

KIC 007281229

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})
007281229-01	OBS	6852.01	0.567113	132.009577	0.0	2.523	8.3	0.0	1.03	6108	0.02	6773.65

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
007281229-01	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_DV

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 007281229-01

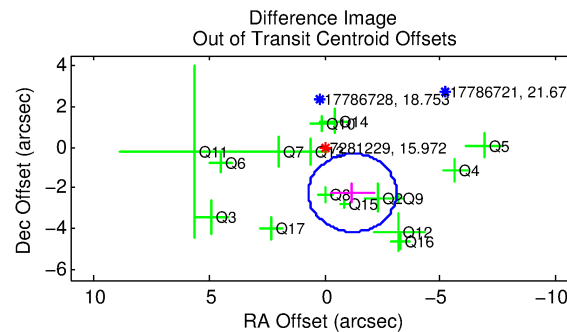
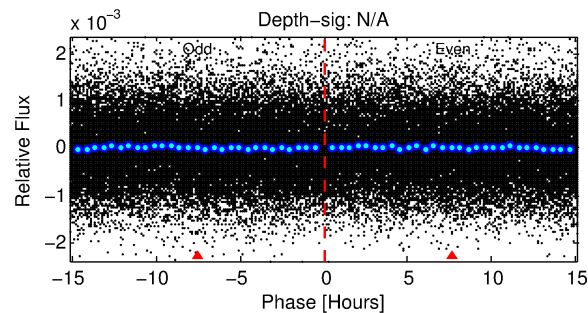
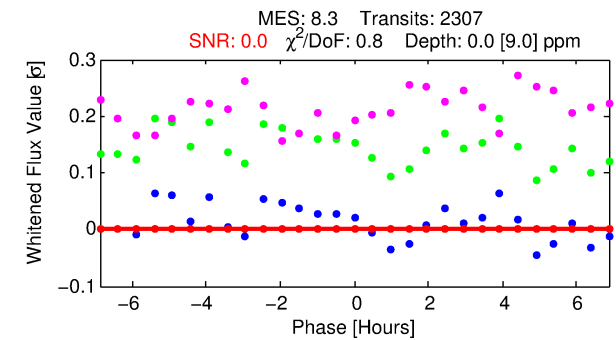
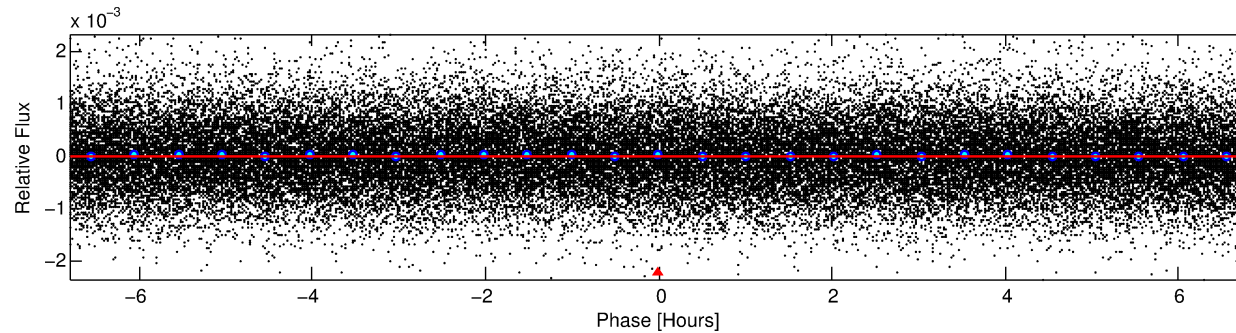
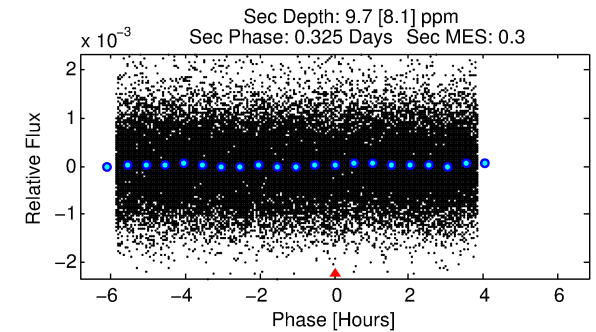
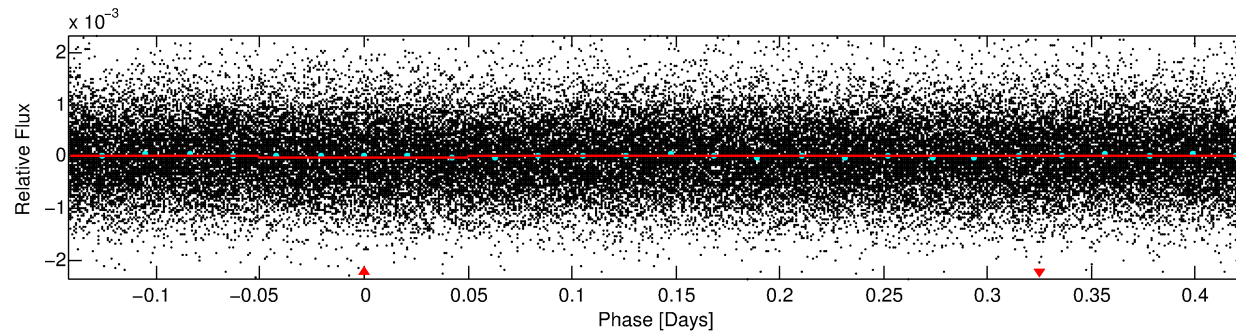
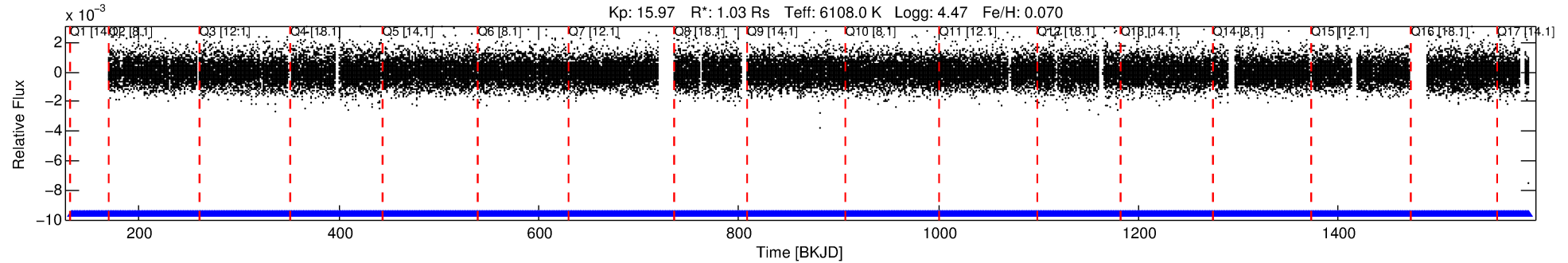
No Significant Match Found

DV One-Page Summary

KIC: 7281229 Candidate: 1 of 1 Period: 0.567 d

KOI: K06852 Corr: No Ephemeris Match

Kp: 15.97 R*: 1.03 Rs Teff: 6108.0 K Logg: 4.47 Fe/H: 0.070



DV Fit Results:

Period = 0.56711 [0.02477] d
Epoch = 132.0096 [8.0334] BKJD
Rp/R* = 0.0002 [0.0365]
a/R* = 1.04 [23.47]
b = 0.98 [11.07]
Seff = 6773.65 [2771.67]
Teq = 2313 [237] K
Rp = 0.02 [4.11] Re
a = 0.0140 [0.0036] AU
Ag = 1903.82 [669537.93] [0.00σ]
Teffp = 23625 [2077364] K [0.01σ]

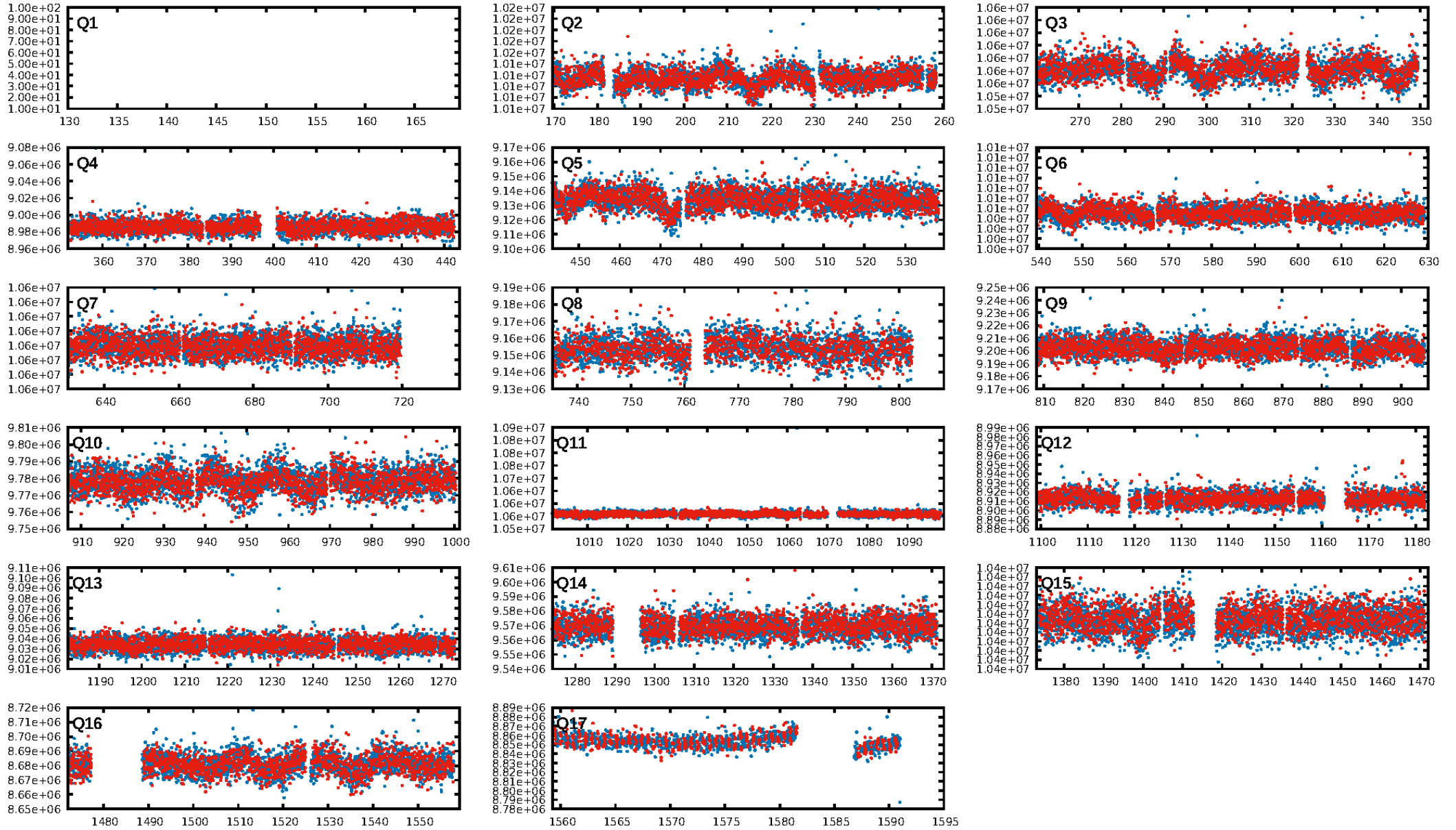
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 3.54e-15
RollingBand-fgt: 1.00 [2260/2260]
GhostDiagnostic-chr: N/A
Centroid-sig: N/A
Centroid-so: N/A
OotOffset-rm: 2.539 arcsec [3.99σ]
KicOffset-rm: 2.331 arcsec [4.05σ]
OotOffset-st: 4/4/4/4 [16]
KicOffset-st: 4/4/4/4 [16]
DiffImageQuality-fgm: 0.00 [0/16]
DiffImageOverlap-fno: 1.00 [16/16]

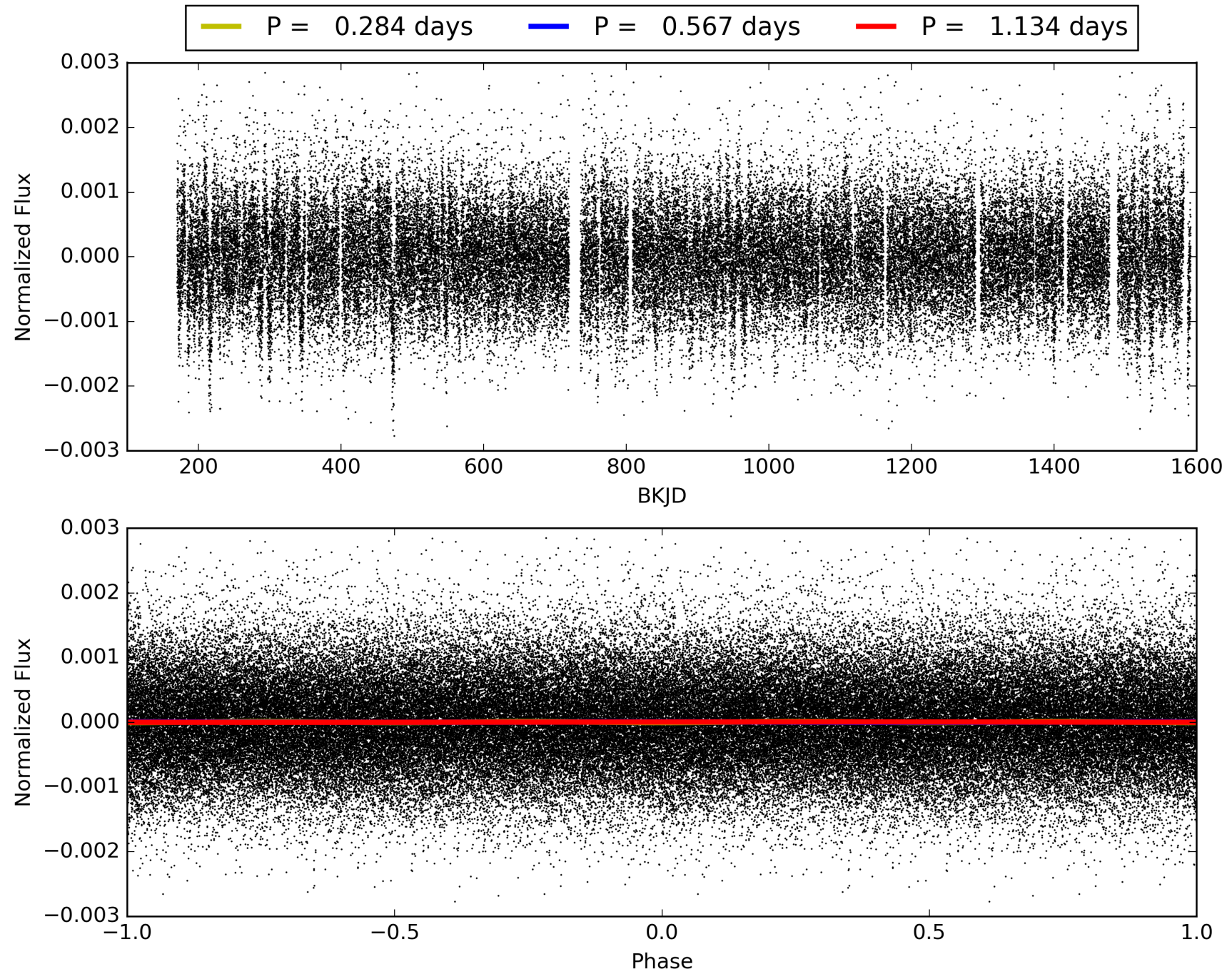
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 29-Jan-2016 13:32:14 Z

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

TCE 007281229-01, PDC Light Curves

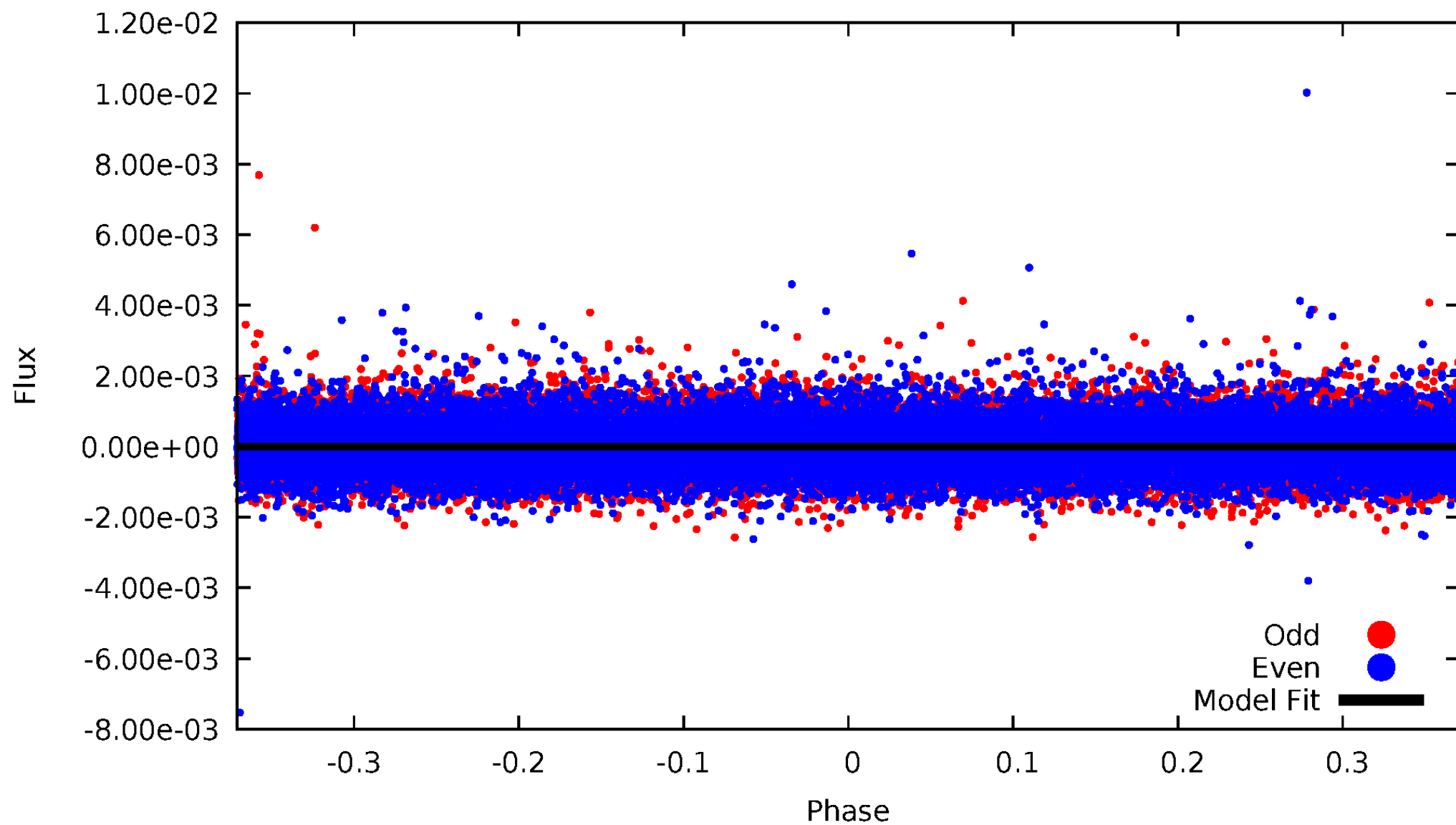


TCE 007281229-01



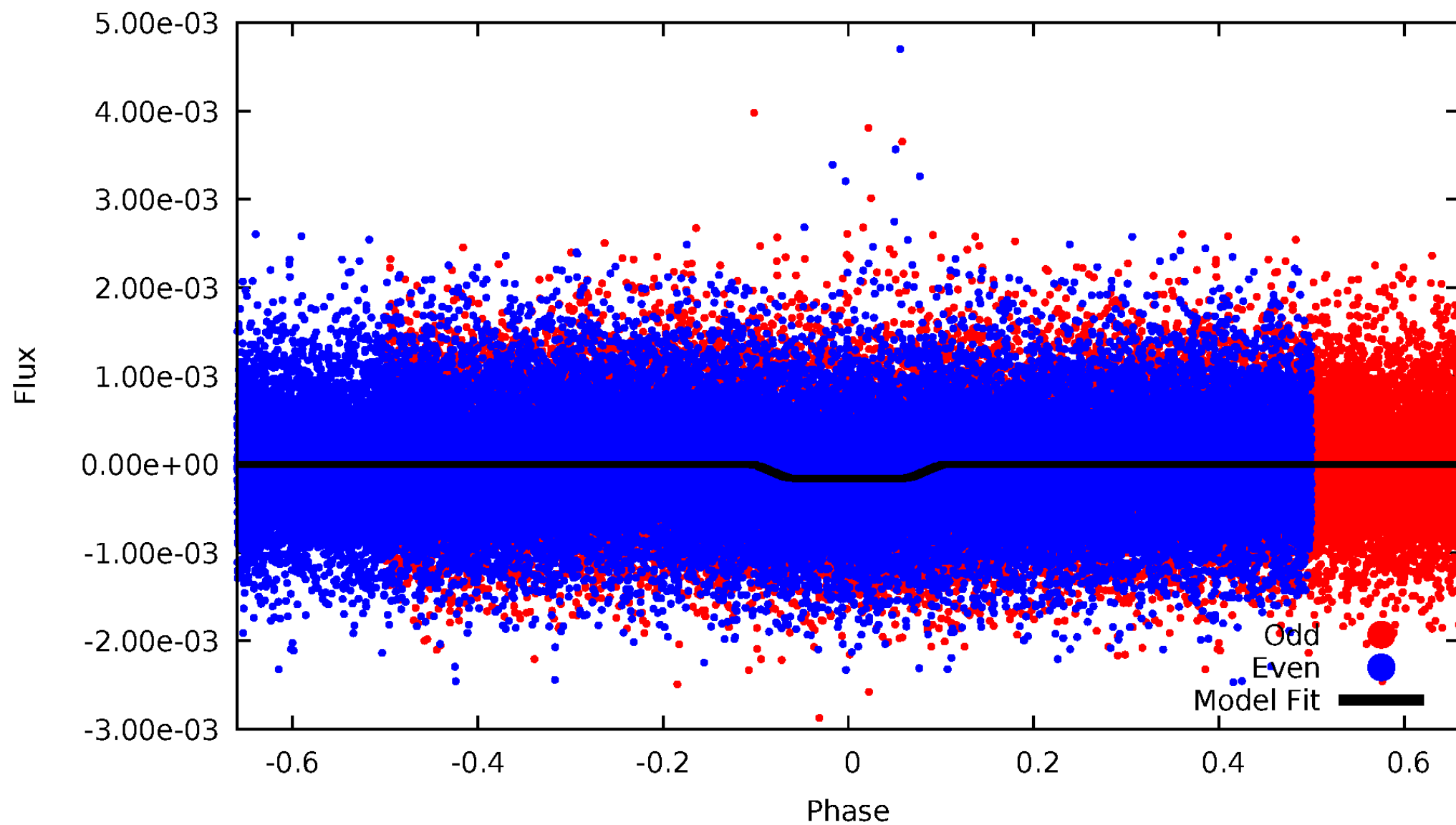
DV Odd/Even

TCE 007281229-01



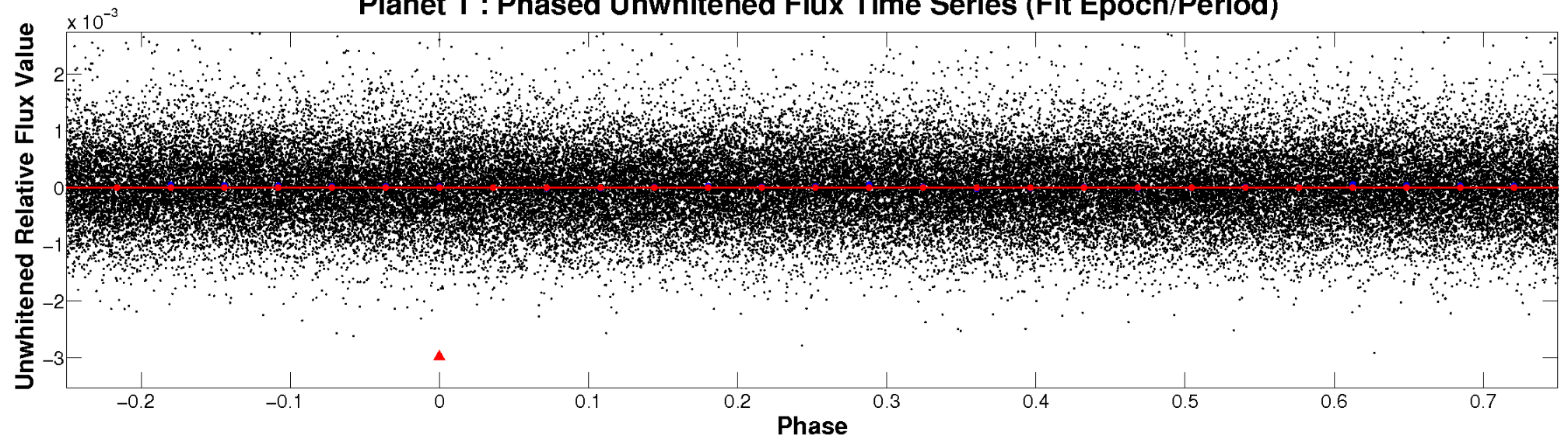
ALT Odd/Even

TCE 007281229-01

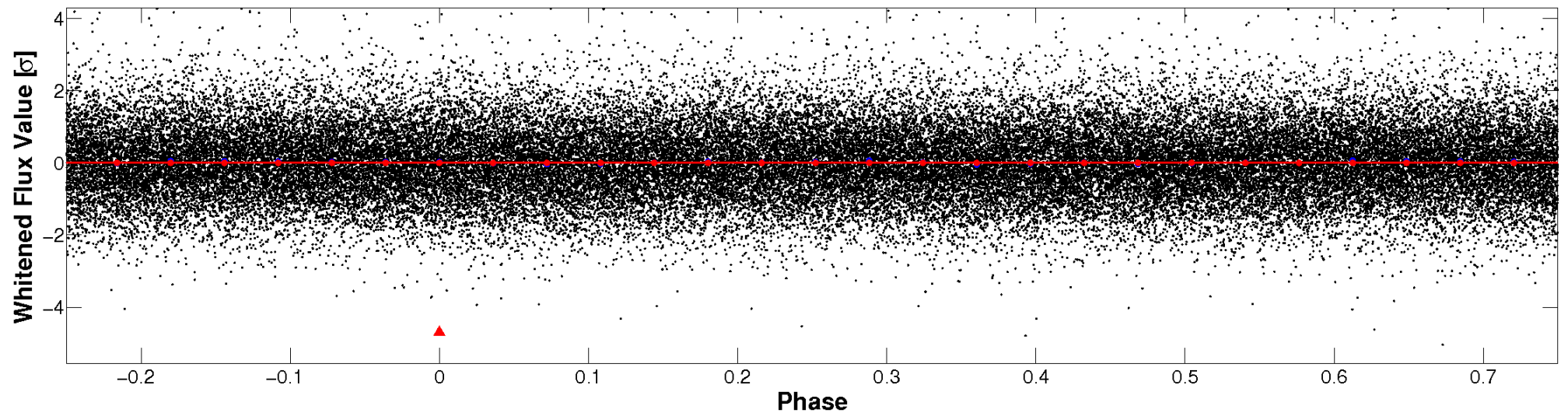


Non-Whitened Vs. Whitened Light Curve

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

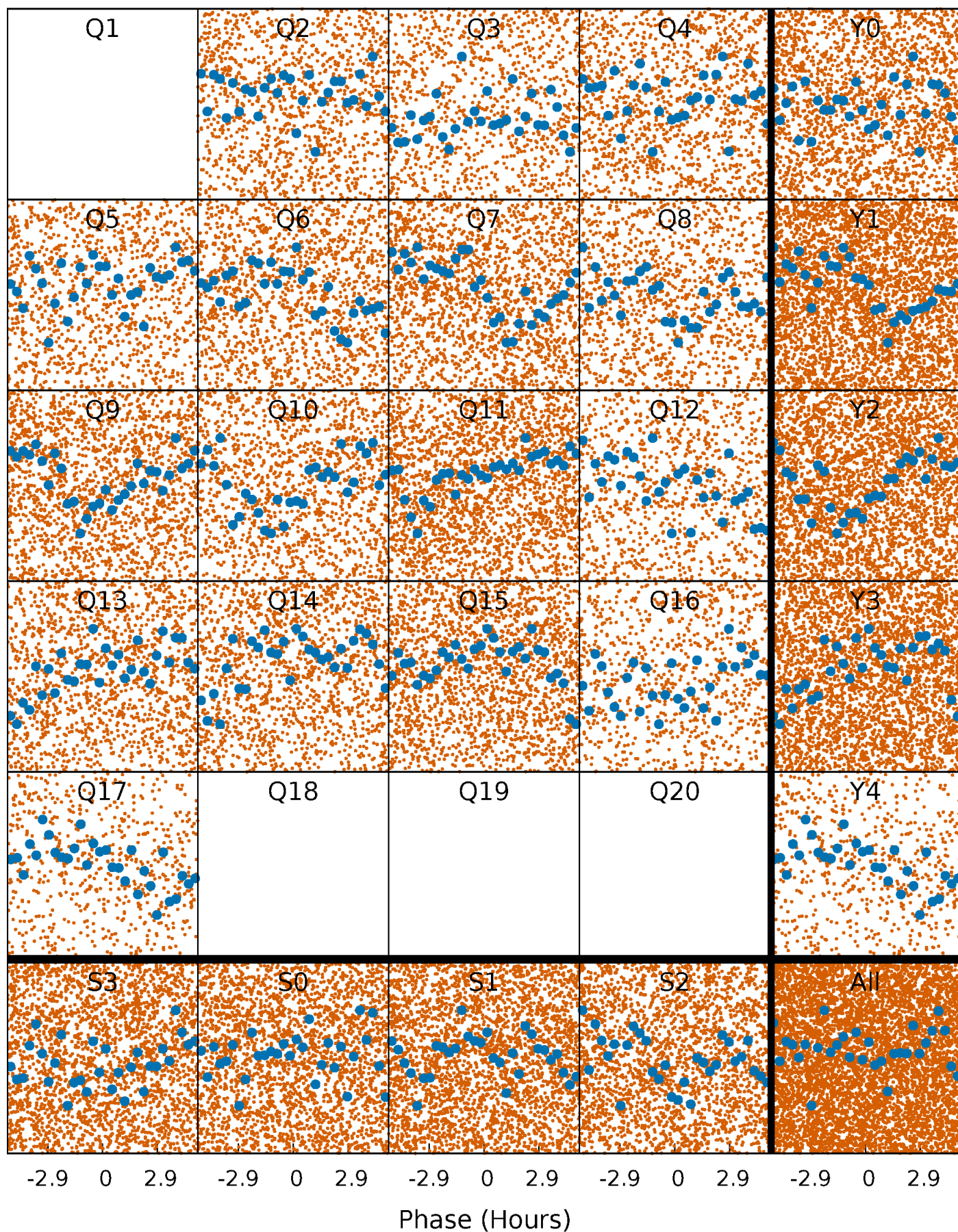


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



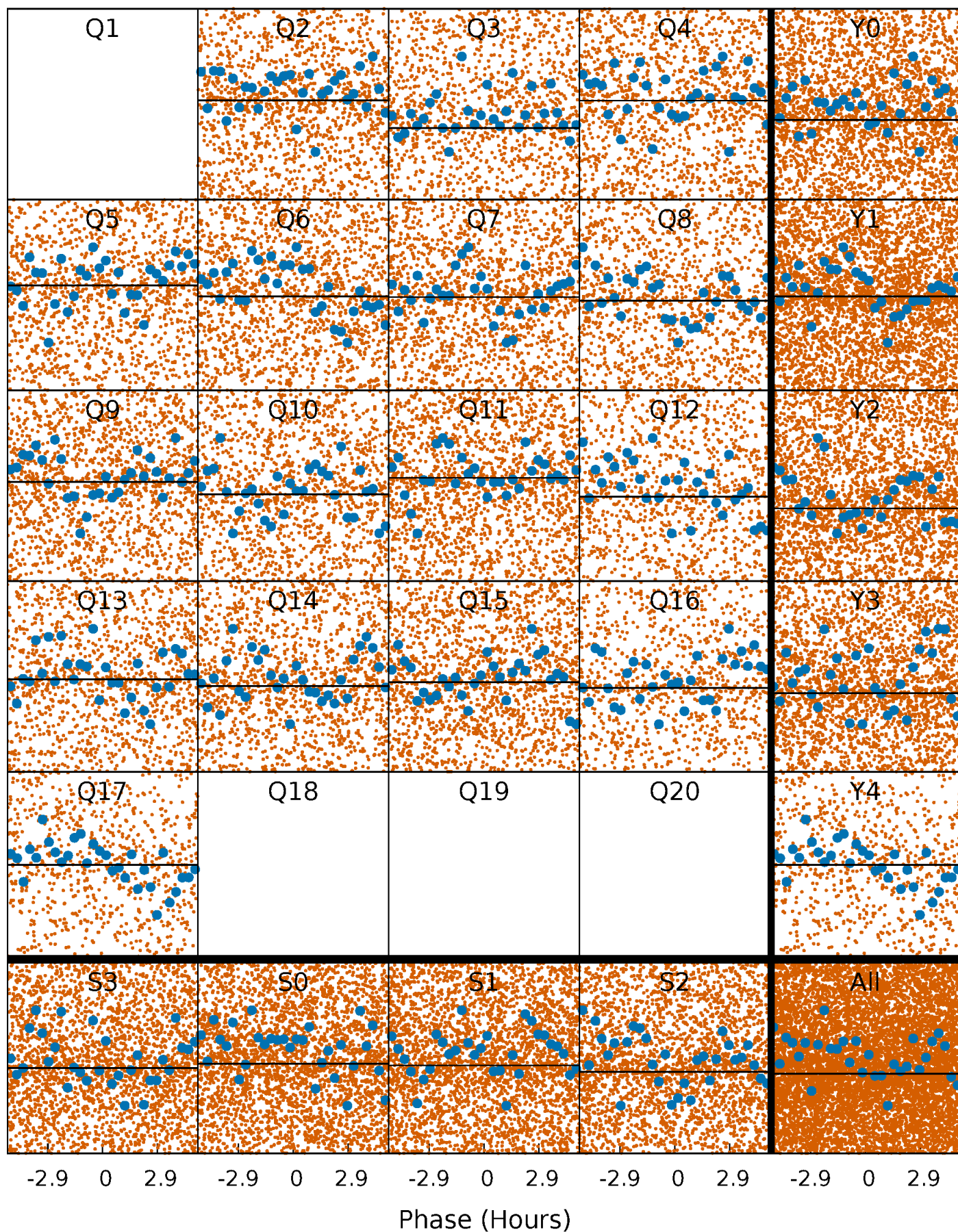
PDC Quarter-Phased Transit Curves

TCE 007281229-01 P= 0.567113 Days $T_0=132.009577$ (BKJD)



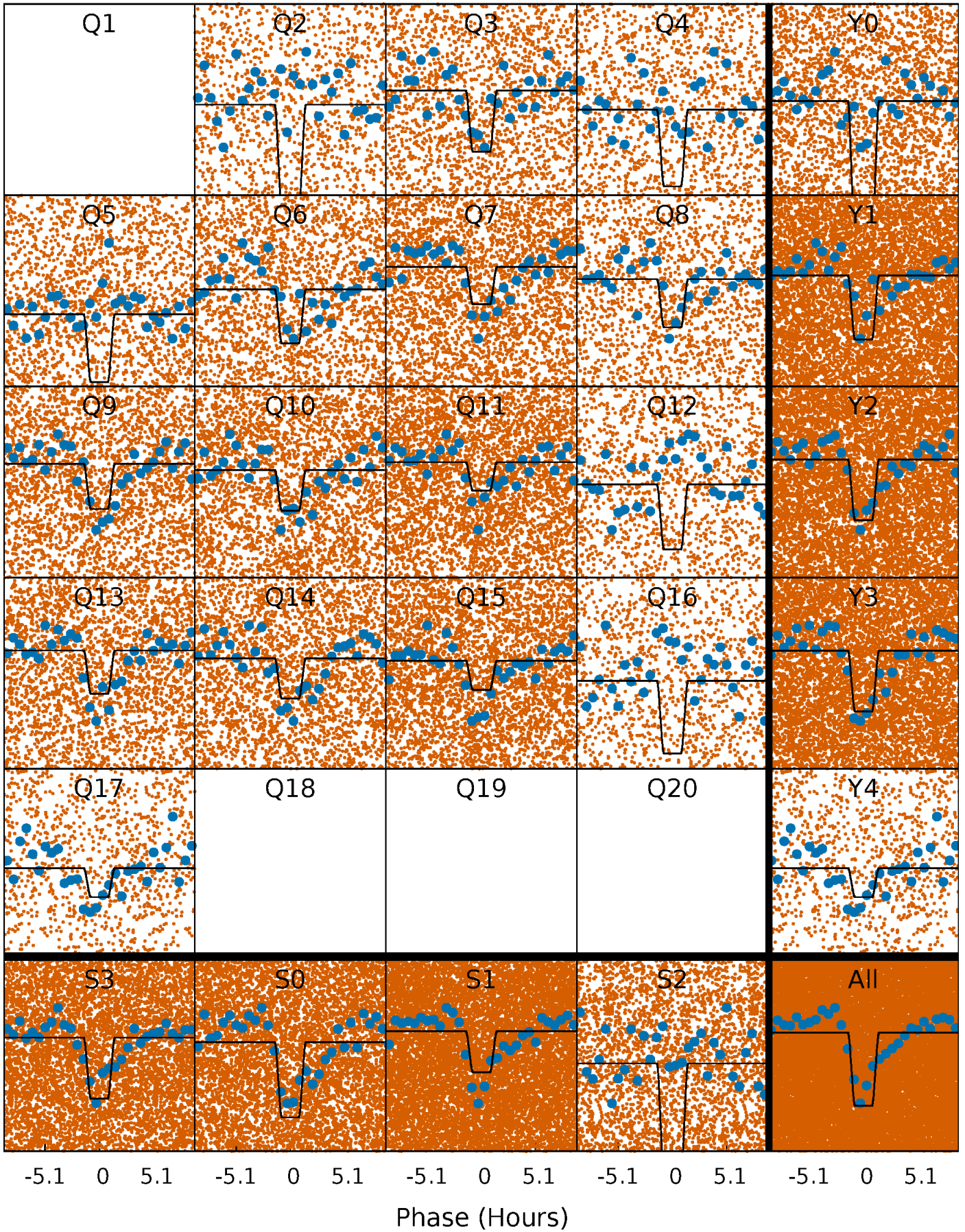
DV Quarter-Phased Transit Curves

TCE 007281229-01 P= 0.567113 Days $T_0=132.009577$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

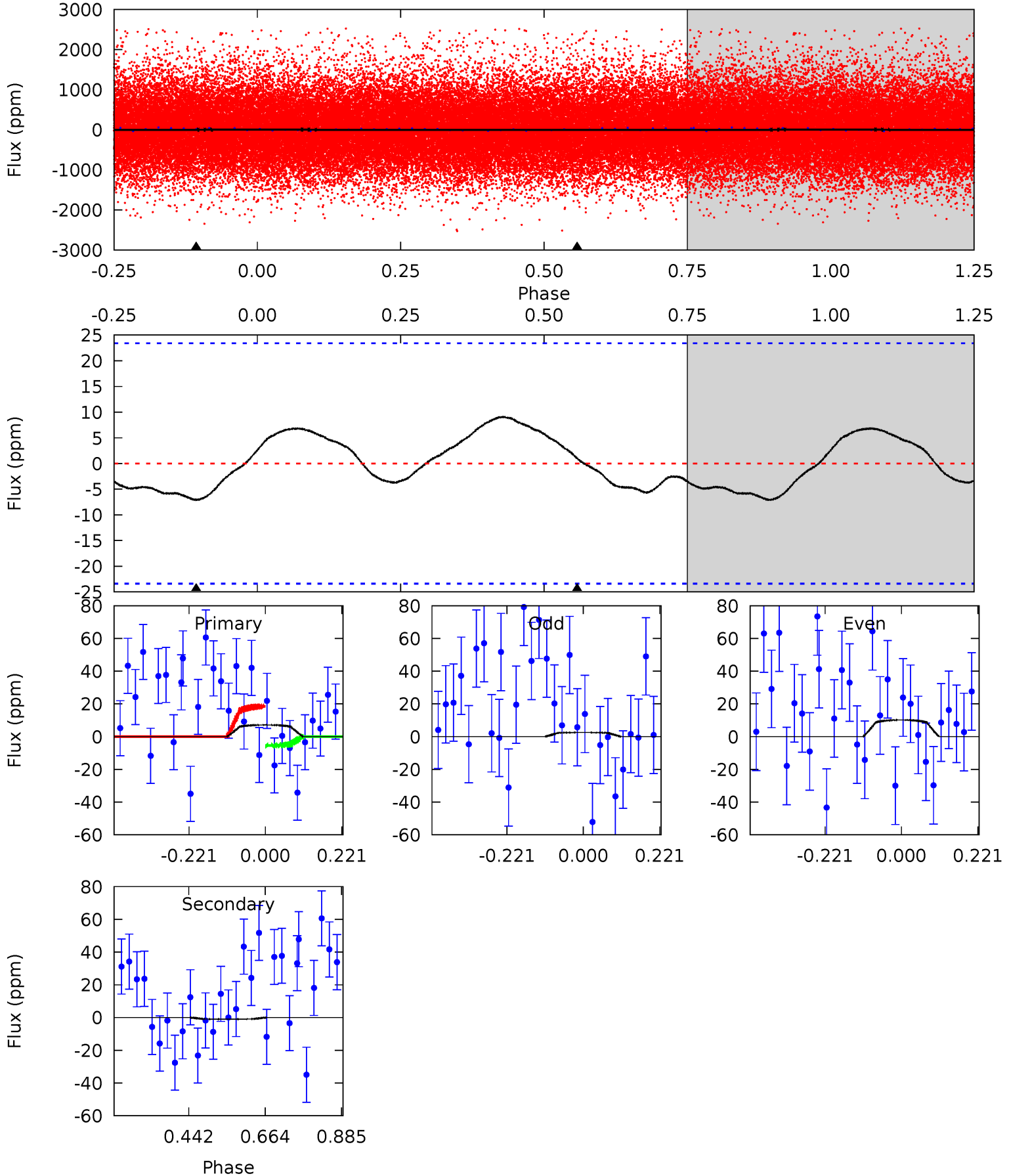
TCE 007281229-01 P= 0.566814 Days $T_0=131.790112$ (BKJD)



DV Model-Shift Uniqueness Test

007281229-01, P = 0.567113 Days, E = 132.009577 Days

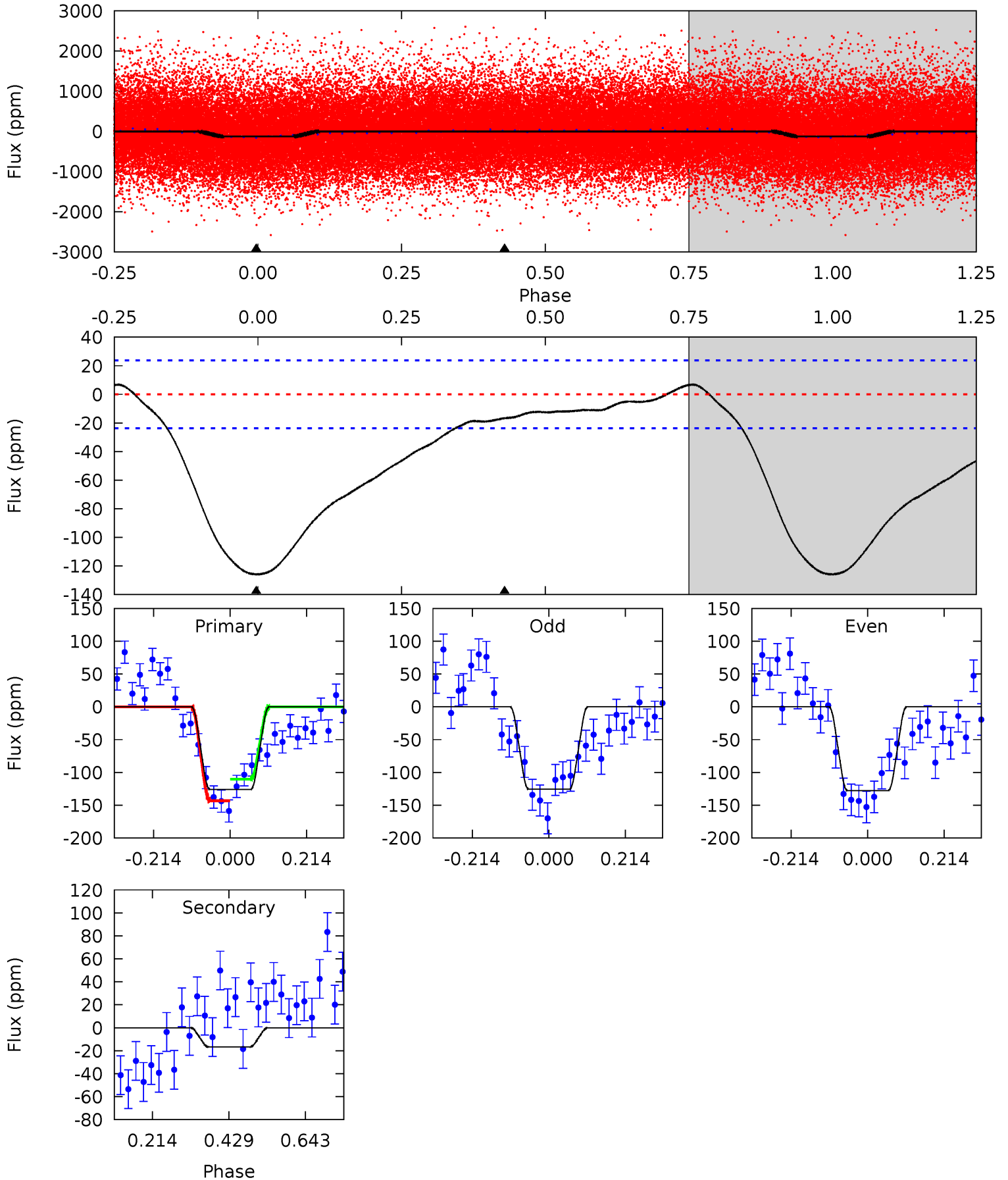
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
1.34	-0.18	0	0	4.40	1.22	0.53	1.34	1.34	-0.18	-0.18	0.71	1.36	0.56	1.23



Alt Model-Shift Uniqueness Test

007281229-01, P = 0.566814 Days, E = 131.790112 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
23.3	3.11	0	0	4.40	1.24	1.75	23.3	23.3	3.11	3.11	0.19	0.87	0.05	3.06



Stellar Parameters For KIC 007281229

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6108^{+193}_{-236}	$4.466^{+0.052}_{-0.208}$	$0.070^{+0.200}_{-0.350}$	$1.030^{+0.302}_{-0.130}$	$1.132^{+0.135}_{-0.166}$	$1.457^{+0.390}_{-0.735}$
	+3%/-4%	+1%/-5%	+286%/-500%	+29%/-13%	+12%/-15%	+27%/-50%
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 007281229-01 / KOI 6852.01

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	1 ± 5	$2.80^{+3.26}_{-1.96}$	3300^{+231}_{-189}	-3310^{+234}_{-339}	$-0.004^{+0.074}_{-0.246}$
Alt.	-17 ± 5	$3.41^{+3.56}_{-2.44}$	3301^{+249}_{-185}	-2952^{+7283}_{-303}	$0.142^{+1.732}_{-0.109}$

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 $A_{obs} \gg 1.0$

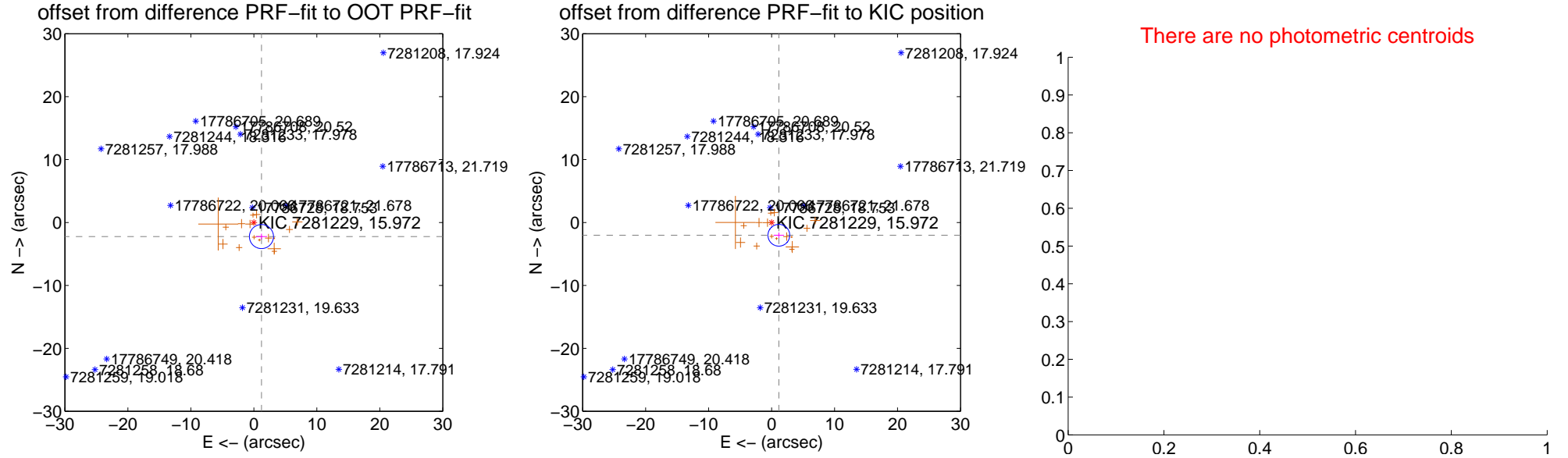
DV Centroid Data

Supplemental centroid analysis for 007281229-01. Kepler magnitude: 15.97. Transit SNR 0.00

There are 0 quarters with good PRF difference image offsets

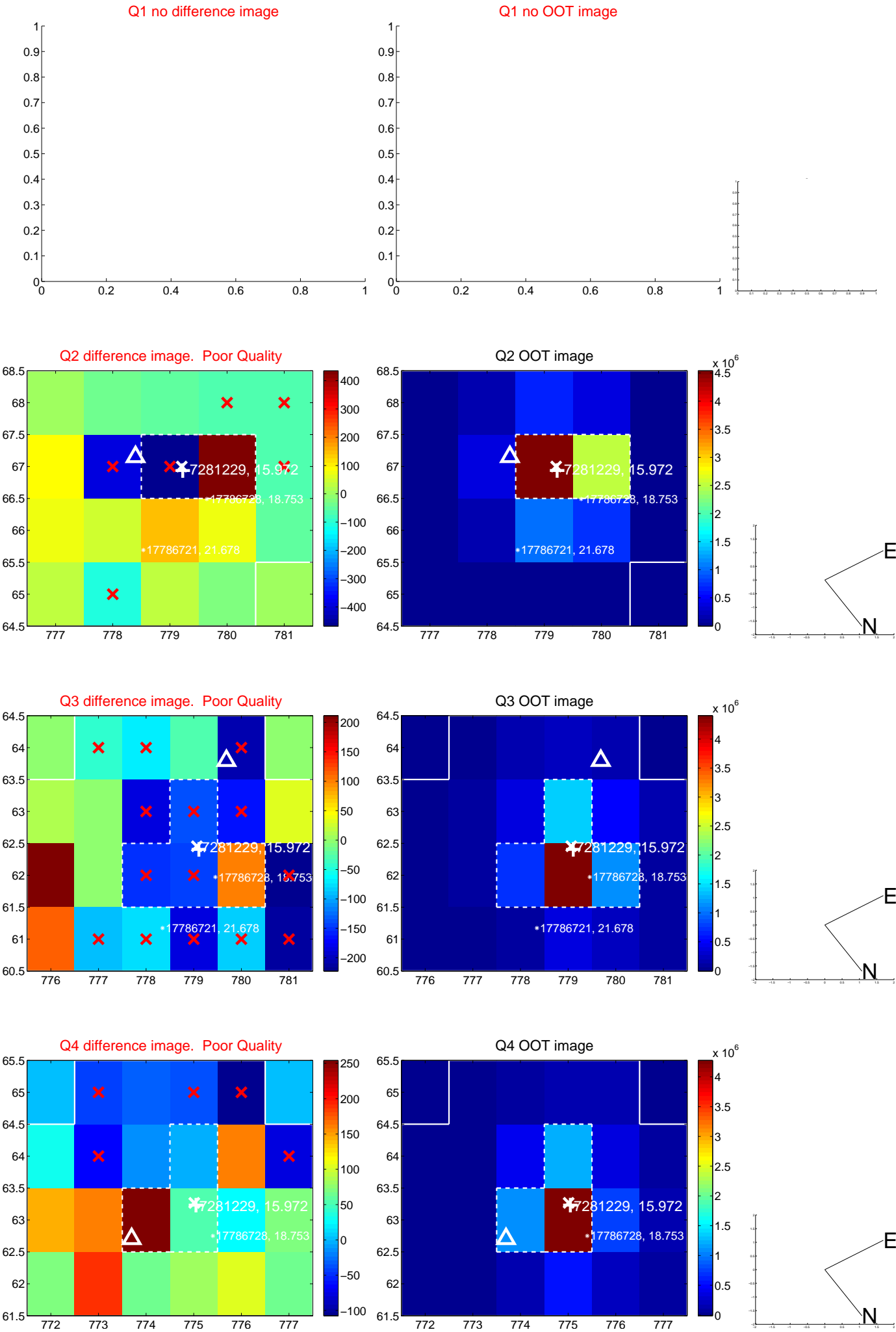
The direct PRF centroid is offset from the target star catalog position by about 0.24 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	2.539 ± 0.637	3.99	-1.208 ± 0.907	-2.234 ± 0.456
PRF-fit source offset from KIC position	2.331 ± 0.576	4.05	-1.152 ± 0.820	-2.026 ± 0.428
photometric centroid source offset	—	—	—	—

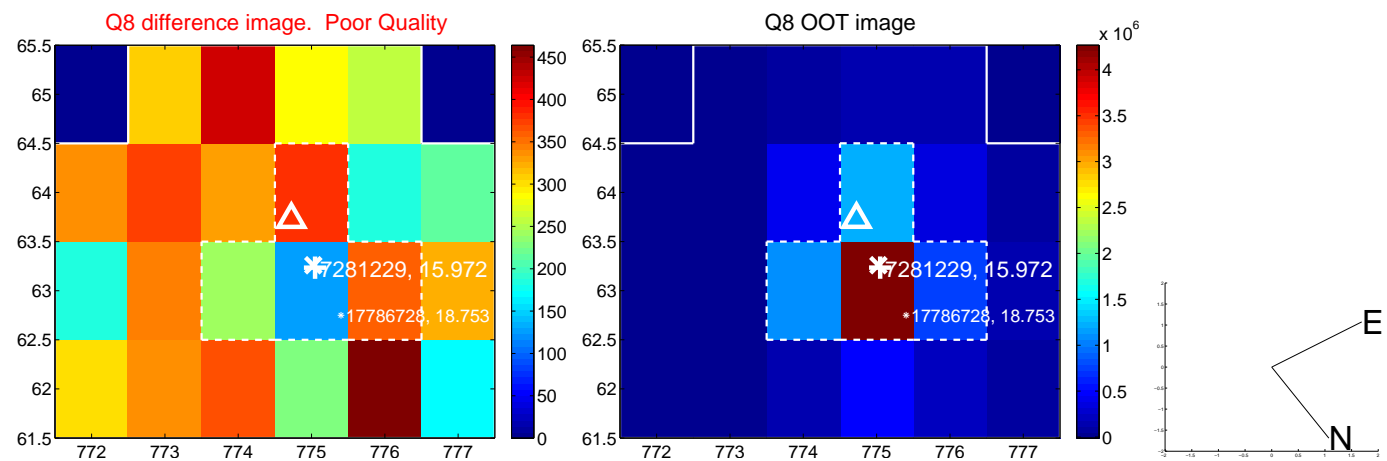
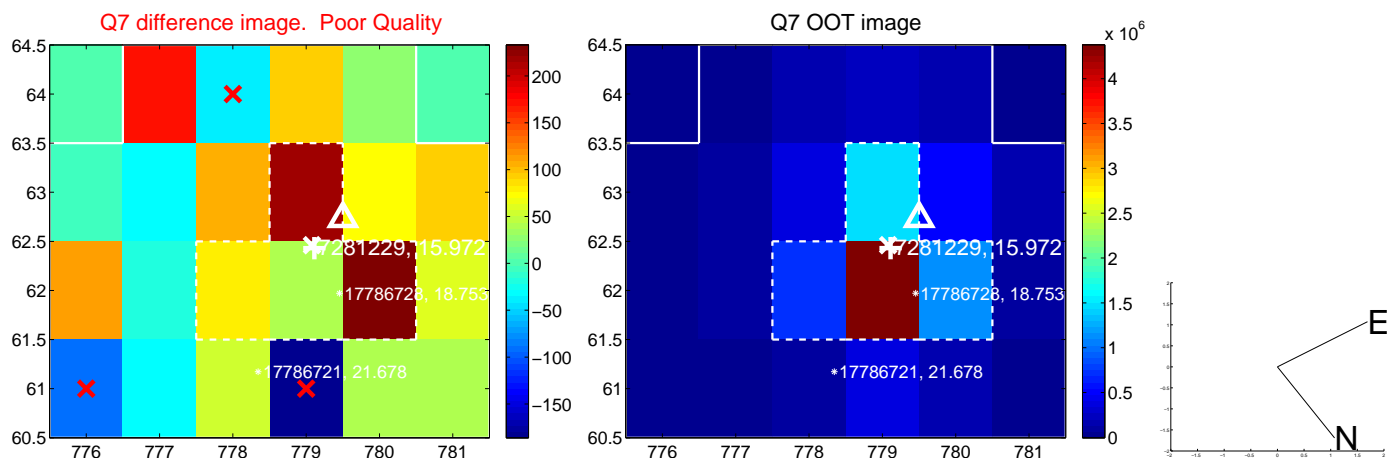
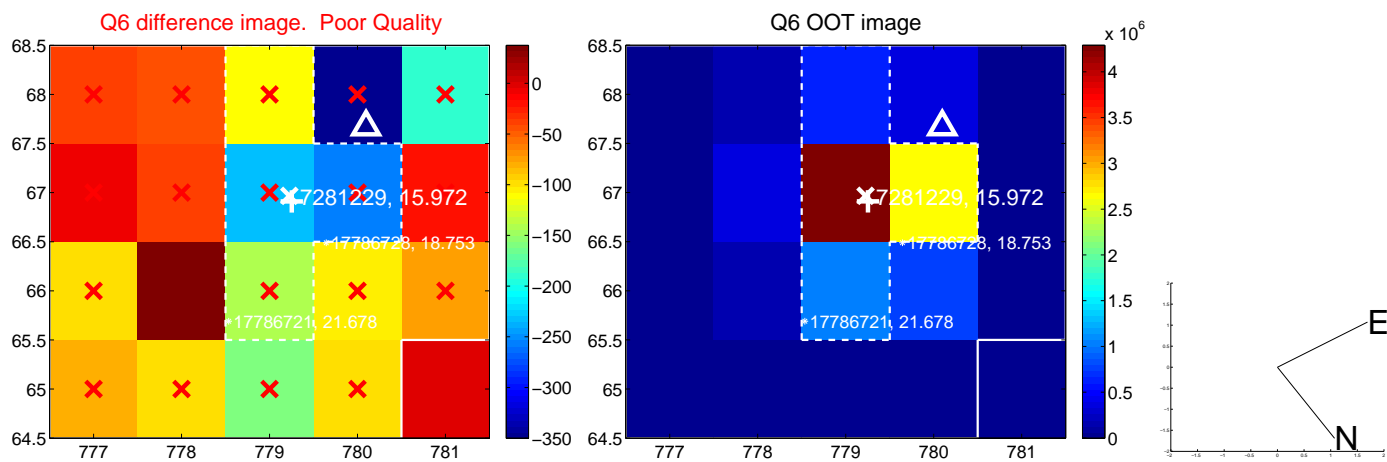
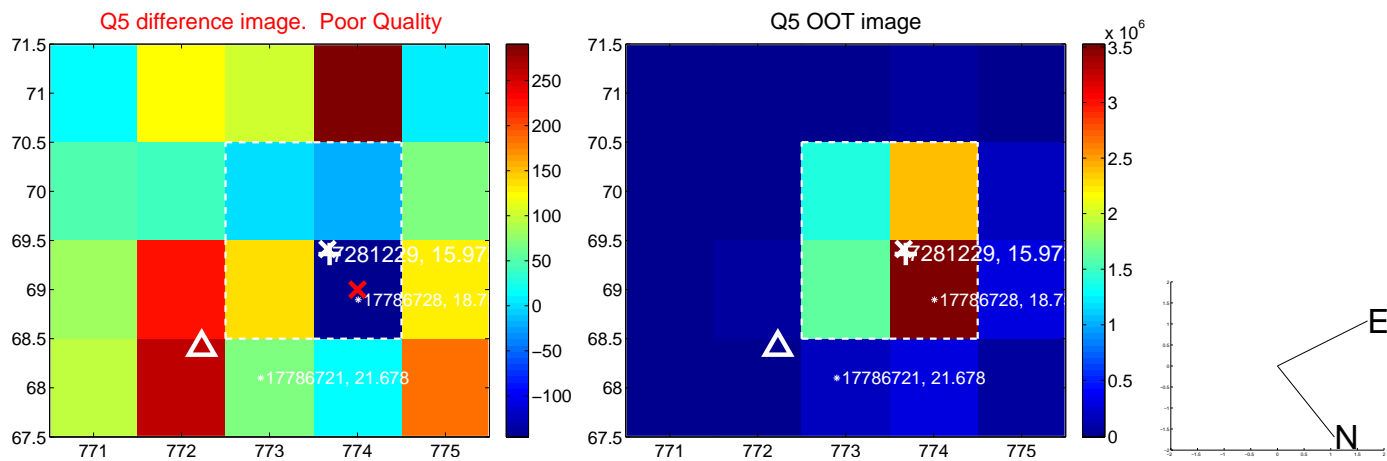


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

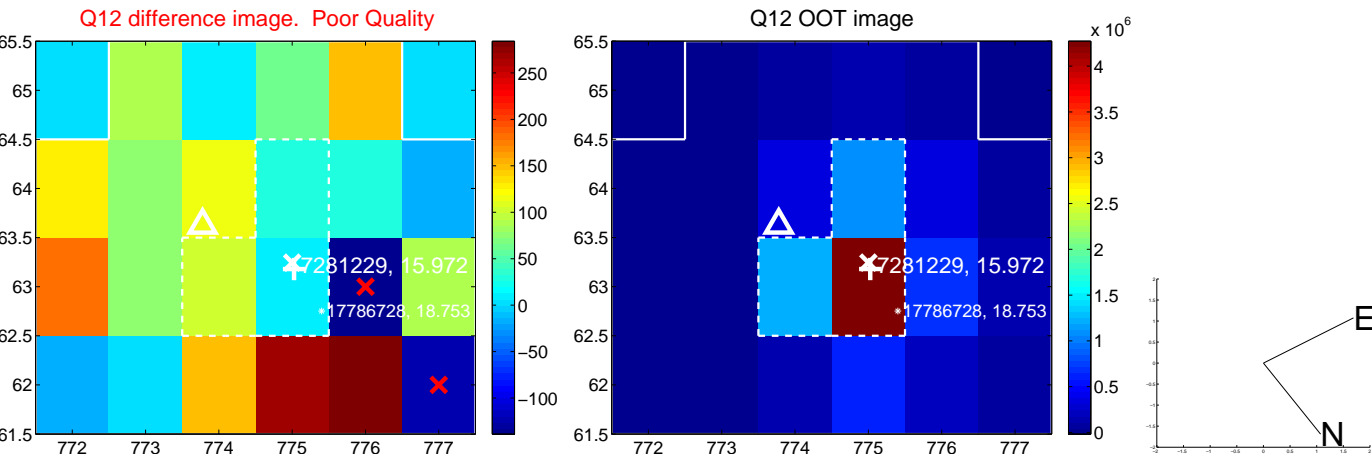
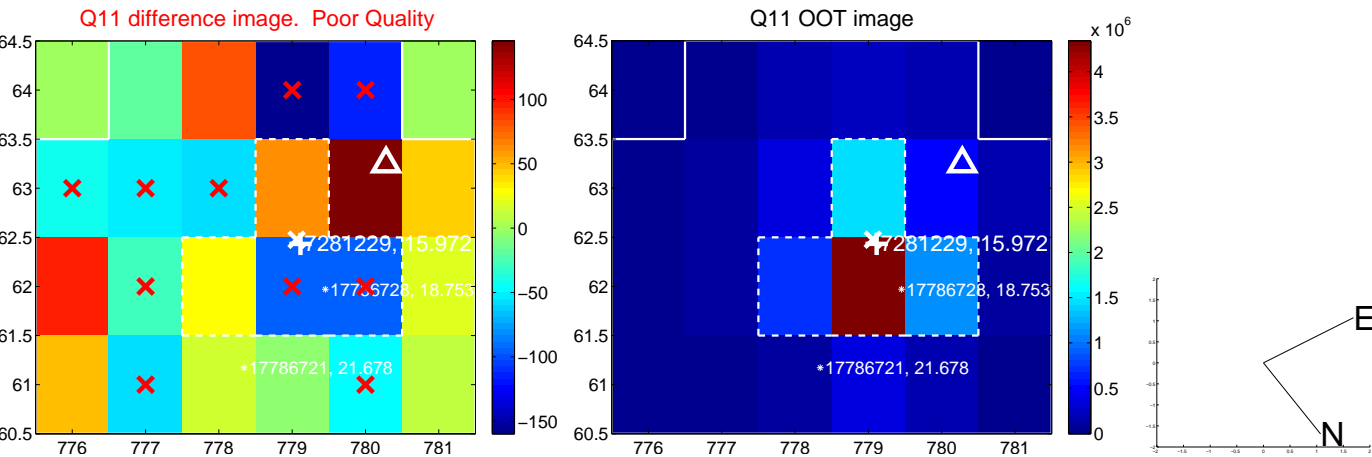
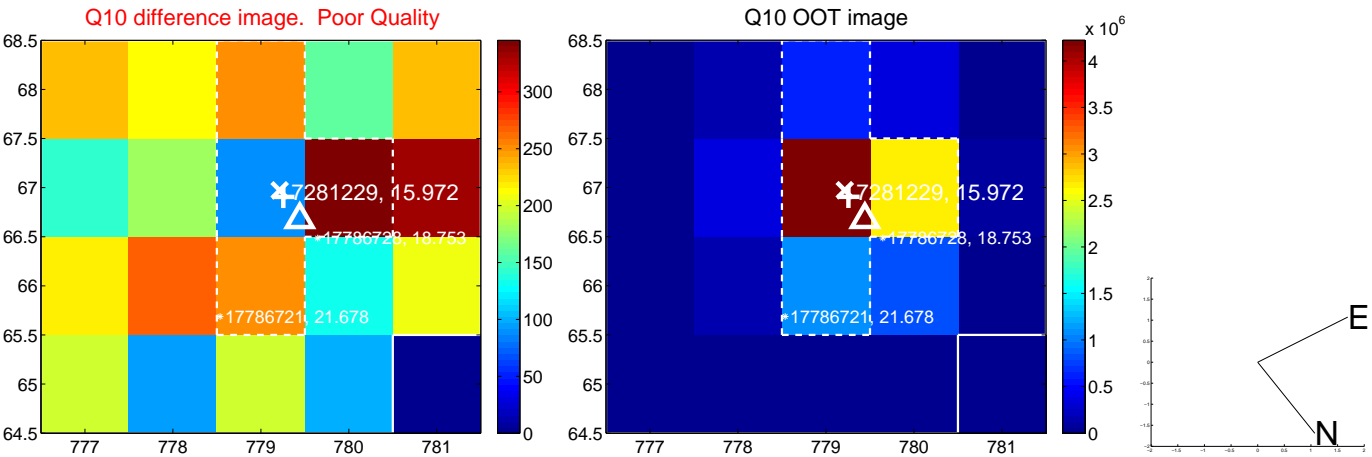
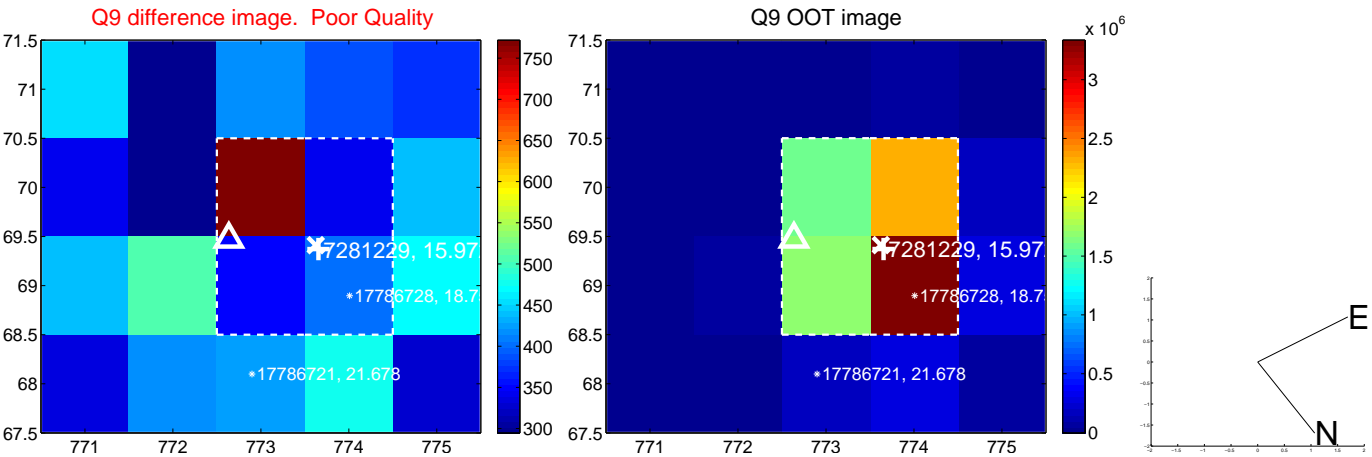
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



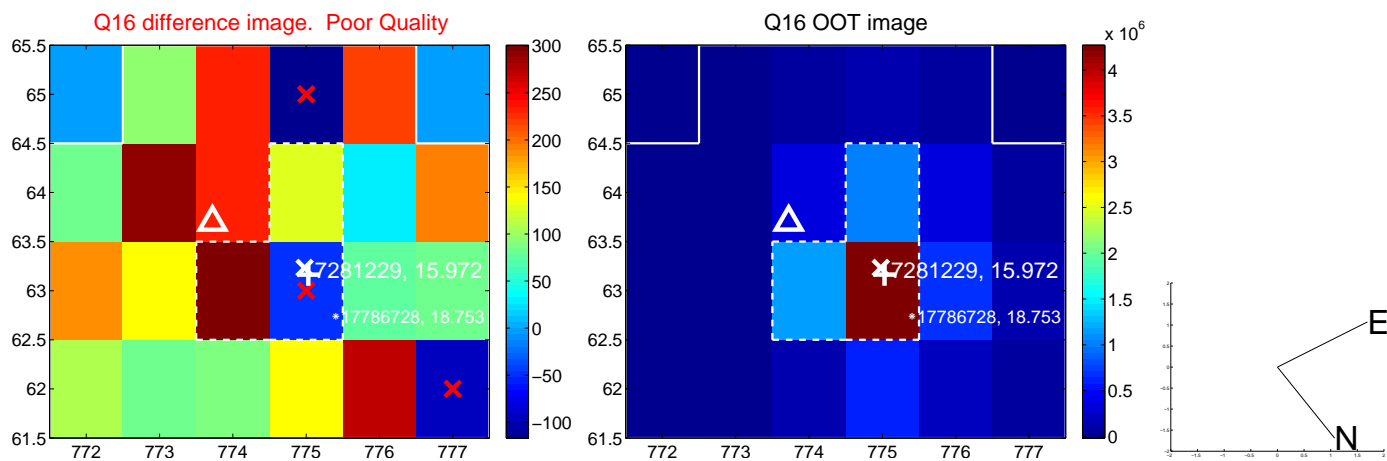
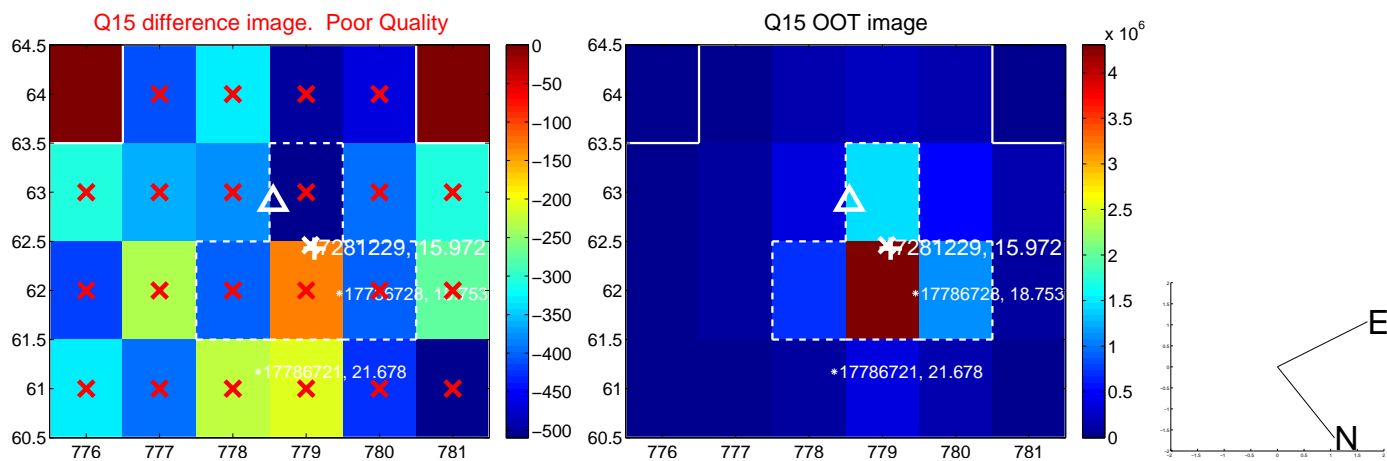
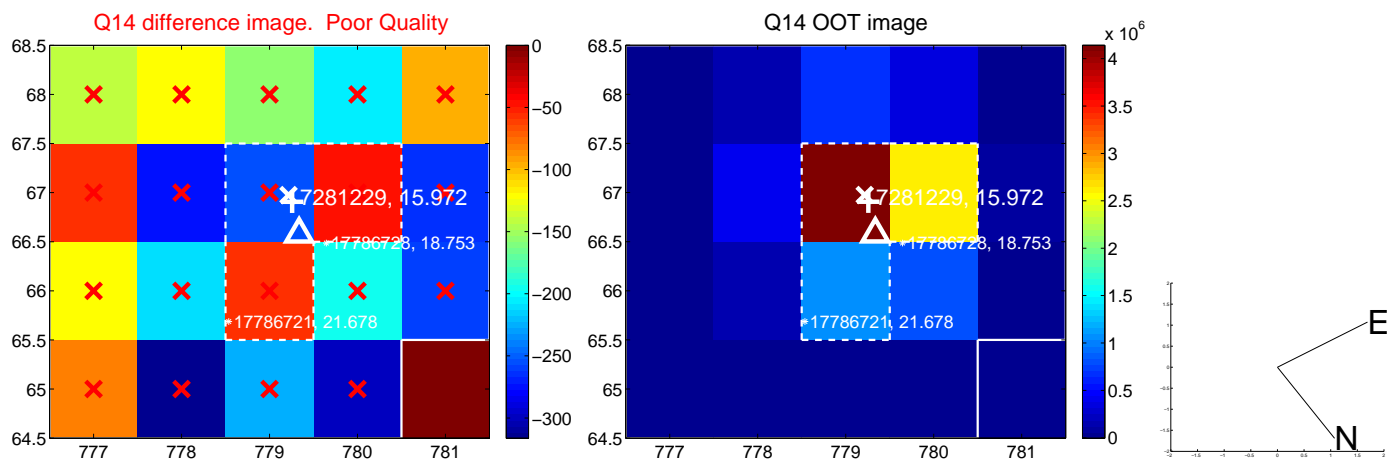
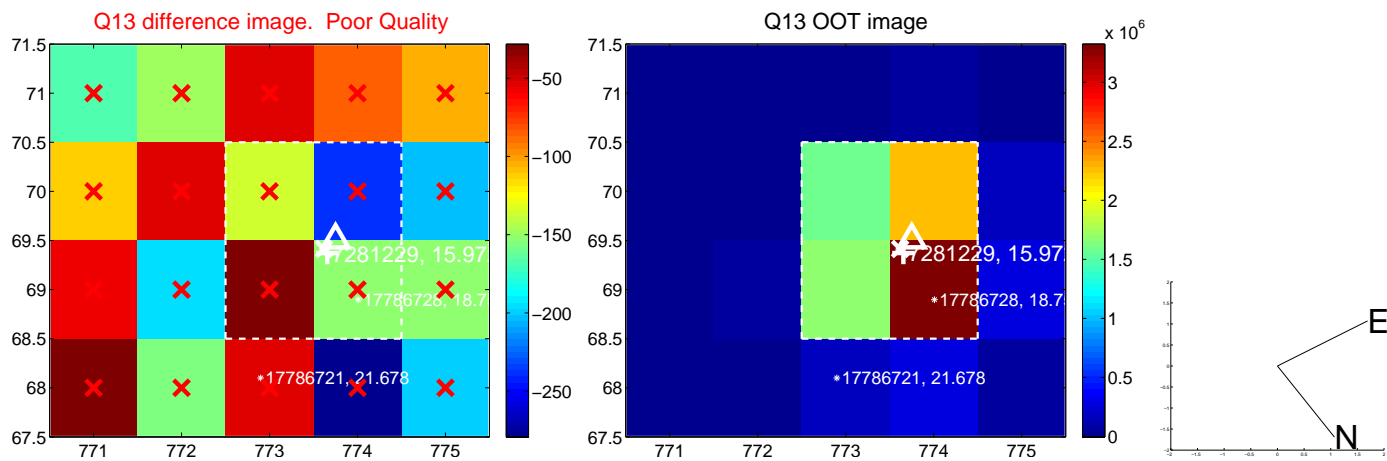
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



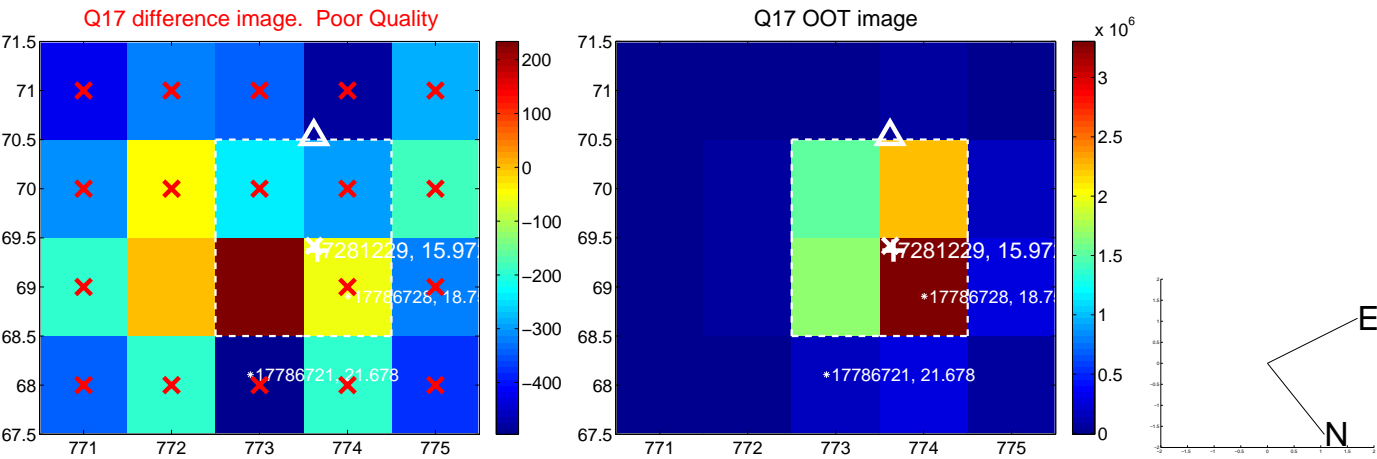
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



folded centroid time series figure for this object.

UKIRT Image

Declination

