

KIC 004264365

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})
004264365-01	OBS	No	0.781606	132.164219	22.3	7.787	11.3	2.7	2.32	6972	1.12	29429.97

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
004264365-01	OBS	FP	0.00	1	0	1	0	LPP_DV—CENT_UNRESOLVED_OFFSET

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

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

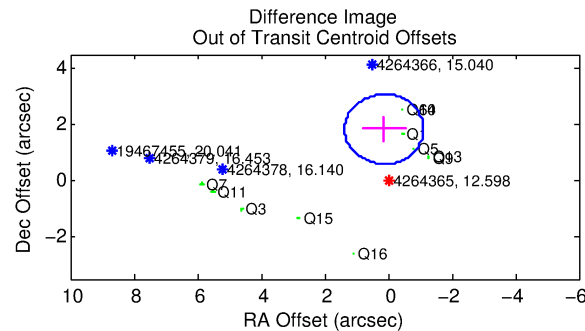
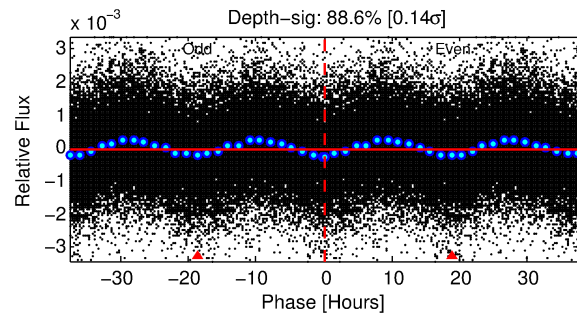
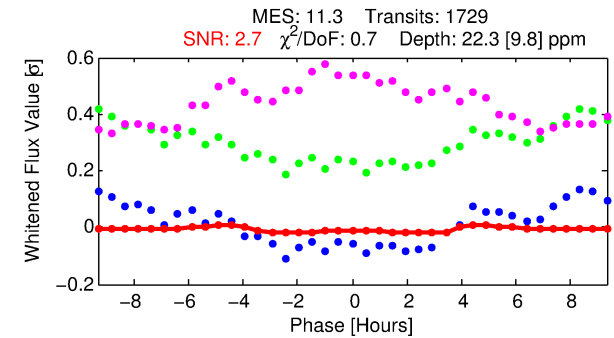
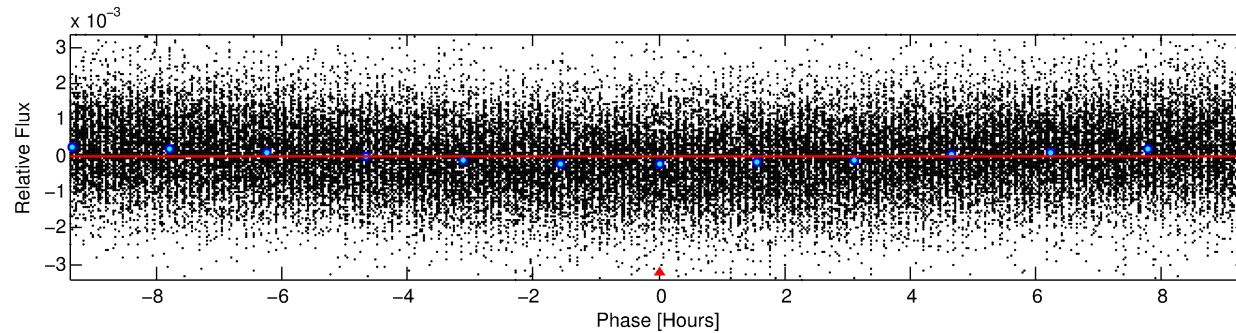
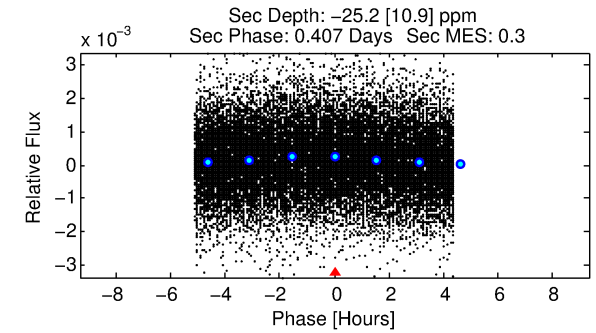
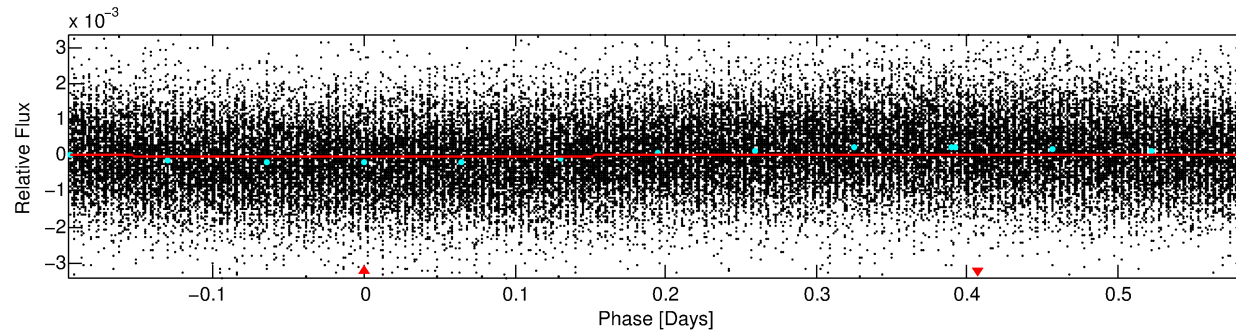
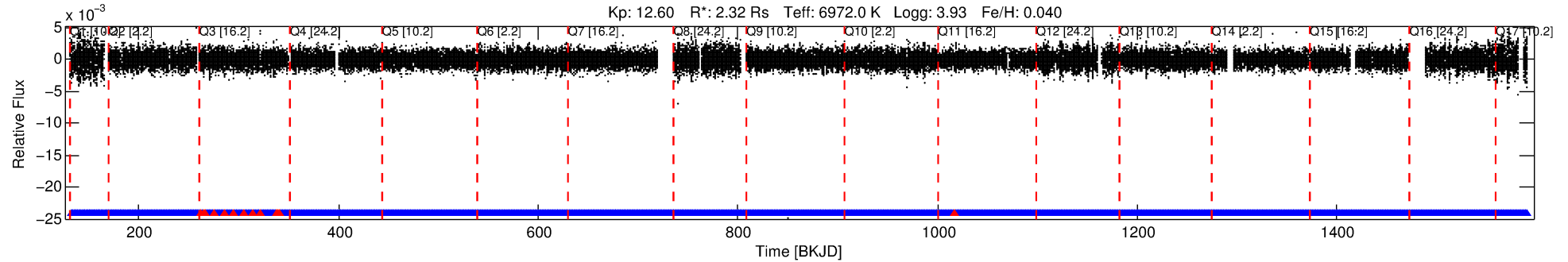
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 004264365-01

No Significant Match Found

DV One-Page Summary

KIC: 4264365 Candidate: 1 of 1 Period: 0.782 d



DV Fit Results:

Period = 0.78161 [0.00004] d
Epoch = 132.1642 [0.0152] BKJD
Rp/R* = 0.0044 [0.0088]
a/R* = 1.04 [0.80]
b = 0.37 [26.74]
Seff = 29429.97 [14659.60]
Teq = 3340 [416] K
Rp = 1.12 [2.25] Re
a = 0.0197 [0.0060] AU
Ag = N/A
Teffp = N/A

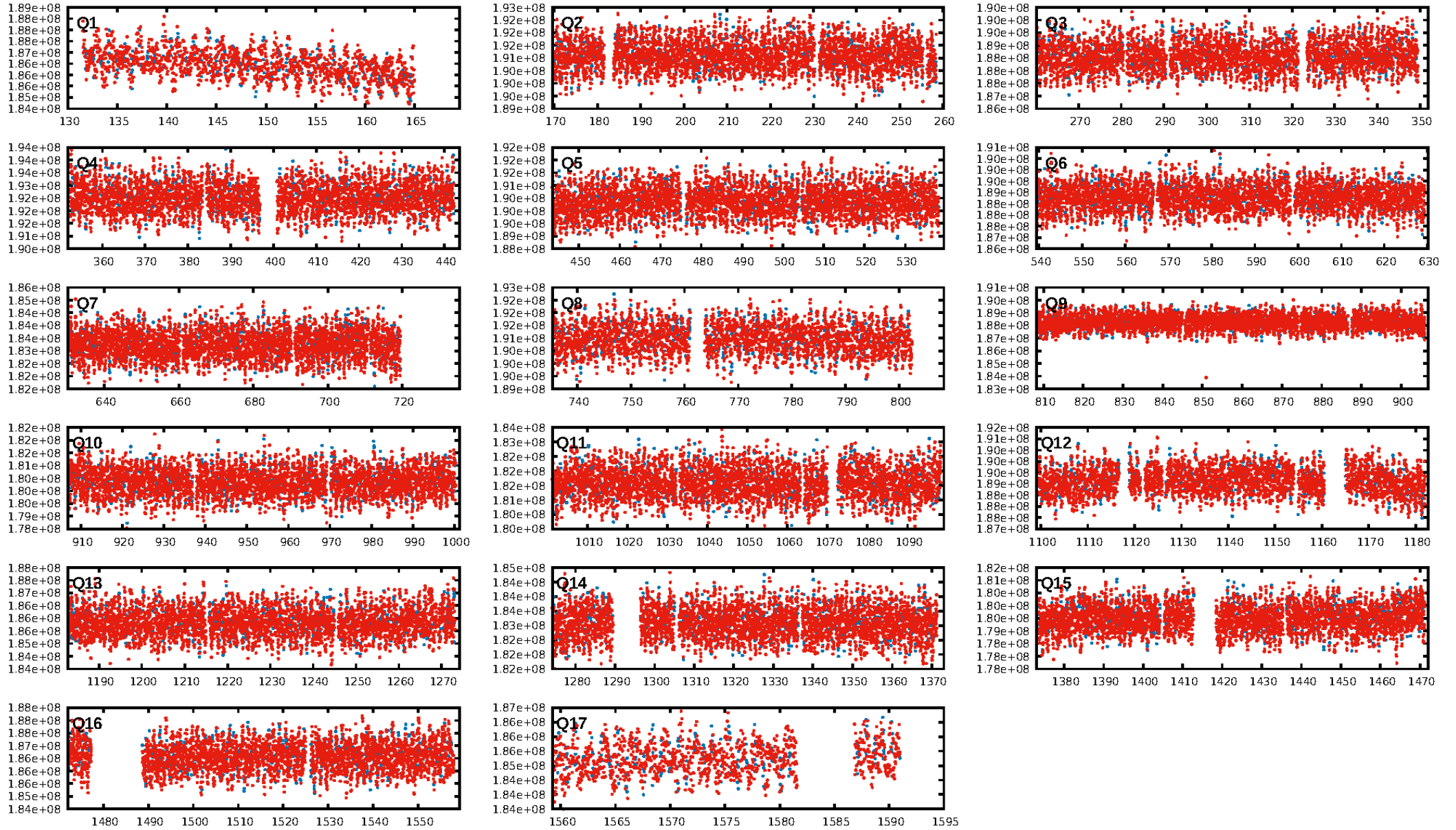
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: N/A
RollingBand-fgt: 0.99 [1636/1650]
GhostDiagnostic-chr: 2.112
Centroid-sig: 0.0%
Centroid-so: 1.626 arcsec [2.80σ]
OotOffset-rm: 1.839 arcsec [4.44σ]
KicOffset-rm: 1.892 arcsec [4.00σ]
OotOffset-st: 3/4/1/4 [12]
KicOffset-st: 3/4/1/4 [12]
DiffImageQuality-fgm: 0.67 [8/12]
DiffImageOverlap-fno: 1.00 [17/17]

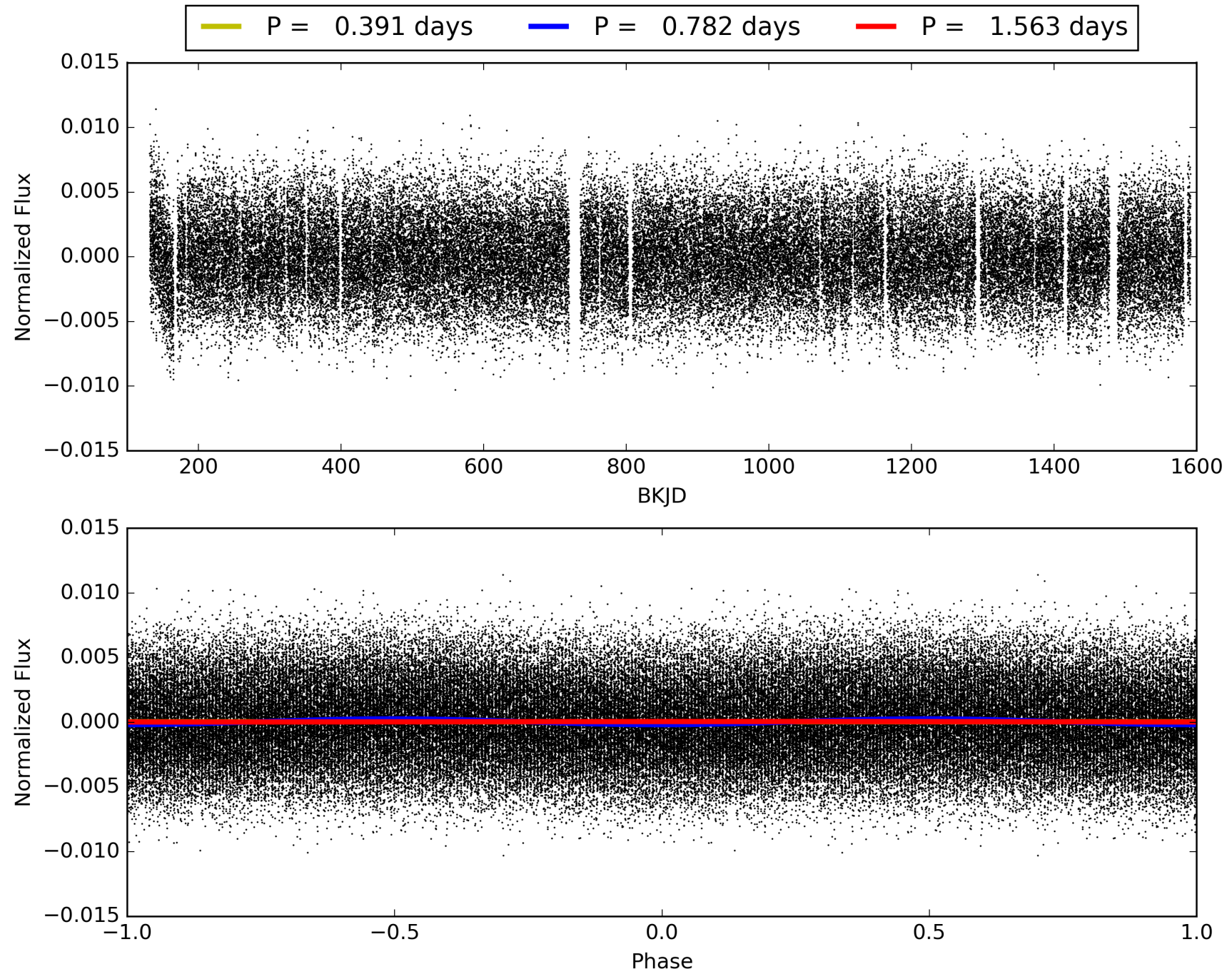
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 31-Jan-2016 02:05:32 Z

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

TCE 004264365-01, PDC Light Curves

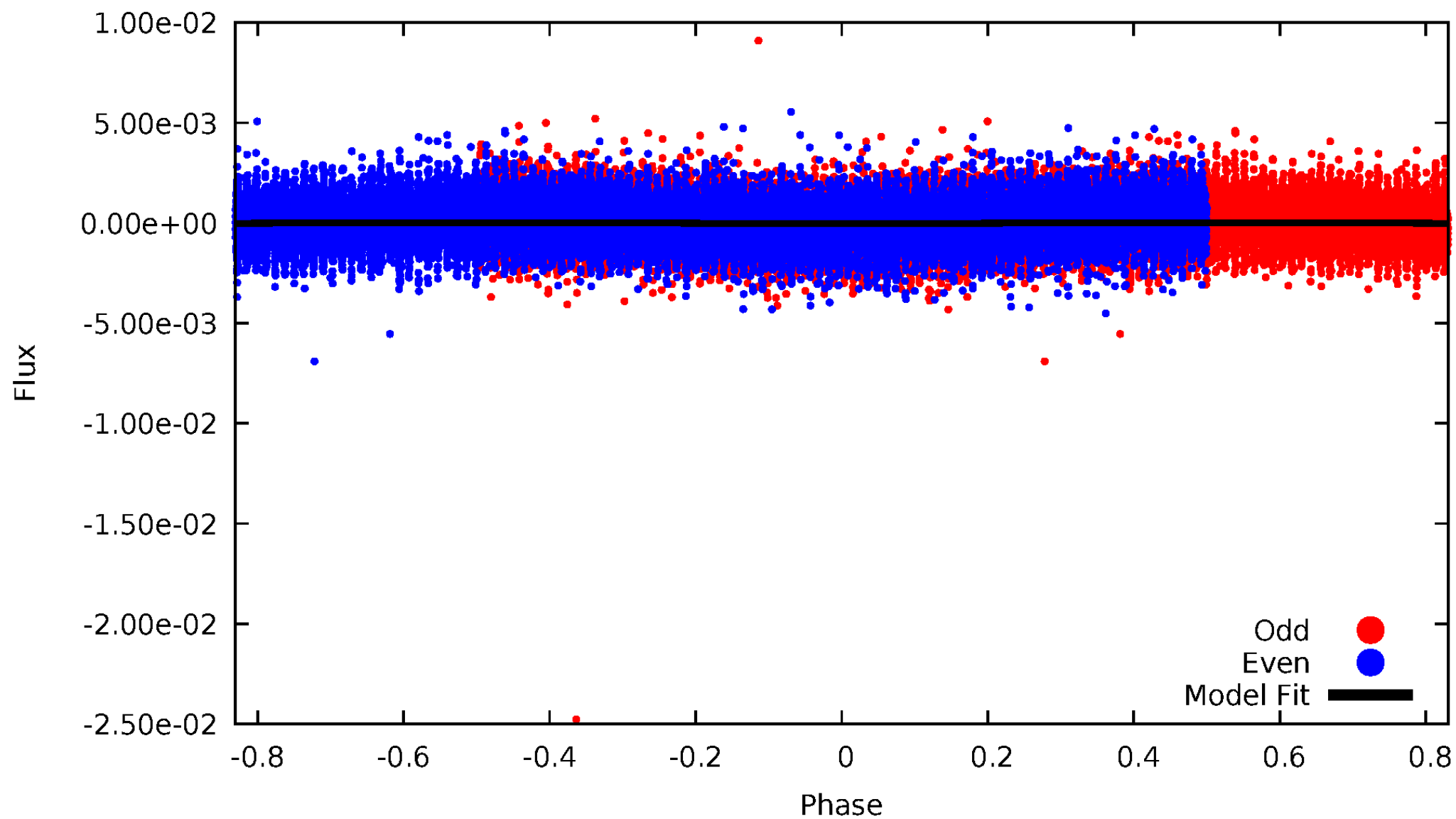


TCE 004264365-01



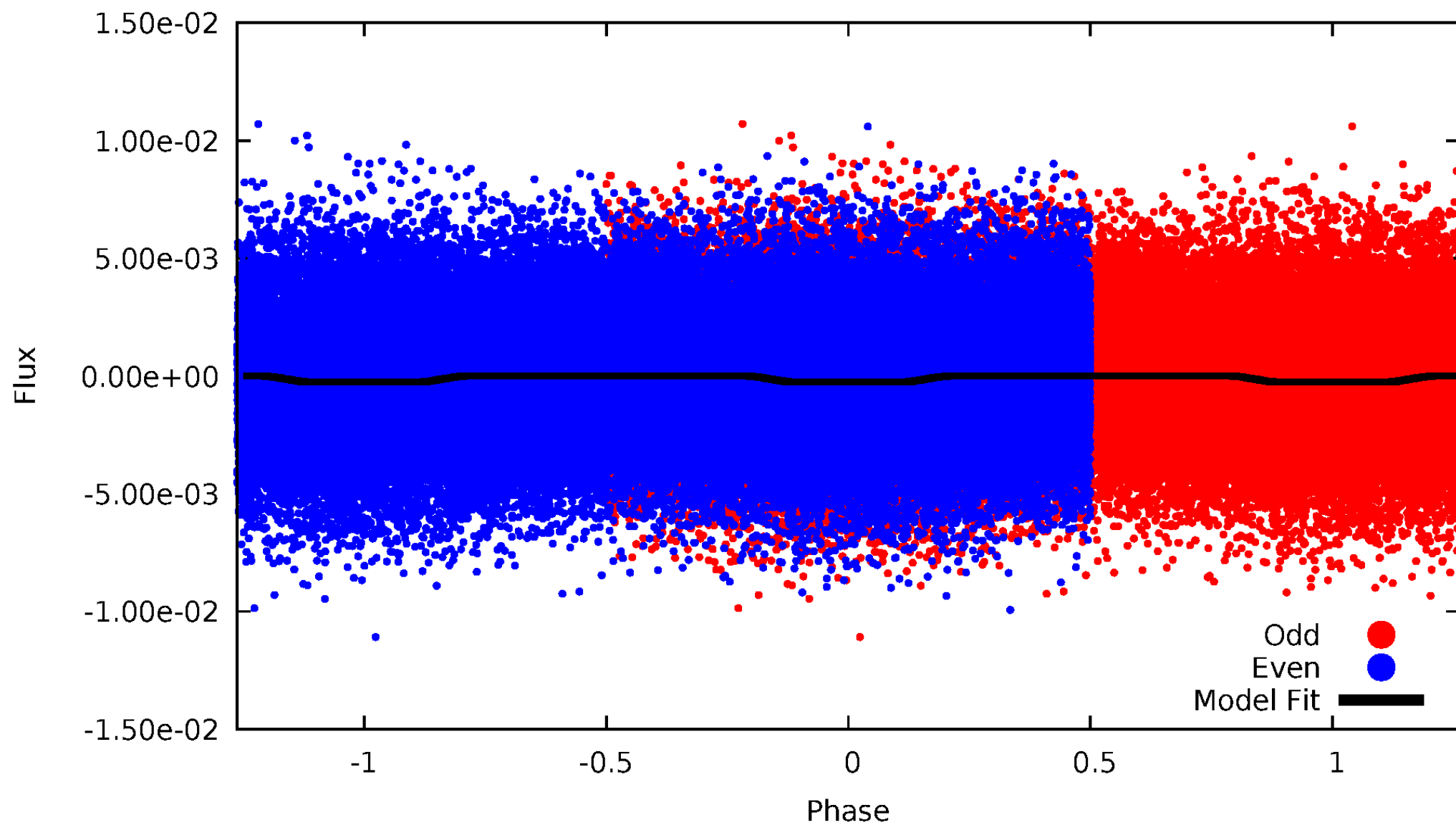
DV Odd/Even

TCE 004264365-01

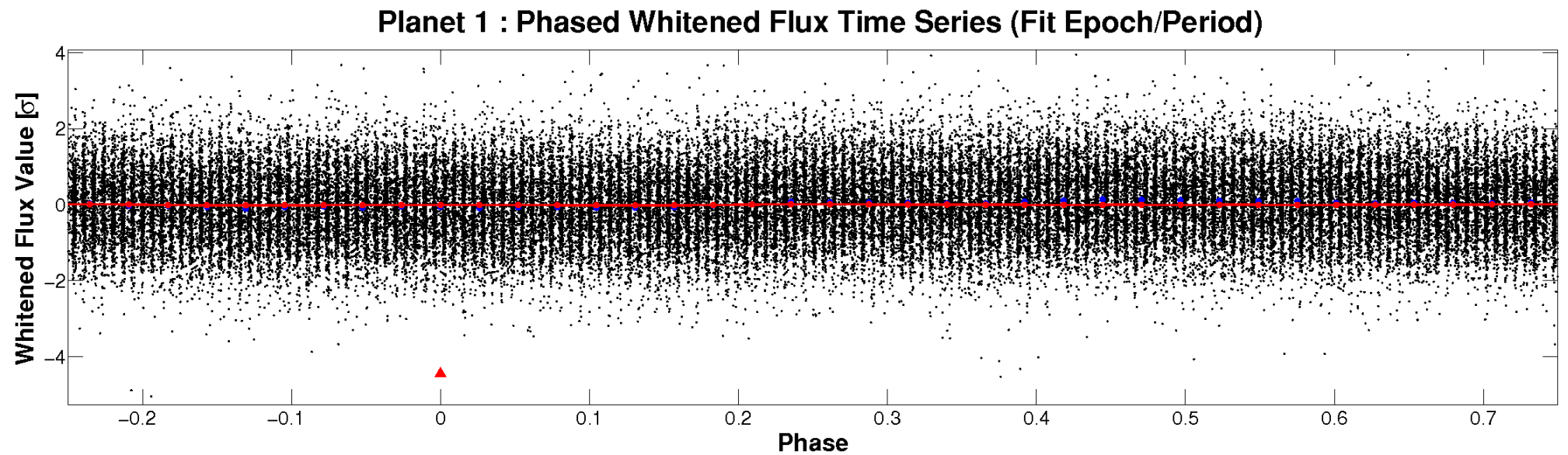
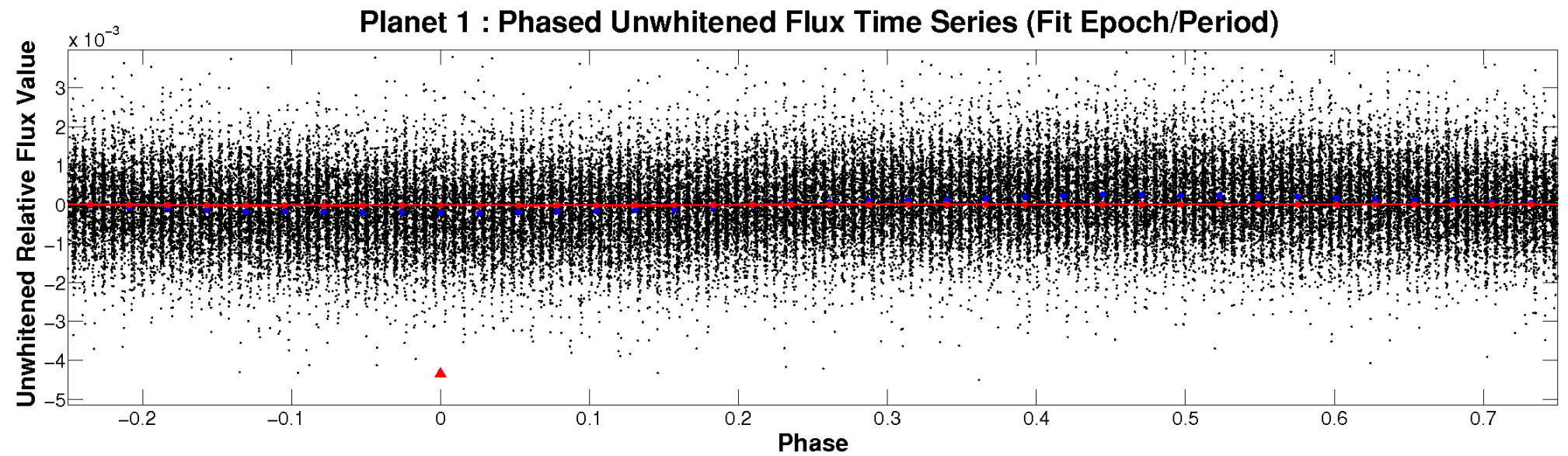


ALT Odd/Even

TCE 004264365-01

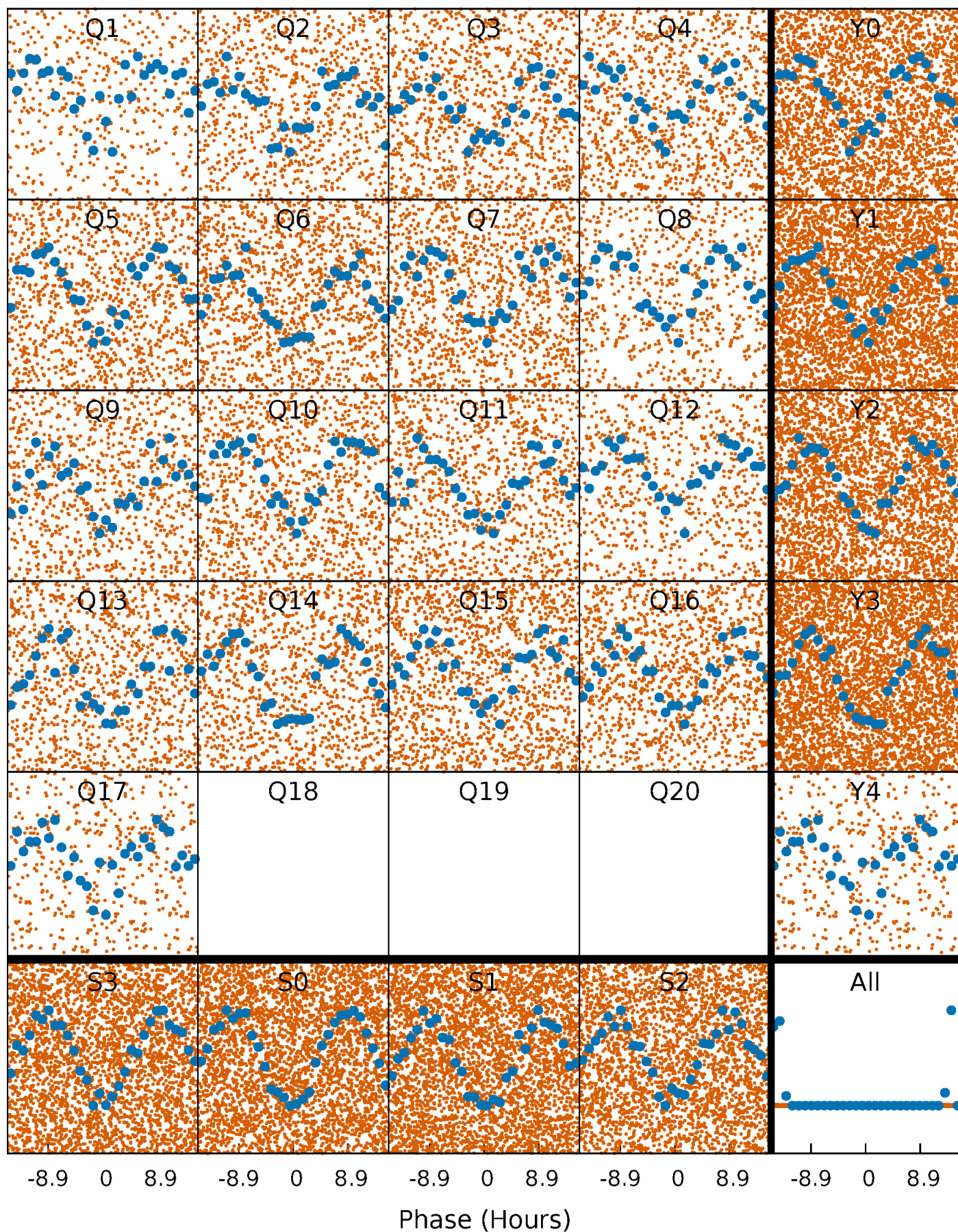


Non-Whitened Vs. Whitened Light Curve



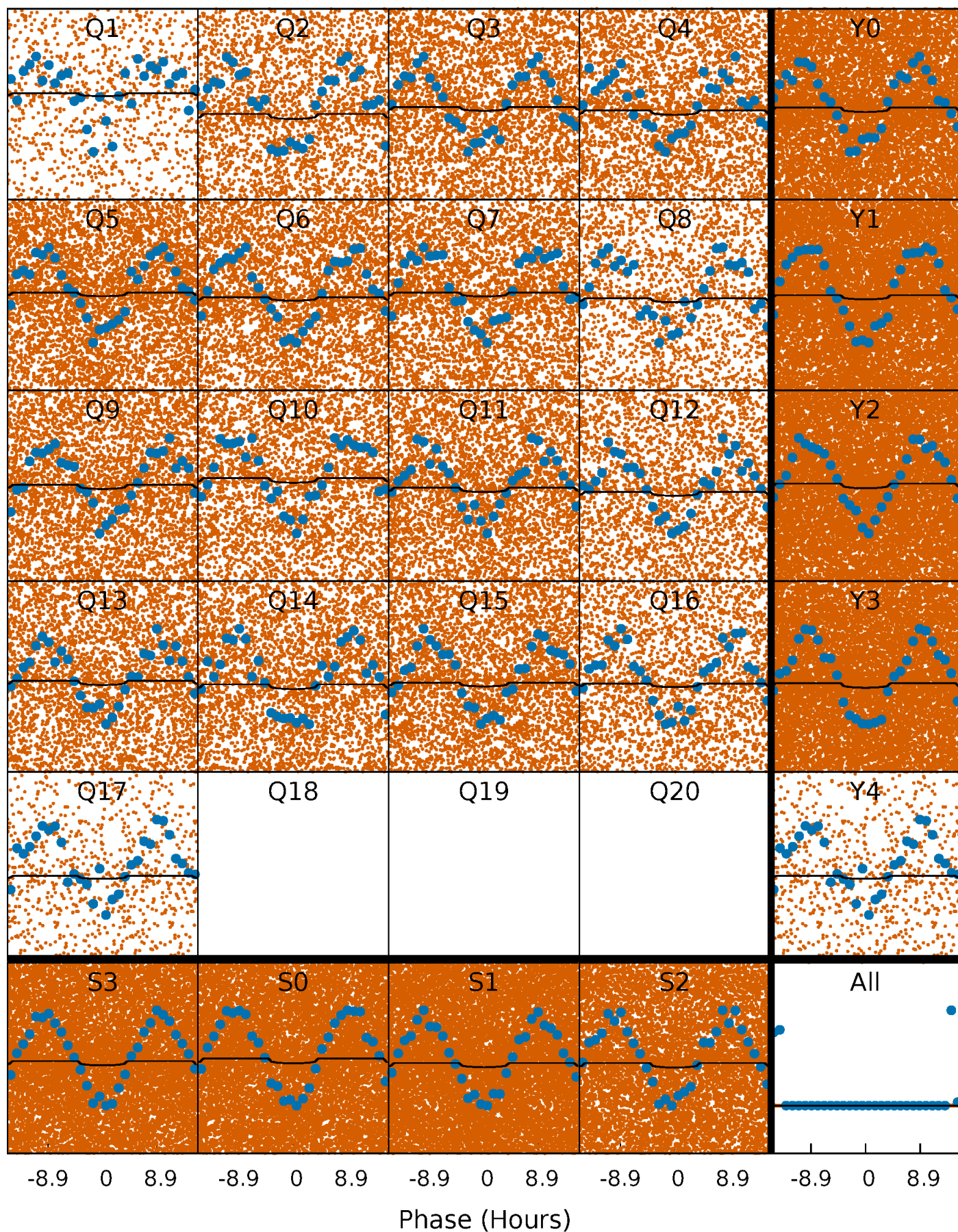
PDC Quarter-Phased Transit Curves

TCE 004264365-01 P= 0.781606 Days $T_0=132.164219$ (BKJD)



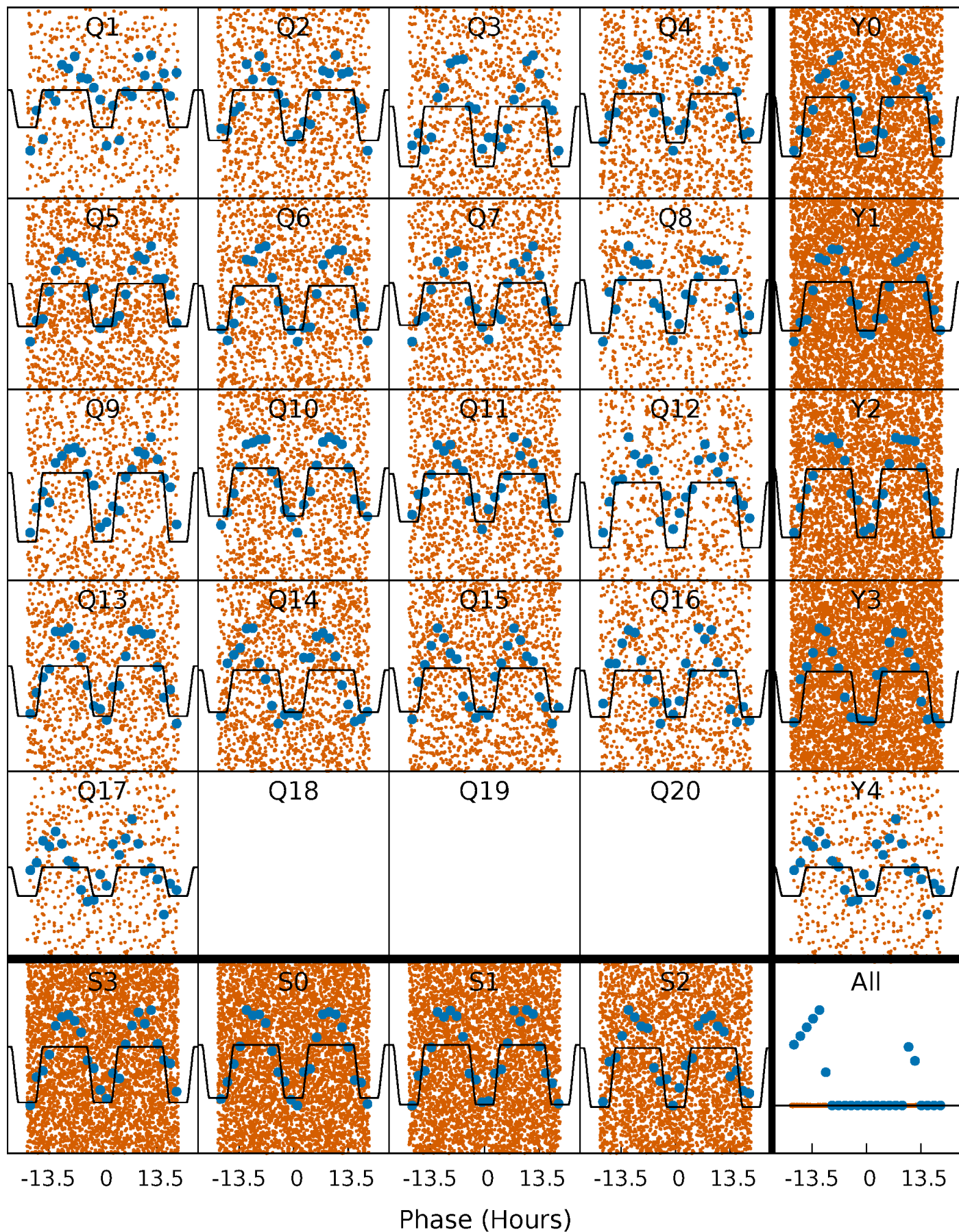
DV Quarter-Phased Transit Curves

TCE 004264365-01 P= 0.781606 Days $T_0=132.164219$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

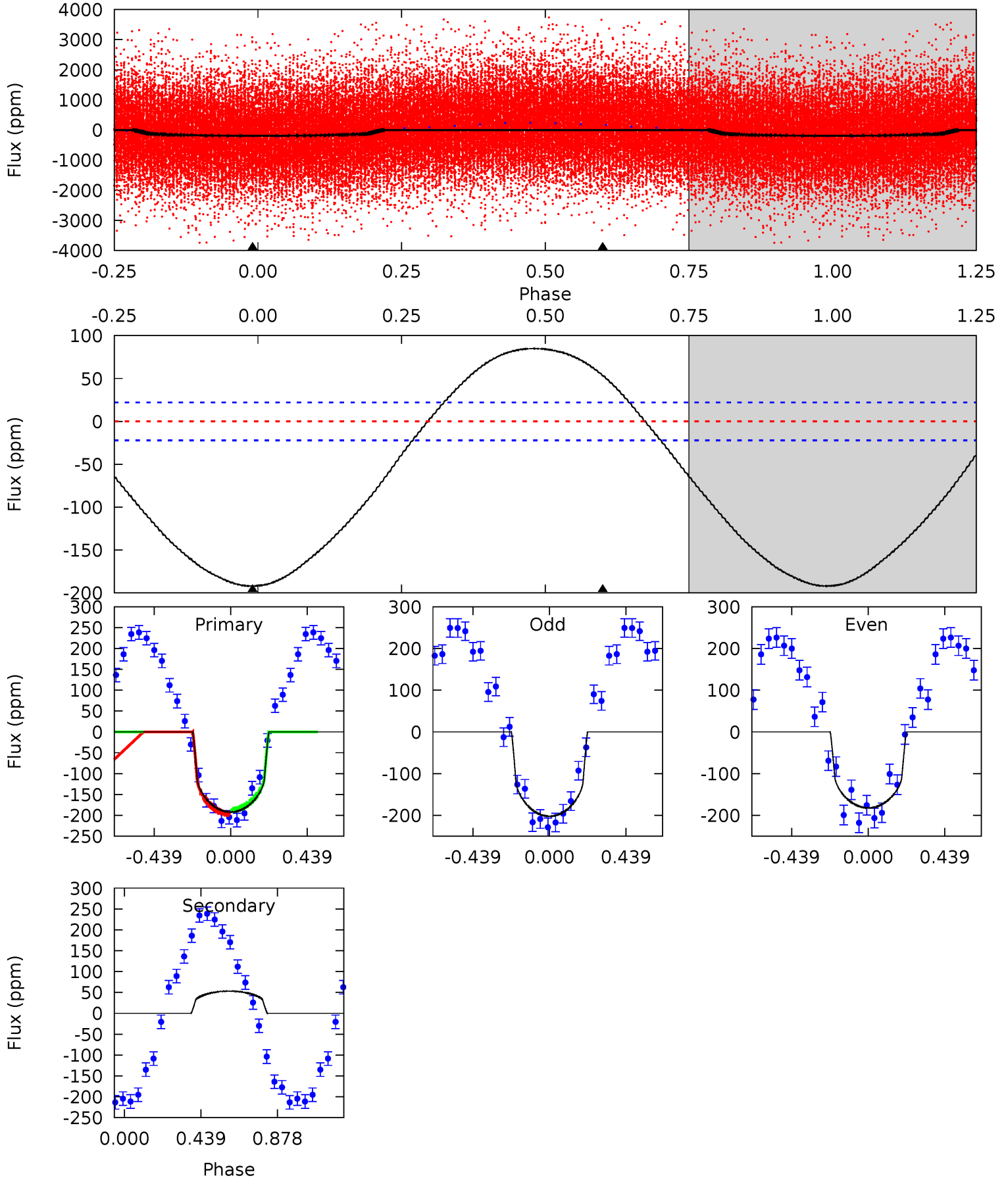
TCE 004264365-01 P= 0.781730 Days $T_0=132.041904$ (BKJD)



DV Model-Shift Uniqueness Test

004264365-01, P = 0.781606 Days, E = 131.382613 Days

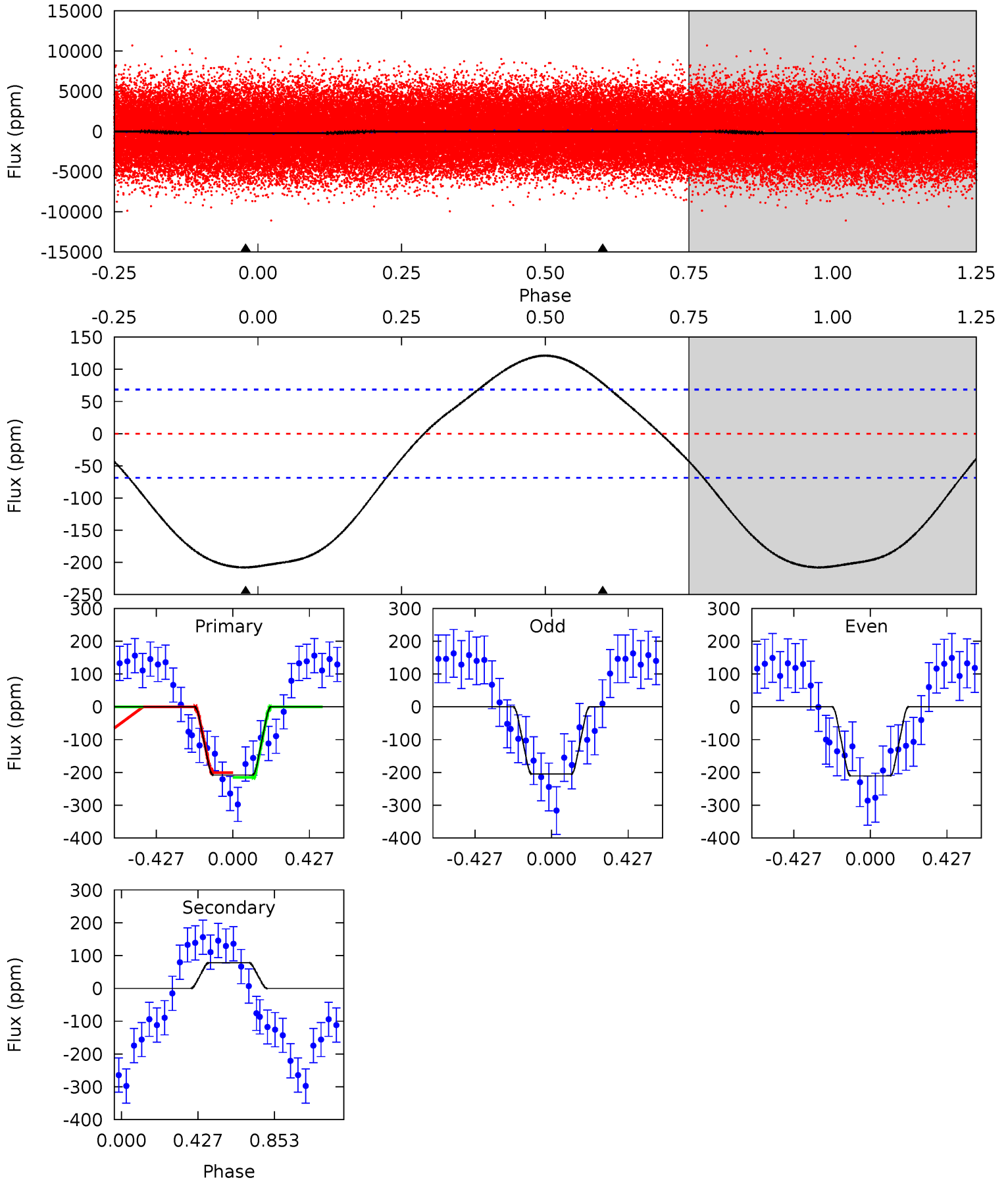
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
36.9	-10.2	0	0	4.24	0.77	4.50	36.9	36.9	-10.2	-10.2	1.92	1.00	0.31	0.96



Alt Model-Shift Uniqueness Test

004264365-01, P = 0.781730 Days, E = 131.260174 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
12.9	-4.86	0	0	4.25	0.79	1.61	12.9	12.9	-4.86	-4.86	0.17	0.94	0.37	0.42



Stellar Parameters For KIC 004264365

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	M (M_{\odot})	ρ_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	6972^{+194}_{-315}	$3.928^{+0.264}_{-0.154}$	$0.040^{+0.250}_{-0.300}$	$2.321^{+0.573}_{-0.788}$	$1.667^{+0.182}_{-0.337}$	$0.188^{+0.361}_{-0.083}$
	+3%/-5%	+7%/-4%	+625%/-750%	+25%/-34%	+11%/-20%	+192%/-44%
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 004264365-01 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	53 ± 5	$1.83^{+1.93}_{-1.16}$	4605^{+366}_{-398}	-6923^{+1672}_{-6821}	$-3.327^{+2.547}_{-23.002}$
Alt.	78 ± 16	$4.04^{+2.36}_{-2.14}$	4605^{+344}_{-374}	-5434^{+688}_{-2061}	$-1.007^{+0.620}_{-3.353}$

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

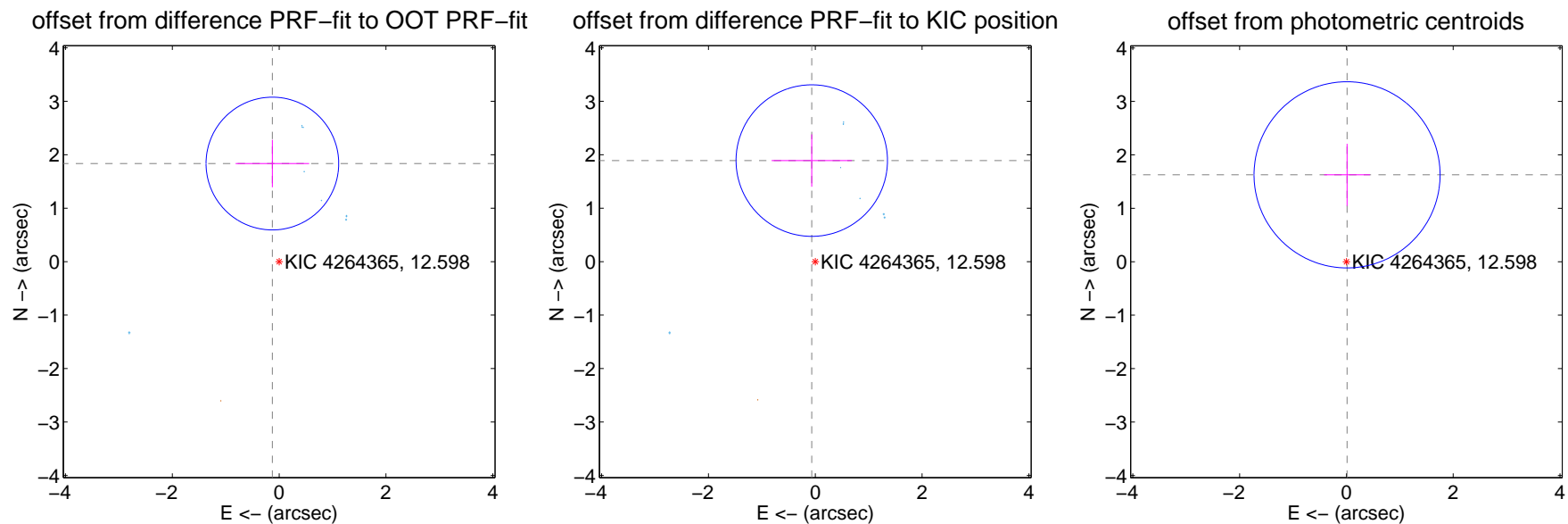
DV Centroid Data

Supplemental centroid analysis for 004264365-01. Kepler magnitude: 12.60. Transit SNR 2.70

There are 8 quarters with good PRF difference image offsets

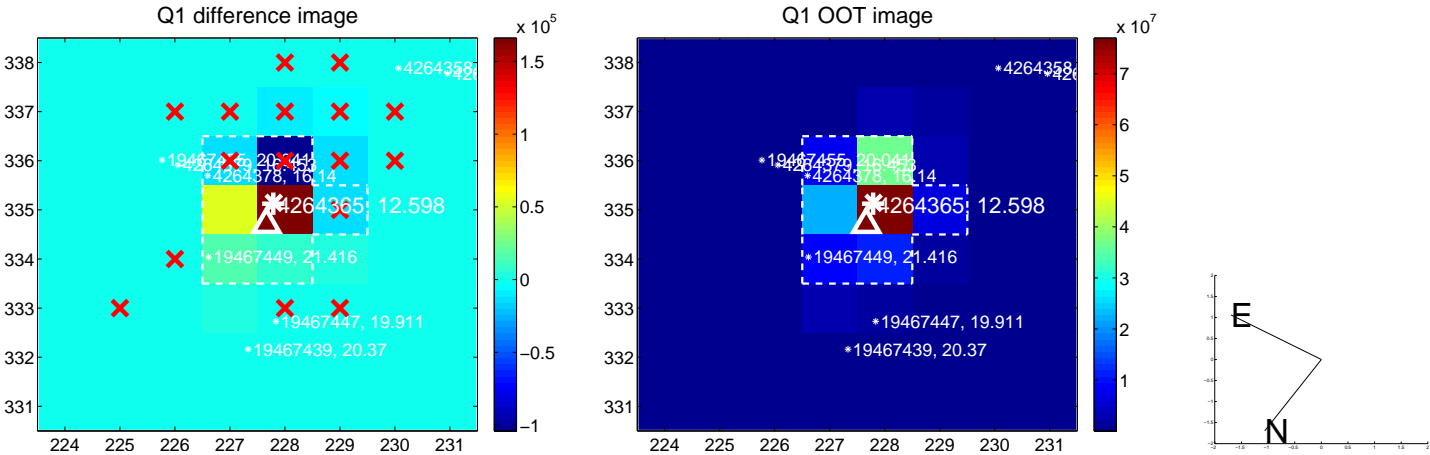
The direct PRF centroid is offset from the target star catalog position by about 0.02 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	1.839 ± 0.414	4.44	0.127 ± 0.689	1.835 ± 0.444
PRF-fit source offset from KIC position	1.892 ± 0.472	4.00	0.066 ± 0.752	1.891 ± 0.489
photometric centroid source offset	1.63 ± 0.58	2.80	-0.01 ± 0.43	1.63 ± 0.58

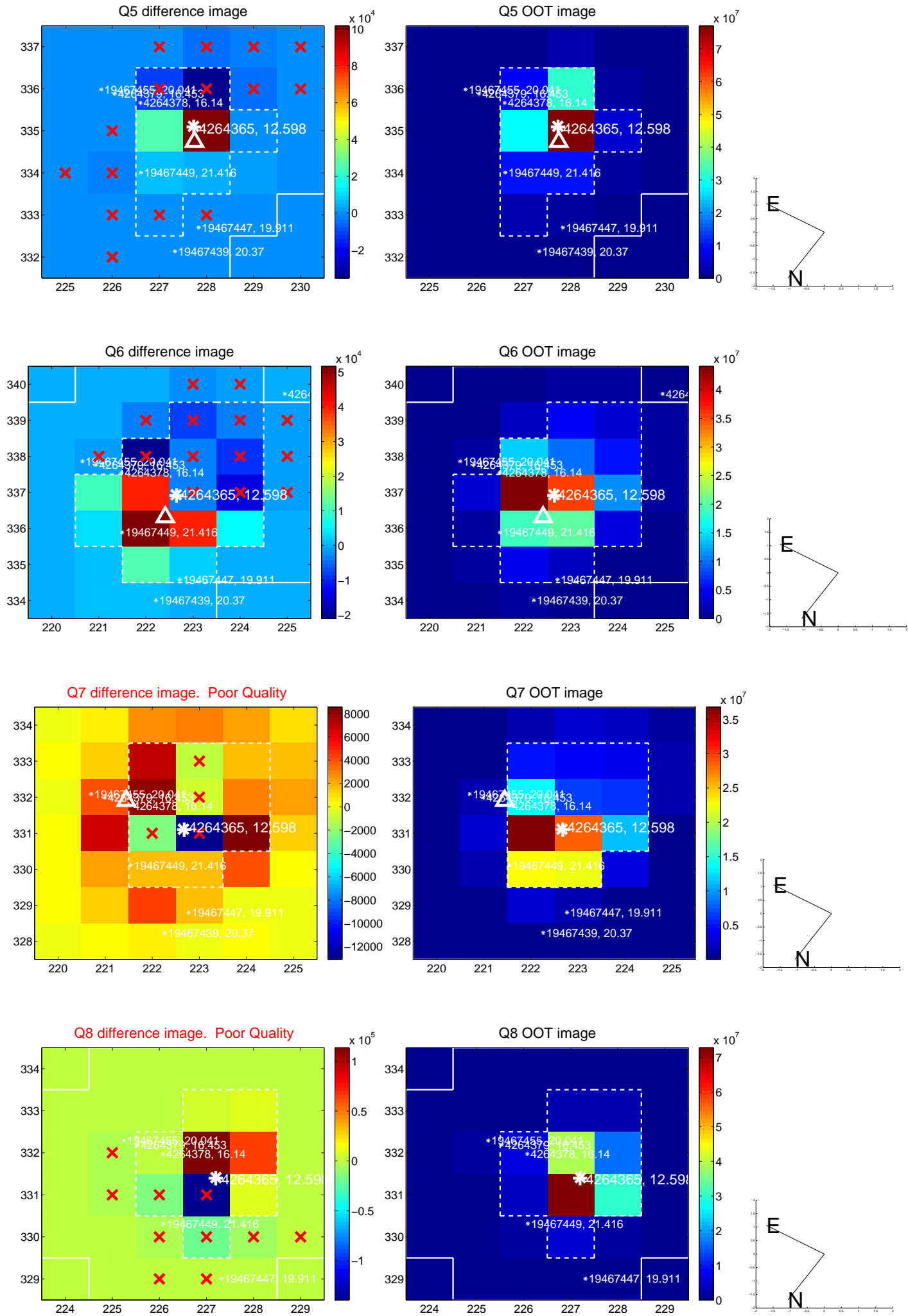


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

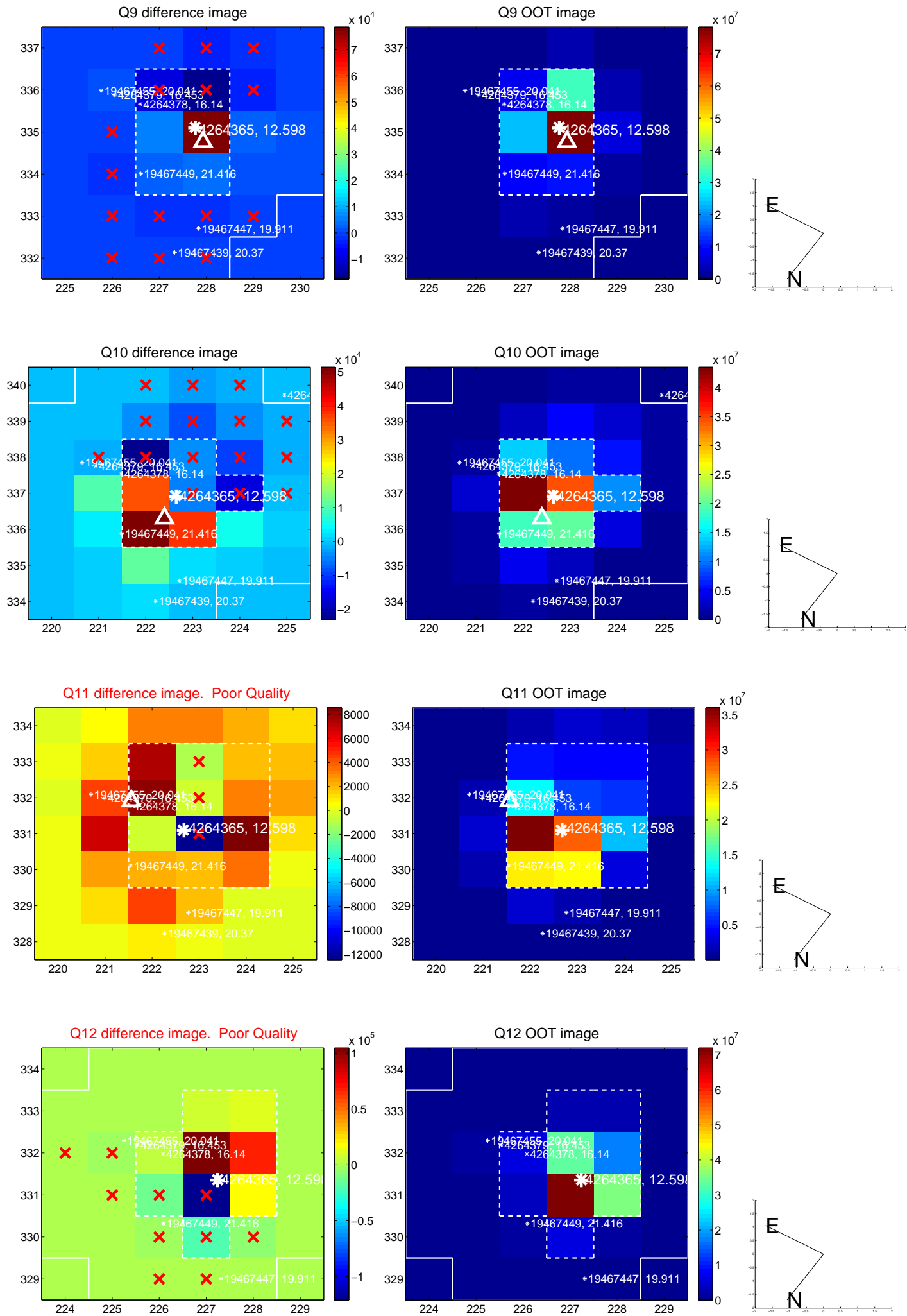
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



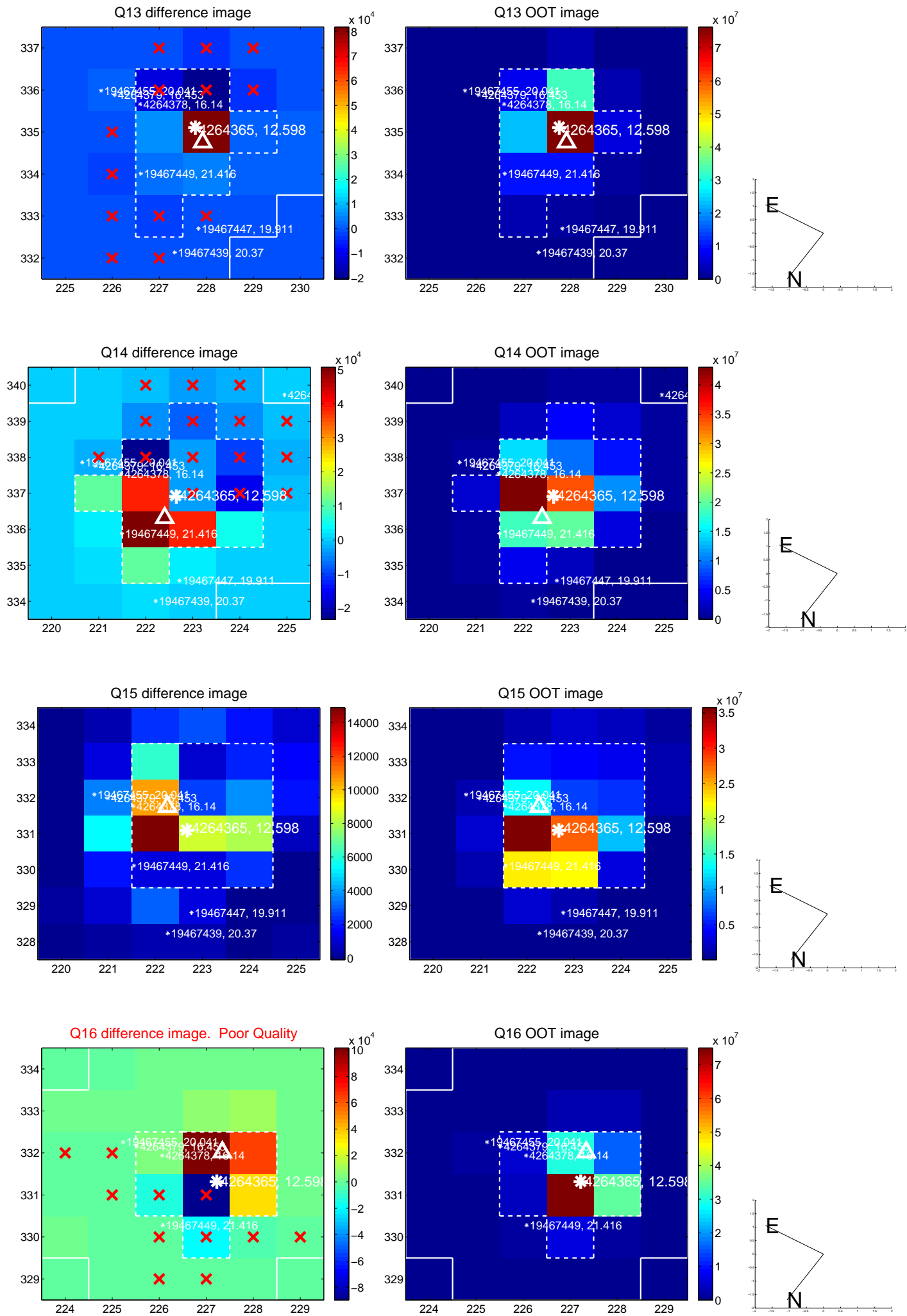
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



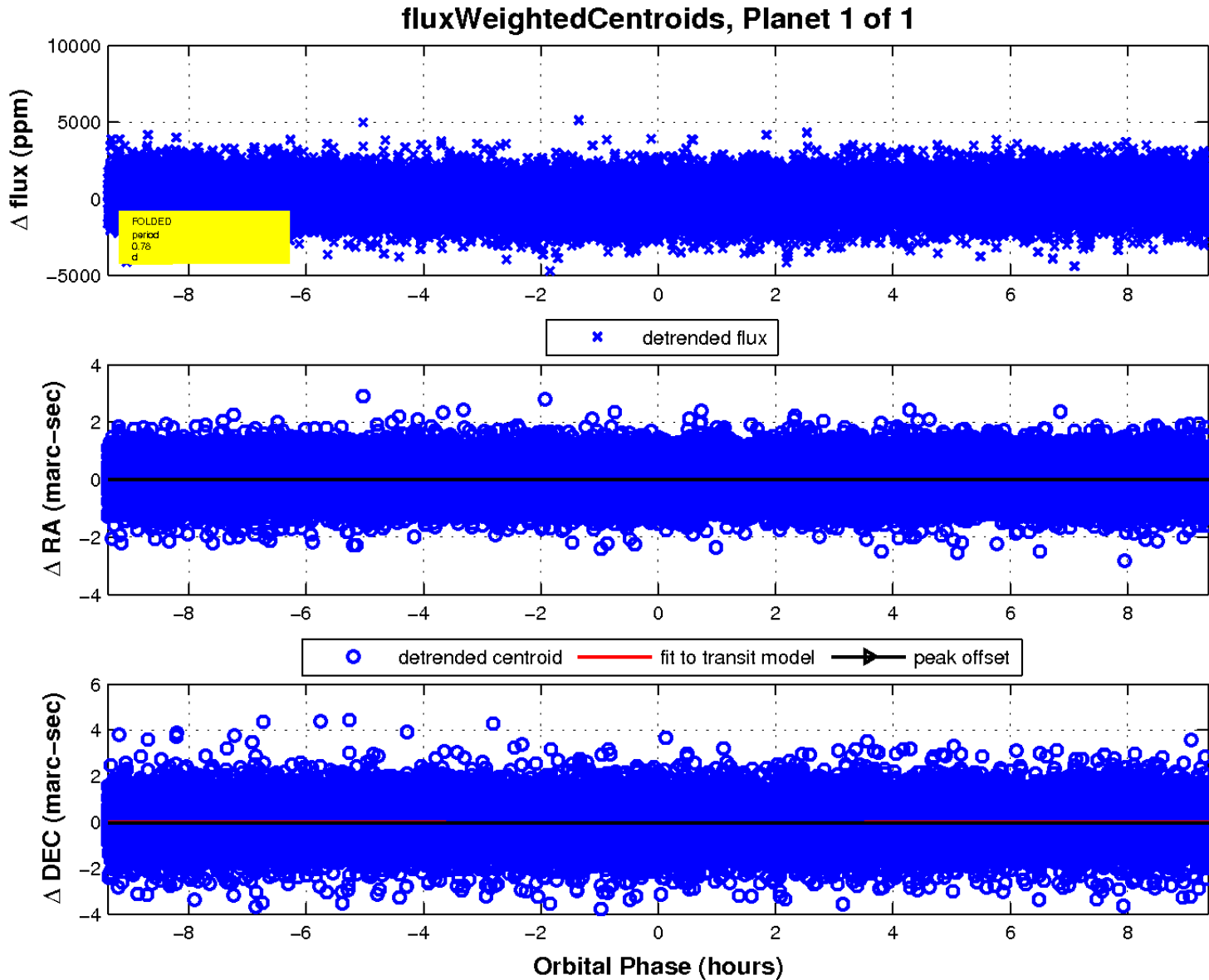
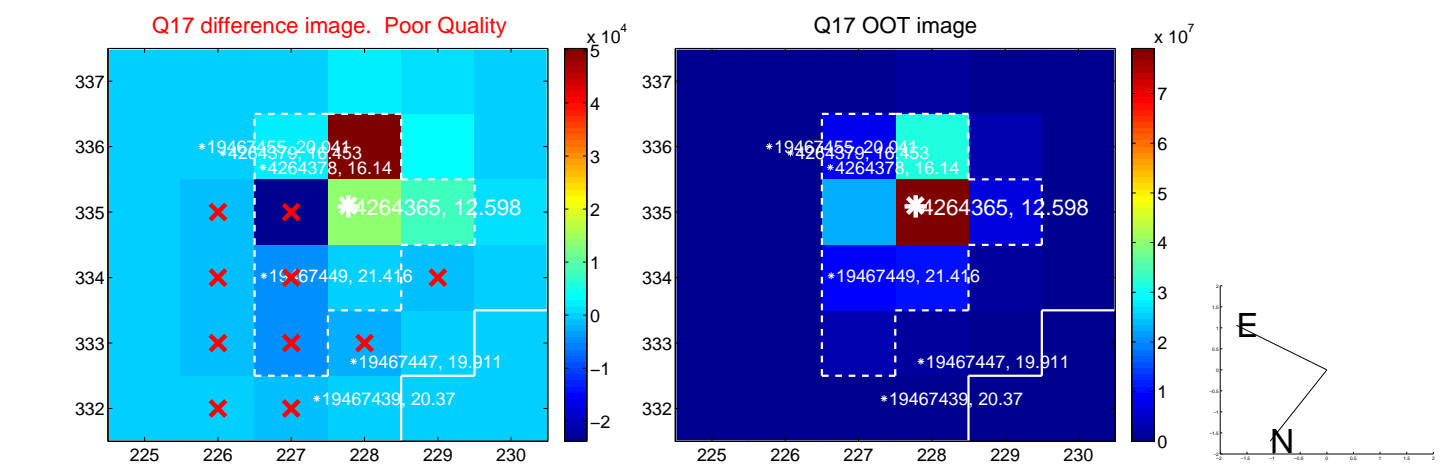
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white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination

