

KIC 005725443

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})
005725443-01	OBS	No	3.062540	134.546694	43.0	36.751	8.7	6.5	1.29	6623	0.85	1437.52

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
005725443-01	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—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.

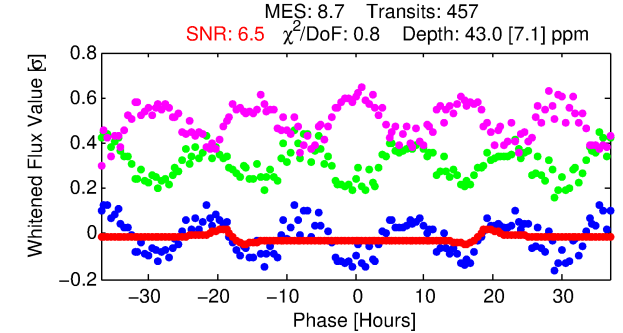
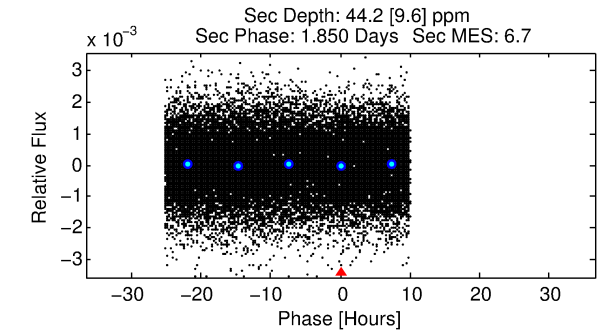
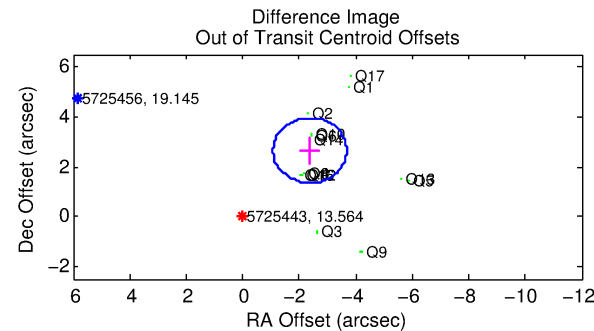
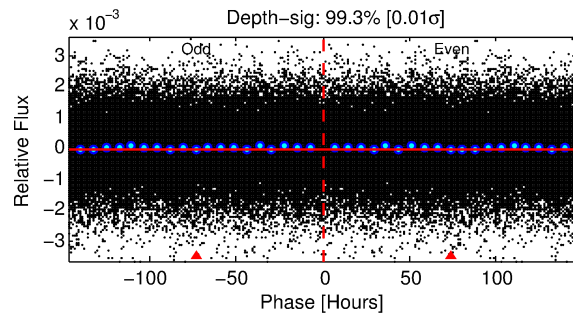
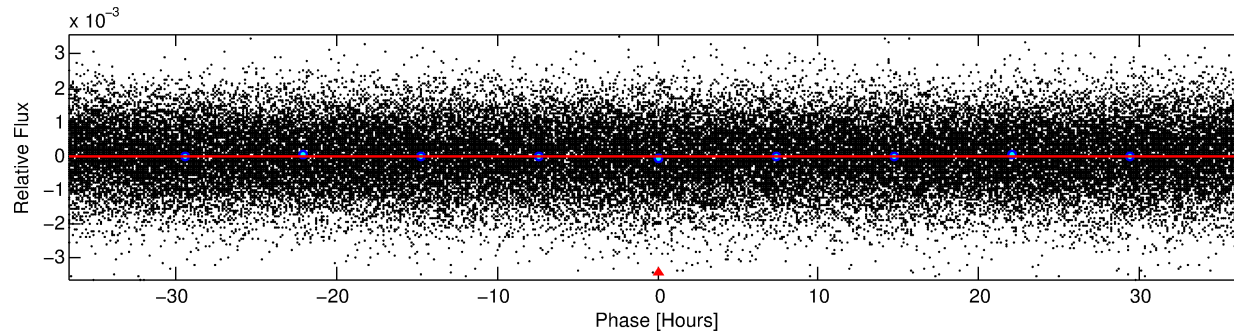
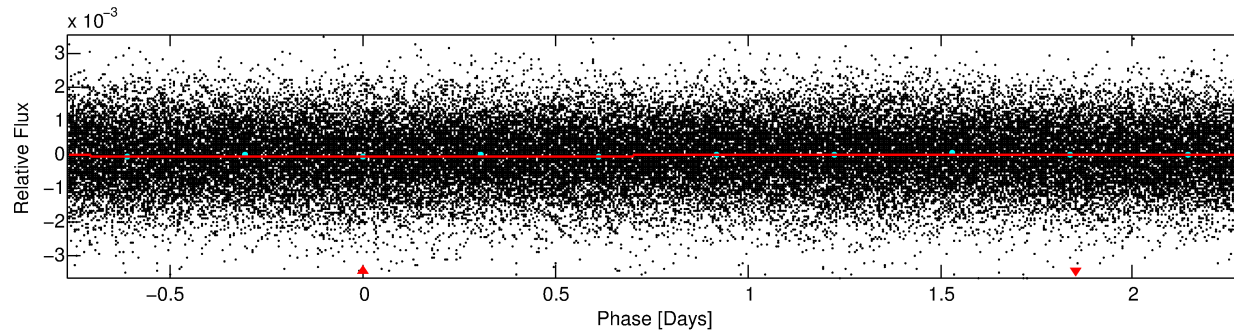
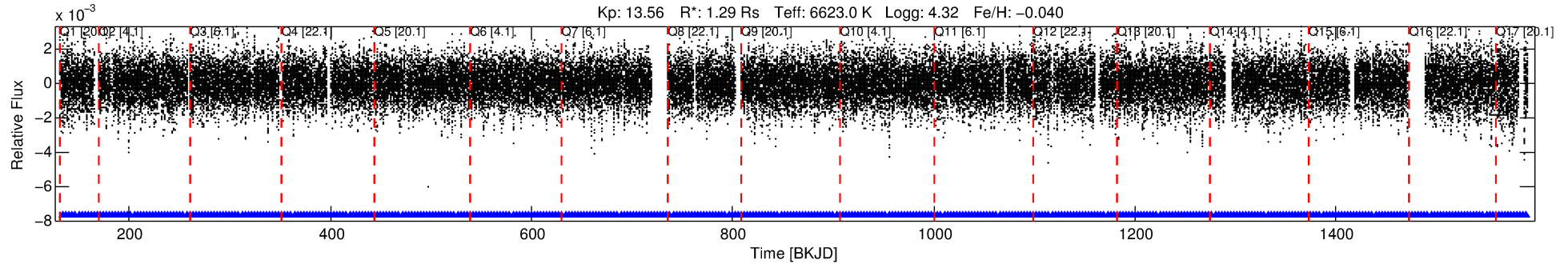
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 005725443-01

No Significant Match Found

DV One-Page Summary

KIC: 5725443 Candidate: 1 of 1 Period: 3.063 d



DV Fit Results:

Period = 3.06254 [0.00014] d
Epoch = 134.5467 [0.0347] BKJD
Rp/R* = 0.0060 [0.0030]
a/R* = 1.00 [0.01]
b = 0.09 [31.44]
Seff = 1437.52 [589.72]
Teq = 1570 [161] K
Rp = 0.85 [0.50] Re
a = 0.0446 [0.0122] AU
Ag = 67.01 [71.88] [0.92 σ]
Teffp = 6946 [1758] K [3.05 σ]

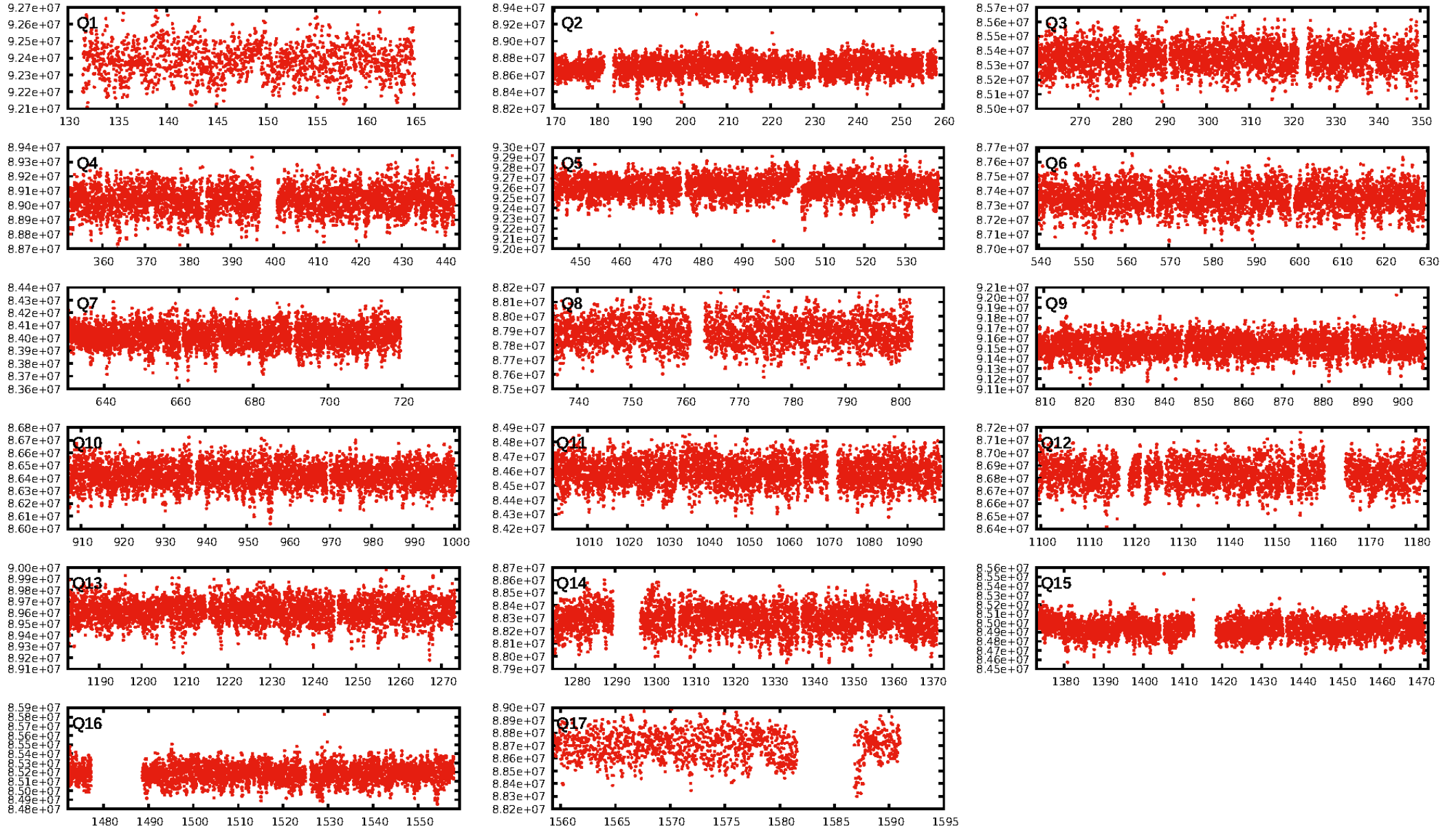
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [436/436]
GhostDiagnostic-chr: 3.053
Centroid-sig: 4.5%
Centroid-so: 1.140 arcsec [2.32 σ]
OotOffset-rm: 3.556 arcsec [8.20 σ]
KicOffset-rm: 2.516 arcsec [7.27 σ]
OotOffset-st: 4/1/4/5 [14]
KicOffset-st: 4/1/4/5 [14]
DiffImageQuality-fgm: 0.00 [0/14]
DiffImageOverlap-fno: 1.00 [17/17]




Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 11:05:52 Z

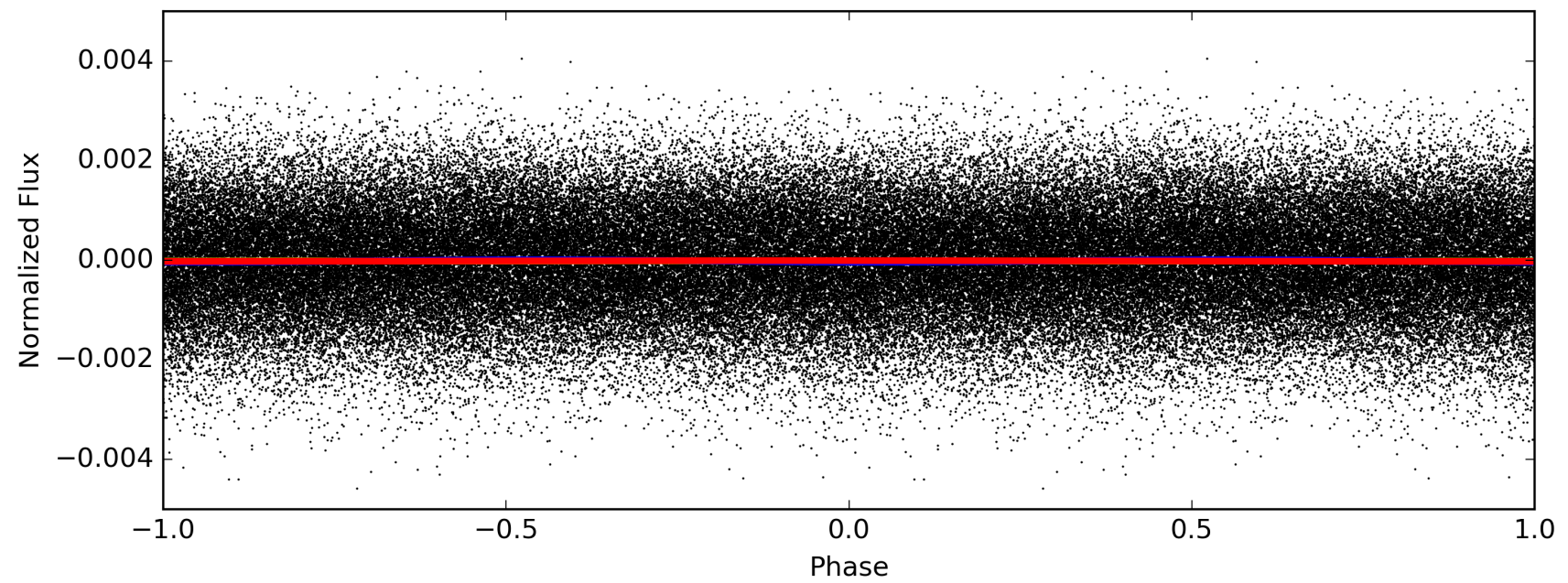
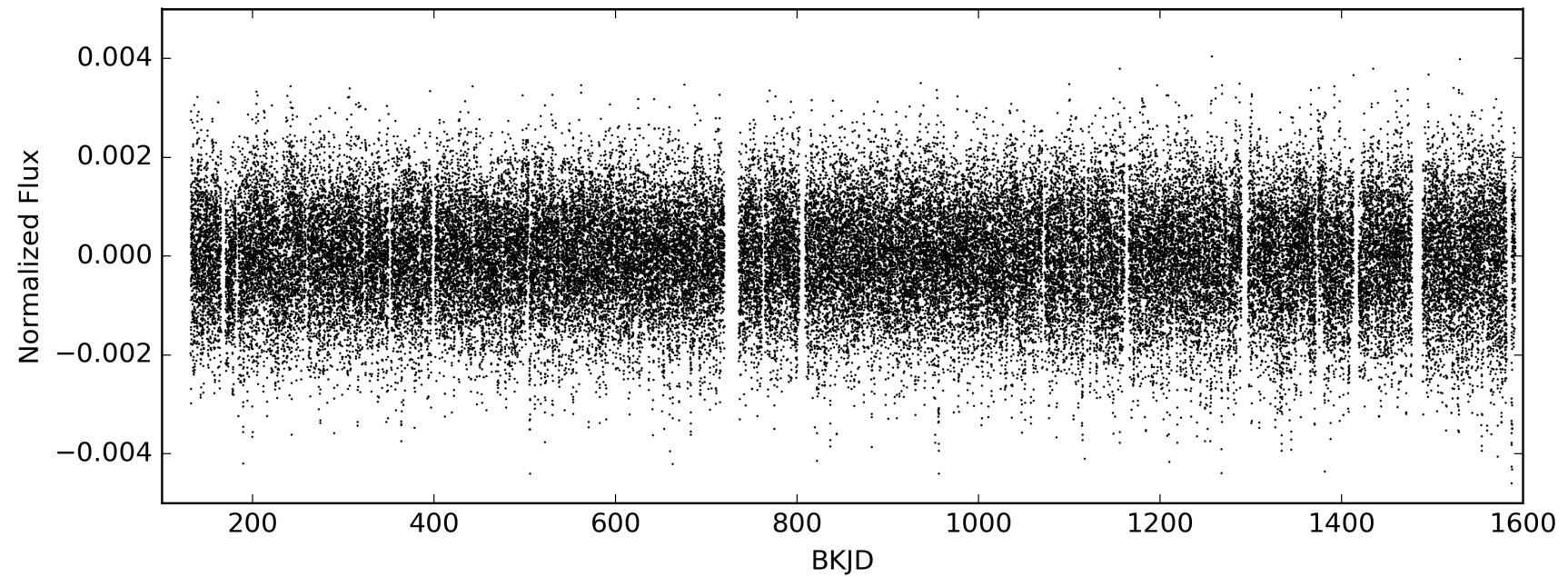
This Data Validation Report Summary was produced in the Kepler Science Operations Center Pipeline at NASA Ames Research Center

TCE 005725443-01, PDC Light Curves



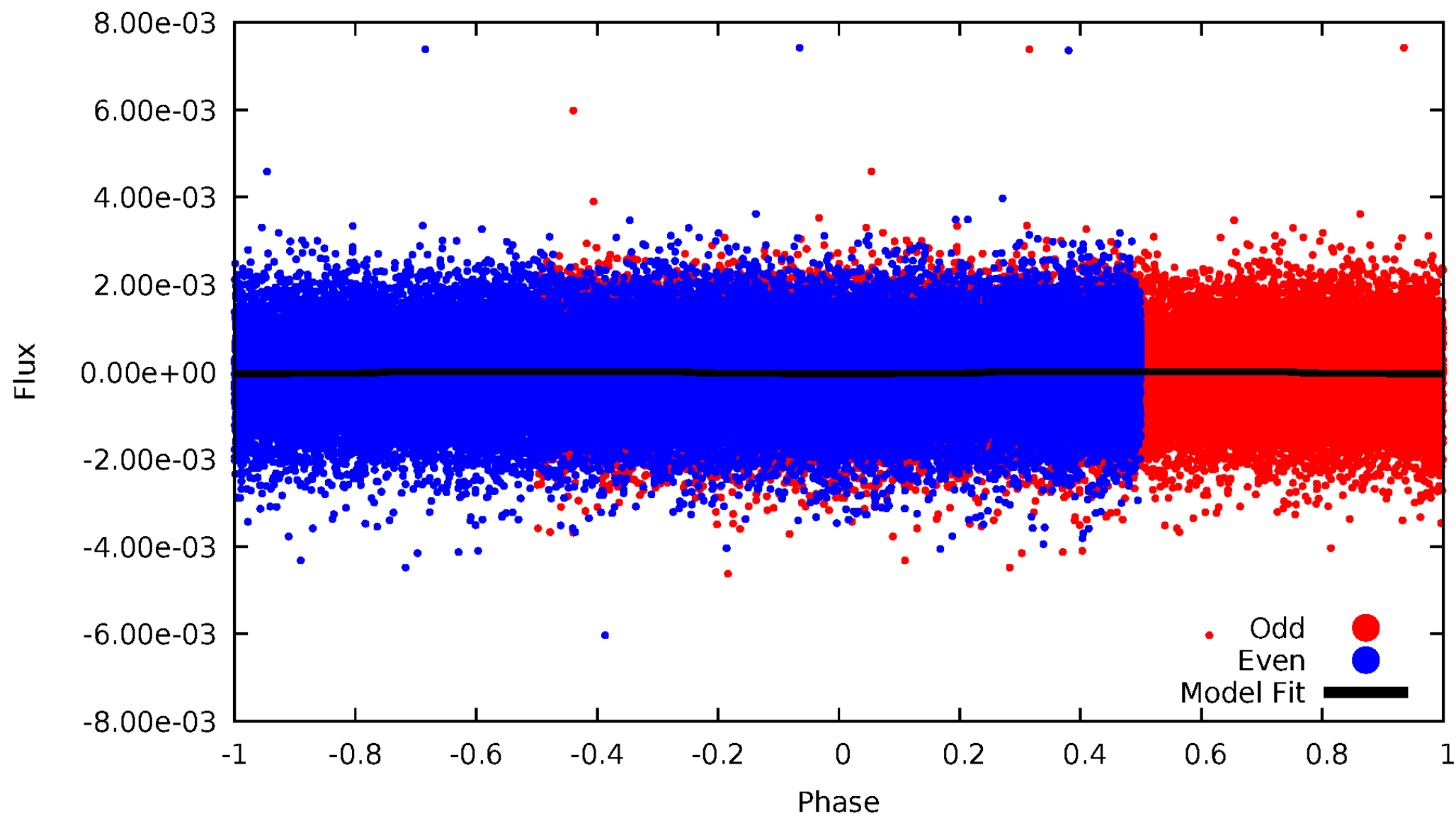
TCE 005725443-01

 P = 1.531 days  P = 3.063 days  P = 6.125 days



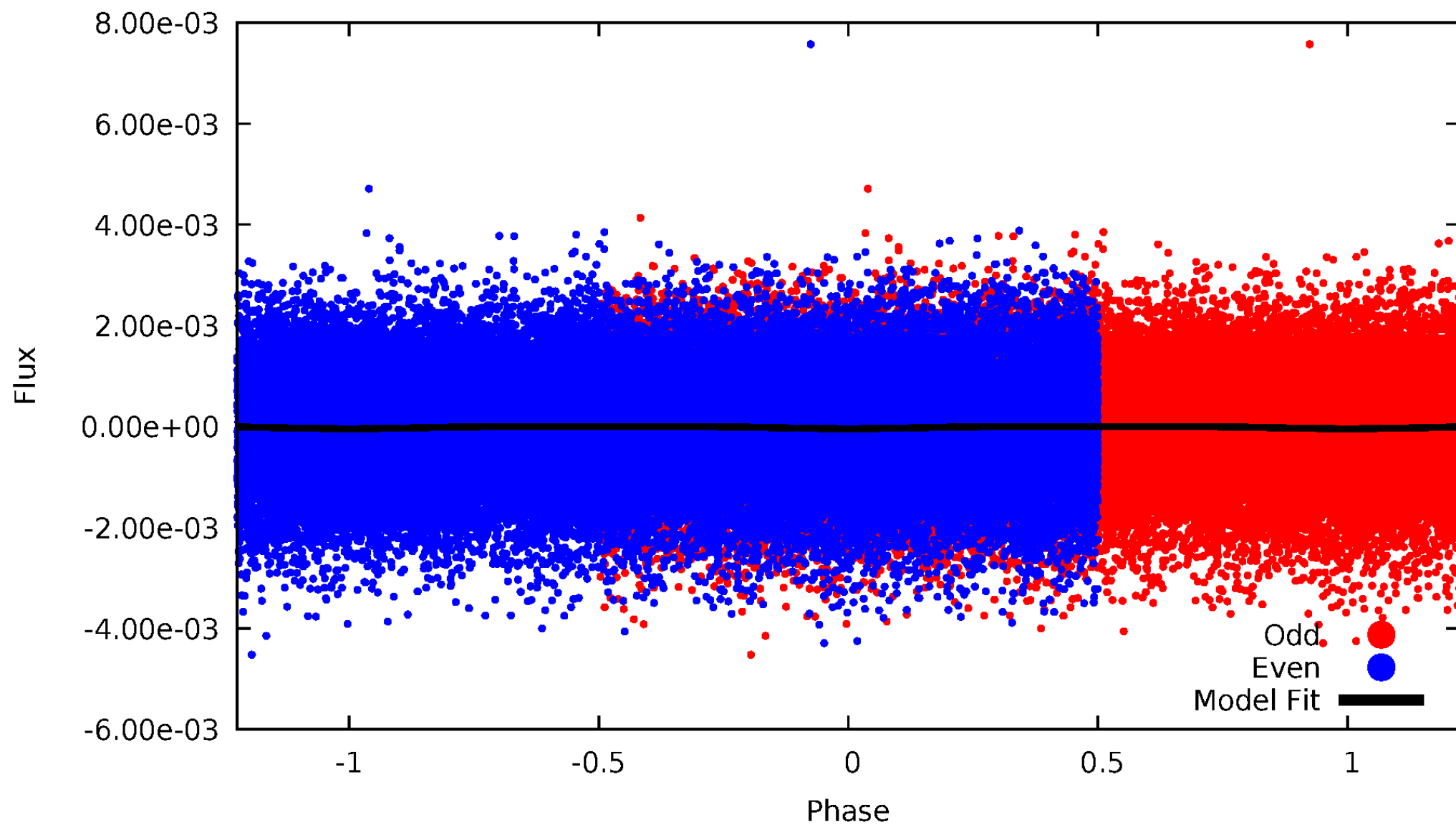
DV Odd/Even

TCE 005725443-01



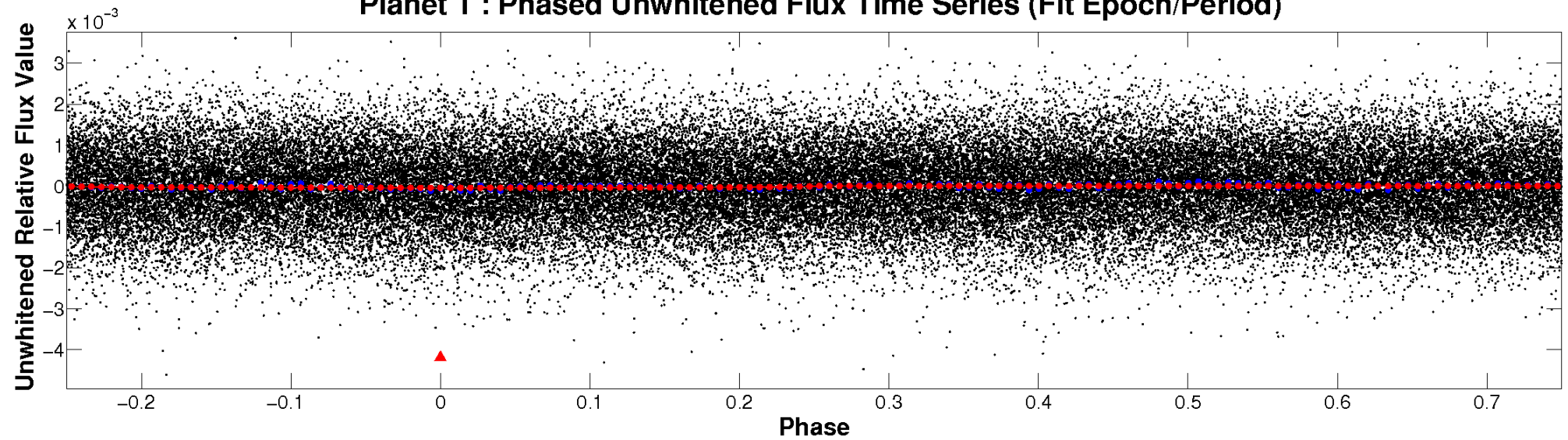
ALT Odd/Even

TCE 005725443-01

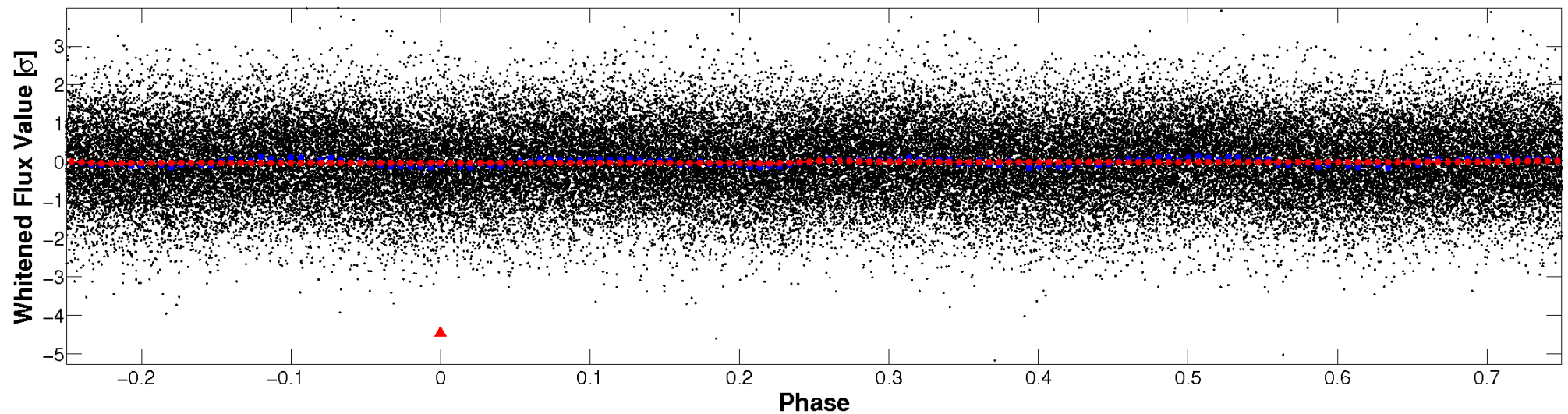


Non-Whitened Vs. Whitened Light Curve

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

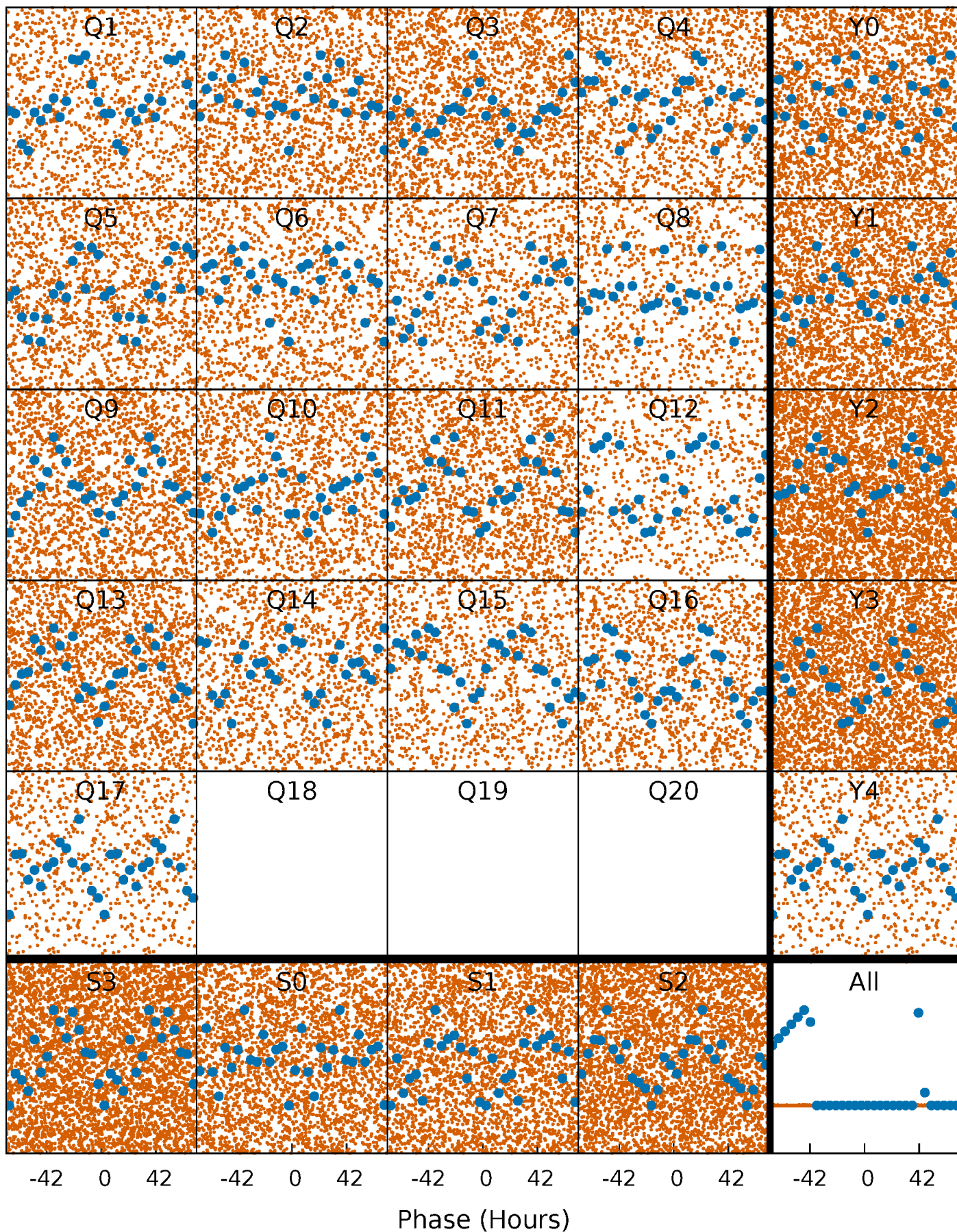


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



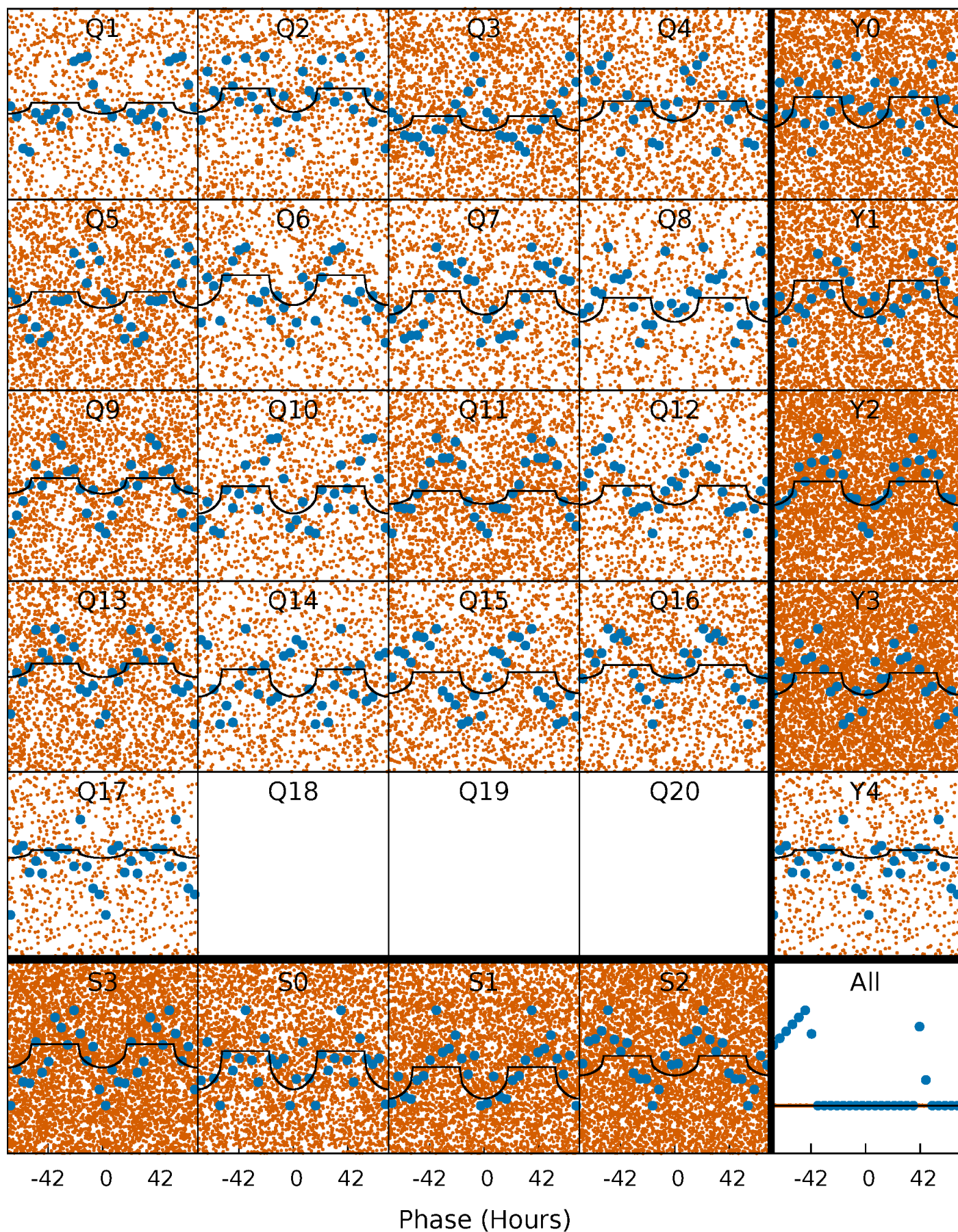
PDC Quarter-Phased Transit Curves

TCE 005725443-01 P= 3.062540 Days $T_0=134.546694$ (BKJD)



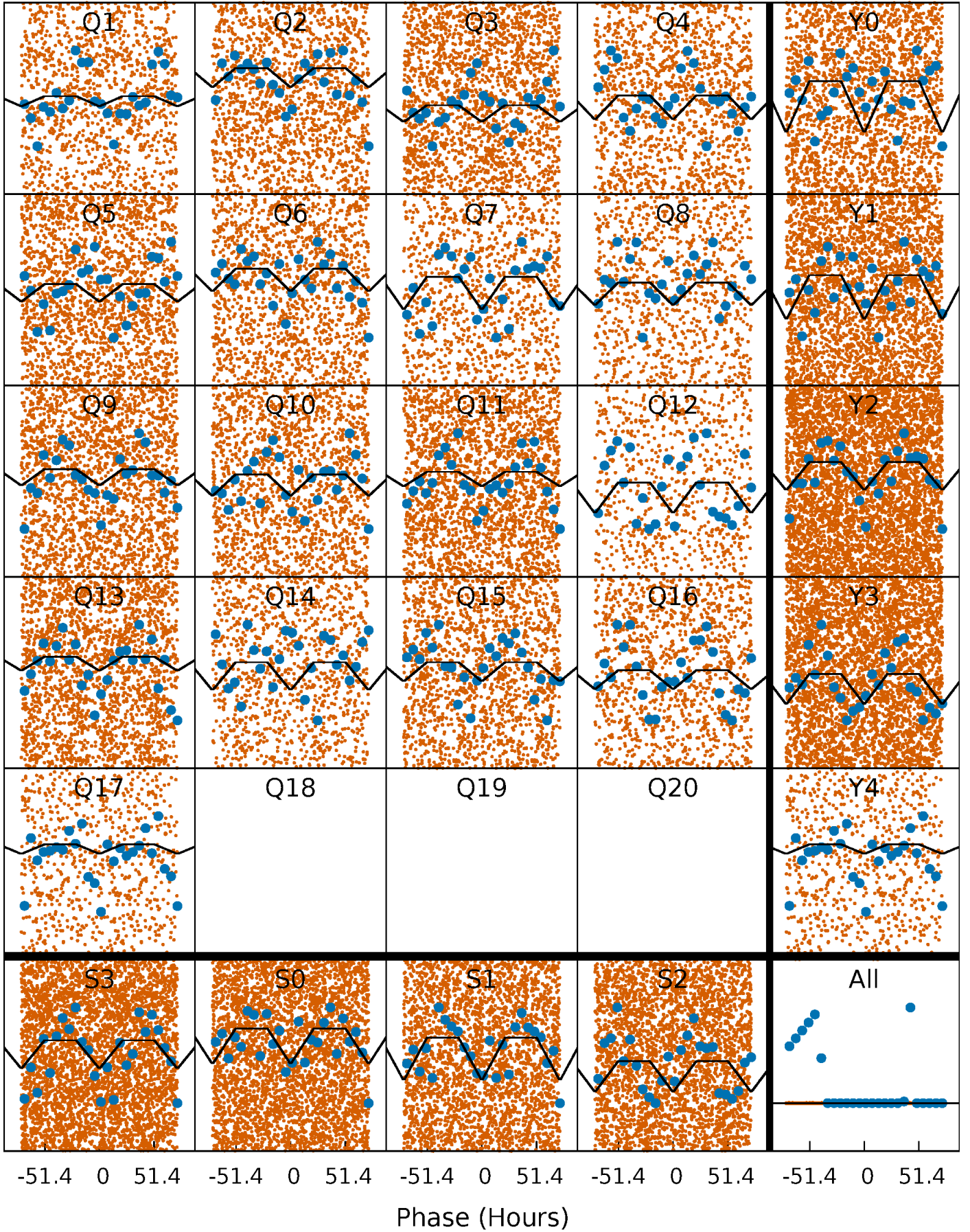
DV Quarter-Phased Transit Curves

TCE 005725443-01 P= 3.062540 Days $T_0=134.546694$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

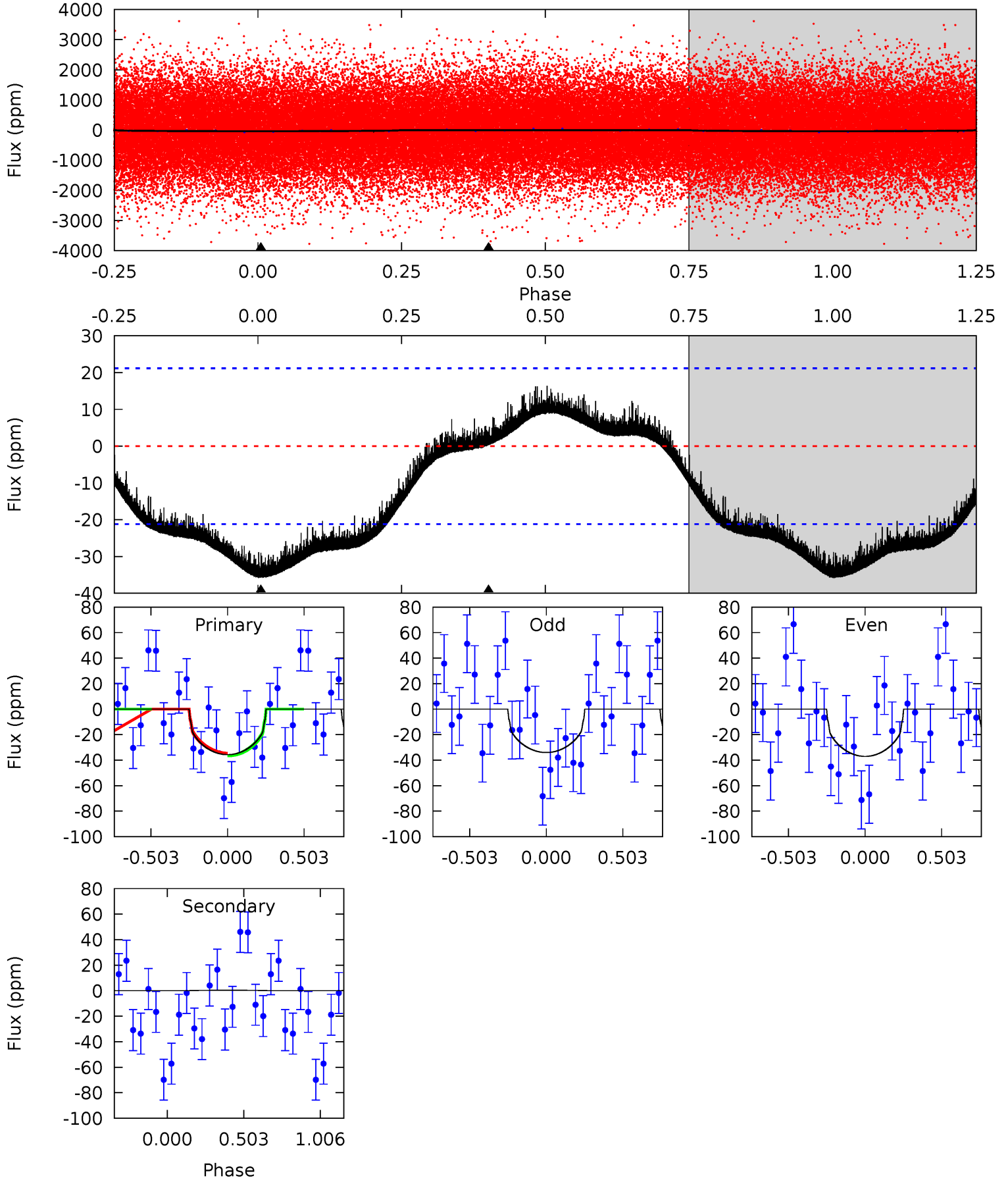
TCE 005725443-01 P= 3.062513 Days $T_0=134.591165$ (BKJD)



DV Model-Shift Uniqueness Test

005725443-01, P = 3.062540 Days, E = 131.484154 Days

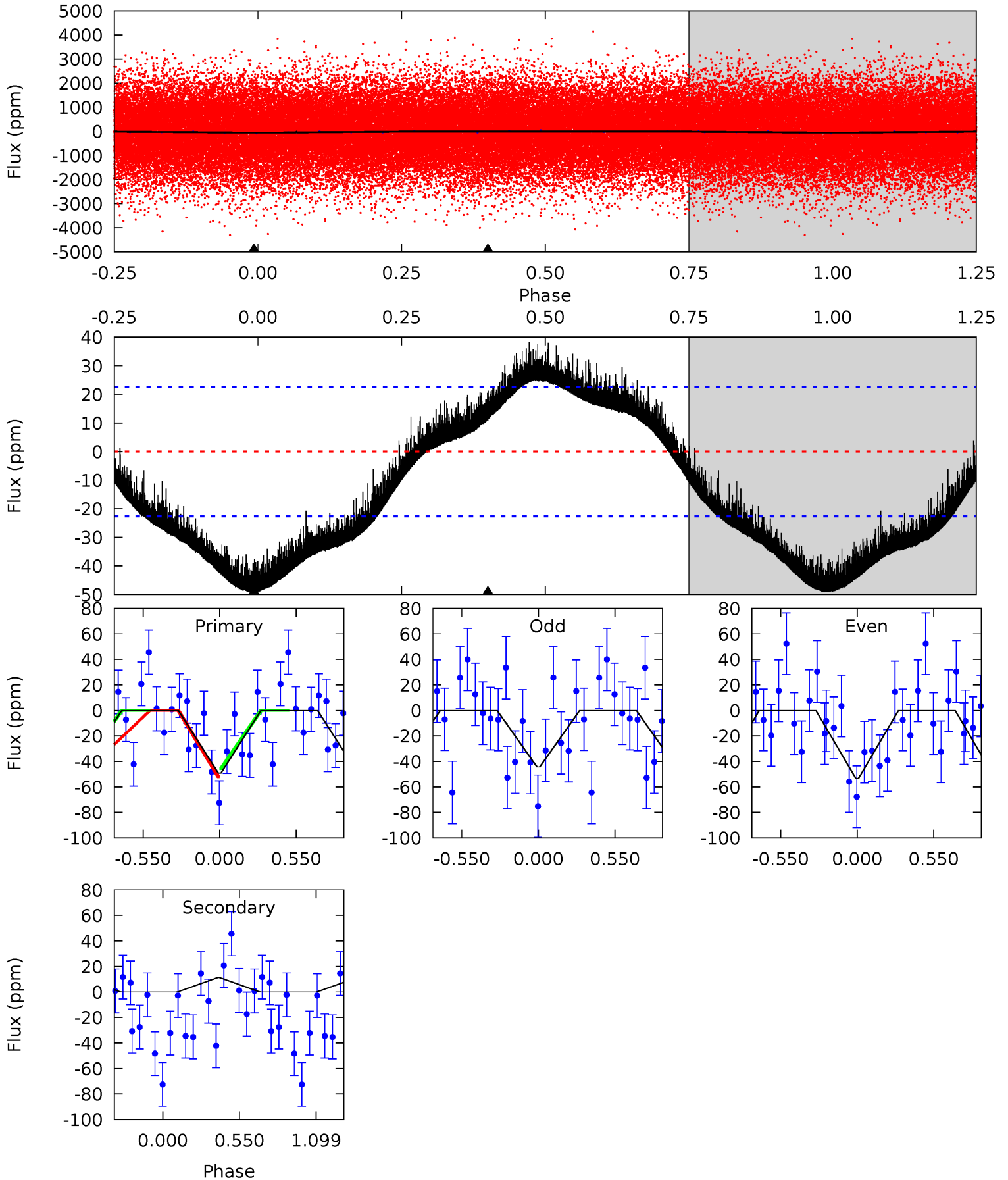
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
7.10	-0.06	0	0	4.21	0.67	0.94	7.10	7.10	-0.06	-0.06	0.29	2.58	0.32	0.20



Alt Model-Shift Uniqueness Test

005725443-01, P = 3.062513 Days, E = 128.466139 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
9.10	-2.07	0	0	4.19	0.60	1.54	9.10	9.10	-2.07	-2.07	0.83	0.78	0.44	0.57



Stellar Parameters For KIC 005725443

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6623^{+161}_{-241}	$4.319^{+0.072}_{-0.203}$	$-0.040^{+0.250}_{-0.350}$	$1.288^{+0.432}_{-0.185}$	$1.266^{+0.187}_{-0.187}$	$0.836^{+0.306}_{-0.428}$
	+2%/-4%	+2%/-5%	+625%/-875%	+34%/-14%	+15%/-15%	+37%/-51%
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 005725443-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	0 ± 5	$0.91^{+0.46}_{-0.46}$	2228^{+162}_{-116}	-2744^{+7087}_{-1791}	$-0.079^{+7.785}_{-9.291}$
Alt.	11 ± 5	$1.00^{+0.44}_{-0.42}$	2226^{+161}_{-119}	-4642^{+714}_{-1480}	$-10.608^{+6.678}_{-26.193}$

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

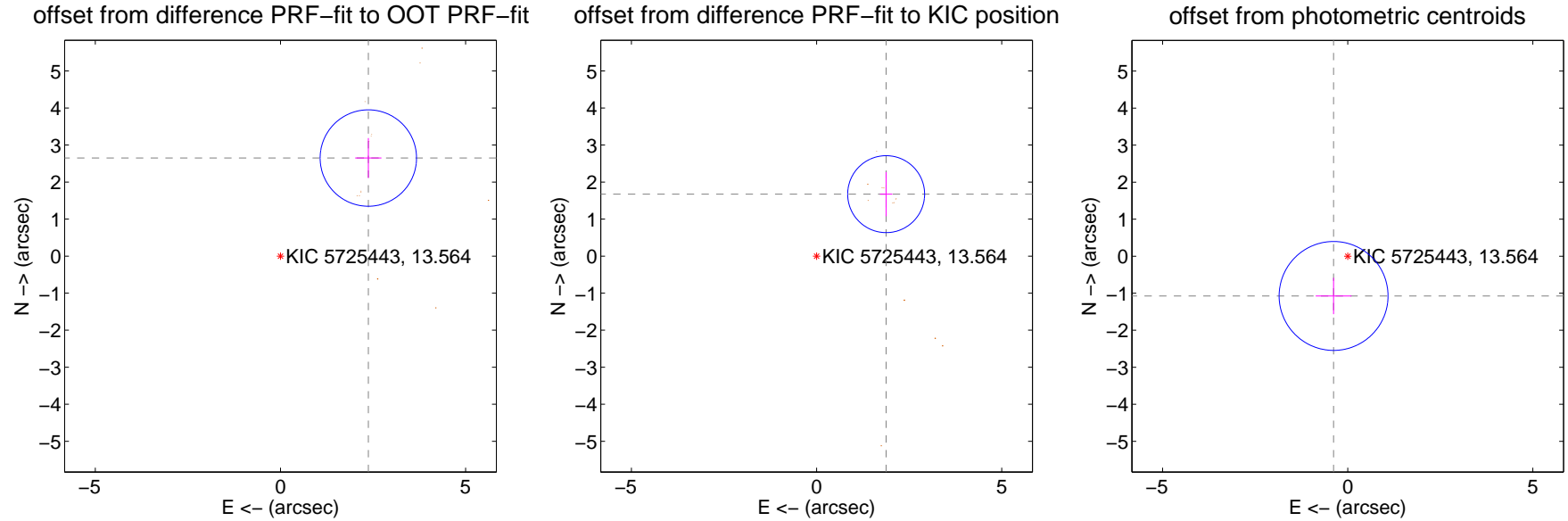
DV Centroid Data

Supplemental centroid analysis for 005725443-01. Kepler magnitude: 13.56. Transit SNR 6.52

There are 0 quarters with good PRF difference image offsets

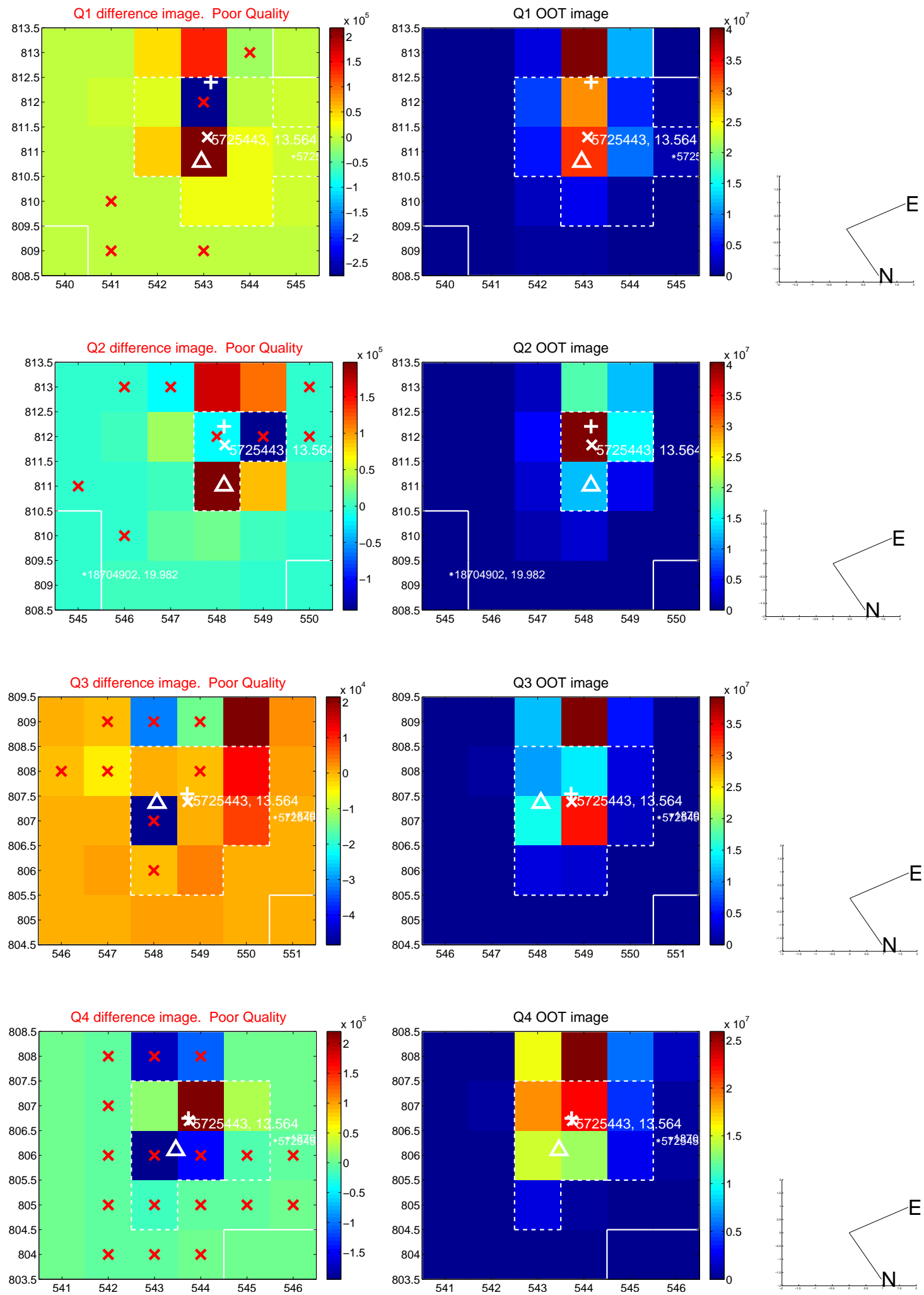
The OOT PRF centroid is offset from the target star catalog position by about 4.41 arcsec so the offset from difference PRF-fit to OOT-fit may be invalid.

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	3.556 ± 0.434	8.20	-2.373 ± 0.355	2.649 ± 0.538
PRF-fit source offset from KIC position	2.516 ± 0.346	7.27	-1.879 ± 0.167	1.673 ± 0.596
photometric centroid source offset	1.14 ± 0.49	2.32	0.38 ± 0.48	-1.07 ± 0.49

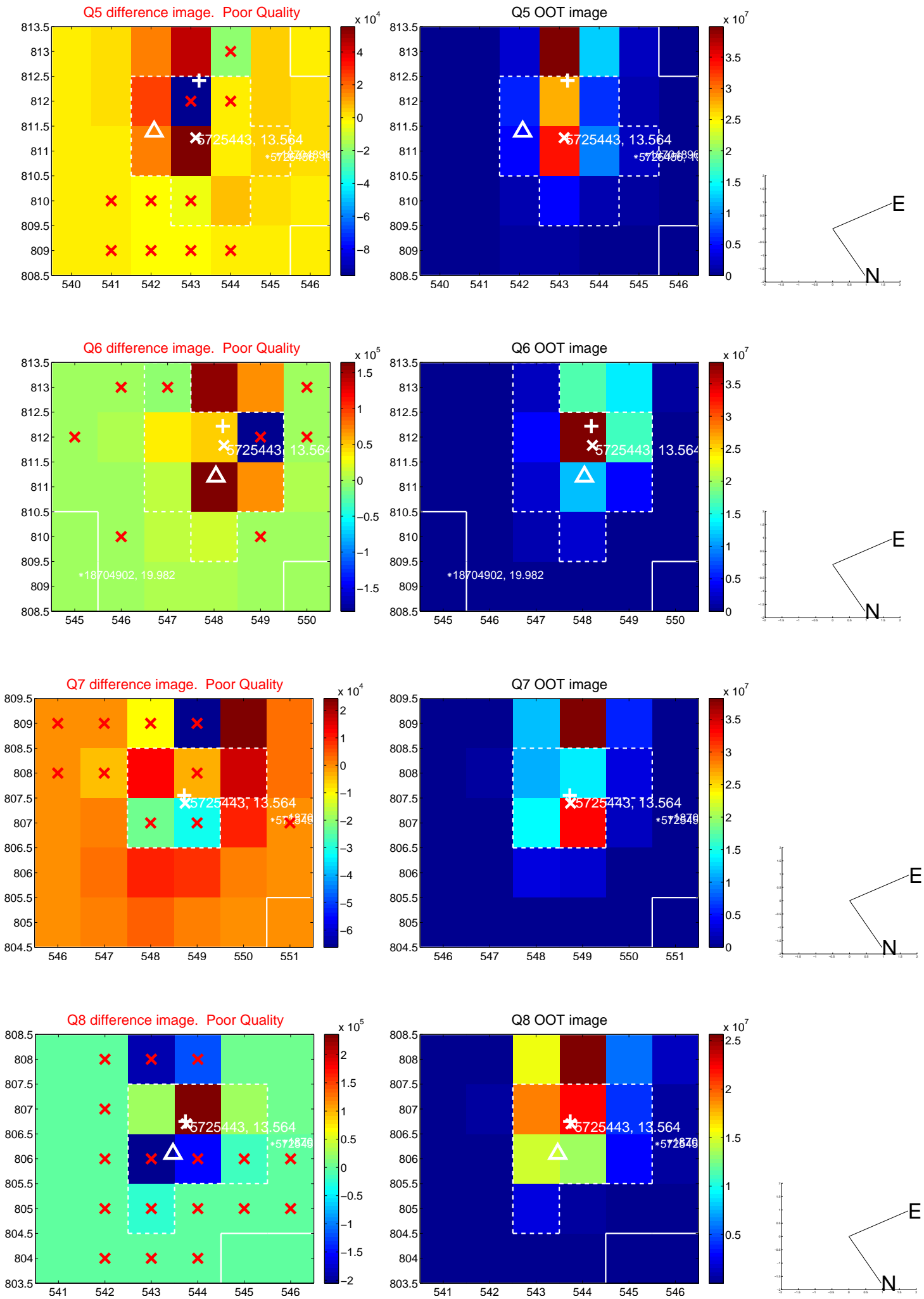


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

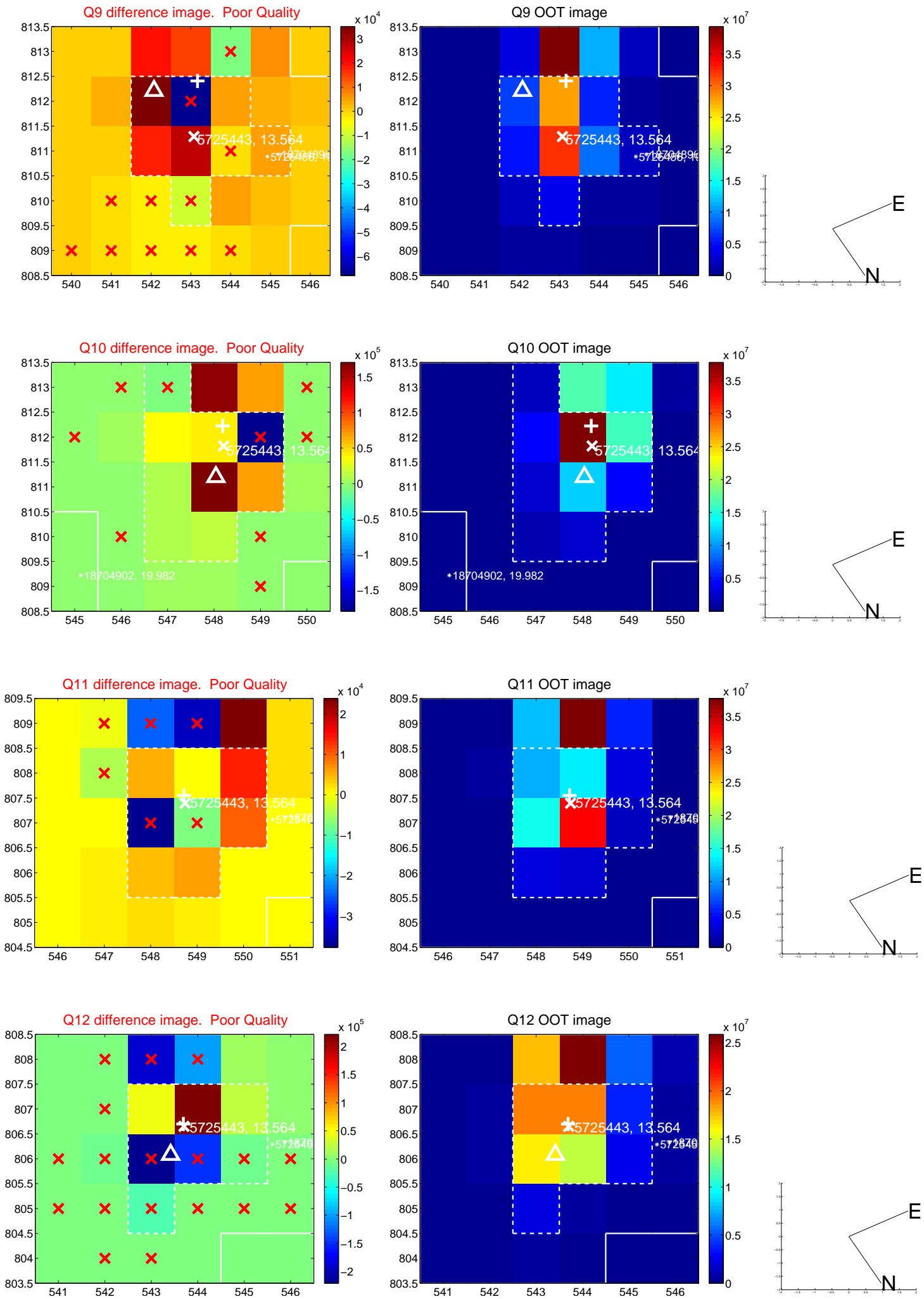
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



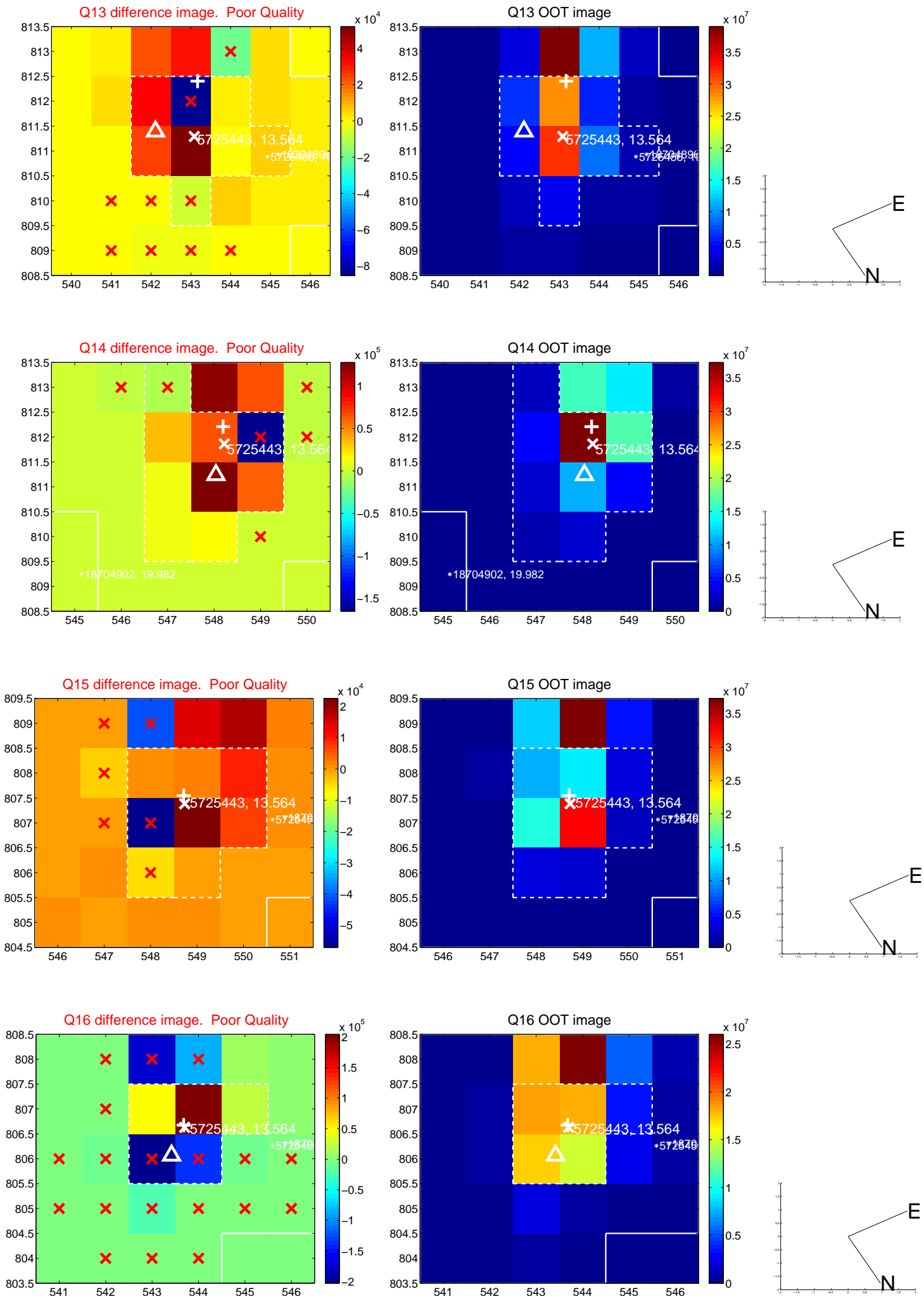
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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.



UKIRT Image

Declination

