

KIC 005092266

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})
005092266-01	OBS	3045.01	44.870153	141.114615	611.3	4.279	14.3	14.9	1.00	6122	2.71	19.53

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
005092266-01	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.

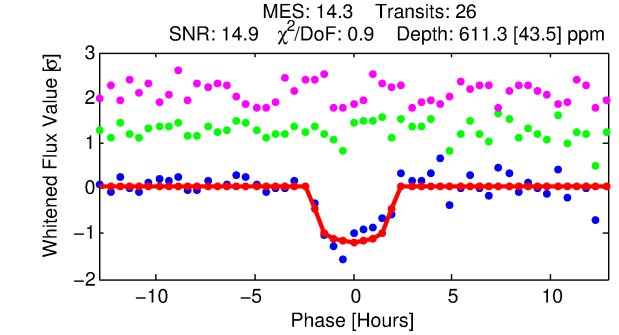
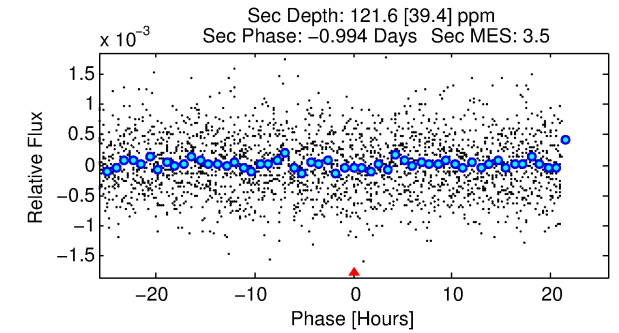
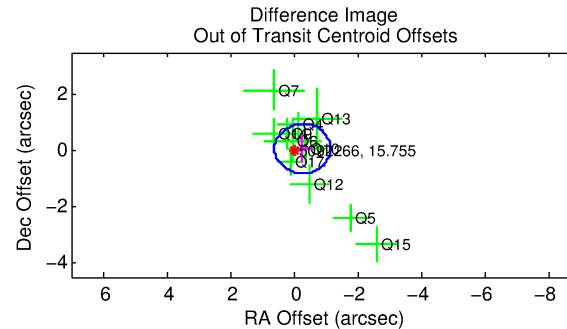
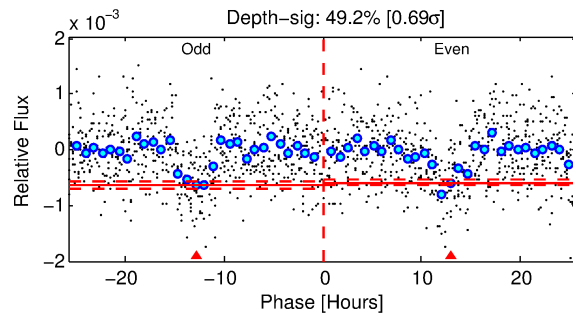
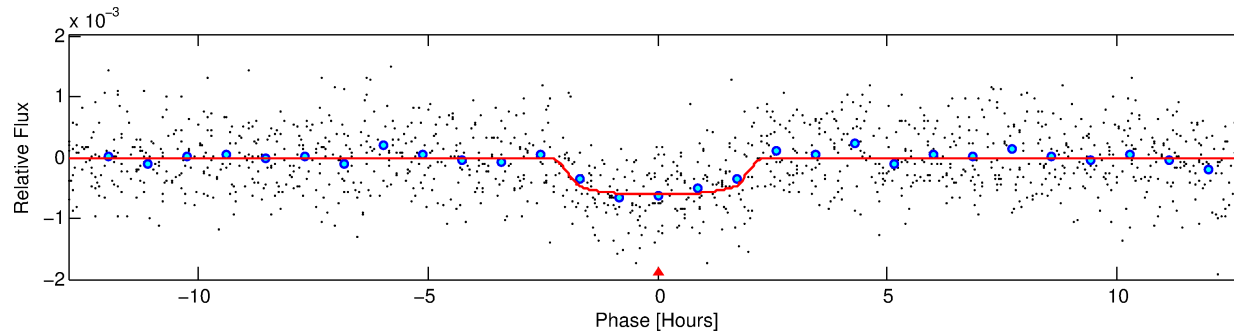
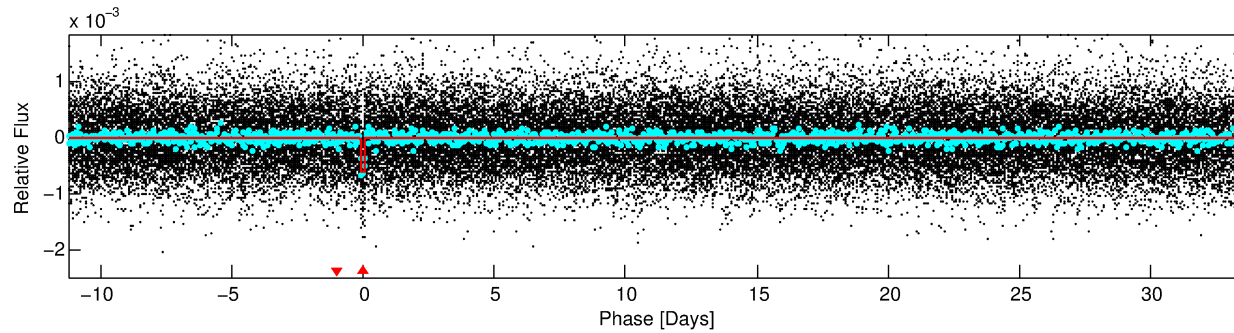
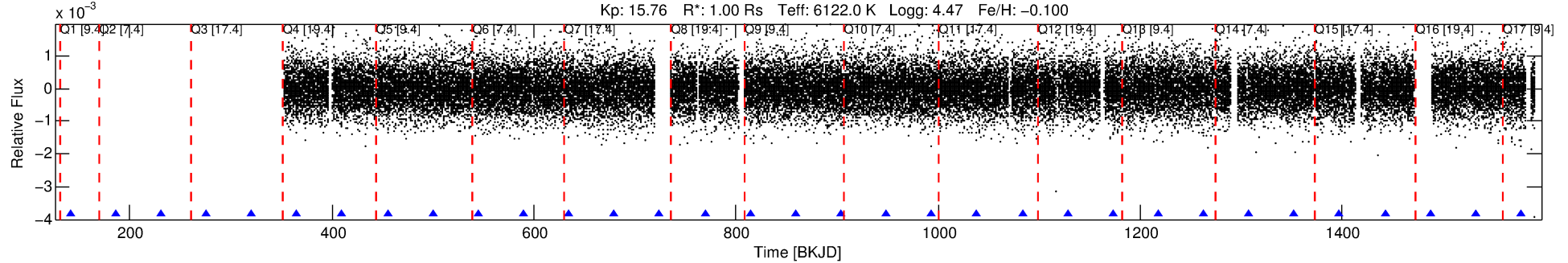
Ephemeris Match Information For 005092266-01

No Significant Match Found

DV One-Page Summary

KIC: 5092266 Candidate: 1 of 1 Period: 44.870 d
KOI: K03045.01 Corr: 0.975

Kp: 15.76 R*: 1.00 Rs Teff: 6122.0 K Logg: 4.47 Fe/H: -0.100



DV Fit Results:

Period = 44.87015 [0.00040] d
Epoch = 141.1146 [0.0082] BKJD
Rp/R* = 0.0249 [0.0101]
a/R* = 52.80 [105.90]
b = 0.78 [0.99]
Seff = 19.53 [8.03]
Teq = 536 [55] K
Rp = 2.71 [1.38] Re
a = 0.2528 [0.0665] AU
Ag = 582.72 [553.22] [1.05σ]
Teffp = 4072 [899] K [3.93σ]

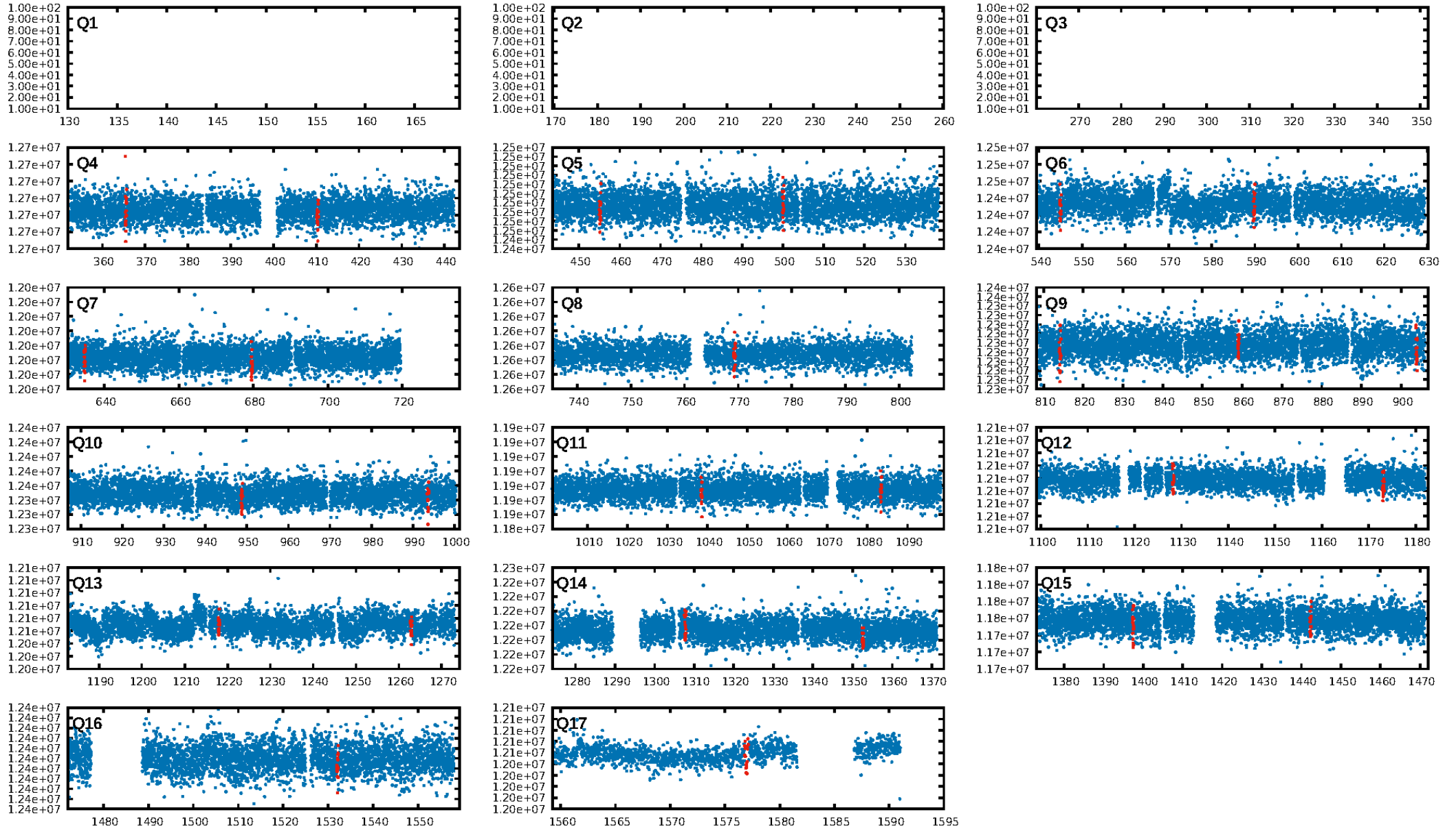
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: 93.0%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: 1.07e-44
RollingBand-fgt: 1.00 [25/25]
GhostDiagnostic-chr: 2.925
Centroid-sig: 1.6%
Centroid-so: 1.104 arcsec [1.34σ]
OotOffset-rm: 0.281 arcsec [0.96σ]
KicOffset-rm: 0.257 arcsec [0.81σ]
OotOffset-st: 3/2/2/4 [11]
KicOffset-st: 3/2/2/4 [11]
DiffImageQuality-fgm: 0.82 [9/11]
DiffImageOverlap-fno: 1.00 [14/14]

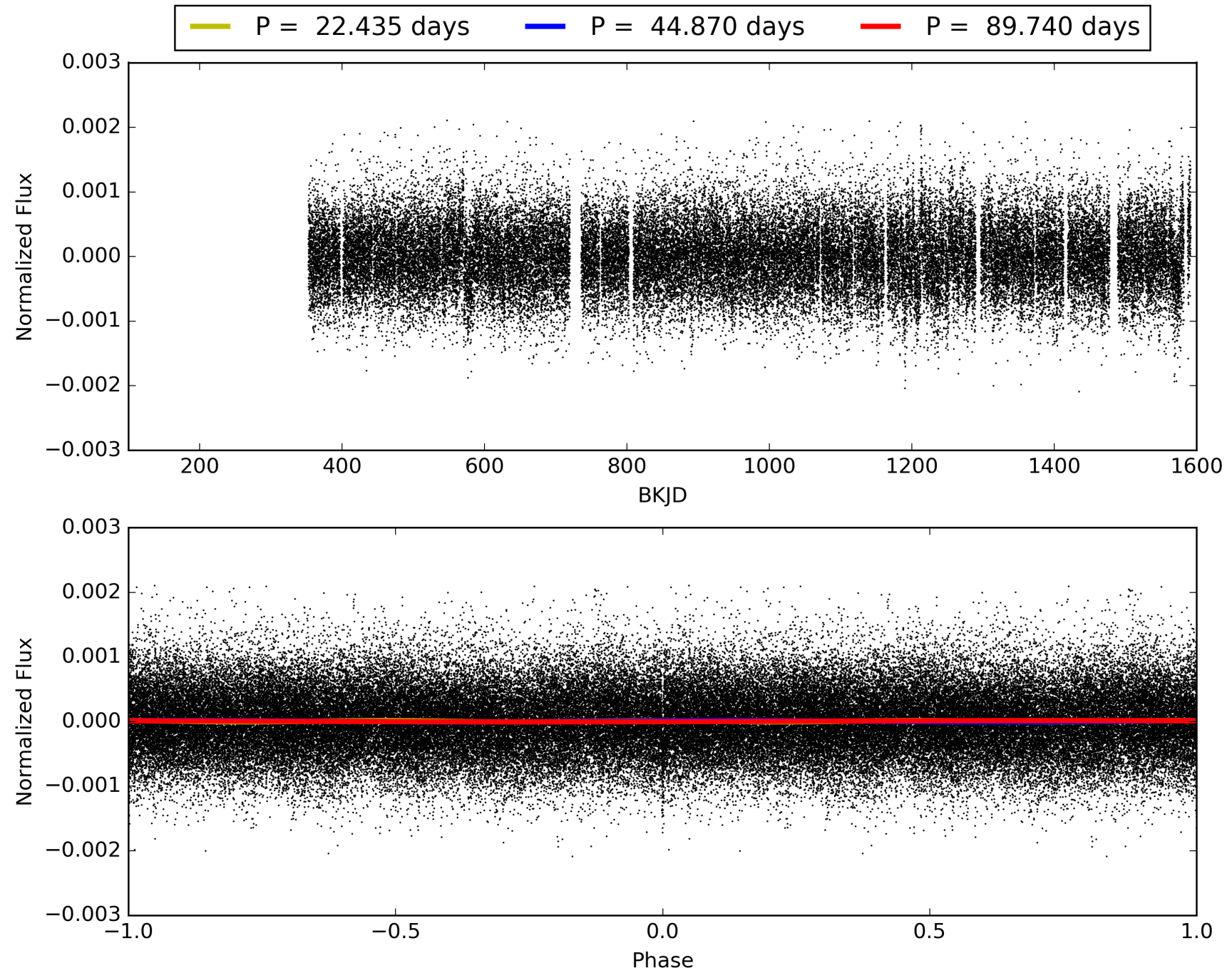
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 31-Jan-2016 13:59:21 Z

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

TCE 005092266-01, PDC Light Curves

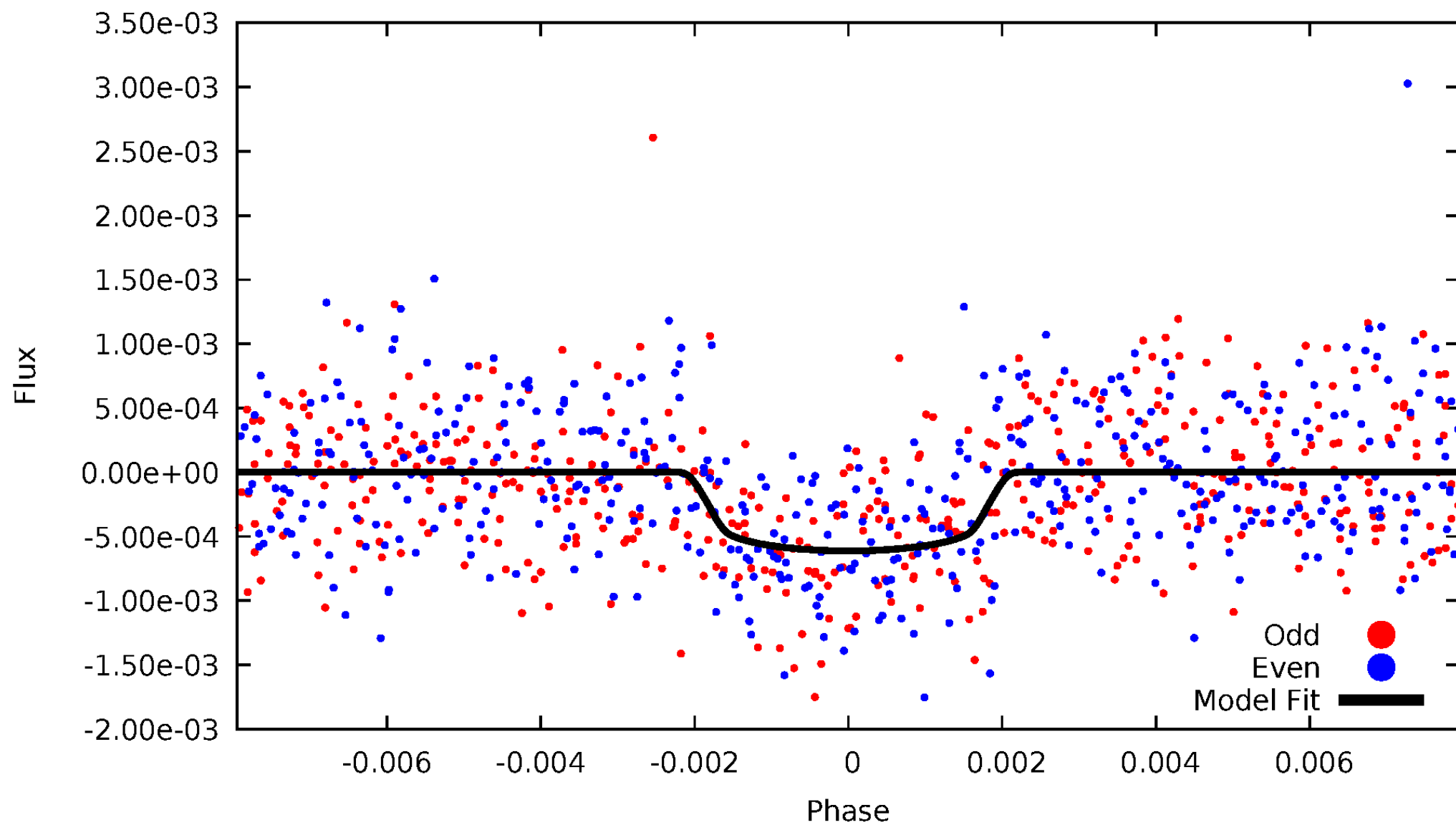


TCE 005092266-01



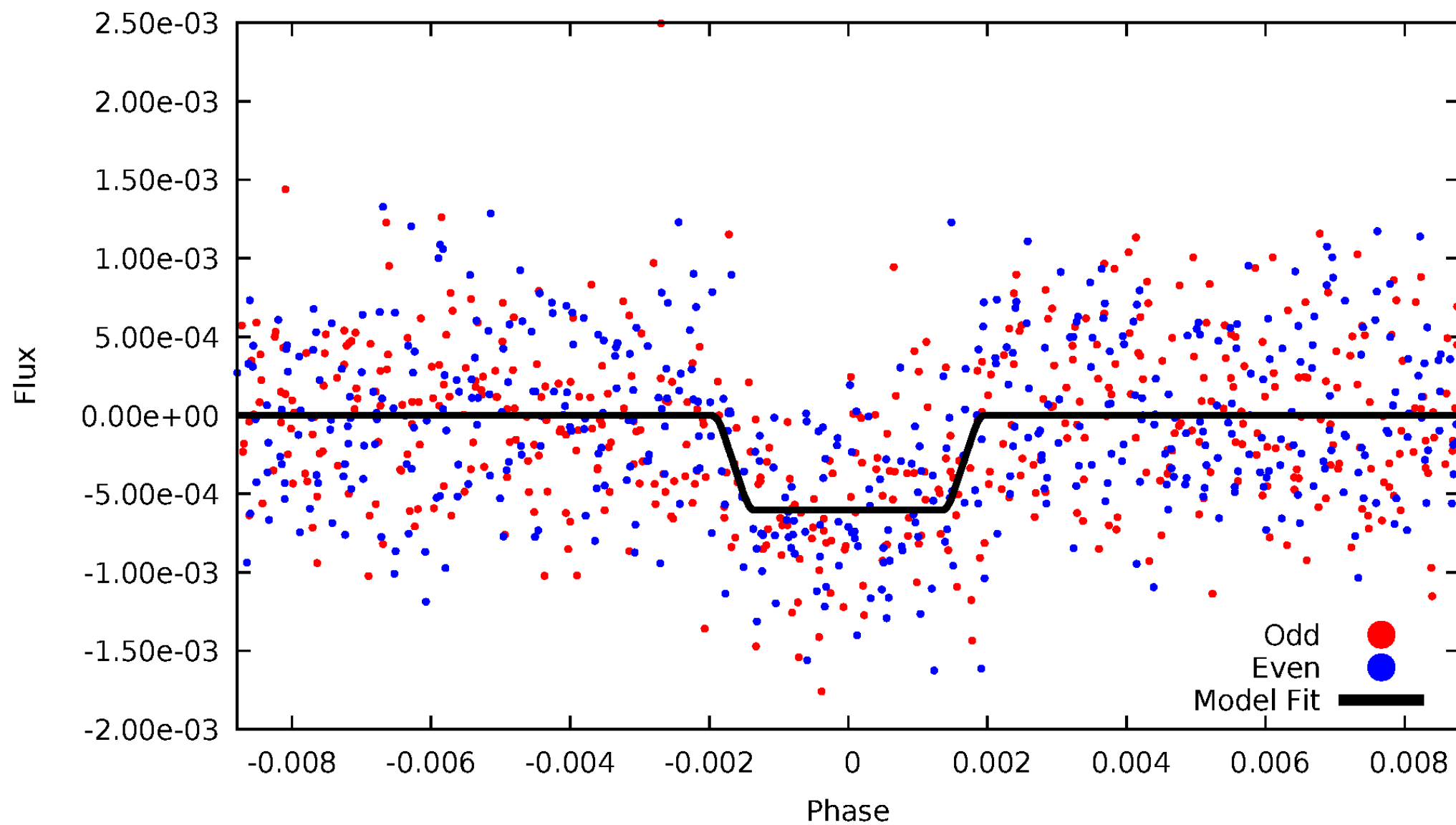
DV Odd/Even

TCE 005092266-01

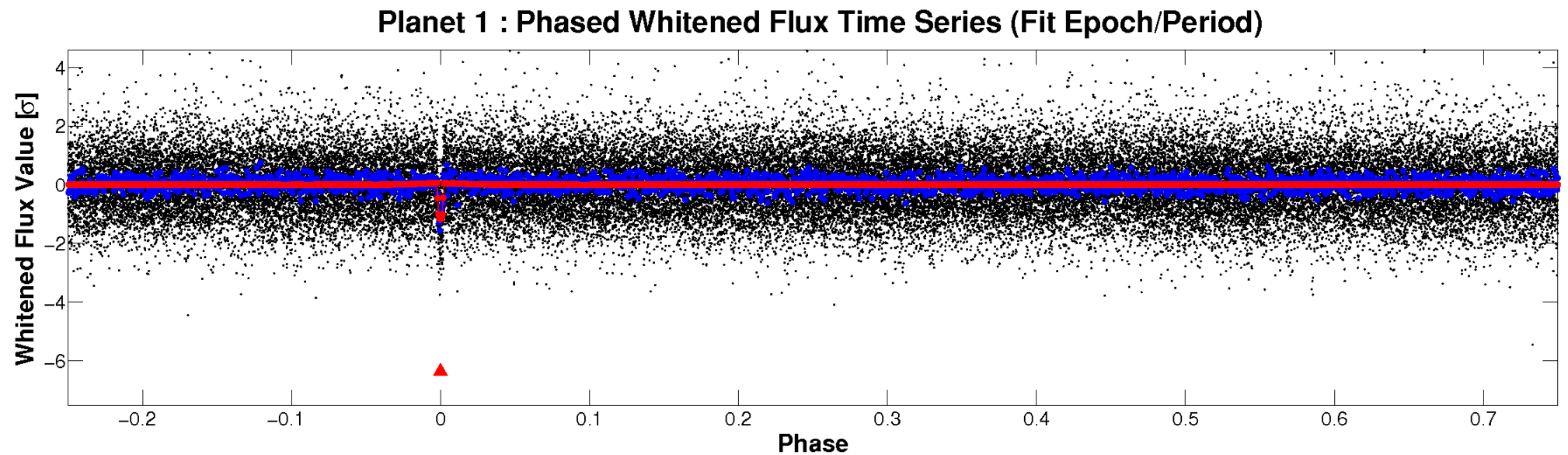
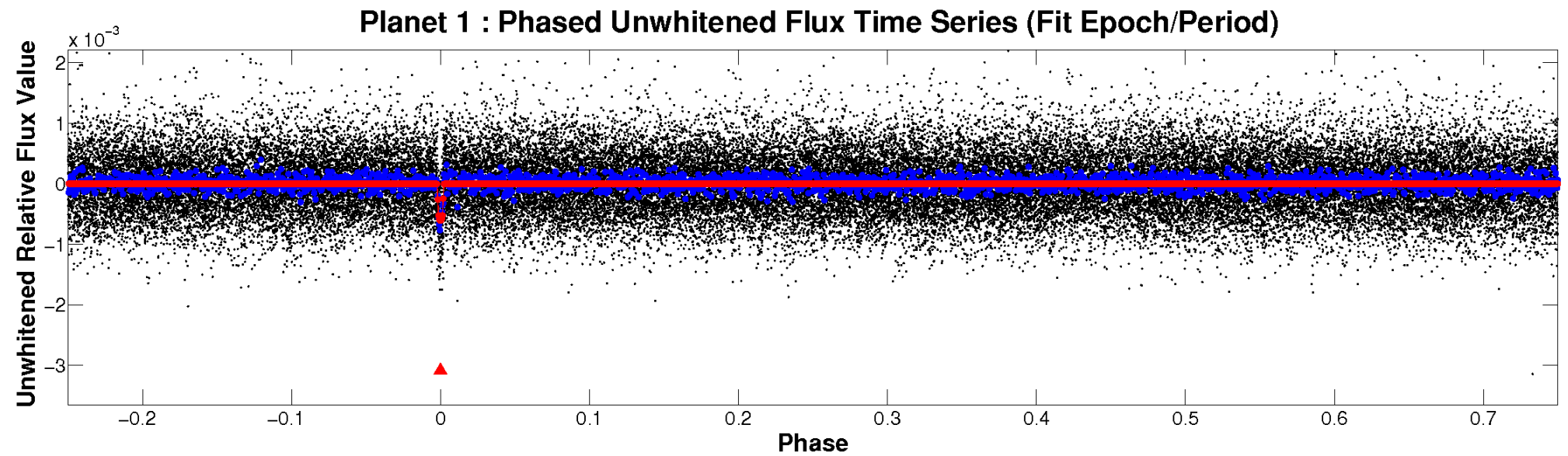


ALT Odd/Even

TCE 005092266-01

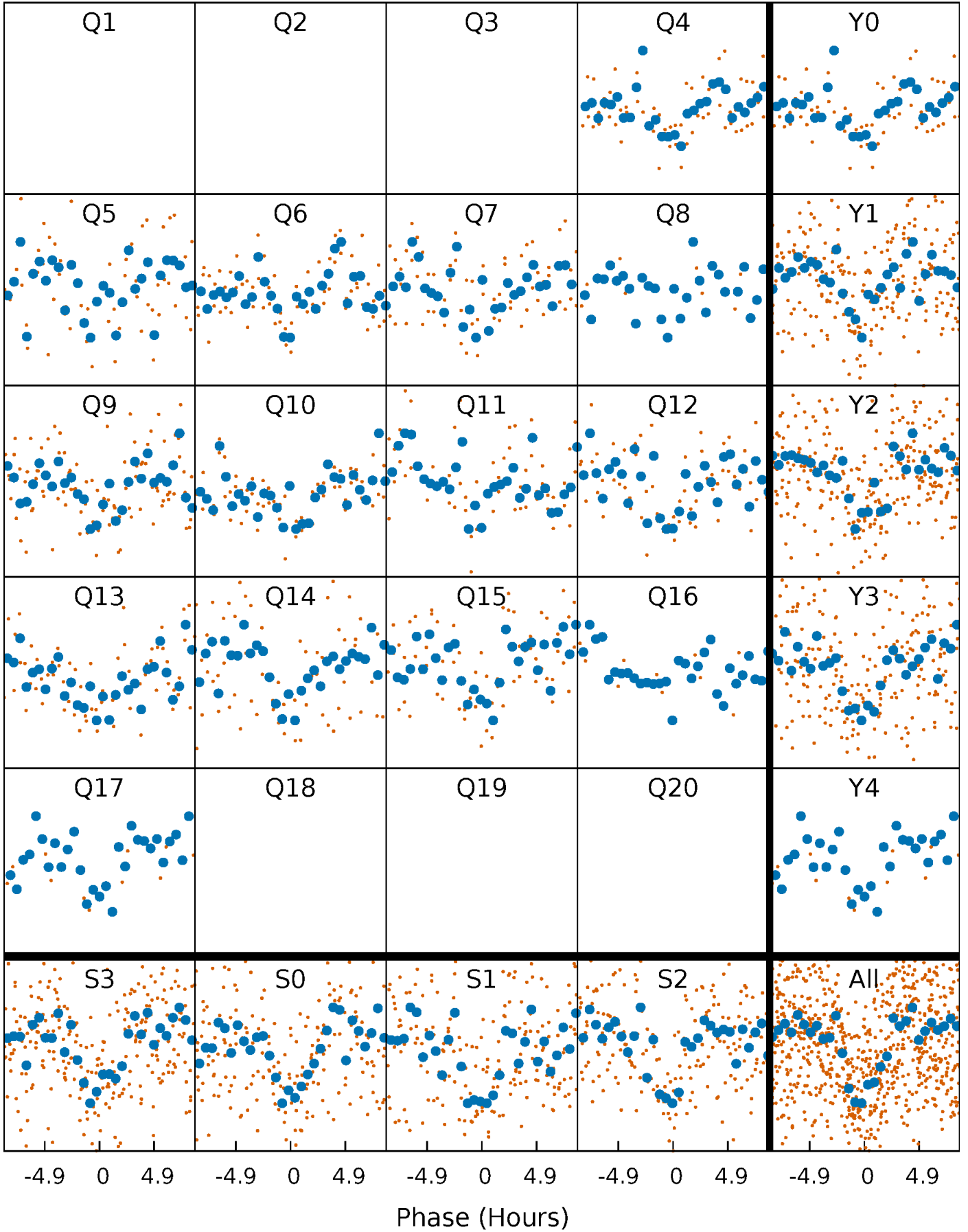


Non-Whitened Vs. Whitened Light Curve



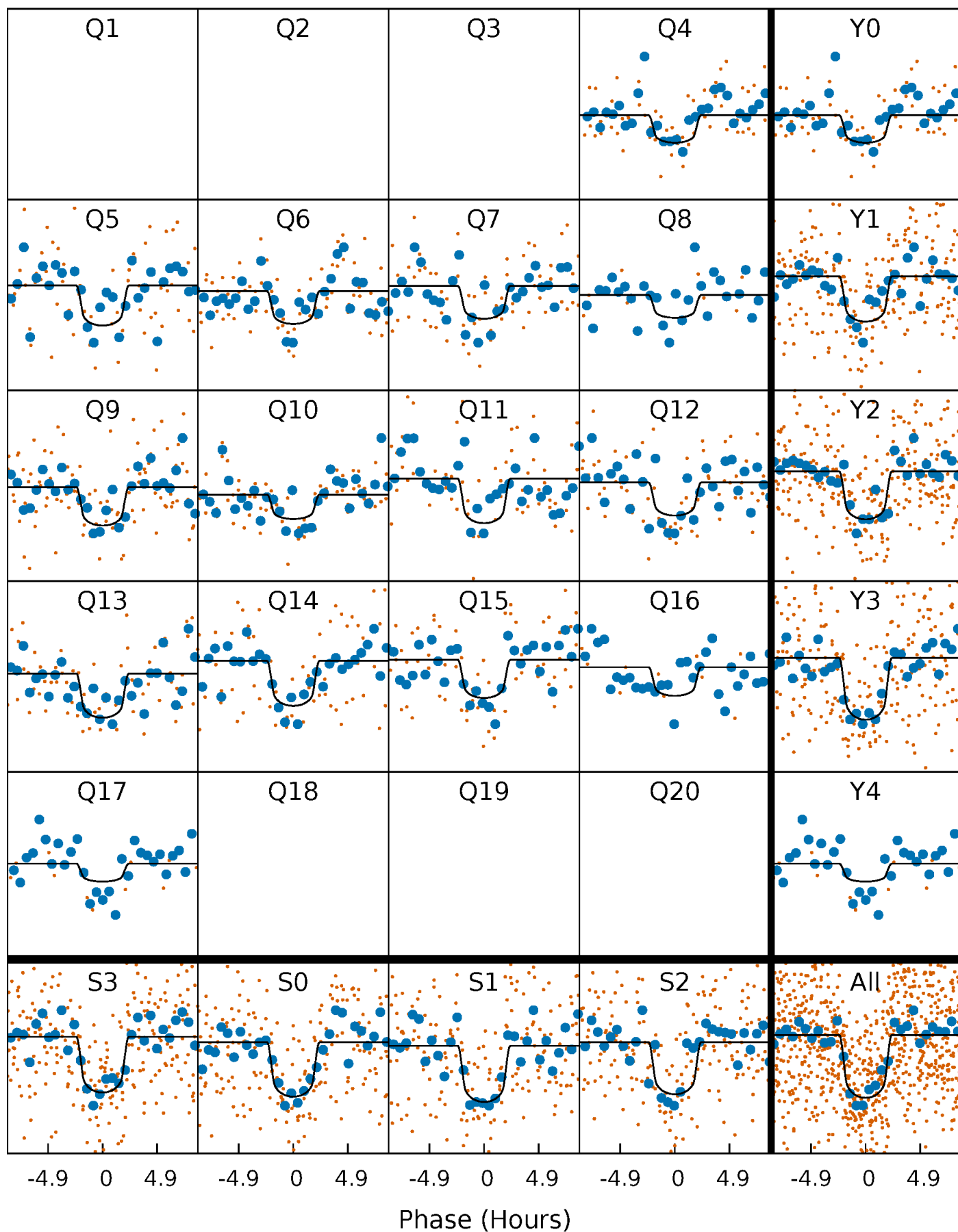
PDC Quarter-Phased Transit Curves

TCE 005092266-01 P= 44.870153 Days $T_0=141.114615$ (BKJD)



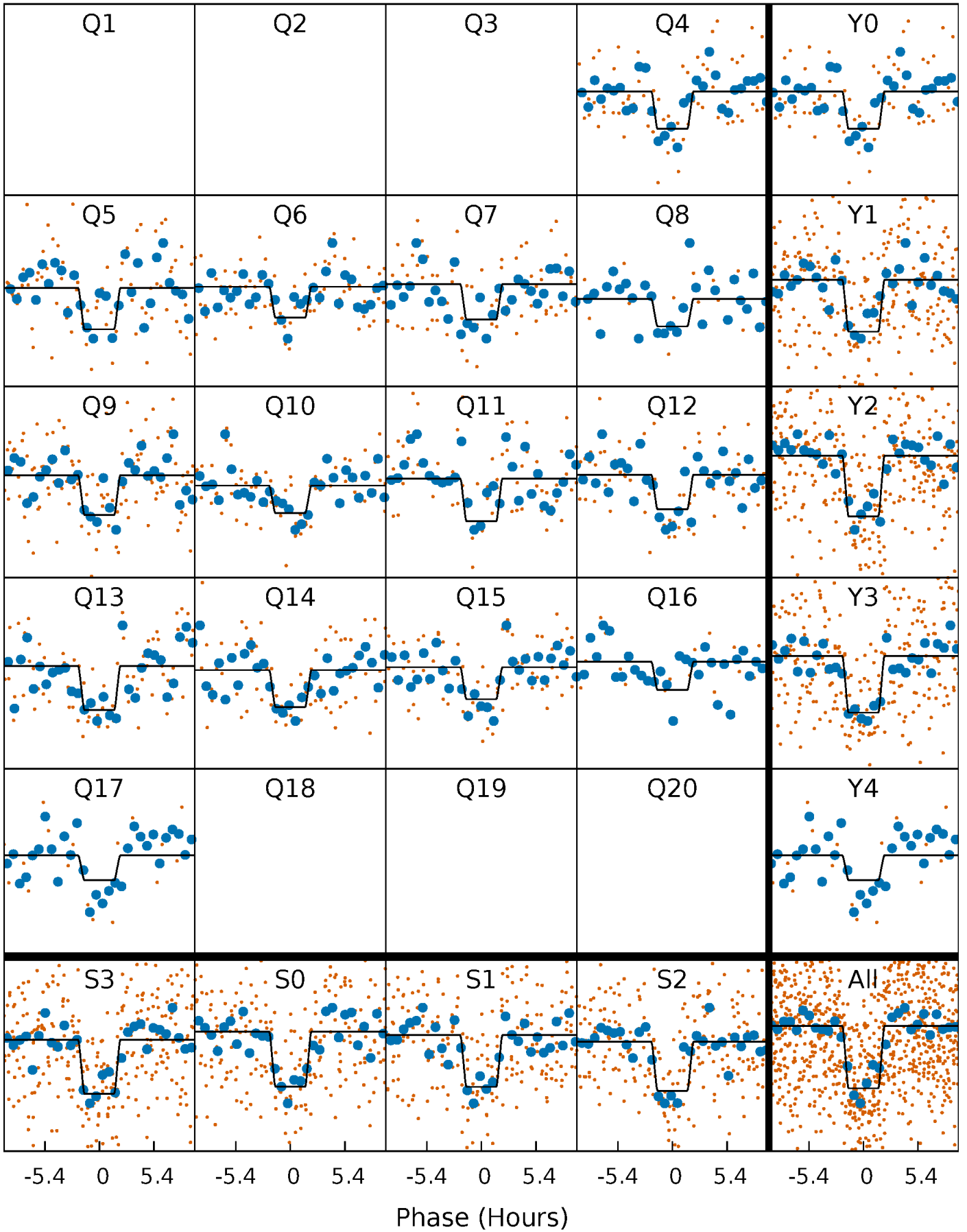
DV Quarter-Phased Transit Curves

TCE 005092266-01 P= 44.870153 Days $T_0=141.114615$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

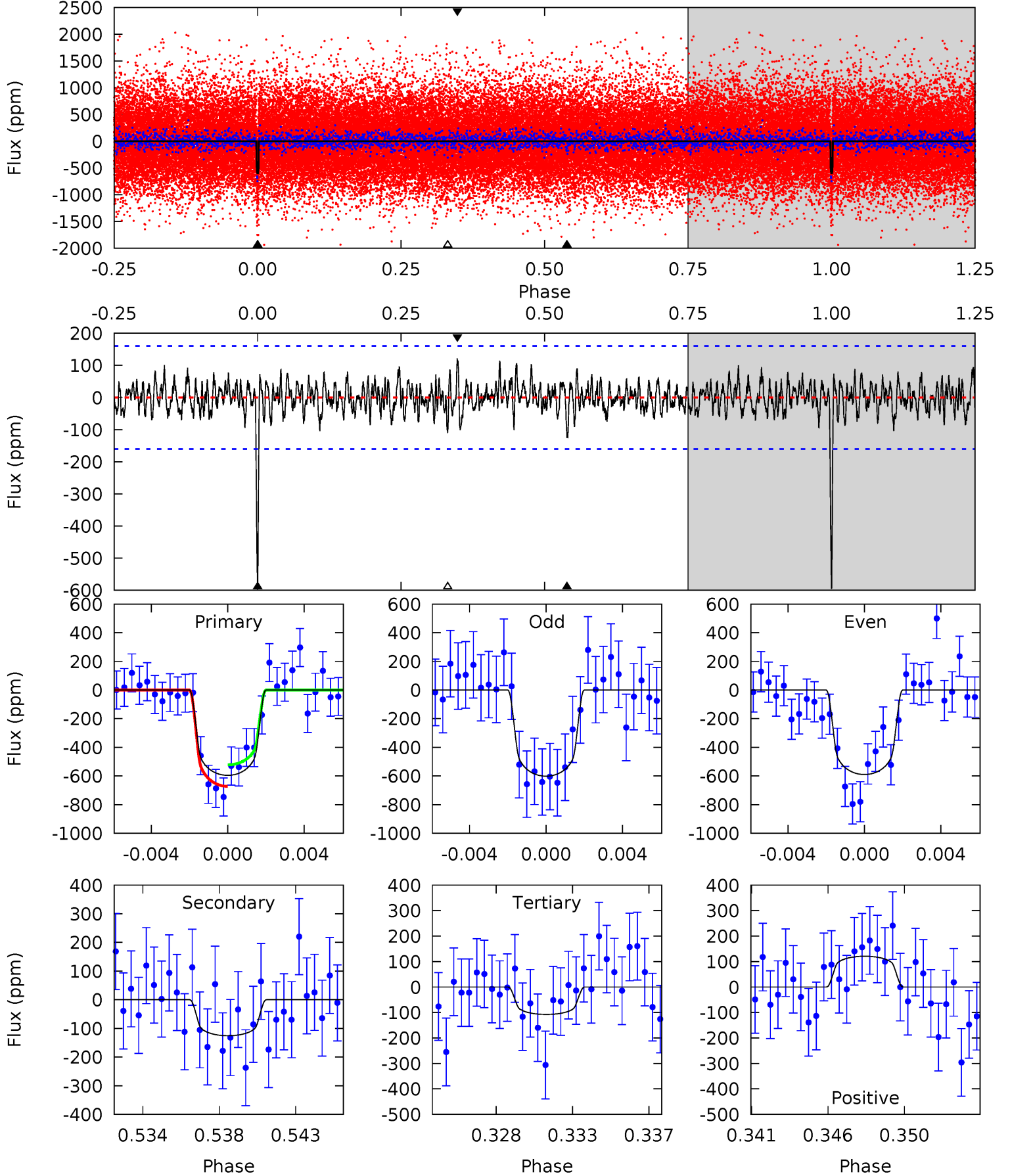
TCE 005092266-01 P= 44.869495 Days $T_0=141.124799$ (BKJD)



DV Model-Shift Uniqueness Test

005092266-01, $P = 44.870153$ Days, $E = 141.114615$ Days

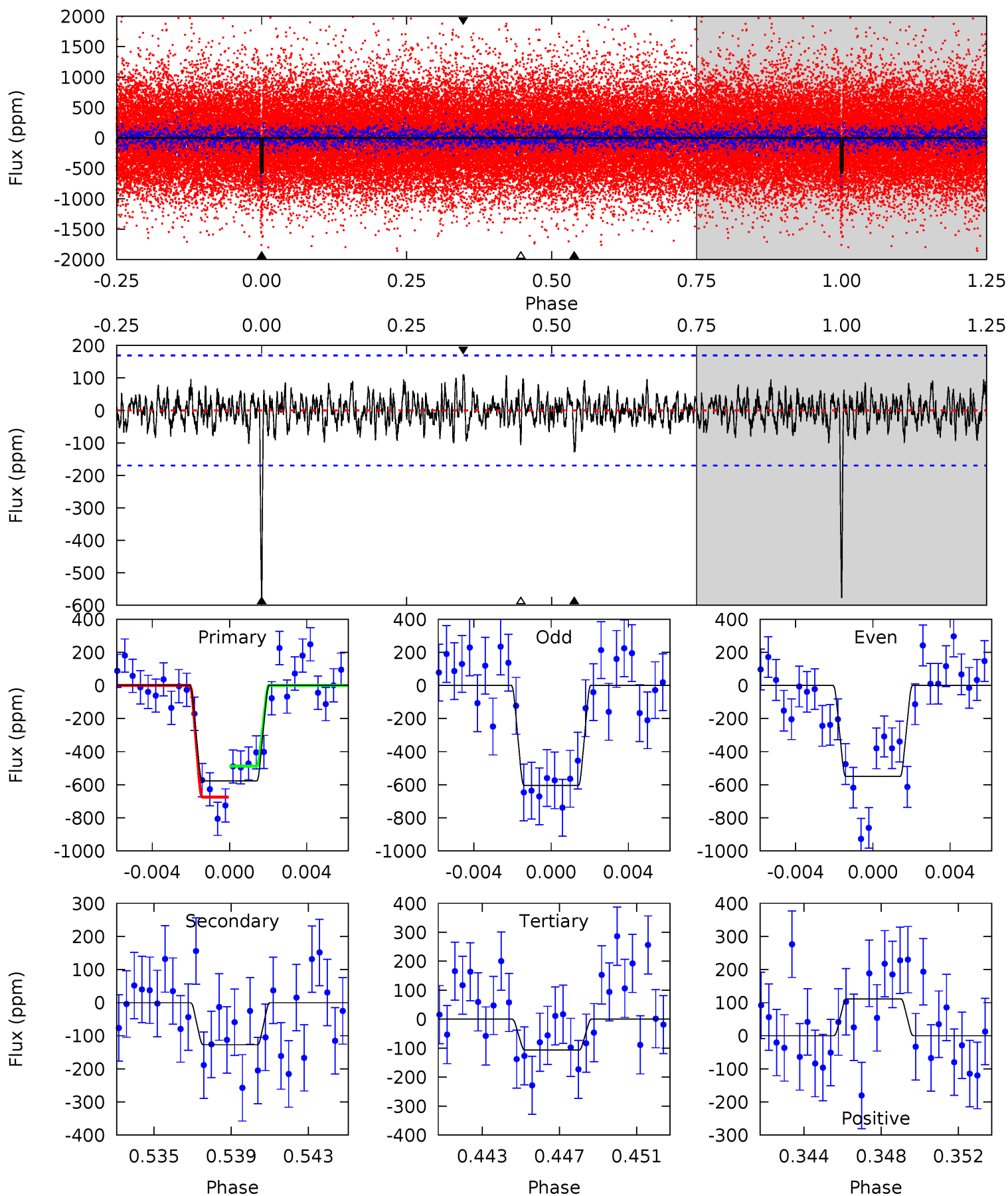
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
19.2	4.05	3.48	3.90	5.18	2.85	1.17	15.8	15.3	0.58	0.15	0.19	1.02	0.17	2.43



Alt Model-Shift Uniqueness Test

005092266-01, P = 44.869495 Days, E = 141.124799 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
17.7	3.91	3.27	3.42	5.21	2.89	1.07	14.5	14.3	0.64	0.48	0.83	1.02	0.16	2.87



Stellar Parameters For KIC 005092266

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6122^{+192}_{-235}	$4.471^{+0.052}_{-0.208}$	$-0.100^{+0.300}_{-0.300}$	$0.996^{+0.312}_{-0.104}$	$1.070^{+0.137}_{-0.150}$	$1.526^{+0.419}_{-0.790}$
	+3%/-4%	+1%/-5%	+300%/-300%	+31%/-10%	+13%/-14%	+27%/-52%
Source	KIC0	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 005092266-01 / KOI 3045.01

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-126 ± 31	$2.82^{+1.23}_{-1.15}$	763^{+58}_{-35}	4321^{+1007}_{-560}	540^{+1003}_{-294}
Alt.	-127 ± 33	$2.84^{+1.26}_{-1.14}$	765^{+56}_{-42}	4304^{+1043}_{-529}	545^{+934}_{-302}

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 $A_{obs} \gg 1.0$

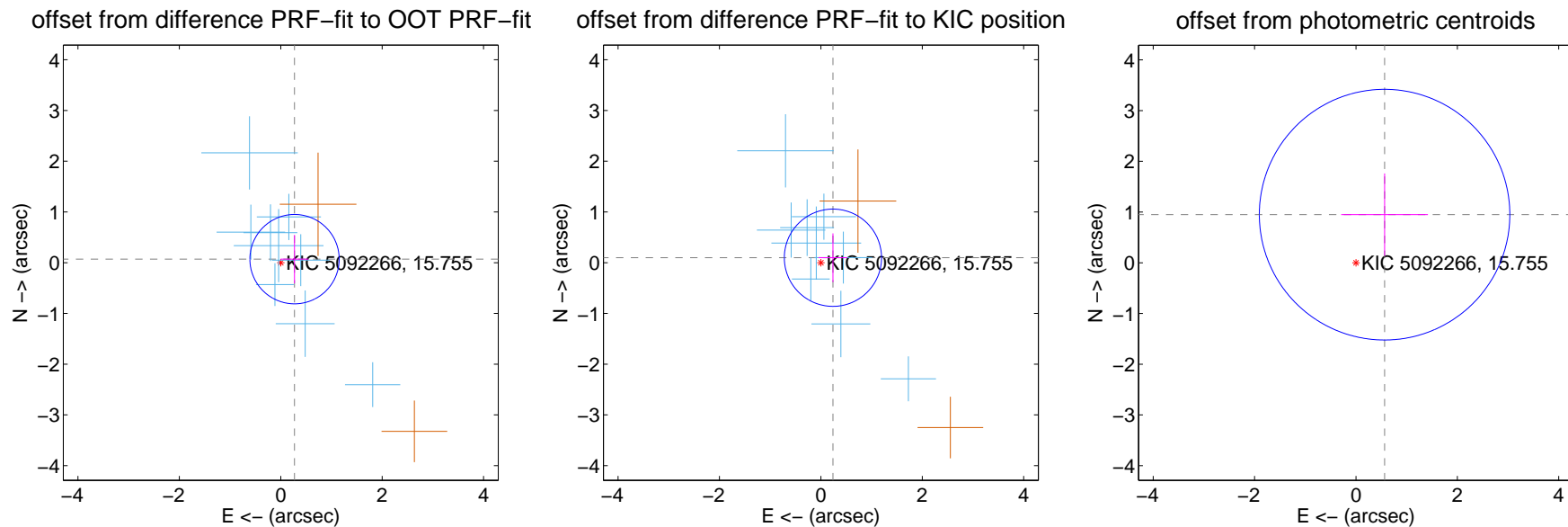
DV Centroid Data

Supplemental centroid analysis for 005092266-01. Kepler magnitude: 15.76. Transit SNR 14.91

There are 9 quarters with good PRF difference image offsets

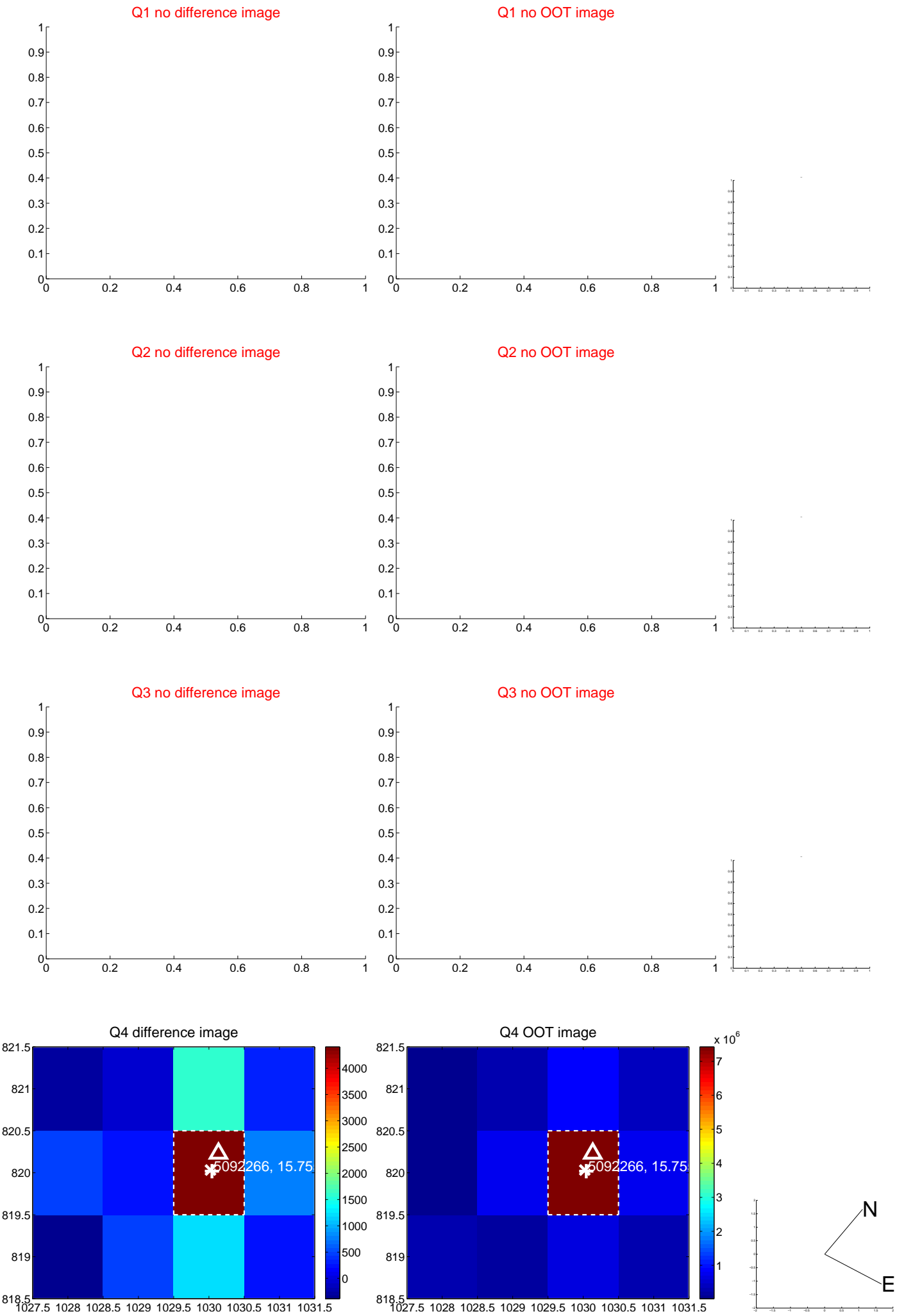
The direct PRF centroid is offset from the target star catalog position by about 0.14 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.281 ± 0.294	0.96	-0.272 ± 0.277	0.070 ± 0.477
PRF-fit source offset from KIC position	0.257 ± 0.320	0.81	-0.238 ± 0.284	0.098 ± 0.480
photometric centroid source offset	1.10 ± 0.82	1.34	-0.56 ± 0.86	0.95 ± 0.81

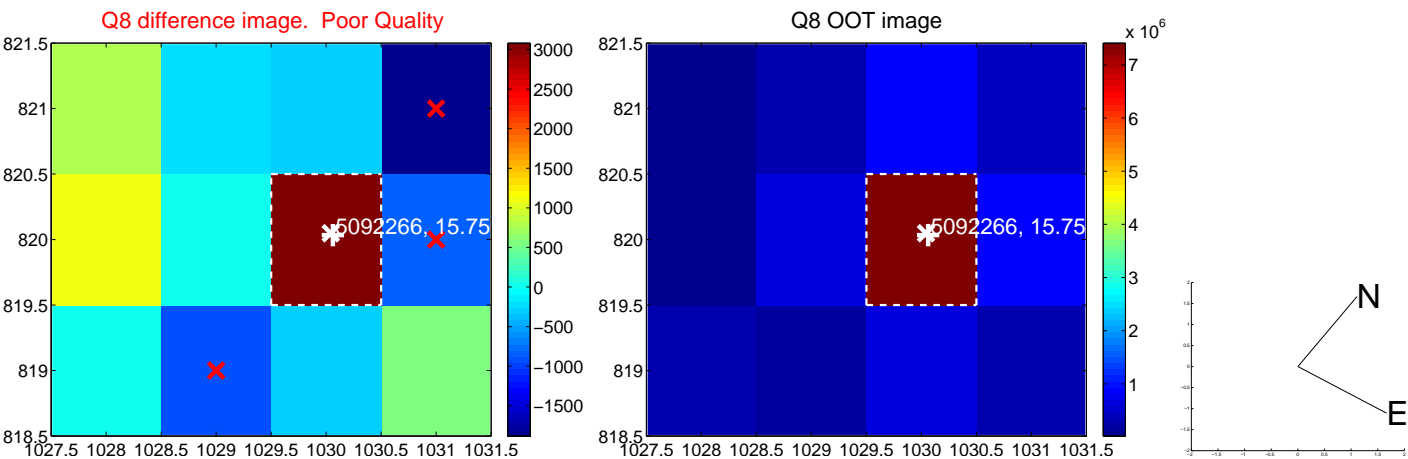
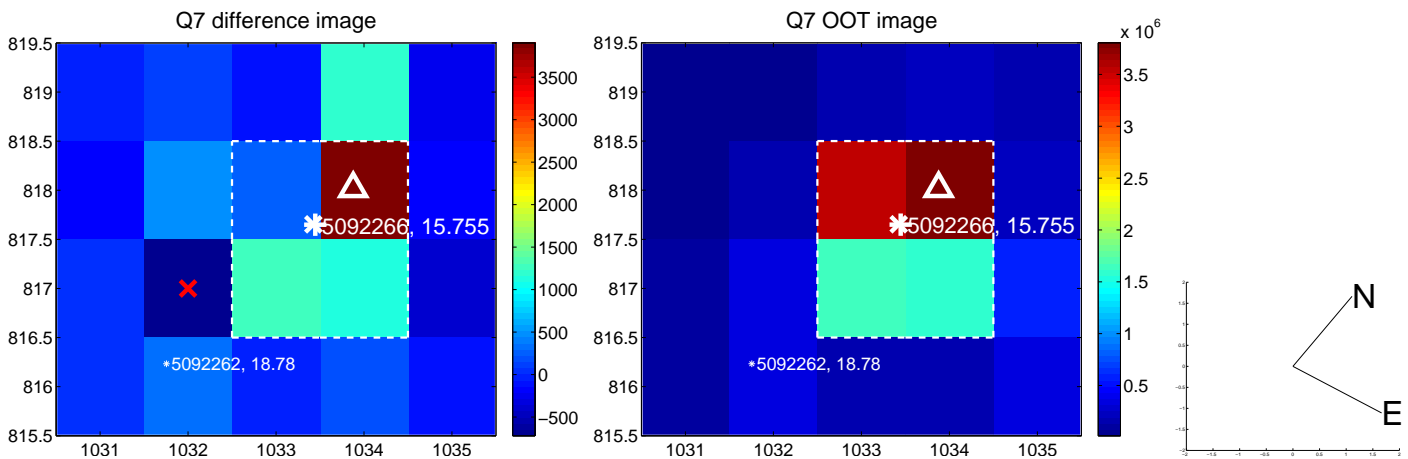
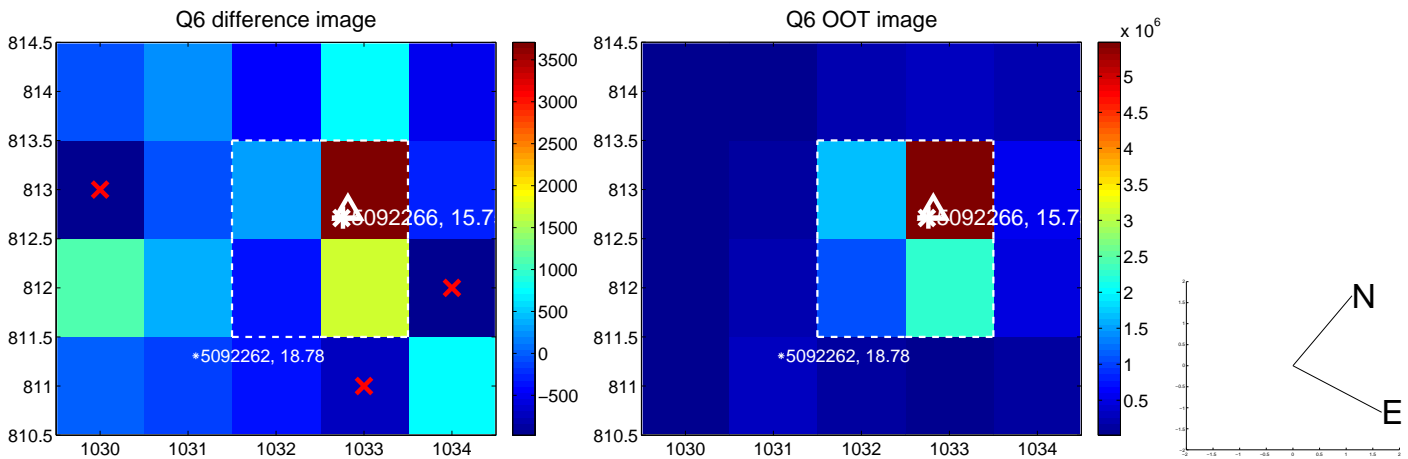
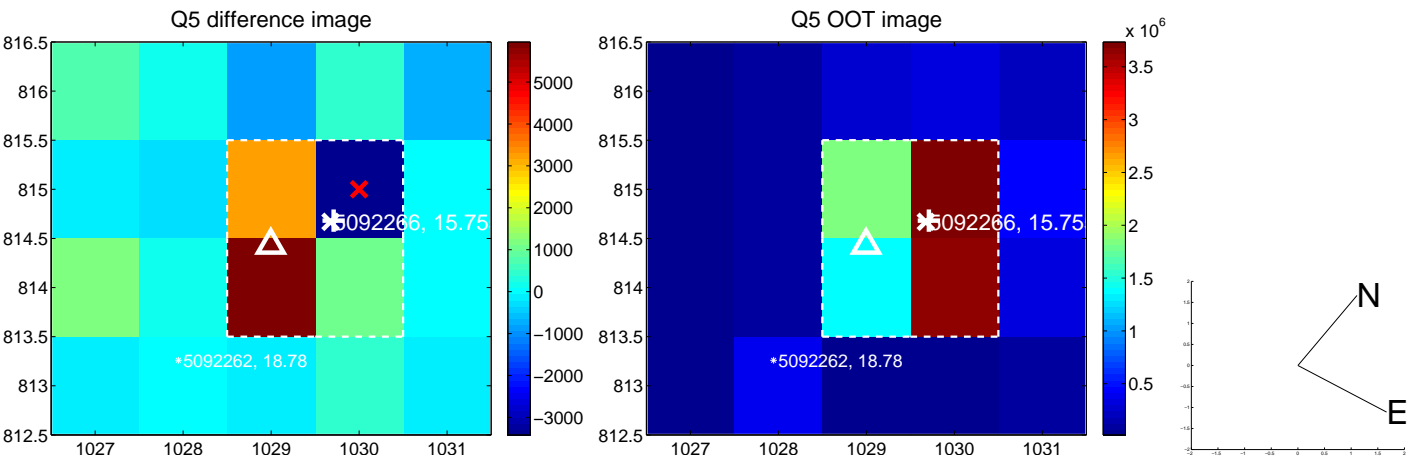


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets**; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

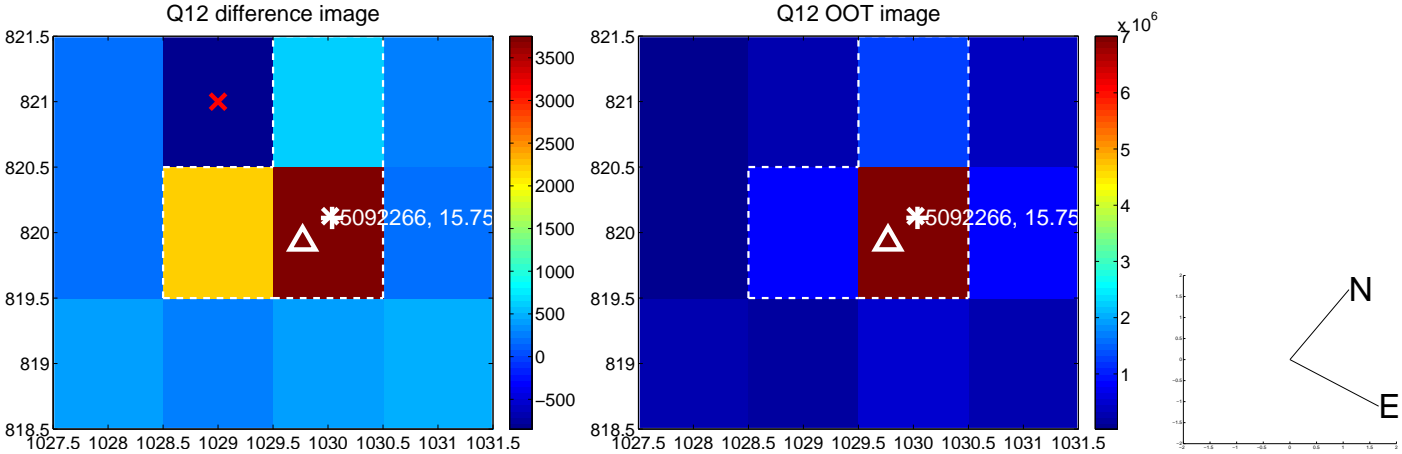
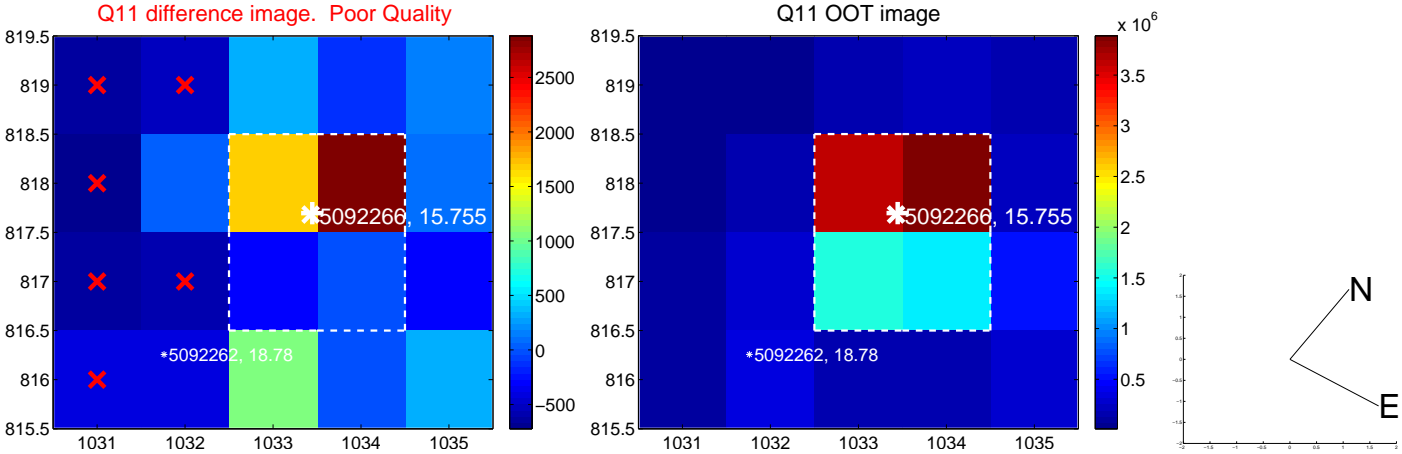
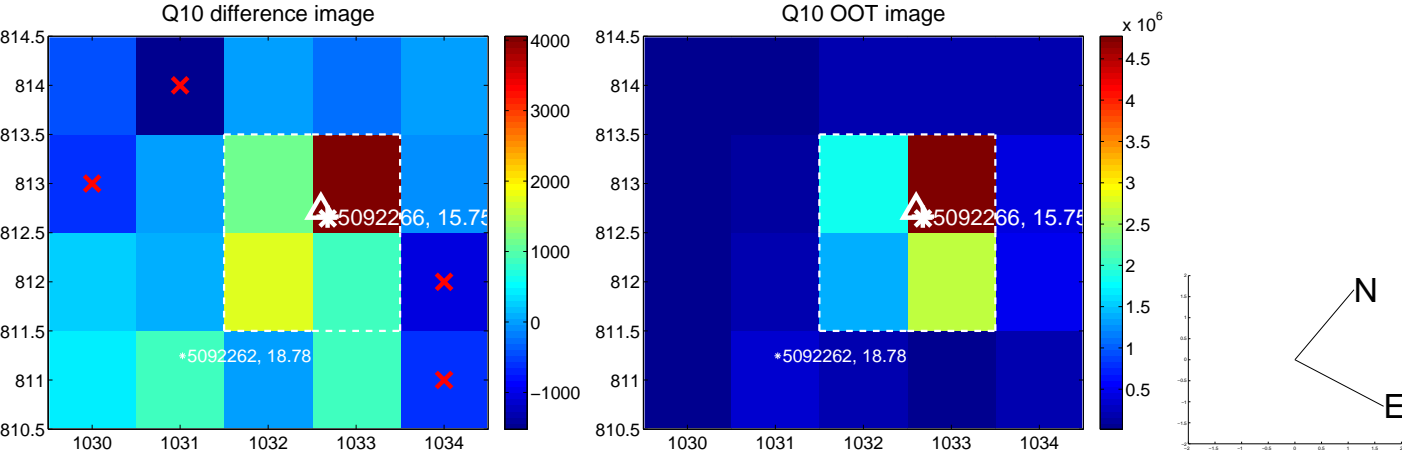
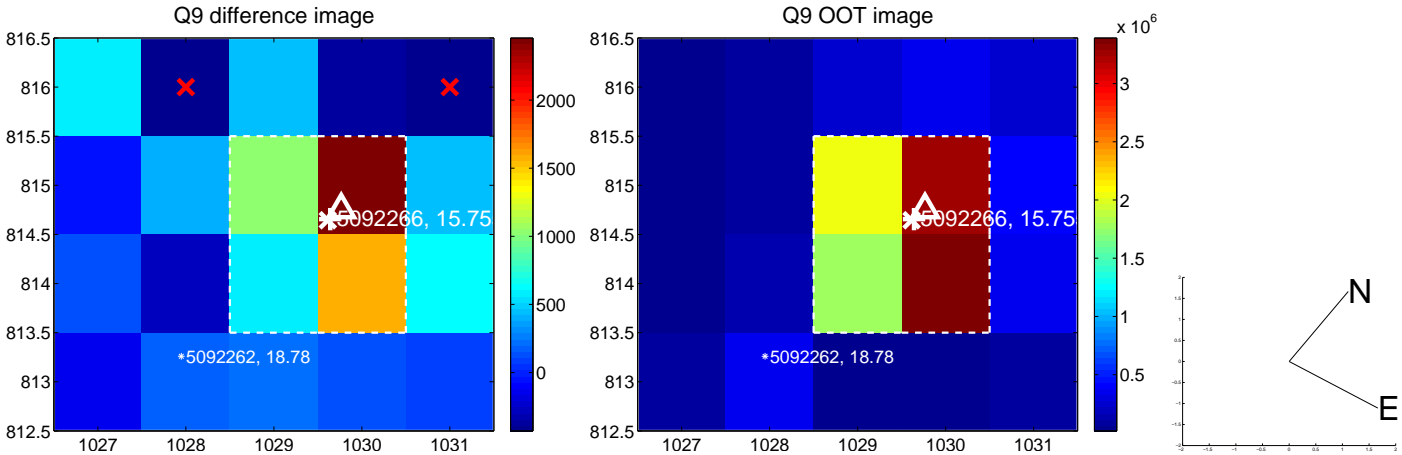
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



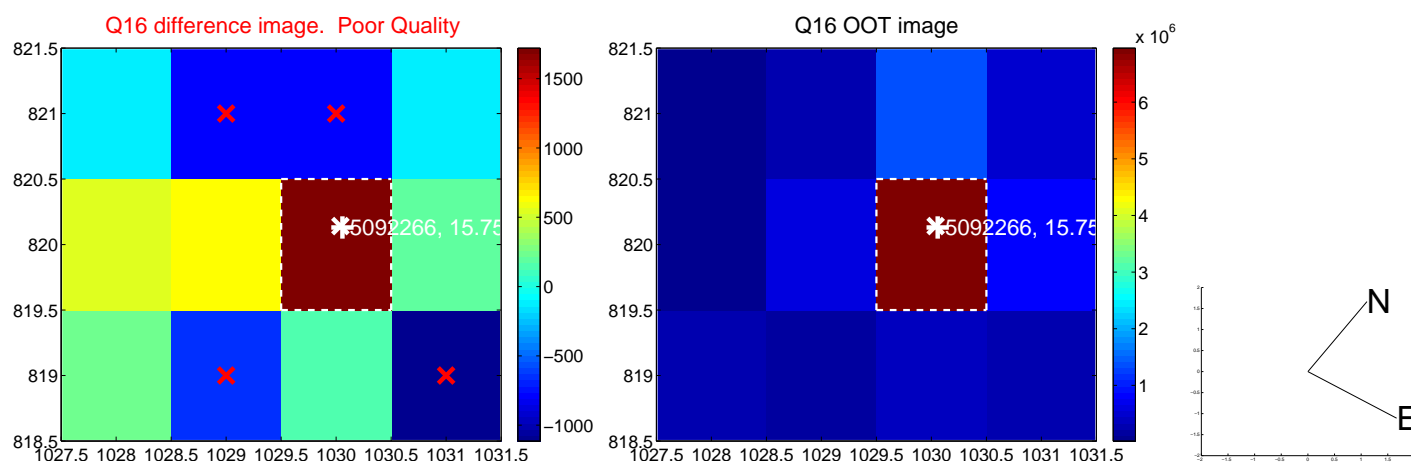
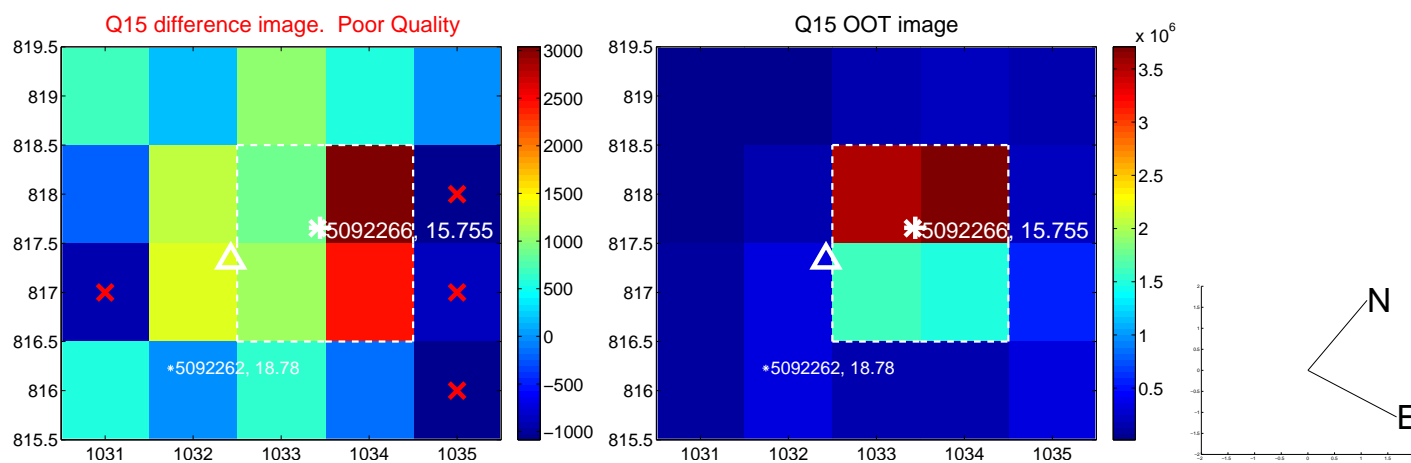
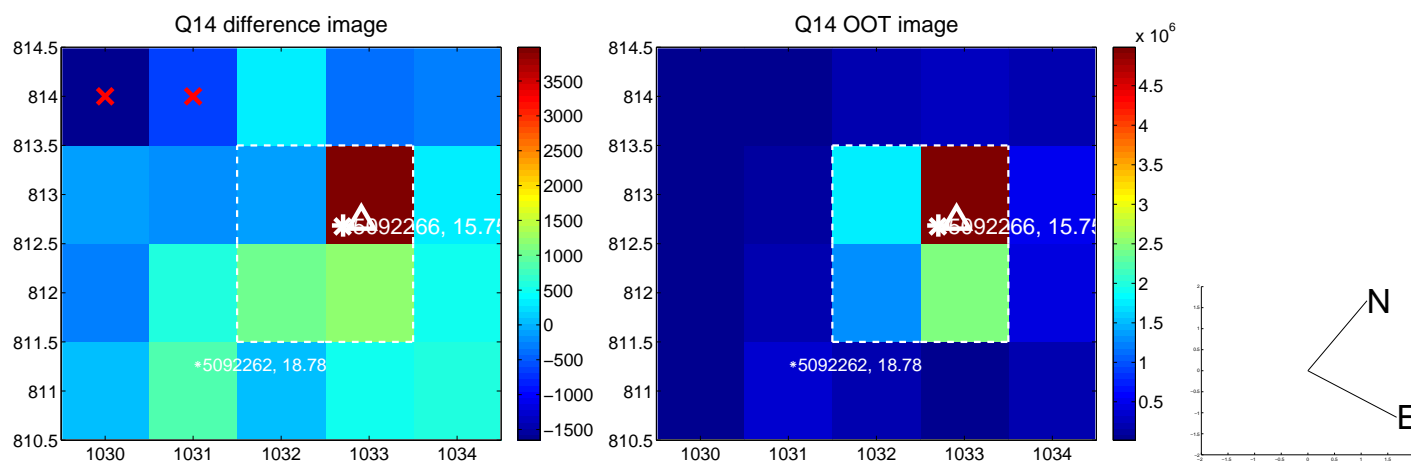
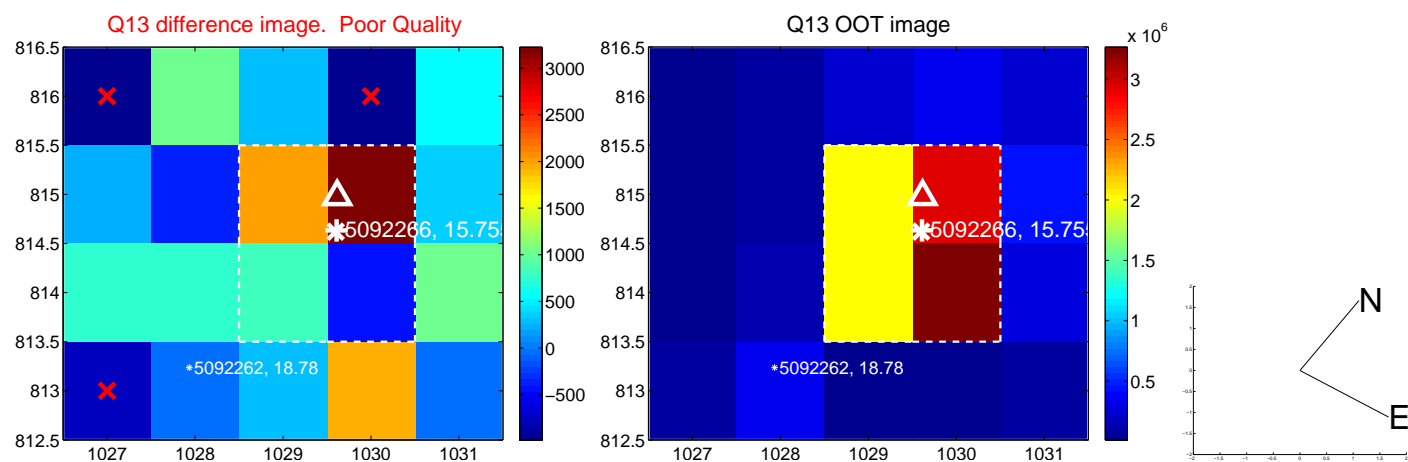
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



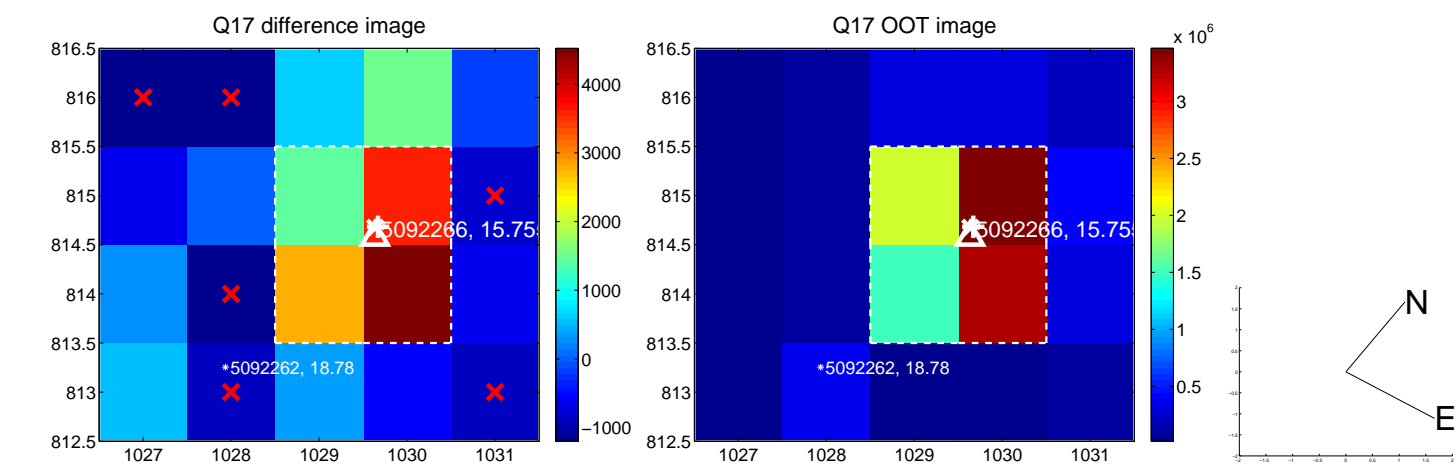
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



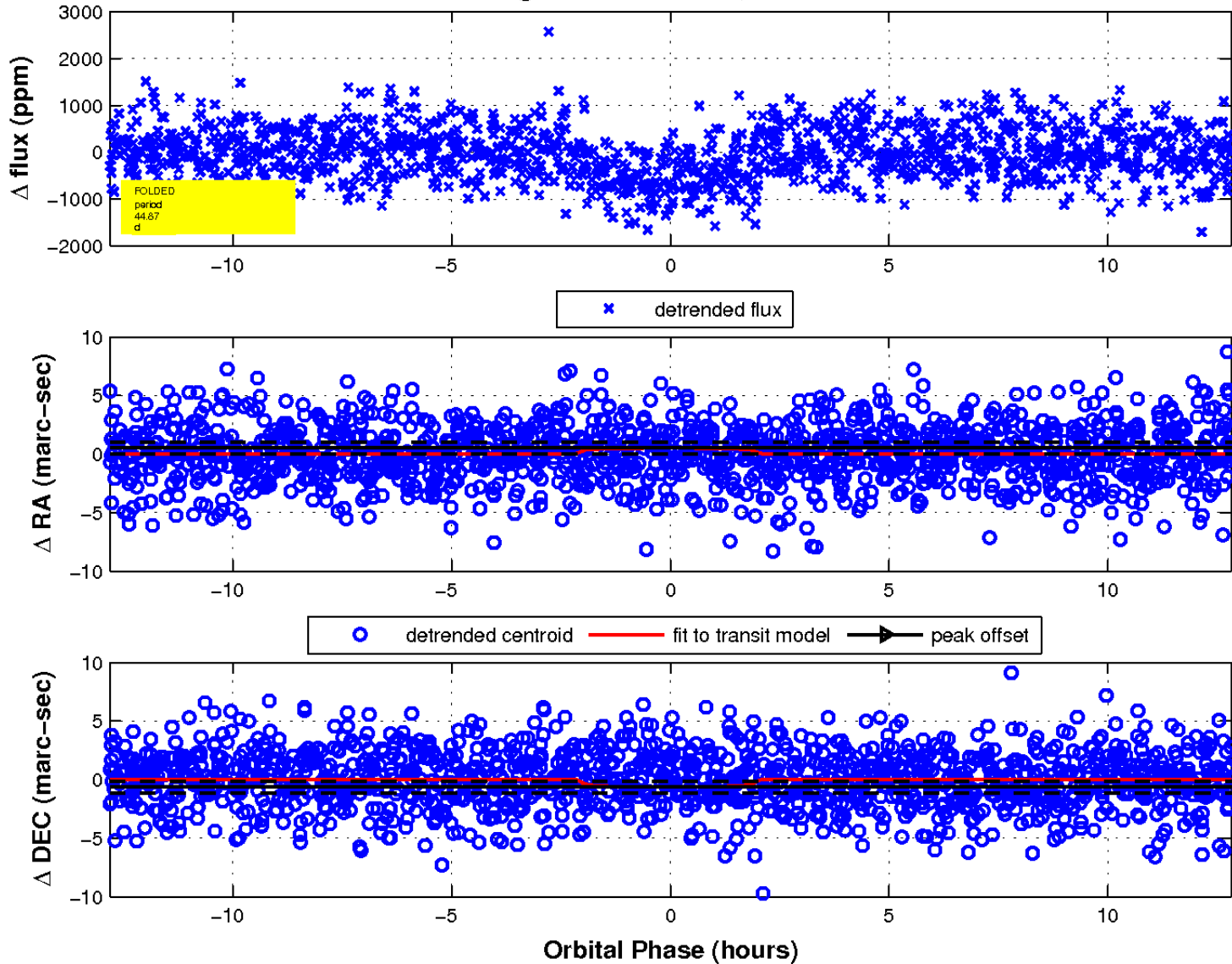
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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fluxWeightedCentroids, Planet 1 of 1



UKIRT Image

Declination

