

KIC 011568428

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})
011568428-01	OBS	No	1.710604	131.894527	209.2	3.000	10.9	-1.0	3.42	7055	5.01	21562.83

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
011568428-01	OBS	FP	0.00	1	0	0	0	LPP_DV—MOD_NONUNIQ_ALT—CENT_NOFITS

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

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

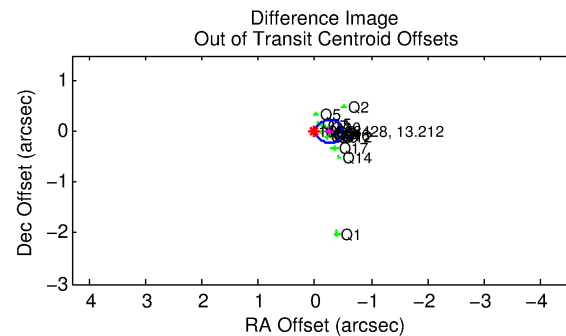
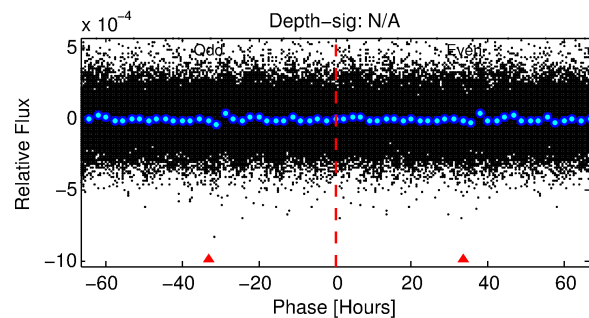
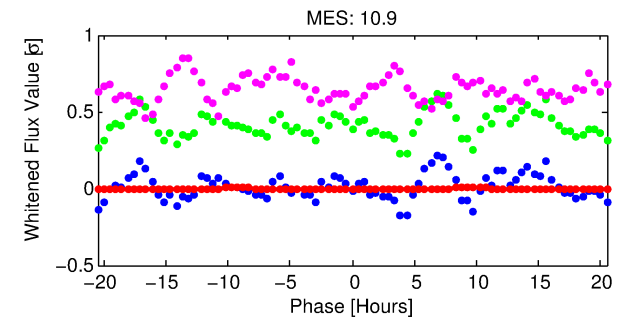
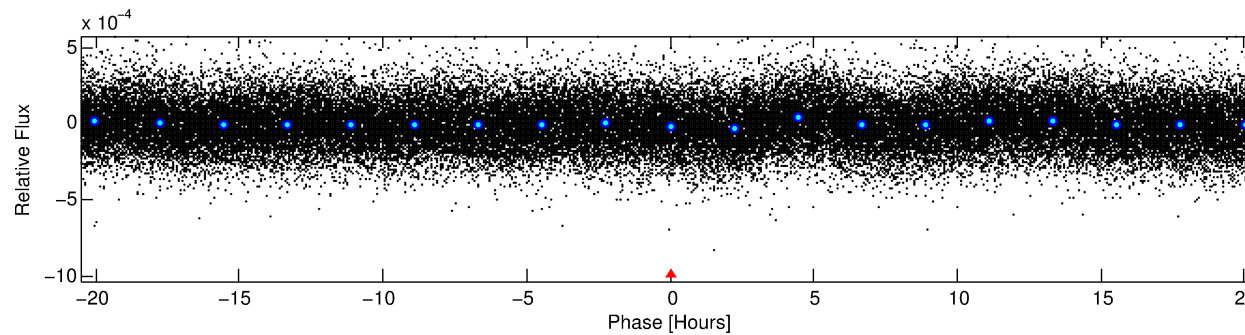
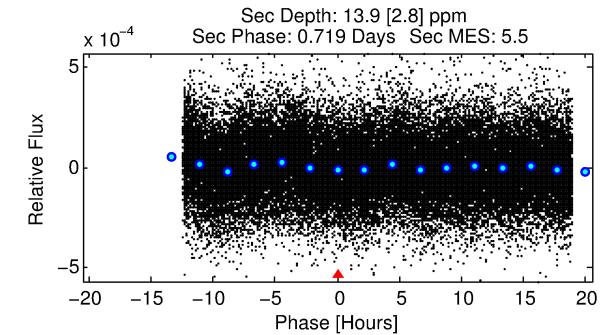
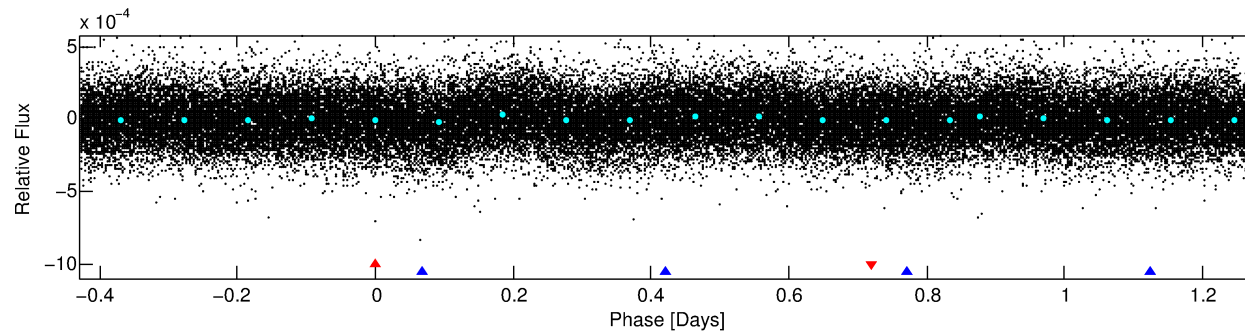
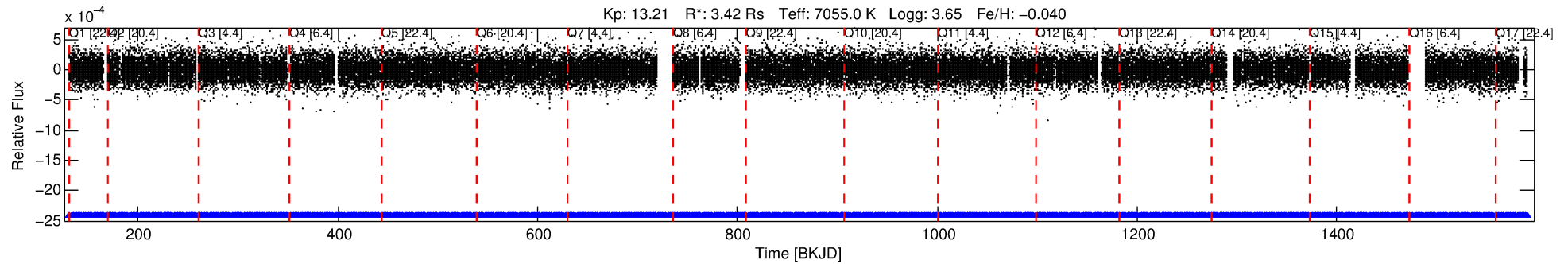
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 011568428-01

No Significant Match Found

DV One-Page Summary

KIC: 11568428 Candidate: 1 of 2 Period: 1.711 d



TPS TCE Results:

Period = 1.71060 d
Epoch = 131.8945 BKJD

DV fit results are unavailable

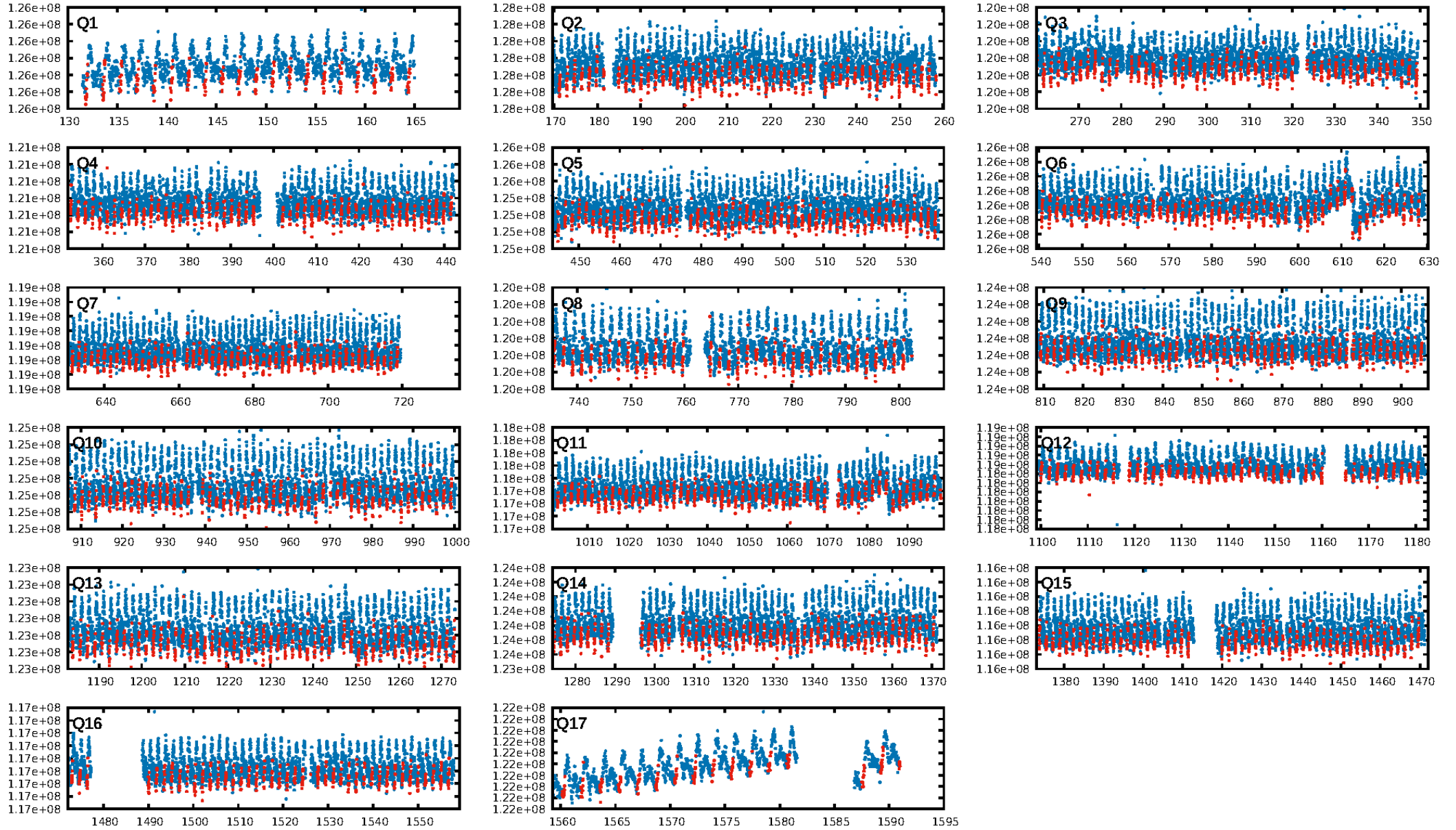
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: 100.0% [1723.80σ]
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 2.34e-24
RollingBand-fgt: 1.00 [757/757]
GhostDiagnostic-chr: 0.3436
Centroid-sig: 0.0%
Centroid-so: 0.380 arcsec [6.92σ]
OotOffset-rm: 0.253 arcsec [3.32σ]
KicOffset-rm: 0.196 arcsec [2.24σ]
OotOffset-st: 4/4/4/5 [17]
KicOffset-st: 4/4/4/5 [17]
DiffImageQuality-fgm: 1.00 [17/17]
DiffImageOverlap-fno: 1.00 [17/17]

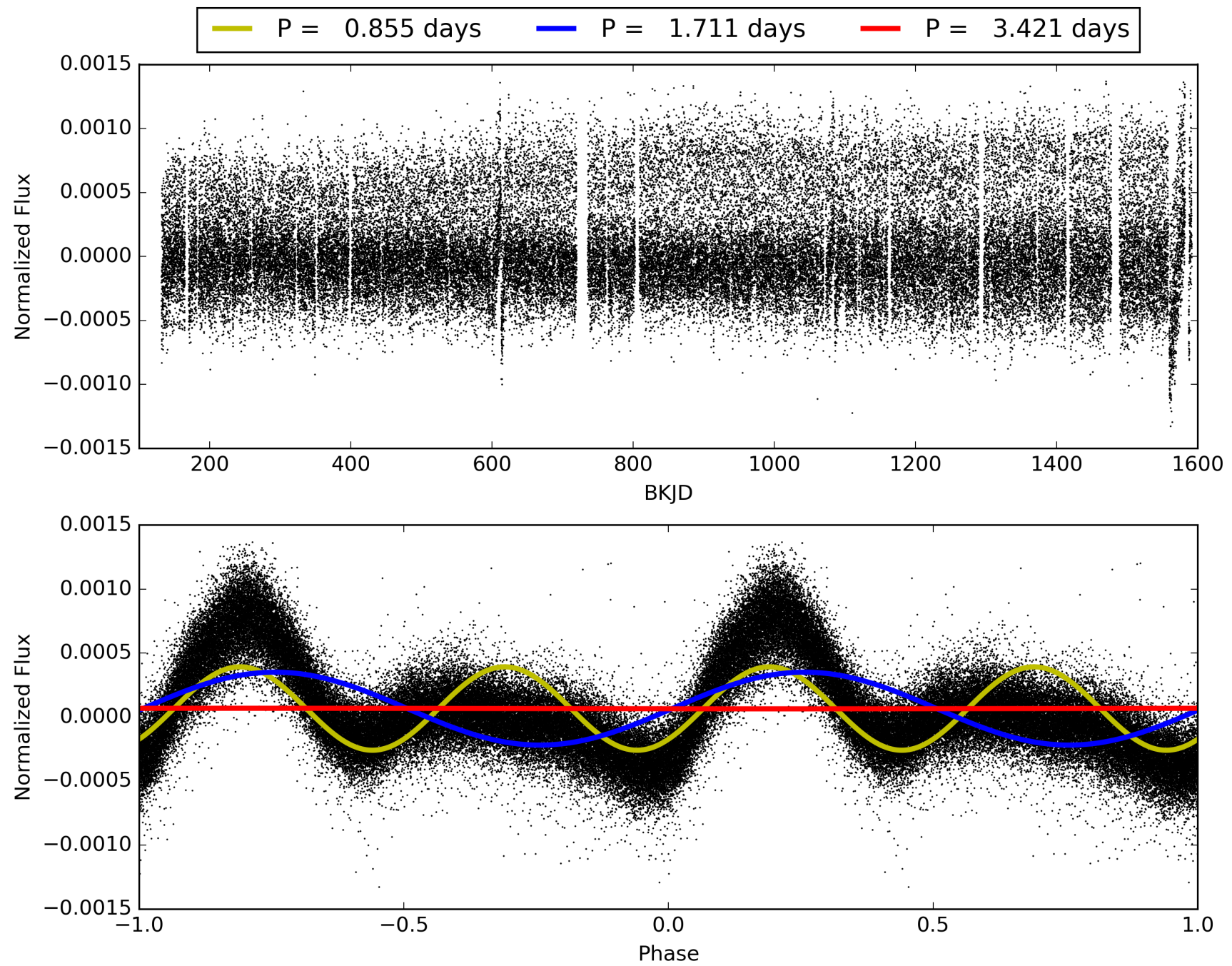
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 29-Jan-2016 05:25:33 Z

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

TCE 011568428-01, PDC Light Curves

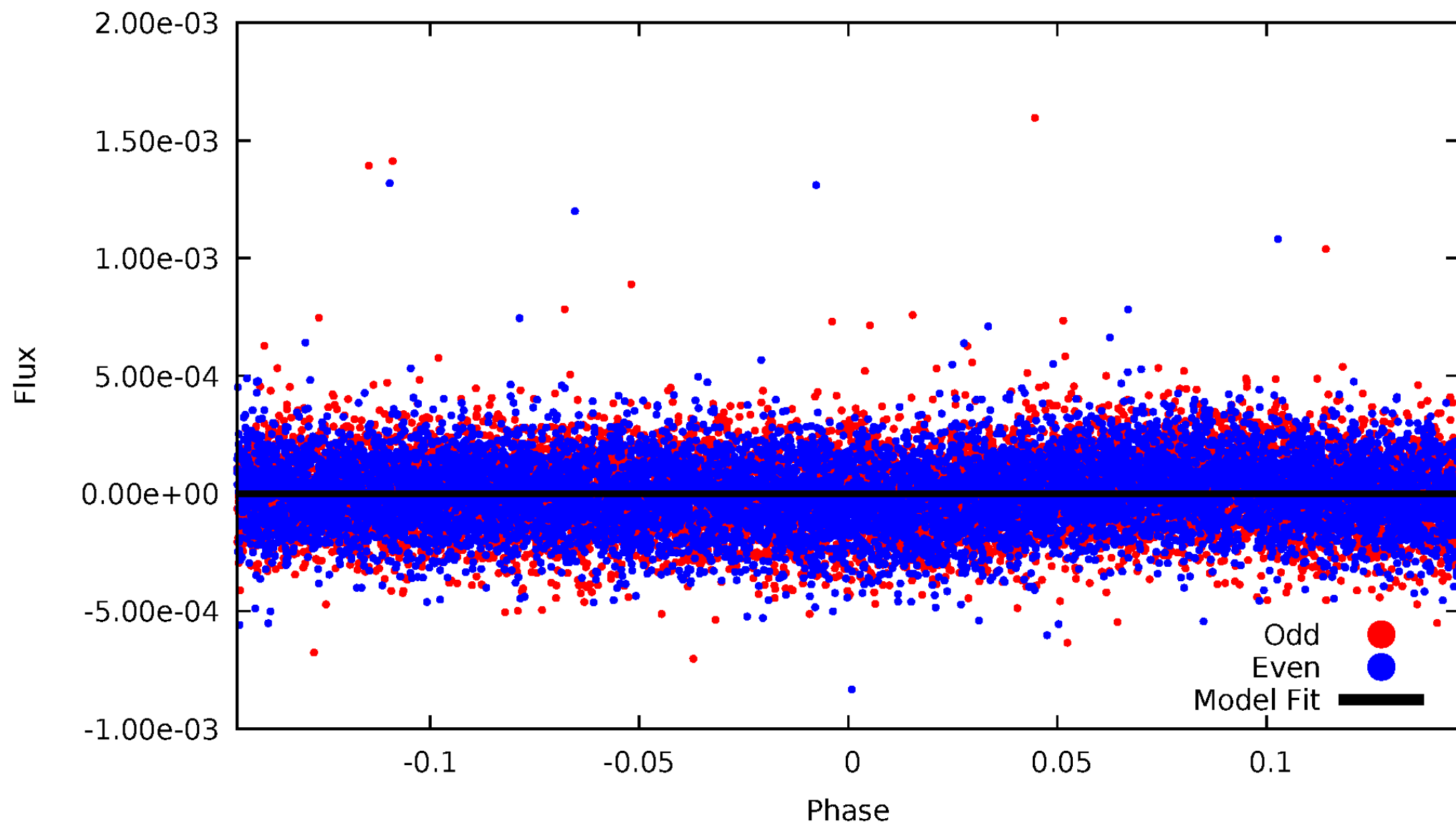


TCE 011568428-01



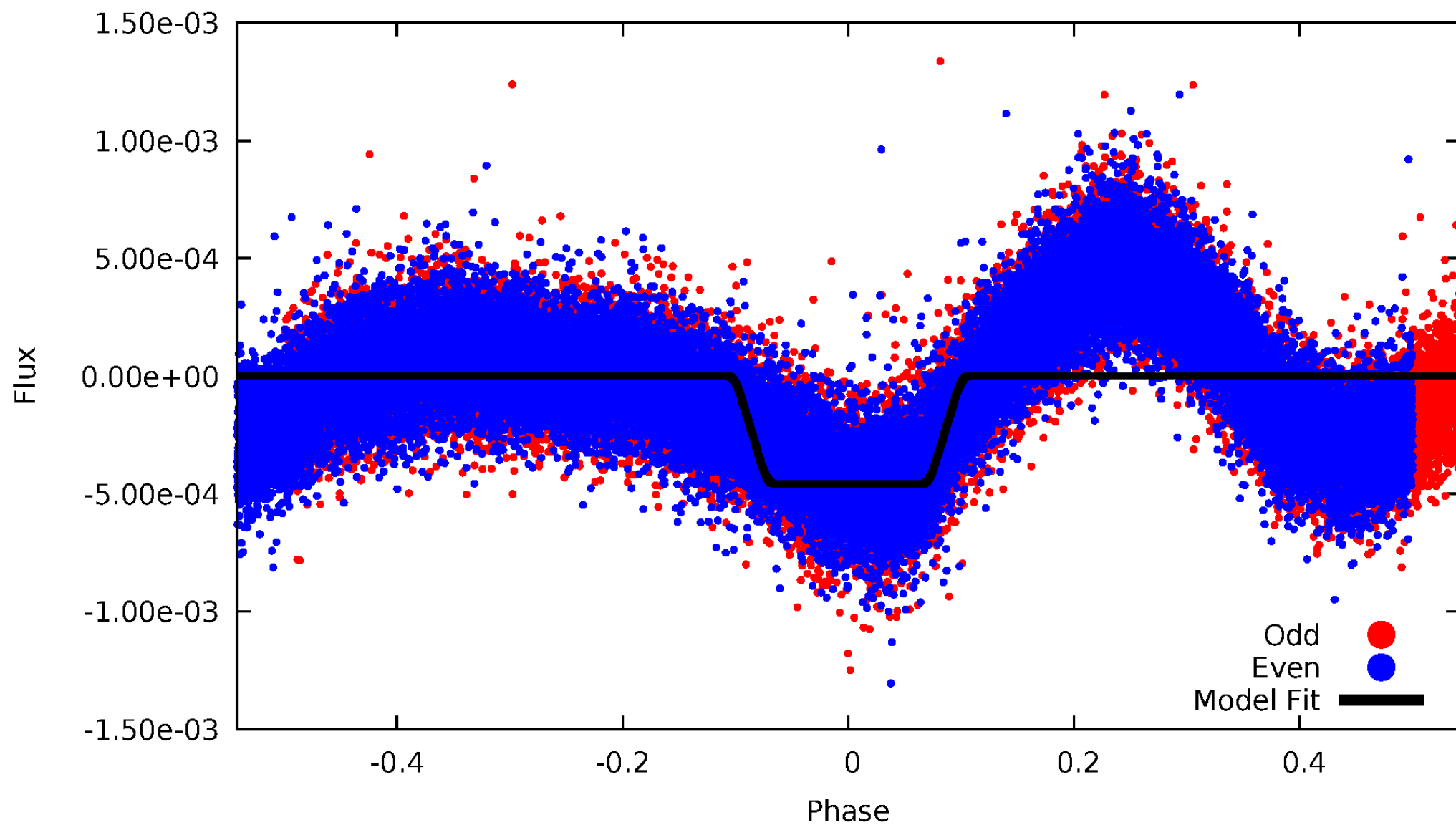
DV Odd/Even

TCE 011568428-01



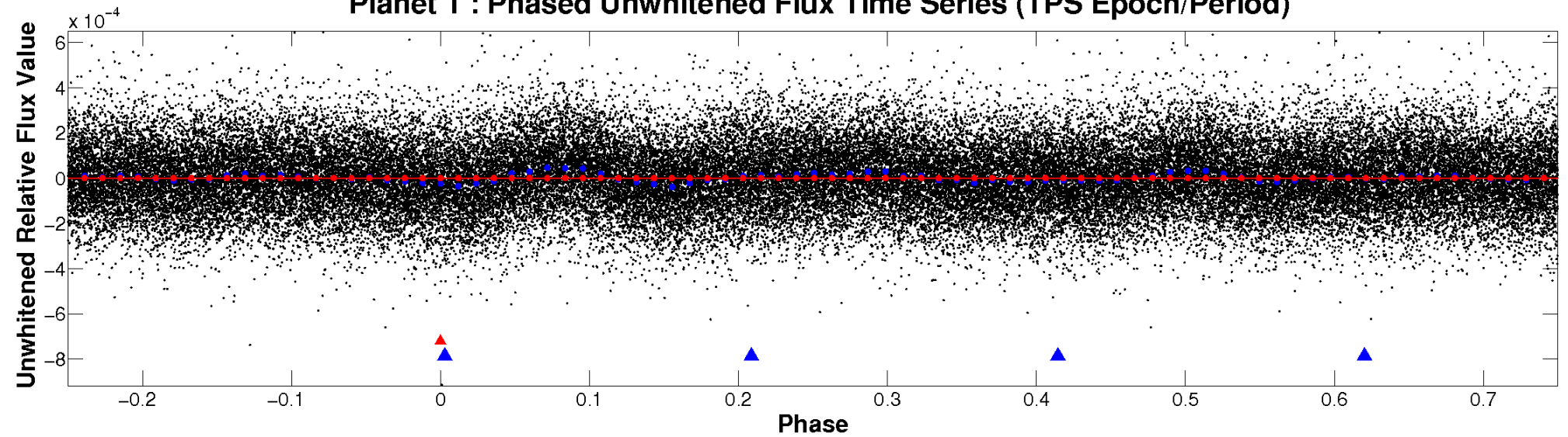
ALT Odd/Even

TCE 011568428-01

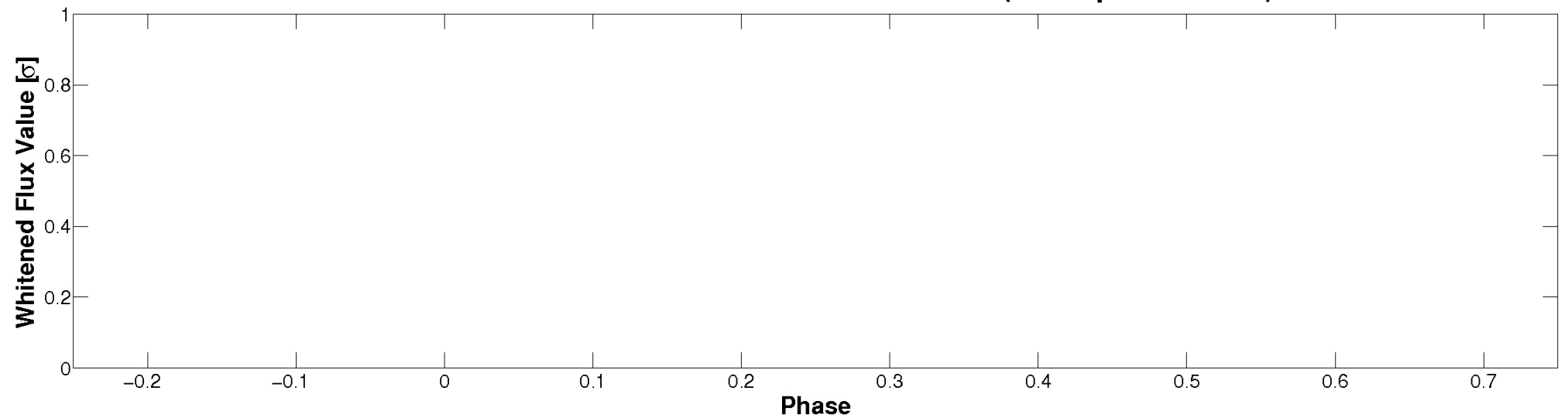


Non-Whitened Vs. Whitened Light Curve

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

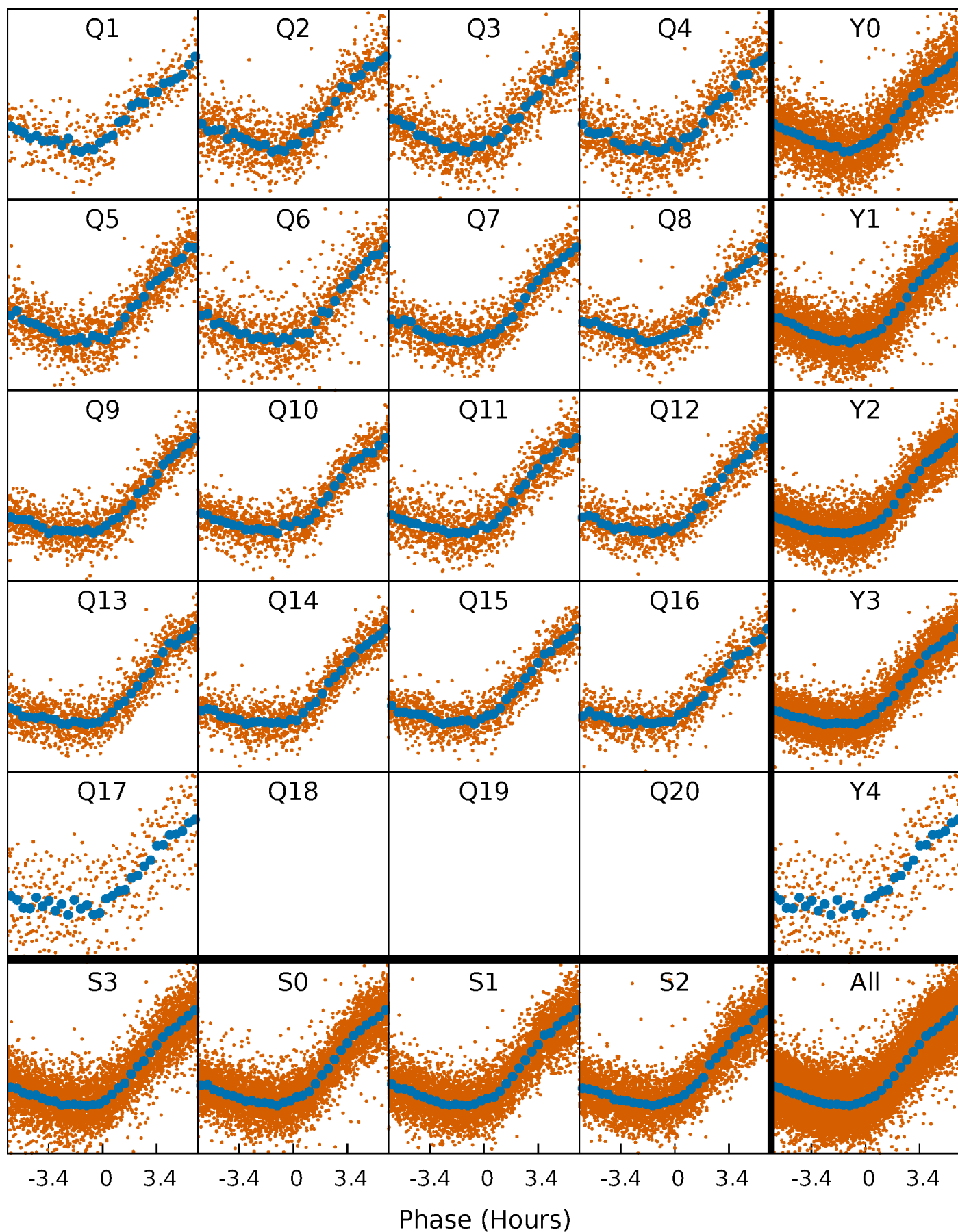


Planet 1 : Phased Whitened Flux Time Series (TPS Epoch/Period)



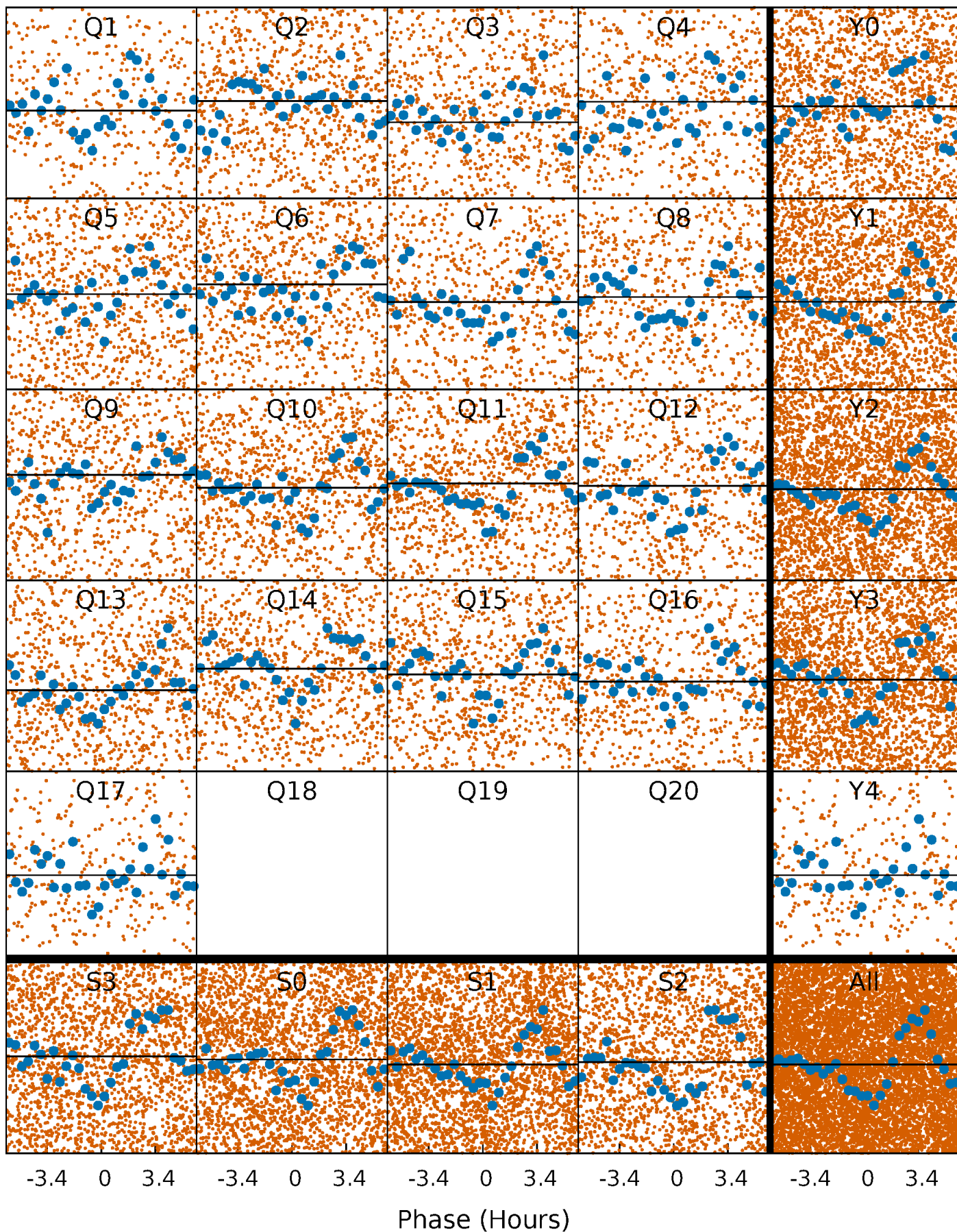
PDC Quarter-Phased Transit Curves

TCE 011568428-01 P= 1.710604 Days $T_0=131.894527$ (BKJD)



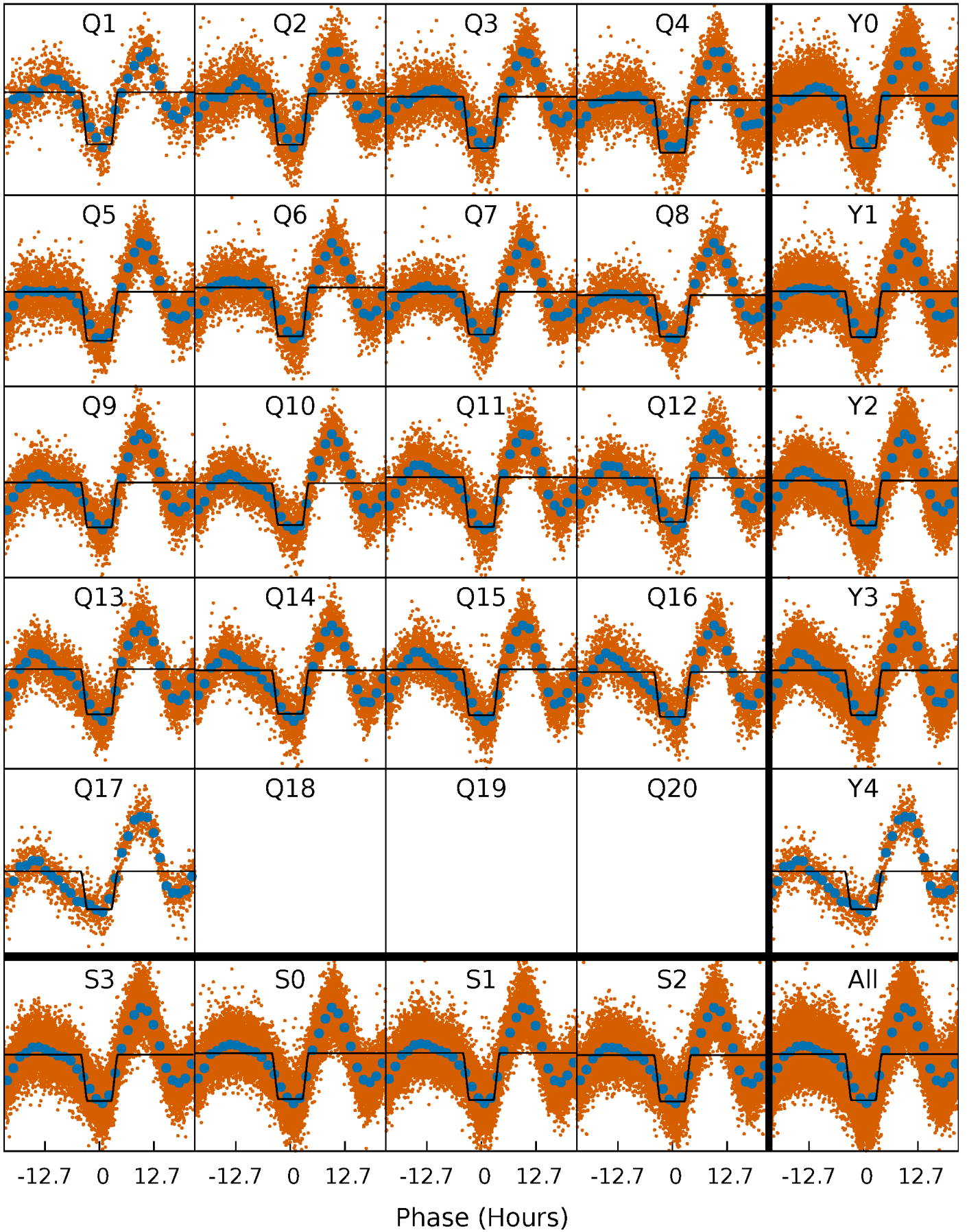
DV Quarter-Phased Transit Curves

TCE 011568428-01 P= 1.710604 Days $T_0=131.894527$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

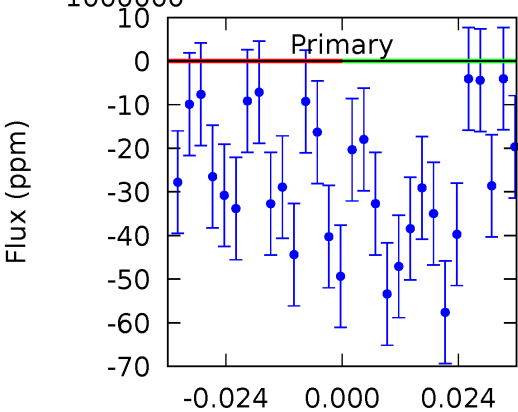
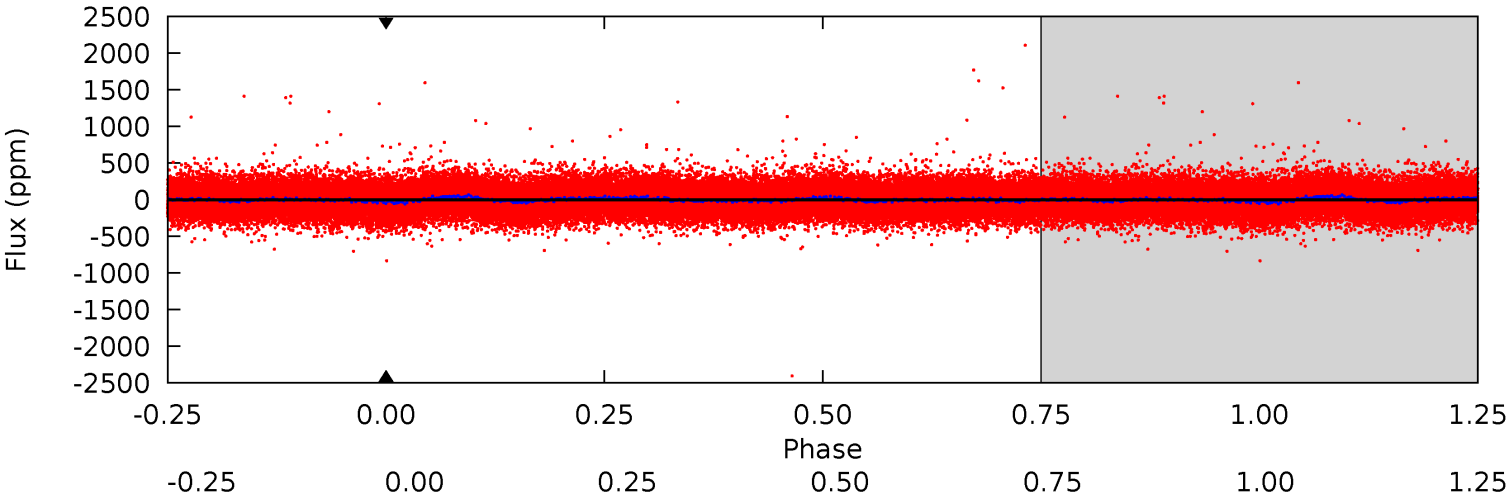
TCE 011568428-01 P= 1.710604 Days $T_0=131.831320$ (BKJD)



DV Model-Shift Uniqueness Test

011568428-01, P = 1.710604 Days, E = 130.183923 Days

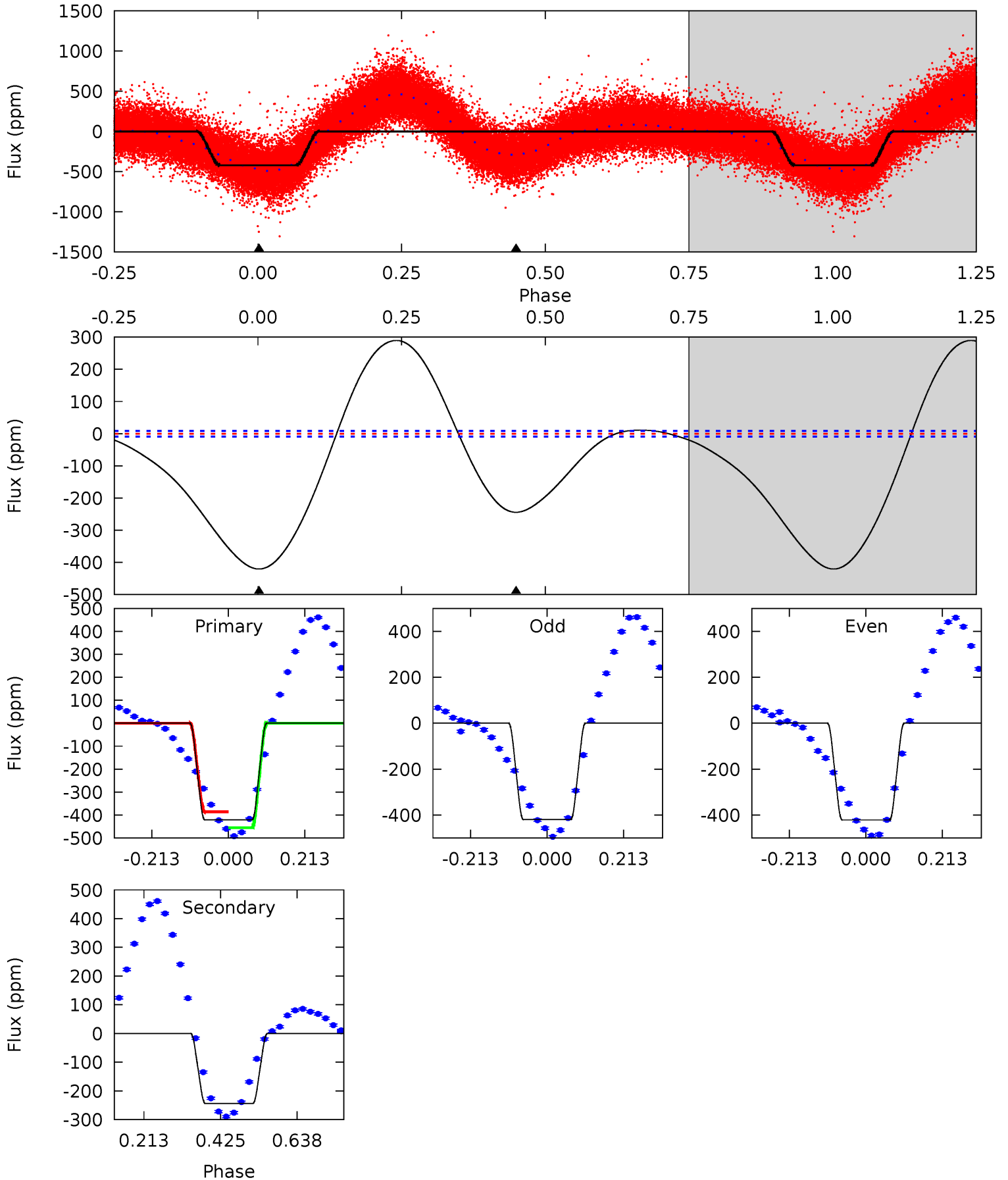
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
0	0	0	0	1.00	1.00	1.00	0	0	0	0	0	0	0	0



Alt Model-Shift Uniqueness Test

011568428-01, P = 1.710604 Days, E = 130.120716 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
211.5	122.8	0	0	4.40	1.25	52.8	211.5	211.5	122.8	122.8	0.49	1.01	0.41	11.7



Stellar Parameters For KIC 011568428

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	M (M_{\odot})	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	7055^{+189}_{-253}	$3.650^{+0.298}_{-0.053}$	$-0.040^{+0.250}_{-0.250}$	$3.424^{+0.395}_{-1.184}$	$1.910^{+0.155}_{-0.336}$	$0.067^{+0.137}_{-0.015}$
	+3%/-4%	+8%/-1%	+625%/-625%	+12%/-35%	+8%/-18%	+204%/-23%
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 011568428-01 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	0 ± 1000000	$24.49^{+28.95}_{-16.74}$	4190^{+236}_{-374}	5506^{+36130}_{-37910}	$2.028^{+248.401}_{-179.192}$
Alt.	-244 ± 2	$25.63^{+27.63}_{-18.43}$	4157^{+254}_{-357}	-2842^{+8670}_{-821}	$0.242^{+3.062}_{-0.186}$

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

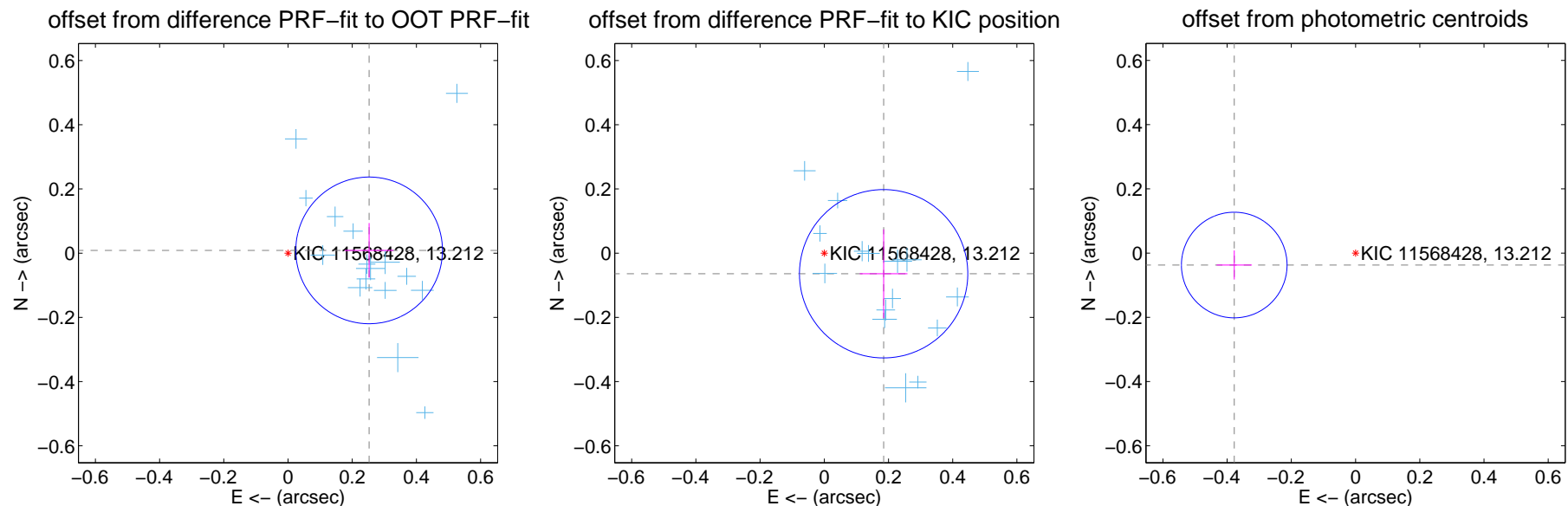
DV Centroid Data

Supplemental centroid analysis for 011568428-01. Kepler magnitude: 13.21. Transit SNR -1.00

There are 17 quarters with good PRF difference image offsets

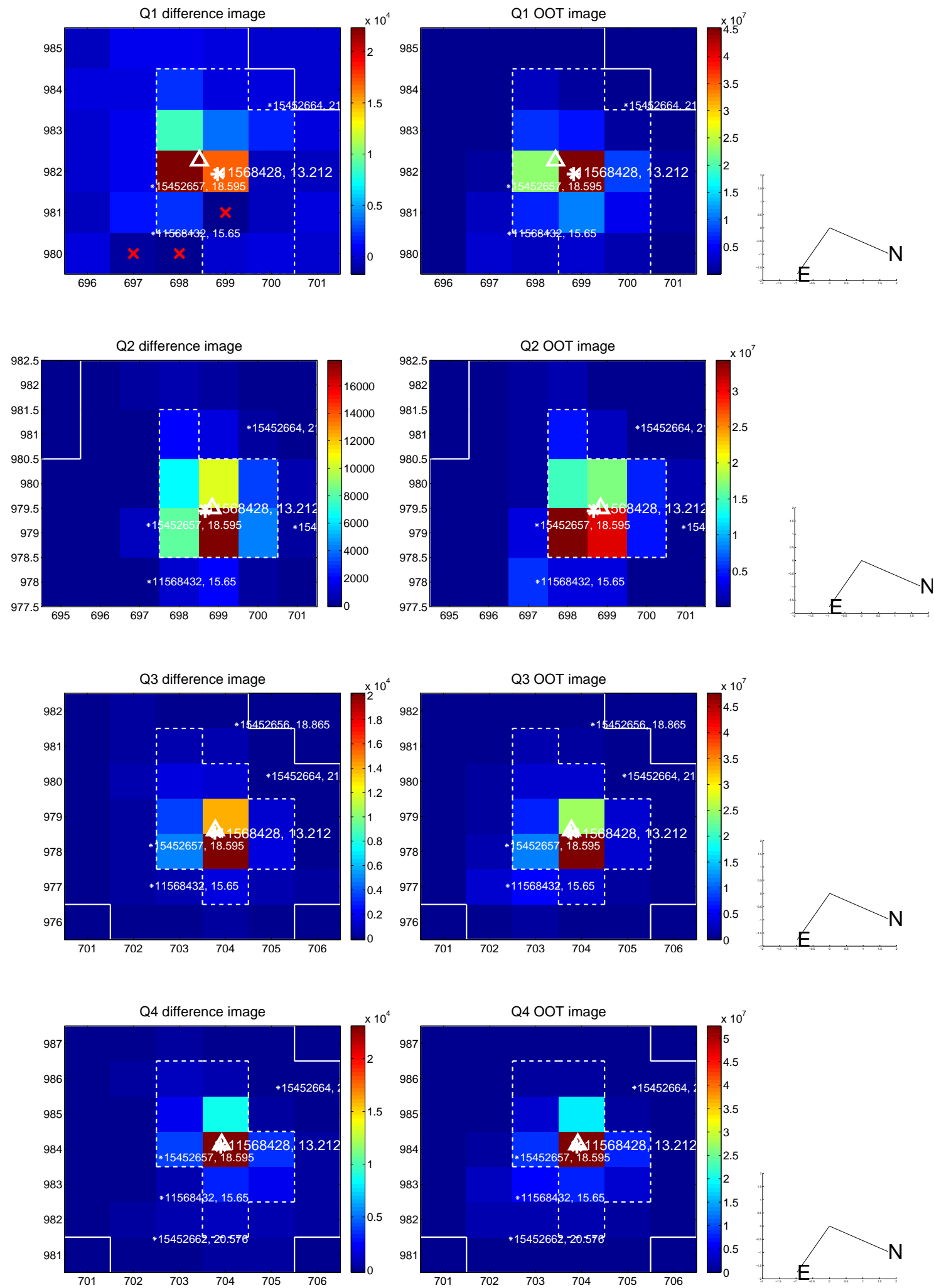
The direct PRF centroid is offset from the target star catalog position by about 0.13 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.253 ± 0.076	3.32	-0.253 ± 0.076	0.009 ± 0.085
PRF-fit source offset from KIC position	0.196 ± 0.087	2.24	-0.185 ± 0.074	-0.064 ± 0.138
photometric centroid source offset	0.38 ± 0.05	6.92	0.38 ± 0.05	-0.04 ± 0.05

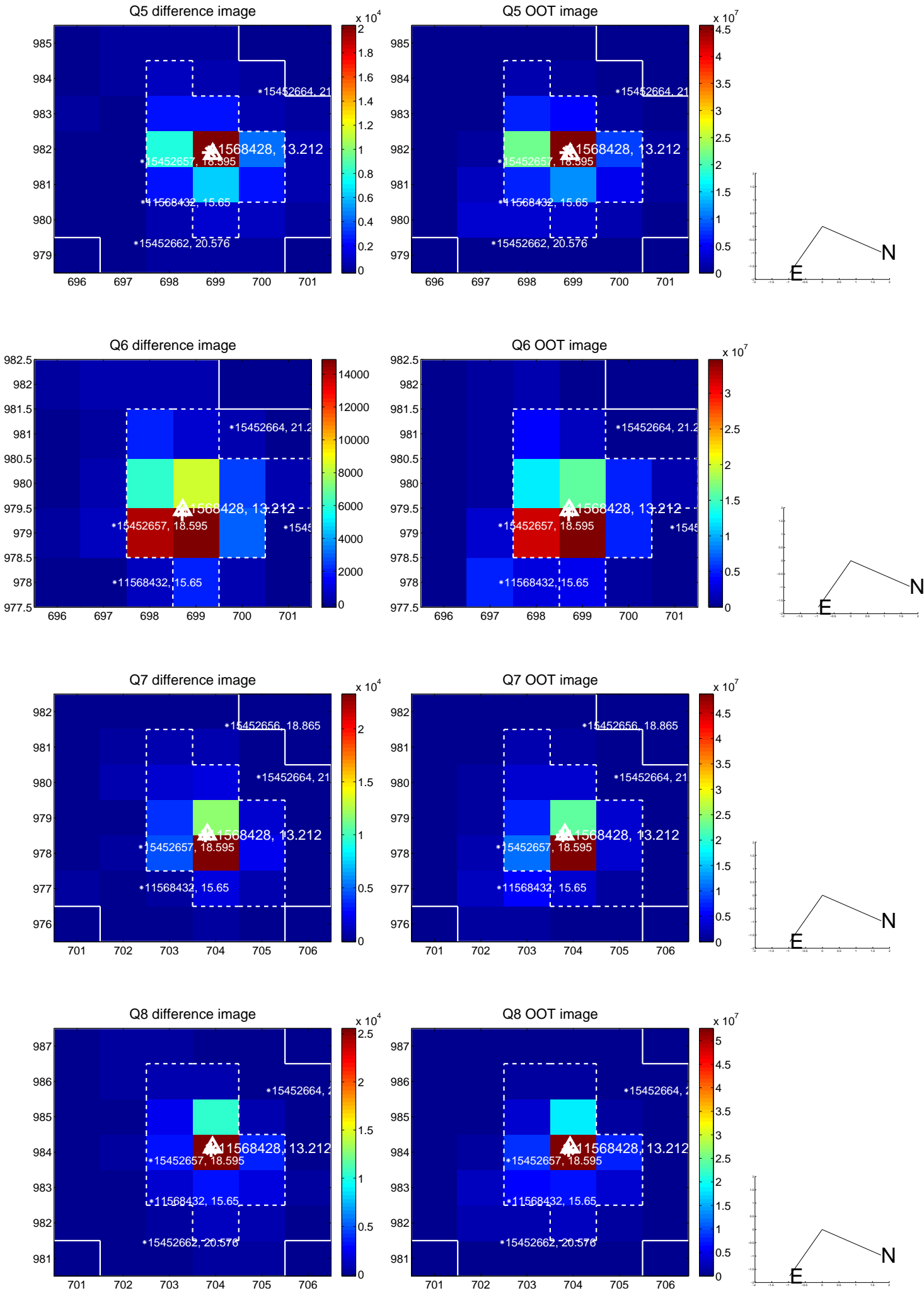


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses:** good quarterly centroid offsets; **Vermillion crosses:** bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

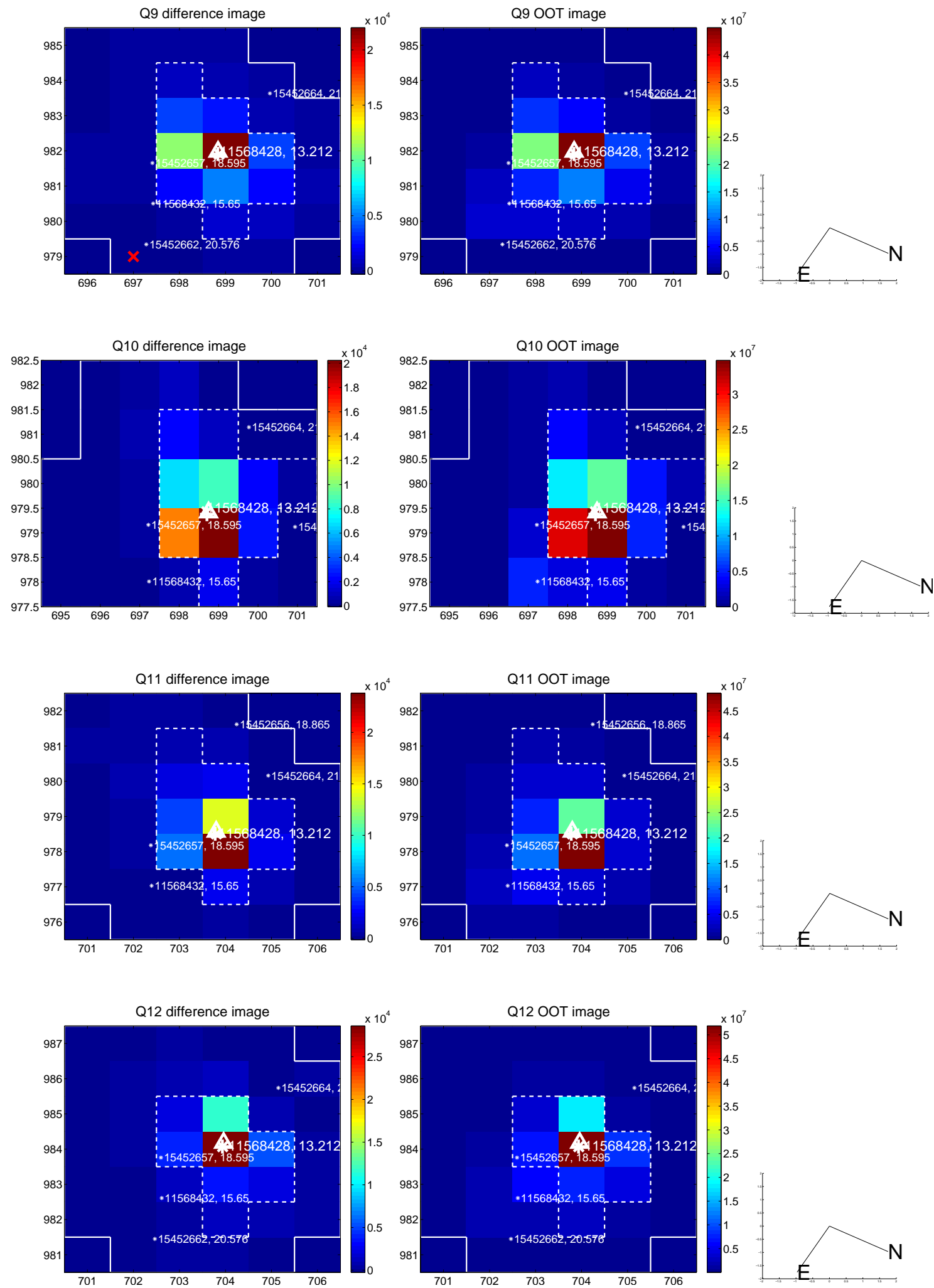
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



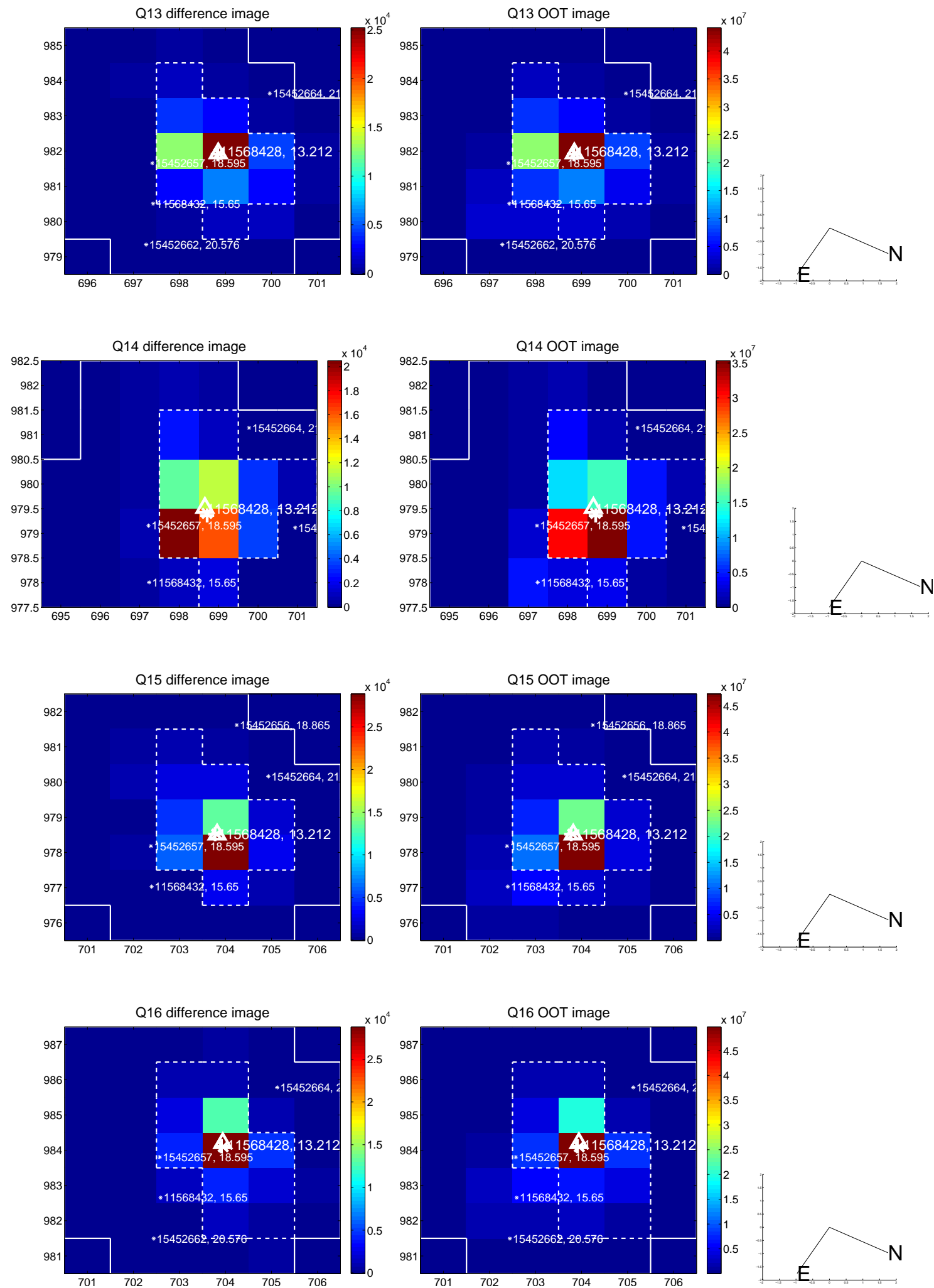
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



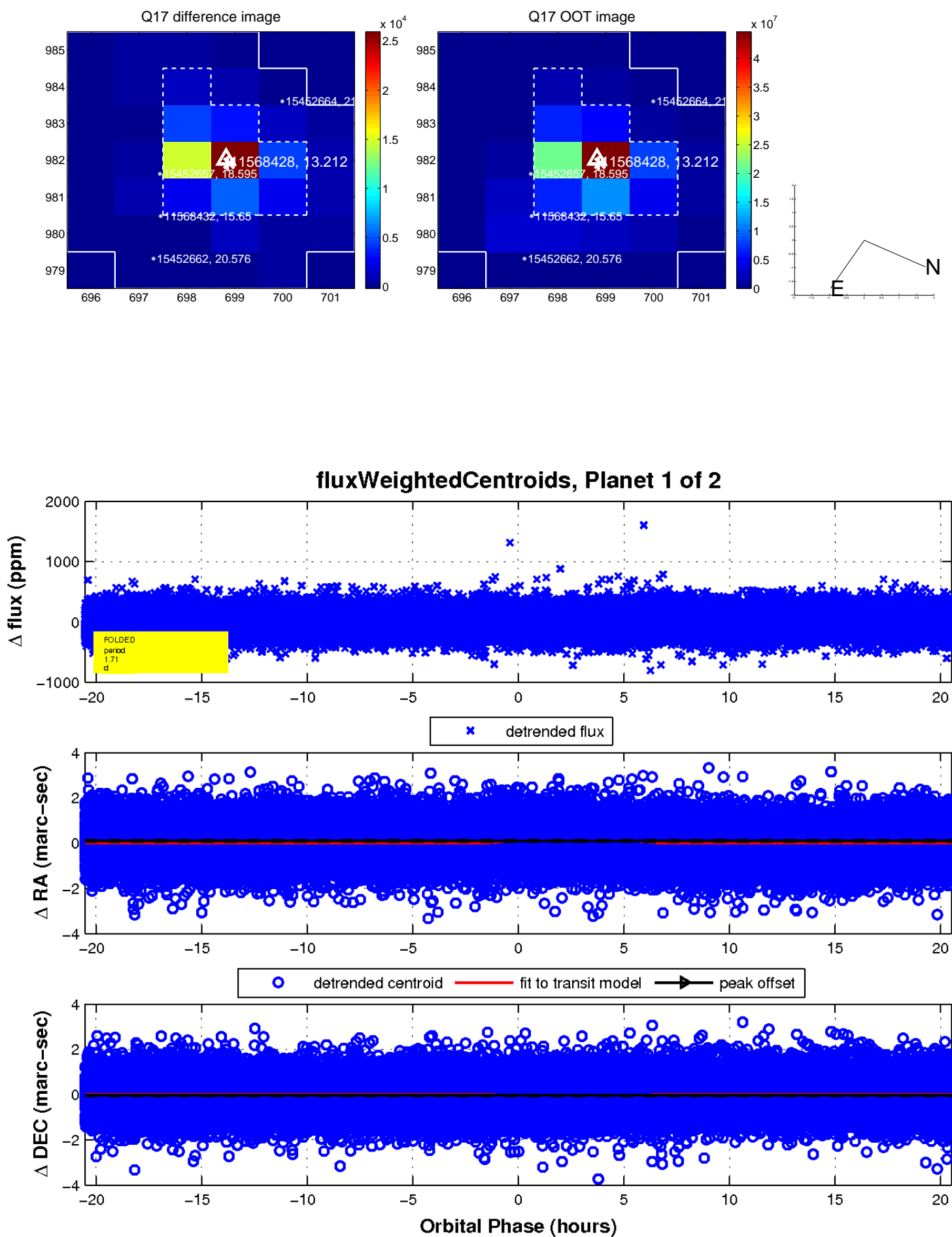
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



UKIRT Image

Declination

