

KIC 005342061

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})
005342061-01	OBS	2666.01	64.034608	159.039508	705.8	8.974	13.2	13.4	0.78	5691	2.92	6.73

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
005342061-01	OBS	PC	0.99	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.

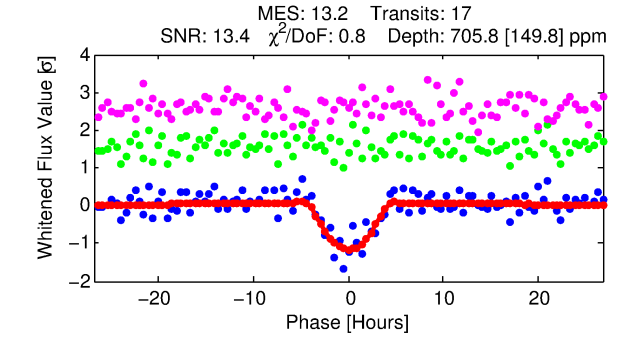
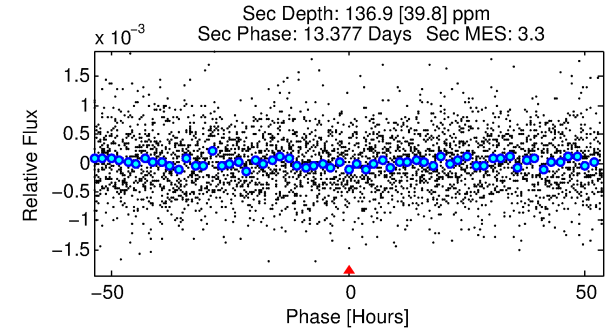
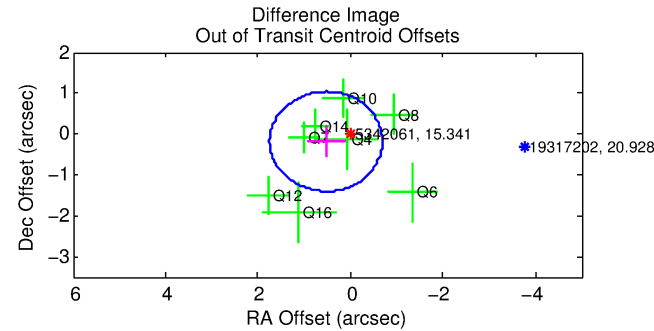
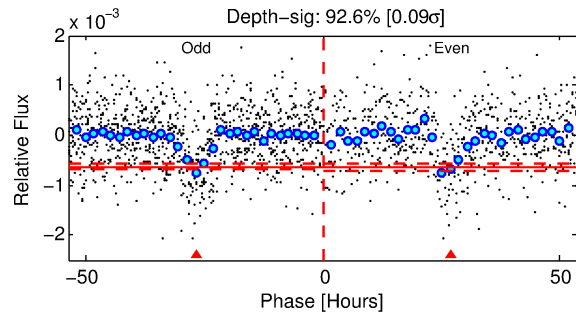
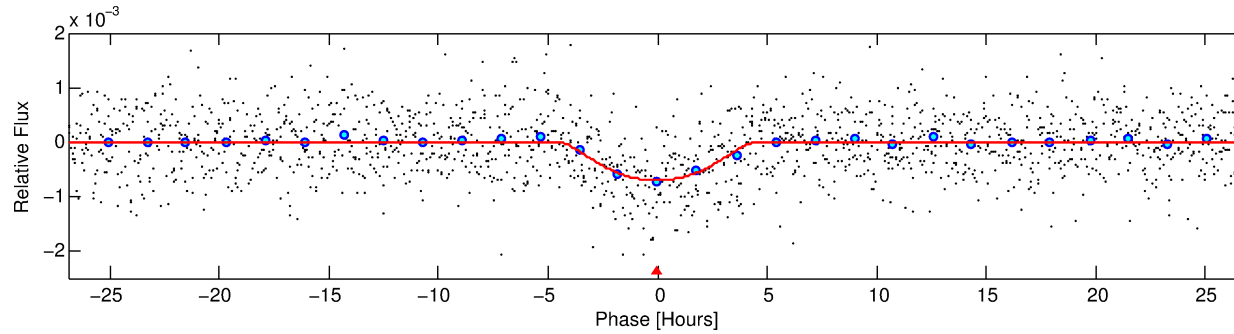
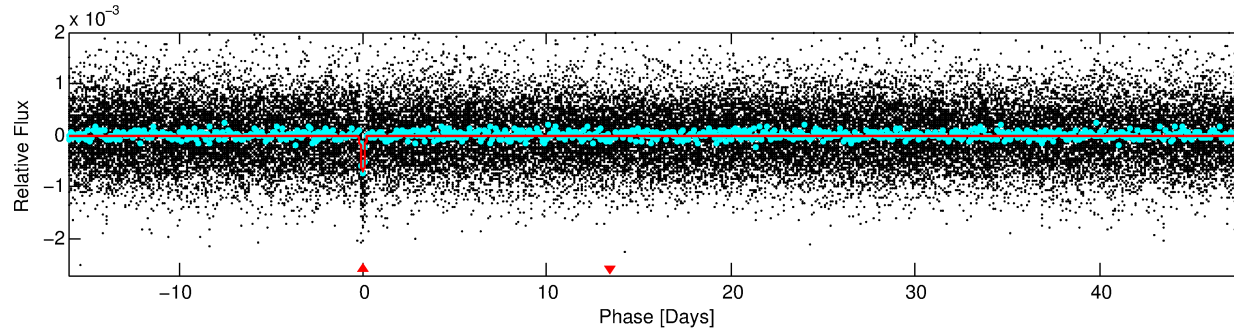
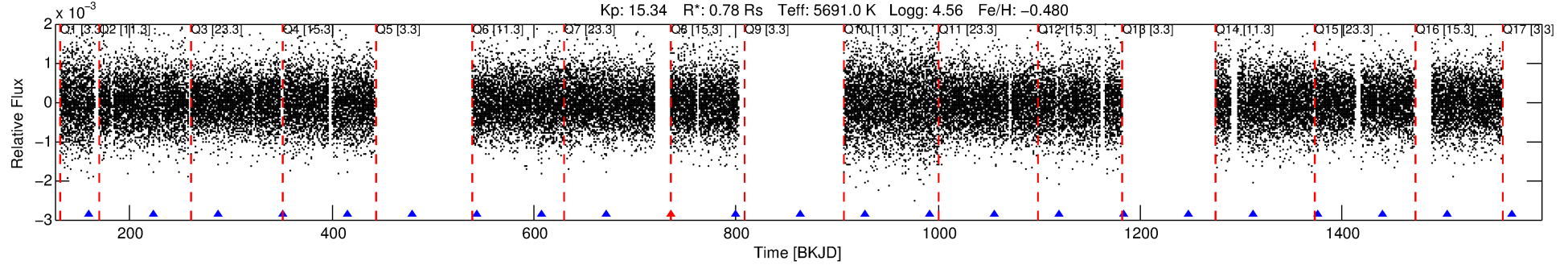
Ephemeris Match Information For 005342061-01

No Significant Match Found

DV One-Page Summary

KIC: 5342061 Candidate: 1 of 1 Period: 64.035 d
KOI: K02666.01 Corr: 0.976

Kp: 15.34 R*: 0.78 Rs Teff: 5691.0 K Logg: 4.56 Fe/H: -0.480



DV Fit Results:

Period = 64.03461 [0.00111] d
Epoch = 159.0395 [0.0140] BKJD
Rp/R* = 0.0342 [0.0153]
a/R* = 18.78 [5.05]
b = 0.98 [0.04]
Seff = 6.73 [2.00]
Teq = 411 [31] K
Rp = 2.92 [1.47] Re
a = 0.2925 [0.0563] AU
Ag = 754.55 [740.06] [1.02σ]
Teff = 3329 [788] K [3.70σ]

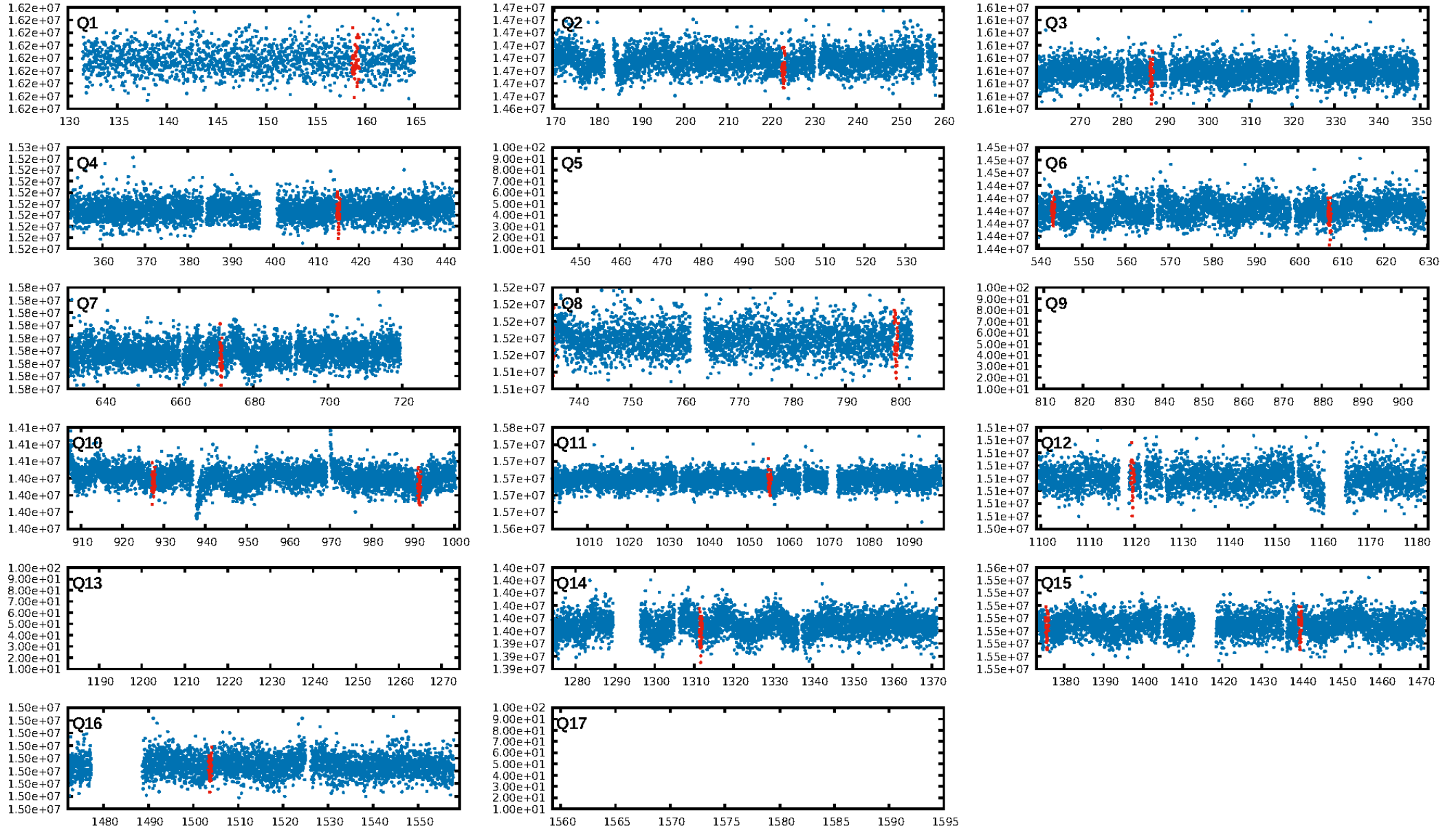
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: 58.4%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: 4.45e-38
RollingBand-fgt: 0.94 [15/16]
GhostDiagnostic-chr: 7.83
Centroid-sig: 2.2%
Centroid-so: 1.577 arcsec [1.57σ]
OotOffset-rm: 0.564 arcsec [1.39σ]
KicOffset-rm: 0.388 arcsec [0.97σ]
OotOffset-st: 3/1/4/0 [8]
KicOffset-st: 3/1/4/0 [8]
DiffImageQuality-fgm: 0.75 [6/8]
DiffImageOverlap-fno: 1.00 [12/12]

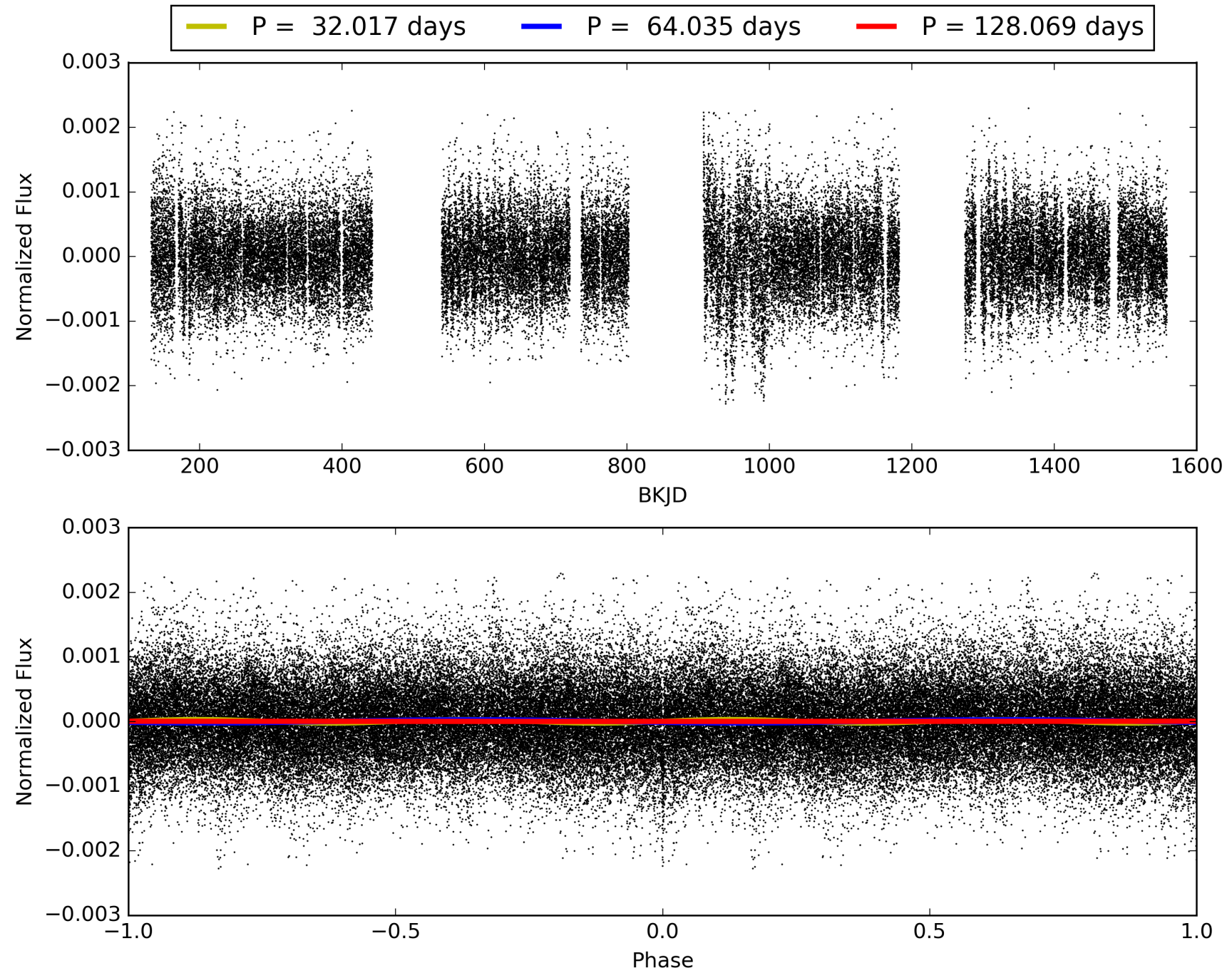
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 31-Jan-2016 21:49:33 Z

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

TCE 005342061-01, PDC Light Curves

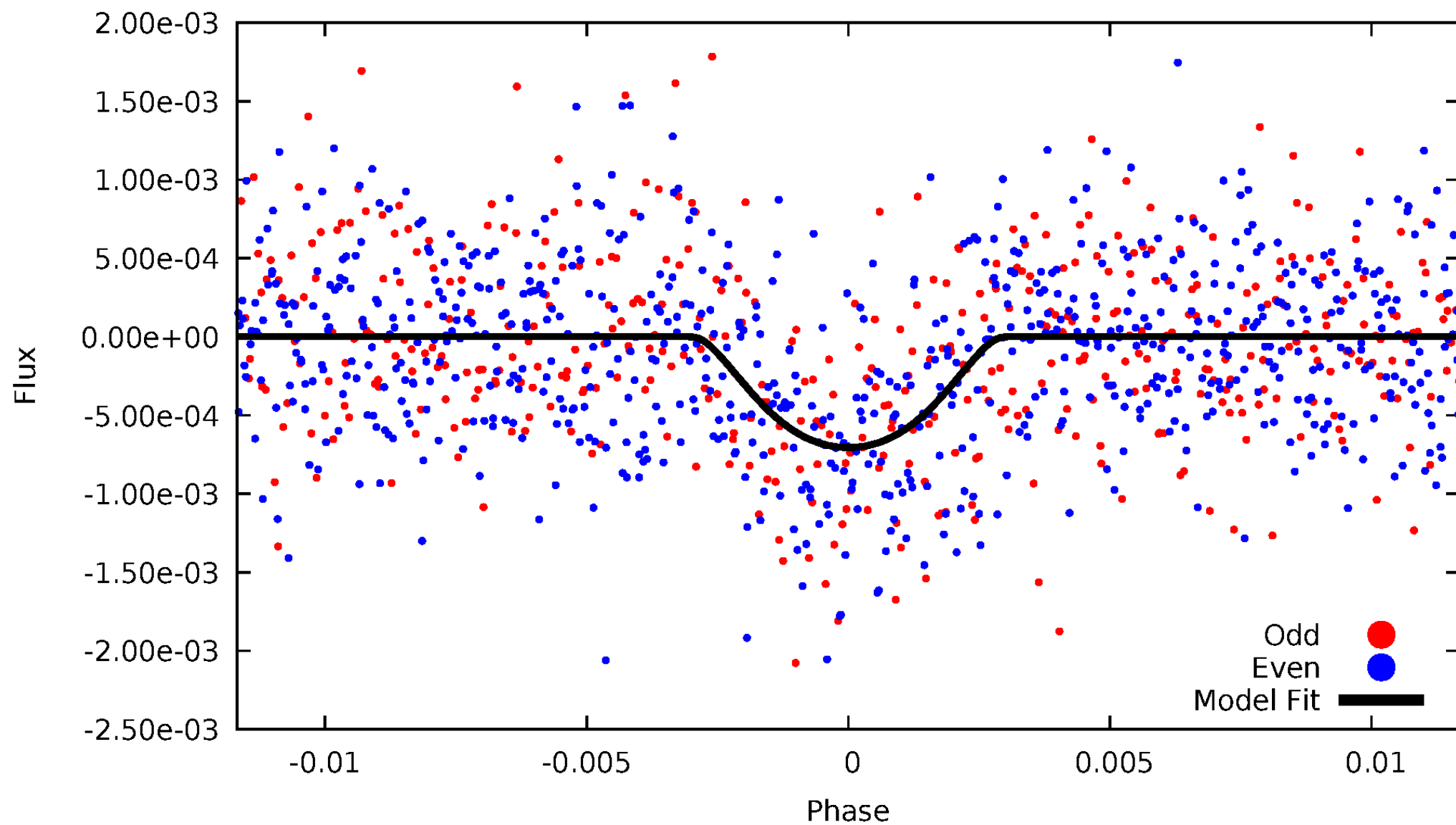


TCE 005342061-01



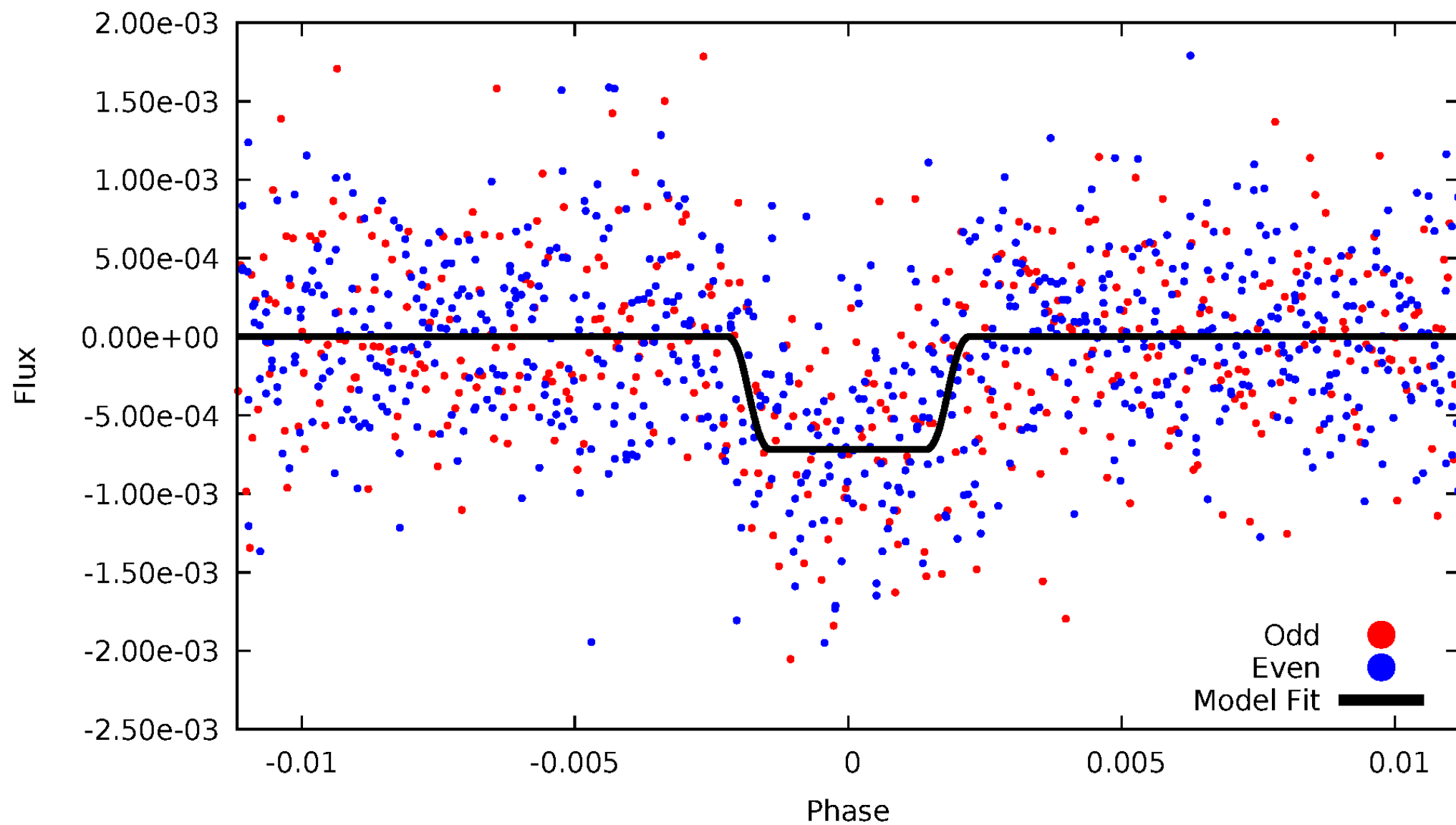
DV Odd/Even

TCE 005342061-01

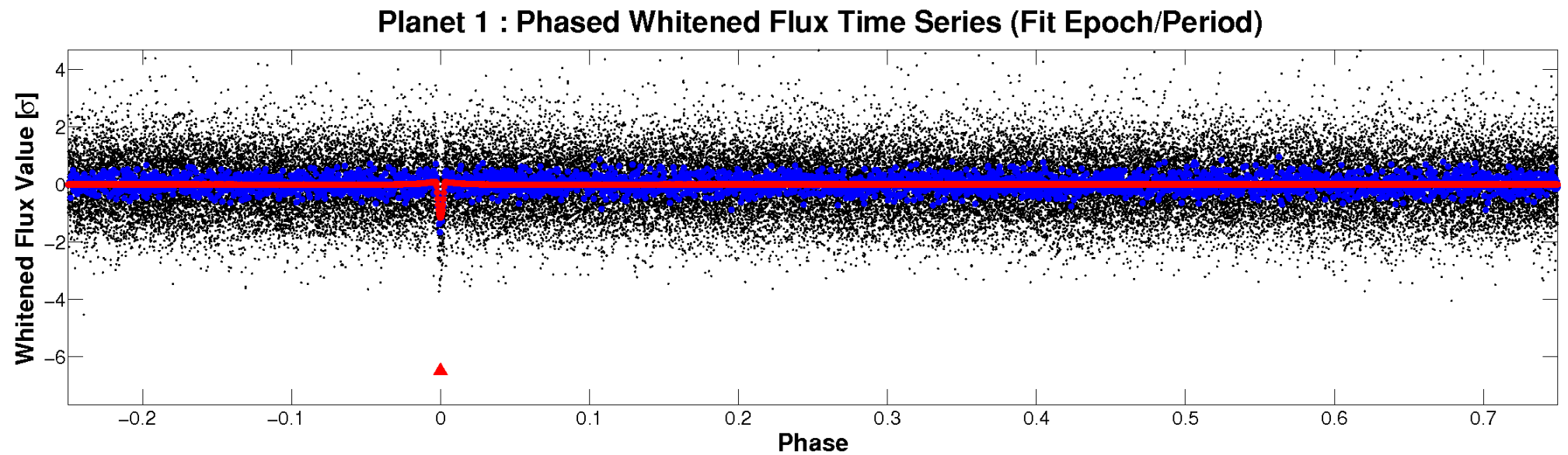
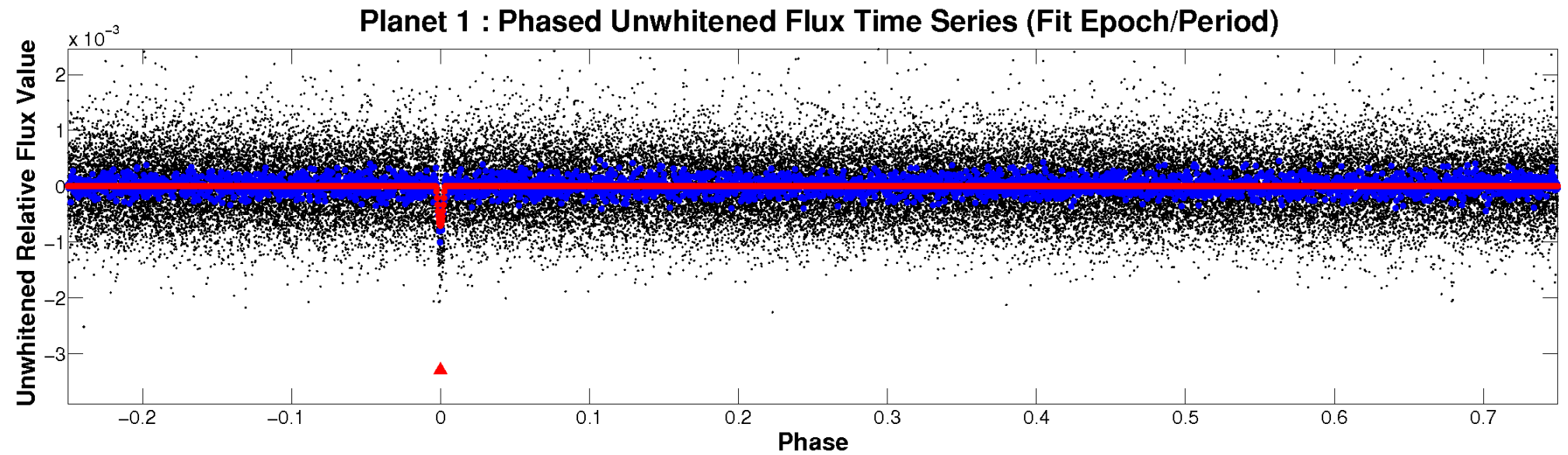


ALT Odd/Even

TCE 005342061-01

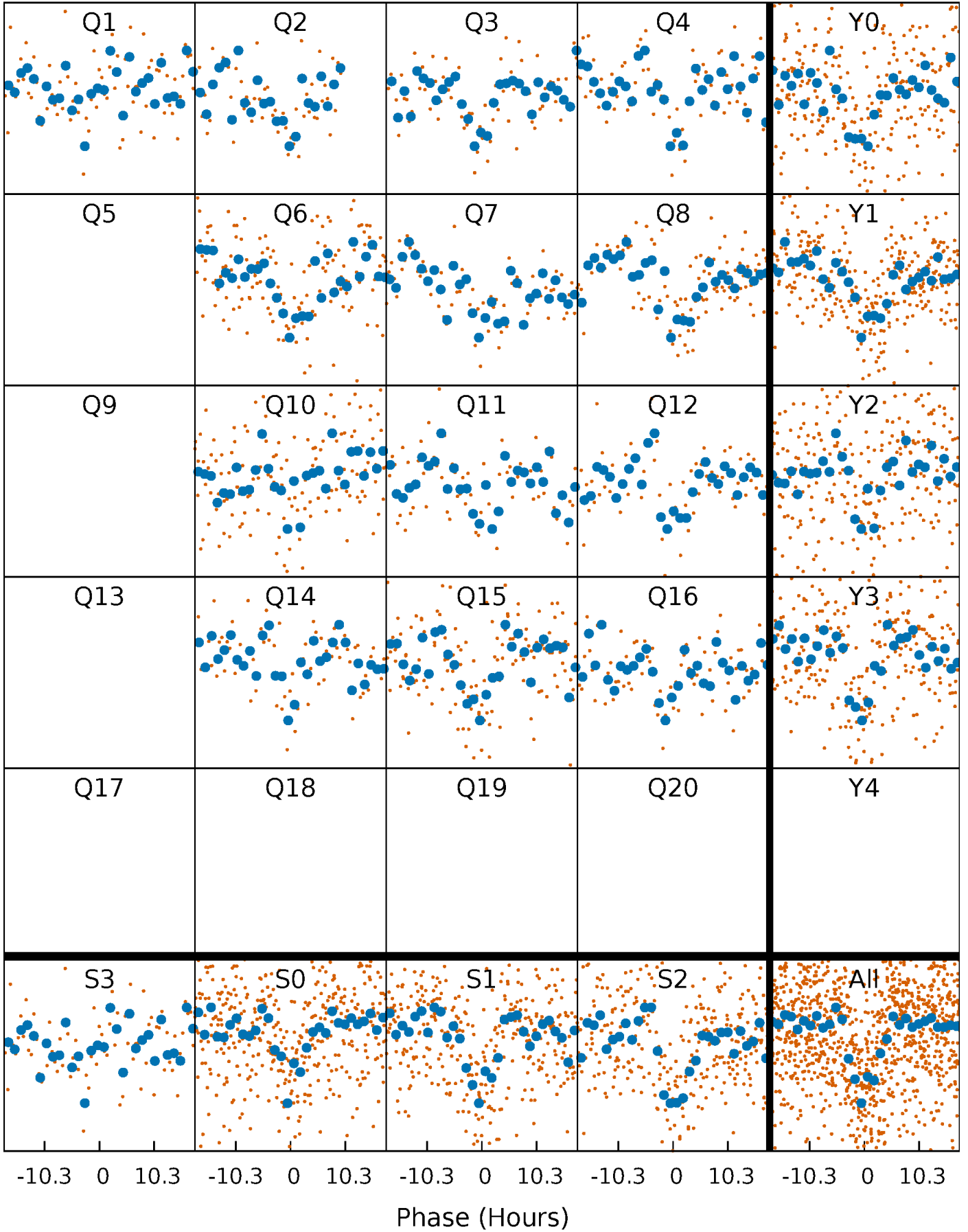


Non-Whitened Vs. Whitened Light Curve



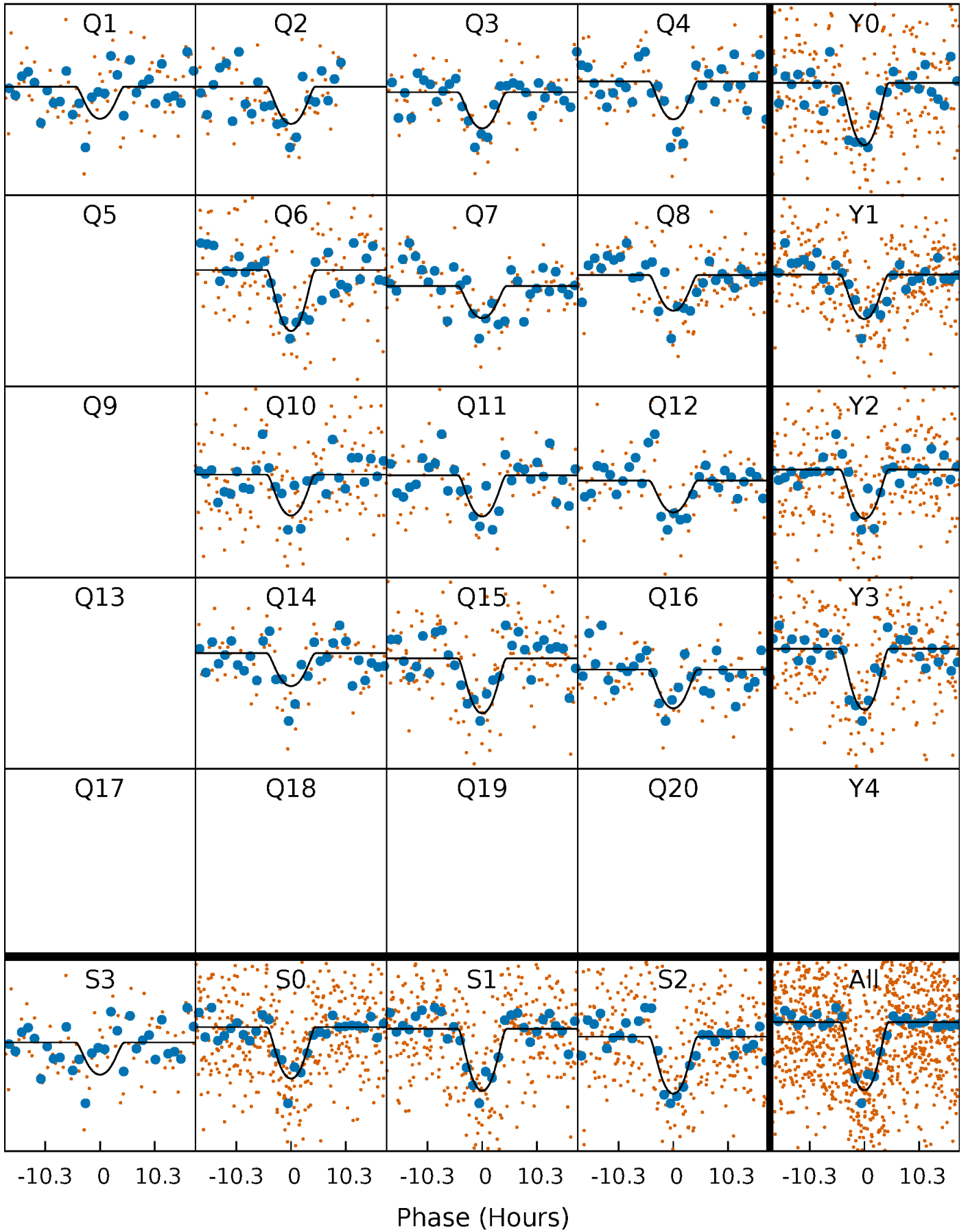
PDC Quarter-Phased Transit Curves

TCE 005342061-01 $P = 64.034608$ Days $T_0 = 159.039508$ (BKJD)



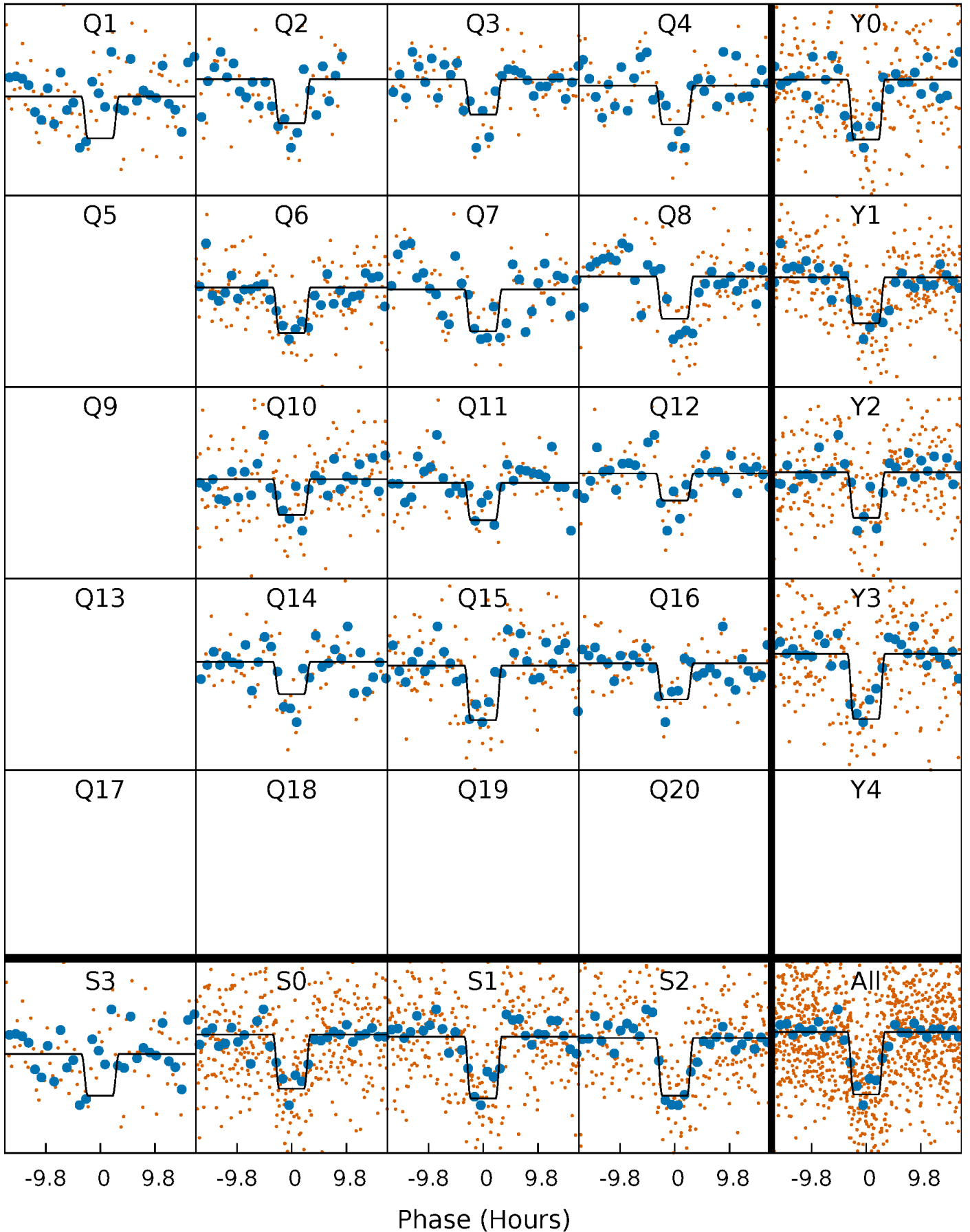
DV Quarter-Phased Transit Curves

TCE 005342061-01 P= 64.034608 Days $T_0=159.039508$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

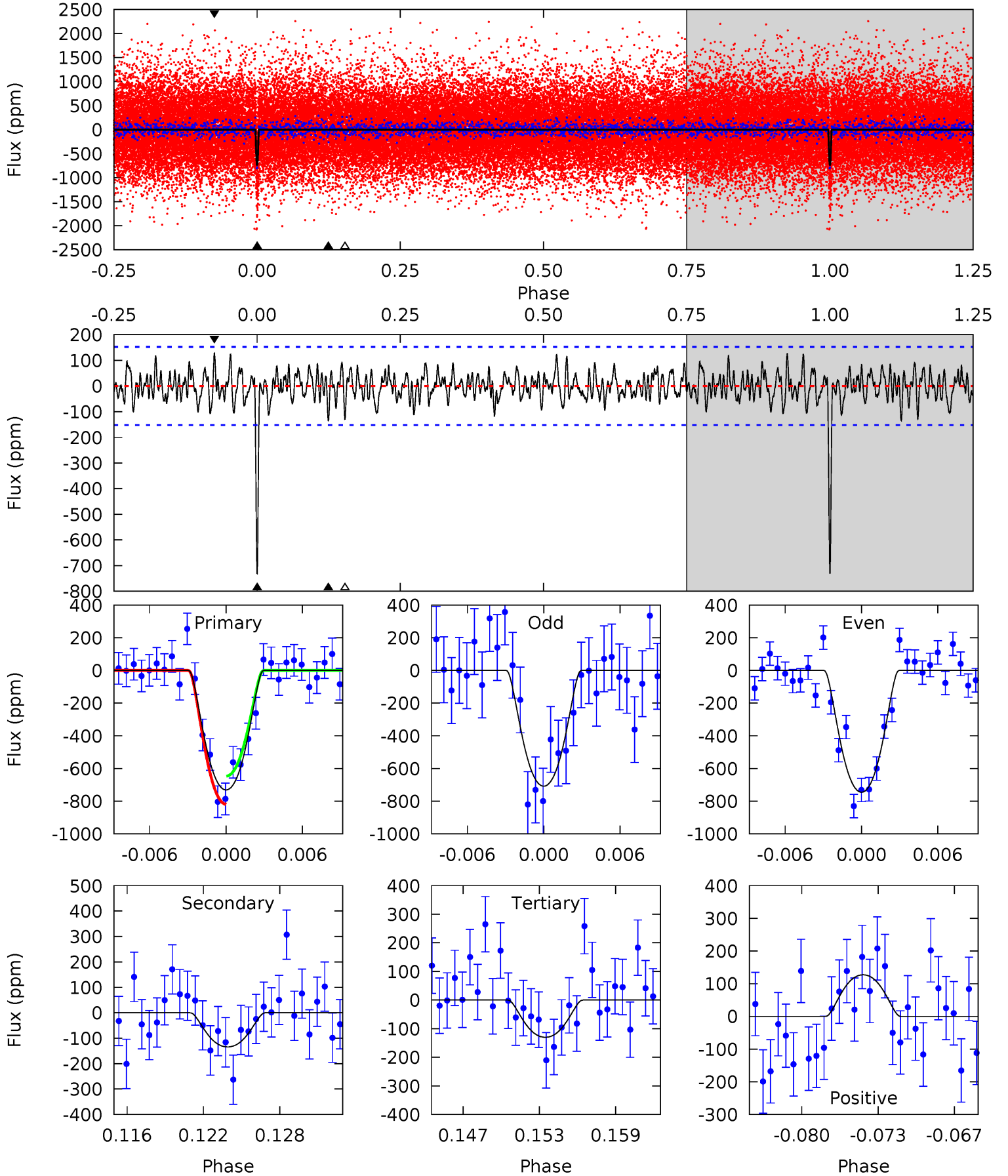
TCE 005342061-01 P= 64.034366 Days $T_0=159.046184$ (BKJD)



DV Model-Shift Uniqueness Test

005342061-01, P = 64.034608 Days, E = 95.004900 Days

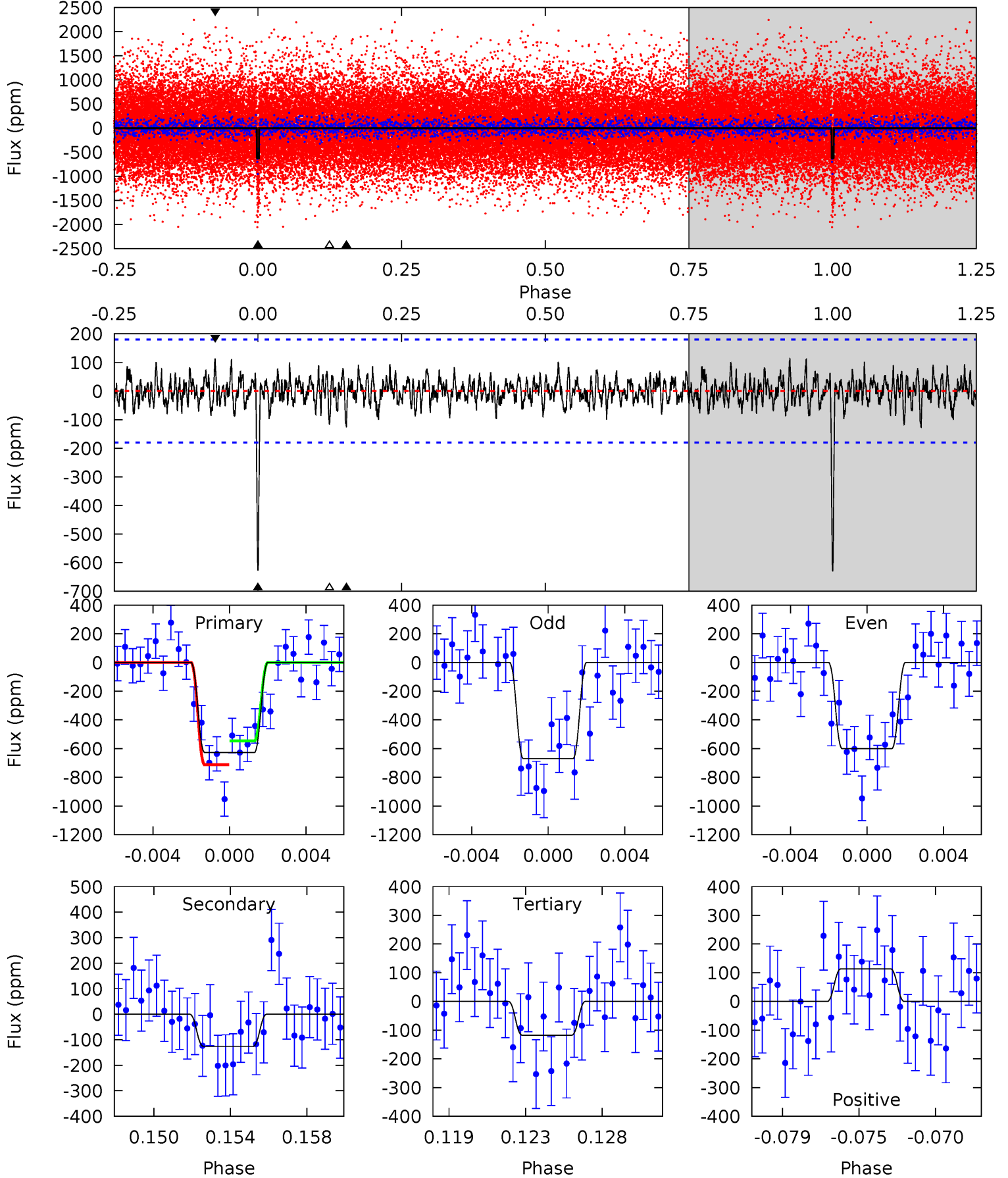
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
24.6	4.51	4.37	4.27	5.12	2.74	1.47	20.2	20.3	0.14	0.24	0.61	0.90	0.15	2.87



Alt Model-Shift Uniqueness Test

005342061-01, P = 64.034366 Days, E = 95.011818 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
18.1	3.63	3.38	3.27	5.18	2.85	1.04	14.7	14.8	0.25	0.37	0.98	0.92	0.15	2.39



Stellar Parameters For KIC 005342061

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	M (M_{\odot})	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	5691^{+155}_{-155}	$4.561^{+0.050}_{-0.150}$	$-0.480^{+0.300}_{-0.300}$	$0.783^{+0.181}_{-0.072}$	$0.814^{+0.096}_{-0.070}$	$2.386^{+0.506}_{-0.999}$
	+3%/-3%	+1%/-3%	+62%/-62%	+23%/-9%	+12%/-9%	+21%/-42%
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 005342061-01 / KOI 2666.01

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-134 ± 30	$3.09^{+1.38}_{-1.35}$	583^{+33}_{-25}	3710^{+797}_{-444}	662^{+1398}_{-368}
Alt.	-126 ± 35	$2.49^{+1.35}_{-1.30}$	581^{+36}_{-23}	3919^{+1439}_{-553}	960^{+3174}_{-587}

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 $A_{obs} \gg 1.0$

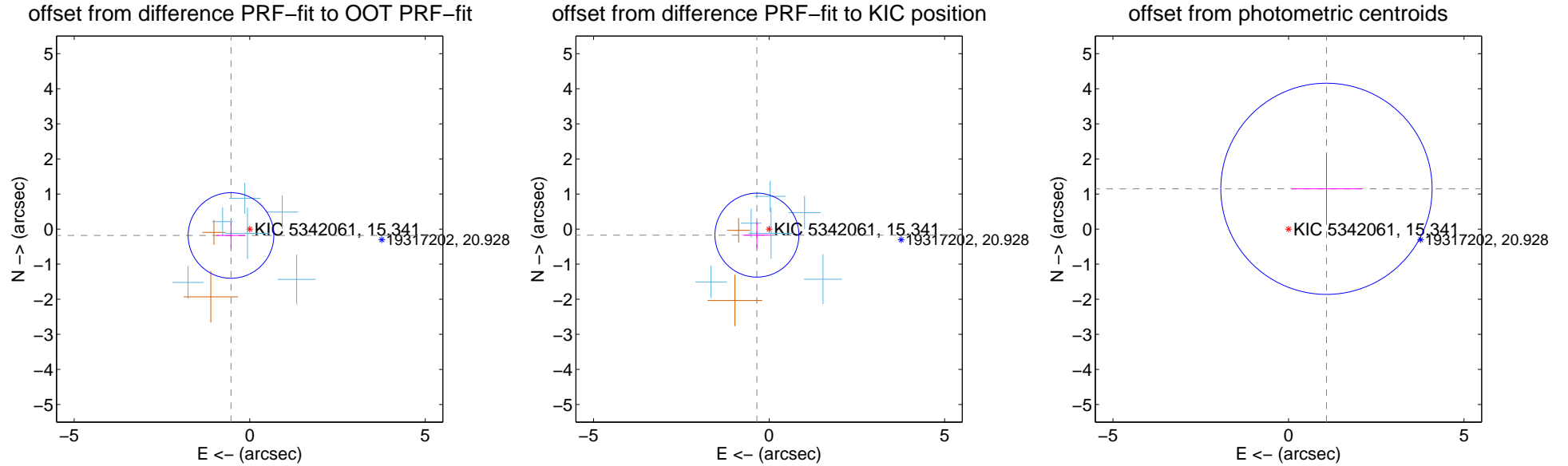
DV Centroid Data

Supplemental centroid analysis for 005342061-01. Kepler magnitude: 15.34. Transit SNR 13.45

There are 6 quarters with good PRF difference image offsets

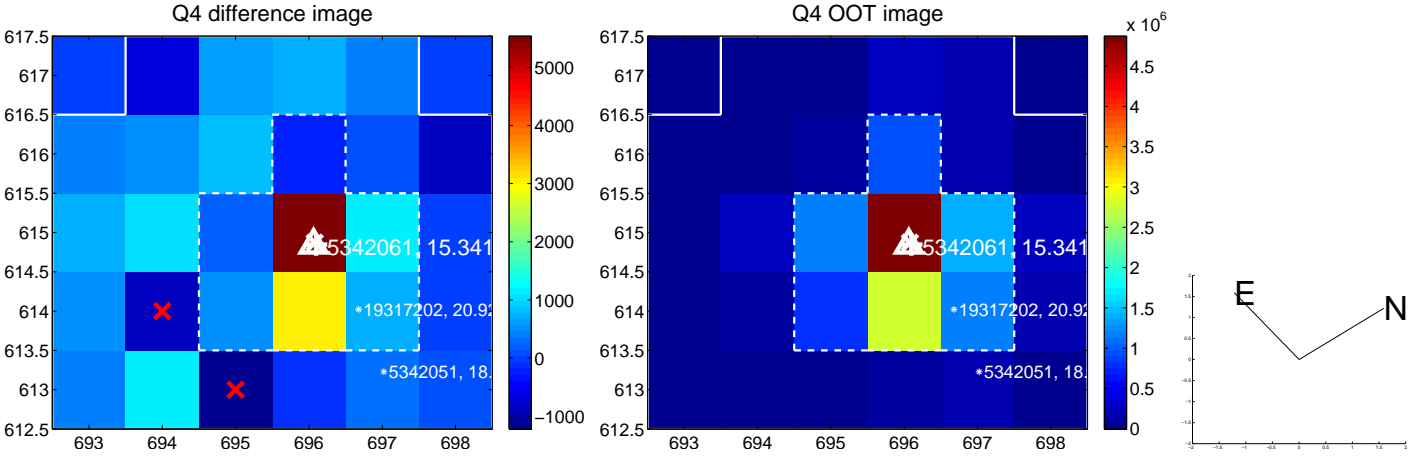
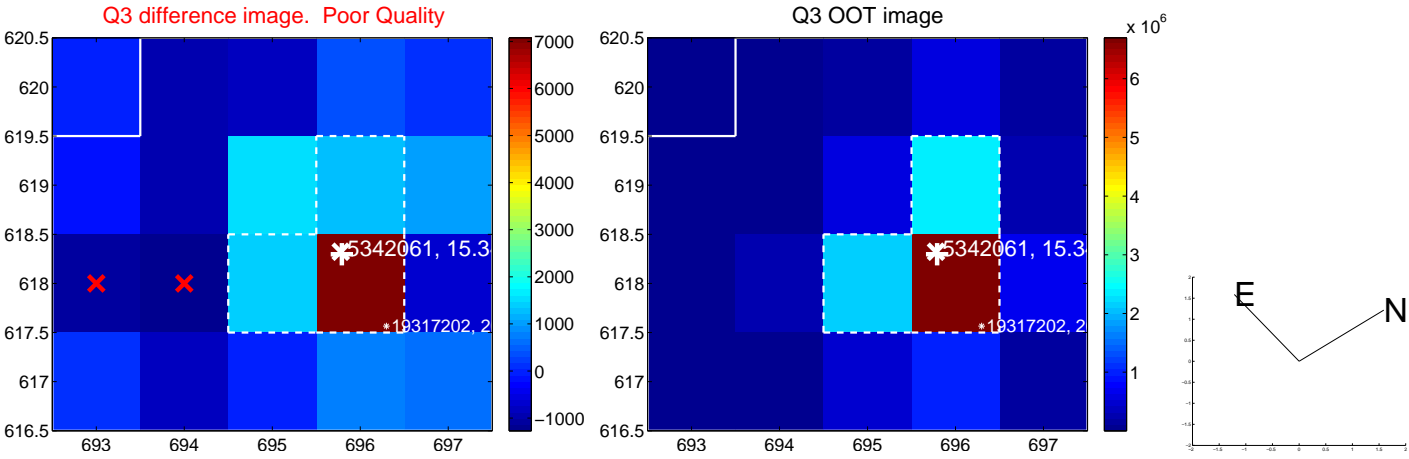
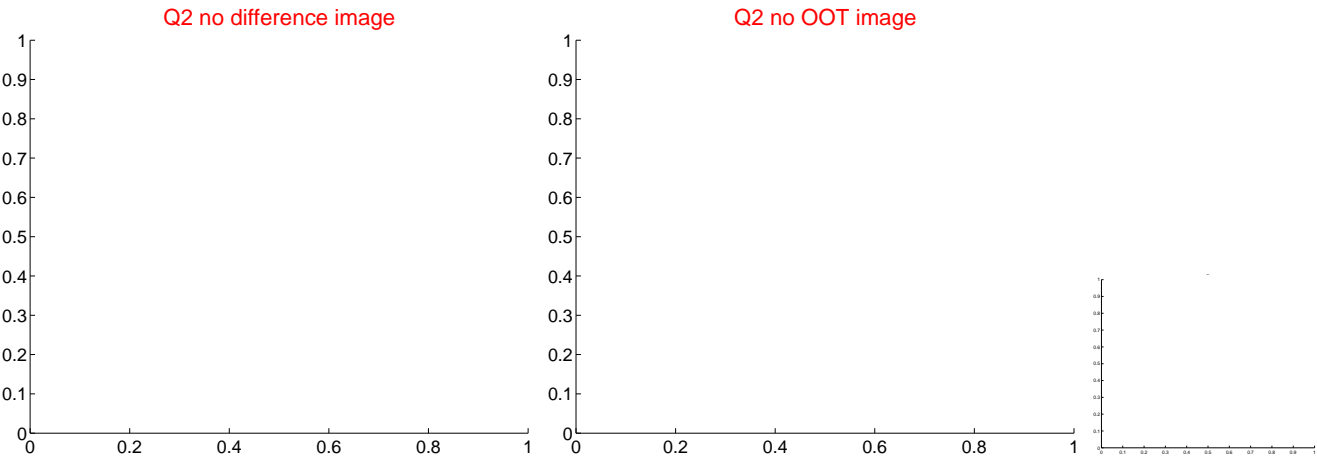
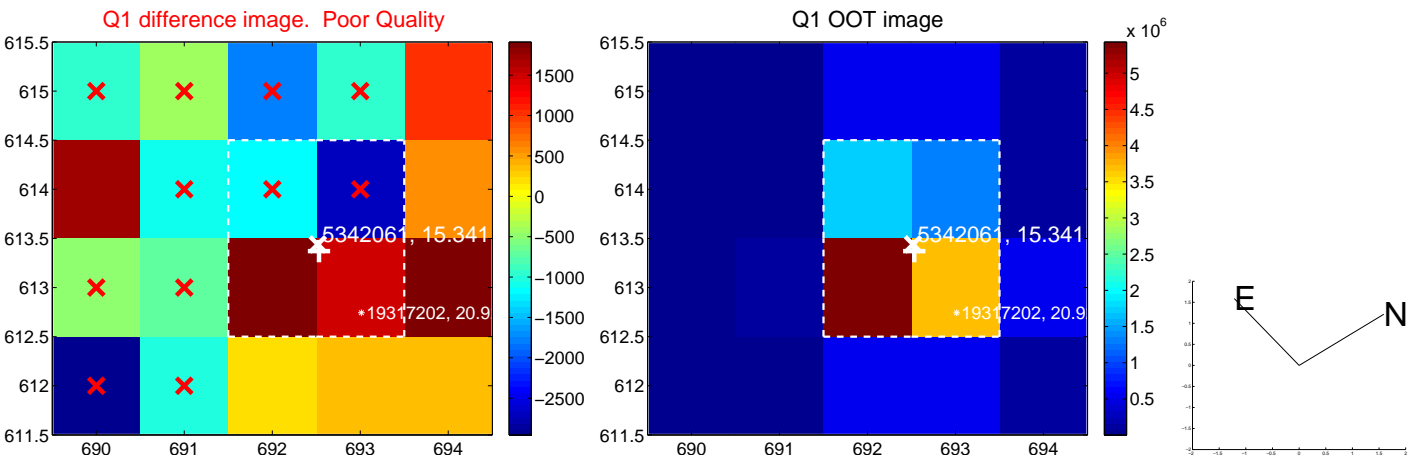
The direct PRF centroid is offset from the target star catalog position by about 0.17 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.564 ± 0.407	1.39	0.534 ± 0.411	-0.182 ± 0.369
PRF-fit source offset from KIC position	0.388 ± 0.399	0.97	0.347 ± 0.404	-0.173 ± 0.377
photometric centroid source offset	1.58 ± 1.00	1.57	-1.08 ± 1.00	1.15 ± 1.01

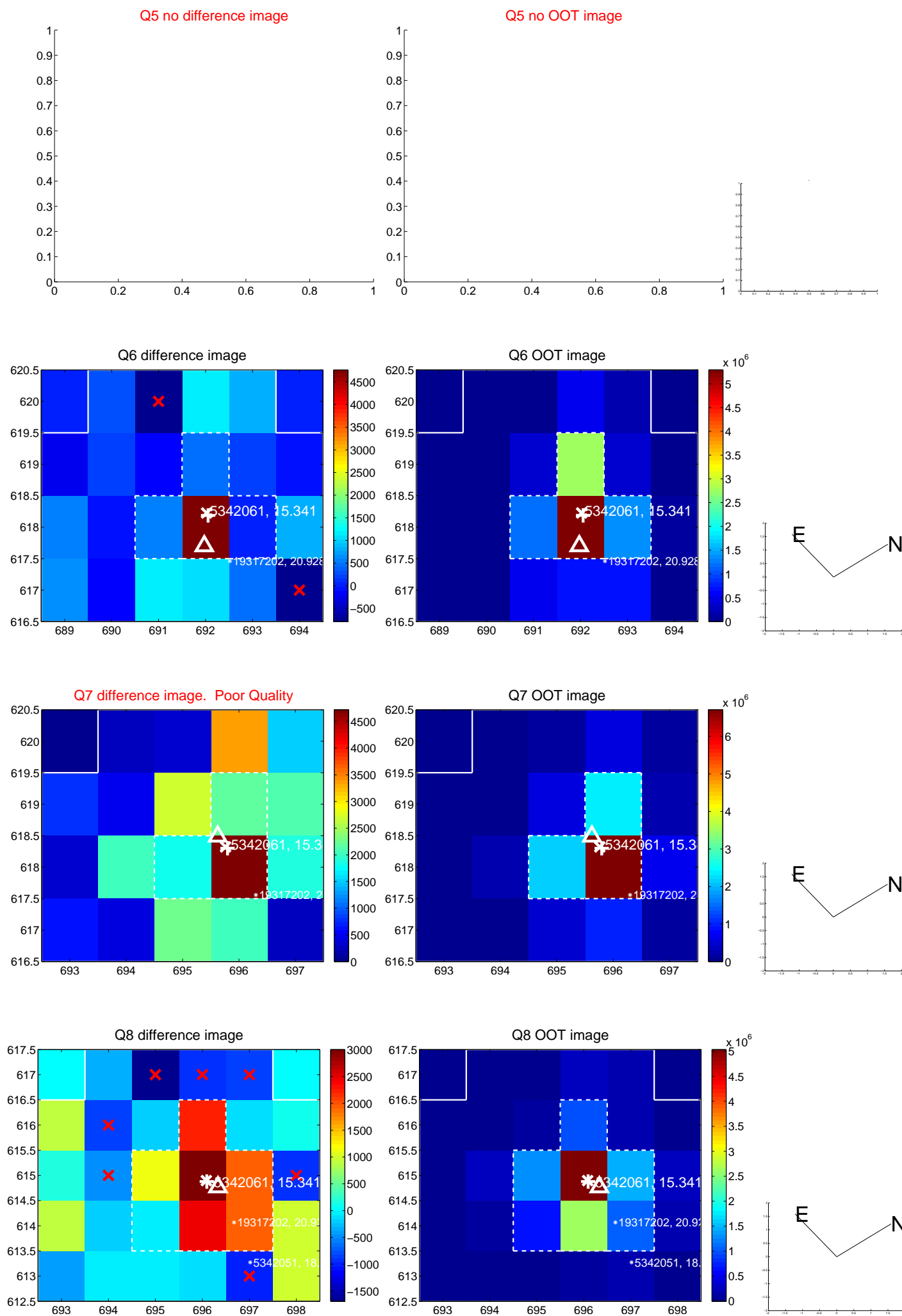


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses:** good quarterly centroid offsets; **Vermillion crosses:** bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

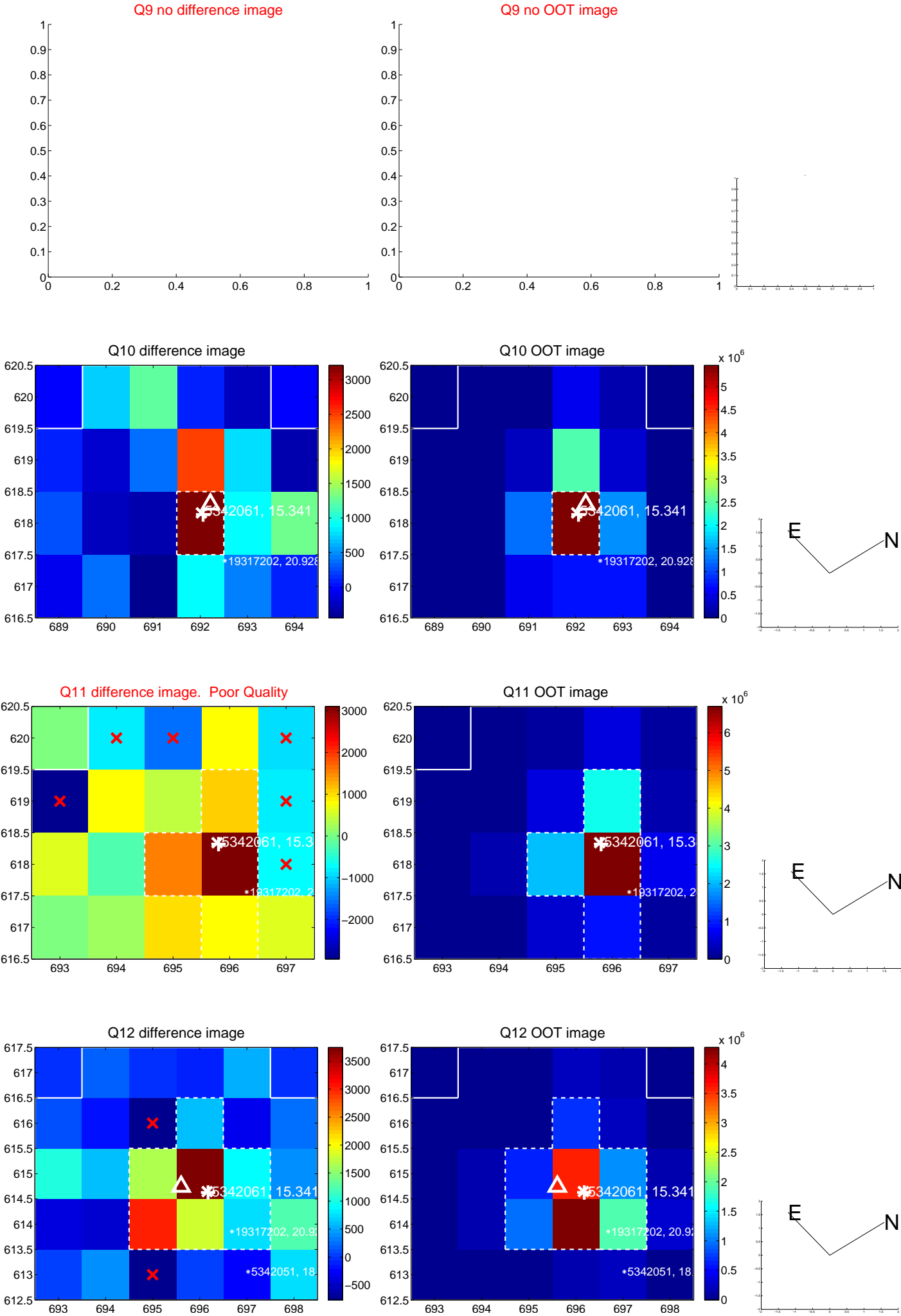
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



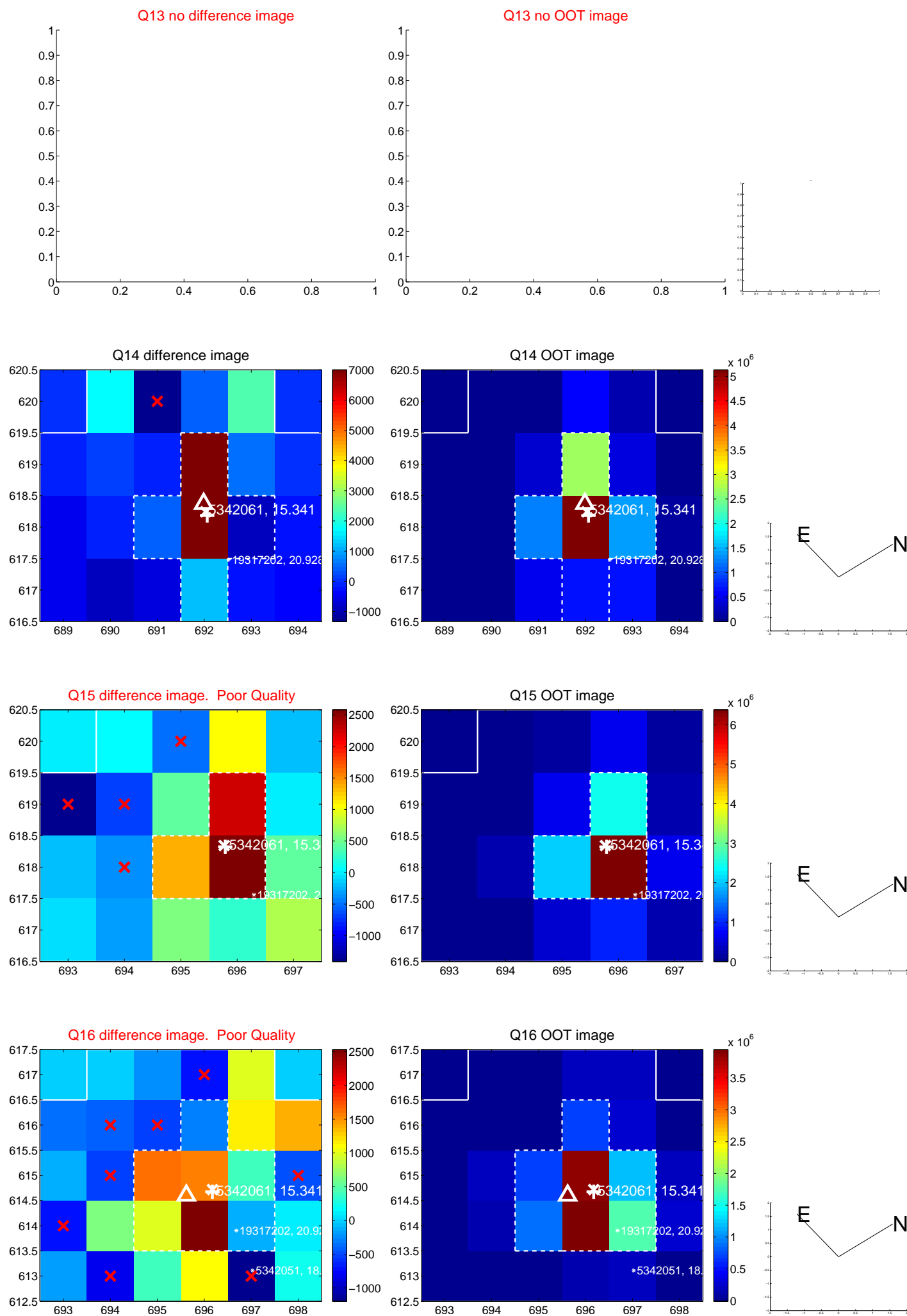
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value



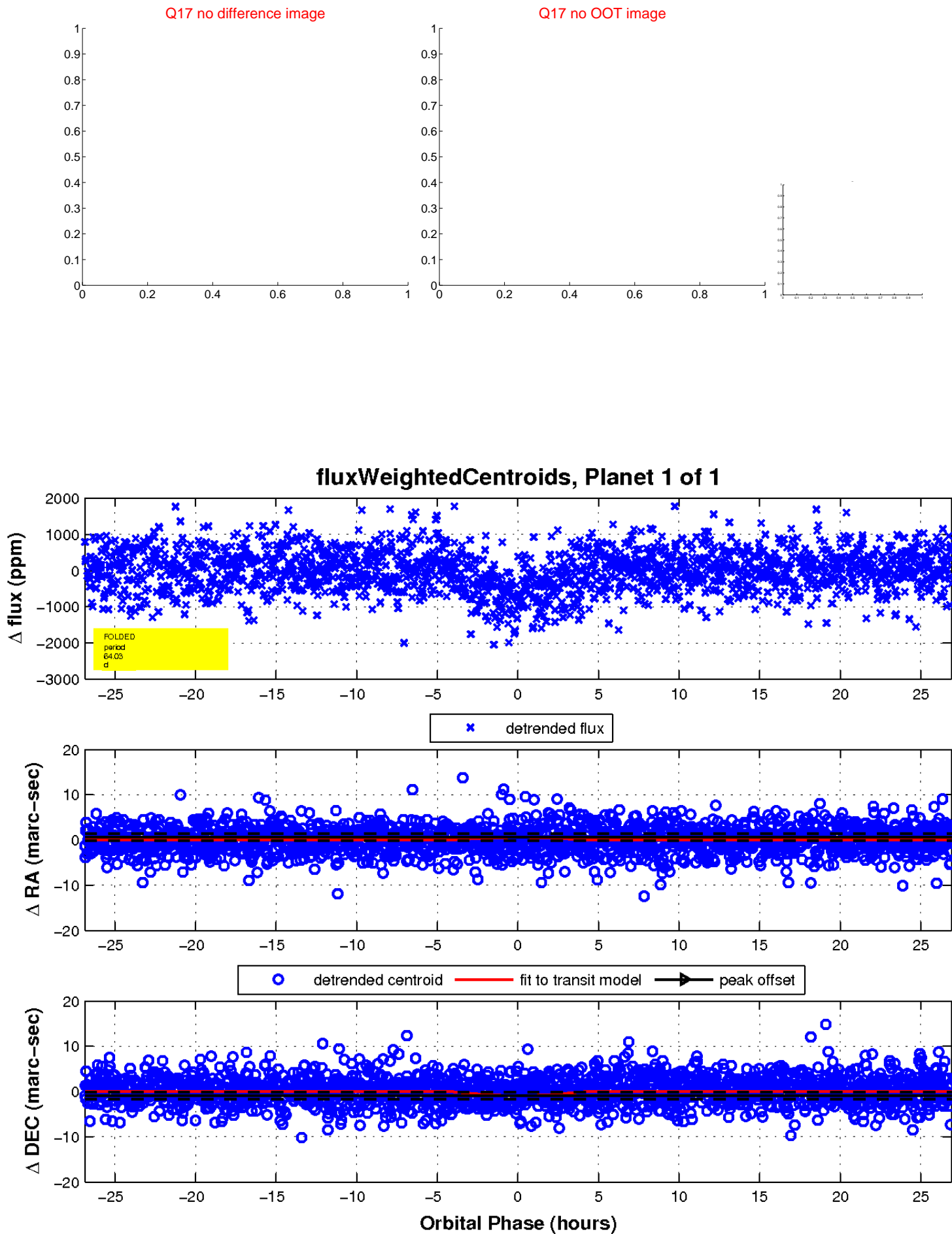
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UKIRT Image

Declination

