

KIC 010449486

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})
010449486-01	OBS	No	0.665118	131.669853	0.0	6.274	8.5	0.0	1.82	7483	0.01	30717.09

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
010449486-01	OBS	FP	0.00	1	0	0	0	SWEET_NTL—LPP_DV—LPP_ALT

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

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

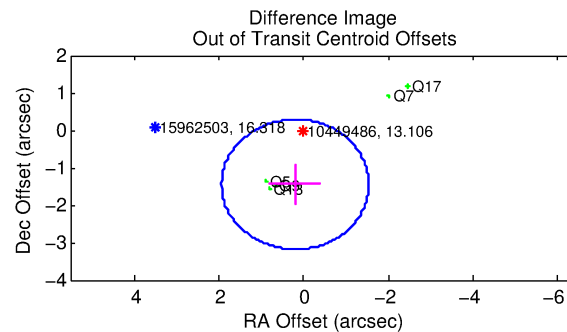
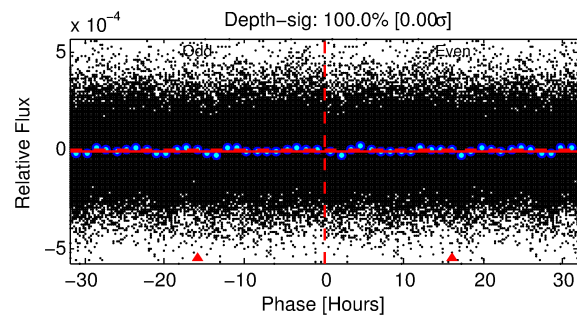
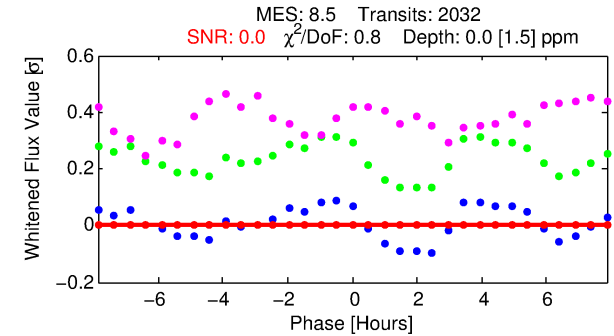
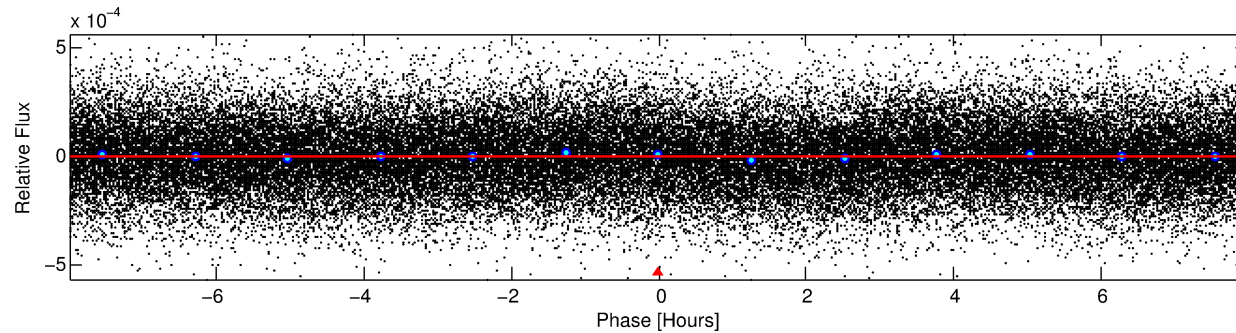
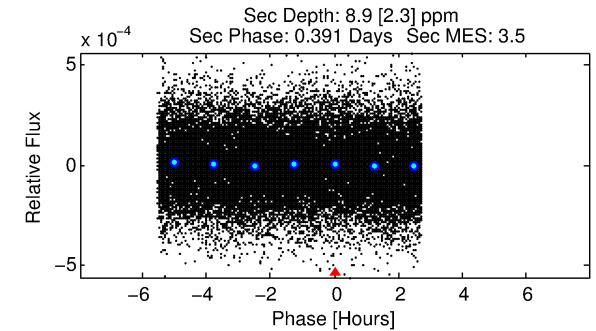
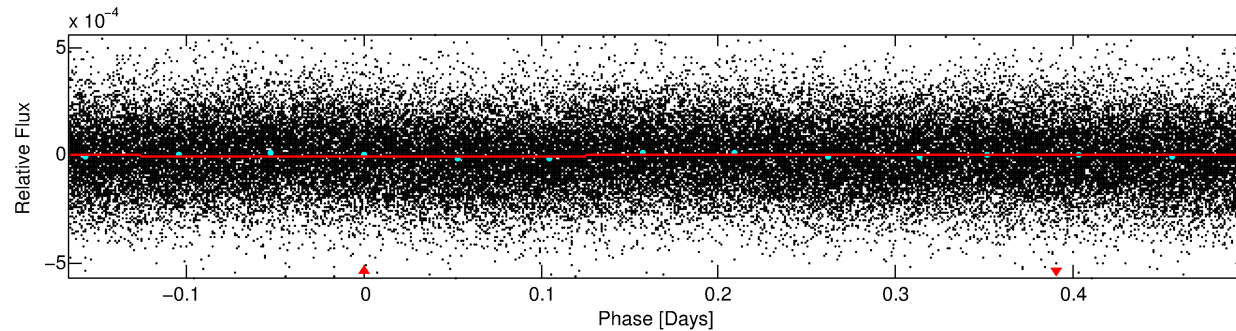
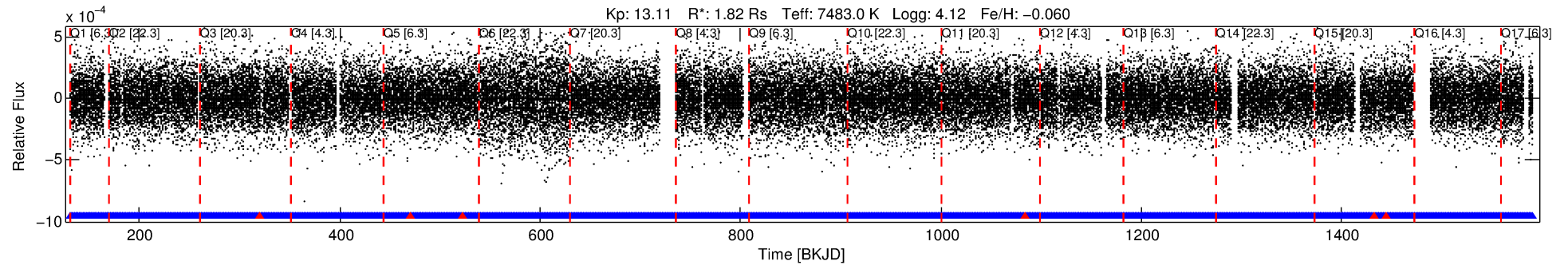
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 010449486-01

No Significant Match Found

DV One-Page Summary

KIC: 10449486 Candidate: 1 of 1 Period: 0.665 d



DV Fit Results:

Period = 0.66512 [0.29245] d
Epoch = 131.6699 [128.6369] BKJD
Rp/R* = 0.0000 [0.0316]
a/R* = 1.03 [69.16]
b = 0.69 [1036.71]
Seff = 30717.09 [21557.50]
Teq = 3376 [592] K
Rp = 0.00 [6.27] Re
a = 0.0174 [0.0066] AU
Ag = 69599.66 [189026244.30] [0.00σ]
Teffp = 84774 [57565630] K [0.00σ]

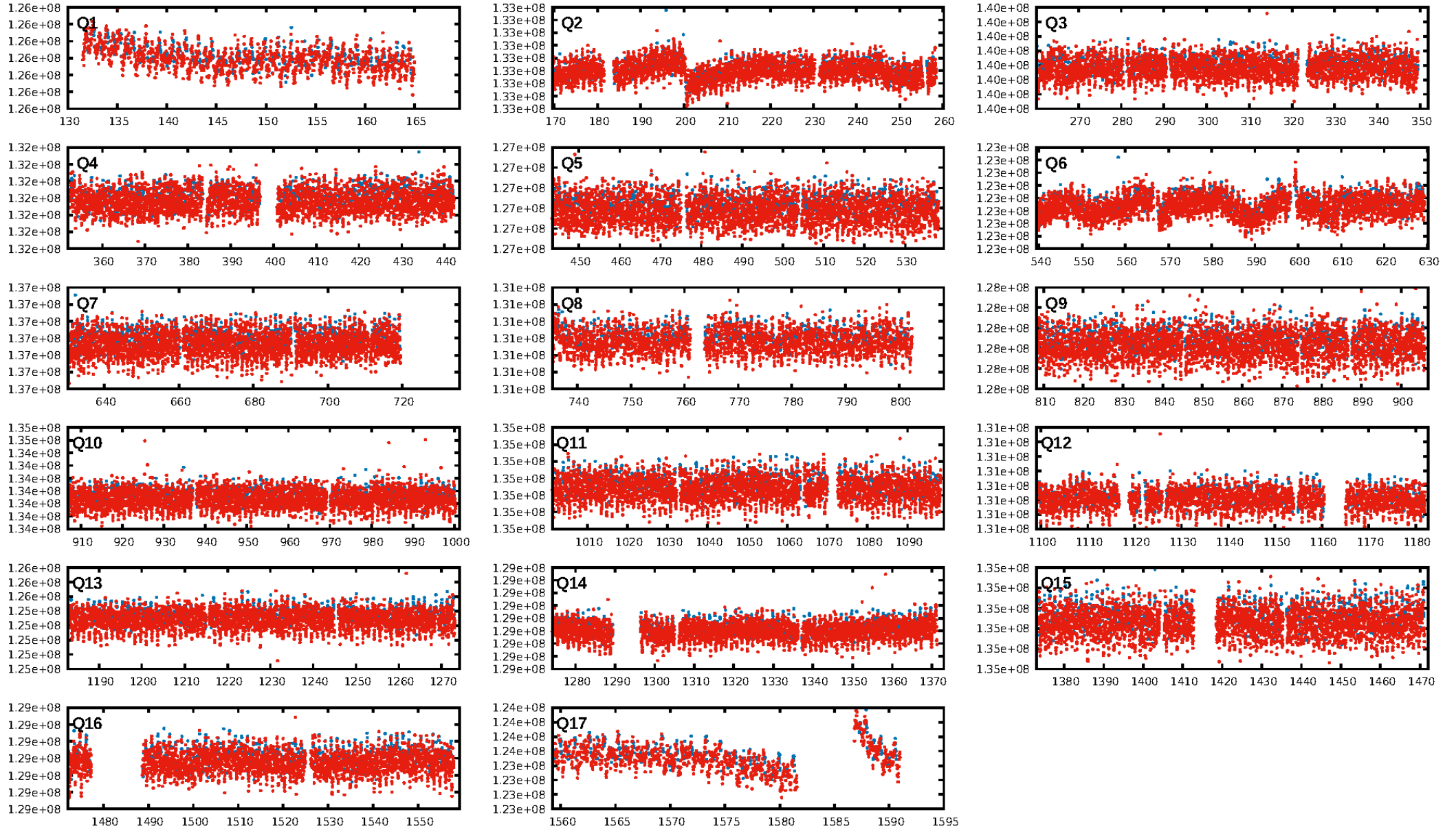
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [1934/1940]
GhostDiagnostic-chr: N/A
Centroid-sig: N/A
Centroid-so: N/A
OotOffset-rm: 1.462 arcsec [2.53σ]
KicOffset-rm: 1.071 arcsec [1.28σ]
OotOffset-st: 0/1/0/4 [5]
KicOffset-st: 0/1/0/4 [5]
DiffImageQuality-fgm: 1.00 [5/5]
DiffImageOverlap-fno: 1.00 [17/17]

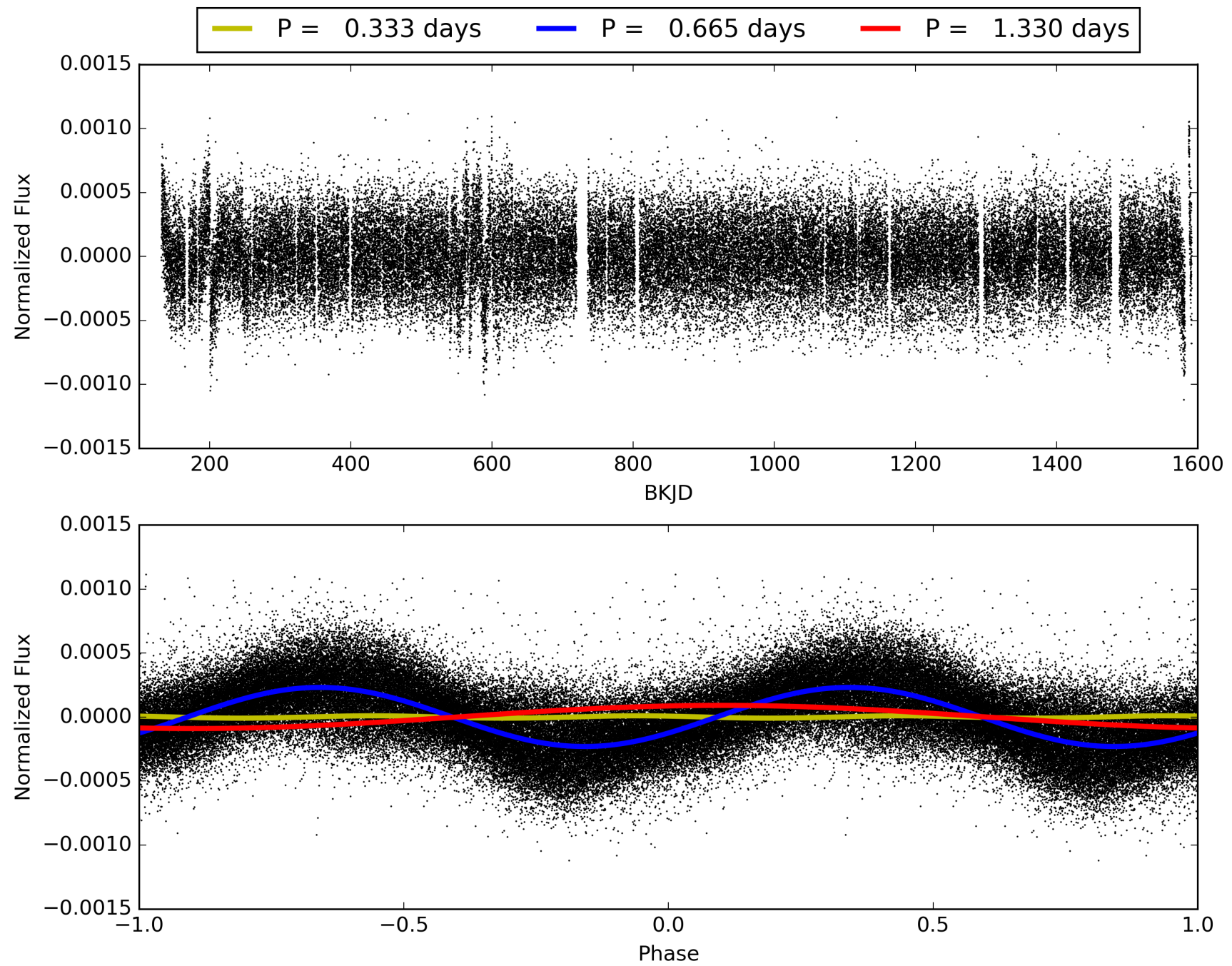
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 18:15:13 Z

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

TCE 010449486-01, PDC Light Curves

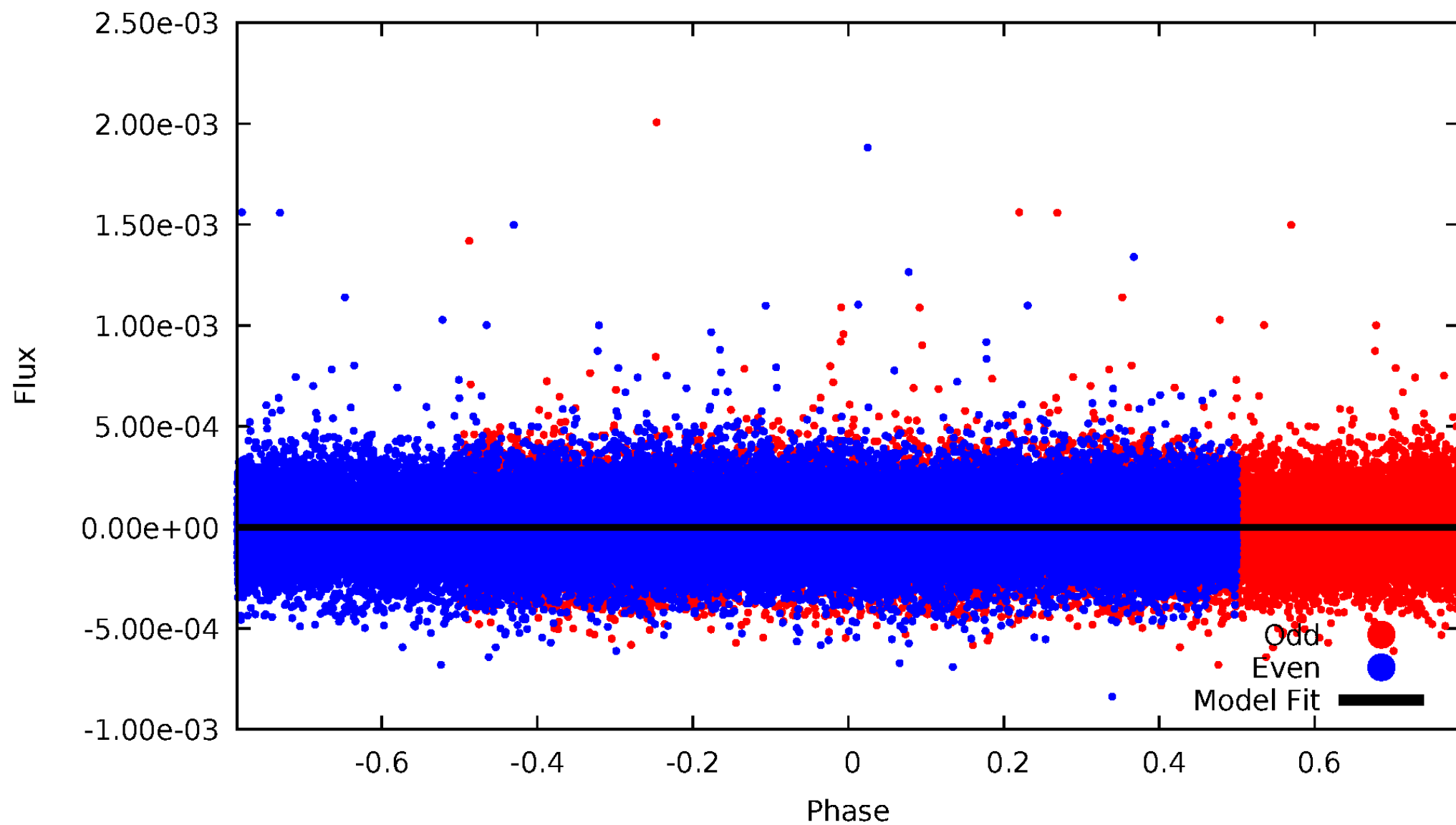


TCE 010449486-01



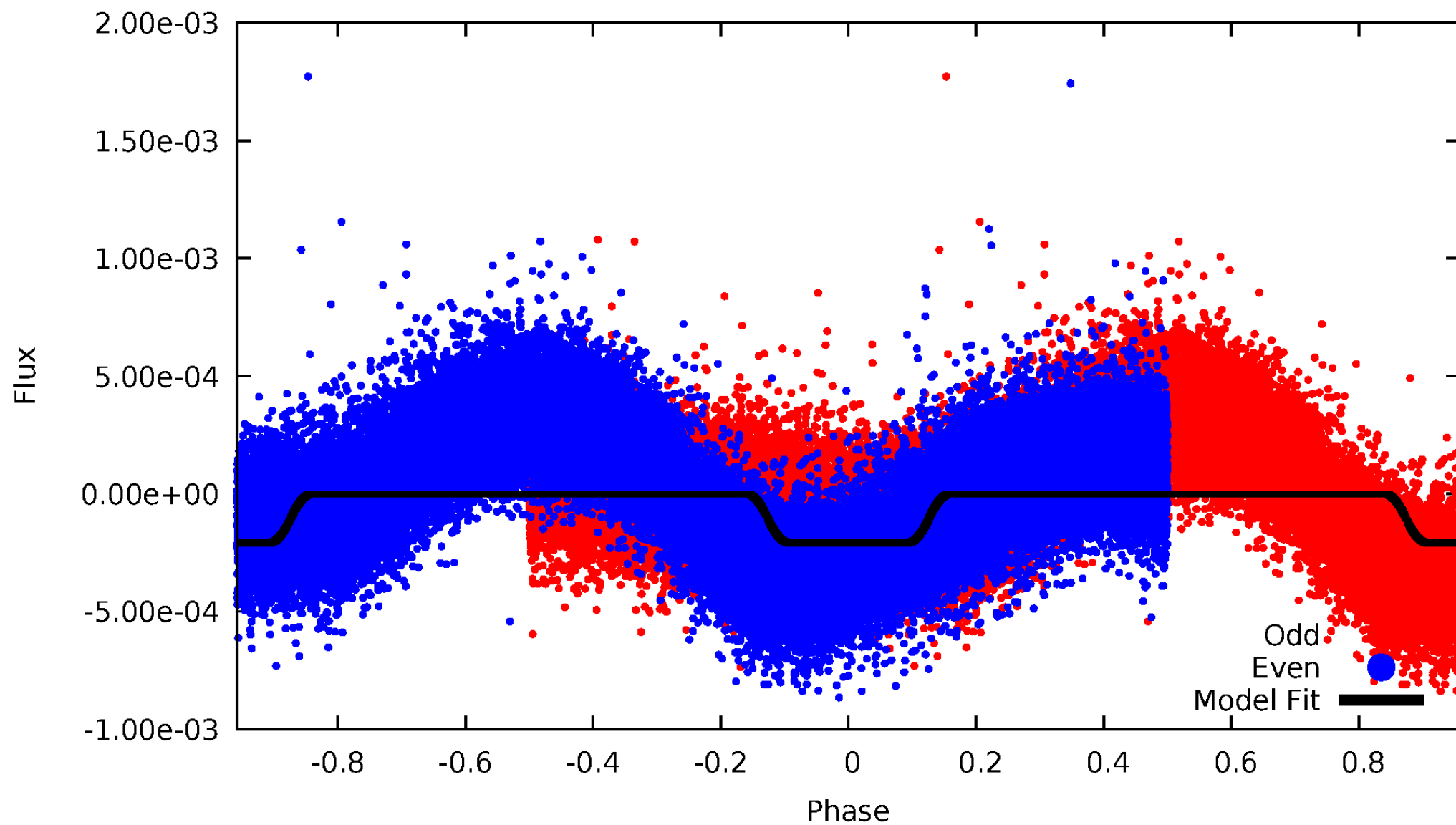
DV Odd/Even

TCE 010449486-01



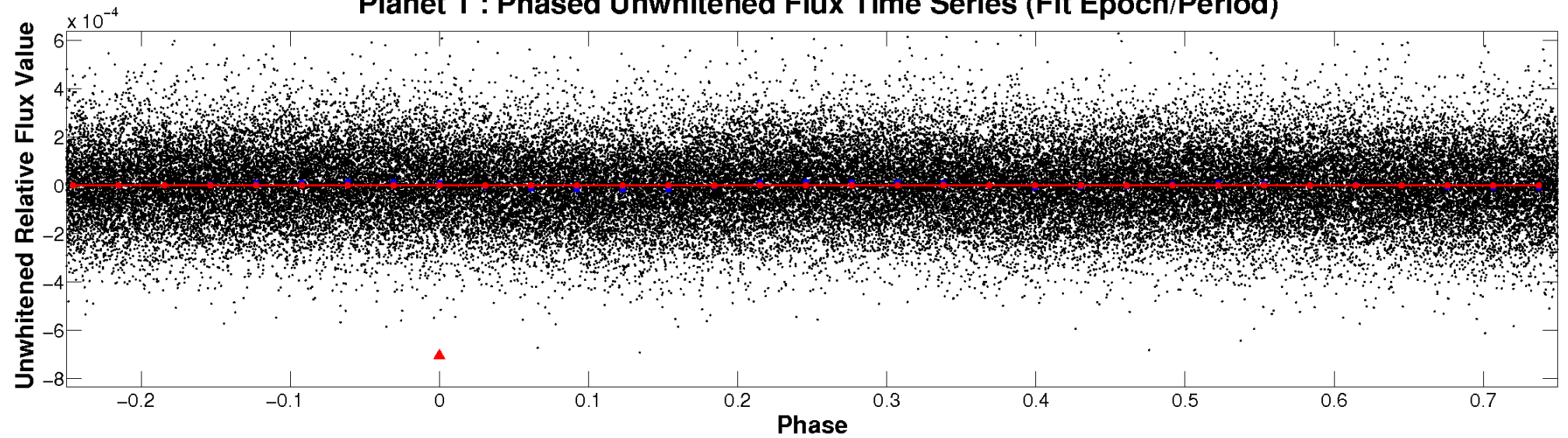
ALT Odd/Even

TCE 010449486-01

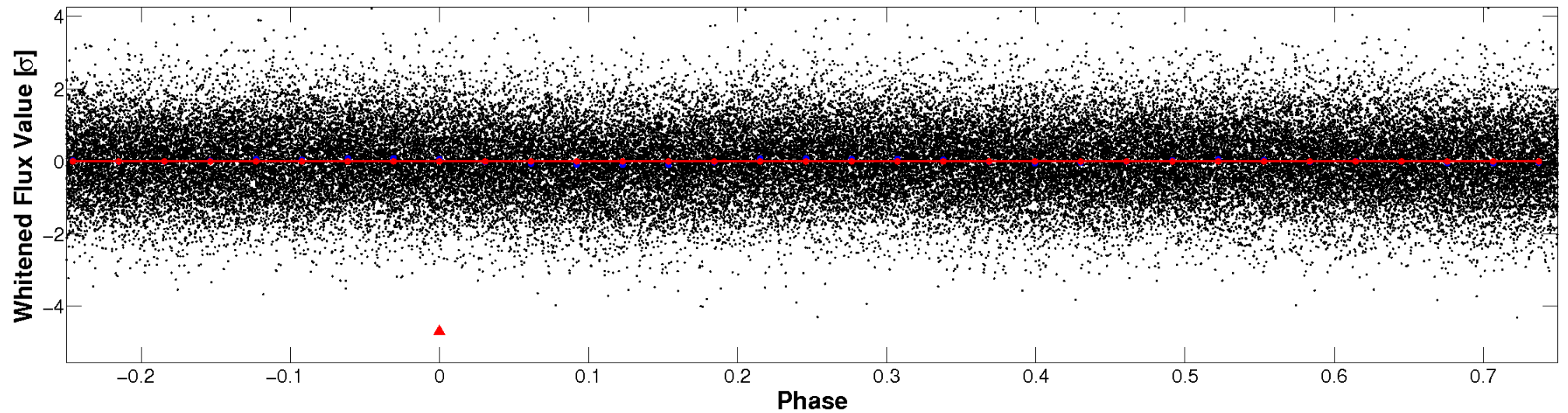


Non-Whitened Vs. Whitened Light Curve

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

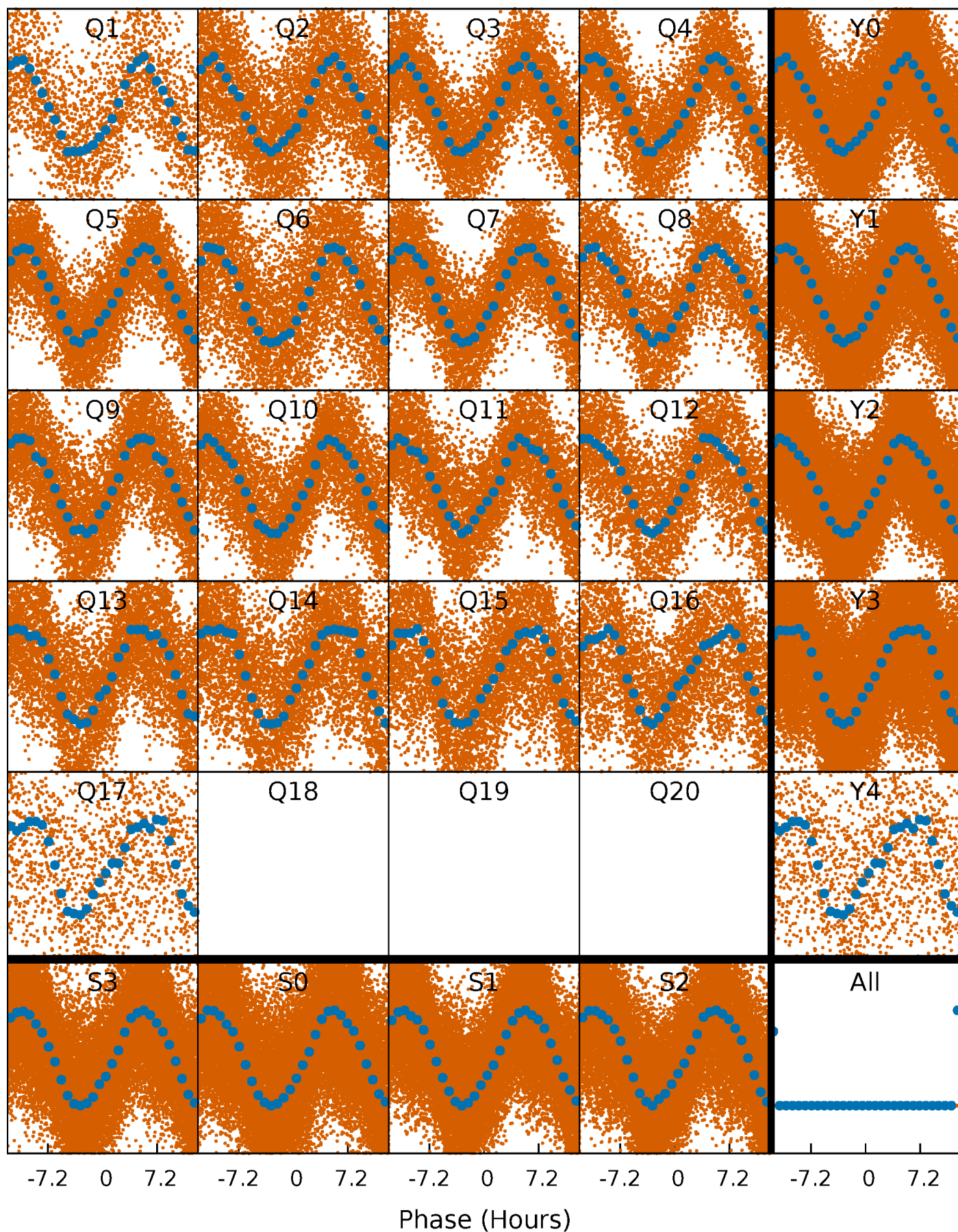


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



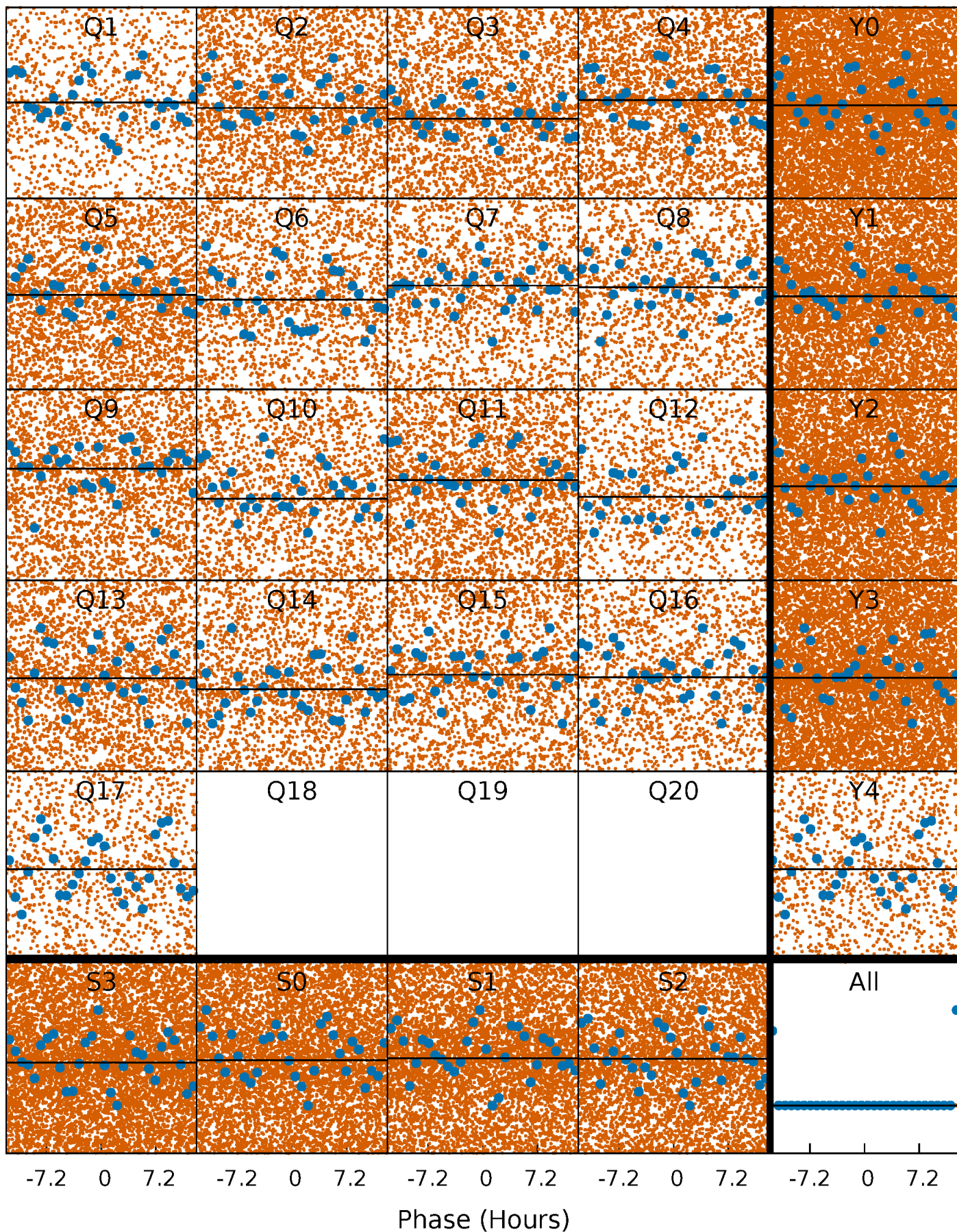
PDC Quarter-Phased Transit Curves

TCE 010449486-01 P= 0.665118 Days $T_0=131.669853$ (BKJD)



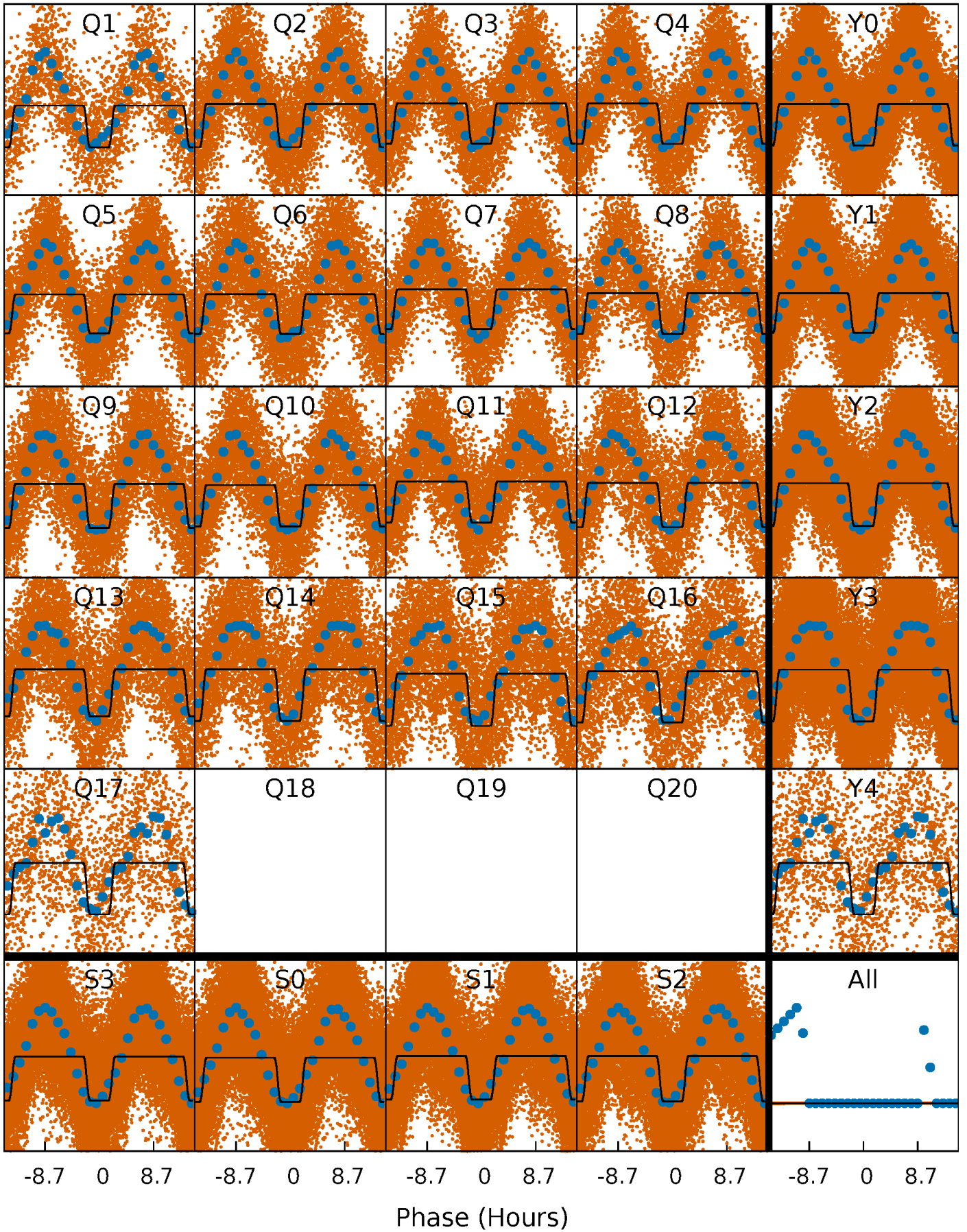
DV Quarter-Phased Transit Curves

TCE 010449486-01 P= 0.665118 Days $T_0=131.669853$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

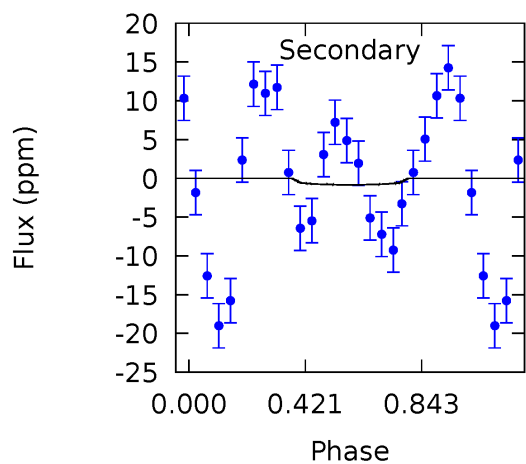
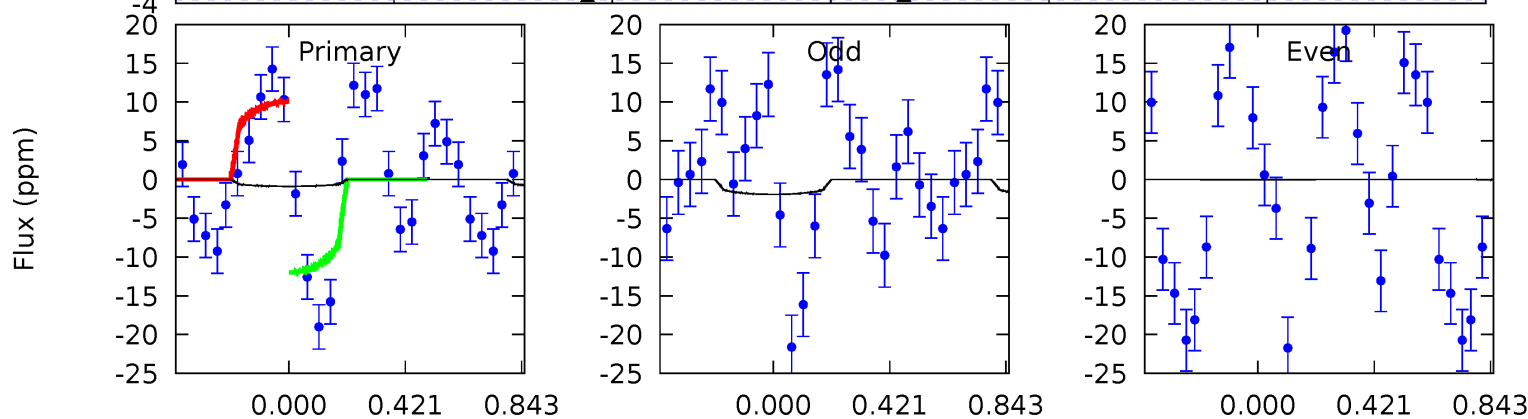
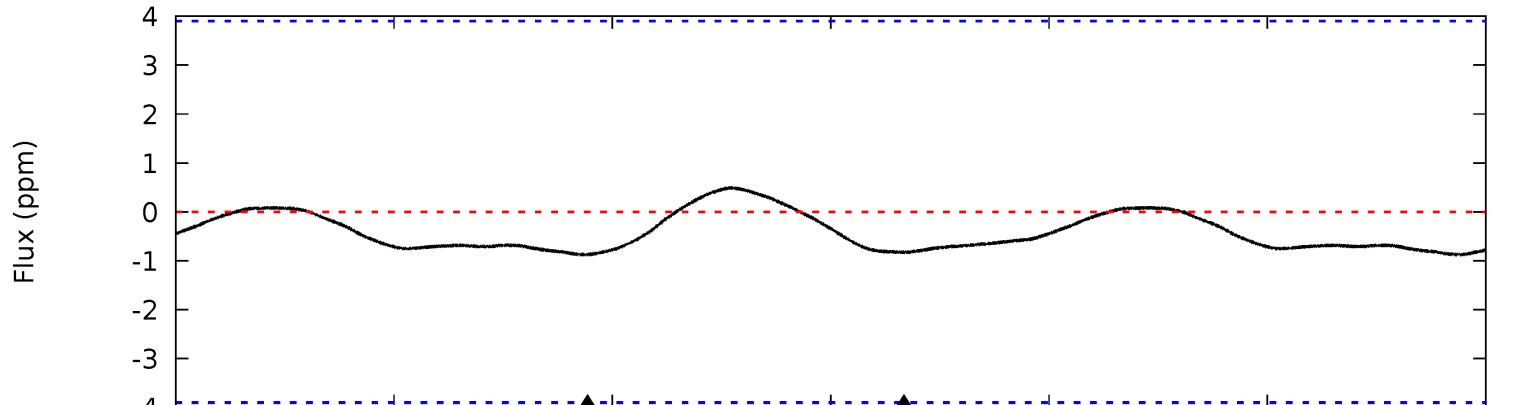
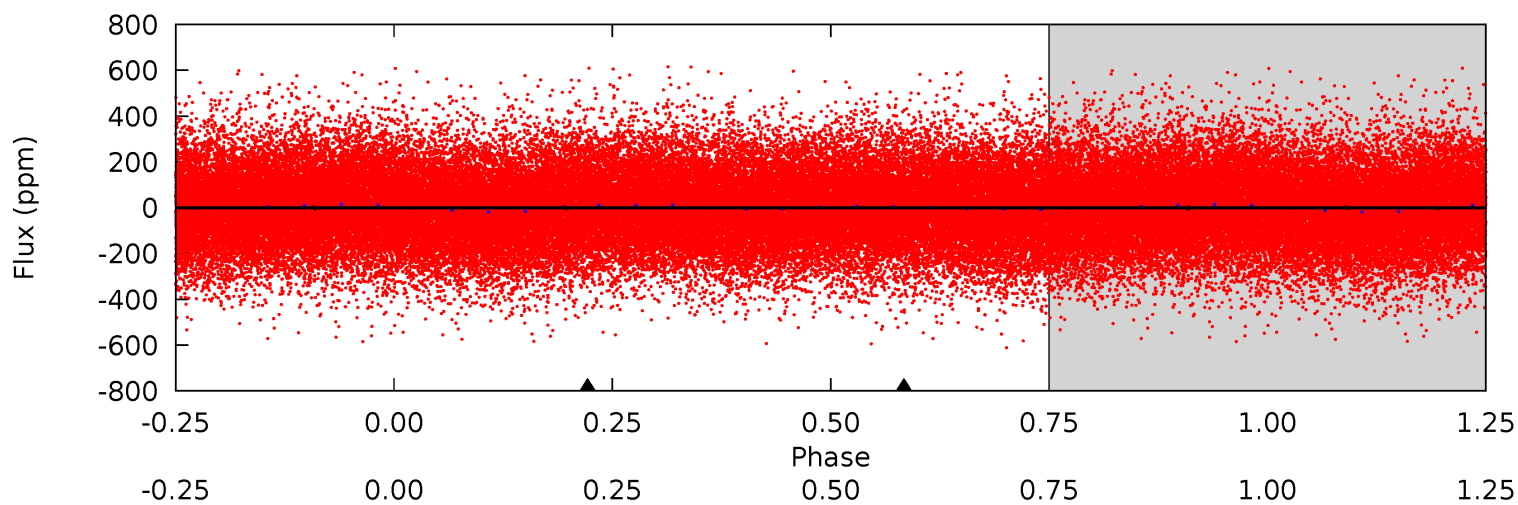
TCE 010449486-01 P= 0.665119 Days $T_0=131.582950$ (BKJD)



DV Model-Shift Uniqueness Test

010449486-01, P = 0.665118 Days, E = 131.004735 Days

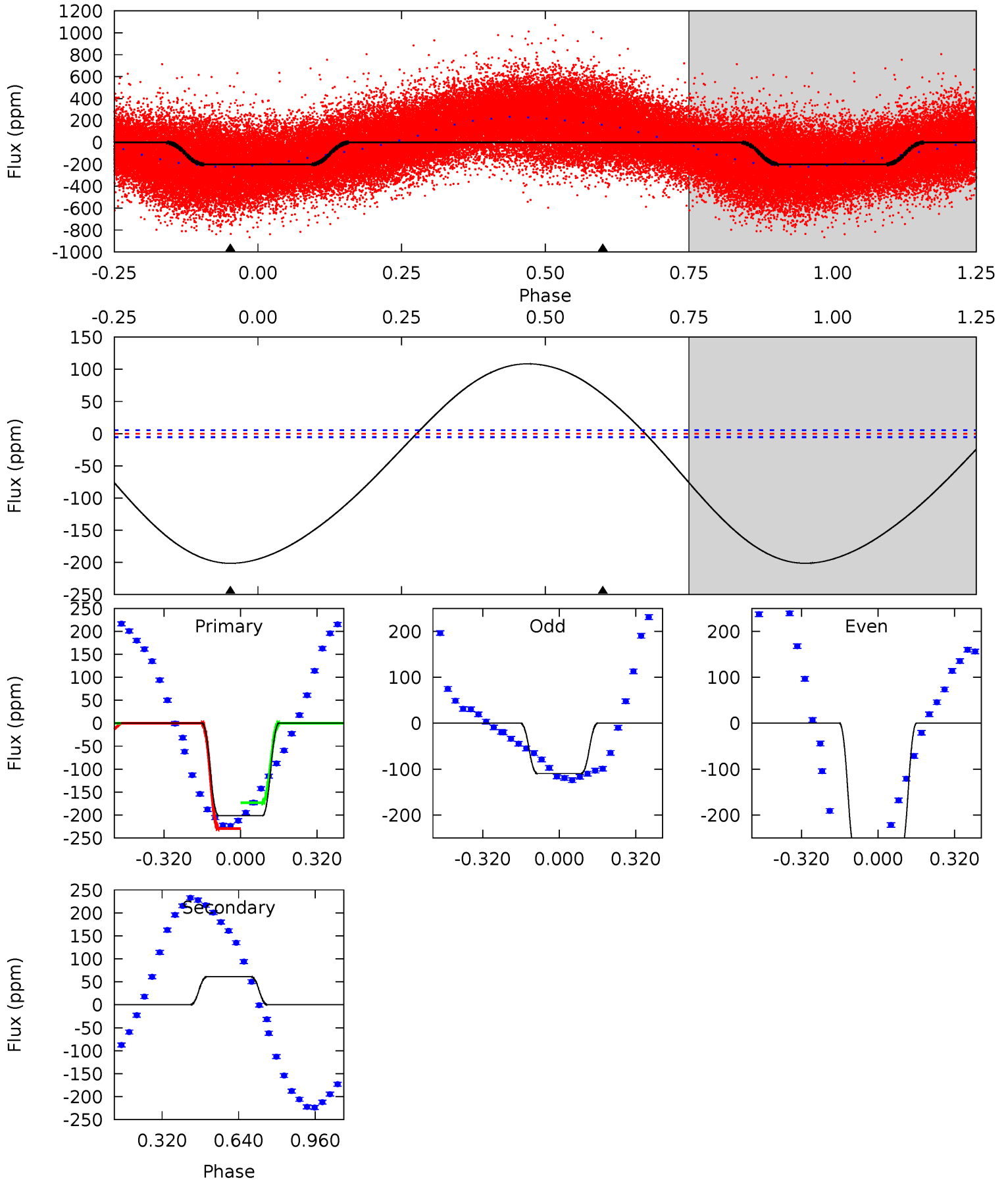
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
0.96	0.91	0	0	4.25	0.80	0.16	0.96	0.96	0.91	0.91	1.02	-0.24	0.36	1.08



Alt Model-Shift Uniqueness Test

010449486-01, P = 0.665119 Days, E = 130.917831 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
158.4	-48.0	0	0	4.31	0.99	20.9	158.4	158.4	-48.0	-48.0	59.8	1.01	0.35	24.4



Stellar Parameters For KIC 010449486

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	7483^{+209}_{-314}	$4.119^{+0.140}_{-0.186}$	$-0.060^{+0.200}_{-0.350}$	$1.820^{+0.540}_{-0.360}$	$1.589^{+0.212}_{-0.259}$	$0.371^{+0.279}_{-0.184}$
	+3%/-4%	+3%/-5%	+333%/-583%	+30%/-20%	+13%/-16%	+75%/-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 010449486-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-1 ± 1	$4.15^{+4.57}_{-2.90}$	4726^{+1041}_{-638}	-4039^{+545}_{-699}	$0.005^{+0.068}_{-0.006}$
Alt.	61 ± 1	$5.37^{+5.51}_{-3.59}$	4779^{+1024}_{-651}	-5033^{+764}_{-2360}	$-0.294^{+0.234}_{-2.426}$

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 $A_{obs} \gg 1.0$

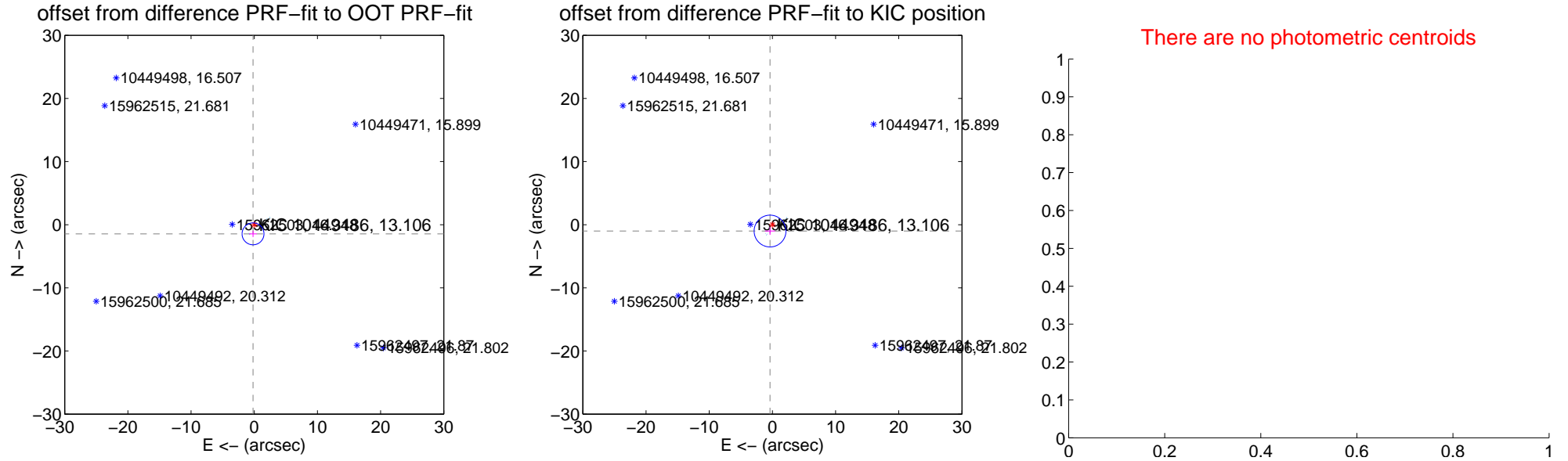
DV Centroid Data

Supplemental centroid analysis for 010449486-01. Kepler magnitude: 13.11. Transit SNR 0.00

There are 5 quarters with good PRF difference image offsets

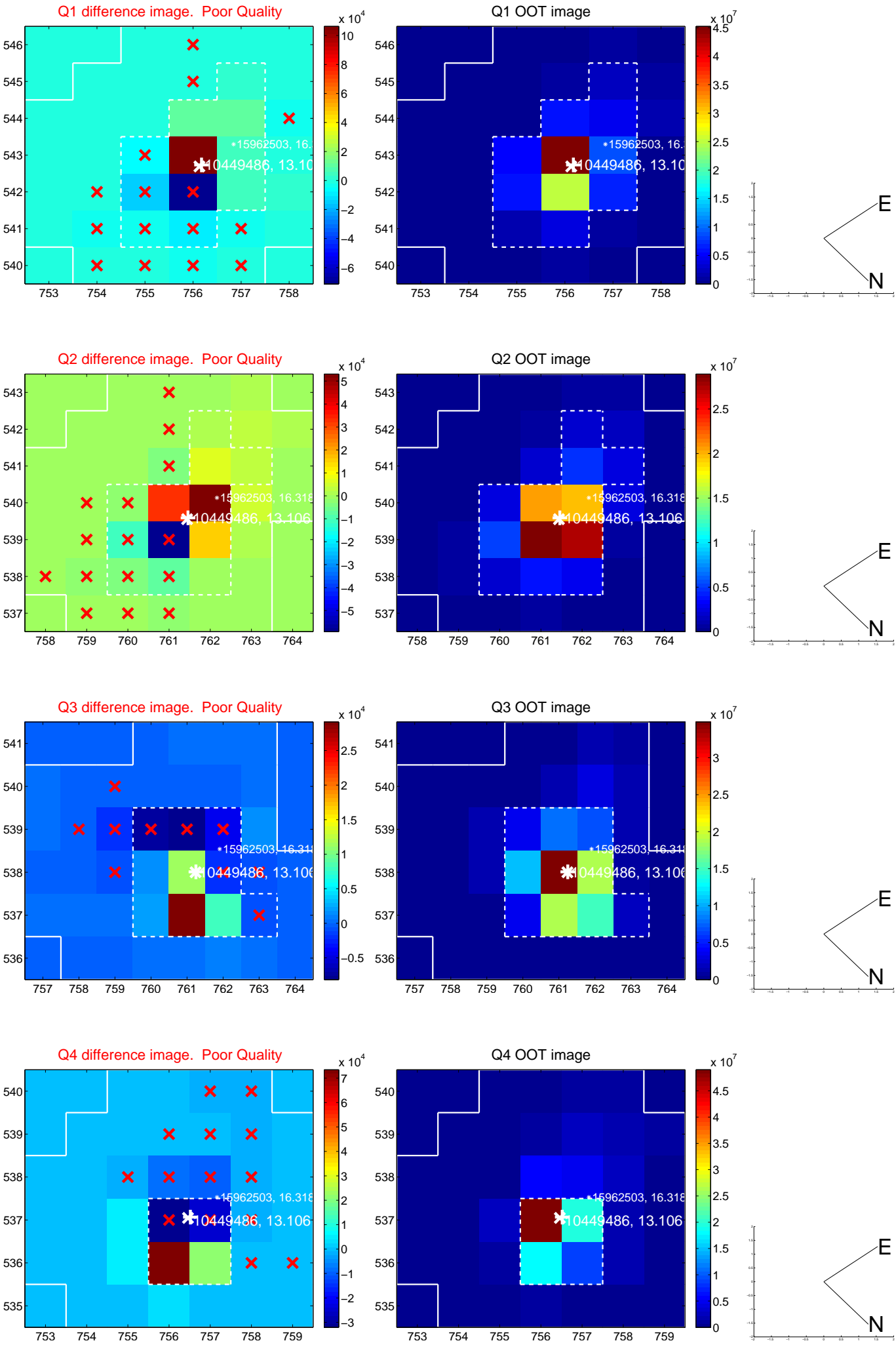
The direct PRF centroid is offset from the target star catalog position by about 0.22 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	1.462 ± 0.578	2.53	0.195 ± 0.604	-1.448 ± 0.503
PRF-fit source offset from KIC position	1.071 ± 0.840	1.28	0.372 ± 0.784	-1.005 ± 0.607
photometric centroid source offset	—	—	—	—

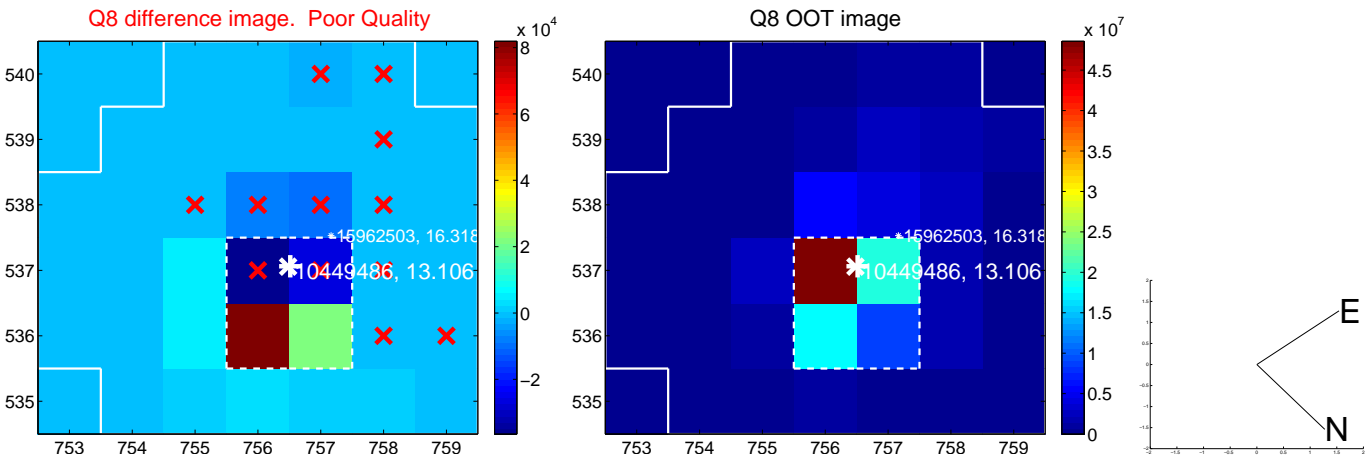
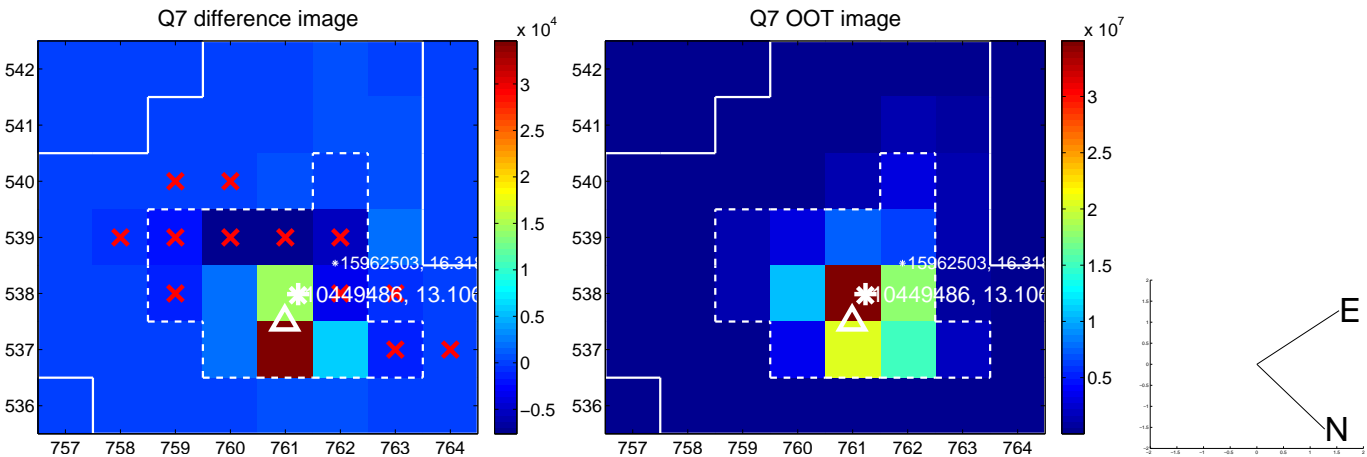
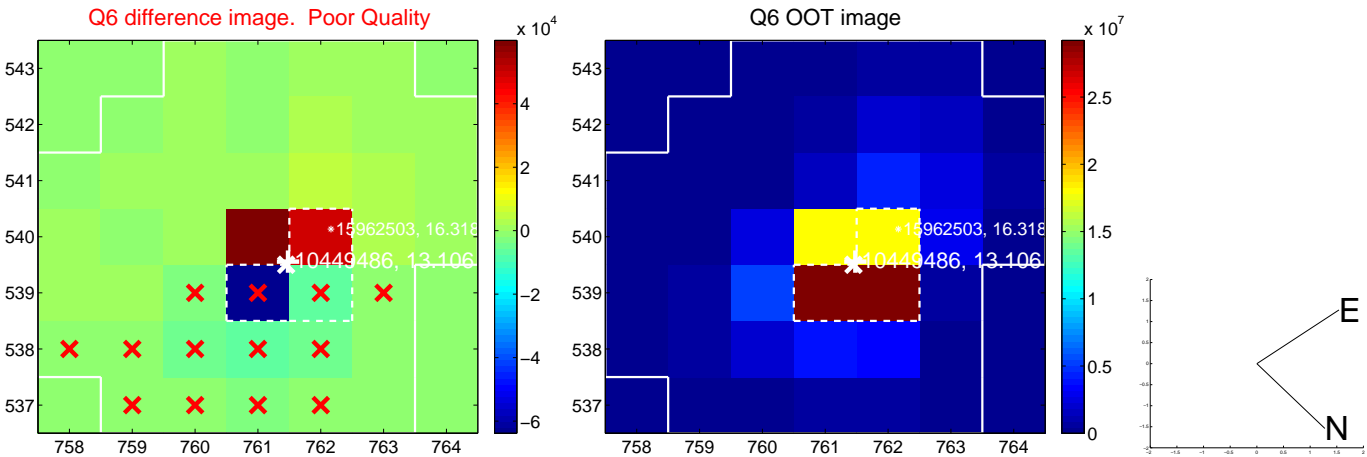
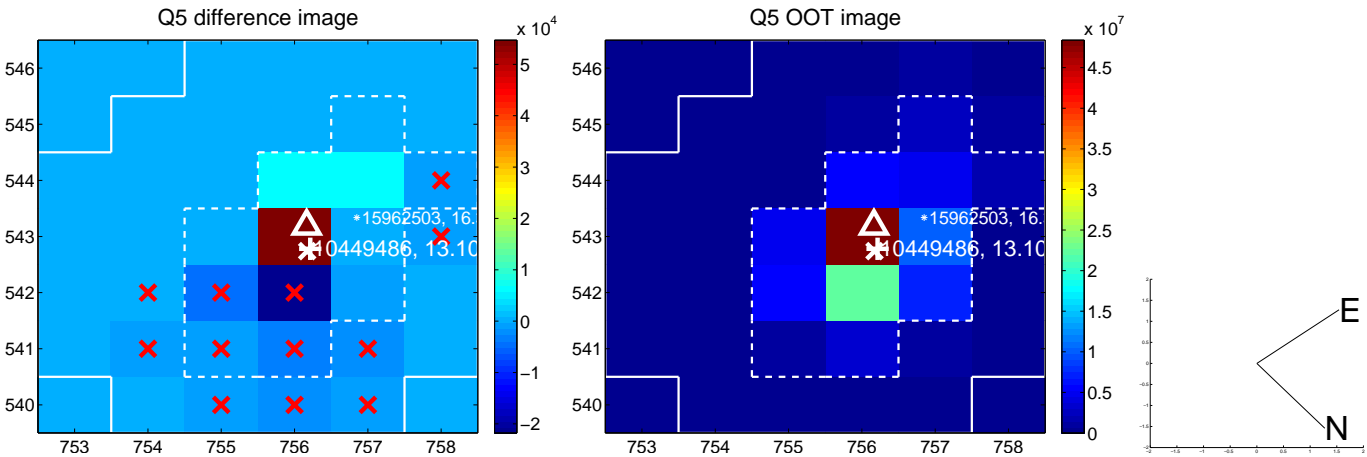


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

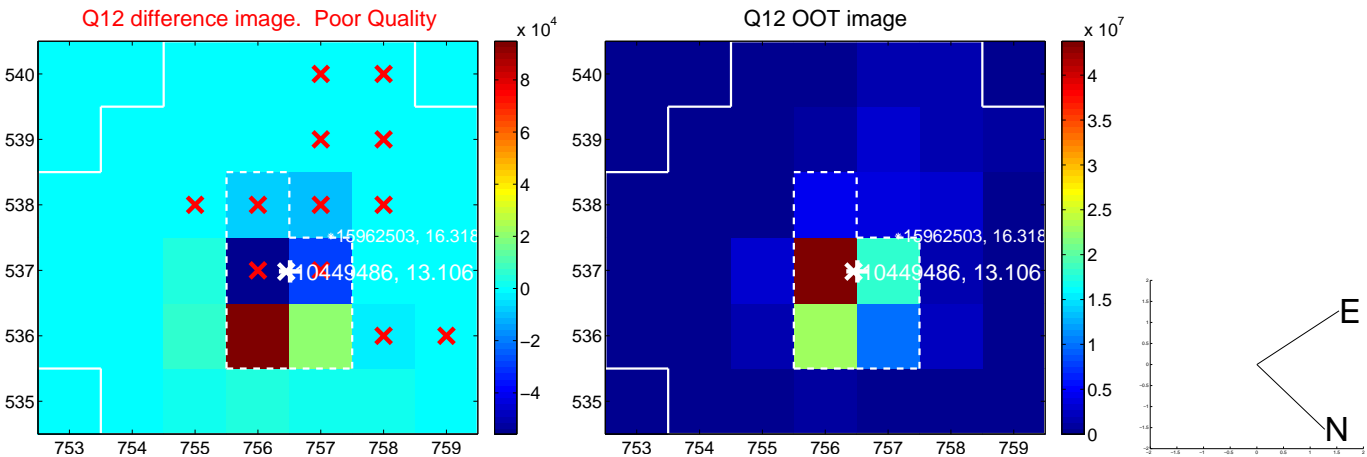
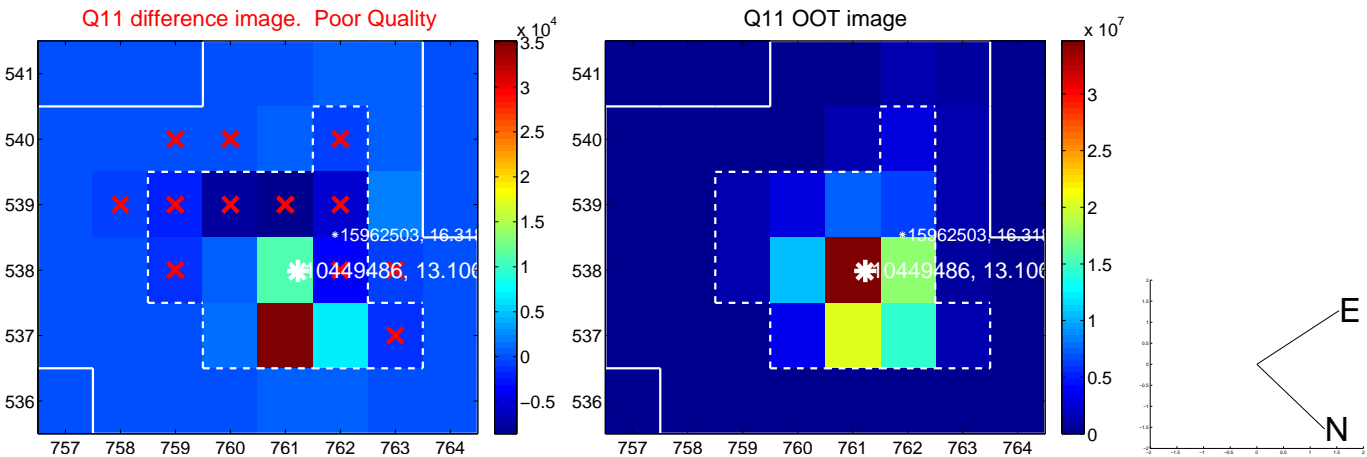
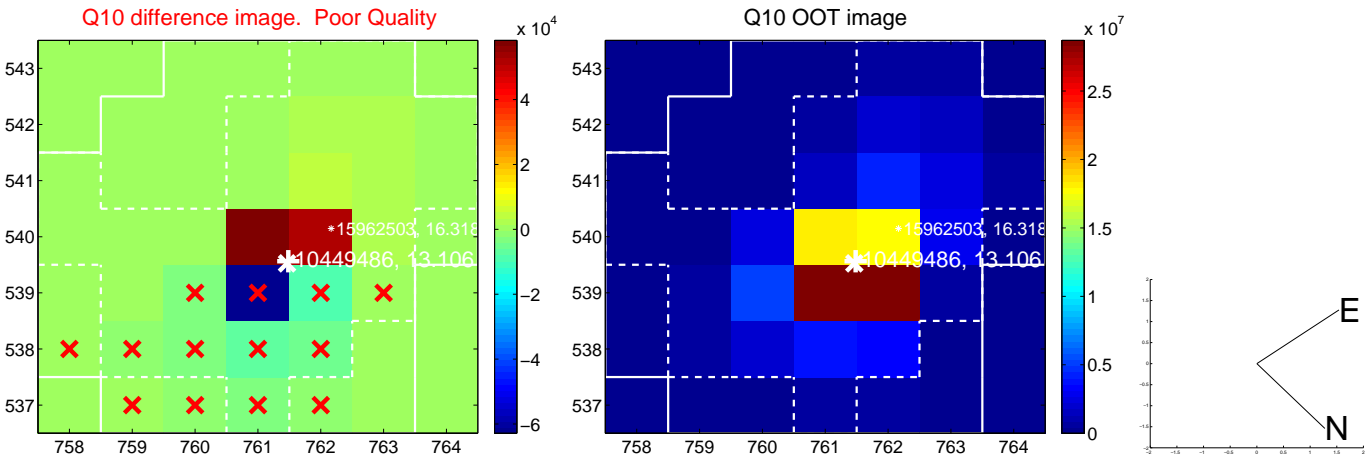
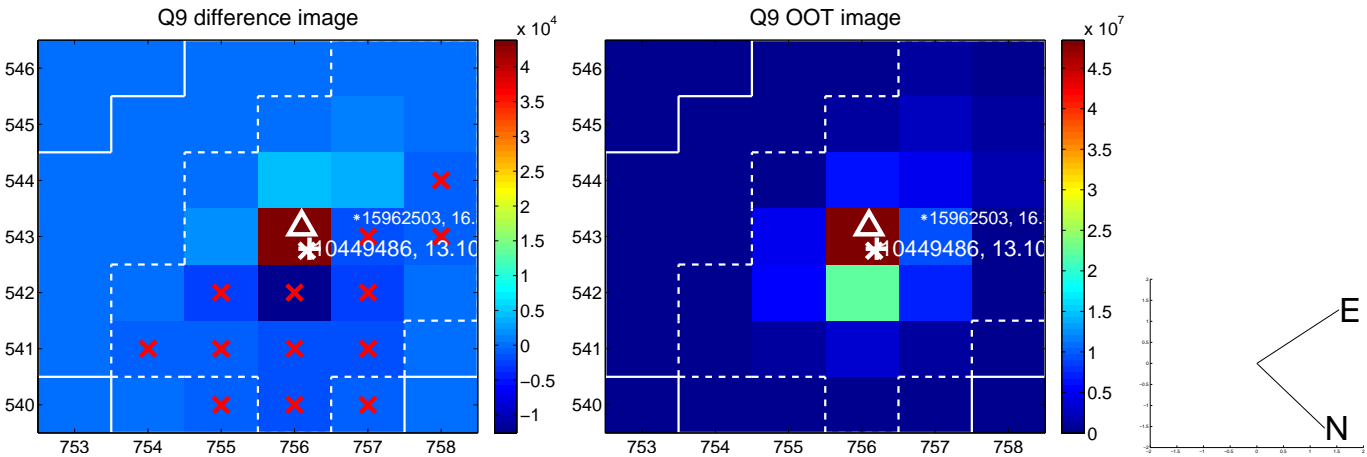
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



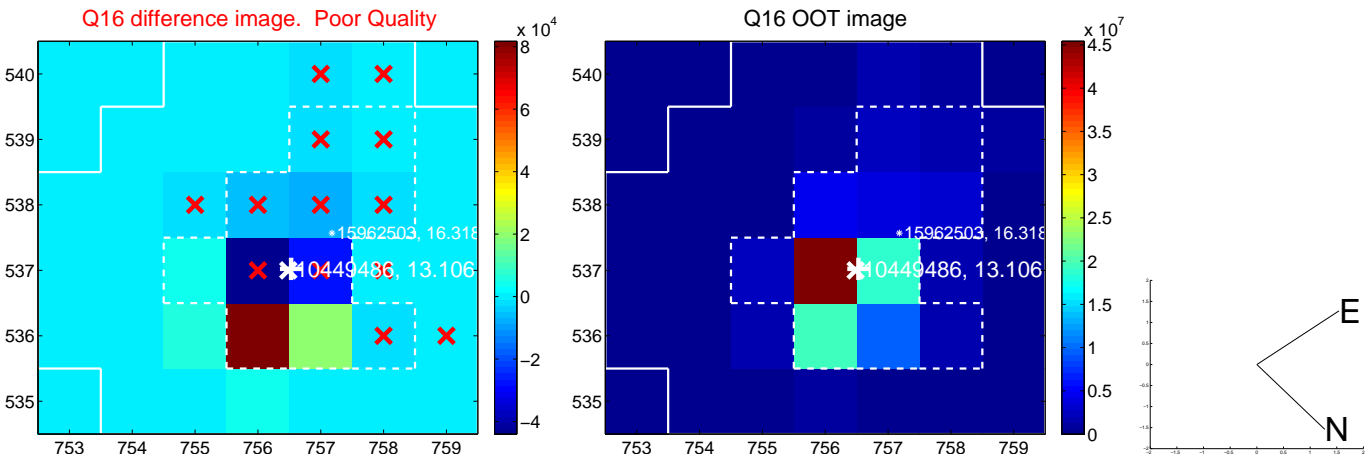
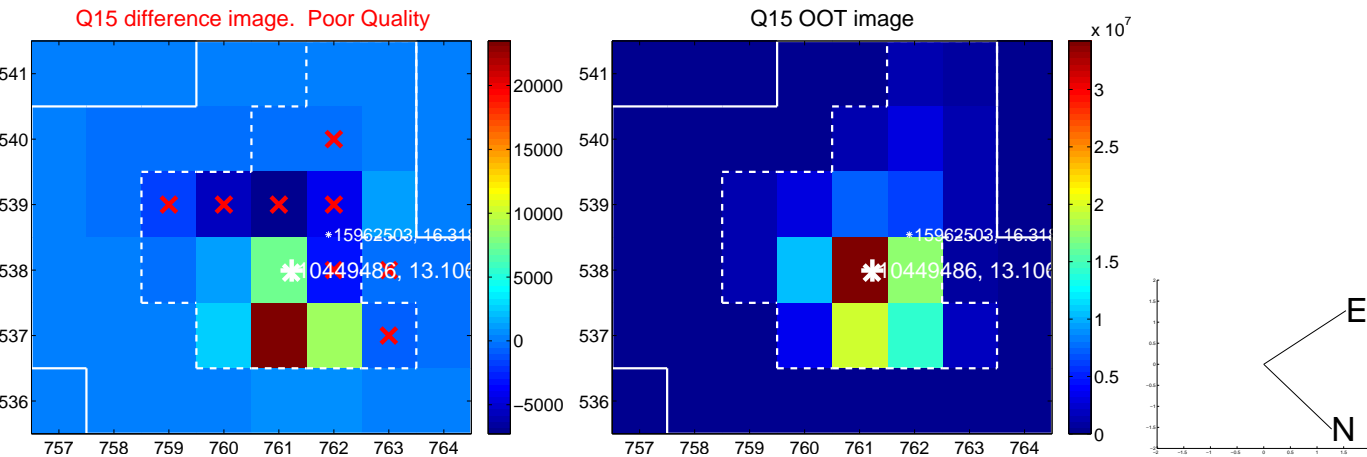
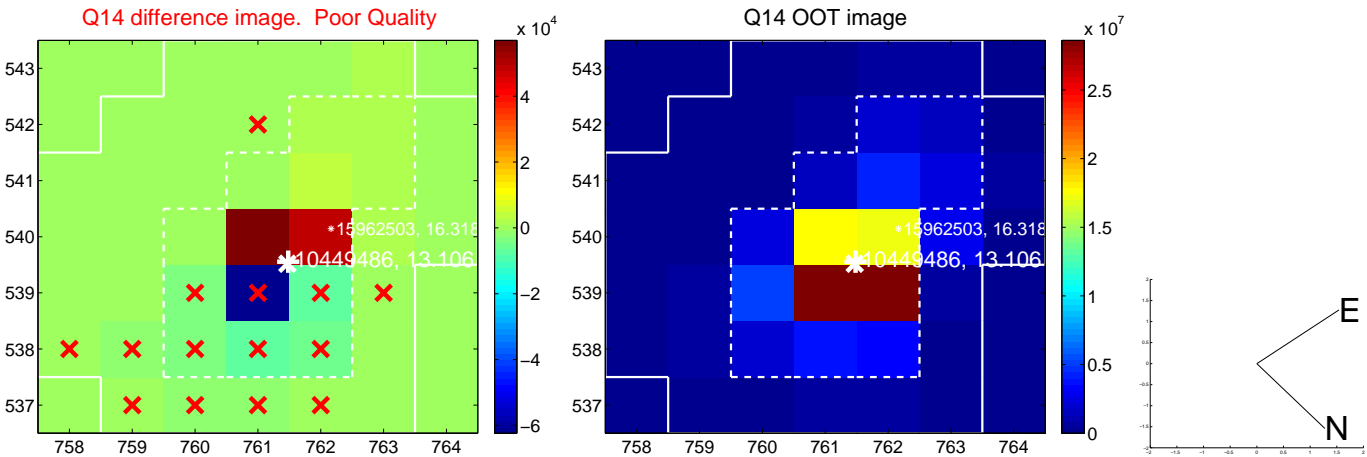
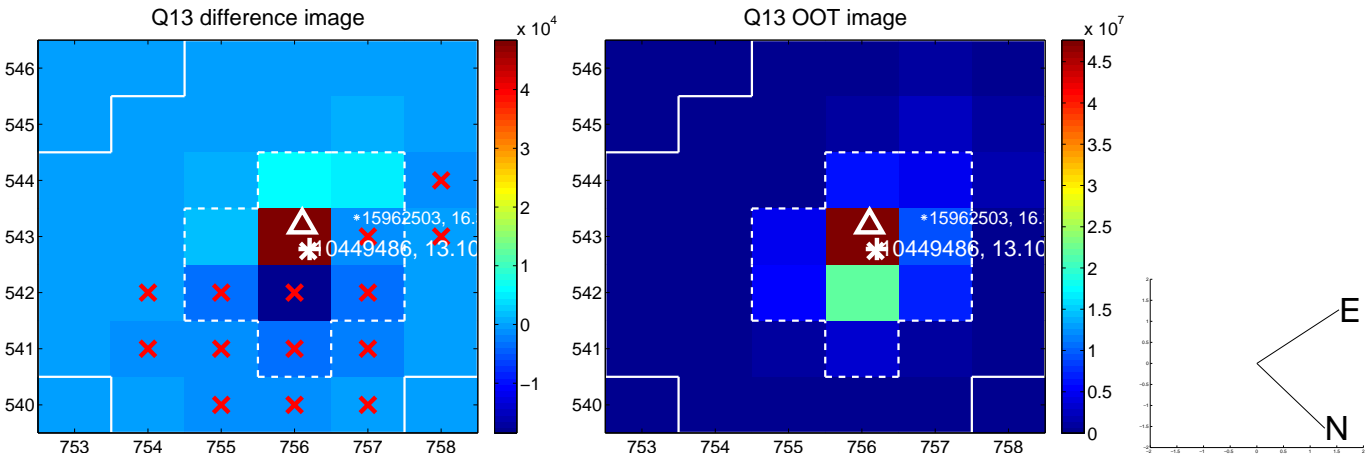
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



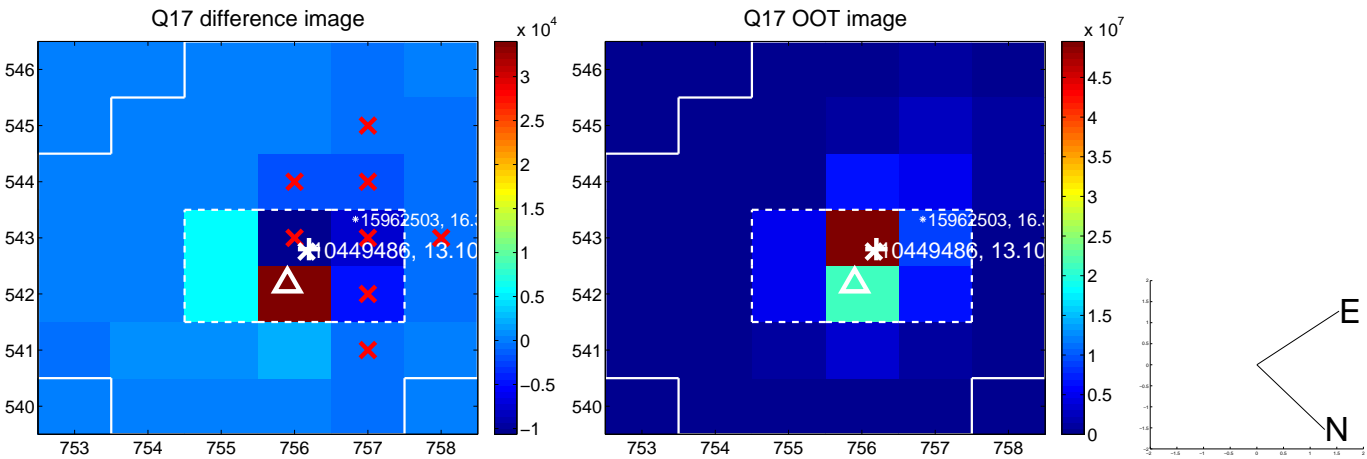
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



folded centroid time series figure for this object.

UKIRT Image

Declination

