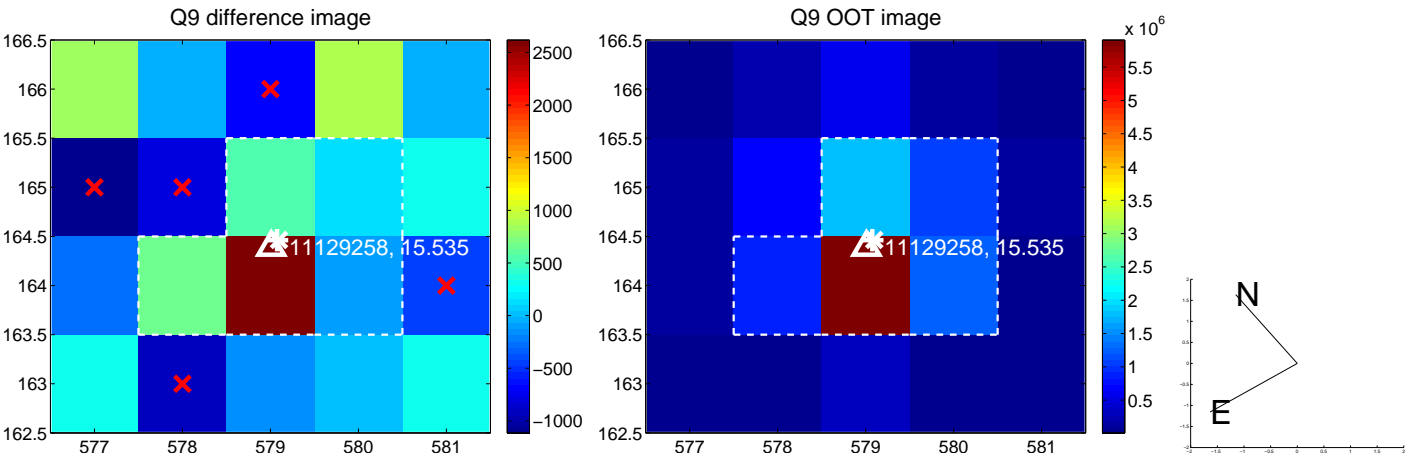
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



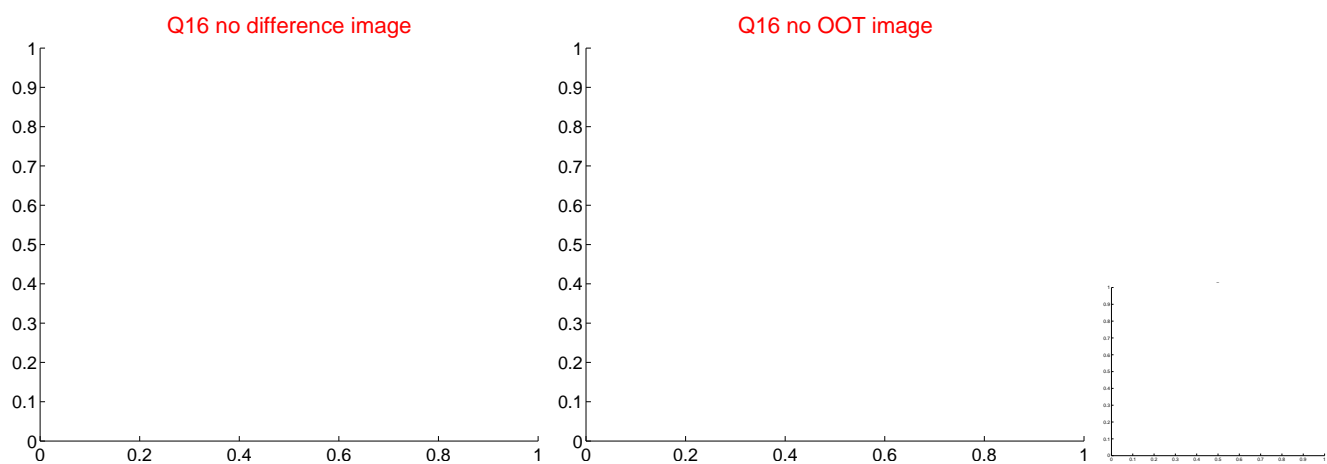
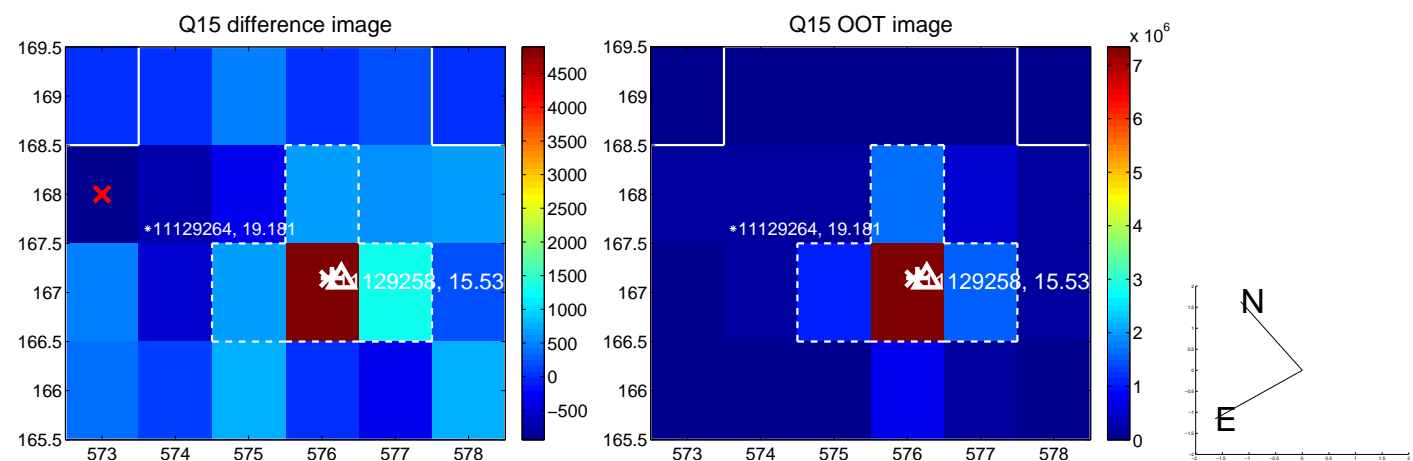
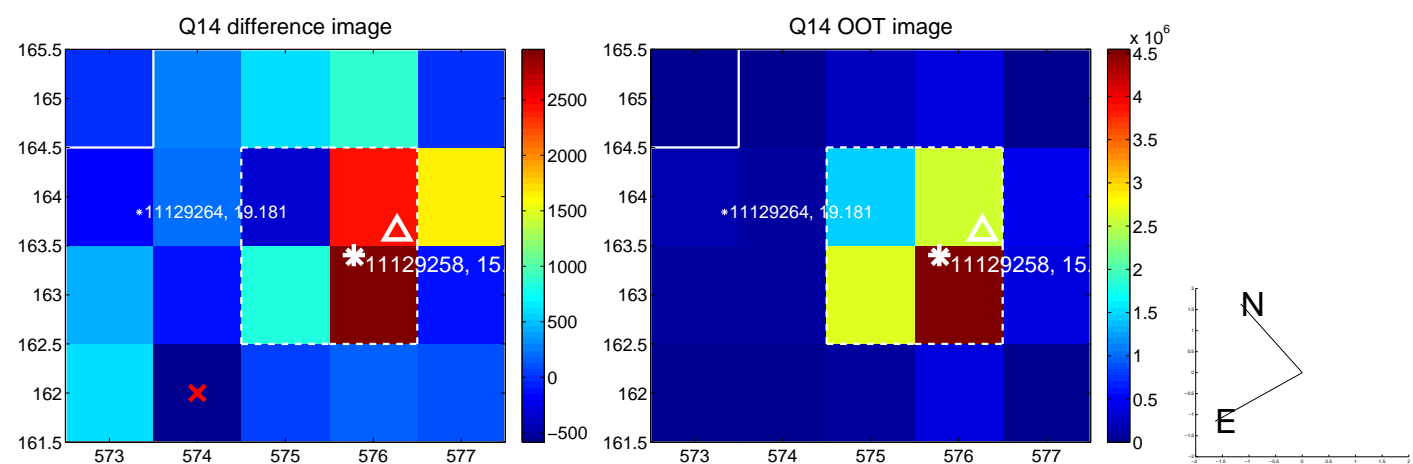
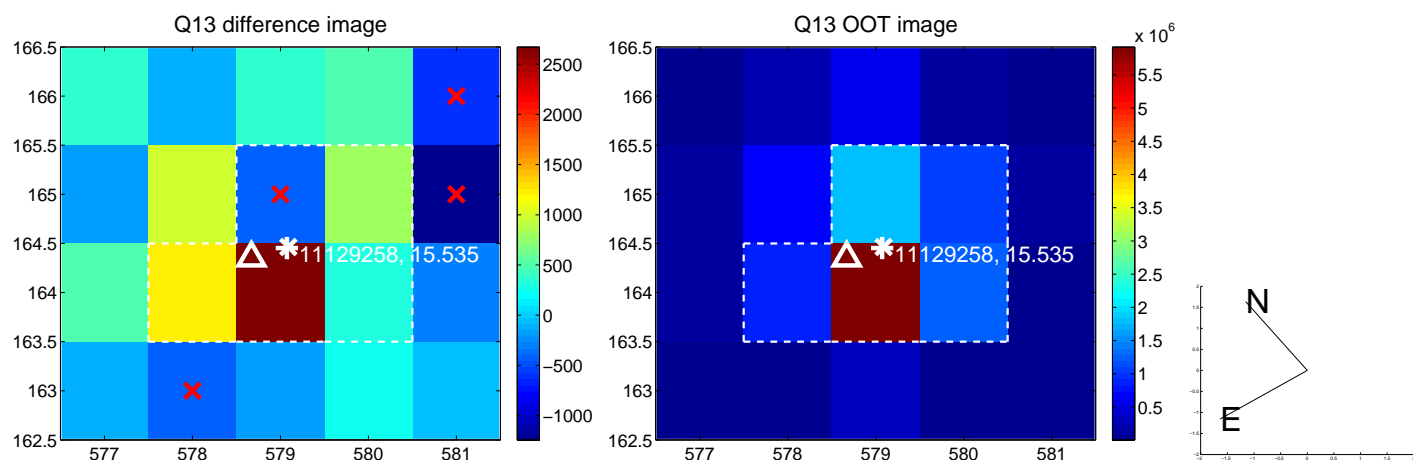
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value



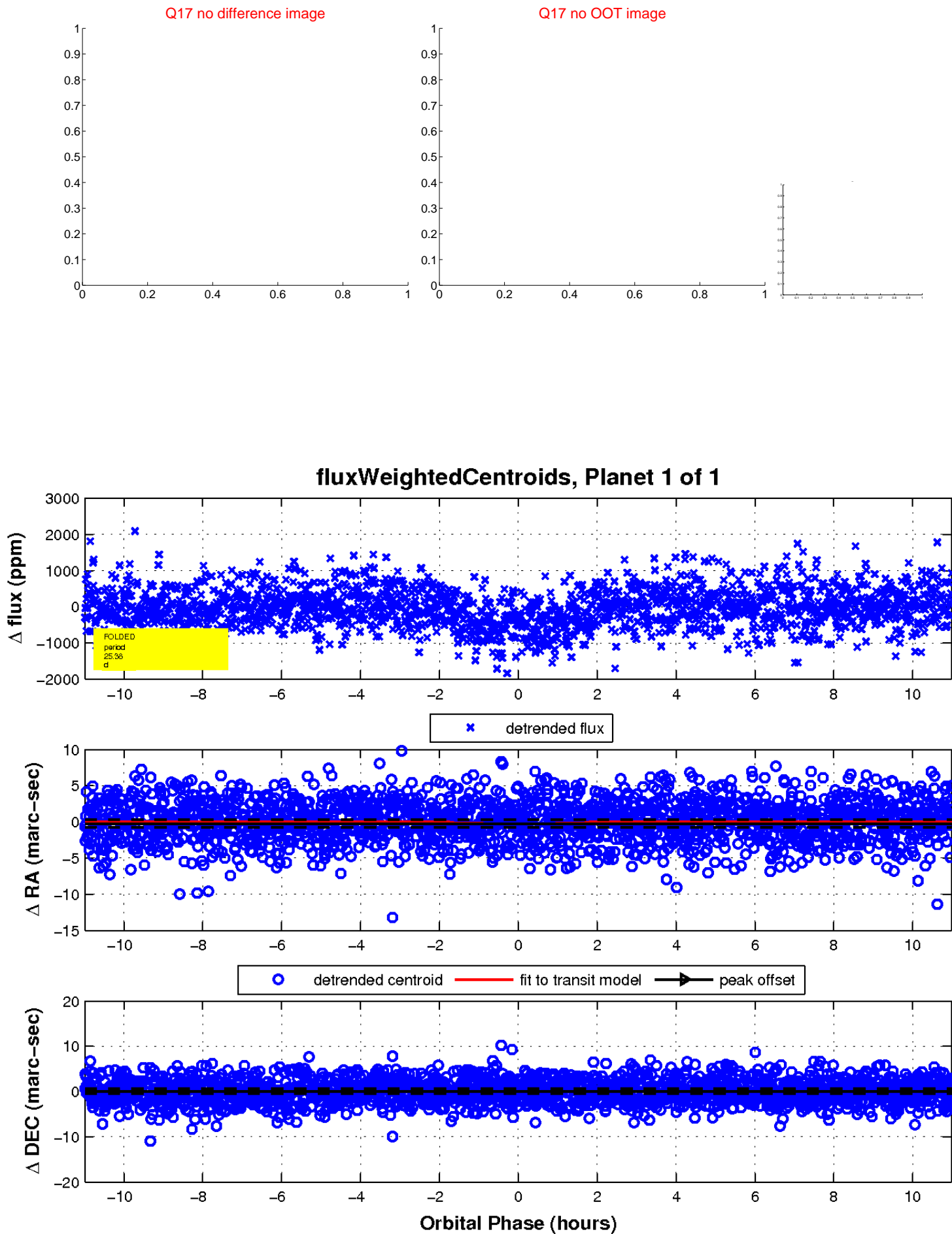
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



UKIRT Image

Declination

