

KIC 011015323

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})
011015323-01	OBS	0479.01	34.188847	159.200436	1096.9	5.684	77.9	80.7	0.93	5515	3.48	18.09

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
011015323-01	OBS	PC	1.00	0	0	0	0	NO_COMMENT

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.

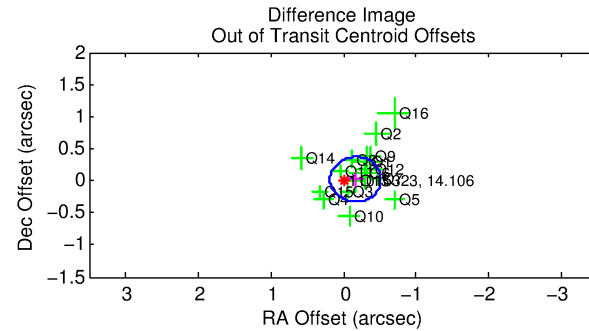
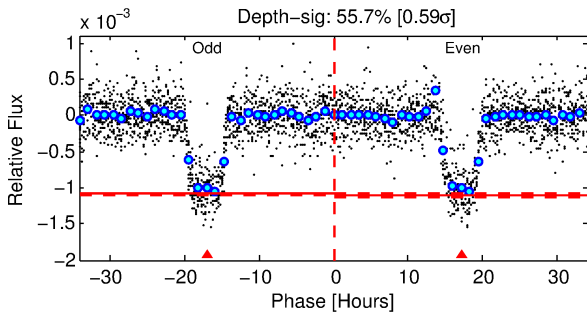
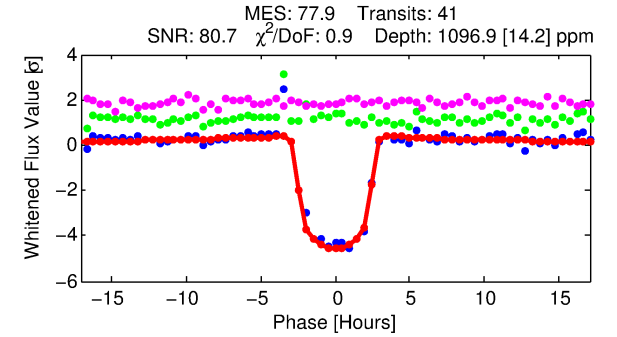
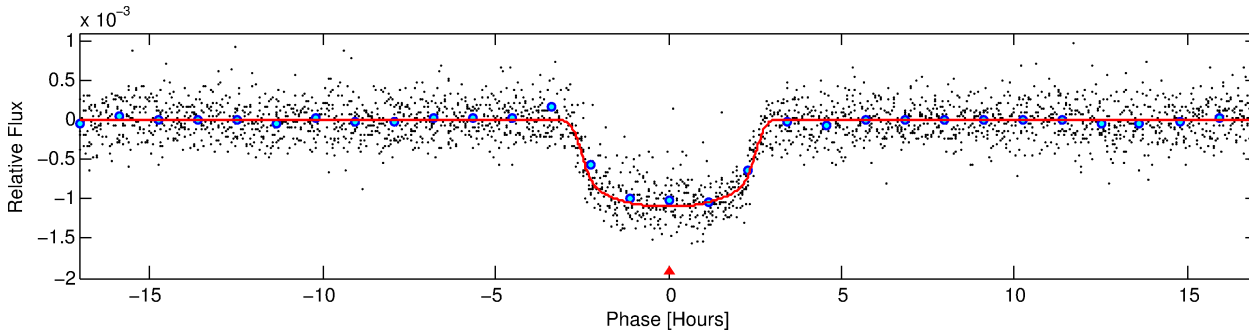
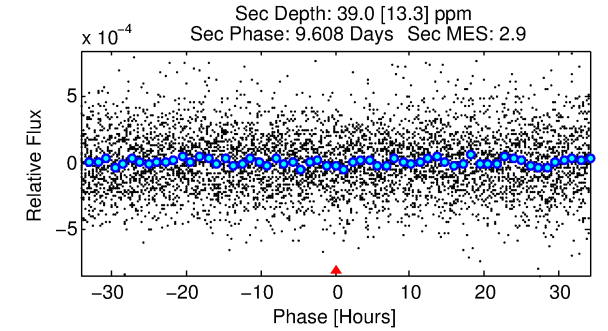
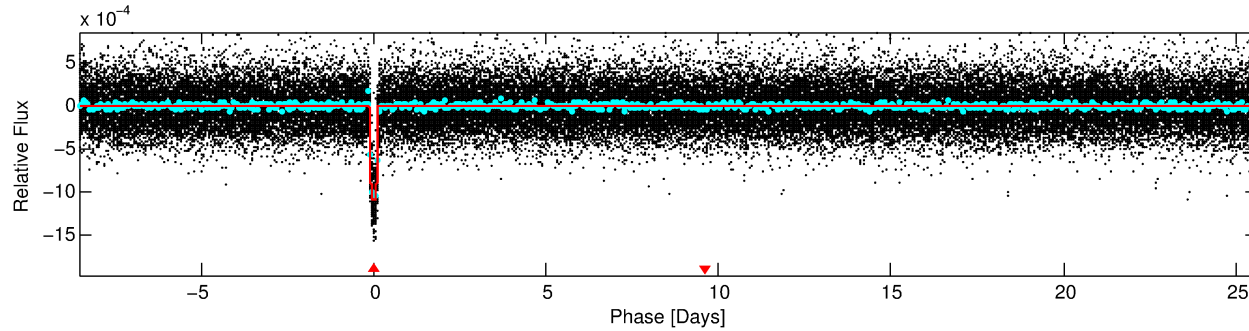
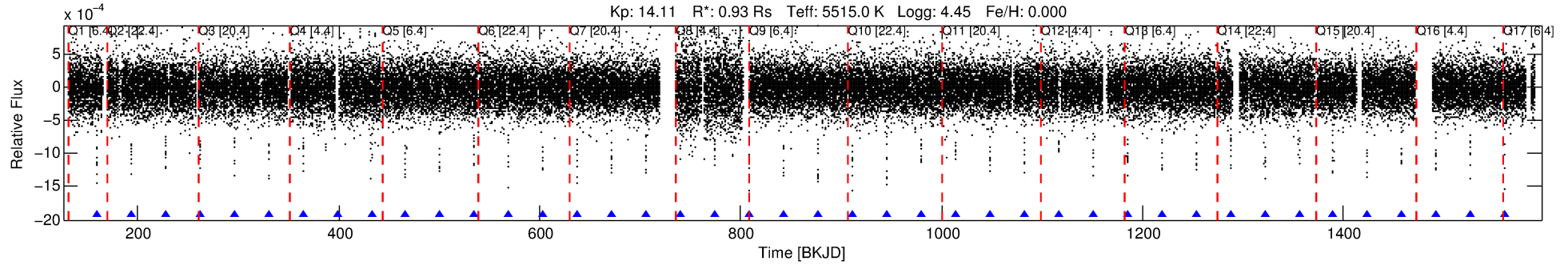
Ephemeris Match Information For 011015323-01

No Significant Match Found

DV One-Page Summary

KIC: 11015323 Candidate: 1 of 1 Period: 34.189 d

KOI: K00479.01 Corr: 0.967



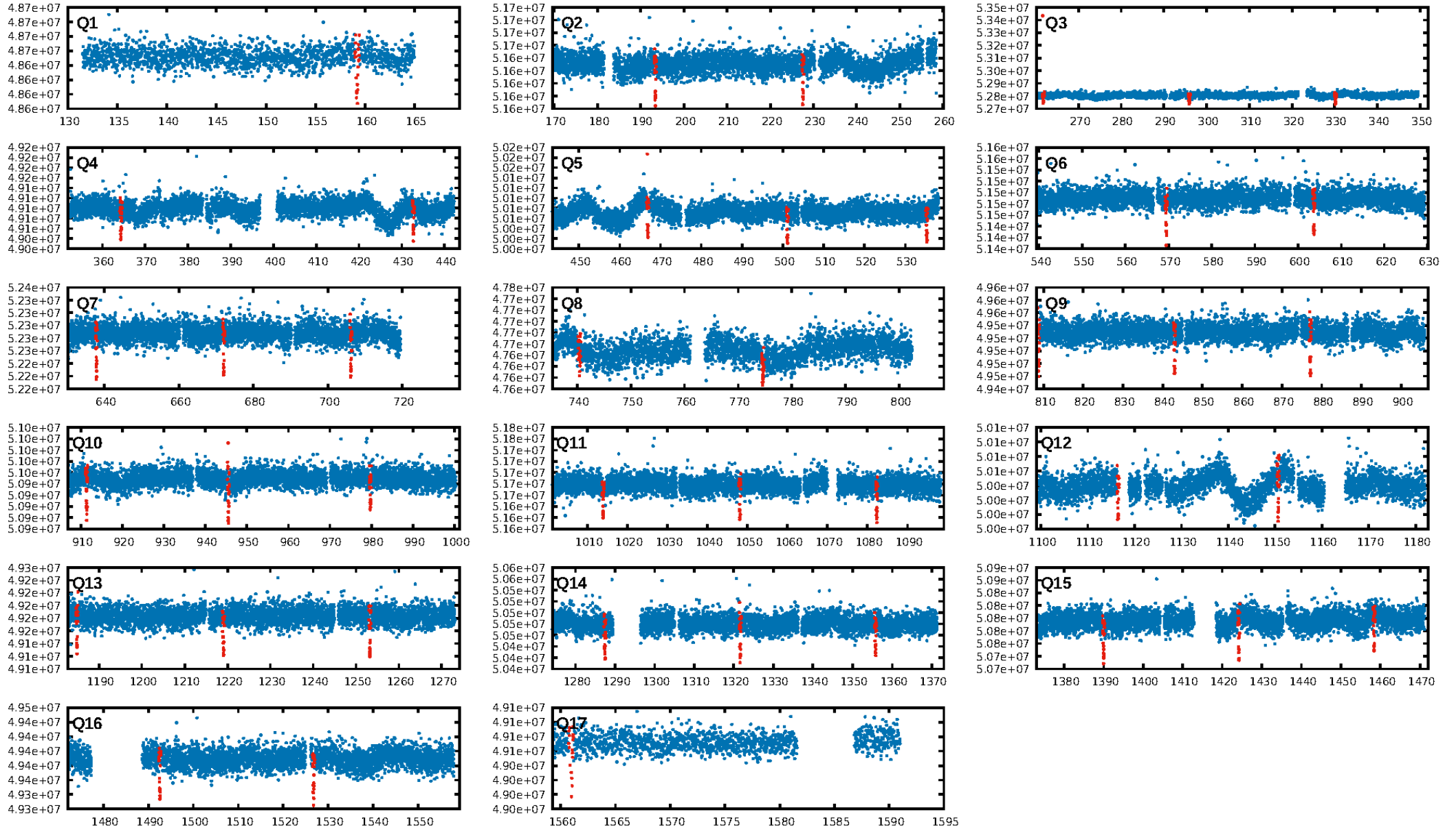
DV Fit Results:

Period = 34.18885 [0.00006] d
Epoch = 159.2004 [0.0015] BKJD
Rp/R* = 0.0344 [0.0011]
a/R* = 28.19 [3.53]
b = 0.83 [0.05]
Seff = 18.09 [3.28]
Teq = 526 [24] K
Rp = 3.48 [0.43] Re
a = 0.1980 [0.0211] AU
Ag = 69.63 [26.66] [2.57σ]
Teffp = 2349 [209] K [8.68σ]

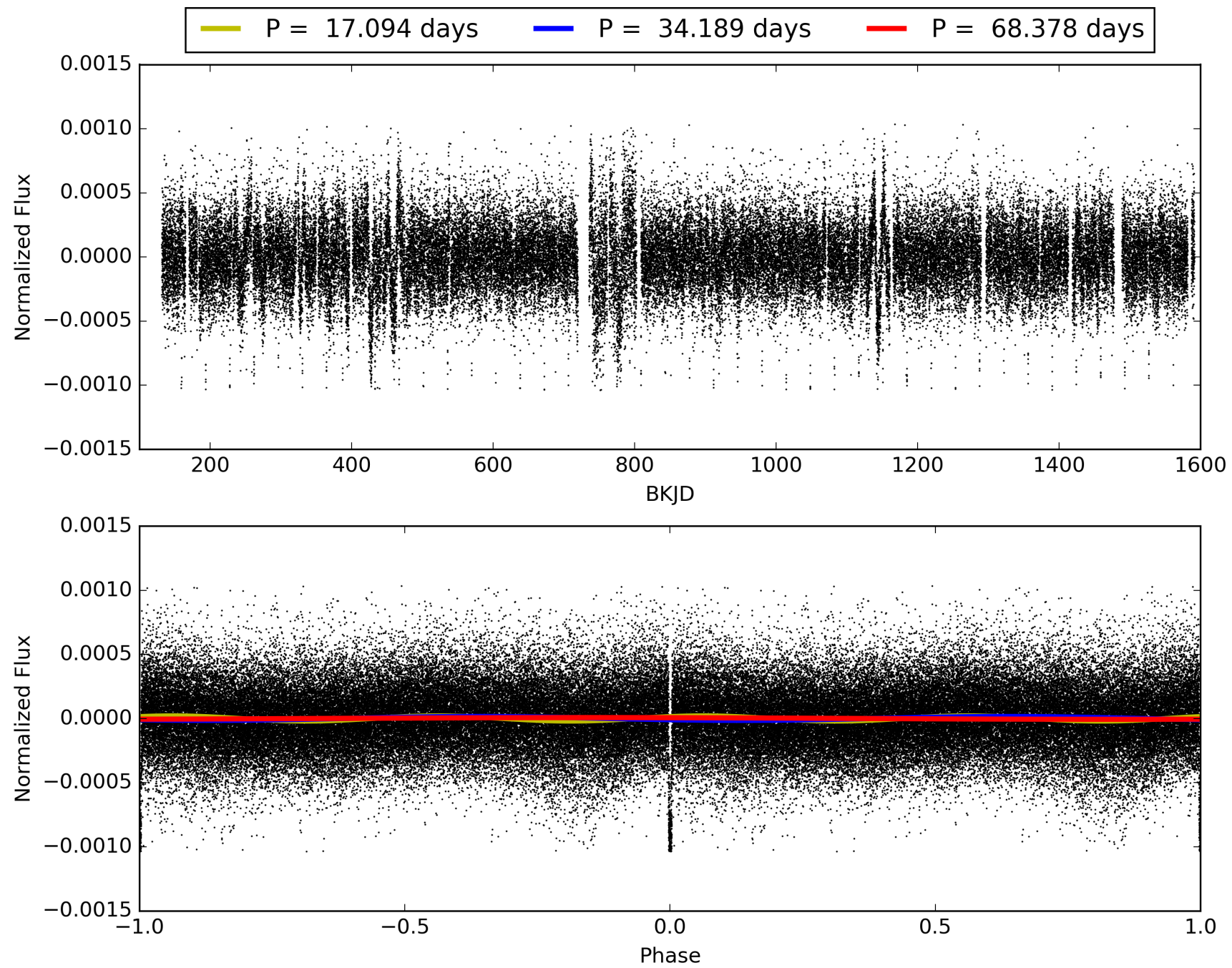
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: 32.9%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: 0.00e+00
RollingBand-fgt: 1.00 [39/39]
GhostDiagnostic-chr: 3.691
Centroid-sig: 5.1%
Centroid-so: 0.434 arcsec [2.35σ]
OotOffset-rm: 0.165 arcsec [1.41σ]
KicOffset-rm: 0.290 arcsec [2.25σ]
OotOffset-st: 4/4/4/4 [16]
KicOffset-st: 4/4/4/4 [16]
DiffImageQuality-fgm: 1.00 [16/16]
DiffImageOverlap-fno: 1.00 [16/16]

TCE 011015323-01, PDC Light Curves

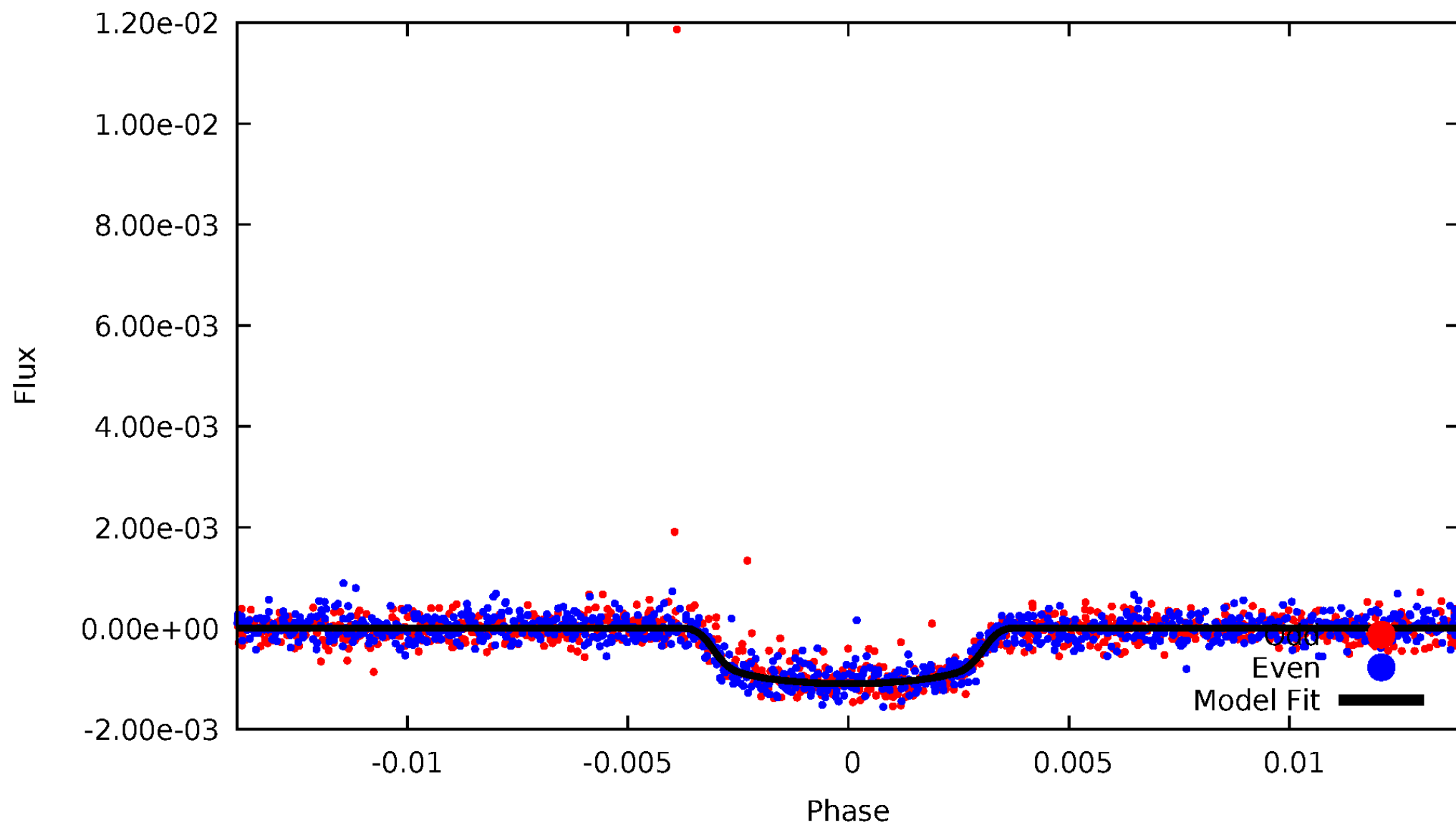


TCE 011015323-01



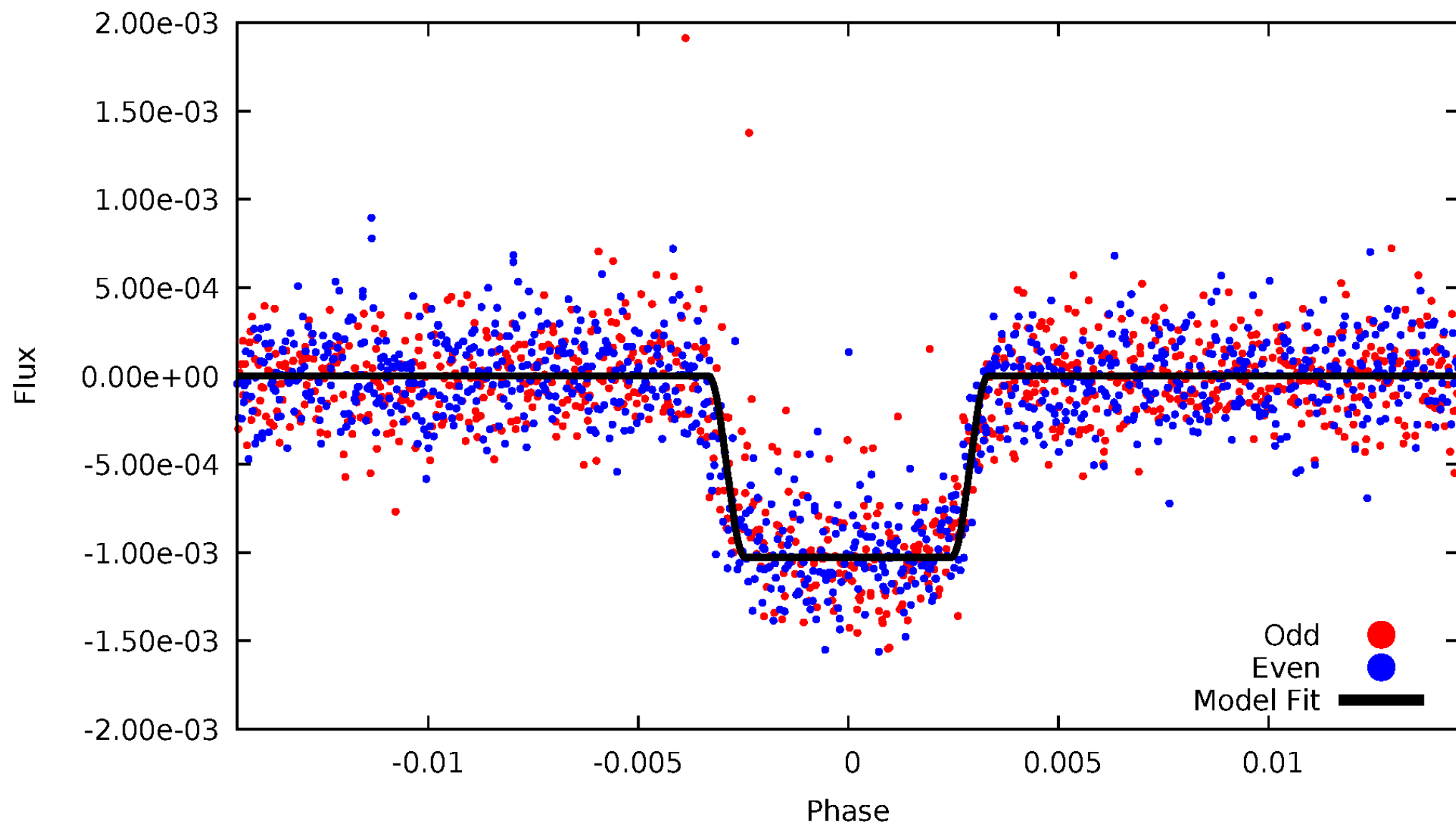
DV Odd/Even

TCE 011015323-01

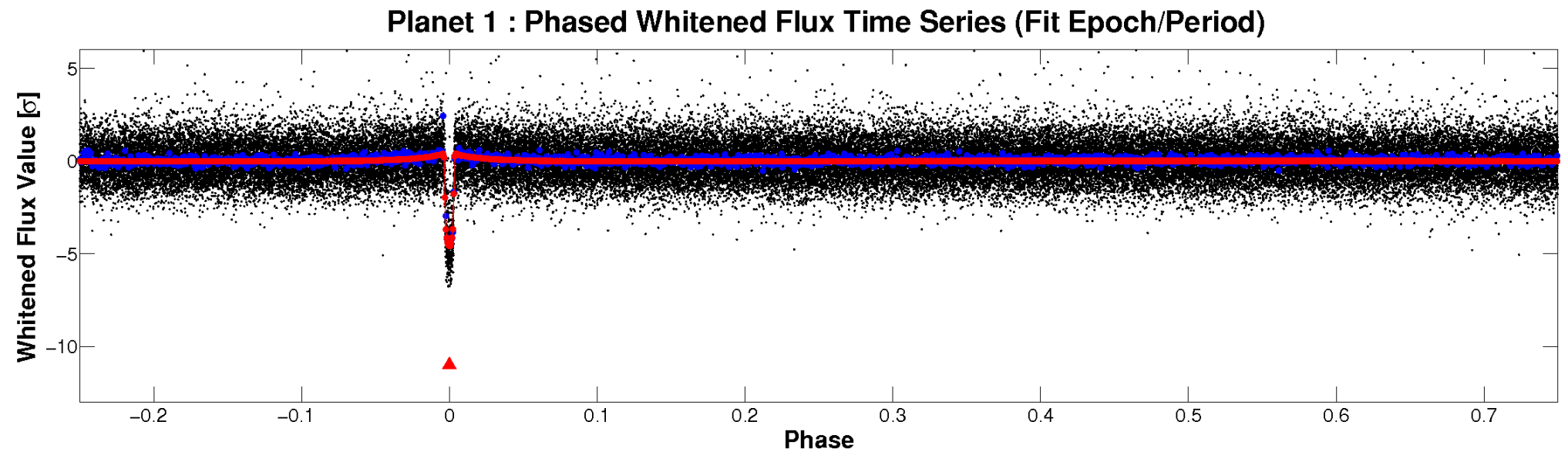
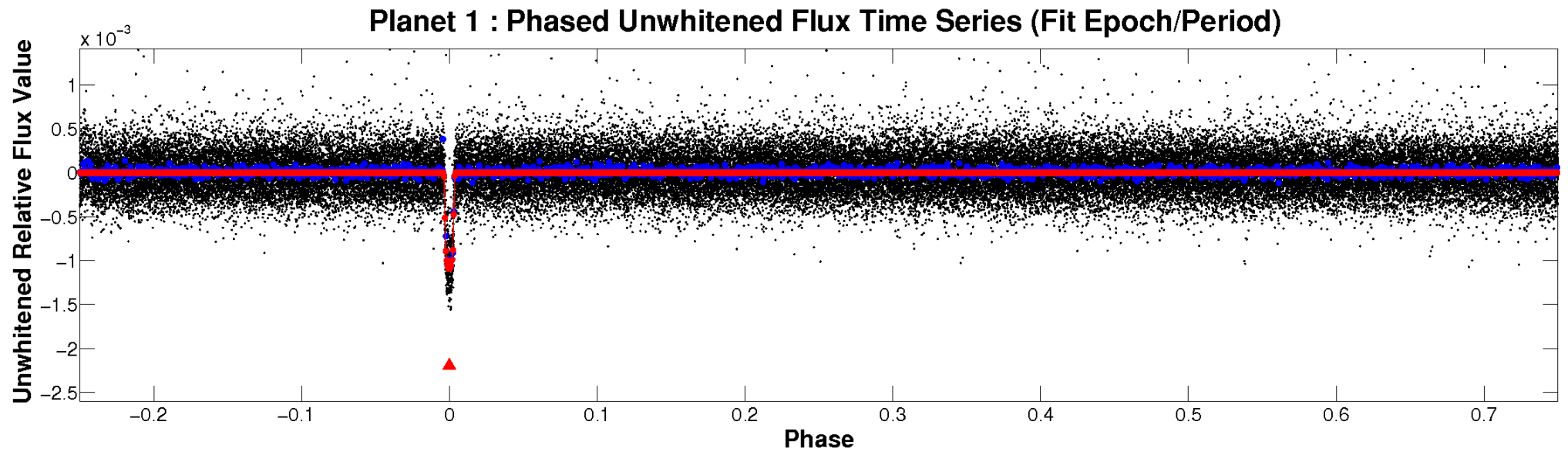


ALT Odd/Even

TCE 011015323-01

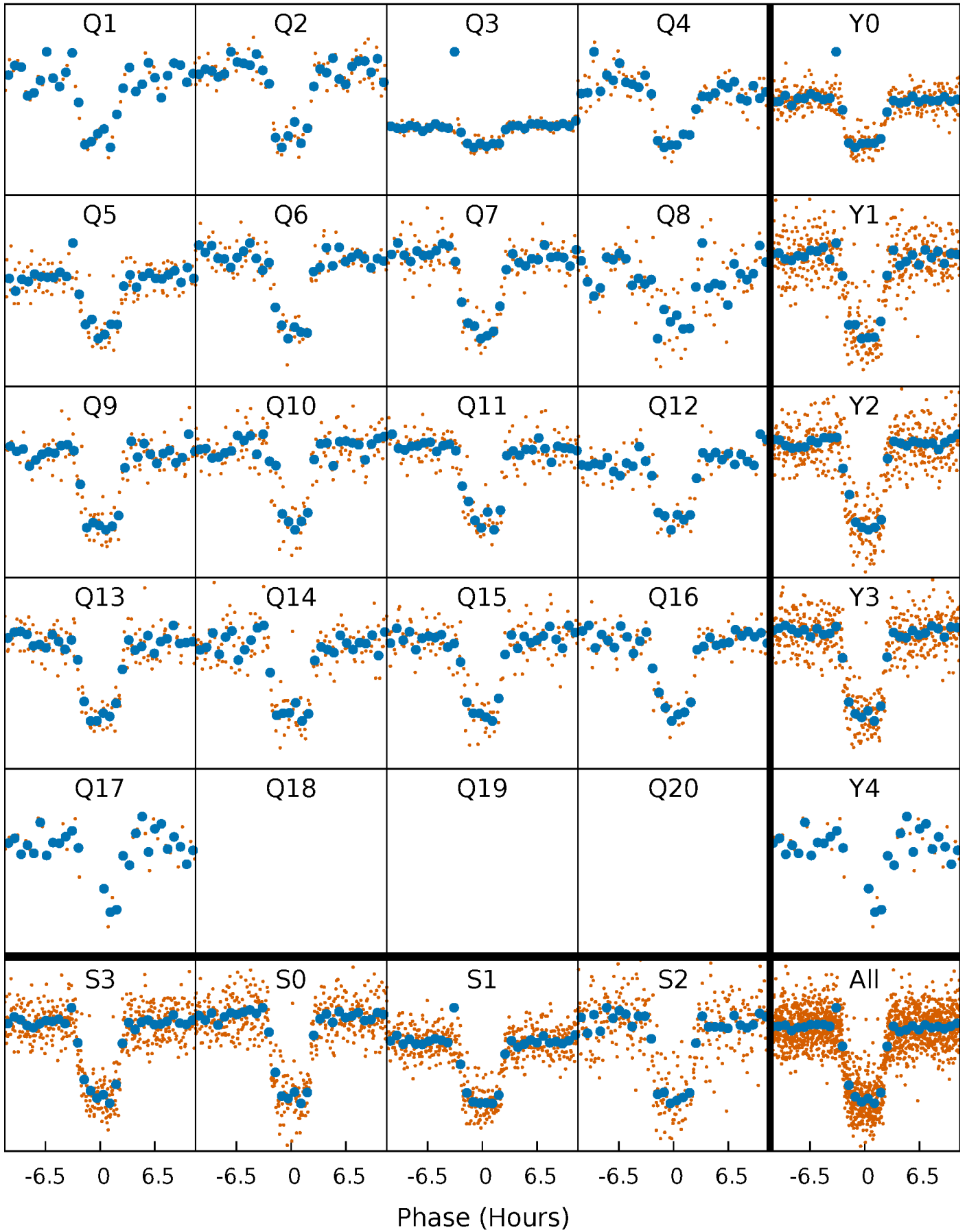


Non-Whitened Vs. Whitened Light Curve



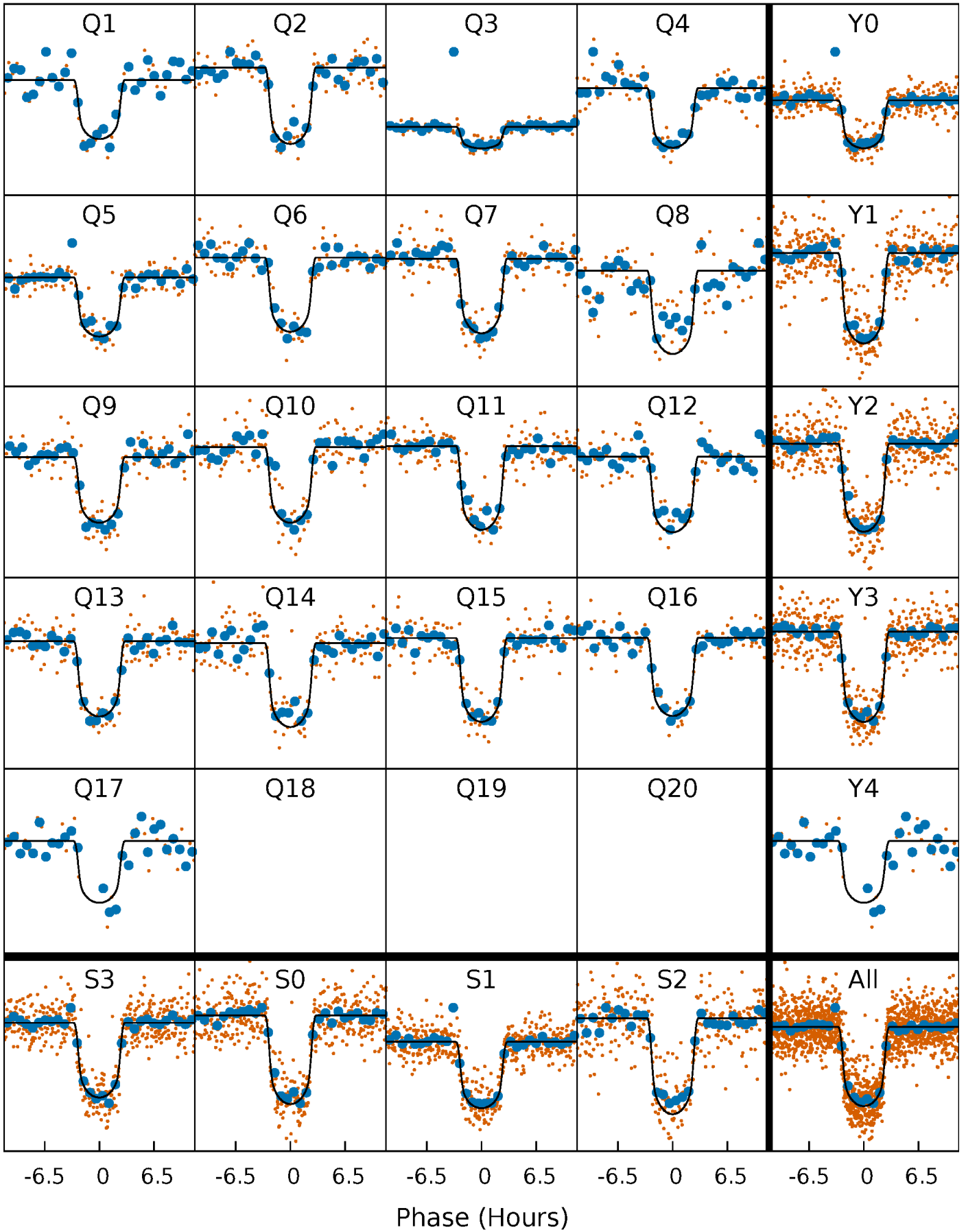
PDC Quarter-Phased Transit Curves

TCE 011015323-01 P= 34.188847 Days $T_0=159.200436$ (BKJD)



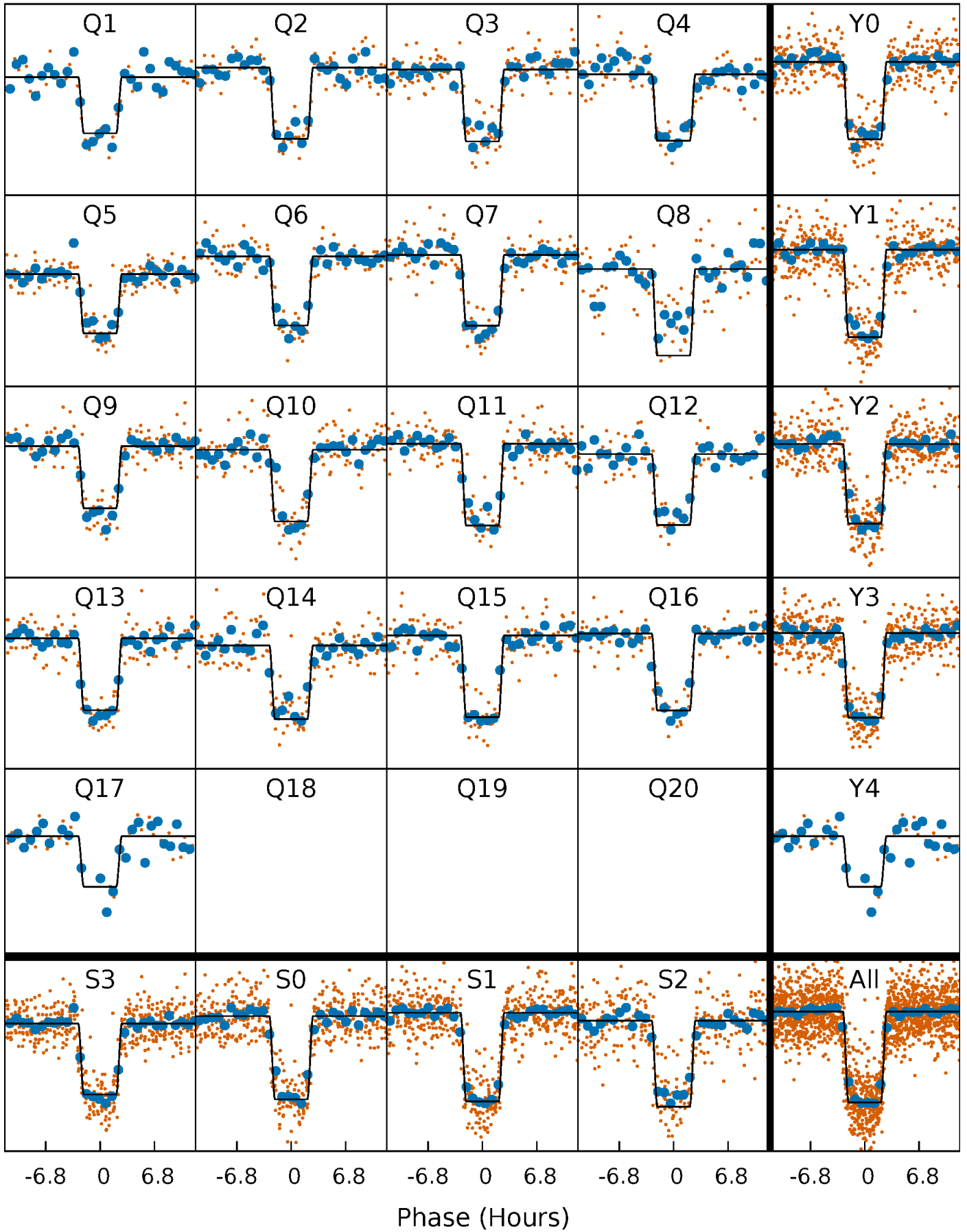
DV Quarter-Phased Transit Curves

TCE 011015323-01 P= 34.188847 Days $T_0=159.200436$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

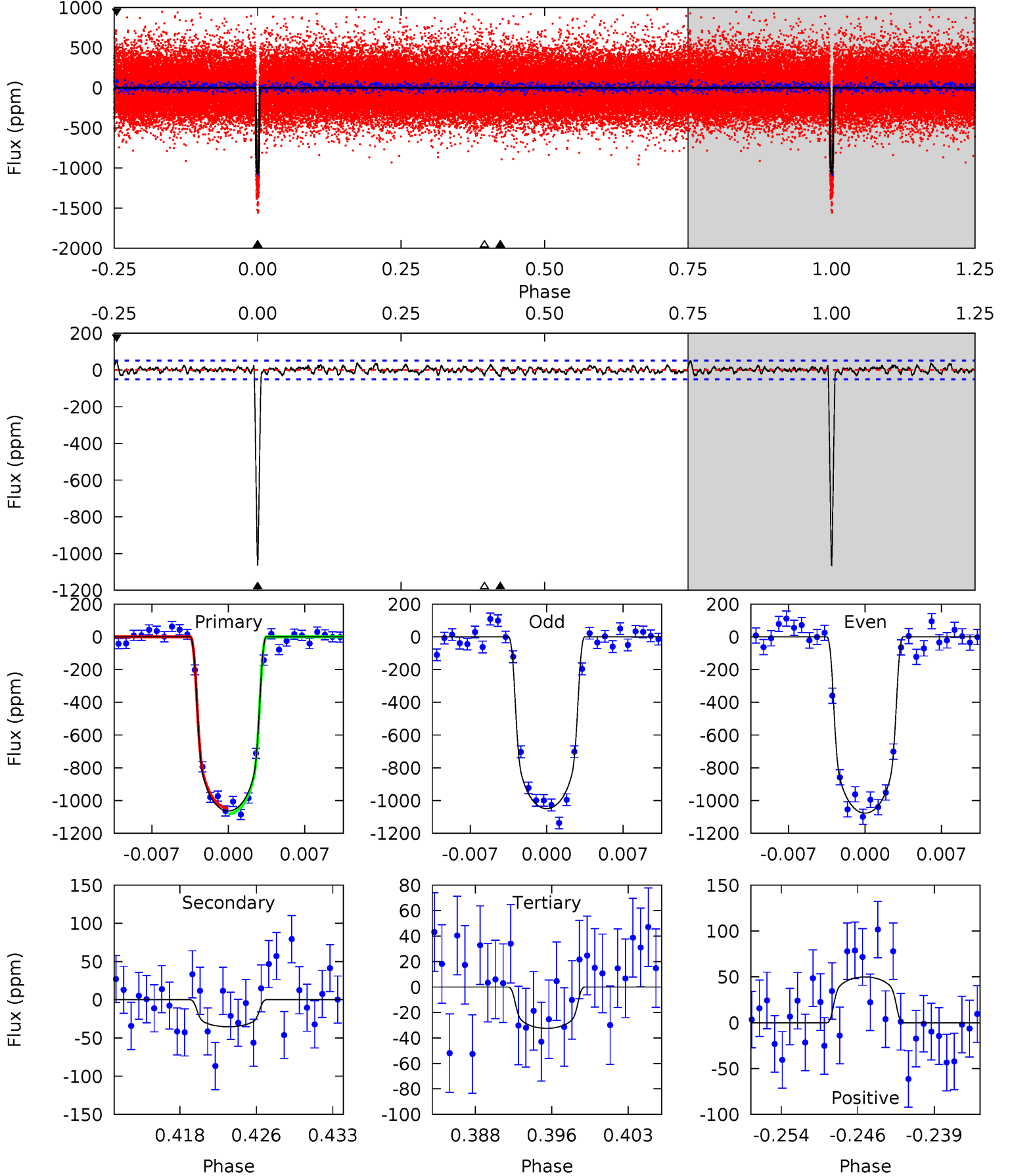
TCE 011015323-01 P= 34.189187 Days $T_0=159.195152$ (BKJD)



DV Model-Shift Uniqueness Test

011015323-01, P = 34.188847 Days, E = 125.011589 Days

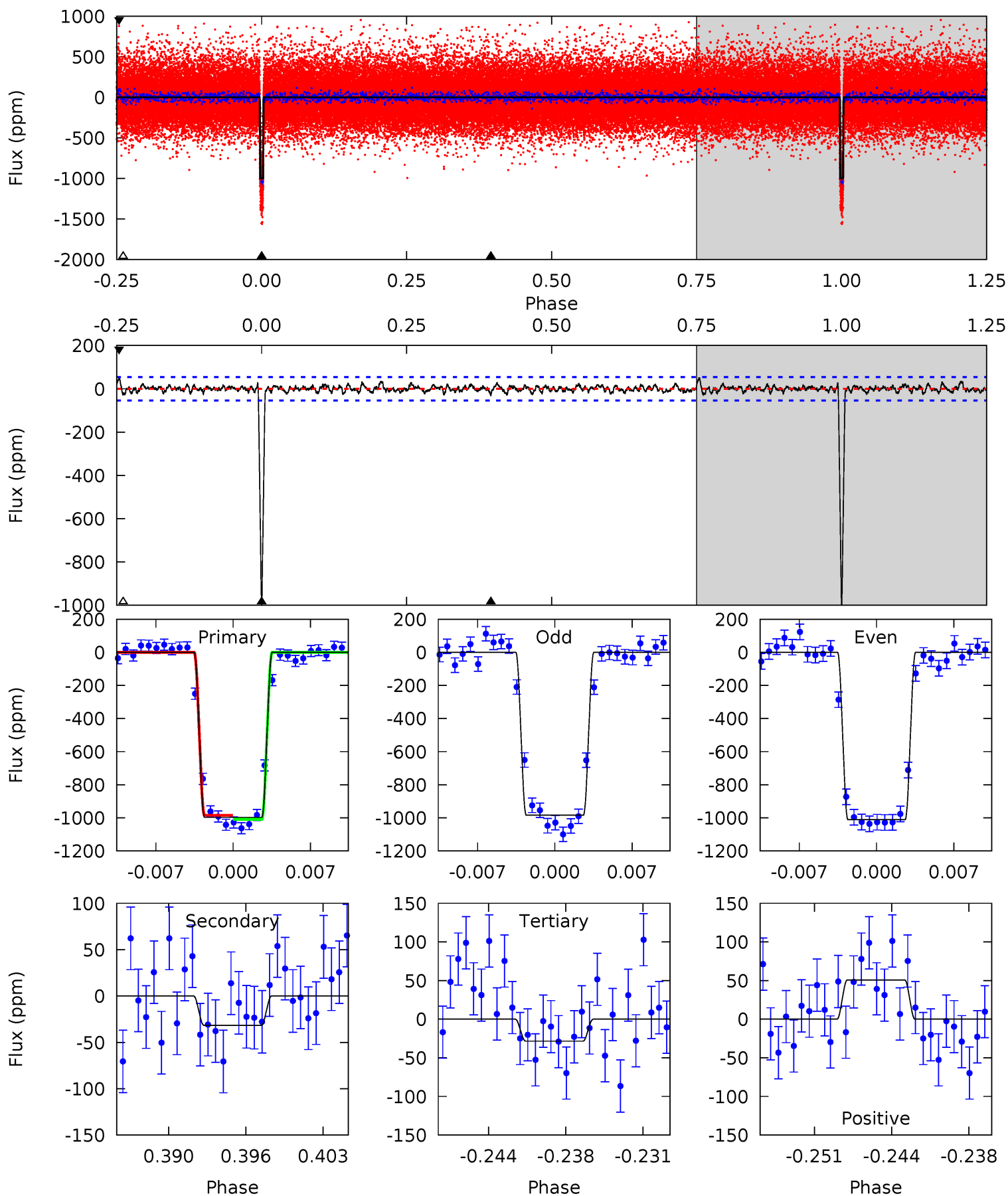
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
105.9	3.52	3.23	4.97	5.08	2.68	1.19	102.7	100.9	0.29	-1.45	1.38	0.98	0.04	1.77



Alt Model-Shift Uniqueness Test

011015323-01, P = 34.189187 Days, E = 125.005965 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
94.0	2.99	2.68	4.79	5.11	2.72	1.03	91.4	89.2	0.31	-1.80	1.32	0.98	0.05	1.14



Stellar Parameters For KIC 011015323

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	M (M_{\odot})	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	5515^{+109}_{-109}	$4.453^{+0.076}_{-0.093}$	$0.000^{+0.150}_{-0.150}$	$0.925^{+0.110}_{-0.080}$	$0.888^{+0.060}_{-0.049}$	$1.577^{+0.491}_{-0.446}$
	+2%/-2%	+2%/-2%	+inf%/-inf%	+12%/-9%	+7%/-6%	+31%/-28%
Source	SPE57	SPE57	SPE57	DSEP		

KIC = Kepler Input Catalog; PHO = Photometry; SPE = Spectroscopy; AST = Asteroseismology
 TRA = Transits; DESP = Dartmouth Models; MULT = Multiple Models

Secondary Eclipse Parameters for KIC 011015323-01 / KOI 0479.01

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-35 ± 10	$3.50^{+0.29}_{-0.23}$	736^{+26}_{-24}	2953^{+123}_{-135}	61^{+21}_{-18}
Alt.	-32 ± 11	$3.25^{+0.26}_{-0.21}$	736^{+29}_{-25}	2985^{+132}_{-179}	64^{+27}_{-23}

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

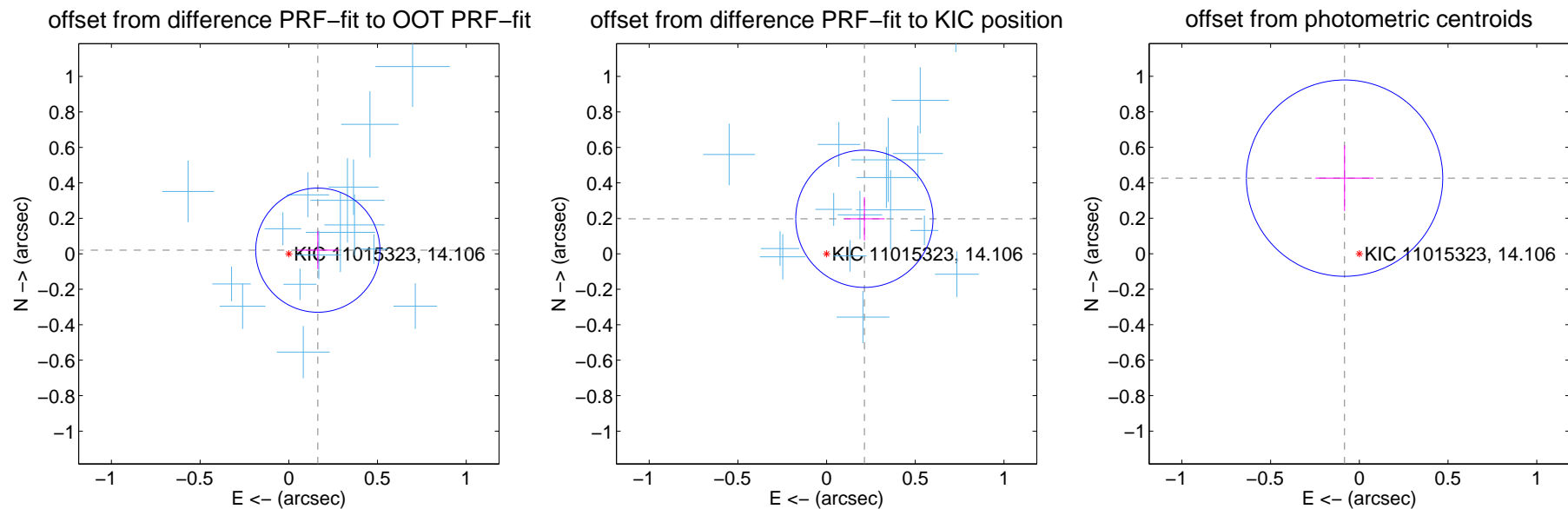
DV Centroid Data

Supplemental centroid analysis for 011015323-01. Kepler magnitude: 14.11. Transit SNR 80.74

There are 16 quarters with good PRF difference image offsets

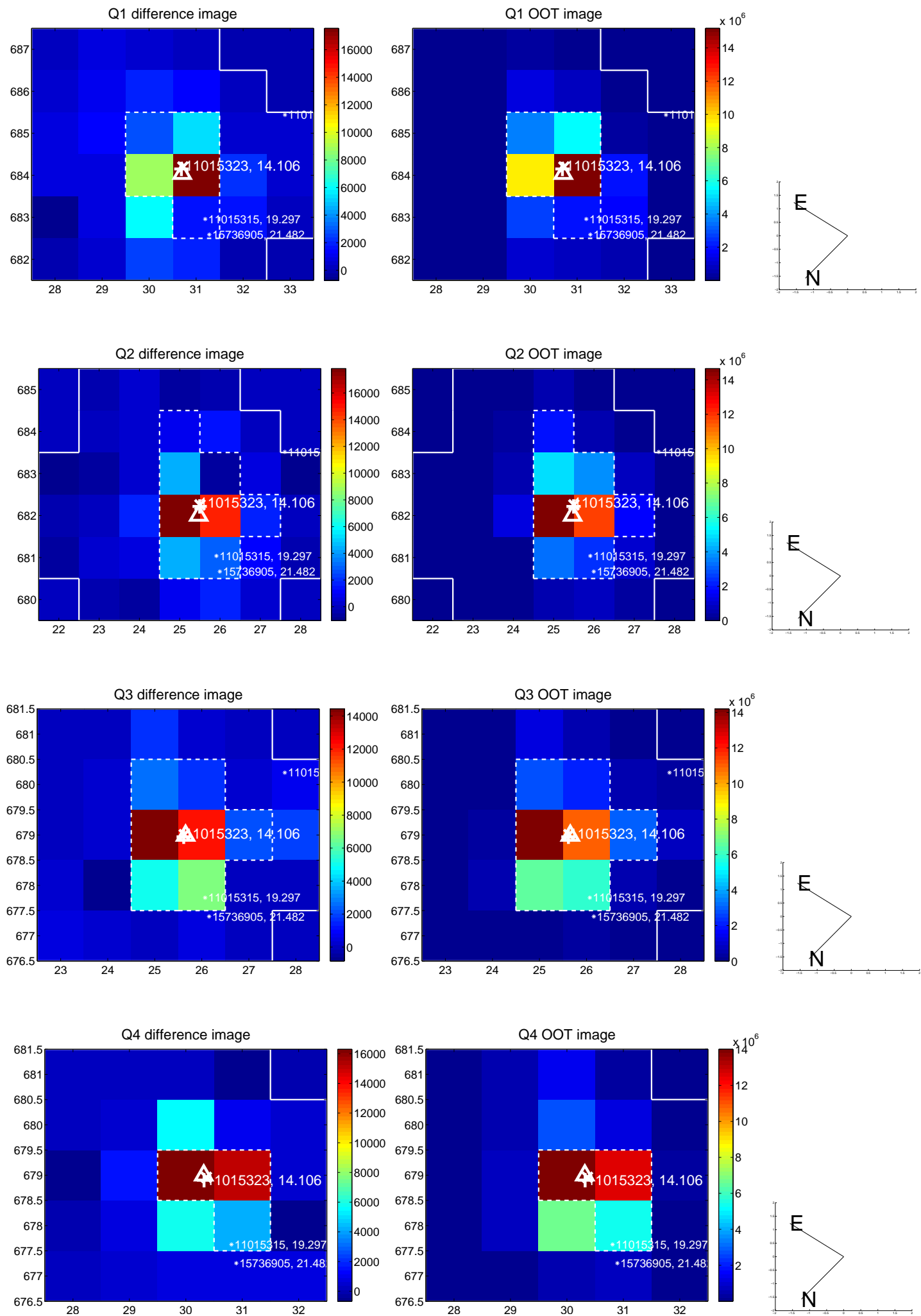
The direct PRF centroid is offset from the target star catalog position by about 0.31 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.165 ± 0.117	1.41	-0.163 ± 0.117	0.020 ± 0.107
PRF-fit source offset from KIC position	0.290 ± 0.129	2.25	-0.213 ± 0.114	0.197 ± 0.122
photometric centroid source offset	0.43 ± 0.18	2.35	0.08 ± 0.16	0.43 ± 0.19

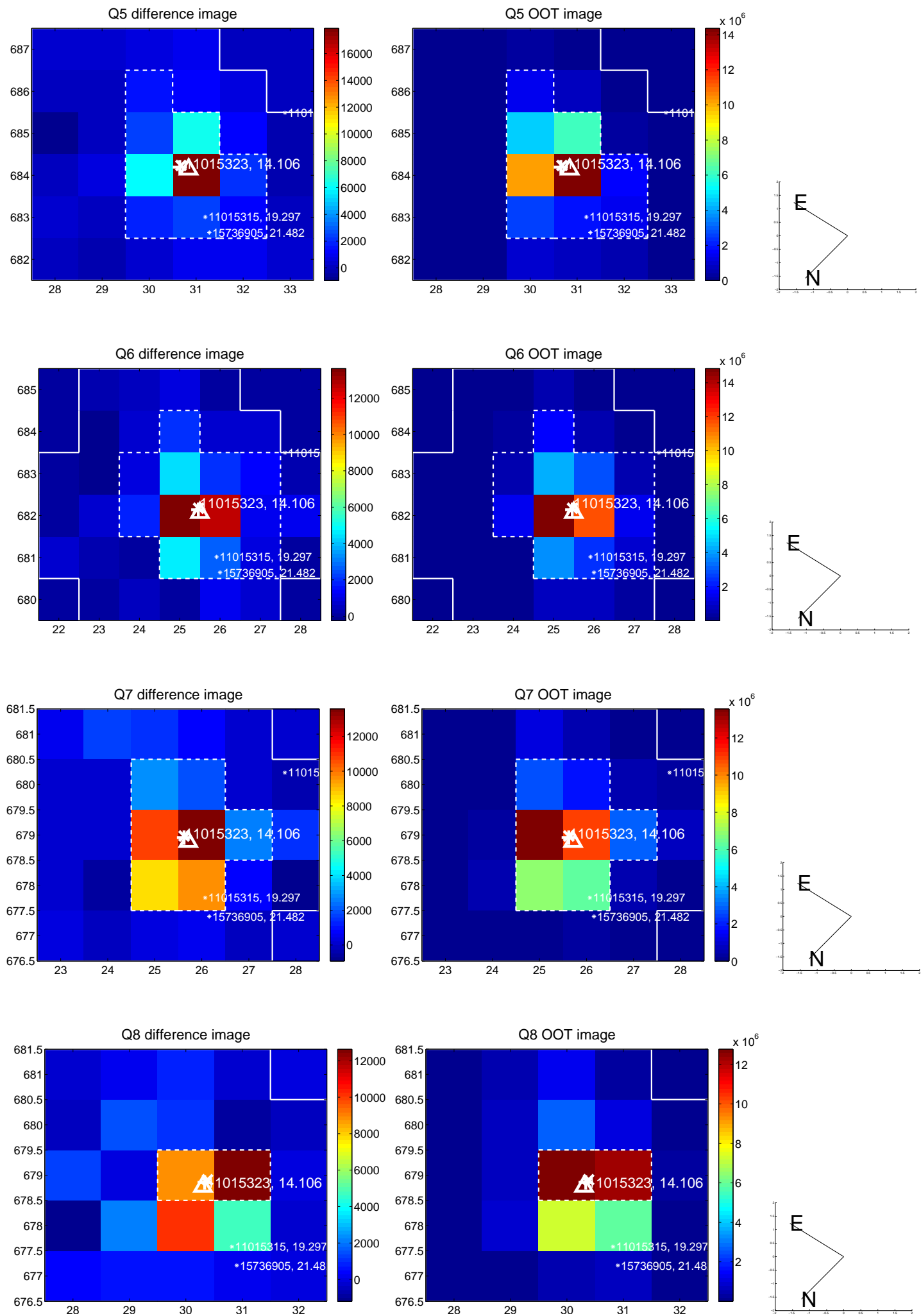


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses:** good quarterly centroid offsets; **Vermillion crosses:** bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

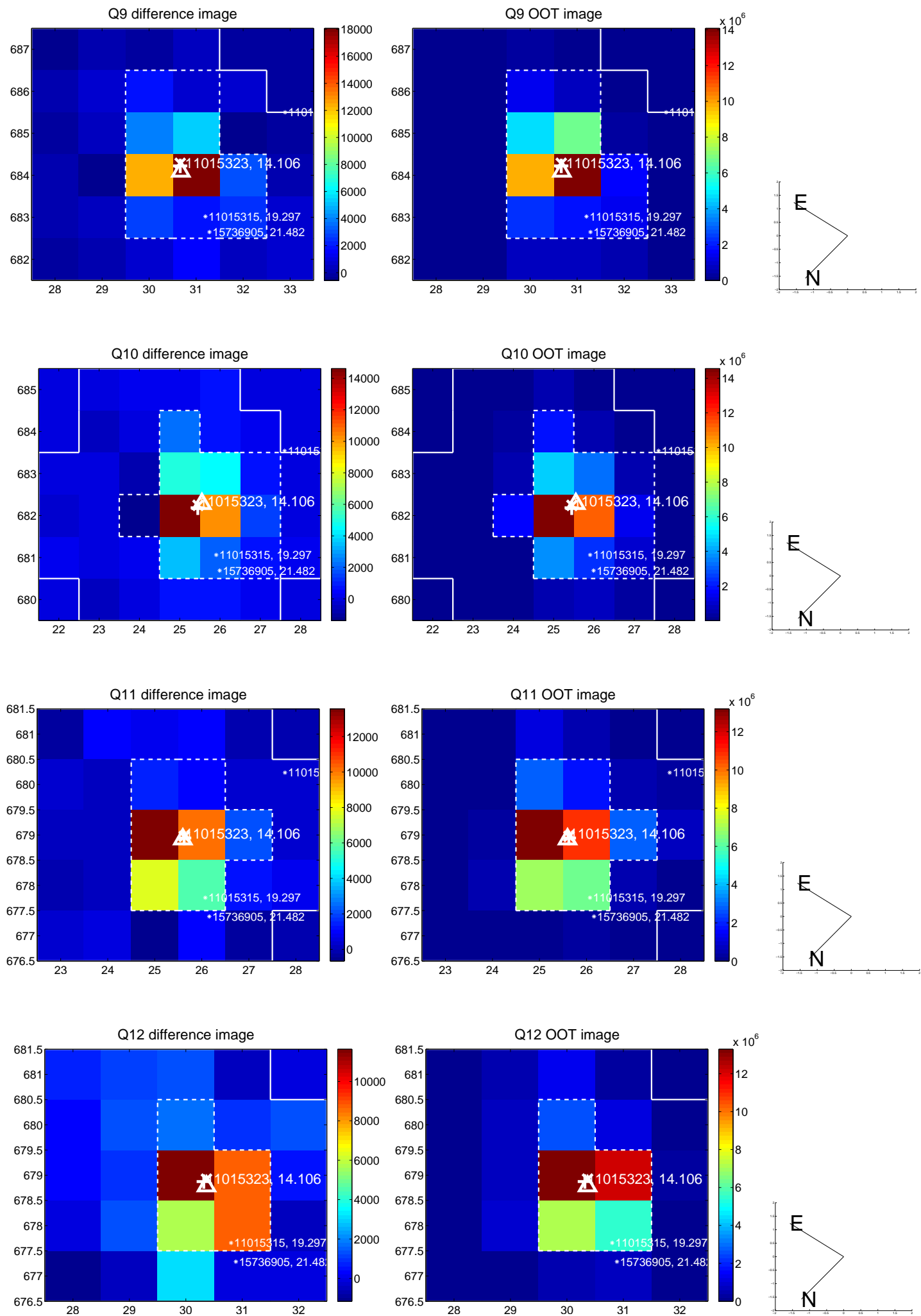
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



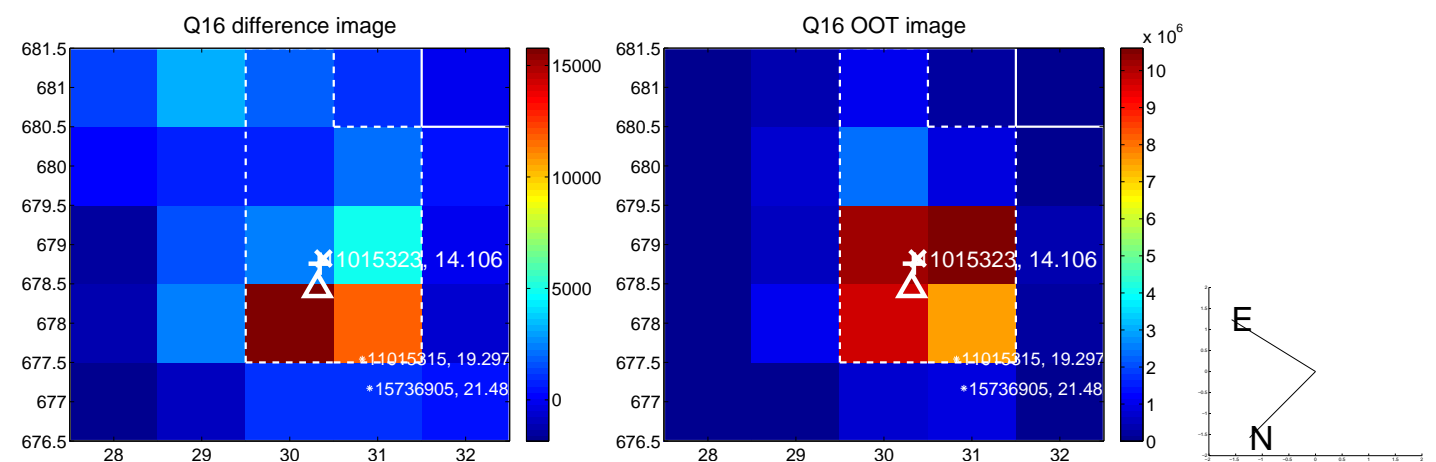
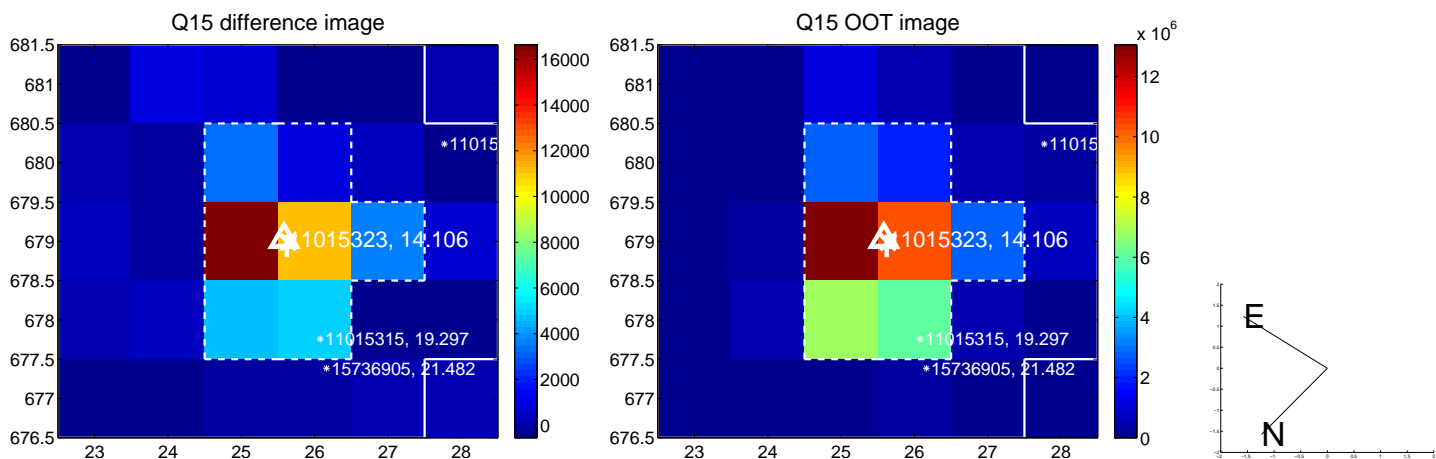
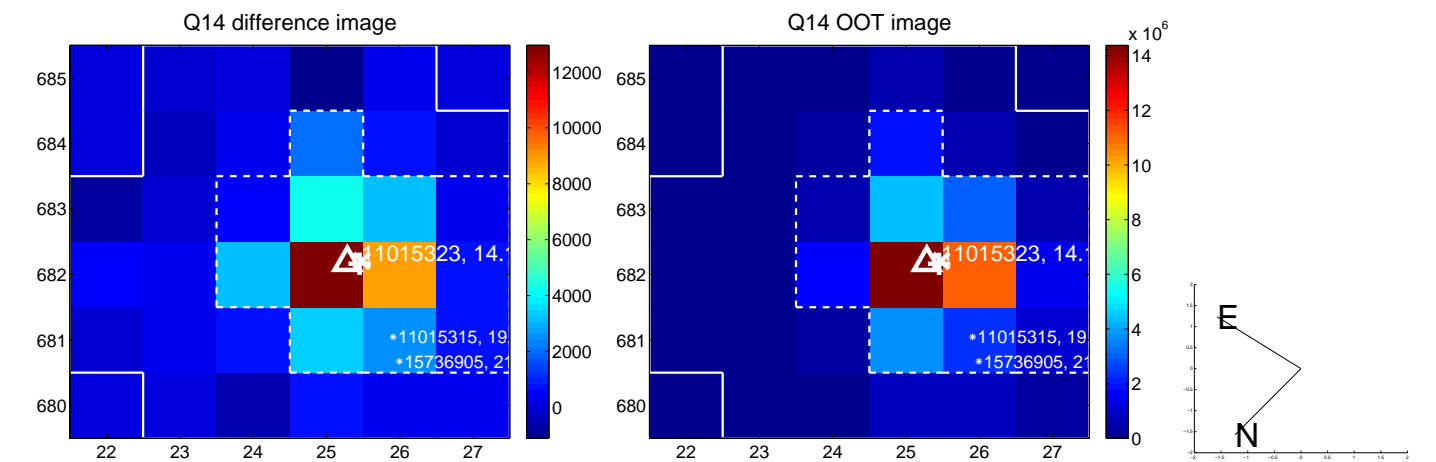
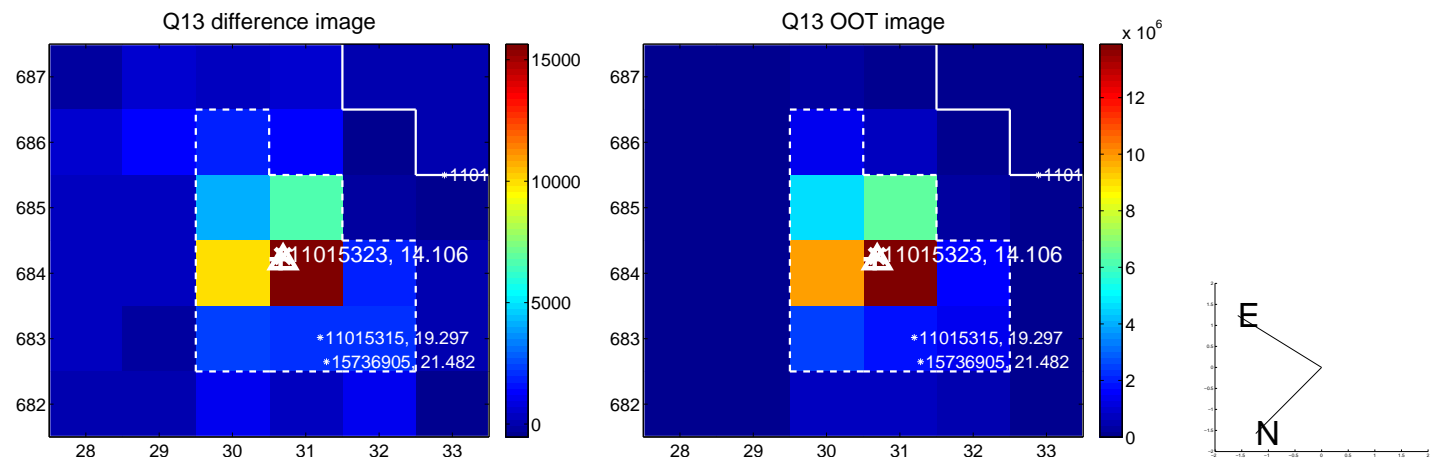
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



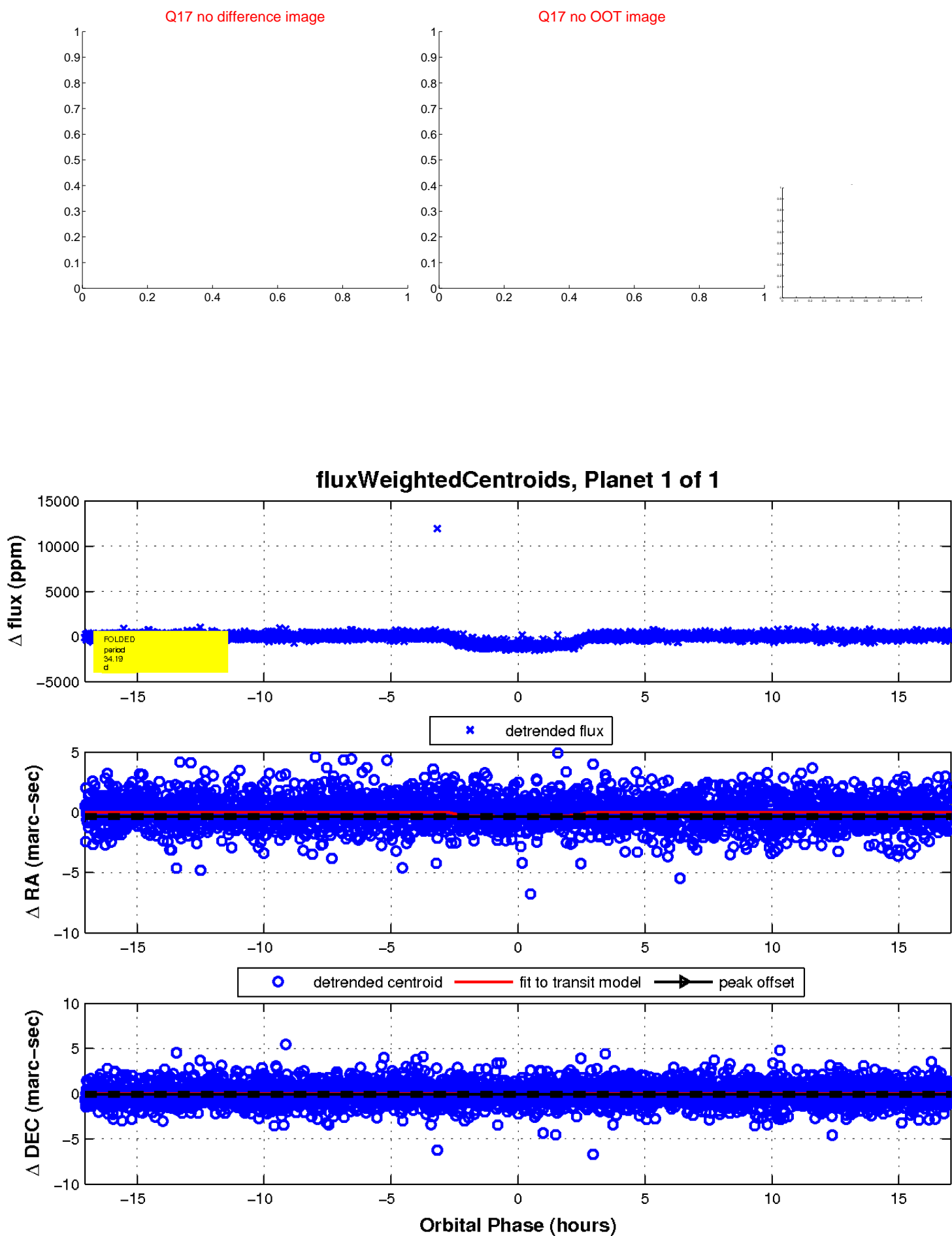
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UKIRT Image

