

KIC 006371322

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})
006371322-01	OBS	No	1.787414	132.415181	23.7	14.898	9.3	2.1	1.87	7209	0.95	7765.88

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
006371322-01	OBS	FP	0.00	1	0	1	0	SWEET_NTL—LPP_DV—HALO_GHOST

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

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

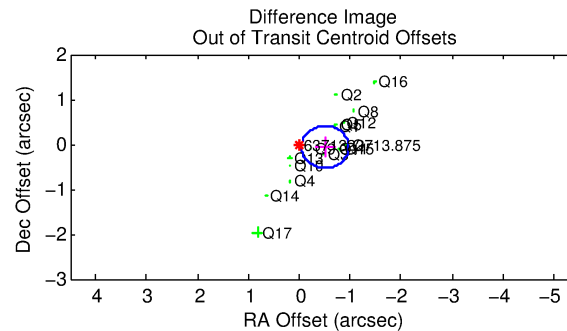
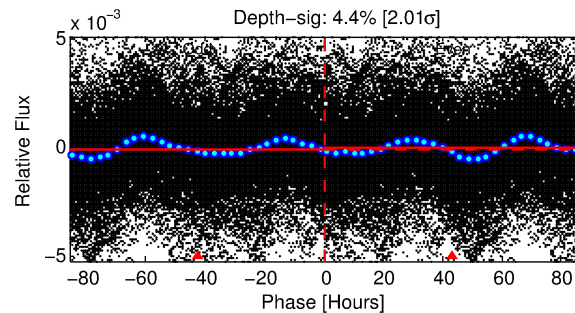
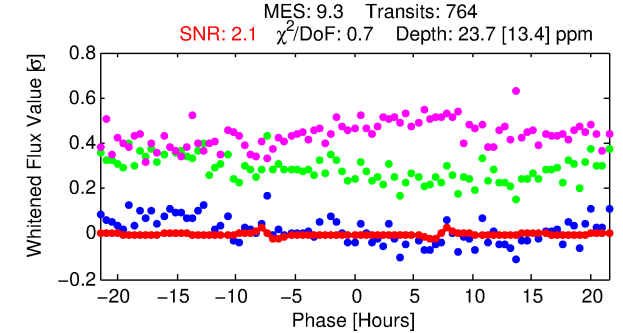
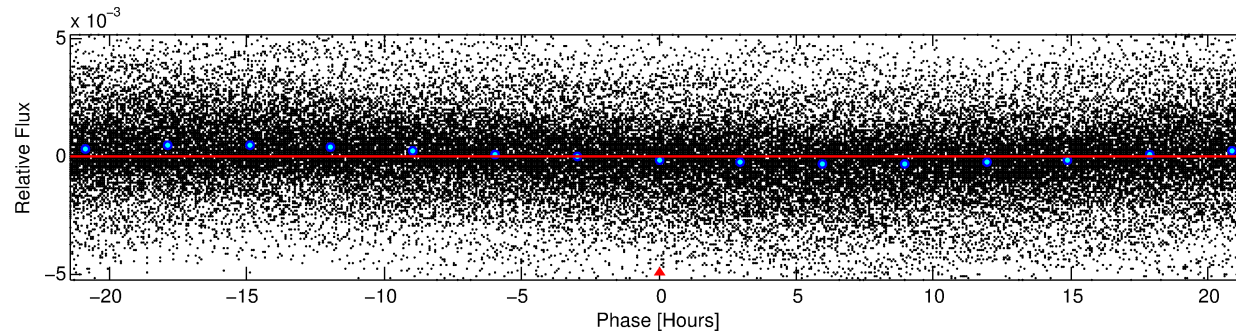
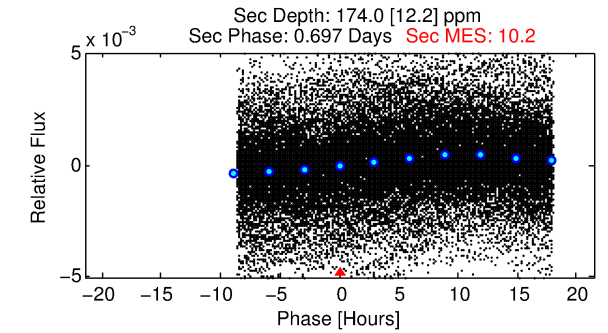
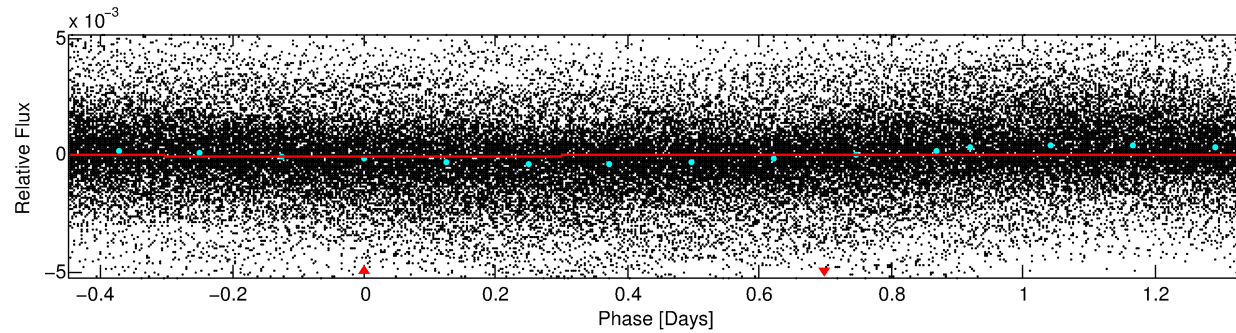
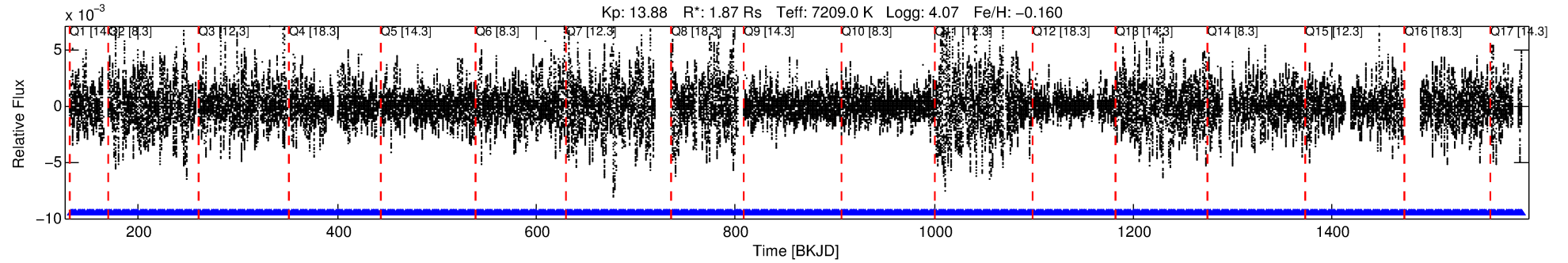
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 006371322-01

No Significant Match Found

DV One-Page Summary

KIC: 6371322 Candidate: 1 of 1 Period: 1.787 d



DV Fit Results:

Period = 1.78741 [0.00005] d
Epoch = 132.4152 [0.0088] BKJD
Rp/R* = 0.0046 [0.0051]
a/R* = 1.10 [1.25]
b = 0.54 [8.84]
Seff = 7765.87 [2972.48]
Teq = 2394 [229] K
Rp = 0.95 [1.08] Re
a = 0.0330 [0.0080] AU
Ag = 115.85 [257.61] [0.45 σ]
Teffp = 12142 [6692] K [1.46 σ]

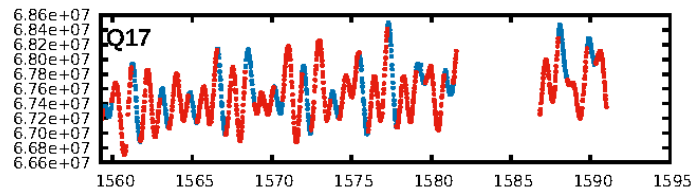
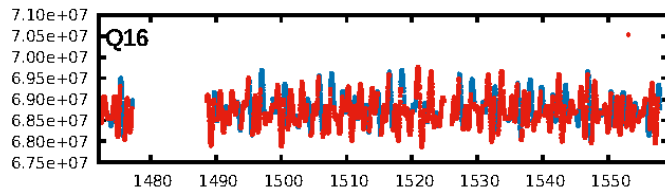
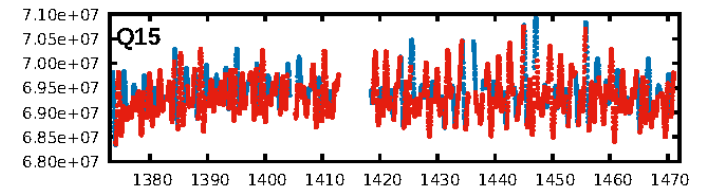
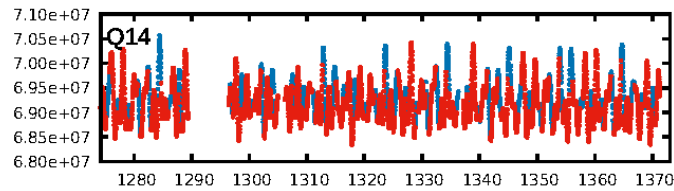
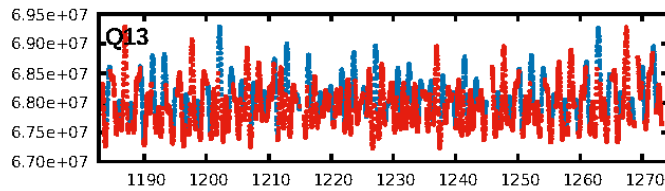
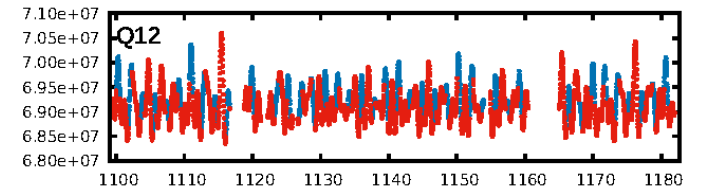
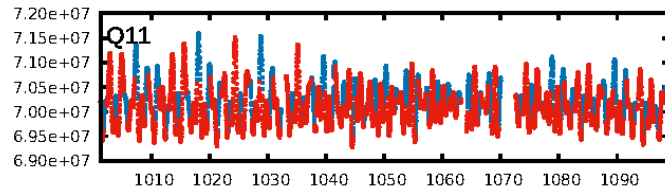
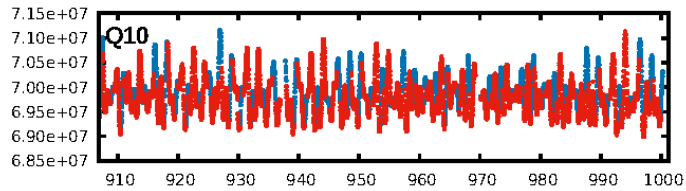
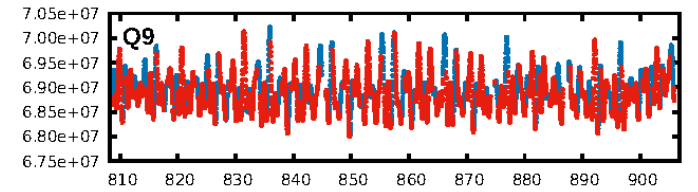
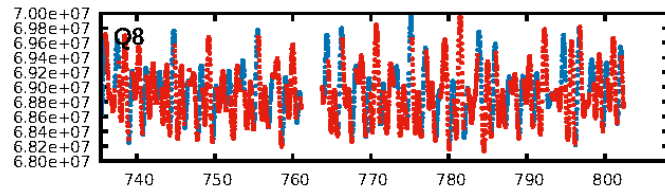
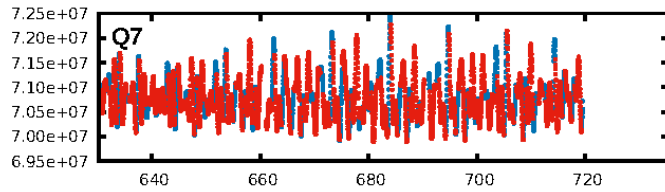
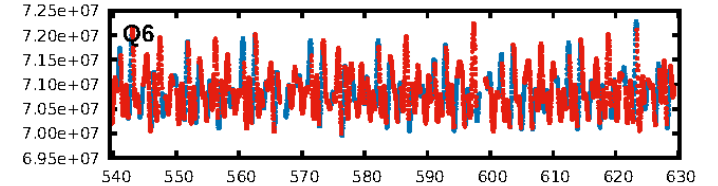
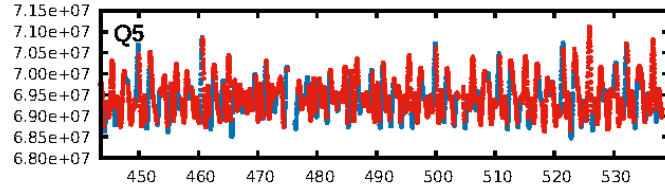
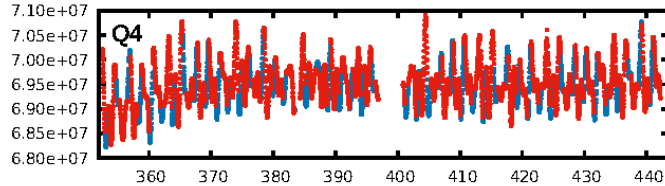
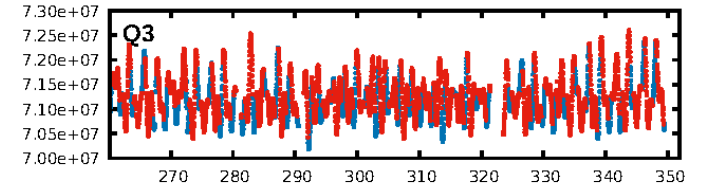
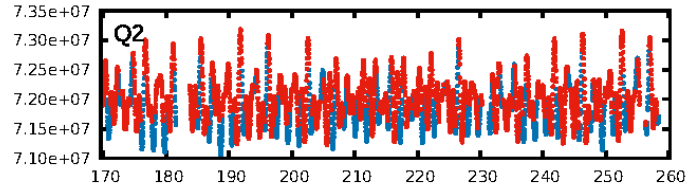
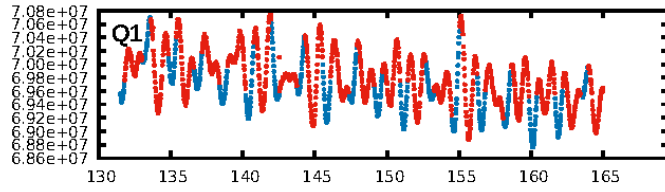
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [730/730]
GhostDiagnostic-chr: 0.1134
Centroid-sig: 0.0%
Centroid-so: 6.700 arcsec [2.63 σ]
OotOffset-rm: 0.511 arcsec [3.29 σ]
KicOffset-rm: 0.189 arcsec [1.27 σ]
OotOffset-st: 3/4/4/5 [16]
KicOffset-st: 3/4/4/5 [16]
DiffImageQuality-fgm: 0.38 [6/16]
DiffImageOverlap-fno: 1.00 [17/17]

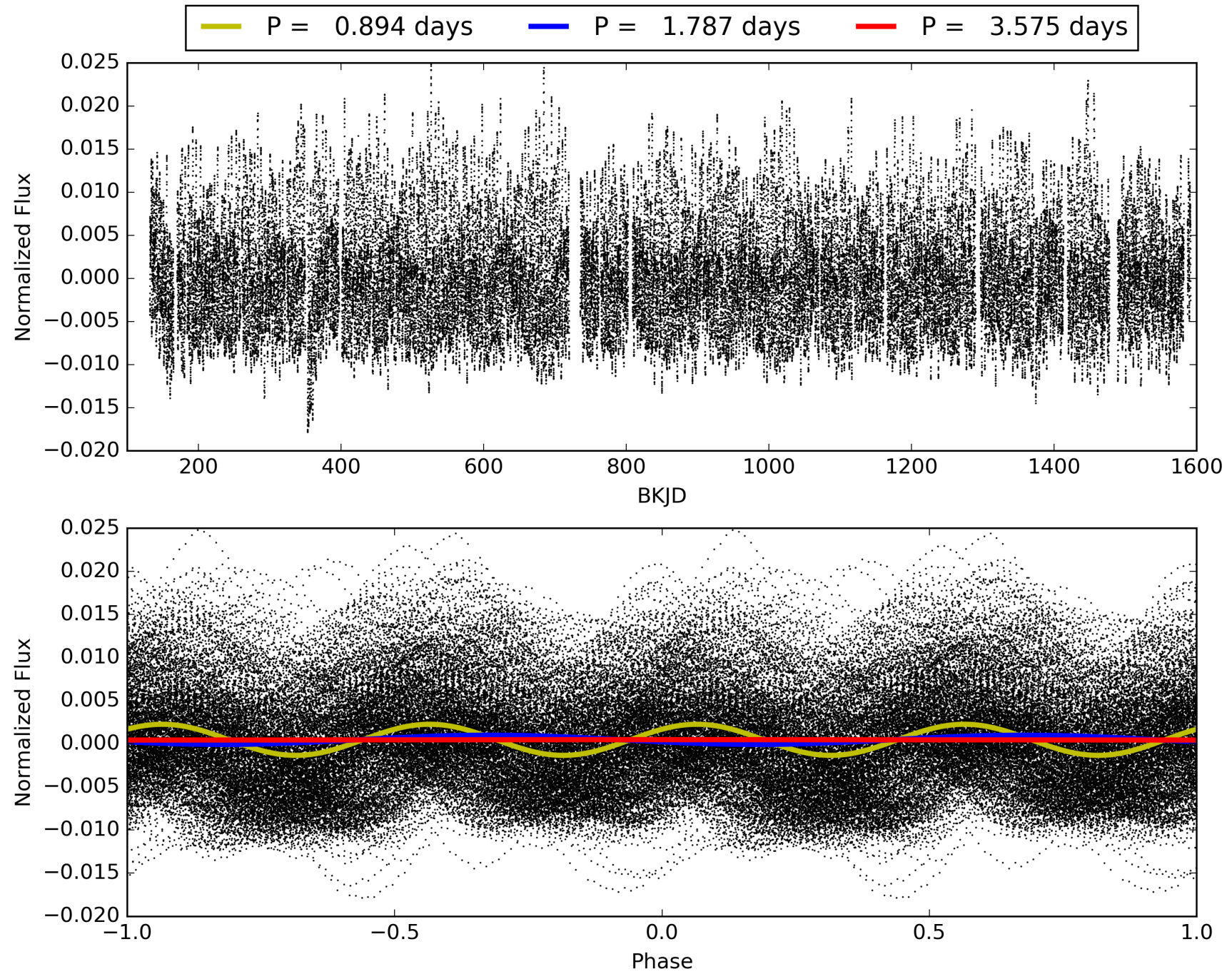
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 17:43:19 Z

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

TCE 006371322-01, PDC Light Curves

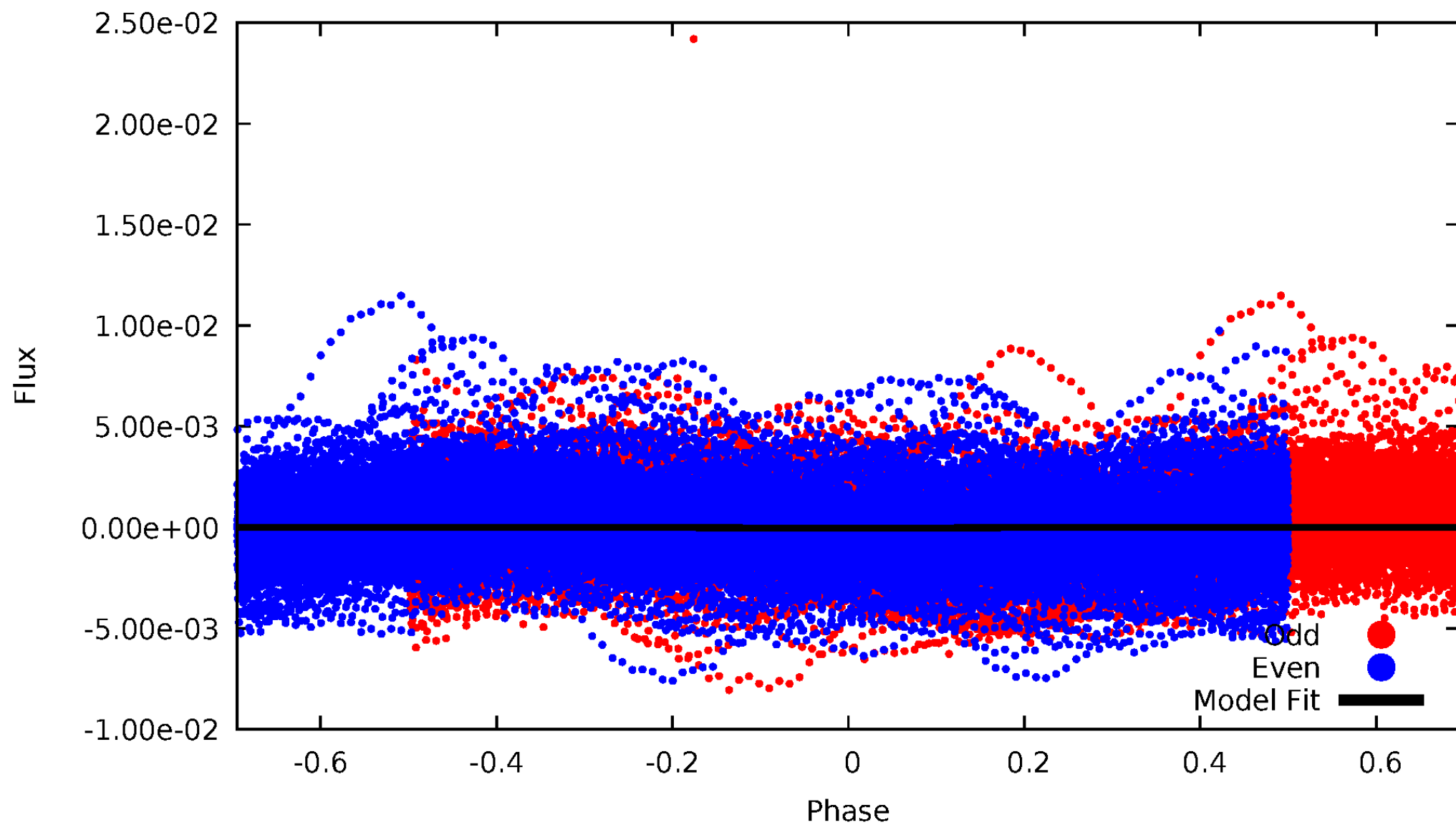


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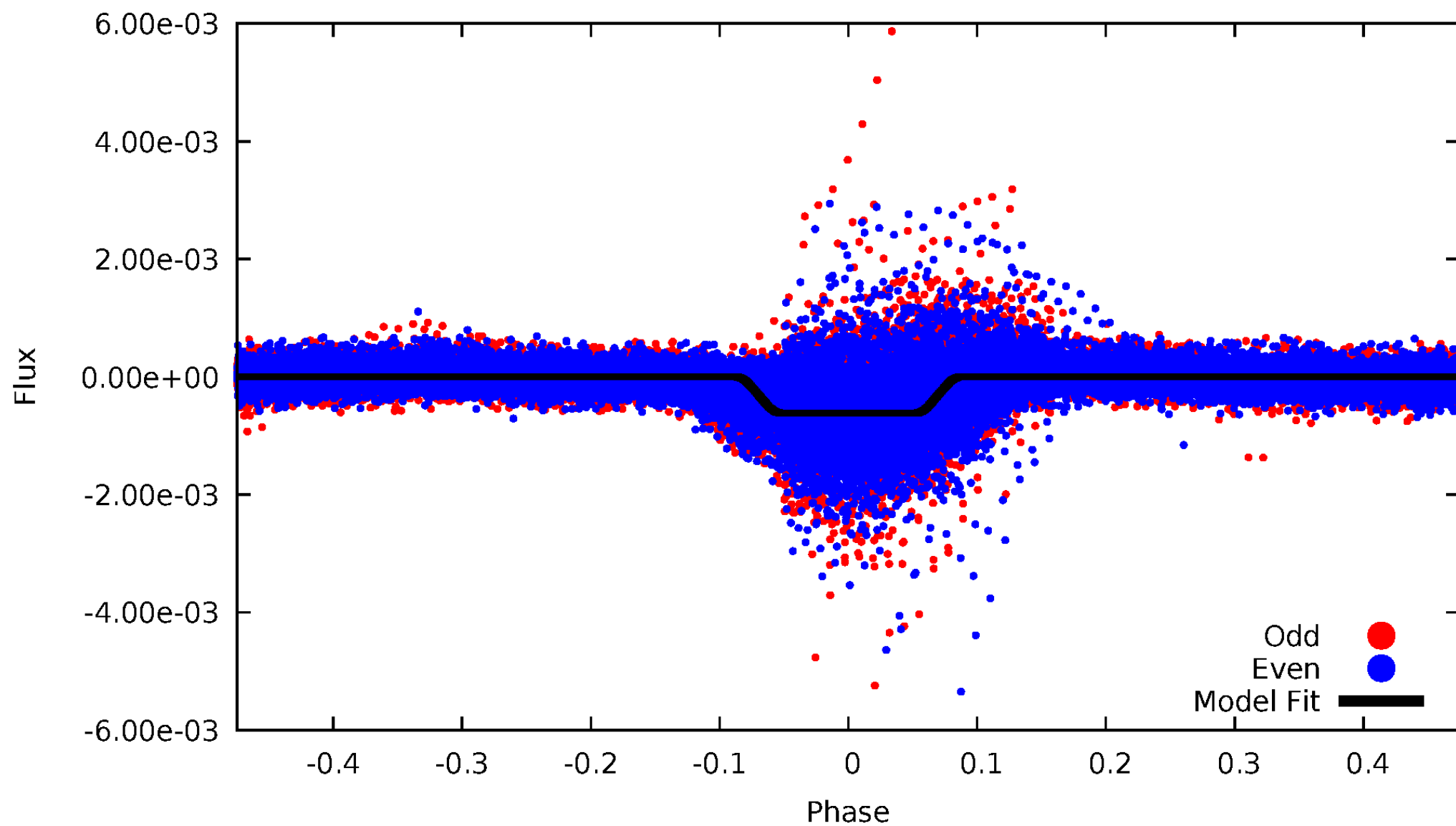
DV Odd/Even

TCE 006371322-01



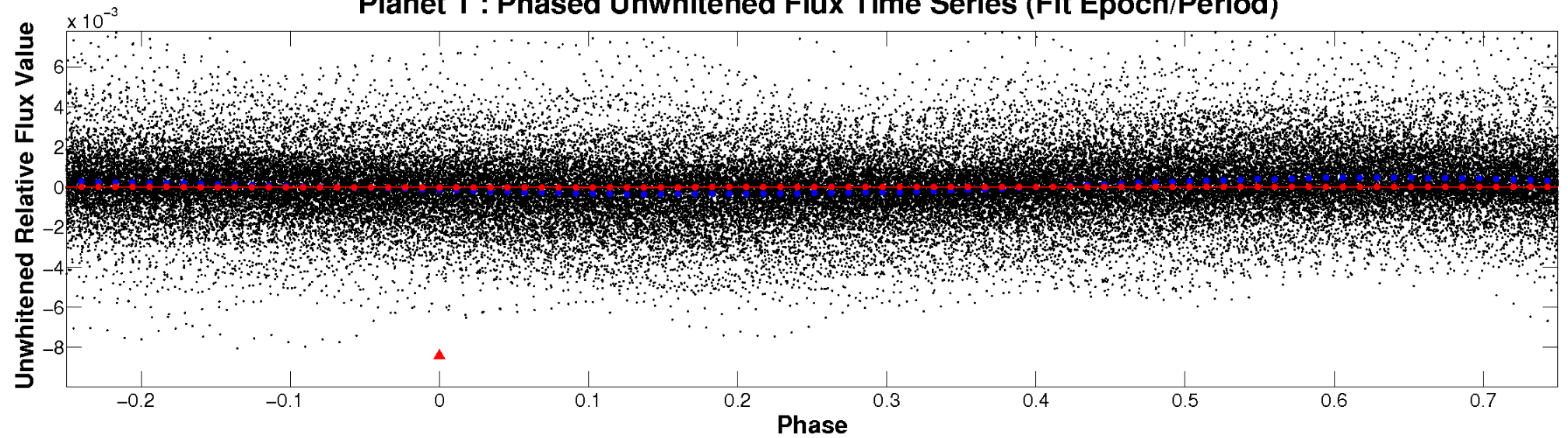
ALT Odd/Even

TCE 006371322-01

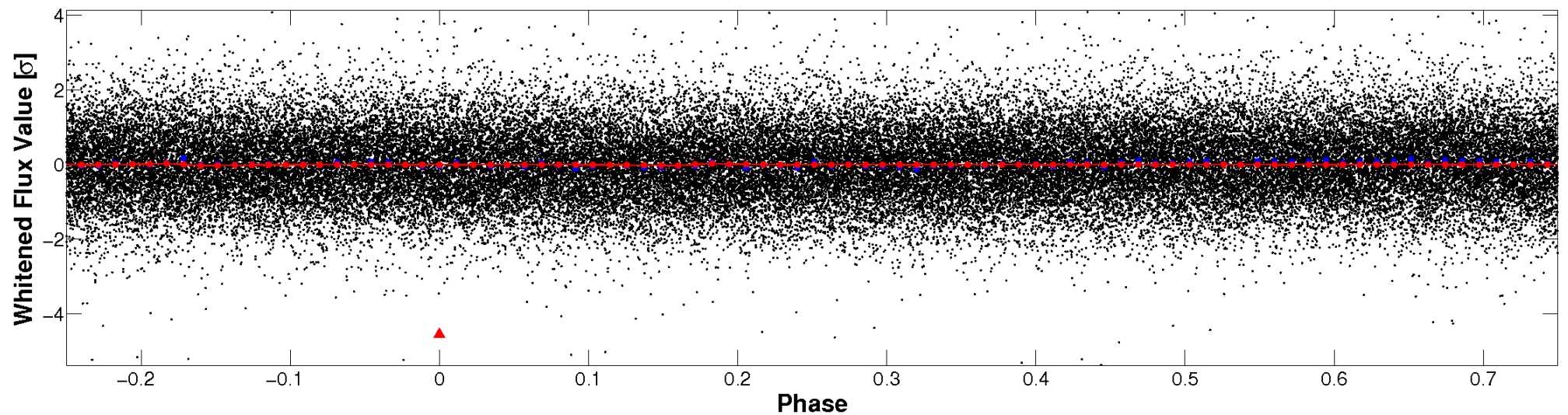


Non-Whitened Vs. Whitened Light Curve

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

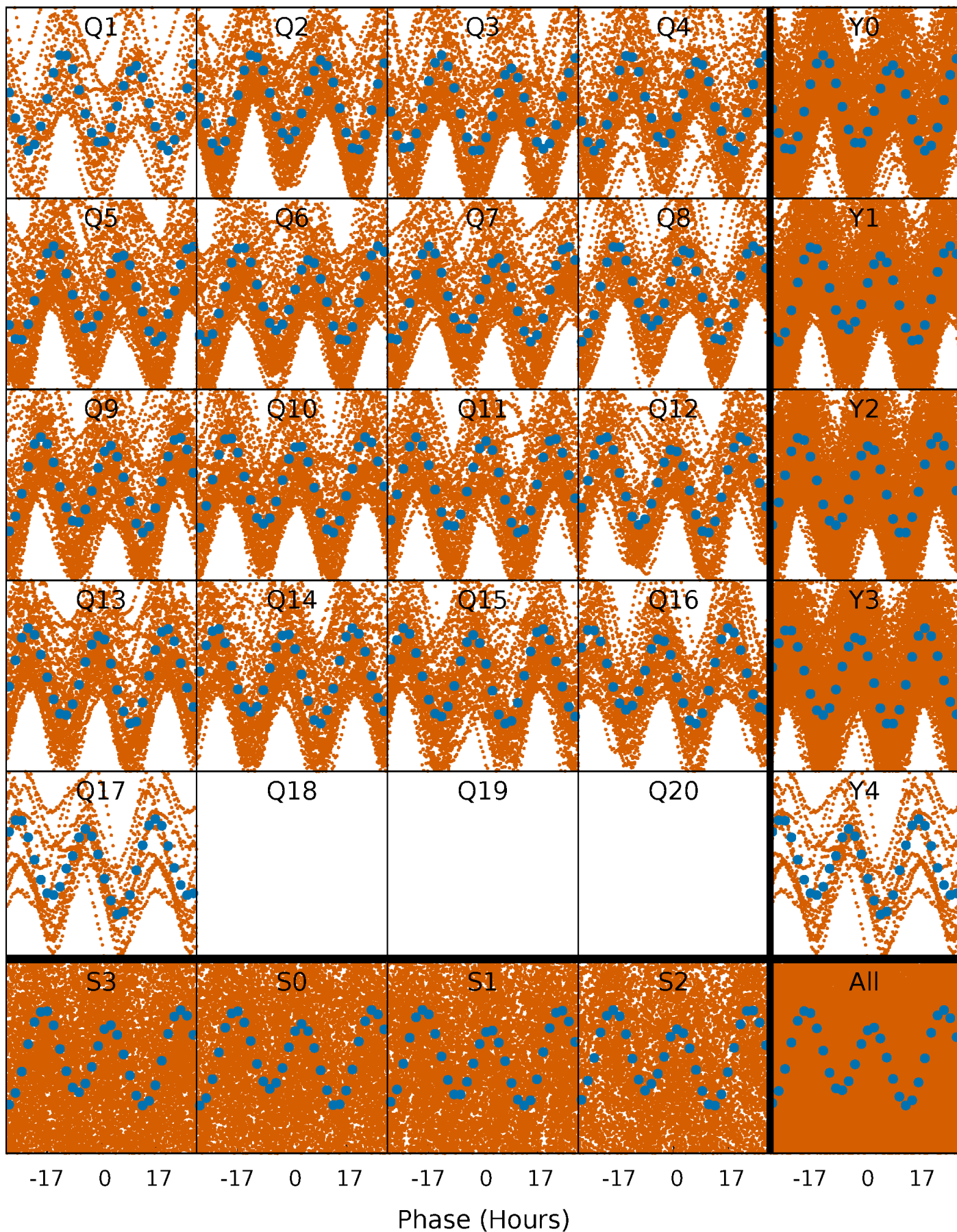


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



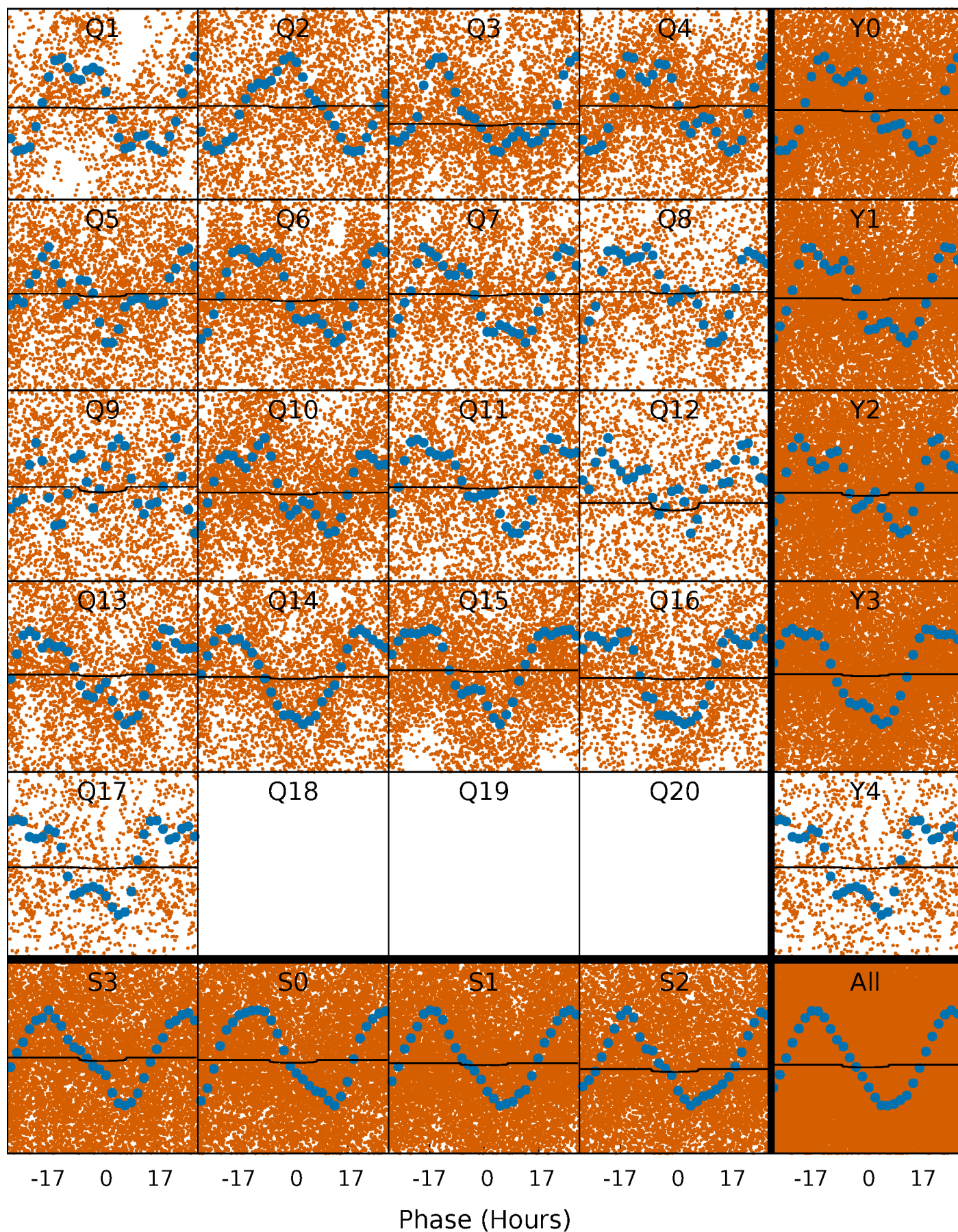
PDC Quarter-Phased Transit Curves

TCE 006371322-01 P= 1.787414 Days $T_0=132.415181$ (BKJD)



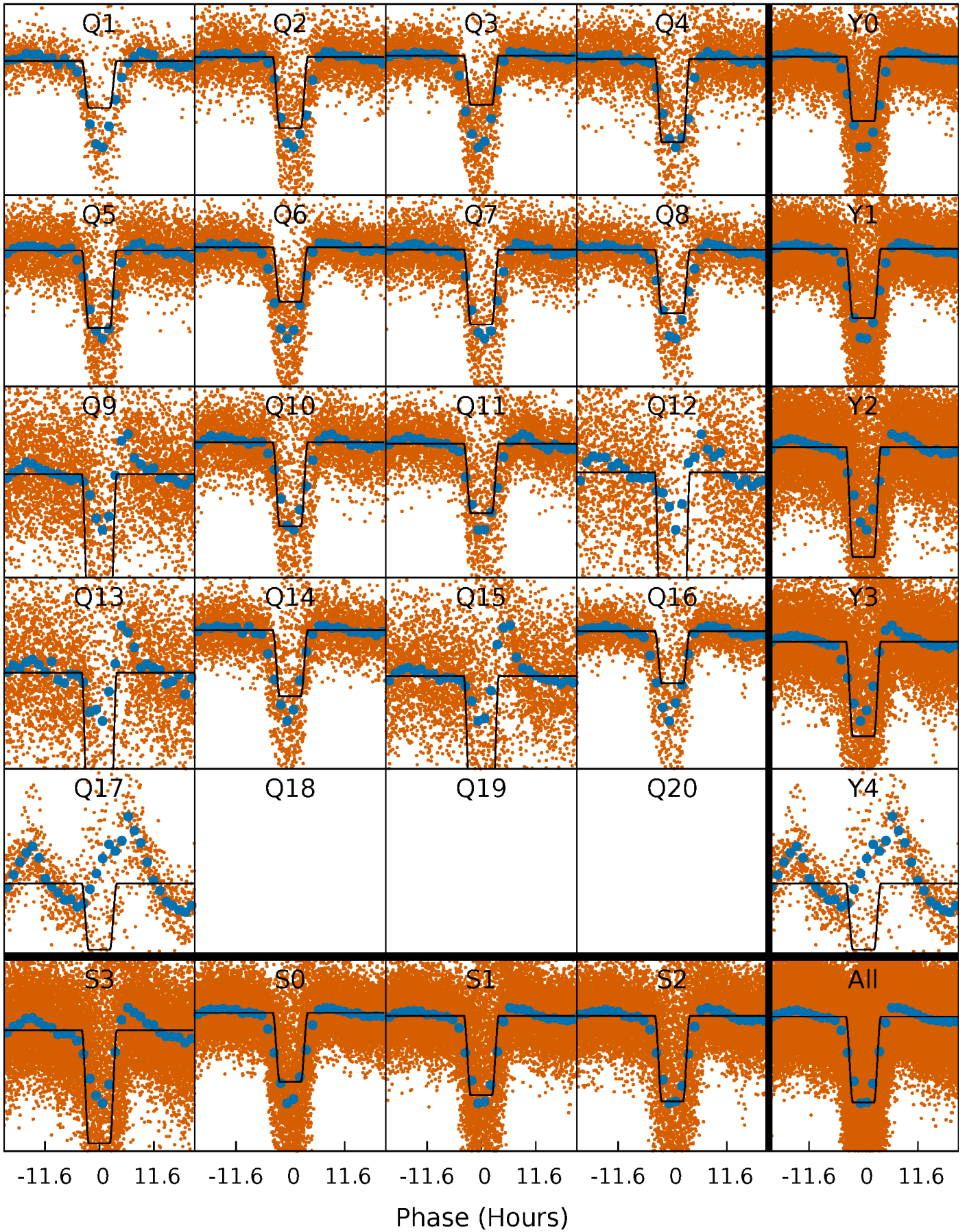
DV Quarter-Phased Transit Curves

TCE 006371322-01 P= 1.787414 Days $T_0=132.415181$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

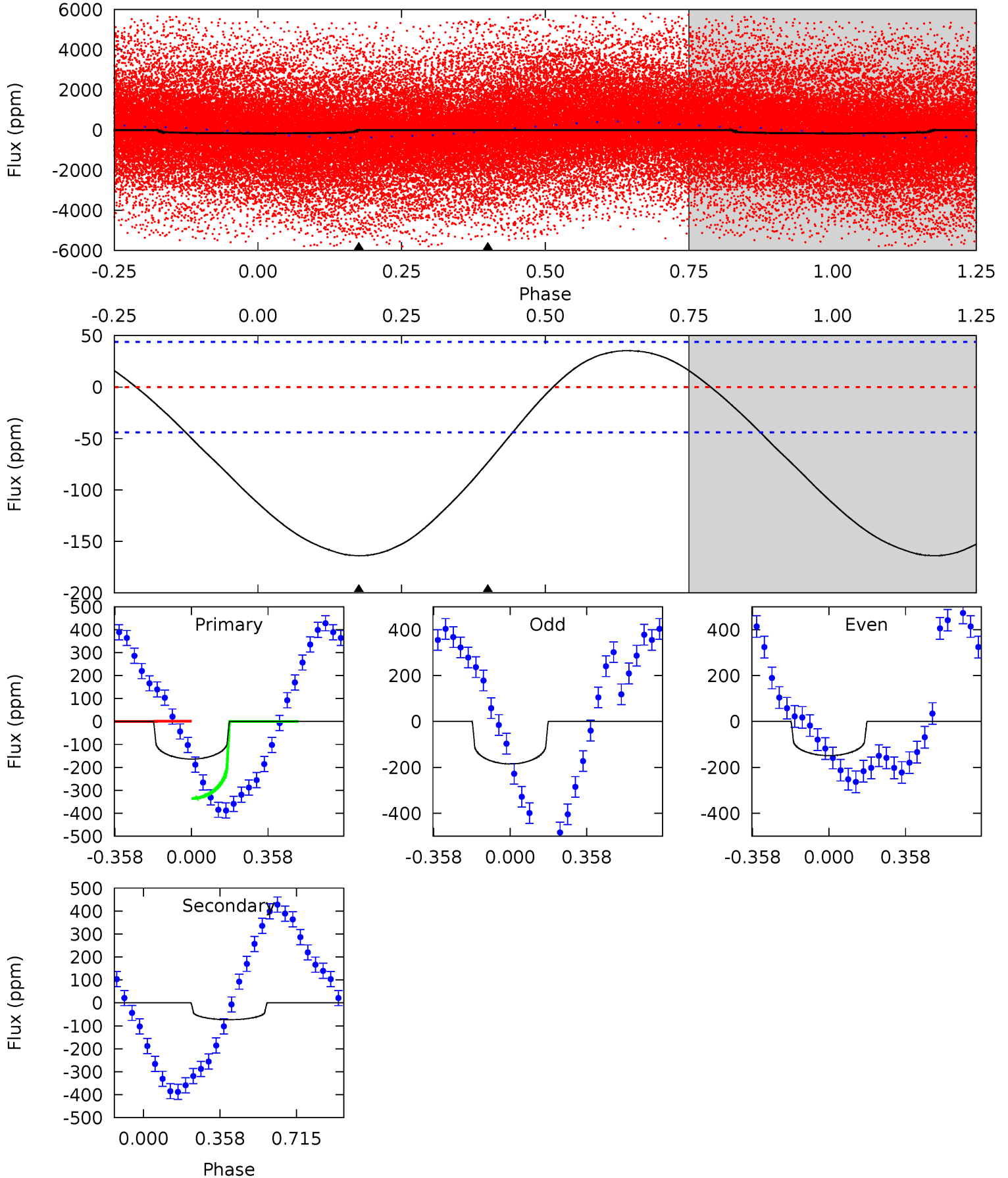
TCE 006371322-01 P= 1.786687 Days $T_0=132.517744$ (BKJD)



DV Model-Shift Uniqueness Test

006371322-01, P = 1.787414 Days, E = 130.627767 Days

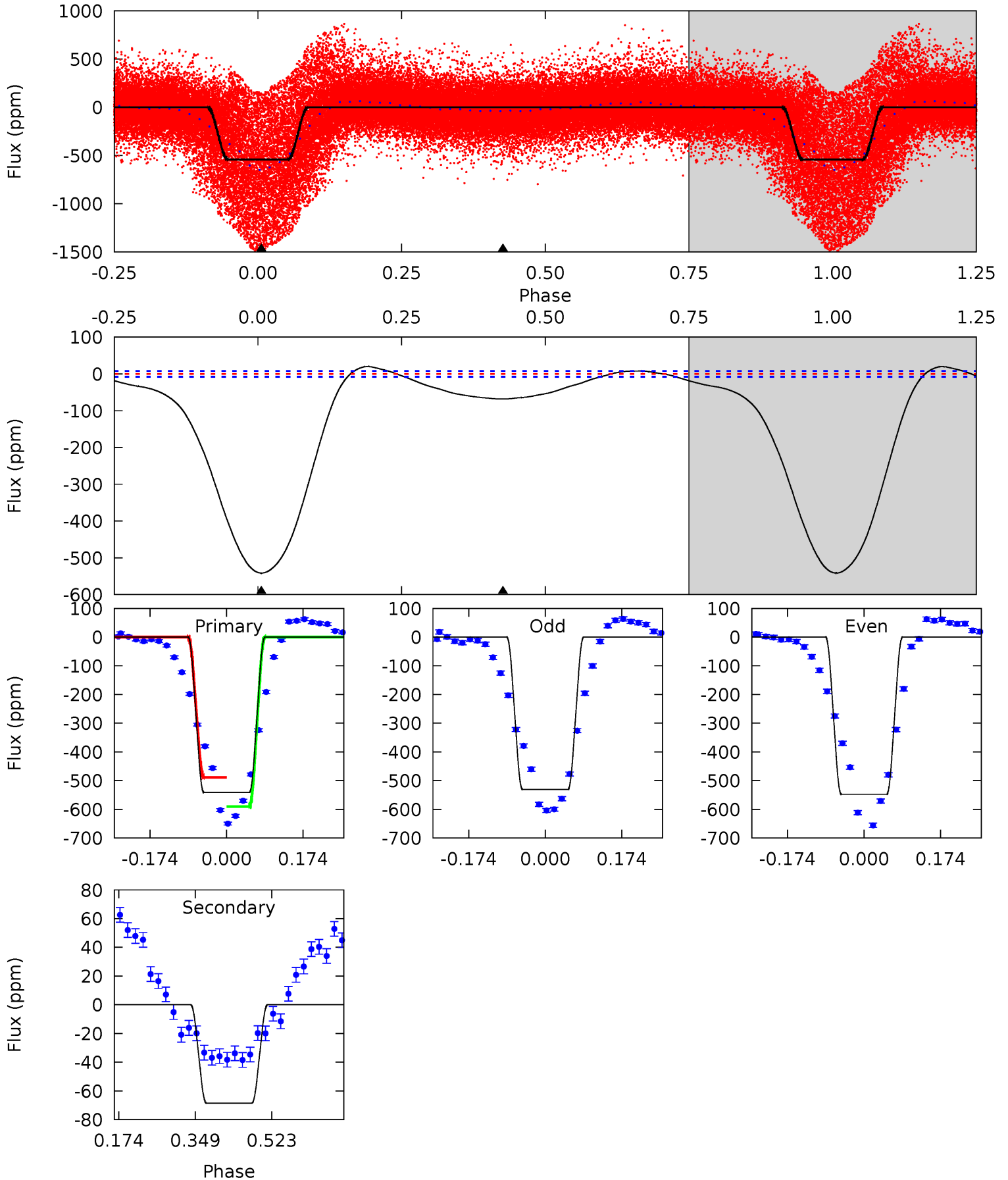
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
16.0	7.15	0	0	4.29	0.92	1.31	16.0	16.0	7.15	7.15	1.79	1.17	0.18	16.3



Alt Model-Shift Uniqueness Test

006371322-01, P = 1.786687 Days, E = 130.731057 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
301.7	38.1	0	0	4.45	1.36	10.4	301.7	301.7	38.1	38.1	4.70	1.00	0.04	28.2



Stellar Parameters For KIC 006371322

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$\rho_{\star} (\text{g}\cdot\text{cm}^{-3})$
	7209^{+230}_{-316}	$4.070^{+0.180}_{-0.180}$	$-0.160^{+0.250}_{-0.350}$	$1.867^{+0.556}_{-0.505}$	$1.492^{+0.212}_{-0.236}$	$0.323^{+0.325}_{-0.163}$
	+3%/-4%	+4%/-4%	+156%/-219%	+30%/-27%	+14%/-16%	+101%/-50%
Source	PHO1	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 006371322-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-73 ± 10	$1.18^{+0.99}_{-0.72}$	3353^{+270}_{-250}	9060^{+12611}_{-2664}	31^{+171}_{-22}
Alt.	-68 ± 2	$5.05^{+1.39}_{-1.23}$	3336^{+276}_{-237}	4162^{+478}_{-388}	$1.587^{+1.183}_{-0.598}$

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 $A_{obs} \gg 1.0$

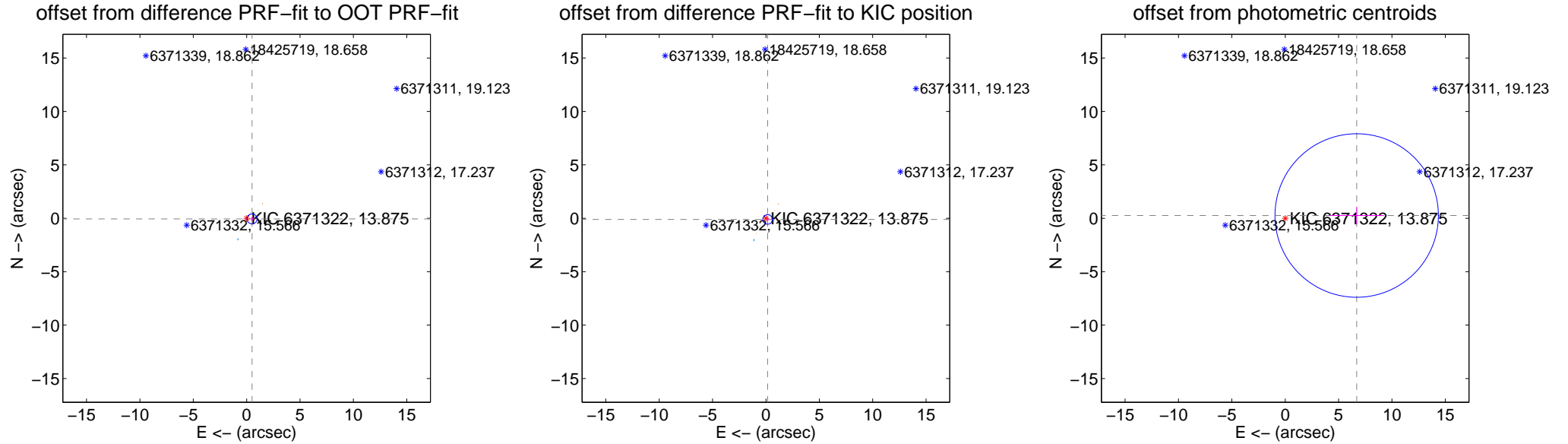
DV Centroid Data

Supplemental centroid analysis for 006371322-01. Kepler magnitude: 13.88. Transit SNR 2.10

There are 6 quarters with good PRF difference image offsets

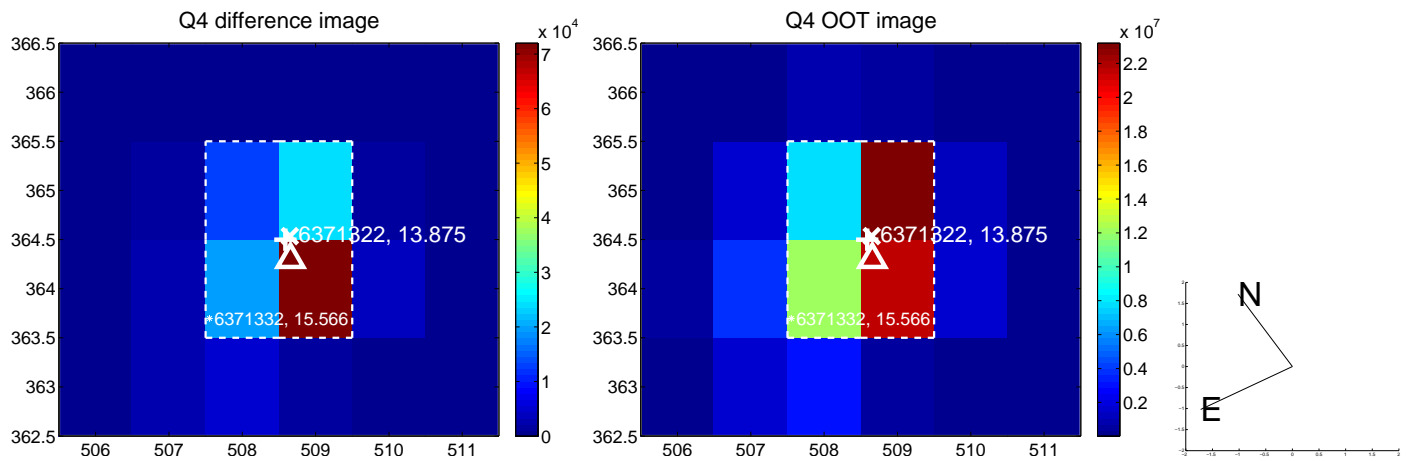
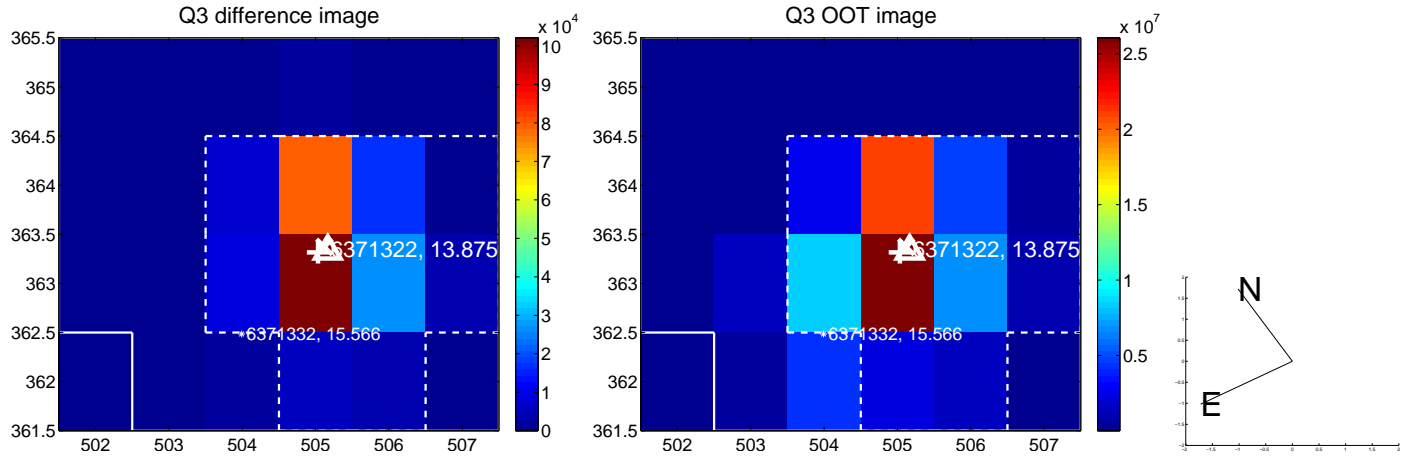
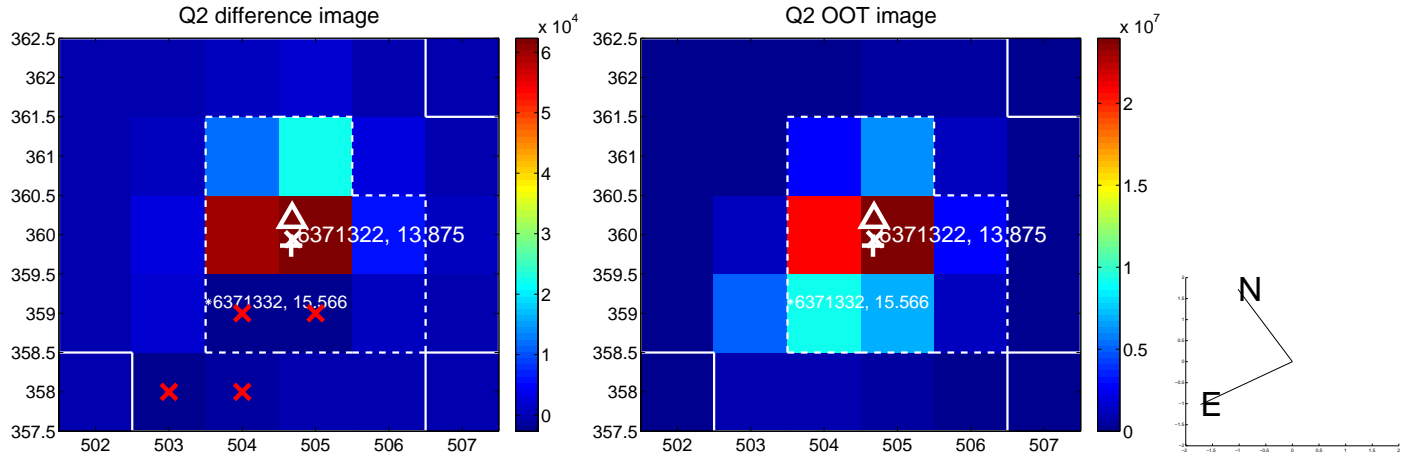
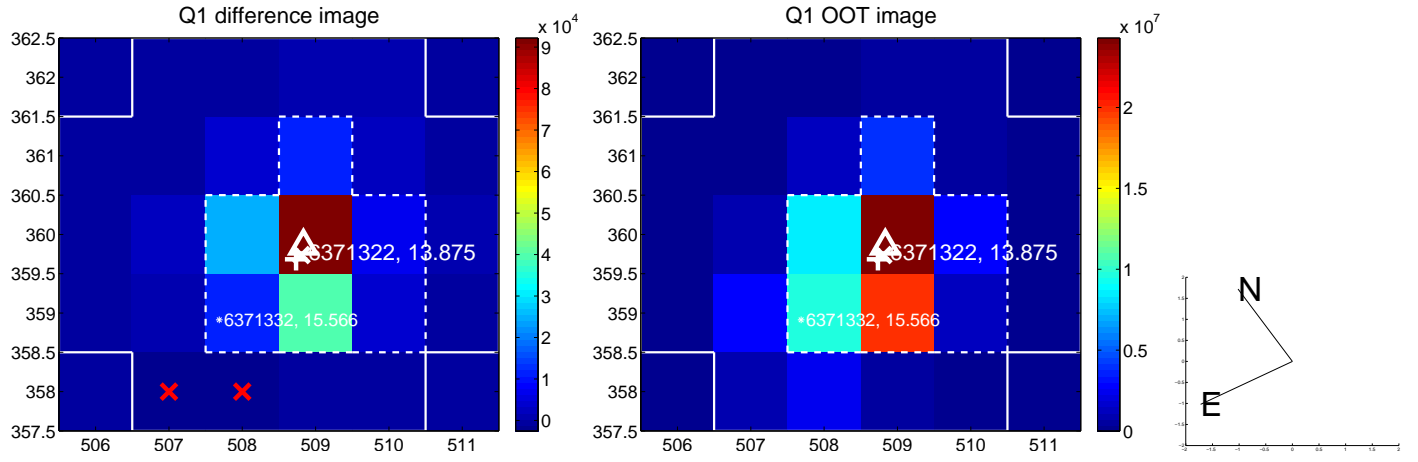
The direct PRF centroid is offset from the target star catalog position by about 0.31 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.511 \pm 0.156	3.29	-0.508 \pm 0.177	-0.062 \pm 0.218
PRF-fit source offset from KIC position	0.189 \pm 0.149	1.27	-0.156 \pm 0.136	-0.108 \pm 0.173
photometric centroid source offset	6.70 \pm 2.55	2.63	-6.69 \pm 2.55	0.26 \pm 0.83

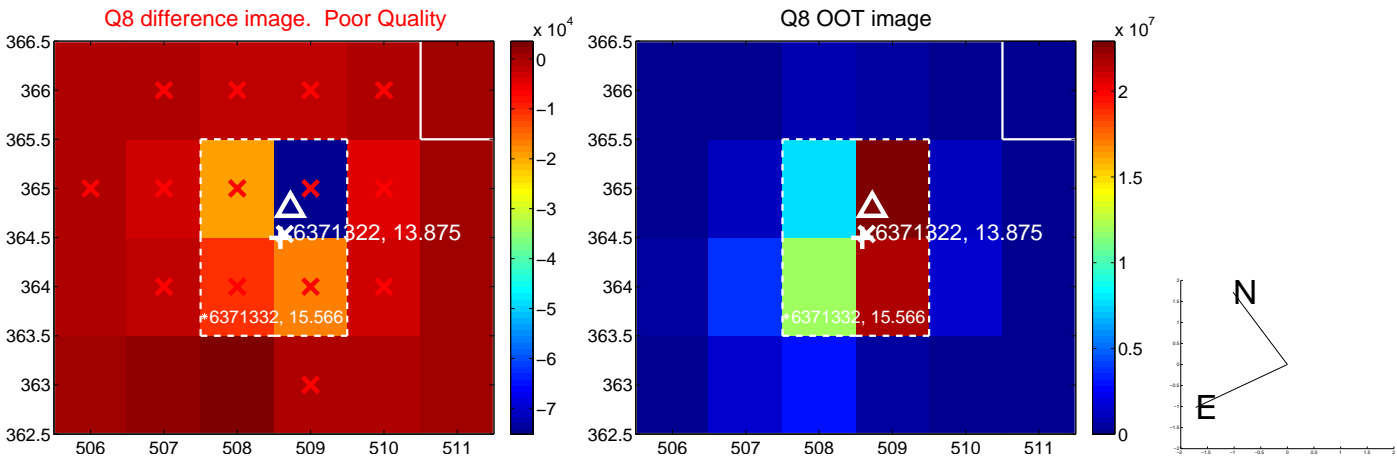
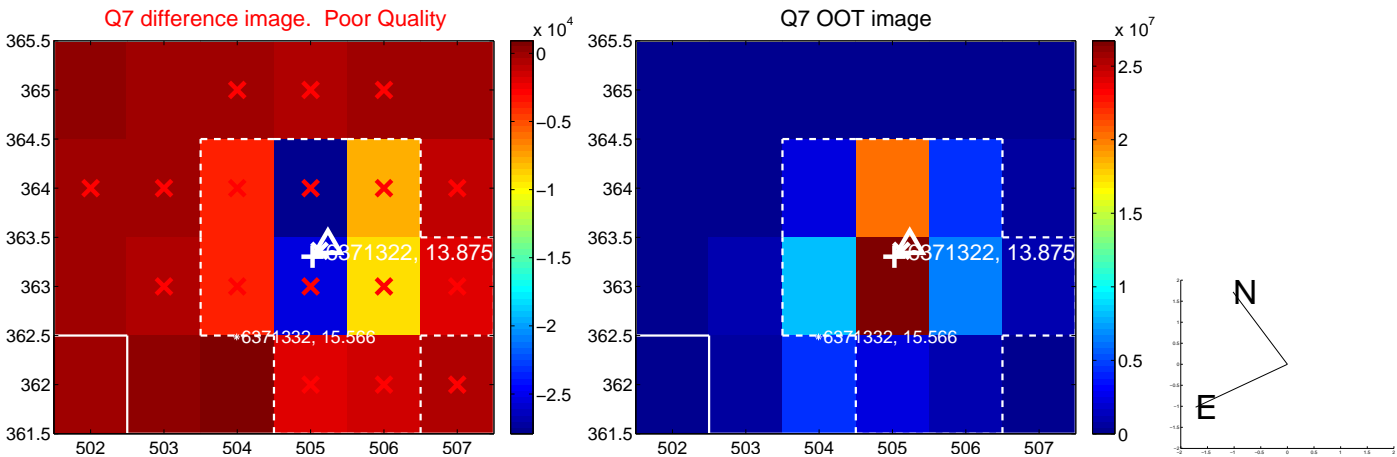
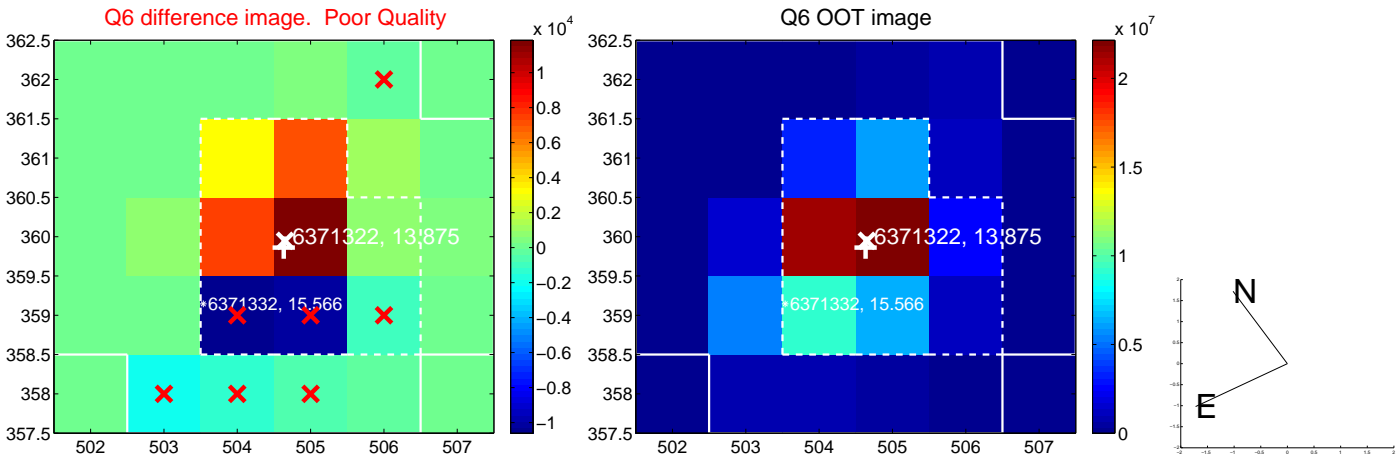
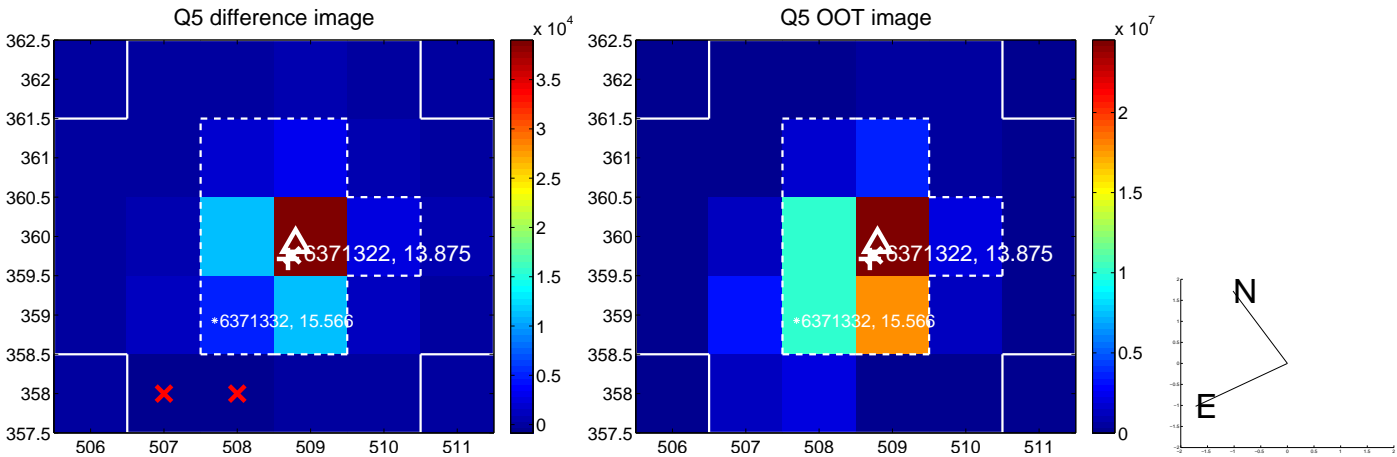


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets**; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

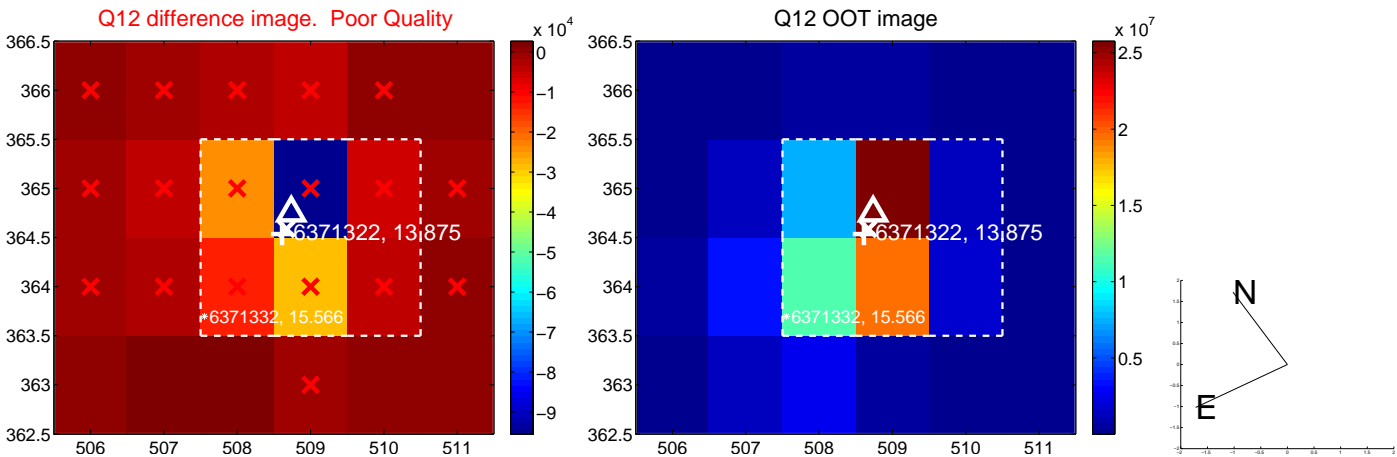
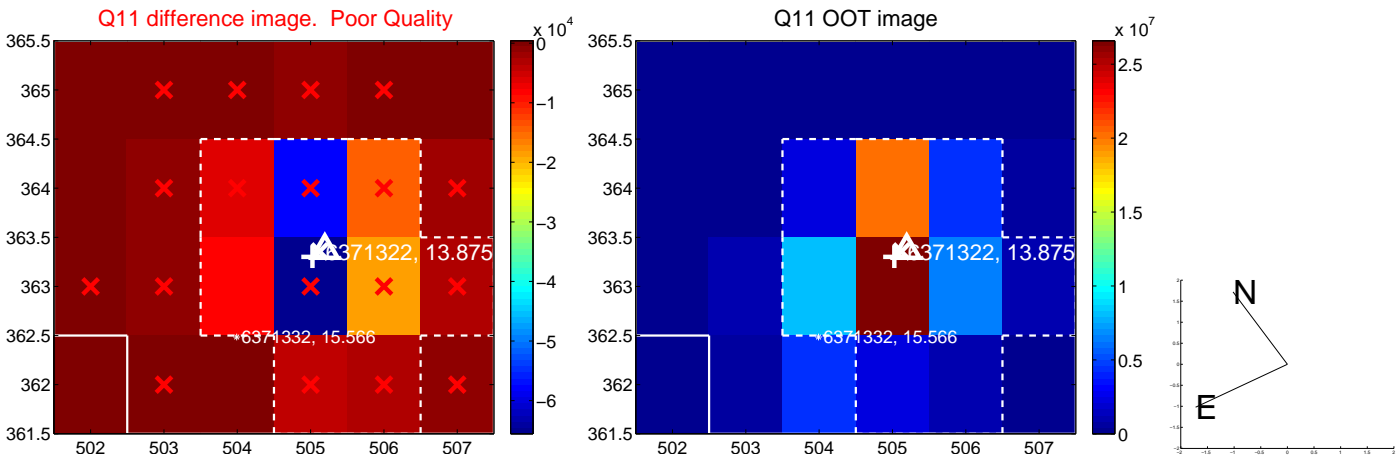
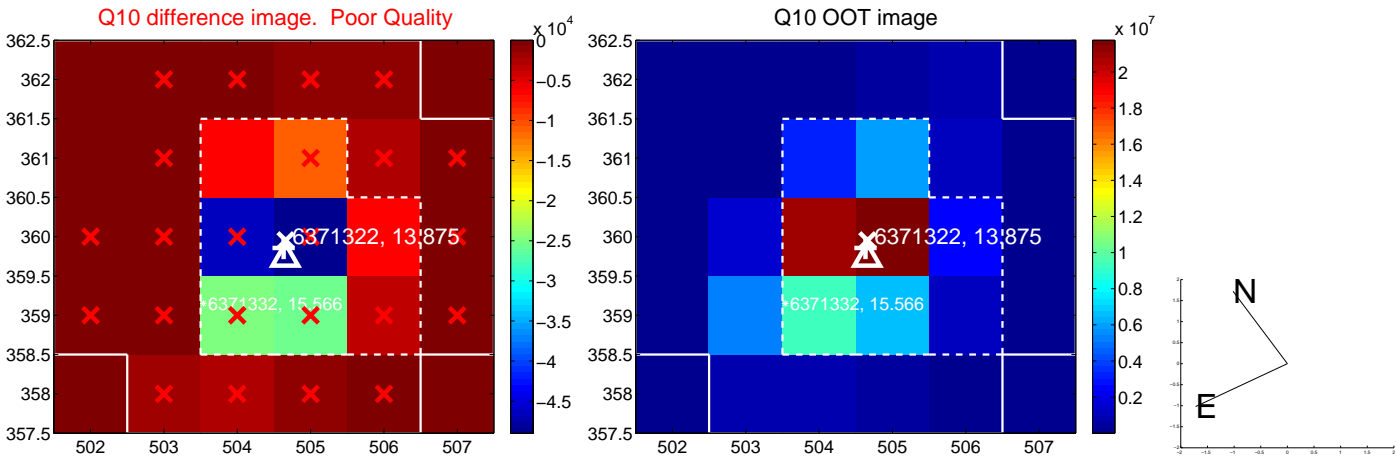
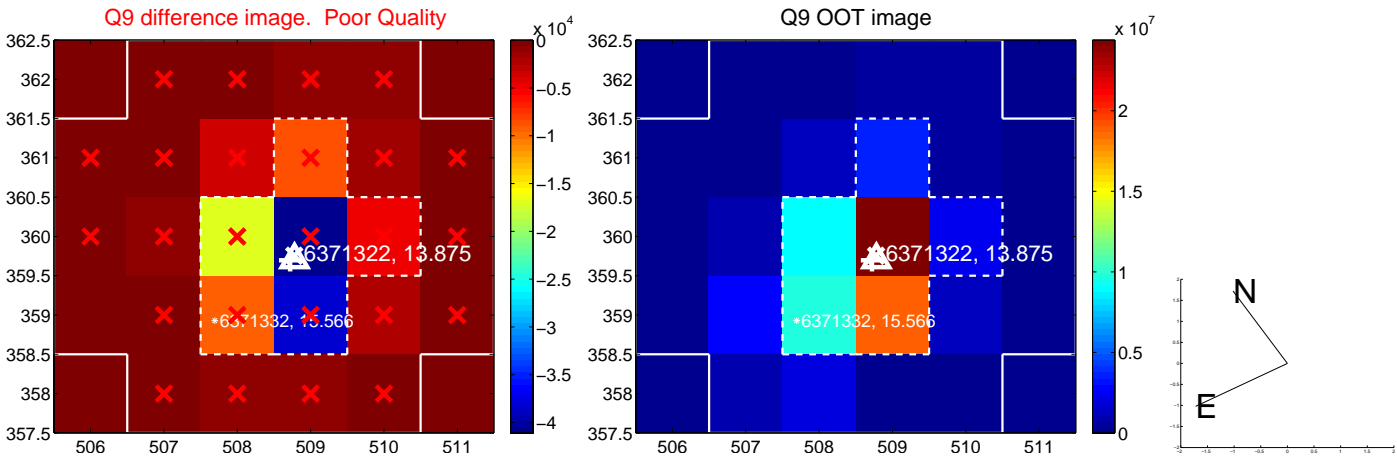
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



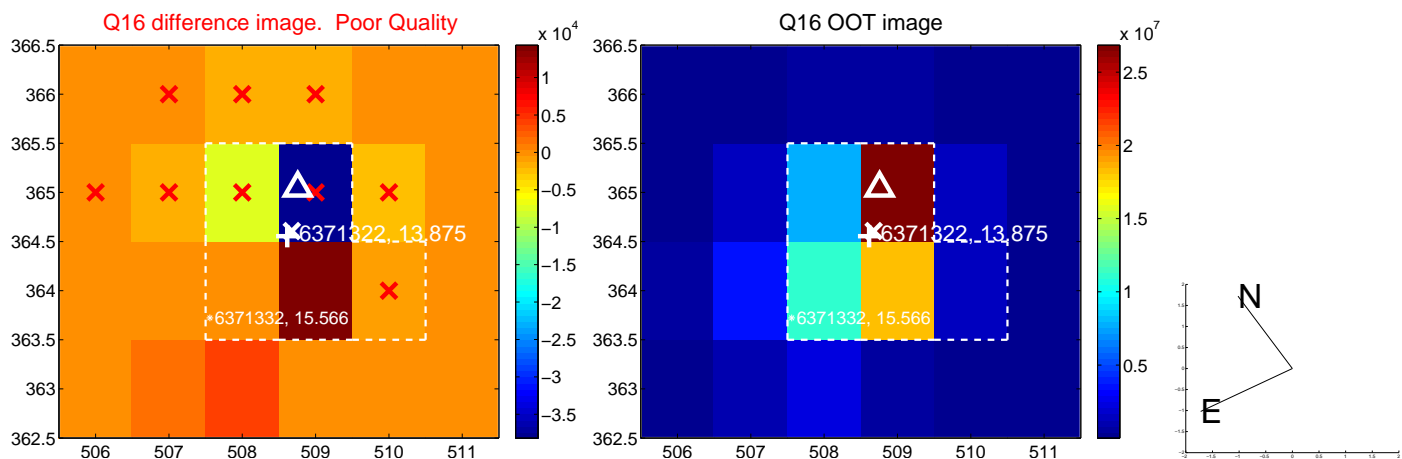
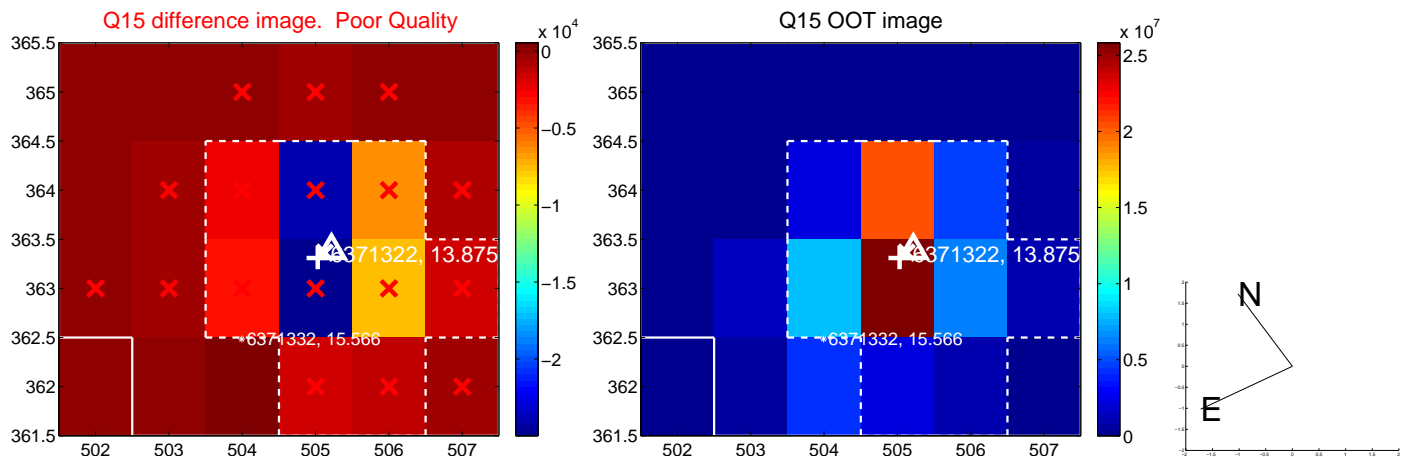
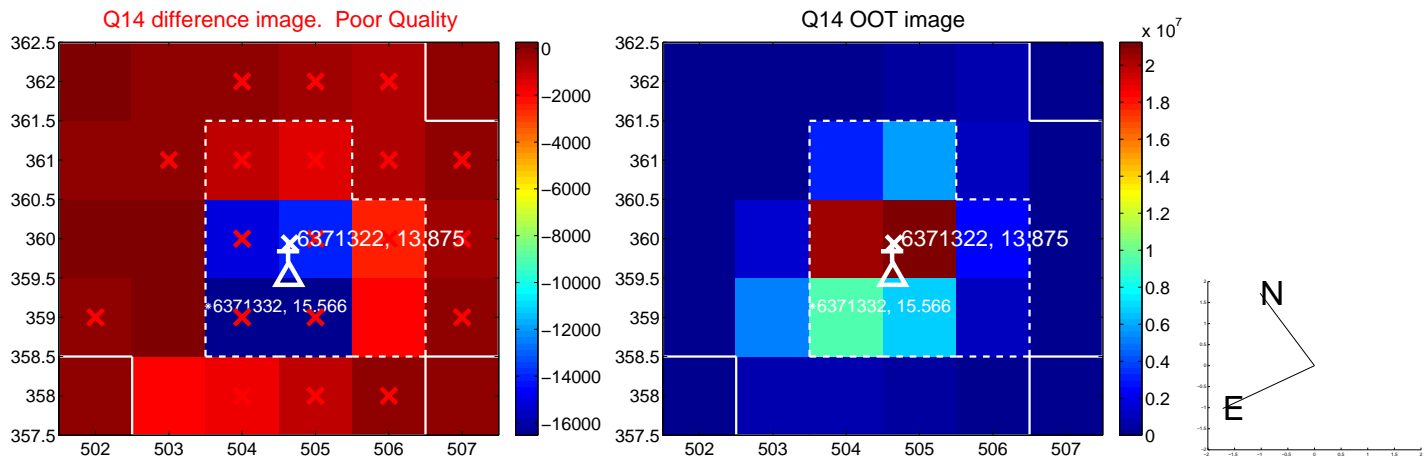
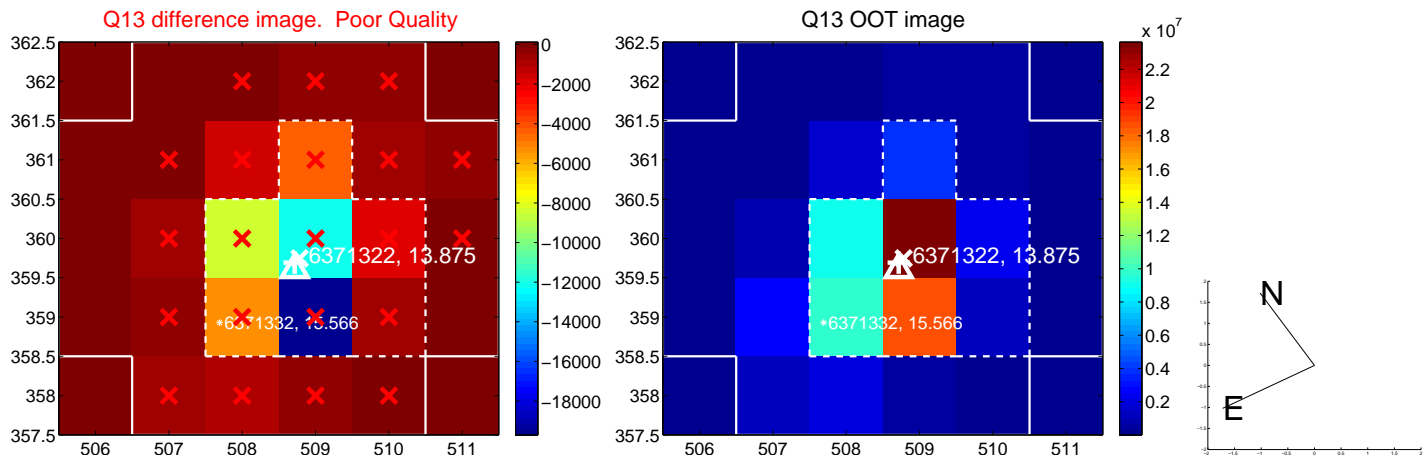
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



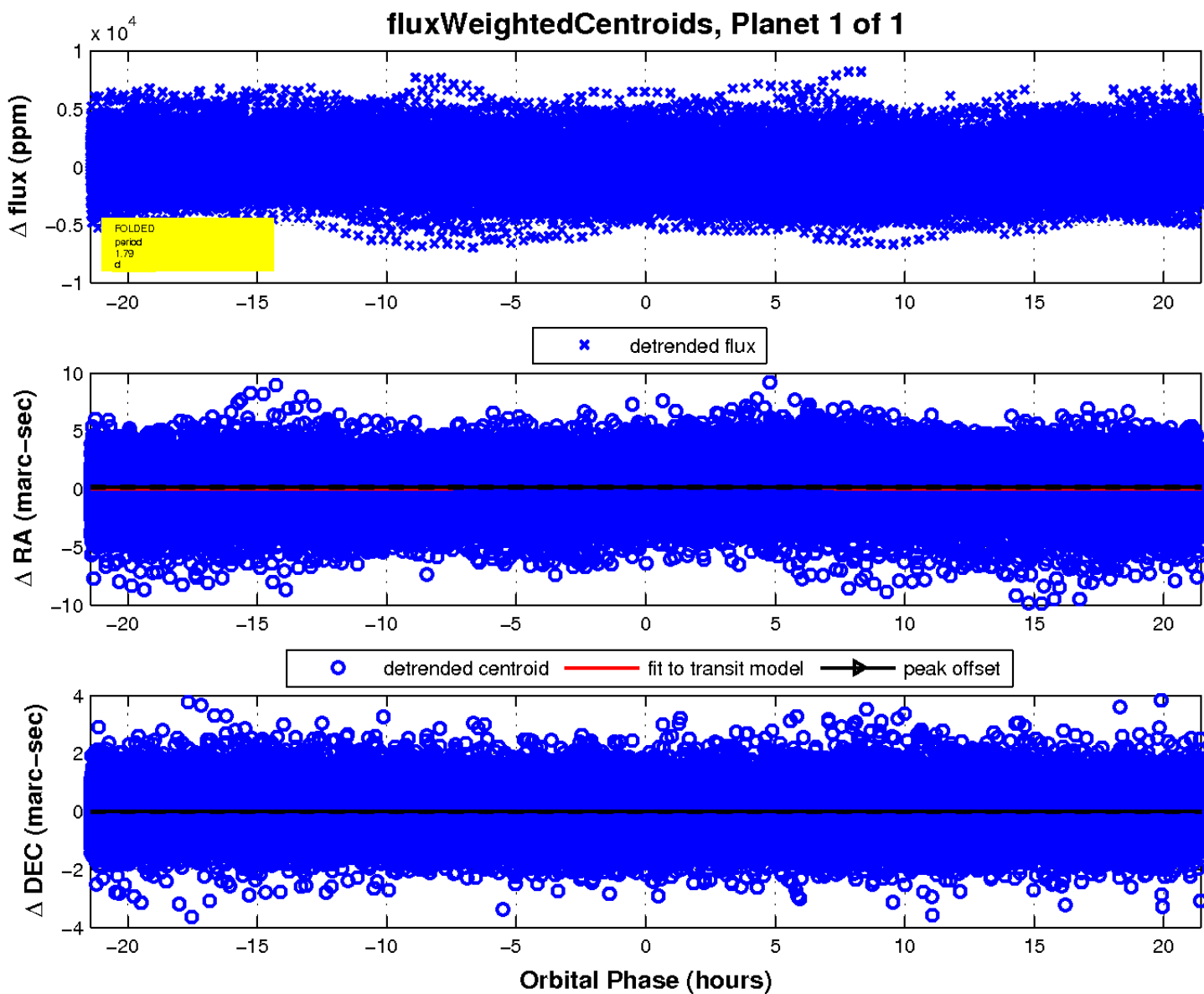
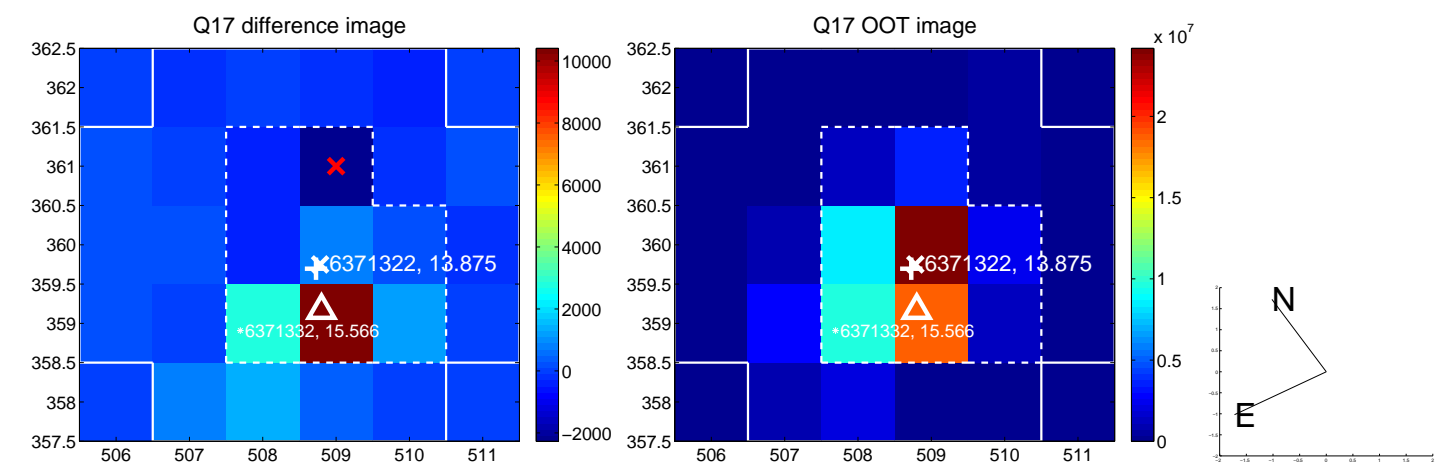
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



UKIRT Image

Declination

