

KIC 011183539

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})
011183539-01	OBS	No	0.644354	131.693245	84.1	2.611	11.9	12.5	3.63	7694	3.89	119959.83

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
011183539-01	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—CENT_SATURATED

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

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

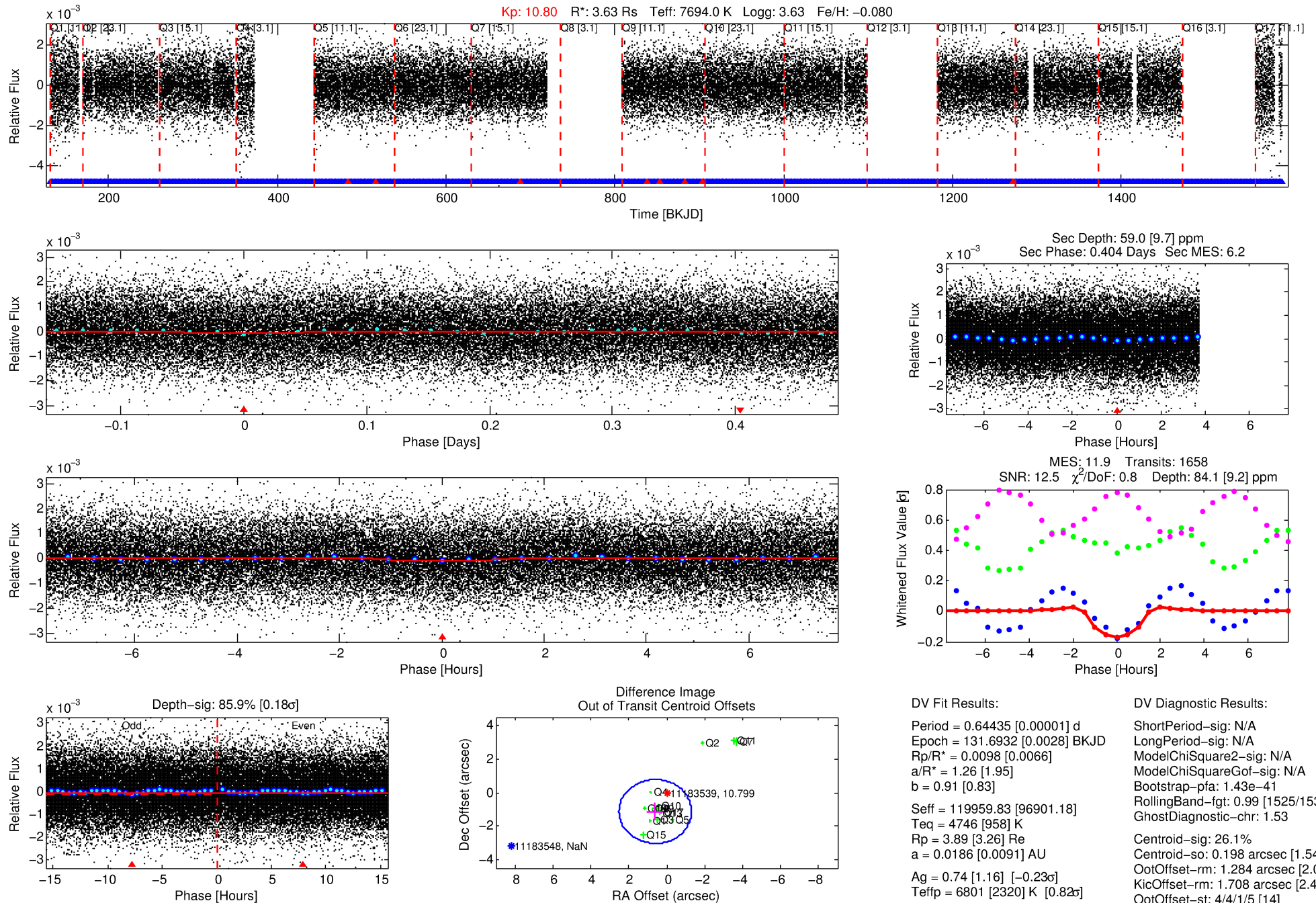
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 011183539-01

No Significant Match Found

DV One-Page Summary

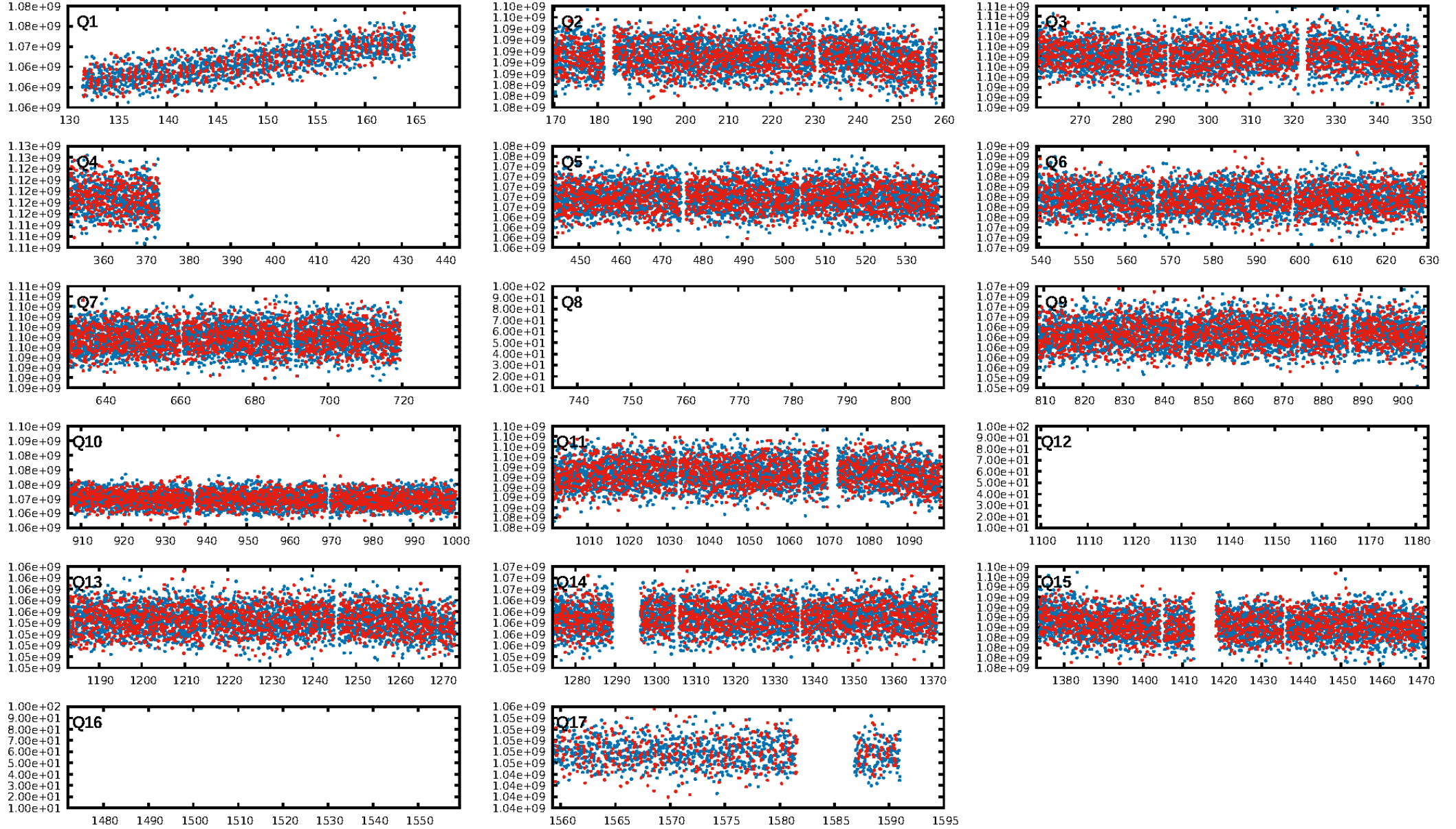
KIC: 11183539 Candidate: 1 of 1 Period: 0.644 d



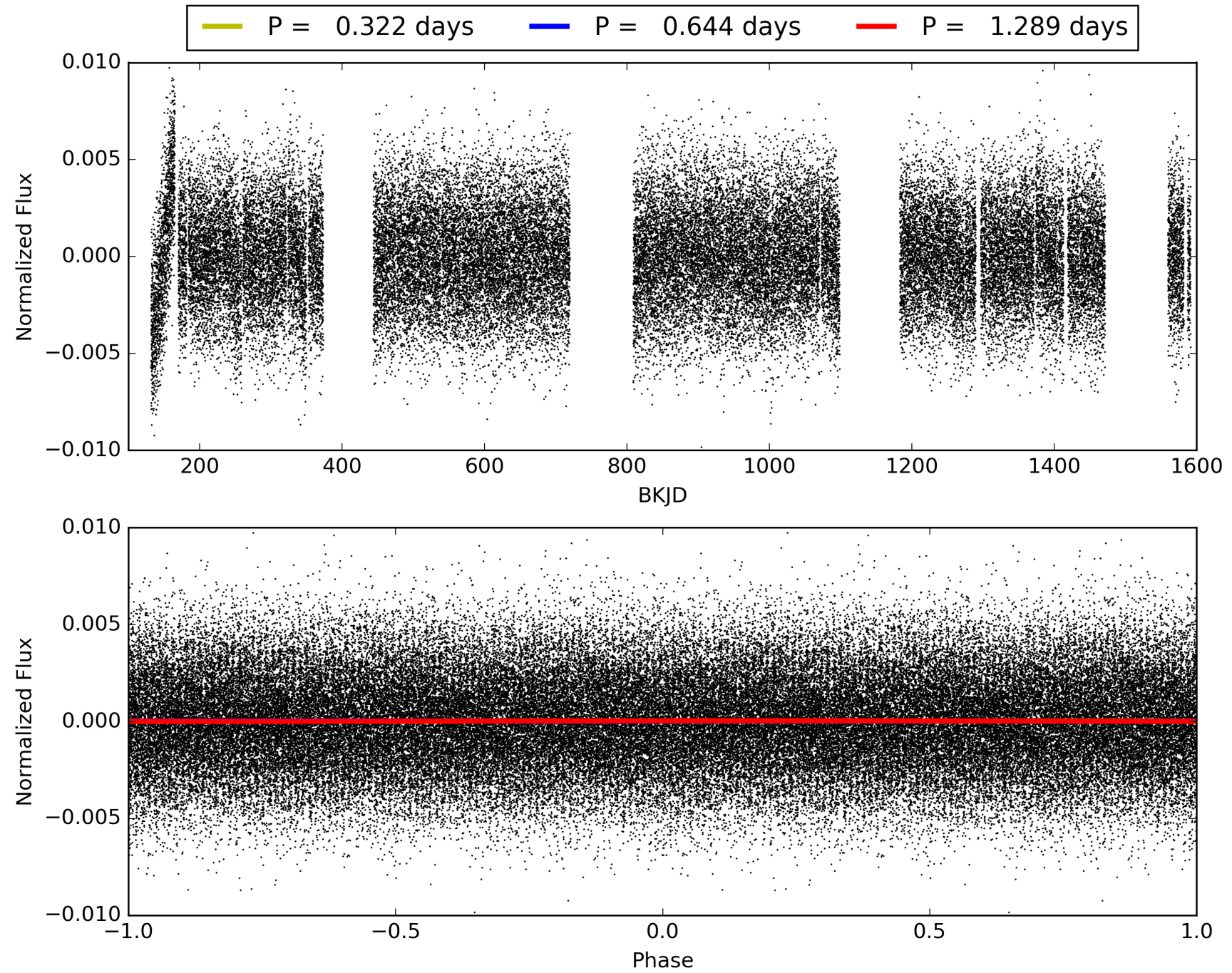
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 29-Jan-2016 01:31:31 Z

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

TCE 011183539-01, PDC Light Curves

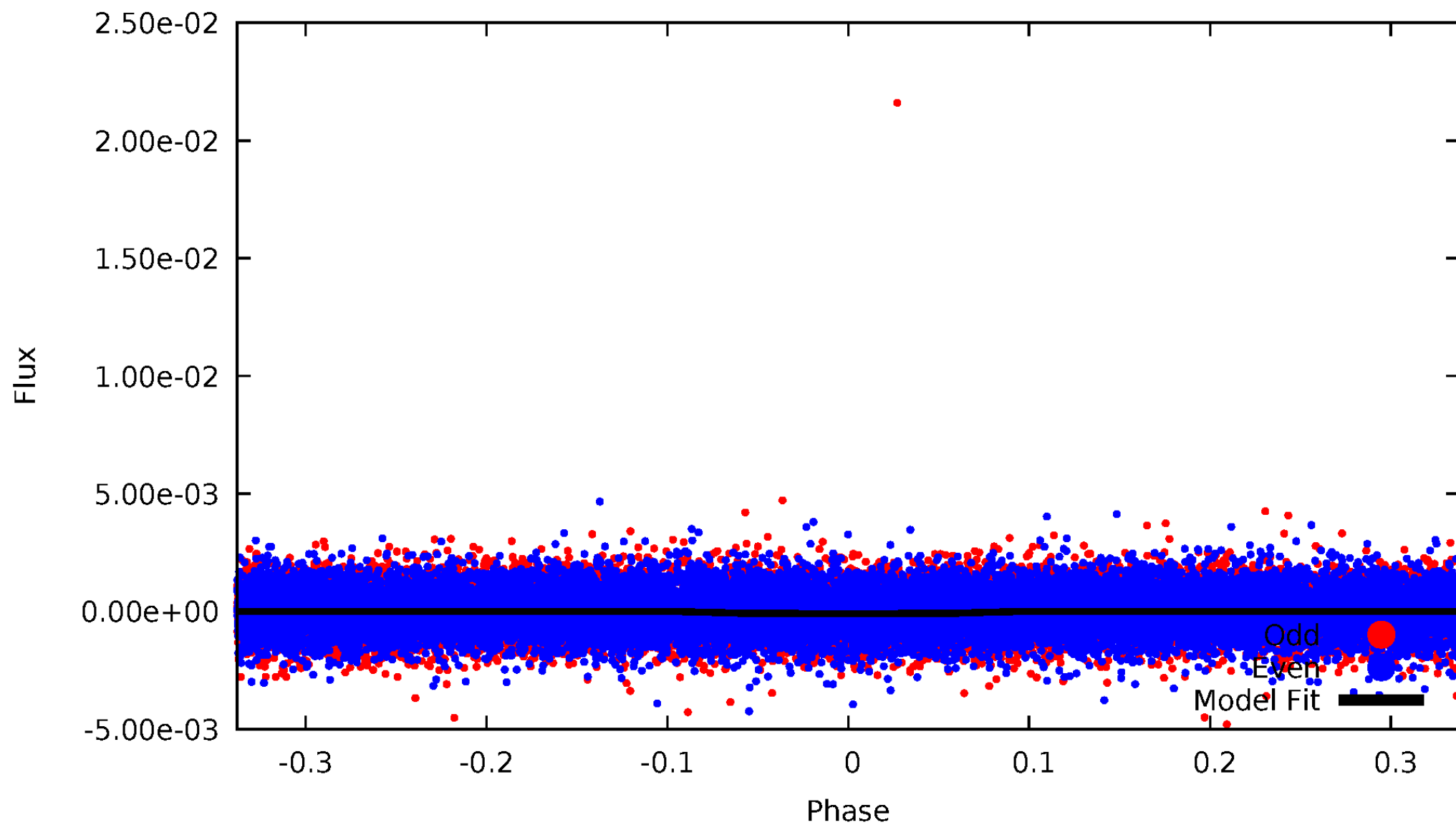


TCE 011183539-01



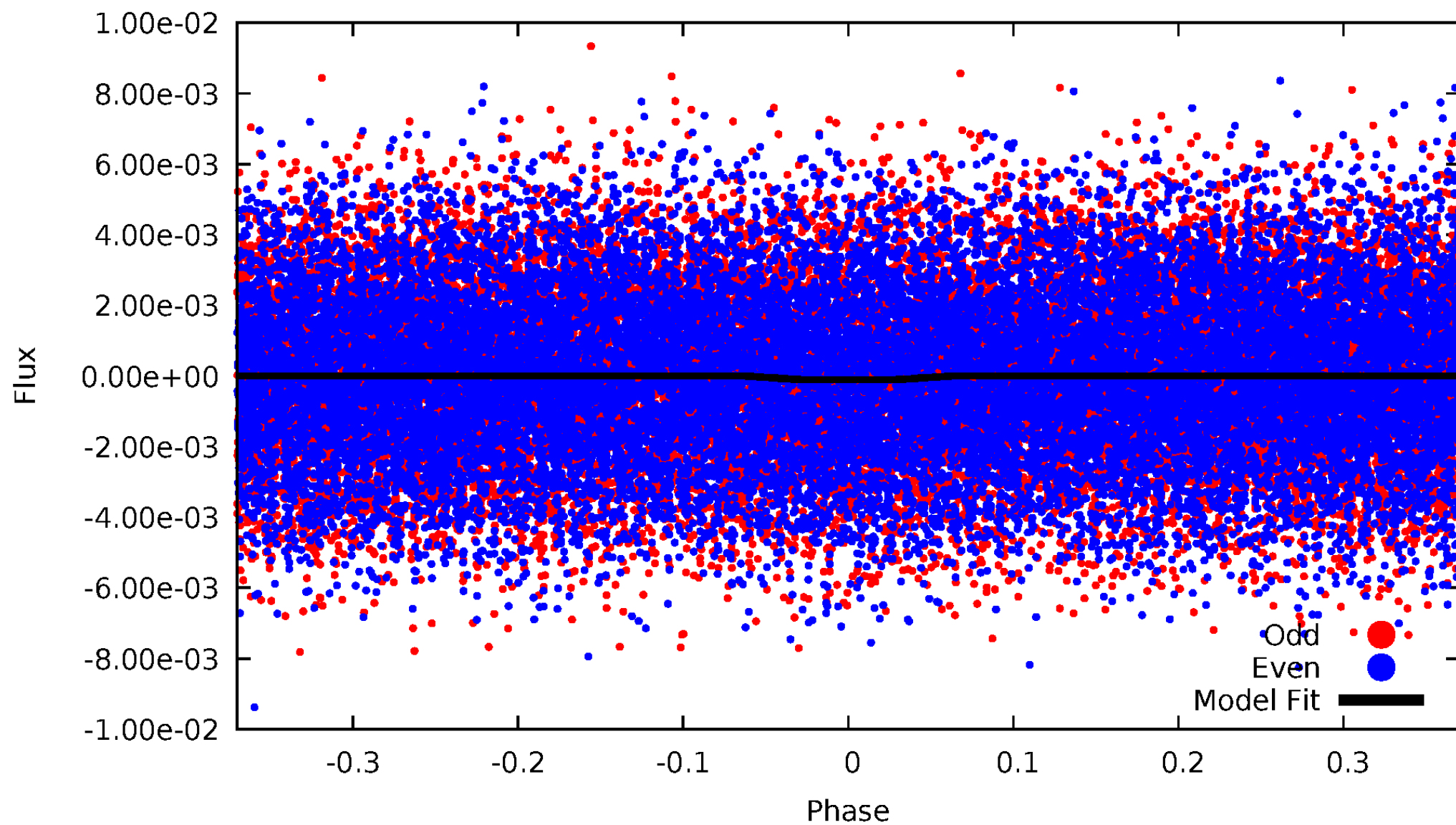
DV Odd/Even

TCE 011183539-01



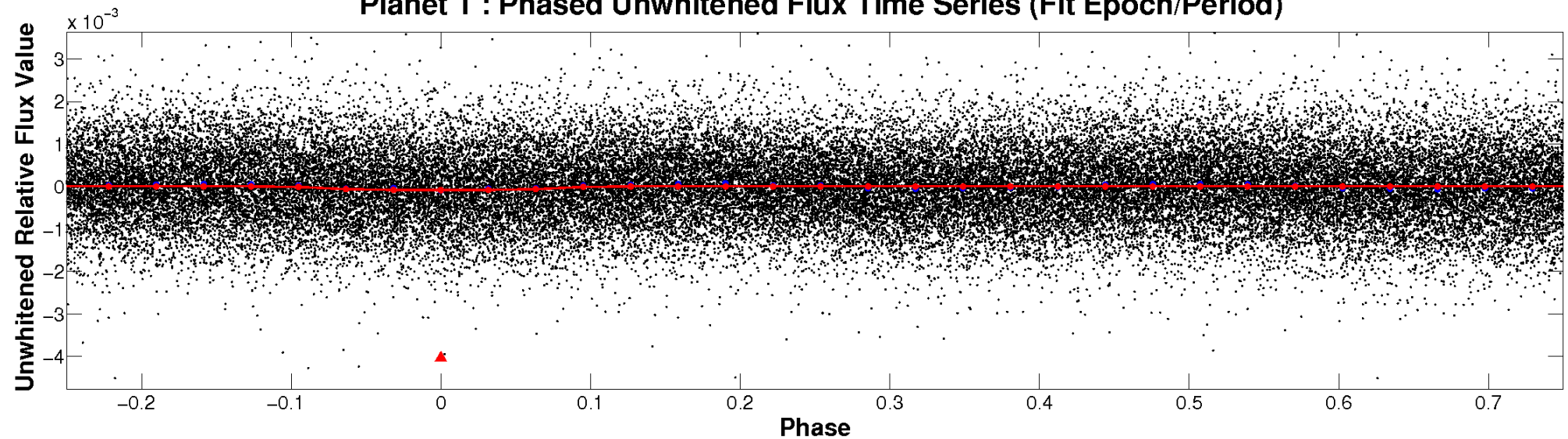
ALT Odd/Even

TCE 011183539-01

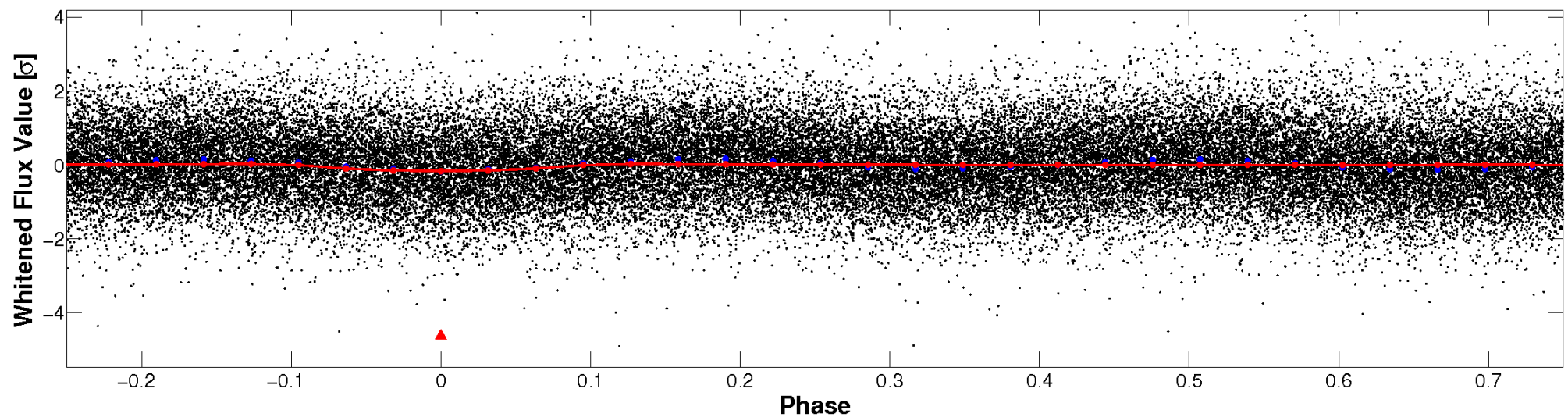


Non-Whitened Vs. Whitened Light Curve

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

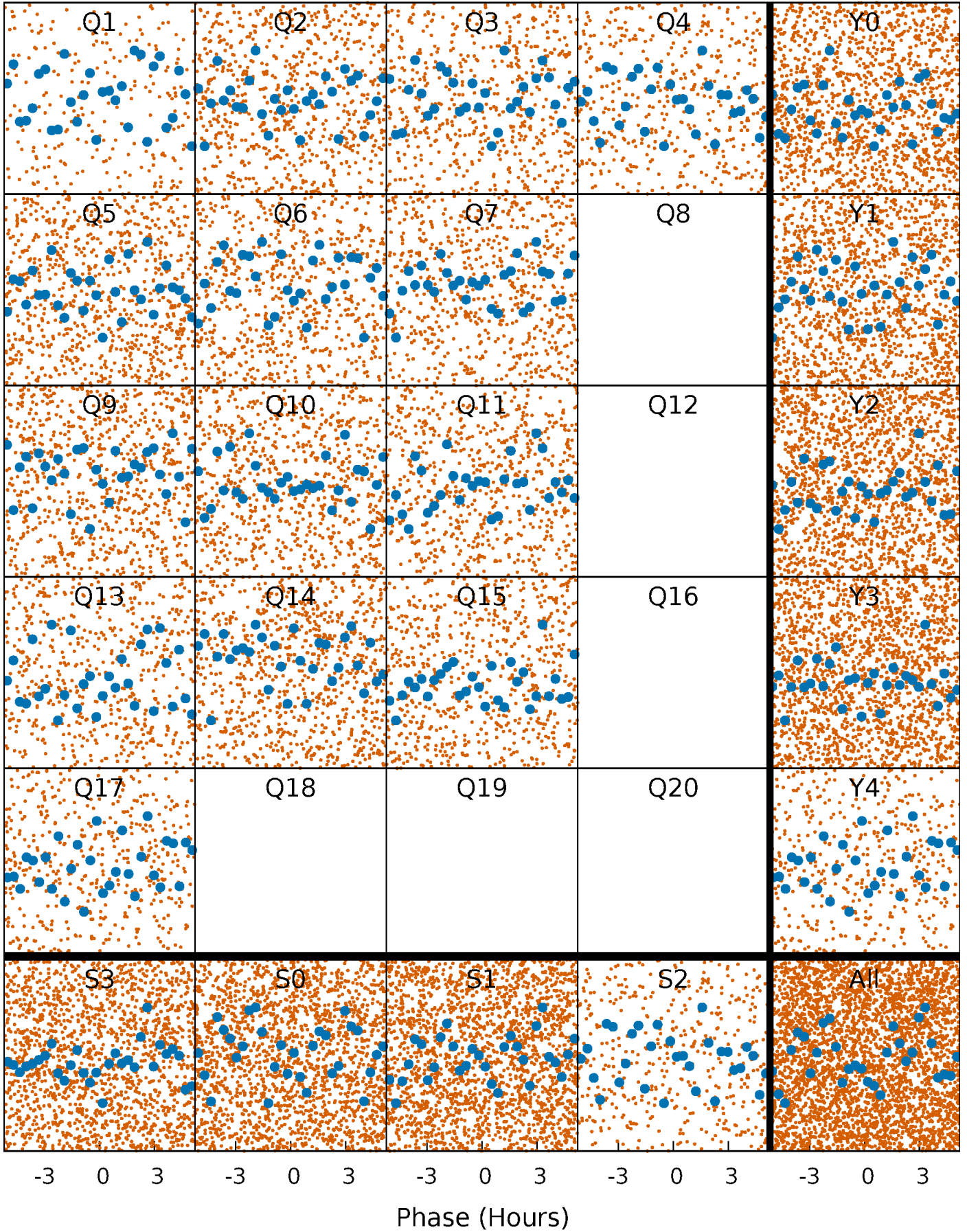


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



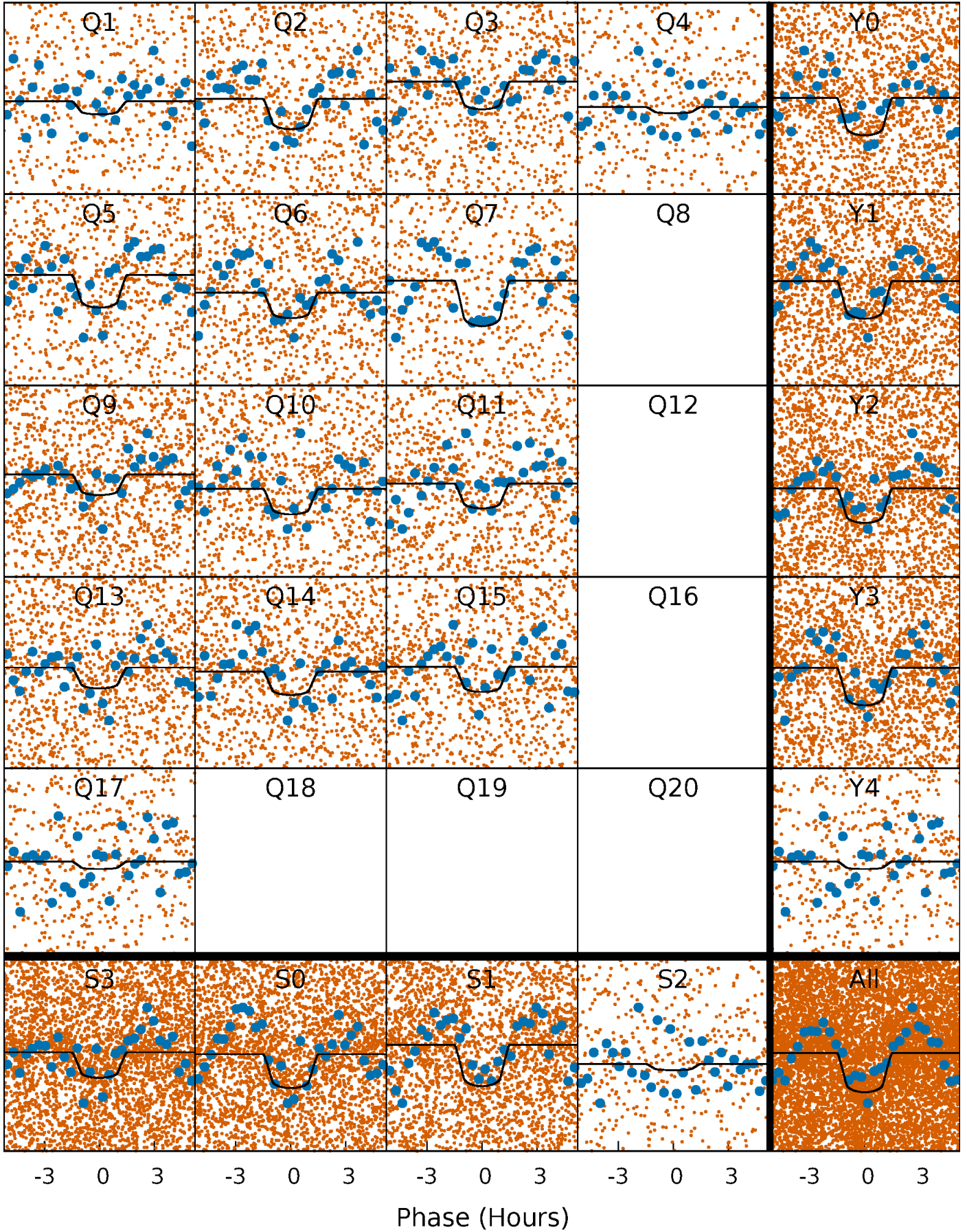
PDC Quarter-Phased Transit Curves

TCE 011183539-01 P= 0.644354 Days $T_0=131.693245$ (BKJD)



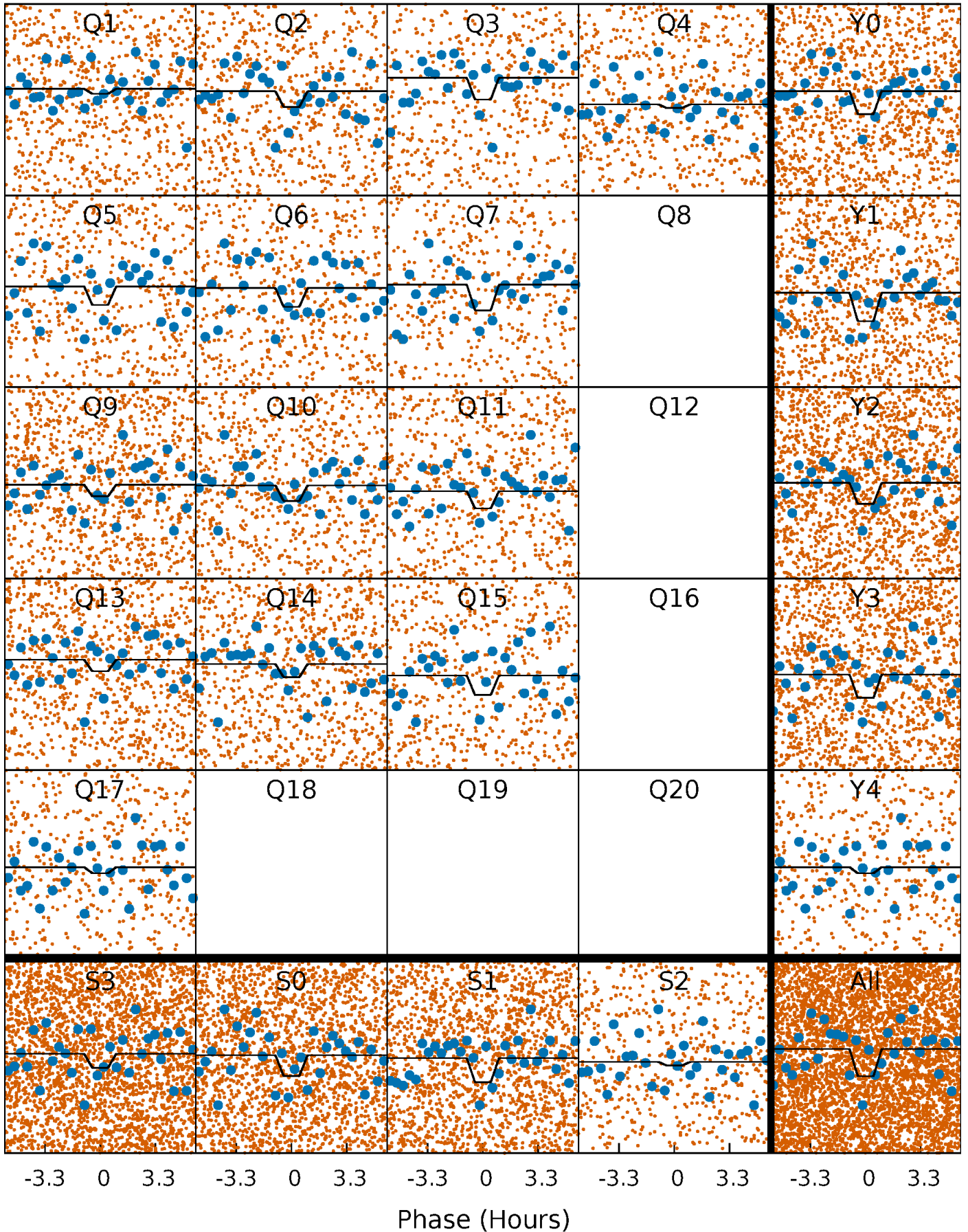
DV Quarter-Phased Transit Curves

TCE 011183539-01 P= 0.644354 Days $T_0=131.693245$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

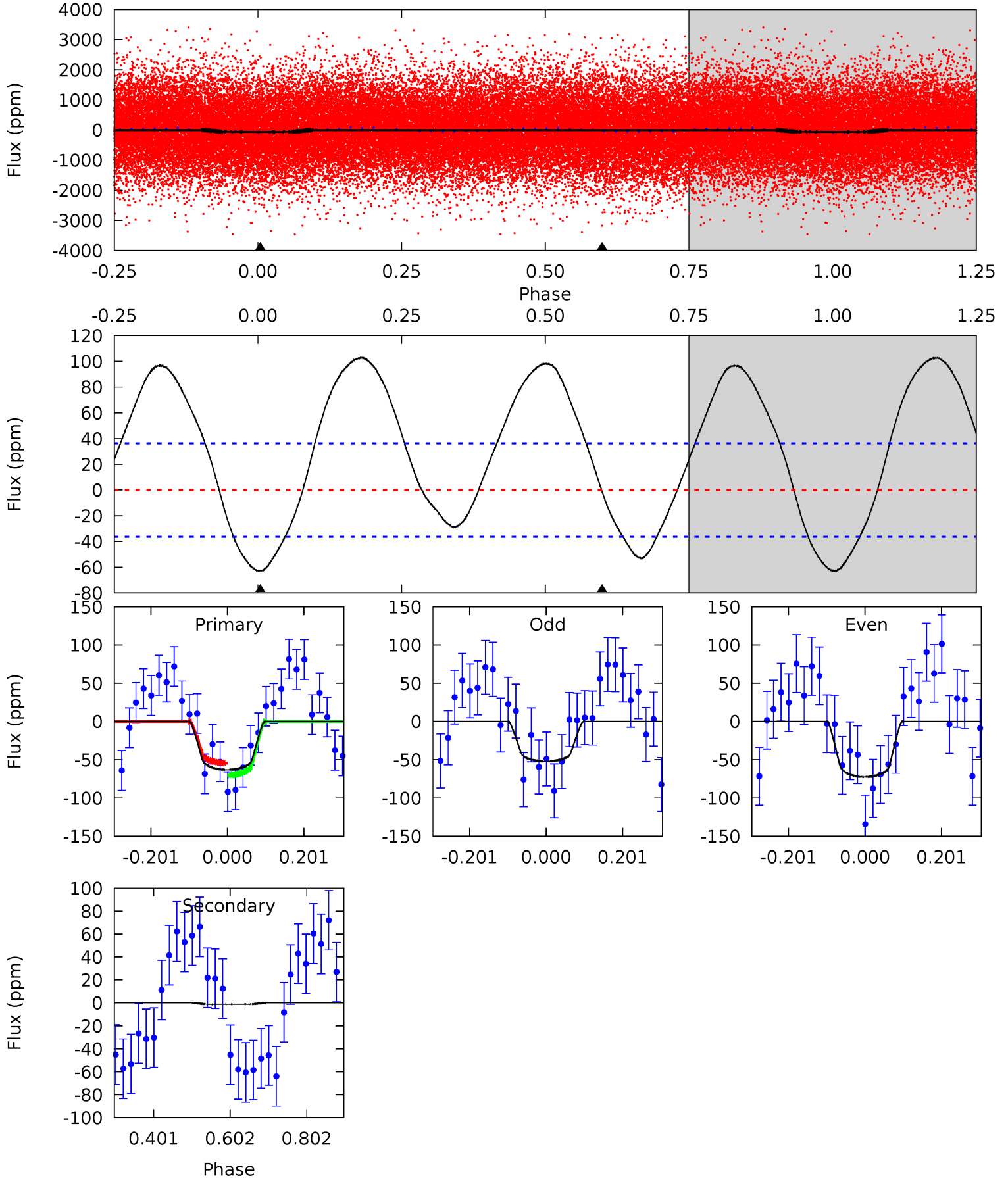
TCE 011183539-01 P= 0.644358 Days $T_0=131.692350$ (BKJD)



DV Model-Shift Uniqueness Test

011183539-01, P = 0.644354 Days, E = 131.048891 Days

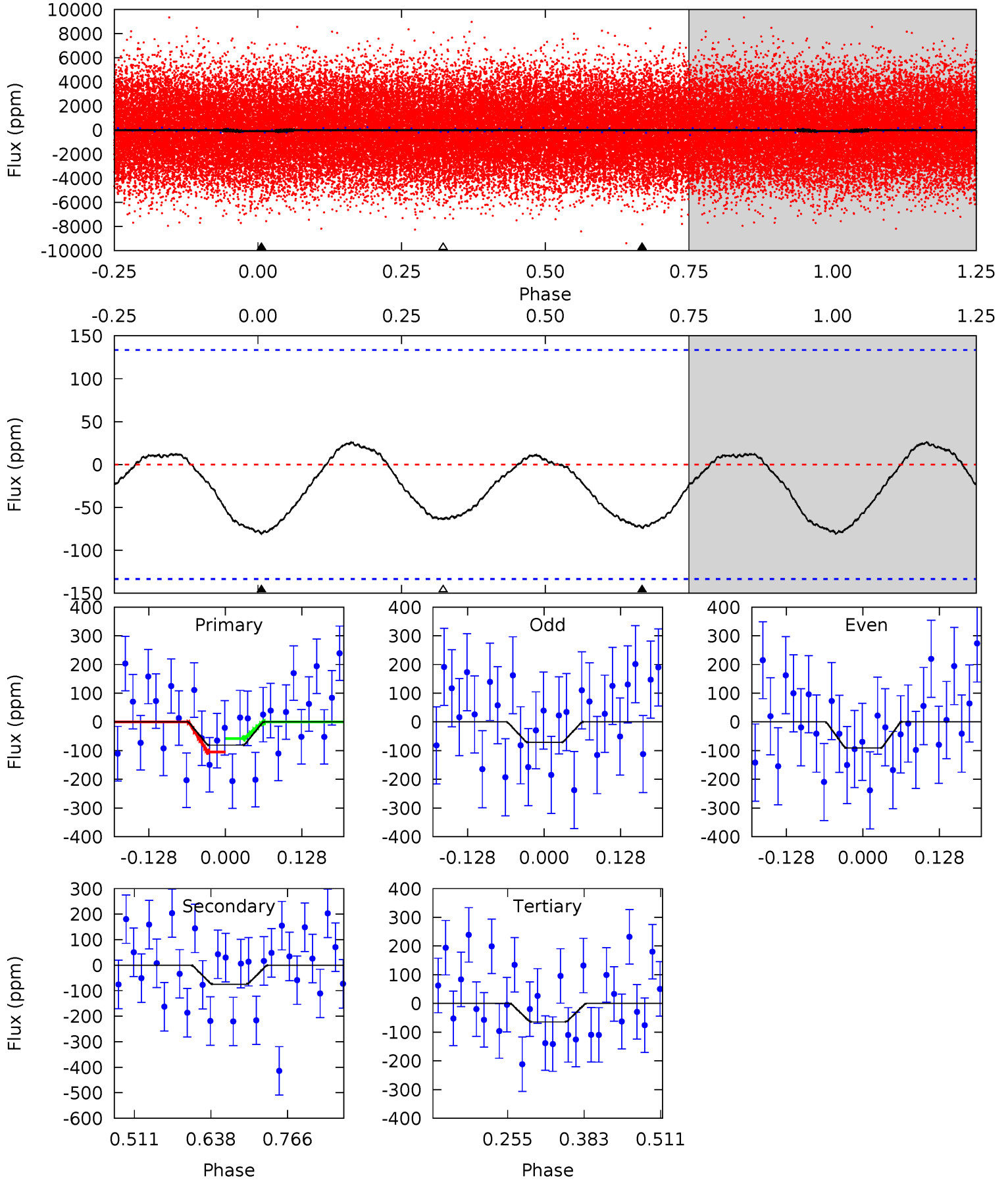
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
7.68	0.15	0	0	4.42	1.28	4.69	7.68	7.68	0.15	0.15	1.23	0.83	0.62	0.96



Alt Model-Shift Uniqueness Test

011183539-01, P = 0.644358 Days, E = 131.047992 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
2.74	2.52	2.18	0	4.51	1.52	0.97	0.56	2.74	0.34	2.52	0.34	0.75	0.25	0.79



Stellar Parameters For KIC 011183539

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	7694^{+213}_{-320}	$3.631^{+0.467}_{-0.082}$	$-0.080^{+0.200}_{-0.300}$	$3.627^{+0.604}_{-1.812}$	$2.054^{+0.291}_{-0.499}$	$0.061^{+0.275}_{-0.017}$
	+3%/-4%	+13%/-2%	+250%/-375%	+17%/-50%	+14%/-24%	+453%/-28%
Source	KIC0	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 011183539-01 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-1 ± 8	$3.45^{+2.72}_{-2.07}$	6346^{+483}_{-885}	-5097^{+1305}_{-646}	$0.010^{+0.212}_{-0.168}$
Alt.	-75 ± 30	$3.54^{+2.69}_{-2.01}$	6382^{+463}_{-754}	6225^{+5303}_{-4217}	$1.063^{+4.565}_{-0.762}$

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

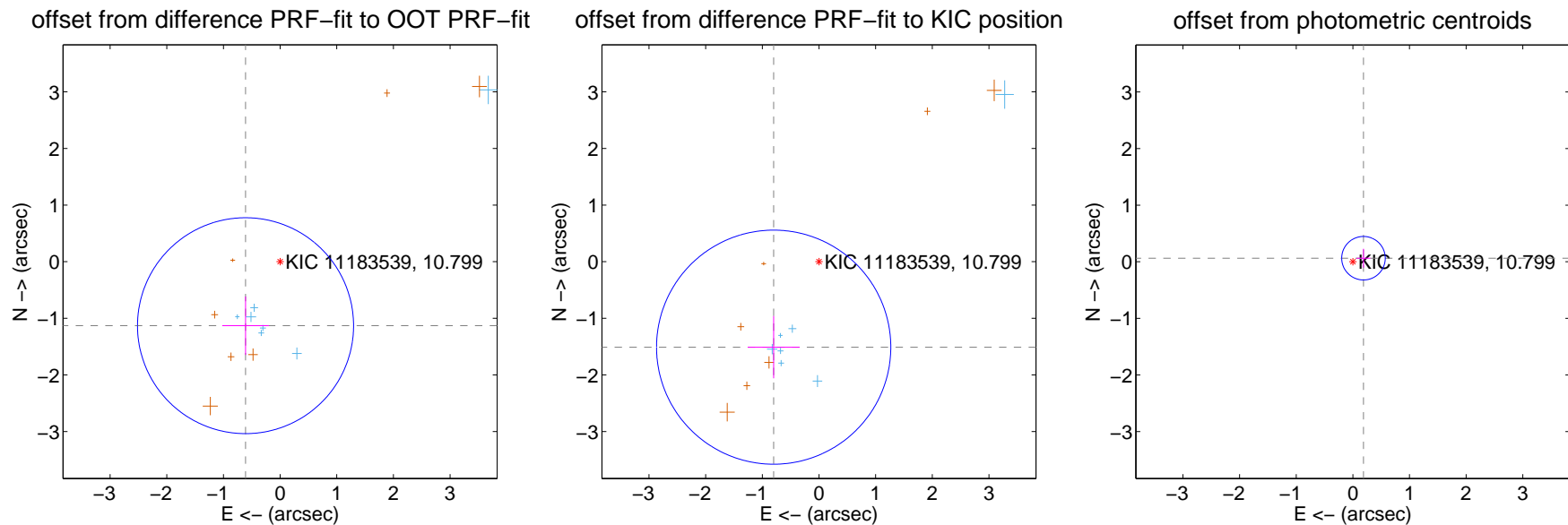
DV Centroid Data

Supplemental centroid analysis for 011183539-01. **Kepler magnitude: 10.80.** Transit SNR 12.46

There are 7 quarters with good PRF difference image offsets

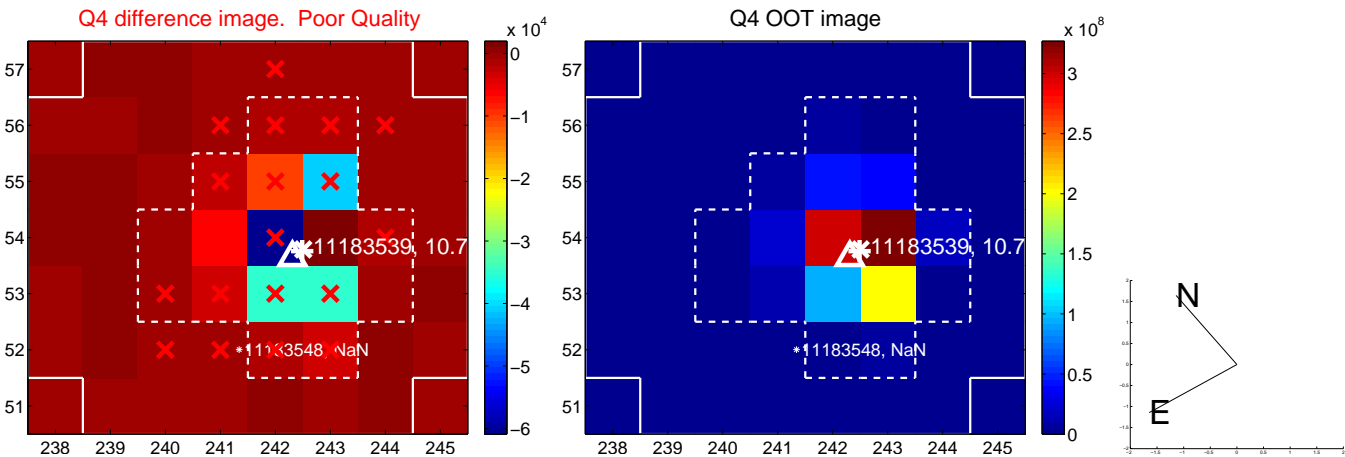
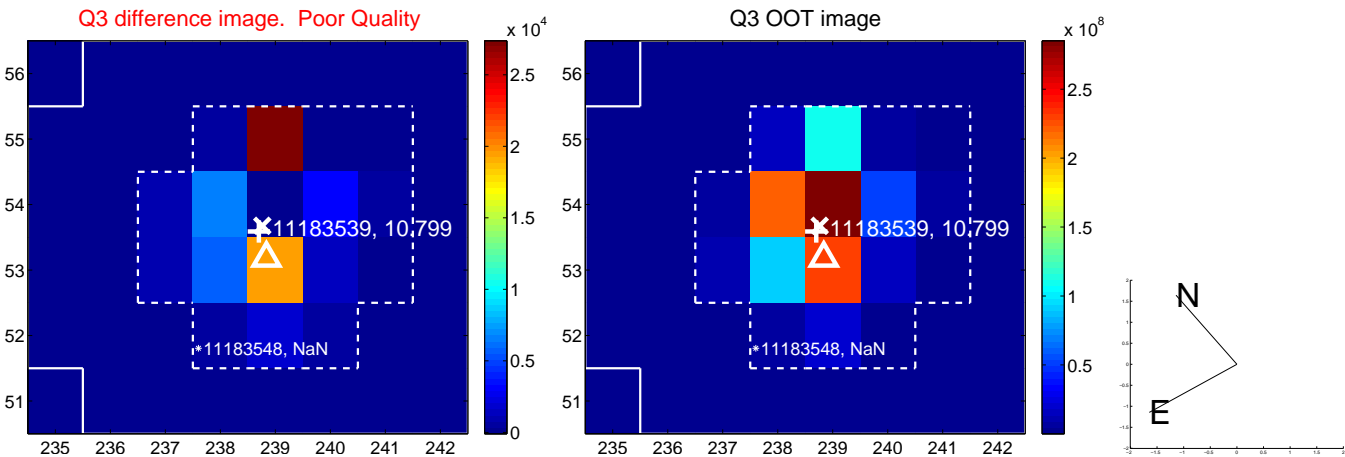
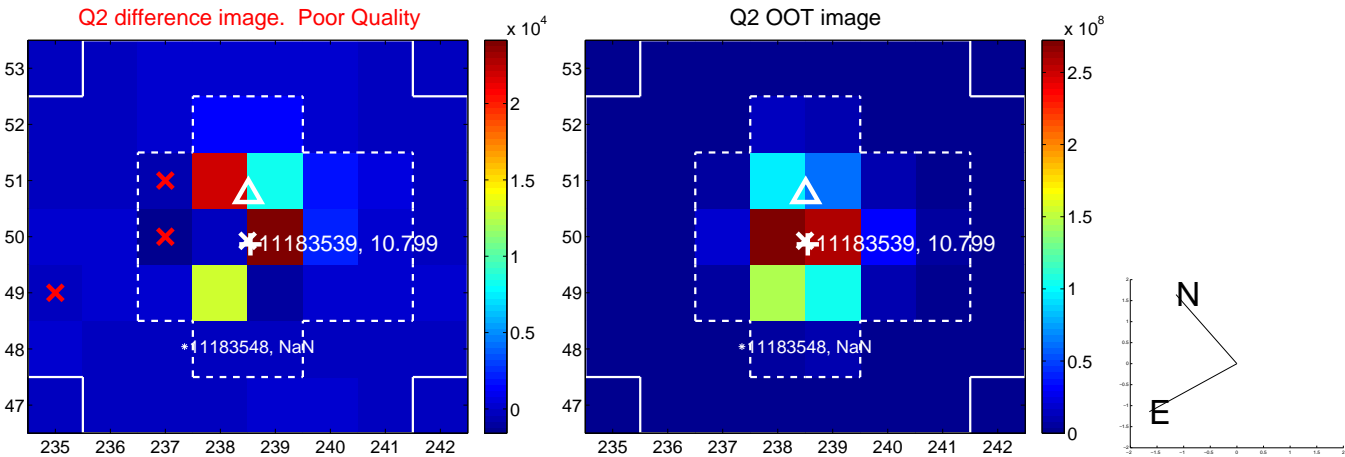
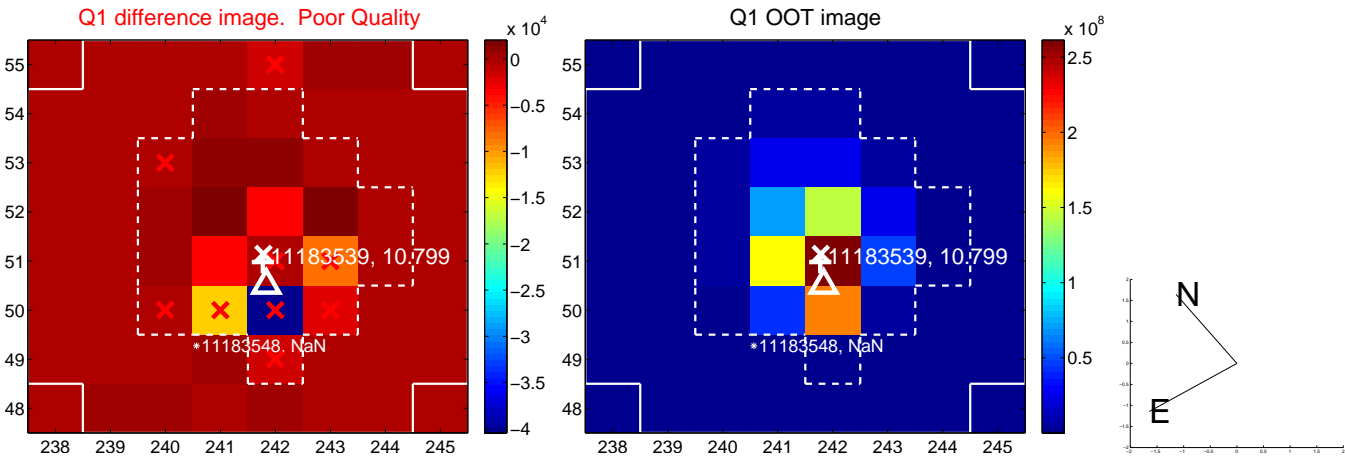
The direct PRF centroid is offset from the target star catalog position by about 0.55 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	1.284 ± 0.635	2.02	0.610 ± 0.411	-1.130 ± 0.516
PRF-fit source offset from KIC position	1.708 ± 0.689	2.48	0.800 ± 0.459	-1.509 ± 0.550
photometric centroid source offset	0.20 ± 0.13	1.54	-0.19 ± 0.12	0.06 ± 0.17

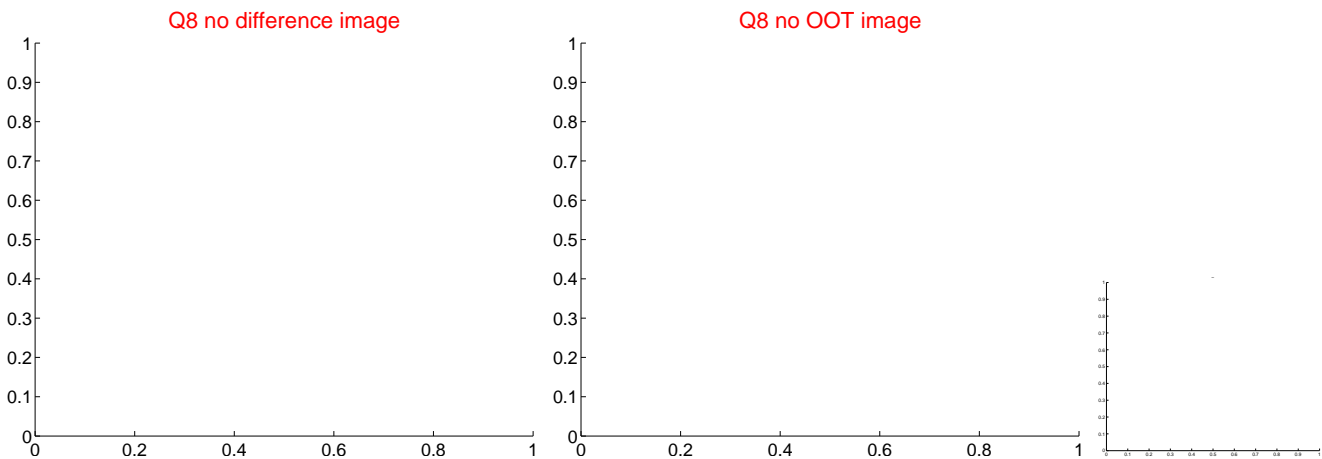
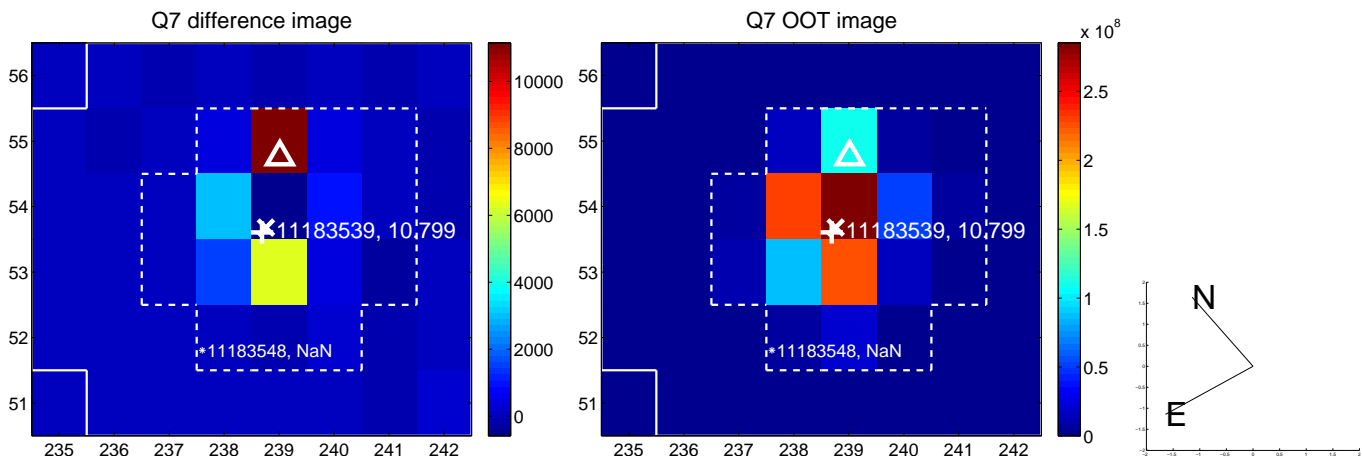
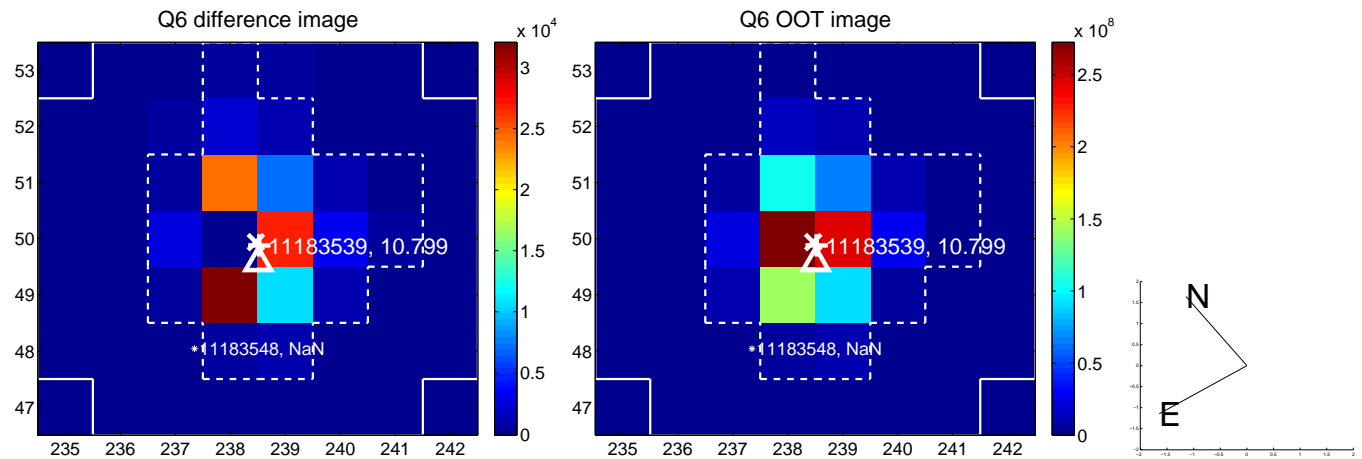
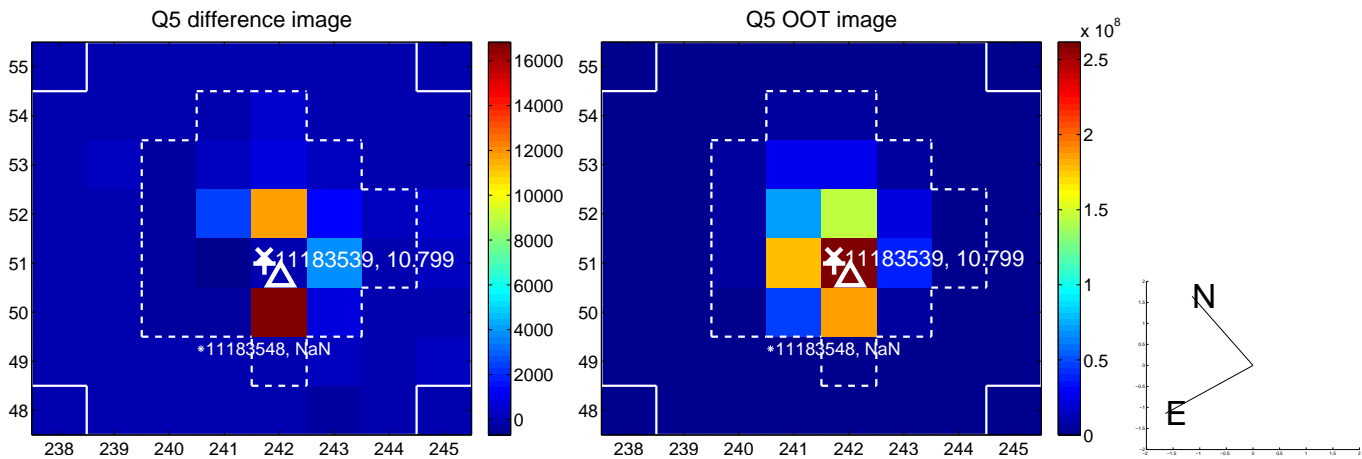


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets;** magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

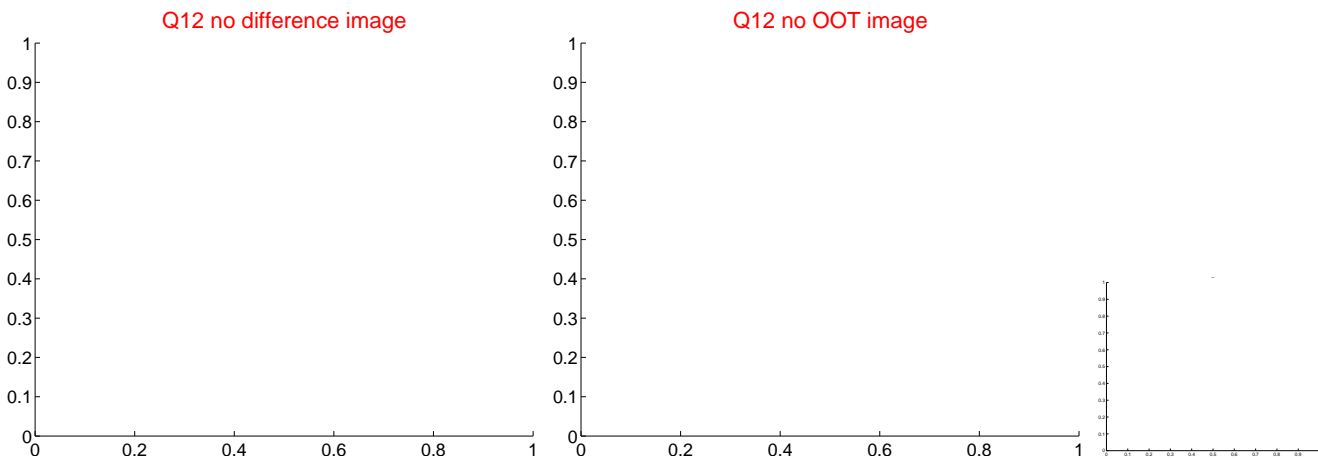
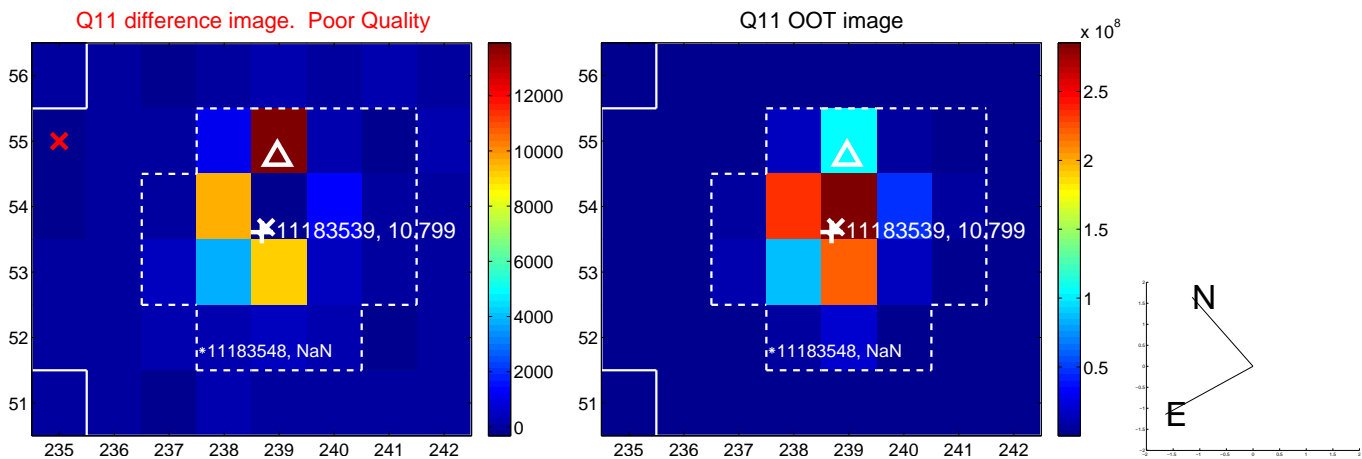
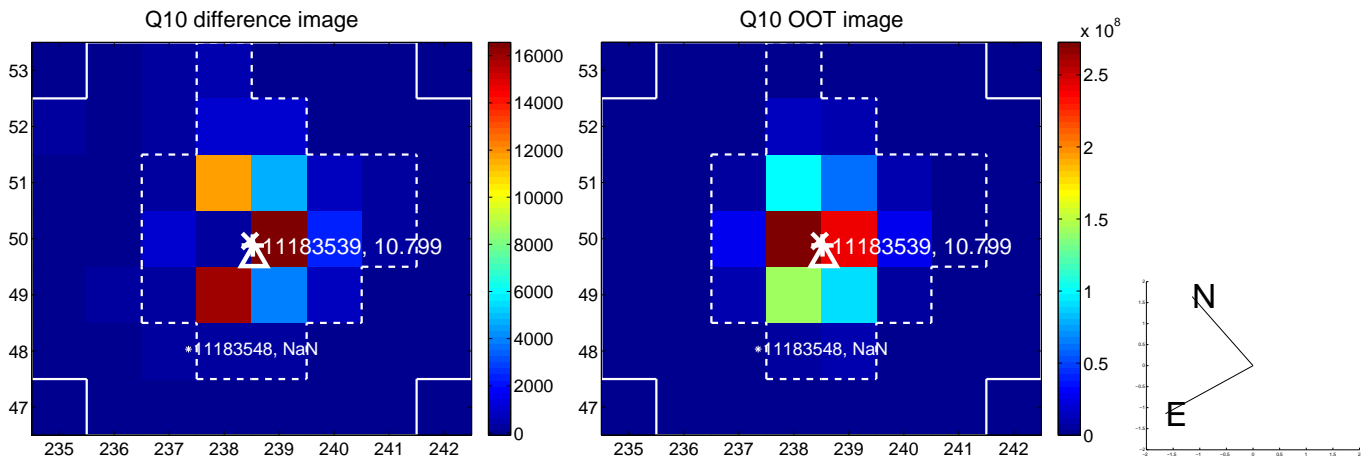
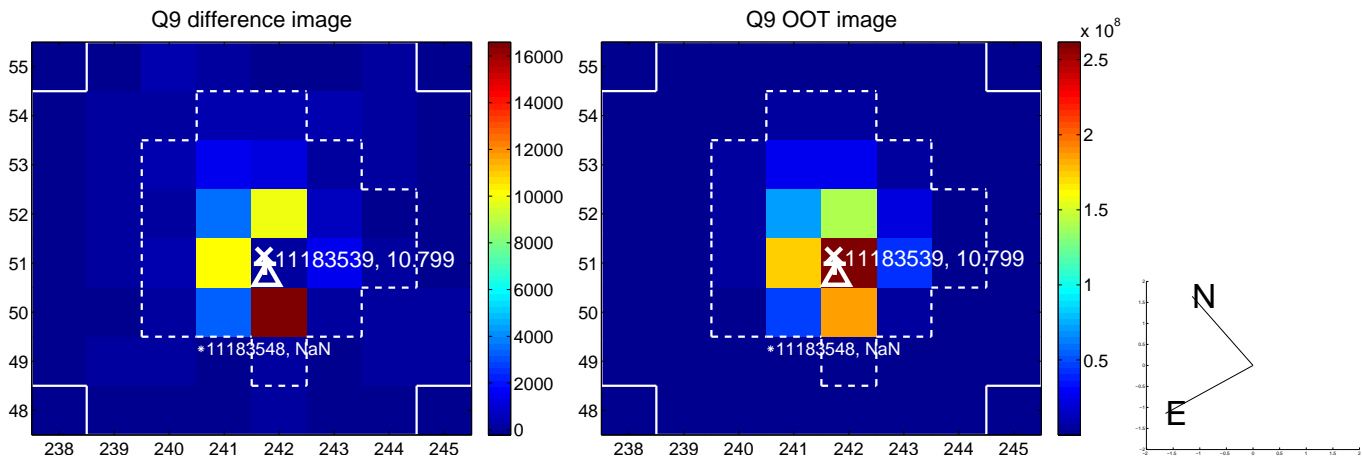
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



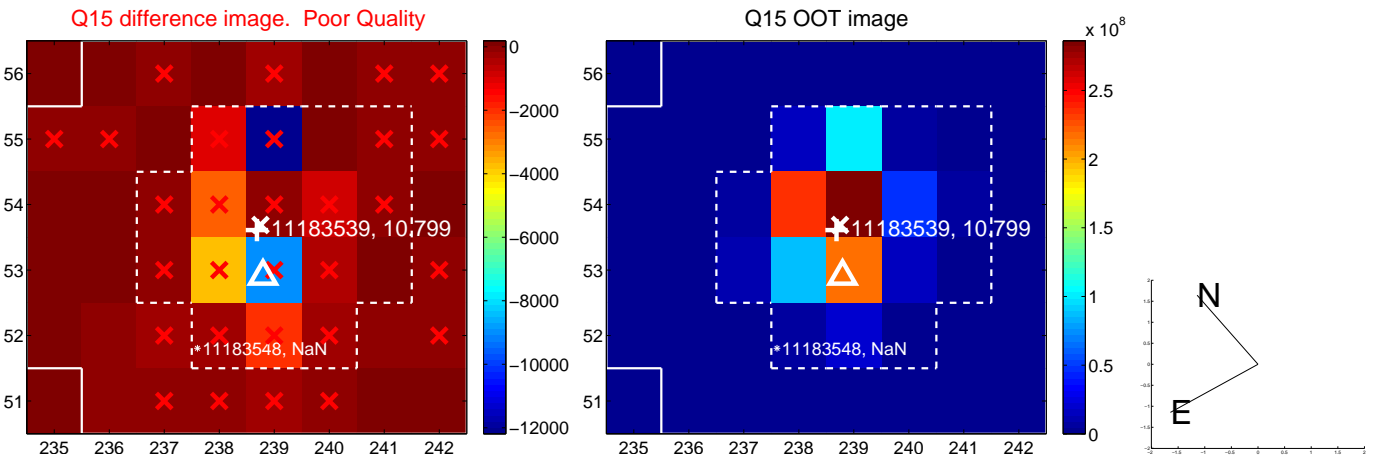
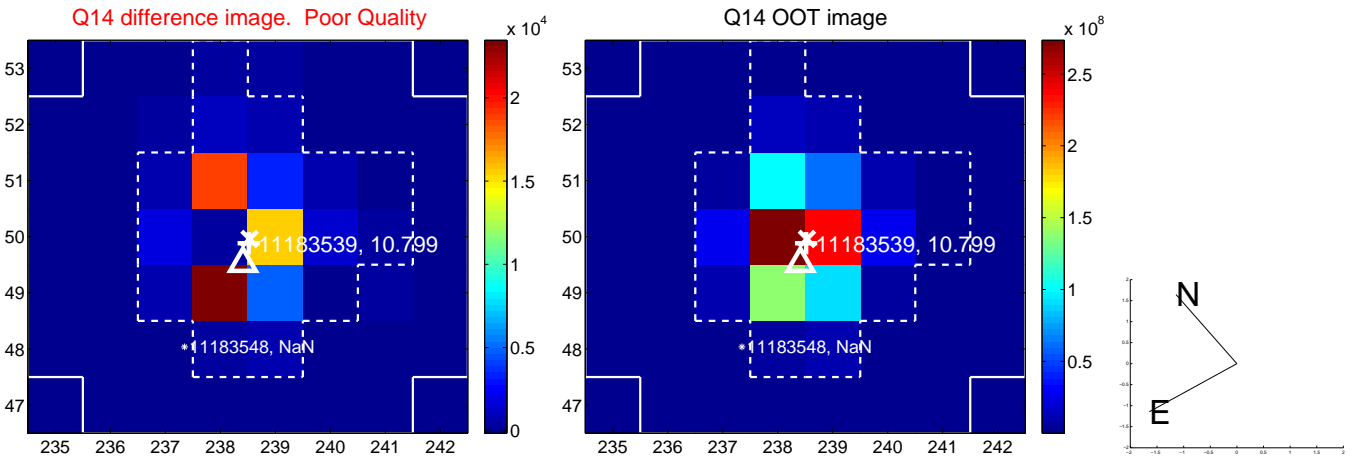
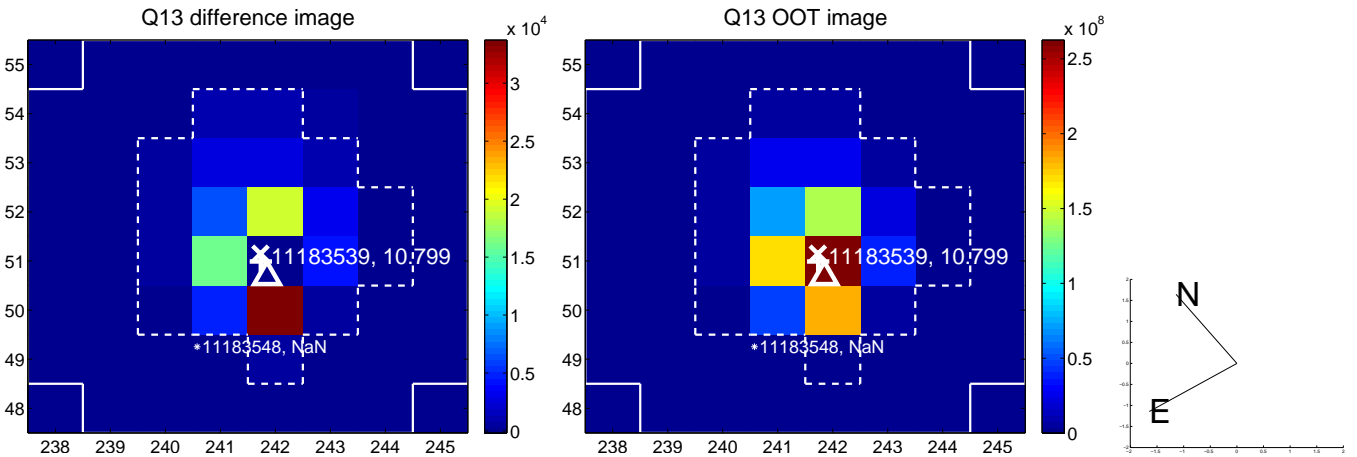
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



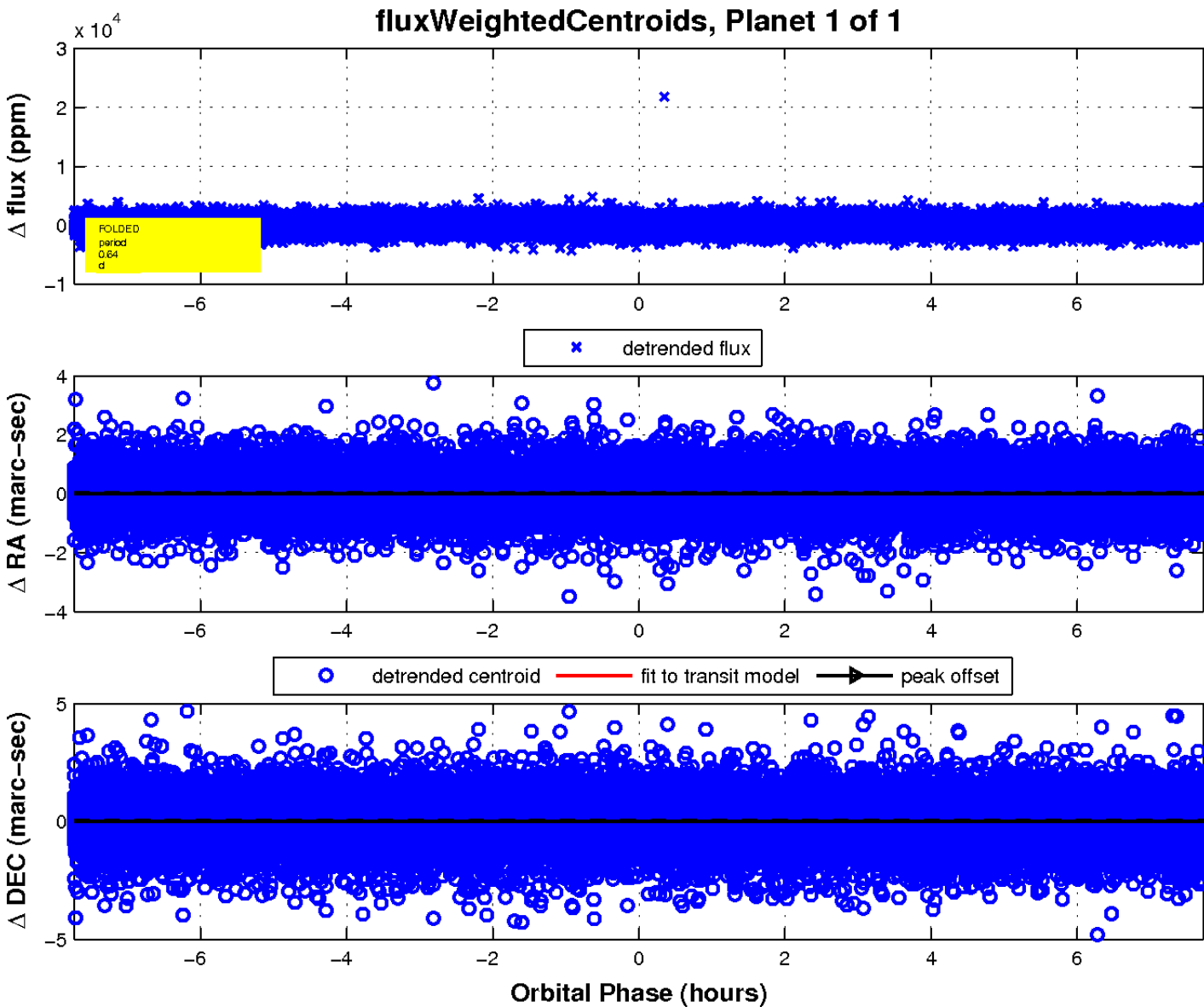
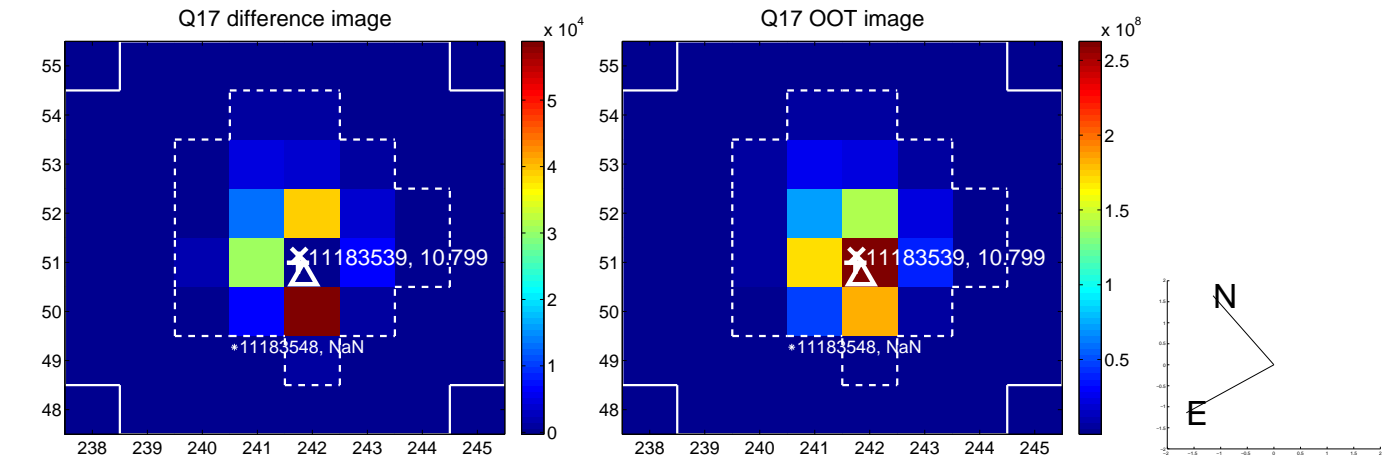
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UKIRT Image

Declination

