

KIC 005511363

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})
005511363-01	OBS	No	0.621775	132.150928	36.7	6.176	9.7	5.0	1.58	6982	0.98	20930.24

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
005511363-01	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.

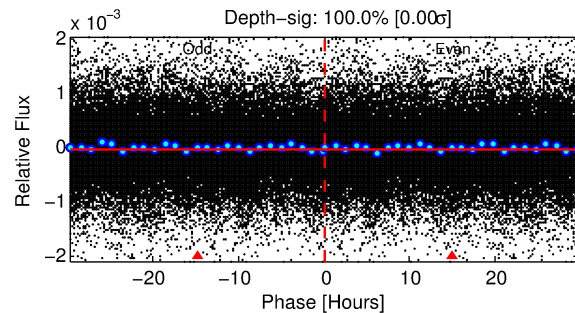
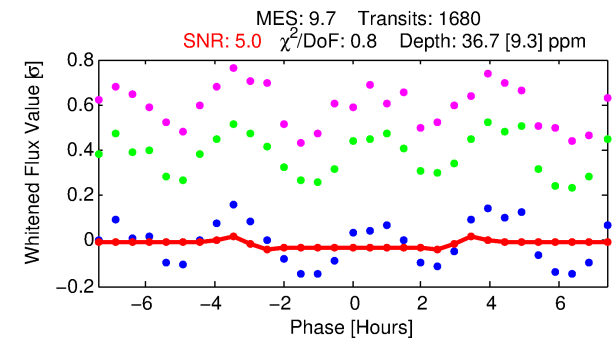
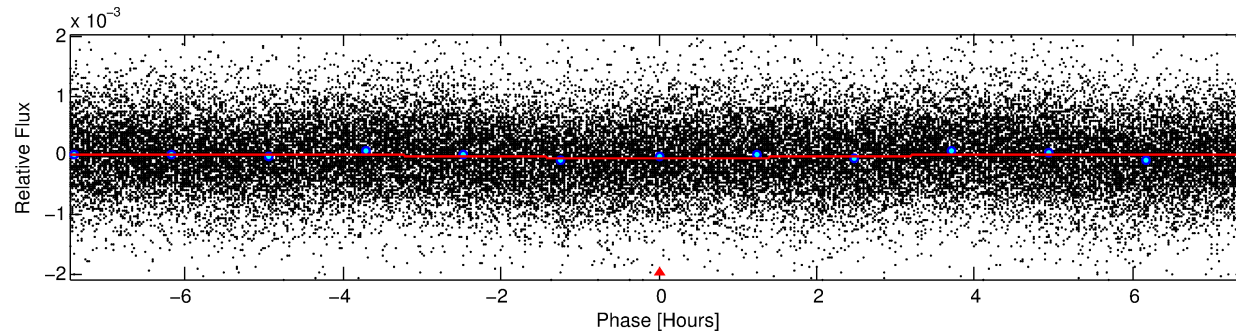
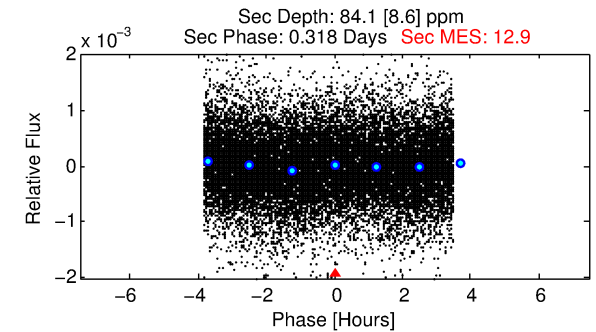
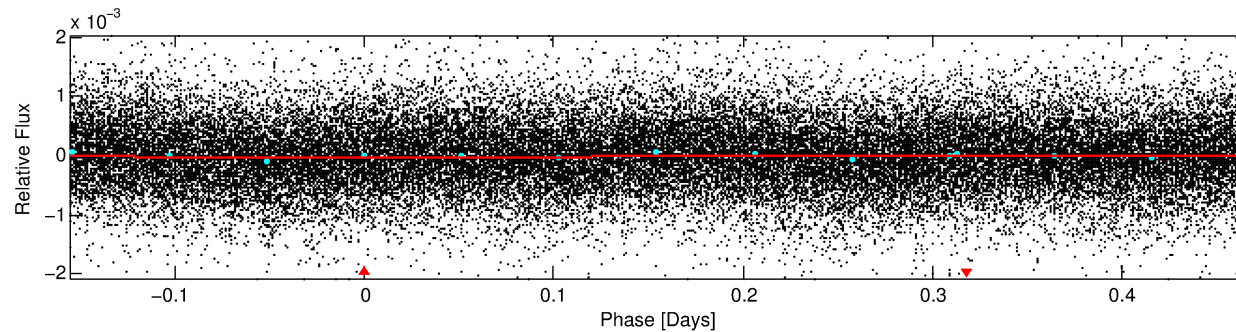
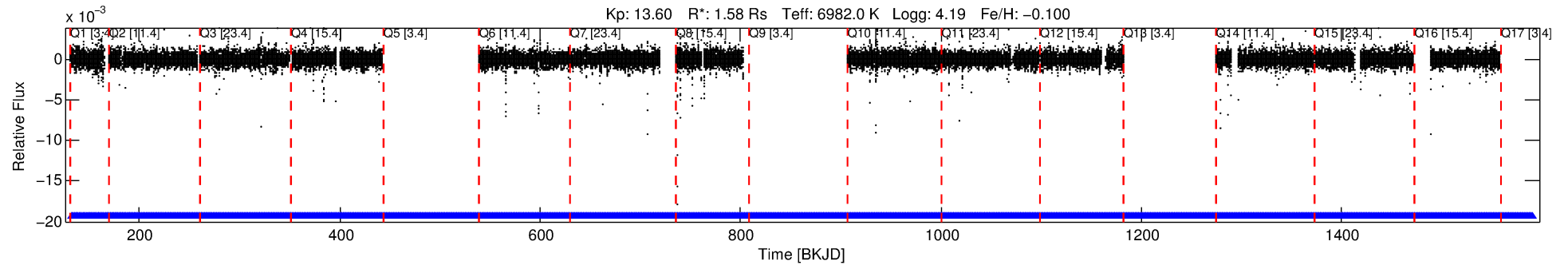
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 005511363-01

No Significant Match Found

DV One-Page Summary

KIC: 5511363 Candidate: 1 of 1 Period: 0.622 d



DV Fit Results:

Period = 0.62177 [0.00002] d
Epoch = 132.1509 [0.0051] BKJD
Rp/R* = 0.0057 [0.0062]
a/R* = 1.04 [0.50]
b = 0.30 [19.66]
Seff = 20930.24 [8288.40]
Teq = 3067 [304] K
Rp = 0.98 [1.12] Re
a = 0.0160 [0.0042] AU
Ag = 12.36 [27.66] [0.41σ]
Teffp = 8892 [4918] K [1.18σ]

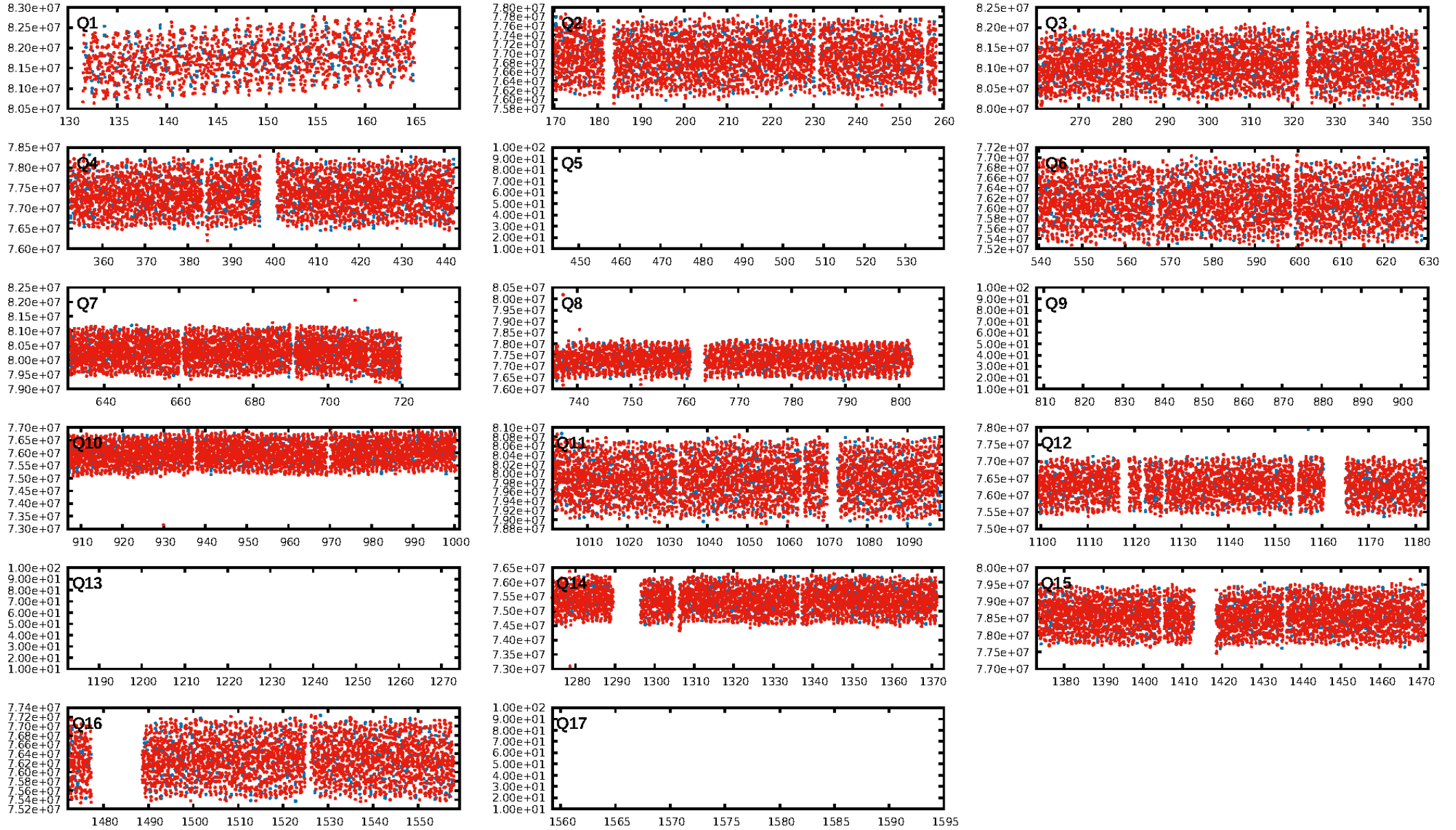
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [1625/1625]
GhostDiagnostic-chr: 6.684
Centroid-sig: 9.9%
Centroid-so: 1.149 arcsec [1.68σ]
OotOffset-rm: N/A
KicOffset-rm: N/A
OotOffset-st: 0/0/0/0 [0]
KicOffset-st: 0/0/0/0 [0]
DiffImageQuality-fgm: N/A
DiffImageOverlap-fno: 1.00 [13/13]

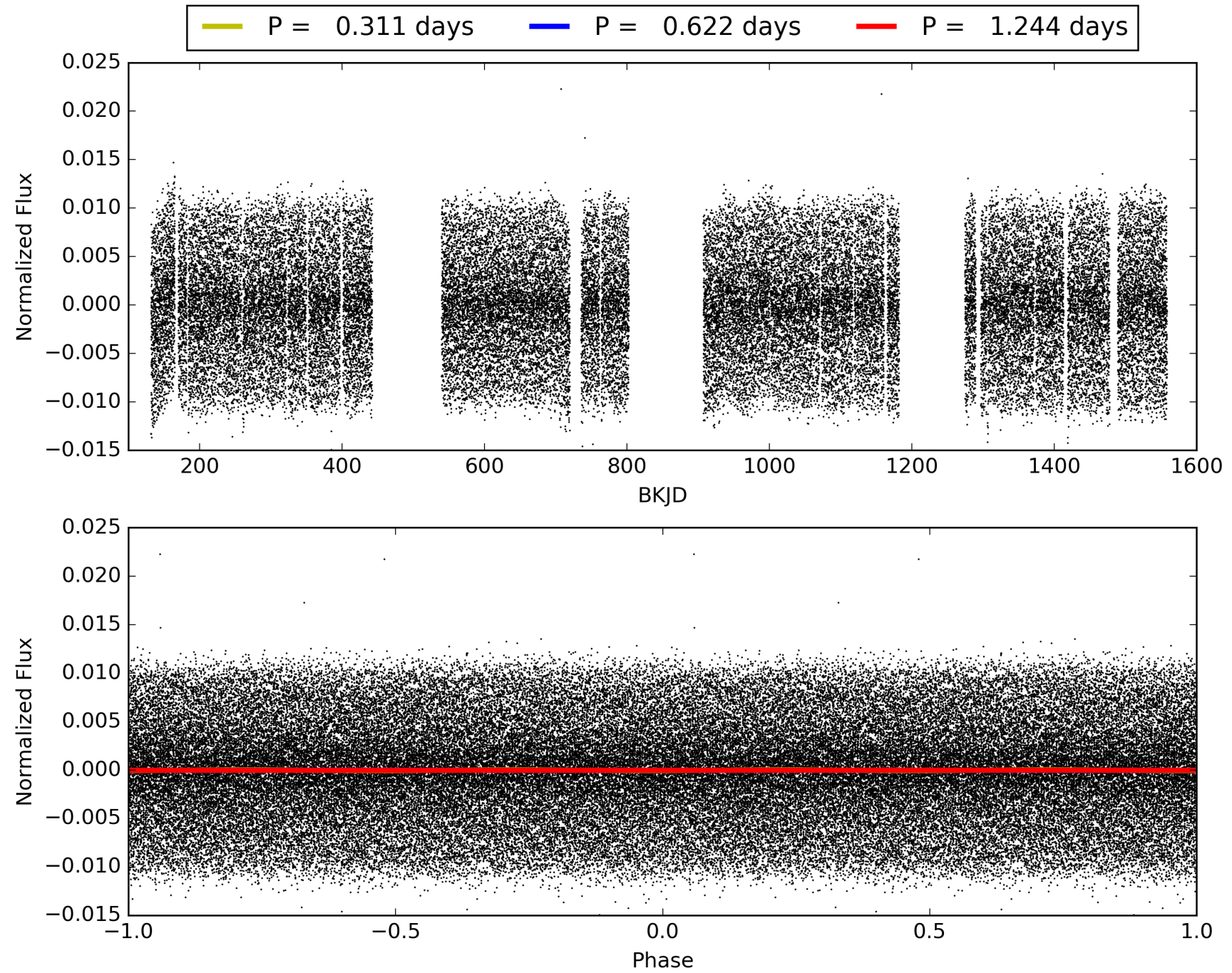
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 01-Feb-2016 04:00:29 Z

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

TCE 005511363-01, PDC Light Curves

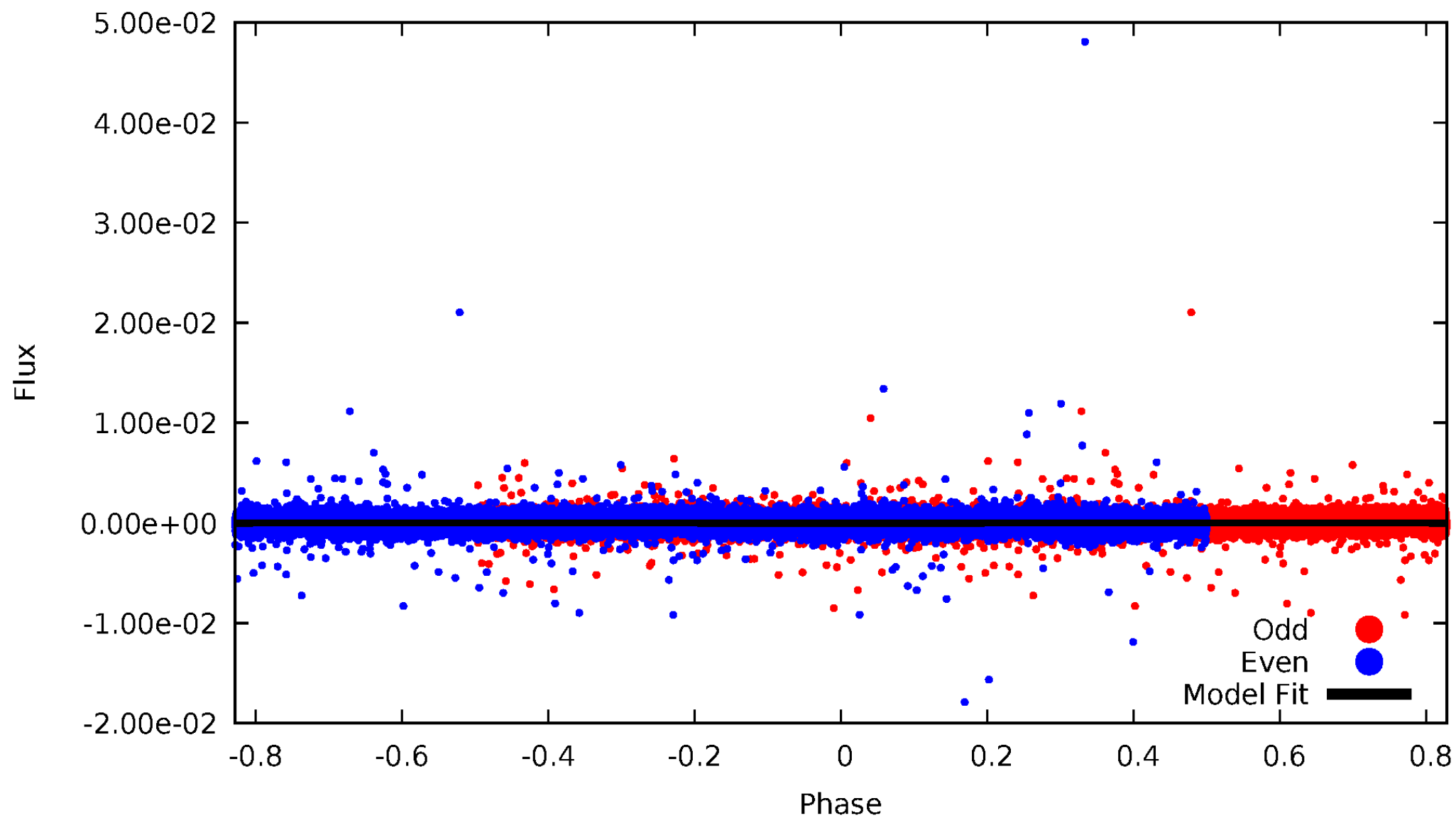


TCE 005511363-01



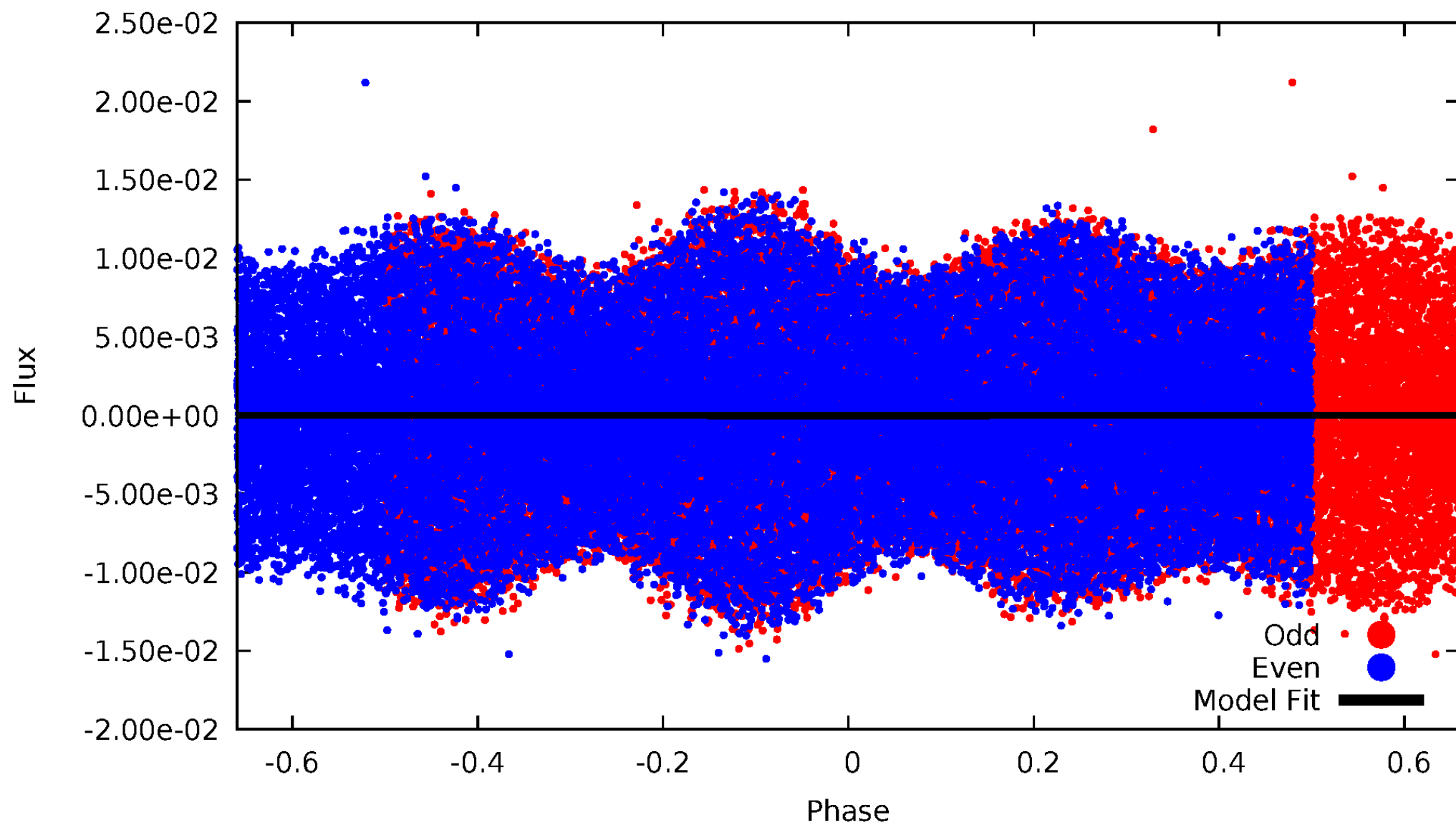
DV Odd/Even

TCE 005511363-01



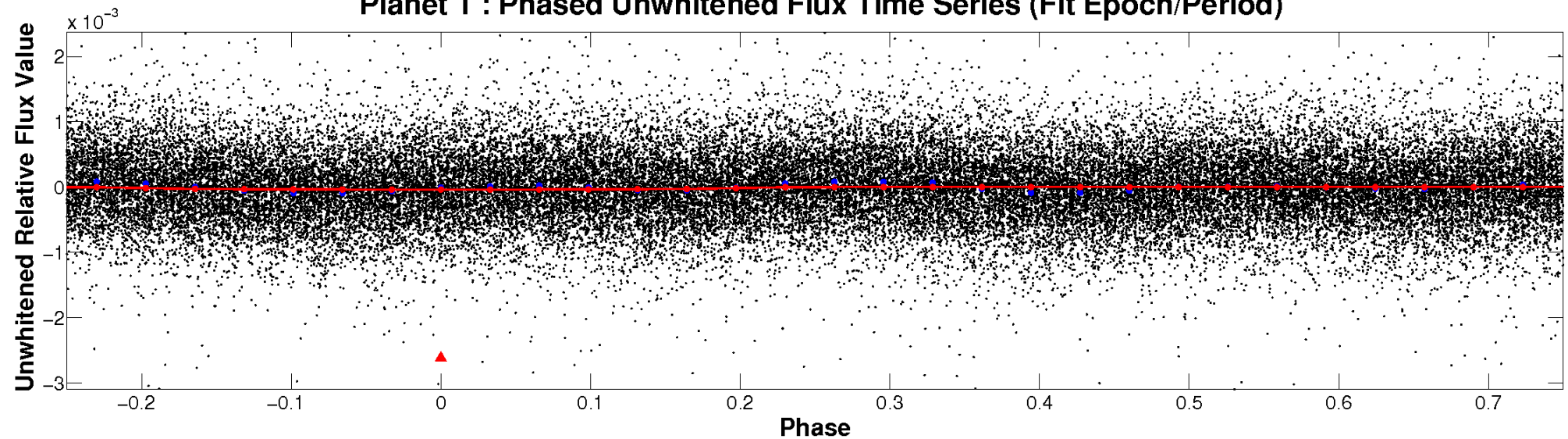
ALT Odd/Even

TCE 005511363-01

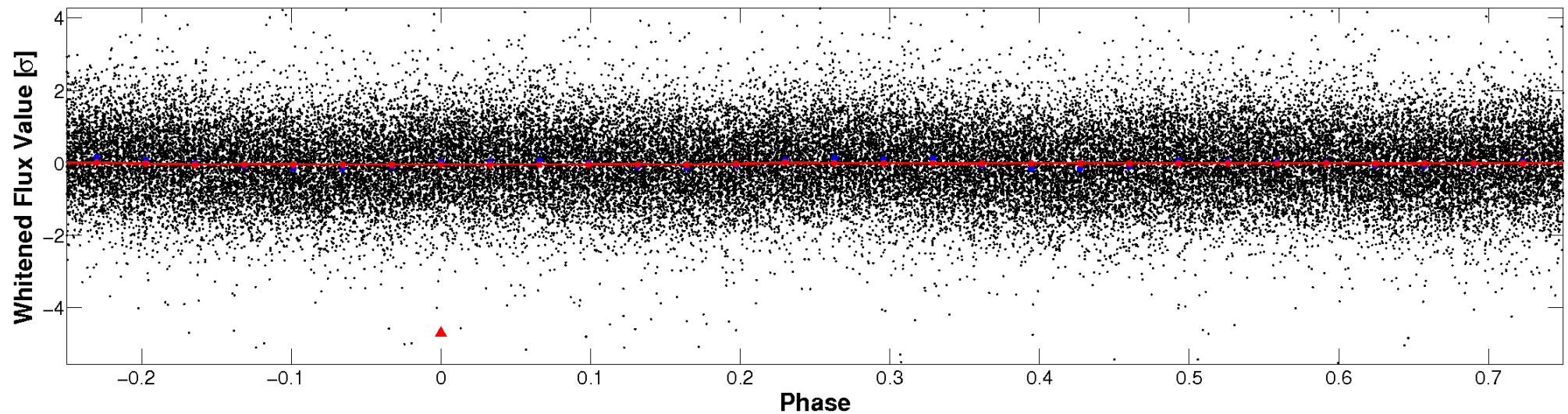


Non-Whitened Vs. Whitened Light Curve

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

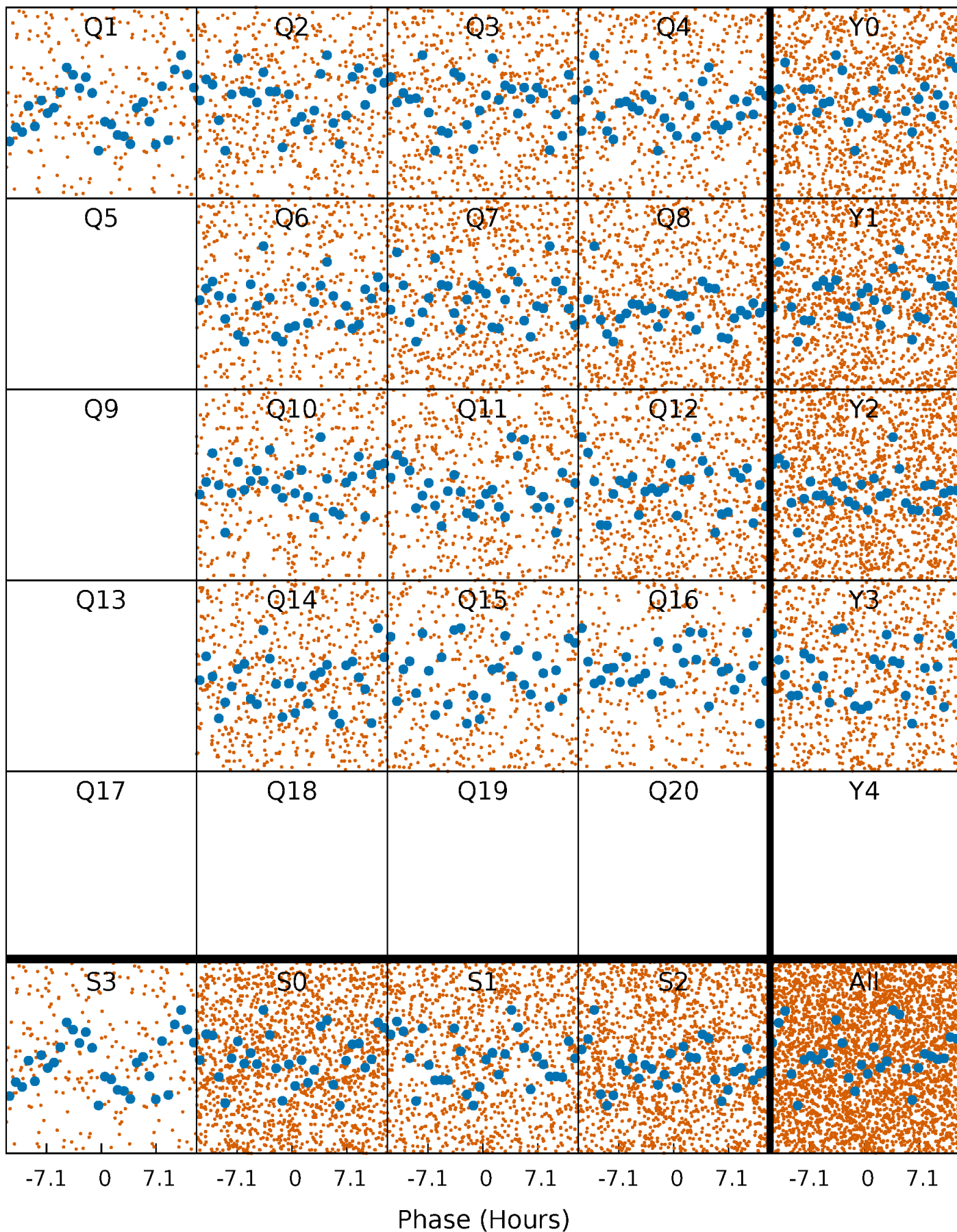


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



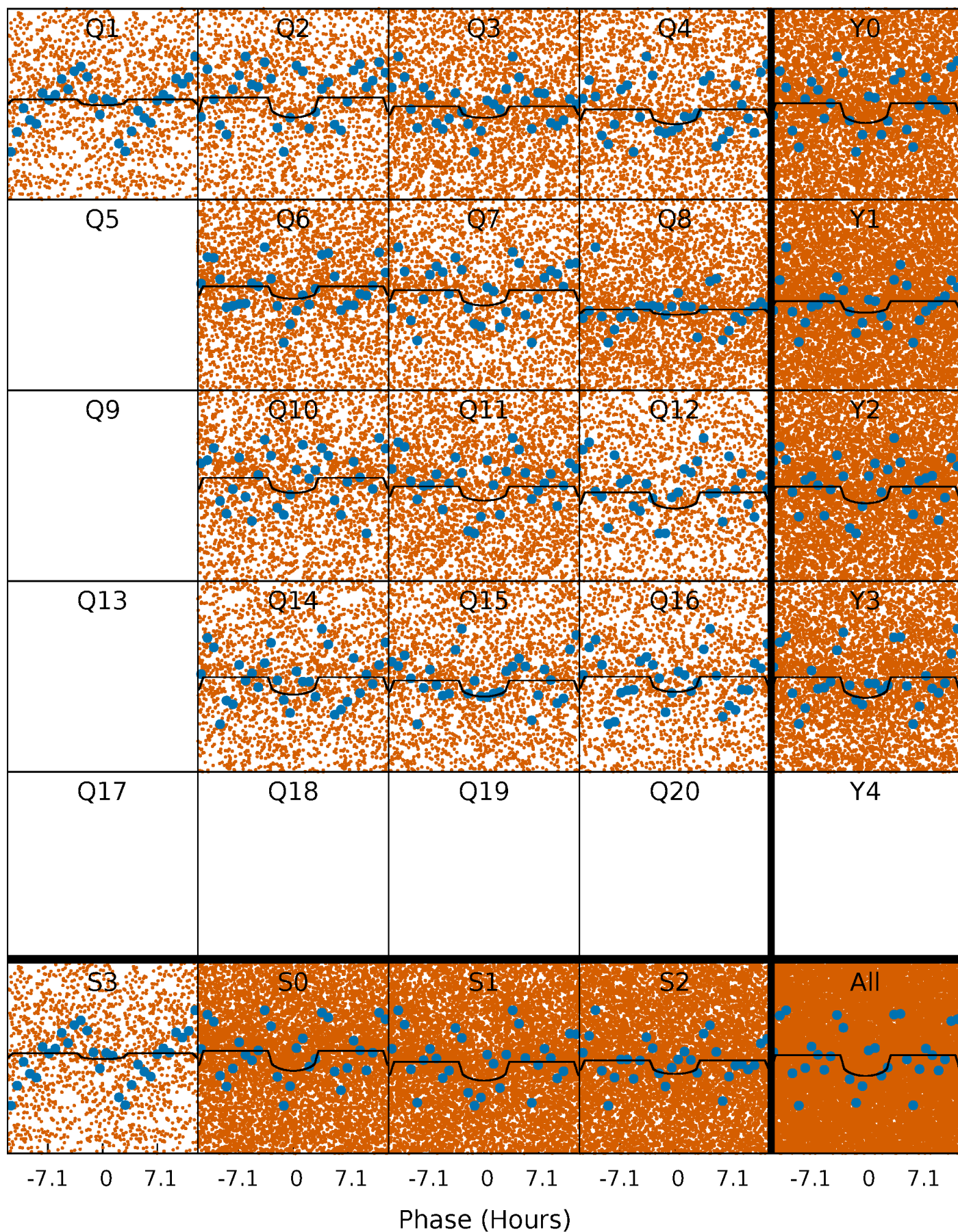
PDC Quarter-Phased Transit Curves

TCE 005511363-01 P= 0.621775 Days $T_0=132.150928$ (BKJD)



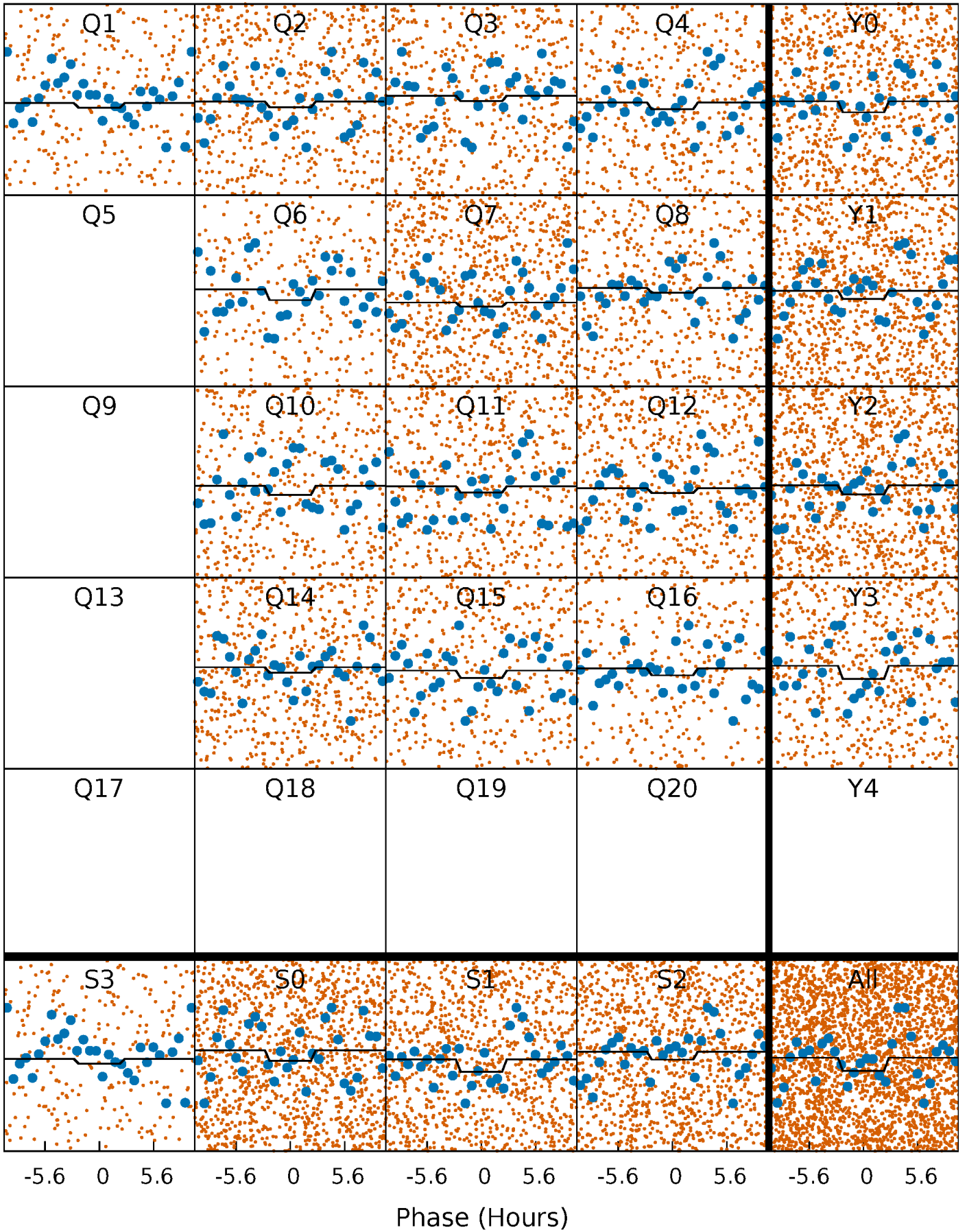
DV Quarter-Phased Transit Curves

TCE 005511363-01 P= 0.621775 Days $T_0=132.150928$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

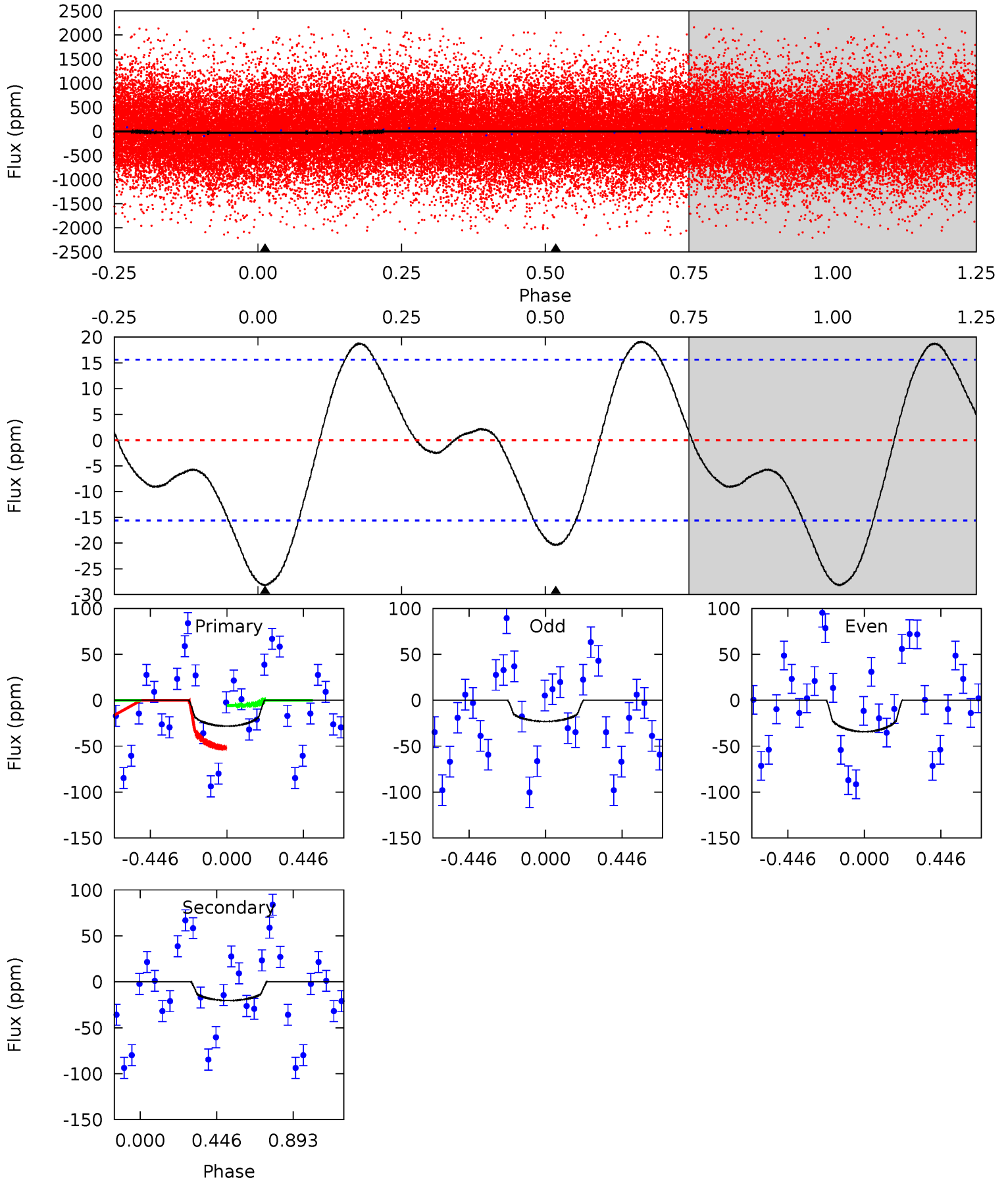
TCE 005511363-01 P= 0.621775 Days $T_0=132.150928$ (BKJD)



DV Model-Shift Uniqueness Test

005511363-01, P = 0.621775 Days, E = 130.907378 Days

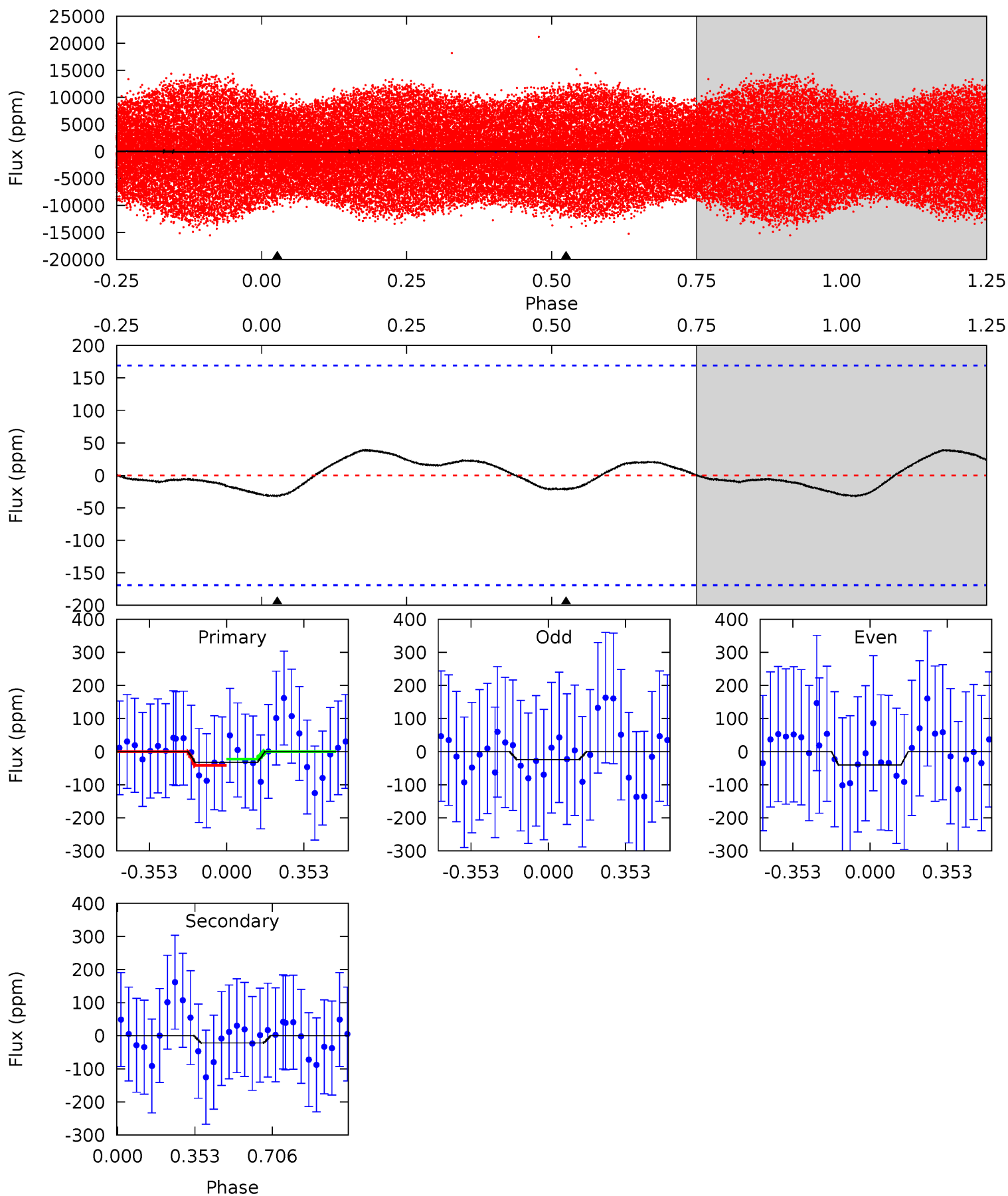
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
7.66	5.53	0	0	4.24	0.76	1.03	7.66	7.66	5.53	5.53	1.54	1.08	0.40	6.30



Alt Model-Shift Uniqueness Test

005511363-01, P = 0.621775 Days, E = 130.907378 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
0.82	0.56	0	0	4.29	0.93	0.30	0.82	0.82	0.56	0.56	0.22	3.81	0.55	0.28



Stellar Parameters For KIC 005511363

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6982^{+170}_{-267}	$4.186^{+0.128}_{-0.192}$	$-0.100^{+0.250}_{-0.350}$	$1.582^{+0.512}_{-0.298}$	$1.411^{+0.195}_{-0.238}$	$0.502^{+0.327}_{-0.267}$
	+2%/-4%	+3%/-5%	+250%/-350%	+32%/-19%	+14%/-17%	+65%/-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 005511363-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-20 ± 4	$1.21^{+1.04}_{-0.76}$	4304^{+334}_{-272}	5334^{+4075}_{-1546}	$1.881^{+11.337}_{-1.336}$
Alt.	-22 ± 39	$1.27^{+0.95}_{-0.81}$	4301^{+340}_{-263}	5082^{+4701}_{-10460}	$1.487^{+12.258}_{-2.845}$

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 $A_{obs} \gg 1.0$

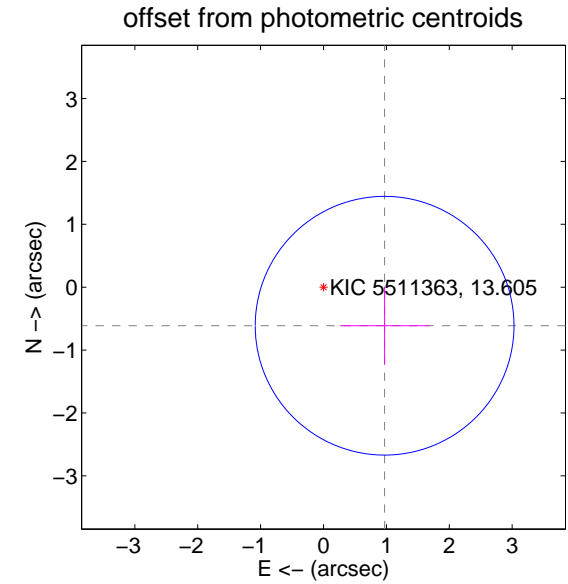
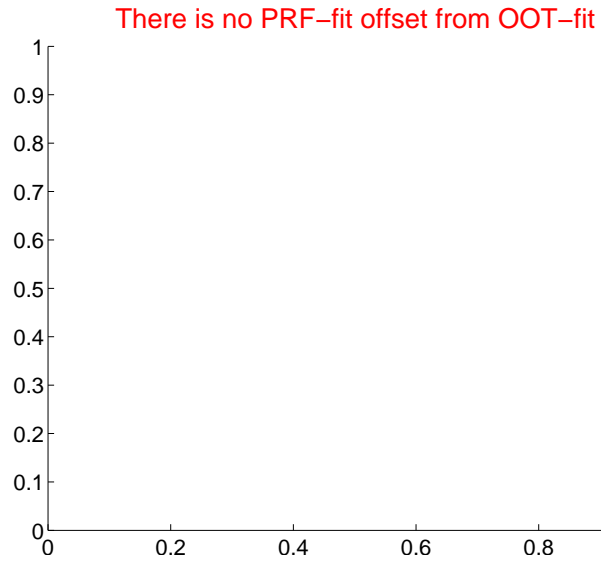
DV Centroid Data

Supplemental centroid analysis for 005511363-01. Kepler magnitude: 13.61. Transit SNR 4.98

There are 0 quarters with good PRF difference image offsets

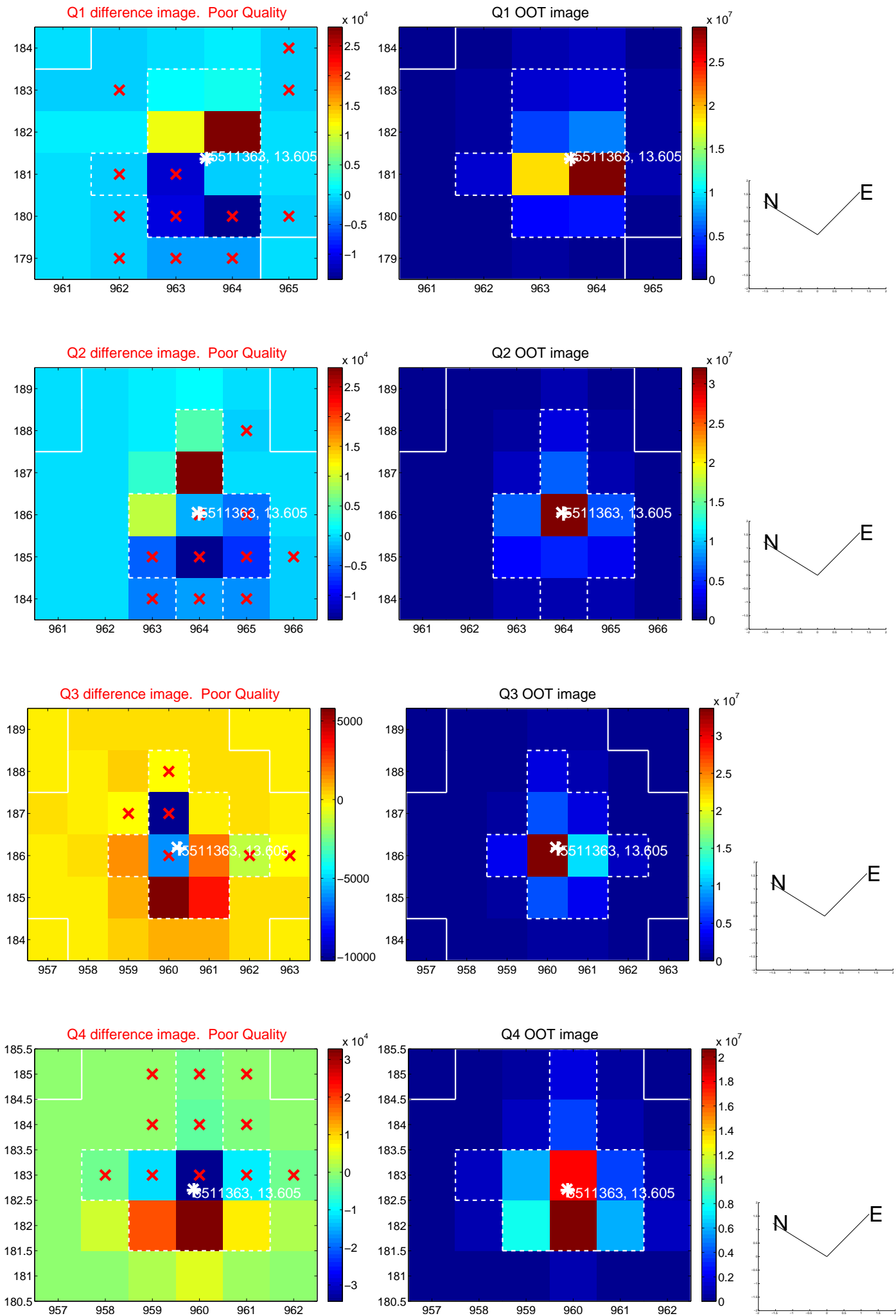
The direct PRF centroid is offset from the target star catalog position by about NaN arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	—	—	—	—
PRF-fit source offset from KIC position	—	—	—	—
photometric centroid source offset	1.15 ± 0.69	1.68	-0.97 ± 0.71	-0.61 ± 0.62

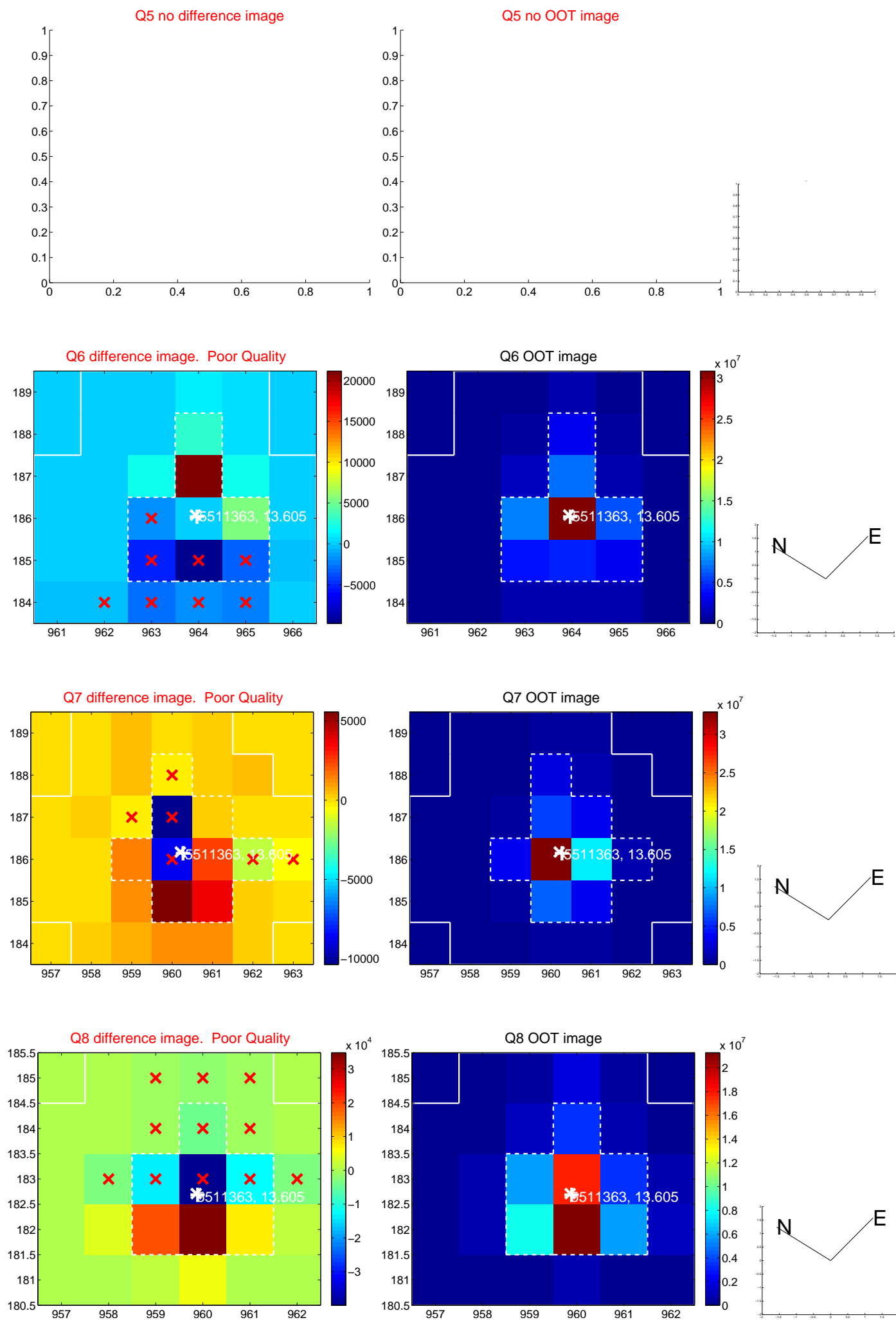


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

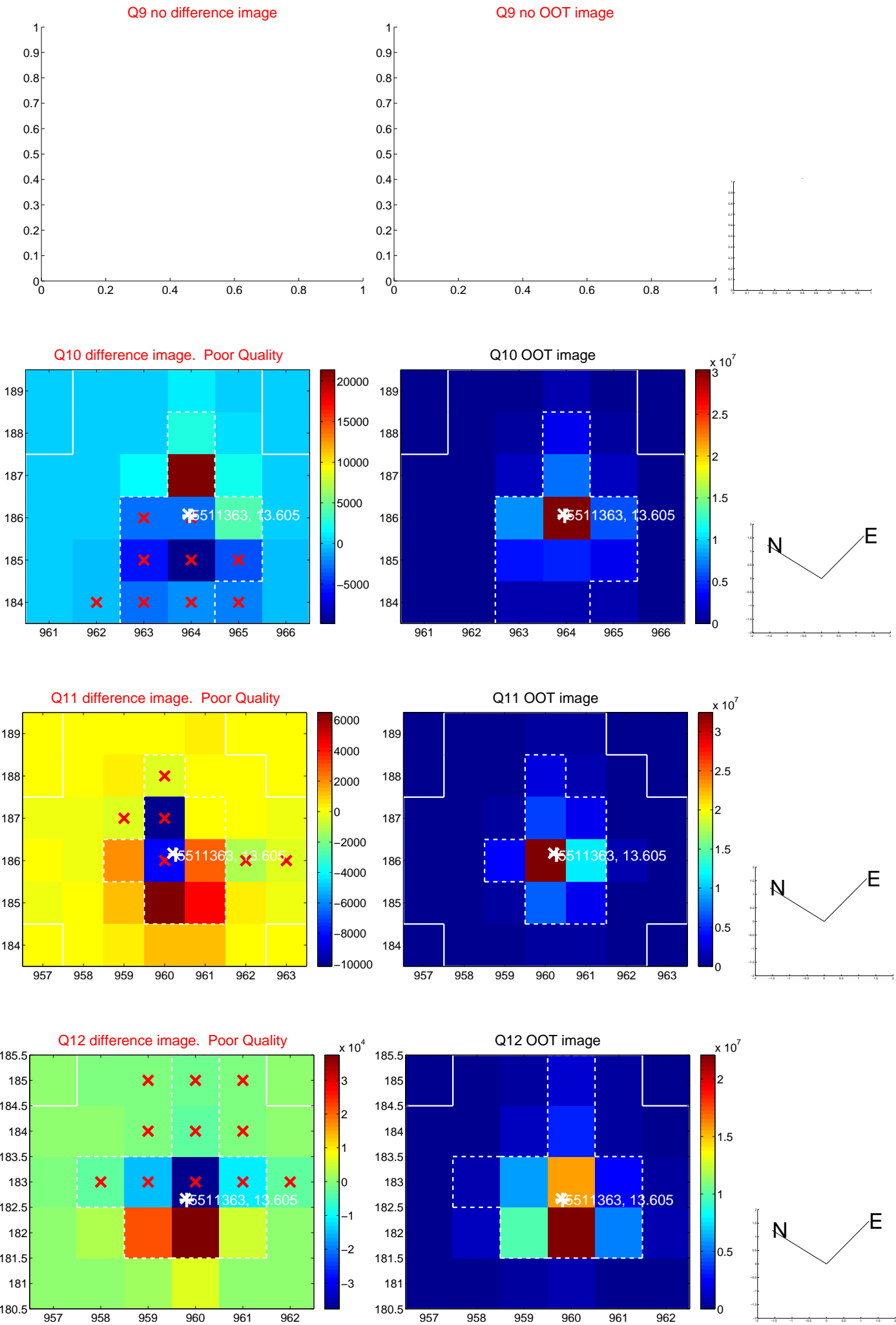
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



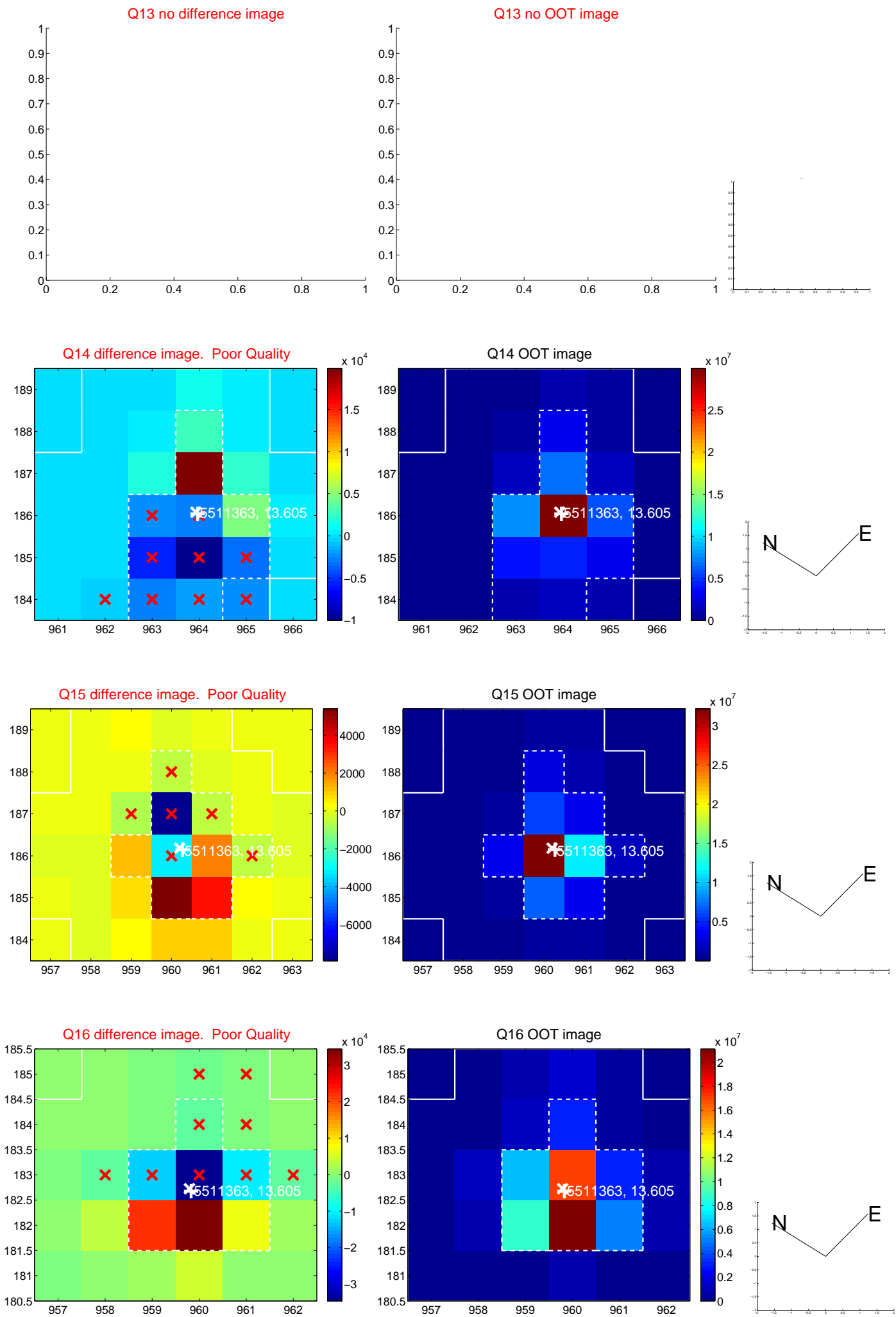
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value



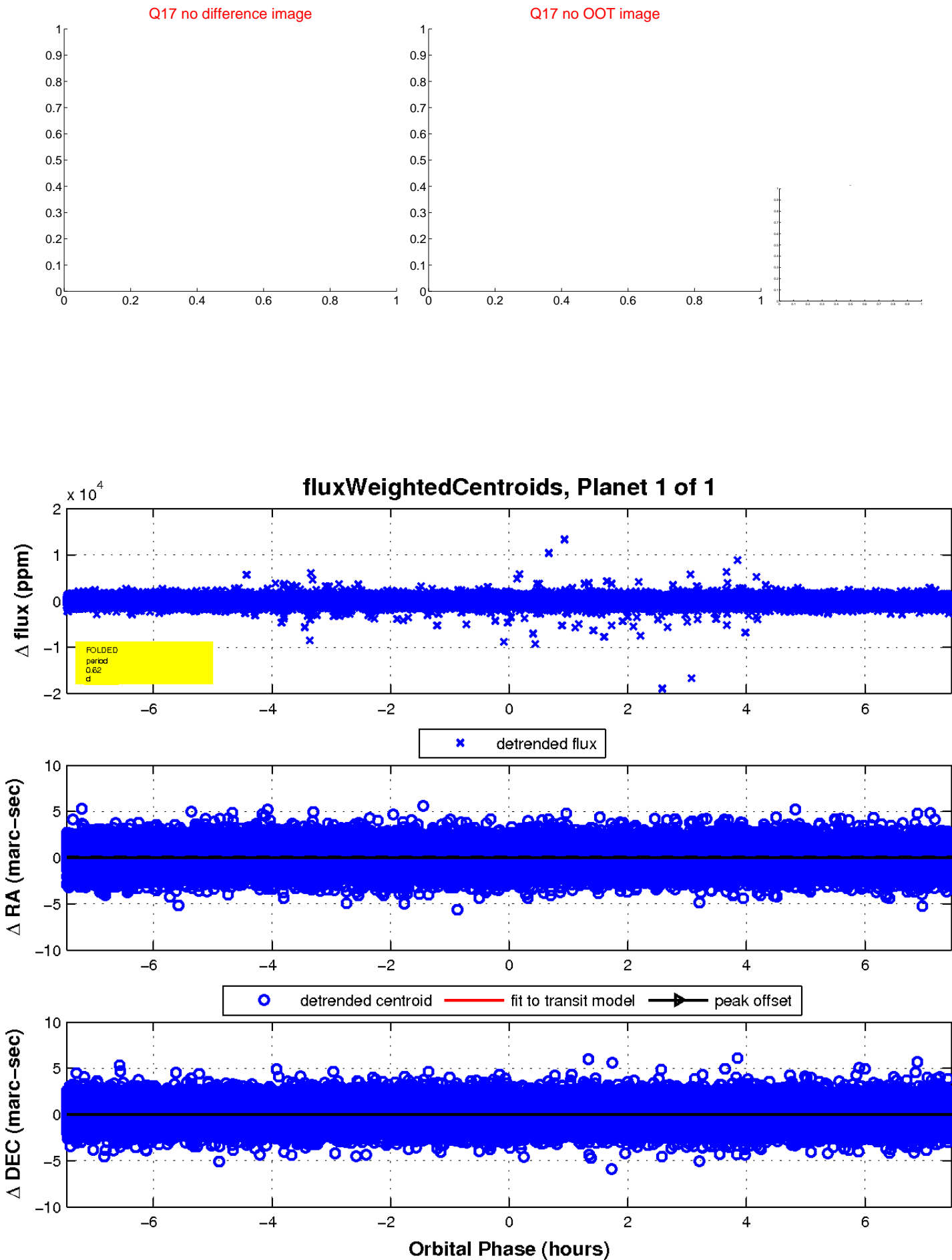
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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.



UKIRT Image

Declination

