

KIC 005528773

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})
005528773-01	OBS	No	2.287991	132.021008	3.7	19.003	9.8	2.4	1.42	7293	0.30	3525.62

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
005528773-01	OBS	FP	0.00	1	0	0	0	SWEET_NTL—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_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.

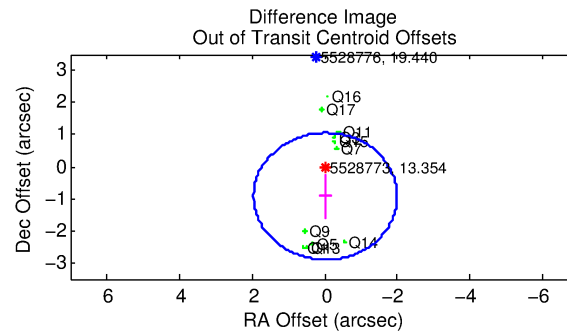
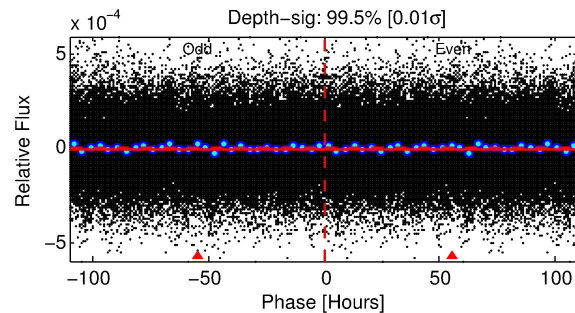
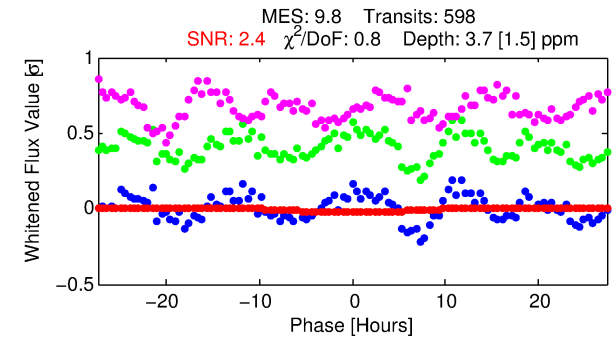
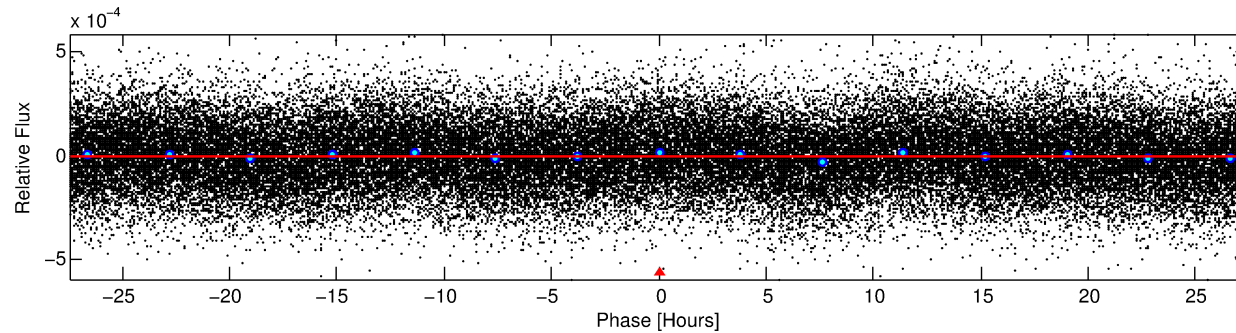
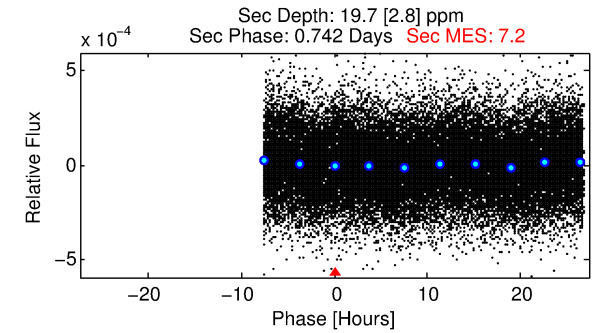
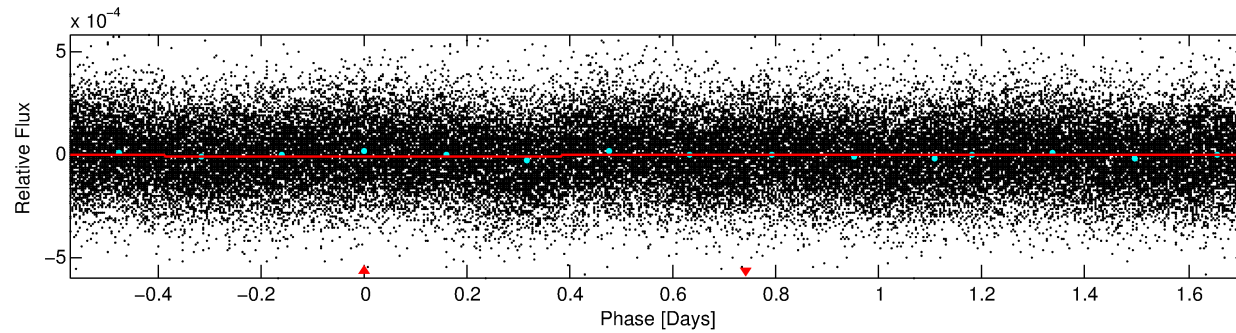
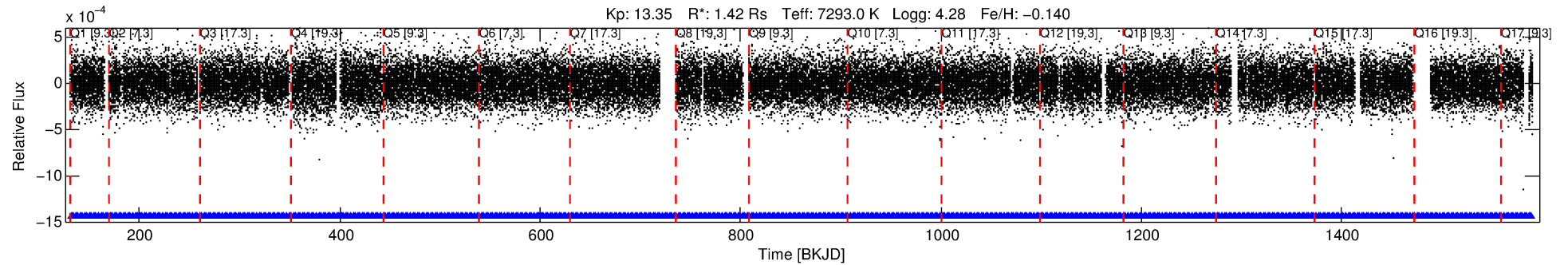
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 005528773-01

No Significant Match Found

DV One-Page Summary

KIC: 5528773 Candidate: 1 of 1 Period: 2.288 d



DV Fit Results:

Period = 2.28799 [0.00020] d
Epoch = 132.0210 [0.0467] BKJD
Rp/R* = 0.0019 [0.0045]
a/R* = 1.06 [1.75]
b = 0.75 [8.70]
Seff = 3525.62 [1601.83]
Teq = 1965 [223] K
Rp = 0.30 [0.70] Re
a = 0.0380 [0.0114] AU
Ag = 178.06 [835.20] [0.21σ]
Teffp = 11097 [12972] K [0.70σ]

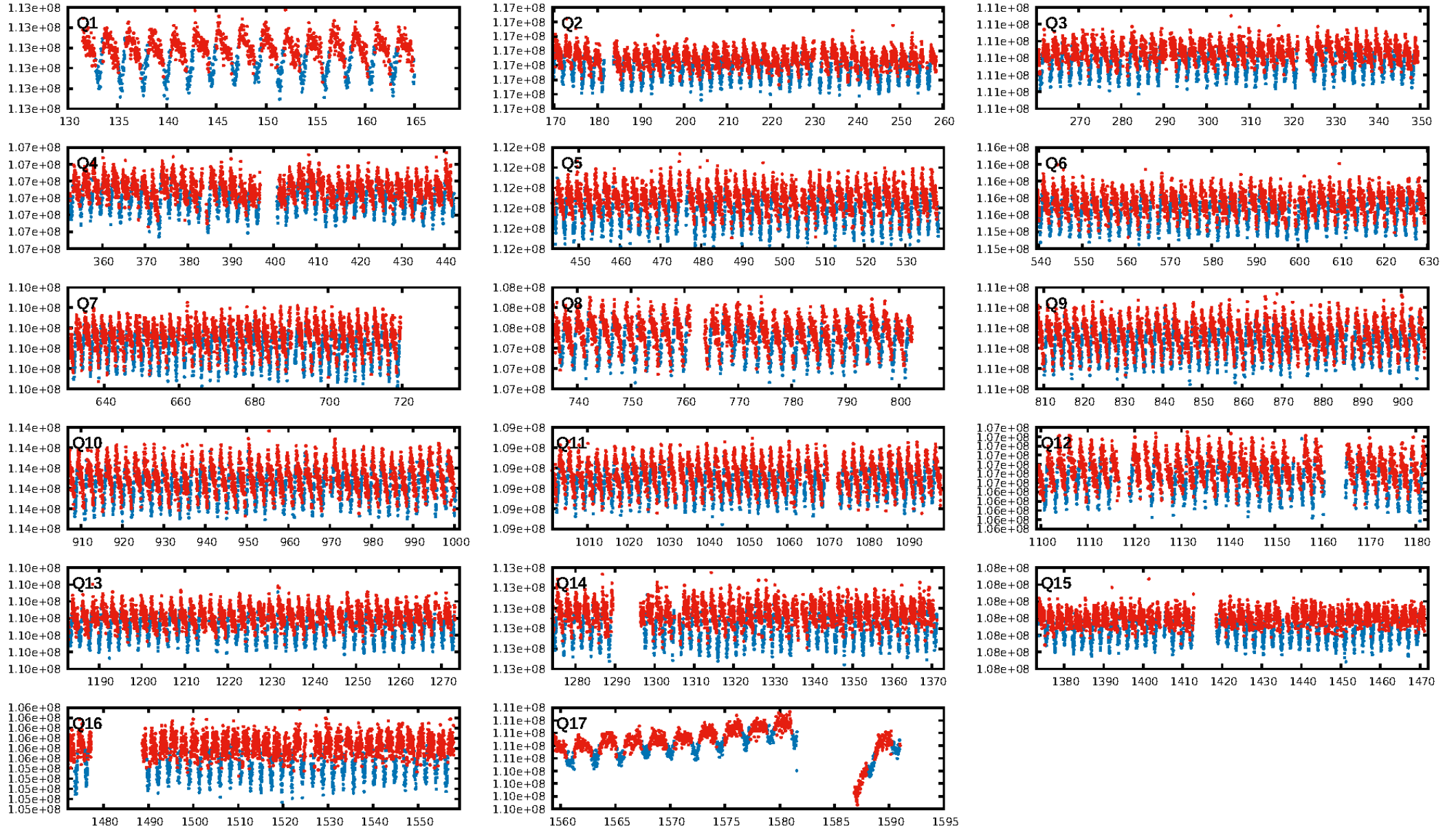
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [571/571]
GhostDiagnostic-chr: N/A
Centroid-sig: N/A
Centroid-so: N/A
OotOffset-rm: 0.925 arcsec [1.40σ]
KicOffset-rm: 0.893 arcsec [1.36σ]
OotOffset-st: 1/4/1/5 [11]
KicOffset-st: 1/4/1/5 [11]
DiffImageQuality-fgm: 0.00 [0/11]
DiffImageOverlap-fno: 1.00 [17/17]

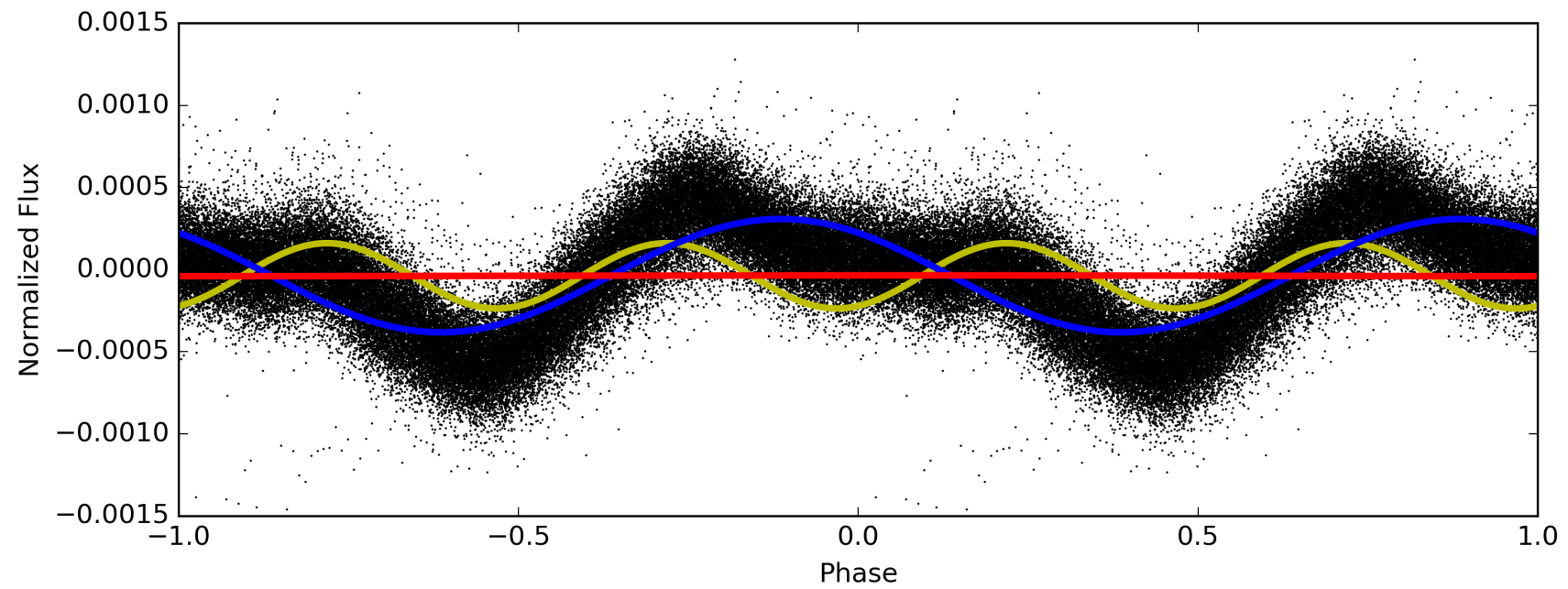
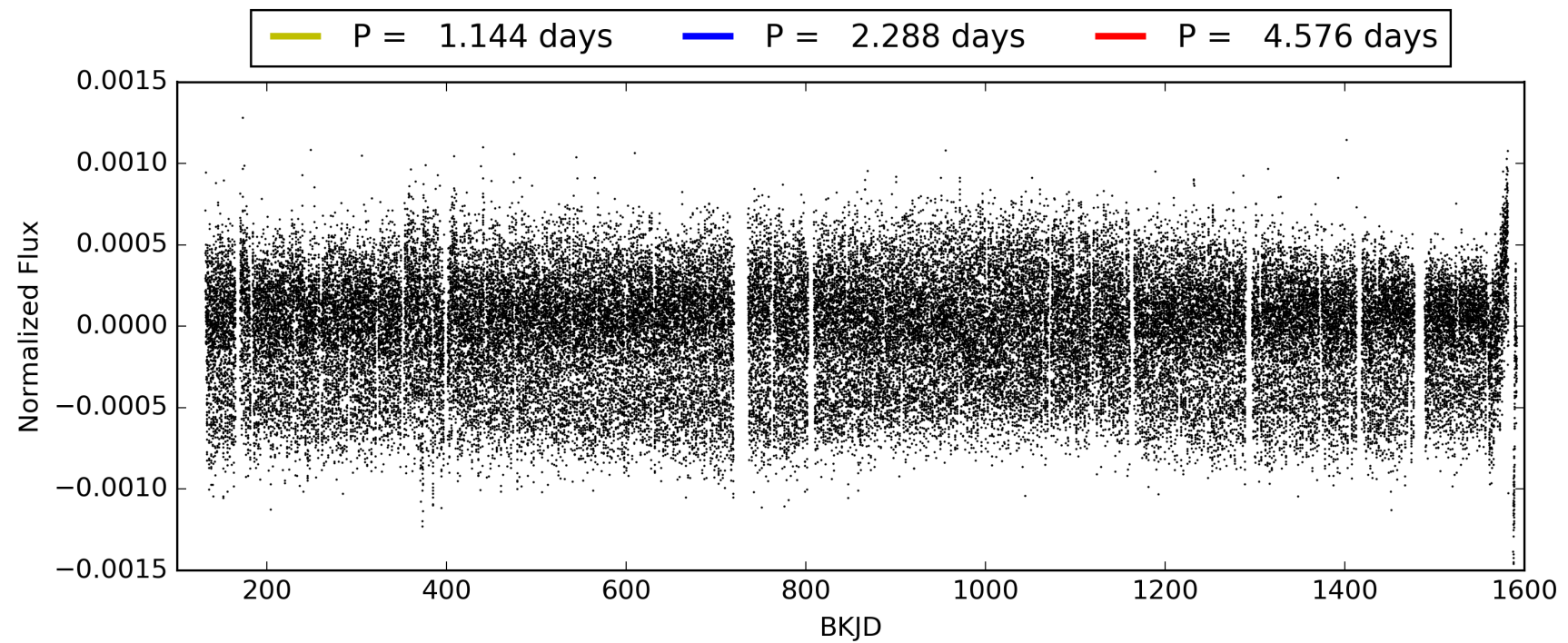
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 31-Jan-2016 02:50:15 Z

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

TCE 005528773-01, PDC Light Curves

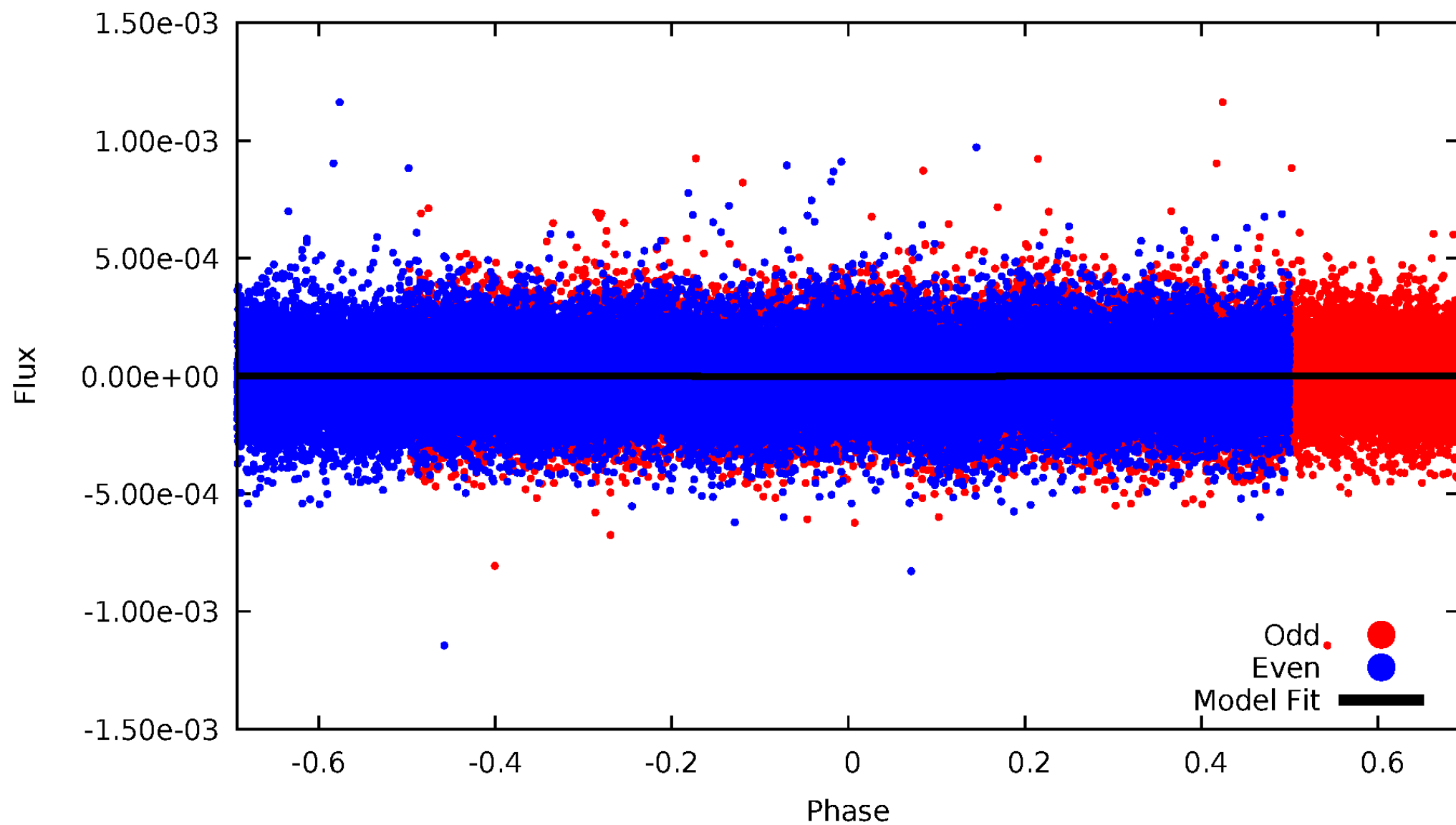


TCE 005528773-01



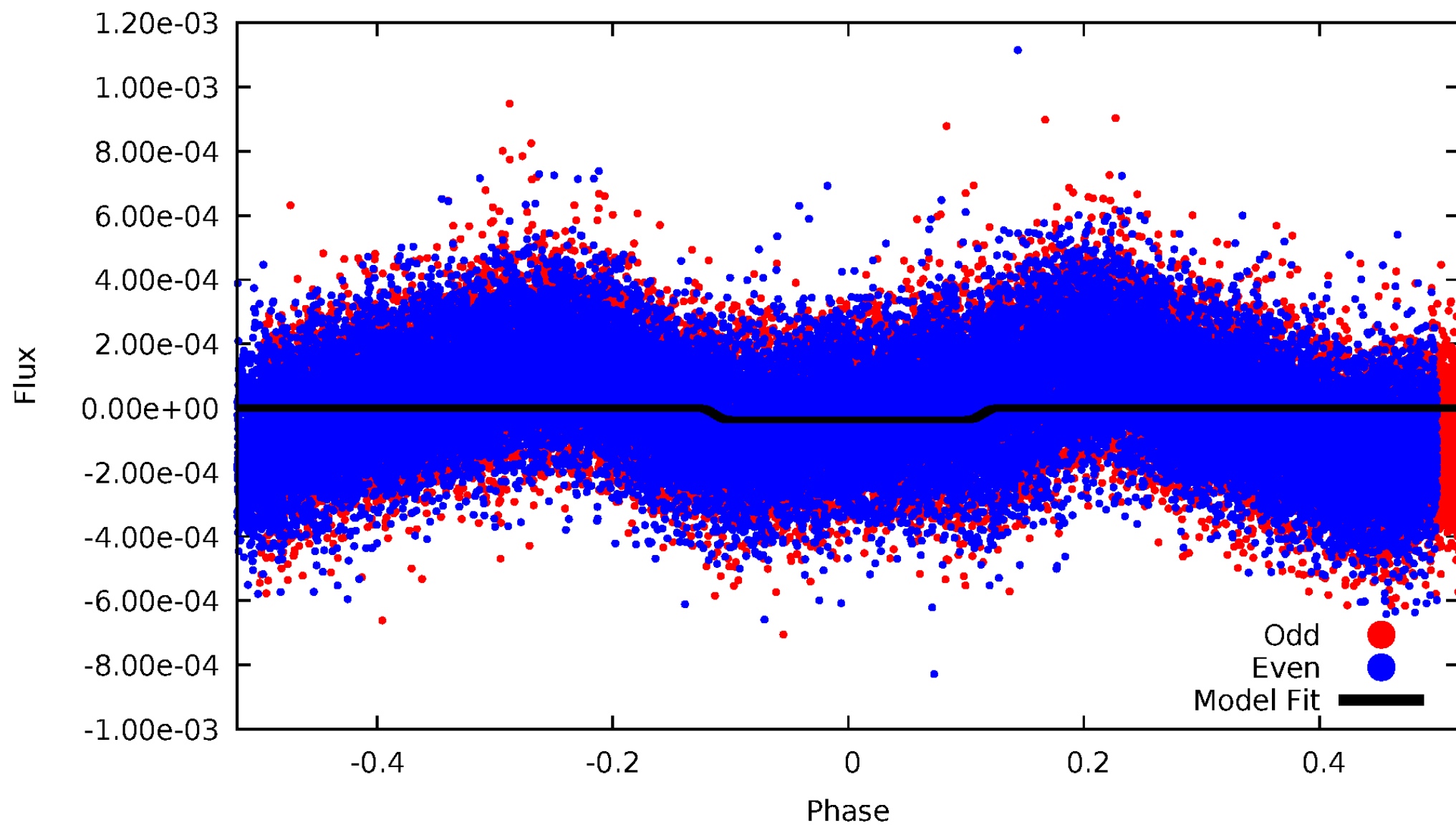
DV Odd/Even

TCE 005528773-01



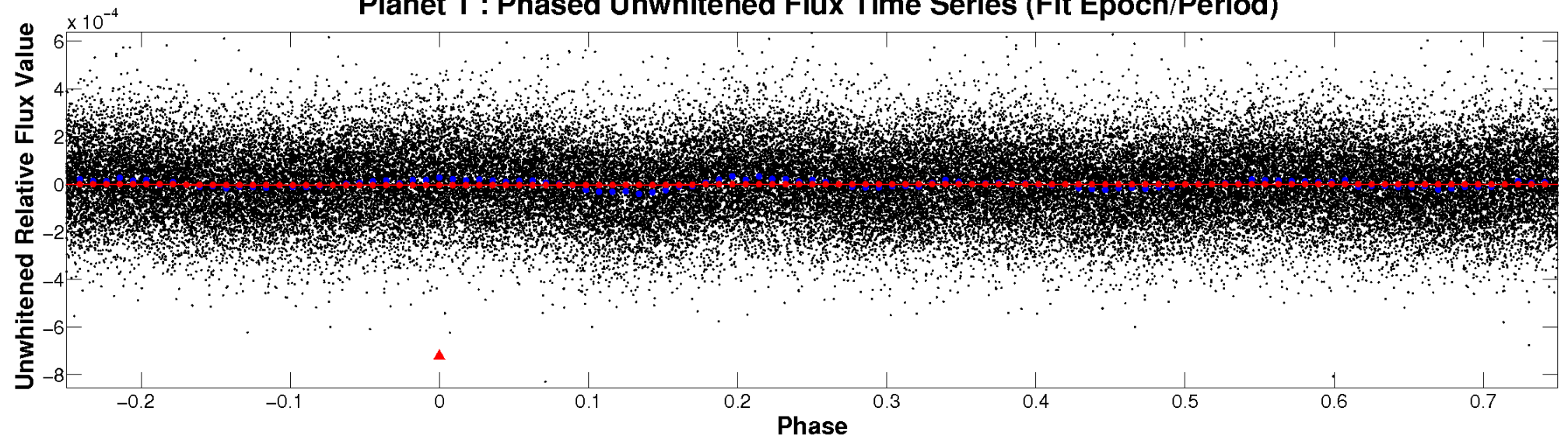
ALT Odd/Even

TCE 005528773-01

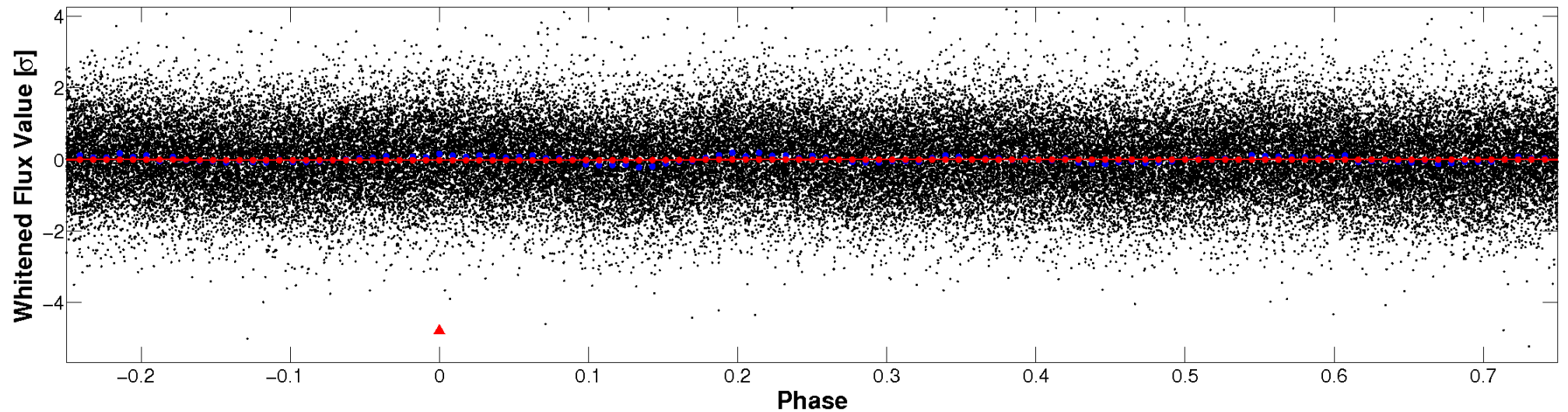


Non-Whitened Vs. Whitened Light Curve

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

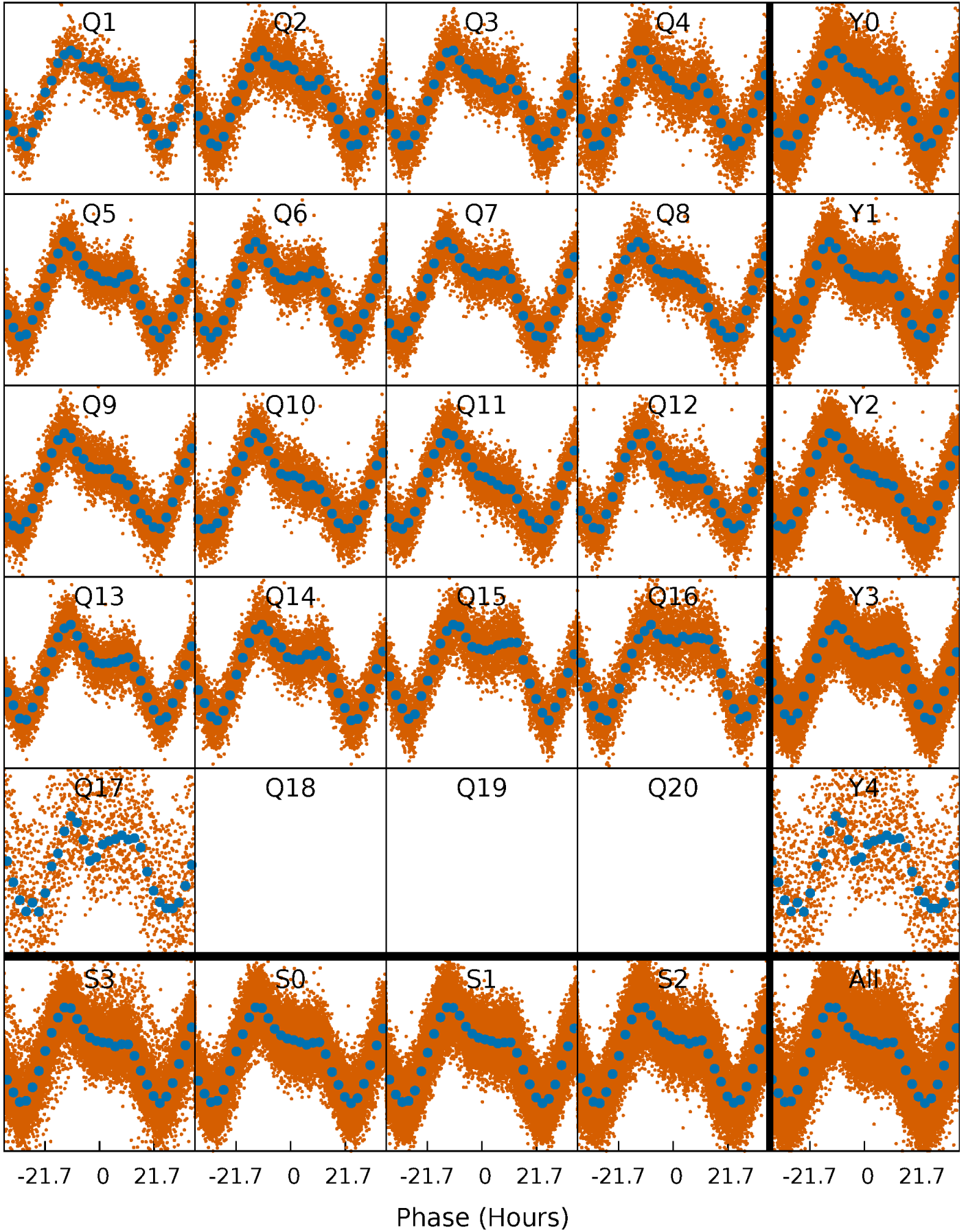


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



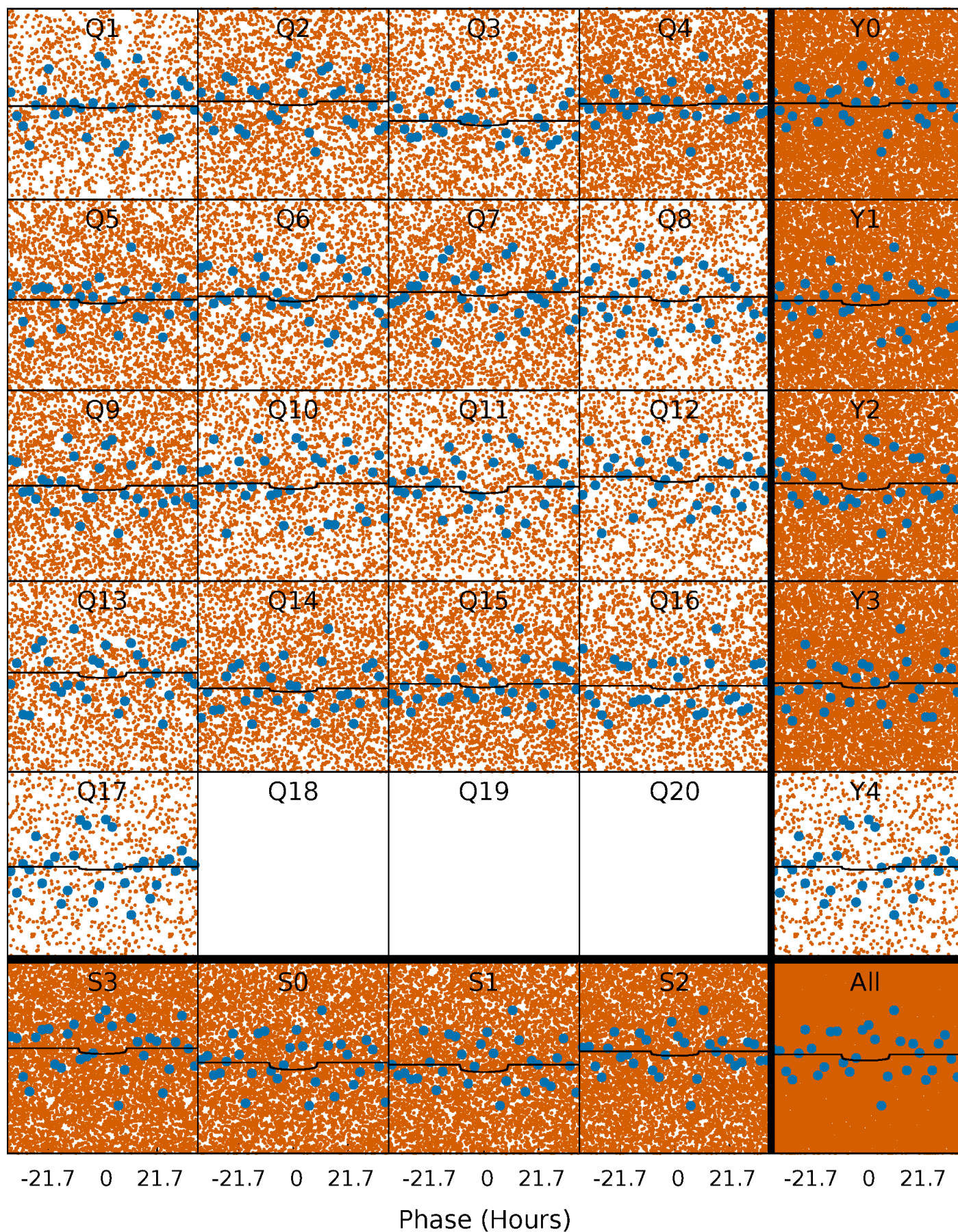
PDC Quarter-Phased Transit Curves

TCE 005528773-01 P= 2.287991 Days $T_0=132.021008$ (BKJD)



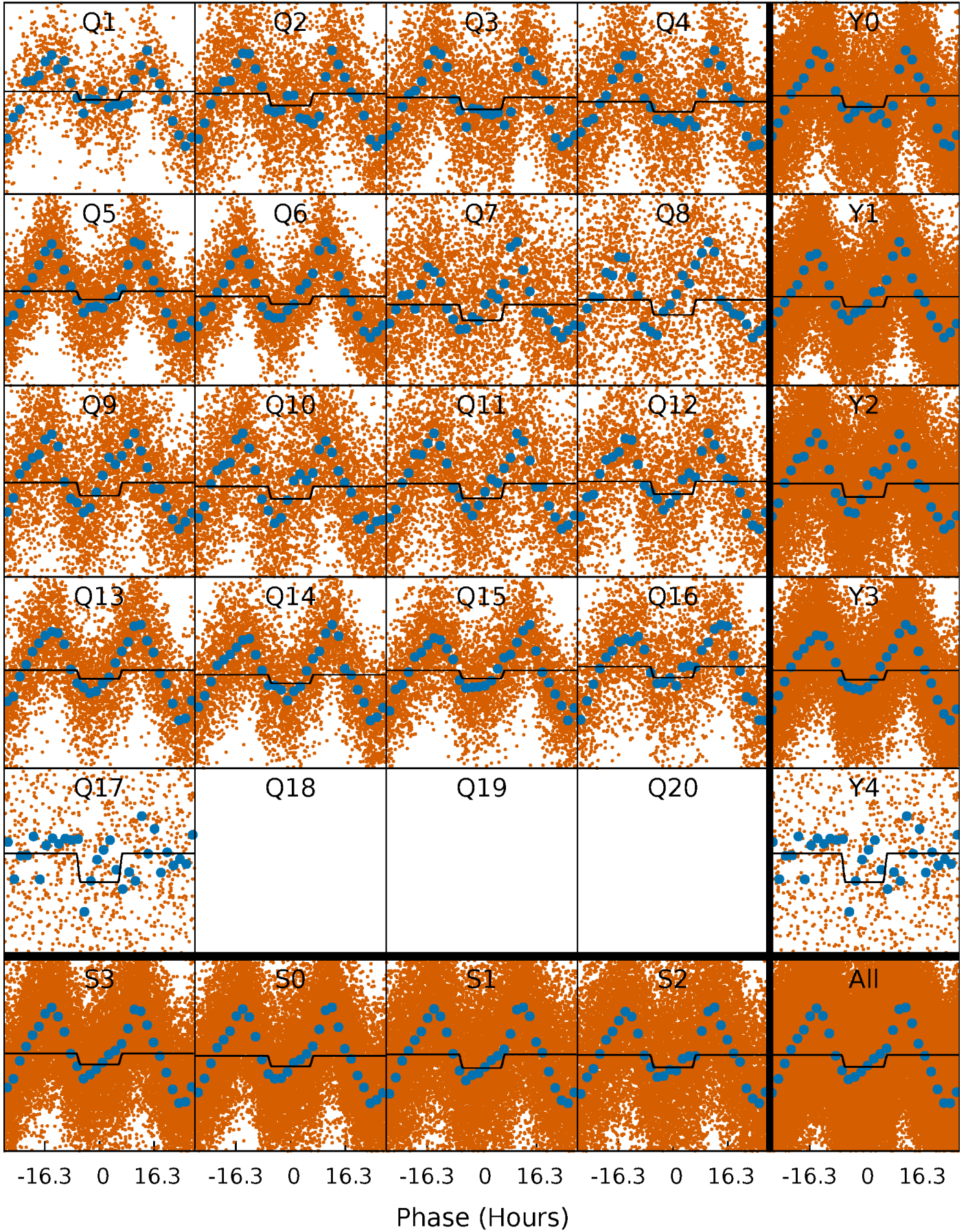
DV Quarter-Phased Transit Curves

TCE 005528773-01 P= 2.287991 Days $T_0=132.021008$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

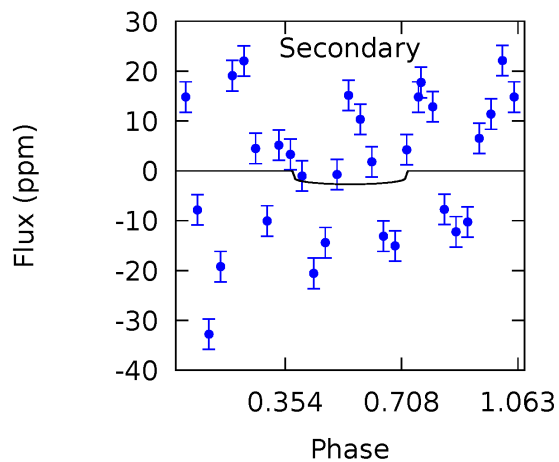
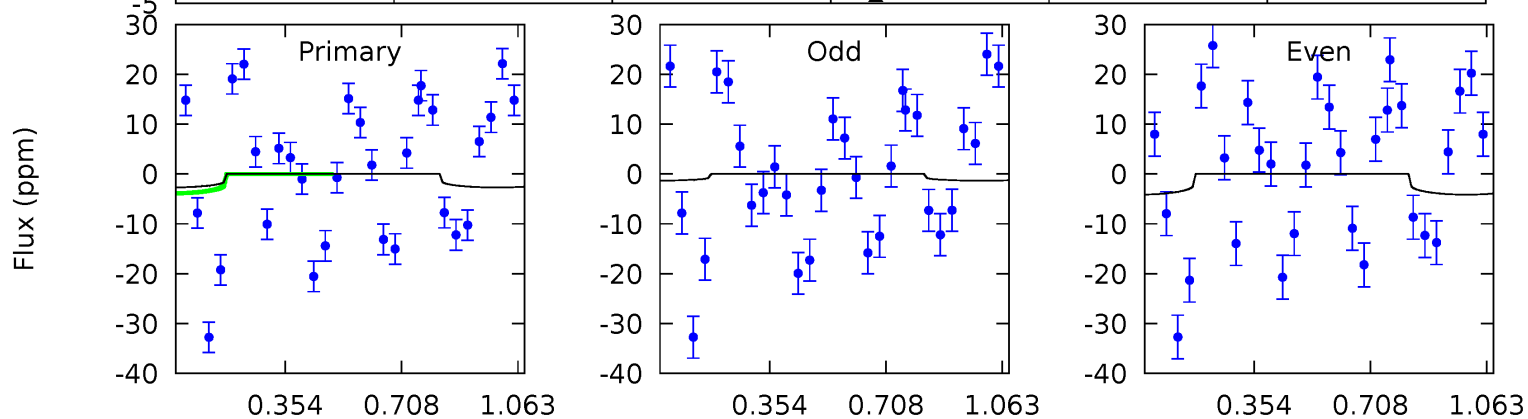
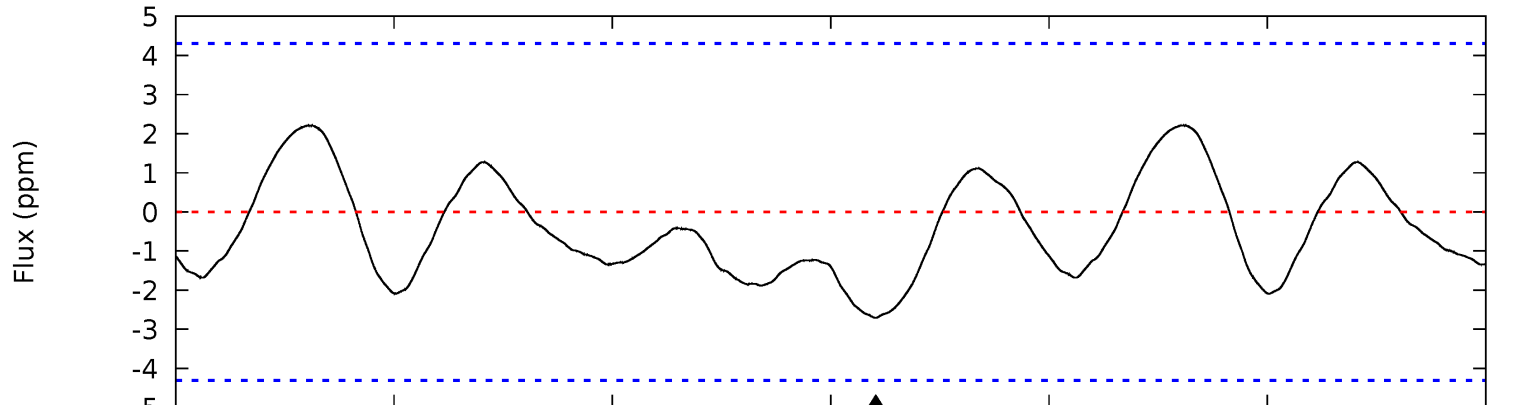
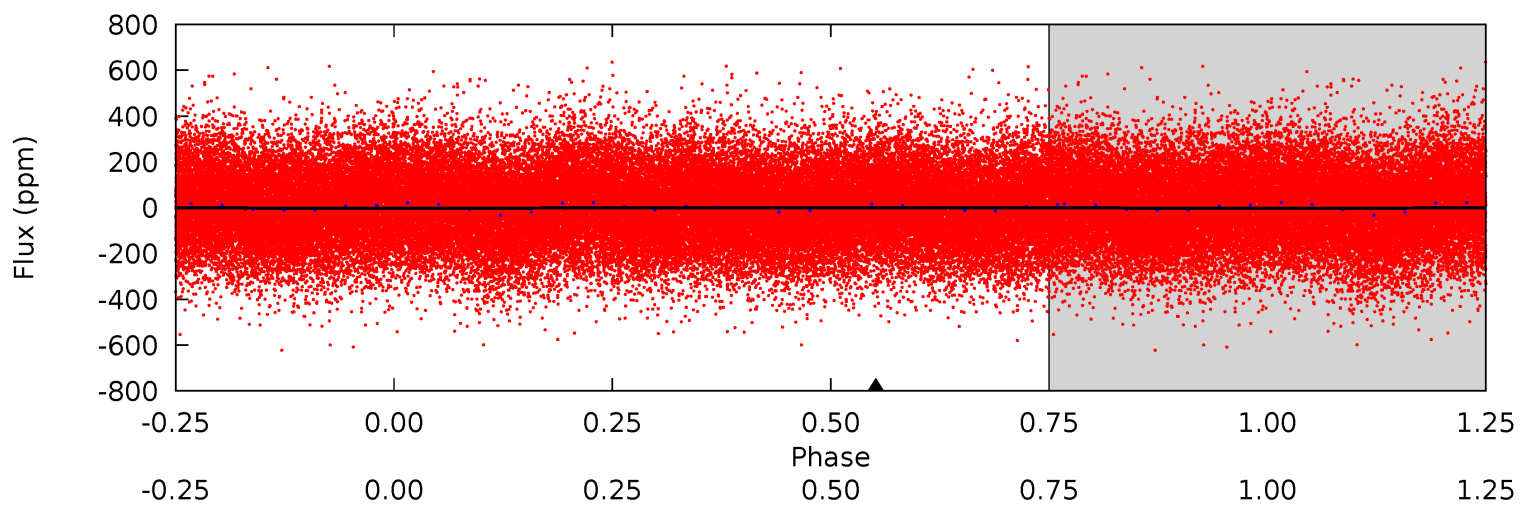
TCE 005528773-01 P= 2.288078 Days $T_0=132.007839$ (BKJD)



DV Model-Shift Uniqueness Test

005528773-01, P = 2.287991 Days, E = 129.733017 Days

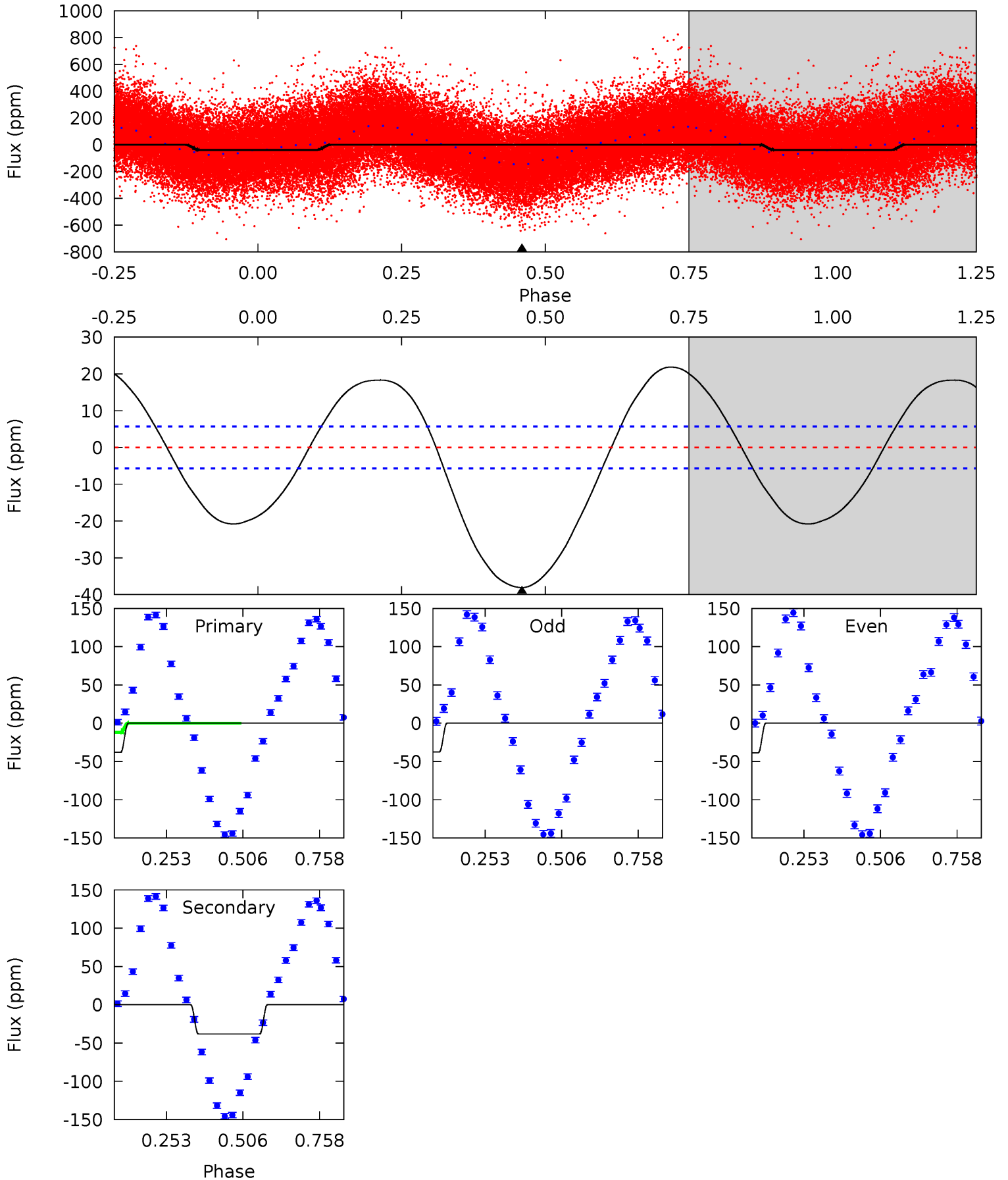
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
2.70	2.70	0	0	4.29	0.93	1.17	2.70	2.70	2.70	2.70	1.42	0.79	0.45	1.16



Alt Model-Shift Uniqueness Test

005528773-01, P = 2.288078 Days, E = 129.719761 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
29.1	29.1	0	0	4.37	1.14	11.4	29.1	29.1	29.1	29.1	0.42	1.03	0.36	21.8



Stellar Parameters For KIC 005528773

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	7293^{+228}_{-330}	$4.281^{+0.072}_{-0.217}$	$-0.140^{+0.250}_{-0.350}$	$1.419^{+0.533}_{-0.178}$	$1.404^{+0.219}_{-0.197}$	$0.693^{+0.231}_{-0.405}$
	+3%/-5%	+2%/-5%	+179%/-250%	+38%/-13%	+16%/-14%	+33%/-59%
Source	KIC0	KIC0	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 005528773-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-3 ± 1	$0.62^{+0.58}_{-0.40}$	2789^{+219}_{-163}	4713^{+3687}_{-1199}	$5.245^{+39.516}_{-3.993}$
Alt.	-38 ± 1	$1.04^{+0.73}_{-0.60}$	2786^{+225}_{-164}	6936^{+5761}_{-1572}	27^{+125}_{-18}

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

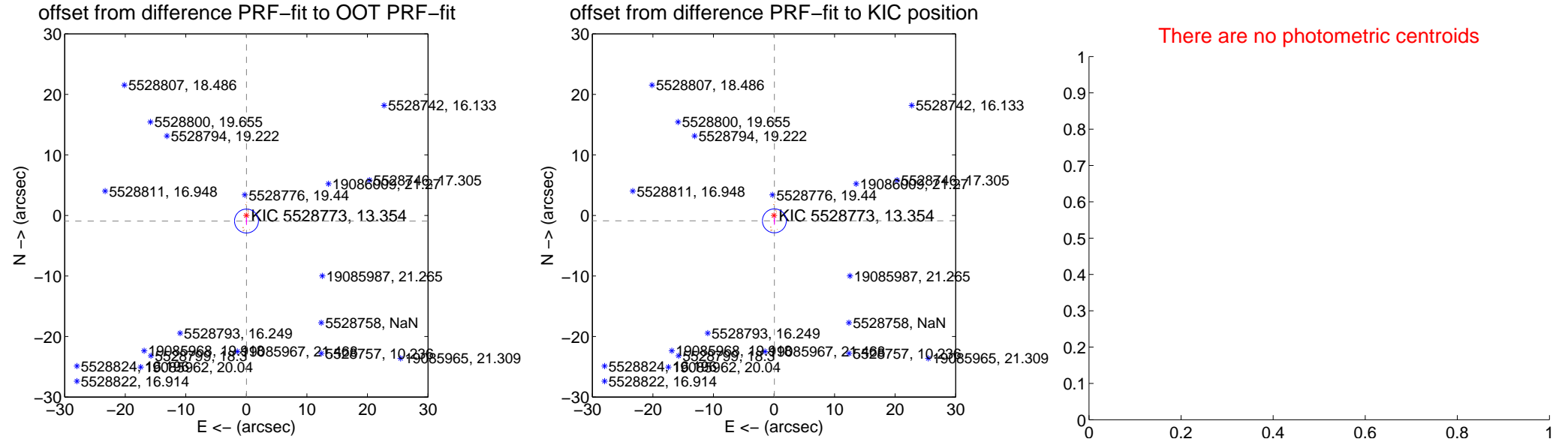
DV Centroid Data

Supplemental centroid analysis for 005528773-01. Kepler magnitude: 13.35. Transit SNR 2.44

There are 0 quarters with good PRF difference image offsets

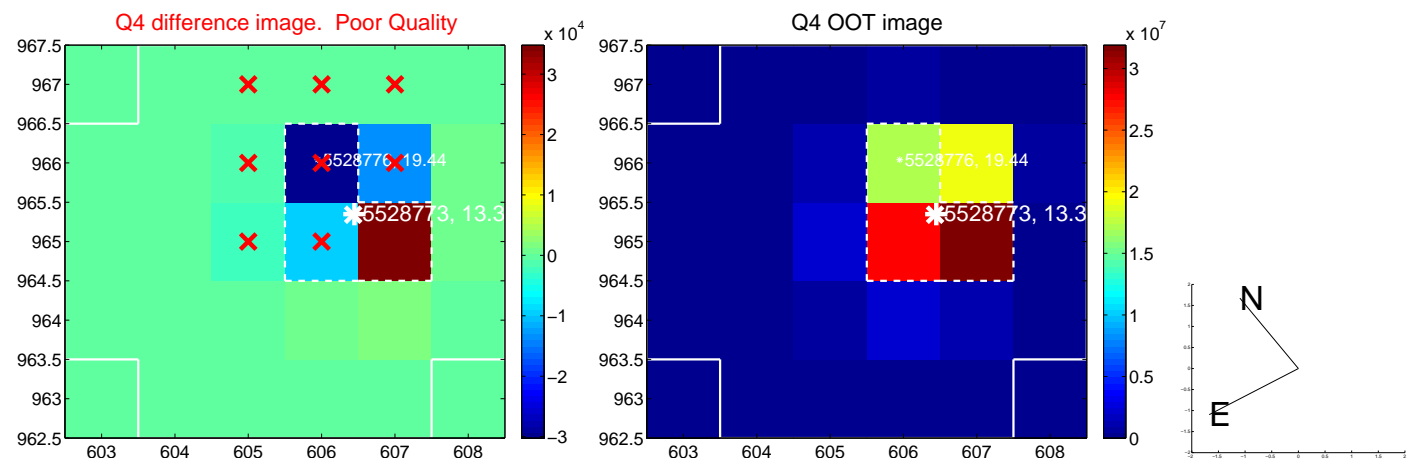
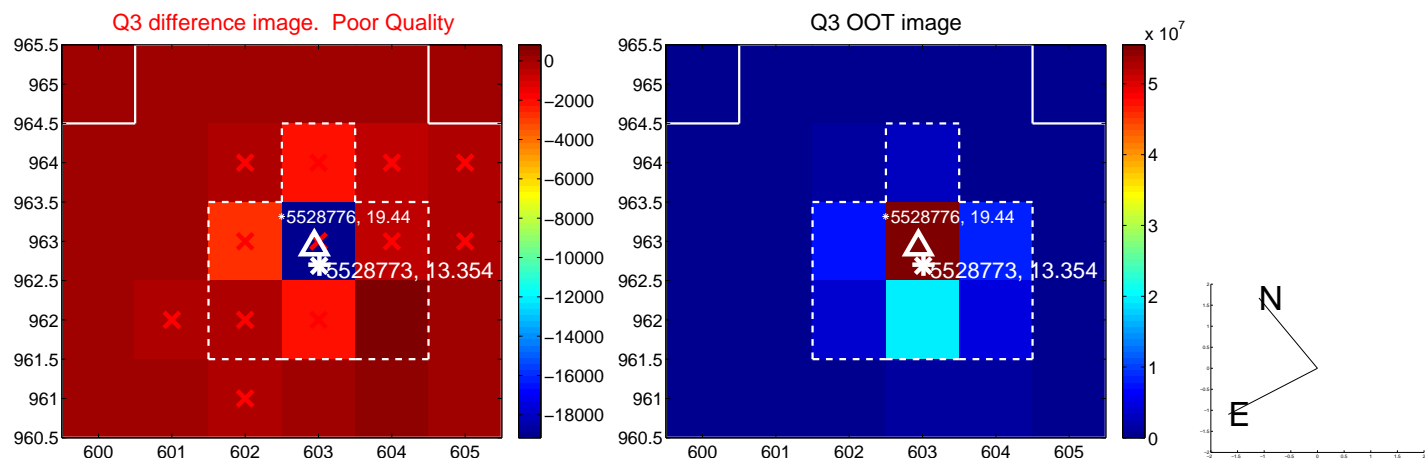
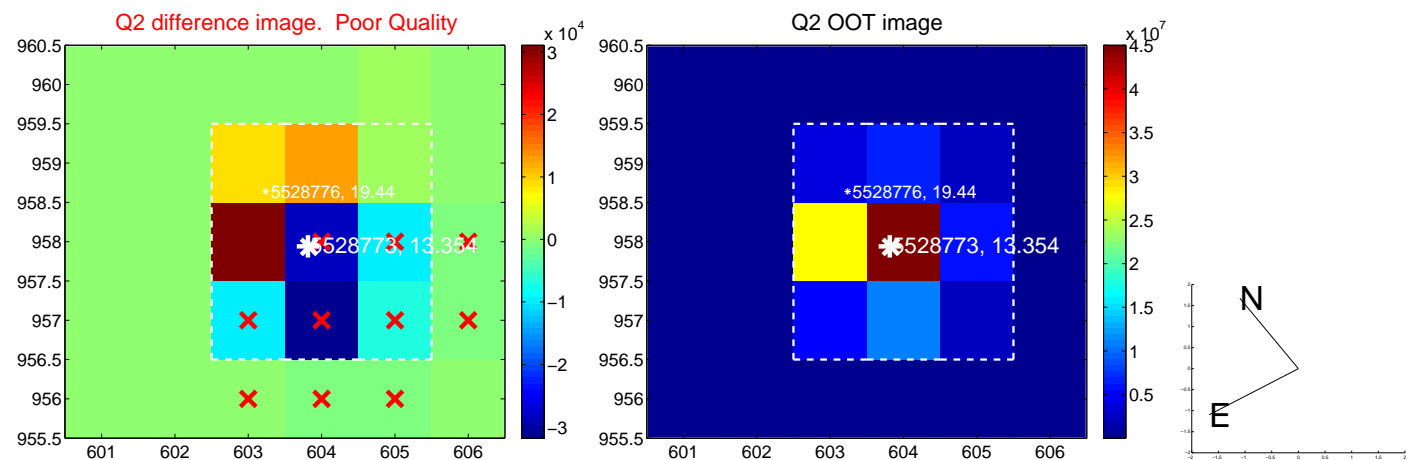
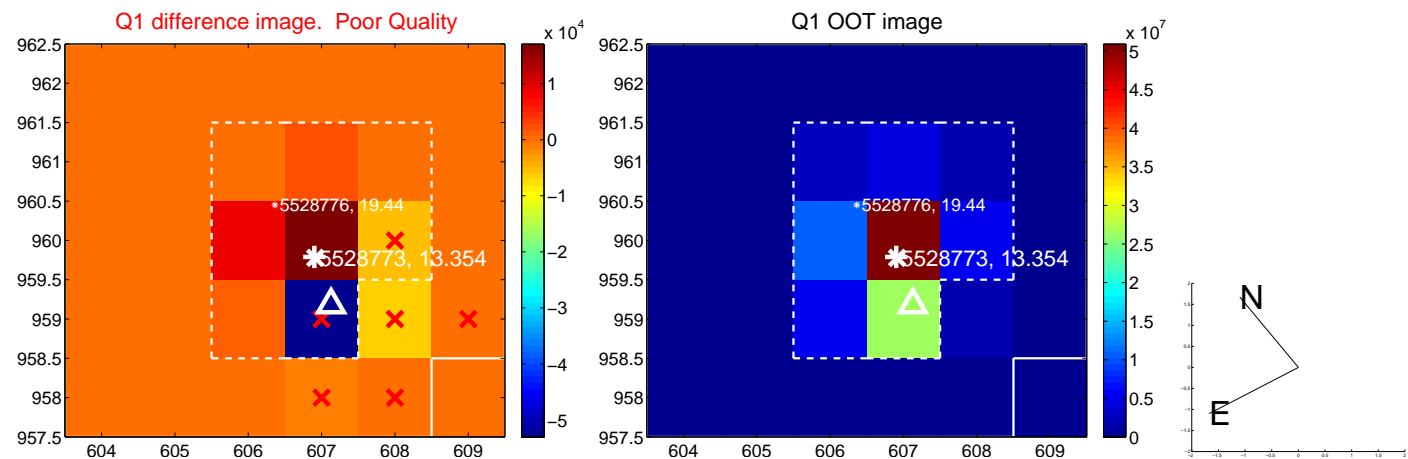
The direct PRF centroid is offset from the target star catalog position by about 0.05 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.925 ± 0.659	1.40	-0.019 ± 0.154	-0.925 ± 0.659
PRF-fit source offset from KIC position	0.893 ± 0.658	1.36	-0.059 ± 0.154	-0.891 ± 0.659
photometric centroid source offset	—	—	—	—

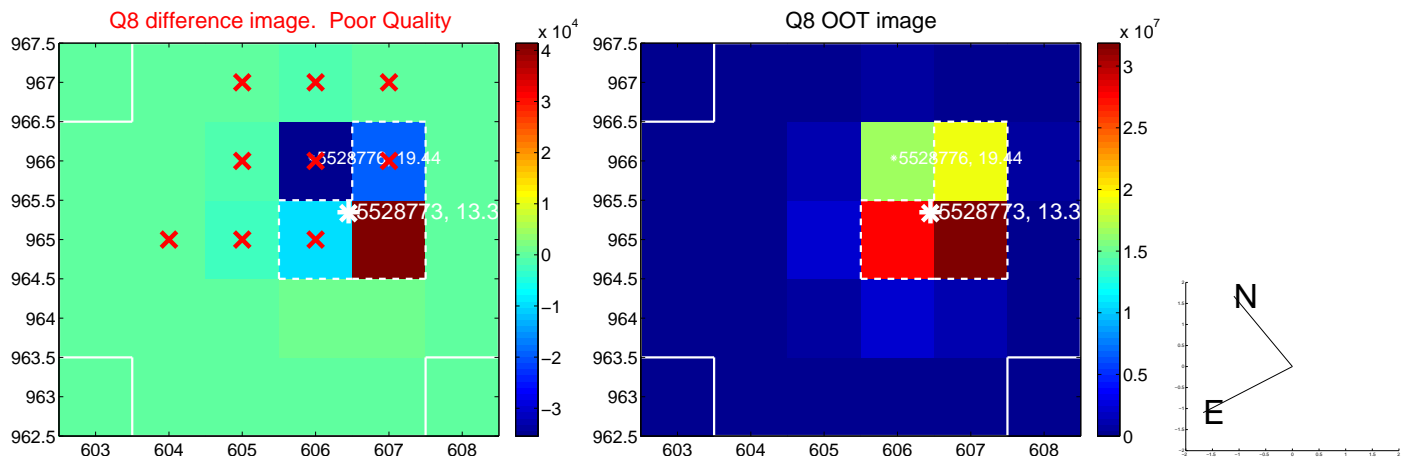
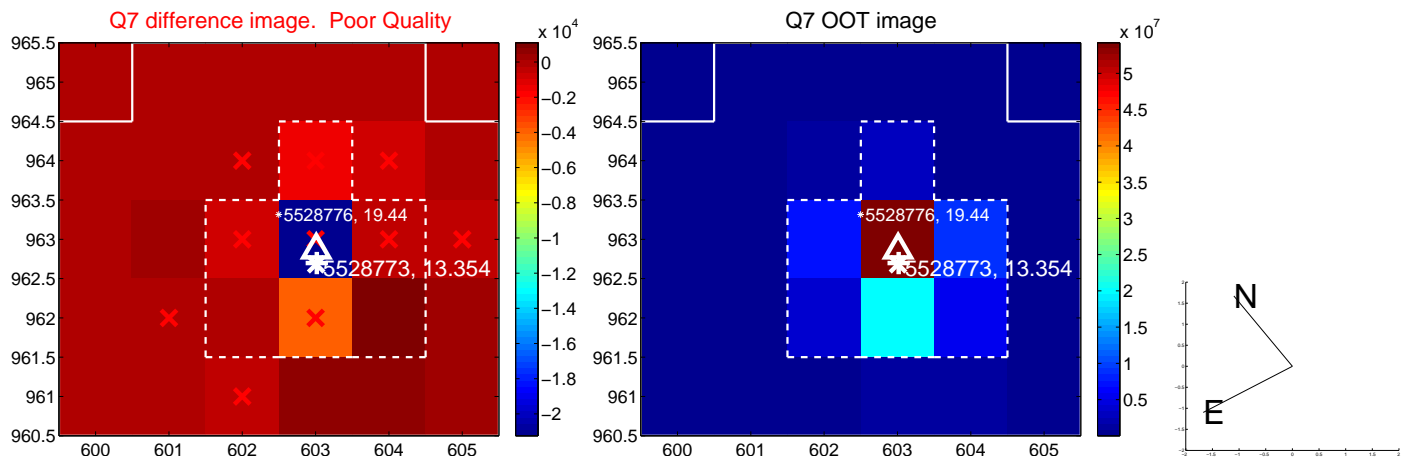
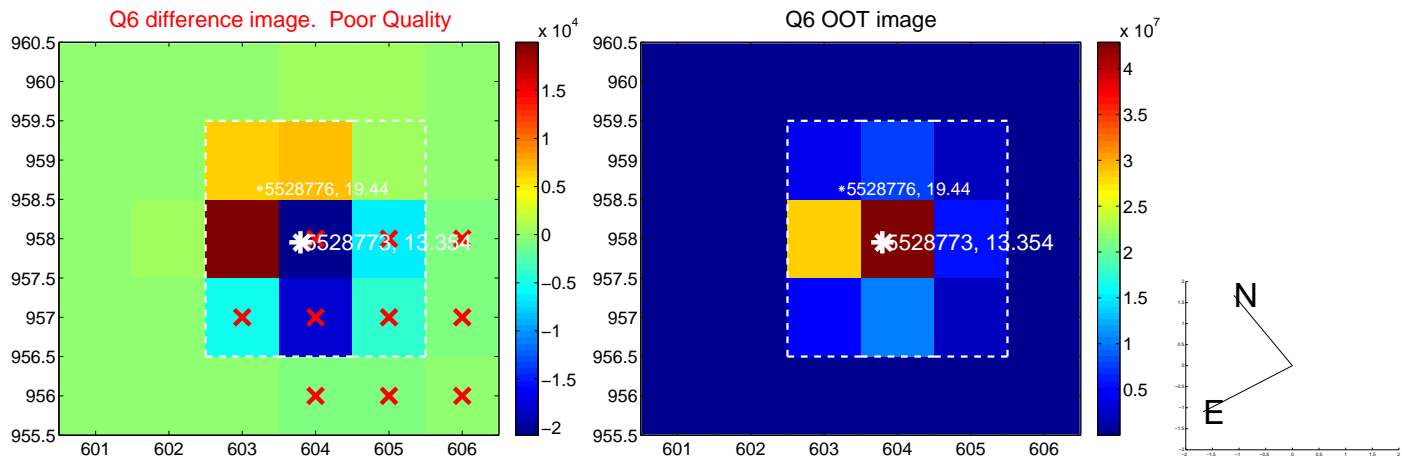
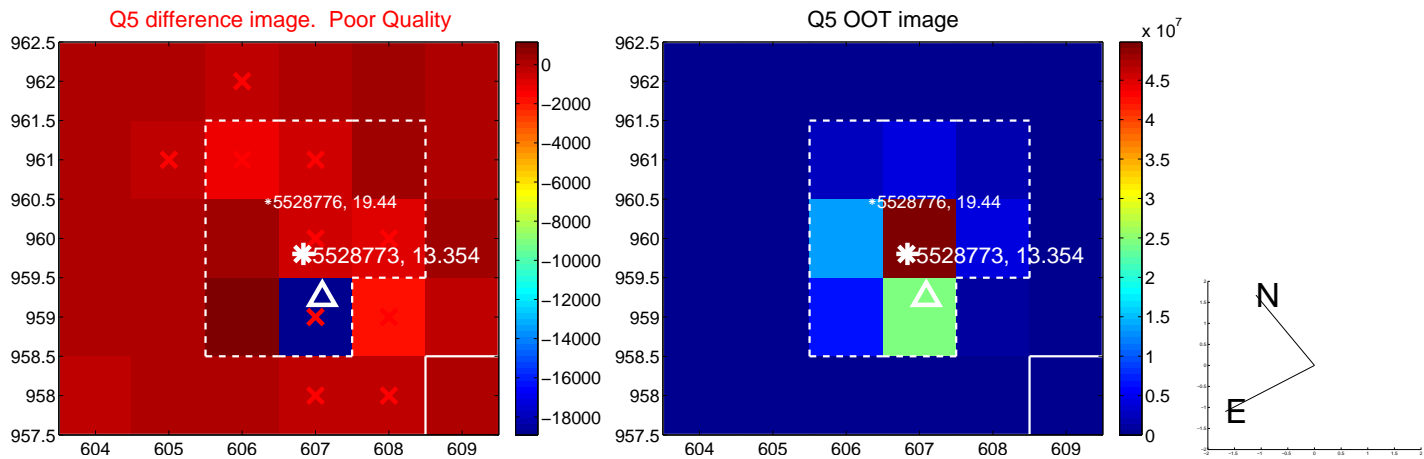


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

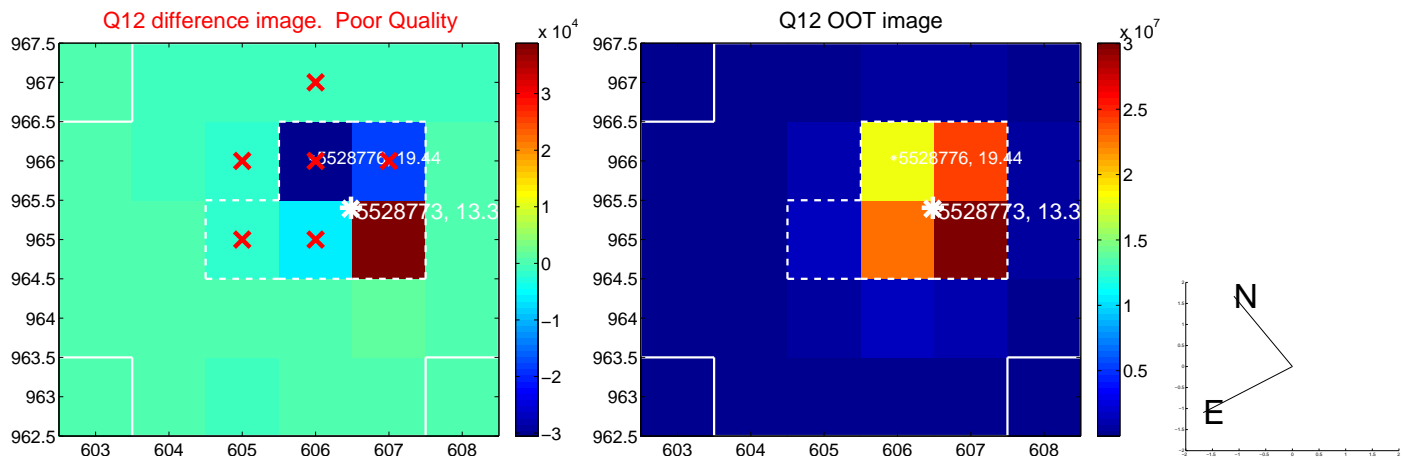
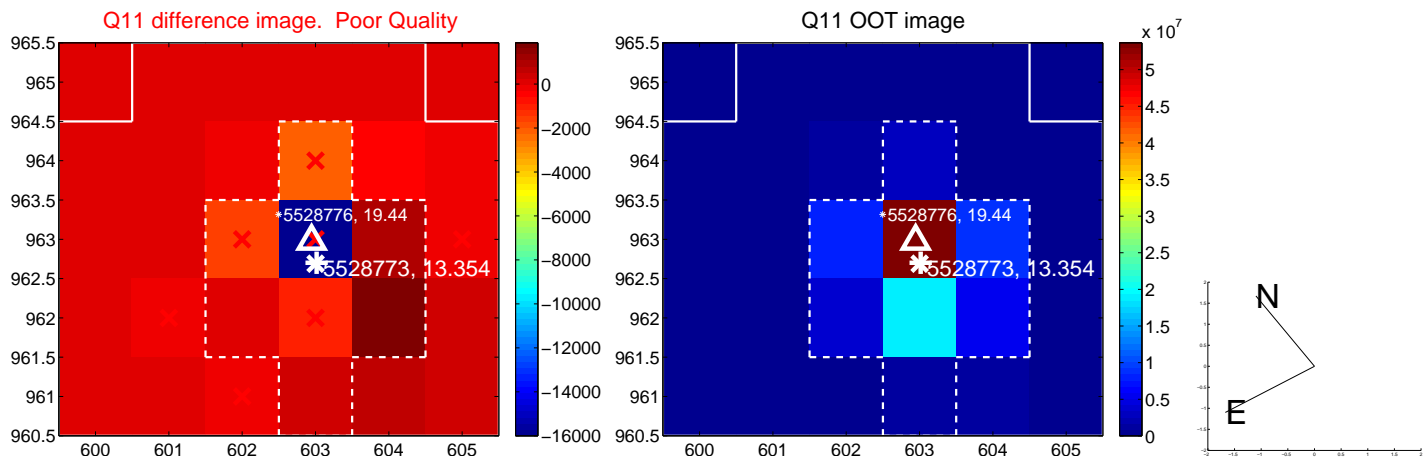
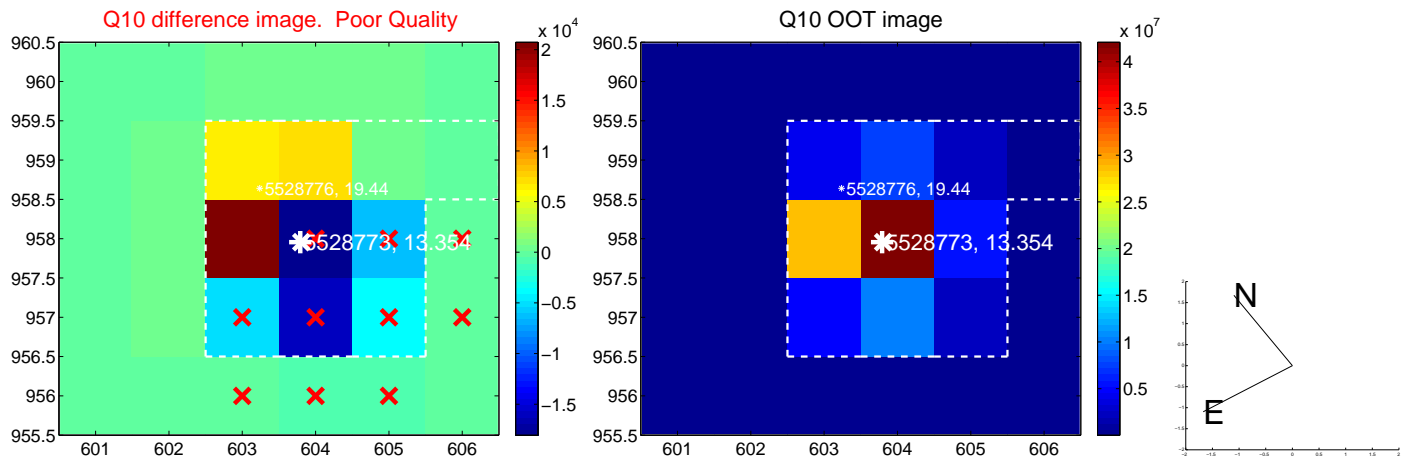
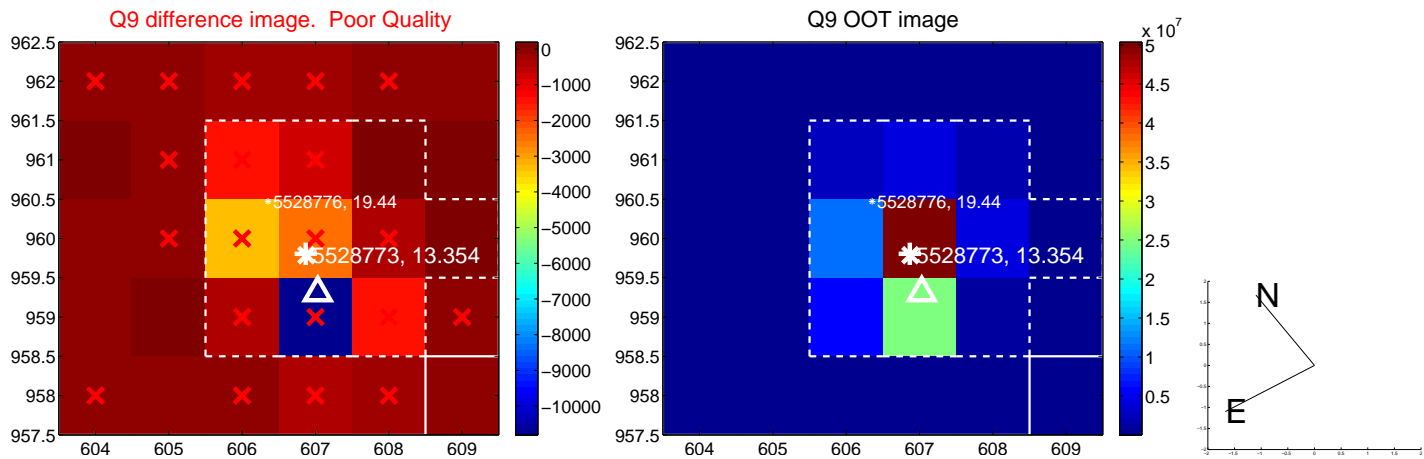
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



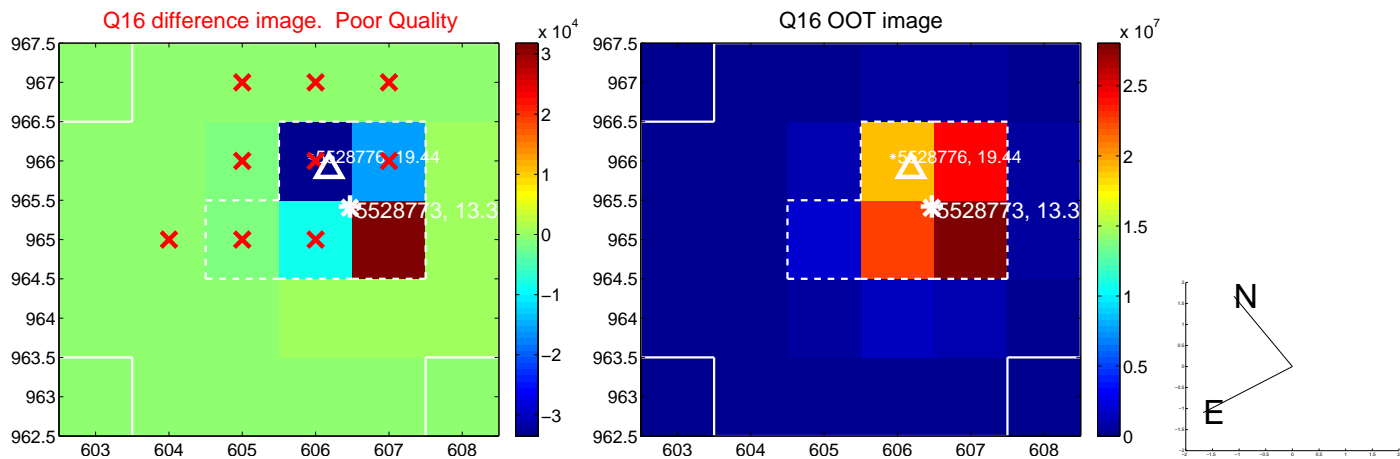
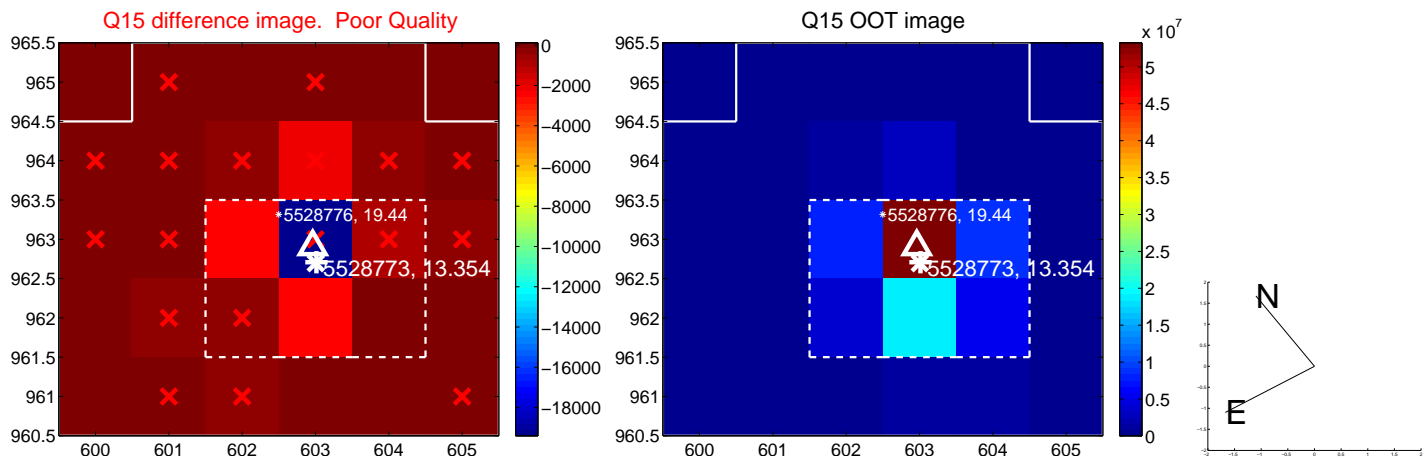
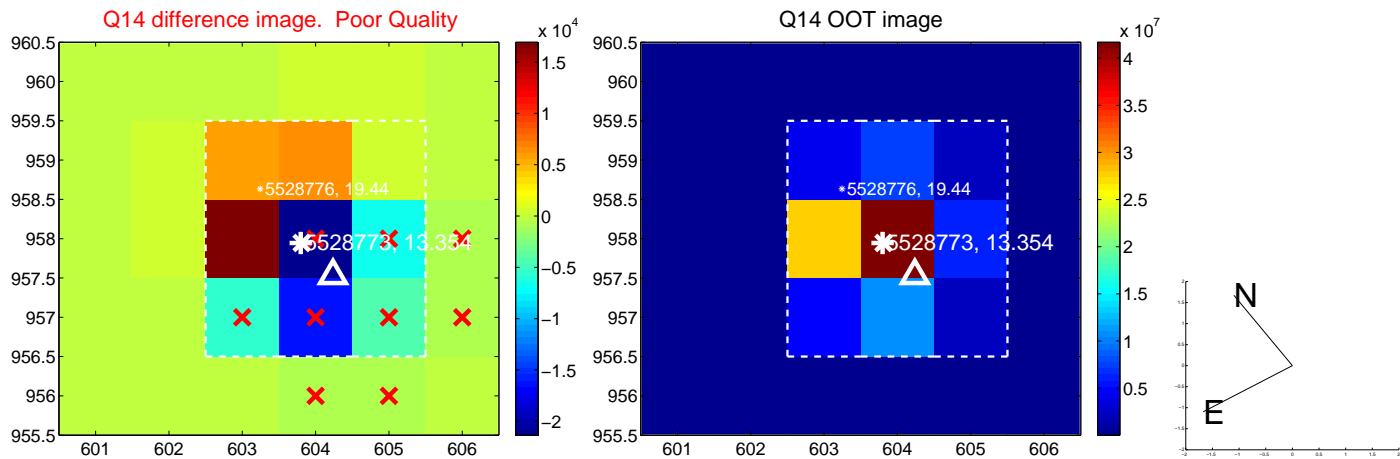
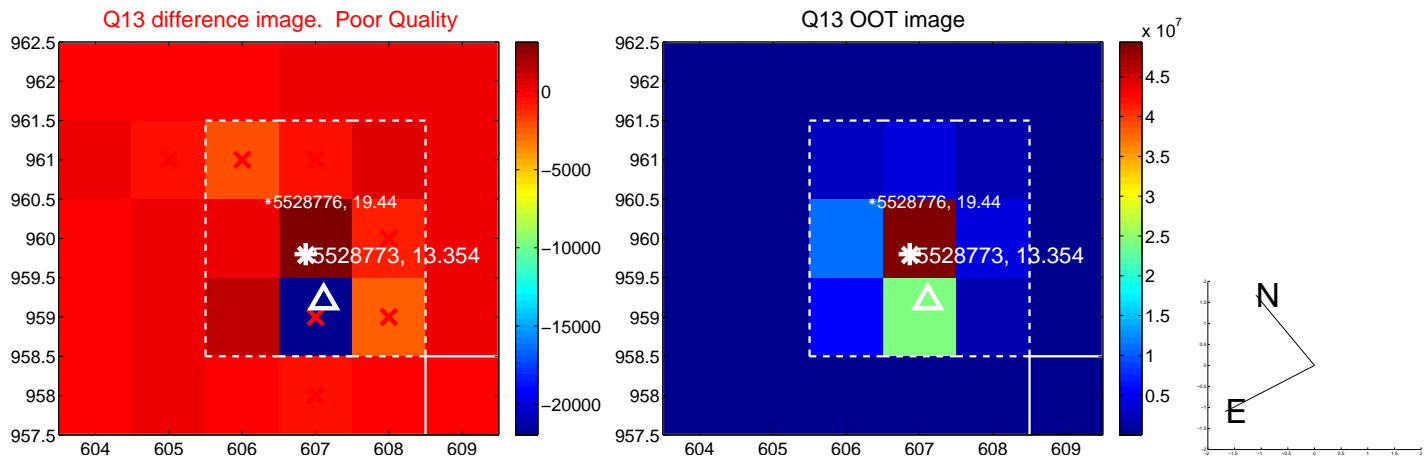
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



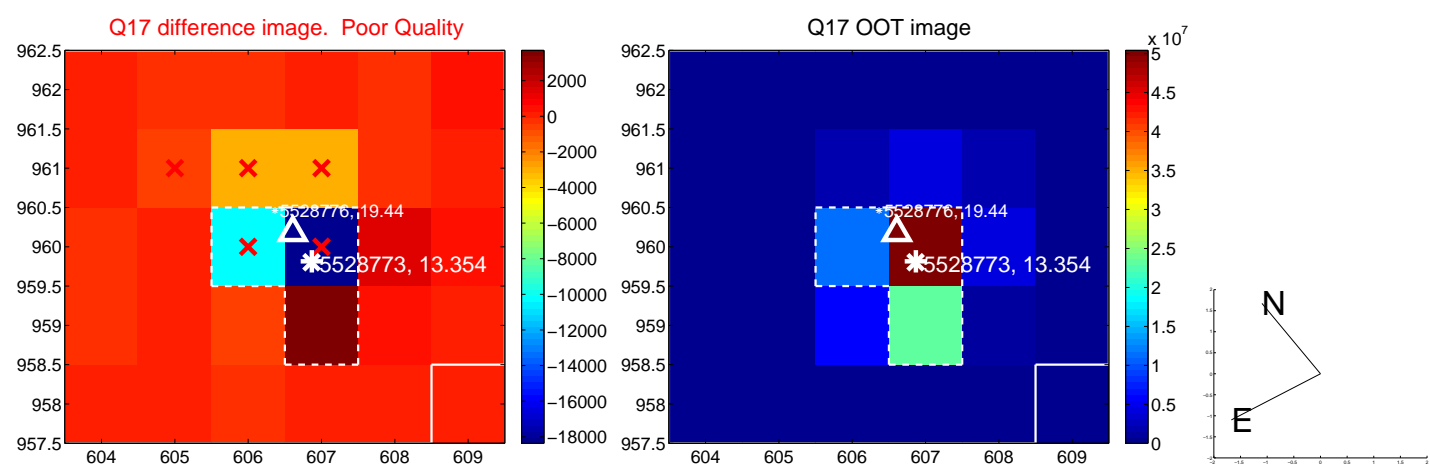
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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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

Declination

