

KIC 007032365

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})
007032365-01	OBS	No	0.566745	131.853395	16.4	4.018	12.2	5.4	0.92	5847	0.38	5470.67

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
007032365-01	OBS	FP	0.00	1	0	0	1	LPP_DV—CENT_FEW_DIFFS—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.

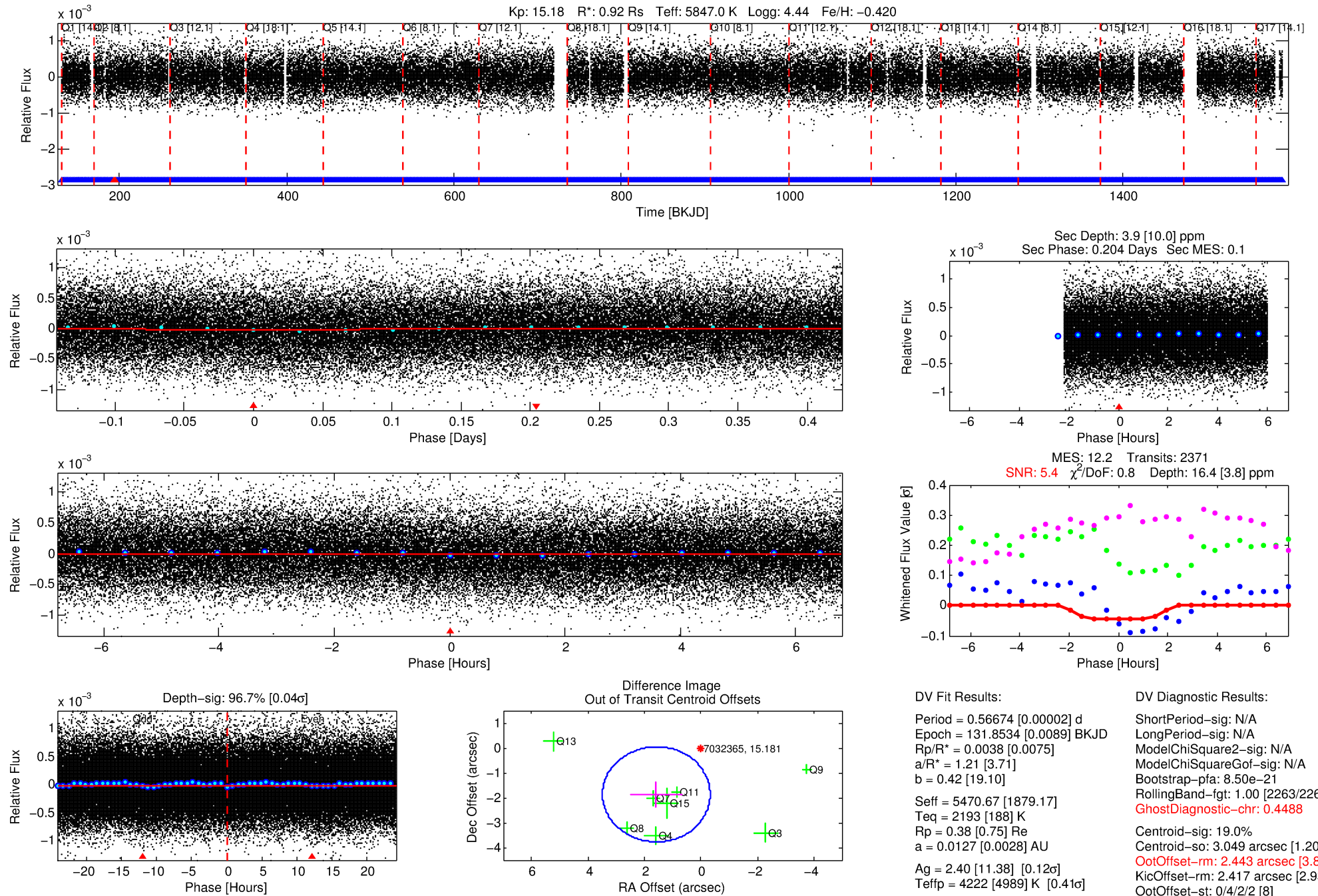
Ephemeris Match Information For 007032365-01

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
007032365-01	7032365	RR-Lyr-pri	7198959	1:1	791.9	179	-87	7.86	15.18	38956.00	Direct-PRF	0	0.63	22.93

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

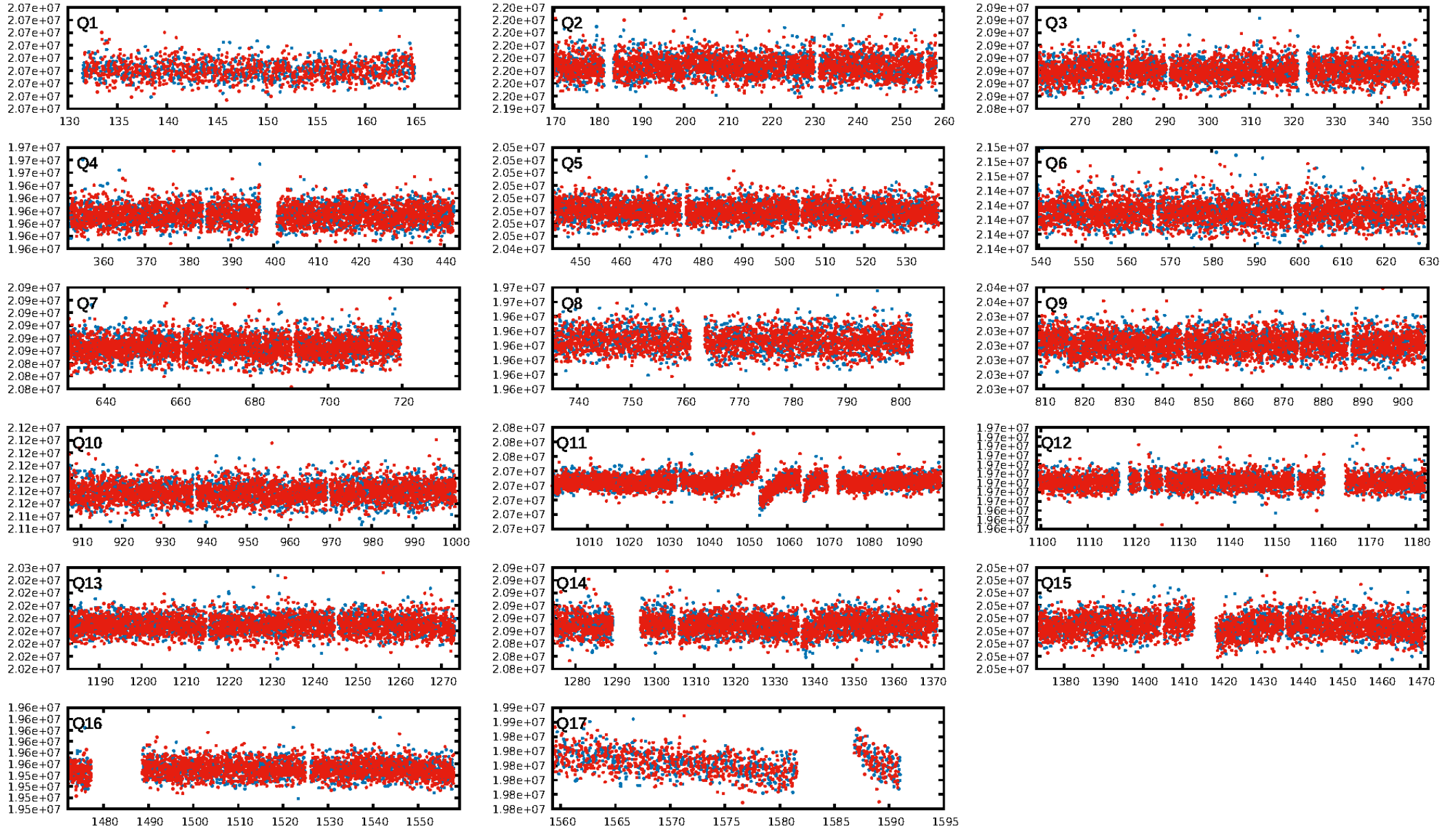
KIC: 7032365 Candidate: 1 of 1 Period: 0.567 d



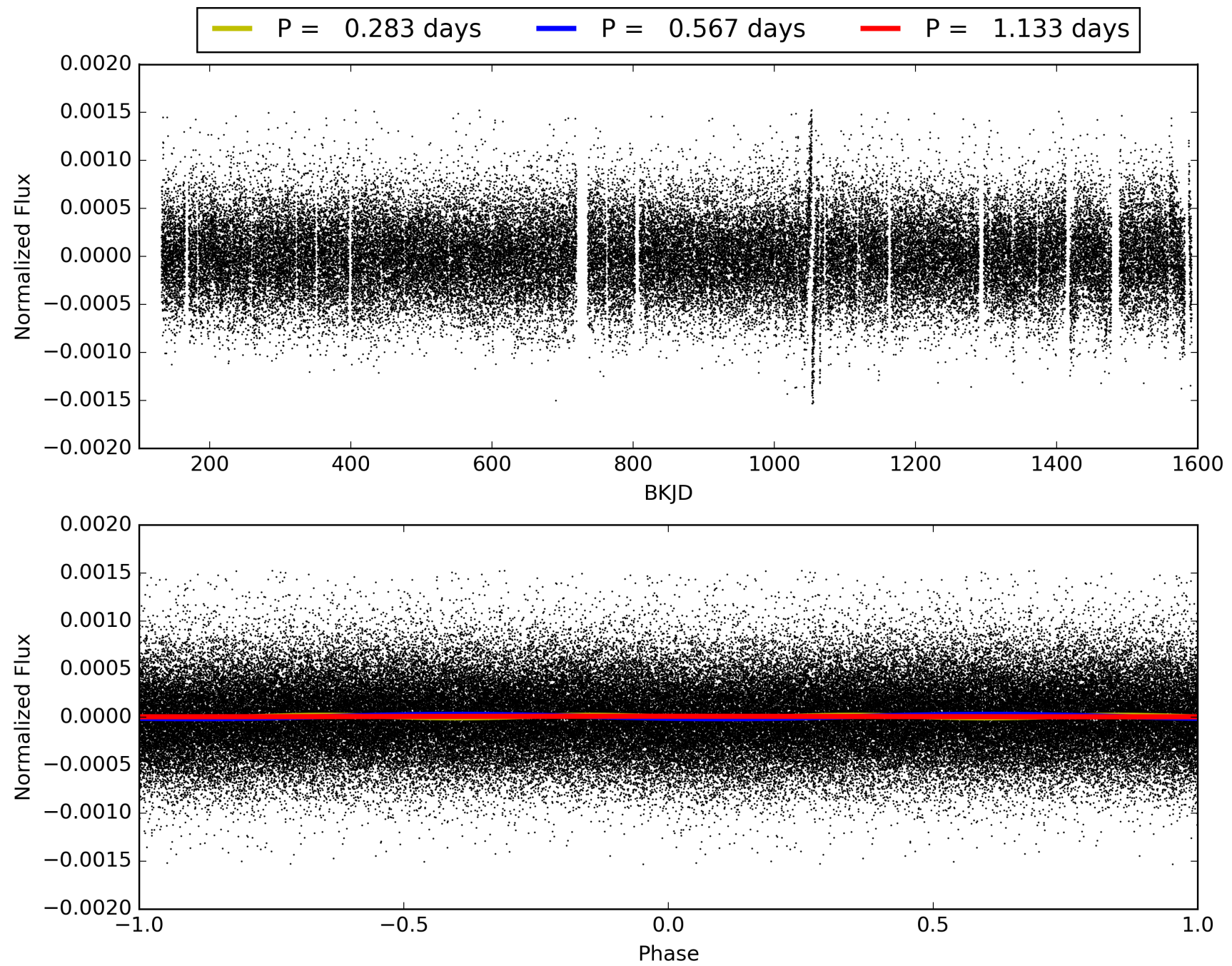
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 29-Jan-2016 09:47:07 Z

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

TCE 007032365-01, PDC Light Curves

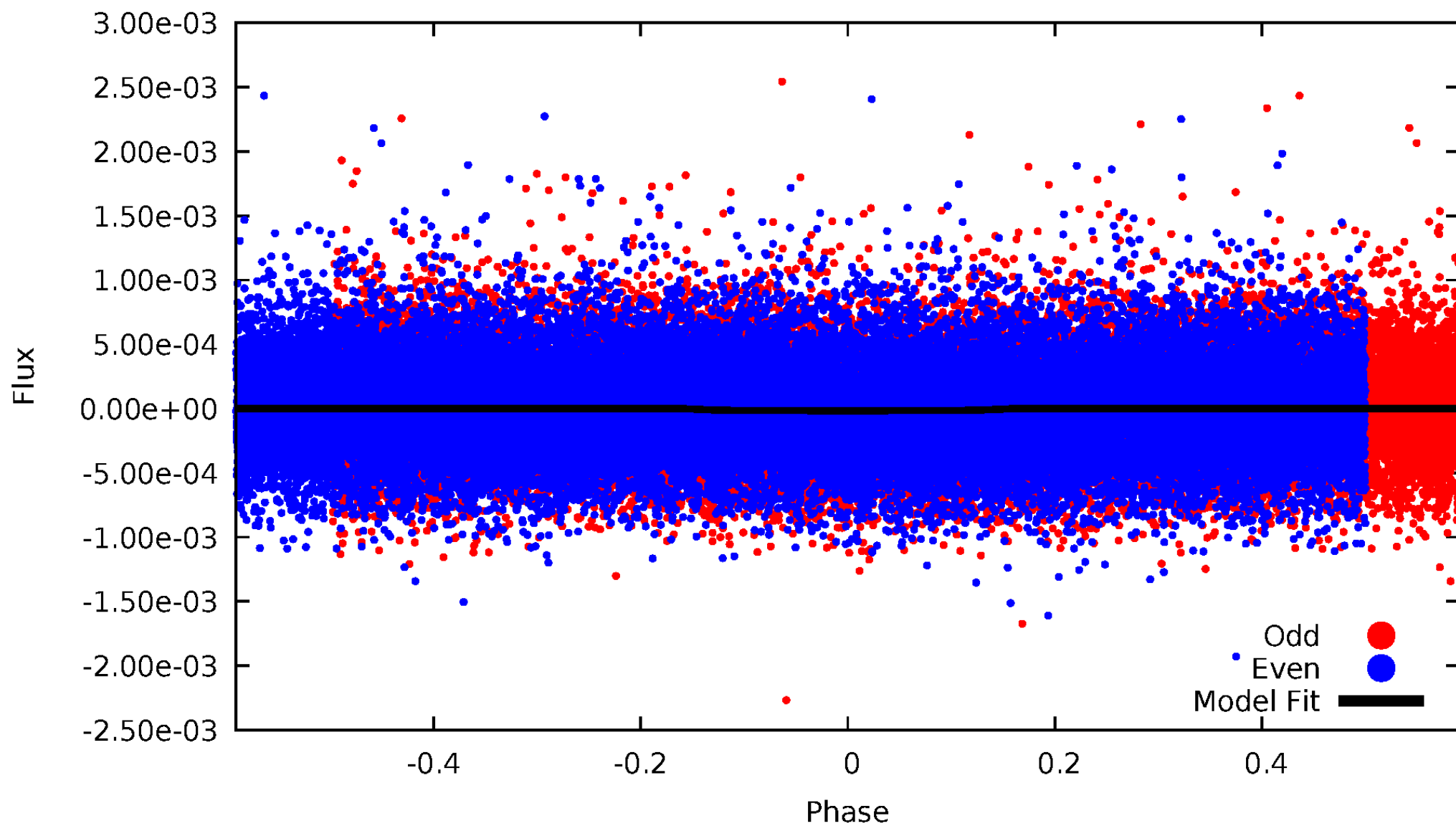


TCE 007032365-01



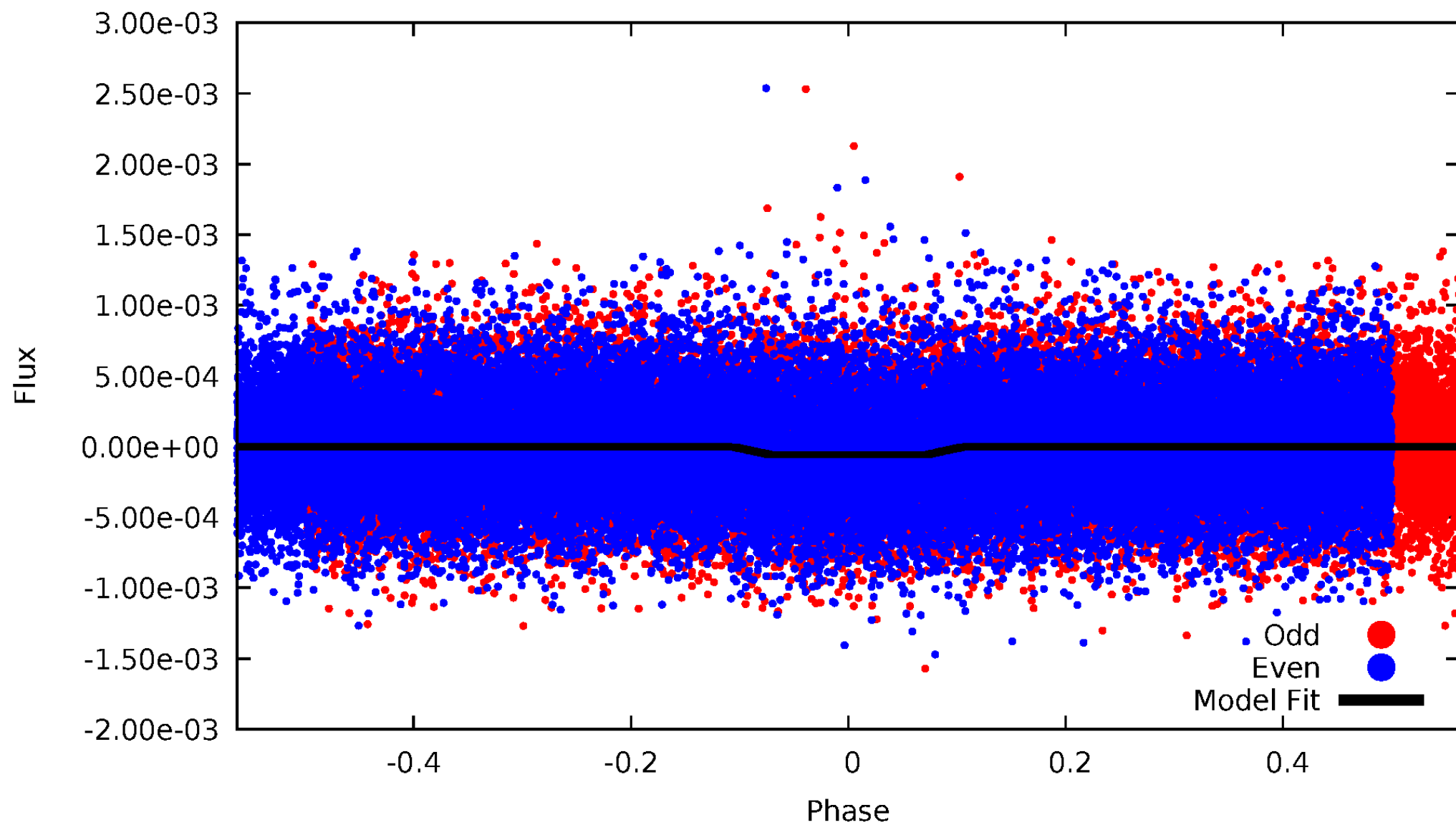
DV Odd/Even

TCE 007032365-01



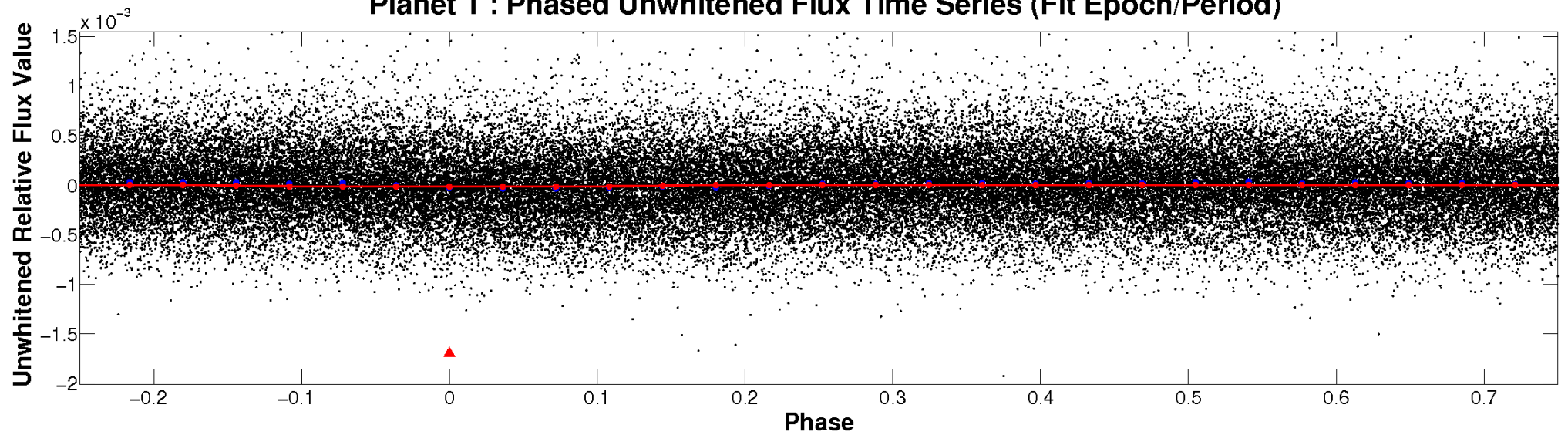
ALT Odd/Even

TCE 007032365-01

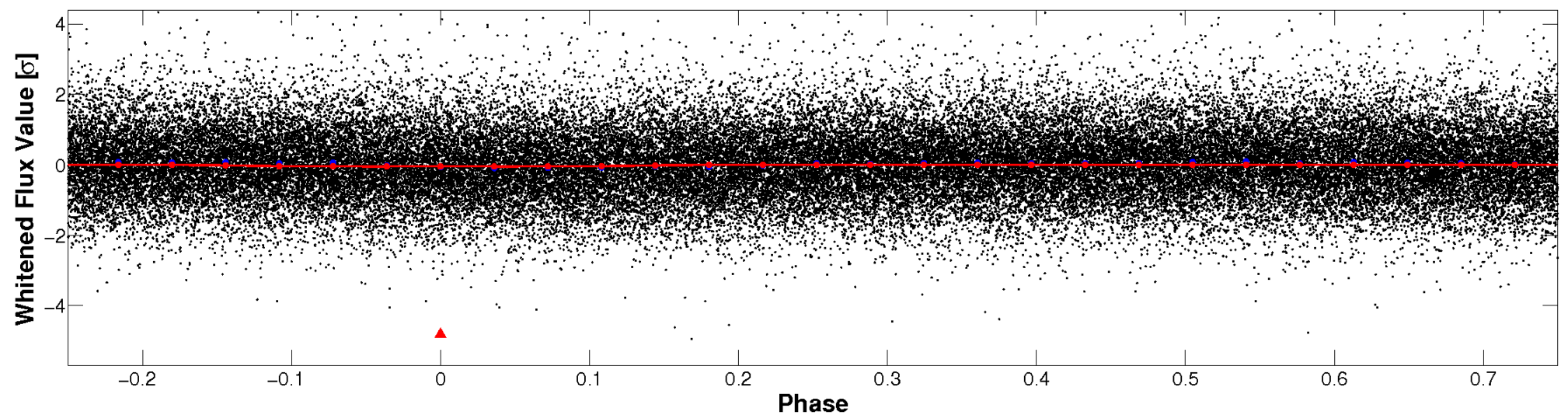


Non-Whitened Vs. Whitened Light Curve

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

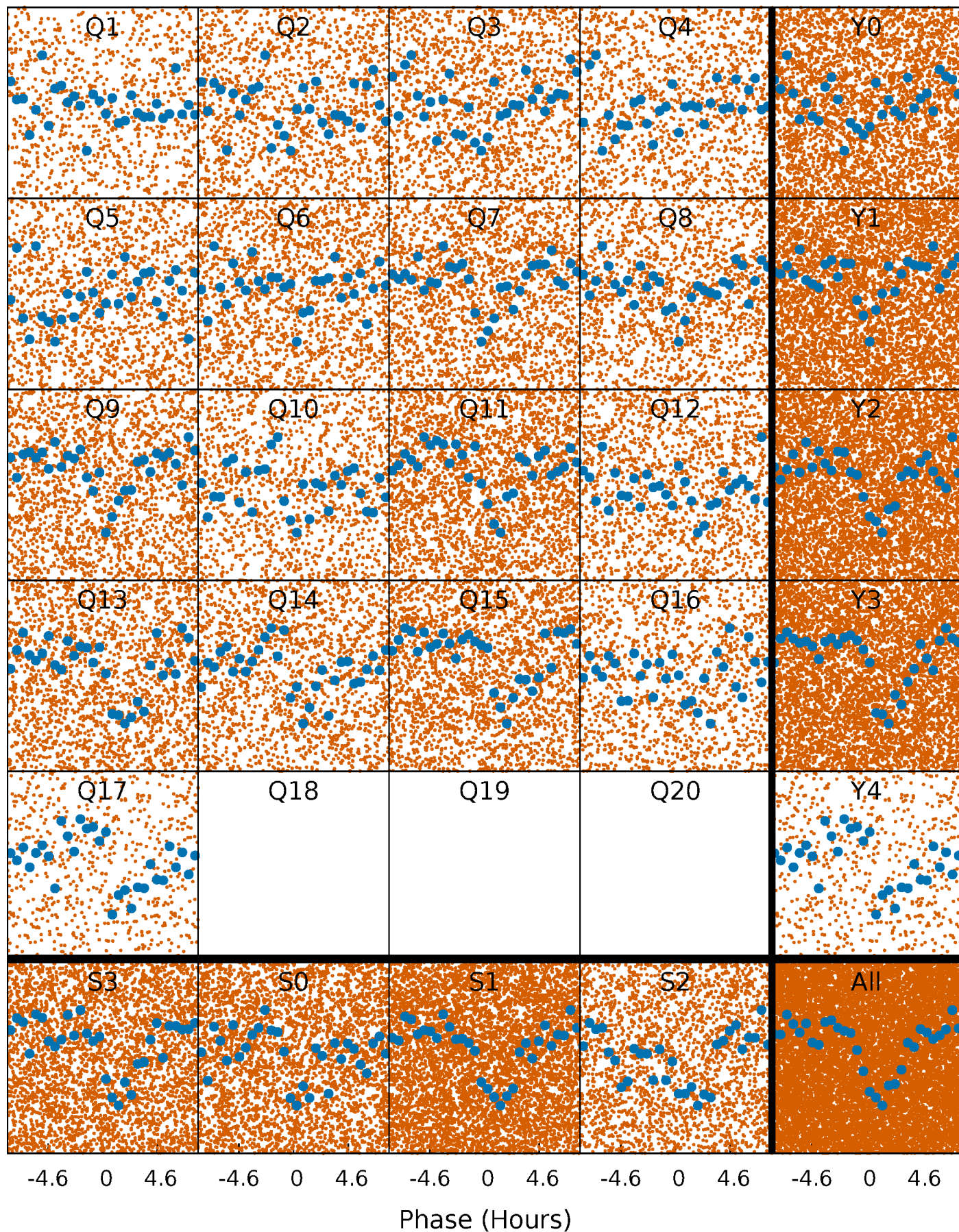


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



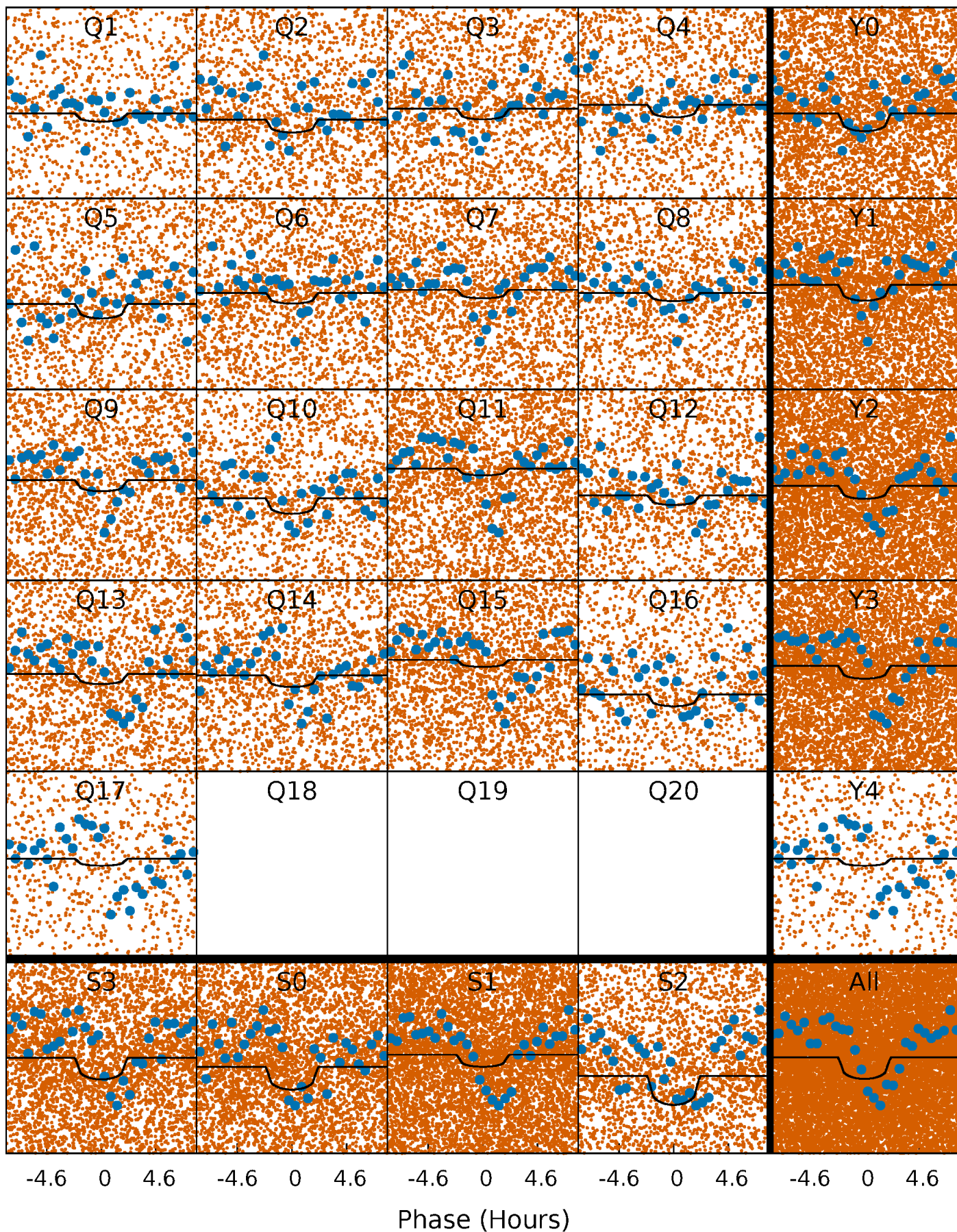
PDC Quarter-Phased Transit Curves

TCE 007032365-01 P= 0.566745 Days $T_0=131.853395$ (BKJD)



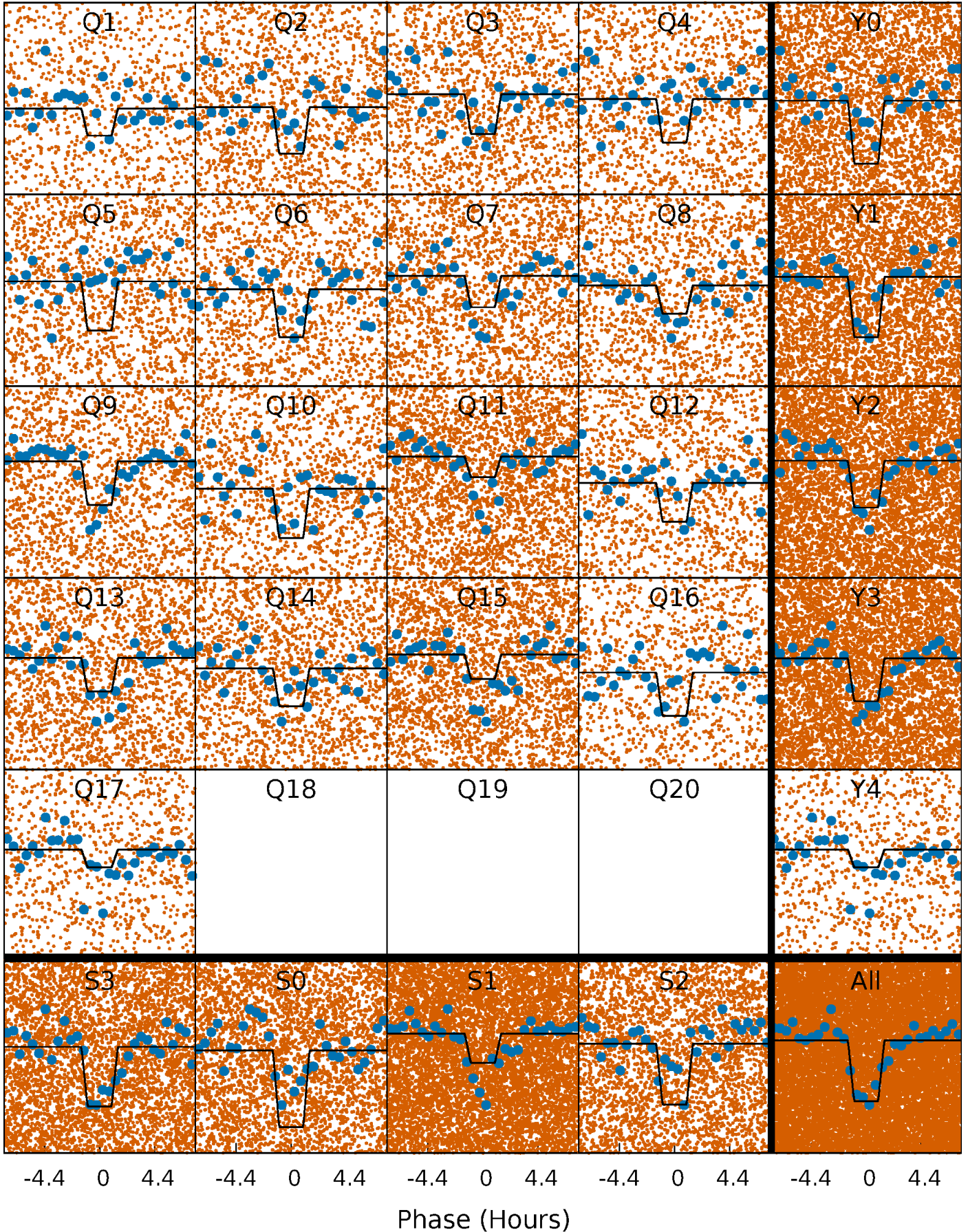
DV Quarter-Phased Transit Curves

TCE 007032365-01 P= 0.566745 Days $T_0=131.853395$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

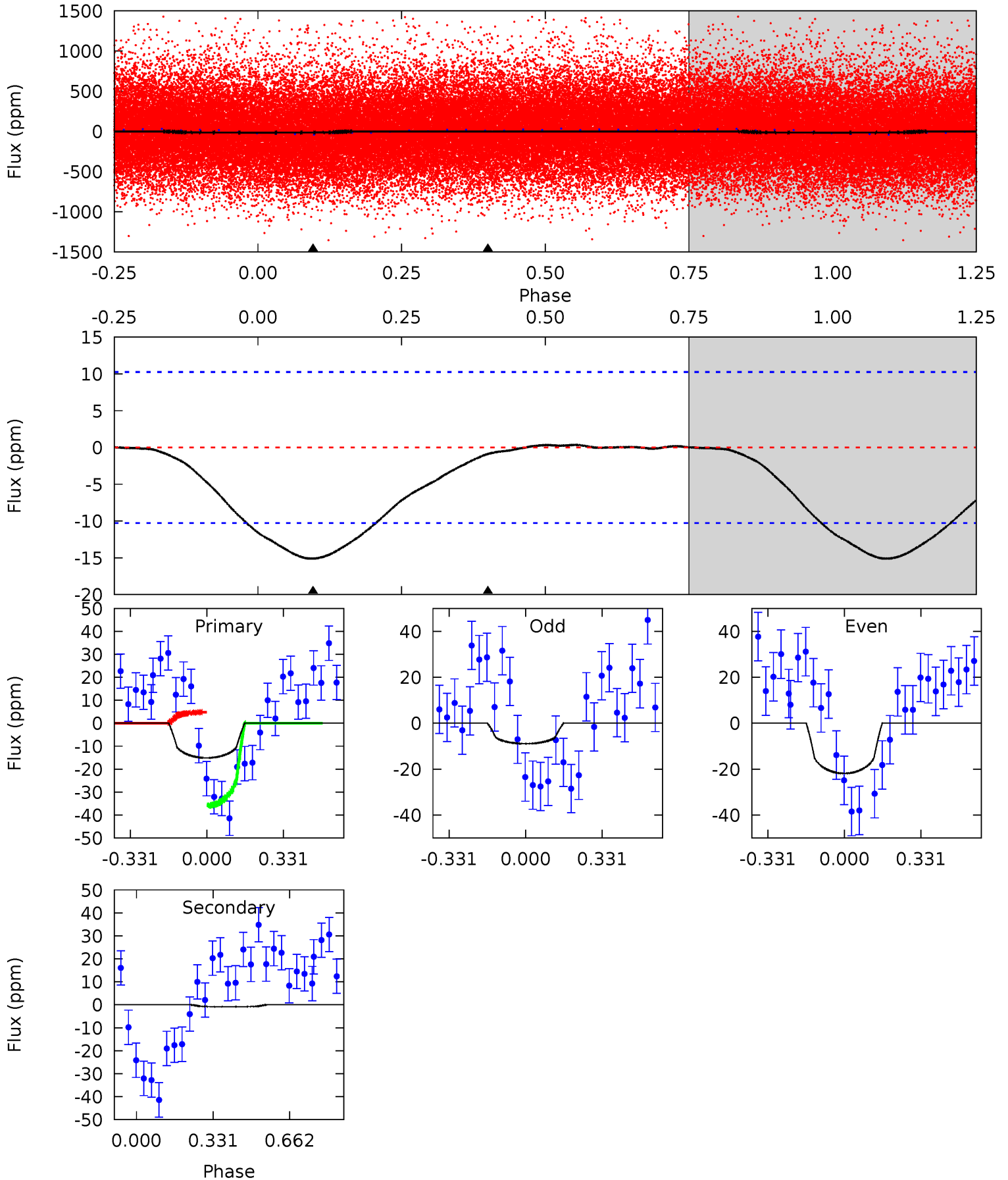
TCE 007032365-01 P= 0.566795 Days $T_0=131.817973$ (BKJD)



DV Model-Shift Uniqueness Test

007032365-01, P = 0.566745 Days, E = 131.286650 Days

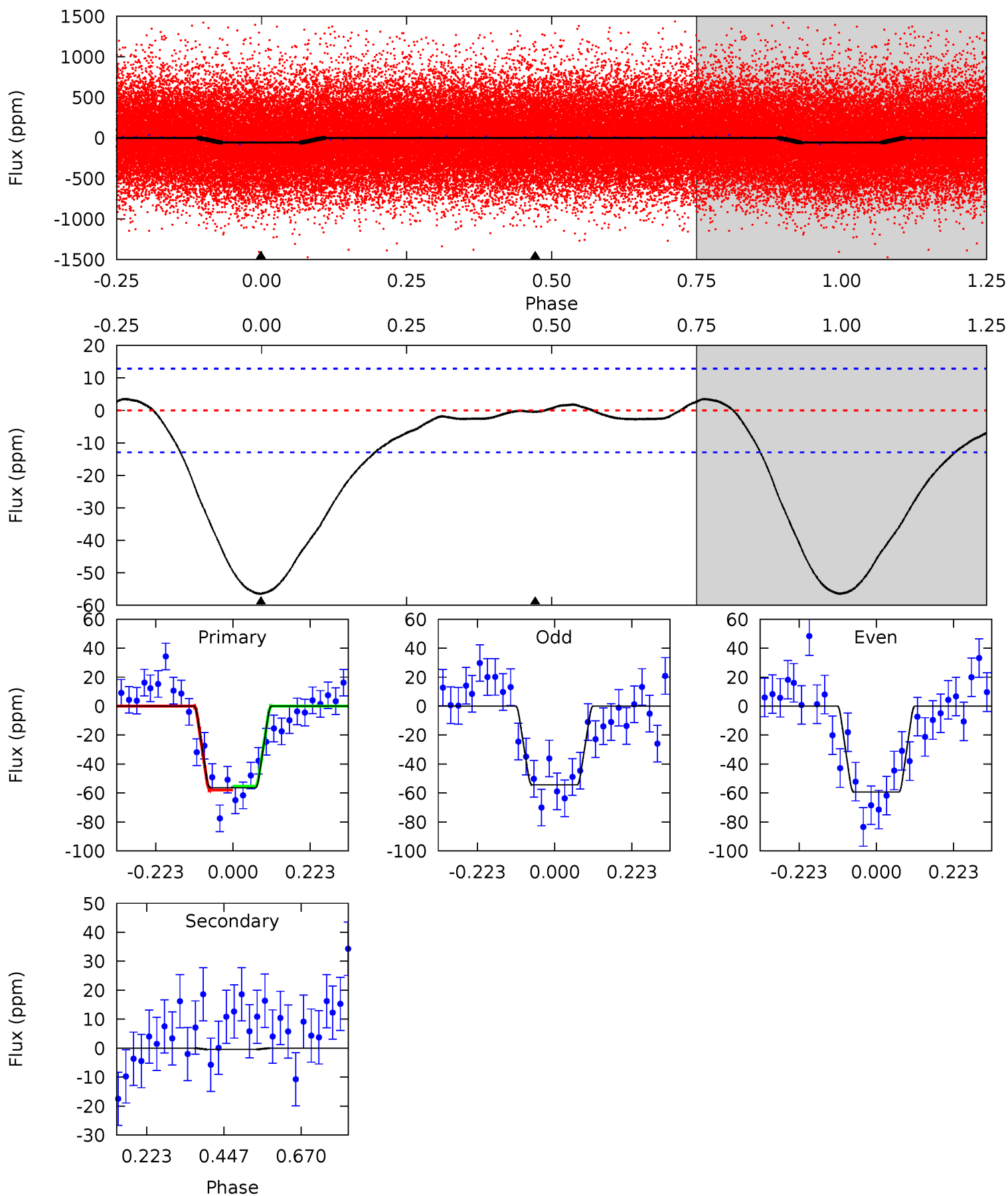
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
6.34	0.37	0	0	4.31	0.97	0.04	6.34	6.34	0.37	0.37	2.73	1.07	0.02	6.51



Alt Model-Shift Uniqueness Test

007032365-01, P = 0.566795 Days, E = 131.251178 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
19.2	0.16	0	0	4.39	1.22	1.50	19.2	19.2	0.16	0.16	0.85	0.90	0.06	0.45



Stellar Parameters For KIC 007032365

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	5847^{+158}_{-175}	$4.441^{+0.116}_{-0.174}$	$-0.420^{+0.300}_{-0.300}$	$0.916^{+0.247}_{-0.133}$	$0.846^{+0.117}_{-0.072}$	$1.549^{+0.778}_{-0.701}$
	+3%/-3%	+3%/-4%	+71%/-71%	+27%/-15%	+14%/-9%	+50%/-45%
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 007032365-01 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-1 ± 2	$0.70^{+0.65}_{-0.44}$	3084^{+200}_{-169}	-2959^{+6693}_{-508}	$0.102^{+1.094}_{-0.322}$
Alt.	-0 ± 3	$0.92^{+0.72}_{-0.53}$	3086^{+204}_{-173}	-3080^{+6229}_{-415}	$0.039^{+0.594}_{-0.305}$

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

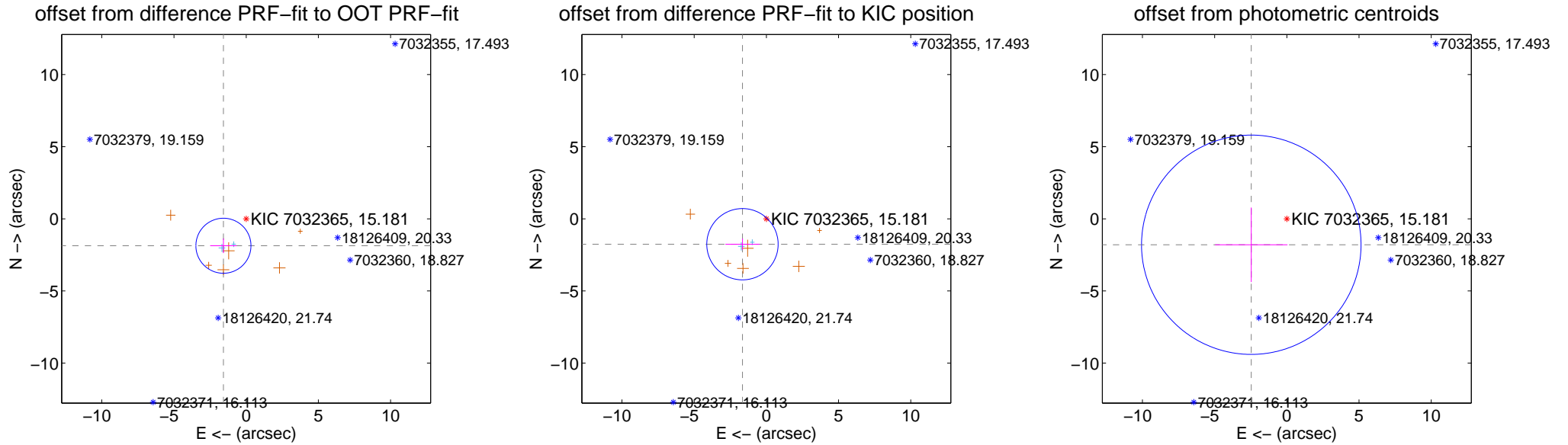
DV Centroid Data

Supplemental centroid analysis for 007032365-01. Kepler magnitude: 15.18. Transit SNR 5.41

There are 2 quarters with good PRF difference image offsets

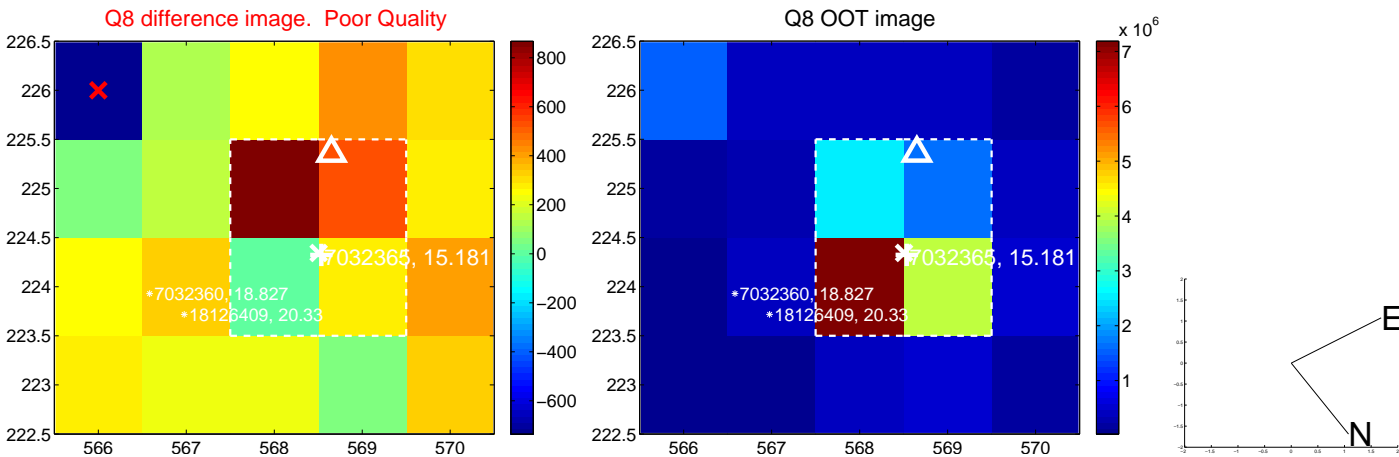
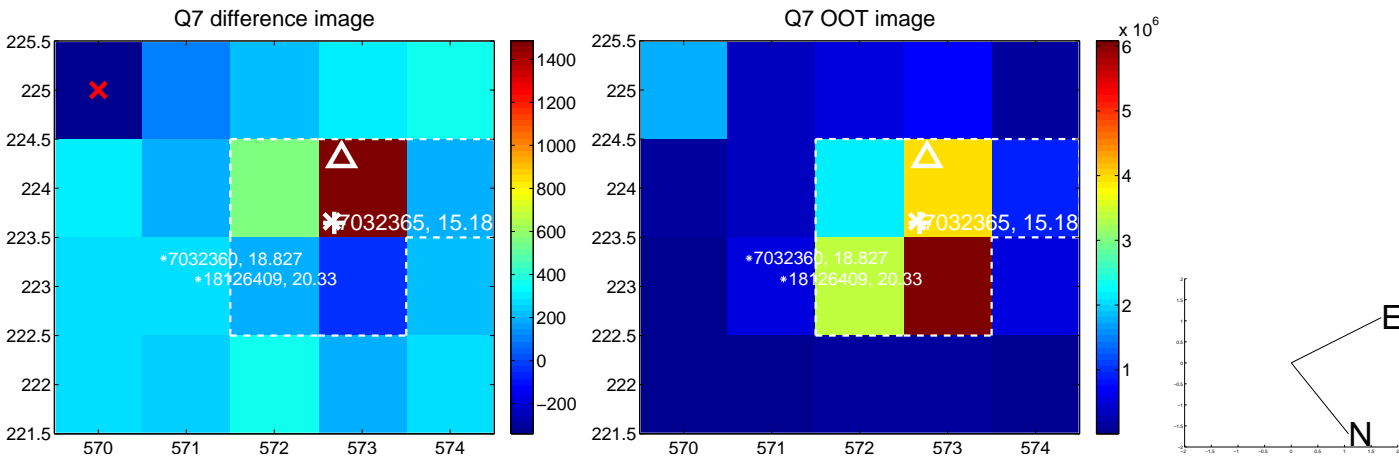
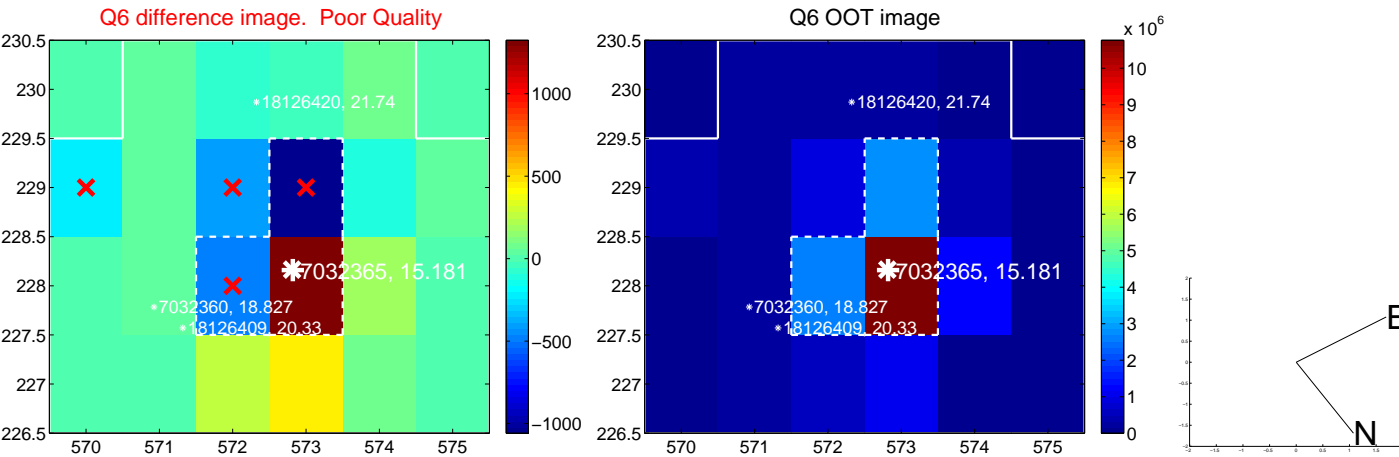
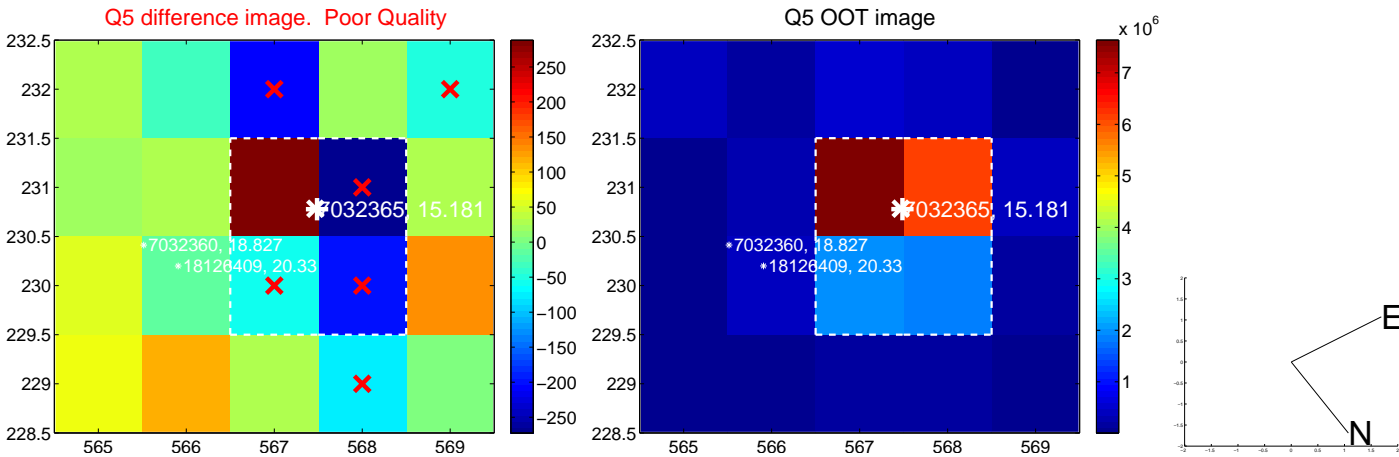
The direct PRF centroid is offset from the target star catalog position by about 0.20 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	2.443 ± 0.636	3.84	1.576 ± 0.916	-1.866 ± 0.509
PRF-fit source offset from KIC position	2.417 ± 0.824	2.93	1.655 ± 1.184	-1.761 ± 0.396
photometric centroid source offset	3.05 ± 2.53	1.20	2.46 ± 2.51	-1.80 ± 2.58

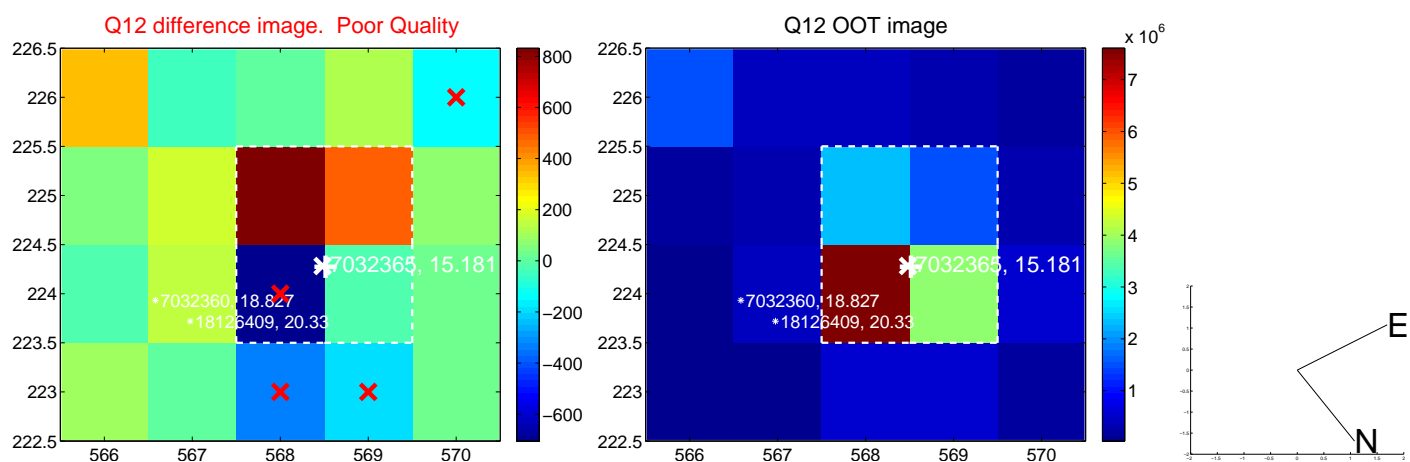
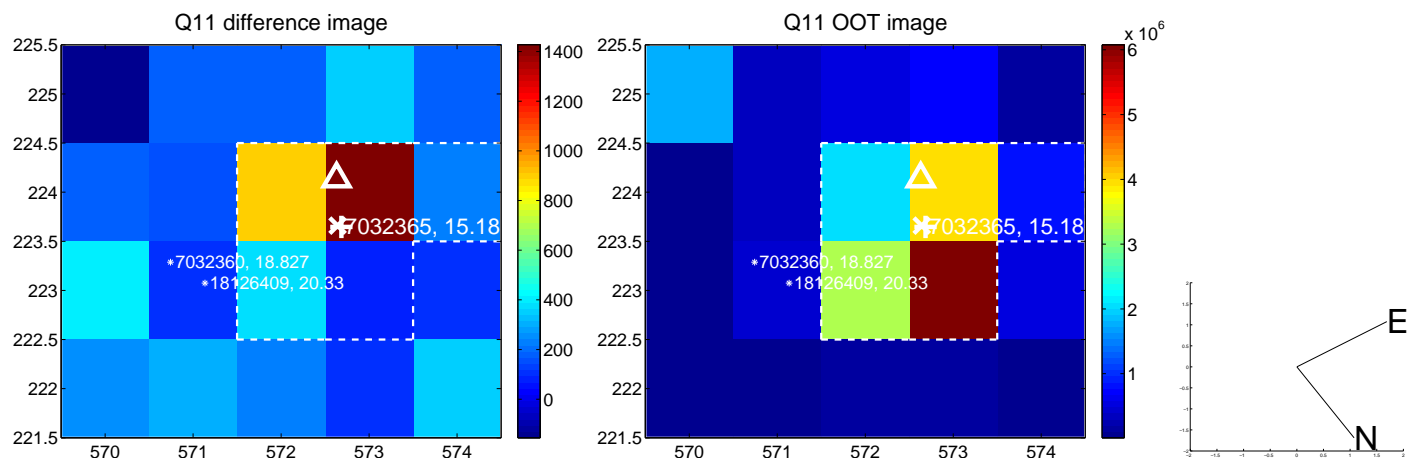
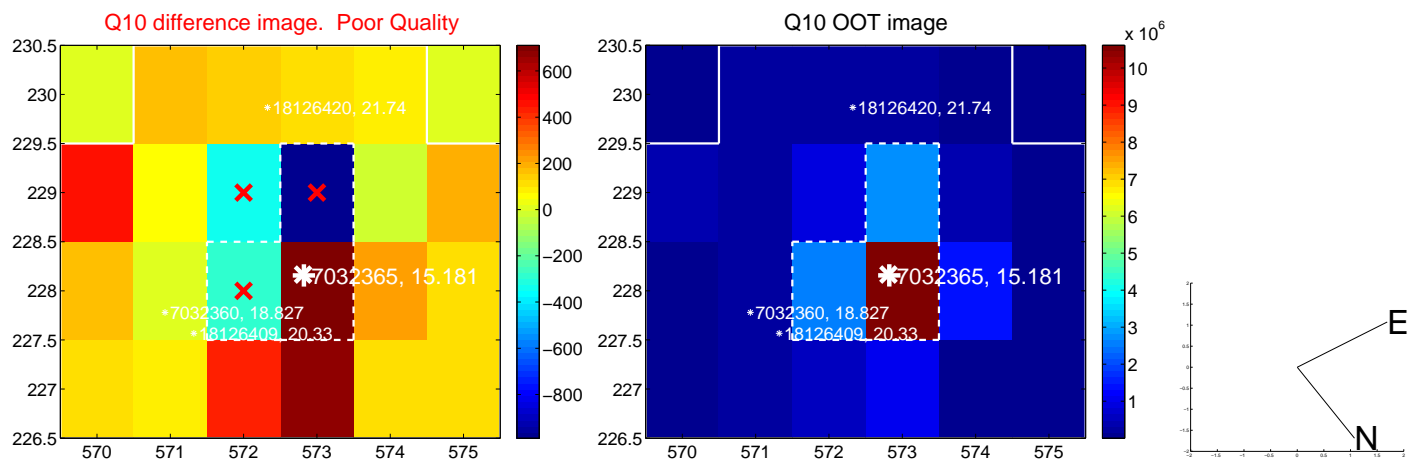
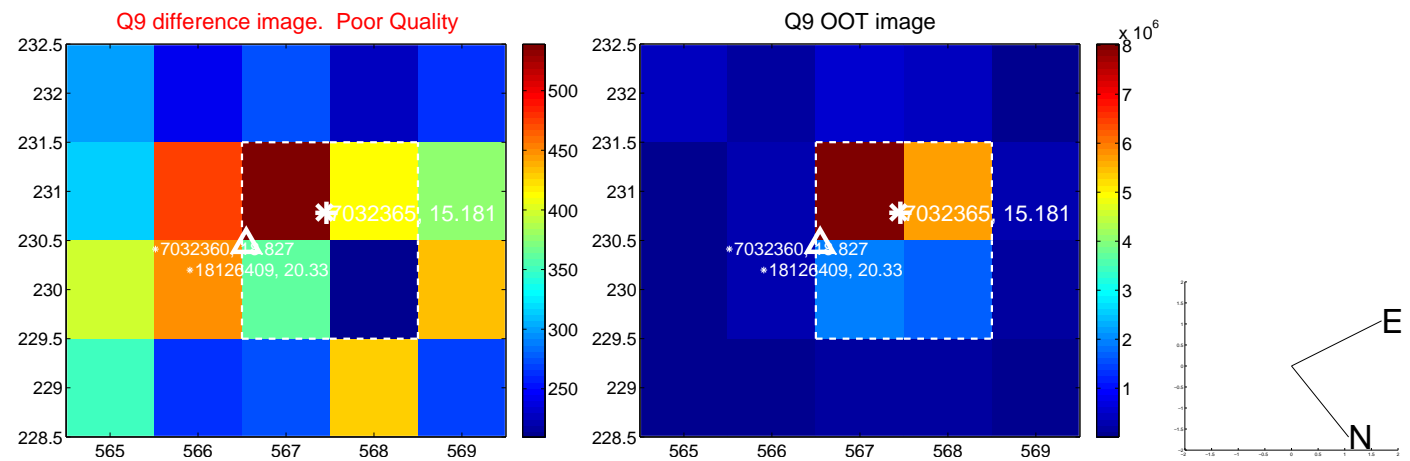


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

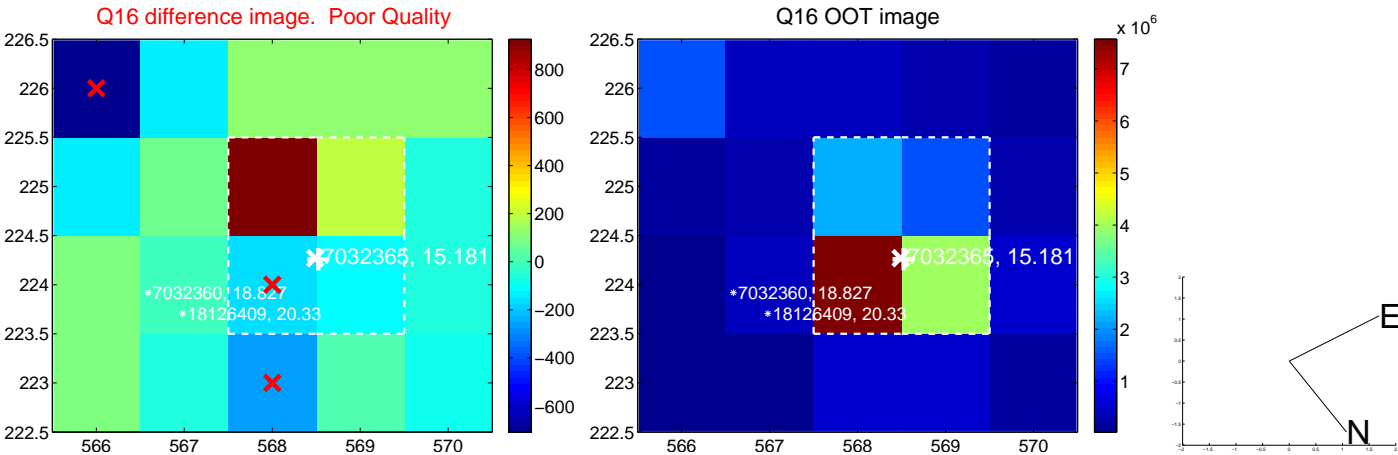
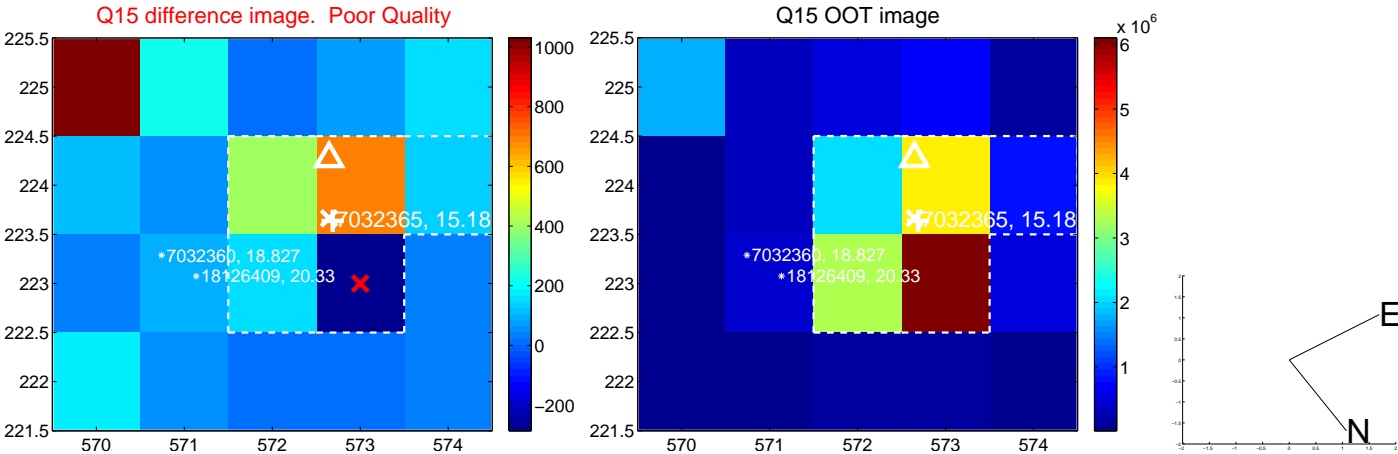
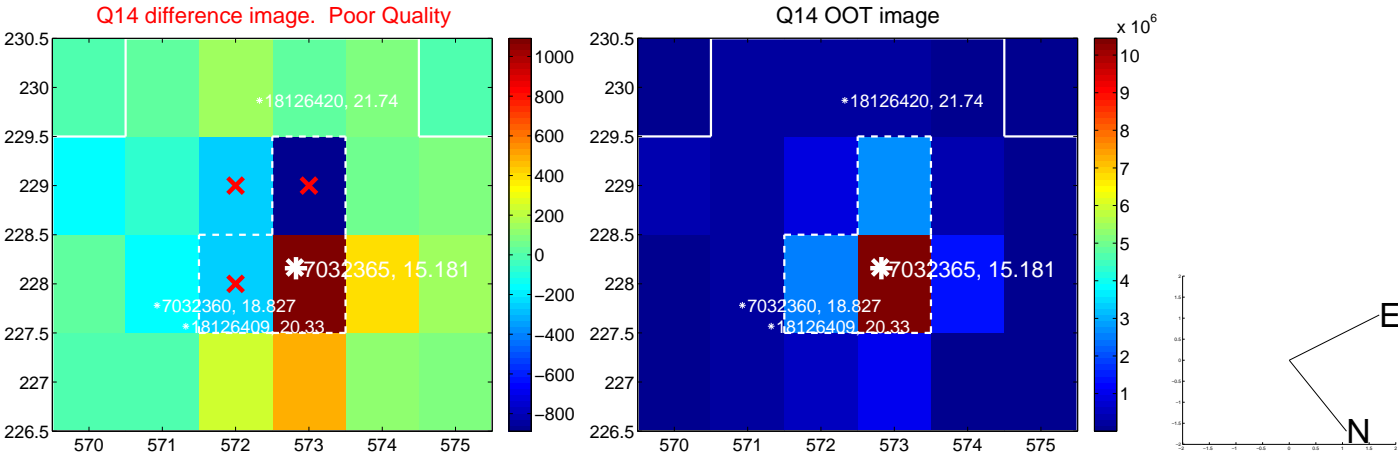
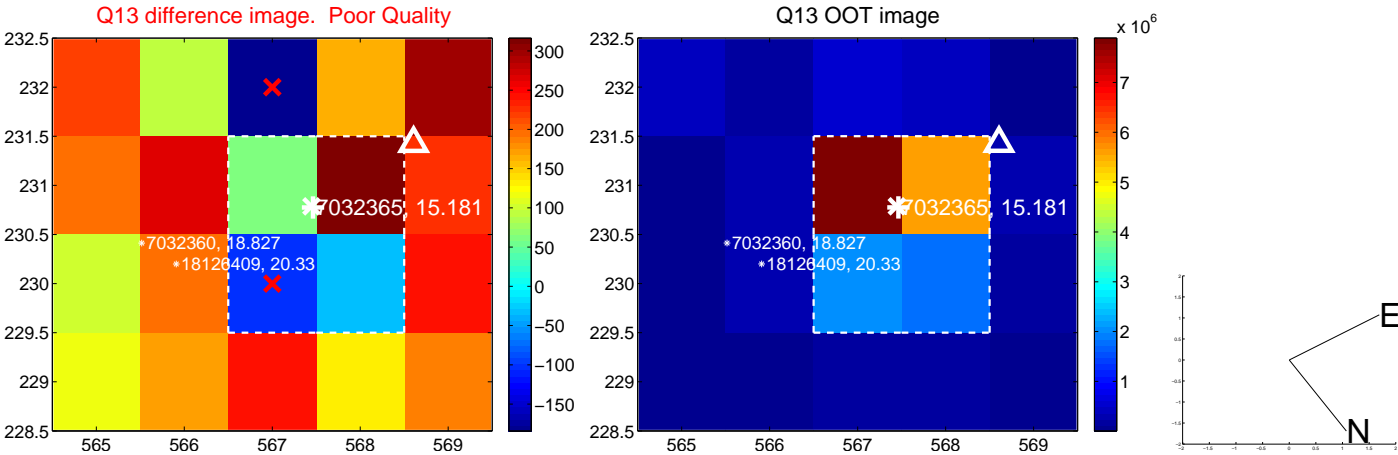
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



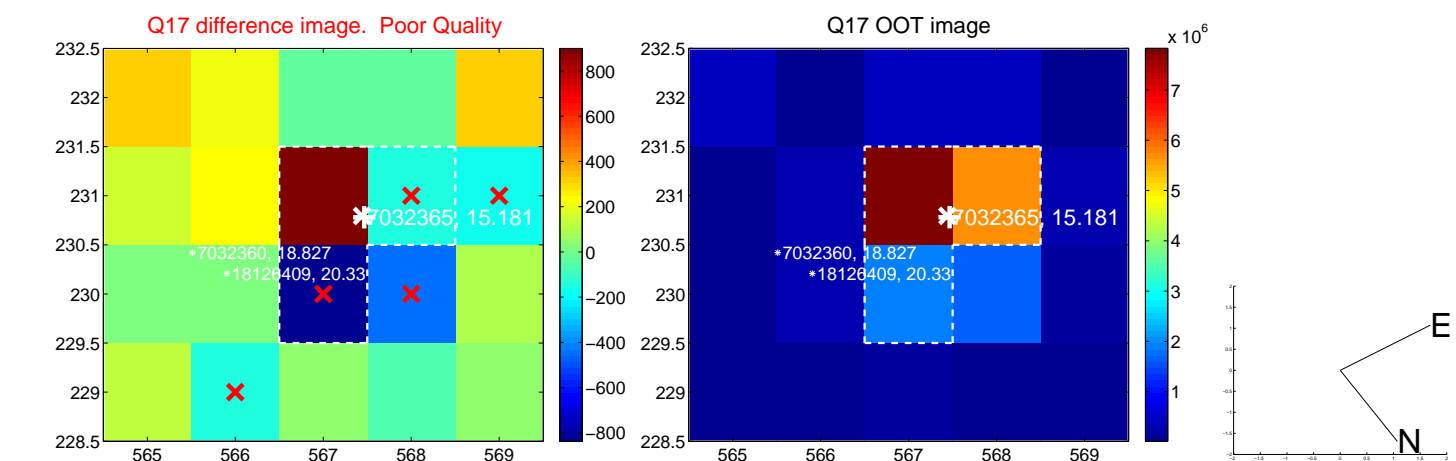
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



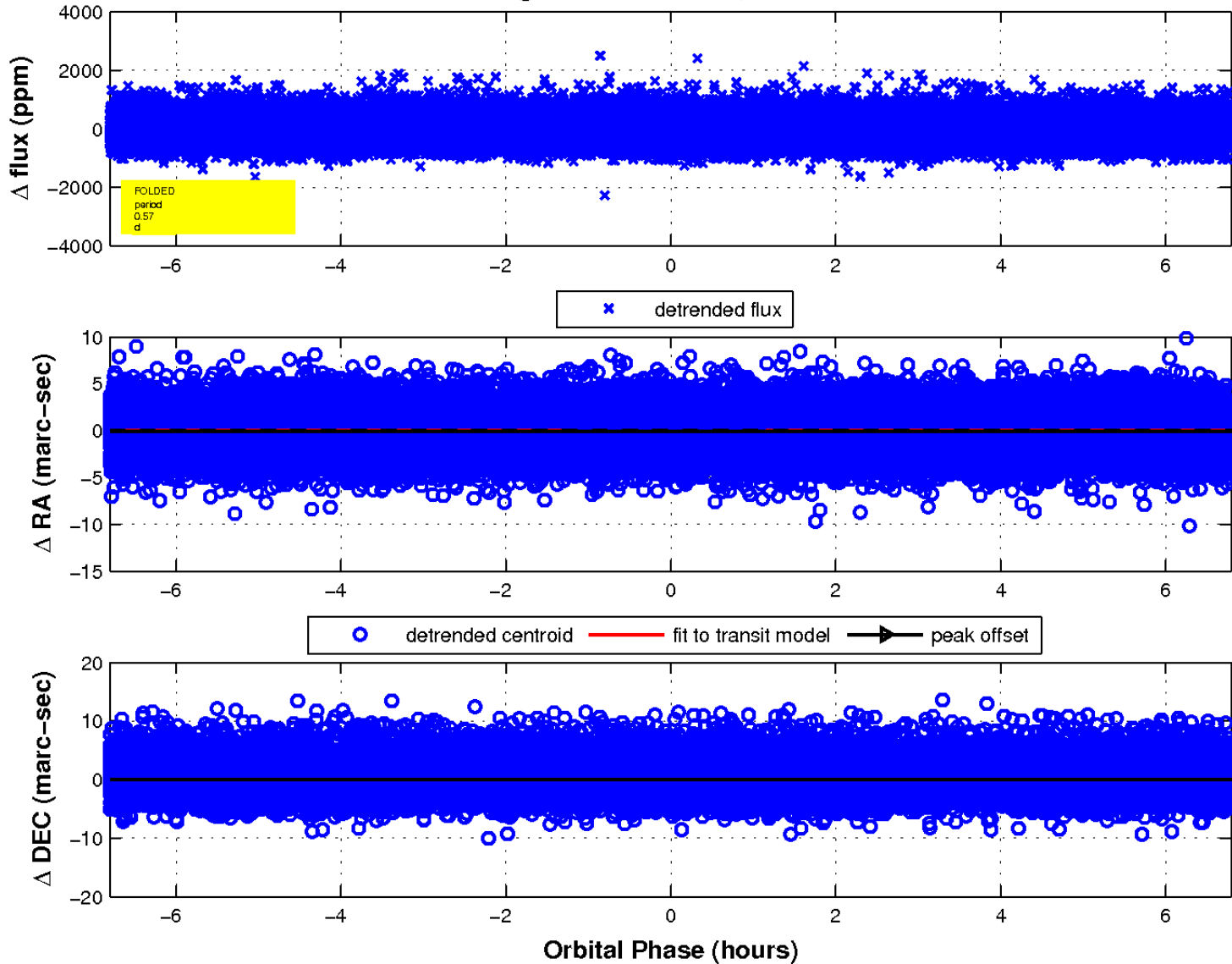
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



fluxWeightedCentroids, Planet 1 of 1



UKIRT Image

Declination

