

KIC 007051690

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})
007051690-01	OBS	No	1.178996	131.538277	270.9	3.000	9.0	-1.0	1.28	6627	2.13	5341.10

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
007051690-01	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—CENT_NOFITS

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

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

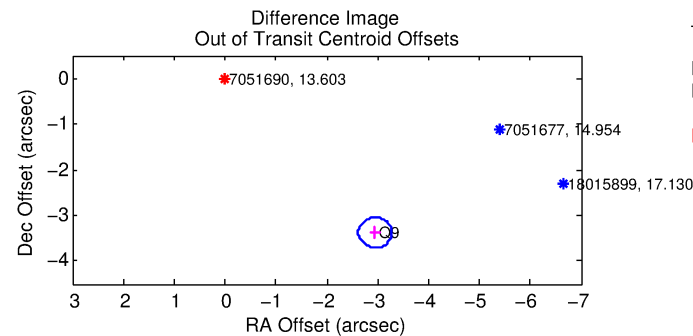
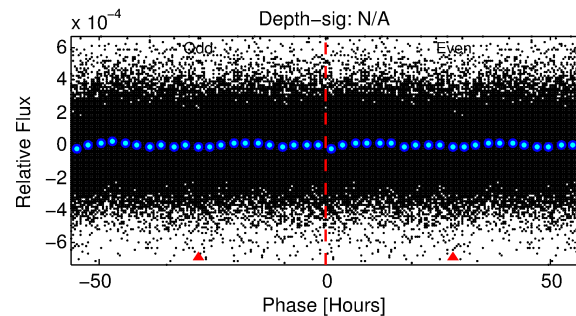
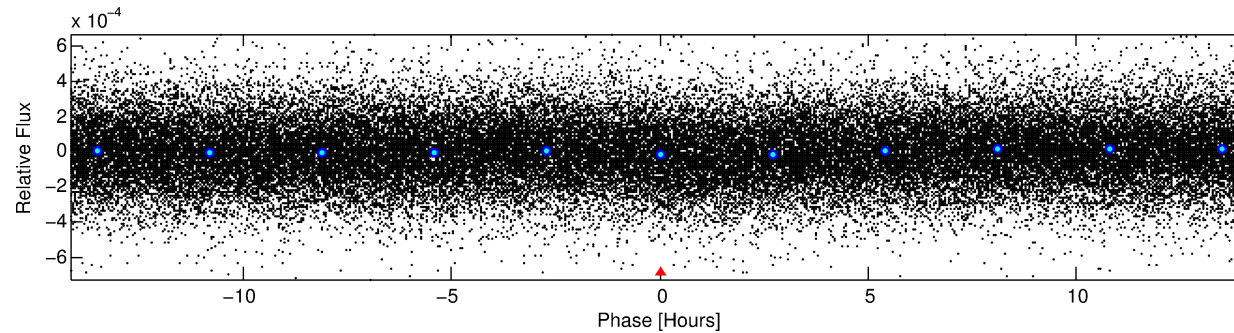
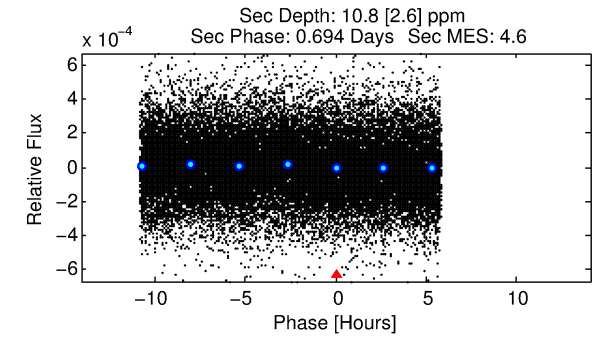
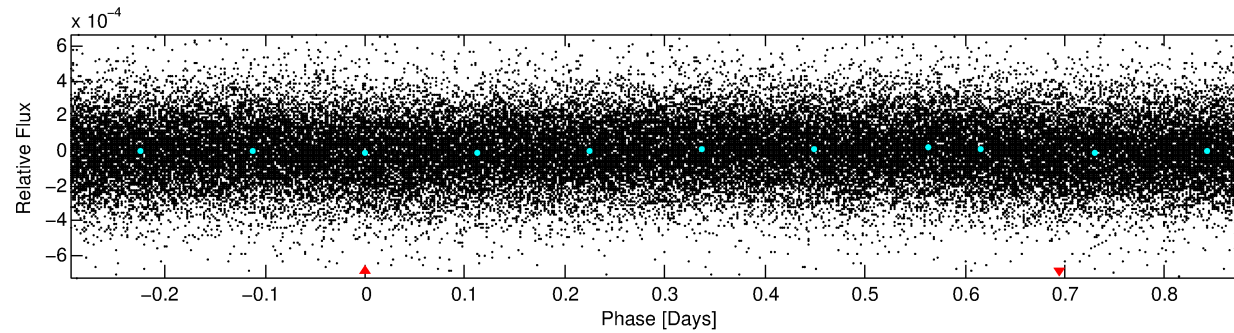
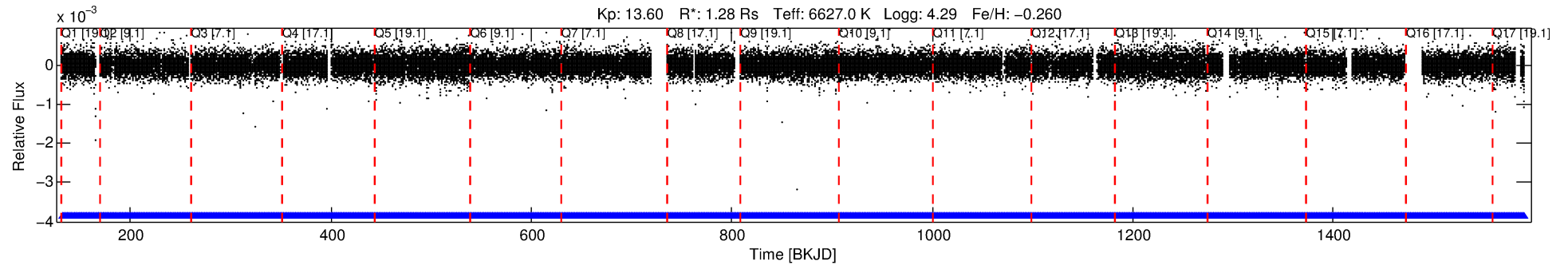
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 007051690-01

No Significant Match Found

DV One-Page Summary

KIC: 7051690 Candidate: 1 of 1 Period: 1.179 d



TPS TCE Results:

Period = 1.17900 d
Epoch = 131.5383 BKJD

DV fit results are unavailable

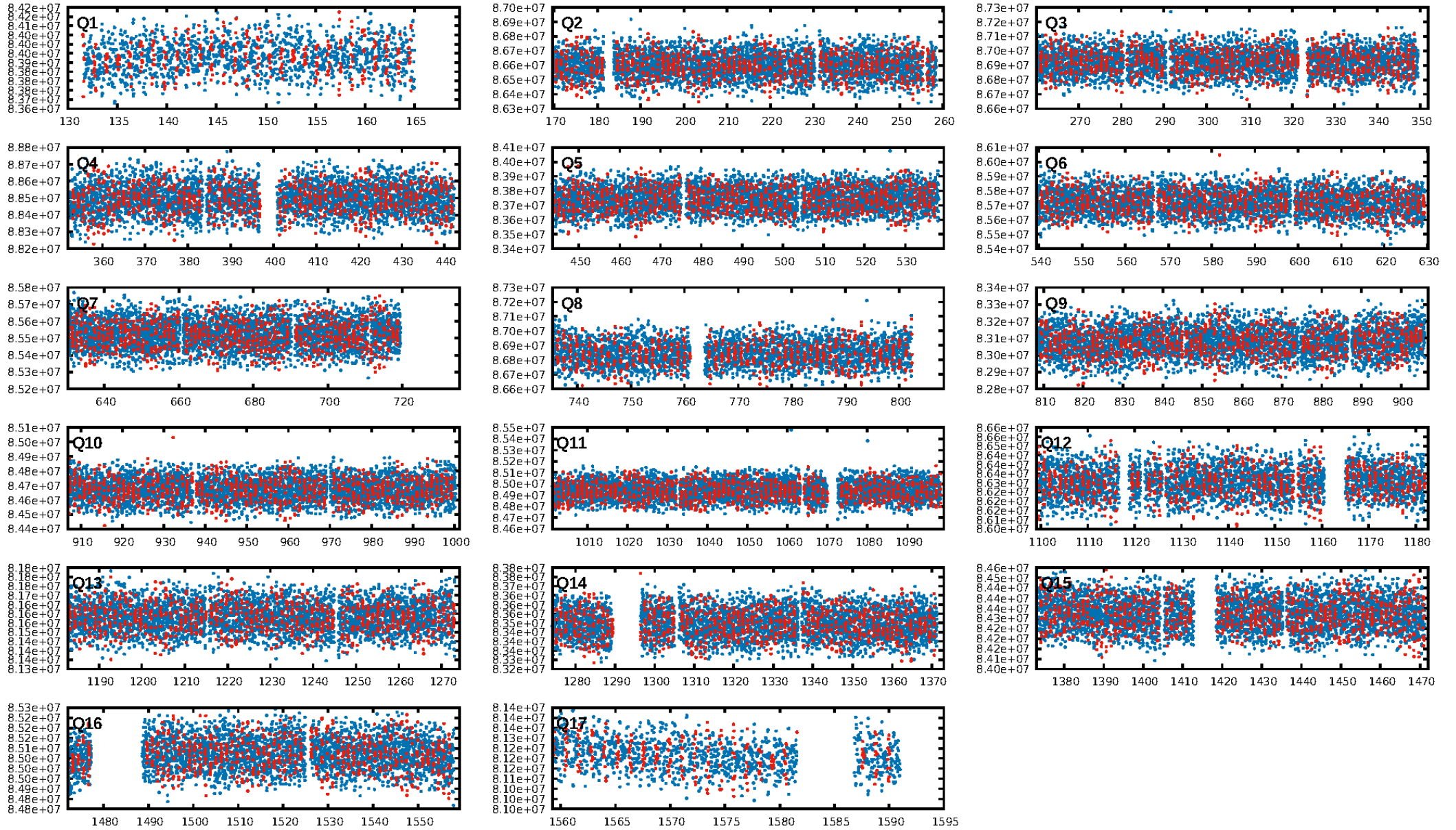
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 9.59e-17
RollingBand-fgt: 1.00 [1111/1111]
GhostDiagnostic-chr: 0.5768
Centroid-sig: 0.0%
Centroid-so: 0.202 arcsec [0.68 σ]
OotOffset-rm: 4.481 arcsec [40.85 σ]
KicOffset-rm: 4.803 arcsec [44.43 σ]
OotOffset-st: 0/0/0/1 [1]
KicOffset-st: 0/0/0/1 [1]
DiffImageQuality-fgm: 0.00 [0/1]
DiffImageOverlap-fno: 1.00 [17/17]

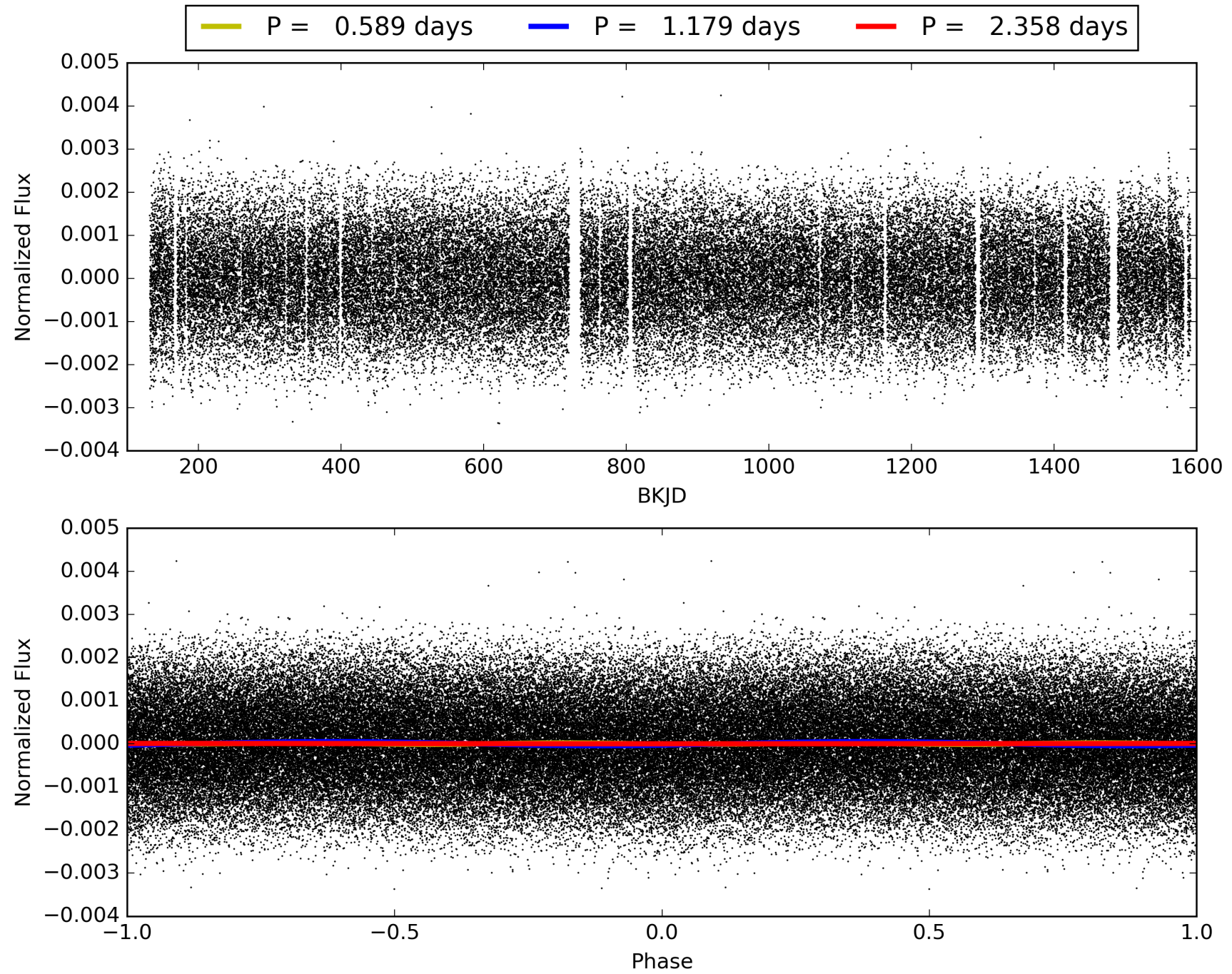
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 11:30:21 Z

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

TCE 007051690-01, PDC Light Curves

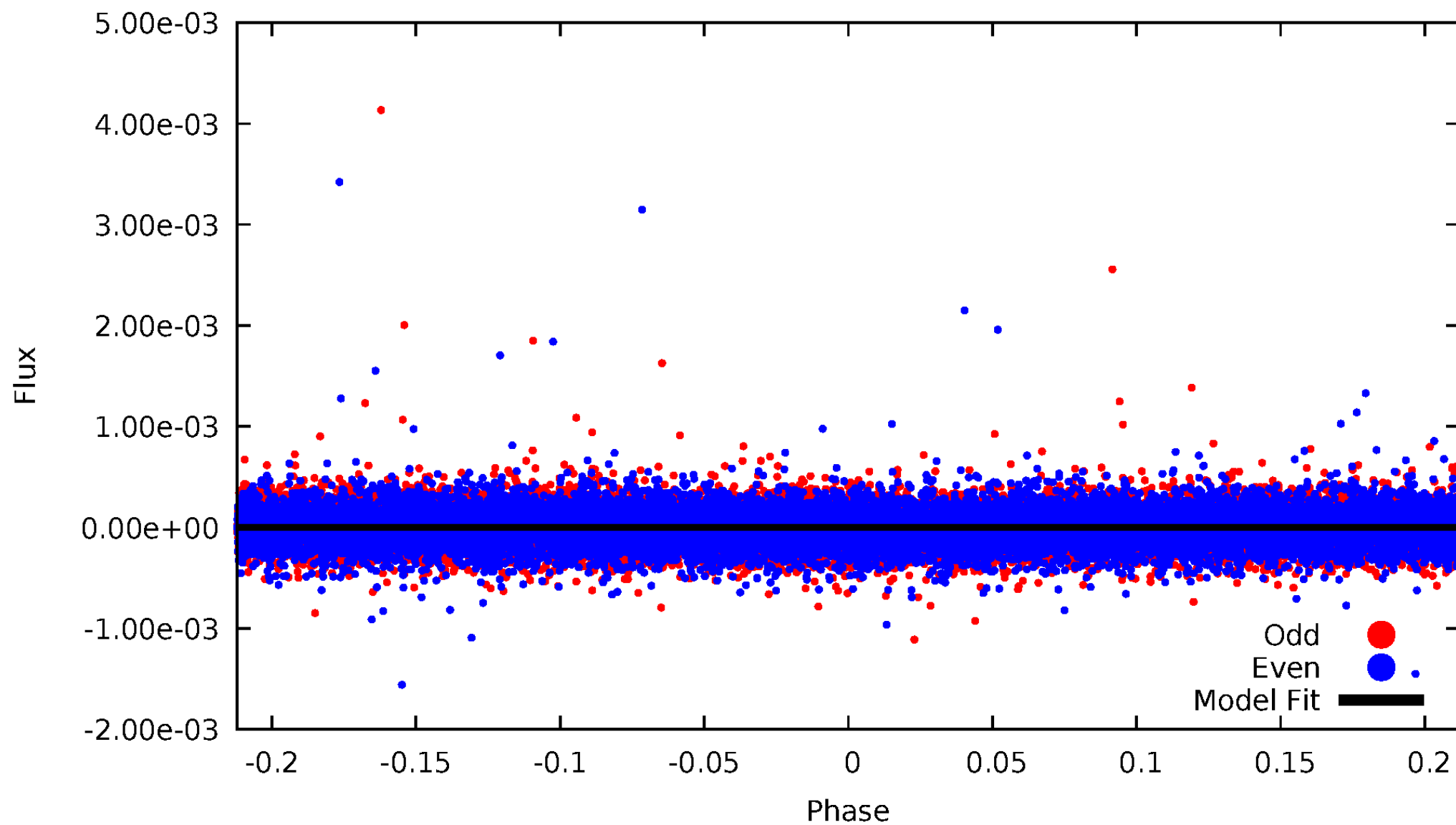


TCE 007051690-01



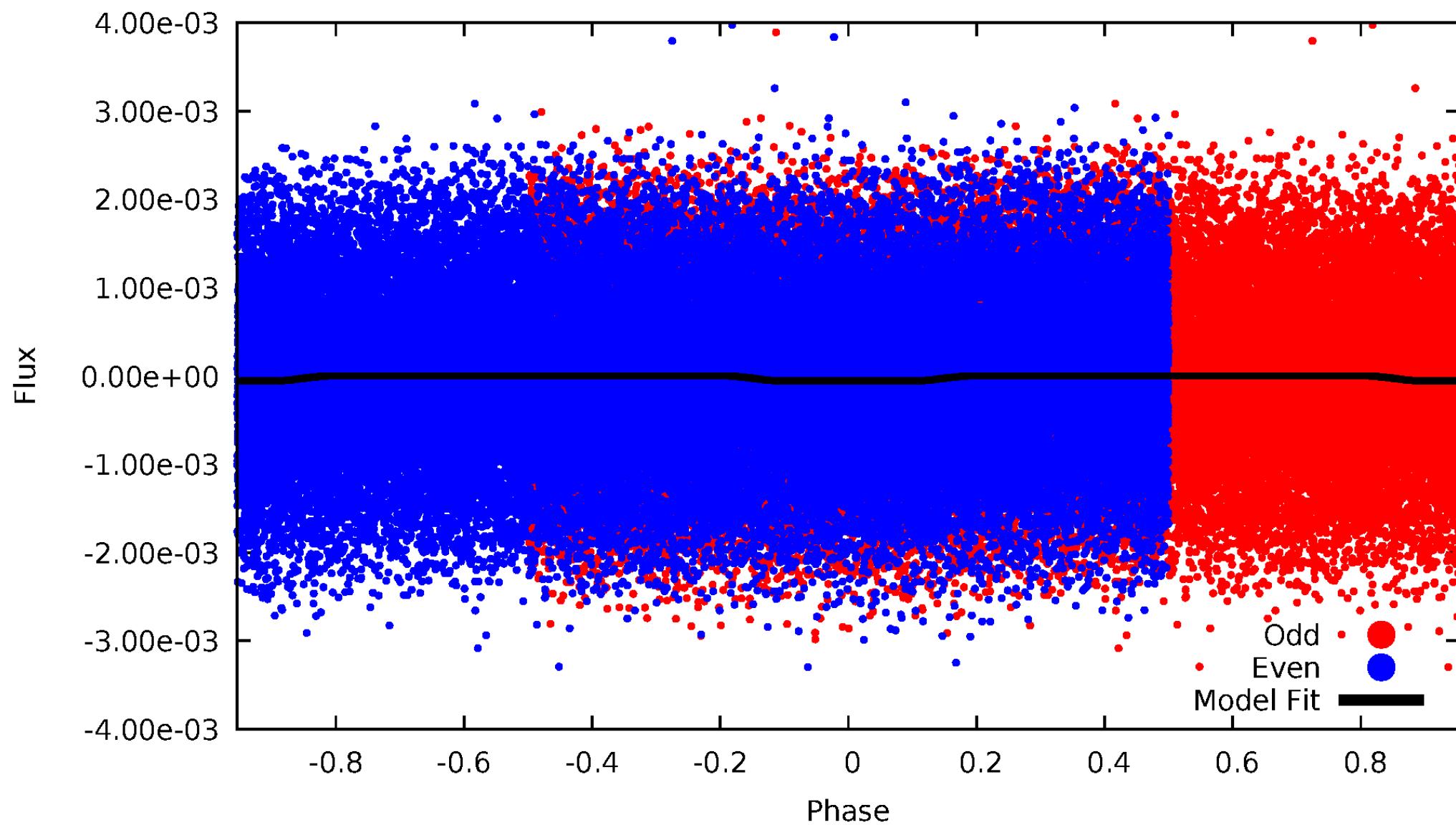
DV Odd/Even

TCE 007051690-01



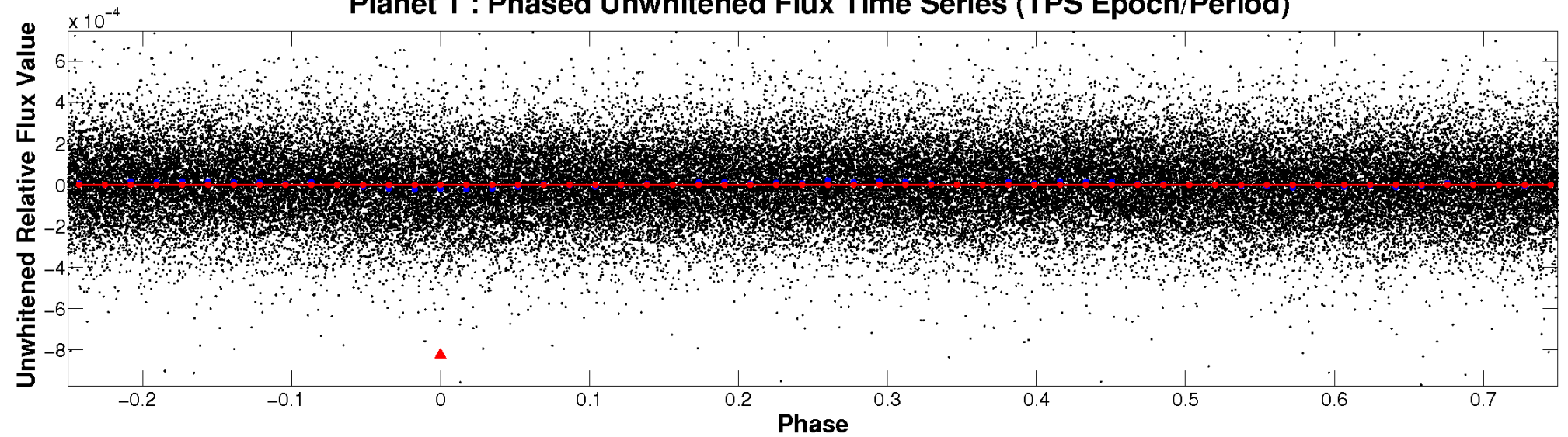
ALT Odd/Even

TCE 007051690-01

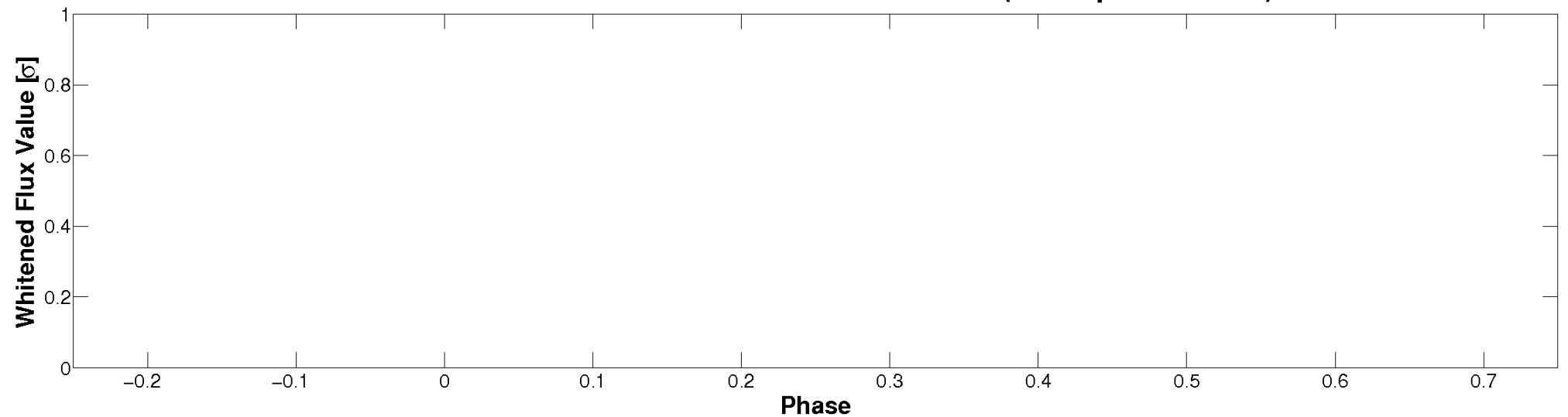


Non-Whitened Vs. Whitened Light Curve

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

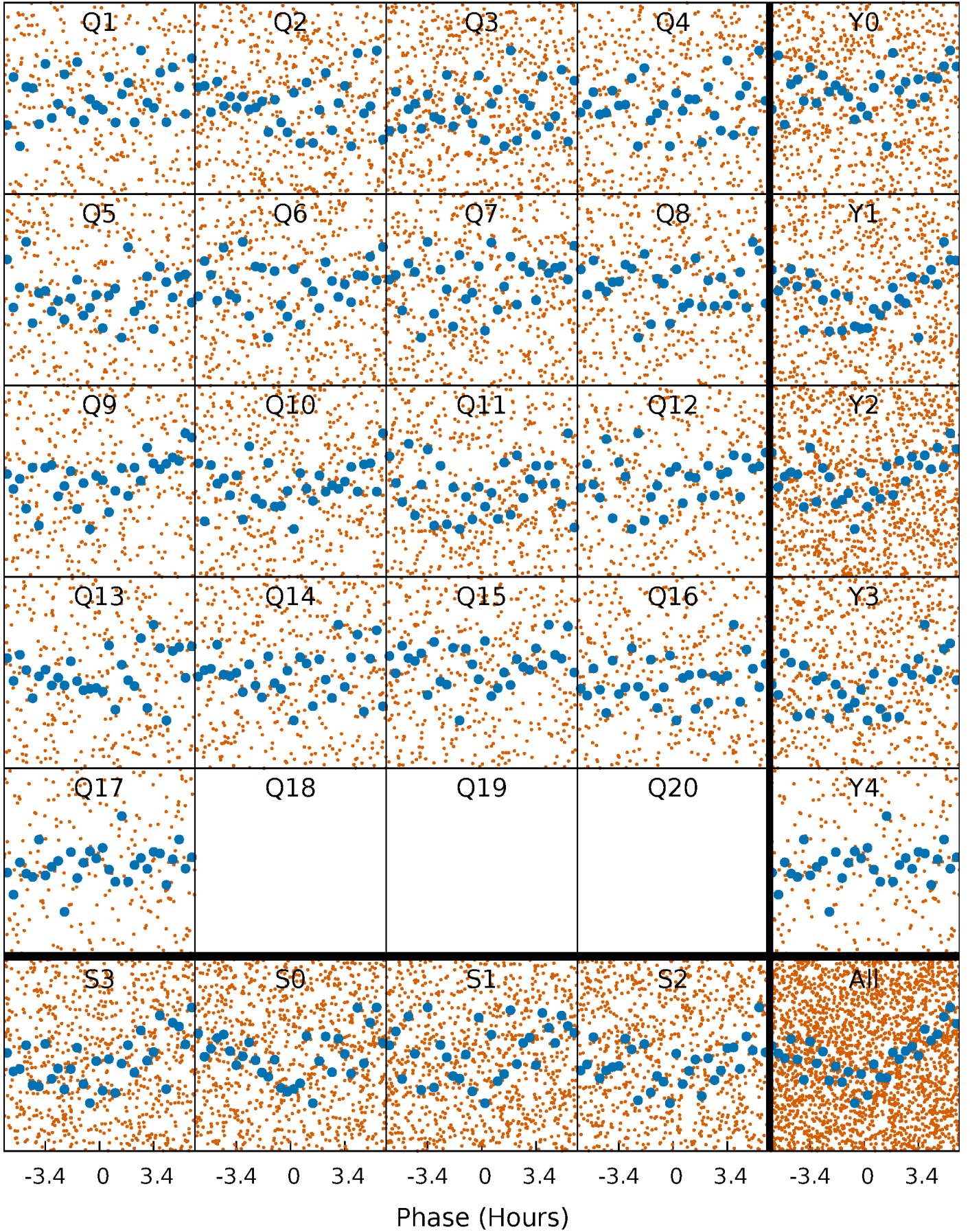


Planet 1 : Phased Whitened Flux Time Series (TPS Epoch/Period)



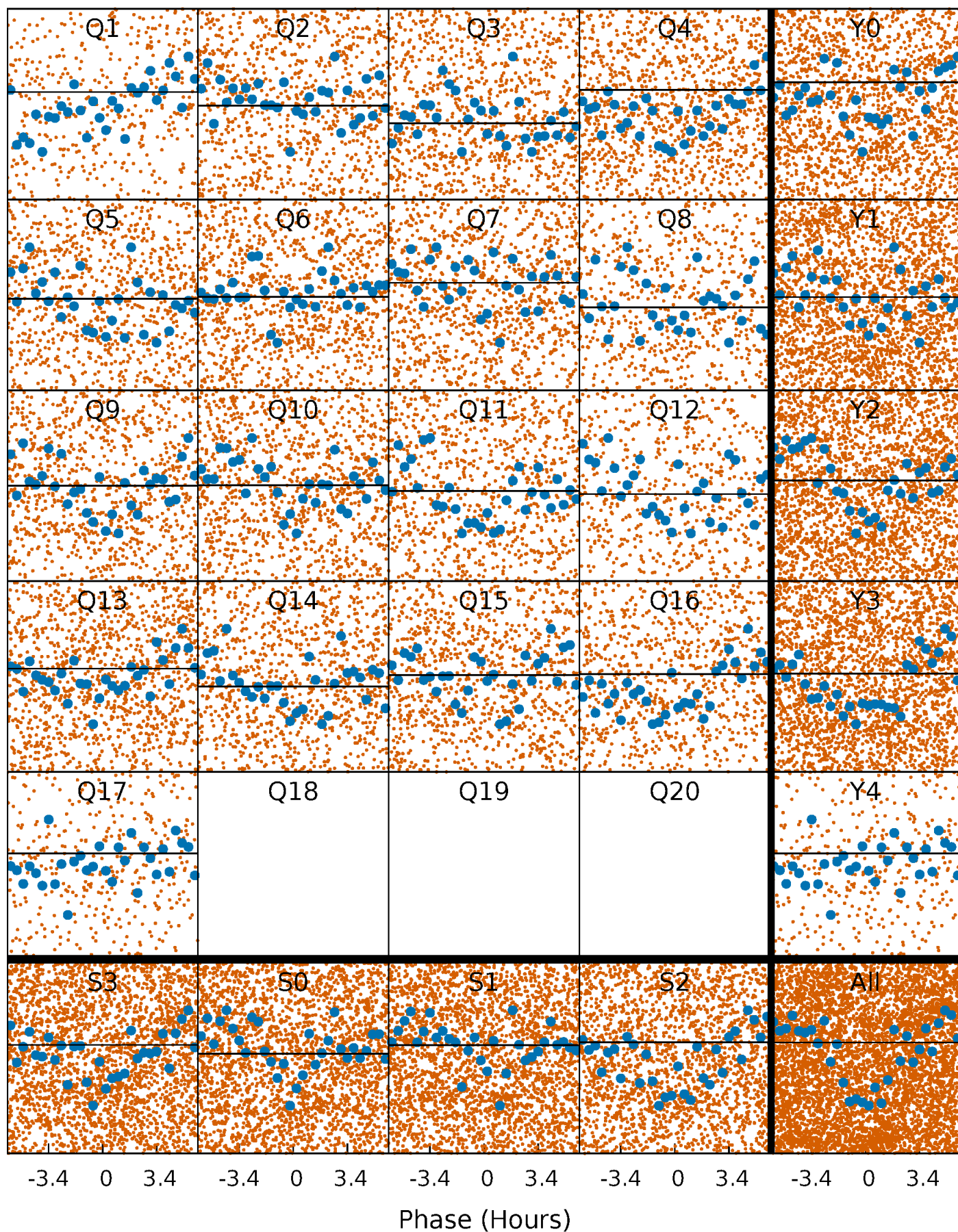
PDC Quarter-Phased Transit Curves

TCE 007051690-01 P= 1.178996 Days $T_0=131.538277$ (BKJD)



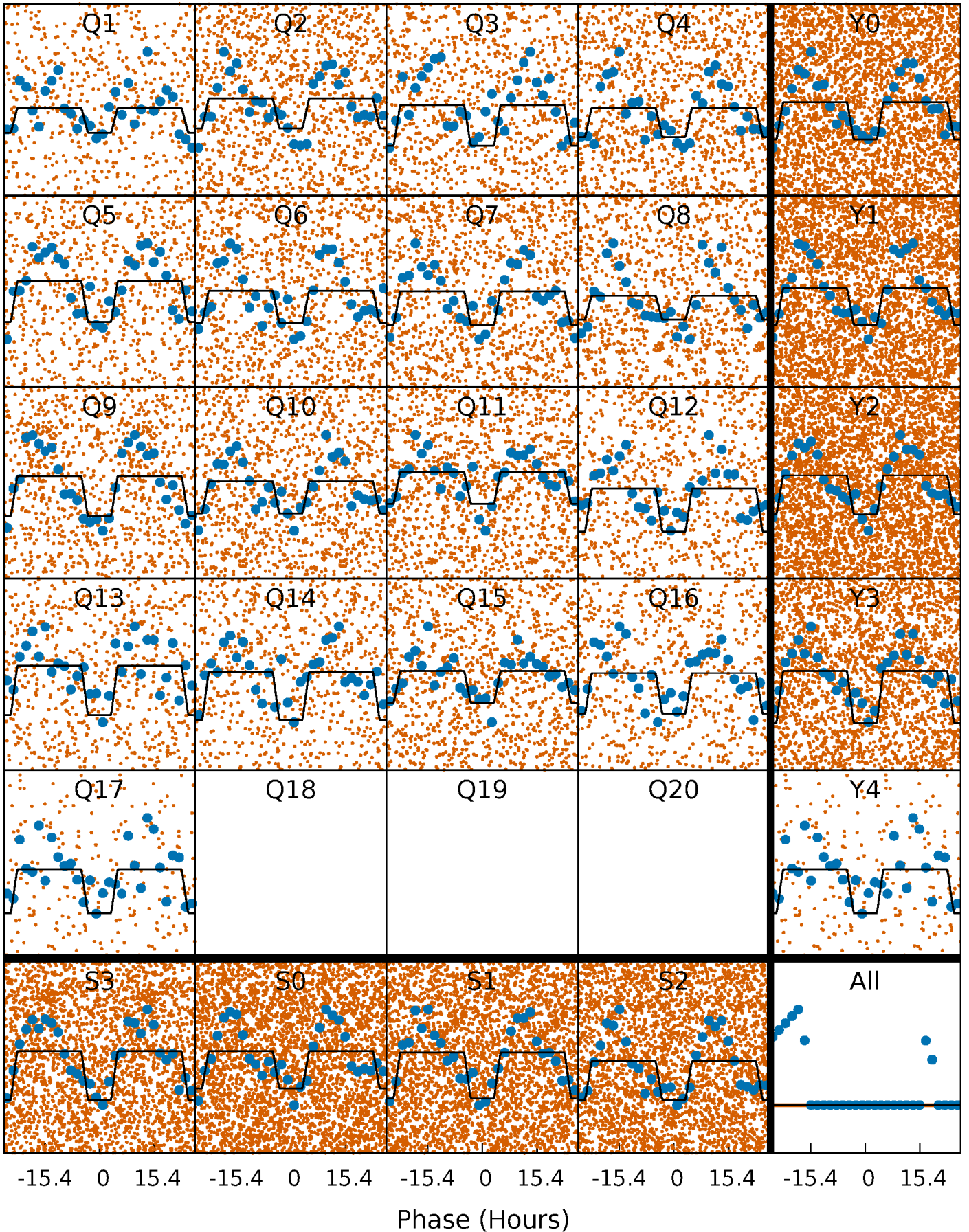
DV Quarter-Phased Transit Curves

TCE 007051690-01 P= 1.178996 Days $T_0=131.538277$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

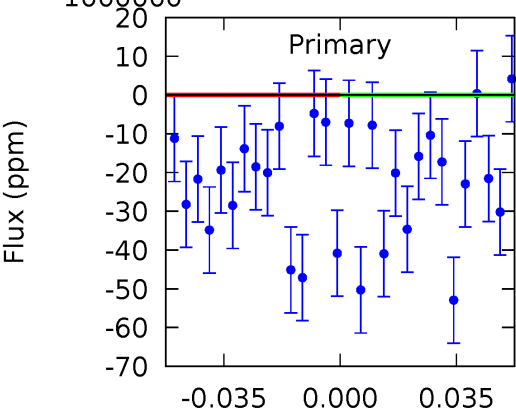
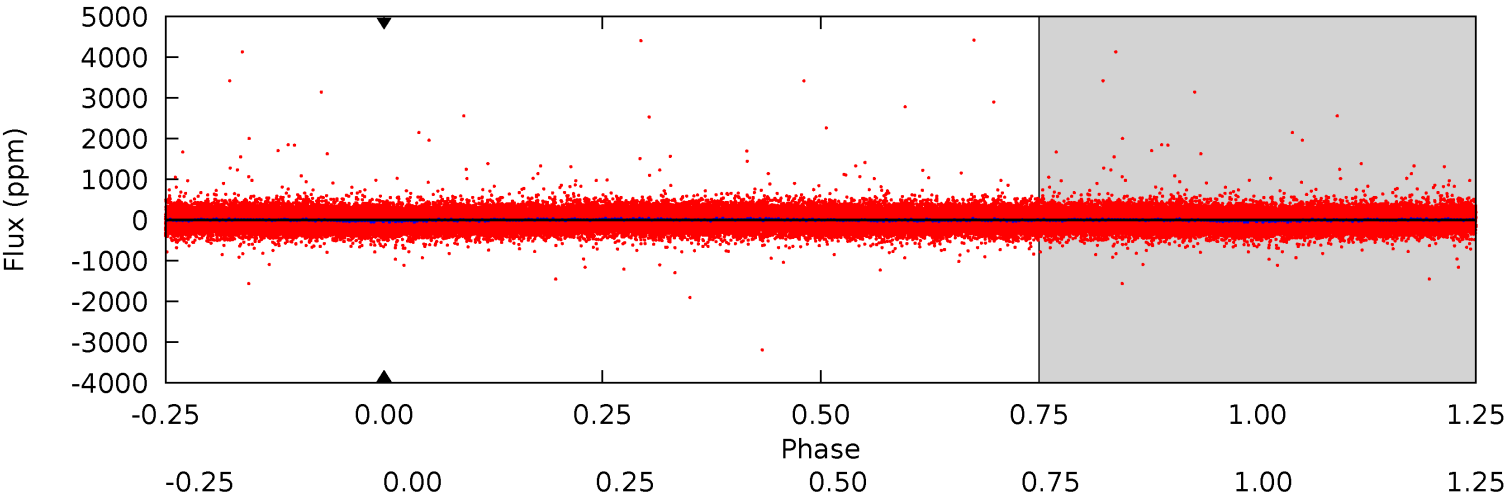
TCE 007051690-01 P= 1.178996 Days $T_0=132.659166$ (BKJD)



DV Model-Shift Uniqueness Test

007051690-01, P = 1.178996 Days, E = 130.359281 Days

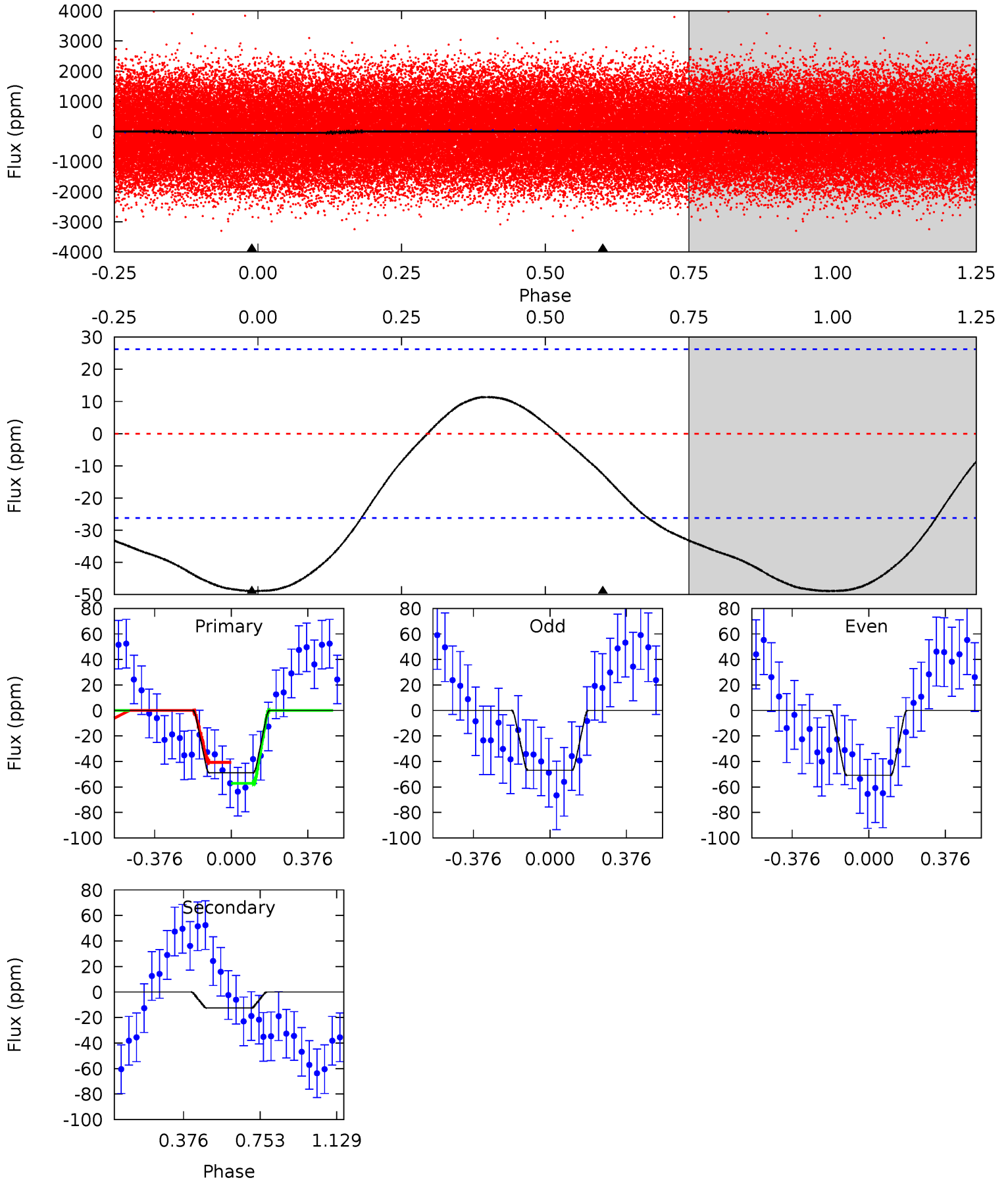
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
0	0	0	0	1.00	1.00	1.00	0	0	0	0	0	0	0	0



Alt Model-Shift Uniqueness Test

007051690-01, P = 1.178996 Days, E = 131.480170 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
7.98	2.05	0	0	4.28	0.88	0.88	7.98	7.98	2.05	2.05	0.32	0.99	0.19	1.35



Stellar Parameters For KIC 007051690

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	6627^{+158}_{-218}	$4.293^{+0.105}_{-0.195}$	$-0.260^{+0.250}_{-0.300}$	$1.283^{+0.393}_{-0.212}$	$1.183^{+0.175}_{-0.158}$	$0.789^{+0.380}_{-0.412}$
	+2%/-3%	+2%/-5%	+96%/-115%	+31%/-17%	+15%/-13%	+48%/-52%
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 007051690-01 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	0 ± 1000000	$9.85^{+11.19}_{-6.92}$	3068^{+228}_{-179}	-4060^{+43239}_{-29784}	$-1.278^{+730.450}_{-598.076}$
Alt.	-13 ± 6	$10.08^{+10.61}_{-6.90}$	3079^{+220}_{-173}	-3040^{+5571}_{-164}	$0.030^{+0.344}_{-0.023}$

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

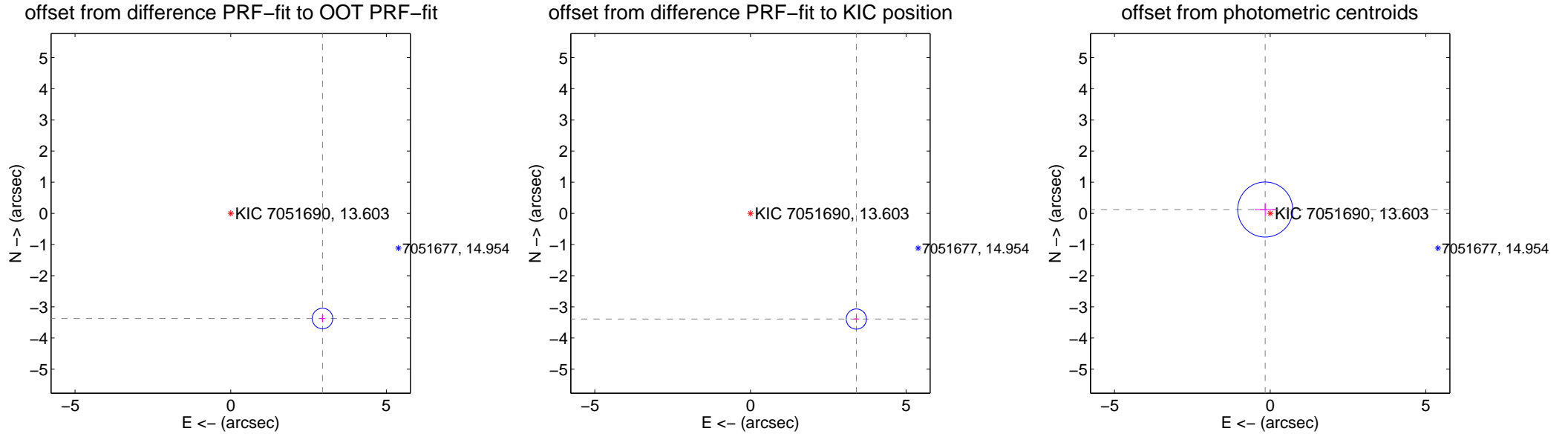
DV Centroid Data

Supplemental centroid analysis for 007051690-01. Kepler magnitude: 13.60. Transit SNR -1.00

There are 0 quarters with good PRF difference image offsets

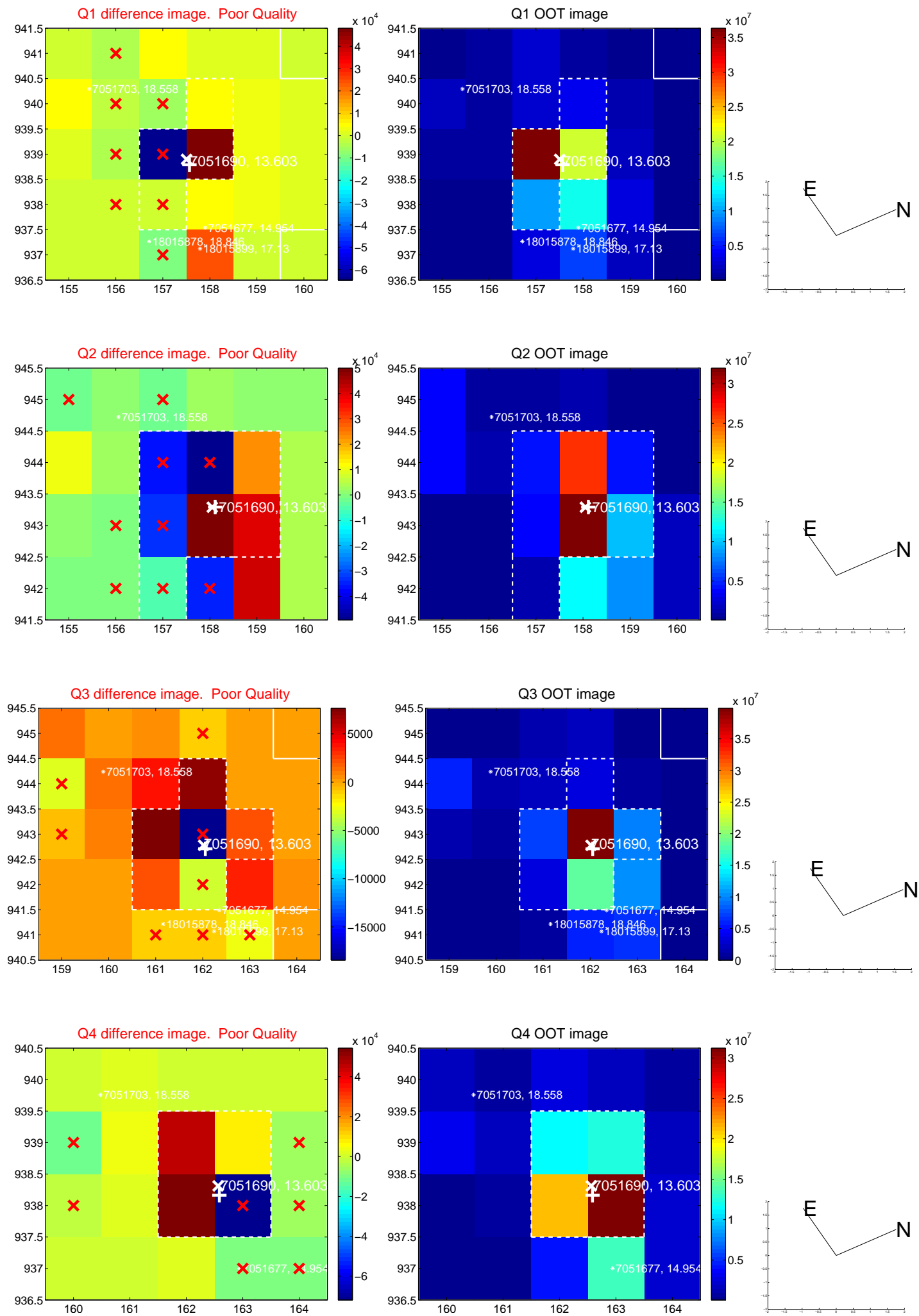
The direct PRF centroid is offset from the target star catalog position by about 0.45 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	4.481 \pm 0.110	40.85	-2.948 \pm 0.096	-3.374 \pm 0.119
PRF-fit source offset from KIC position	4.803 \pm 0.108	44.43	-3.401 \pm 0.096	-3.392 \pm 0.119
photometric centroid source offset	0.20 \pm 0.29	0.68	0.16 \pm 0.34	0.12 \pm 0.20

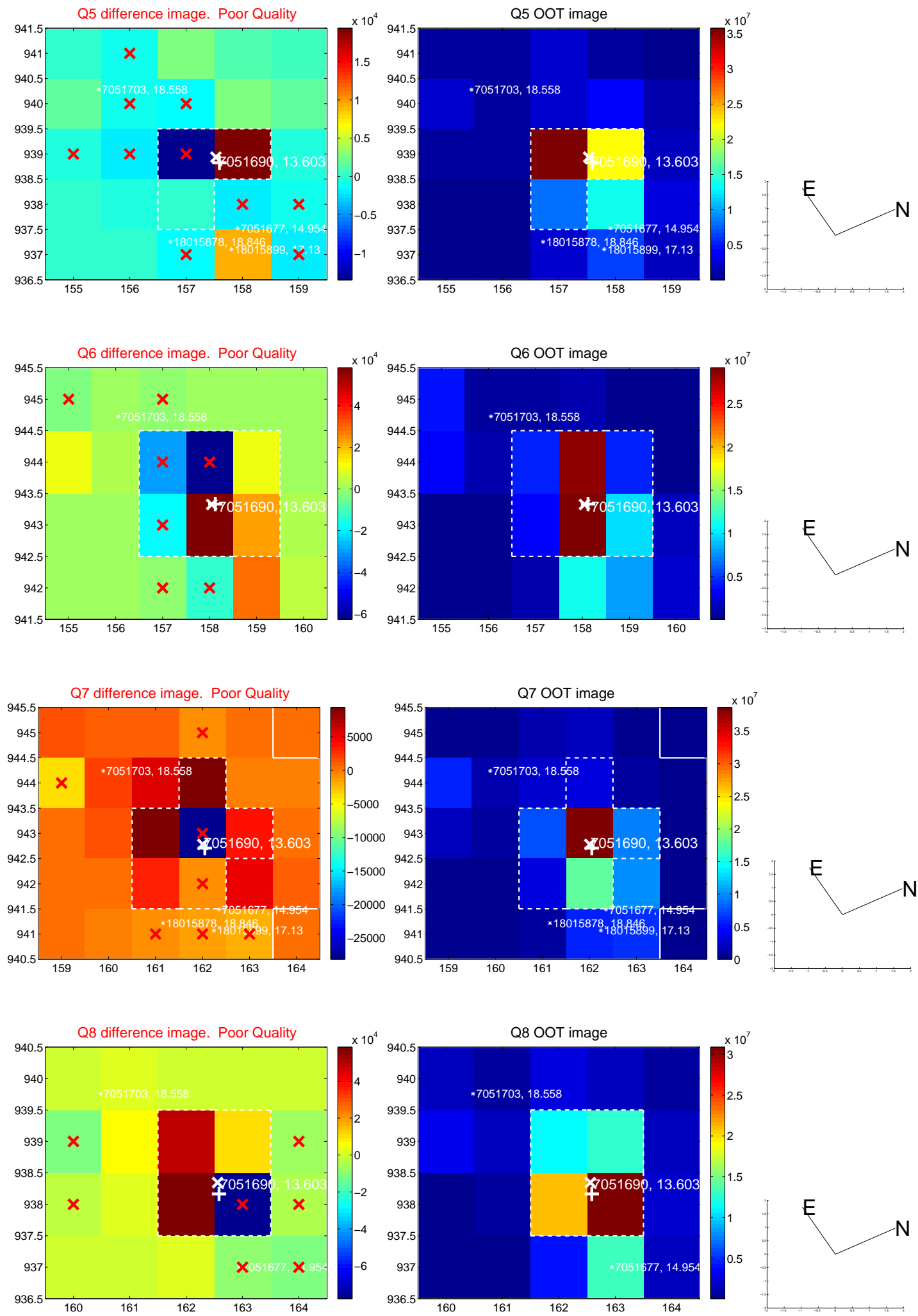


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

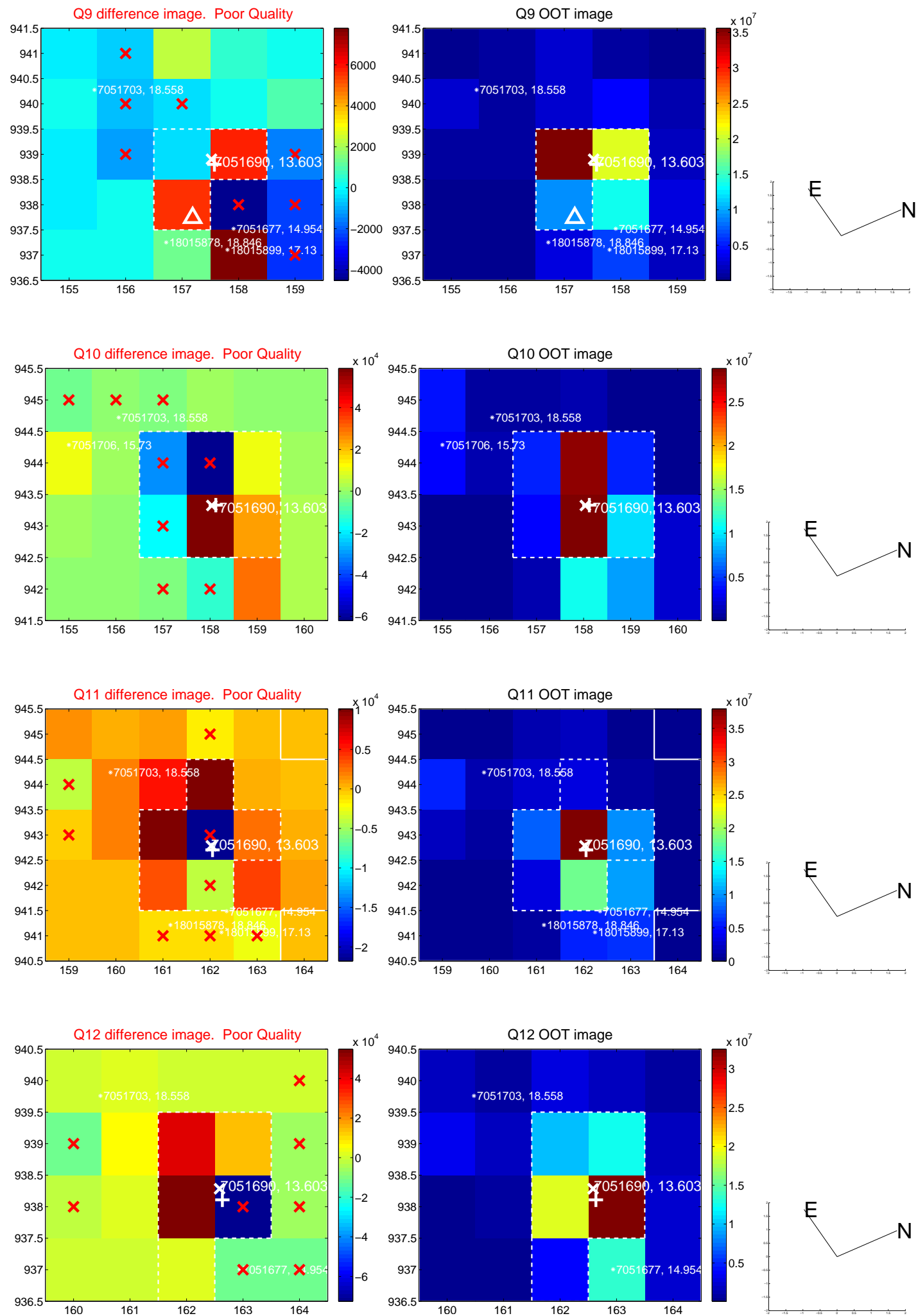
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



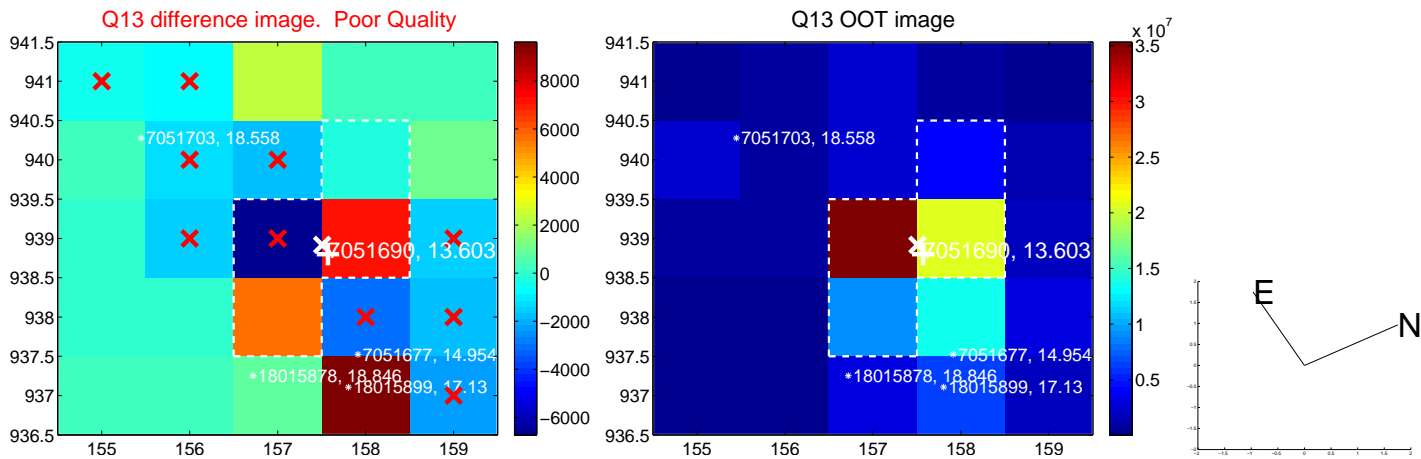
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



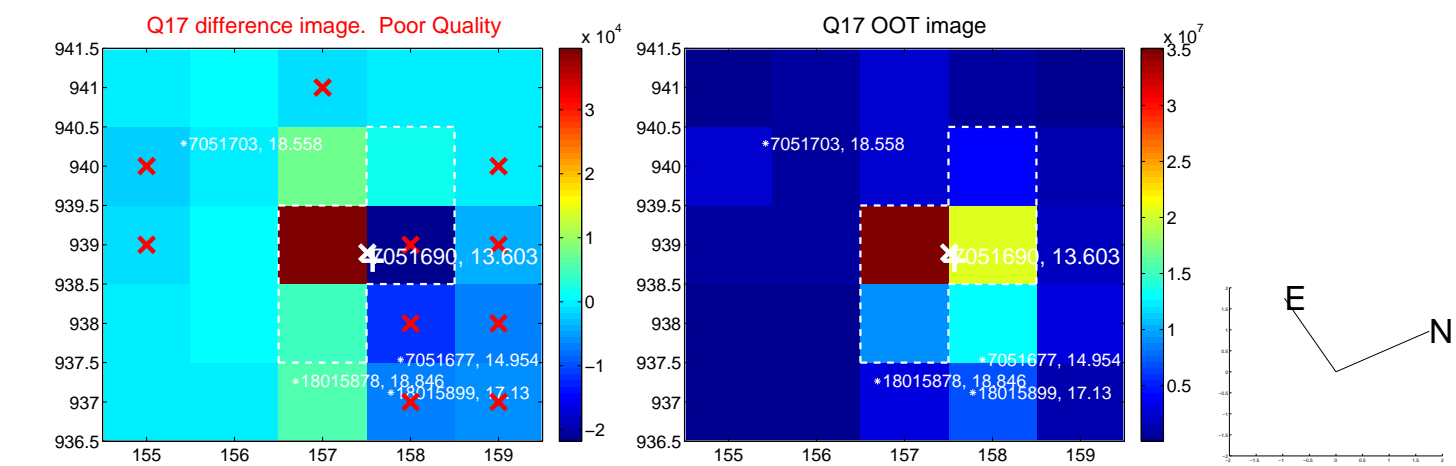
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



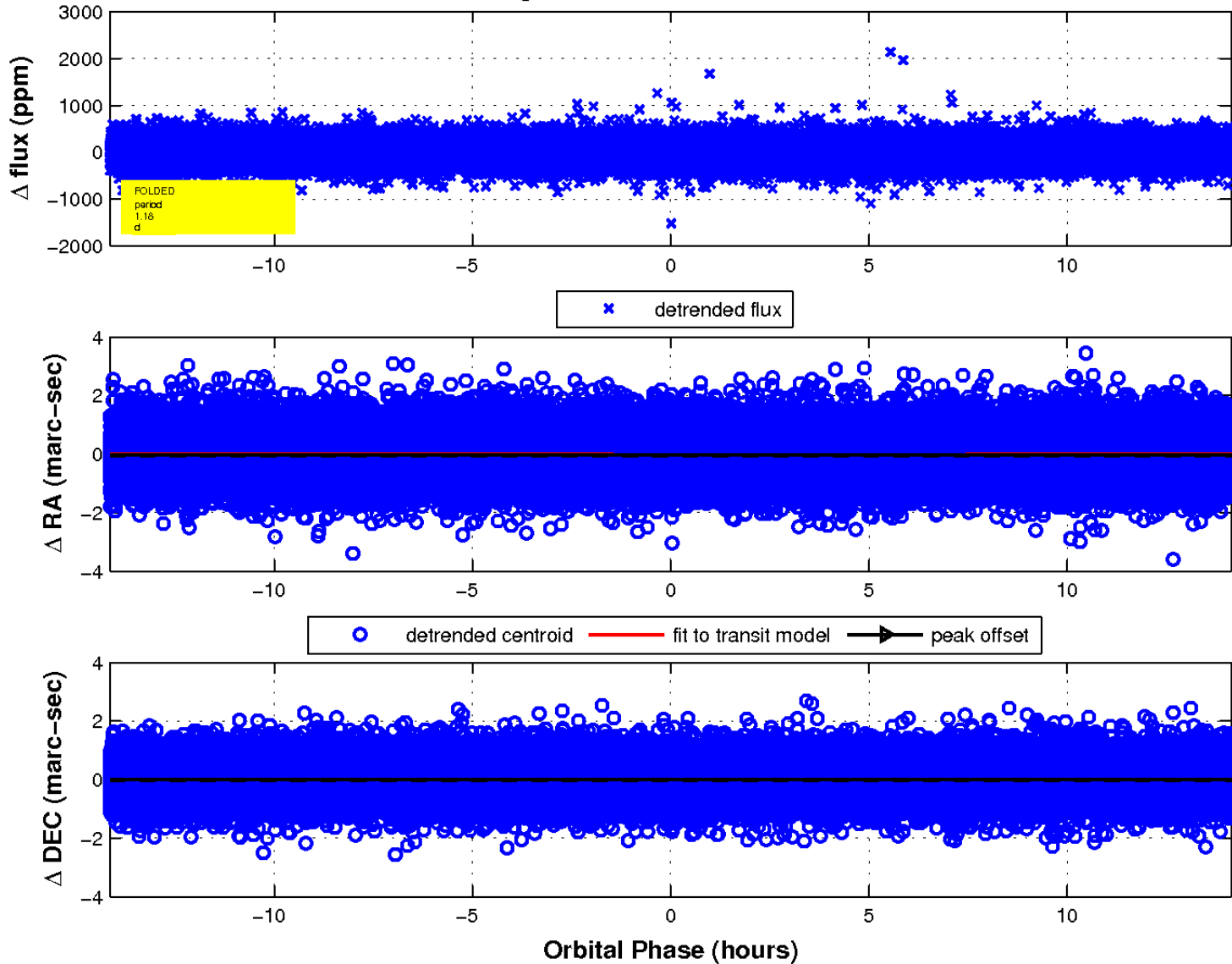
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



fluxWeightedCentroids, Planet 1 of 1



UKIRT Image

Declination

