

KIC 006633952

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})
006633952-01	OBS	No	1.505083	132.284158	55.3	5.955	7.3	6.9	0.89	6077	0.78	1495.62

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
006633952-01	OBS	FP	0.00	1	0	0	0	LPP_DV—MOD_NONUNIQ_ALT—CENT_FEW_DIFFS

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

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

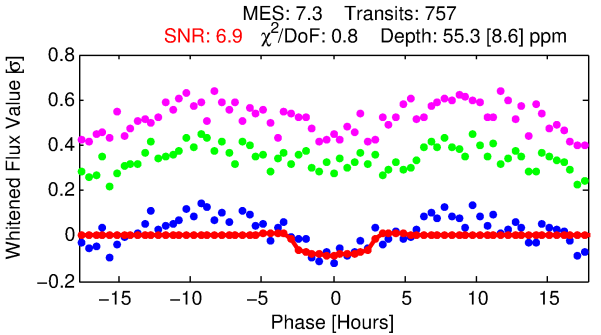
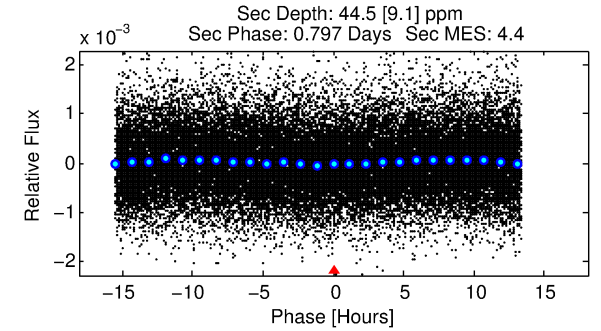
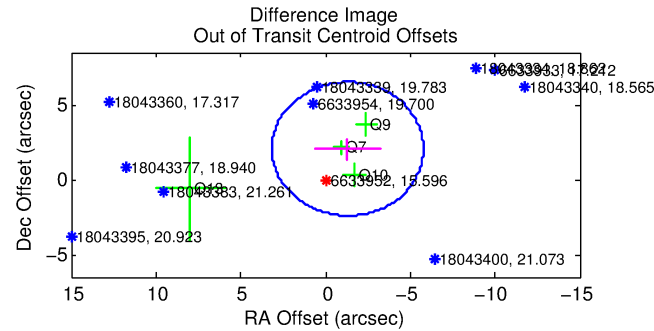
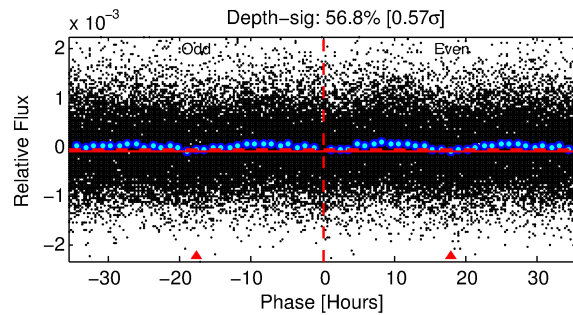
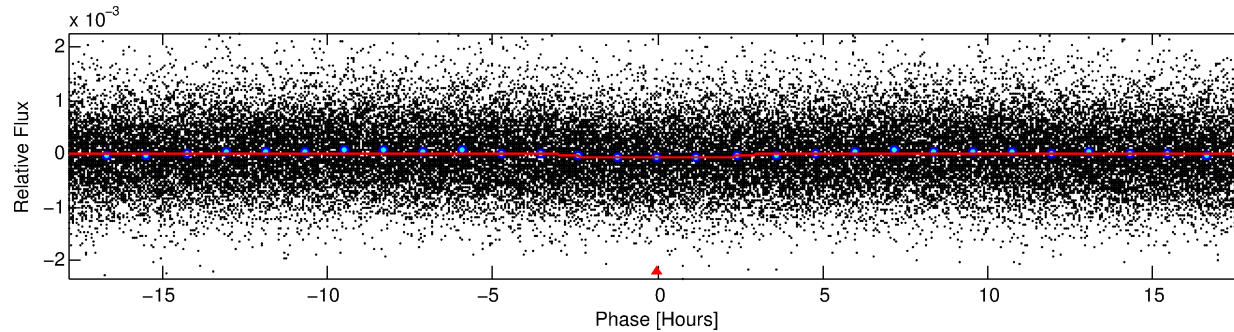
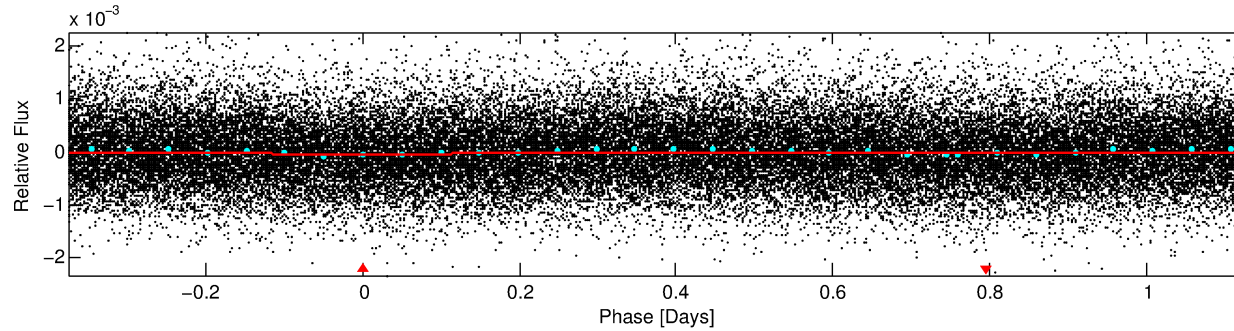
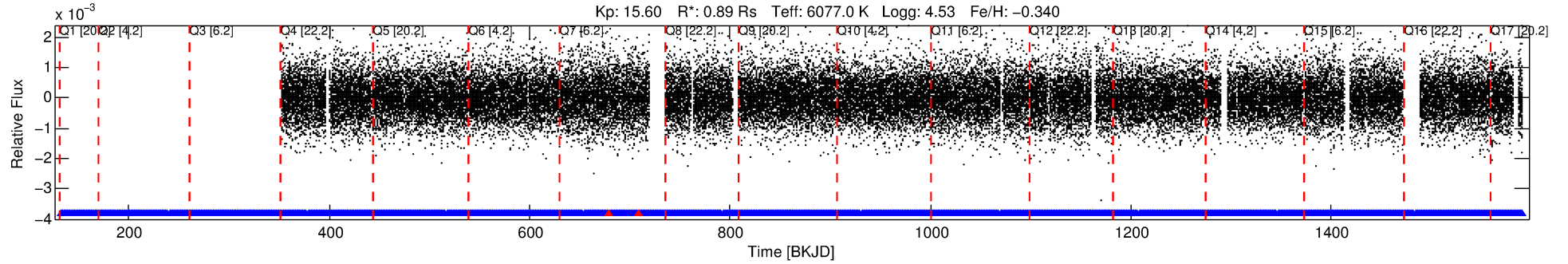
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 006633952-01

No Significant Match Found

DV One-Page Summary

KIC: 6633952 Candidate: 1 of 1 Period: 1.505 d



DV Fit Results:

Period = 1.50508 [0.00003] d
Epoch = 132.2842 [0.0093] BKJD
Rp/R* = 0.0080 [0.0050]
a/R* = 1.29 [1.73]
b = 0.90 [0.74]
Seff = 1495.62 [619.05]
Teq = 1586 [164] K
Rp = 0.78 [0.54] Re
a = 0.0255 [0.0067] AU
Ag = 26.29 [34.89] [0.73 σ]
Teffp = 5552 [1771] K [2.23 σ]

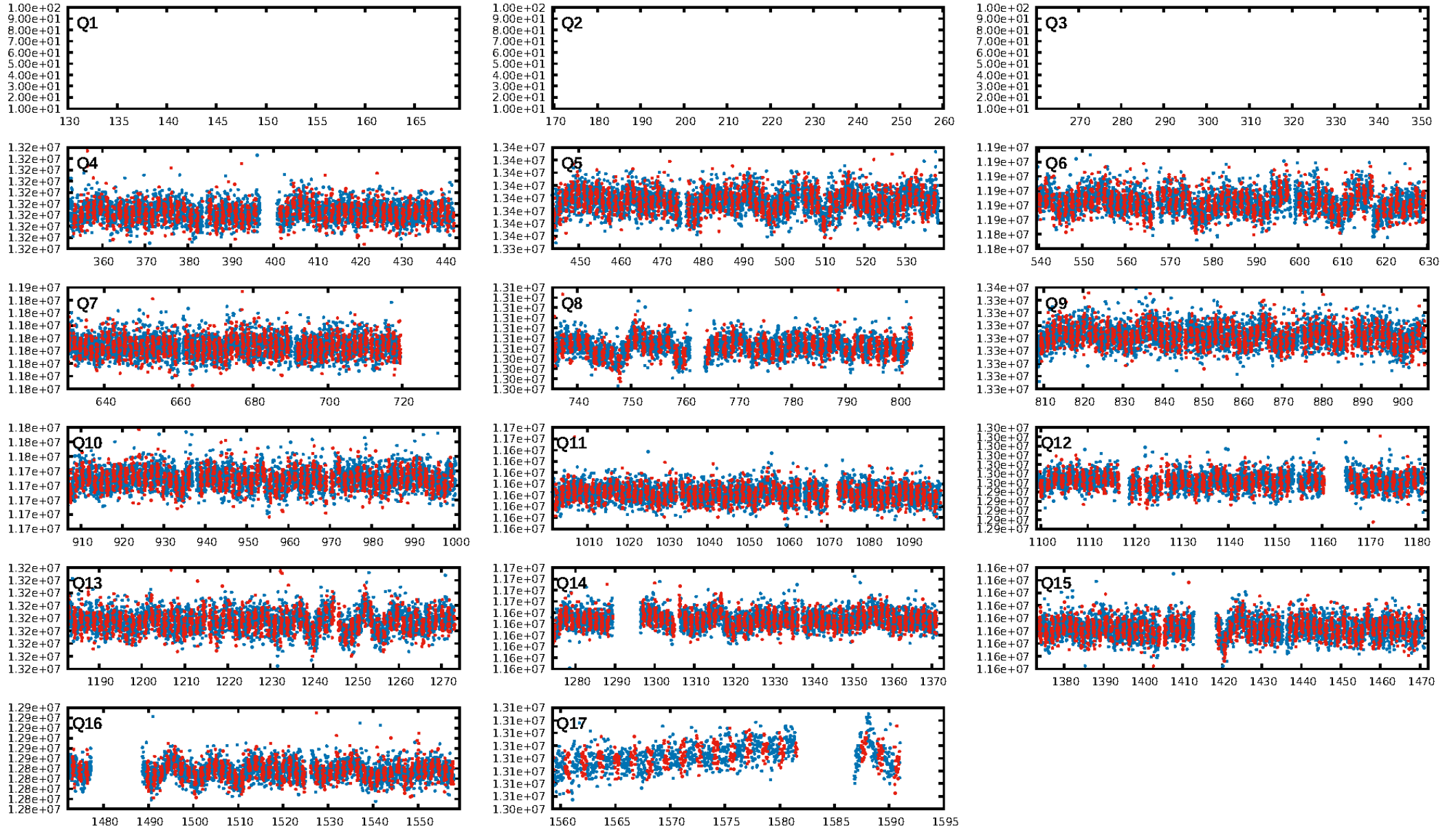
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 3.50e-13
RollingBand-fgt: 1.00 [737/739]
GhostDiagnostic-chr: 14.13
Centroid-sig: 2.2%
Centroid-so: 3.954 arcsec [1.68 σ]
OotOffset-rm: 2.431 arcsec [1.63 σ]
KicOffset-rm: 2.452 arcsec [2.10 σ]
OotOffset-st: 1/1/0/2 [4]
KicOffset-st: 1/1/1/2 [5]
DiffImageQuality-fgm: 0.00 [0/5]
DiffImageOverlap-fno: 1.00 [14/14]

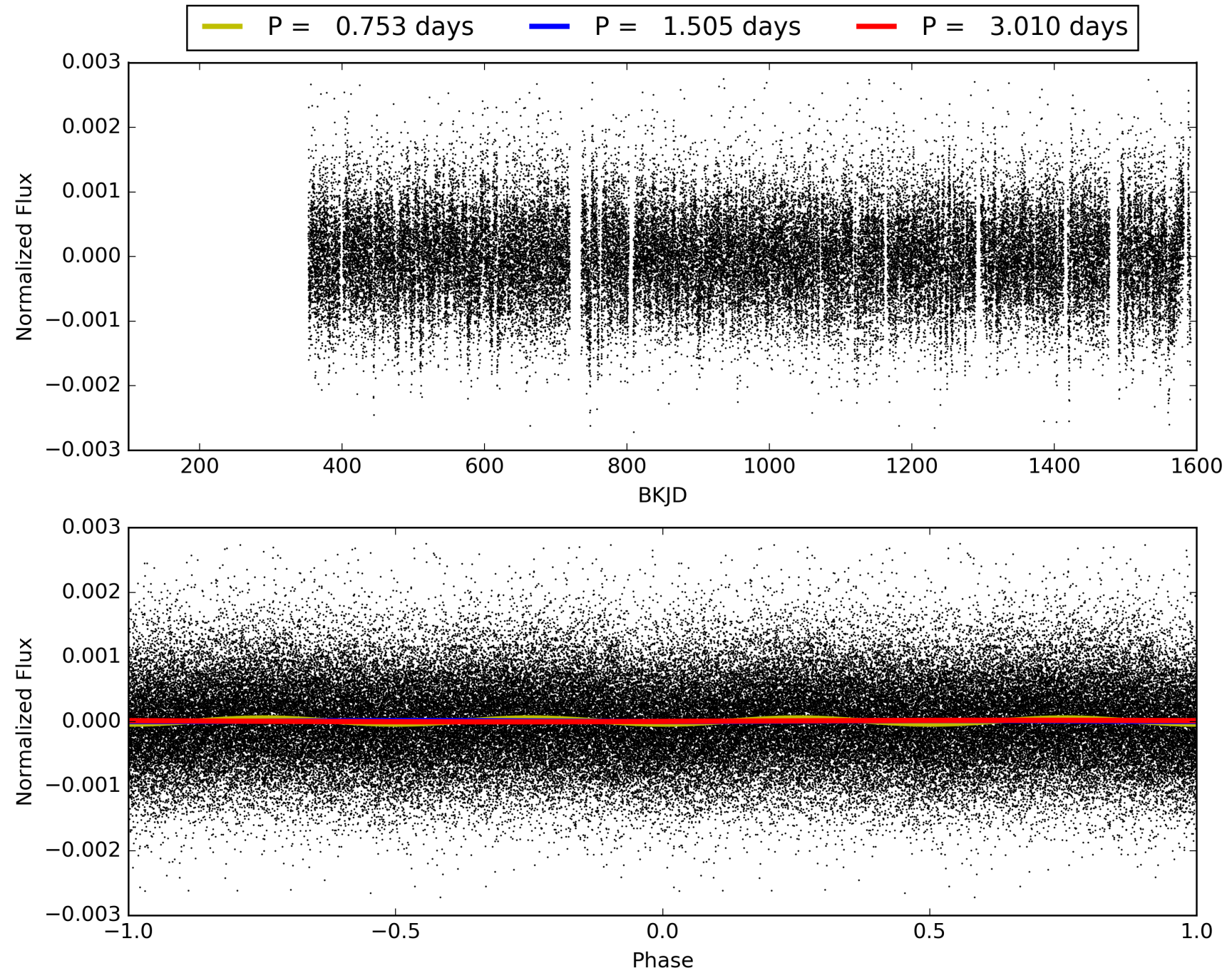
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 29-Jan-2016 23:49:47 Z

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

TCE 006633952-01, PDC Light Curves

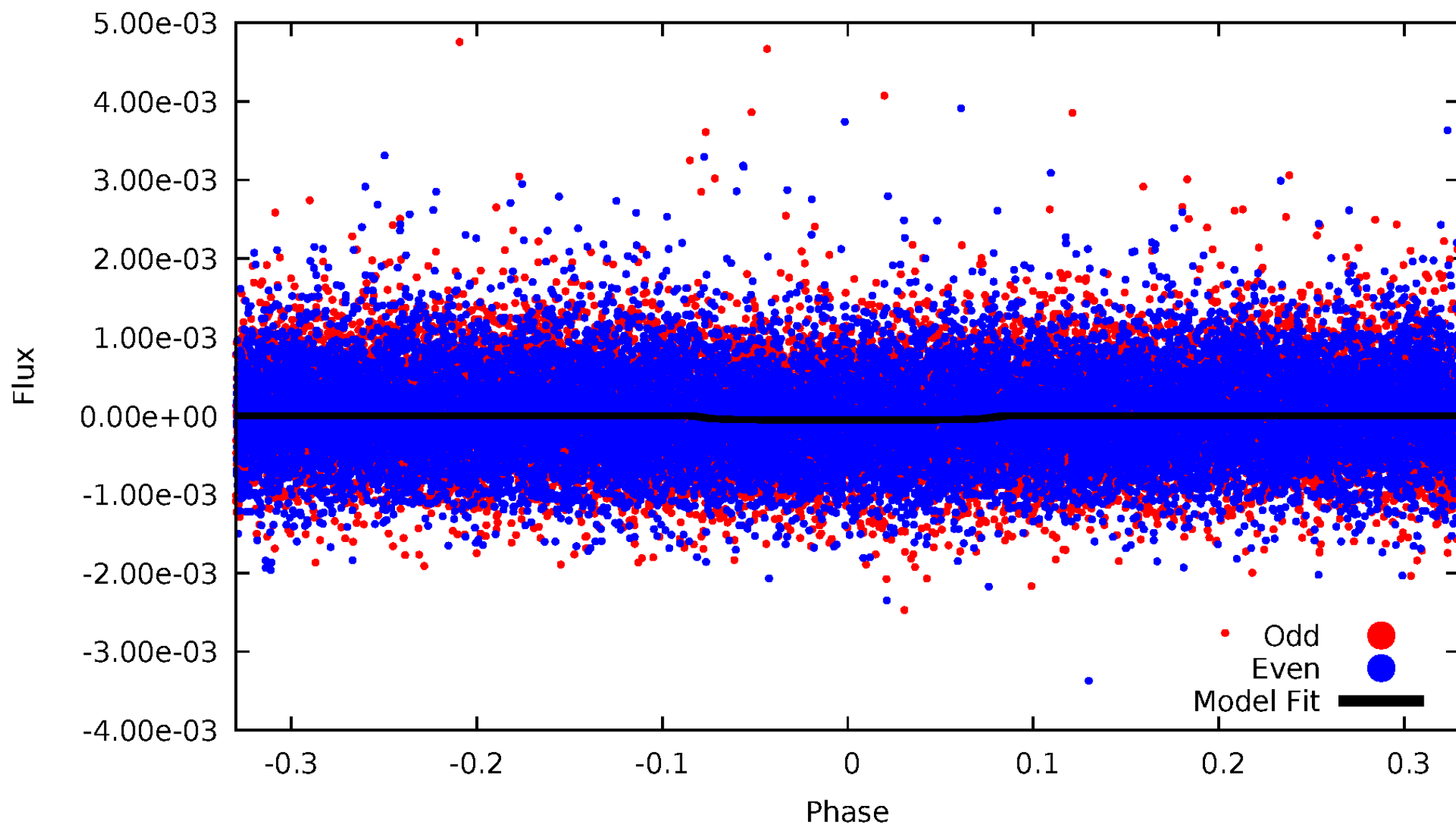


TCE 006633952-01



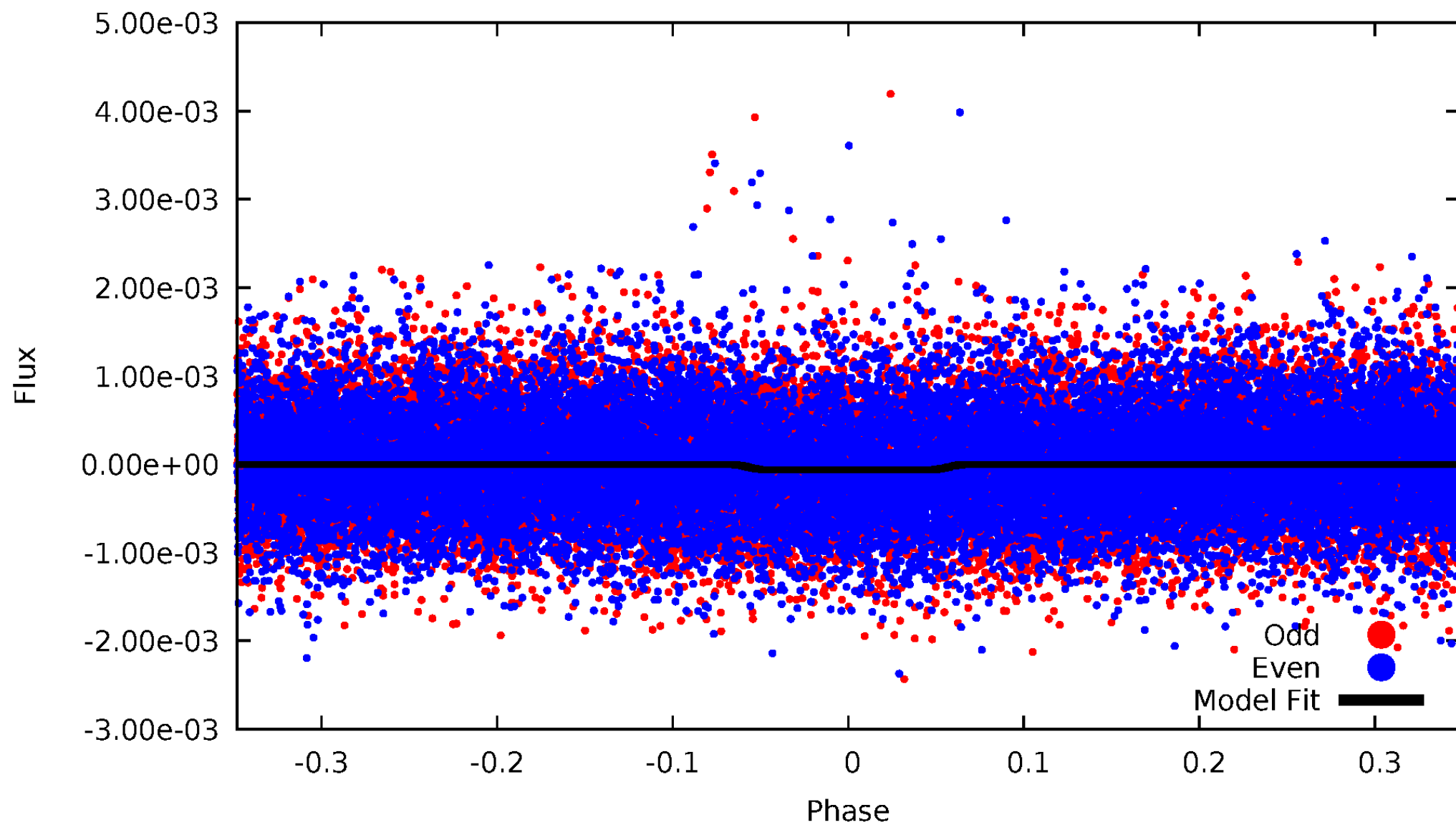
DV Odd/Even

TCE 006633952-01



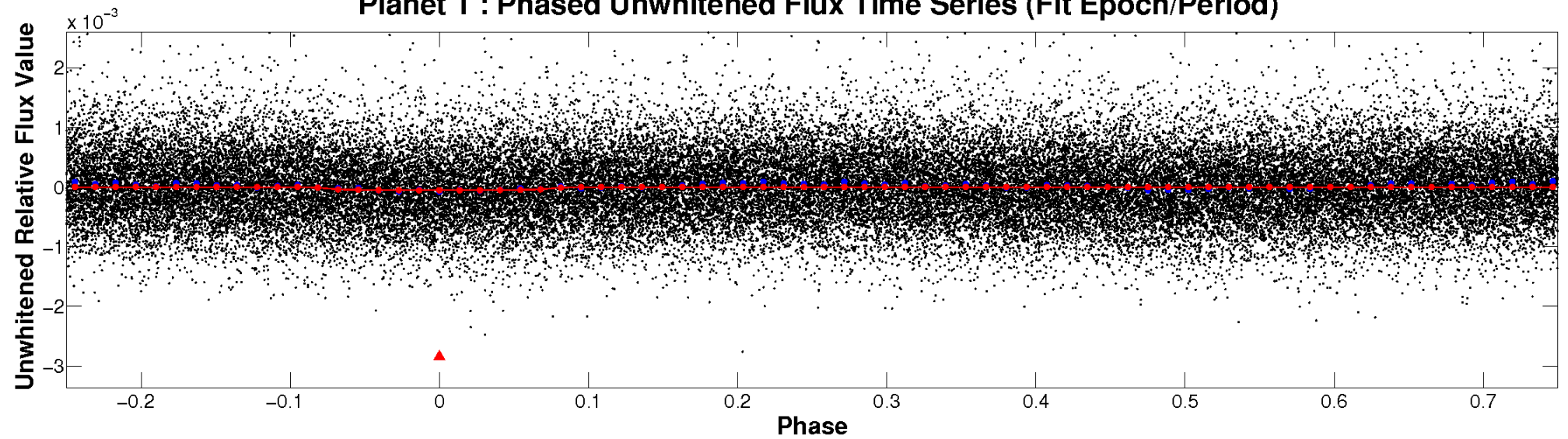
ALT Odd/Even

TCE 006633952-01

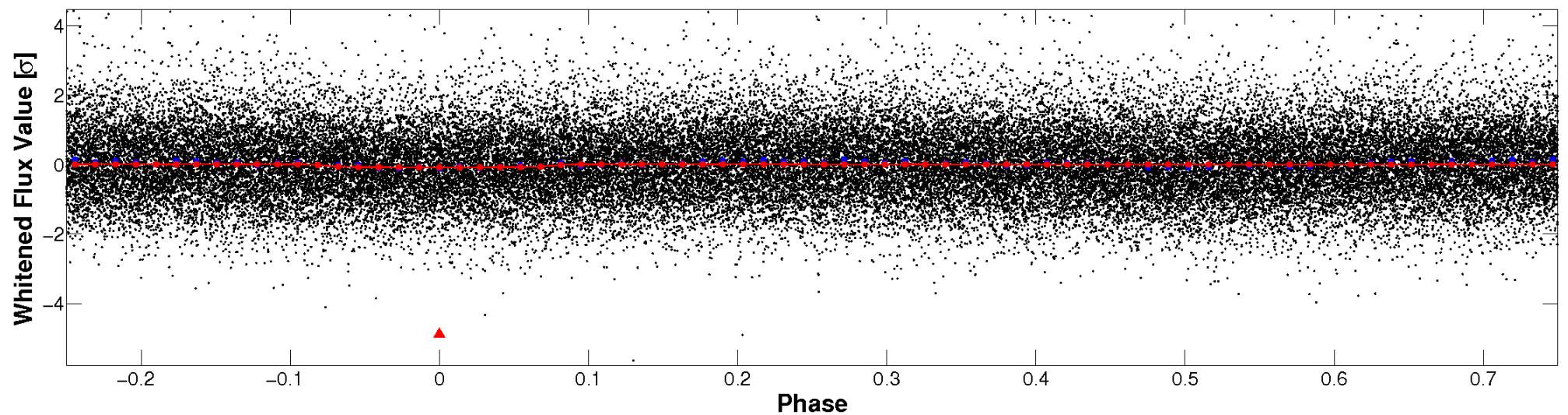


Non-Whitened Vs. Whitened Light Curve

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

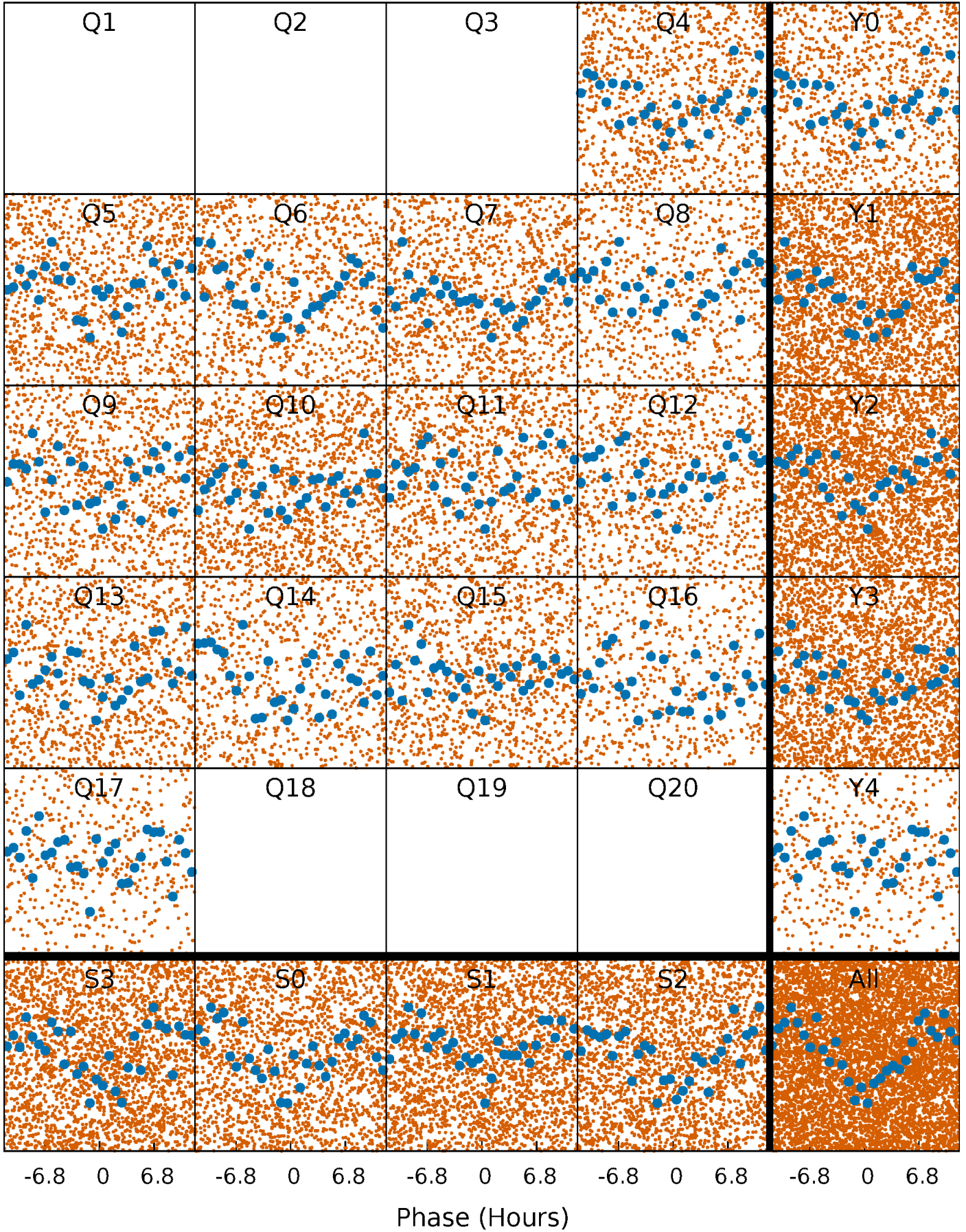


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



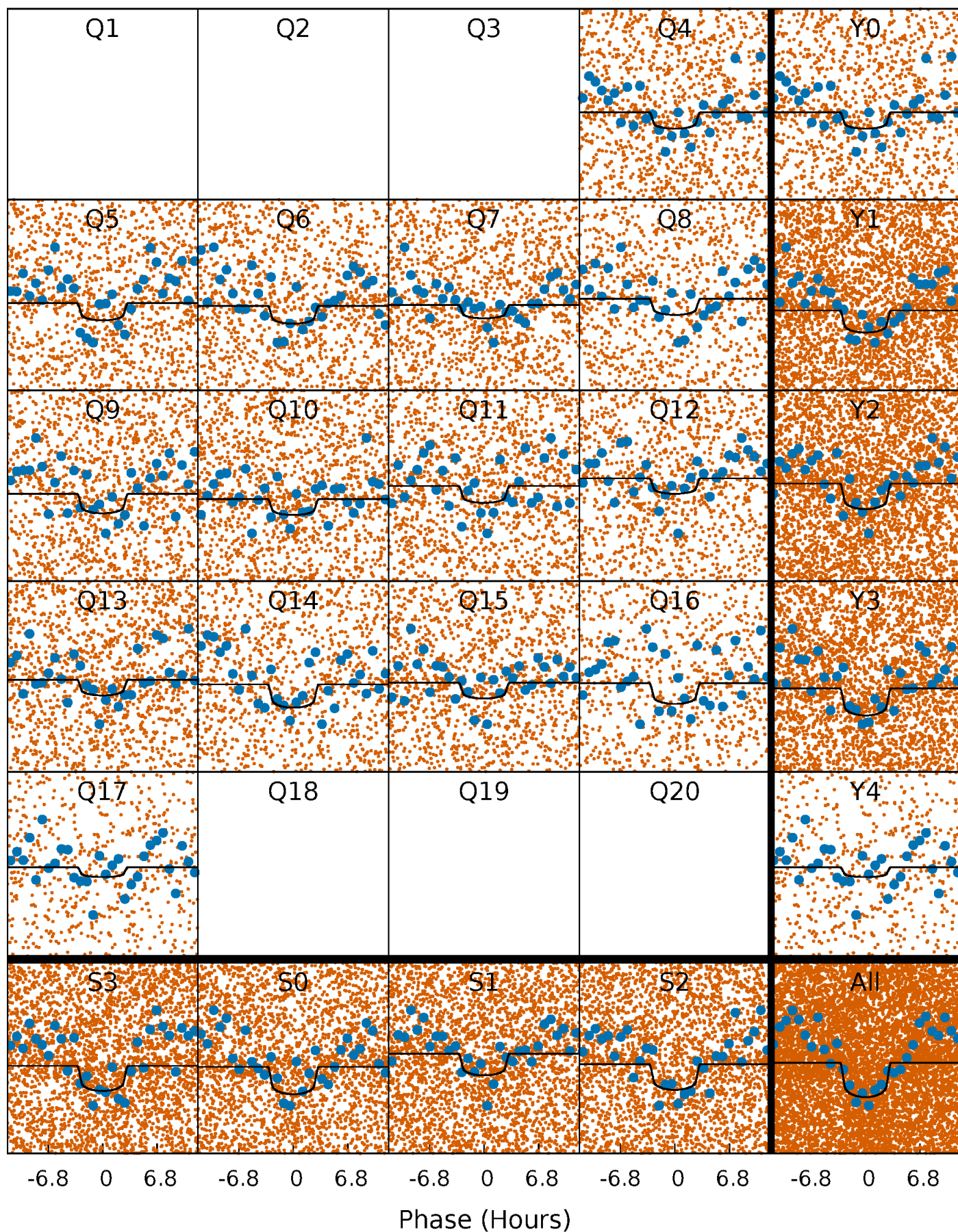
PDC Quarter-Phased Transit Curves

TCE 006633952-01 P= 1.505083 Days $T_0=132.284158$ (BKJD)



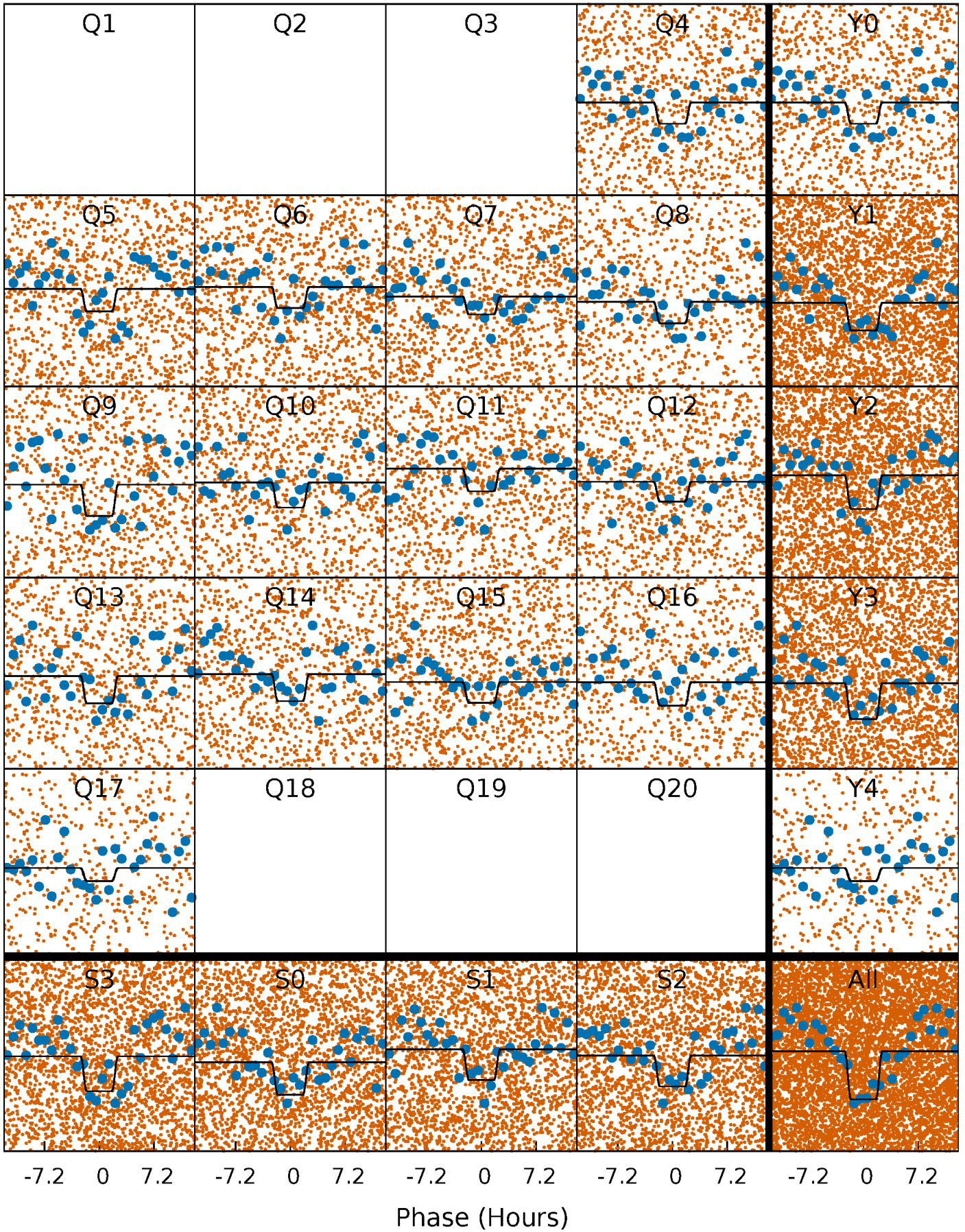
DV Quarter-Phased Transit Curves

TCE 006633952-01 P= 1.505083 Days $T_0=132.284158$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

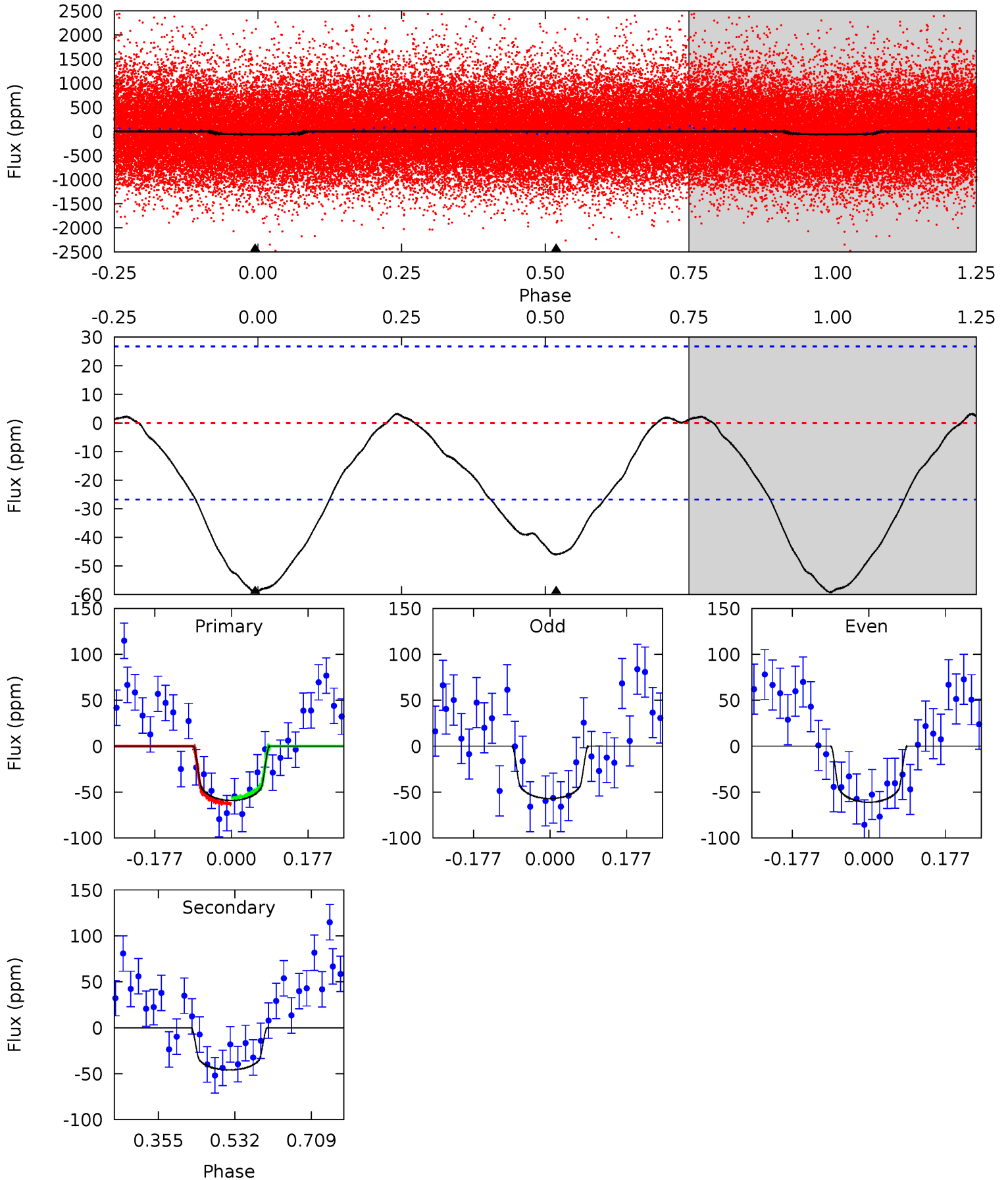
TCE 006633952-01 P= 1.505063 Days $T_0=132.289295$ (BKJD)



DV Model-Shift Uniqueness Test

006633952-01, P = 1.505083 Days, E = 132.284158 Days

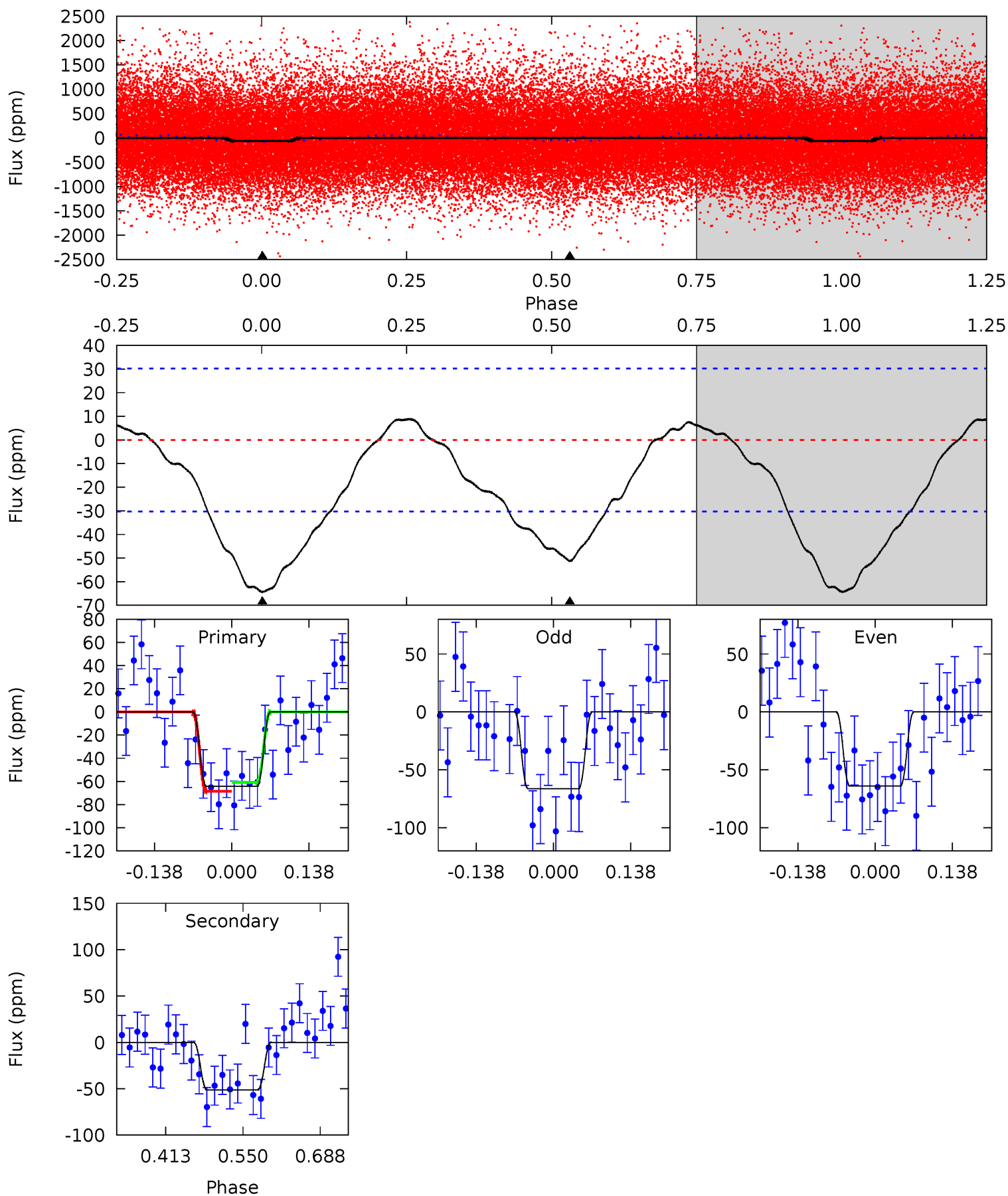
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
9.82	7.62	0	0	4.44	1.35	0.73	9.82	9.82	7.62	7.62	0.33	0.98	0.05	0.51



Alt Model-Shift Uniqueness Test

006633952-01, P = 1.505063 Days, E = 132.289295 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
9.57	7.62	0	0	4.50	1.49	1.33	9.57	9.57	7.62	7.62	0.17	0.88	0.12	0.58



Stellar Parameters For KIC 006633952

	$T_{\text{eff}} (K)$	$\log(g)$	$[\text{Fe}/\text{H}]$	$R (R_{\odot})$	$M (M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6077^{+213}_{-213}	$4.526^{+0.040}_{-0.216}$	$-0.340^{+0.300}_{-0.300}$	$0.891^{+0.273}_{-0.091}$	$0.974^{+0.130}_{-0.130}$	$1.936^{+0.420}_{-1.005}$
	+4%/-4%	+1%/-5%	+88%/-88%	+31%/-10%	+13%/-13%	+22%/-52%
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 006633952-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-46 ± 6	$0.81^{+0.55}_{-0.42}$	2270^{+167}_{-106}	5636^{+2685}_{-1202}	24^{+85}_{-16}
Alt.	-51 ± 7	$0.87^{+0.51}_{-0.47}$	2290^{+170}_{-130}	5587^{+3263}_{-1013}	23^{+94}_{-14}

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

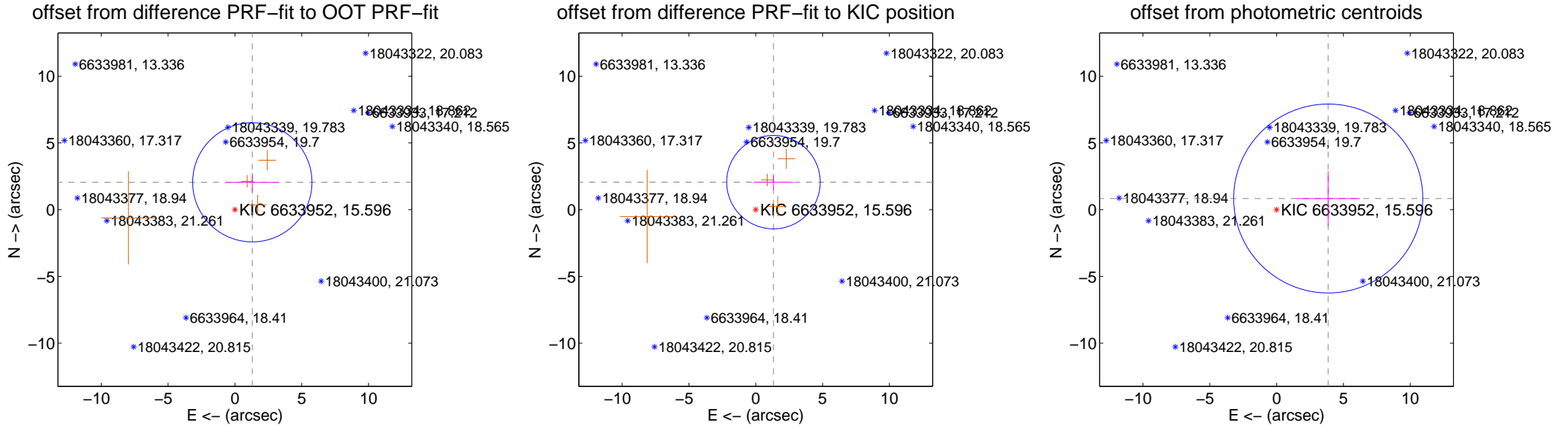
DV Centroid Data

Supplemental centroid analysis for 006633952-01. Kepler magnitude: 15.60. Transit SNR 6.90

There are 0 quarters with good PRF difference image offsets

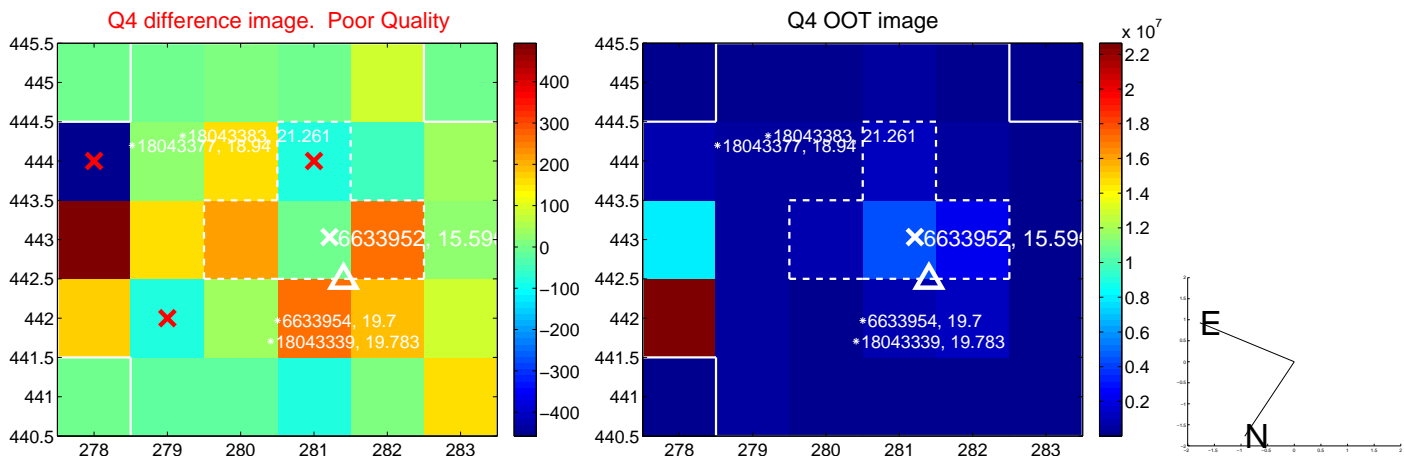
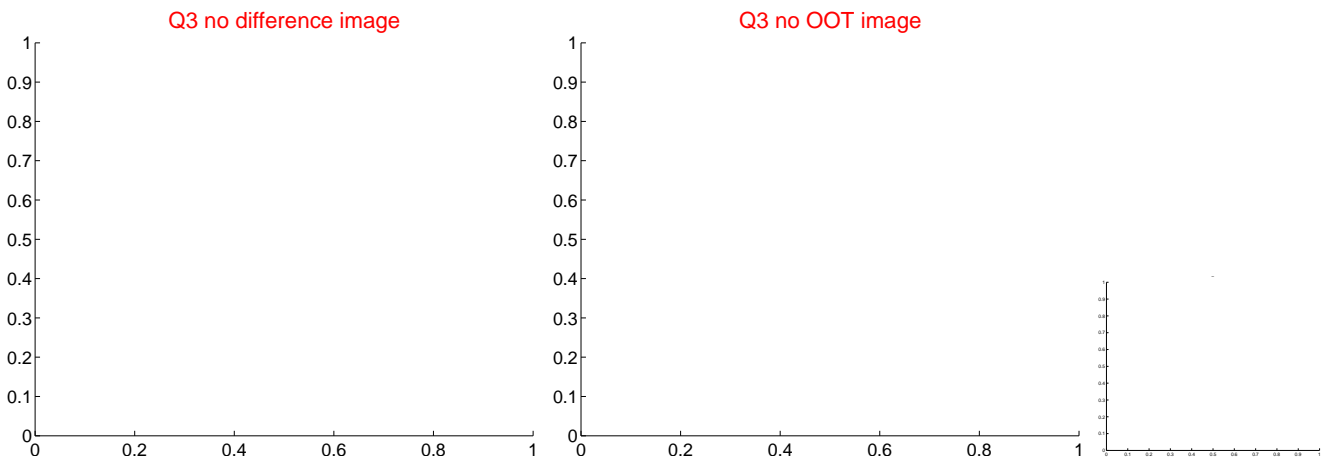
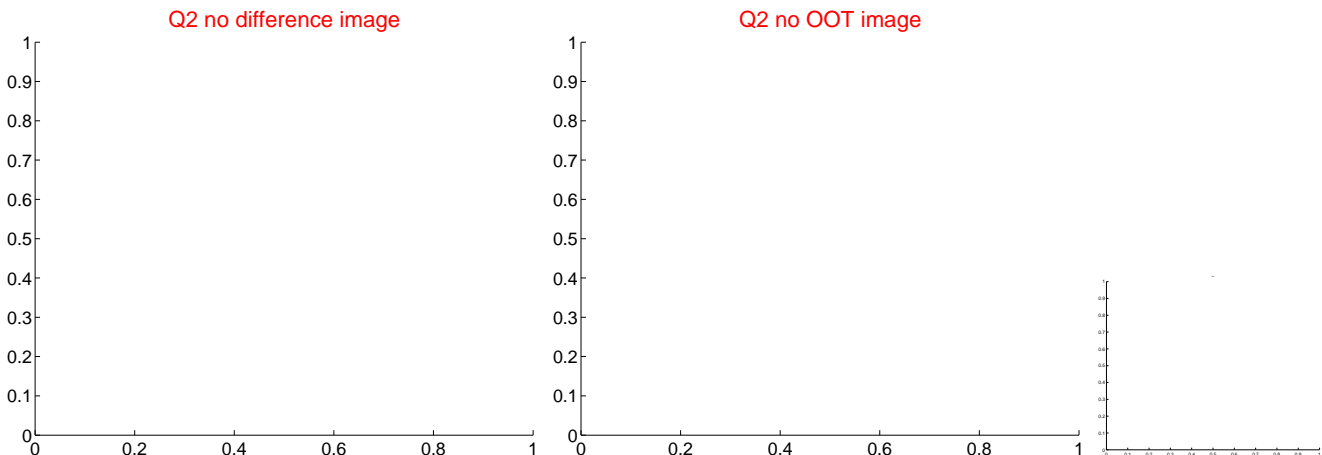
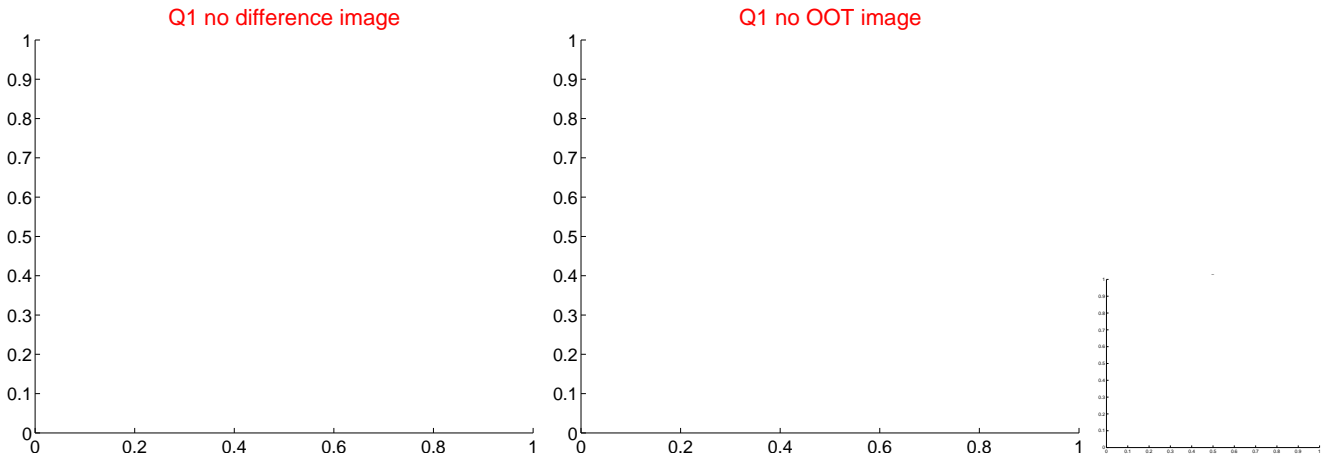
The direct PRF centroid is offset from the target star catalog position by about 0.19 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	2.431 ± 1.488	1.63	-1.301 ± 1.959	2.053 ± 0.694
PRF-fit source offset from KIC position	2.452 ± 1.167	2.10	-1.325 ± 1.487	2.064 ± 0.578
photometric centroid source offset	3.95 ± 2.36	1.68	-3.86 ± 2.37	0.84 ± 2.05

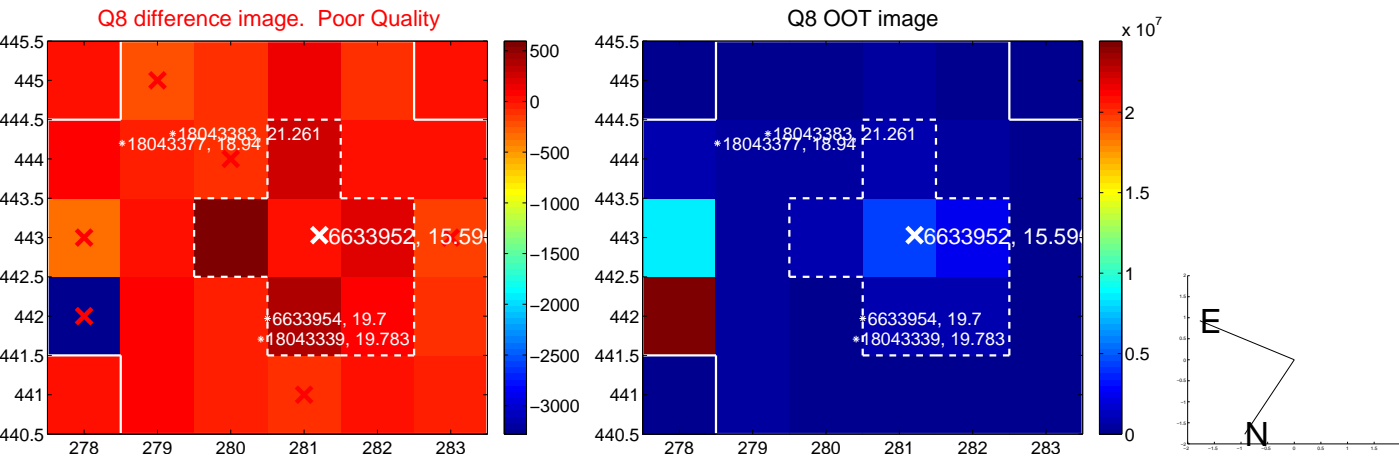
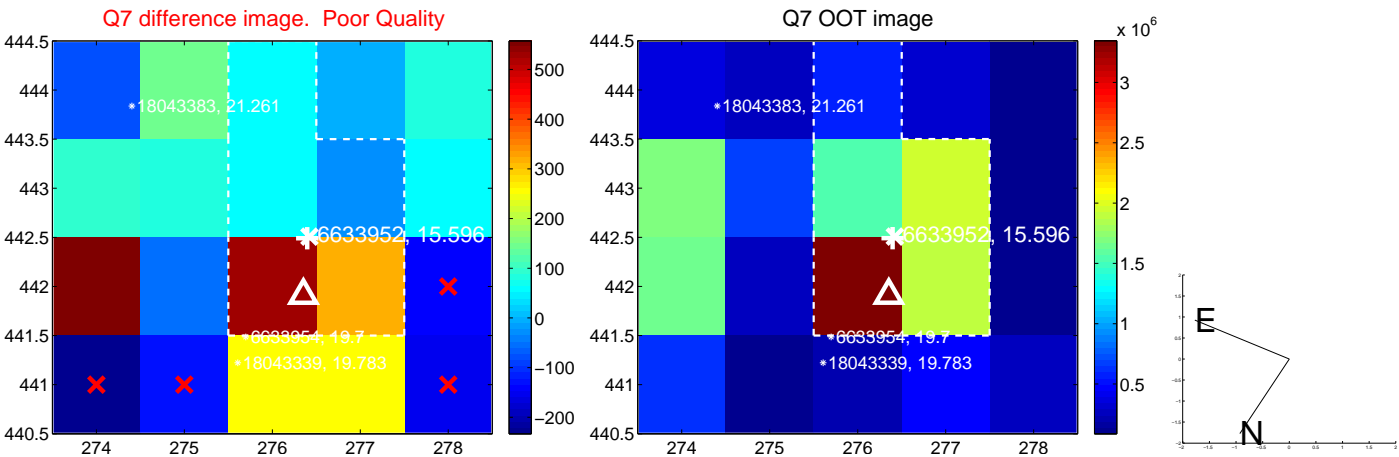
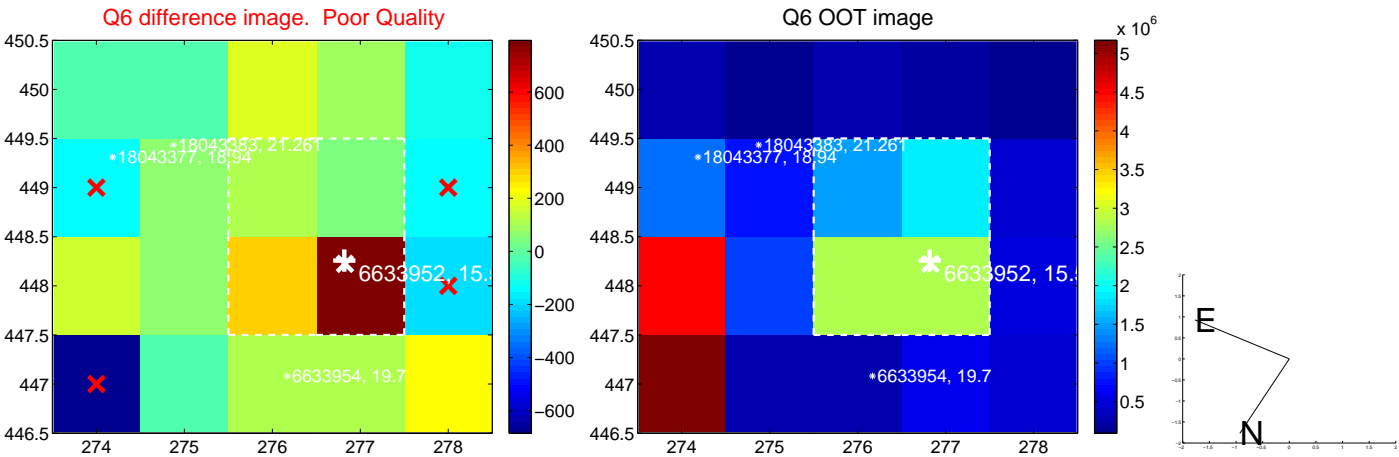
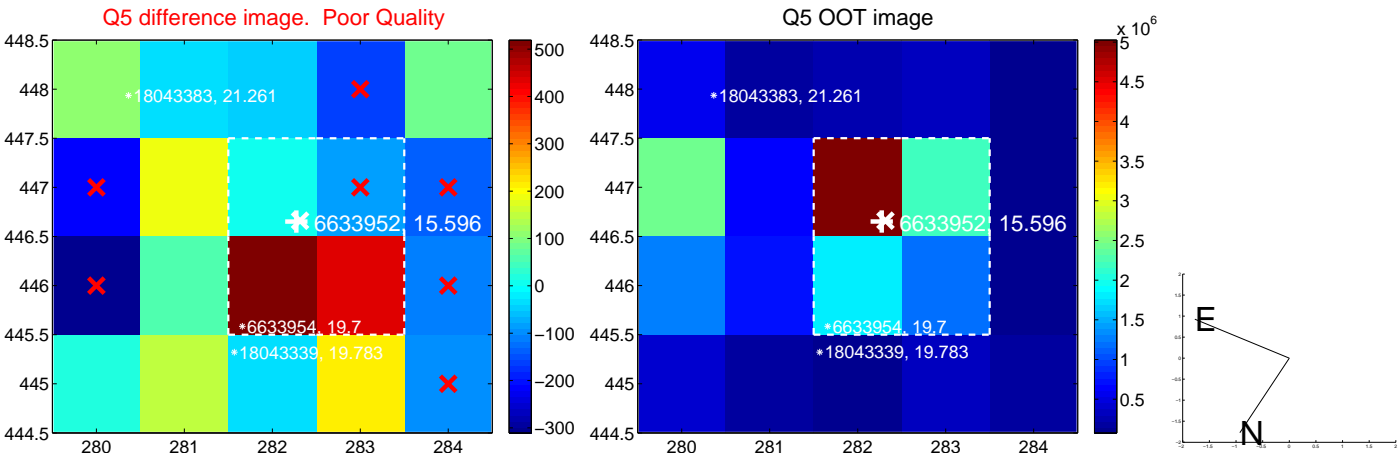


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

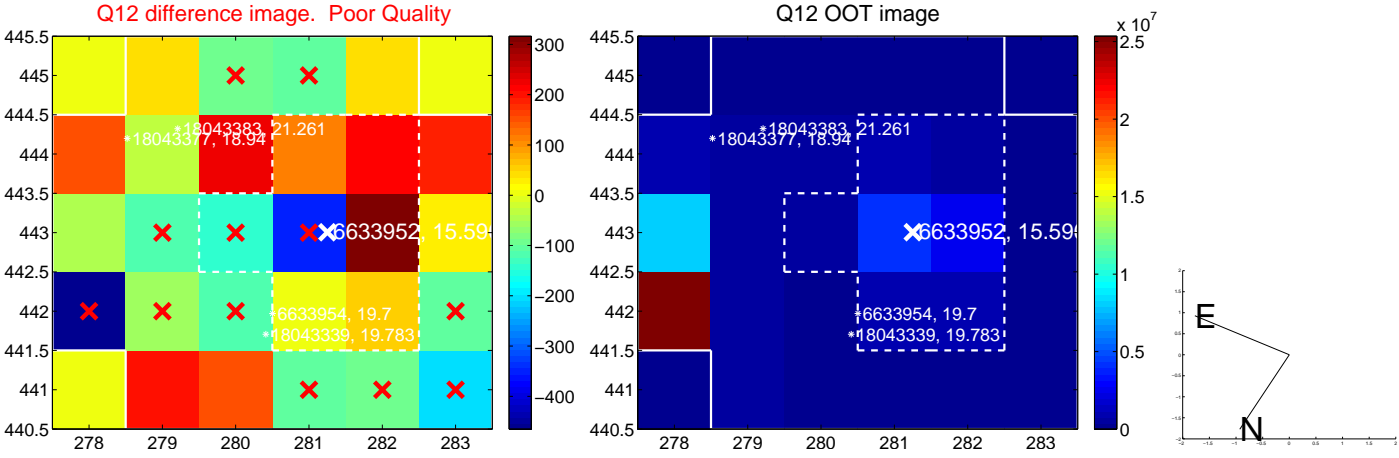
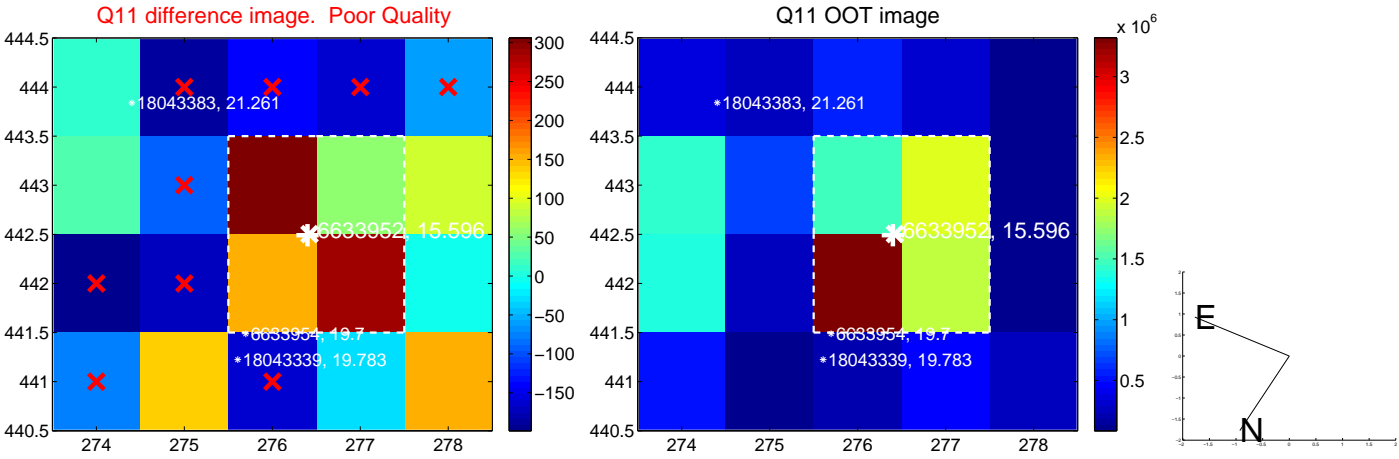
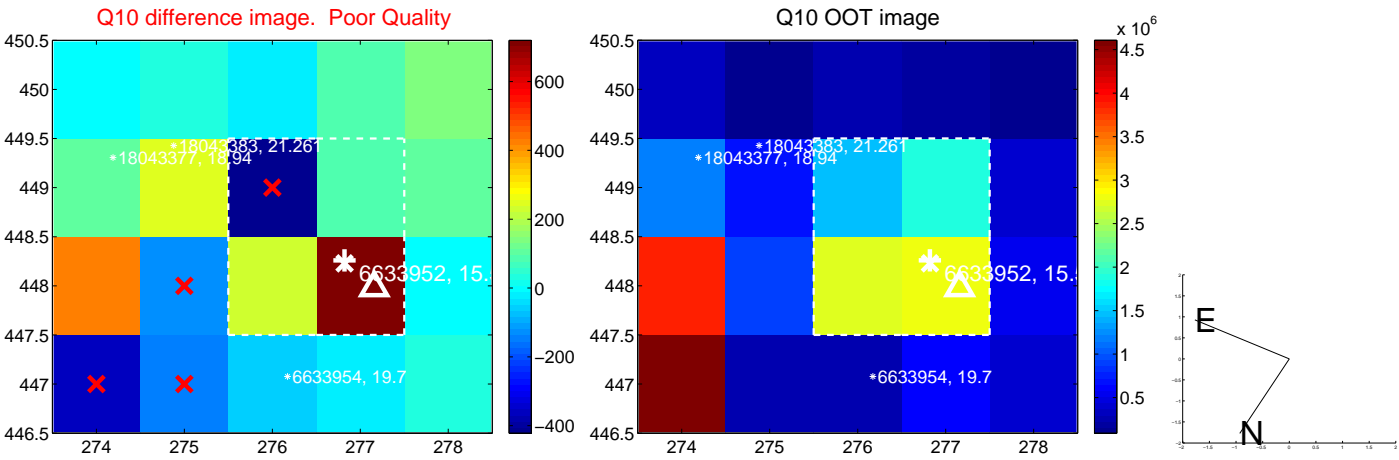
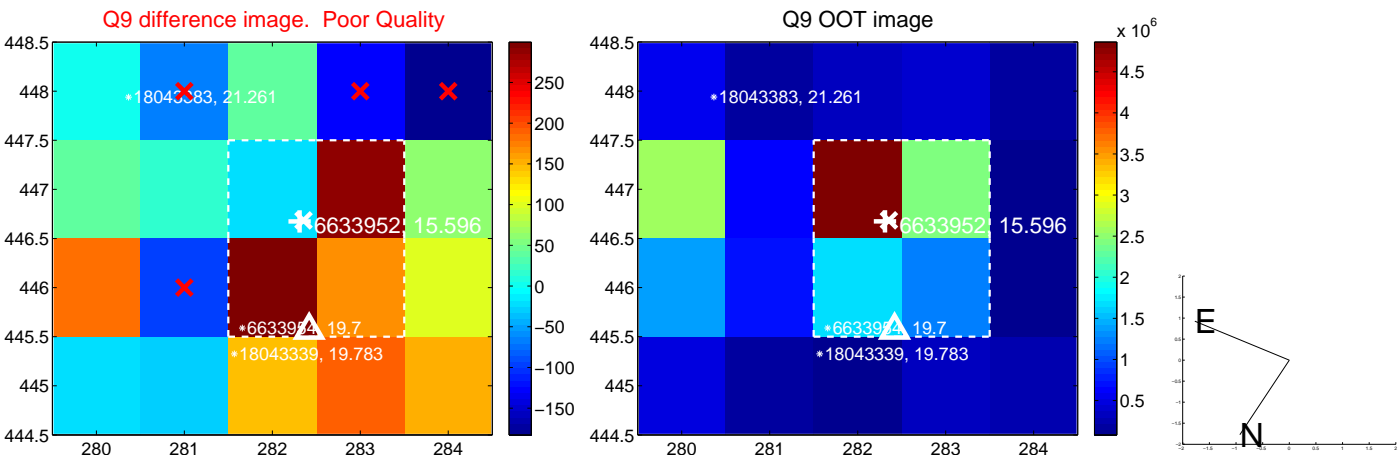
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value



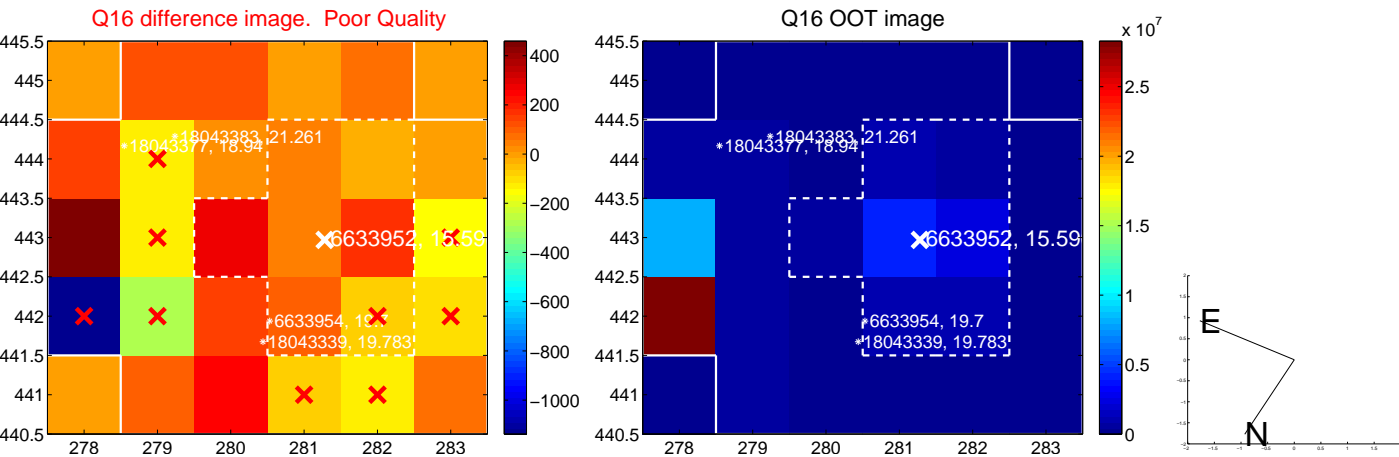
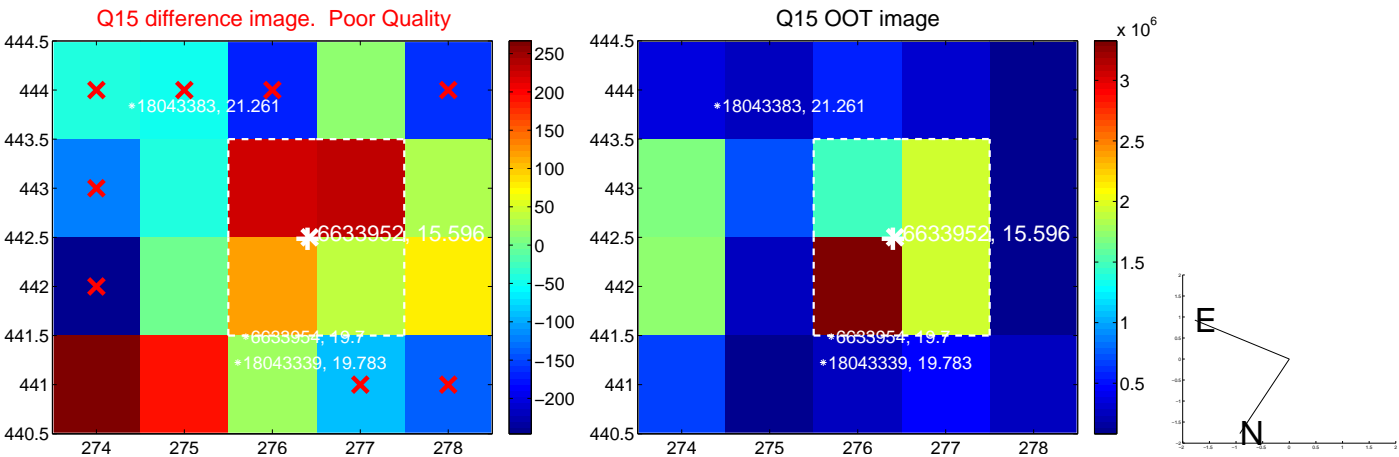
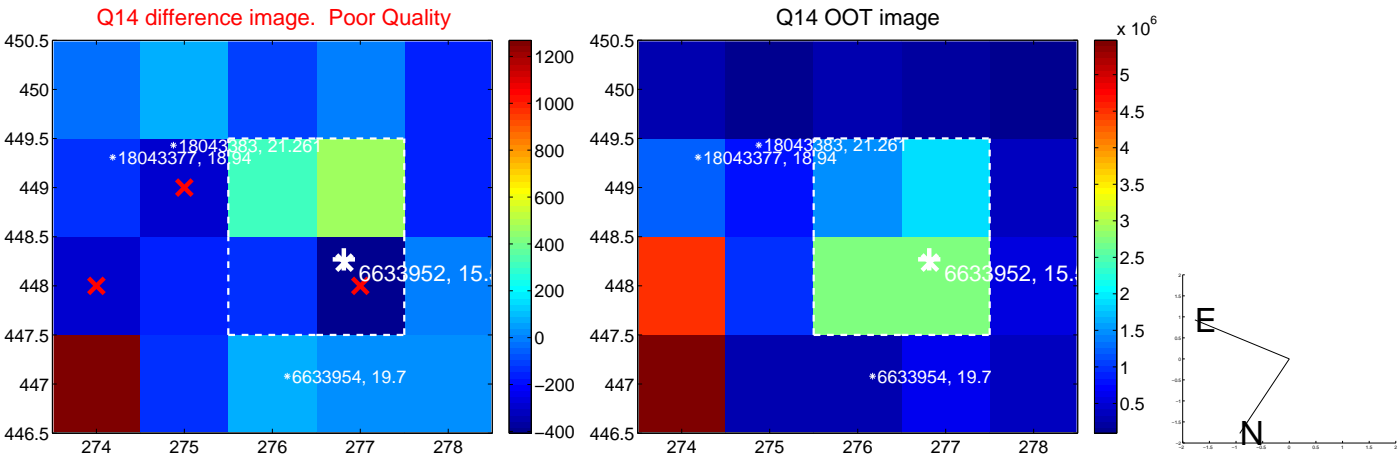
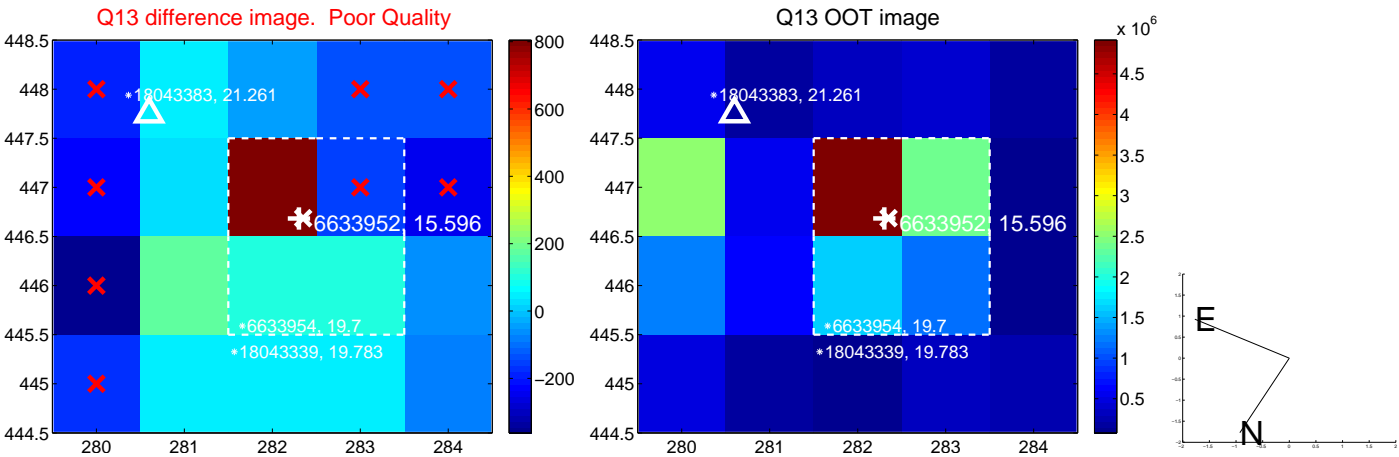
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



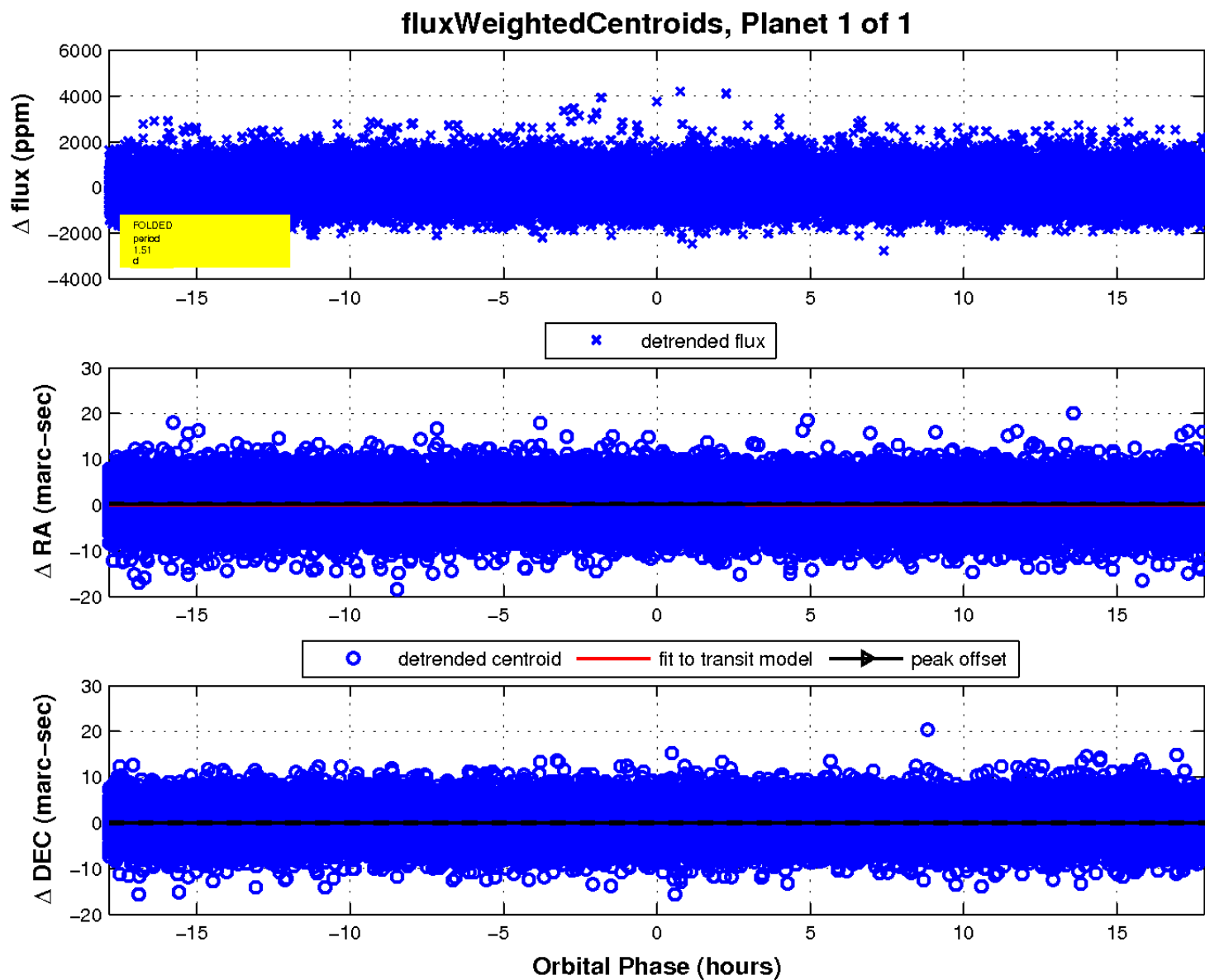
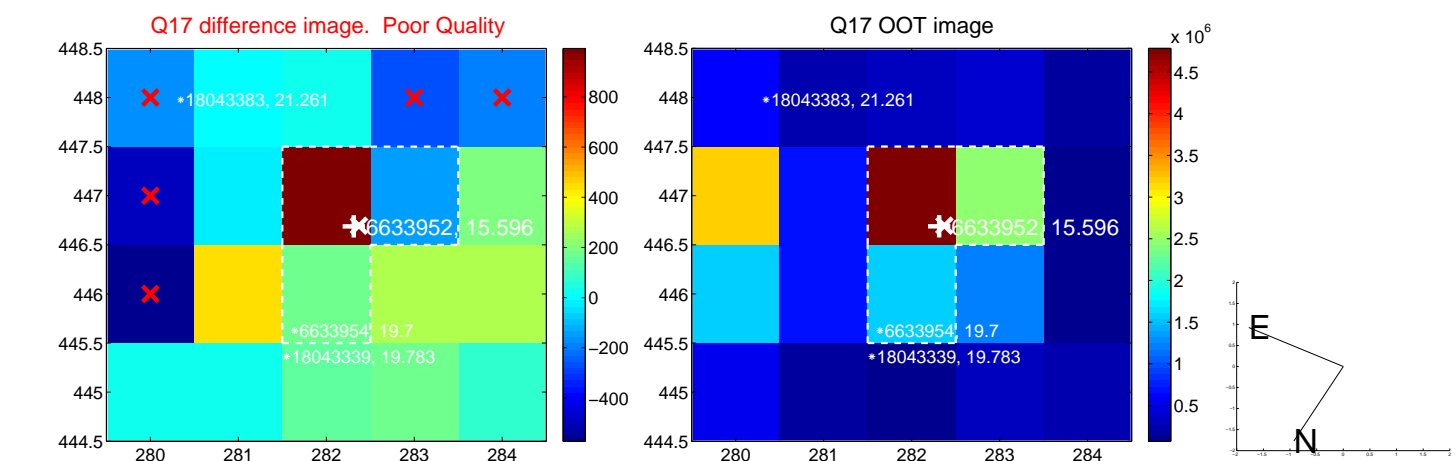
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UKIRT Image

