

KIC 009632537

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})
009632537-01	OBS	No	2.316469	132.320373	92.3	6.208	8.8	8.8	2.92	8037	2.82	17897.51

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
009632537-01	OBS	FP	0.00	1	0	0	0	SWEET_NTL — LPP_DV — MOD_NONUNIQ_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.

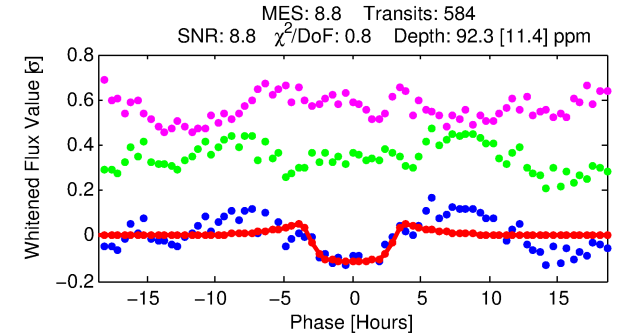
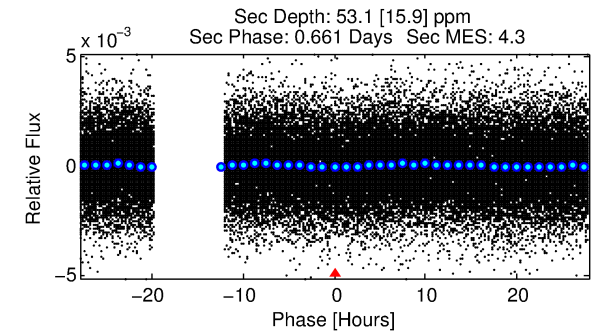
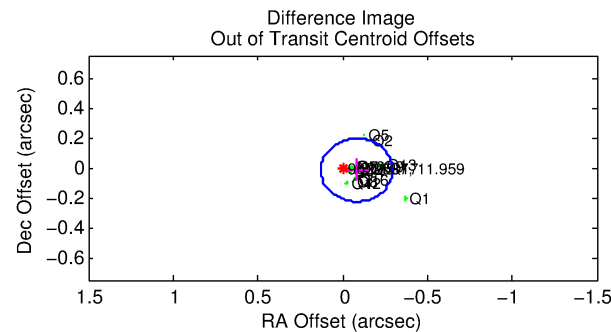
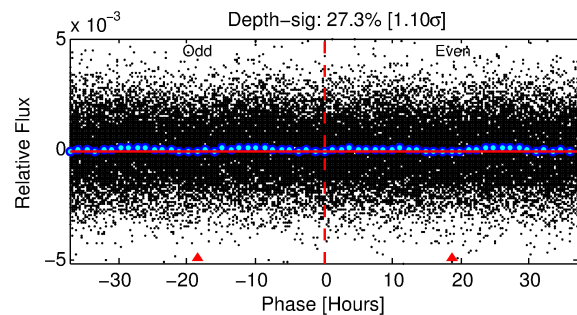
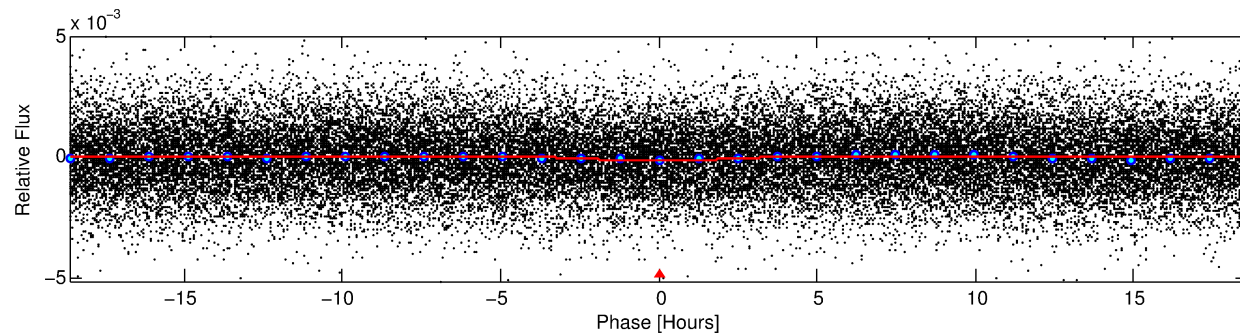
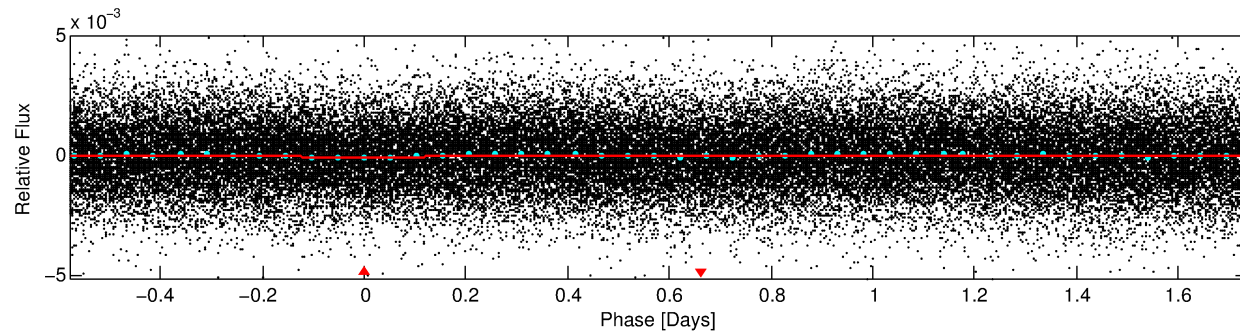
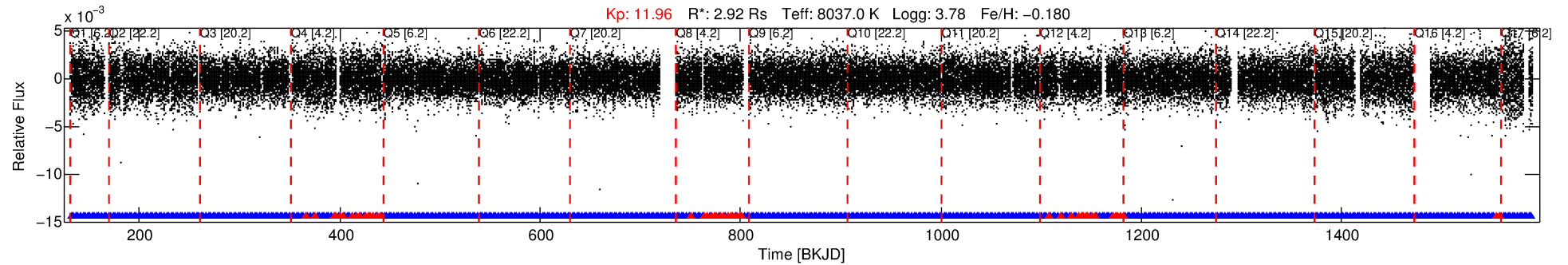
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 009632537-01

No Significant Match Found

DV One-Page Summary

KIC: 9632537 Candidate: 1 of 1 Period: 2.316 d



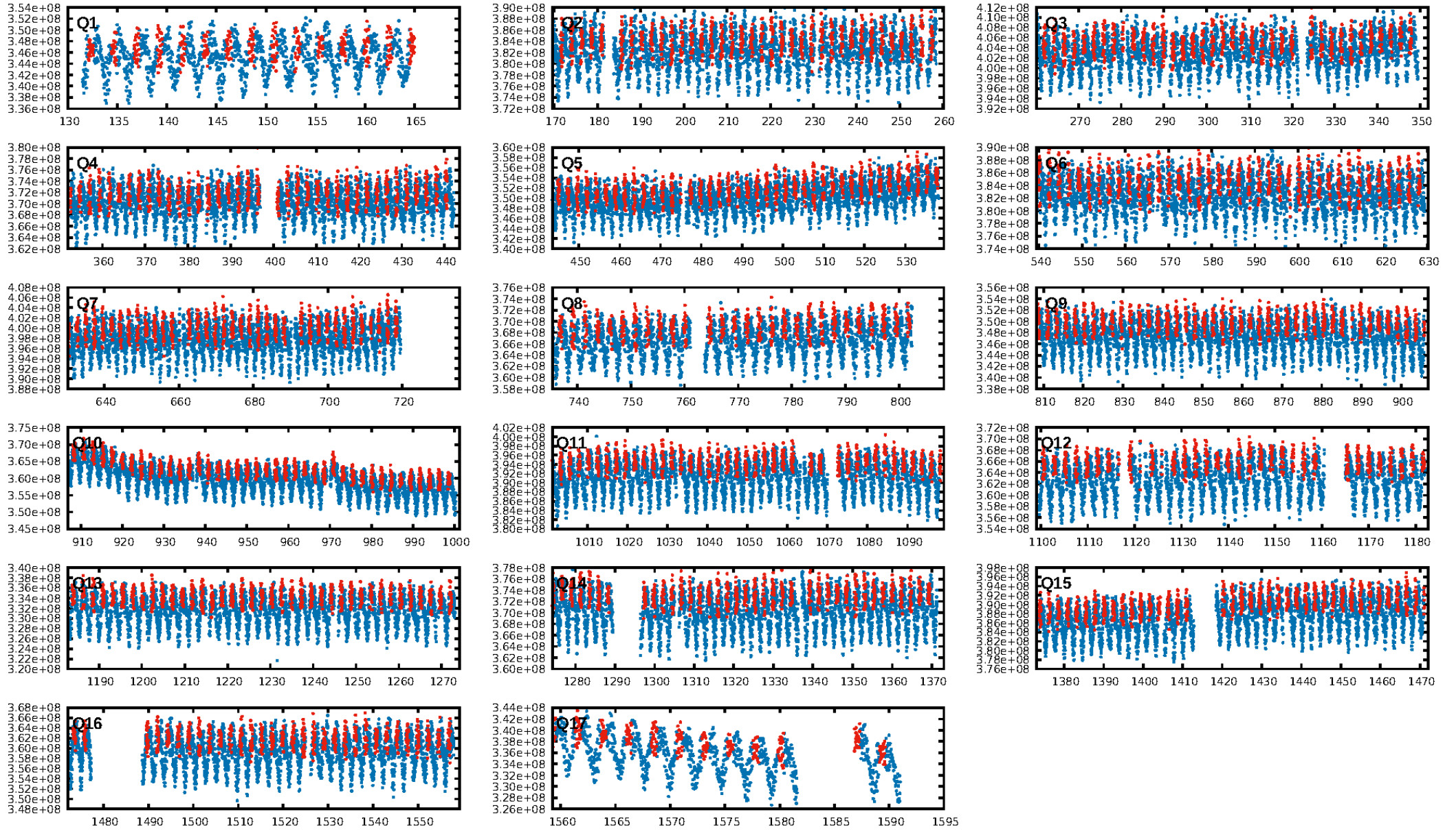
DV Fit Results:

Period = 2.31647 [0.00003] d
Epoch = 132.3204 [0.0088] BKJD
 R_p/R^* = 0.0089 [0.0201]
 a/R^* = 2.94 [32.58]
 b = 0.01 [2059.43]
 S_{eff} = 17897.51 [11819.30]
 T_{eq} = 2949 [487] K
 R_p = 2.82 [6.52] R_e
 a = 0.0422 [0.0168] AU
 A_g = 6.50 [29.88] [0.18 σ]
 T_{eff} = 7282 [8289] K [0.52 σ]

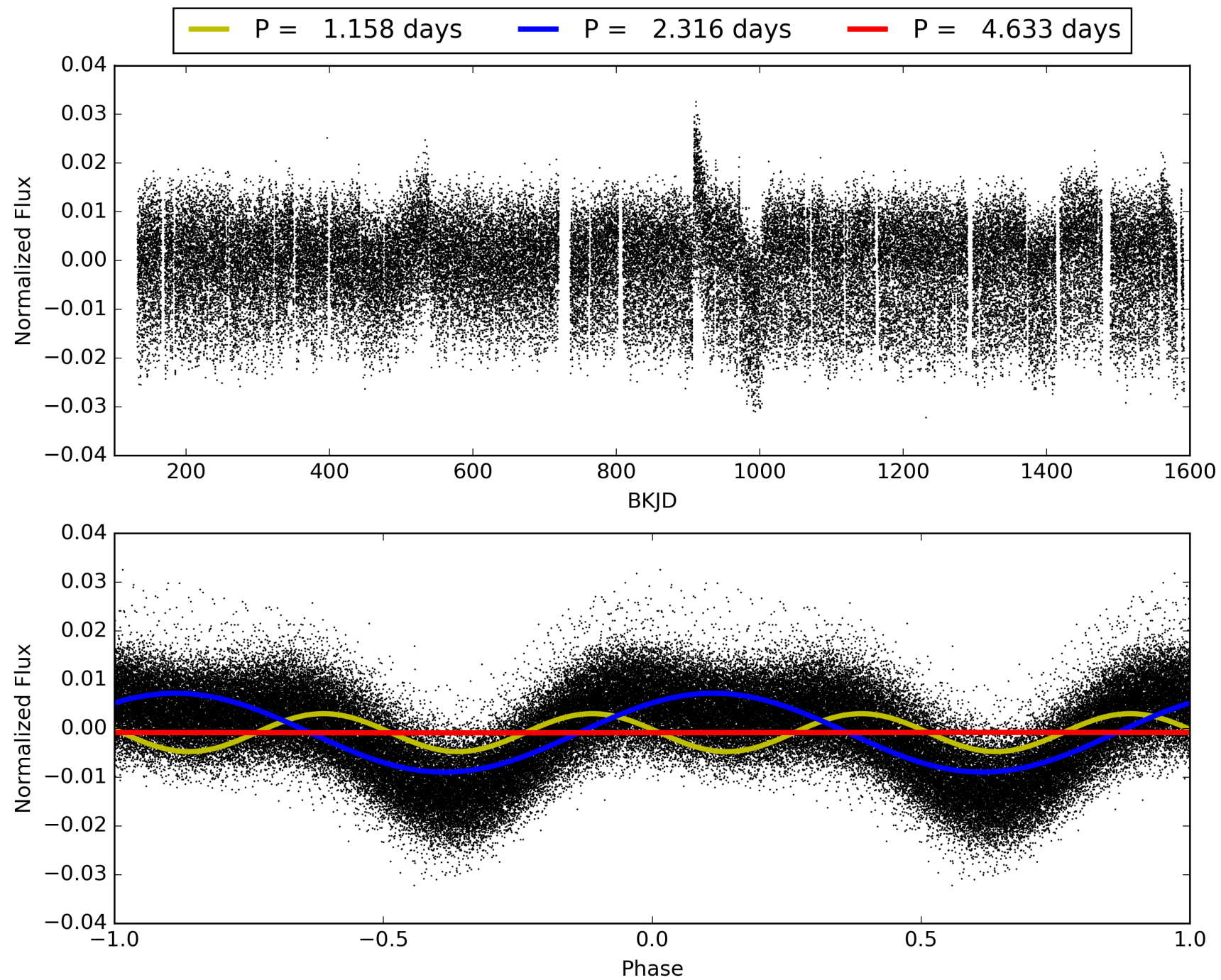
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 3.36e-19
RollingBand-fgt: 0.92 [511/557]
GhostDiagnostic-chr: 1.52
Centroid-sig: 0.0%
Centroid-so: 0.301 arcsec [1.90 σ]
OotOffset-rm: 0.083 arcsec [1.18 σ]
KicOffset-rm: 0.086 arcsec [1.22 σ]
OotOffset-st: 4/4/4/5 [17]
KicOffset-st: 4/4/4/5 [17]
DiffImageQuality-fgm: 0.00 [0/17]
DiffImageOverlap-fno: 1.00 [17/17]

TCE 009632537-01, PDC Light Curves

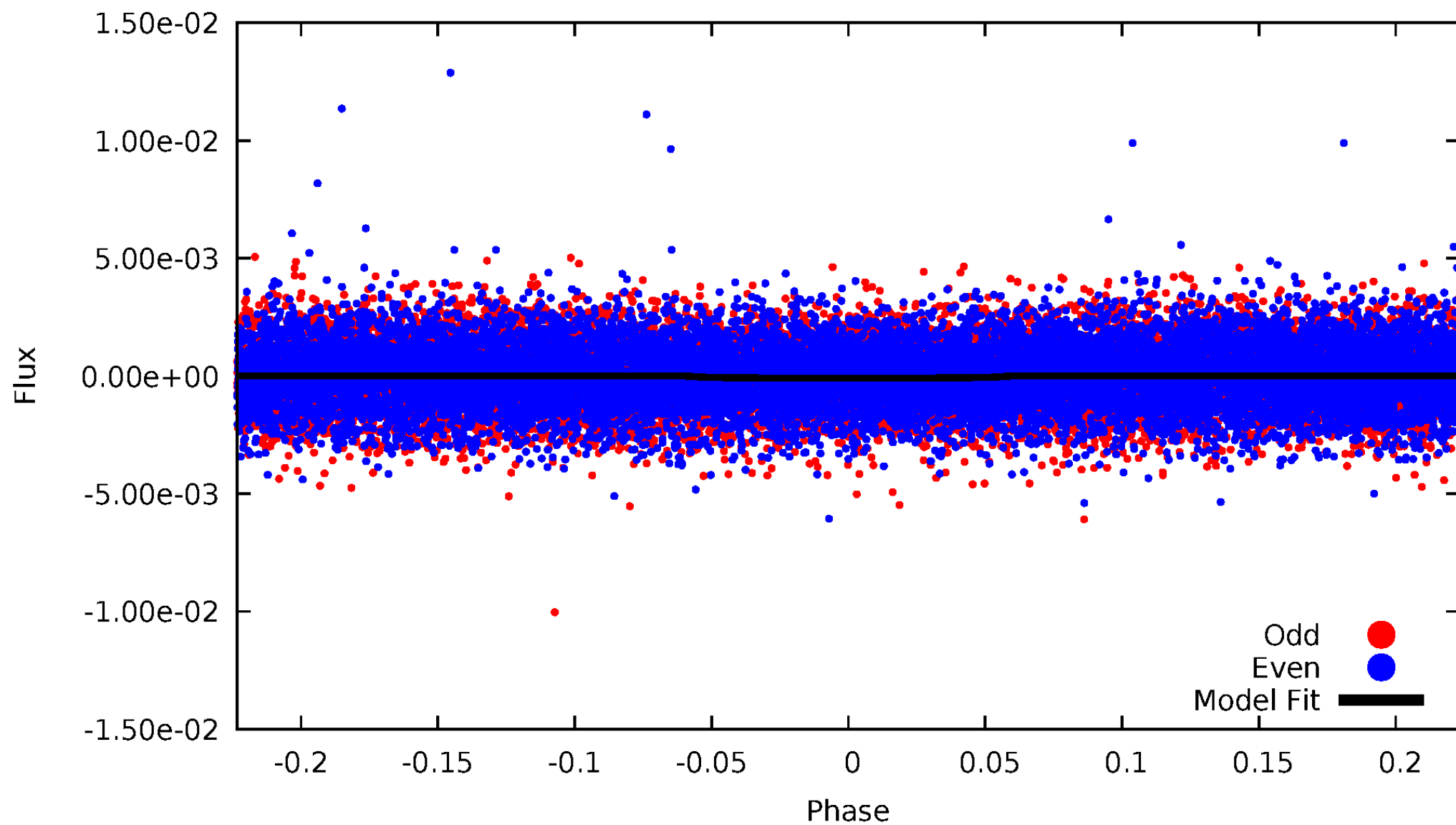


TCE 009632537-01



DV Odd/Even

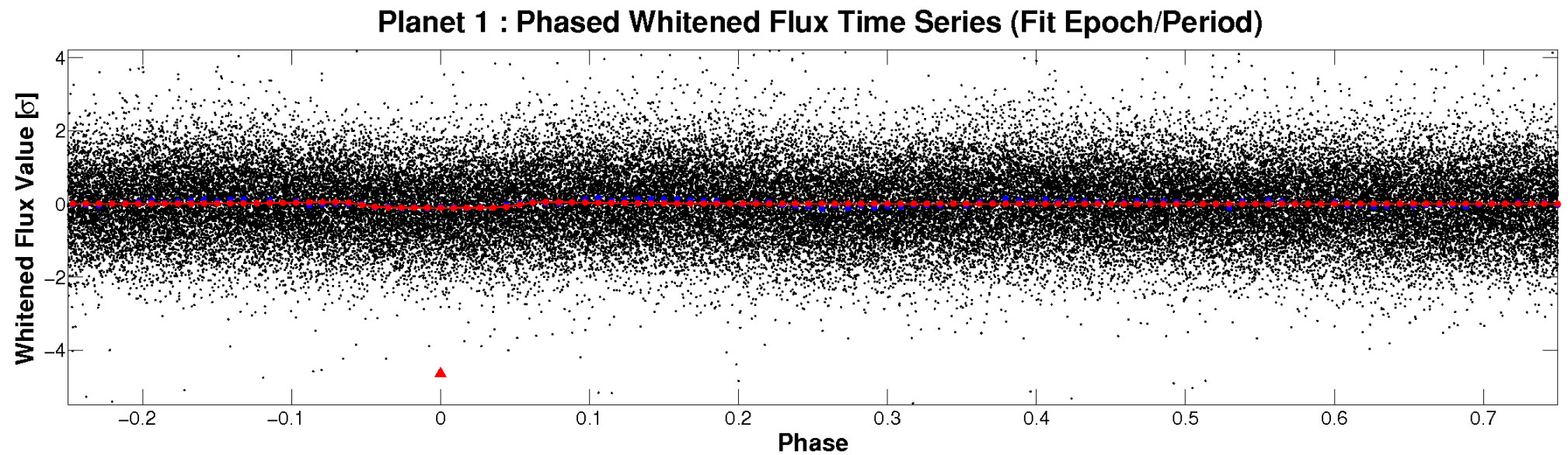
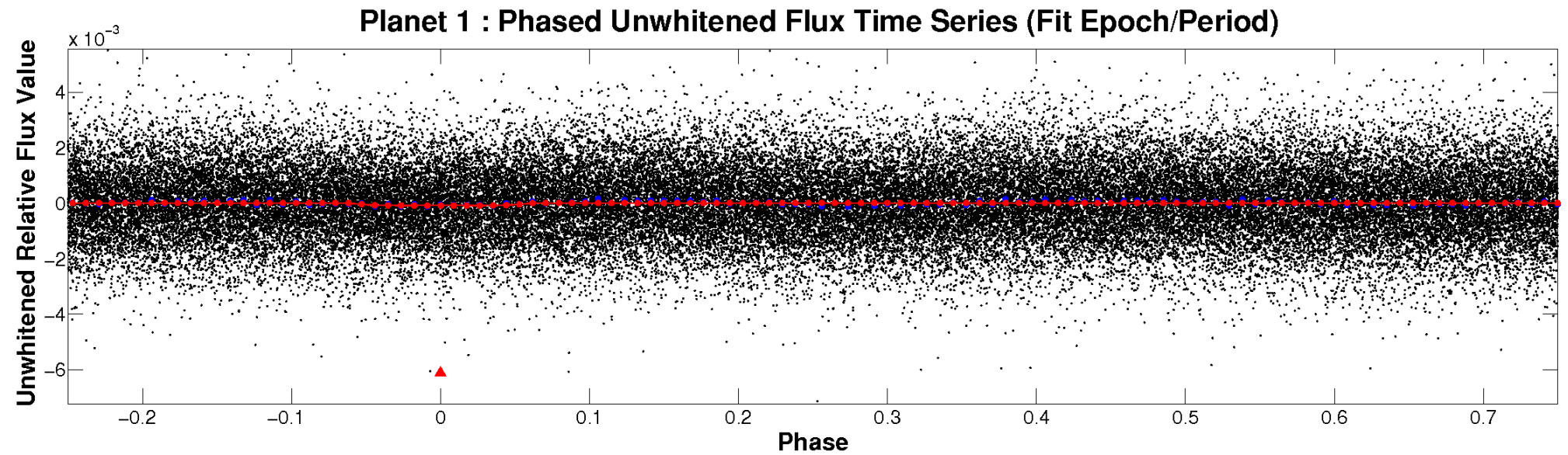
TCE 009632537-01



ALT Odd/Even

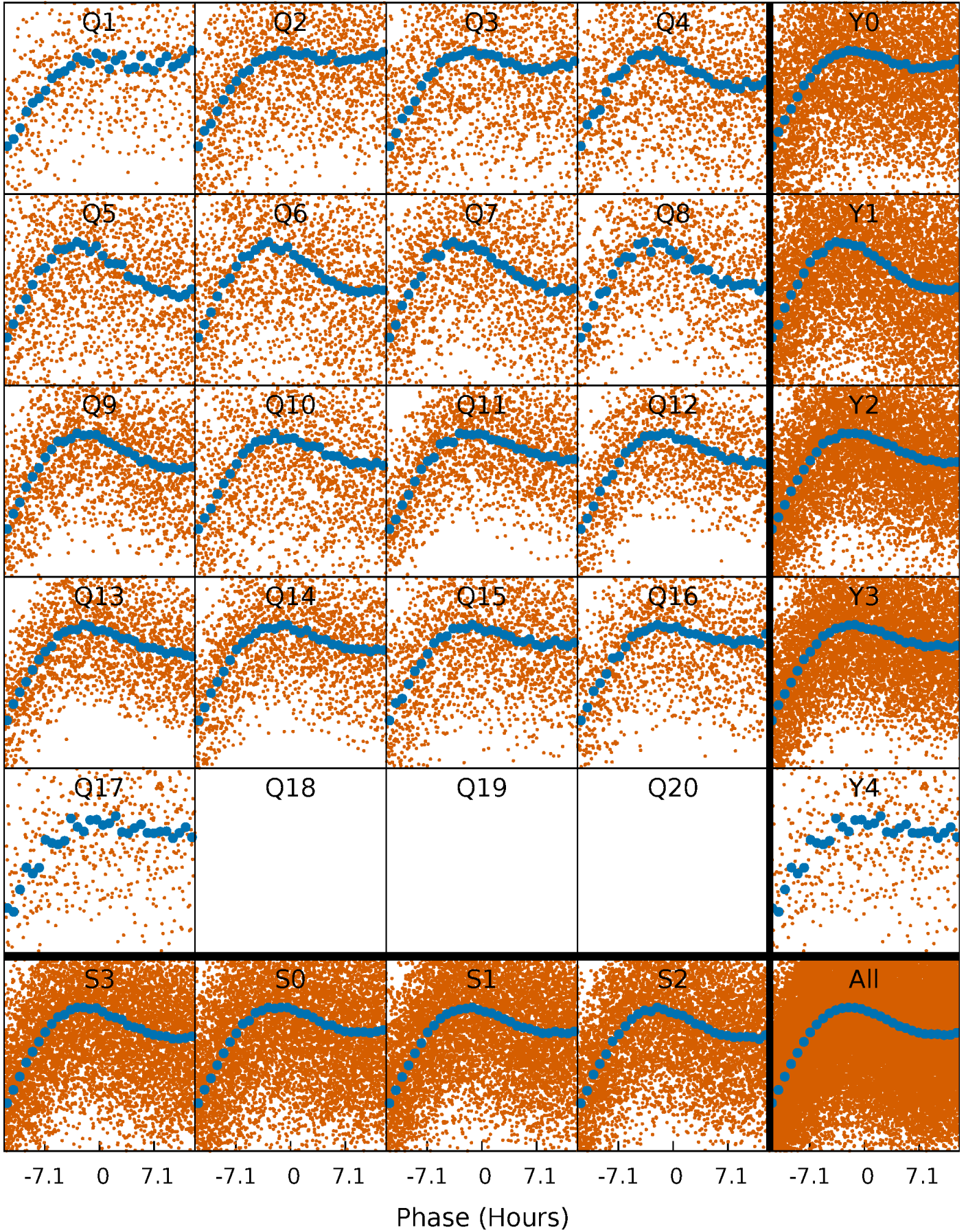
This plot does not exist for this TCE.

Non-Whitened Vs. Whitened Light Curve



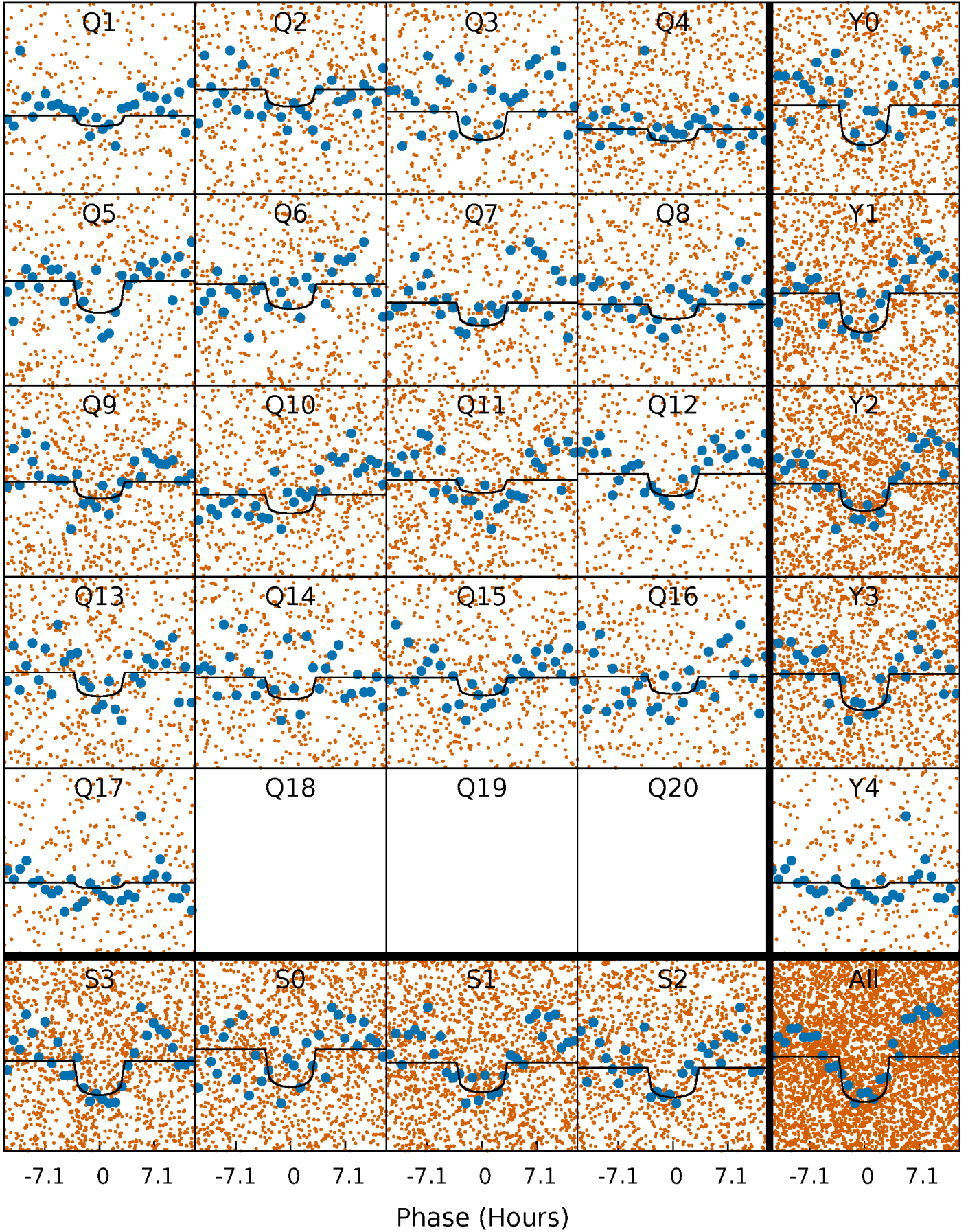
PDC Quarter-Phased Transit Curves

TCE 009632537-01 P= 2.316469 Days $T_0=132.320373$ (BKJD)



DV Quarter-Phased Transit Curves

TCE 009632537-01 P= 2.316469 Days $T_0=132.320373$ (BKJD)

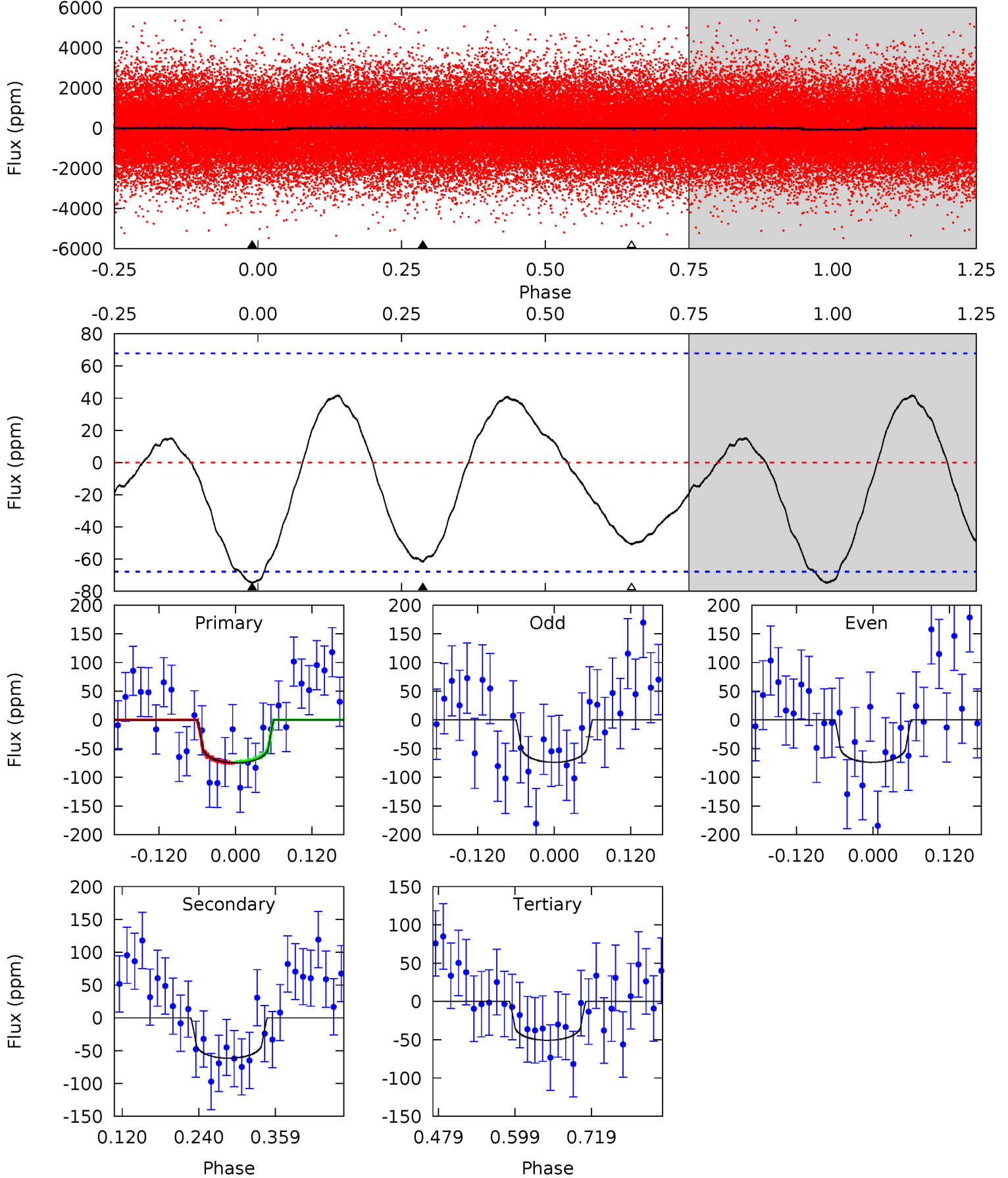


This plot does not exist for this TCE.

DV Model-Shift Uniqueness Test

009632537-01, P = 2.316469 Days, E = 130.003904 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
4.99	4.11	3.38	0	4.53	1.56	1.99	1.61	4.99	0.72	4.11	0.00	0.98	0.36	0.07



Alt Model-Shift Uniqueness Test

This plot does not exist for this TCE.

Stellar Parameters For KIC 009632537

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	8037^{+222}_{-334}	$3.778^{+0.376}_{-0.070}$	$-0.180^{+0.200}_{-0.300}$	$2.917^{+0.400}_{-1.201}$	$1.863^{+0.101}_{-0.379}$	$0.106^{+0.339}_{-0.032}$
	+3%/-4%	+10%/-2%	+111%/-167%	+14%/-41%	+5%/-20%	+321%/-31%
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 009632537-01 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-62 ± 15	$4.85^{+4.43}_{-3.29}$	3981^{+267}_{-408}	5197^{+4653}_{-1586}	$2.551^{+20.355}_{-1.939}$
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 $A_{obs} \gg 1.0$

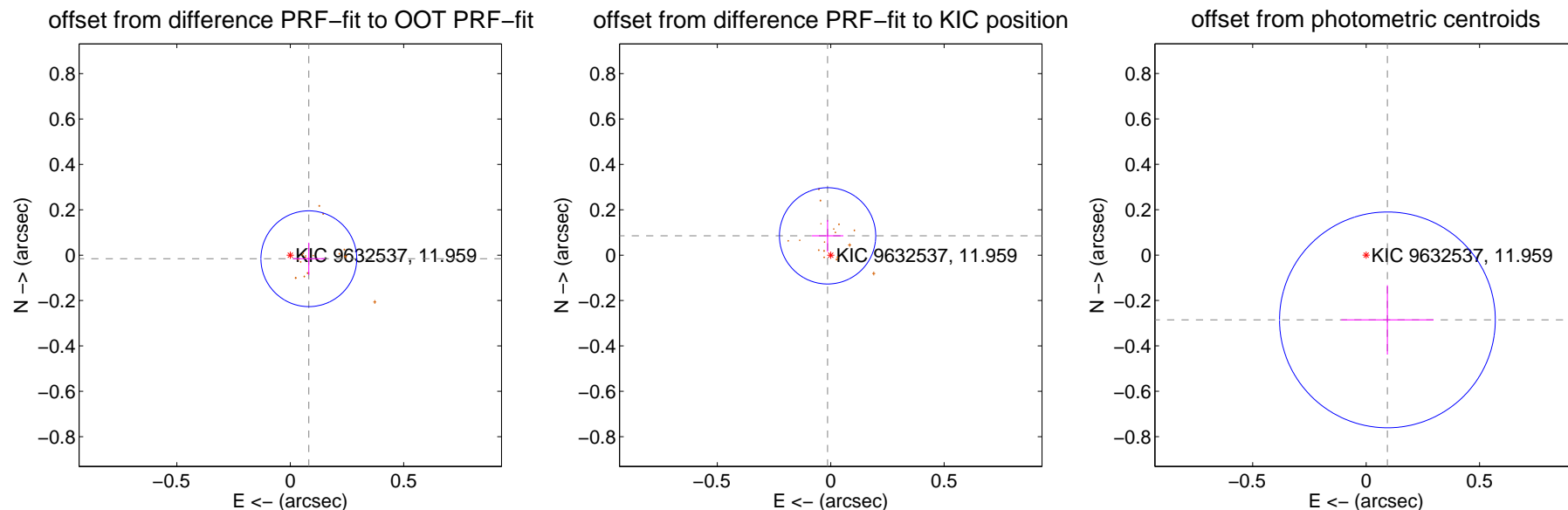
DV Centroid Data

Supplemental centroid analysis for 009632537-01. **Kepler magnitude: 11.96.** Transit SNR 8.79

There are 0 quarters with good PRF difference image offsets

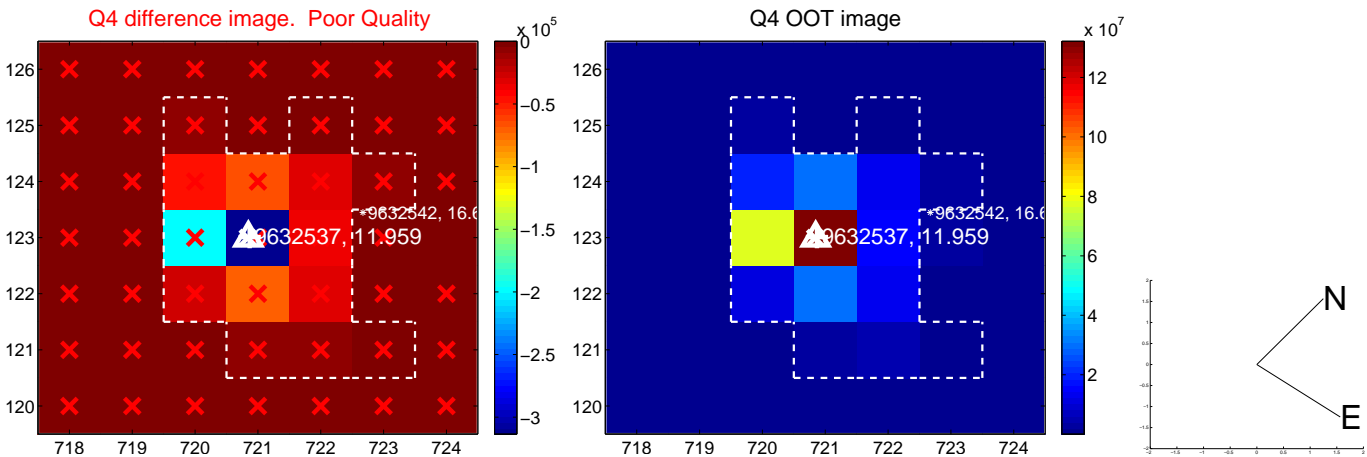
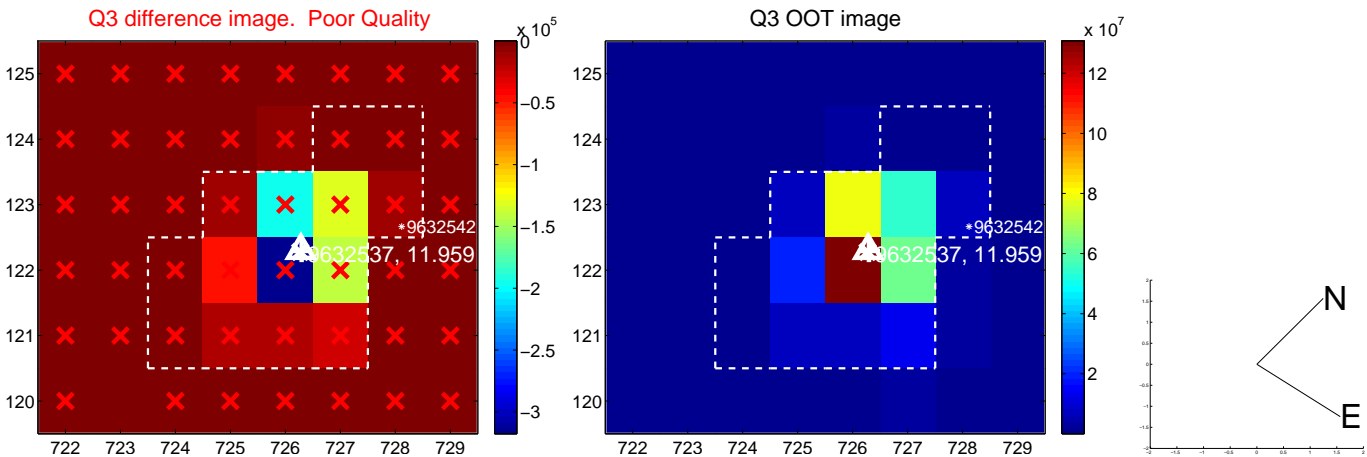
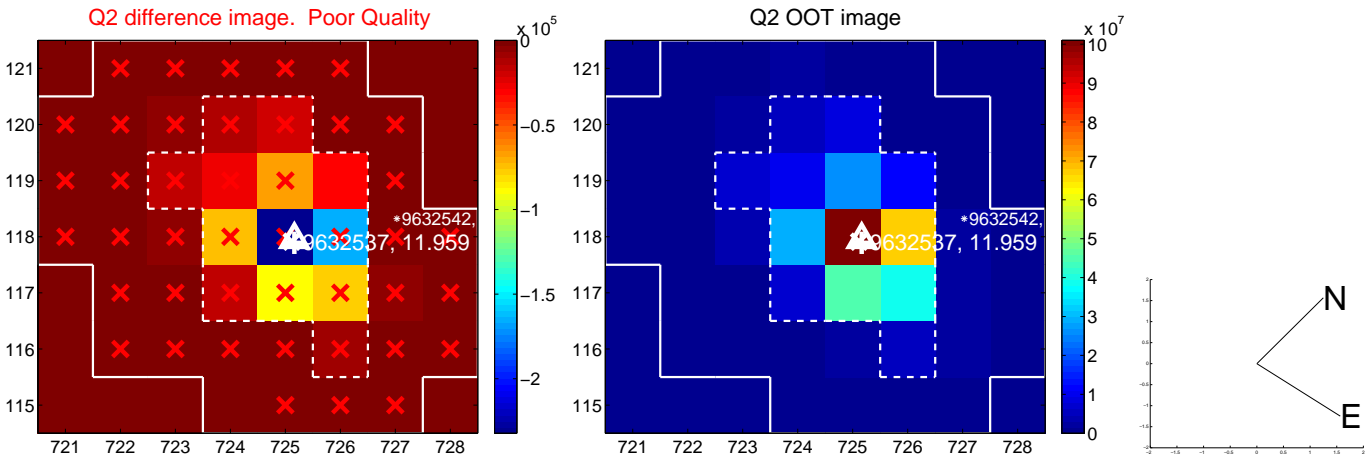
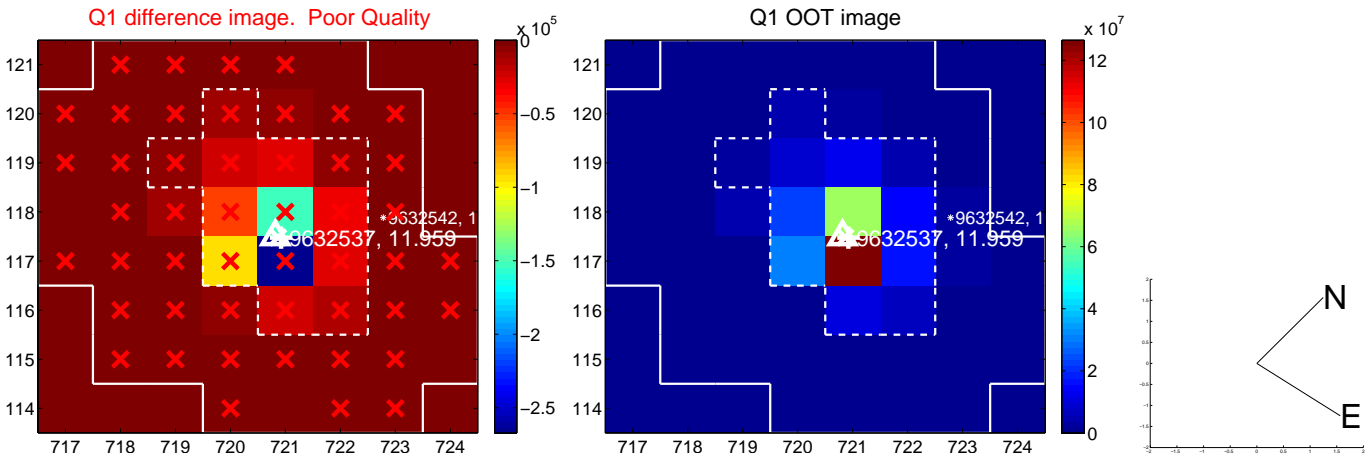
The direct PRF centroid is offset from the target star catalog position by about 0.17 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.083 ± 0.070	1.18	-0.082 ± 0.070	-0.016 ± 0.071
PRF-fit source offset from KIC position	0.086 ± 0.071	1.22	0.014 ± 0.069	0.085 ± 0.070
photometric centroid source offset	0.30 ± 0.16	1.90	-0.09 ± 0.20	-0.29 ± 0.15

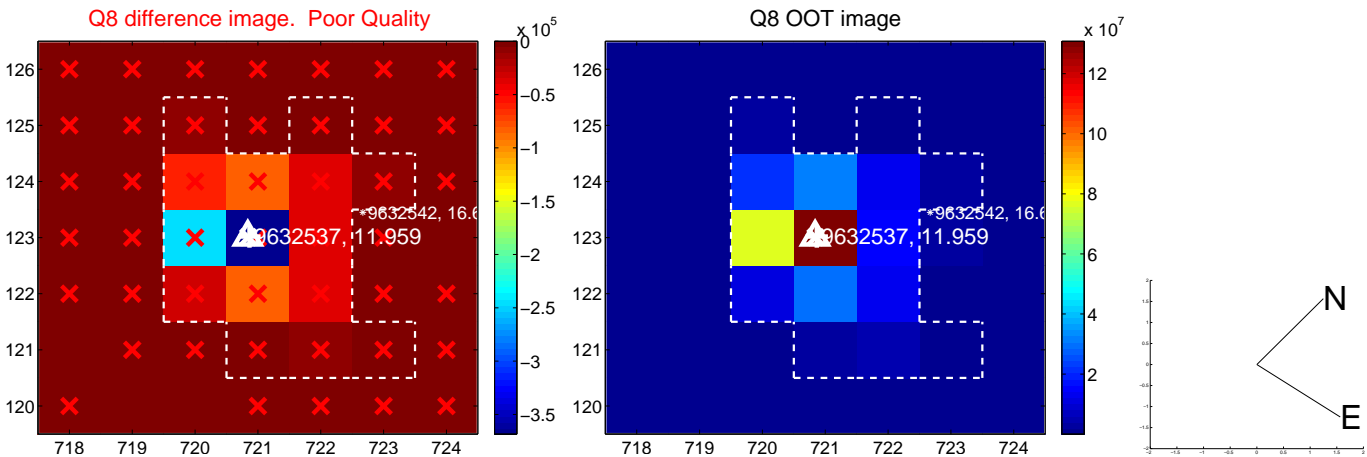
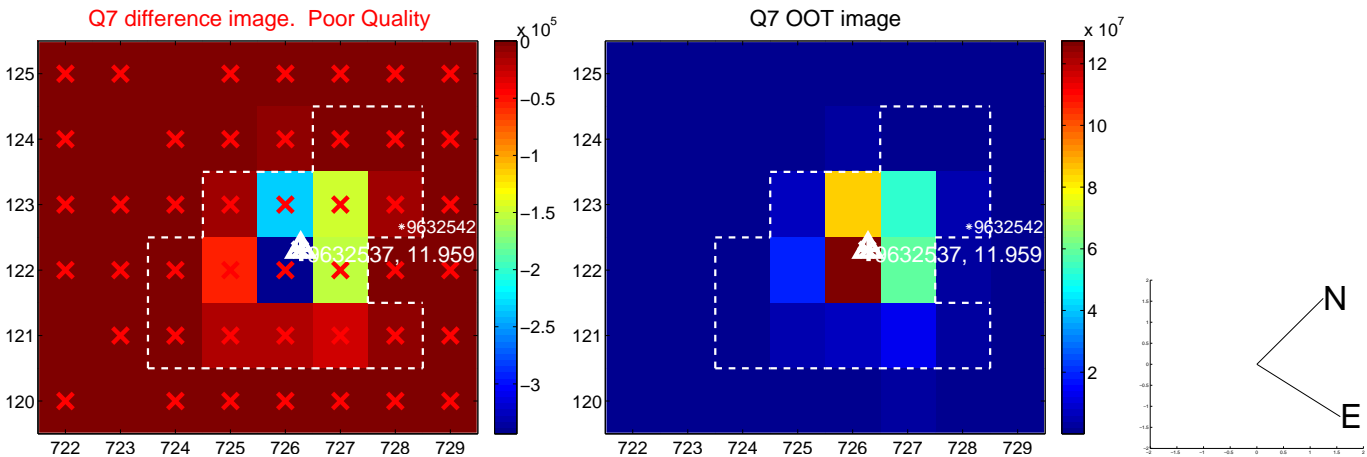
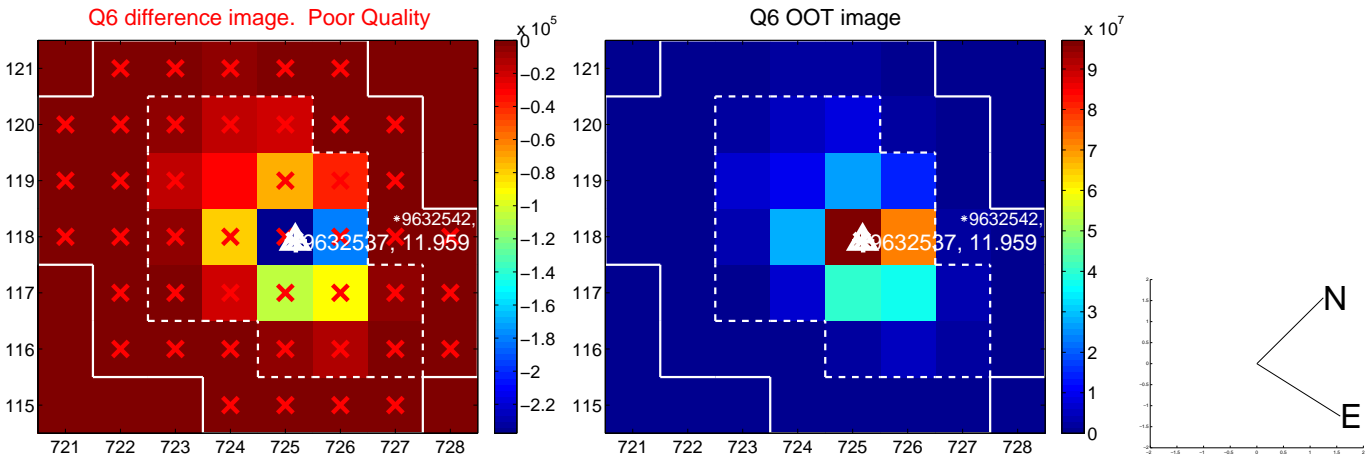
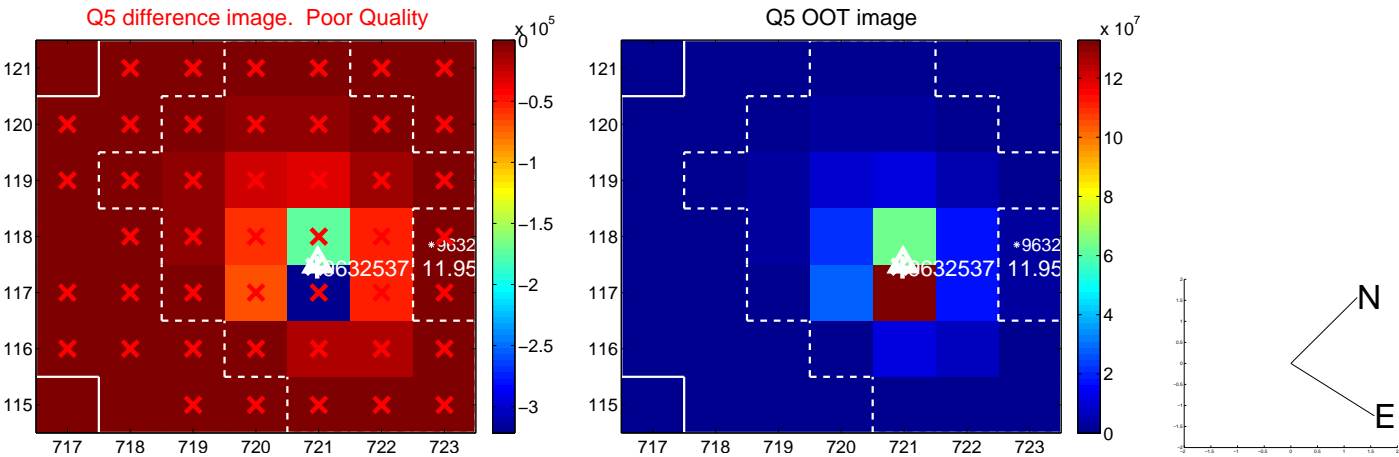


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets;** magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

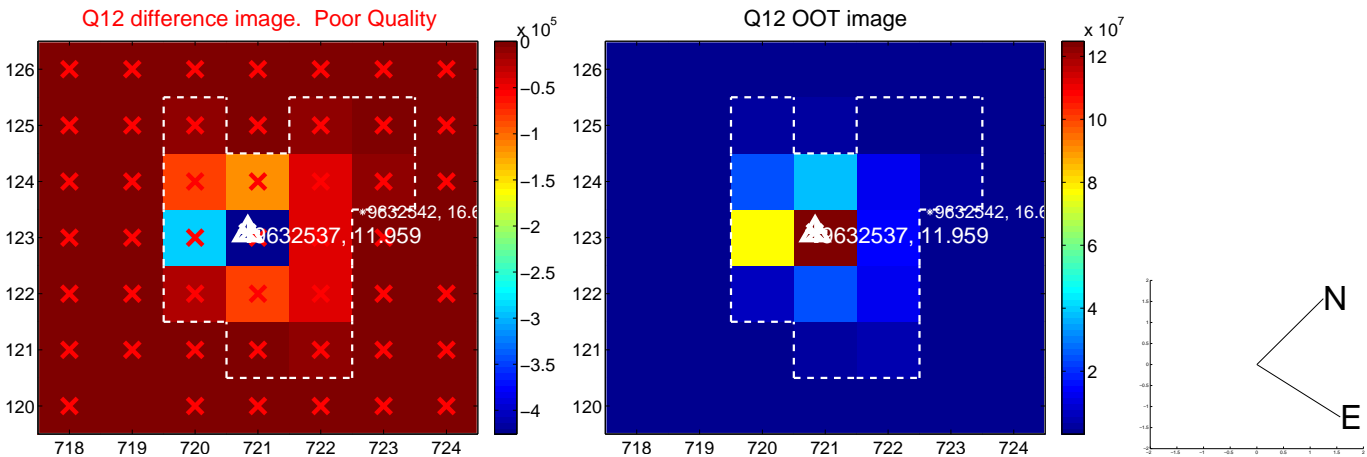
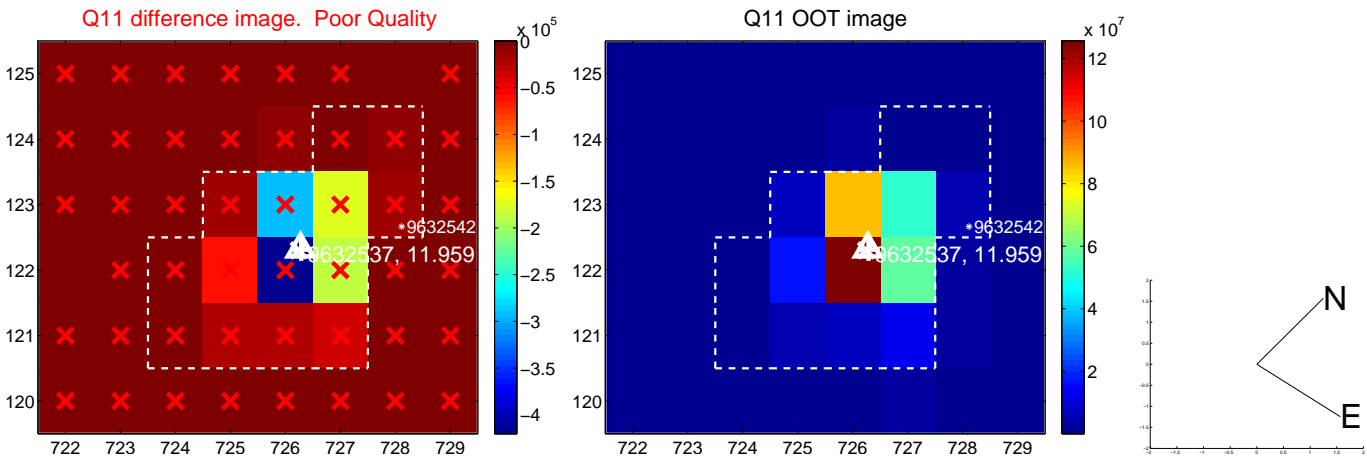
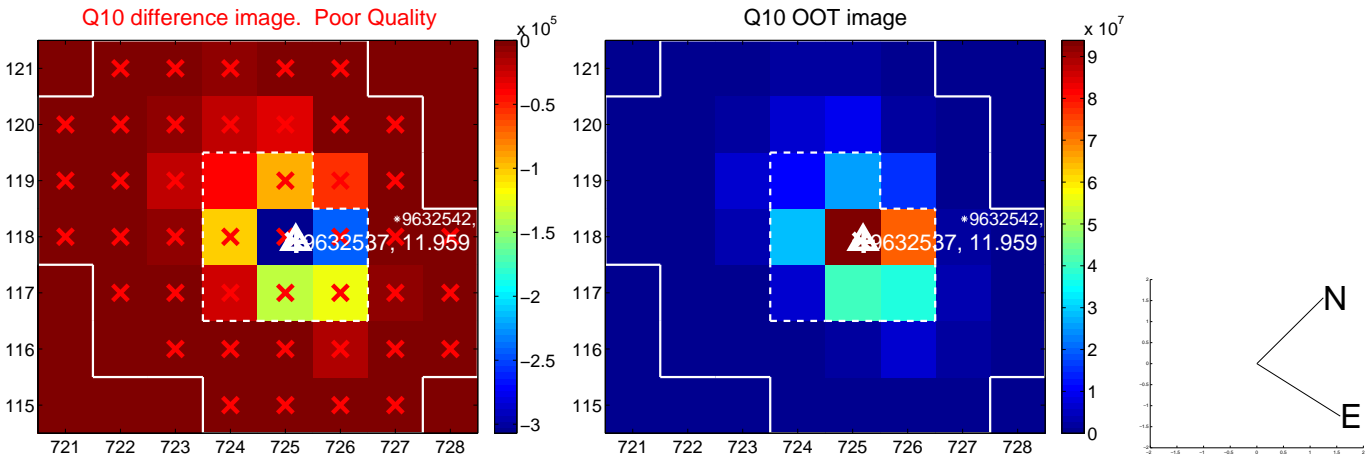
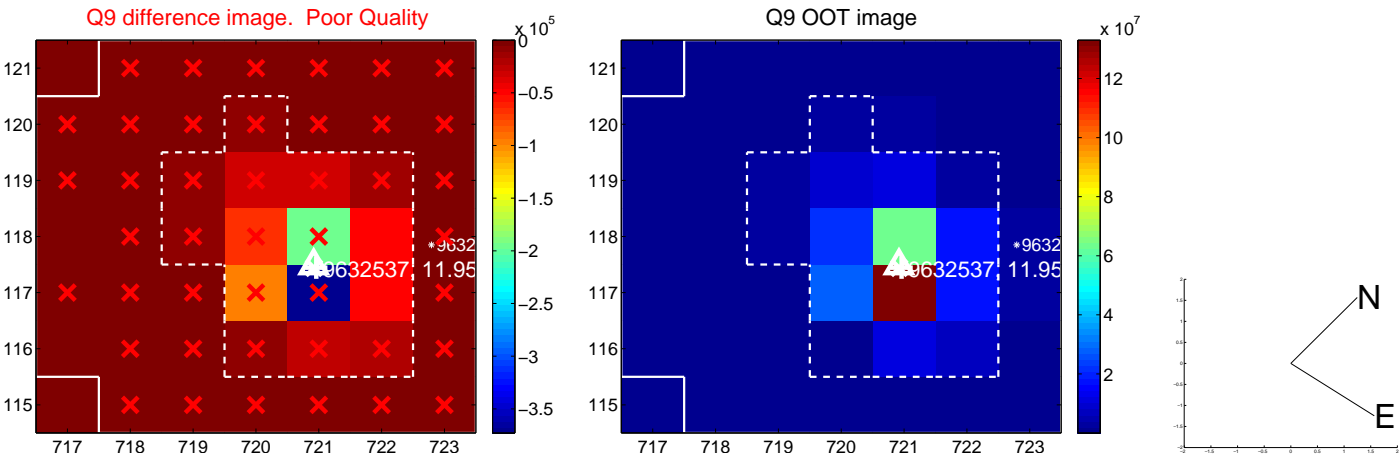
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



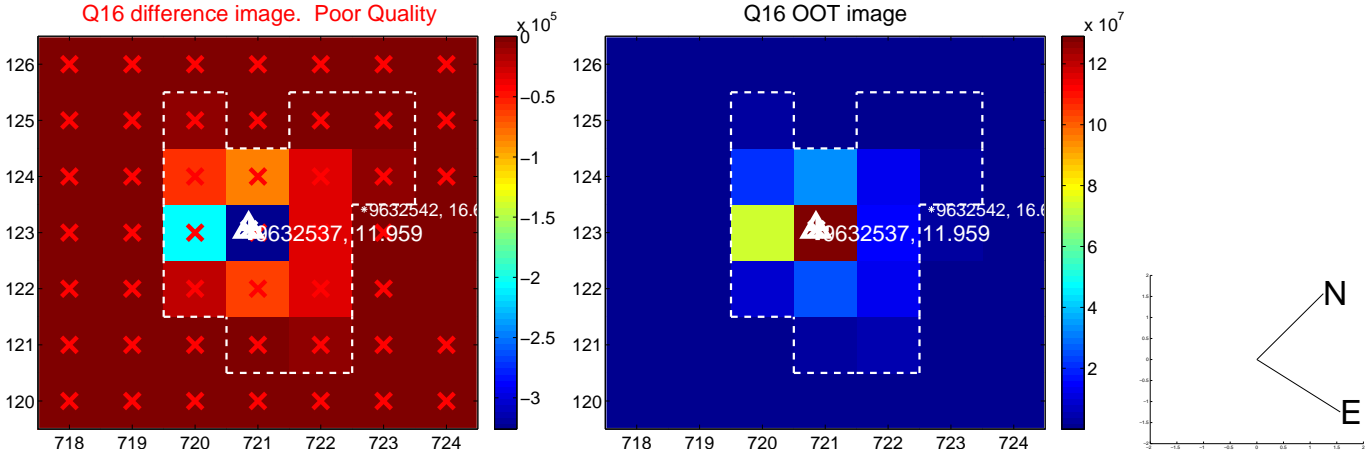
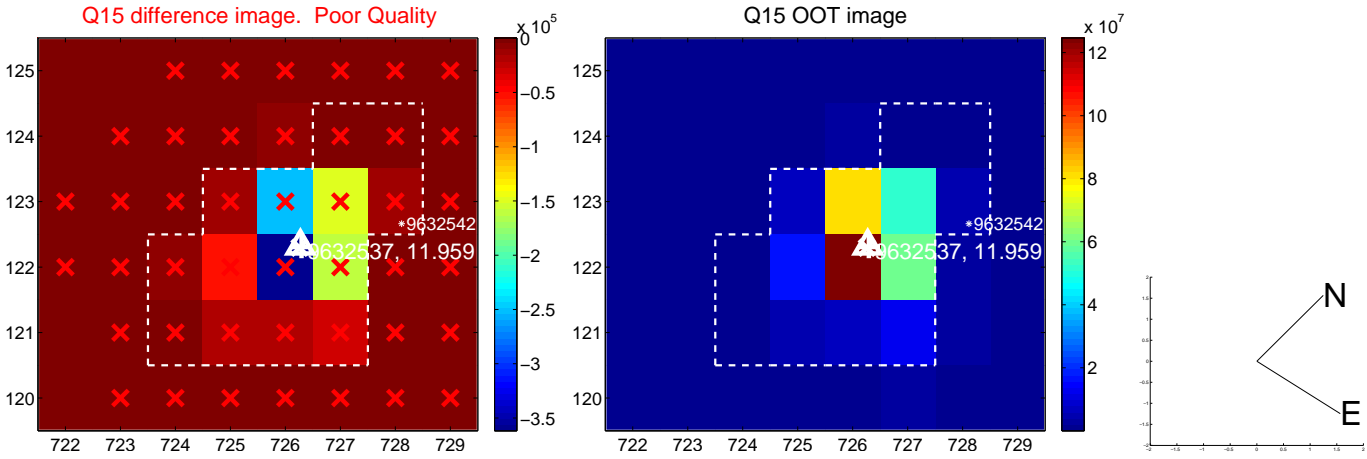
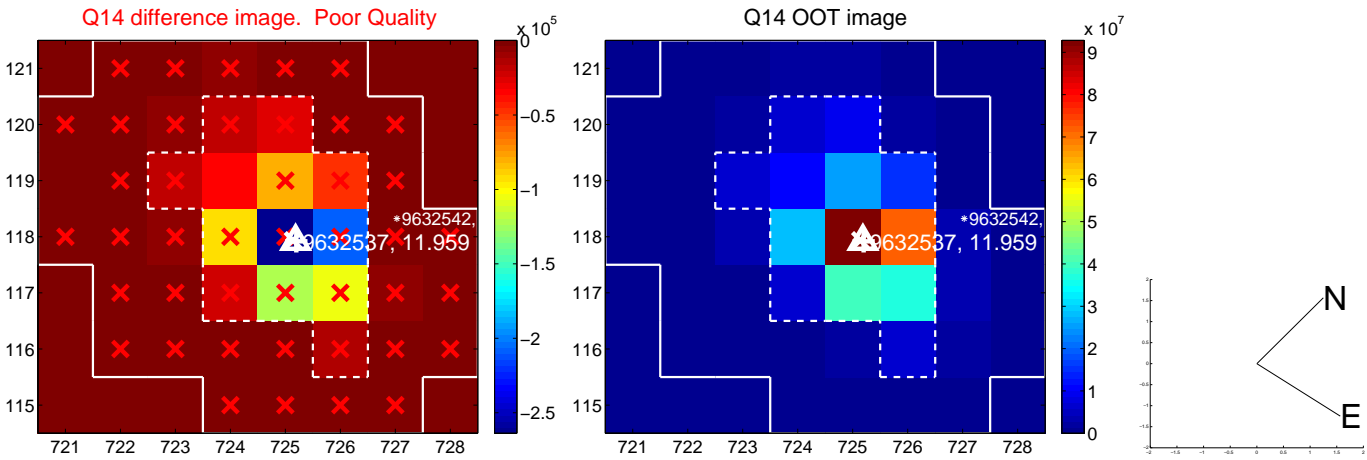
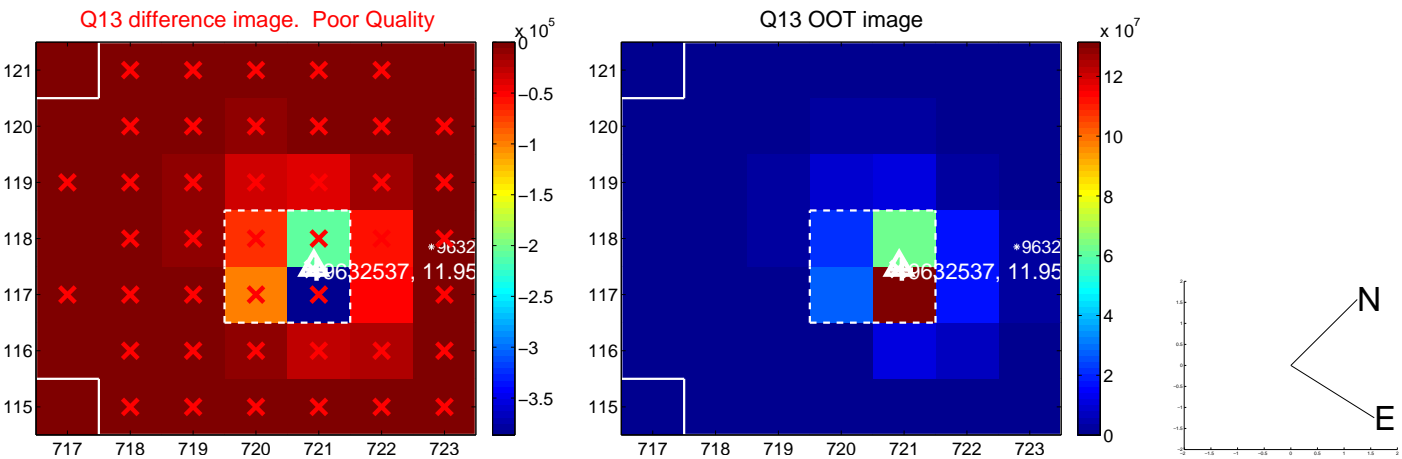
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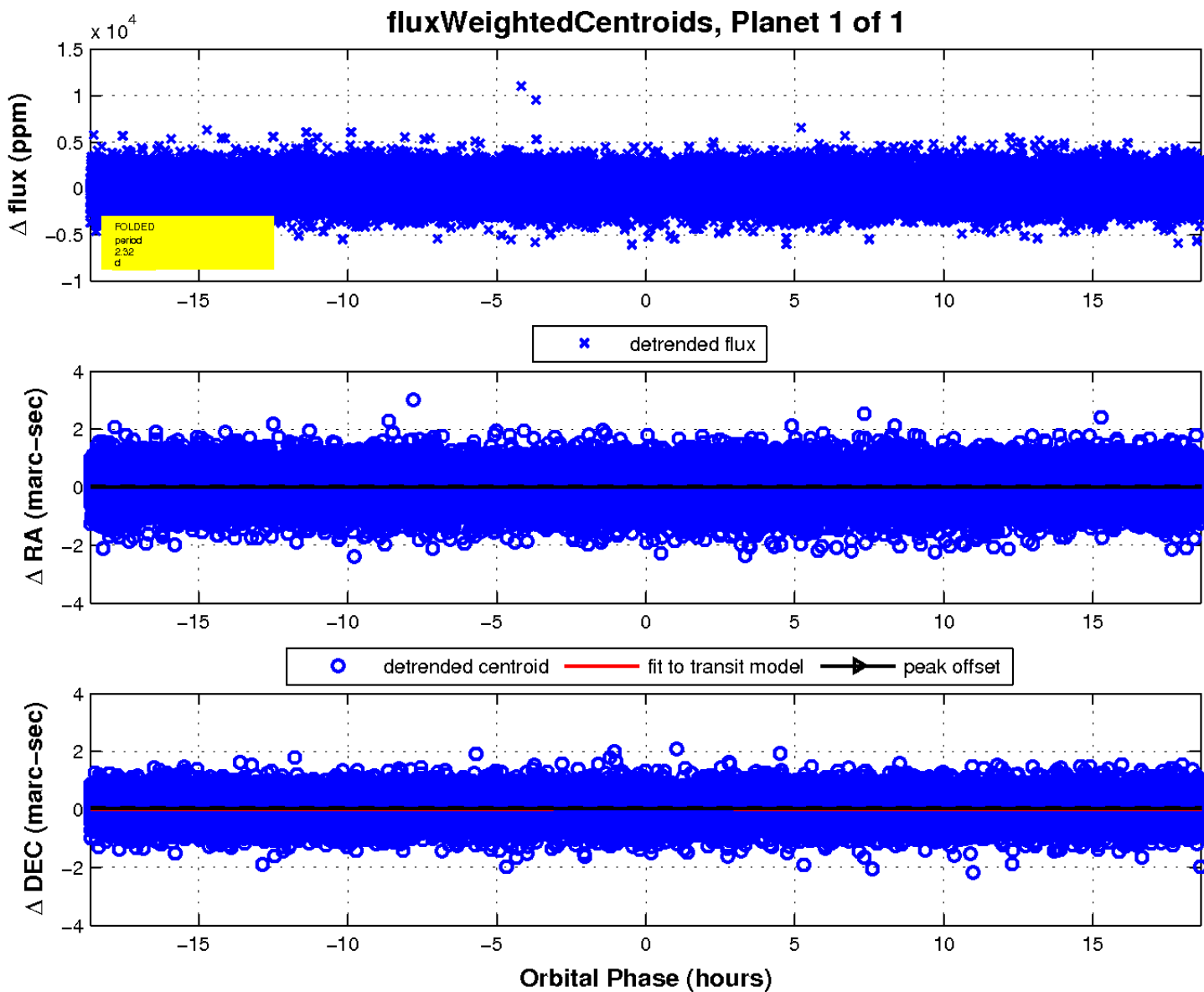
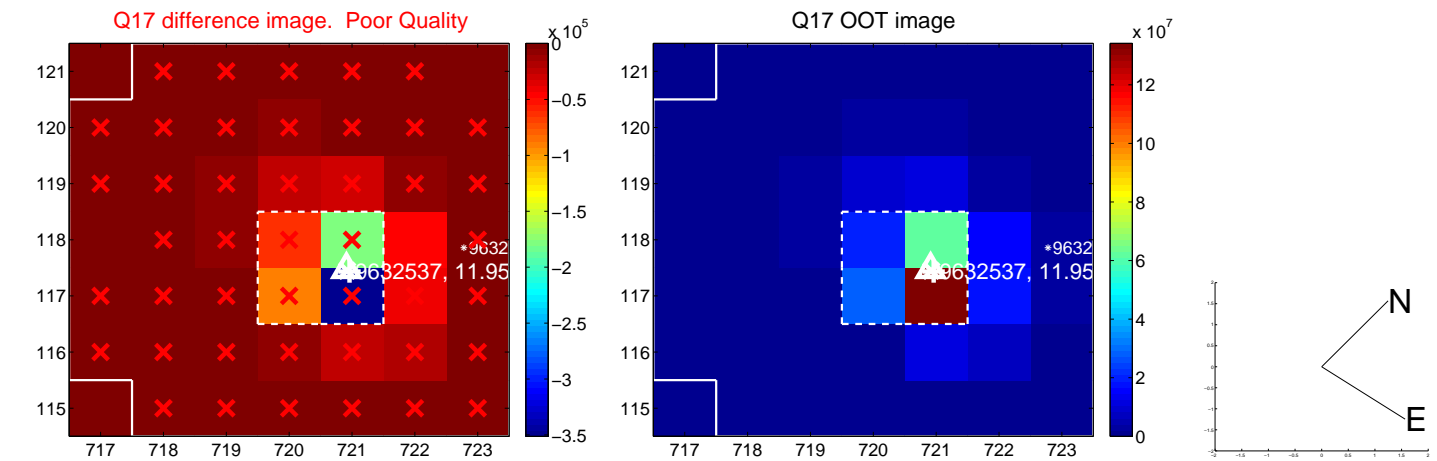
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UKIRT Image

Declination

