

KIC 005264888

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})
005264888-01	OBS	No	1.905170	131.684550	37.9	8.379	8.3	9.2	0.97	6075	0.70	1226.64

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
005264888-01	OBS	FP	0.00	1	0	0	1	LPP_DV—MOD_NONUNIQ_ALT—EPHEM_MATCH

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.

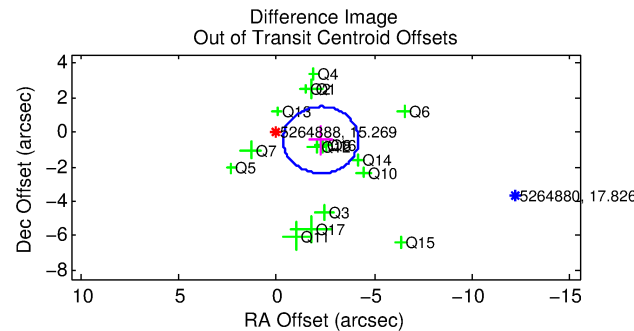
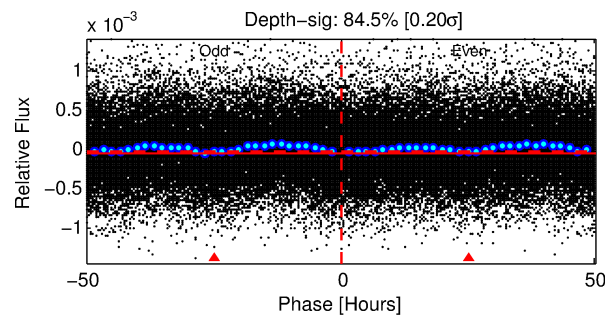
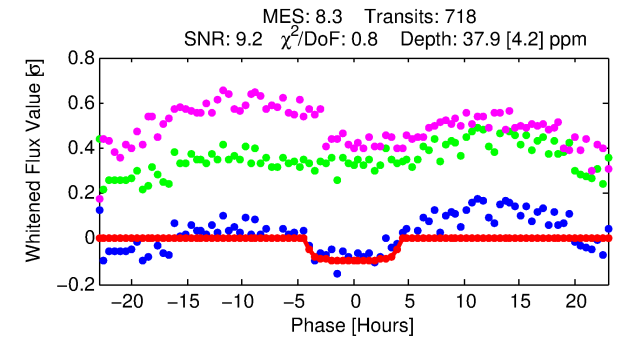
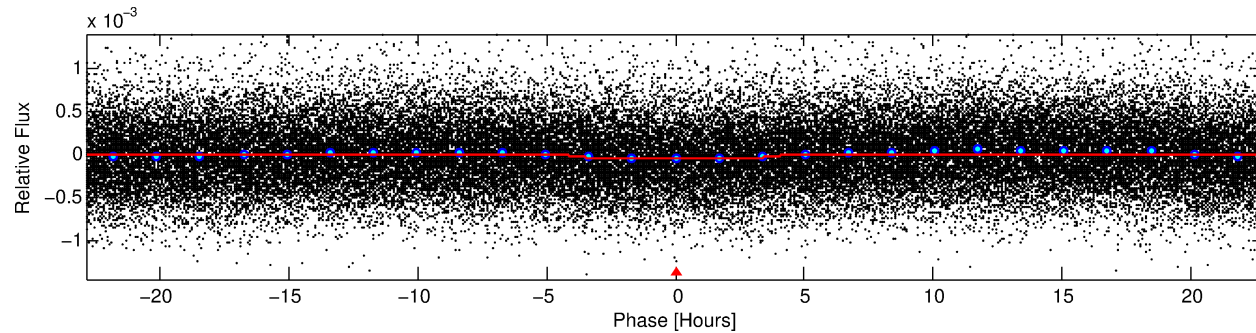
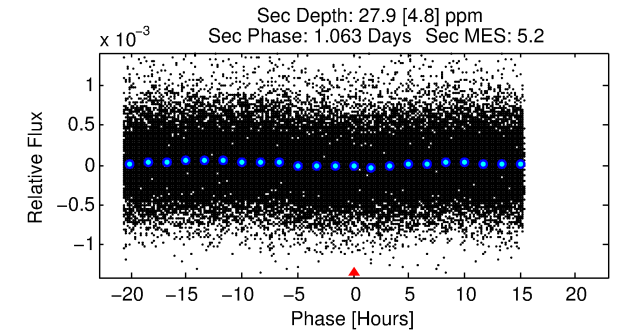
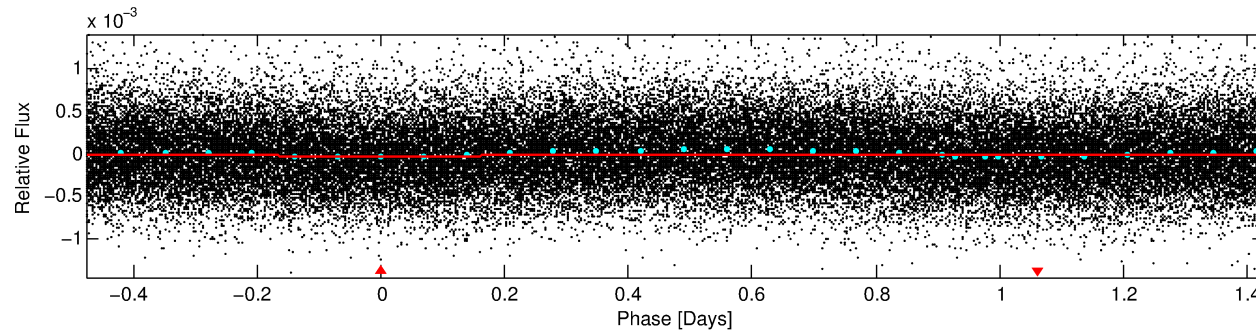
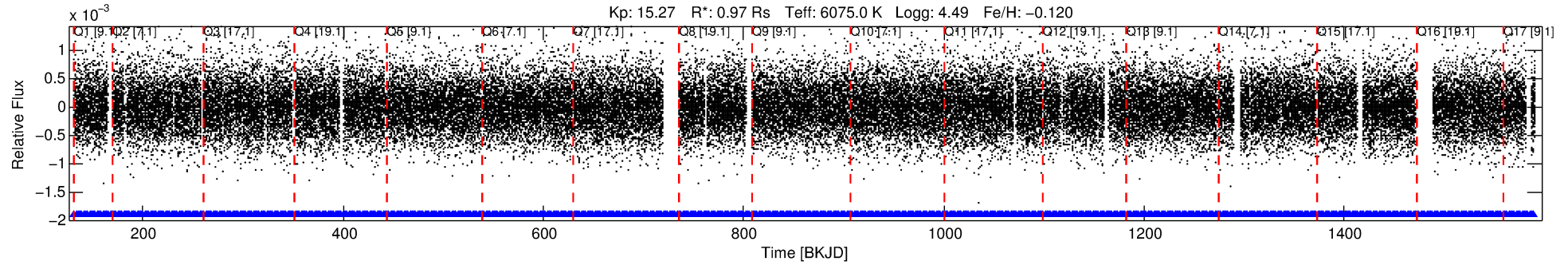
Ephemeris Match Information For 005264888-01

TCE (1)	KIC	Parent (2)	Parent KIC	$P_1:P_2$	Dist ($''$)	Δ Row	Δ Col	m_2	m_1	D_2/D_1	Mechanism	Flag	σ_P	σ_T
005264888-01	5264888	005264818-pri	5264818	1:1	85.1	21	6	8.86	15.27	692.11	Direct-PRF	0	4.56	4.28

Notes: $P_1:P_2$ is the period ratio. Dist is the distance in arcseconds. Δ Row and Δ Col are the number of pixels apart in row and column. m_2 and m_1 are the magnitudes of the parent and child. D_2/D_1 is the parent's transit depth divided by the child's. σ_P and σ_T are the significance of the match in period and epoch. For a match to be considered significant $\sigma_P < 5.0$ and $\sigma_T < 5.0$. Matches which have σ_P and σ_T very close to this cutoff should receive extra scrutiny, especially if the period ratio is very large.

DV One-Page Summary

KIC: 5264888 Candidate: 1 of 1 Period: 1.905 d



DV Fit Results:

Period = 1.90517 [0.00003] d
Epoch = 131.6845 [0.0096] BKJD
Rp/R* = 0.0066 [0.0029]
a/R* = 1.23 [0.98]
b = 0.89 [0.53]
Seff = 1226.64 [505.07]
Teff = 1509 [155] K
Rp = 0.70 [0.38] Re
a = 0.0306 [0.0081] AU
Ag = 29.35 [28.61] [0.99σ]
Teffp = 5431 [1225] K [3.17σ]

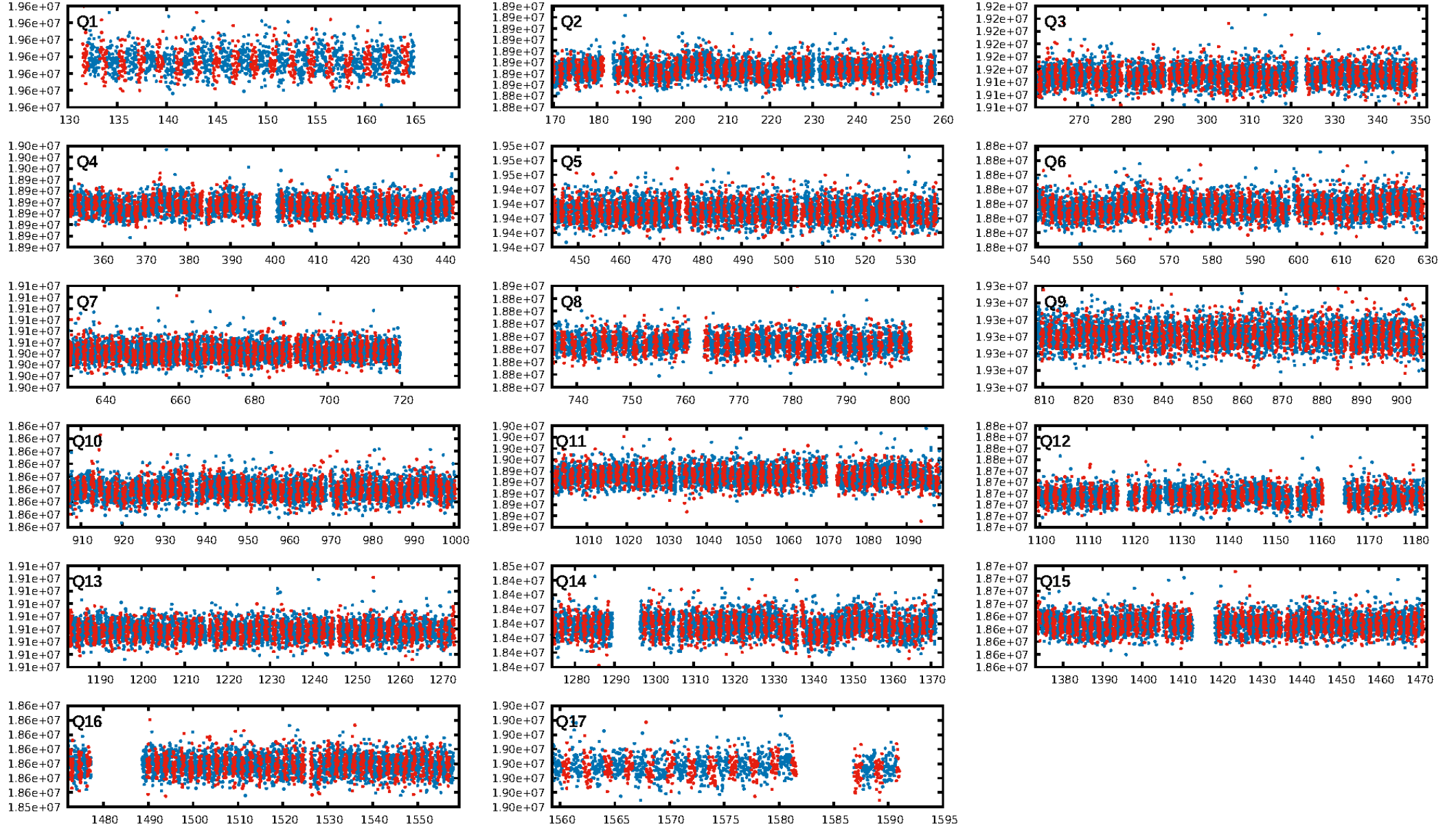
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 1.97e-15
RollingBand-fgt: 1.00 [685/685]
GhostDiagnostic-chr: 0.4402
Centroid-sig: N/A
Centroid-so: 0.128 arcsec [0.08σ]
OotOffset-rm: 2.303 arcsec [3.58σ]
KicOffset-rm: 2.094 arcsec [3.48σ]
OotOffset-st: 4/4/4/4 [16]
KicOffset-st: 4/4/4/4 [16]
DiffImageQuality-fgm: 0.12 [2/16]
DiffImageOverlap-fno: 1.00 [17/17]

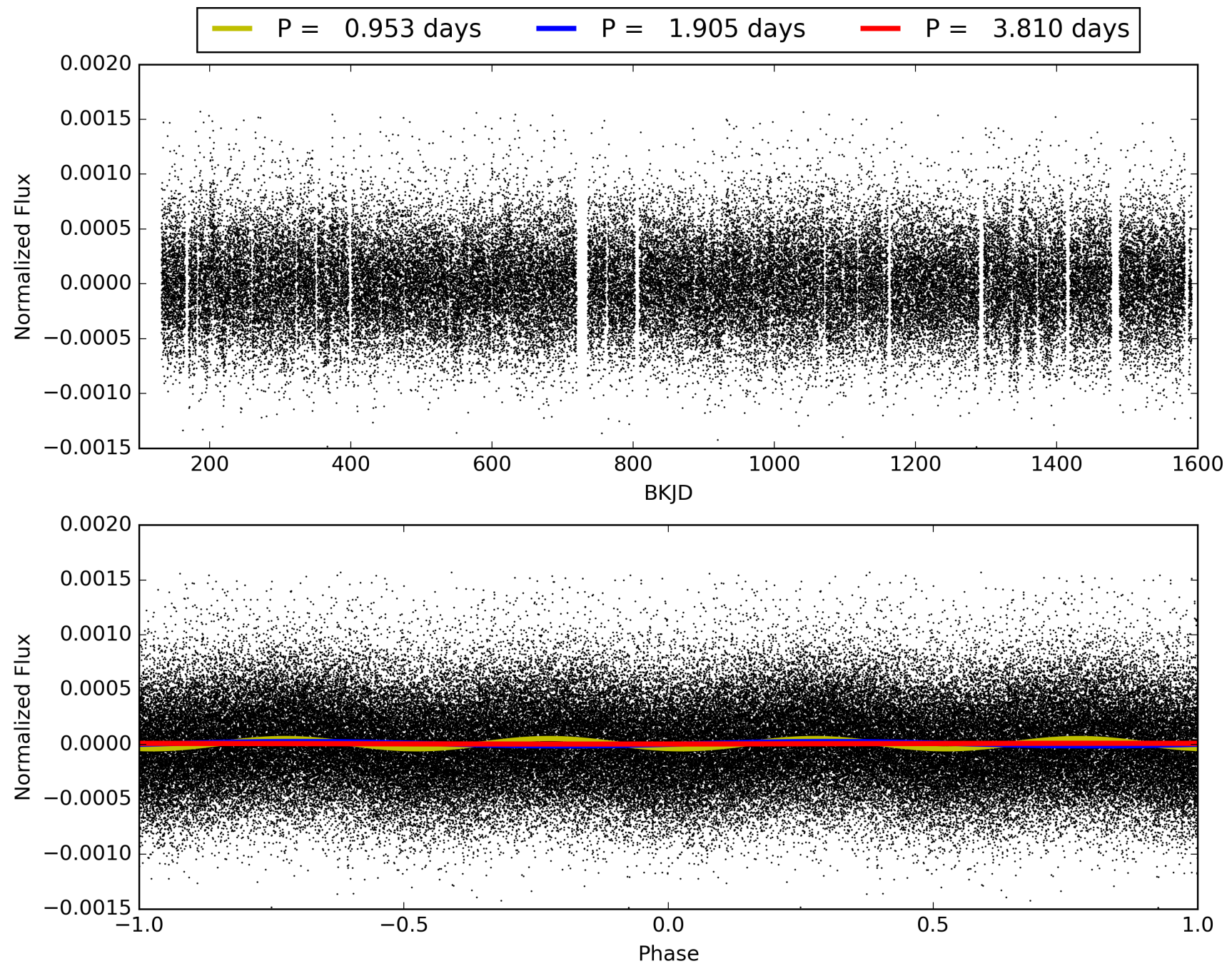
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 31-Jan-2016 17:47:06 Z

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

TCE 005264888-01, PDC Light Curves

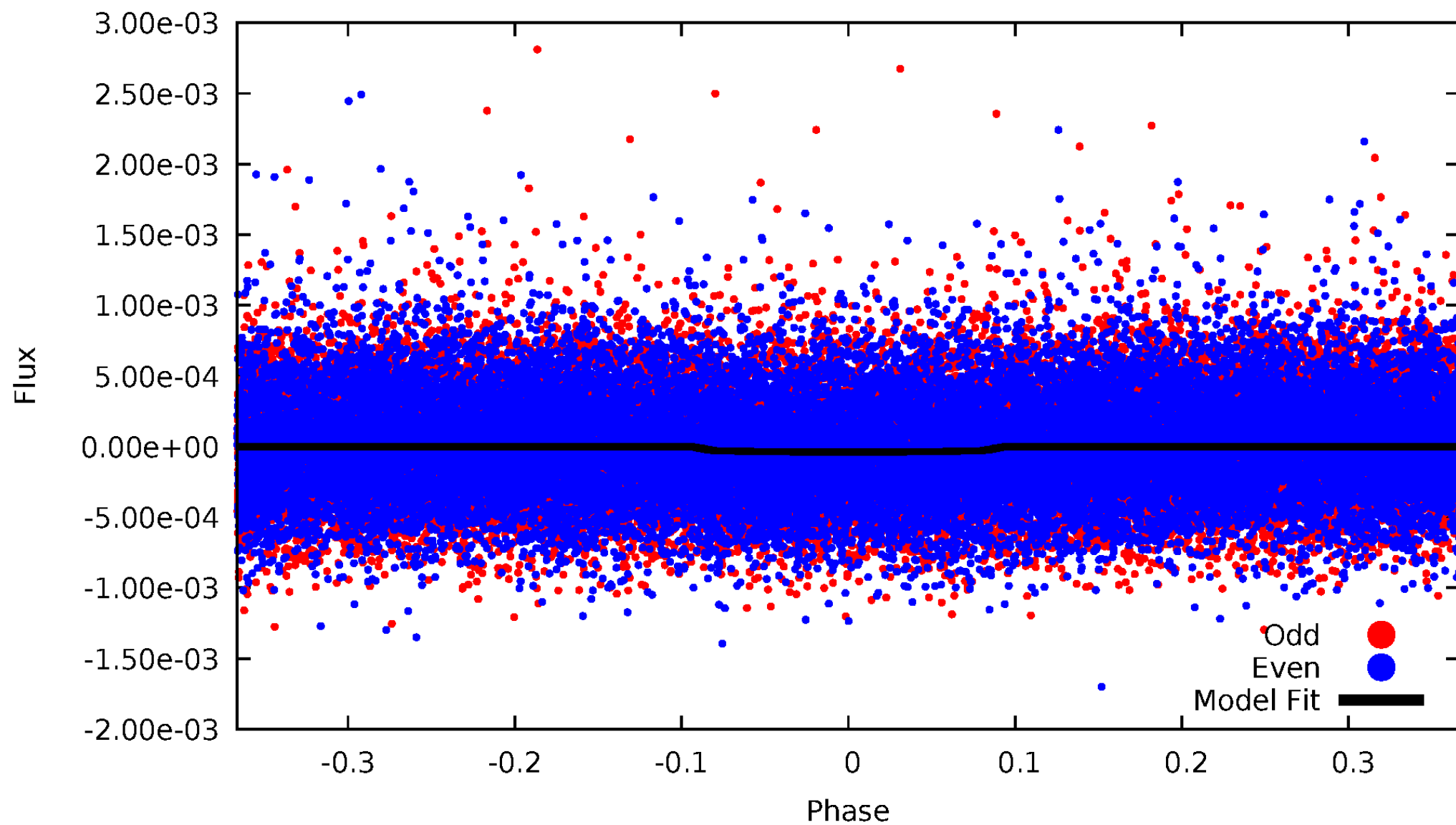


TCE 005264888-01



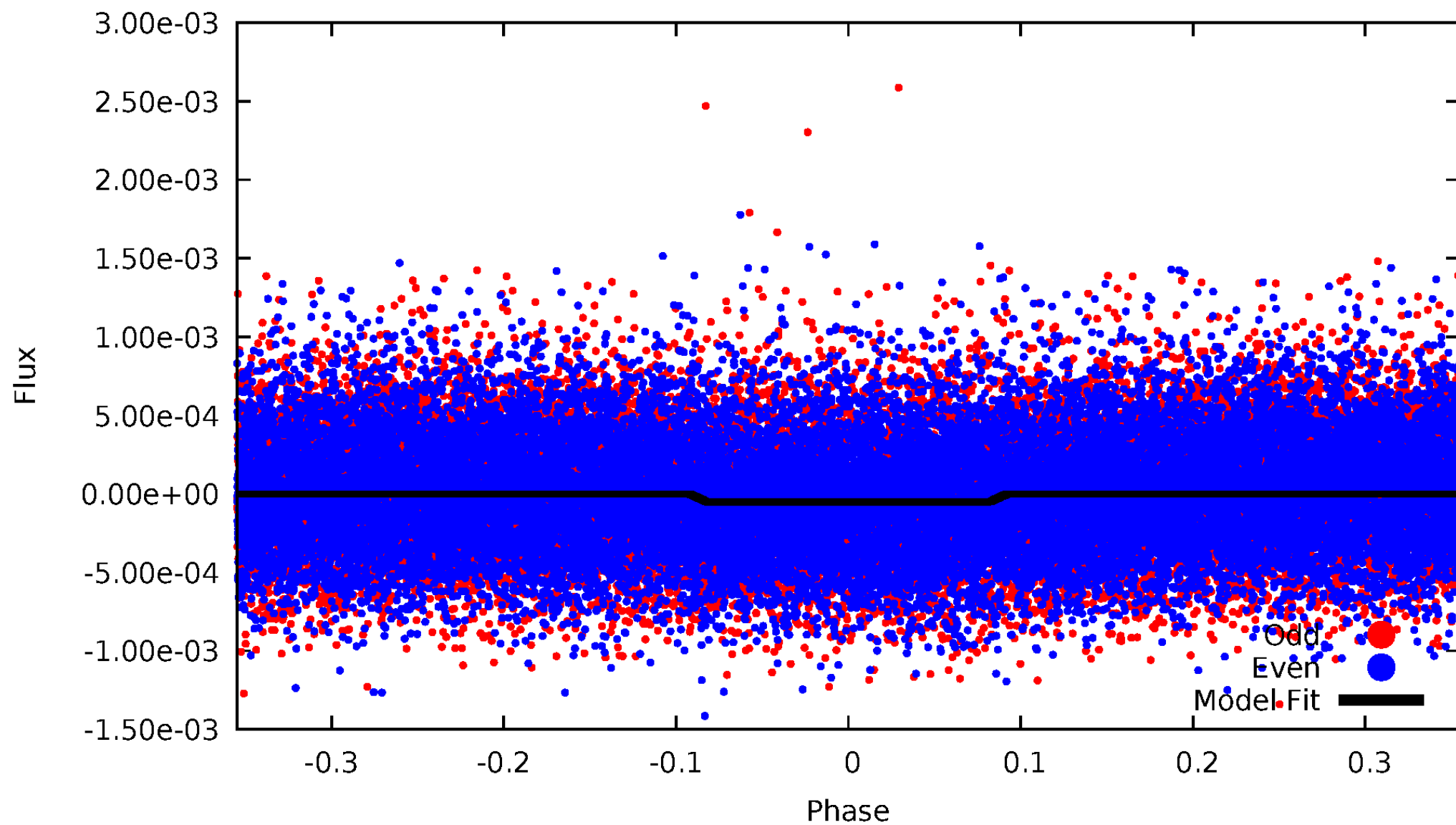
DV Odd/Even

TCE 005264888-01



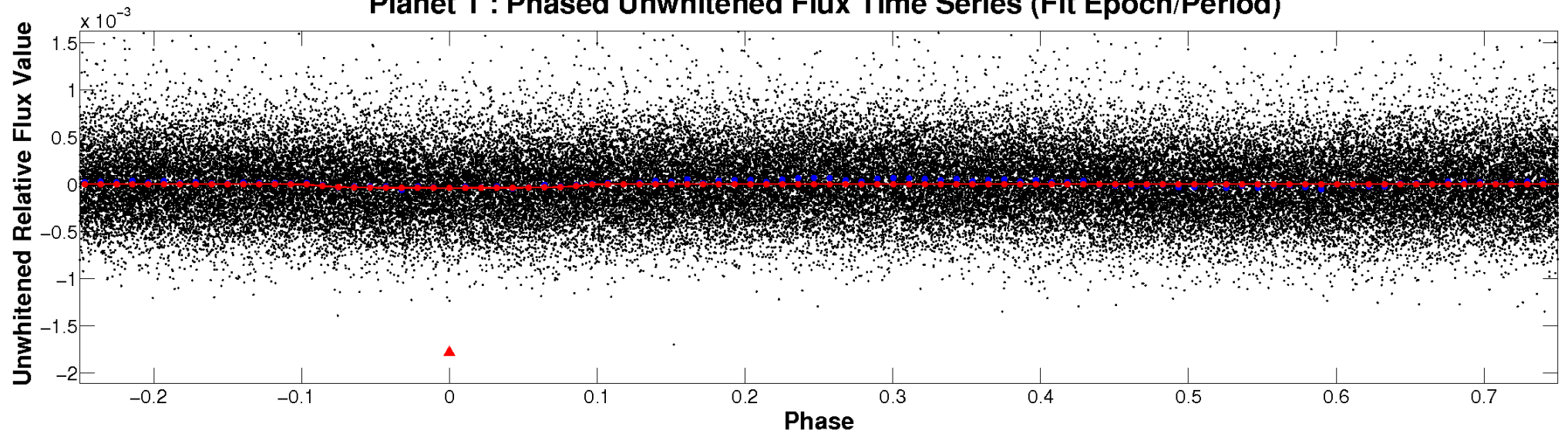
ALT Odd/Even

TCE 005264888-01

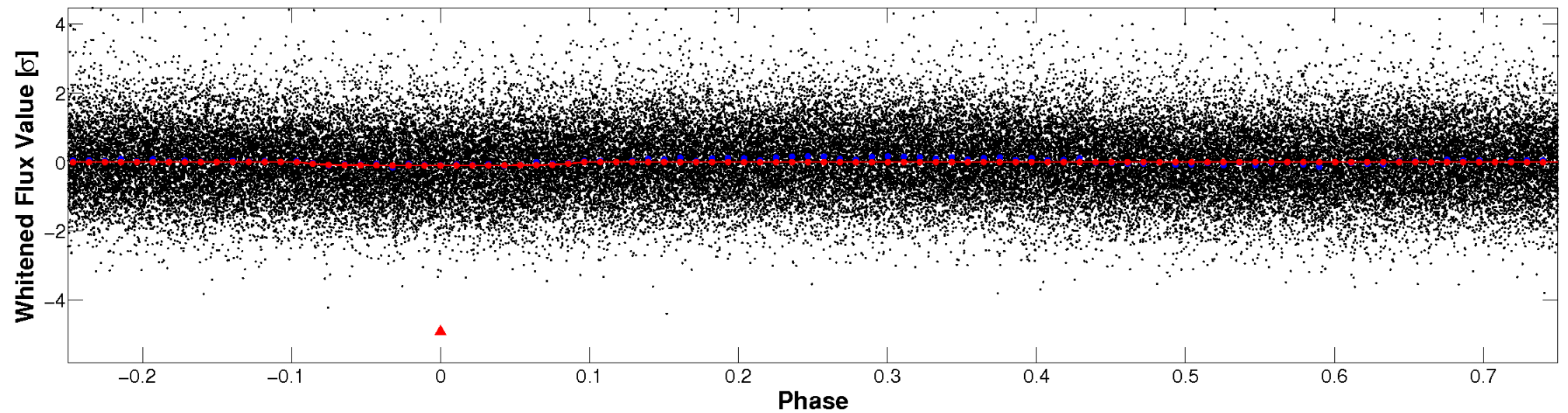


Non-Whitened Vs. Whitened Light Curve

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

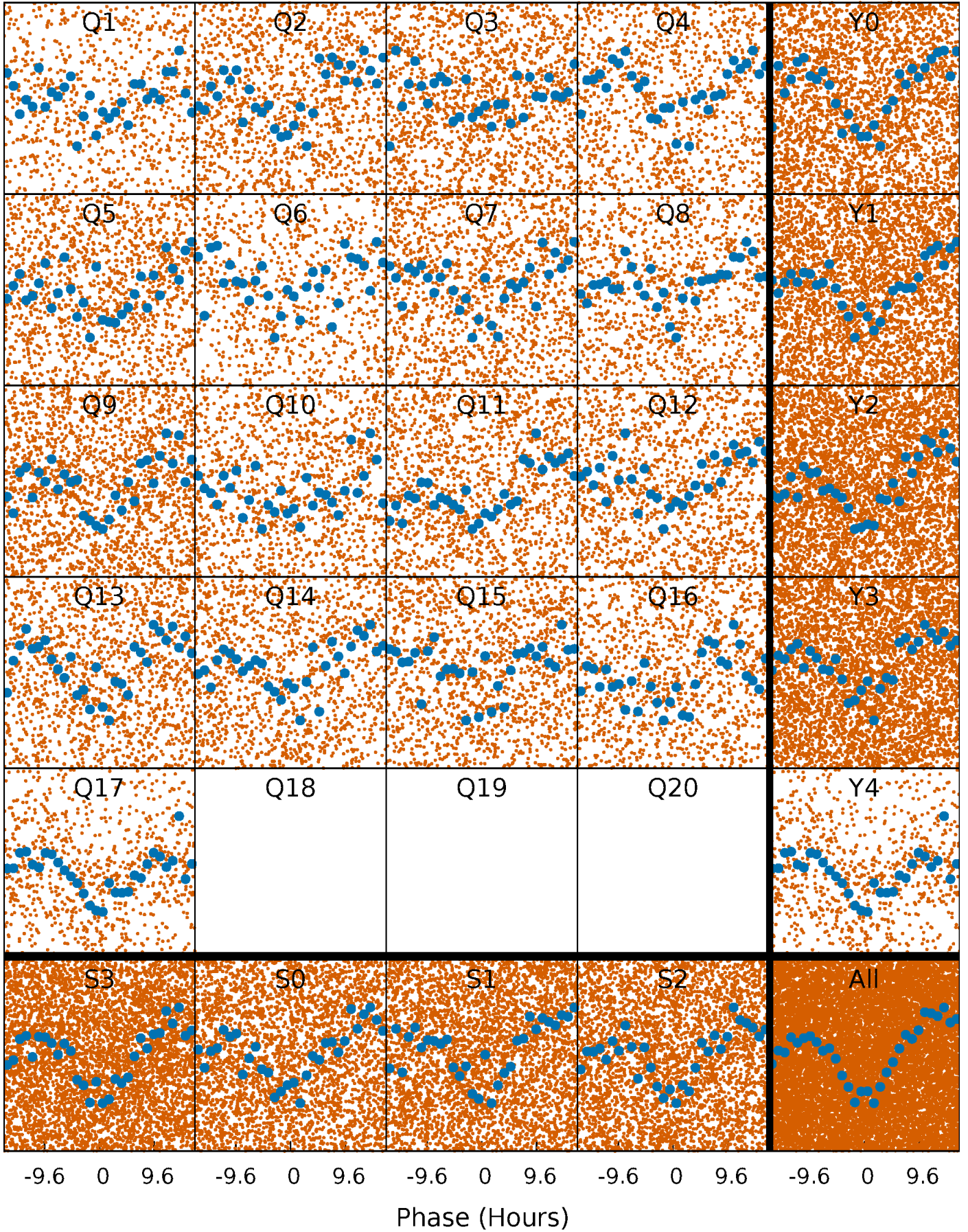


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



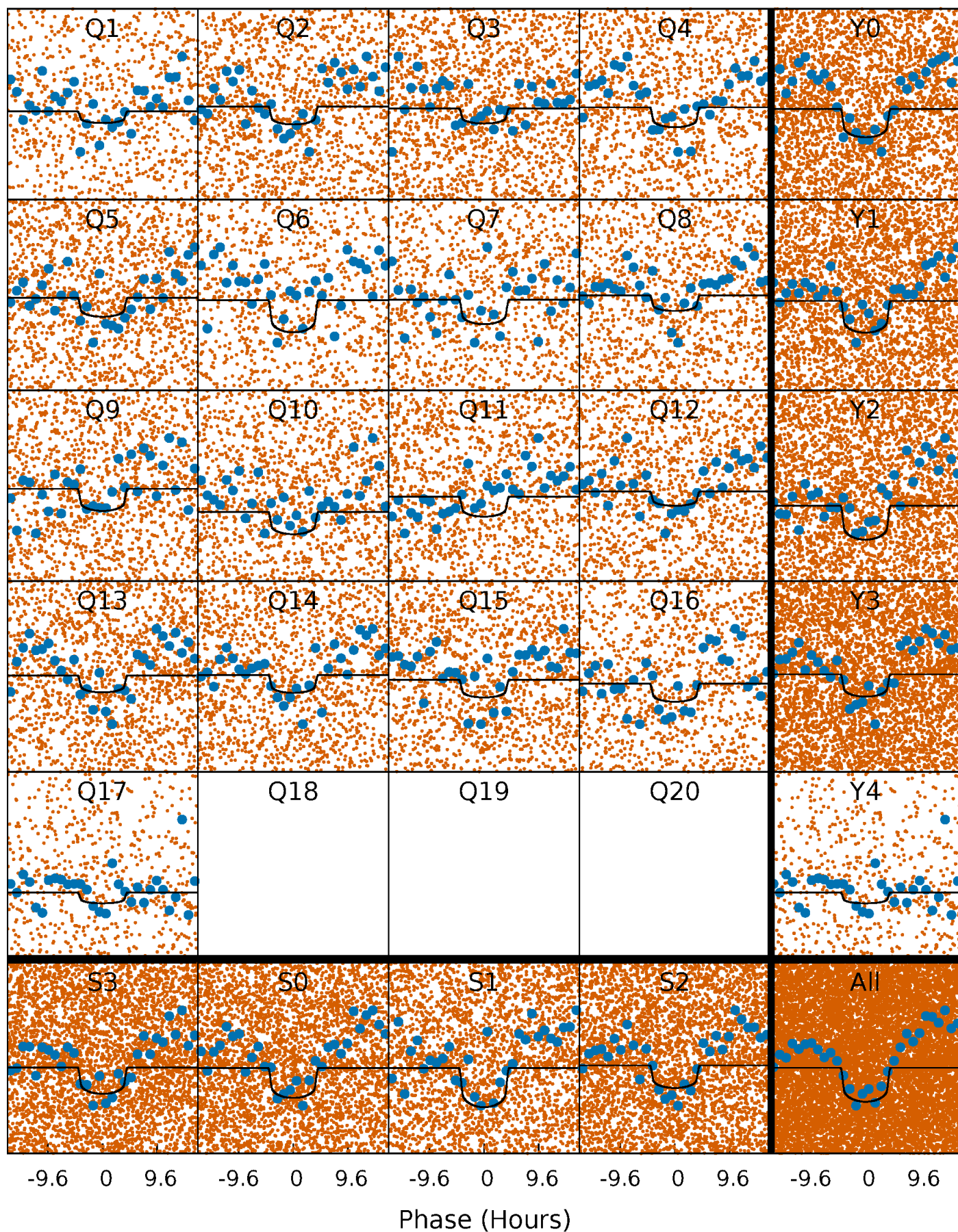
PDC Quarter-Phased Transit Curves

TCE 005264888-01 P= 1.905170 Days $T_0=131.684550$ (BKJD)



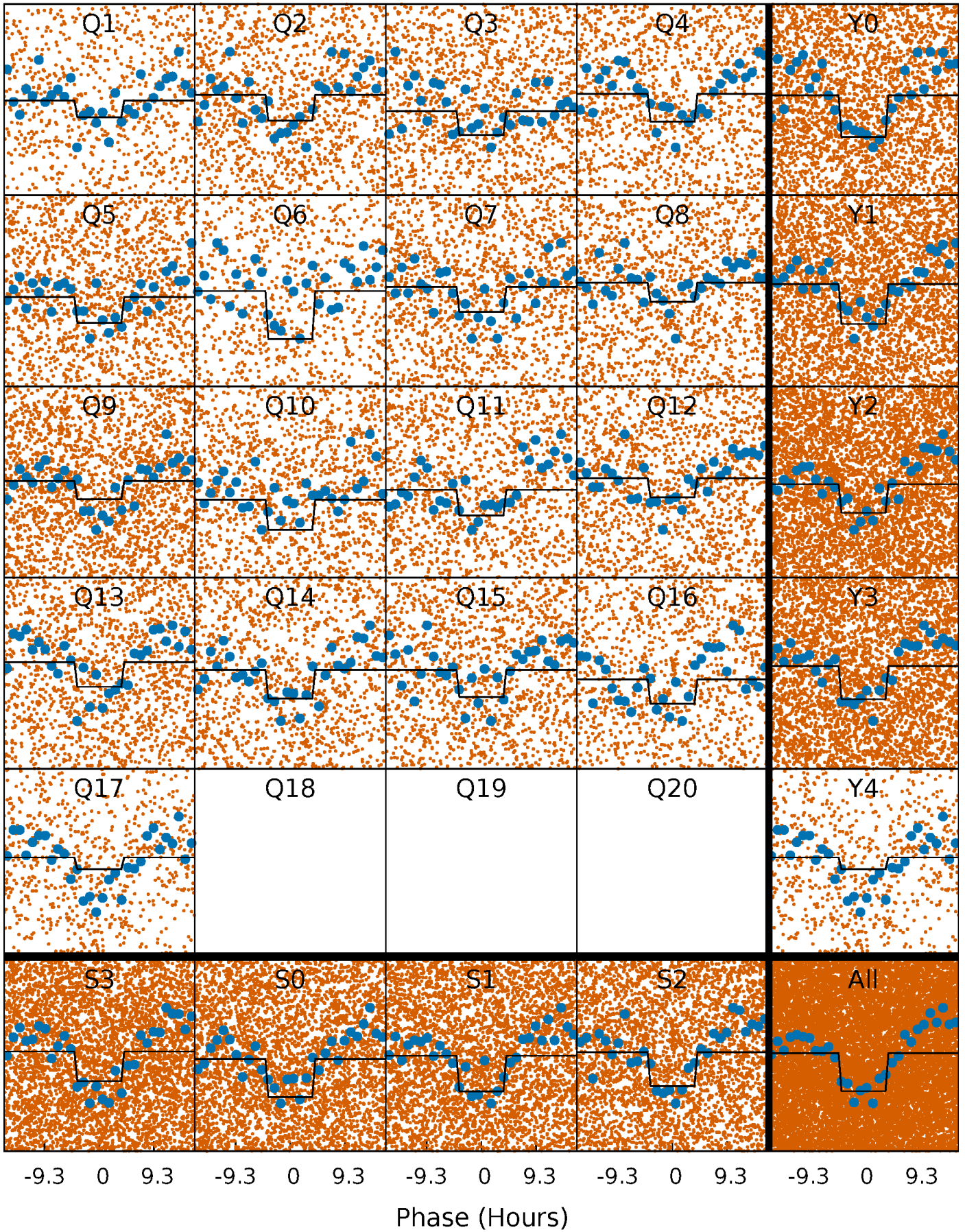
DV Quarter-Phased Transit Curves

TCE 005264888-01 P= 1.905170 Days $T_0=131.684550$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

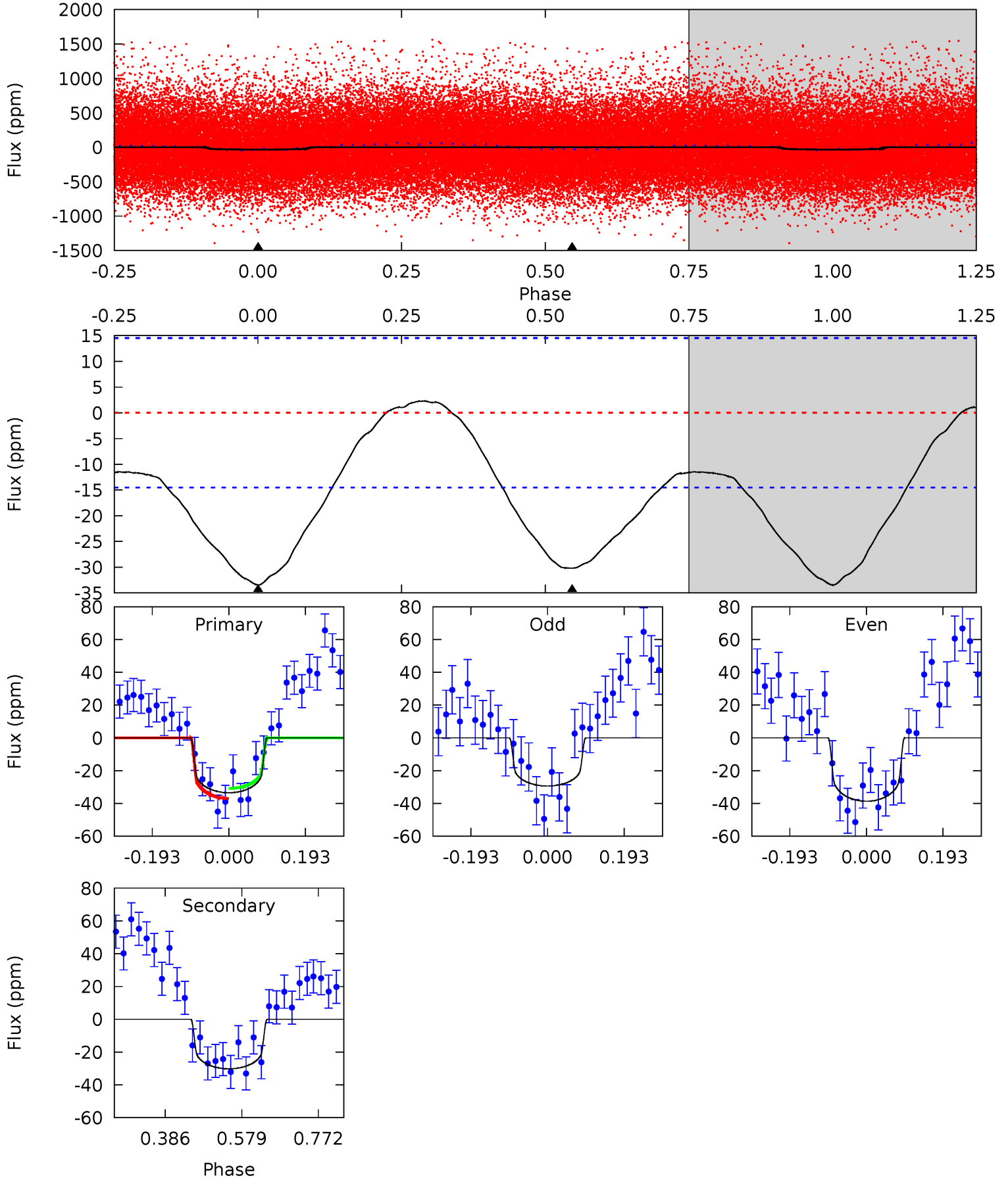
TCE 005264888-01 P= 1.905205 Days $T_0=131.678461$ (BKJD)



DV Model-Shift Uniqueness Test

005264888-01, P = 1.905170 Days, E = 129.779380 Days

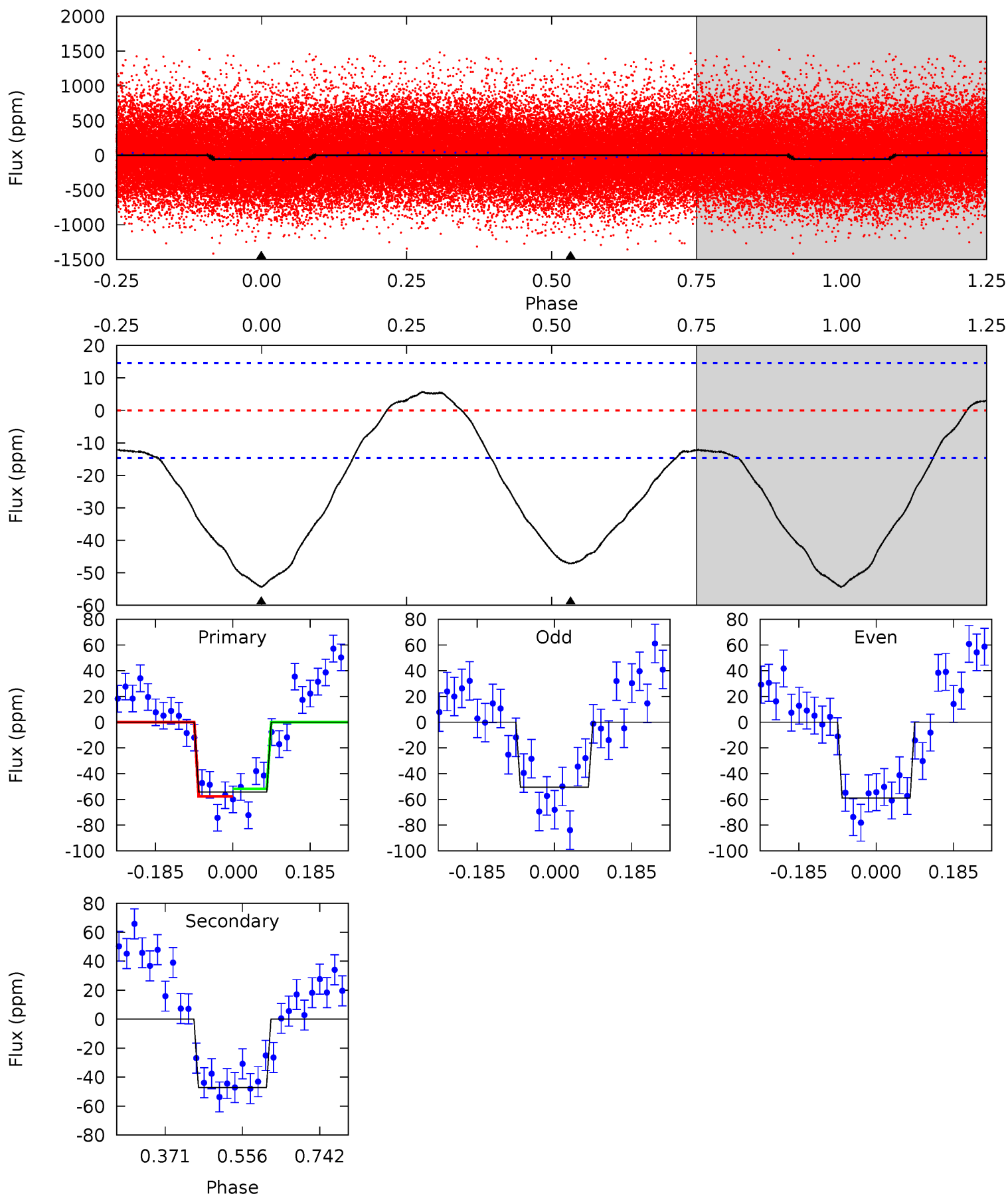
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
10.2	9.21	0	0	4.42	1.30	1.76	10.2	10.2	9.21	9.21	1.42	0.91	0.06	0.94



Alt Model-Shift Uniqueness Test

005264888-01, P = 1.905205 Days, E = 129.773256 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
16.5	14.3	0	0	4.43	1.32	2.34	16.5	16.5	14.3	14.3	1.29	1.02	0.09	0.88



Stellar Parameters For KIC 005264888

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6075^{+180}_{-198}	$4.486^{+0.054}_{-0.216}$	$-0.120^{+0.250}_{-0.300}$	$0.969^{+0.300}_{-0.100}$	$1.048^{+0.139}_{-0.139}$	$1.622^{+0.460}_{-0.895}$
	+3%/-3%	+1%/-5%	+208%/-250%	+31%/-10%	+13%/-13%	+28%/-55%
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 005264888-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-30 ± 3	$0.73^{+0.34}_{-0.32}$	2156^{+170}_{-112}	5545^{+1808}_{-834}	28^{+61}_{-15}
Alt.	-47 ± 3	$0.82^{+0.33}_{-0.32}$	2150^{+166}_{-98}	5820^{+1867}_{-787}	35^{+64}_{-17}

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 $A_{obs} \gg 1.0$

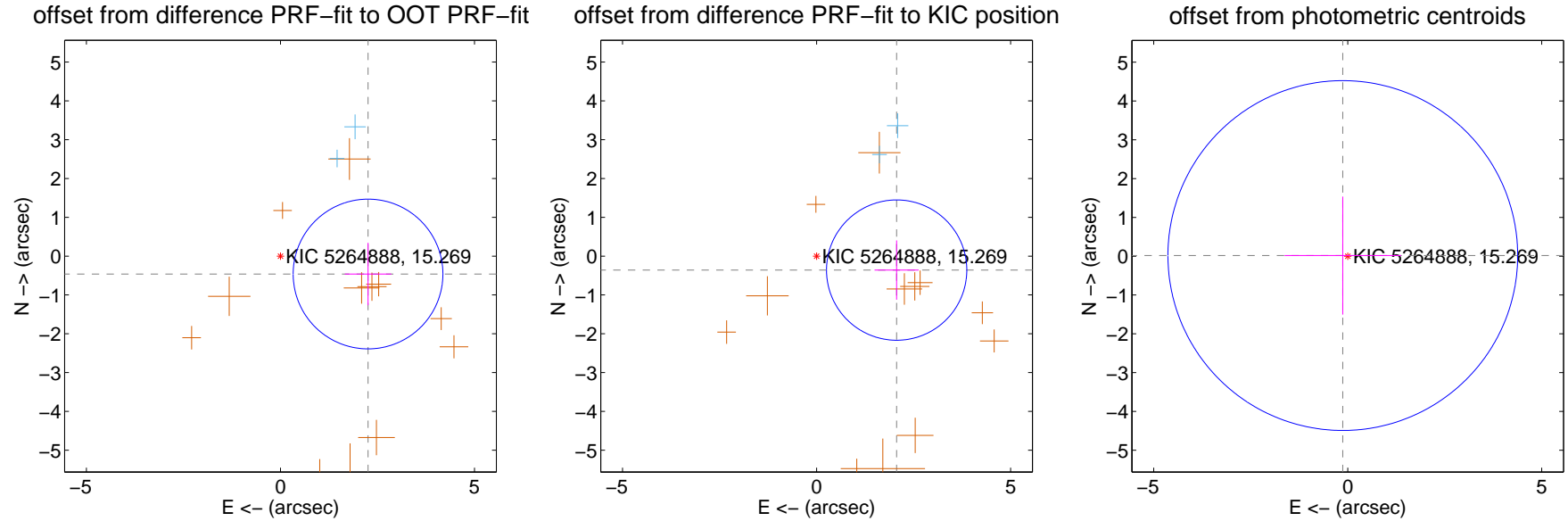
DV Centroid Data

Supplemental centroid analysis for 005264888-01. Kepler magnitude: 15.27. Transit SNR 9.20

There are 2 quarters with good PRF difference image offsets

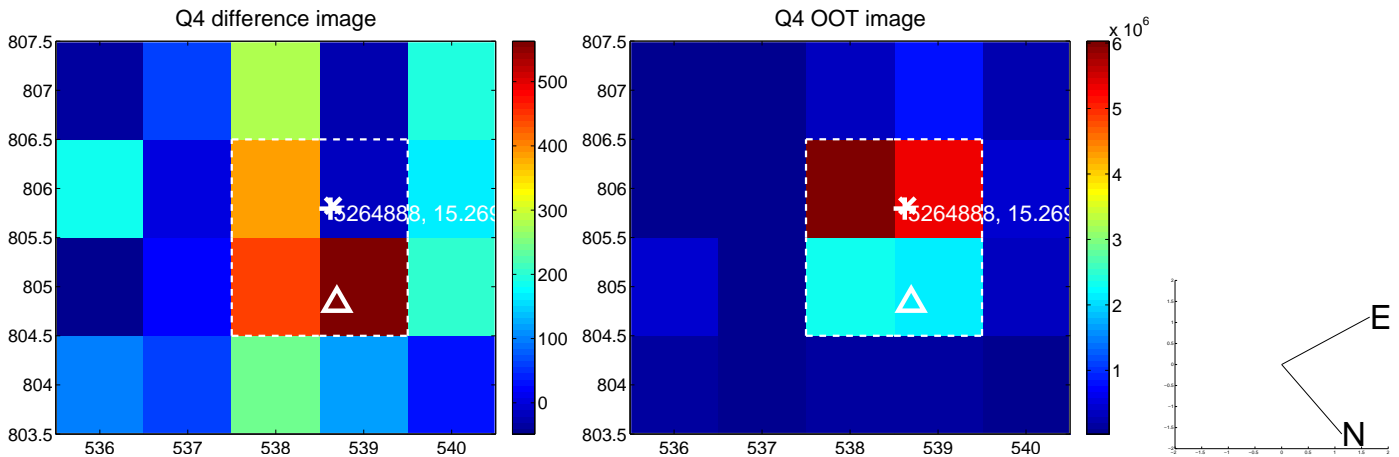
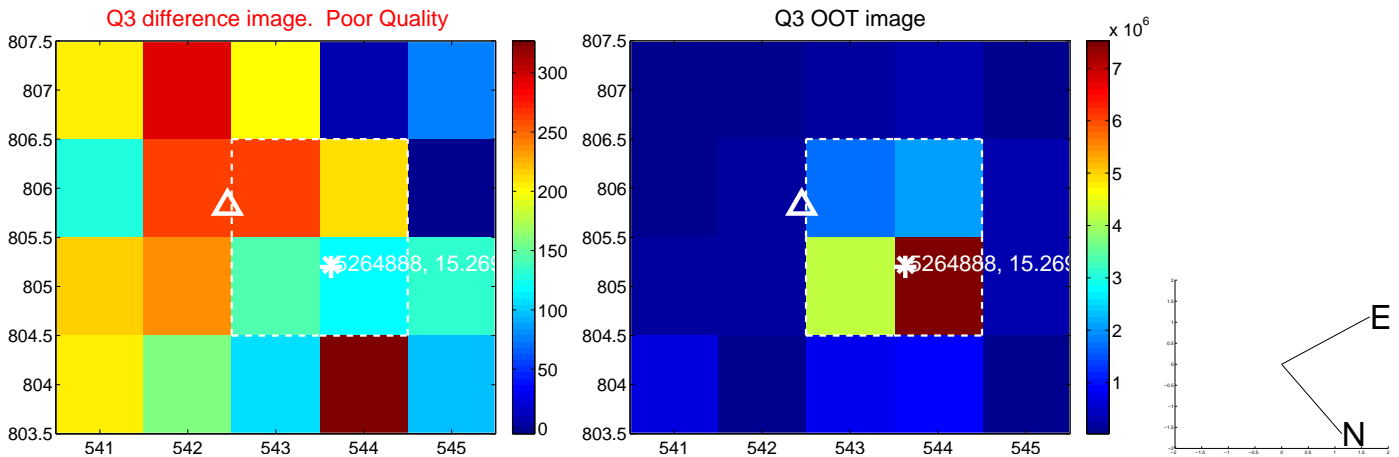
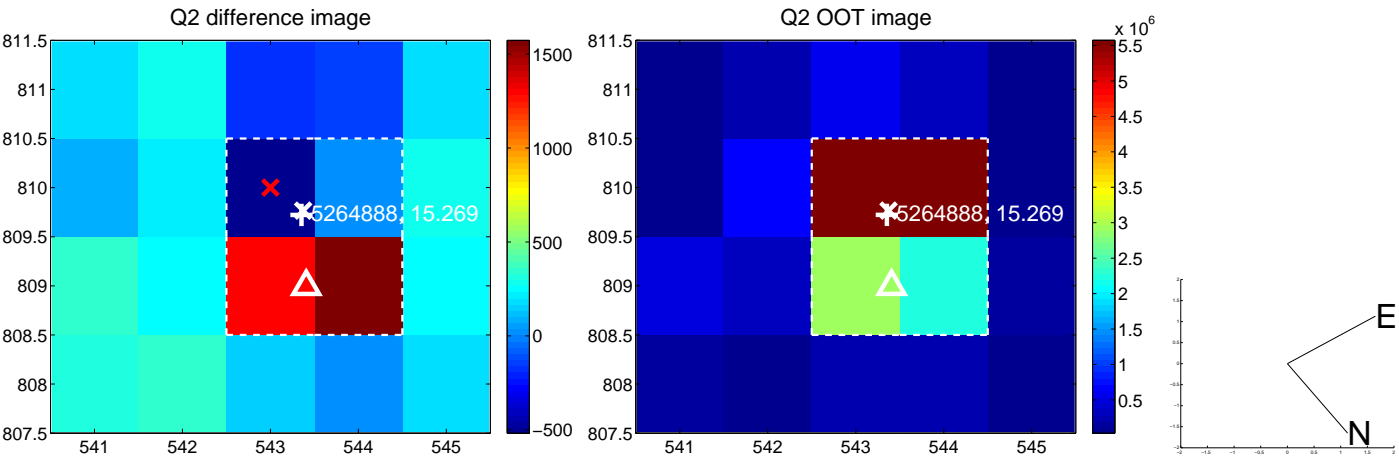
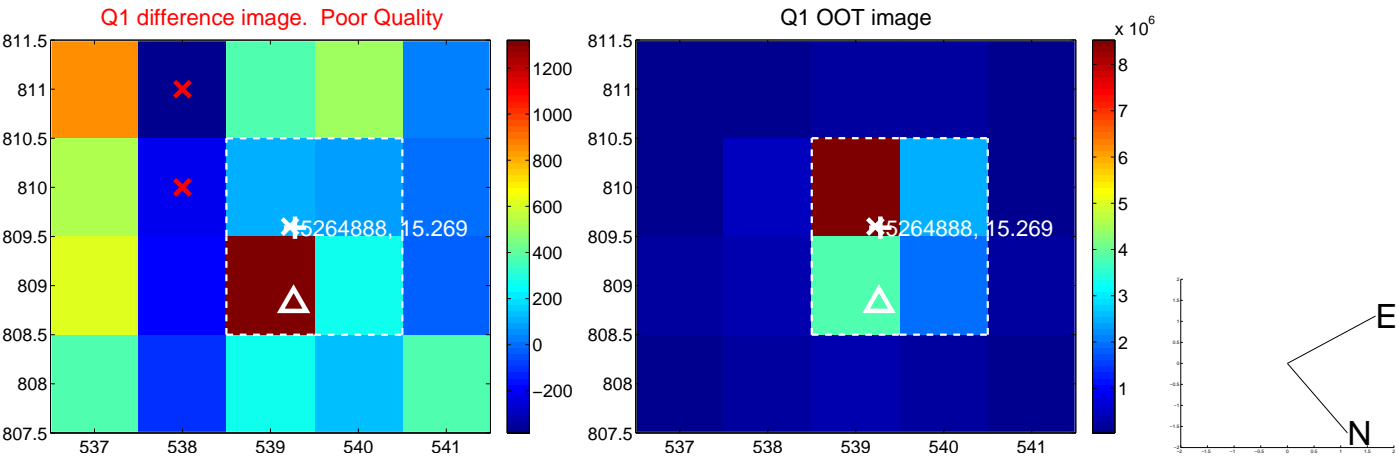
The direct PRF centroid is offset from the target star catalog position by about 0.15 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	2.303 ± 0.643	3.58	-2.256 ± 0.600	-0.461 ± 0.803
PRF-fit source offset from KIC position	2.094 ± 0.602	3.48	-2.063 ± 0.568	-0.360 ± 0.764
photometric centroid source offset	0.13 ± 1.50	0.08	0.13 ± 1.50	0.02 ± 1.52

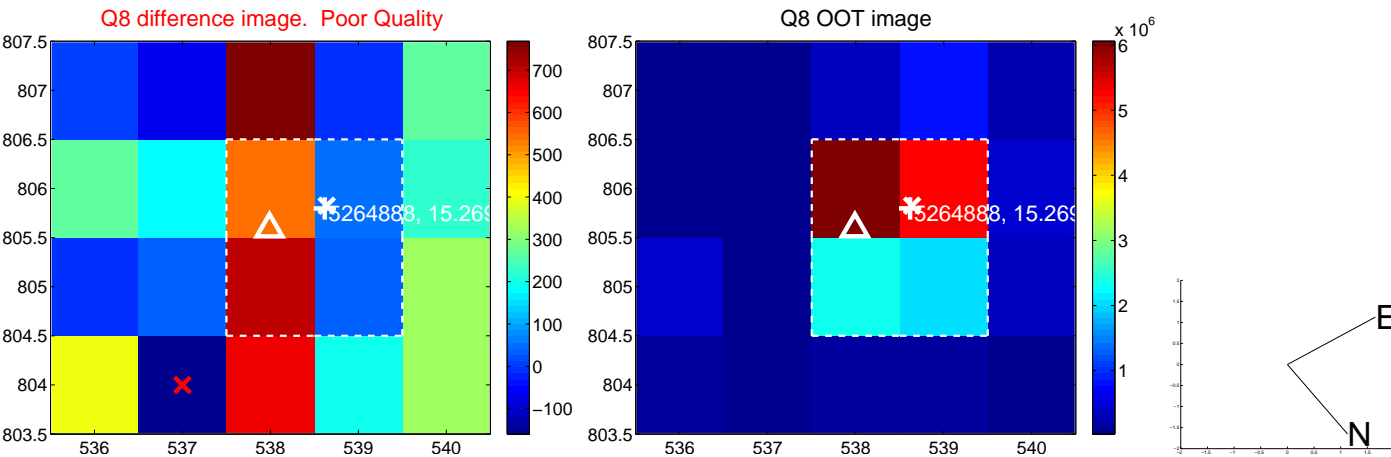
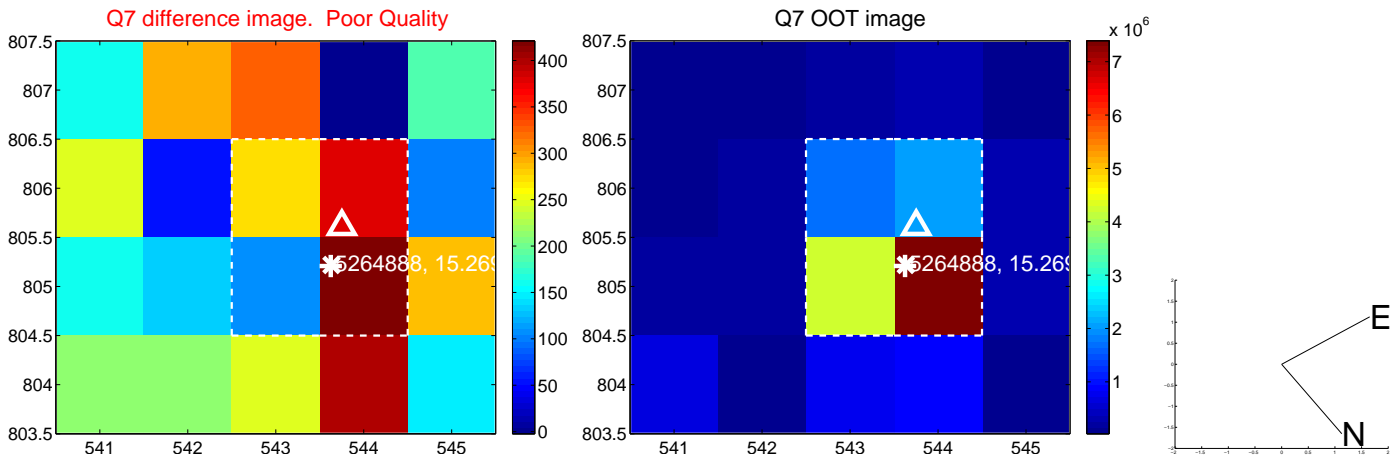
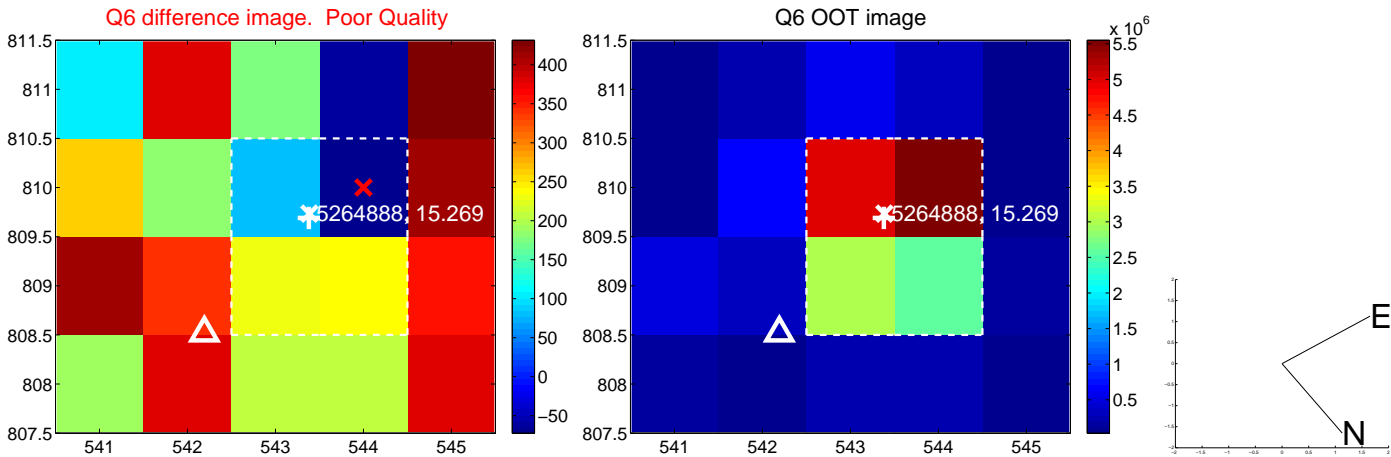
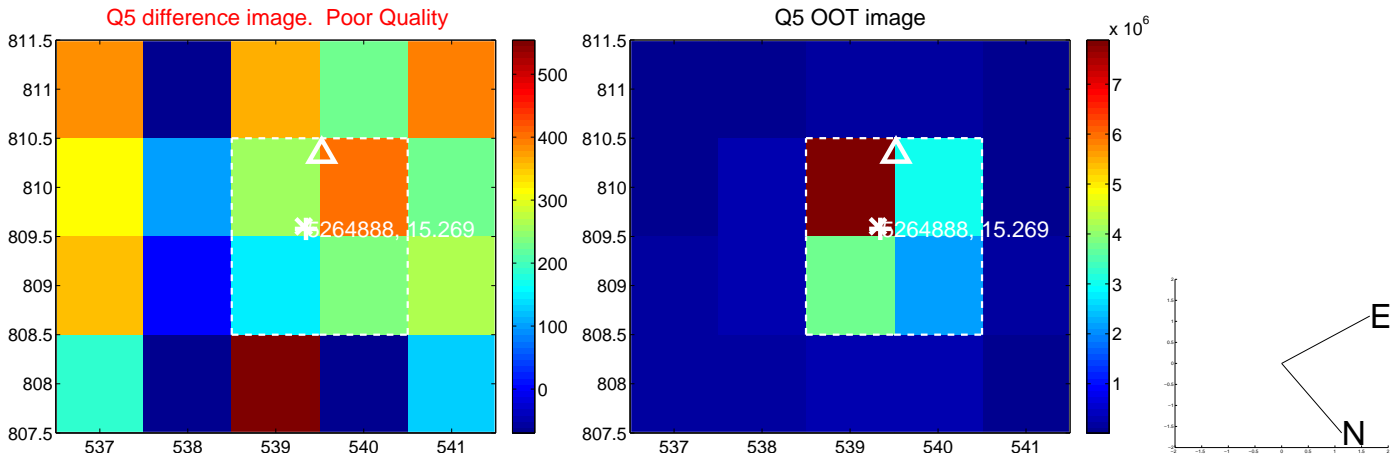


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

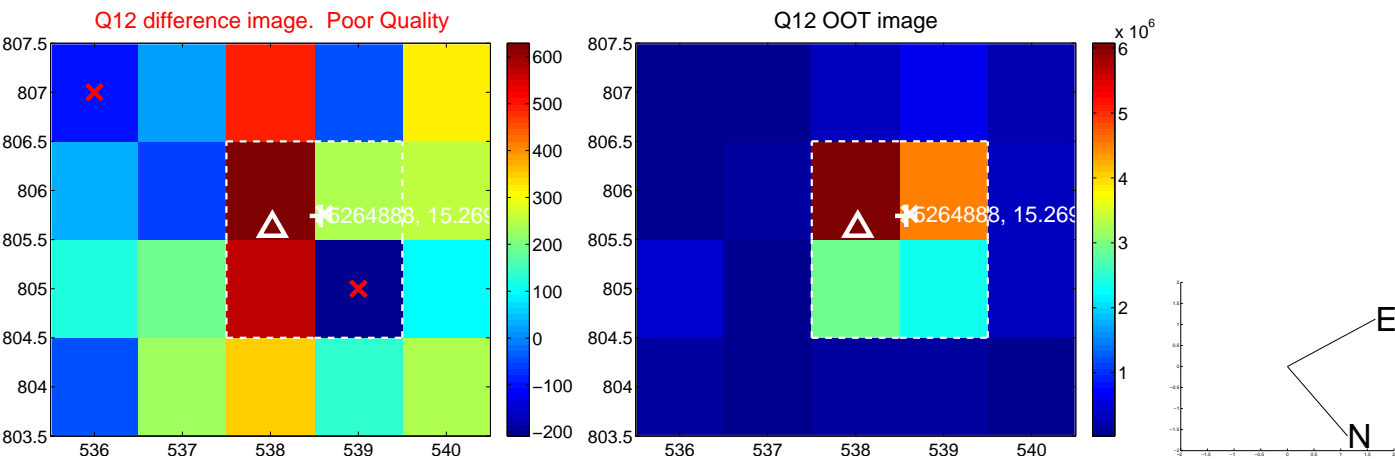
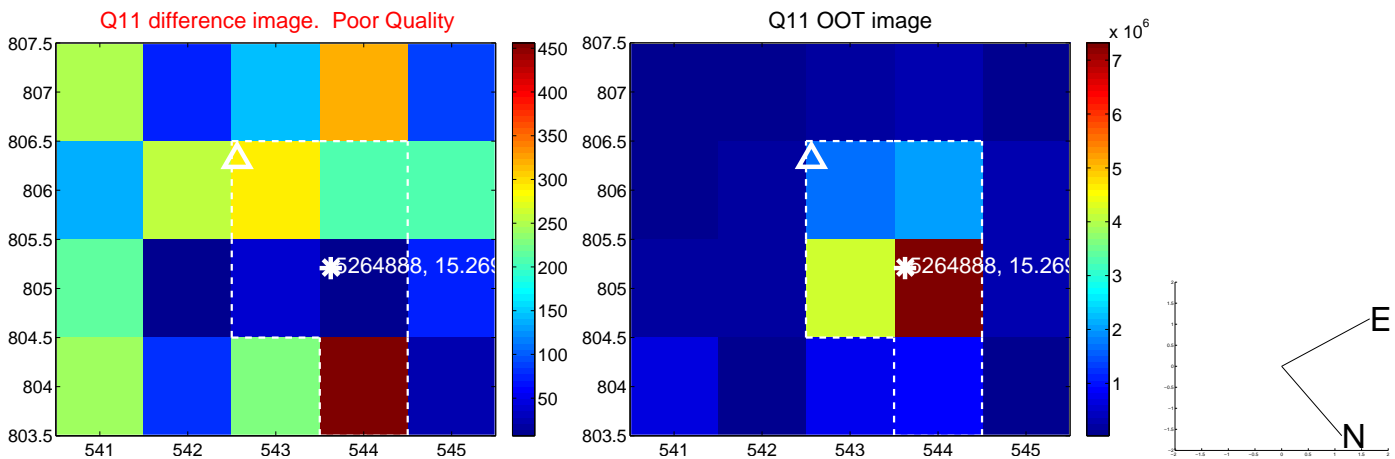
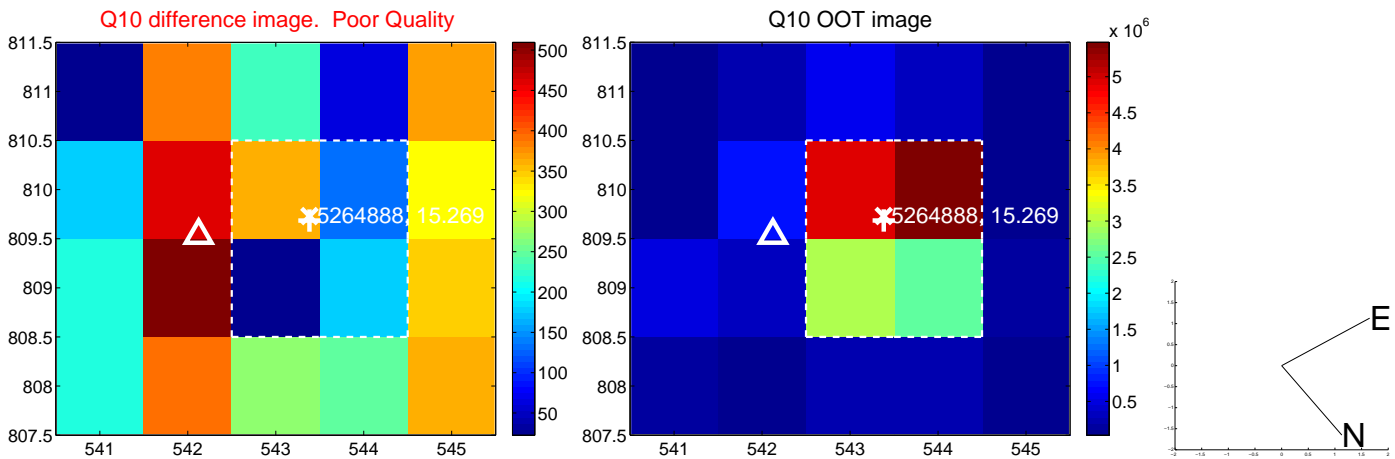
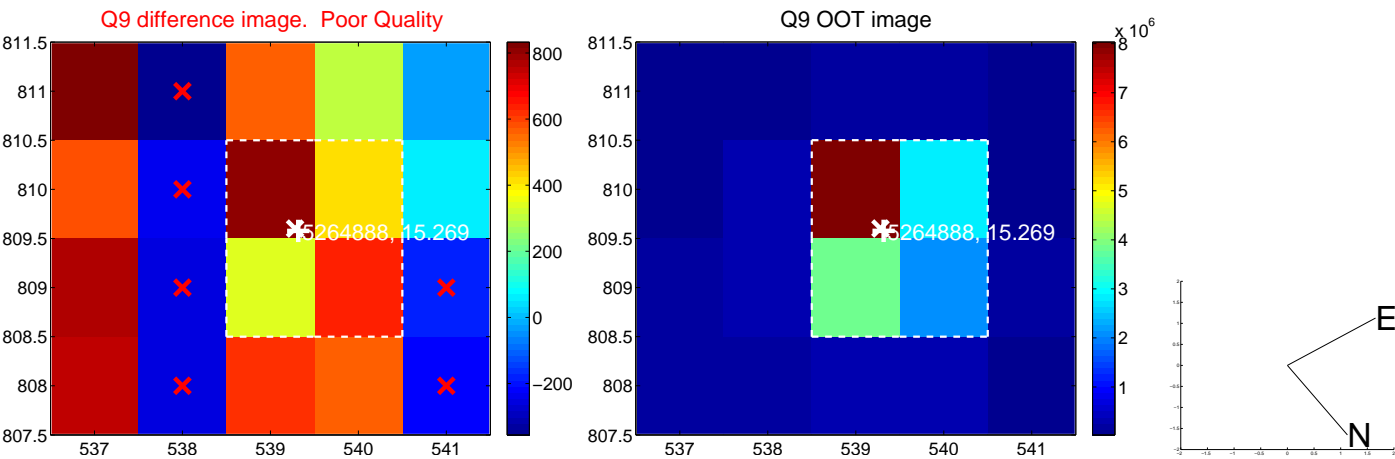
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



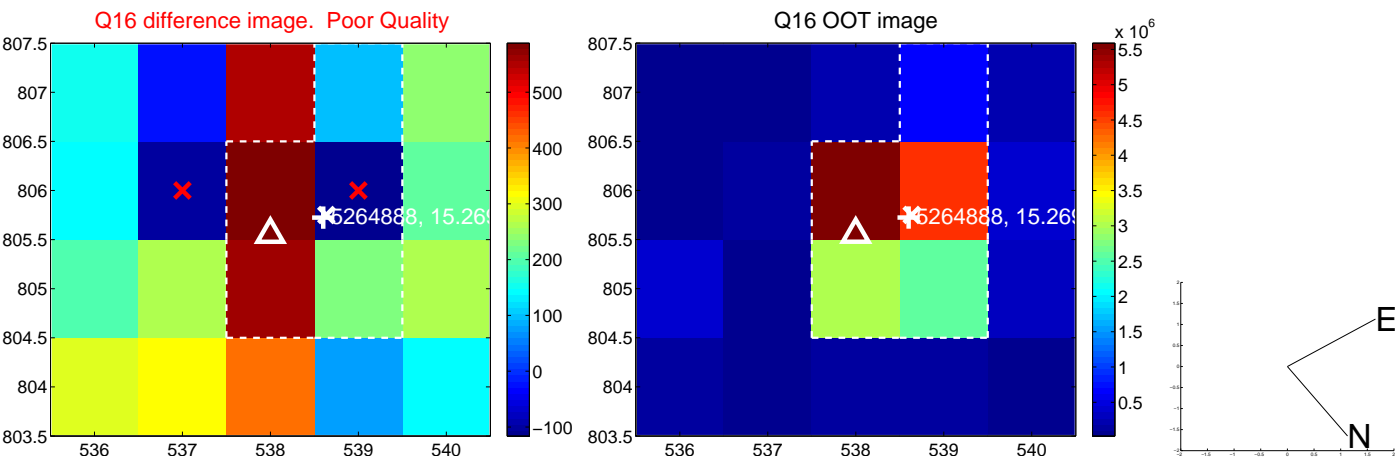
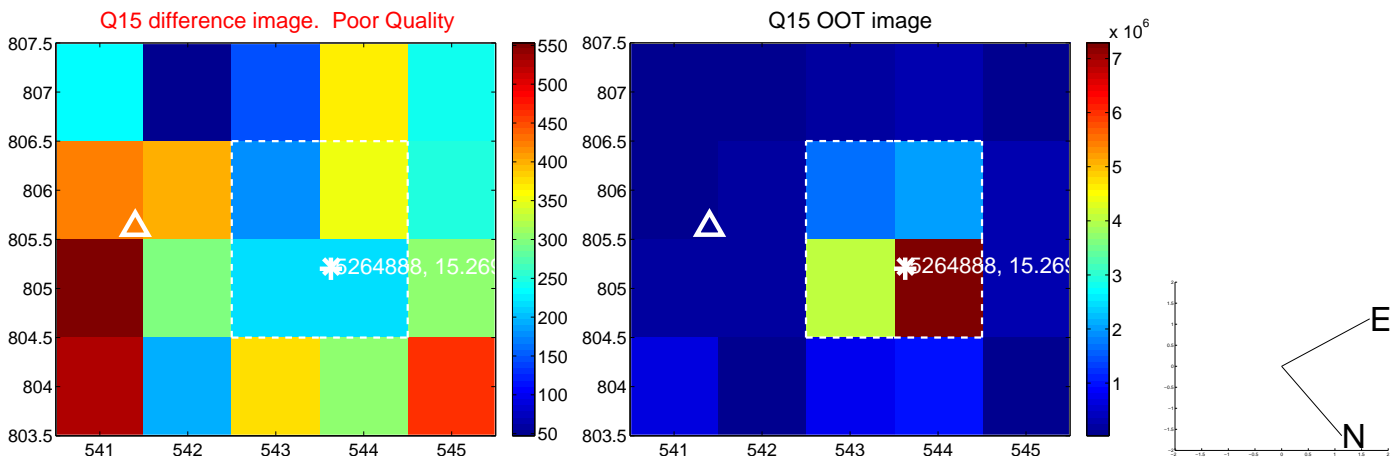
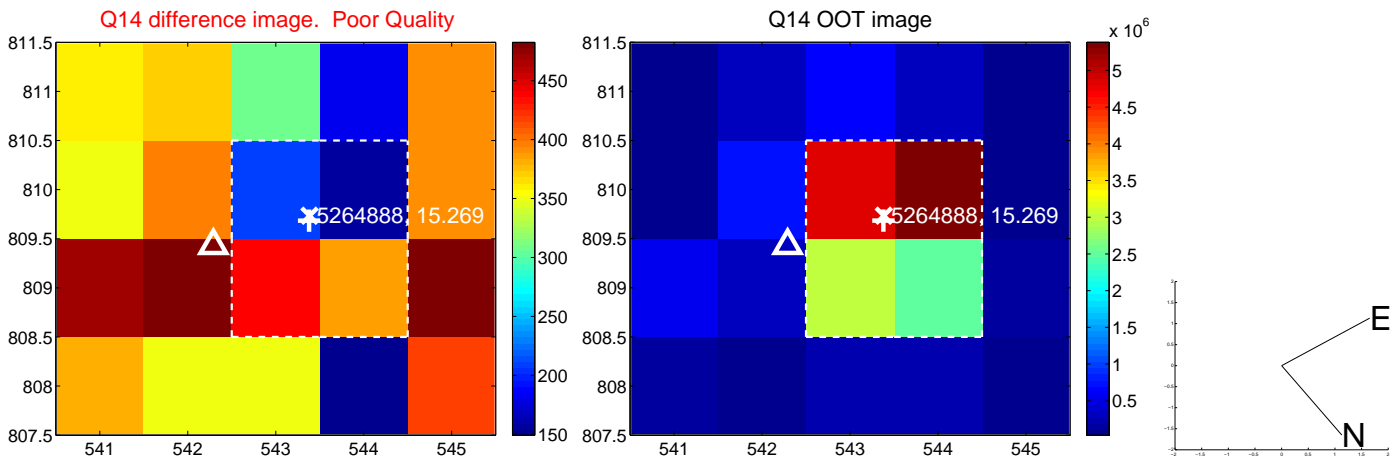
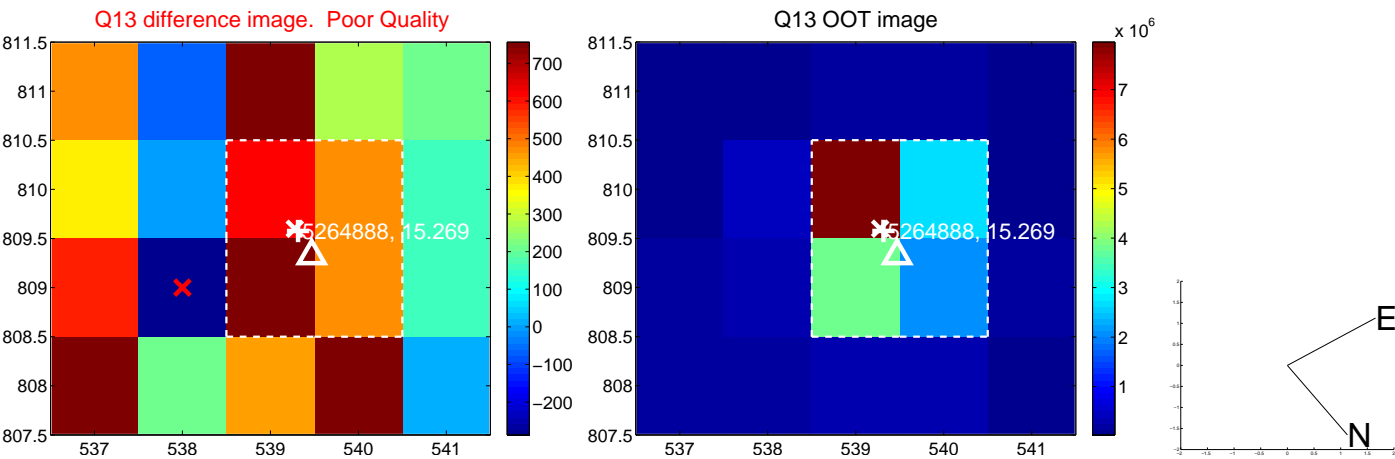
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



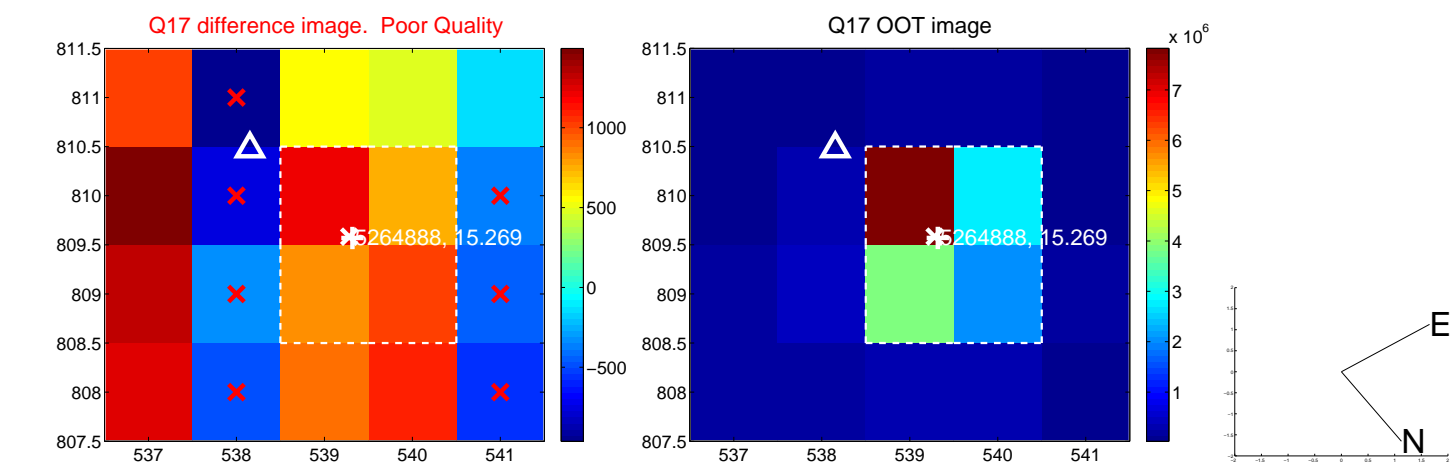
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



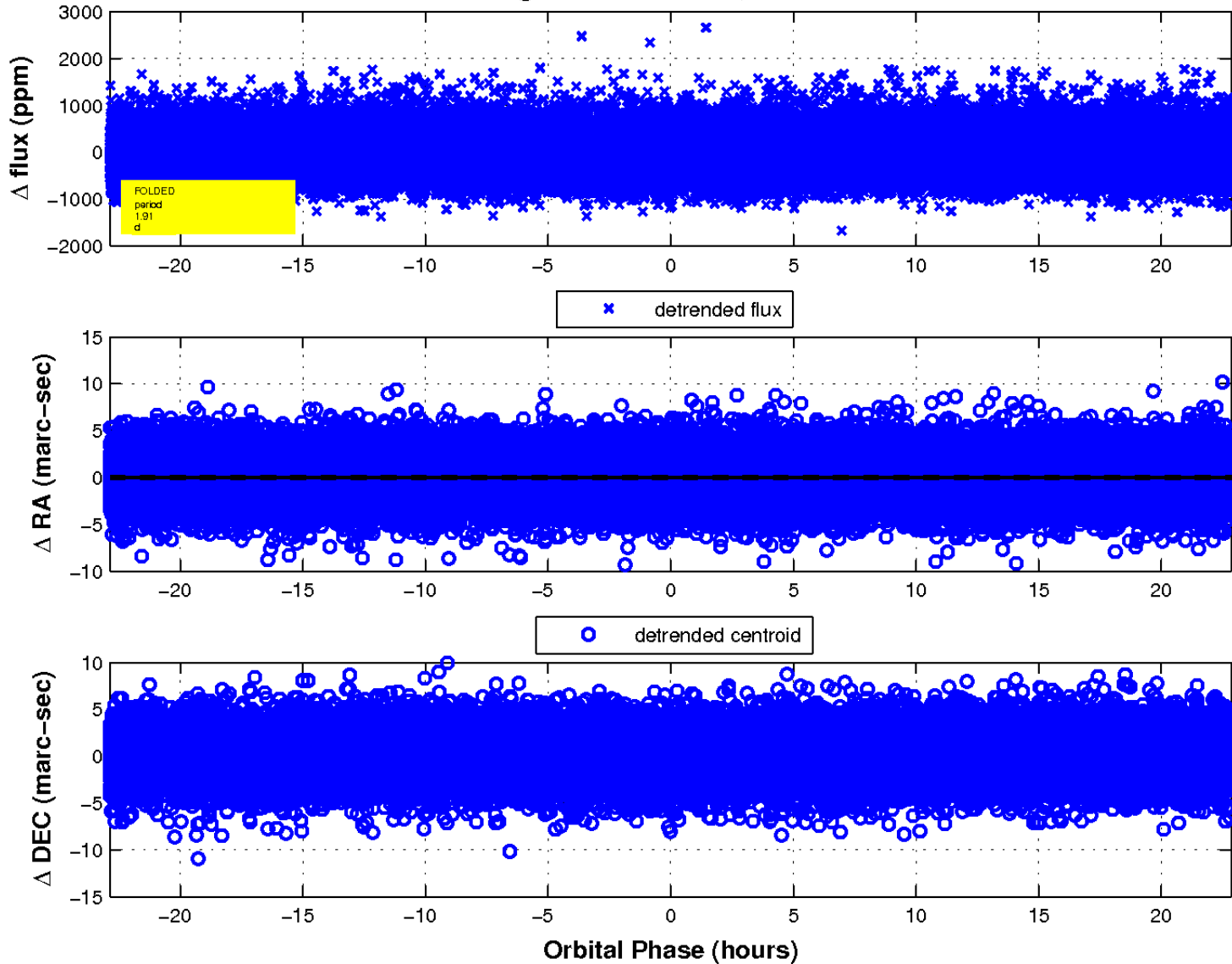
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white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



fluxWeightedCentroids, Planet 1 of 1



UKIRT Image

Declination

