

KIC 006584278

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})
006584278-01	OBS	6733.01	1.289372	132.102576	26.8	3.903	8.0	8.9	4.19	5826	2.55	22213.26

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
006584278-01	OBS	PC	0.89	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.

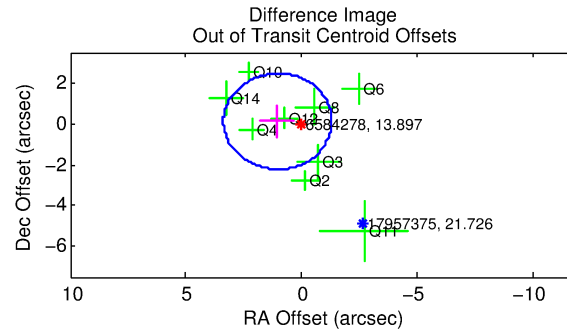
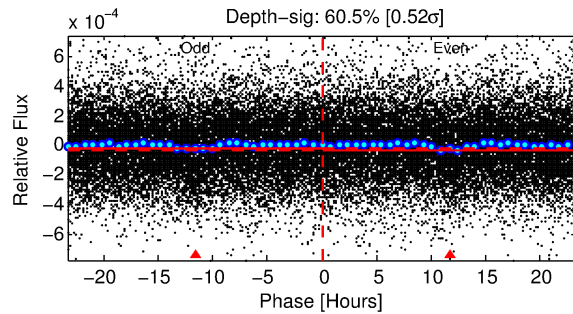
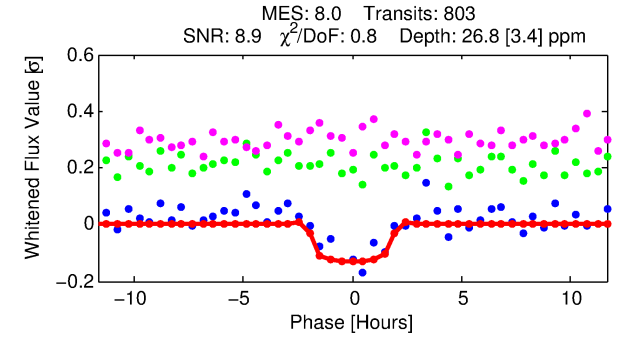
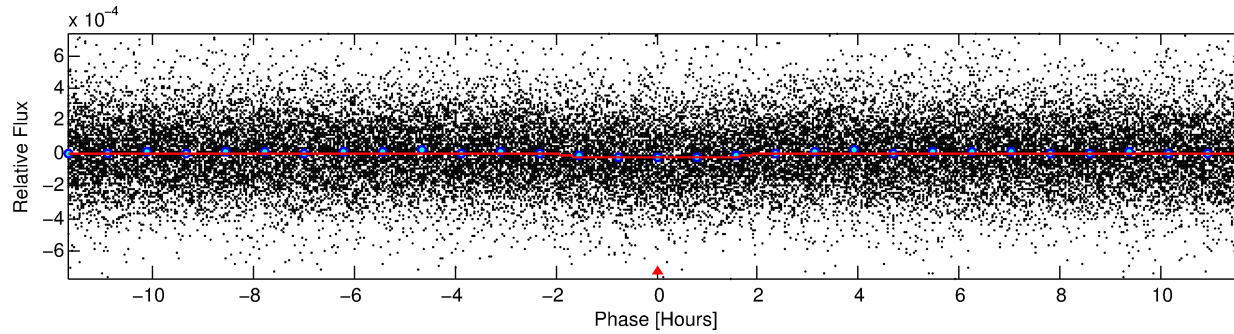
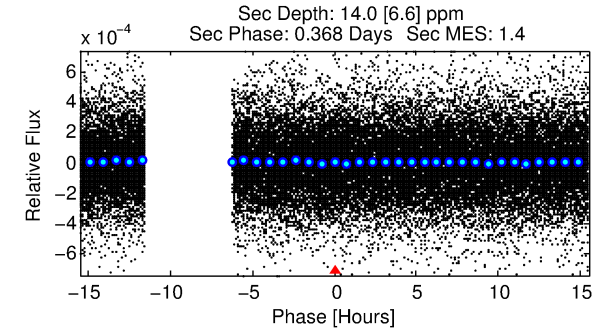
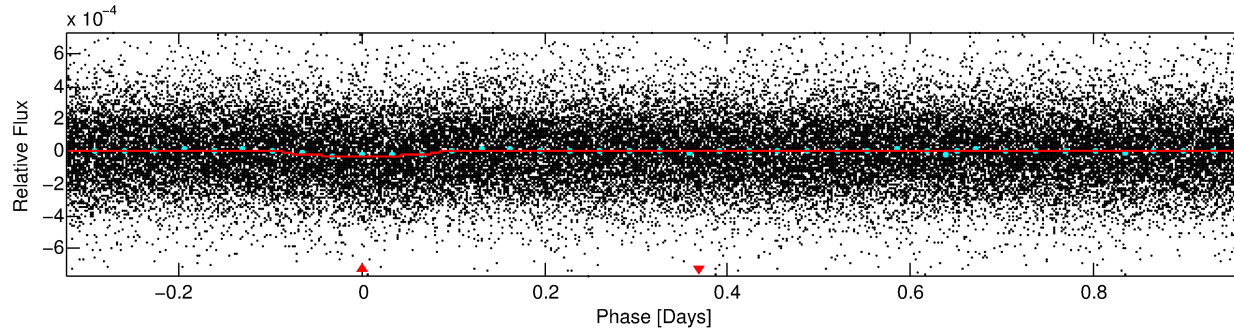
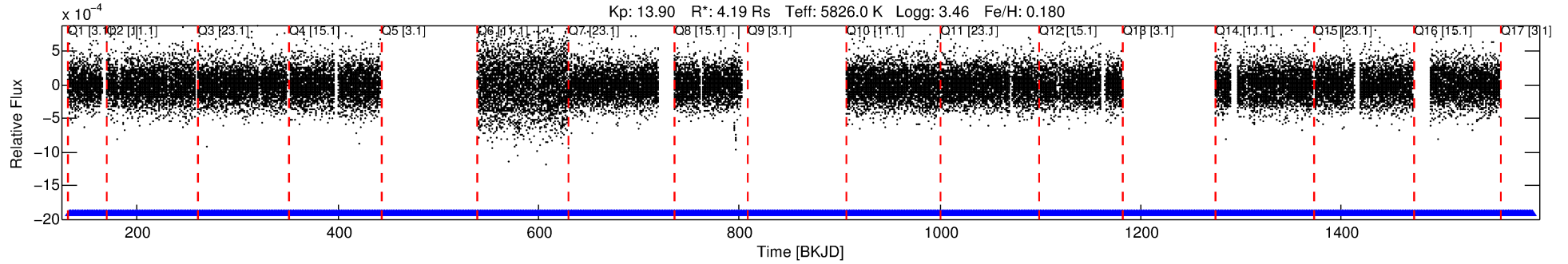
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 006584278-01

No Significant Match Found

DV One-Page Summary

KIC: 6584278 Candidate: 1 of 1 Period: 1.289 d
KOI: K06733.01 Corr: 0.898



DV Fit Results:

Period = 1.28937 [0.00002] d
Epoch = 132.1026 [0.0053] BKJD
Rp/R* = 0.0056 [0.0034]
a/R* = 1.51 [2.54]
b = 0.89 [0.72]
Seff = 22213.26 [9992.41]
Teq = 3113 [350] K
Rp = 2.55 [1.79] Re
a = 0.0286 [0.0084] AU
Ag = 0.97 [1.35] [-0.02σ]
Teffp = 4773 [1580] K [1.03σ]

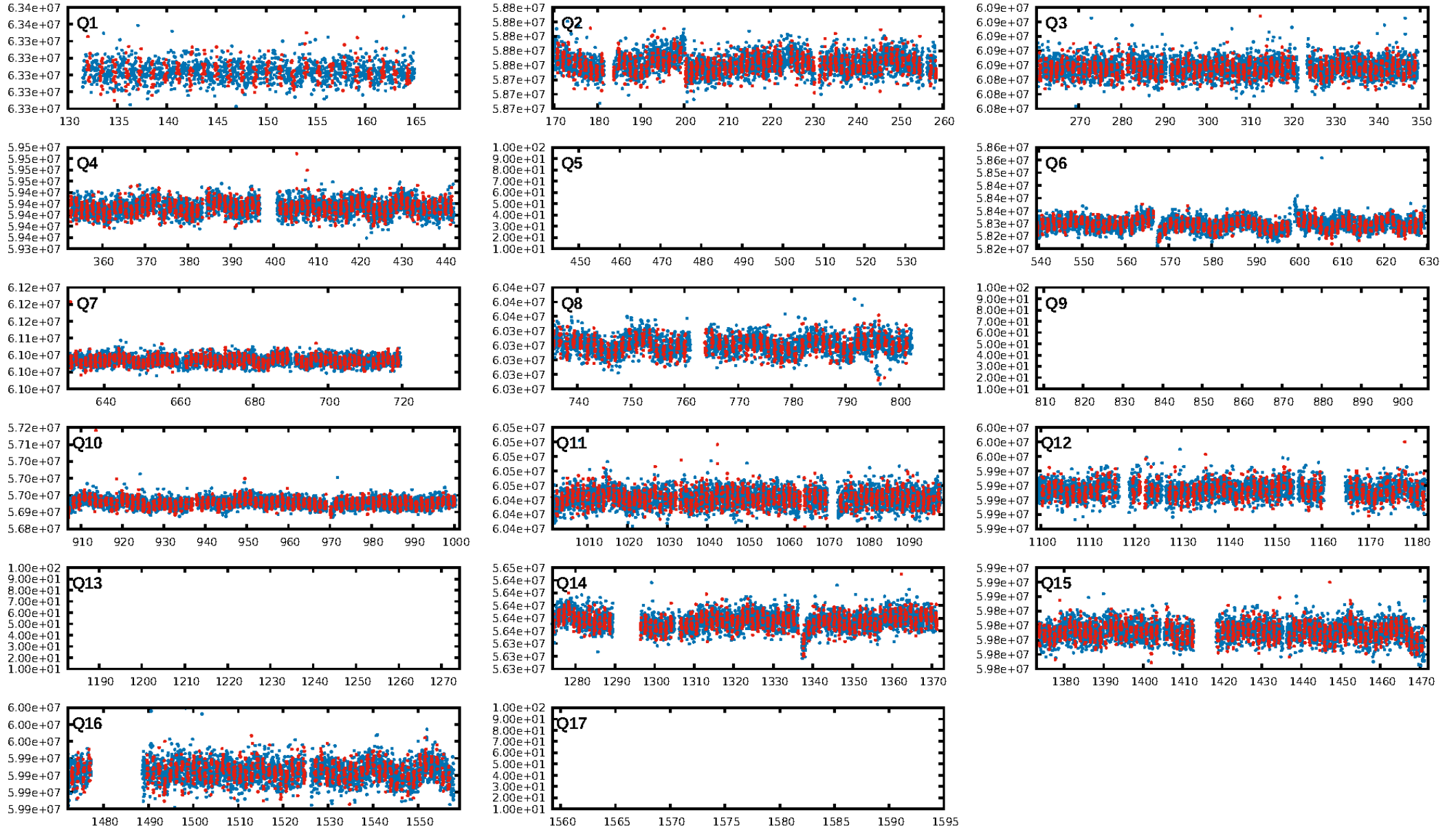
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGoF-sig: N/A
Bootstrap-pfa: 5.97e-14
RollingBand-fgt: 1.00 [777/777]
GhostDiagnostic-chr: 4.603
Centroid-sig: 0.0%
Centroid-so: 3.198 arcsec [2.31σ]
OotOffset-rm: 1.041 arcsec [1.33σ]
KicOffset-rm: 1.034 arcsec [1.54σ]
OotOffset-st: 4/2/3/0 [9]
KicOffset-st: 4/2/3/0 [9]
DiffImageQuality-fgm: 0.78 [7/9]
DiffImageOverlap-fno: 1.00 [13/13]

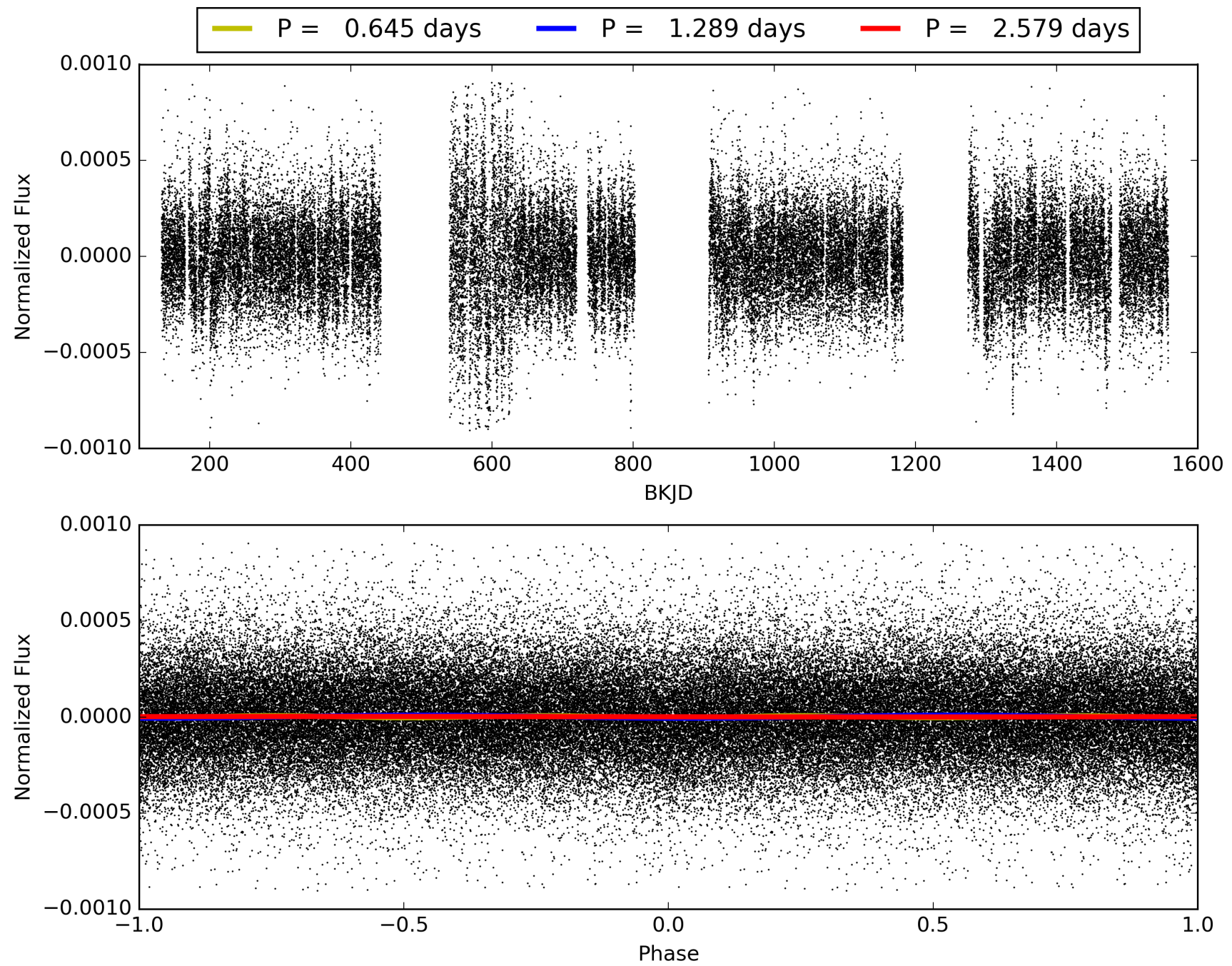
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 01-Feb-2016 02:58:55 Z

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

TCE 006584278-01, PDC Light Curves

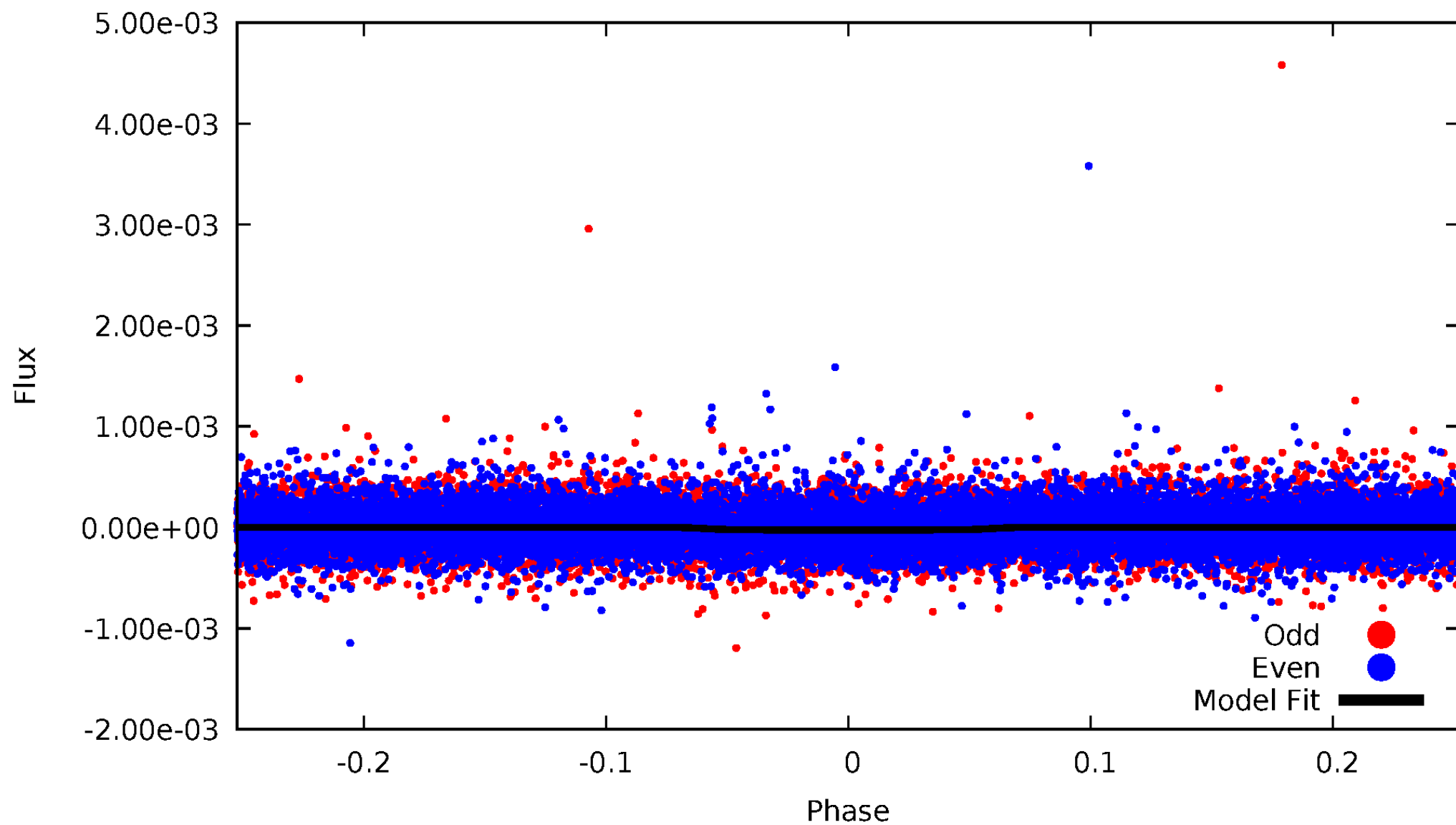


TCE 006584278-01



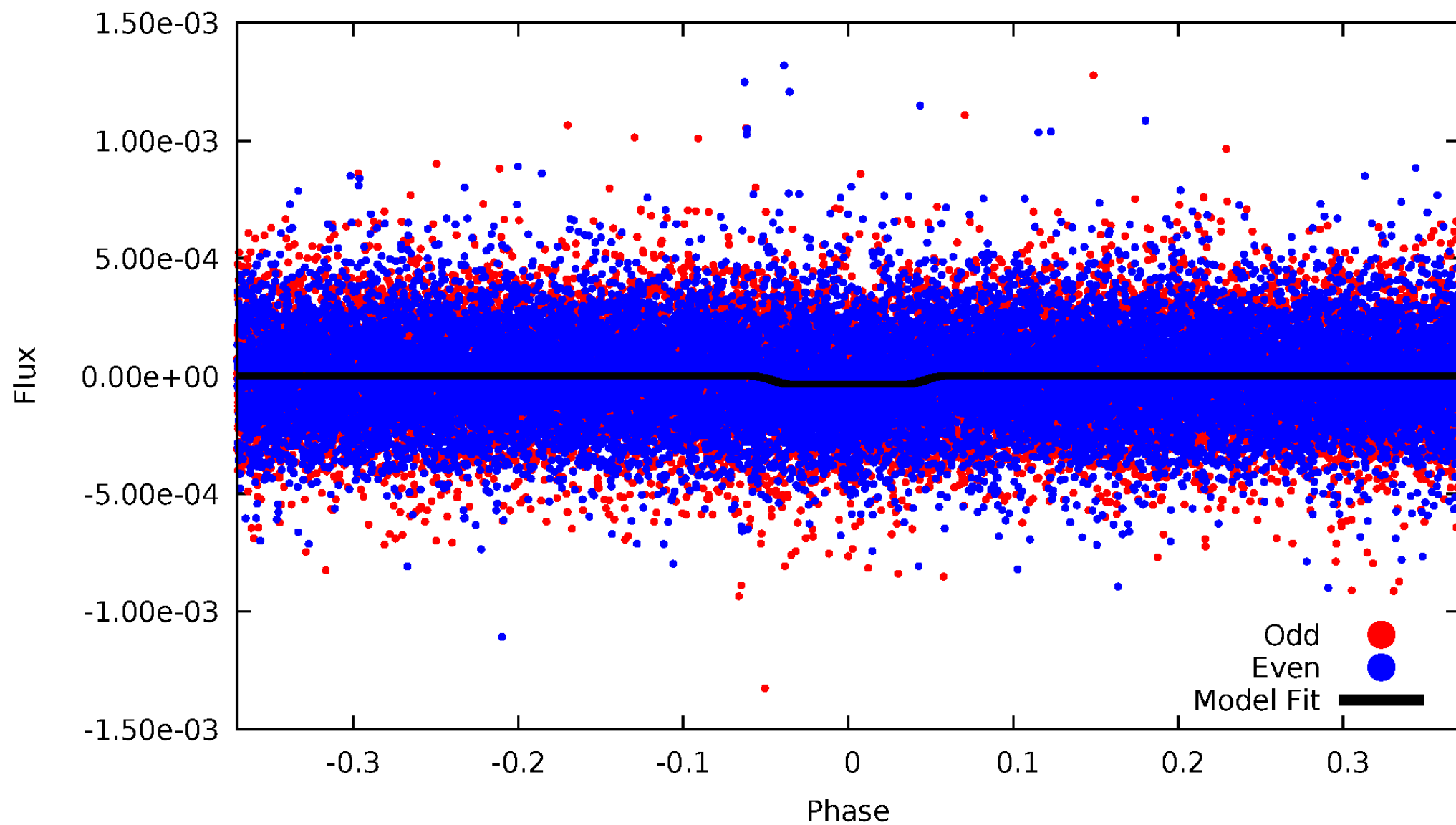
DV Odd/Even

TCE 006584278-01

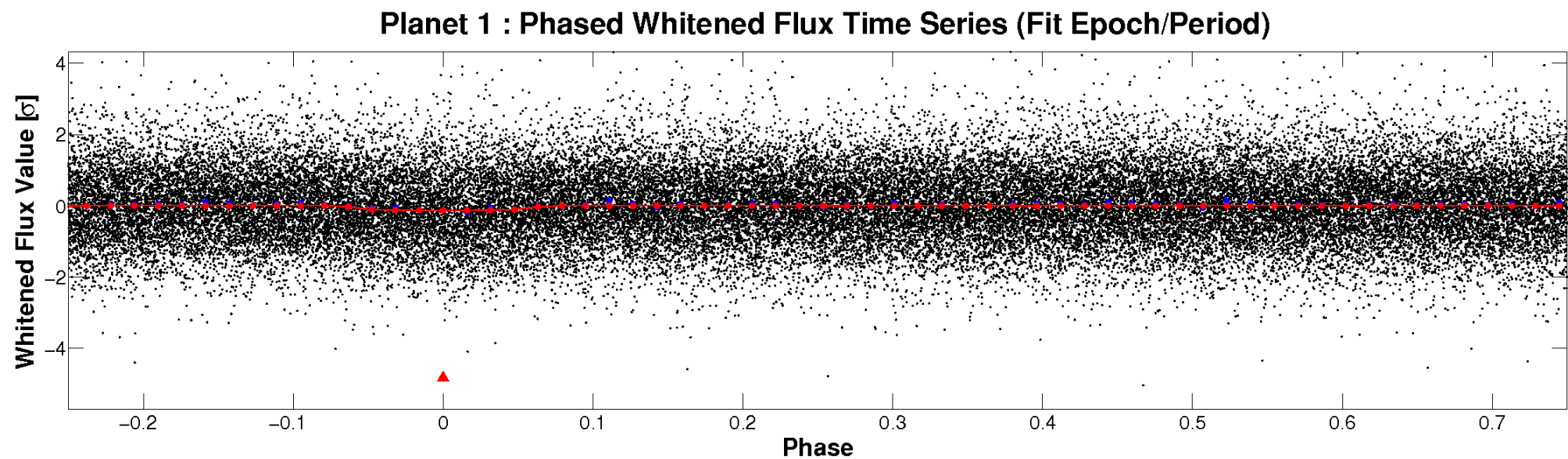
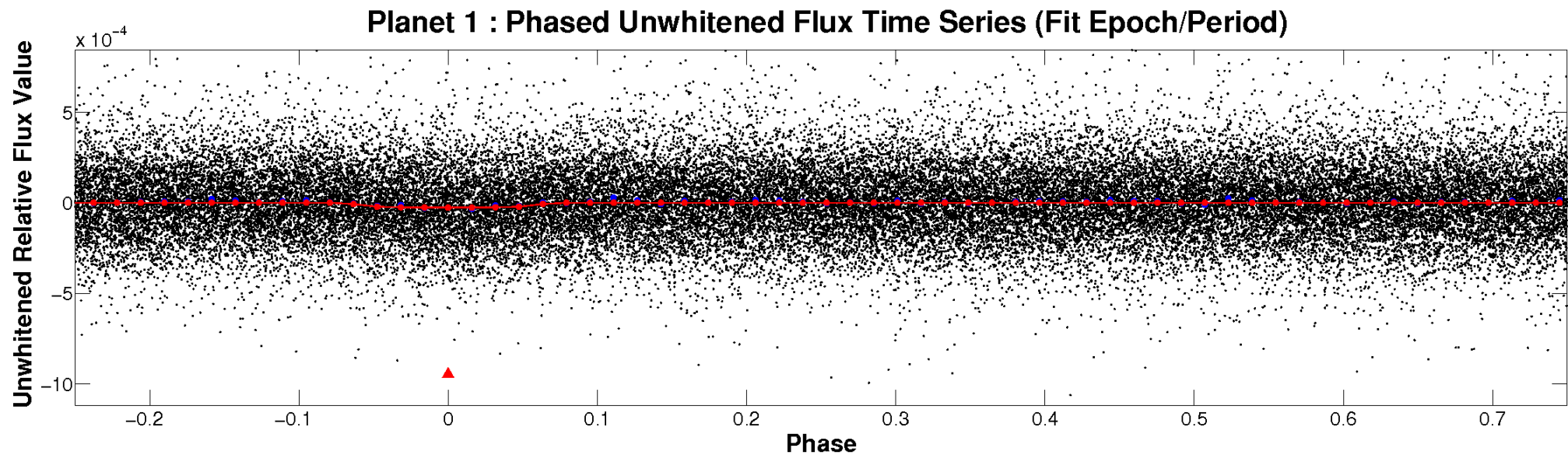


ALT Odd/Even

TCE 006584278-01

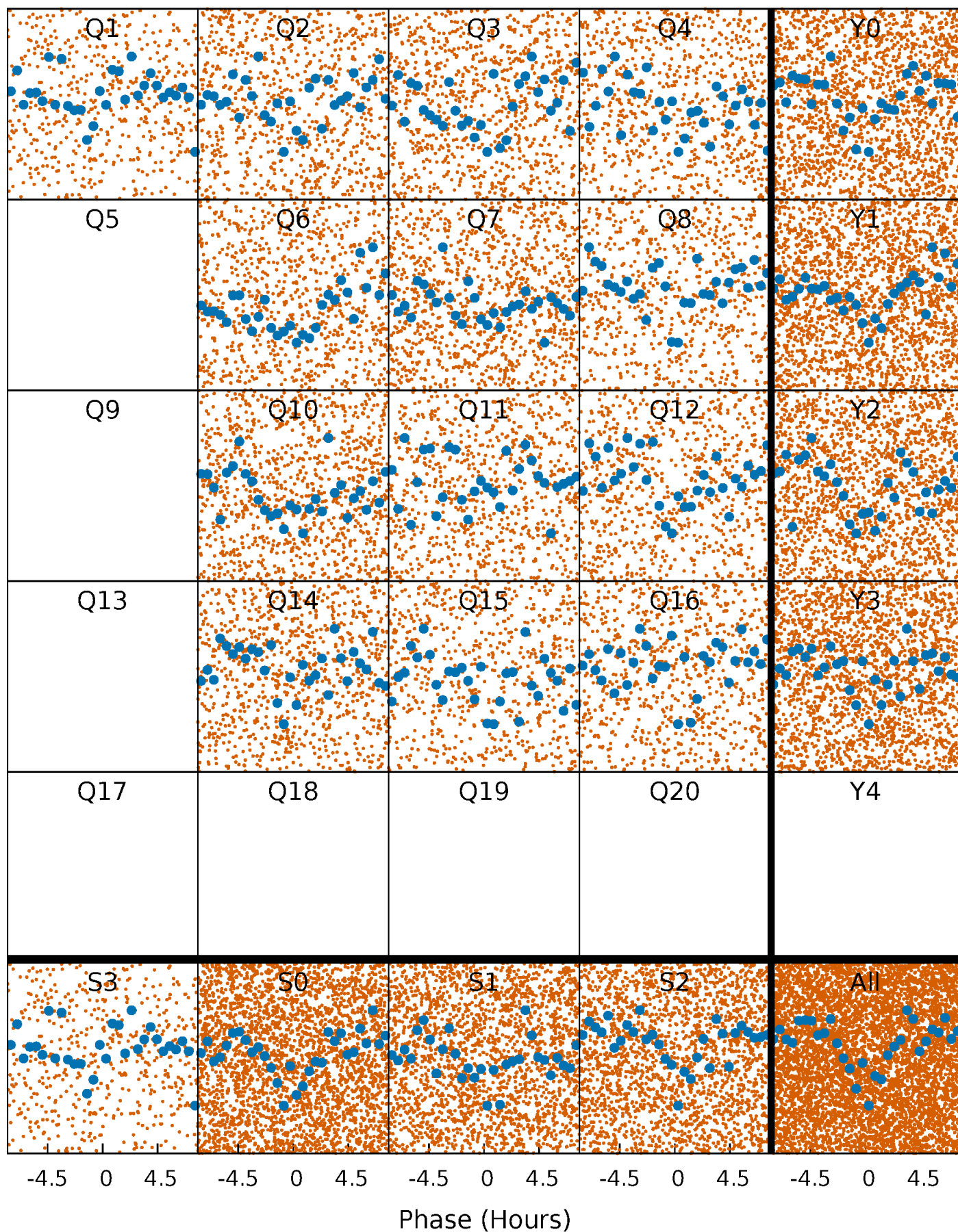


Non-Whitened Vs. Whitened Light Curve



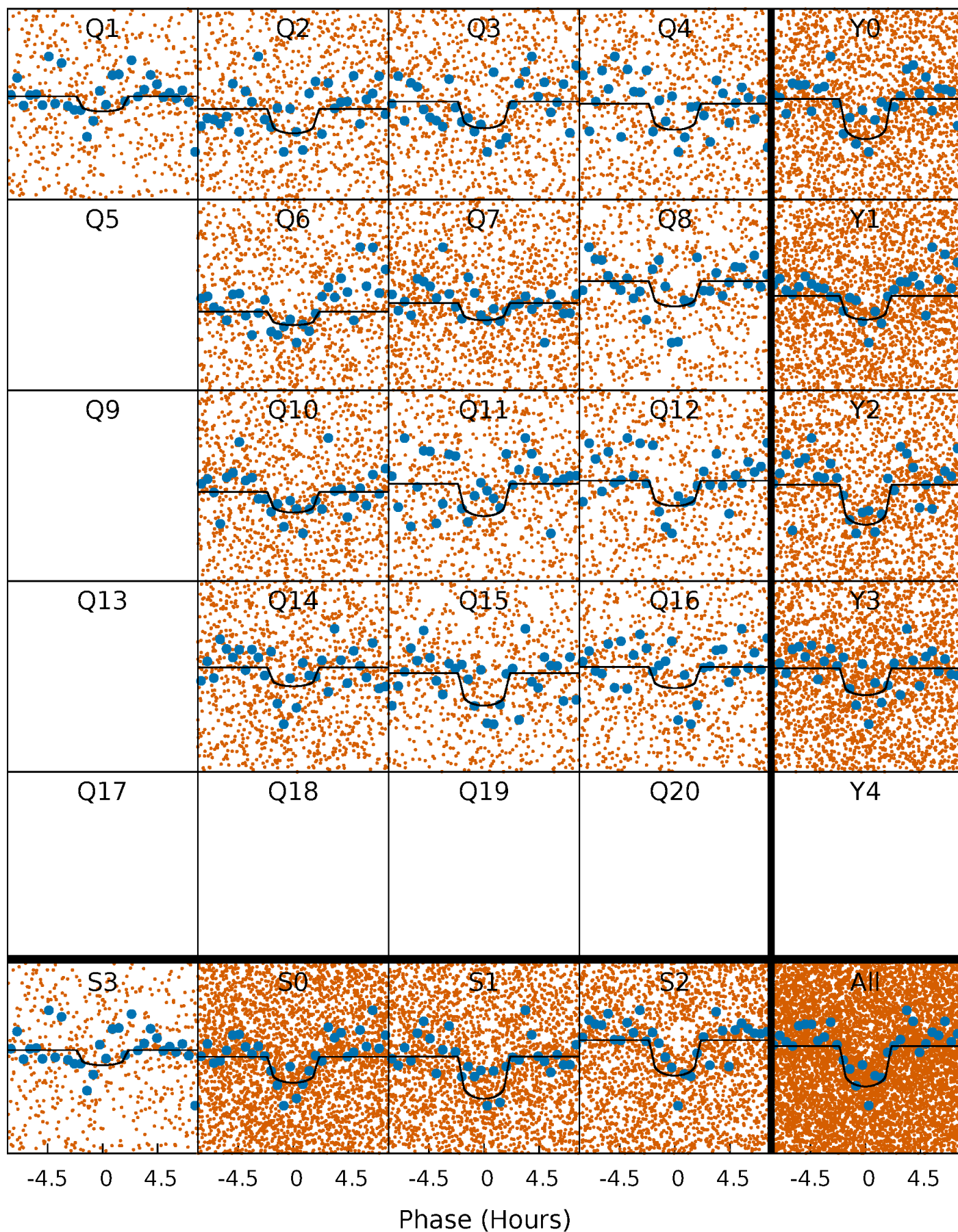
PDC Quarter-Phased Transit Curves

TCE 006584278-01 P= 1.289372 Days $T_0=132.102576$ (BKJD)



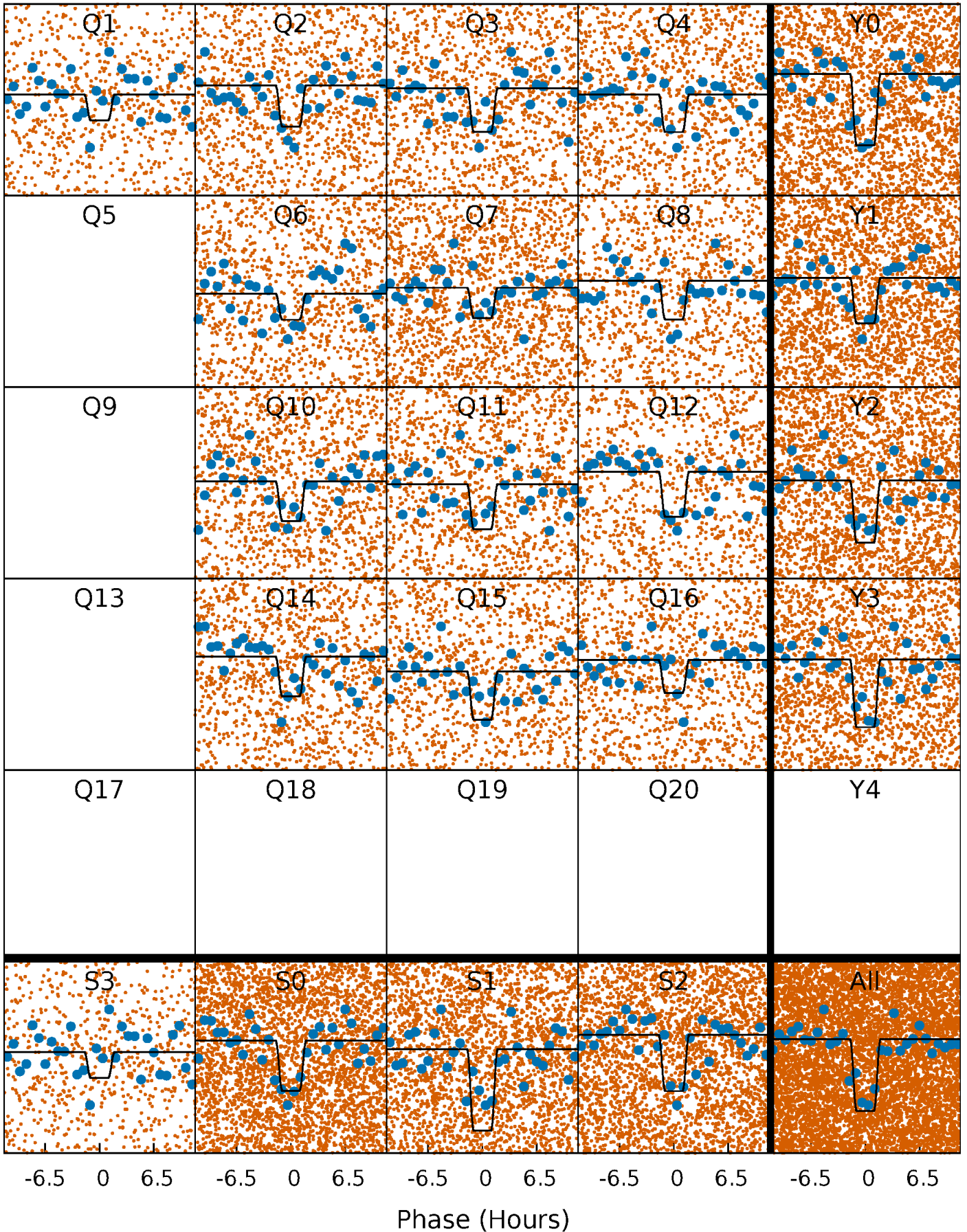
DV Quarter-Phased Transit Curves

TCE 006584278-01 P= 1.289372 Days $T_0=132.102576$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

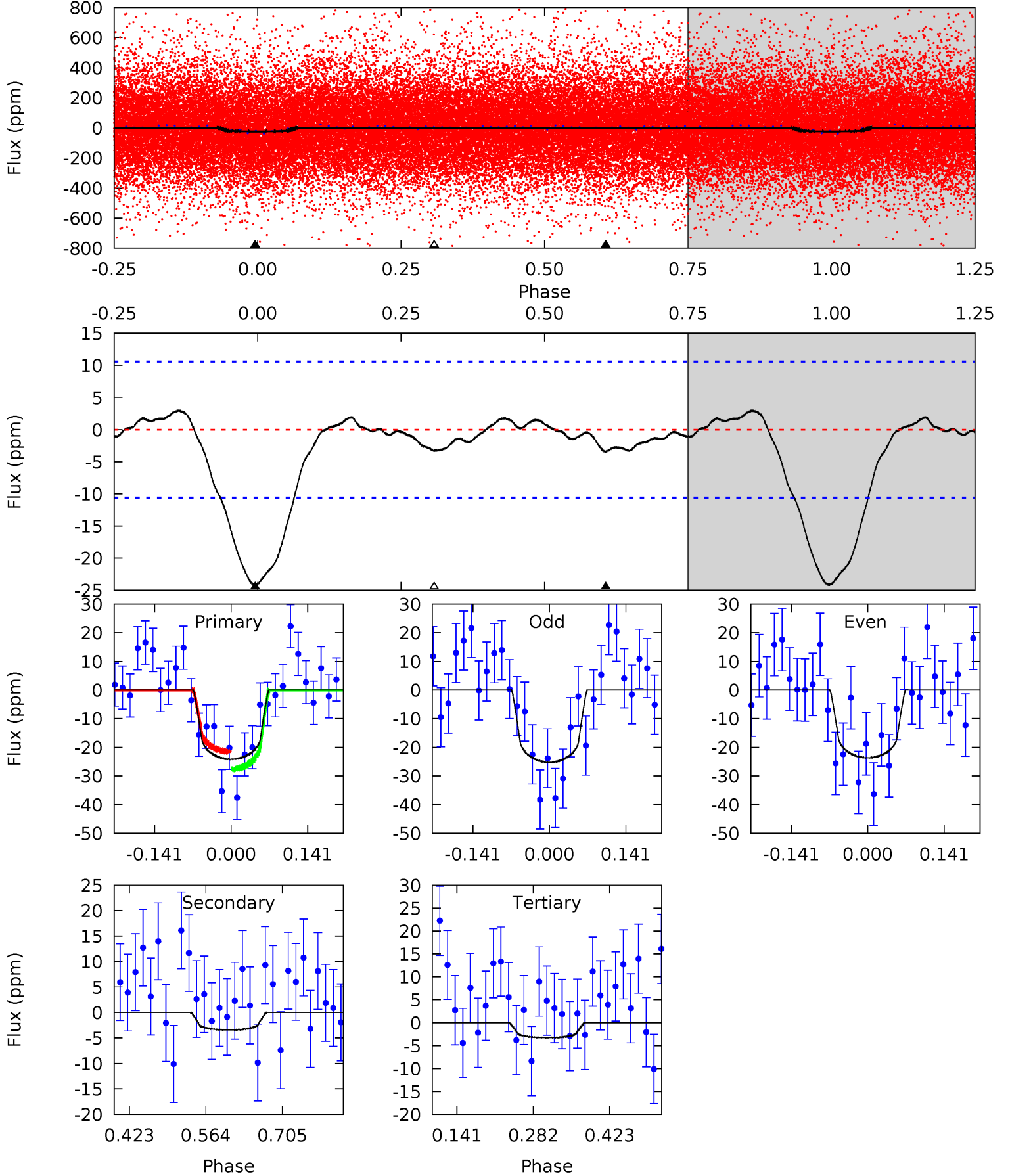
TCE 006584278-01 P= 1.289376 Days $T_0=132.106566$ (BKJD)



DV Model-Shift Uniqueness Test

006584278-01, P = 1.289372 Days, E = 130.813204 Days

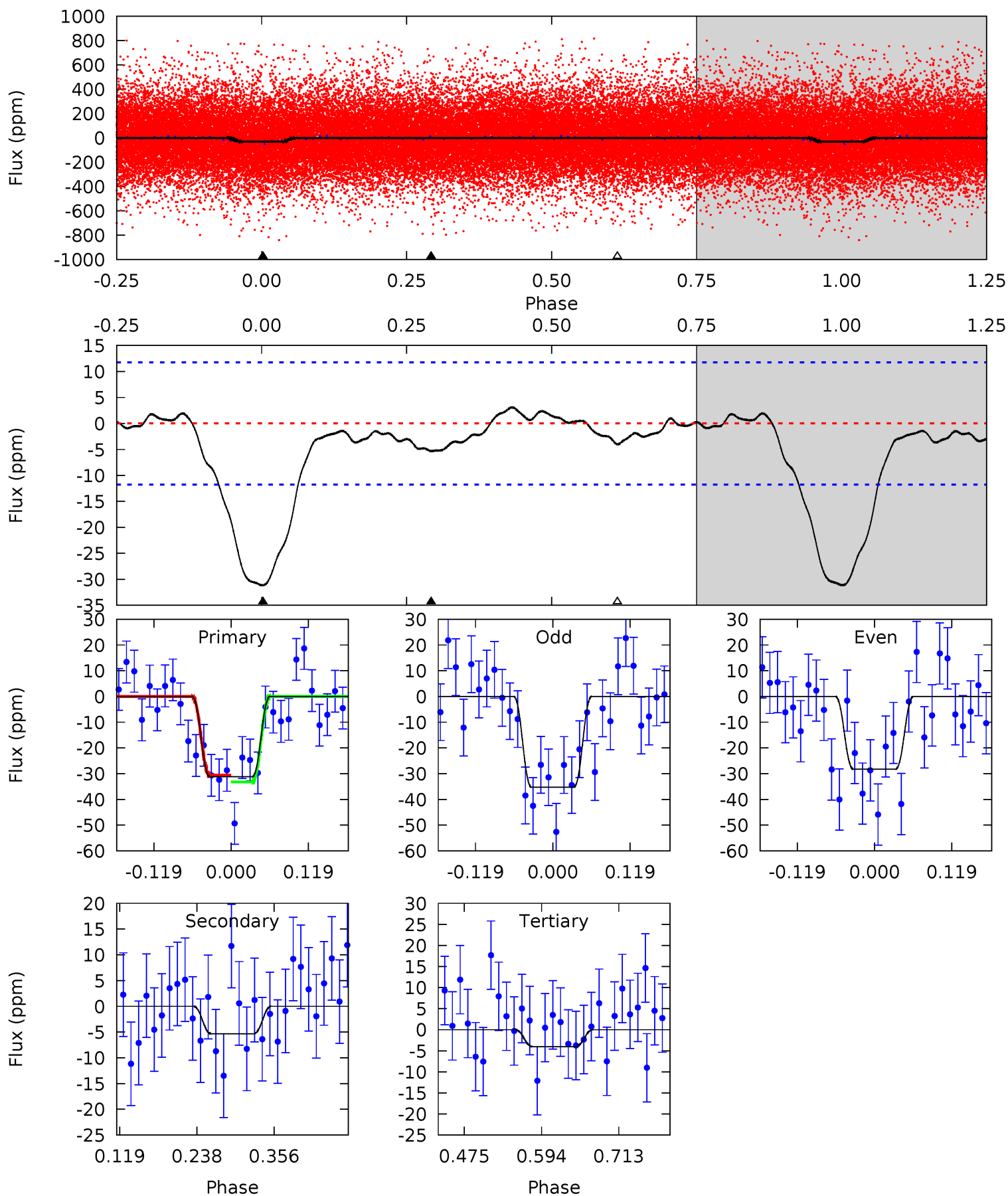
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
10.2	1.46	1.40	0	4.49	1.47	0.65	8.84	10.2	0.06	1.46	0.34	0.98	0.11	1.31



Alt Model-Shift Uniqueness Test

006584278-01, P = 1.289376 Days, E = 130.817190 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
12.0	2.05	1.55	0	4.53	1.56	0.69	10.4	12.0	0.49	2.05	1.36	0.98	0.09	0.51



Stellar Parameters For KIC 006584278

	$T_{\text{eff}} (K)$	$\log(g)$	$[\text{Fe}/\text{H}]$	$R (R_{\odot})$	$M (M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	5826^{+78}_{-87}	$3.465^{+0.252}_{-0.108}$	$0.180^{+0.150}_{-0.150}$	$4.189^{+0.750}_{-1.393}$	$1.865^{+0.132}_{-0.395}$	$0.036^{+0.060}_{-0.012}$
	+1%/-1%	+7%/-3%	+83%/-83%	+18%/-33%	+7%/-21%	+168%/-34%
Source	SPE90	SPE90	SPE90	DSEP		

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

Secondary Eclipse Parameters for KIC 006584278-01 / KOI 6733.01

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-3 ± 2	$2.38^{+1.77}_{-1.15}$	4293^{+247}_{-335}	-3163^{+7652}_{-651}	$0.209^{+0.853}_{-0.166}$
Alt.	-5 ± 3	$2.64^{+1.52}_{-1.36}$	4315^{+230}_{-310}	2317^{+2498}_{-5947}	$0.308^{+1.063}_{-0.205}$

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

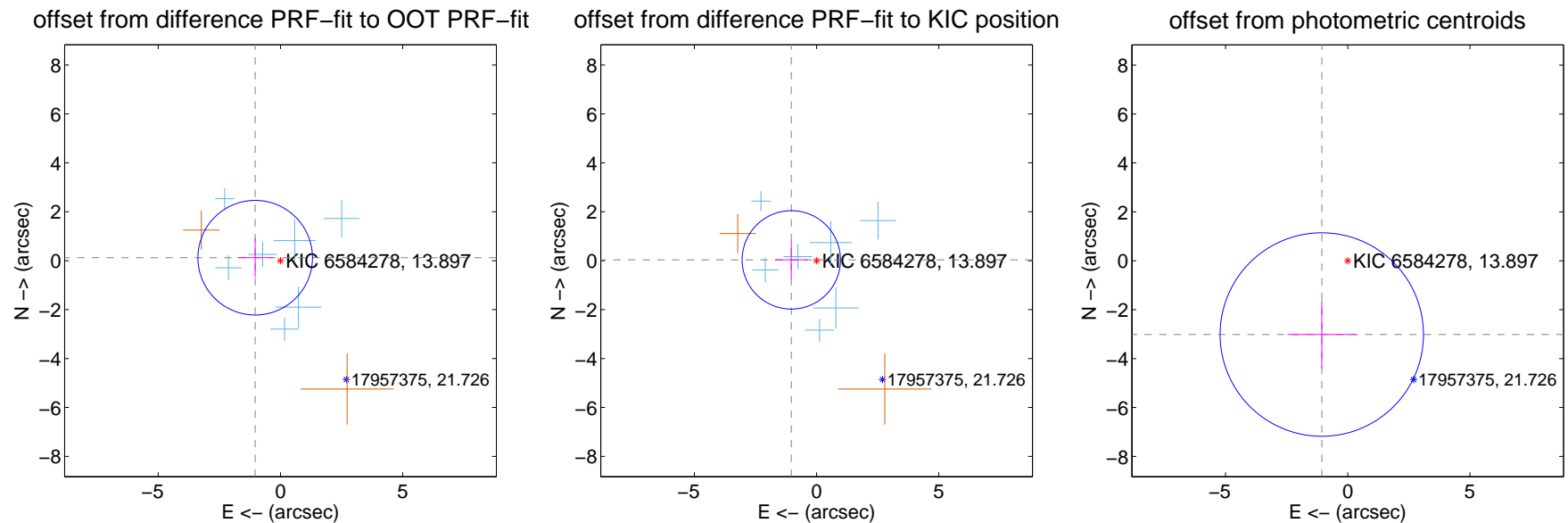
DV Centroid Data

Supplemental centroid analysis for 006584278-01. Kepler magnitude: 13.90. Transit SNR 8.91

There are 7 quarters with good PRF difference image offsets

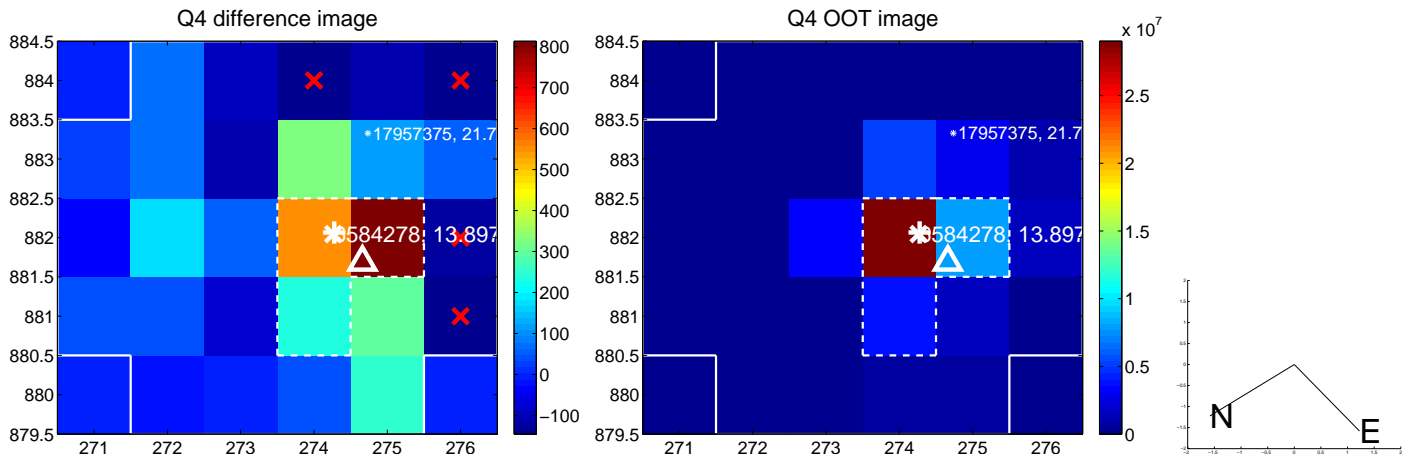
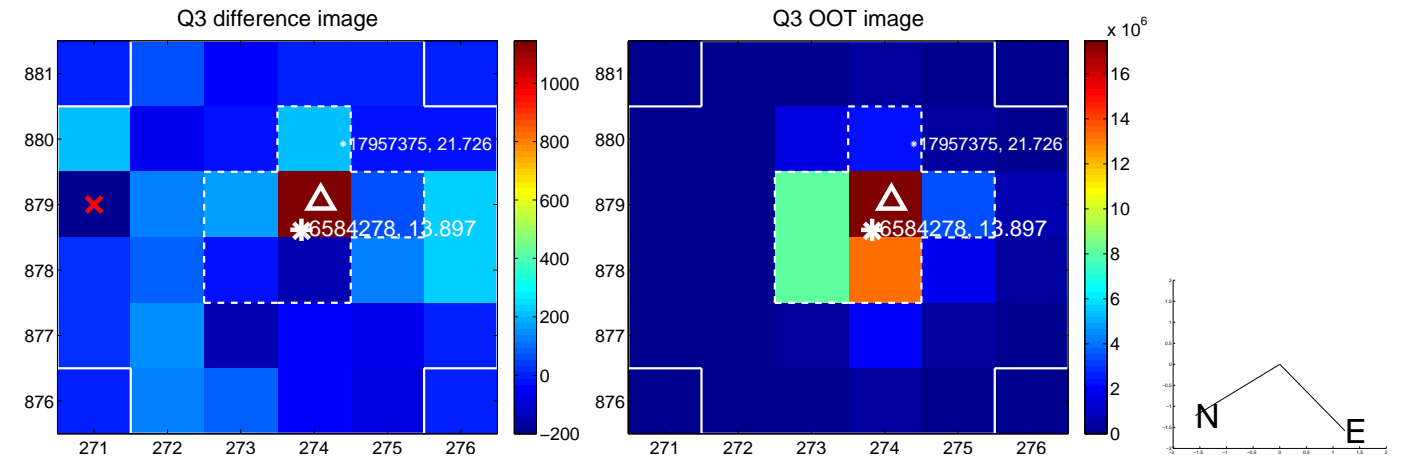
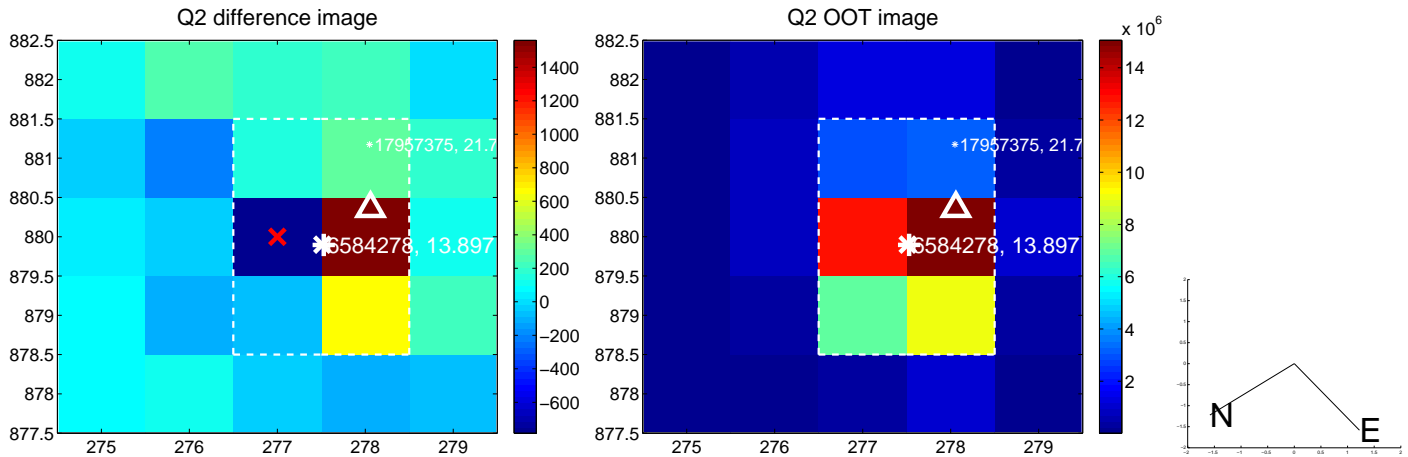
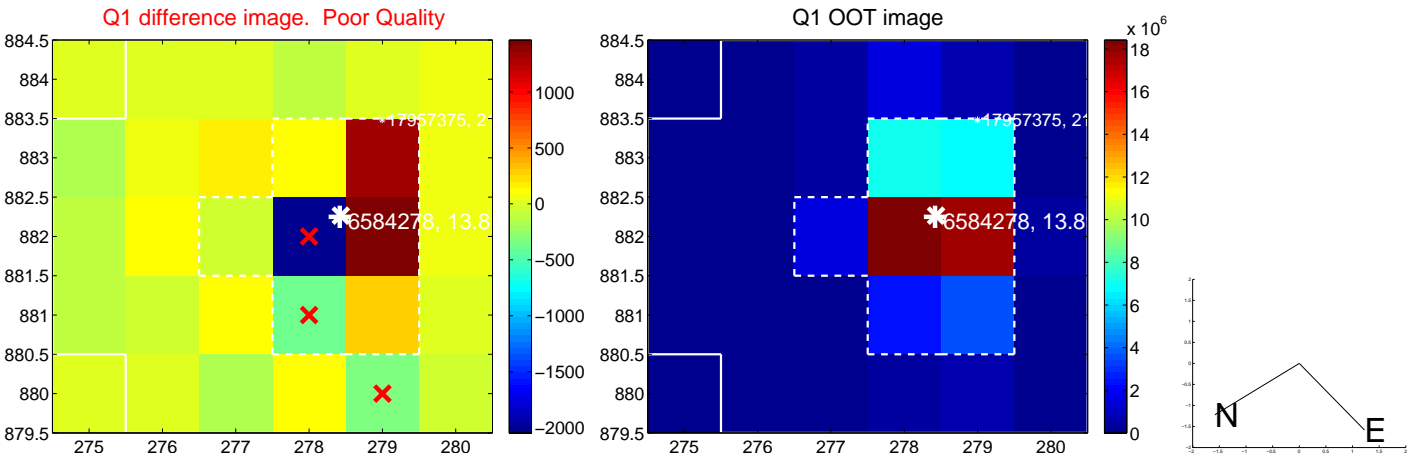
The direct PRF centroid is offset from the target star catalog position by about 0.15 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	1.041 ± 0.781	1.33	1.034 ± 0.725	0.122 ± 0.801
PRF-fit source offset from KIC position	1.034 ± 0.671	1.54	1.034 ± 0.670	0.034 ± 0.770
photometric centroid source offset	3.20 ± 1.39	2.31	1.06 ± 1.41	-3.02 ± 1.38

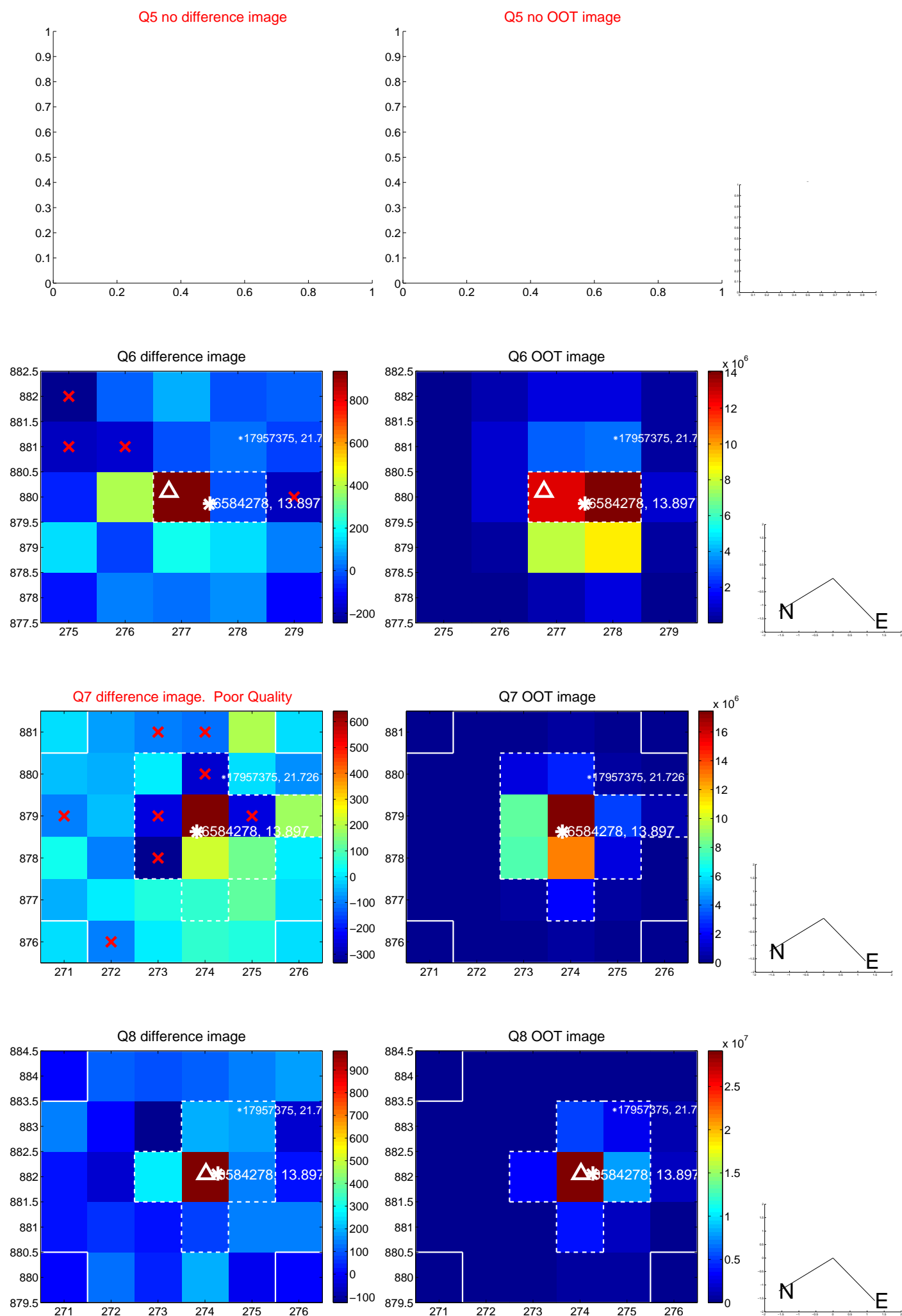


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses:** good quarterly centroid offsets; **Vermillion crosses:** bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

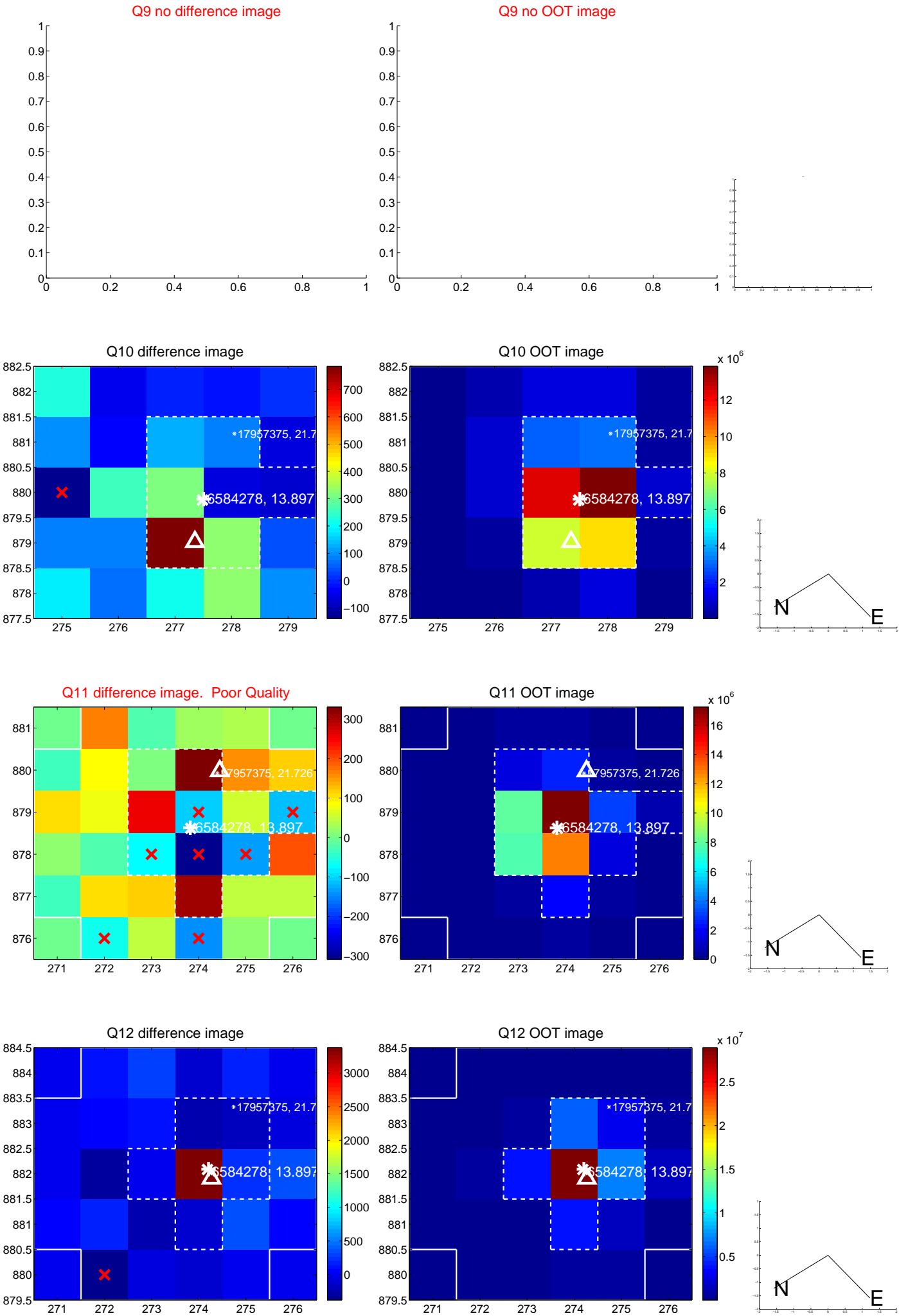
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



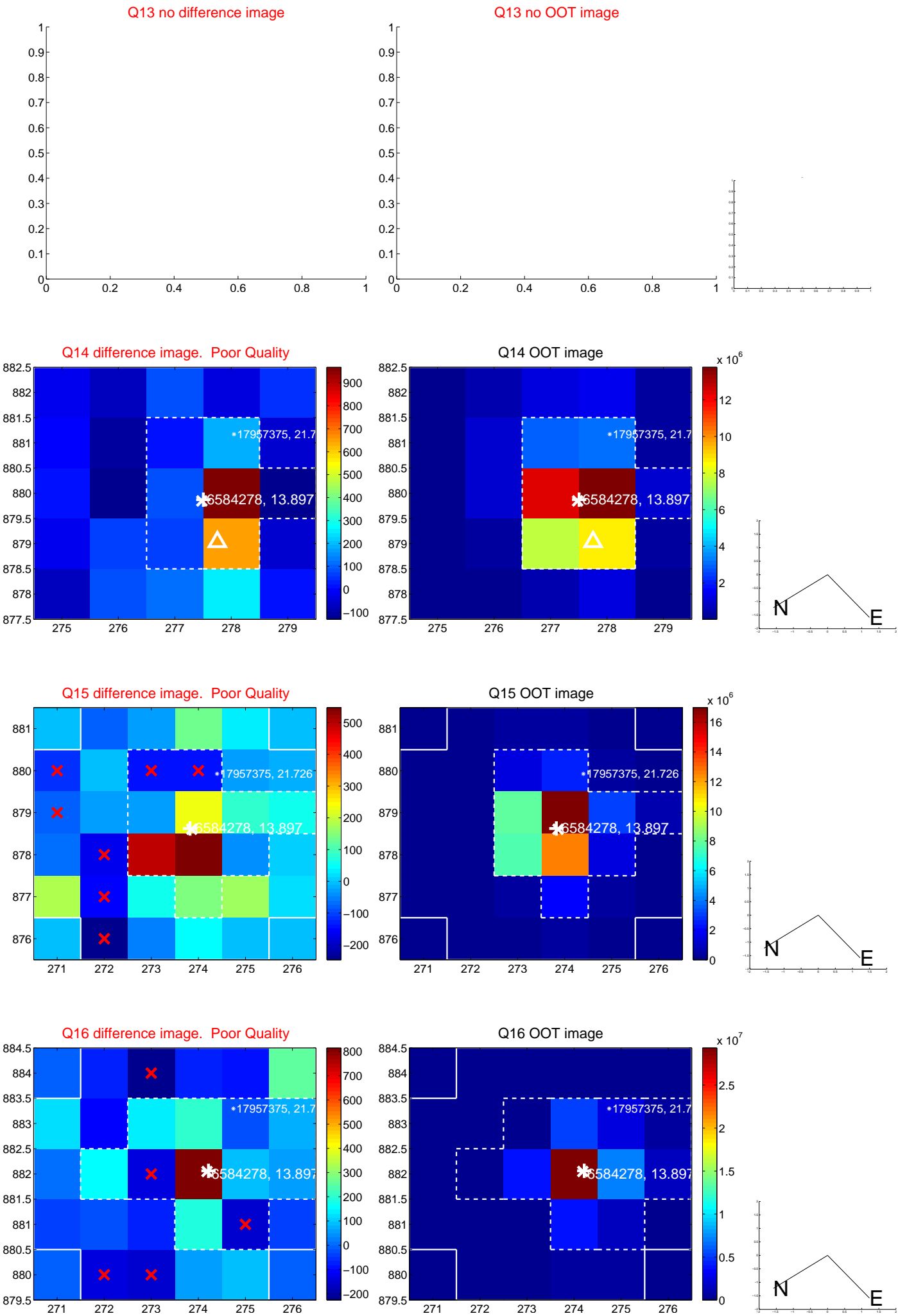
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



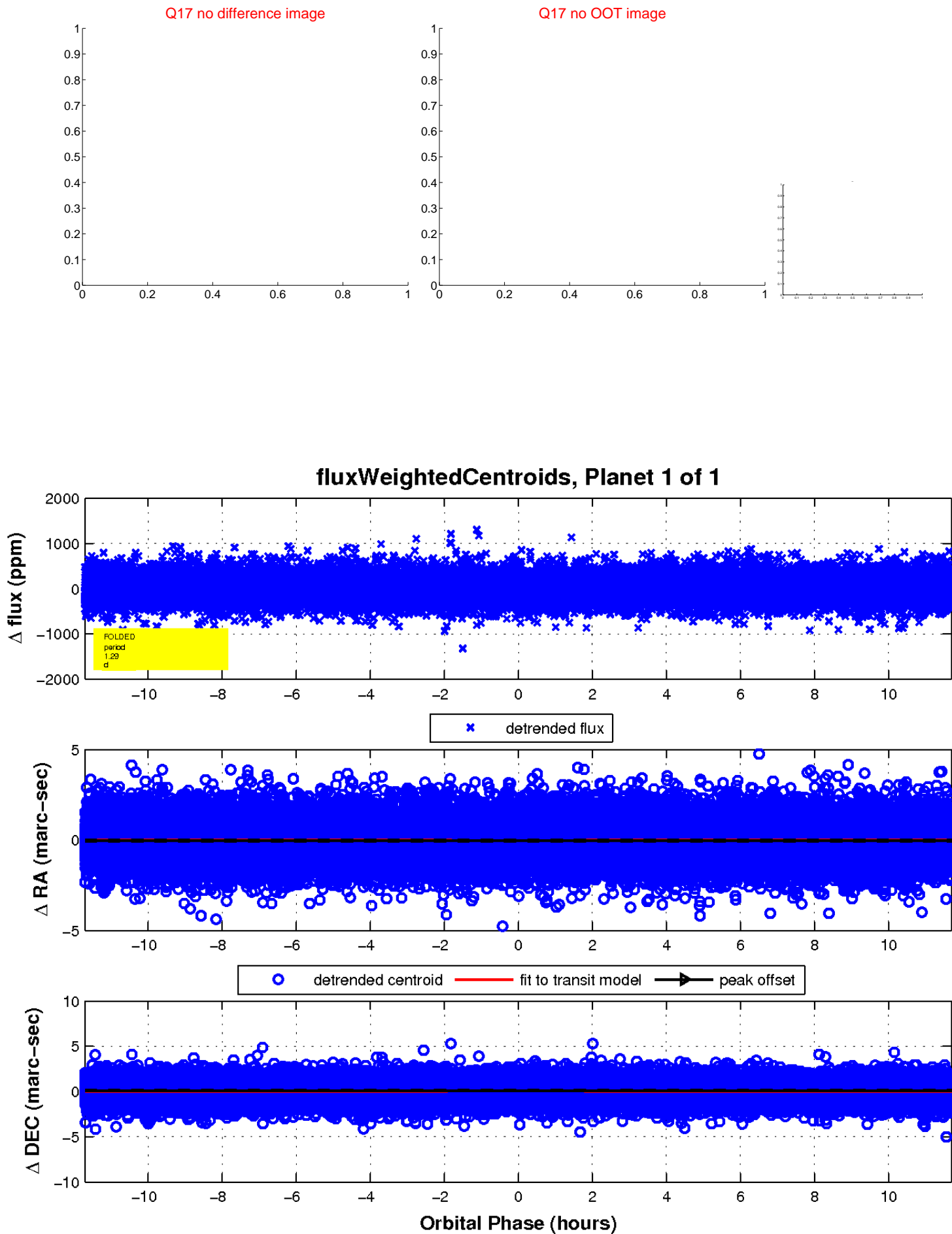
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



UKIRT Image

Declination

