

KIC 004949795

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})
004949795-01	OBS	No	1.564030	133.061620	45.6	6.045	9.4	9.8	0.89	5713	0.61	1086.24

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
004949795-01	OBS	FP	0.00	1	0	1	1	LPP_DV—CENT_RESOLVED_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.

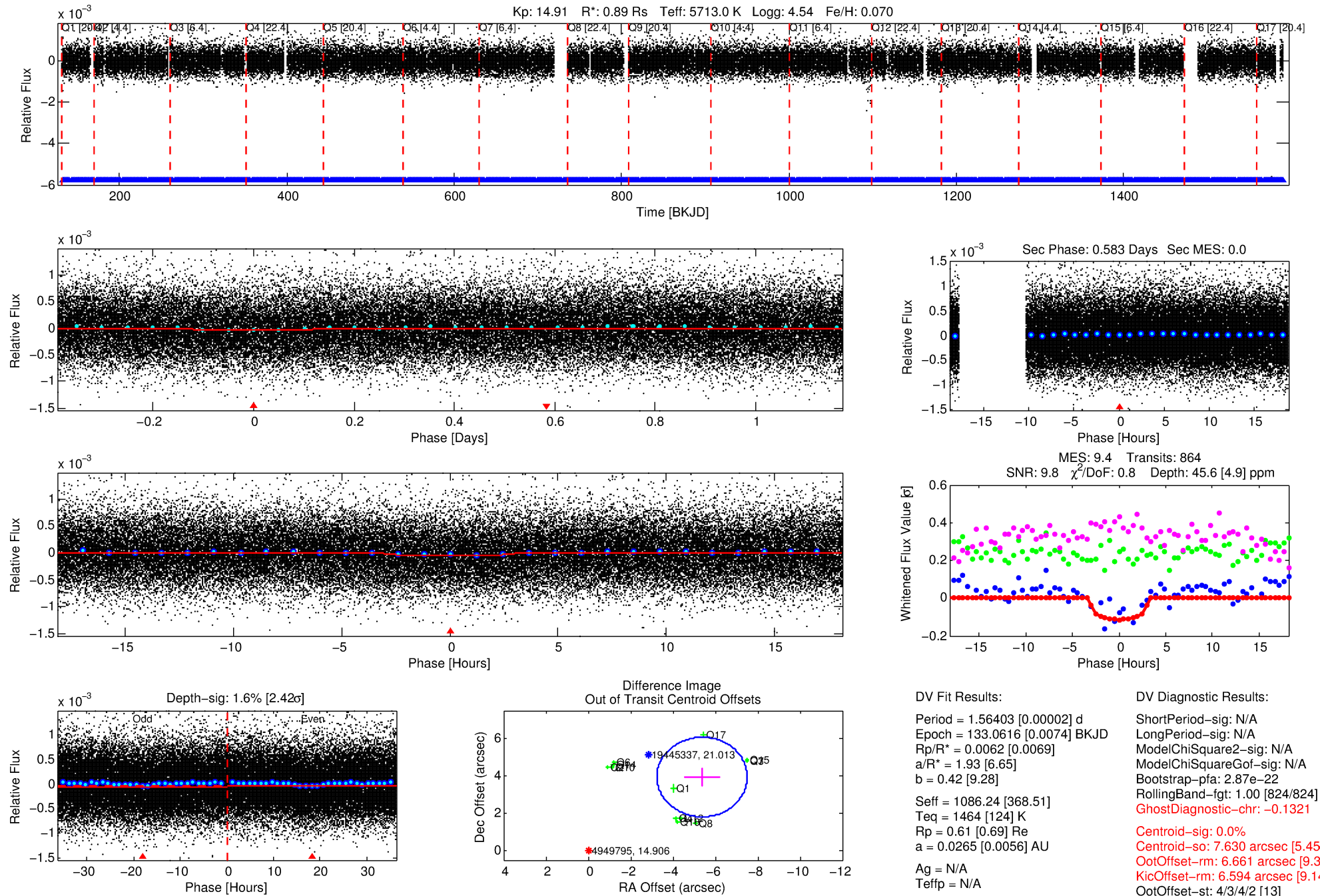
Ephemeris Match Information For 004949795-01

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
004949795-01	4949795	004949770-pri	4949770	1:1	23.9	-6	1	12.57	14.91	2943.50	Direct-PRF	0	3.08	2.01

Notes: $P_1:P_2$ 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. m_2 and m_1 are the magnitudes of the parent and child. D_2/D_1 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

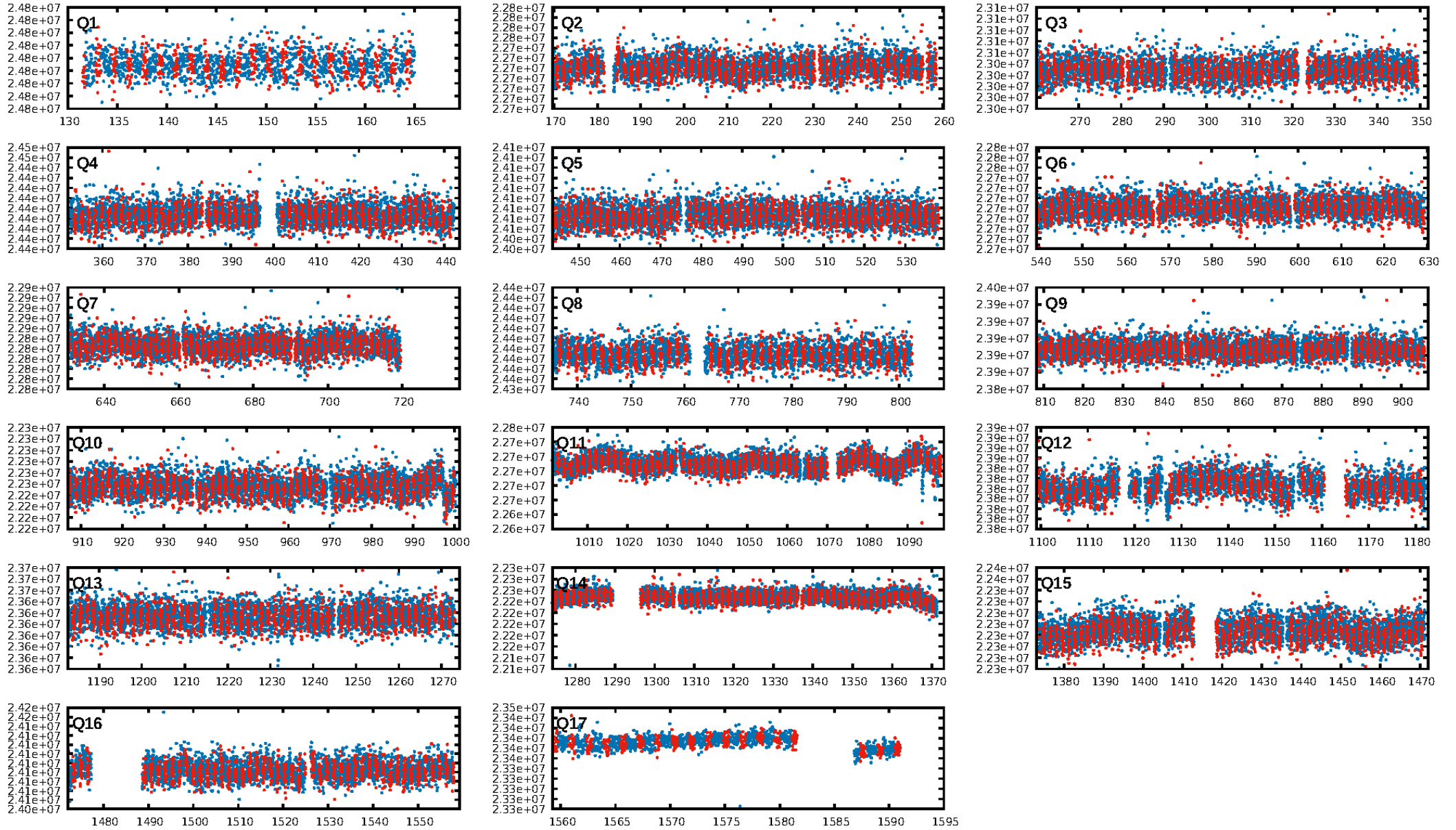
KIC: 4949795 Candidate: 1 of 1 Period: 1.564 d



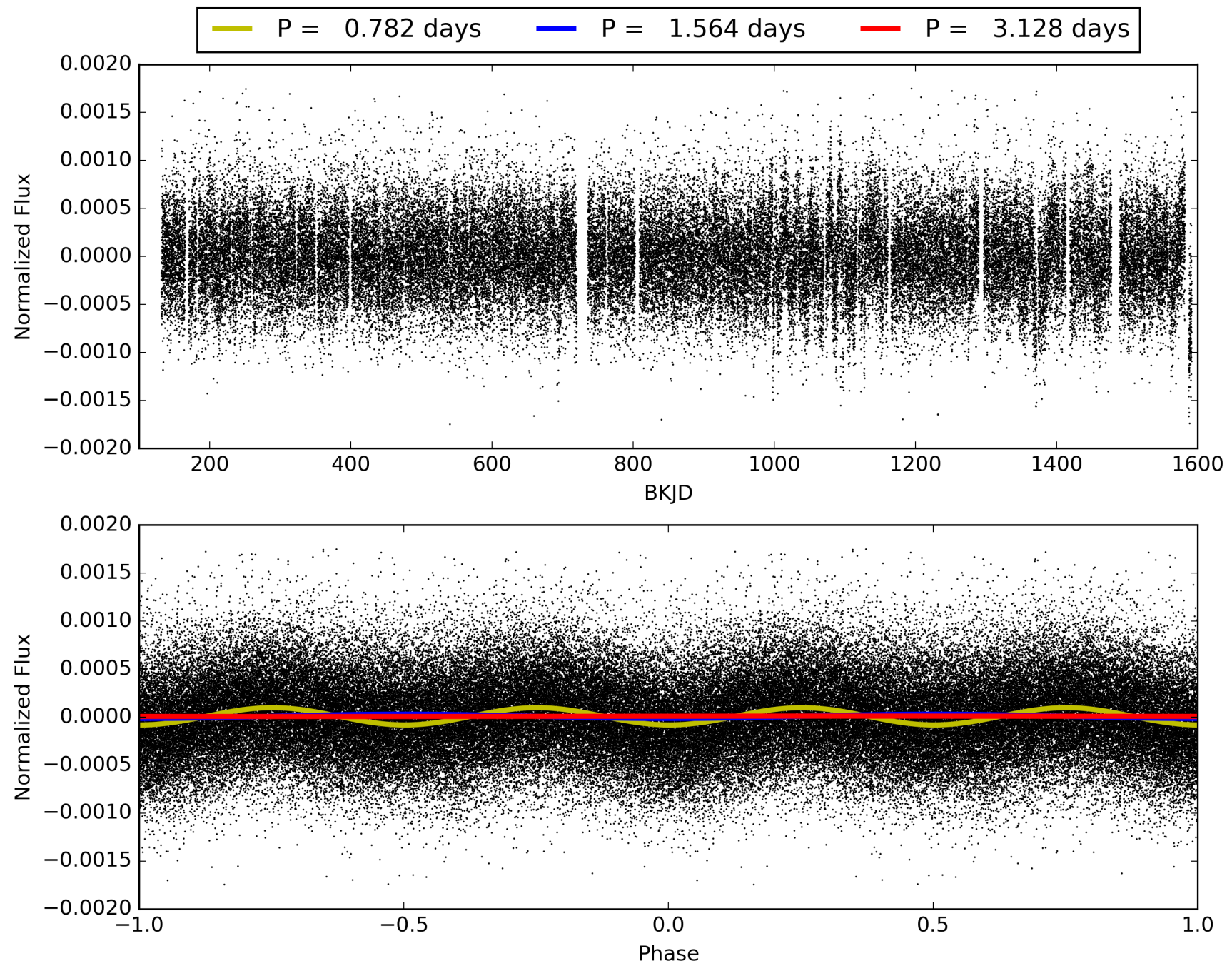
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 29-Jan-2016 09:55:37 Z

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

TCE 004949795-01, PDC Light Curves

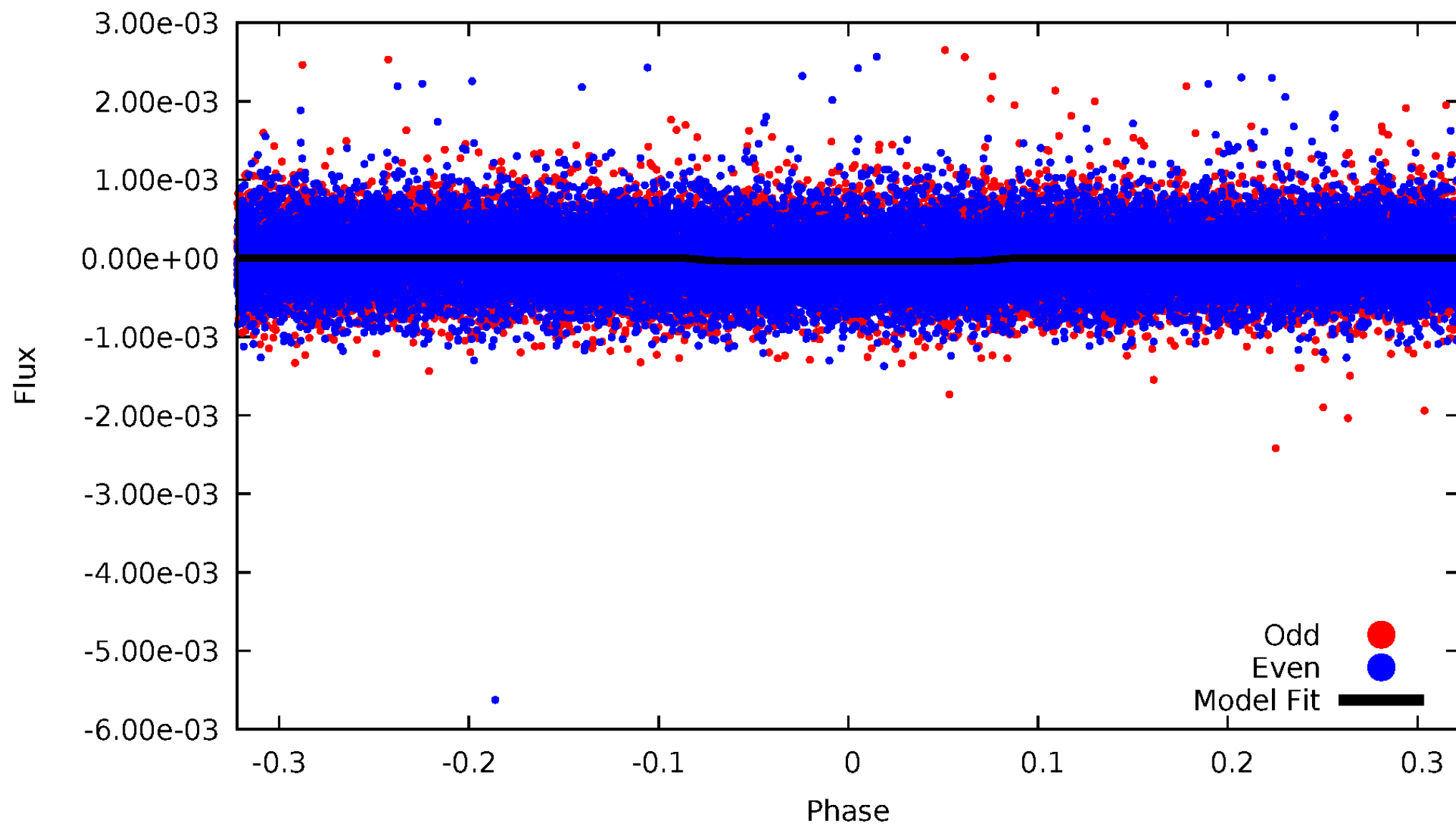


TCE 004949795-01



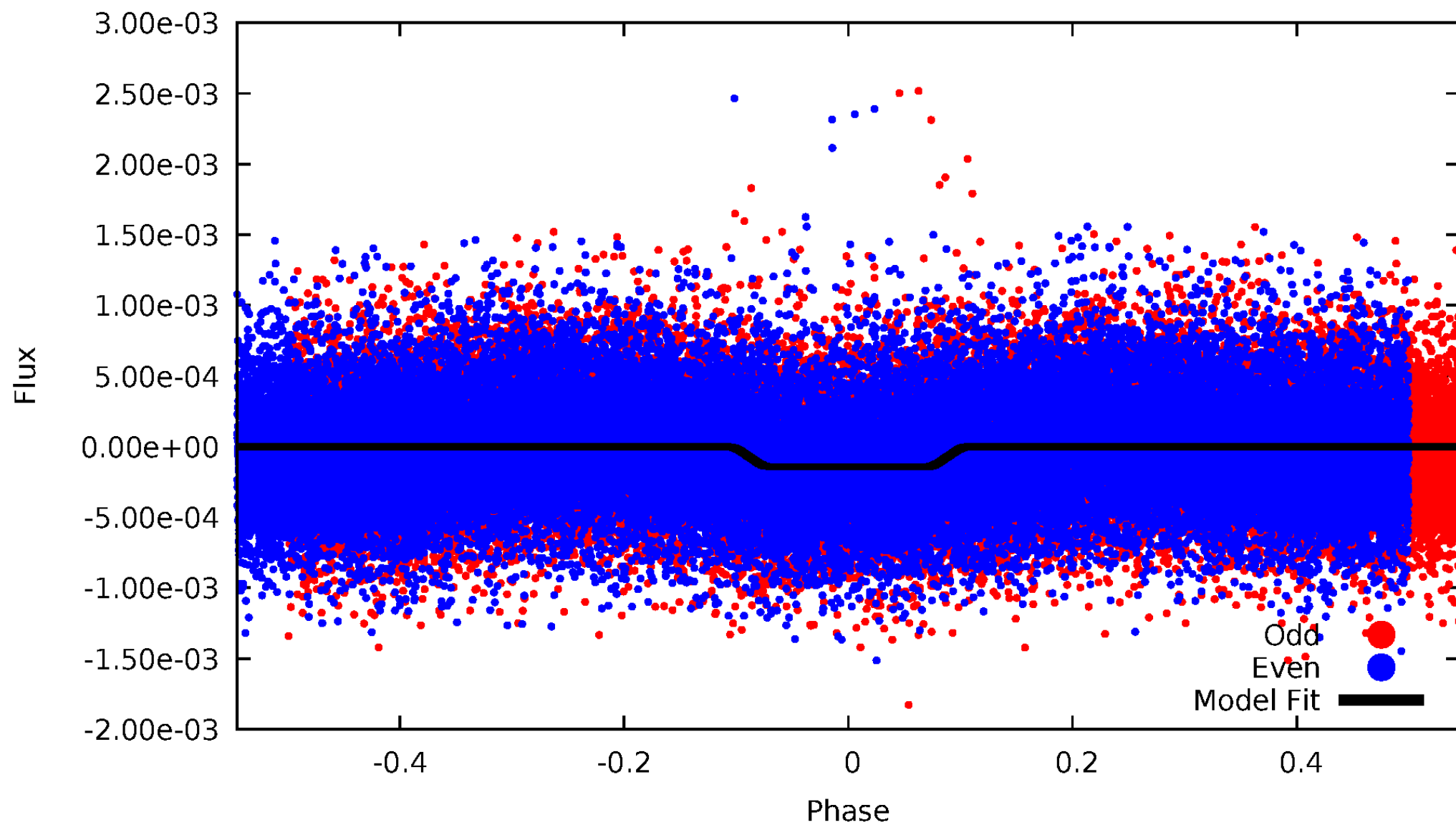
DV Odd/Even

TCE 004949795-01

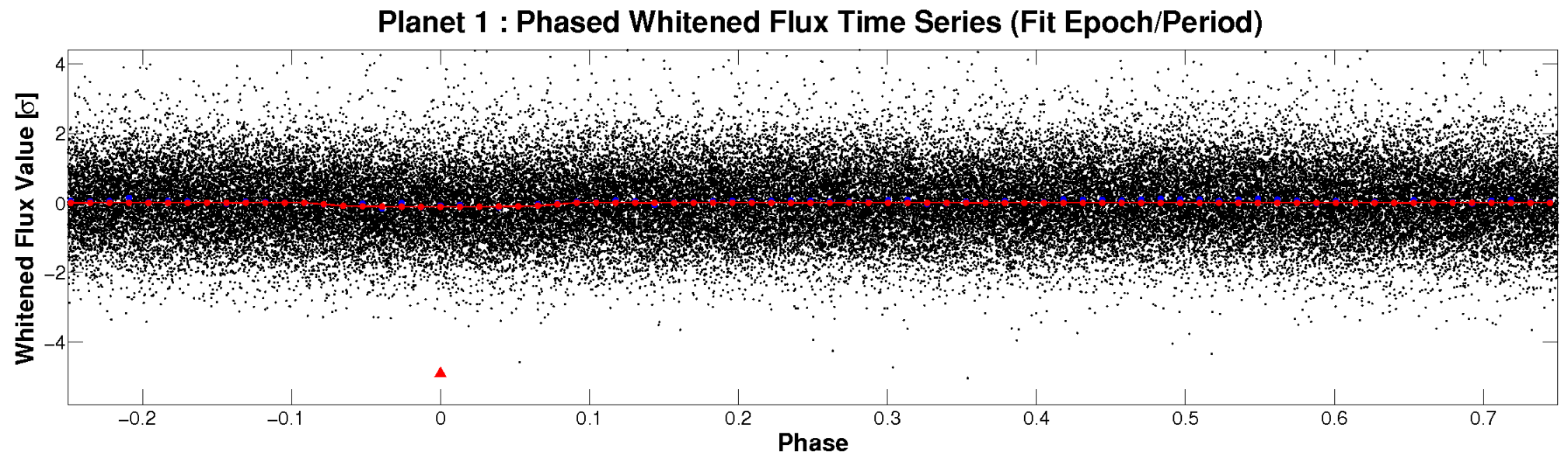
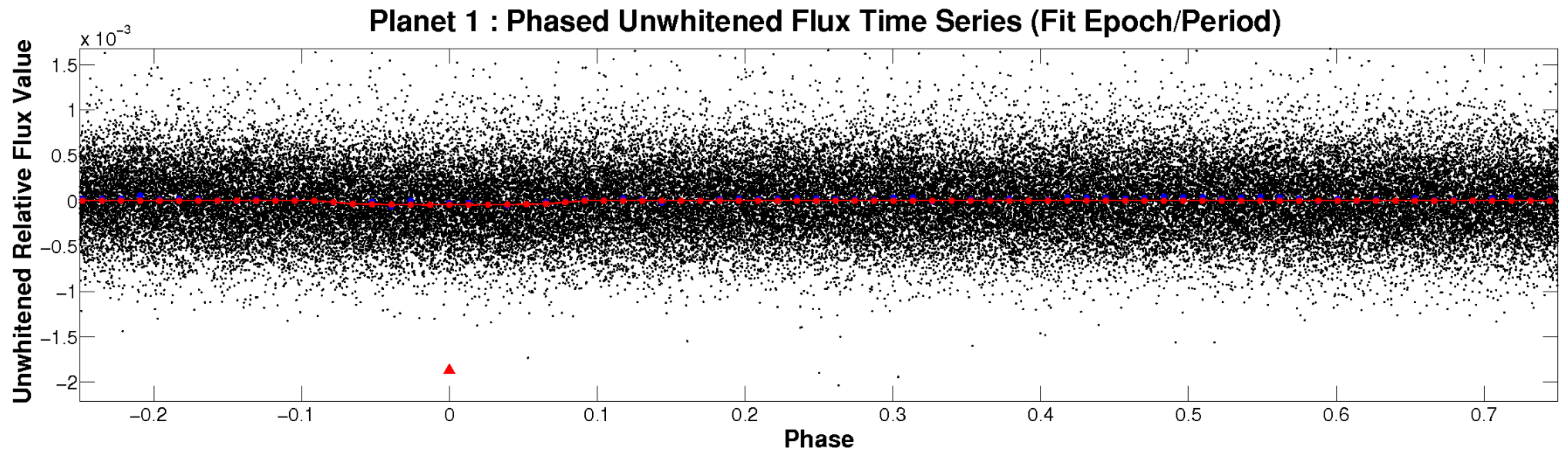


ALT Odd/Even

TCE 004949795-01

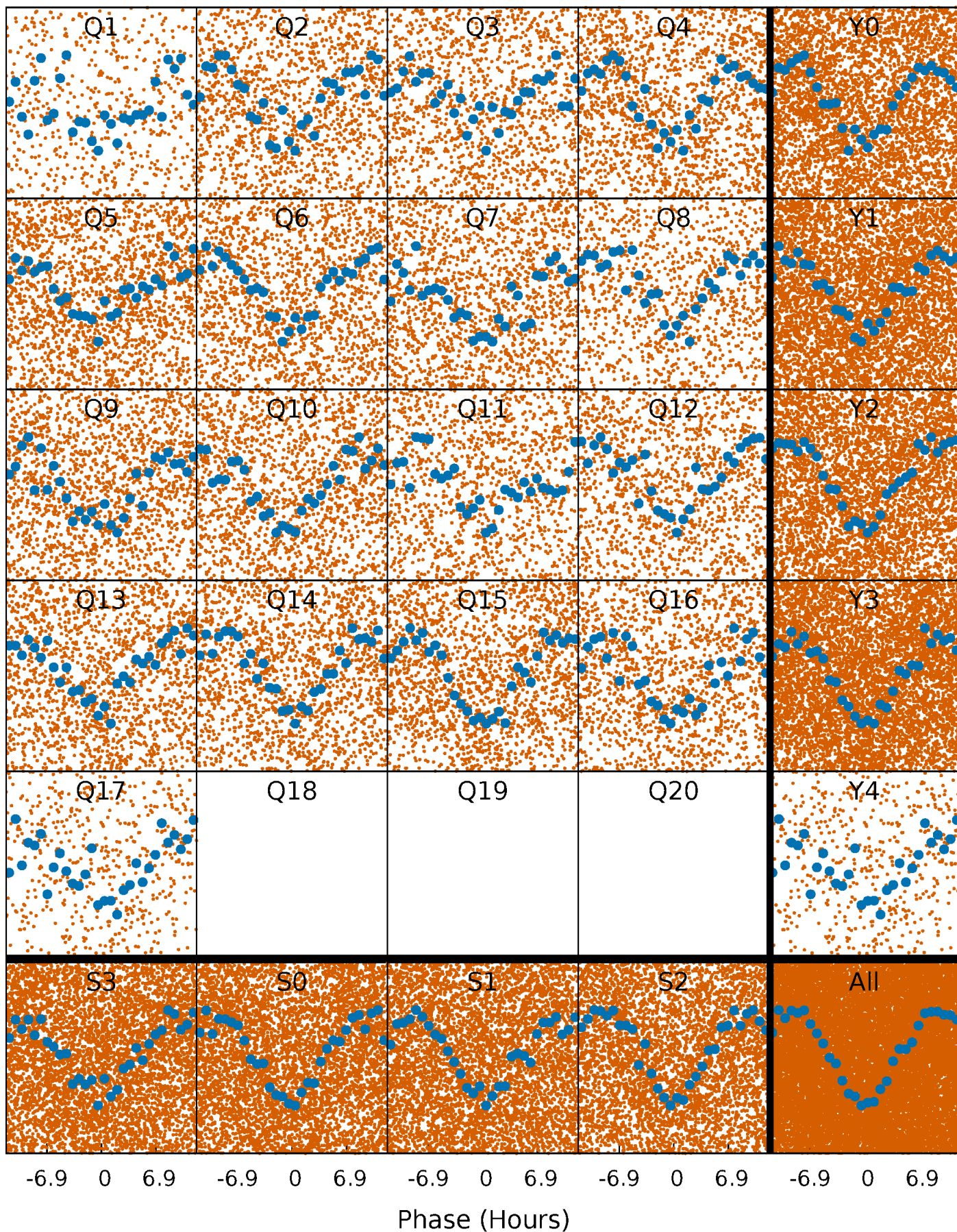


Non-Whitened Vs. Whitened Light Curve



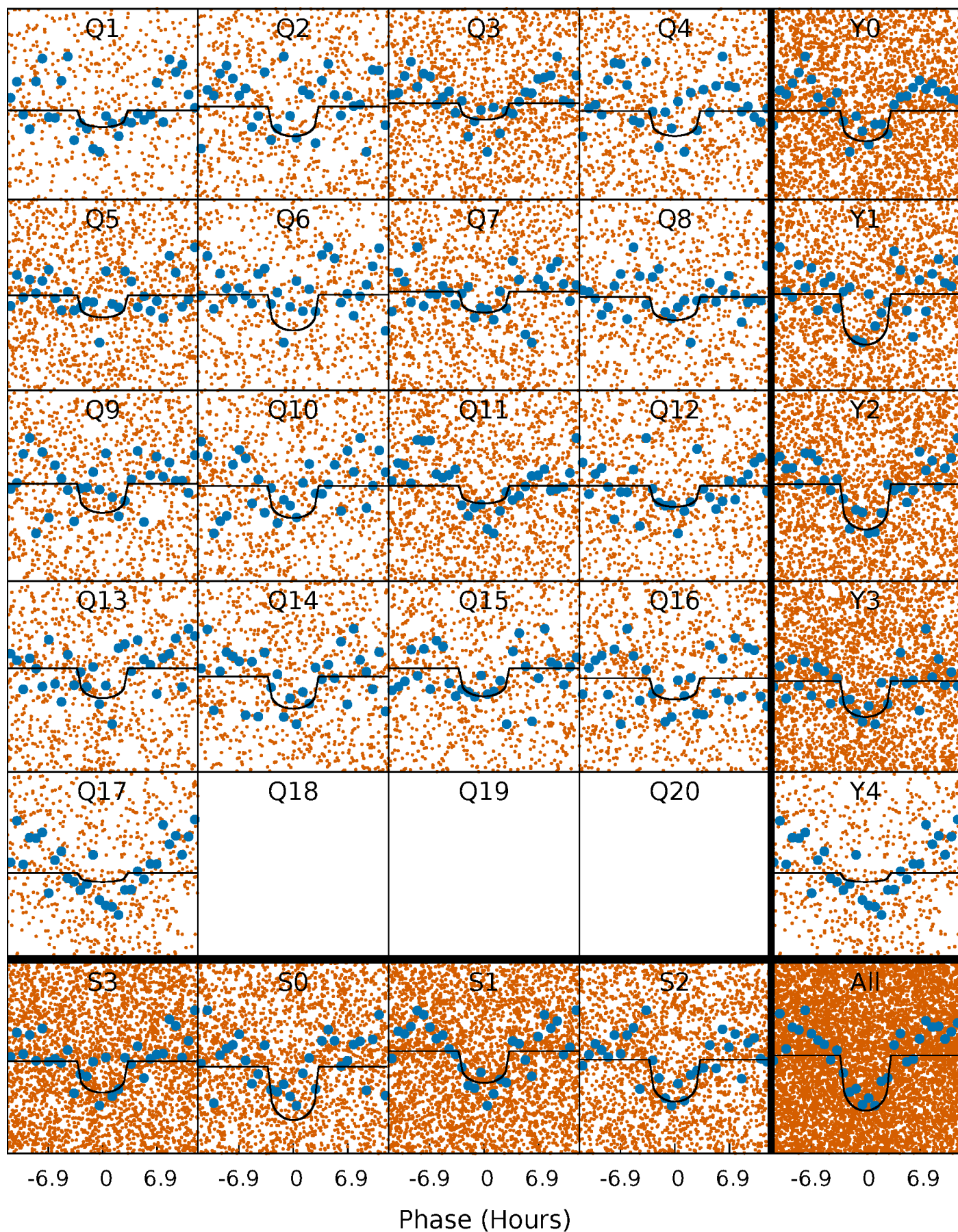
PDC Quarter-Phased Transit Curves

TCE 004949795-01 P= 1.564030 Days $T_0=133.061620$ (BKJD)



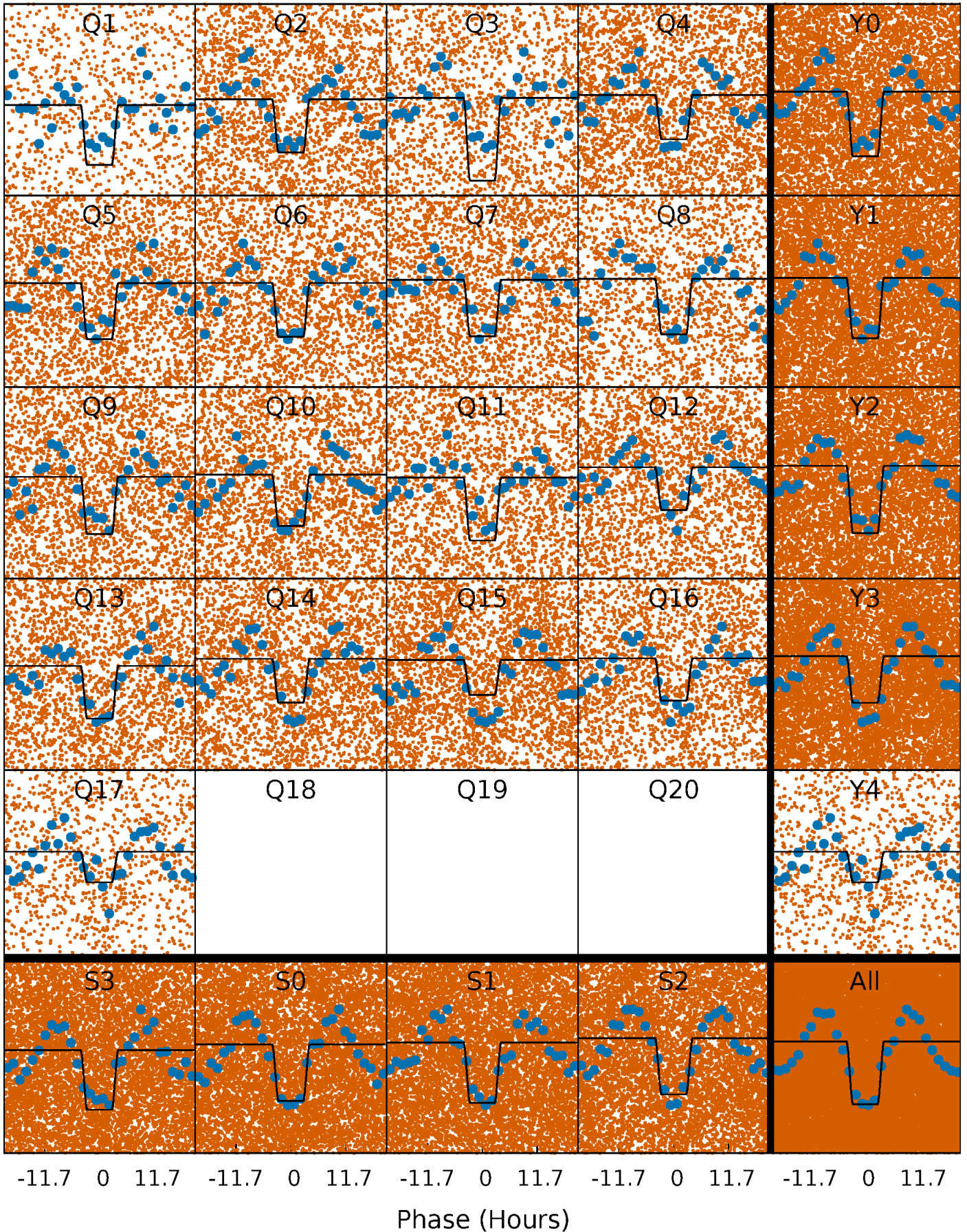
DV Quarter-Phased Transit Curves

TCE 004949795-01 P= 1.564030 Days $T_0=133.061620$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

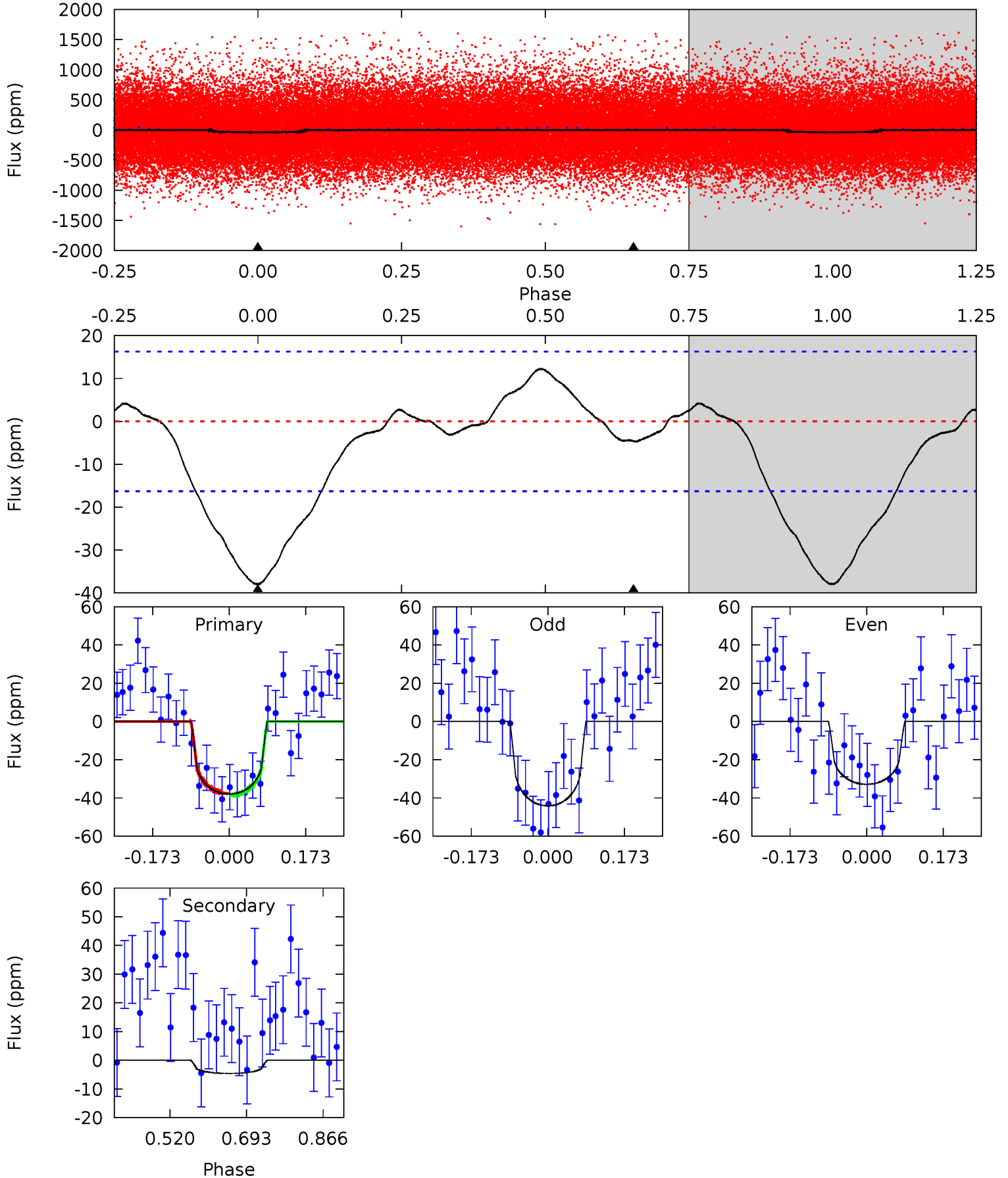
TCE 004949795-01 P= 1.563999 Days $T_0=133.074614$ (BKJD)



DV Model-Shift Uniqueness Test

004949795-01, P = 1.564030 Days, E = 131.497590 Days

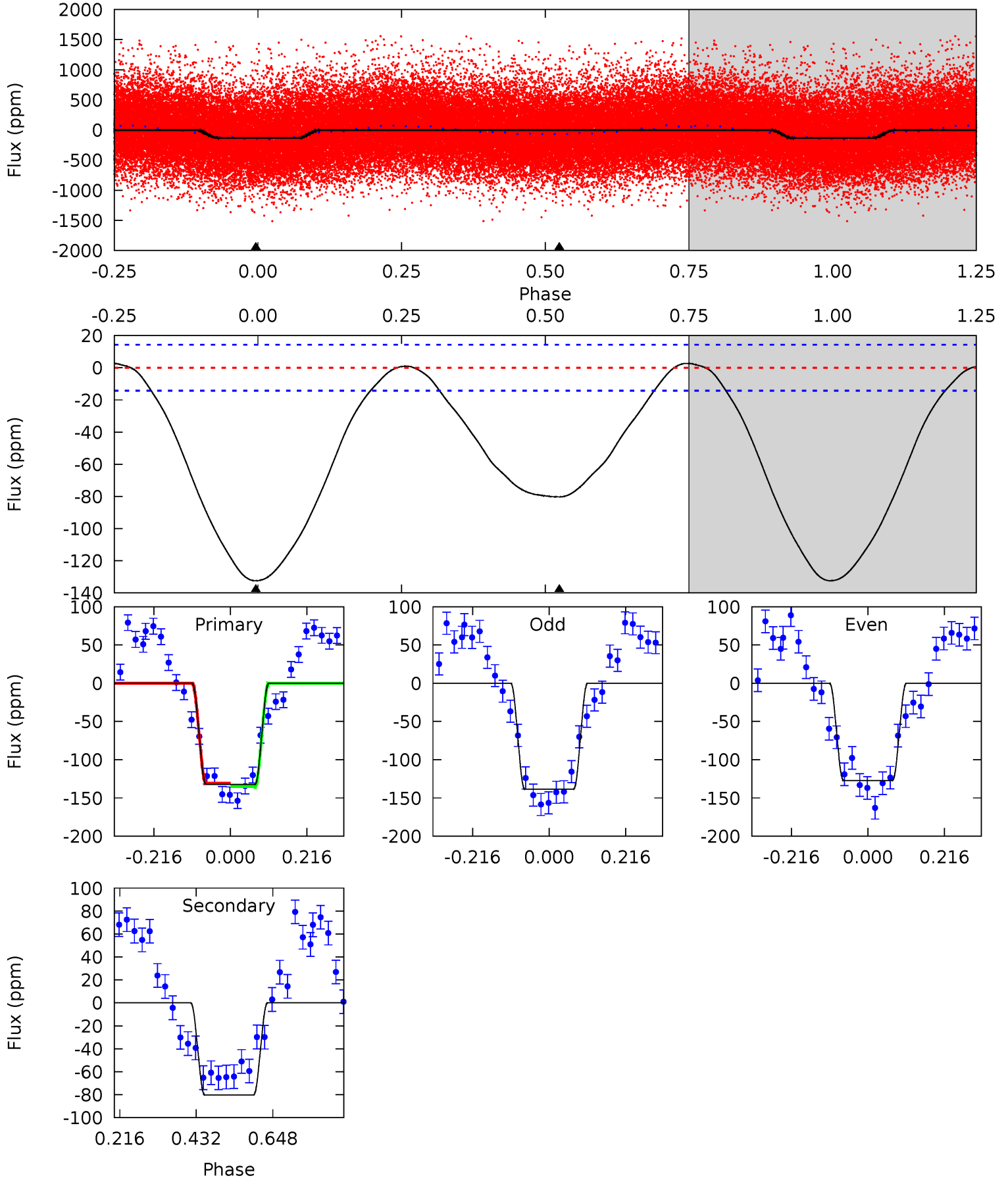
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
10.4	1.26	0	0	4.45	1.36	1.02	10.4	10.4	1.26	1.26	1.55	0.96	0.24	0.14



Alt Model-Shift Uniqueness Test

004949795-01, P = 1.563999 Days, E = 131.510615 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
40.8	24.7	0	0	4.40	1.24	1.01	40.8	40.8	24.7	24.7	1.74	1.04	0.02	0.66



Stellar Parameters For KIC 004949795

	$T_{\text{eff}} (K)$	$\log(g)$	$[\text{Fe}/\text{H}]$	$R (R_{\odot})$	$M (M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	5713^{+156}_{-173}	$4.541^{+0.031}_{-0.178}$	$0.070^{+0.250}_{-0.300}$	$0.893^{+0.215}_{-0.072}$	$1.010^{+0.083}_{-0.134}$	$2.000^{+0.345}_{-0.948}$
	+3%/-3%	+1%/-4%	+357%/-429%	+24%/-8%	+8%/-13%	+17%/-47%
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 004949795-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-5 ± 4	$0.81^{+0.62}_{-0.51}$	2089^{+129}_{-87}	3329^{+1447}_{-1182}	$2.373^{+14.248}_{-2.002}$
Alt.	-80 ± 3	$1.26^{+0.71}_{-0.61}$	2097^{+117}_{-86}	4928^{+1944}_{-787}	19^{+54}_{-11}

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

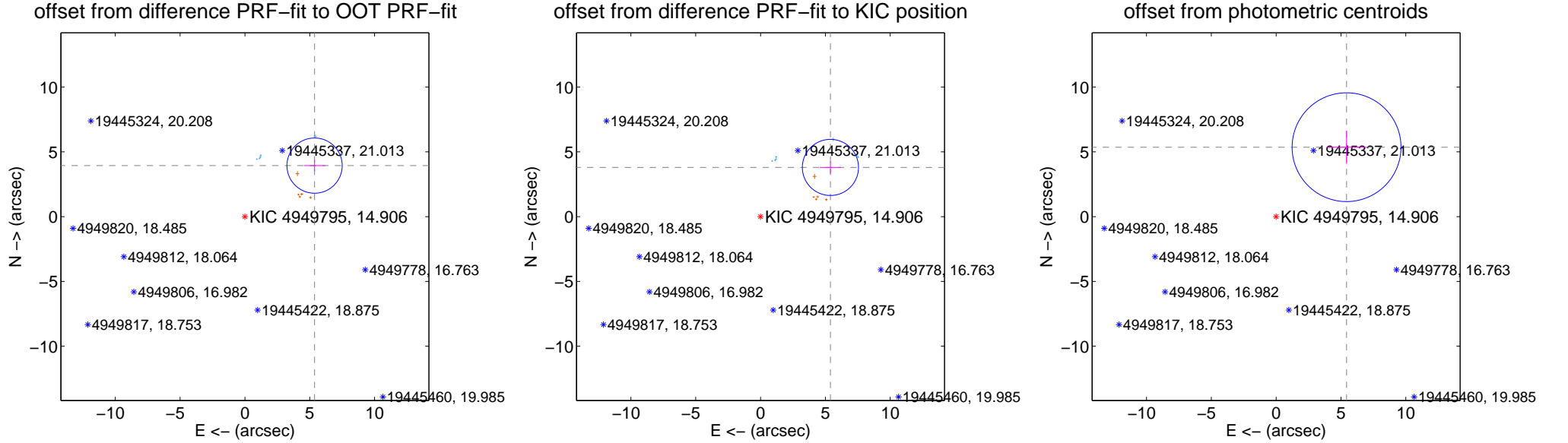
DV Centroid Data

Supplemental centroid analysis for 004949795-01. Kepler magnitude: 14.91. Transit SNR 9.83

There are 8 quarters with good PRF difference image offsets

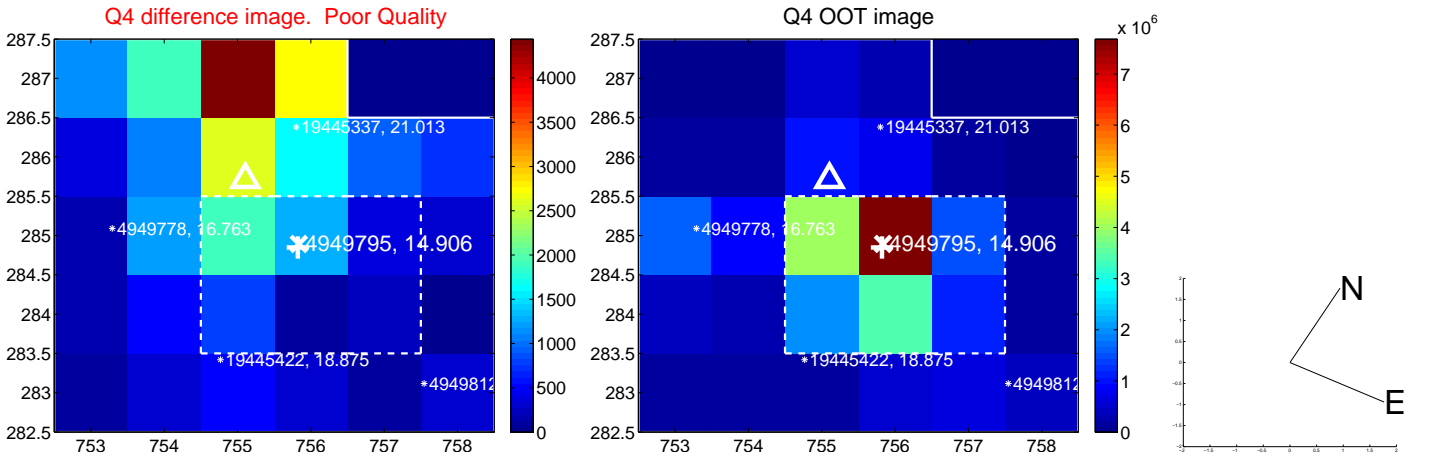
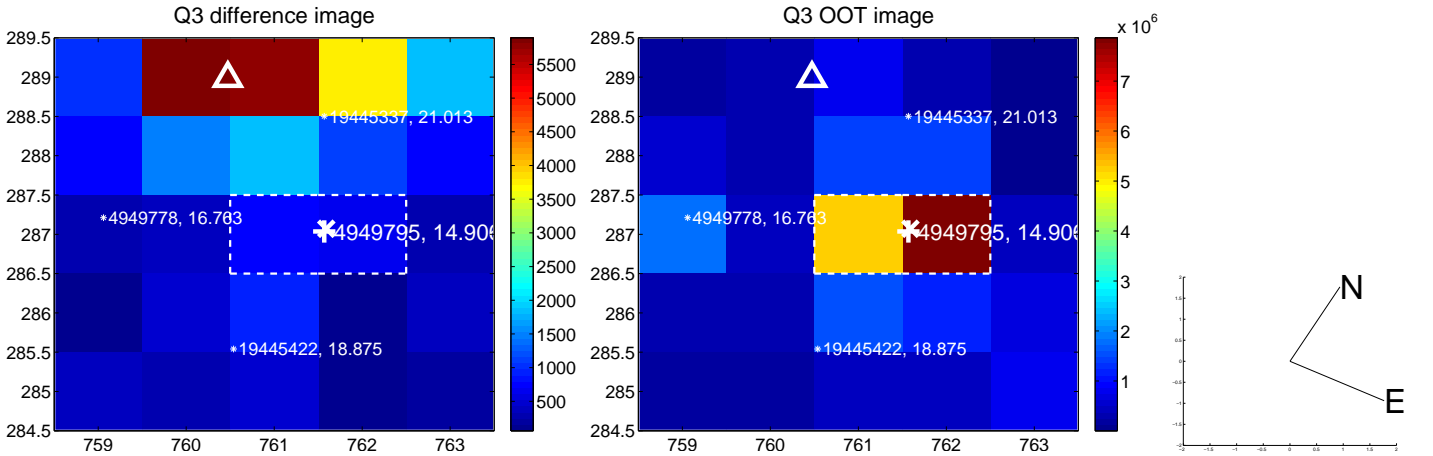
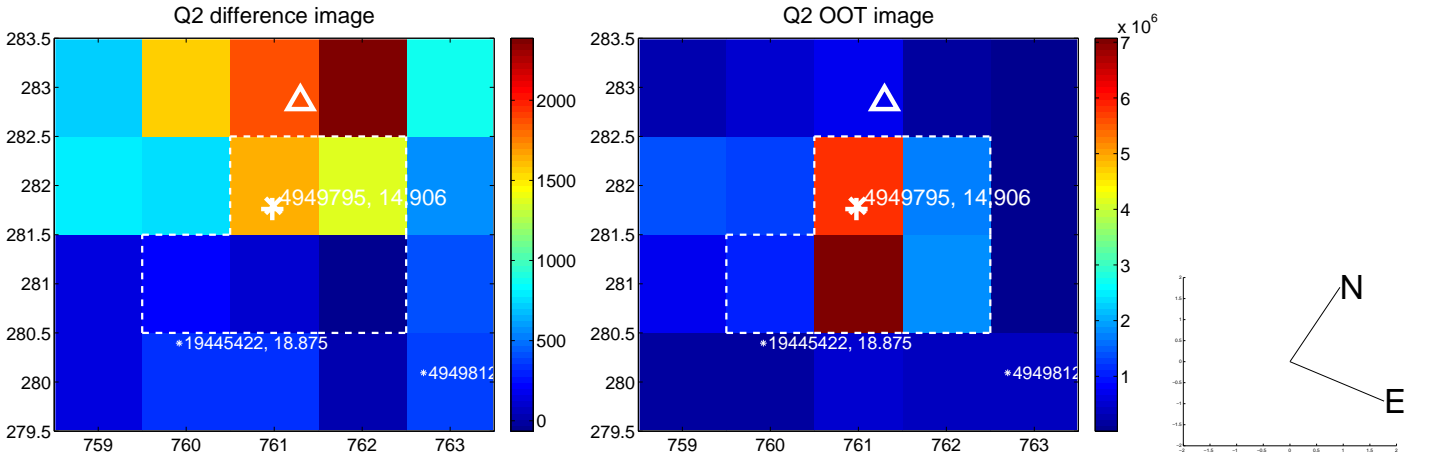
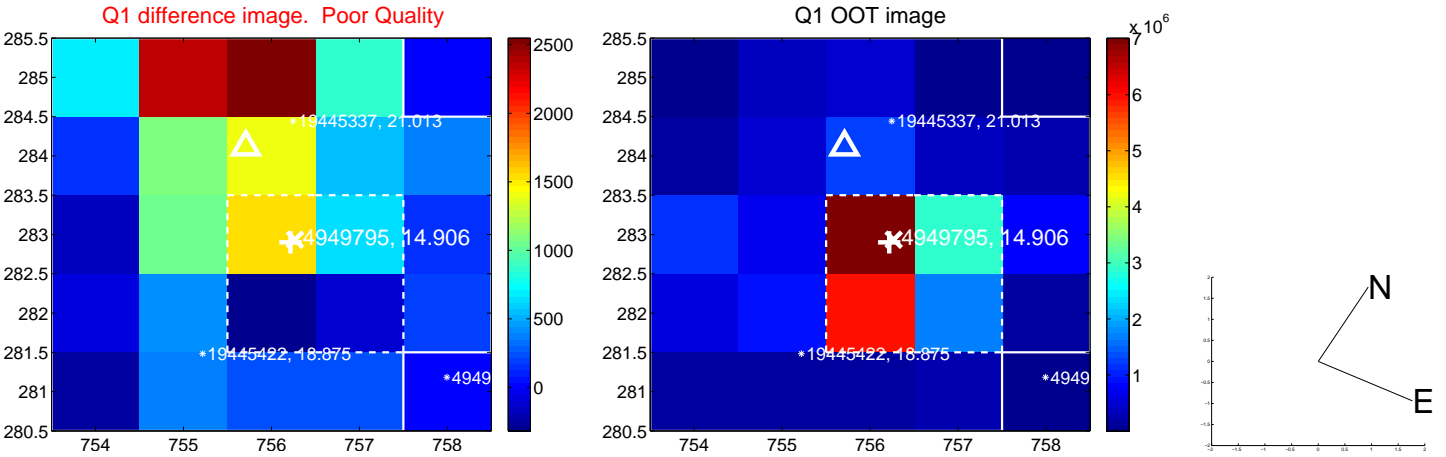
The direct PRF centroid is offset from the target star catalog position by about 0.29 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	6.661 ± 0.710	9.38	-5.372 ± 0.816	3.939 ± 0.453
PRF-fit source offset from KIC position	6.594 ± 0.722	9.14	-5.390 ± 0.820	3.799 ± 0.465
photometric centroid source offset	7.63 ± 1.40	5.45	-5.43 ± 1.51	5.36 ± 1.28

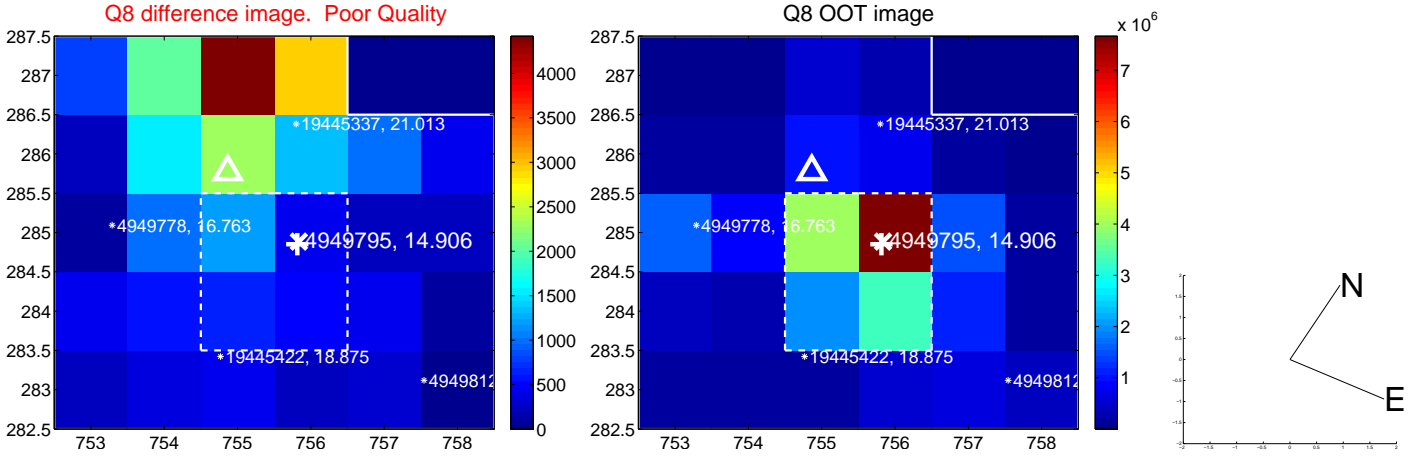
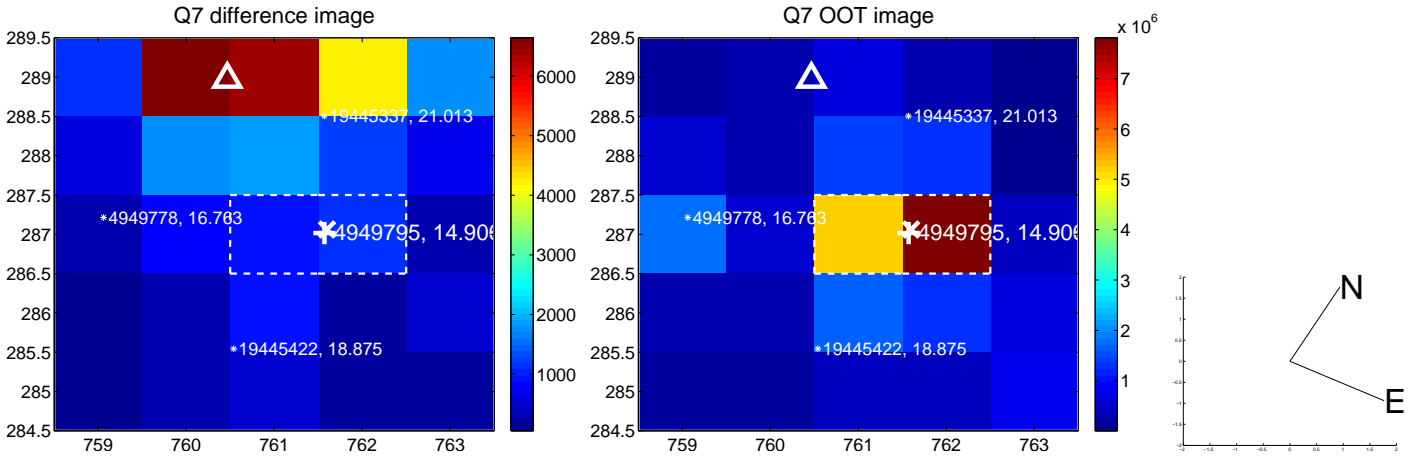
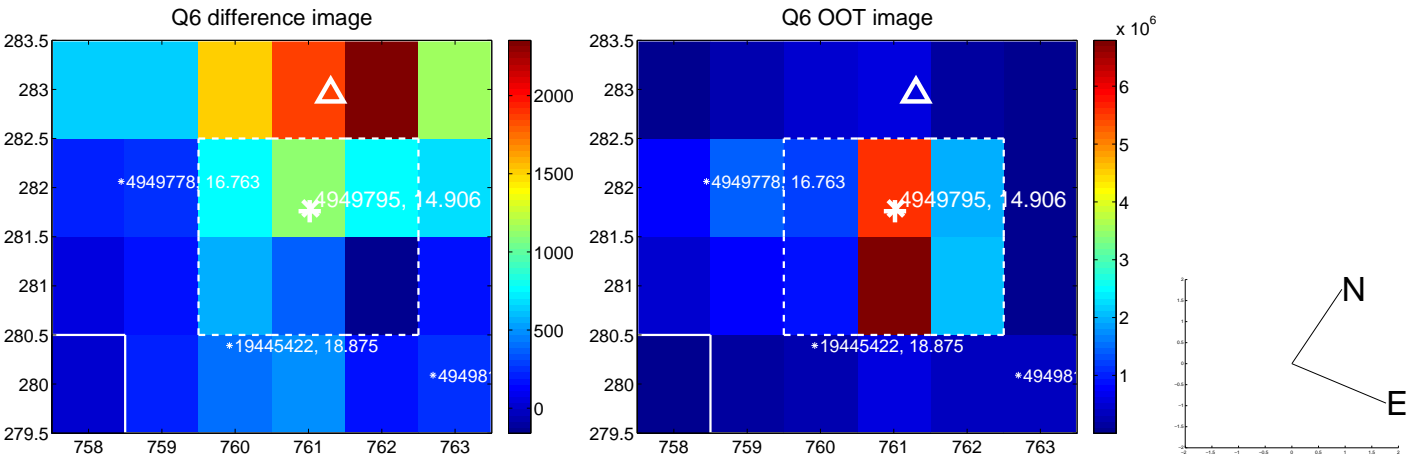
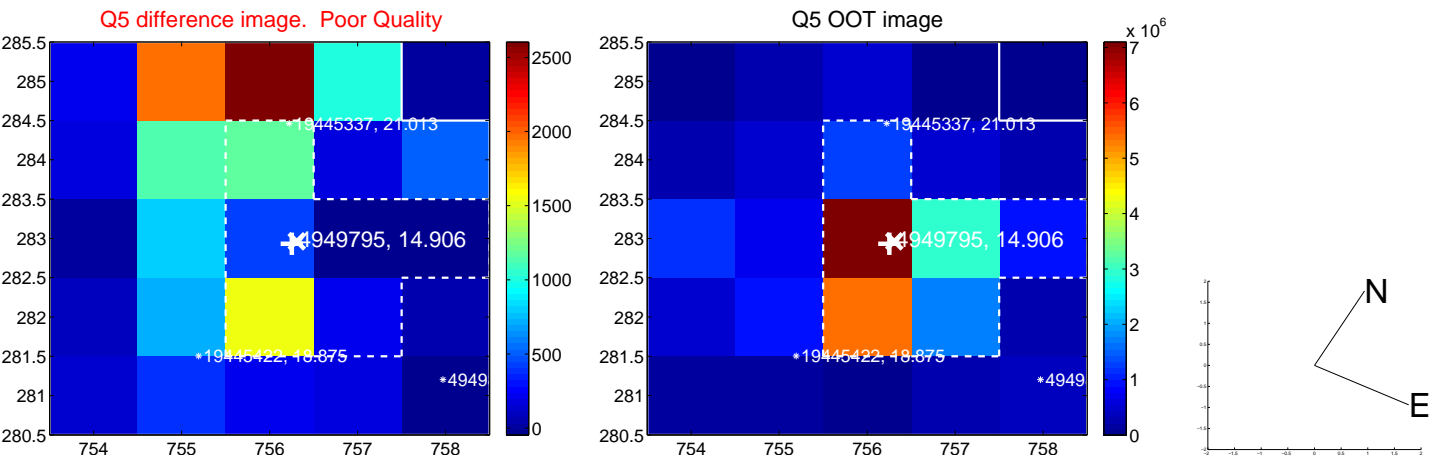


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

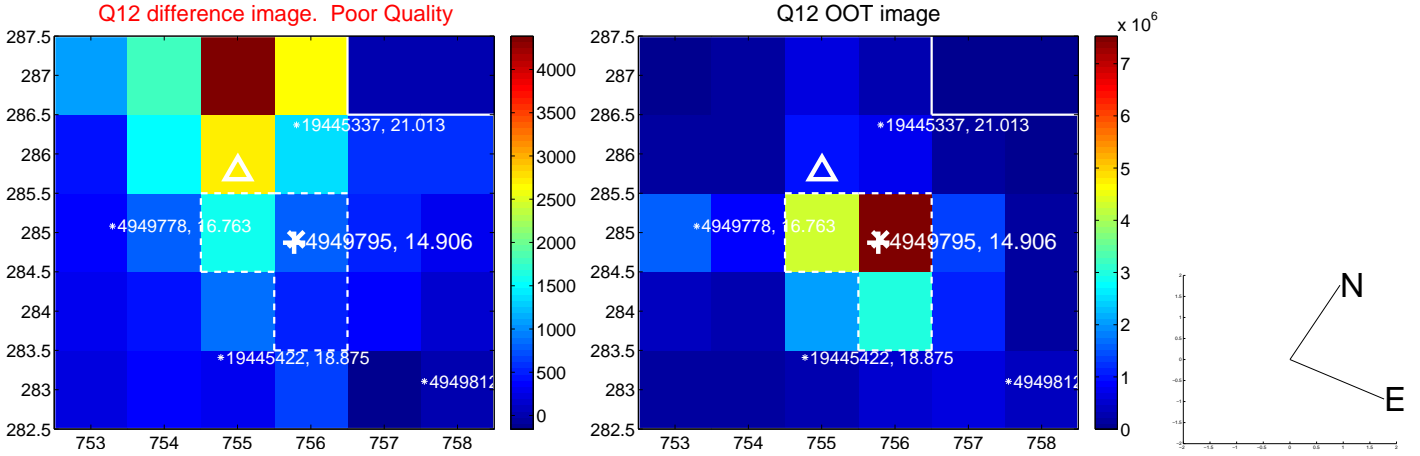
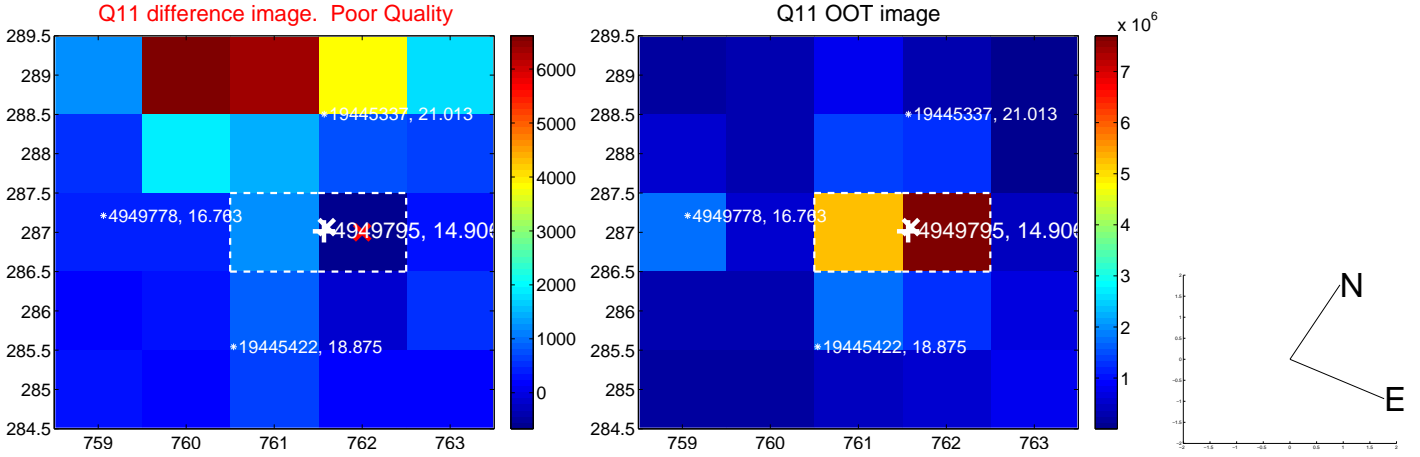
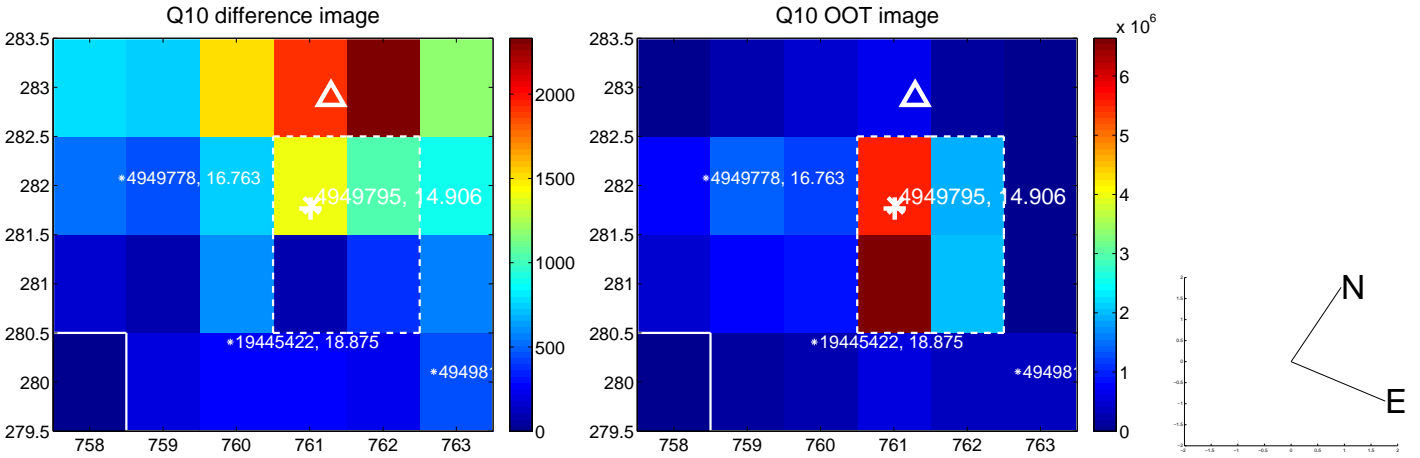
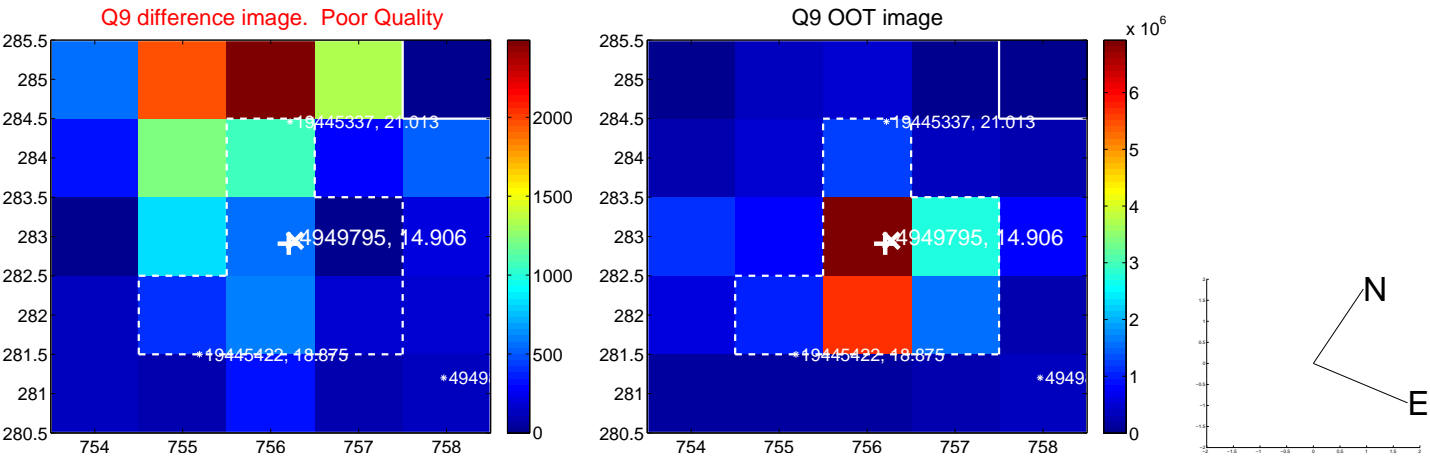
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



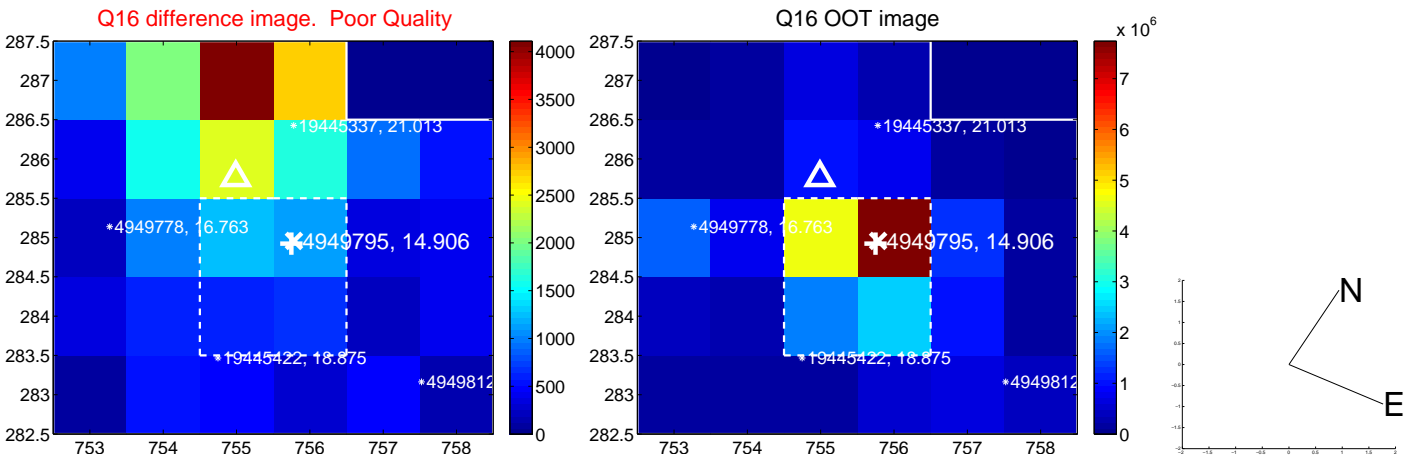
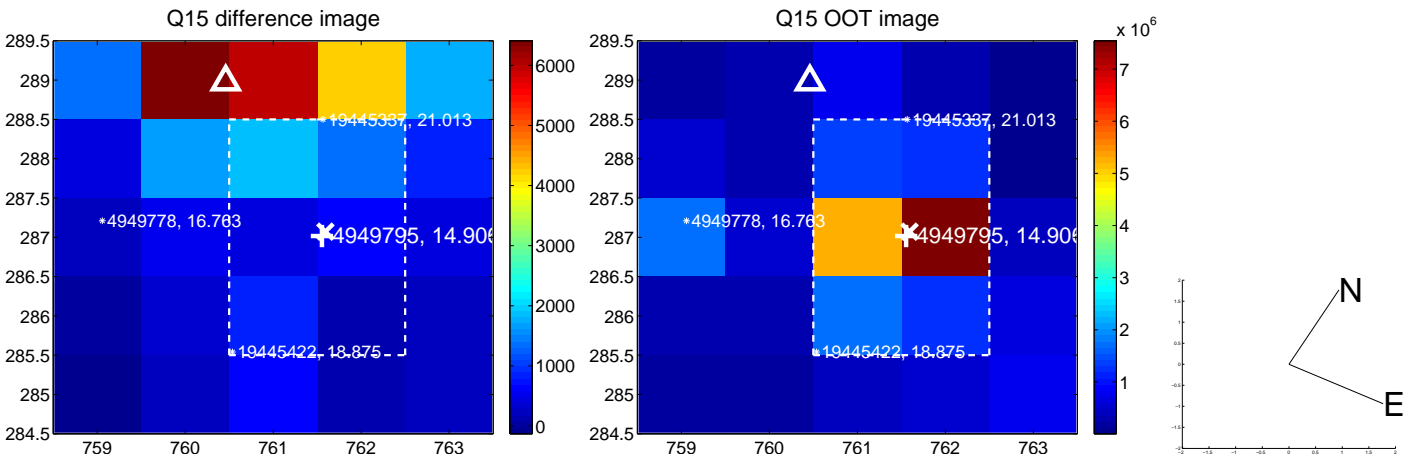
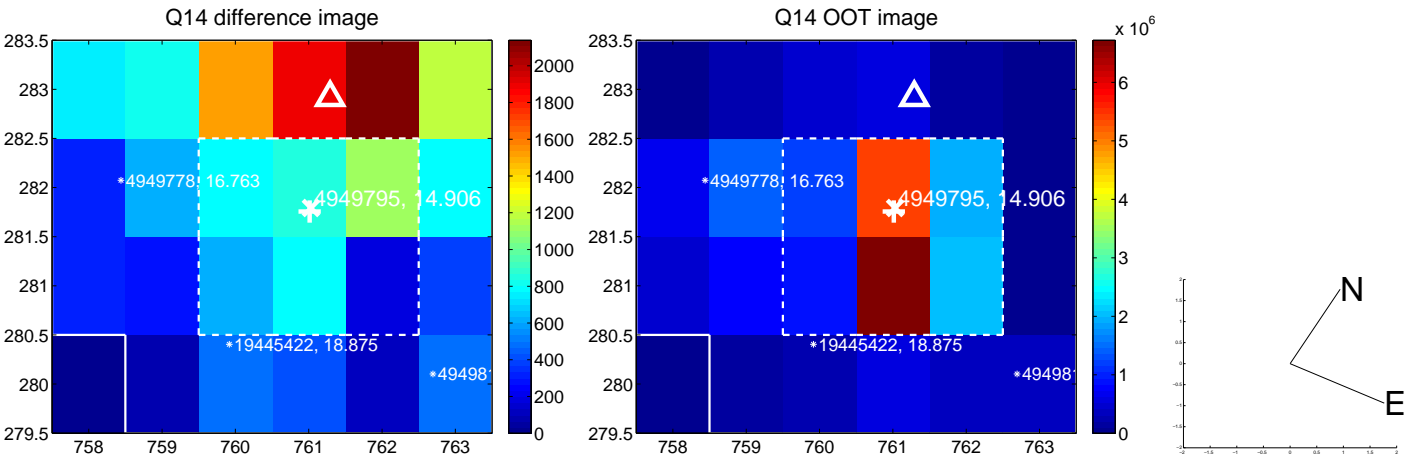
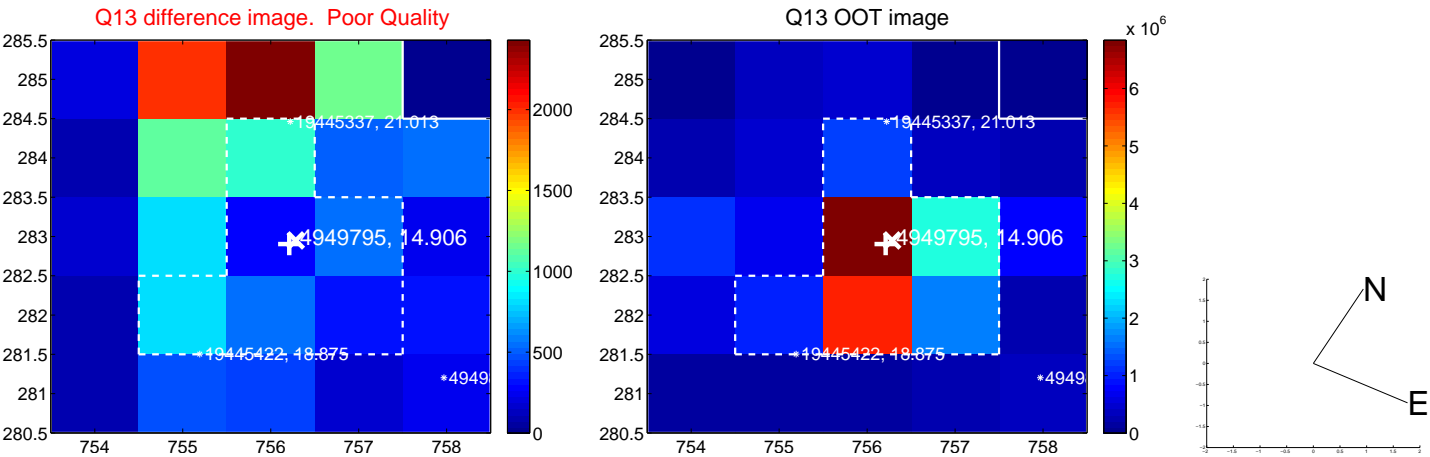
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



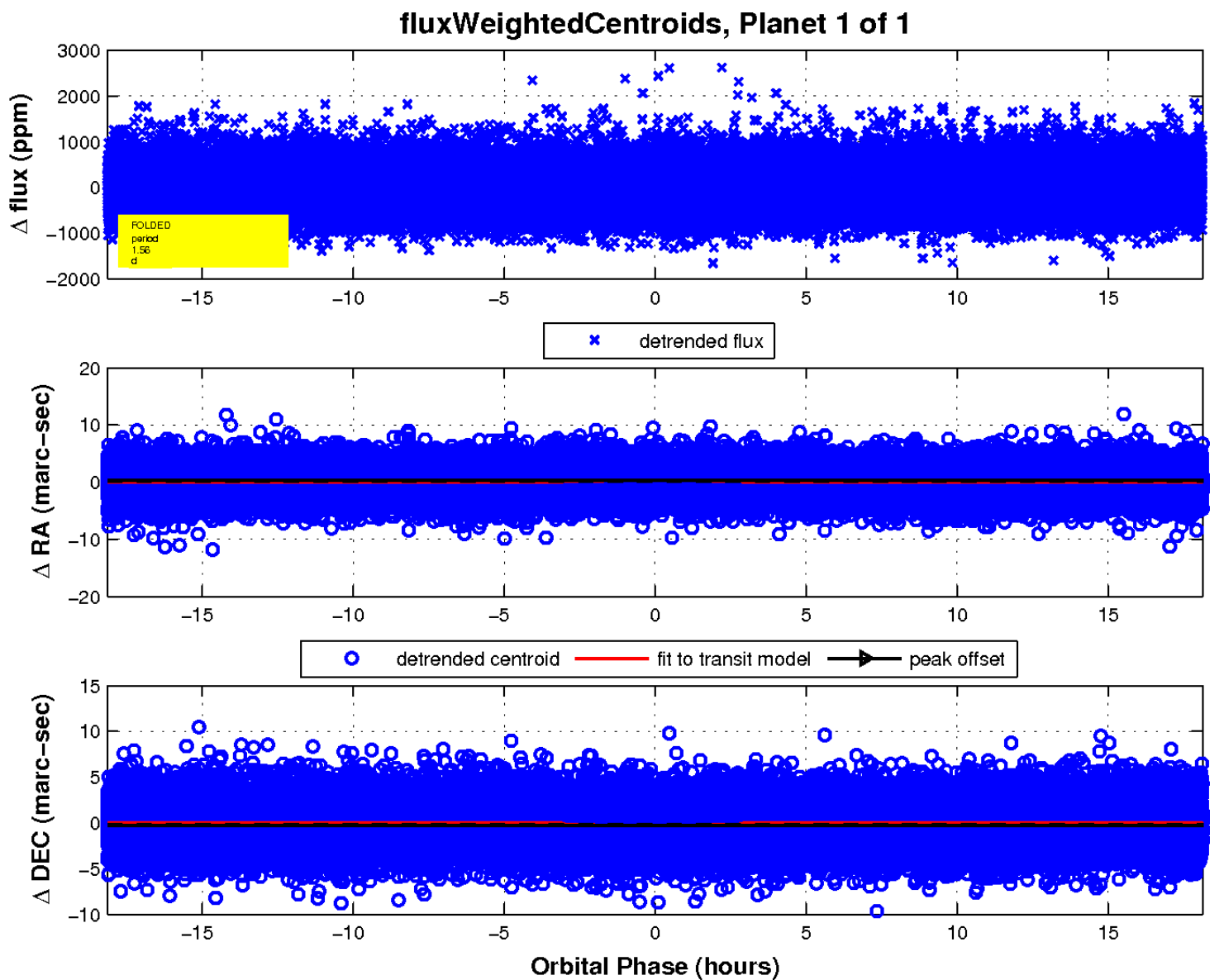
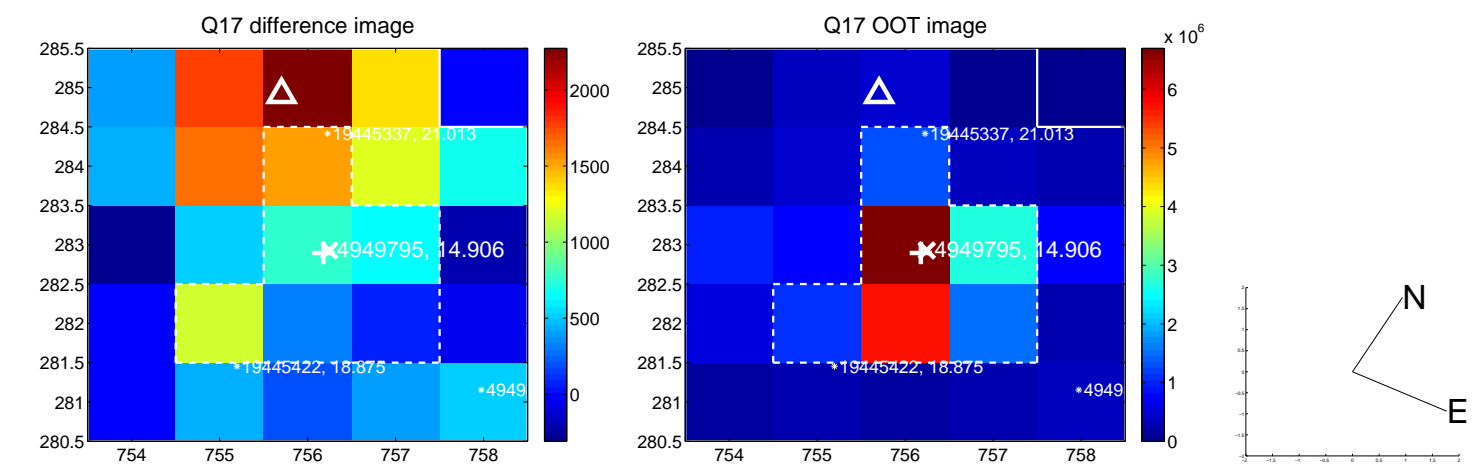
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



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



UKIRT Image

