

KIC 007750216

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})
007750216-01	OBS	No	1.530865	132.822517	181.6	9.487	7.3	9.6	2.16	8118	3.83	17464.08

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
007750216-01	OBS	FP	0.00	1	0	0	0	LPP_DV—CENT_FEW_DIFFS

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

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

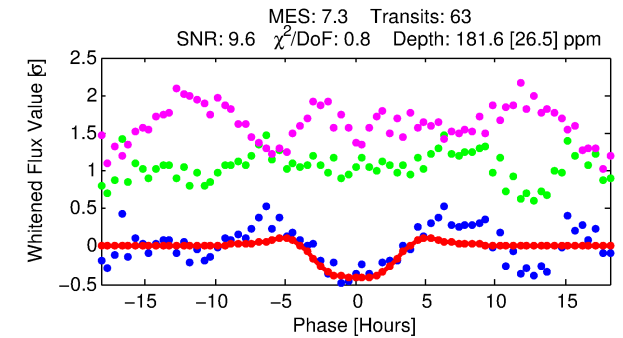
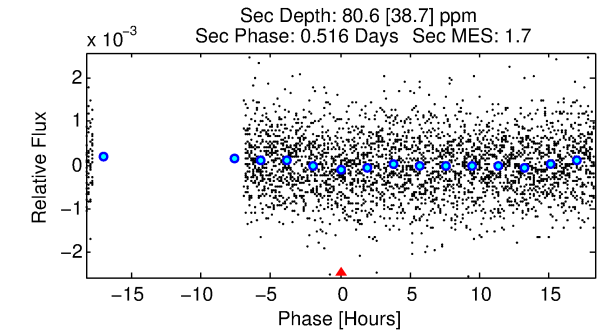
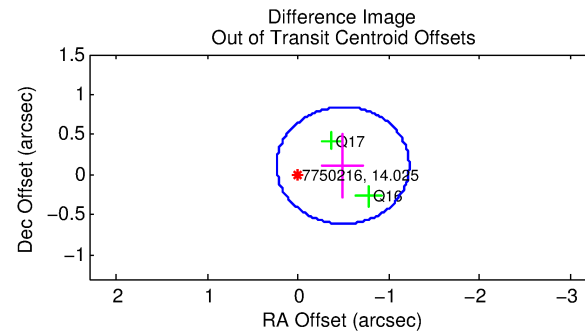
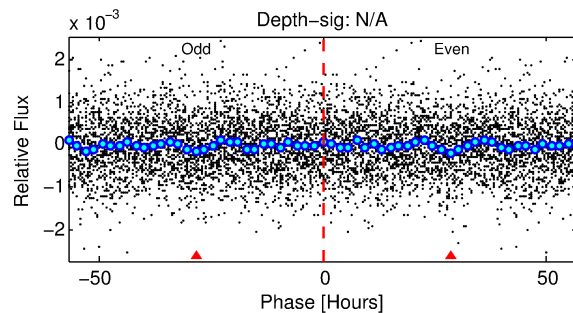
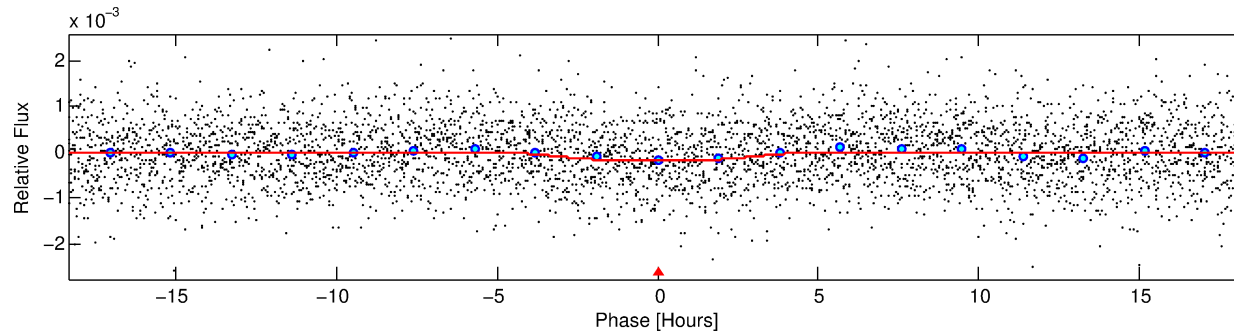
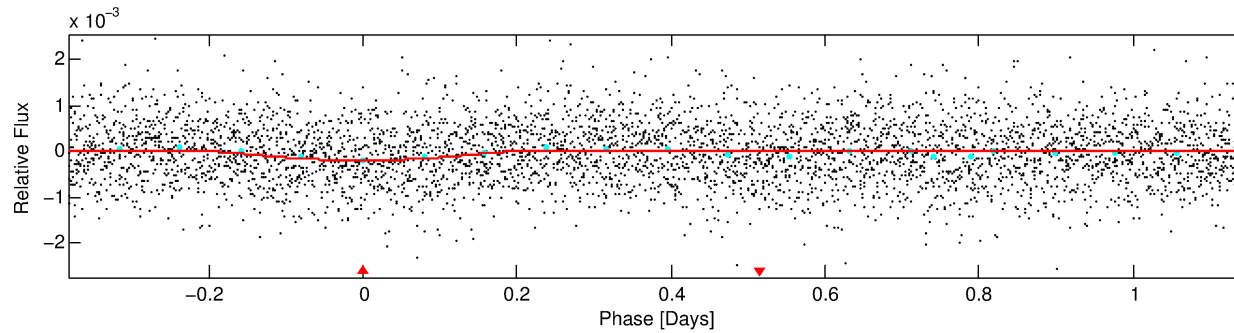
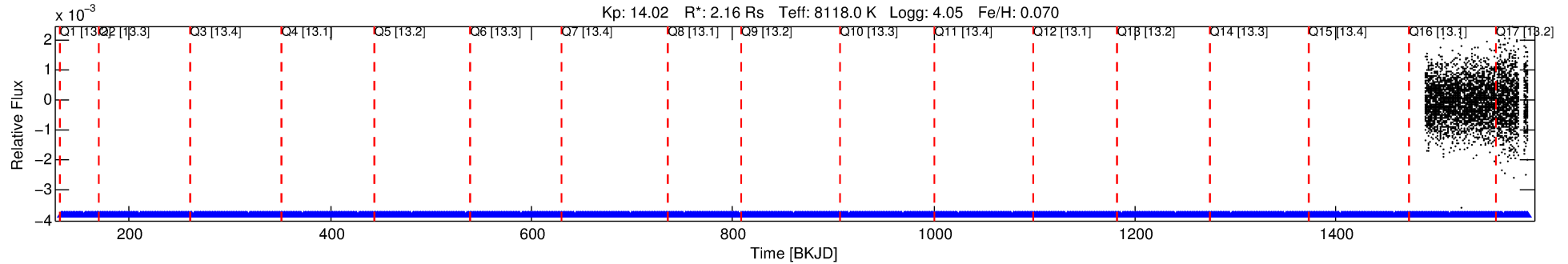
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 007750216-01

No Significant Match Found

DV One-Page Summary

KIC: 7750216 Candidate: 1 of 1 Period: 1.531 d



DV Fit Results:

Period = 1.53087 [0.00003] d
Epoch = 132.8225 [0.0181] BKJD
Rp/R* = 0.0162 [0.0014]
a/R* = 1.05 [0.02]
b = 0.98 [0.01]
Seff = 17464.08 [5748.81]
Teq = 2931 [241] K
Rp = 3.83 [0.93] Re
a = 0.0323 [0.0061] AU
Ag = 3.15 [1.82] [1.18σ]
Teffp = 6037 [814] K [3.66σ]

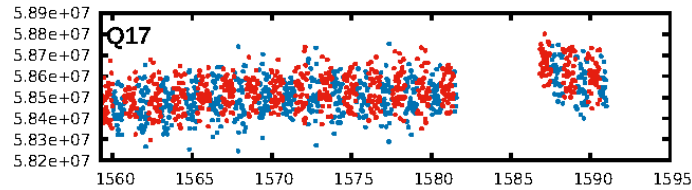
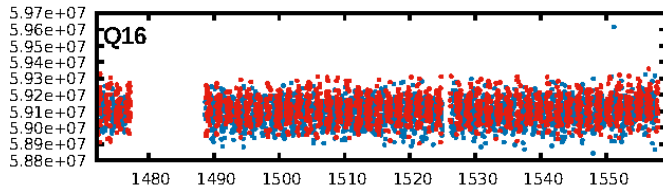
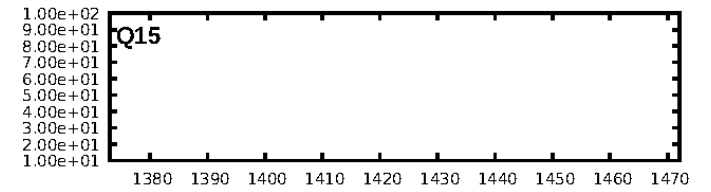
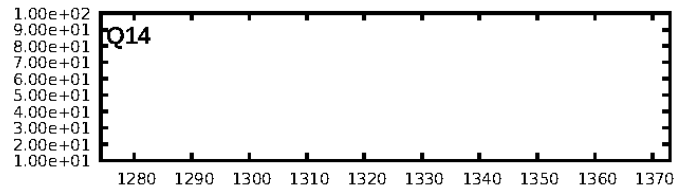
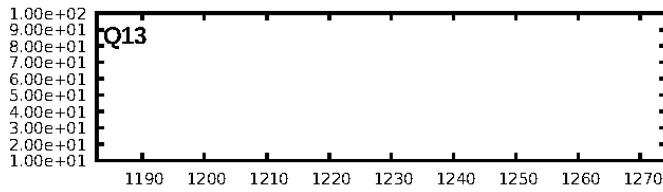
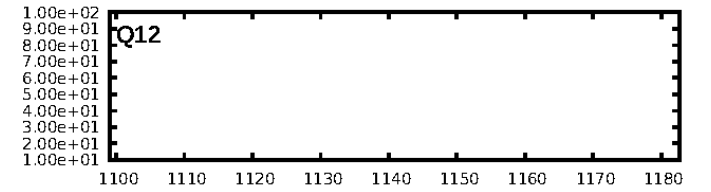
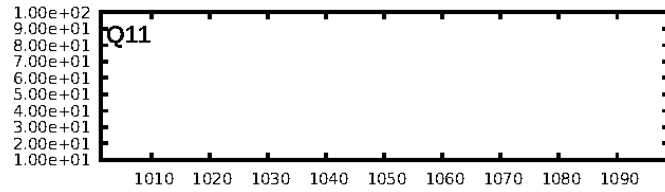
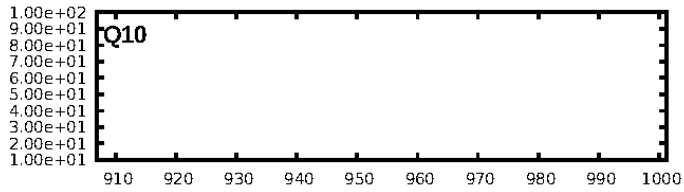
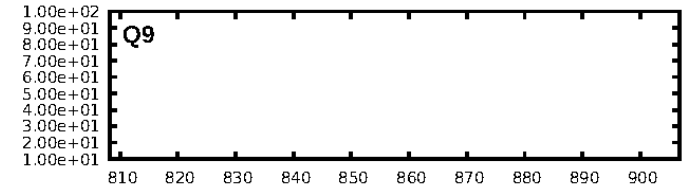
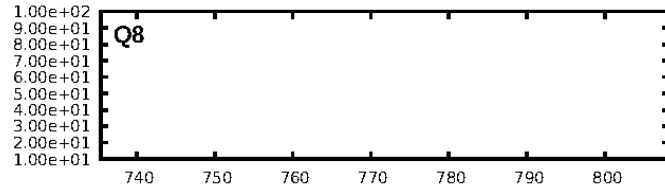
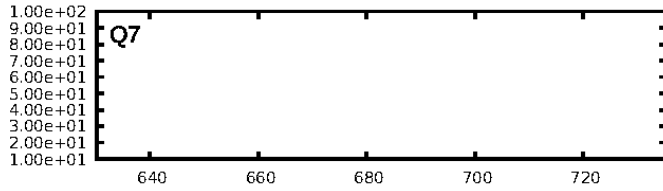
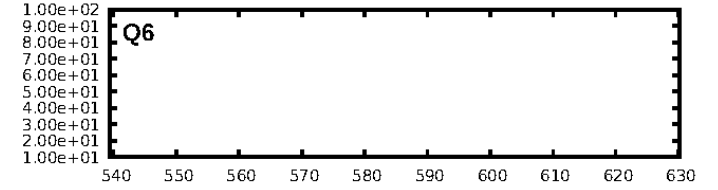
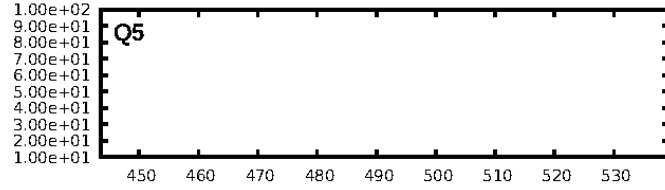
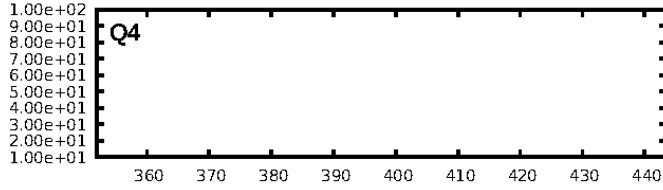
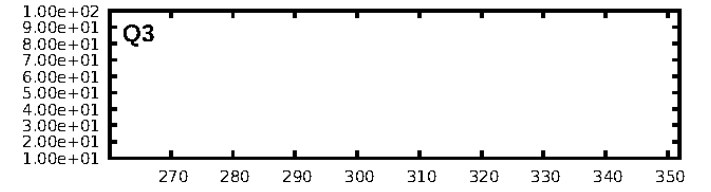
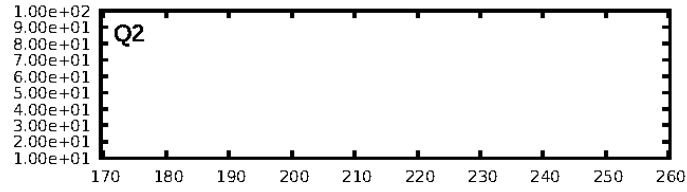
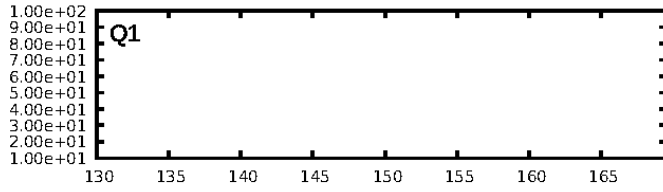
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: 100.0%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [45/45]
GhostDiagnostic-chr: 2.188
Centroid-sig: 1.9%
Centroid-so: 1.242 arcsec [1.75σ]
OotOffset-rm: 0.506 arcsec [2.08σ]
OotOffset-st: 0/0/1/1 [2]
KicOffset-rm: 0.517 arcsec [2.09σ]
KicOffset-st: 0/0/1/1 [2]
DiffImageQuality-fgm: 0.00 [0/2]
DiffImageOverlap-fno: 1.00 [2/2]

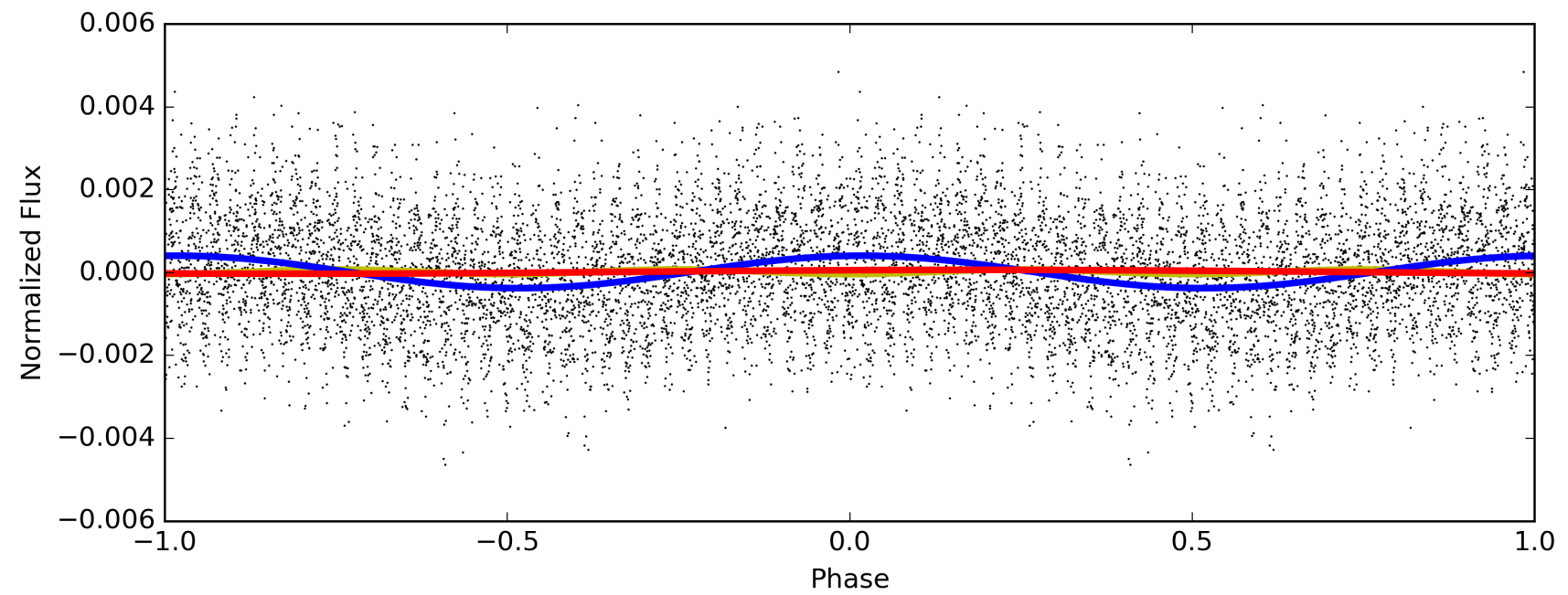
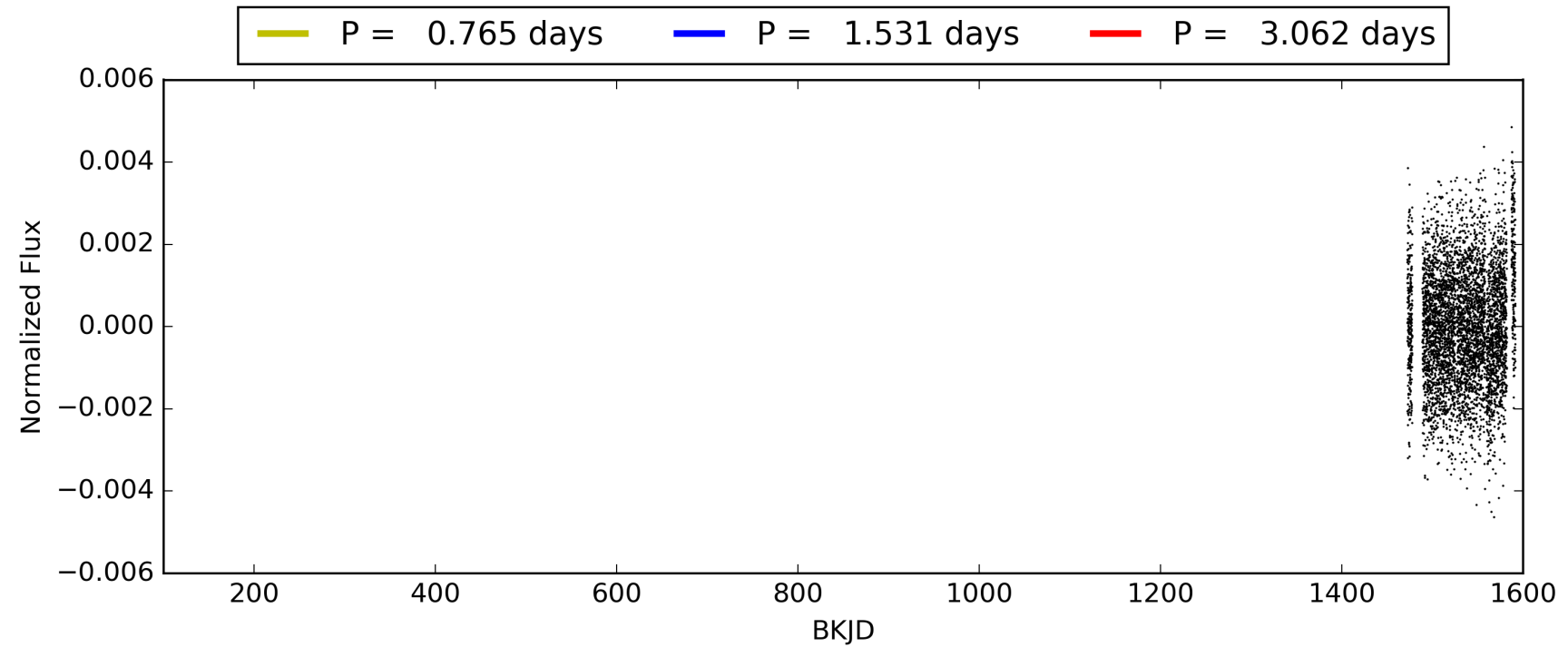
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 31-Jan-2016 21:26:48 Z

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

TCE 007750216-01, PDC Light Curves

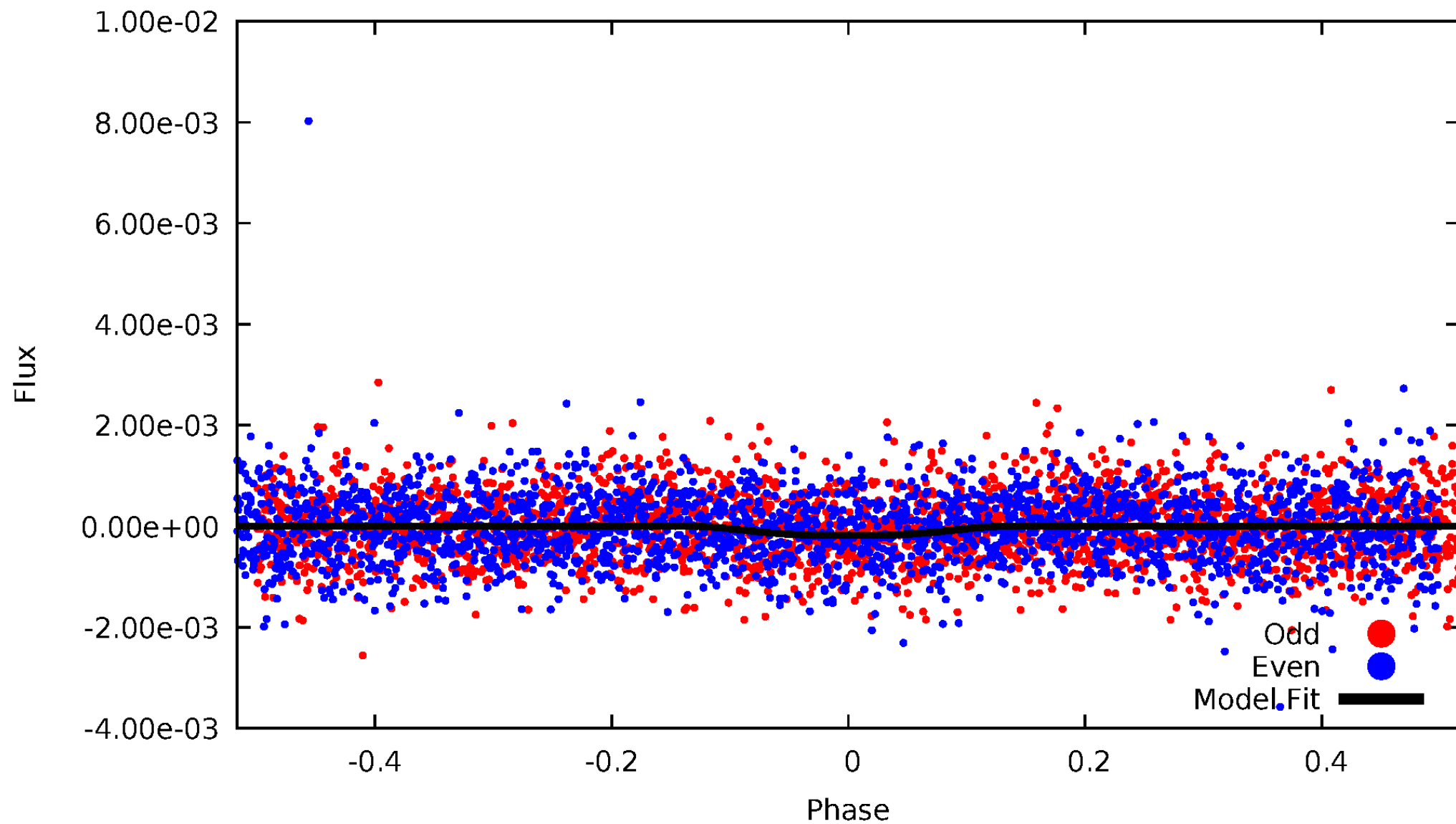


TCE 007750216-01



DV Odd/Even

TCE 007750216-01

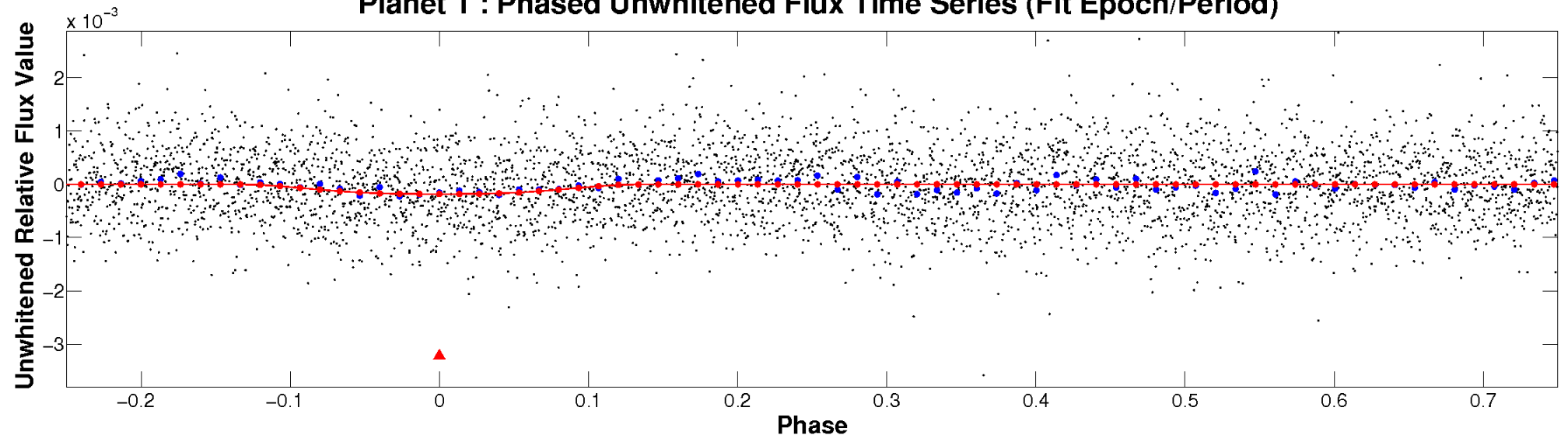


ALT Odd/Even

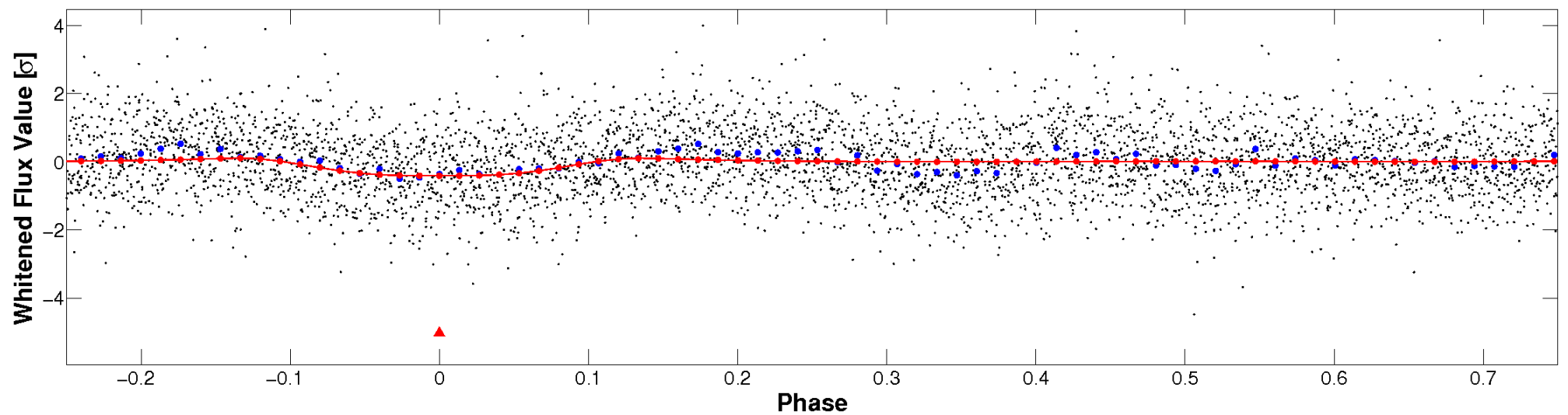
This plot does not exist for this TCE.

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)



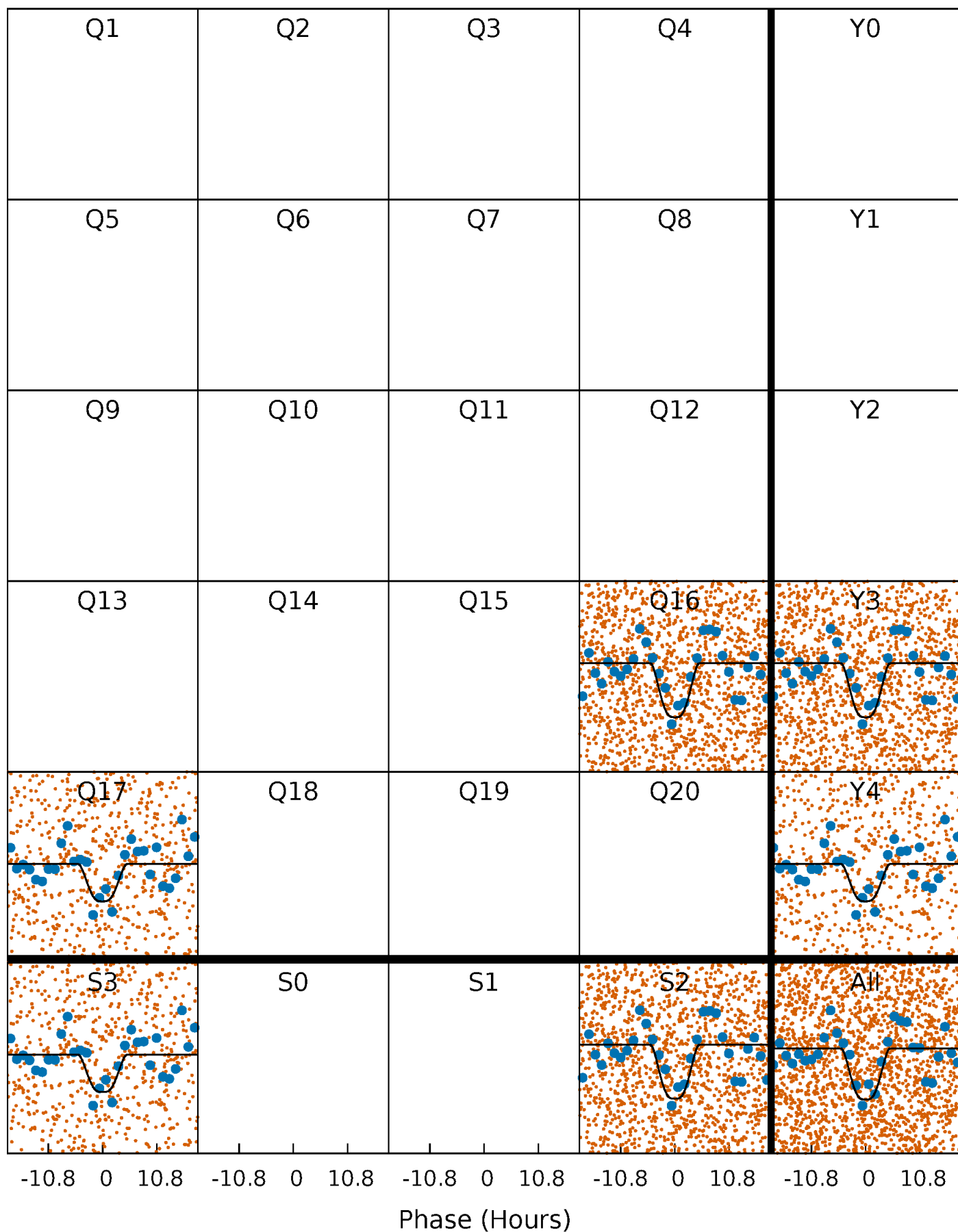
PDC Quarter-Phased Transit Curves

TCE 007750216-01 P= 1.530865 Days $T_0=132.822517$ (BKJD)



DV Quarter-Phased Transit Curves

TCE 007750216-01 P= 1.530865 Days $T_0=132.822517$ (BKJD)

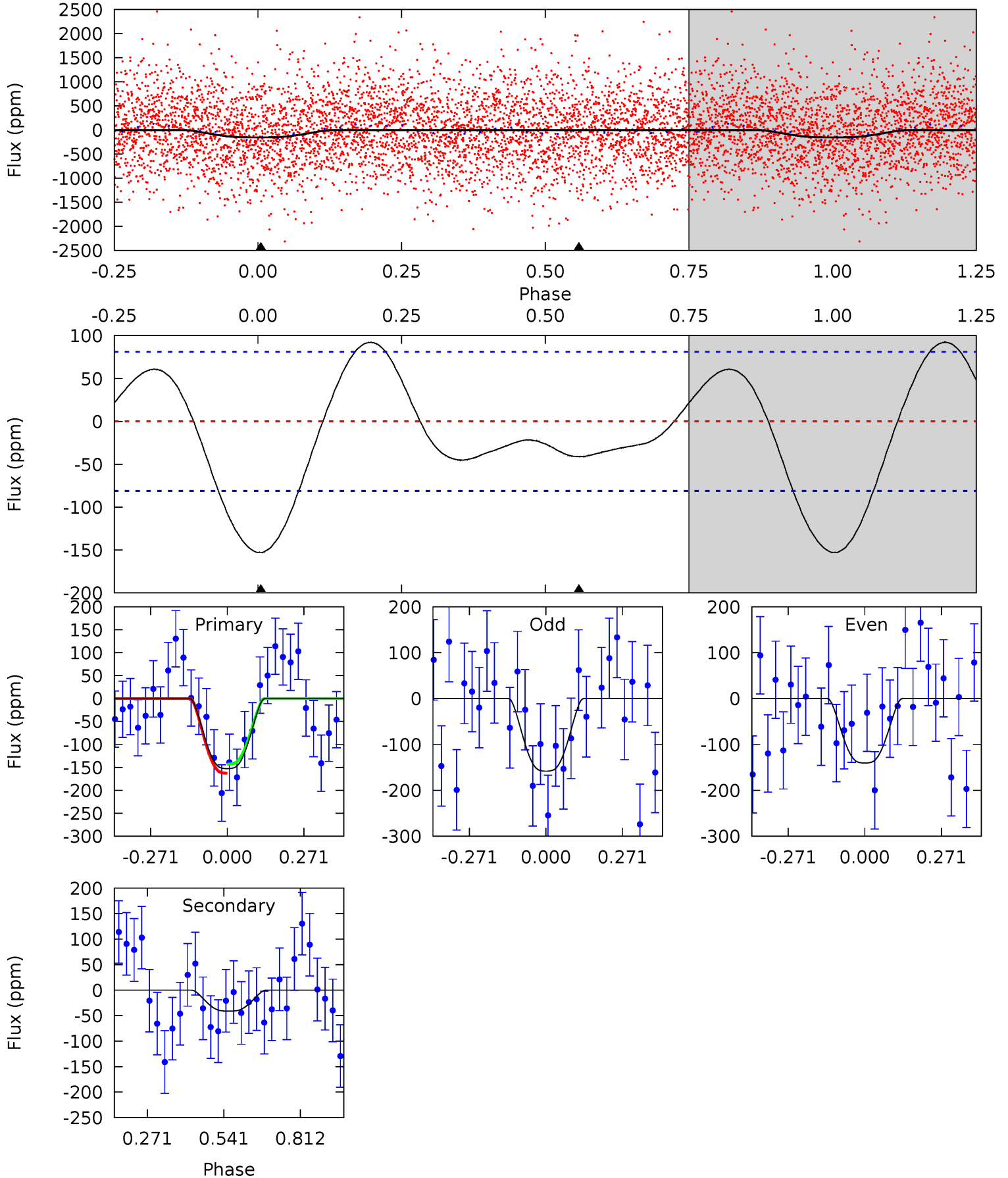


This plot does not exist for this TCE.

DV Model-Shift Uniqueness Test

007750216-01, P = 1.530865 Days, E = 132.822517 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
8.21	2.21	0	0	4.35	1.10	1.88	8.21	8.21	2.21	2.21	0.50	1.11	0.38	0.55



Alt Model-Shift Uniqueness Test

This plot does not exist for this TCE.

Stellar Parameters For KIC 007750216

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	8118^{+224}_{-365}	$4.050^{+0.150}_{-0.150}$	$0.070^{+0.250}_{-0.400}$	$2.163^{+0.492}_{-0.492}$	$1.914^{+0.287}_{-0.351}$	$0.266^{+0.223}_{-0.103}$
	+3%/-4%	+4%/-4%	+357%/-571%	+23%/-23%	+15%/-18%	+84%/-39%
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 007750216-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-41 ± 19	$3.85^{+0.67}_{-0.59}$	4088^{+288}_{-269}	4793^{+548}_{-681}	$1.562^{+0.934}_{-0.710}$
Alt.	N/A	N/A	N/A	N/A	N/A

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 $A_{\text{obs}} \gg 1.0$

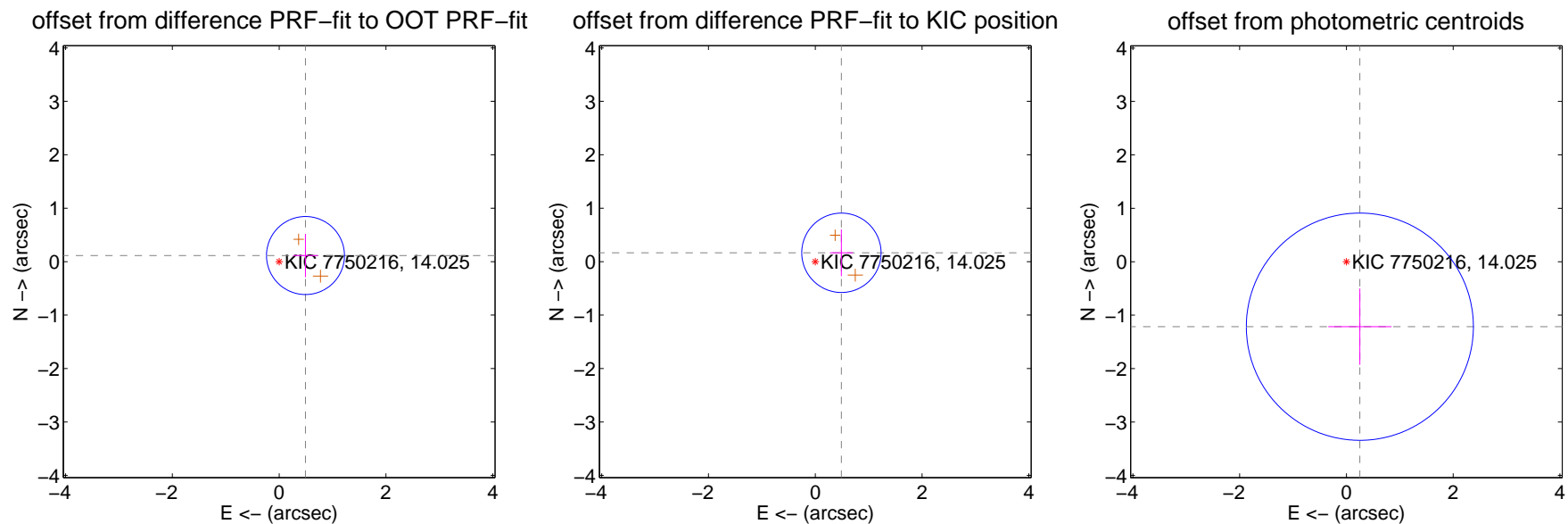
DV Centroid Data

Supplemental centroid analysis for 007750216-01. Kepler magnitude: 14.03. Transit SNR 9.61

There are 0 quarters with good PRF difference image offsets

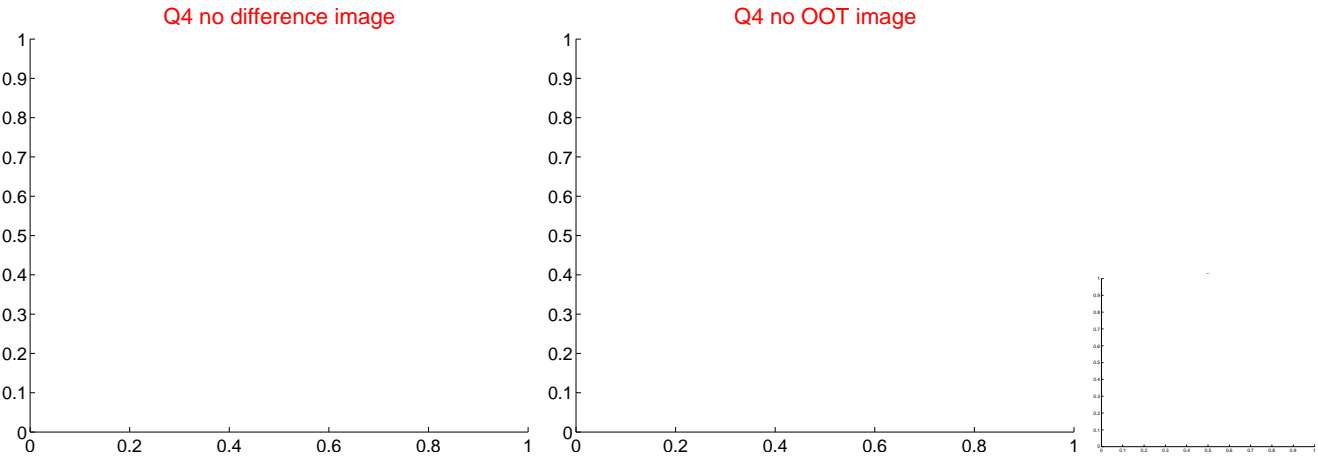
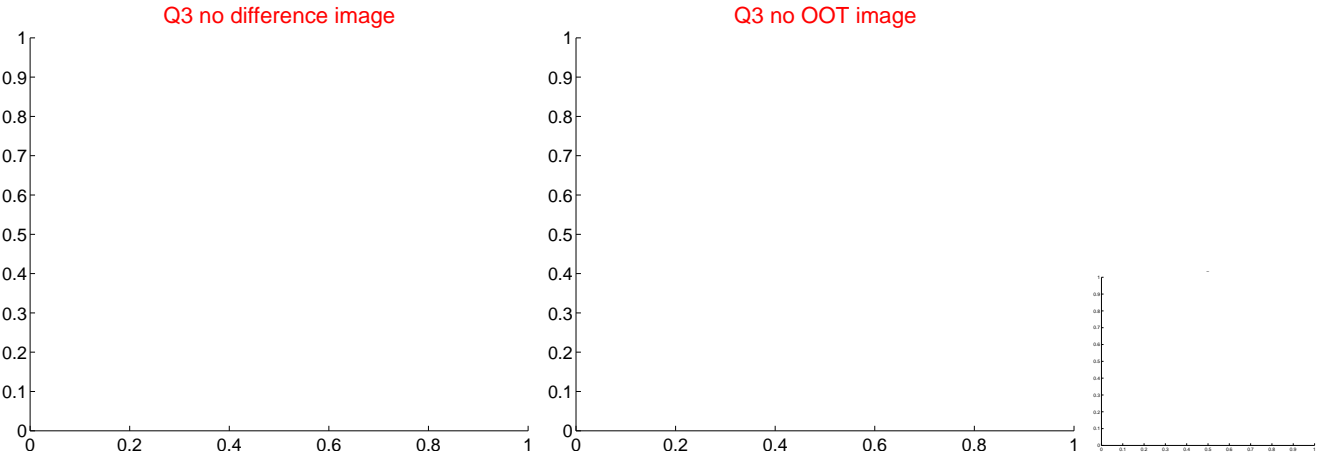
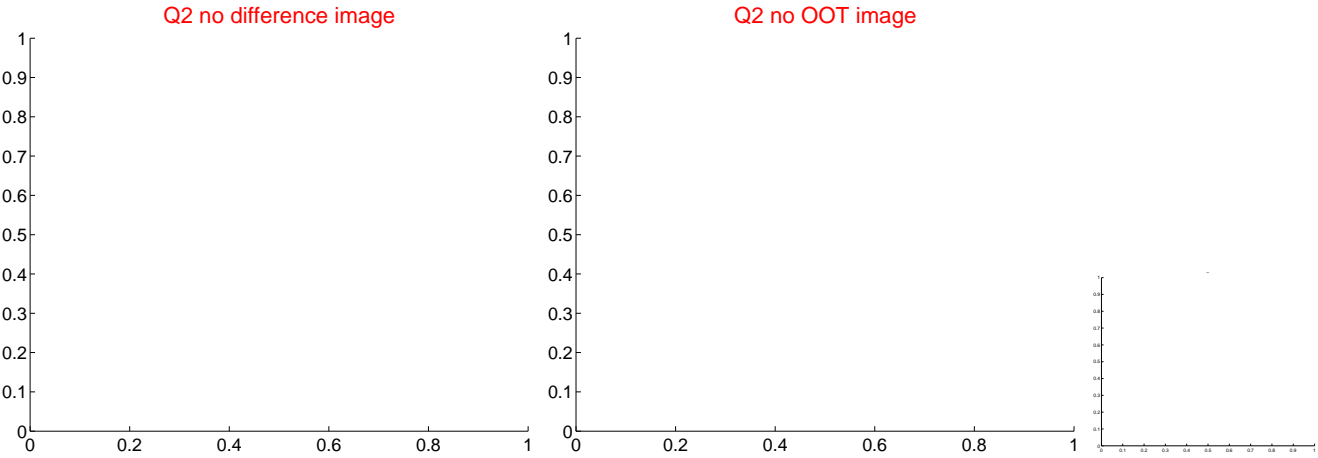
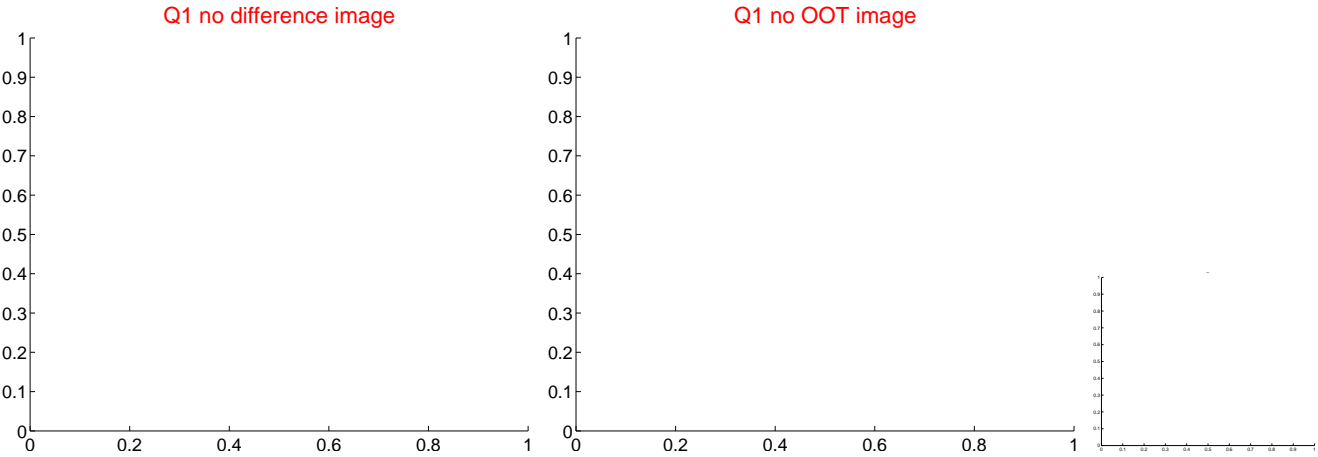
The direct PRF centroid is offset from the target star catalog position by about 0.08 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.506 ± 0.243	2.08	-0.493 ± 0.231	0.114 ± 0.405
PRF-fit source offset from KIC position	0.517 ± 0.248	2.09	-0.490 ± 0.215	0.166 ± 0.438
photometric centroid source offset	1.24 ± 0.71	1.75	-0.25 ± 0.59	-1.22 ± 0.71

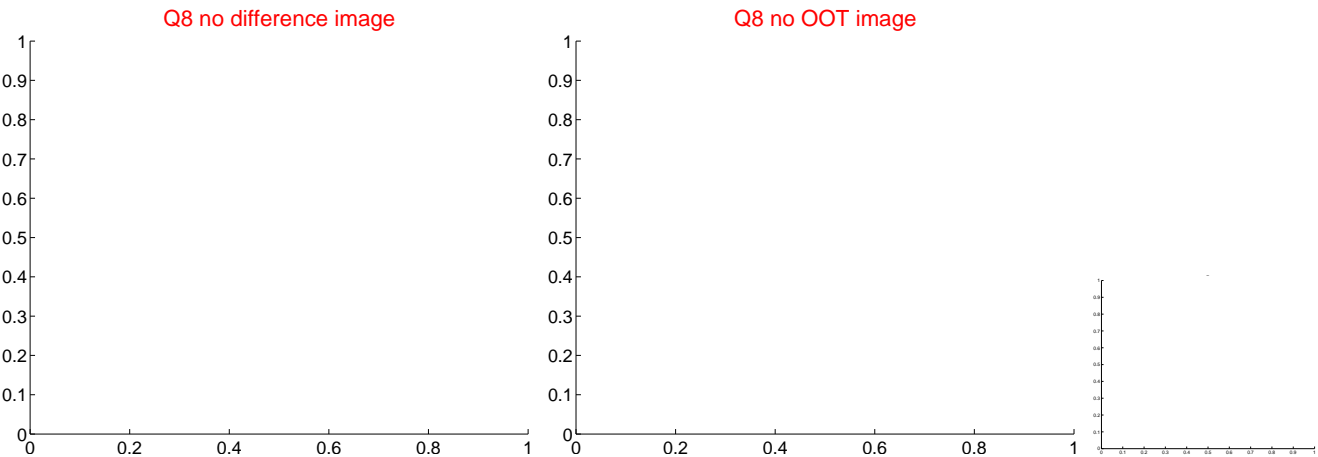
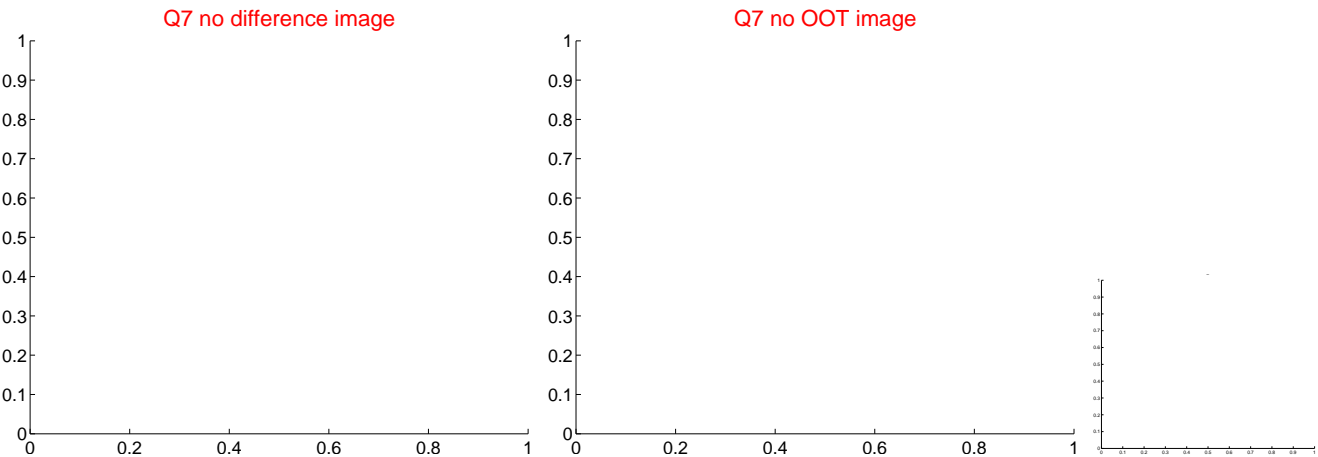
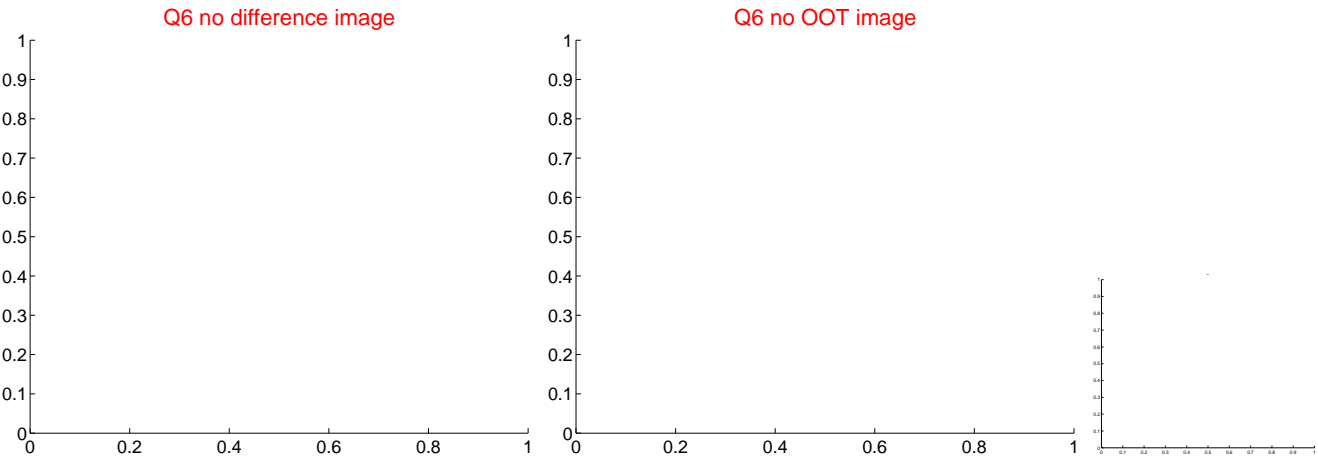
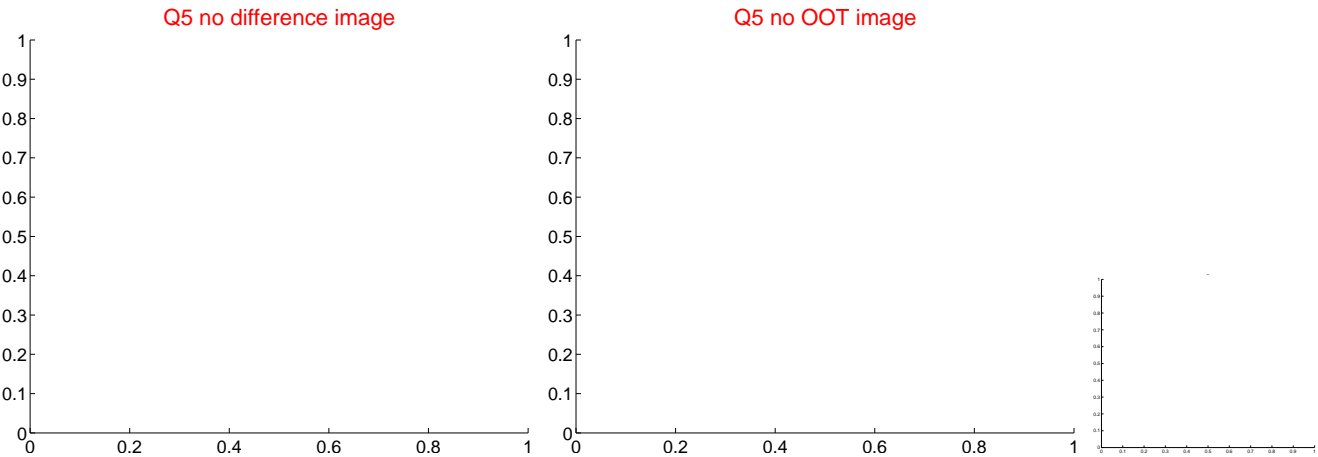


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

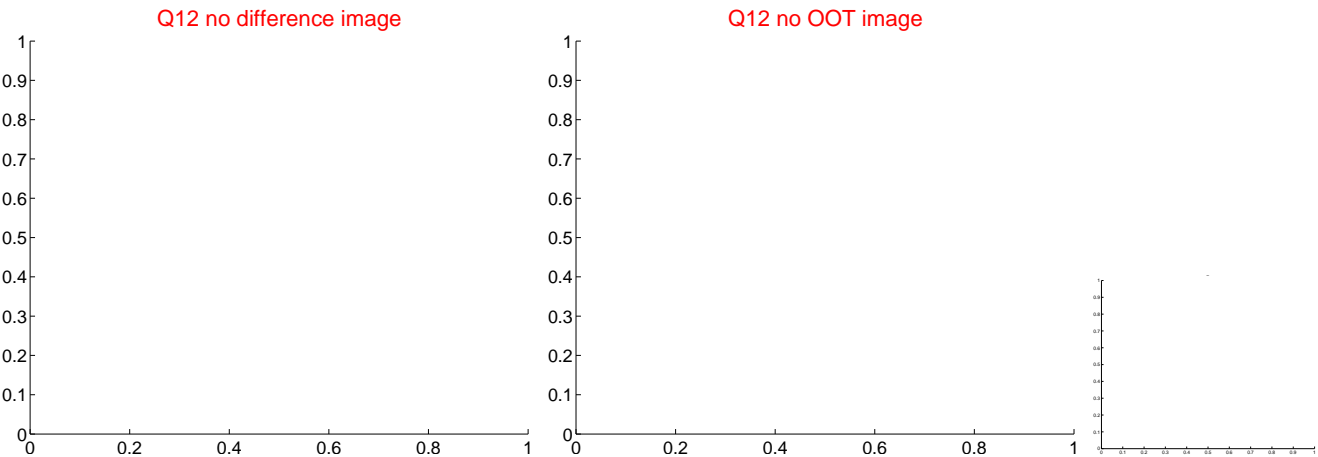
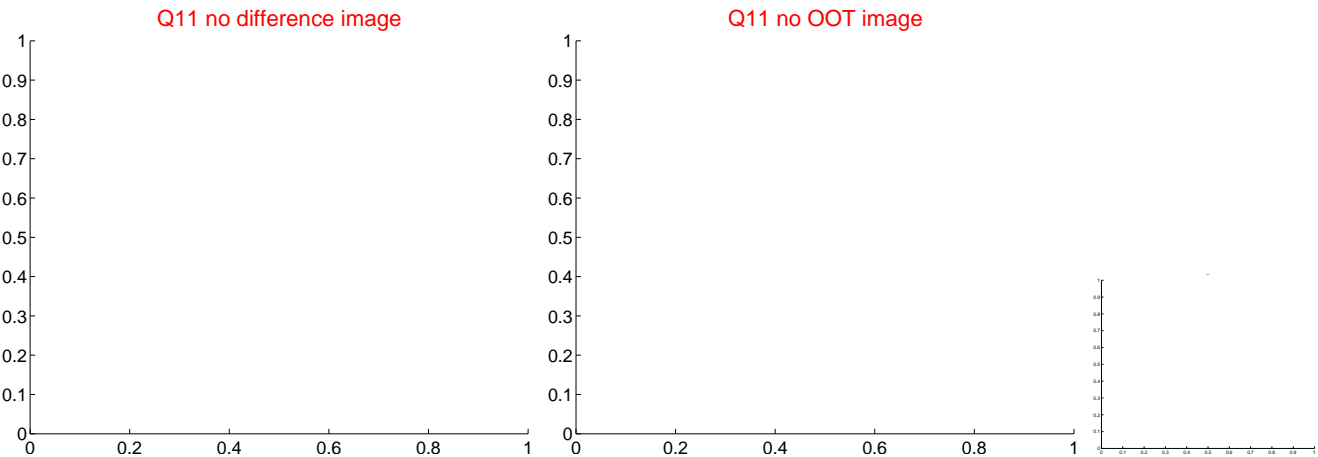
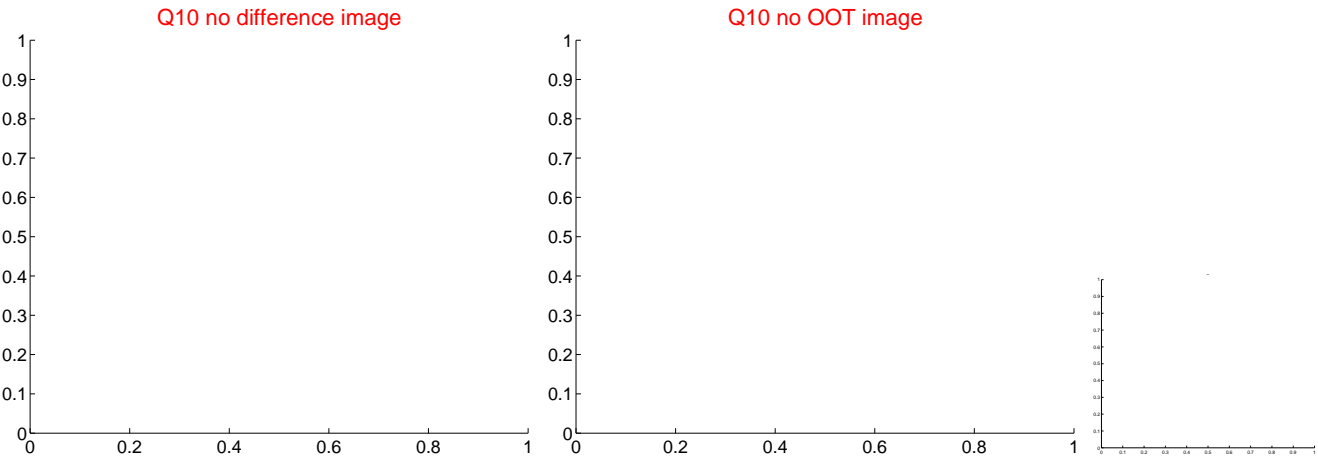
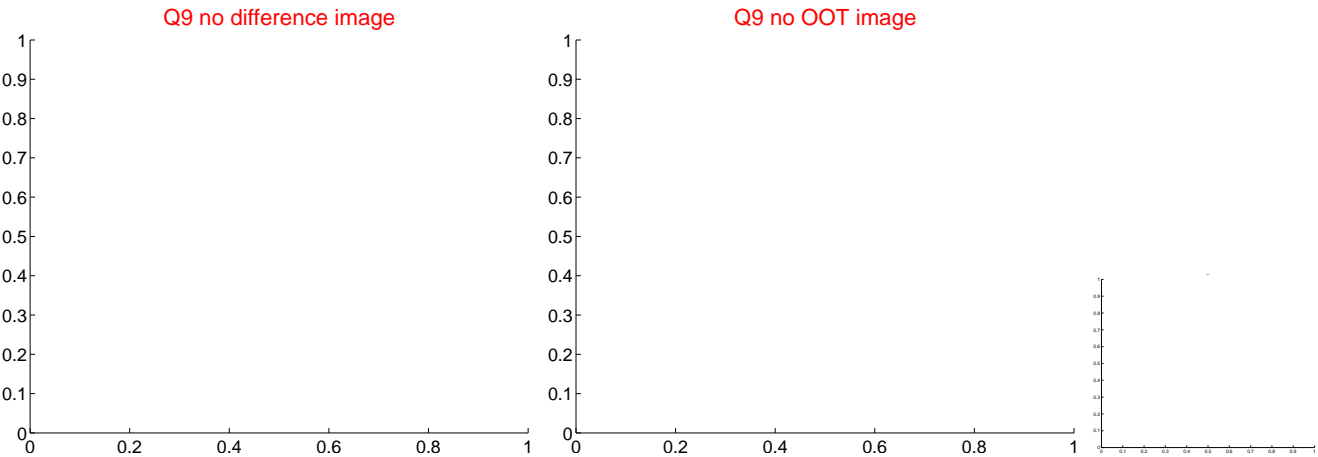
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



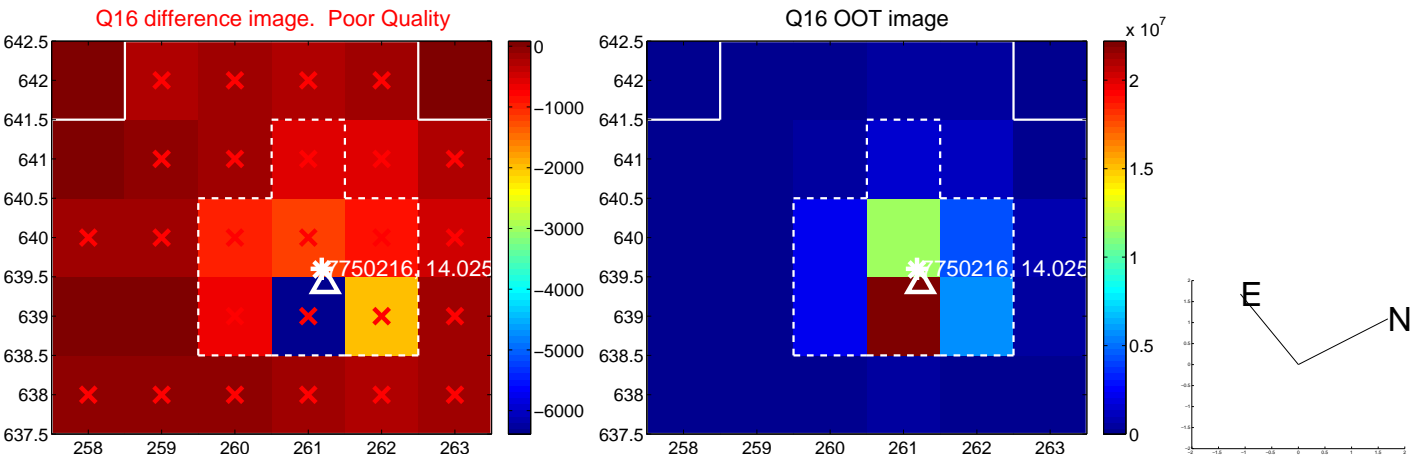
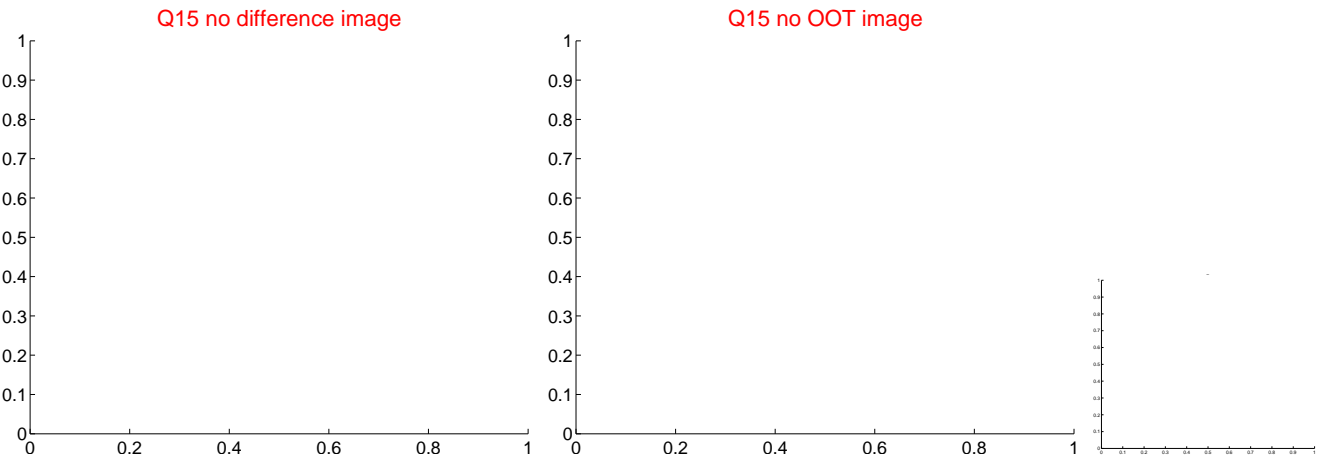
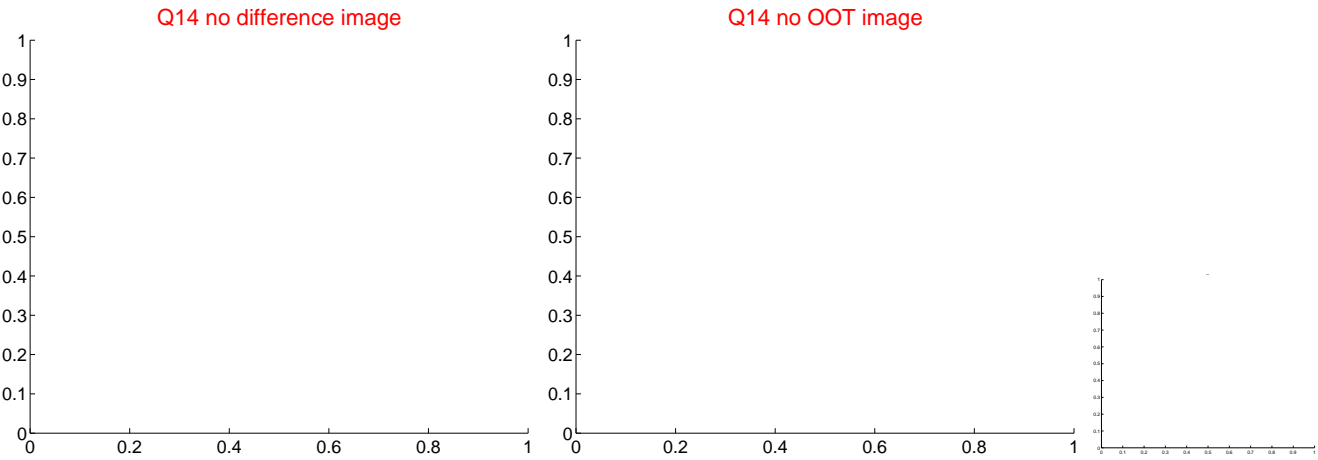
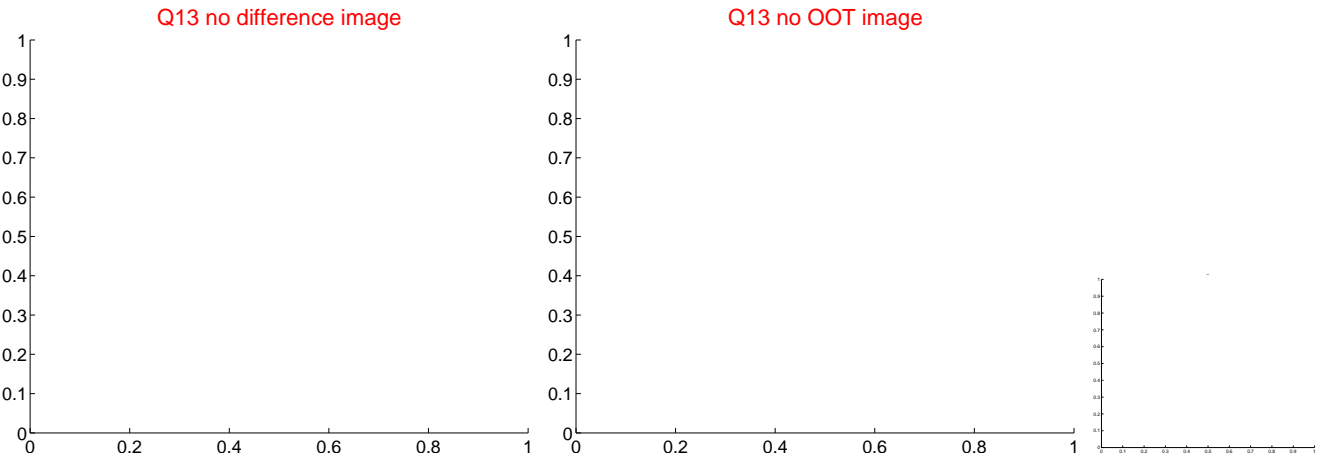
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



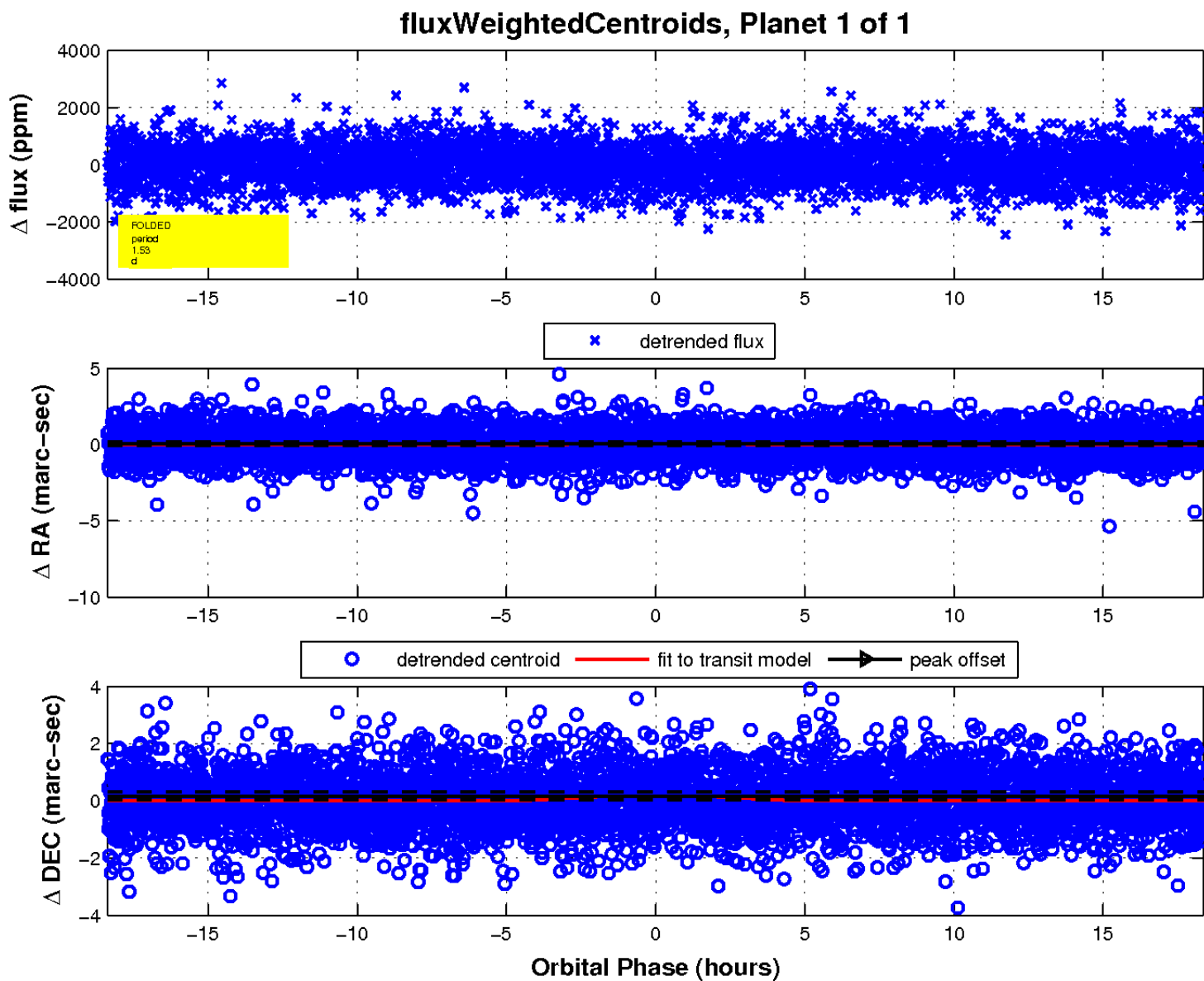
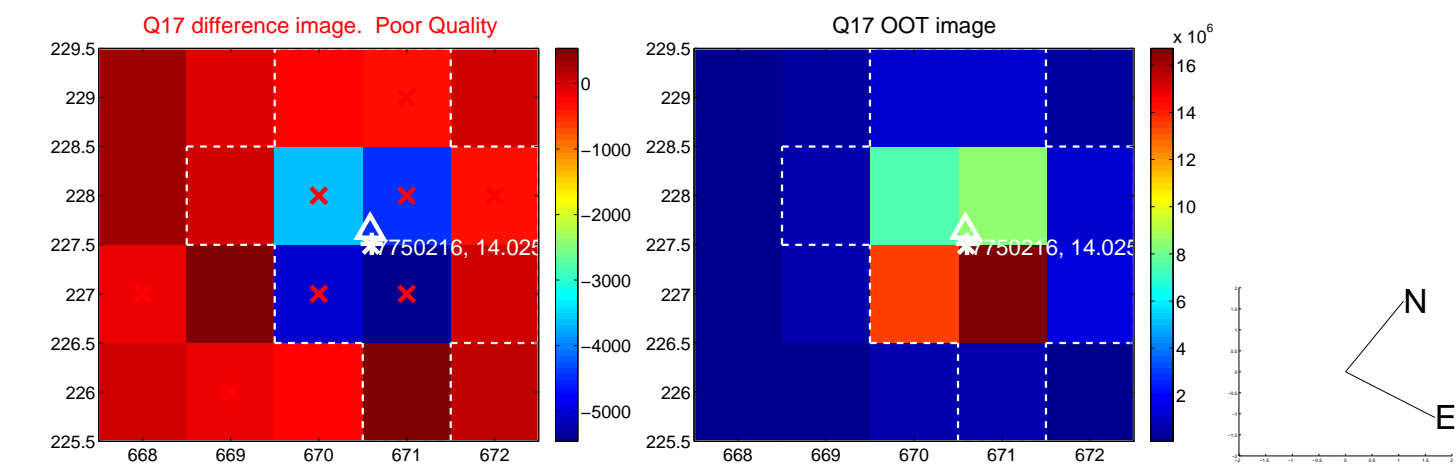
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UKIRT Image

Declination

