

KIC 008265481

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})
008265481-01	OBS	No	1.631090	131.661635	39.4	5.903	8.5	9.3	1.52	7052	1.28	5525.28

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
008265481-01	OBS	FP	0.00	1	0	0	0	LPP_DV—MOD_NONUNIQ_DV

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

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

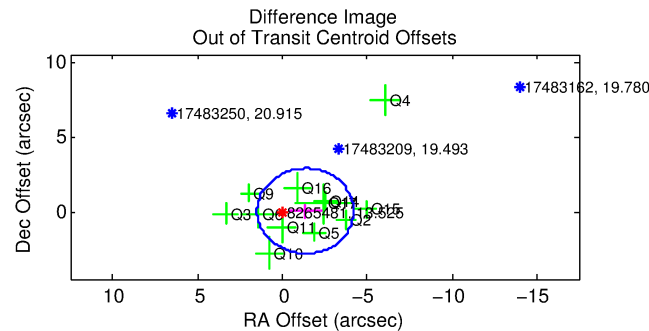
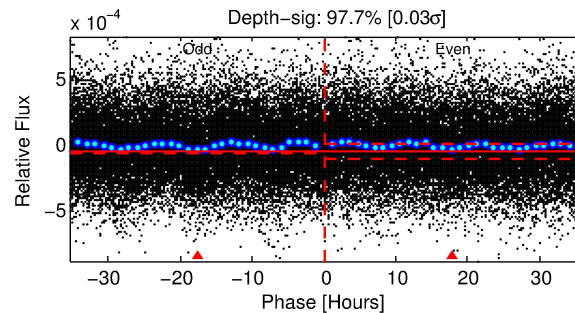
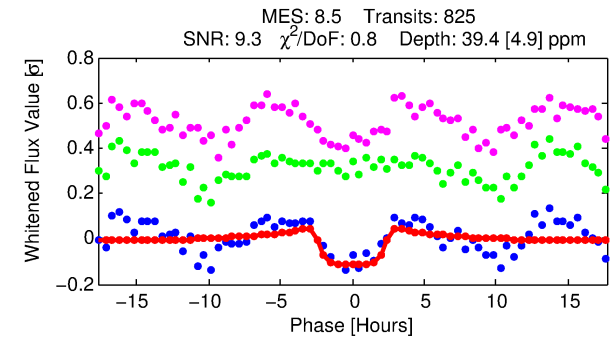
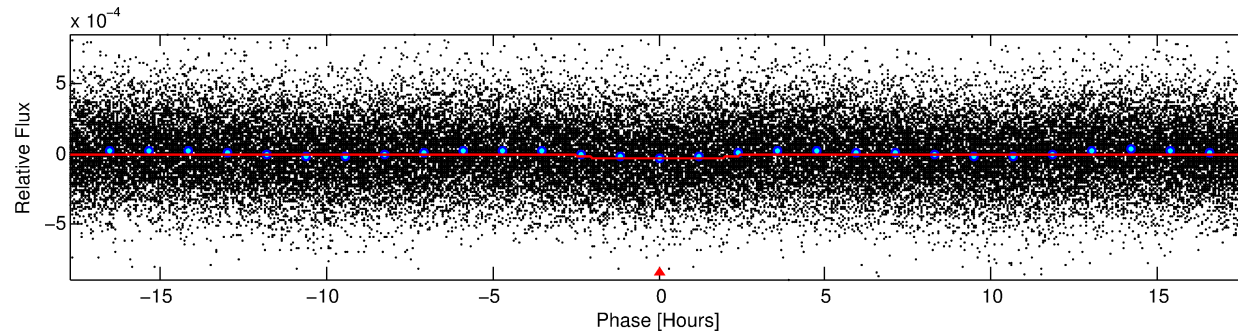
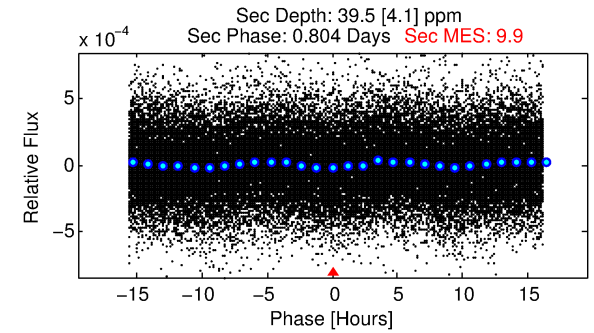
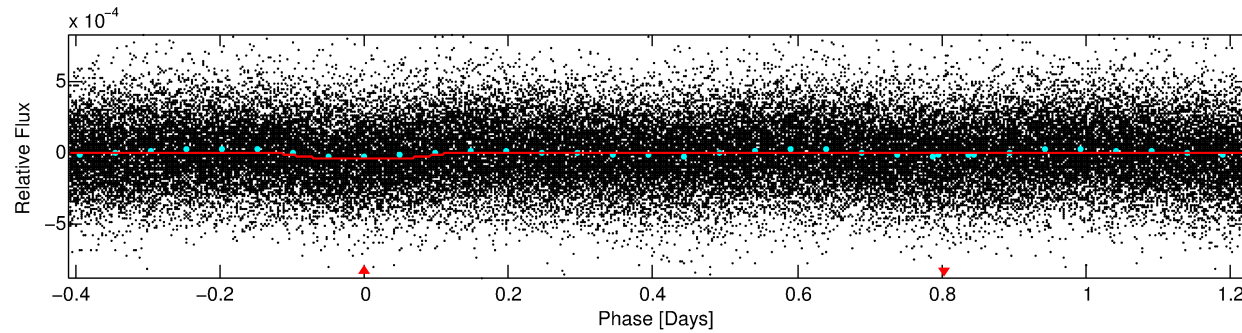
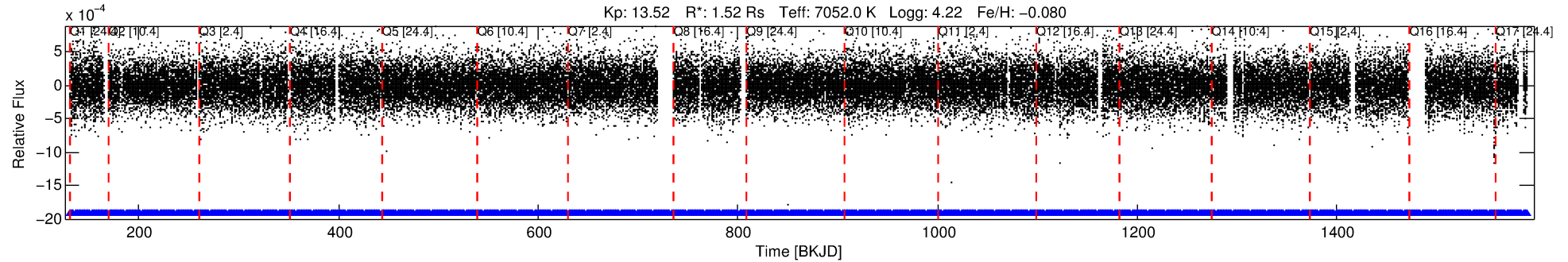
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 008265481-01

No Significant Match Found

DV One-Page Summary

KIC: 8265481 Candidate: 1 of 1 Period: 1.631 d



DV Fit Results:

Period = 1.63109 [0.00002] d
Epoch = 131.6616 [0.0066] BKJD
Rp/R* = 0.0077 [0.0006]
a/R* = 1.08 [0.03]
b = 0.99 [0.01]
Seff = 5525.28 [2285.85]
Teq = 2198 [227] K
Rp = 1.28 [0.45] Re
a = 0.0304 [0.0084] AU
Ag = 12.27 [5.14] [2.19σ]
Teffp = 6361 [392] K [9.18σ]

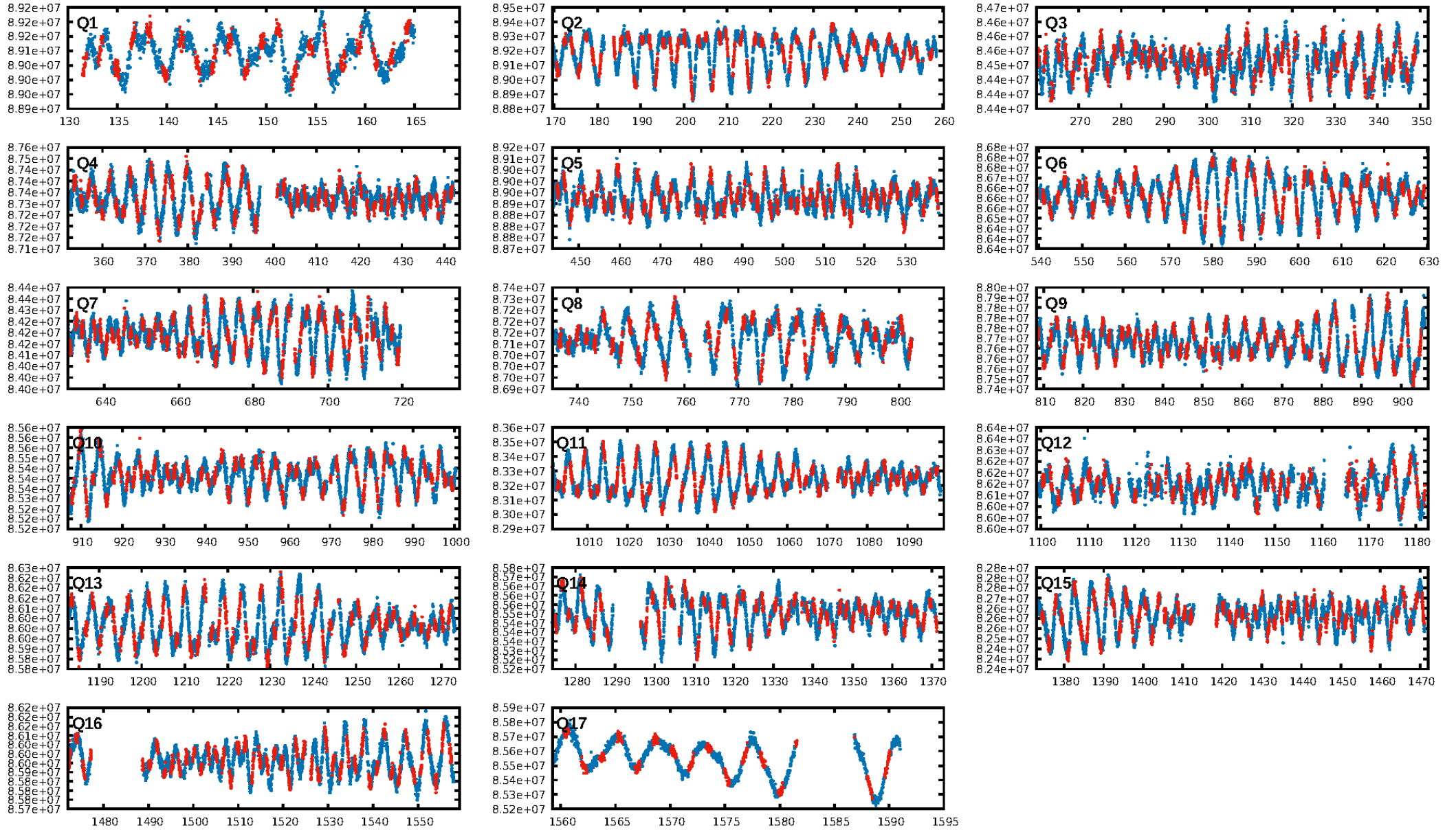
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 5.79e-15
RollingBand-fgt: 1.00 [788/788]
GhostDiagnostic-chr: -27.63
Centroid-sig: 48.4%
Centroid-so: 0.151 arcsec [0.16σ]
OotOffset-rm: 1.365 arcsec [1.44σ]
OotOffset-st: 4/3/2/3 [12]
KicOffset-rm: 1.476 arcsec [1.53σ]
KicOffset-st: 4/3/2/3 [12]
DiffImageQuality-fgm: 0.25 [3/12]
DiffImageOverlap-fno: 1.00 [17/17]

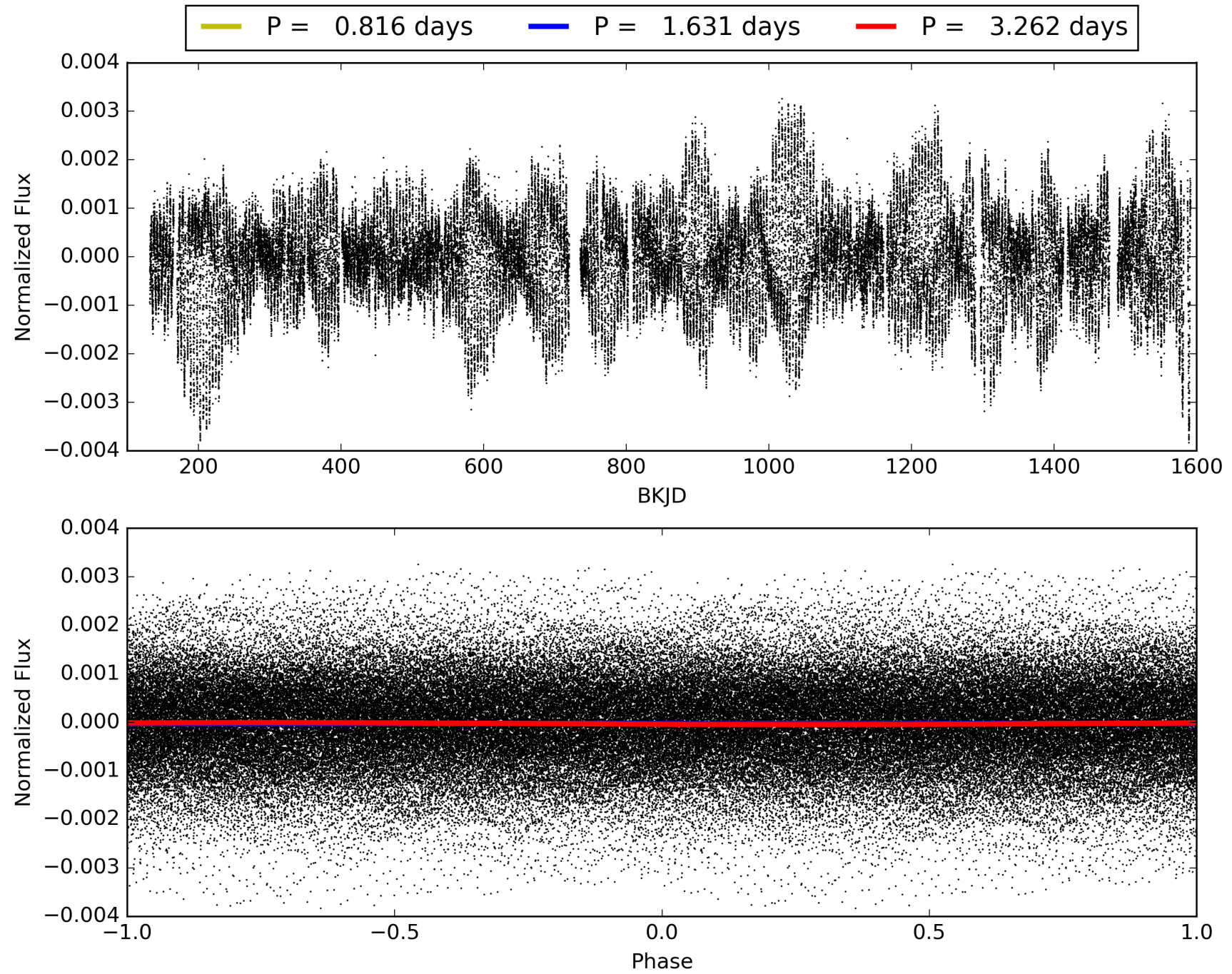
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 09:43:17 Z

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

TCE 008265481-01, PDC Light Curves

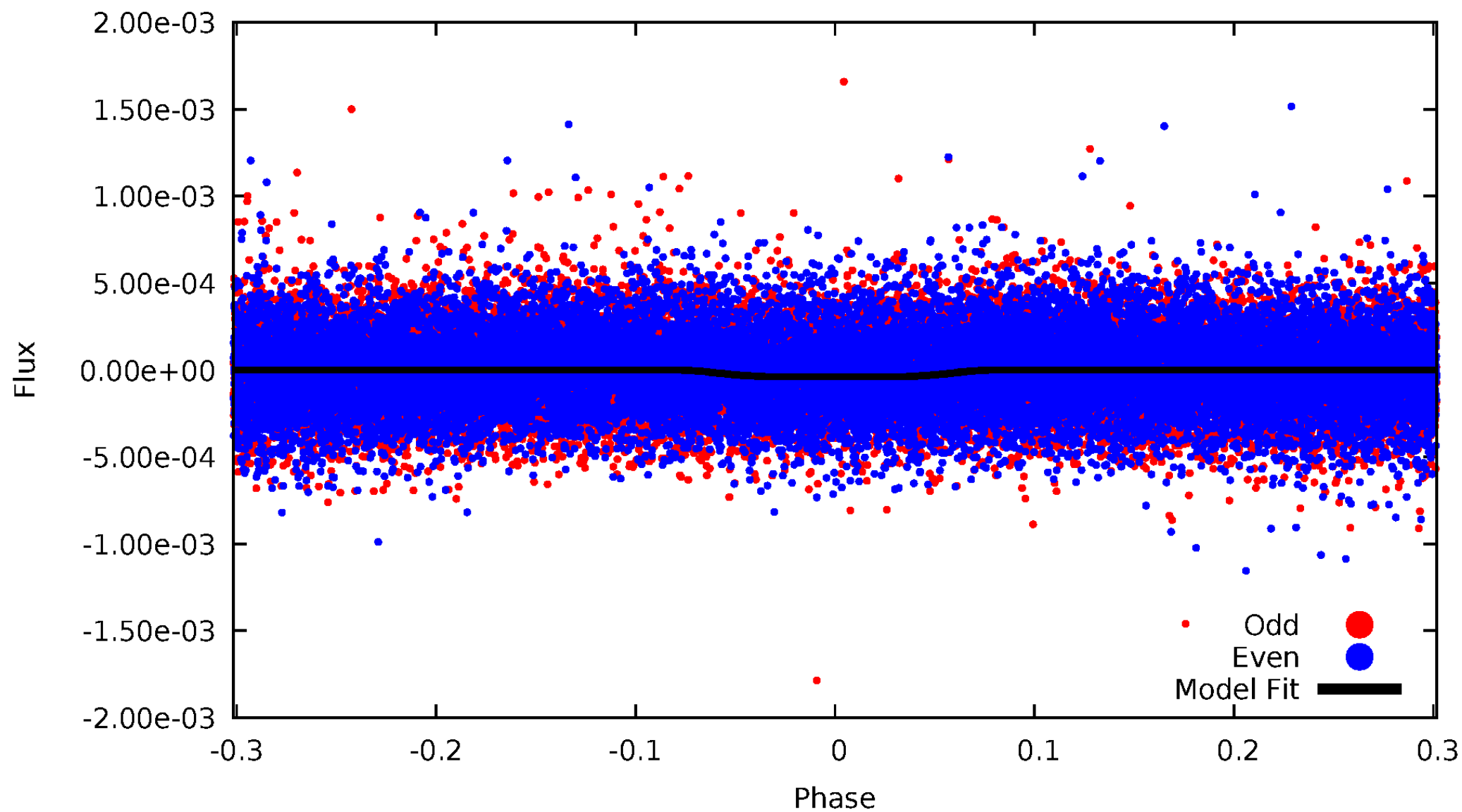


TCE 008265481-01



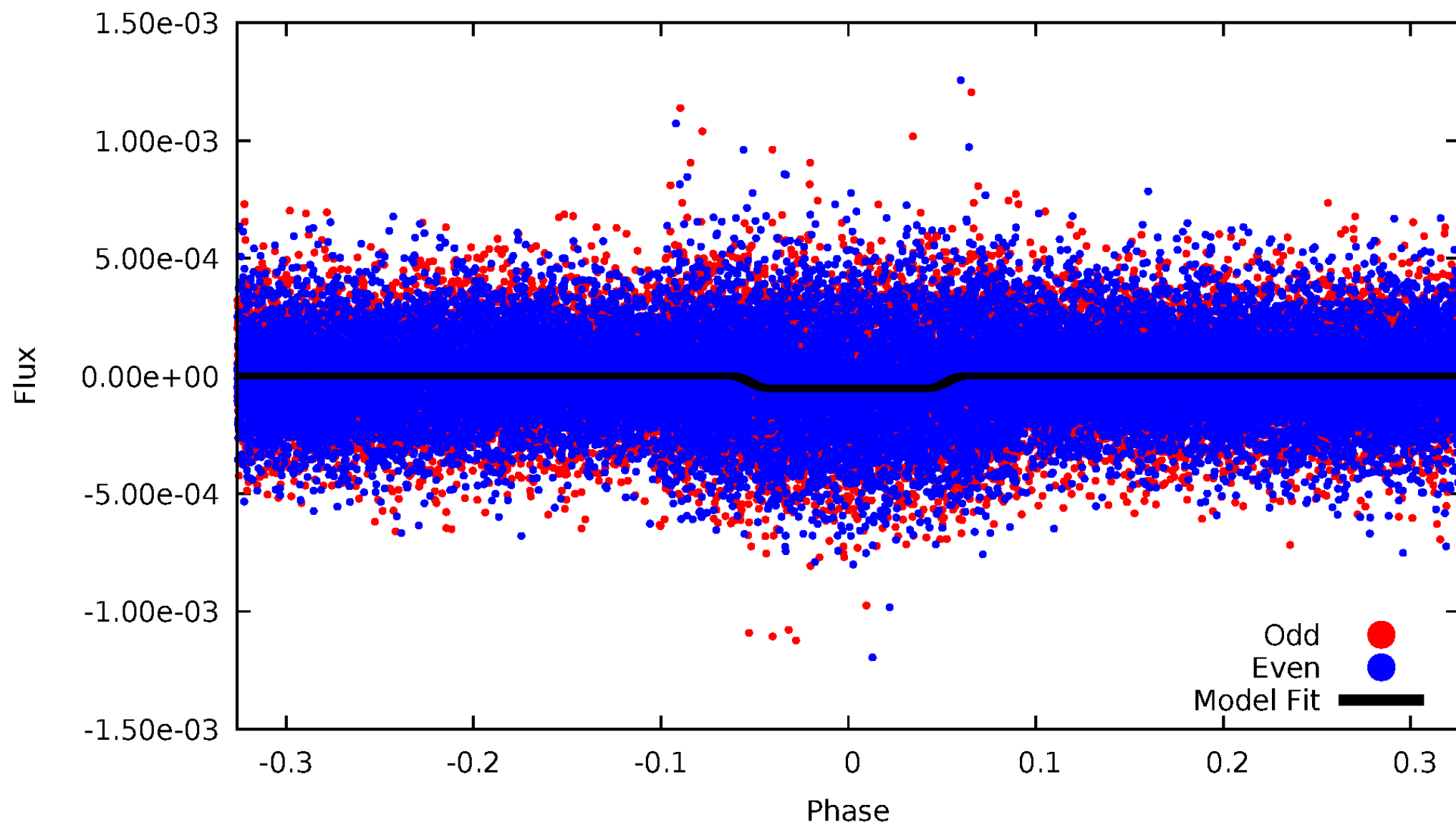
DV Odd/Even

TCE 008265481-01



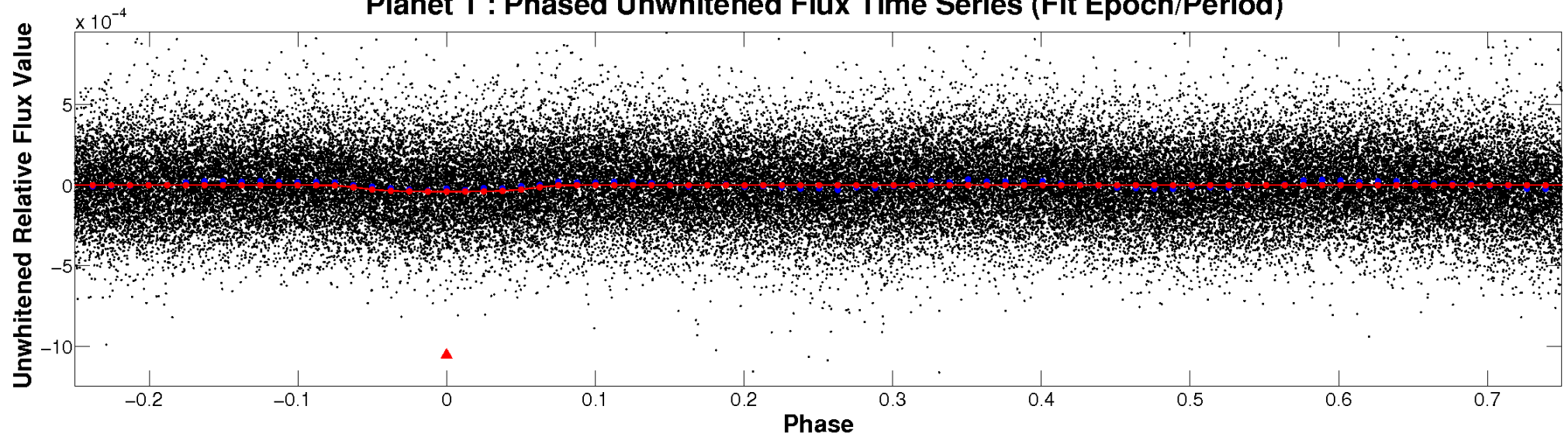
ALT Odd/Even

TCE 008265481-01

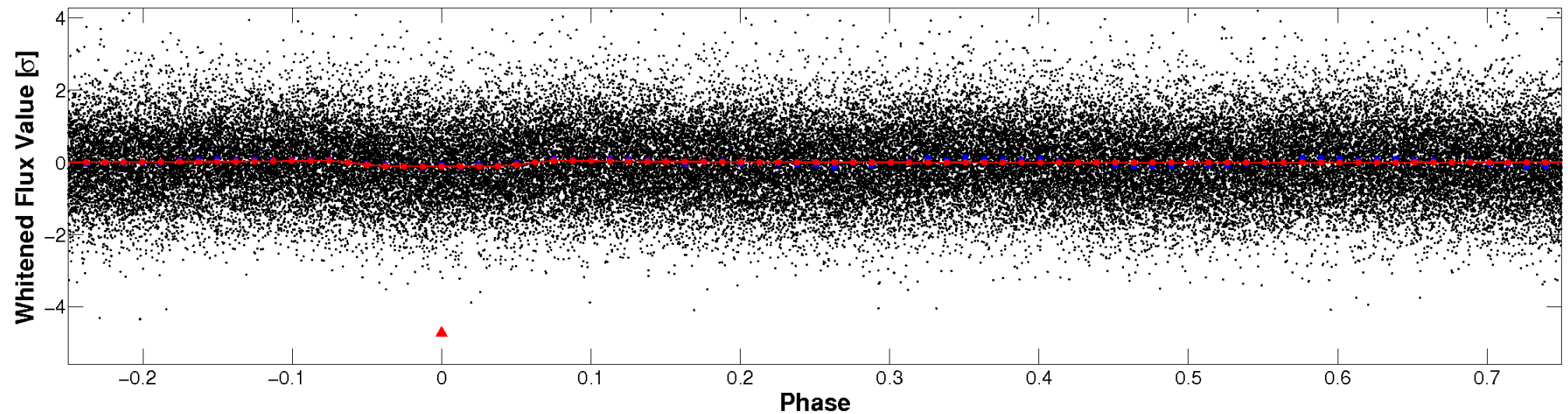


Non-Whitened Vs. Whitened Light Curve

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

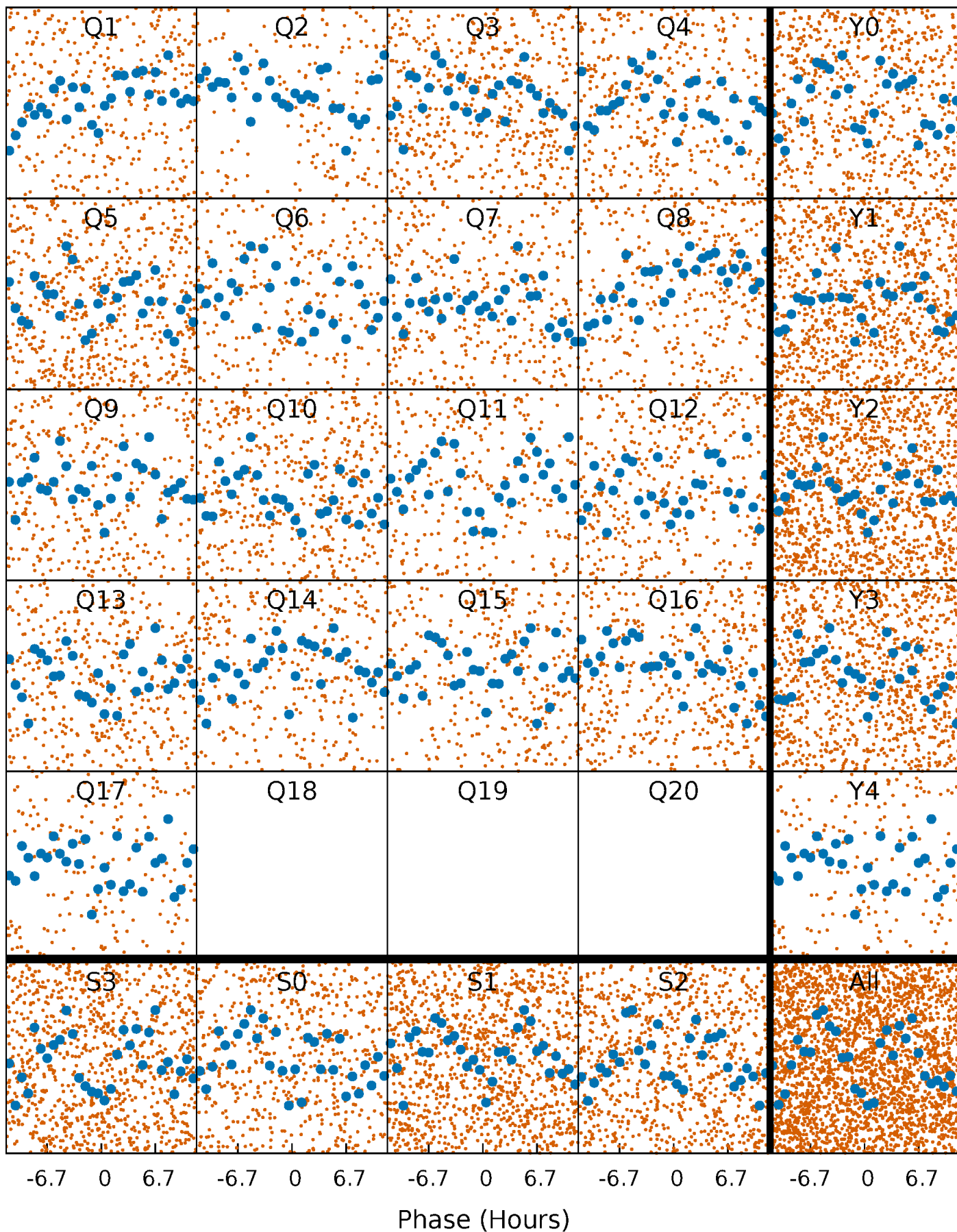


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



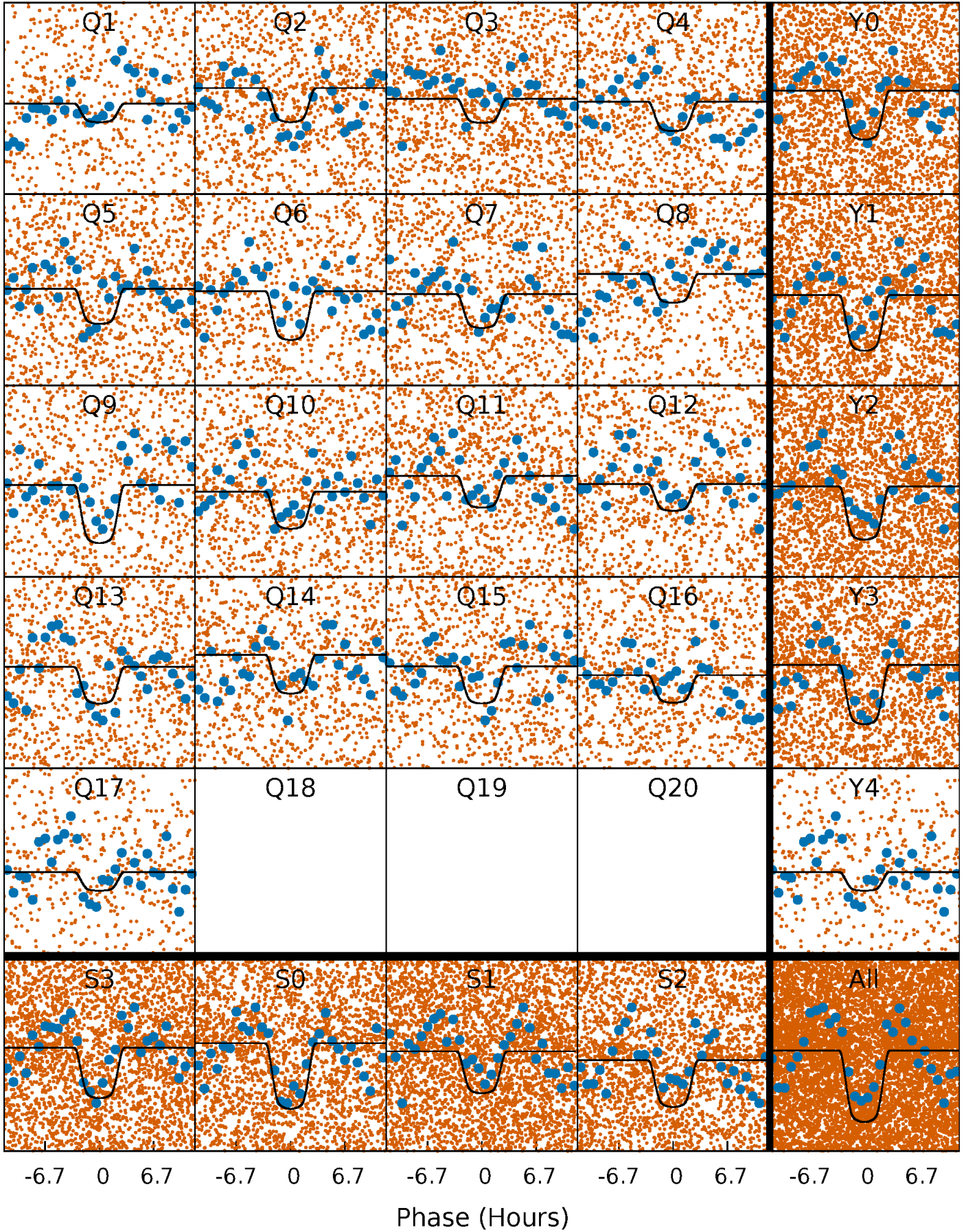
PDC Quarter-Phased Transit Curves

TCE 008265481-01 P= 1.631090 Days $T_0=131.661635$ (BKJD)



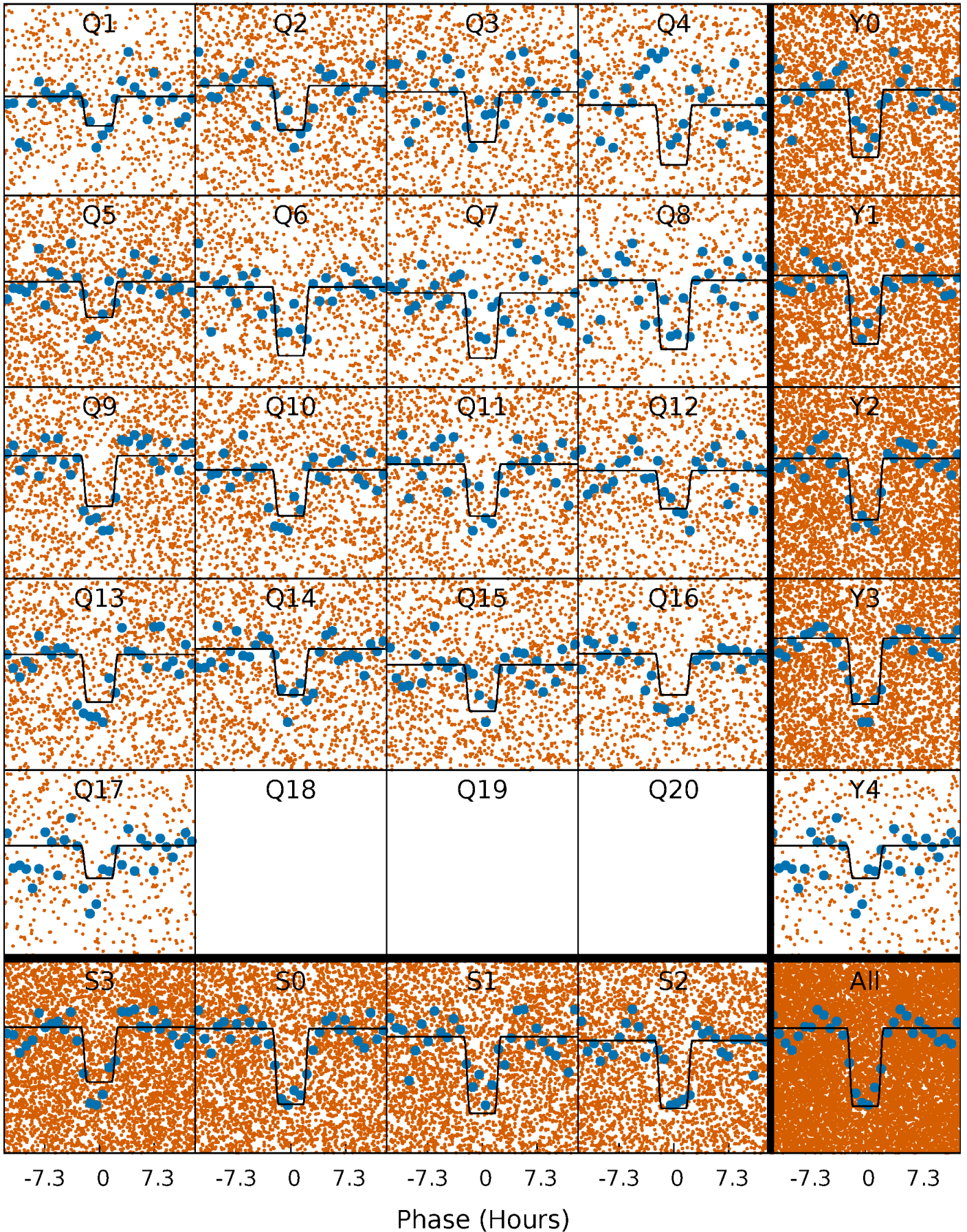
DV Quarter-Phased Transit Curves

TCE 008265481-01 P= 1.631090 Days $T_0=131.661635$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

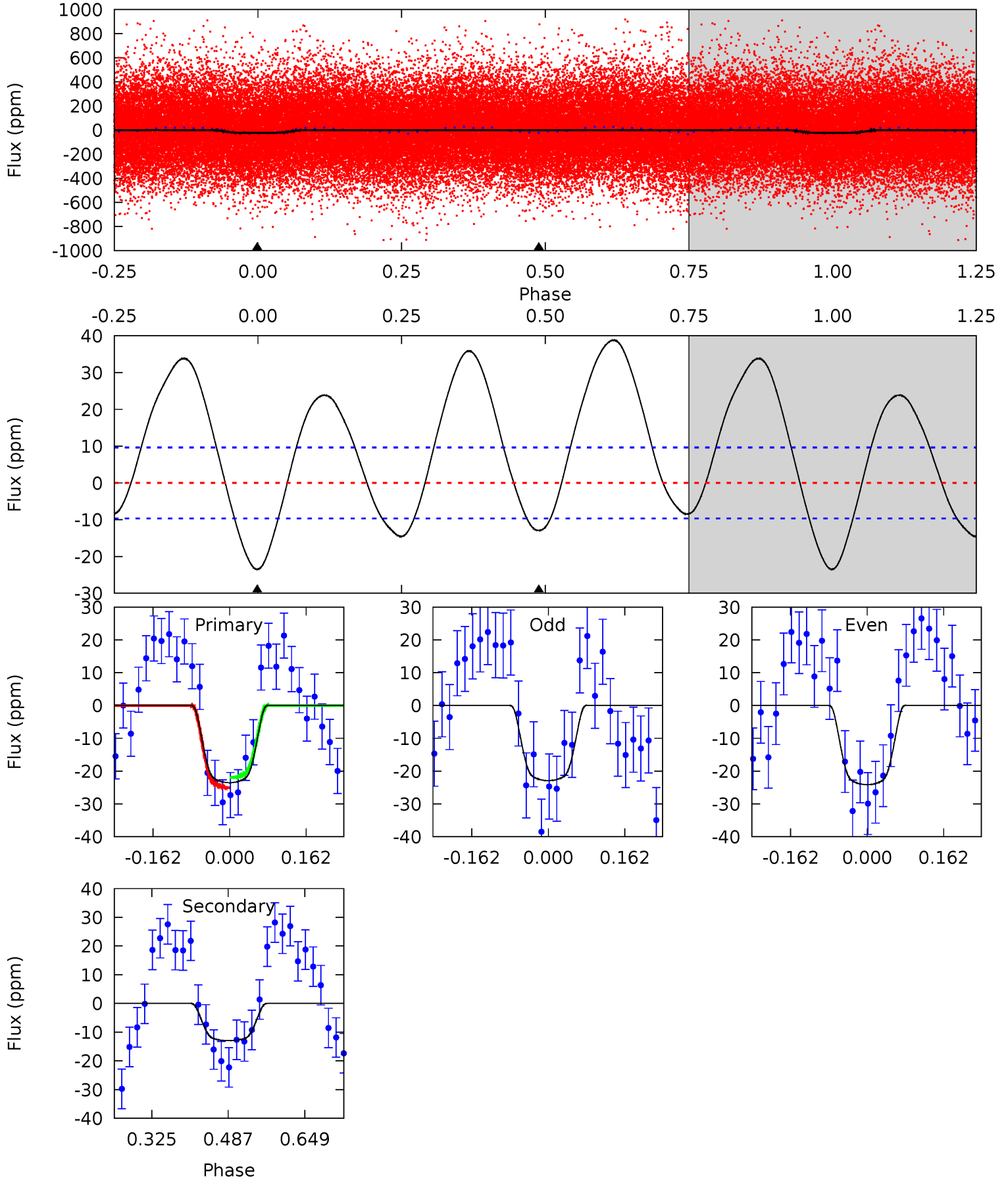
TCE 008265481-01 P= 1.631122 Days $T_0=131.640631$ (BKJD)



DV Model-Shift Uniqueness Test

008265481-01, P = 1.631090 Days, E = 130.030545 Days

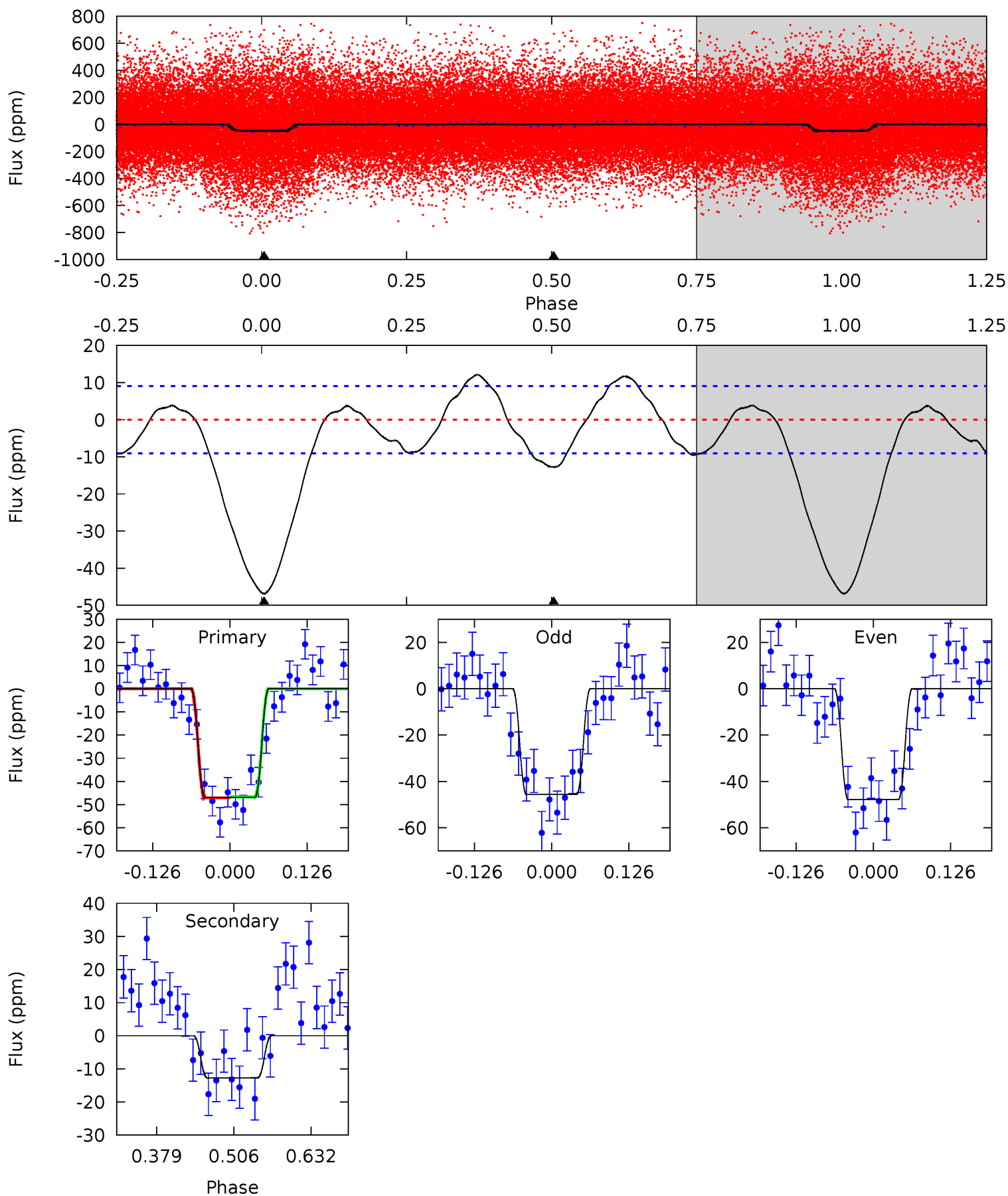
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
10.9	5.99	0	0	4.46	1.40	5.58	10.9	10.9	5.99	5.99	0.29	0.92	0.62	0.72



Alt Model-Shift Uniqueness Test

008265481-01, P = 1.631122 Days, E = 130.009509 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
23.4	6.35	0	0	4.52	1.53	3.07	23.4	23.4	6.35	6.35	0.55	1.08	0.21	0.11



Stellar Parameters For KIC 008265481

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	7052^{+197}_{-296}	$4.224^{+0.105}_{-0.195}$	$-0.080^{+0.250}_{-0.350}$	$1.518^{+0.526}_{-0.263}$	$1.412^{+0.226}_{-0.205}$	$0.569^{+0.288}_{-0.303}$
	+3%/-4%	+2%/-5%	+312%/-438%	+35%/-17%	+16%/-15%	+51%/-53%
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 008265481-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-13 ± 2	$1.32^{+0.23}_{-0.18}$	3093^{+243}_{-173}	4777^{+266}_{-246}	$3.747^{+1.405}_{-1.135}$
Alt.	-13 ± 2	$1.24^{+0.23}_{-0.18}$	3105^{+243}_{-193}	4883^{+292}_{-254}	$4.162^{+1.536}_{-1.213}$

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

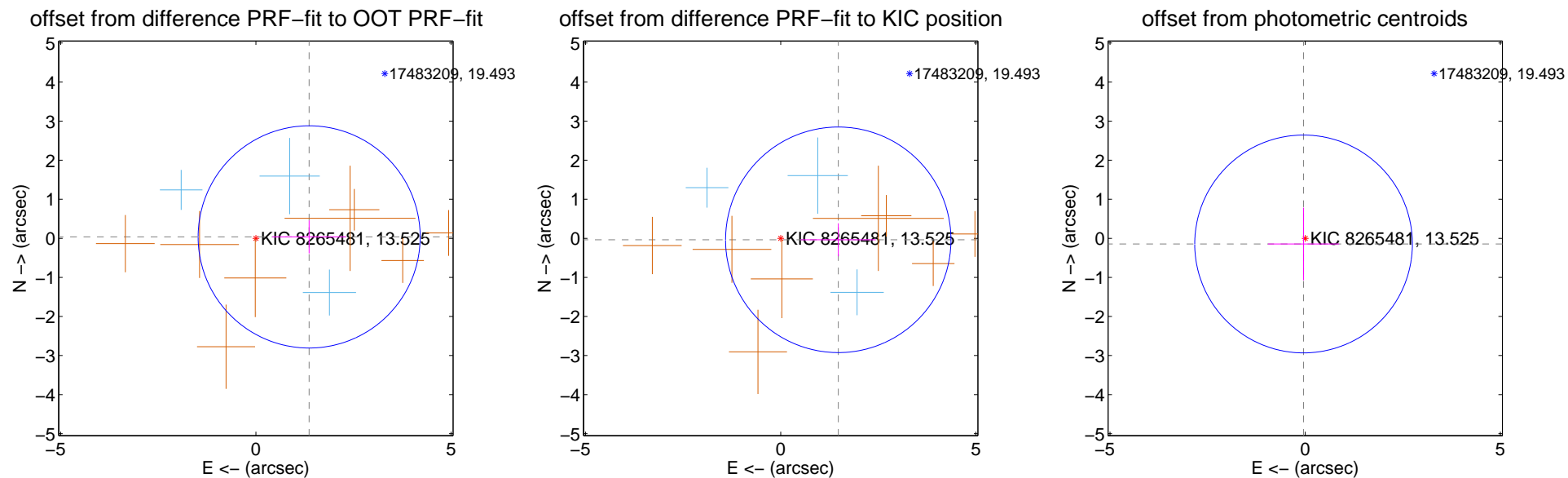
DV Centroid Data

Supplemental centroid analysis for 008265481-01. Kepler magnitude: 13.53. Transit SNR 9.30

There are 3 quarters with good PRF difference image offsets

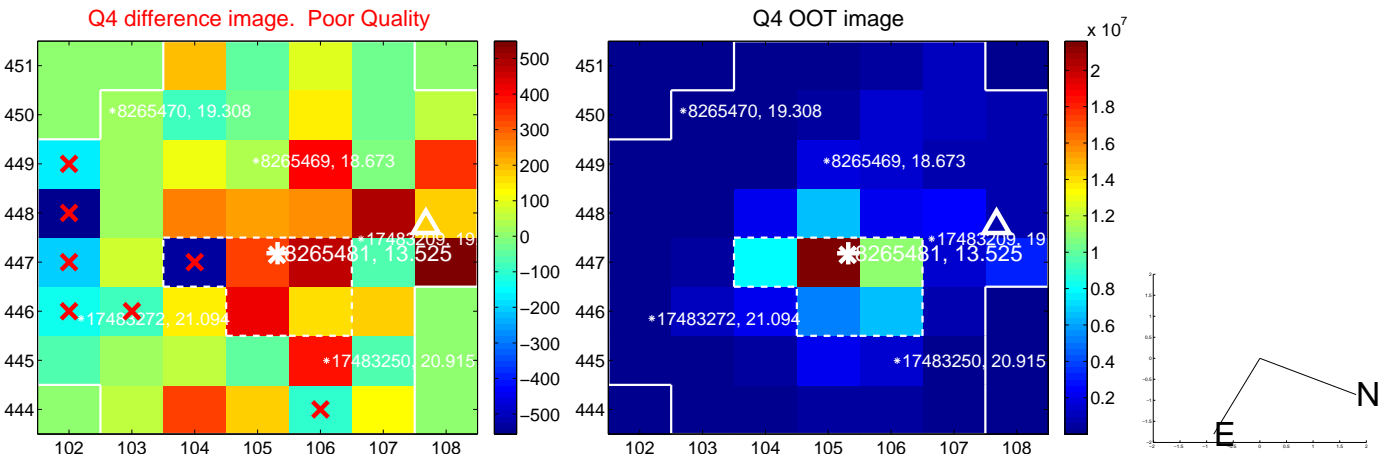
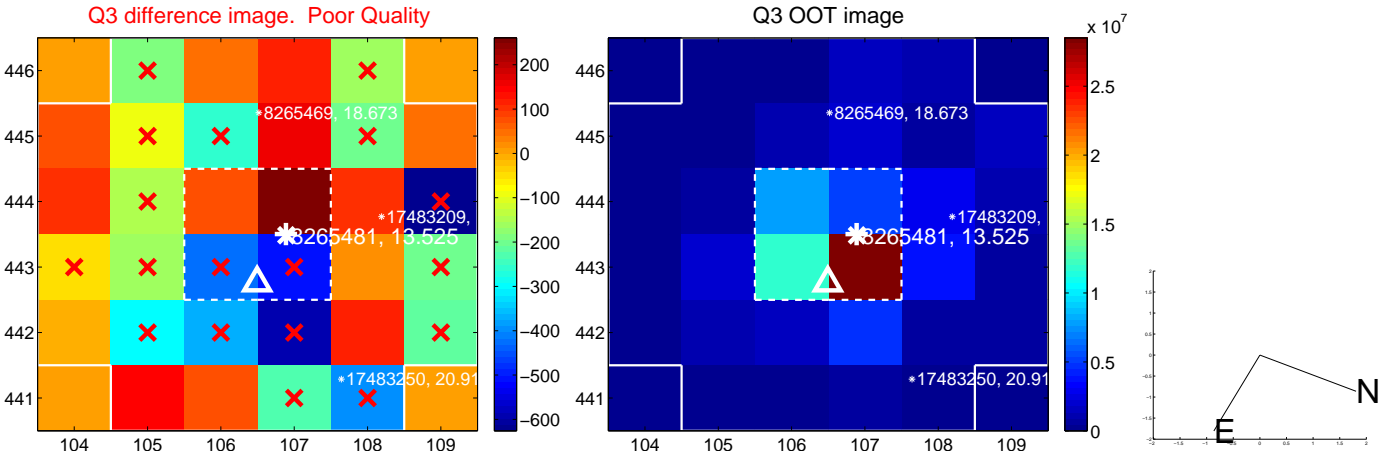
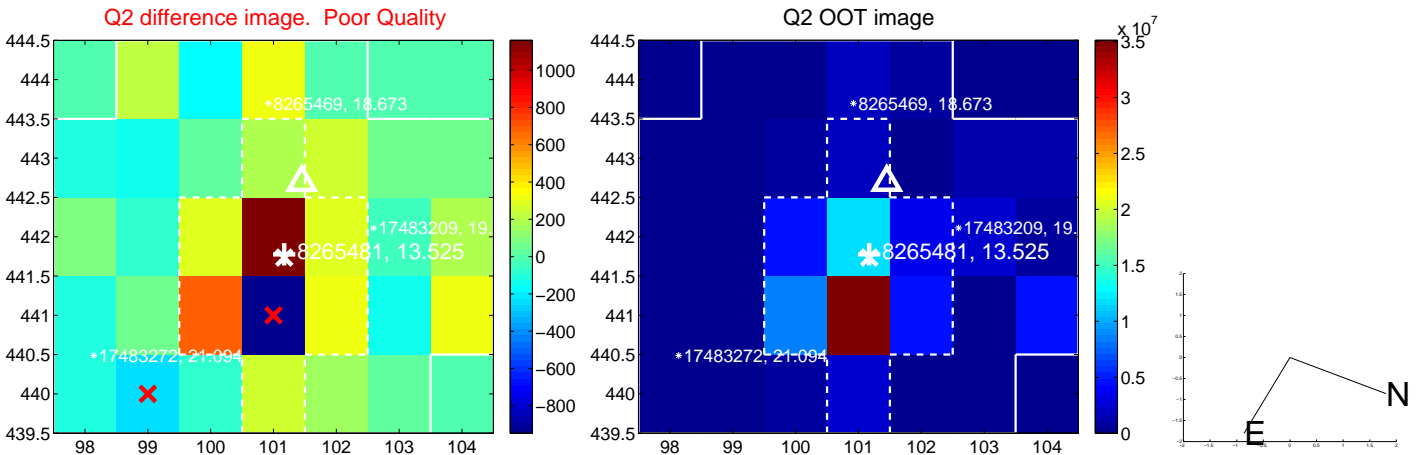
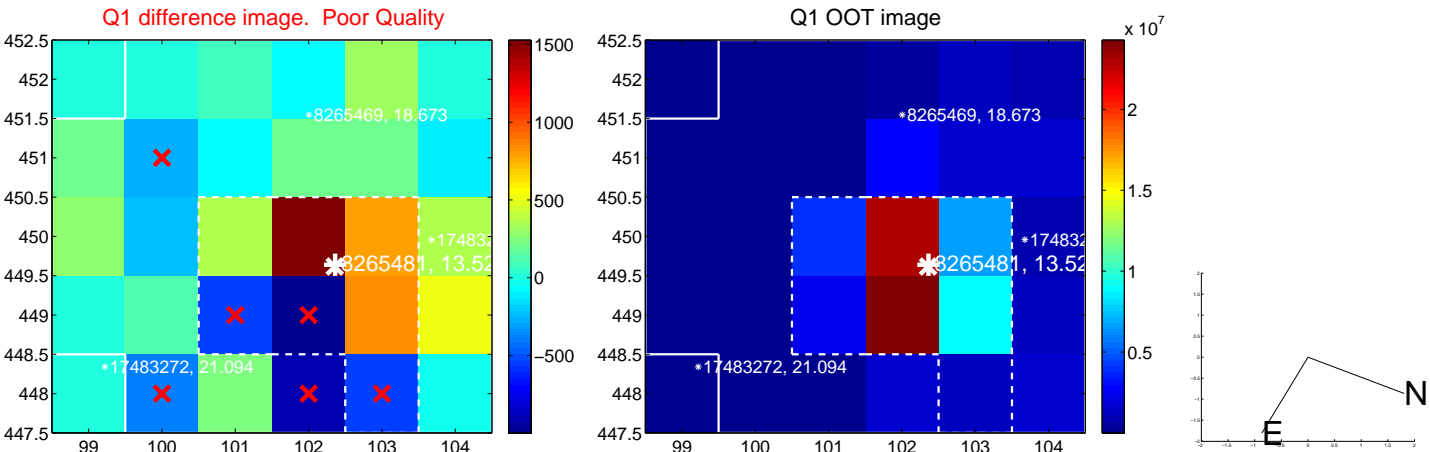
The direct PRF centroid is offset from the target star catalog position by about 0.09 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	1.365 ± 0.948	1.44	-1.365 ± 0.948	0.036 ± 0.422
PRF-fit source offset from KIC position	1.476 ± 0.962	1.53	-1.475 ± 0.962	-0.038 ± 0.421
photometric centroid source offset	0.15 ± 0.93	0.16	0.04 ± 0.91	-0.14 ± 0.93

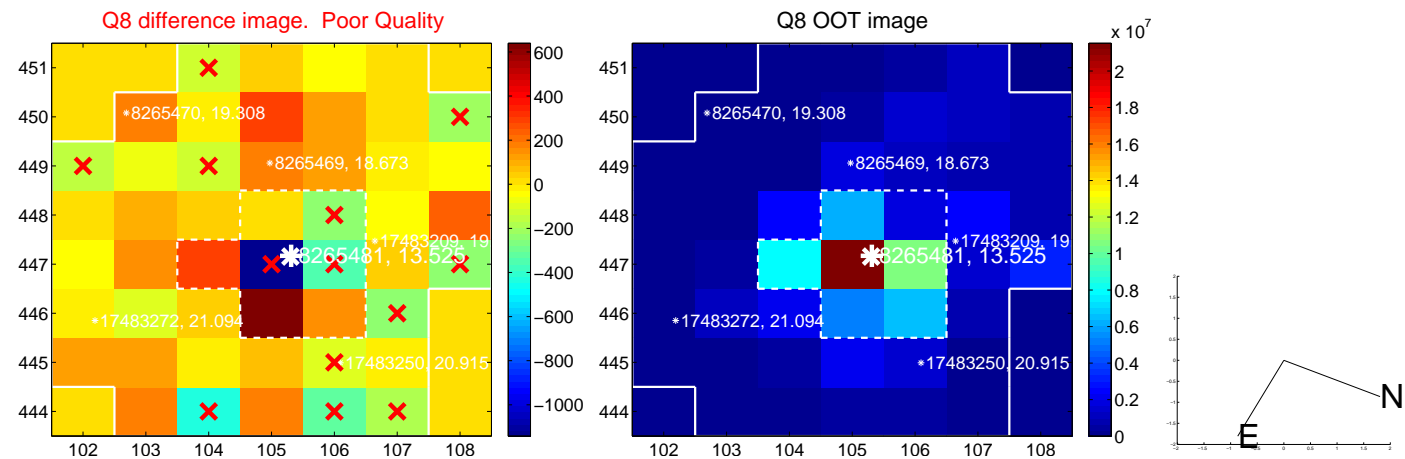
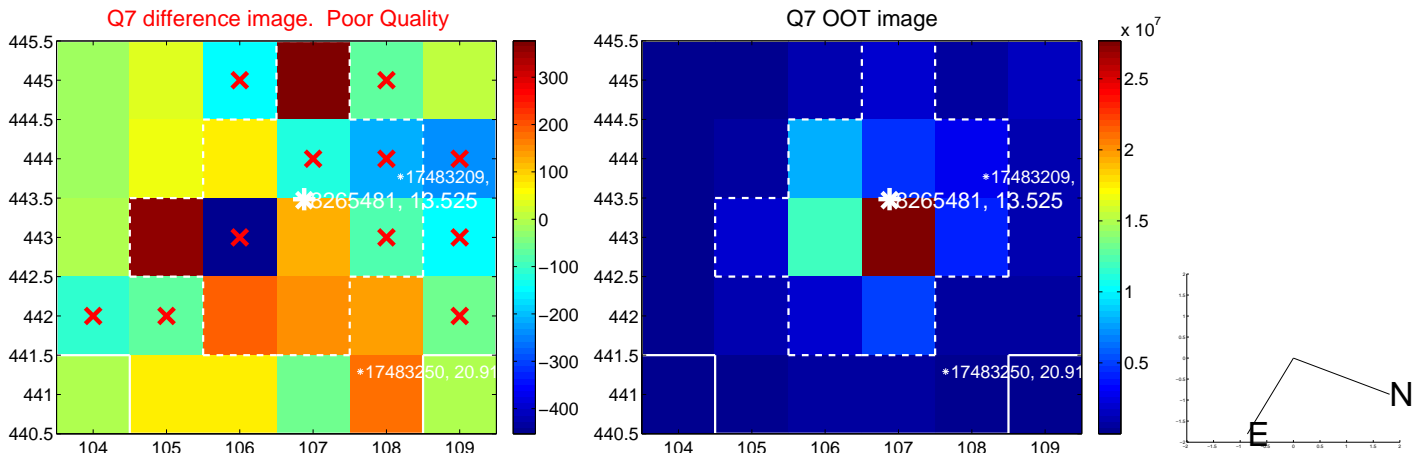
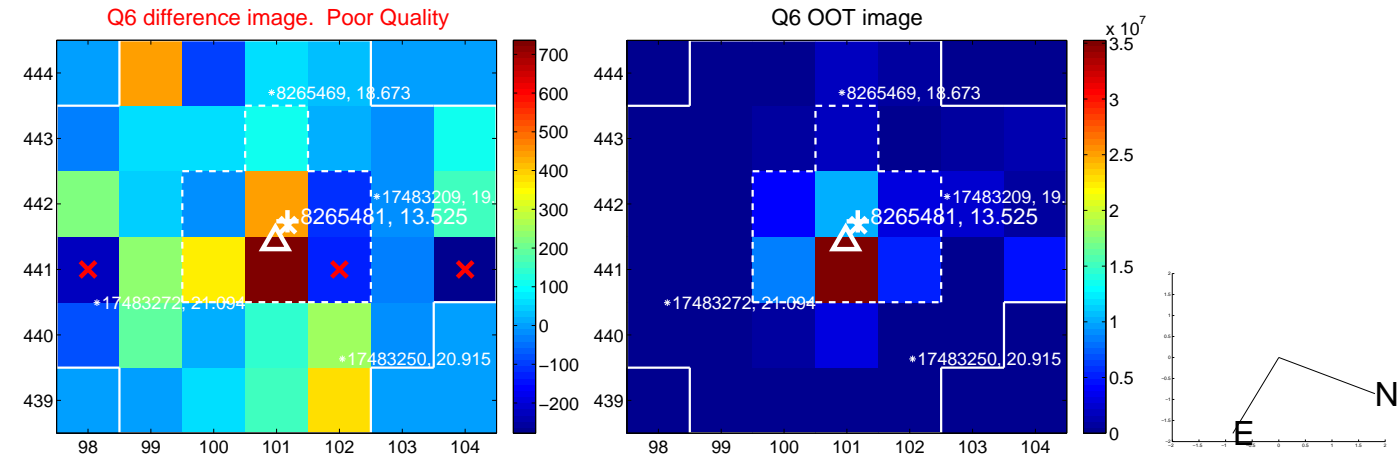
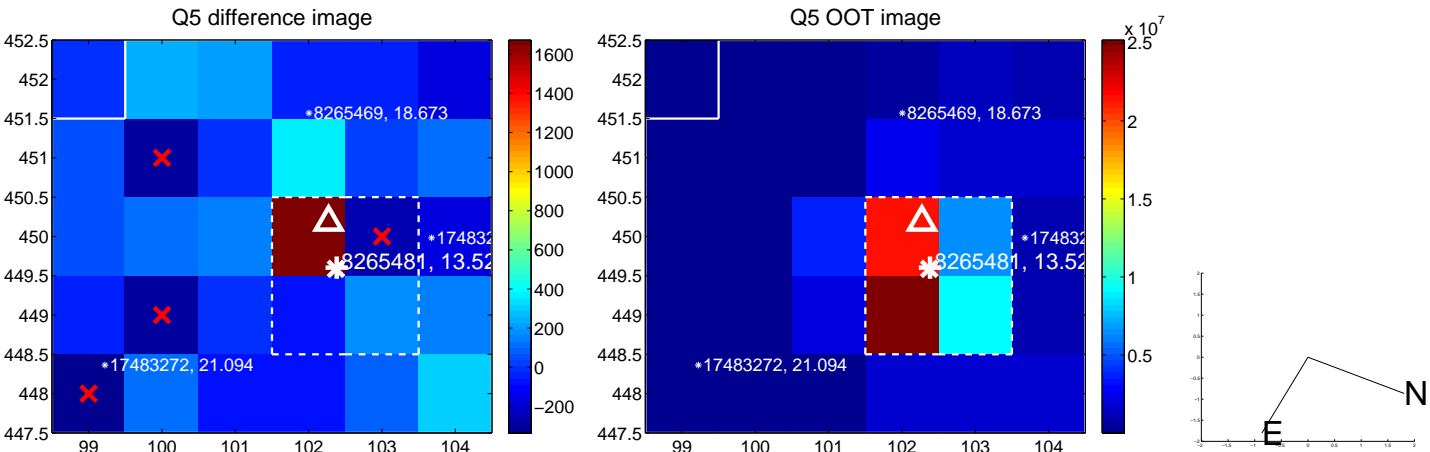


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

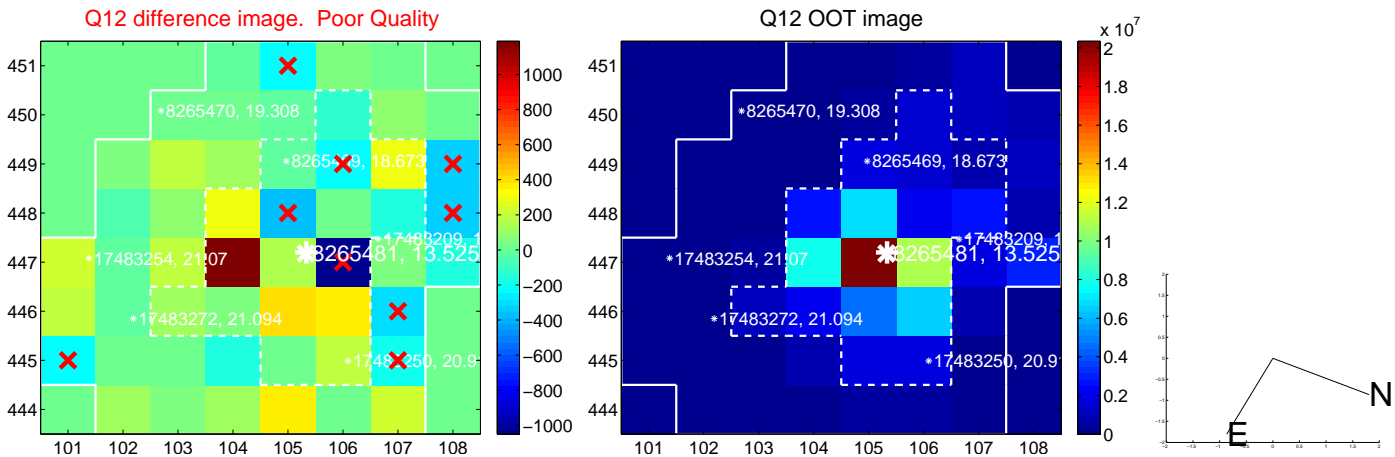
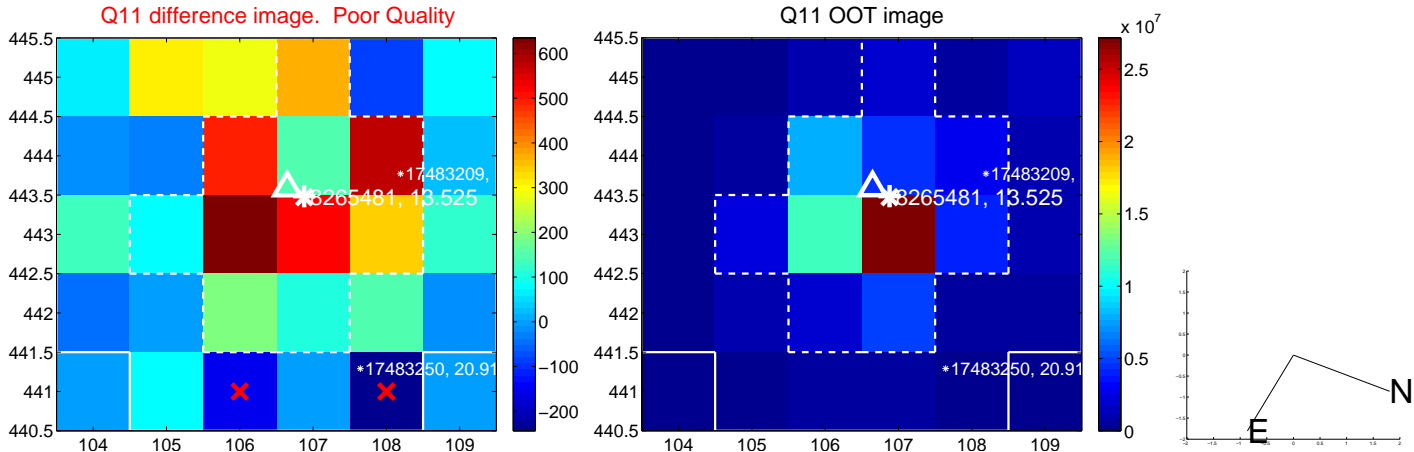
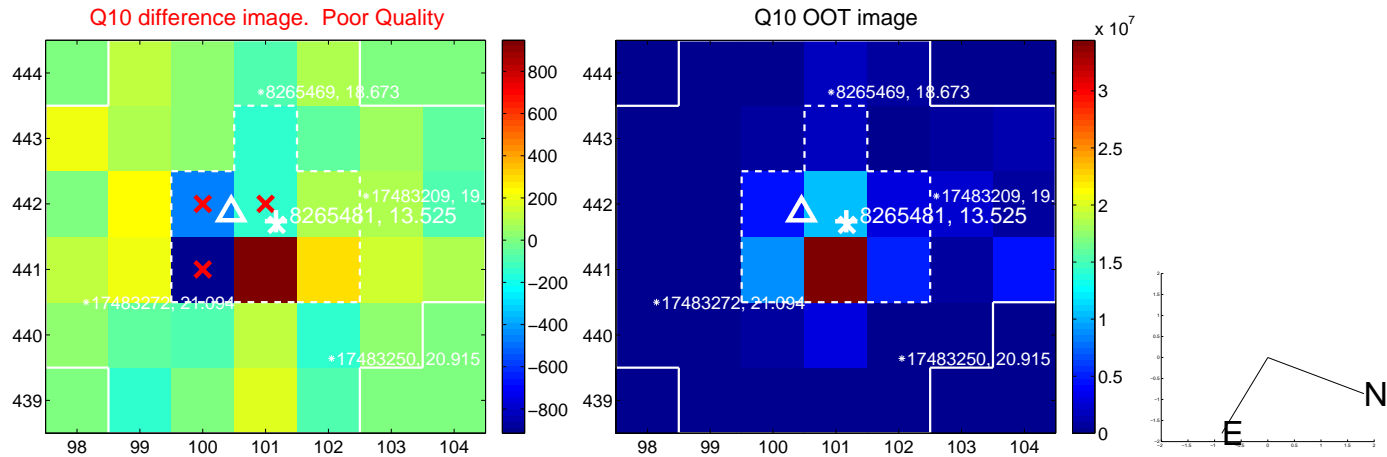
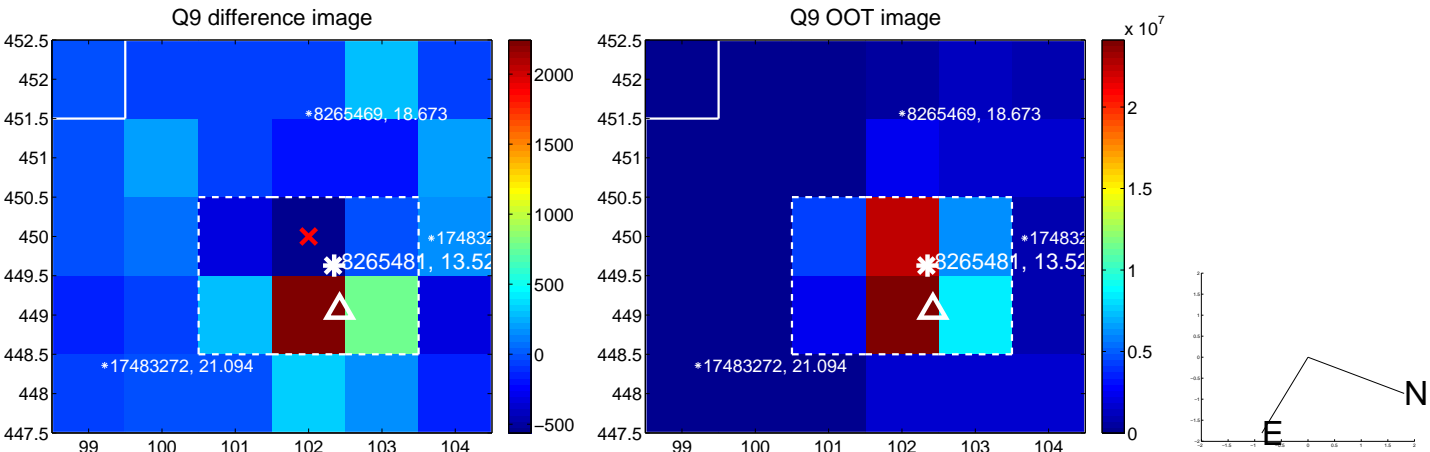
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



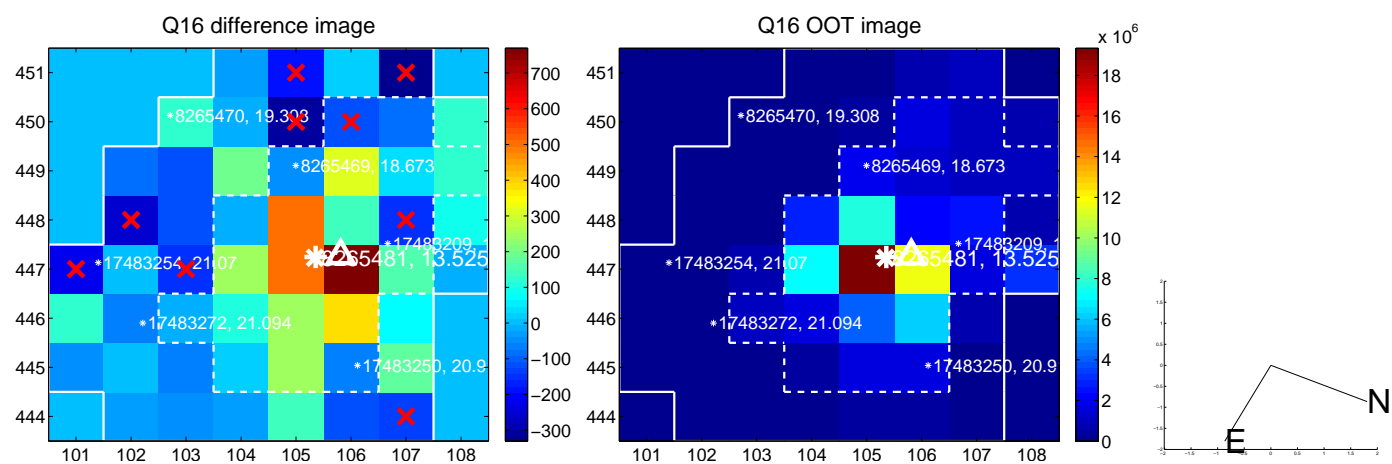
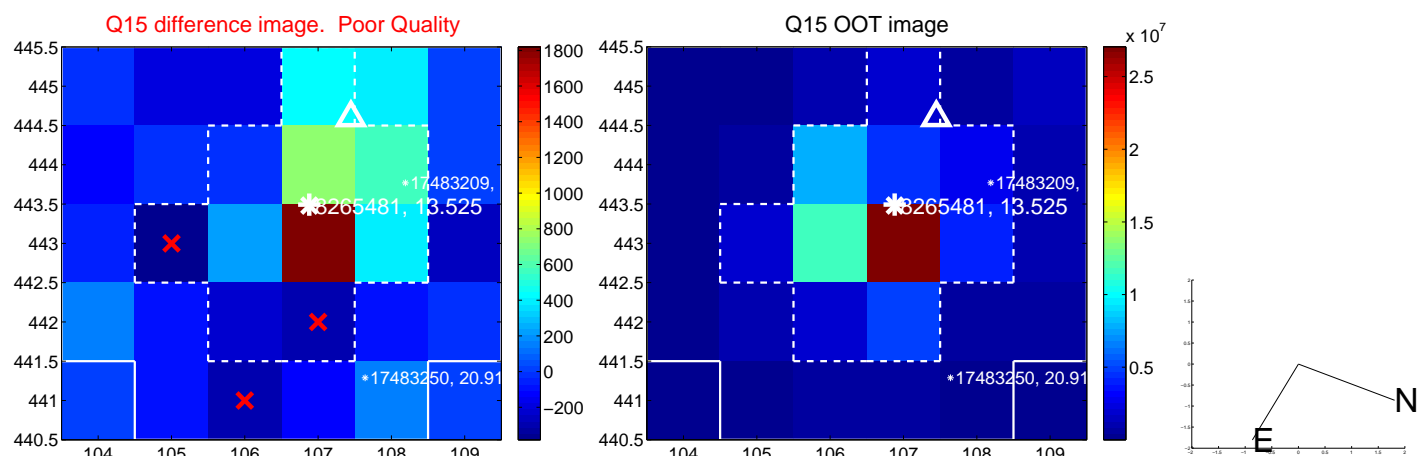
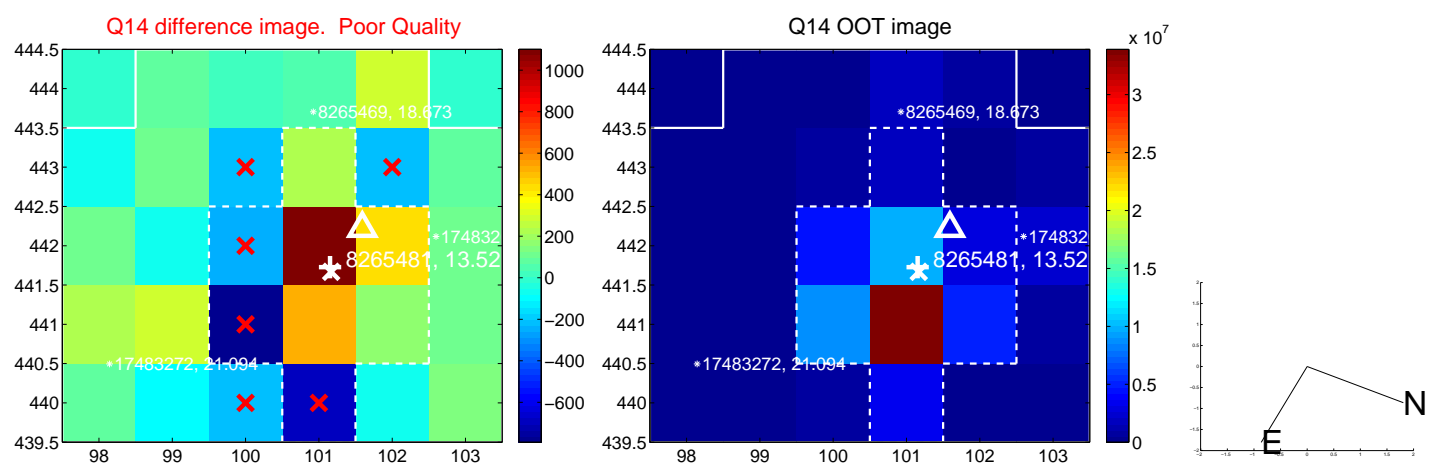
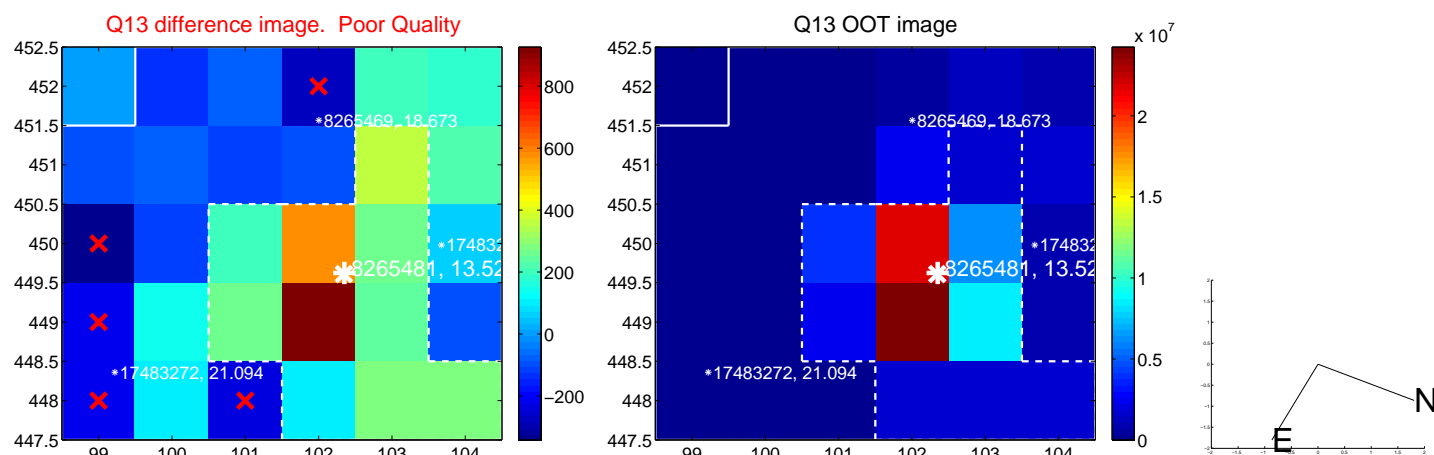
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



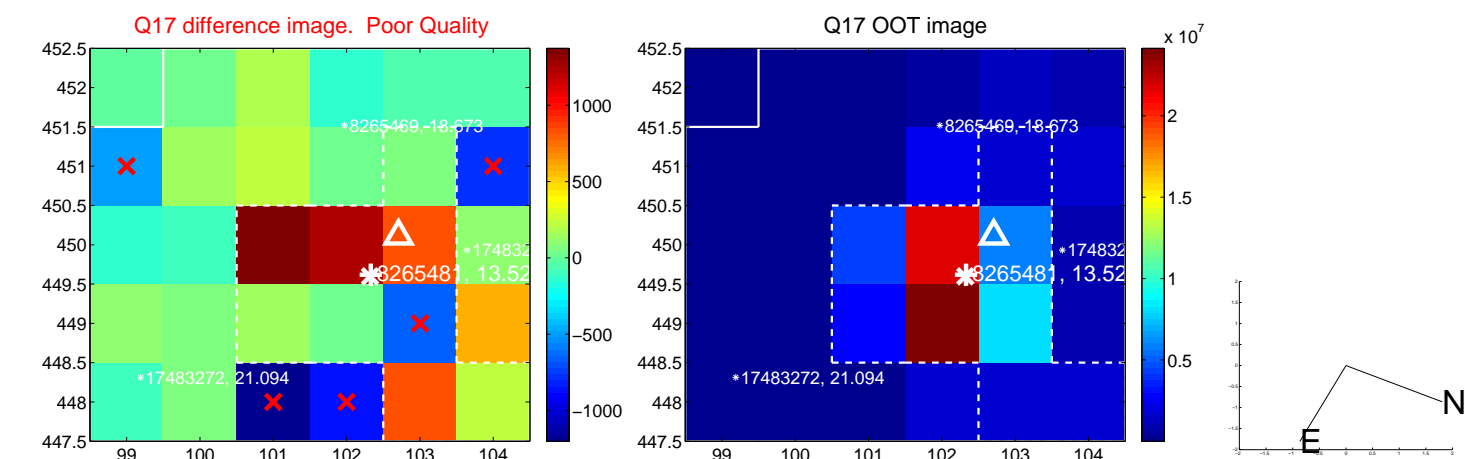
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



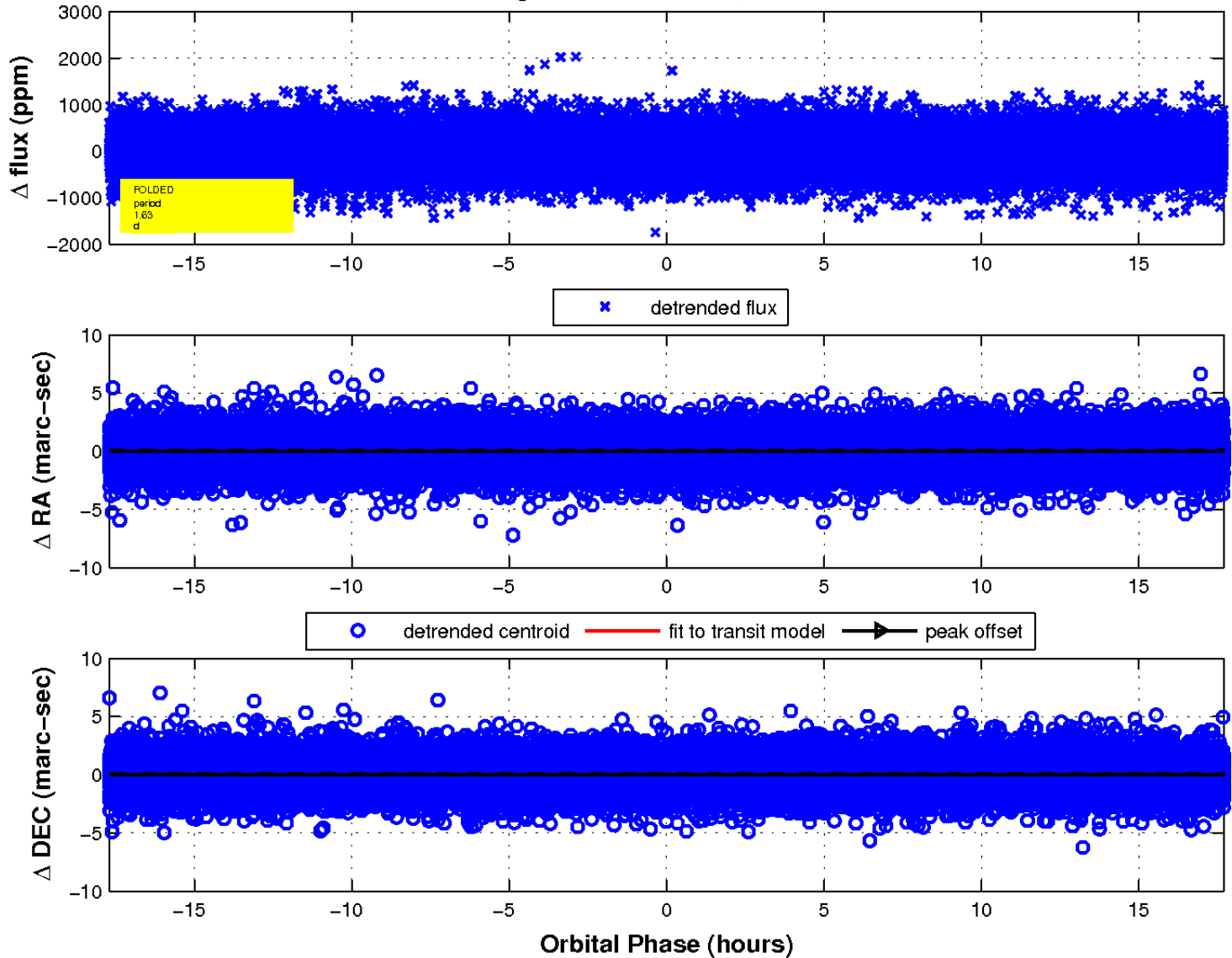
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



fluxWeightedCentroids, Planet 1 of 1



UKIRT Image

Declination

