

KIC 011145138

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})
011145138-01	OBS	No	2.330511	133.400763	14.5	21.166	11.1	14.3	2.52	7852	1.07	11882.77

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
011145138-01	OBS	FP	0.00	1	0	0	0	LPP_DV—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.

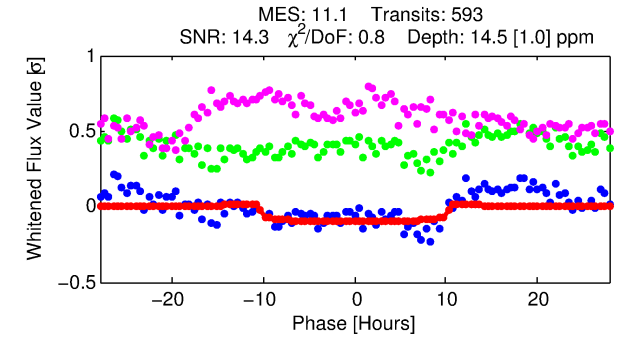
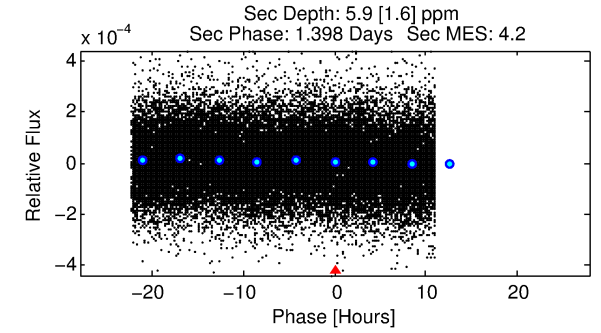
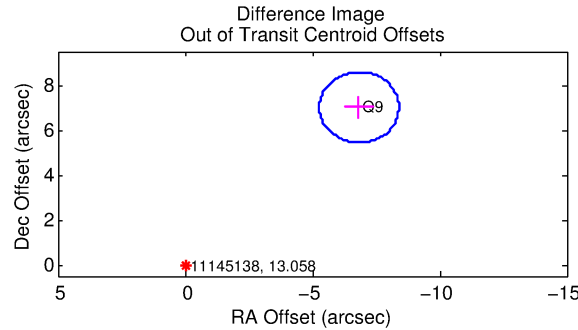
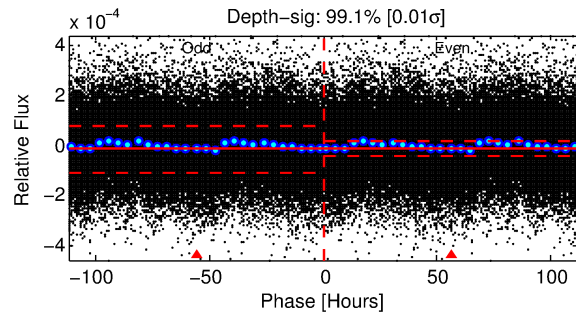
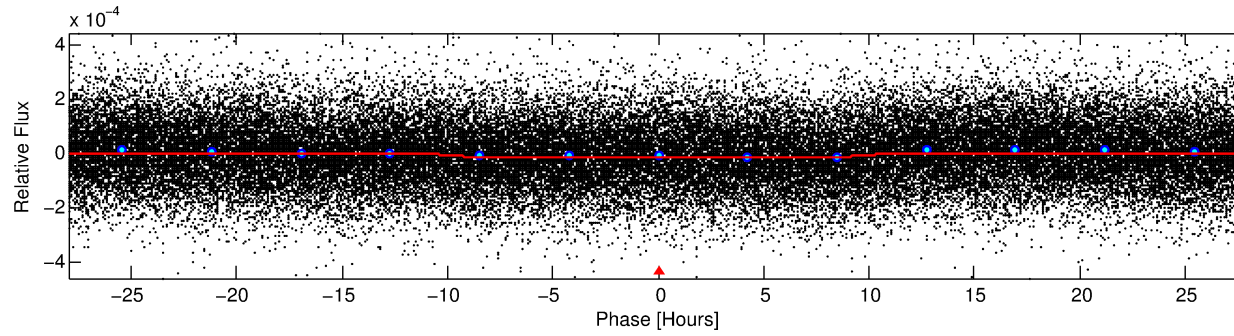
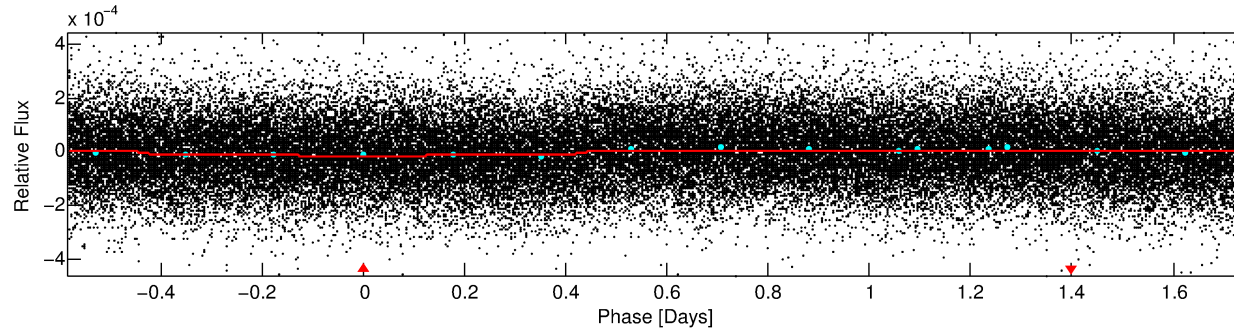
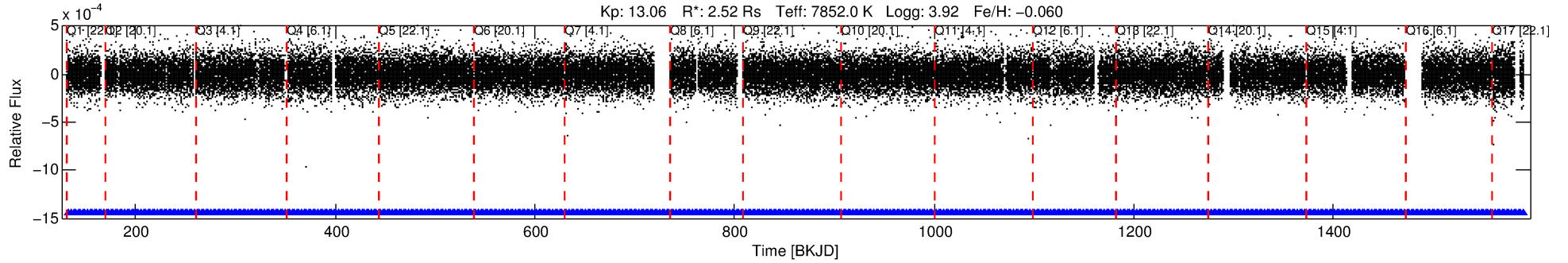
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 011145138-01

No Significant Match Found

DV One-Page Summary

KIC: 11145138 Candidate: 1 of 1 Period: 2.331 d



DV Fit Results:

Period = 2.33051 [0.00004] d
Epoch = 133.4008 [0.0111] BKJD
Rp/R* = 0.0039 [0.0010]
a/R* = 1.03 [0.09]
b = 0.83 [0.63]
Seff = 11882.77 [5981.53]
Teq = 2662 [335] K
Rp = 1.07 [0.45] Re
a = 0.0426 [0.0131] AU
Ag = 5.19 [3.89] [1.08σ]
Teffp = 6213 [936] K [3.57σ]

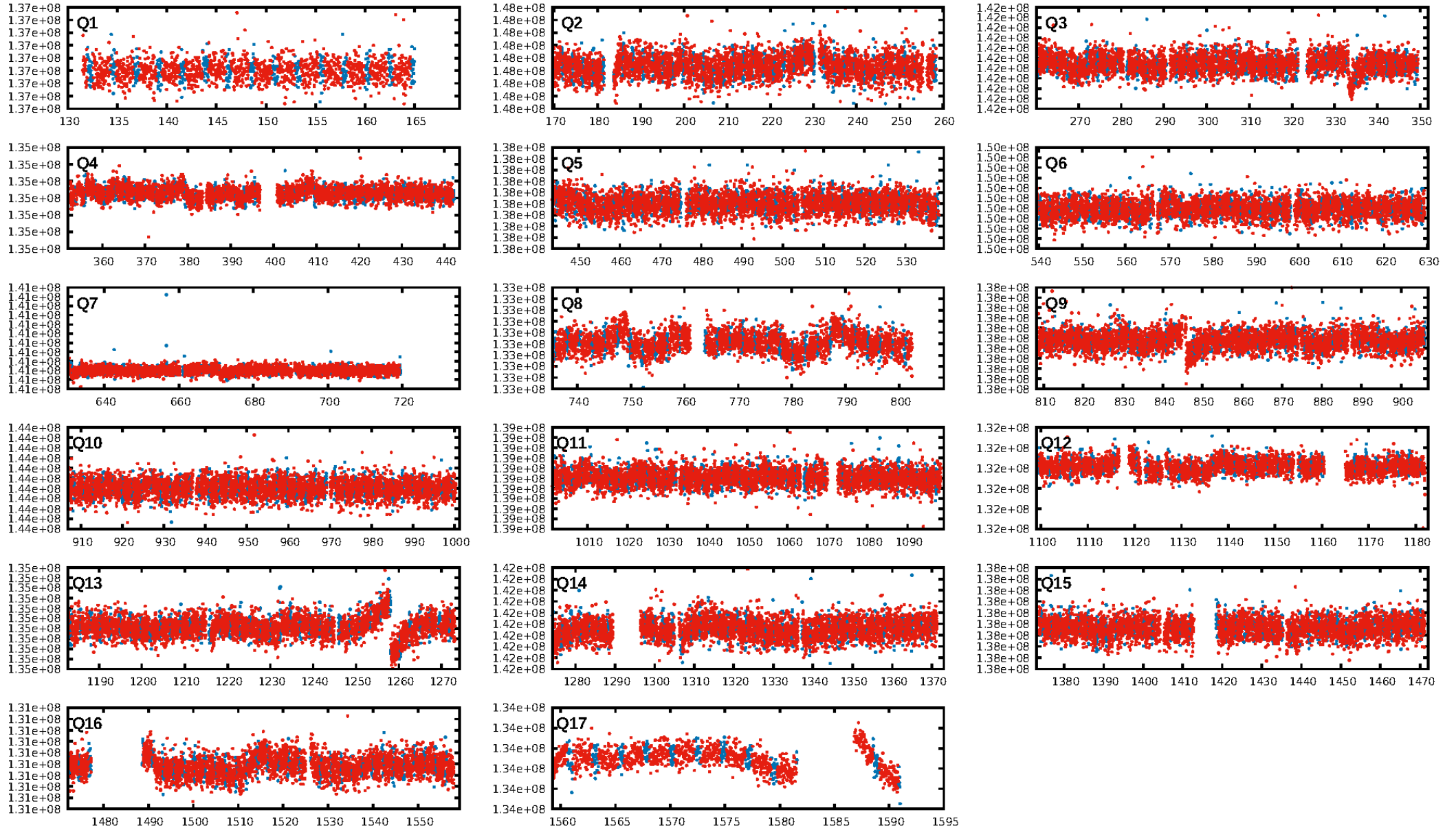
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [566/566]
GhostDiagnostic-chr: 2.944
Centroid-sig: 0.1%
Centroid-so: 2.493 arcsec [2.81σ]
OotOffset-rm: 9.782 arcsec [18.73σ]
KicOffset-rm: 9.730 arcsec [18.62σ]
OotOffset-st: 0/0/0/1 [1]
KicOffset-st: 0/0/0/1 [1]
DiffImageQuality-fgm: 0.00 [0/1]
DiffImageOverlap-fno: 1.00 [17/17]

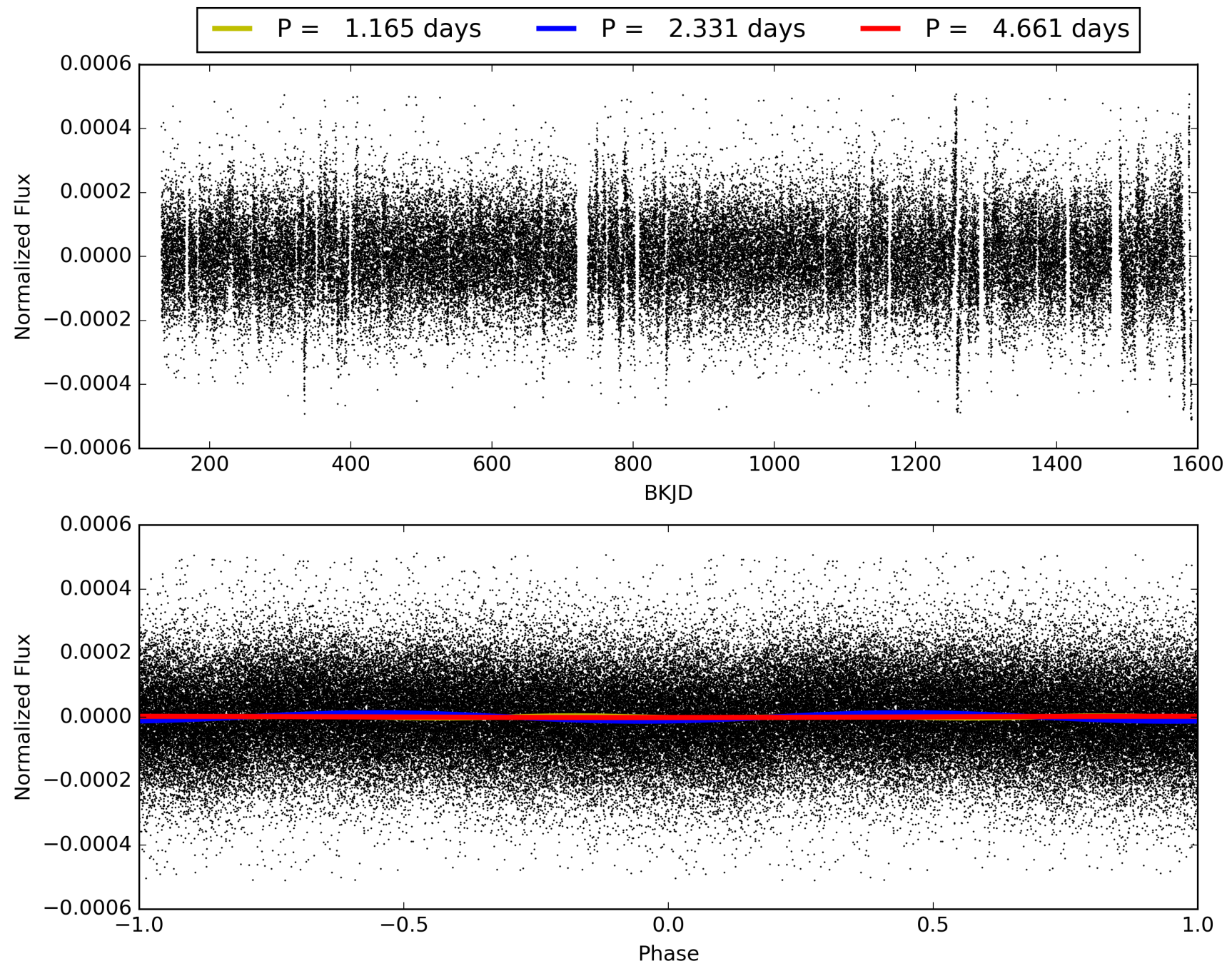
Software Revision: svn-ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 28-Jan-2016 19:55:20 Z

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

TCE 011145138-01, PDC Light Curves

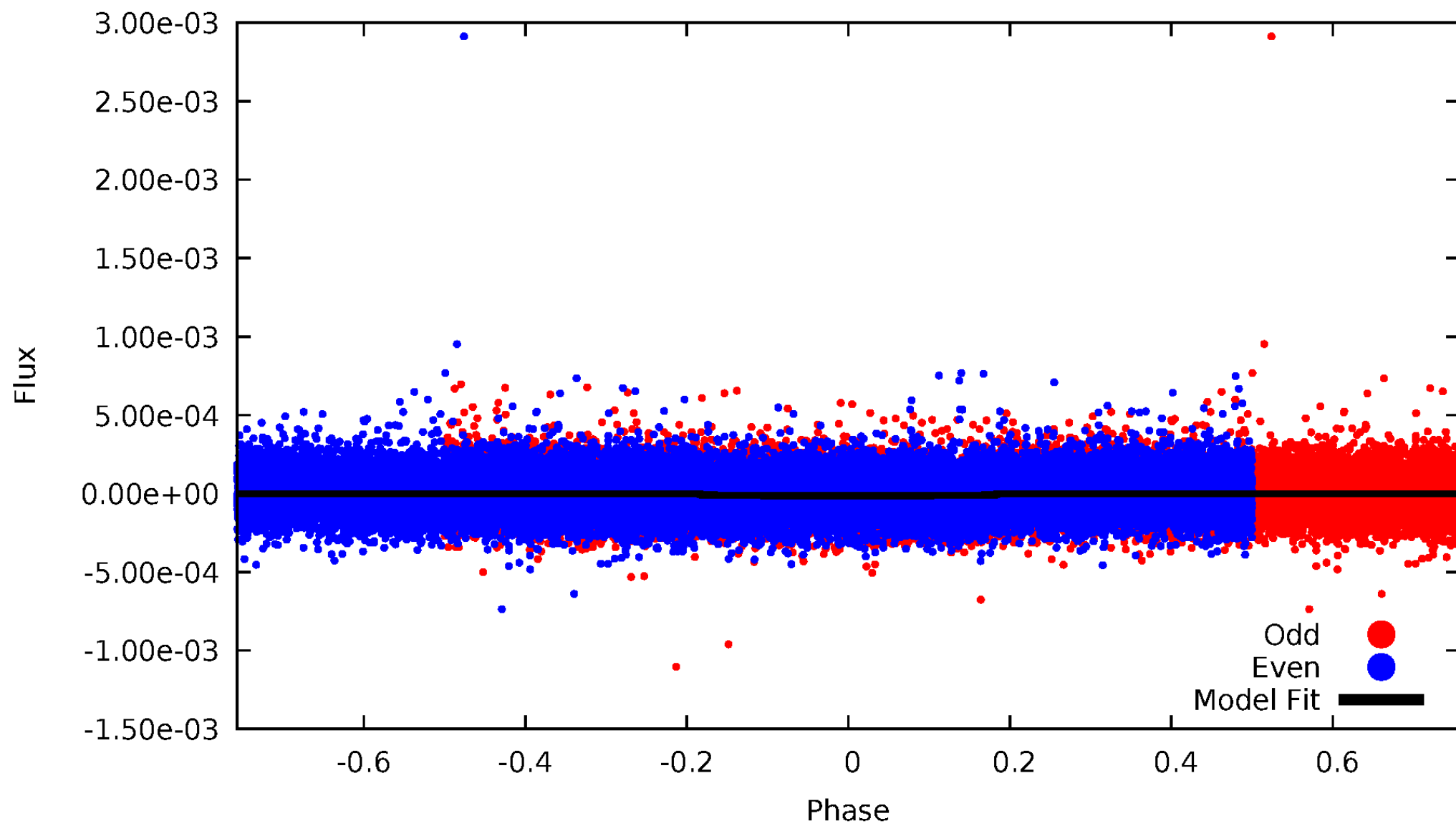


TCE 011145138-01



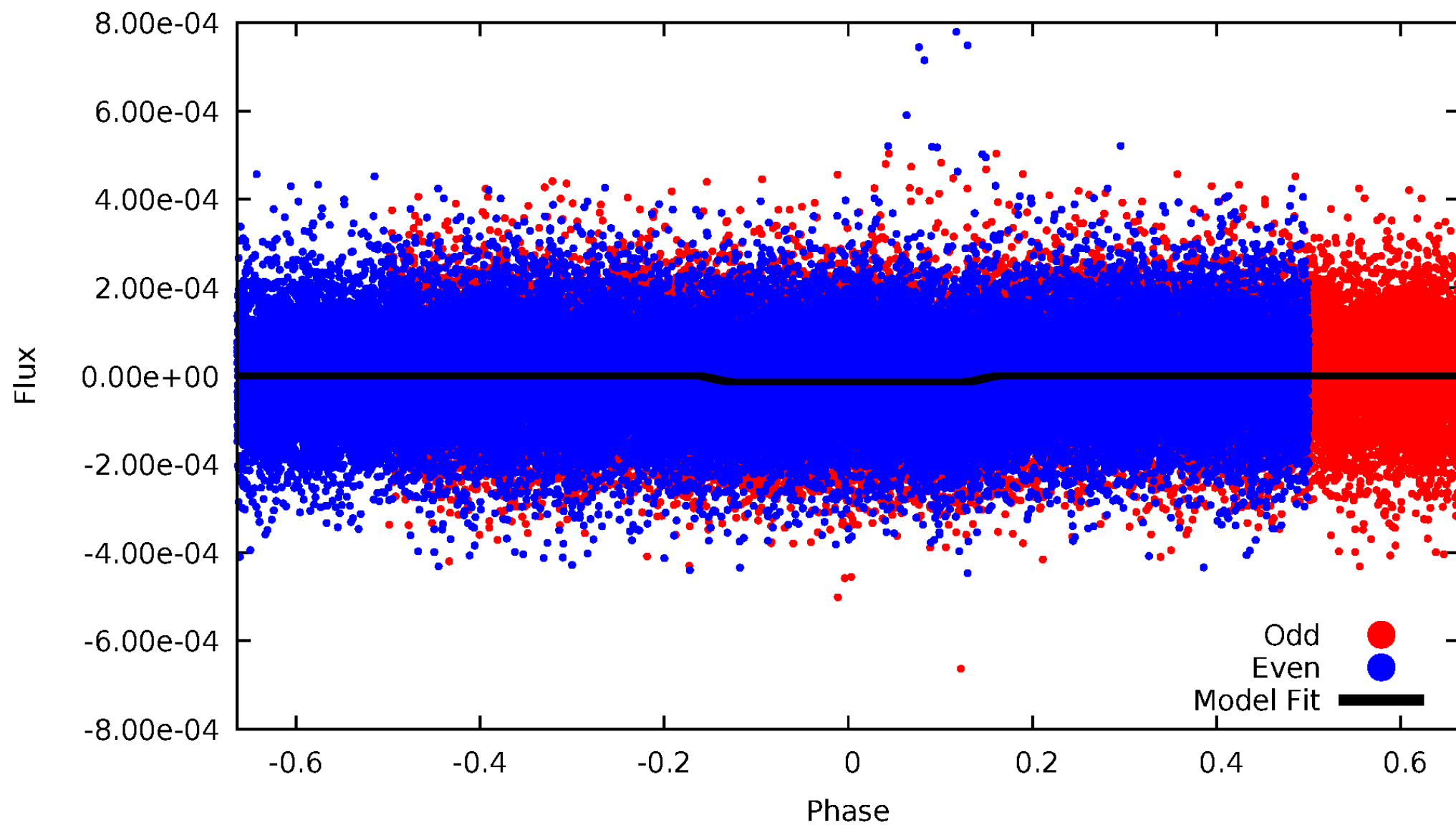
DV Odd/Even

TCE 011145138-01

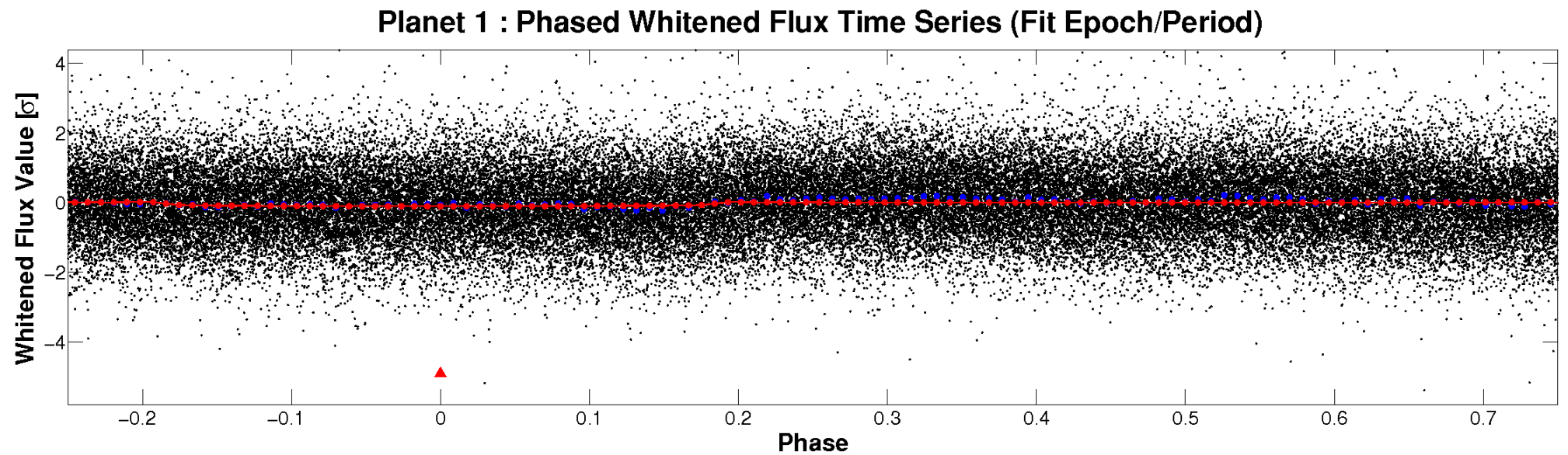
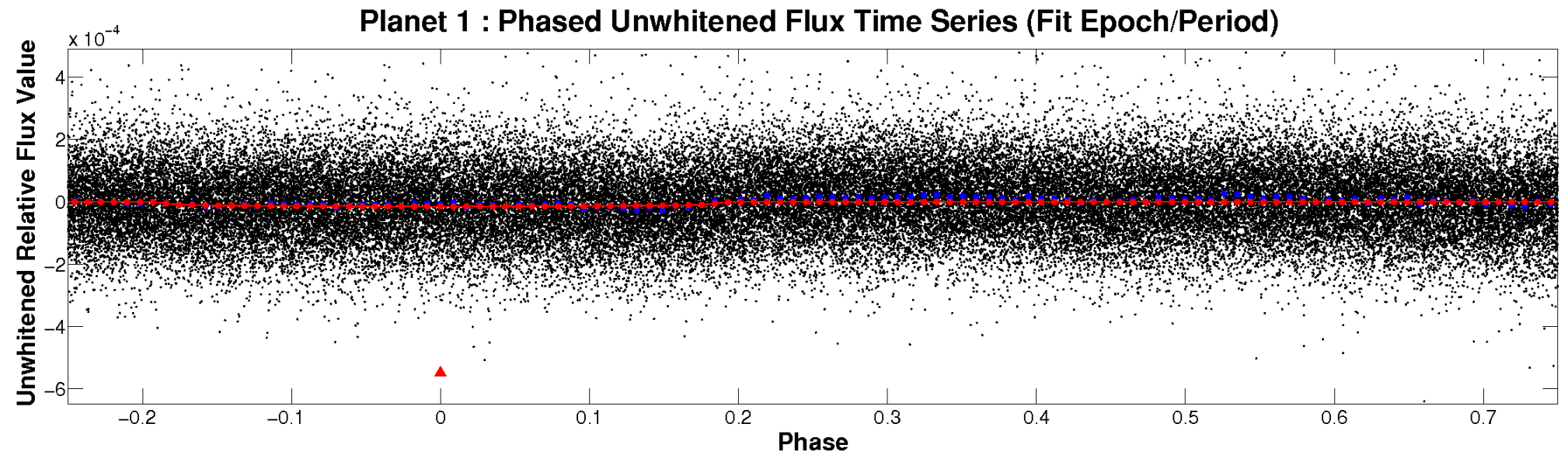


ALT Odd/Even

TCE 011145138-01

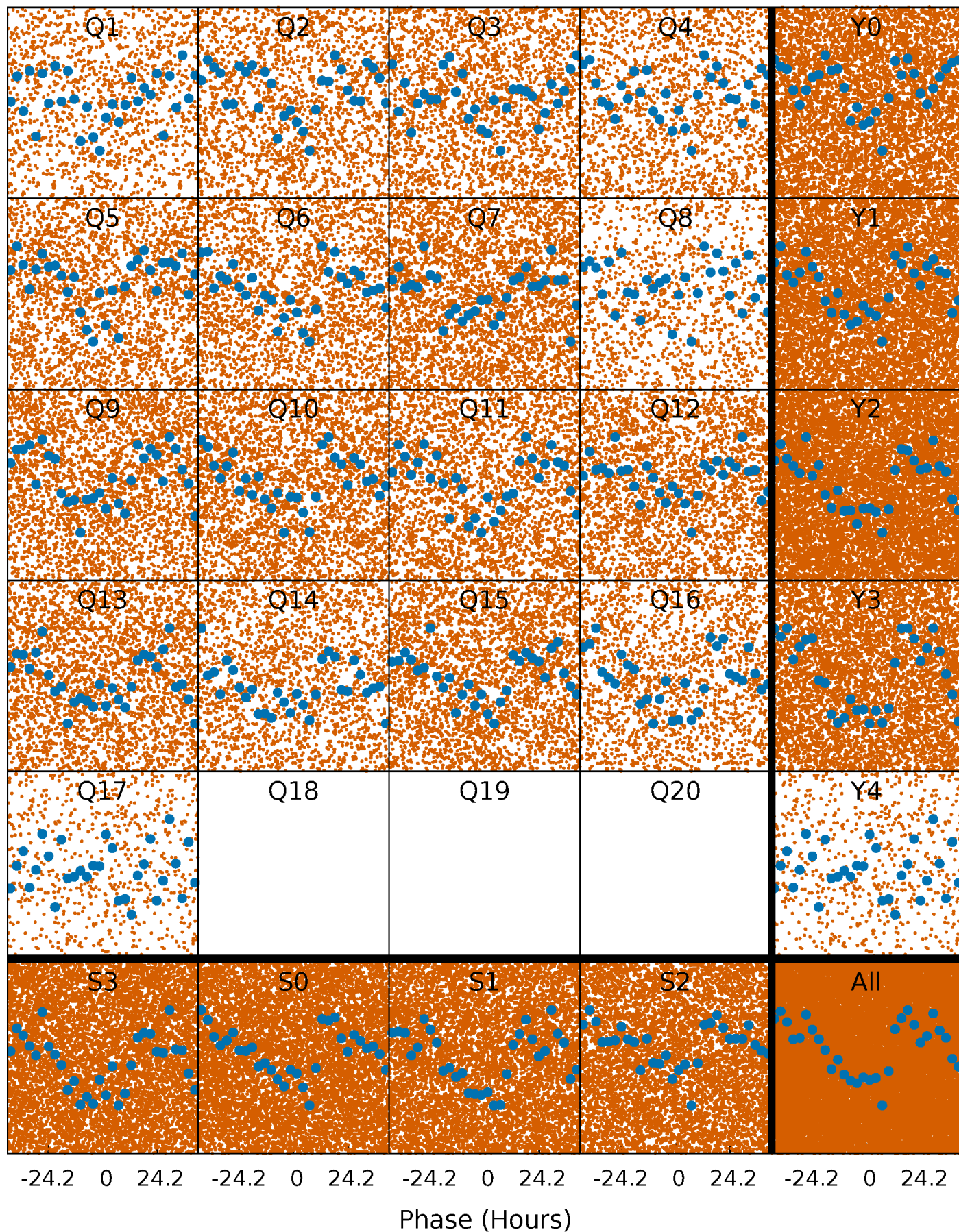


Non-Whitened Vs. Whitened Light Curve



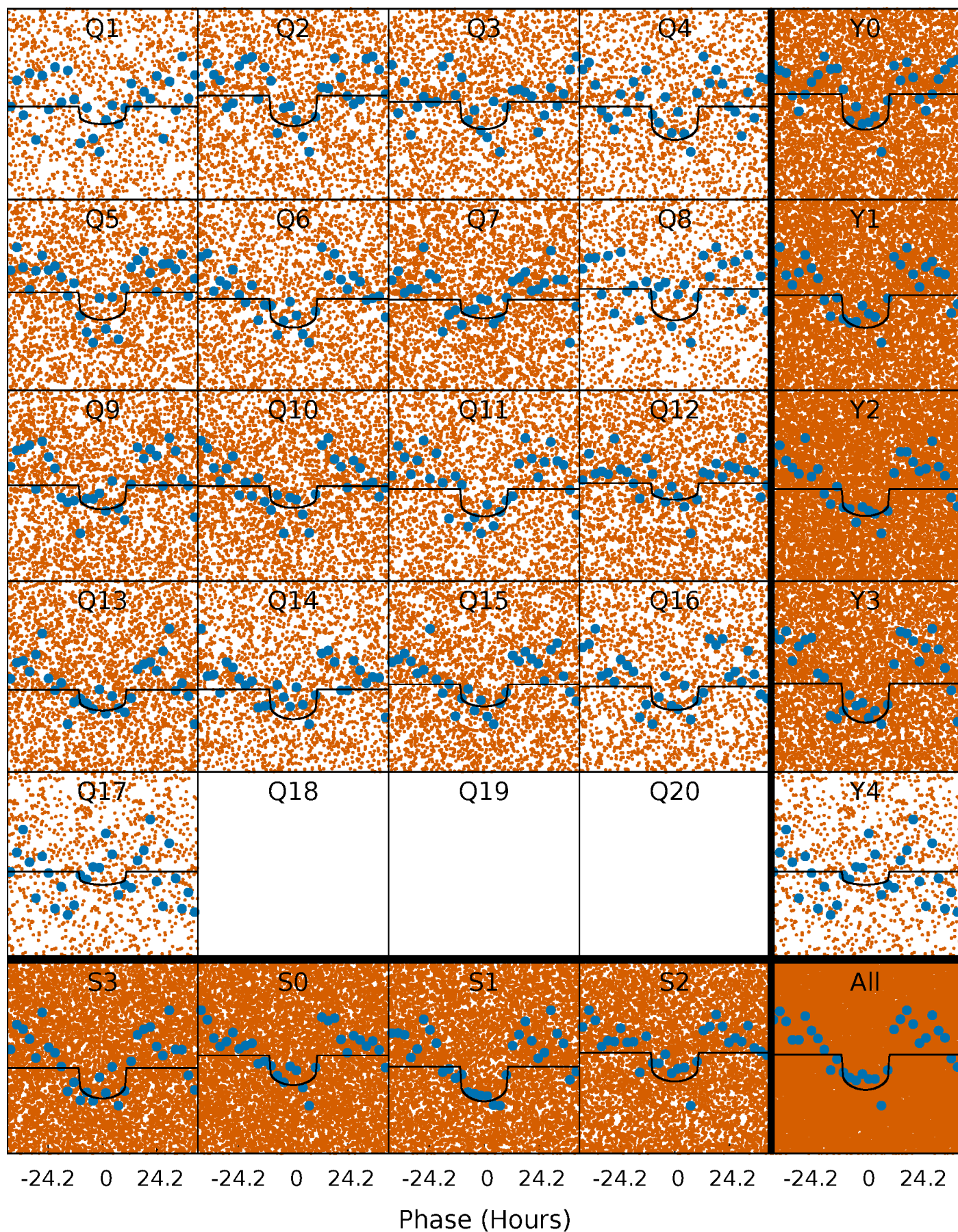
PDC Quarter-Phased Transit Curves

TCE 011145138-01 P= 2.330511 Days $T_0=133.400764$ (BKJD)



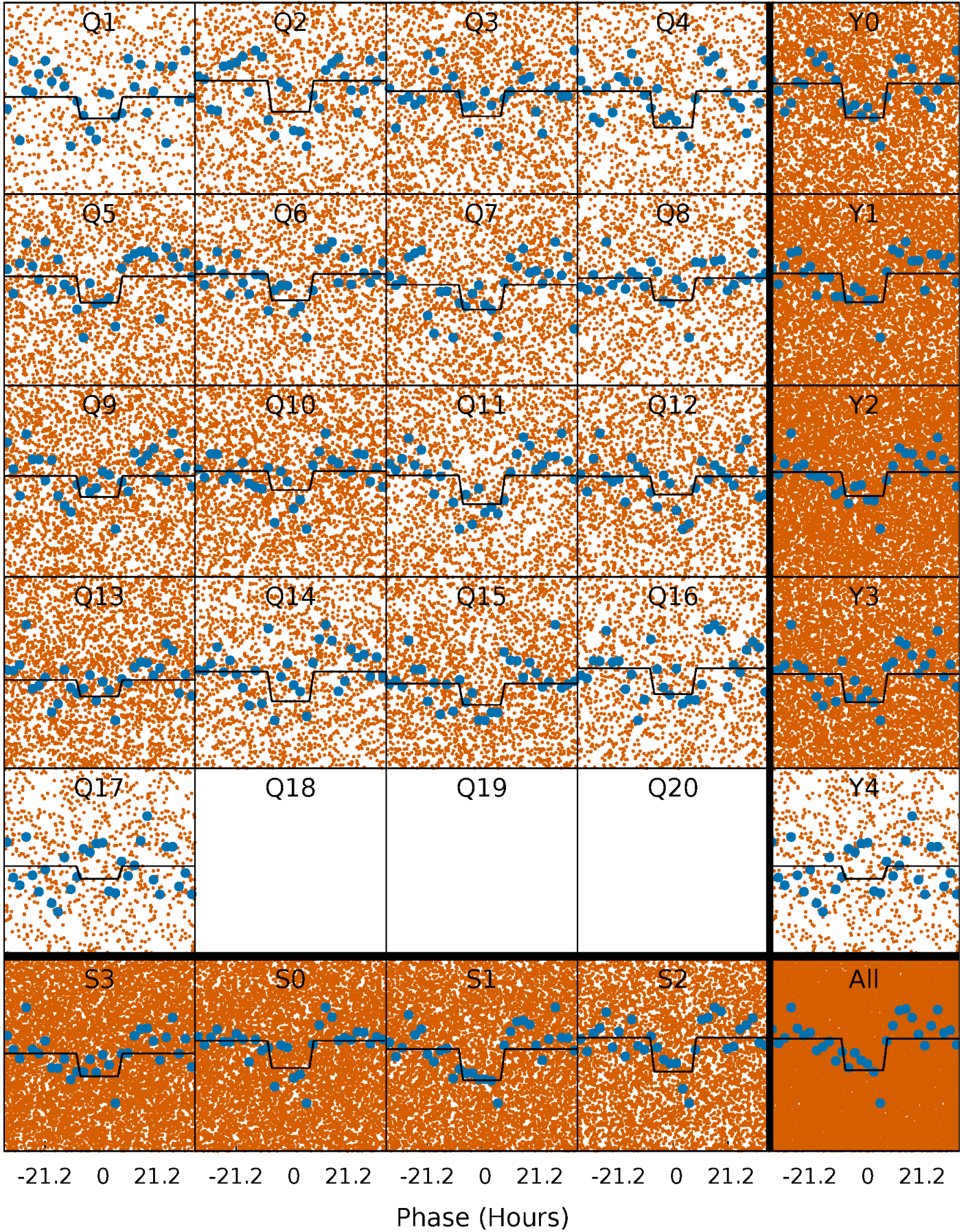
DV Quarter-Phased Transit Curves

TCE 011145138-01 P= 2.330511 Days $T_0=133.400764$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

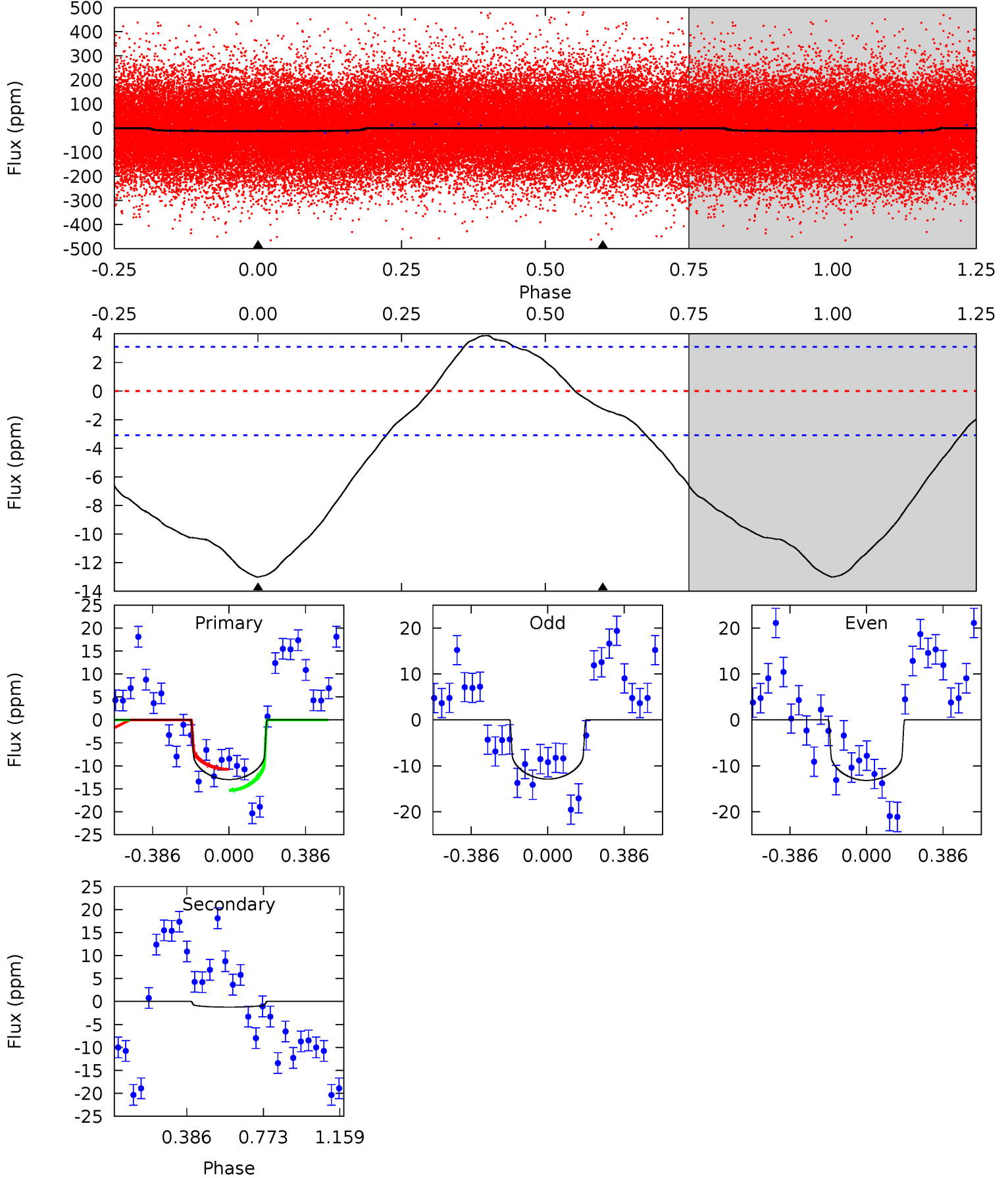
TCE 011145138-01 P= 2.330668 Days $T_0=133.433633$ (BKJD)



DV Model-Shift Uniqueness Test

011145138-01, P = 2.330511 Days, E = 131.070253 Days

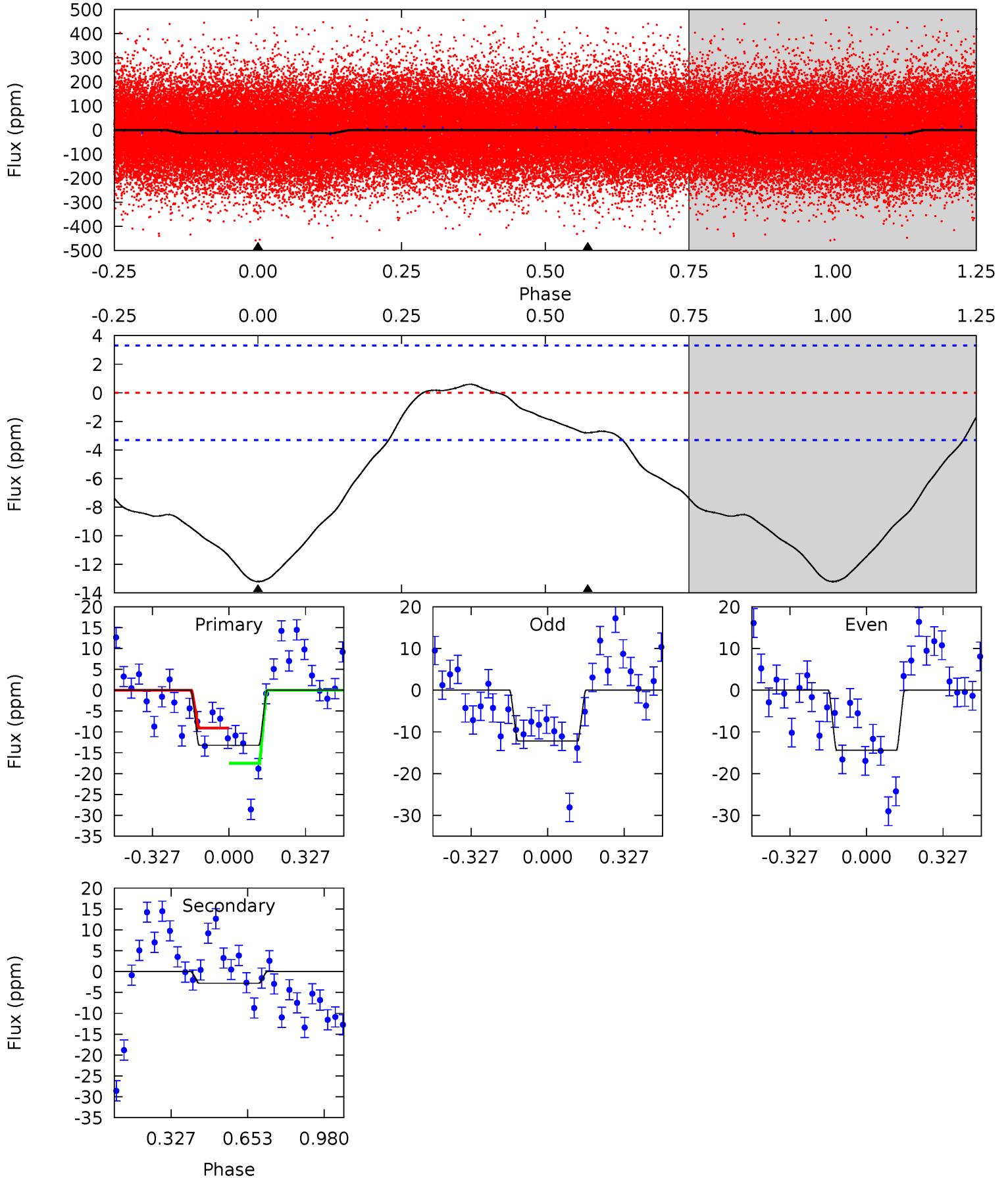
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
18.0	1.71	0	0	4.27	0.87	1.92	18.0	18.0	1.71	1.71	0.21	1.00	0.23	3.20



Alt Model-Shift Uniqueness Test

011145138-01, P = 2.330668 Days, E = 131.102965 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
17.2	3.66	0	0	4.31	0.98	1.09	17.2	17.2	3.66	3.66	1.45	1.01	0.04	5.44



Stellar Parameters For KIC 011145138

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	7852^{+216}_{-324}	$3.915^{+0.273}_{-0.117}$	$-0.060^{+0.200}_{-0.350}$	$2.518^{+0.457}_{-0.849}$	$1.900^{+0.098}_{-0.418}$	$0.168^{+0.306}_{-0.061}$
	+3%/-4%	+7%/-3%	+333%/-583%	+18%/-34%	+5%/-22%	+182%/-36%
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 011145138-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-1 ± 1	$1.00^{+0.33}_{-0.30}$	3657^{+262}_{-320}	4075^{+782}_{-1211}	$1.130^{+1.483}_{-0.749}$
Alt.	-3 ± 1	$0.94^{+0.29}_{-0.31}$	3639^{+245}_{-327}	5114^{+1036}_{-701}	$3.138^{+3.929}_{-1.571}$

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

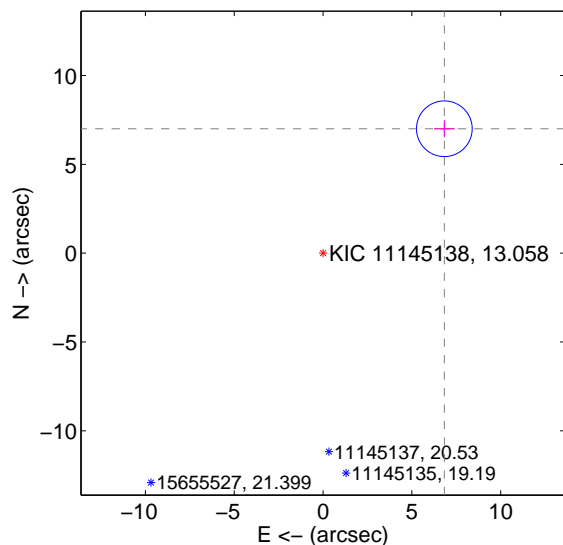
Supplemental centroid analysis for 011145138-01. Kepler magnitude: 13.06. Transit SNR 14.27

There are 0 quarters with good PRF difference image offsets

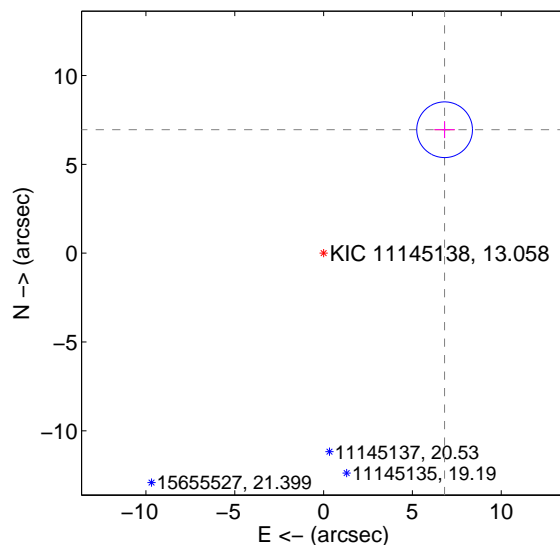
The direct PRF centroid is offset from the target star catalog position by about 0.06 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	9.782 ± 0.522	18.73	-6.828 ± 0.571	7.004 ± 0.471
PRF-fit source offset from KIC position	9.730 ± 0.523	18.62	-6.811 ± 0.571	6.948 ± 0.471
photometric centroid source offset	2.49 ± 0.89	2.81	2.26 ± 0.86	1.05 ± 1.02

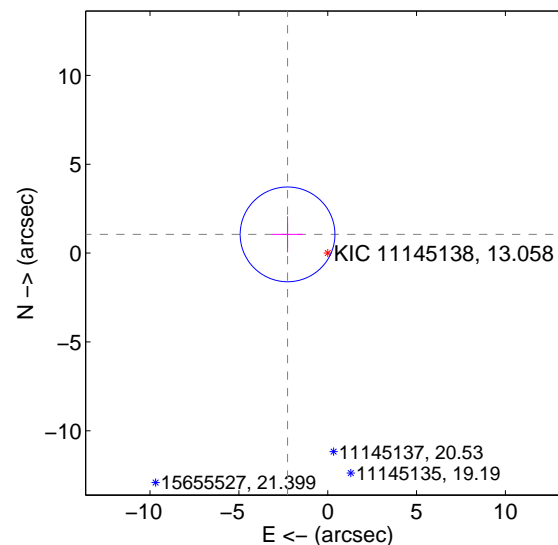
offset from difference PRF-fit to OOT PRF-fit



offset from difference PRF-fit to KIC position

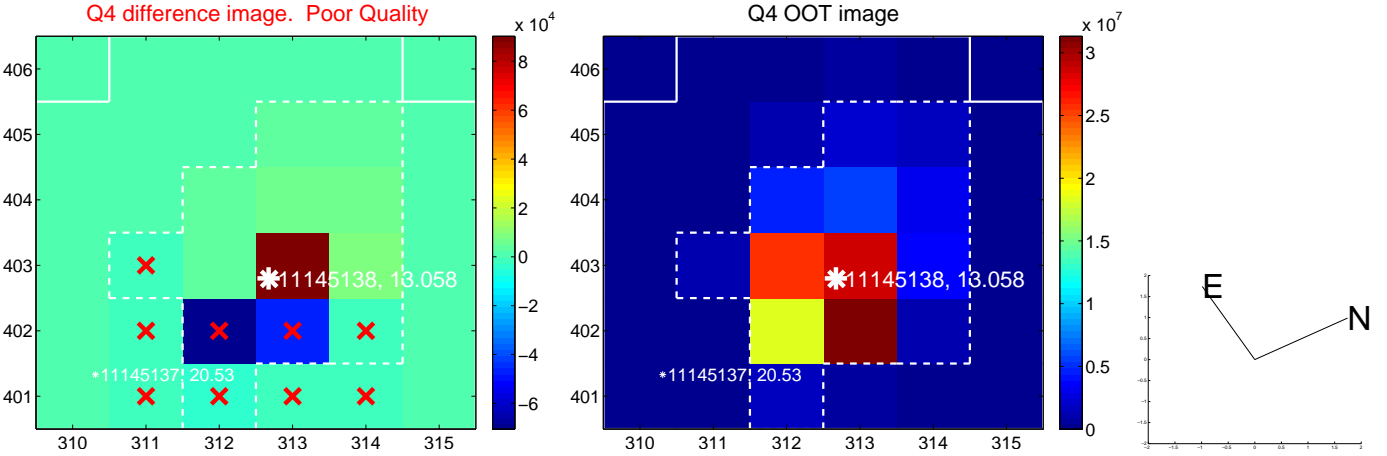
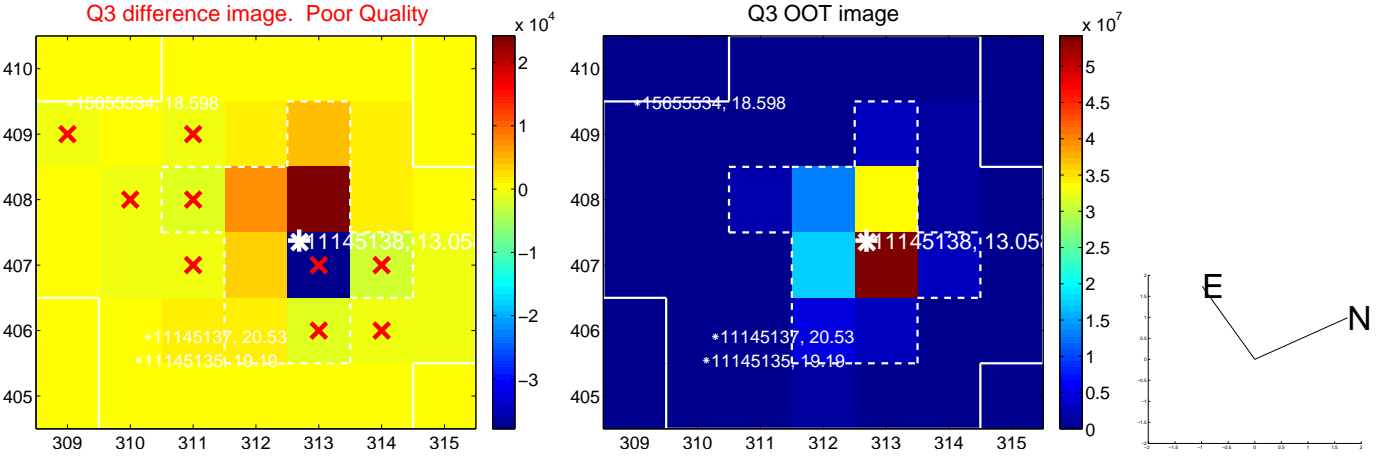
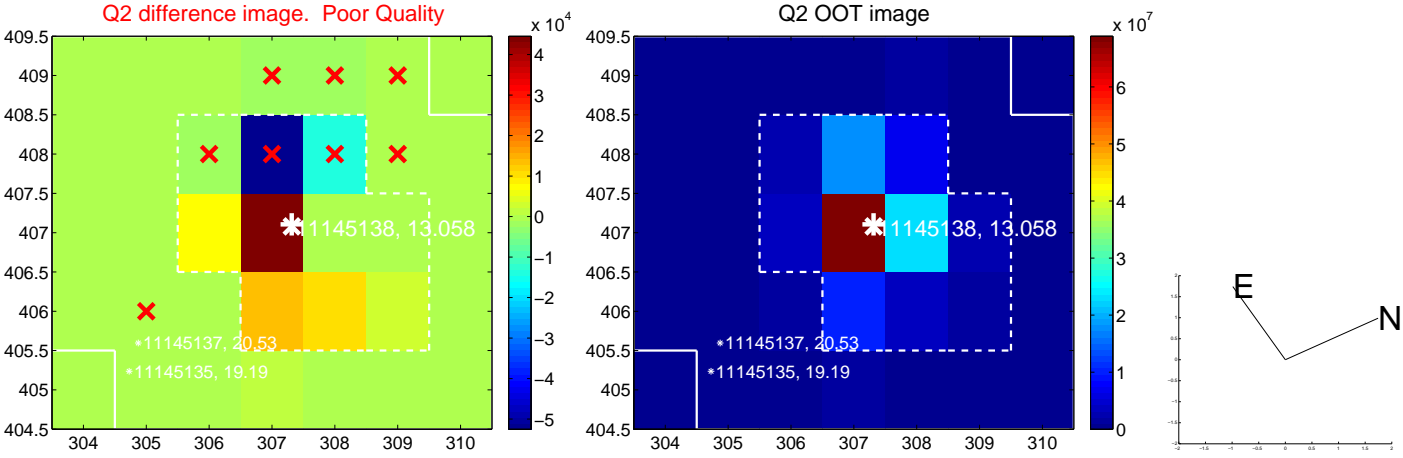
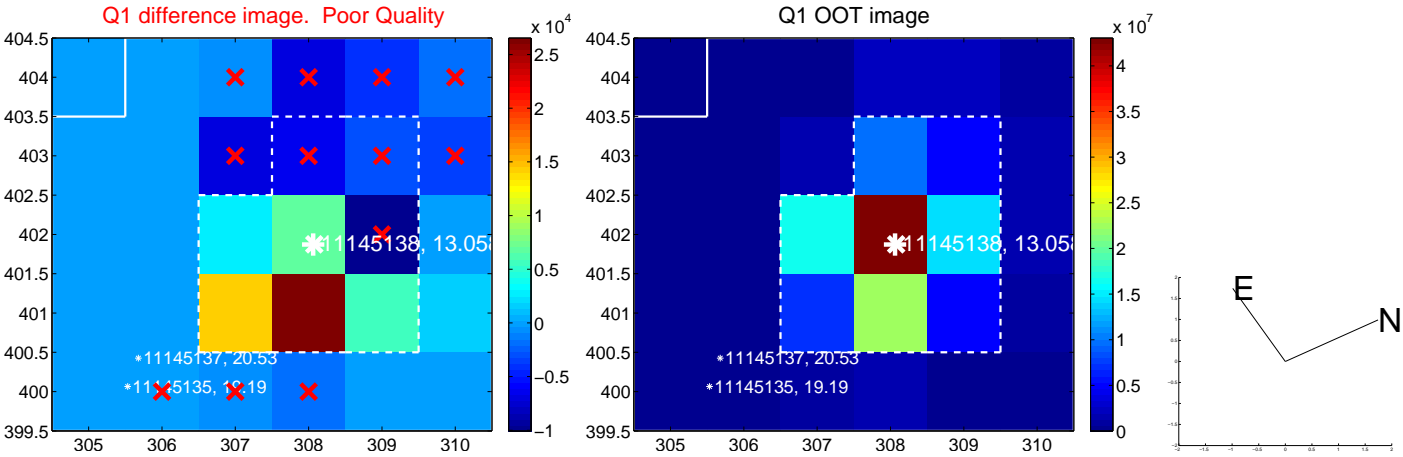


offset from photometric centroids

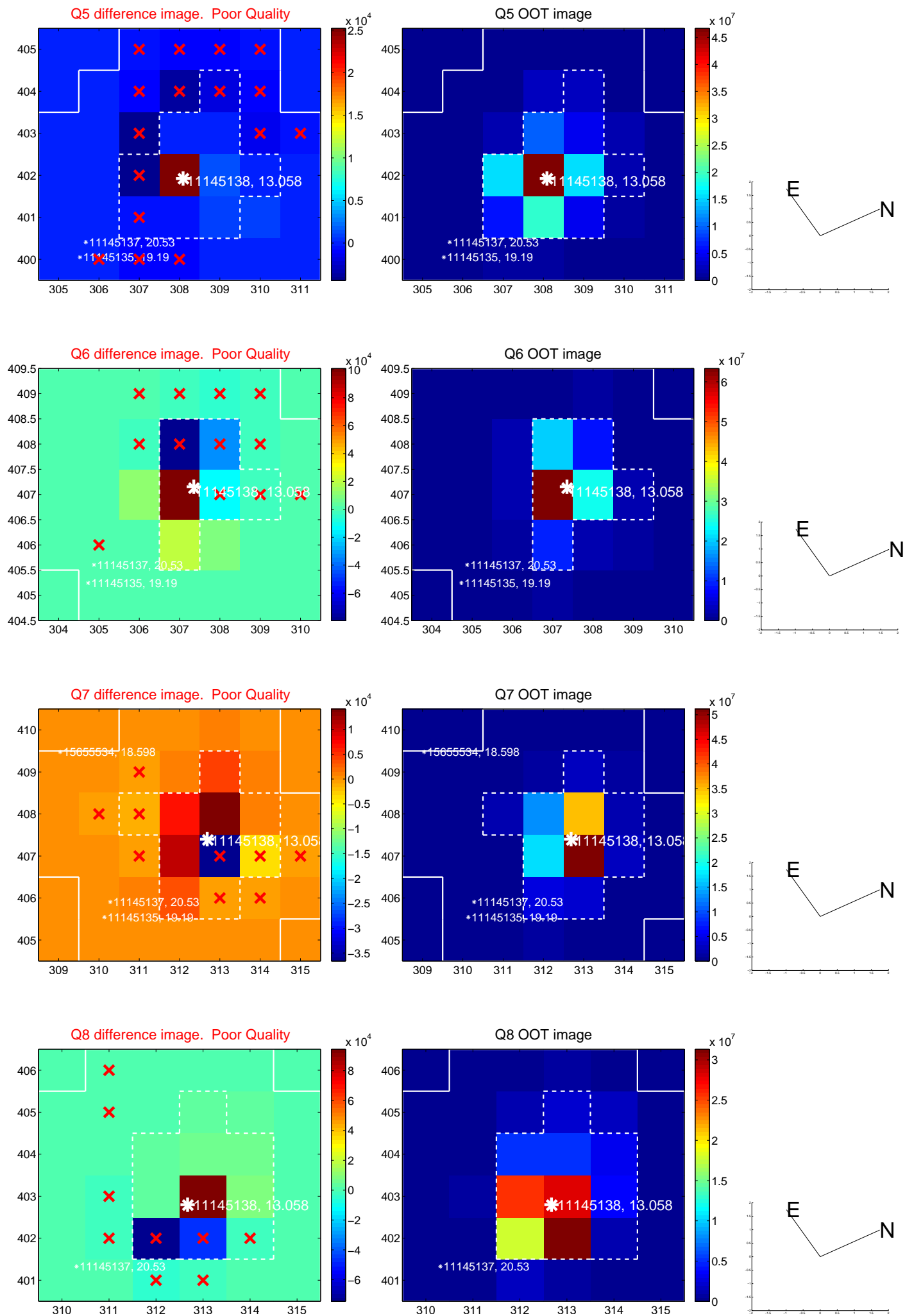


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

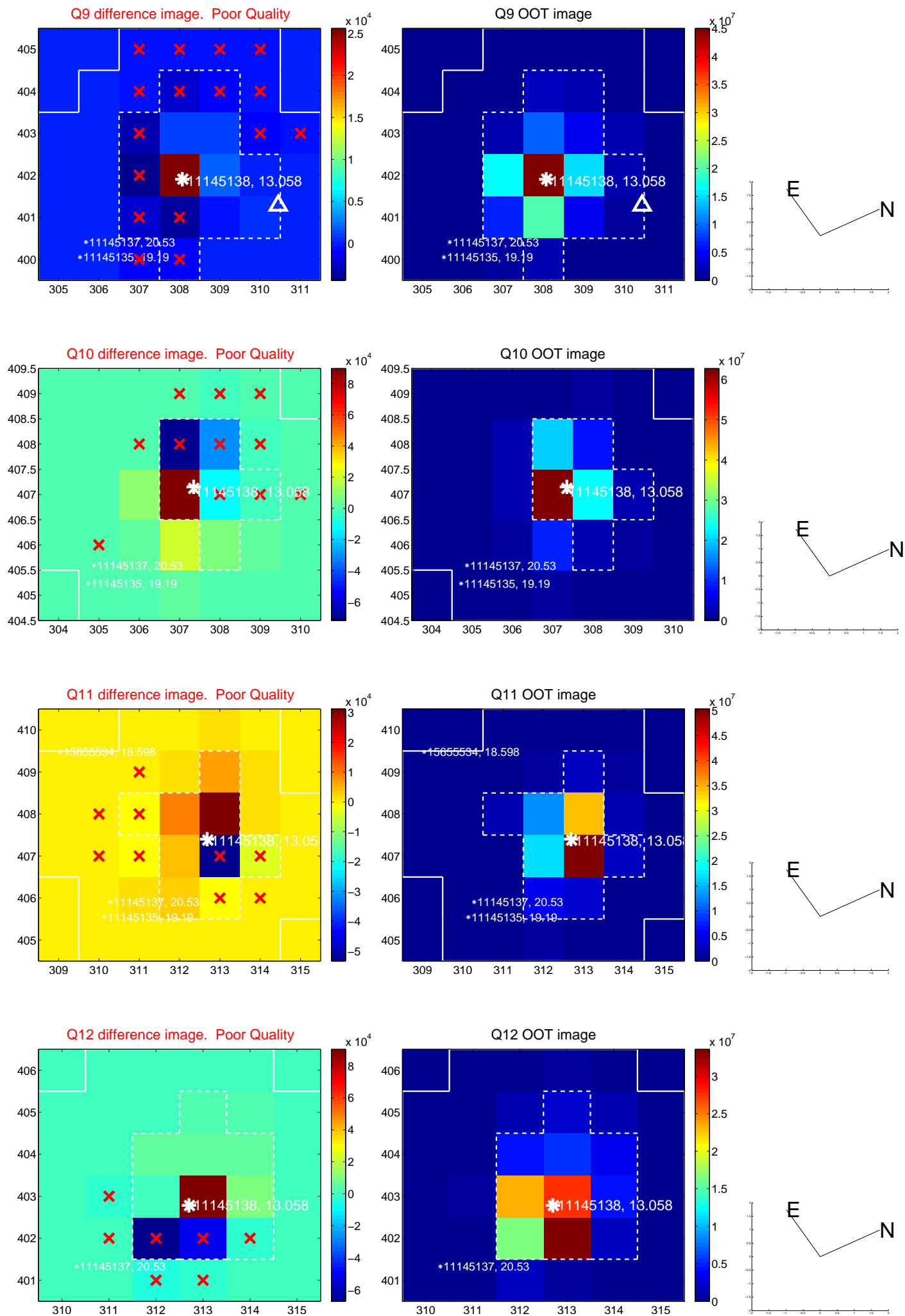
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



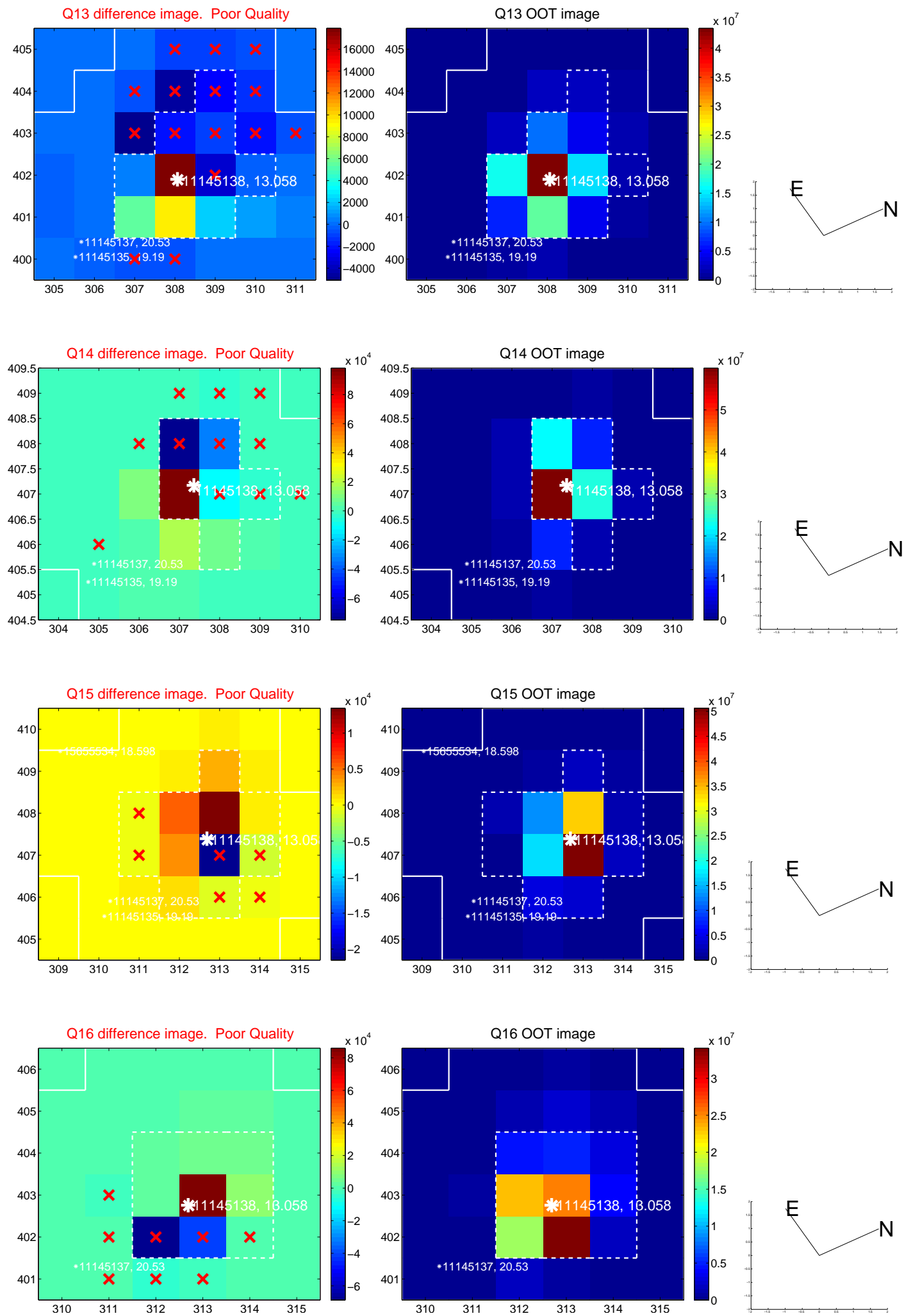
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



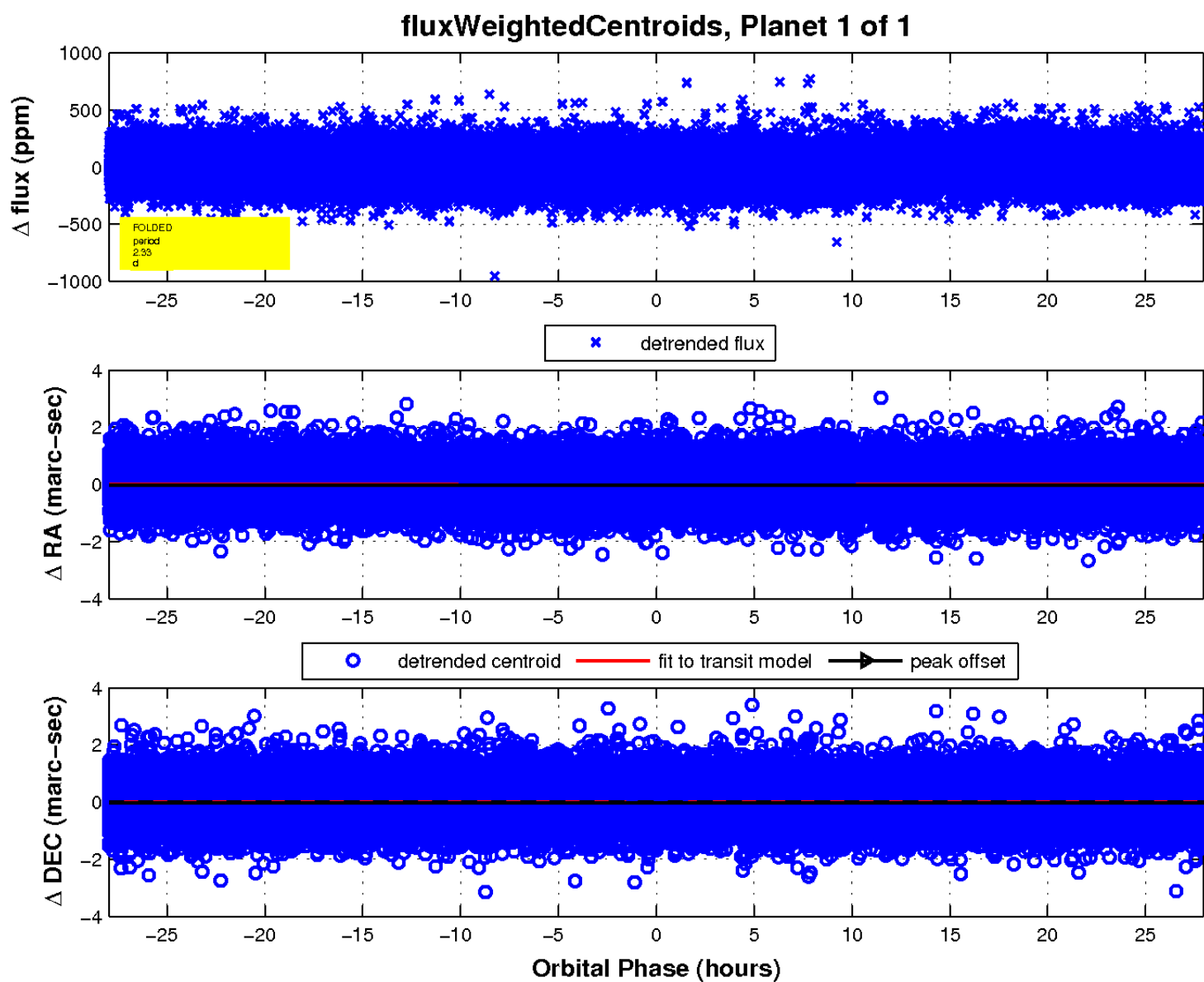
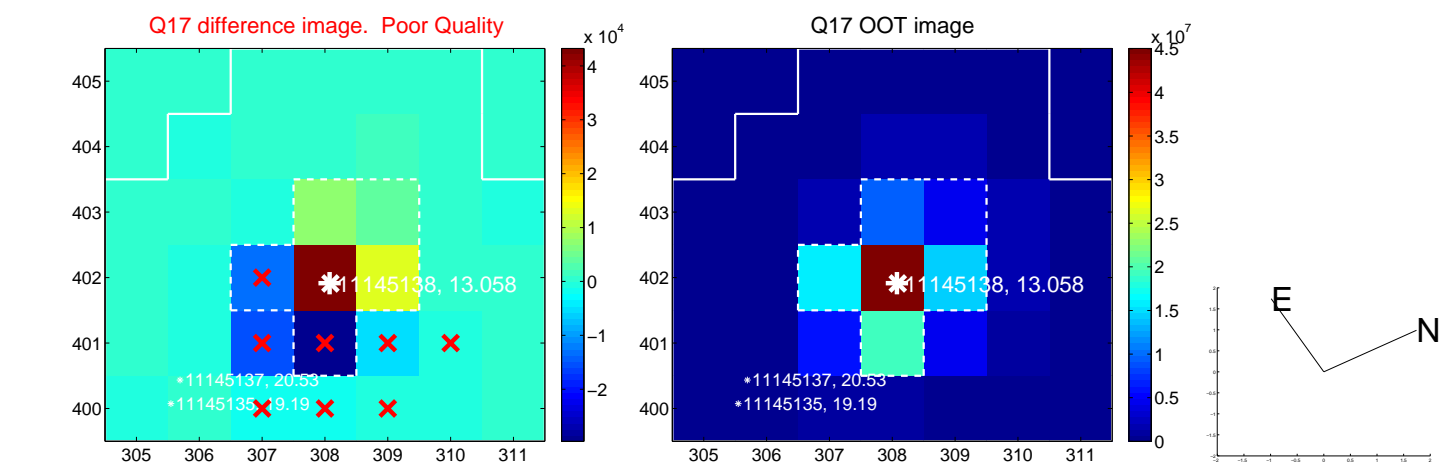
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



UKIRT Image

