

KIC 007967517

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})
007967517-01	OBS	7860.01	0.579515	132.004502	30.2	1.217	10.4	13.2	1.10	6339	0.72	9015.97

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
007967517-01	OBS	FP	0.00	0	0	1	0	CENT_RESOLVED_OFFSET

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

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

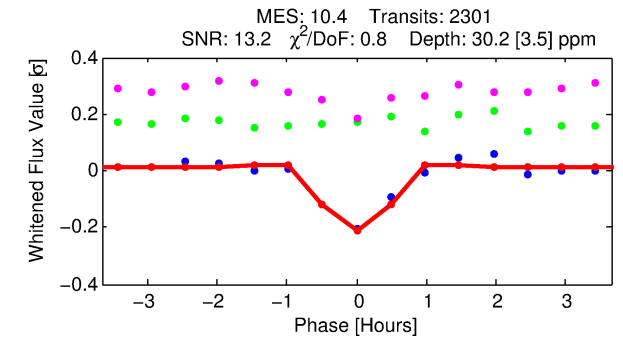
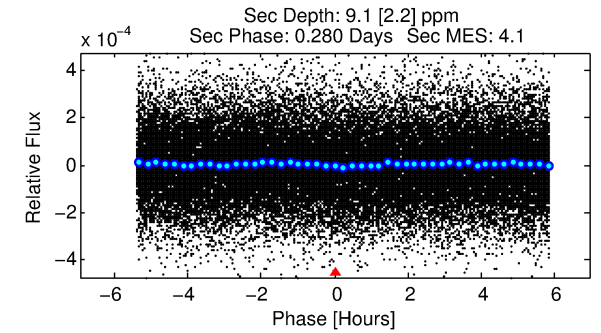
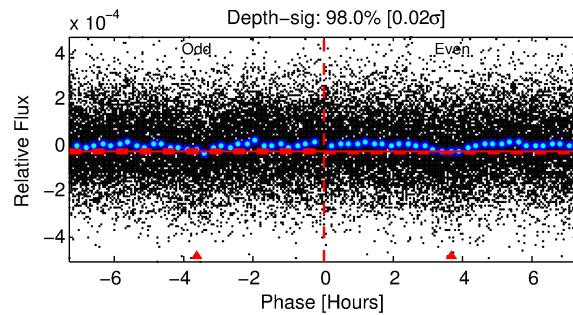
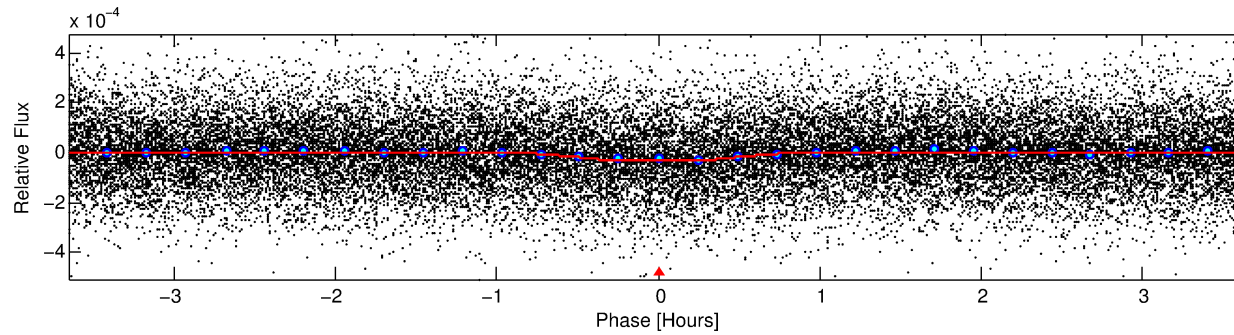
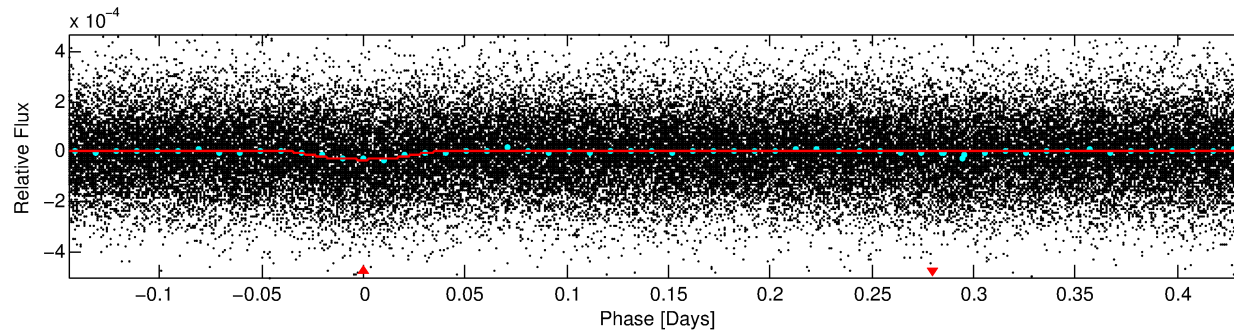
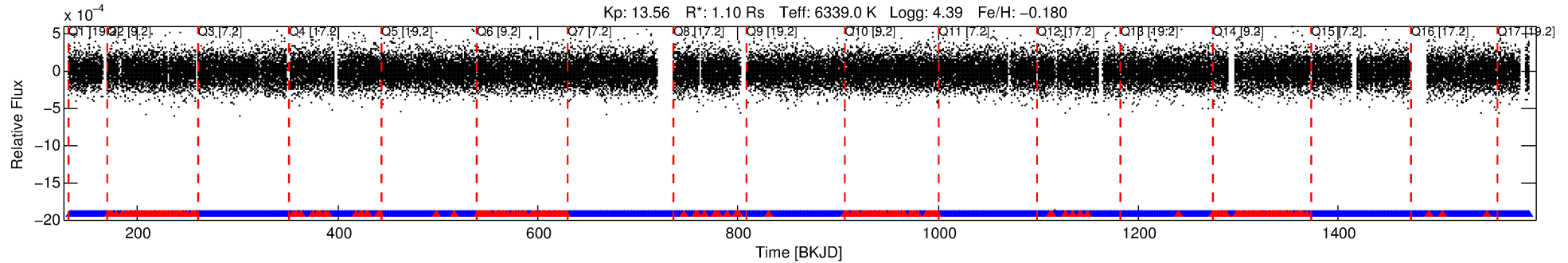
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 007967517-01

No Significant Match Found

DV One-Page Summary

KIC: 7967517 Candidate: 1 of 1 Period: 0.580 d



DV Fit Results:

Period = 0.57951 [0.00001] d
Epoch = 132.0045 [0.0014] BKJD
Rp/R* = 0.0060 [0.0012]
a/R* = 1.86 [1.42]
b = 0.90 [0.22]
Seff = 9015.97 [3671.56]
Teff = 2485 [253] K
Rp = 0.72 [0.27] Re
a = 0.0140 [0.0037] AU
Ag = 1.89 [1.14] [0.79σ]
Teffp = 4507 [553] K [3.32σ]

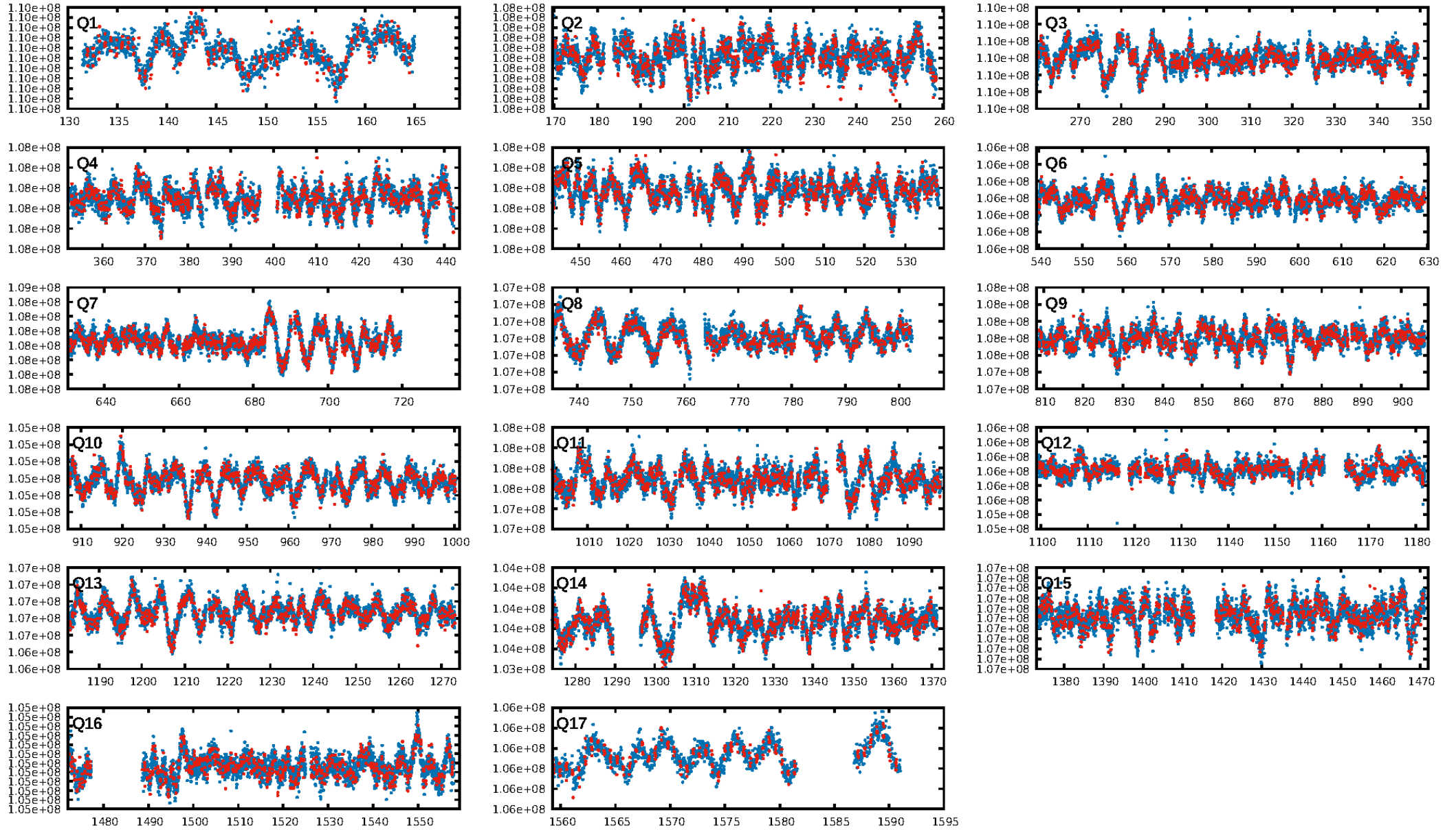
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 4.64e-24
RollingBand-fgt: 0.87 [1903/2198]
GhostDiagnostic-chr: -0.7487
Centroid-sig: 0.0%
Centroid-so: 15.239 arcsec [18.20σ]
OotOffset-rm: N/A
KicOffset-rm: N/A
OotOffset-st: 0/0/0/0 [0]
KicOffset-st: 0/0/0/0 [0]
DiffImageQuality-fgm: N/A
DiffImageOverlap-fno: 1.00 [17/17]

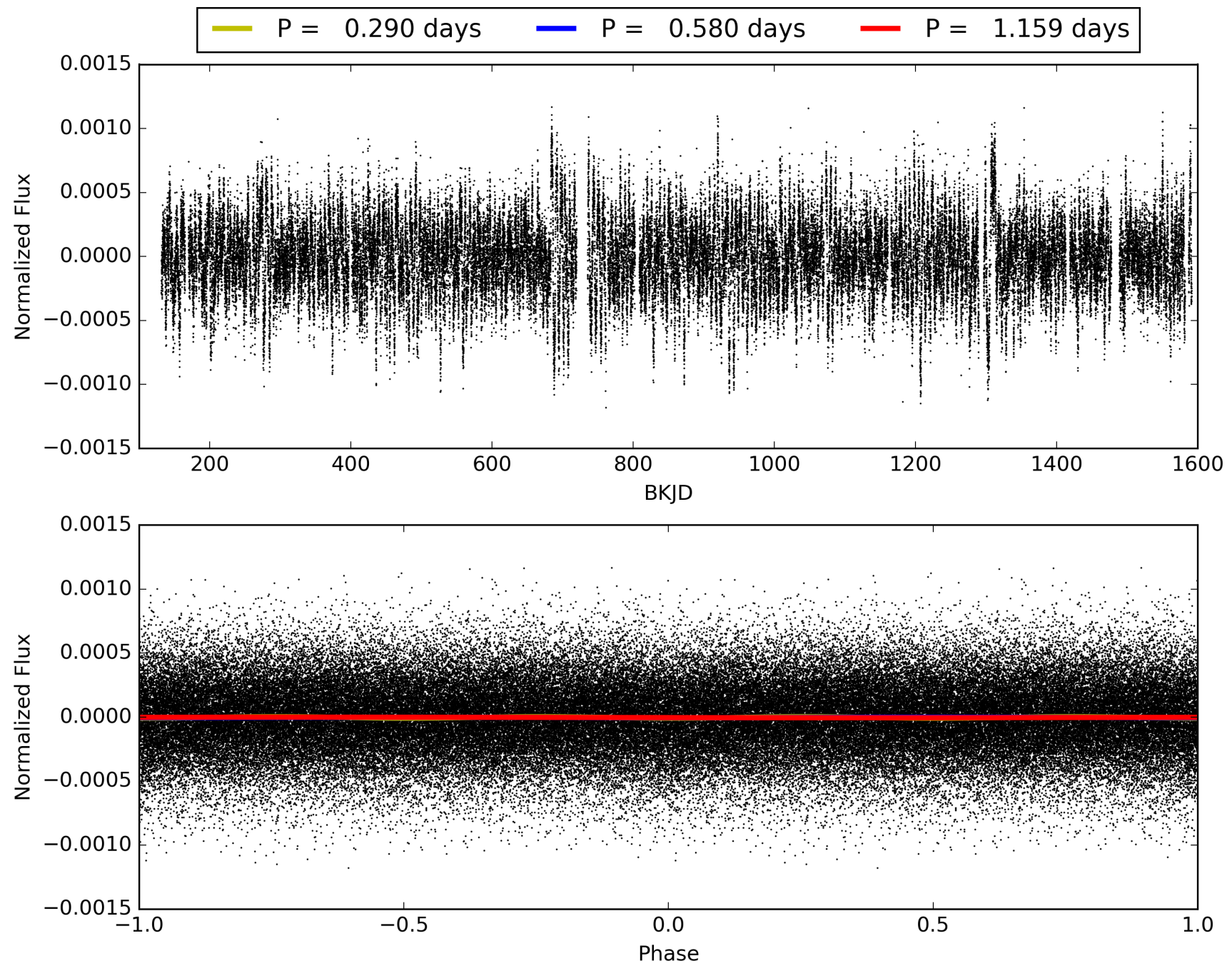
Software Revision: svn-ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 29-Jan-2016 05:35:42 Z

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

TCE 007967517-01, PDC Light Curves

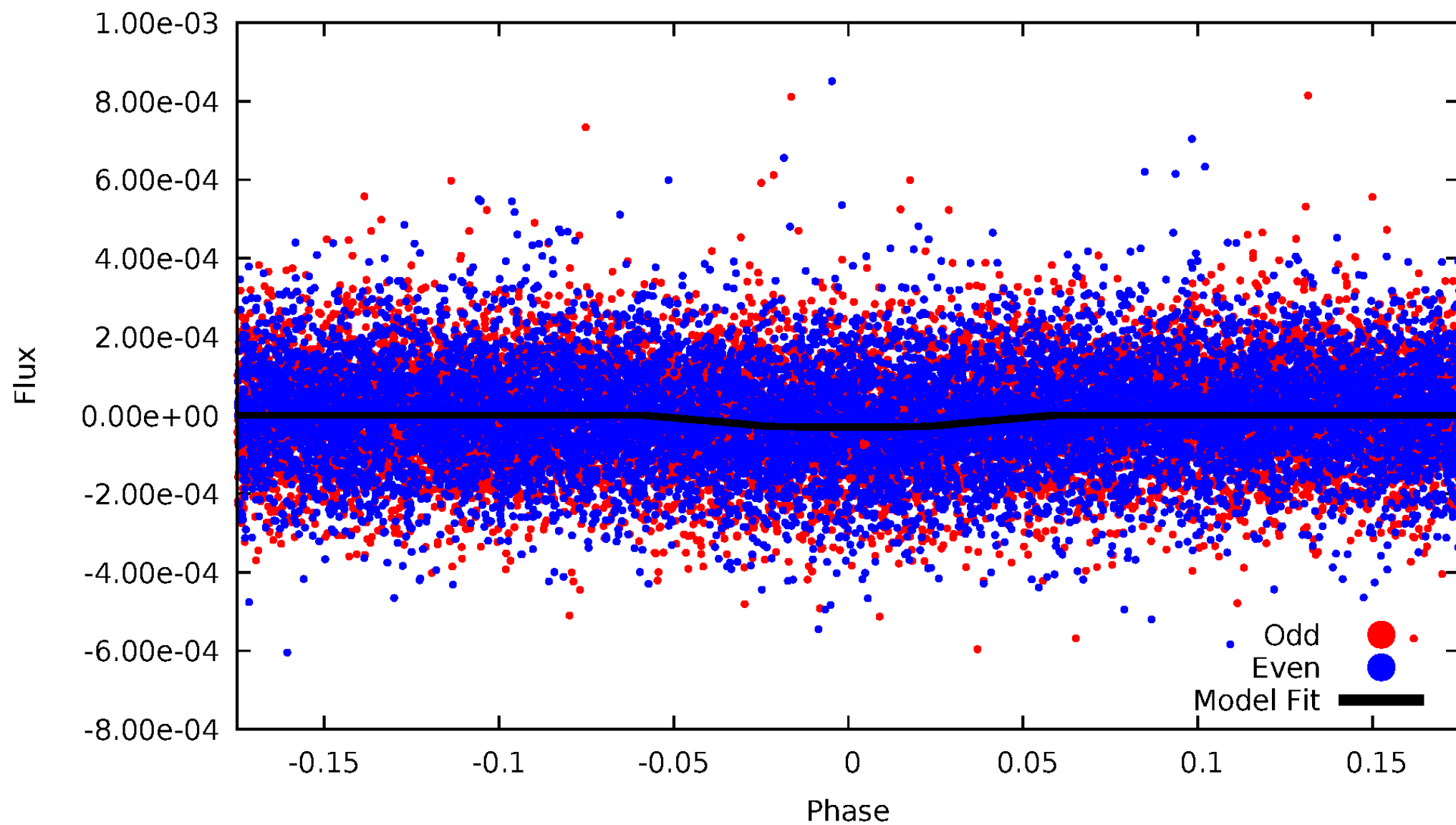


TCE 007967517-01



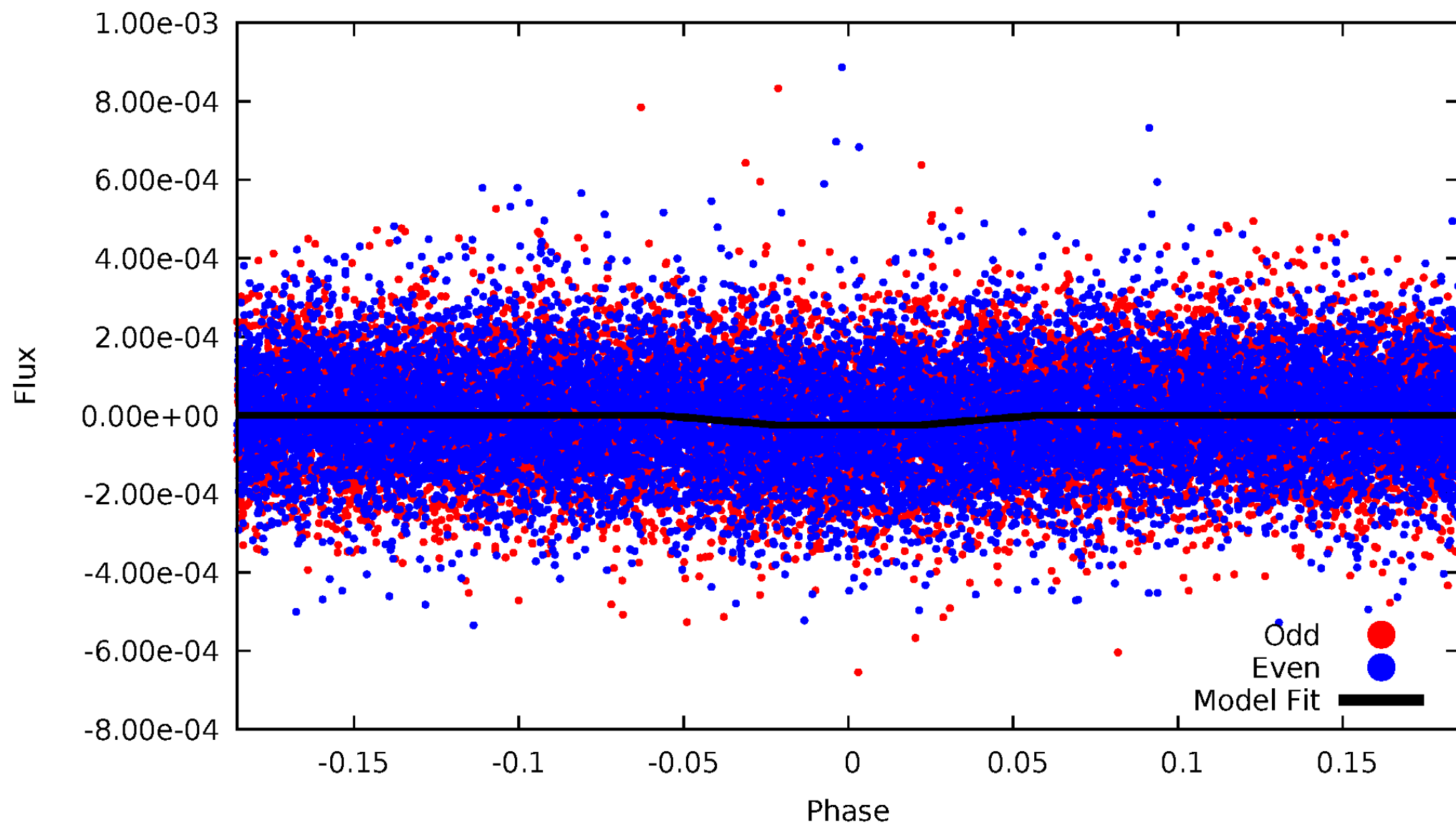
DV Odd/Even

TCE 007967517-01



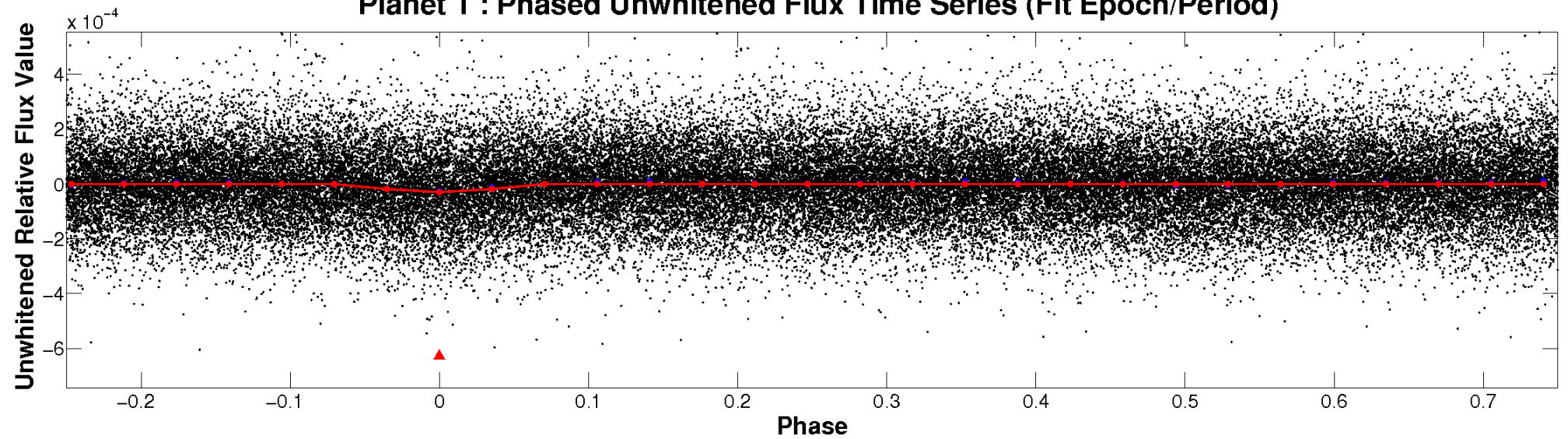
ALT Odd/Even

TCE 007967517-01

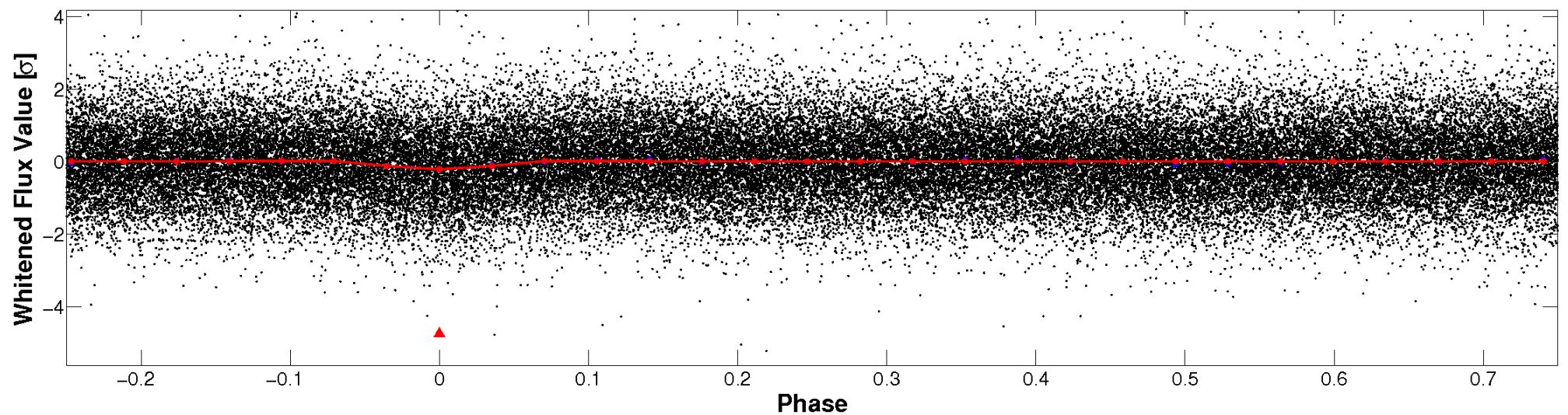


Non-Whitened Vs. Whitened Light Curve

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

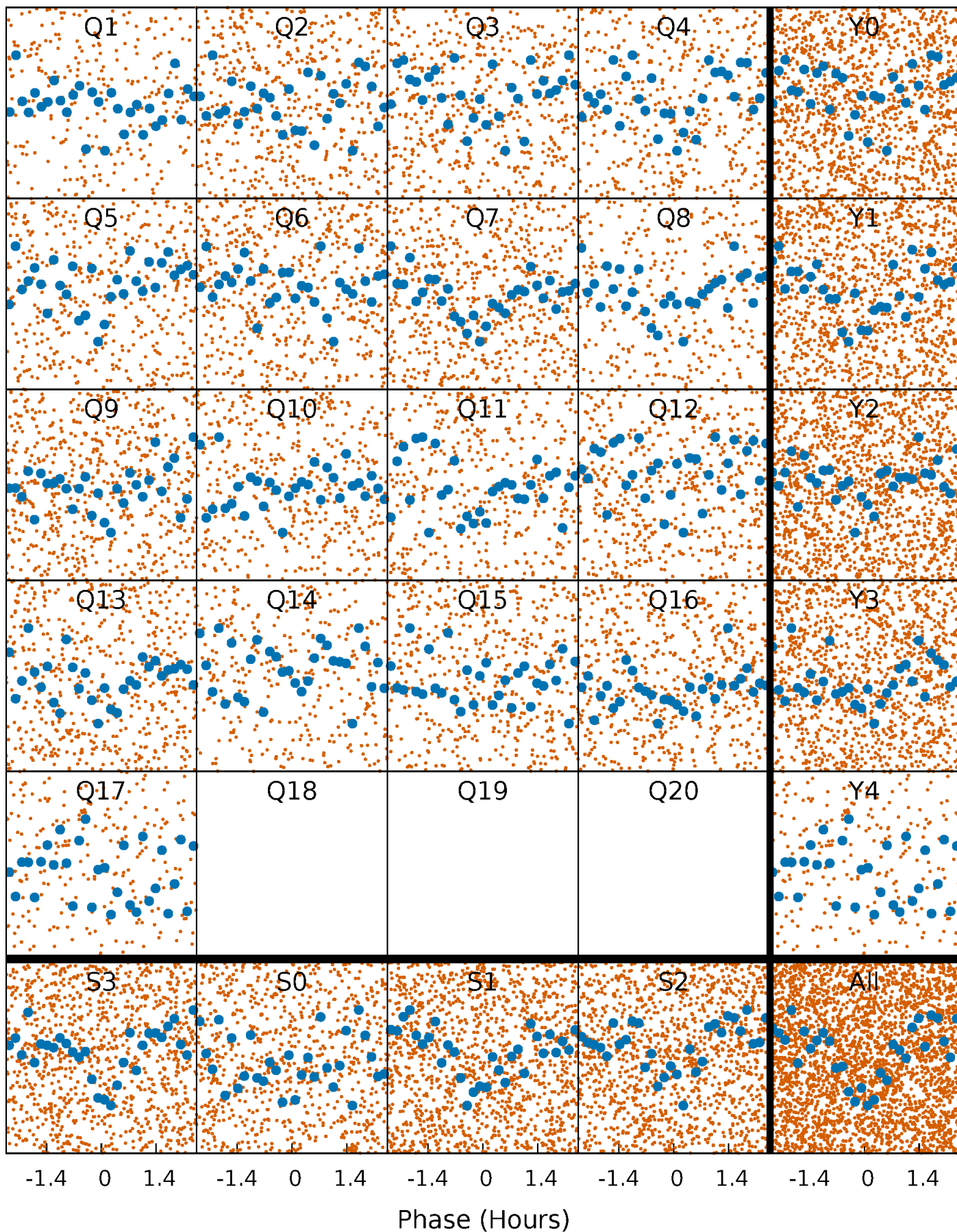


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



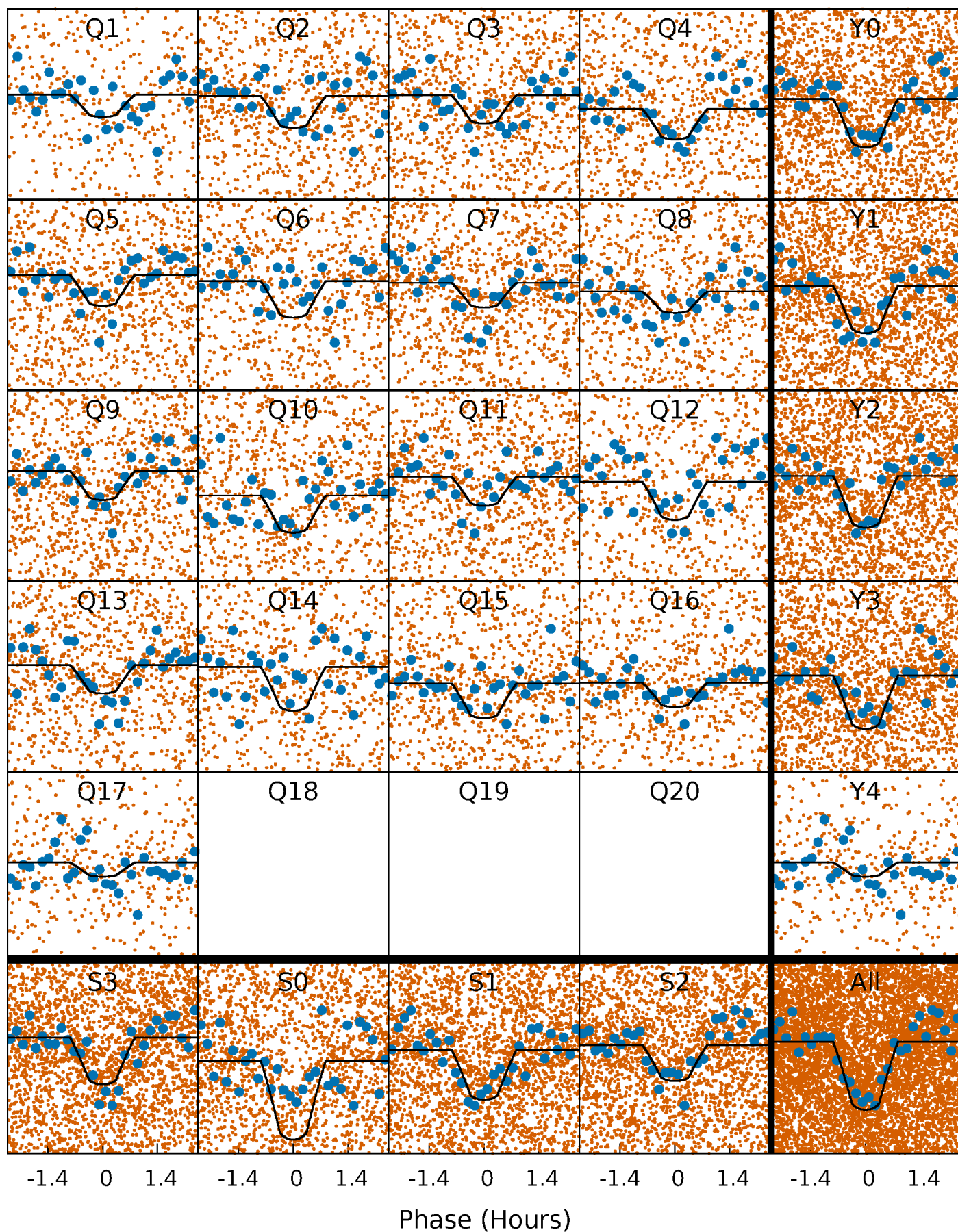
PDC Quarter-Phased Transit Curves

TCE 007967517-01 P= 0.579515 Days $T_0=132.004502$ (BKJD)



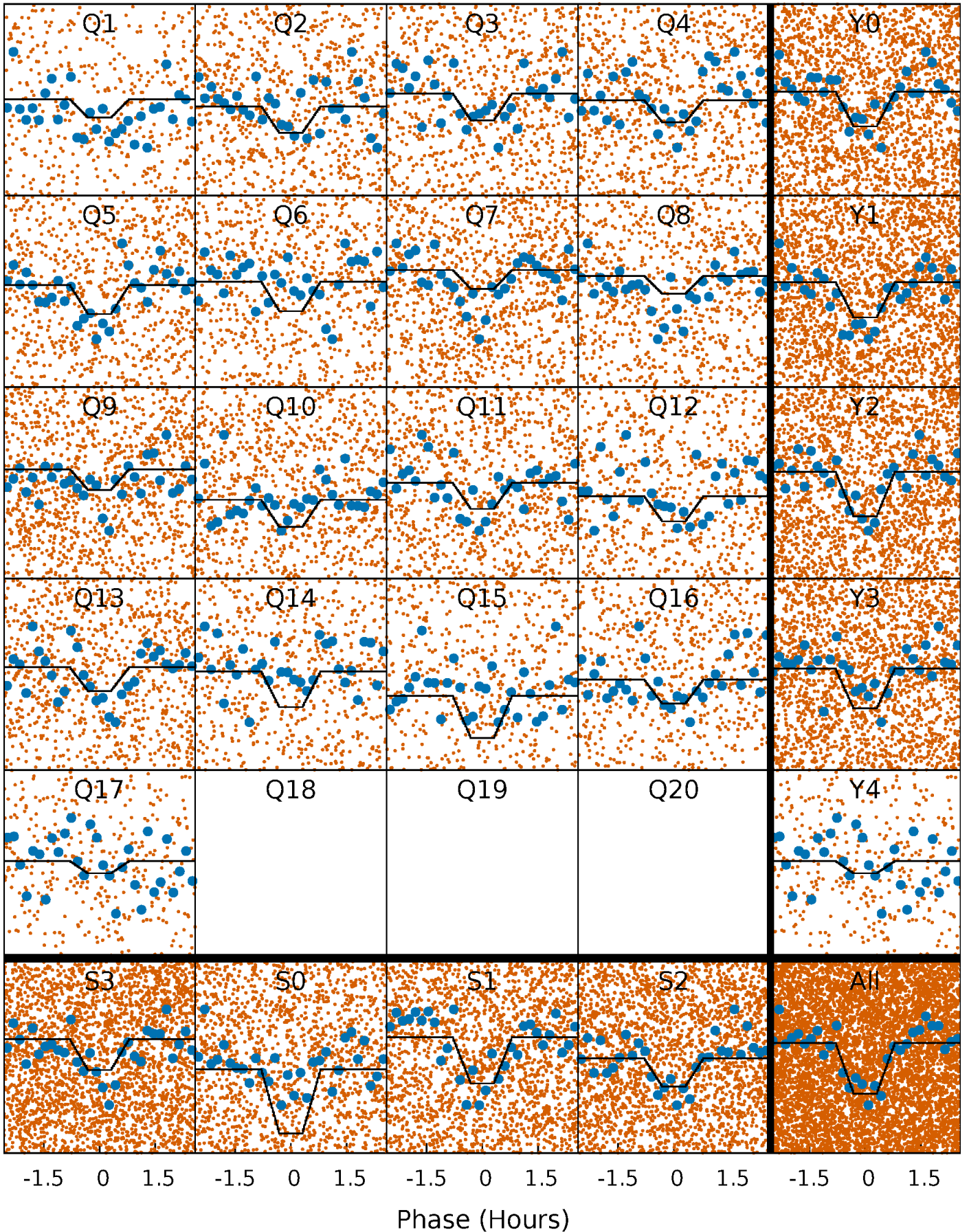
DV Quarter-Phased Transit Curves

TCE 007967517-01 P= 0.579515 Days $T_0=132.004502$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

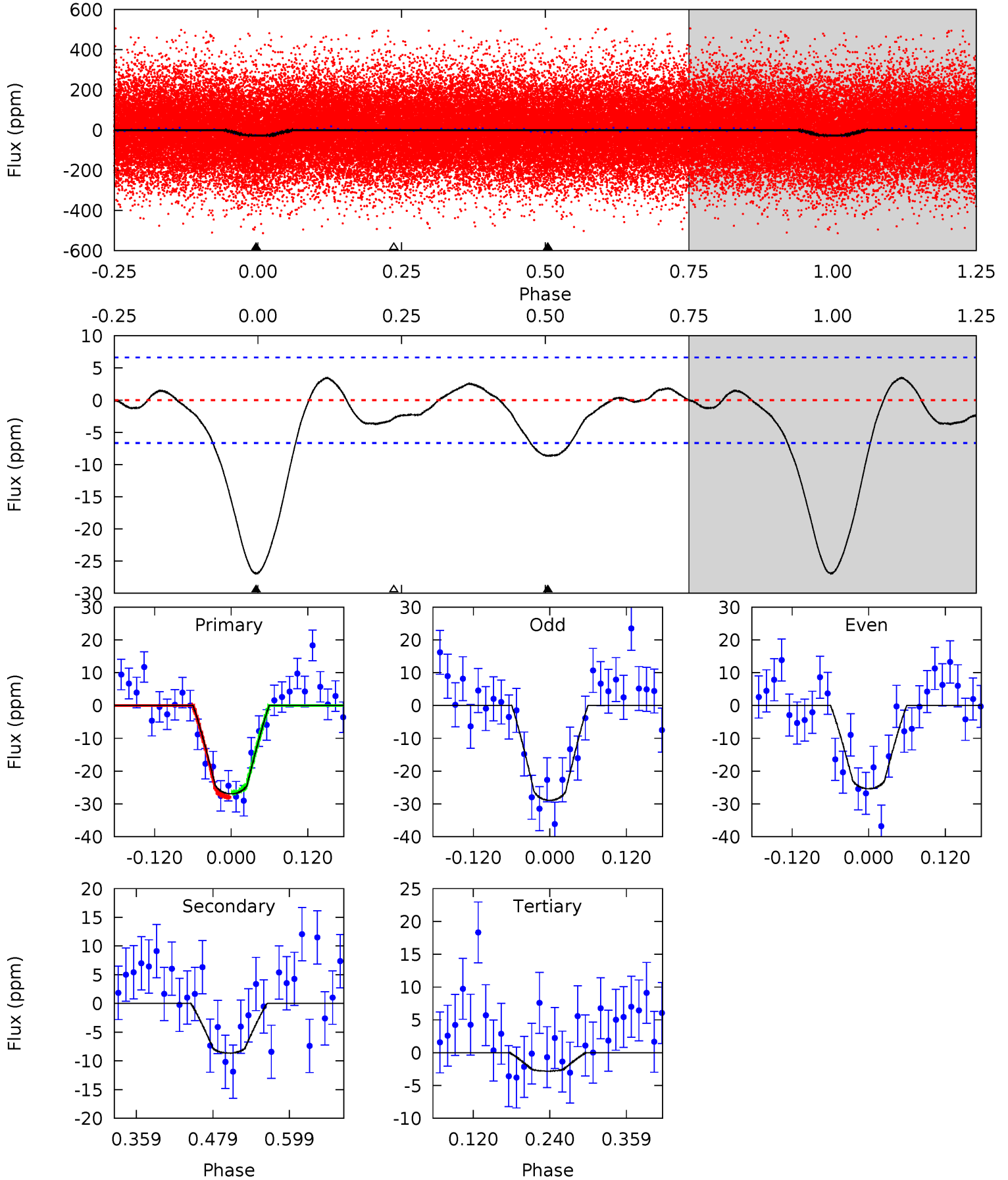
TCE 007967517-01 P= 0.579509 Days $T_0=132.010379$ (BKJD)



DV Model-Shift Uniqueness Test

007967517-01, P = 0.579515 Days, E = 131.424987 Days

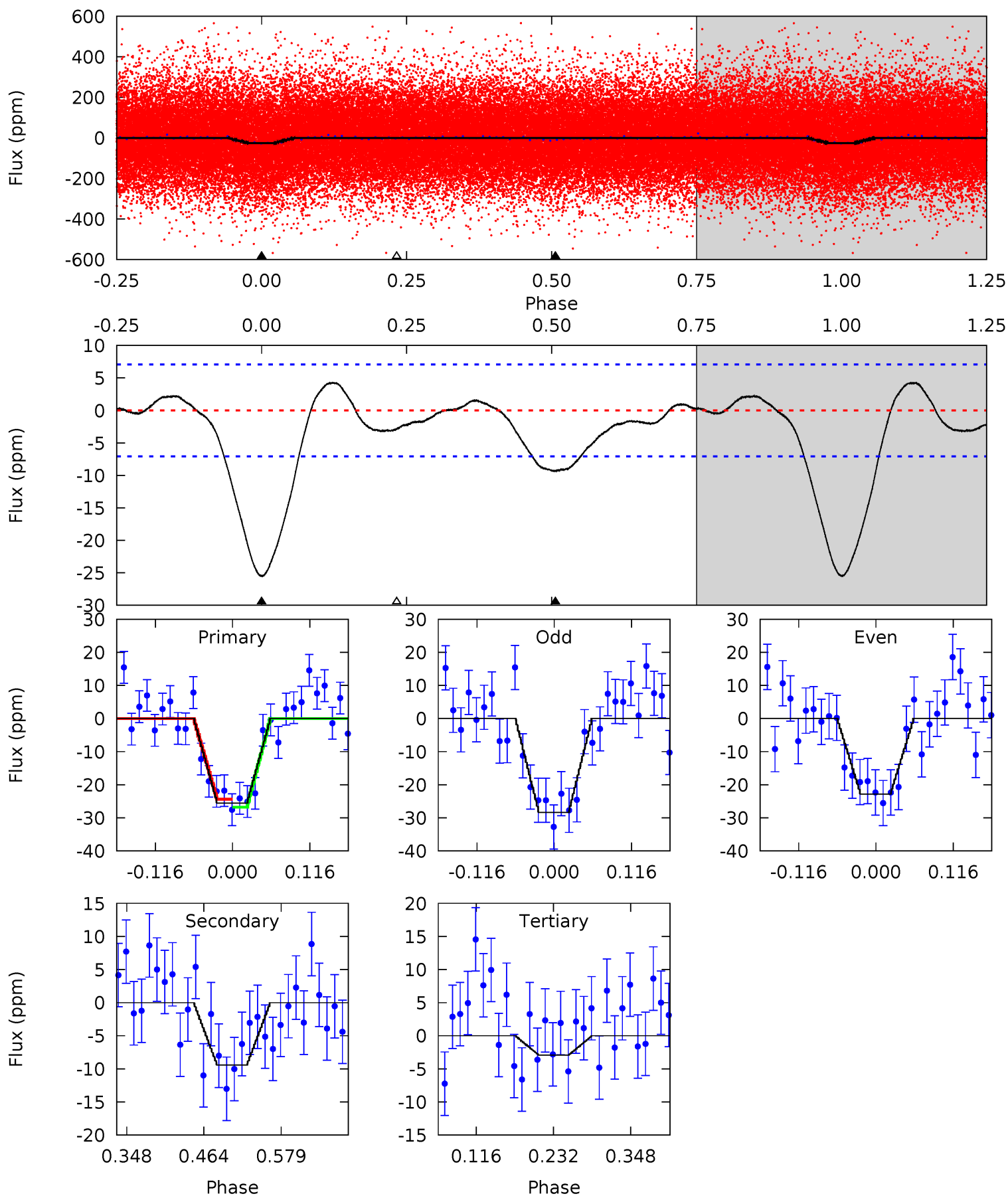
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
18.3	5.89	1.91	0	4.53	1.56	1.26	16.4	18.3	3.98	5.89	1.21	1.03	0.11	0.46



Alt Model-Shift Uniqueness Test

007967517-01, P = 0.579509 Days, E = 131.430870 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
16.4	6.05	1.88	0	4.53	1.57	1.16	14.5	16.4	4.16	6.05	1.77	1.01	0.15	0.78



Stellar Parameters For KIC 007967517

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6339^{+175}_{-241}	$4.387^{+0.087}_{-0.203}$	$-0.180^{+0.250}_{-0.300}$	$1.102^{+0.353}_{-0.151}$	$1.075^{+0.169}_{-0.139}$	$1.131^{+0.441}_{-0.611}$
	+3%/-4%	+2%/-5%	+139%/-167%	+32%/-14%	+16%/-13%	+39%/-54%
Source	PHO54	PHO54	PHO54	DSEP		

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

Secondary Eclipse Parameters for KIC 007967517-01 / KOI 7860.01

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-9 ± 1	$0.75^{+0.17}_{-0.17}$	3512^{+261}_{-189}	4401^{+548}_{-426}	$1.641^{+1.064}_{-0.602}$
Alt.	-9 ± 2	$0.62^{+0.17}_{-0.16}$	3514^{+270}_{-191}	4865^{+780}_{-483}	$2.474^{+2.258}_{-0.939}$

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

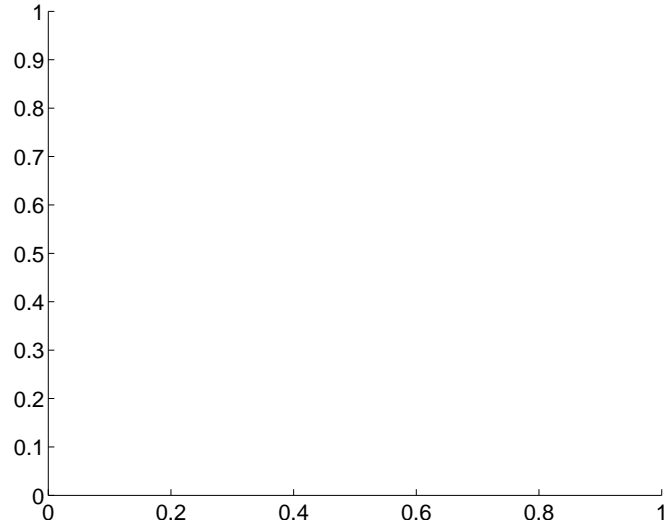
Supplemental centroid analysis for 007967517-01. Kepler magnitude: 13.56. Transit SNR 13.22

There are 0 quarters with good PRF difference image offsets

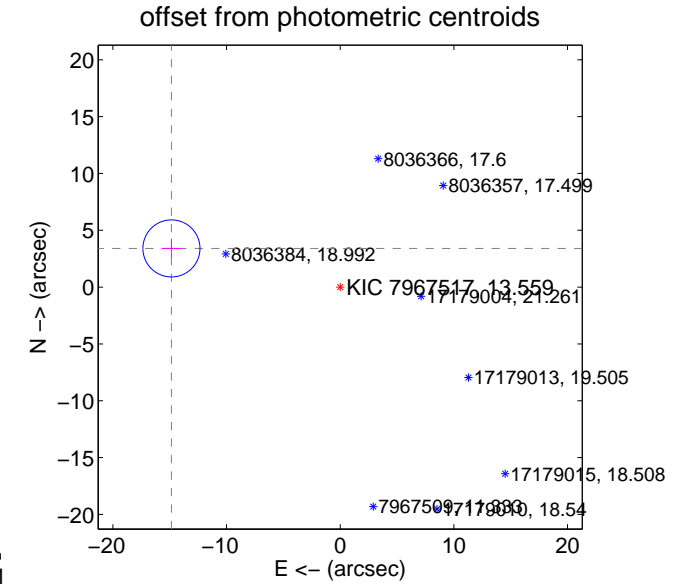
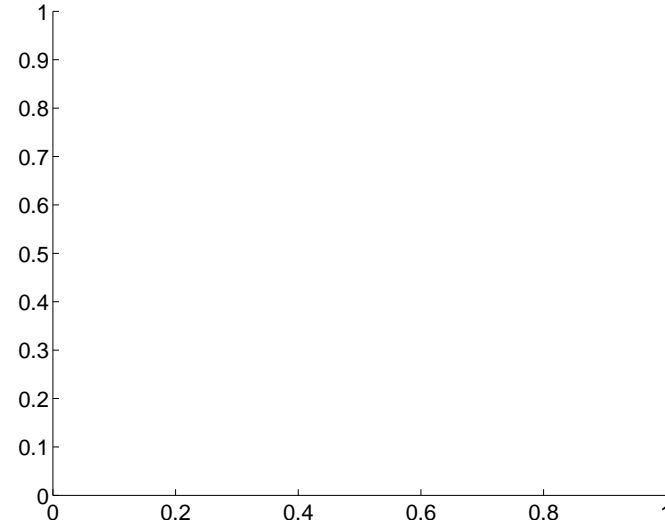
The direct PRF centroid is offset from the target star catalog position by about NaN arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	—	—	—	—
PRF-fit source offset from KIC position	—	—	—	—
photometric centroid source offset	15.24 ± 0.84	18.20	14.85 ± 0.84	3.40 ± 0.86

There is no PRF-fit offset from OOT-fit

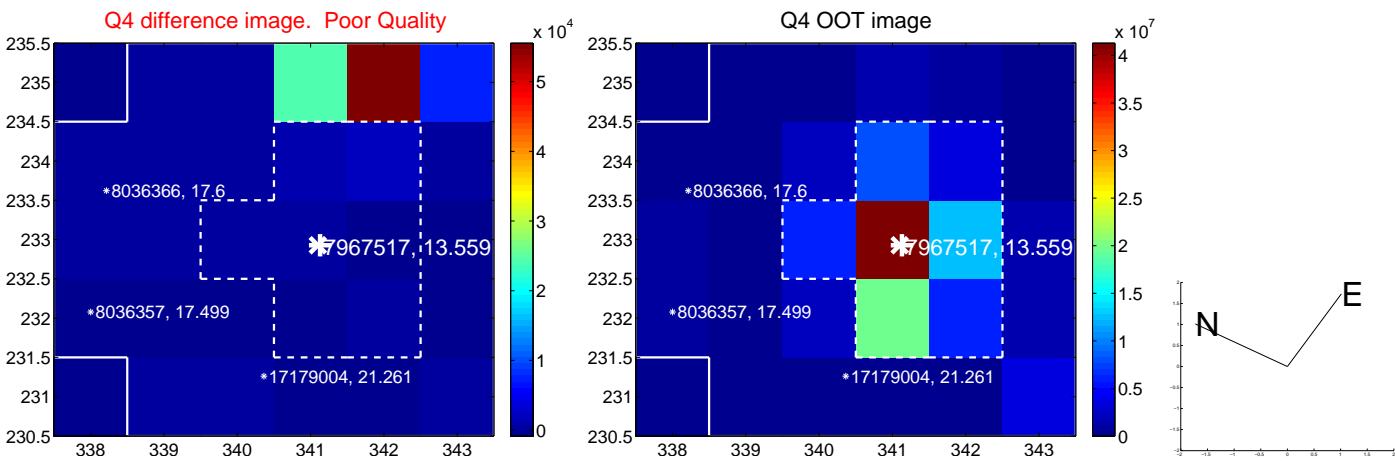
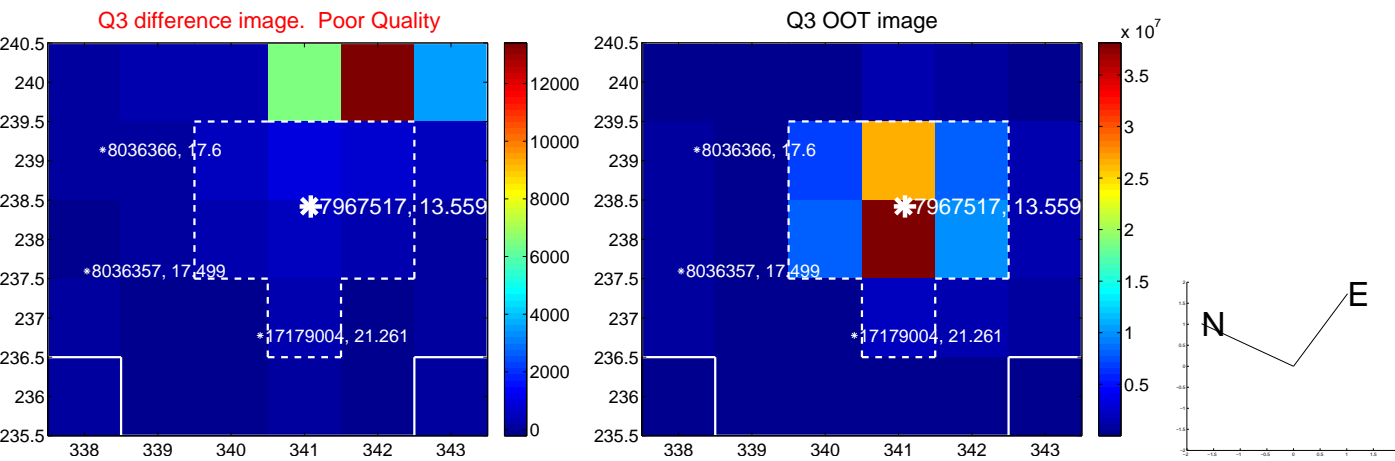
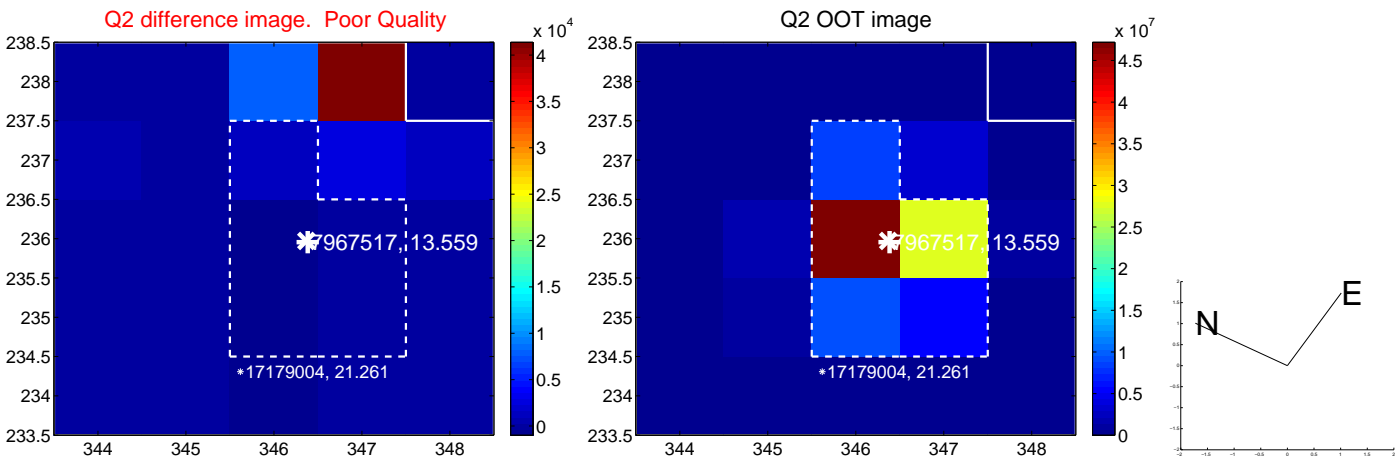
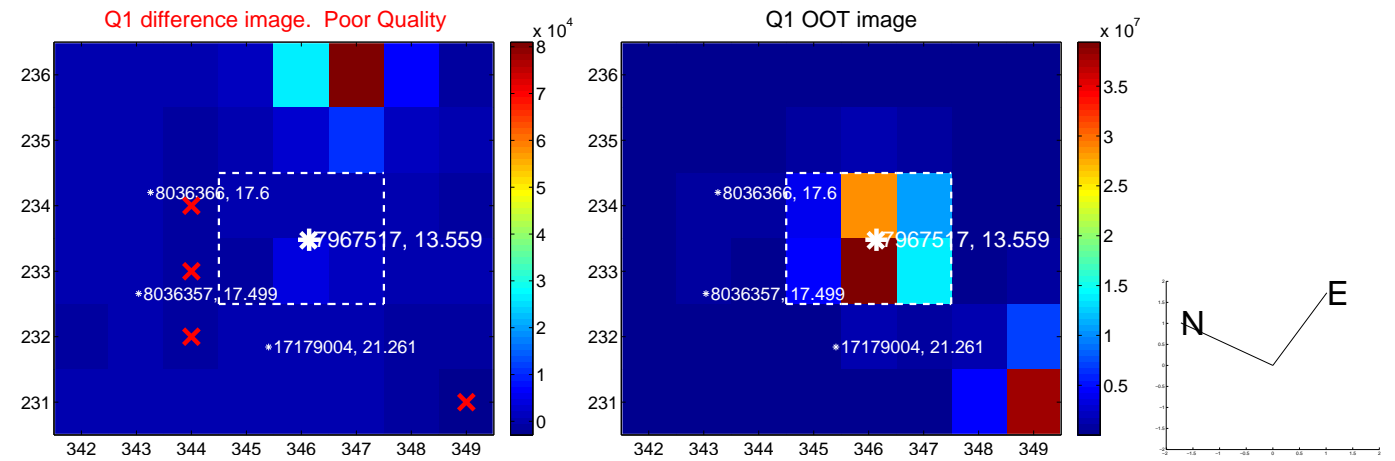


There is no PRF-fit offset from KIC

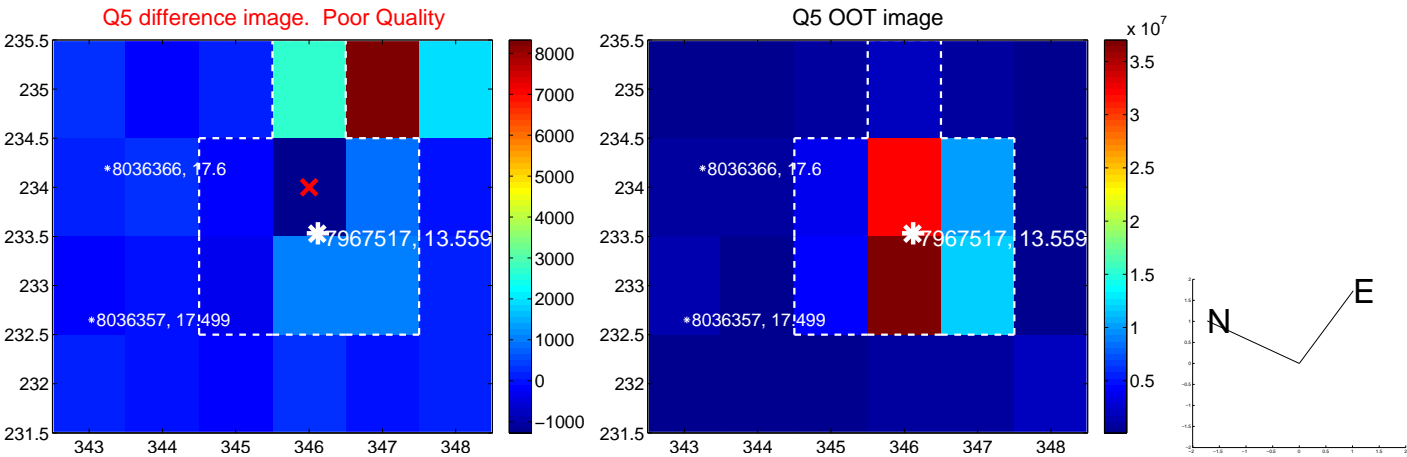


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

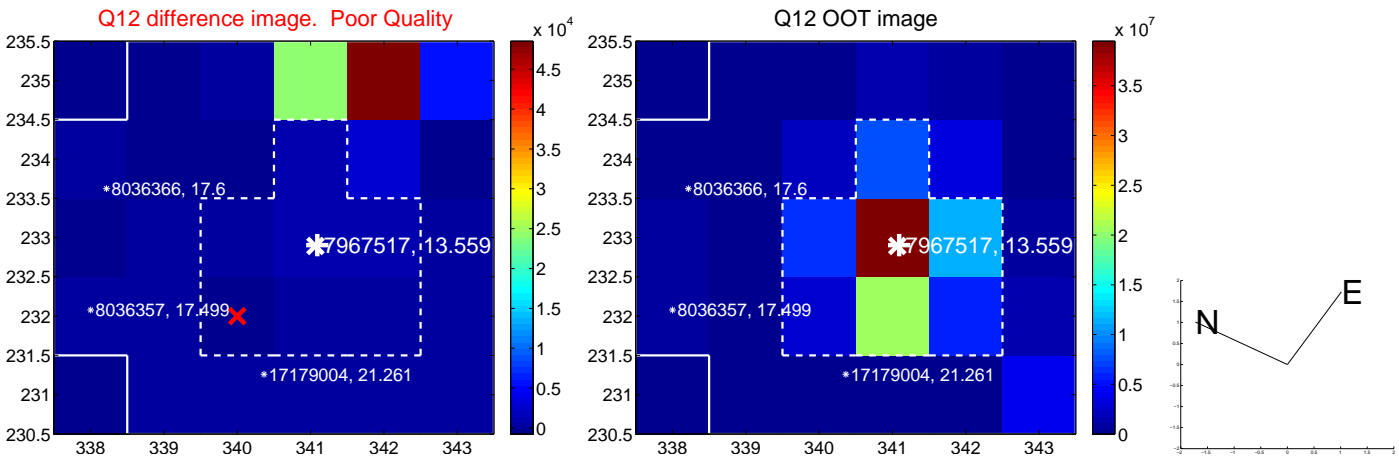
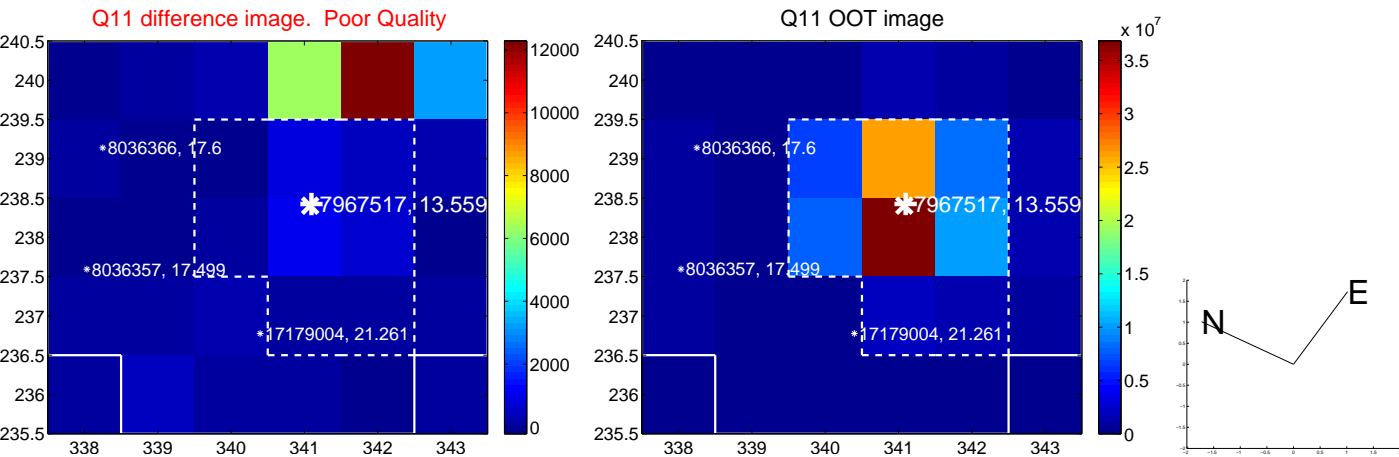
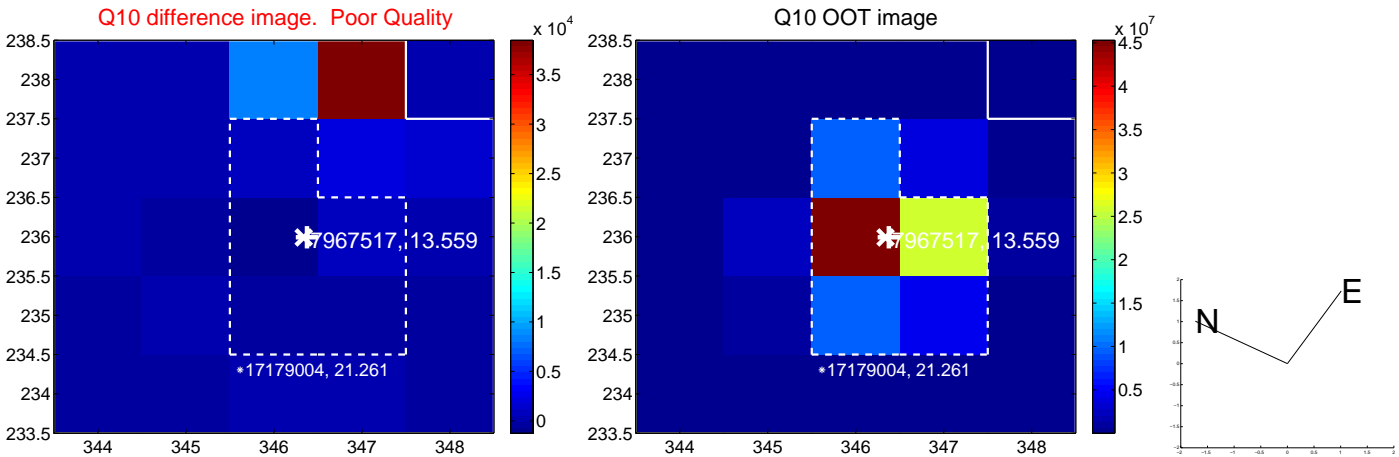
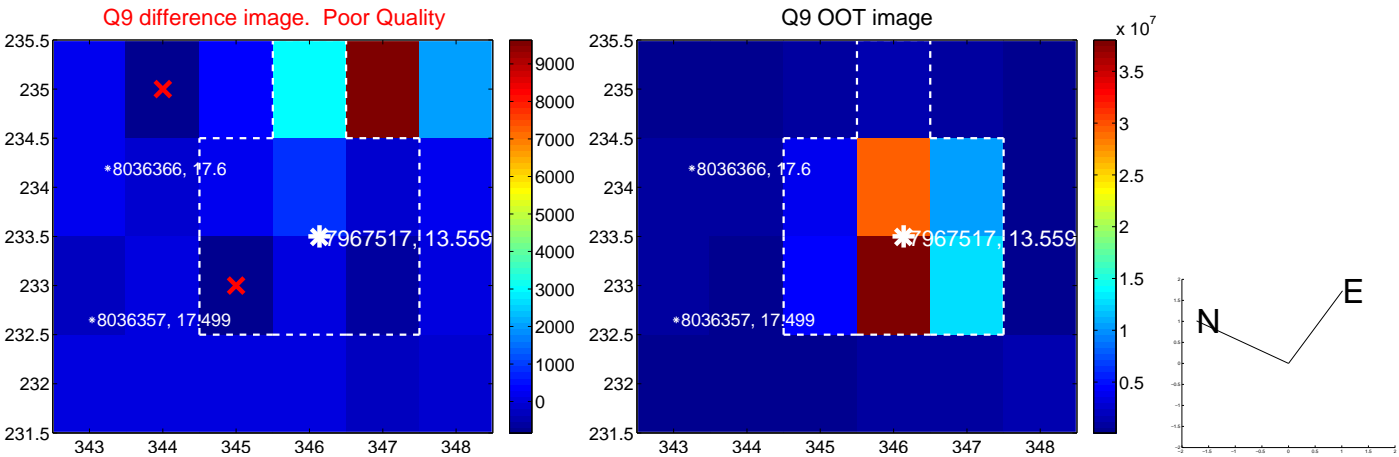
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



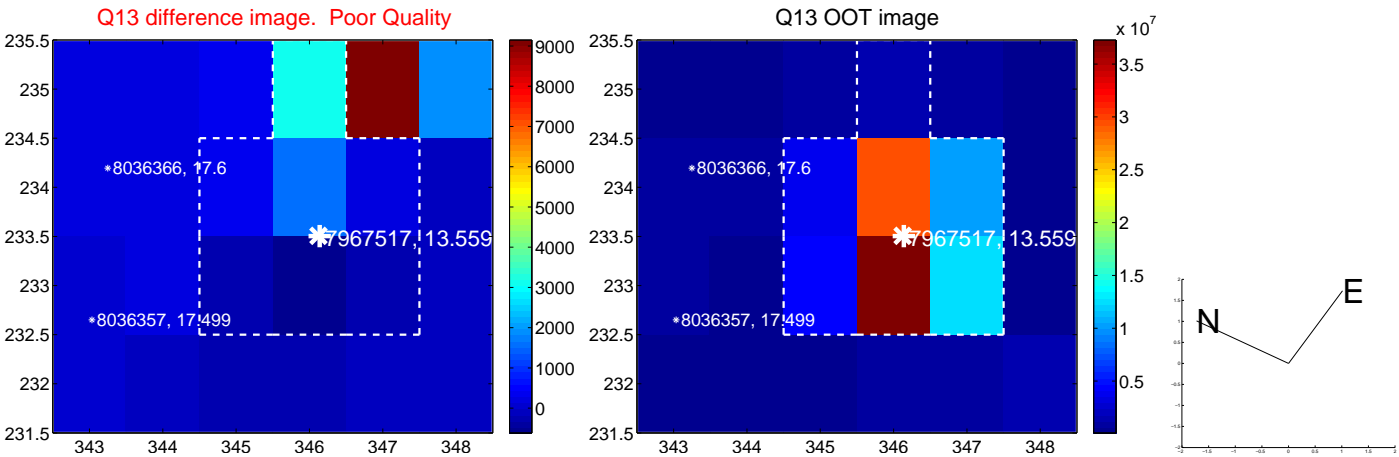
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



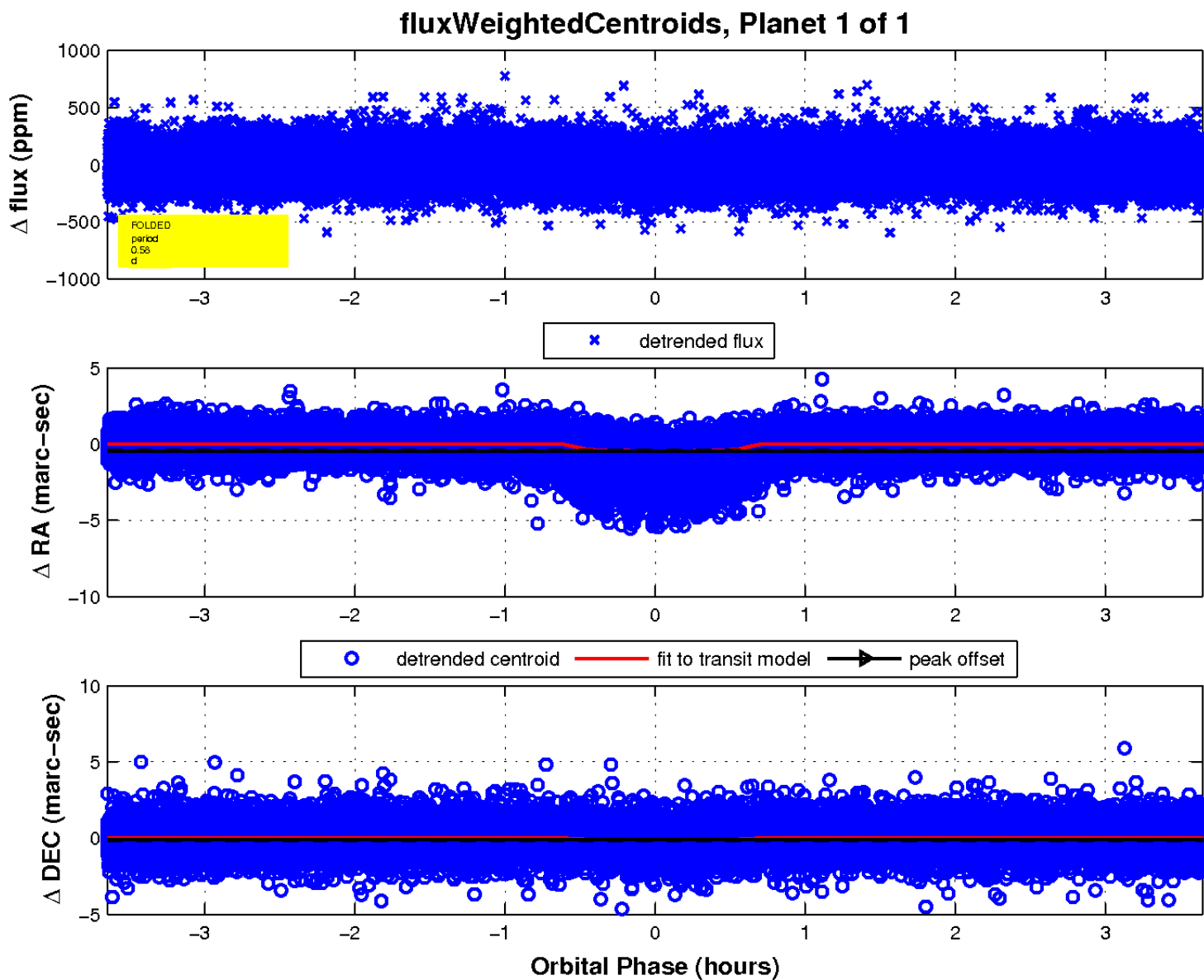
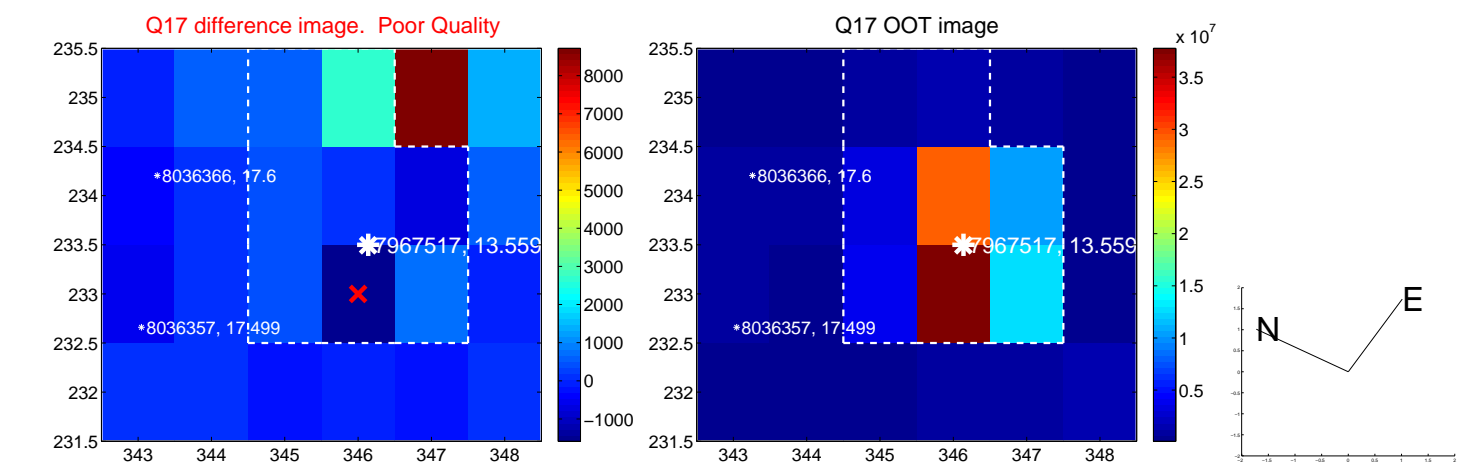
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white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination

