

KIC 002569639

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})
002569639-01	OBS	No	6.715581	133.705897	13.3	4.069	11.1	7.2	1.88	8243	0.78	2092.99

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
002569639-01	OBS	FP	0.00	1	0	0	0	LPP_DV—CENT_SATURATED

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

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

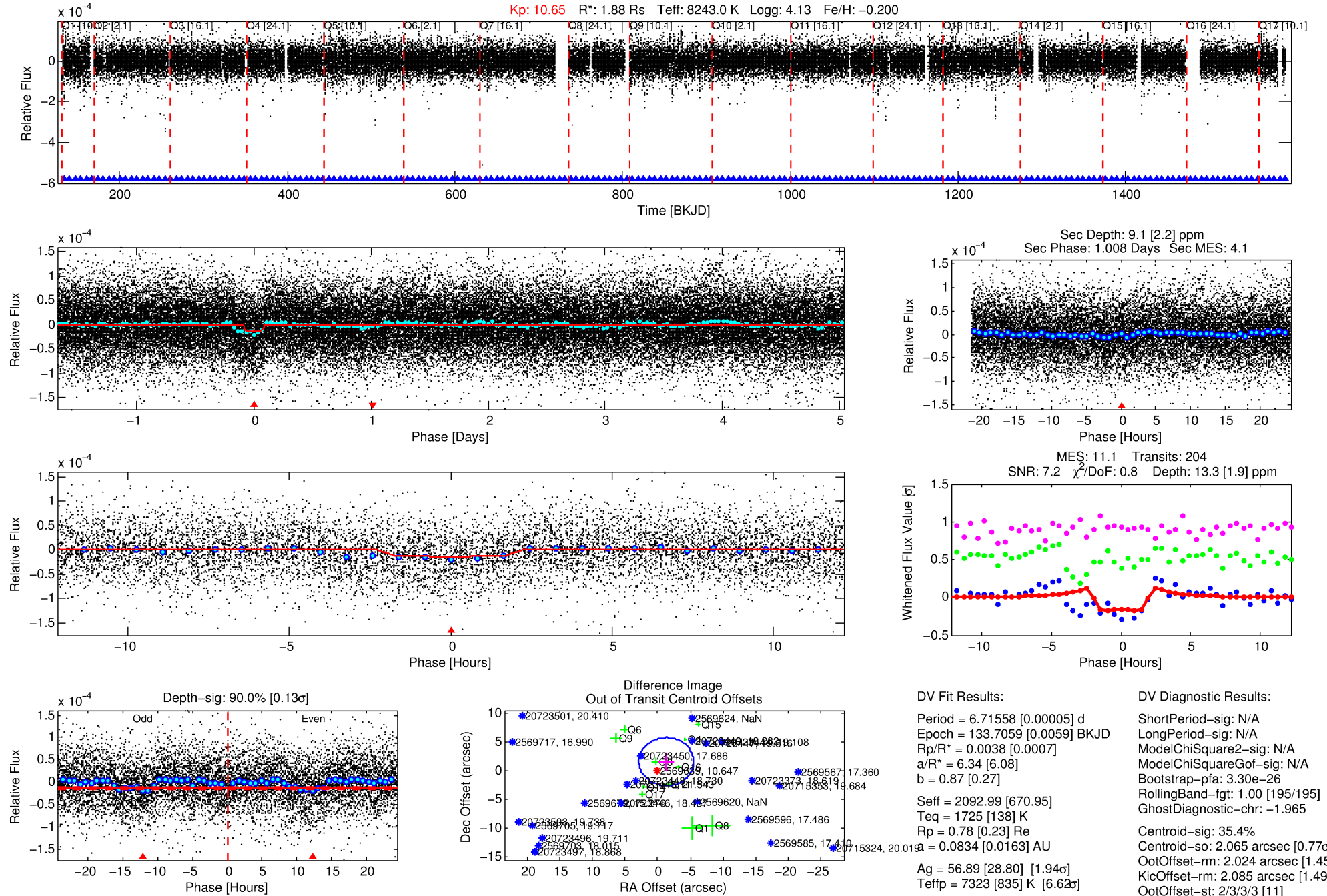
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 002569639-01

No Significant Match Found

DV One-Page Summary

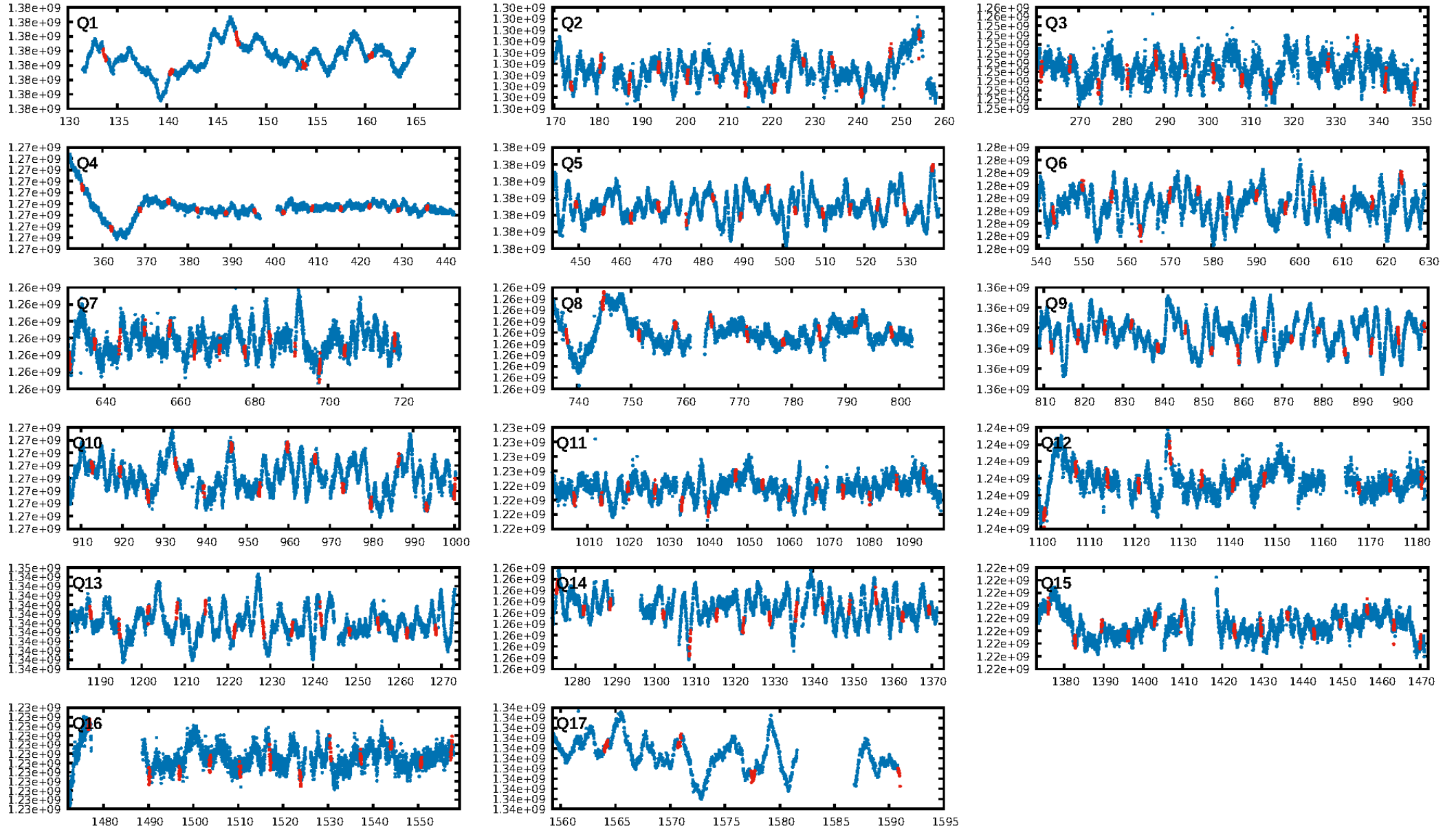
KIC: 2569639 Candidate: 1 of 1 Period: 6.716 d



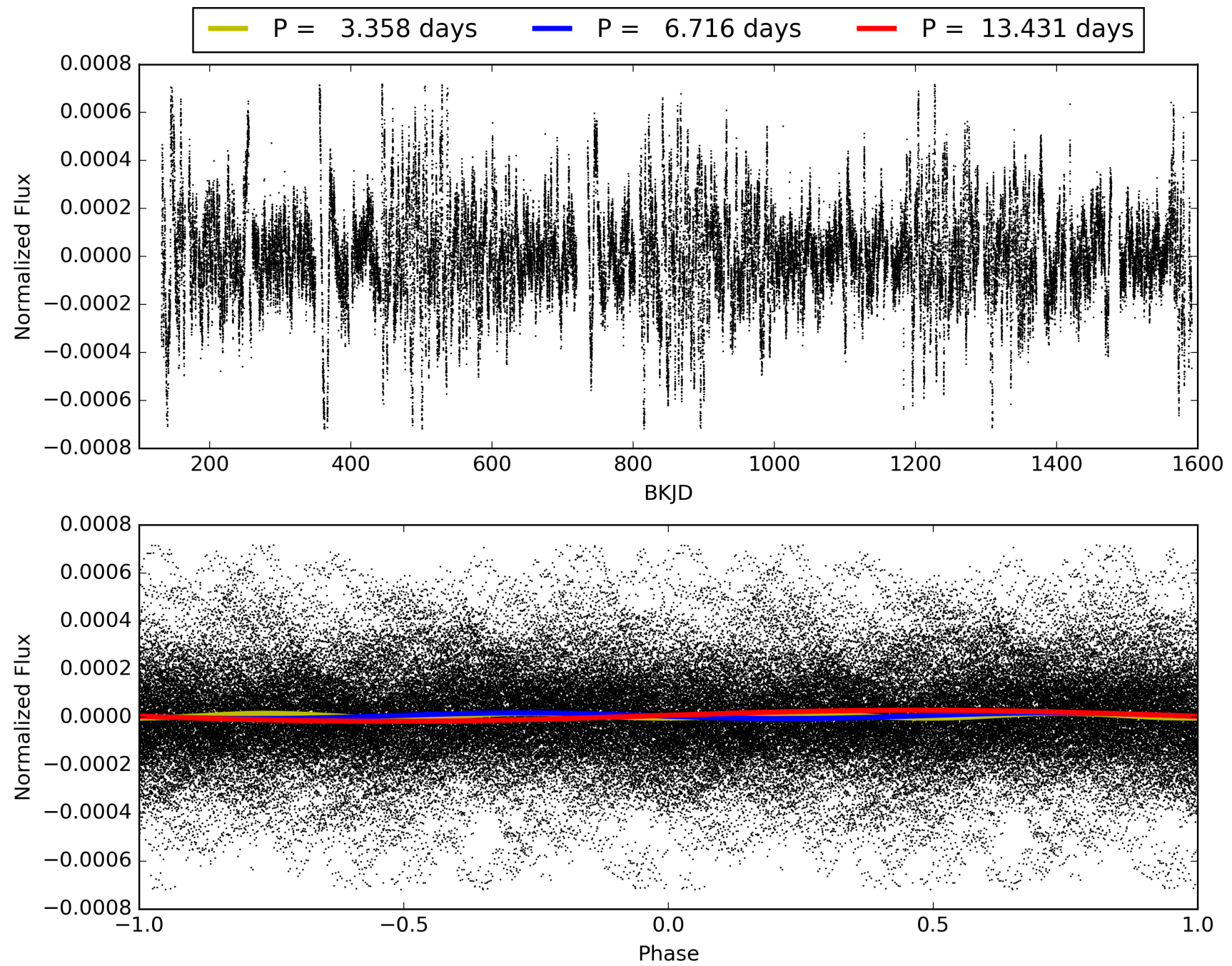
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 15:11:28 Z

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

TCE 002569639-01, PDC Light Curves

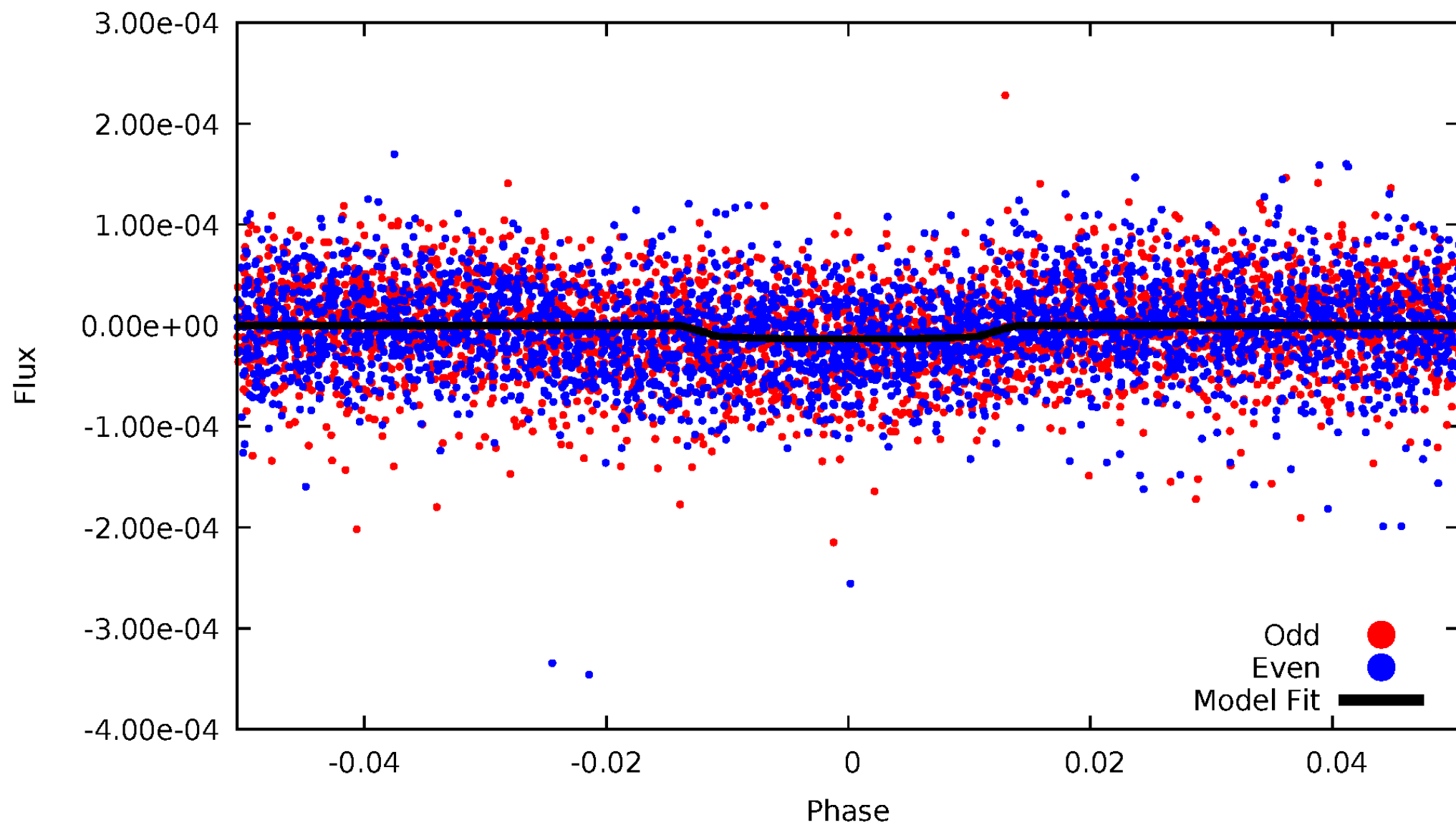


TCE 002569639-01



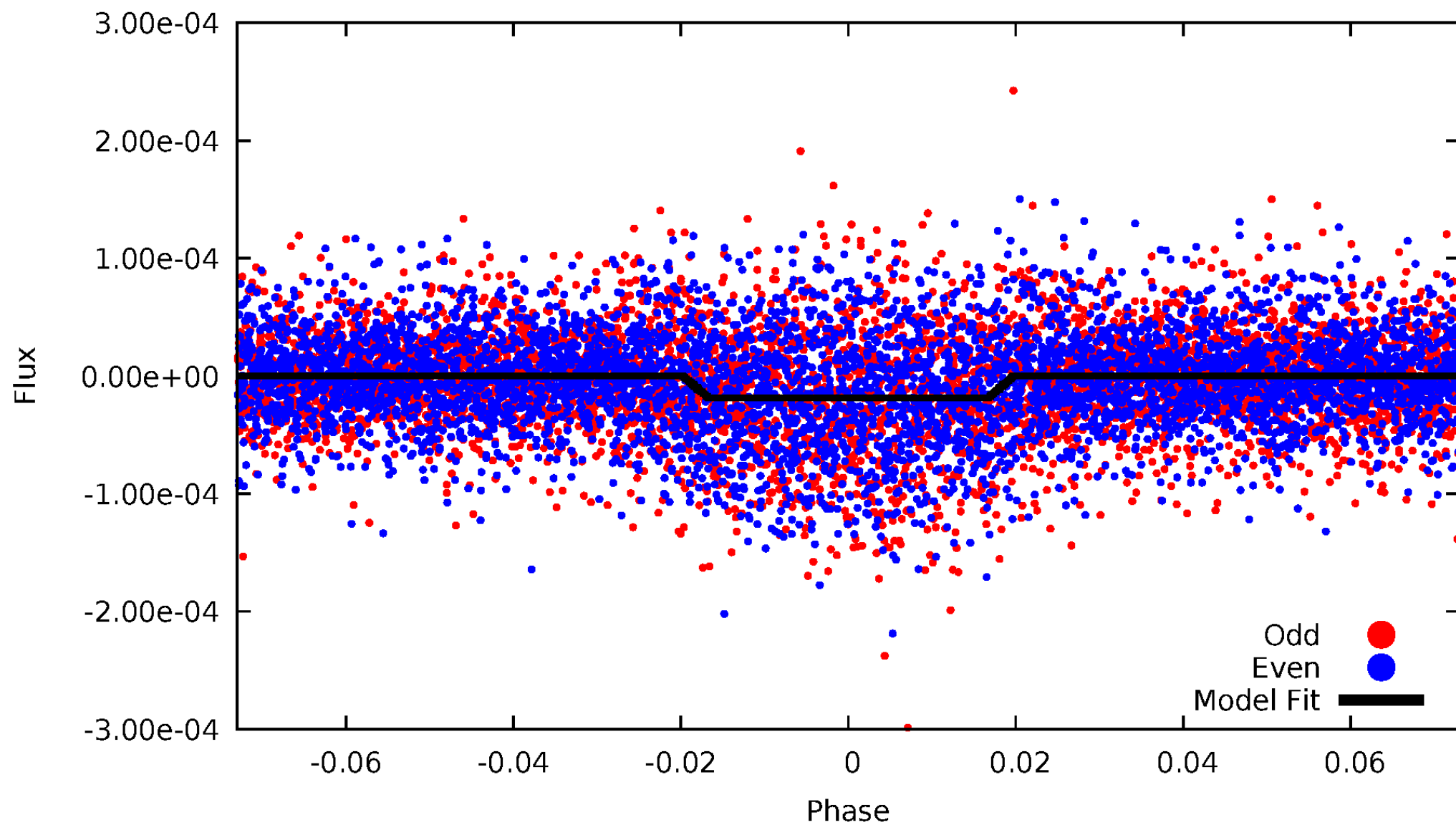
DV Odd/Even

TCE 002569639-01



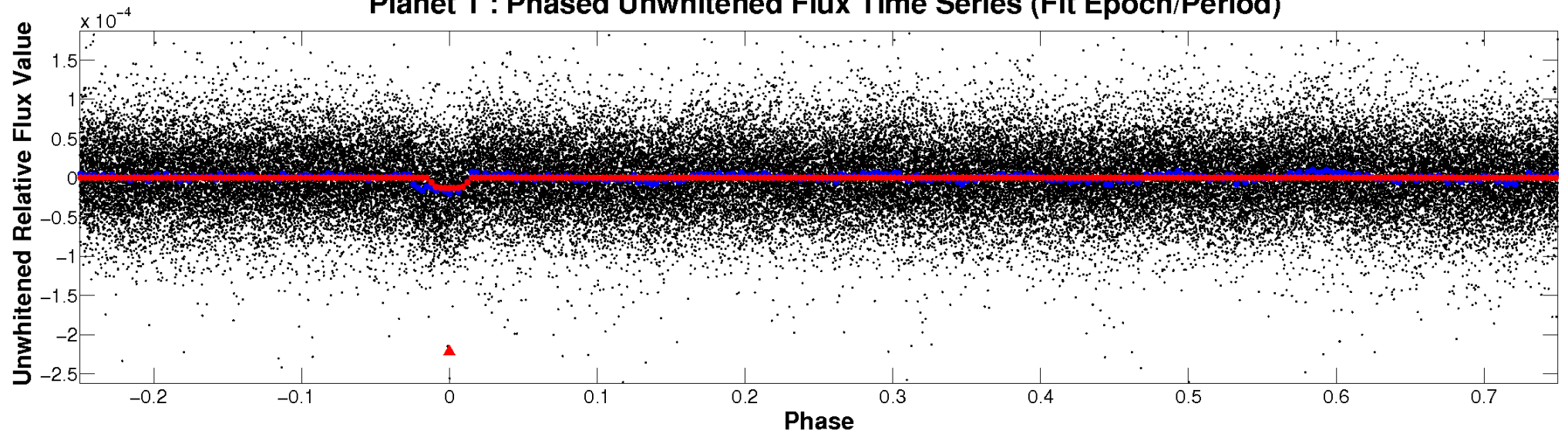
ALT Odd/Even

TCE 002569639-01

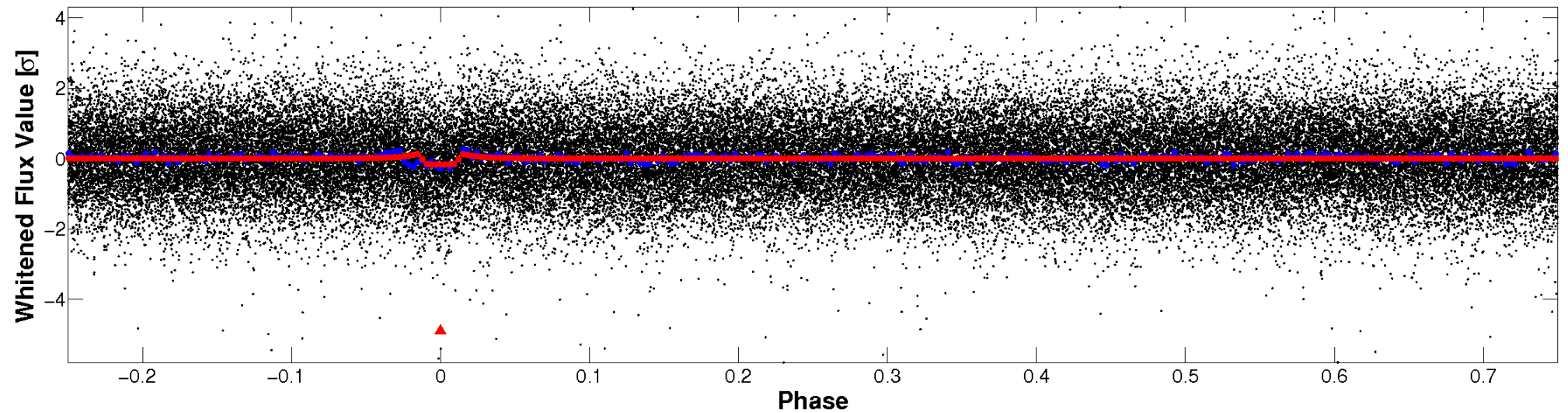


Non-Whitened Vs. Whitened Light Curve

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

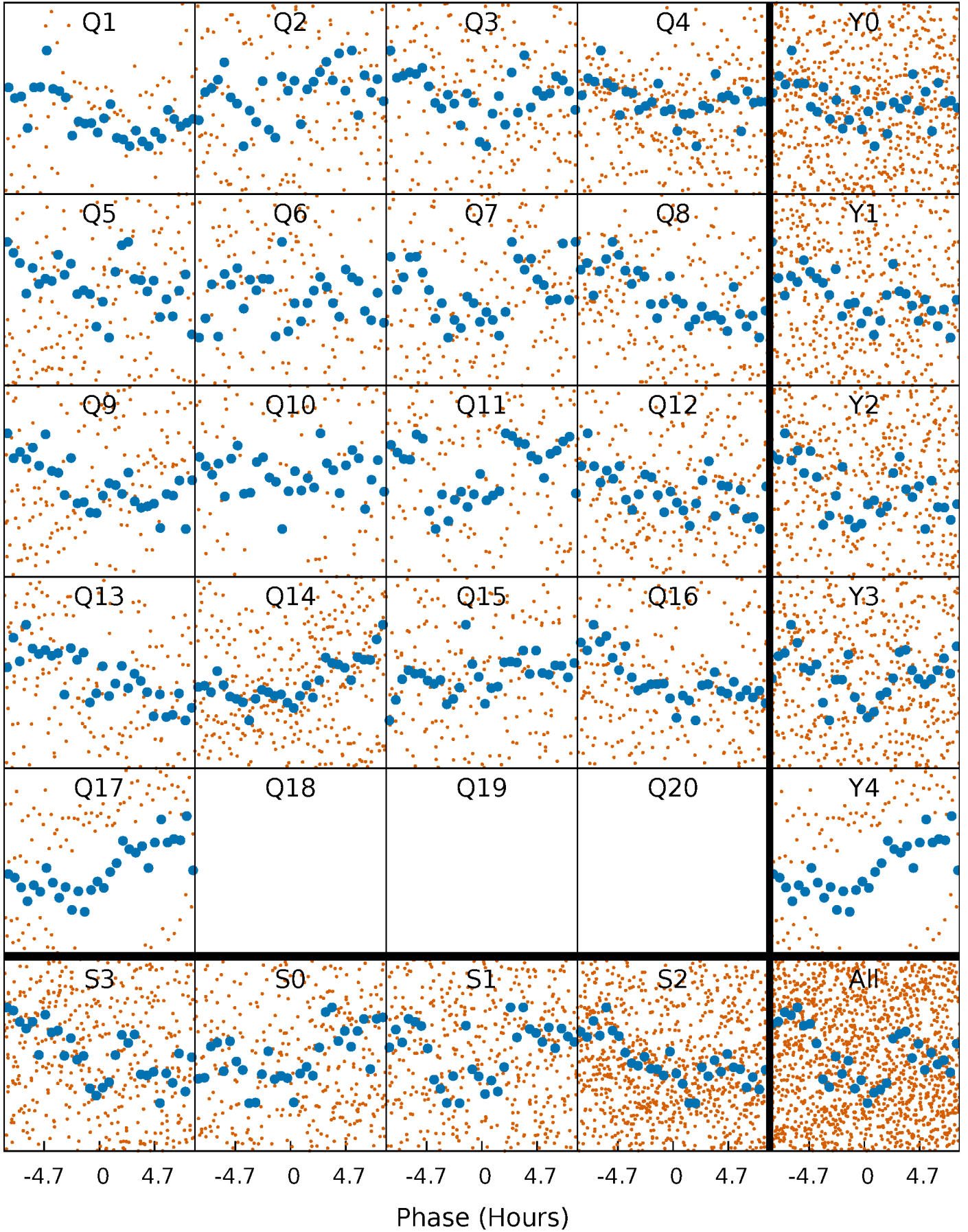


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



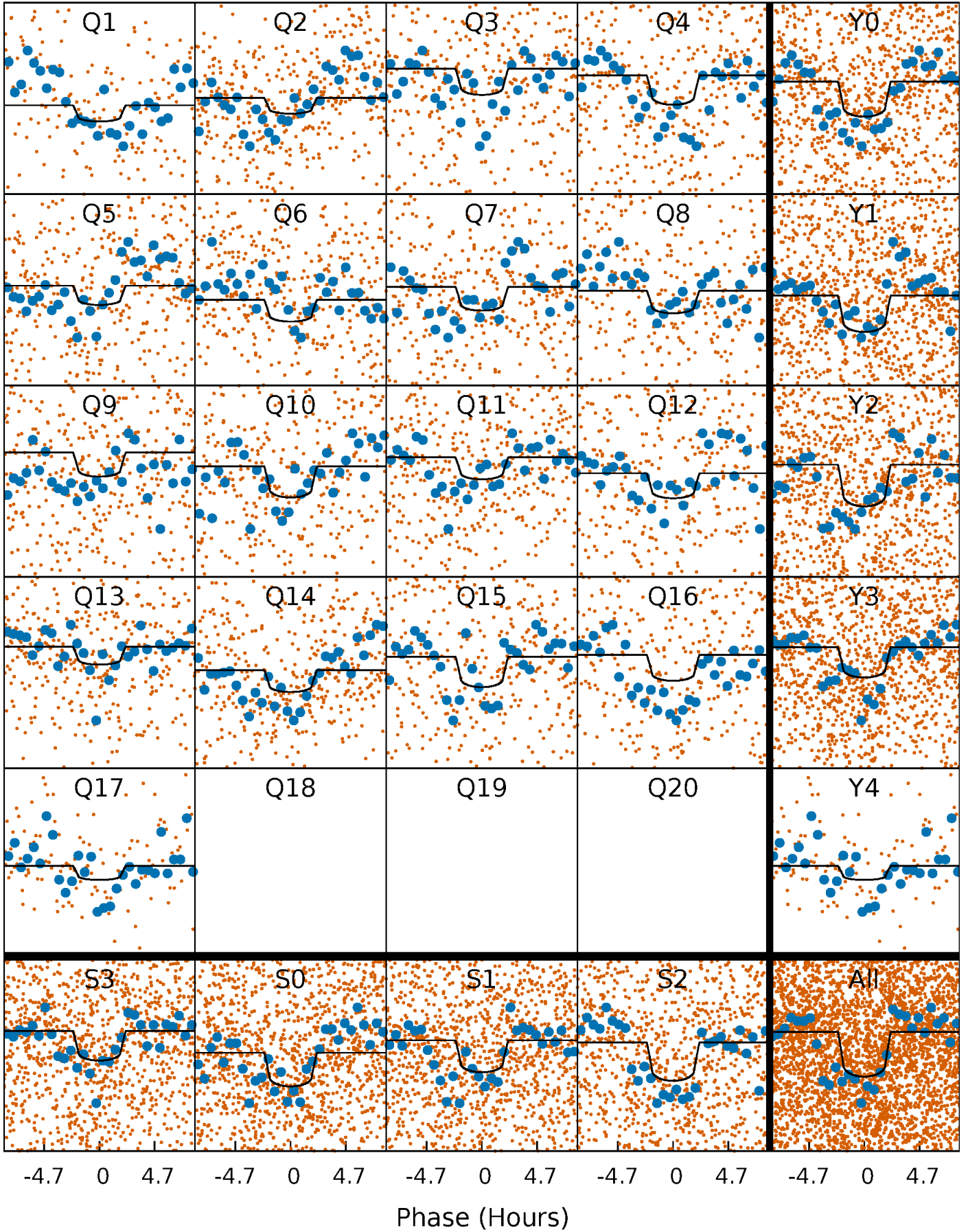
PDC Quarter-Phased Transit Curves

TCE 002569639-01 P= 6.715581 Days $T_0=133.705897$ (BKJD)



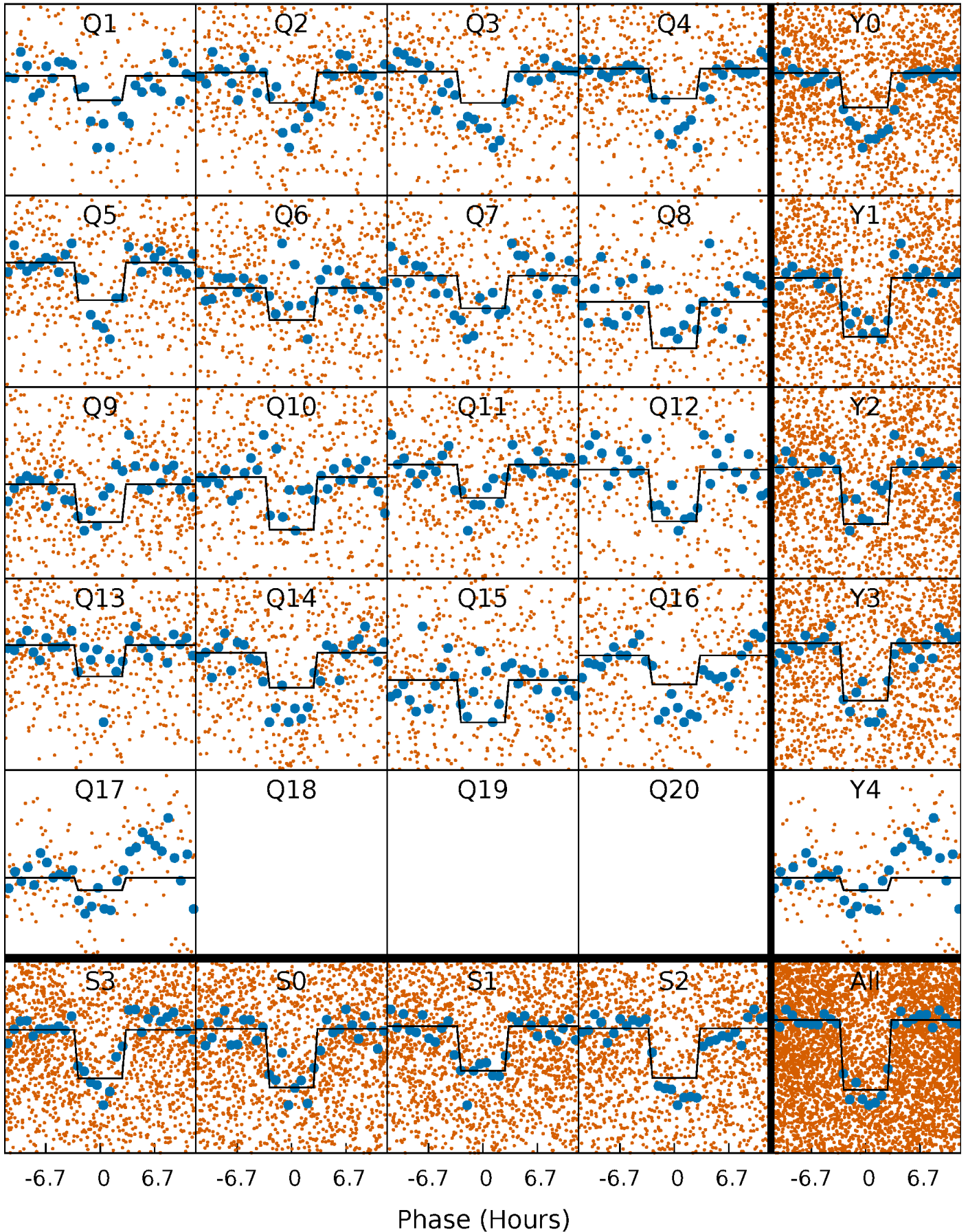
DV Quarter-Phased Transit Curves

TCE 002569639-01 P= 6.715581 Days $T_0=133.705897$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

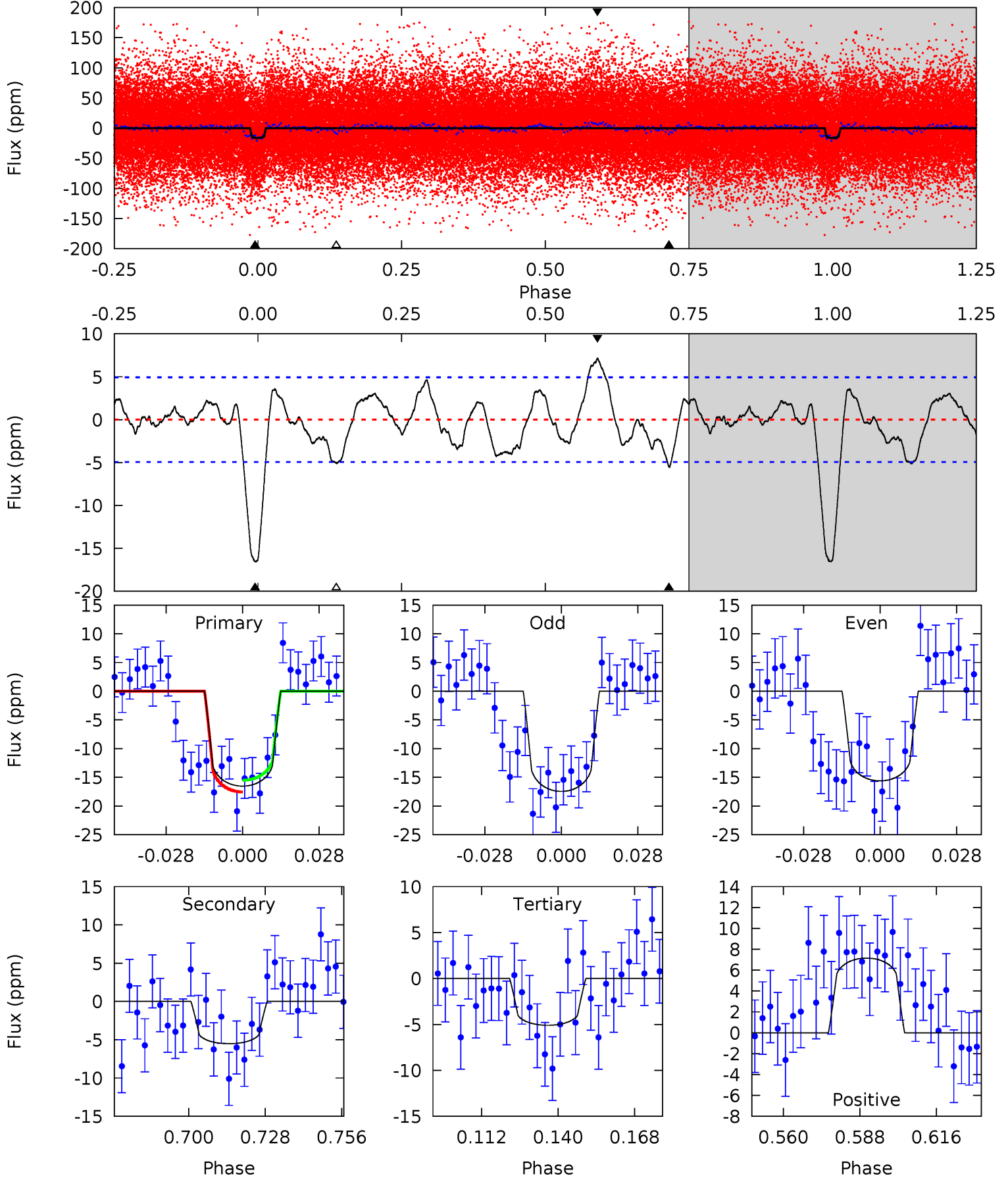
TCE 002569639-01 P= 6.715654 Days $T_0=133.656837$ (BKJD)



DV Model-Shift Uniqueness Test

002569639-01, P = 6.715581 Days, E = 126.990316 Days

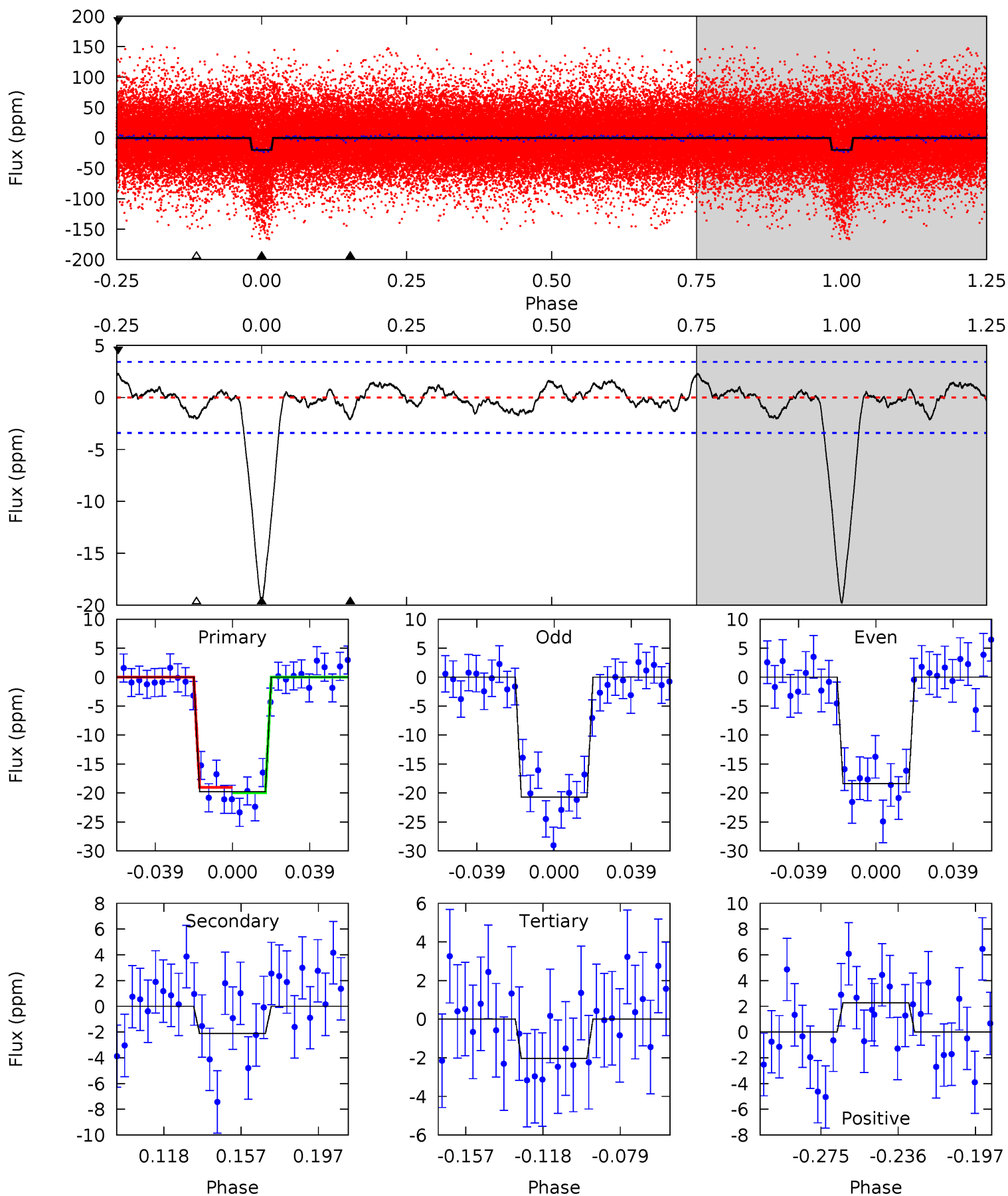
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
16.2	5.40	4.98	7.00	4.82	2.20	2.36	11.2	9.19	0.42	-1.60	0.90	0.99	0.30	1.00



Alt Model-Shift Uniqueness Test

002569639-01, P = 6.715654 Days, E = 126.941183 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
27.5	2.94	2.82	3.15	4.76	2.06	1.21	24.7	24.3	0.12	-0.21	1.61	1.36	0.10	0.62



Stellar Parameters For KIC 002569639

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	8243^{+226}_{-340}	$4.126^{+0.145}_{-0.145}$	$-0.200^{+0.200}_{-0.350}$	$1.877^{+0.454}_{-0.372}$	$1.714^{+0.157}_{-0.269}$	$0.365^{+0.276}_{-0.157}$
	+3%/-4%	+4%/-4%	+100%/-175%	+24%/-20%	+9%/-16%	+76%/-43%
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 002569639-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-6 ± 1	$0.77^{+0.17}_{-0.16}$	2391^{+164}_{-156}	6223^{+707}_{-585}	34^{+21}_{-12}
Alt.	-2 ± 1	$0.87^{+0.18}_{-0.18}$	2394^{+172}_{-152}	4724^{+499}_{-449}	10^{+7}_{-4}

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 $A_{obs} \gg 1.0$

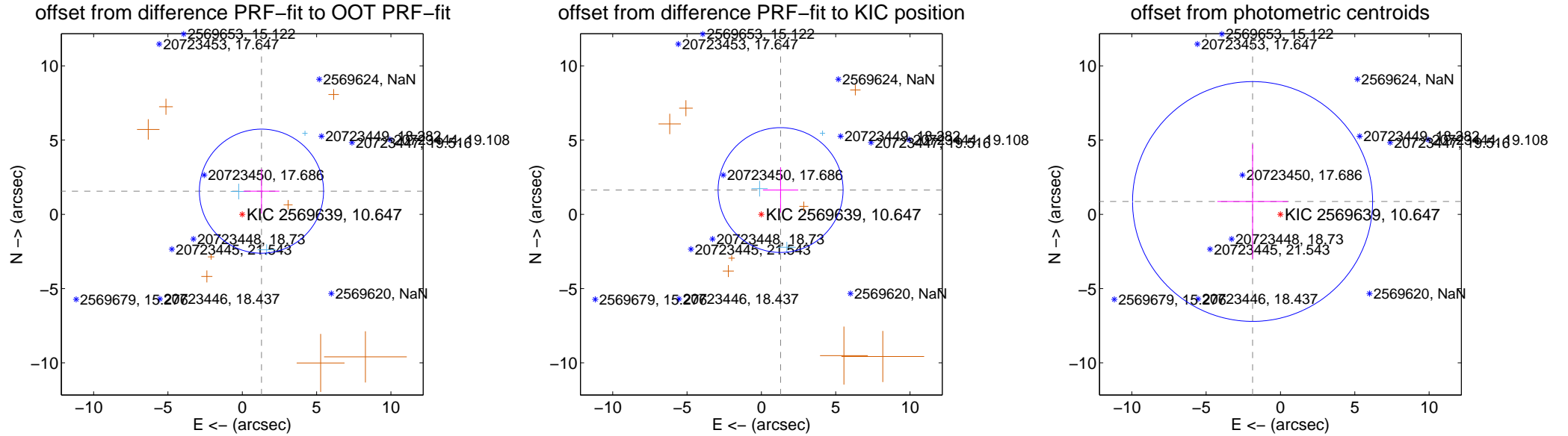
DV Centroid Data

Supplemental centroid analysis for 002569639-01. **Kepler magnitude: 10.65.** Transit SNR 7.19

There are 3 quarters with good PRF difference image offsets

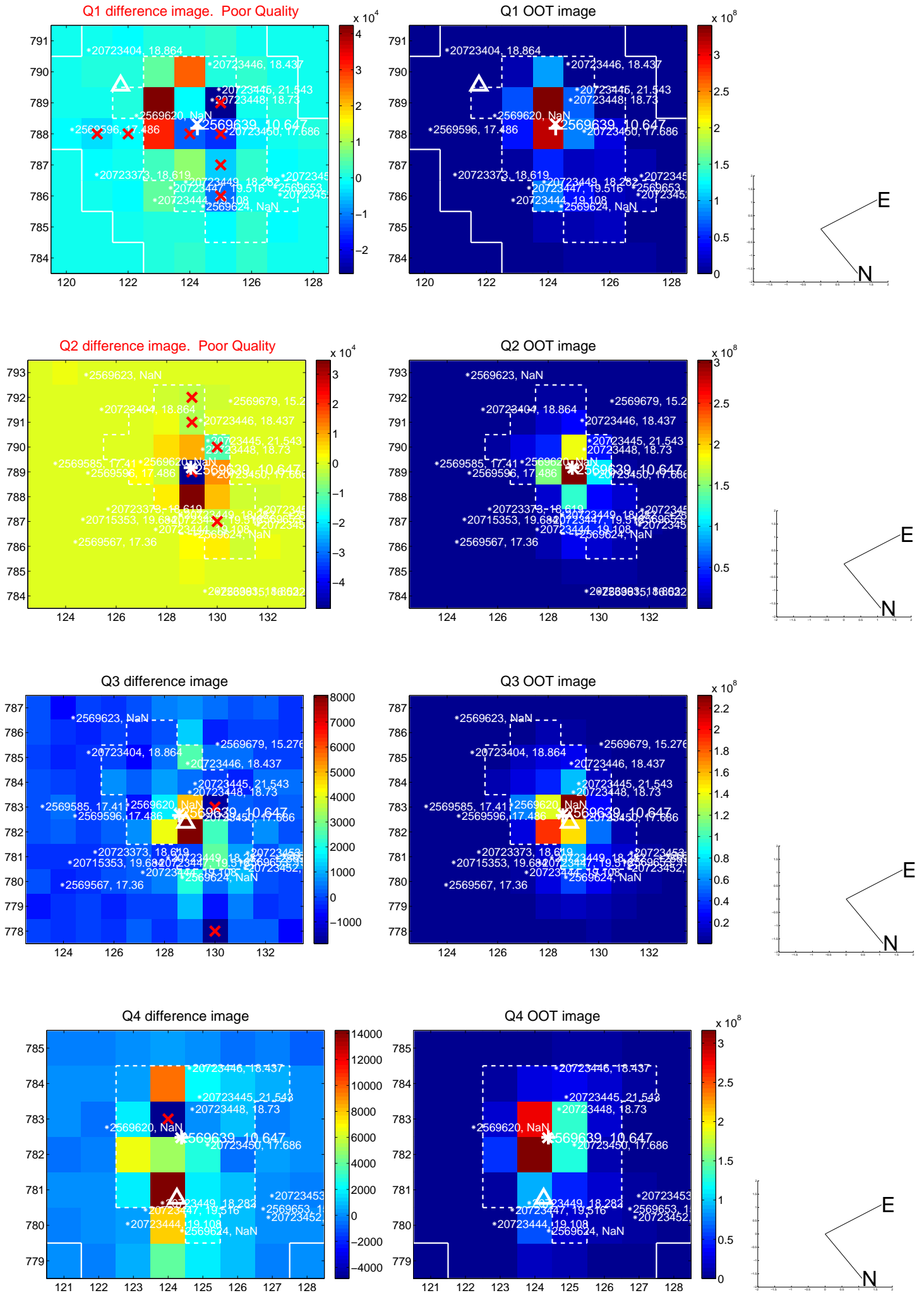
The direct PRF centroid is offset from the target star catalog position by about 0.40 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	2.024 ± 1.393	1.45	-1.290 ± 1.207	1.560 ± 1.506
PRF-fit source offset from KIC position	2.085 ± 1.401	1.49	-1.293 ± 1.186	1.636 ± 1.520
photometric centroid source offset	2.07 ± 2.69	0.77	1.88 ± 2.37	0.86 ± 3.85

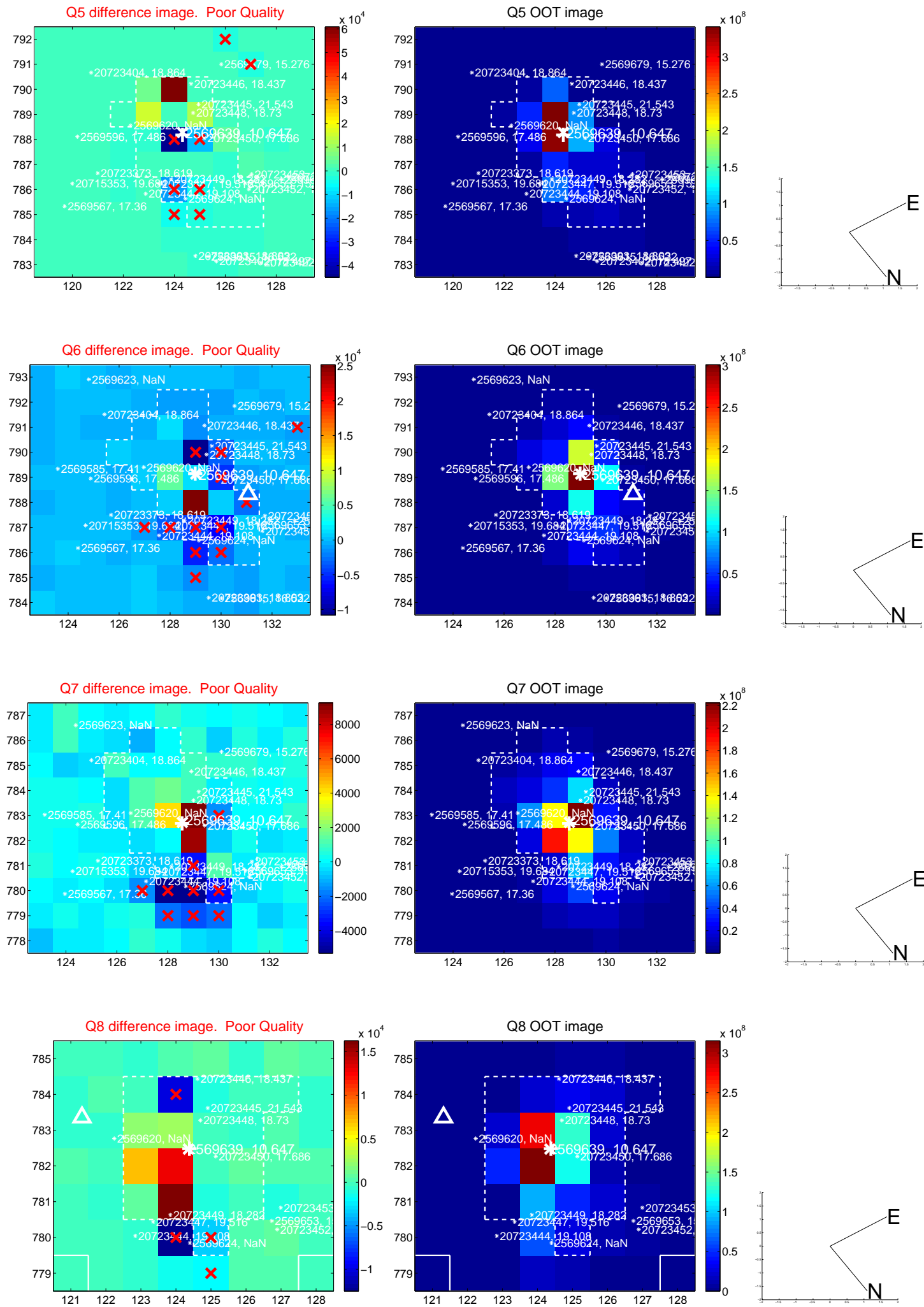


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets;** magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

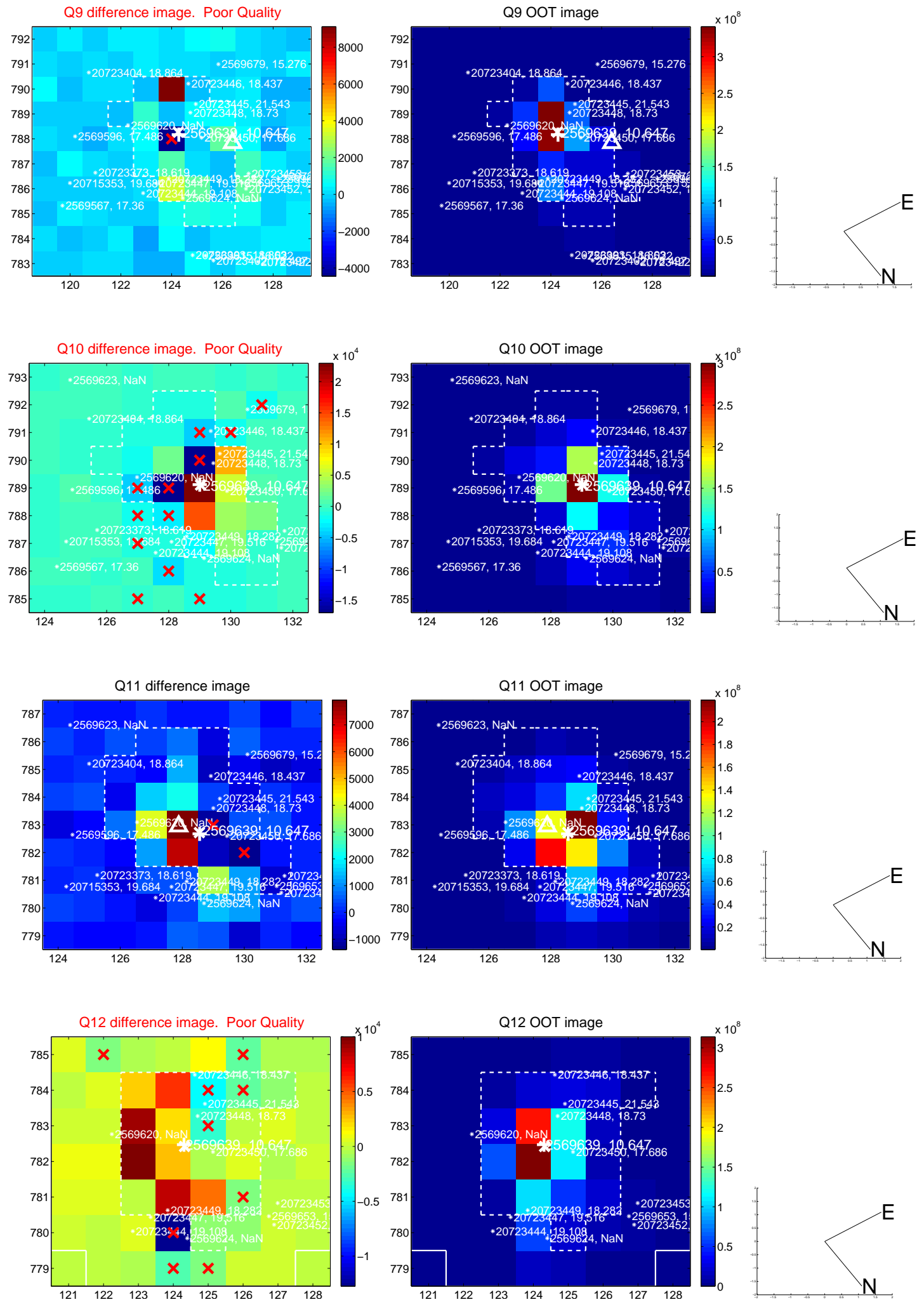
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



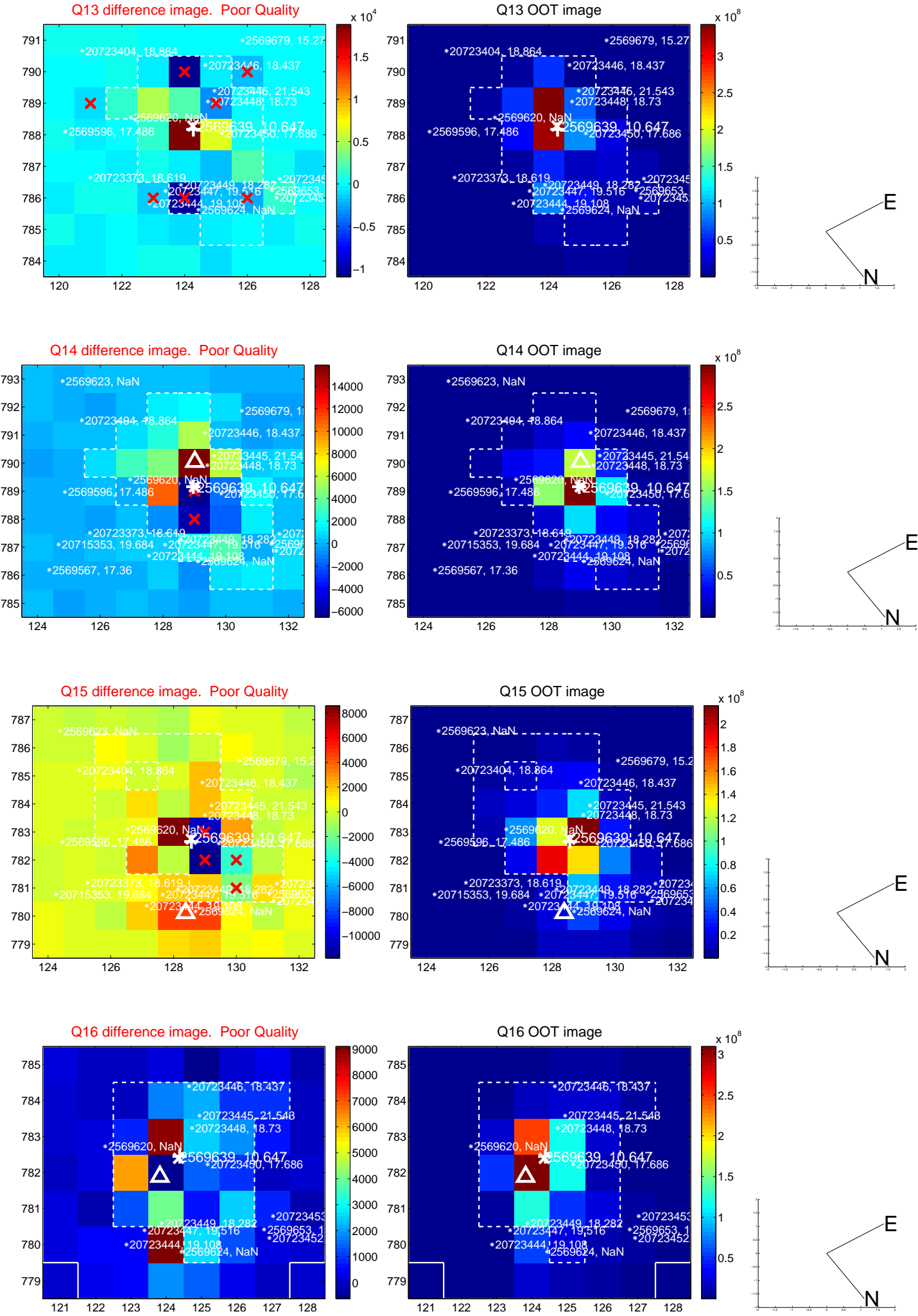
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



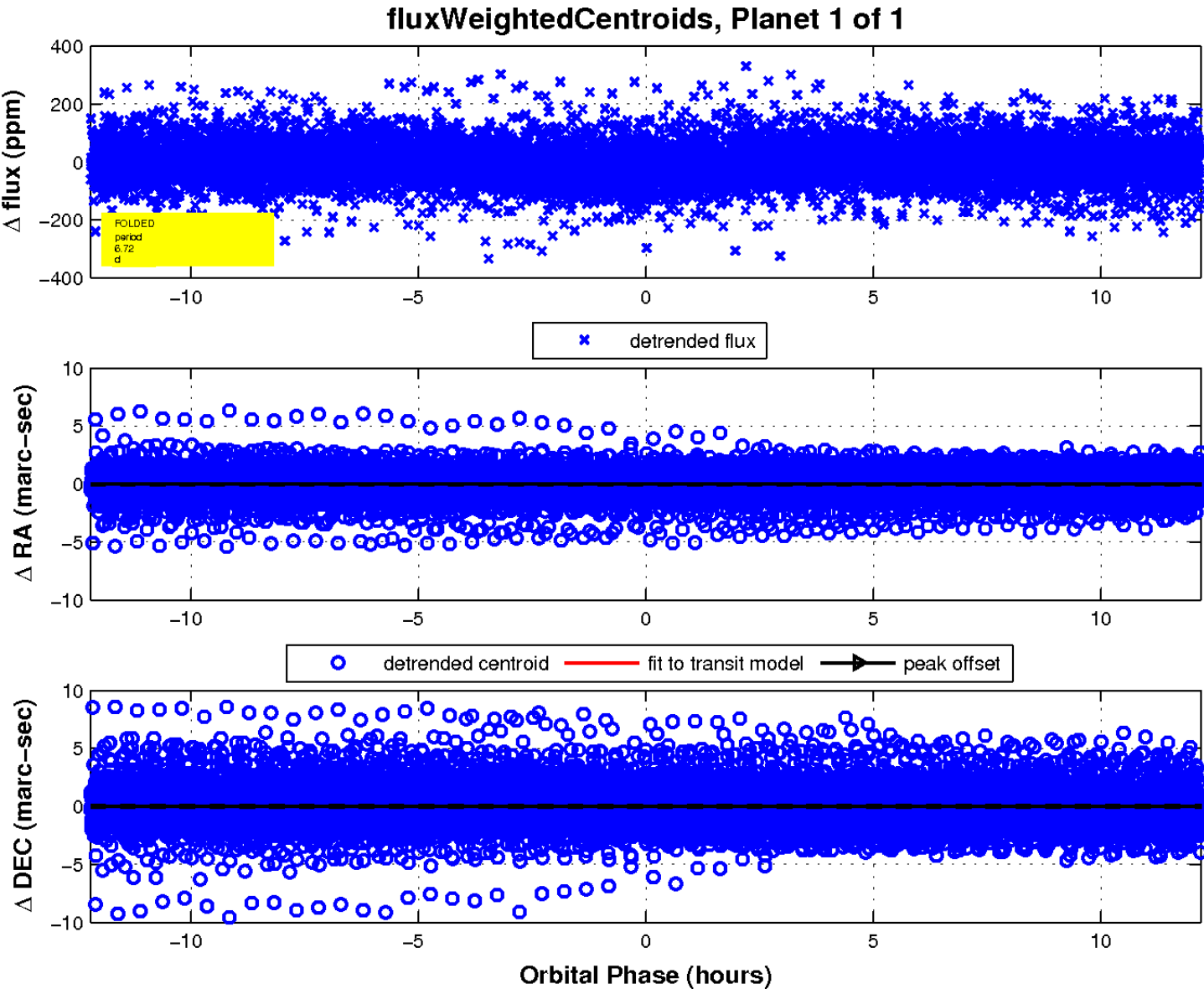
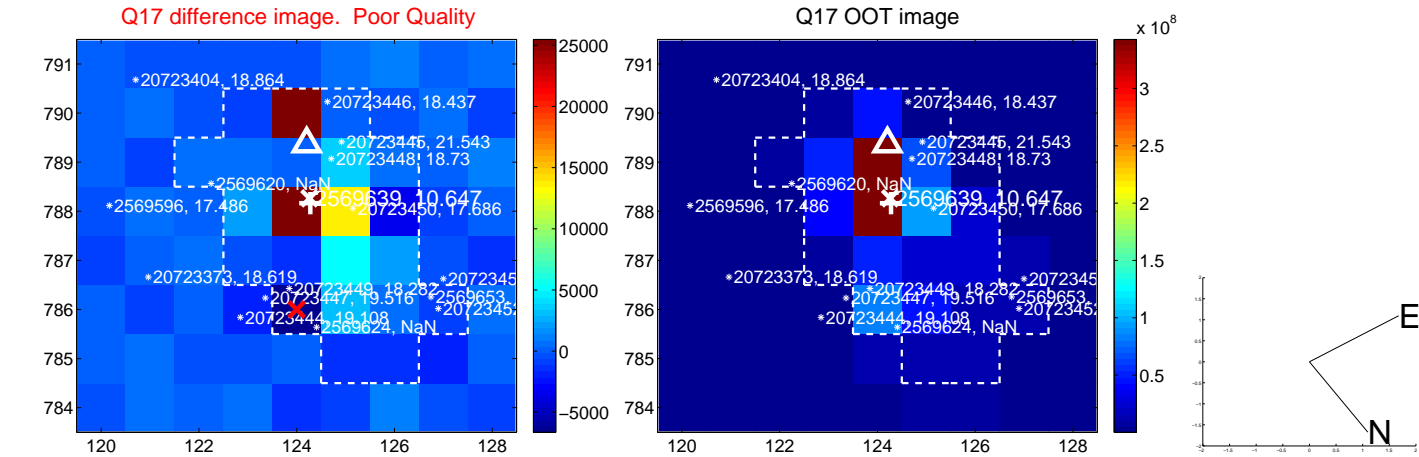
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white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination

