

KIC 006936075

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})
006936075-01	OBS	No	0.527398	131.804744	1152.8	1.500	15.5	-1.0	0.92	5807	3.11	5180.09

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
006936075-01	OBS	FP	0.00	1	0	0	1	LPP_DV—LPP_ALT—CENT_NOFITS—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.

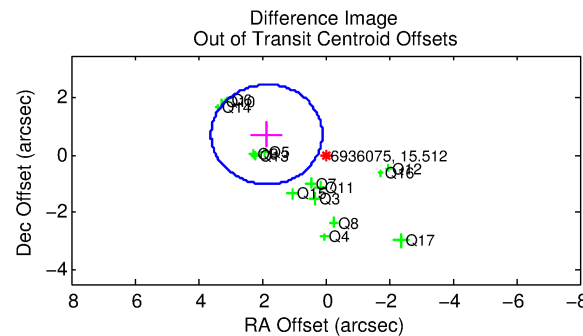
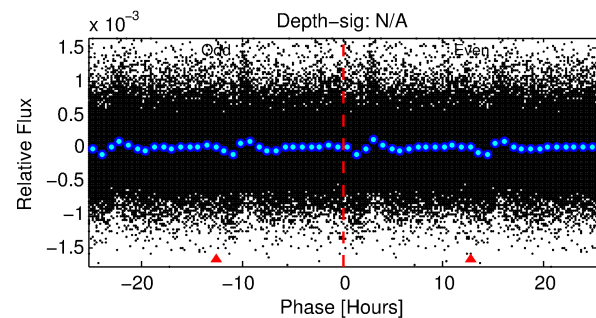
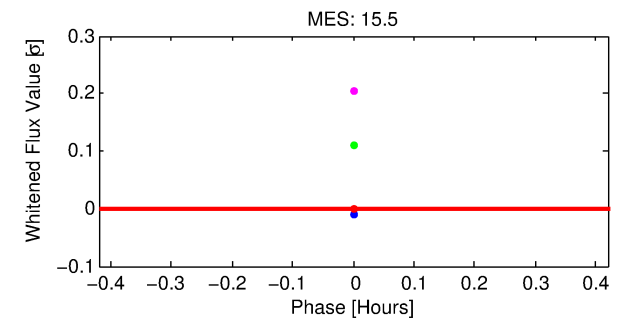
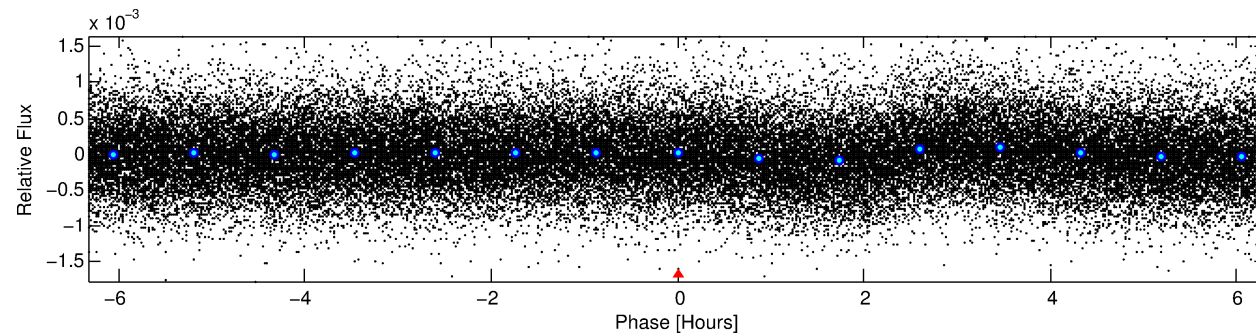
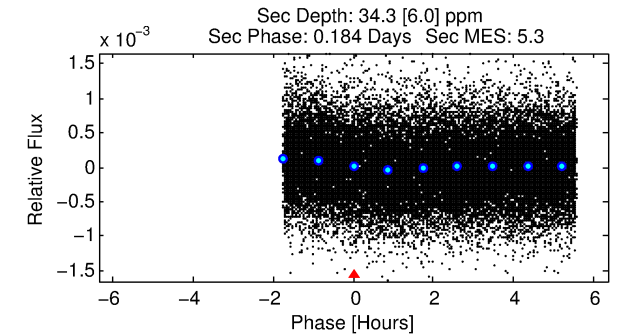
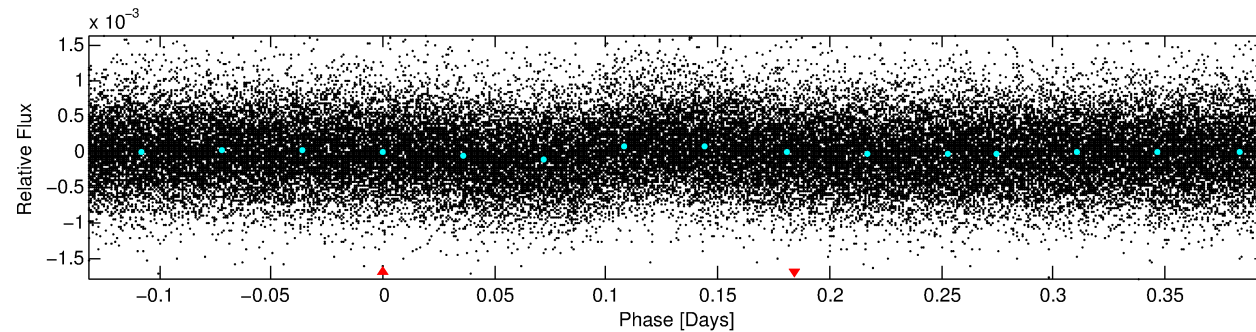
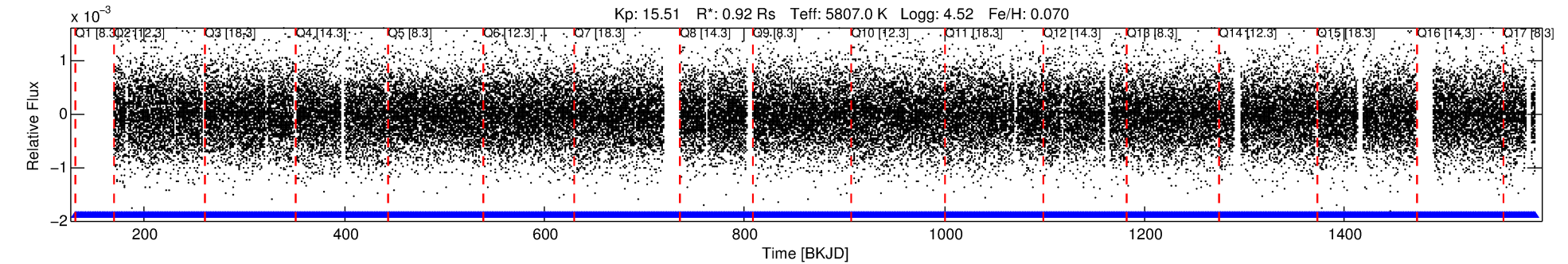
Ephemeris Match Information For 006936075-01

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
006936075-01	6936075	FN-Lyr-pri	6936115	1:1	57.3	-1	15	12.88	15.52	610.16	Direct-PRF	0	0.19	3.68

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: 6936075 Candidate: 1 of 1 Period: 0.527 d



TPS TCE Results:

Period = 0.52740 d
Epoch = 131.8047 BKJD

DV fit results are unavailable

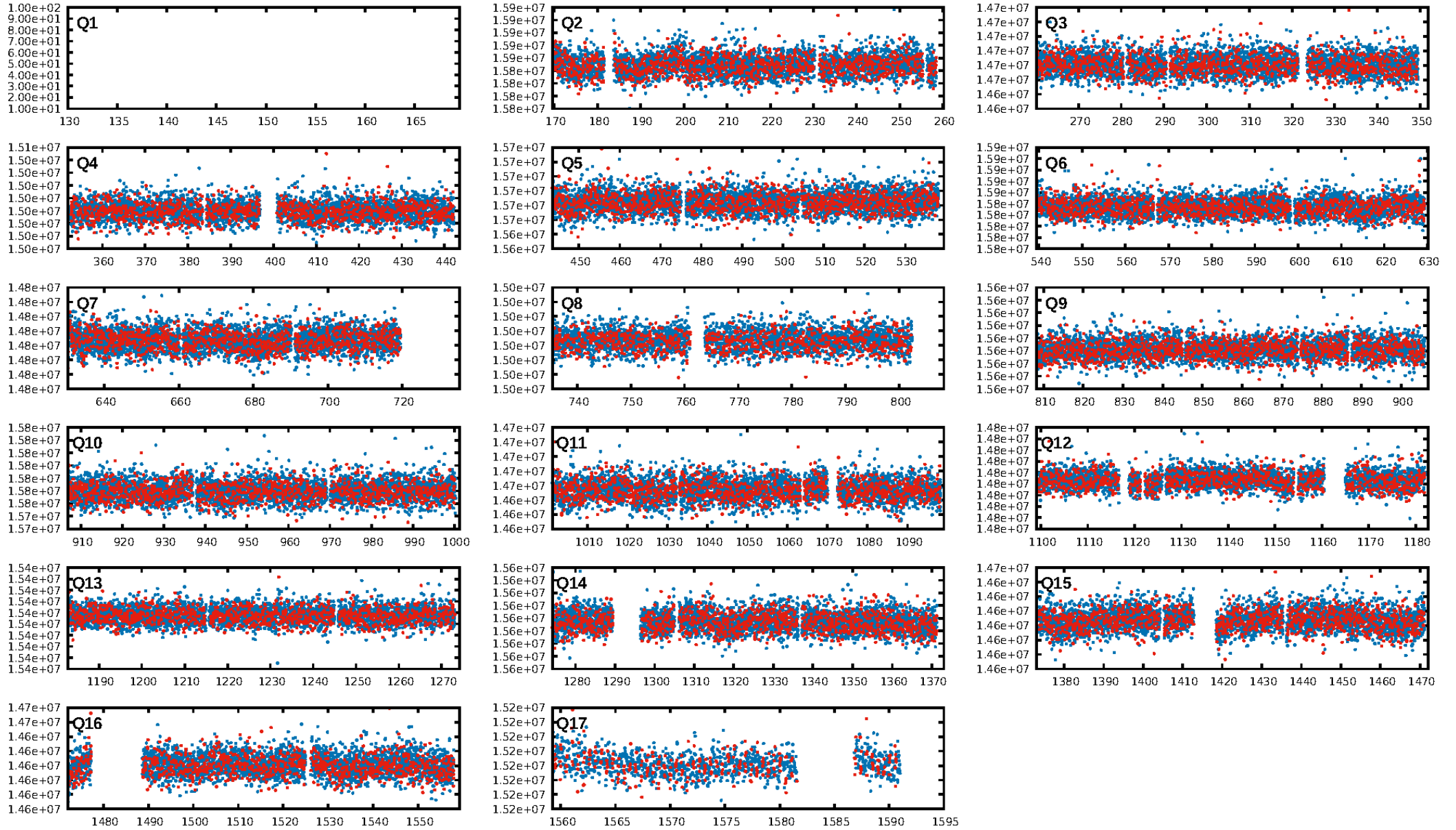
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 1.60e-50
RollingBand-fgt: 1.00 [2437/2437]
GhostDiagnostic-chr: 5.32
Centroid-sig: 0.0%
Centroid-so: 2.542 arcsec [5.66 σ]
OotOffset-rm: 1.987 arcsec [3.41 σ]
KicOffset-rm: 1.907 arcsec [3.02 σ]
OotOffset-st: 3/4/4/4 [15]
KicOffset-st: 3/4/4/4 [15]
DiffImageQuality-fgm: 0.40 [6/15]
DiffImageOverlap-fno: 1.00 [16/16]

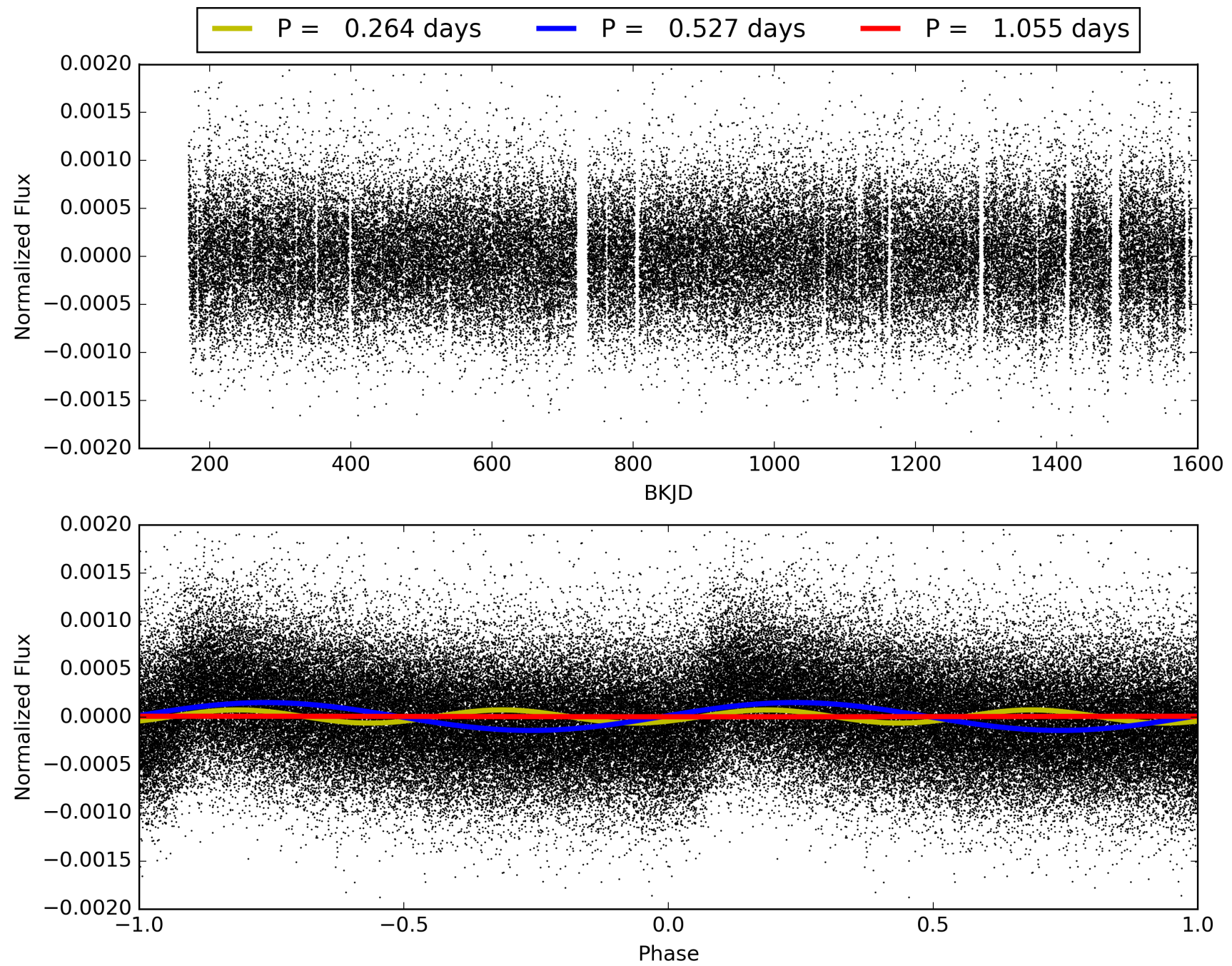
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 31-Jan-2016 21:18:05 Z

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

TCE 006936075-01, PDC Light Curves

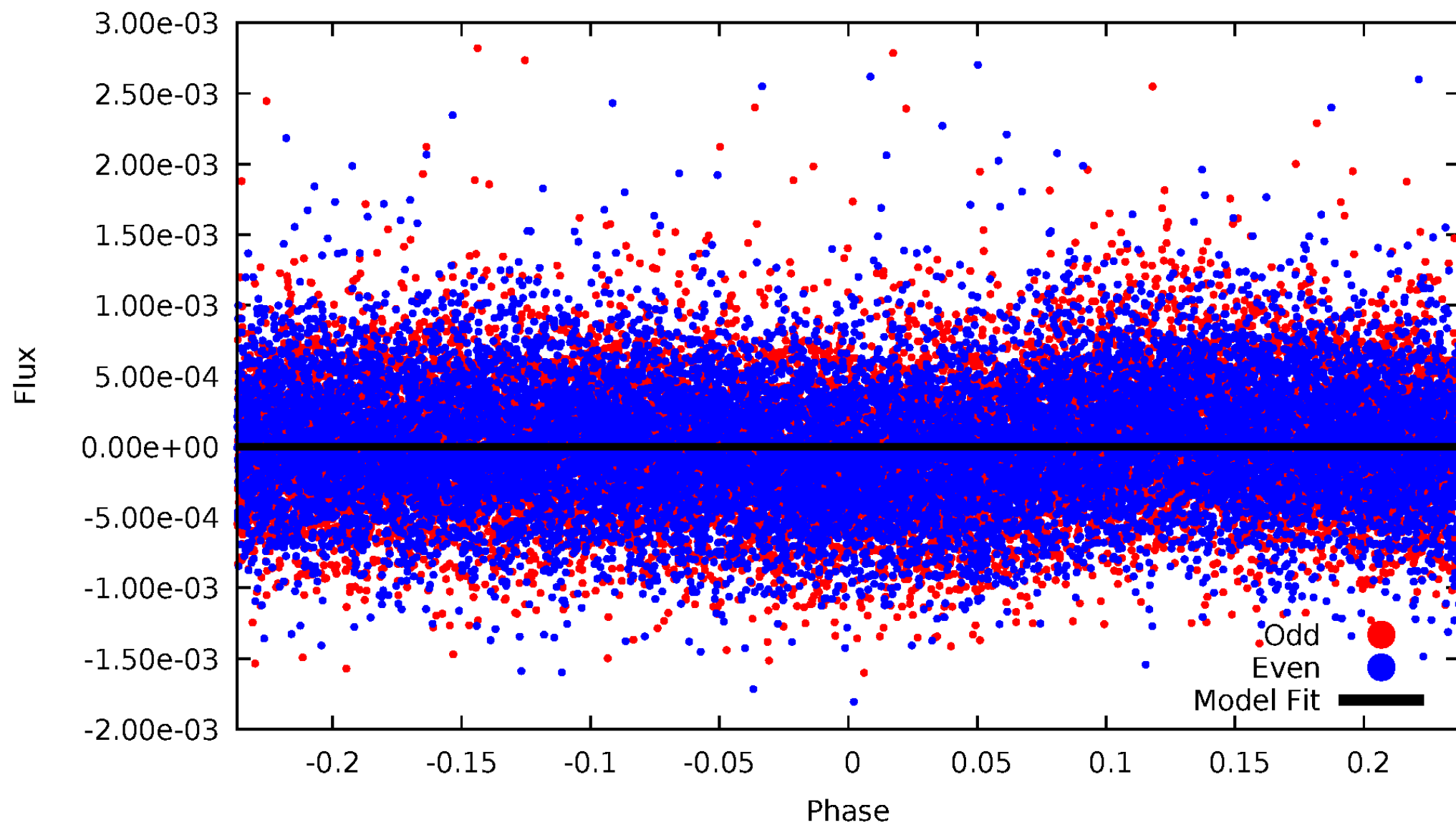


TCE 006936075-01



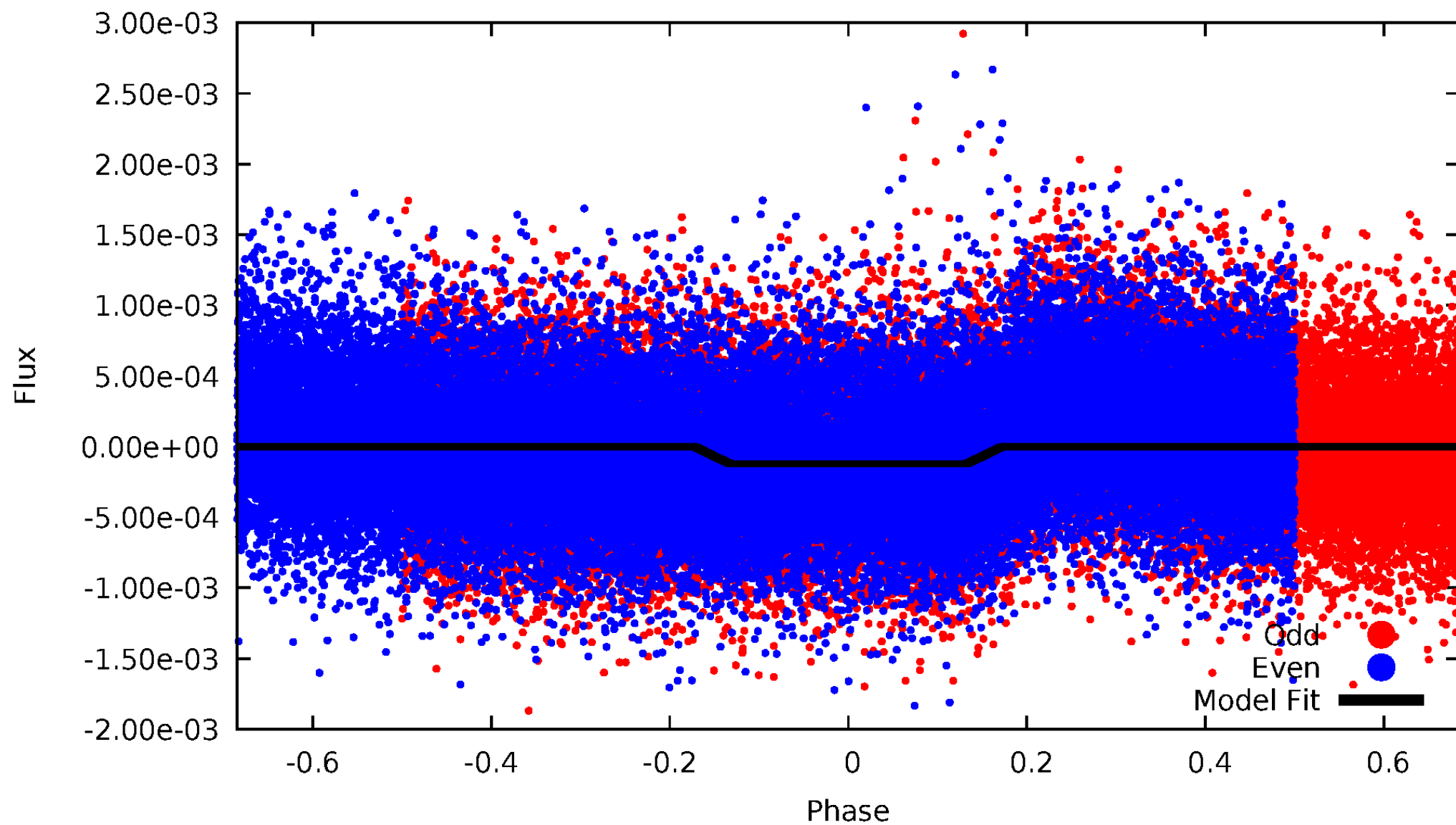
DV Odd/Even

TCE 006936075-01

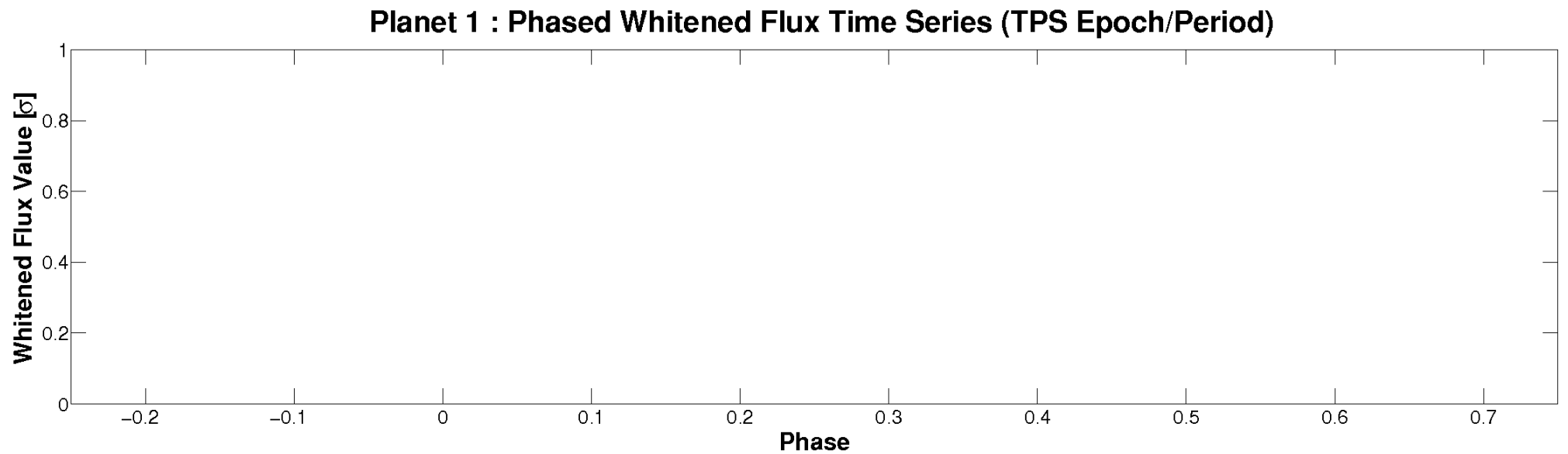
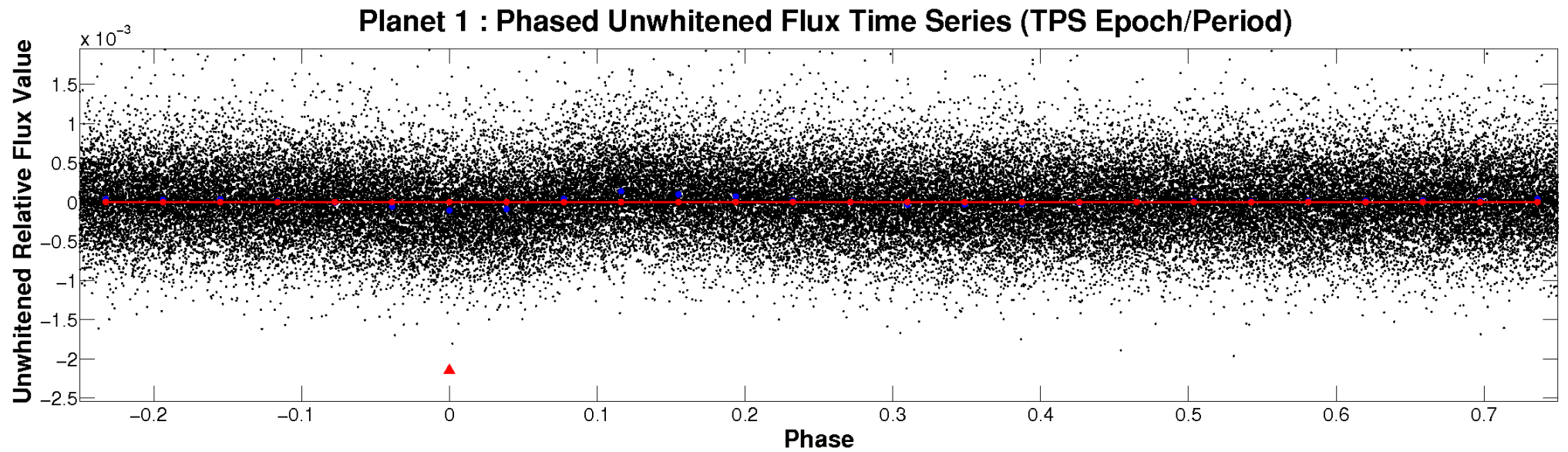


ALT Odd/Even

TCE 006936075-01

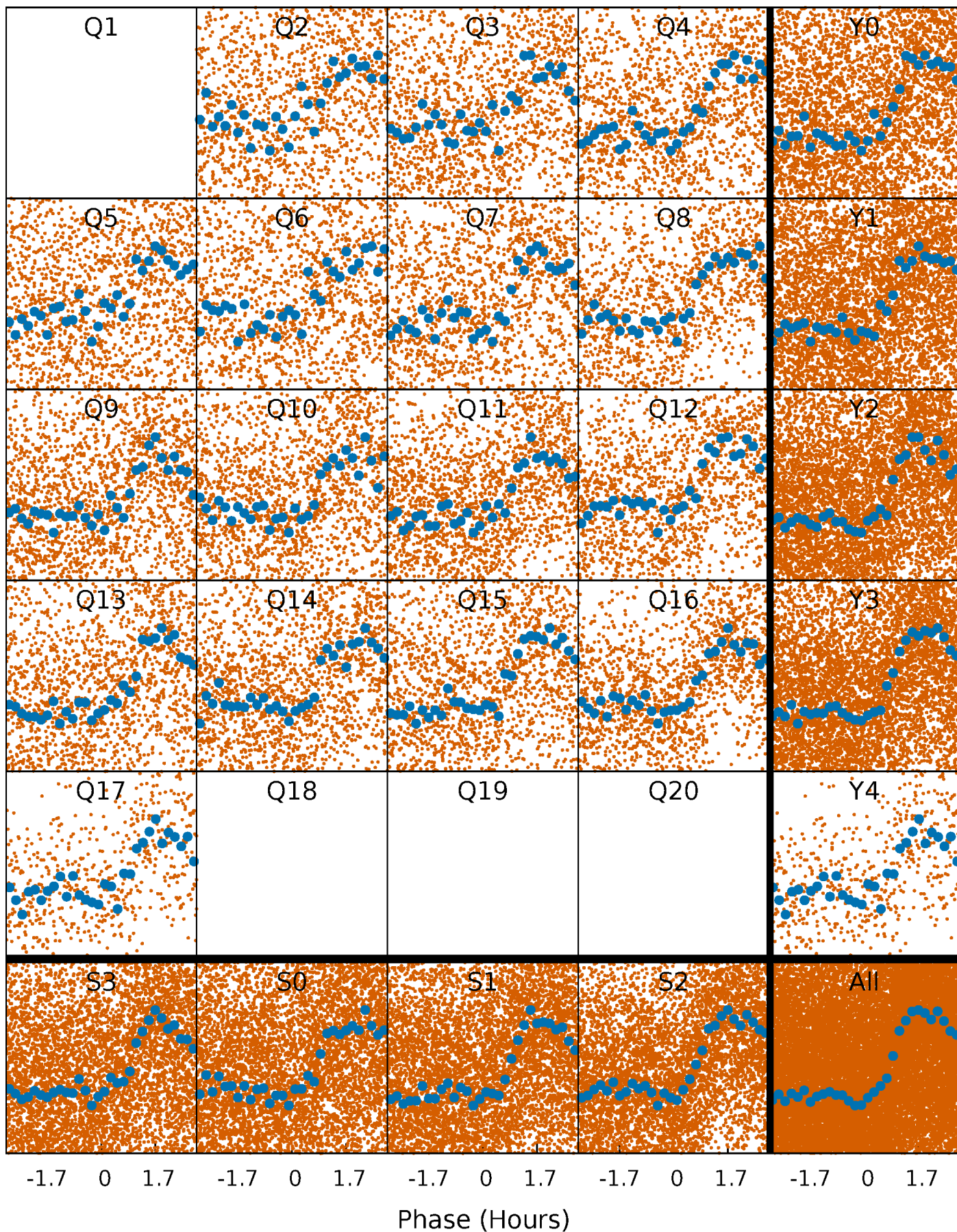


Non-Whitened Vs. Whitened Light Curve



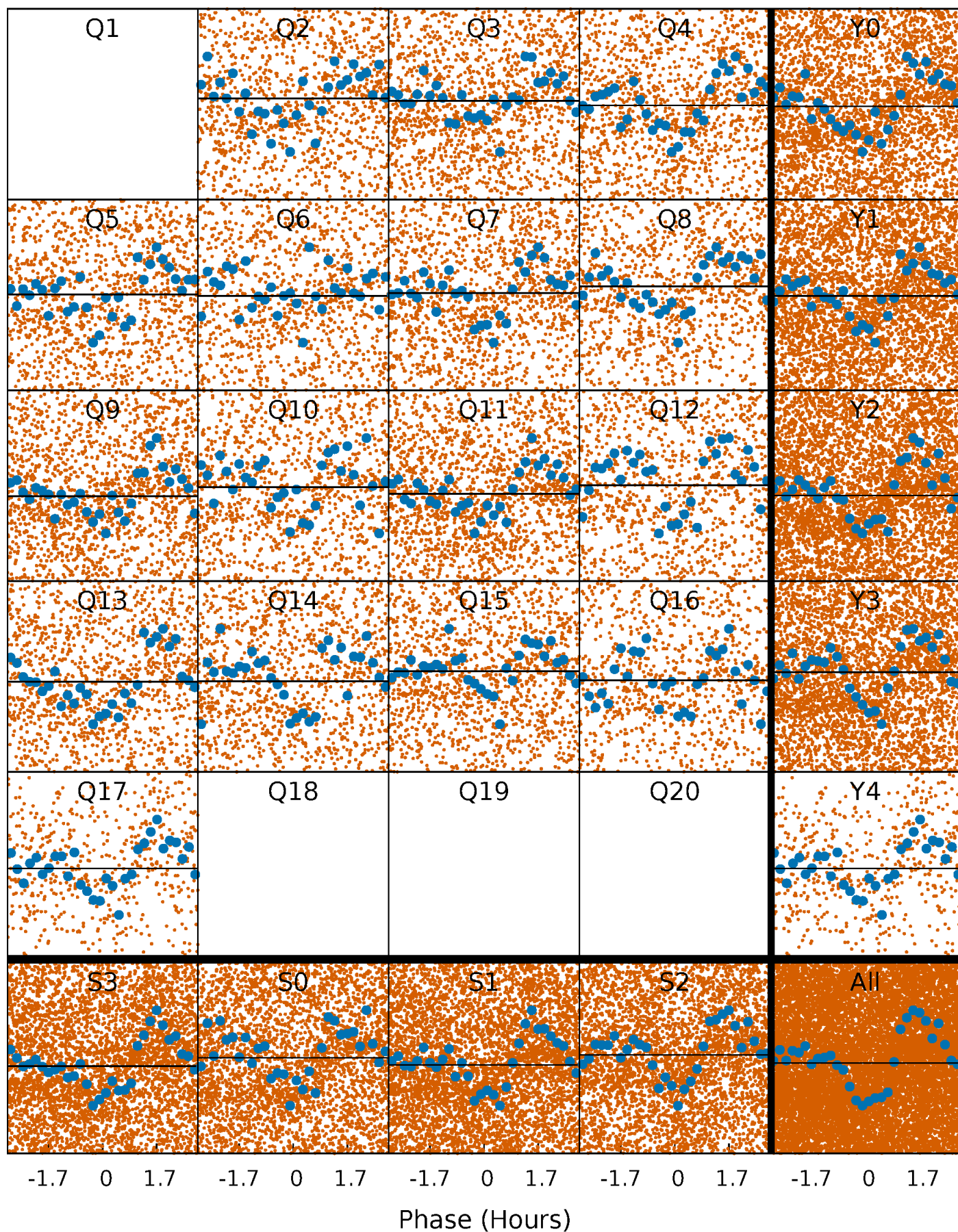
PDC Quarter-Phased Transit Curves

TCE 006936075-01 P= 0.527398 Days $T_0=131.804744$ (BKJD)



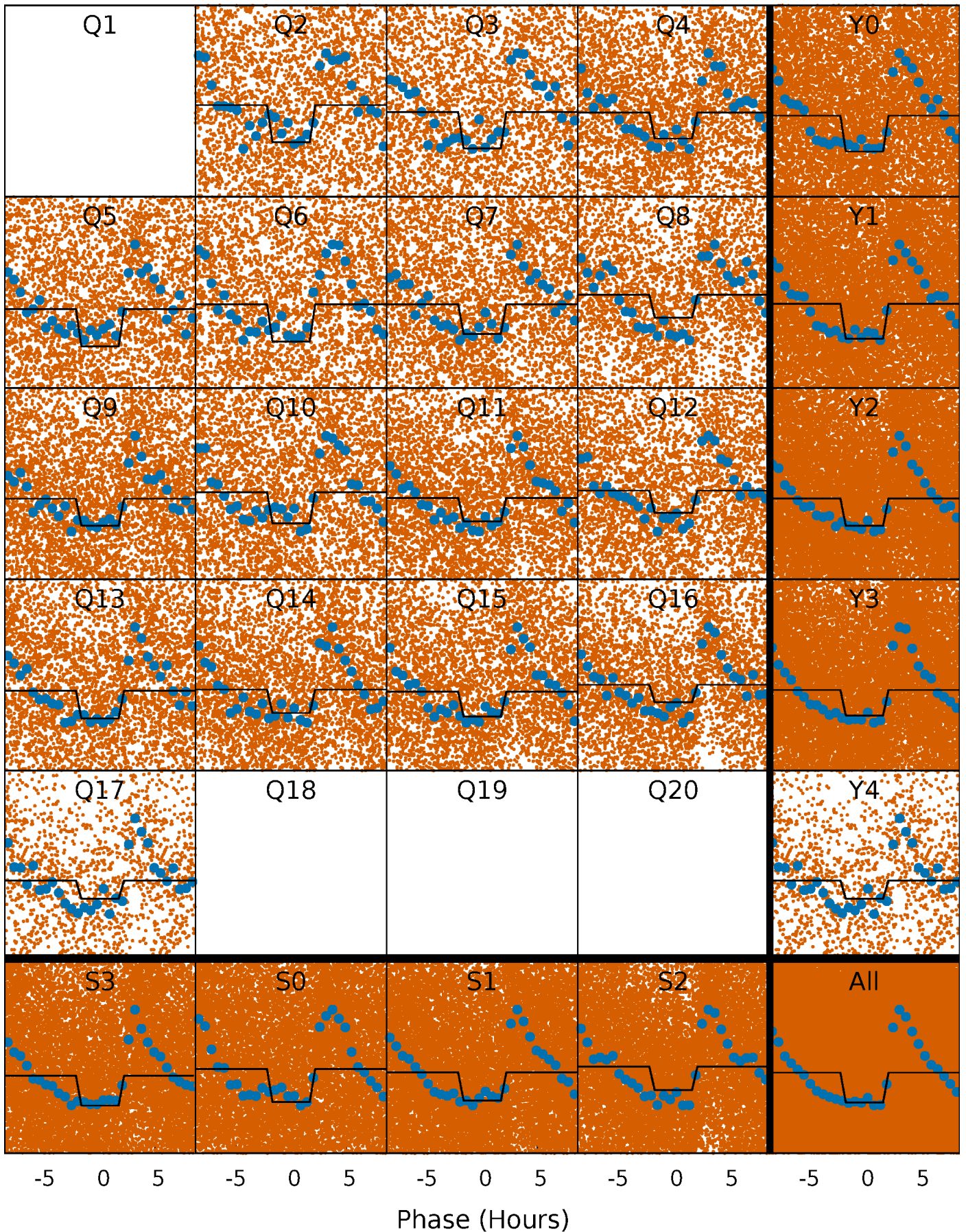
DV Quarter-Phased Transit Curves

TCE 006936075-01 P= 0.527398 Days $T_0=131.804744$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

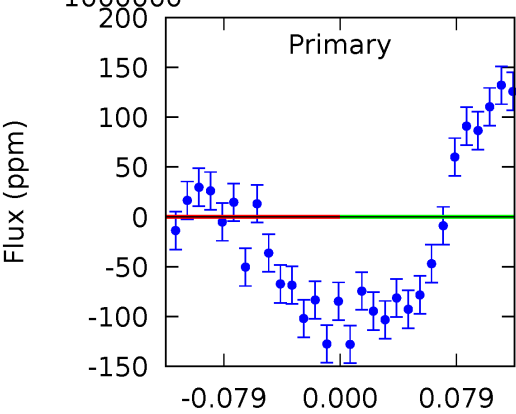
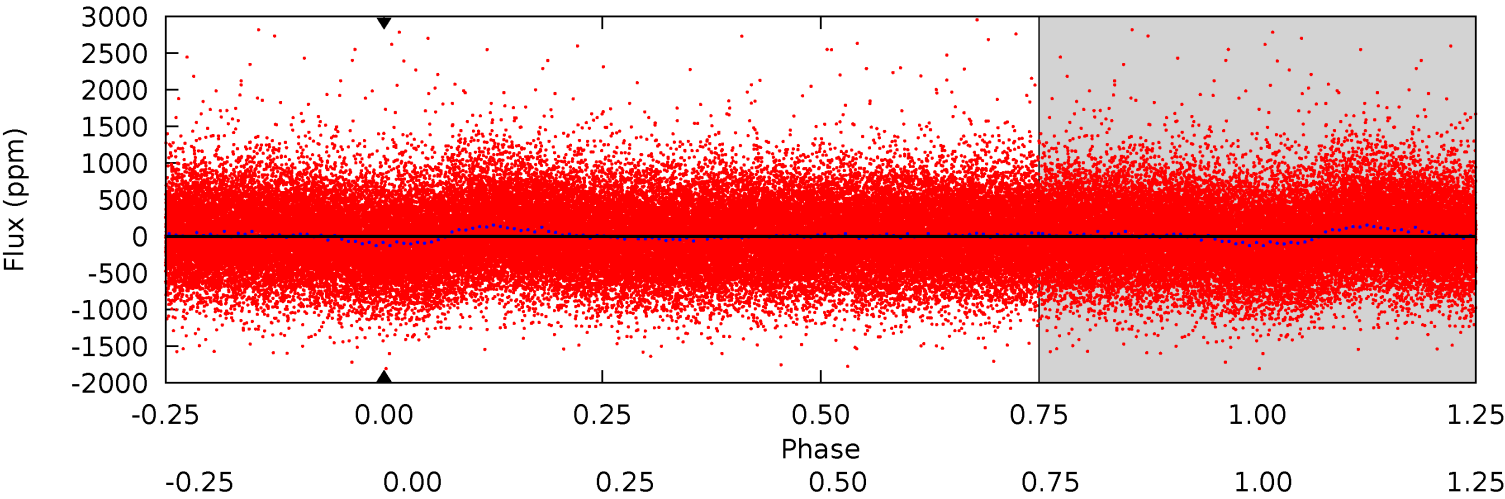
TCE 006936075-01 P= 0.527398 Days $T_0=131.746034$ (BKJD)



DV Model-Shift Uniqueness Test

006936075-01, P = 0.527398 Days, E = 131.804744 Days

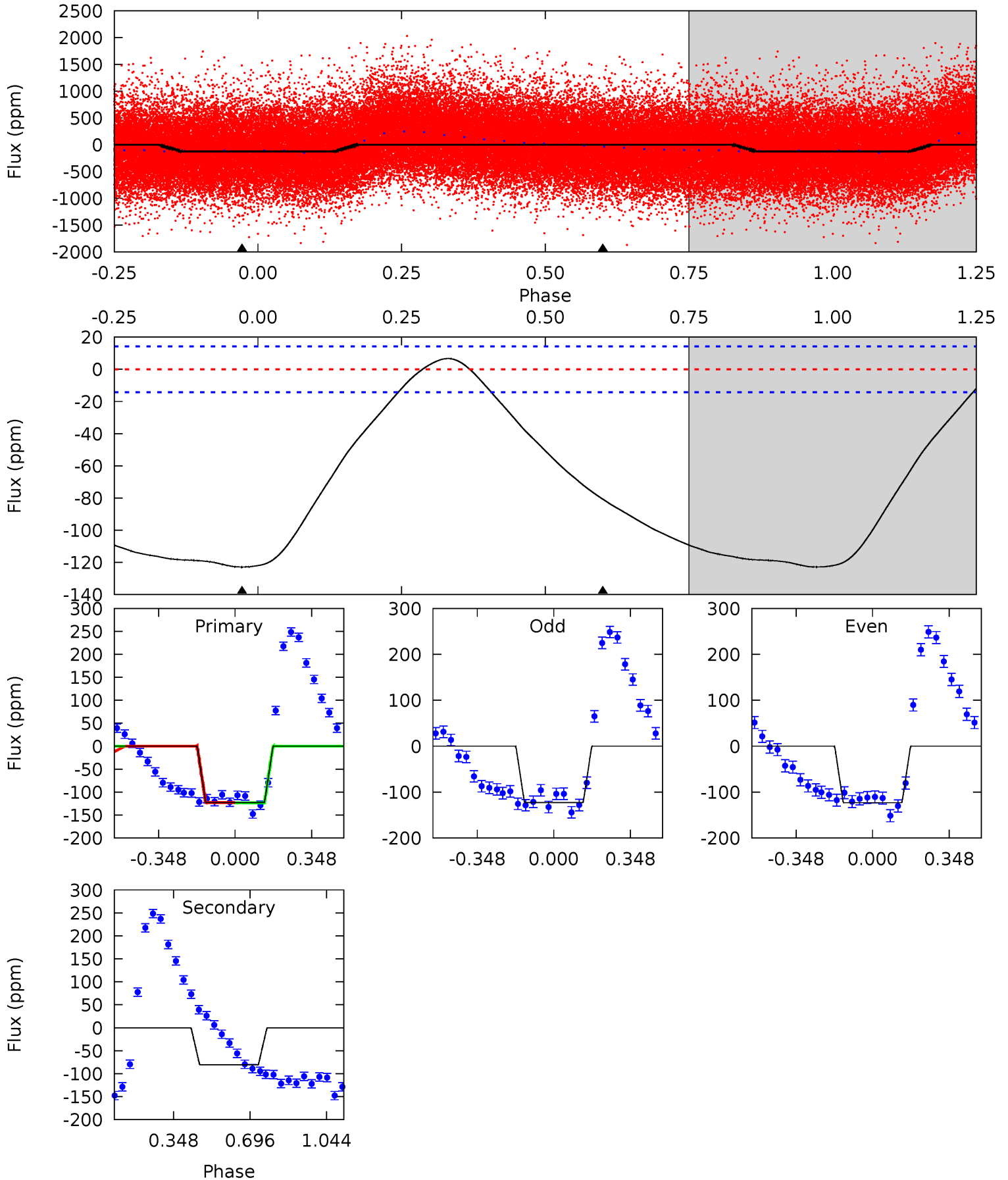
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
0	0	0	0	1.00	1.00	1.00	0	0	0	0	0	0	0	0



Alt Model-Shift Uniqueness Test

006936075-01, P = 0.527398 Days, E = 131.746034 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
37.1	24.4	0	0	4.30	0.94	2.27	37.1	37.1	24.4	24.4	0.02	1.00	0.05	0.09



Stellar Parameters For KIC 006936075

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	M (M_{\odot})	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	5807^{+156}_{-191}	$4.524^{+0.037}_{-0.213}$	$0.070^{+0.250}_{-0.300}$	$0.922^{+0.273}_{-0.091}$	$1.036^{+0.112}_{-0.137}$	$1.859^{+0.380}_{-0.980}$
	+3%/-3%	+1%/-5%	+357%/-429%	+30%/-10%	+11%/-13%	+20%/-53%
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 006936075-01 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	0 ± 1000000	$8.70^{+8.44}_{-6.11}$	3094^{+221}_{-144}	-3245^{+24941}_{-13270}	$-0.067^{+242.875}_{-163.556}$
Alt.	-81 ± 3	$7.18^{+8.05}_{-4.99}$	3099^{+236}_{-142}	-2862^{+6809}_{-282}	$0.144^{+1.440}_{-0.113}$

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 $A_{obs} \gg 1.0$

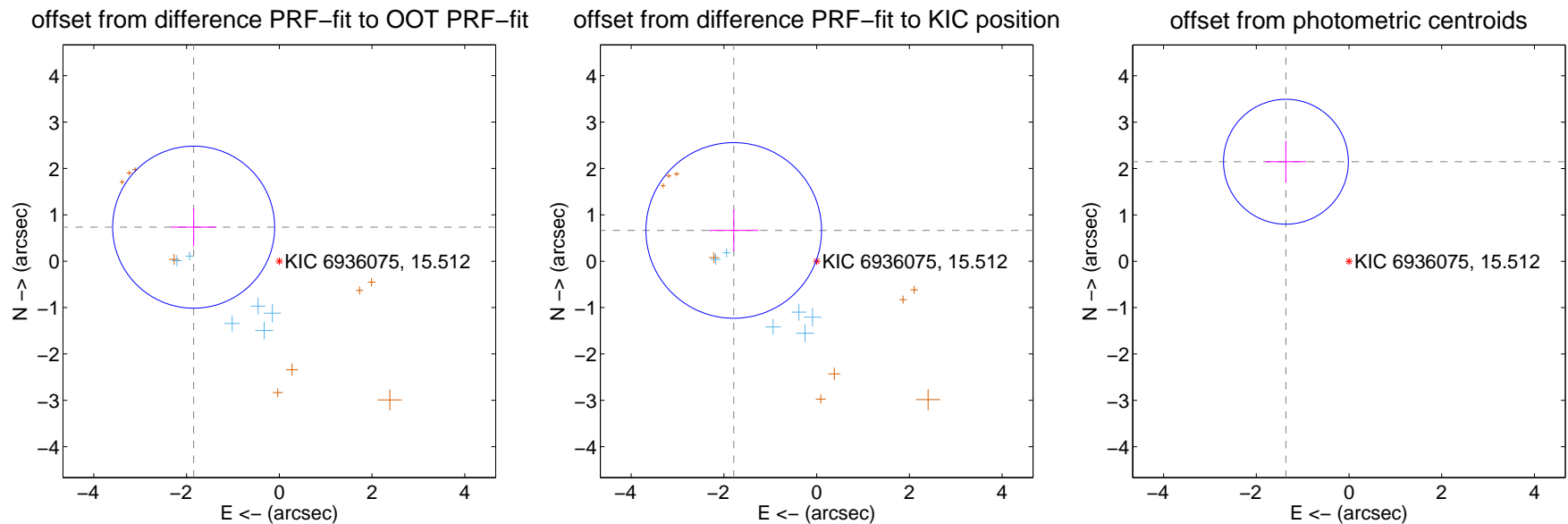
DV Centroid Data

Supplemental centroid analysis for 006936075-01. Kepler magnitude: 15.51. Transit SNR -1.00

There are 6 quarters with good PRF difference image offsets

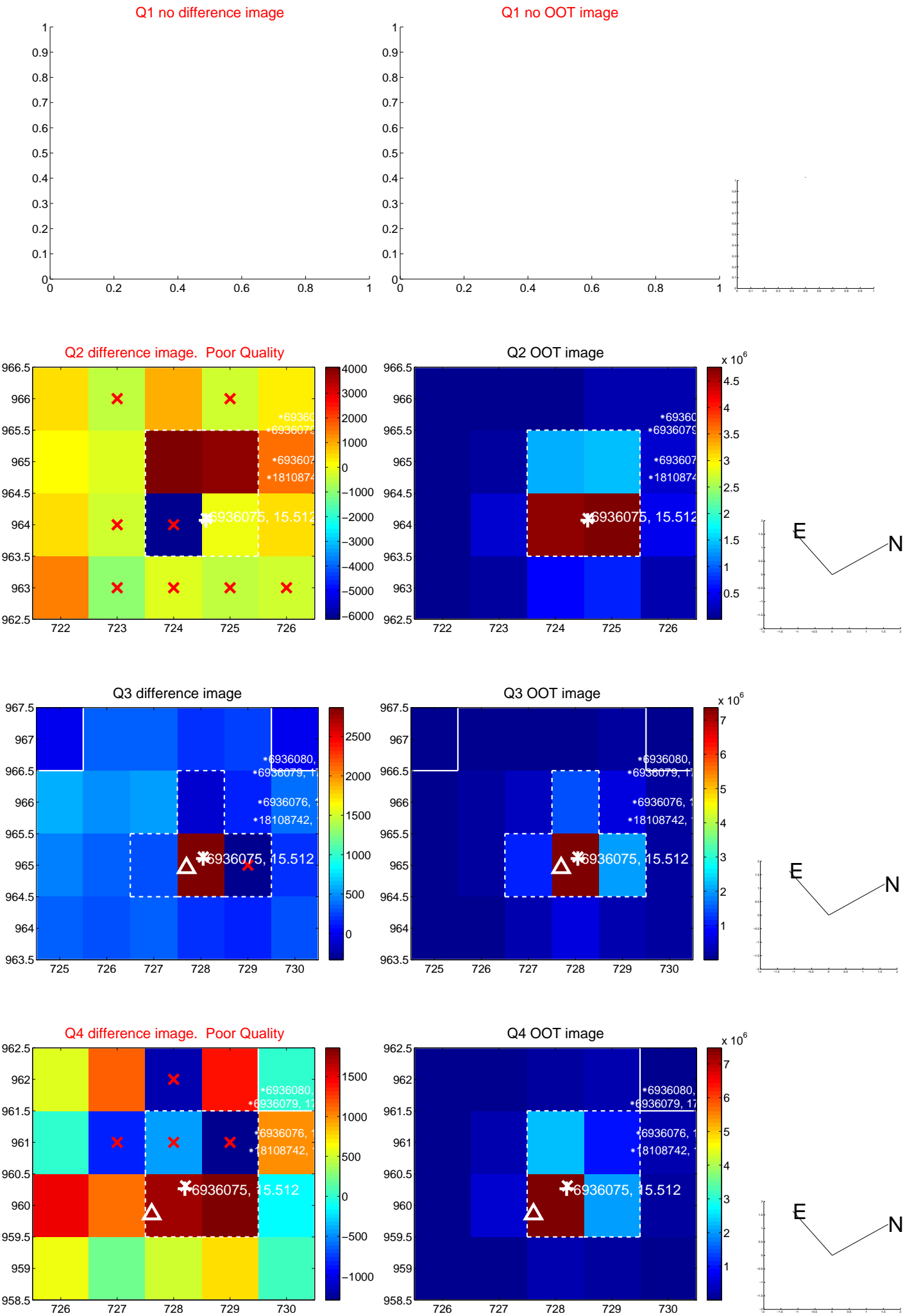
The direct PRF centroid is offset from the target star catalog position by about 0.02 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	1.987 ± 0.582	3.41	1.847 ± 0.492	0.733 ± 0.415
PRF-fit source offset from KIC position	1.907 ± 0.631	3.02	1.788 ± 0.536	0.663 ± 0.449
photometric centroid source offset	2.54 ± 0.45	5.66	1.36 ± 0.44	2.15 ± 0.45

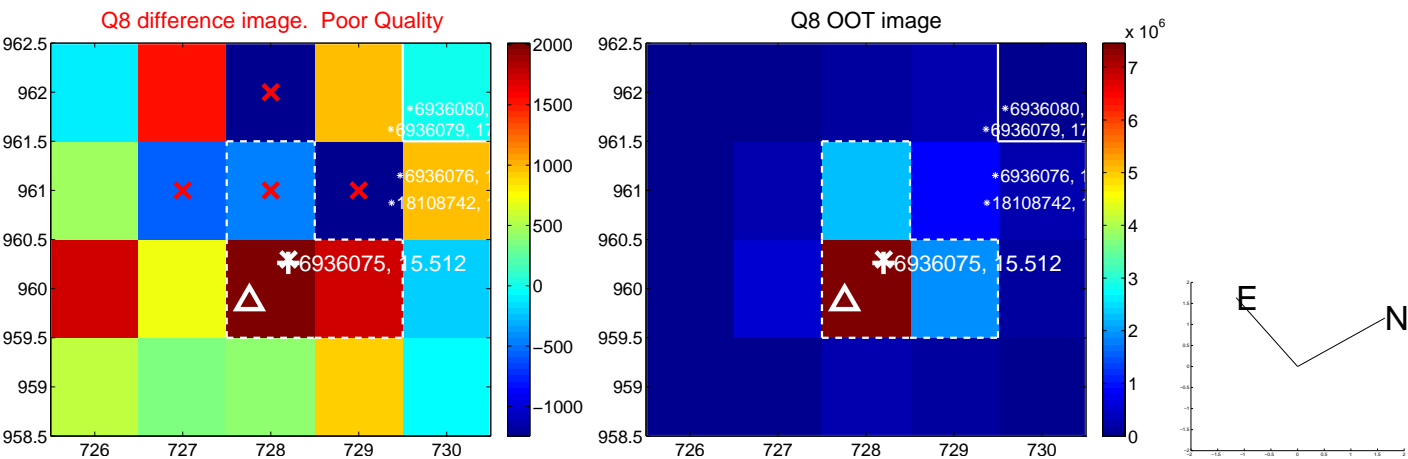
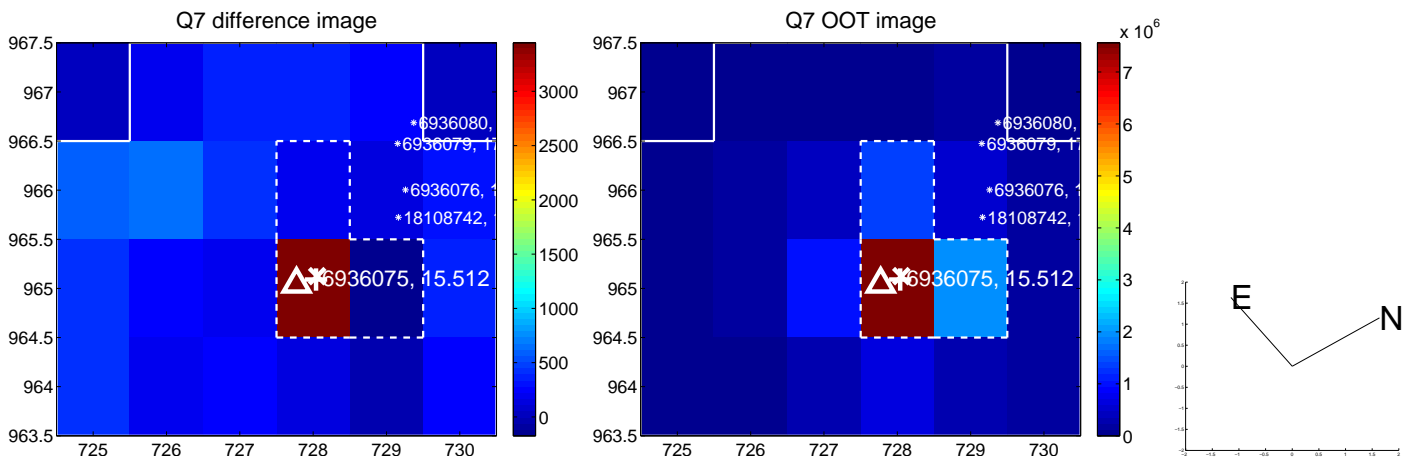
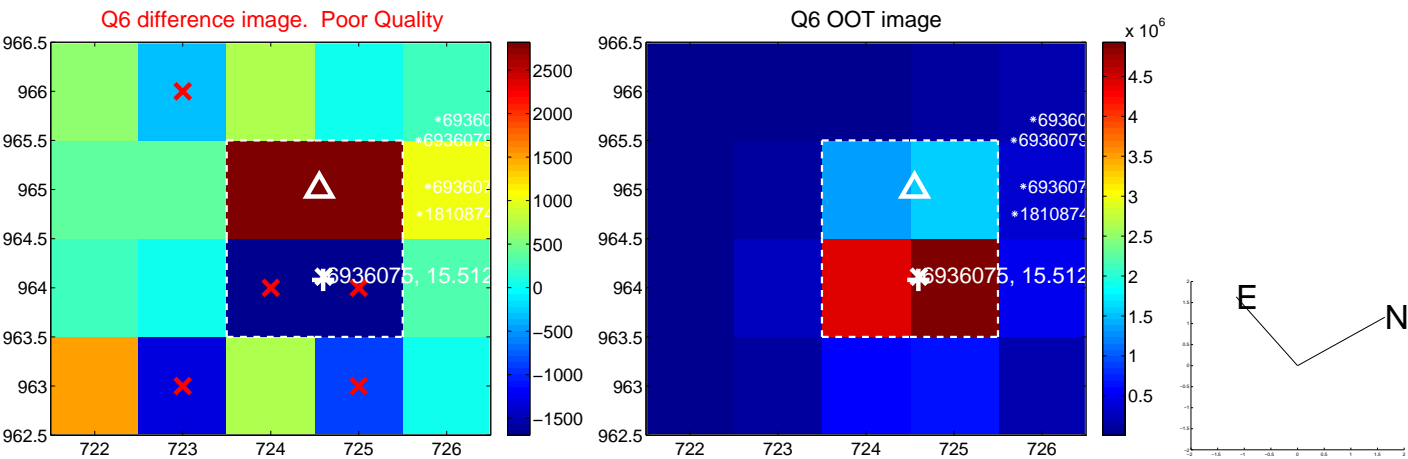
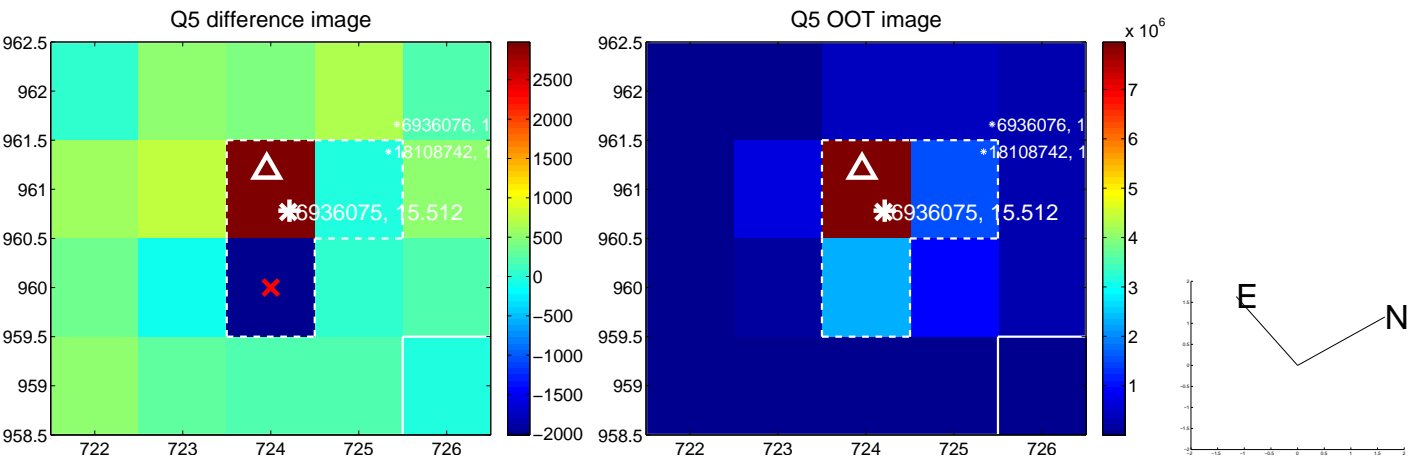


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets**; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

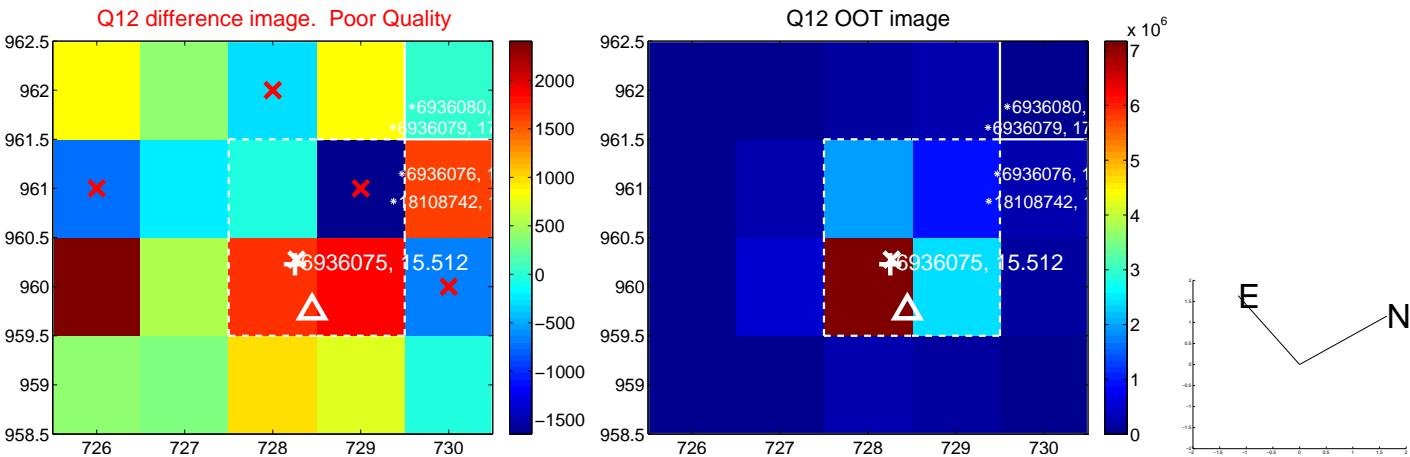
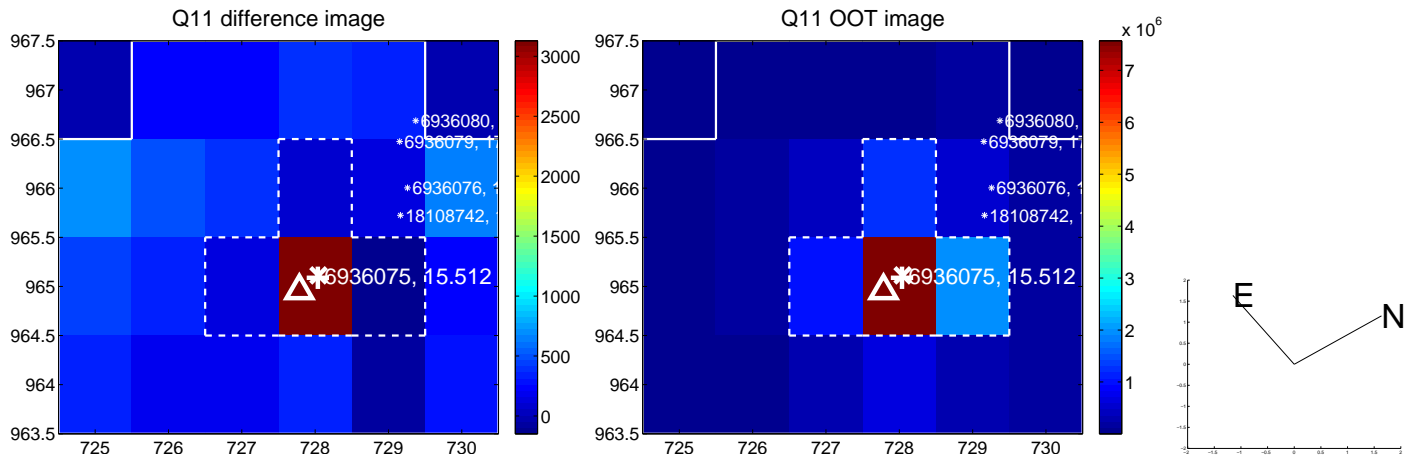
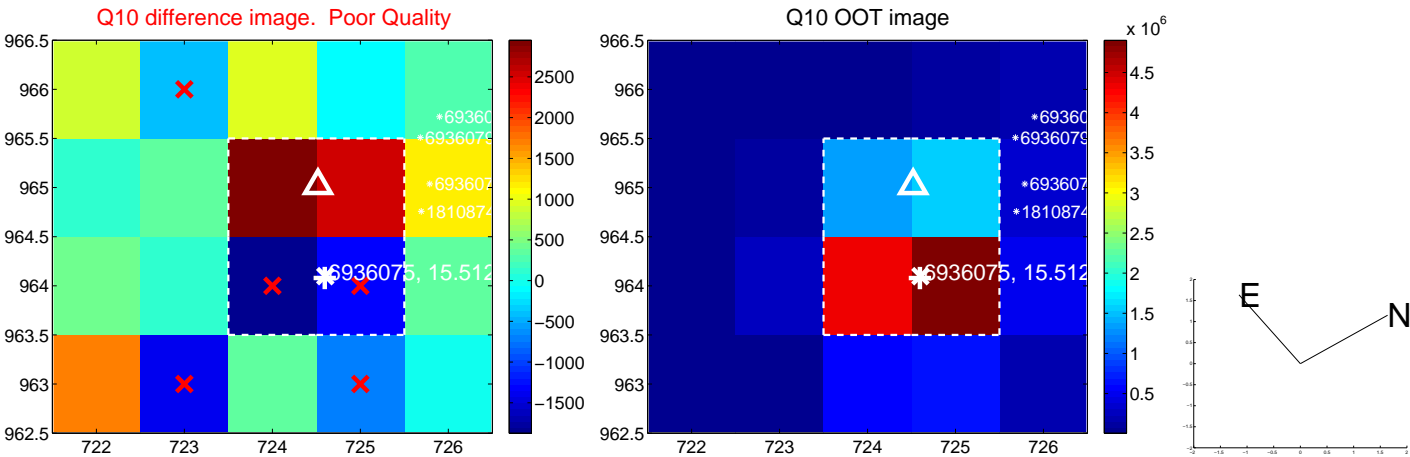
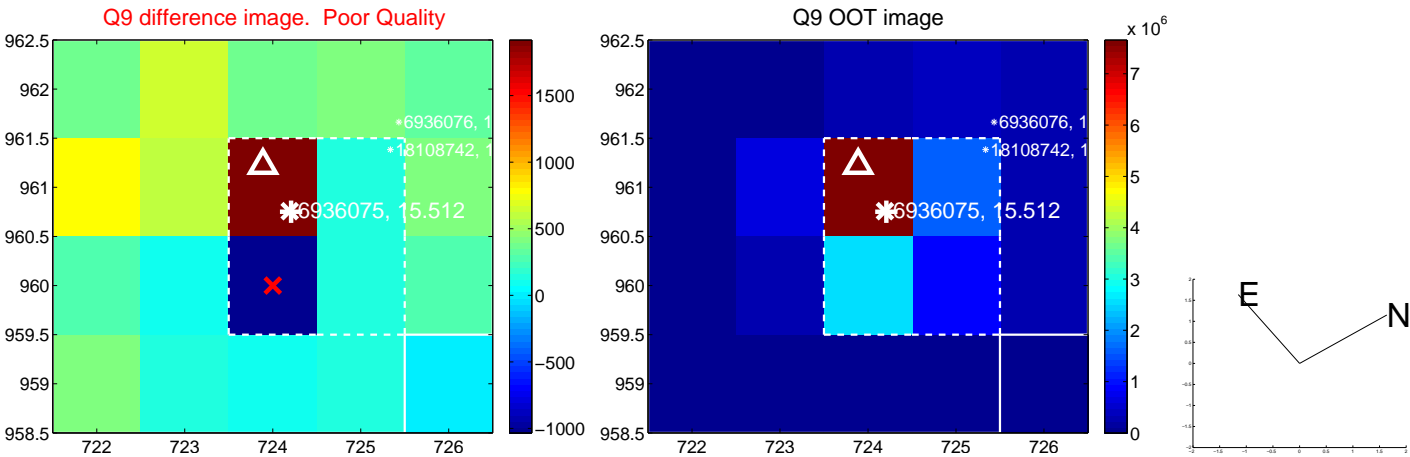
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



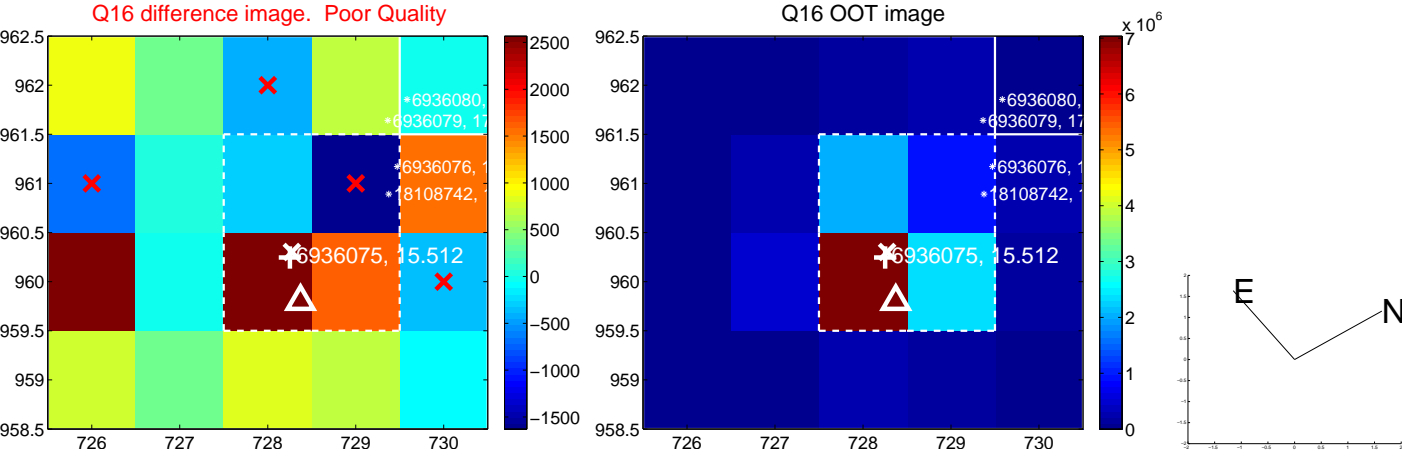
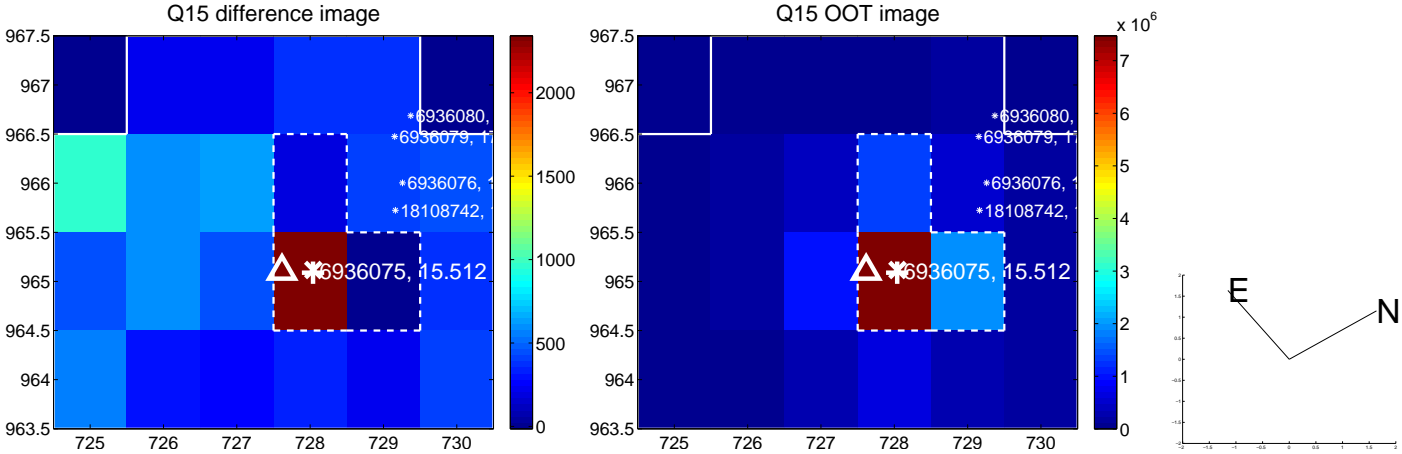
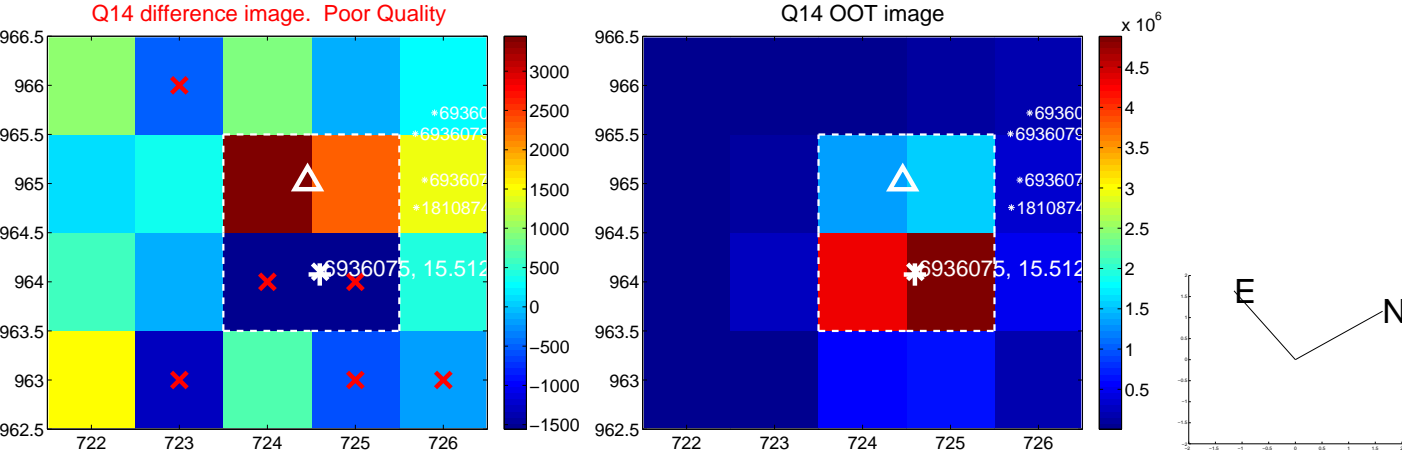
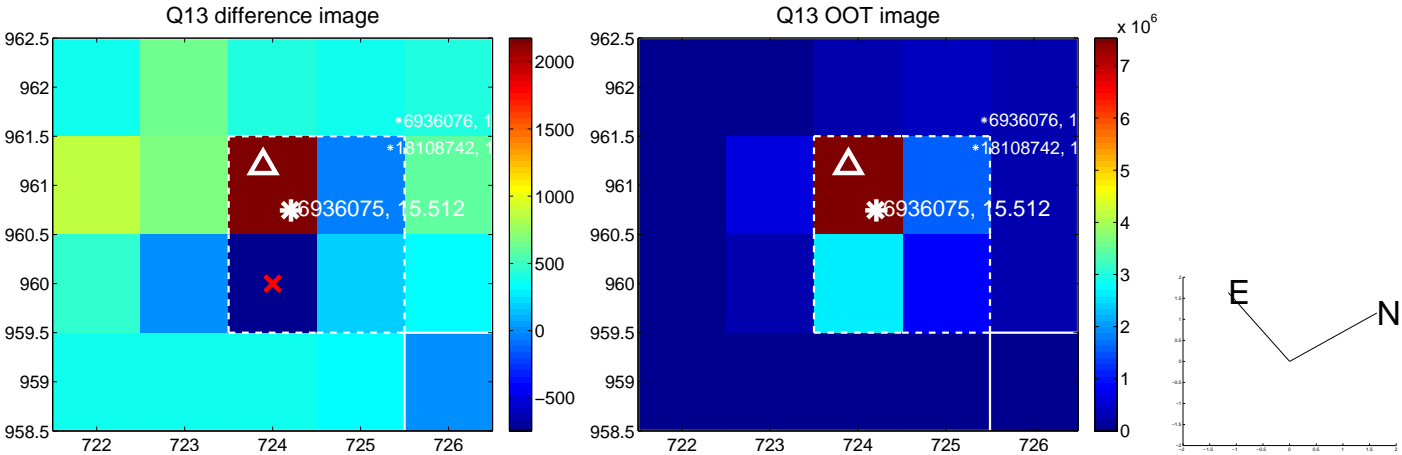
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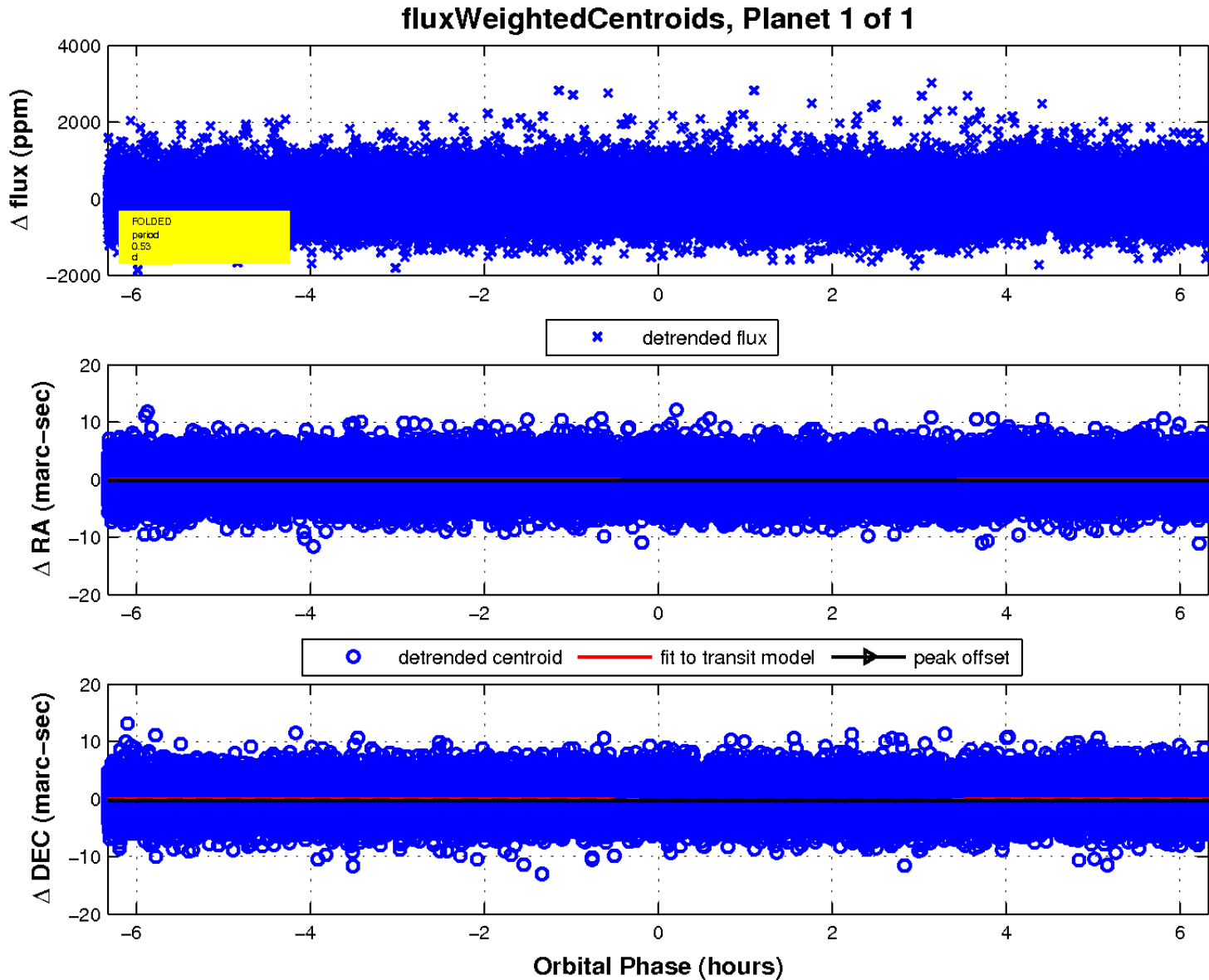
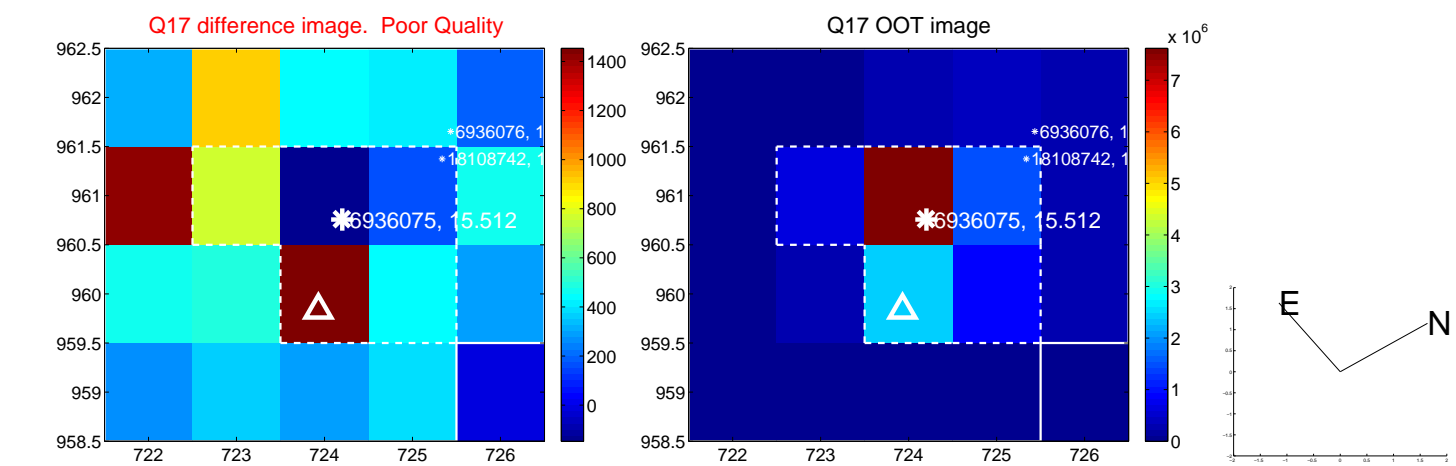
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UKIRT Image

Declination

