

KIC 007032369

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})
007032369-01	OBS	No	0.566788	131.822449	27.6	3.543	7.7	7.9	1.01	6263	0.62	7459.74

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
007032369-01	OBS	FP	0.00	1	0	1	1	LPP_DV—MOD_NONUNIQ_ALT—CENT_UNRESOLVED_OFFSET—HALO_GHOST—EPHEM_MATCH

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.

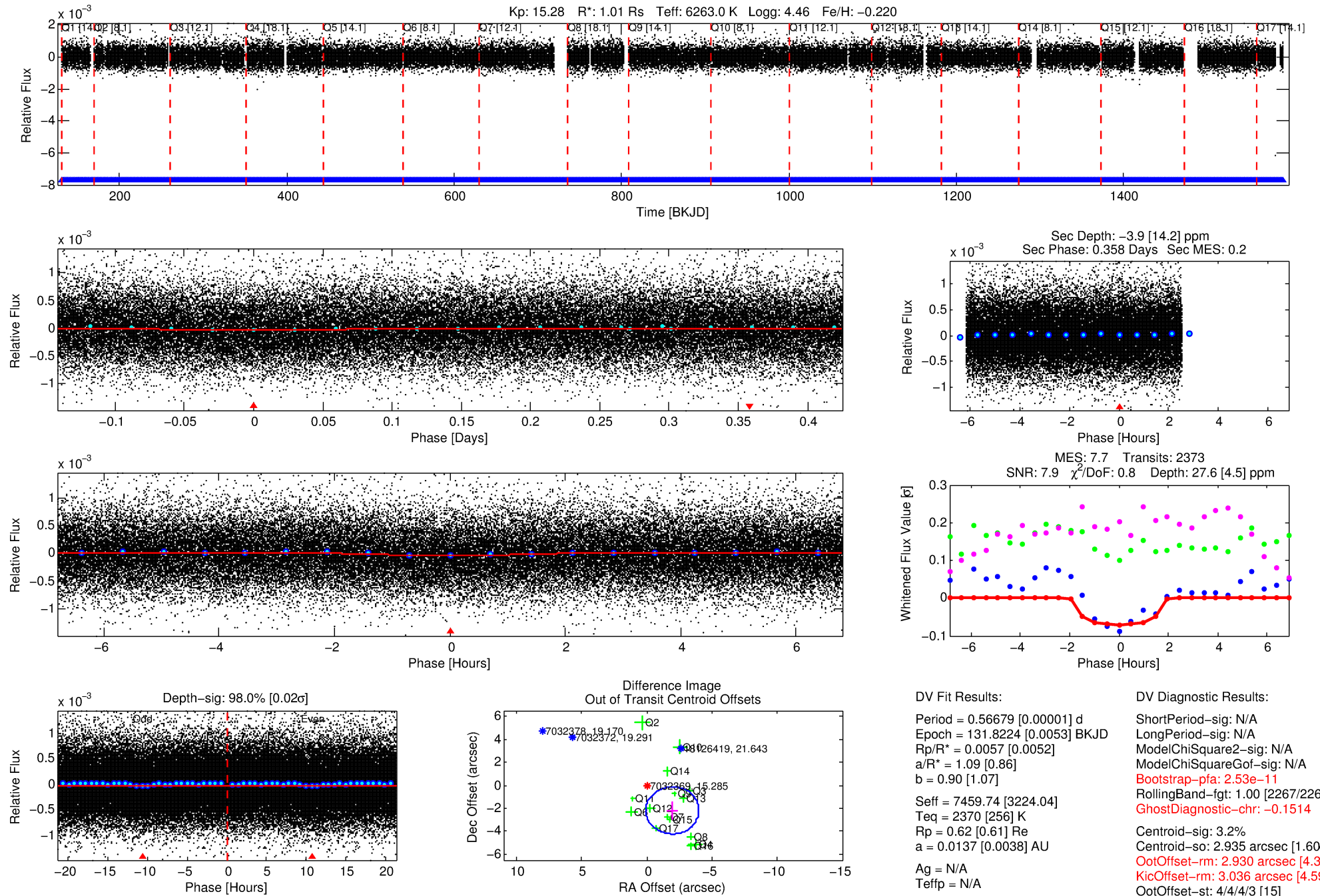
Ephemeris Match Information For 007032369-01

TCE (1)	KIC	Parent (2)	Parent KIC	P ₁ :P ₂	Dist ($''$)	Δ Row	Δ Col	m ₂	m ₁	D ₂ /D ₁	Mechanism	Flag	σ_P	σ_T
007032369-01	7032369	RR-Lyr-pri	7198959	1:1	1018.9	228	-117	7.86	15.28	22261.00	Direct-PRF	0	1.90	19.26

Notes: P₁:P₂ is the period ratio. Dist is the distance in arcseconds. Δ Row and Δ Col are the number of pixels apart in row and column. m₂ and m₁ are the magnitudes of the parent and child. D₂/D₁ is the parent's transit depth divided by the child's. σ_P and σ_T are the significance of the match in period and epoch. For a match to be considered significant $\sigma_P < 5.0$ and $\sigma_T < 5.0$. Matches which have σ_P and σ_T very close to this cutoff should receive extra scrutiny, especially if the period ratio is very large.

DV One-Page Summary

KIC: 7032369 Candidate: 1 of 1 Period: 0.567 d



DV Fit Results:

Period = 0.56679 [0.00001] d
Epoch = 131.8224 [0.0053] BKJD
Rp/R* = 0.0057 [0.0052]
a/R* = 1.09 [0.86]
b = 0.90 [1.07]
Seff = 7459.74 [3224.04]
Teff = 2370 [256] K
Rp = 0.62 [0.61] Re
a = 0.0137 [0.0038] AU
Ag = N/A
Teffp = N/A

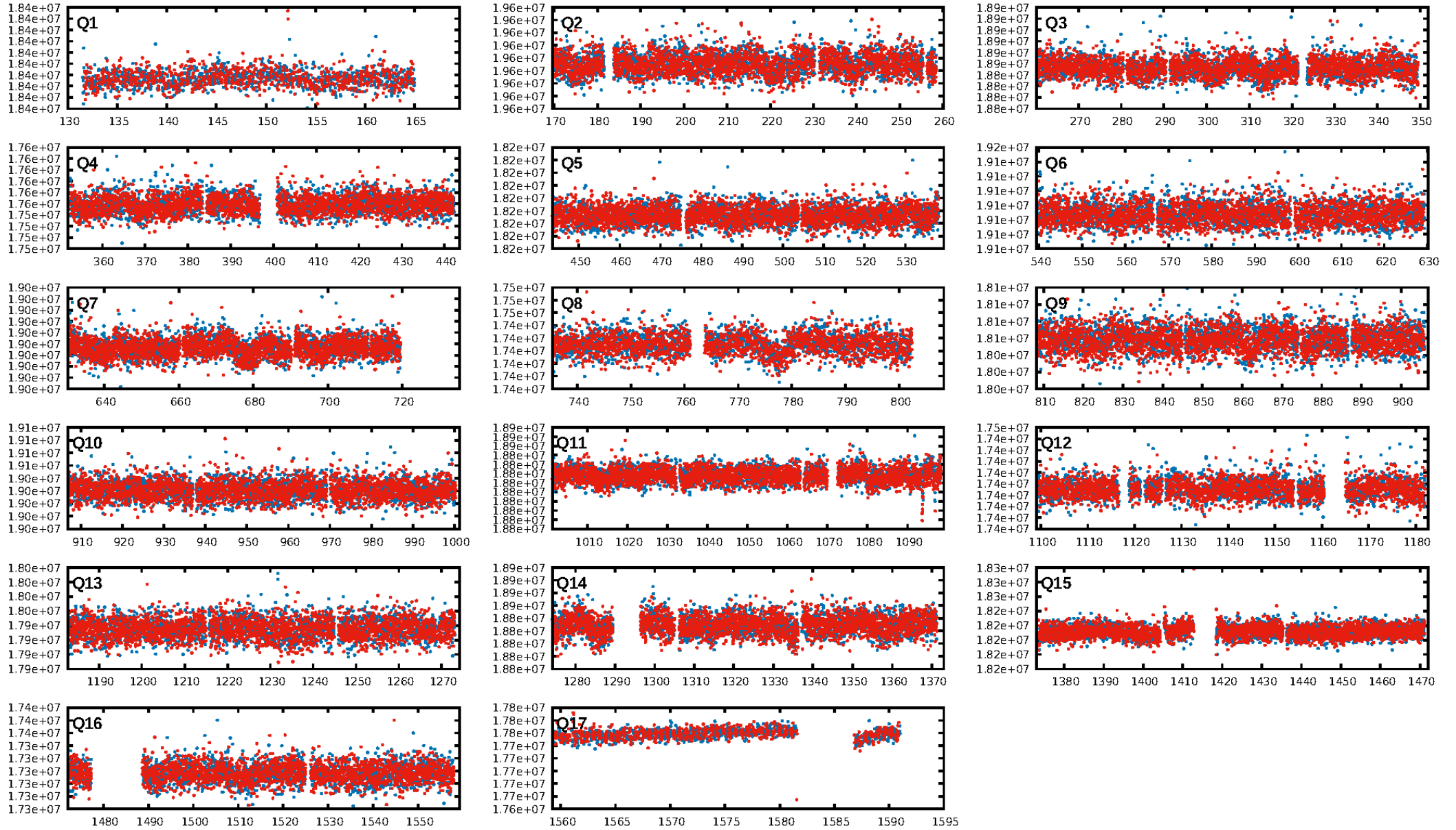
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 2.53e-11
RollingBand-fgt: 1.00 [2267/2267]
GhostDiagnostic-chr: -0.1514
Centroid-sig: 3.2%
Centroid-so: 2.935 arcsec [1.60σ]
OotOffset-rm: 2.930 arcsec [4.30σ]
KicOffset-rm: 3.036 arcsec [4.59σ]
OotOffset-st: 4/4/4/3 [15]
KicOffset-st: 4/4/4/3 [15]
DiffImageQuality-fgm: 0.00 [0/15]
DiffImageOverlap-fno: 1.00 [17/17]

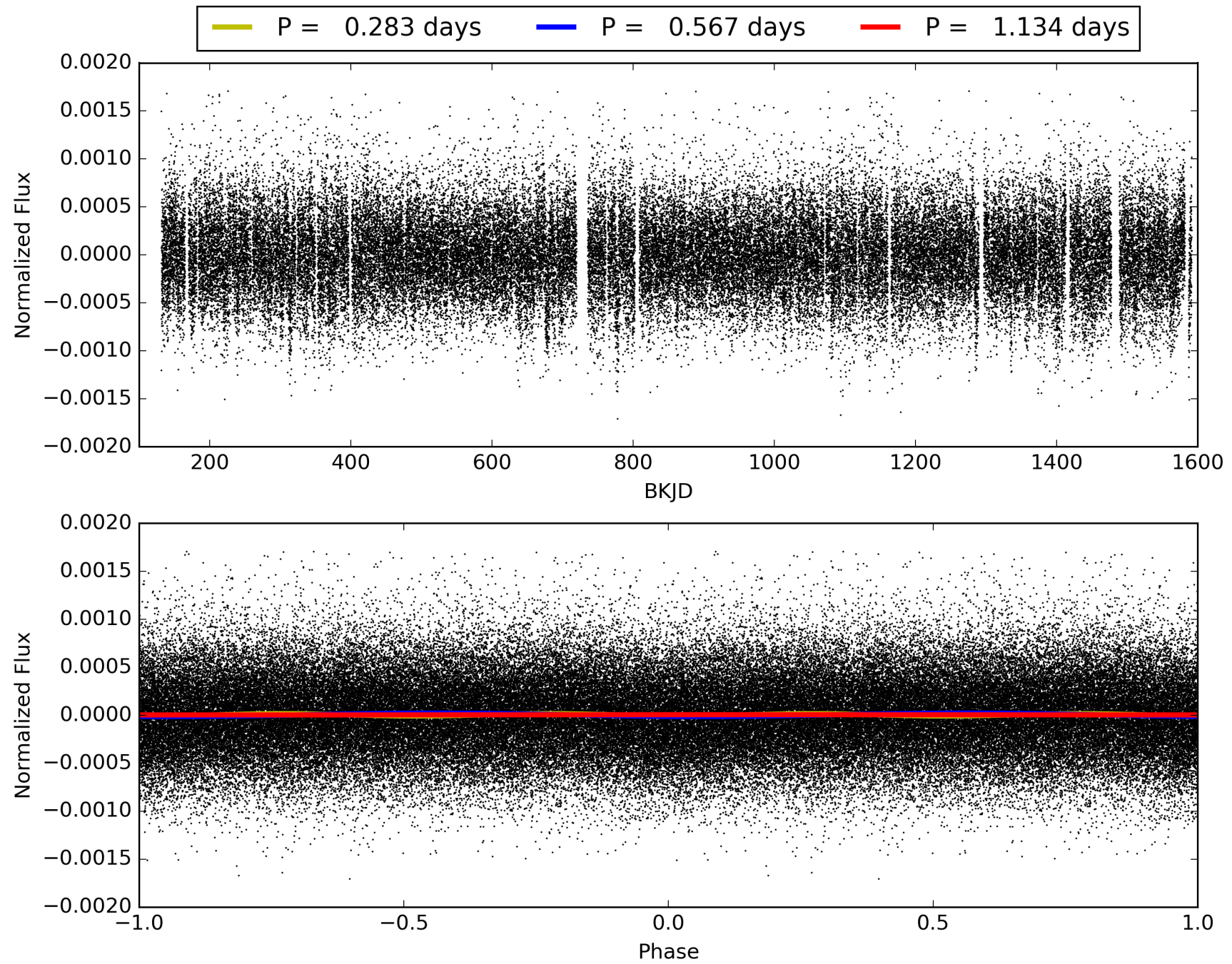
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 29-Jan-2016 10:22:08 Z

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

TCE 007032369-01, PDC Light Curves

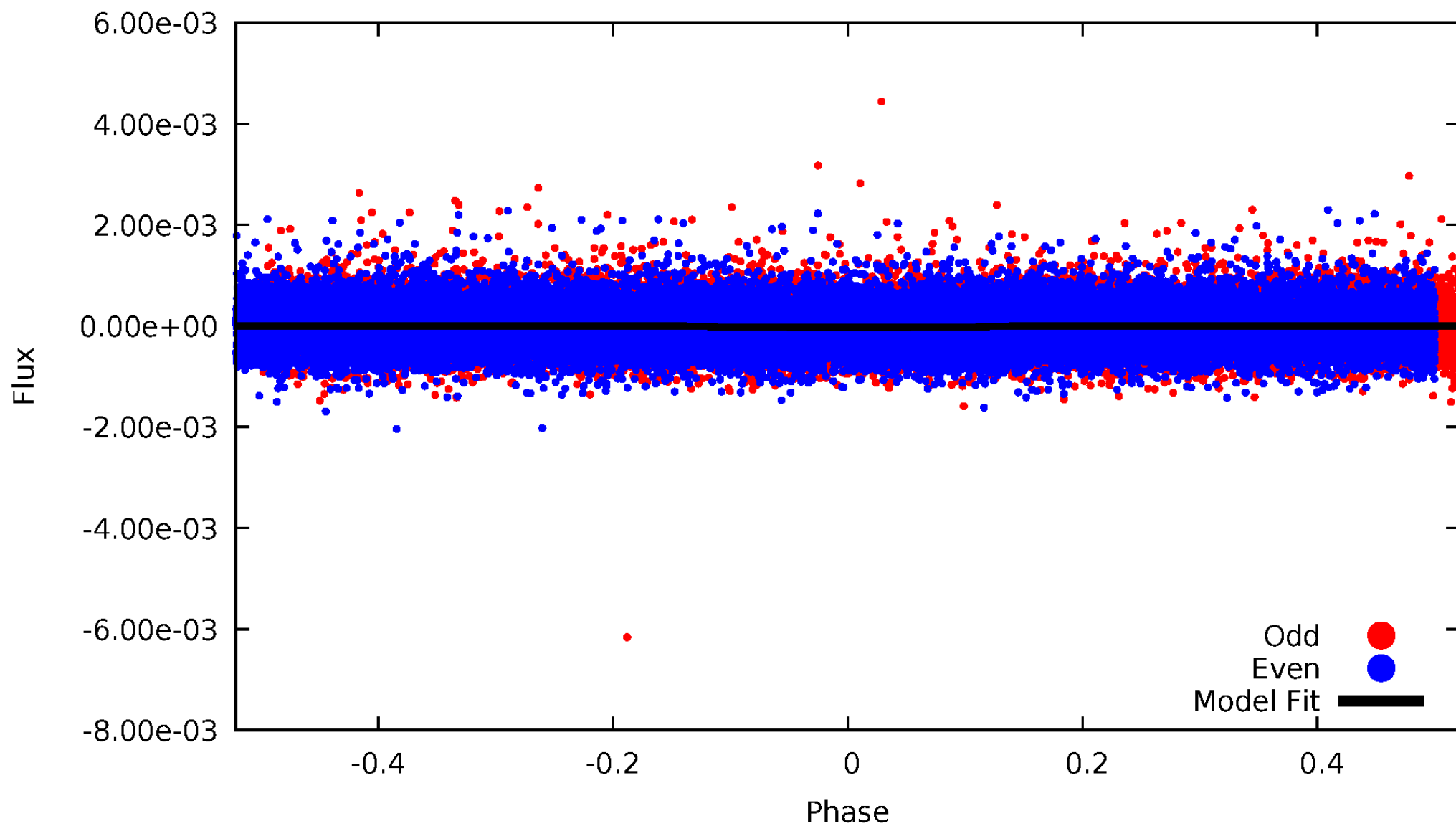


TCE 007032369-01



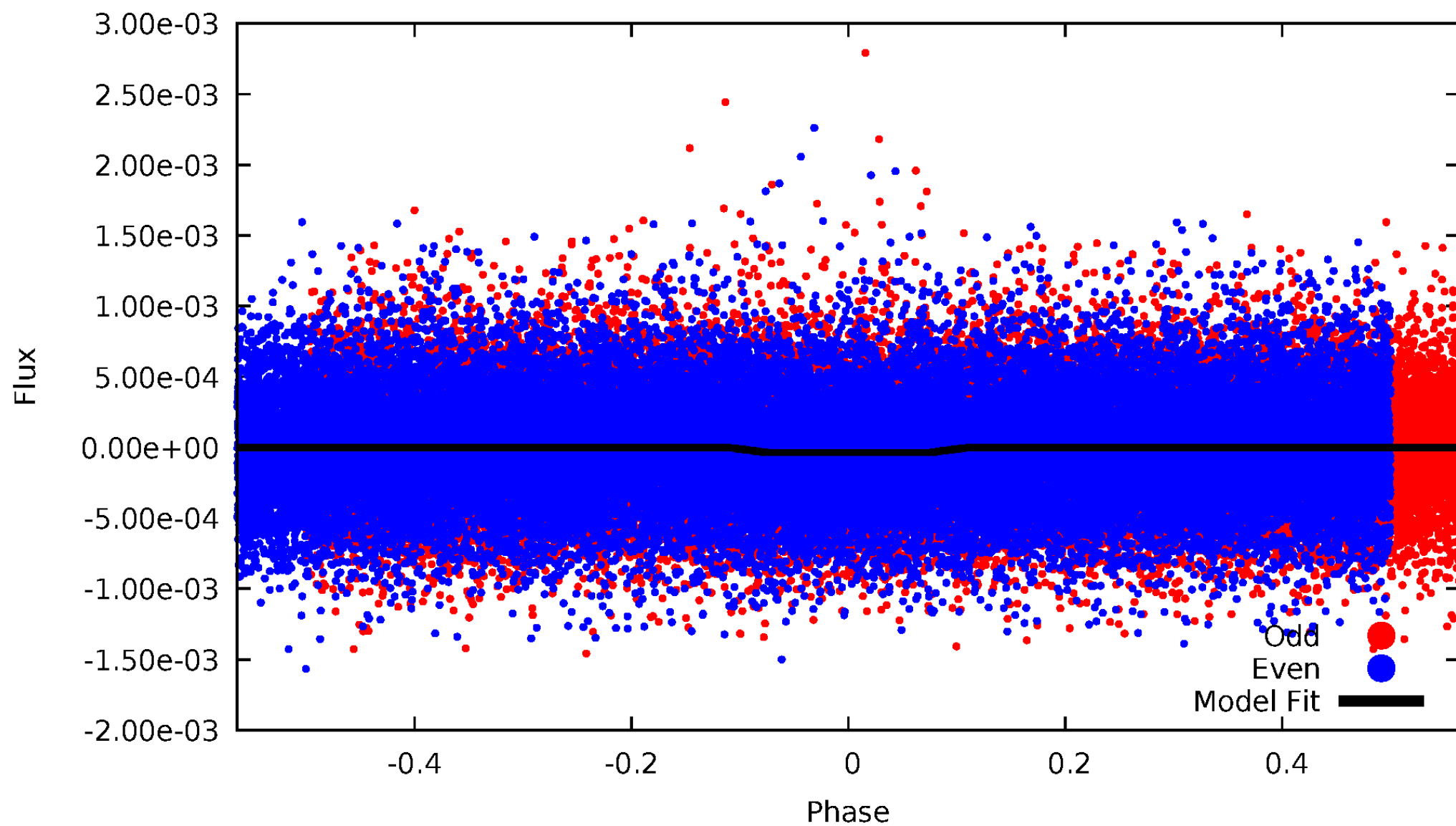
DV Odd/Even

TCE 007032369-01



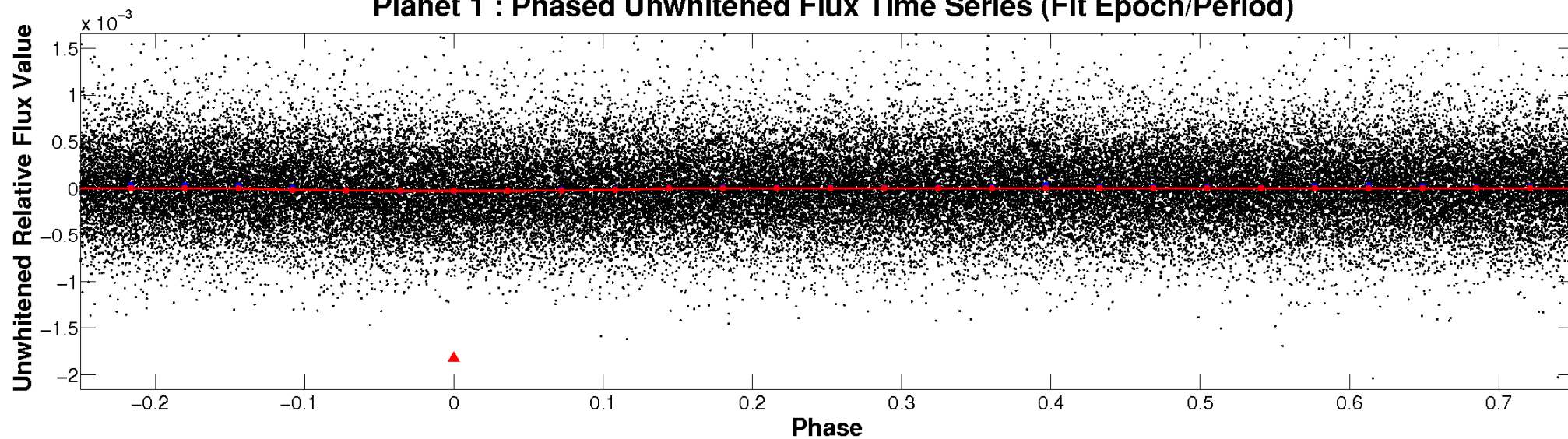
ALT Odd/Even

TCE 007032369-01

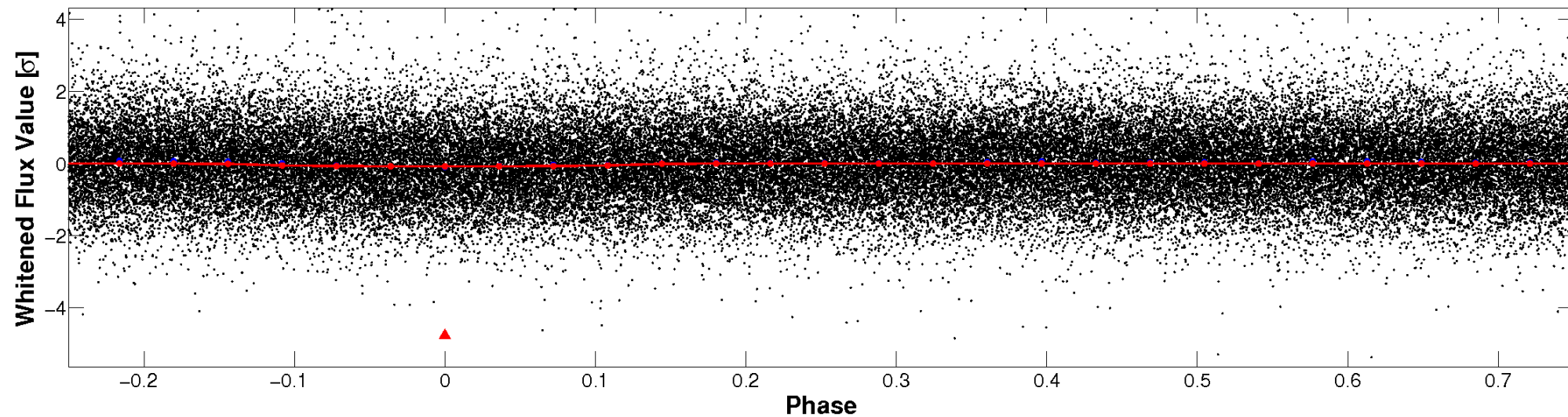


Non-Whitened Vs. Whitened Light Curve

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

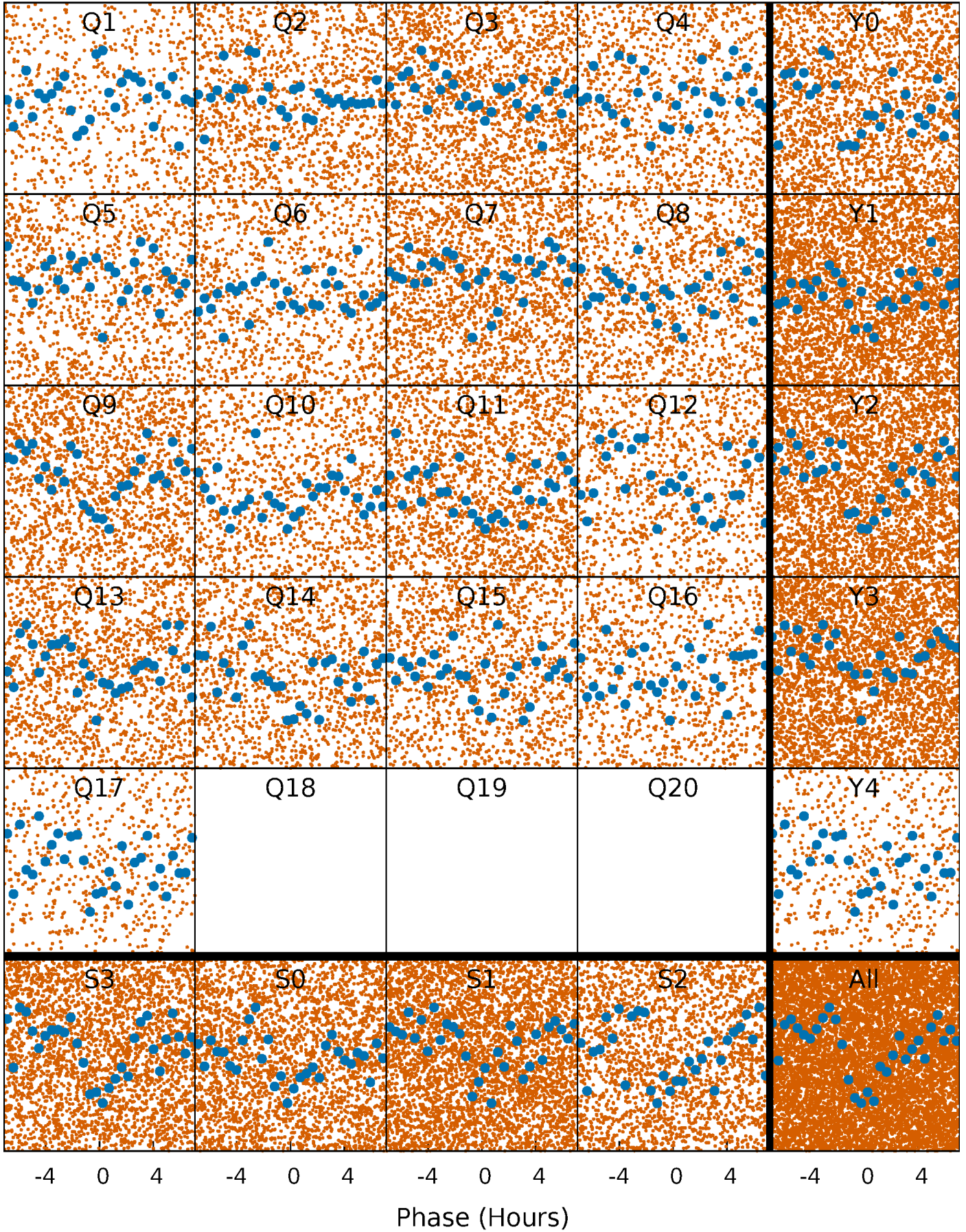


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



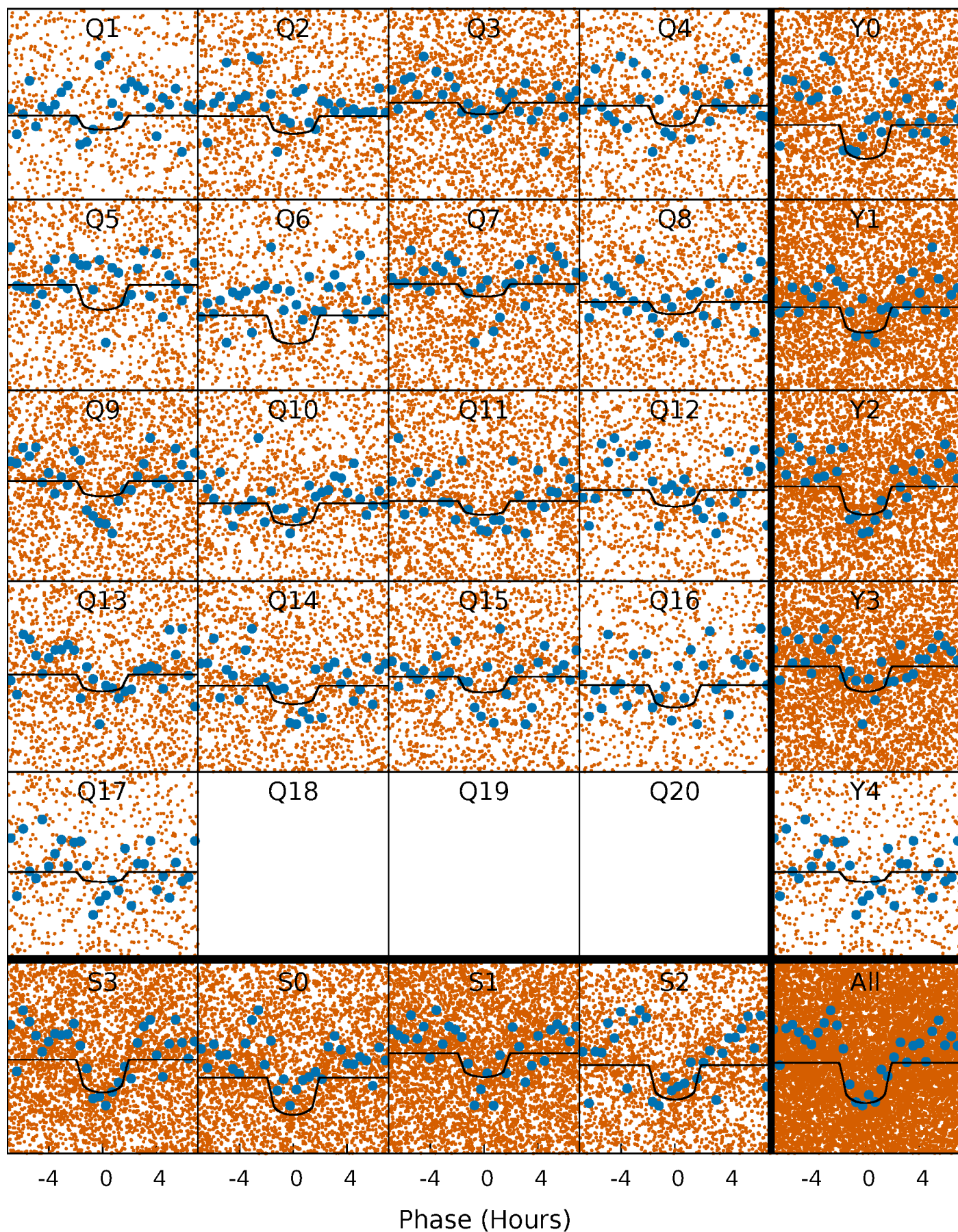
PDC Quarter-Phased Transit Curves

TCE 007032369-01 P= 0.566788 Days $T_0=131.822449$ (BKJD)



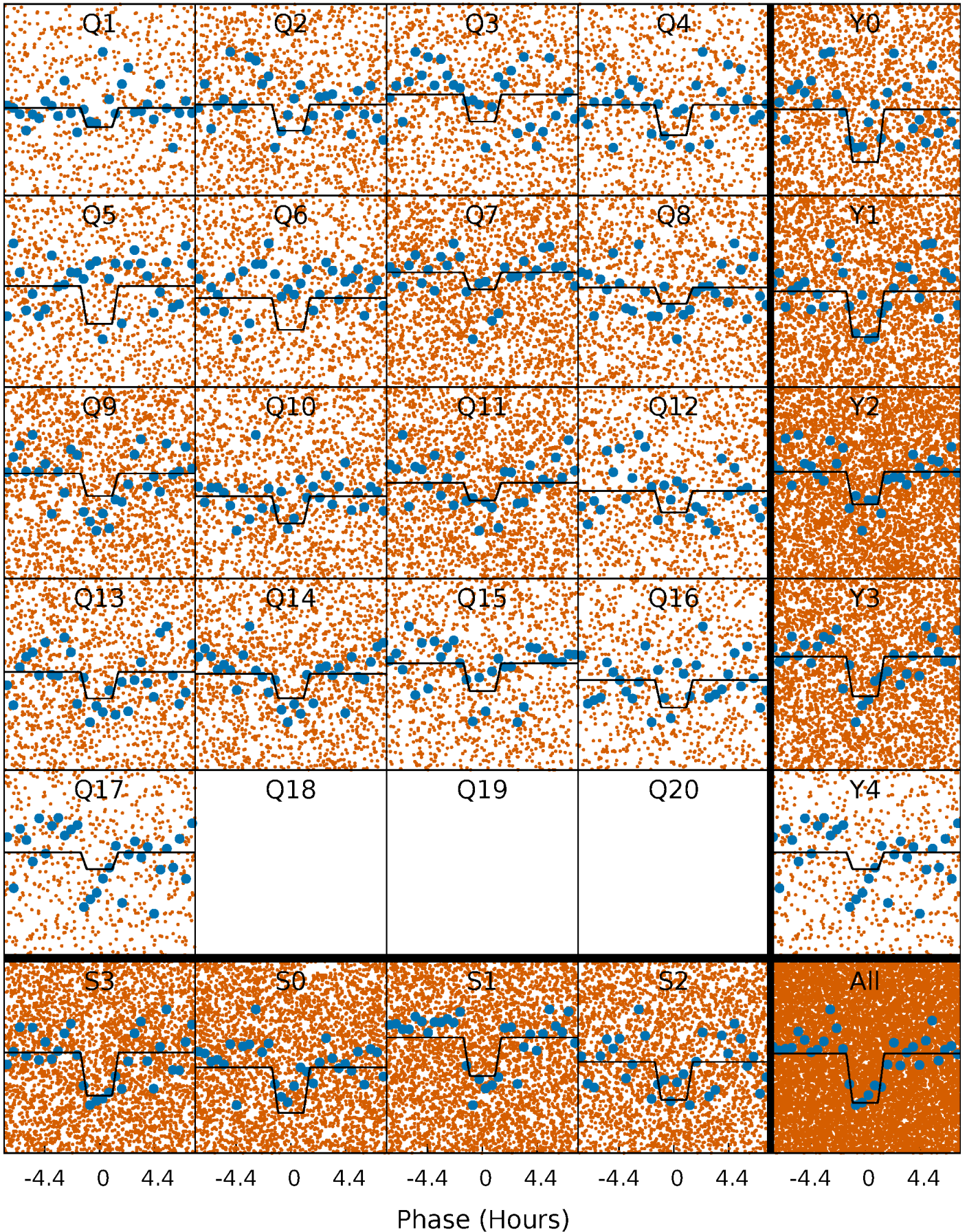
DV Quarter-Phased Transit Curves

TCE 007032369-01 P= 0.566788 Days $T_0=131.822449$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

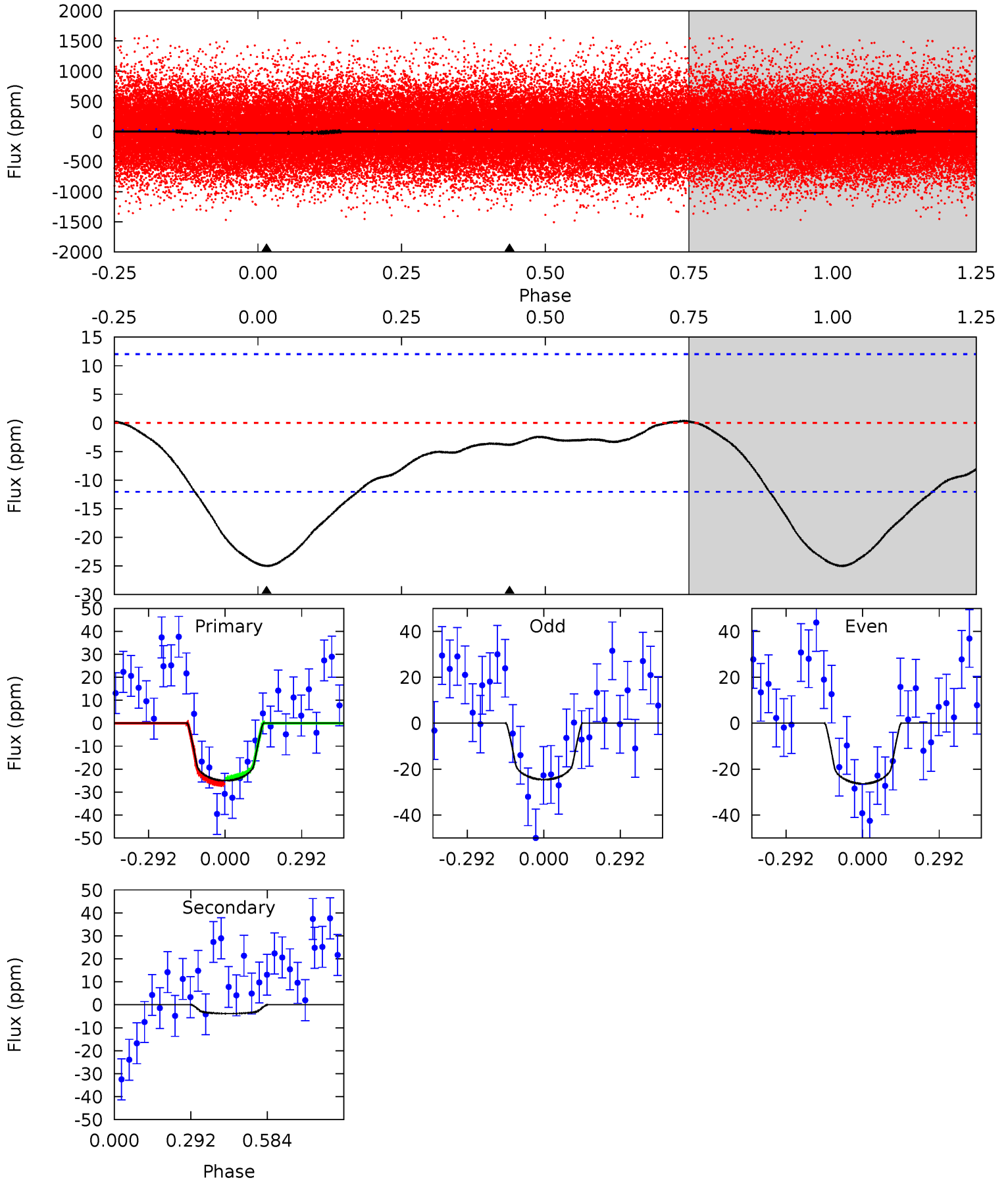
TCE 007032369-01 P= 0.566795 Days $T_0=131.819306$ (BKJD)



DV Model-Shift Uniqueness Test

007032369-01, P = 0.566788 Days, E = 131.255661 Days

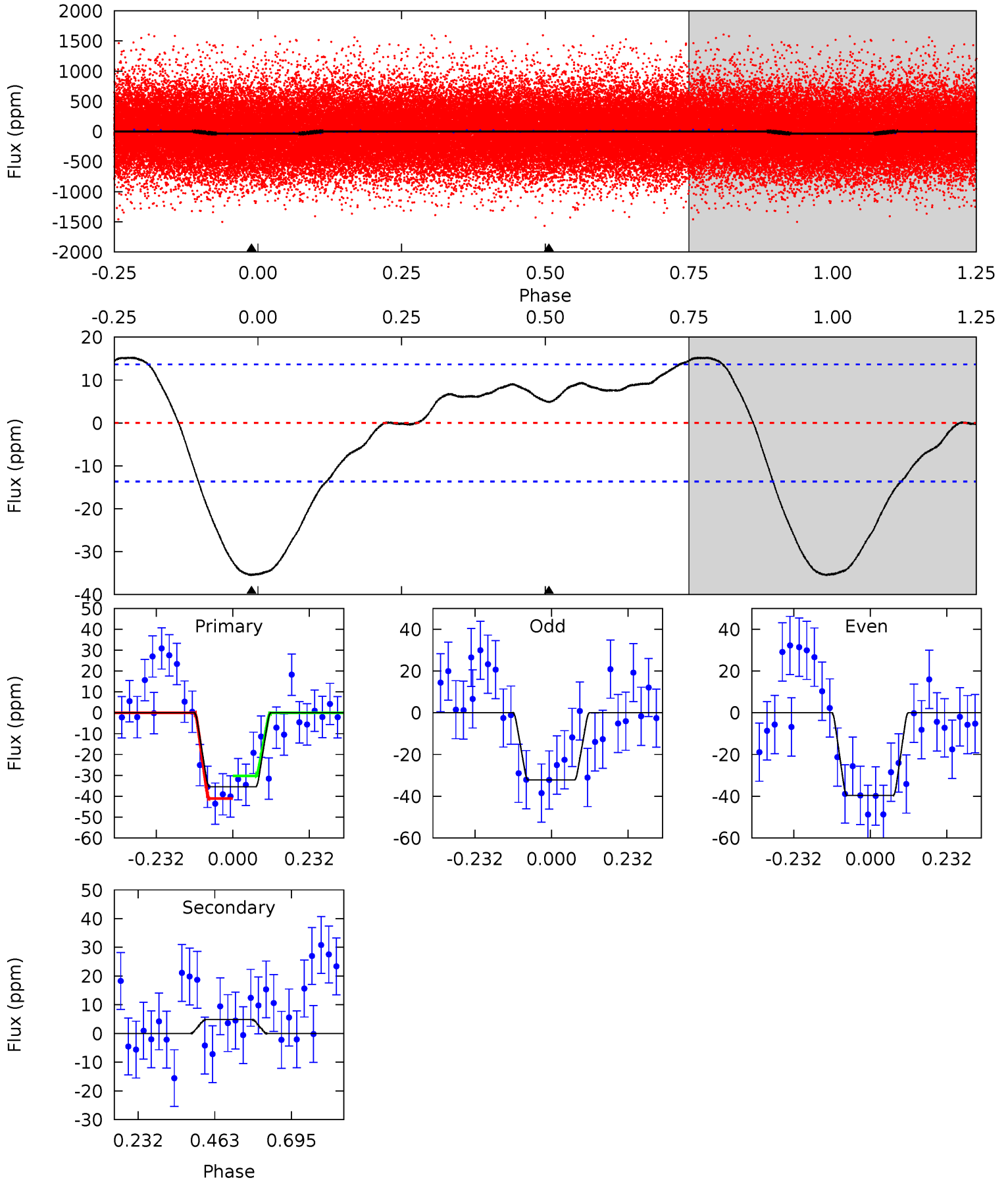
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
9.01	1.38	0	0	4.33	1.05	0.14	9.01	9.01	1.38	1.38	0.32	0.81	0.01	0.42



Alt Model-Shift Uniqueness Test

007032369-01, P = 0.566795 Days, E = 131.252511 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
11.4	-1.55	0	0	4.39	1.20	2.19	11.4	11.4	-1.55	-1.55	1.17	0.97	0.30	1.72



Stellar Parameters For KIC 007032369

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6263^{+175}_{-219}	$4.460^{+0.056}_{-0.224}$	$-0.220^{+0.250}_{-0.300}$	$1.009^{+0.335}_{-0.112}$	$1.068^{+0.144}_{-0.144}$	$1.462^{+0.437}_{-0.799}$
	+3%/-3%	+1%/-5%	+114%/-136%	+33%/-11%	+13%/-13%	+30%/-55%
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 007032369-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-4 ± 3	$0.79^{+0.59}_{-0.47}$	3377^{+258}_{-169}	3141^{+2017}_{-6347}	$0.513^{+3.246}_{-0.421}$
Alt.	5 ± 3	$0.74^{+0.58}_{-0.44}$	3381^{+281}_{-179}	-4093^{+533}_{-1670}	$-0.702^{+0.542}_{-4.444}$

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 $A_{obs} \gg 1.0$

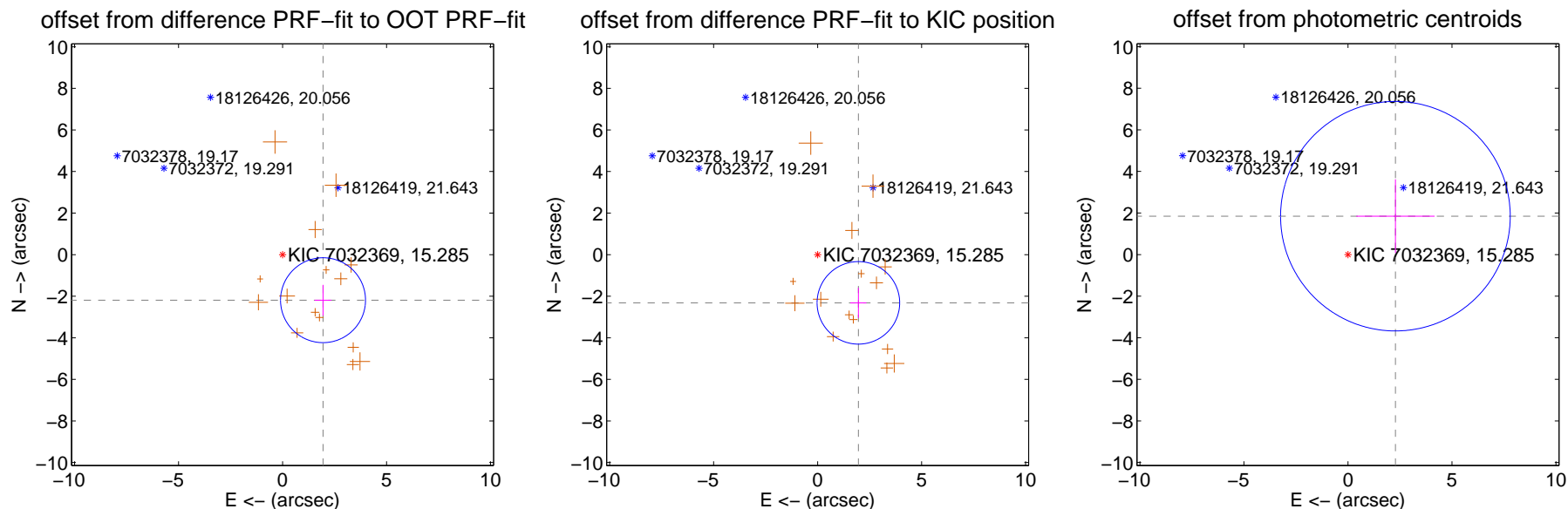
DV Centroid Data

Supplemental centroid analysis for 007032369-01. Kepler magnitude: 15.29. Transit SNR 7.87

There are 0 quarters with good PRF difference image offsets

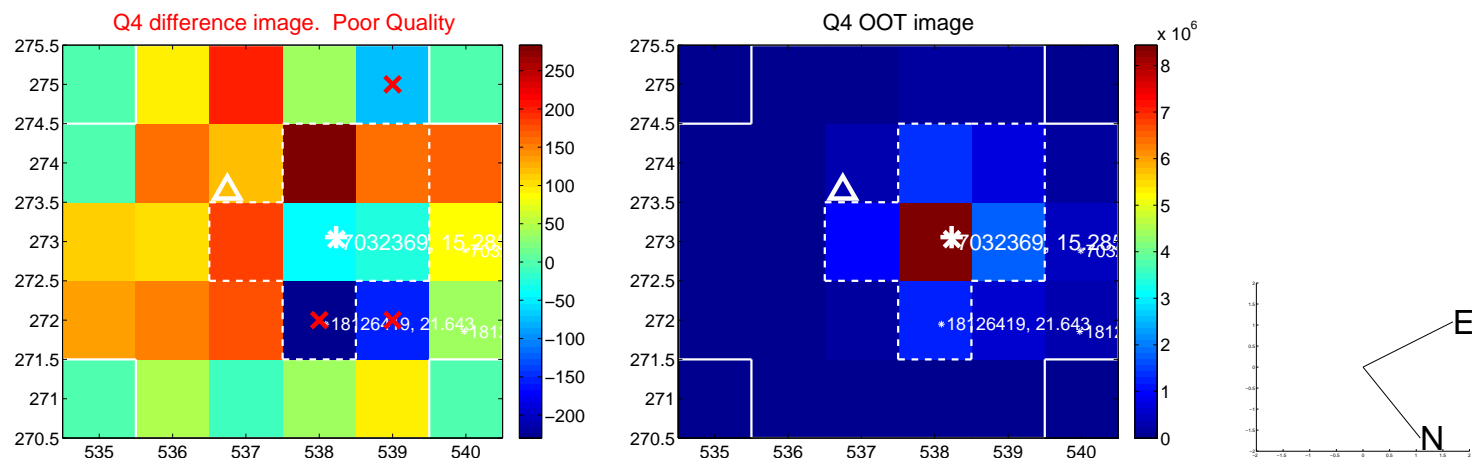
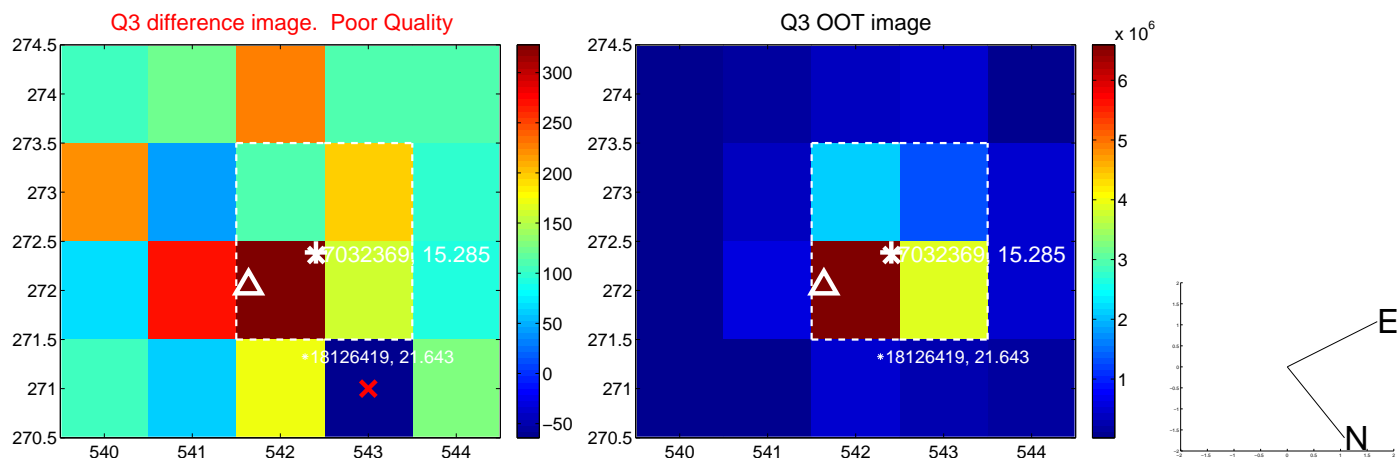
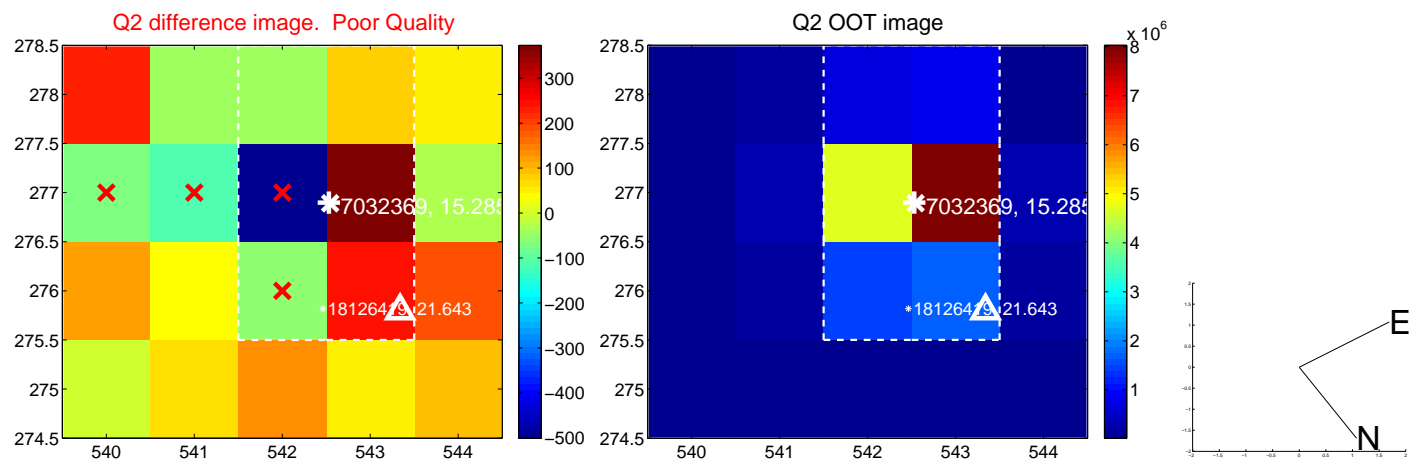
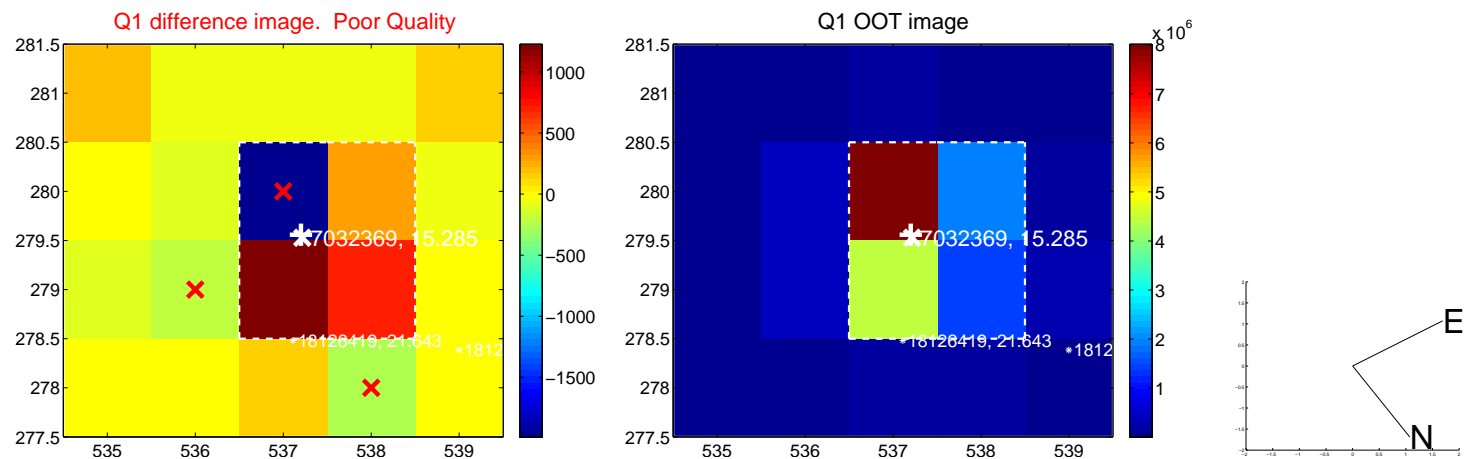
The direct PRF centroid is offset from the target star catalog position by about 0.19 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	2.930 ± 0.681	4.30	-1.946 ± 0.407	-2.191 ± 0.739
PRF-fit source offset from KIC position	3.036 ± 0.662	4.59	-1.960 ± 0.387	-2.319 ± 0.722
photometric centroid source offset	2.93 ± 1.84	1.60	-2.28 ± 1.88	1.85 ± 1.77

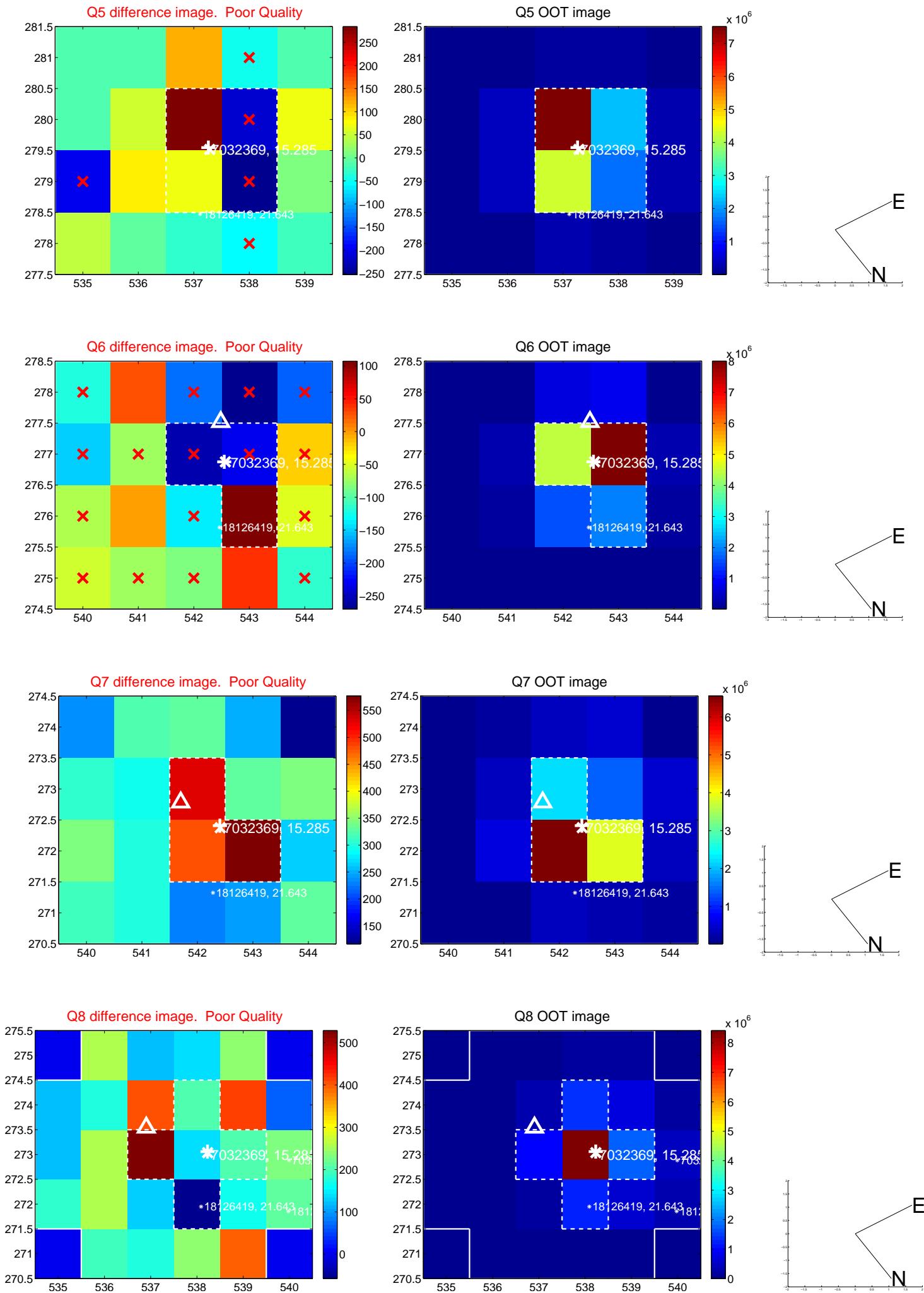


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

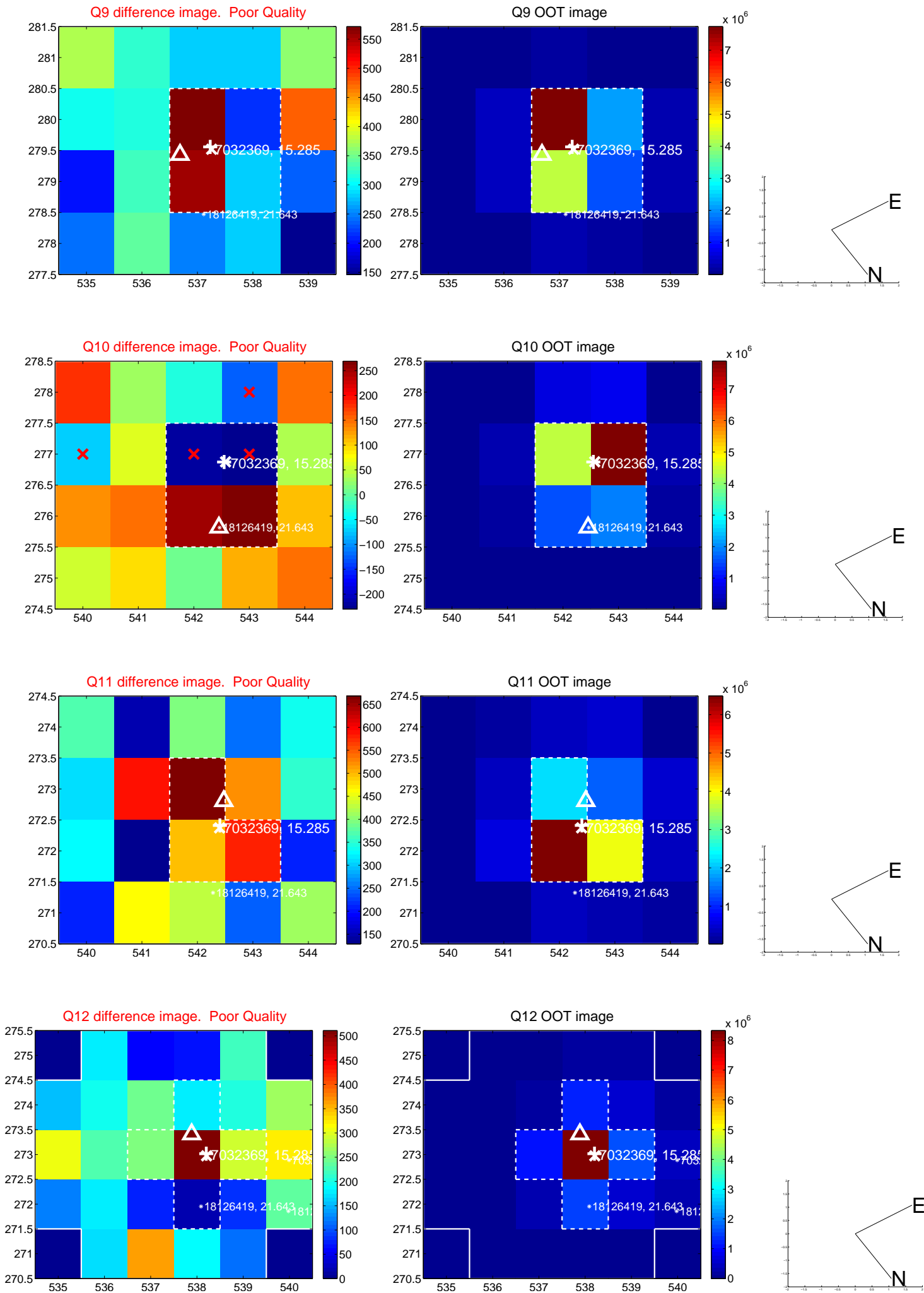
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



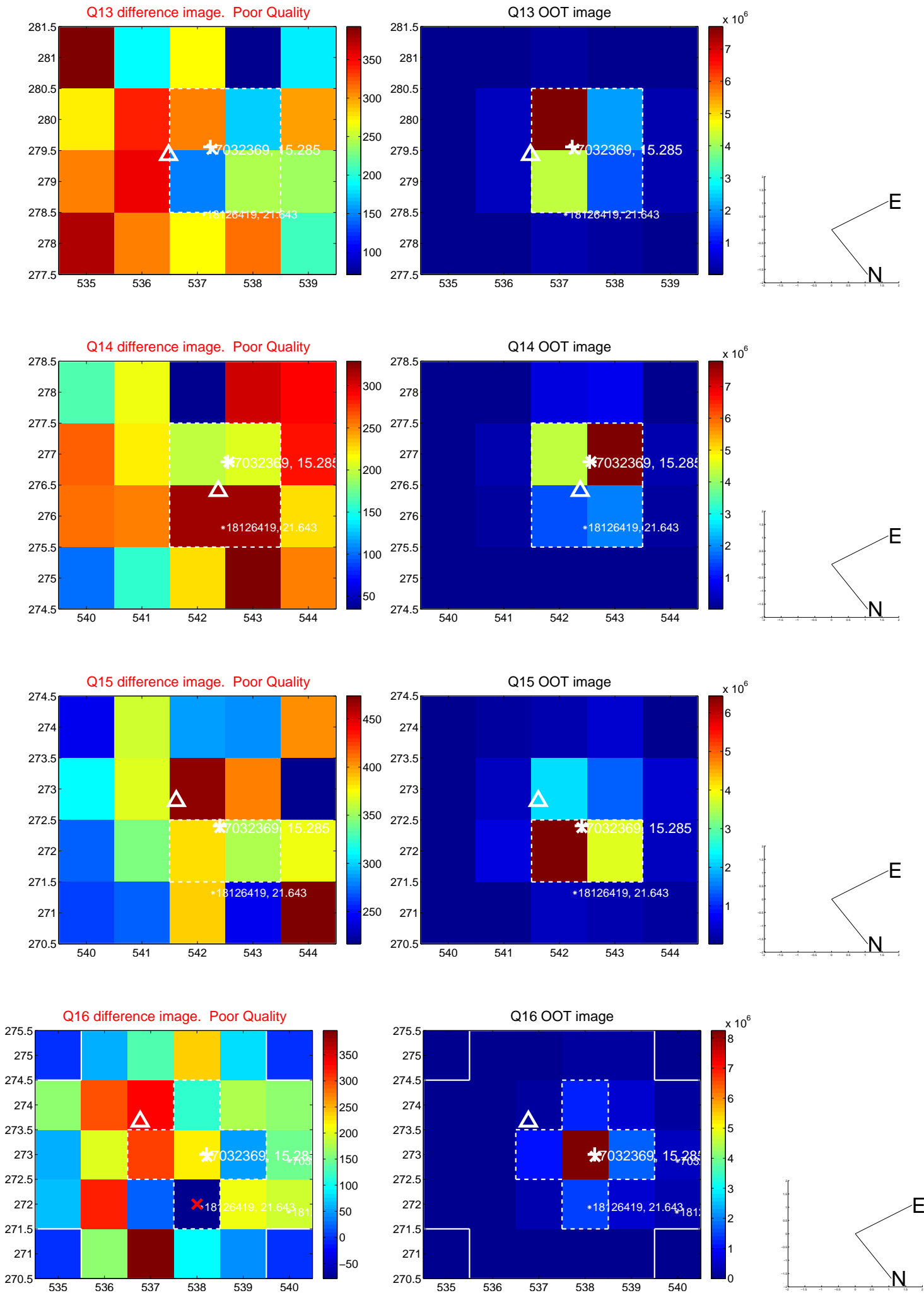
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



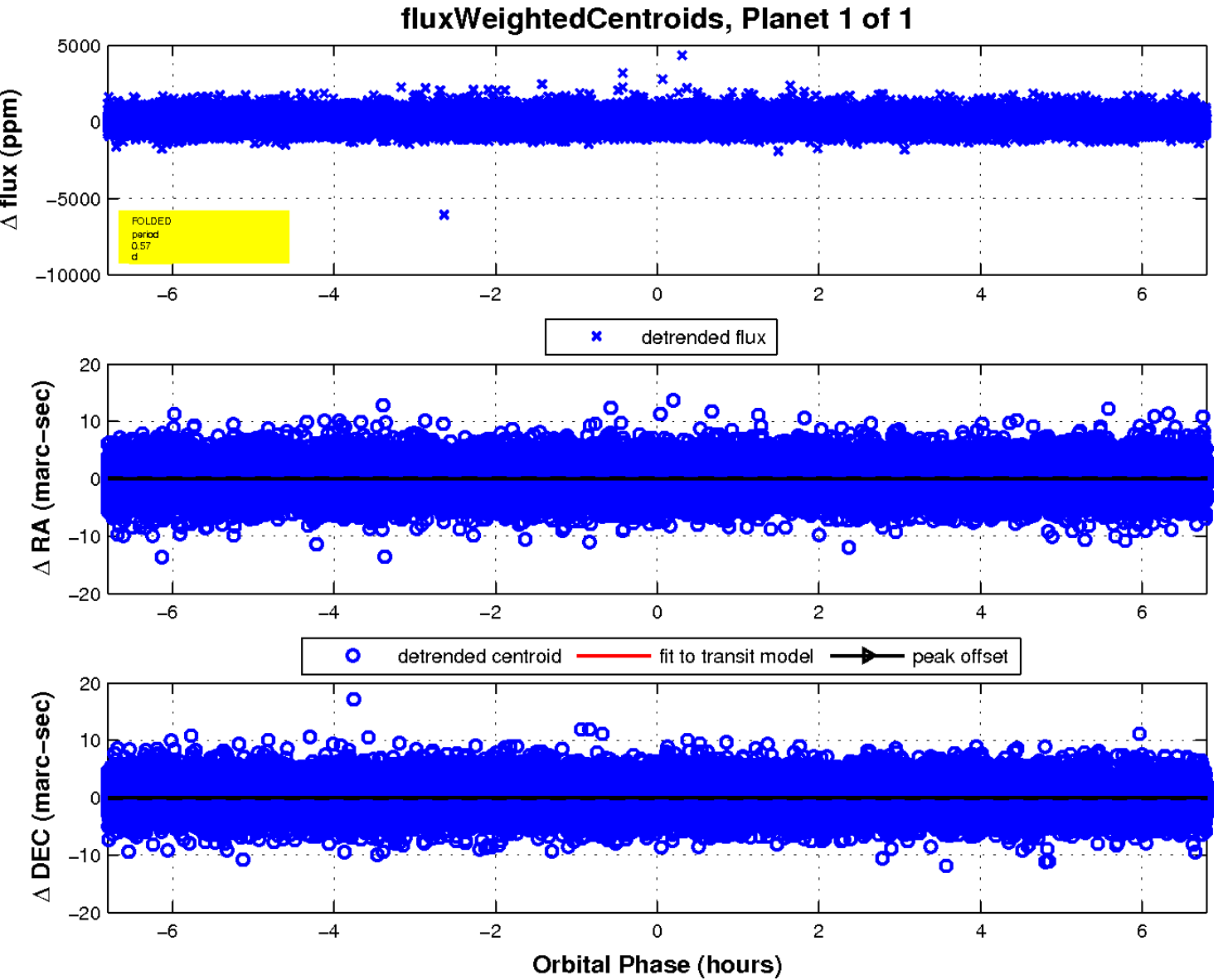
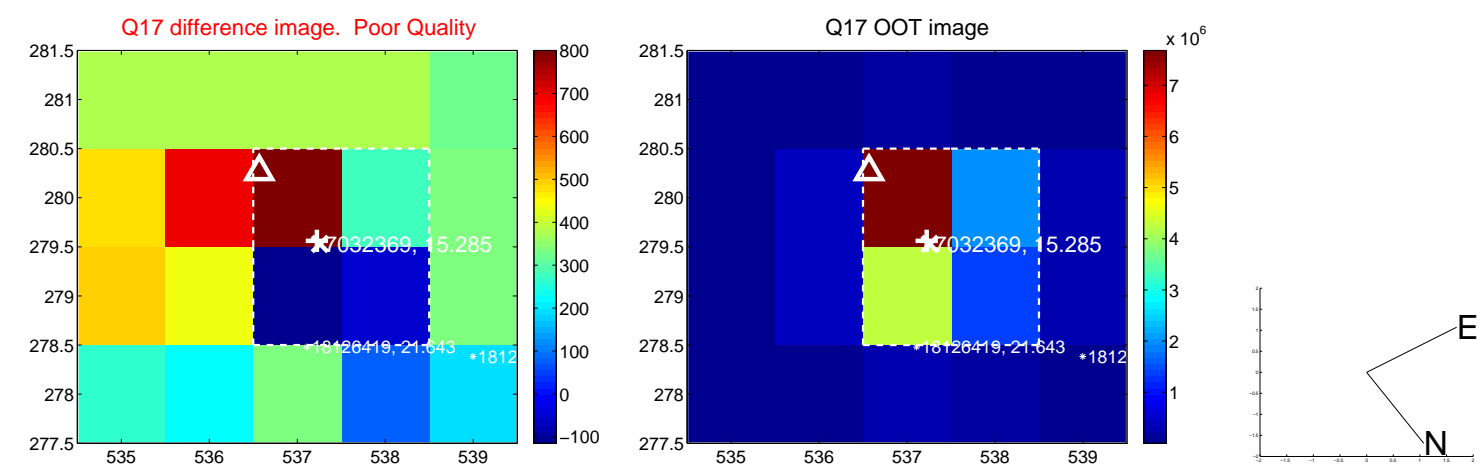
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



UKIRT Image

Declination

