

KIC 005598393

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})
005598393-01	OBS	No	0.733285	132.141202	162.2	2.500	8.5	-1.0	3.38	7063	4.37	65997.35

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
005598393-01	OBS	FP	0.00	1	0	1	0	LPP_DV—LPP_ALT—CENT_NOFITS—HALO_GHOST

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

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

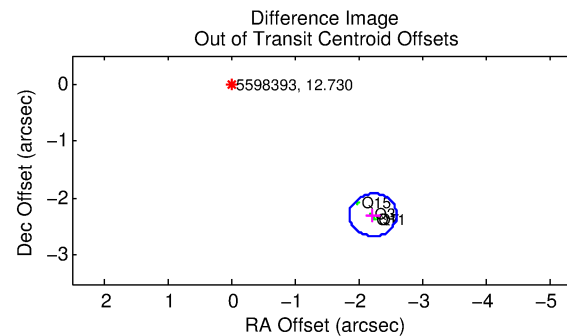
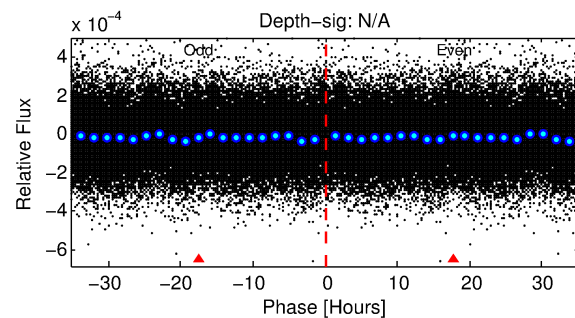
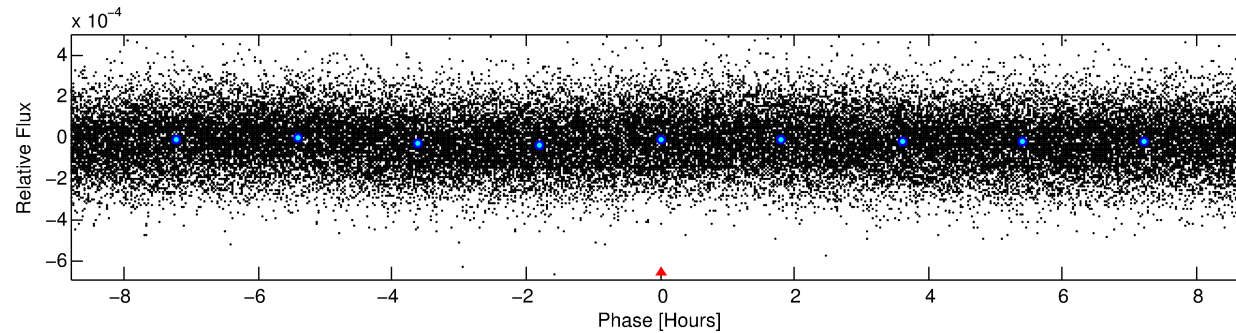
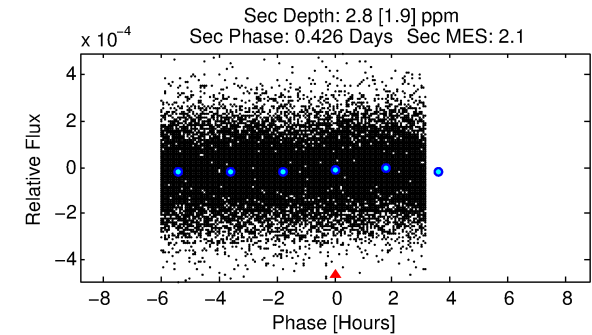
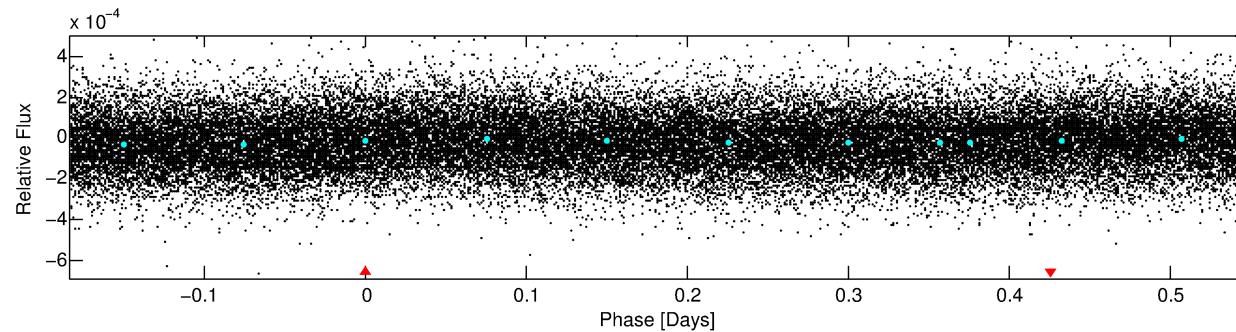
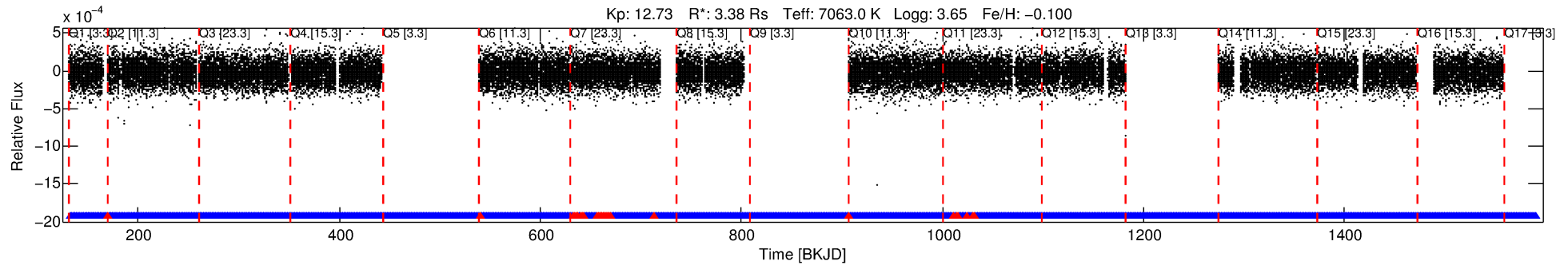
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 005598393-01

No Significant Match Found

DV One-Page Summary

KIC: 5598393 Candidate: 1 of 1 Period: 0.733 d



TPS TCE Results:

Period = 0.73329 d
Epoch = 132.1412 BKJD

DV fit results are unavailable

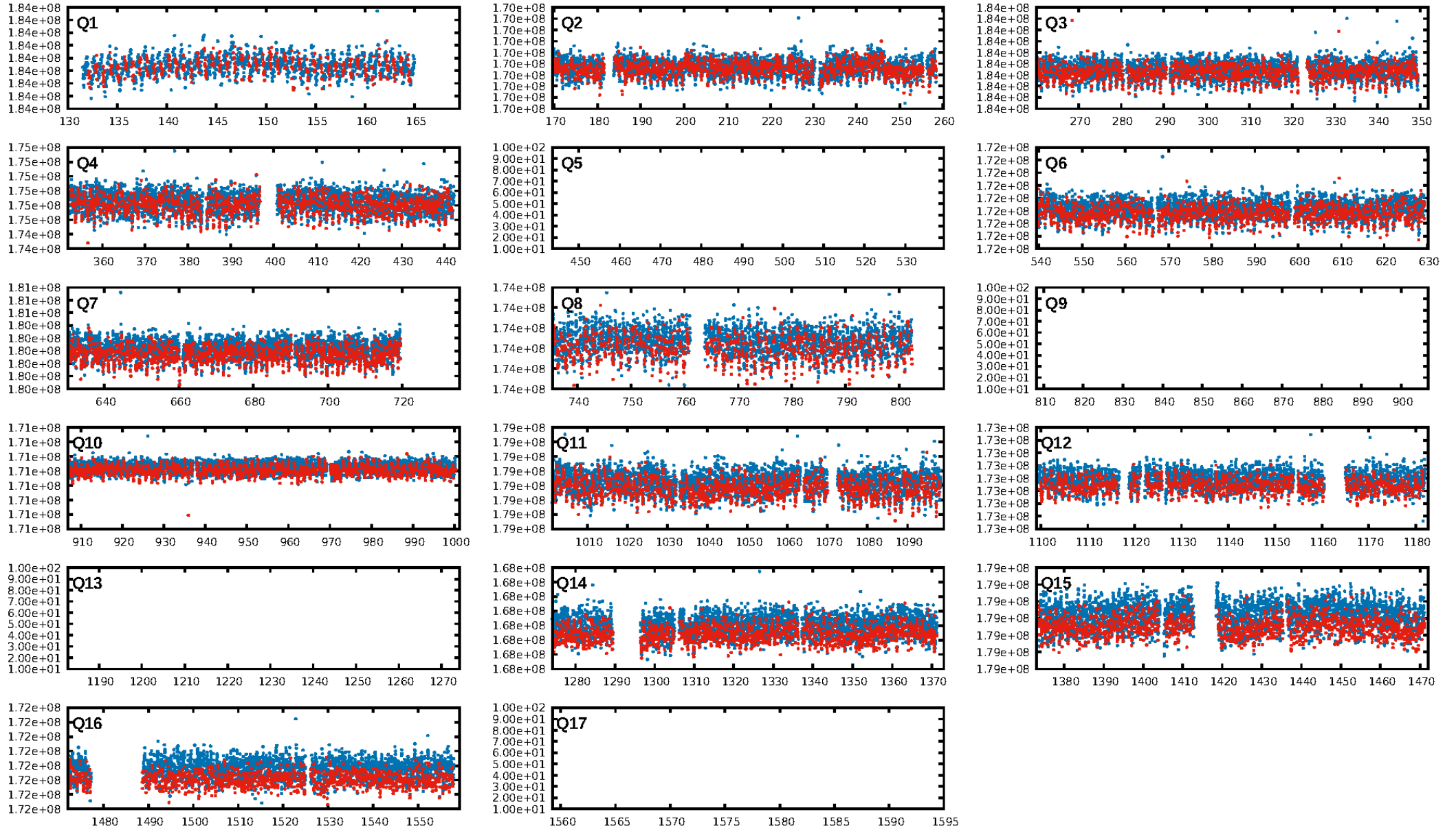
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 7.62e-15
RollingBand-fgt: 0.97 [1348/1387]
GhostDiagnostic-chr: -0.1202
Centroid-sig: 0.2%
Centroid-so: 0.295 arcsec [4.00σ]
OotOffset-rm: 3.199 arcsec [25.80σ]
KicOffset-rm: 3.129 arcsec [29.43σ]
OotOffset-st: 0/4/0/0 [4]
KicOffset-st: 0/4/0/0 [4]
DiffImageQuality-fgm: 0.25 [1/4]
DiffImageOverlap-fno: 1.00 [13/13]

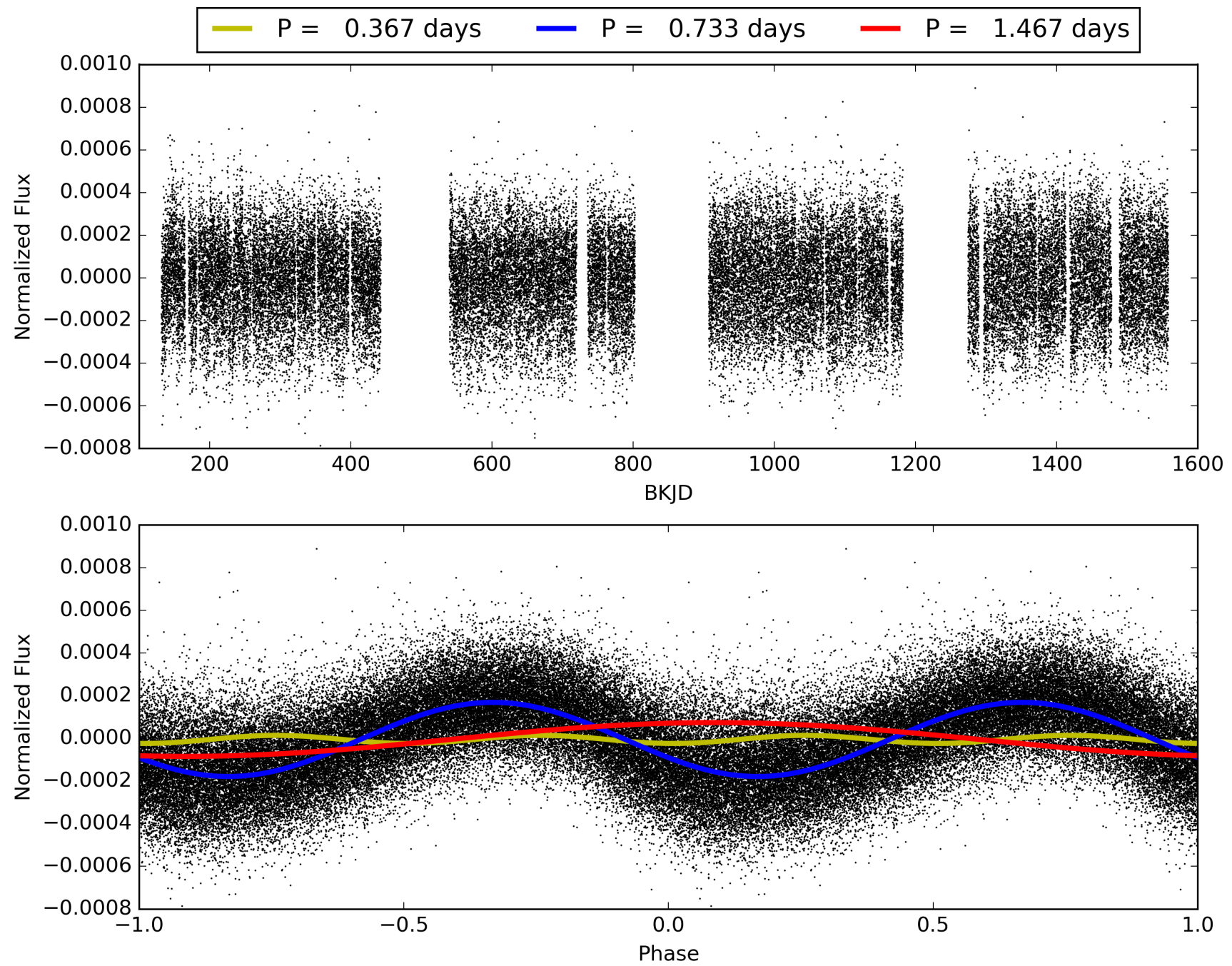
Software Revision: svn-ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 01-Feb-2016 00:45:53 Z

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

TCE 005598393-01, PDC Light Curves

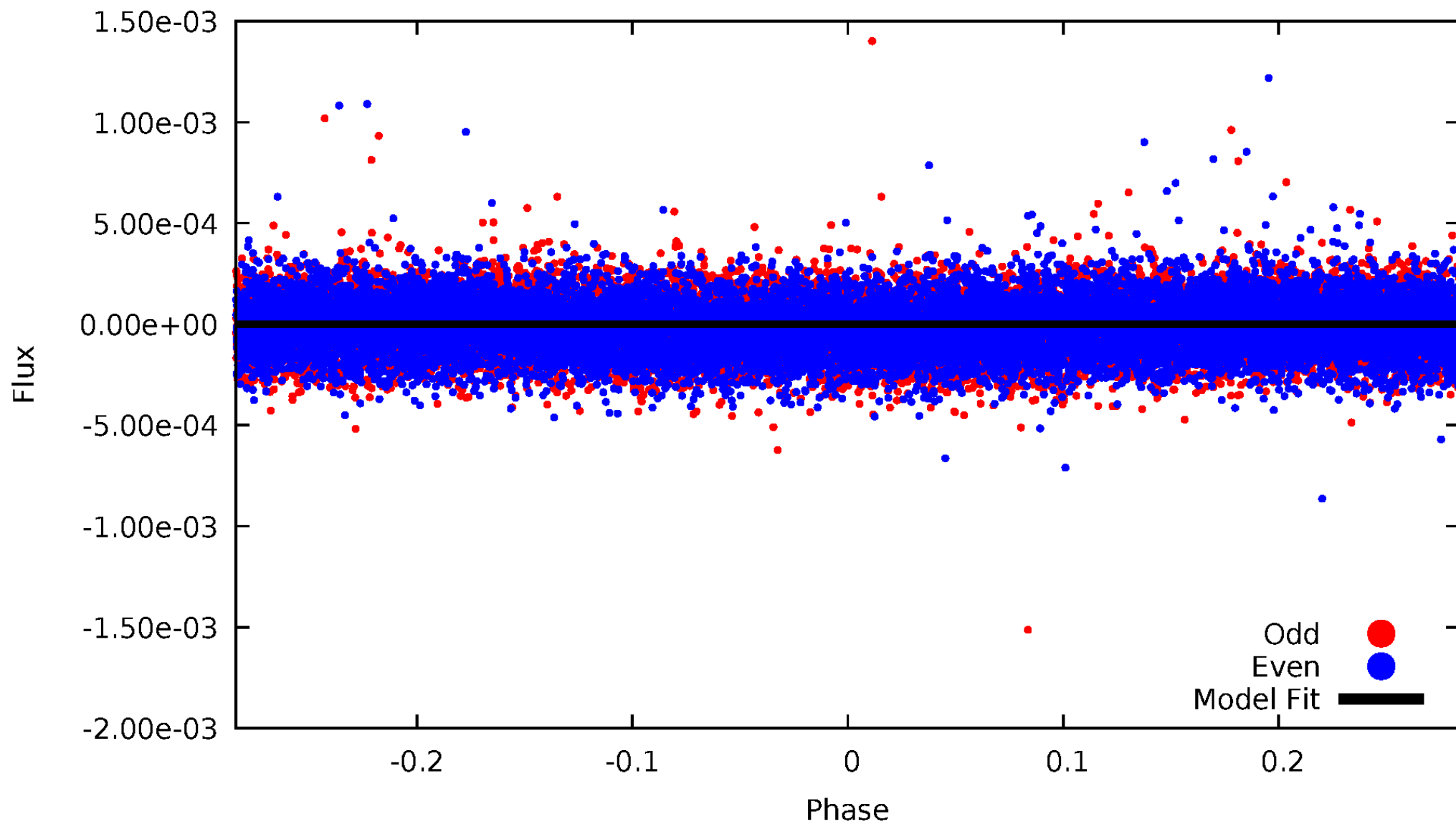


TCE 005598393-01



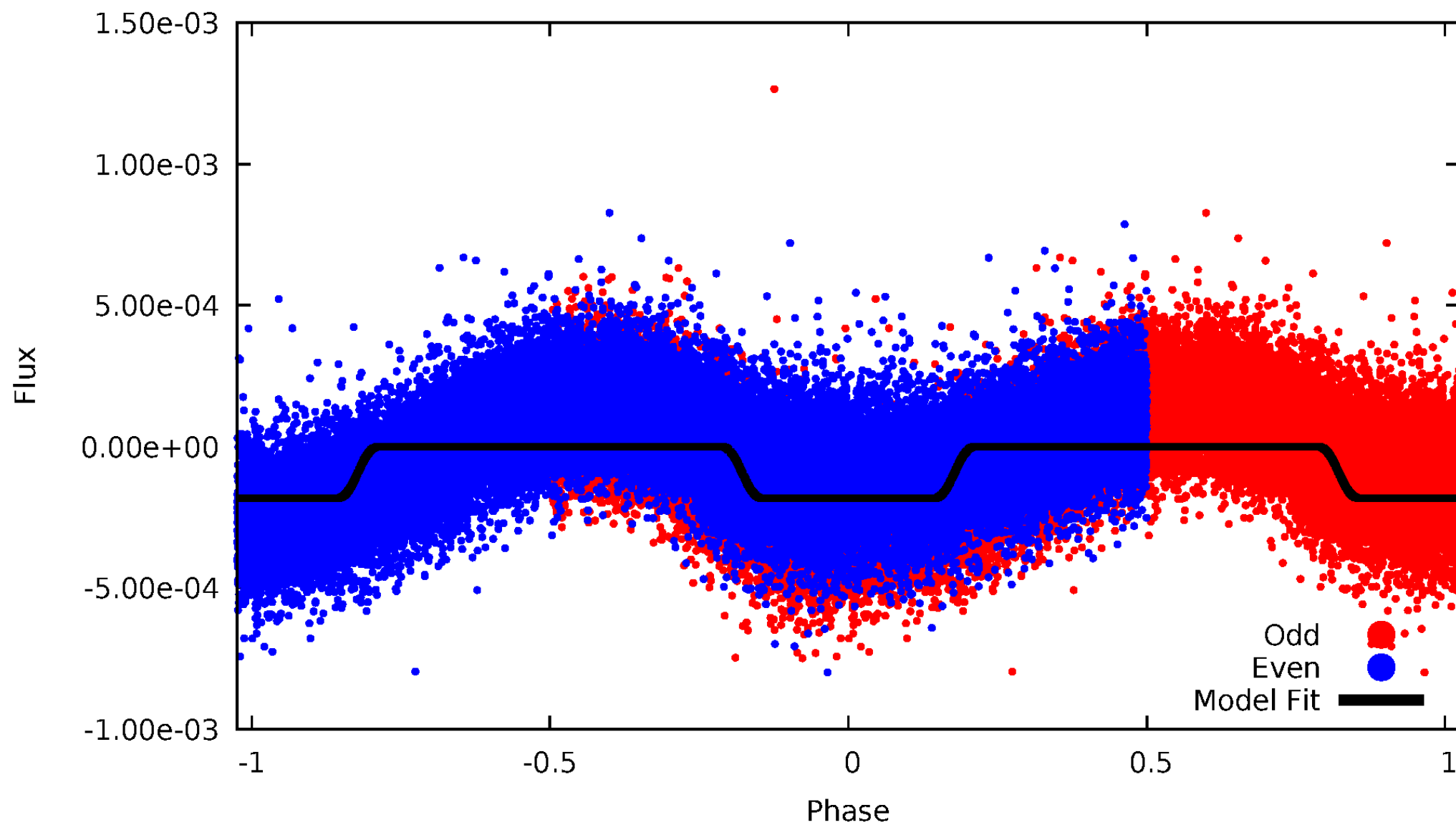
DV Odd/Even

TCE 005598393-01

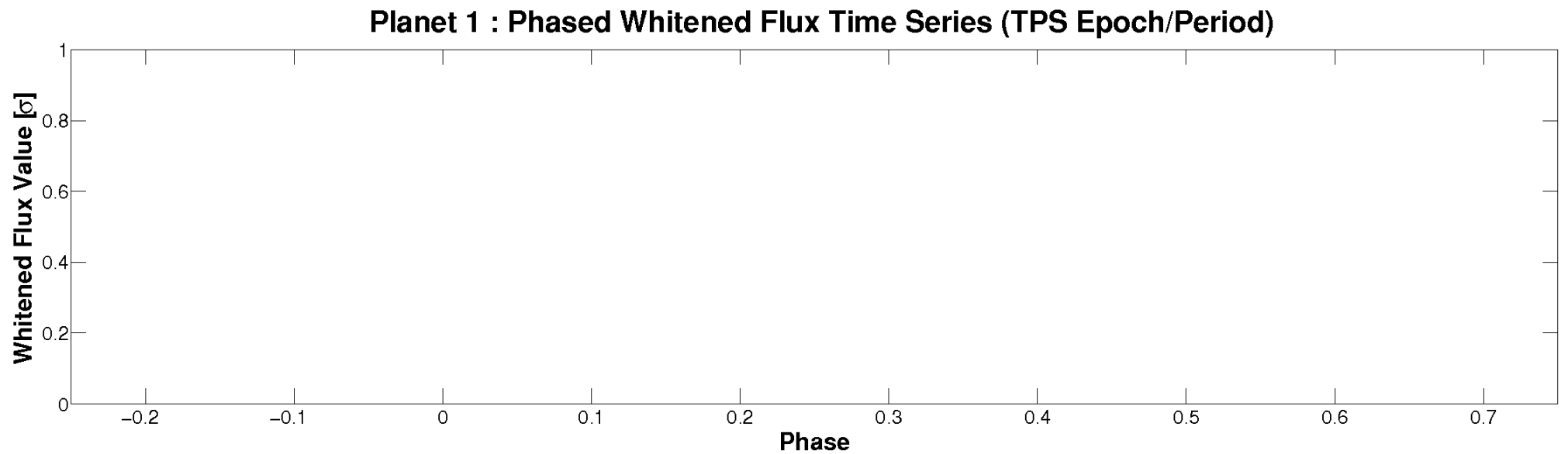
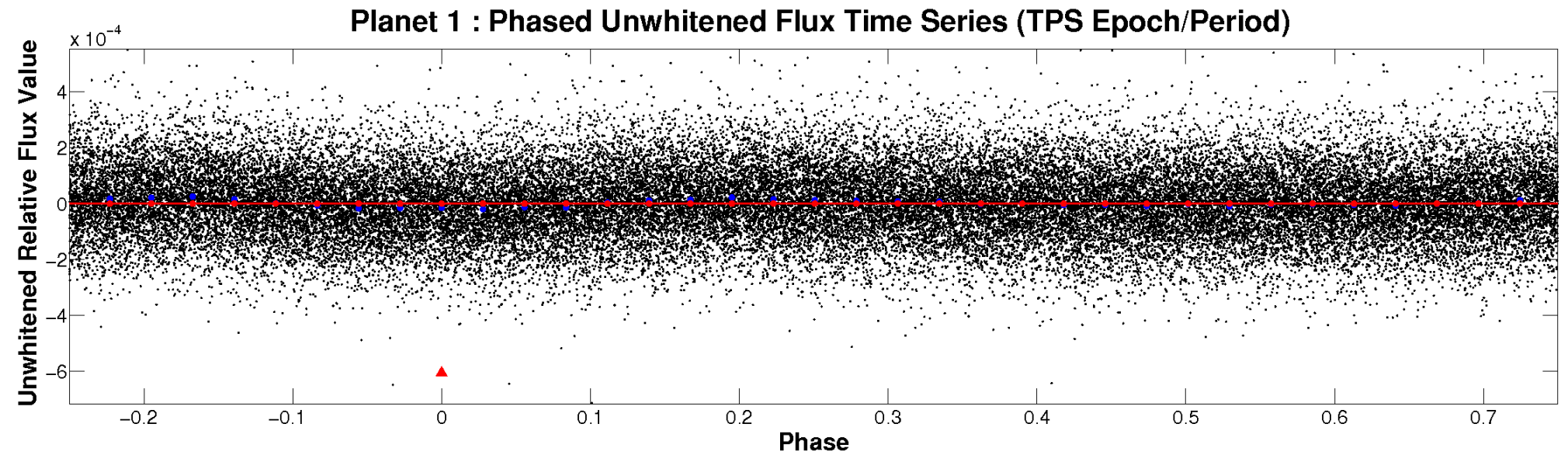


ALT Odd/Even

TCE 005598393-01

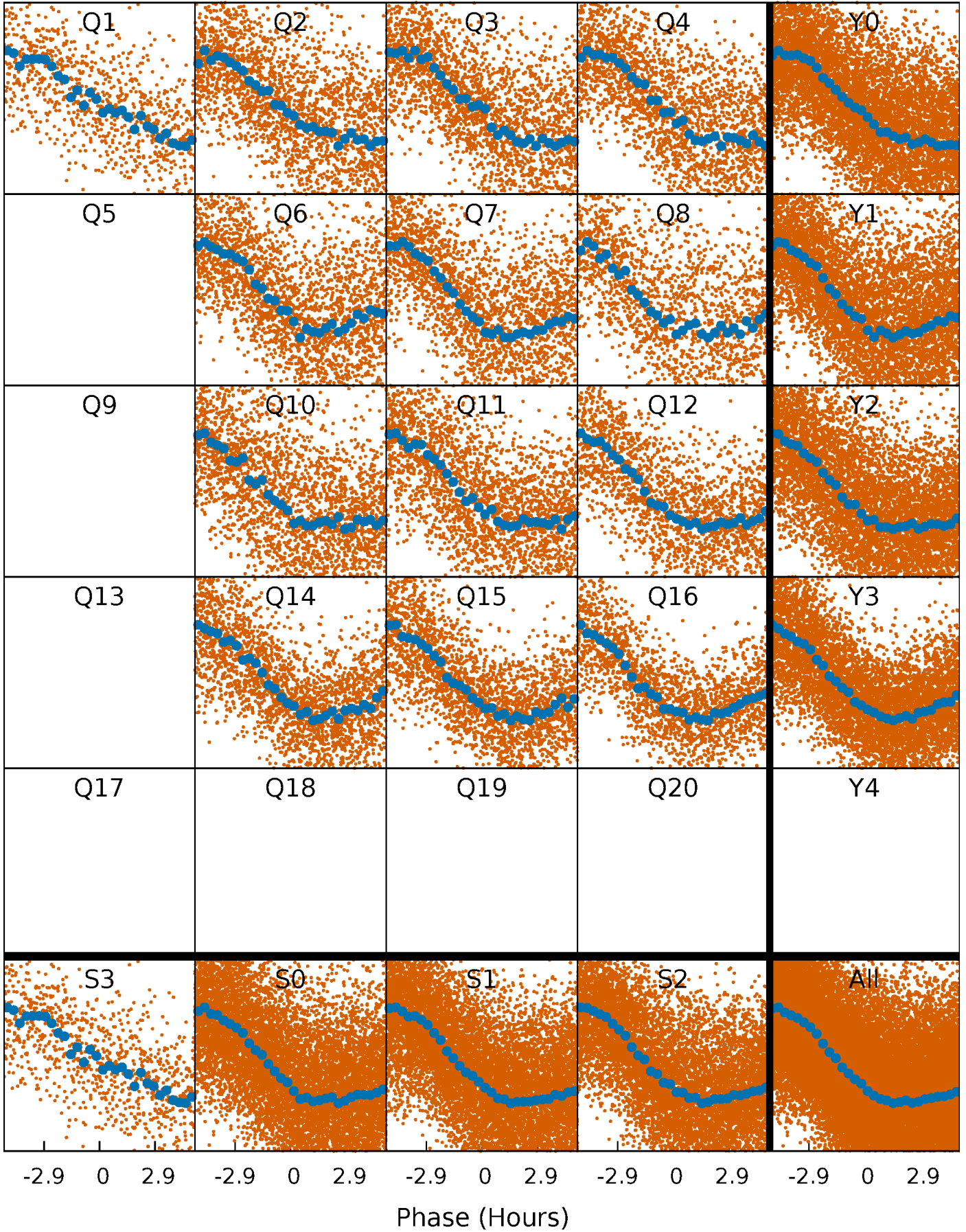


Non-Whitened Vs. Whitened Light Curve



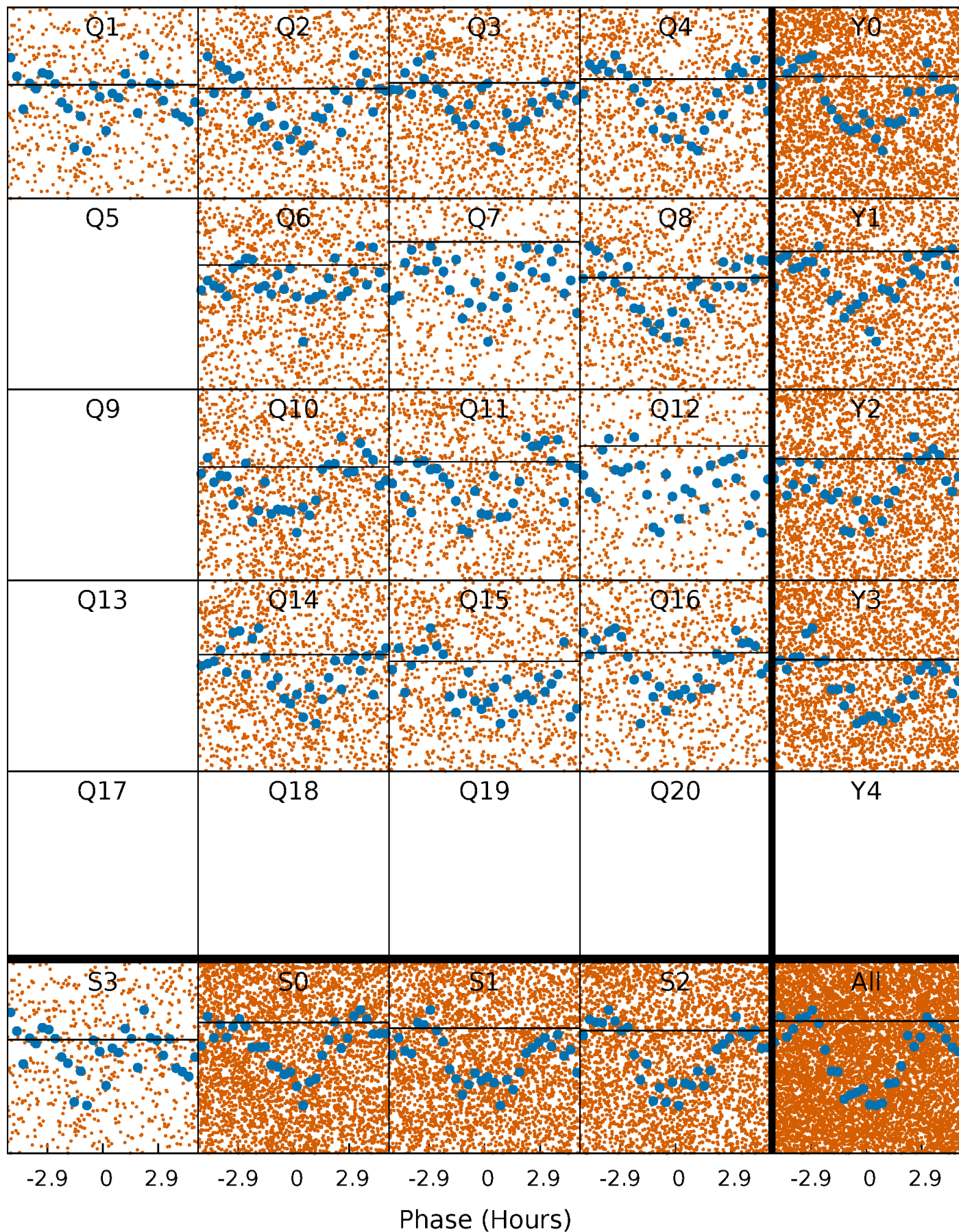
PDC Quarter-Phased Transit Curves

TCE 005598393-01 P= 0.733285 Days $T_0=132.141202$ (BKJD)



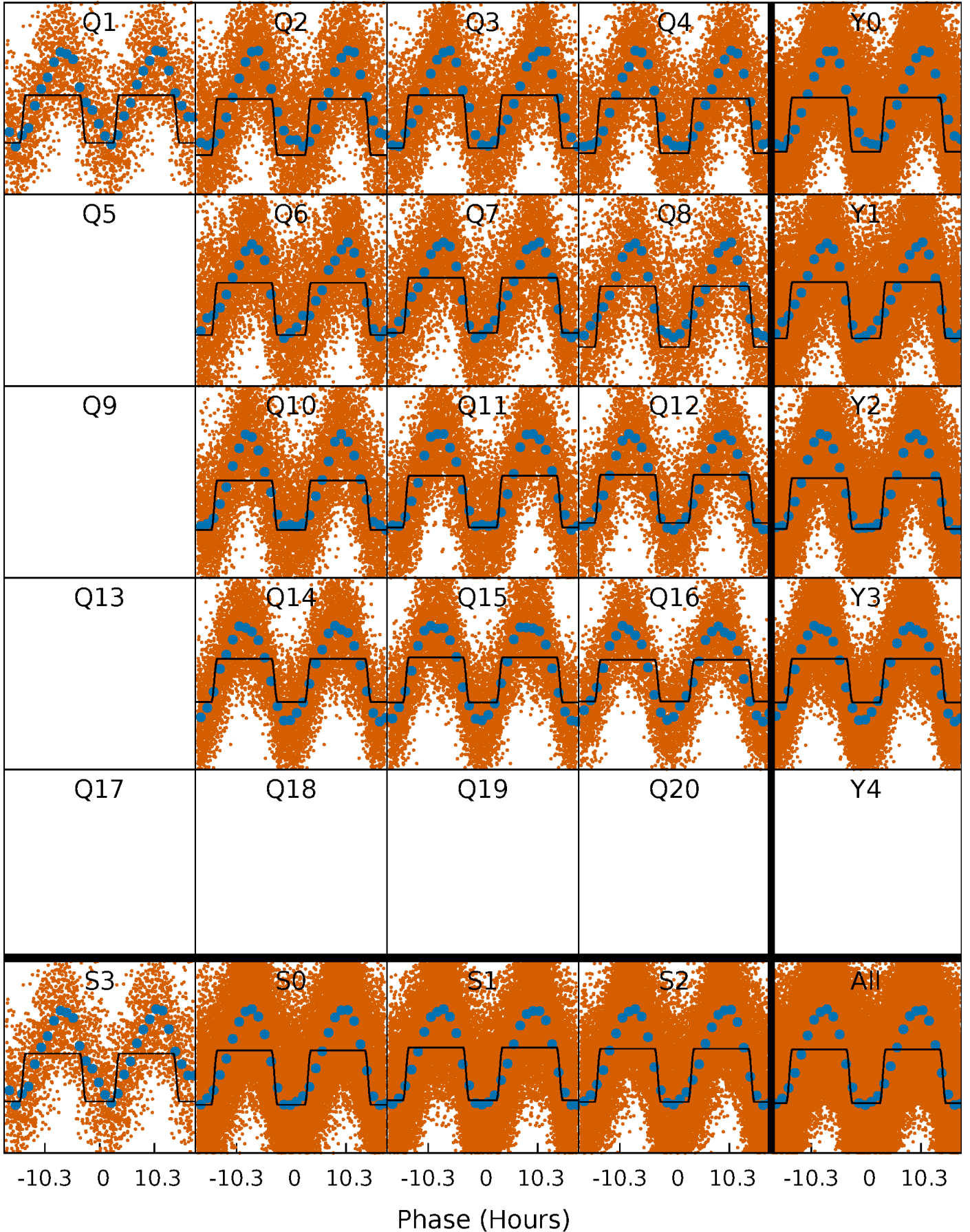
DV Quarter-Phased Transit Curves

TCE 005598393-01 P= 0.733285 Days $T_0=132.141202$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

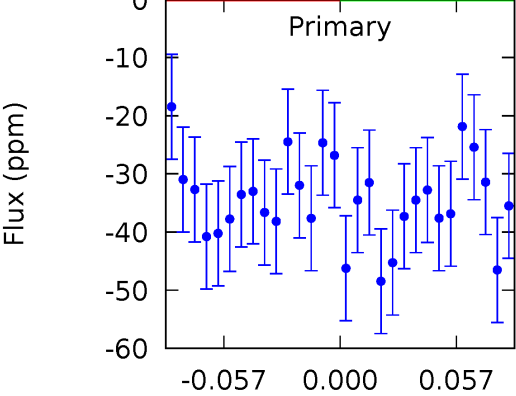
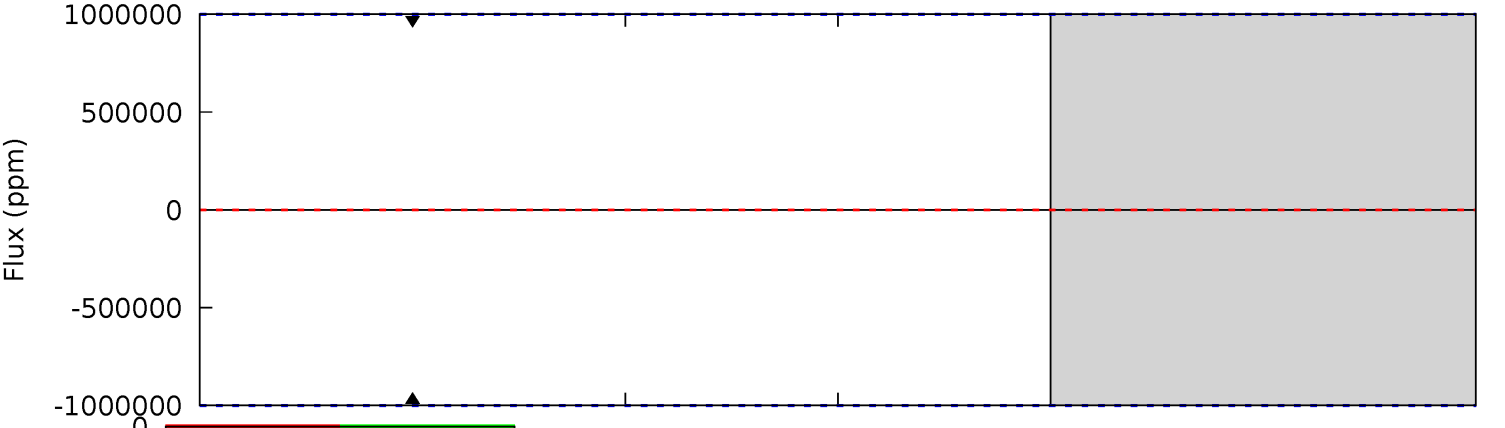
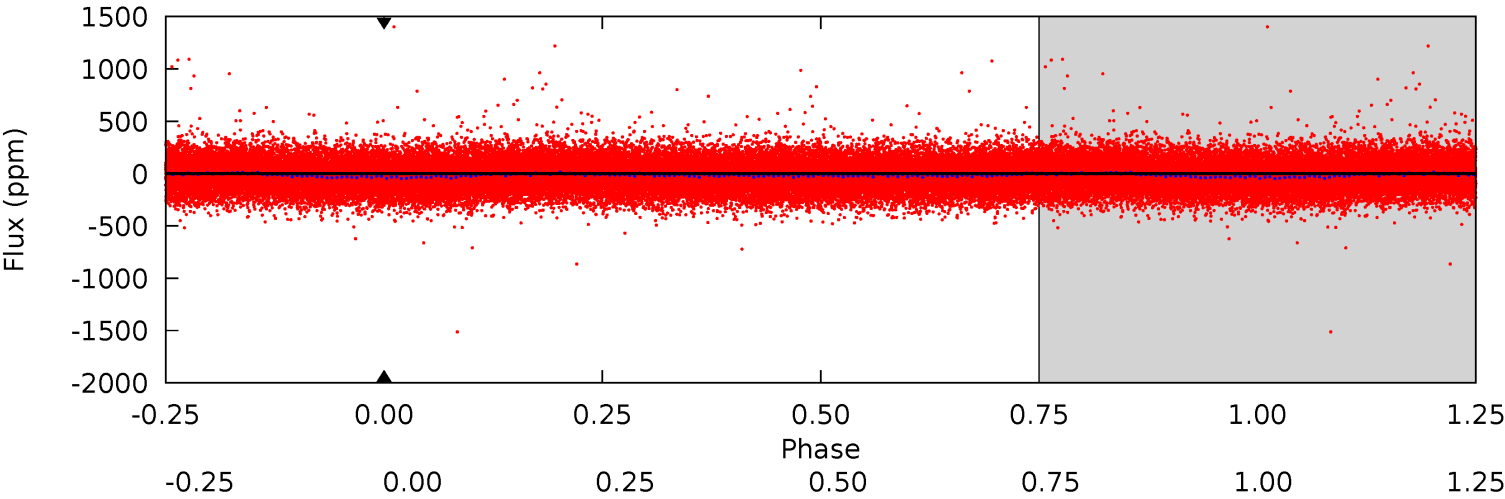
TCE 005598393-01 P= 0.733285 Days $T_0=132.240596$ (BKJD)



DV Model-Shift Uniqueness Test

005598393-01, P = 0.733285 Days, E = 131.407917 Days

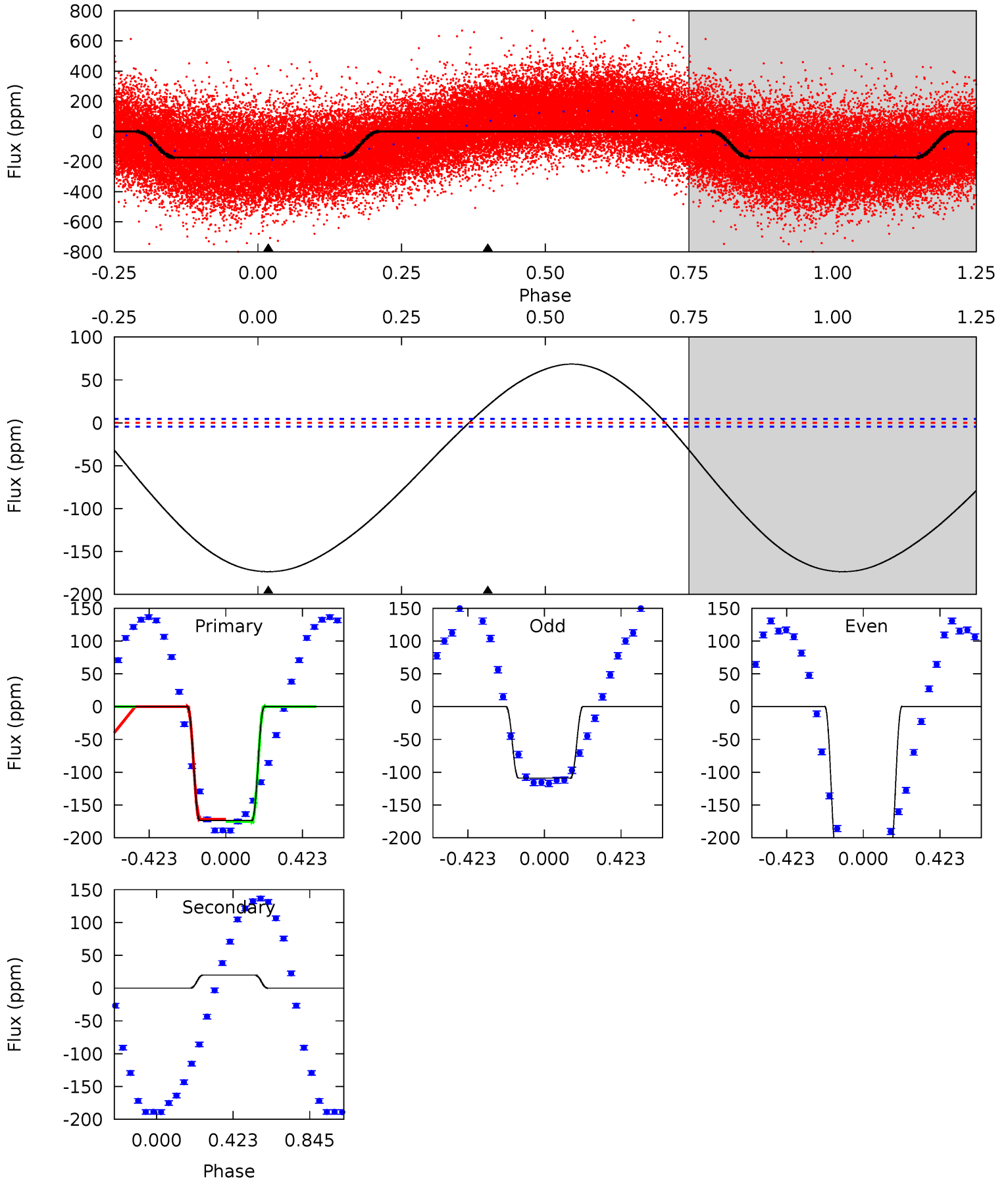
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
0	0	0	0	1.00	1.00	1.00	0	0	0	0	0	0	0	0



Alt Model-Shift Uniqueness Test

005598393-01, P = 0.733285 Days, E = 131.507311 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
162.9	-18.6	0	0	4.25	0.80	20.1	162.9	162.9	-18.6	-18.6	61.2	0.91	0.28	1.61



Stellar Parameters For KIC 005598393

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	7063^{+190}_{-253}	$3.655^{+0.298}_{-0.053}$	$-0.100^{+0.250}_{-0.250}$	$3.385^{+0.318}_{-1.272}$	$1.888^{+0.166}_{-0.388}$	$0.069^{+0.144}_{-0.012}$
	+3%/-4%	+8%/-1%	+250%/-250%	+9%/-38%	+9%/-21%	+211%/-18%
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 005598393-01 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	0 ± 1000000	$25.65^{+23.81}_{-18.41}$	5564^{+308}_{-486}	6383^{+40670}_{-33287}	$1.589^{+94.321}_{-41.181}$
Alt.	20 ± 1	$23.27^{+24.86}_{-16.89}$	5560^{+304}_{-445}	-4763^{+297}_{-264}	$-0.008^{+0.006}_{-0.092}$

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

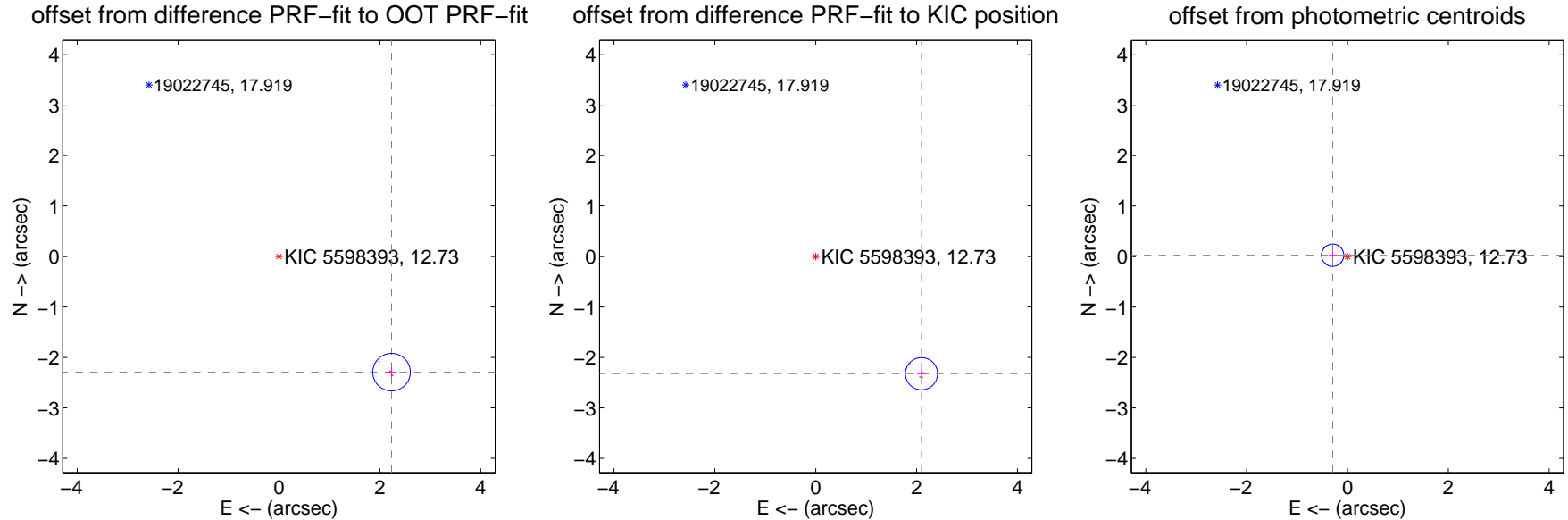
DV Centroid Data

Supplemental centroid analysis for 005598393-01. Kepler magnitude: 12.73. Transit SNR -1.00

There are 1 quarters with good PRF difference image offsets

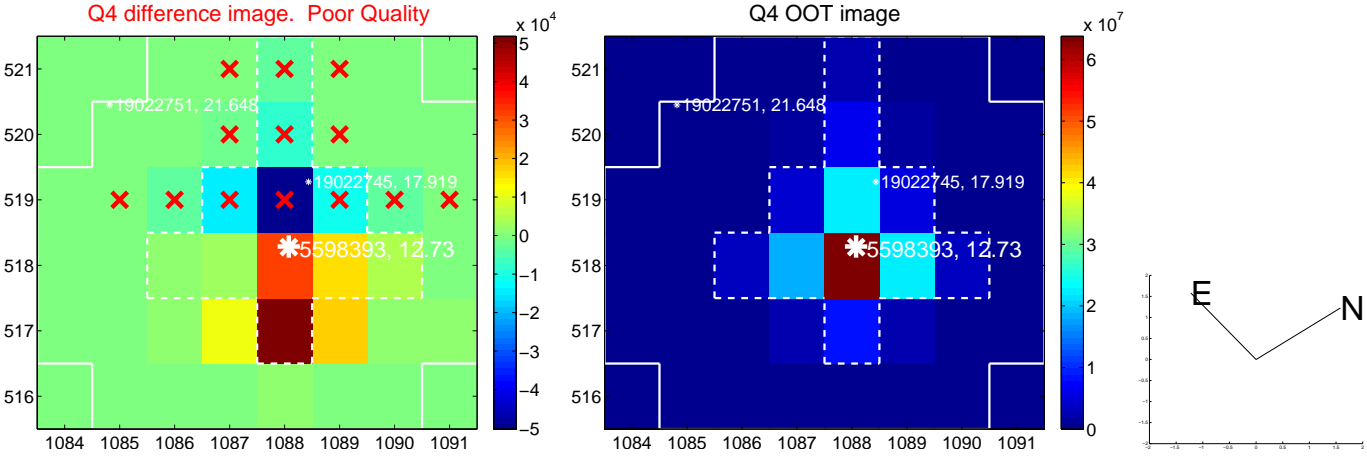
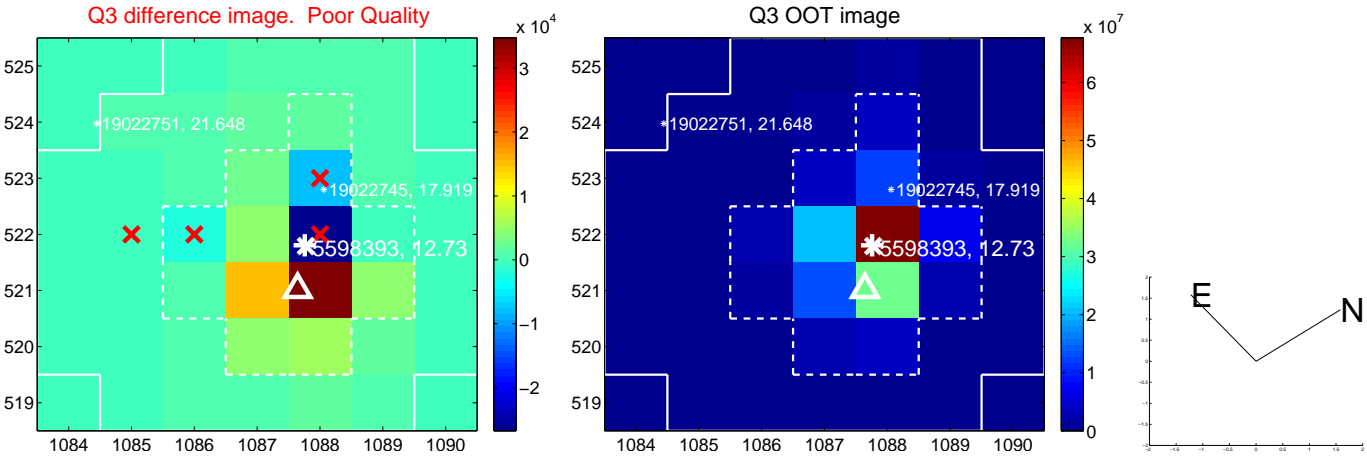
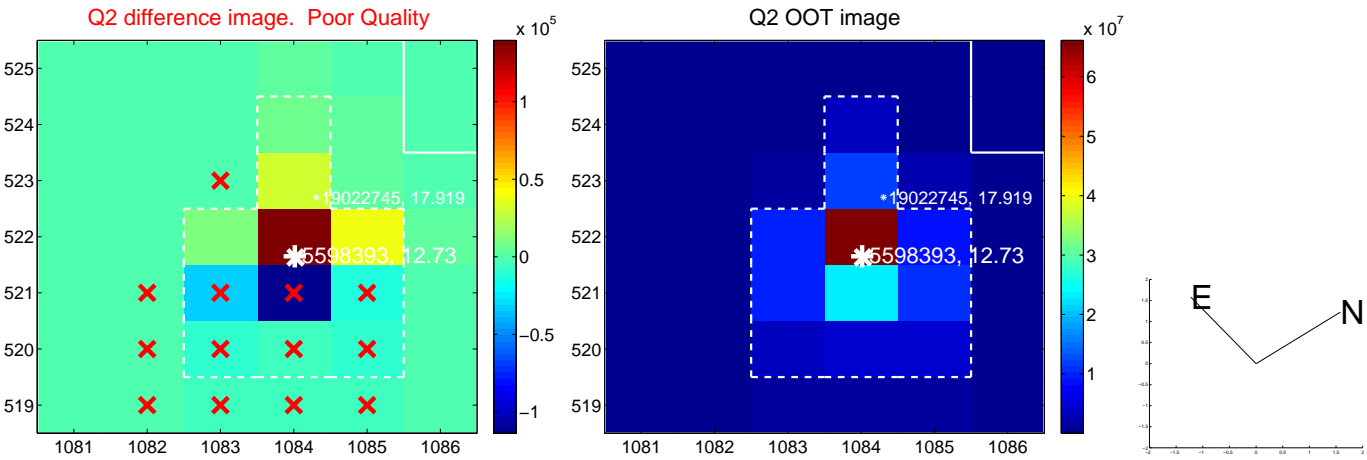
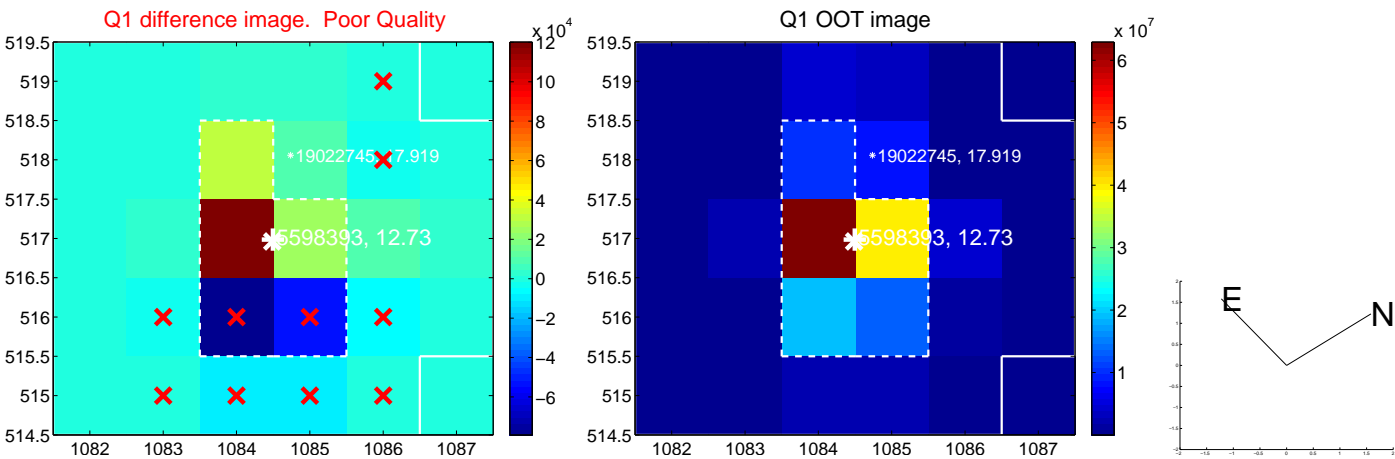
The direct PRF centroid is offset from the target star catalog position by about 0.13 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	3.199 ± 0.124	25.80	-2.231 ± 0.100	-2.292 ± 0.100
PRF-fit source offset from KIC position	3.129 ± 0.106	29.43	-2.097 ± 0.090	-2.322 ± 0.089
photometric centroid source offset	0.30 ± 0.07	4.00	0.29 ± 0.07	0.03 ± 0.08

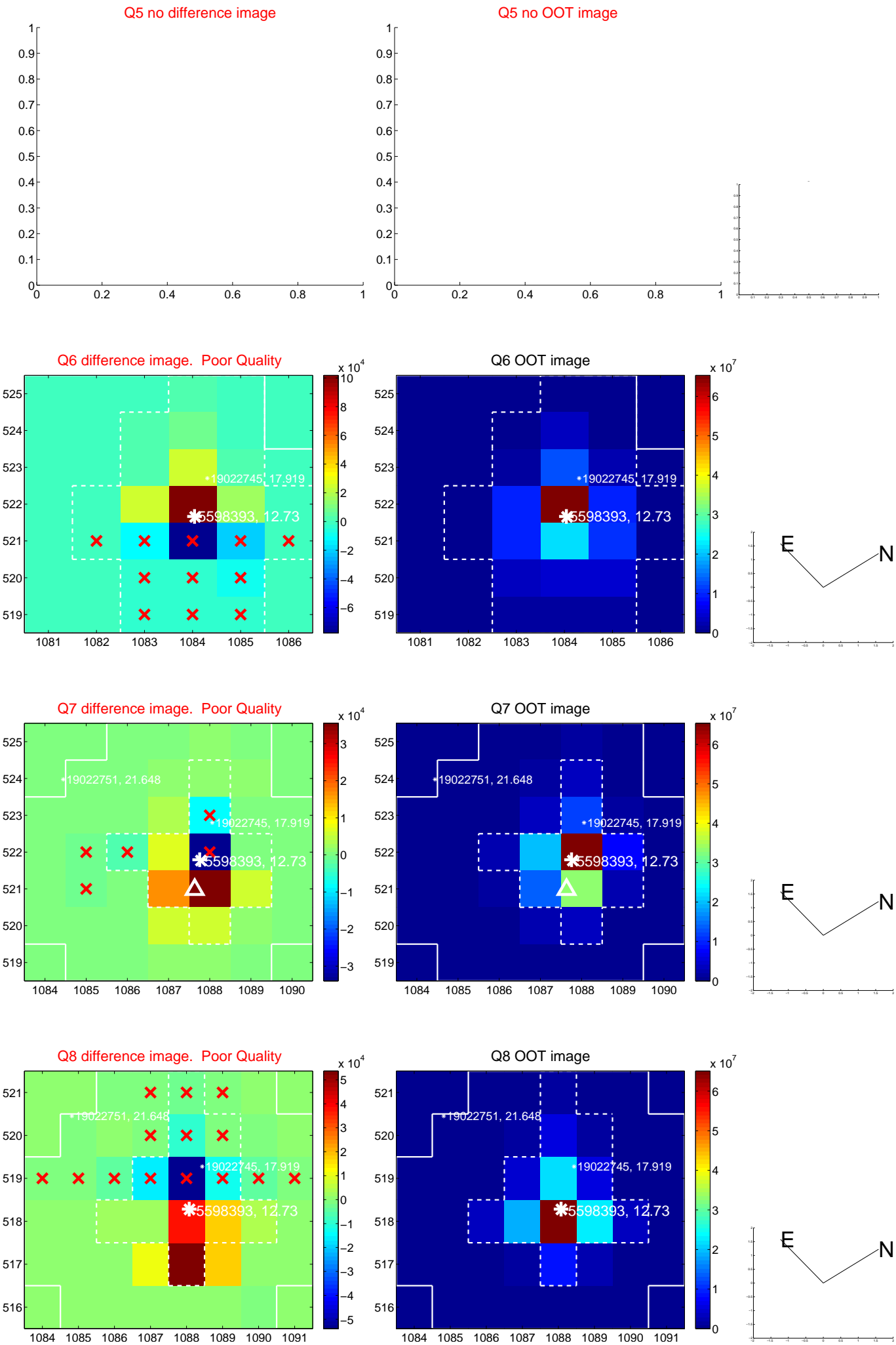


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

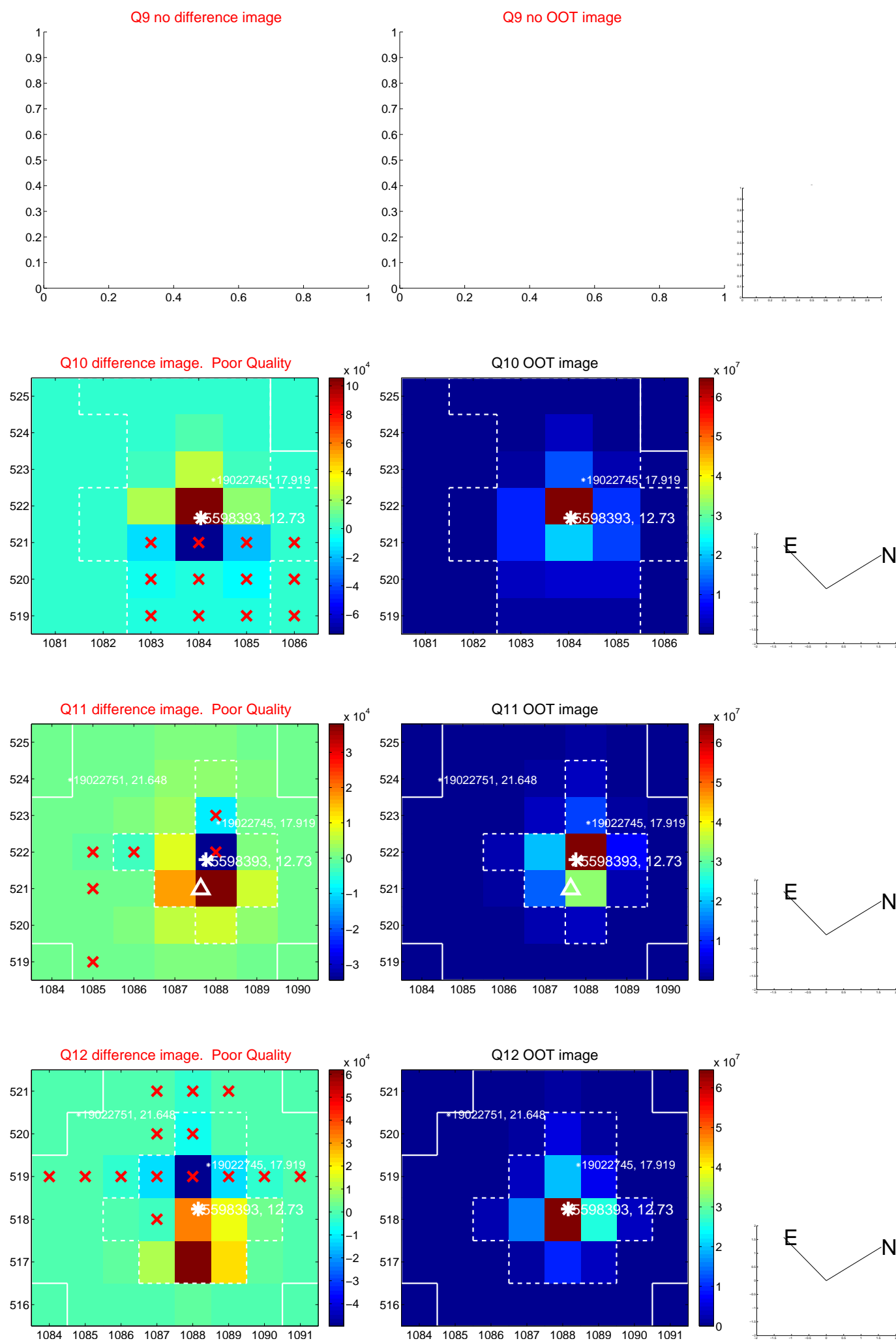
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



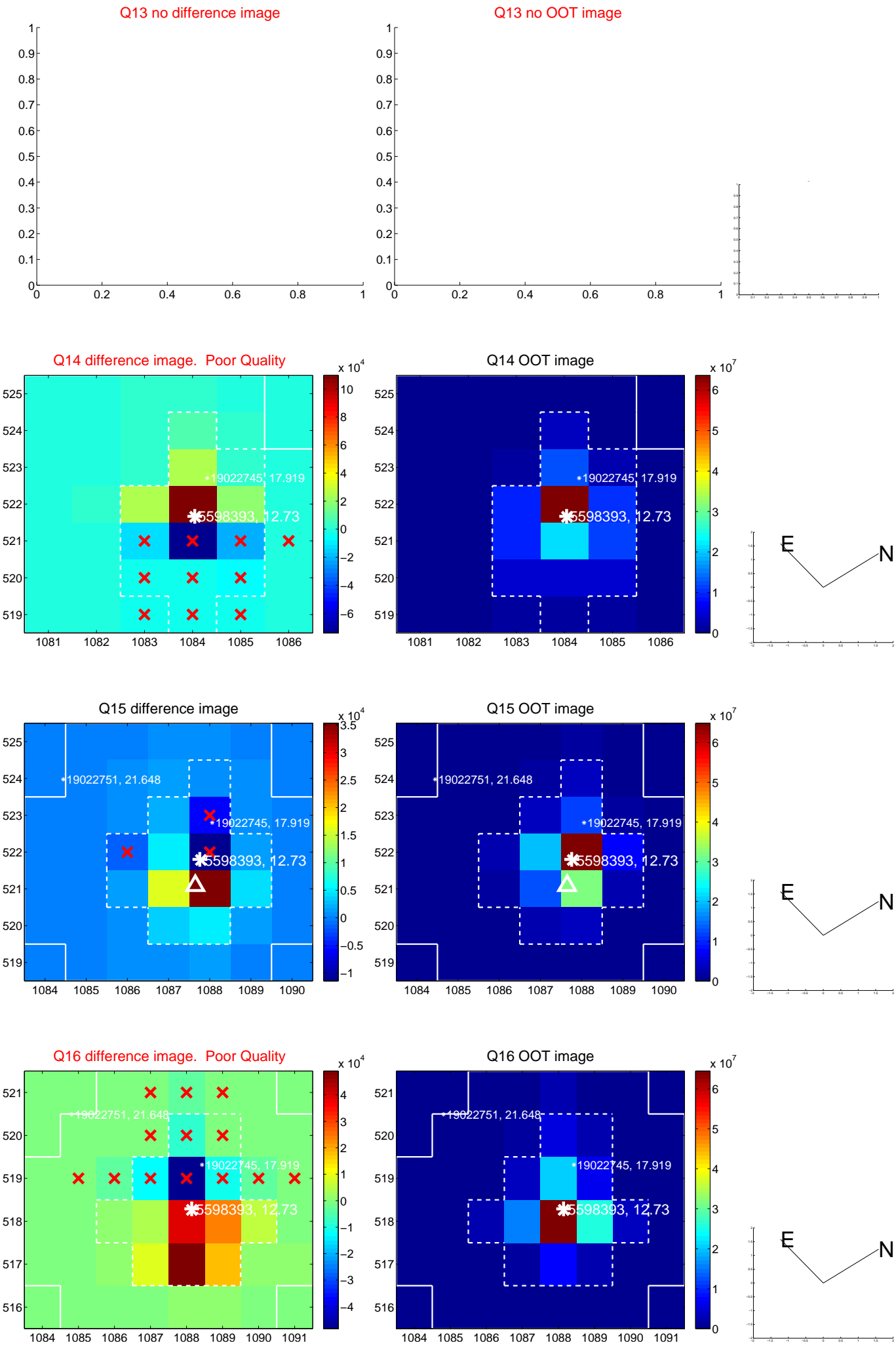
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



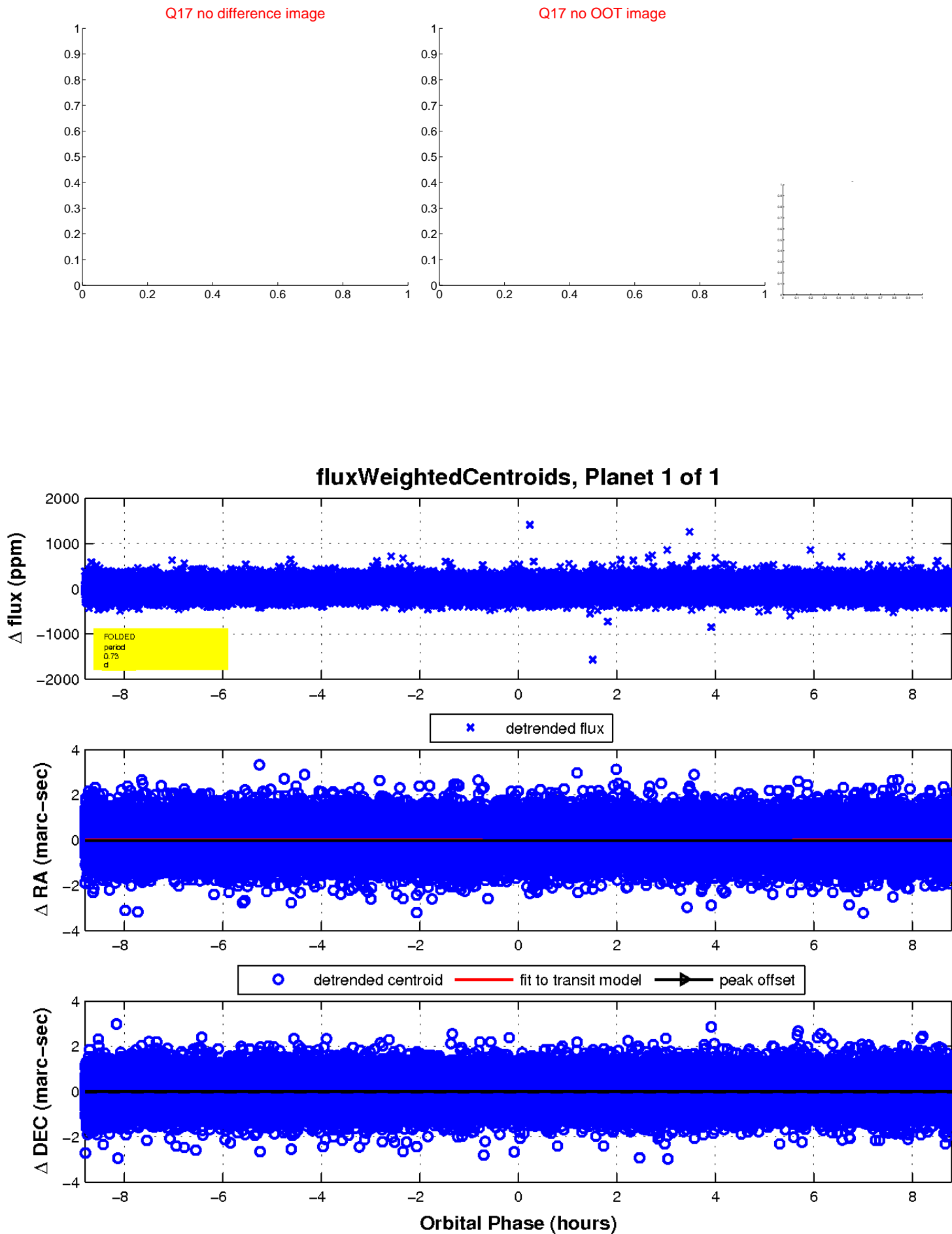
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value



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



UKIRT Image

