

KIC 003347258

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})
003347258-01	OBS	No	0.725050	131.947643	4.5	7.623	11.1	3.0	2.16	7048	0.48	29860.94

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
003347258-01	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_ALT—CENT_FEW_MEAS

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

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

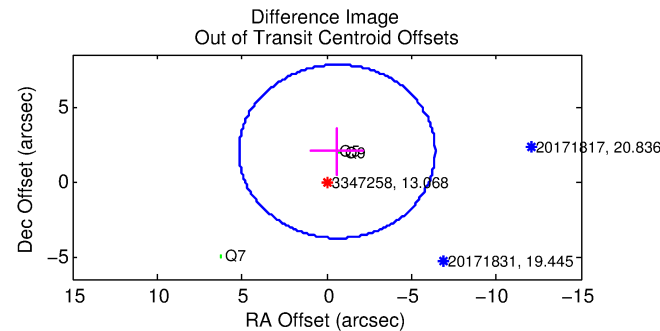
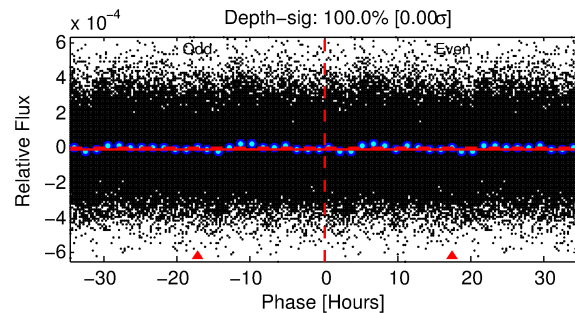
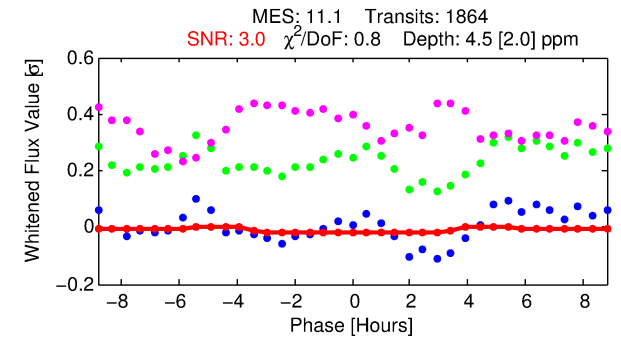
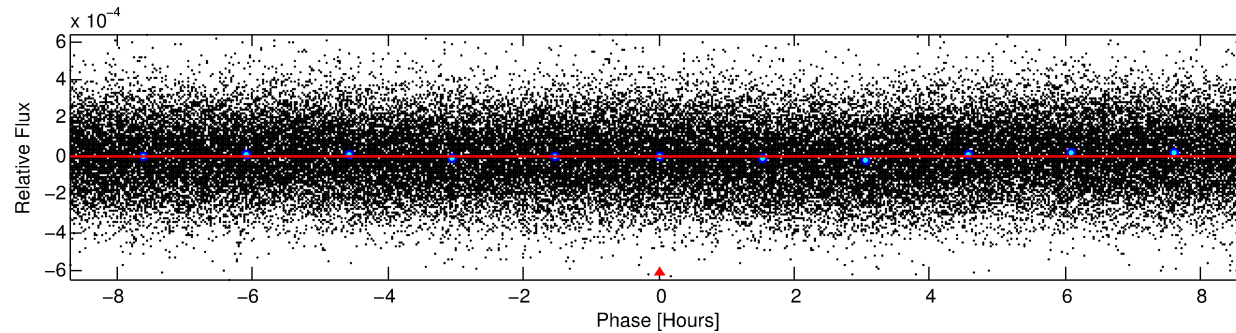
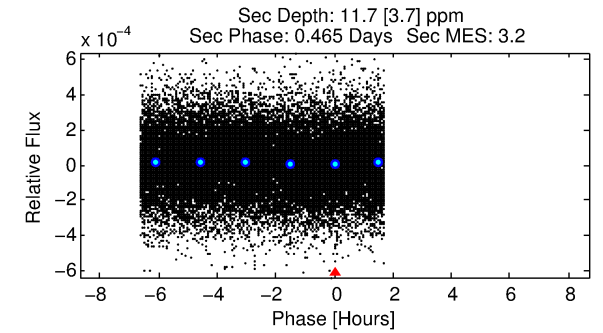
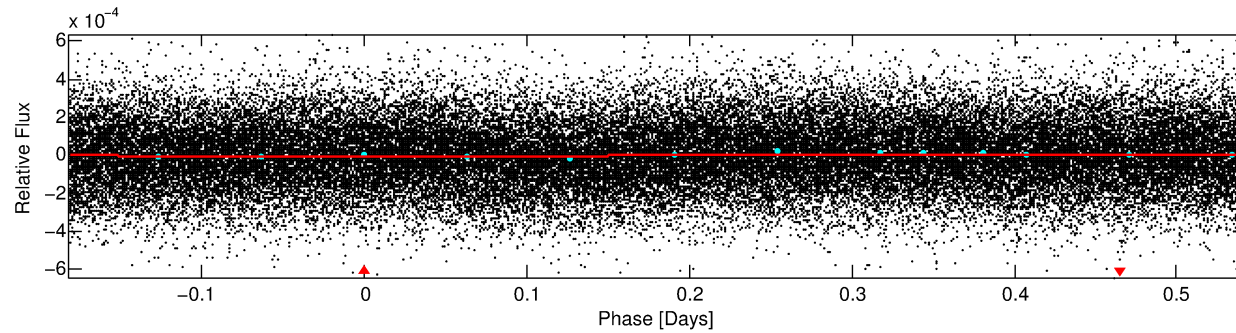
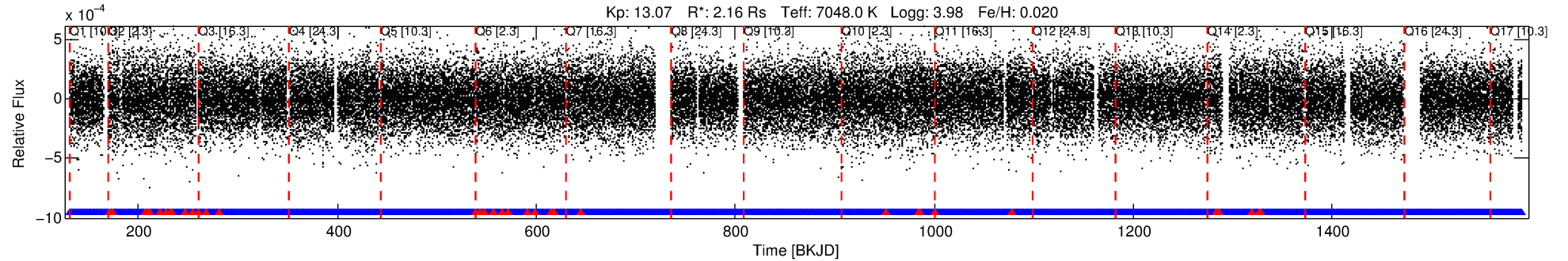
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 003347258-01

No Significant Match Found

DV One-Page Summary

KIC: 3347258 Candidate: 1 of 1 Period: 0.725 d



DV Fit Results:

Period = 0.72505 [0.00005] d
Epoch = 131.9476 [0.0208] BKJD
Rp/R* = 0.0020 [0.0060]
a/R* = 1.02 [0.56]
b = 0.50 [26.84]
Seff = 29860.94 [8936.90]
Teq = 3352 [251] K
Rp = 0.48 [1.42] Re
a = 0.0186 [0.0036] AU
Ag = 9.81 [58.52] [0.15σ]
Teffp = 9171 [13665] K [0.43σ]

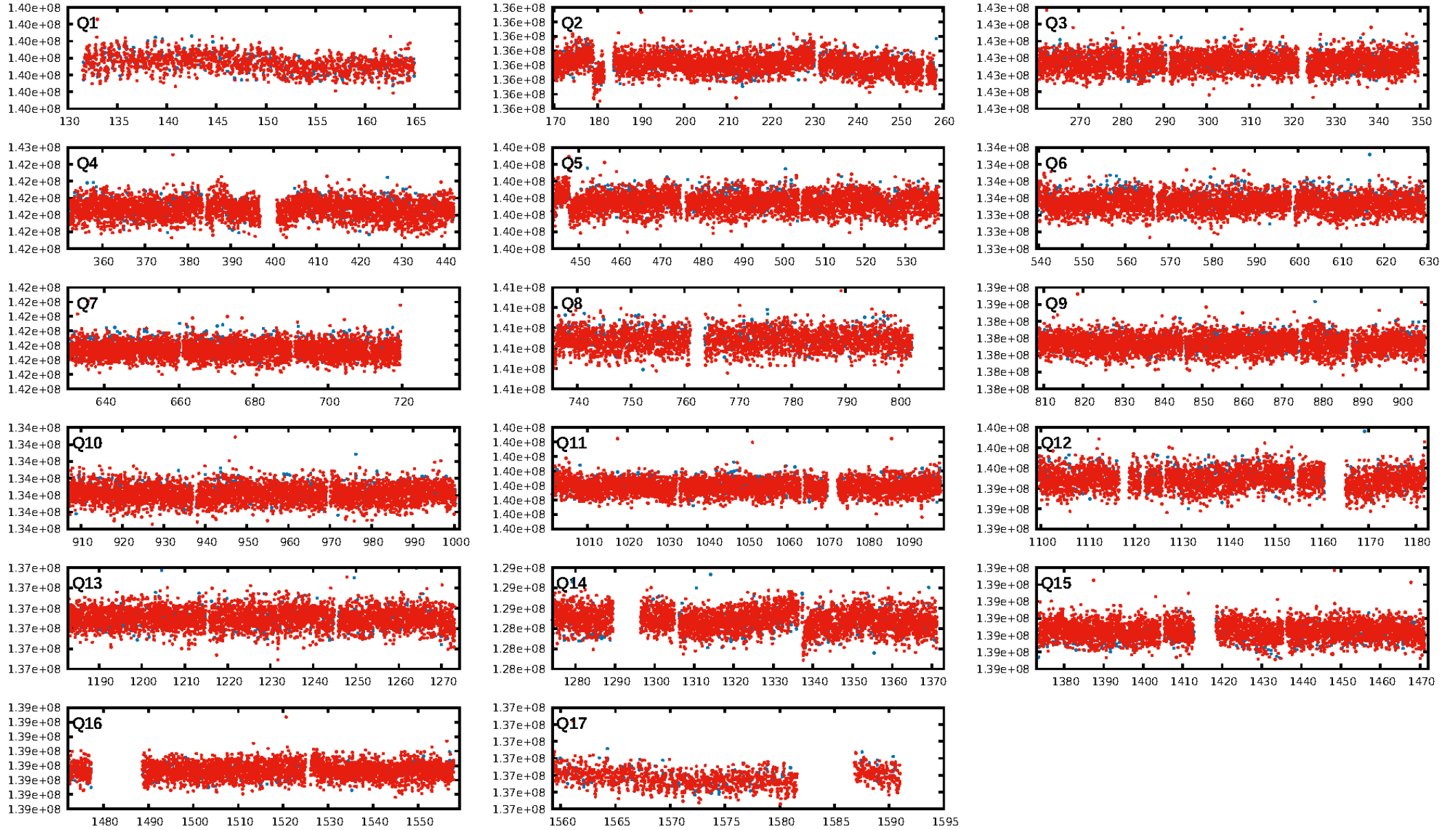
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: N/A
RollingBand-fgt: 0.98 [1745/1781]
GhostDiagnostic-chr: N/A
Centroid-sig: N/A
Centroid-so: N/A
OotOffset-rm: 2.106 arcsec [1.09σ]
Centroid-so: N/A
OotOffset-st: 0/1/0/2 [3]
KicOffset-rm: 2.189 arcsec [1.04σ]
OotOffset-st: 0/1/0/2 [3]
KicOffset-st: 0/1/0/2 [3]
DiffImageQuality-fgm: 0.67 [2/3]
DiffImageOverlap-fno: 1.00 [17/17]

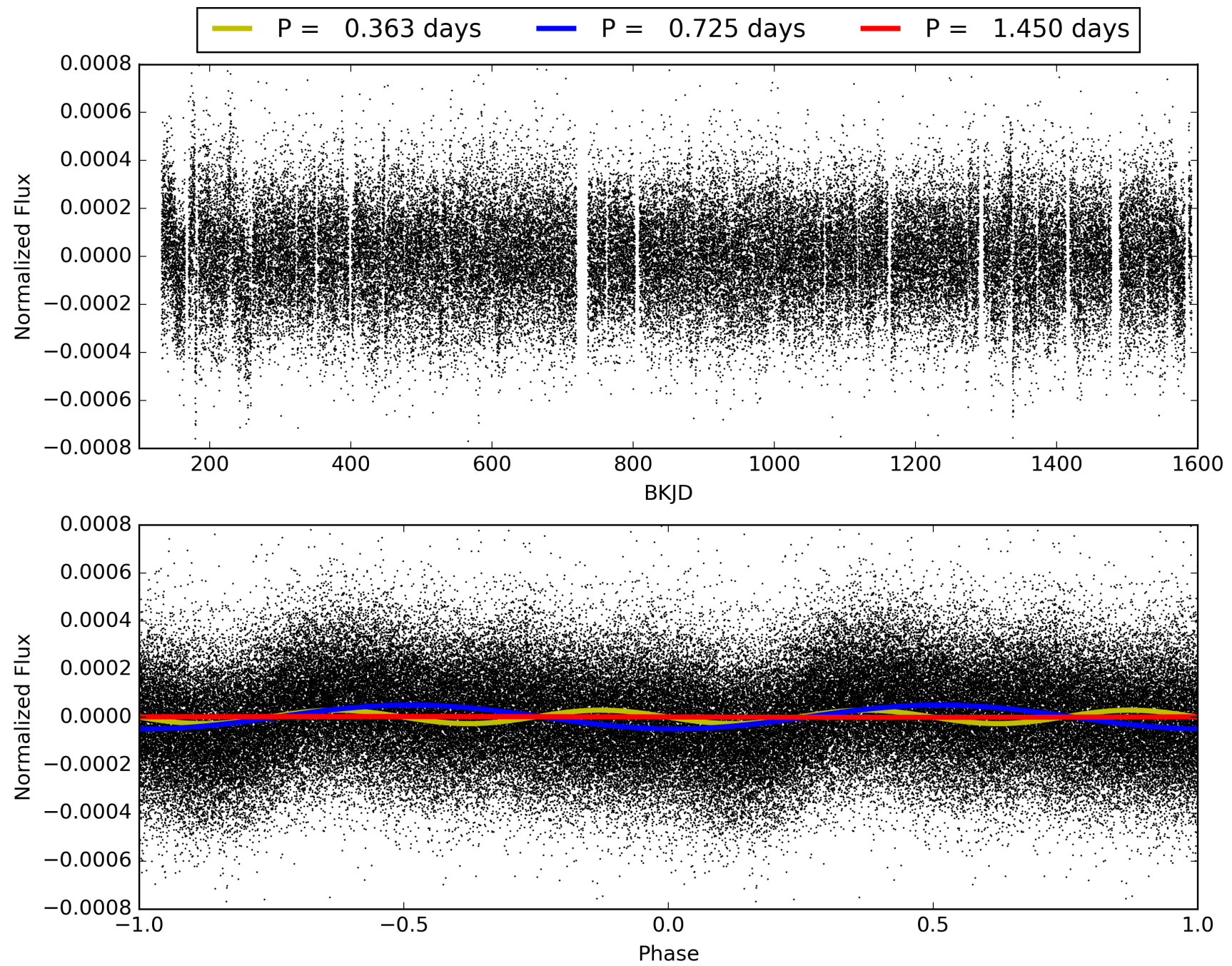
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 29-Jan-2016 23:03:23 Z

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

TCE 003347258-01, PDC Light Curves

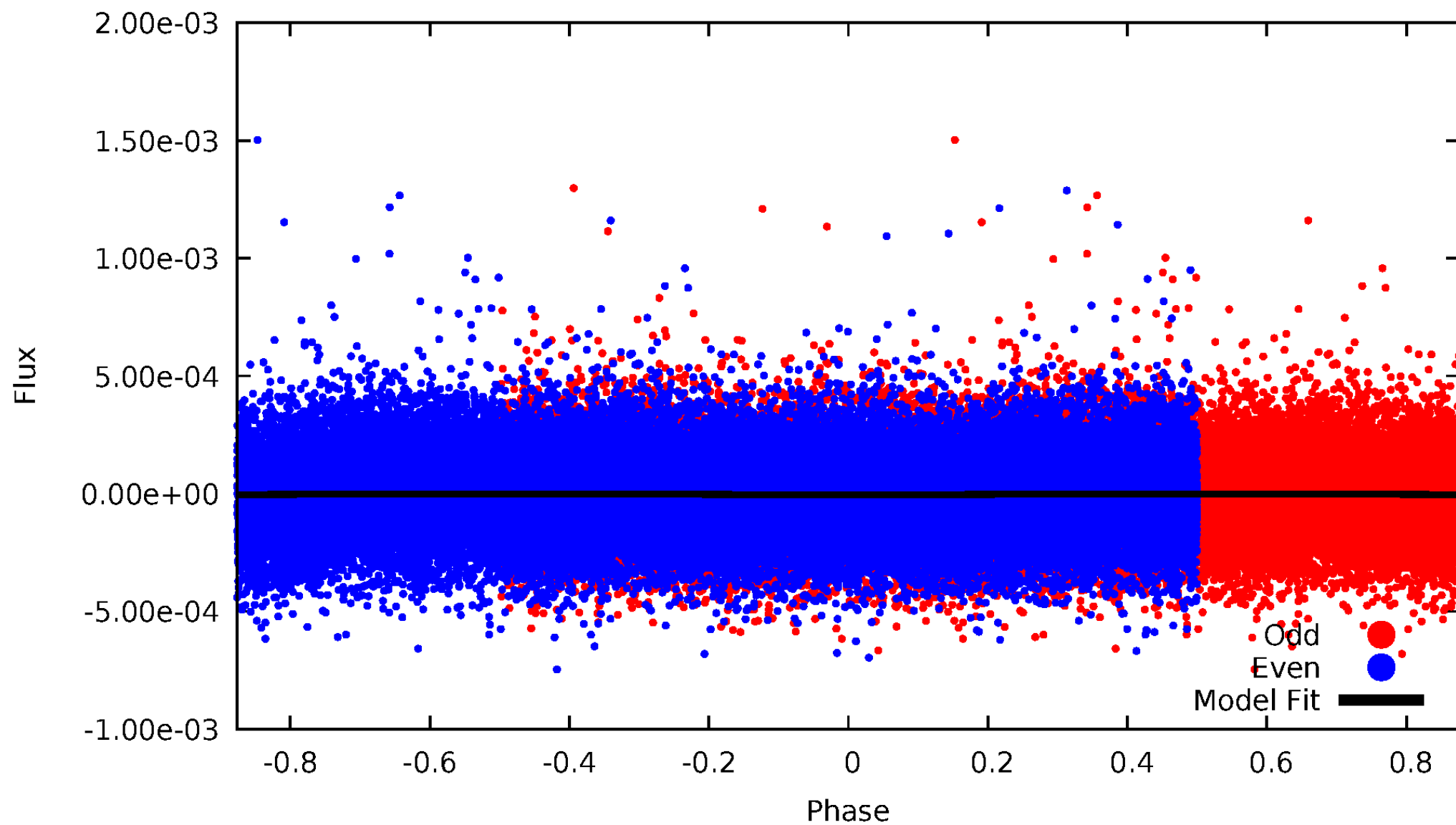


TCE 003347258-01



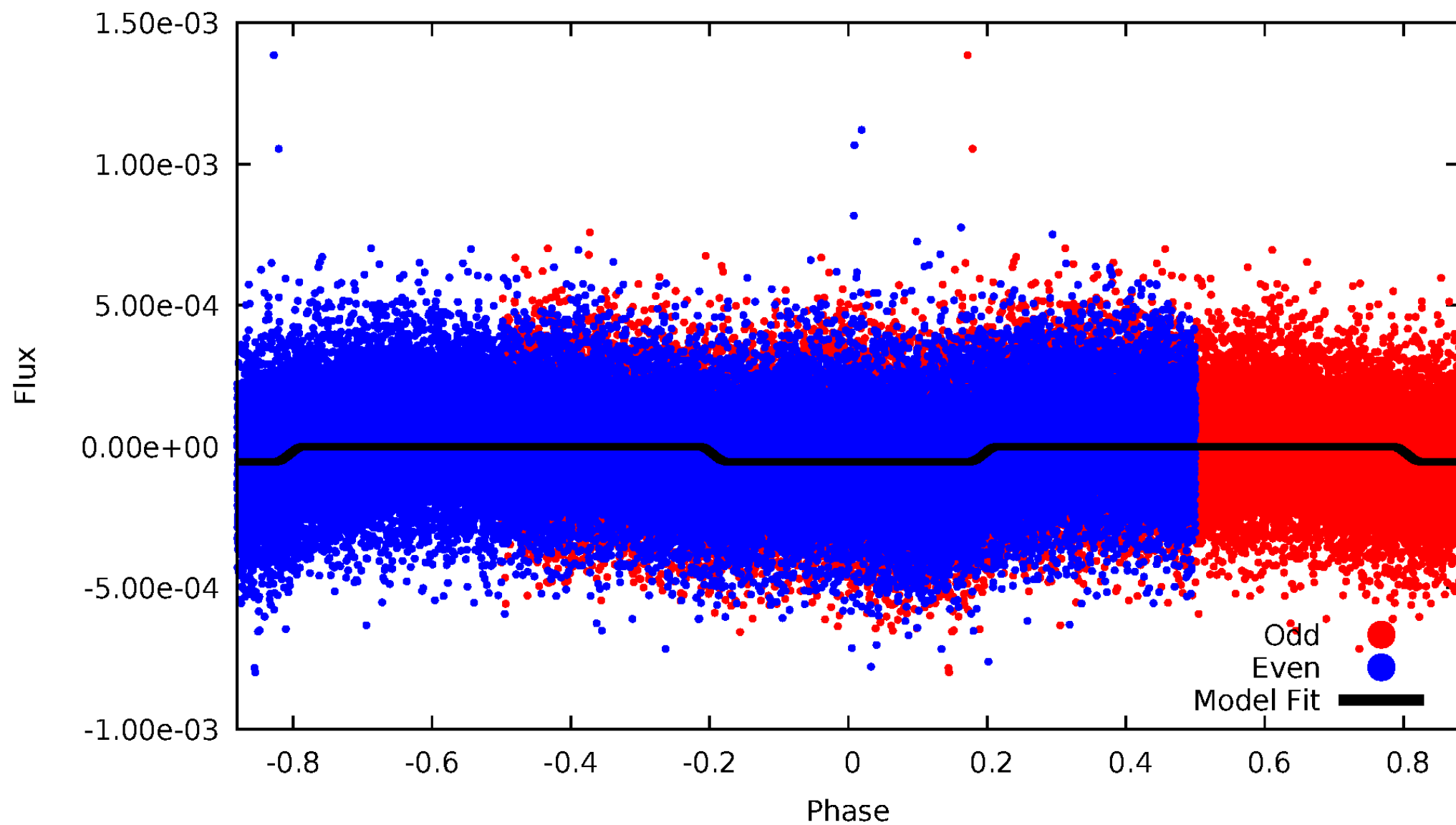
DV Odd/Even

TCE 003347258-01



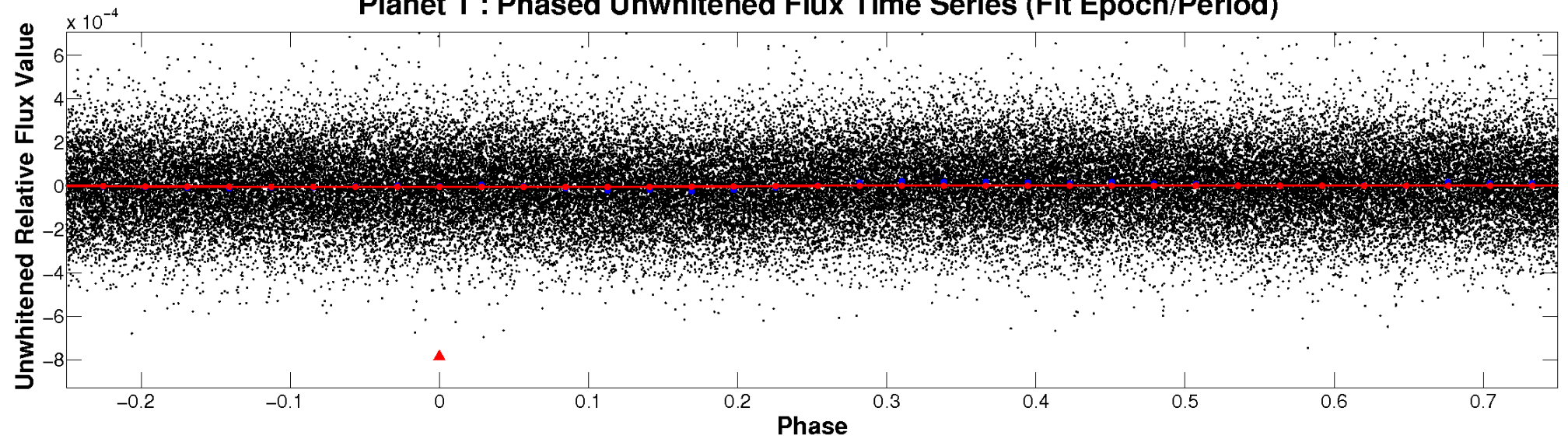
ALT Odd/Even

TCE 003347258-01

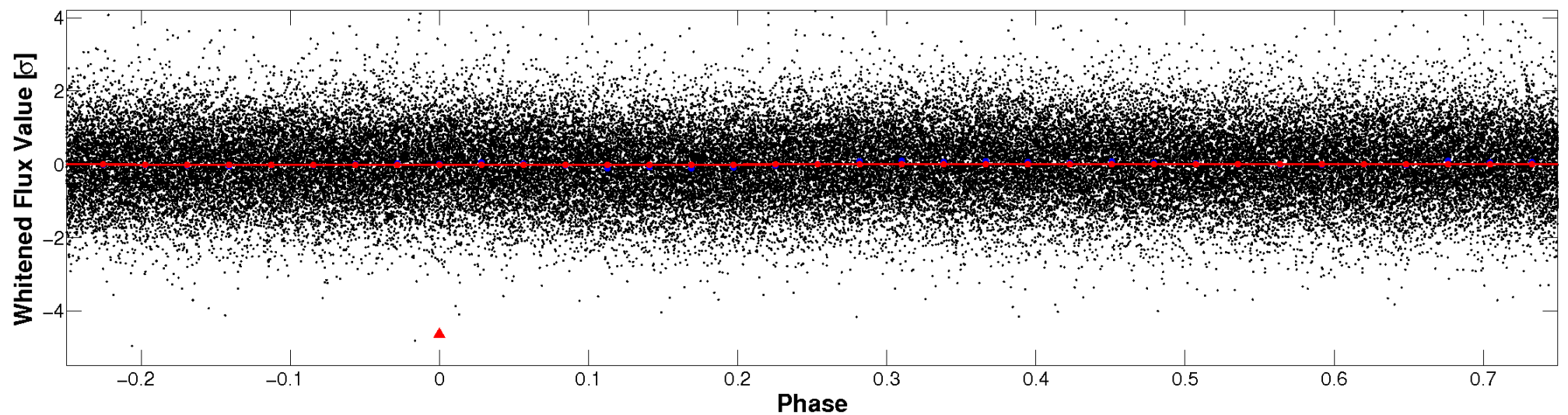


Non-Whitened Vs. Whitened Light Curve

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

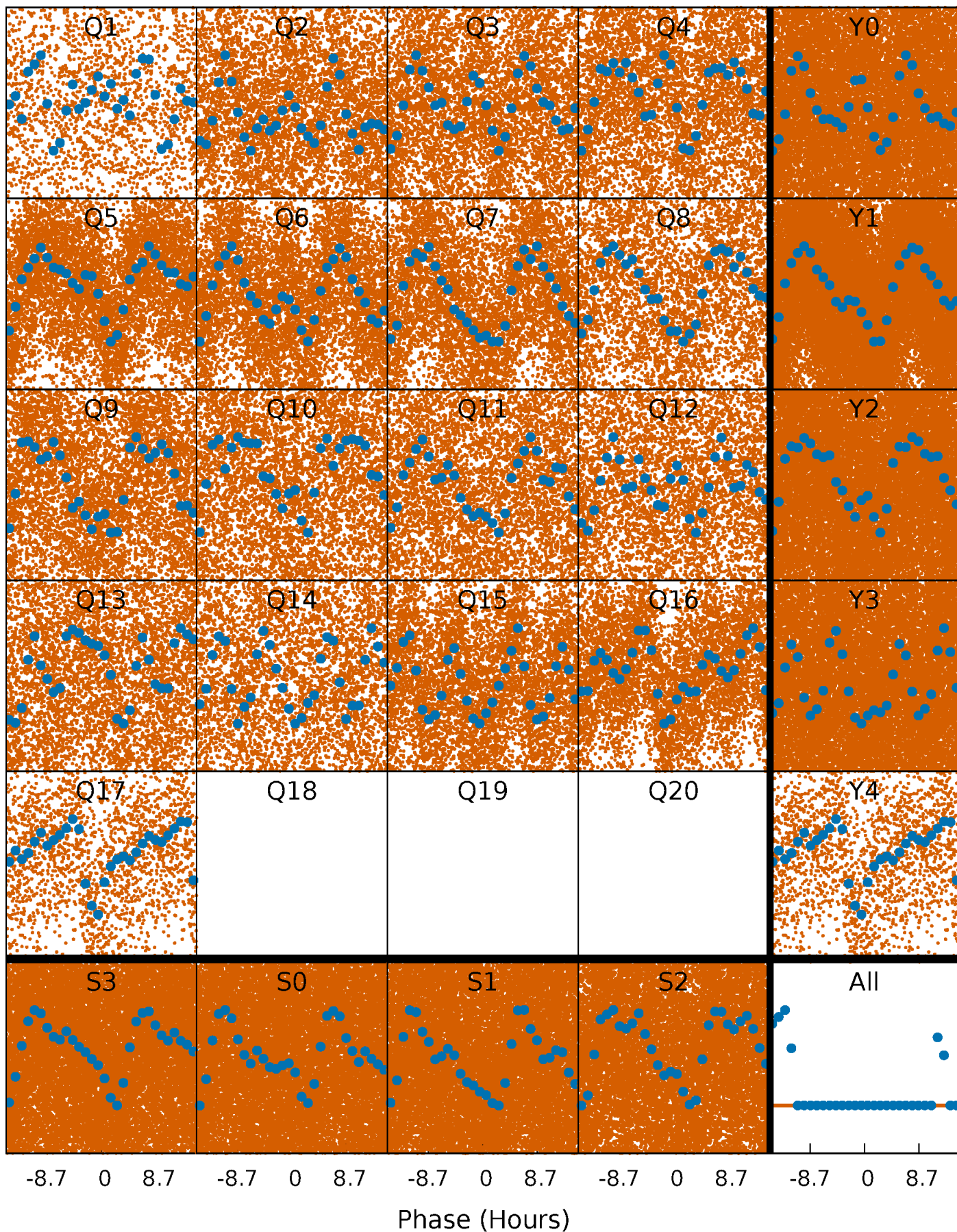


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



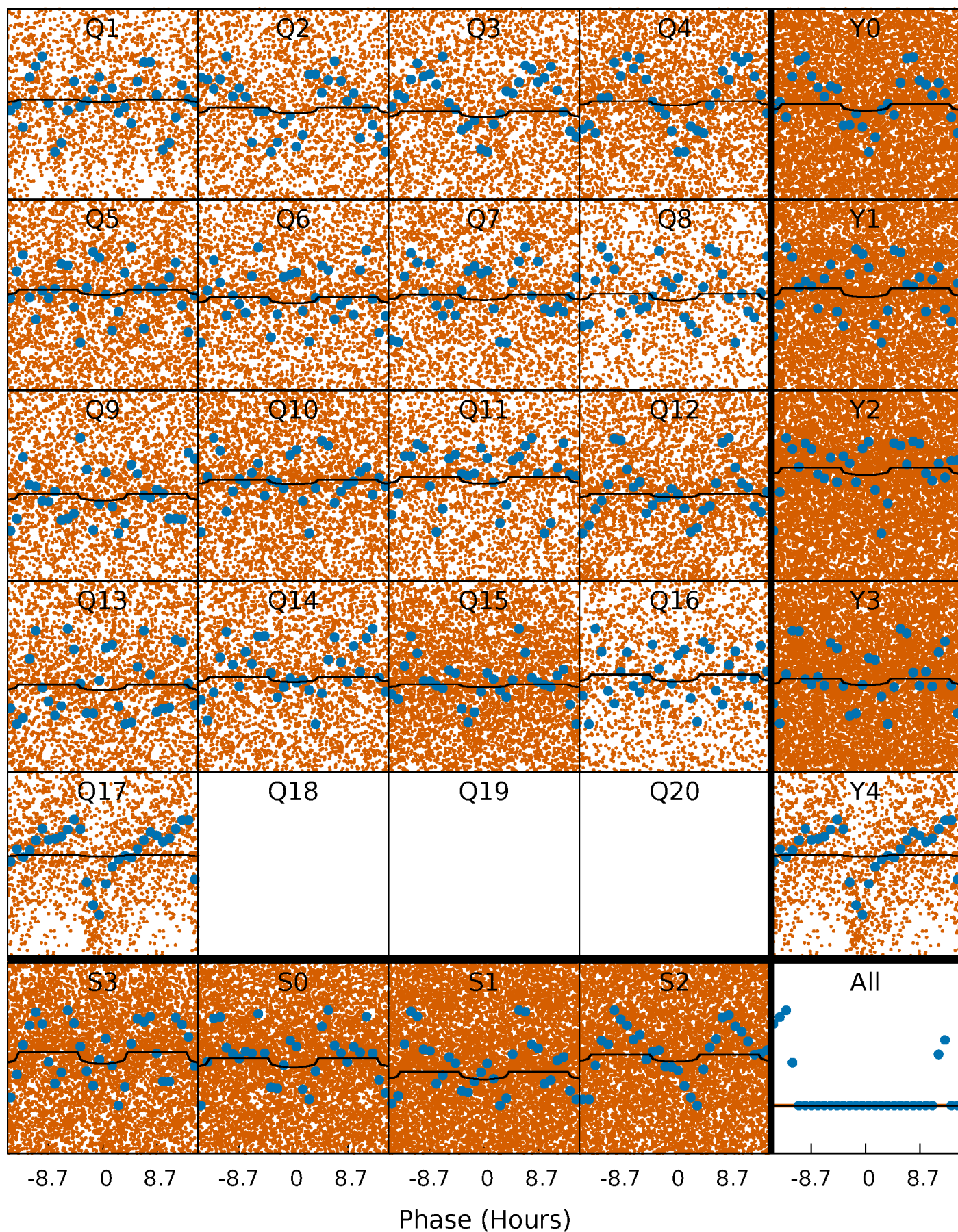
PDC Quarter-Phased Transit Curves

TCE 003347258-01 P= 0.725050 Days $T_0=131.947643$ (BKJD)



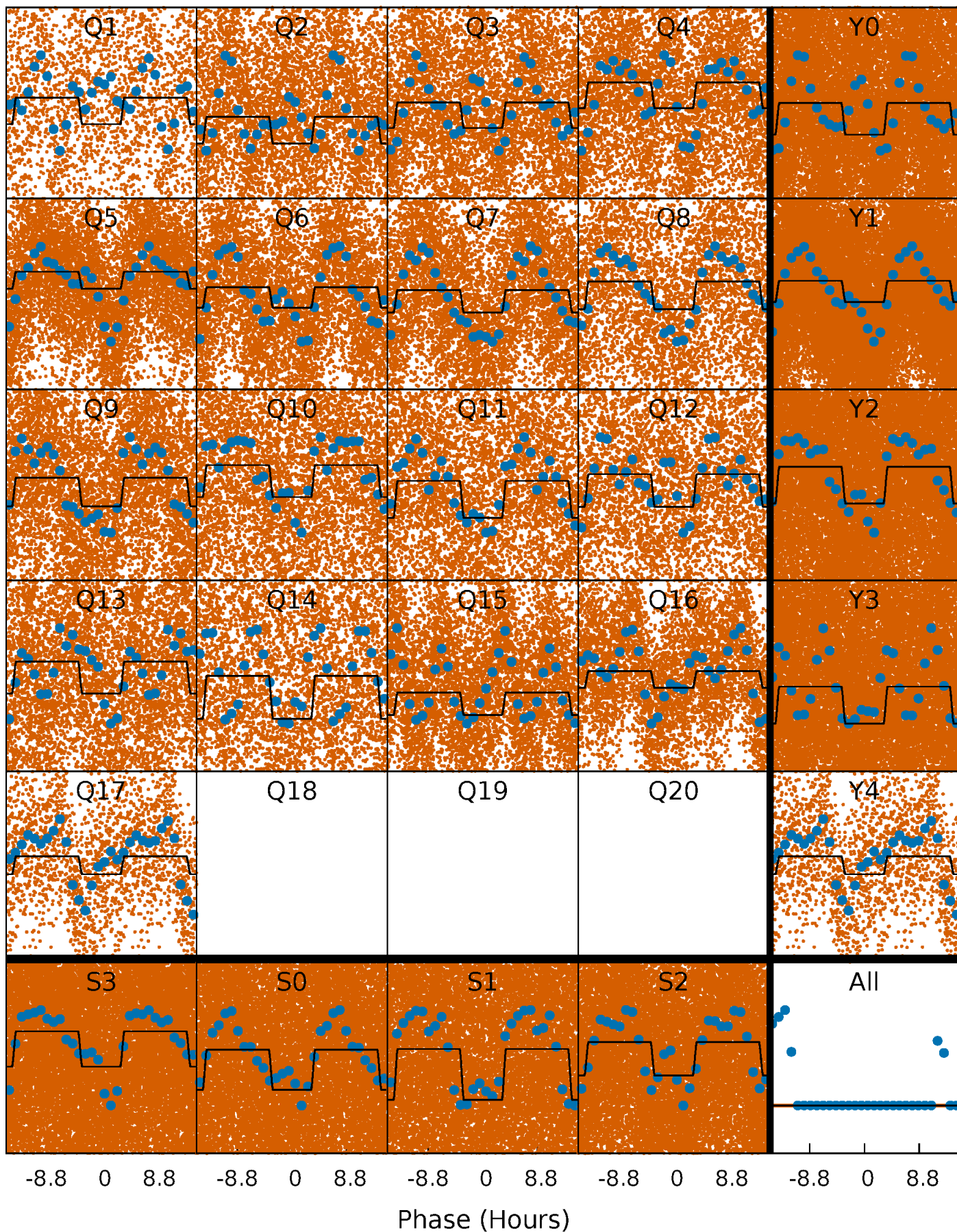
DV Quarter-Phased Transit Curves

TCE 003347258-01 P= 0.725050 Days $T_0=131.947643$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

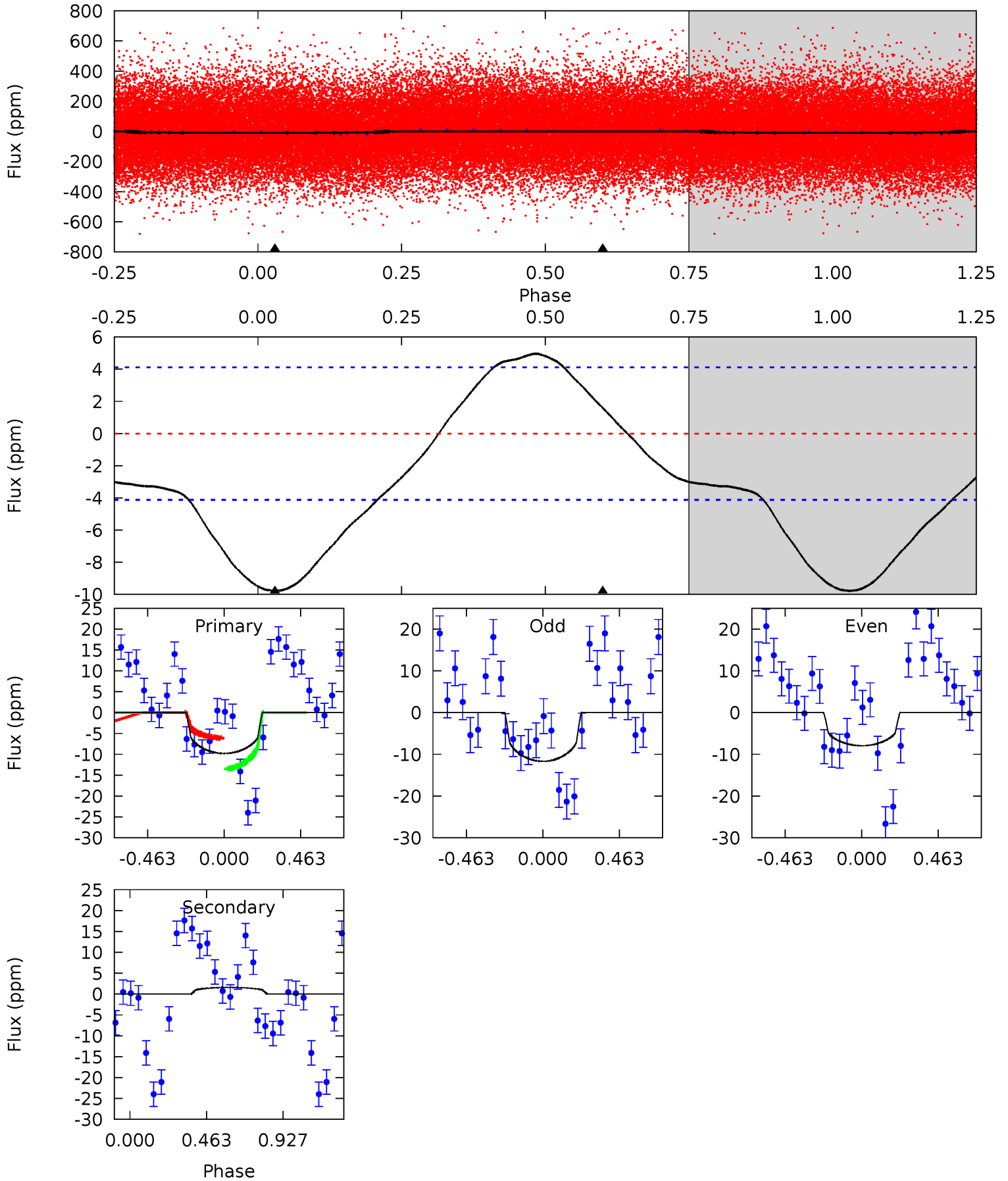
TCE 003347258-01 P= 0.725106 Days $T_0=131.928260$ (BKJD)



DV Model-Shift Uniqueness Test

003347258-01, P = 0.725050 Days, E = 131.222593 Days

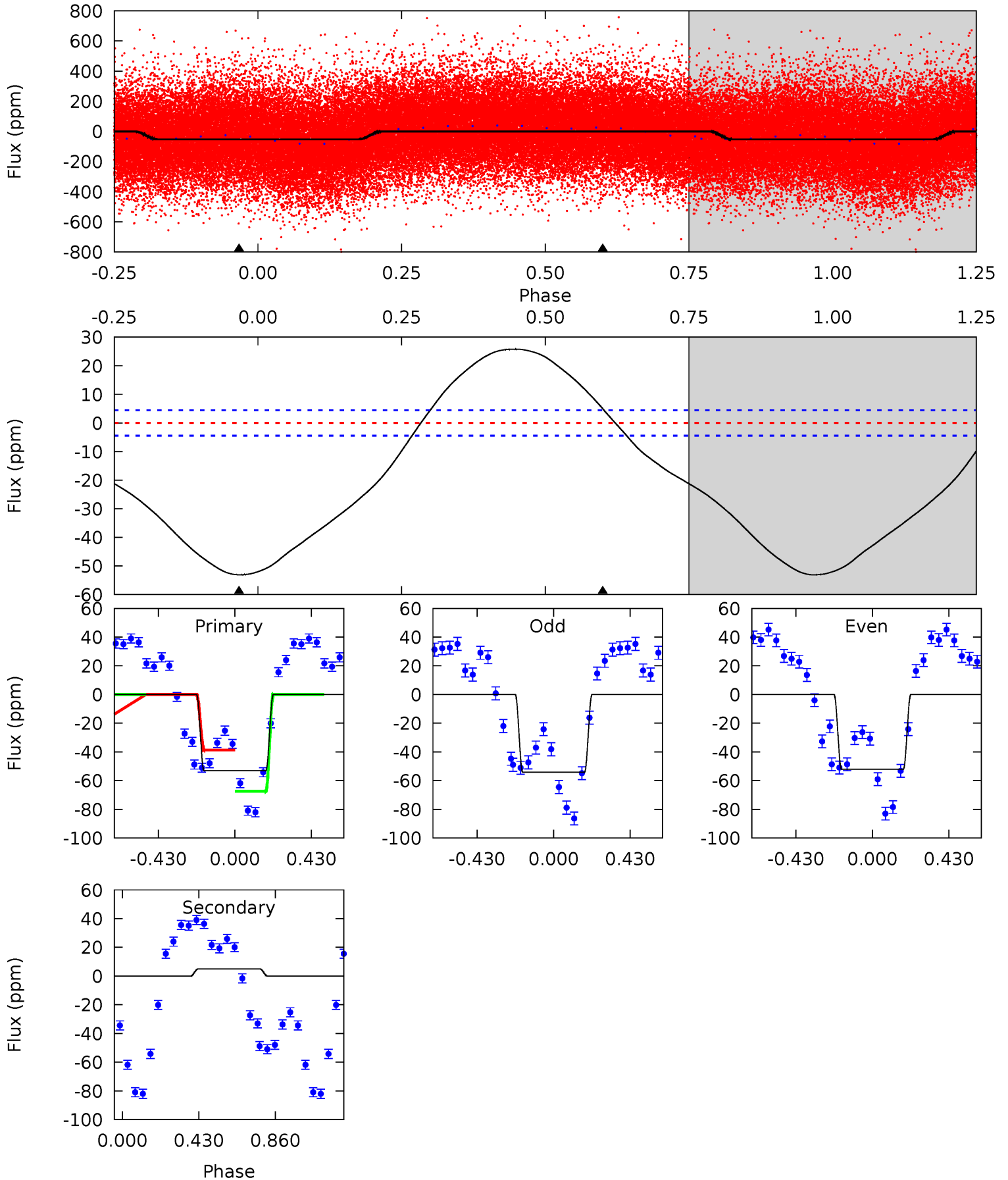
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
10.1	-1.64	0	0	4.23	0.73	1.41	10.1	10.1	-1.64	-1.64	1.93	1.23	0.34	3.84



Alt Model-Shift Uniqueness Test

003347258-01, P = 0.725106 Days, E = 131.203154 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
50.6	-4.73	0	0	4.25	0.79	7.65	50.6	50.6	-4.73	-4.73	0.96	1.02	0.33	13.5



Stellar Parameters For KIC 003347258

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	7048^{+73}_{-83}	$3.981^{+0.168}_{-0.112}$	$0.020^{+0.150}_{-0.150}$	$2.161^{+0.383}_{-0.468}$	$1.628^{+0.149}_{-0.164}$	$0.227^{+0.196}_{-0.077}$
	+1%/-1%	+4%/-3%	+750%/-750%	+18%/-22%	+9%/-10%	+86%/-34%
Source	SPE68	SPE68	SPE68	DSEP		

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

Secondary Eclipse Parameters for KIC 003347258-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	2 ± 1	$1.14^{+1.17}_{-0.78}$	4680^{+224}_{-256}	-4529^{+371}_{-1996}	$-0.201^{+0.166}_{-2.039}$
Alt.	5 ± 1	$1.75^{+1.41}_{-1.06}$	4648^{+242}_{-270}	-4615^{+354}_{-1556}	$-0.287^{+0.198}_{-1.779}$

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 $A_{obs} \gg 1.0$

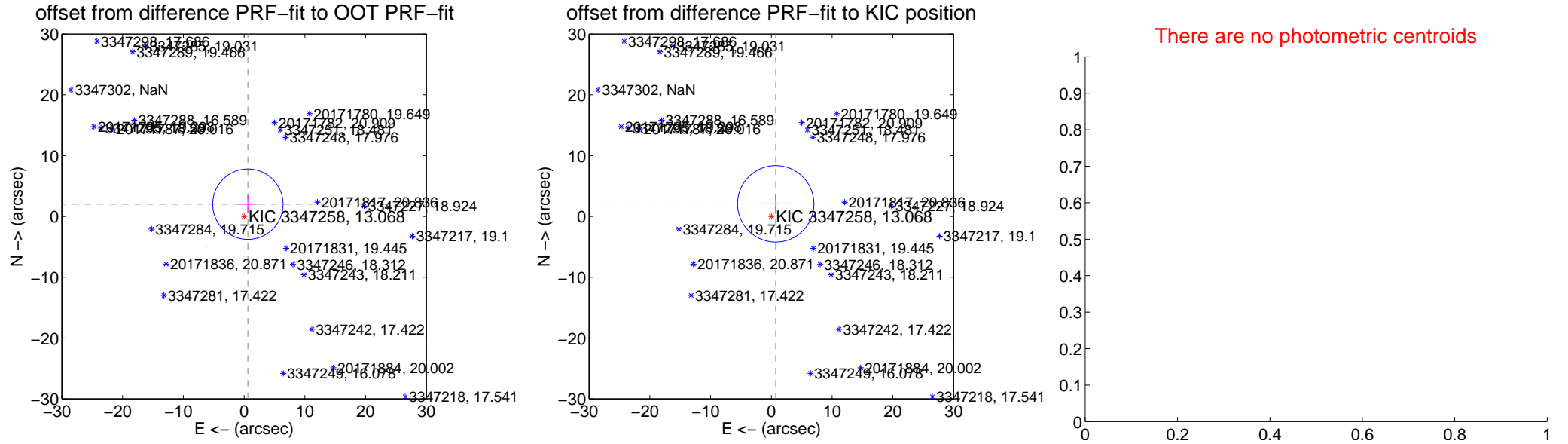
DV Centroid Data

Supplemental centroid analysis for 003347258-01. Kepler magnitude: 13.07. Transit SNR 2.97

There are 2 quarters with good PRF difference image offsets

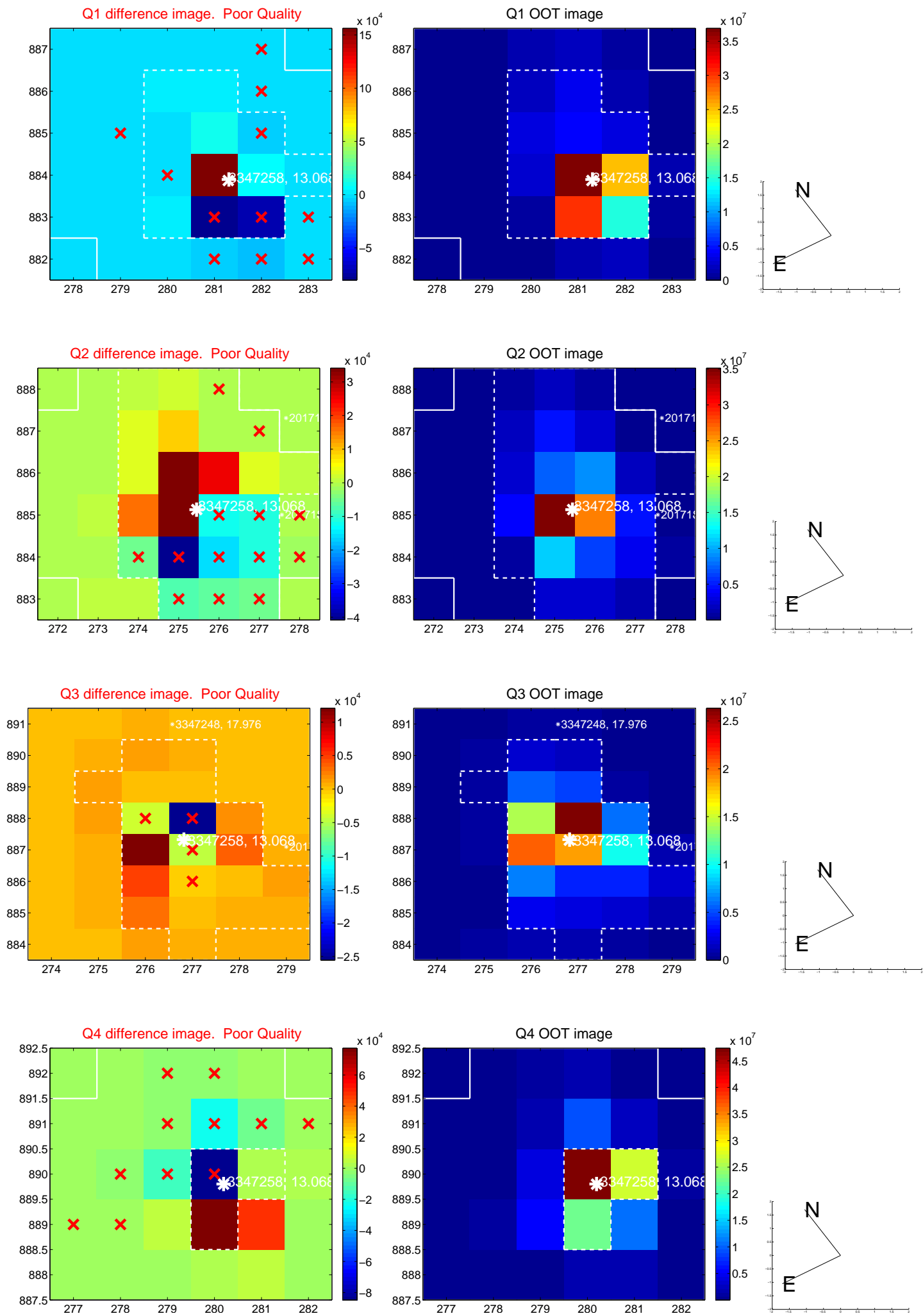
The direct PRF centroid is offset from the target star catalog position by about 0.11 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	2.106 ± 1.929	1.09	-0.618 ± 1.530	2.014 ± 1.549
PRF-fit source offset from KIC position	2.189 ± 2.095	1.04	-0.720 ± 1.626	2.068 ± 1.654
photometric centroid source offset	—	—	—	—

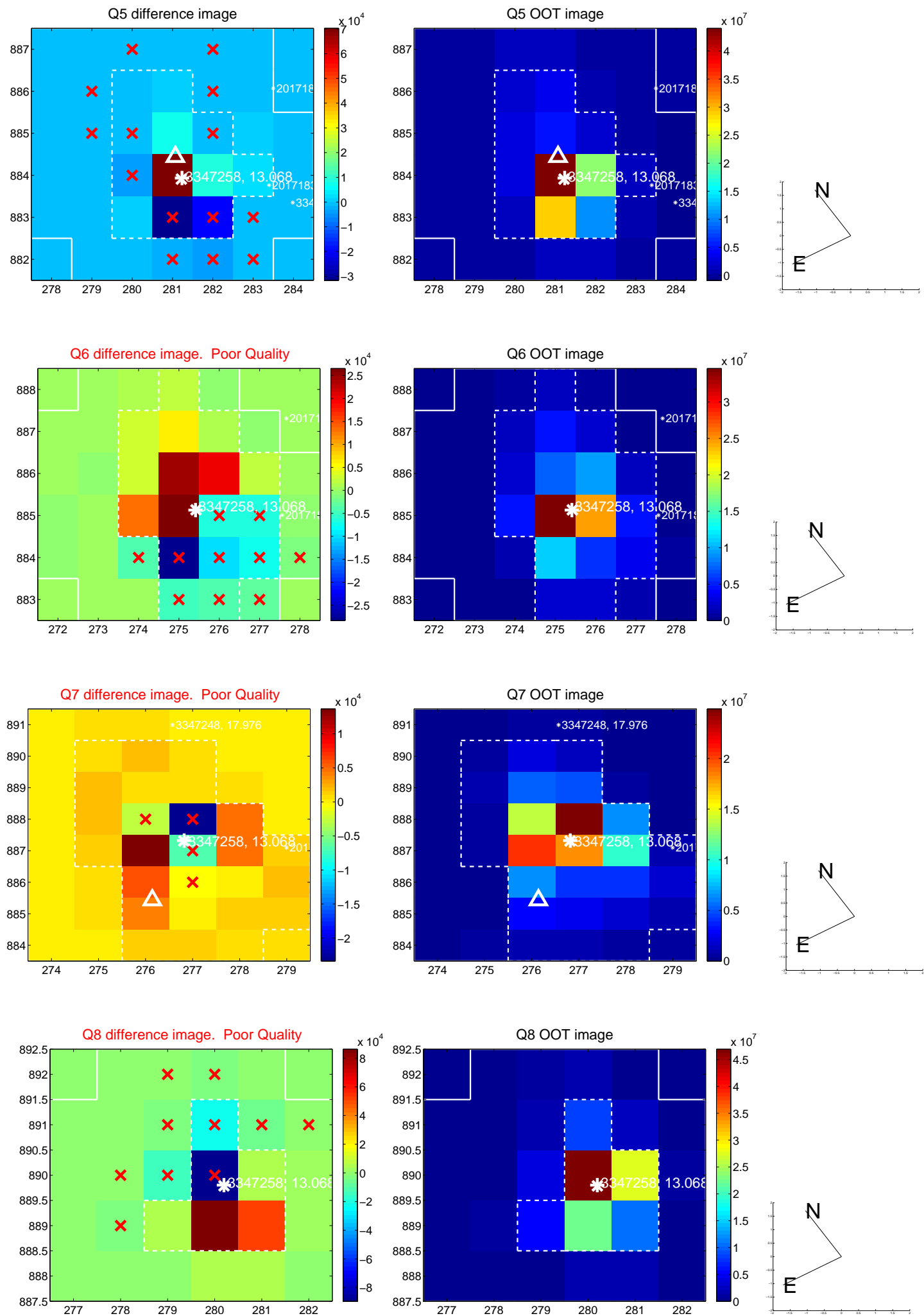


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

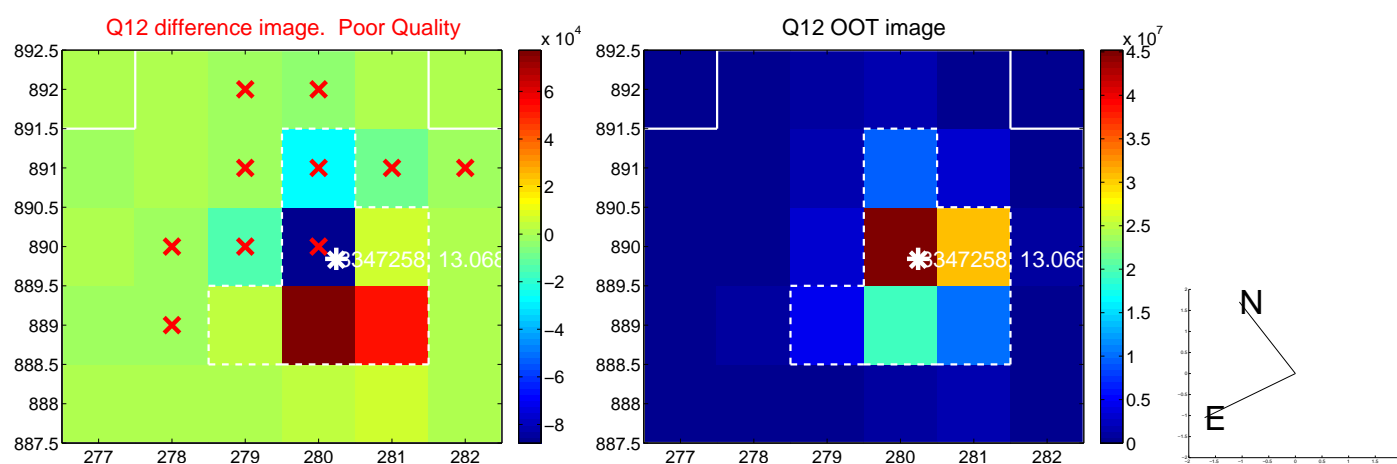
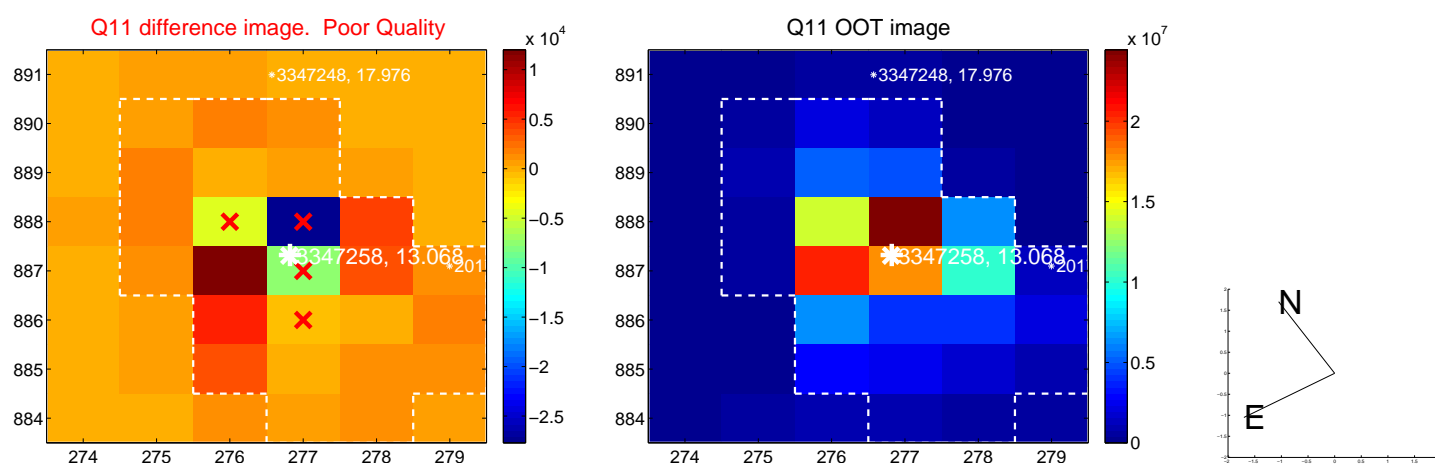
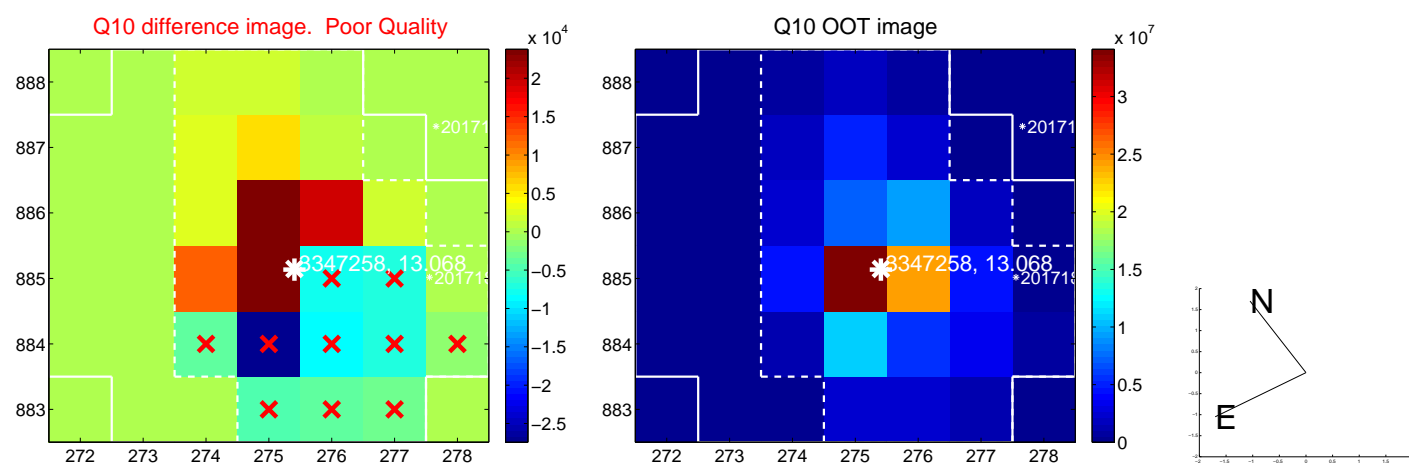
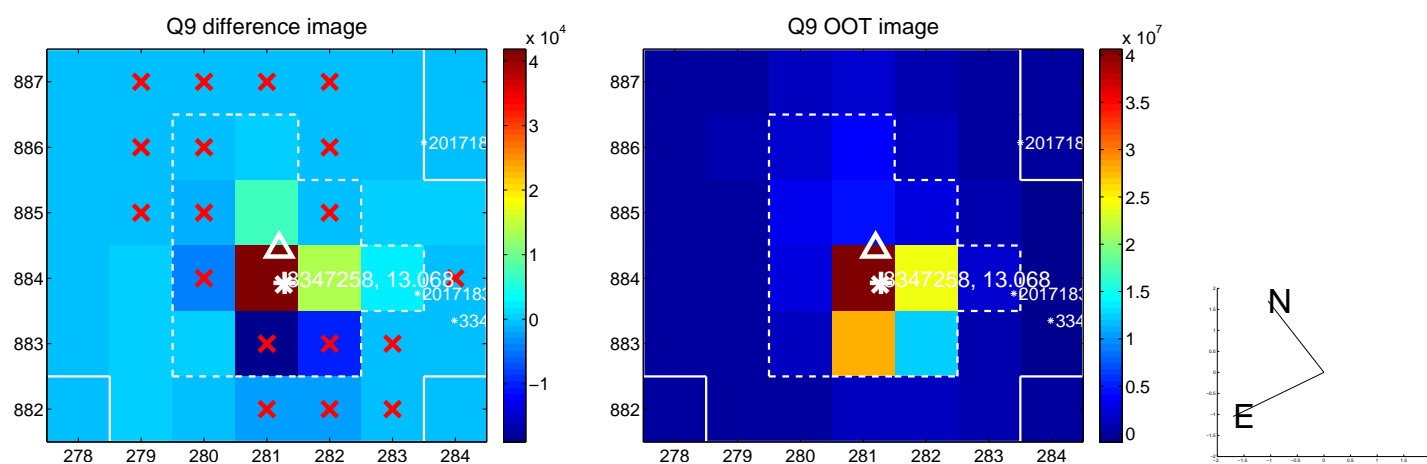
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



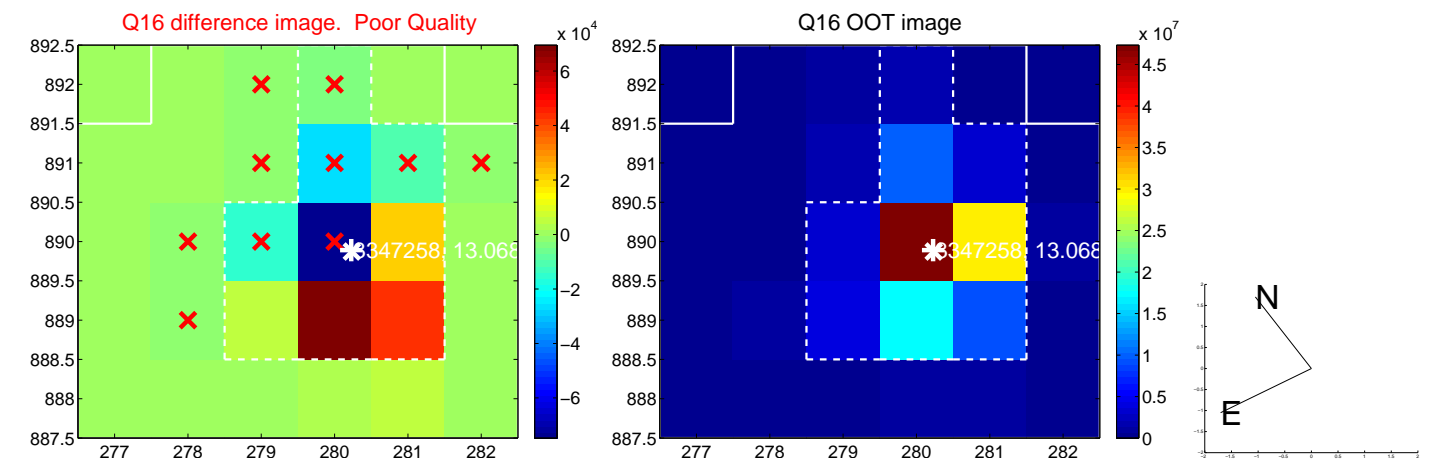
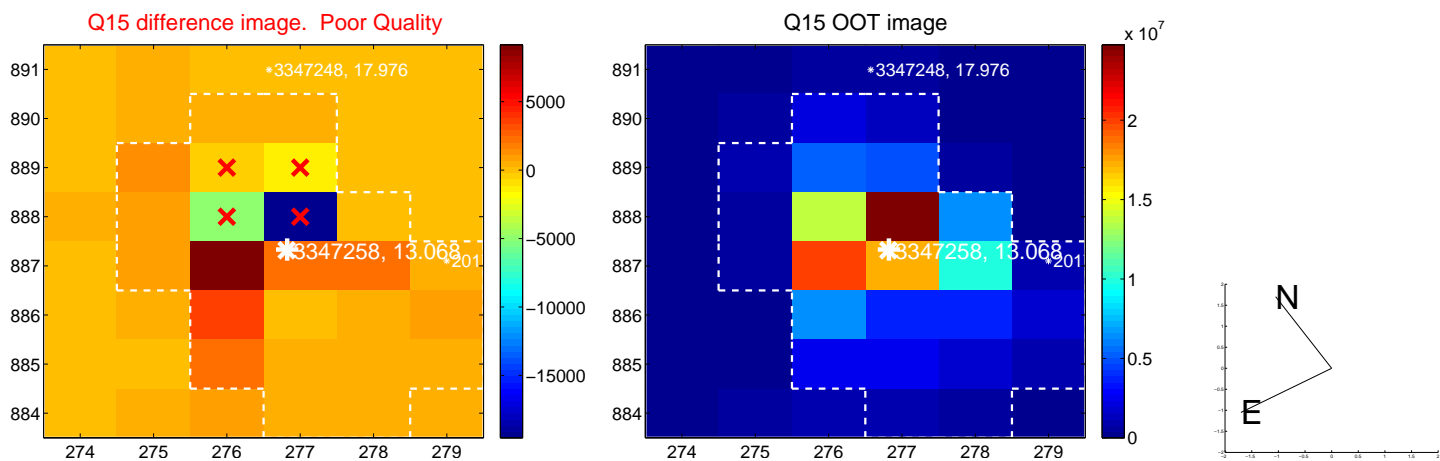
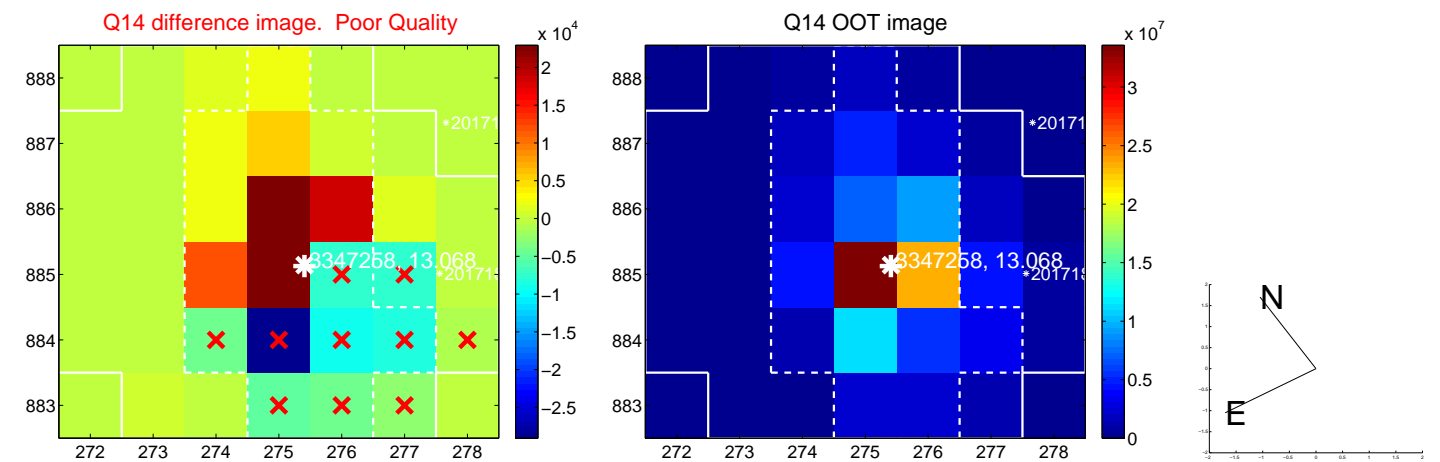
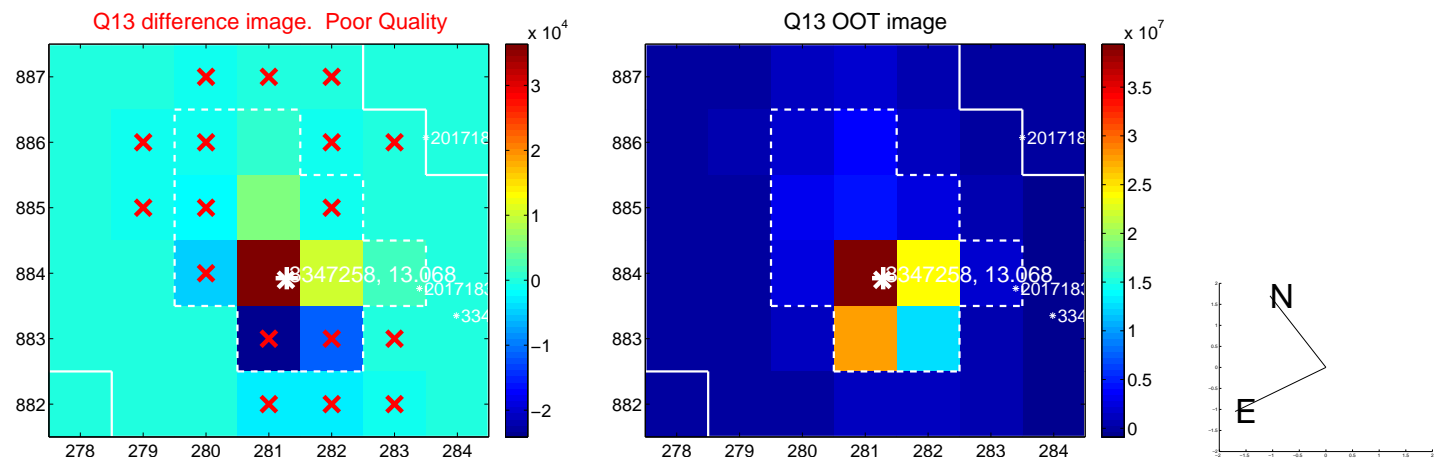
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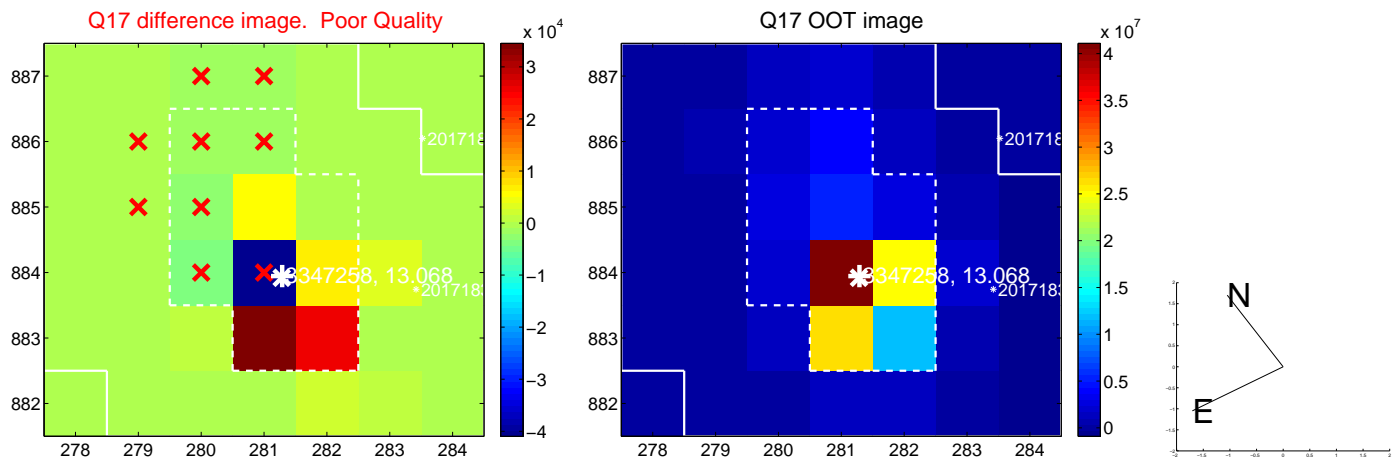
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folded centroid time series figure for this object.

UKIRT Image

Declination

