

KIC 007951015

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})
007951015-01	OBS	No	0.675783	131.839465	21.5	1.409	10.6	10.7	1.84	7219	0.91	27213.28

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
007951015-01	OBS	FP	0.00	1	0	0	0	SWEET_NTL

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

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

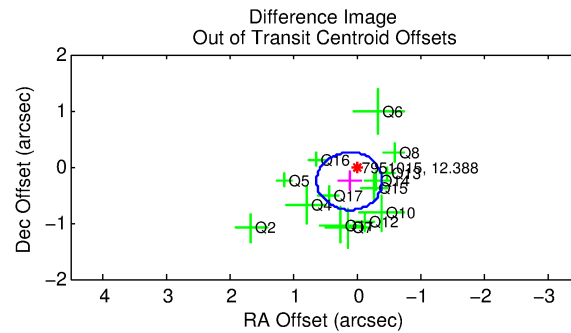
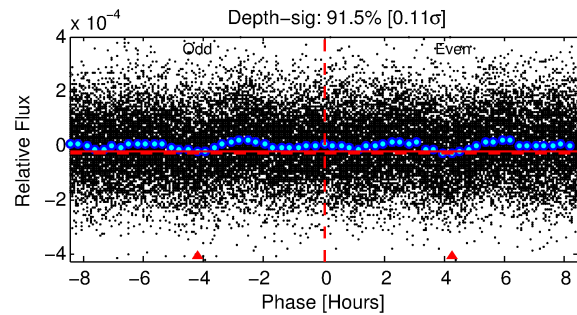
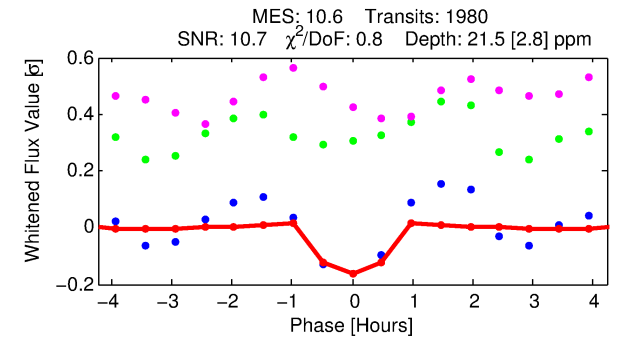
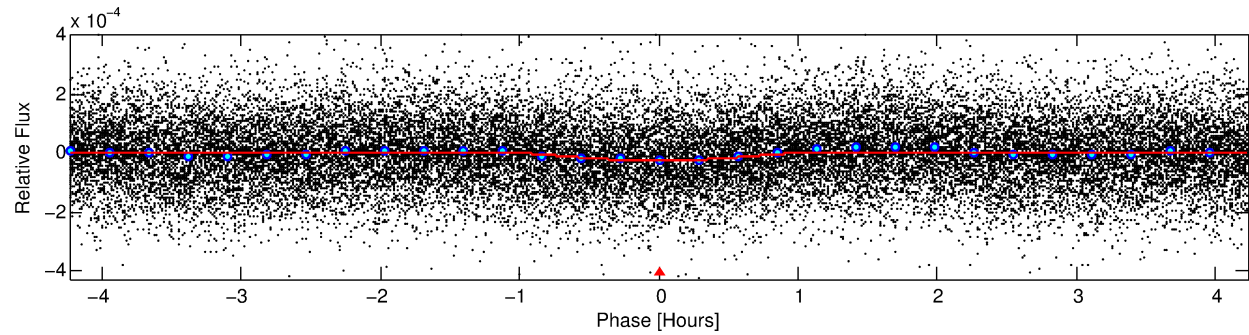
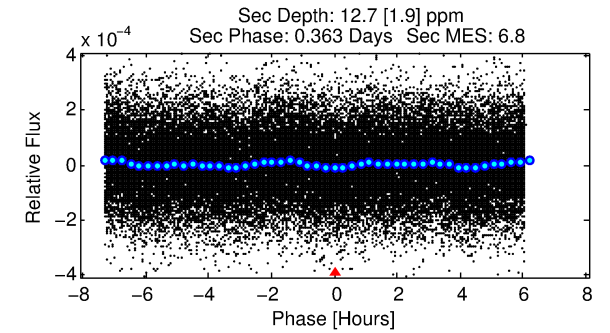
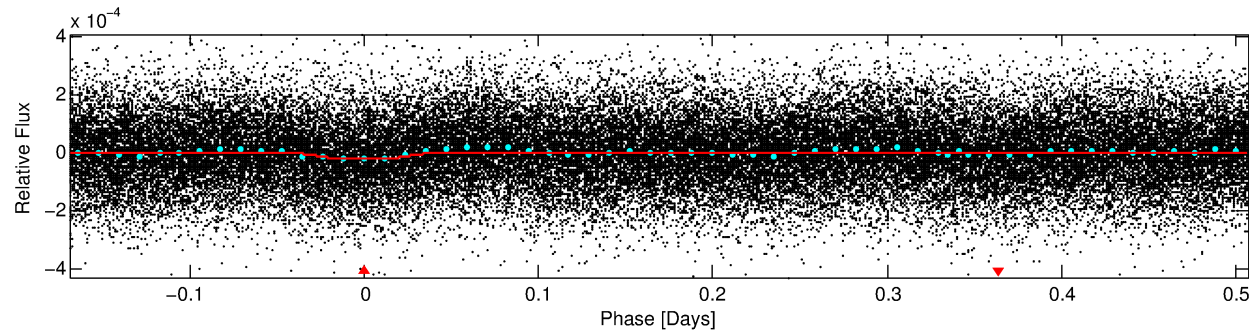
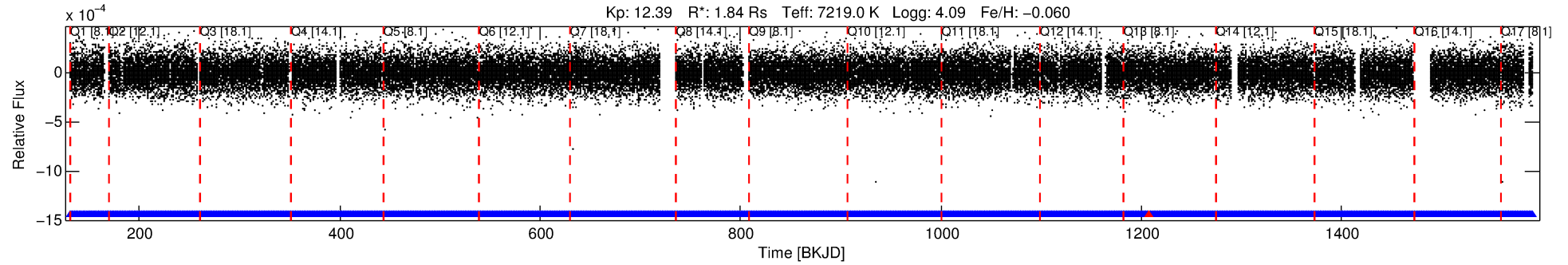
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 007951015-01

No Significant Match Found

DV One-Page Summary

KIC: 7951015 Candidate: 1 of 1 Period: 0.676 d



DV Fit Results:

Period = 0.67578 [0.00001] d
Epoch = 131.8395 [0.0017] BKJD
Rp/R* = 0.0046 [0.0006]
a/R* = 2.82 [1.84]
b = 0.68 [0.59]
Seff = 27213.29 [10455.48]
Teq = 3275 [315] K
Rp = 0.91 [0.31] Re
a = 0.0174 [0.0043] AU
Ag = 2.52 [1.19] [1.28σ]
Teffp = 6383 [556] K [4.86σ]

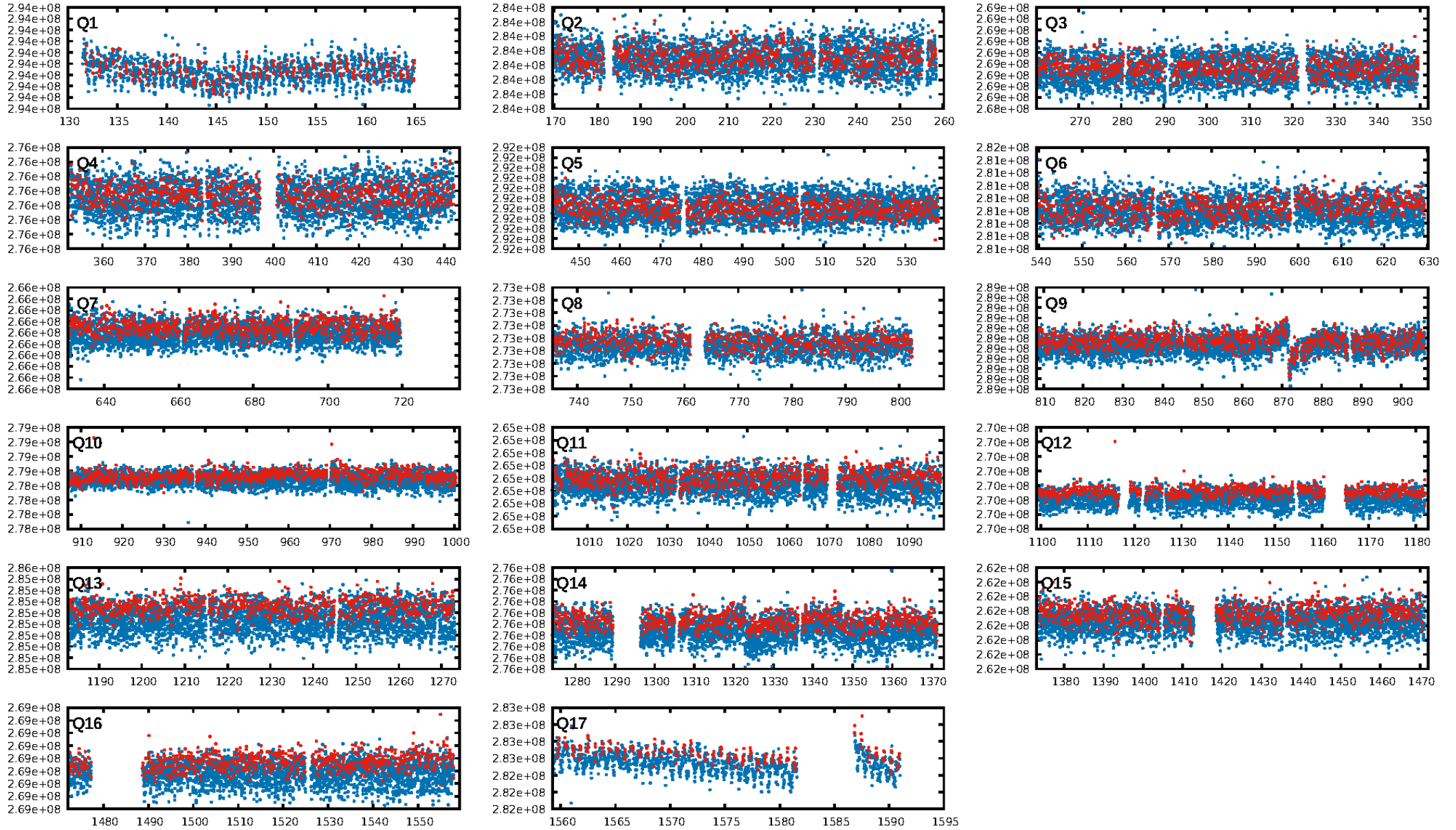
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 6.88e-23
RollingBand-fgt: 1.00 [1889/1890]
GhostDiagnostic-chr: -2.733
Centroid-sig: 37.1%
Centroid-so: 0.195 arcsec [0.18σ]
OotOffset-rm: 0.280 arcsec [1.63σ]
OotOffset-st: 4/3/4/3 [14]
KicOffset-rm: 0.275 arcsec [1.36σ]
KicOffset-st: 4/3/4/3 [14]
DiffImageQuality-fgm: 0.29 [4/14]
DiffImageOverlap-fno: 1.00 [17/17]

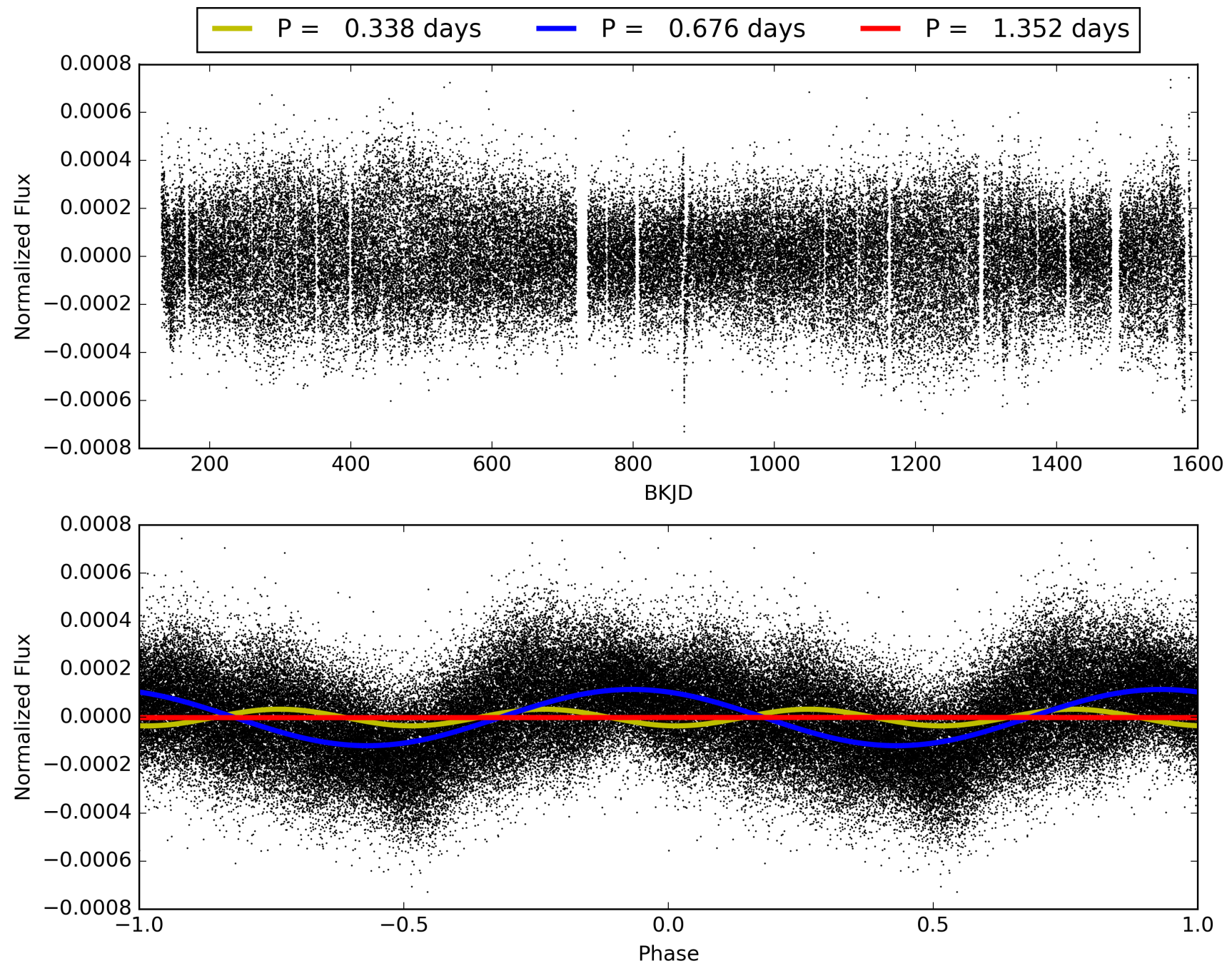
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 01-Feb-2016 05:25:15 Z

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

TCE 007951015-01, PDC Light Curves

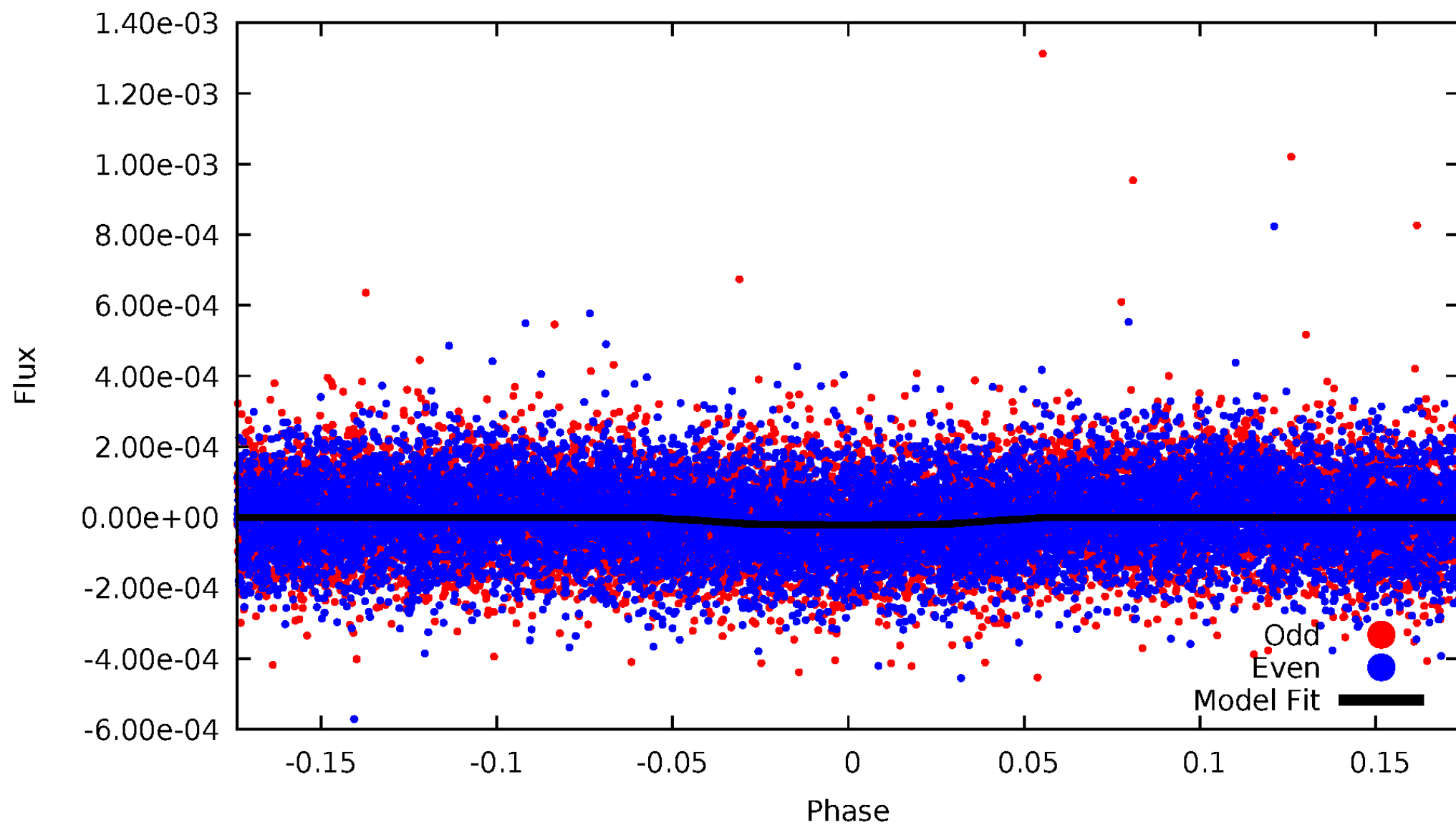


TCE 007951015-01



DV Odd/Even

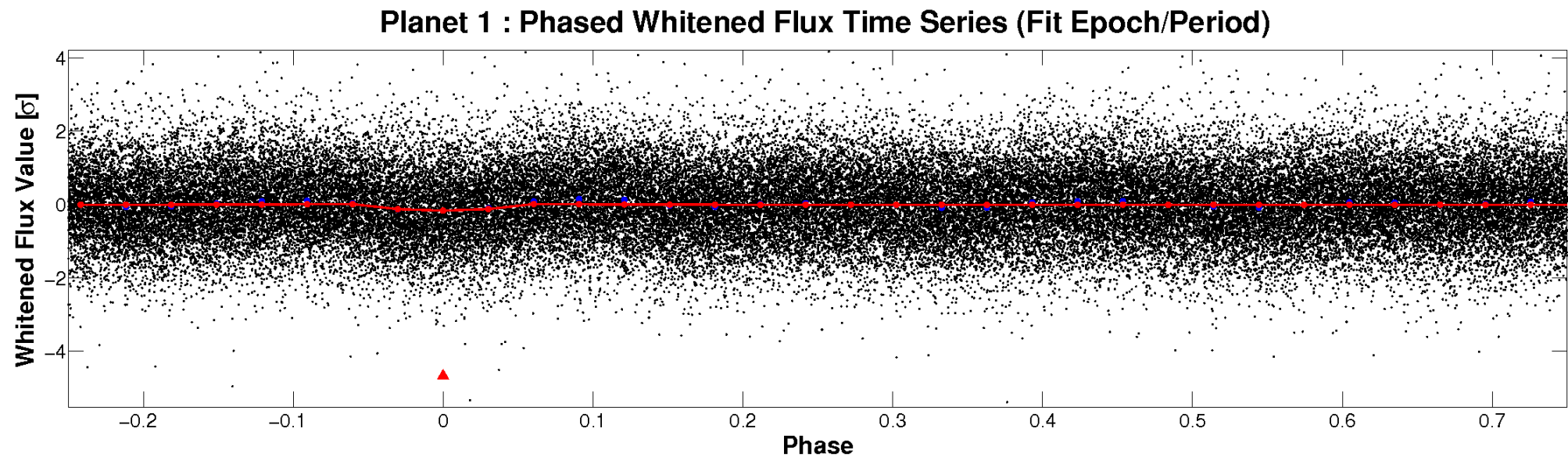
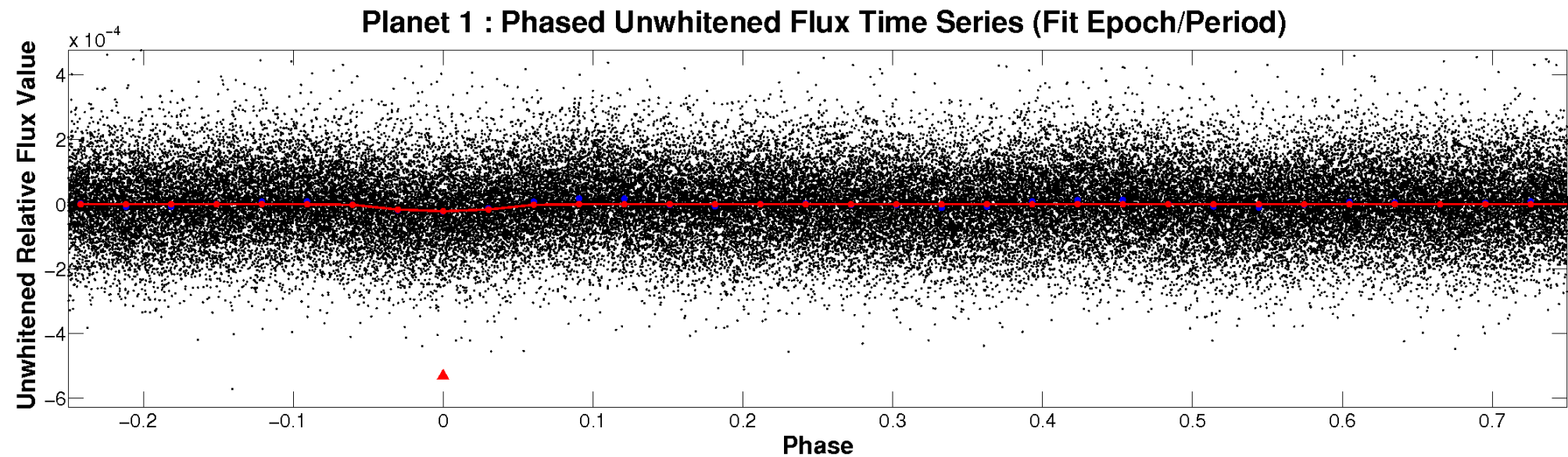
TCE 007951015-01



ALT Odd/Even

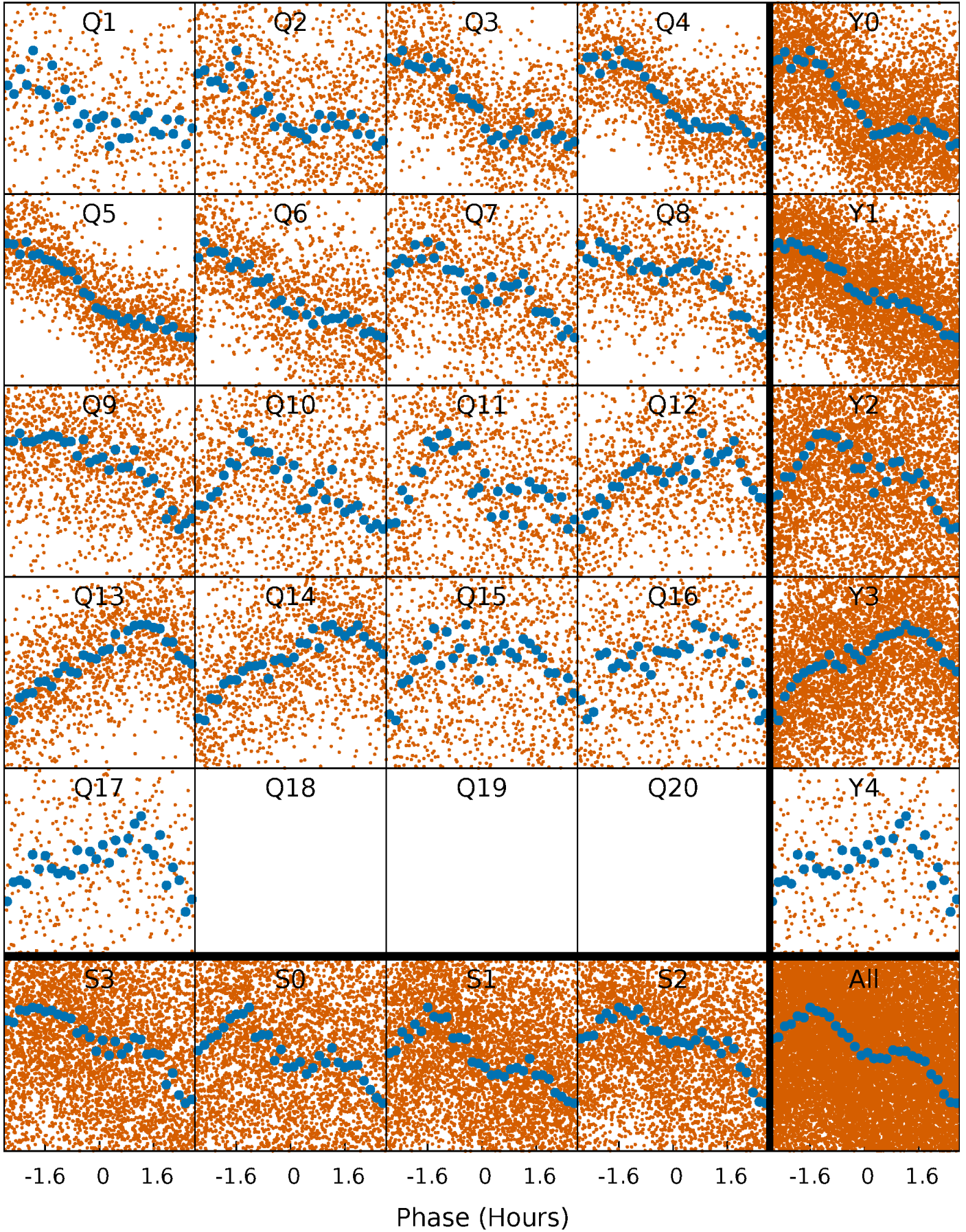
This plot does not exist for this TCE.

Non-Whitened Vs. Whitened Light Curve



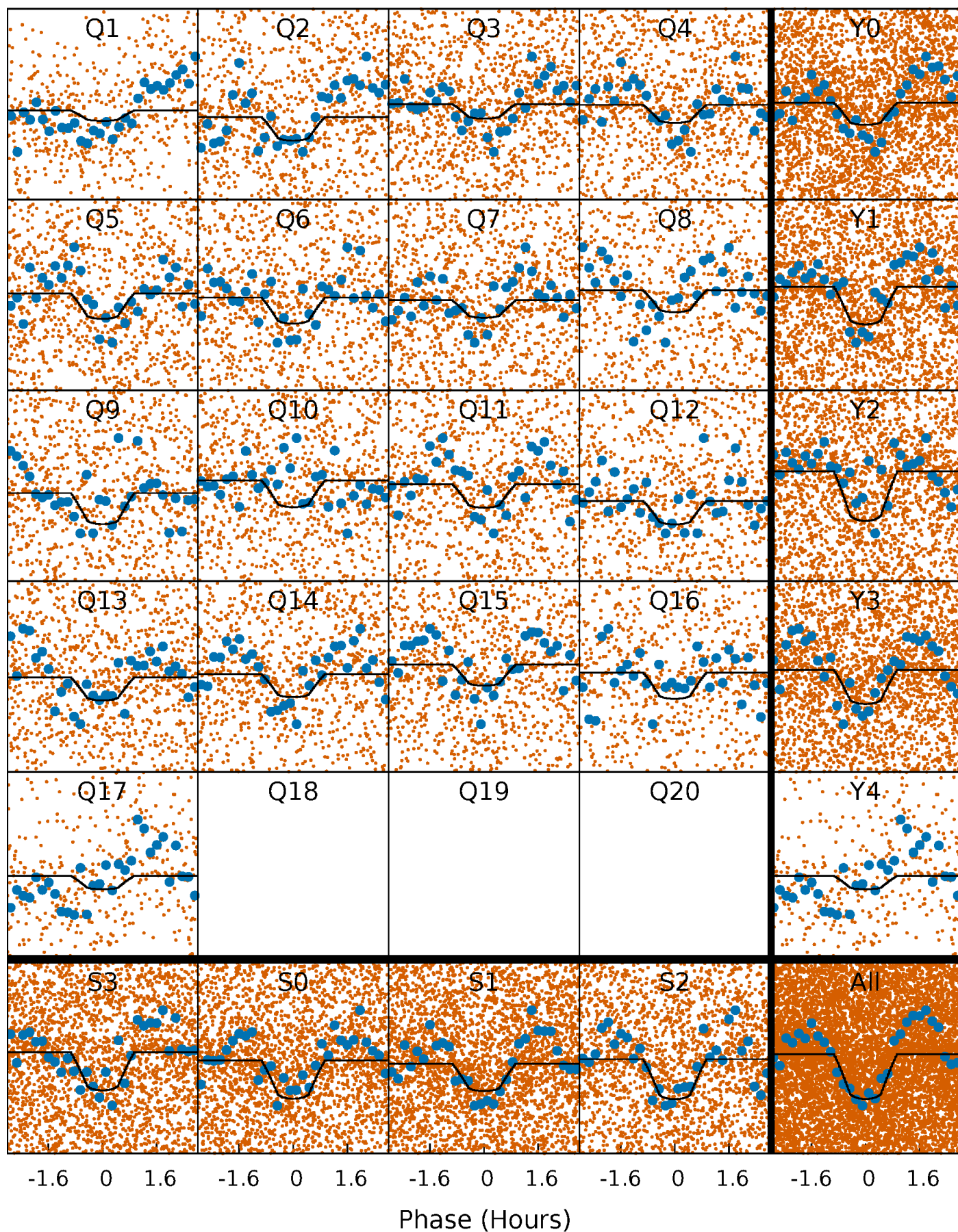
PDC Quarter-Phased Transit Curves

TCE 007951015-01 P= 0.675783 Days $T_0=131.839464$ (BKJD)



DV Quarter-Phased Transit Curves

TCE 007951015-01 P= 0.675783 Days $T_0=131.839464$ (BKJD)

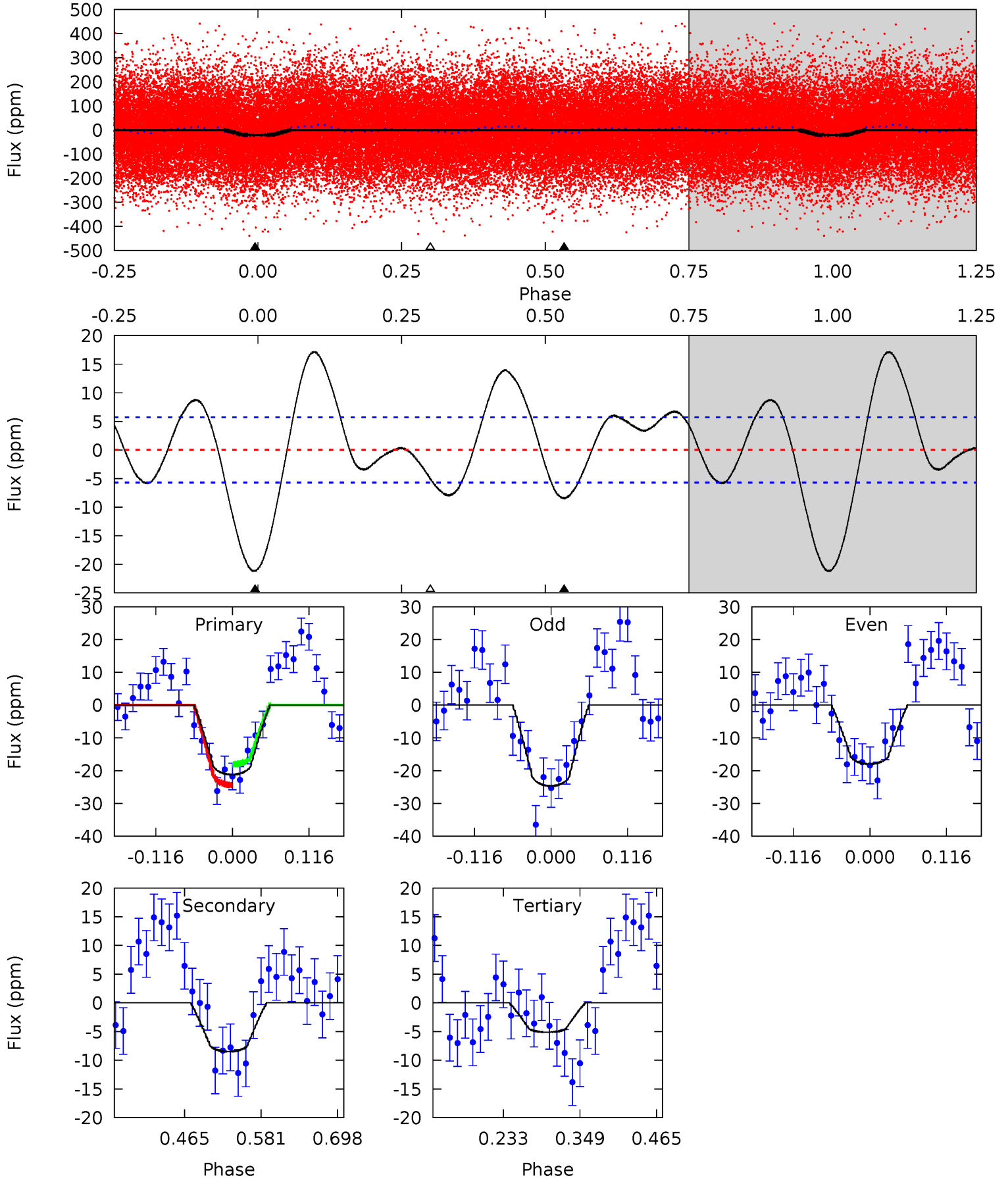


This plot does not exist for this TCE.

DV Model-Shift Uniqueness Test

007951015-01, P = 0.675783 Days, E = 131.163681 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
16.8	6.74	4.05	0	4.53	1.57	4.22	12.8	16.8	2.69	6.74	2.69	0.96	0.45	2.53



Alt Model-Shift Uniqueness Test

This plot does not exist for this TCE.

Stellar Parameters For KIC 007951015

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	7219^{+201}_{-277}	$4.095^{+0.153}_{-0.187}$	$-0.060^{+0.200}_{-0.350}$	$1.839^{+0.563}_{-0.422}$	$1.533^{+0.212}_{-0.259}$	$0.347^{+0.277}_{-0.167}$
	+3%/-4%	+4%/-5%	+333%/-583%	+31%/-23%	+14%/-17%	+80%/-48%
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 007951015-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-8 ± 1	$0.91^{+0.20}_{-0.15}$	4581^{+352}_{-307}	5418^{+521}_{-477}	$1.636^{+0.779}_{-0.523}$
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 $T_{obs} \gg T_{max}$ AND $A_{obs} \gg 1.0$

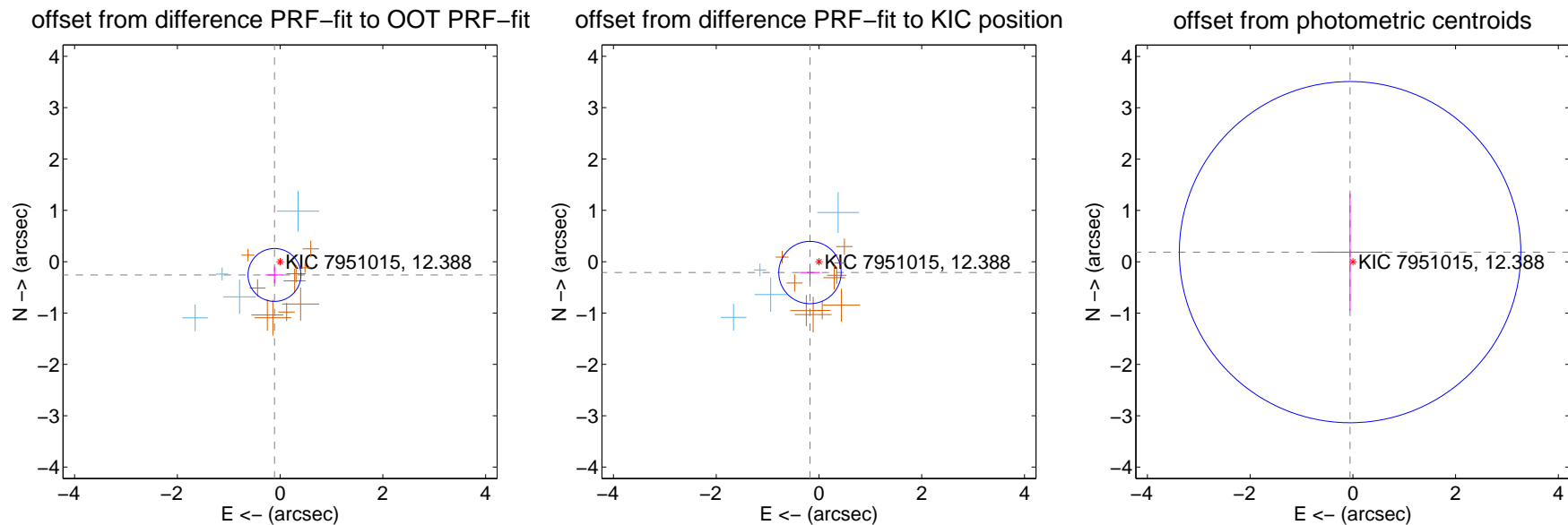
DV Centroid Data

Supplemental centroid analysis for 007951015-01. Kepler magnitude: 12.39. Transit SNR 10.66

There are 4 quarters with good PRF difference image offsets

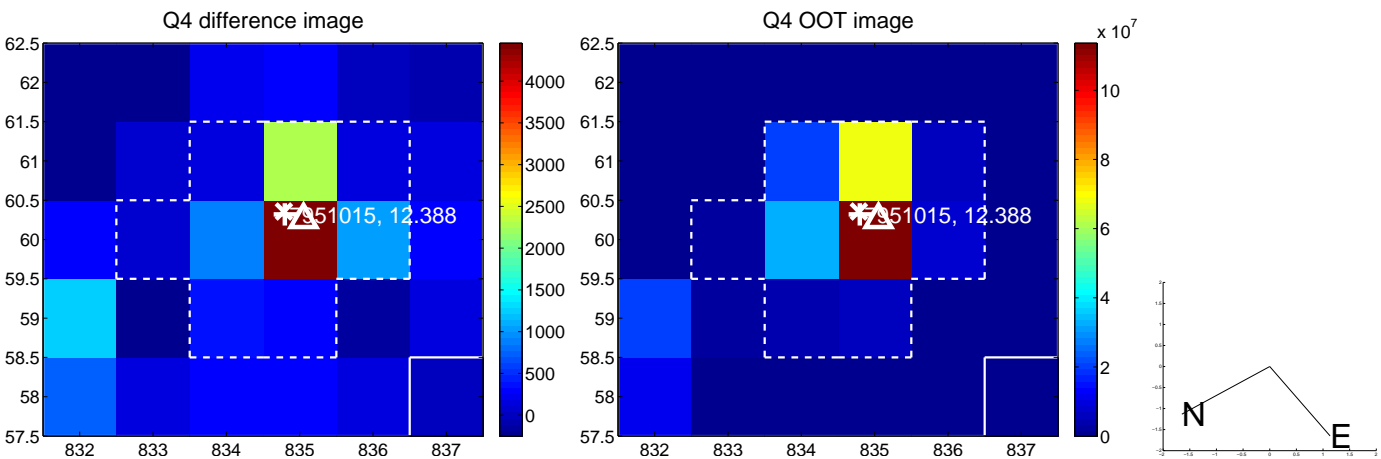
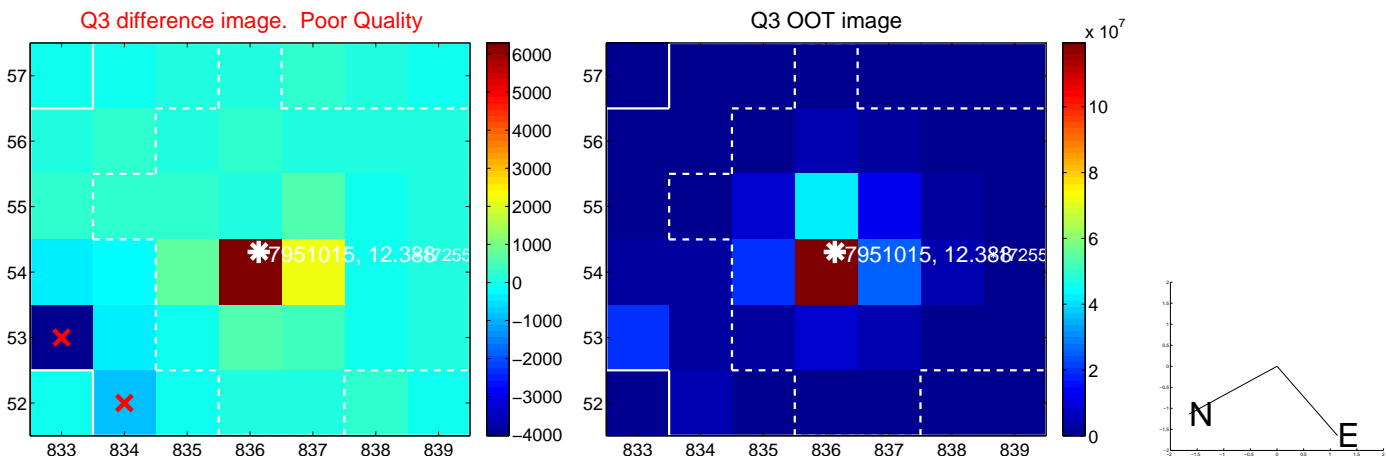
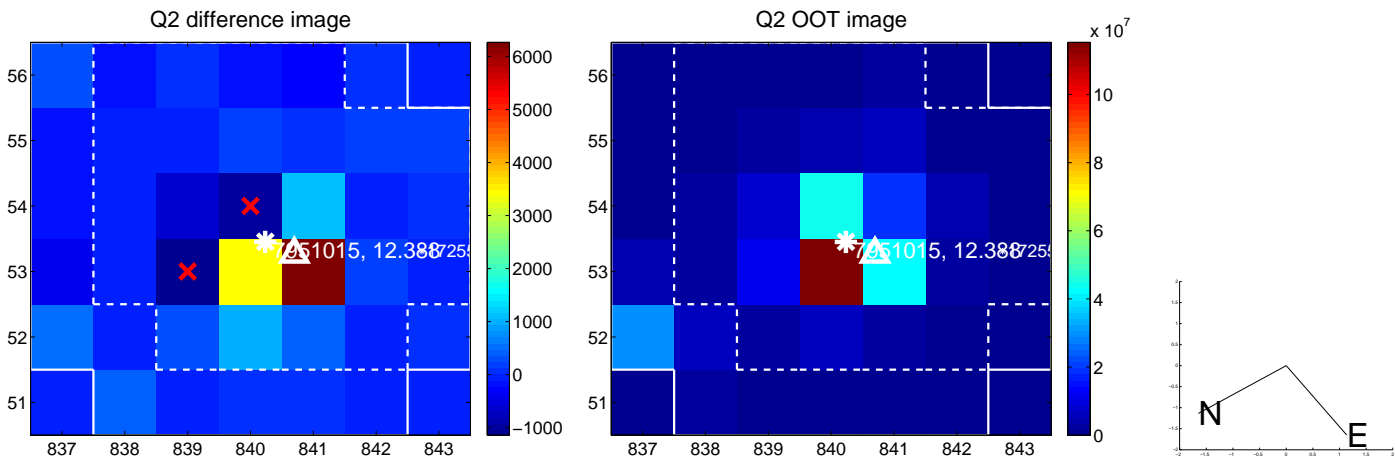
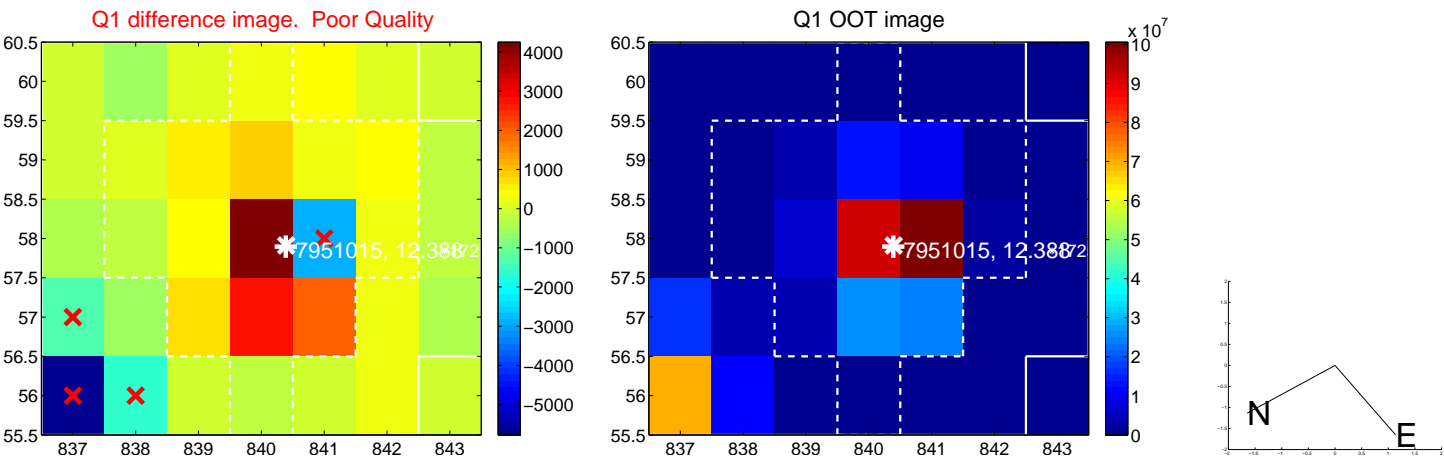
The direct PRF centroid is offset from the target star catalog position by about 0.10 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.280 ± 0.172	1.63	0.110 ± 0.171	-0.258 ± 0.161
PRF-fit source offset from KIC position	0.275 ± 0.202	1.36	0.175 ± 0.194	-0.211 ± 0.170
photometric centroid source offset	0.20 ± 1.11	0.18	0.05 ± 0.63	0.19 ± 1.14

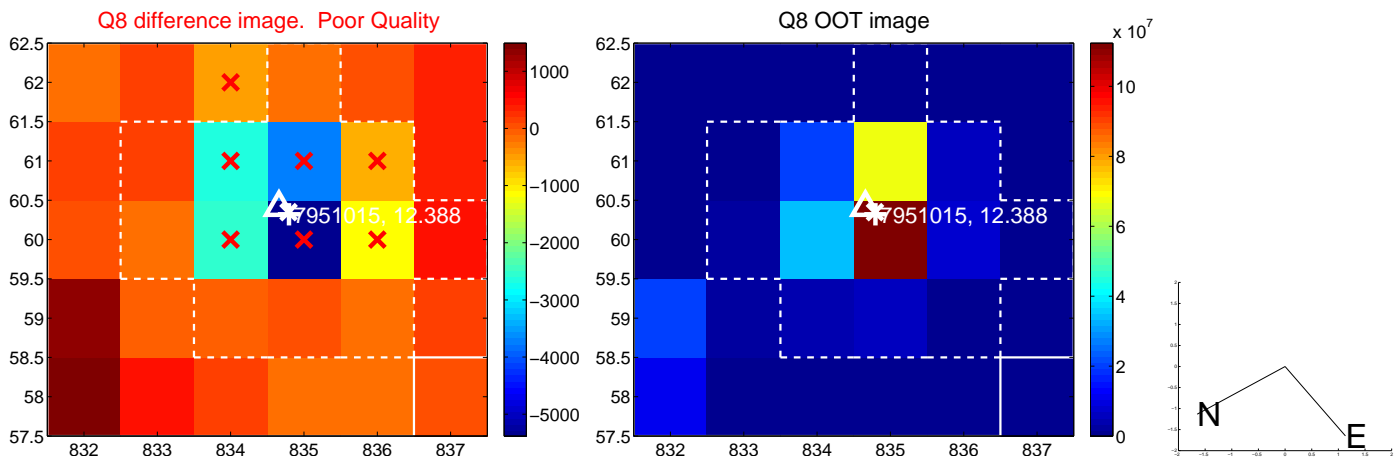
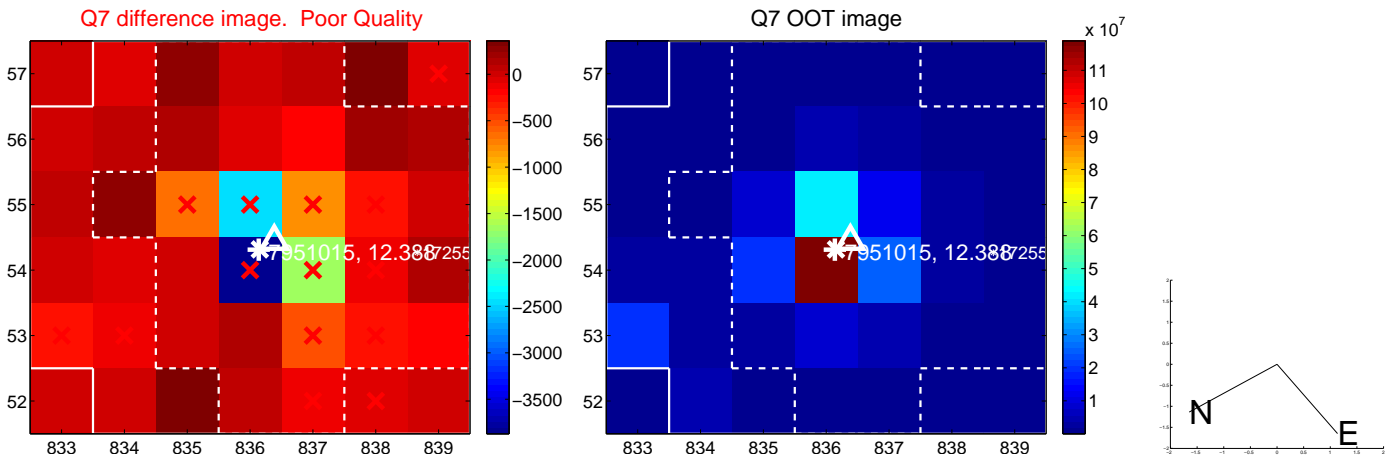
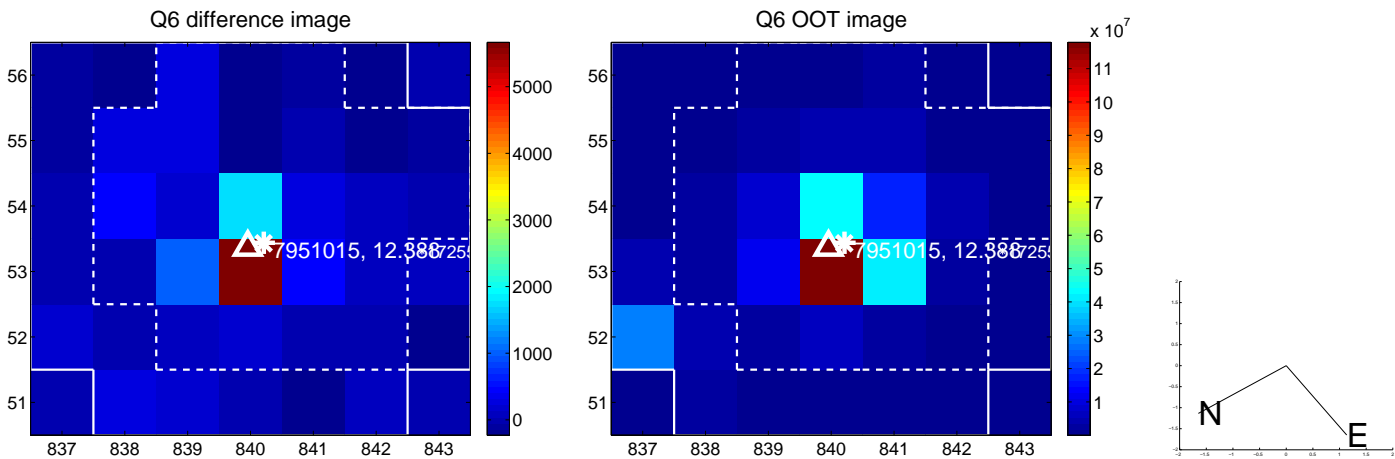
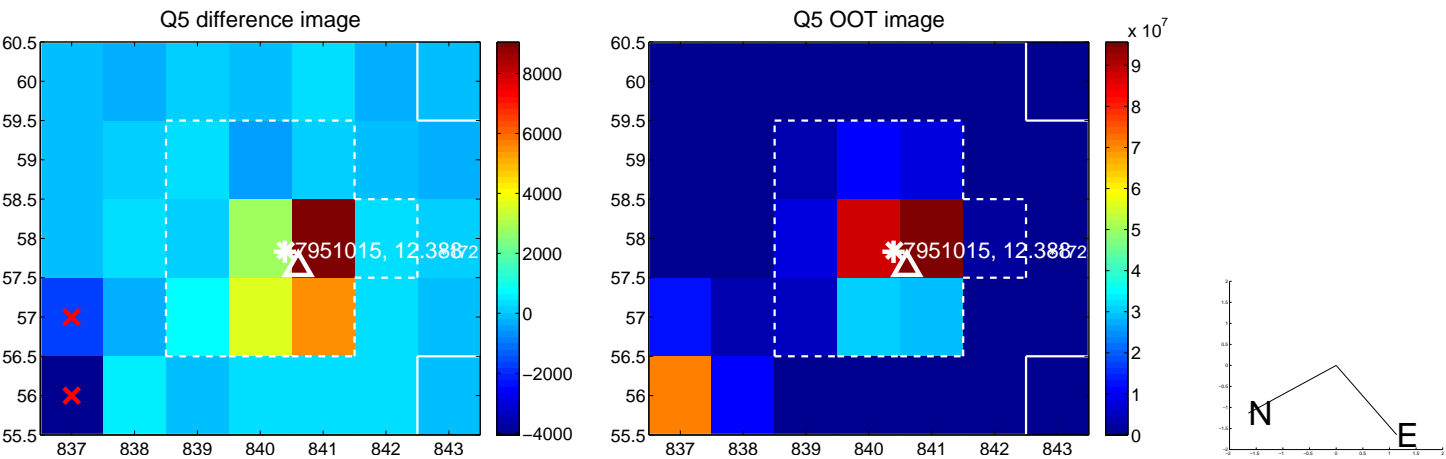


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets**; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

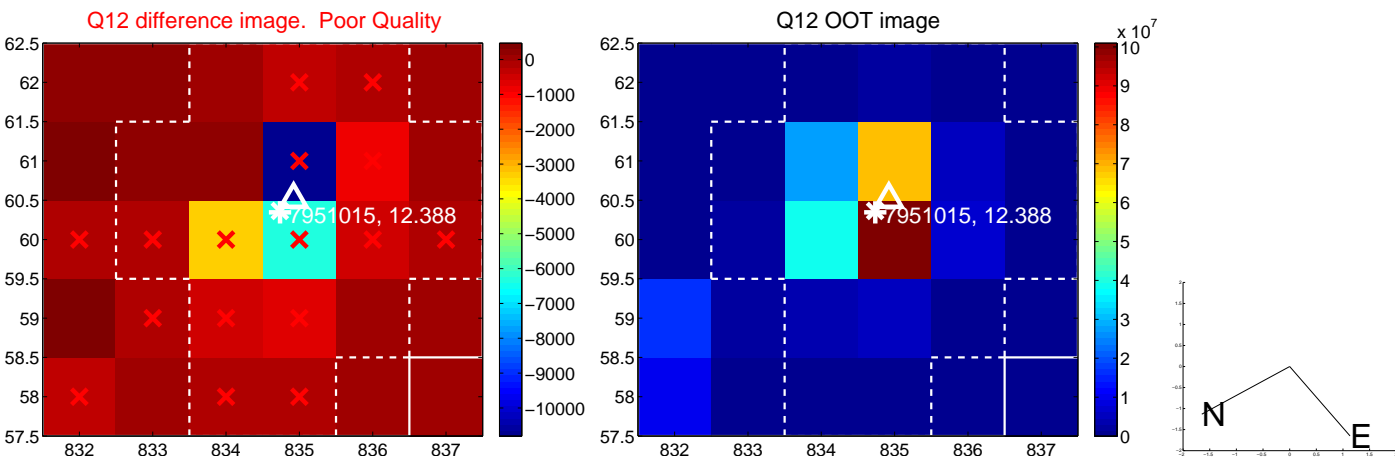
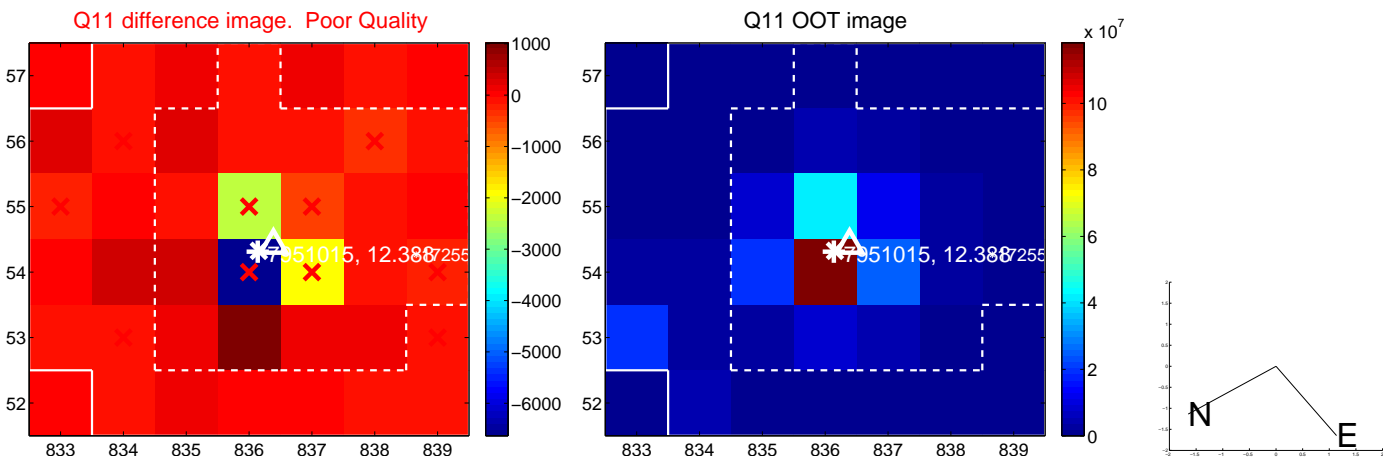
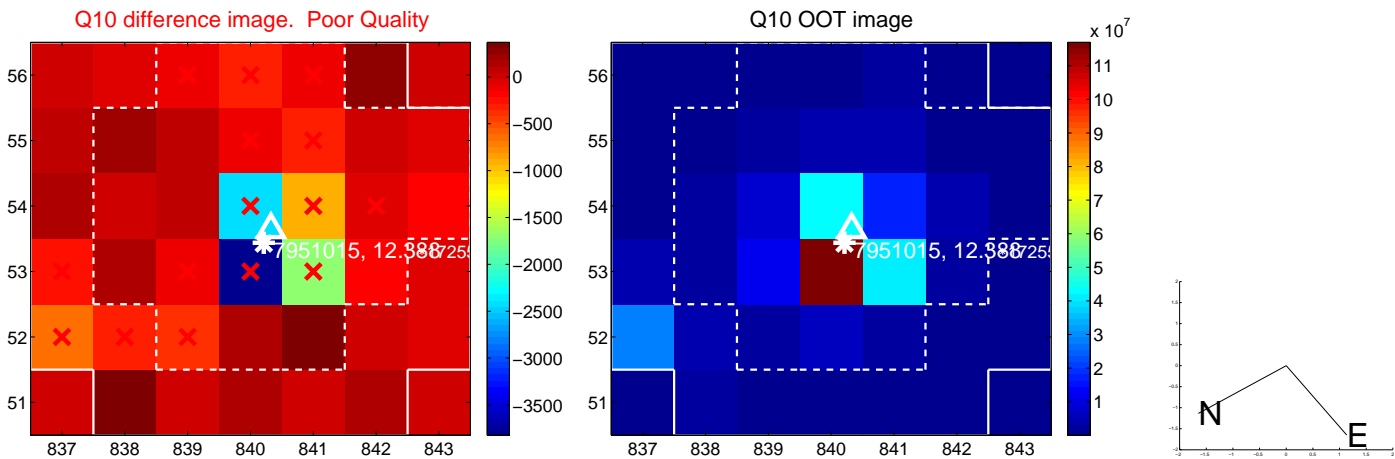
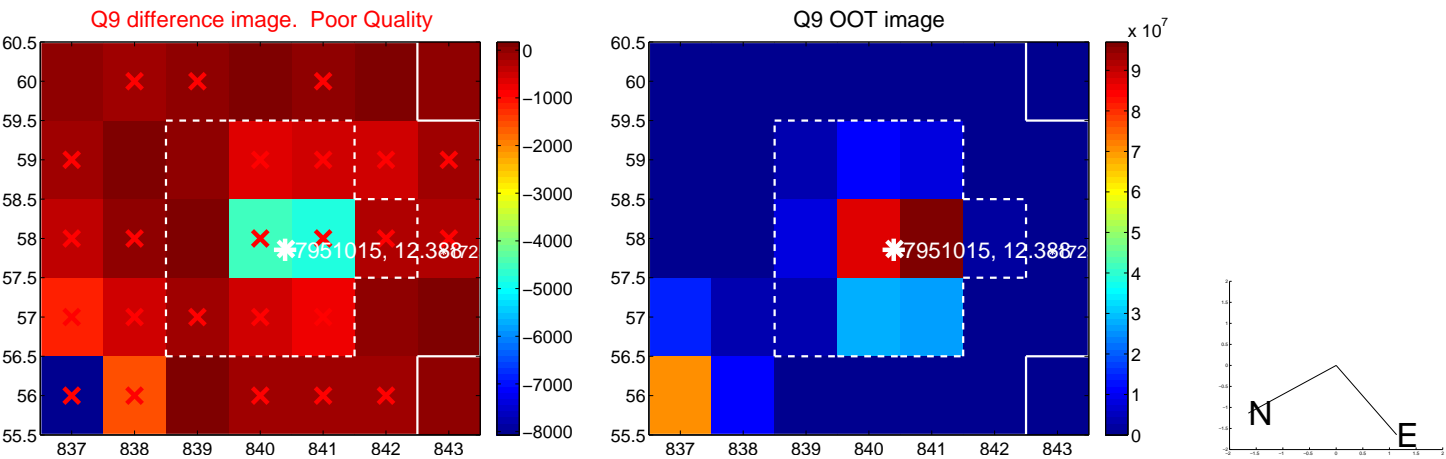
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



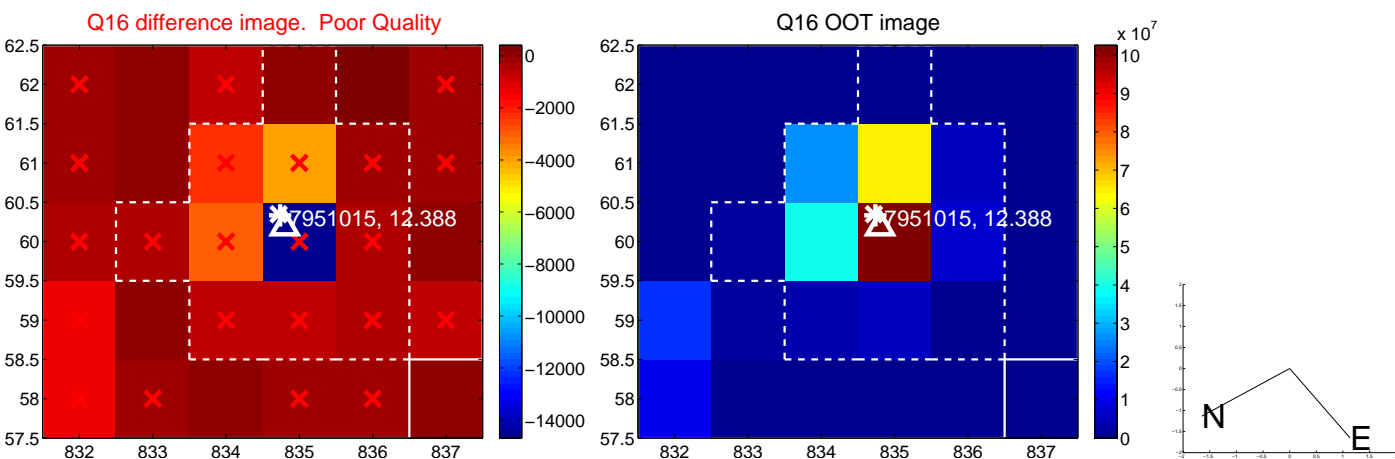
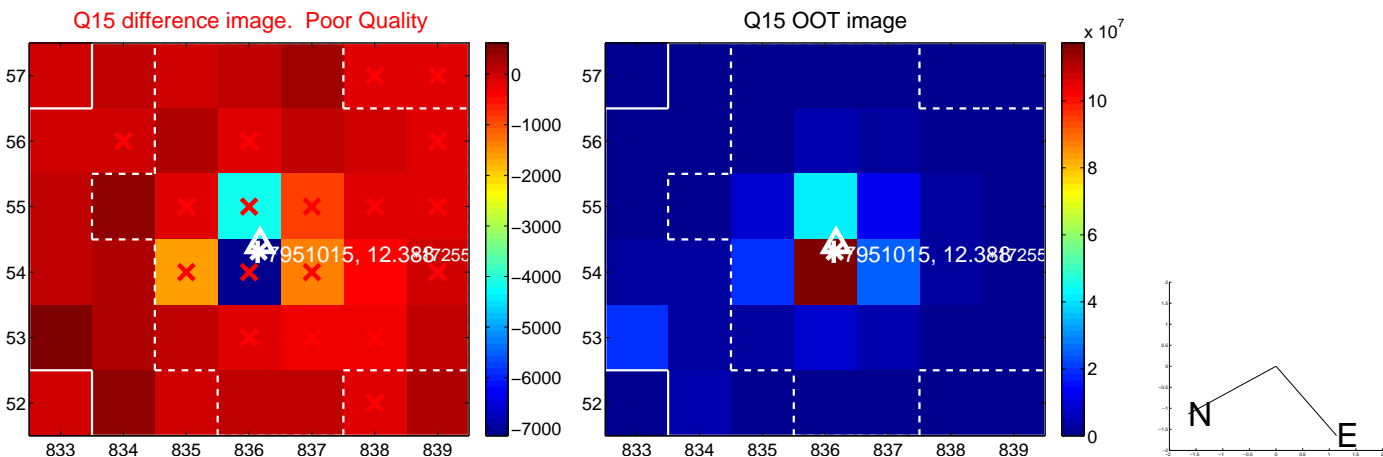
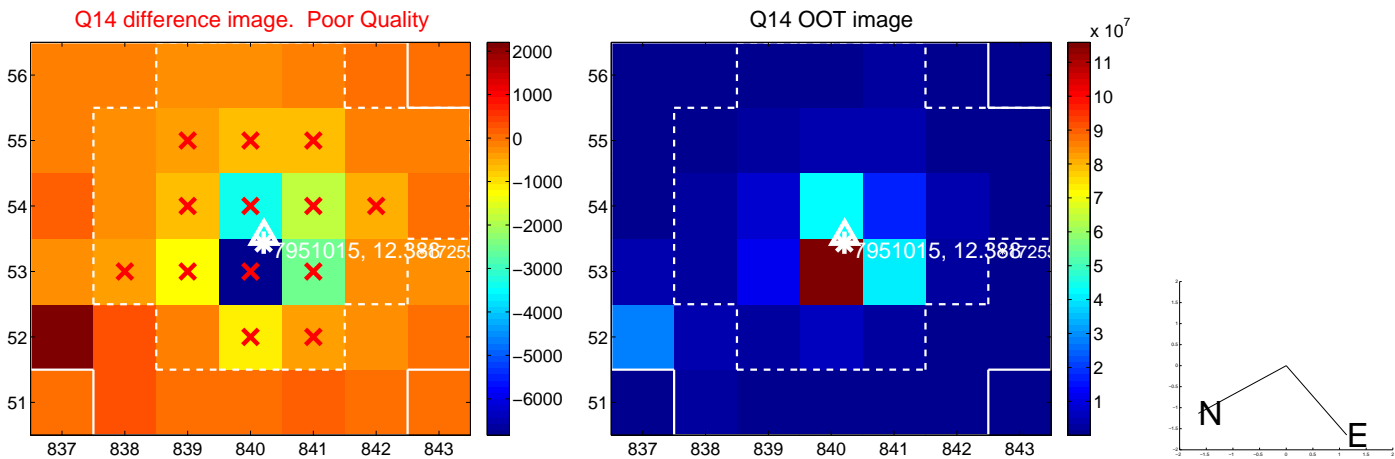
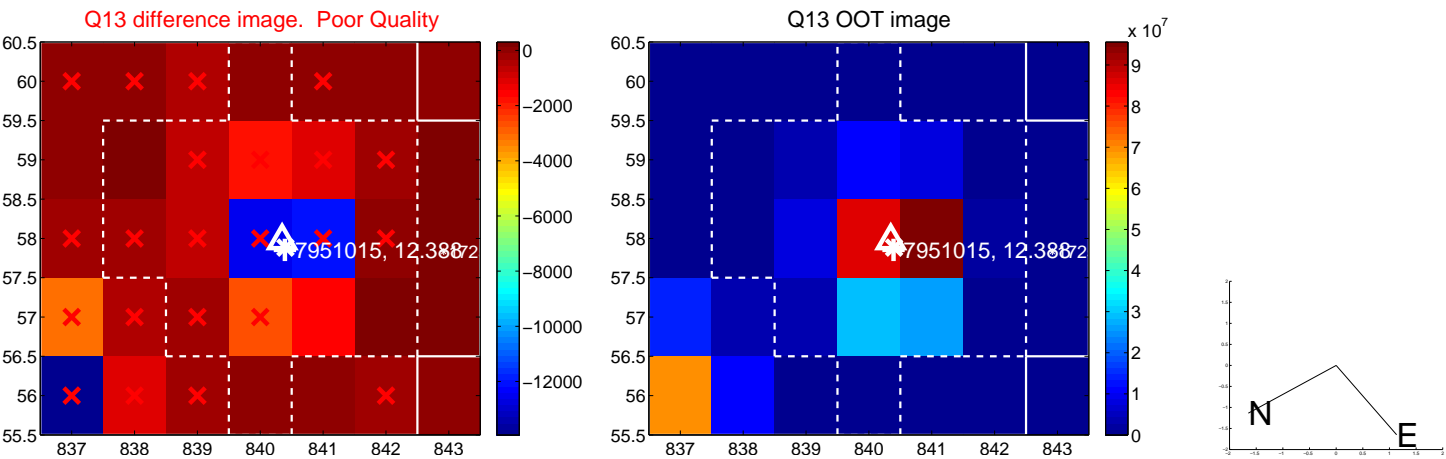
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



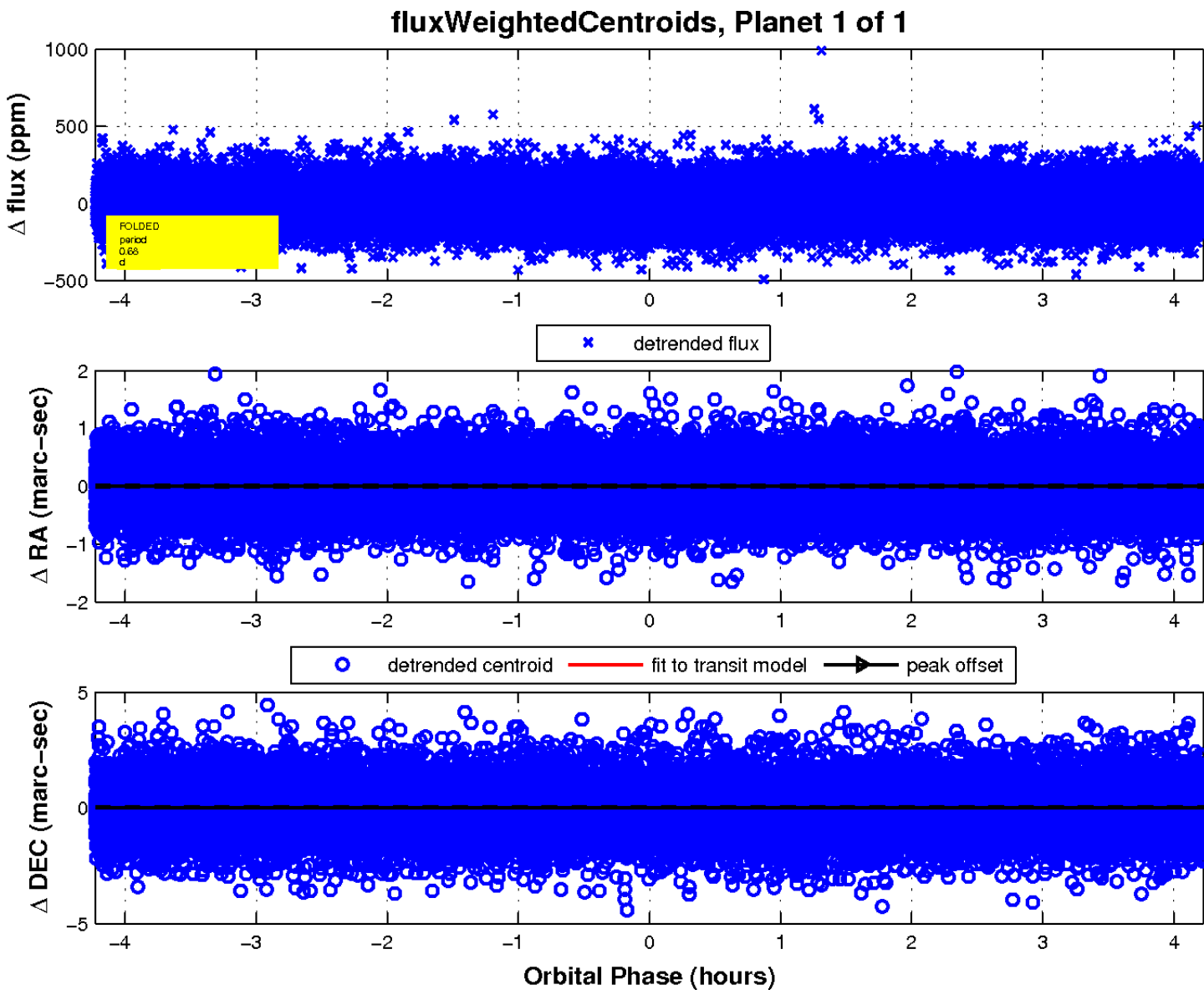
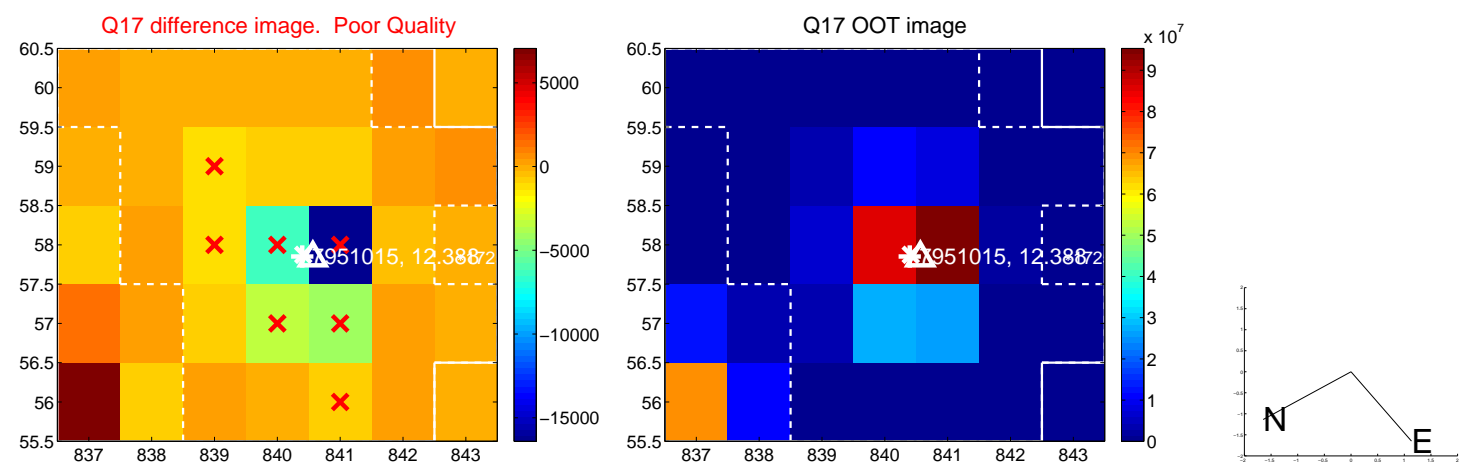
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UKIRT Image

Declination

