

KIC 008126371

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})
008126371-01	OBS	No	2.952148	133.035460	28.6	31.606	10.4	13.9	13.40	6489	7.26	0.00

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
008126371-01	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.

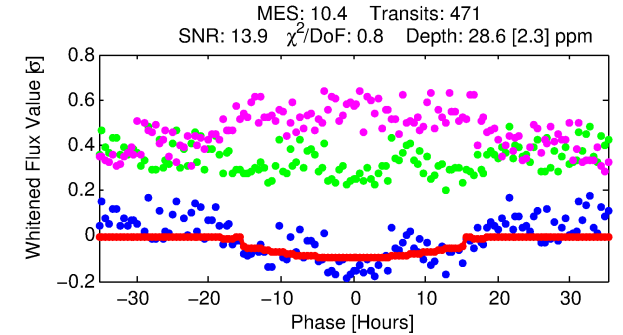
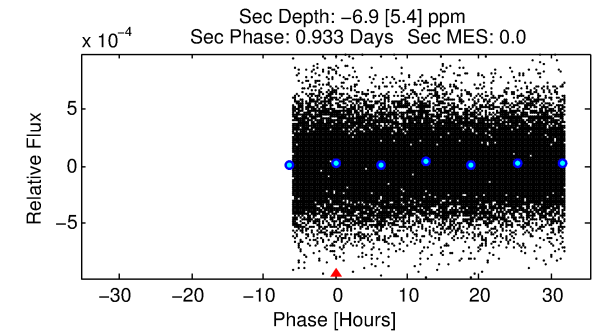
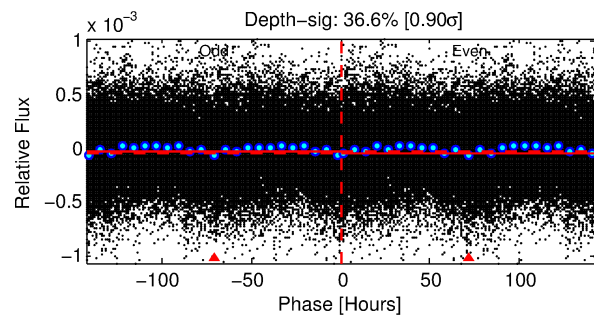
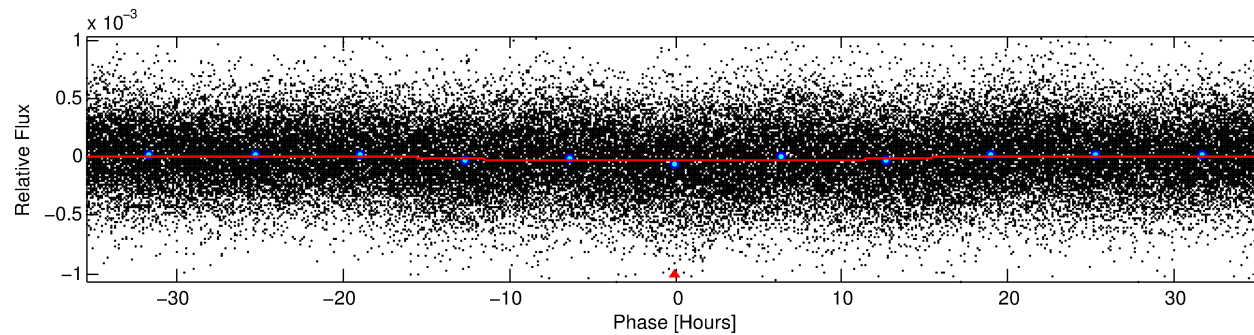
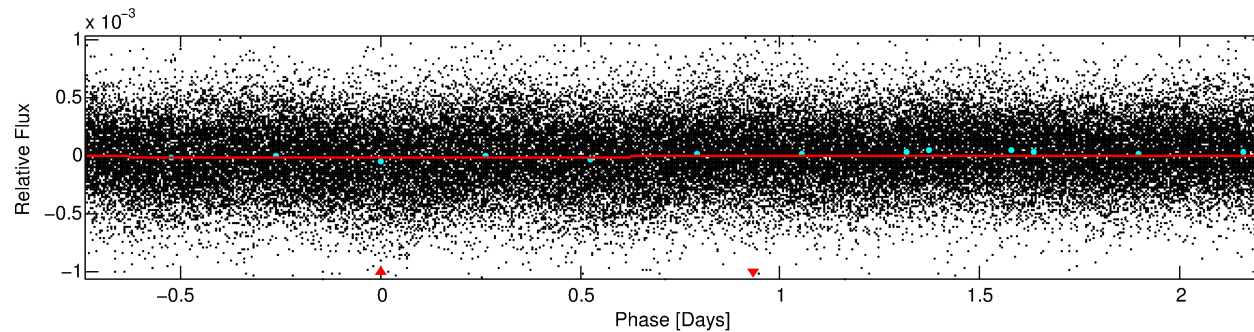
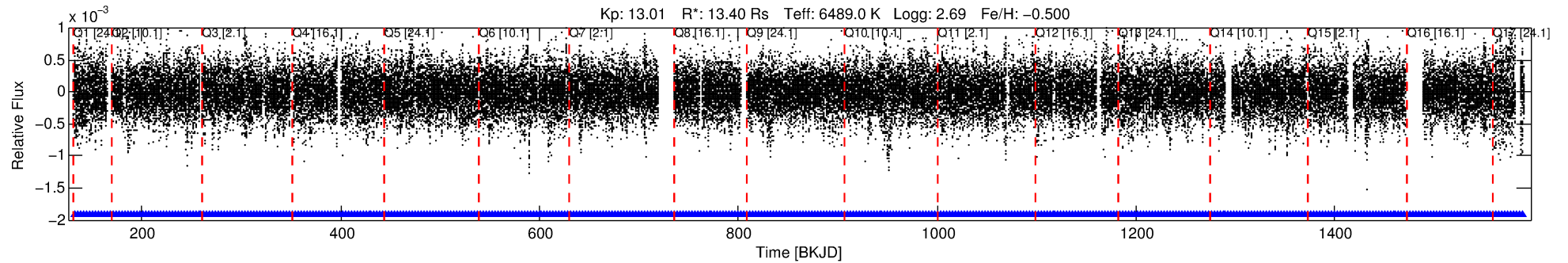
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 008126371-01

No Significant Match Found

DV One-Page Summary

KIC: 8126371 Candidate: 1 of 1 Period: 2.952 d



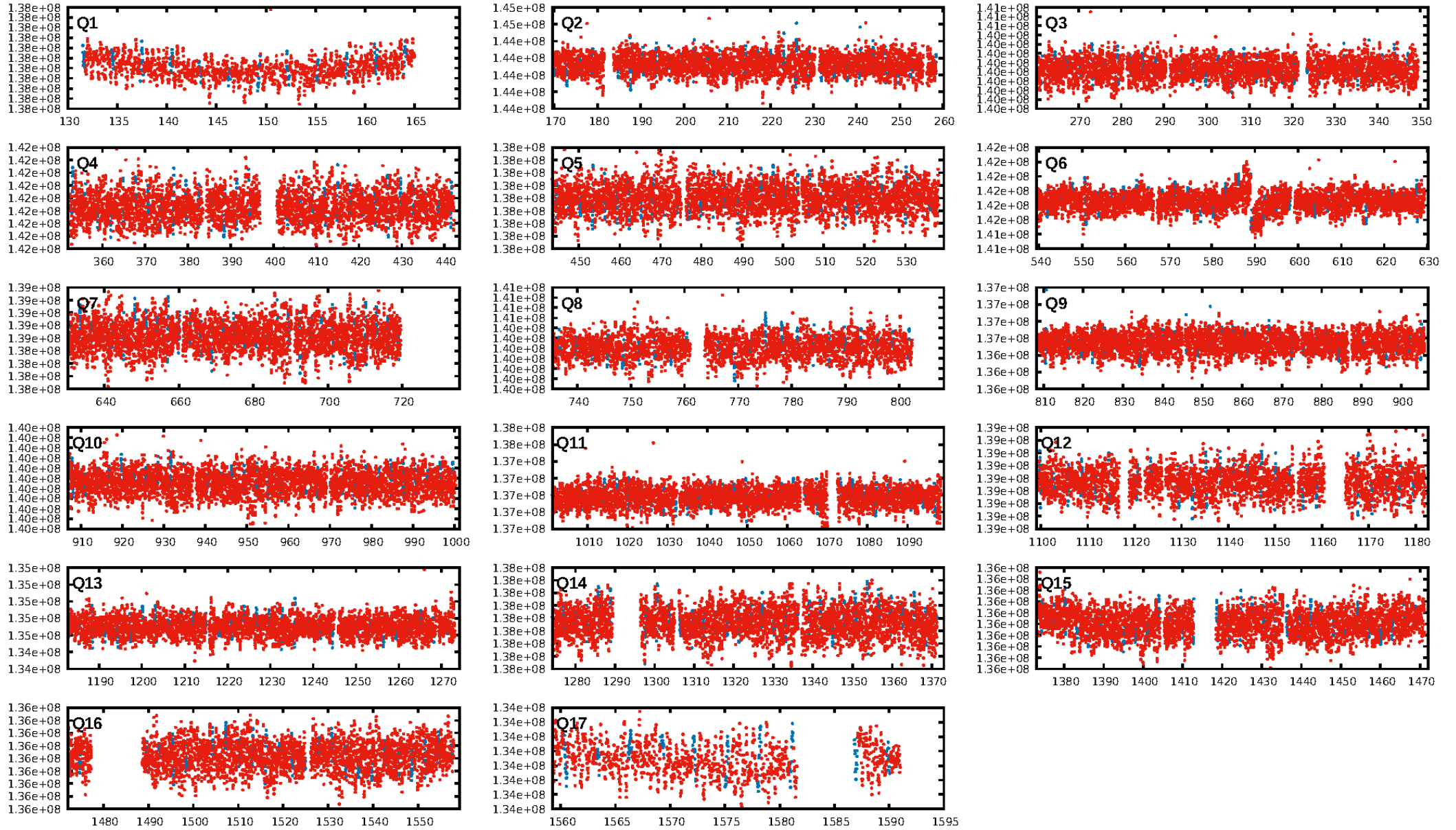
DV Fit Results:

Period = 2.95215 [0.00007] d
Epoch = 133.0355 [0.0136] BKJD
Rp/R* = 0.0050 [0.0013]
a/R* = 1.02 [0.05]
b = 0.28 [4.74]
Seff = N/A
Teq = N/A
Rp = 7.26 [4.80] Re
a = N/A
Ag = N/A
Teffp = N/A

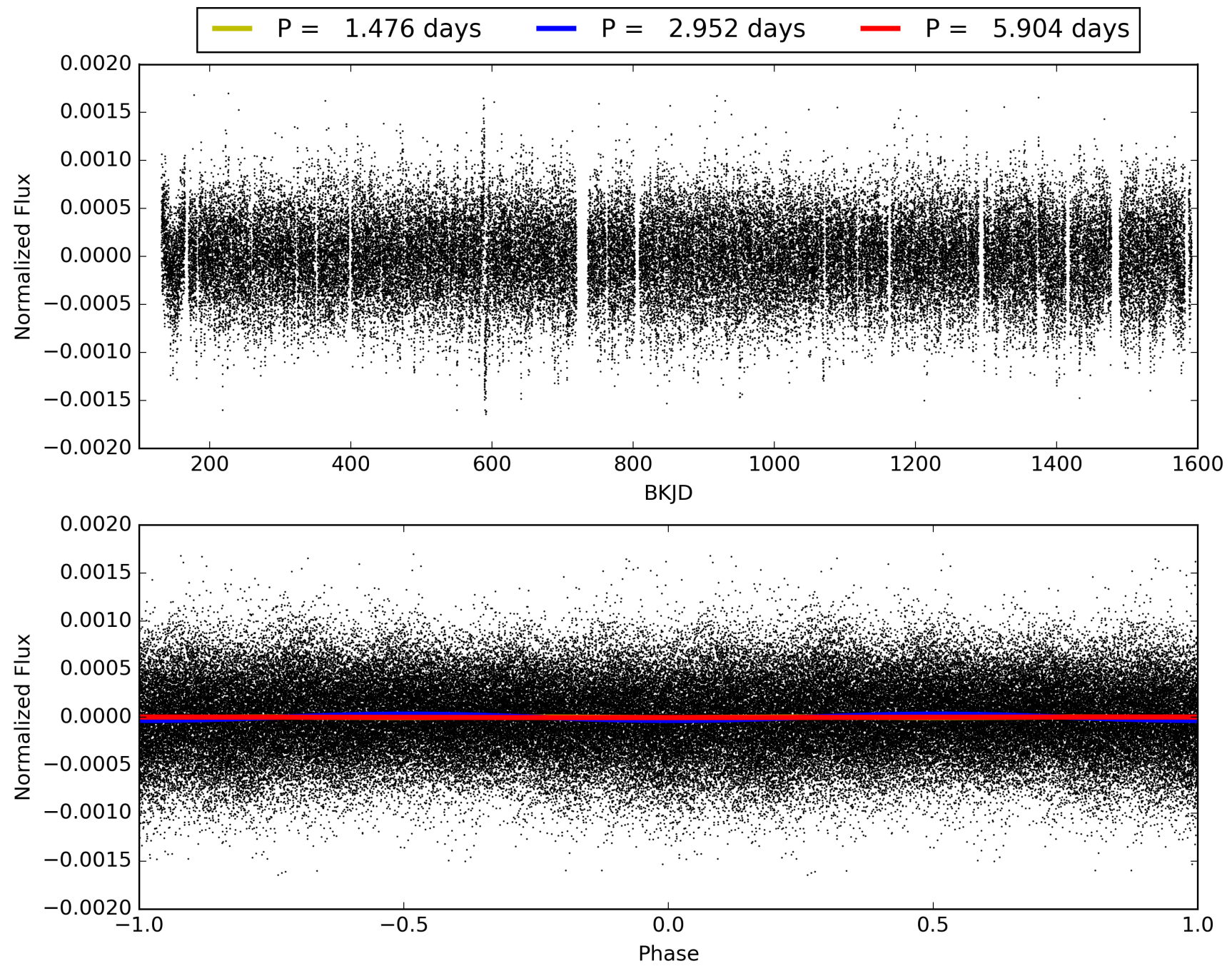
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGoF-sig: N/A
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [449/449]
GhostDiagnostic-chr: 42.58
Centroid-sig: 48.4%
Centroid-so: 0.554 arcsec [0.98 σ]
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 [17/17]

TCE 008126371-01, PDC Light Curves

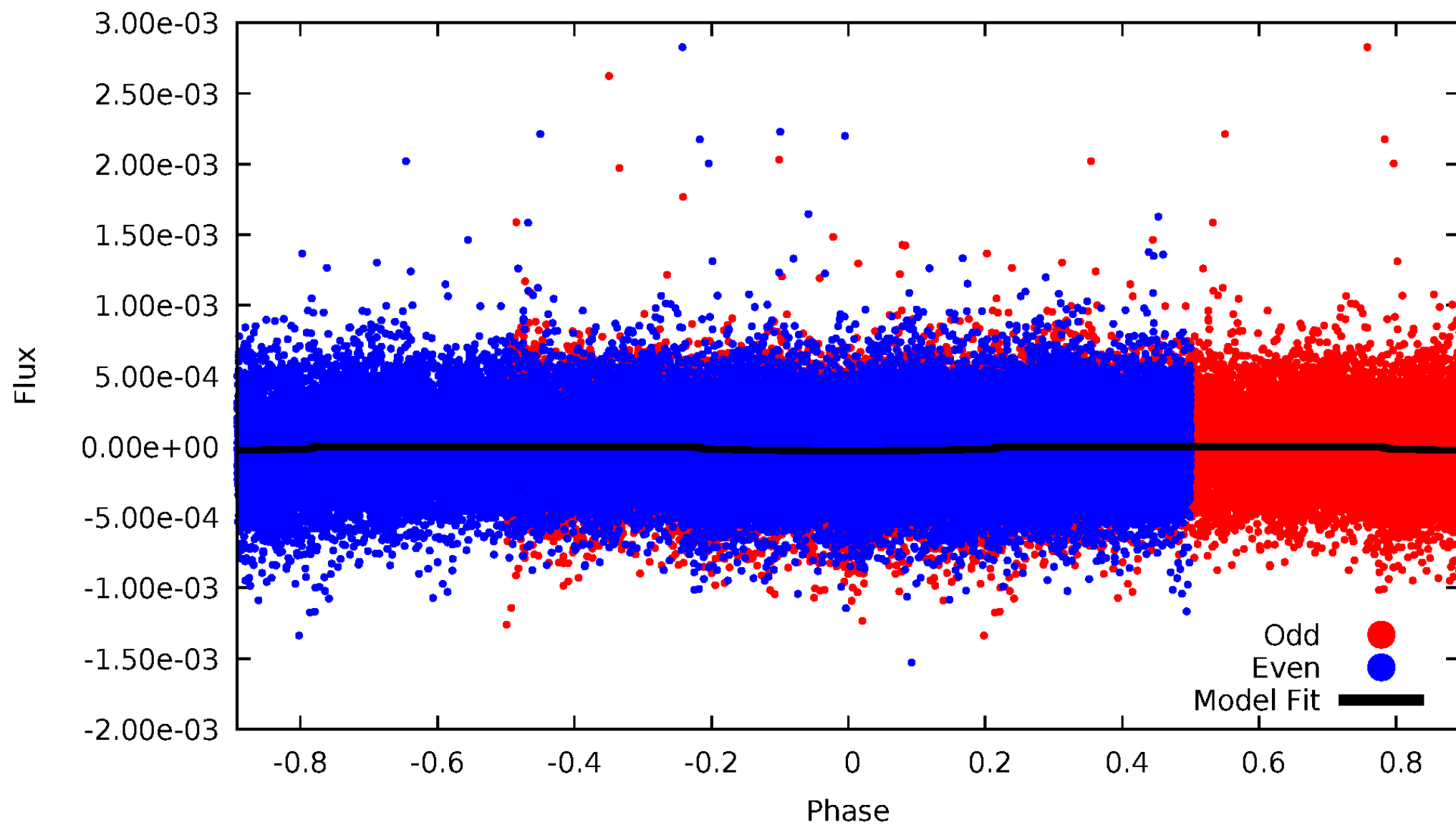


TCE 008126371-01



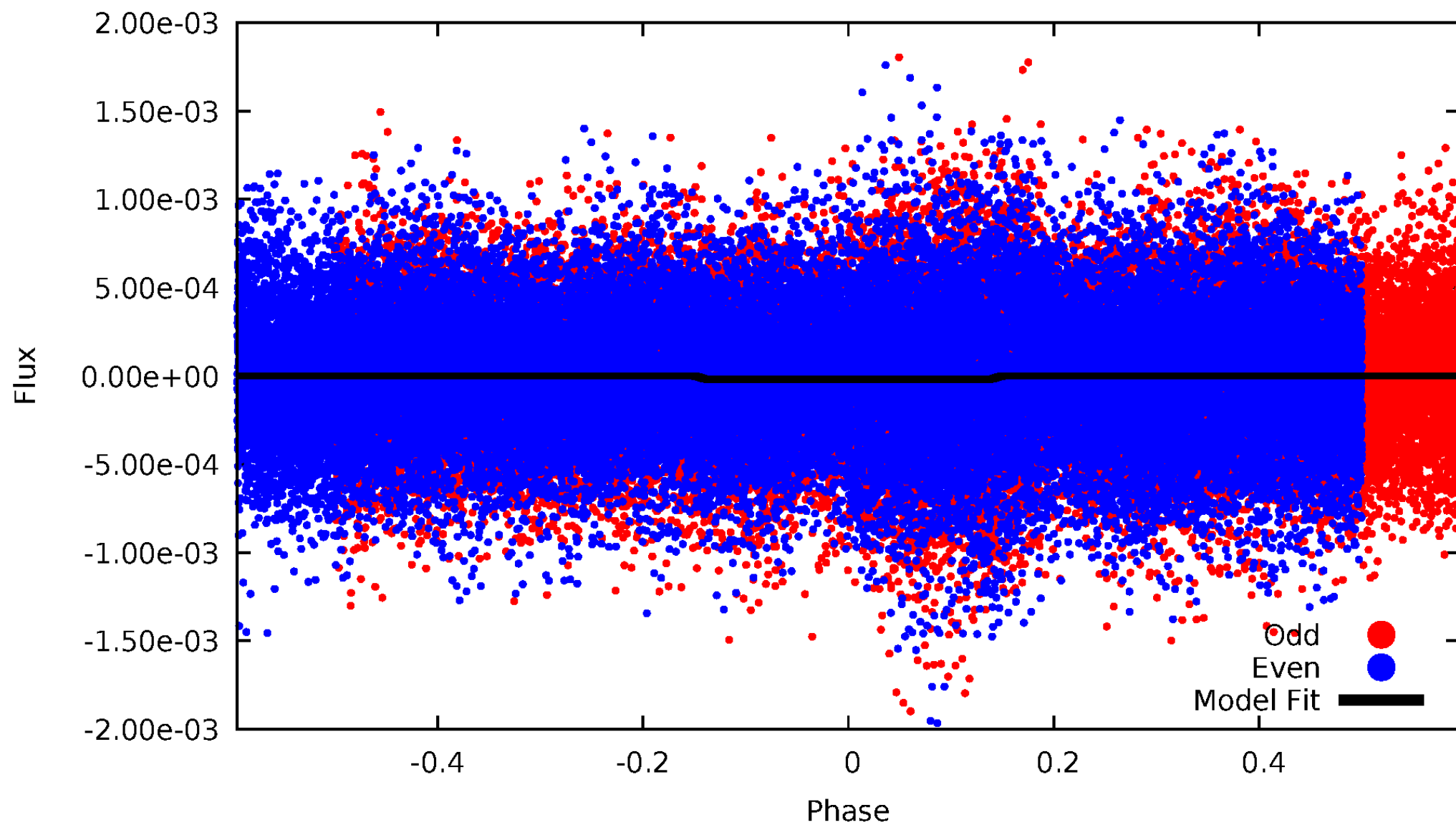
DV Odd/Even

TCE 008126371-01

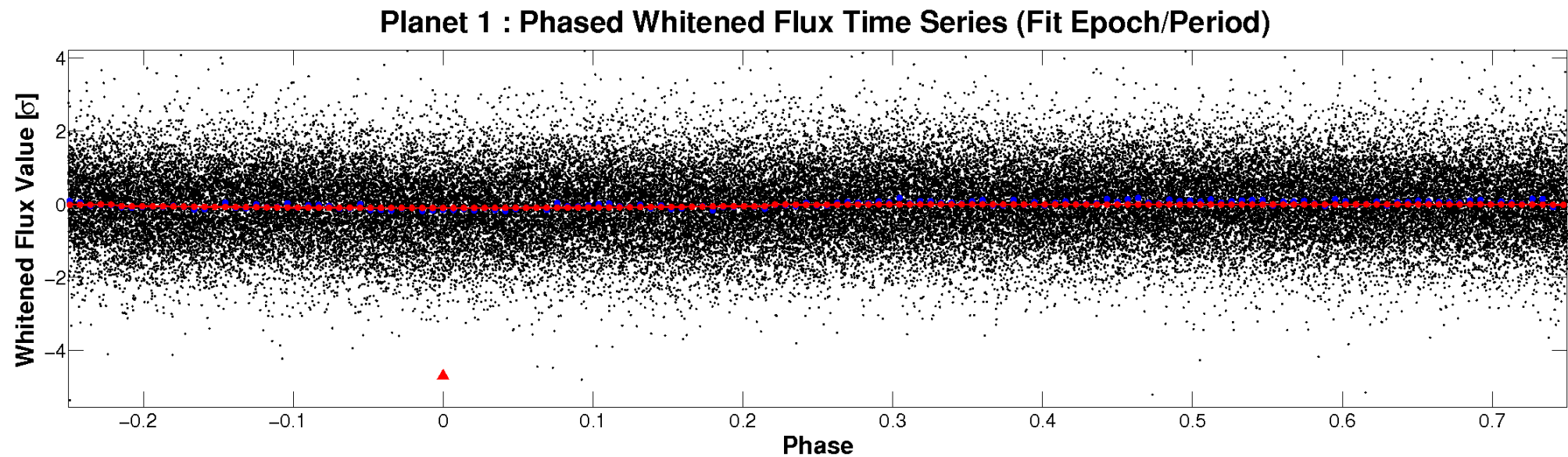
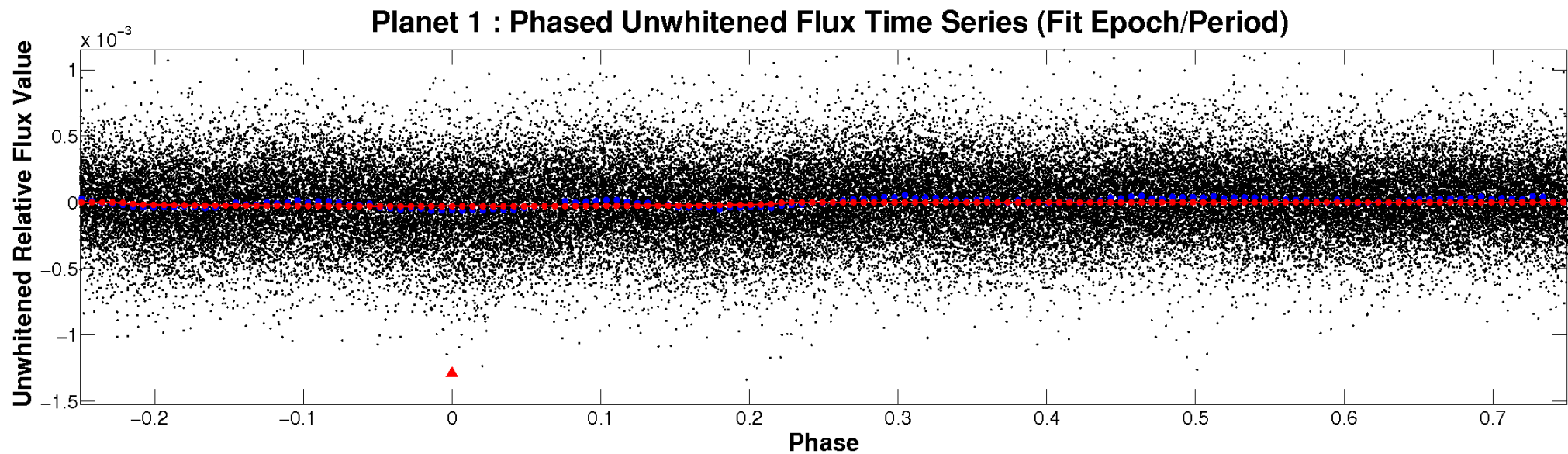


ALT Odd/Even

TCE 008126371-01

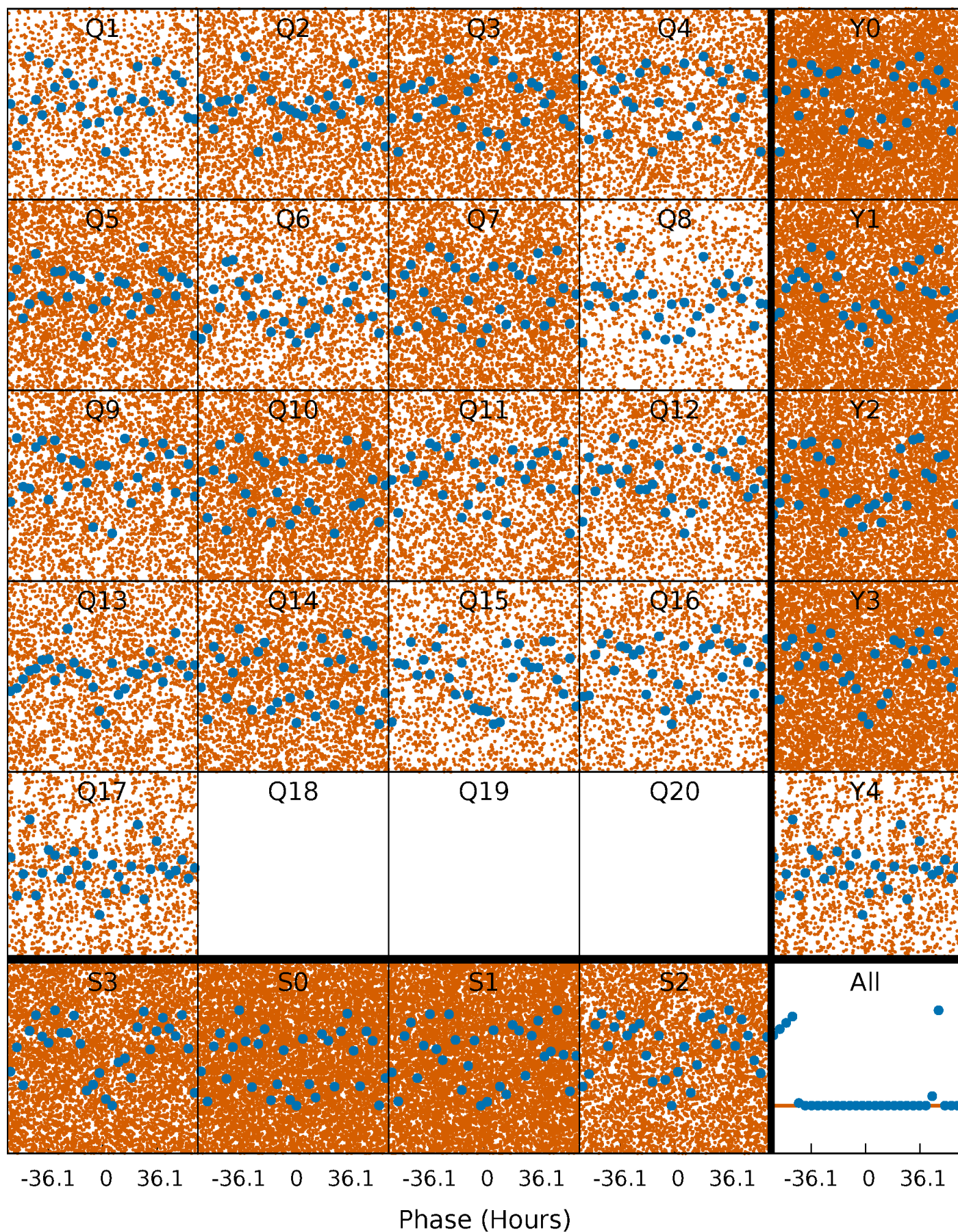


Non-Whitened Vs. Whitened Light Curve



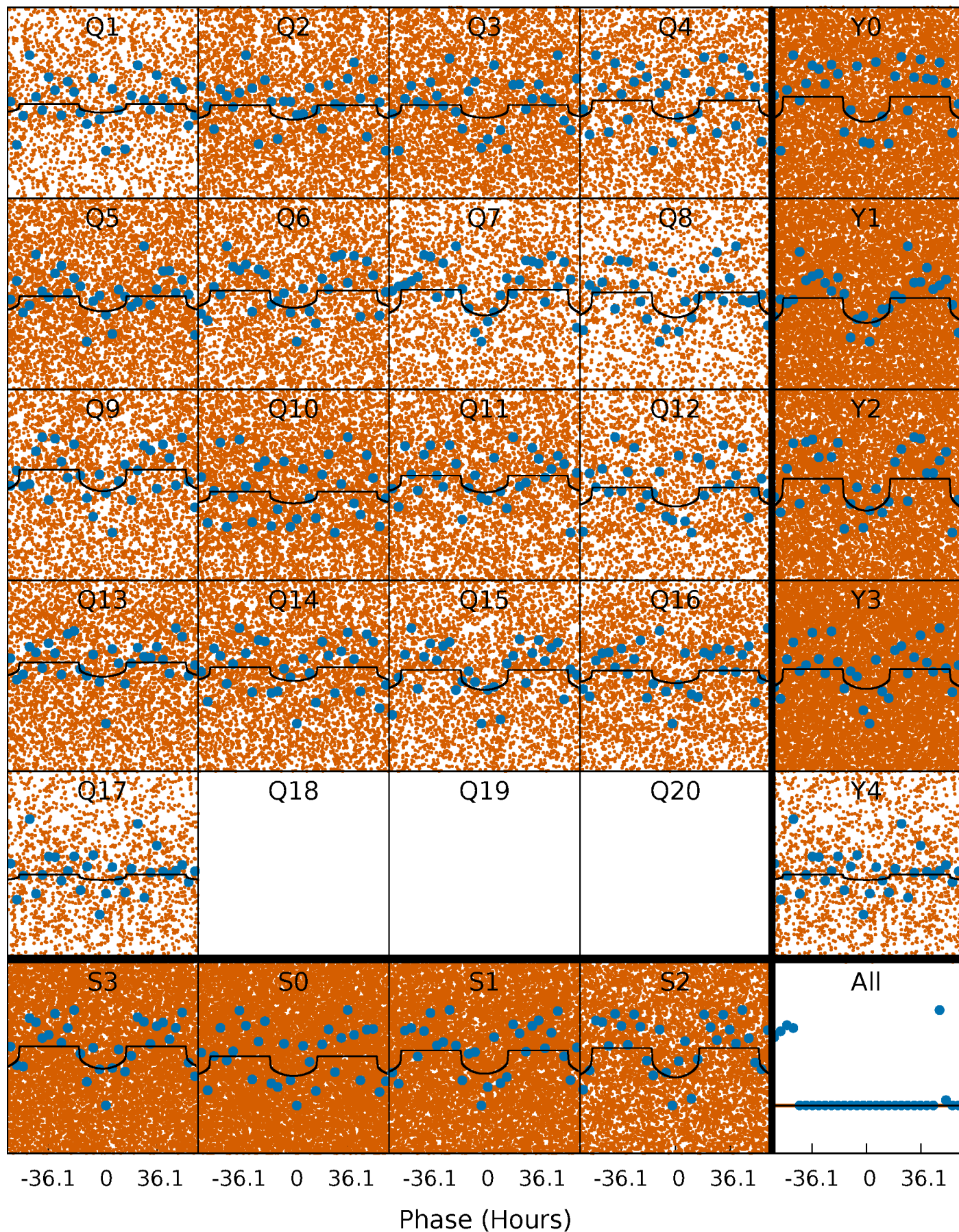
PDC Quarter-Phased Transit Curves

TCE 008126371-01 P= 2.952148 Days $T_0=133.035460$ (BKJD)



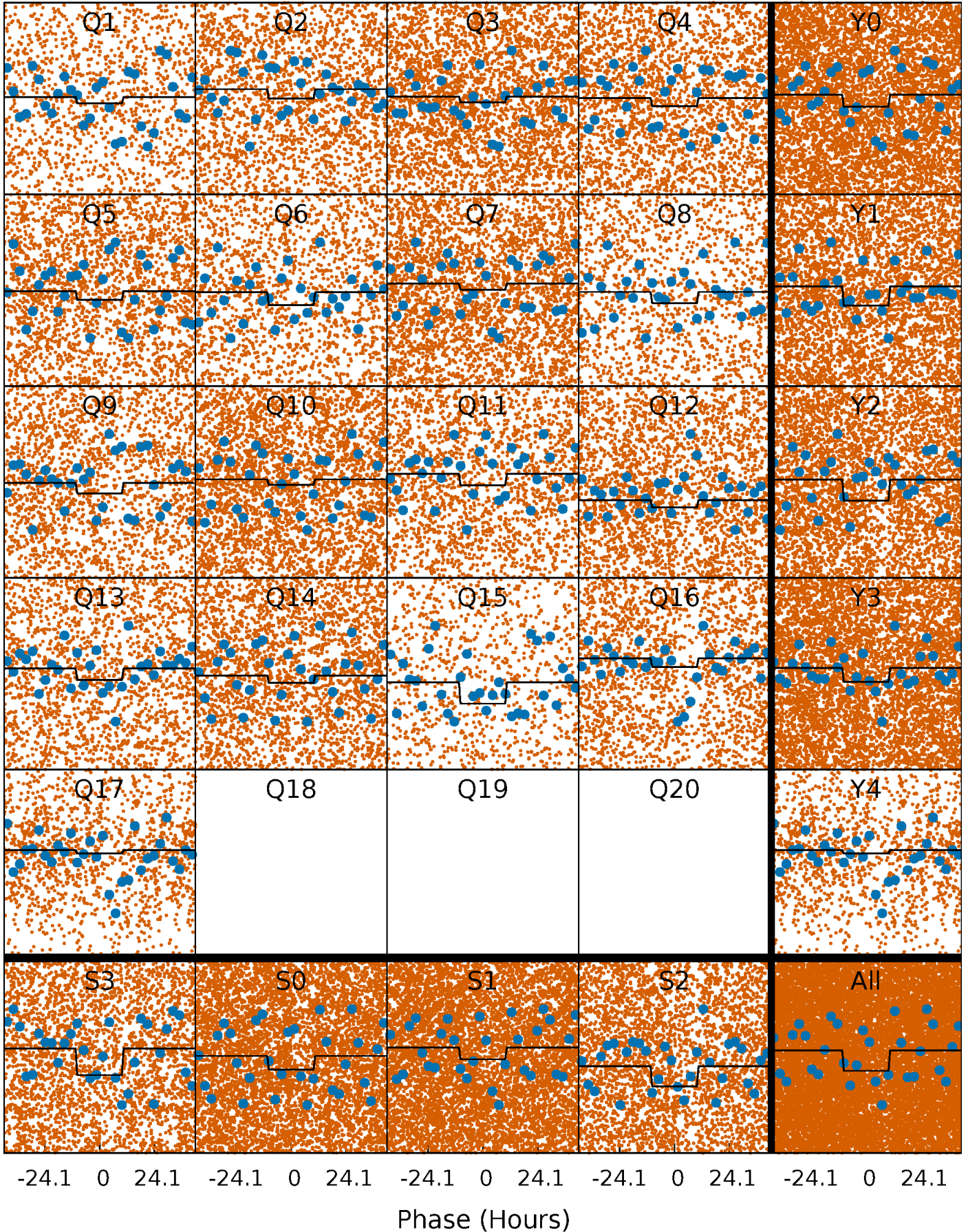
DV Quarter-Phased Transit Curves

TCE 008126371-01 P= 2.952148 Days $T_0=133.035460$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

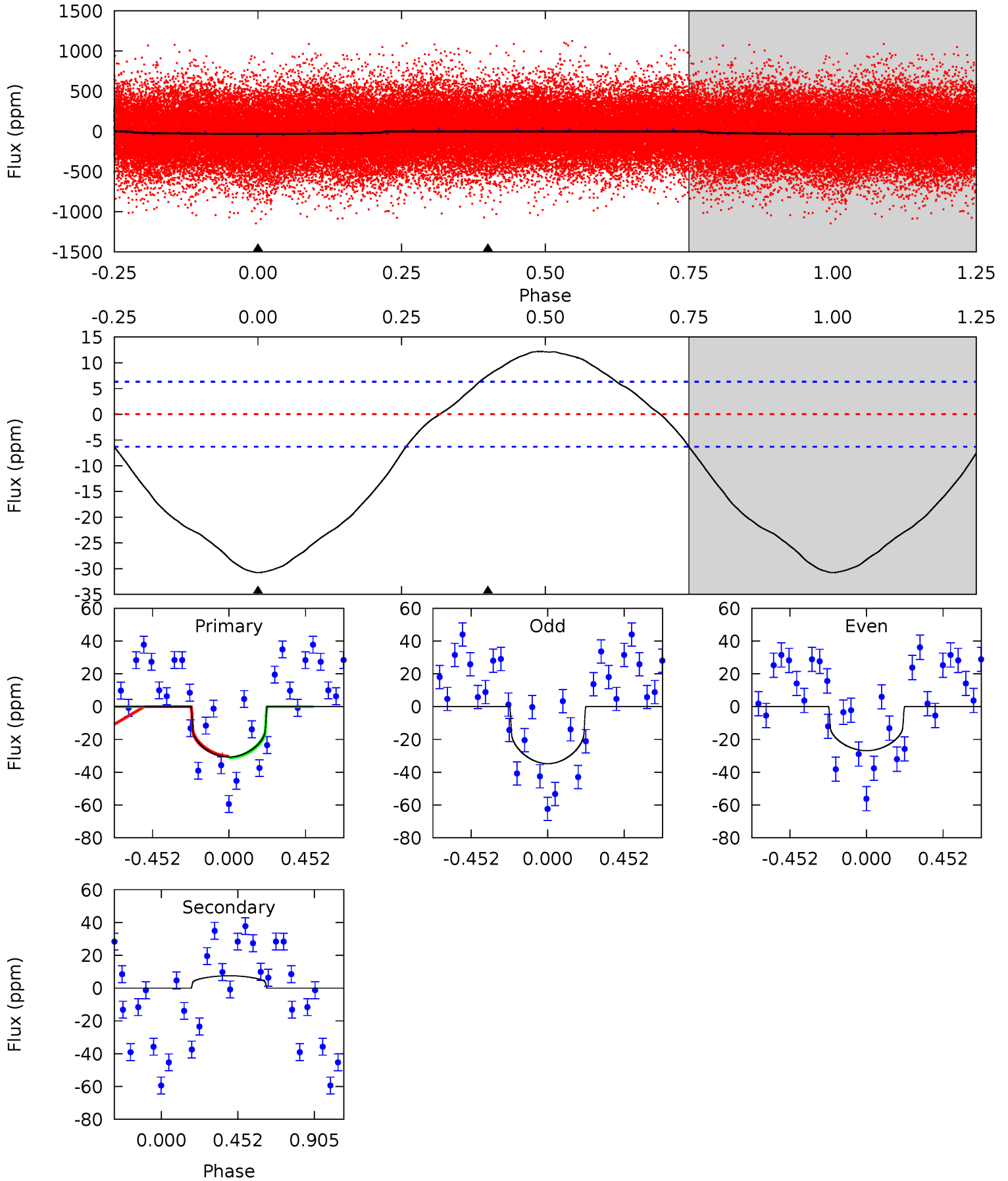
TCE 008126371-01 P= 2.952119 Days $T_0=132.768048$ (BKJD)



DV Model-Shift Uniqueness Test

008126371-01, P = 2.952148 Days, E = 130.083312 Days

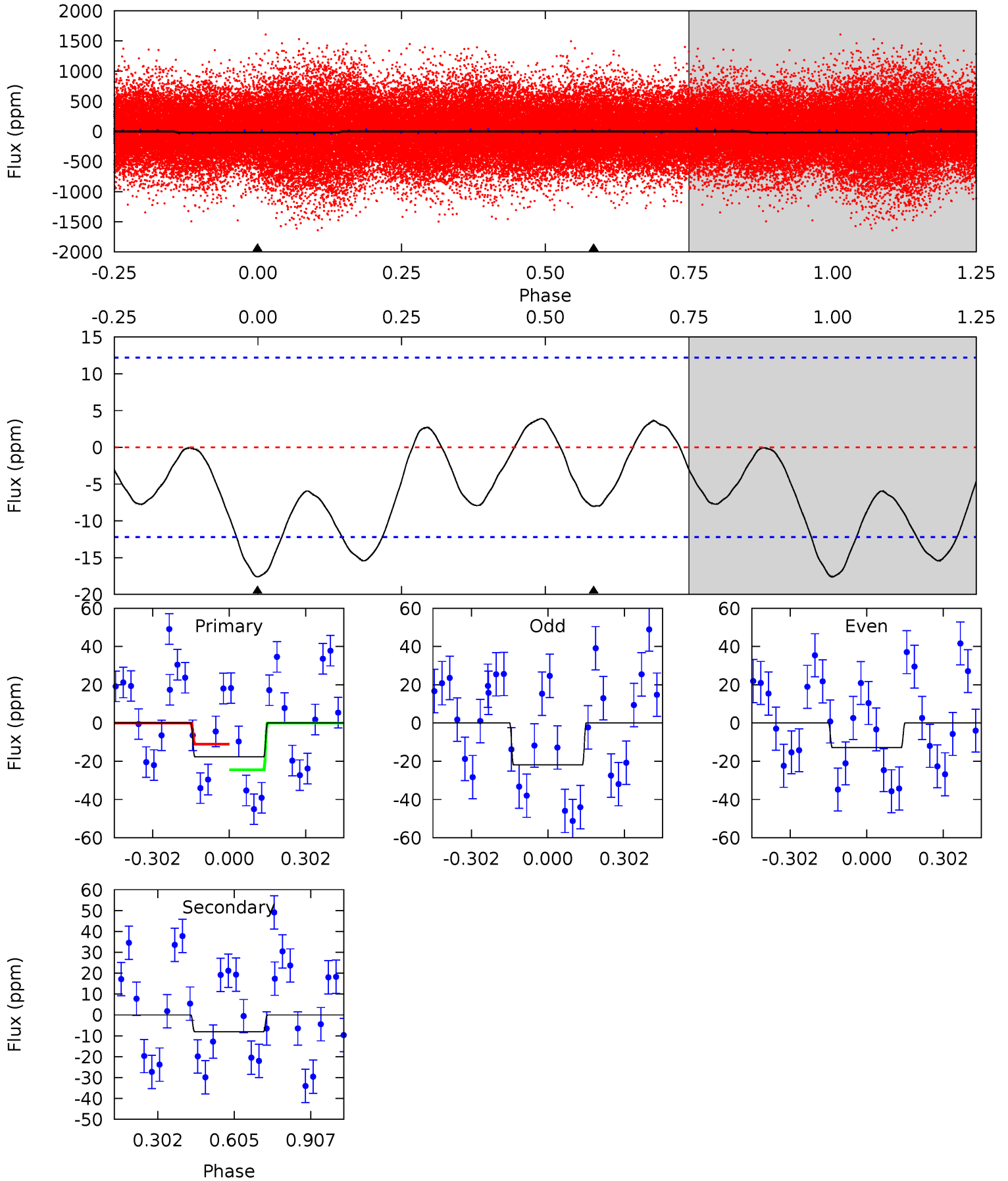
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
20.7	-5.05	0	0	4.24	0.75	2.10	20.7	20.7	-5.05	-5.05	2.66	0.96	0.28	0.30



Alt Model-Shift Uniqueness Test

008126371-01, P = 2.952119 Days, E = 129.815929 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
6.25	2.84	0	0	4.33	1.03	0.93	6.25	6.25	2.84	2.84	1.61	0.93	0.18	2.58



Stellar Parameters For KIC 008126371

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	6489^{+134}_{-312}	$2.694^{+0.576}_{-0.144}$	$-0.500^{+0.500}_{-0.450}$	$13.402^{+0.901}_{-8.110}$	$3.239^{+0.071}_{-1.348}$	$0.002^{+0.017}_{-0.000}$
	+2%/-5%	+21%/-5%	+100%/-90%	+7%/-61%	+2%/-42%	+906%/-22%
Source	PHO1	FLK73	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 008126371-01 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	8 ± 1	$6.56^{+2.50}_{-2.38}$	5900^{+327}_{-792}	-5733^{+446}_{-603}	$-0.319^{+0.156}_{-0.447}$
Alt.	-8 ± 3	$5.91^{+2.18}_{-2.20}$	5927^{+310}_{-750}	4020^{+1590}_{-8078}	$0.415^{+0.637}_{-0.223}$

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 $A_{obs} \gg 1.0$

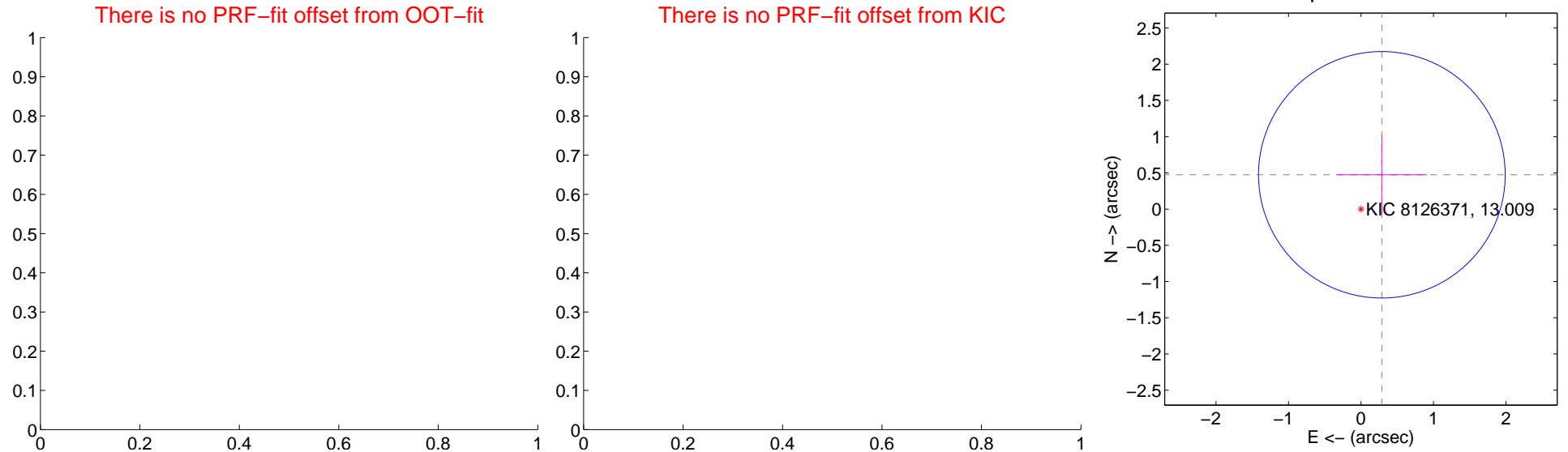
DV Centroid Data

Supplemental centroid analysis for 008126371-01. Kepler magnitude: 13.01. Transit SNR 13.93

There are 0 quarters with good PRF difference image offsets

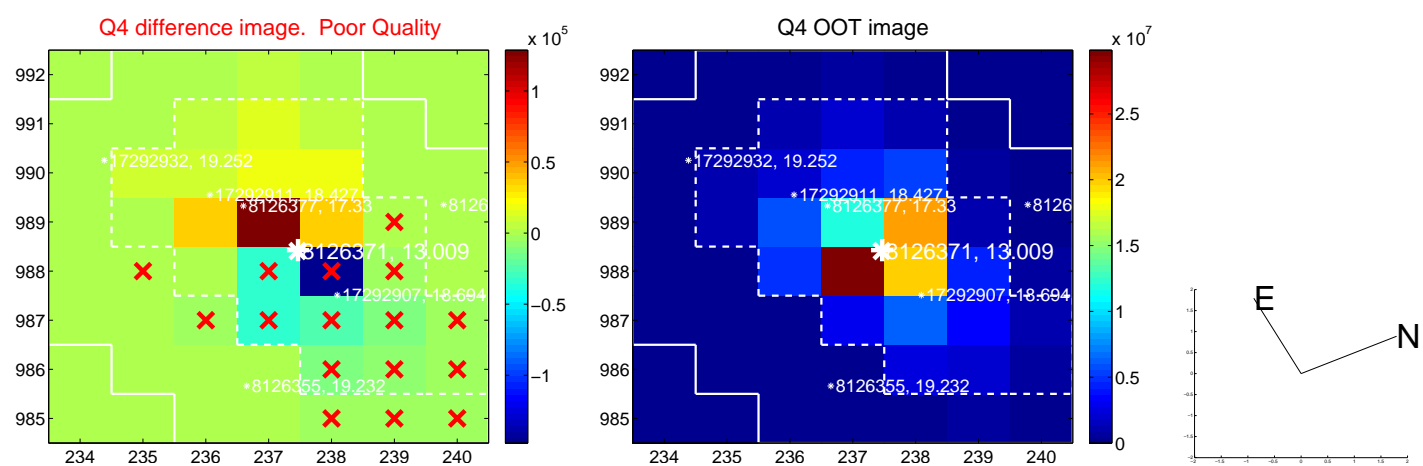
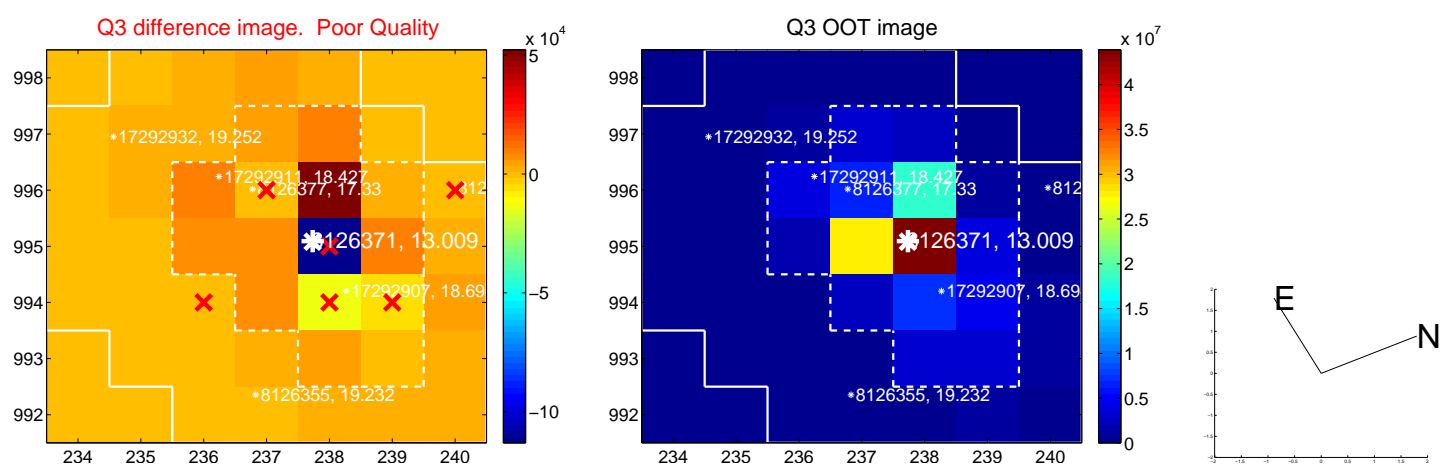
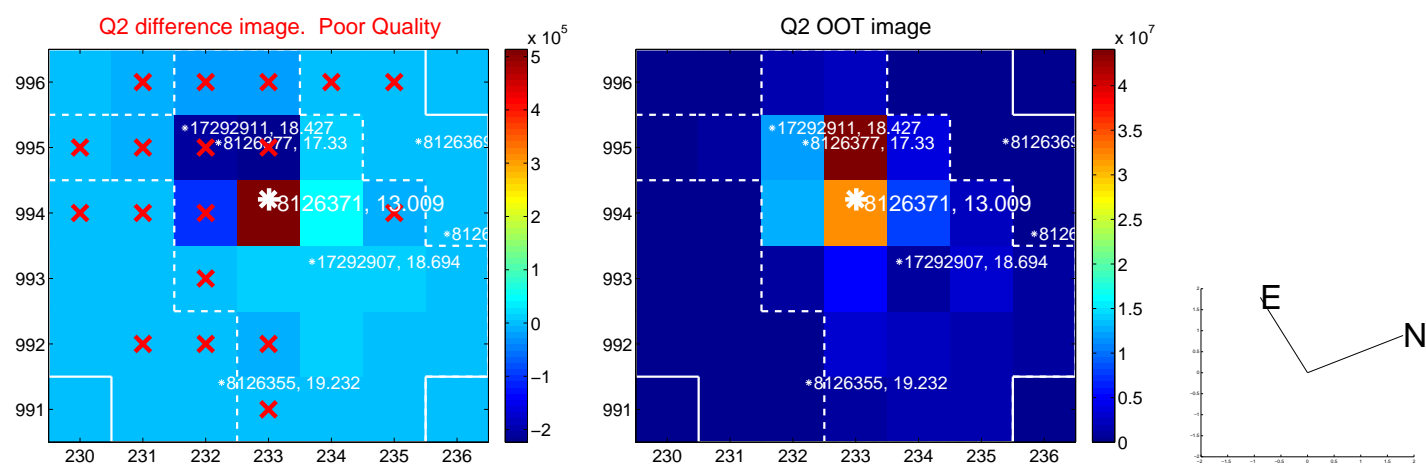
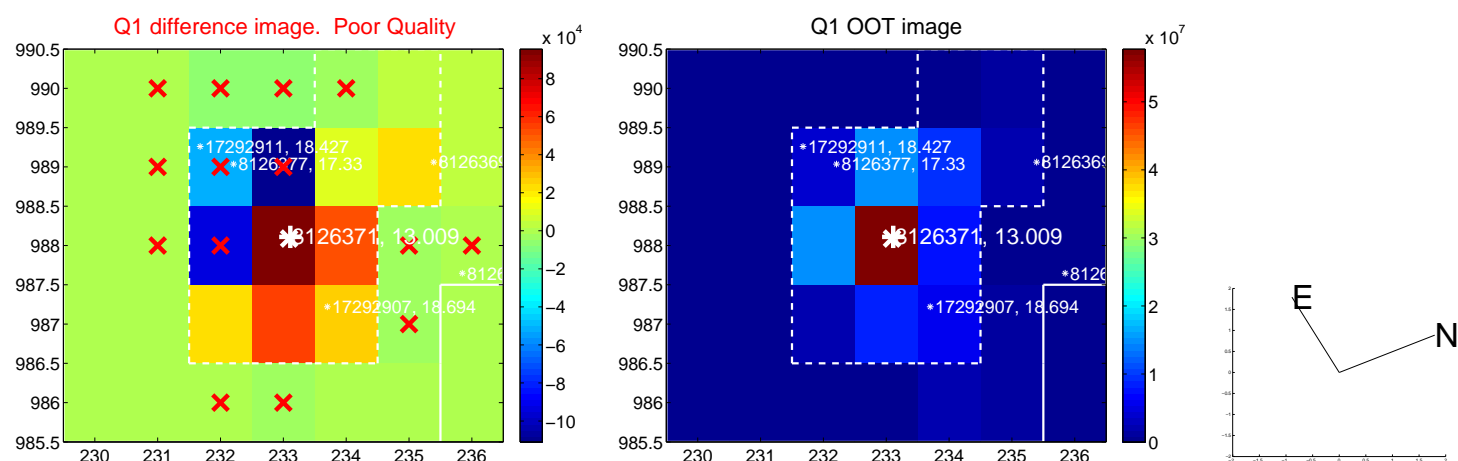
The direct PRF centroid is offset from the target star catalog position by about NaN arcsec

	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	0.55 ± 0.57	0.98	-0.29 ± 0.63	0.47 ± 0.54

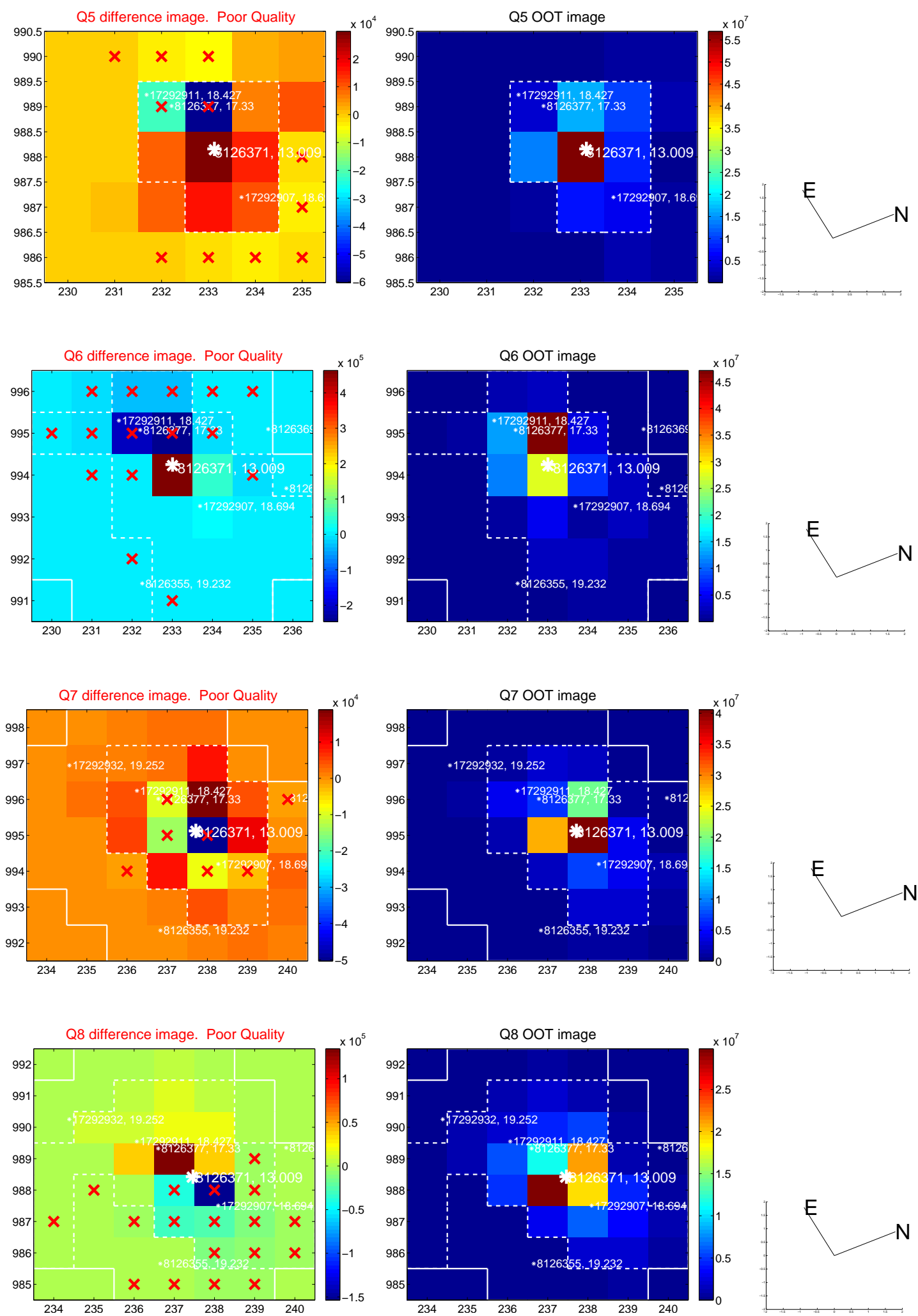


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

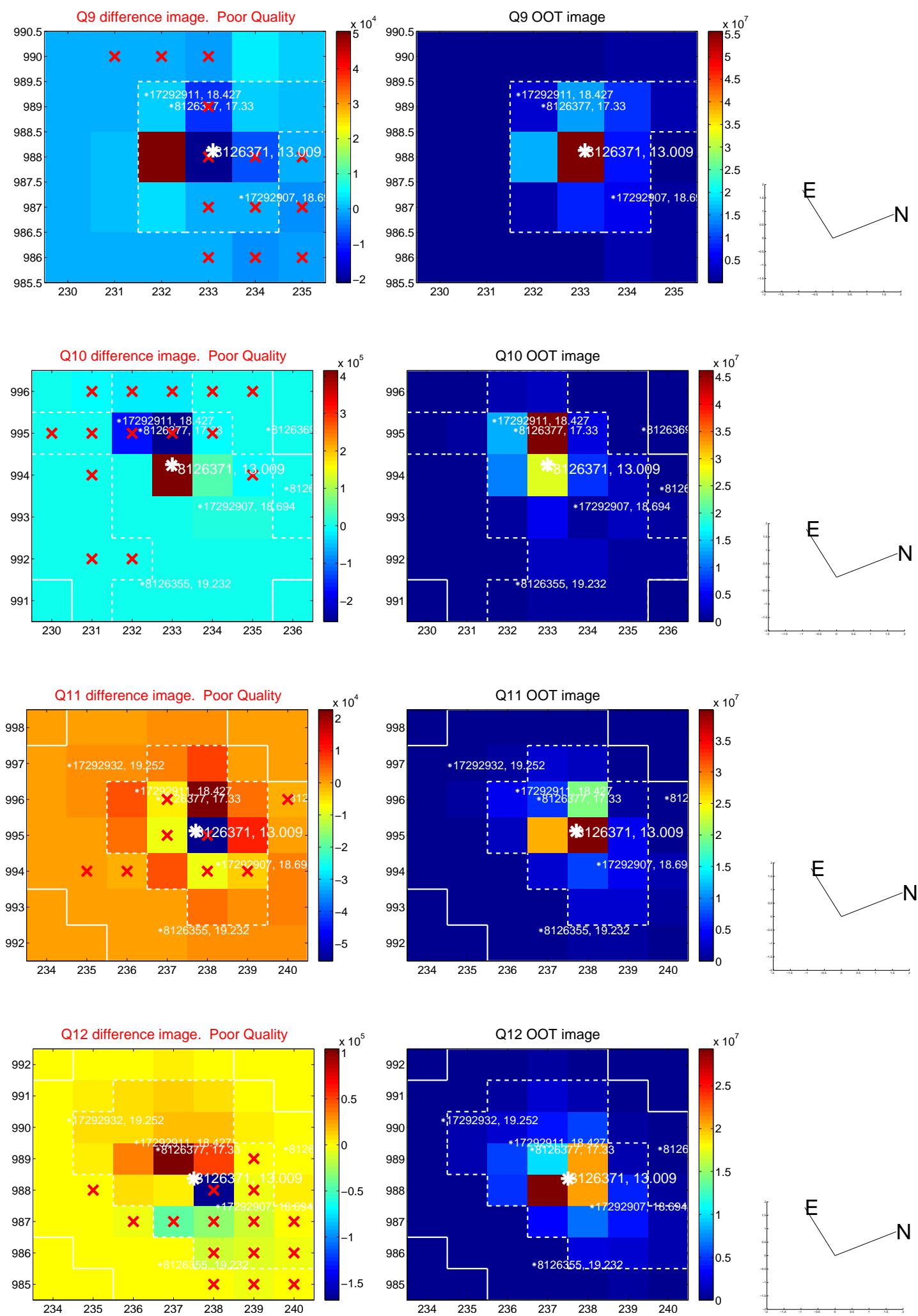
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



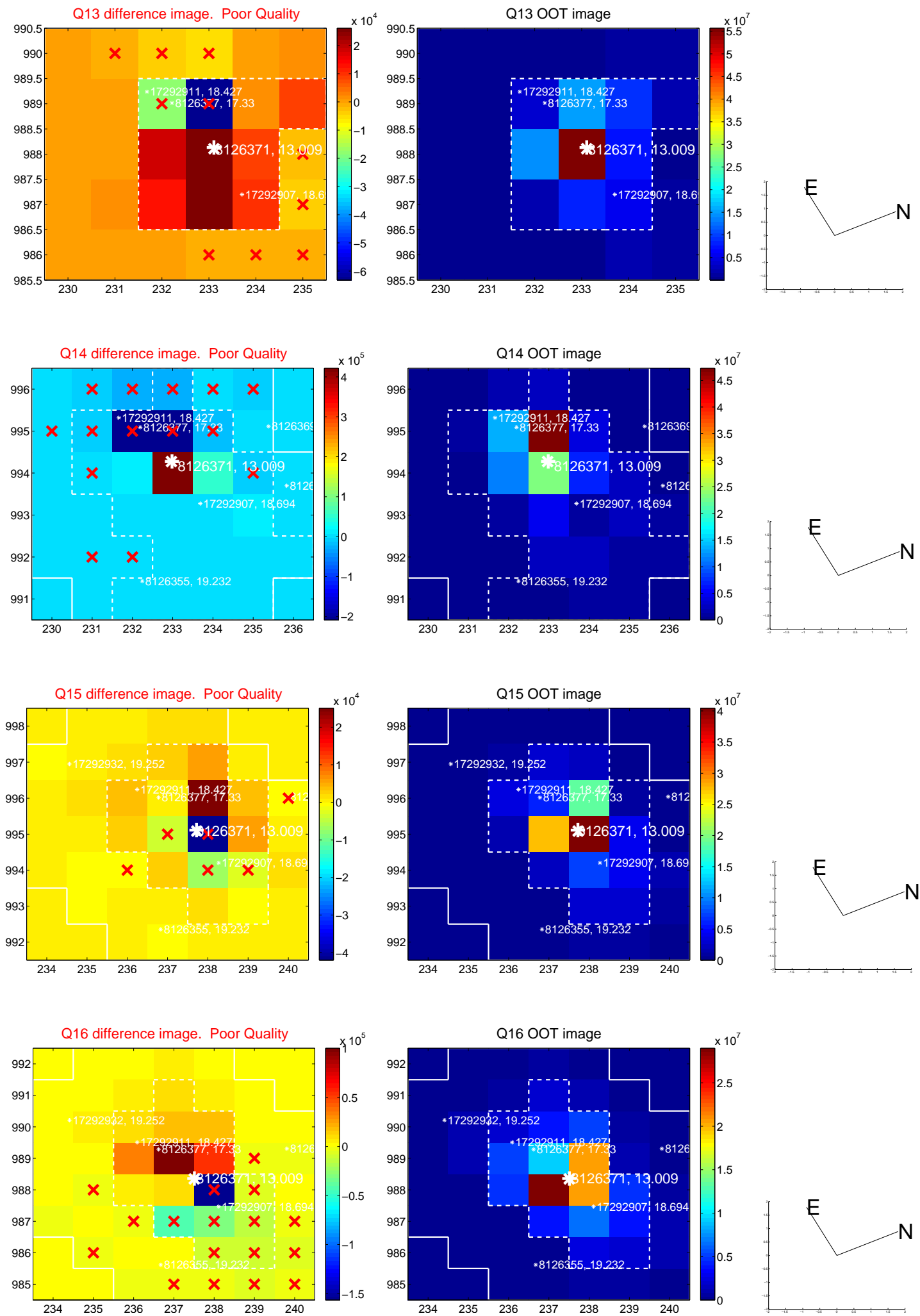
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



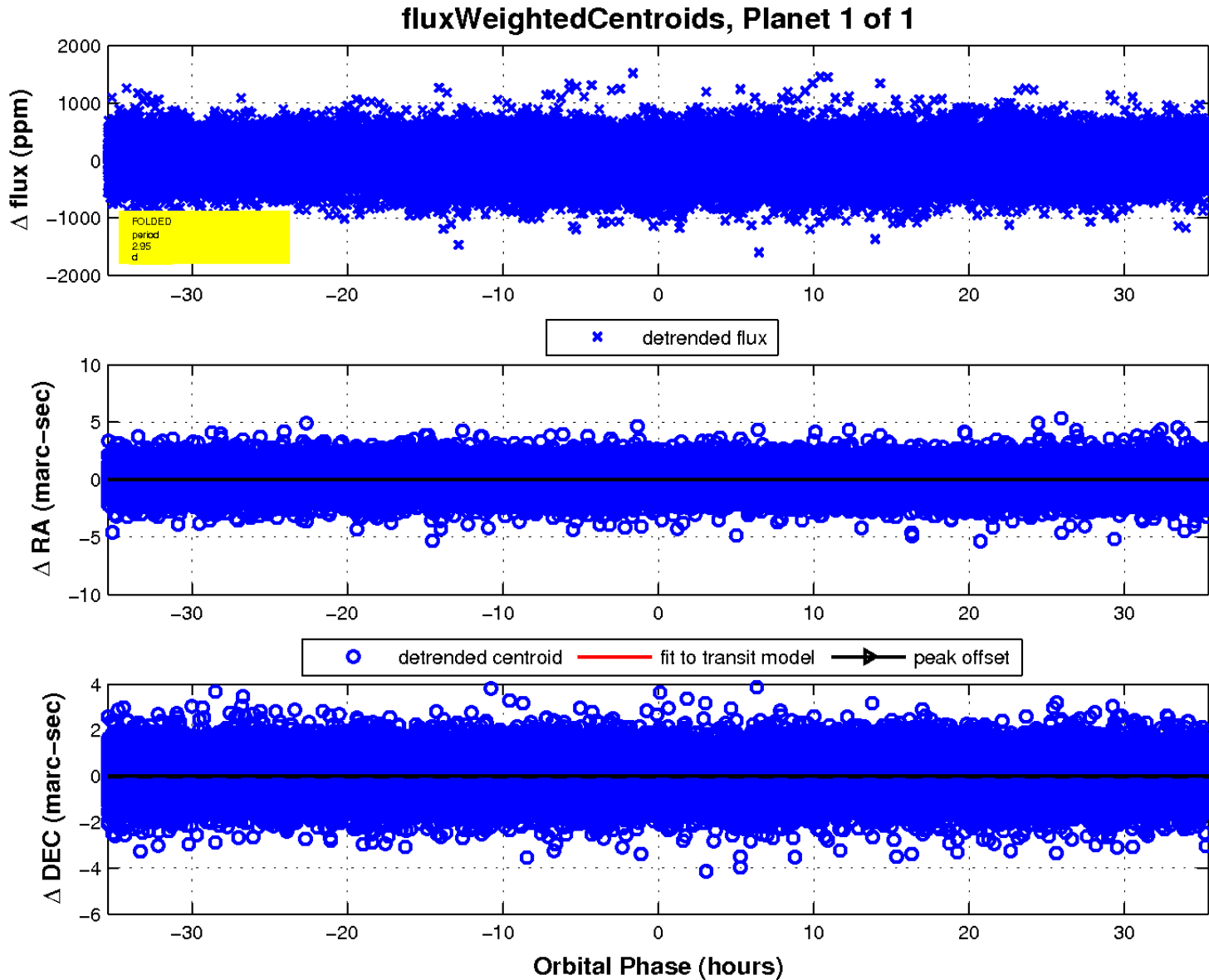
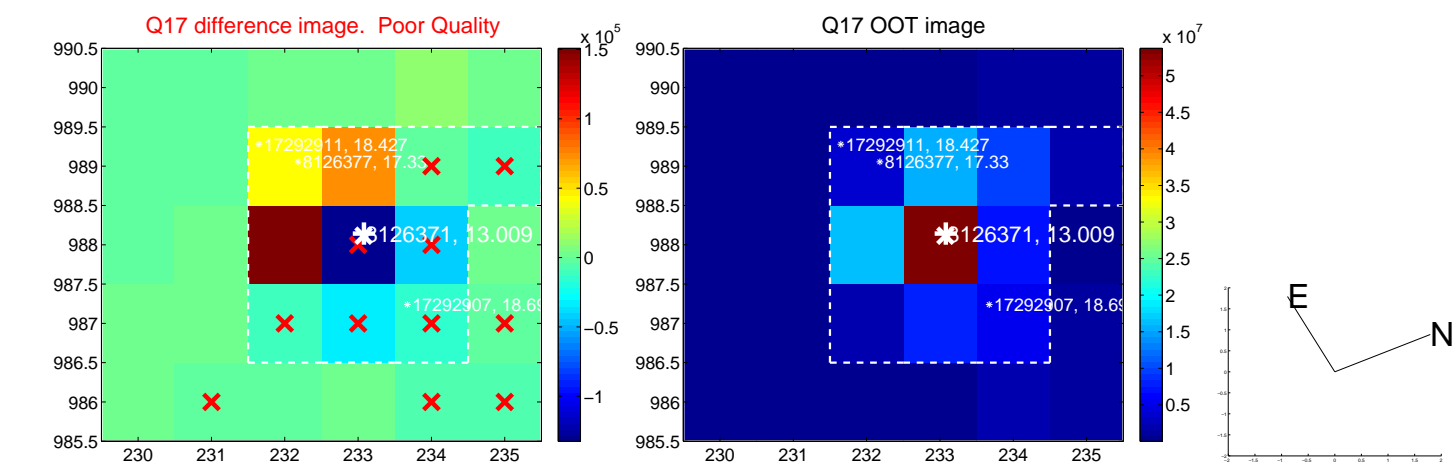
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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UKIRT Image

Declination

