

KIC 006519670

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})
006519670-01	OBS	No	0.566760	131.861461	30.7	3.354	7.7	6.1	1.05	6161	0.70	7254.14

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
006519670-01	OBS	FP	0.00	1	0	1	0	LPP_DV—CENT_UNRESOLVED_OFFSET—HALO_GHOST

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

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

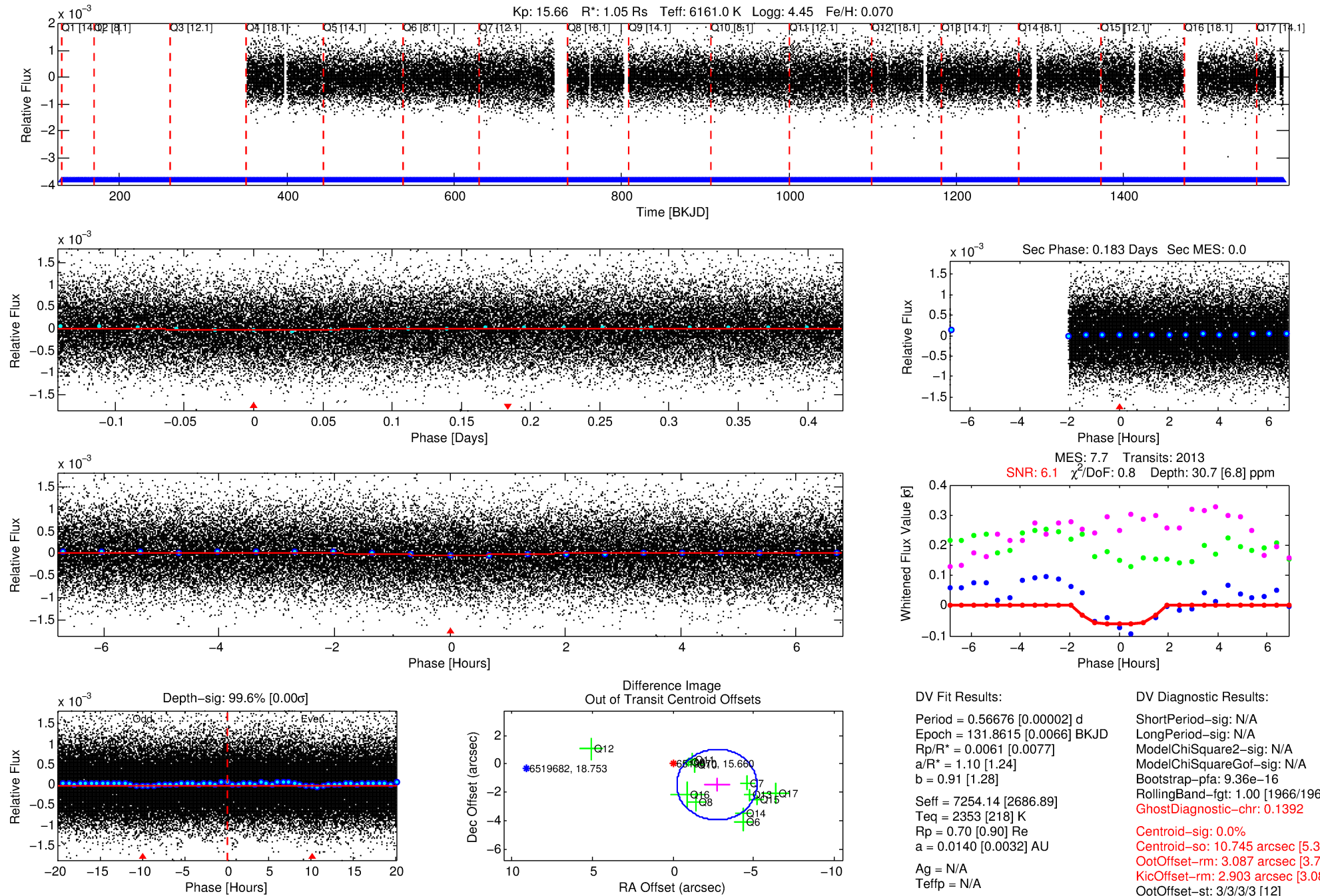
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 006519670-01

No Significant Match Found

DV One-Page Summary

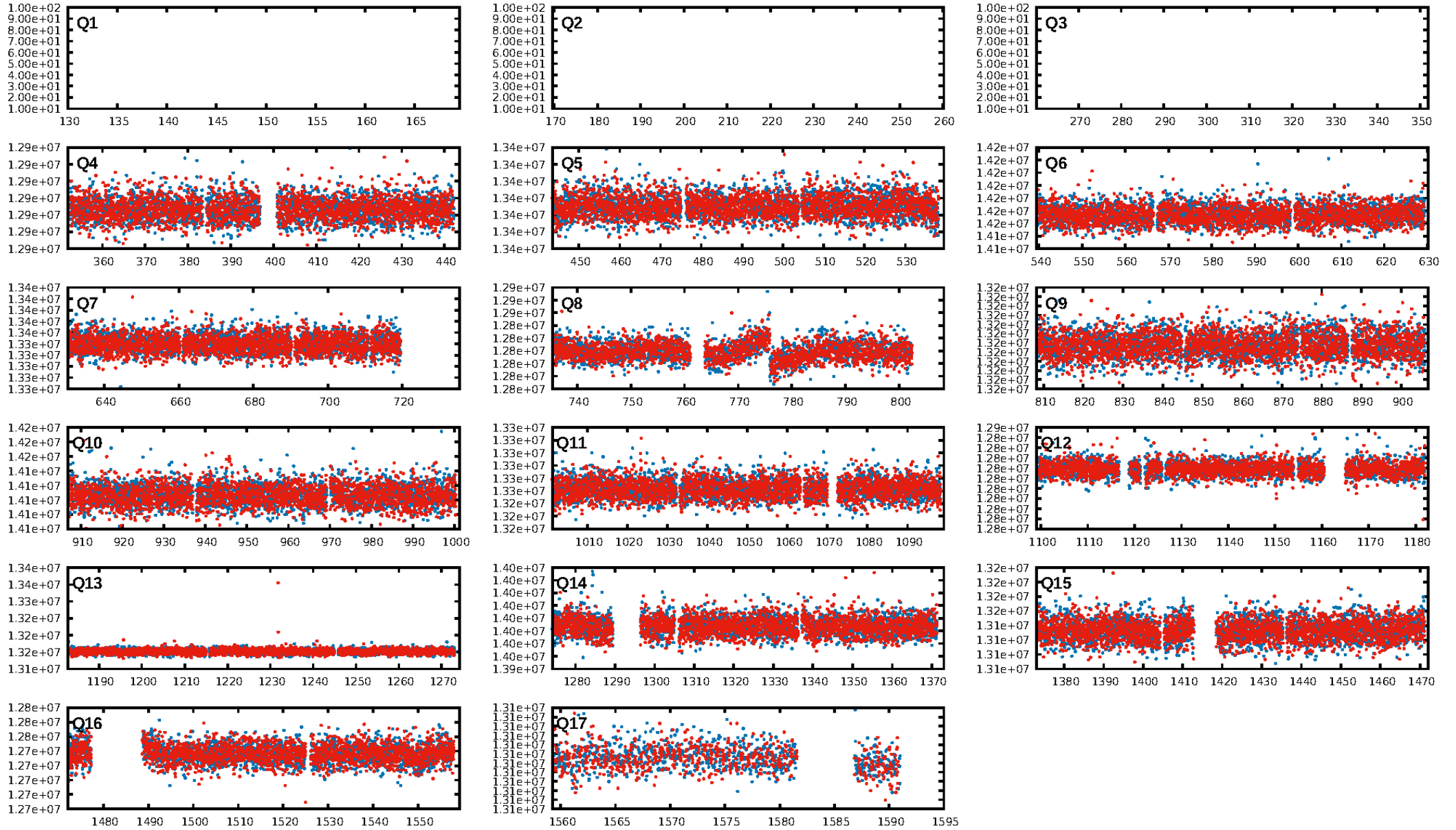
KIC: 6519670 Candidate: 1 of 1 Period: 0.567 d



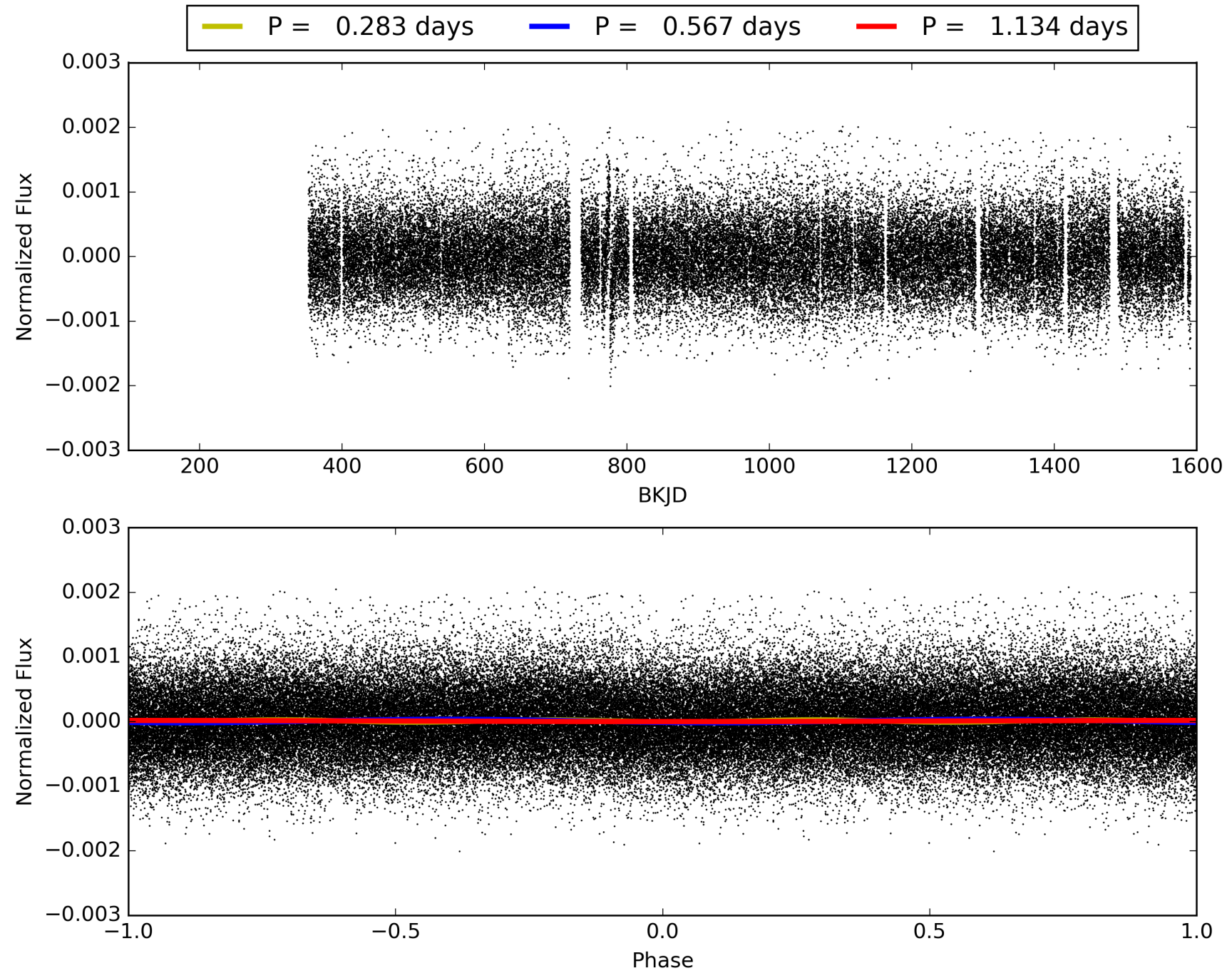
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 29-Jan-2016 10:49:59 Z

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

TCE 006519670-01, PDC Light Curves

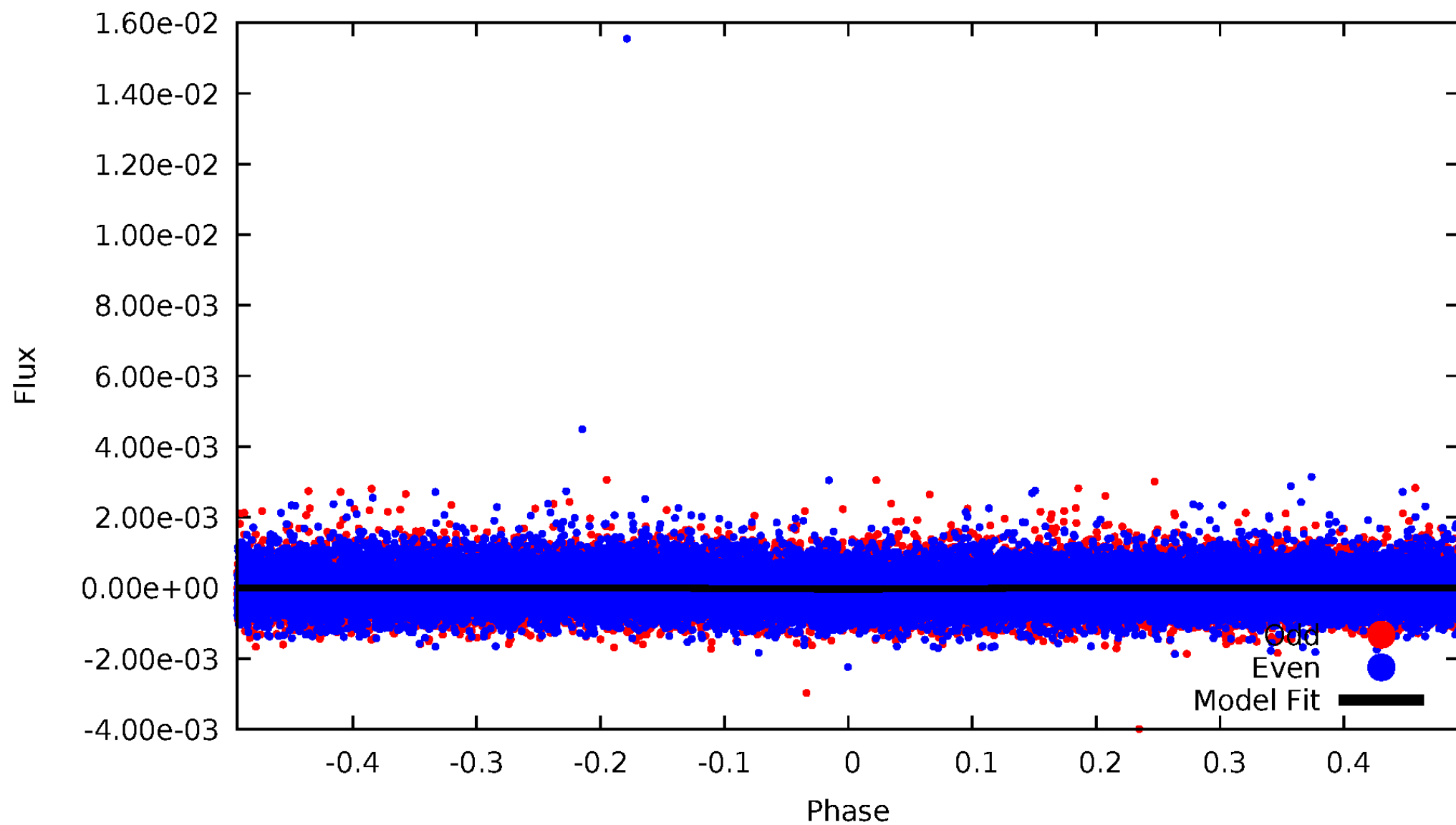


TCE 006519670-01



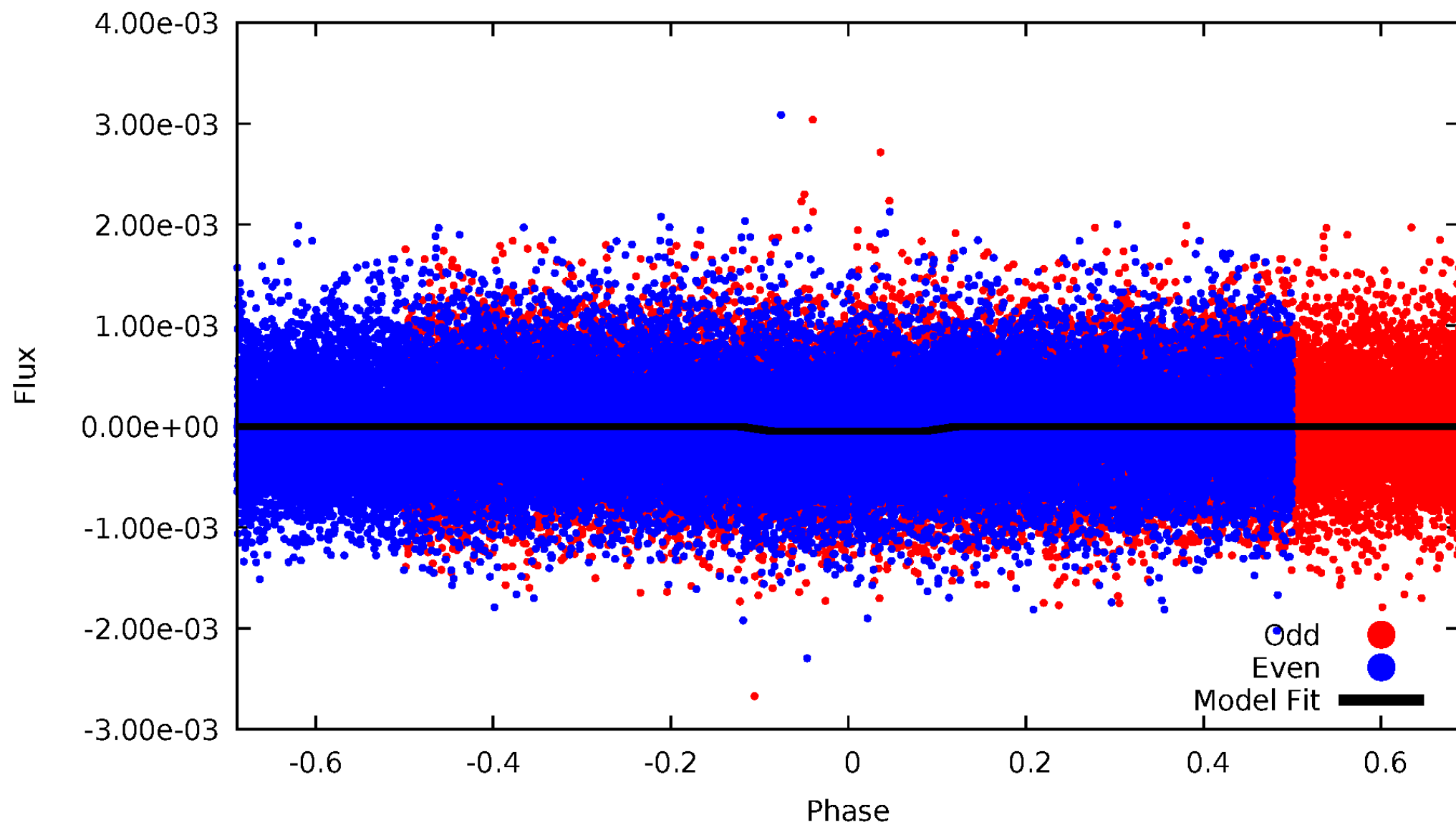
DV Odd/Even

TCE 006519670-01



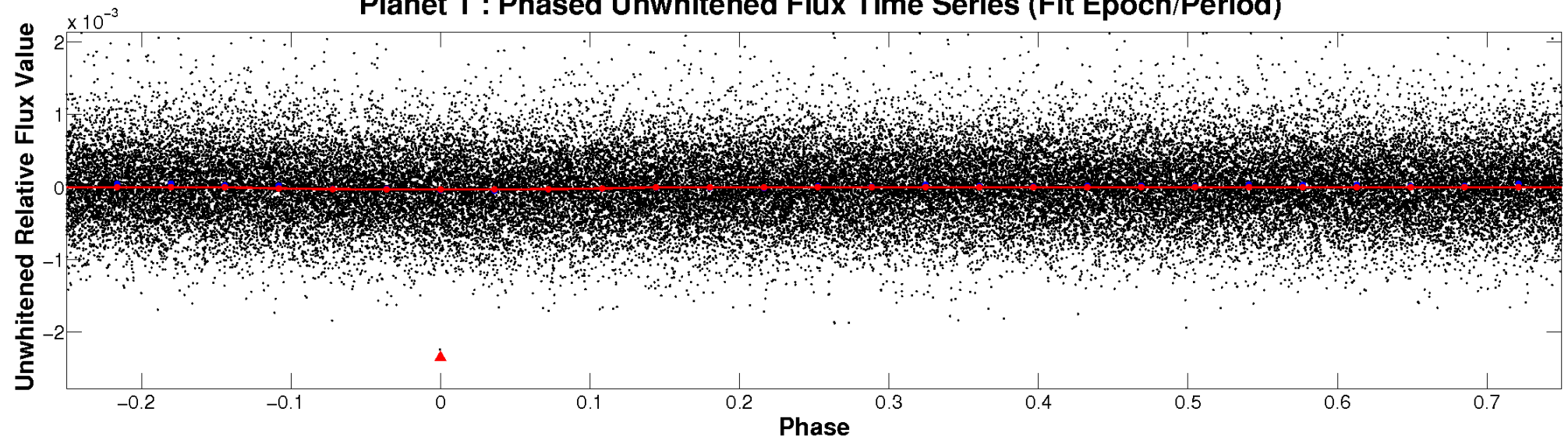
ALT Odd/Even

TCE 006519670-01

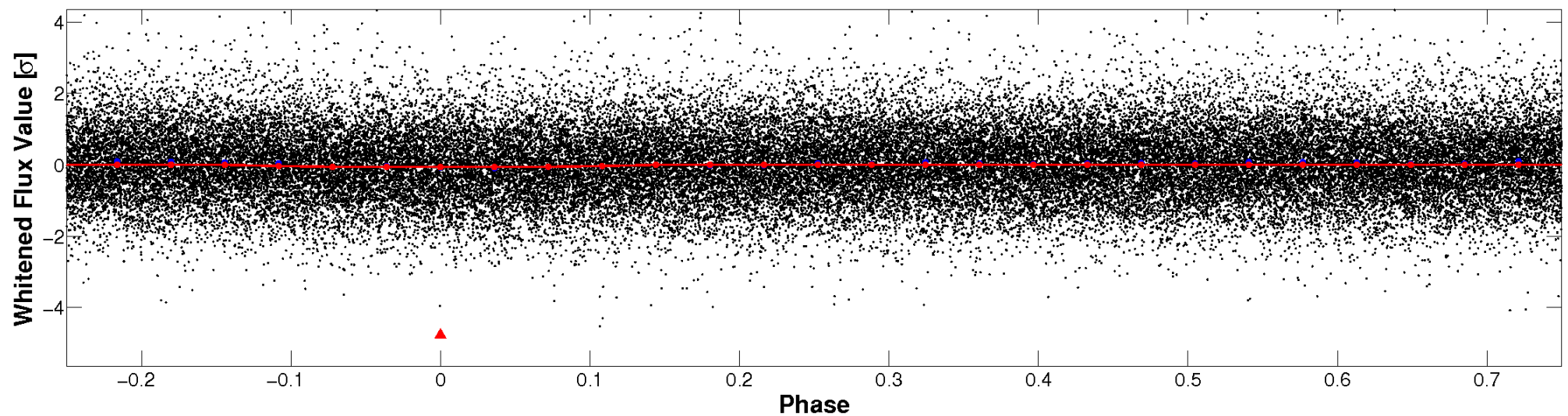


Non-Whitened Vs. Whitened Light Curve

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

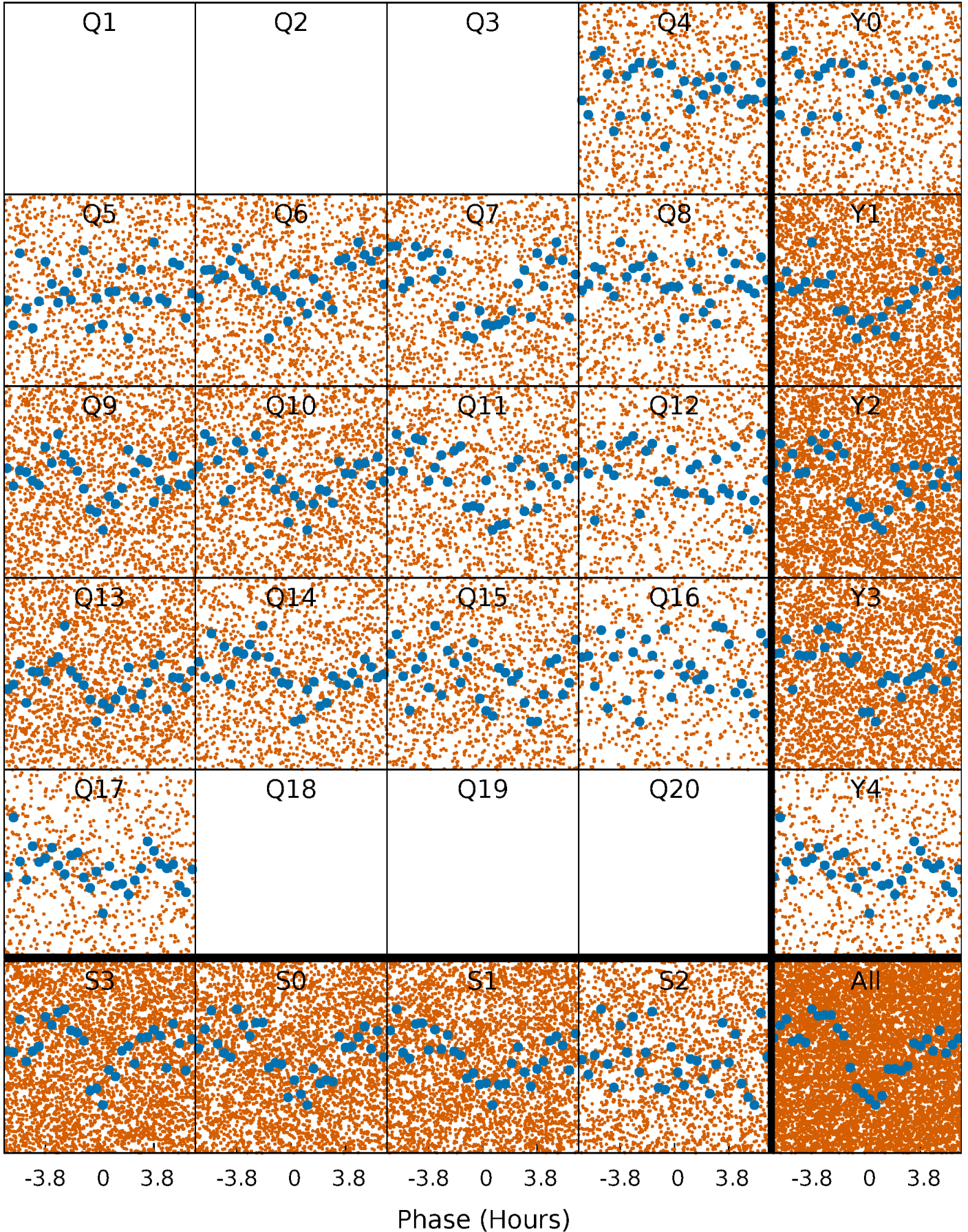


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



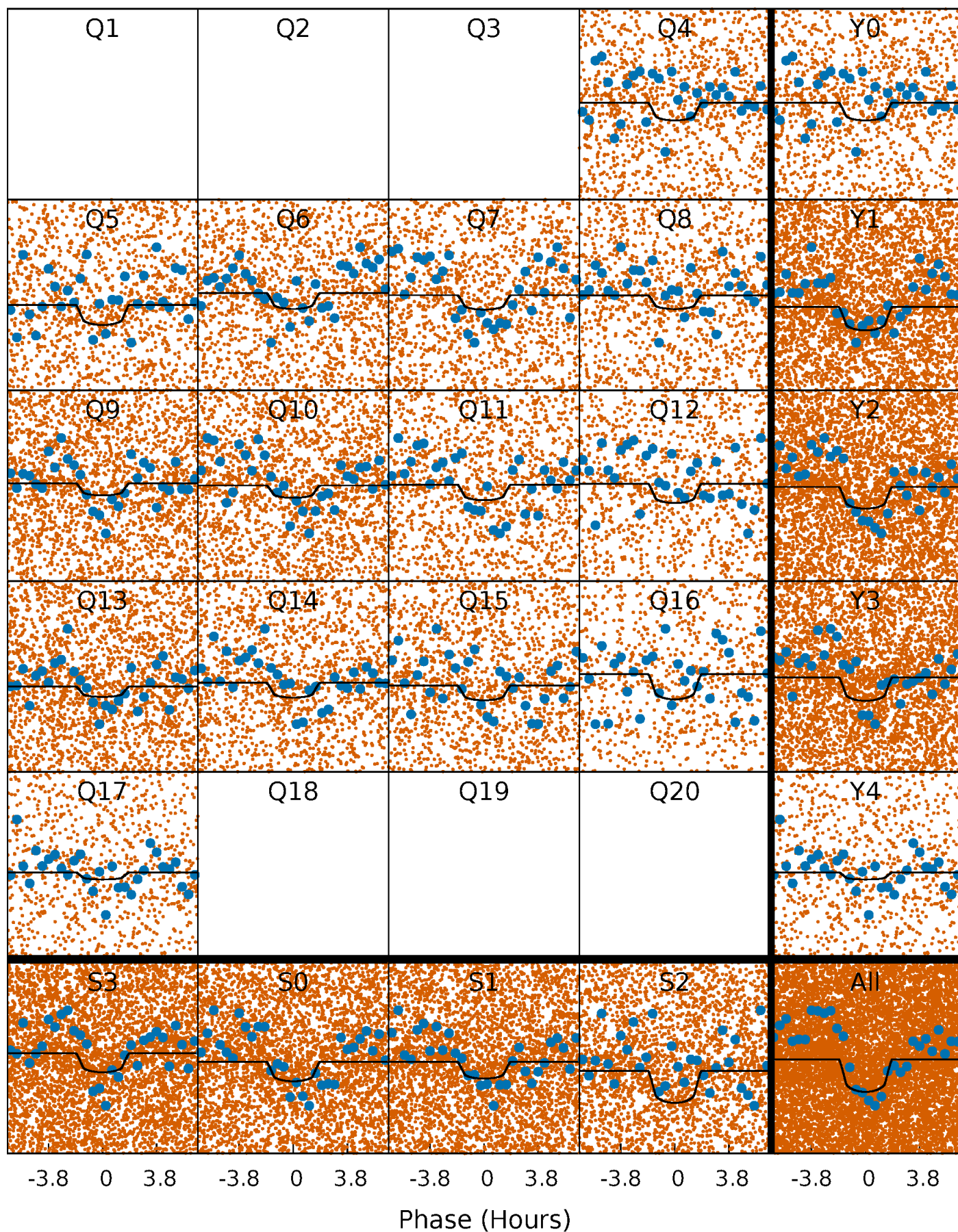
PDC Quarter-Phased Transit Curves

TCE 006519670-01 P= 0.566760 Days $T_0=131.861461$ (BKJD)



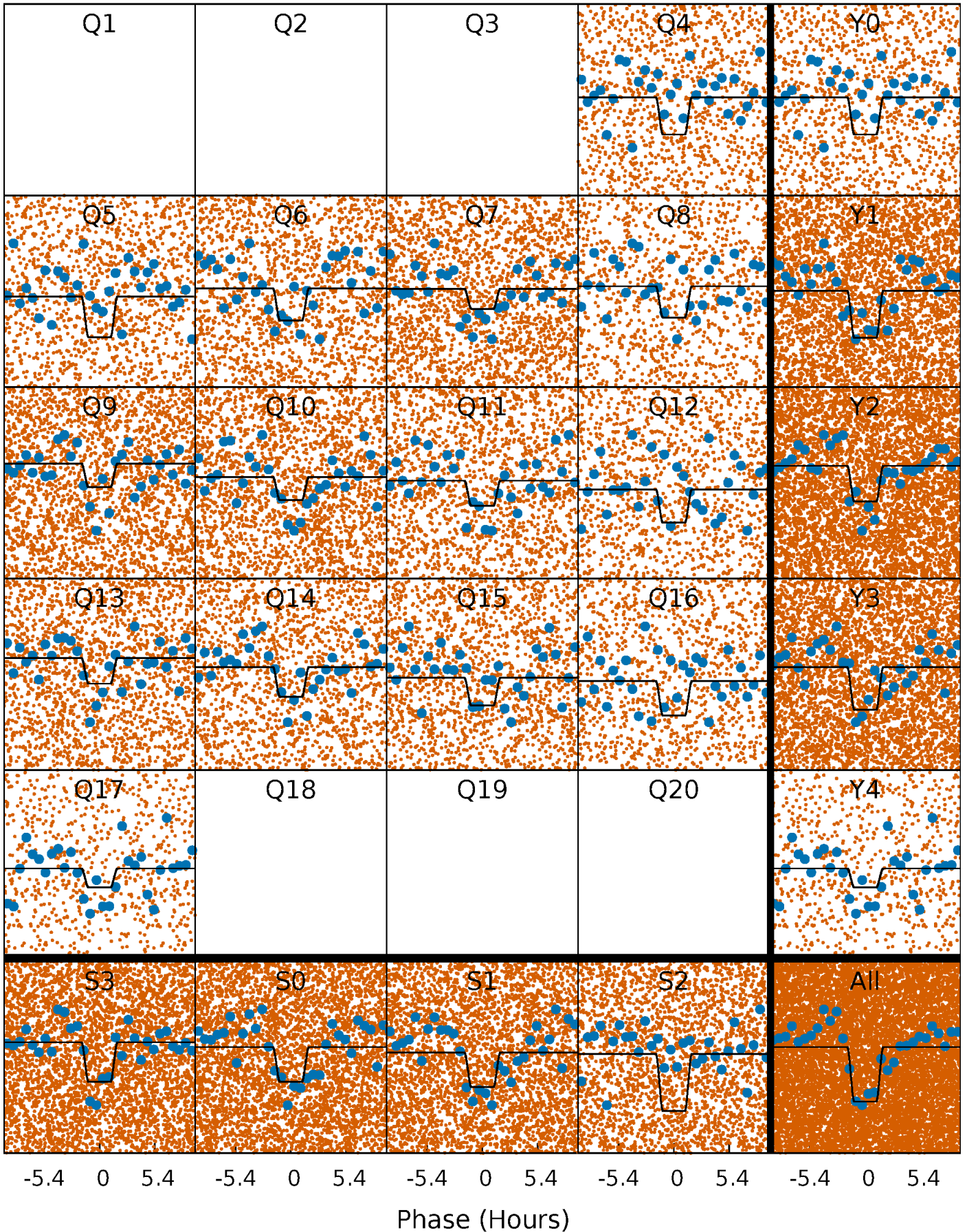
DV Quarter-Phased Transit Curves

TCE 006519670-01 P= 0.566760 Days $T_0=131.861461$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

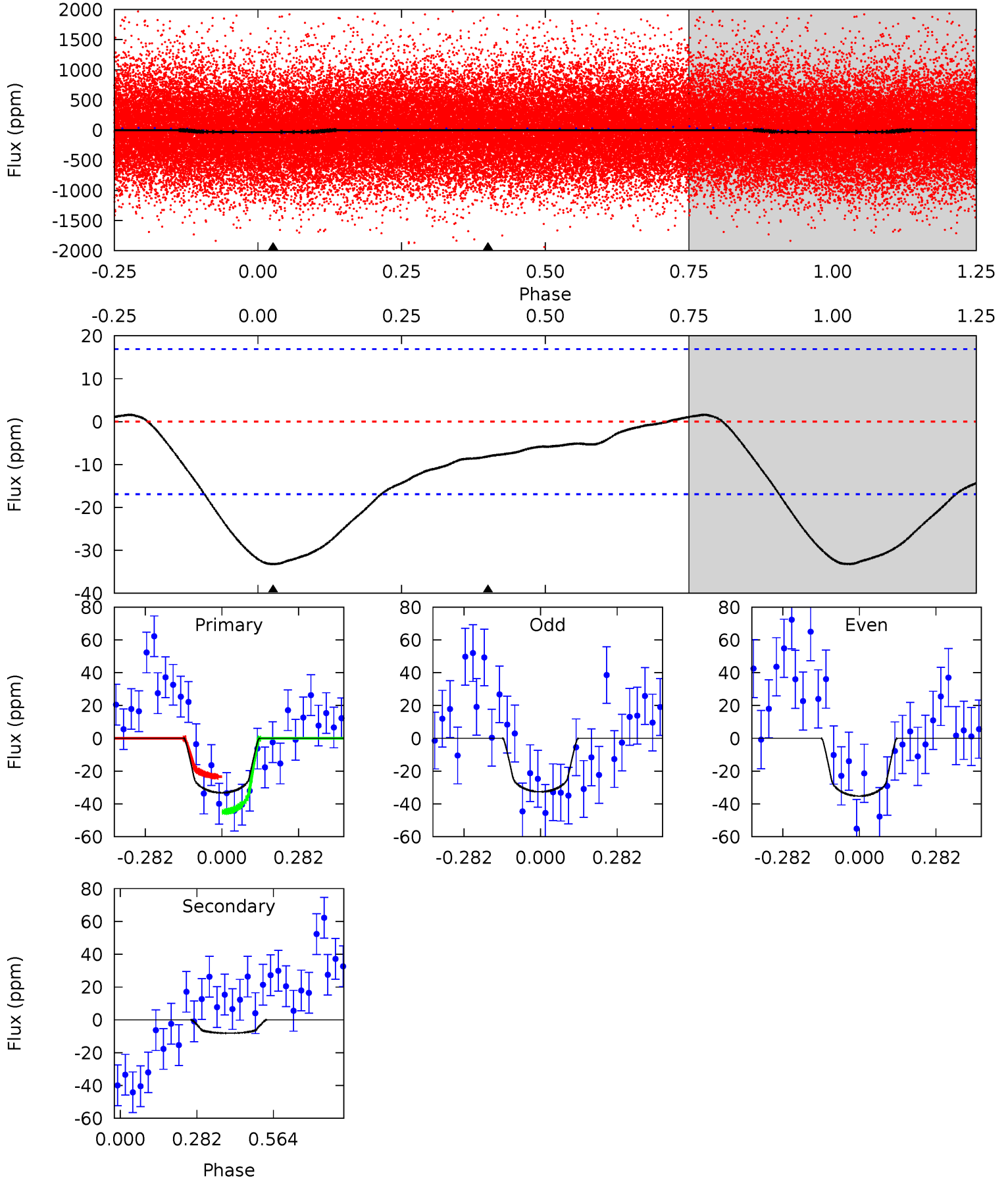
TCE 006519670-01 P= 0.566782 Days $T_0=131.847808$ (BKJD)



DV Model-Shift Uniqueness Test

006519670-01, P = 0.566760 Days, E = 131.861461 Days

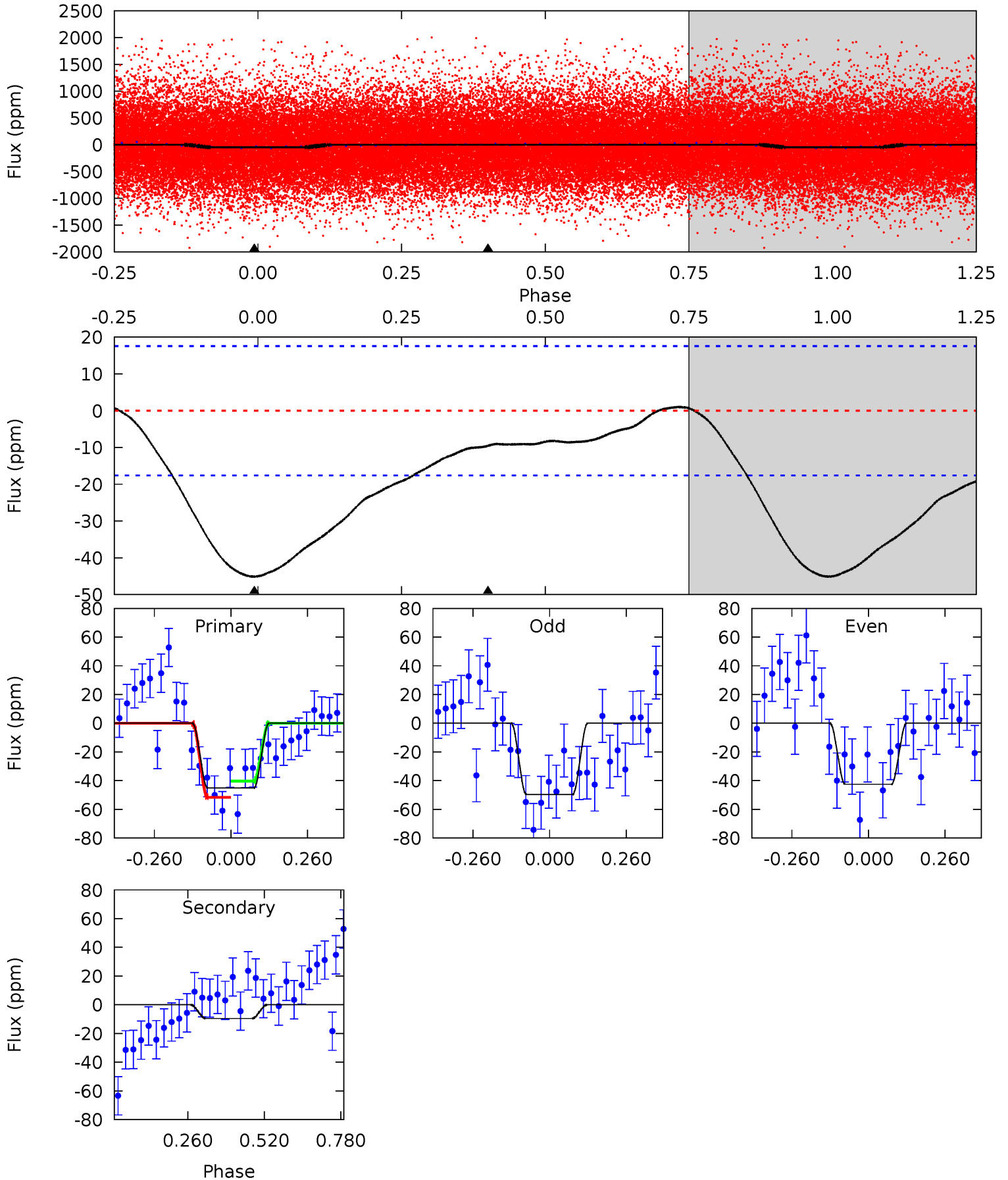
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
8.54	2.09	0	0	4.34	1.08	0.20	8.54	8.54	2.09	2.09	0.33	0.94	0.05	2.74



Alt Model-Shift Uniqueness Test

006519670-01, P = 0.566782 Days, E = 131.847808 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
11.2	2.37	0	0	4.36	1.13	0.48	11.2	11.2	2.37	2.37	0.87	1.02	0.02	1.42



Stellar Parameters For KIC 006519670

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6161^{+172}_{-258}	$4.454^{+0.060}_{-0.180}$	$0.070^{+0.250}_{-0.300}$	$1.053^{+0.286}_{-0.122}$	$1.150^{+0.123}_{-0.169}$	$1.388^{+0.360}_{-0.693}$
	+3%/-4%	+1%/-4%	+357%/-429%	+27%/-12%	+11%/-15%	+26%/-50%
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 006519670-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-8 ± 4	$0.93^{+0.84}_{-0.60}$	3332^{+208}_{-174}	3657^{+2317}_{-6465}	$0.914^{+6.117}_{-0.706}$
Alt.	-10 ± 4	$1.01^{+0.88}_{-0.67}$	3345^{+183}_{-188}	3681^{+2466}_{-6416}	$0.906^{+6.805}_{-0.682}$

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 $A_{obs} \gg 1.0$

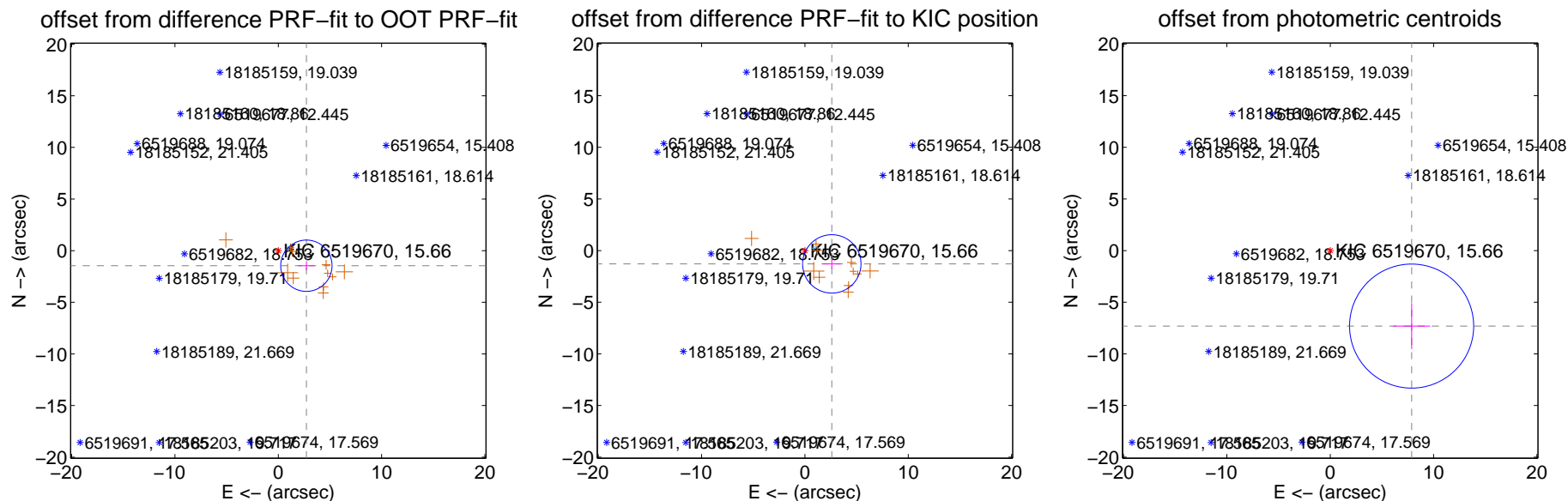
DV Centroid Data

Supplemental centroid analysis for 006519670-01. Kepler magnitude: 15.66. Transit SNR 6.10

There are 1 quarters with good PRF difference image offsets

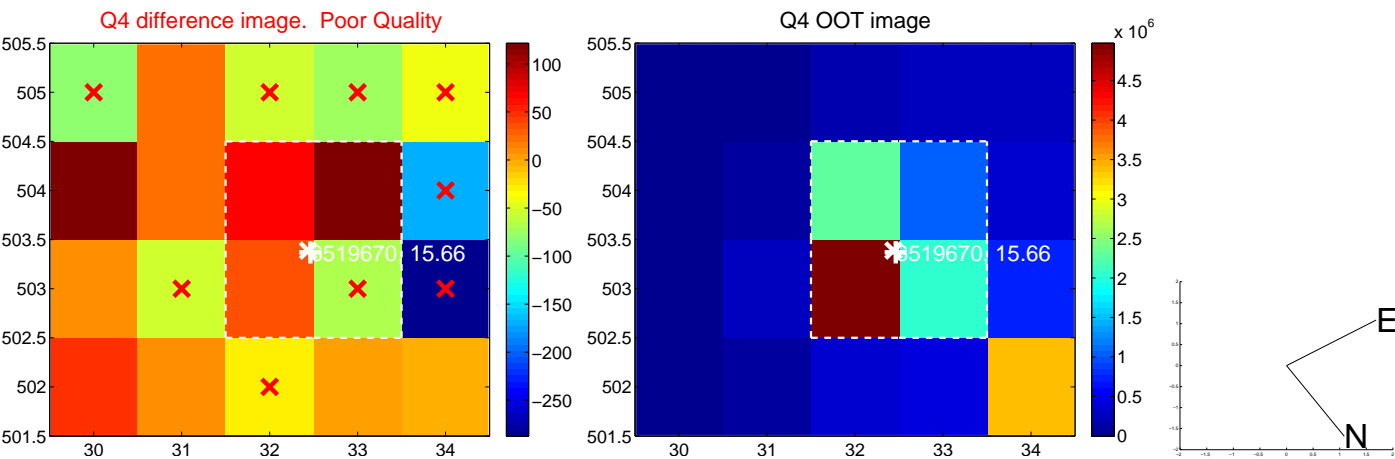
The direct PRF centroid is offset from the target star catalog position by about 0.12 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	3.087 ± 0.828	3.73	-2.721 ± 0.772	-1.459 ± 0.426
PRF-fit source offset from KIC position	2.903 ± 0.942	3.08	-2.601 ± 0.884	-1.289 ± 0.456
photometric centroid source offset	10.75 ± 2.00	5.37	-7.88 ± 1.79	-7.31 ± 2.22

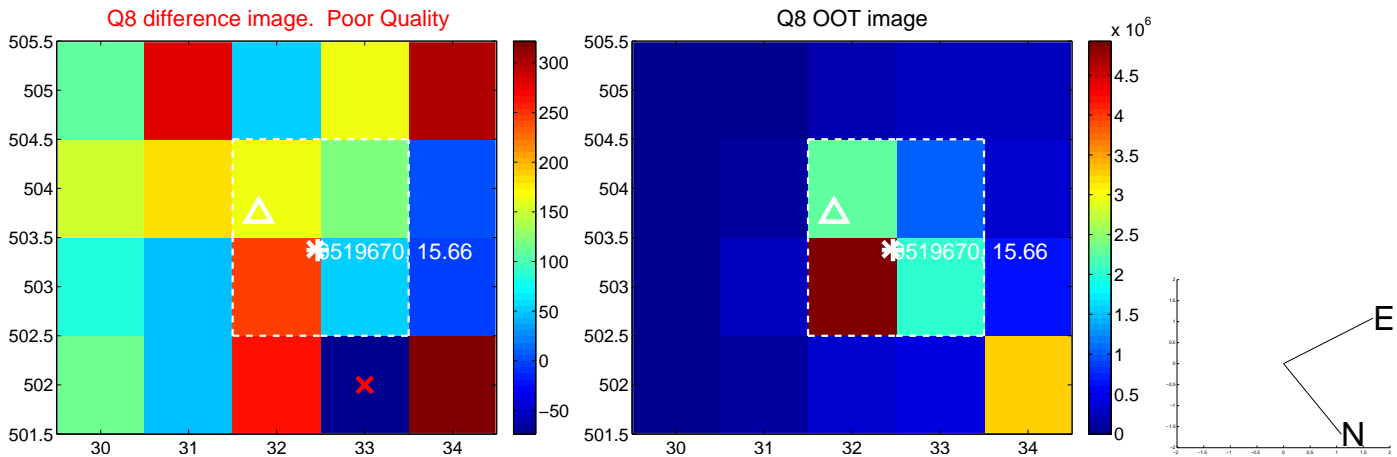
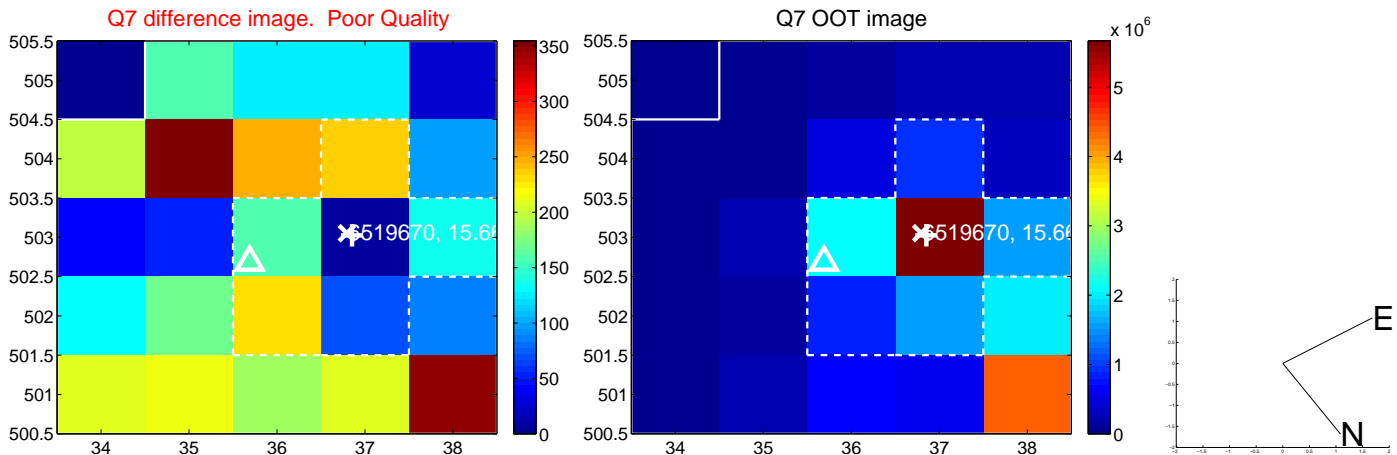
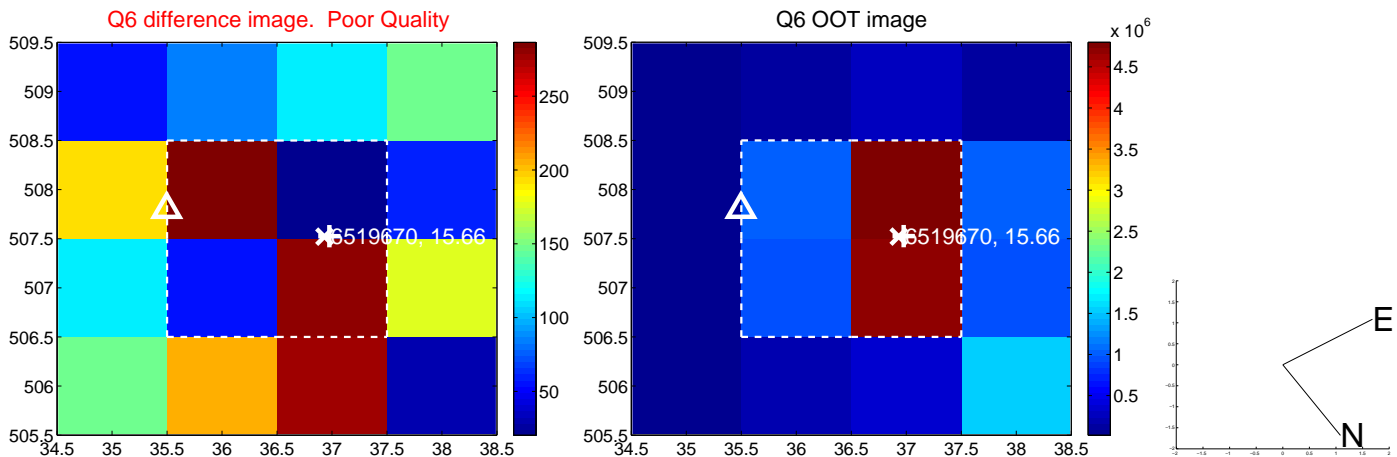
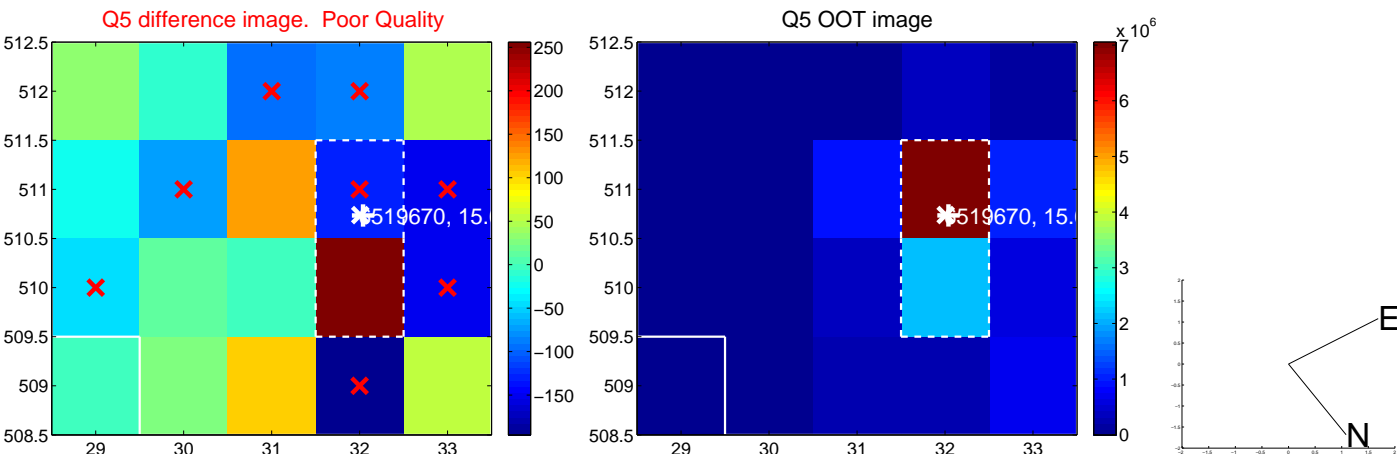


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

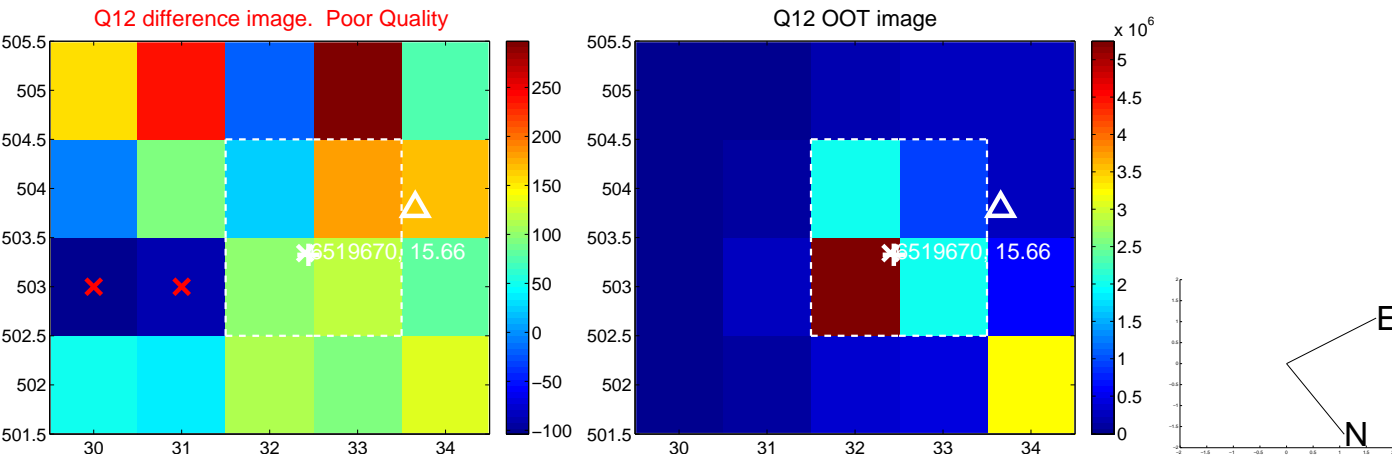
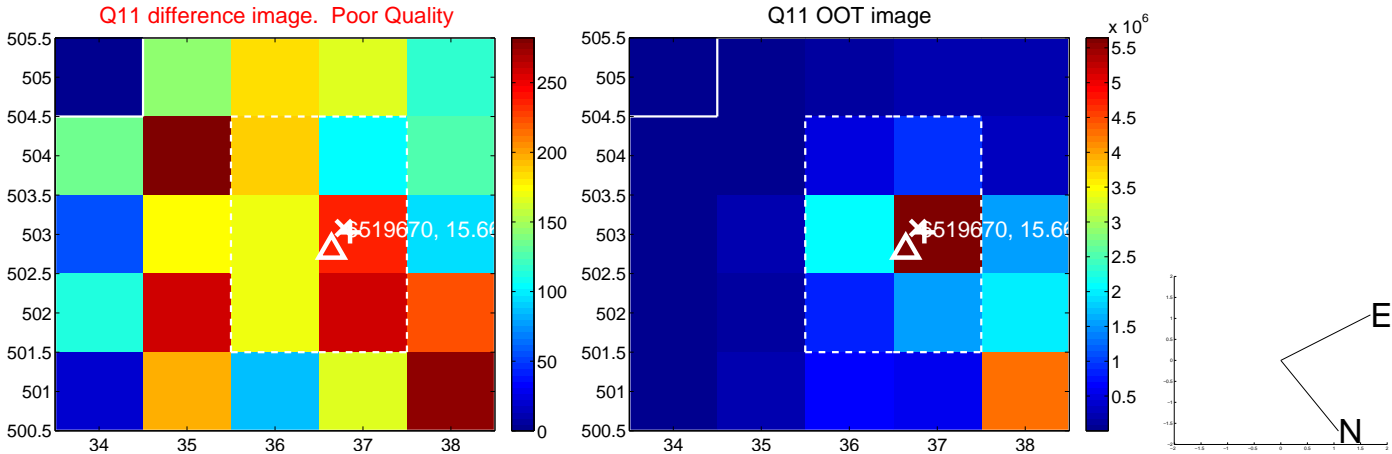
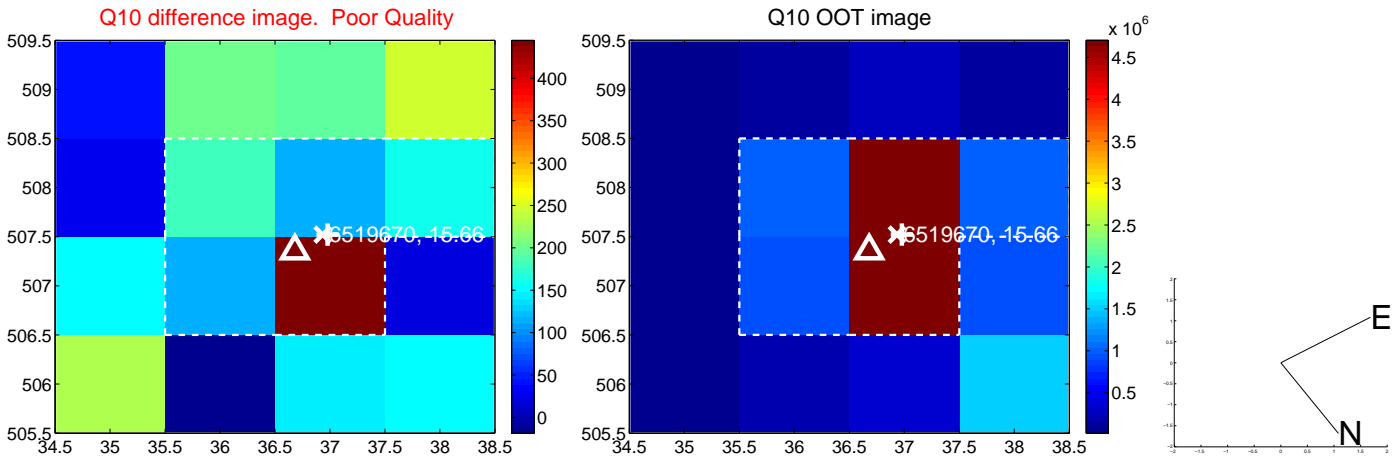
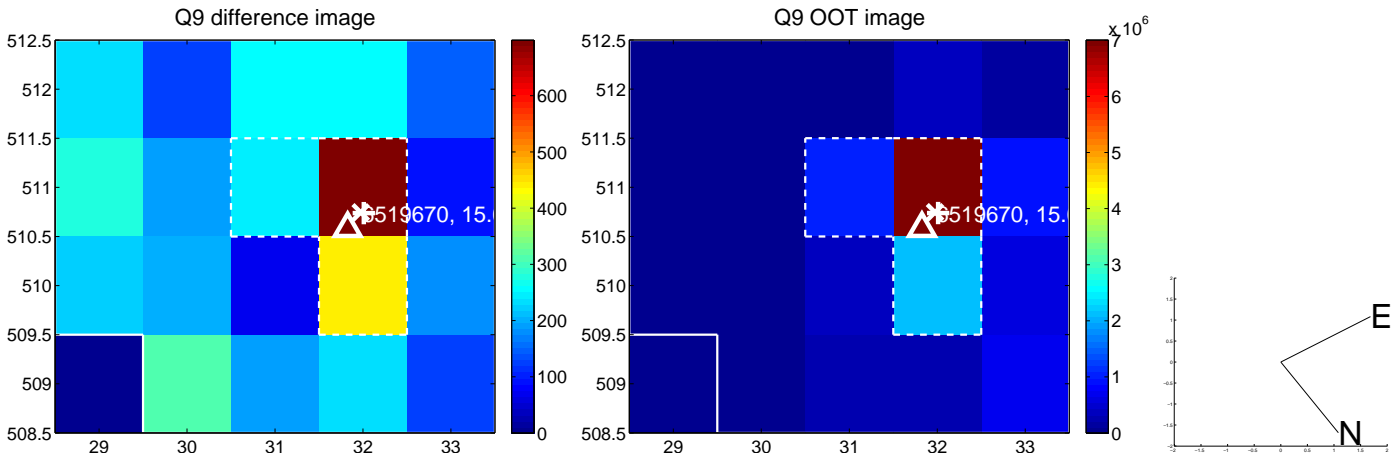
white ×: KIC target position; +: OOT centroid; △: difference centroid. red ✕: large negative pixel value.



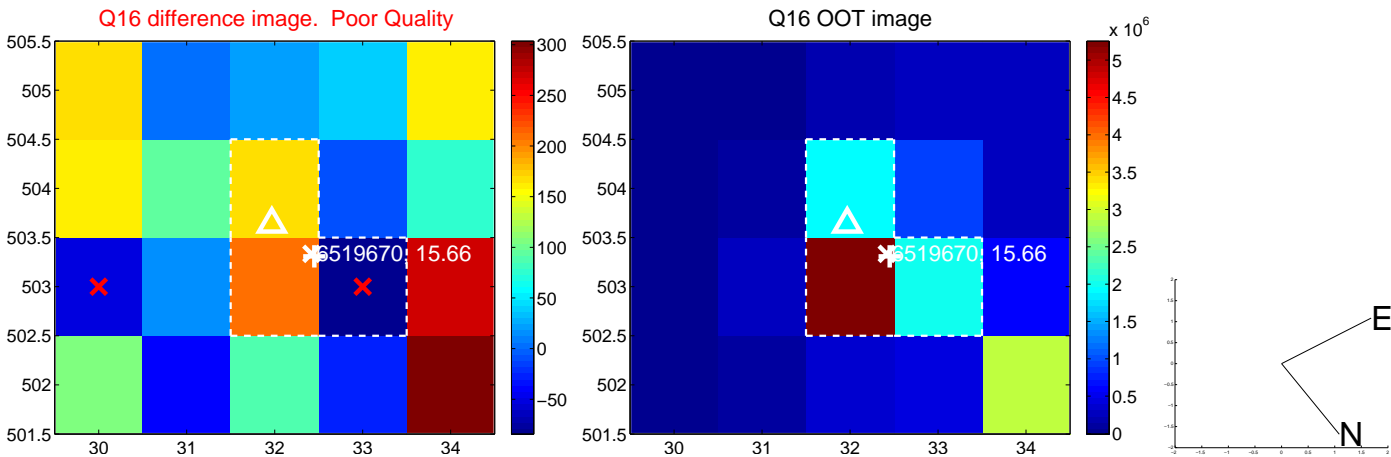
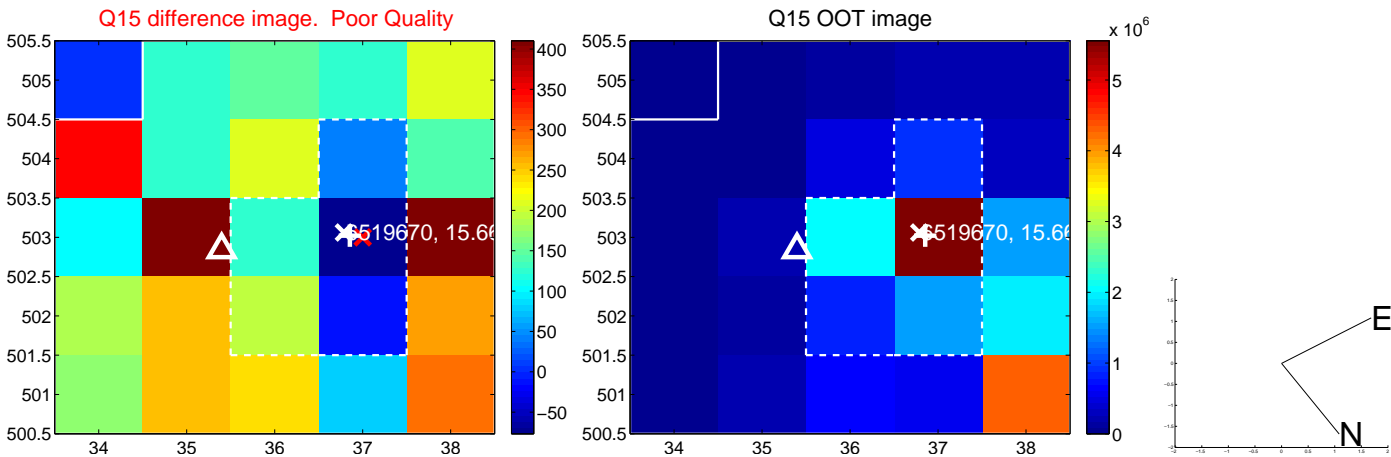
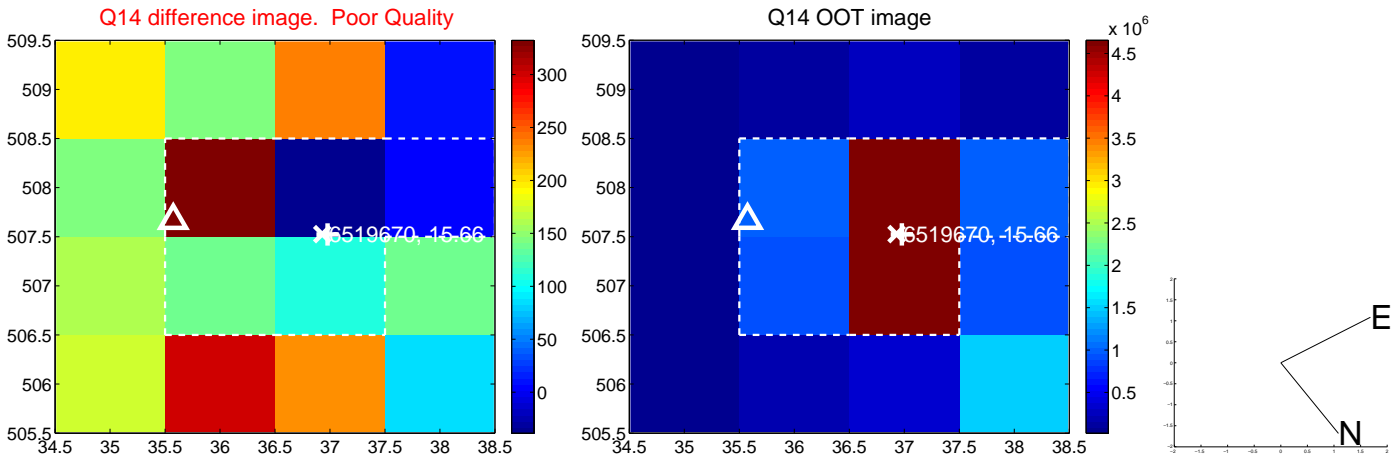
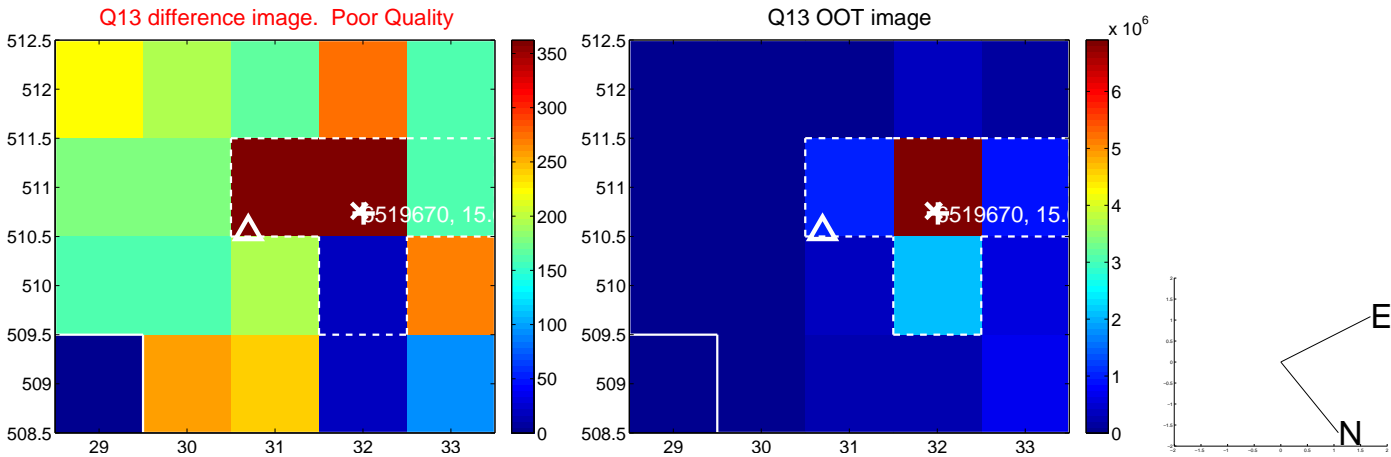
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



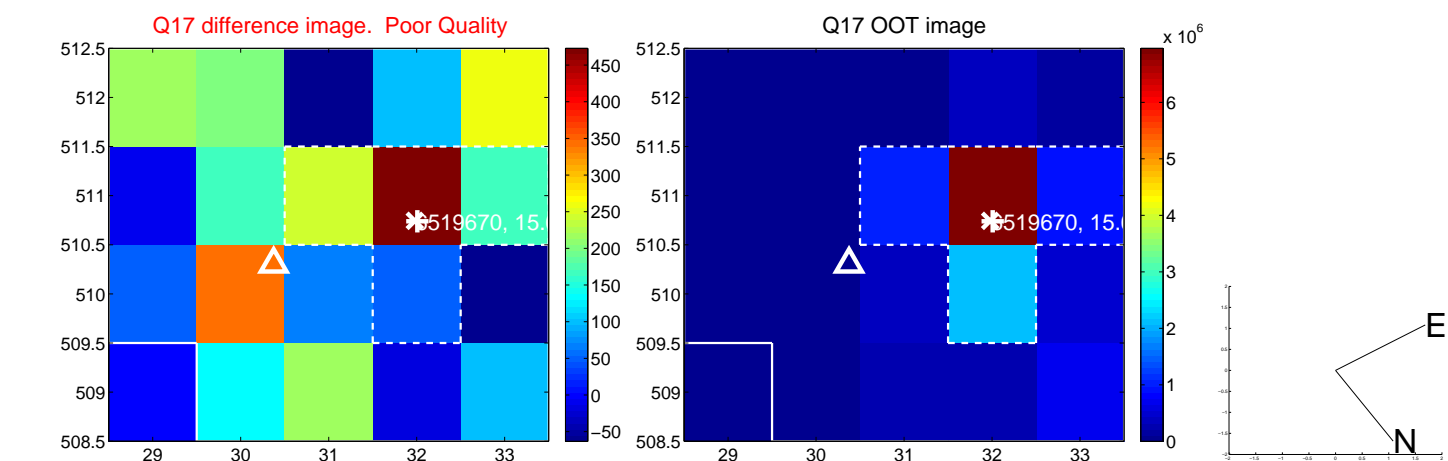
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



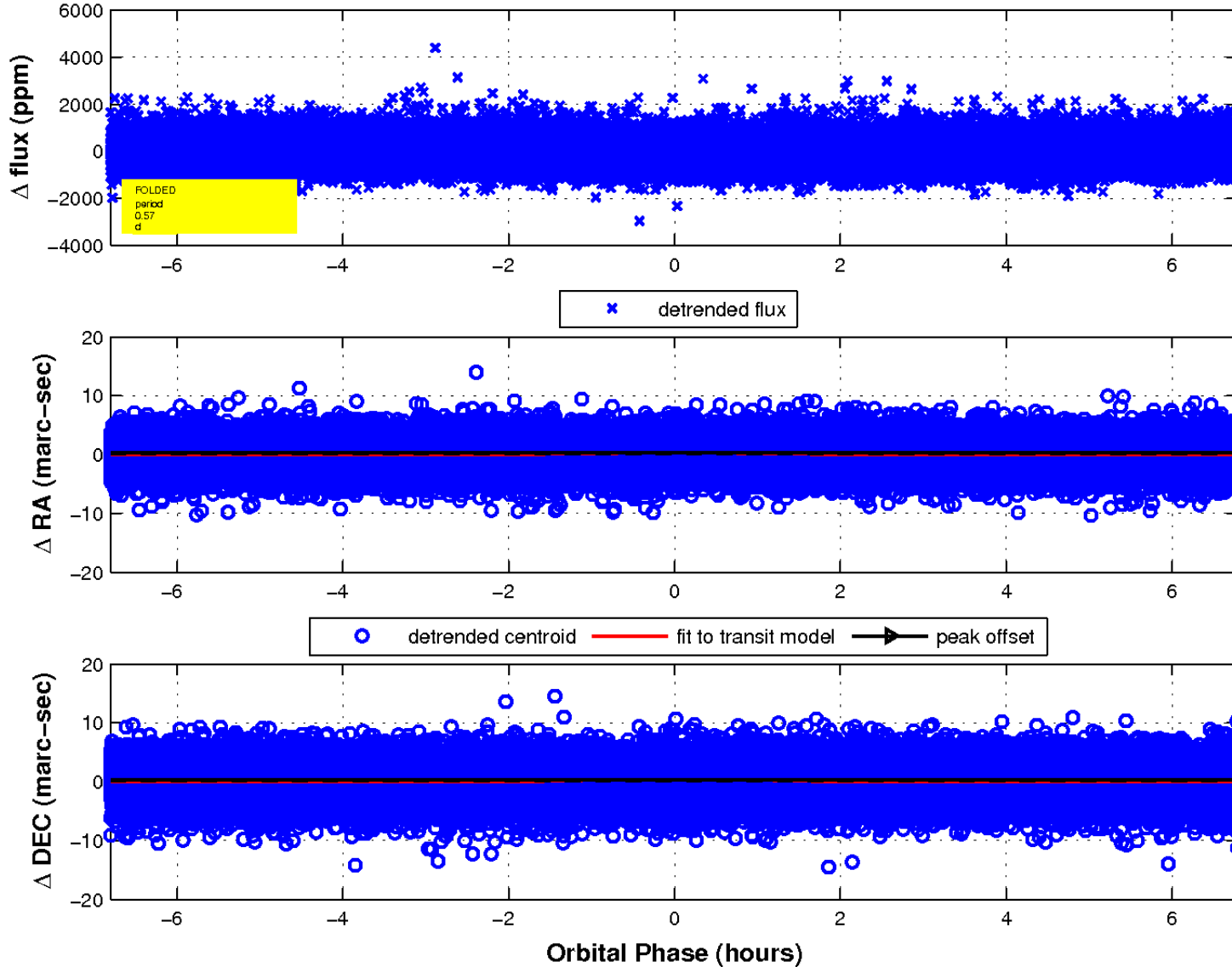
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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fluxWeightedCentroids, Planet 1 of 1



UKIRT Image

Declination

