

KIC 008701912

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})
008701912-01	OBS	No	0.620085	131.664498	18.0	1.477	8.1	10.9	4.44	7346	1.92	0.00

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
008701912-01	OBS	FP	0.00	1	0	0	0	SWEET_NTL—LPP_DV—MOD_NONUNIQ_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.

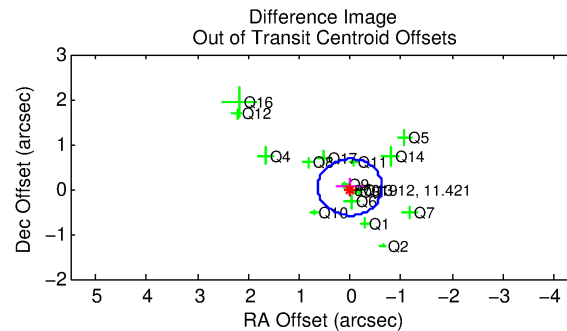
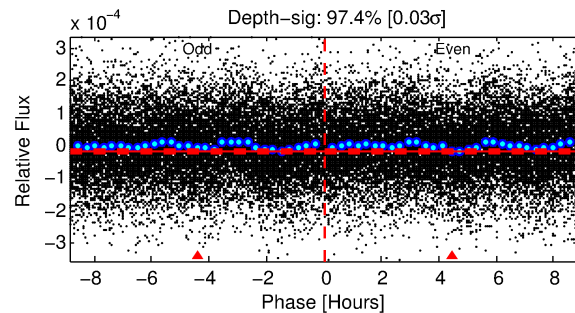
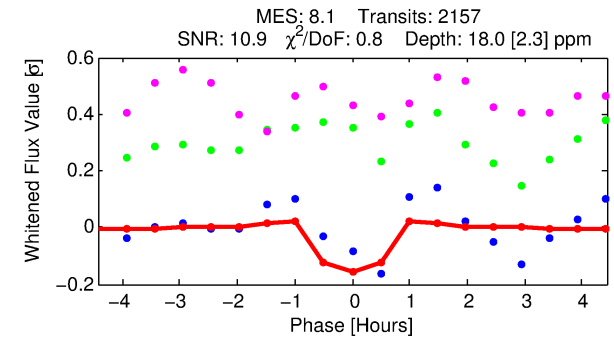
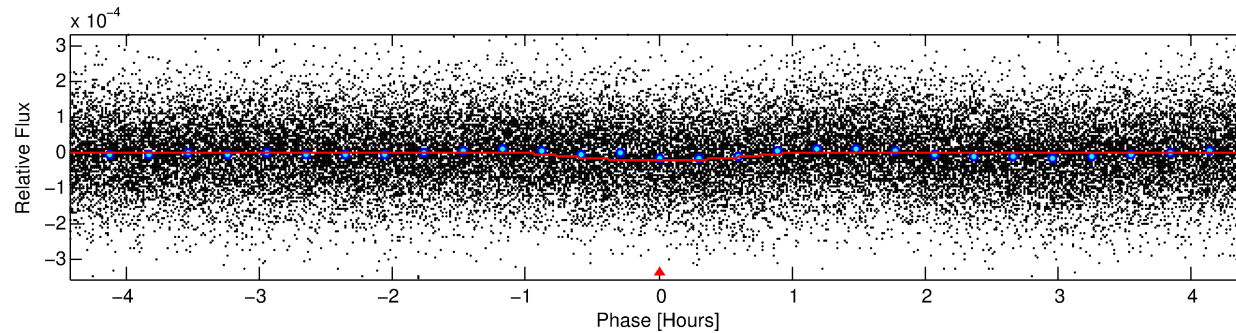
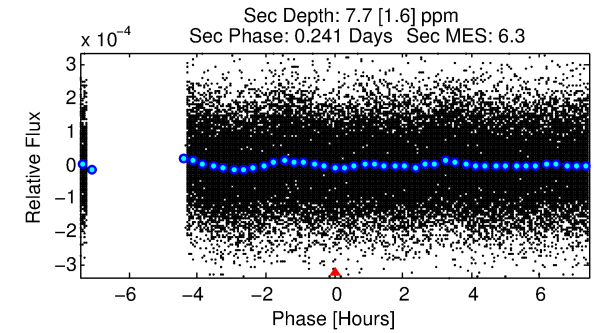
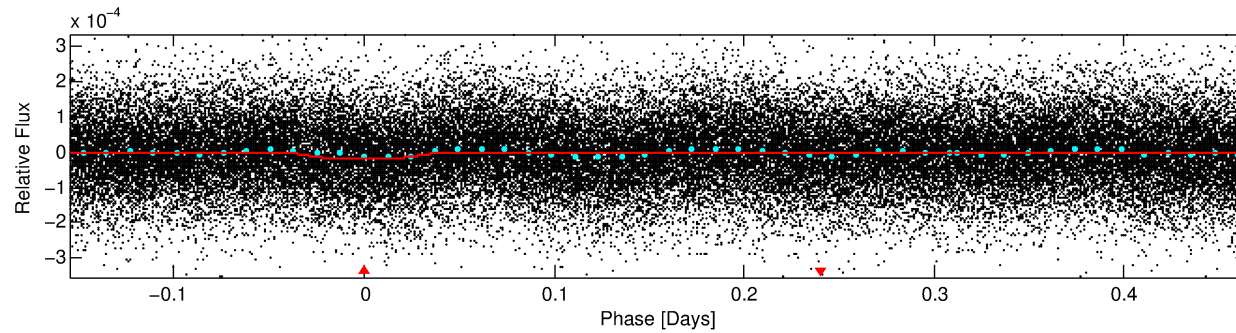
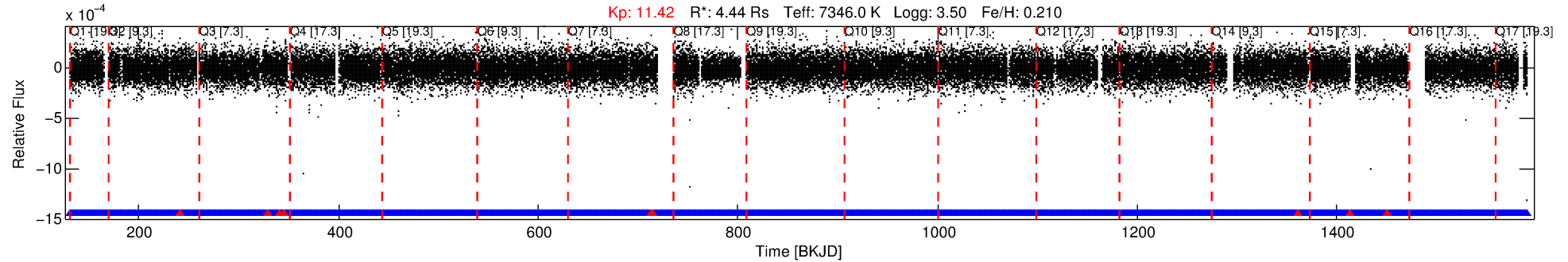
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 008701912-01

No Significant Match Found

DV One-Page Summary

KIC: 8701912 Candidate: 1 of 1 Period: 0.620 d



DV Fit Results:

Period = 0.62009 [0.00001] d
Epoch = 131.6645 [0.0016] BKJD
 $R_p/R^* = 0.0040$ [0.0012]
 $a/R^* = 3.14$ [4.59]
 $b = 0.30$ [4.96]
 $S_{\text{eff}} = \text{N/A}$
 $T_{\text{eq}} = \text{N/A}$
 $R_p = 1.92$ [1.16] R_e
 $a = \text{N/A}$
 $A_g = \text{N/A}$
 $T_{\text{eff}} = \text{N/A}$

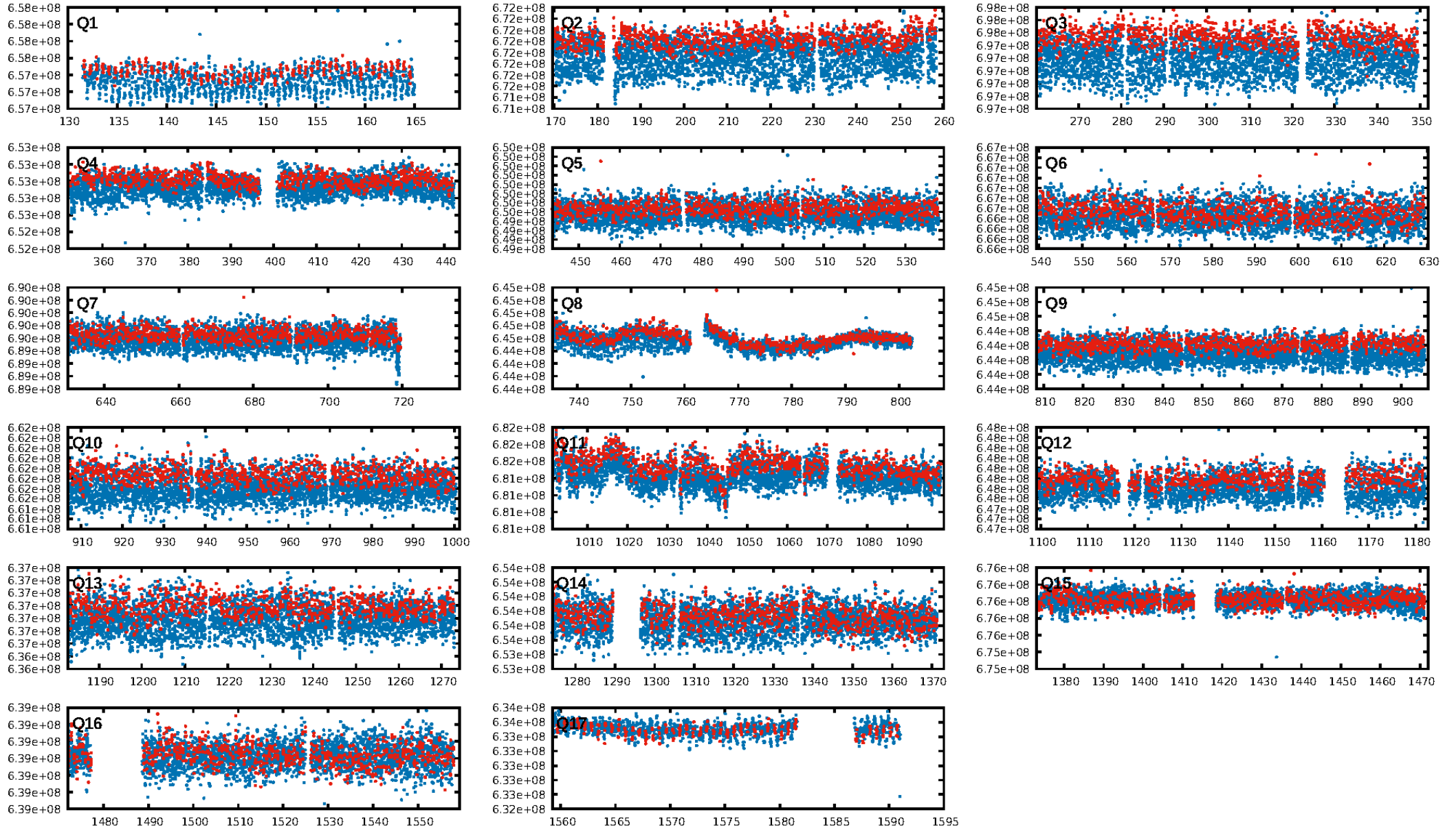
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 1.22e-14
RollingBand-fgt: 1.00 [2051/2060]
GhostDiagnostic-chr: -1.11
Centroid-sig: 0.0%
Centroid-so: 1.437 arcsec [3.32σ]
OotOffset-rm: 0.042 arcsec [0.20σ]
KicOffset-rm: 0.044 arcsec [0.17σ]
OotOffset-st: 4/3/4/5 [16]
KicOffset-st: 4/3/4/5 [16]
DiffImageQuality-fgm: 0.31 [5/16]
DiffImageOverlap-fno: 1.00 [17/17]

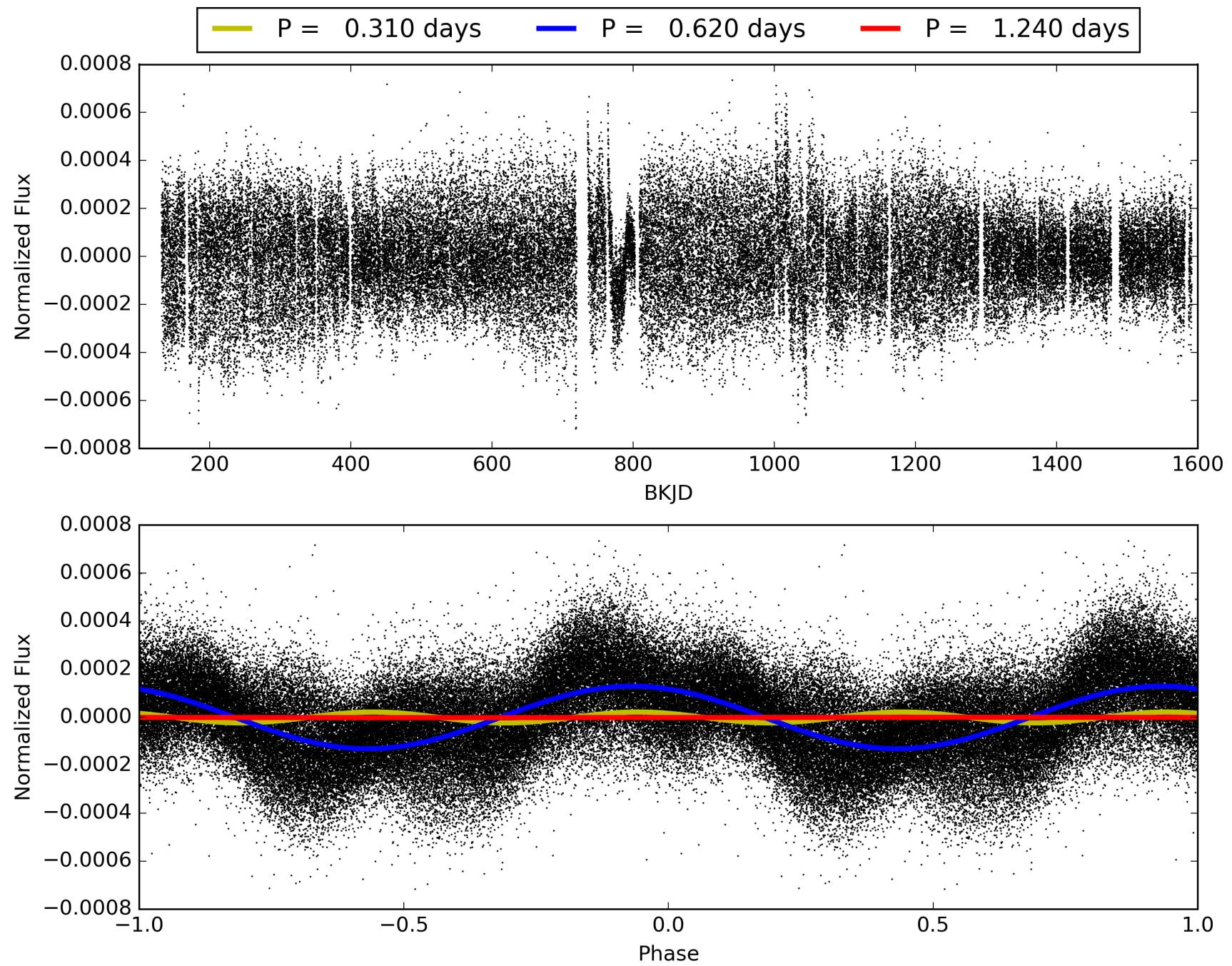
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 20:30:46 Z

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

TCE 008701912-01, PDC Light Curves

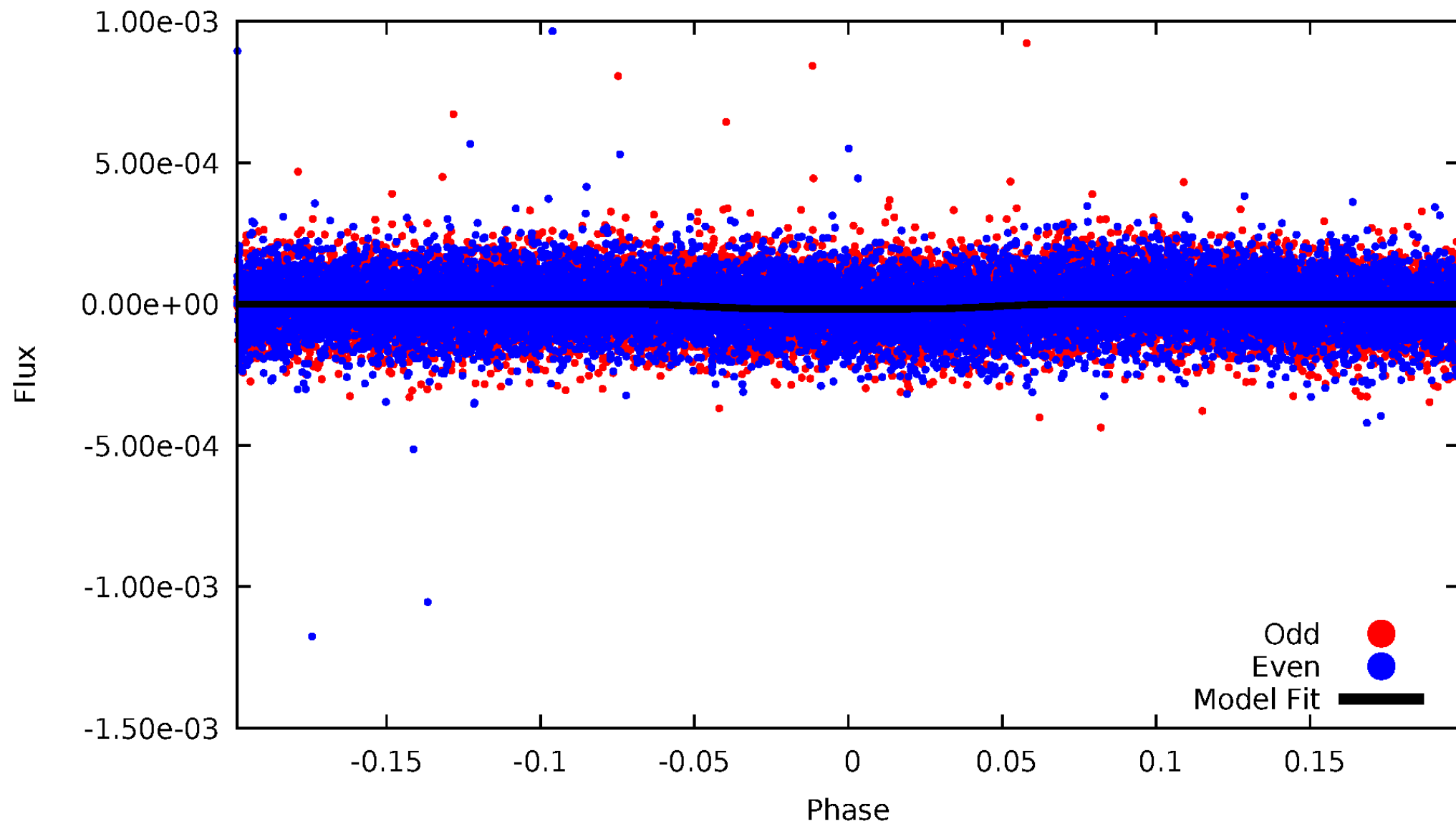


TCE 008701912-01



DV Odd/Even

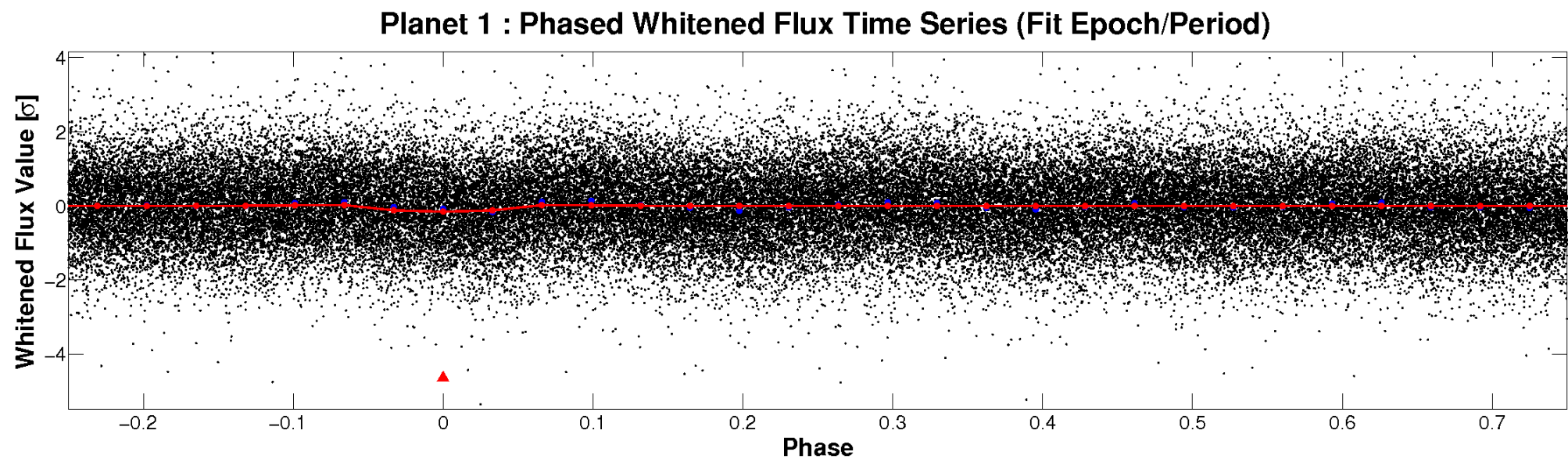
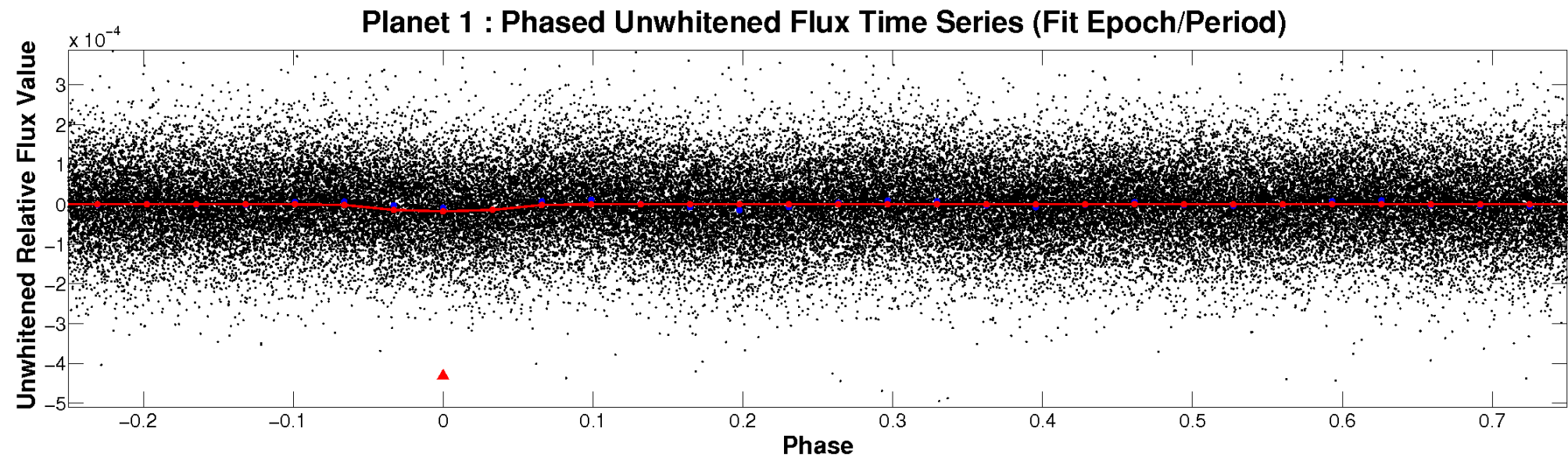
TCE 008701912-01



ALT Odd/Even

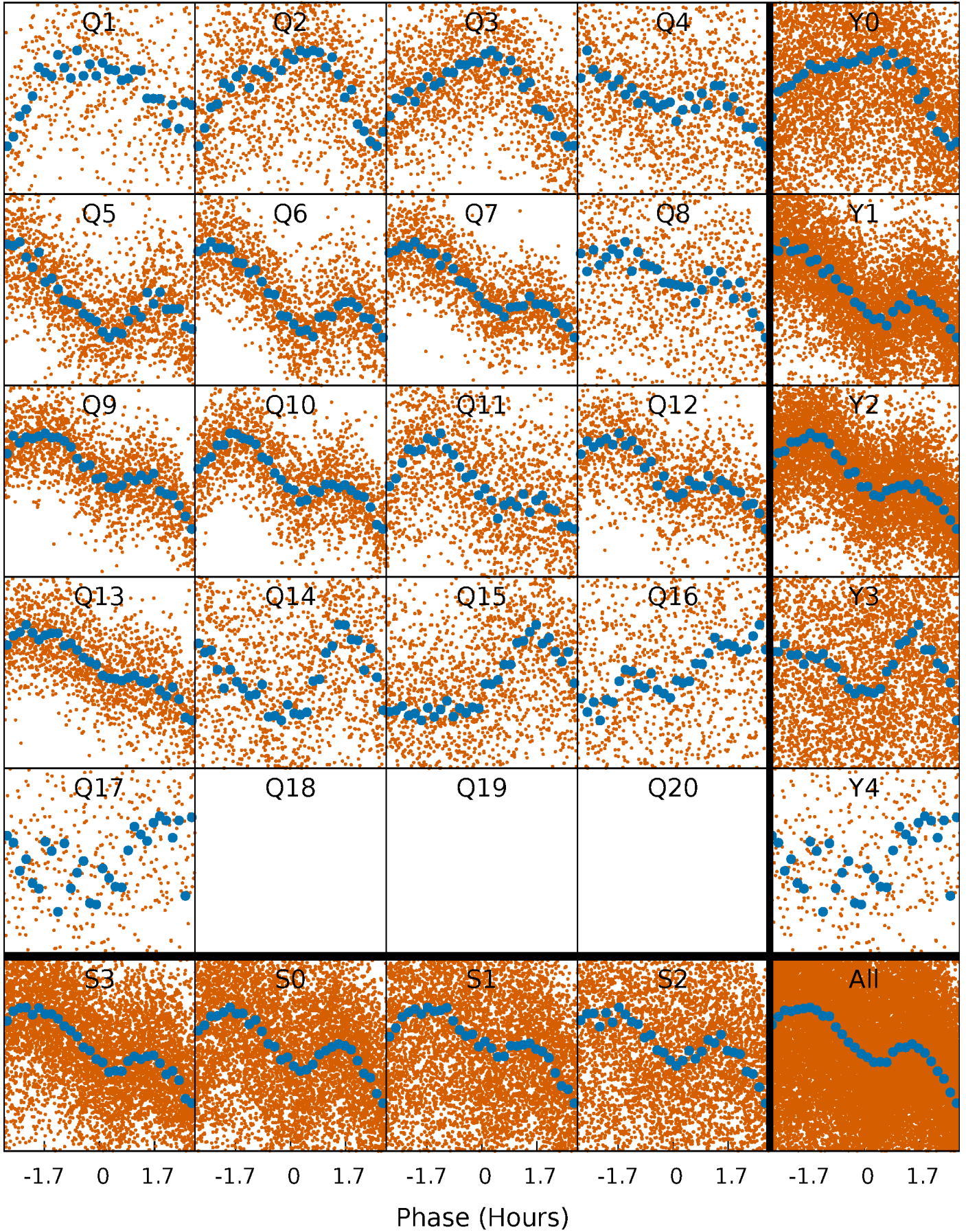
This plot does not exist for this TCE.

Non-Whitened Vs. Whitened Light Curve



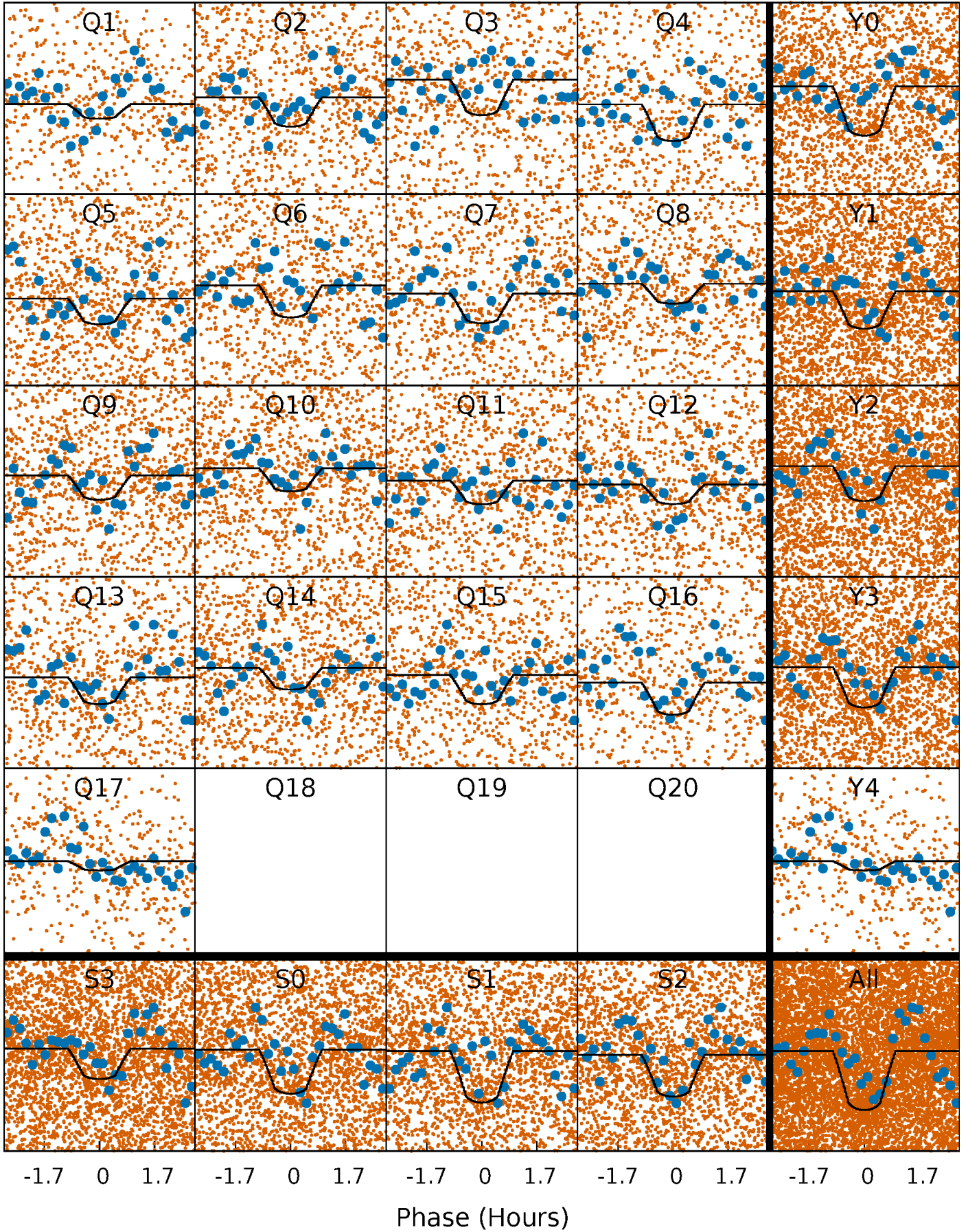
PDC Quarter-Phased Transit Curves

TCE 008701912-01 P= 0.620085 Days $T_0=131.664498$ (BKJD)



DV Quarter-Phased Transit Curves

TCE 008701912-01 P= 0.620085 Days $T_0=131.664498$ (BKJD)

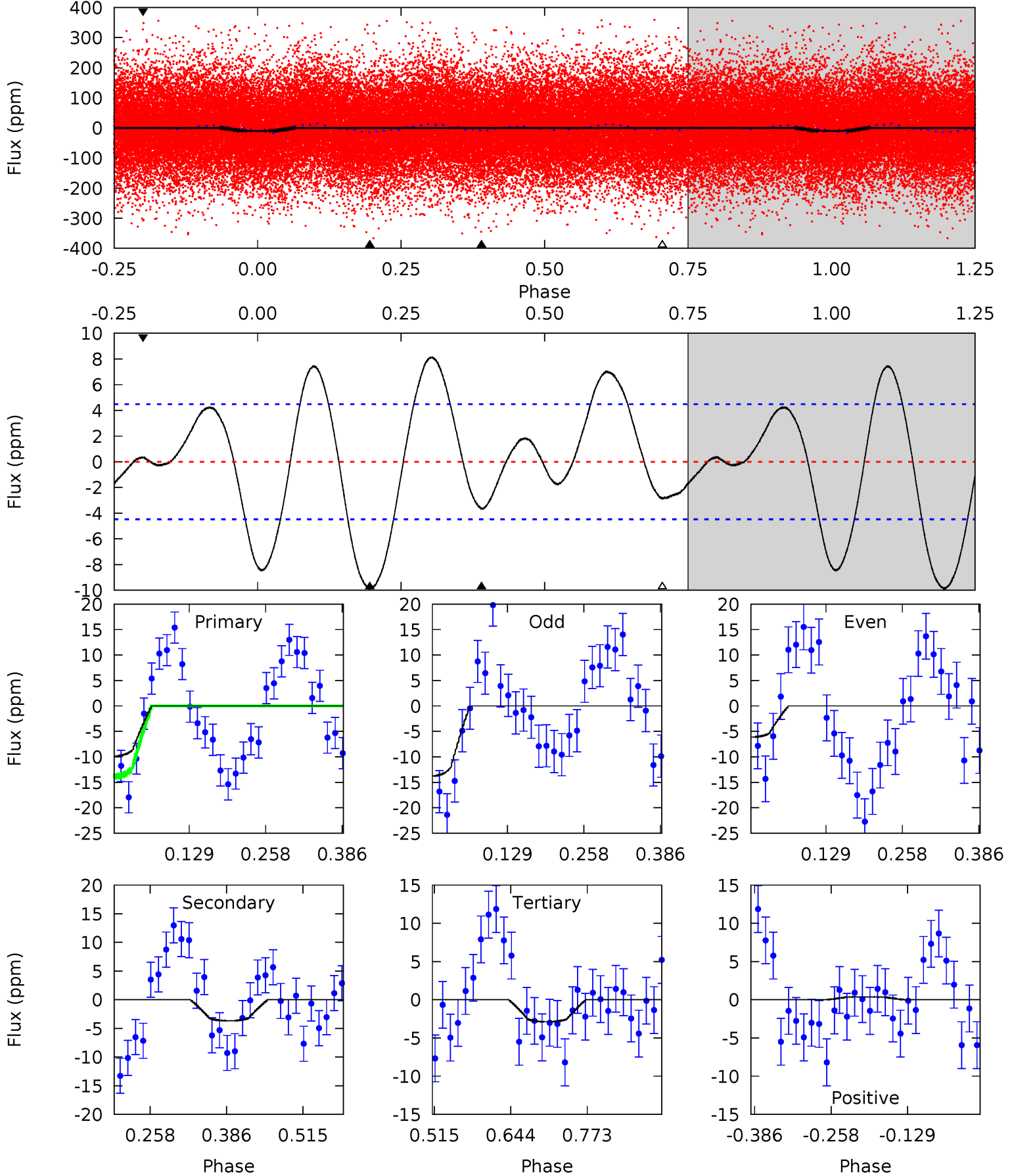


This plot does not exist for this TCE.

DV Model-Shift Uniqueness Test

008701912-01, P = 0.620085 Days, E = 131.044413 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
9.94	3.69	2.91	0.38	4.51	1.52	3.76	7.03	9.56	0.79	3.31	3.83	1.21	0.45	3.97



Alt Model-Shift Uniqueness Test

This plot does not exist for this TCE.

Stellar Parameters For KIC 008701912

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	7346^{+203}_{-330}	$3.500^{+0.540}_{-0.030}$	$0.210^{+0.150}_{-0.350}$	$4.437^{+0.276}_{-2.348}$	$2.267^{+0.213}_{-0.638}$	$0.037^{+0.260}_{-0.004}$
	+3%/-4%	+15%/-1%	+71%/-167%	+6%/-53%	+9%/-28%	+710%/-10%
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 008701912-01 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-4 \pm 1	$1.67^{+0.61}_{-0.61}$	6624^{+458}_{-866}	-3722^{+8756}_{-1158}	$0.250^{+0.393}_{-0.121}$
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 $A_{\text{obs}} \gg 1.0$

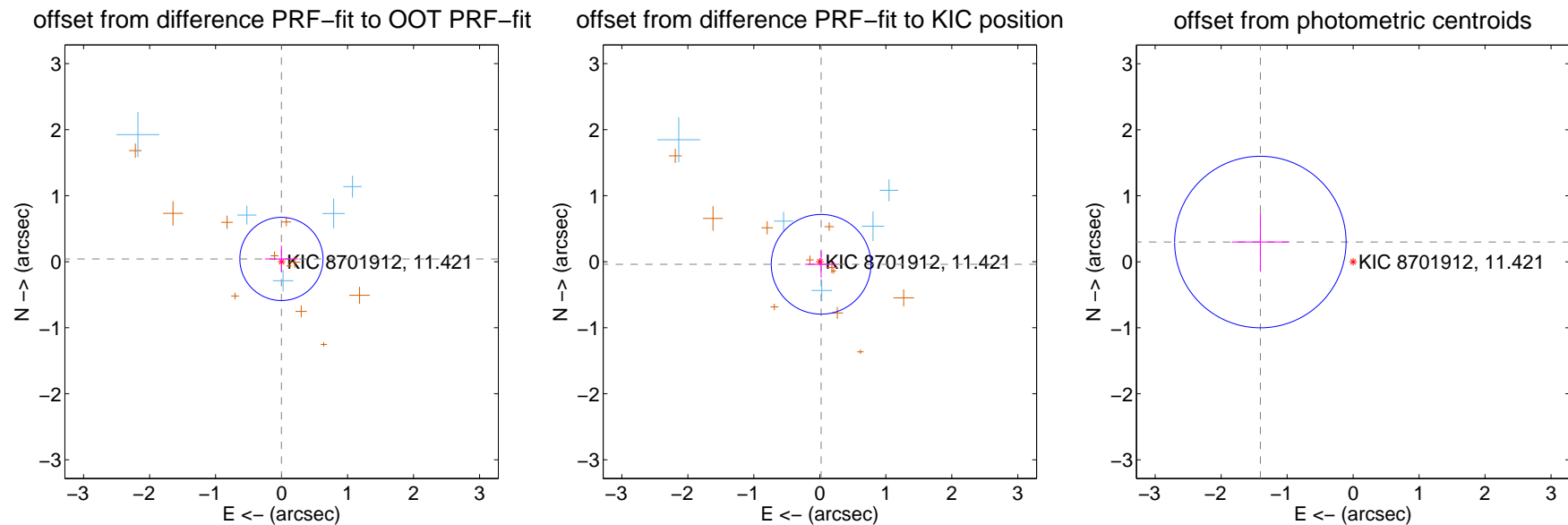
DV Centroid Data

Supplemental centroid analysis for 008701912-01. **Kepler magnitude: 11.42.** Transit SNR 10.93

There are 5 quarters with good PRF difference image offsets

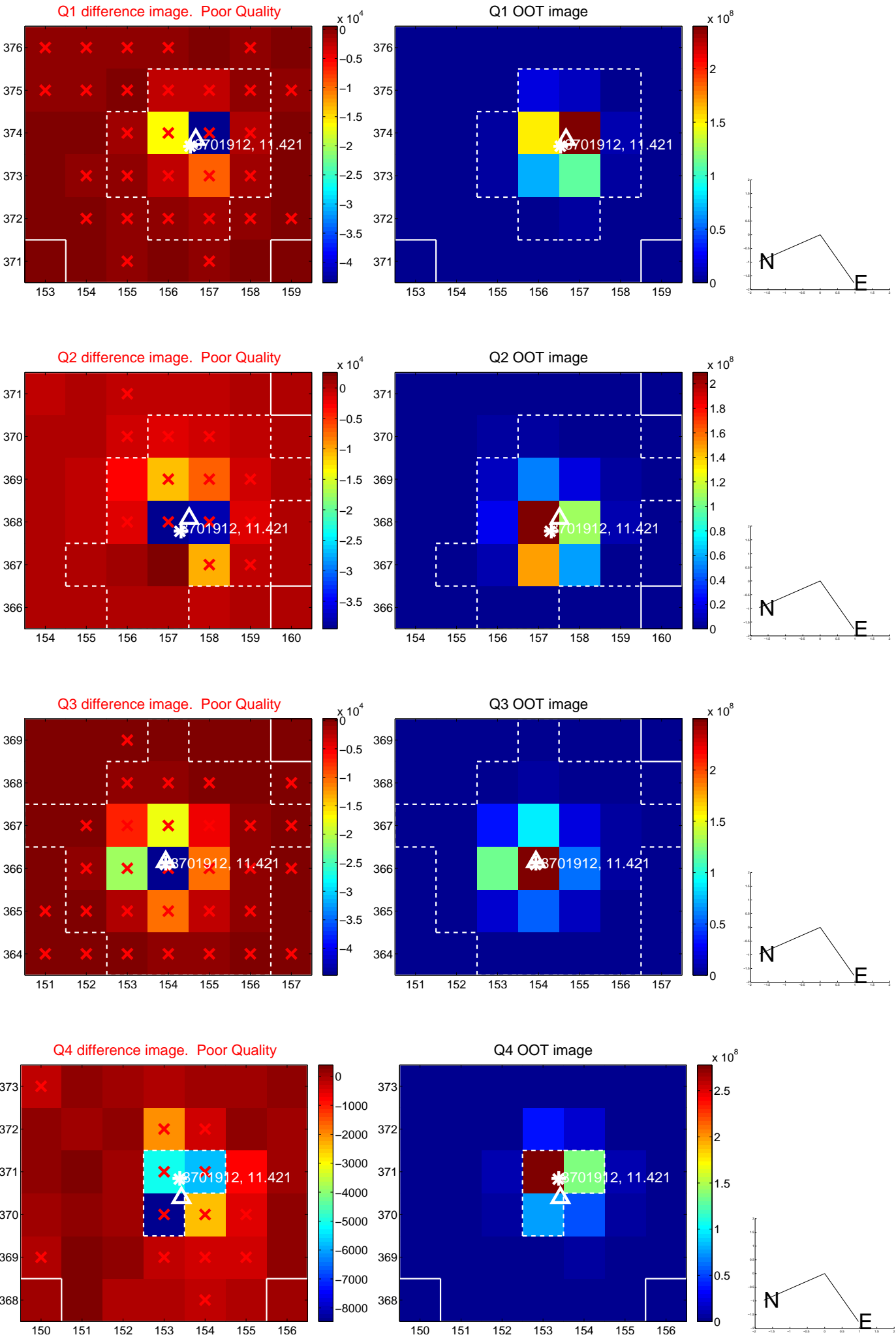
The direct PRF centroid is offset from the target star catalog position by about 0.09 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.042 ± 0.210	0.20	0.002 ± 0.250	0.042 ± 0.203
PRF-fit source offset from KIC position	0.044 ± 0.252	0.17	-0.019 ± 0.244	-0.039 ± 0.204
photometric centroid source offset	1.44 ± 0.43	3.32	1.41 ± 0.43	0.30 ± 0.44

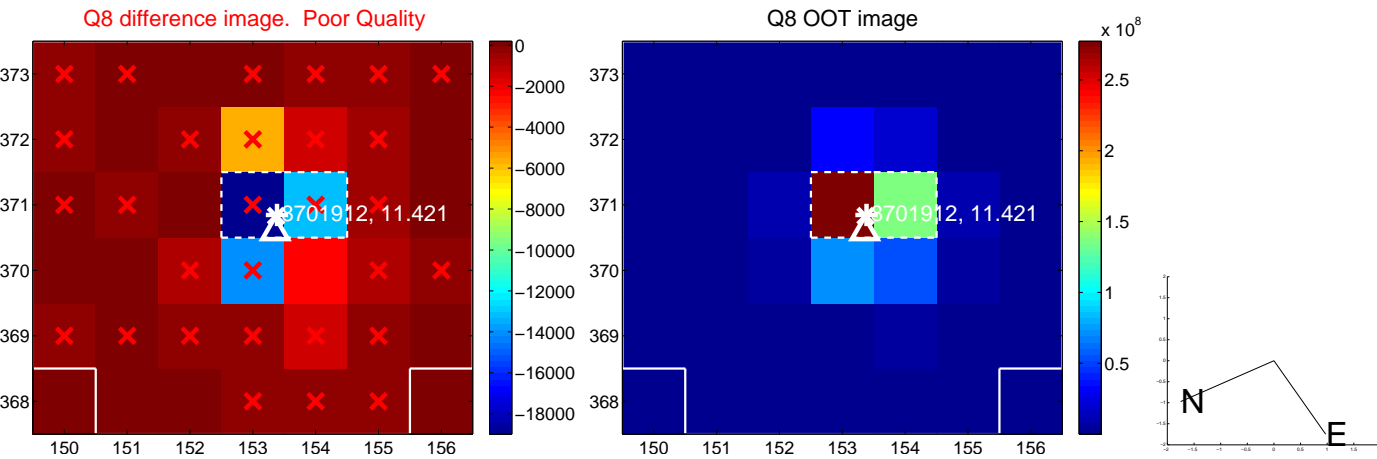
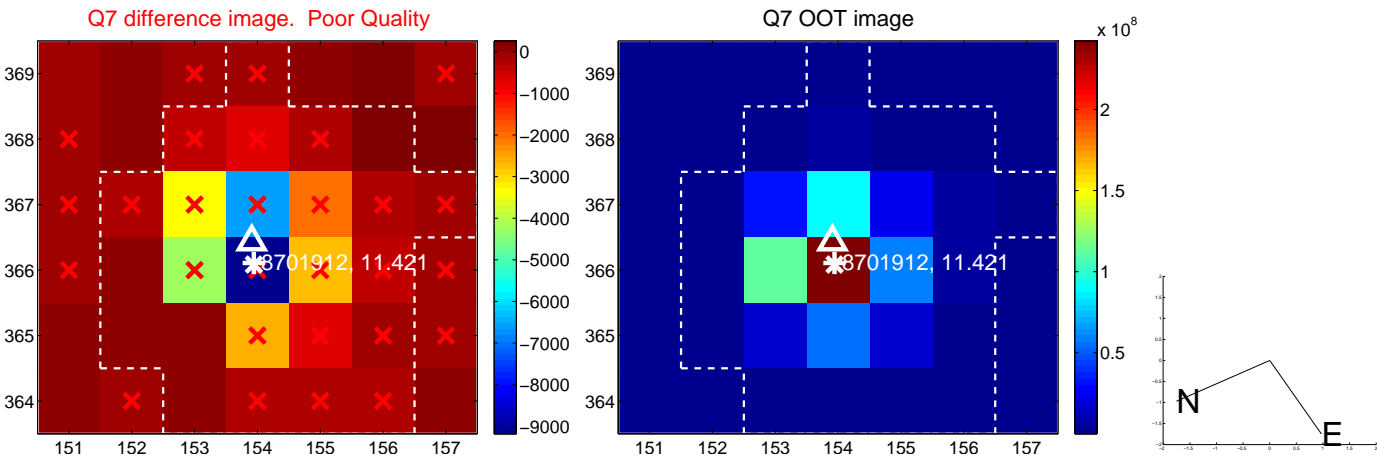
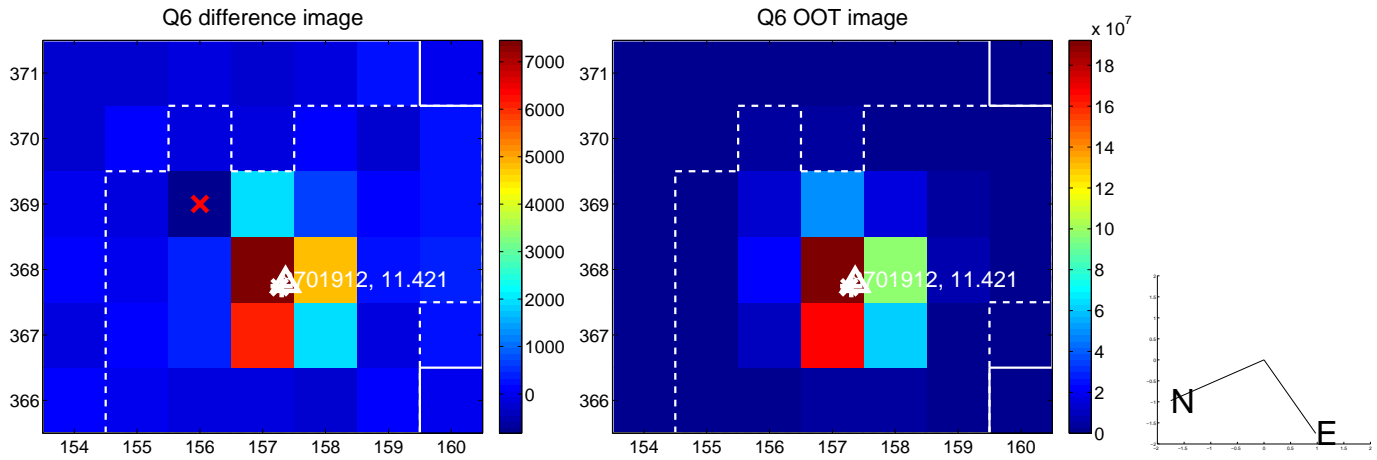
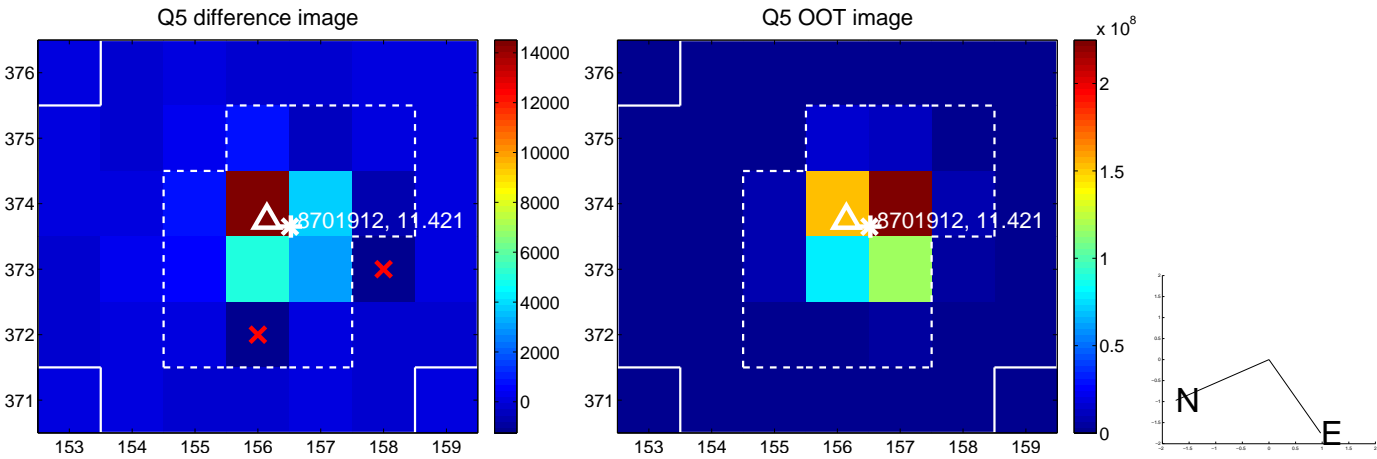


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets;** magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

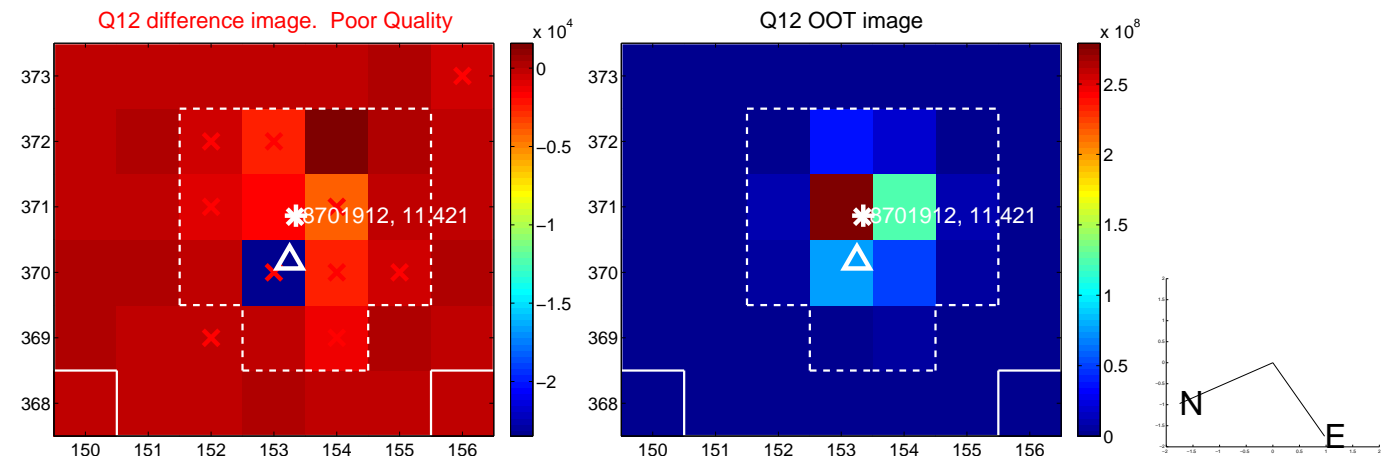
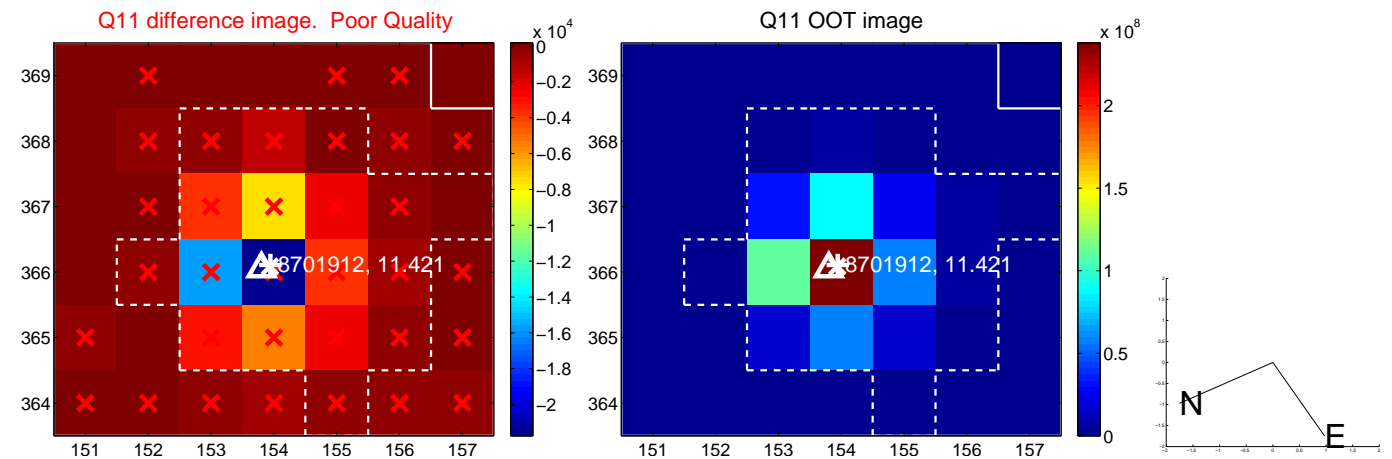
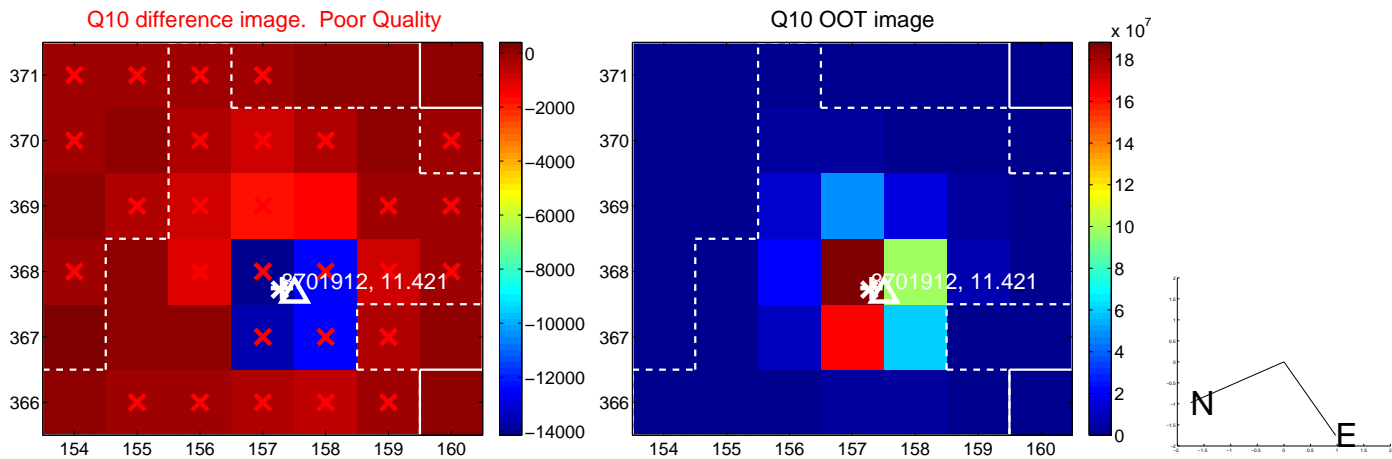
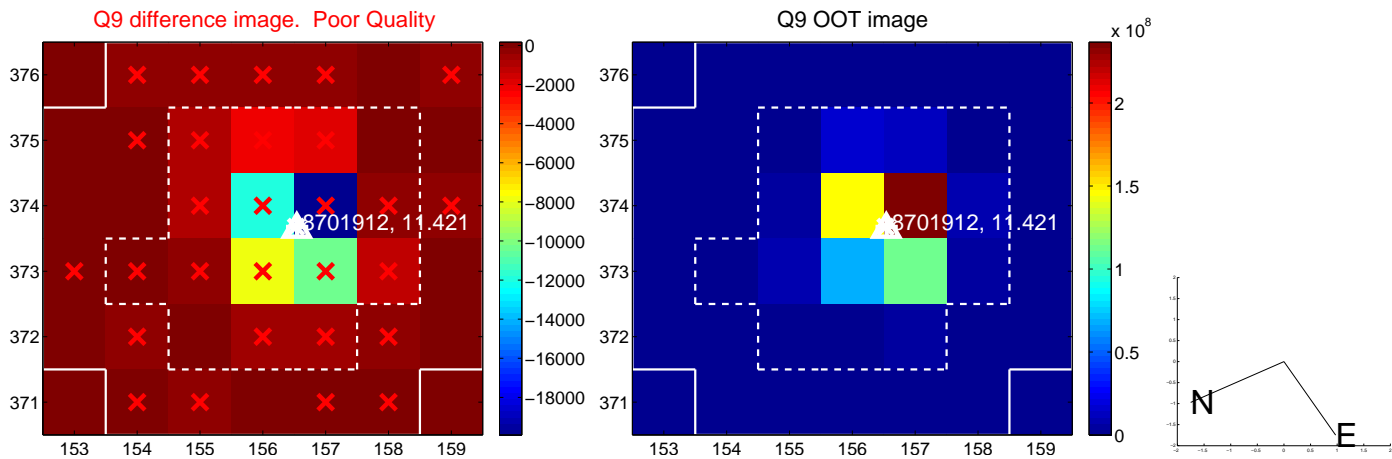
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



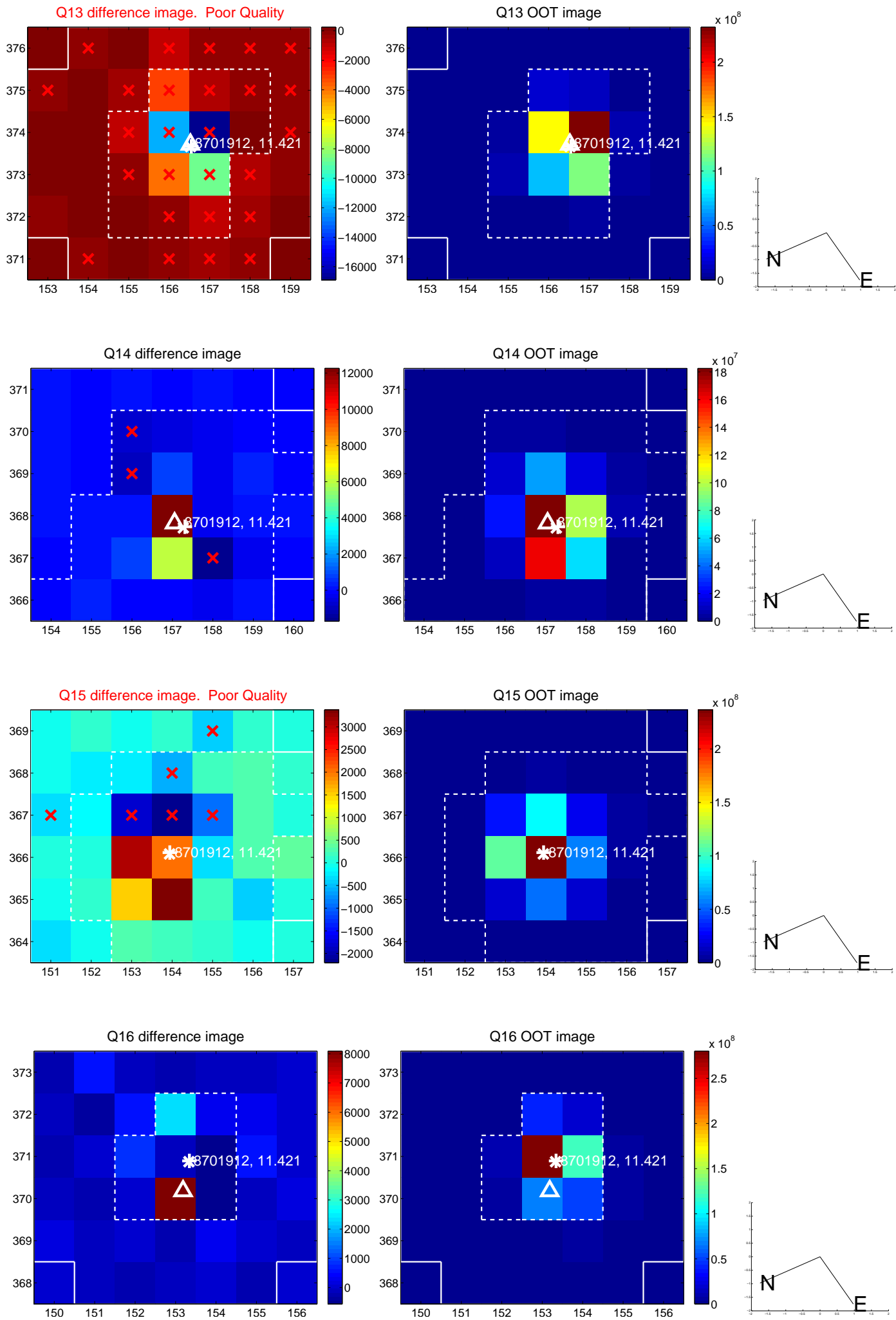
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



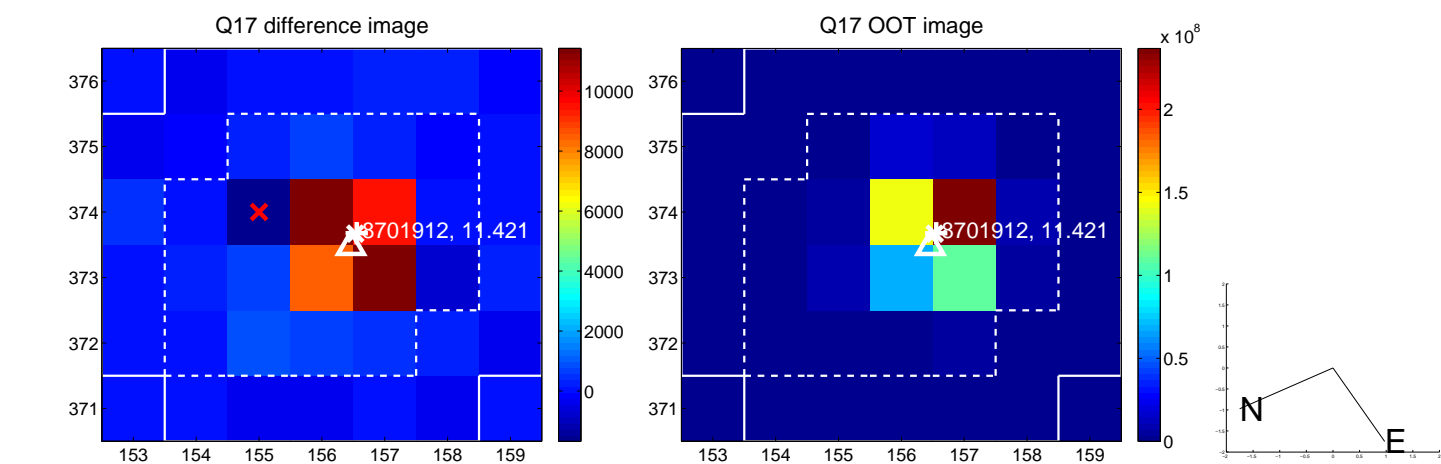
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



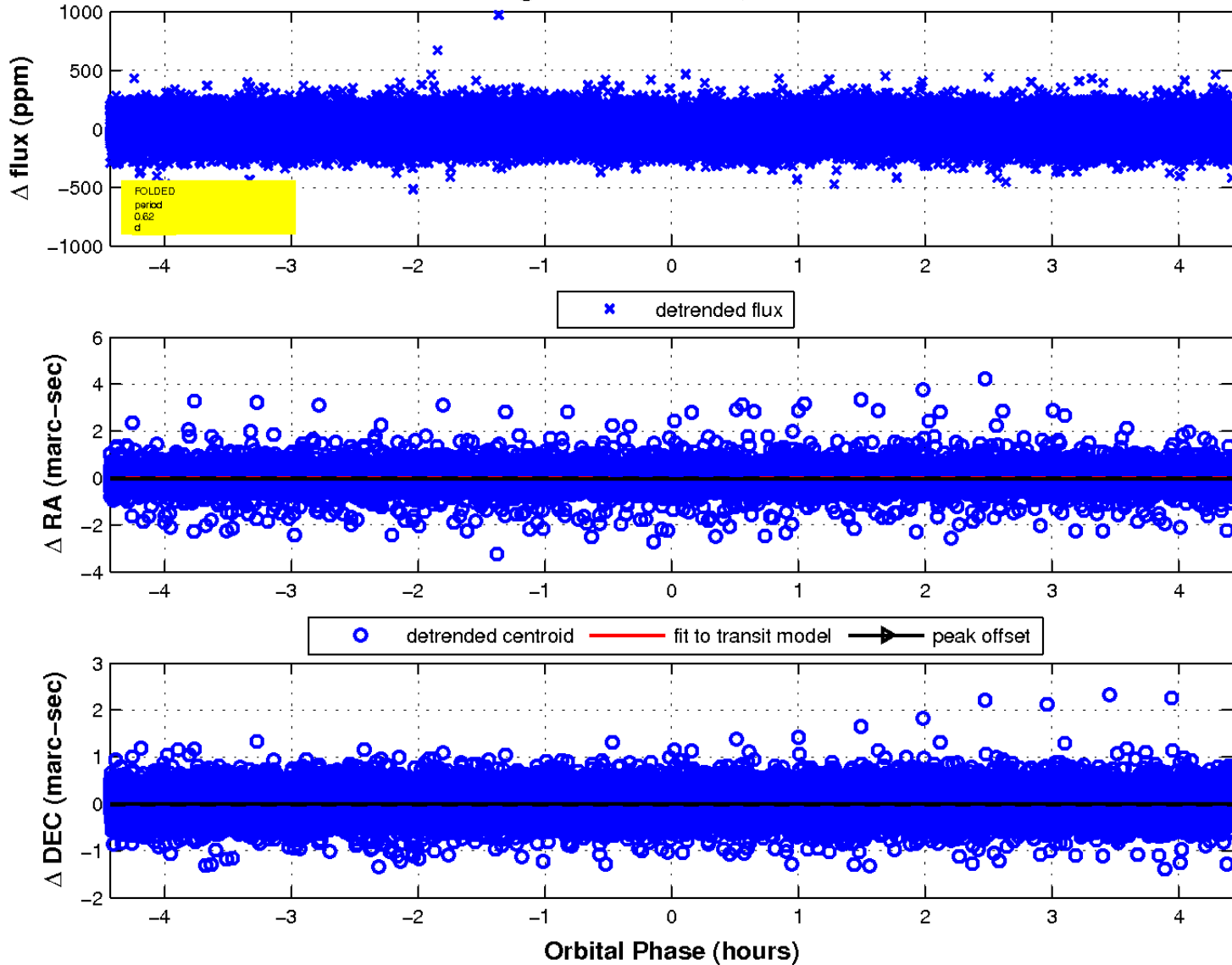
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white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



fluxWeightedCentroids, Planet 1 of 1



UKIRT Image

Declination

