

KIC 005479871

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})
005479871-01	OBS	No	1.701063	132.699194	57.0	13.303	9.8	10.9	0.99	5462	0.73	1069.69

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
005479871-01	OBS	FP	0.00	1	0	1	0	LPP_DV—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.

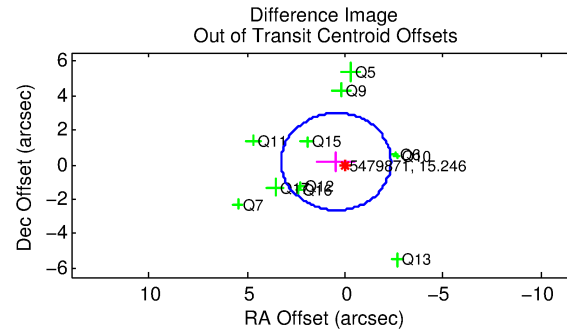
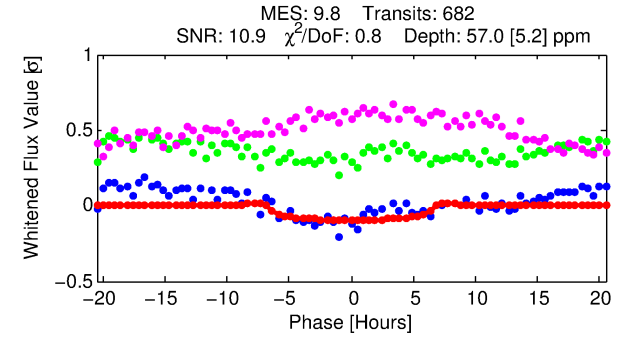
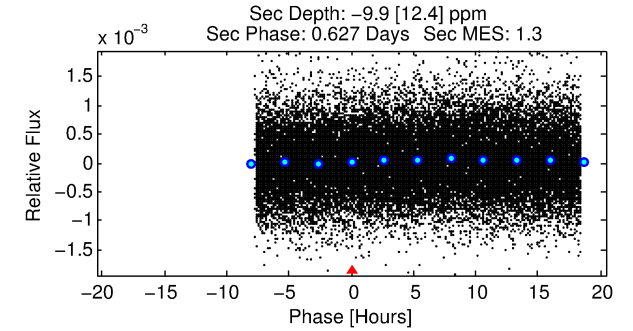
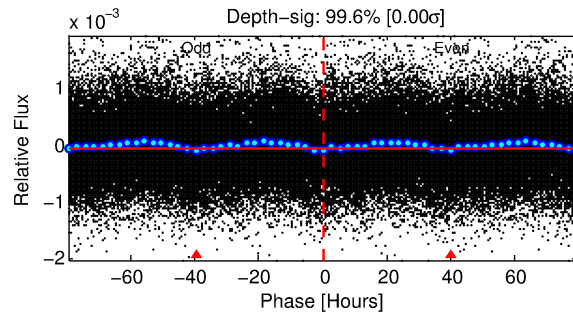
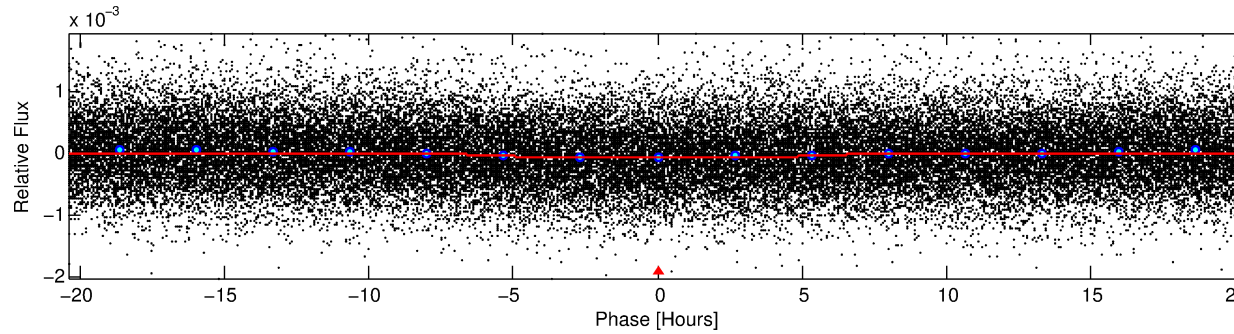
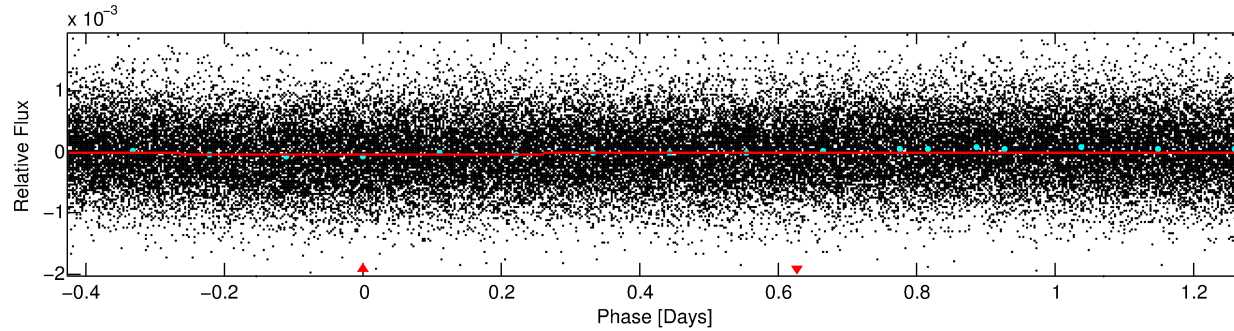
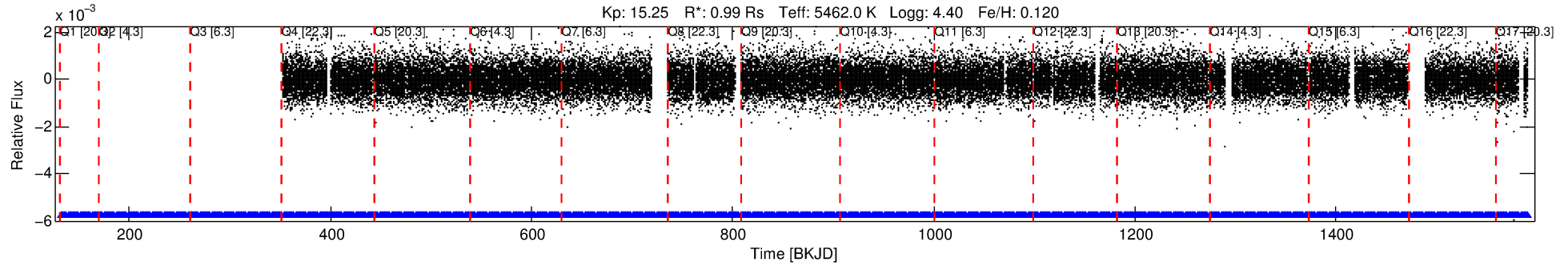
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 005479871-01

No Significant Match Found

DV One-Page Summary

KIC: 5479871 Candidate: 1 of 1 Period: 1.701 d



DV Fit Results:

Period = 1.70106 [0.00003] d
Epoch = 132.6992 [0.0120] BKJD
Rp/R* = 0.0068 [0.0074]
a/R* = 1.18 [1.40]
b = 0.01 [674.30]
Seff = 1069.69 [389.70]
Teq = 1458 [133] K
Rp = 0.73 [0.82] Re
a = 0.0269 [0.0063] AU
Ag = N/A
Teffp = N/A

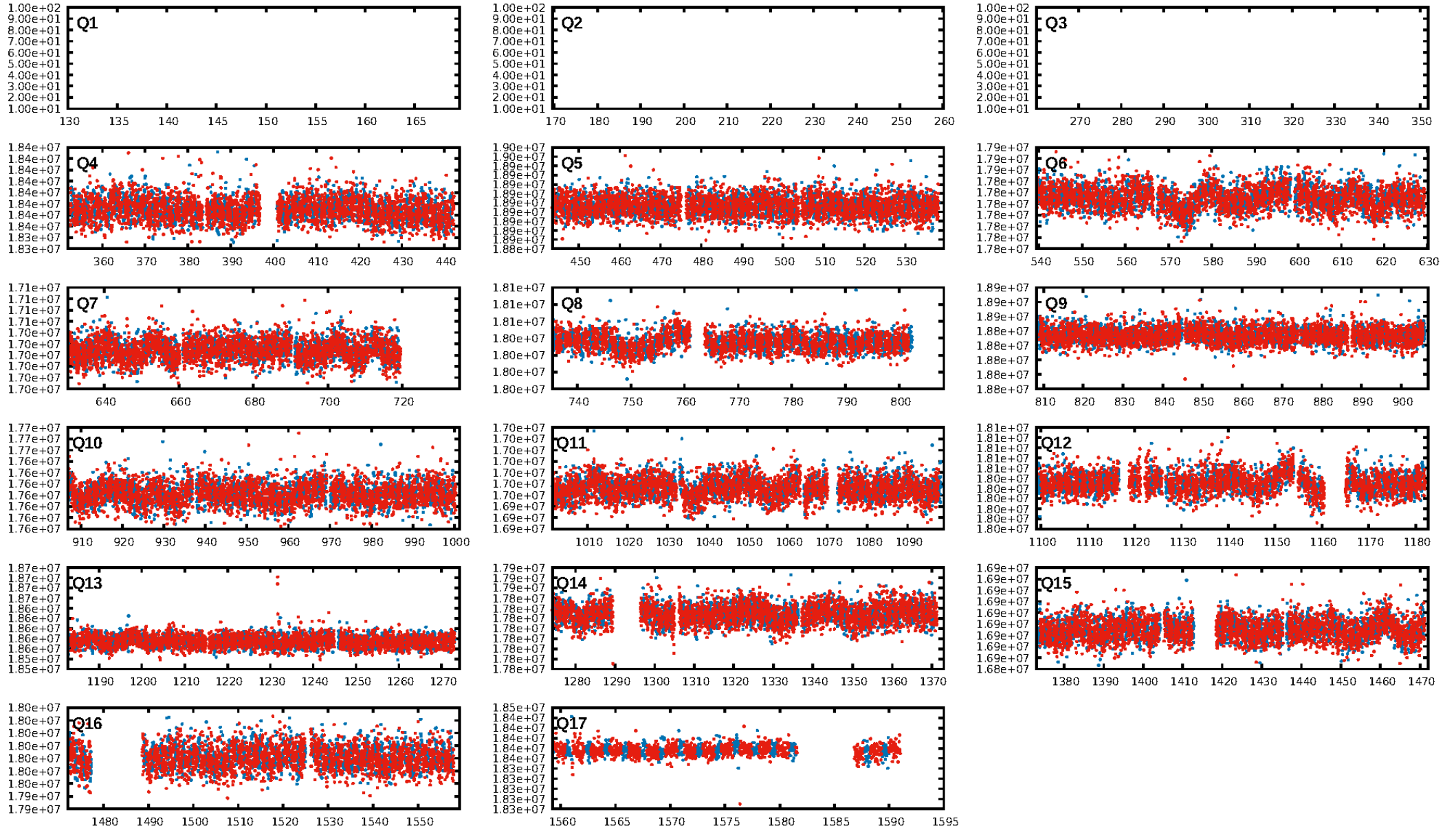
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 5.19e-45
RollingBand-fgt: 1.00 [666/666]
GhostDiagnostic-chr: 0.2937
Centroid-sig: 0.0%
Centroid-so: 1.624 arcsec [1.68σ]
OotOffset-rm: 0.495 arcsec [0.53σ]
KicOffset-rm: 0.236 arcsec [0.26σ]
OotOffset-st: 2/3/2/4 [11]
KicOffset-st: 2/3/2/4 [11]
DiffImageQuality-fgm: 0.18 [2/11]
DiffImageOverlap-fno: 1.00 [14/14]

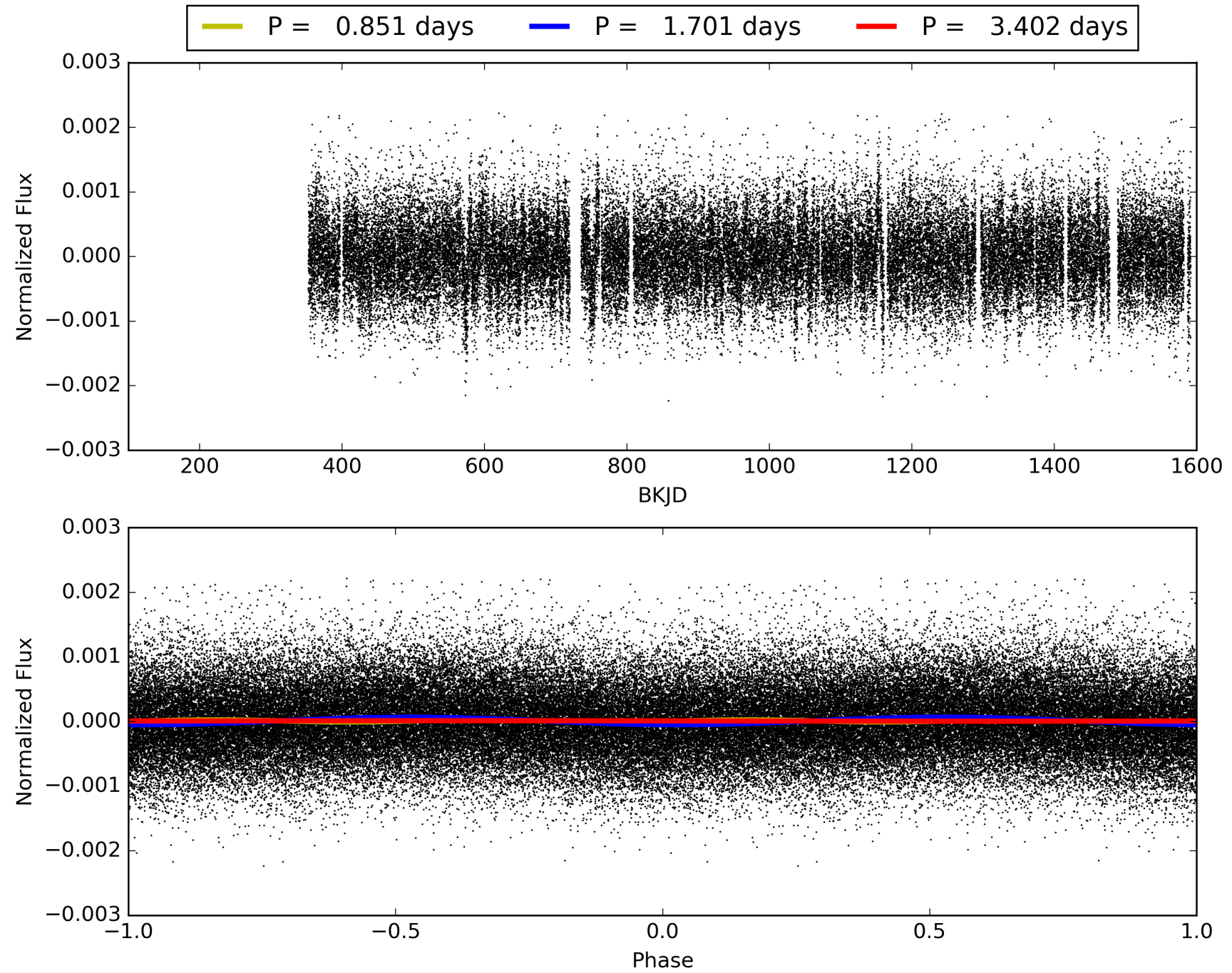
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 29-Jan-2016 07:16:06 Z

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

TCE 005479871-01, PDC Light Curves

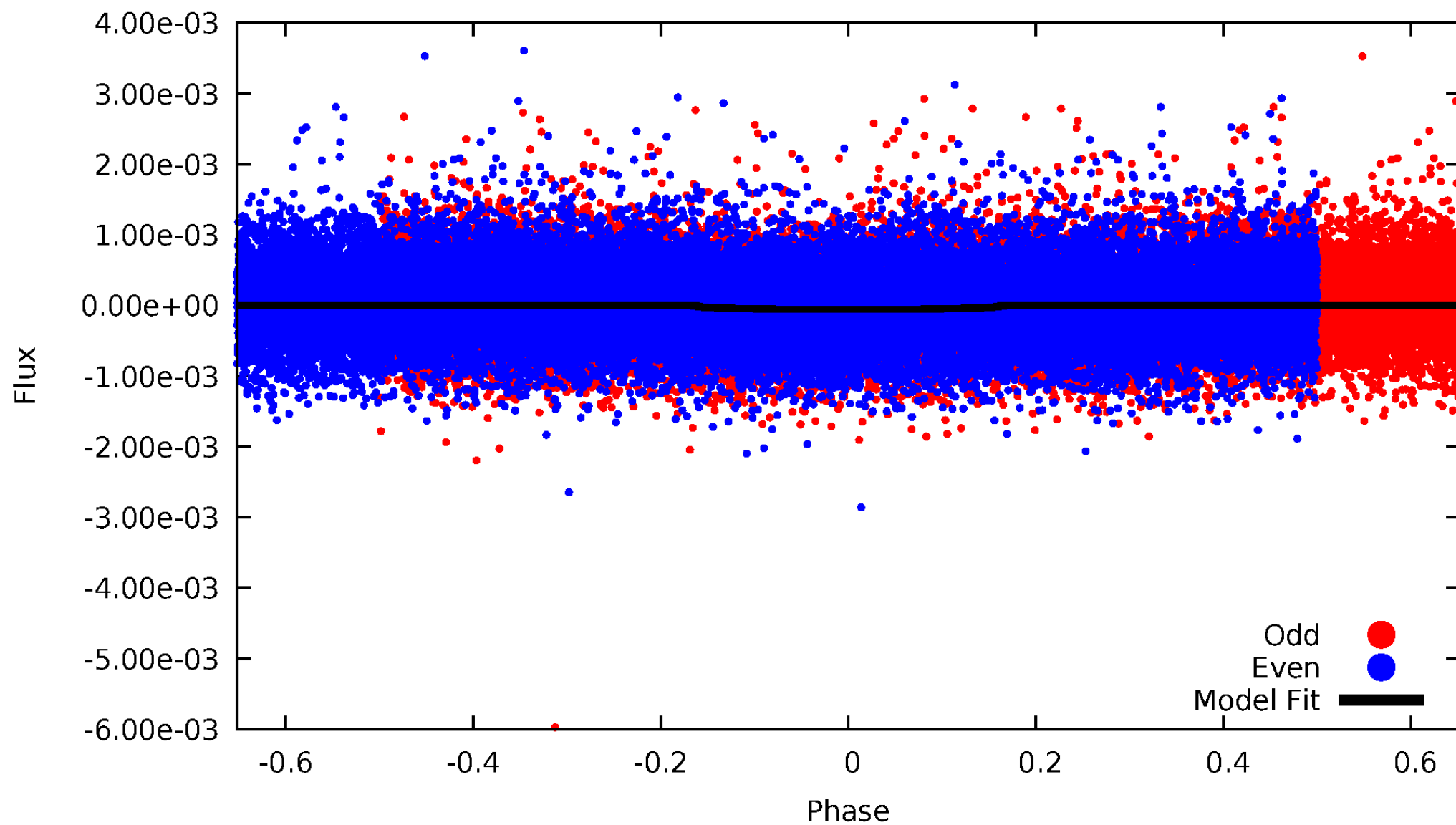


TCE 005479871-01



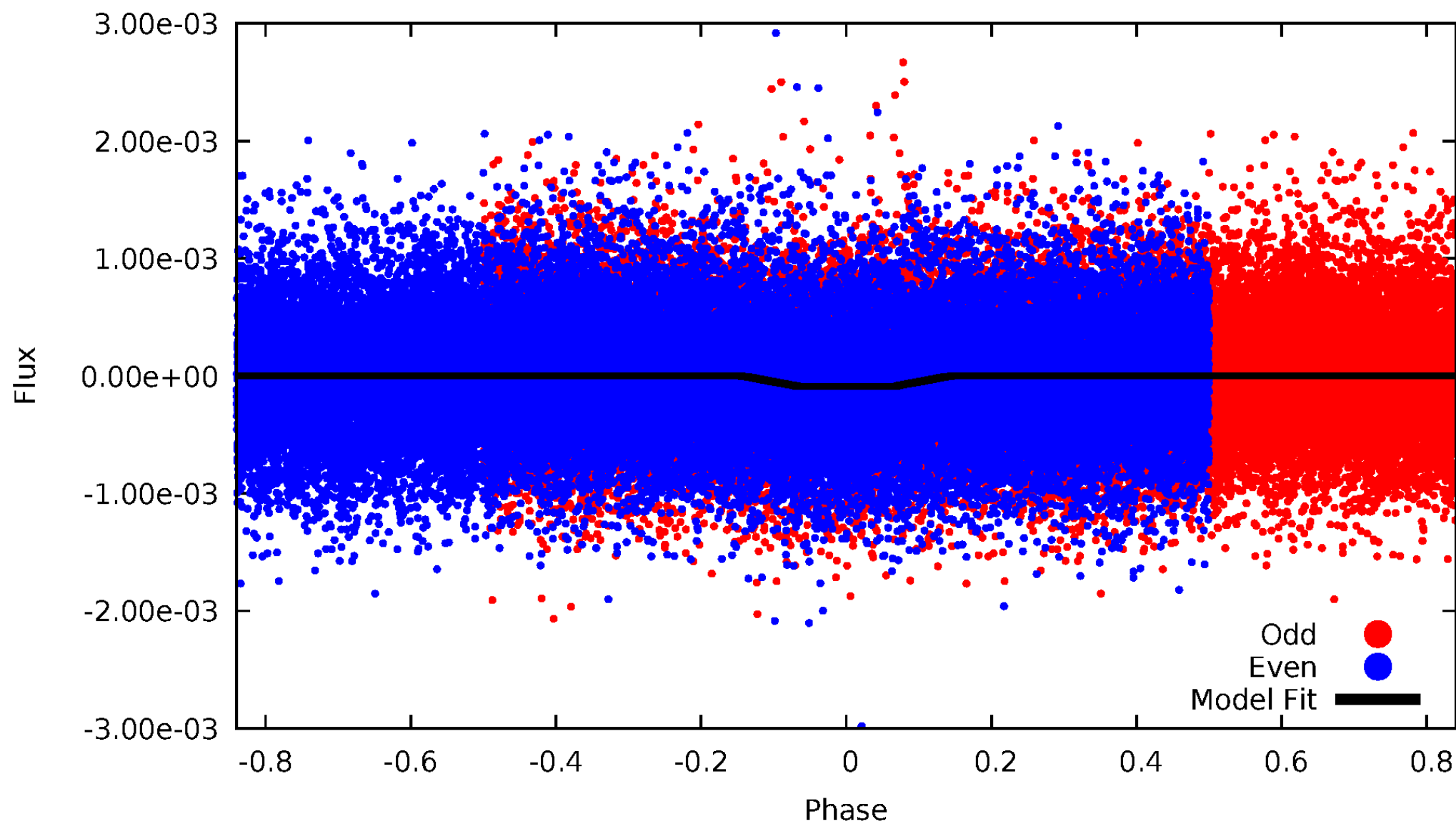
DV Odd/Even

TCE 005479871-01



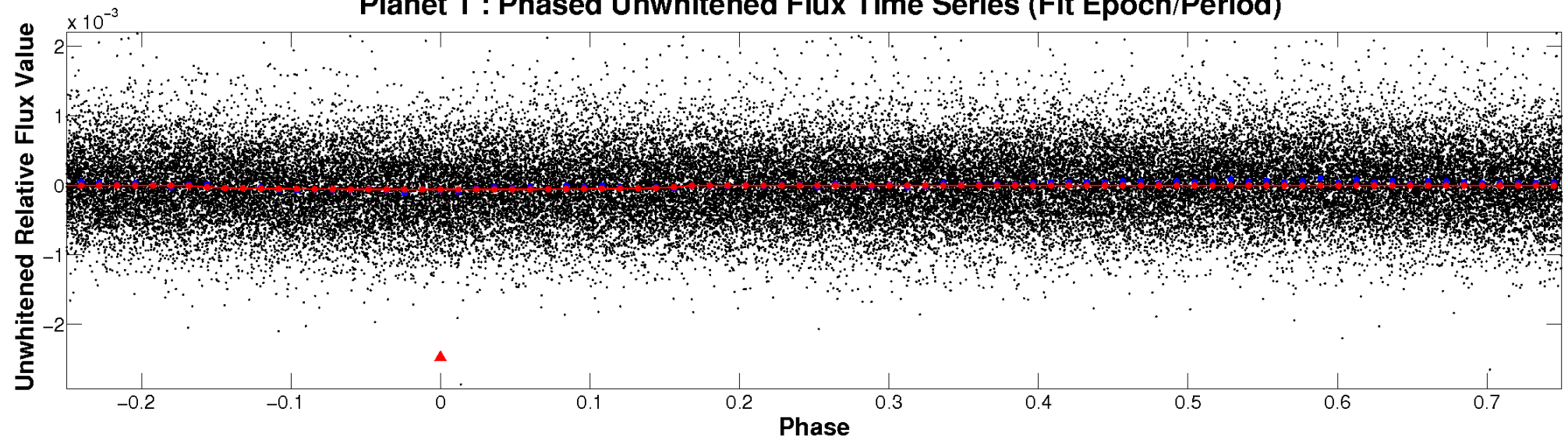
ALT Odd/Even

TCE 005479871-01

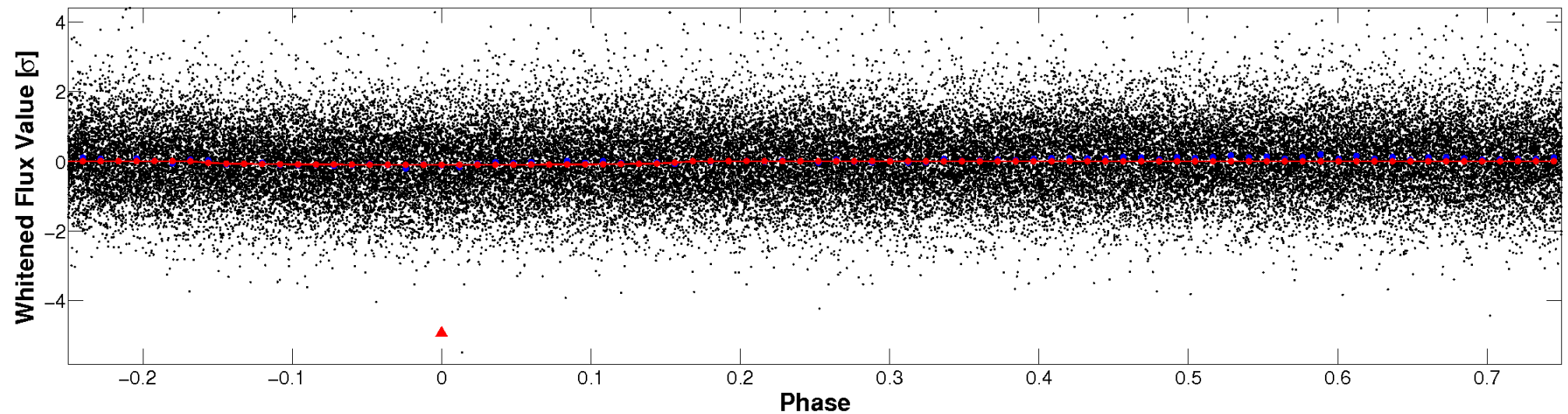


Non-Whitened Vs. Whitened Light Curve

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

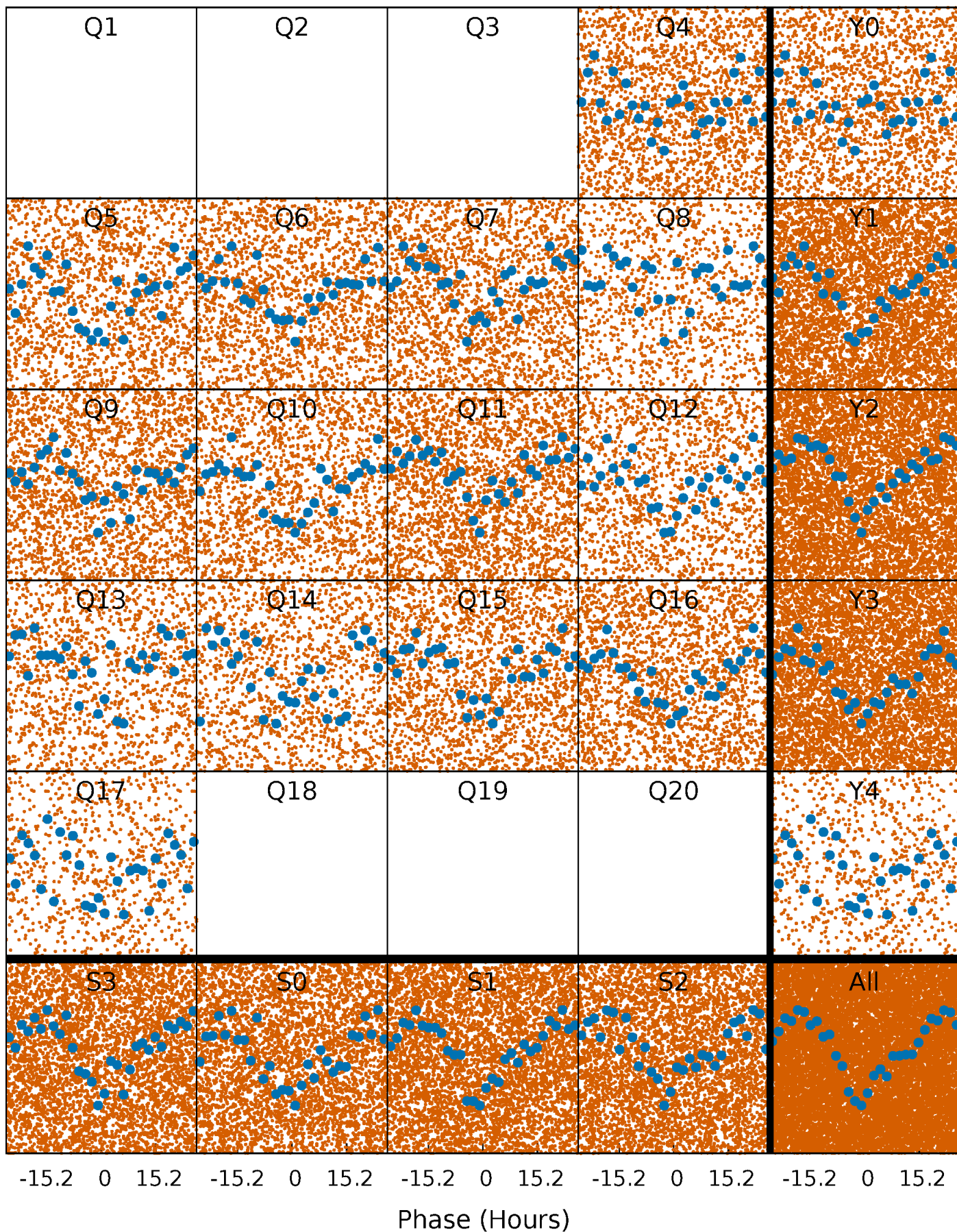


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



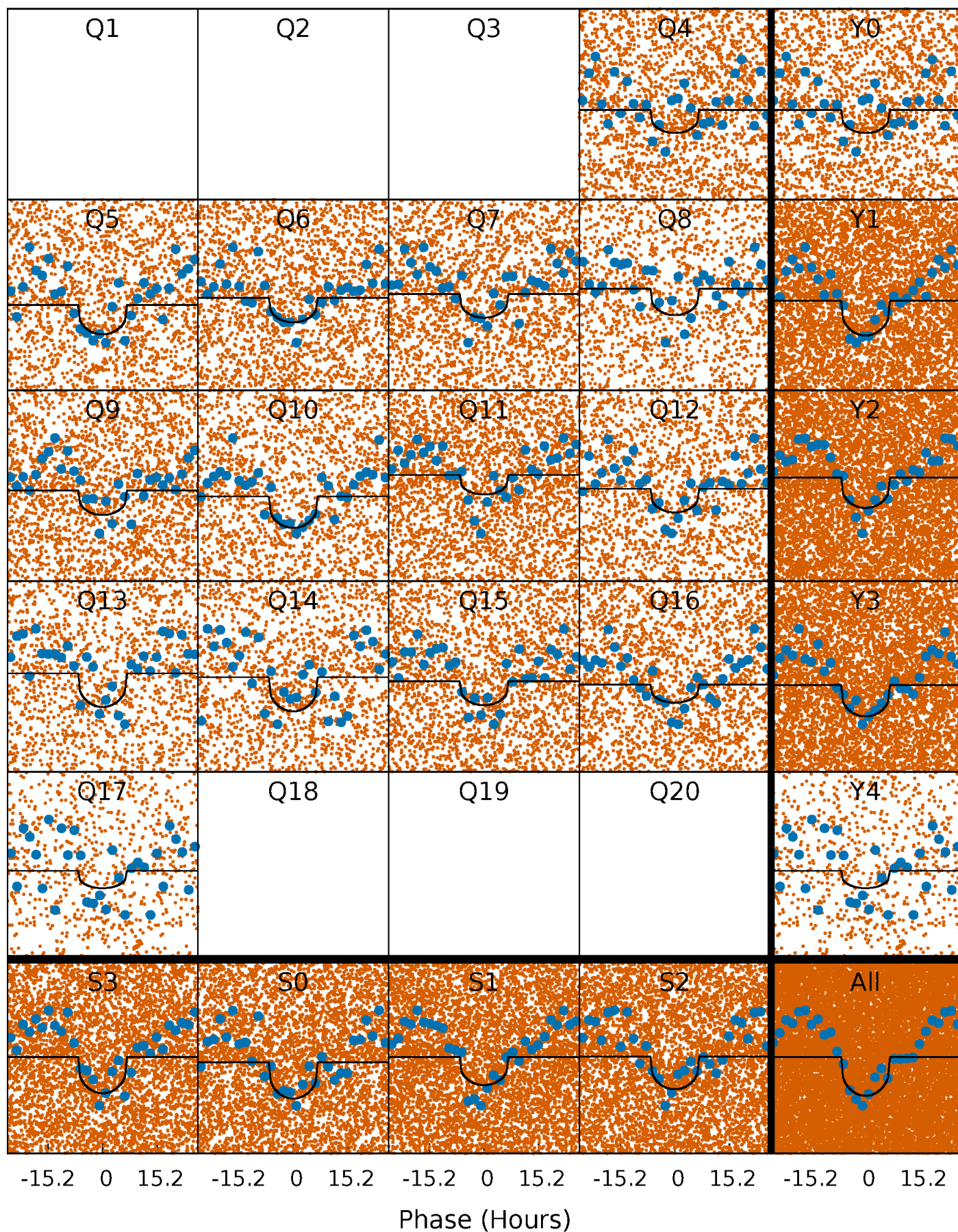
PDC Quarter-Phased Transit Curves

TCE 005479871-01 P= 1.701063 Days $T_0=132.699194$ (BKJD)



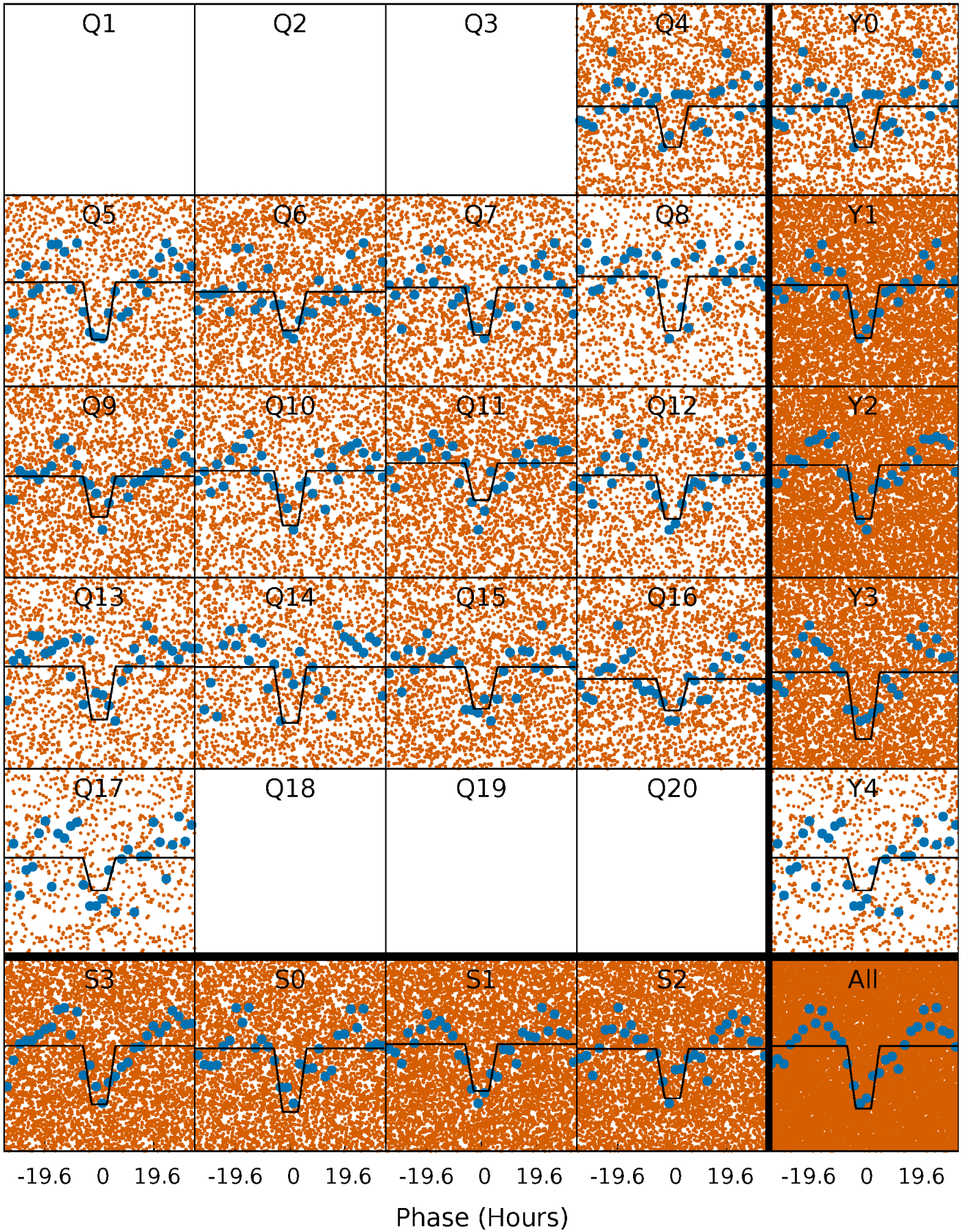
DV Quarter-Phased Transit Curves

TCE 005479871-01 P= 1.701063 Days $T_0=132.699194$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

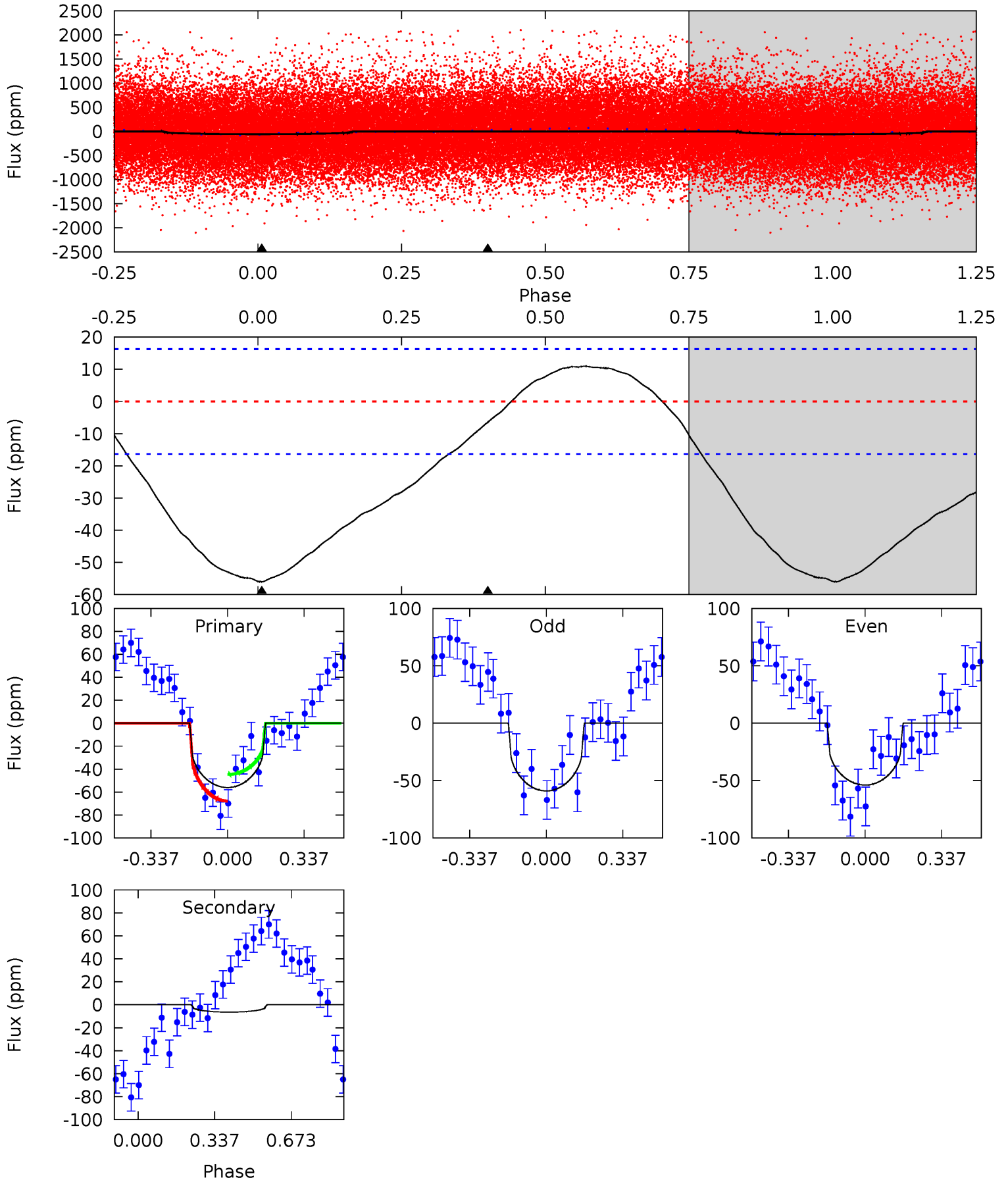
TCE 005479871-01 P= 1.701203 Days $T_0=132.591504$ (BKJD)



DV Model-Shift Uniqueness Test

005479871-01, P = 1.701063 Days, E = 132.699194 Days

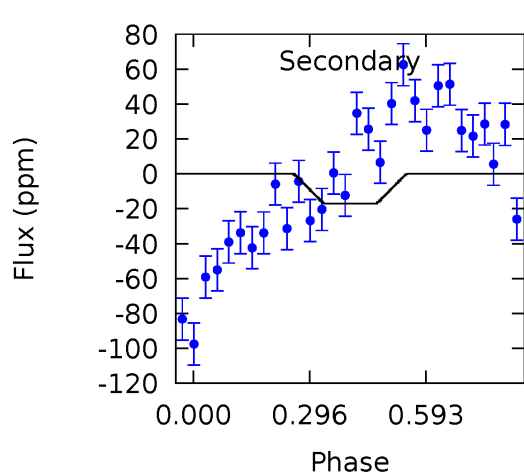
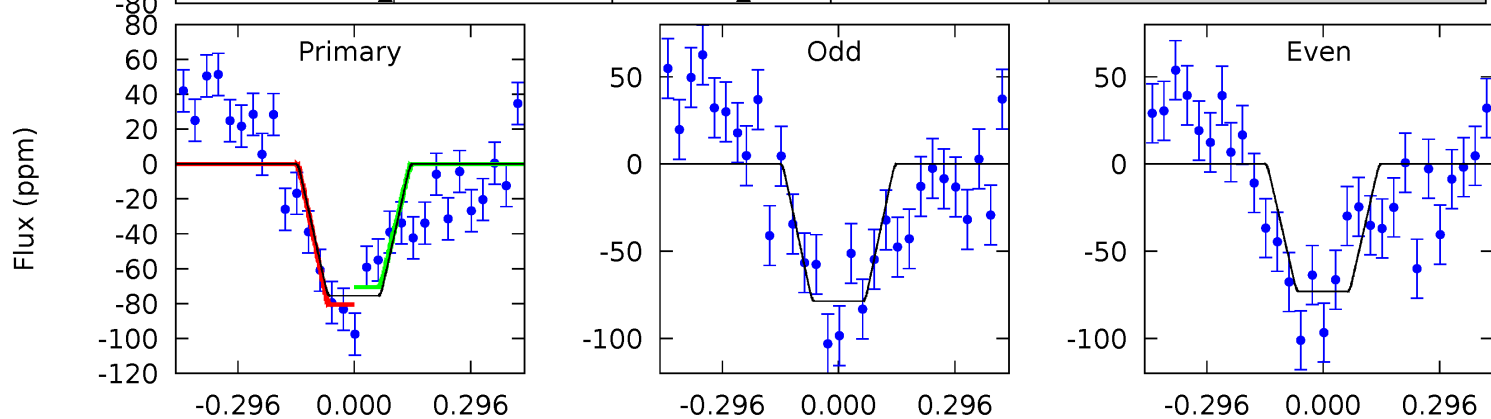
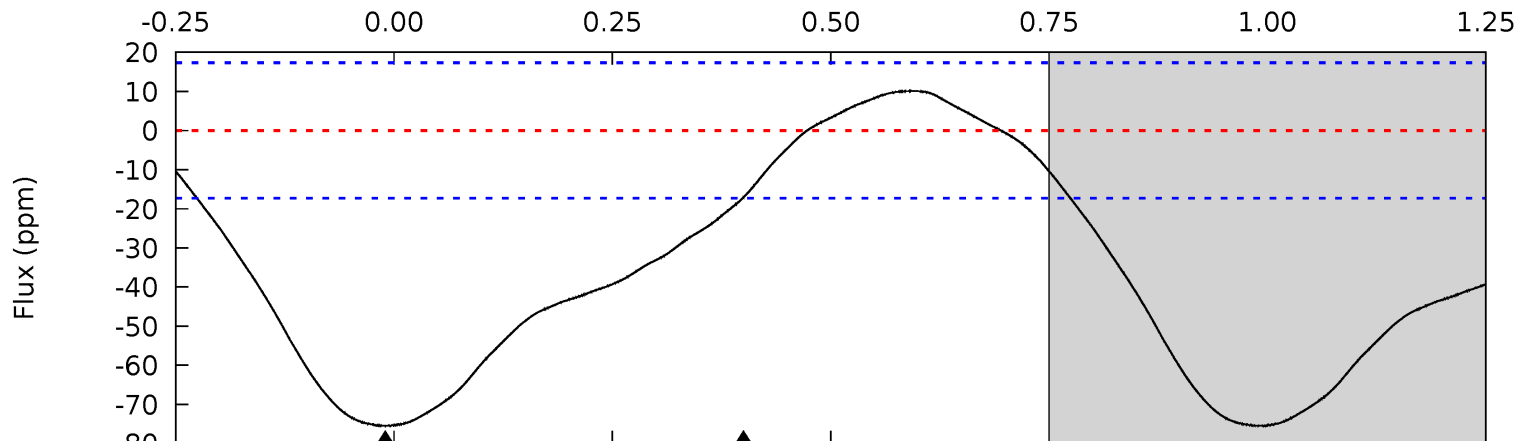
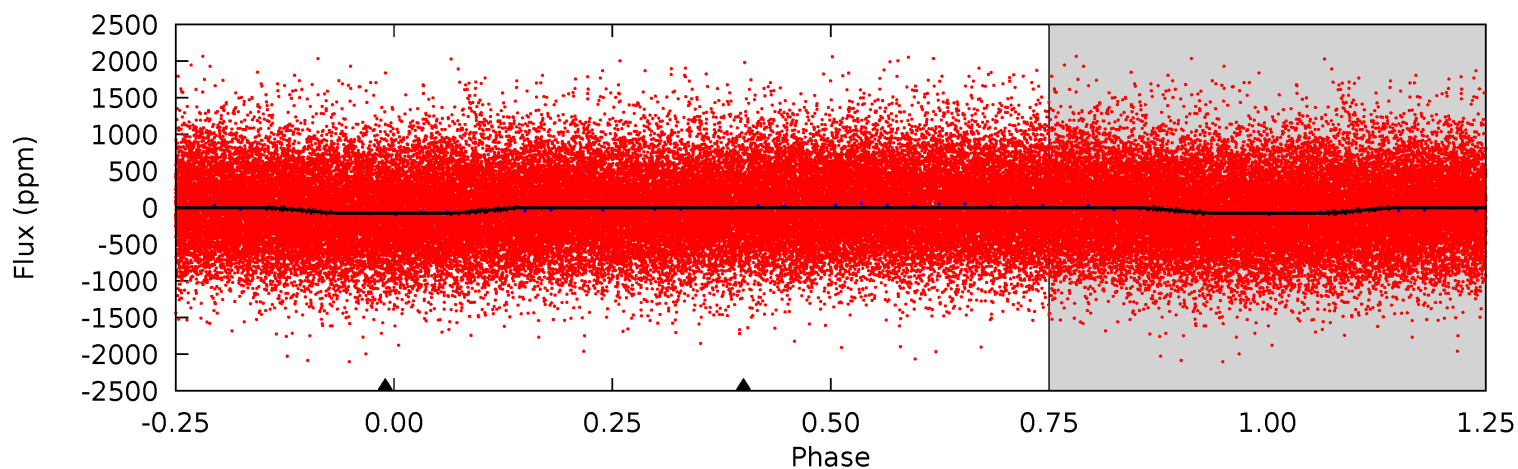
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
14.8	1.70	0	0	4.30	0.96	1.43	14.8	14.8	1.70	1.70	0.68	1.13	0.16	3.13



Alt Model-Shift Uniqueness Test

005479871-01, P = 1.701203 Days, E = 132.591504 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
18.9	4.29	0	0	4.33	1.04	1.03	18.9	18.9	4.29	4.29	0.69	1.31	0.12	1.27



Stellar Parameters For KIC 005479871

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	5462^{+180}_{-180}	$4.404^{+0.139}_{-0.186}$	$0.120^{+0.250}_{-0.300}$	$0.986^{+0.272}_{-0.147}$	$0.900^{+0.101}_{-0.074}$	$1.321^{+0.755}_{-0.658}$
	+3%/-3%	+3%/-4%	+208%/-250%	+28%/-15%	+11%/-8%	+57%/-50%
Source	KIC0	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 005479871-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-6 ± 4	$0.94^{+0.72}_{-0.57}$	2045^{+144}_{-115}	3318^{+1422}_{-802}	$2.443^{+16.089}_{-1.854}$
Alt.	-17 ± 4	$1.12^{+0.80}_{-0.65}$	2055^{+161}_{-118}	3781^{+1517}_{-621}	$5.387^{+25.973}_{-3.555}$

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 $A_{obs} \gg 1.0$

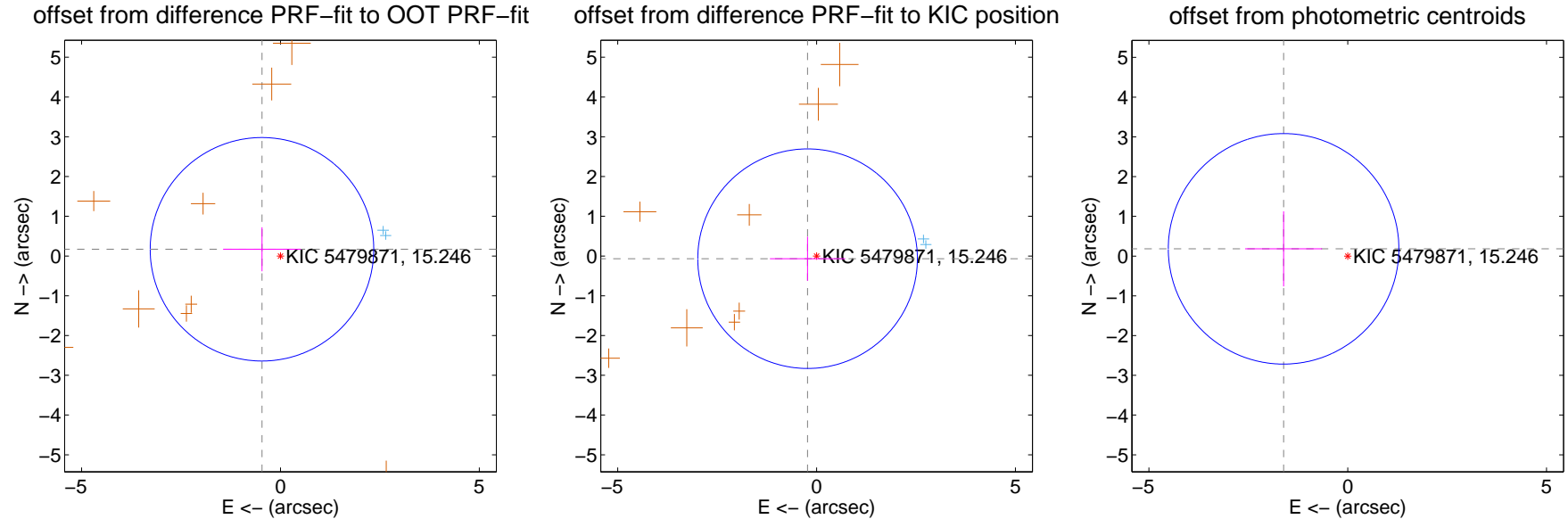
DV Centroid Data

Supplemental centroid analysis for 005479871-01. Kepler magnitude: 15.25. Transit SNR 10.94

There are 2 quarters with good PRF difference image offsets

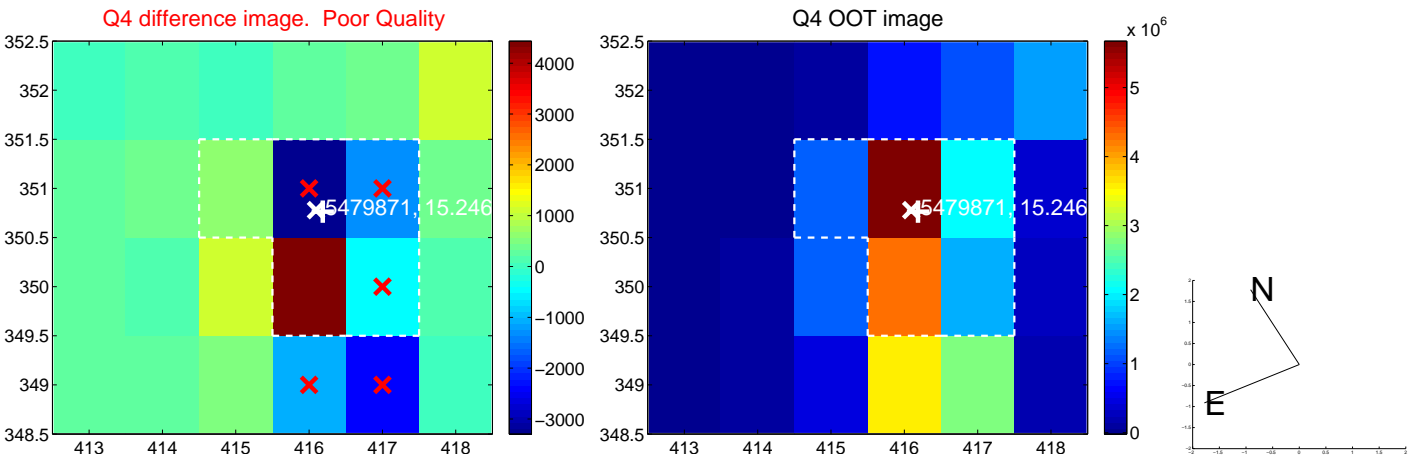
The direct PRF centroid is offset from the target star catalog position by about 0.56 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.495 ± 0.937	0.53	0.465 ± 0.977	0.170 ± 0.555
PRF-fit source offset from KIC position	0.236 ± 0.920	0.26	0.226 ± 0.946	-0.067 ± 0.555
photometric centroid source offset	1.62 ± 0.97	1.68	1.61 ± 0.97	0.18 ± 0.94

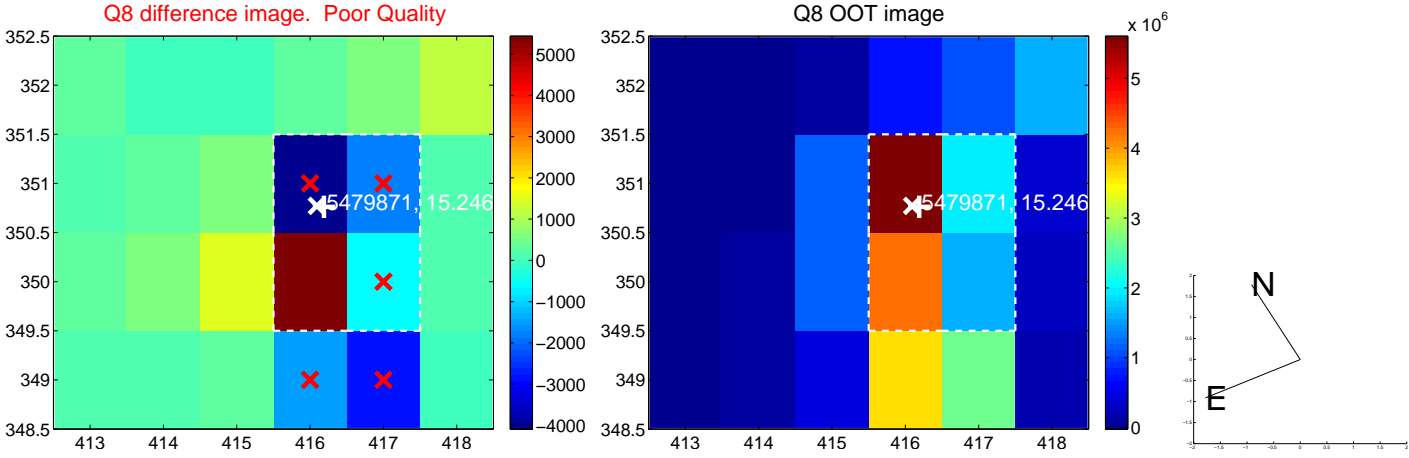
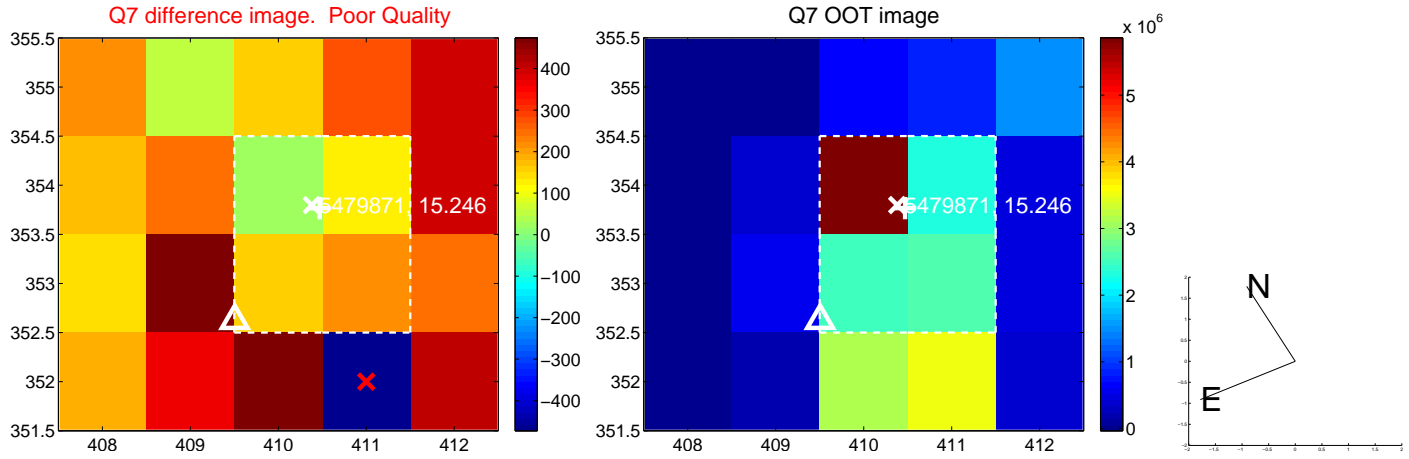
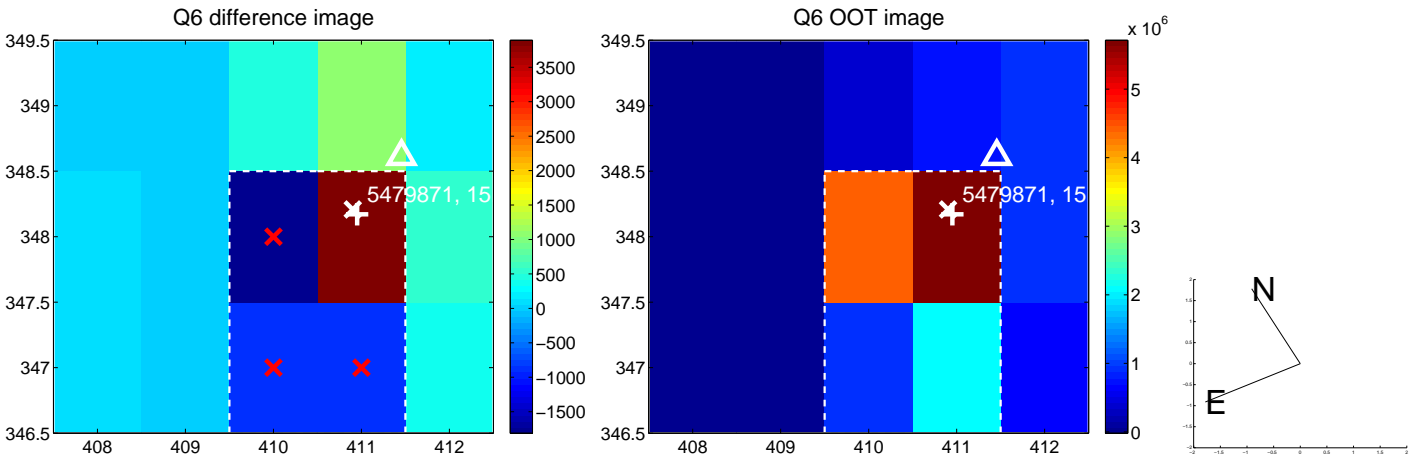
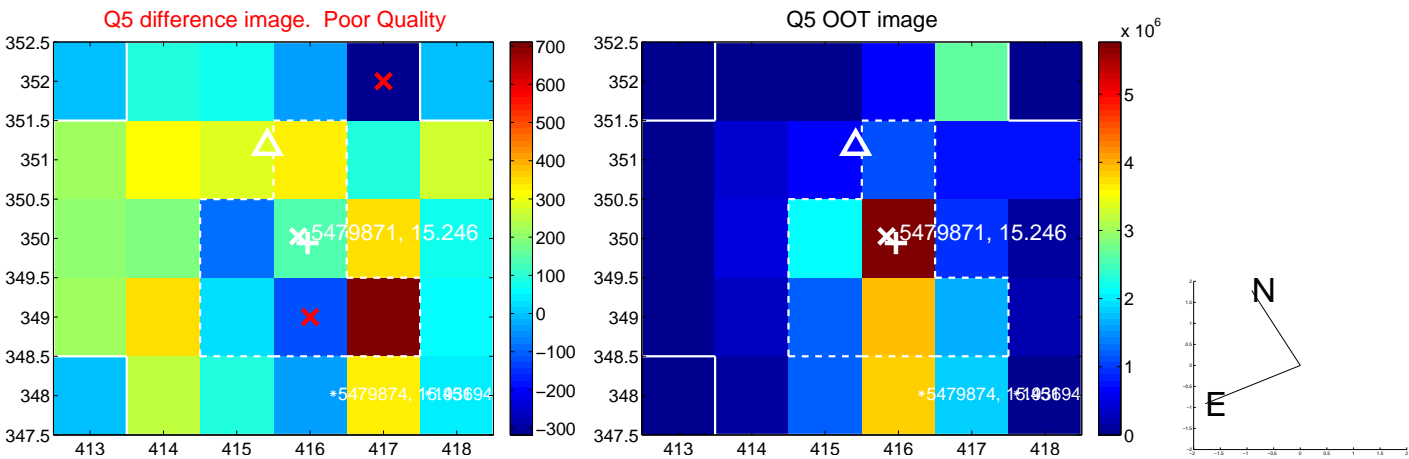


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

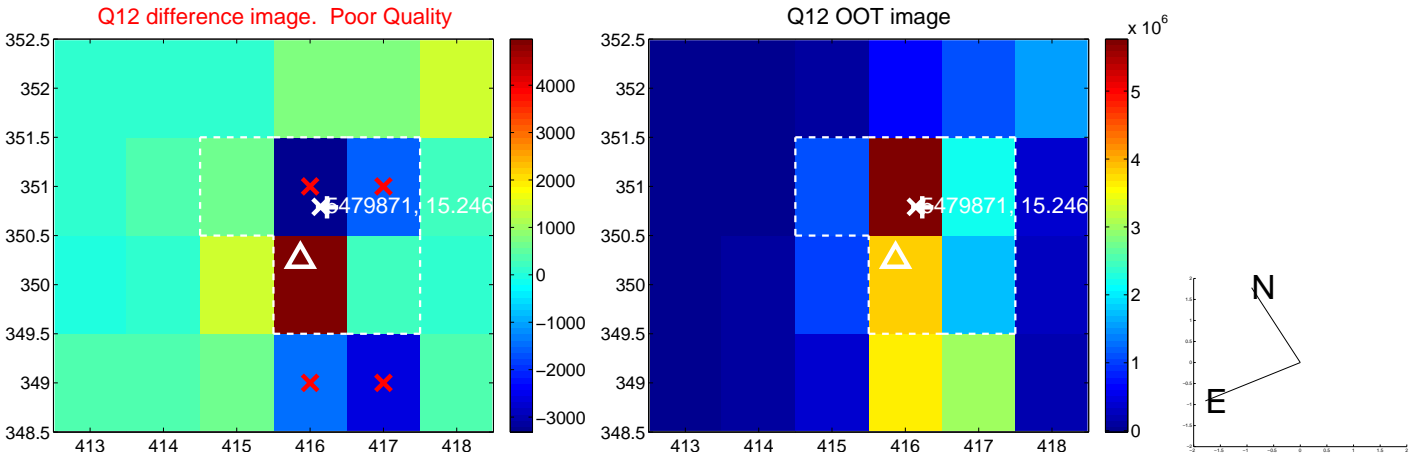
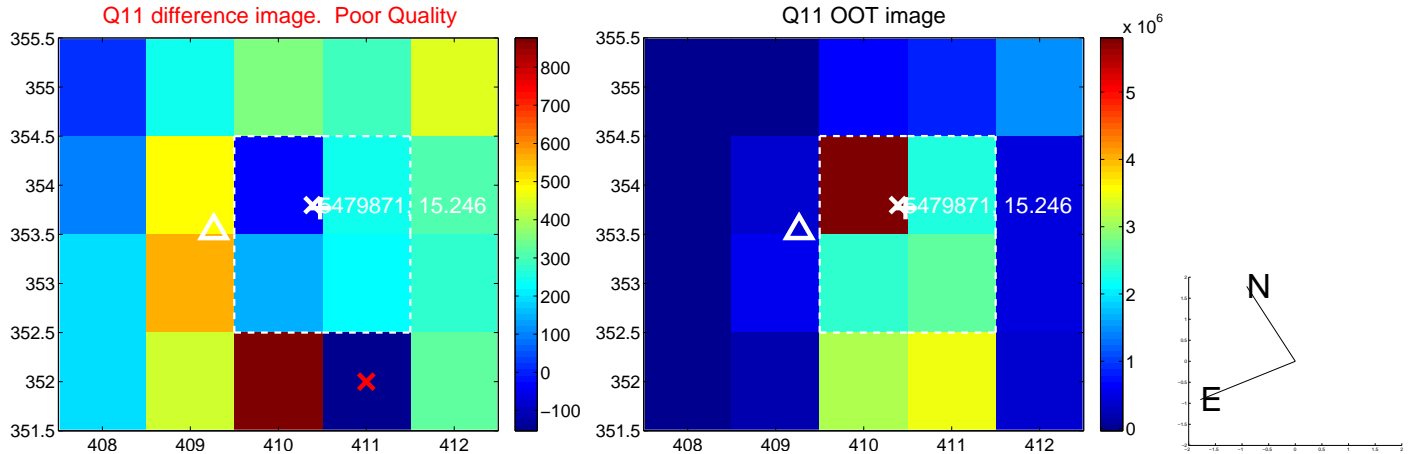
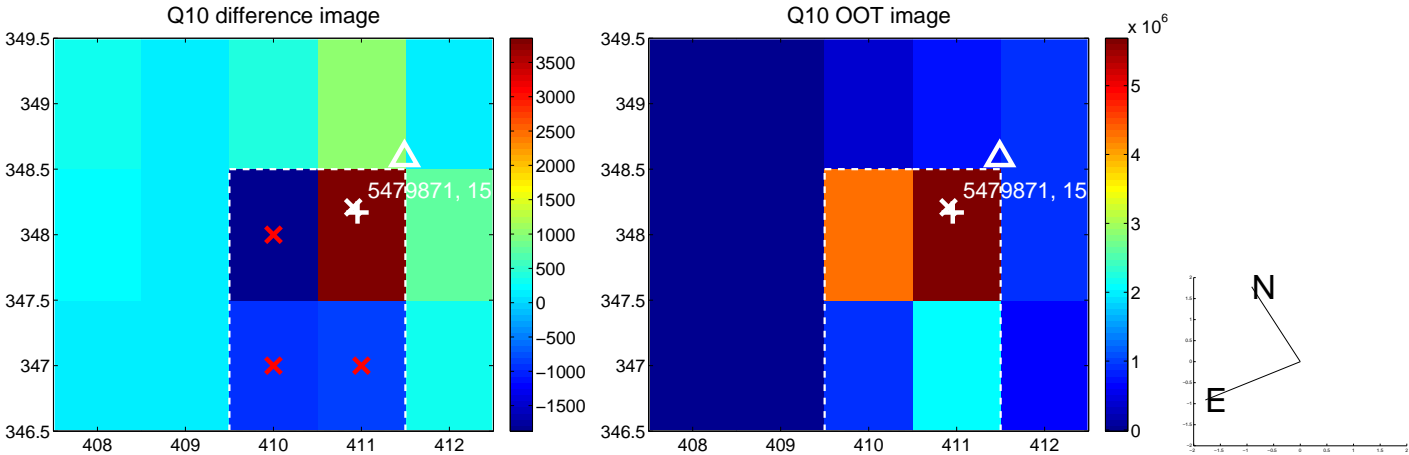
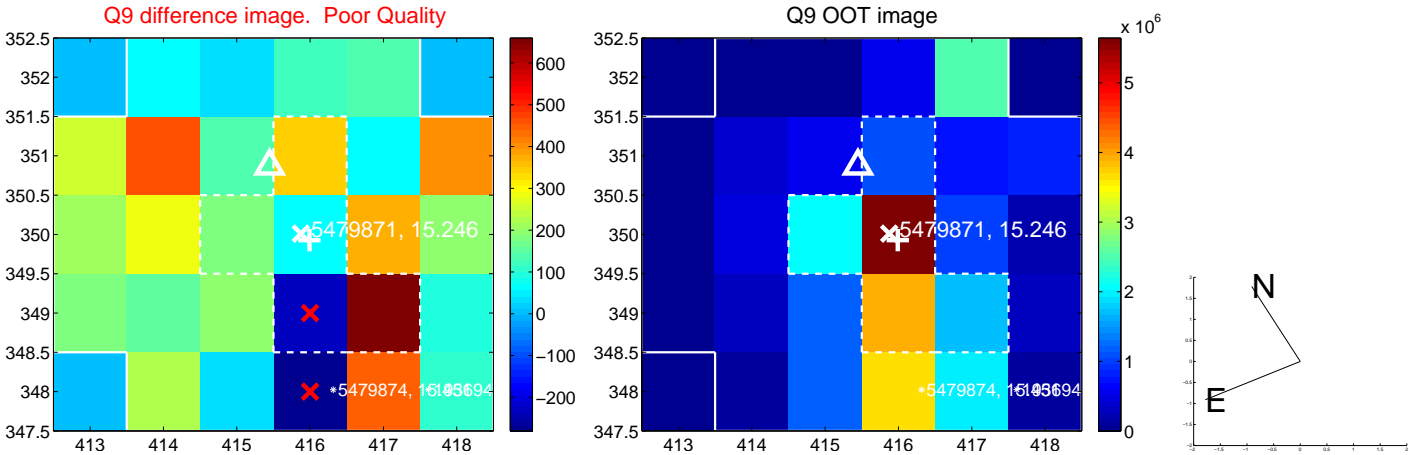
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



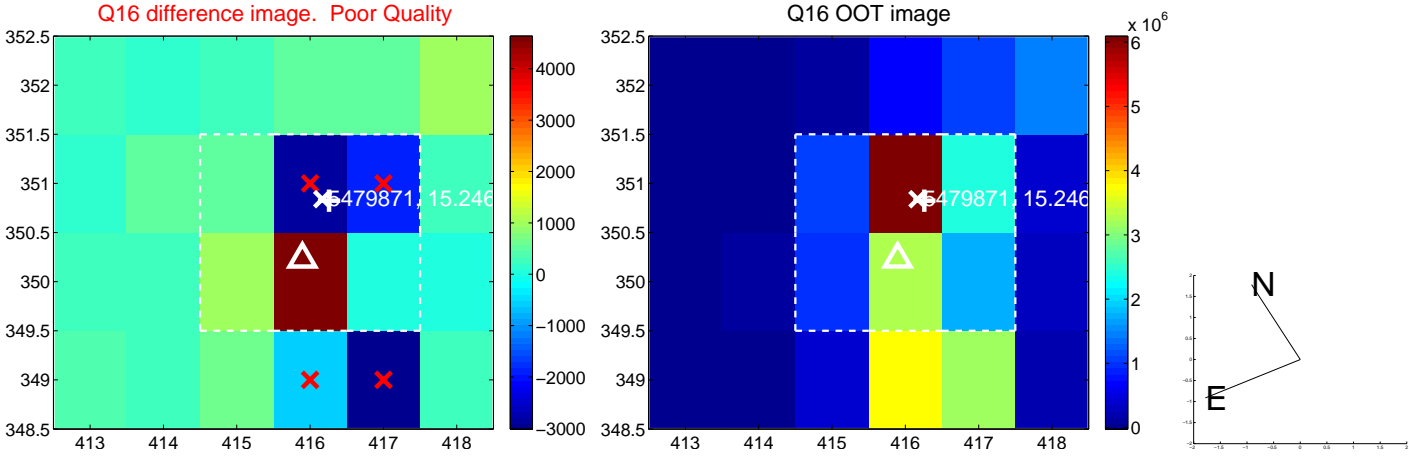
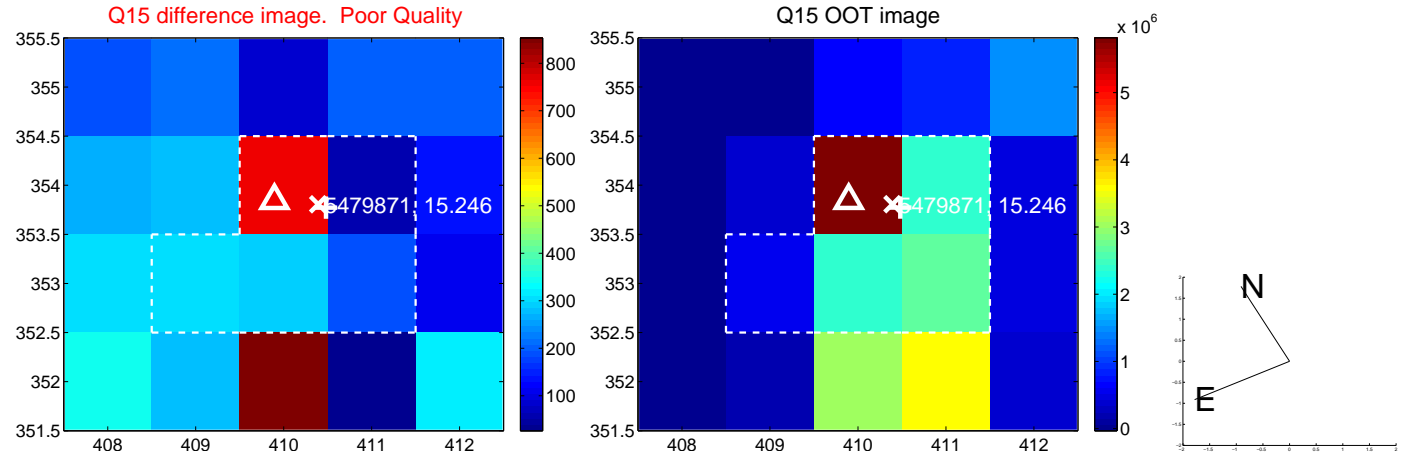
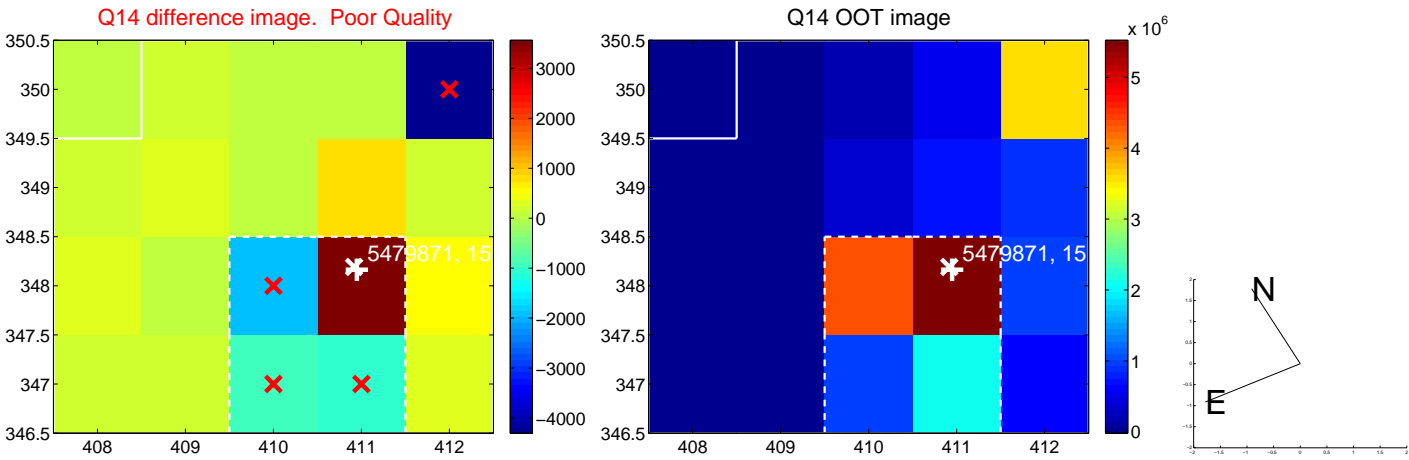
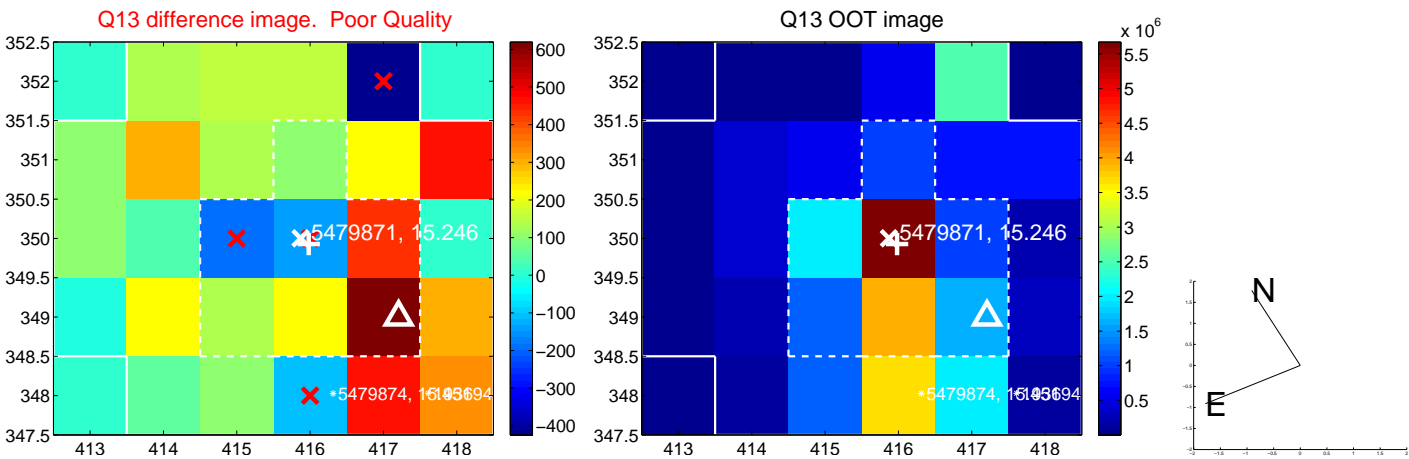
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



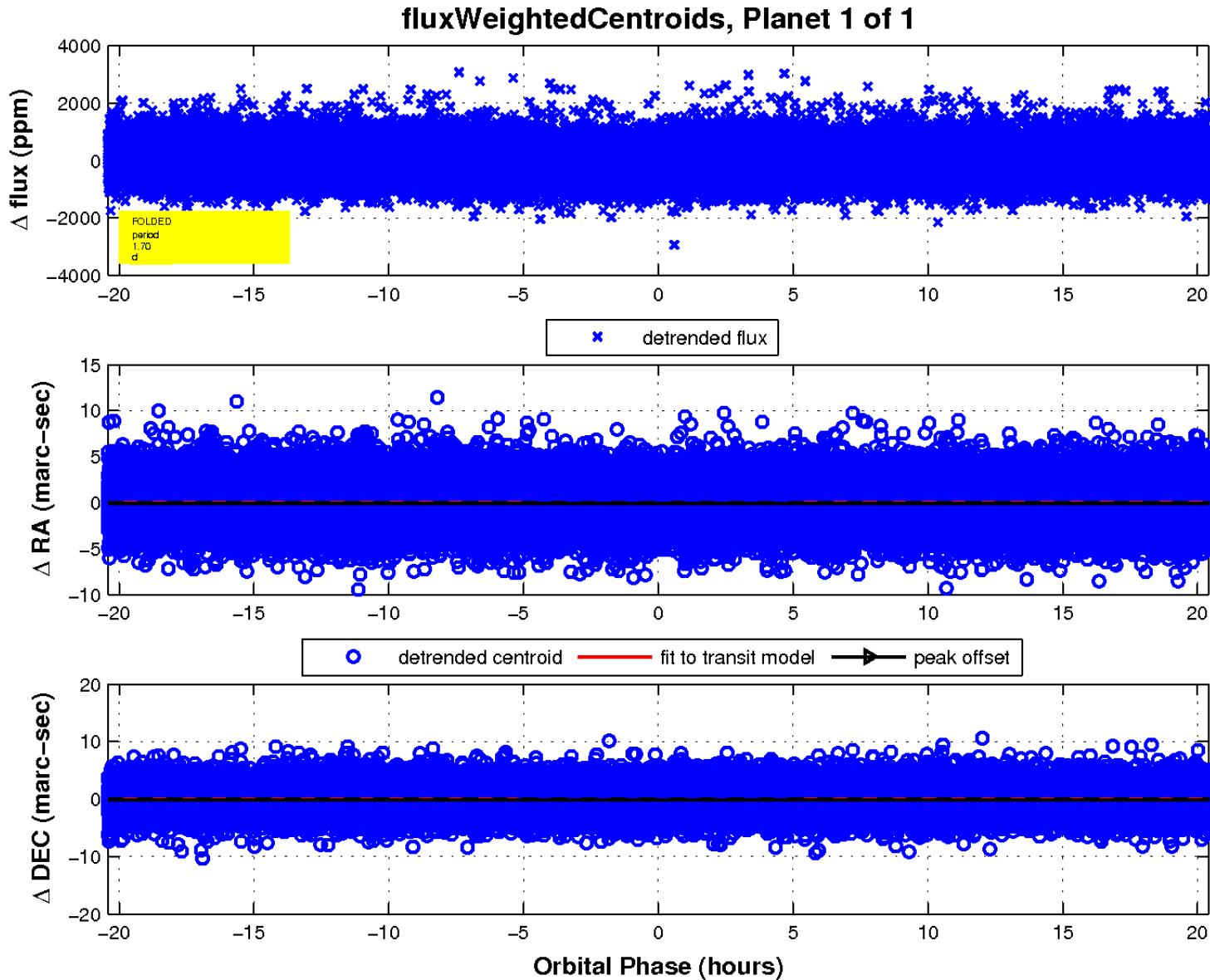
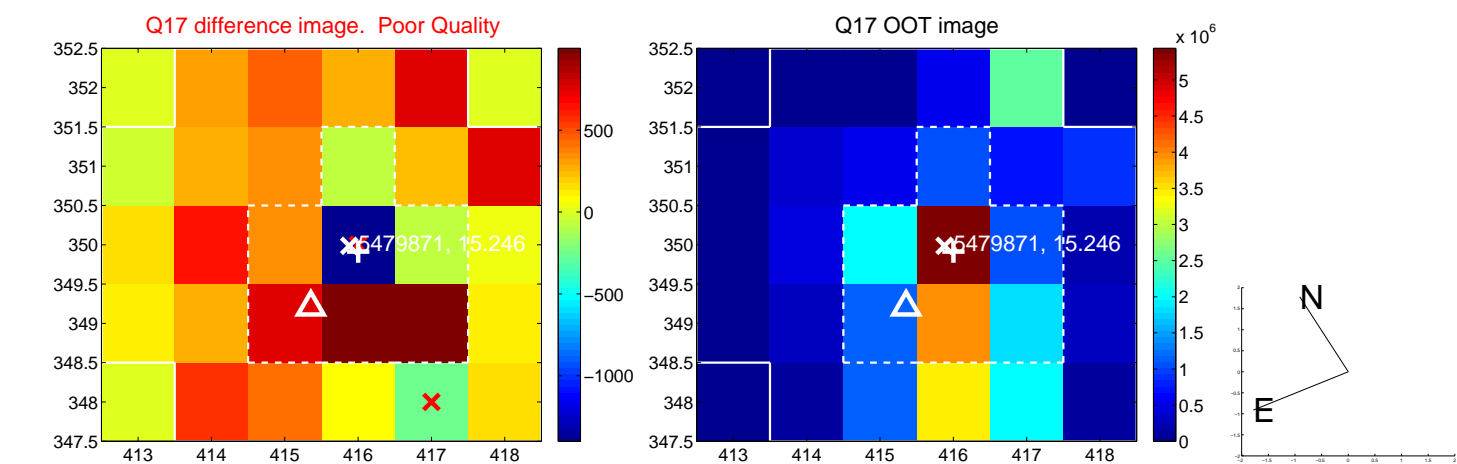
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



UKIRT Image

Declination

