

KIC 002582800

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})
002582800-01	OBS	No	0.810613	132.296013	16.7	6.971	11.5	10.7	2.71	7937	1.23	56043.01

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
002582800-01	OBS	FP	0.00	1	0	0	0	LPP_DV—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.

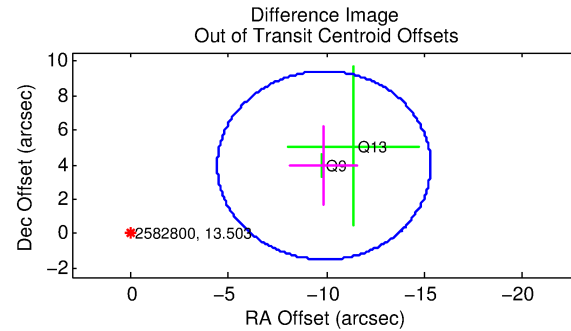
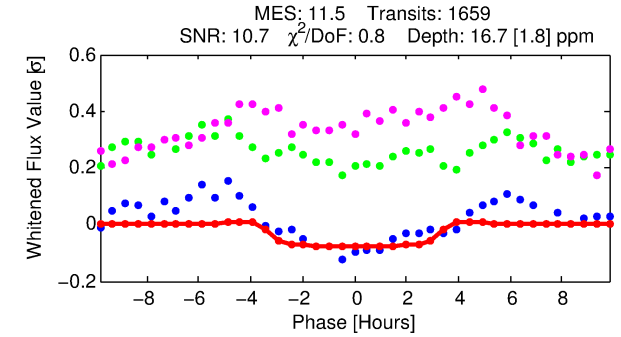
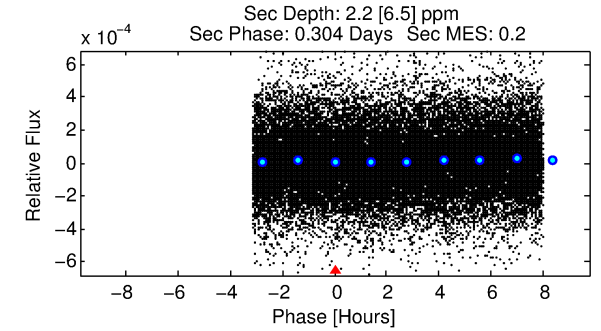
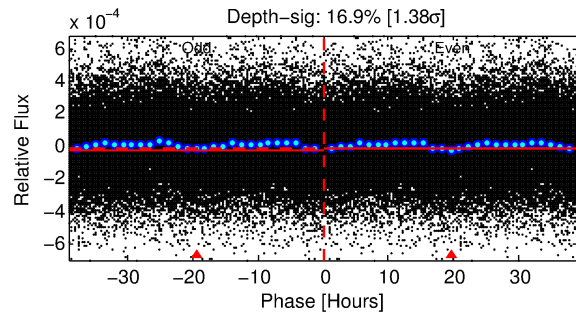
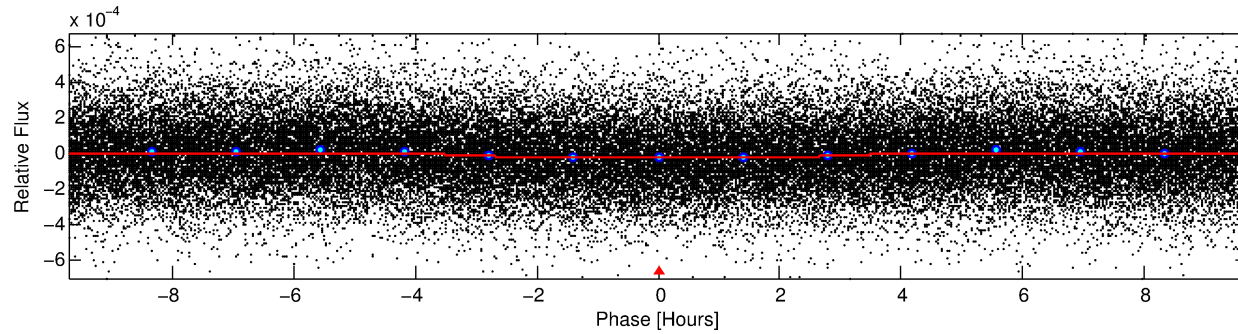
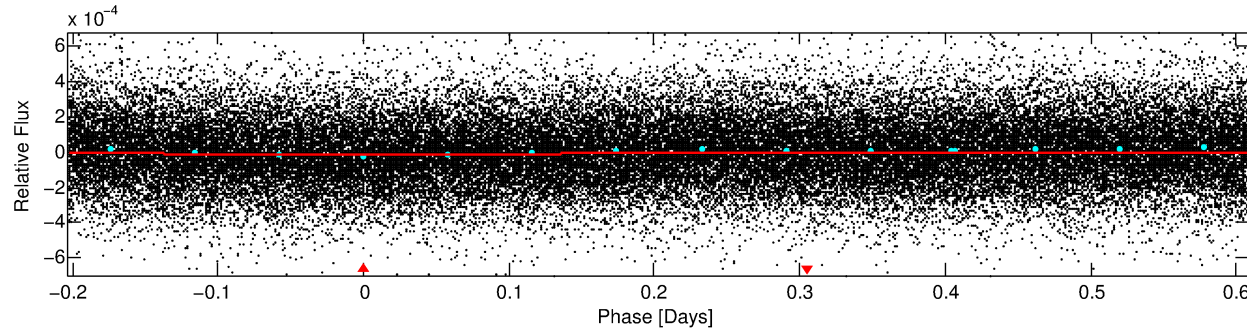
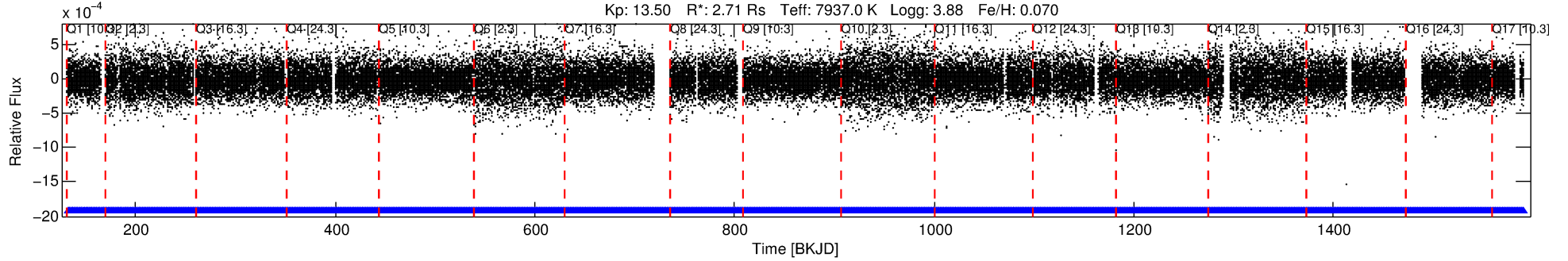
Ephemeris Match Information For 002582800-01

No Significant Match Found

DV One-Page Summary

KIC: 2582800 Candidate: 1 of 1 Period: 0.811 d
KOI: K04949 Corr: No Ephemeris Match

Kp: 13.50 R*: 2.71 Rs Teff: 7937.0 K Logg: 3.88 Fe/H: 0.070



DV Fit Results:

Period = 0.81061 [0.00001] d
Epoch = 132.2960 [0.0060] BKJD
Rp/R* = 0.0042 [0.0029]
a/R* = 1.04 [0.34]
b = 0.82 [1.73]
Seff = 56043.01 [29552.74]
Teff = 3923 [517] K
Rp = 1.23 [0.98] Re
a = 0.0216 [0.0071] AU
Ag = 0.37 [1.24] [-0.51σ]
Teffp = 4728 [3920] K [0.20σ]

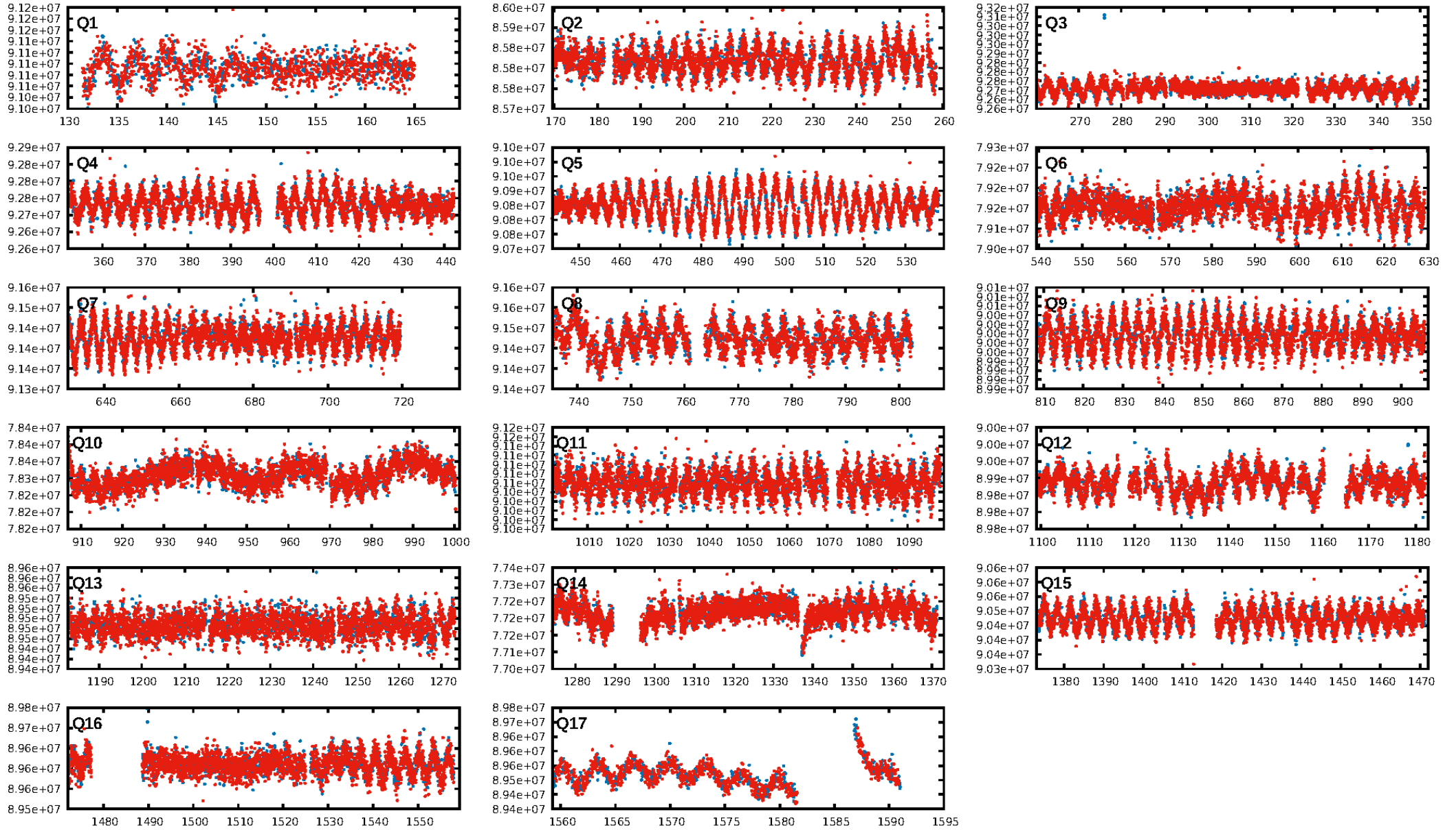
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [1584/1584]
GhostDiagnostic-chr: 1.54
Centroid-sig: 0.5%
Centroid-so: 1.342 arcsec [1.21σ]
OotOffset-rm: 10.640 arcsec [5.86σ]
KicOffset-rm: 10.712 arcsec [5.89σ]
OotOffset-st: 0/0/0/2 [2]
KicOffset-st: 0/0/0/2 [2]
DiffImageQuality-fgm: 0.00 [0/2]
DiffImageOverlap-fno: 1.00 [17/17]

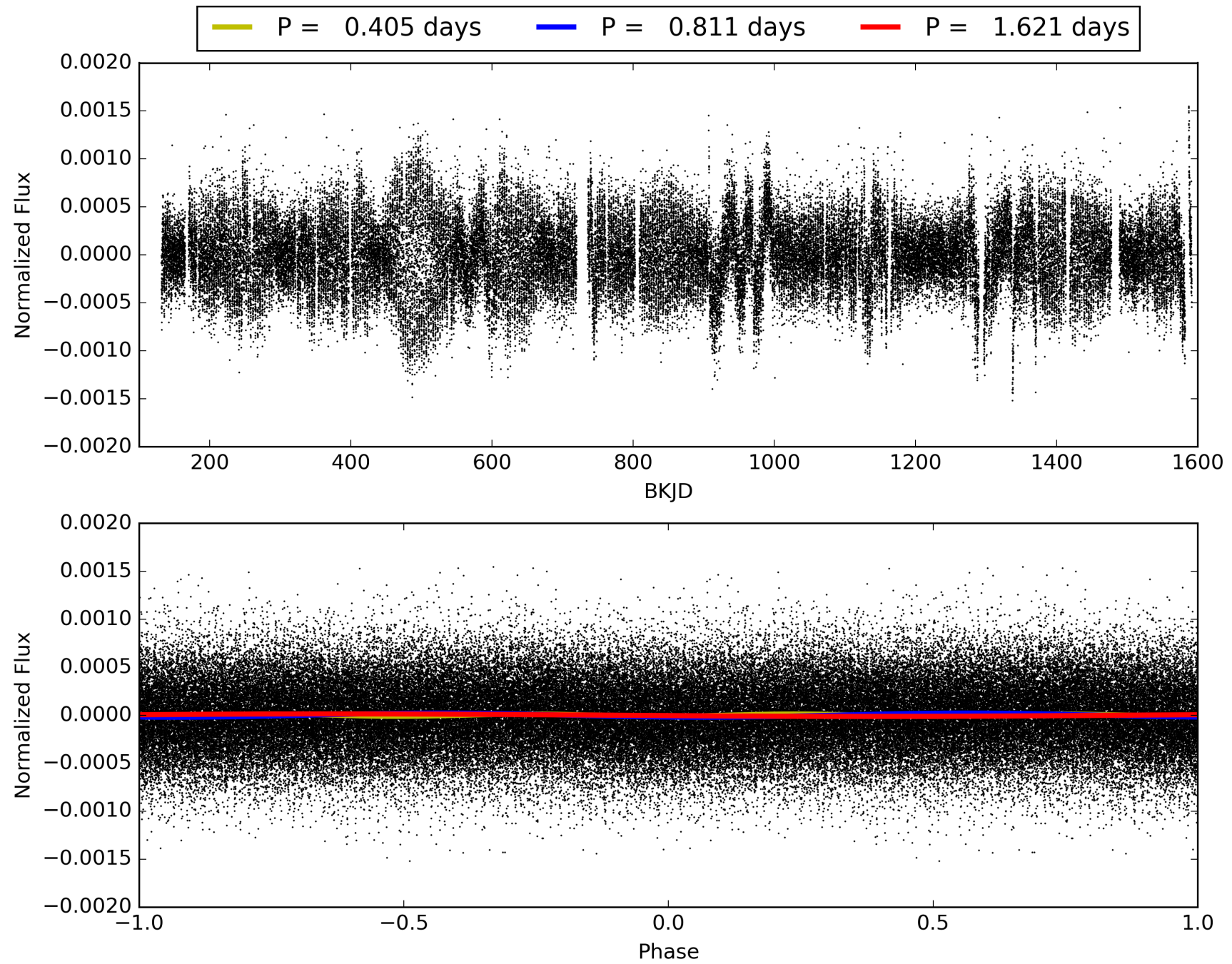
Software Revision: svn-ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 01:20:32 Z

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

TCE 002582800-01, PDC Light Curves

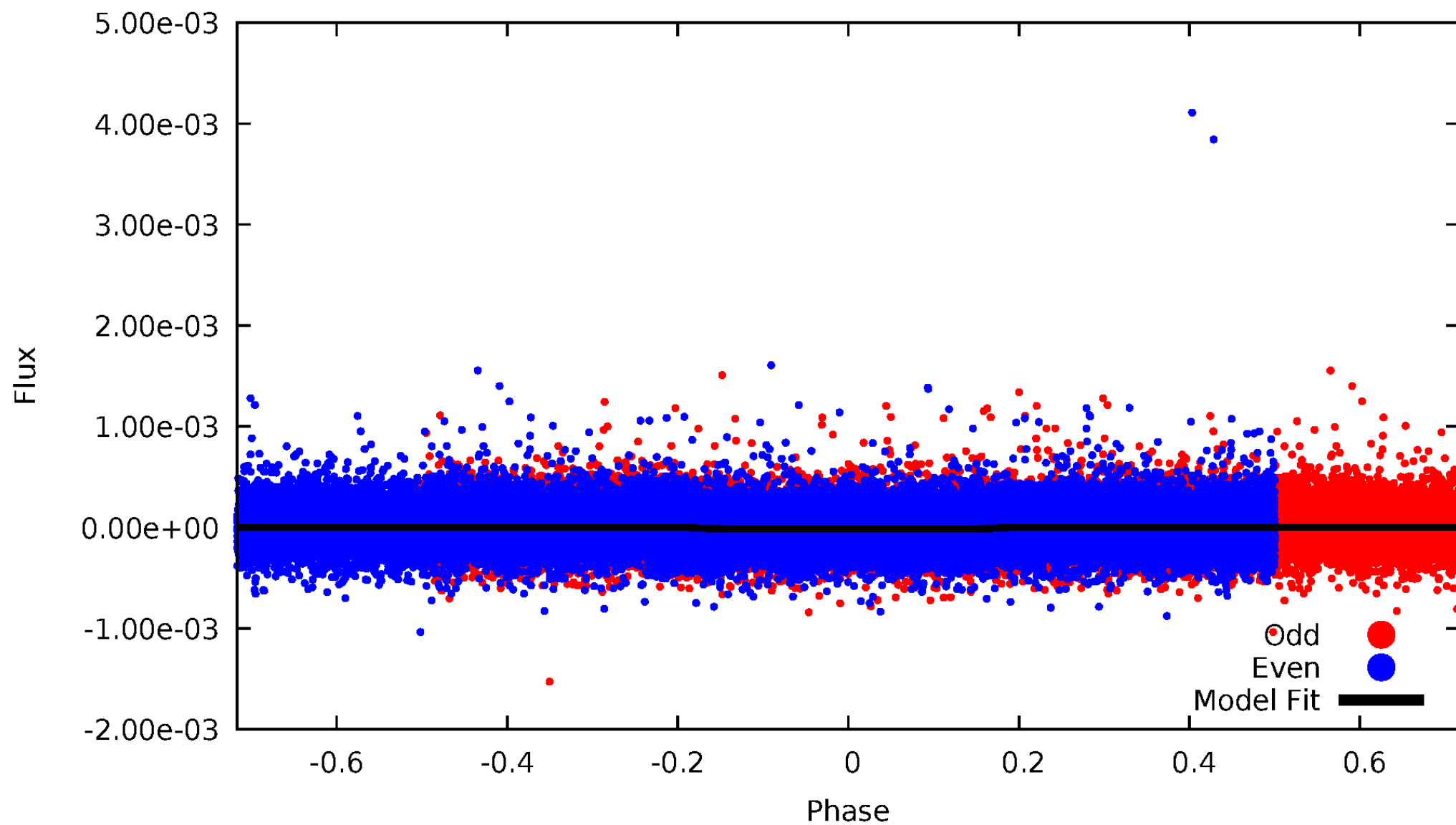


TCE 002582800-01



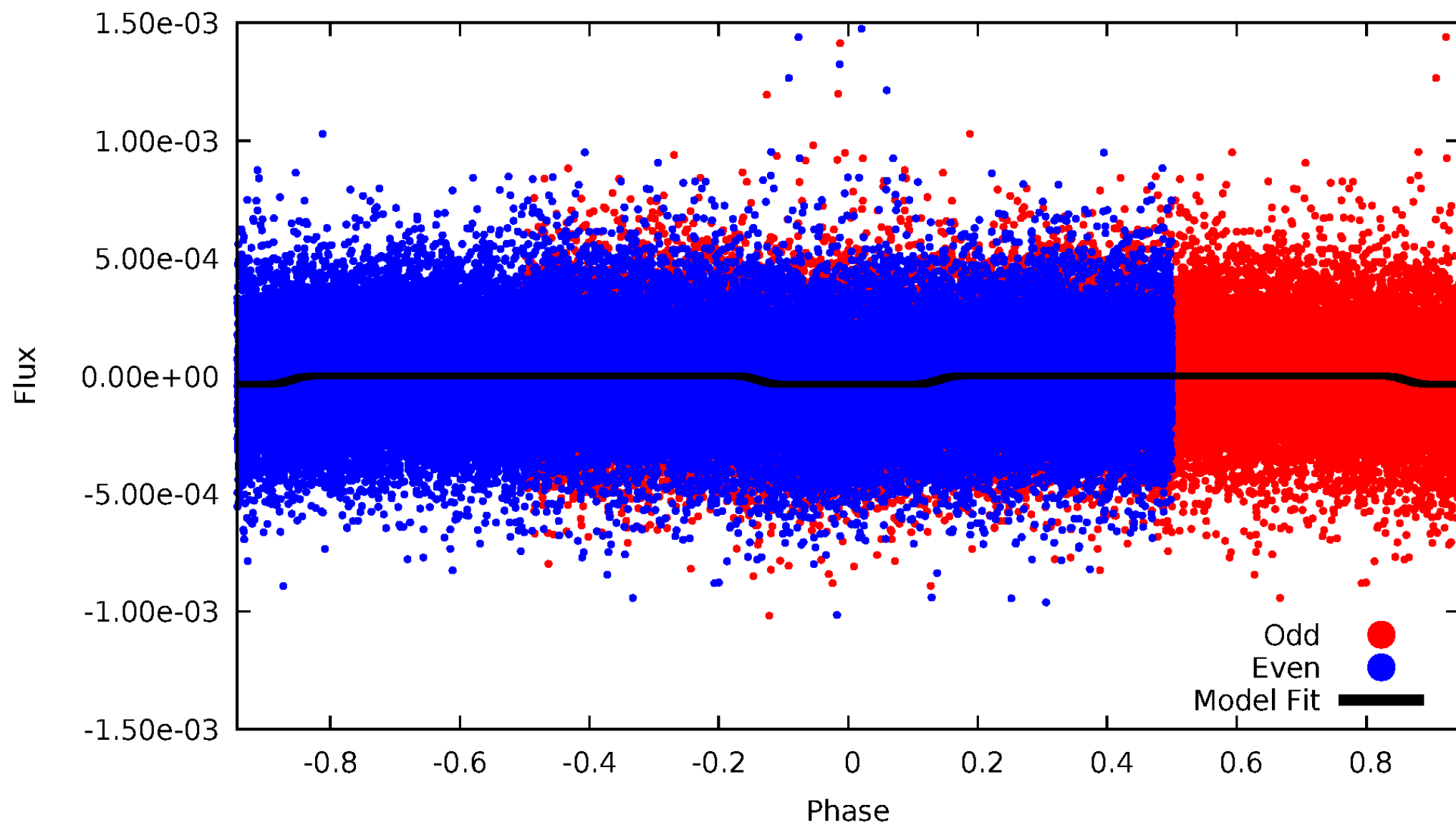
DV Odd/Even

TCE 002582800-01



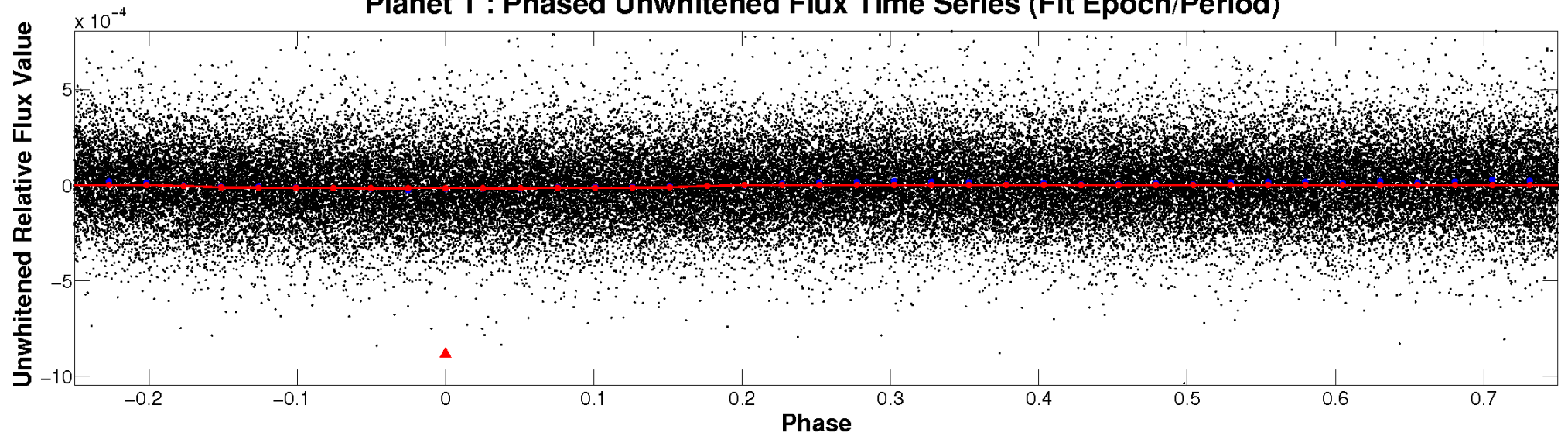
ALT Odd/Even

TCE 002582800-01

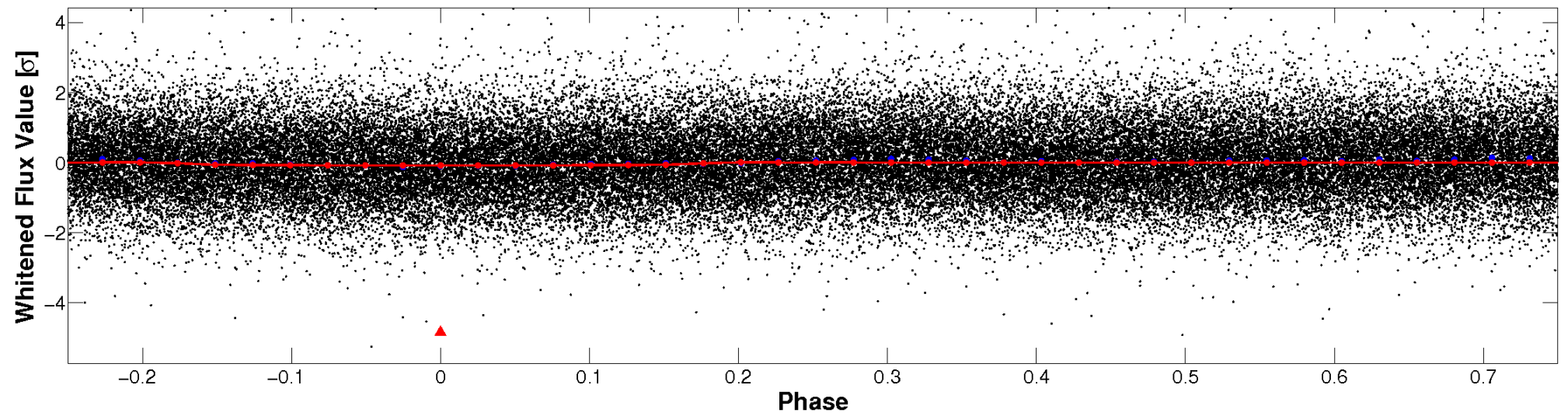


Non-Whitened Vs. Whitened Light Curve

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

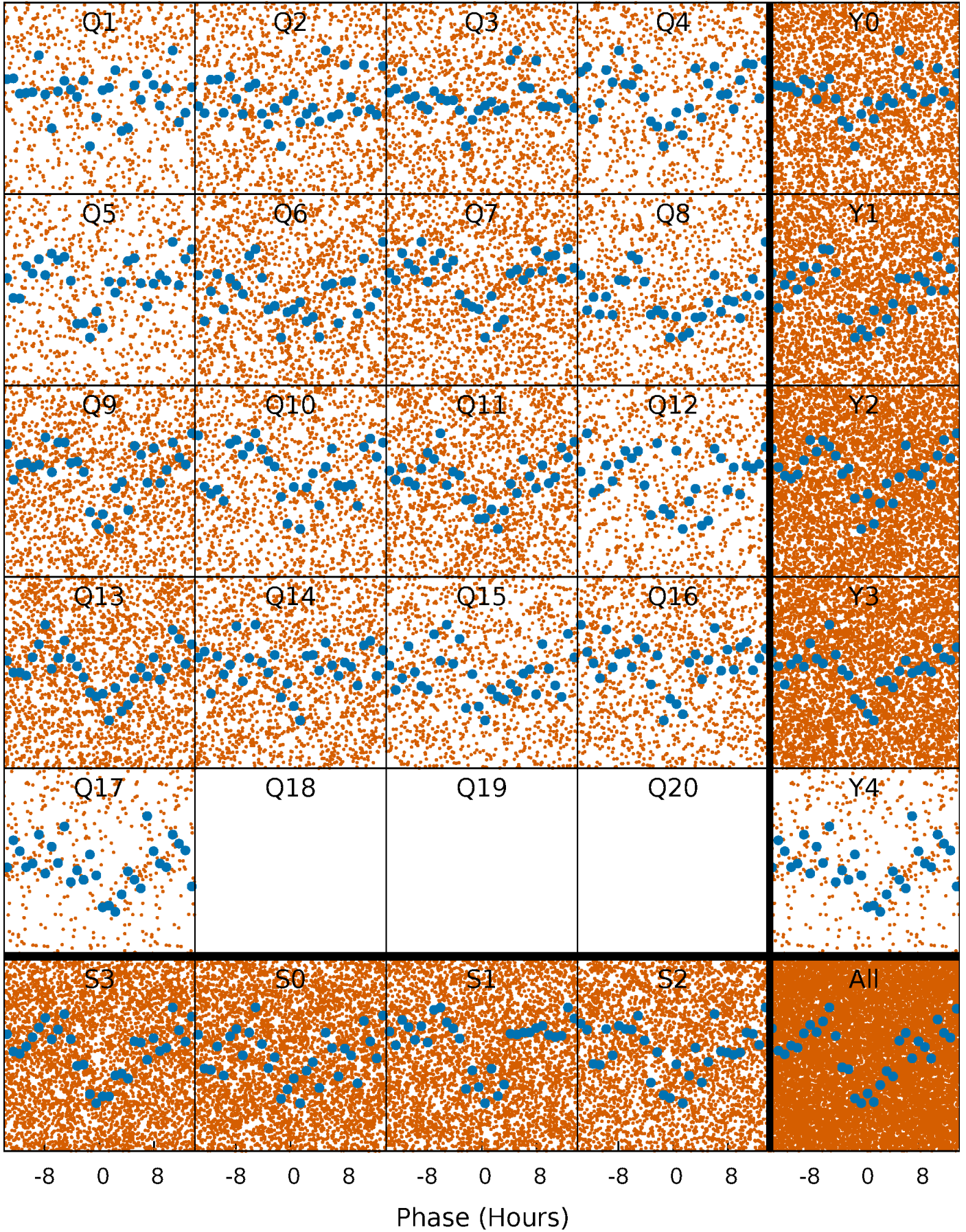


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



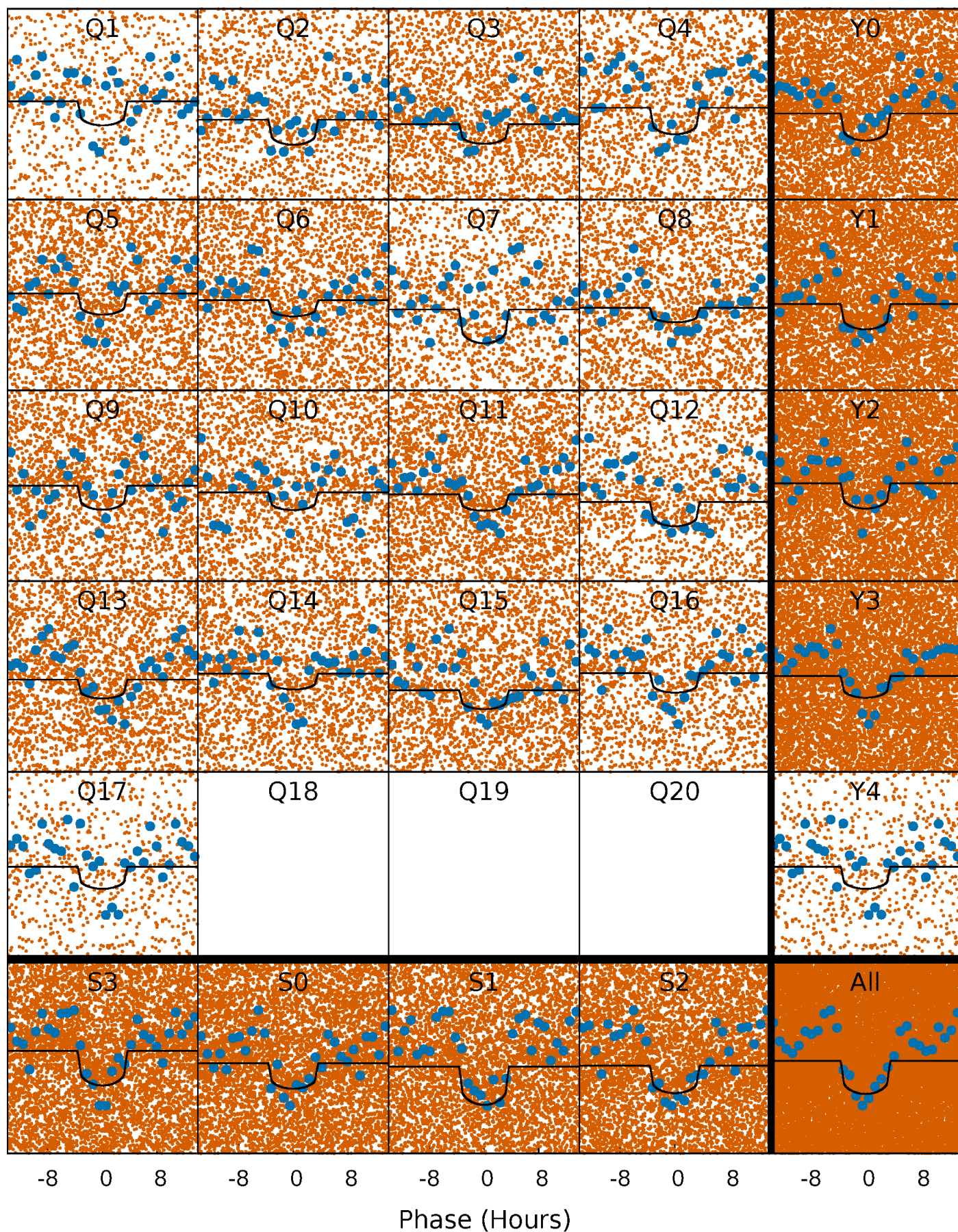
PDC Quarter-Phased Transit Curves

TCE 002582800-01 P= 0.810613 Days $T_0=132.296013$ (BKJD)



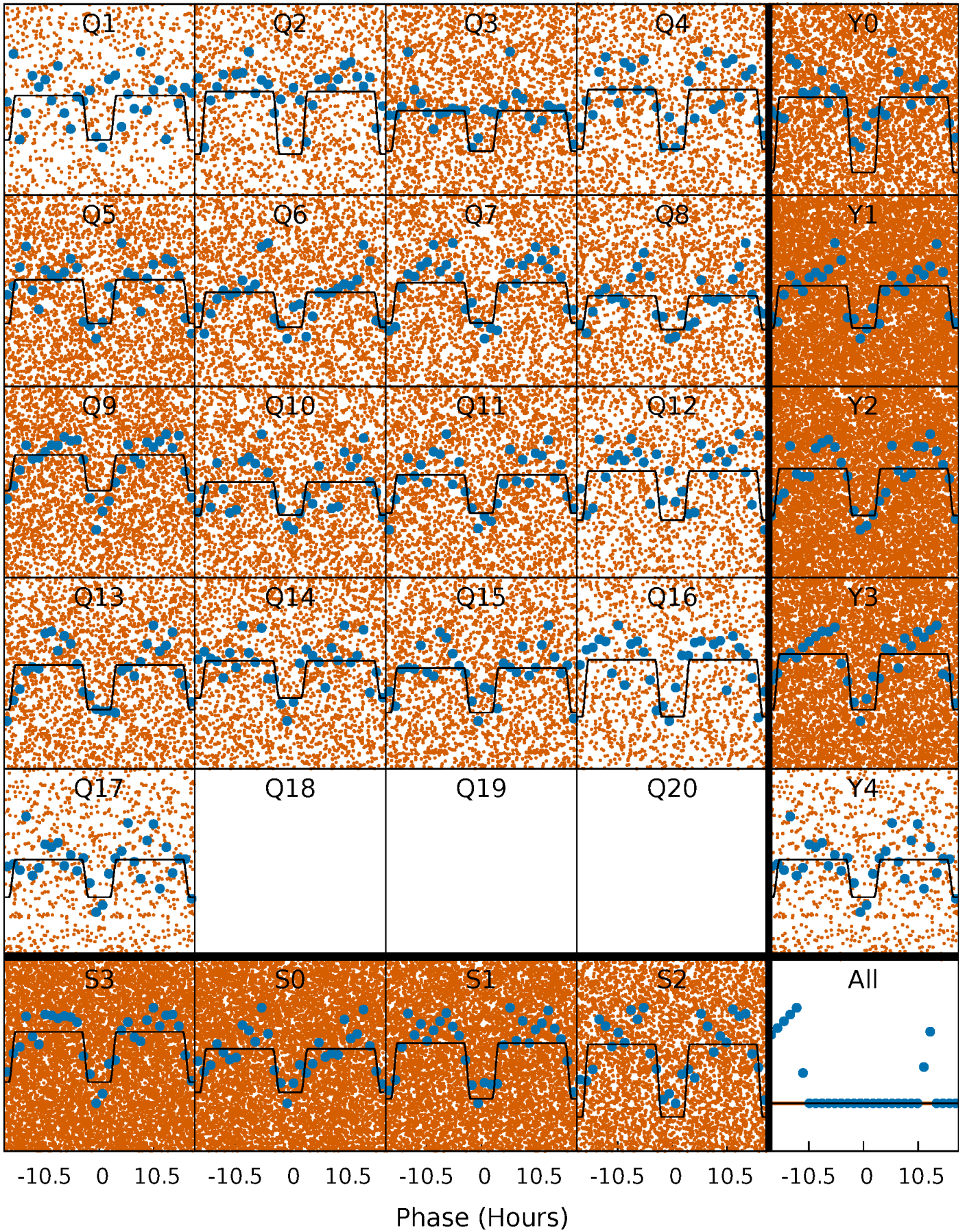
DV Quarter-Phased Transit Curves

TCE 002582800-01 P= 0.810613 Days $T_0=132.296013$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

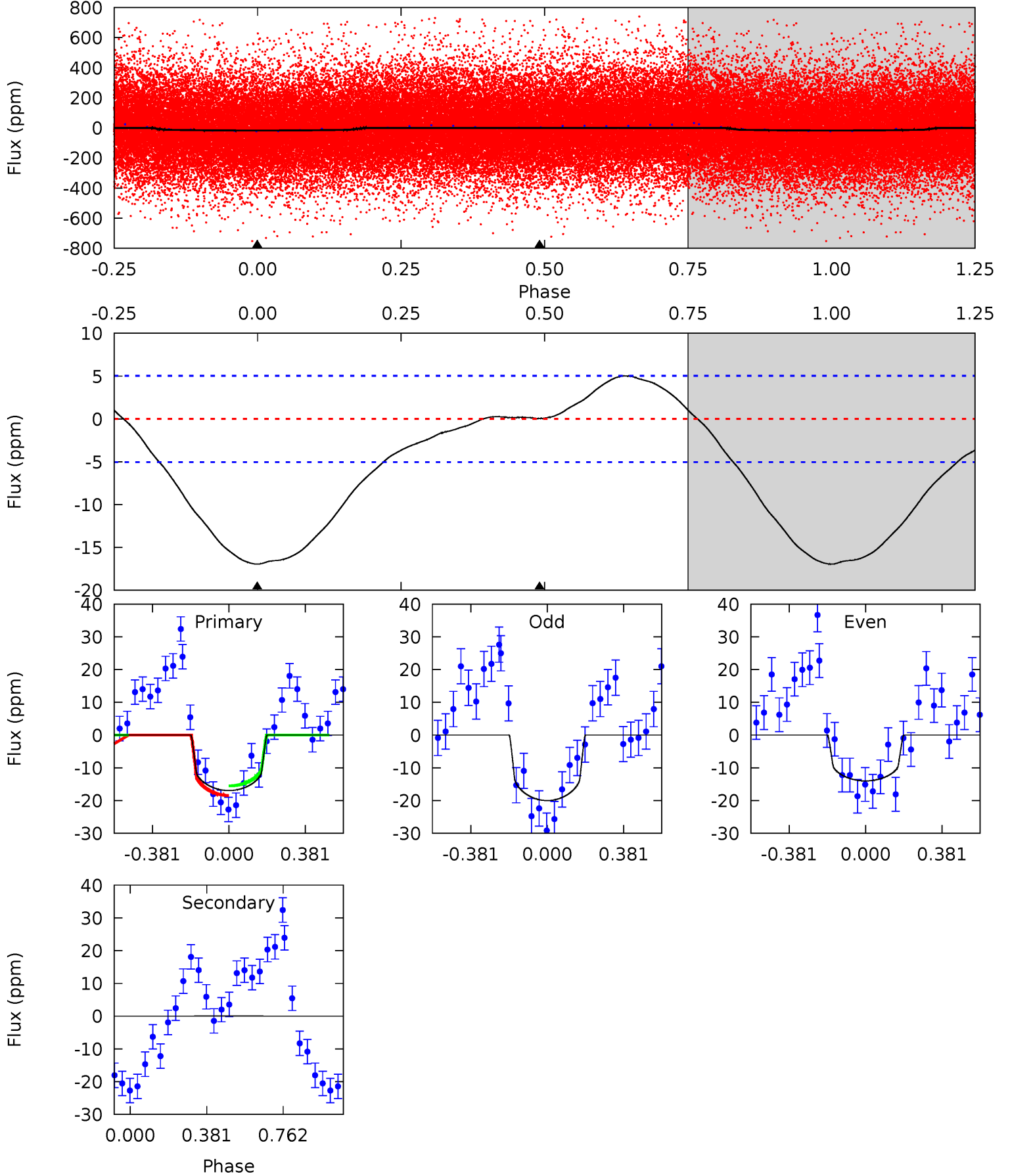
TCE 002582800-01 P= 0.810674 Days $T_0=132.253765$ (BKJD)



DV Model-Shift Uniqueness Test

002582800-01, P = 0.810613 Days, E = 131.485400 Days

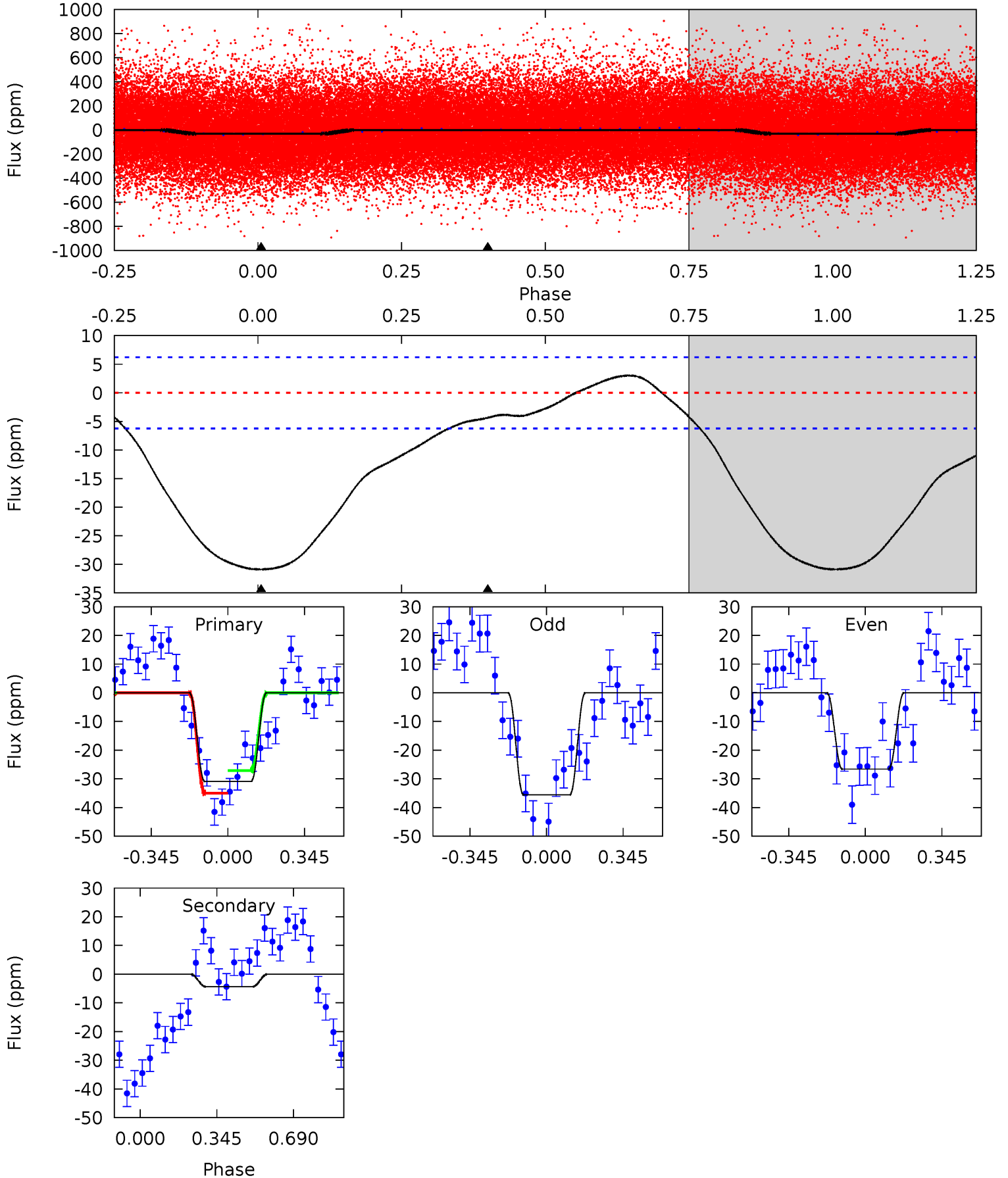
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
14.4	-0.04	0	0	4.28	0.88	2.30	14.4	14.4	-0.04	-0.04	2.57	0.90	0.23	1.26



Alt Model-Shift Uniqueness Test

002582800-01, P = 0.810674 Days, E = 131.443091 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
21.3	3.02	0	0	4.30	0.94	1.61	21.3	21.3	3.02	3.02	3.10	0.94	0.09	2.69



Stellar Parameters For KIC 002582800

	$T_{\text{eff}} (K)$	$\log(g)$	$[\text{Fe}/\text{H}]$	$R (R_{\odot})$	$M (M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	7937^{+192}_{-357}	$3.882^{+0.280}_{-0.120}$	$0.070^{+0.250}_{-0.400}$	$2.711^{+0.430}_{-1.004}$	$2.043^{+0.282}_{-0.484}$	$0.144^{+0.304}_{-0.045}$
	+2%/-4%	+7%/-3%	+357%/-571%	+16%/-37%	+14%/-24%	+211%/-31%
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 002582800-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	0 ± 1	$1.23^{+0.91}_{-0.72}$	5400^{+344}_{-490}	-4492^{+1708}_{-688}	$-0.001^{+0.276}_{-0.259}$
Alt.	-4 ± 1	$1.62^{+0.93}_{-0.77}$	5381^{+388}_{-482}	3716^{+2249}_{-7660}	$0.419^{+1.220}_{-0.259}$

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

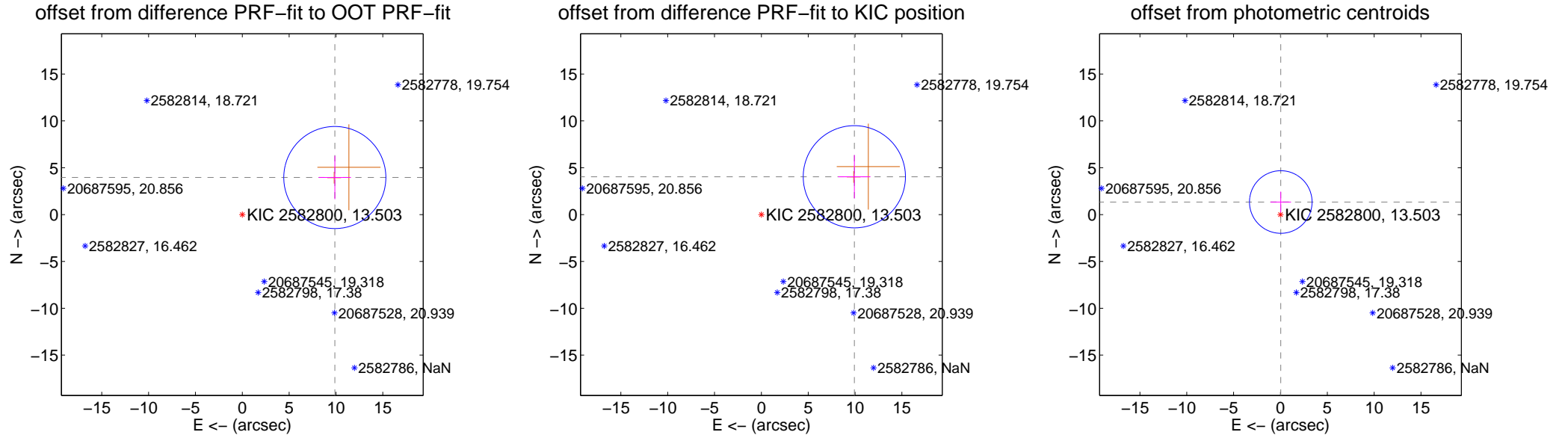
DV Centroid Data

Supplemental centroid analysis for 002582800-01. Kepler magnitude: 13.50. Transit SNR 10.71

There are 0 quarters with good PRF difference image offsets

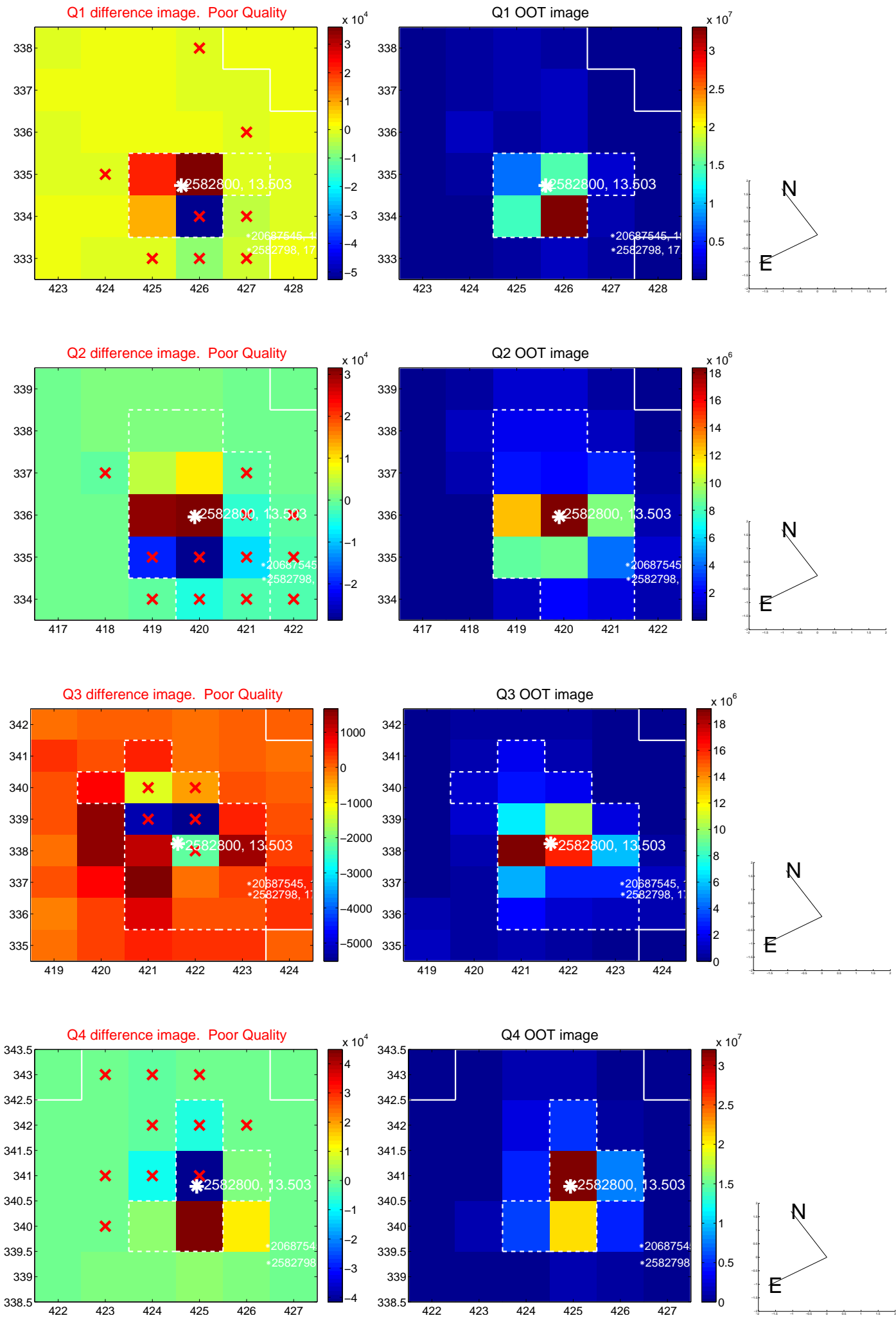
The direct PRF centroid is offset from the target star catalog position by about 0.07 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	10.640 \pm 1.816	5.86	-9.877 \pm 1.722	3.957 \pm 2.316
PRF-fit source offset from KIC position	10.712 \pm 1.818	5.89	-9.923 \pm 1.722	4.037 \pm 2.316
photometric centroid source offset	1.34 \pm 1.11	1.21	-0.03 \pm 1.10	1.34 \pm 1.11

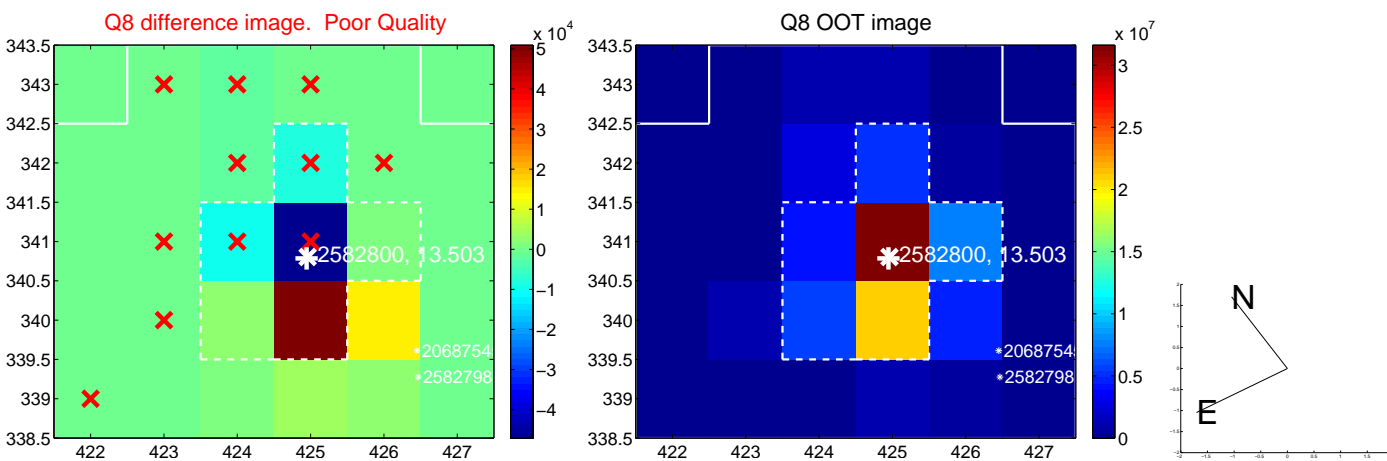
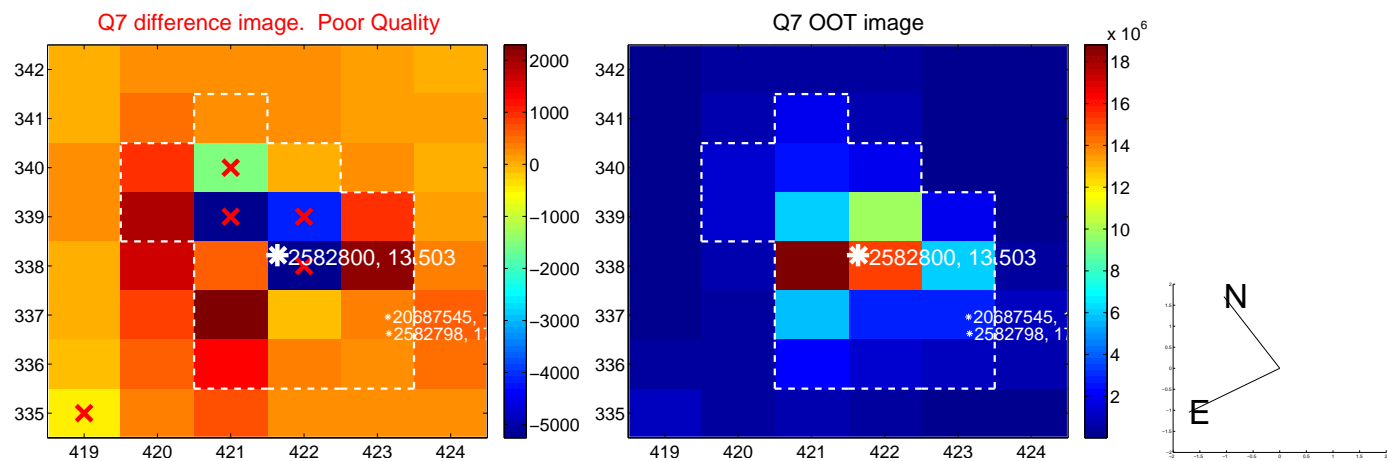
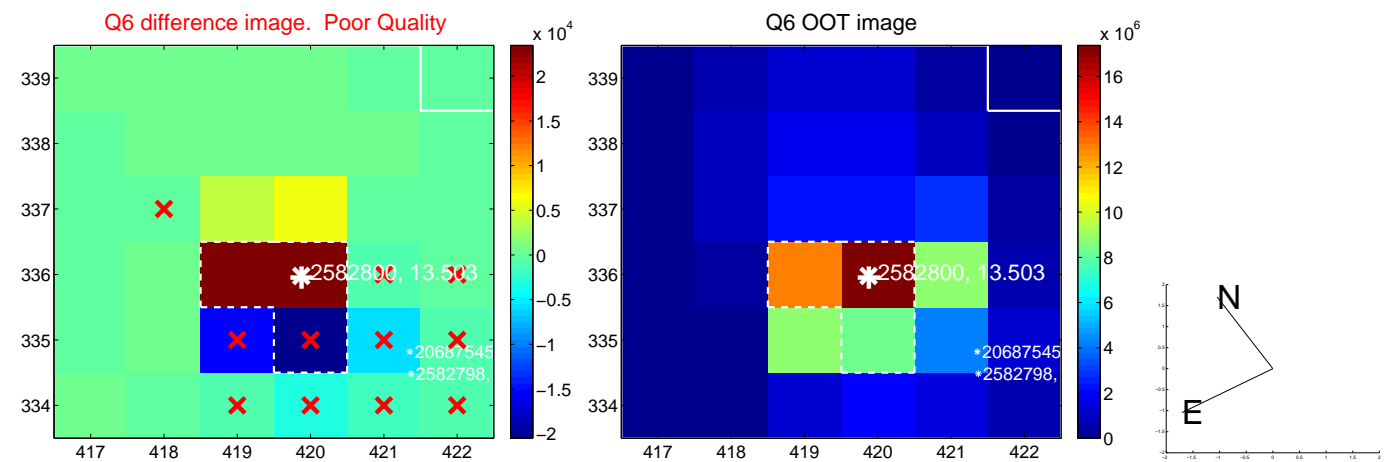
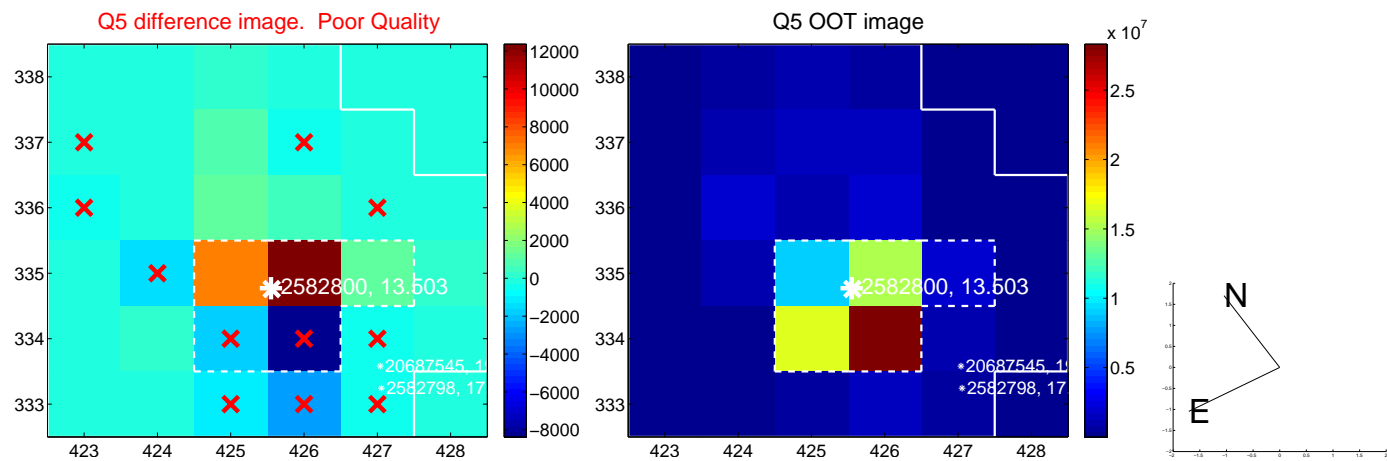


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

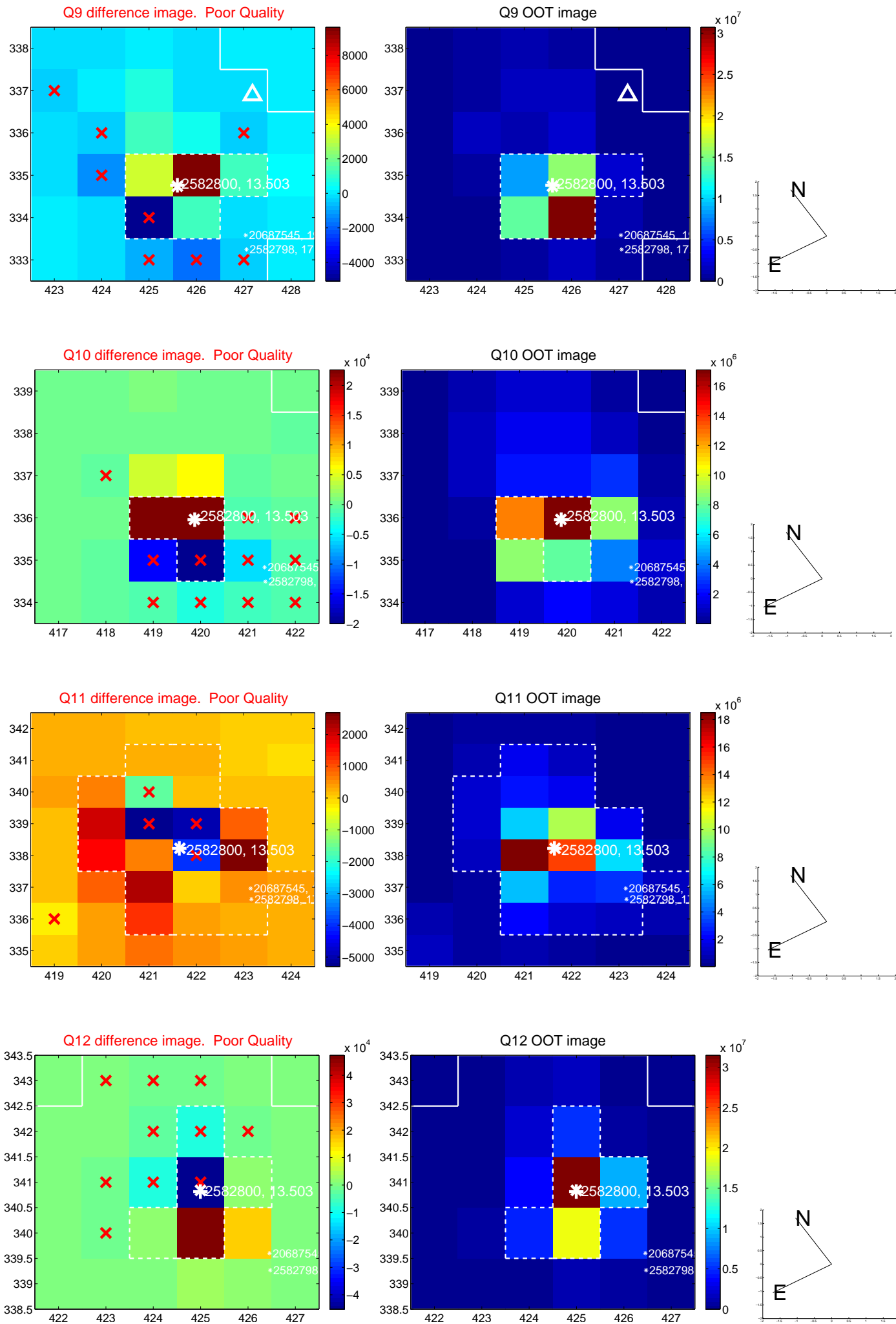
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



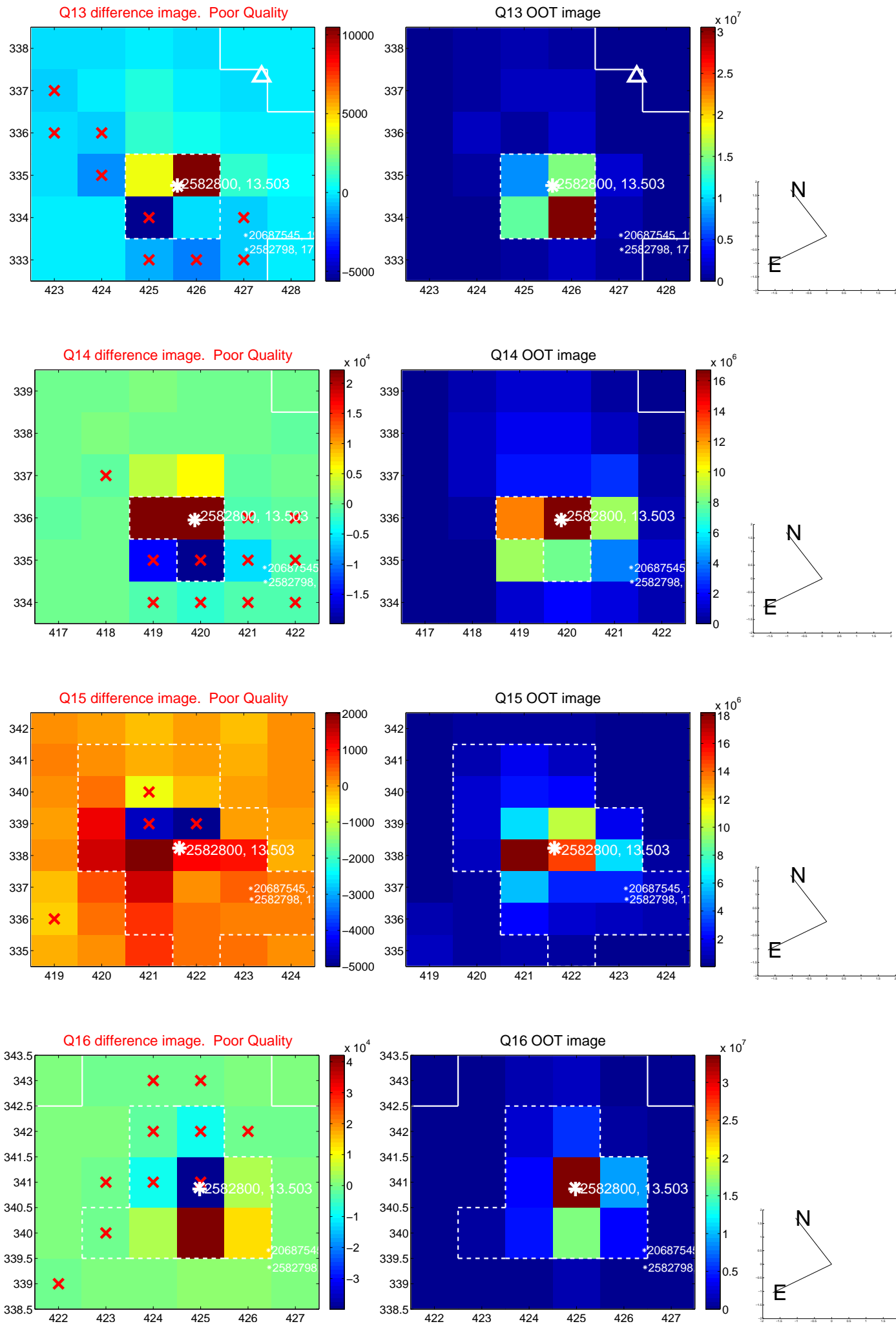
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



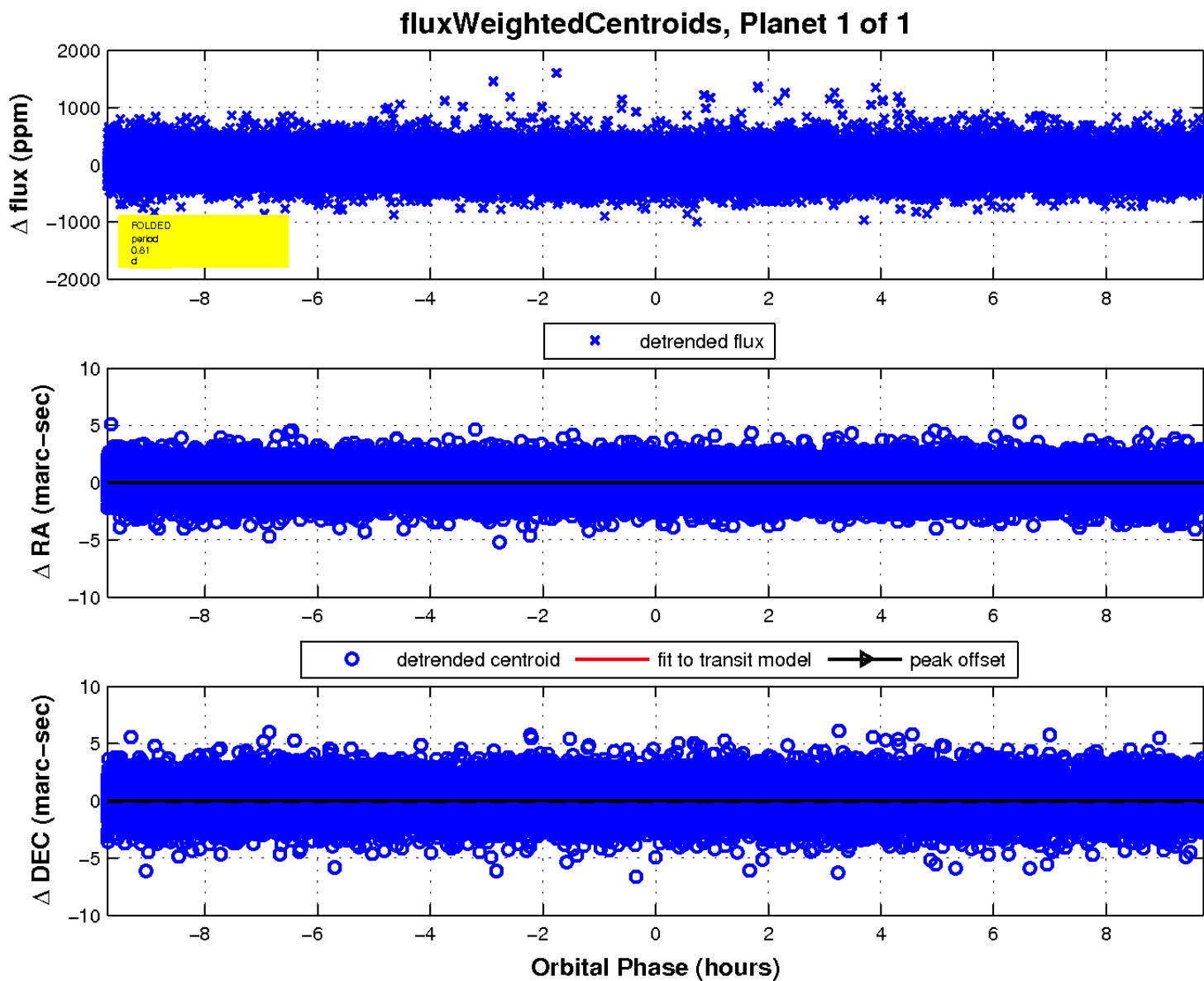
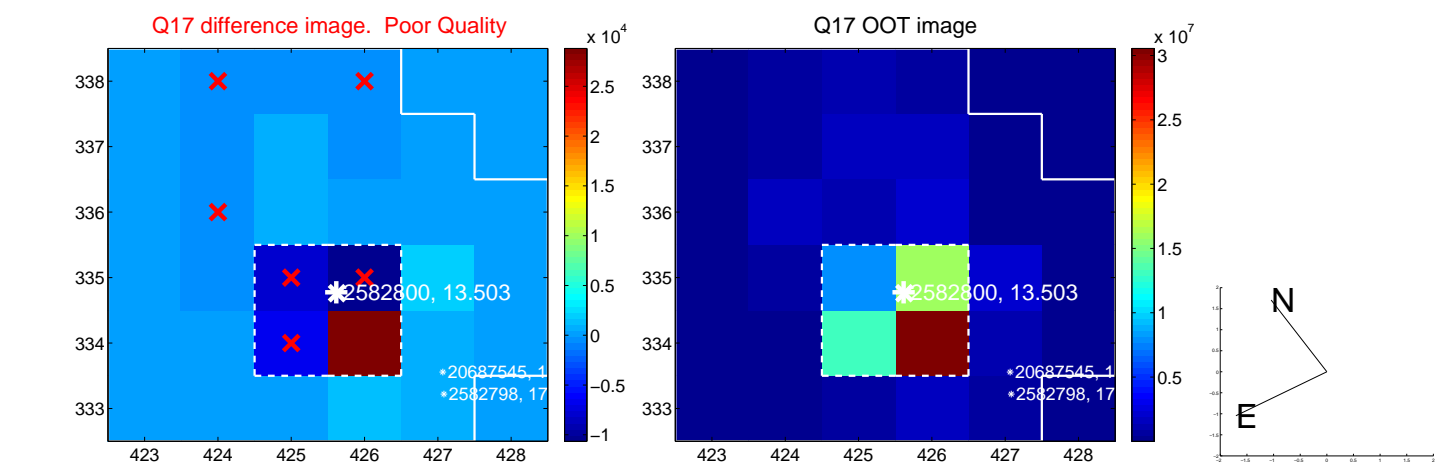
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white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination

