

KIC 005473611

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})
005473611-01	OBS	No	1.245650	131.869776	163.6	9.907	9.2	15.3	0.88	5482	1.10	1421.66

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
005473611-01	OBS	FP	0.00	1	0	0	0	LPP_DV—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.

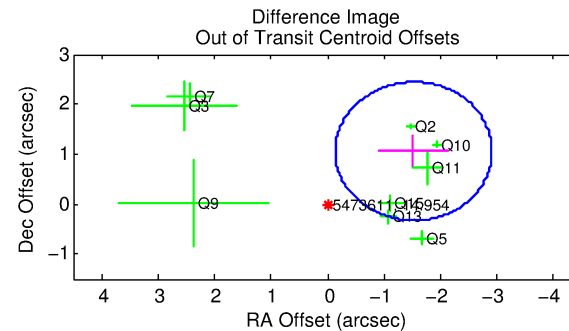
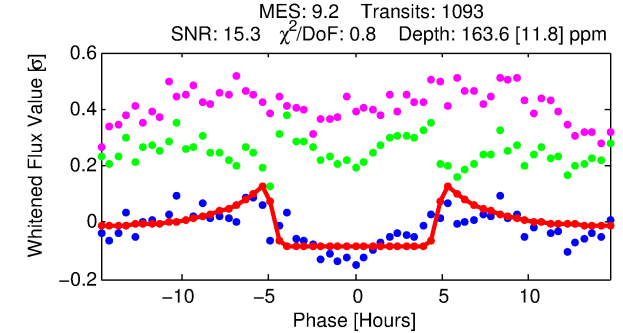
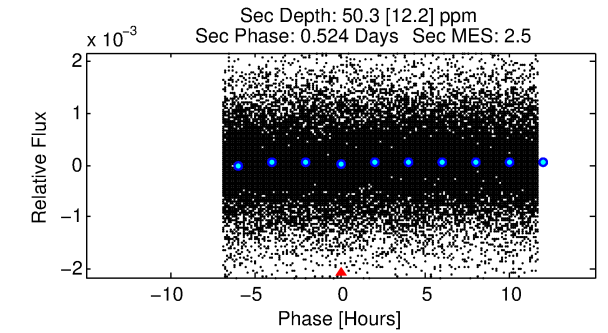
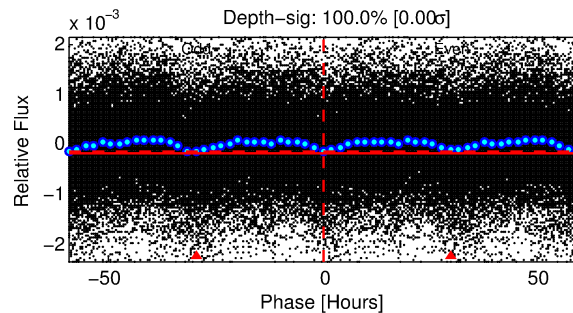
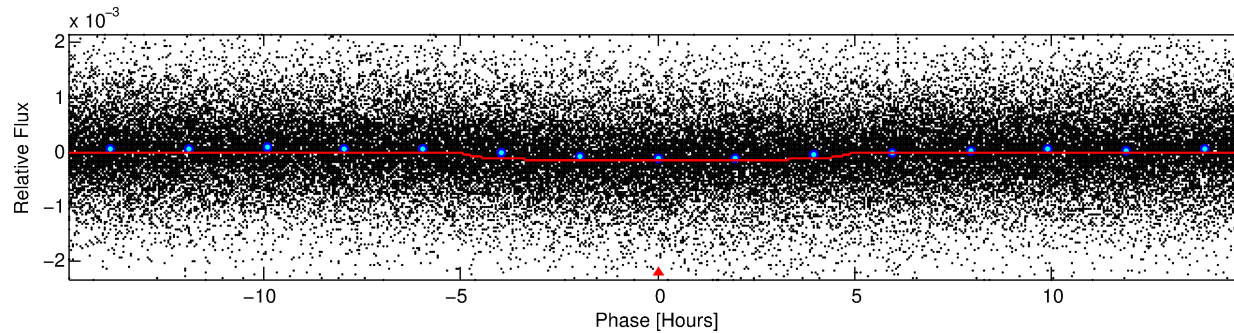
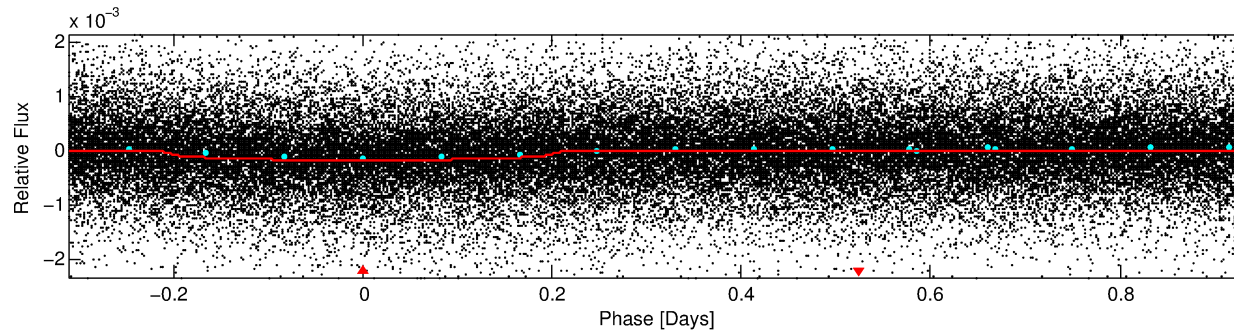
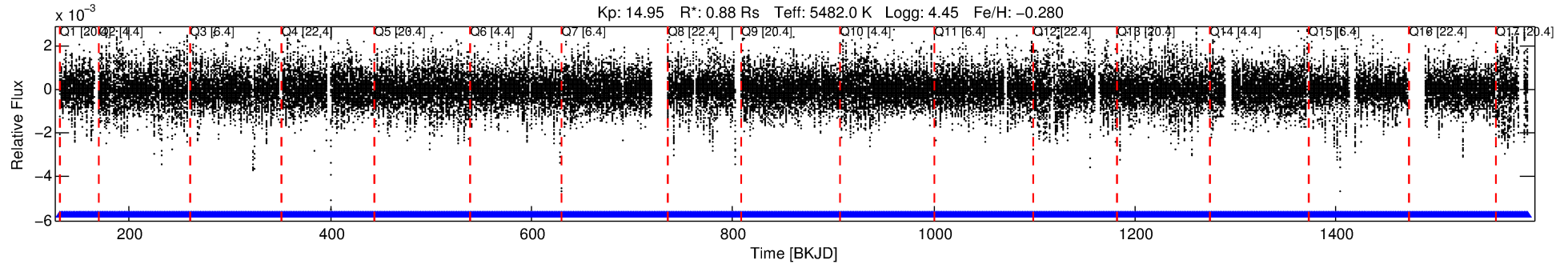
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 005473611-01

No Significant Match Found

DV One-Page Summary

KIC: 5473611 Candidate: 1 of 1 Period: 1.246 d



DV Fit Results:

Period = 1.24565 [0.00001] d
Epoch = 131.8698 [0.0024] BKJD
Rp/R* = 0.0116 [0.0045]
a/R* = 1.17 [0.51]
b = 0.10 [16.32]
Seff = 1421.66 [430.58]
Teq = 1566 [119] K
Rp = 1.10 [0.49] Re
a = 0.0209 [0.0039] AU
Ag = 9.91 [8.52] [1.05 σ]
Teffp = 4295 [883] K [3.06 σ]

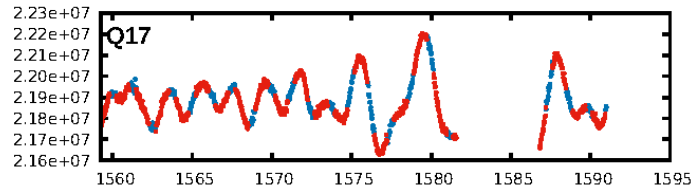
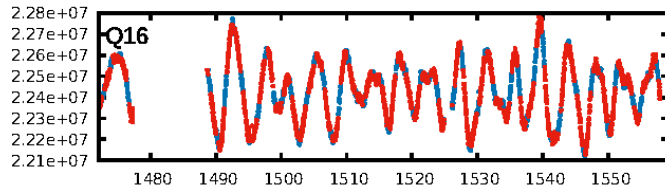
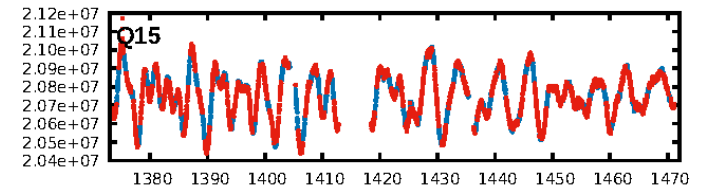
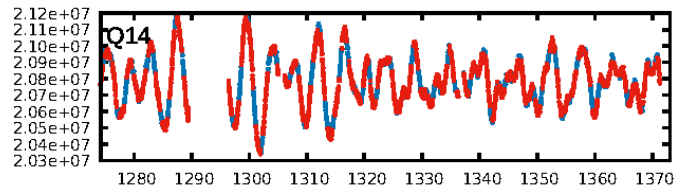
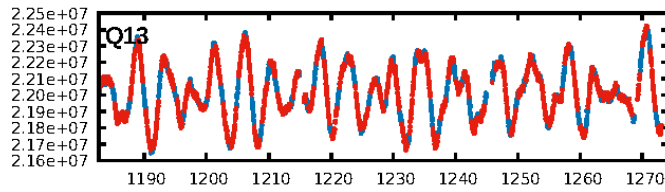
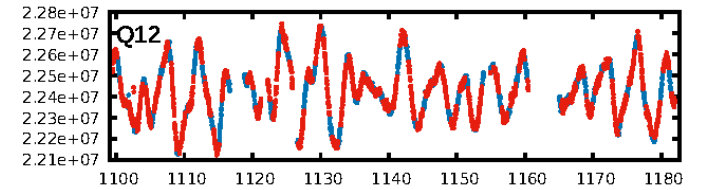
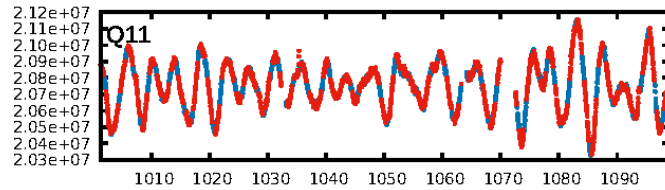
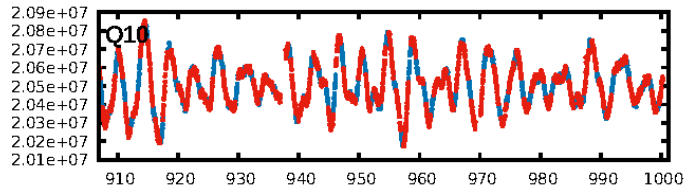
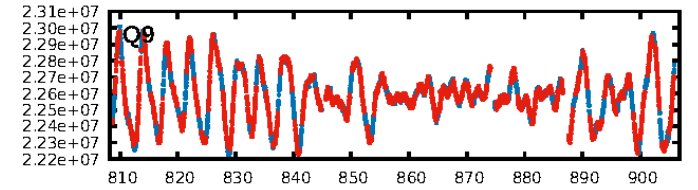
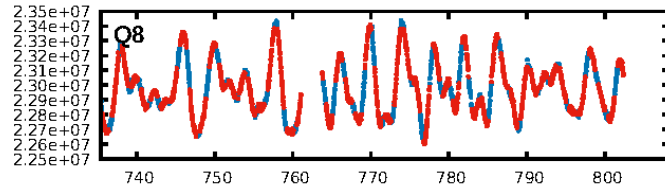
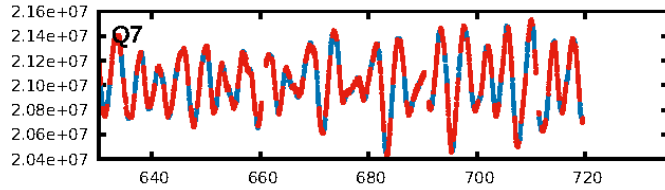
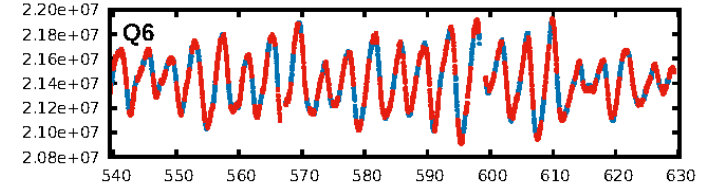
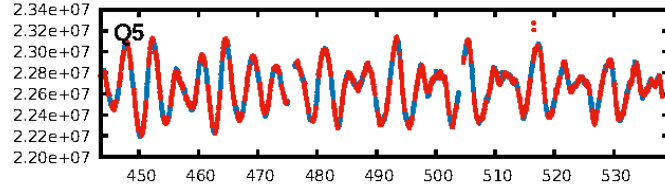
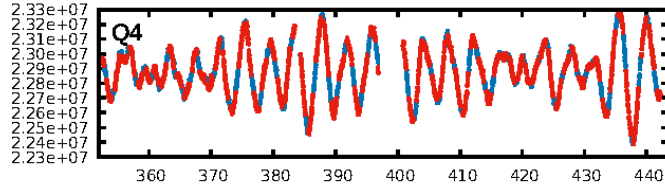
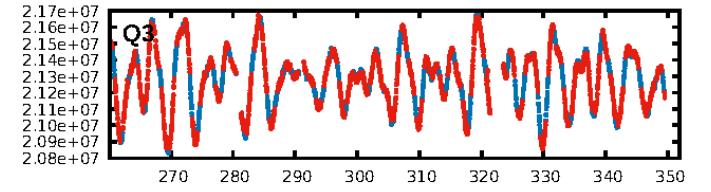
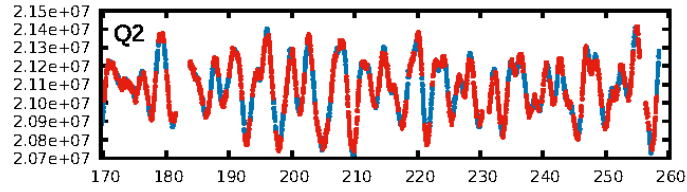
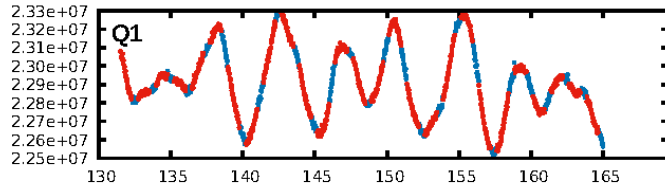
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [1044/1044]
GhostDiagnostic-chr: 1.049
Centroid-sig: 0.1%
Centroid-so: 0.830 arcsec [2.35 σ]
OotOffset-rm: 1.853 arcsec [4.01 σ]
KicOffset-rm: 1.733 arcsec [3.83 σ]
OotOffset-st: 2/4/0/3 [9]
KicOffset-st: 2/4/0/3 [9]
DiffImageQuality-fgm: 0.56 [5/9]
DiffImageOverlap-fno: 1.00 [17/17]

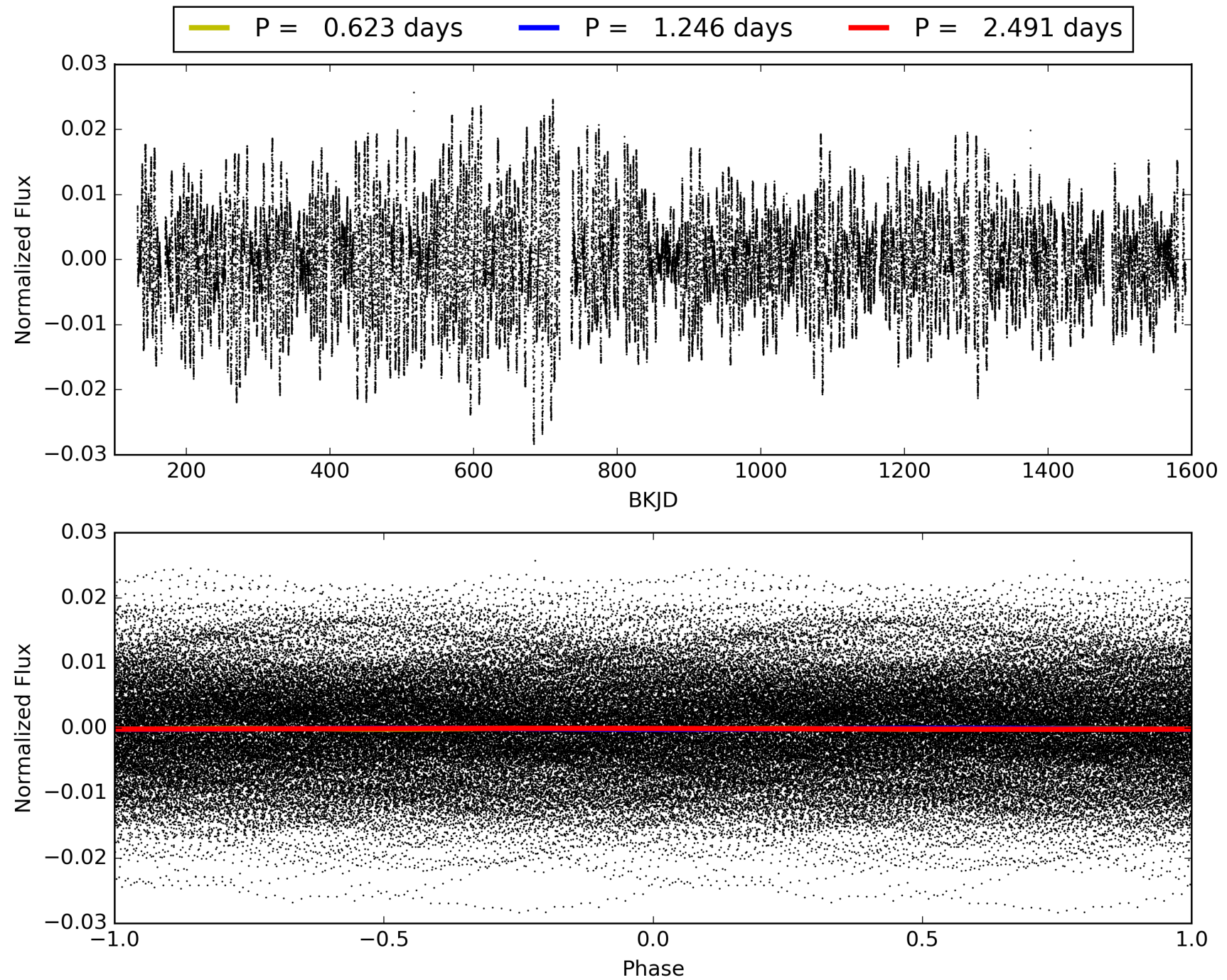
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 29-Jan-2016 16:10:03 Z

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

TCE 005473611-01, PDC Light Curves

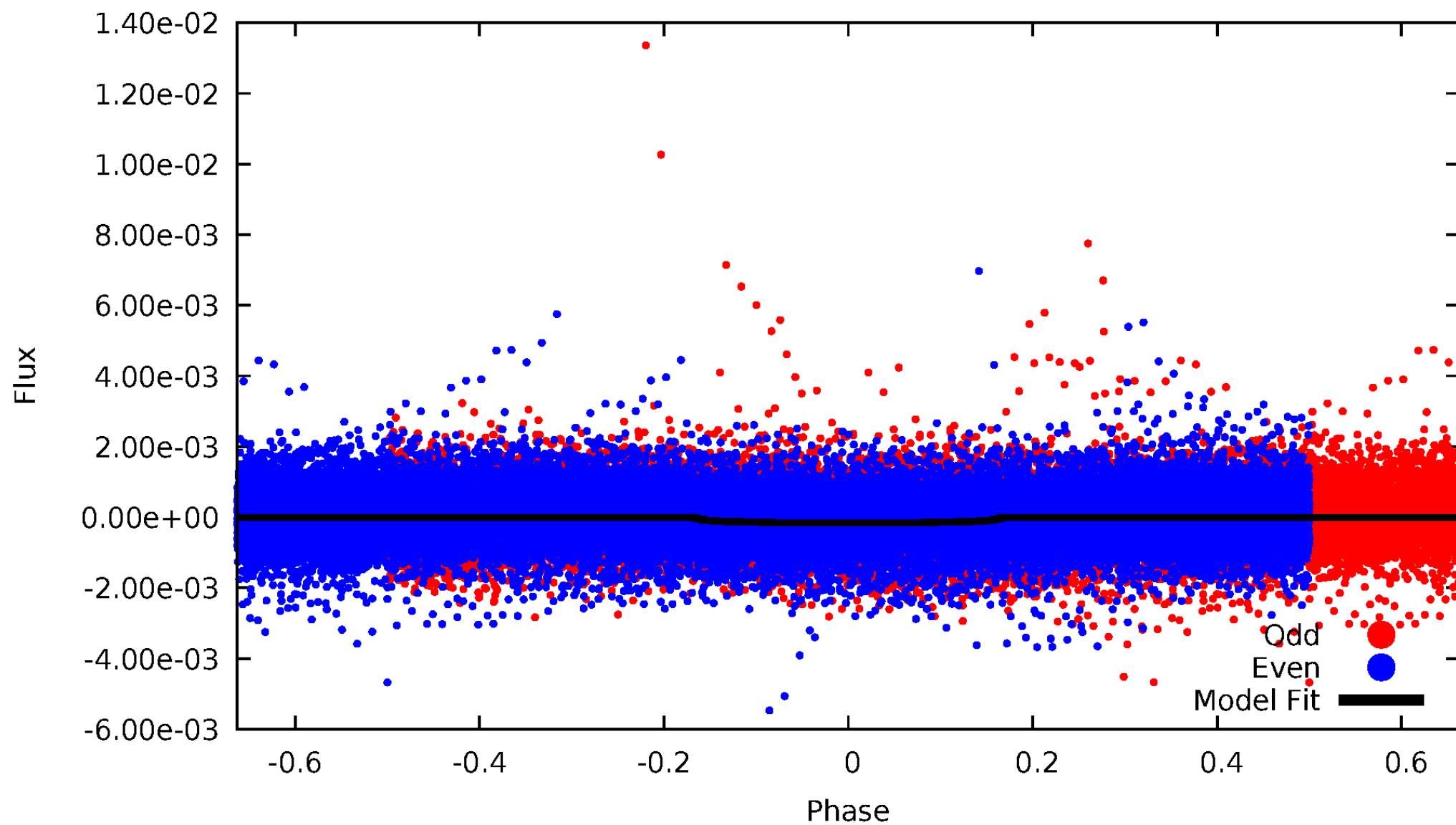


TCE 005473611-01



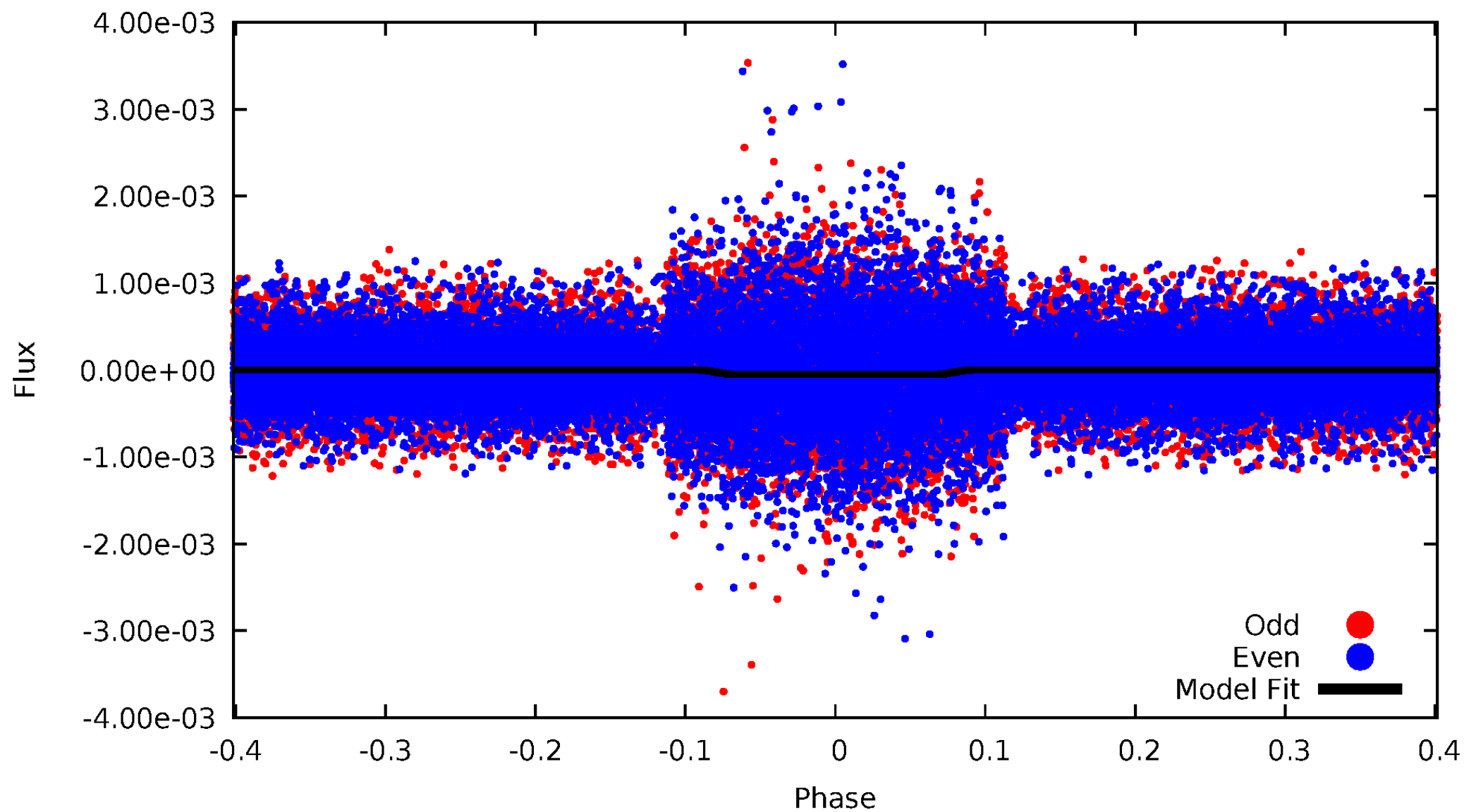
DV Odd/Even

TCE 005473611-01

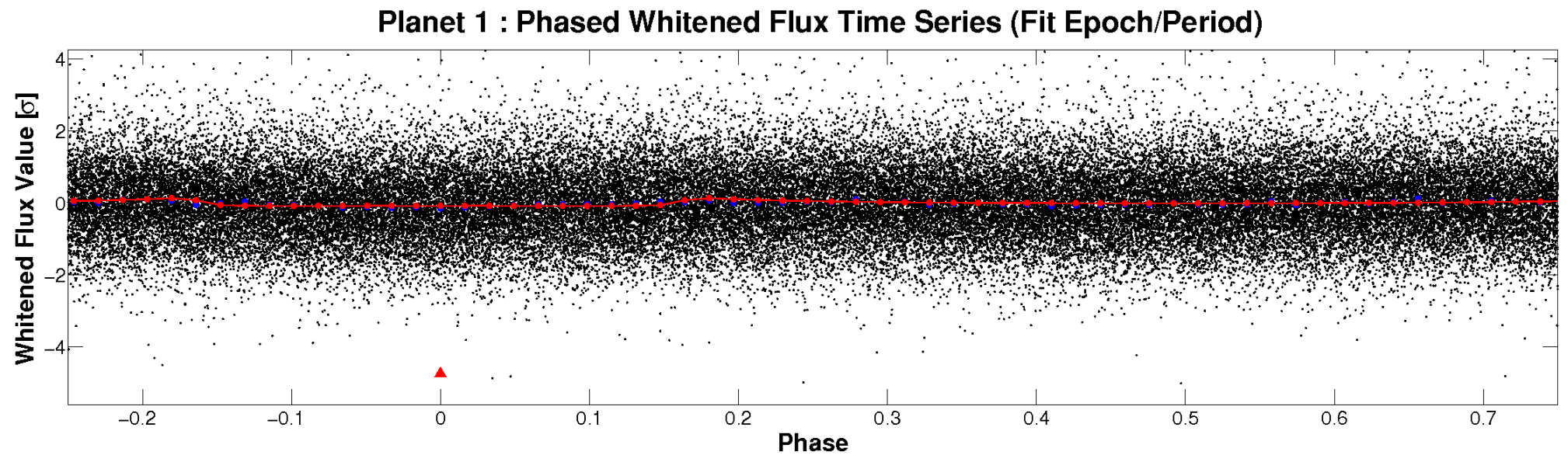
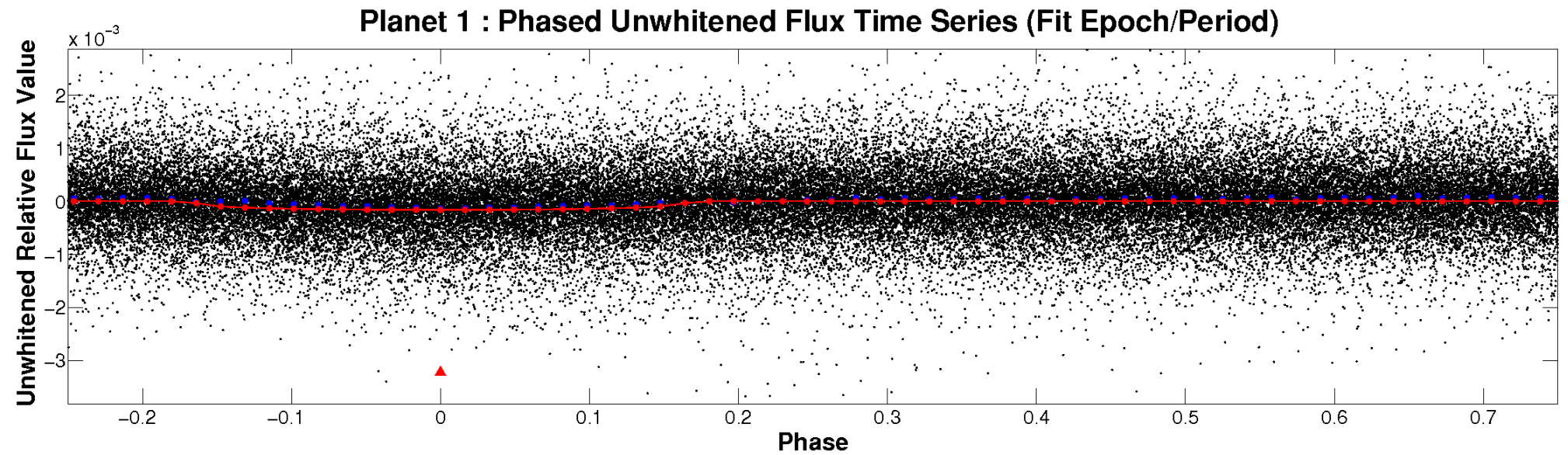


ALT Odd/Even

TCE 005473611-01

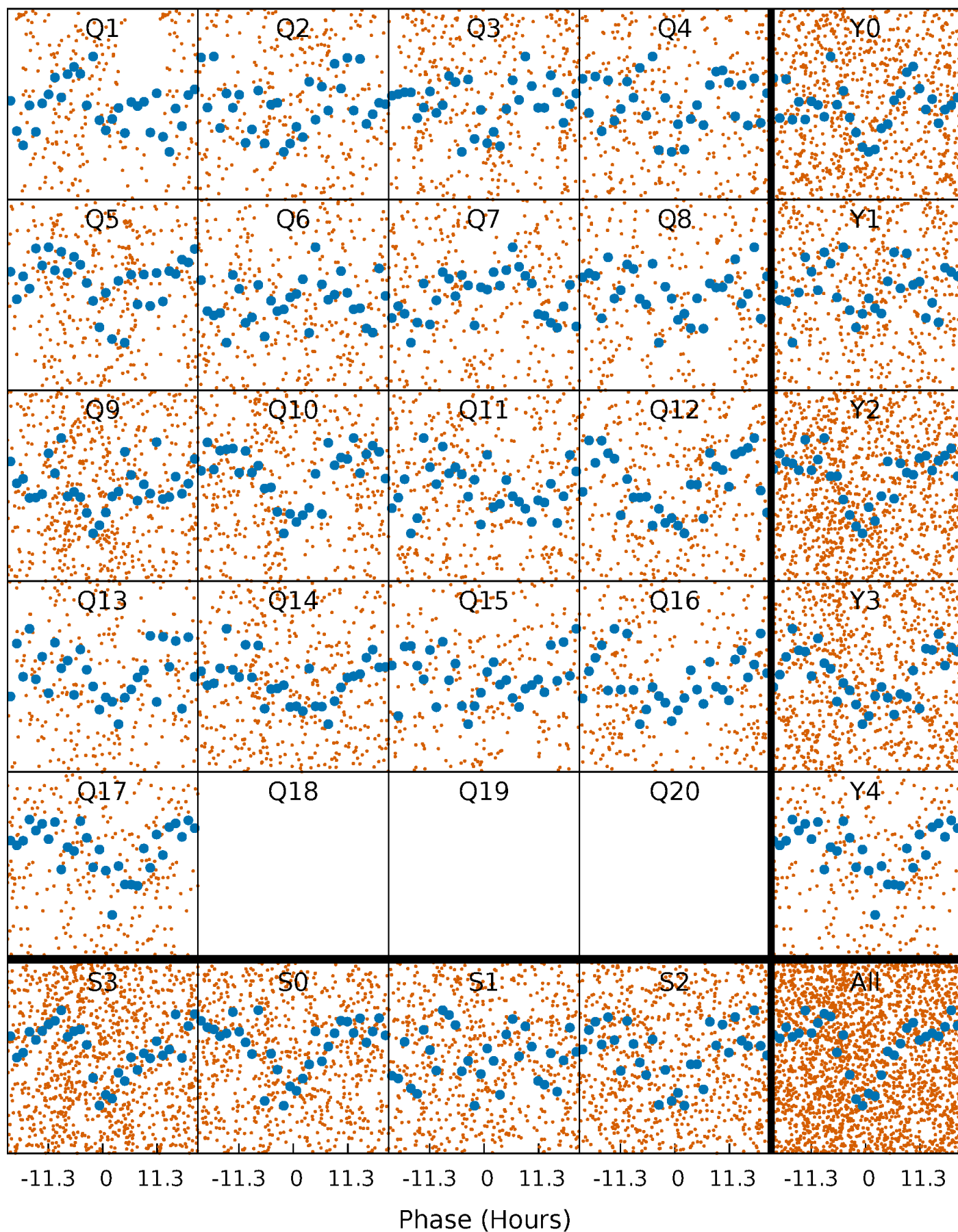


Non-Whitened Vs. Whitened Light Curve



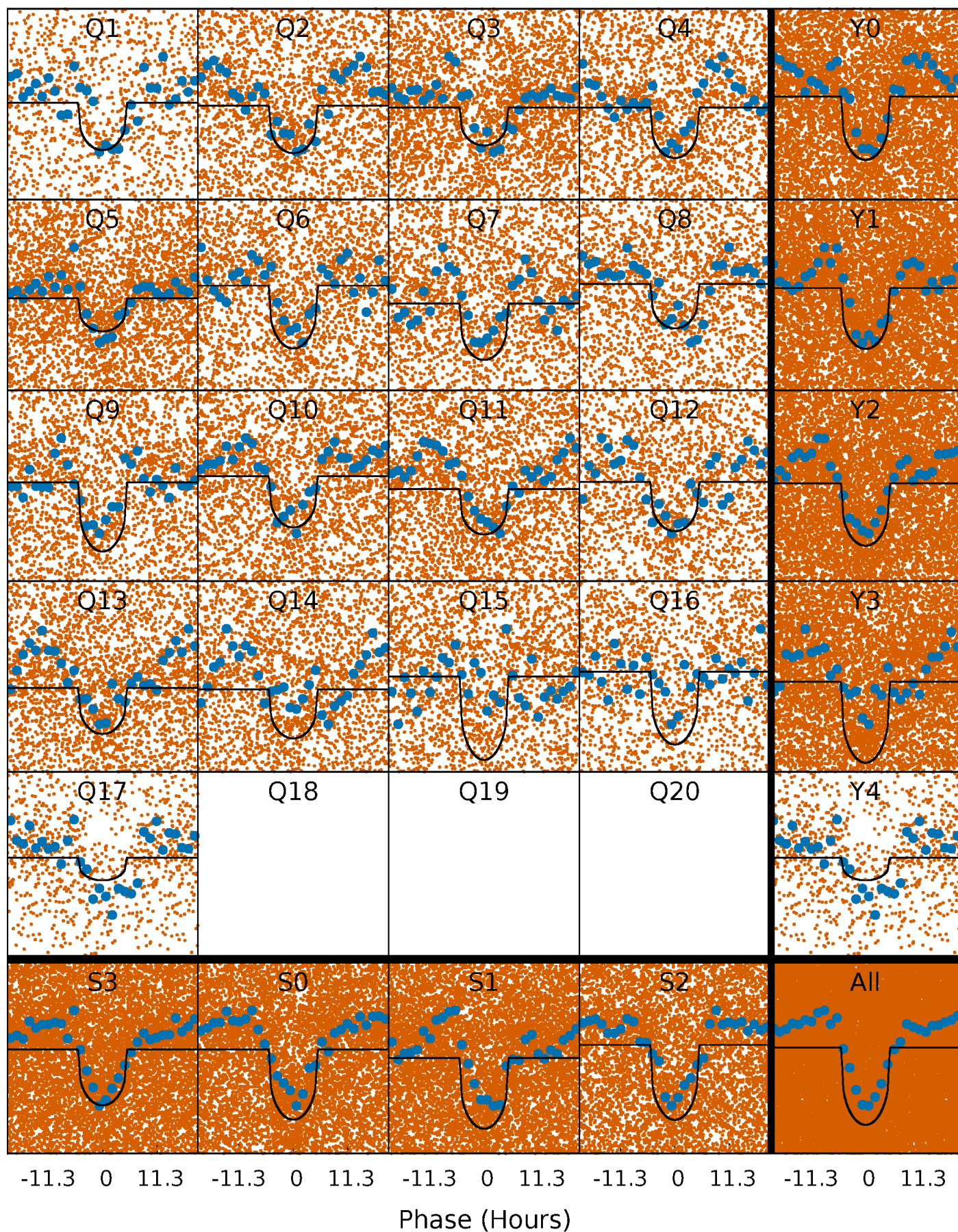
PDC Quarter-Phased Transit Curves

TCE 005473611-01 P= 1.245650 Days $T_0=131.869776$ (BKJD)



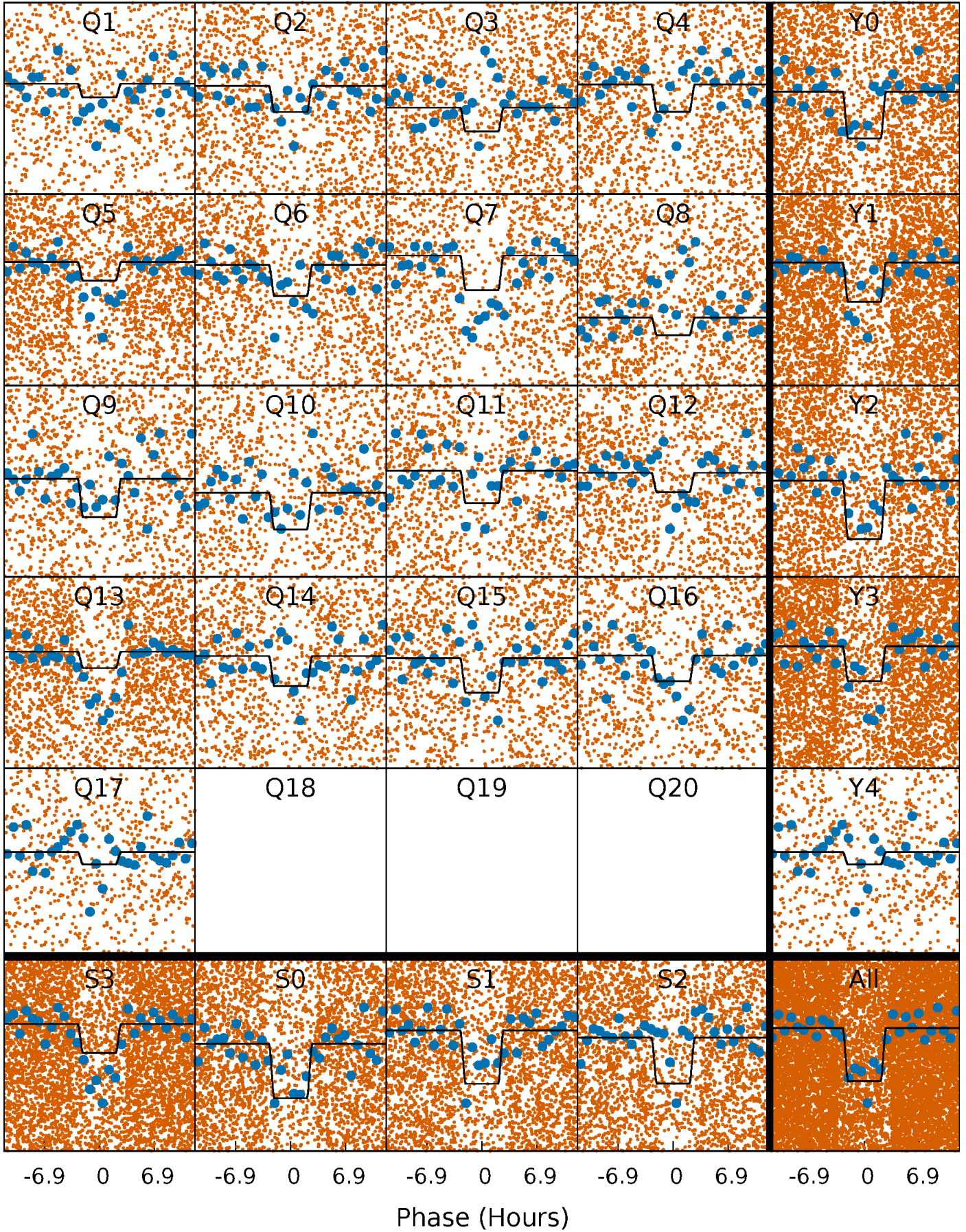
DV Quarter-Phased Transit Curves

TCE 005473611-01 P= 1.245650 Days $T_0=131.869776$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

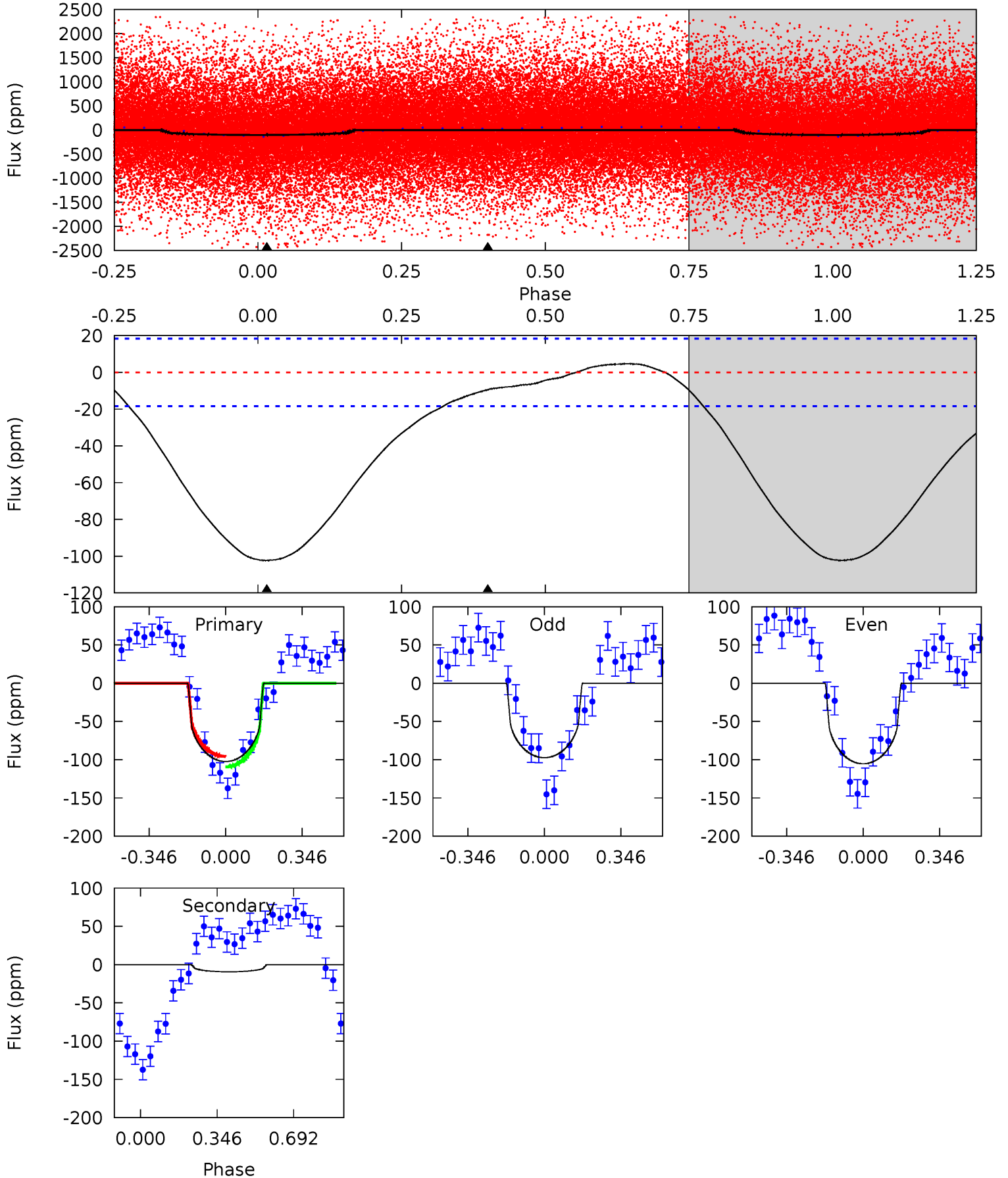
TCE 005473611-01 P= 1.245612 Days $T_0=131.858824$ (BKJD)



DV Model-Shift Uniqueness Test

005473611-01, P = 1.245650 Days, E = 130.624126 Days

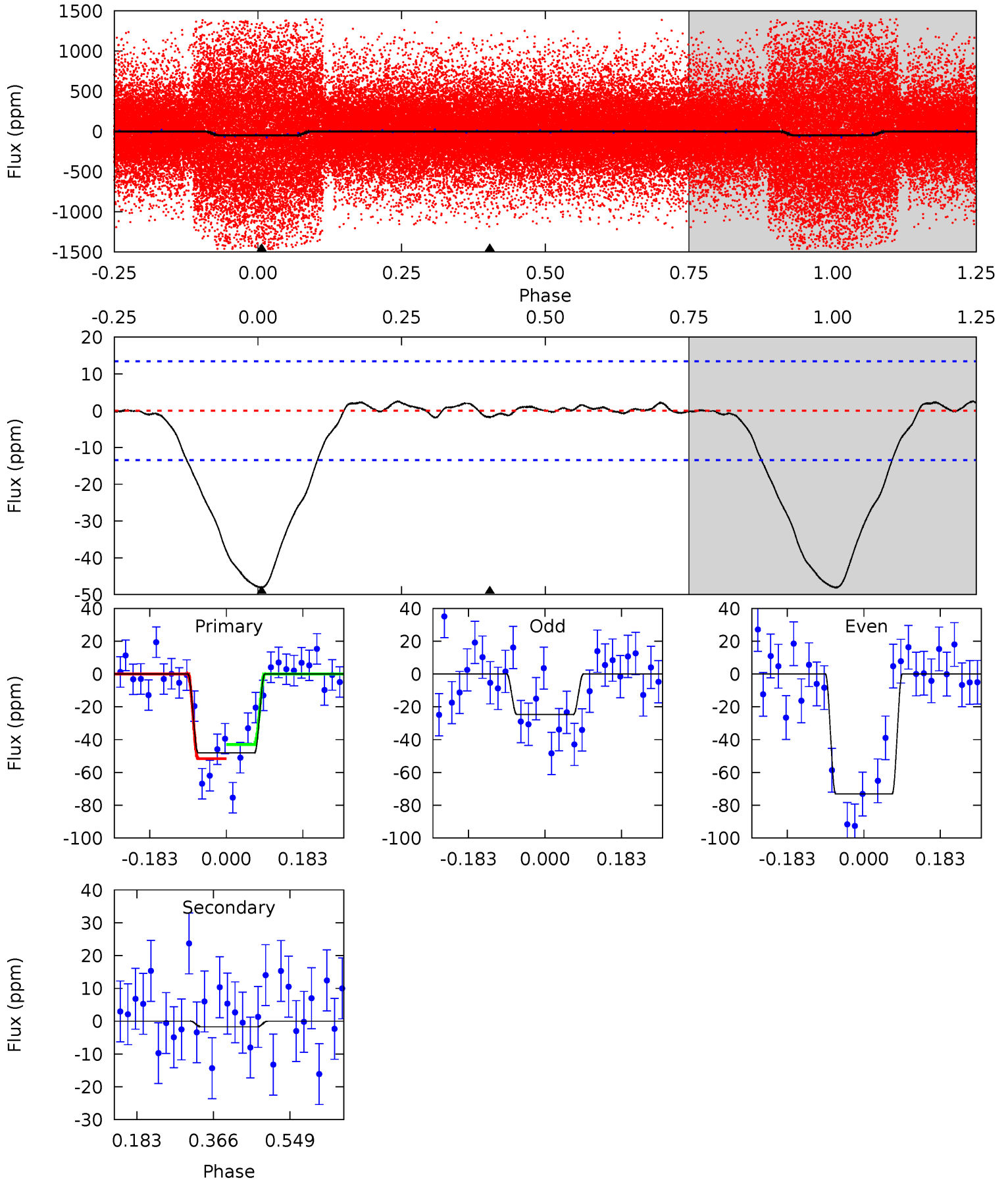
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
24.0	2.20	0	0	4.30	0.94	1.17	24.0	24.0	2.20	2.20	0.94	1.07	0.04	1.63



Alt Model-Shift Uniqueness Test

005473611-01, P = 1.245612 Days, E = 130.613212 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
15.9	0.57	0	0	4.44	1.33	0.23	15.9	15.9	0.57	0.57	7.87	1.14	0.05	1.40



Stellar Parameters For KIC 005473611

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	5482^{+166}_{-166}	$4.447^{+0.126}_{-0.154}$	$-0.280^{+0.300}_{-0.300}$	$0.875^{+0.191}_{-0.127}$	$0.783^{+0.116}_{-0.058}$	$1.644^{+0.902}_{-0.682}$
	+3%/-3%	+3%/-3%	+107%/-107%	+22%/-15%	+15%/-7%	+55%/-41%
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 005473611-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-9 ± 4	$1.11^{+0.42}_{-0.45}$	2190^{+138}_{-124}	3229^{+719}_{-502}	$1.780^{+3.556}_{-1.053}$
Alt.	-2 ± 3	$0.70^{+0.47}_{-0.38}$	2194^{+127}_{-111}	2705^{+1197}_{-5681}	$0.719^{+4.262}_{-1.183}$

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 $A_{obs} \gg 1.0$

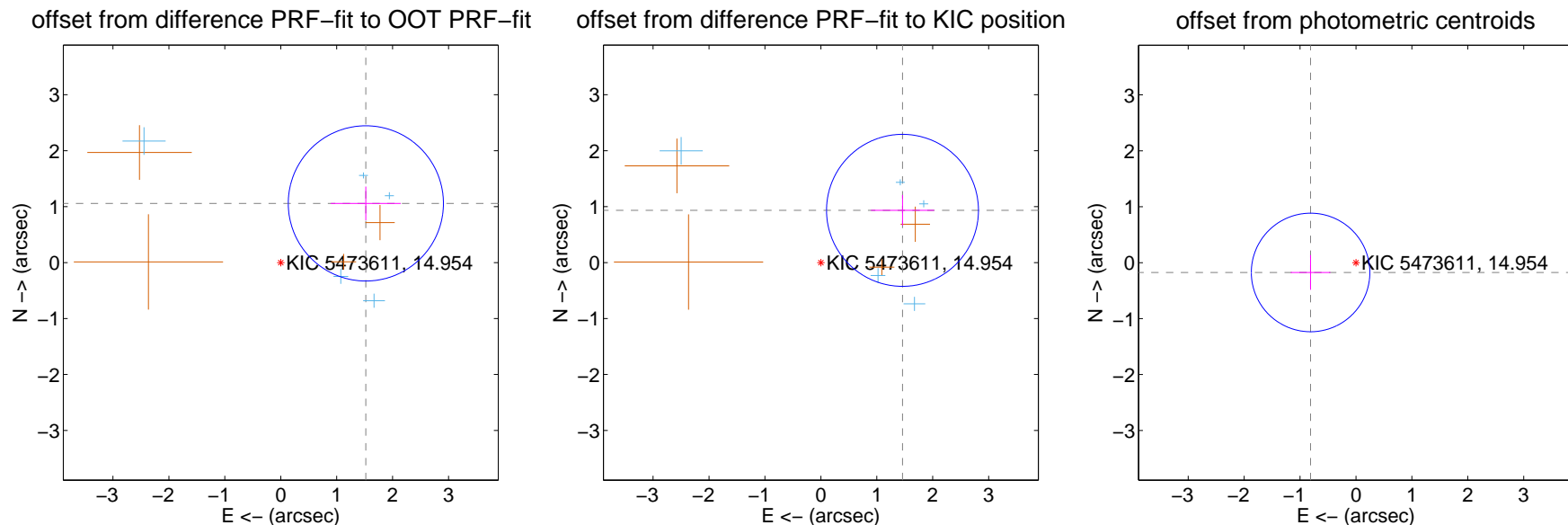
DV Centroid Data

Supplemental centroid analysis for 005473611-01. Kepler magnitude: 14.95. Transit SNR 15.30

There are 5 quarters with good PRF difference image offsets

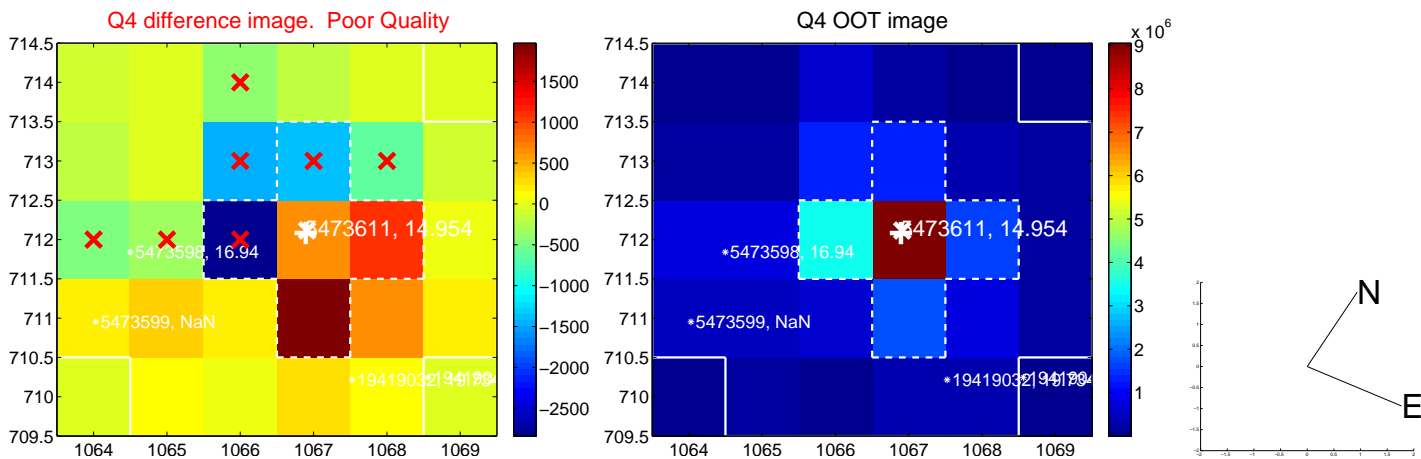
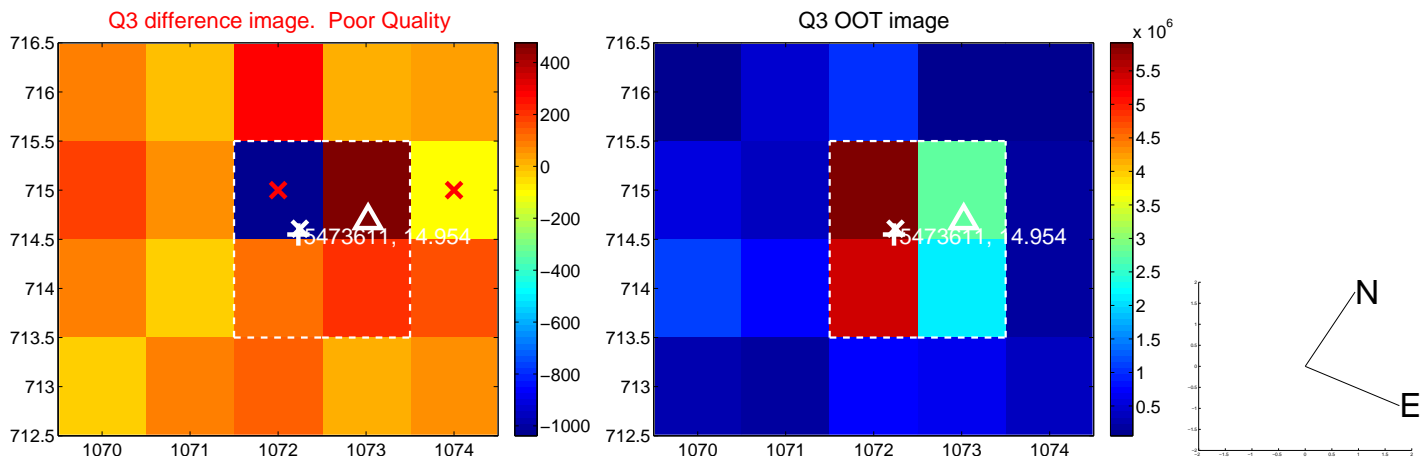
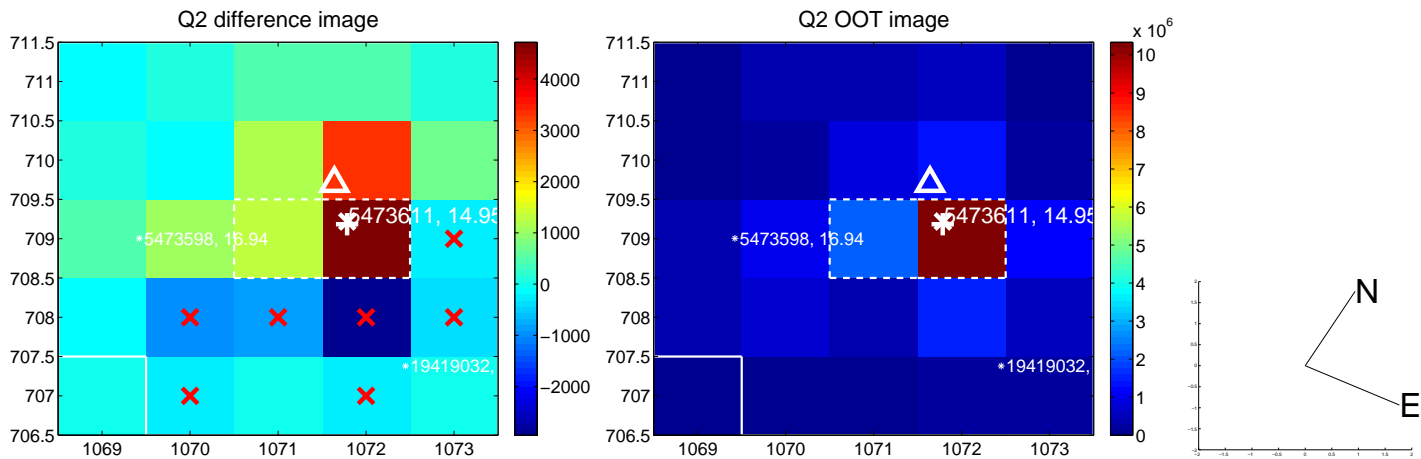
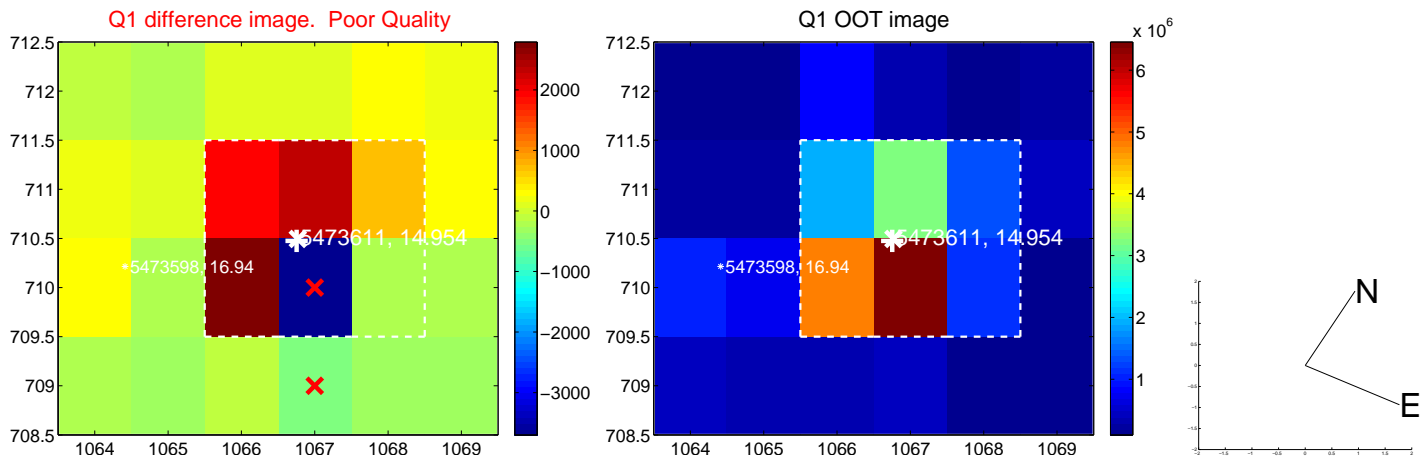
The direct PRF centroid is offset from the target star catalog position by about 0.10 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	1.853 ± 0.462	4.01	-1.521 ± 0.625	1.058 ± 0.301
PRF-fit source offset from KIC position	1.733 ± 0.453	3.83	-1.460 ± 0.565	0.934 ± 0.274
photometric centroid source offset	0.83 ± 0.35	2.35	0.81 ± 0.36	-0.18 ± 0.31

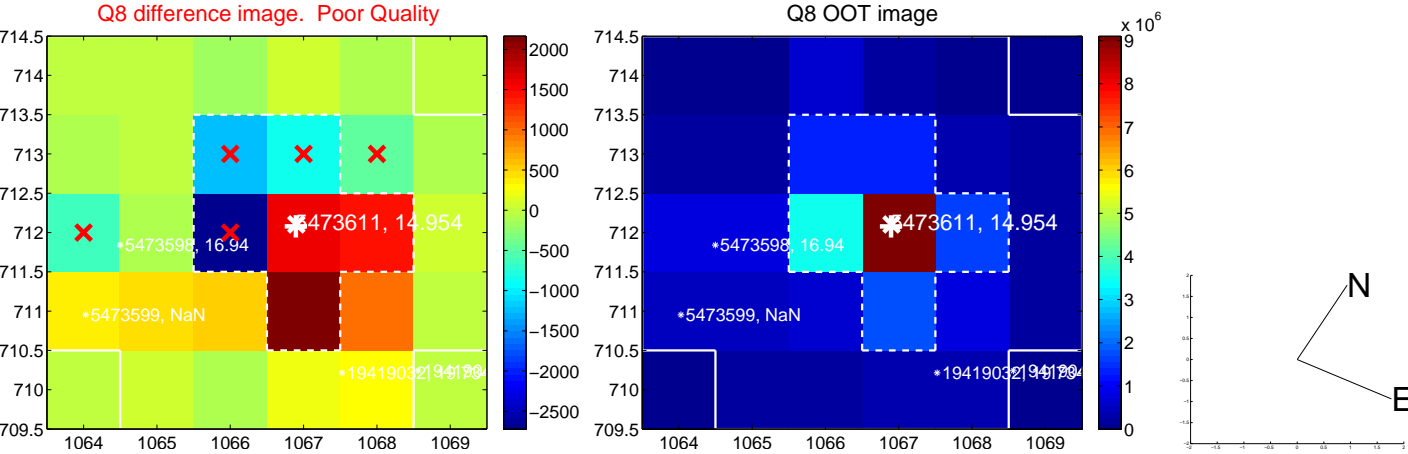
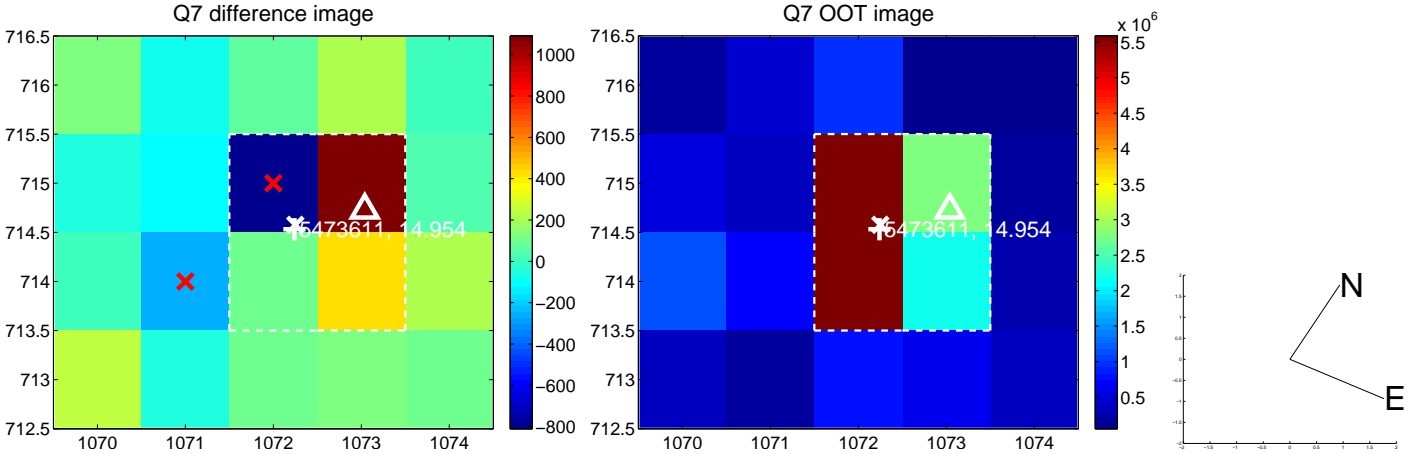
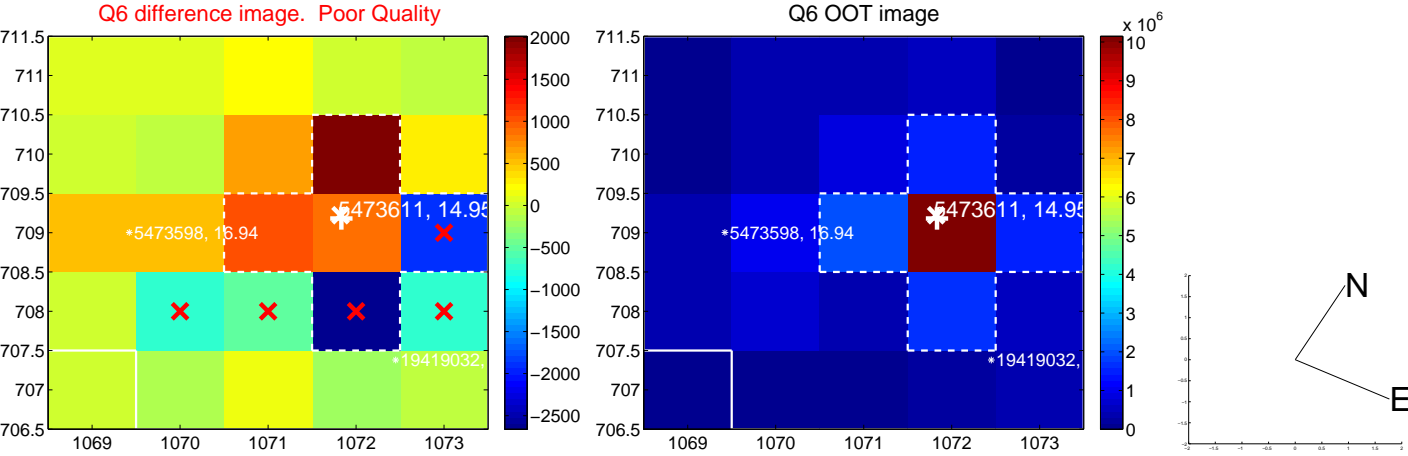
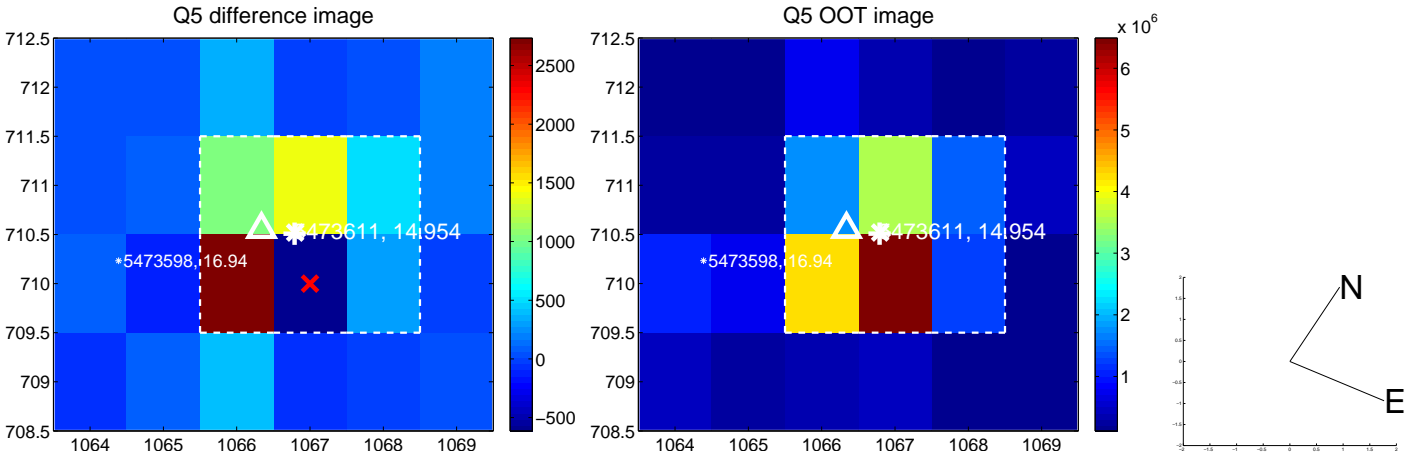


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

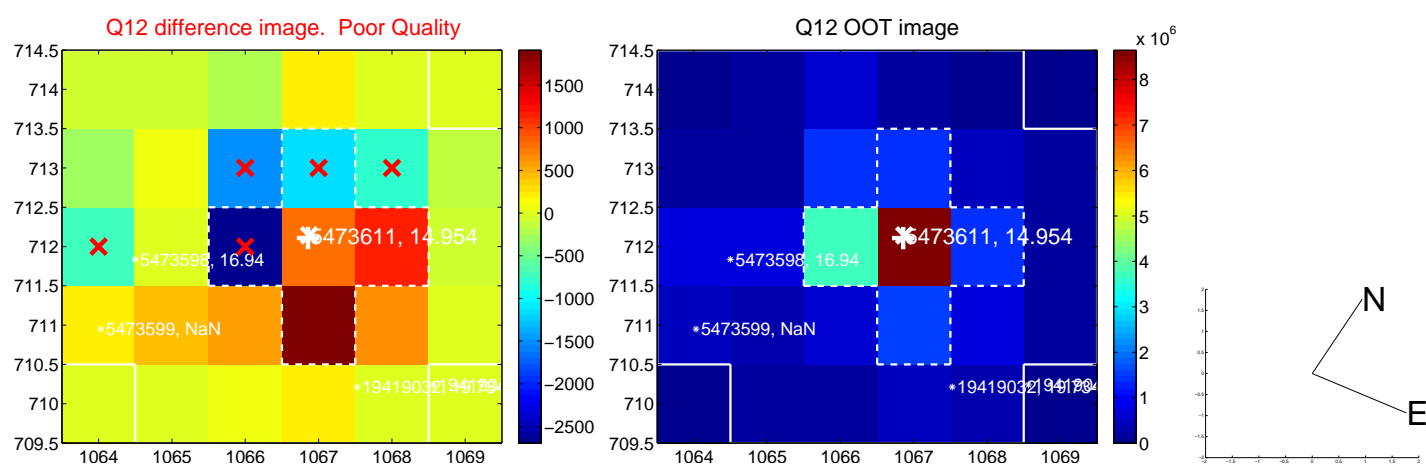
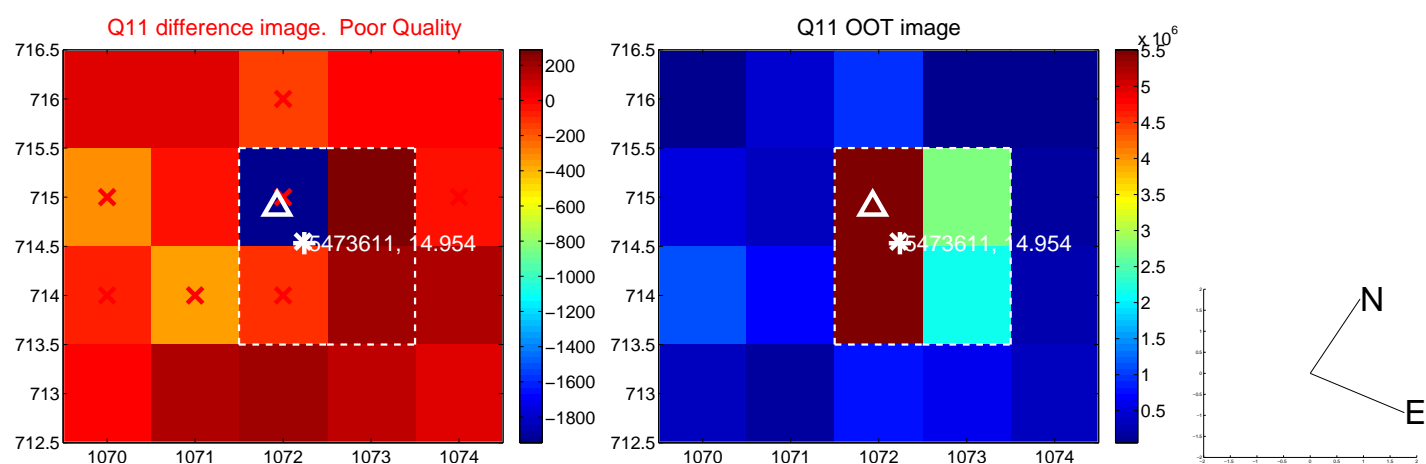
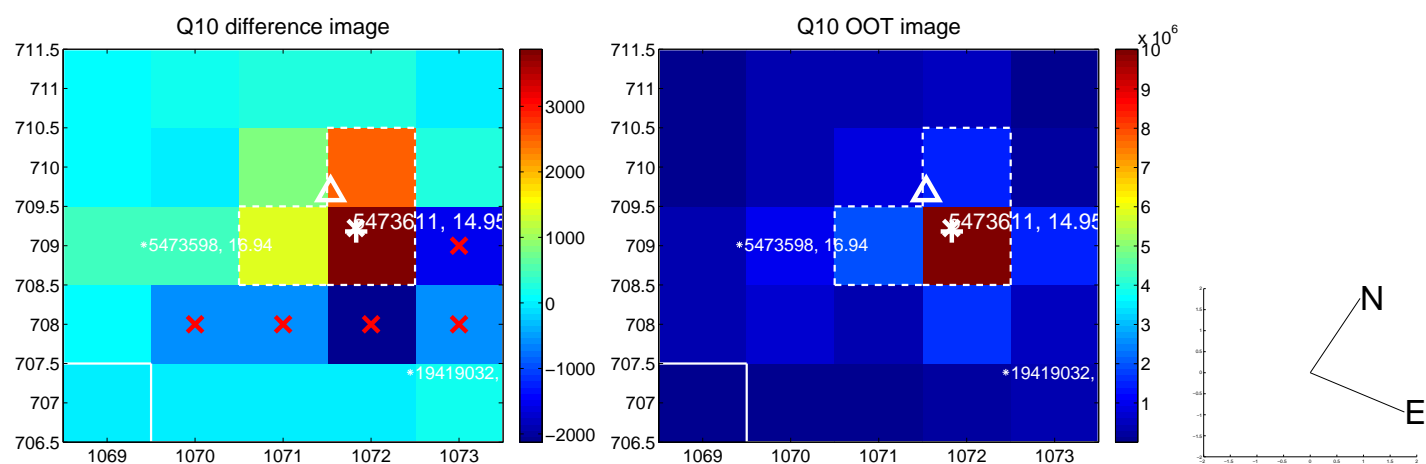
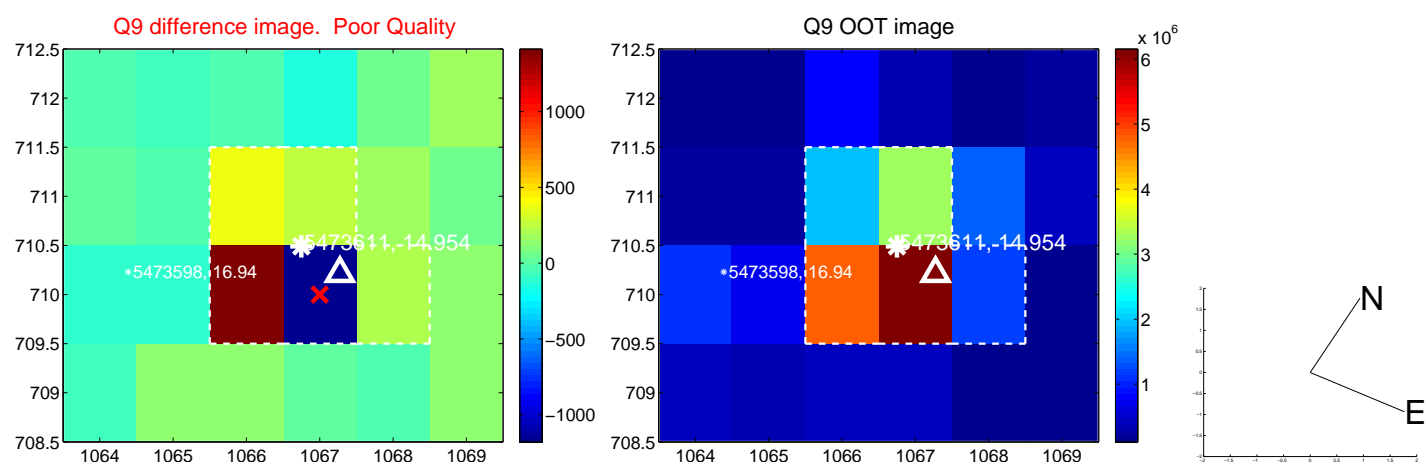
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



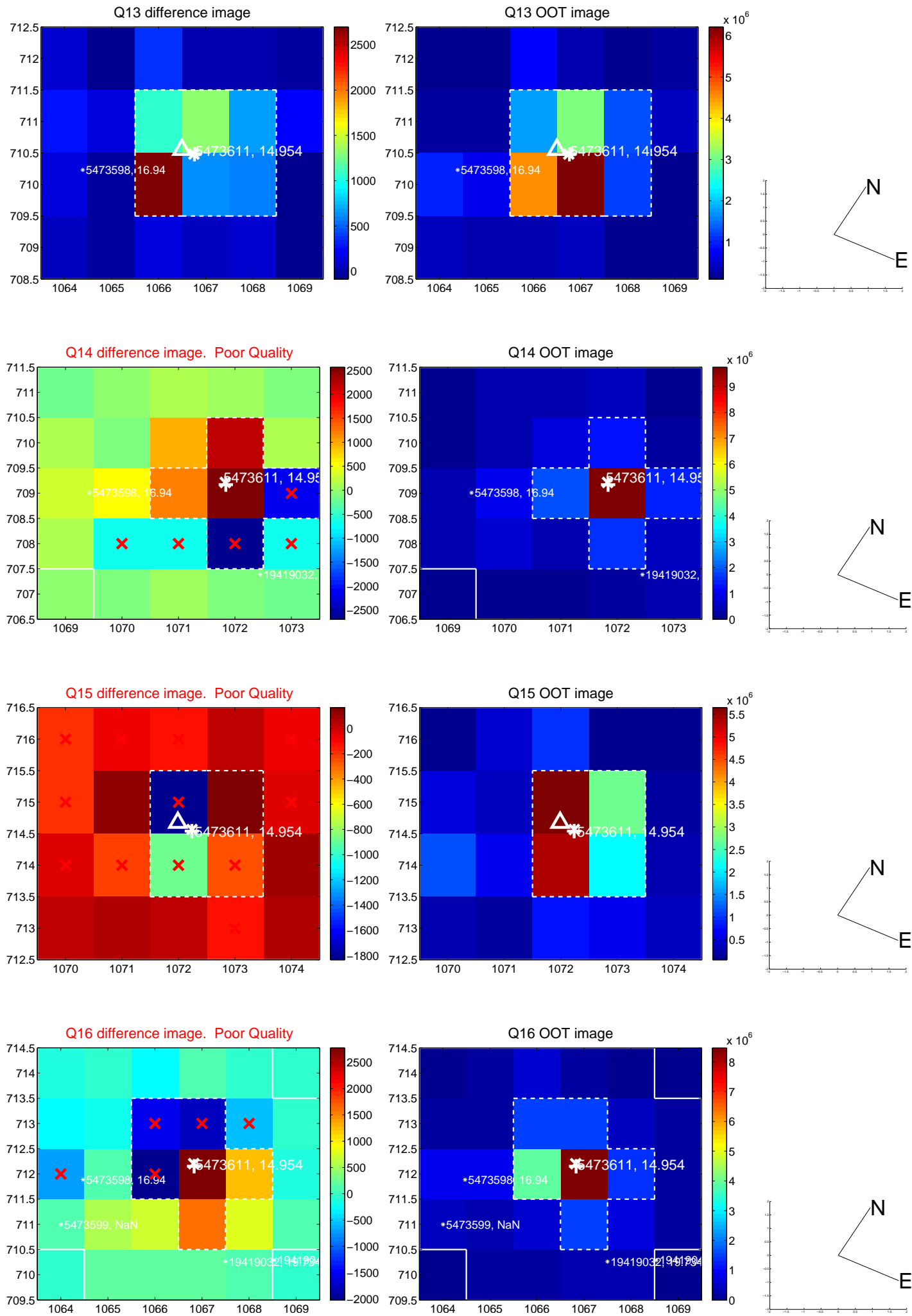
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



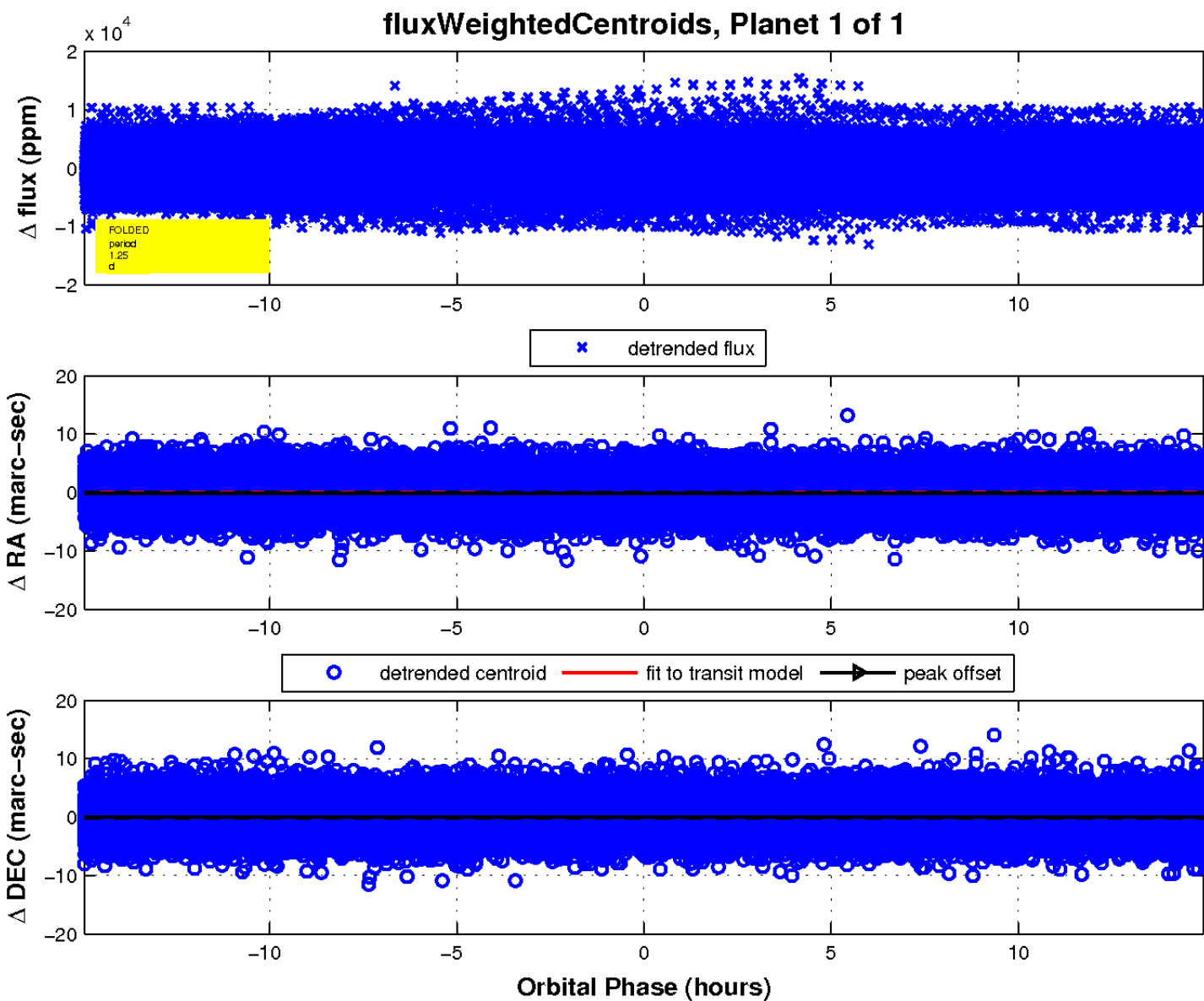
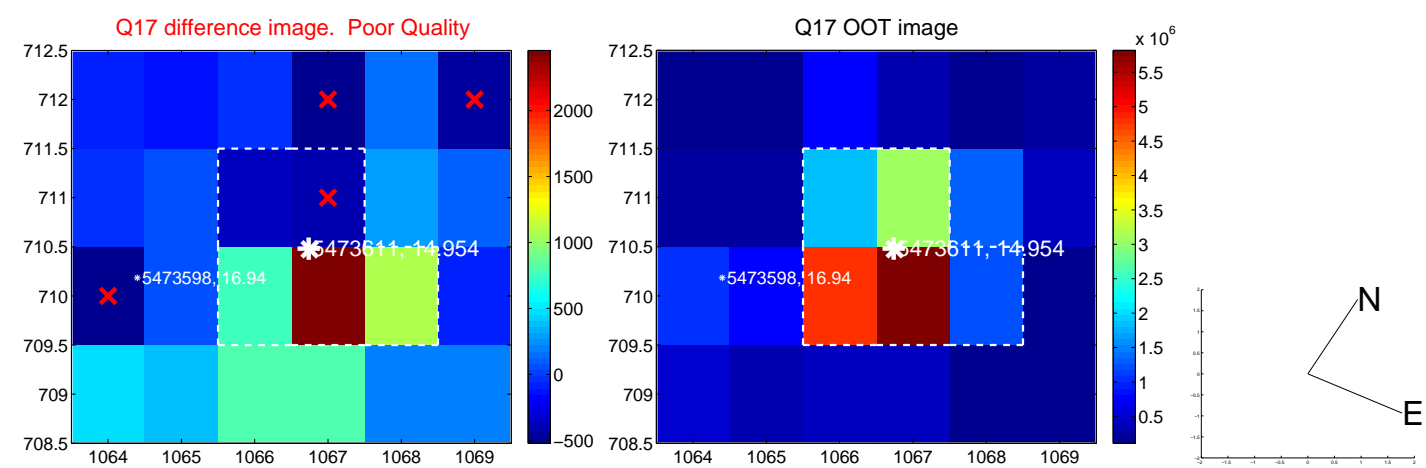
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white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination

