

KIC 011182608

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})
011182608-01	OBS	No	0.512906	131.613491	13.8	3.850	13.4	3.8	1.52	7626	0.58	32610.29

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
011182608-01	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—CENT_SATURATED

Notes: OBS = Observed. INJ = Injected. INV = Inverted. SCR = Scrambled.

N = Not Transit-Like. S = Stellar Eclipse. C = Centroid Offset. E = Ephemeris Match.

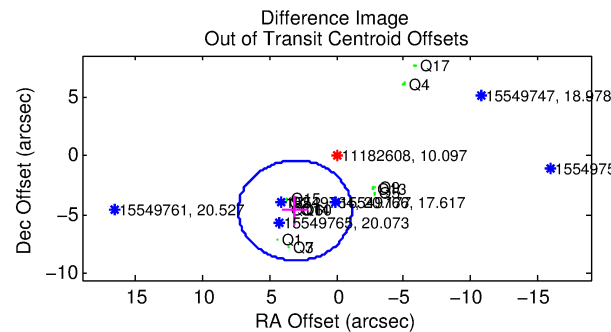
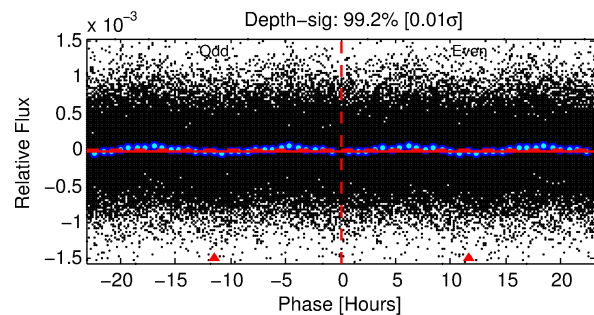
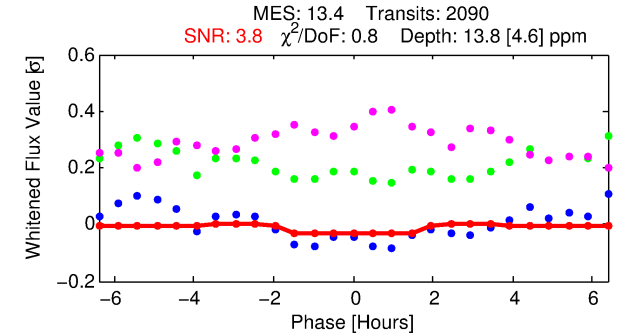
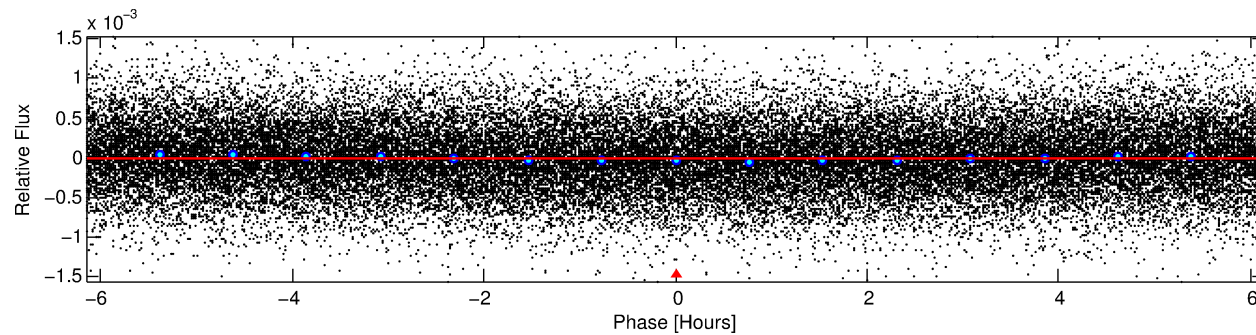
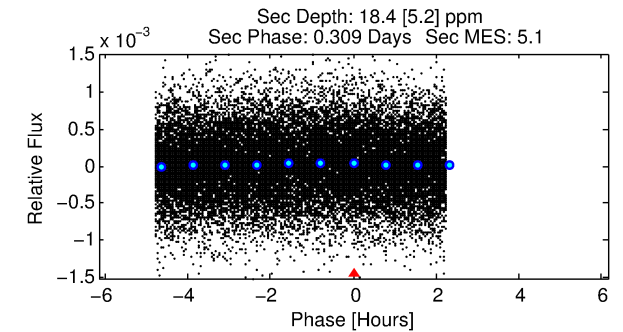
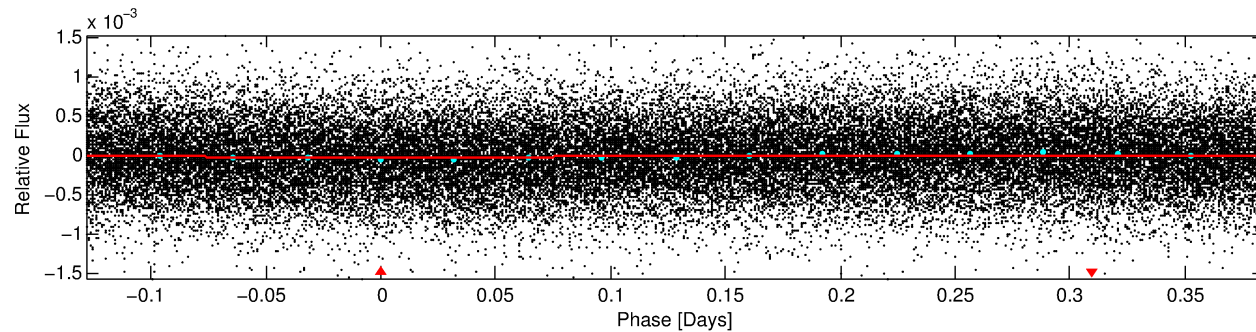
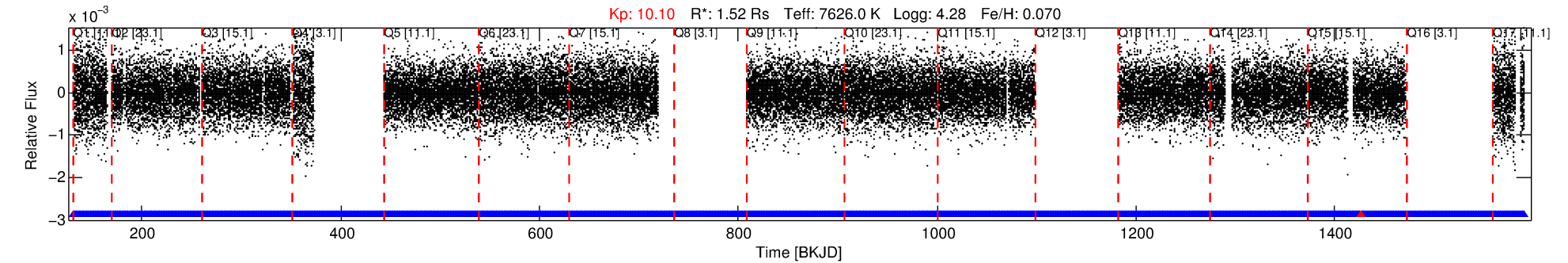
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 011182608-01

No Significant Match Found

DV One-Page Summary

KIC: 11182608 Candidate: 1 of 1 Period: 0.513 d



DV Fit Results:

Period = 0.51291 [0.00003] d
Epoch = 131.6135 [0.0102] BKJD
 $R_p/R^* = 0.0035$ [0.0080]
 $a/R^* = 1.19$ [4.99]
 $b = 0.27$ [49.34]
Seff = 32610.29 [15816.01]
Teff = 3427 [415] K
 $R_p = 0.58$ [1.35] R_e
 $a = 0.0147$ [0.0048] AU
 $A_g = 6.55$ [30.43] [0.18σ]
Teffp = 8474 [9807] K [0.51σ]

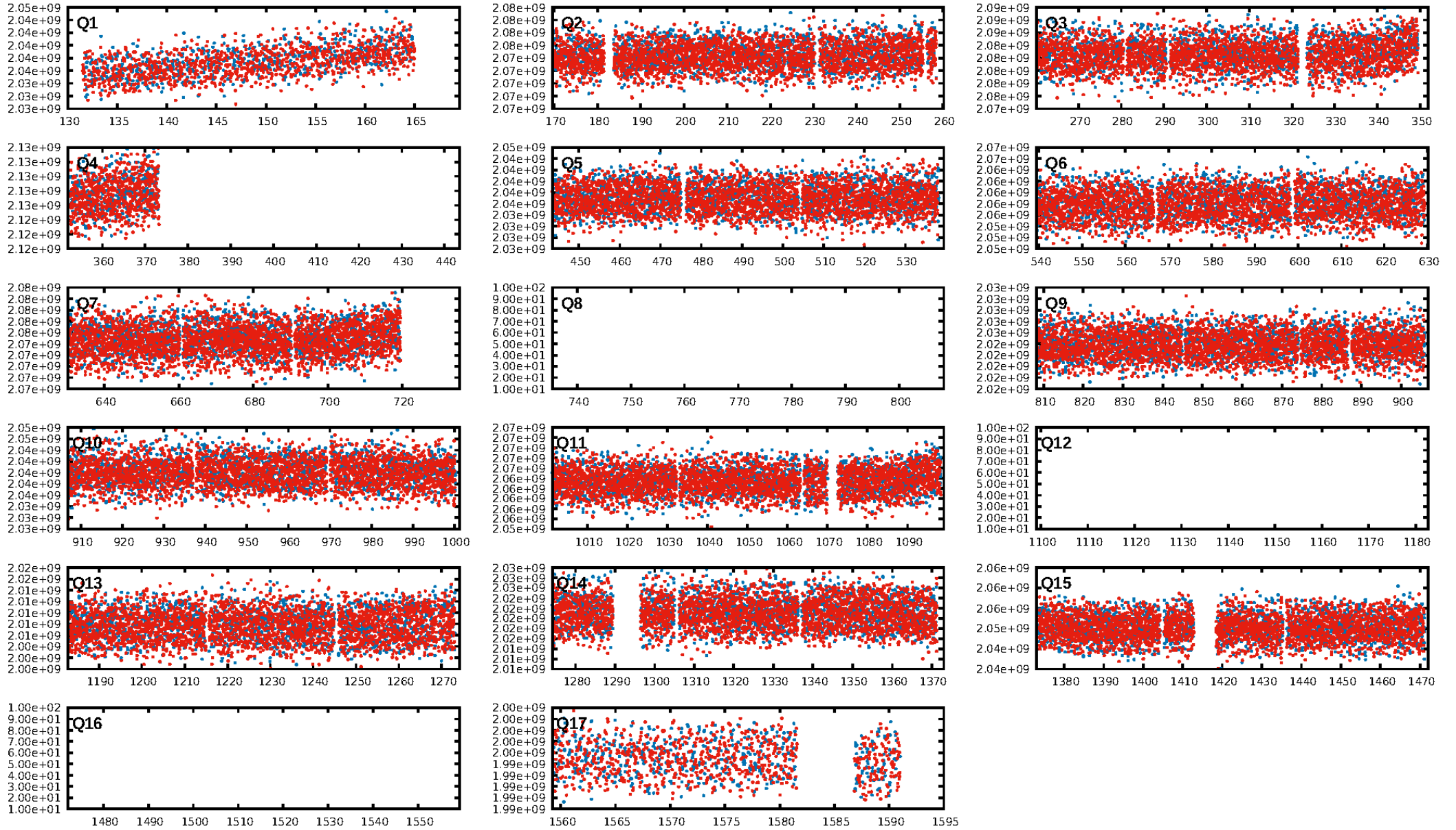
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 1.23e-39
RollingBand-fgt: 1.00 [1930/1931]
GhostDiagnostic-chr: N/A
Centroid-sig: 6.8%
Centroid-so: 0.766 arcsec [1.07σ]
OotOffset-rm: 5.563 arcsec [3.93σ]
KicOffset-rm: 4.541 arcsec [3.24σ]
OotOffset-st: 4/4/1/5 [14]
KicOffset-st: 4/4/1/5 [14]
DiffImageQuality-fgm: 0.57 [8/14]
DiffImageOverlap-fno: 1.00 [14/14]

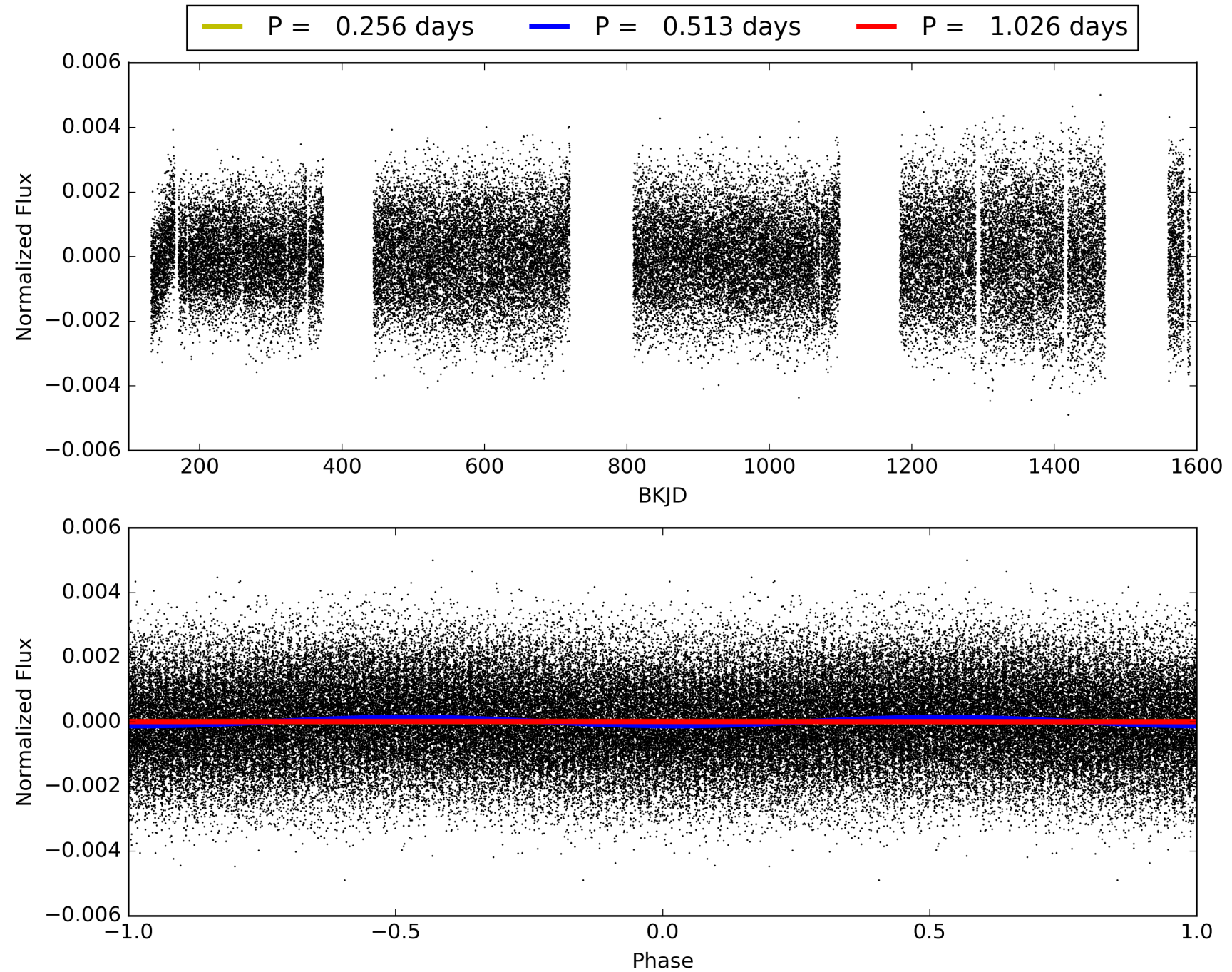
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 29-Jan-2016 04:21:09 Z

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

TCE 011182608-01, PDC Light Curves

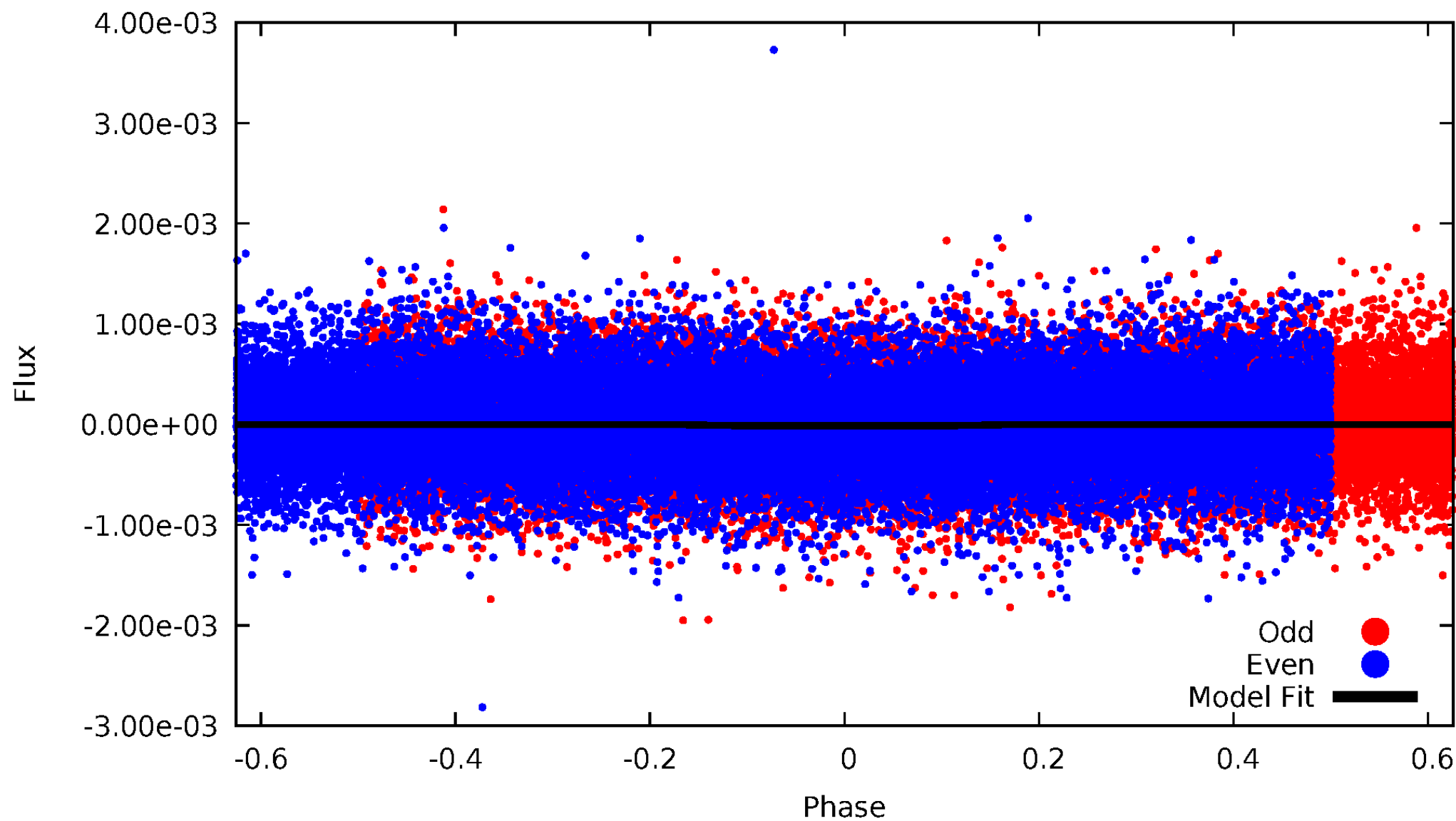


TCE 011182608-01



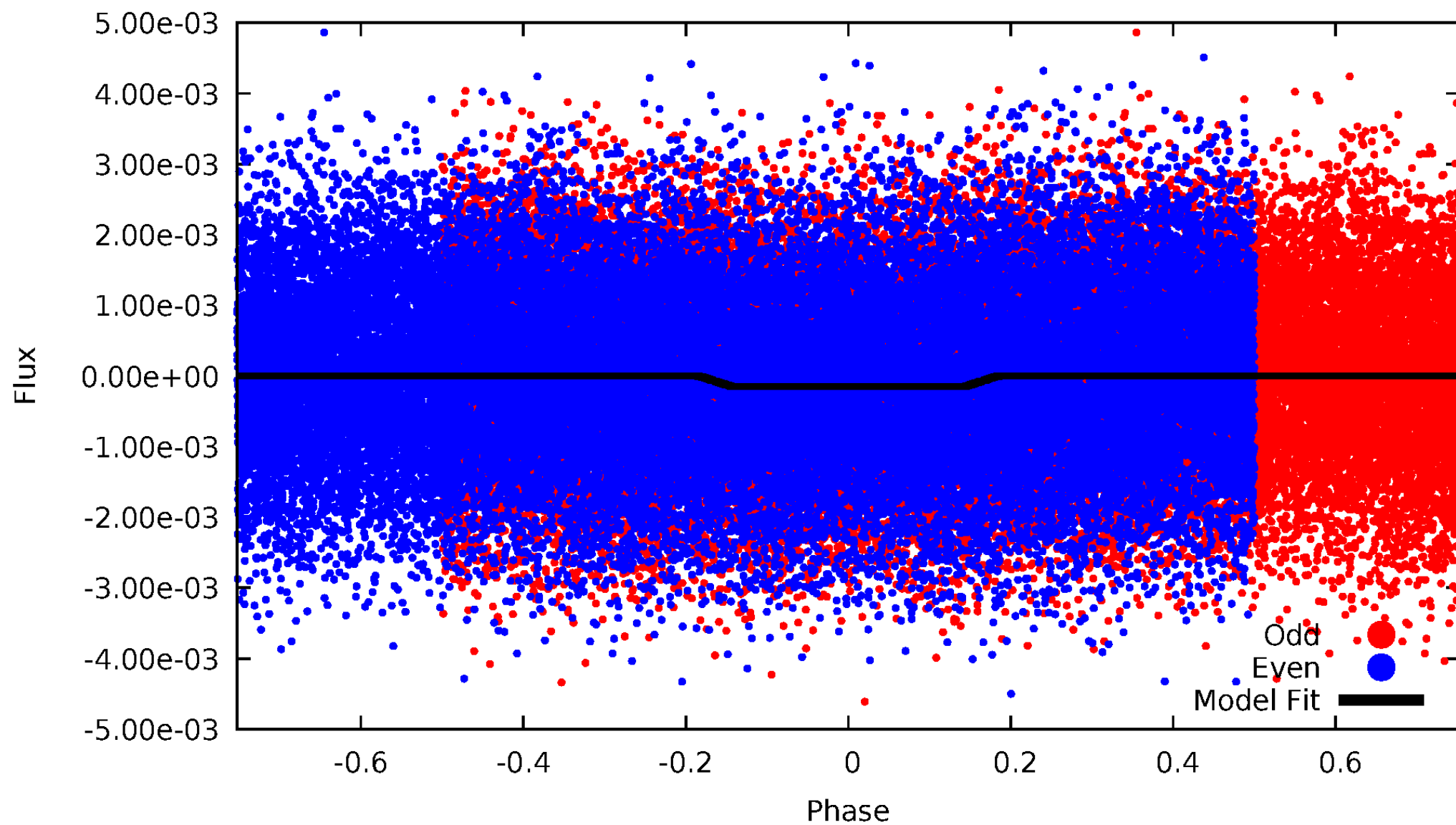
DV Odd/Even

TCE 011182608-01

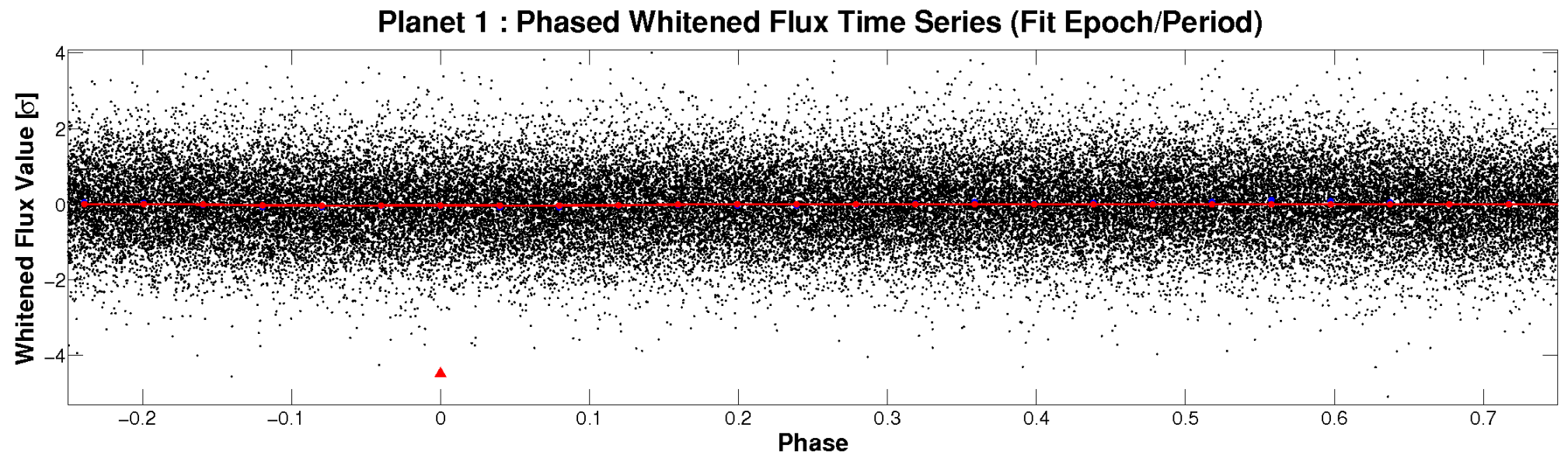
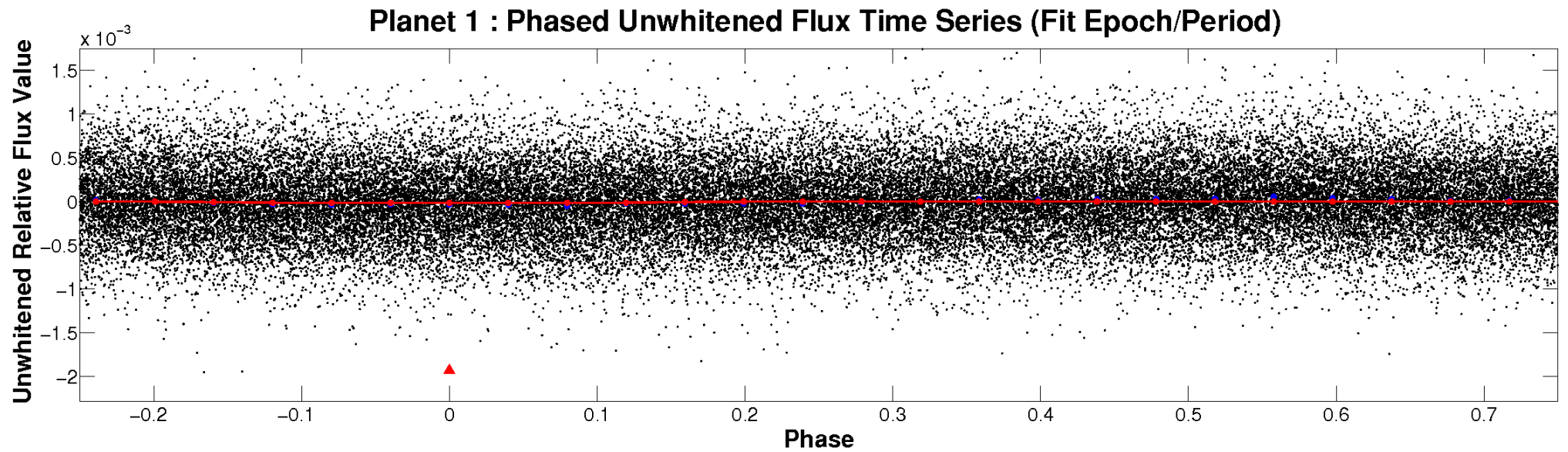


ALT Odd/Even

TCE 011182608-01

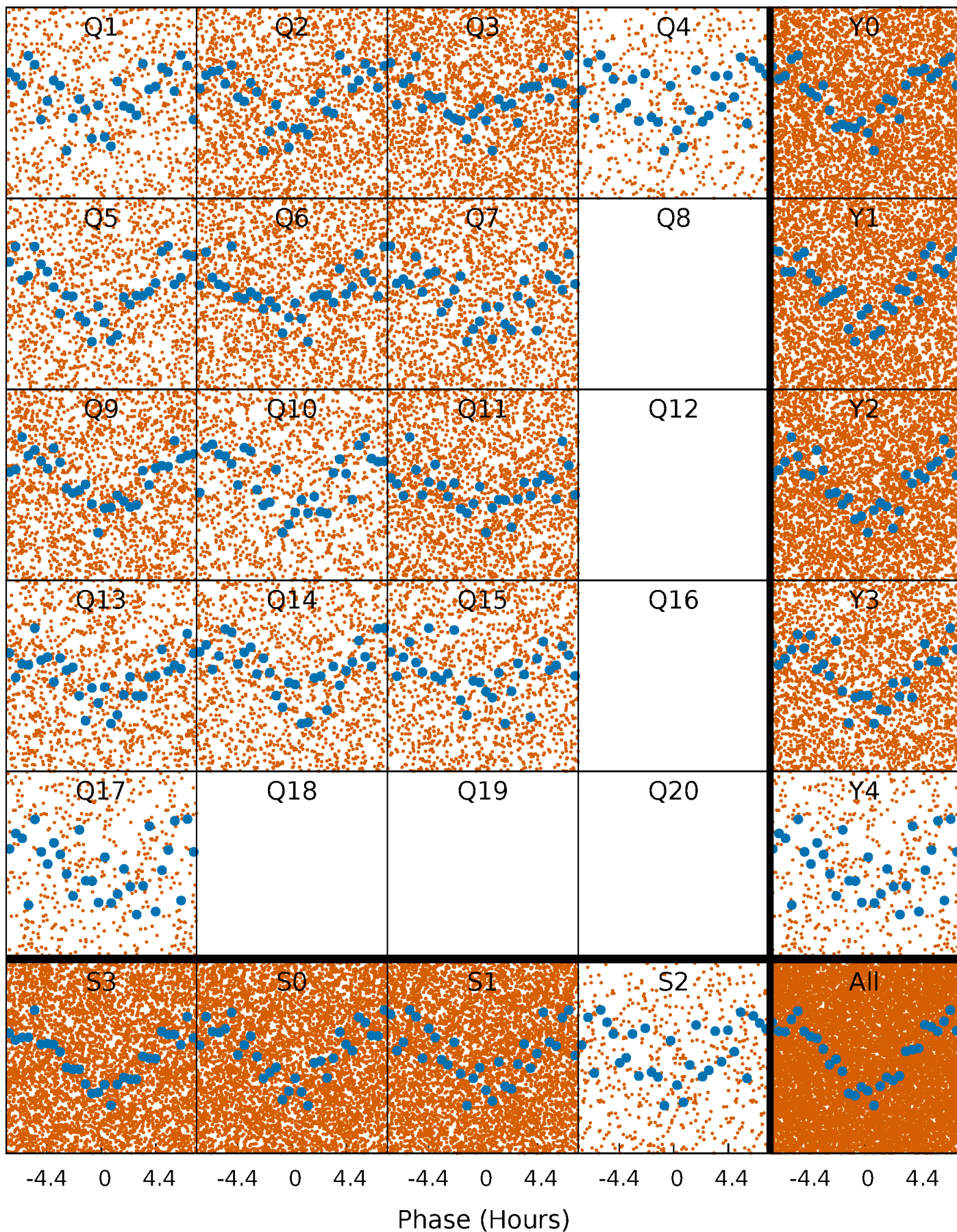


Non-Whitened Vs. Whitened Light Curve



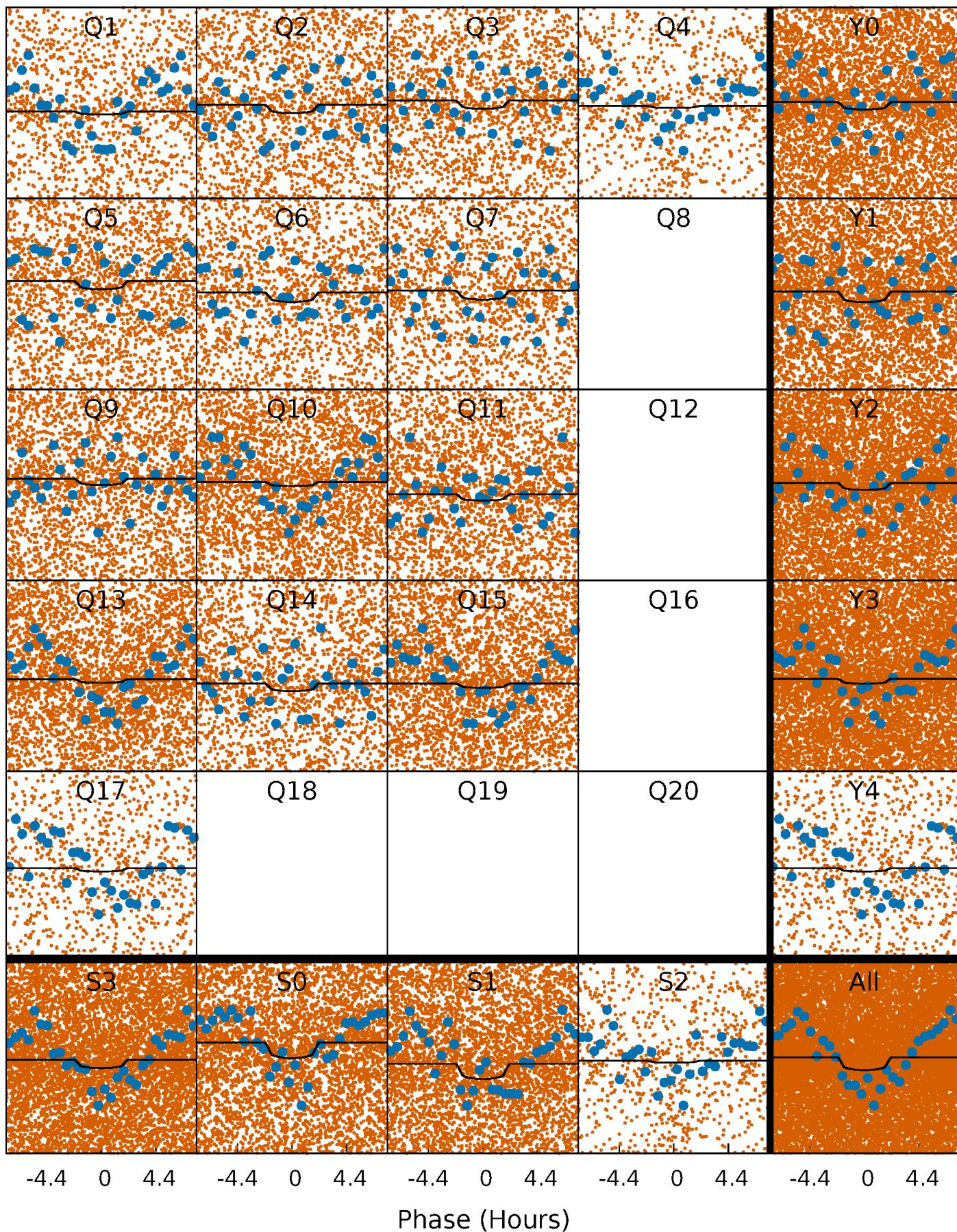
PDC Quarter-Phased Transit Curves

TCE 011182608-01 P= 0.512906 Days $T_0=131.613491$ (BKJD)



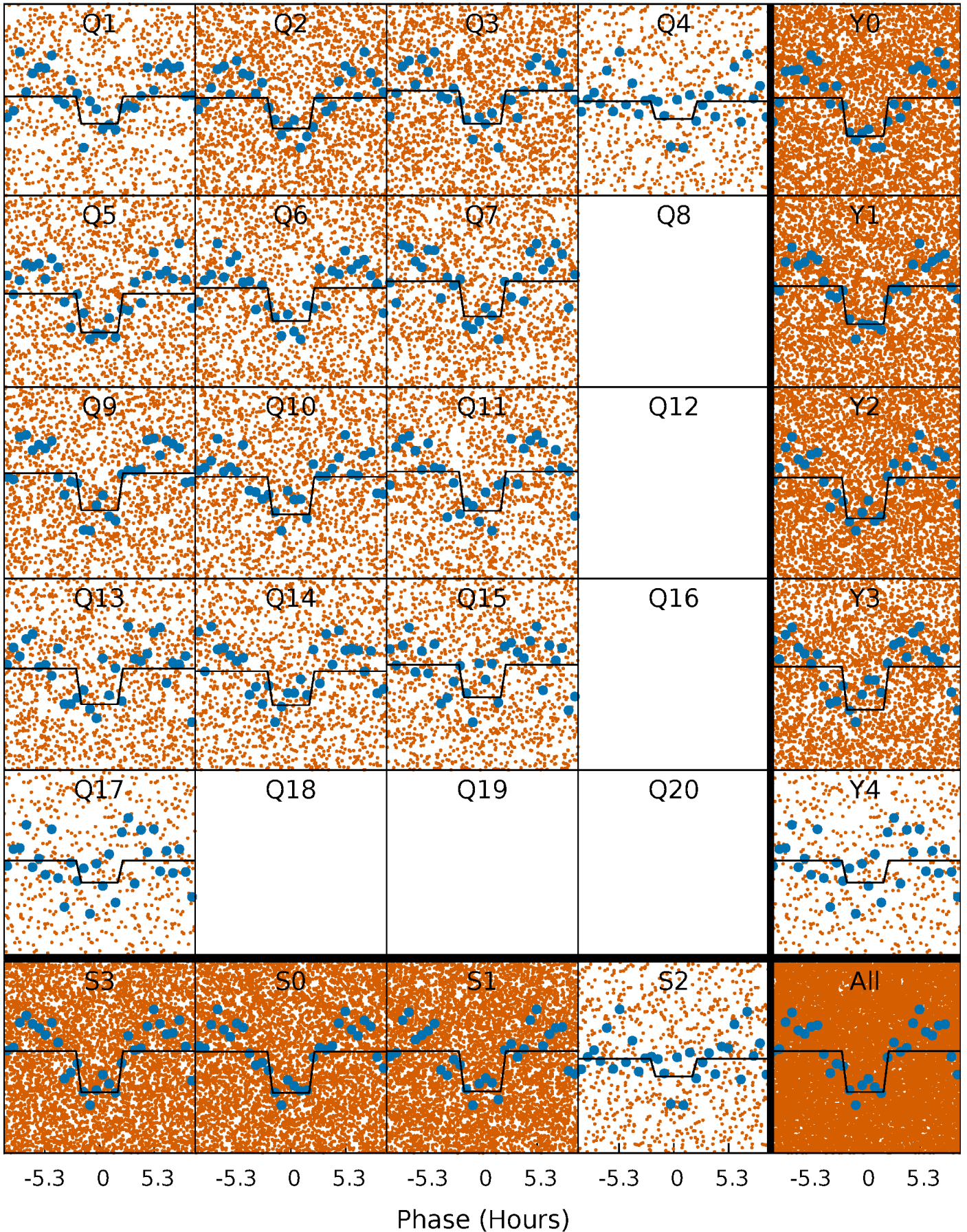
DV Quarter-Phased Transit Curves

TCE 011182608-01 P= 0.512906 Days $T_0=131.613491$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

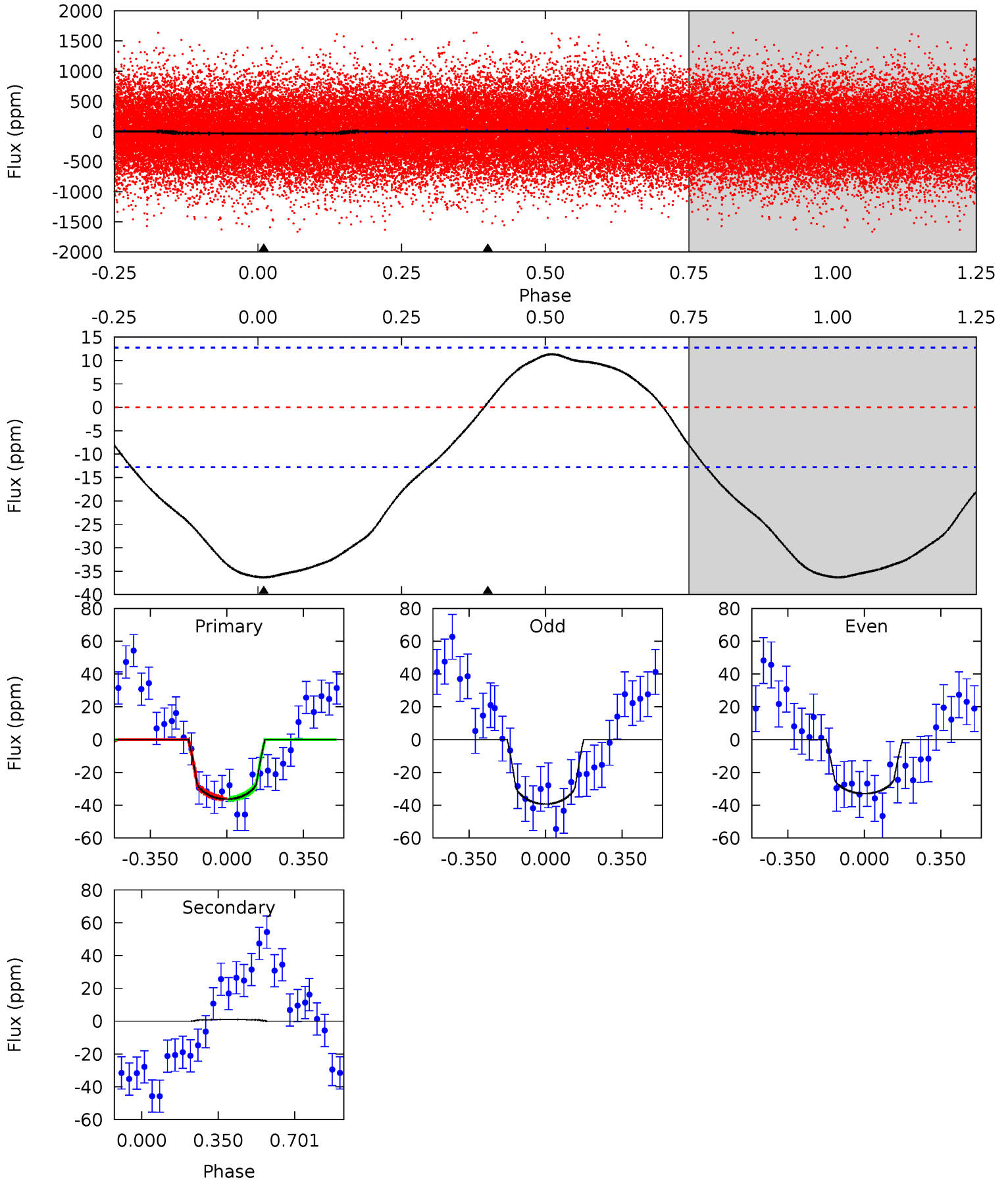
TCE 011182608-01 P= 0.512967 Days $T_0=131.564657$ (BKJD)



DV Model-Shift Uniqueness Test

011182608-01, P = 0.512906 Days, E = 131.100585 Days

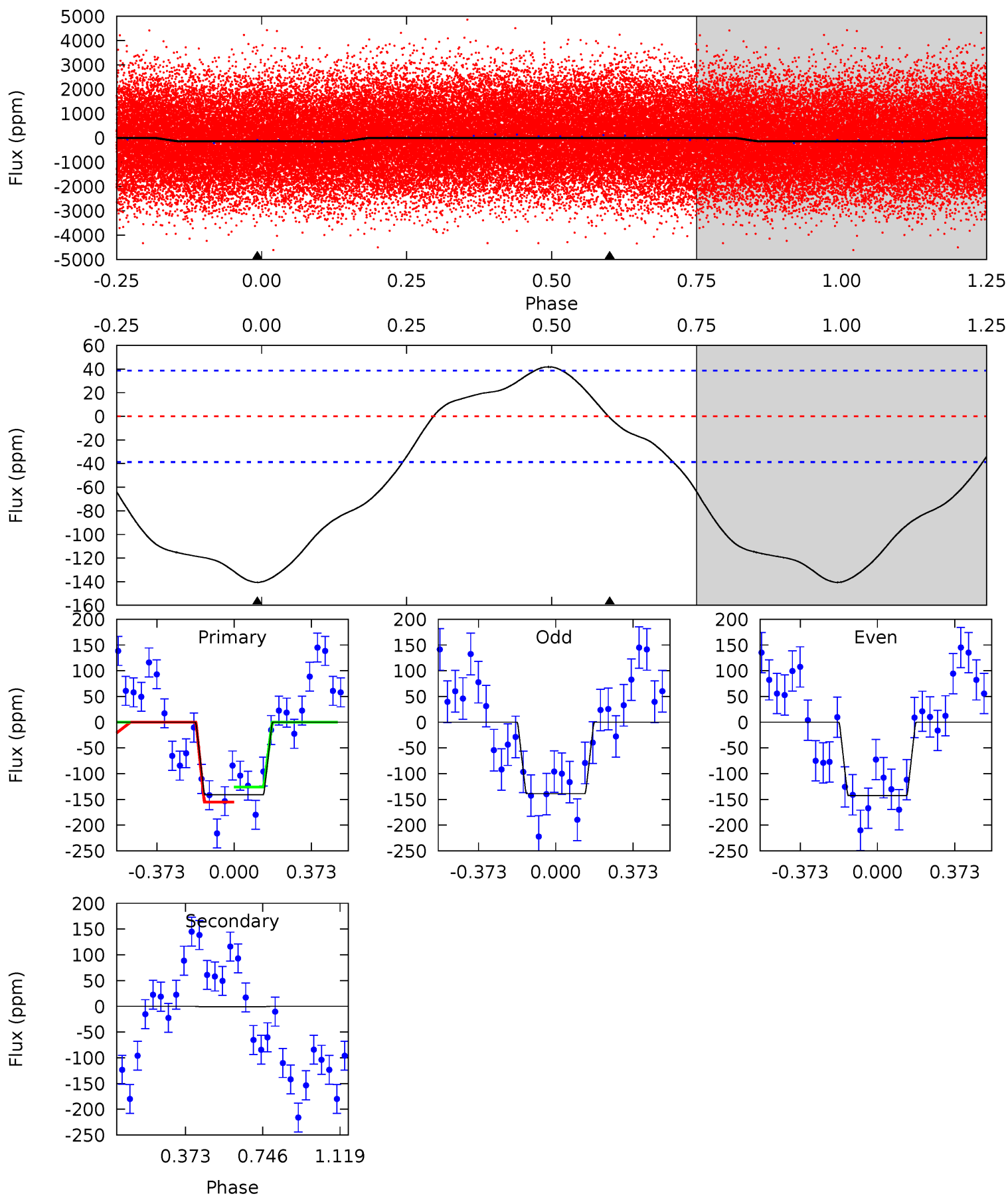
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
12.2	-0.33	0	0	4.29	0.93	1.53	12.2	12.2	-0.33	-0.33	1.07	1.01	0.24	0.05



Alt Model-Shift Uniqueness Test

011182608-01, P = 0.512967 Days, E = 131.051690 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
15.5	0.11	0	0	4.28	0.89	1.78	15.5	15.5	0.11	0.11	0.20	1.02	0.23	1.62



Stellar Parameters For KIC 011182608

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	7626^{+214}_{-322}	$4.278^{+0.060}_{-0.240}$	$0.070^{+0.150}_{-0.400}$	$1.524^{+0.609}_{-0.190}$	$1.606^{+0.210}_{-0.210}$	$0.639^{+0.213}_{-0.389}$
	+3%/-4%	+1%/-6%	+214%/-571%	+40%/-12%	+13%/-13%	+33%/-61%
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 011182608-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	1 ± 3	$1.23^{+1.15}_{-0.84}$	4881^{+383}_{-264}	-4410^{+670}_{-1276}	$-0.046^{+0.178}_{-0.858}$
Alt.	-1 ± 9	$2.18^{+1.41}_{-1.24}$	4875^{+484}_{-280}	-4134^{+7485}_{-752}	$0.028^{+0.350}_{-0.288}$

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 $A_{obs} \gg 1.0$

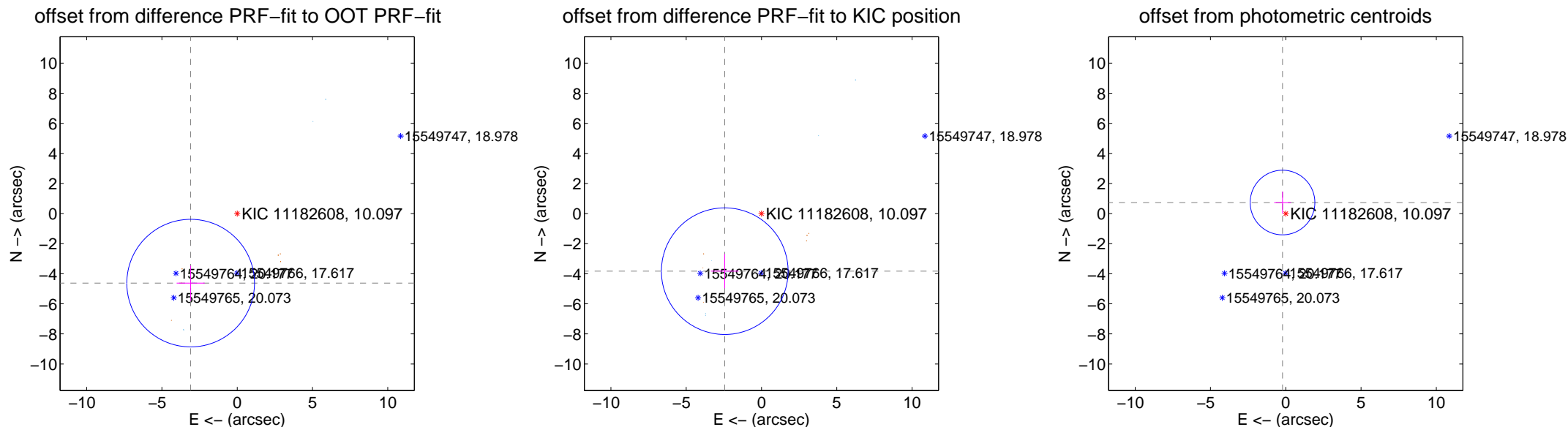
DV Centroid Data

Supplemental centroid analysis for 011182608-01. **Kepler magnitude: 10.10.** Transit SNR 3.79

There are 8 quarters with good PRF difference image offsets

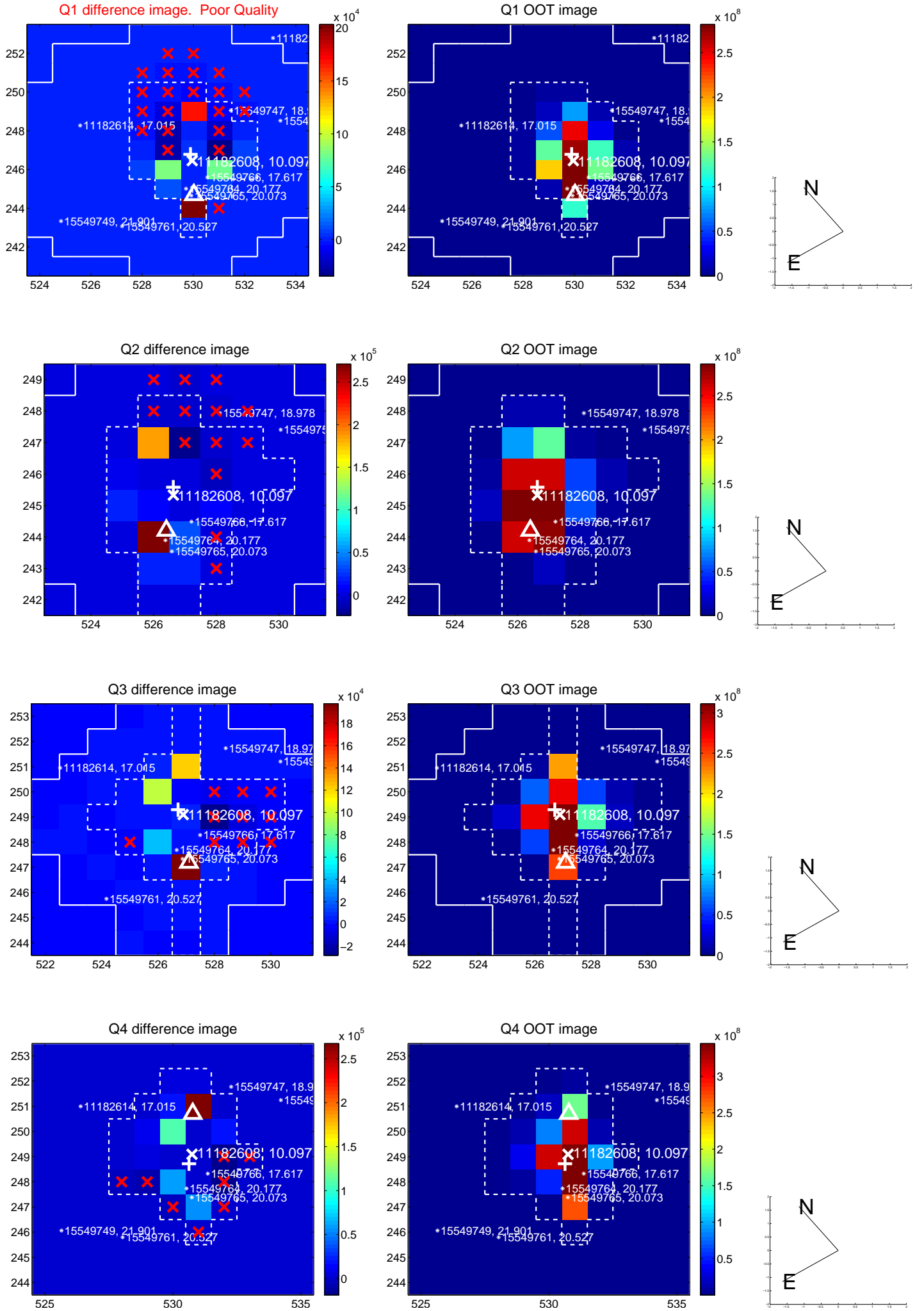
The direct PRF centroid is offset from the target star catalog position by about 1.33 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	5.563 ± 1.414	3.93	3.093 ± 0.930	-4.623 ± 1.157
PRF-fit source offset from KIC position	4.541 ± 1.403	3.24	2.441 ± 0.920	-3.830 ± 1.139
photometric centroid source offset	0.77 ± 0.72	1.07	0.22 ± 0.56	0.73 ± 0.73

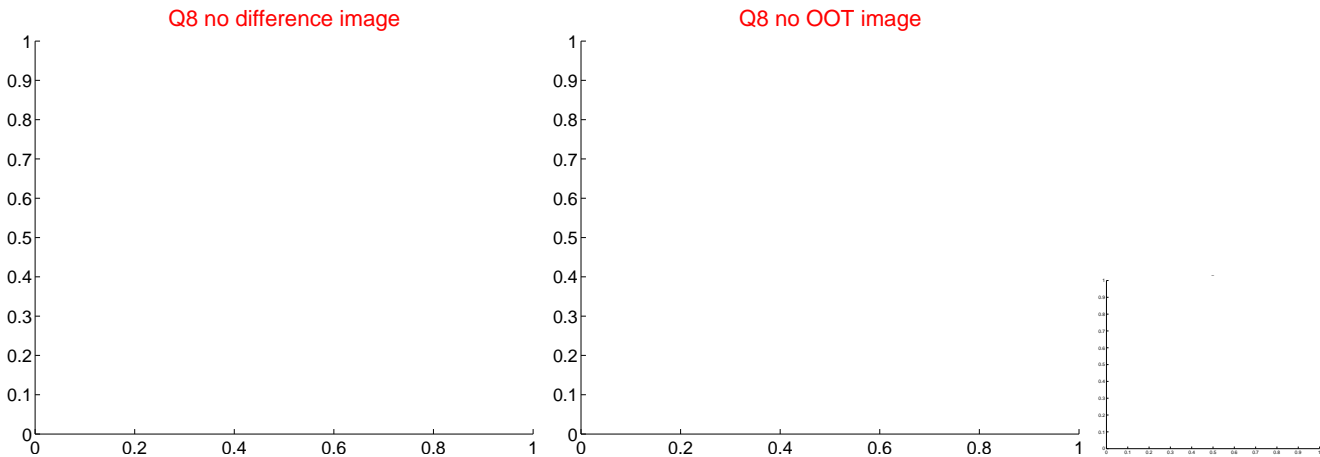
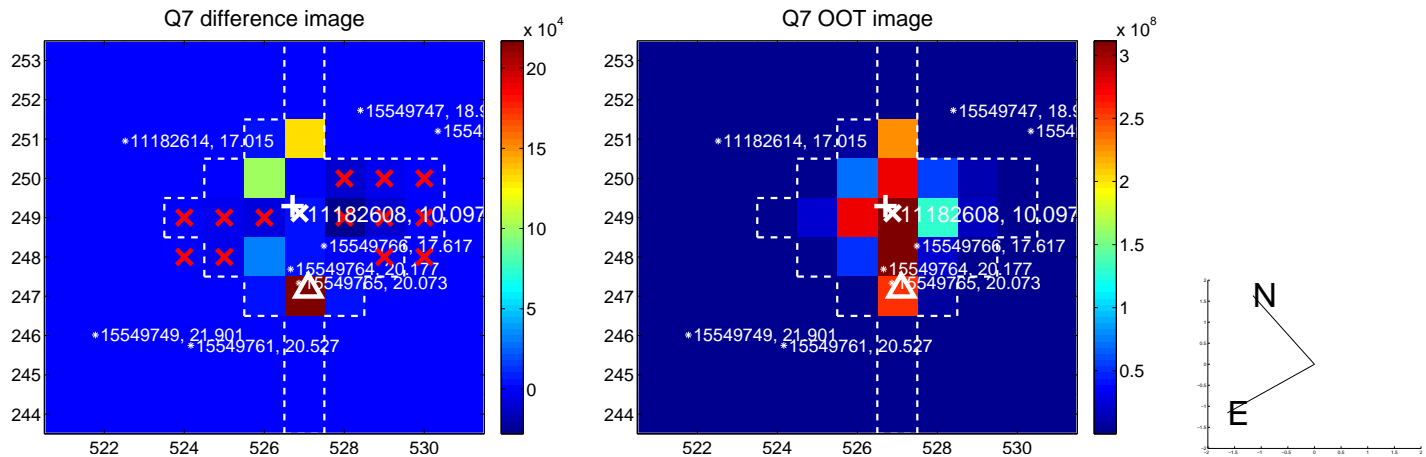
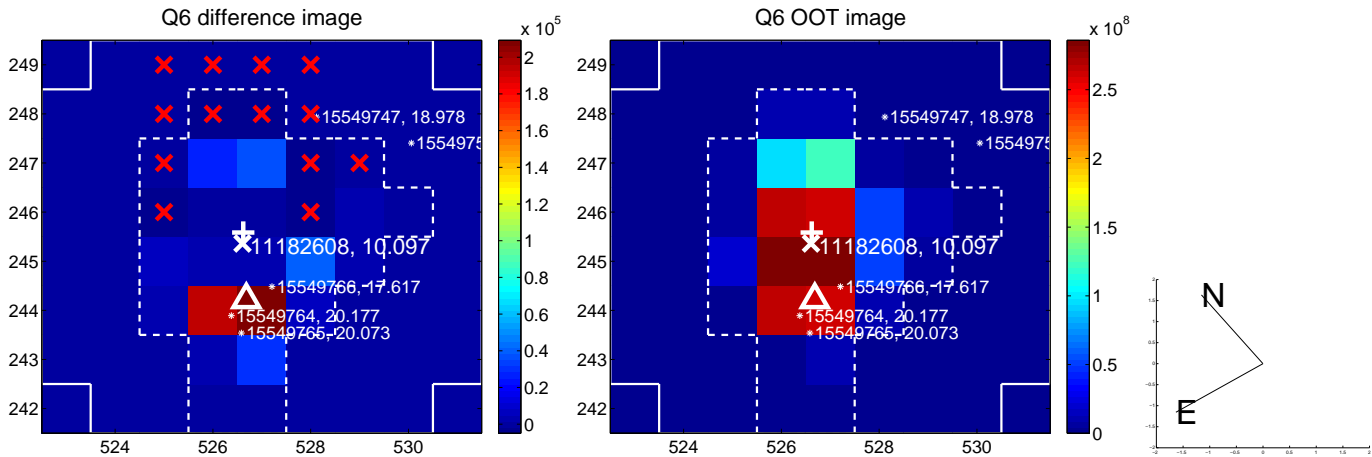
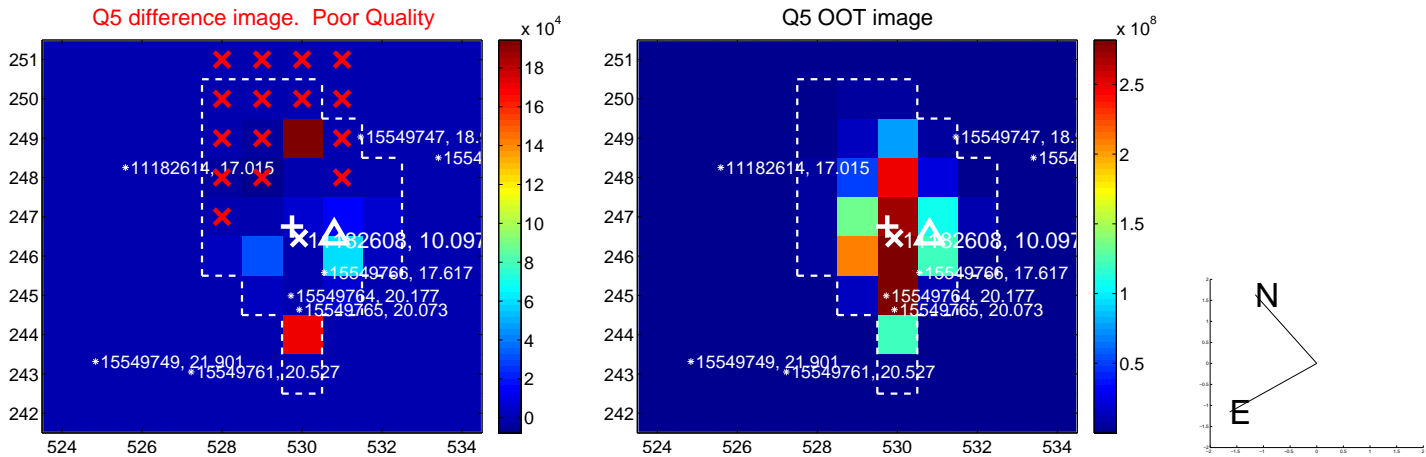


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets;** magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

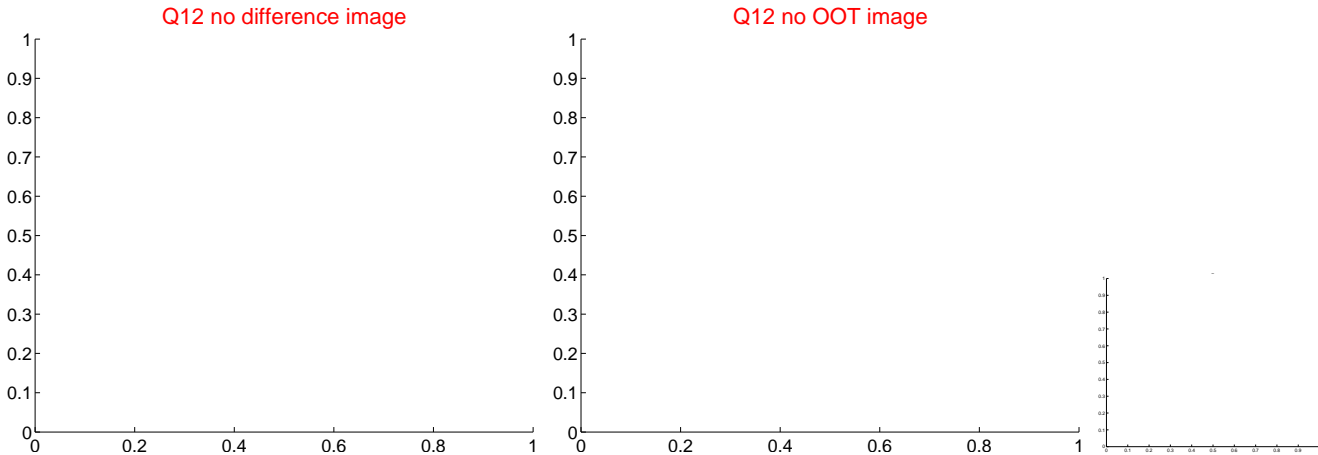
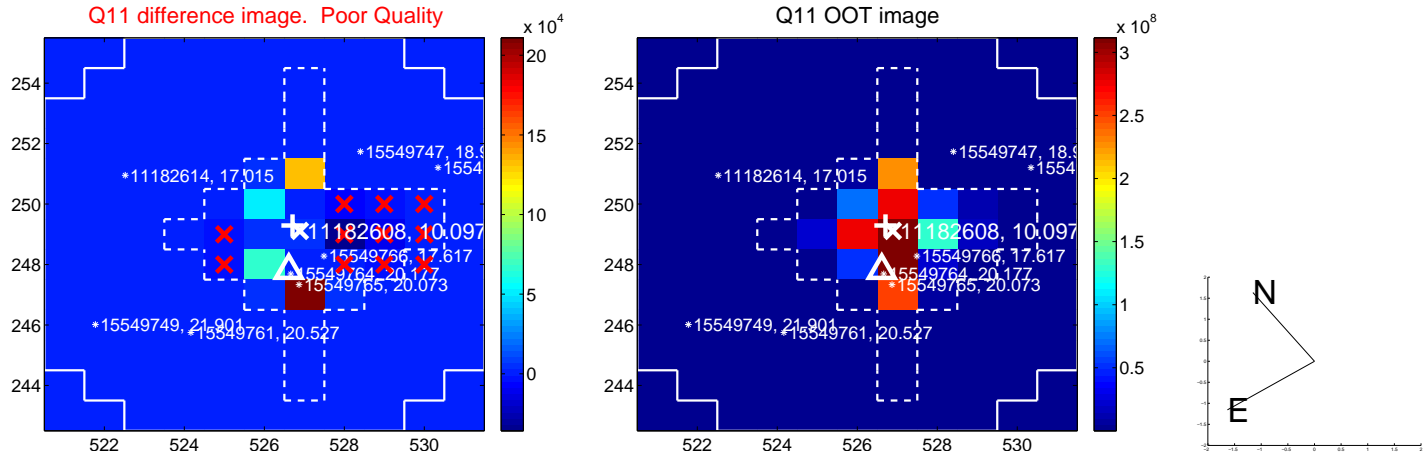
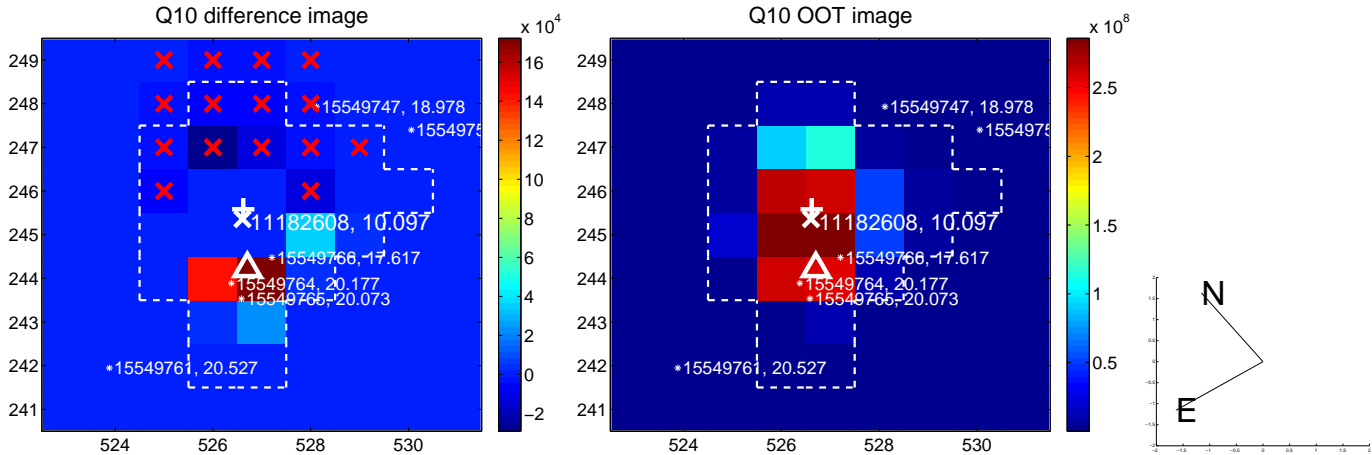
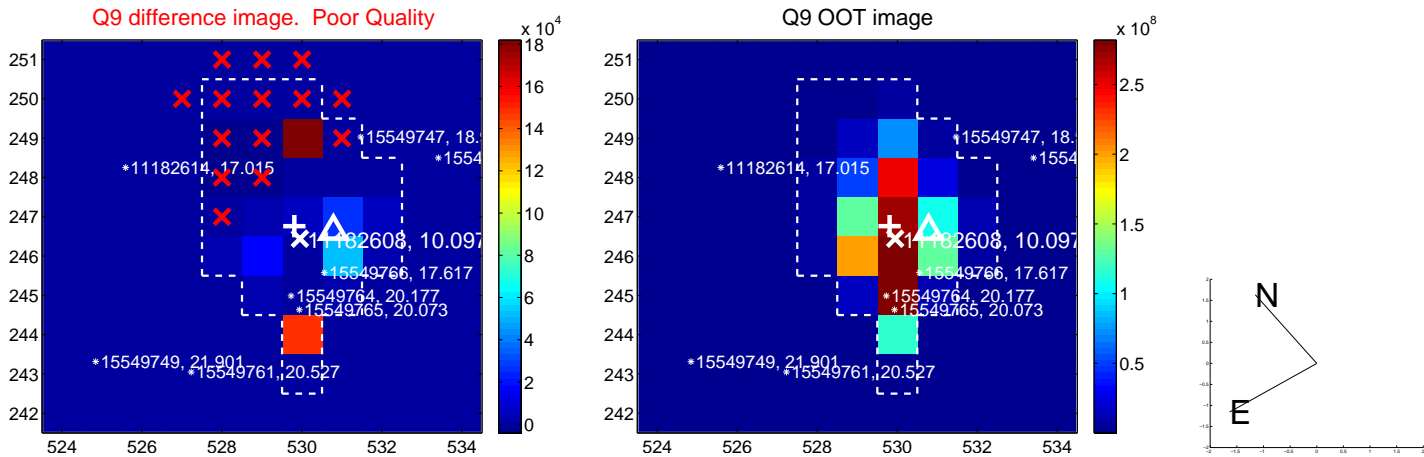
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



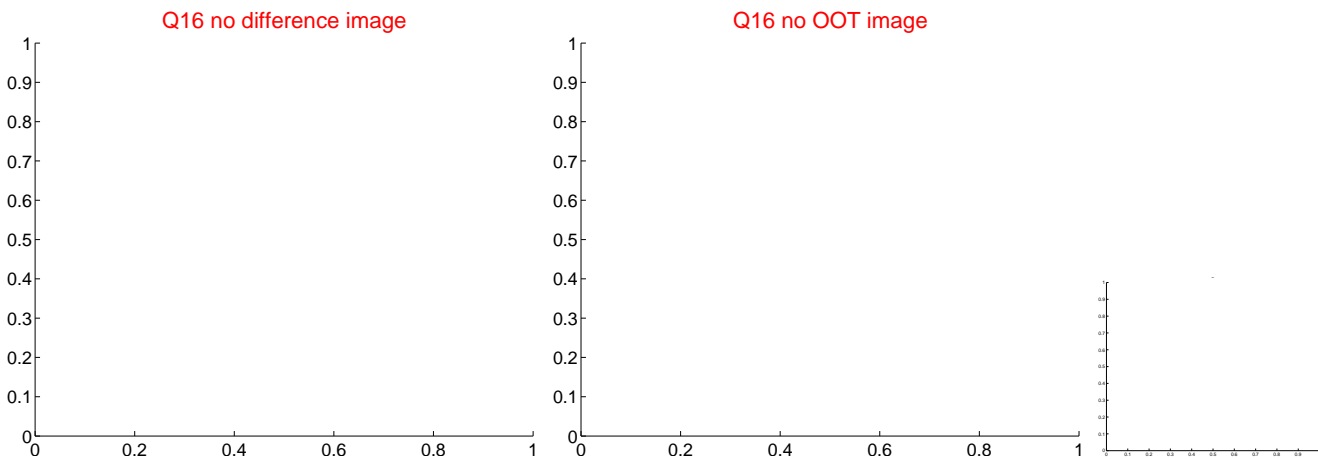
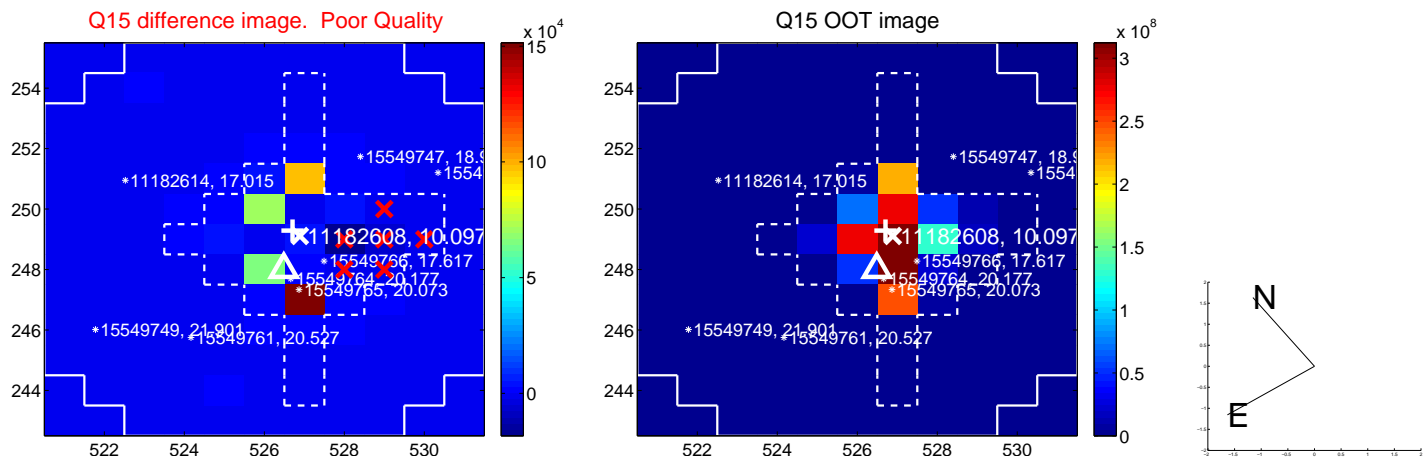
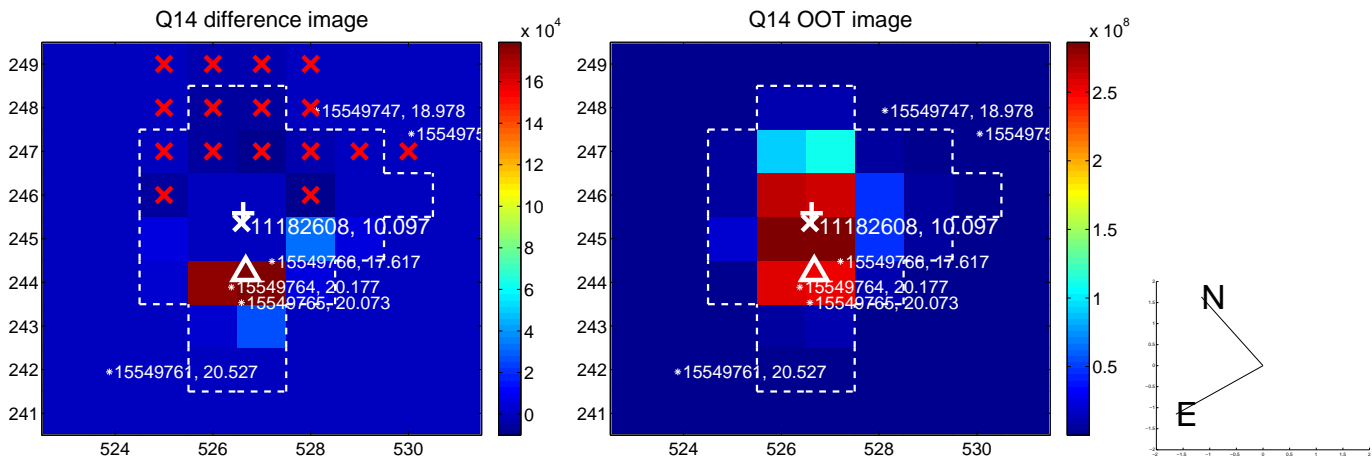
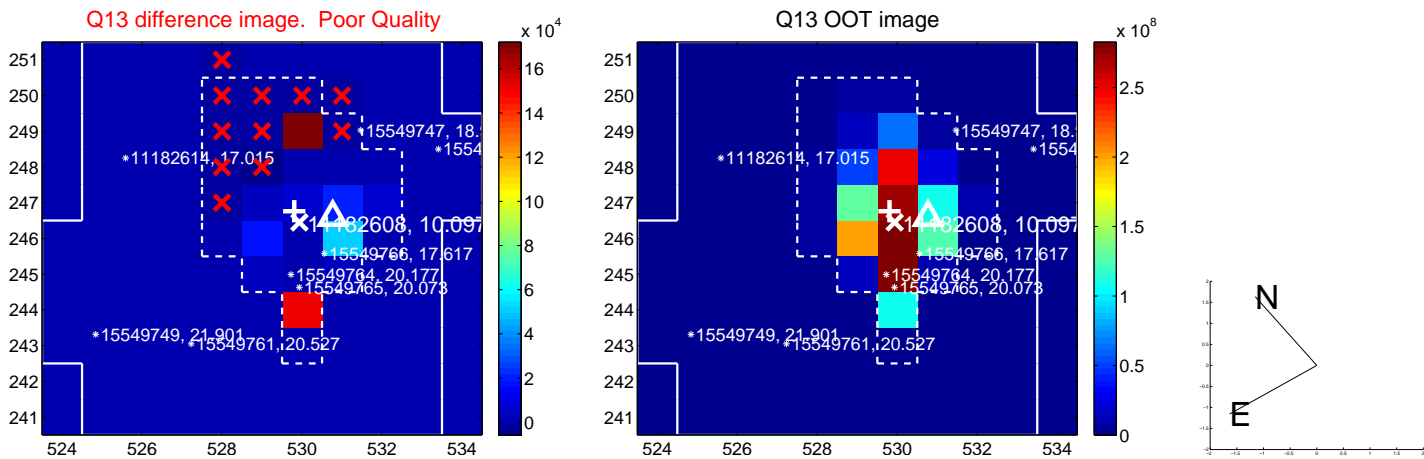
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



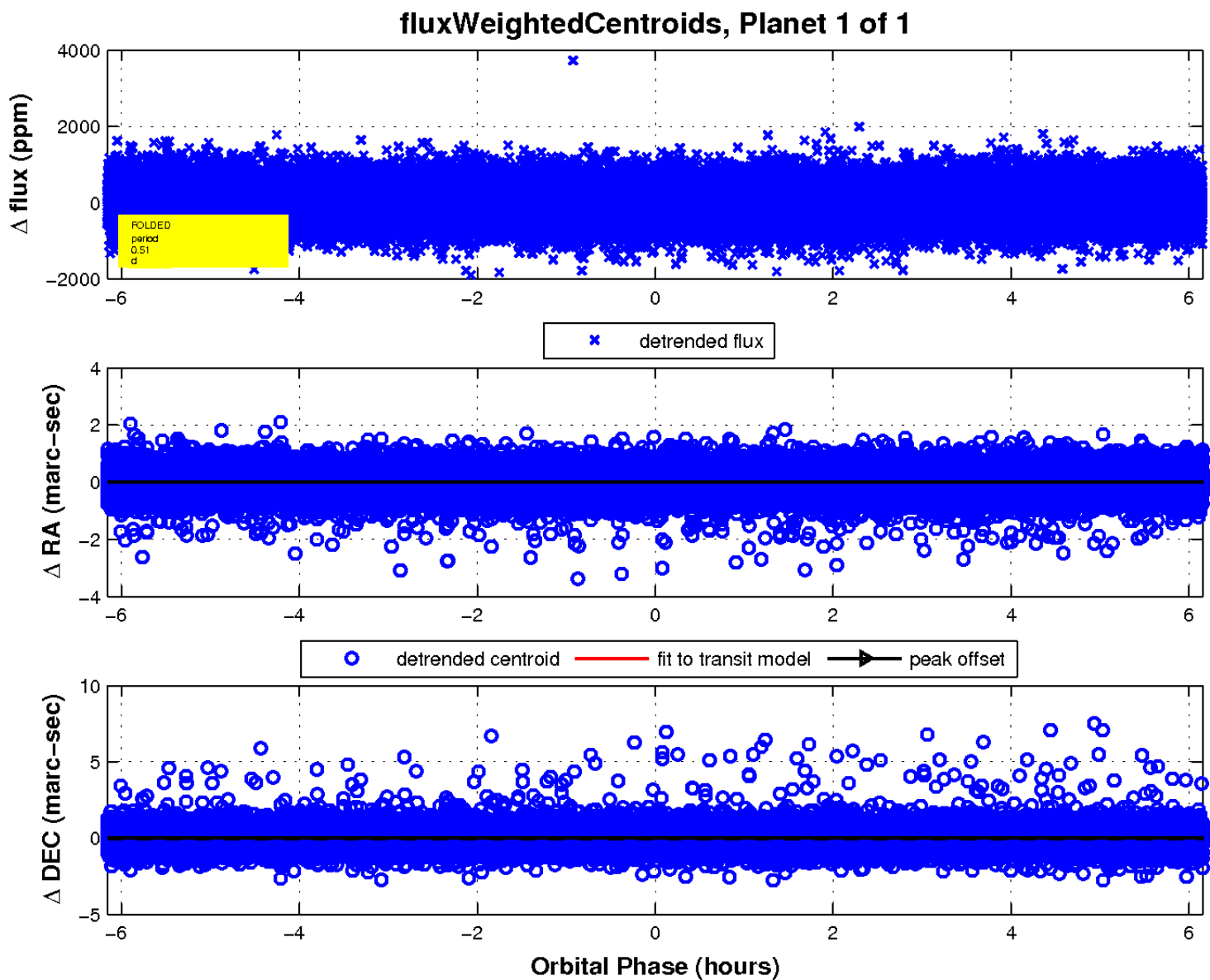
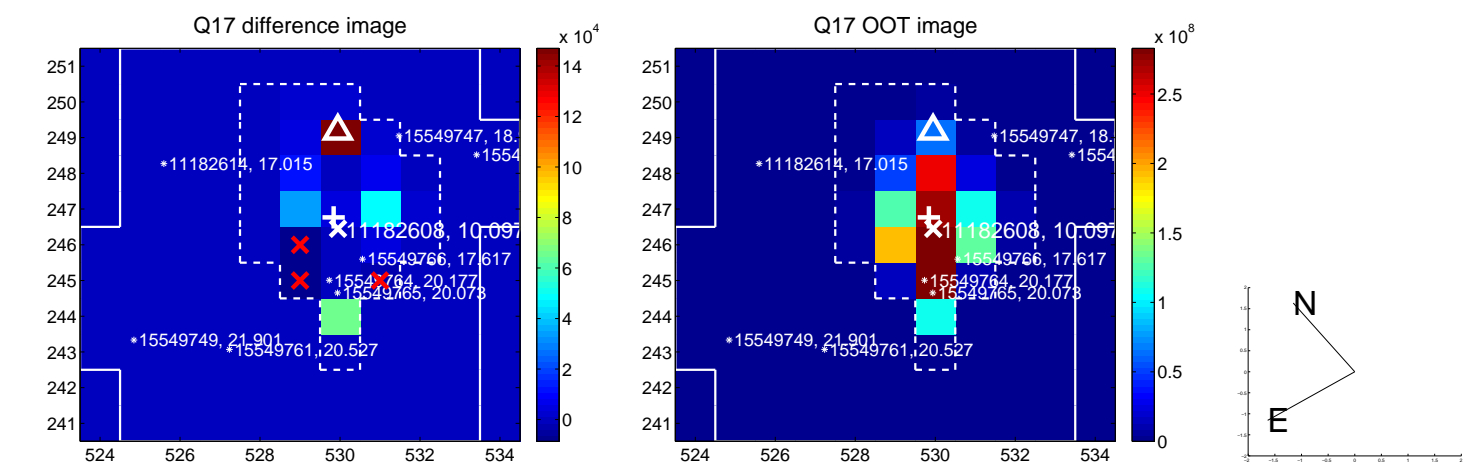
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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UKIRT Image

Declination

