

KIC 009469350

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})
009469350-01	OBS	No	0.794186	131.975777	22487.5	3.000	195.4	-1.0	0.90	5201	13.12	2134.06

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
009469350-01	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_ALT—CENT_NOFITS

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

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

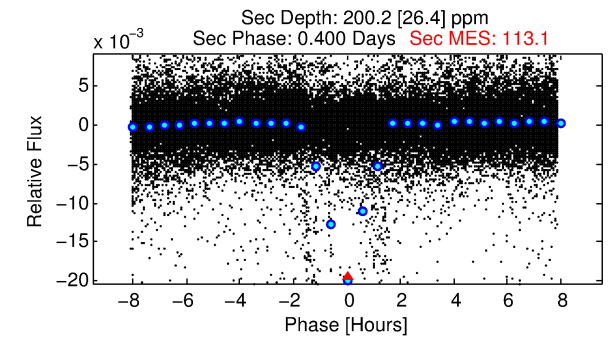
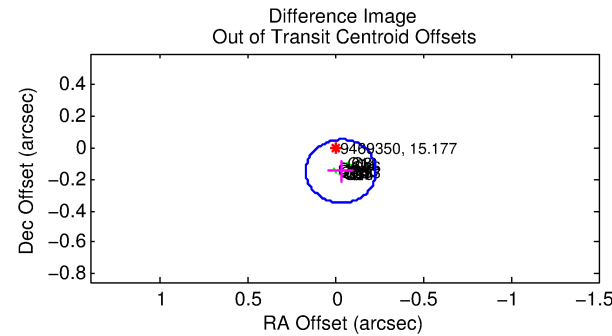
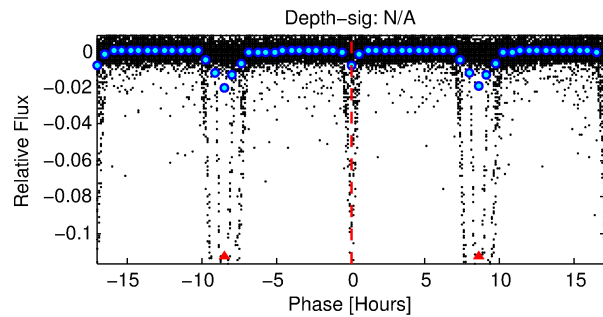
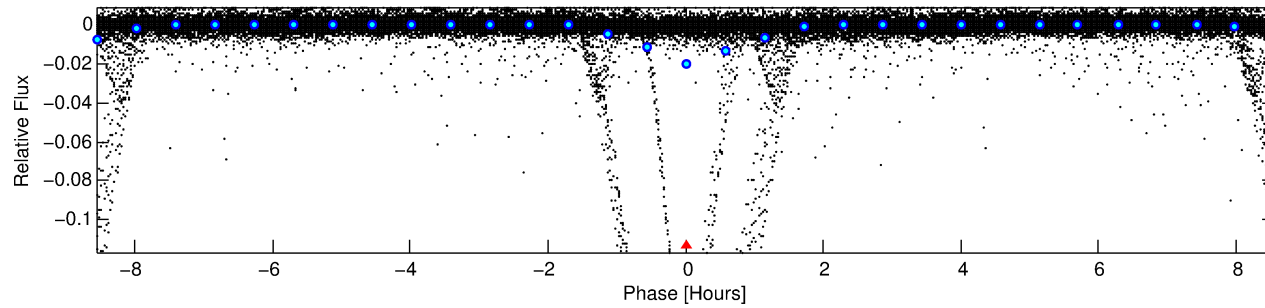
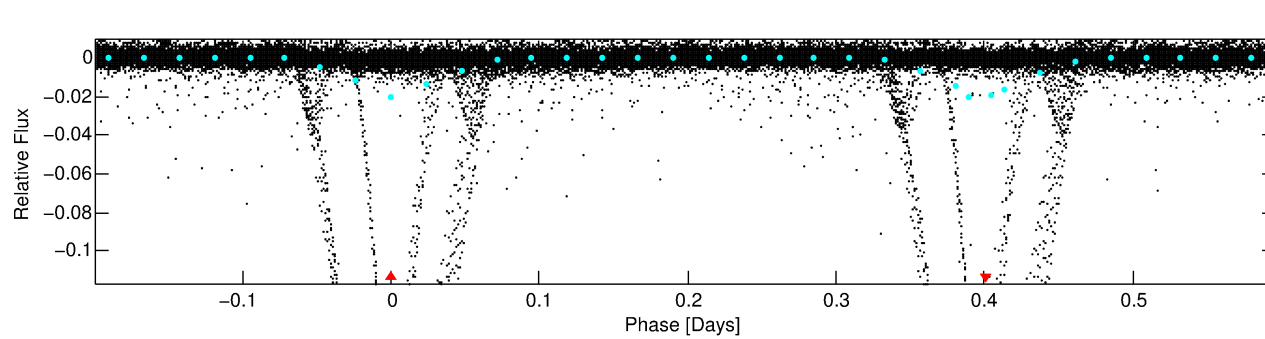
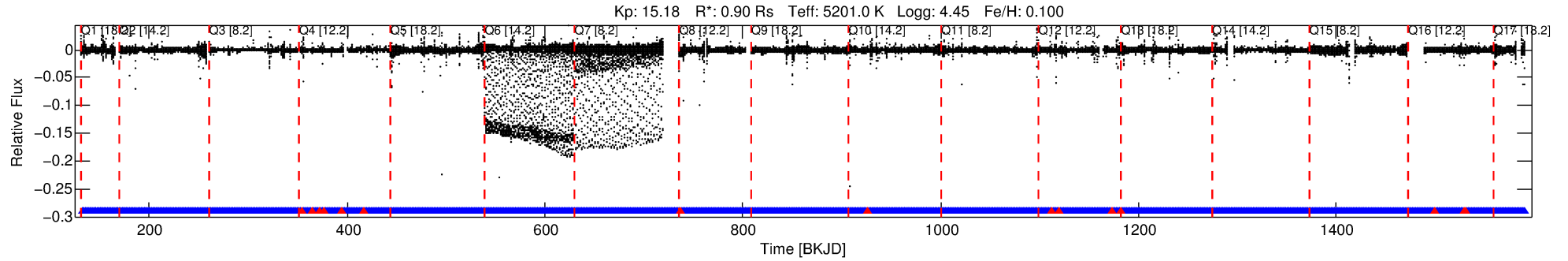
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 009469350-01

No Significant Match Found

DV One-Page Summary

KIC: 9469350 Candidate: 1 of 1 Period: 0.794 d



TPS TCE Results:

Period = 0.79419 d
Epoch = 131.9758 BKJD

DV fit results are unavailable

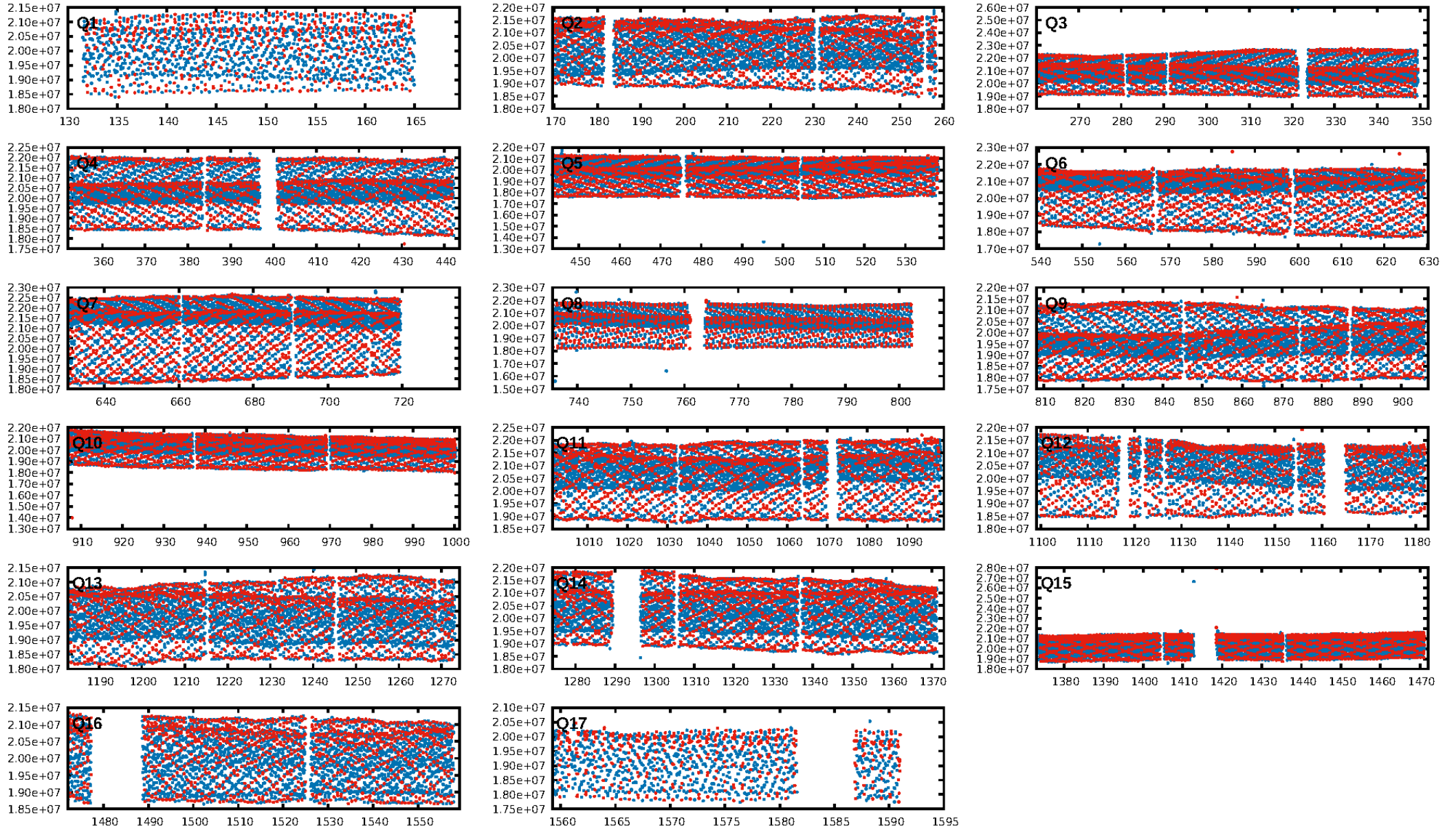
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: N/A
RollingBand-fgt: 0.99 [1592/1608]
GhostDiagnostic-chr: 0.8439
Centroid-sig: 0.0%
Centroid-so: 0.528 arcsec [498.56σ]
OotOffset-rm: 0.149 arcsec [2.23σ]
KicOffset-rm: 0.126 arcsec [1.87σ]
OotOffset-st: 4/4/4/5 [17]
KicOffset-st: 4/4/4/5 [17]
DiffImageQuality-fgm: 1.00 [17/17]
DiffImageOverlap-fno: 1.00 [17/17]

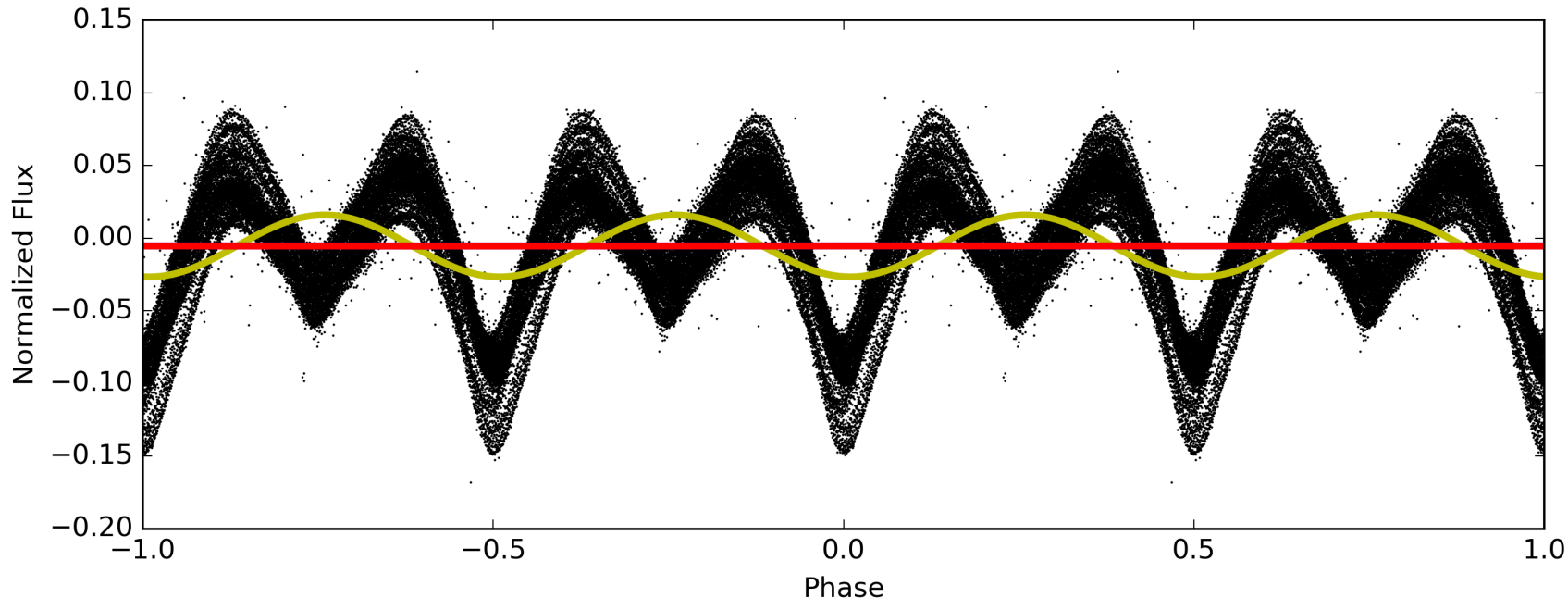
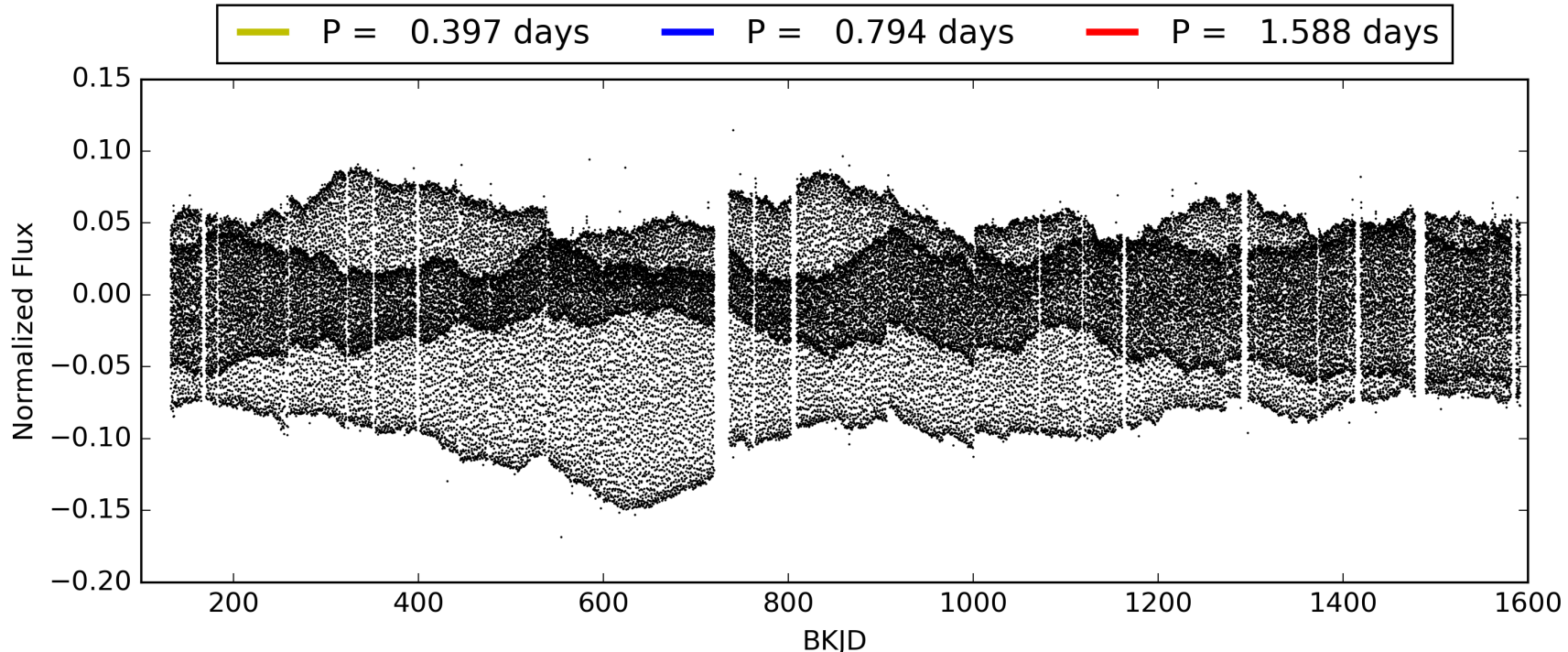
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 31-Jan-2016 22:33:53 Z

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

TCE 009469350-01, PDC Light Curves

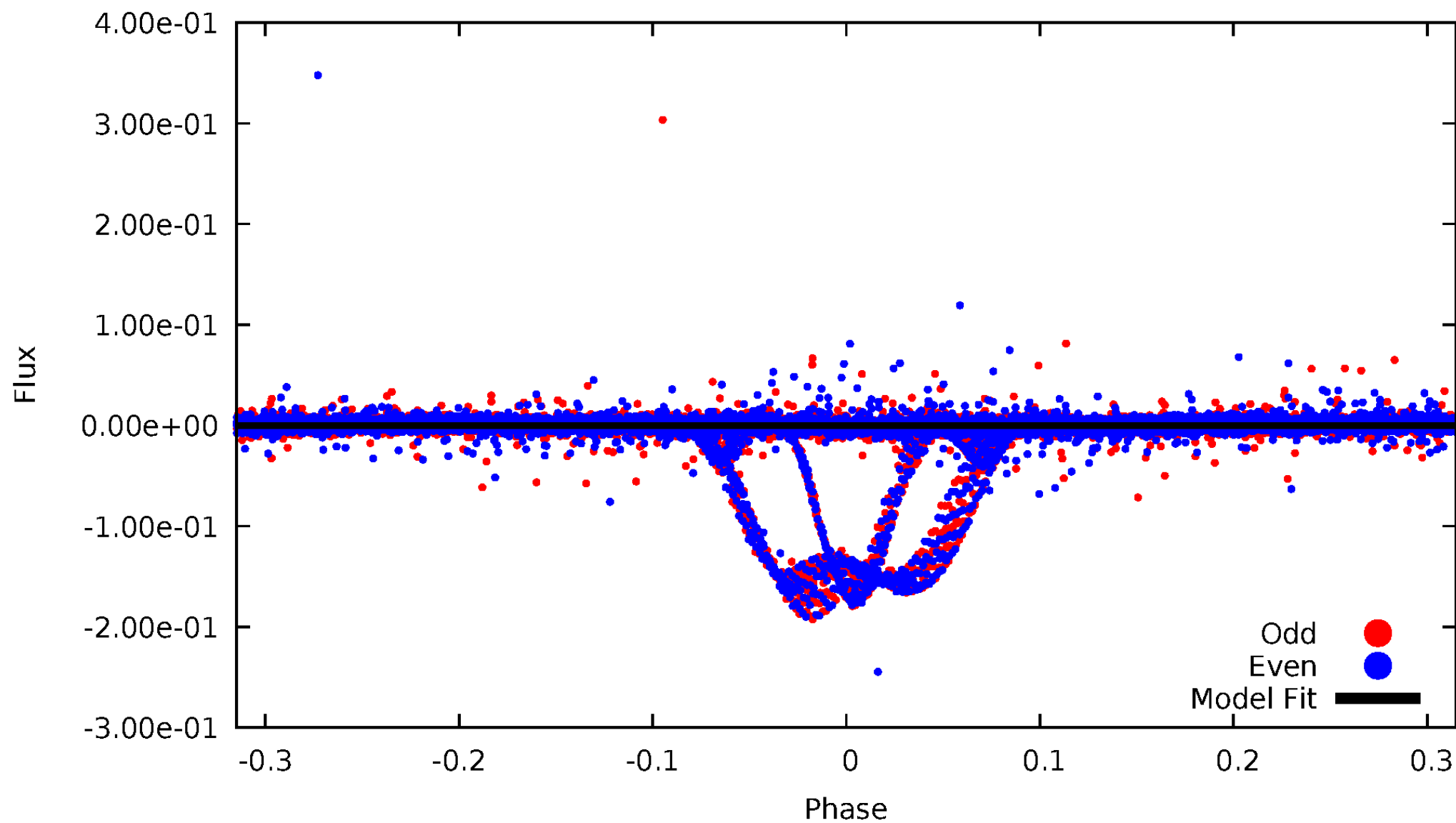


TCE 009469350-01



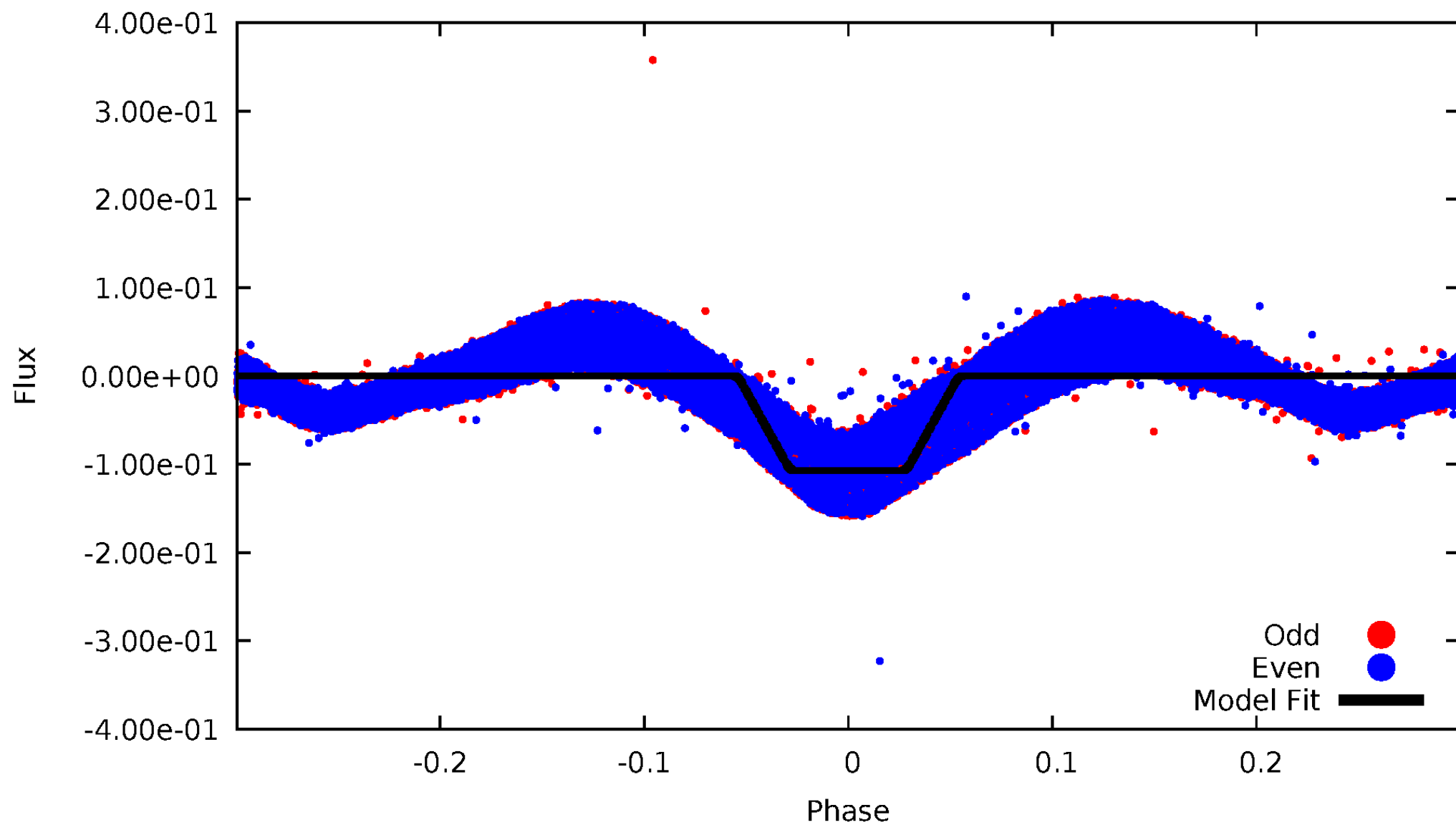
DV Odd/Even

TCE 009469350-01



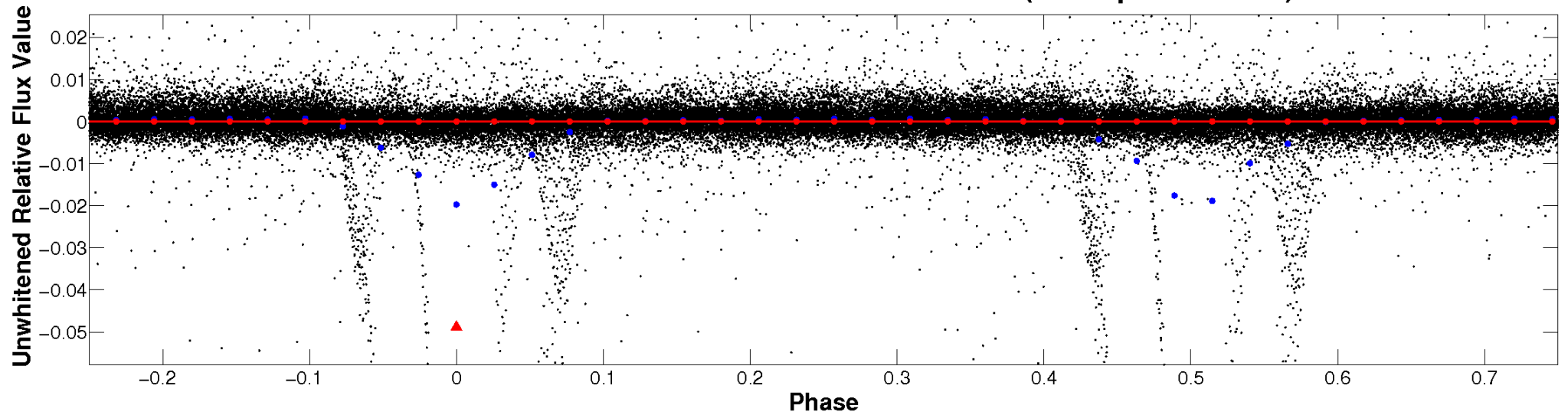
ALT Odd/Even

TCE 009469350-01

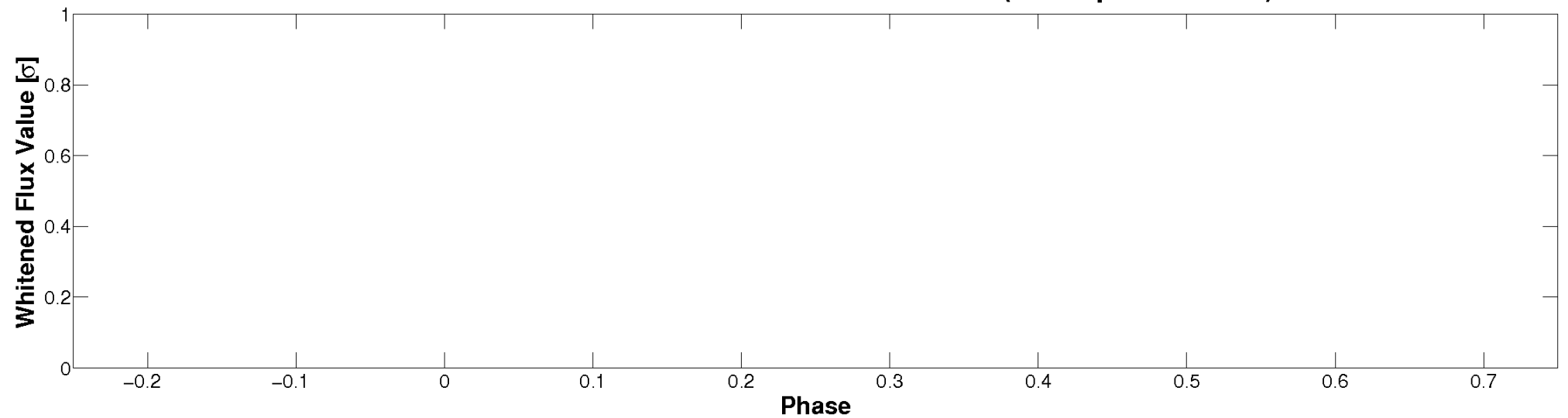


Non-Whitened Vs. Whitened Light Curve

Planet 1 : Phased Unwhitened Flux Time Series (TPS Epoch/Period)

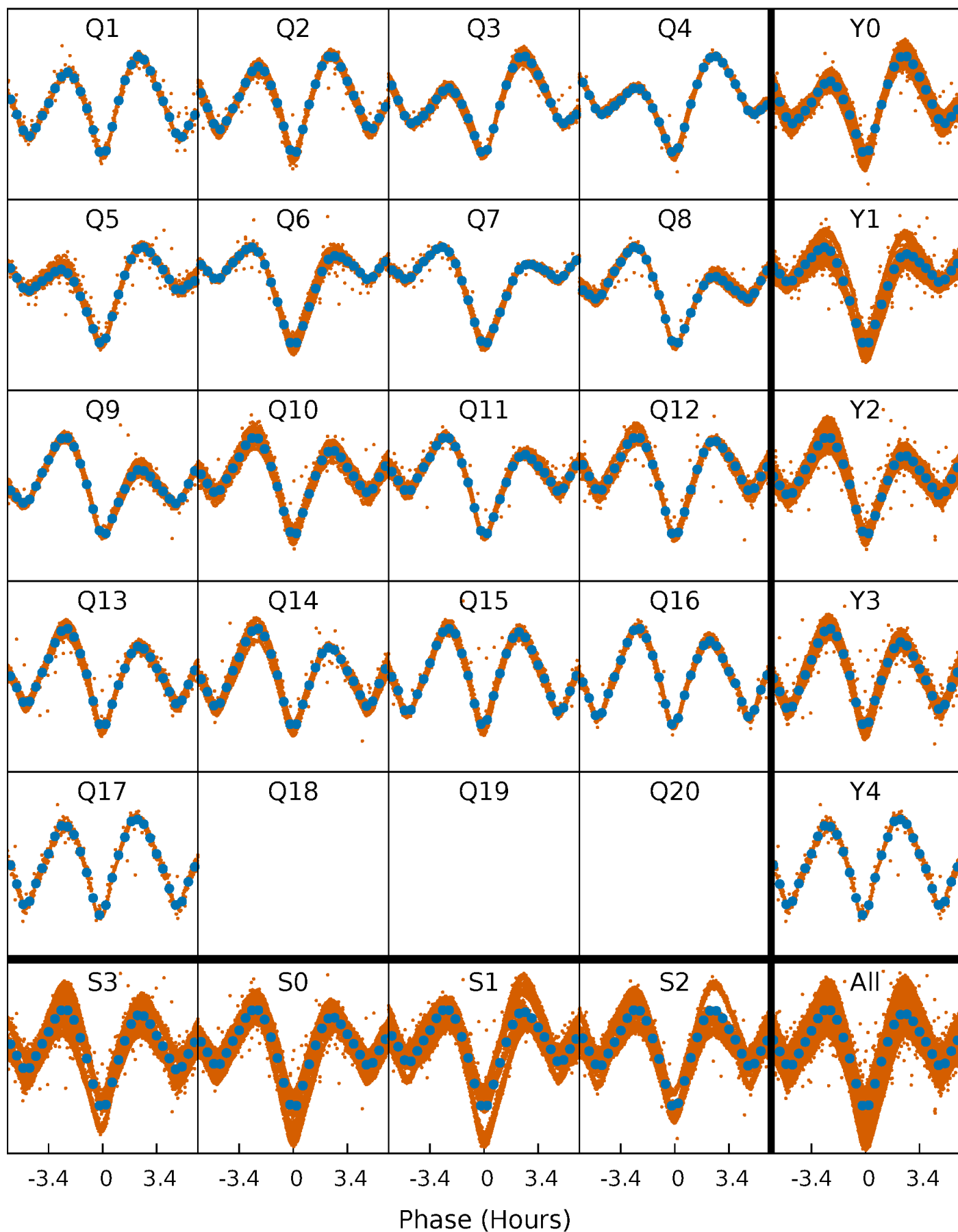


Planet 1 : Phased Whitened Flux Time Series (TPS Epoch/Period)



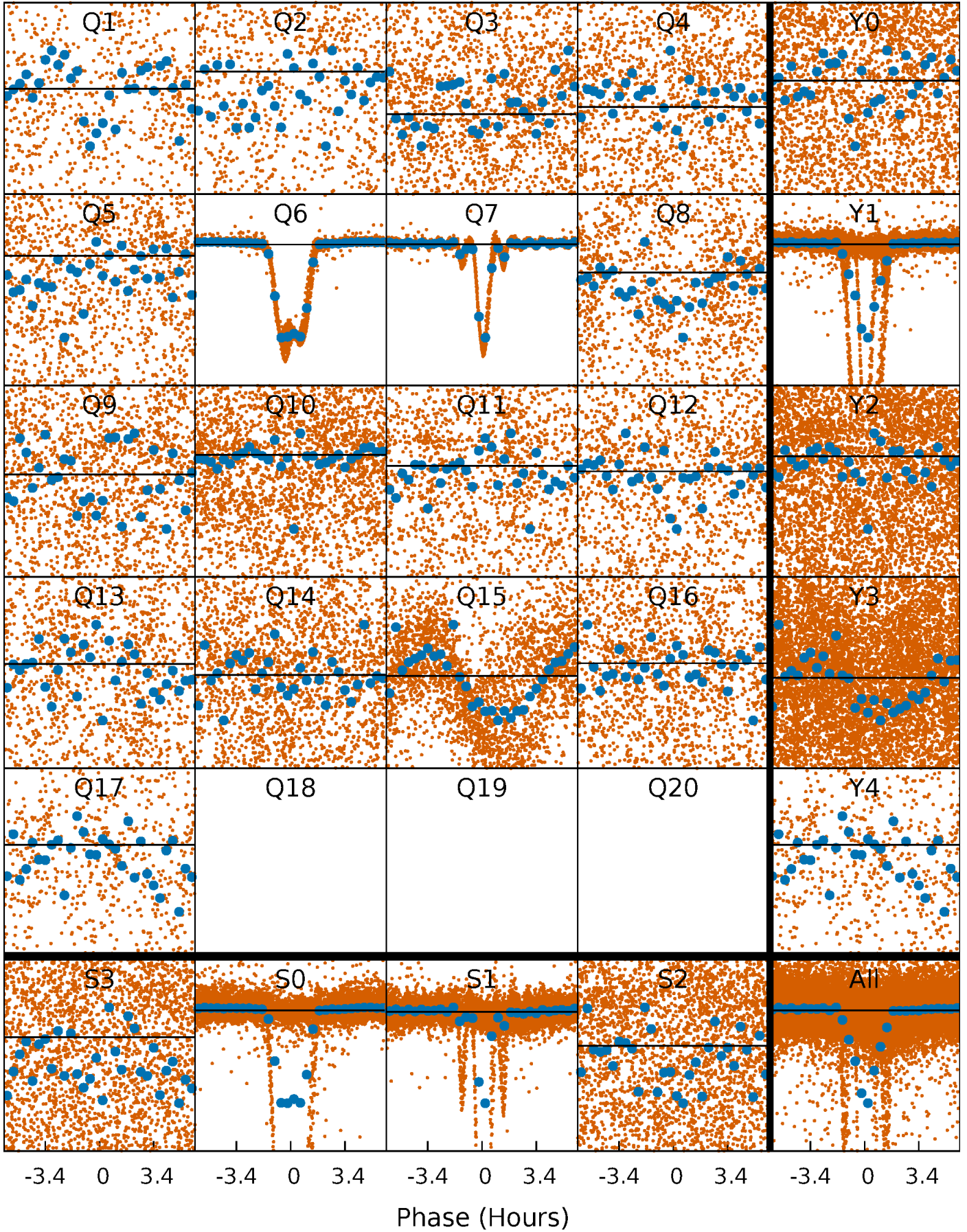
PDC Quarter-Phased Transit Curves

TCE 009469350-01 P= 0.794186 Days $T_0=131.975777$ (BKJD)



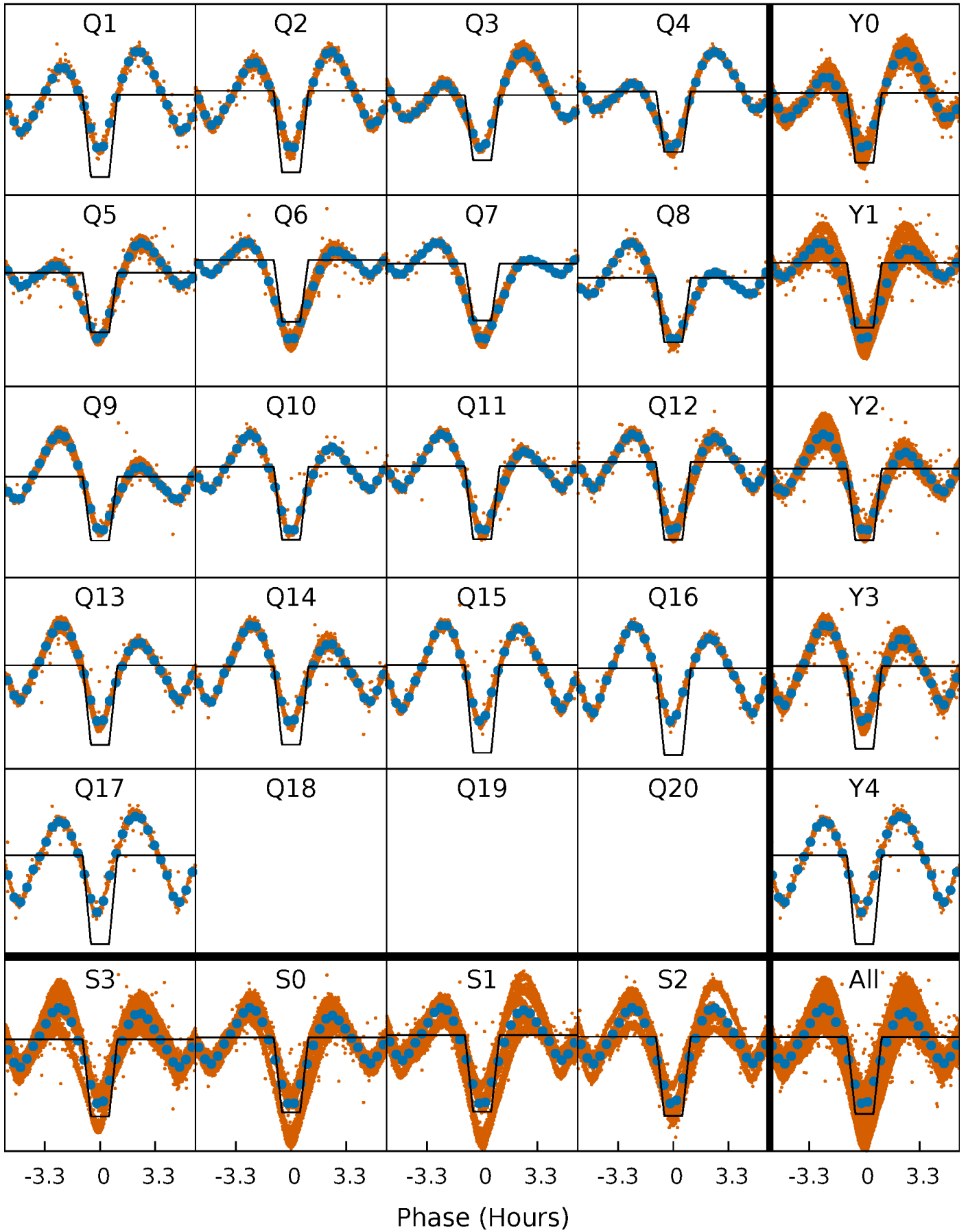
DV Quarter-Phased Transit Curves

TCE 009469350-01 P= 0.794186 Days $T_0=131.975777$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

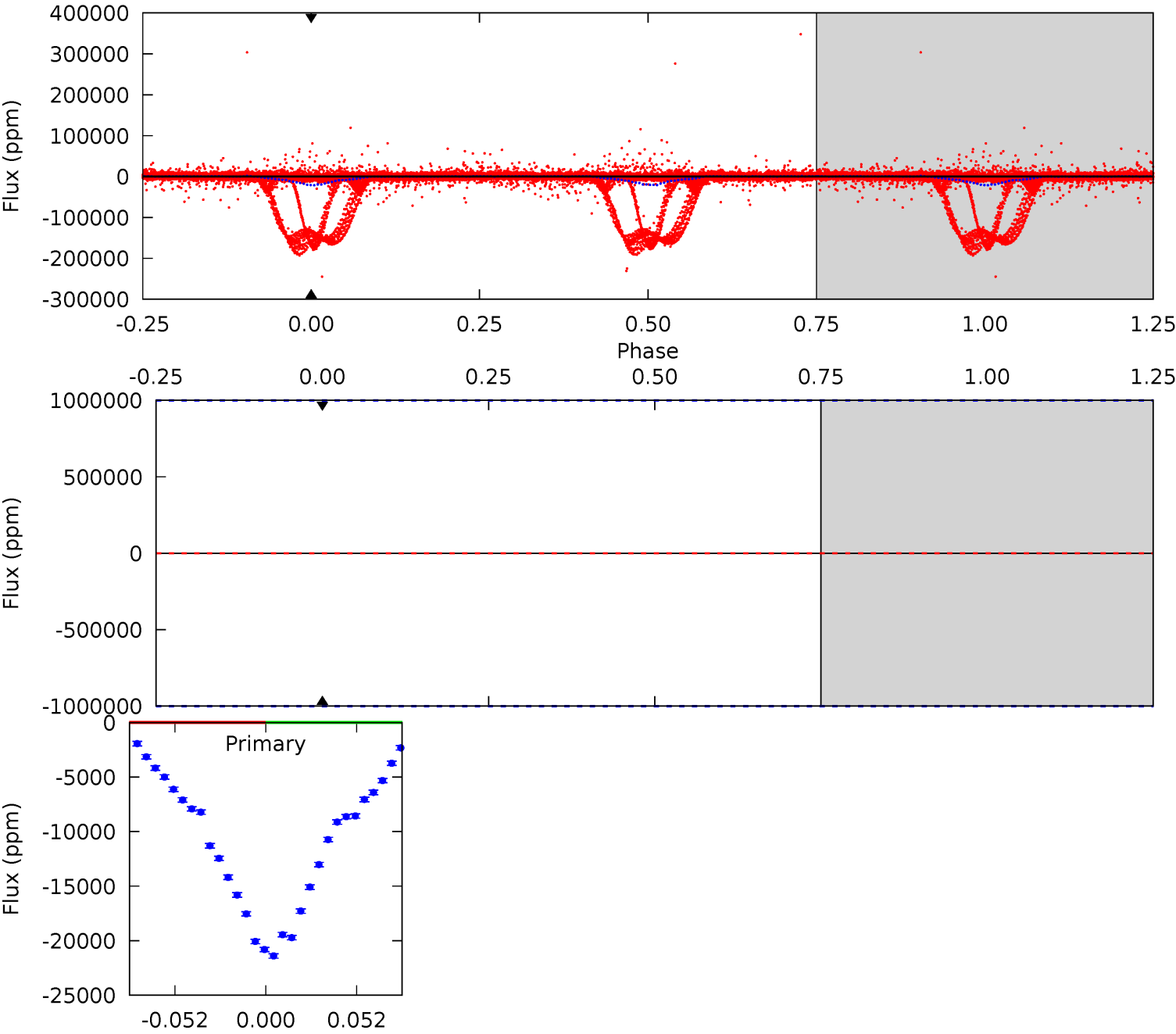
TCE 009469350-01 P= 0.794186 Days $T_0=131.976594$ (BKJD)



DV Model-Shift Uniqueness Test

009469350-01, P = 0.794186 Days, E = 131.181591 Days

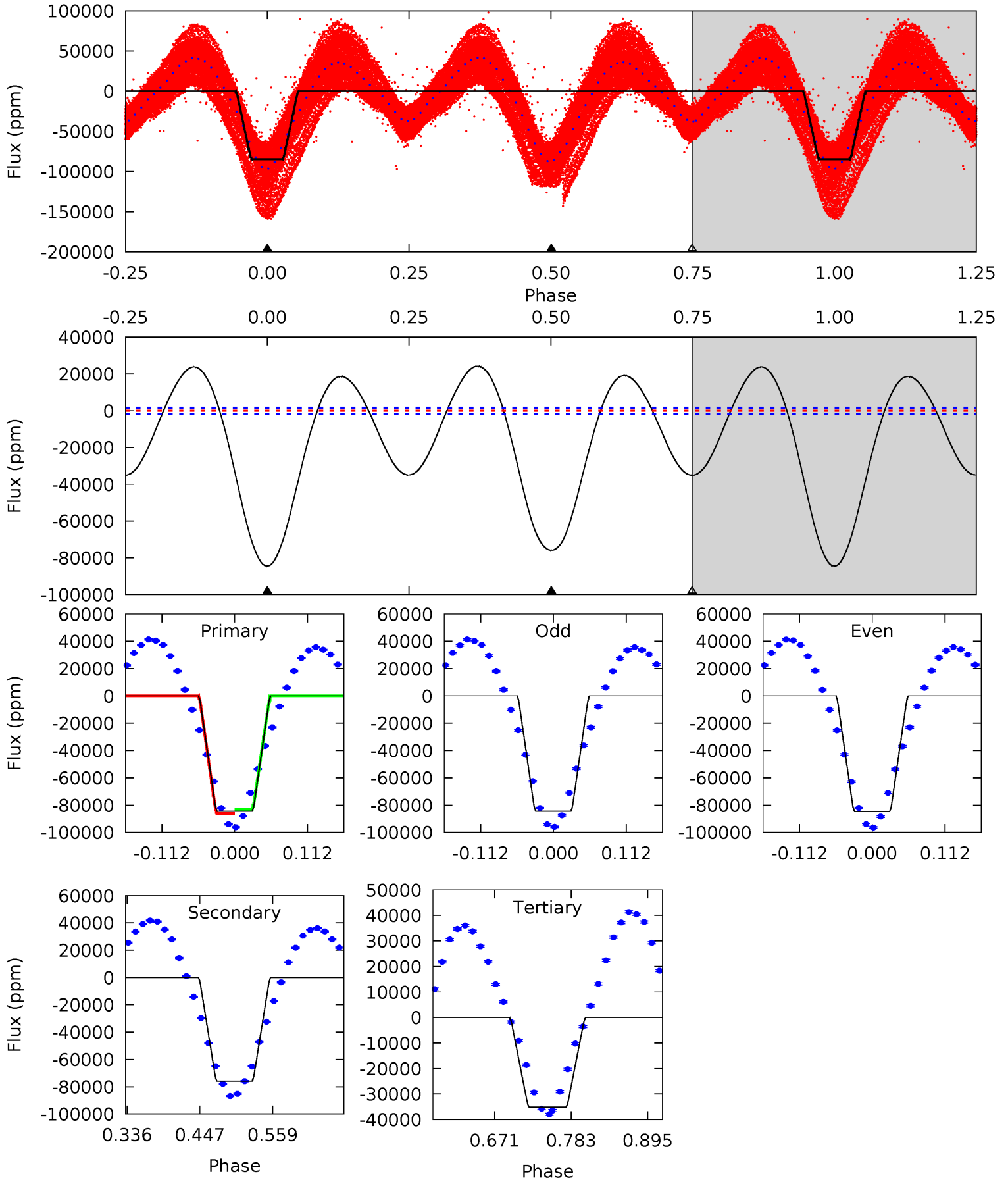
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
0	0	0	0	1.00	1.00	1.00	0	0	0	0	0	0	0	0



Alt Model-Shift Uniqueness Test

009469350-01, P = 0.794186 Days, E = 131.182408 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
231.7	208.0	96.2	0	4.54	1.59	56.8	135.5	231.7	111.9	208.0	0.20	1.06	0.22	4.45



Stellar Parameters For KIC 009469350

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	5201^{+155}_{-140}	$4.447^{+0.117}_{-0.130}$	$0.100^{+0.250}_{-0.300}$	$0.897^{+0.149}_{-0.122}$	$0.820^{+0.092}_{-0.064}$	$1.602^{+0.757}_{-0.606}$
	+3%/-3%	+3%/-3%	+250%/-300%	+17%/-14%	+11%/-8%	+47%/-38%
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 009469350-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	0 ± 1000000	$14.05^{+10.22}_{-8.25}$	2428^{+132}_{-112}	-3185^{+12557}_{-4982}	$-0.621^{+117.753}_{-79.952}$
Alt.	-75889 ± 365	$32.54^{+10.46}_{-10.14}$	2424^{+138}_{-113}	4874^{+902}_{-528}	11^{+12}_{-5}

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 $A_{obs} \gg 1.0$

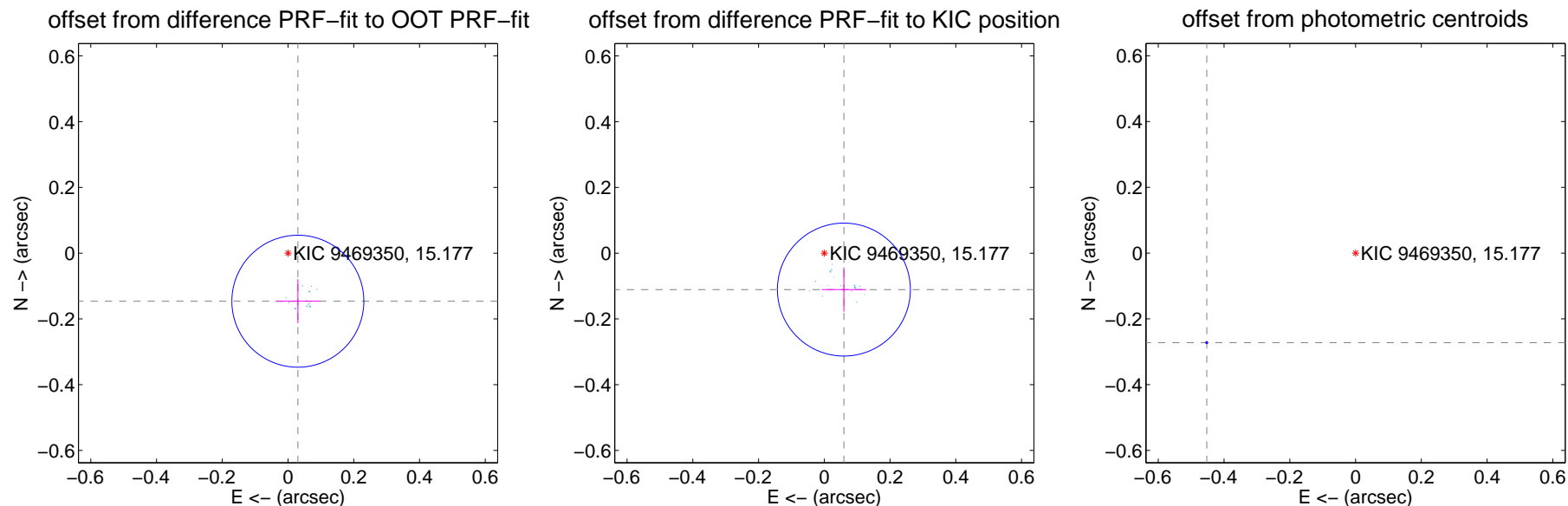
DV Centroid Data

Supplemental centroid analysis for 009469350-01. Kepler magnitude: 15.18. Transit SNR -1.00

There are 17 quarters with good PRF difference image offsets

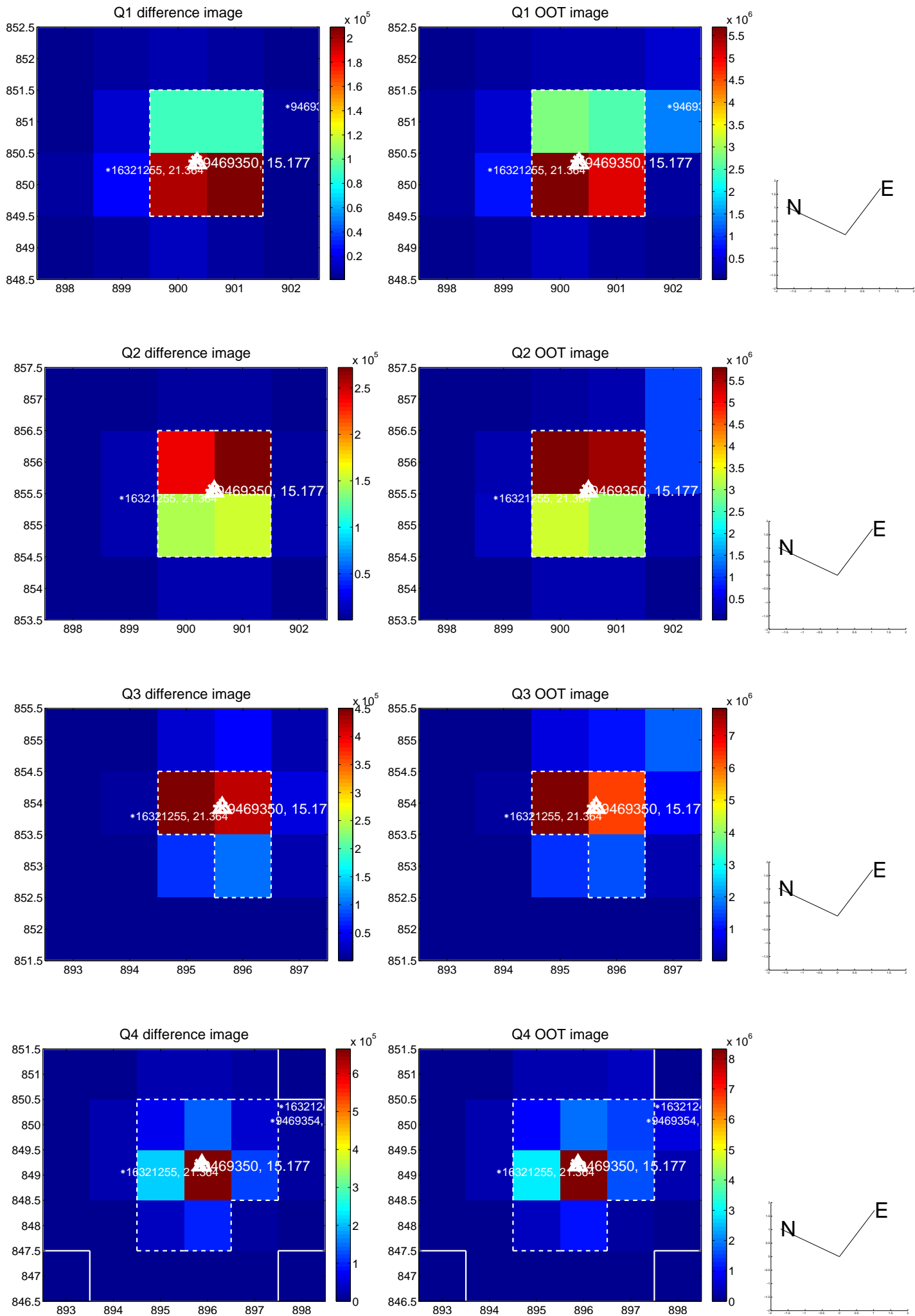
The direct PRF centroid is offset from the target star catalog position by about 0.06 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.149 ± 0.067	2.23	-0.030 ± 0.067	-0.146 ± 0.067
PRF-fit source offset from KIC position	0.126 ± 0.067	1.87	-0.060 ± 0.068	-0.111 ± 0.067
photometric centroid source offset	0.53 ± 0.00	498.56	0.45 ± 0.00	-0.27 ± 0.00

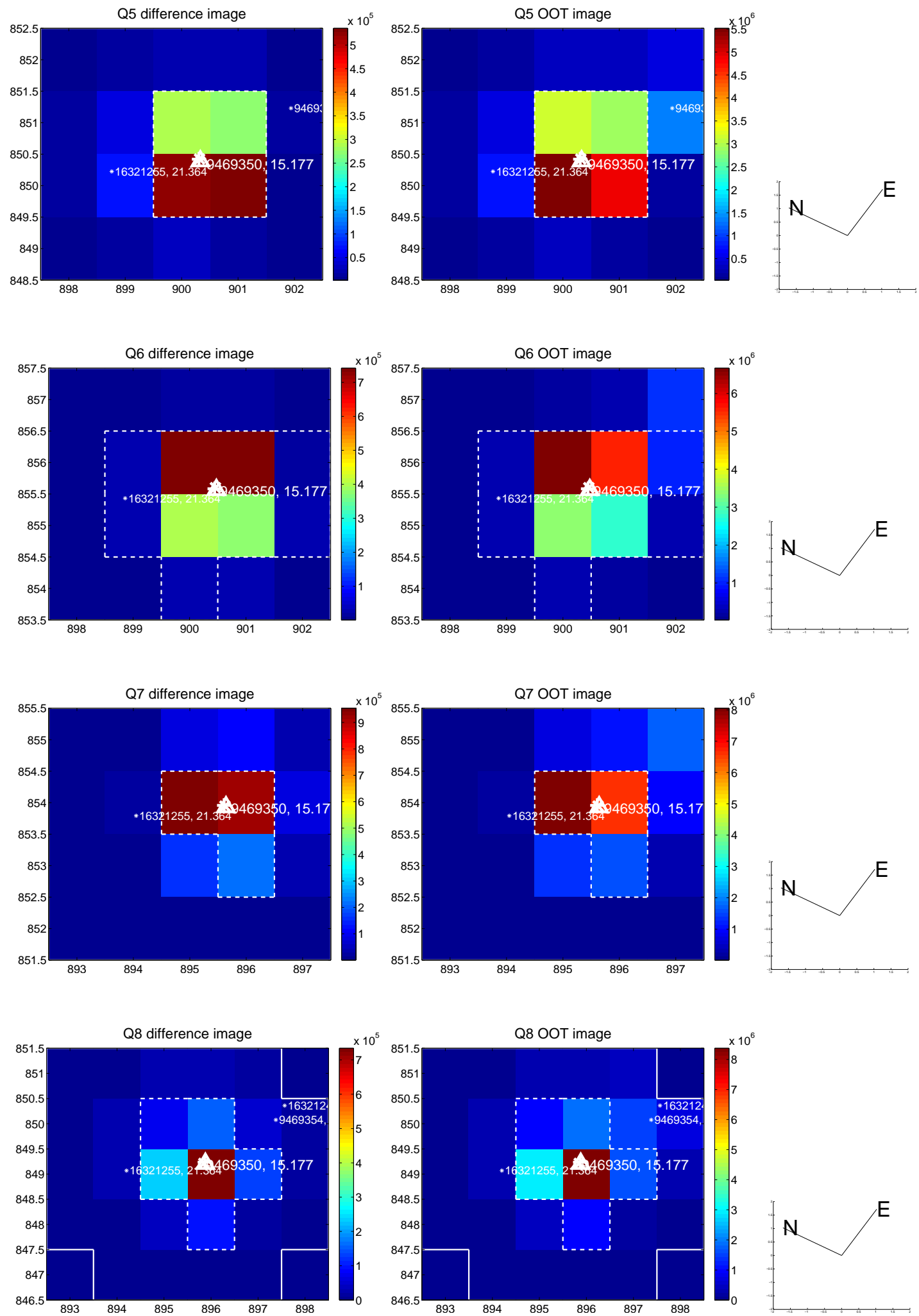


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses:** good quarterly centroid offsets; **Vermillion crosses:** bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

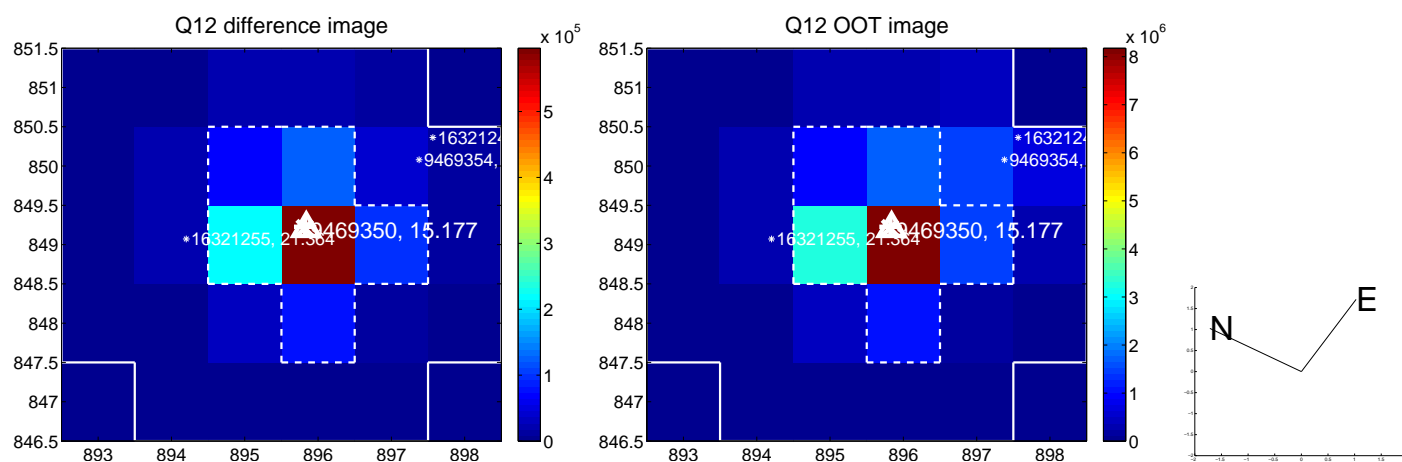
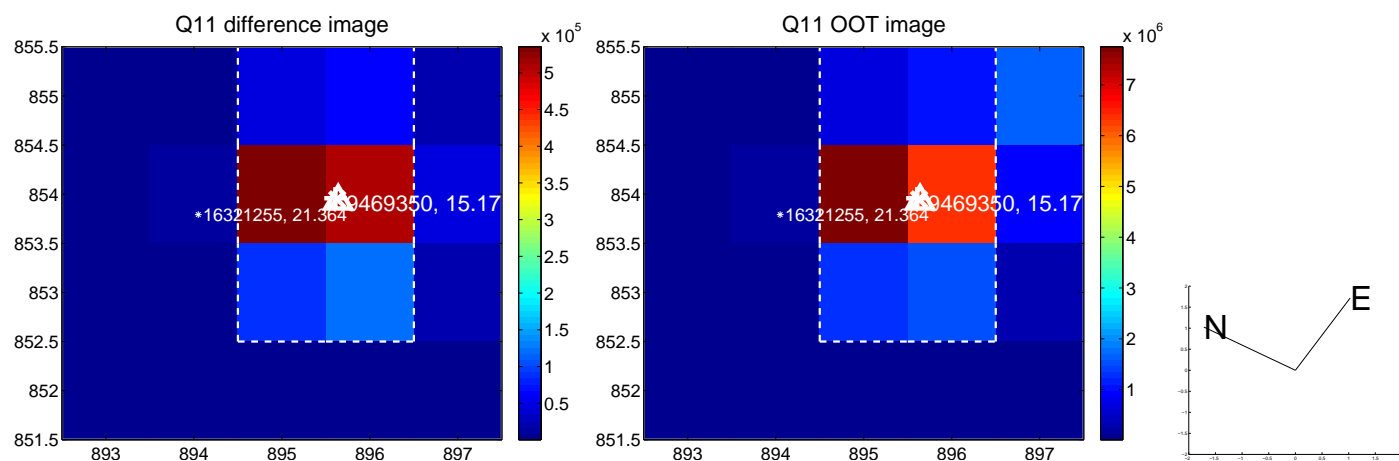
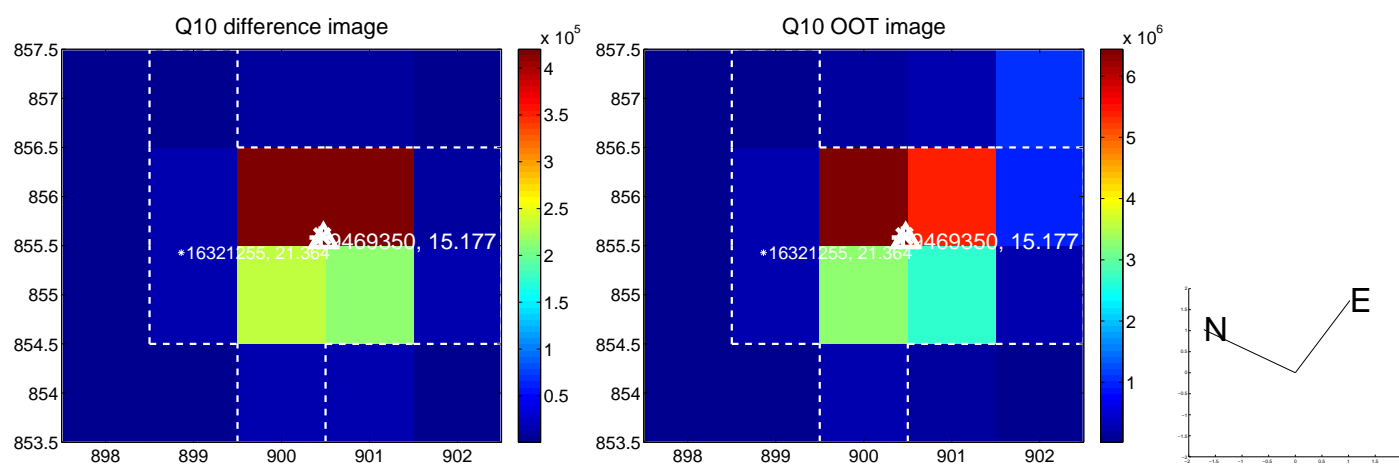
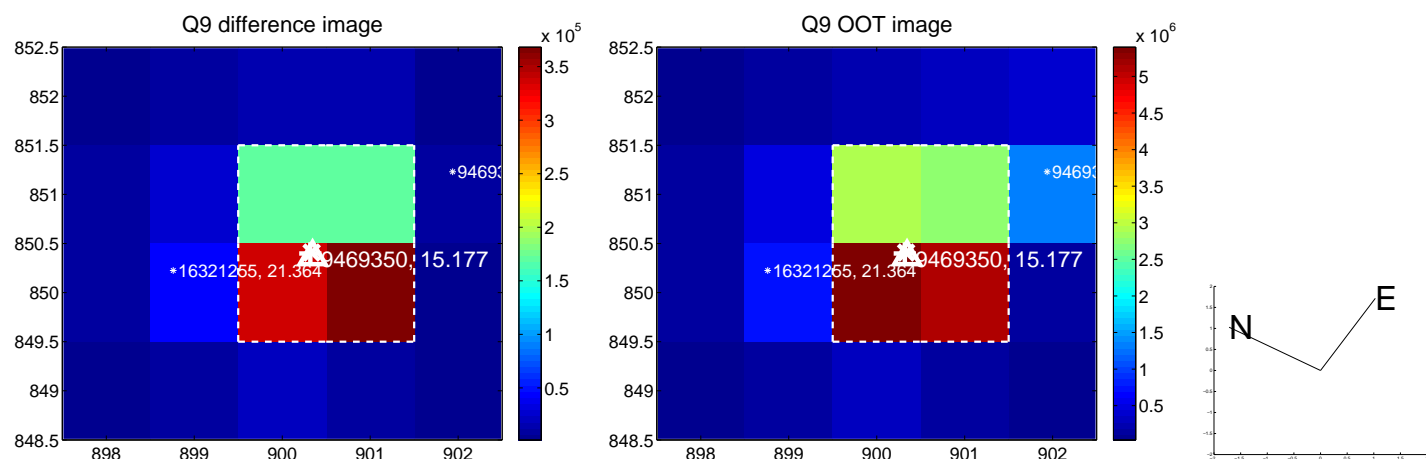
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



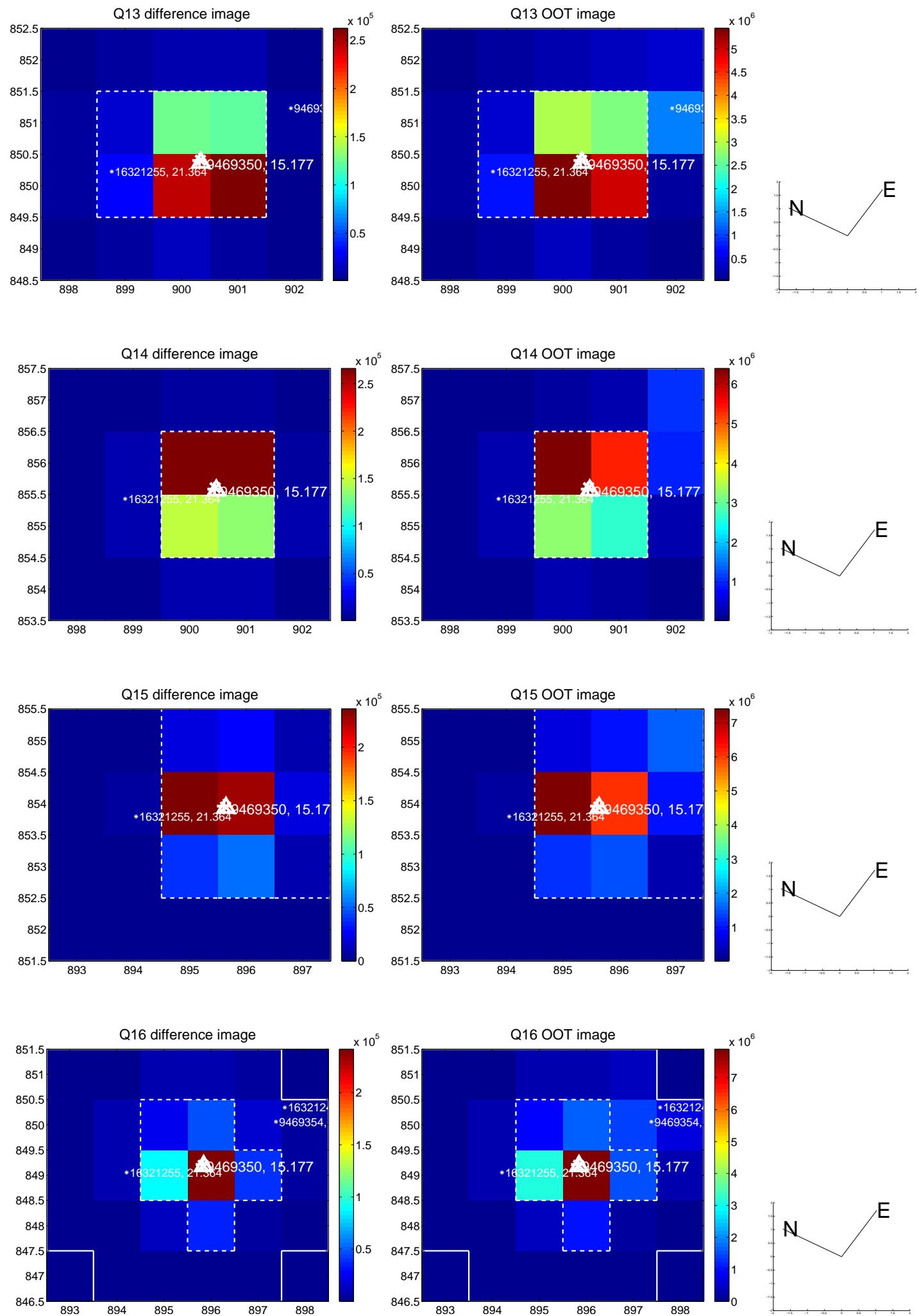
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



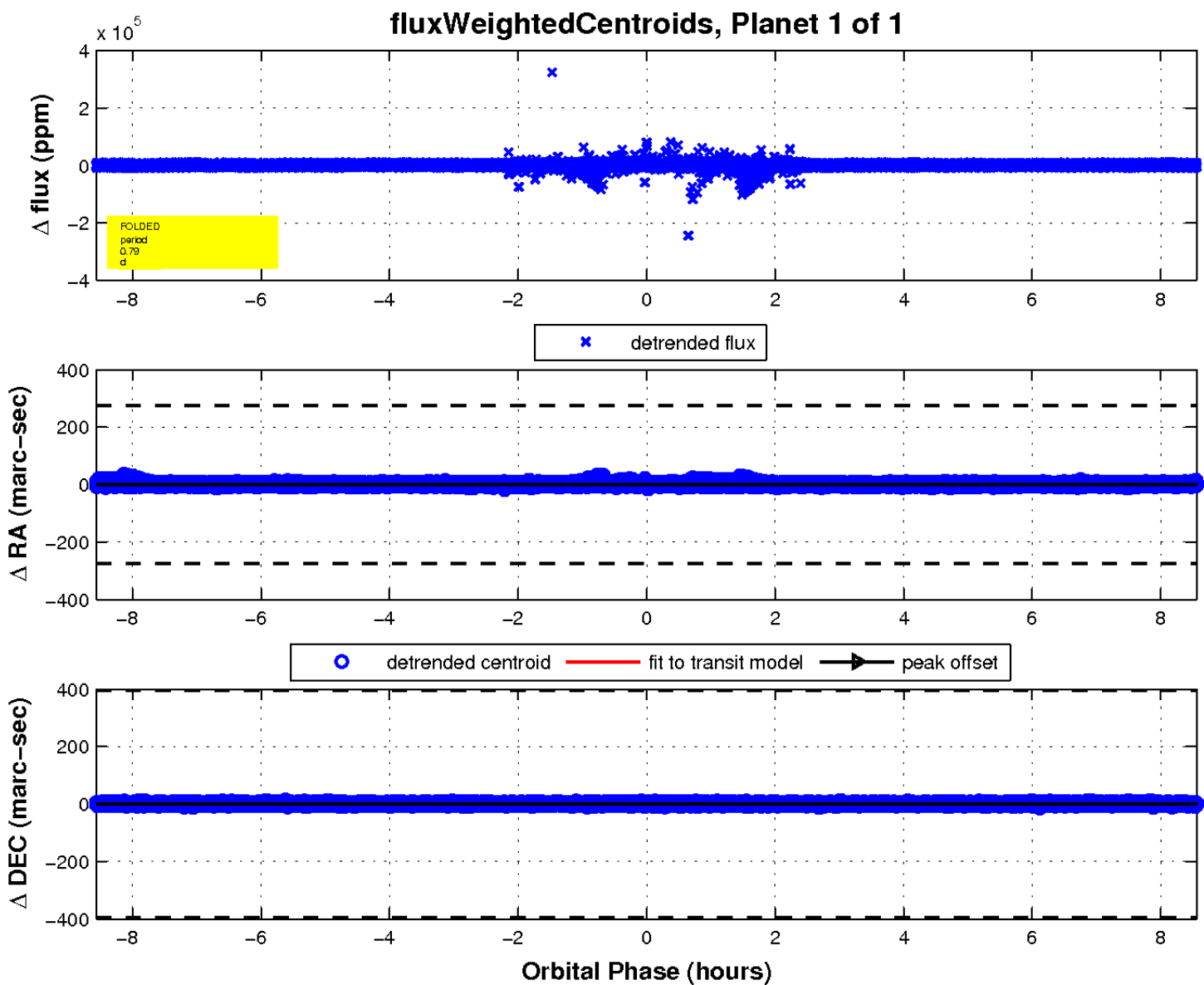
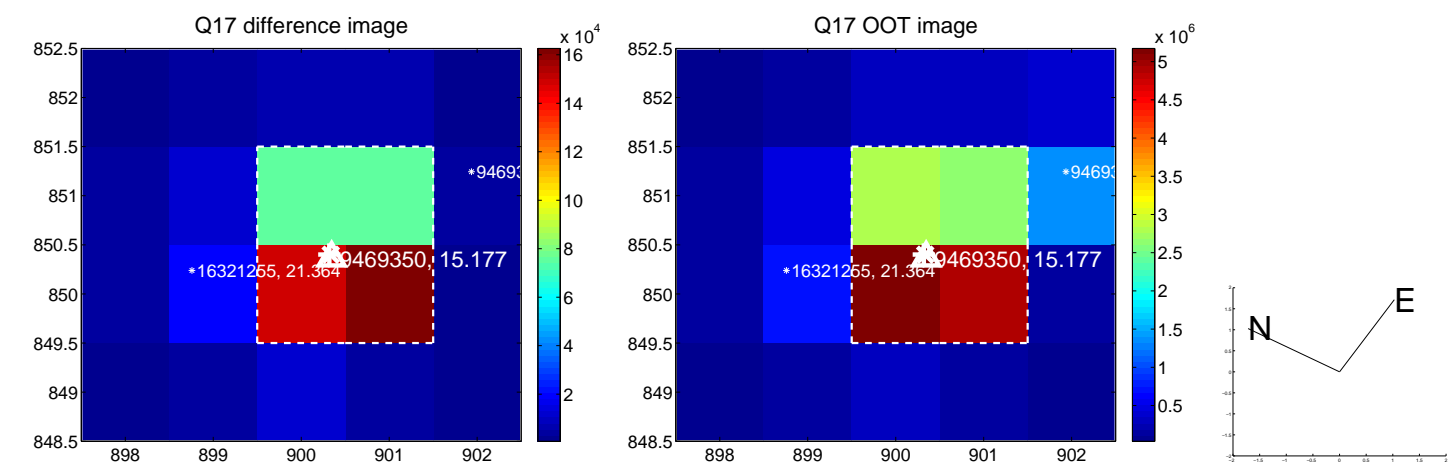
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white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination

