

KIC 007175896

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})
007175896-01	OBS	No	0.594352	131.989883	5.3	5.089	10.3	9.4	1.68	6916	0.39	22265.01

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
007175896-01	OBS	FP	0.00	1	0	0	0	LPP_DV—CENT_SATURATED

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

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

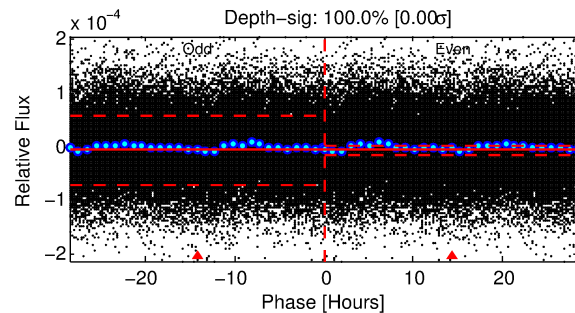
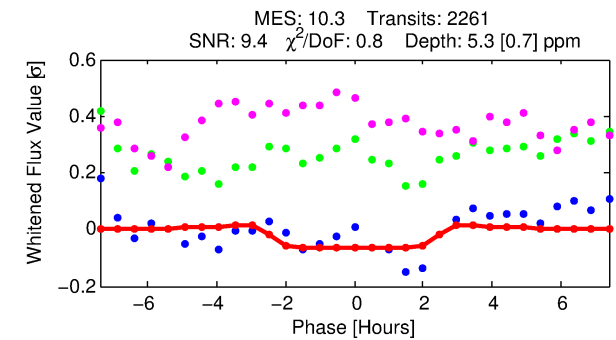
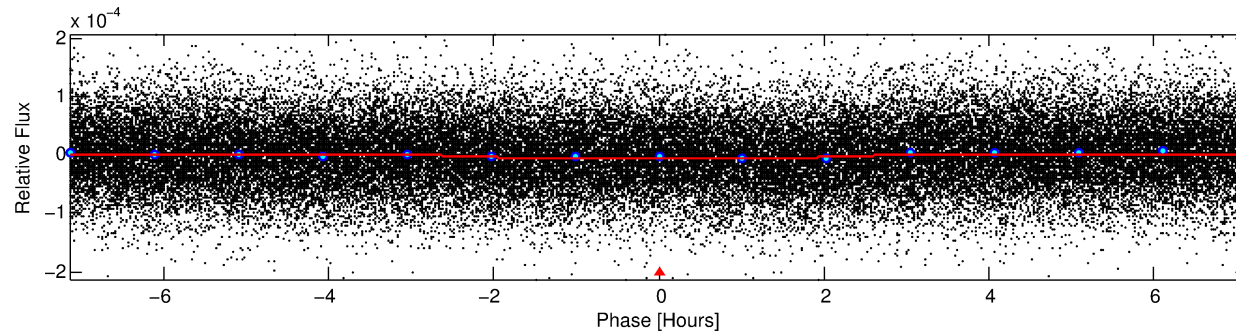
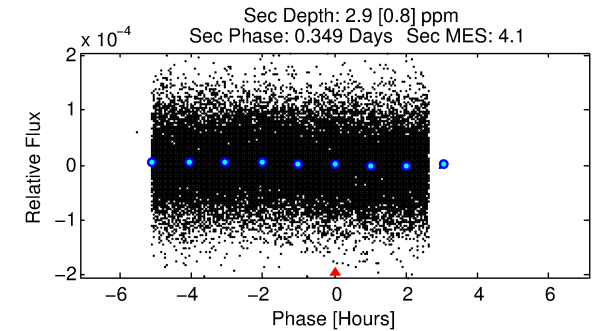
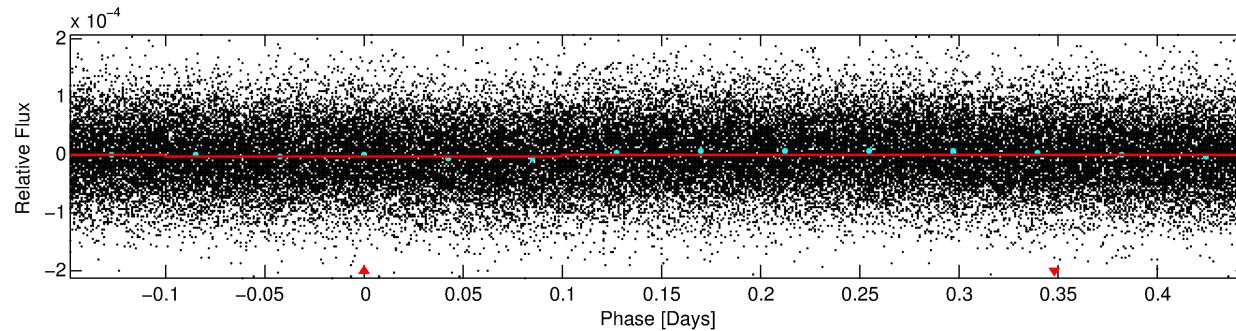
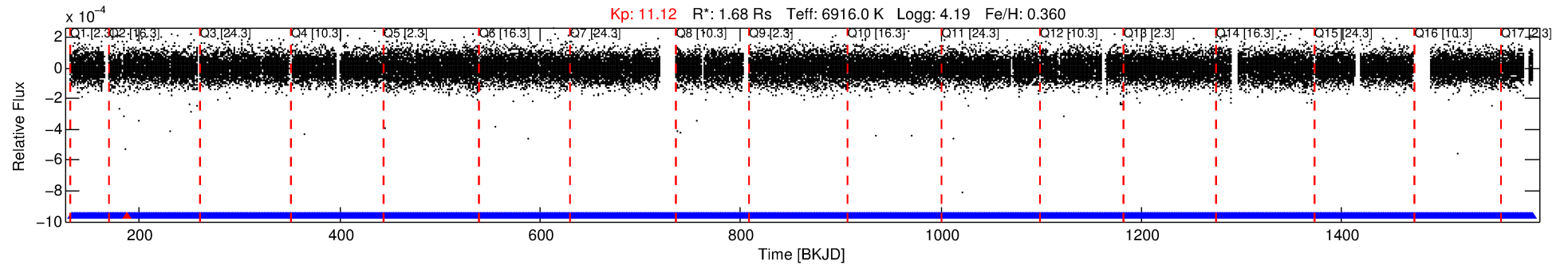
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 007175896-01

No Significant Match Found

DV One-Page Summary

KIC: 7175896 Candidate: 1 of 1 Period: 0.594 d



DV Fit Results:

Period = 0.59435 [0.00001] d
Epoch = 131.9899 [0.0045] BKJD
Rp/R* = 0.0021 [0.0021]
a/R* = 1.11 [1.12]
b = 0.24 [22.28]
Seff = 22265.01 [6791.12]
Teq = 3115 [238] K
Rp = 0.39 [0.39] Re
a = 0.0161 [0.0030] AU
Ag = 2.68 [5.35] [0.31σ]
Teffp = 6160 [3057] K [0.99σ]

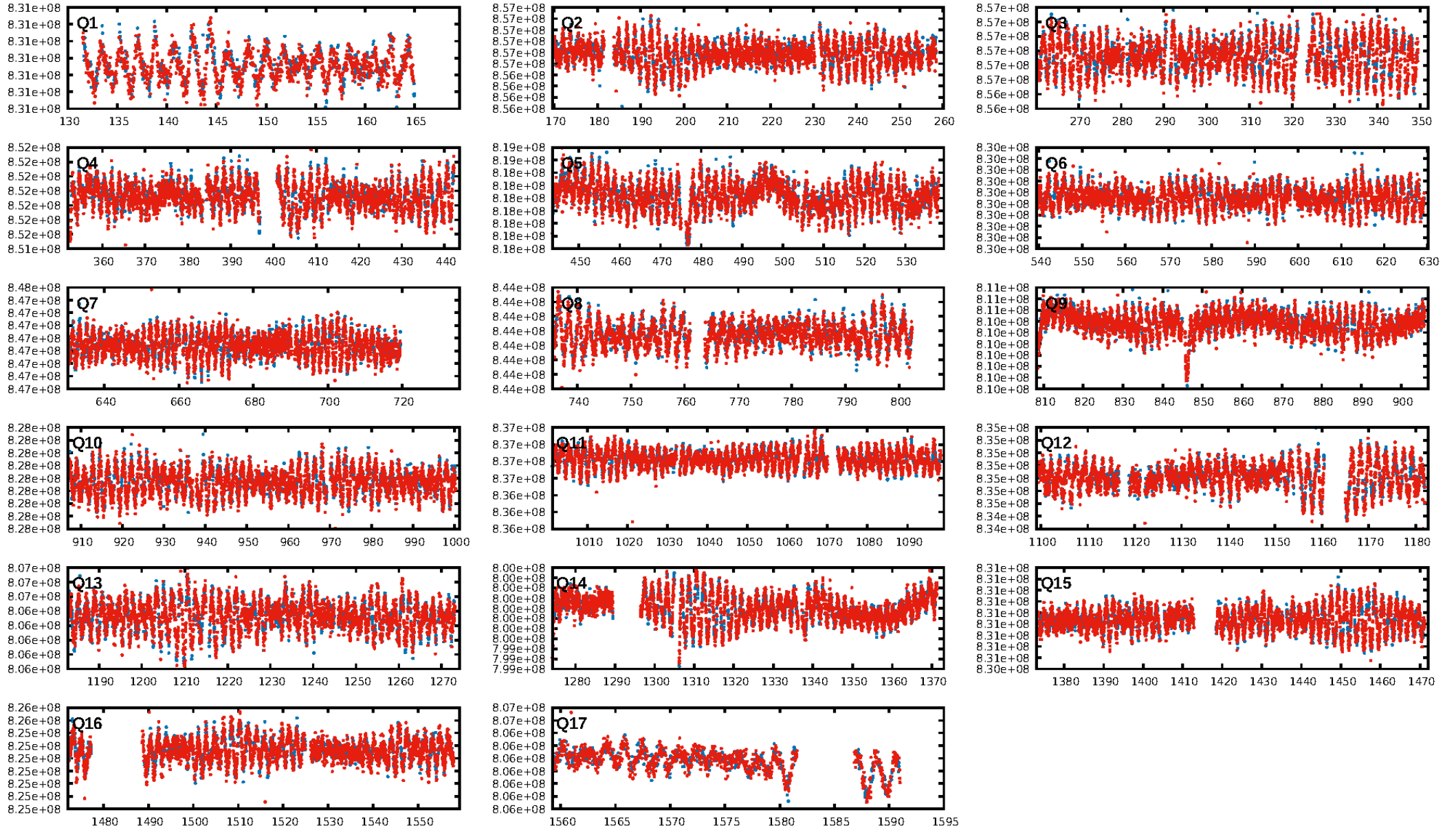
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [2159/2160]
GhostDiagnostic-chr: 3.29
Centroid-sig: 9.4%
Centroid-so: 1.722 arcsec [1.34σ]
OotOffset-rm: N/A
KicOffset-rm: N/A
OotOffset-st: 0/0/0 [0]
KicOffset-st: 0/0/0 [0]
DiffImageQuality-fgm: N/A
DiffImageOverlap-fno: 1.00 [17/17]

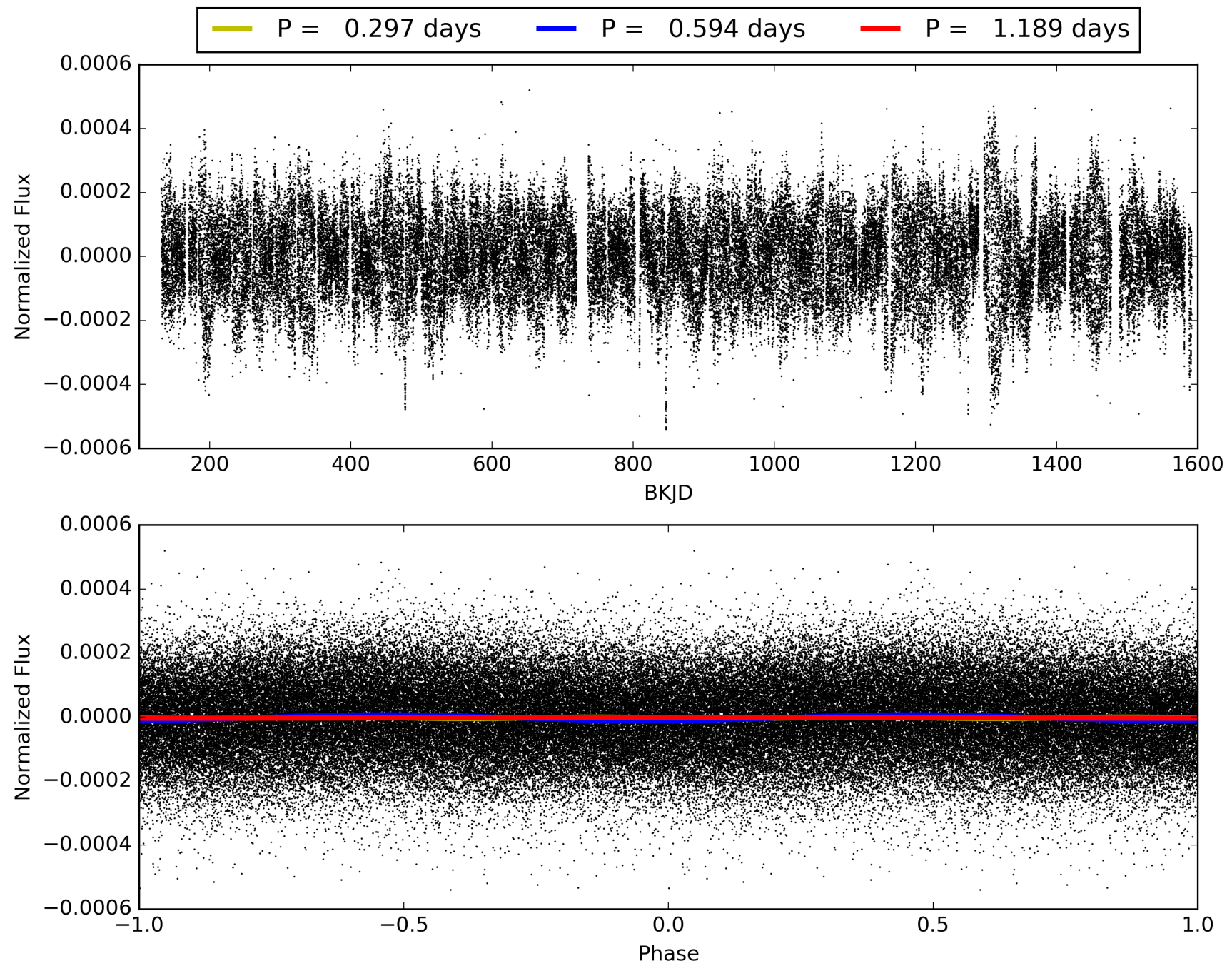
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 01-Feb-2016 03:33:27 Z

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

TCE 007175896-01, PDC Light Curves

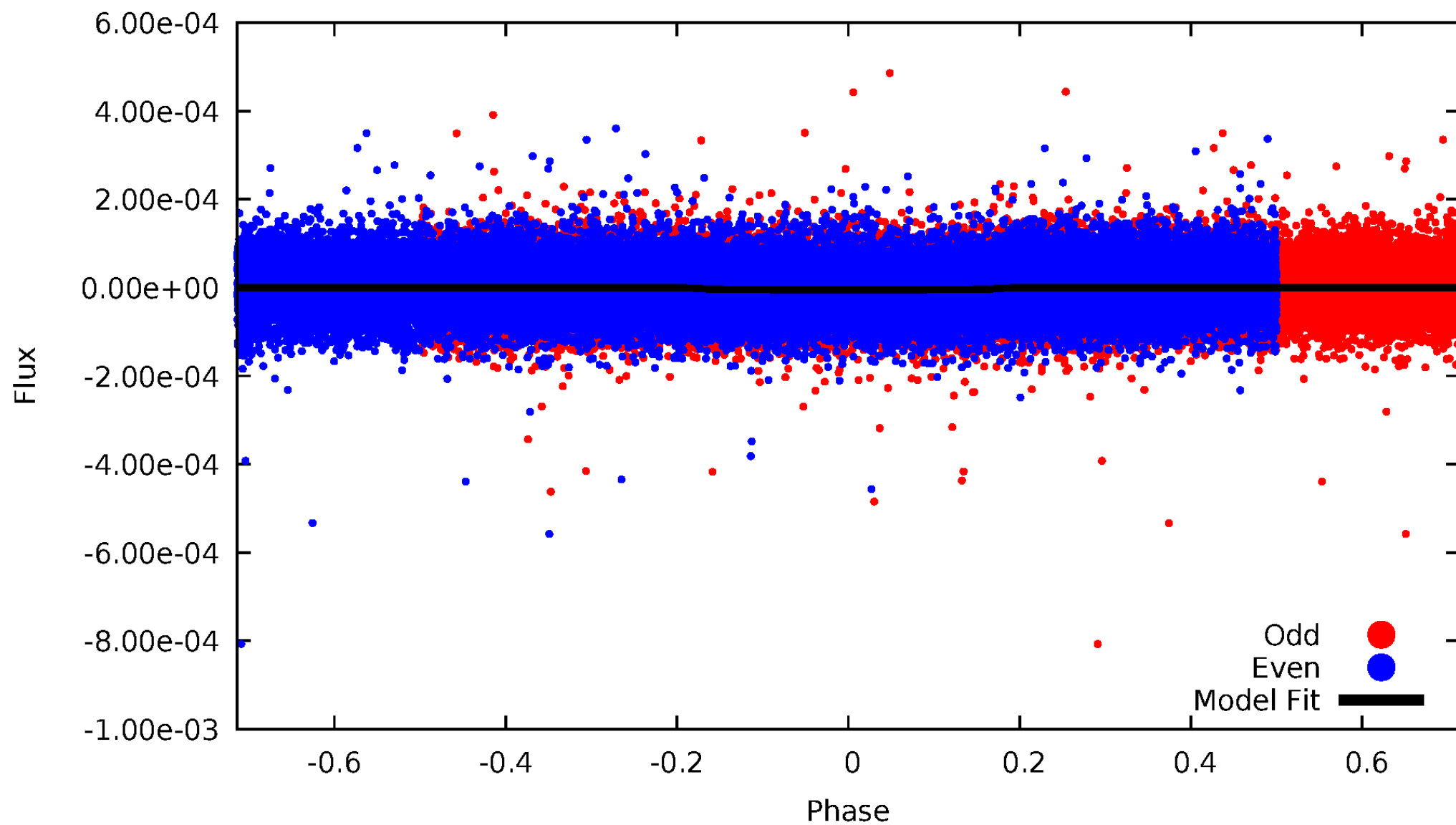


TCE 007175896-01



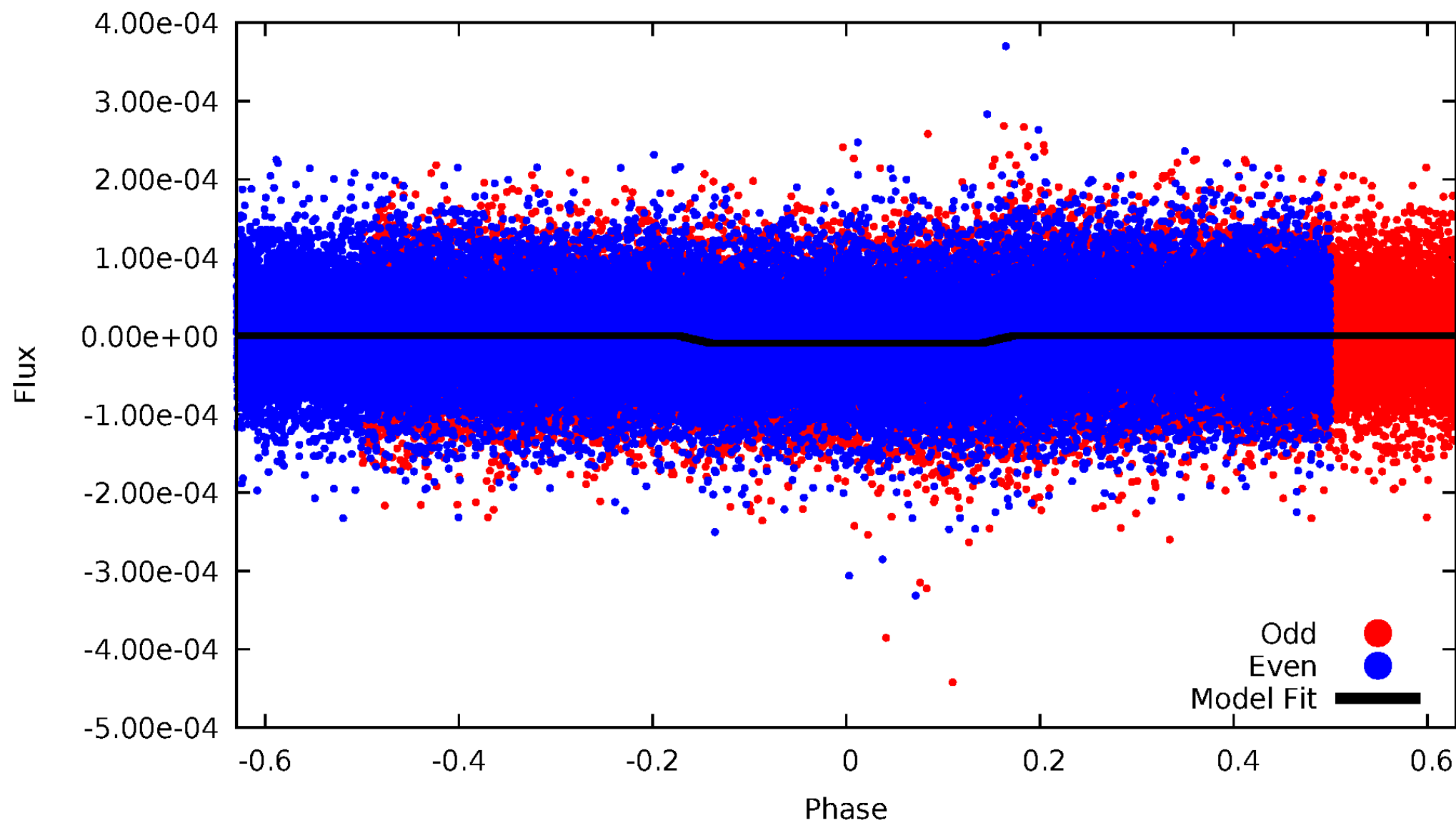
DV Odd/Even

TCE 007175896-01



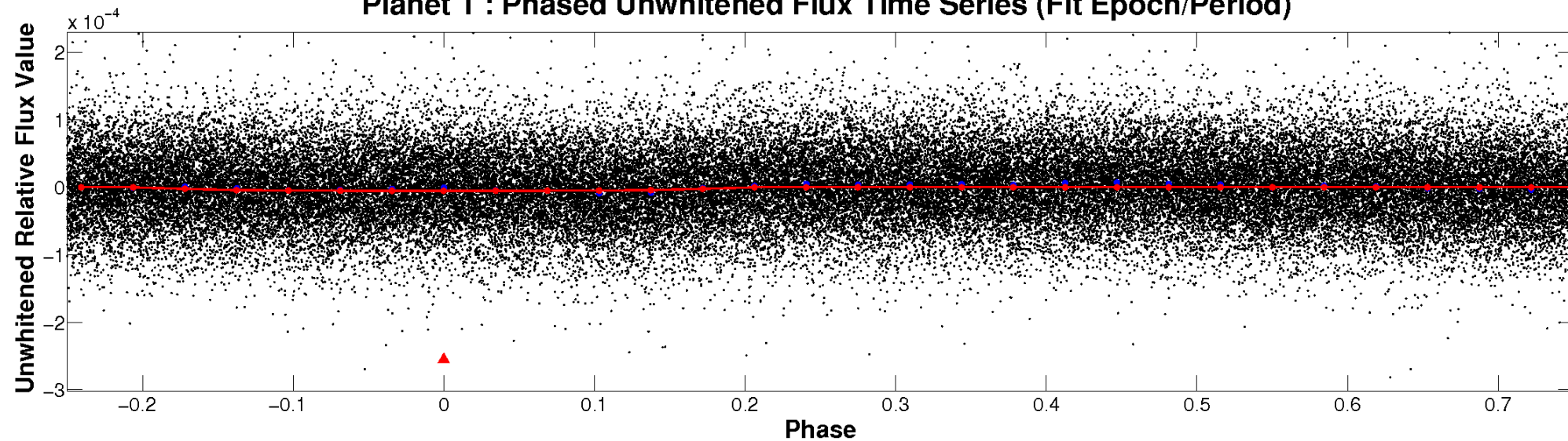
ALT Odd/Even

TCE 007175896-01

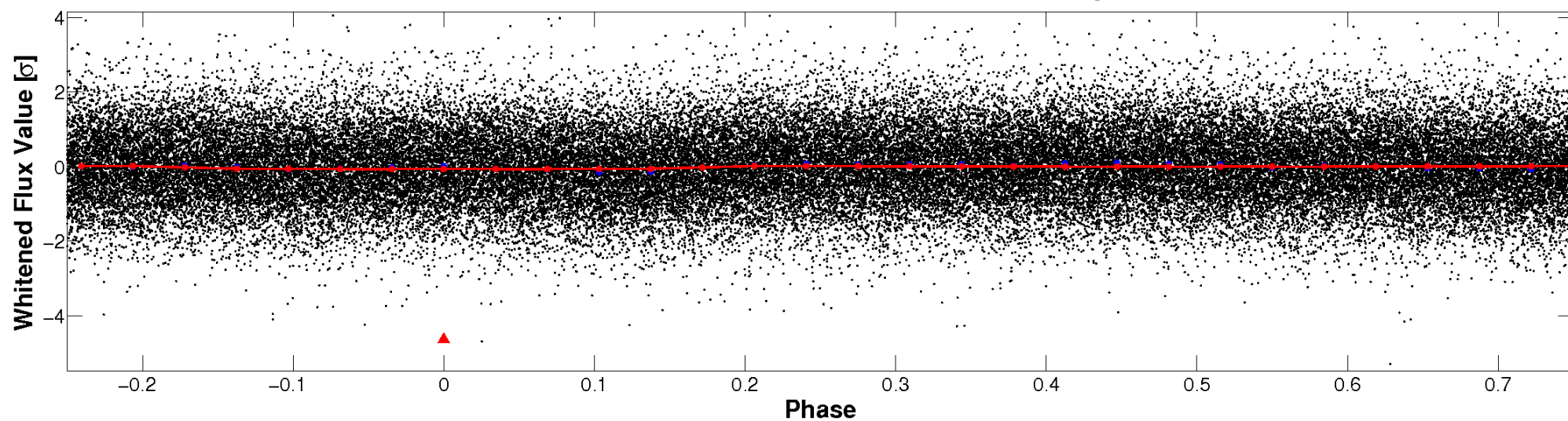


Non-Whitened Vs. Whitened Light Curve

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

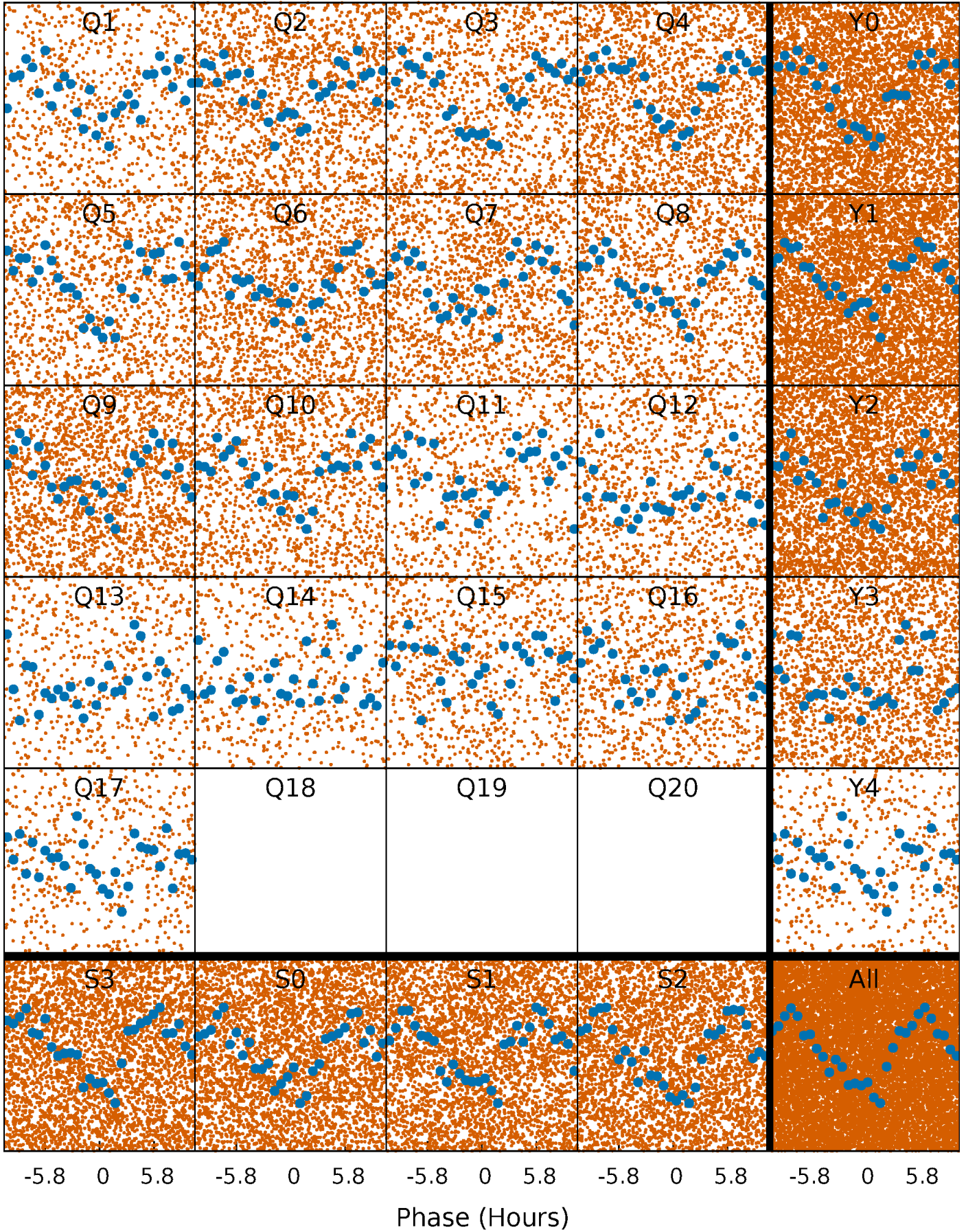


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



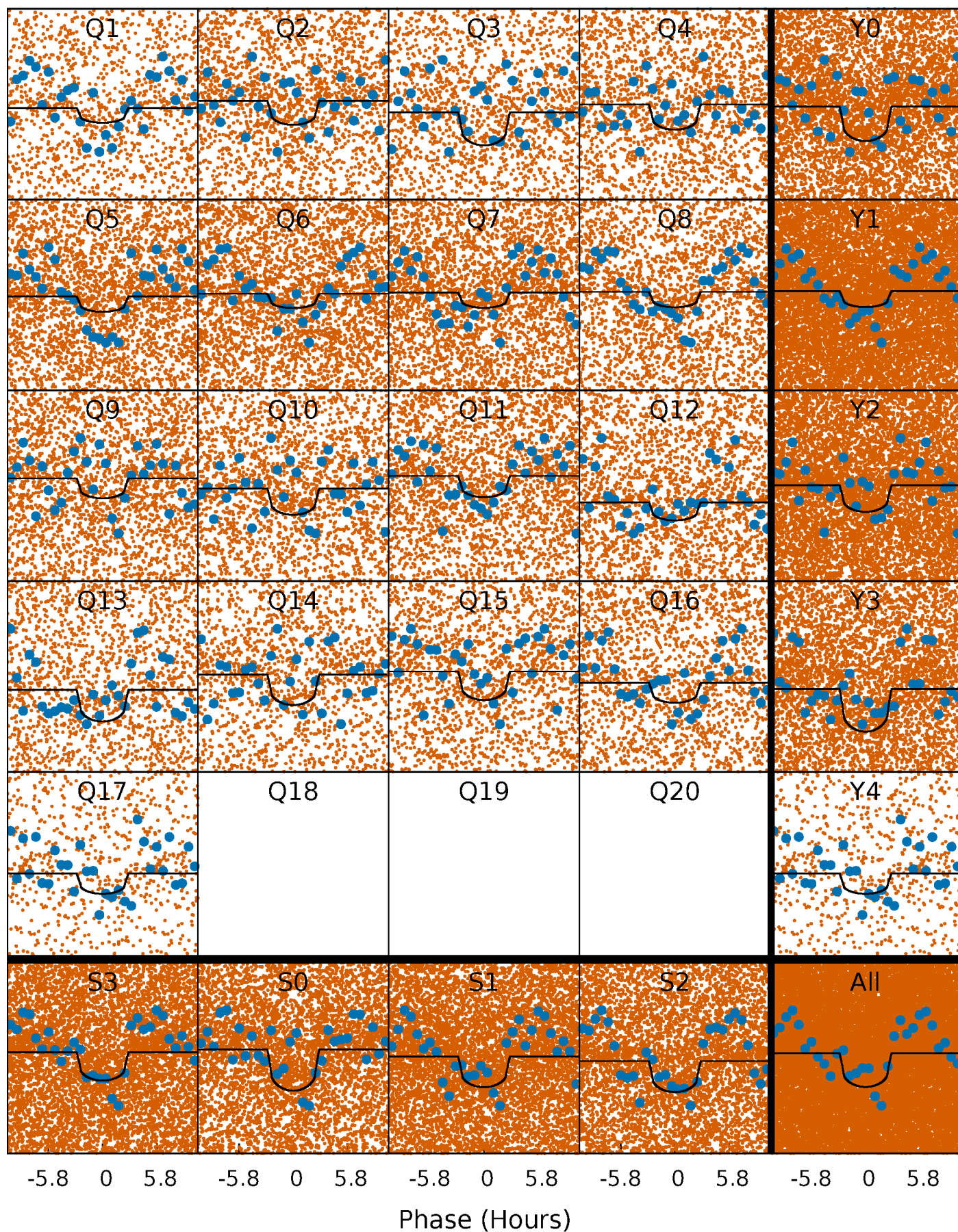
PDC Quarter-Phased Transit Curves

TCE 007175896-01 P= 0.594352 Days $T_0=131.989883$ (BKJD)



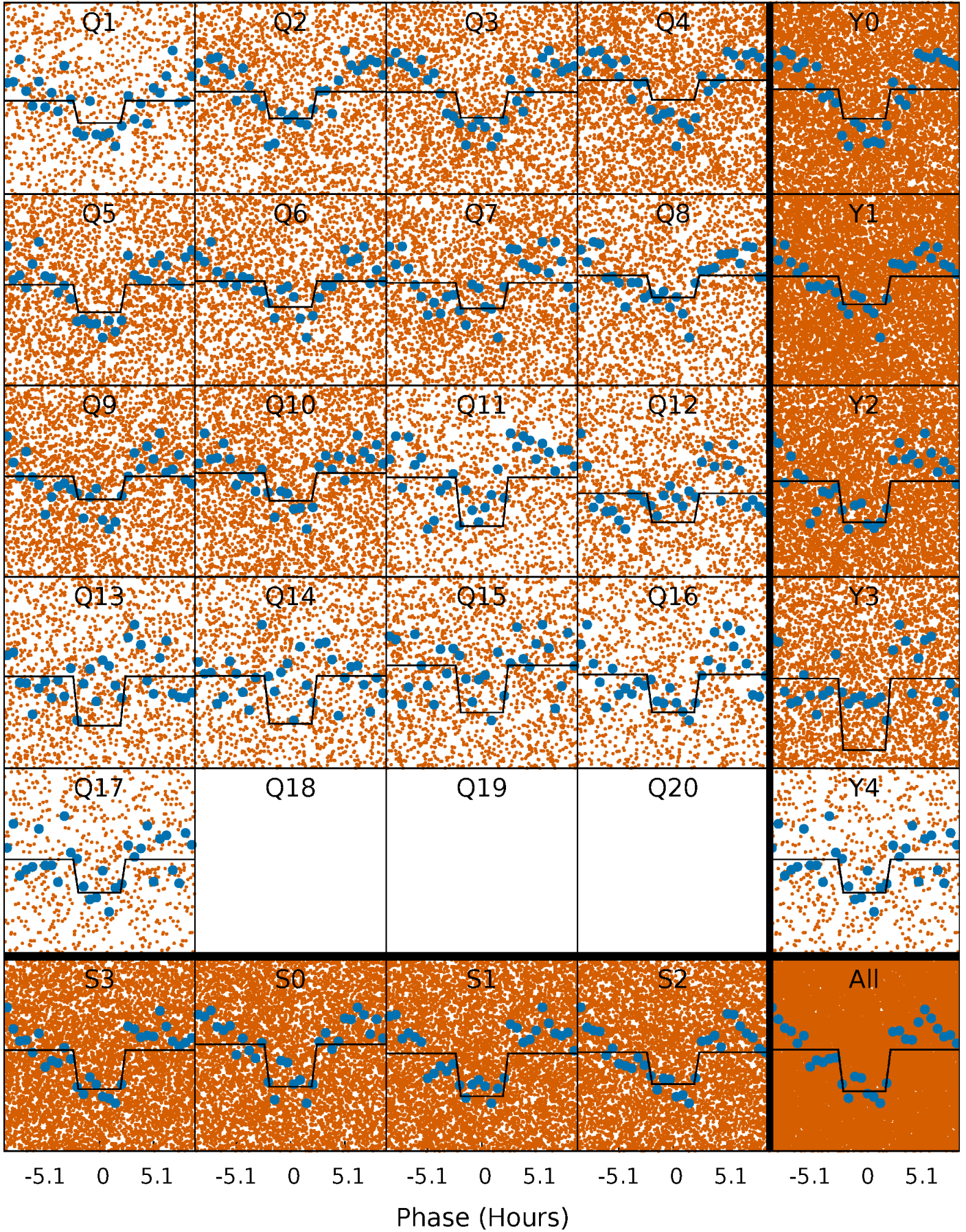
DV Quarter-Phased Transit Curves

TCE 007175896-01 P= 0.594352 Days $T_0=131.989883$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

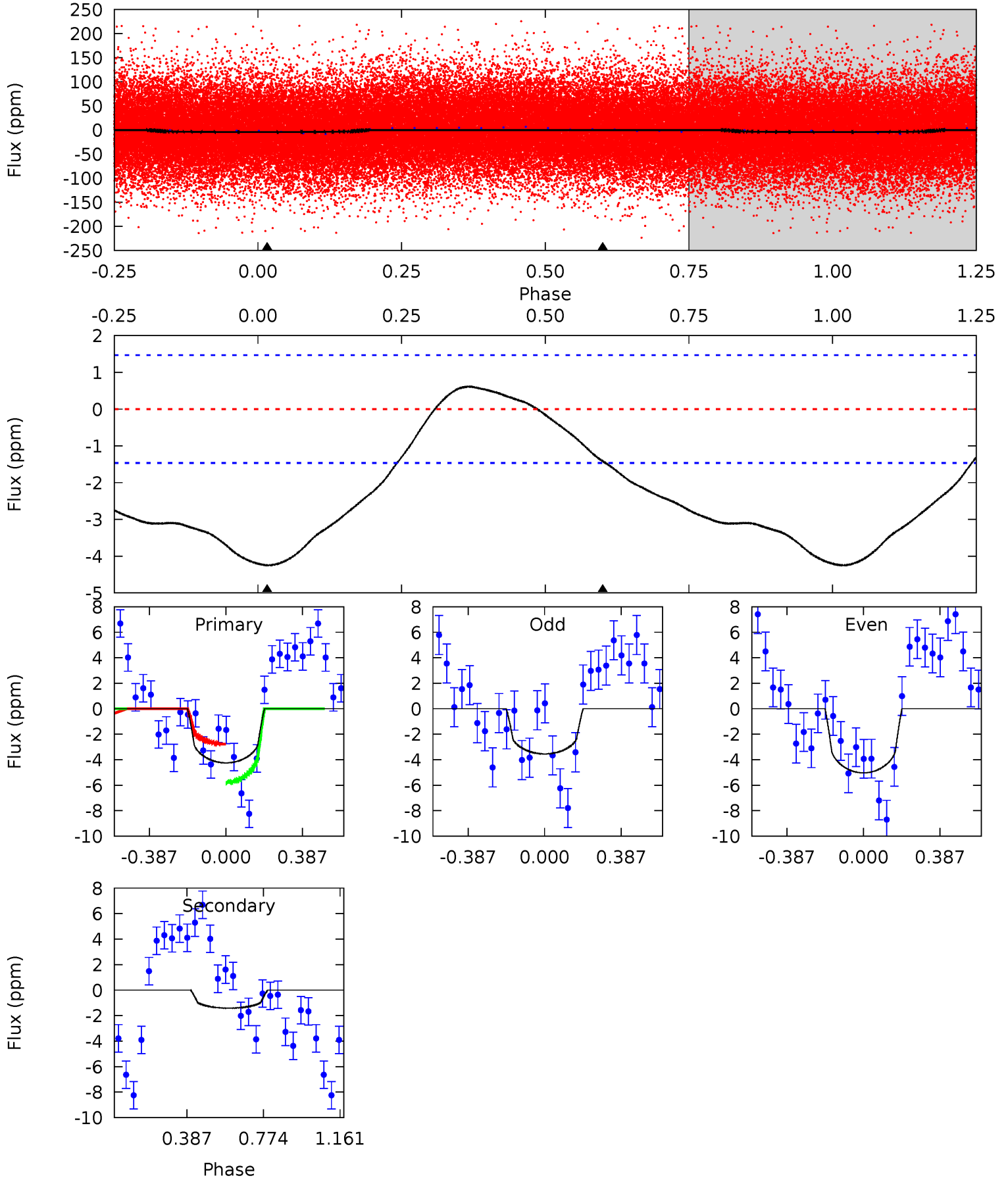
TCE 007175896-01 P= 0.594371 Days $T_0=131.985572$ (BKJD)



DV Model-Shift Uniqueness Test

007175896-01, P = 0.594352 Days, E = 131.395531 Days

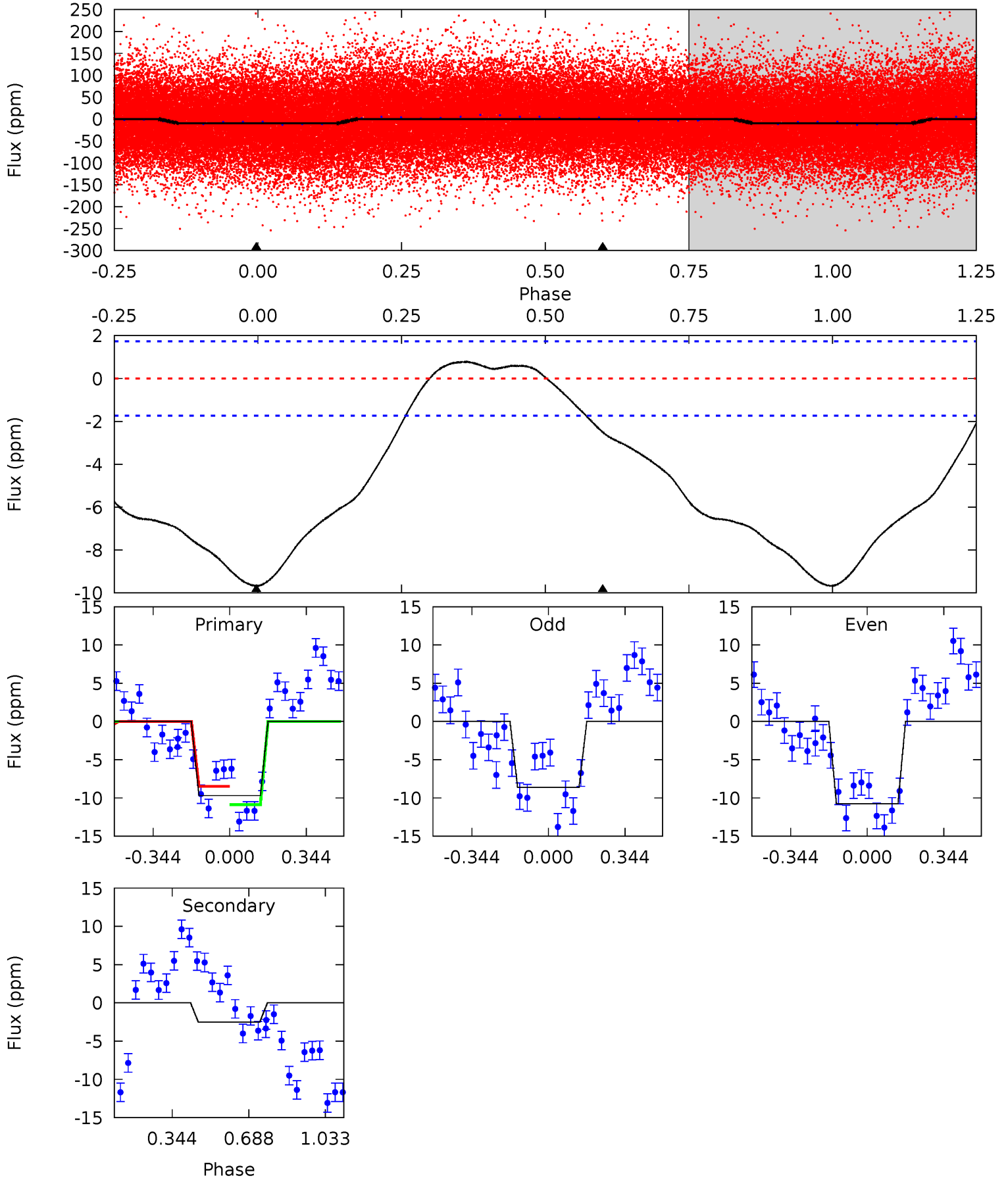
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
12.4	4.13	0	0	4.27	0.87	1.56	12.4	12.4	4.13	4.13	2.16	0.97	0.13	4.37



Alt Model-Shift Uniqueness Test

007175896-01, P = 0.594371 Days, E = 131.391201 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
23.9	6.20	0	0	4.30	0.95	2.18	23.9	23.9	6.20	6.20	2.67	1.06	0.07	2.99



Stellar Parameters For KIC 007175896

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	6916^{+154}_{-239}	$4.186^{+0.073}_{-0.147}$	$0.360^{+0.050}_{-0.350}$	$1.679^{+0.382}_{-0.206}$	$1.578^{+0.134}_{-0.201}$	$0.469^{+0.183}_{-0.194}$
	+2%/-3%	+2%/-4%	+14%/-97%	+23%/-12%	+8%/-13%	+39%/-41%
Source	PHO1	FLK73	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 007175896-01 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-1 ± 0	$0.49^{+0.38}_{-0.29}$	4377^{+237}_{-213}	4272^{+2876}_{-7120}	$0.798^{+4.105}_{-0.539}$
Alt.	-3 ± 0	$0.59^{+0.44}_{-0.30}$	4380^{+260}_{-197}	4587^{+2337}_{-1775}	$1.006^{+3.305}_{-0.673}$

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 $A_{obs} \gg 1.0$

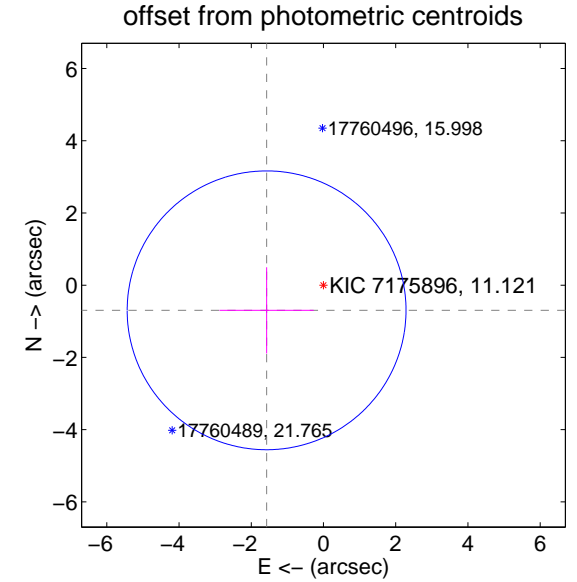
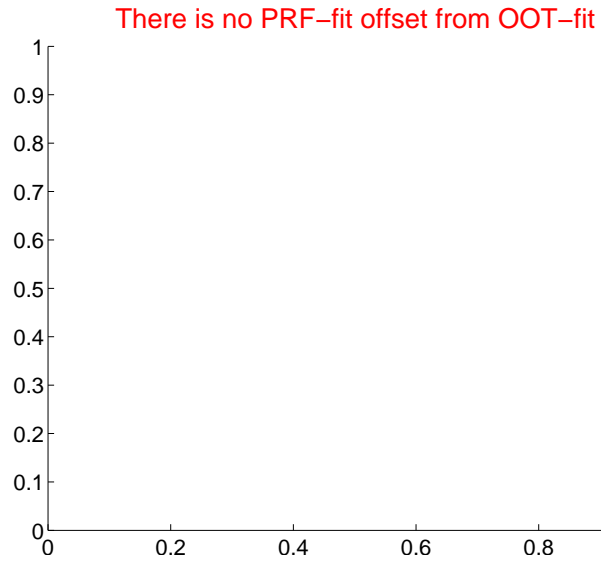
DV Centroid Data

Supplemental centroid analysis for 007175896-01. **Kepler magnitude: 11.12.** Transit SNR 9.37

There are 0 quarters with good PRF difference image offsets

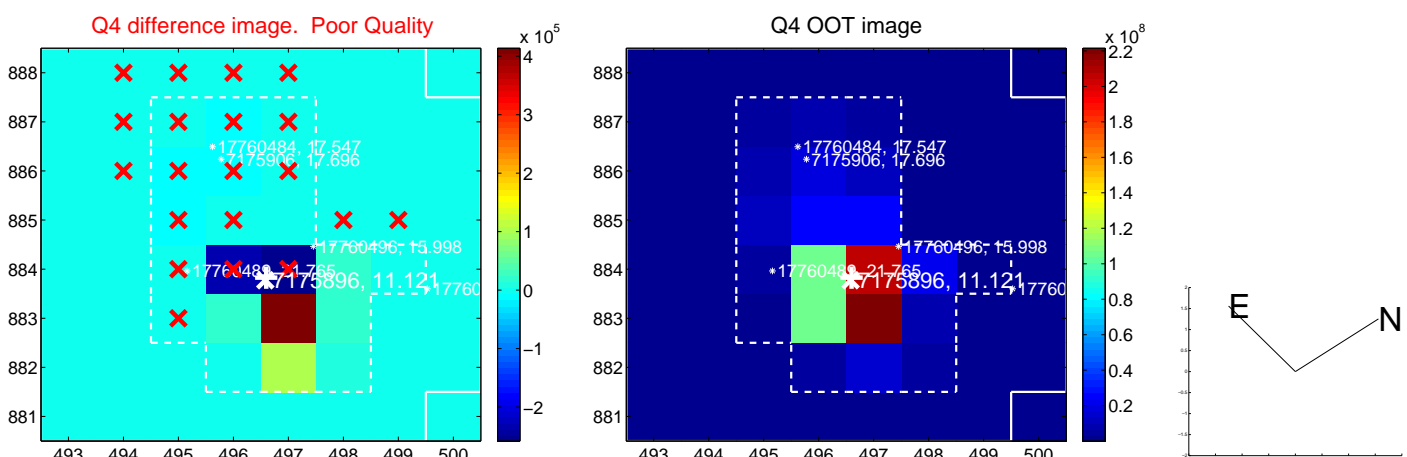
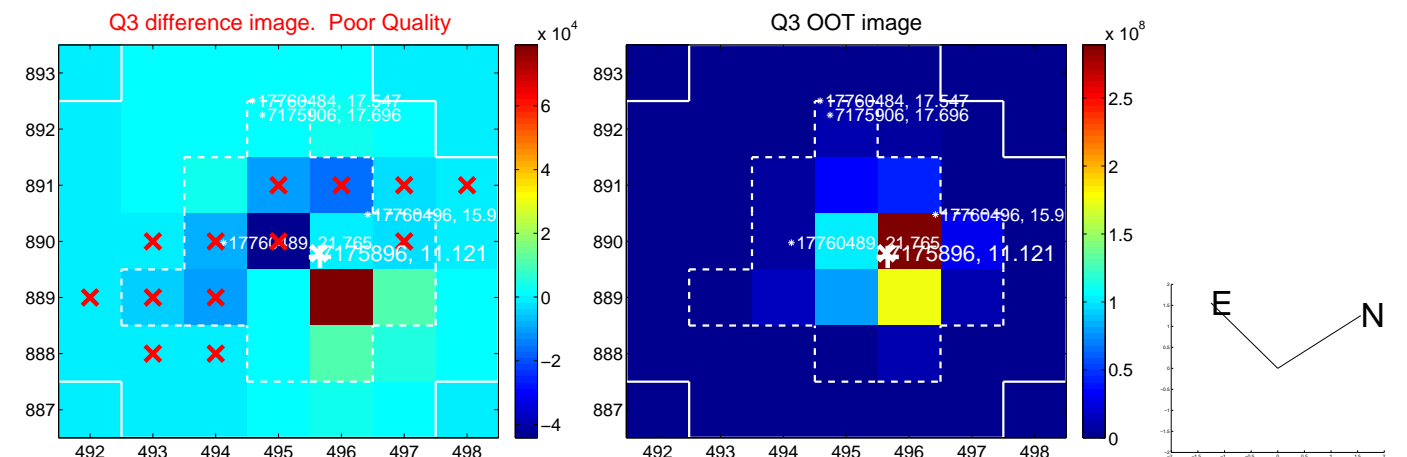
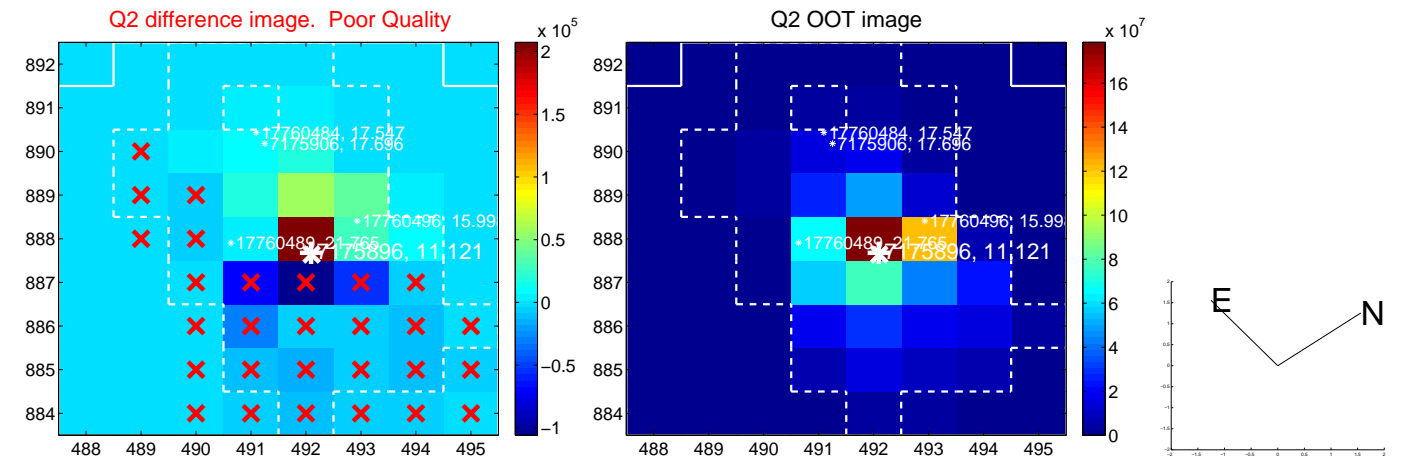
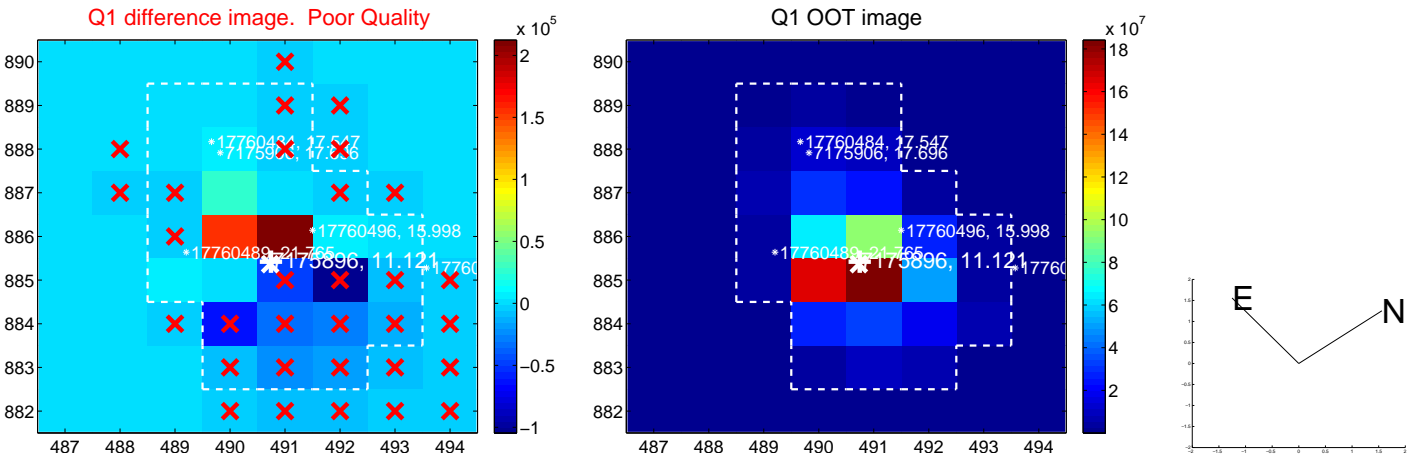
The direct PRF centroid is offset from the target star catalog position by about NaN arcsec

	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	1.72 ± 1.29	1.34	1.58 ± 1.30	-0.70 ± 1.19

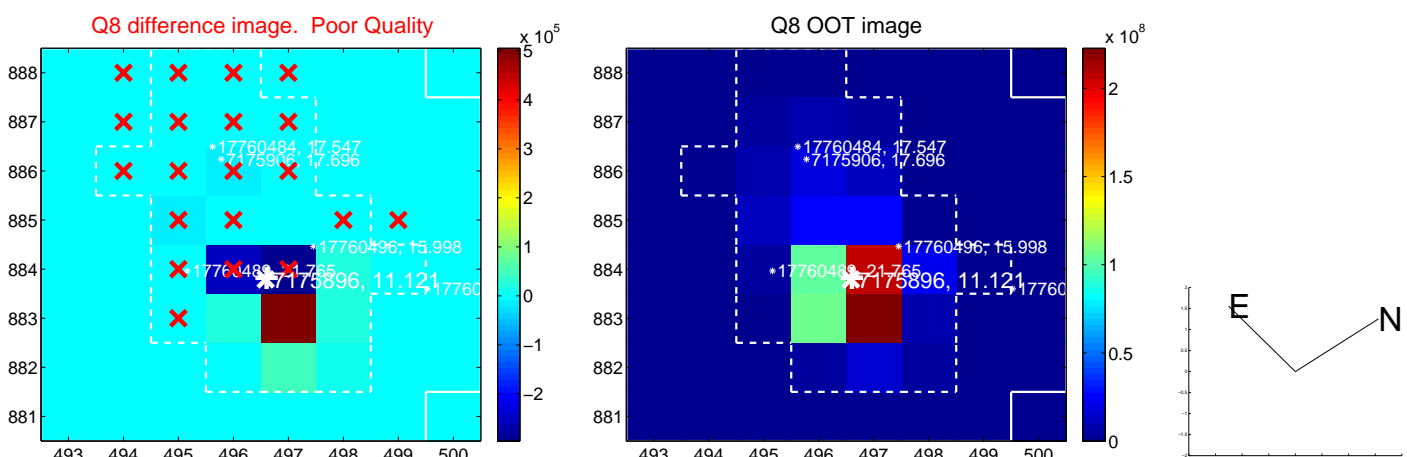
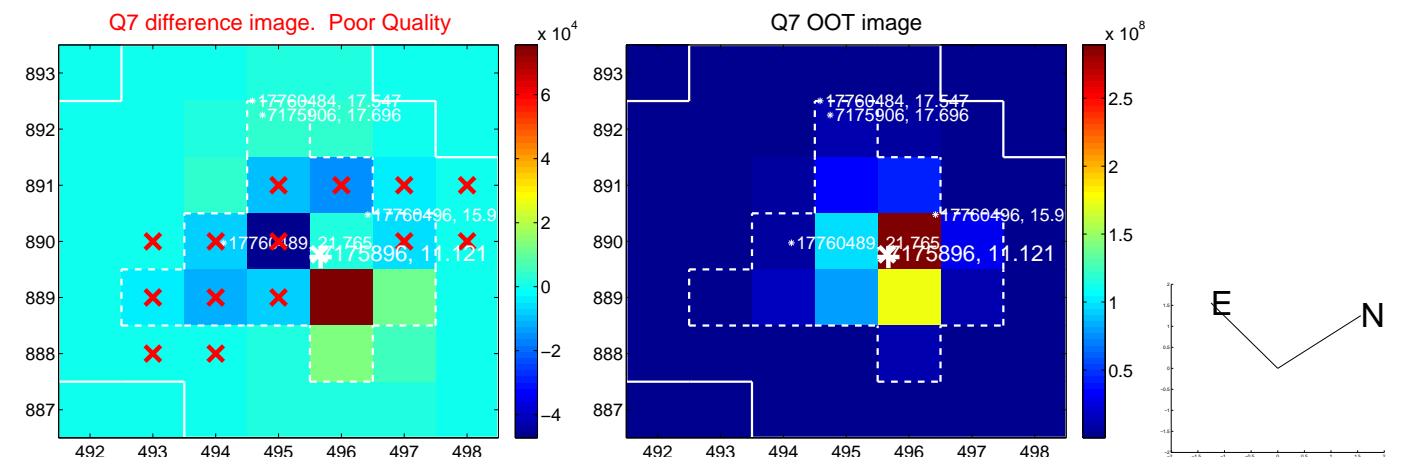
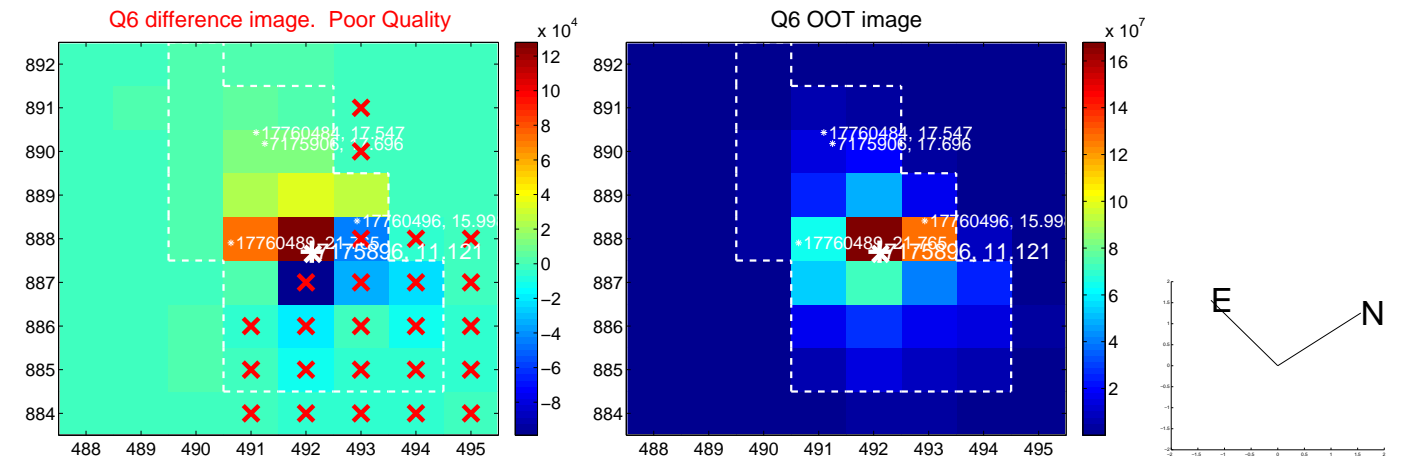
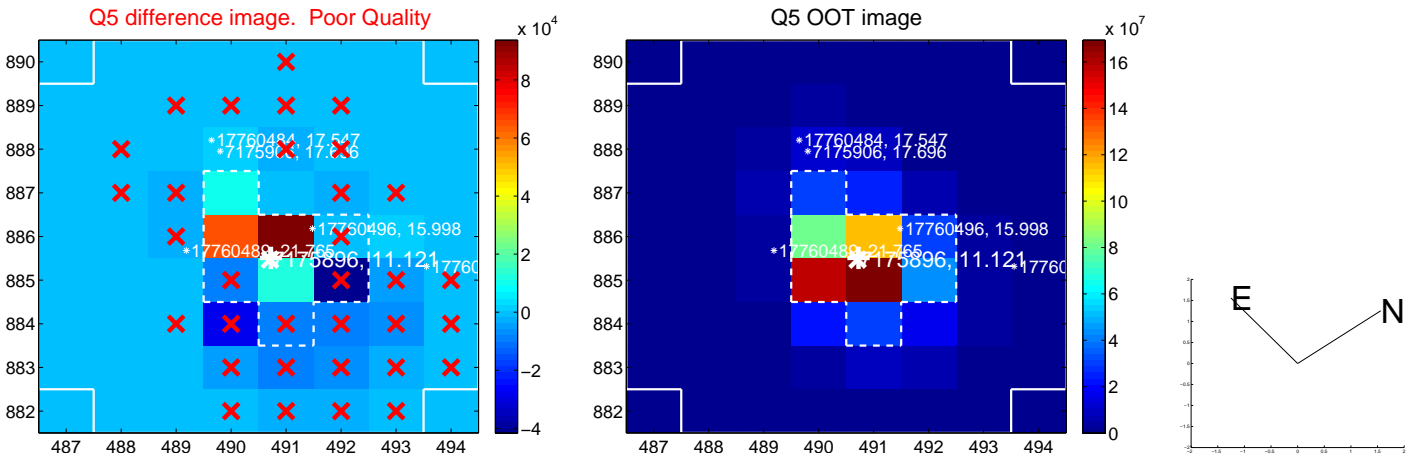


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets**; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

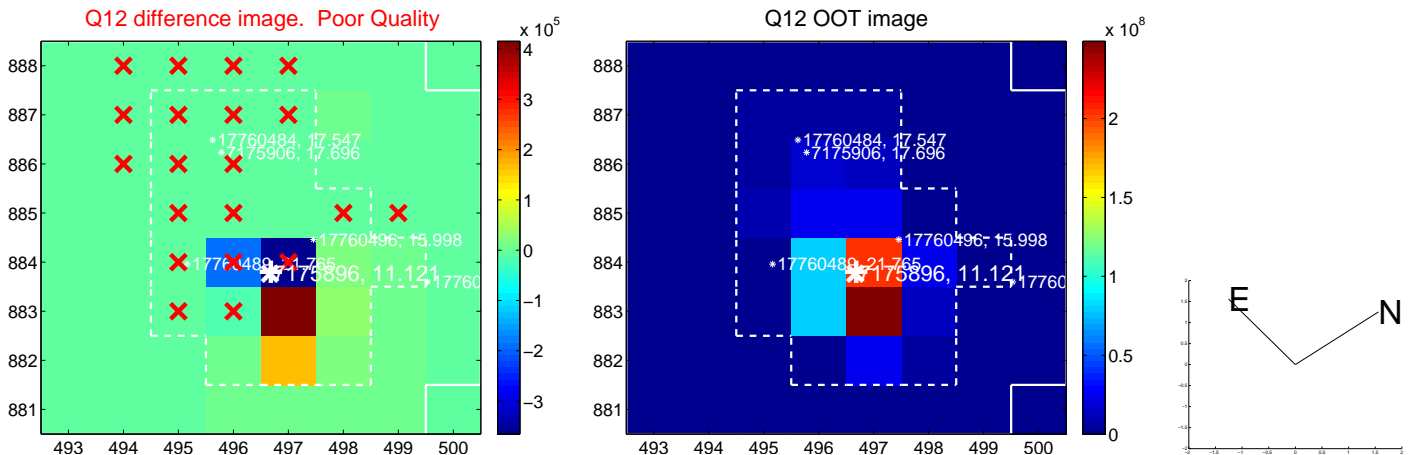
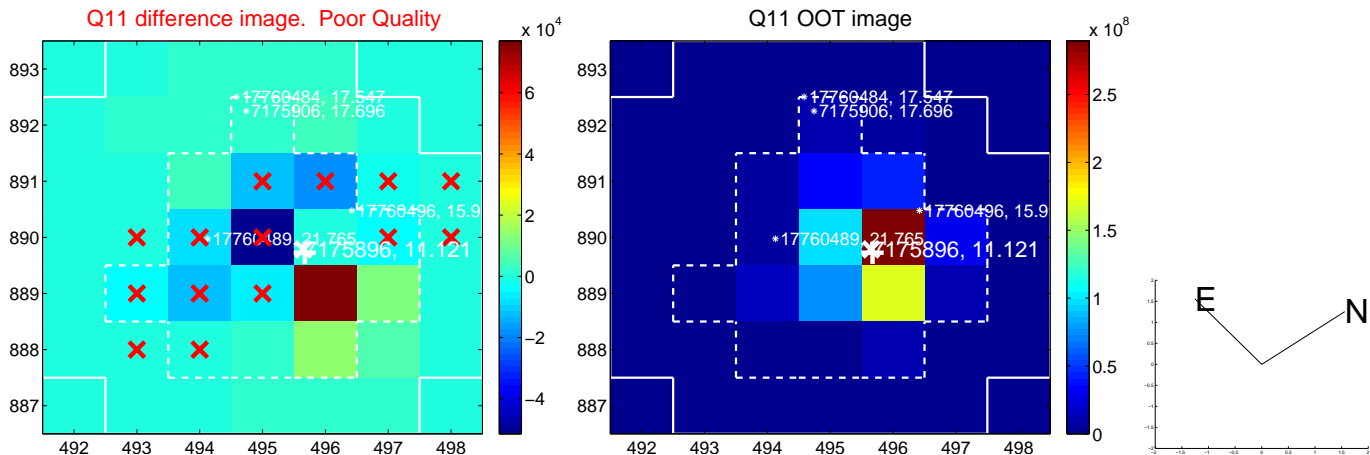
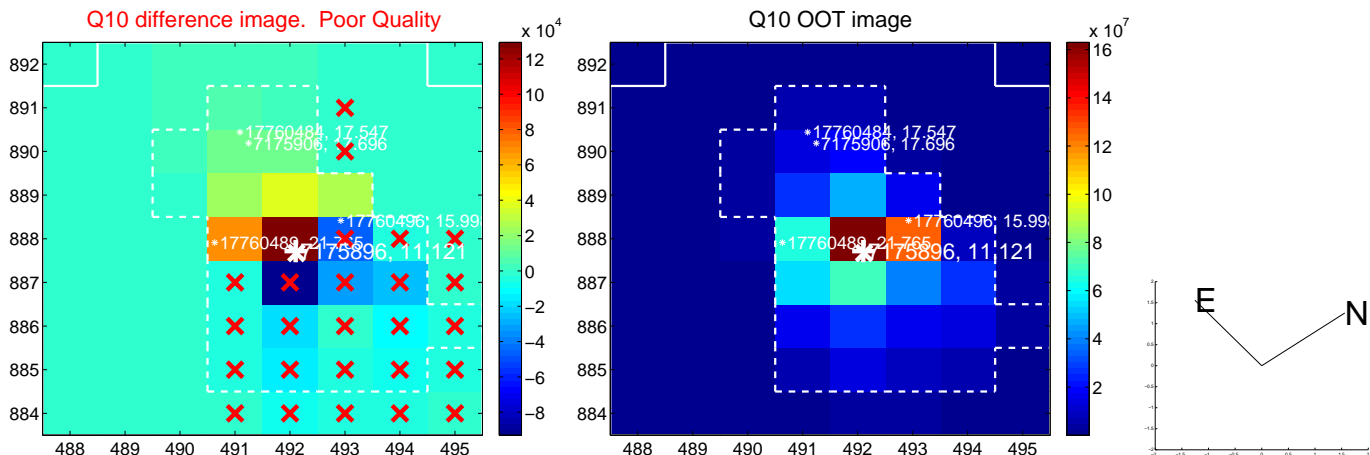
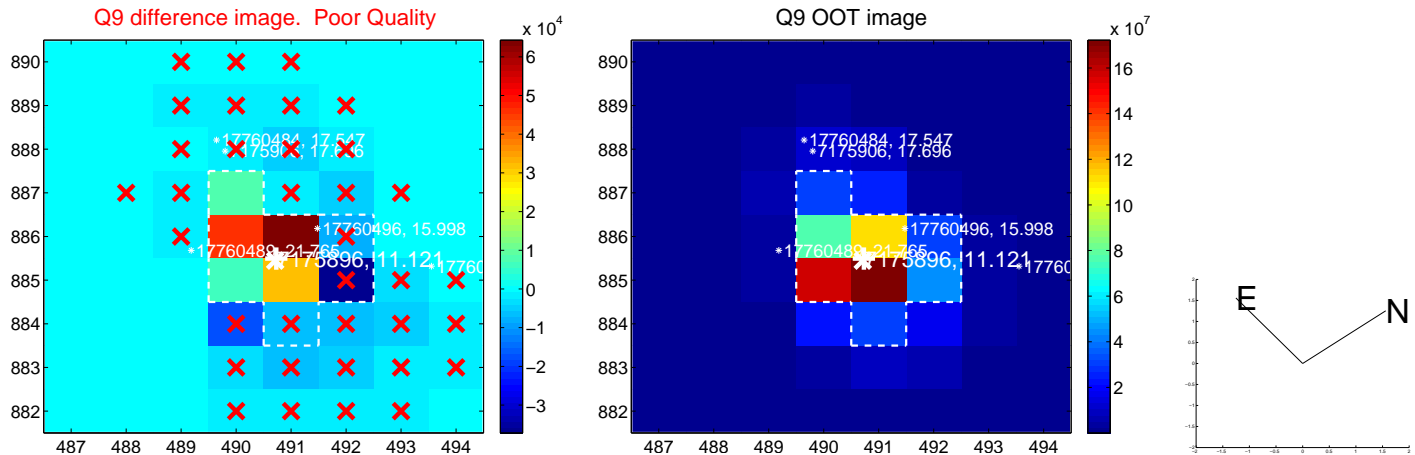
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



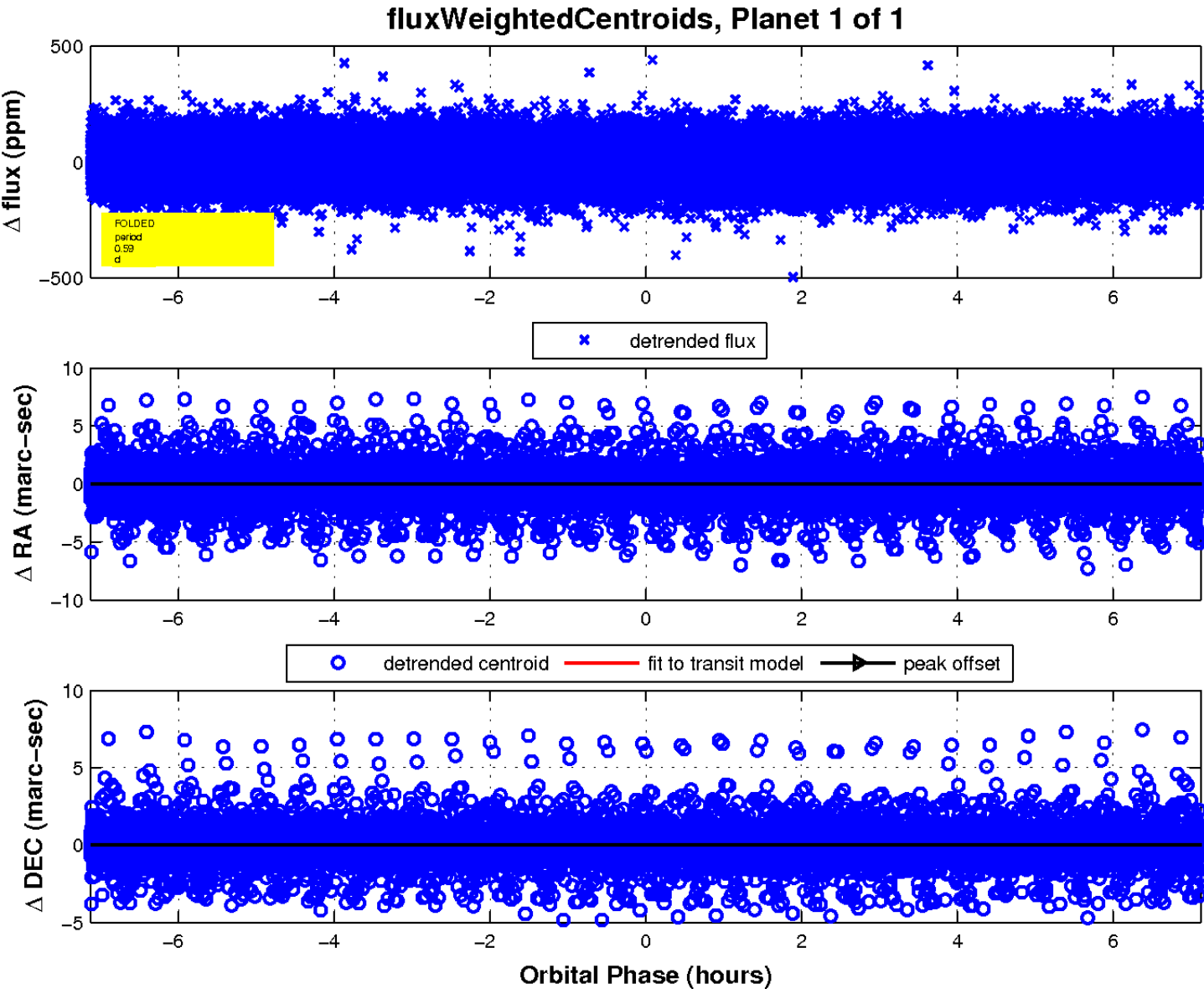
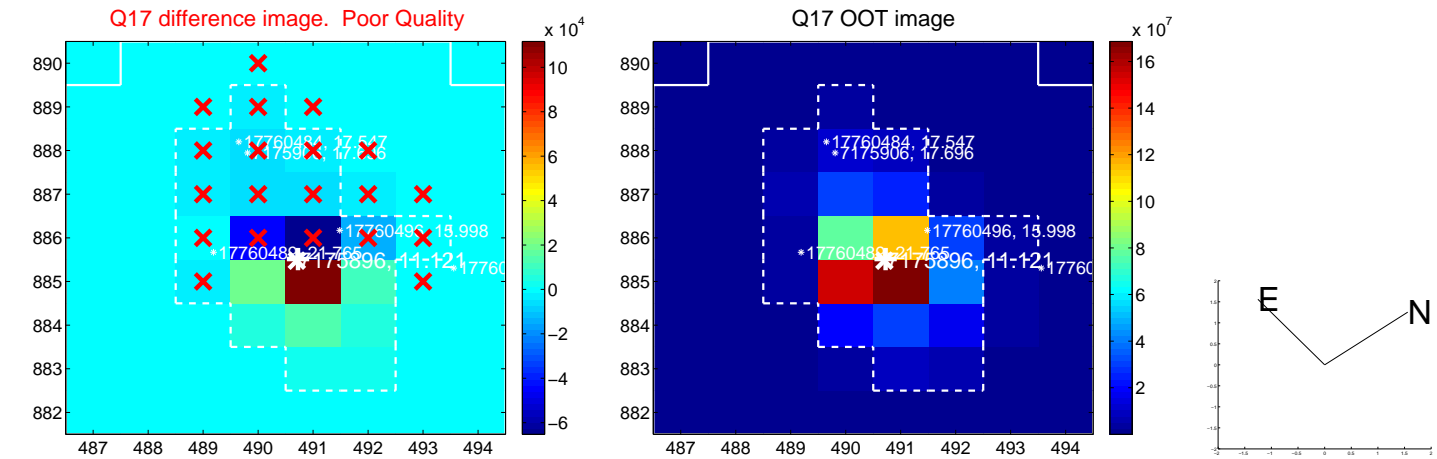
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



UKIRT Image

Declination

