

KIC 008112584

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})
008112584-01	OBS	No	0.782354	132.144000	0.0	6.710	8.6	0.0	5.14	6480	0.07	0.00

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
008112584-01	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—CENT_FEW_DIFFS

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

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

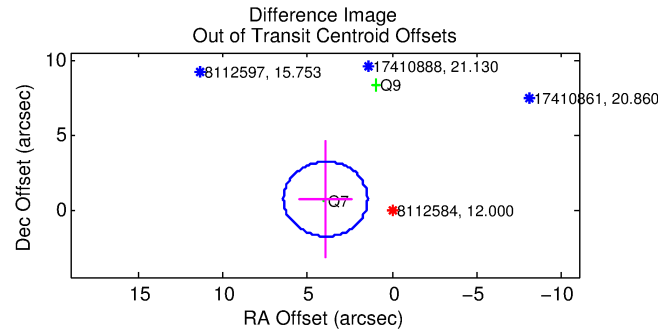
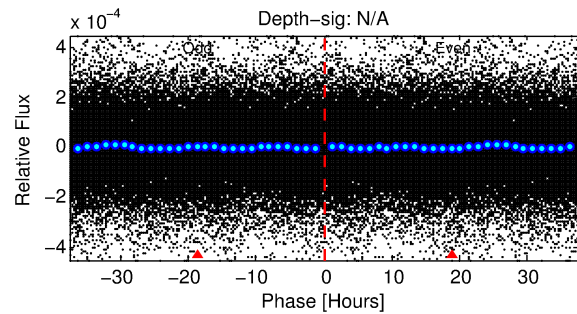
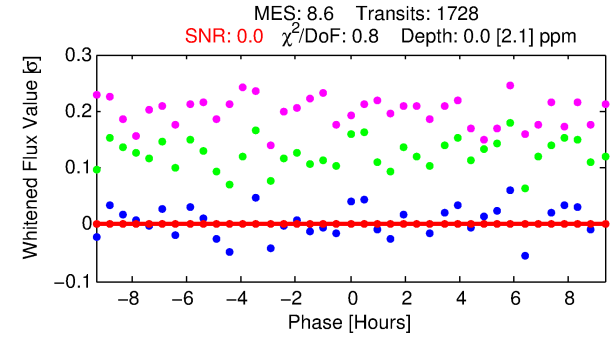
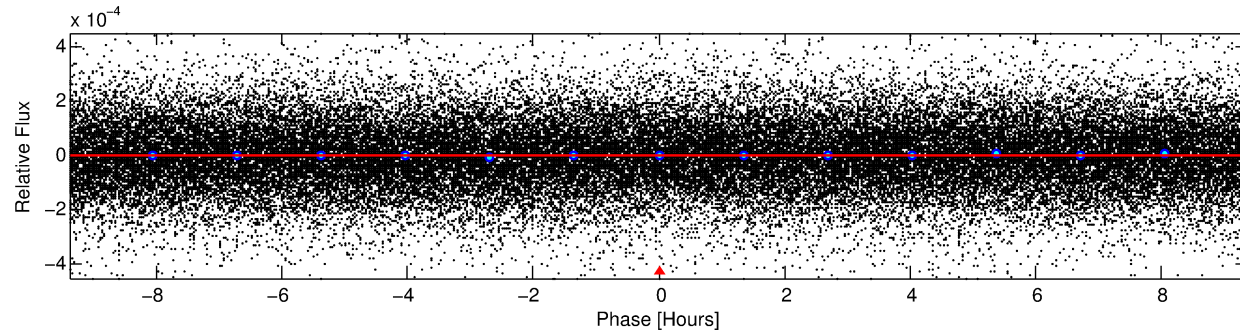
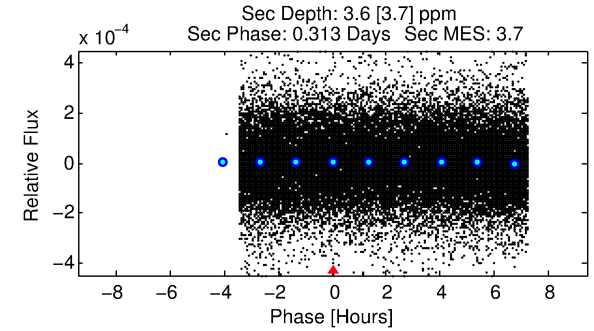
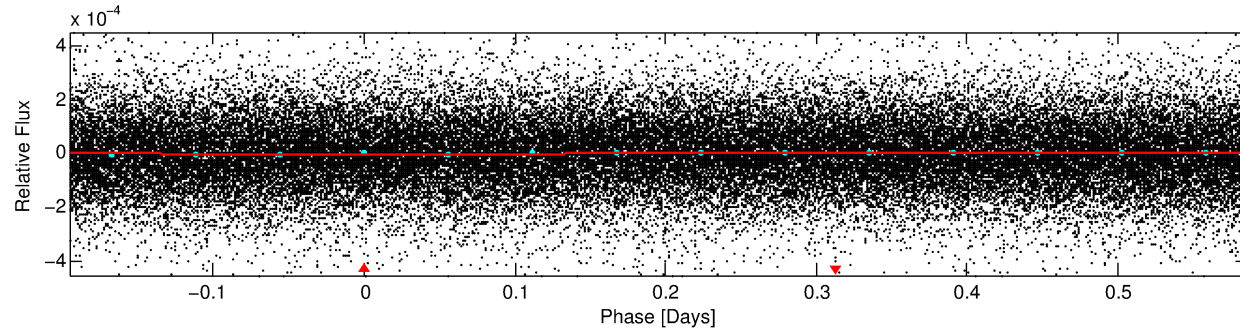
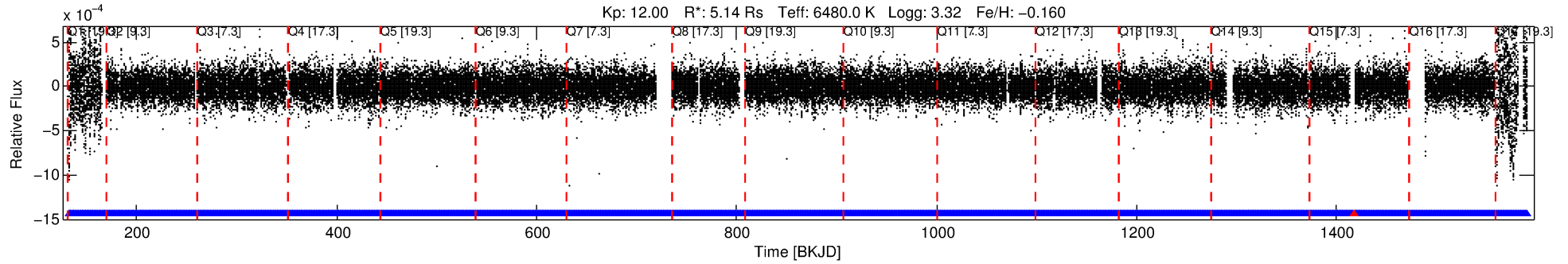
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 008112584-01

No Significant Match Found

DV One-Page Summary

KIC: 8112584 Candidate: 1 of 1 Period: 0.782 d



DV Fit Results:

Period = 0.78235 [0.01444] d
Epoch = 132.1440 [3.2428] BKJD
Rp/R* = 0.0001 [0.0089]
a/R* = 1.05 [6.32]
b = 0.75 [40.67]
Seff = N/A
Teq = N/A
Rp = 0.07 [5.01] Re
a = N/A
Ag = N/A
Teffp = N/A

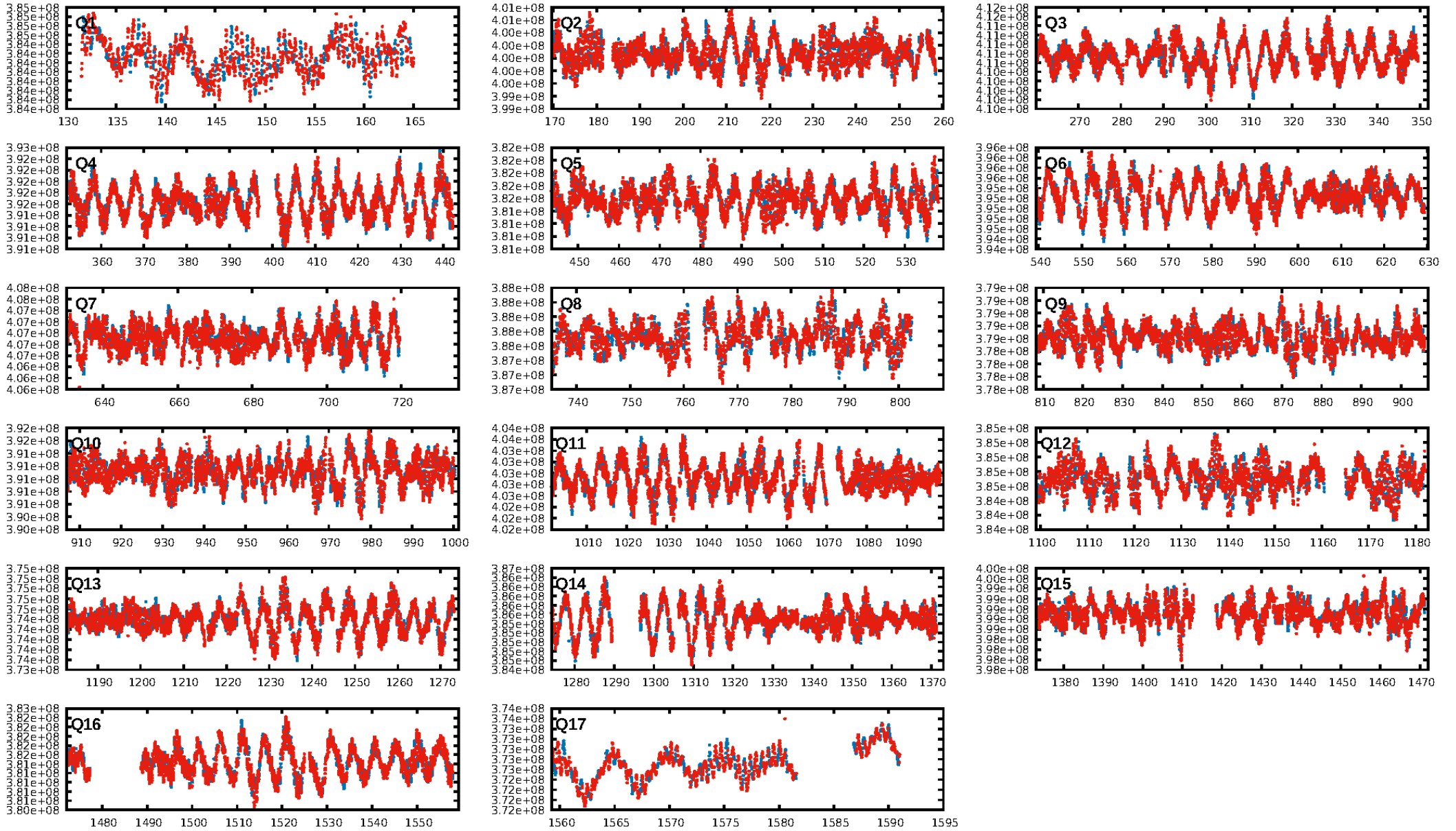
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [1650/1651]
GhostDiagnostic-chr: N/A
Centroid-sig: N/A
Centroid-so: N/A
OotOffset-rm: 4.005 arcsec [4.83σ]
KicOffset-rm: 3.975 arcsec [4.57σ]
OotOffset-st: 0/1/0/1 [2]
KicOffset-st: 0/1/0/1 [2]
DiffImageQuality-fgm: 0.00 [0/2]
DiffImageOverlap-fno: 1.00 [17/17]

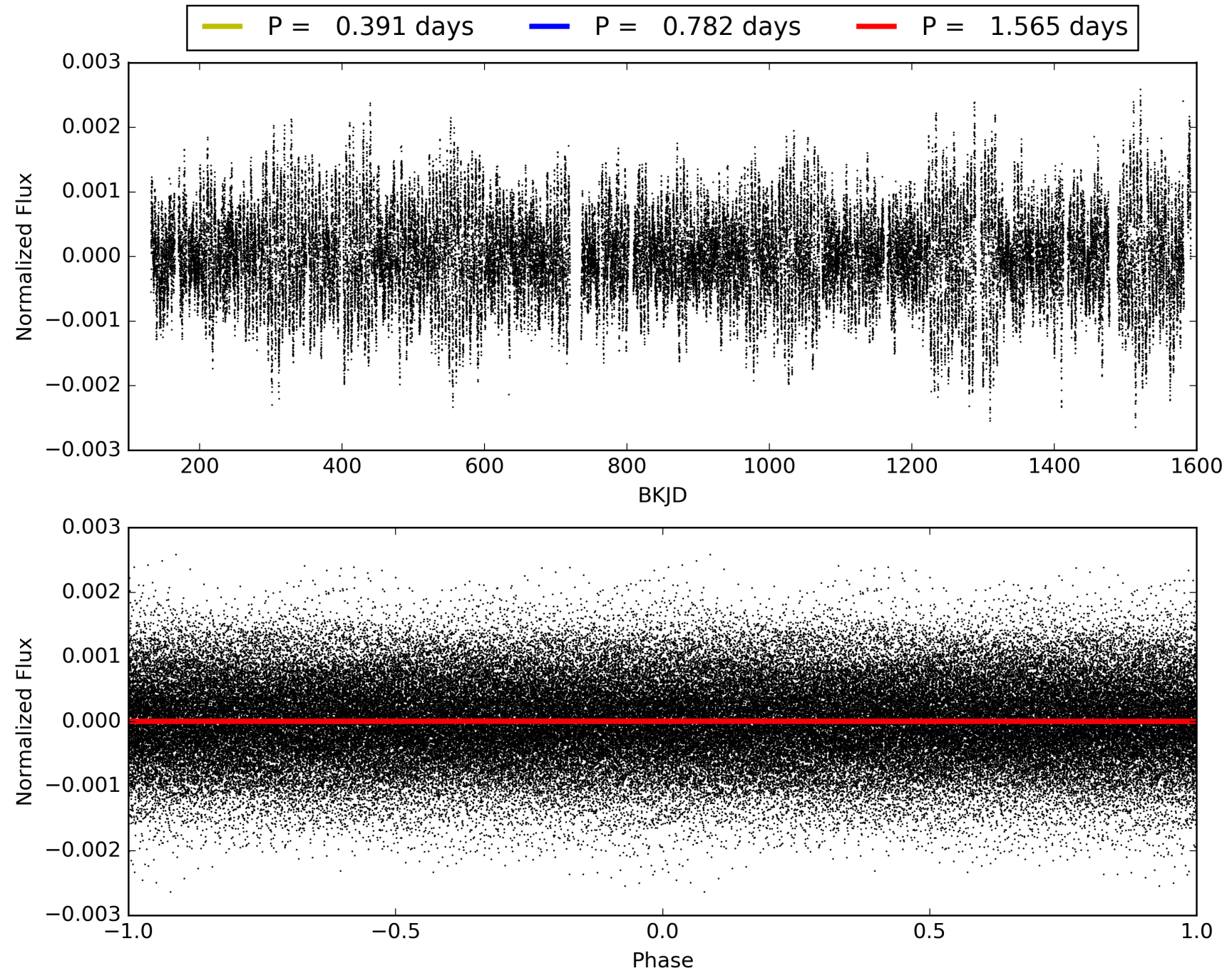
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 17:32:38 Z

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

TCE 008112584-01, PDC Light Curves

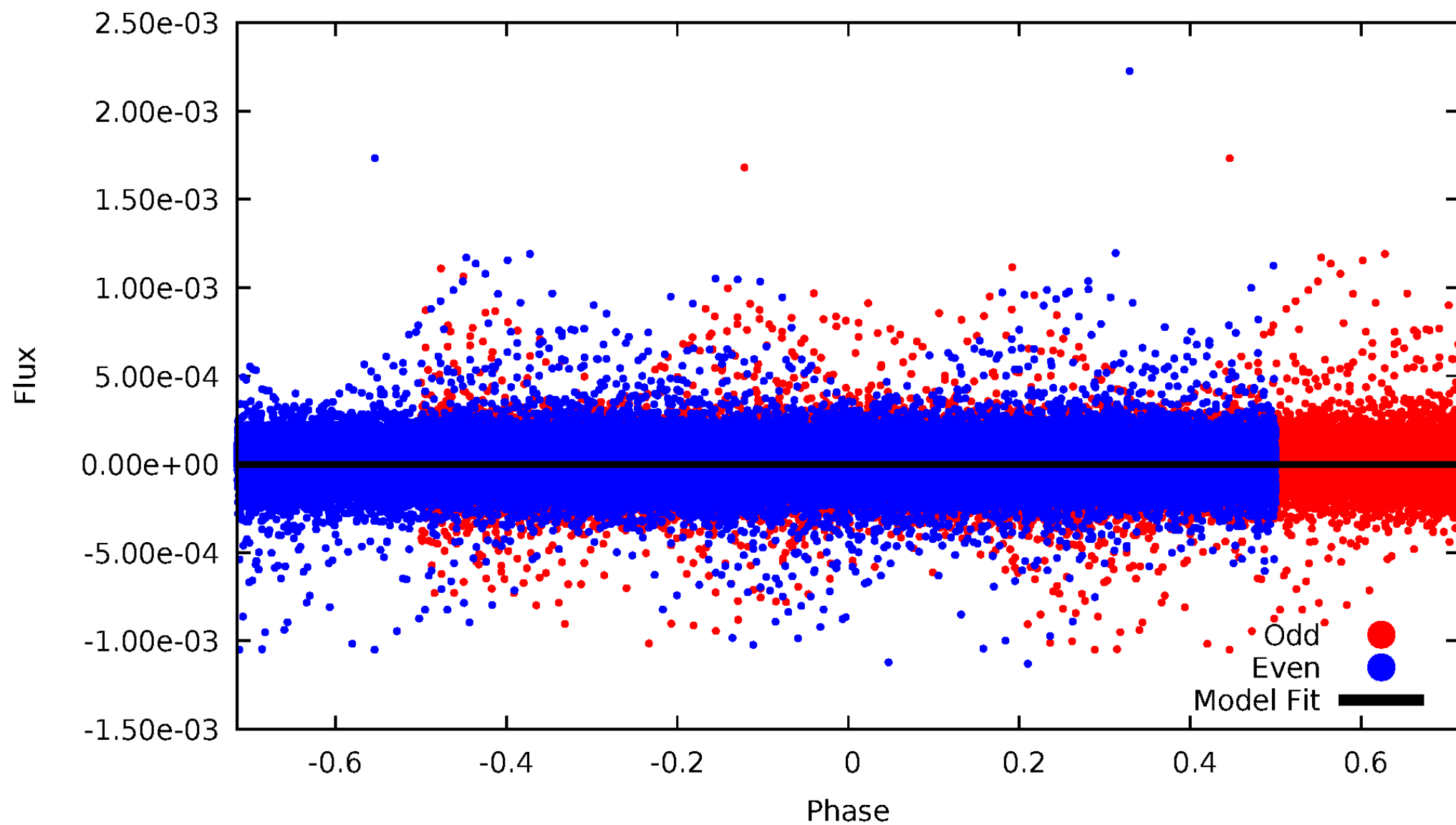


TCE 008112584-01



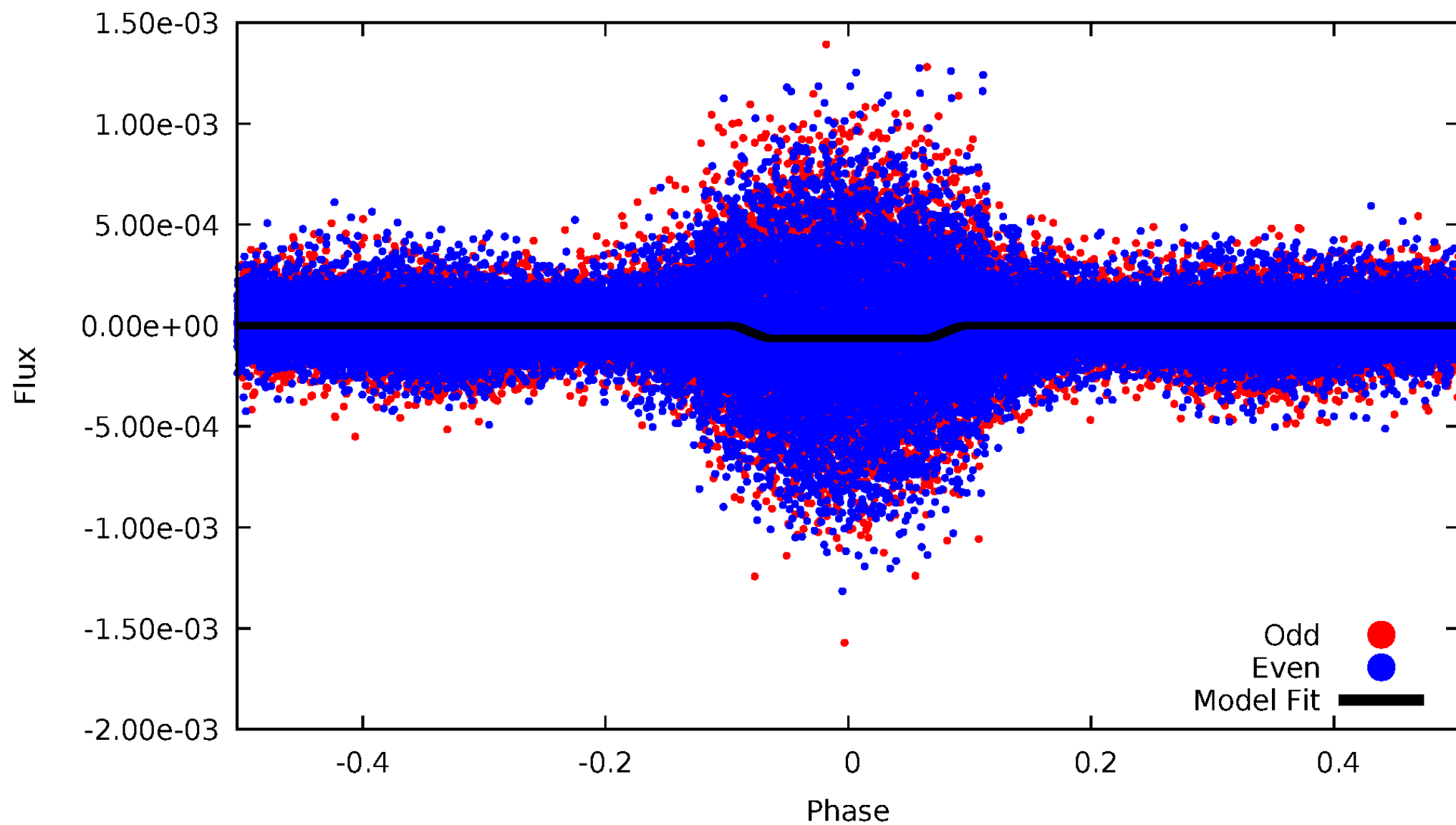
DV Odd/Even

TCE 008112584-01

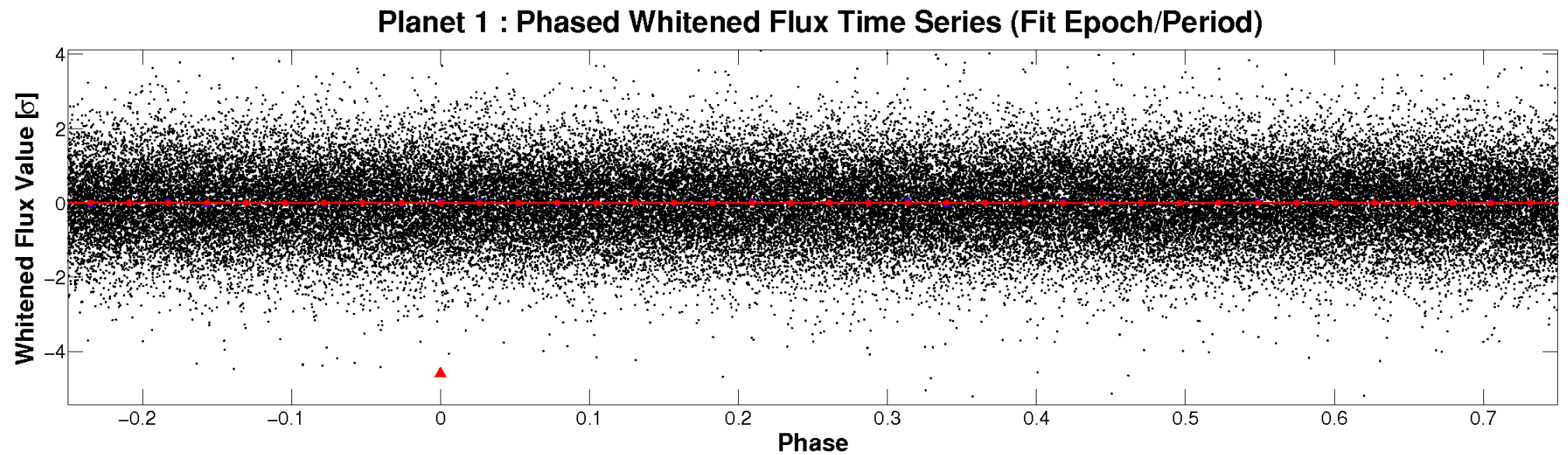
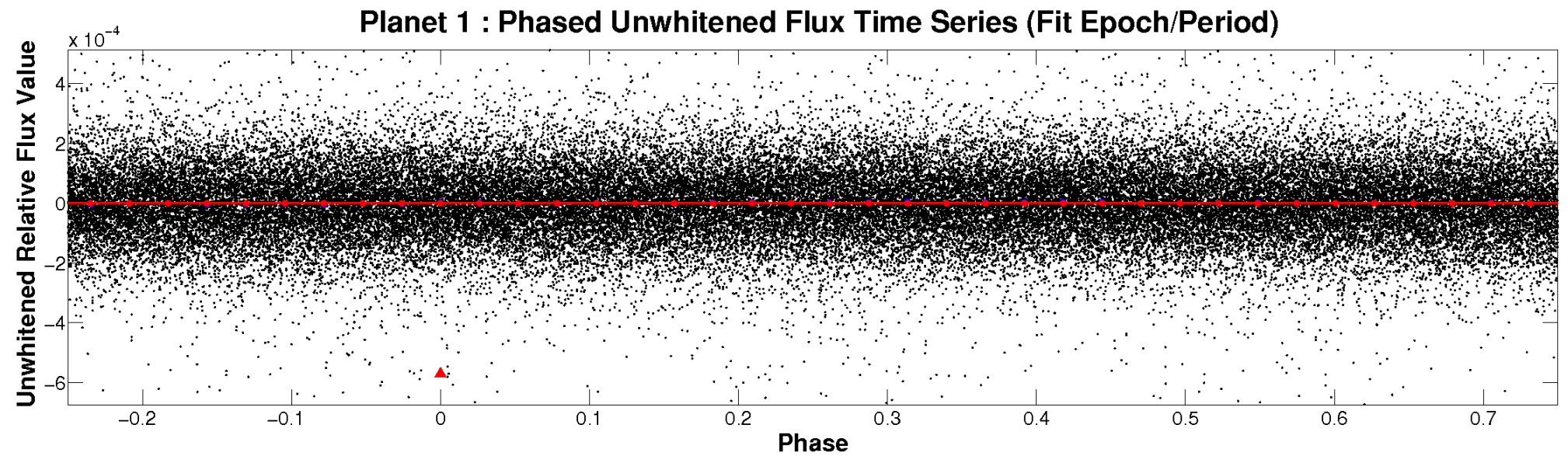


ALT Odd/Even

TCE 008112584-01

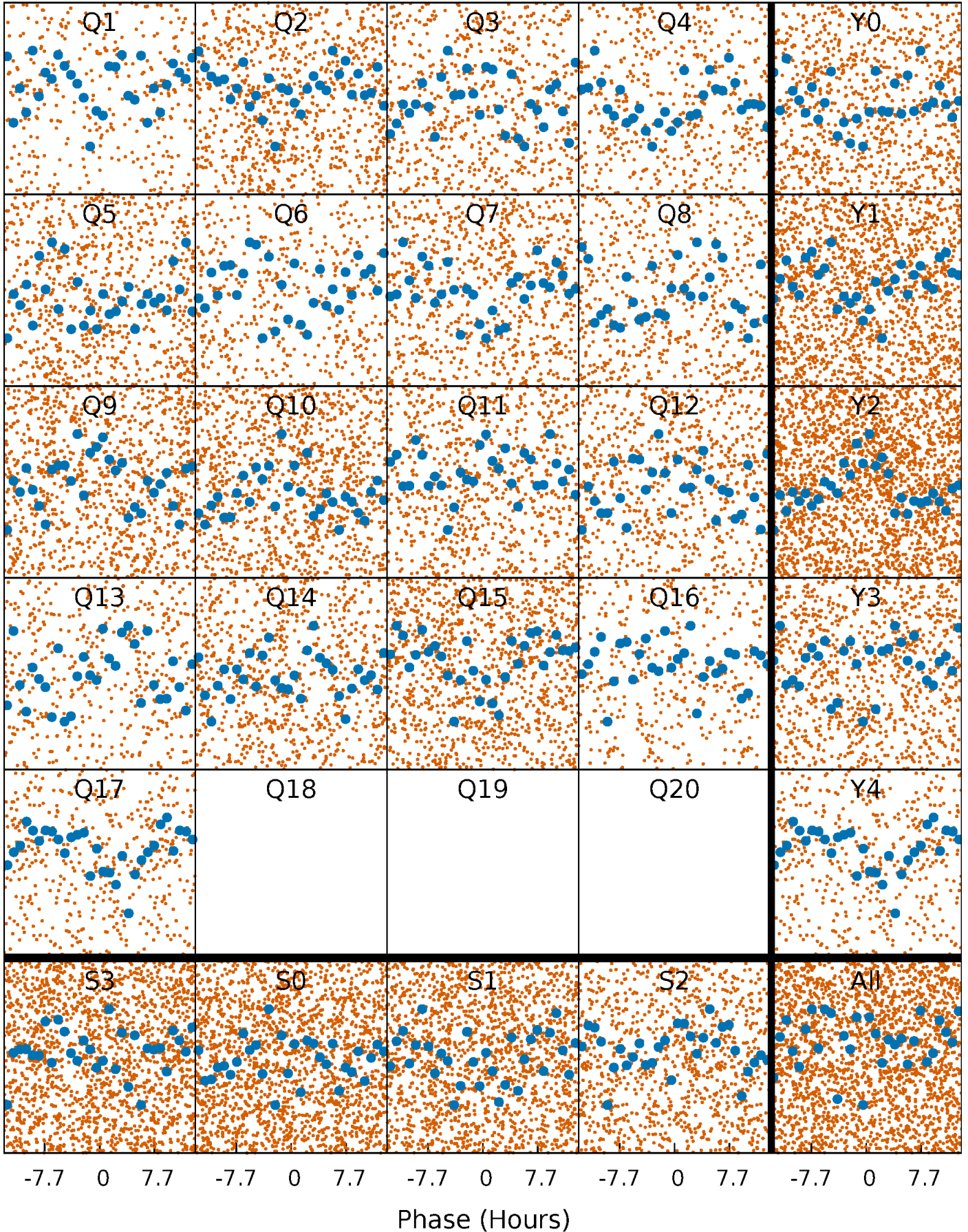


Non-Whitened Vs. Whitened Light Curve



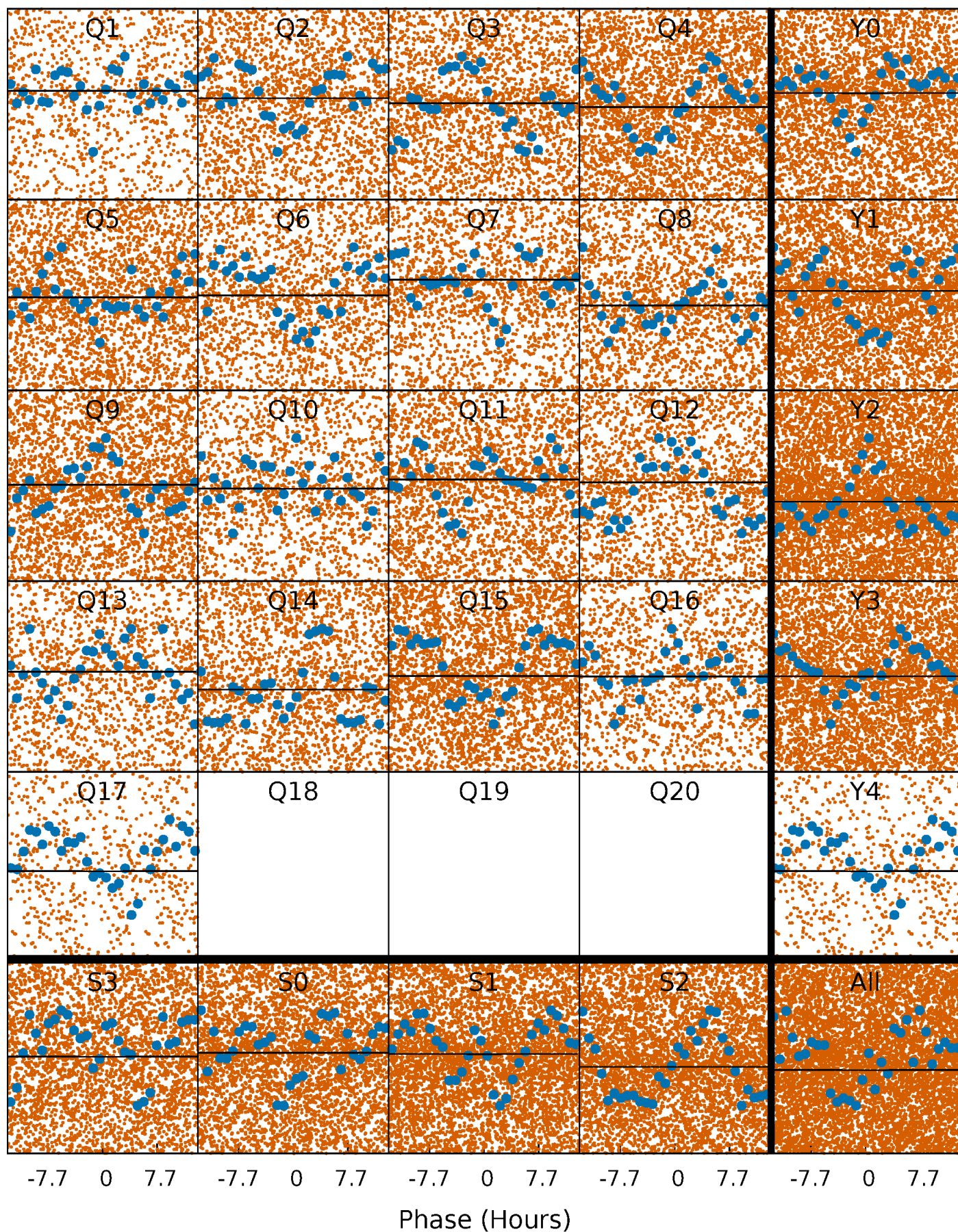
PDC Quarter-Phased Transit Curves

TCE 008112584-01 P= 0.782354 Days $T_0=132.144000$ (BKJD)



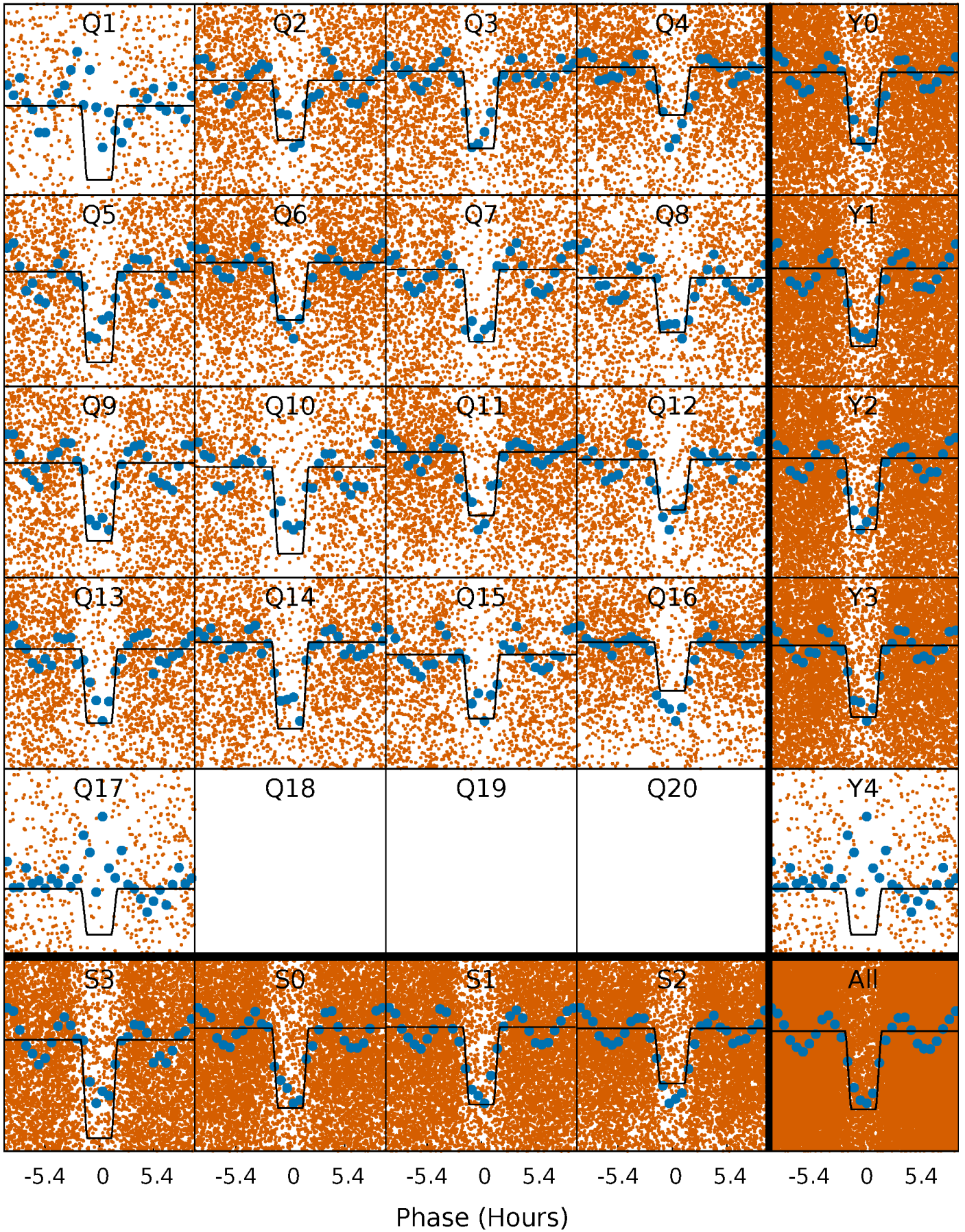
DV Quarter-Phased Transit Curves

TCE 008112584-01 P= 0.782354 Days $T_0=132.144000$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

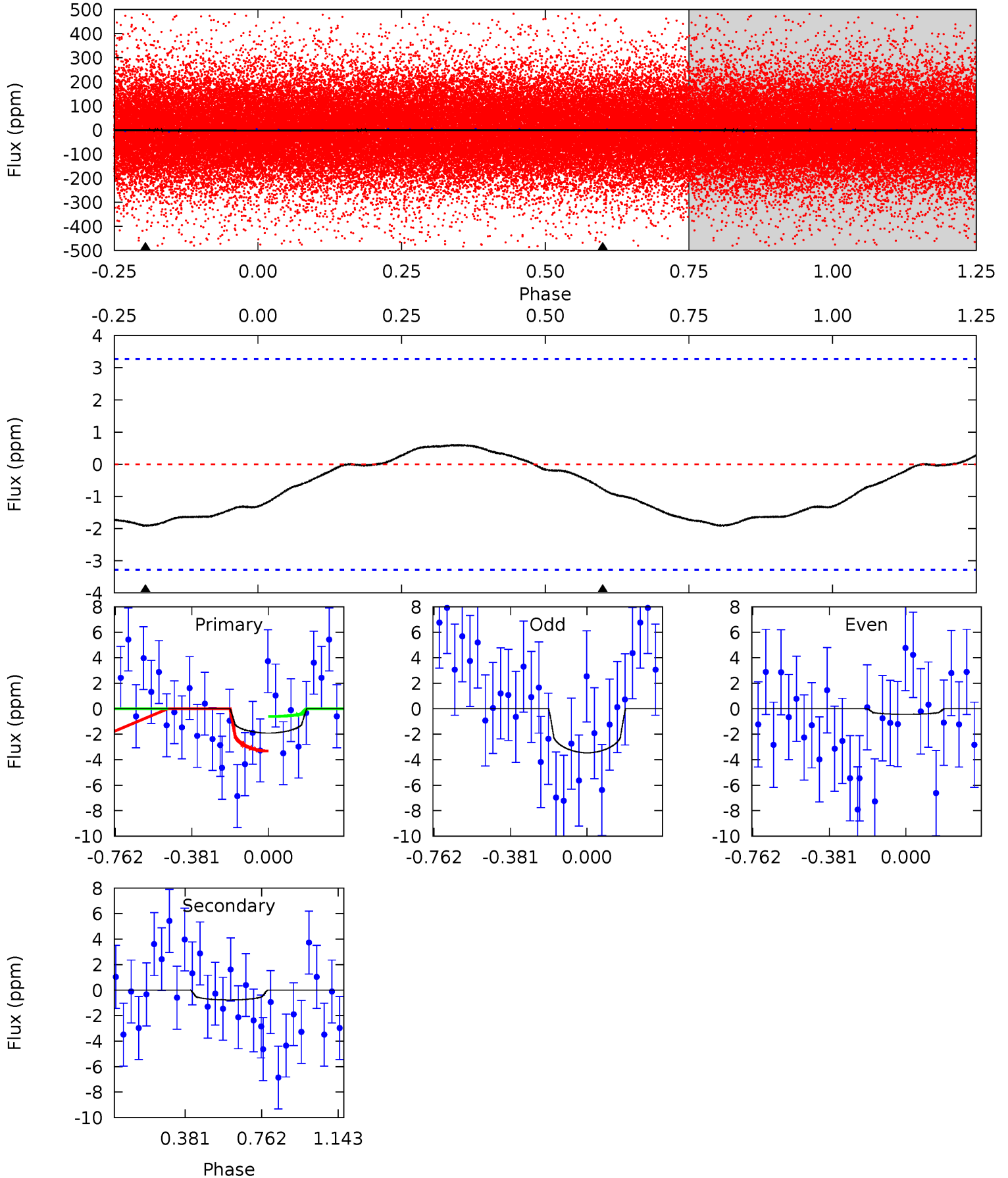
TCE 008112584-01 P= 0.784803 Days $T_0=131.515821$ (BKJD)



DV Model-Shift Uniqueness Test

008112584-01, P = 0.782354 Days, E = 131.361646 Days

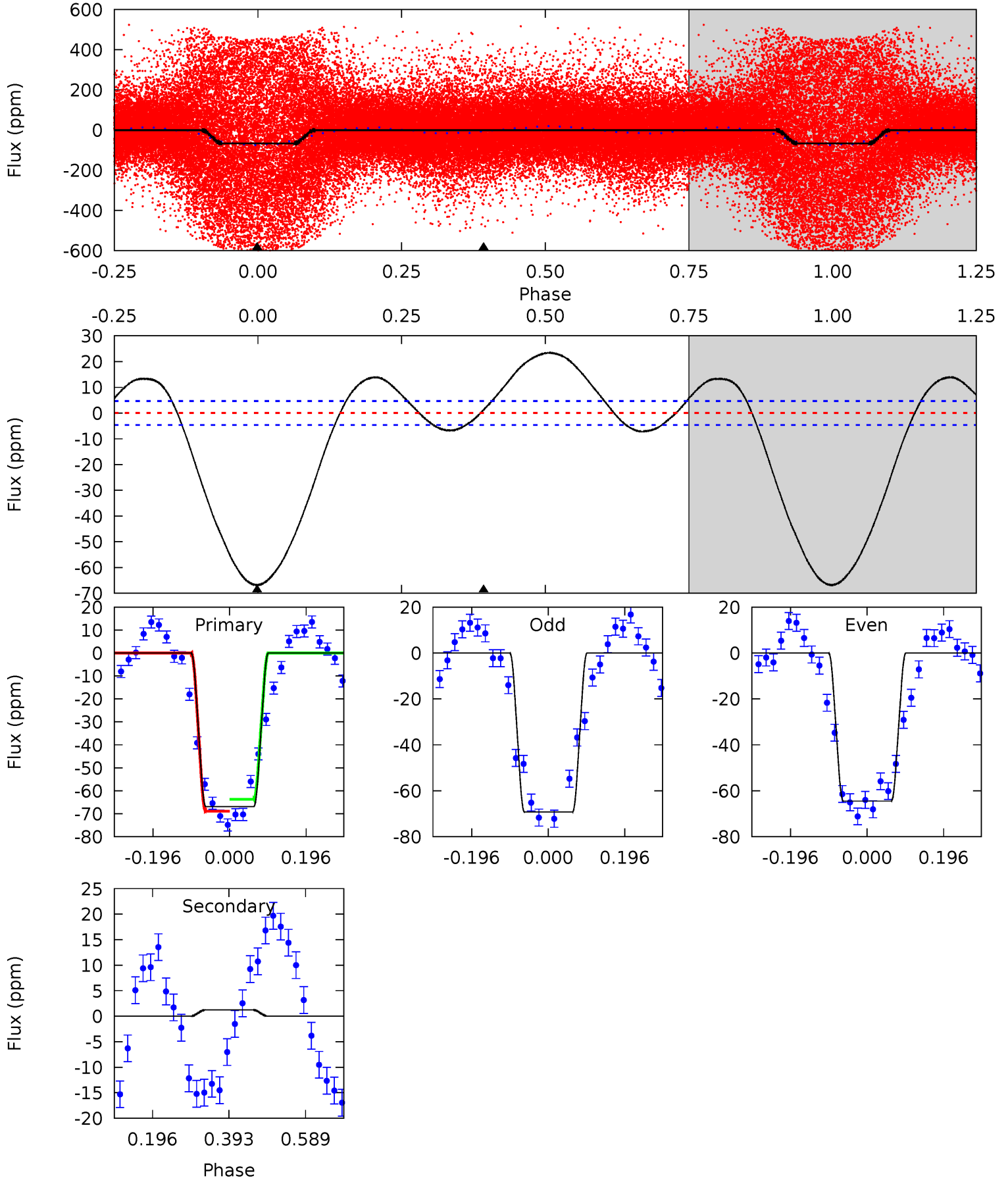
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
2.49	1.01	0	0	4.28	0.88	0.12	2.49	2.49	1.01	1.01	1.92	-3.51	0.24	1.73



Alt Model-Shift Uniqueness Test

008112584-01, P = 0.784803 Days, E = 130.731018 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
63.4	-1.16	0	0	4.42	1.29	6.53	63.4	63.4	-1.16	-1.16	2.25	0.74	0.26	2.63



Stellar Parameters For KIC 008112584

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	M (M_{\odot})	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	6480^{+164}_{-164}	$3.323^{+0.387}_{-0.065}$	$-0.160^{+0.350}_{-0.300}$	$5.142^{+0.354}_{-2.005}$	$2.028^{+0.126}_{-0.378}$	$0.021^{+0.060}_{-0.004}$
	+3%/-3%	+12%/-2%	+219%/-188%	+7%/-39%	+6%/-19%	+285%/-21%
Source	PHO1	FLK73	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 008112584-01 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-1 ± 1	$3.22^{+3.30}_{-2.40}$	6121^{+295}_{-611}	-4941^{+1096}_{-319}	$0.013^{+0.172}_{-0.013}$
Alt.	1 ± 1	$4.75^{+4.50}_{-2.93}$	6154^{+286}_{-620}	-5173^{+428}_{-299}	$-0.010^{+0.009}_{-0.079}$

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 $A_{obs} \gg 1.0$

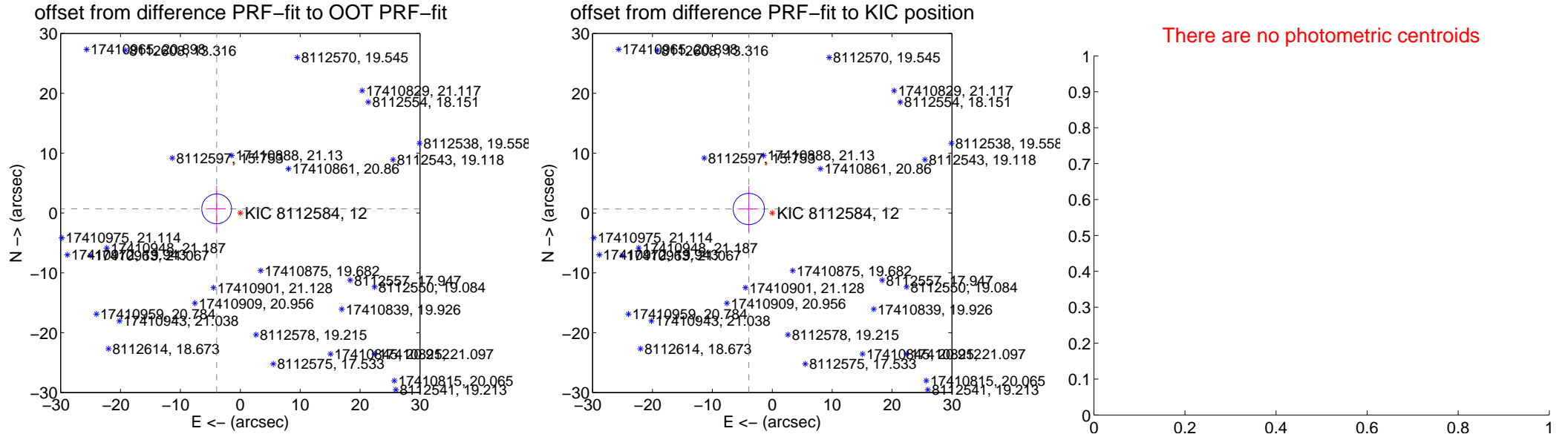
DV Centroid Data

Supplemental centroid analysis for 008112584-01. Kepler magnitude: 12.00. Transit SNR 0.01

There are 0 quarters with good PRF difference image offsets

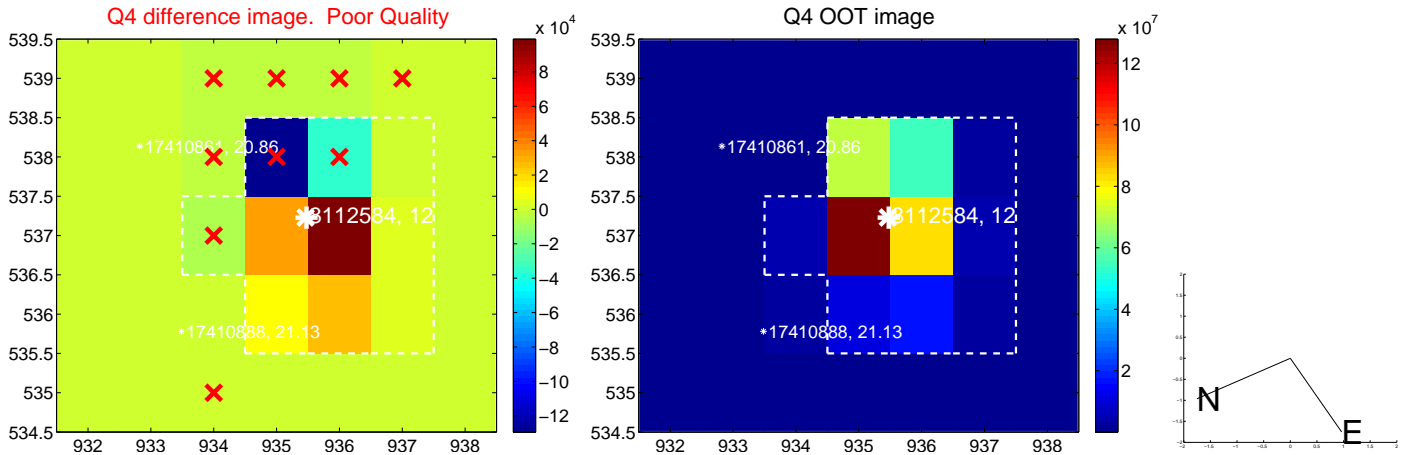
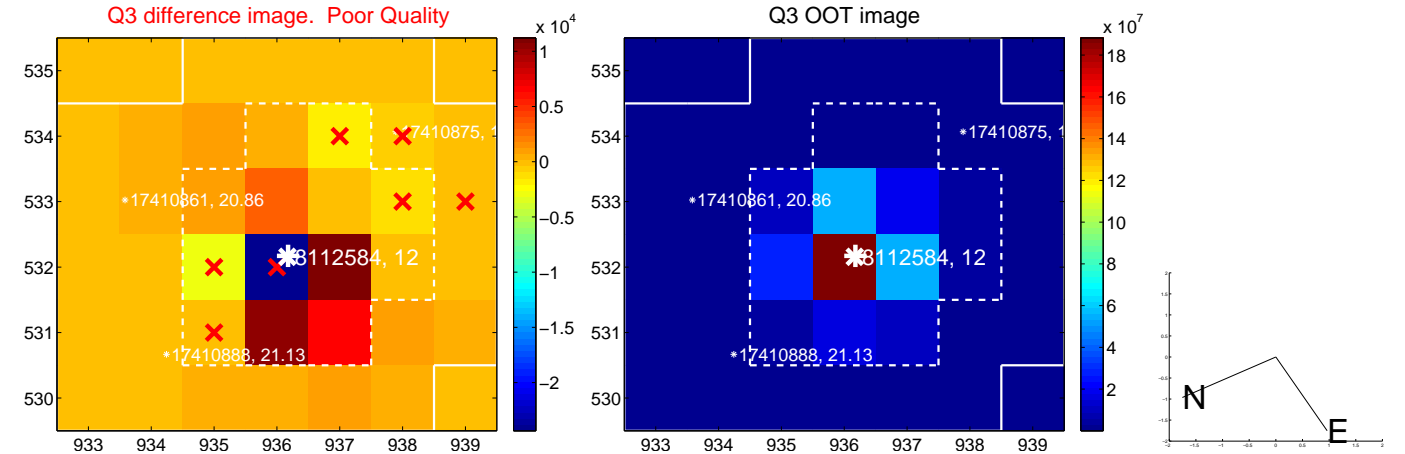
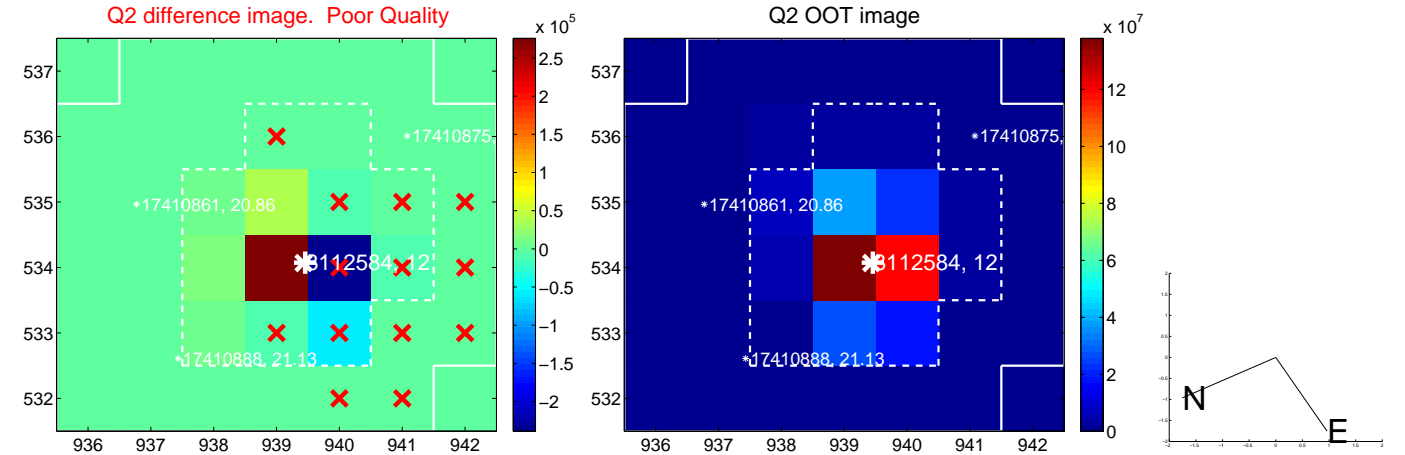
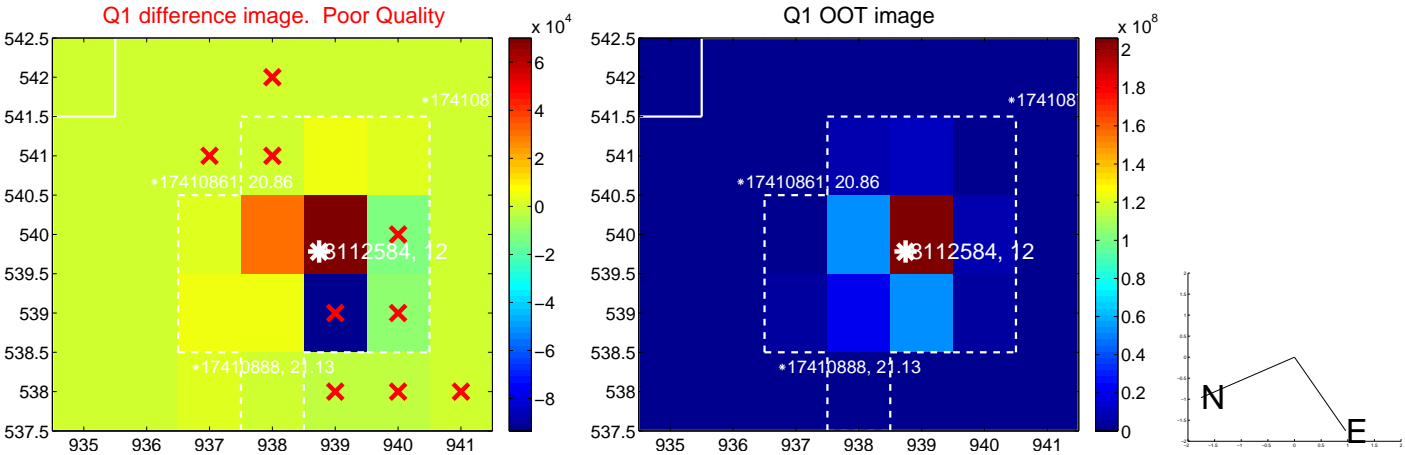
The direct PRF centroid is offset from the target star catalog position by about 0.08 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	4.005 \pm 0.829	4.83	3.944 \pm 1.523	0.699 \pm 3.849
PRF-fit source offset from KIC position	3.975 \pm 0.870	4.57	3.917 \pm 1.542	0.673 \pm 3.841
photometric centroid source offset	—	—	—	—

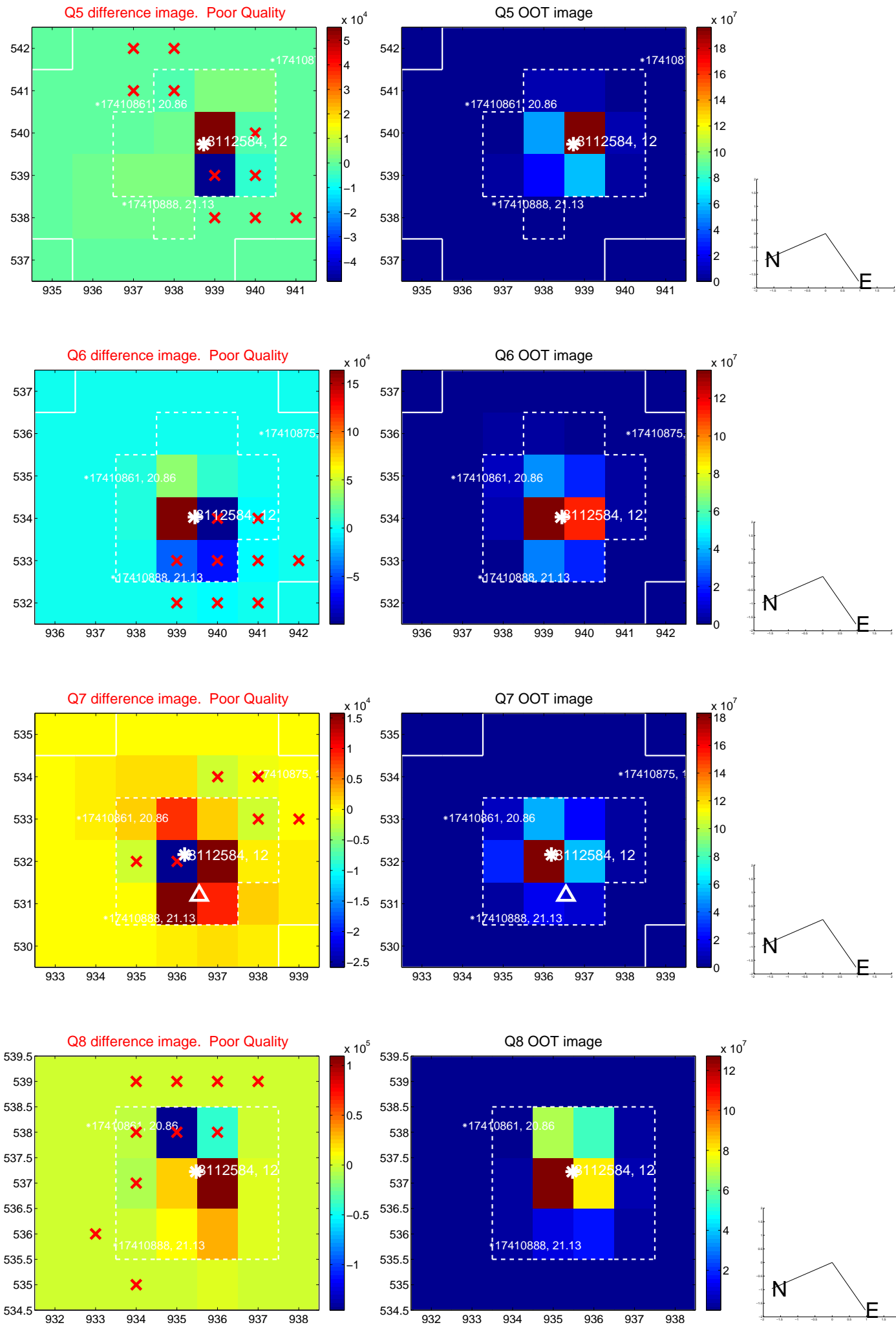


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

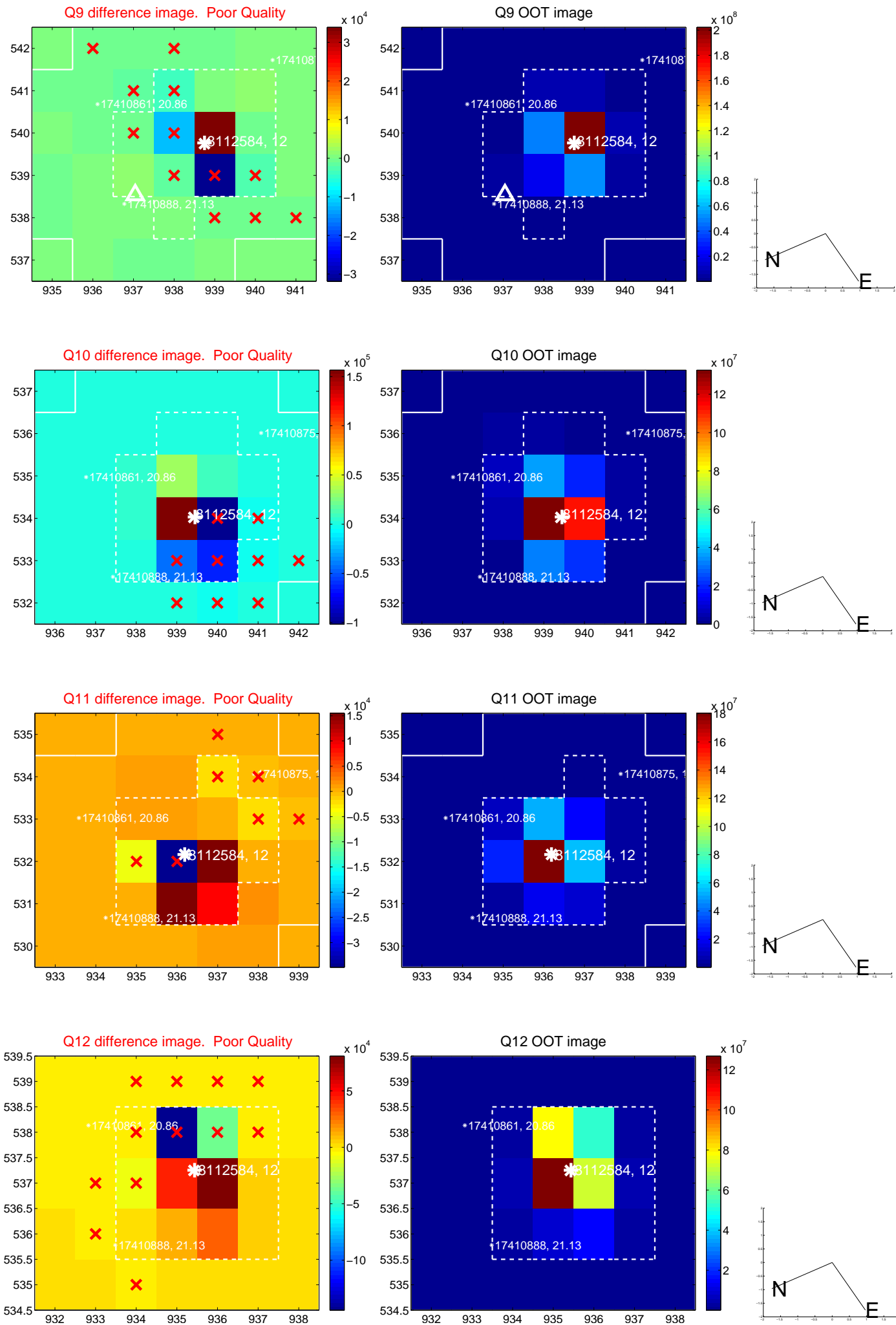
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



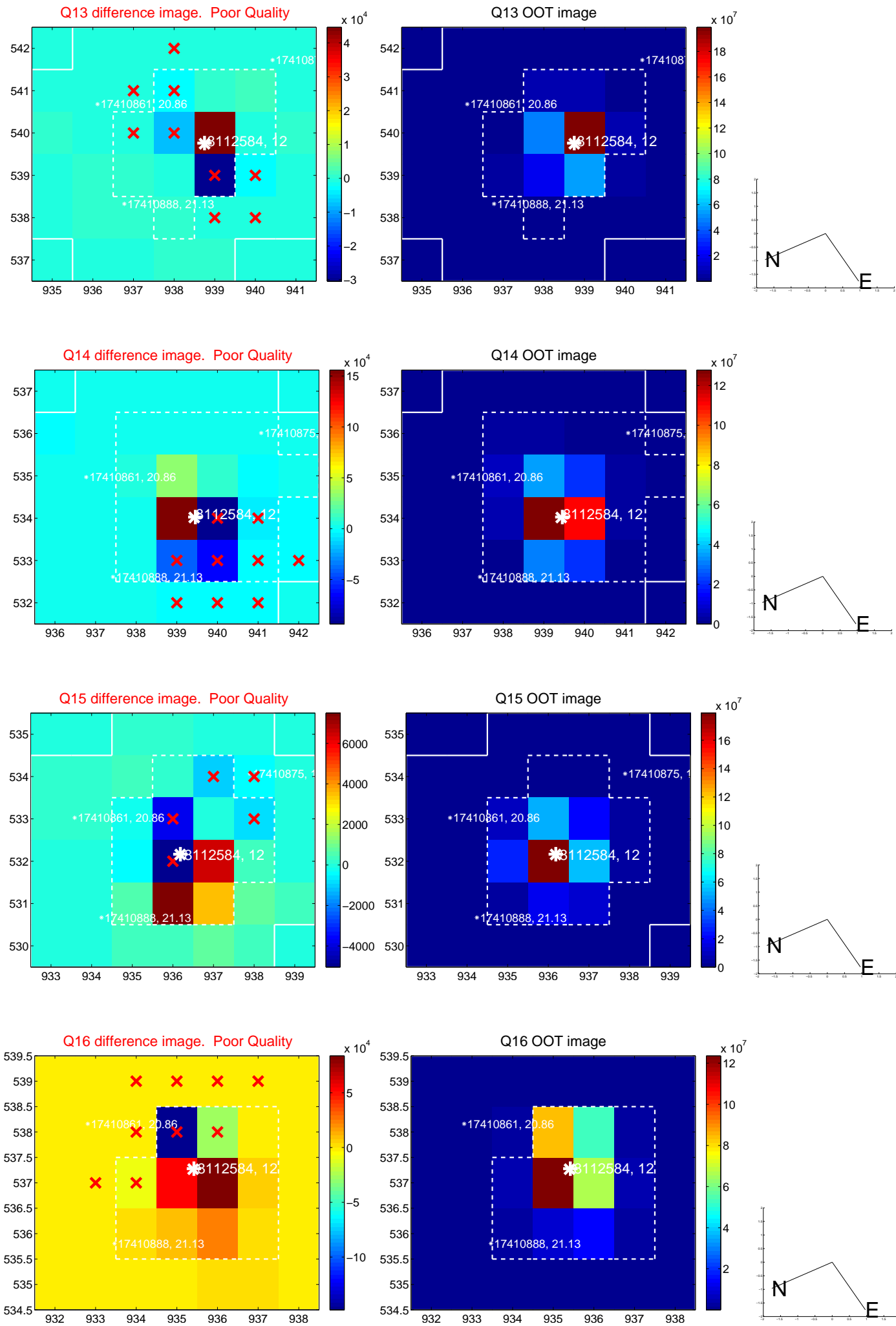
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



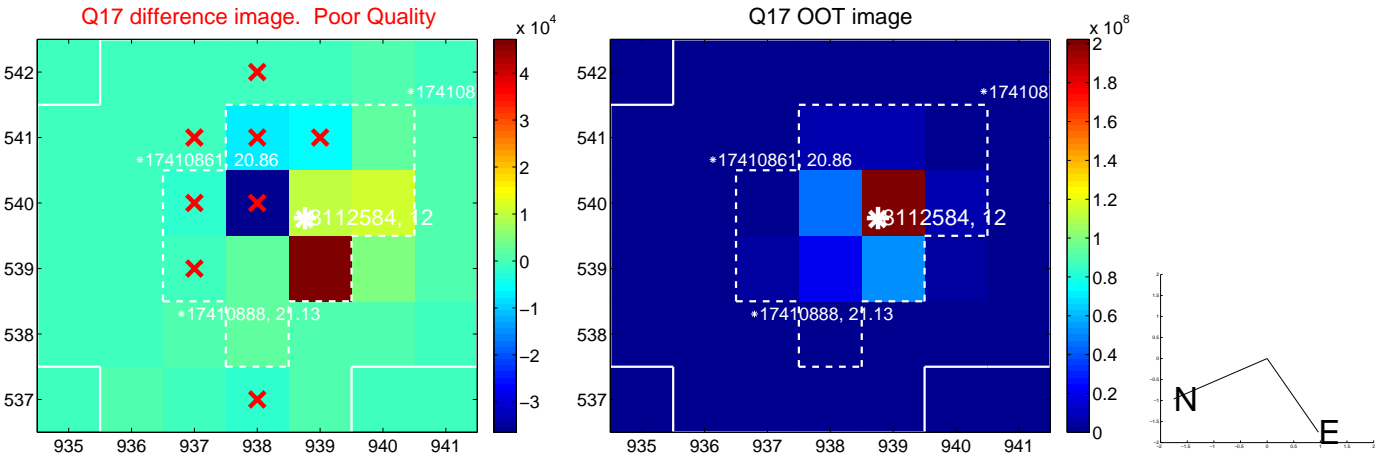
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



folded centroid time series figure for this object.

UKIRT Image

