

KIC 006264750

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})
006264750-01	OBS	4715.01	53.287628	172.262852	157.1	6.109	8.9	9.1	1.06	6015	1.52	19.67

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
006264750-01	OBS	PC	0.84	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.

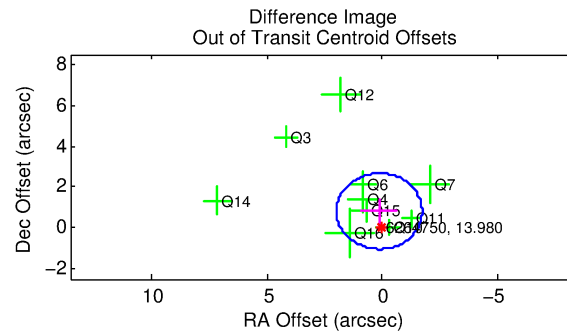
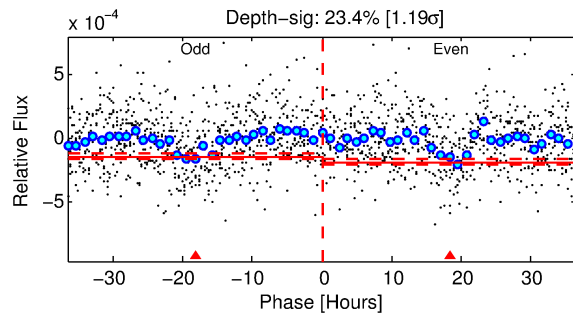
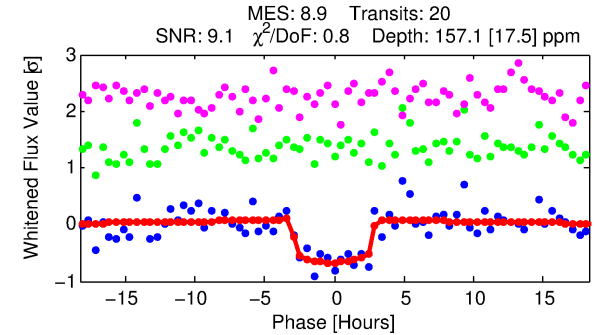
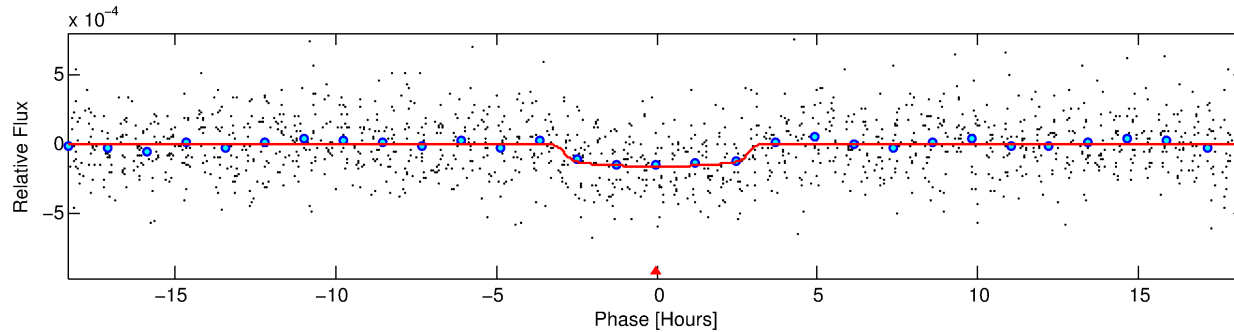
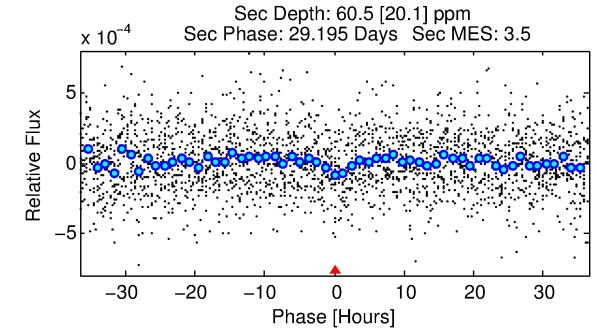
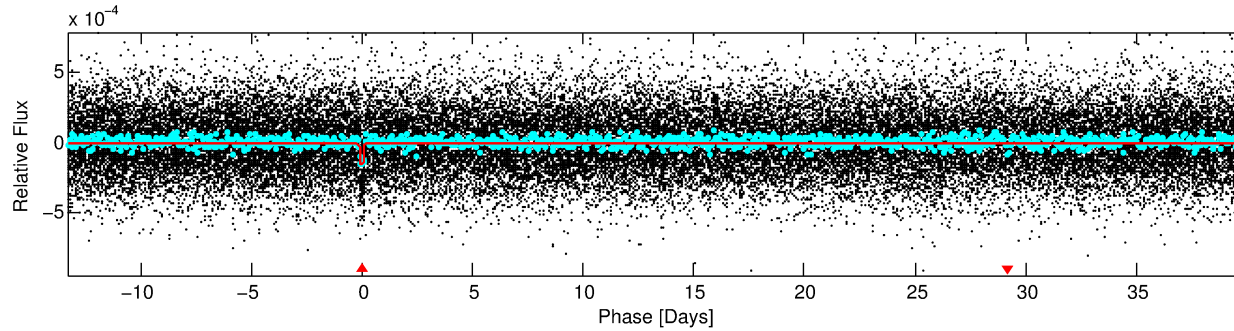
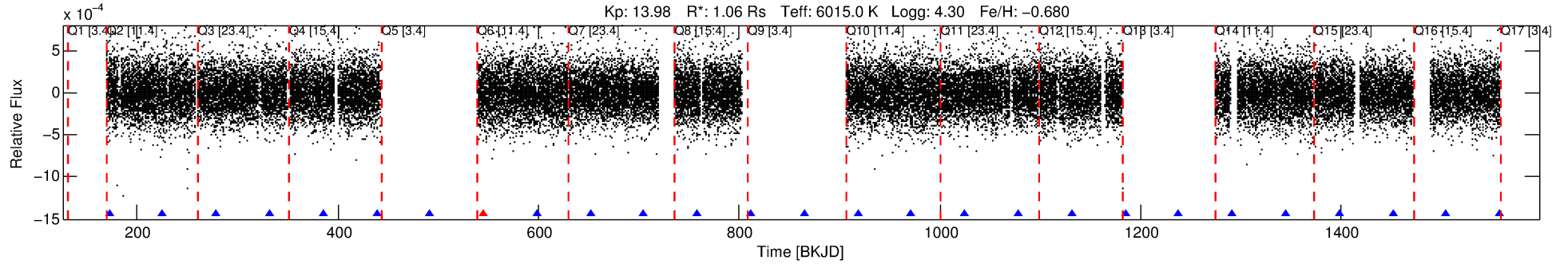
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 006264750-01

No Significant Match Found

DV One-Page Summary

KIC: 6264750 Candidate: 1 of 1 Period: 53.288 d
KOI: K04715.01 Corr: 0.943



DV Fit Results:

Period = 53.28763 [0.00070] d
Epoch = 172.2629 [0.0106] BKJD
Rp/R* = 0.0132 [0.0051]
a/R* = 34.50 [71.79]
b = 0.87 [0.58]
Seff = 19.67 [8.46]
Teq = 537 [58] K
Rp = 1.52 [0.74] Re
a = 0.2581 [0.0678] AU
Ag = 960.38 [904.22] [1.06σ]
Teffp = 4622 [992] K [4.11σ]

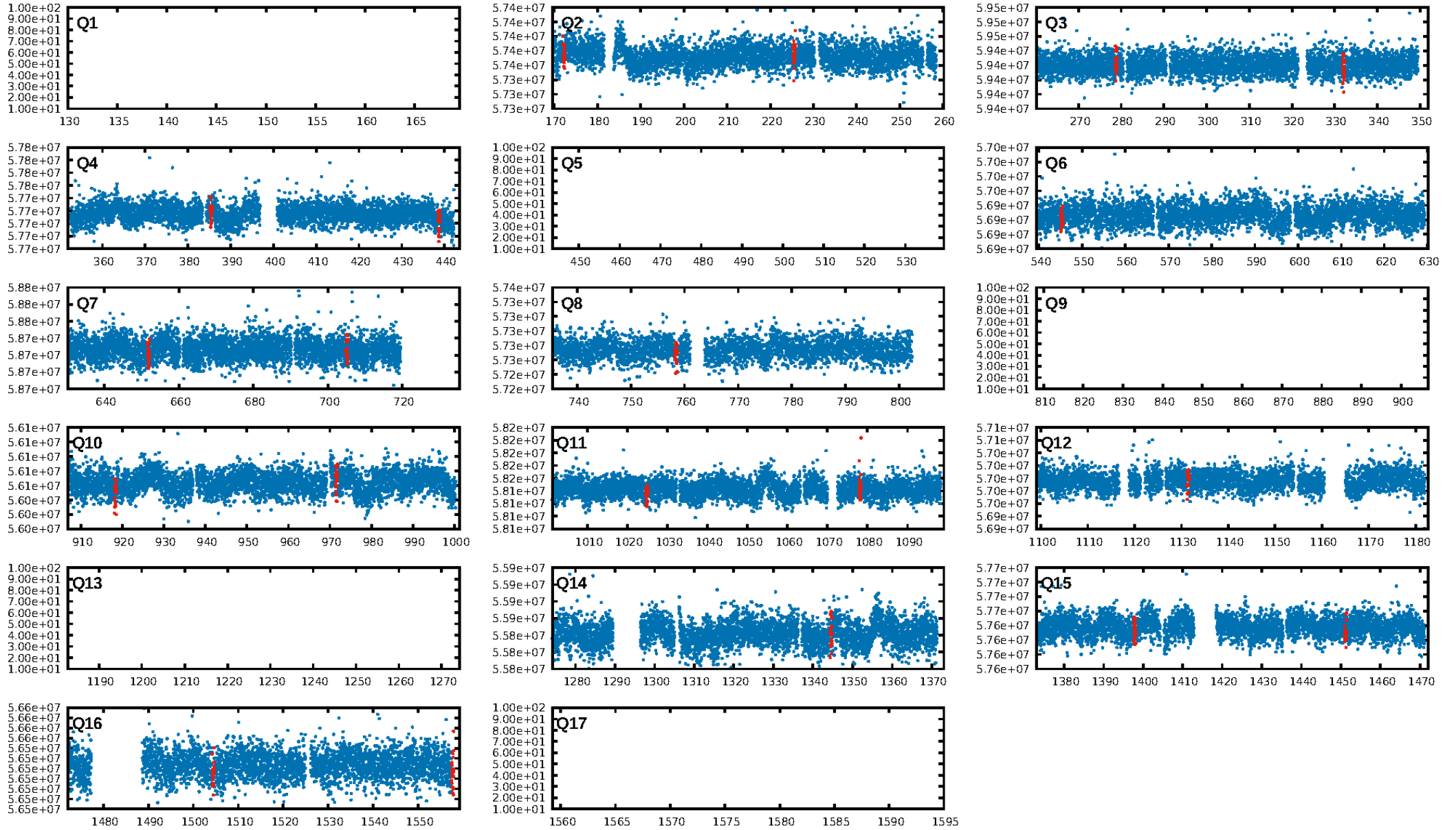
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: 86.1%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: 6.06e-19
RollingBand-fgt: 0.95 [19/20]
GhostDiagnostic-chr: -2.193
Centroid-sig: 76.9%
Centroid-so: 0.591 arcsec [0.39σ]
OotOffset-rm: 0.830 arcsec [1.34σ]
KicOffset-rm: 0.778 arcsec [1.12σ]
OotOffset-st: 3/4/3/0 [10]
KicOffset-st: 3/4/3/0 [10]
DiffImageQuality-fgm: 0.50 [5/10]
DiffImageOverlap-fno: 1.00 [12/12]

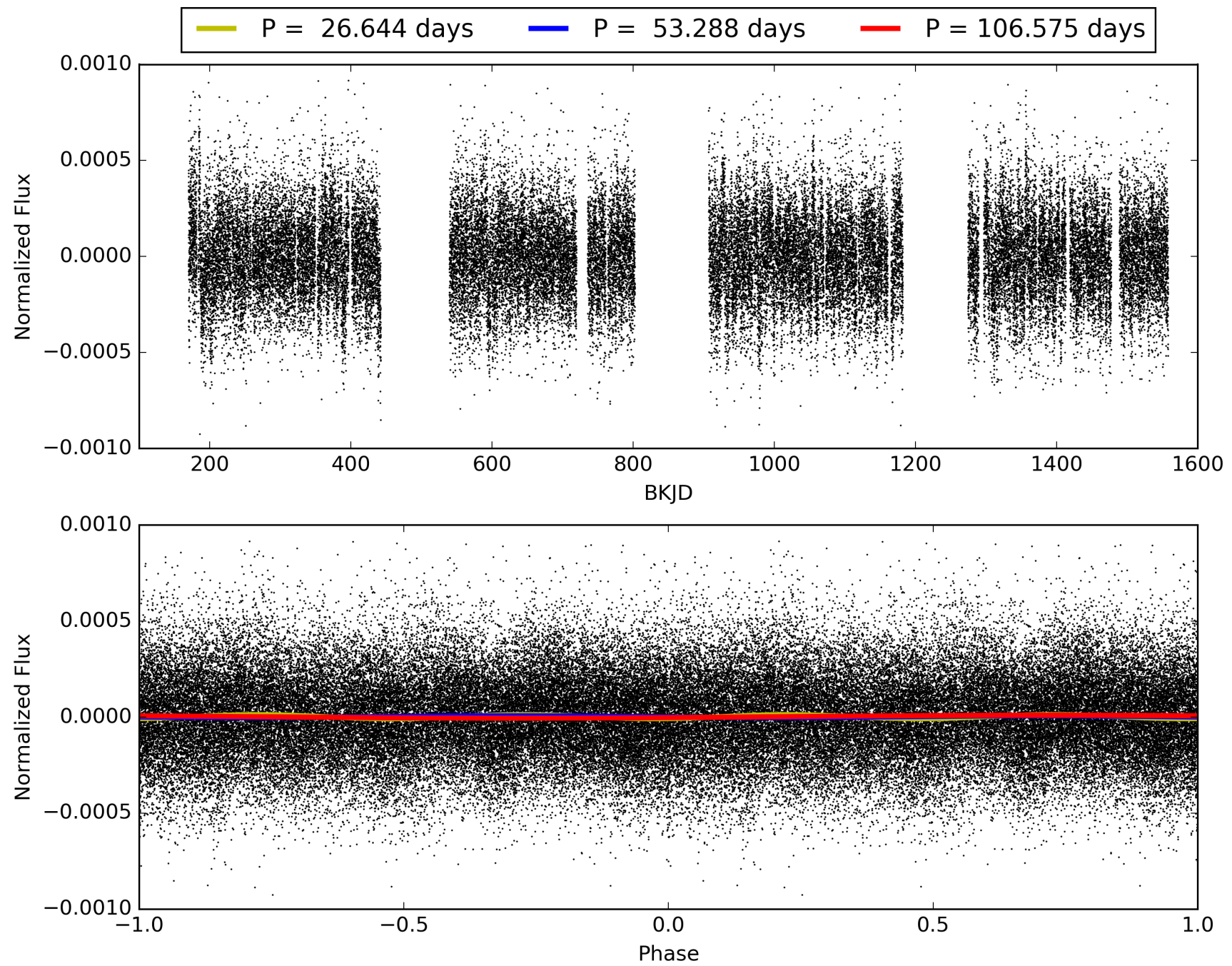
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 31-Jan-2016 23:00:52 Z

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

TCE 006264750-01, PDC Light Curves

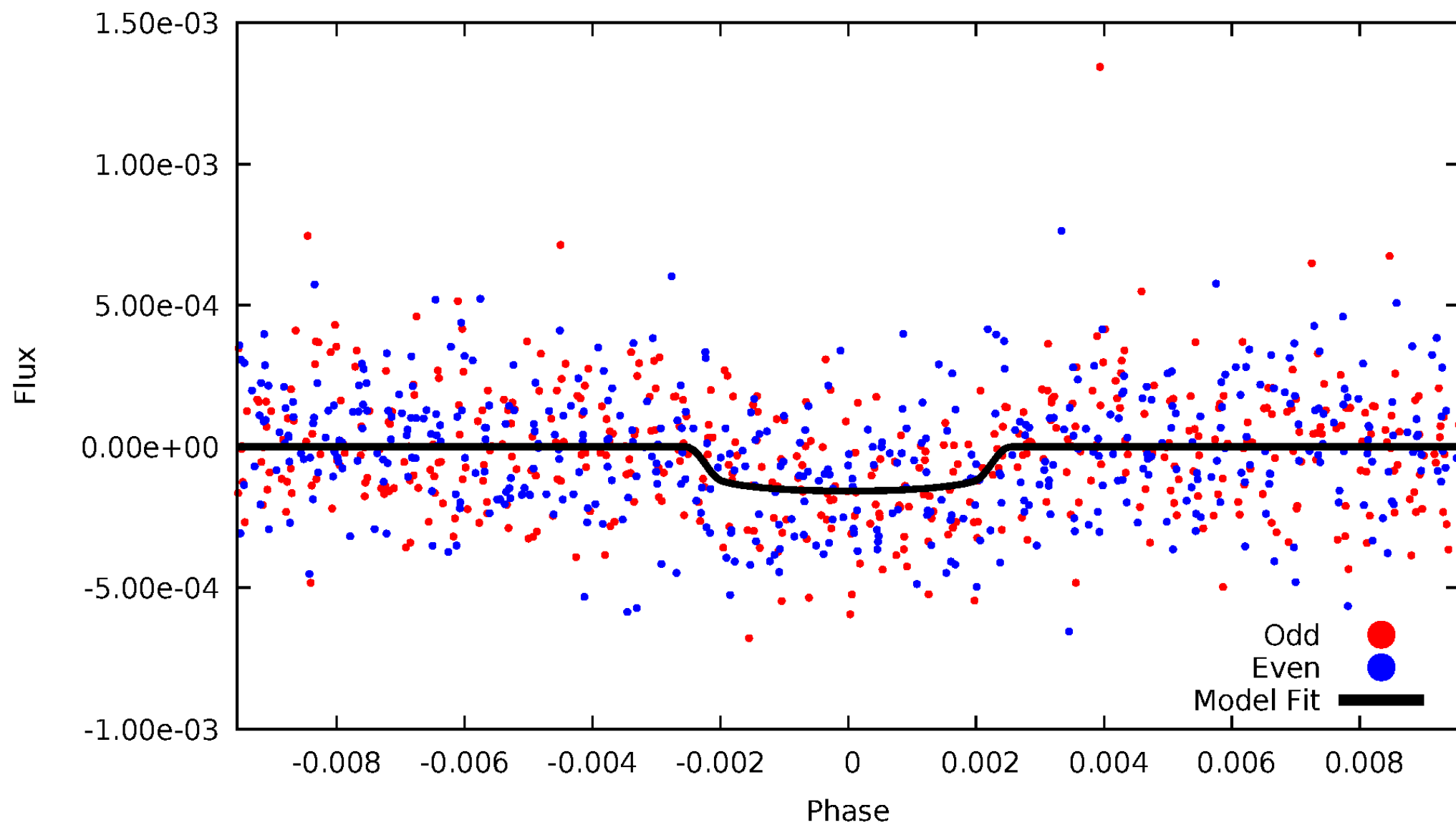


TCE 006264750-01



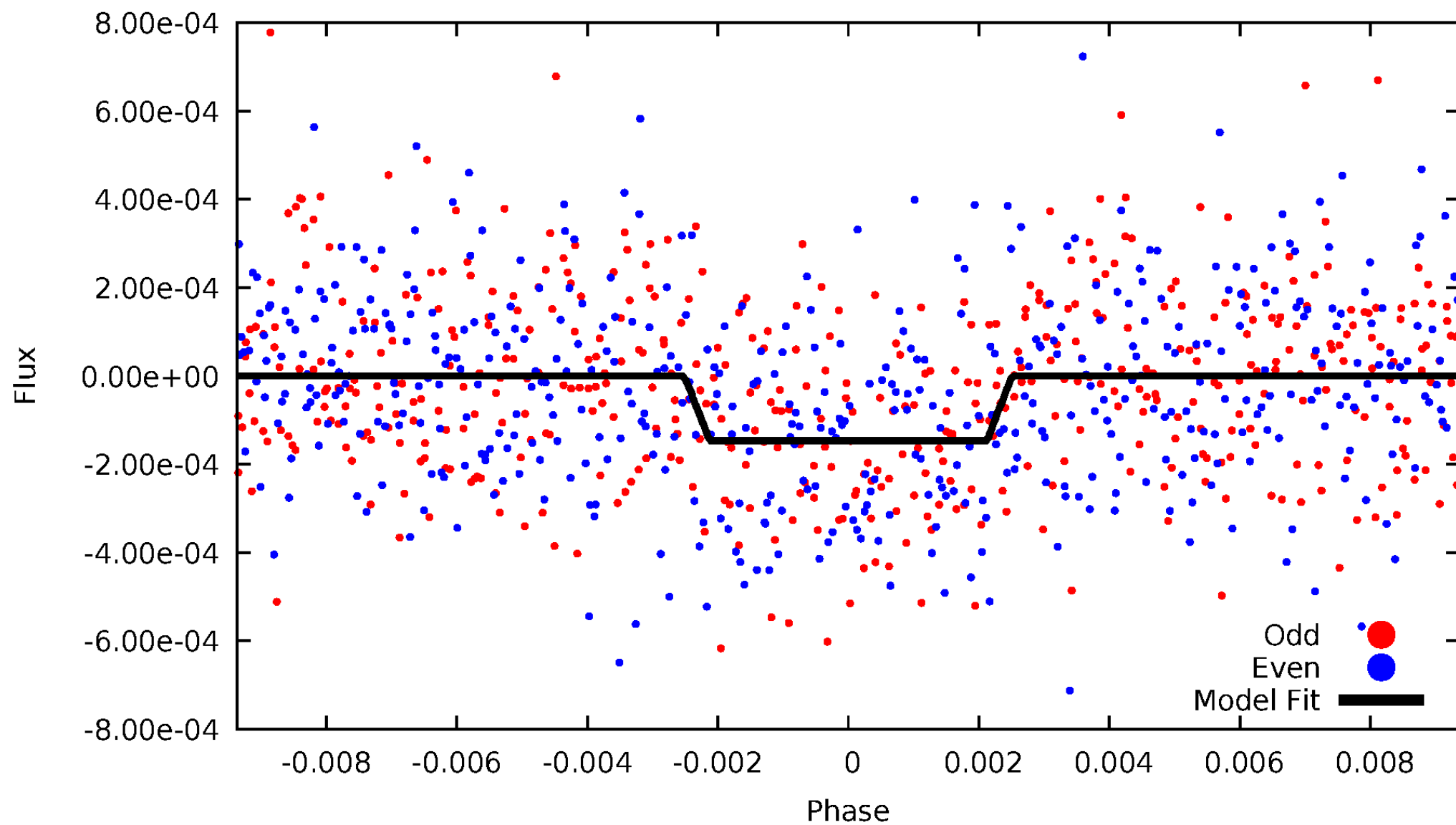
DV Odd/Even

TCE 006264750-01

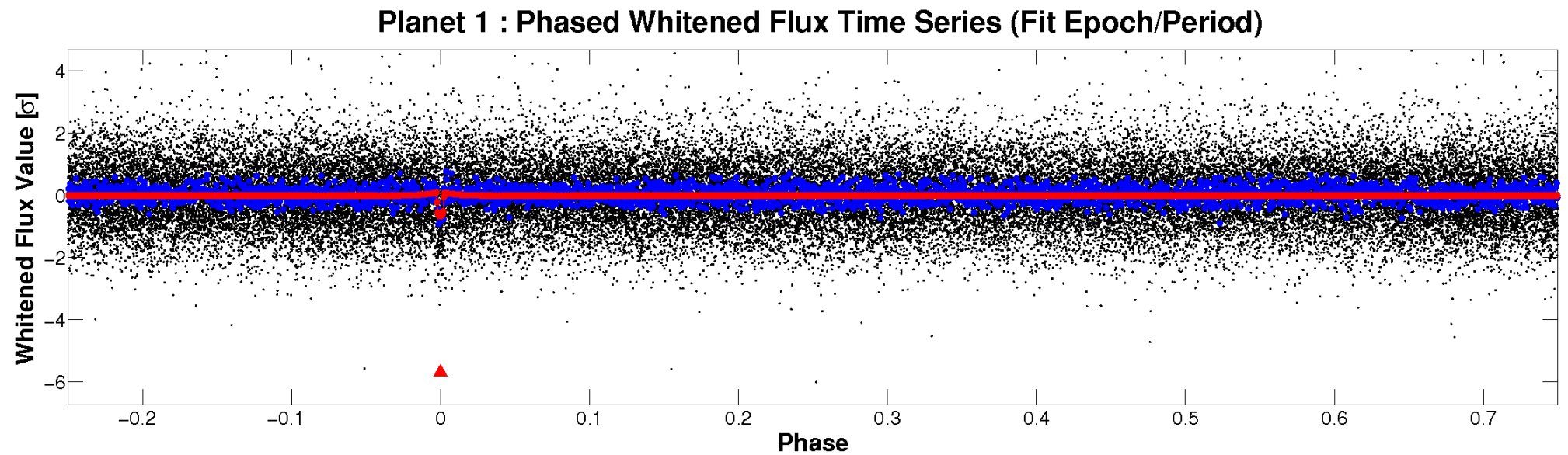
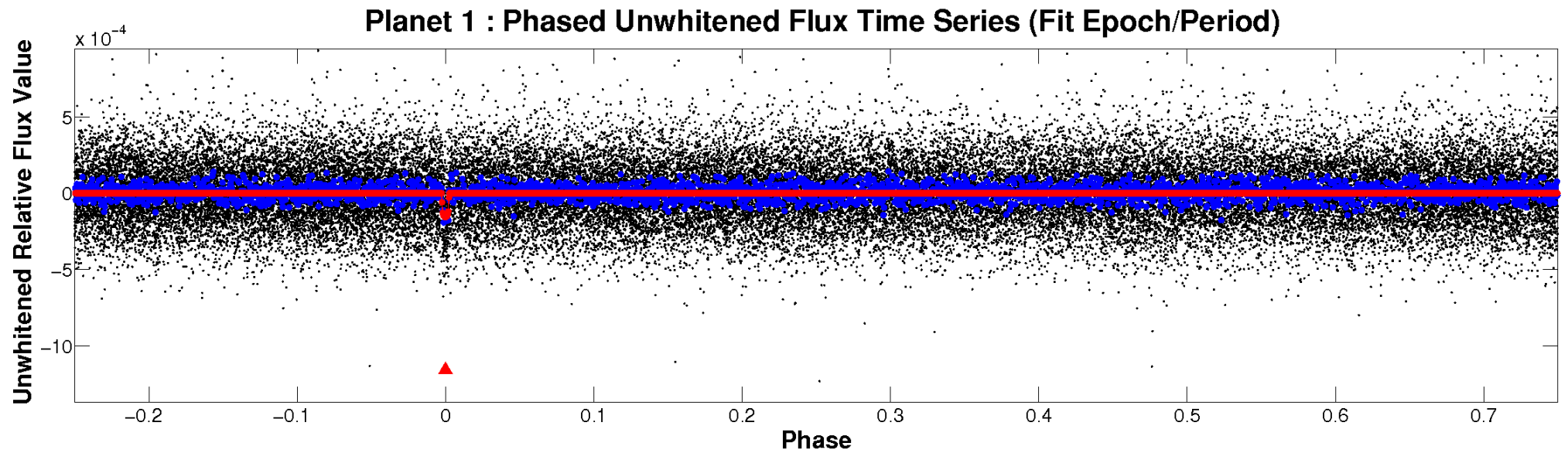


ALT Odd/Even

TCE 006264750-01

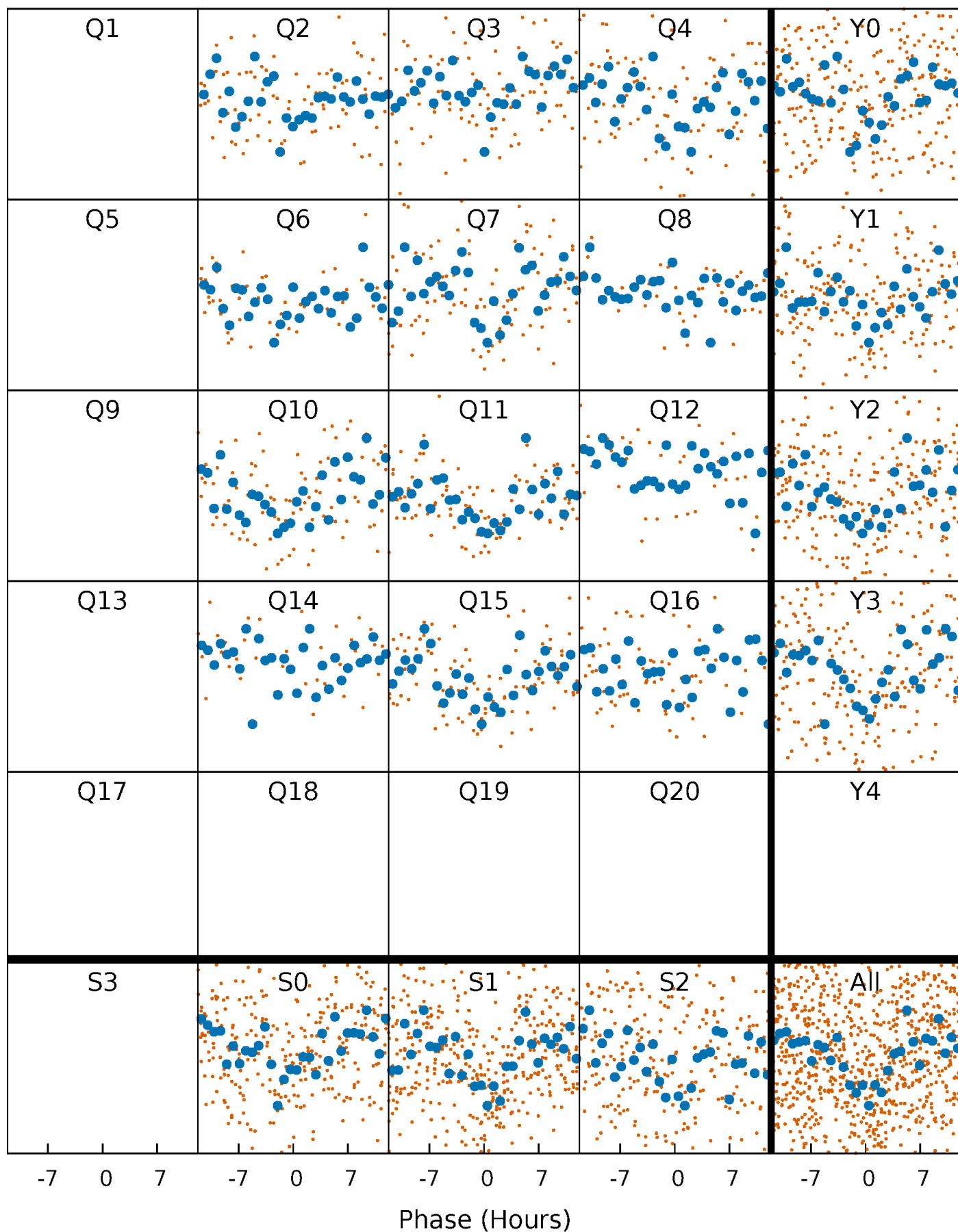


Non-Whitened Vs. Whitened Light Curve



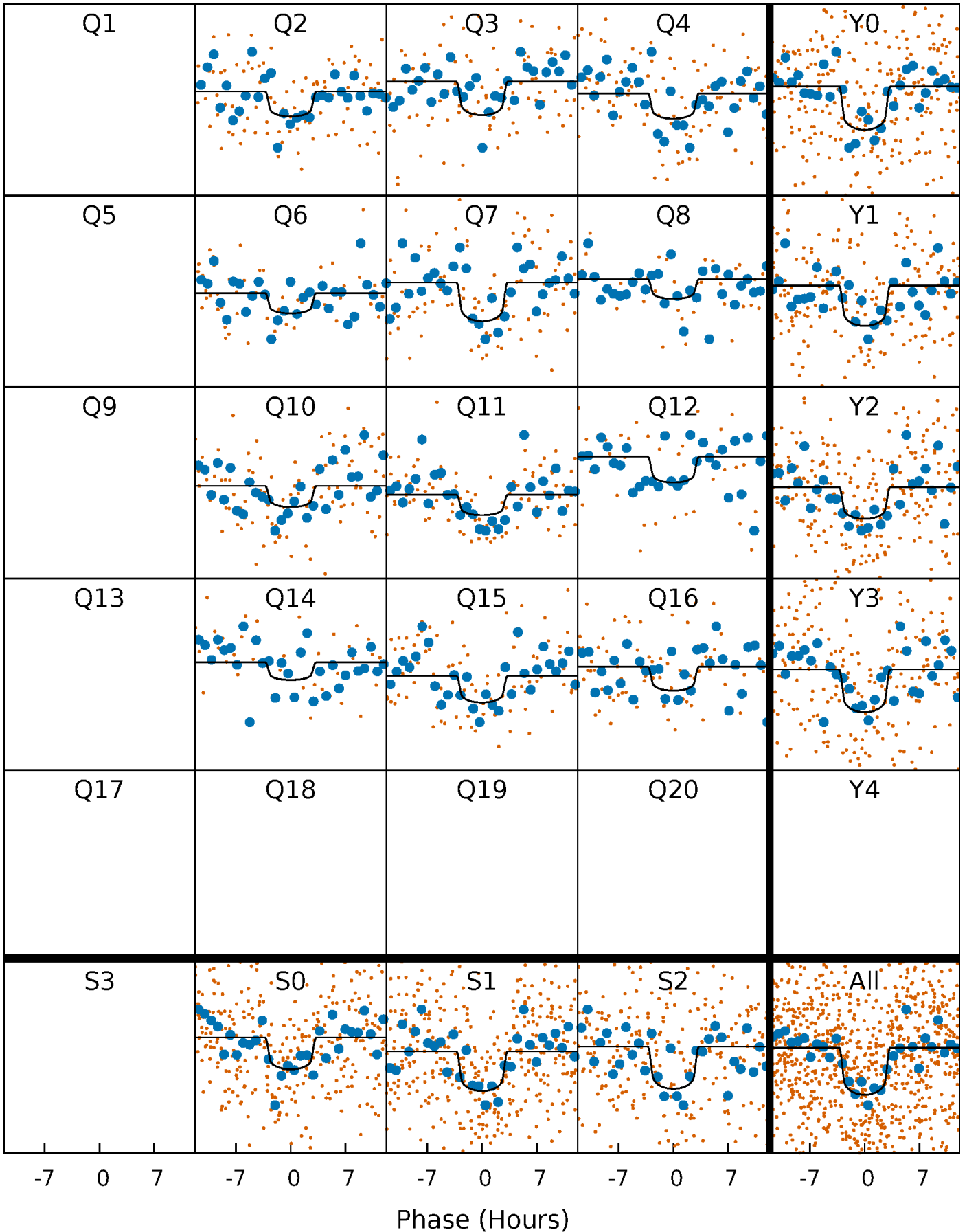
PDC Quarter-Phased Transit Curves

TCE 006264750-01 P= 53.287628 Days $T_0=172.262852$ (BKJD)



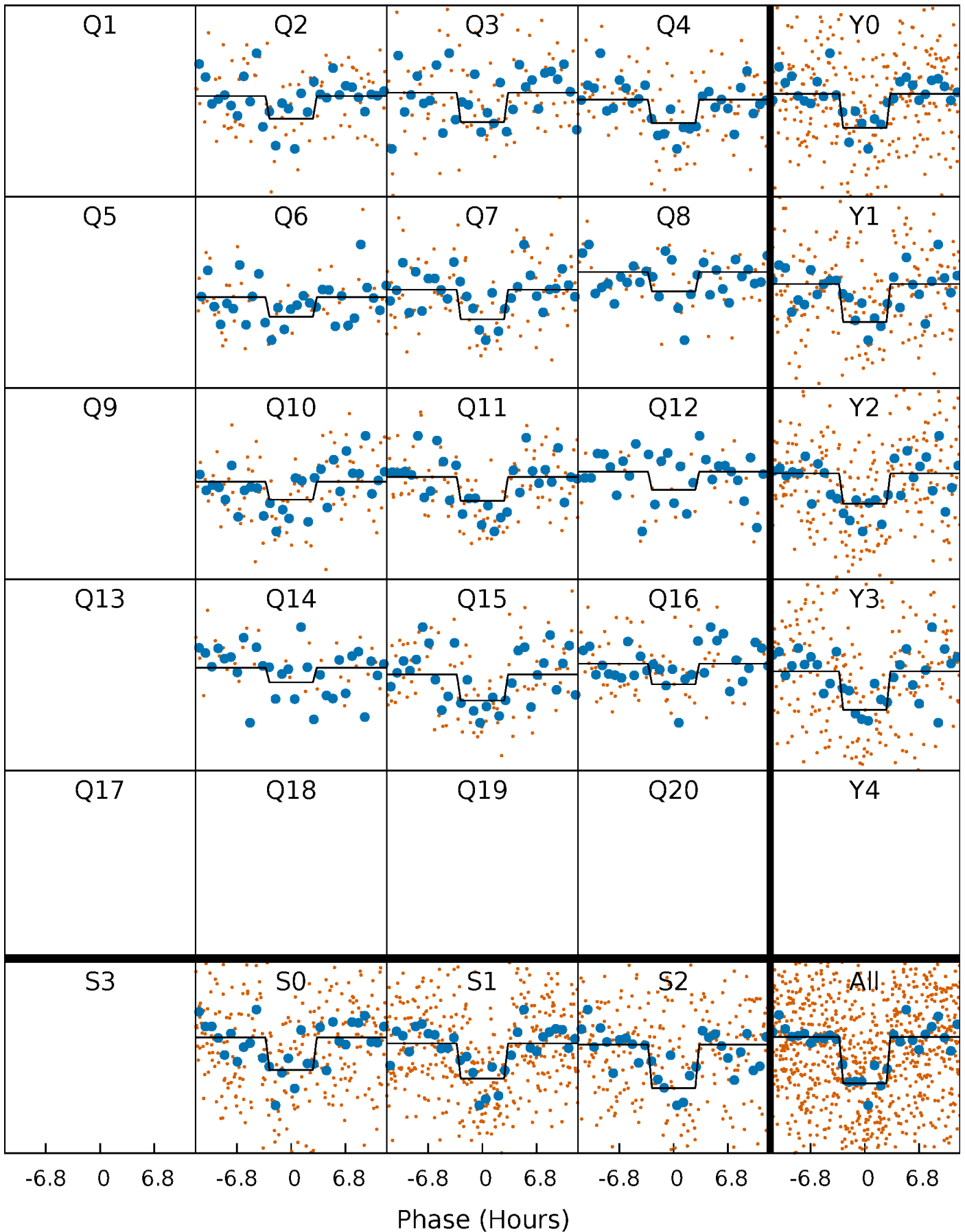
DV Quarter-Phased Transit Curves

TCE 006264750-01 P= 53.287628 Days $T_0=172.262852$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

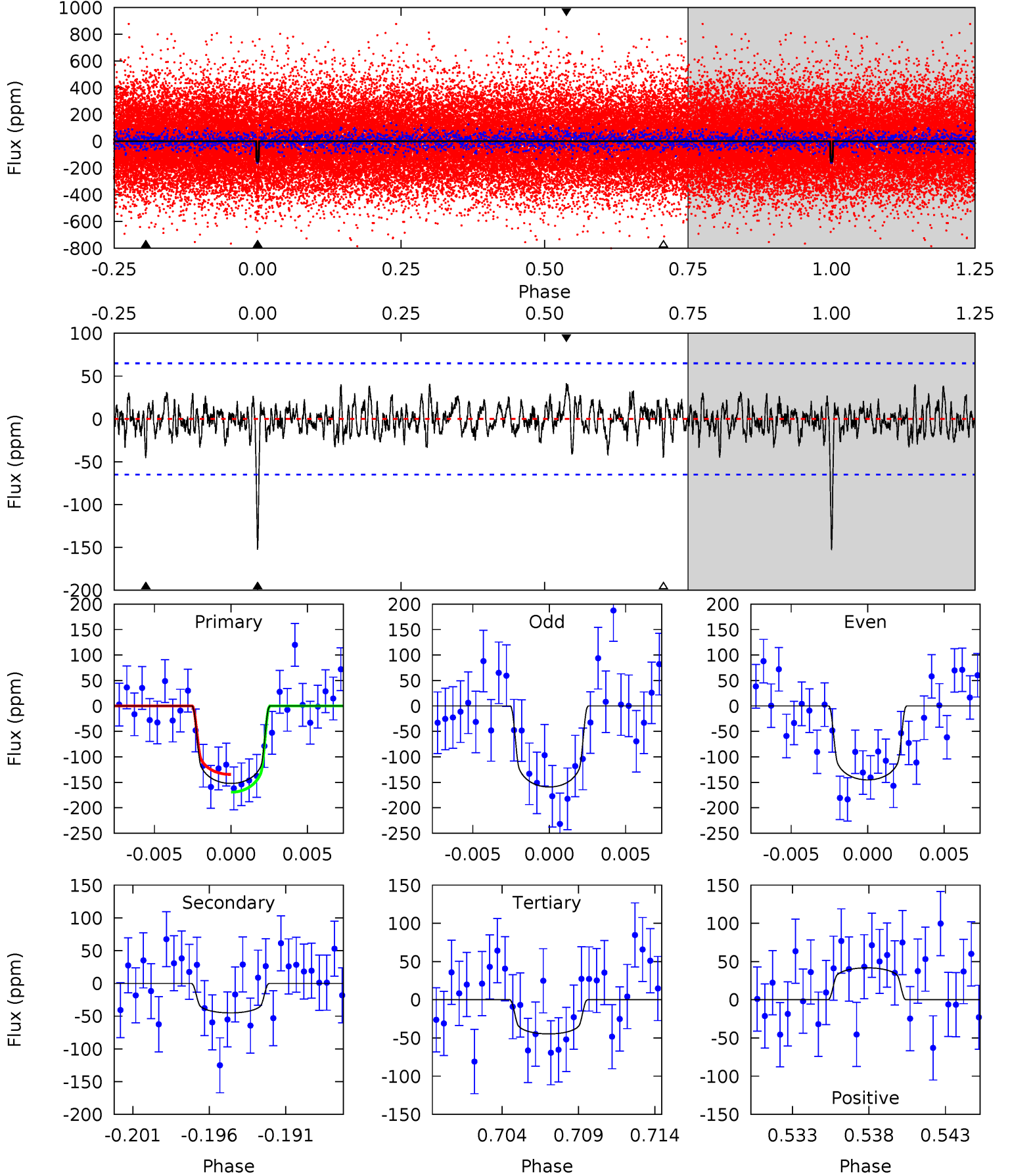
TCE 006264750-01 P= 53.286212 Days $T_0=172.285639$ (BKJD)



DV Model-Shift Uniqueness Test

006264750-01, P = 53.287628 Days, E = 118.975224 Days

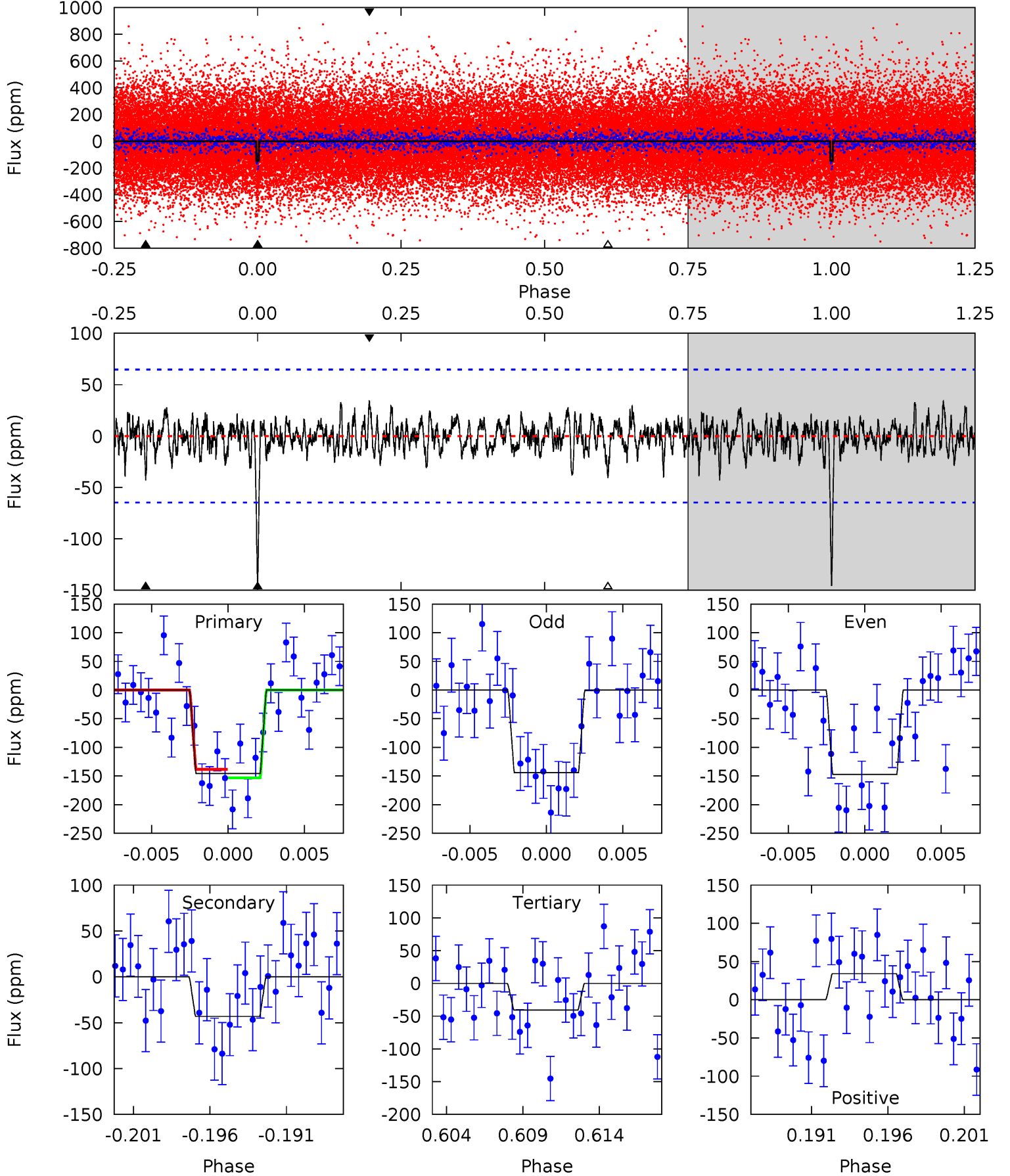
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
12.1	3.58	3.55	3.32	5.16	2.81	1.07	8.54	8.77	0.03	0.26	0.55	0.98	0.22	1.39



Alt Model-Shift Uniqueness Test

006264750-01, P = 53.286212 Days, E = 118.999427 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	3.44	3.25	2.72	5.16	2.81	0.94	8.37	8.90	0.19	0.72	0.11	1.07	0.19	0.59



Stellar Parameters For KIC 006264750

	$T_{\text{eff}} (K)$	$\log(g)$	$[\text{Fe}/\text{H}]$	$R (R_{\odot})$	$M (M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6015^{+200}_{-200}	$4.297^{+0.236}_{-0.193}$	$-0.680^{+0.300}_{-0.300}$	$1.057^{+0.302}_{-0.247}$	$0.806^{+0.113}_{-0.056}$	$0.962^{+1.195}_{-0.458}$
	+3%/-3%	+5%/-4%	+44%/-44%	+29%/-23%	+14%/-7%	+124%/-48%
Source	PHO54	PHO54	PHO54	DSEP		

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

Secondary Eclipse Parameters for KIC 006264750-01 / KOI 4715.01

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-45 ± 13	$1.53^{+0.64}_{-0.62}$	746^{+62}_{-56}	4467^{+1004}_{-592}	713^{+1334}_{-403}
Alt.	-43 ± 13	$1.40^{+0.66}_{-0.59}$	749^{+59}_{-55}	4553^{+1121}_{-596}	800^{+1489}_{-453}

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

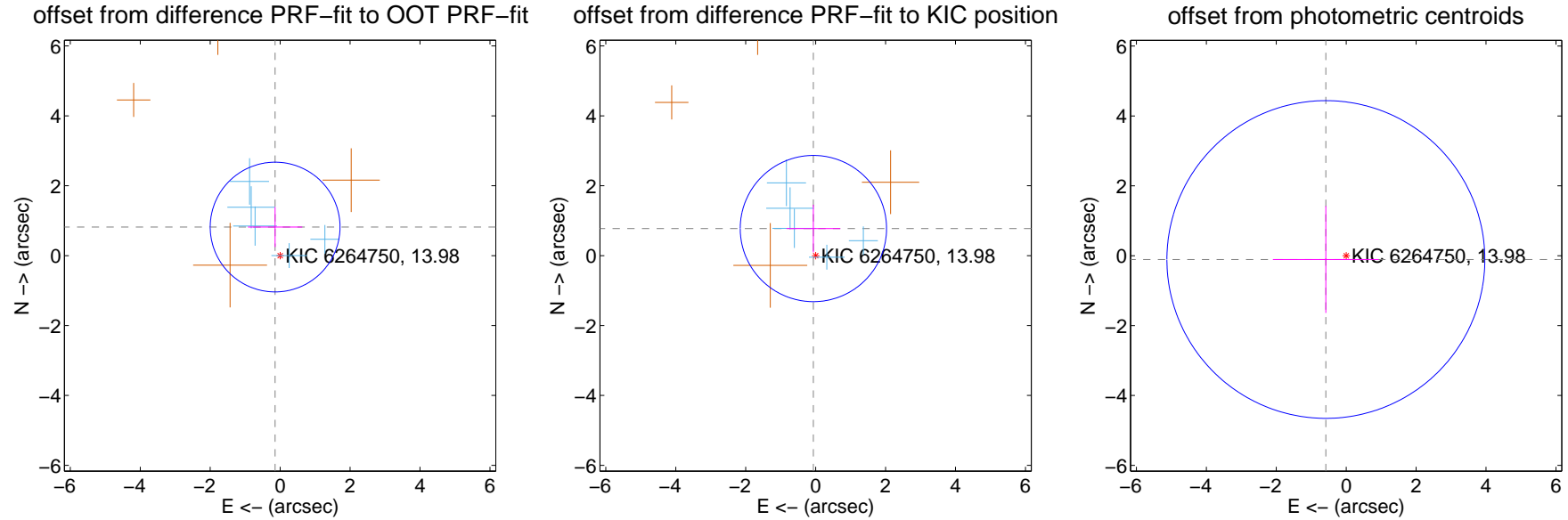
DV Centroid Data

Supplemental centroid analysis for 006264750-01. Kepler magnitude: 13.98. Transit SNR 9.10

There are 5 quarters with good PRF difference image offsets

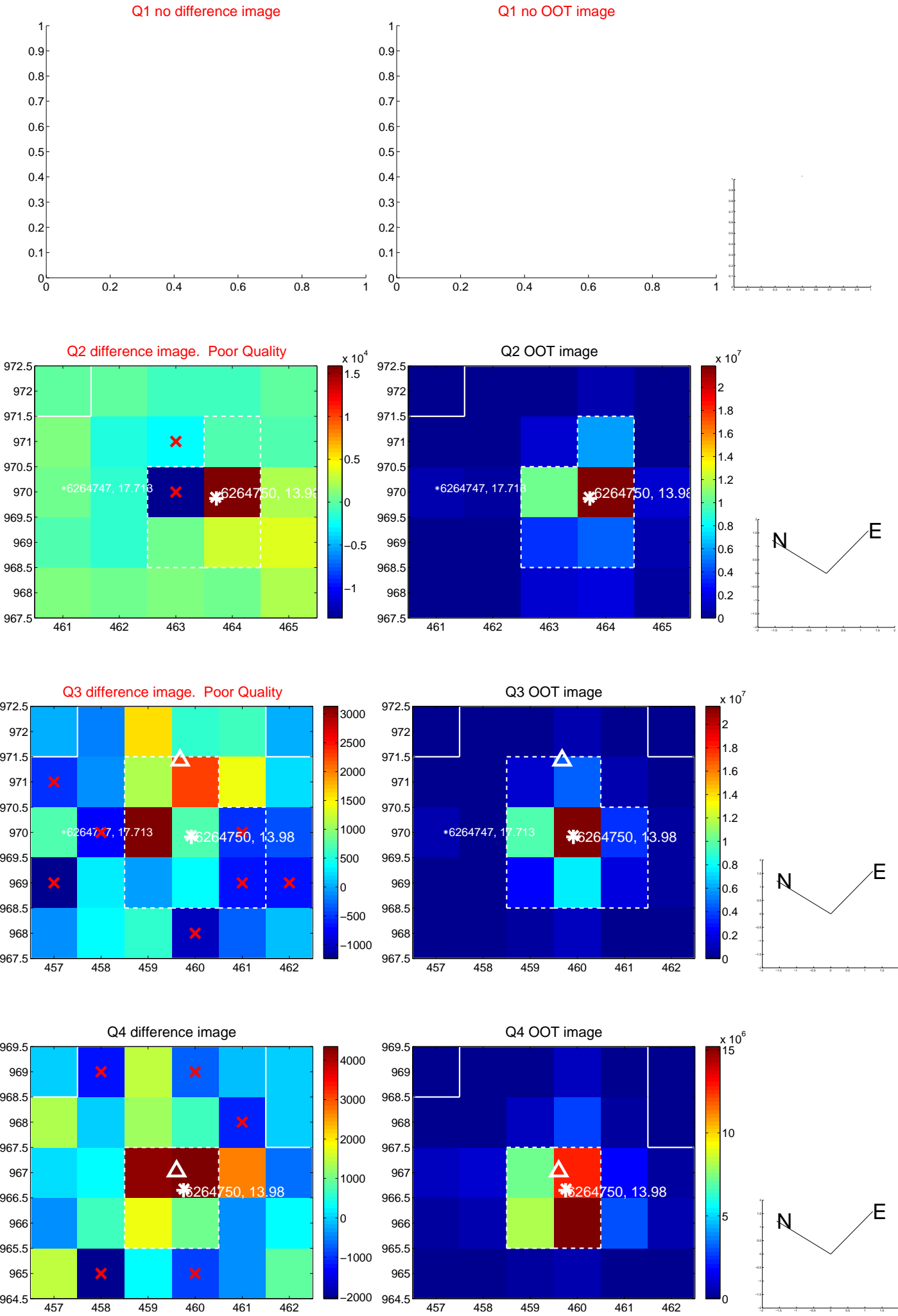
The direct PRF centroid is offset from the target star catalog position by about 0.14 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.830 ± 0.619	1.34	0.143 ± 0.776	0.818 ± 0.571
PRF-fit source offset from KIC position	0.778 ± 0.697	1.12	0.064 ± 0.769	0.775 ± 0.682
photometric centroid source offset	0.59 ± 1.52	0.39	0.58 ± 1.52	-0.11 ± 1.53

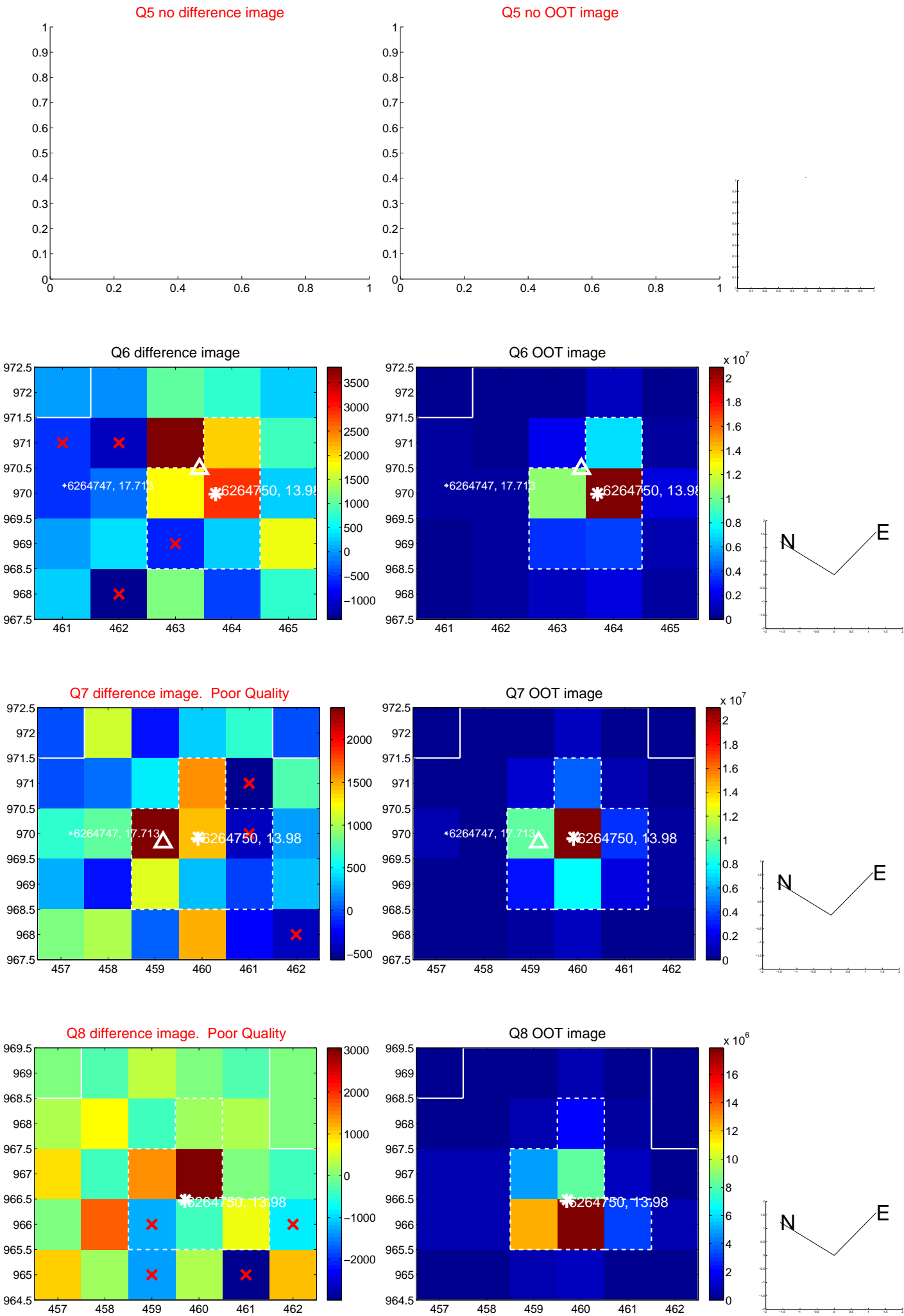


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets**; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

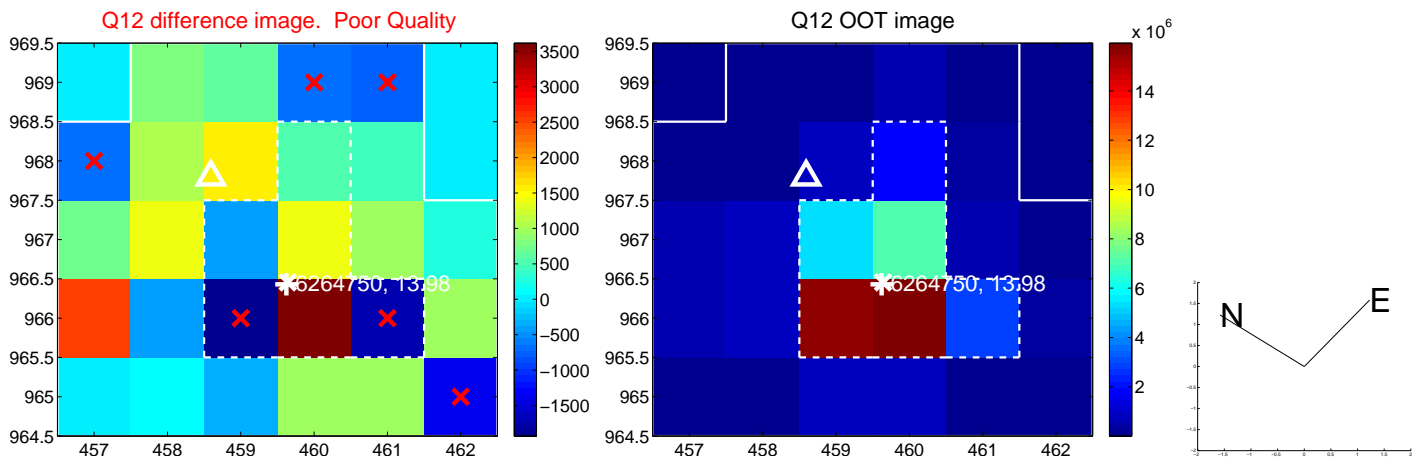
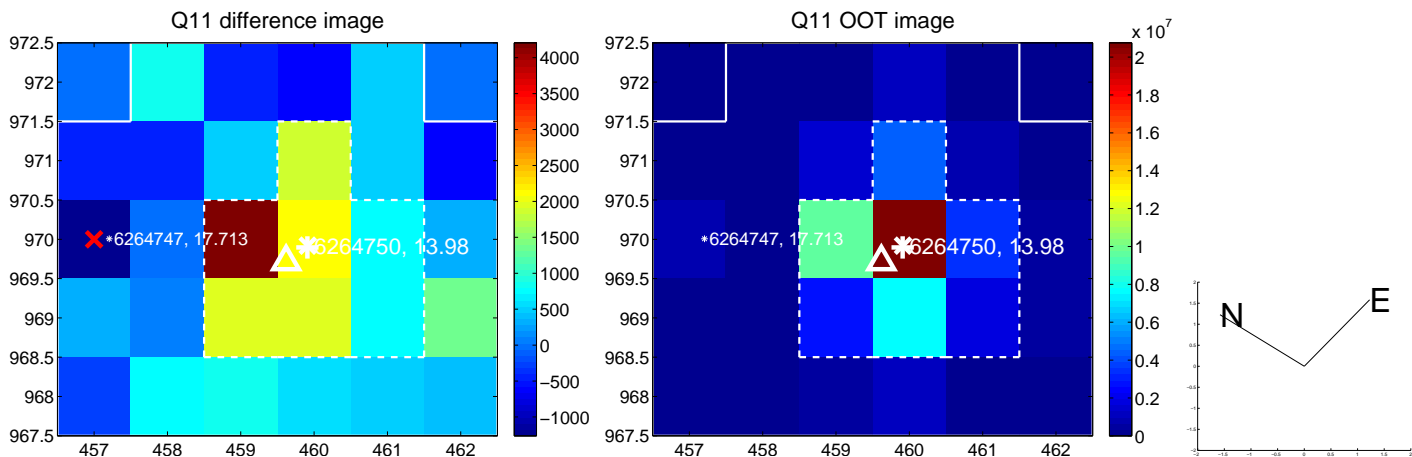
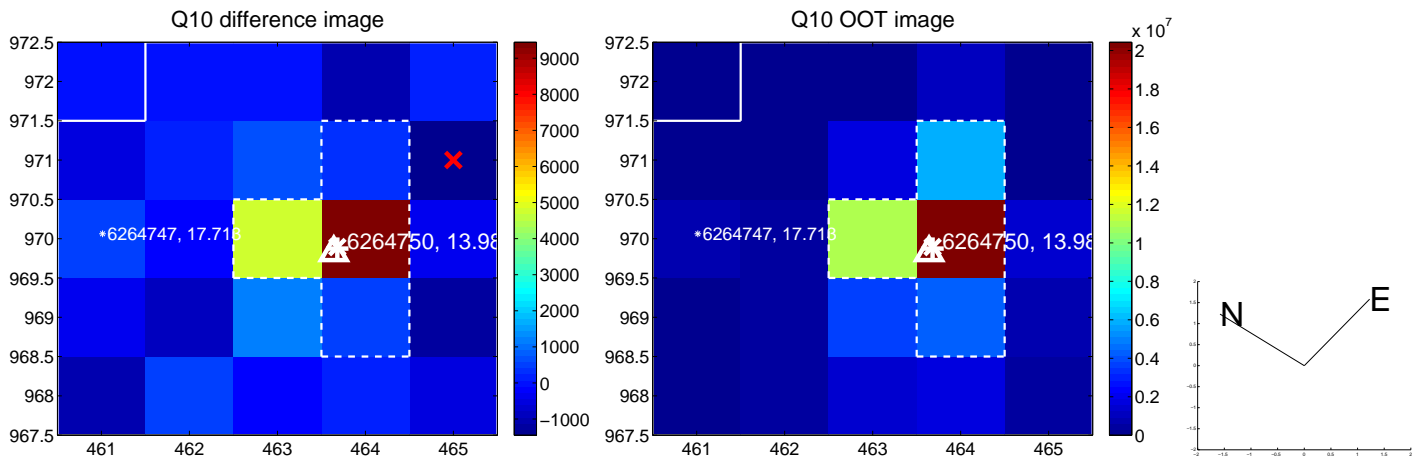
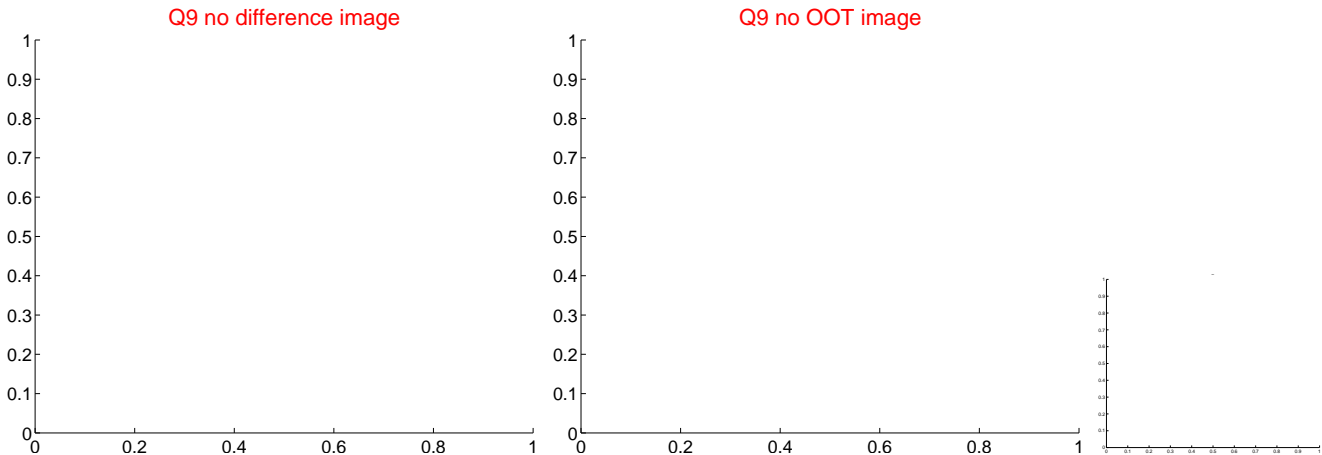
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



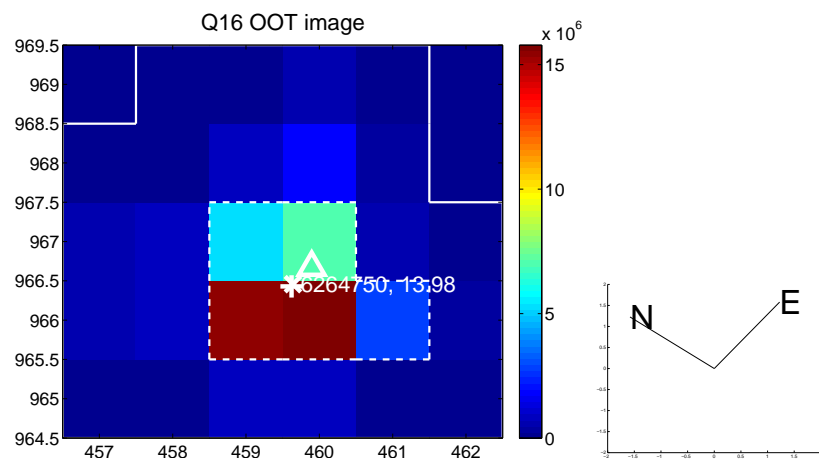
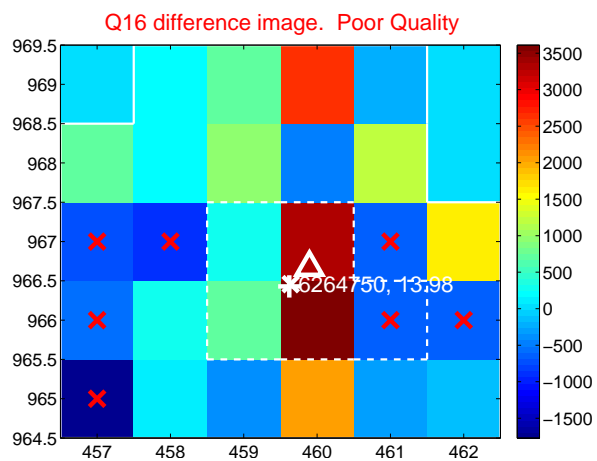
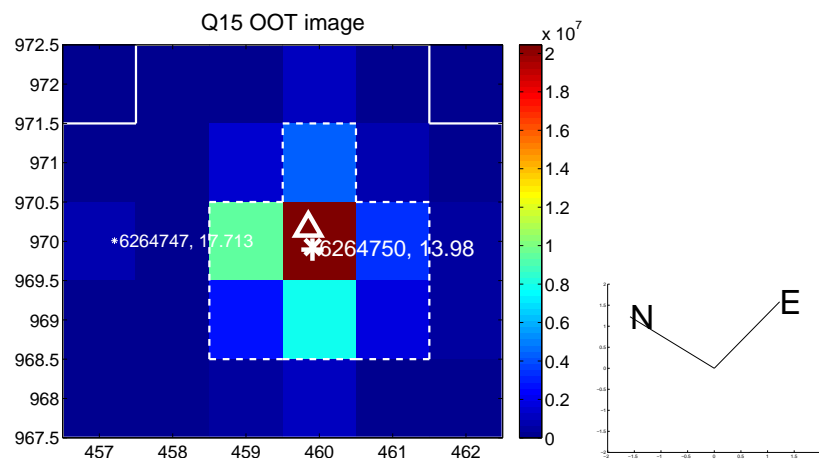
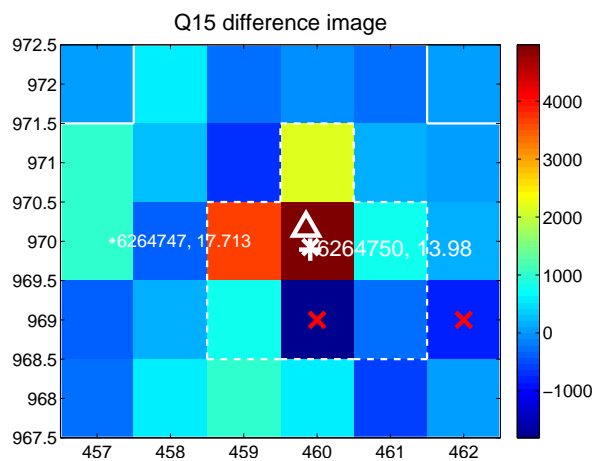
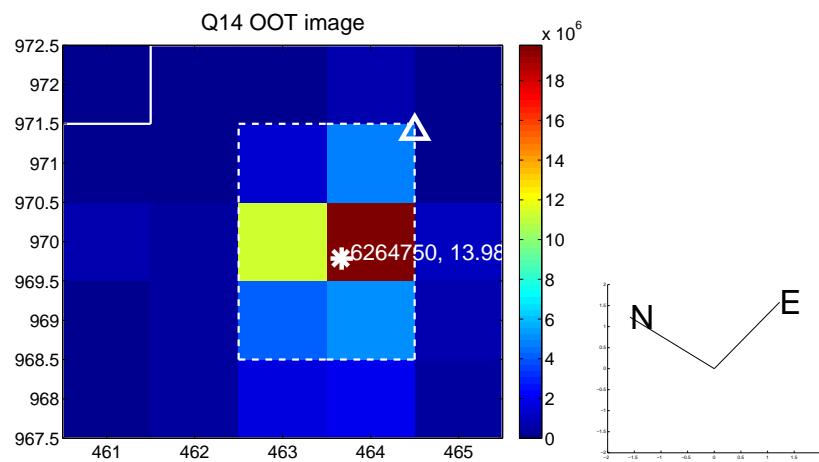
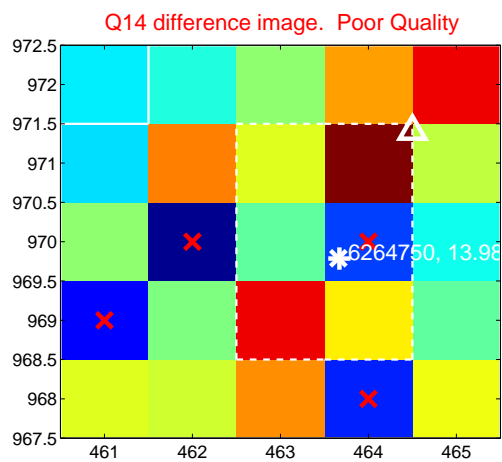
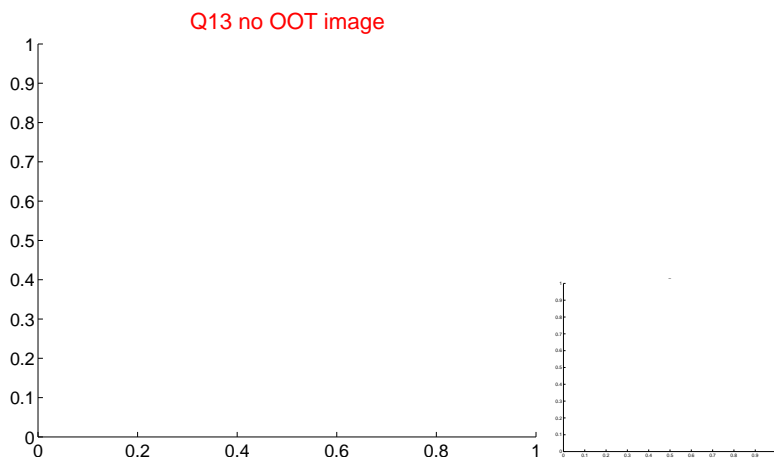
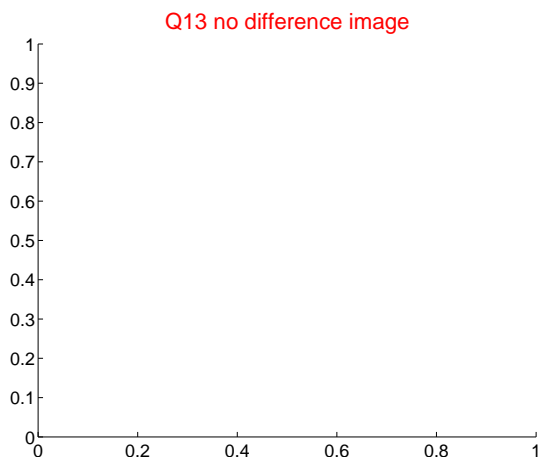
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



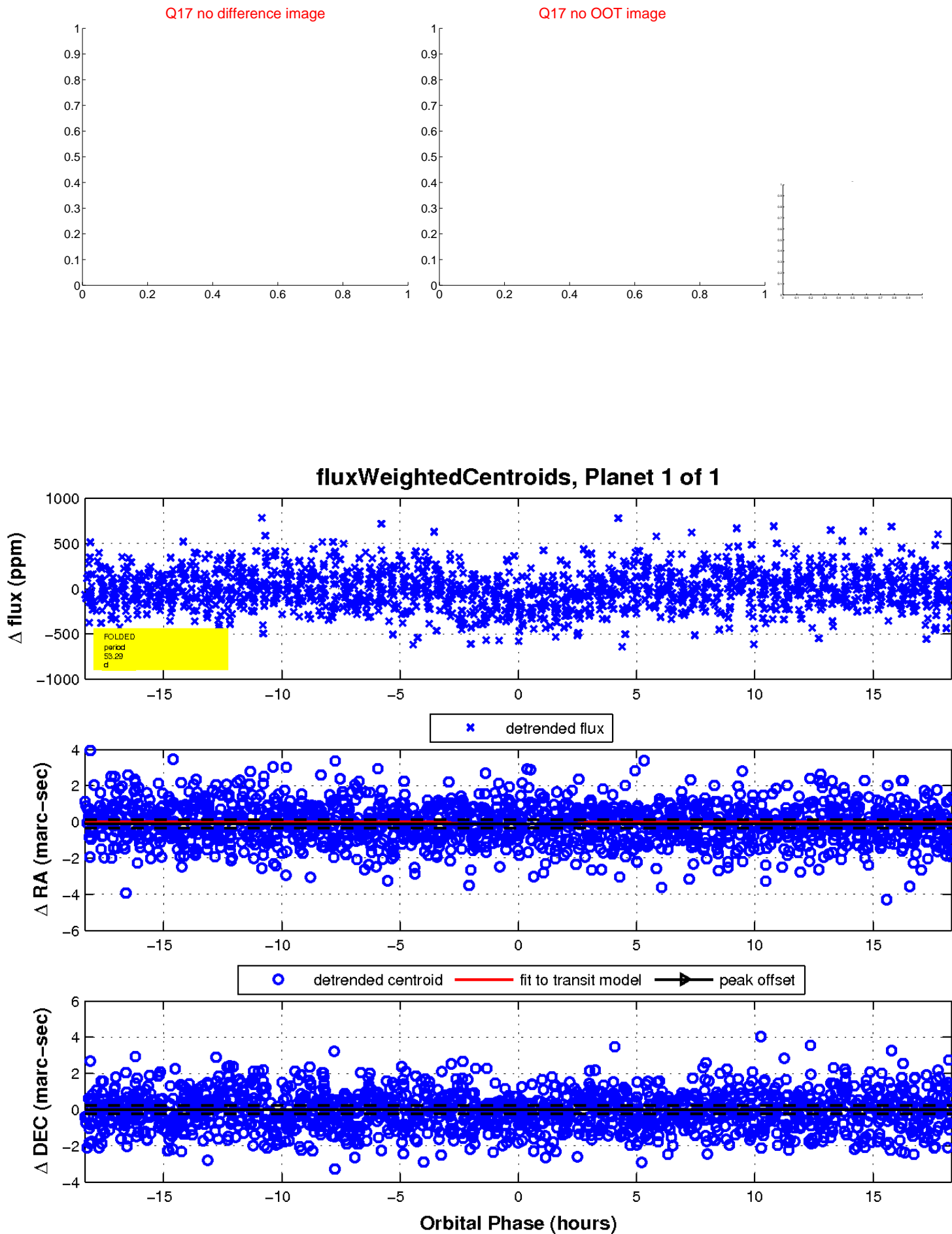
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UKIRT Image

