

KIC 007363405

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})
007363405-01	OBS	No	2.221729	133.106349	2.1	19.387	12.9	7.4	2.72	7837	0.41	13784.95

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
007363405-01	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—CENT_SATURATED

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

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

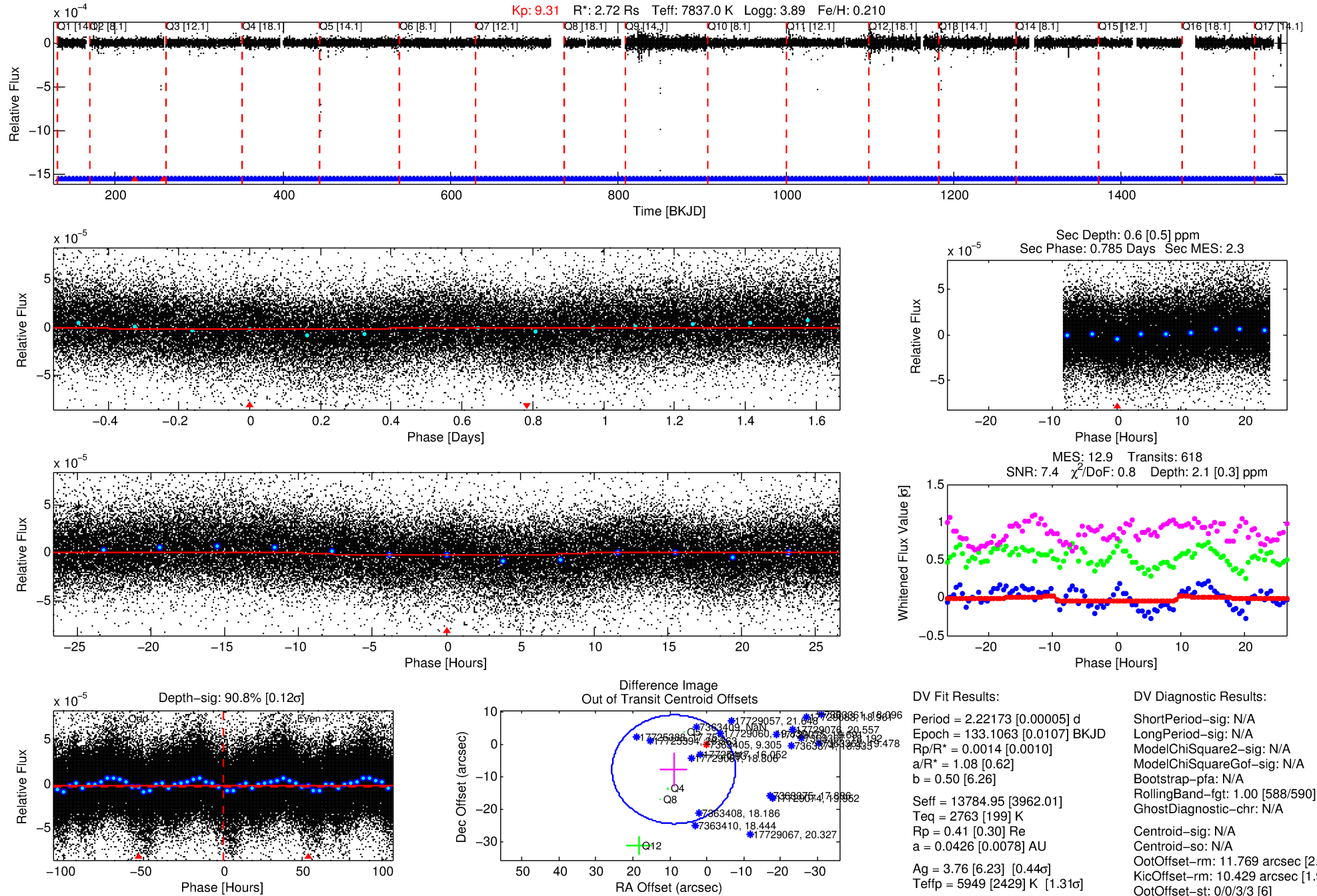
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 007363405-01

No Significant Match Found

DV One-Page Summary

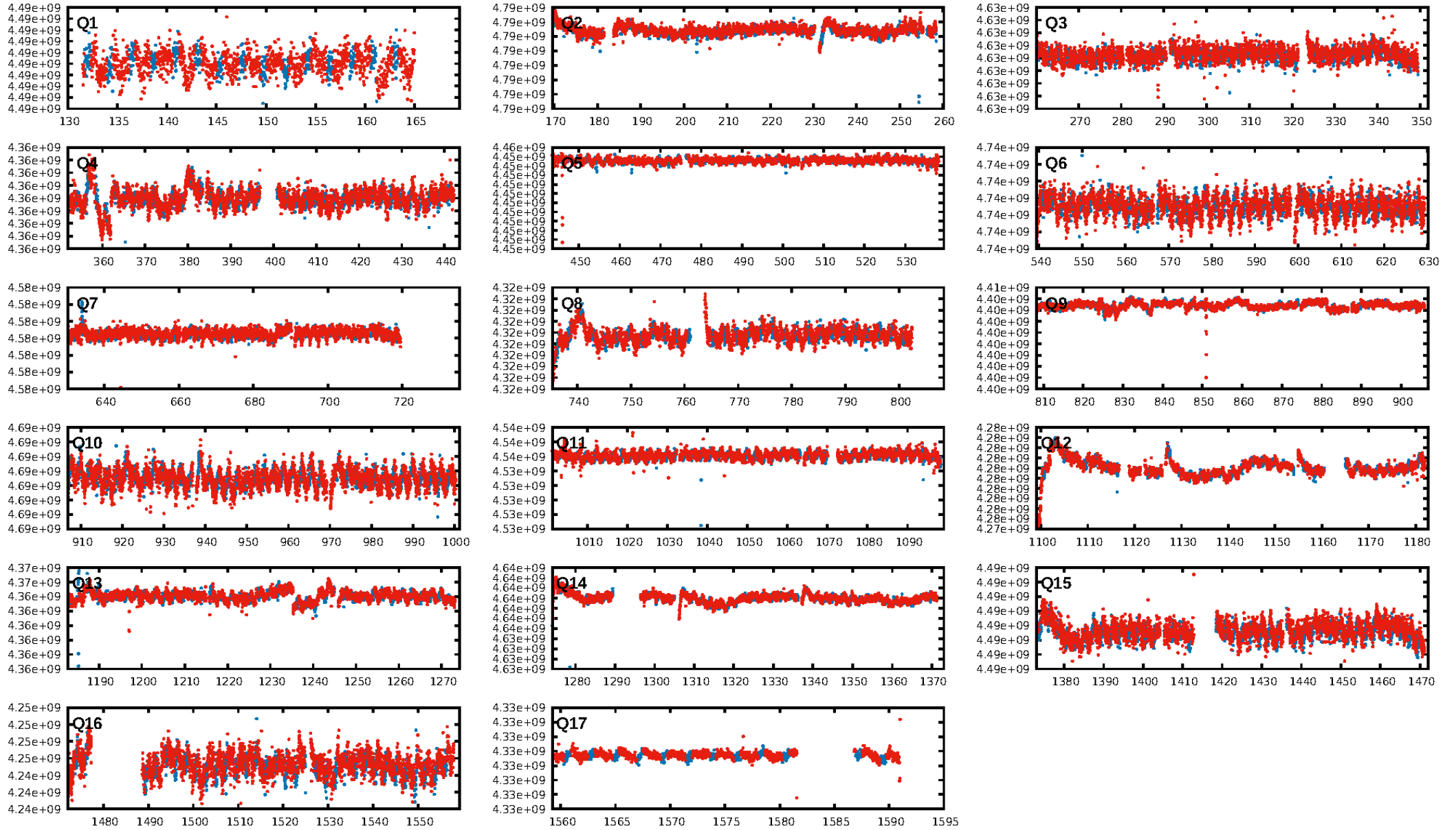
KIC: 7363405 Candidate: 1 of 1 Period: 2.222 d



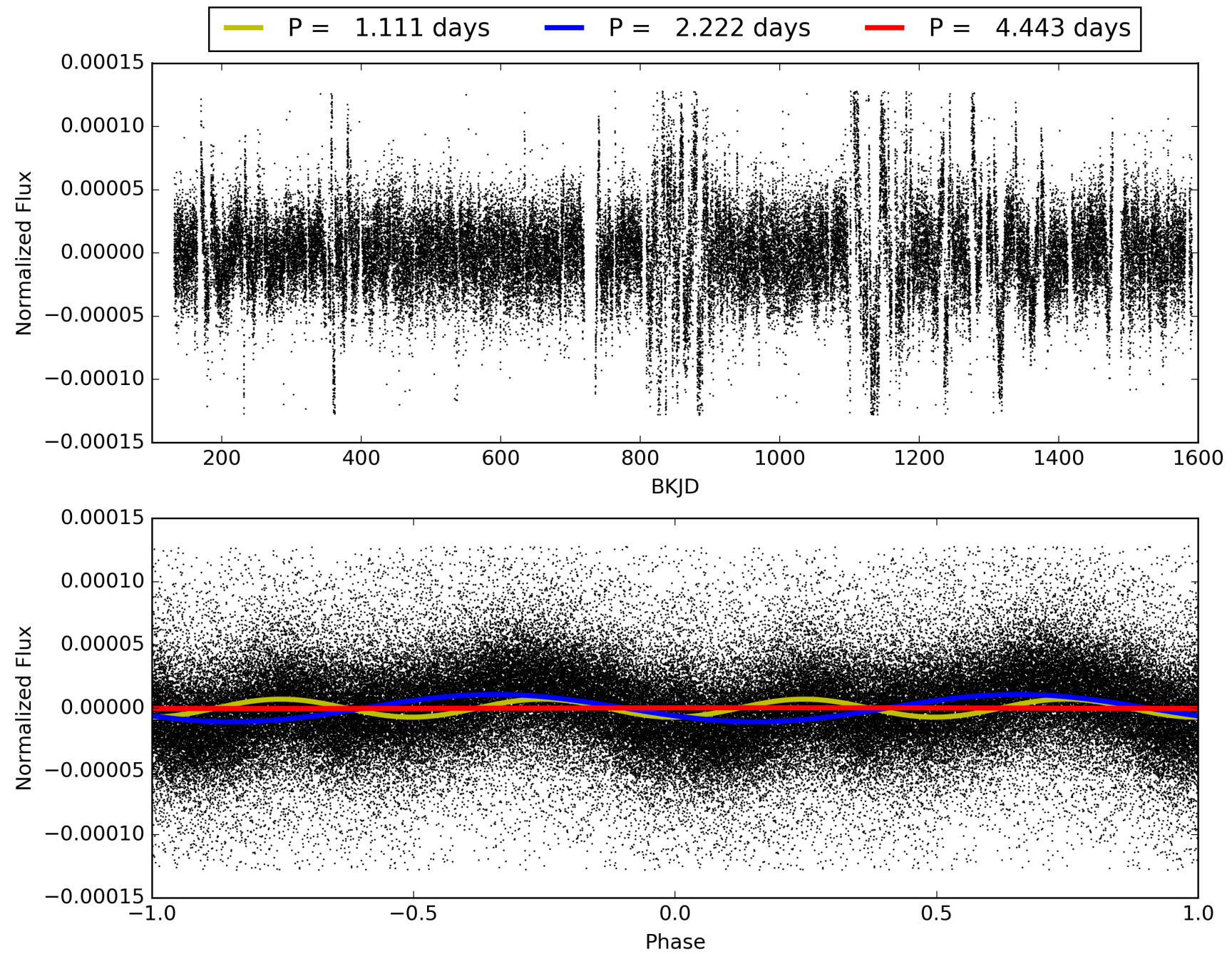
Software Revision: svn-ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 29-Jan-2016 05:57:22 Z

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

TCE 007363405-01, PDC Light Curves

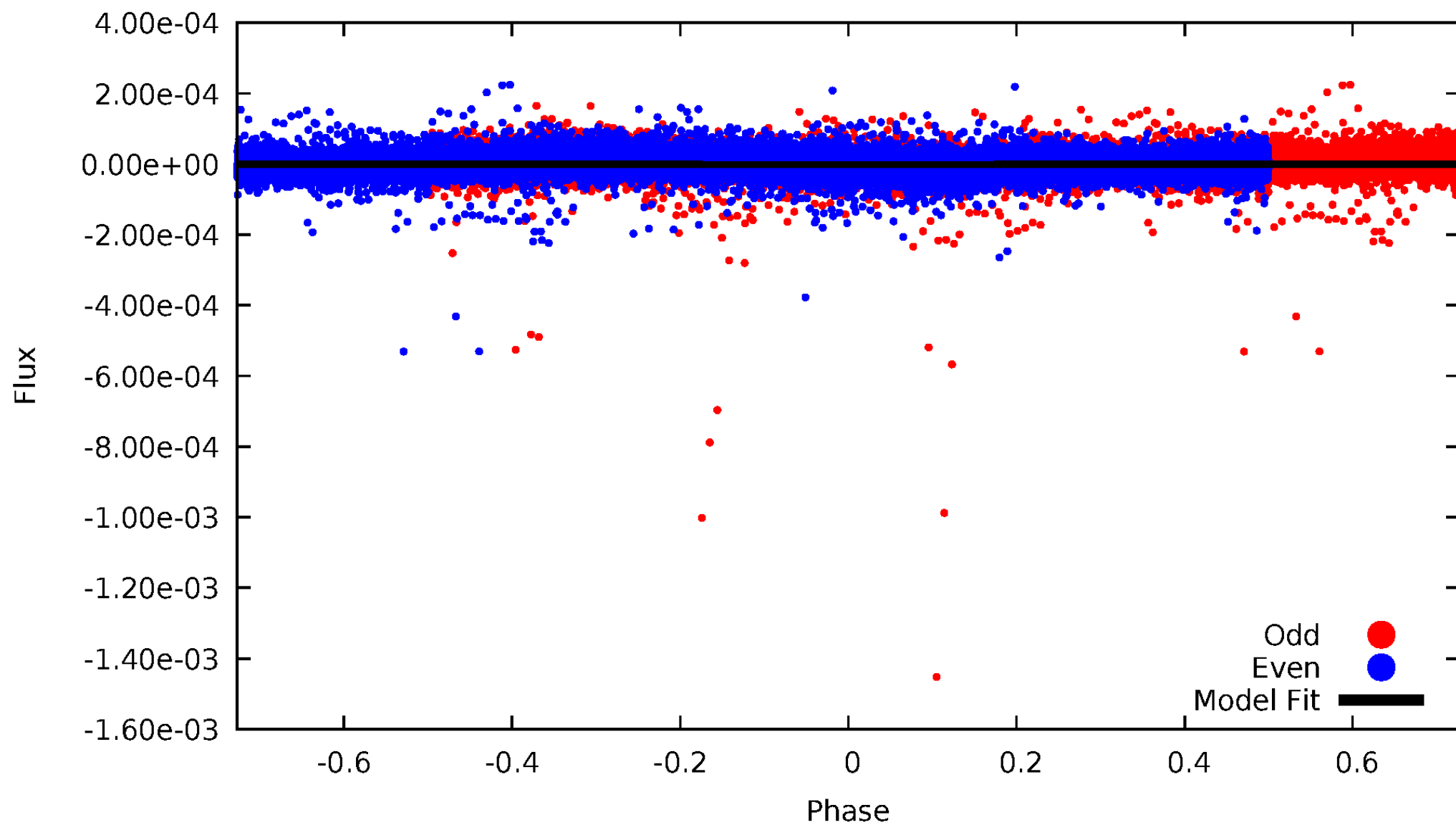


TCE 007363405-01



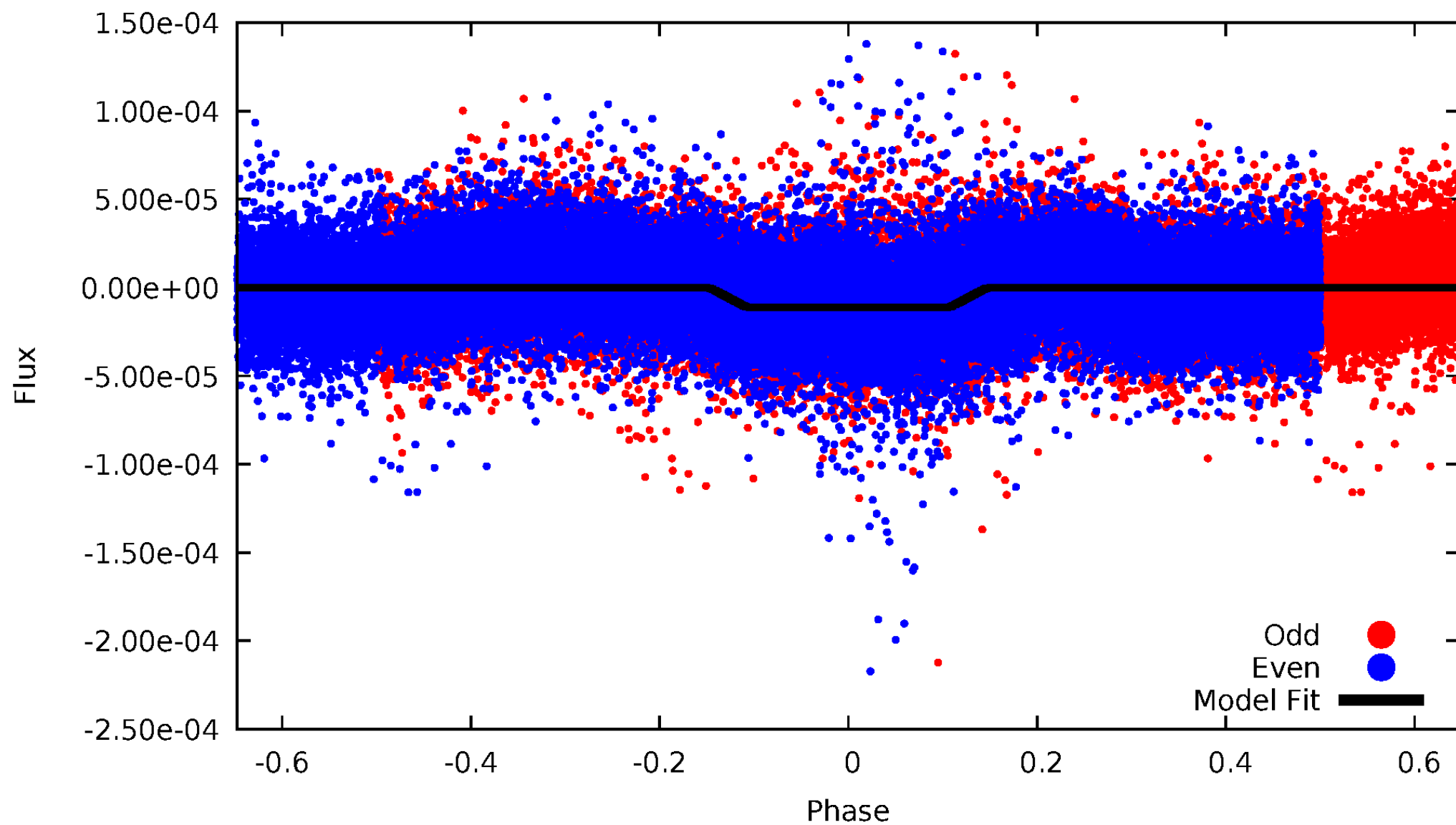
DV Odd/Even

TCE 007363405-01



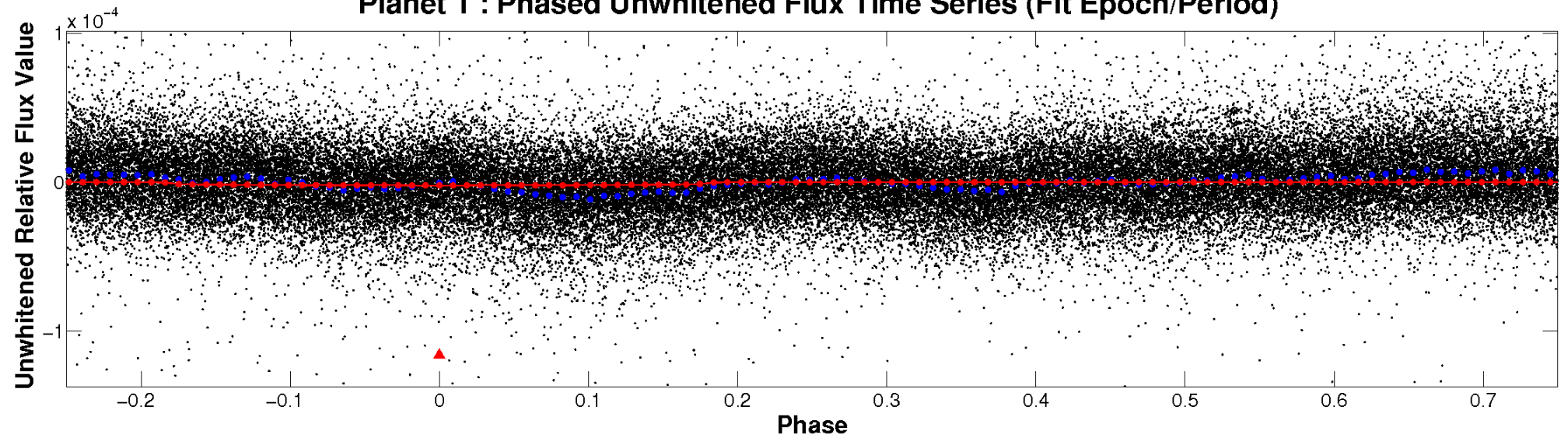
ALT Odd/Even

TCE 007363405-01

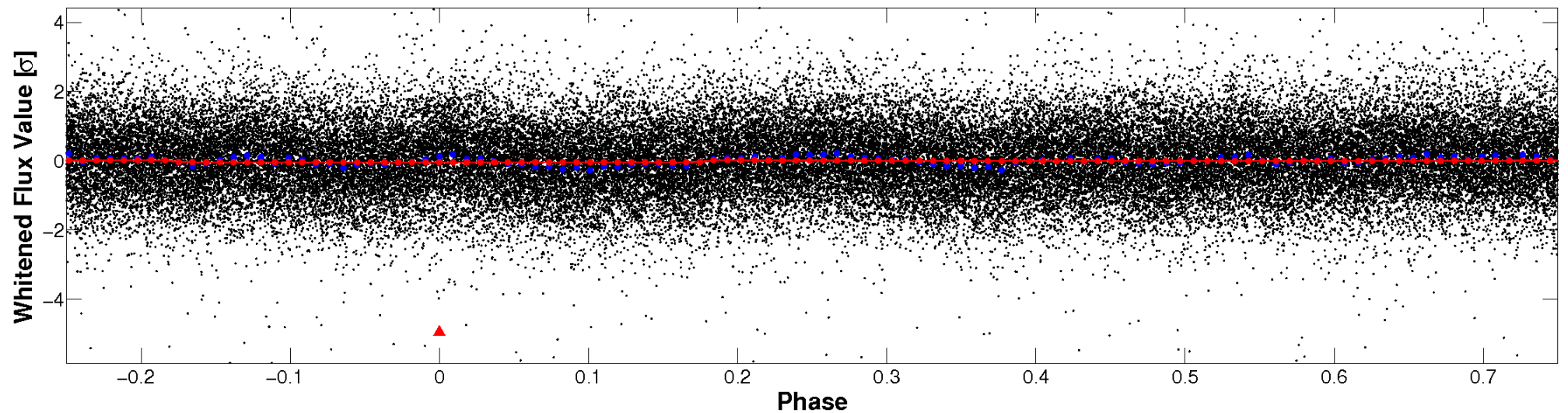


Non-Whitened Vs. Whitened Light Curve

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

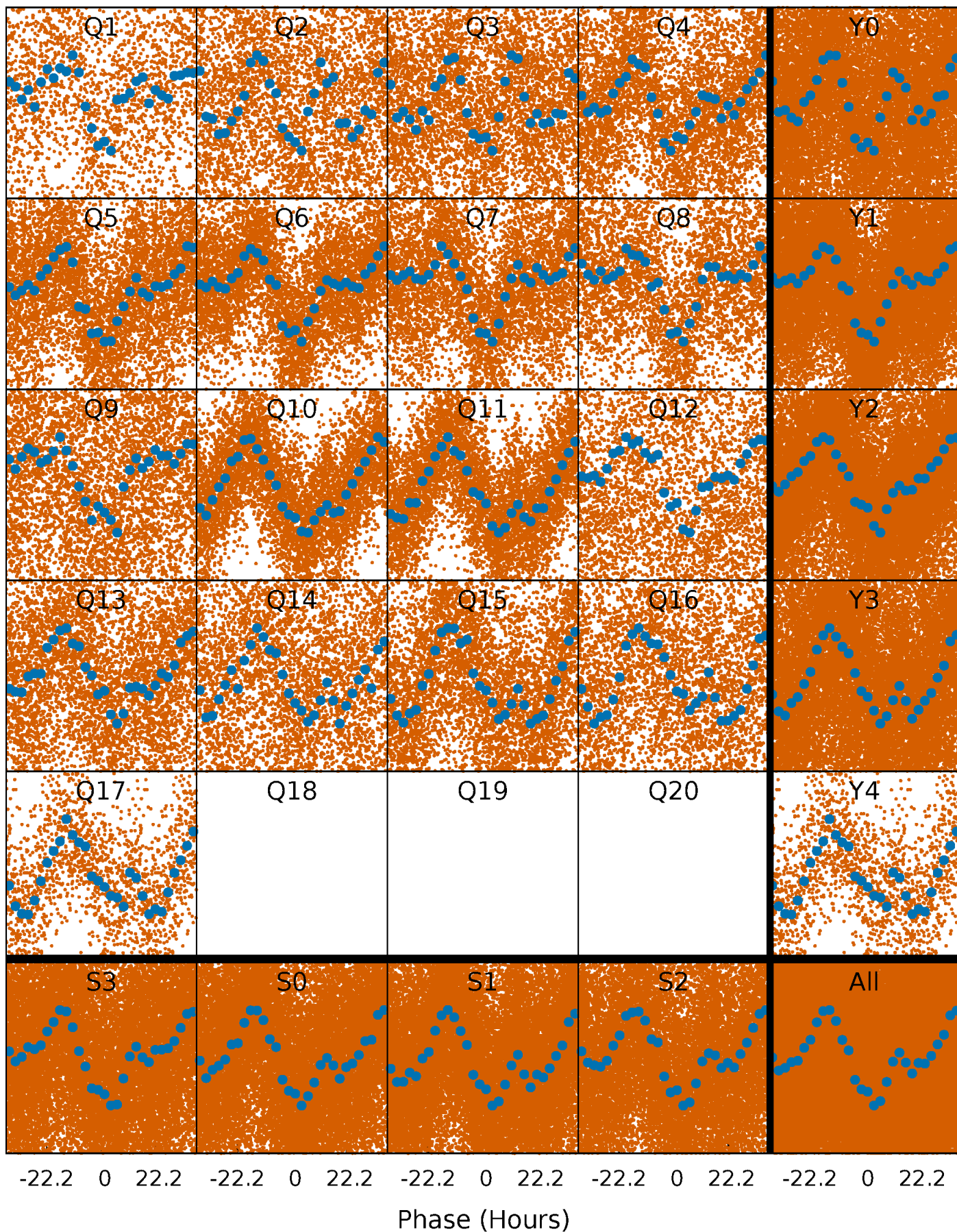


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



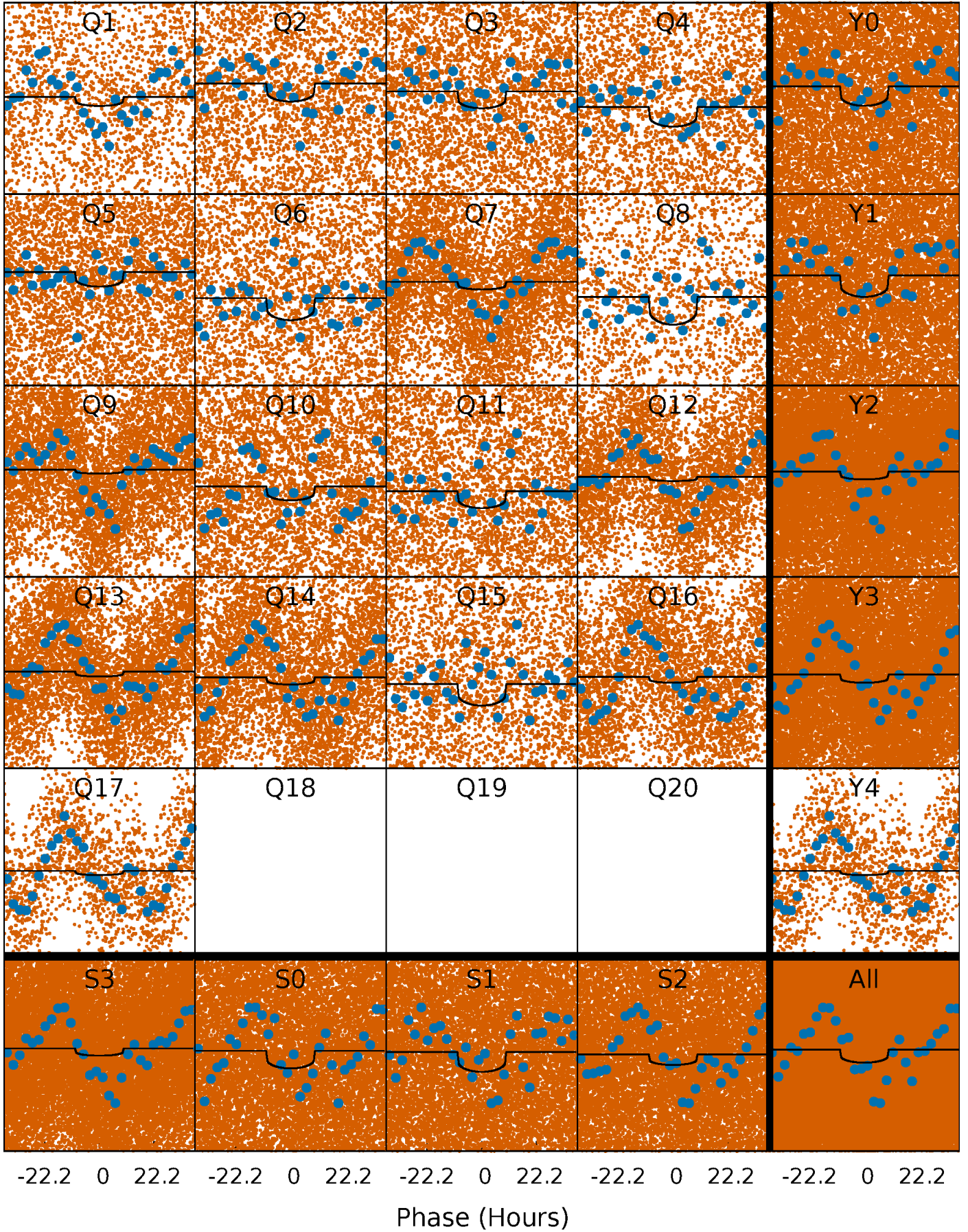
PDC Quarter-Phased Transit Curves

TCE 007363405-01 P= 2.221729 Days $T_0=133.106349$ (BKJD)



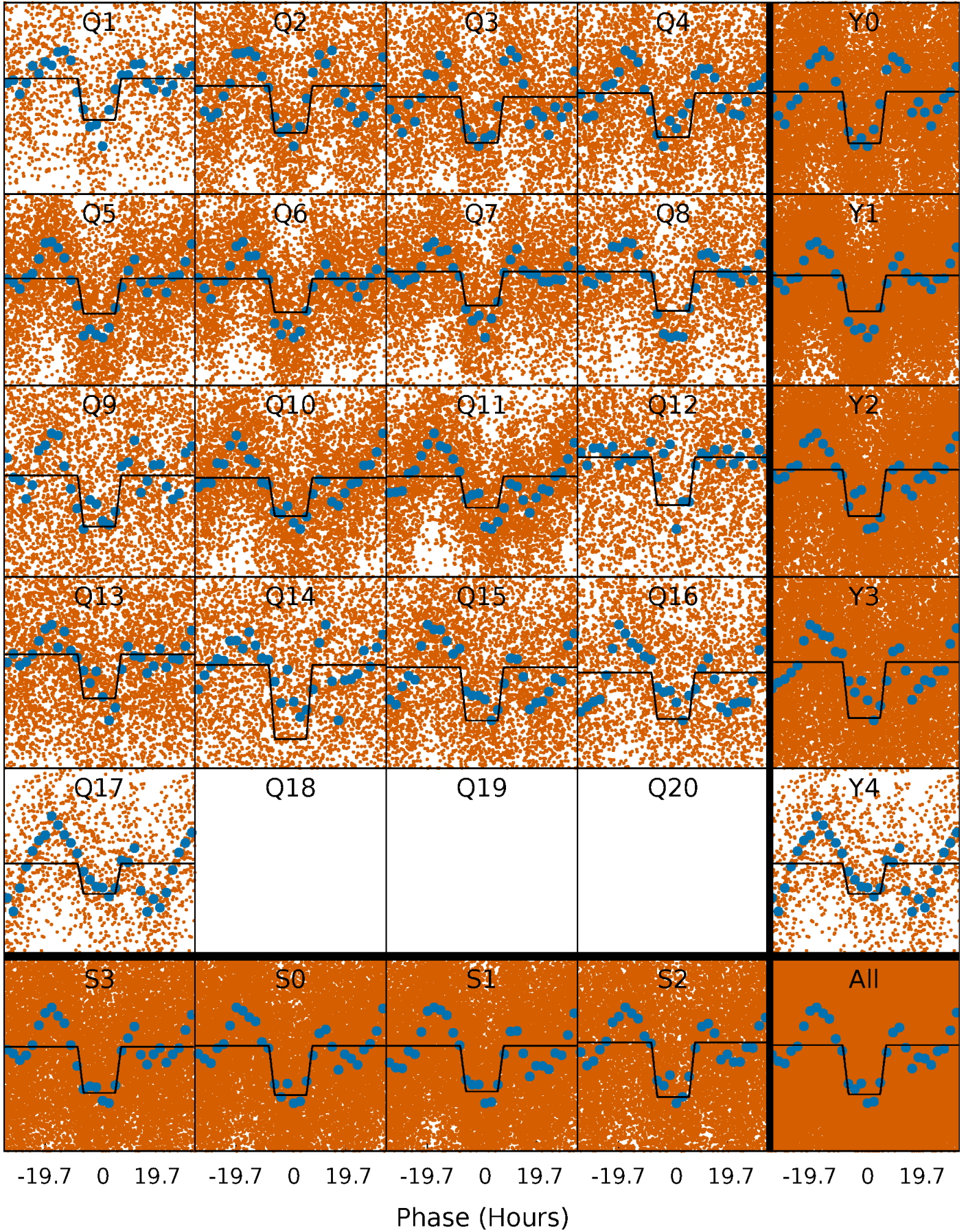
DV Quarter-Phased Transit Curves

TCE 007363405-01 P= 2.221729 Days $T_0=133.106349$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

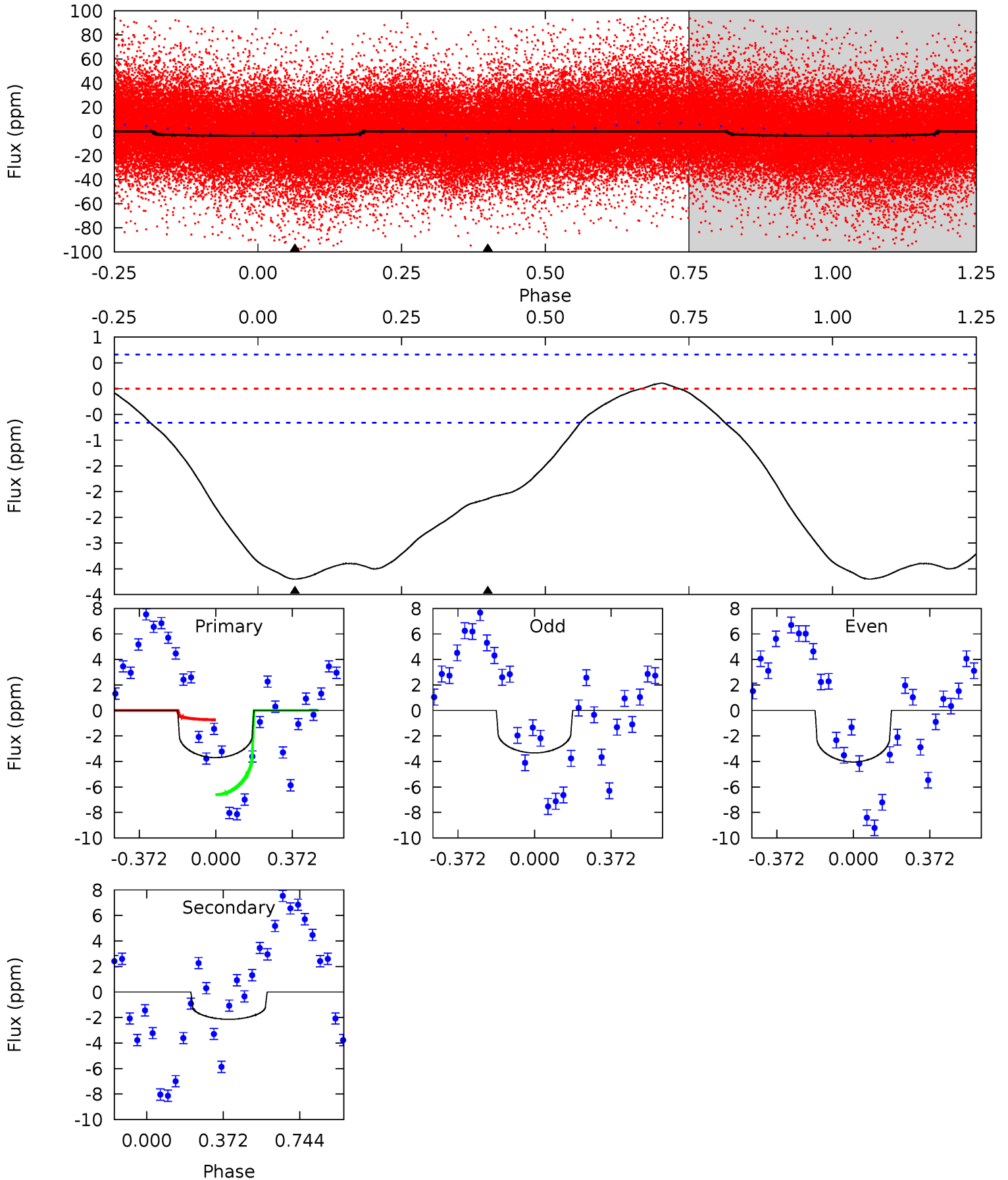
TCE 007363405-01 P= 2.221800 Days $T_0=133.167180$ (BKJD)



DV Model-Shift Uniqueness Test

007363405-01, P = 2.221729 Days, E = 130.884620 Days

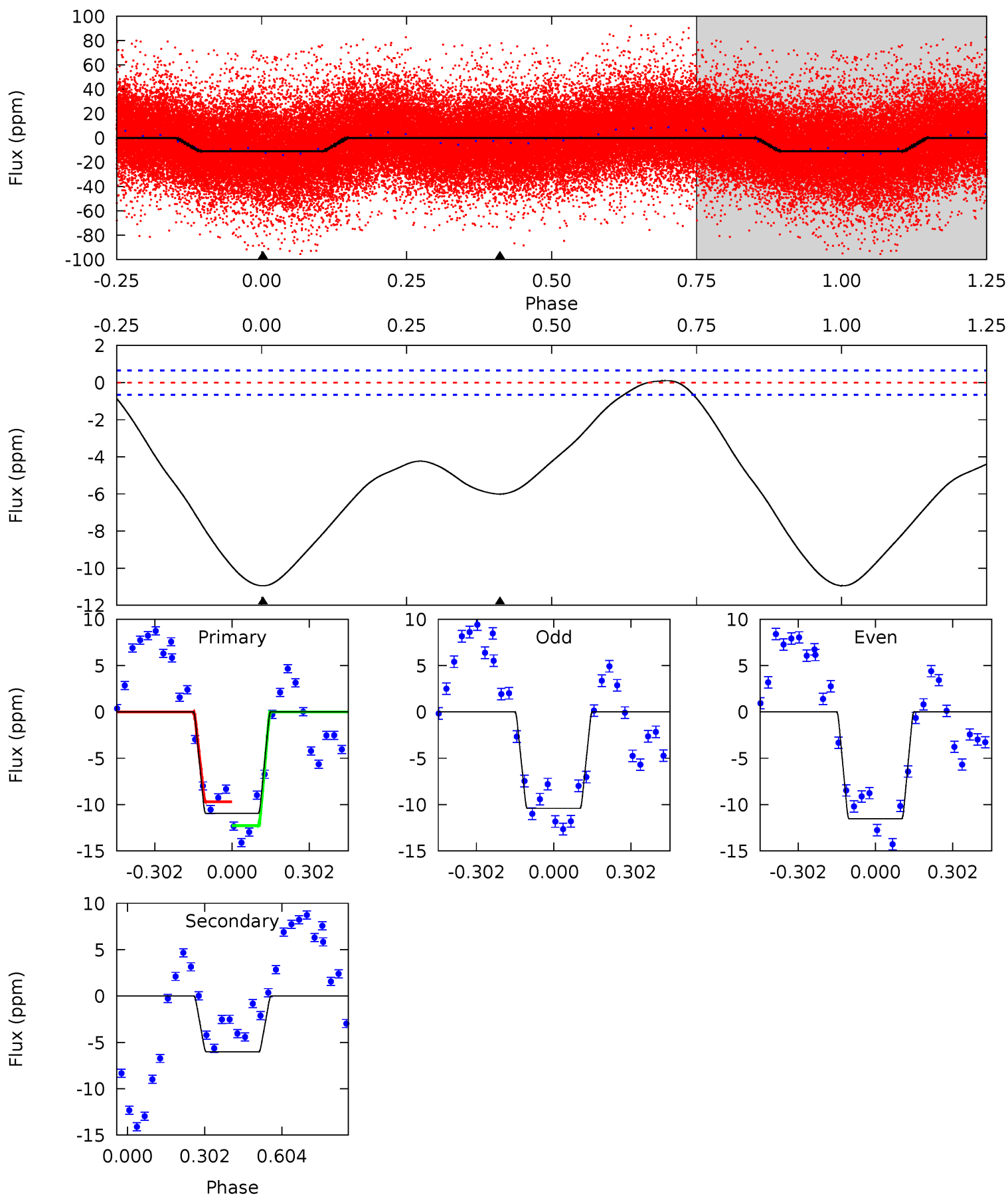
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
23.9	13.8	0	0	4.28	0.89	0.89	23.9	23.9	13.8	13.8	2.31	1.31	0.03	20.7



Alt Model-Shift Uniqueness Test

007363405-01, P = 2.221800 Days, E = 130.945380 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
72.2	39.6	0	0	4.33	1.03	2.21	72.2	72.2	39.6	39.6	3.72	1.02	0.01	8.83



Stellar Parameters For KIC 007363405

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	7837^{+62}_{-94}	$3.888^{+0.162}_{-0.108}$	$0.210^{+0.200}_{-0.200}$	$2.718^{+0.498}_{-0.554}$	$2.083^{+0.176}_{-0.243}$	$0.146^{+0.117}_{-0.051}$
	+1%/-1%	+4%/-3%	+95%/-95%	+18%/-20%	+8%/-12%	+80%/-35%
Source	SPE68	SPE68	SPE68	DSEP		

KIC = Kepler Input Catalog; PHO = Photometry; SPE = Spectroscopy; AST = Asteroseismology
 TRA = Transits; DESP = Dartmouth Models; MULT = Multiple Models

Secondary Eclipse Parameters for KIC 007363405-01 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-2 ± 0	$0.42^{+0.27}_{-0.24}$	3828^{+181}_{-199}	7823^{+7372}_{-1935}	12^{+51}_{-8}
Alt.	-6 ± 0	$0.98^{+0.31}_{-0.29}$	3835^{+181}_{-201}	6431^{+1330}_{-801}	$6.092^{+6.455}_{-2.496}$

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 $A_{obs} \gg 1.0$

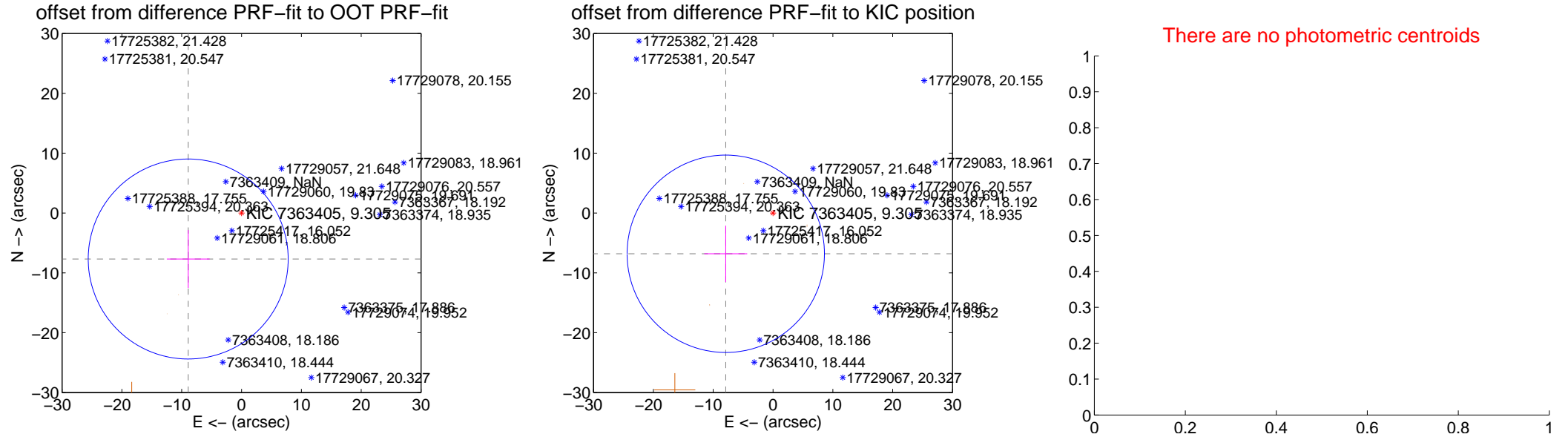
DV Centroid Data

Supplemental centroid analysis for 007363405-01. **Kepler magnitude: 9.30.** Transit SNR 7.38

There are 0 quarters with good PRF difference image offsets

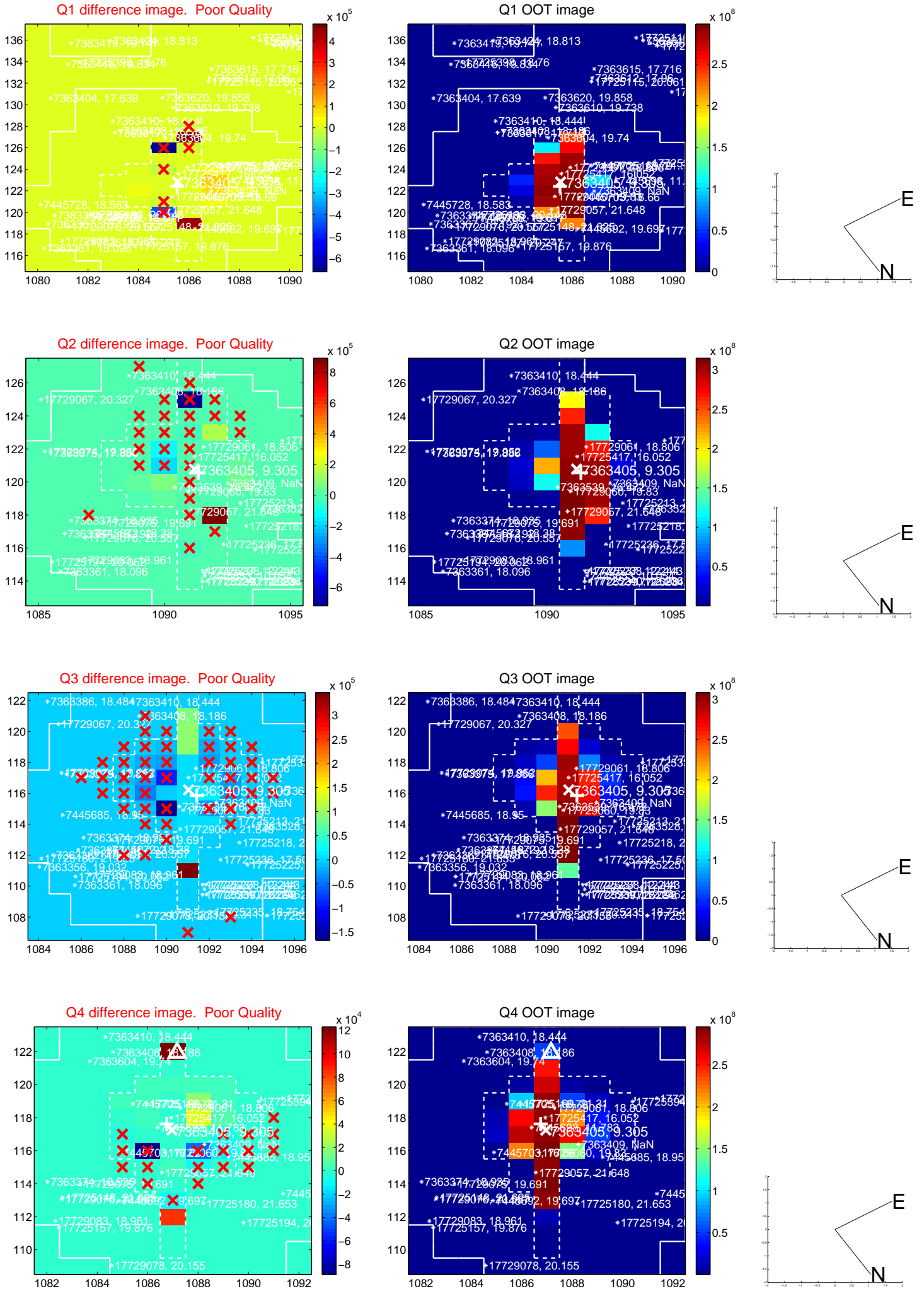
The direct PRF centroid is offset from the target star catalog position by about 1.63 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	11.769 ± 5.569	2.11	8.914 ± 3.576	-7.685 ± 4.841
PRF-fit source offset from KIC position	10.429 ± 5.496	1.90	7.897 ± 3.592	-6.812 ± 4.705
photometric centroid source offset	—	—	—	—

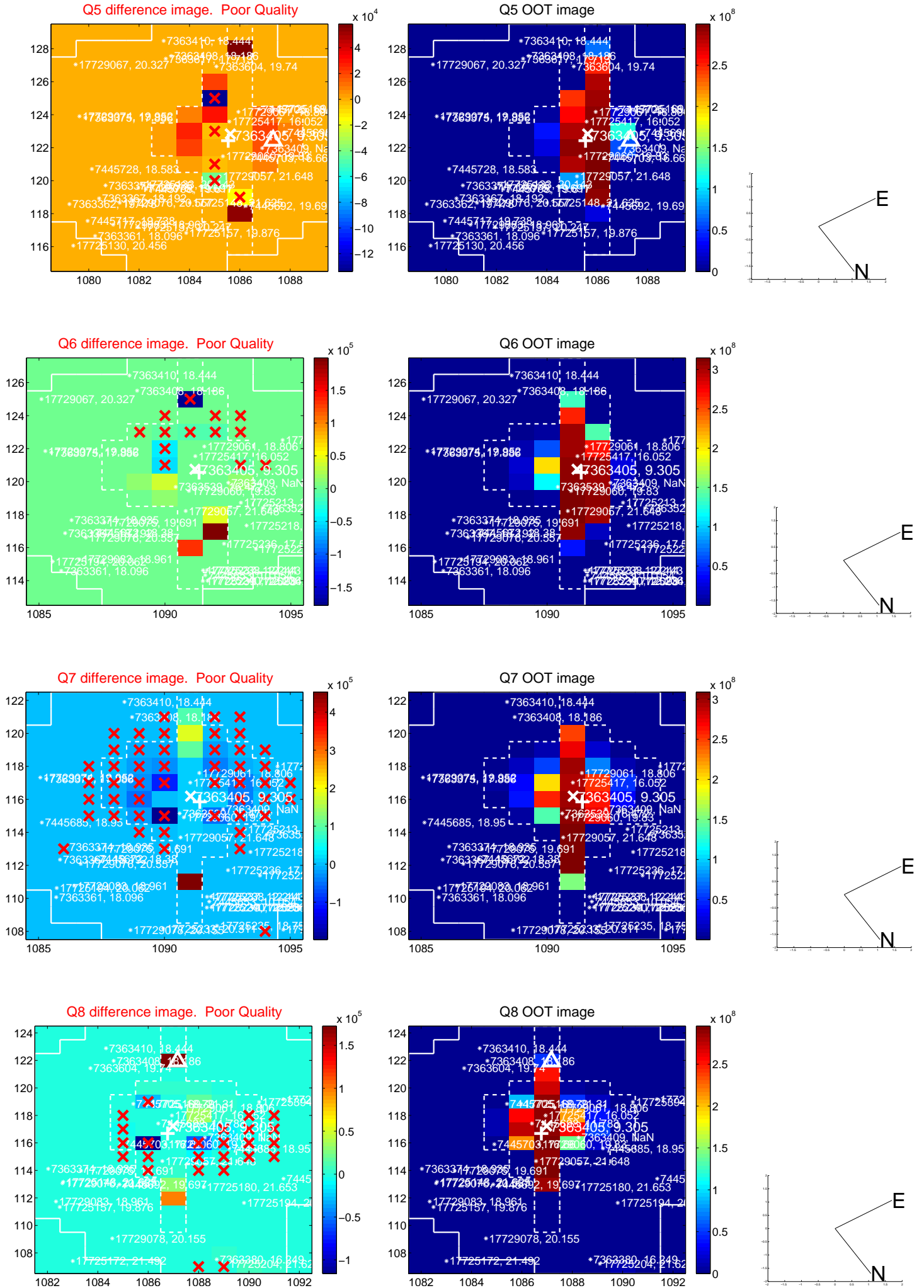


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets;** magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

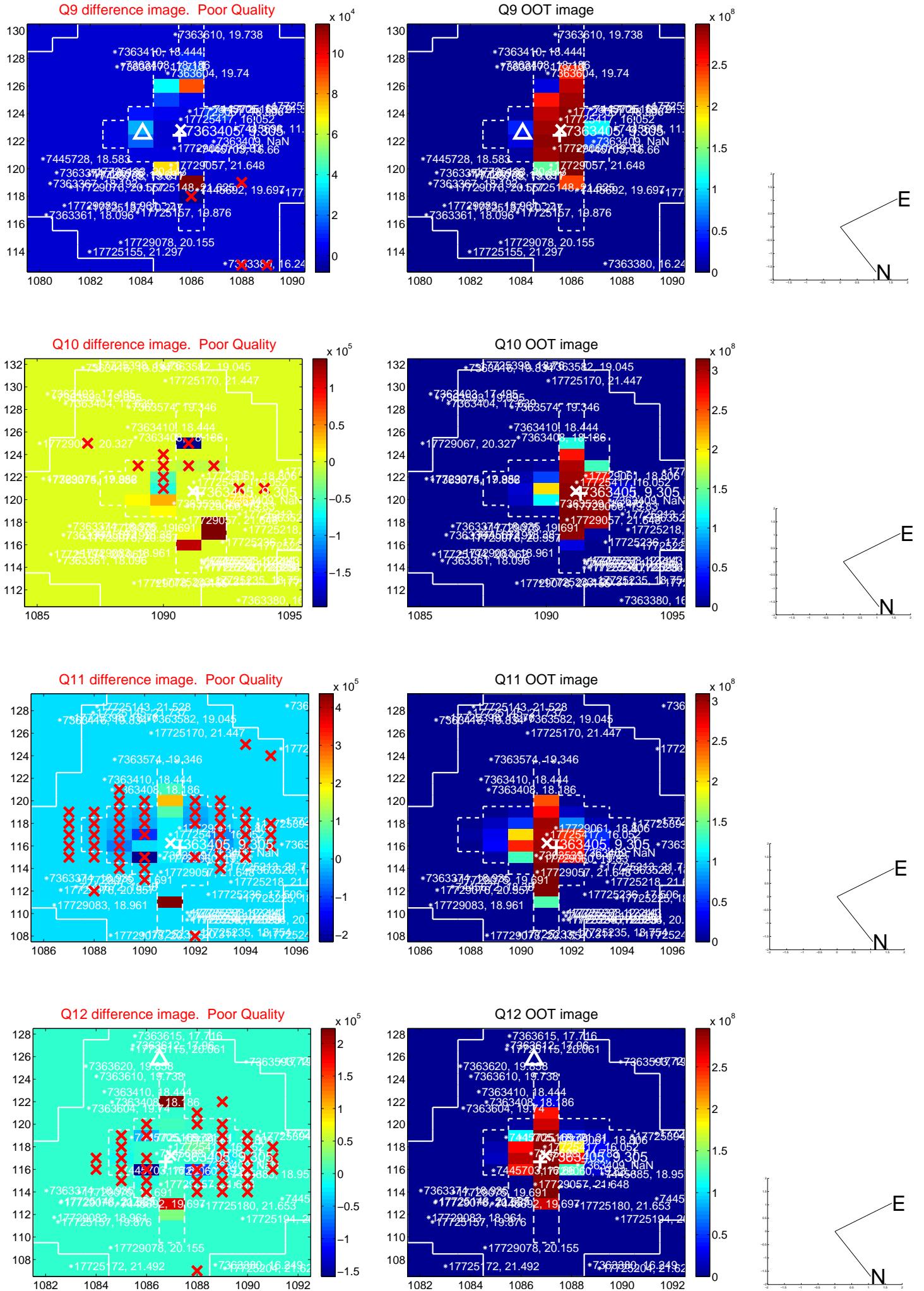
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



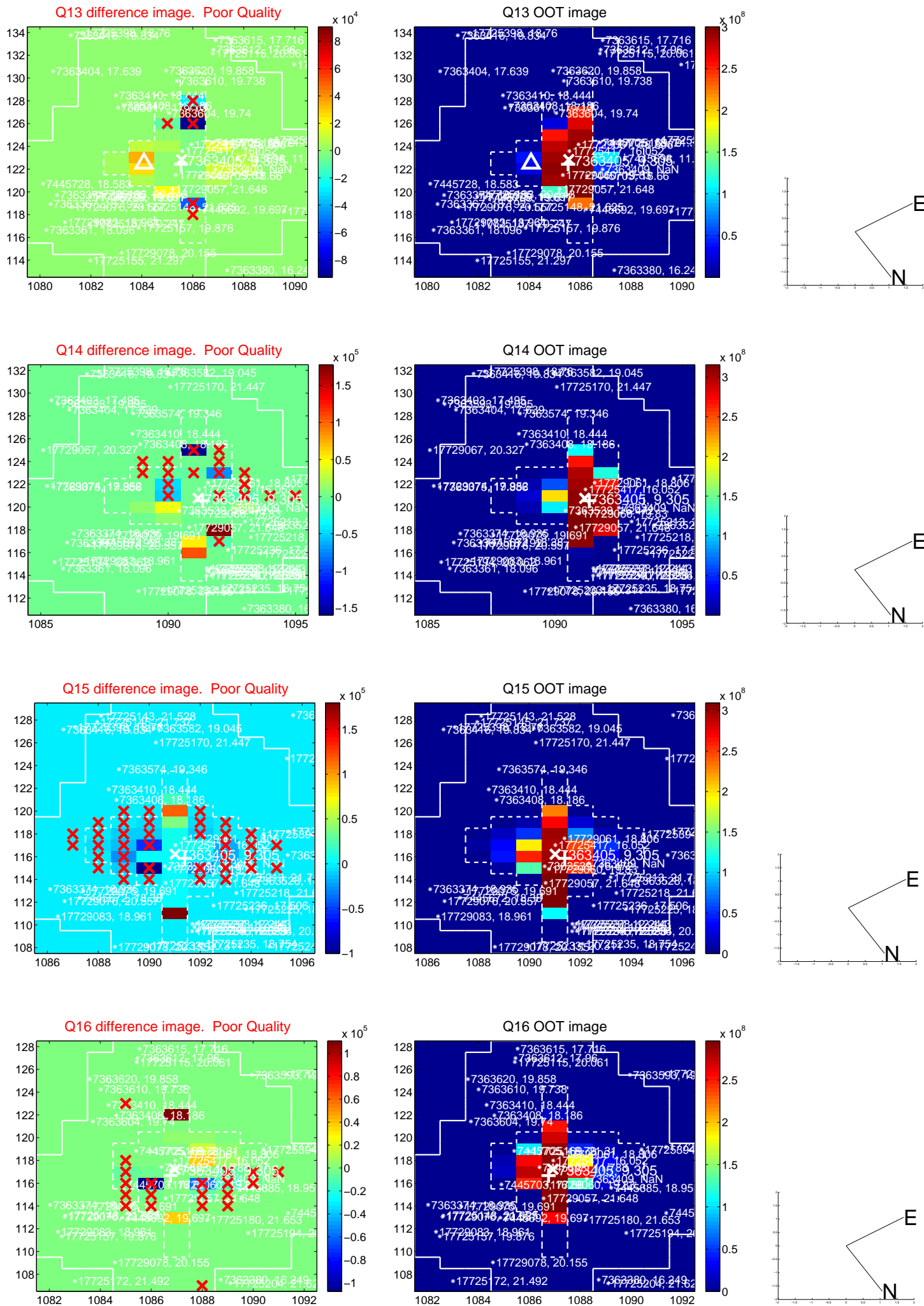
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



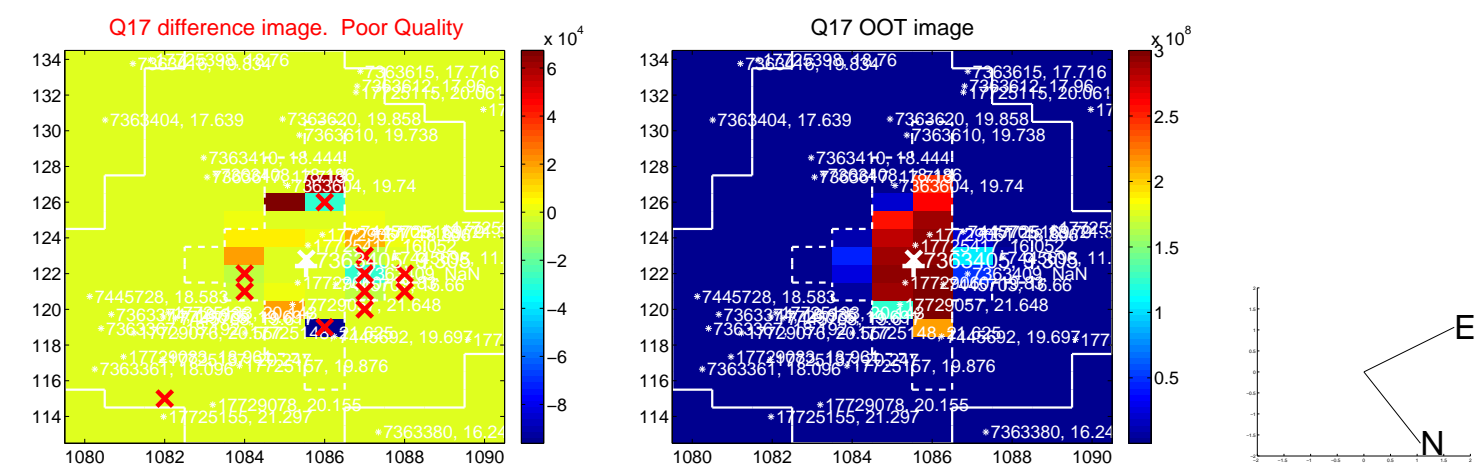
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



white ×: KIC target position; +: OOT centroid; △: difference centroid. red ✕: large negative pixel value.



folded centroid time series figure for this object.

UKIRT Image

