

KIC 005008211

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})
005008211-01	OBS	No	1.805756	131.840351	21.9	6.879	11.4	11.5	1.80	7494	0.90	7459.45

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
005008211-01	OBS	FP	0.00	1	0	0	0	SWEET_NTL—LPP_DV

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

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

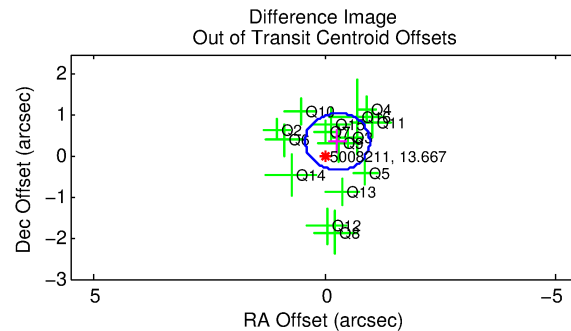
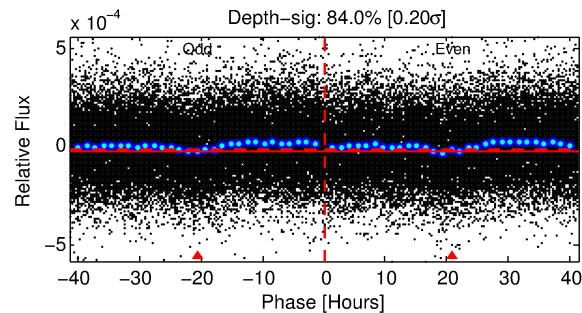
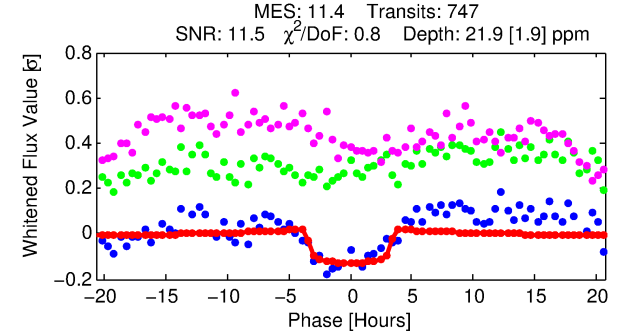
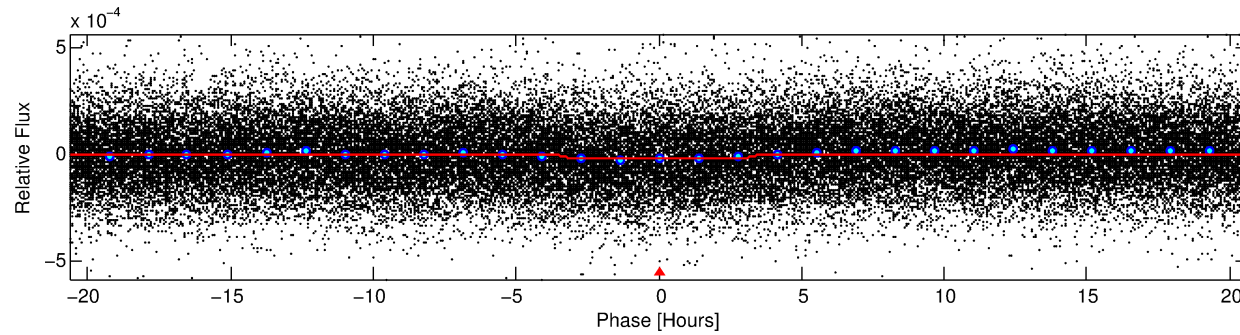
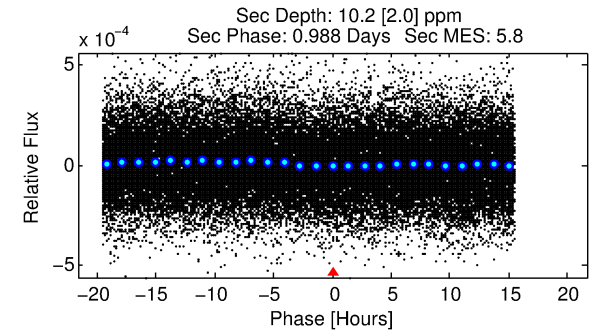
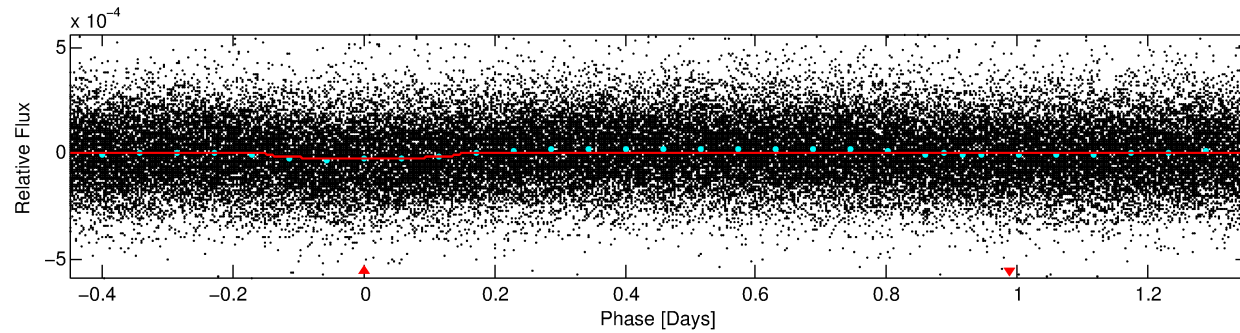
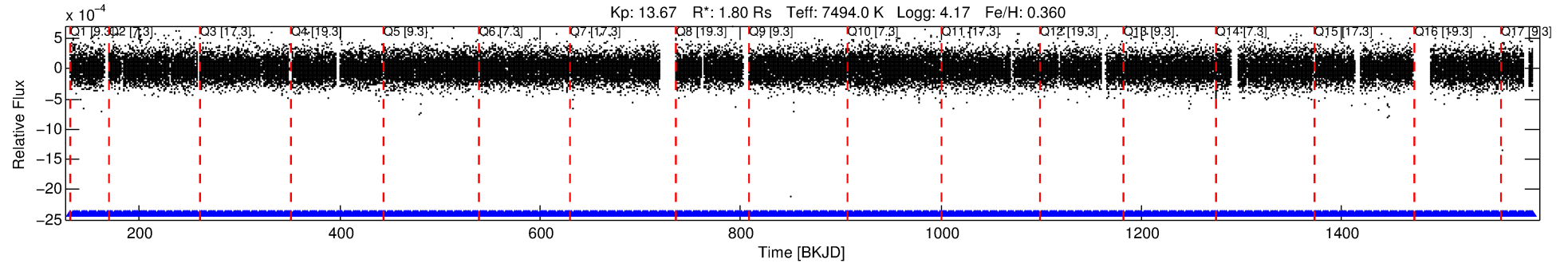
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 005008211-01

No Significant Match Found

DV One-Page Summary

KIC: 5008211 Candidate: 1 of 1 Period: 1.806 d



DV Fit Results:

Period = 1.80576 [0.00002] d
Epoch = 131.8404 [0.0056] BKJD
Rp/R* = 0.0046 [0.0012]
a/R* = 1.68 [1.84]
b = 0.68 [1.32]
Seff = 7459.45 [3115.86]
Teq = 2370 [247] K
Rp = 0.90 [0.37] Re
a = 0.0351 [0.0091] AU
Ag = 8.51 [5.88] [1.28σ]
Teffp = 6257 [943] K [3.99σ]

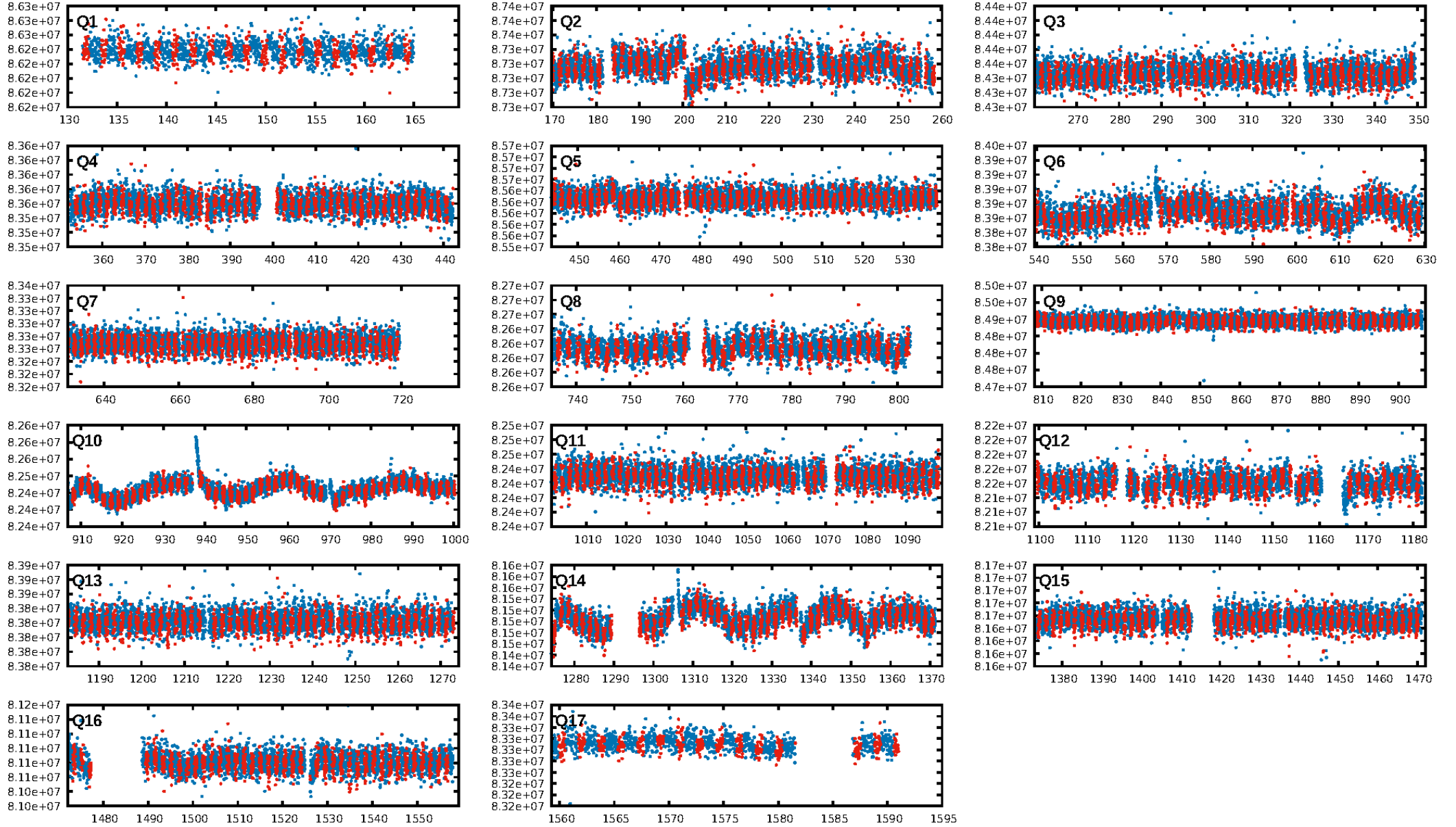
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 8.13e-28
RollingBand-fgt: 1.00 [713/713]
GhostDiagnostic-chr: 14.64
Centroid-sig: 19.9%
Centroid-so: 1.106 arcsec [1.15σ]
OotOffset-rm: 0.458 arcsec [1.97σ]
KicOffset-rm: 0.441 arcsec [1.84σ]
OotOffset-st: 4/4/4/3 [15]
KicOffset-st: 4/4/4/3 [15]
DiffImageQuality-fgm: 1.00 [15/15]
DiffImageOverlap-fno: 1.00 [17/17]

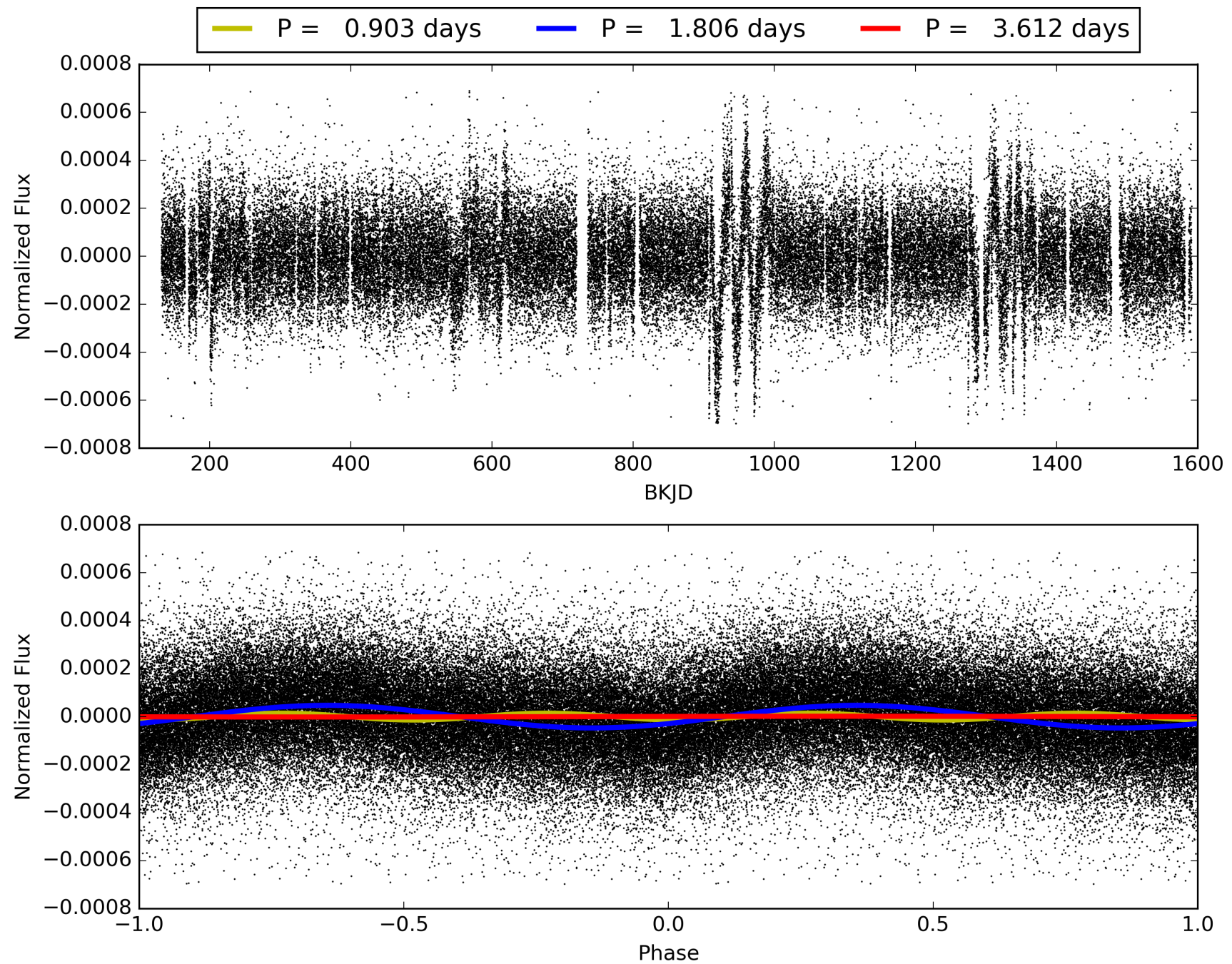
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 31-Jan-2016 07:07:43 Z

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

TCE 005008211-01, PDC Light Curves

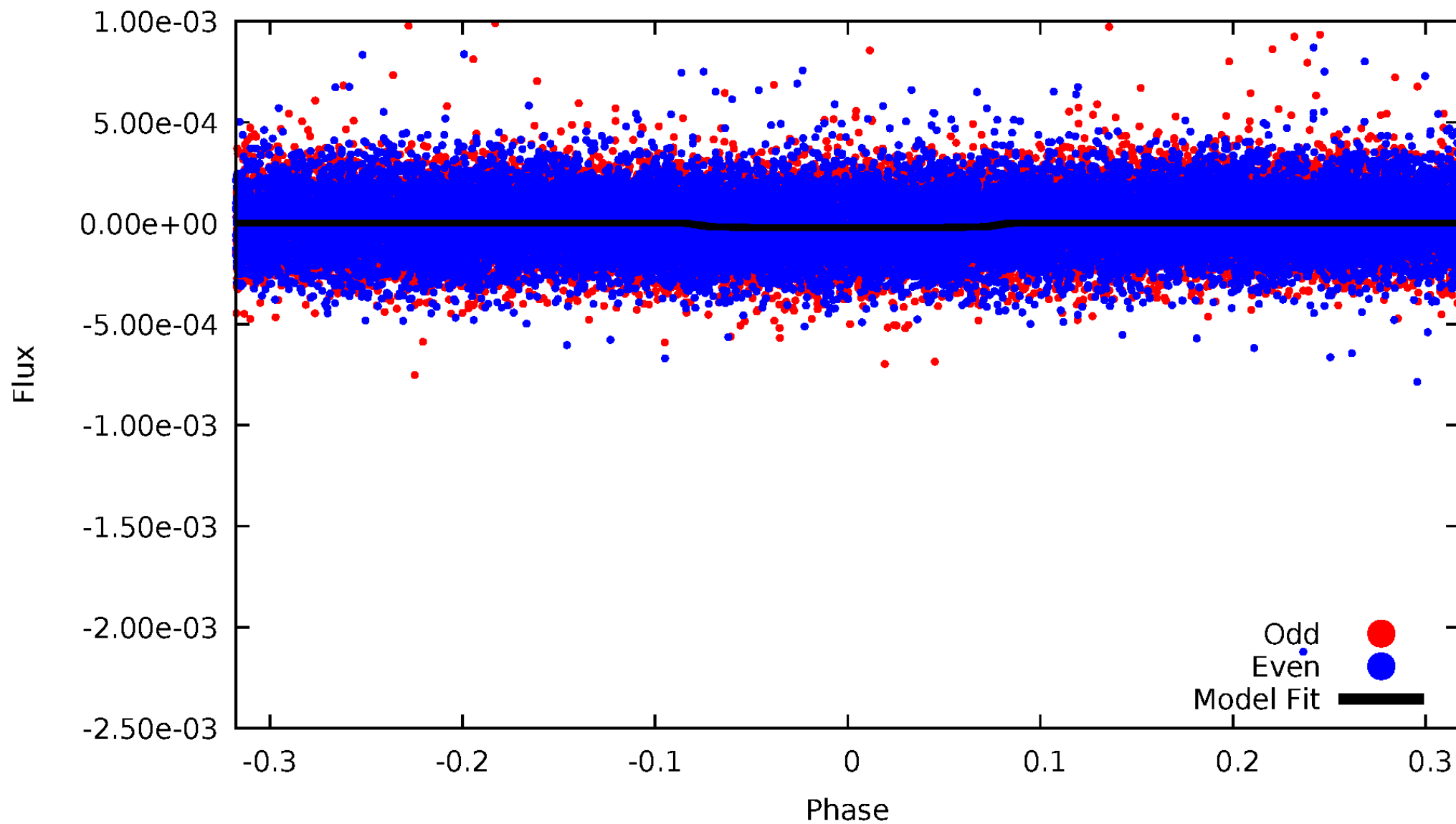


TCE 005008211-01



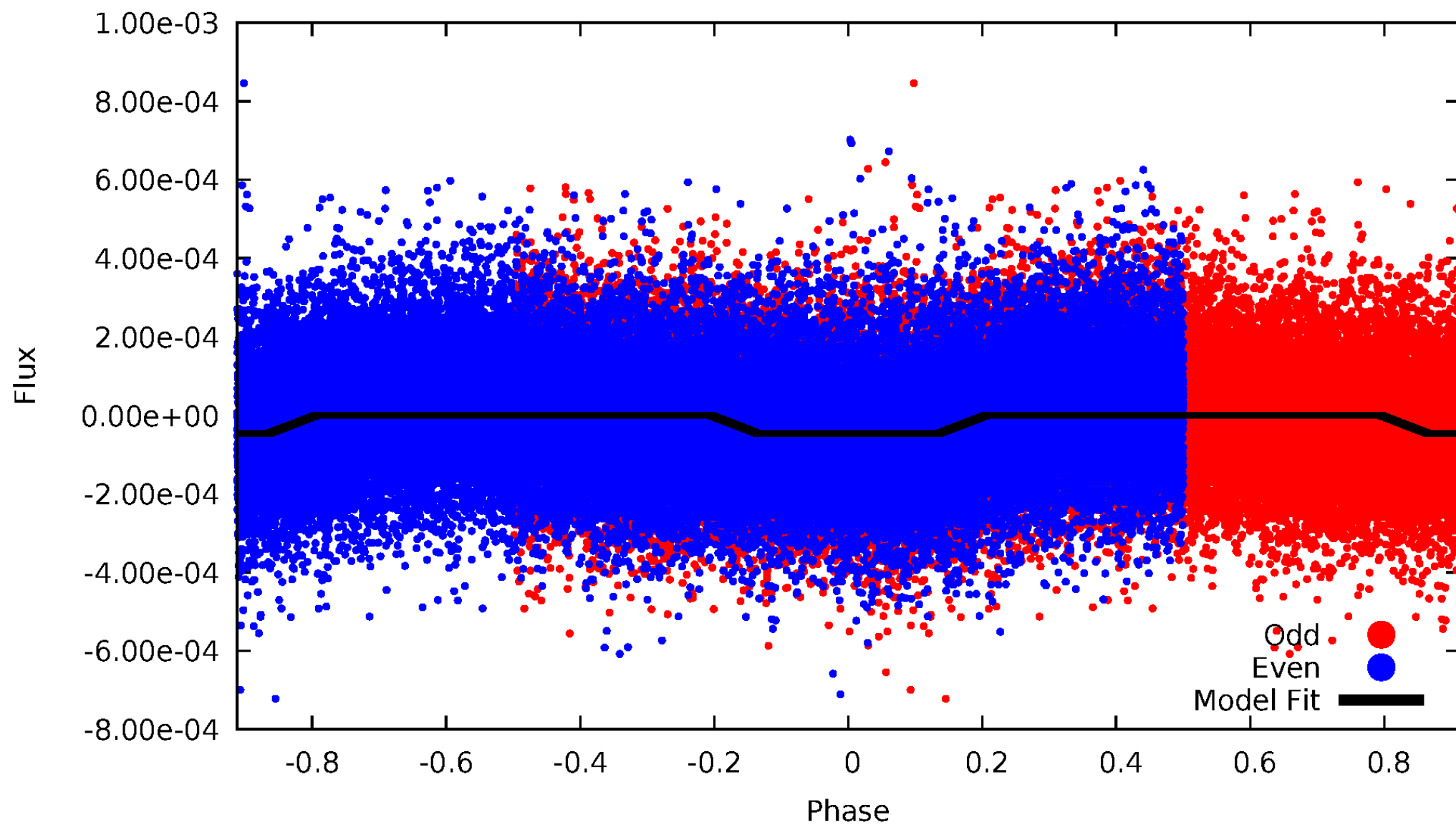
DV Odd/Even

TCE 005008211-01



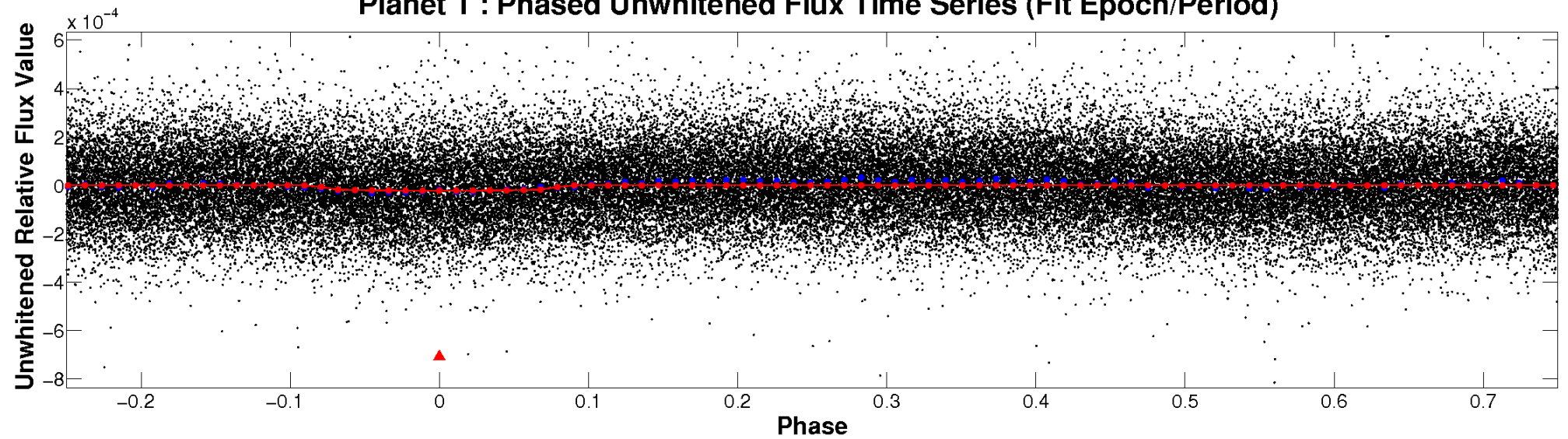
ALT Odd/Even

TCE 005008211-01

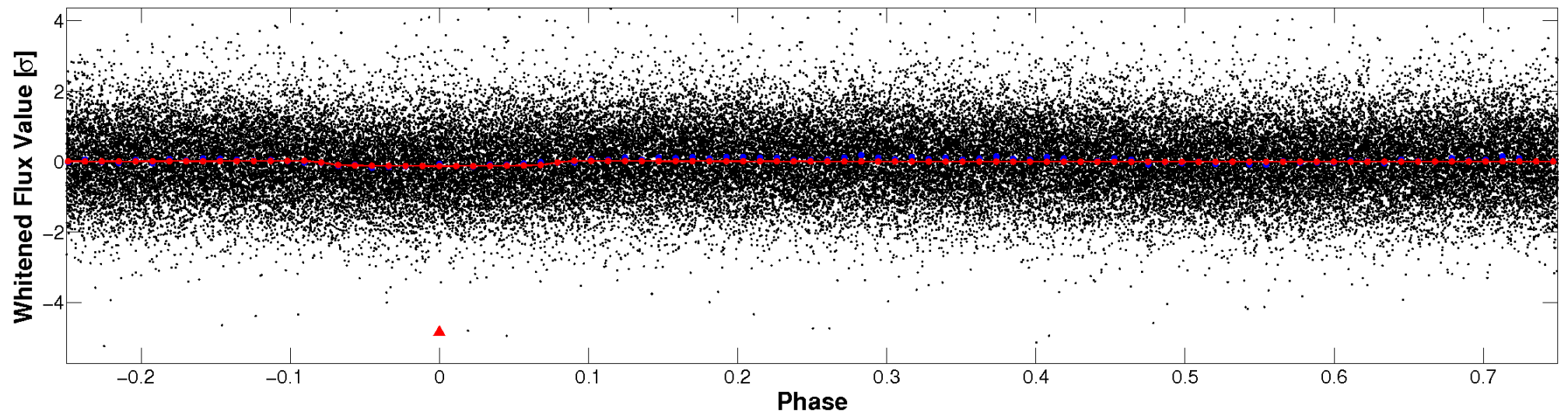


Non-Whitened Vs. Whitened Light Curve

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

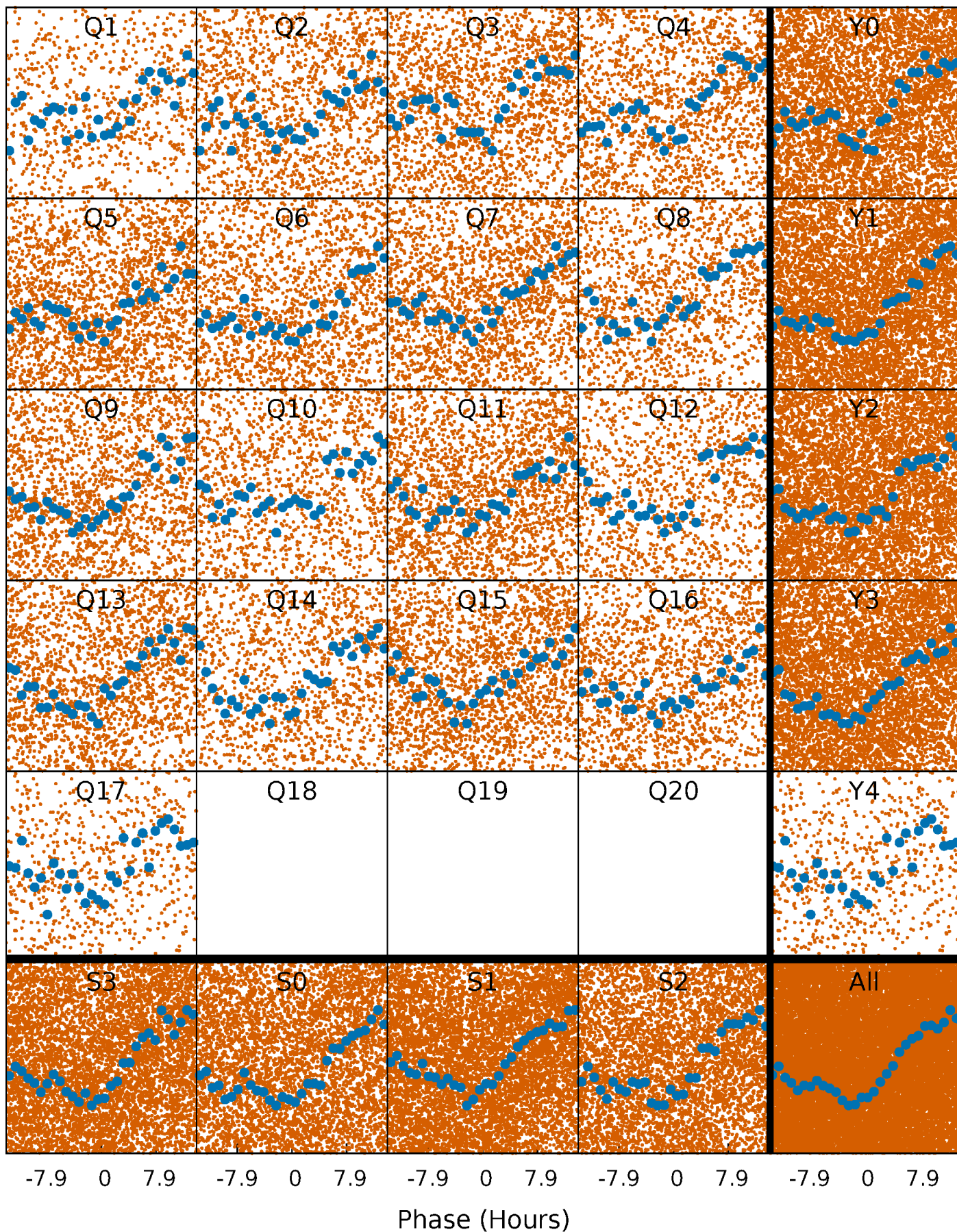


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



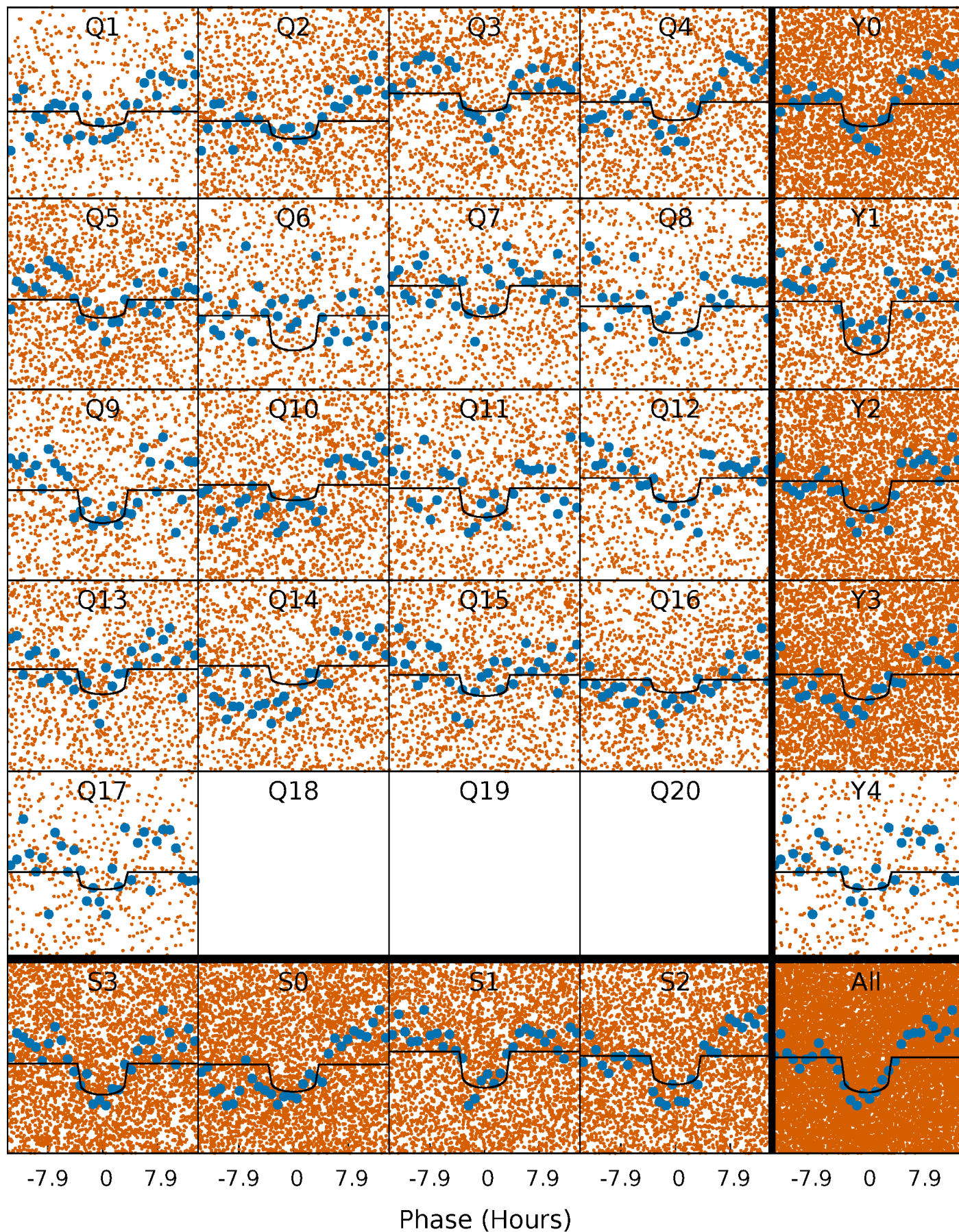
PDC Quarter-Phased Transit Curves

TCE 005008211-01 P= 1.805756 Days $T_0=131.840351$ (BKJD)



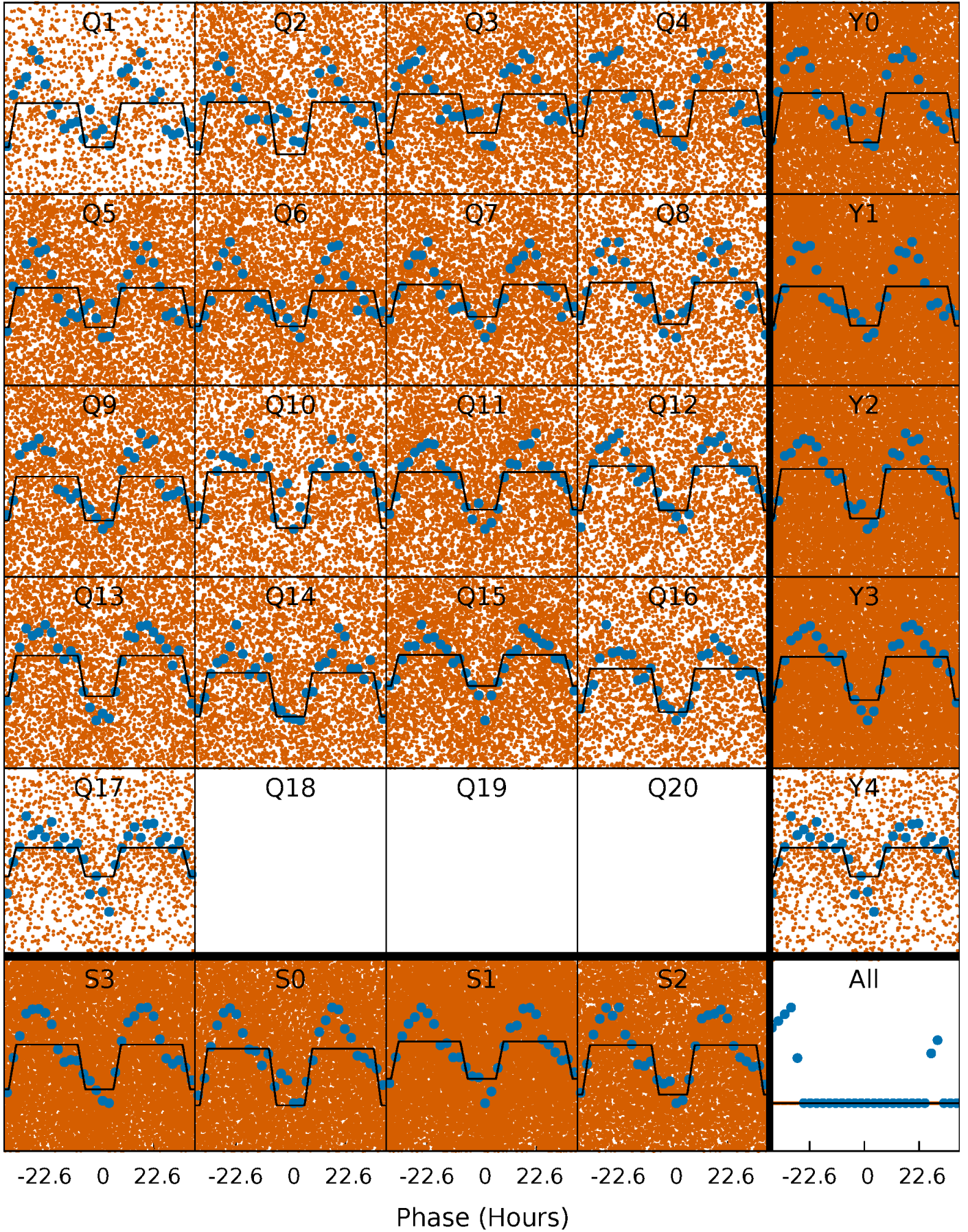
DV Quarter-Phased Transit Curves

TCE 005008211-01 P= 1.805756 Days $T_0=131.840351$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

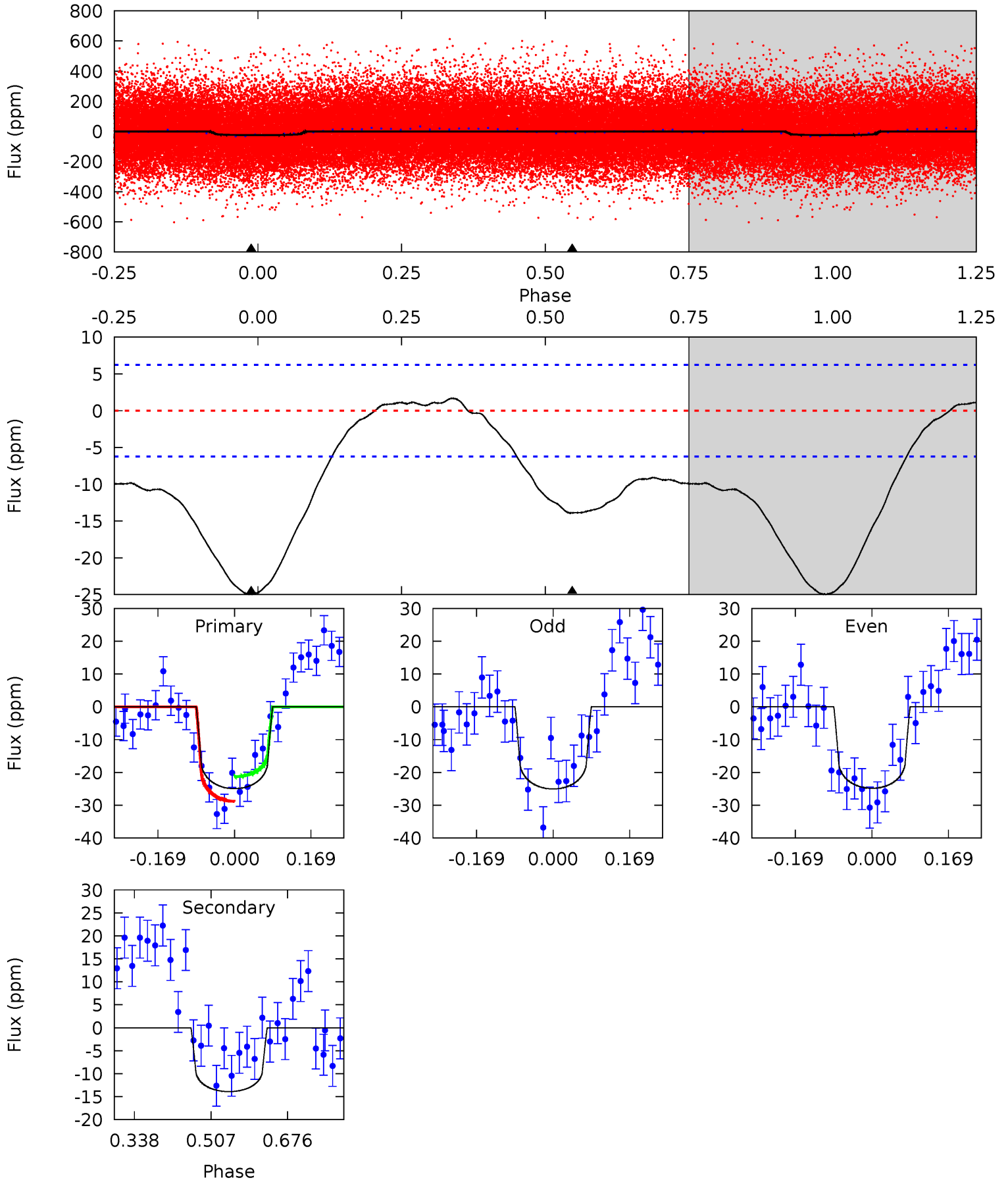
TCE 005008211-01 P= 1.805688 Days $T_0=131.708606$ (BKJD)



DV Model-Shift Uniqueness Test

005008211-01, P = 1.805756 Days, E = 130.034595 Days

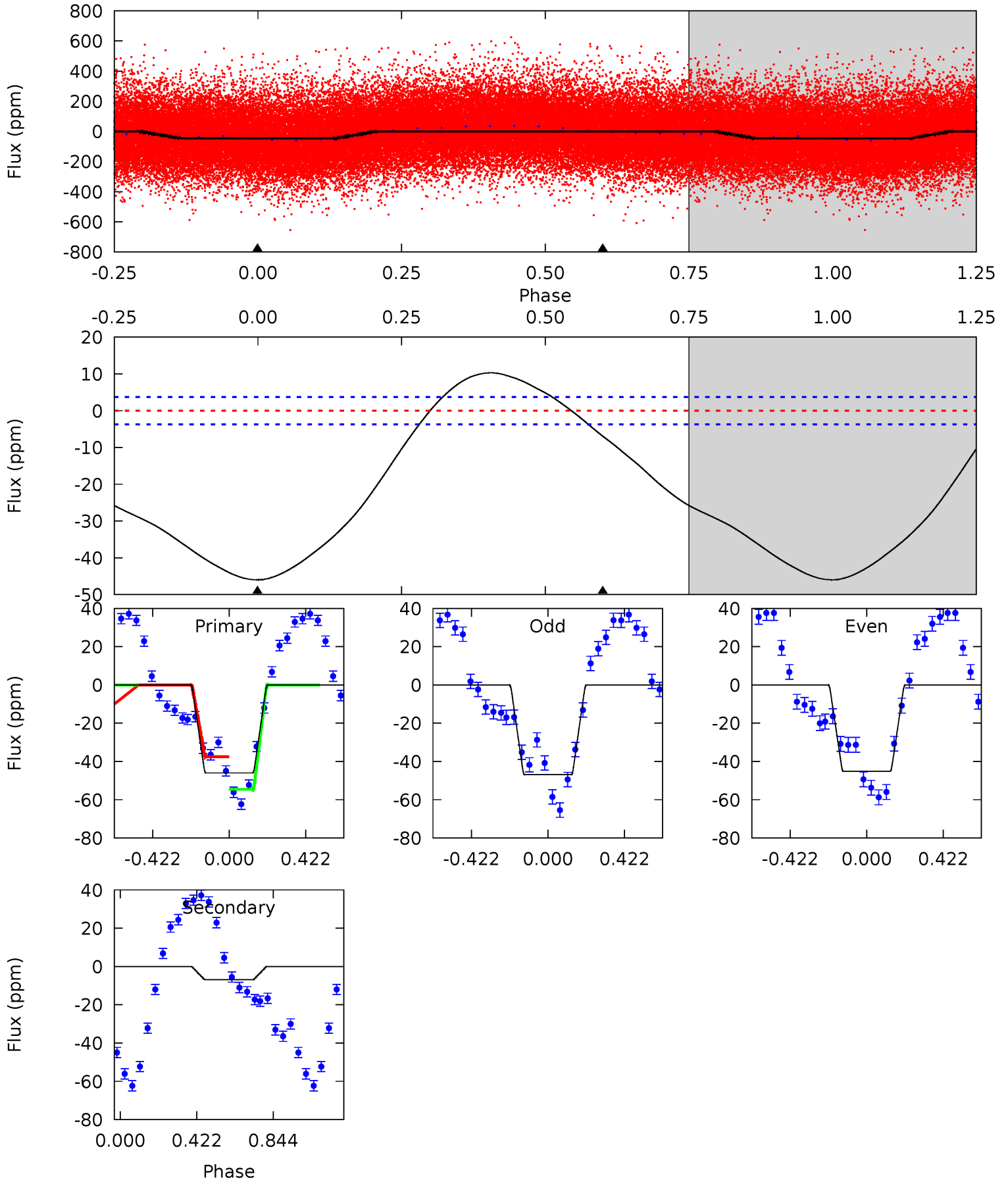
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
17.8	9.94	0	0	4.45	1.38	3.55	17.8	17.8	9.94	9.94	0.07	1.08	0.06	2.69



Alt Model-Shift Uniqueness Test

005008211-01, P = 1.805688 Days, E = 129.902918 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
52.7	7.94	0	0	4.25	0.80	6.19	52.7	52.7	7.94	7.94	1.03	0.96	0.18	9.78



Stellar Parameters For KIC 005008211

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	M (M_{\odot})	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	7494^{+206}_{-324}	$4.173^{+0.070}_{-0.210}$	$0.360^{+0.050}_{-0.450}$	$1.802^{+0.545}_{-0.252}$	$1.764^{+0.184}_{-0.253}$	$0.425^{+0.151}_{-0.214}$
	+3%/-4%	+2%/-5%	+14%/-125%	+30%/-14%	+10%/-14%	+36%/-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 005008211-01 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-14 ± 1	$0.95^{+0.29}_{-0.29}$	3368^{+256}_{-189}	6532^{+1397}_{-796}	10^{+10}_{-4}
Alt.	-7 ± 1	$1.41^{+0.33}_{-0.28}$	3363^{+256}_{-195}	4550^{+513}_{-361}	$2.290^{+1.303}_{-0.756}$

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 $A_{obs} \gg 1.0$

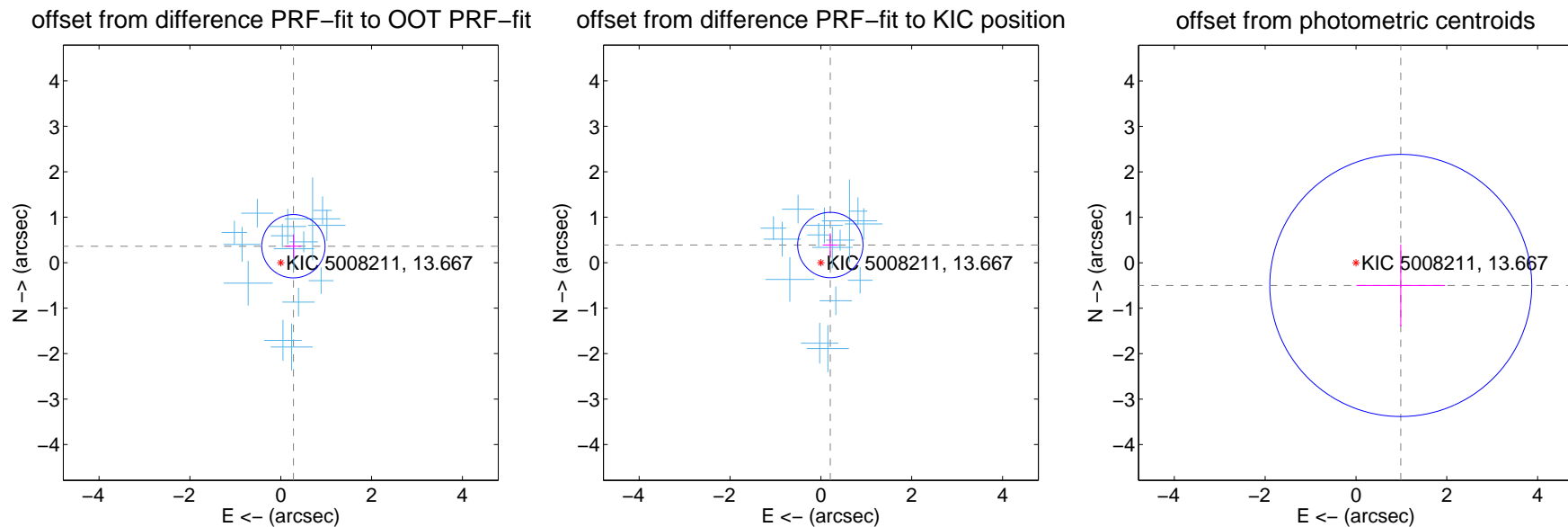
DV Centroid Data

Supplemental centroid analysis for 005008211-01. Kepler magnitude: 13.67. Transit SNR 11.52

There are 15 quarters with good PRF difference image offsets

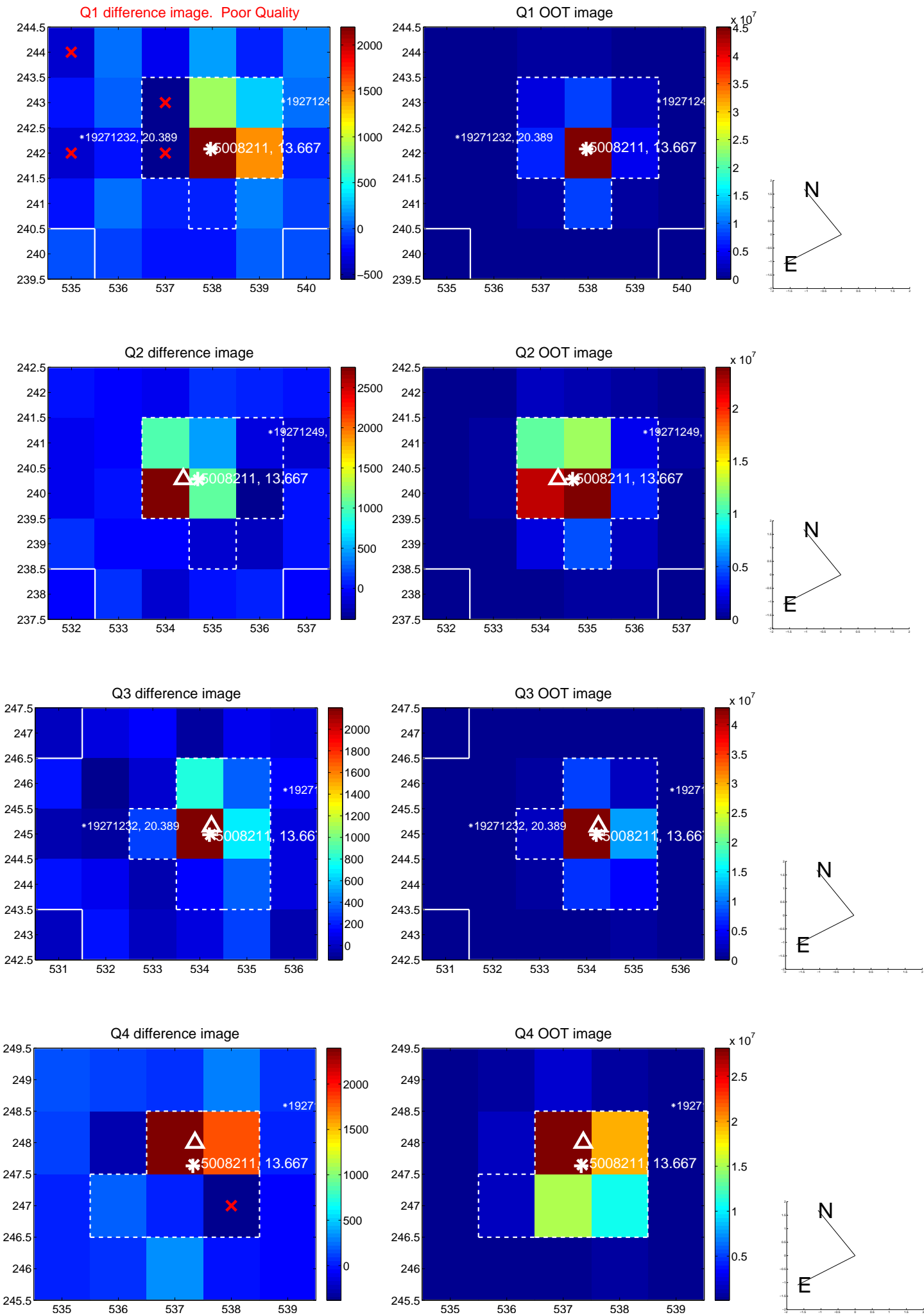
The direct PRF centroid is offset from the target star catalog position by about 0.08 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.458 ± 0.232	1.97	-0.279 ± 0.171	0.362 ± 0.259
PRF-fit source offset from KIC position	0.441 ± 0.240	1.84	-0.208 ± 0.167	0.389 ± 0.258
photometric centroid source offset	1.11 ± 0.96	1.15	-0.99 ± 0.98	-0.50 ± 0.90

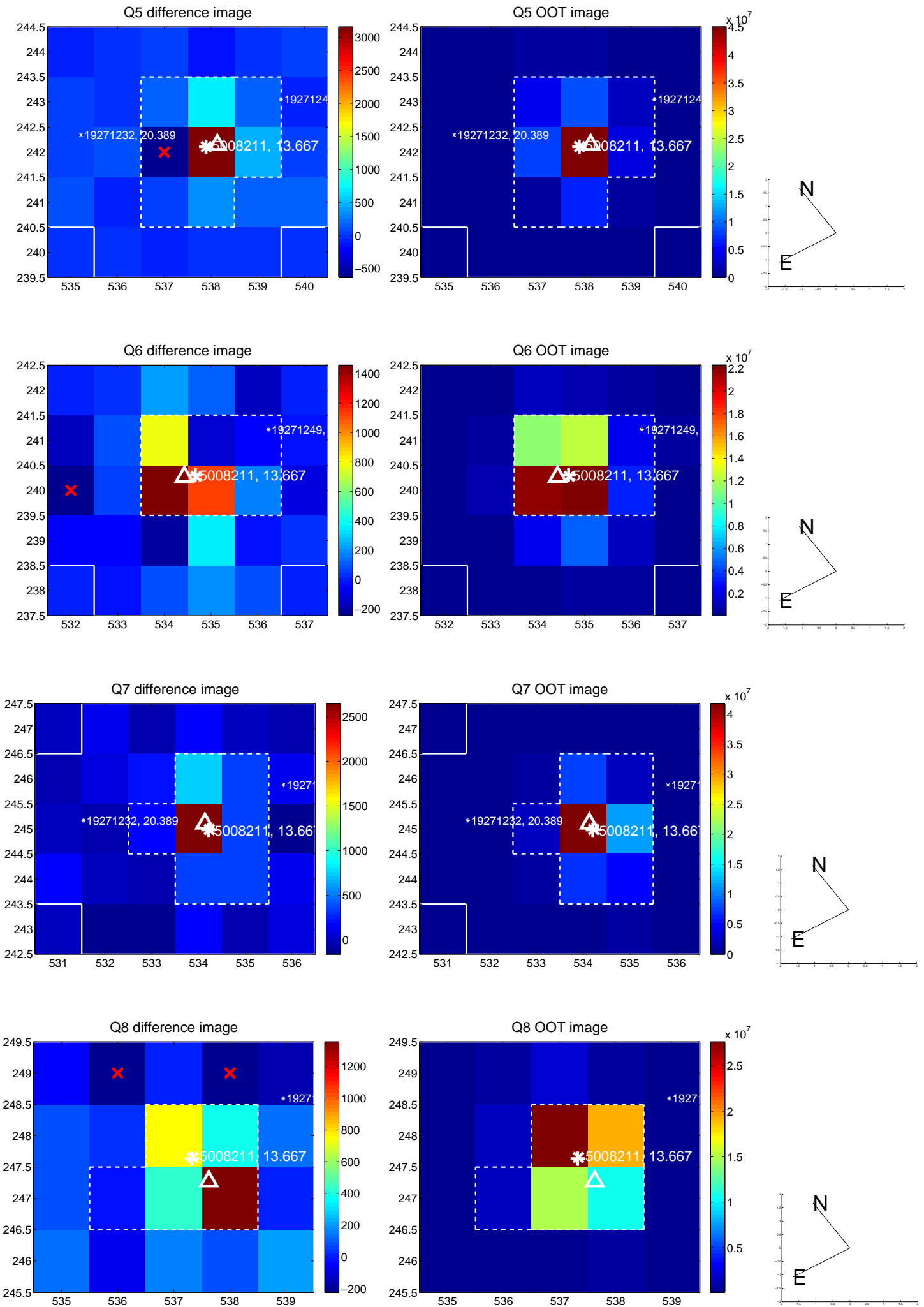


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses:** good quarterly centroid offsets; **Vermillion crosses:** bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

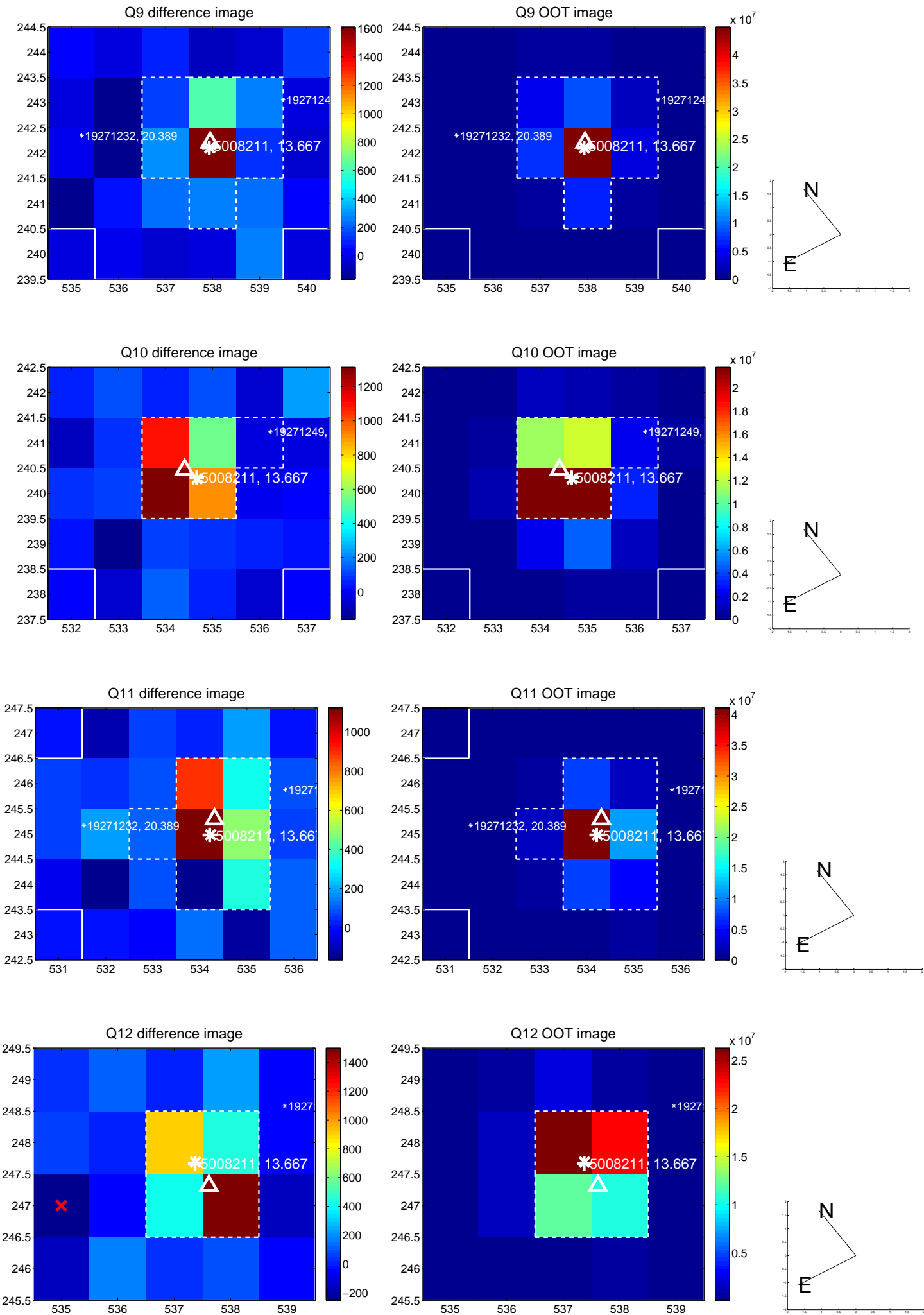
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



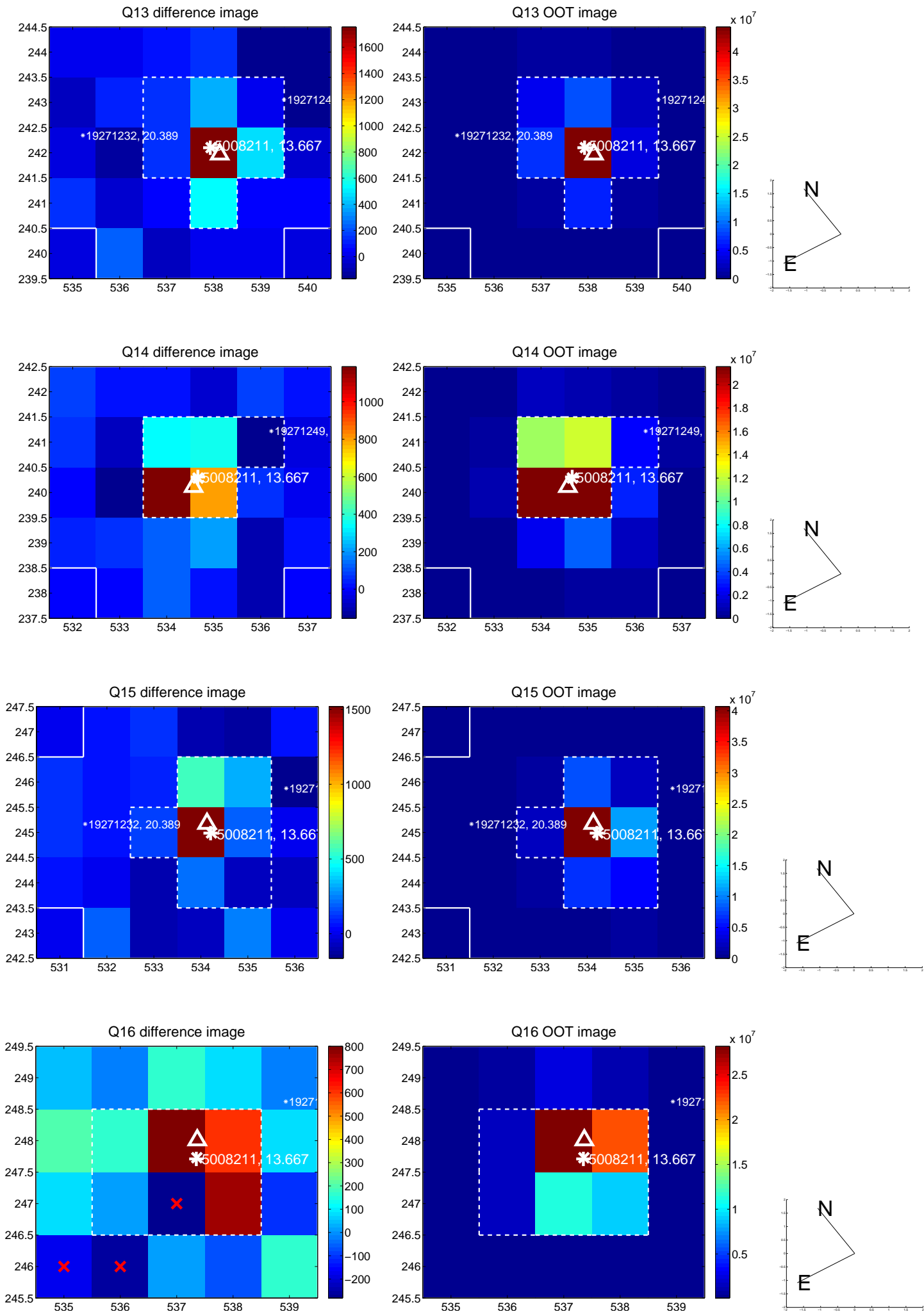
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



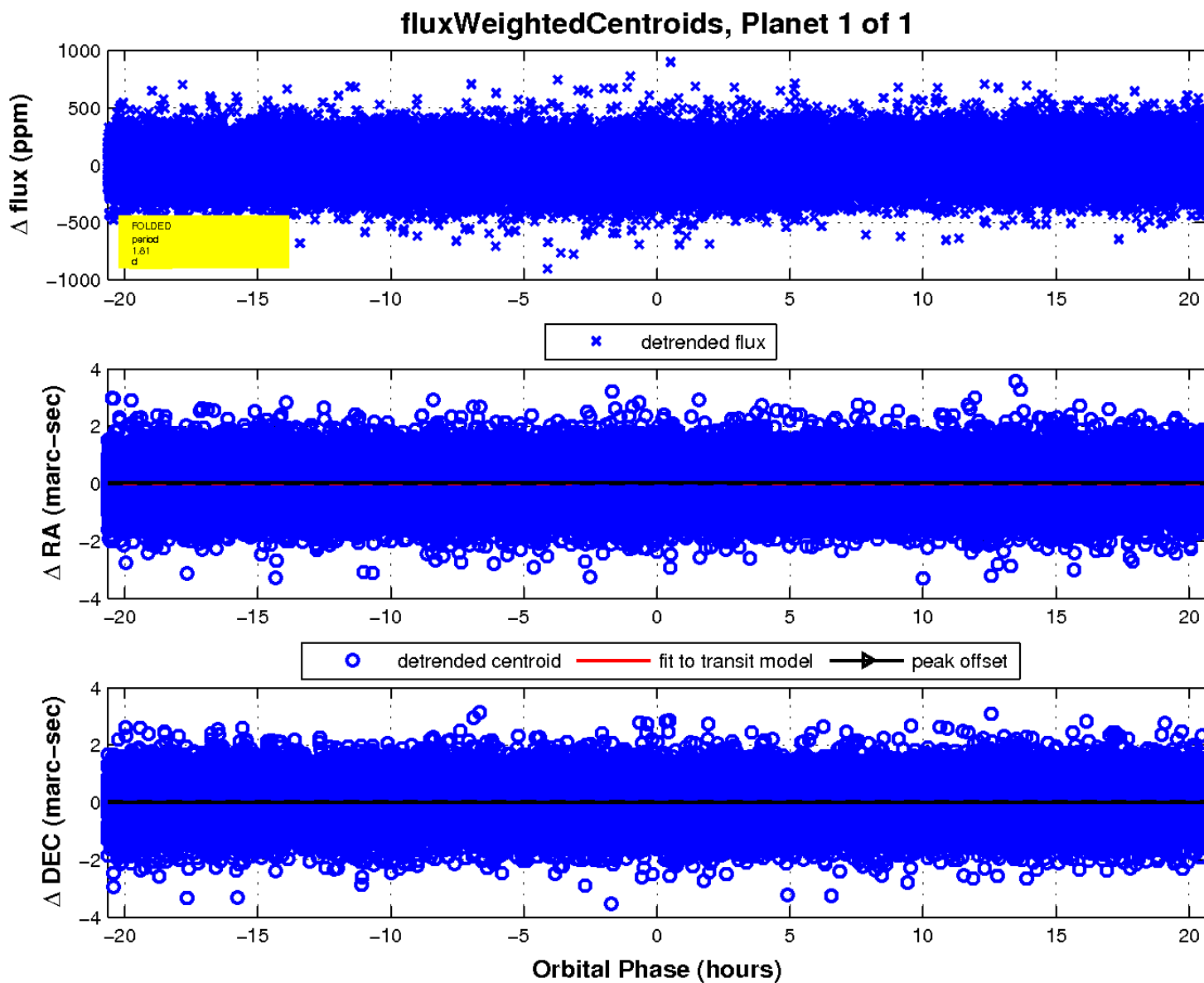
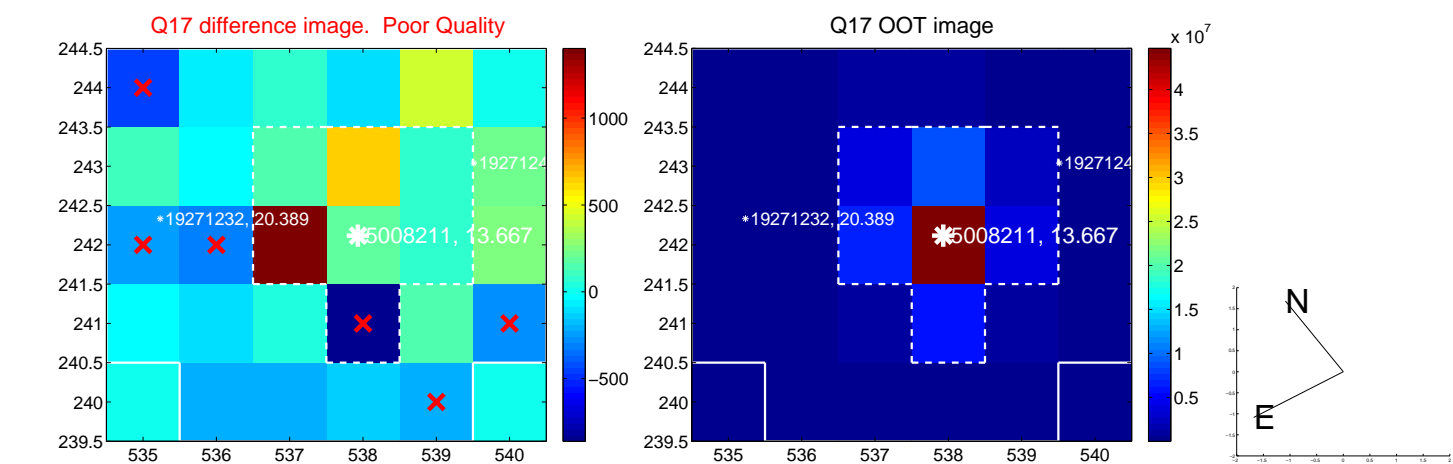
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white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination

