

KIC 005360548

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})
005360548-01	OBS	No	0.515333	131.925782	0.8	4.328	7.9	3.4	2.85	8645	0.27	164374.59

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
005360548-01	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.

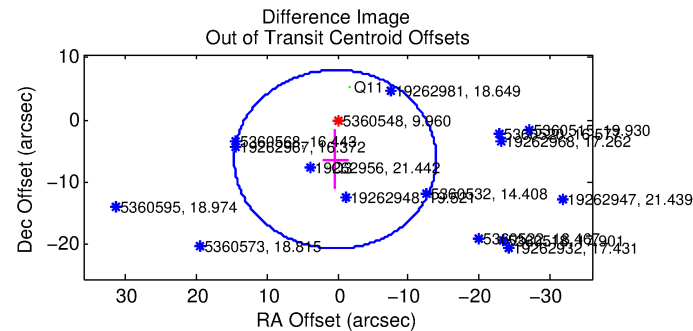
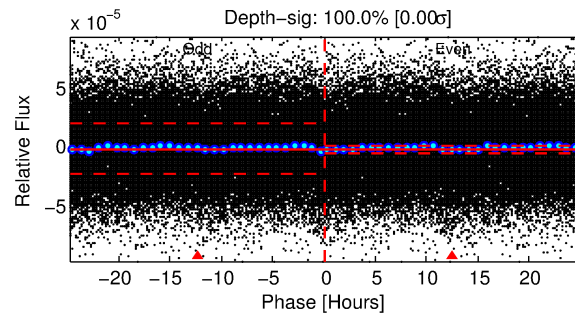
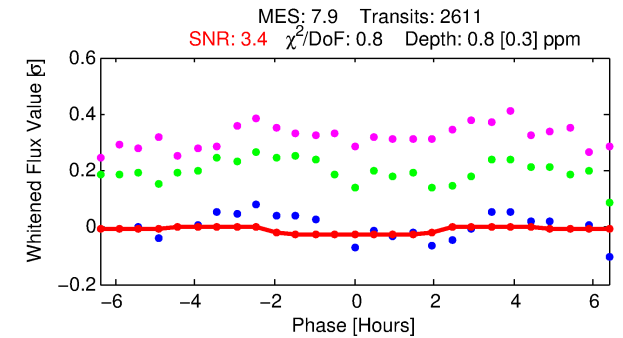
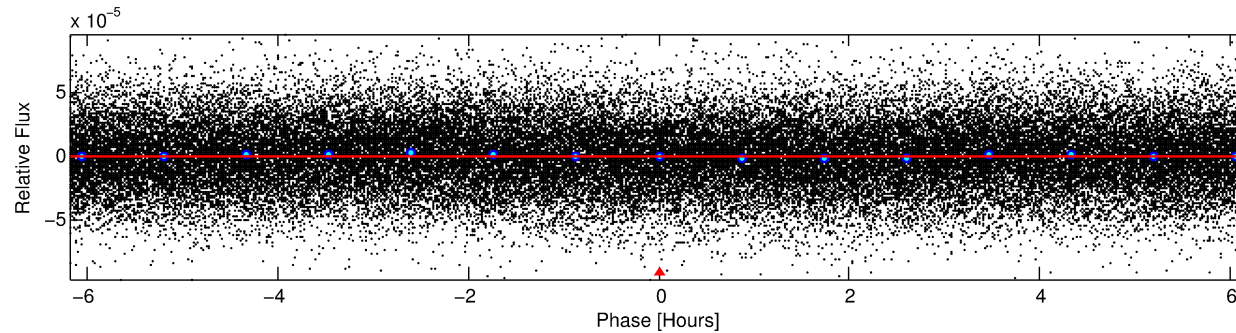
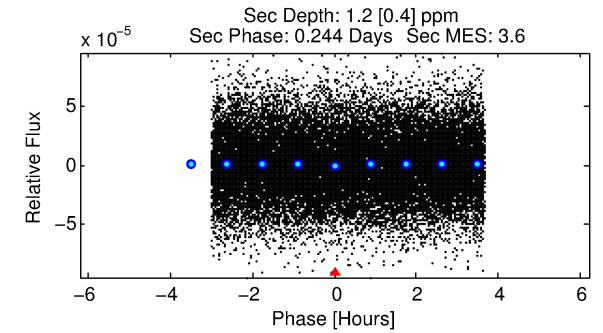
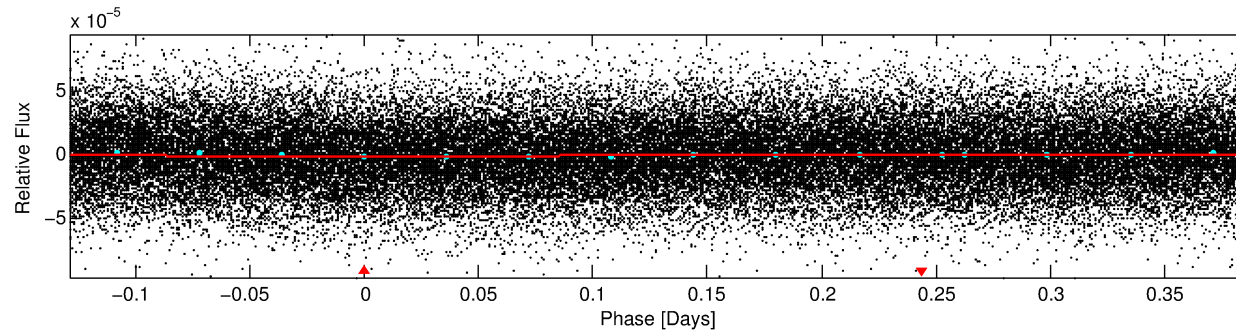
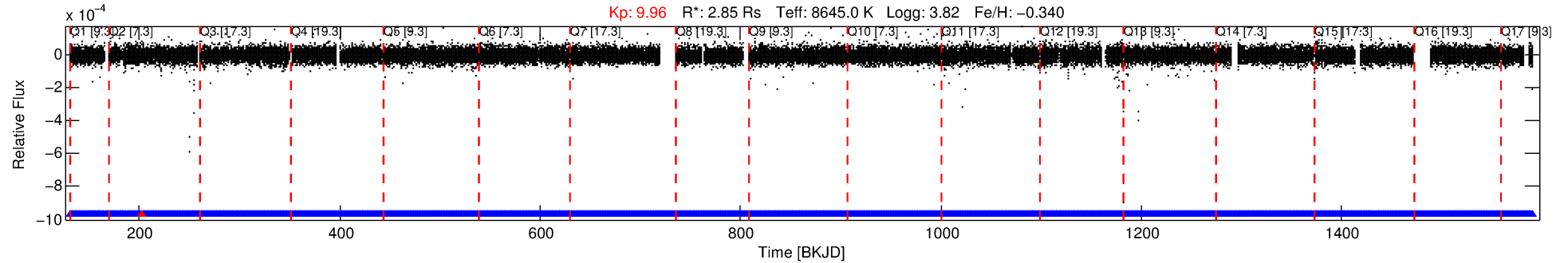
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 005360548-01

No Significant Match Found

DV One-Page Summary

KIC: 5360548 Candidate: 1 of 1 Period: 0.515 d



DV Fit Results:

Period = 0.51533 [0.00003] d
Epoch = 131.9258 [0.0110] BKJD
Rp/R* = 0.0009 [0.0007]
a/R* = 1.09 [0.83]
b = 0.50 [6.96]
Seff = 164374.59 [77431.84]
Teff = 5134 [605] K
Rp = 0.27 [0.22] Re
a = 0.0157 [0.0047] AU
Ag = 2.22 [3.55] [0.34σ]
Teffp = 9690 [3707] K [1.21σ]

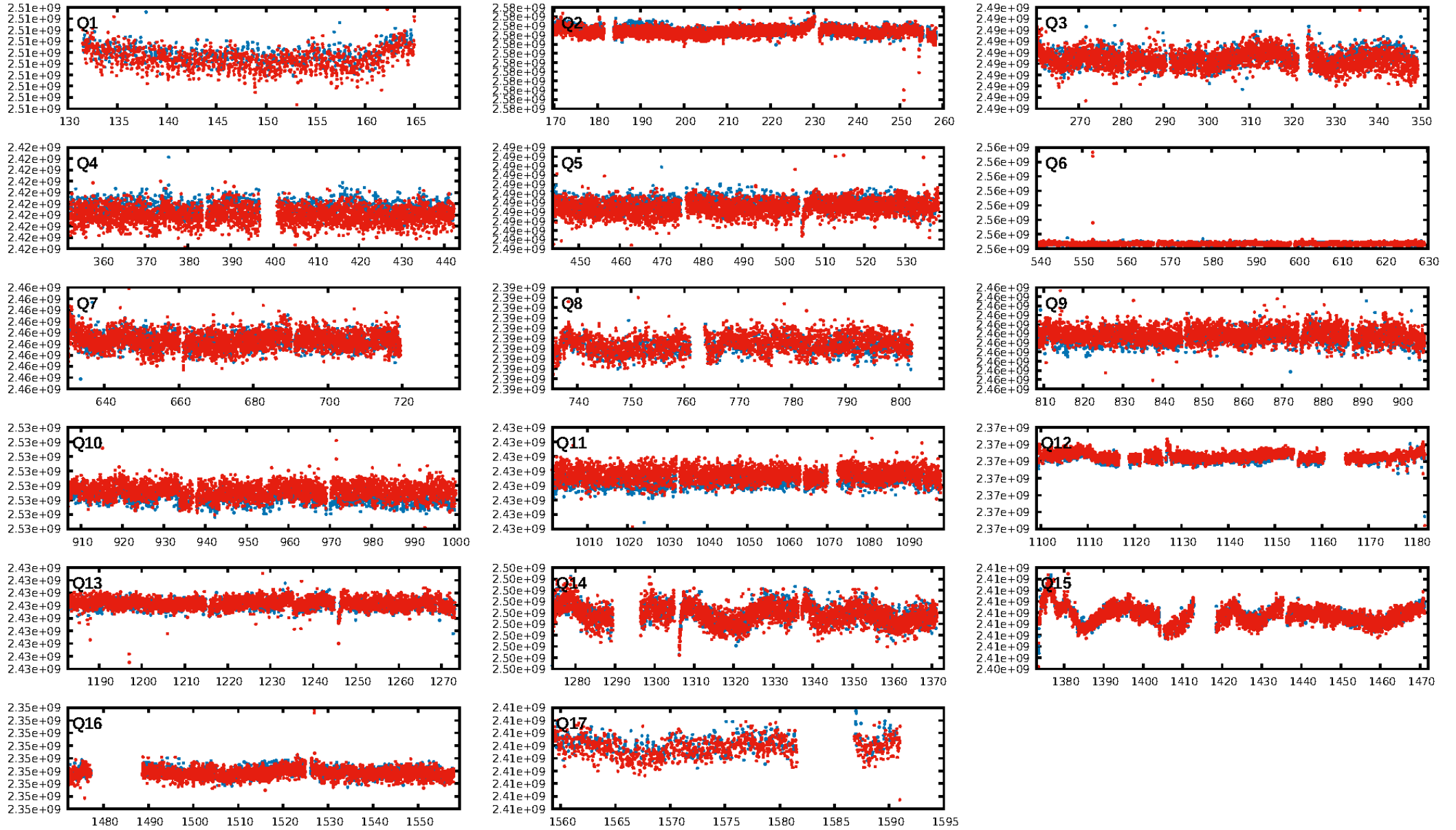
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [2493/2494]
GhostDiagnostic-chr: N/A
Centroid-sig: N/A
Centroid-so: N/A
OotOffset-rm: 6.332 arcsec [1.33σ]
KicOffset-rm: 5.630 arcsec [1.19σ]
OotOffset-st: 0/2/0/0 [2]
KicOffset-st: 0/2/0/0 [2]
DiffImageQuality-fgm: 0.00 [0/2]
DiffImageOverlap-fno: 1.00 [17/17]

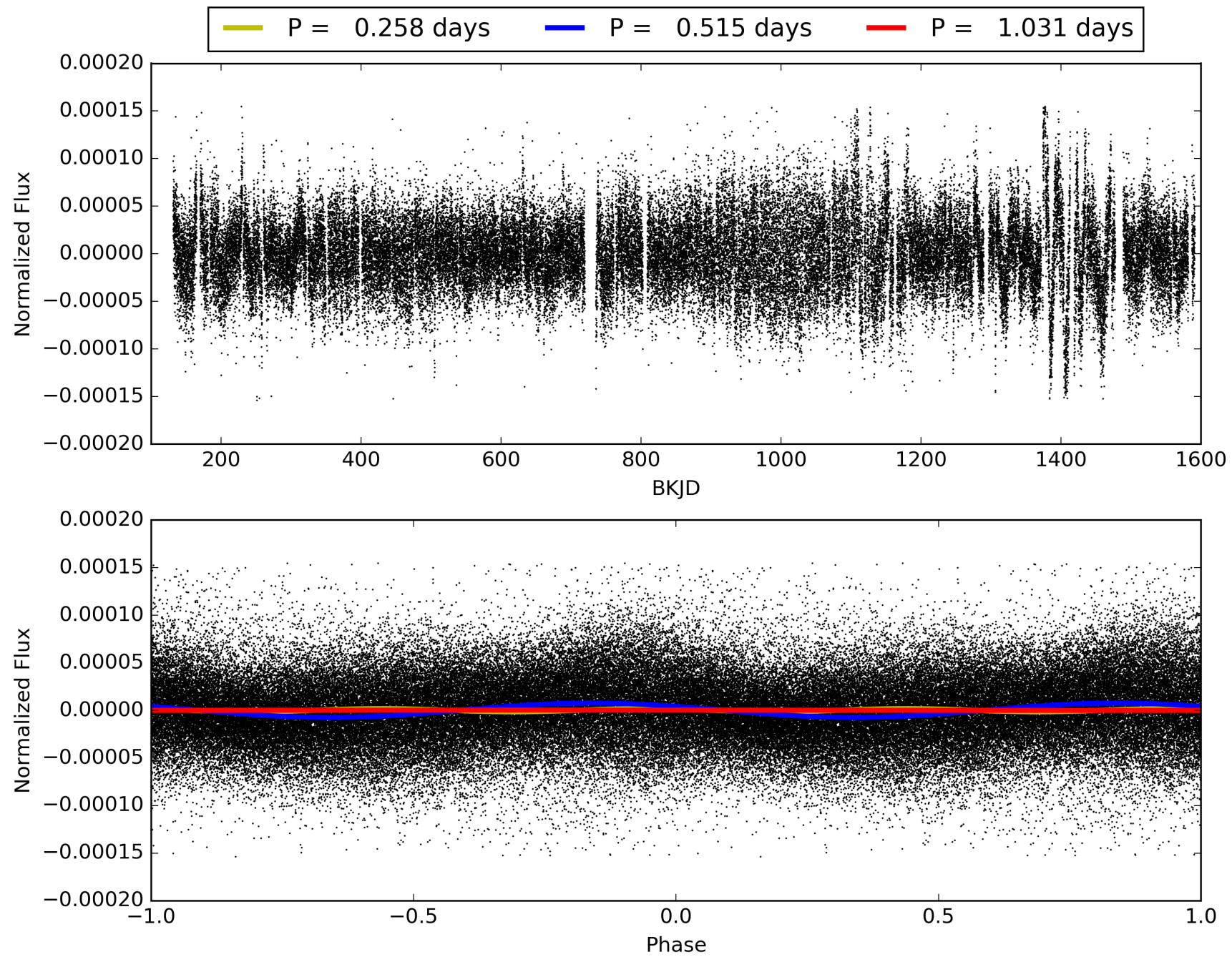
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 31-Jan-2016 12:02:34 Z

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

TCE 005360548-01, PDC Light Curves

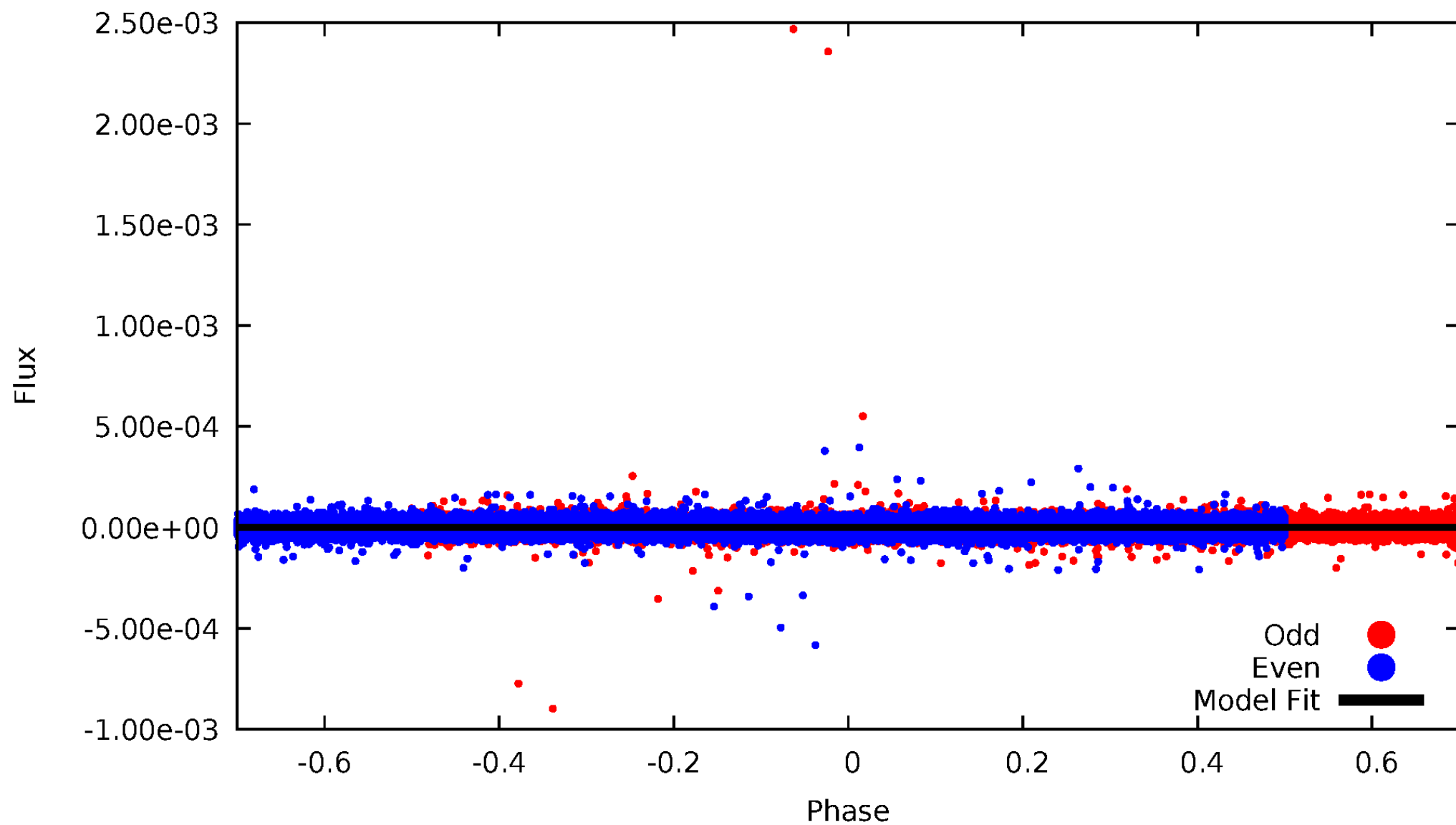


TCE 005360548-01



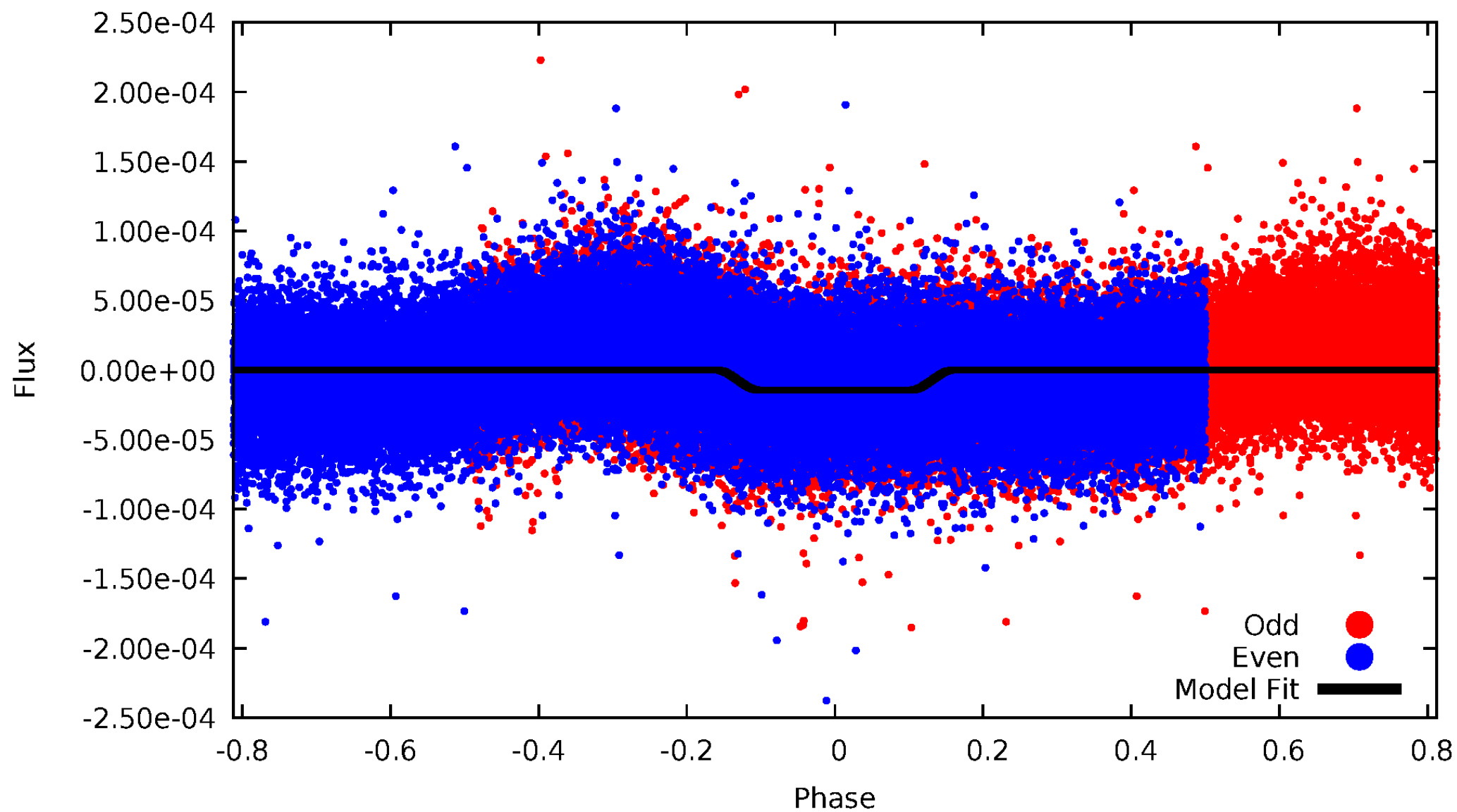
DV Odd/Even

TCE 005360548-01



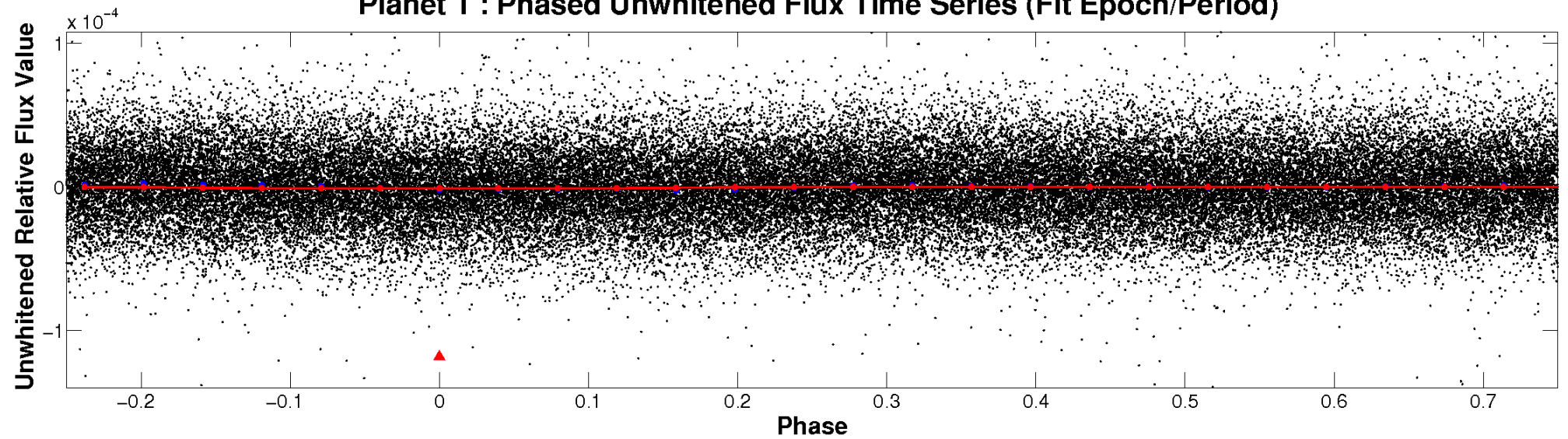
ALT Odd/Even

TCE 005360548-01

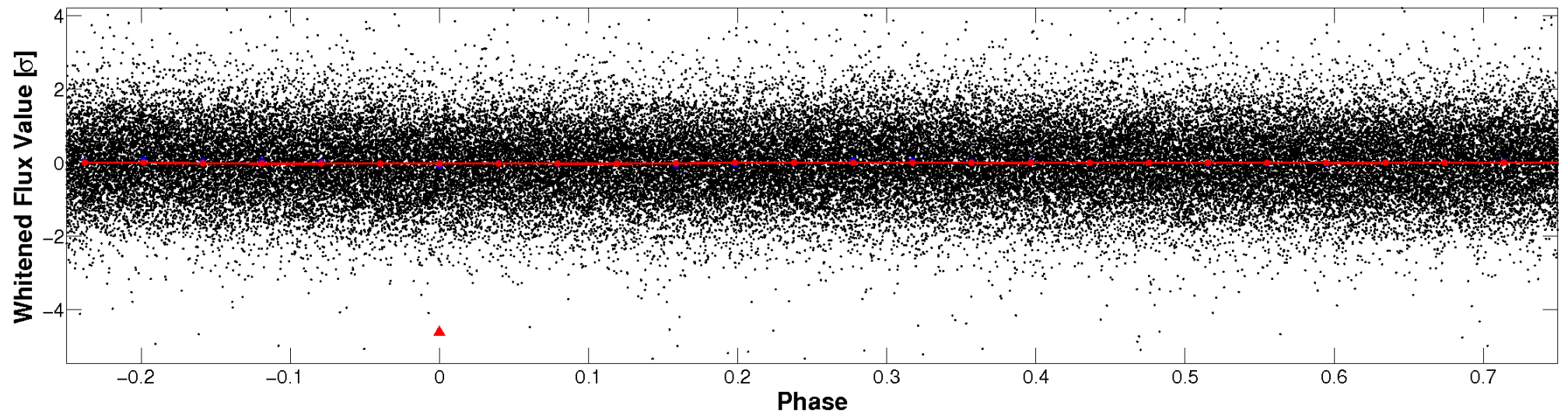


Non-Whitened Vs. Whitened Light Curve

Planet 1 : Phased Unwhitened Flux Time Series (Fit Epoch/Period)

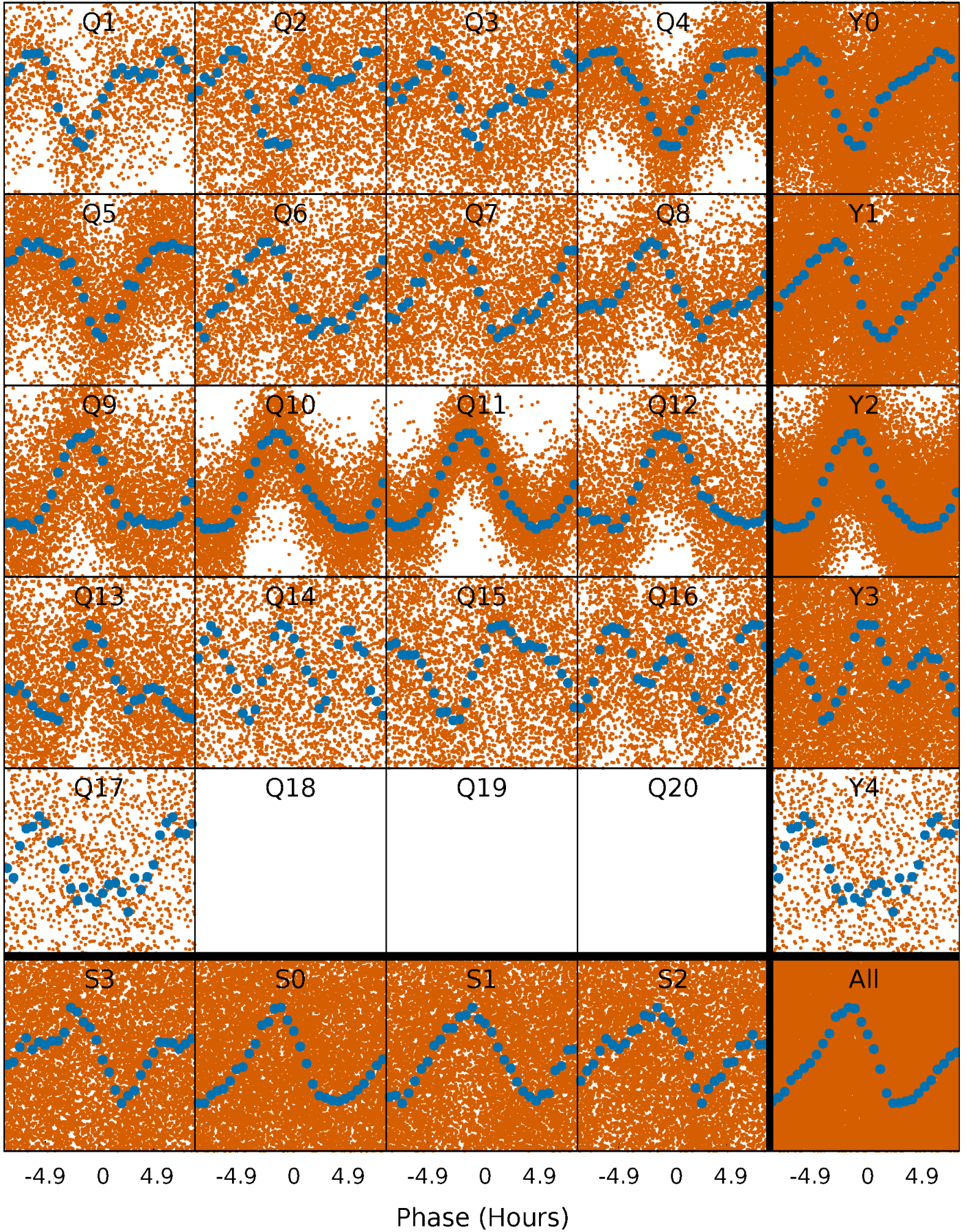


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



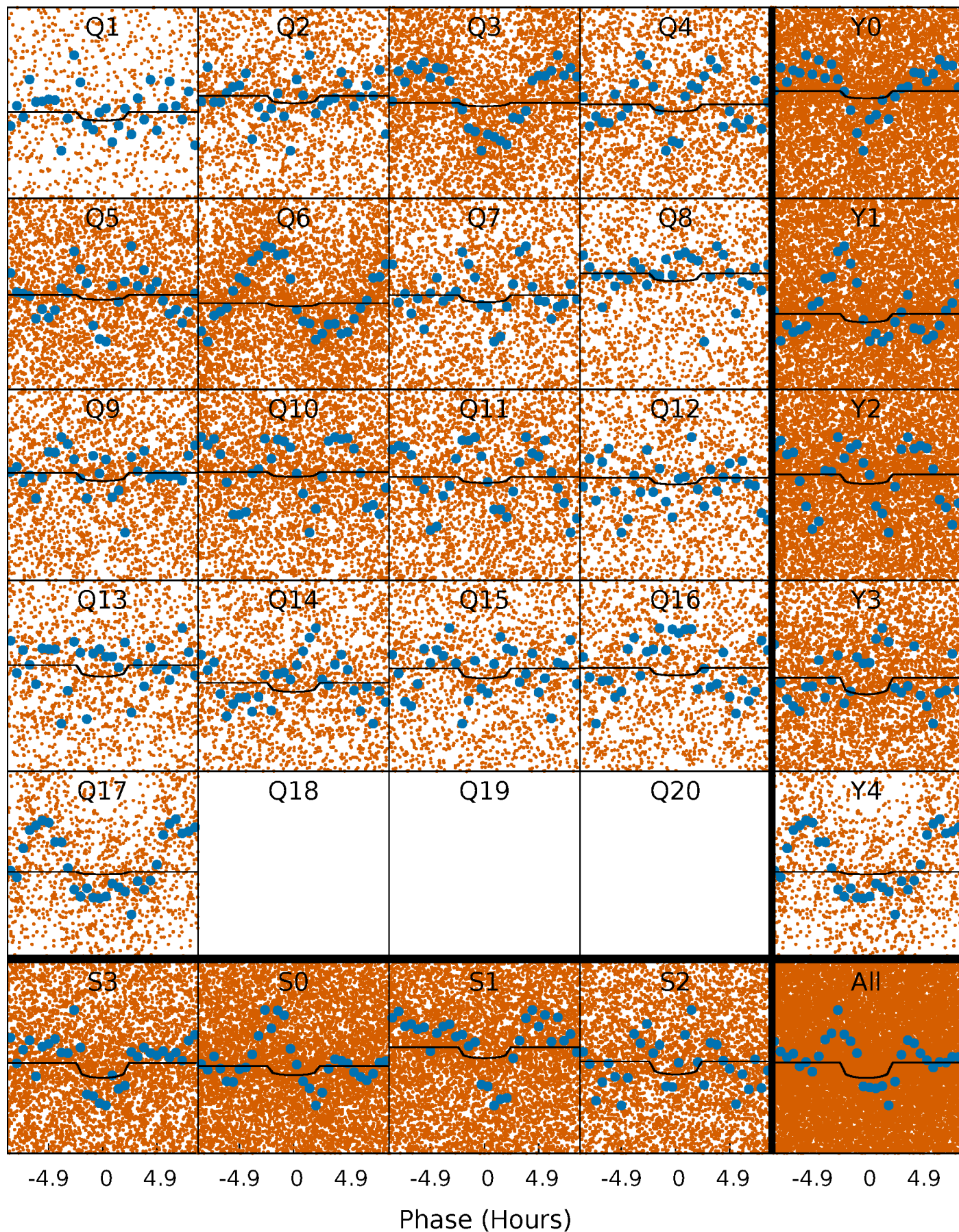
PDC Quarter-Phased Transit Curves

TCE 005360548-01 P= 0.515333 Days $T_0=131.925782$ (BKJD)



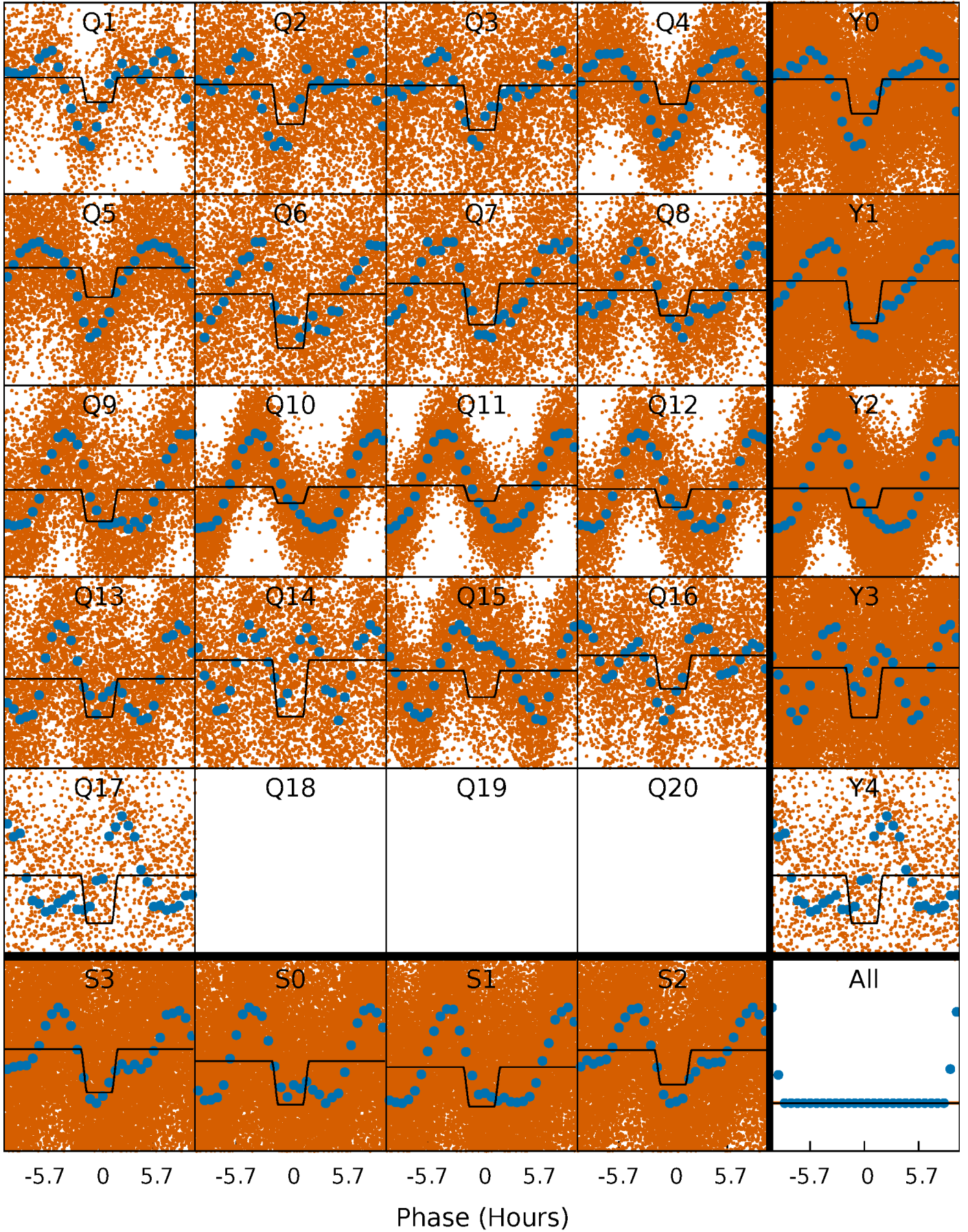
DV Quarter-Phased Transit Curves

TCE 005360548-01 P= 0.515333 Days $T_0=131.925782$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

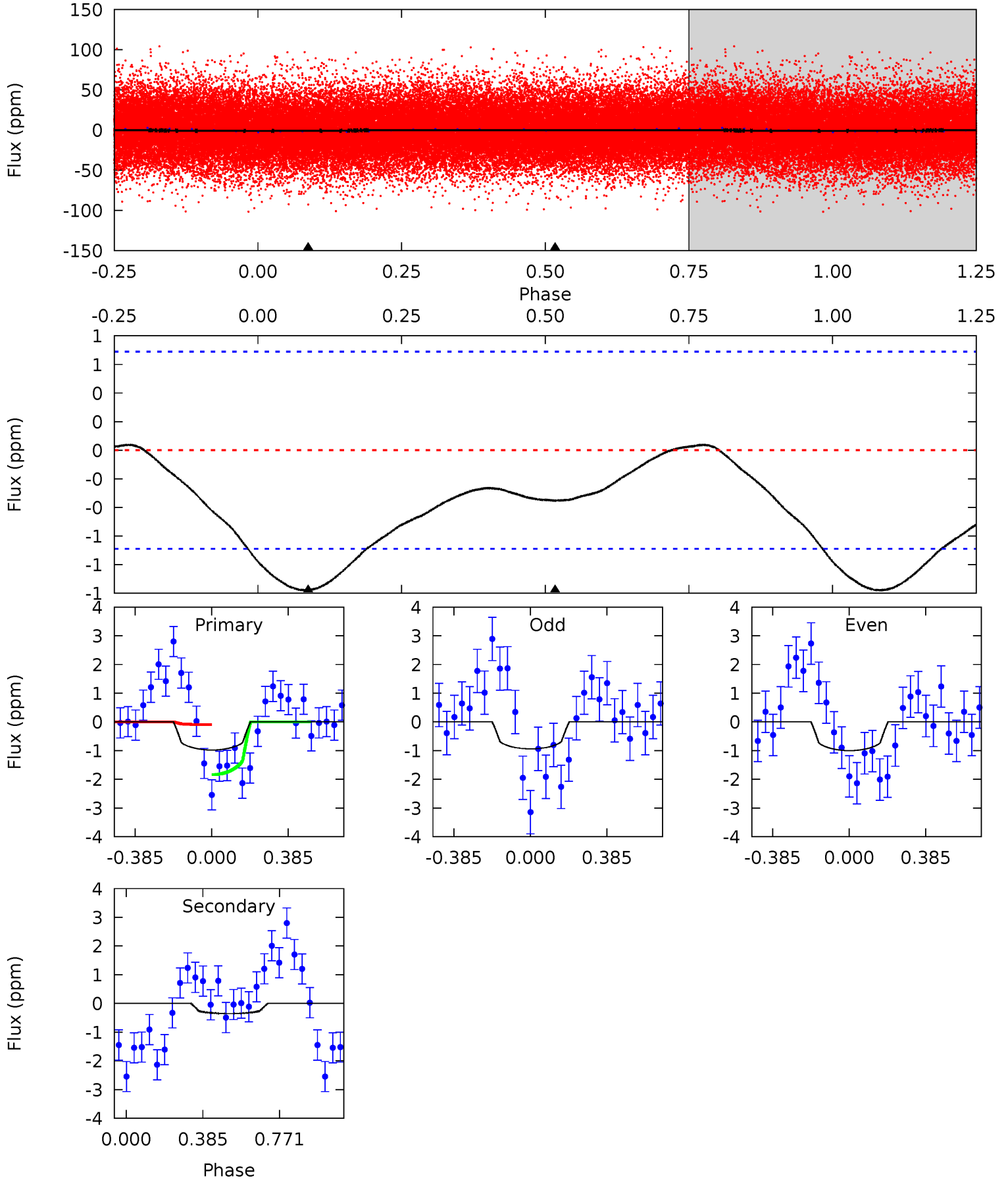
TCE 005360548-01 P= 0.515406 Days $T_0=131.906474$ (BKJD)



DV Model-Shift Uniqueness Test

005360548-01, P = 0.515333 Days, E = 131.410449 Days

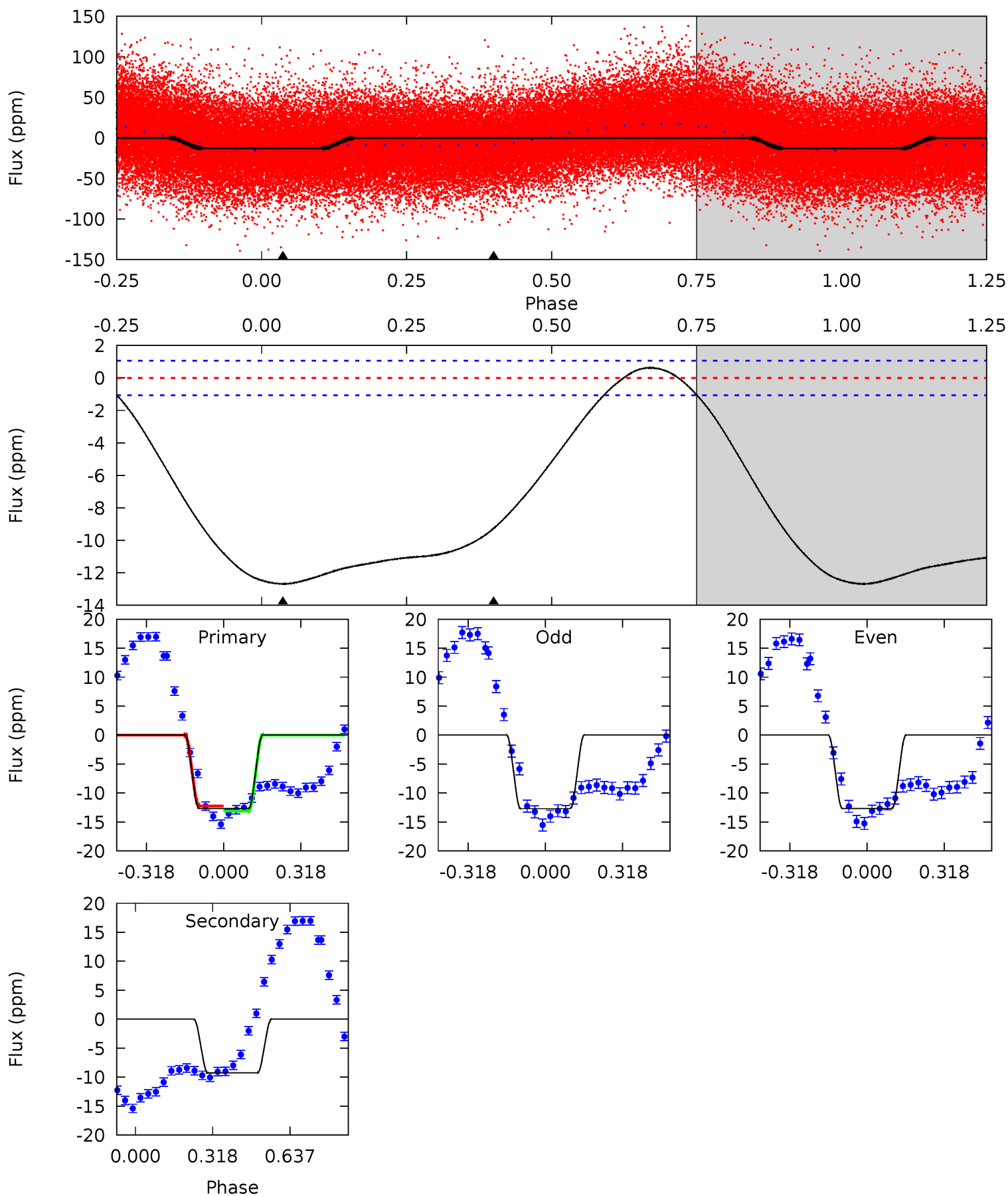
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
6.07	2.19	0	0	4.27	0.87	0.41	6.07	6.07	2.19	2.19	0.19	0.89	0.04	5.44



Alt Model-Shift Uniqueness Test

005360548-01, P = 0.515406 Days, E = 131.391068 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
51.4	37.5	0	0	4.32	1.00	3.06	51.4	51.4	37.5	37.5	0.10	0.95	0.05	2.07



Stellar Parameters For KIC 005360548

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	8645^{+60}_{-94}	$3.819^{+0.272}_{-0.048}$	$-0.340^{+0.150}_{-0.150}$	$2.851^{+0.229}_{-0.914}$	$1.956^{+0.089}_{-0.214}$	$0.119^{+0.205}_{-0.019}$
	+1%/-1%	+7%/-1%	+44%/-44%	+8%/-32%	+5%/-11%	+172%/-16%
Source	SPE68	SPE68	SPE68	DSEP		

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

Secondary Eclipse Parameters for KIC 005360548-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-0 ± 0	$0.26^{+0.19}_{-0.14}$	7059^{+232}_{-598}	5546^{+5084}_{-10216}	$0.644^{+2.712}_{-0.478}$
Alt.	-9 ± 0	$1.10^{+0.24}_{-0.24}$	7088^{+210}_{-551}	6864^{+1138}_{-882}	$1.035^{+0.620}_{-0.336}$

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 $A_{obs} \gg 1.0$

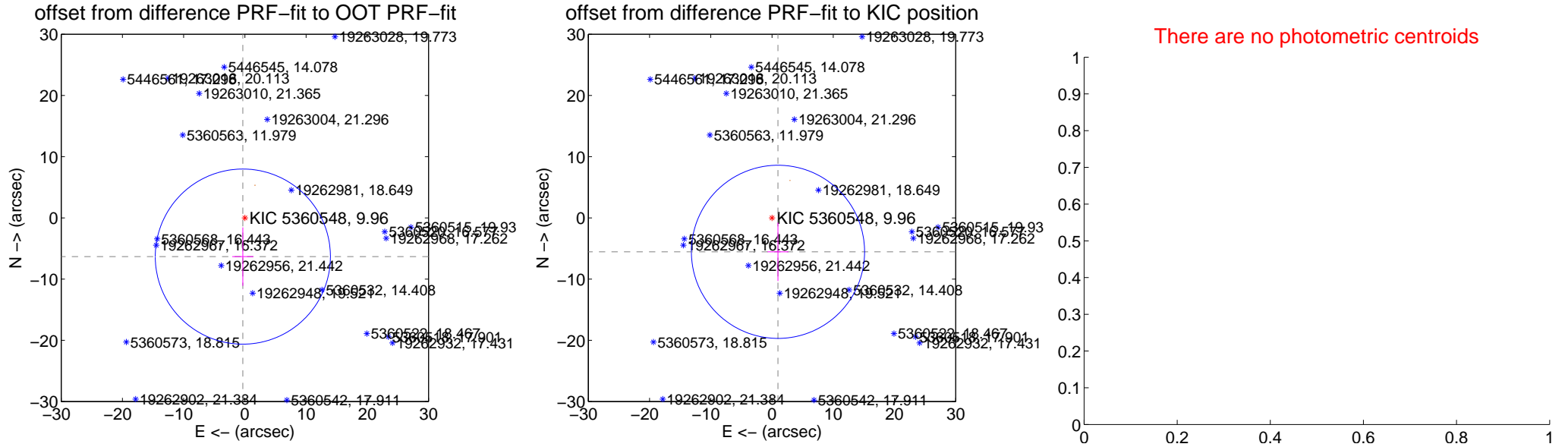
DV Centroid Data

Supplemental centroid analysis for 005360548-01. **Kepler magnitude: 9.96.** Transit SNR 3.39

There are 0 quarters with good PRF difference image offsets

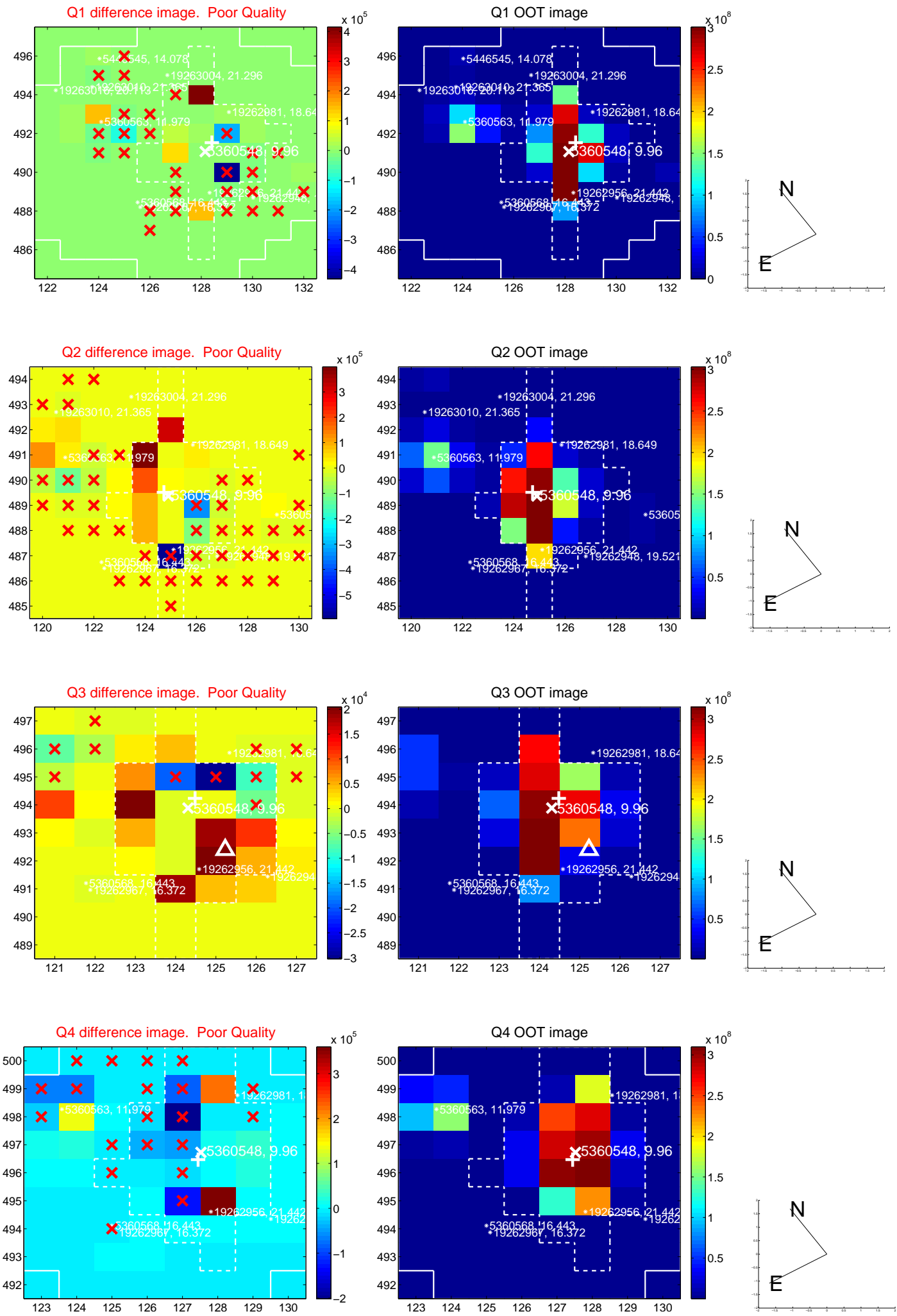
The direct PRF centroid is offset from the target star catalog position by about 1.51 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	6.332 ± 4.768	1.33	0.330 ± 1.734	-6.323 ± 4.773
PRF-fit source offset from KIC position	5.630 ± 4.714	1.19	-0.979 ± 1.713	-5.544 ± 4.777
photometric centroid source offset	—	—	—	—

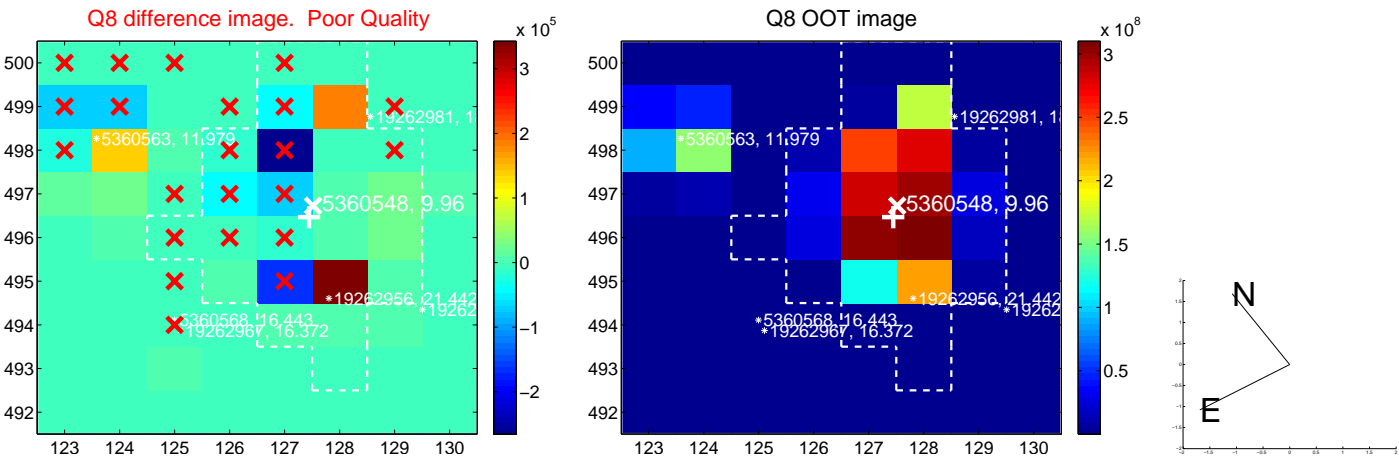
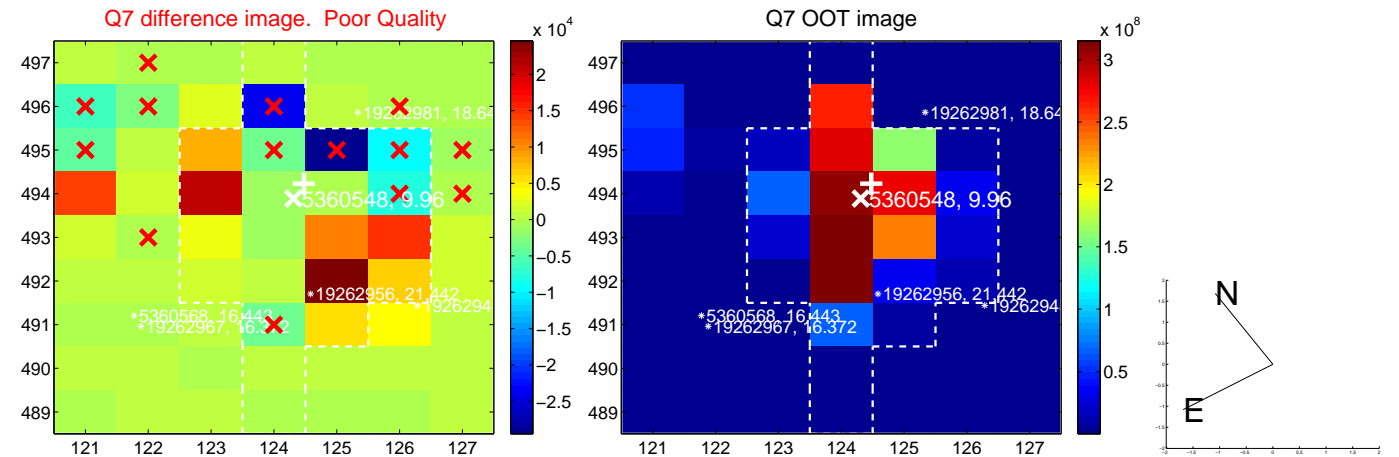
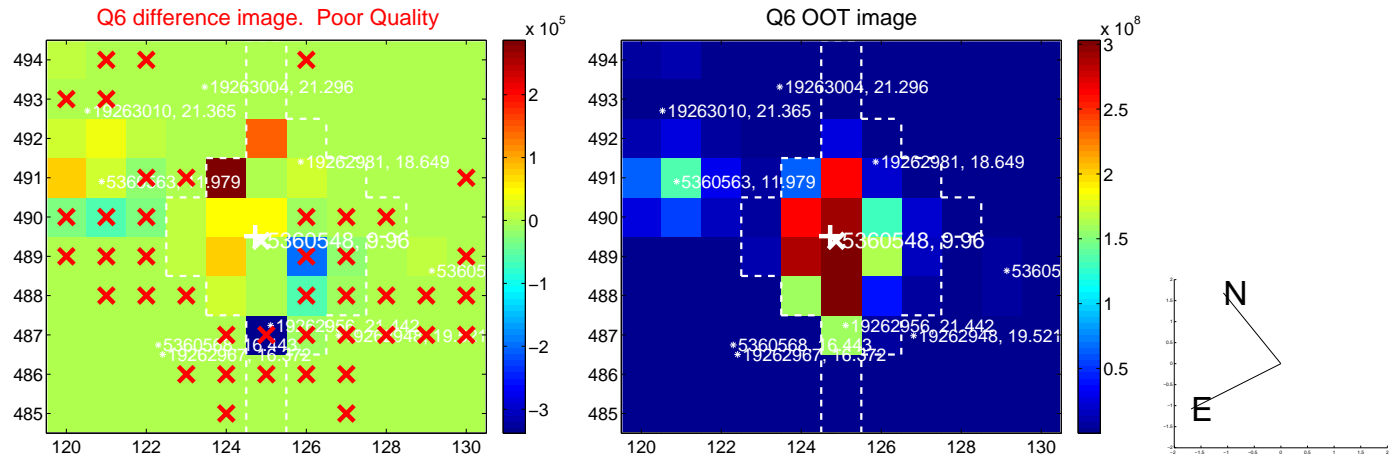
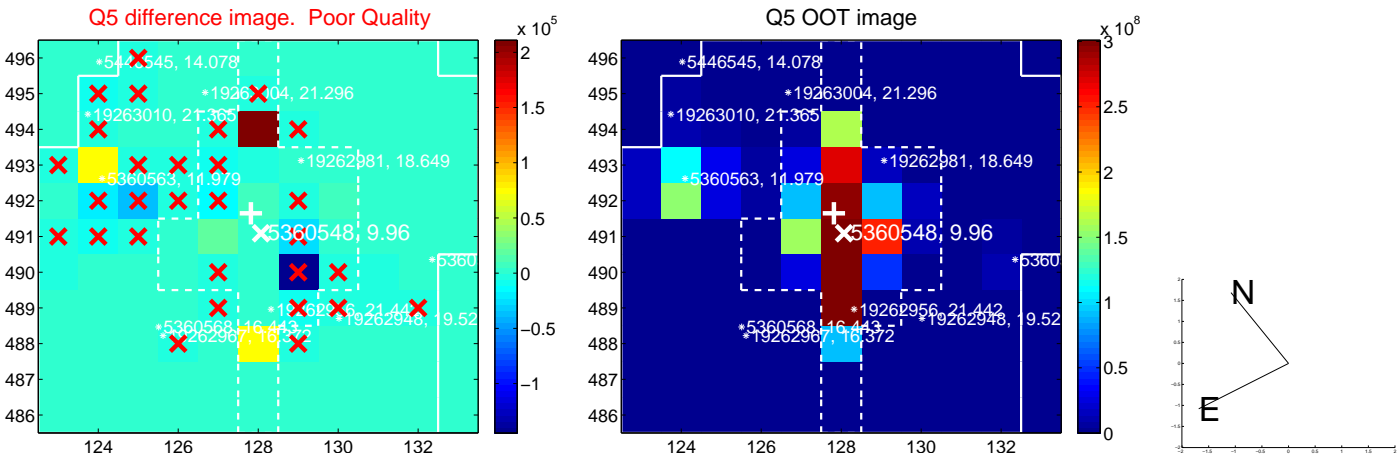


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets;** magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

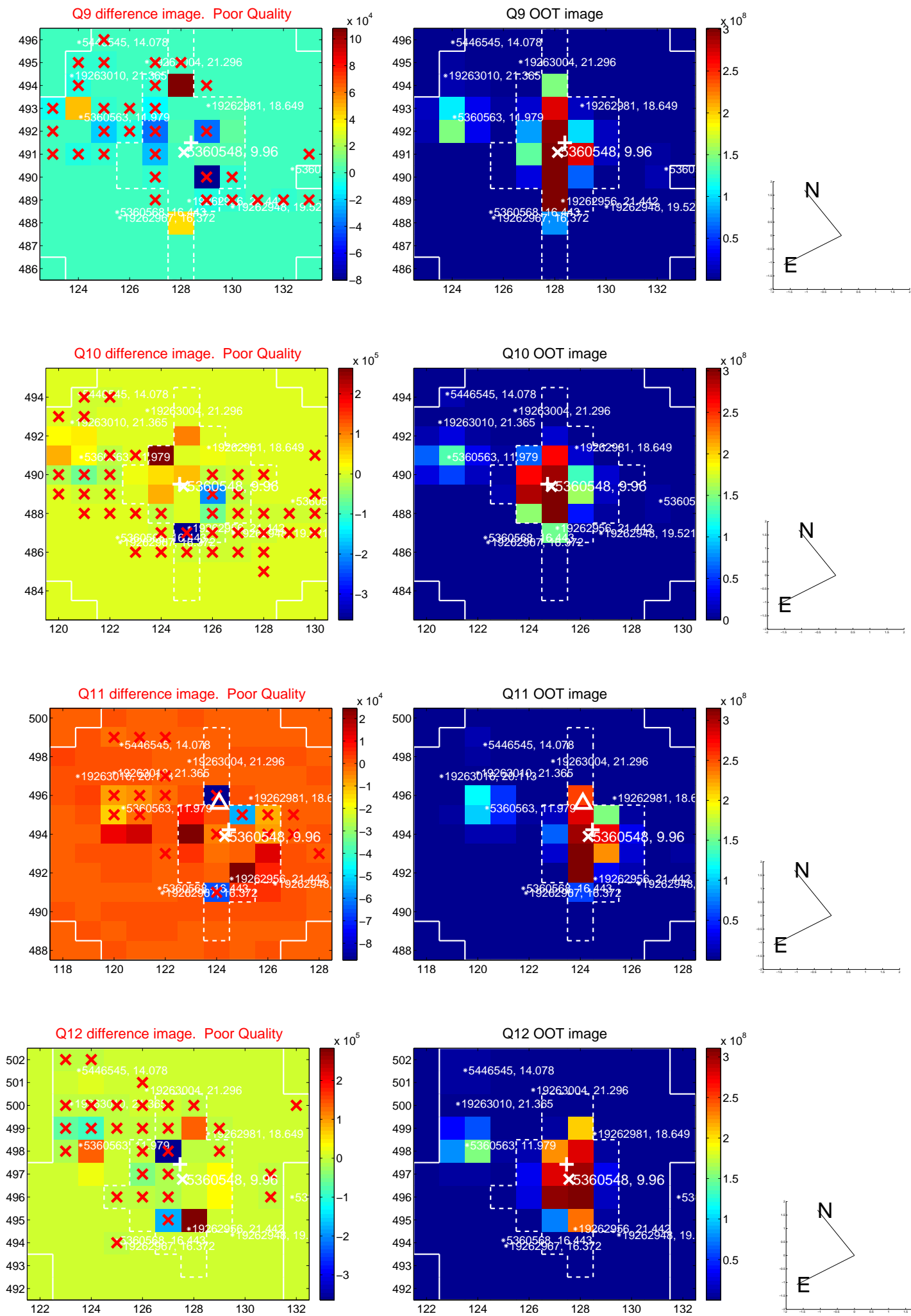
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



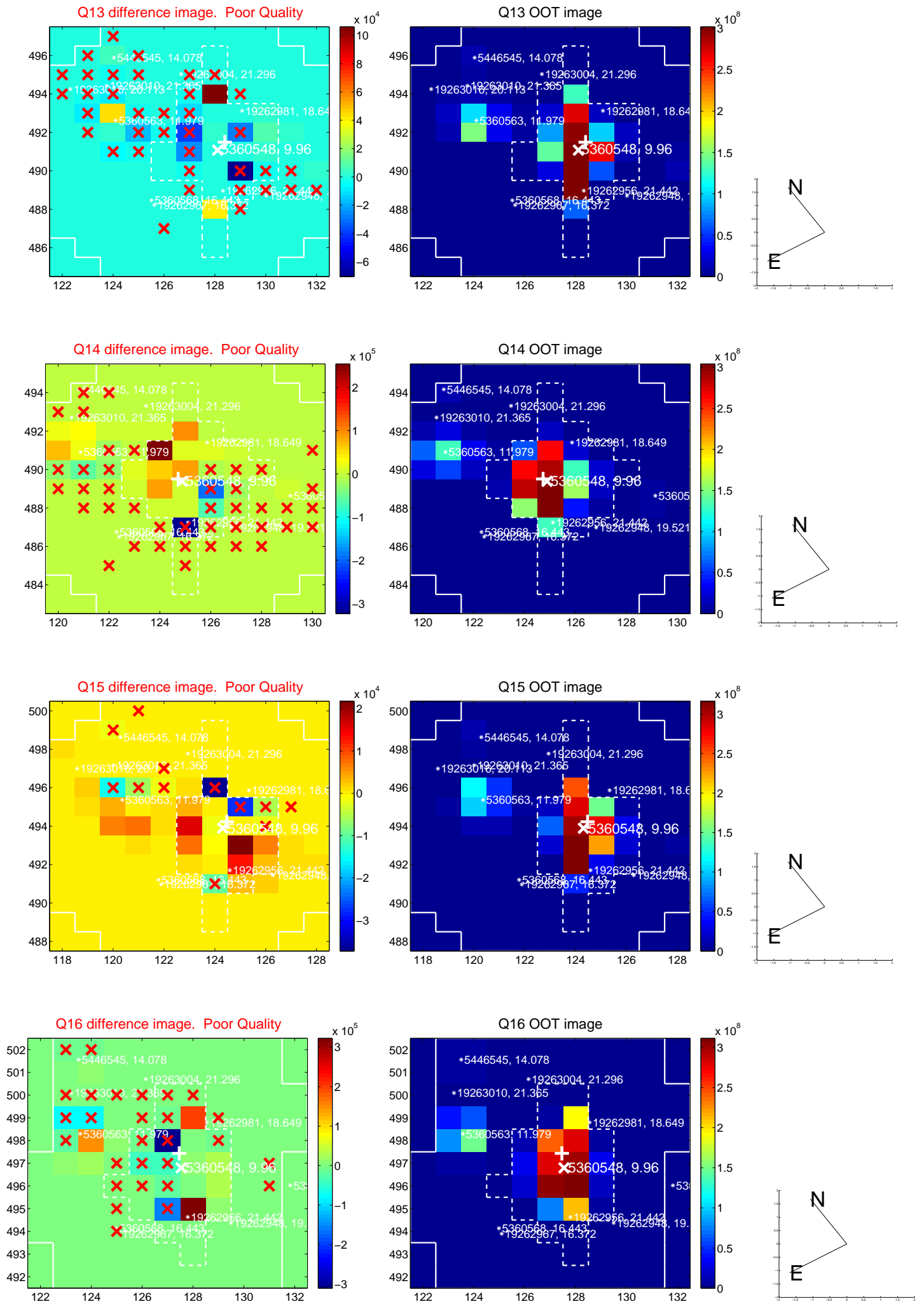
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



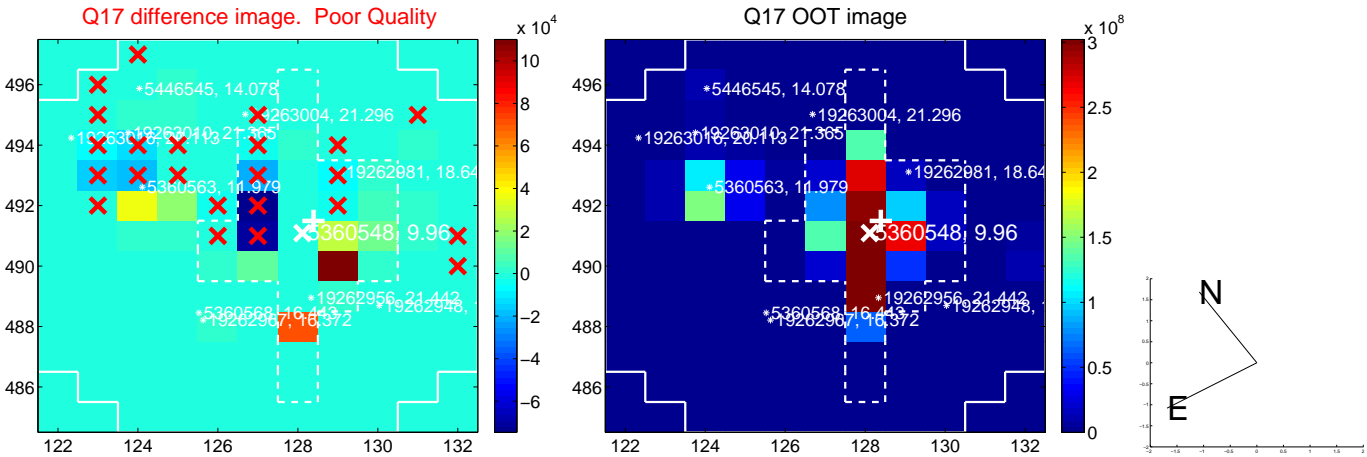
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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.



folded centroid time series figure for this object.

UKIRT Image

