

KIC 011125666

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})
011125666-01	OBS	No	0.613192	131.924344	13.2	6.488	9.5	10.6	1.43	6543	0.54	14660.75

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
011125666-01	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—CENT_FEW_MEAS

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

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

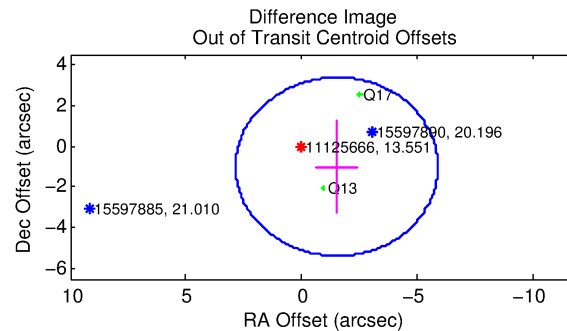
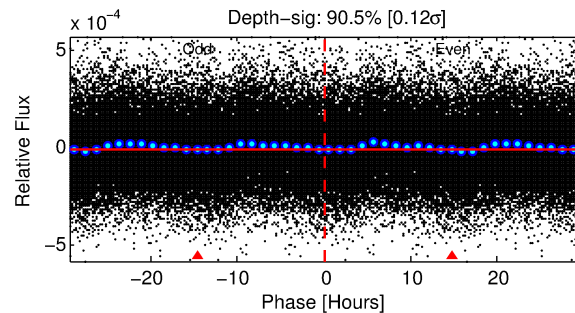
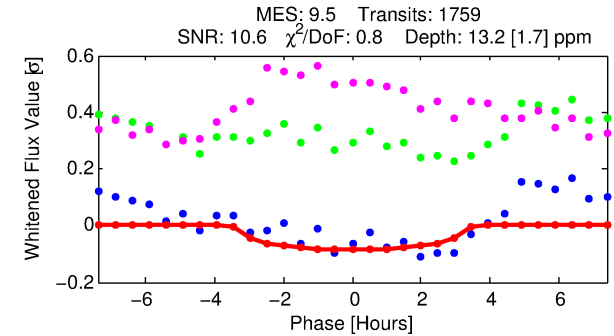
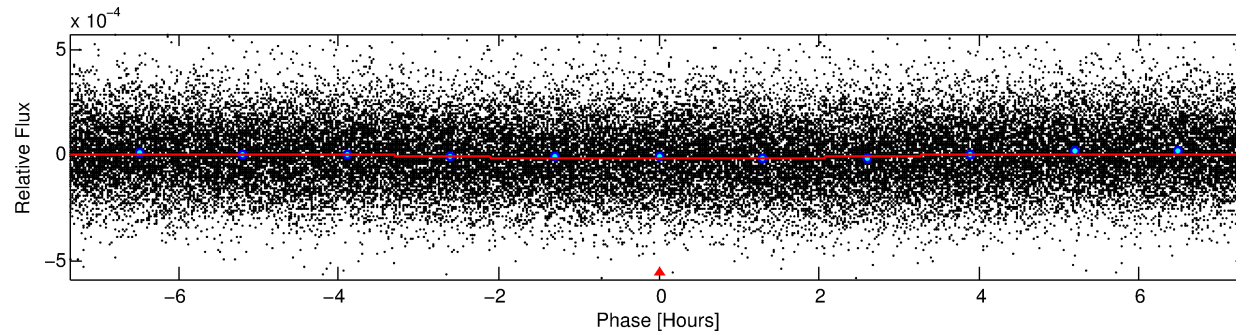
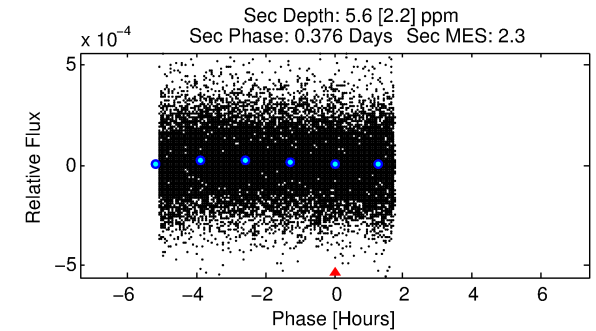
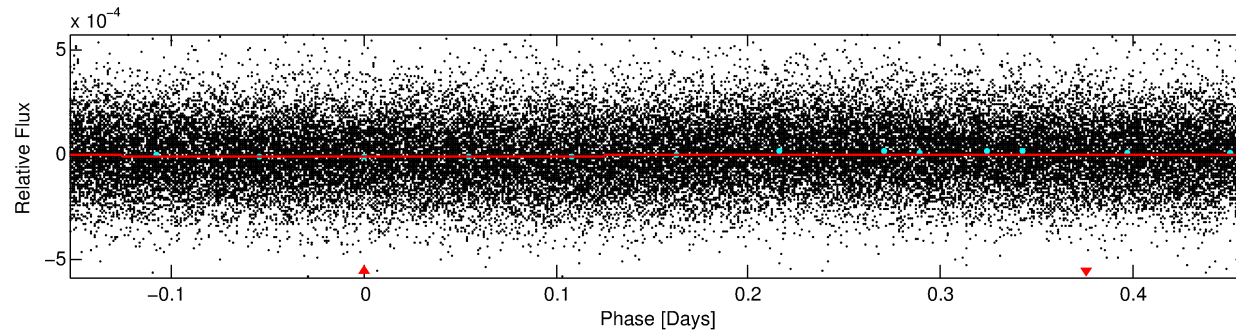
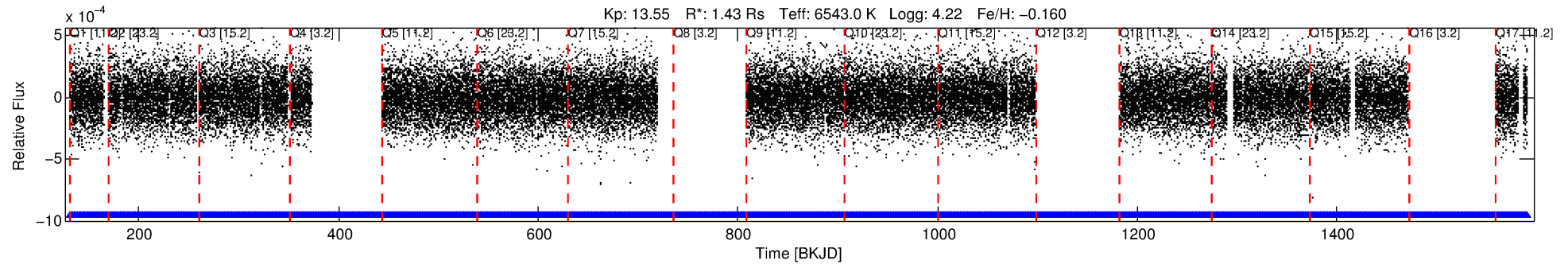
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 011125666-01

No Significant Match Found

DV One-Page Summary

KIC: 11125666 Candidate: 1 of 1 Period: 0.613 d



DV Fit Results:

Period = 0.61319 [0.00001] d
Epoch = 131.9243 [0.0066] BKJD
Rp/R* = 0.0035 [0.0033]
a/R* = 1.02 [0.15]
b = 0.57 [6.24]
Seff = 14660.74 [5444.41]
Teq = 2806 [260] K
Rp = 0.54 [0.54] Re
a = 0.0151 [0.0037] AU
Ag = 2.39 [4.74] [0.29σ]
Teffp = 5396 [2634] K [0.98σ]

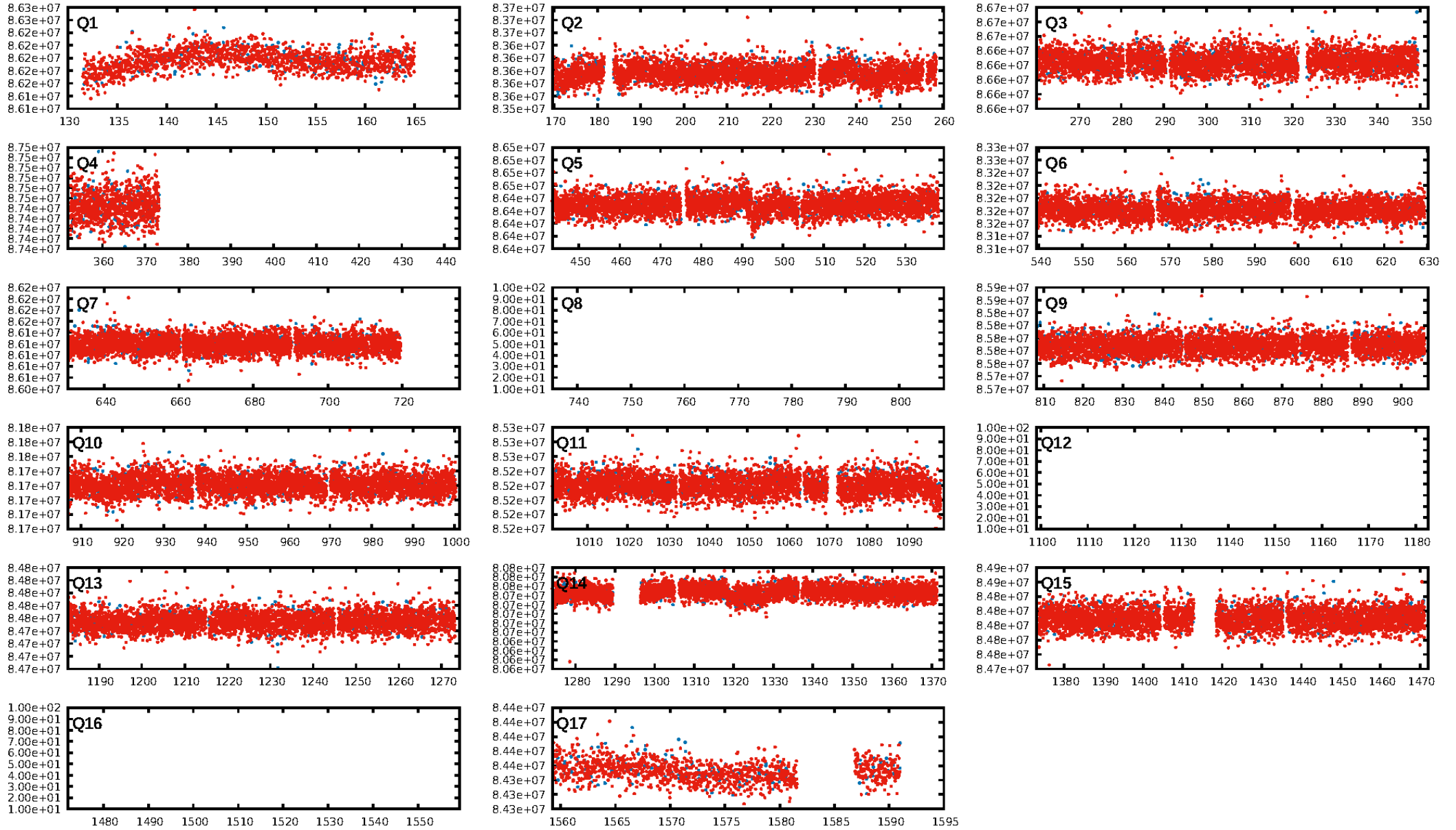
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [1626/1626]
GhostDiagnostic-chr: -0.6826
Centroid-sig: 0.0%
Centroid-so: 9.844 arcsec [7.15σ]
OotOffset-rm: 1.827 arcsec [1.25σ]
OotOffset-st: 0/0/0/2 [2]
KicOffset-rm: 1.897 arcsec [1.20σ]
KicOffset-st: 0/0/0/2 [2]
DiffImageQuality-fgm: 0.50 [1/2]
DiffImageOverlap-fno: 1.00 [14/14]

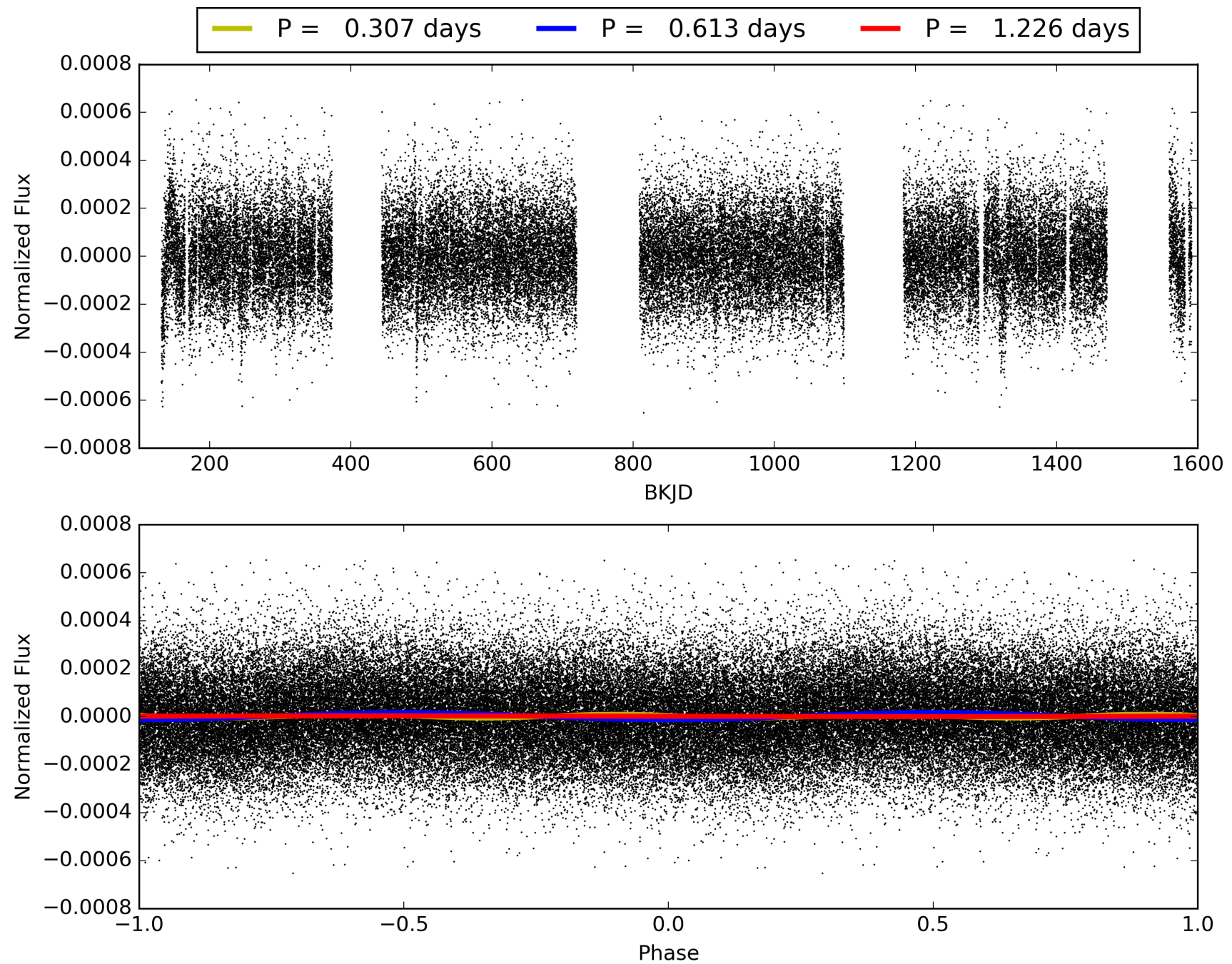
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 28-Jan-2016 23:13:35 Z

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

TCE 011125666-01, PDC Light Curves

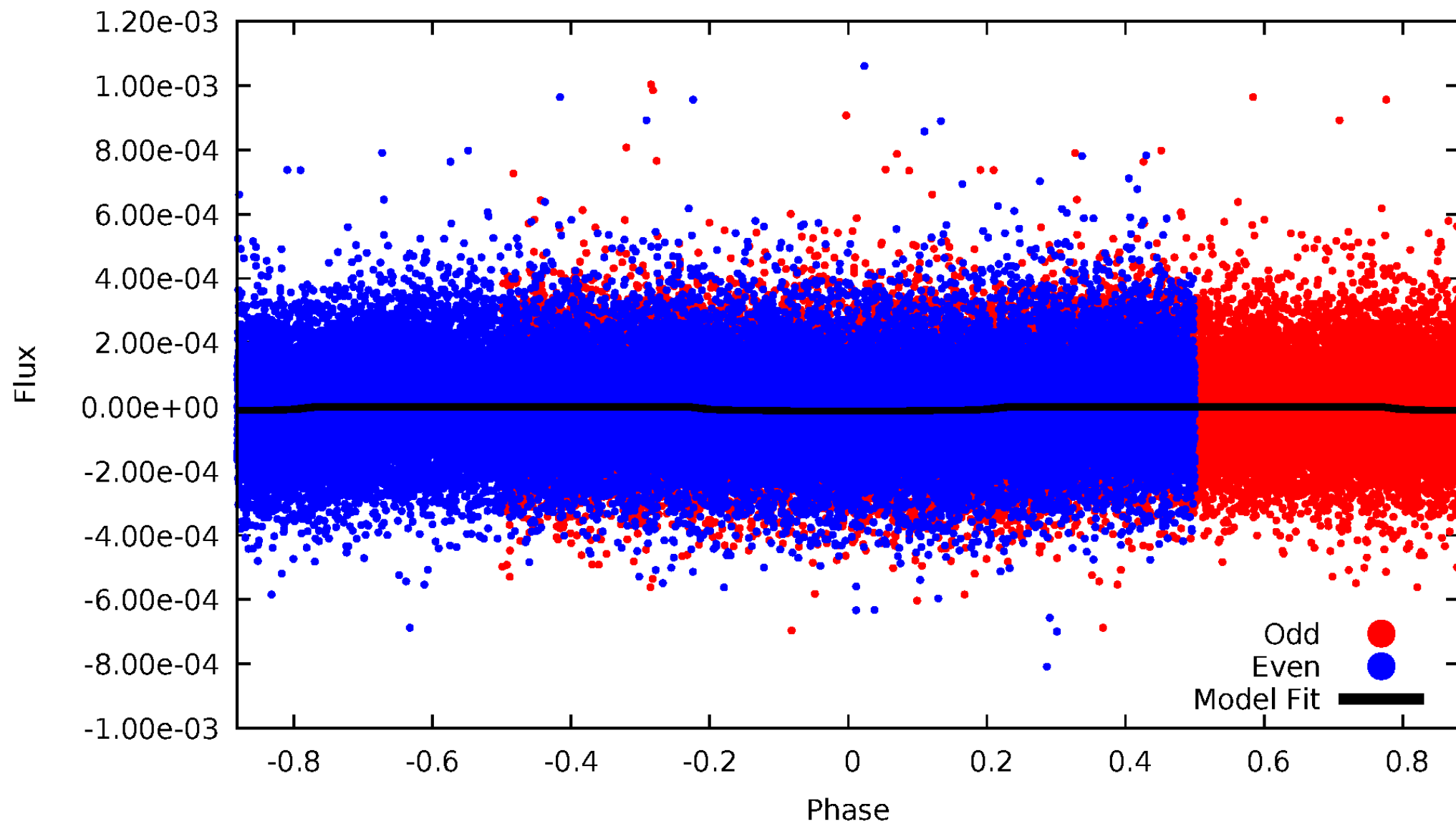


TCE 011125666-01



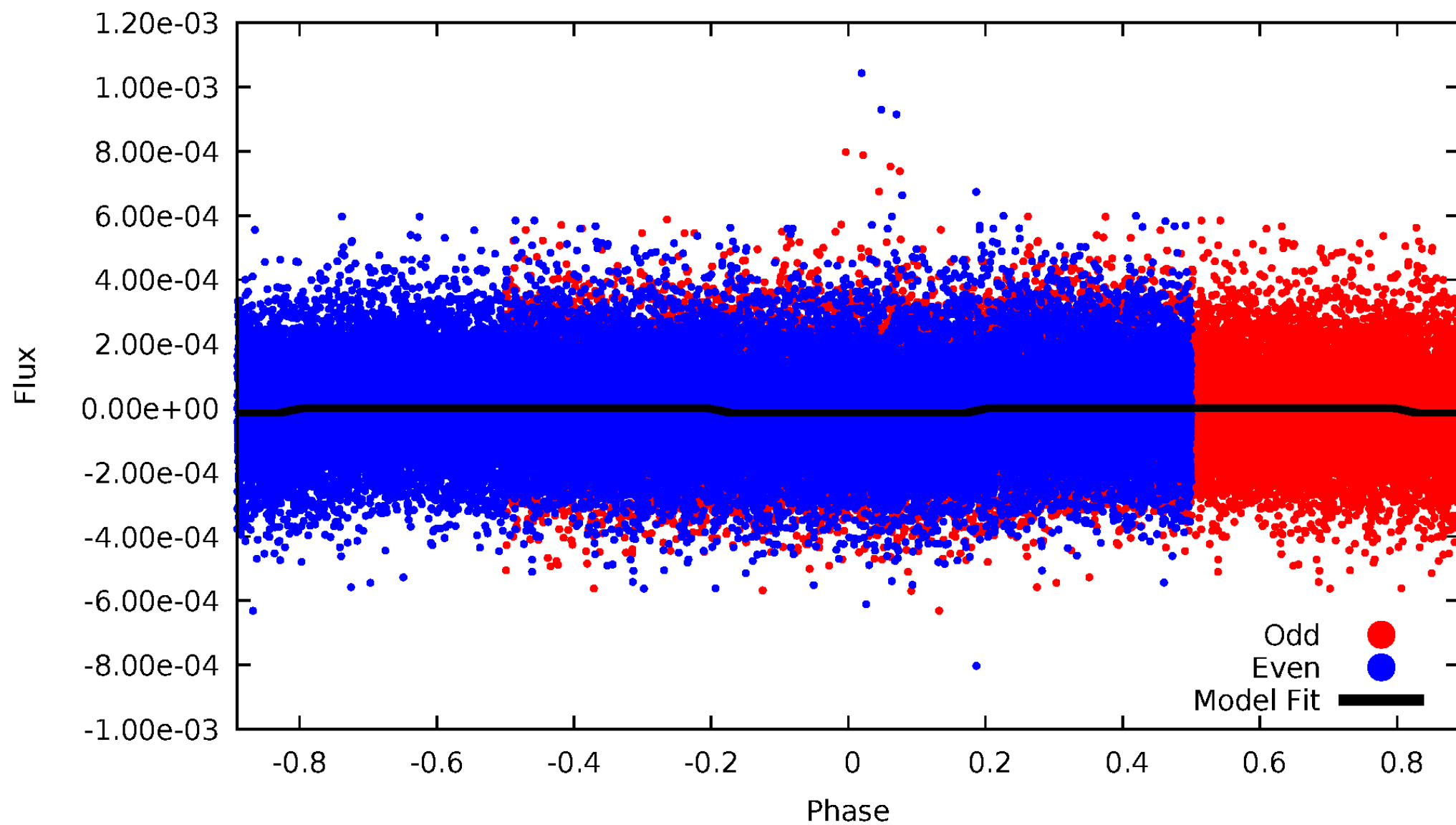
DV Odd/Even

TCE 011125666-01



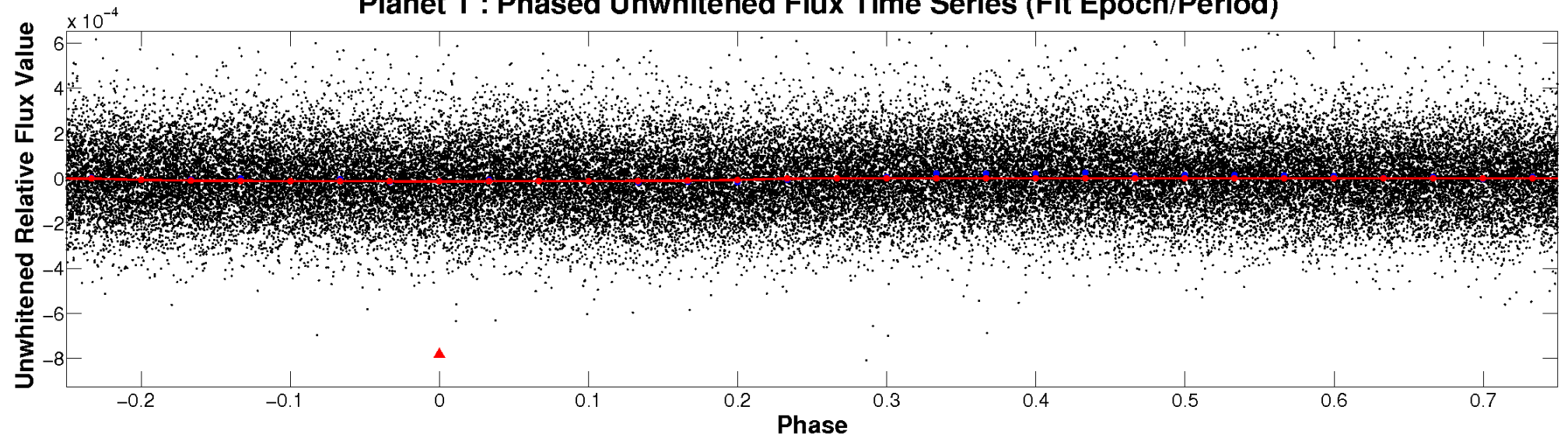
ALT Odd/Even

TCE 011125666-01

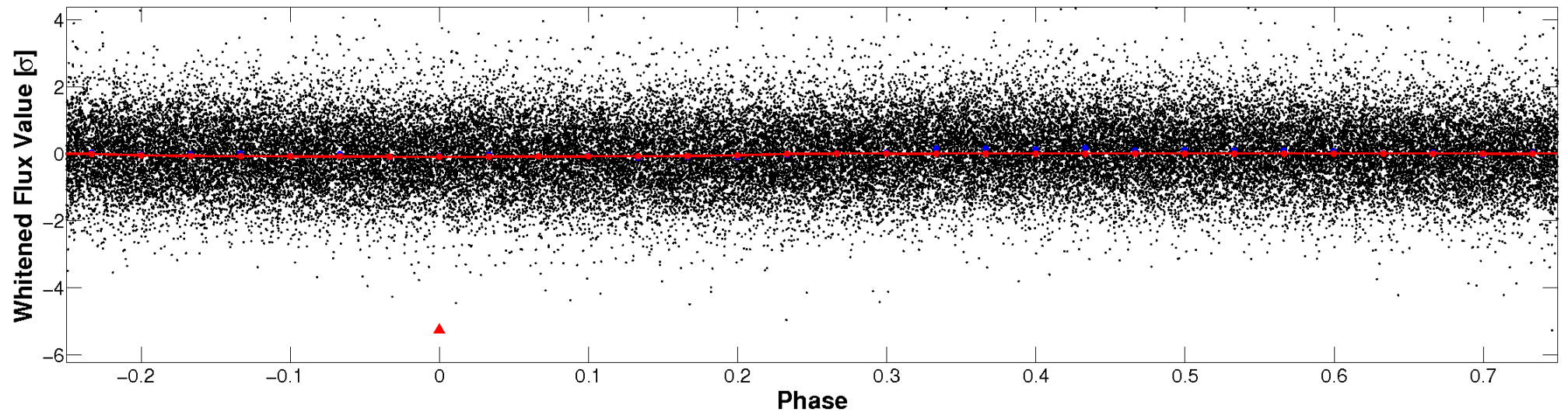


Non-Whitened Vs. Whitened Light Curve

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

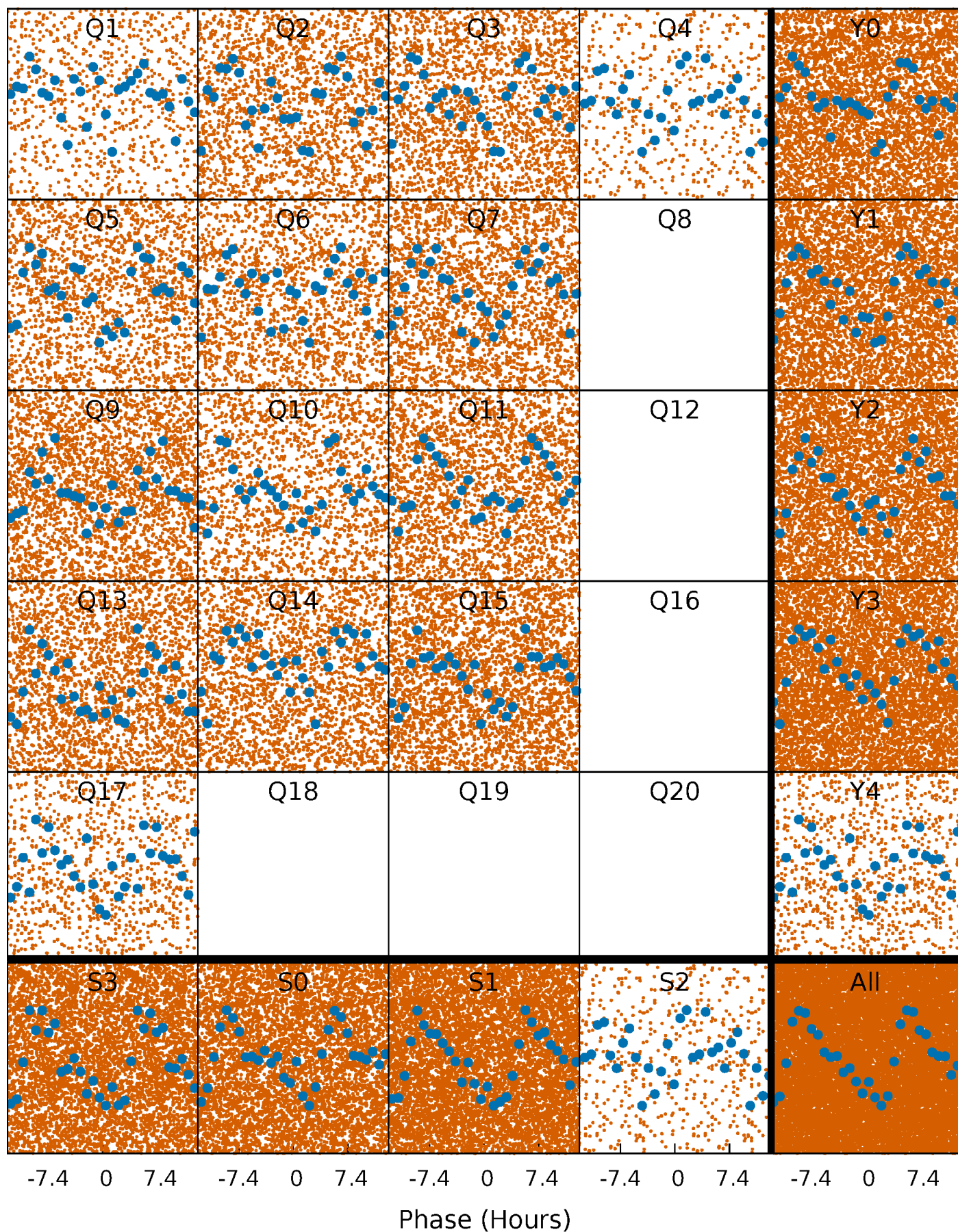


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



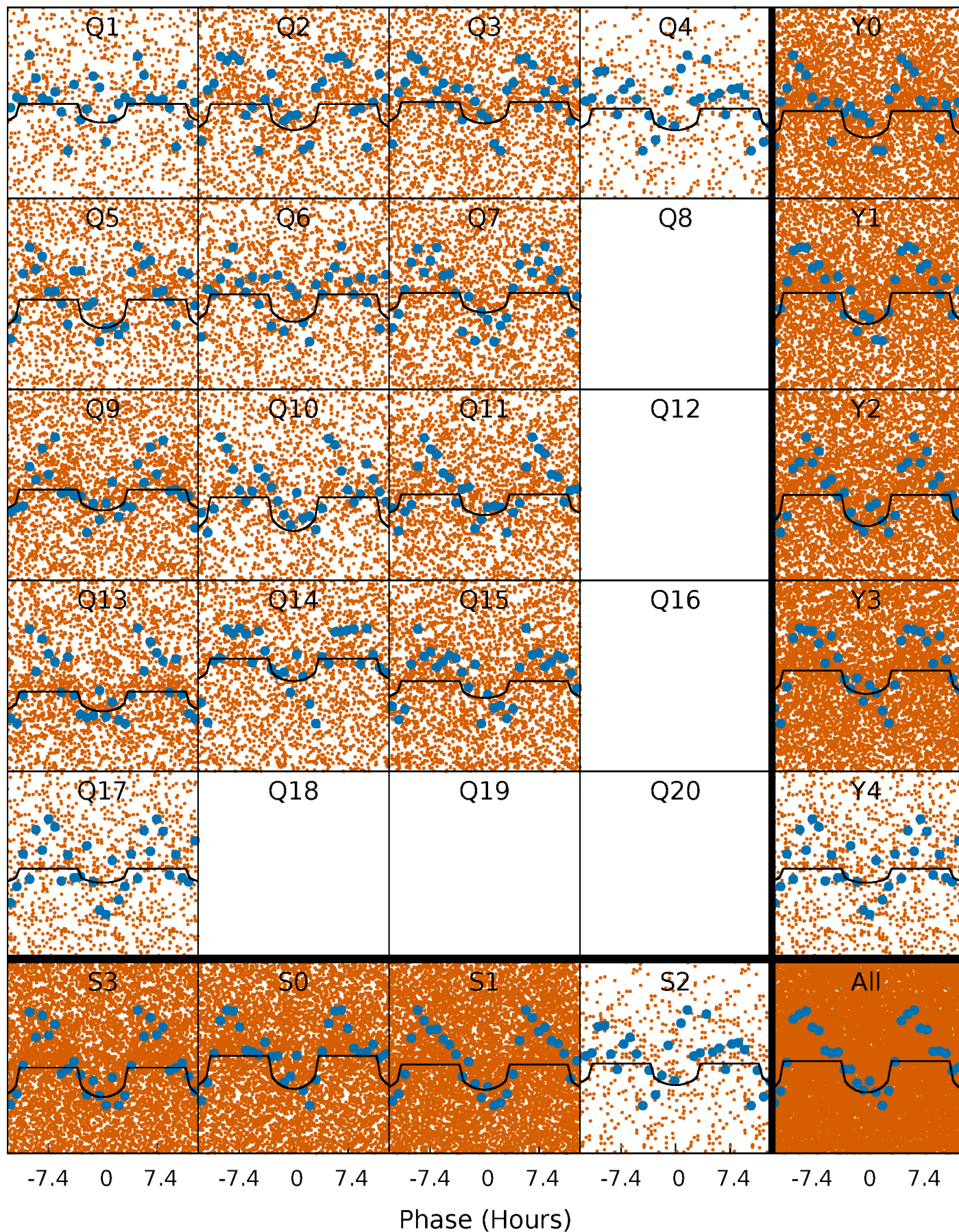
PDC Quarter-Phased Transit Curves

TCE 011125666-01 P= 0.613192 Days $T_0=131.924344$ (BKJD)



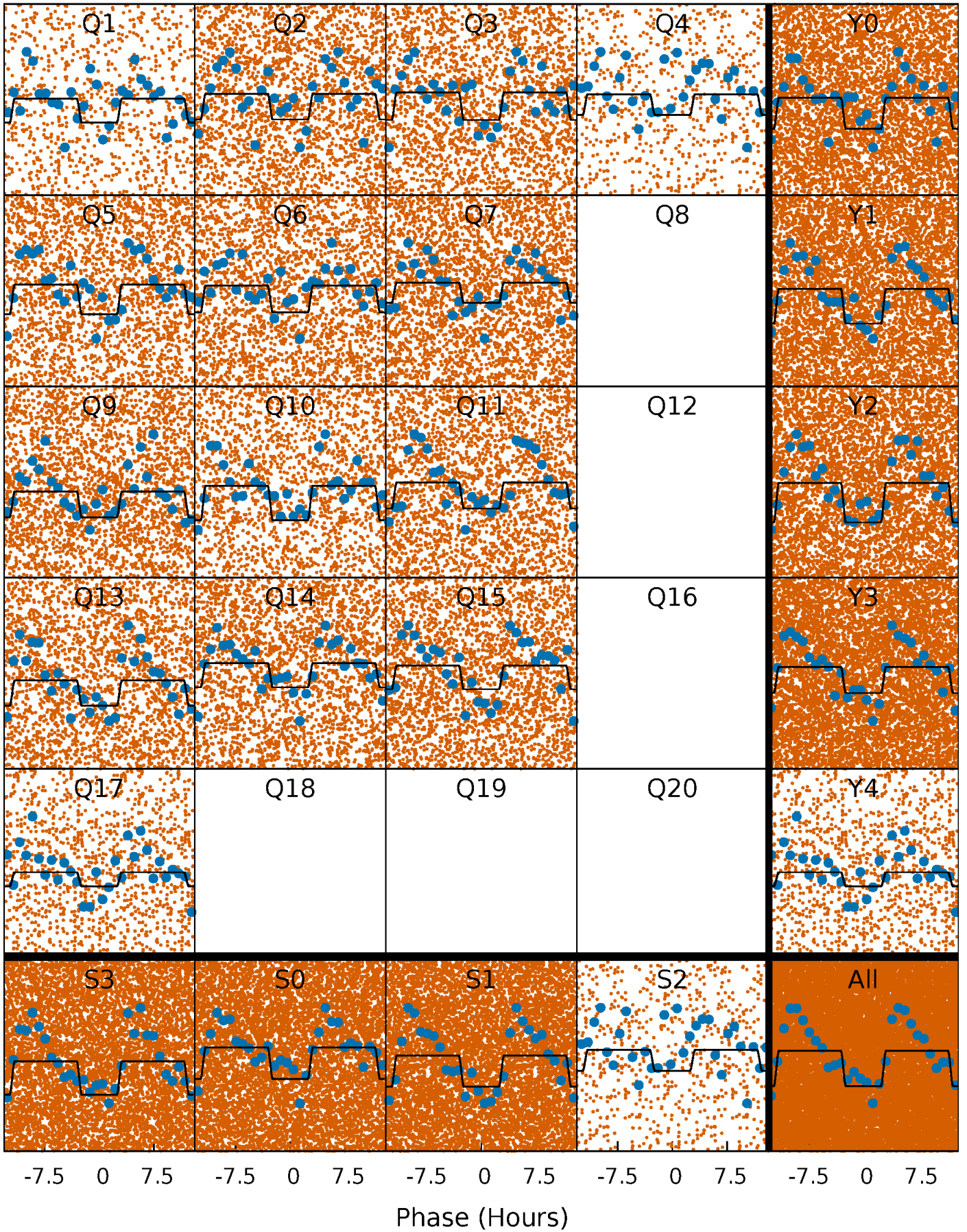
DV Quarter-Phased Transit Curves

TCE 011125666-01 P= 0.613192 Days $T_0=131.924344$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

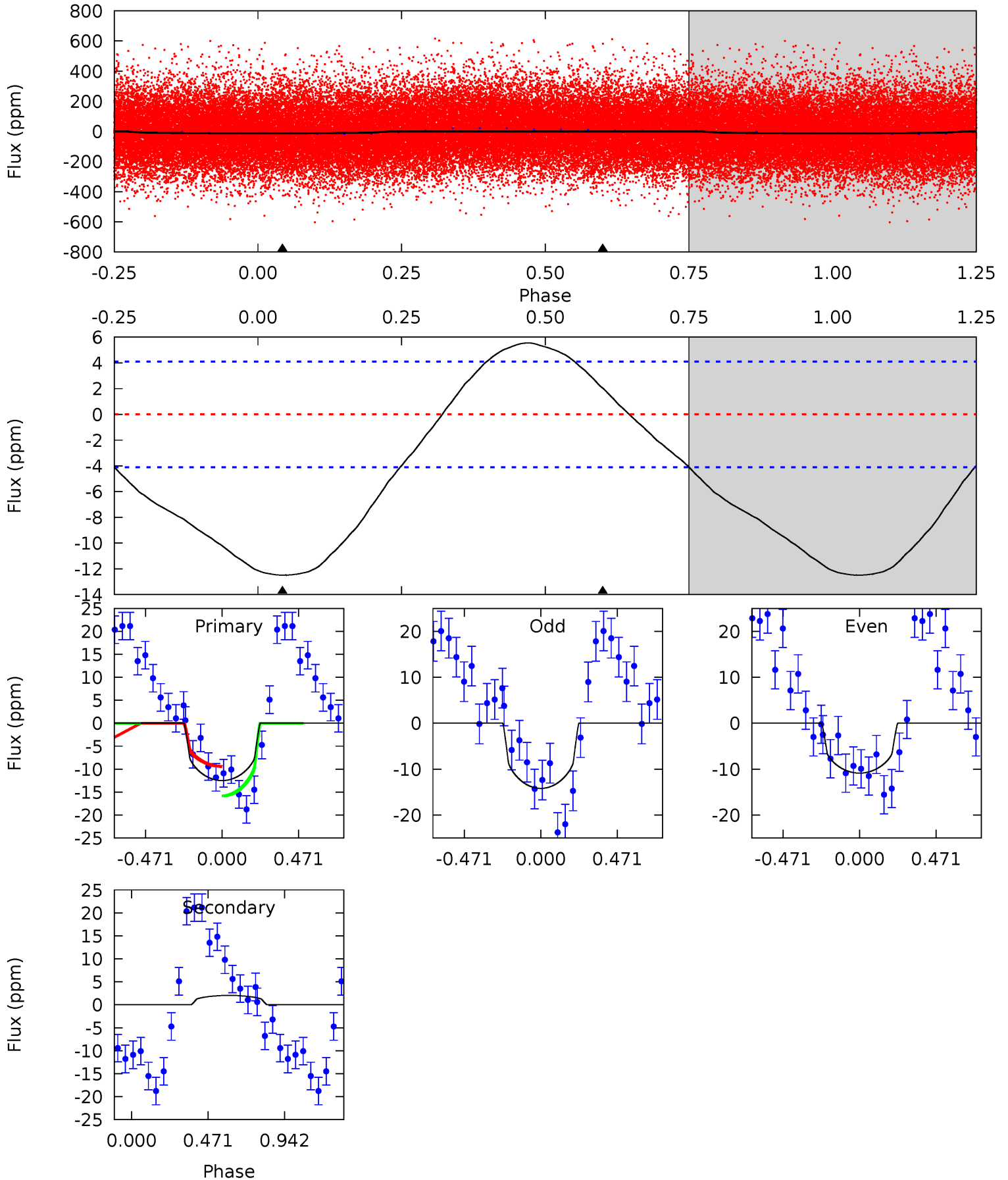
TCE 011125666-01 P= 0.613223 Days $T_0=131.922376$ (BKJD)



DV Model-Shift Uniqueness Test

011125666-01, P = 0.613192 Days, E = 131.311152 Days

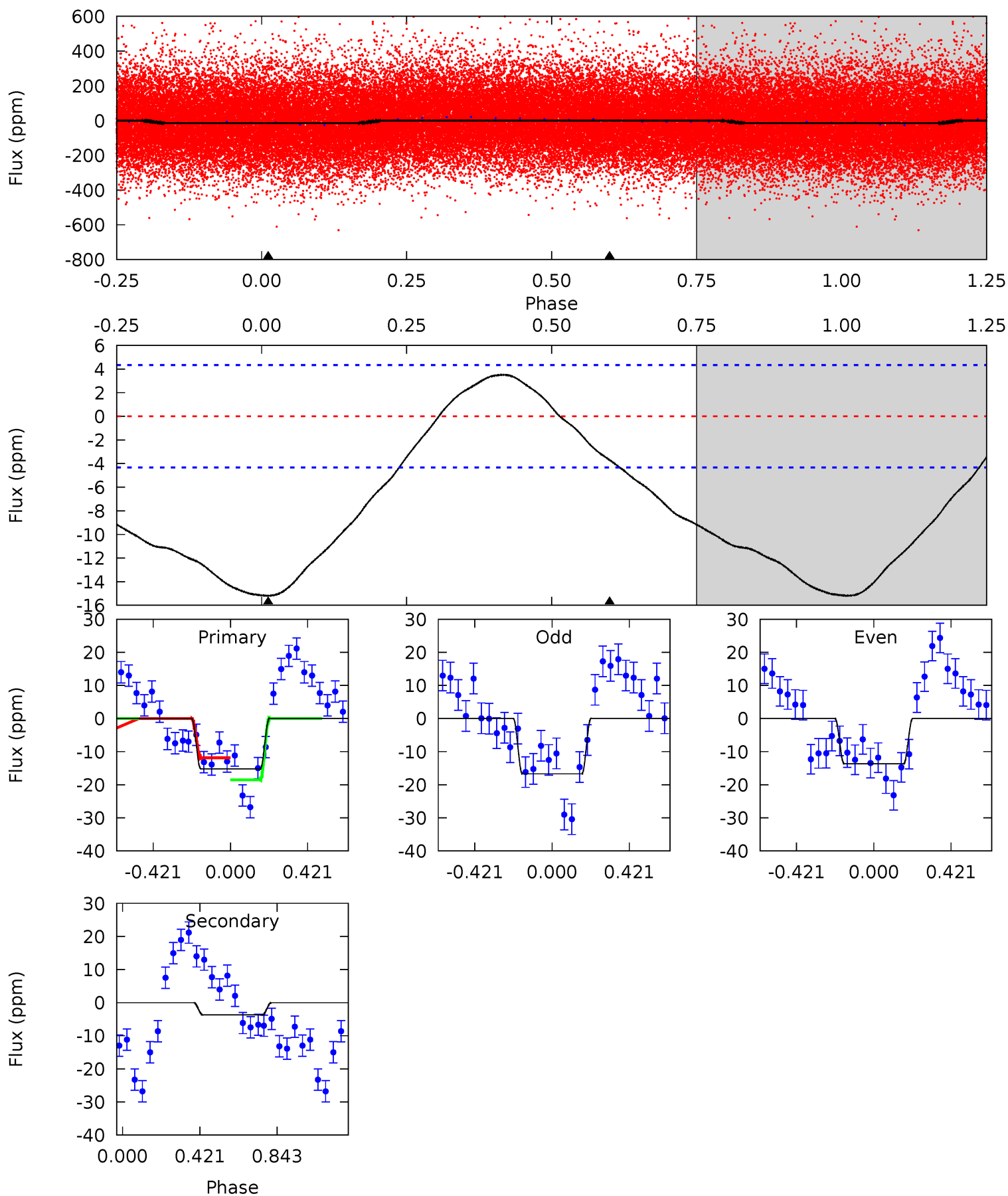
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
12.9	-2.10	0	0	4.23	0.72	1.74	12.9	12.9	-2.10	-2.10	1.71	1.05	0.31	3.36



Alt Model-Shift Uniqueness Test

011125666-01, P = 0.613223 Days, E = 131.309153 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
14.9	3.63	0	0	4.25	0.80	1.66	14.9	14.9	3.63	3.63	1.49	0.99	0.19	3.28



Stellar Parameters For KIC 011125666

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6543^{+146}_{-211}	$4.216^{+0.153}_{-0.187}$	$-0.160^{+0.250}_{-0.300}$	$1.427^{+0.422}_{-0.307}$	$1.225^{+0.188}_{-0.188}$	$0.594^{+0.462}_{-0.302}$
	+2%/-3%	+4%/-4%	+156%/-188%	+30%/-22%	+15%/-15%	+78%/-51%
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 011125666-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	2 ± 1	$0.64^{+0.48}_{-0.43}$	3914^{+319}_{-221}	-4489^{+559}_{-2336}	$-0.596^{+0.442}_{-4.428}$
Alt.	-4 ± 1	$0.67^{+0.53}_{-0.39}$	3912^{+315}_{-247}	4207^{+2406}_{-2103}	$0.991^{+4.862}_{-0.687}$

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 $A_{obs} \gg 1.0$

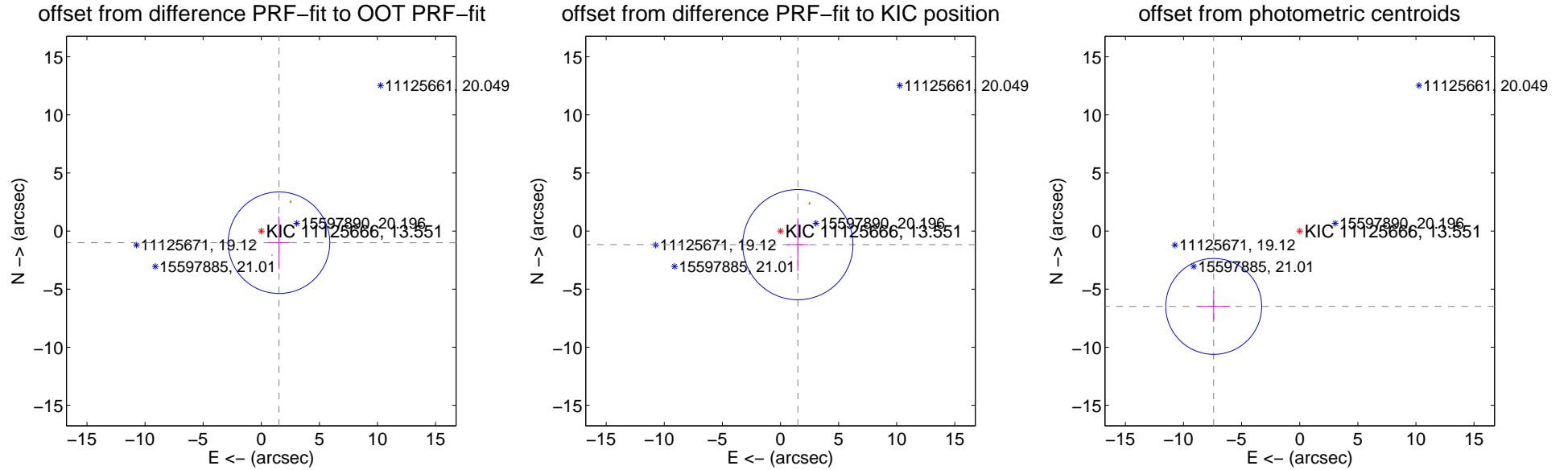
DV Centroid Data

Supplemental centroid analysis for 011125666-01. Kepler magnitude: 13.55. Transit SNR 10.60

There are 1 quarters with good PRF difference image offsets

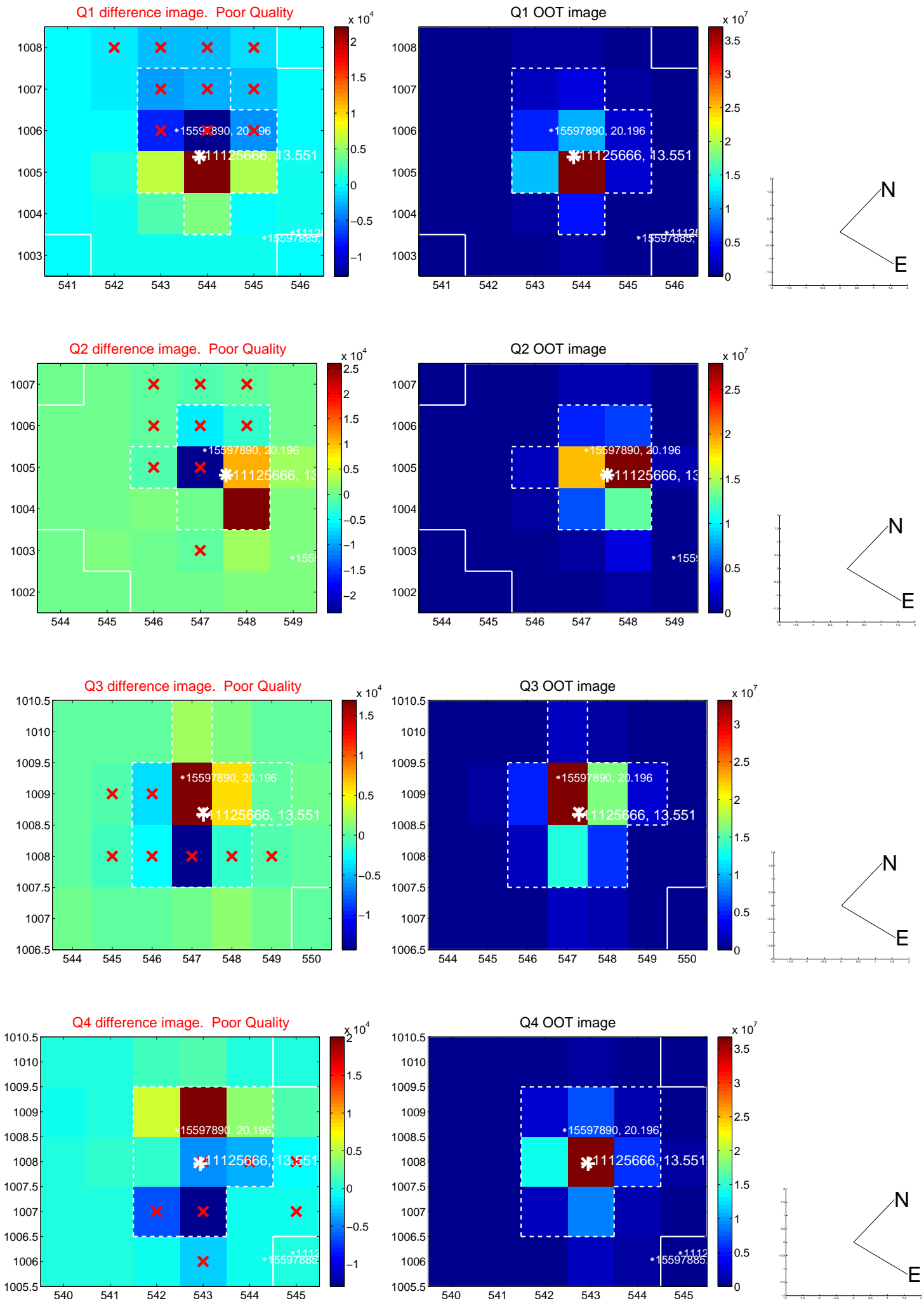
The direct PRF centroid is offset from the target star catalog position by about 0.14 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	1.827 ± 1.457	1.25	-1.526 ± 0.912	-1.004 ± 2.259
PRF-fit source offset from KIC position	1.897 ± 1.581	1.20	-1.493 ± 0.918	-1.171 ± 2.280
photometric centroid source offset	9.84 ± 1.38	7.15	7.40 ± 1.40	-6.49 ± 1.34

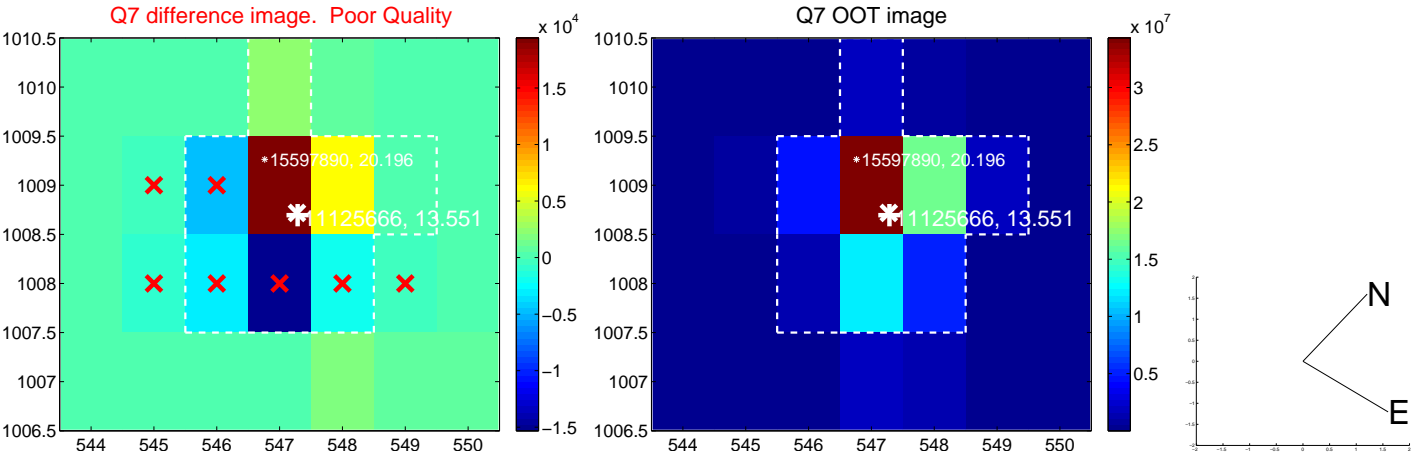
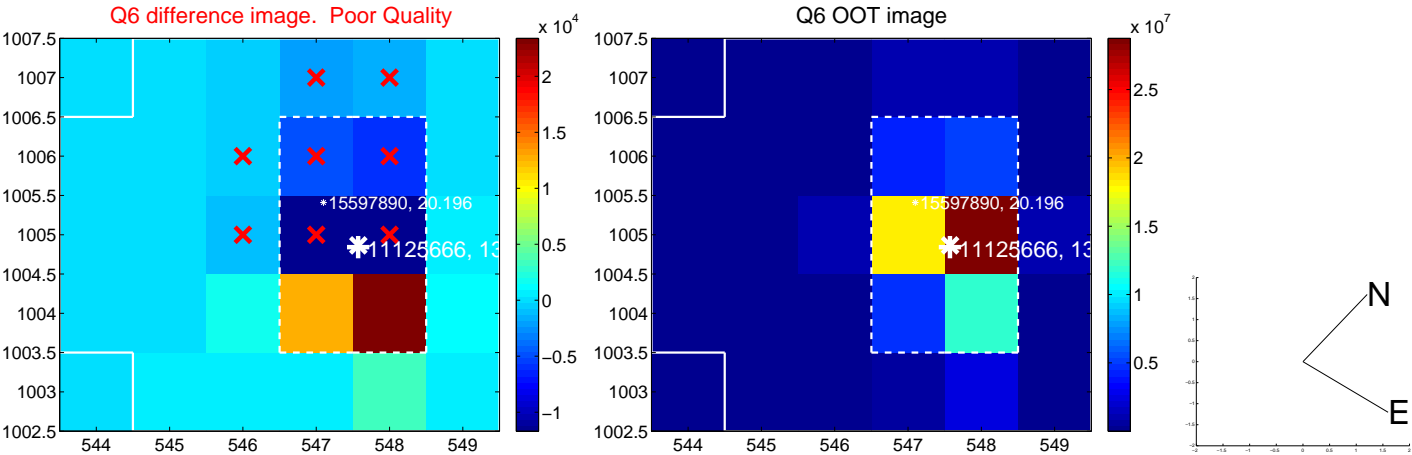
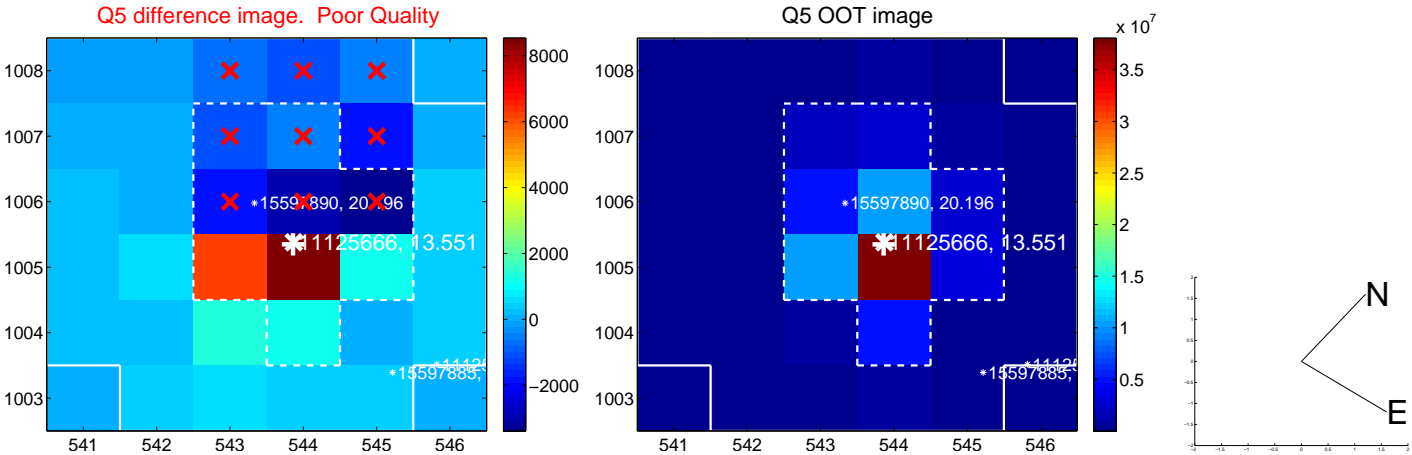


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

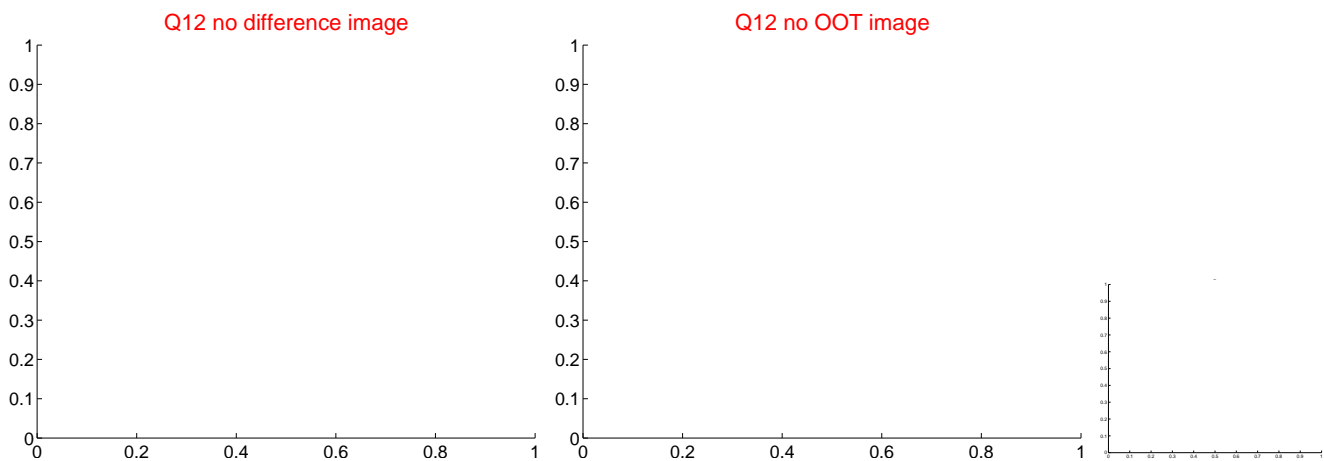
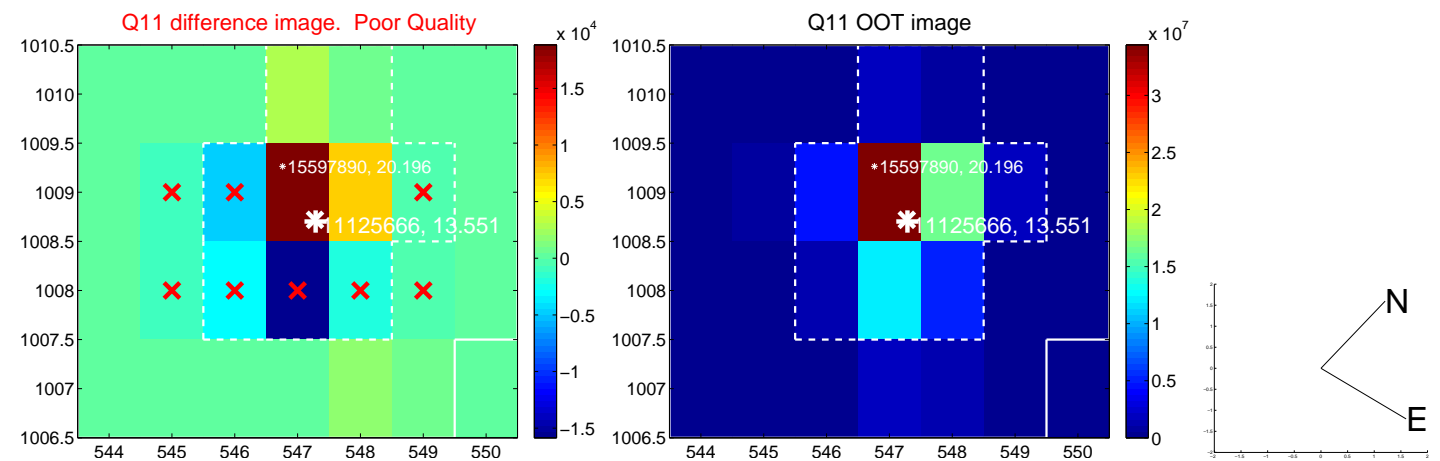
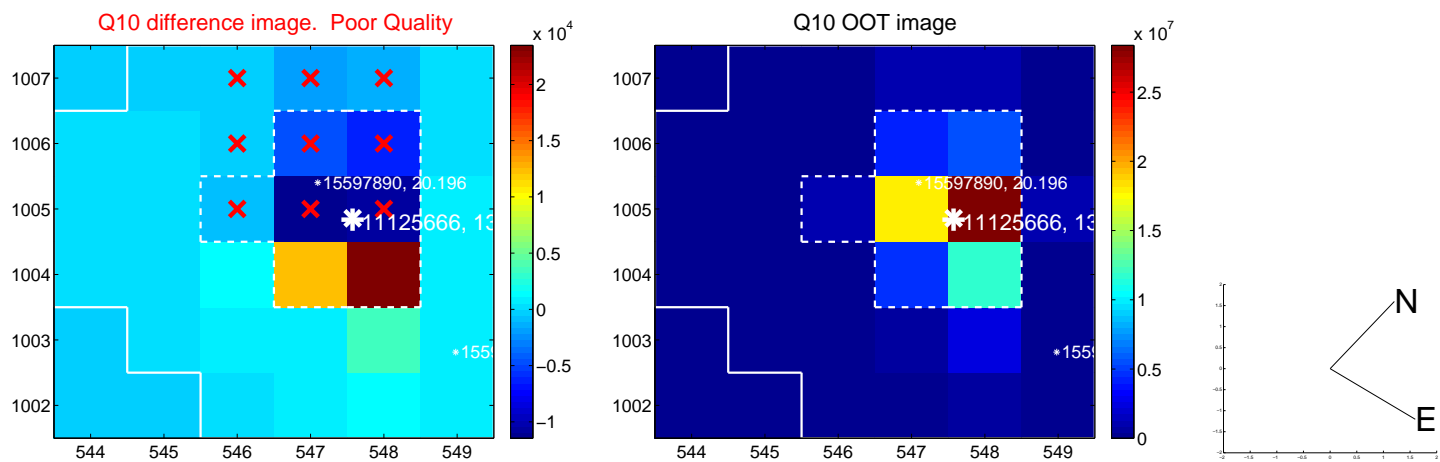
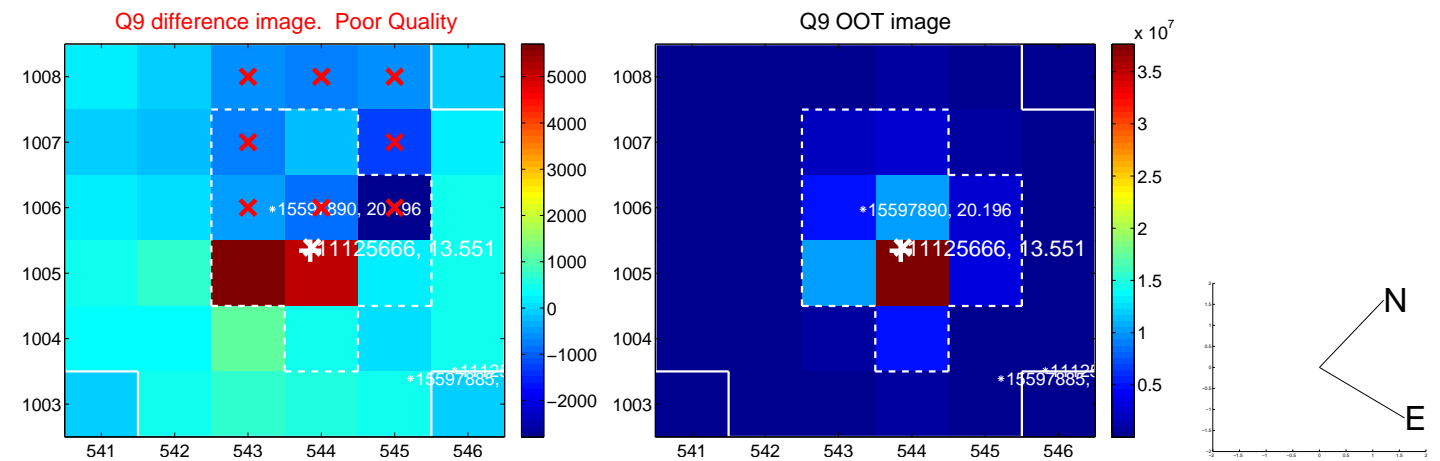
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



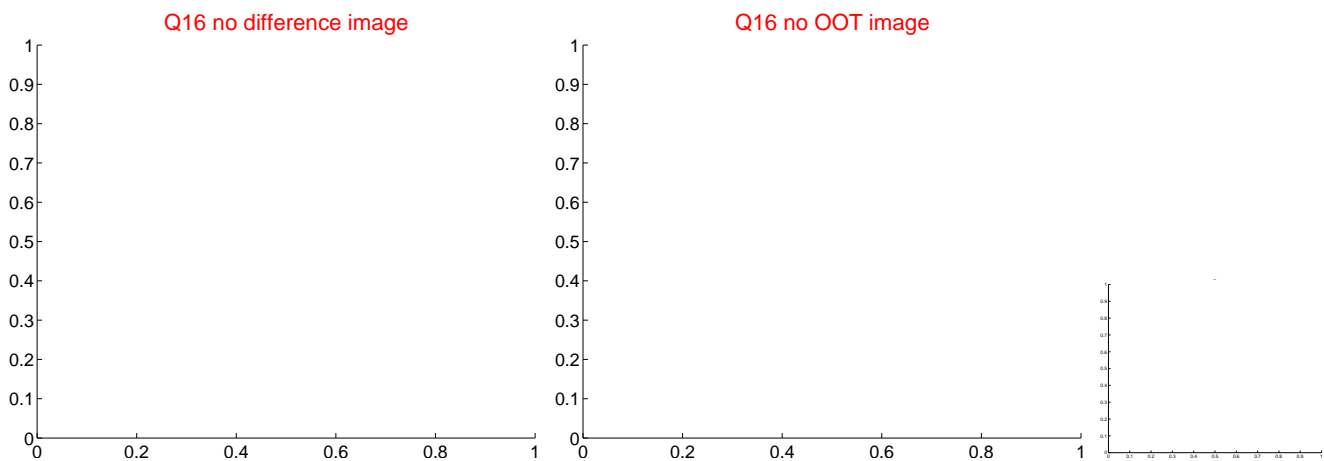
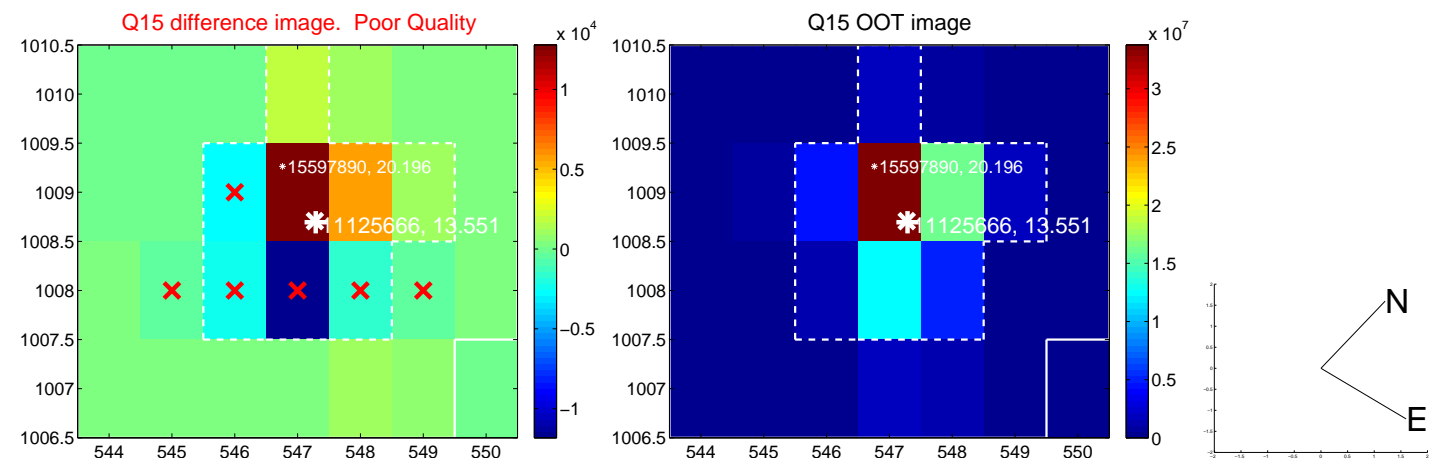
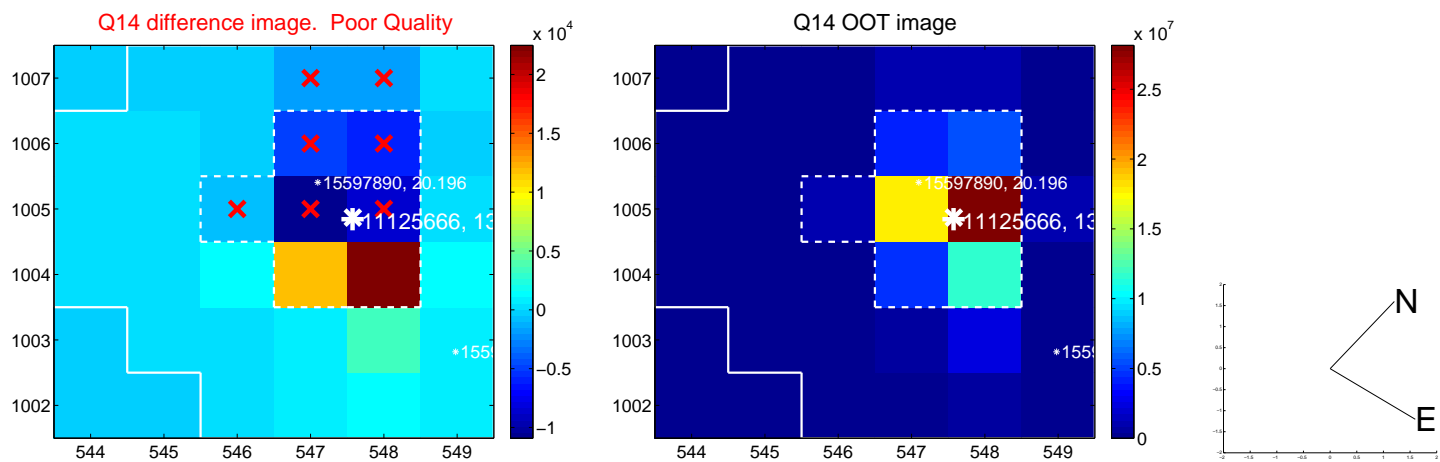
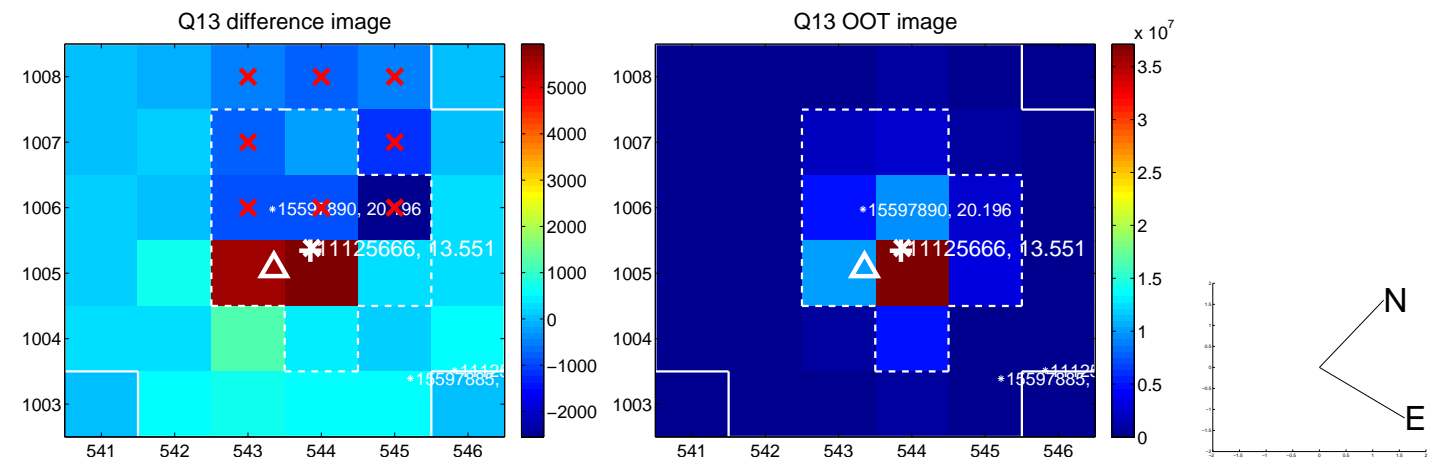
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



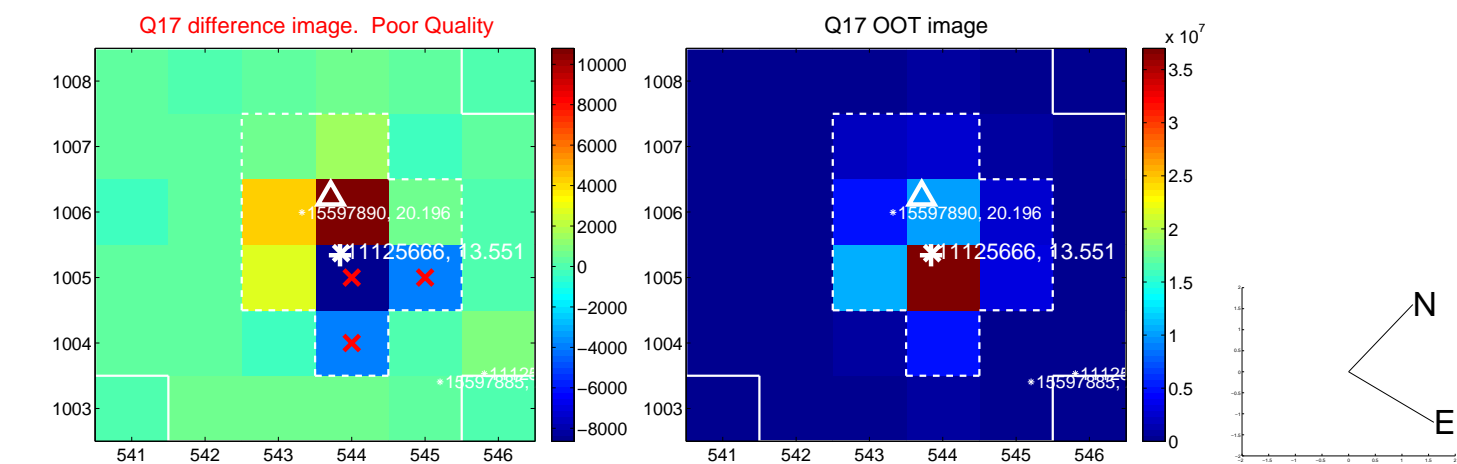
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



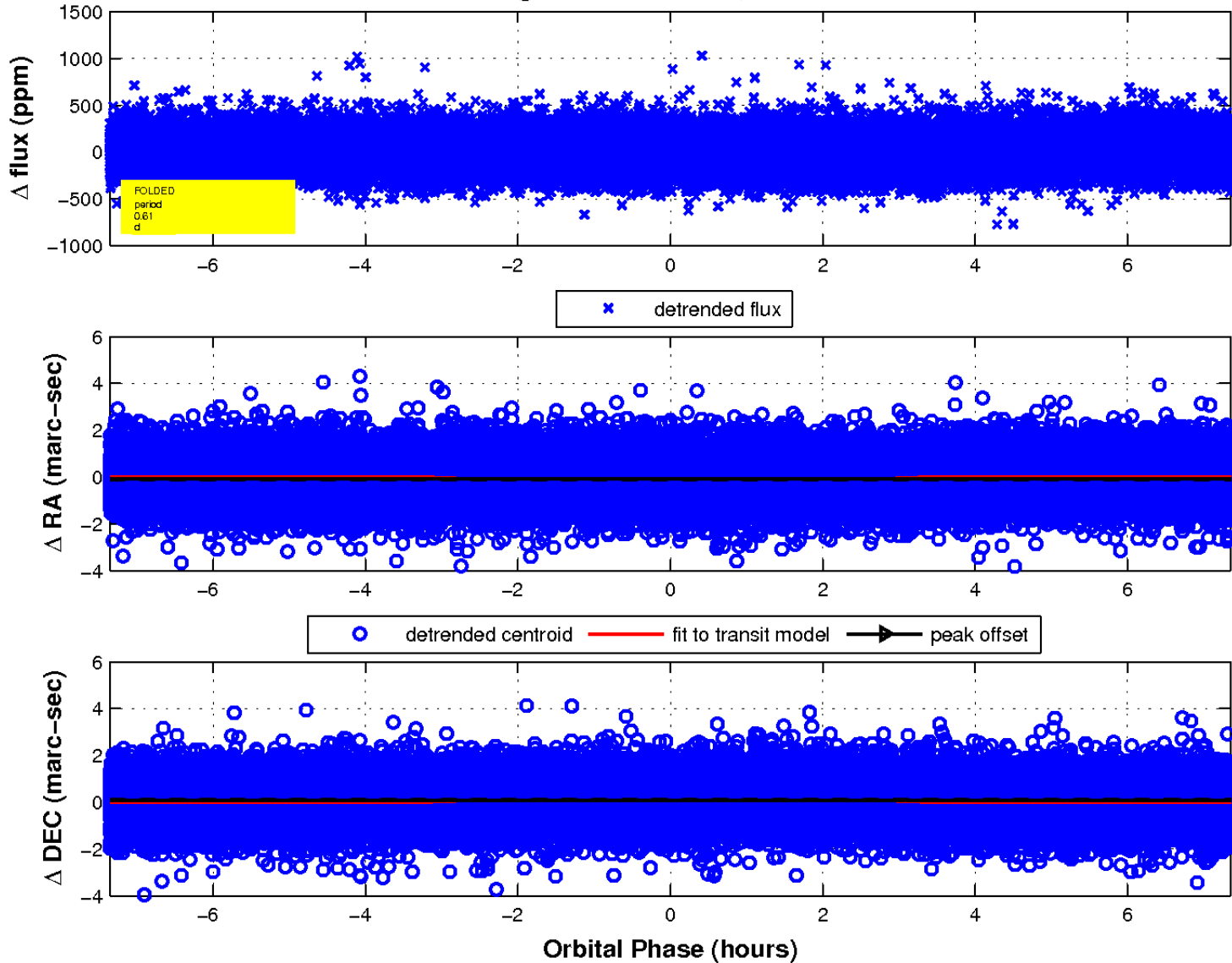
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fluxWeightedCentroids, Planet 1 of 1



UKIRT Image

Declination

