

KIC 006206125

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})
006206125-01	OBS	No	0.573326	131.536392	74.5	4.405	14.3	12.2	4.68	9591	4.17	0.00

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
006206125-01	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—CENT_SATURATED

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

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

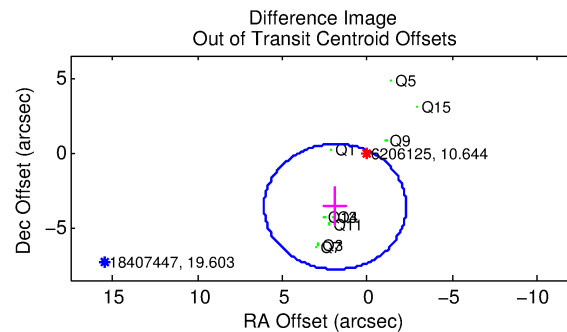
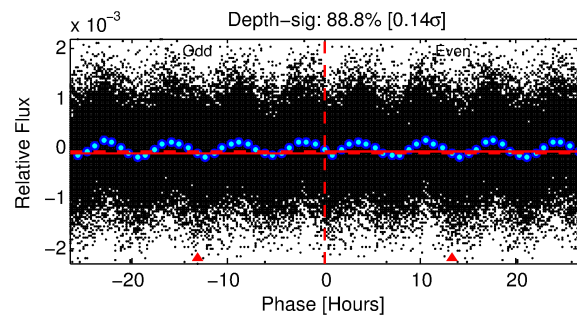
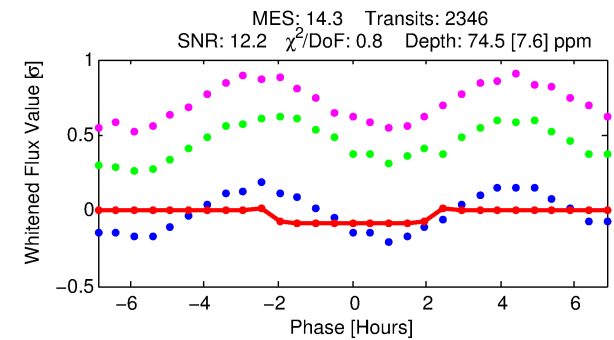
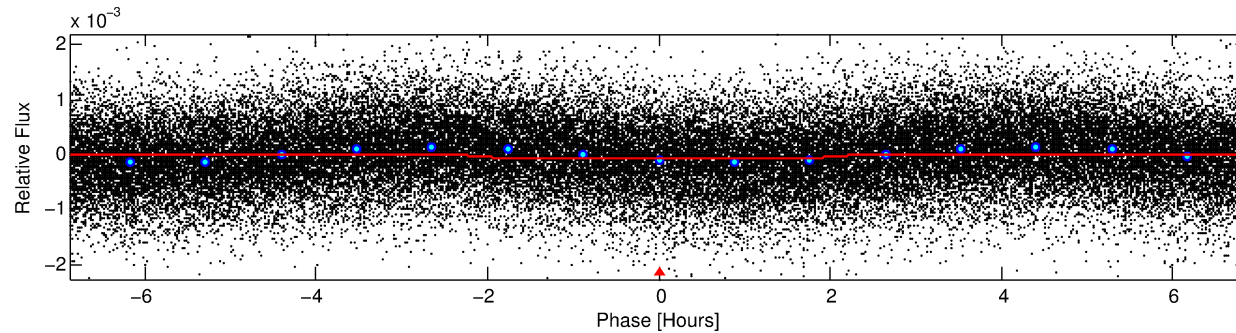
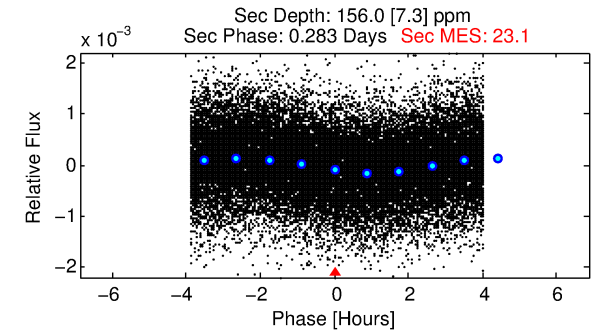
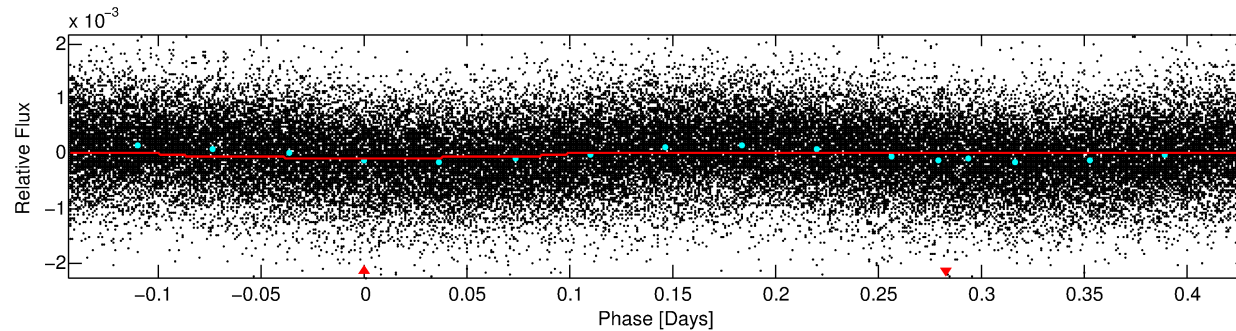
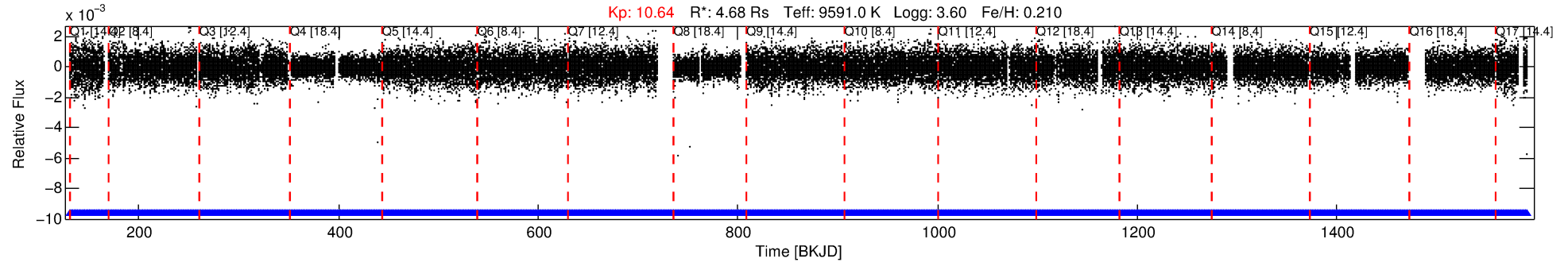
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 006206125-01

No Significant Match Found

DV One-Page Summary

KIC: 6206125 Candidate: 1 of 1 Period: 0.573 d



DV Fit Results:

Period = 0.57333 [0.00001] d
Epoch = 131.5364 [0.0024] BKJD
Rp/R* = 0.0082 [0.0043]
a/R* = 1.17 [1.15]
b = 0.34 [9.41]
Seff = N/A
Teq = N/A
Rp = 4.18 [3.08] Re
a = N/A
Ag = N/A
Teffp = N/A

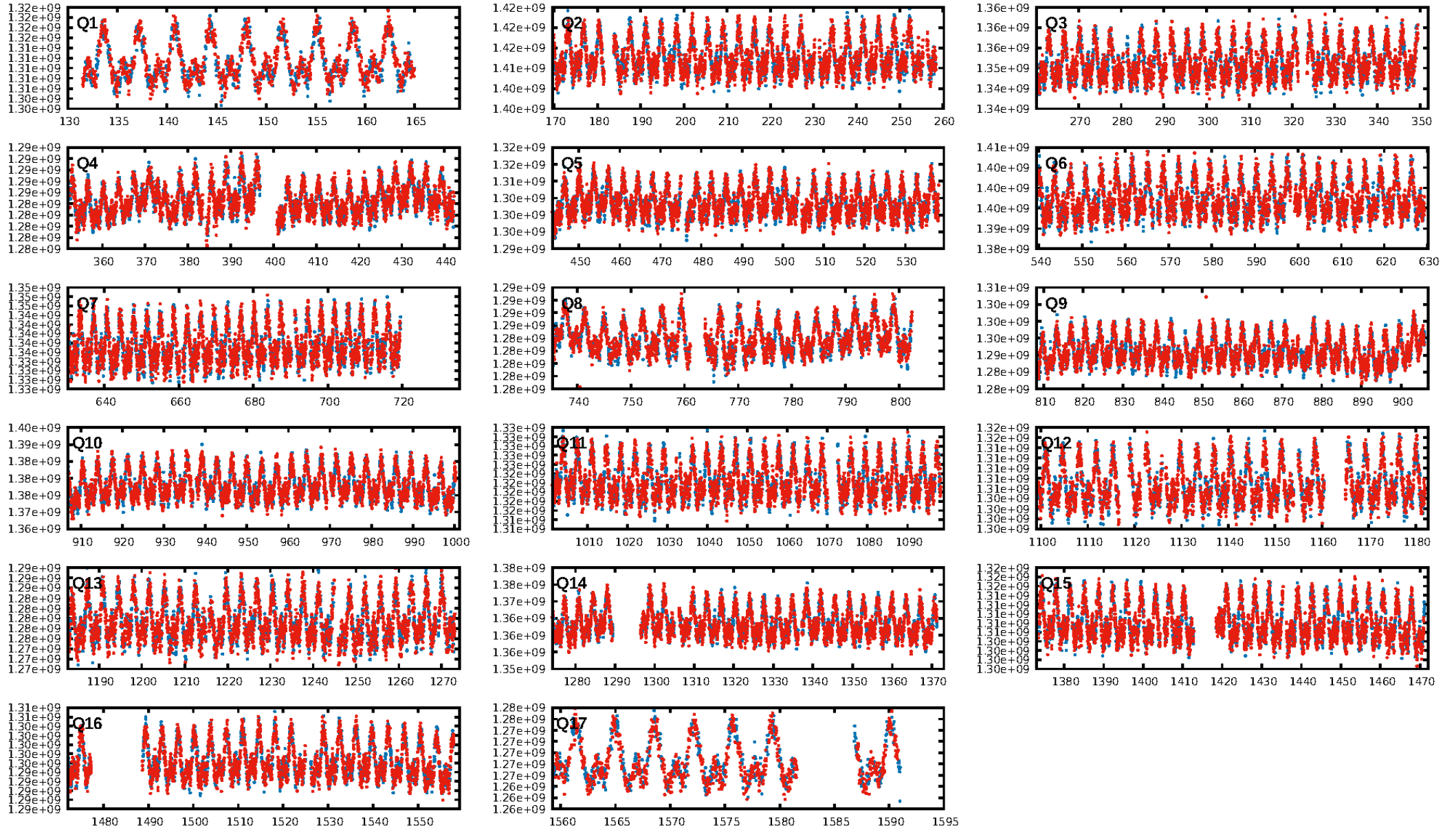
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [2241/2241]
GhostDiagnostic-chr: -1.037
Centroid-sig: 0.0%
Centroid-so: 0.336 arcsec [1.48σ]
OotOffset-rm: 4.068 arcsec [2.91σ]
KicOffset-rm: 3.955 arcsec [2.84σ]
OotOffset-st: 0/4/1/4 [9]
KicOffset-st: 0/4/1/4 [9]
DiffImageQuality-fgm: 0.67 [6/9]
DiffImageOverlap-fno: 1.00 [17/17]

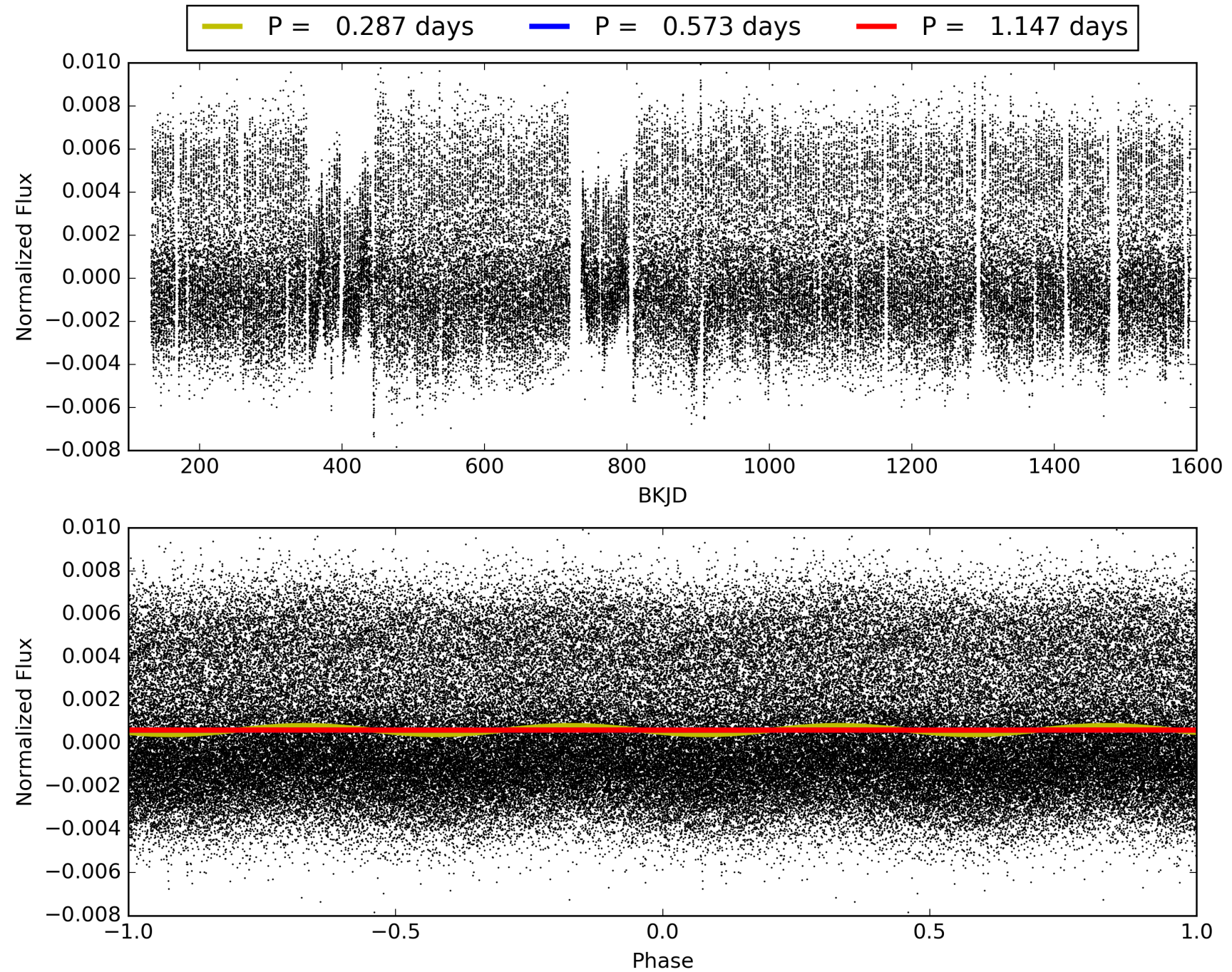
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 31-Jan-2016 00:23:10 Z

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

TCE 006206125-01, PDC Light Curves

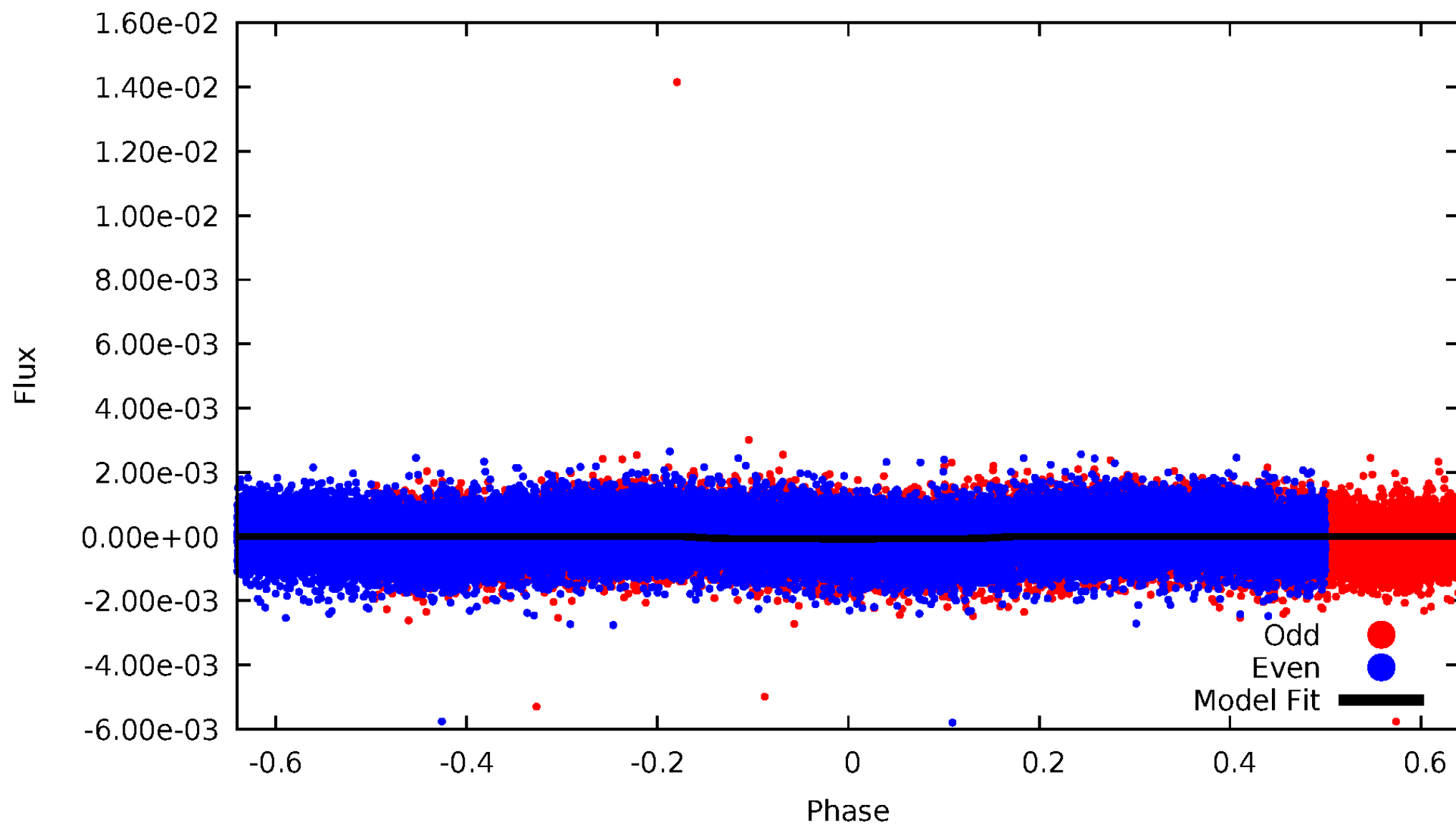


TCE 006206125-01



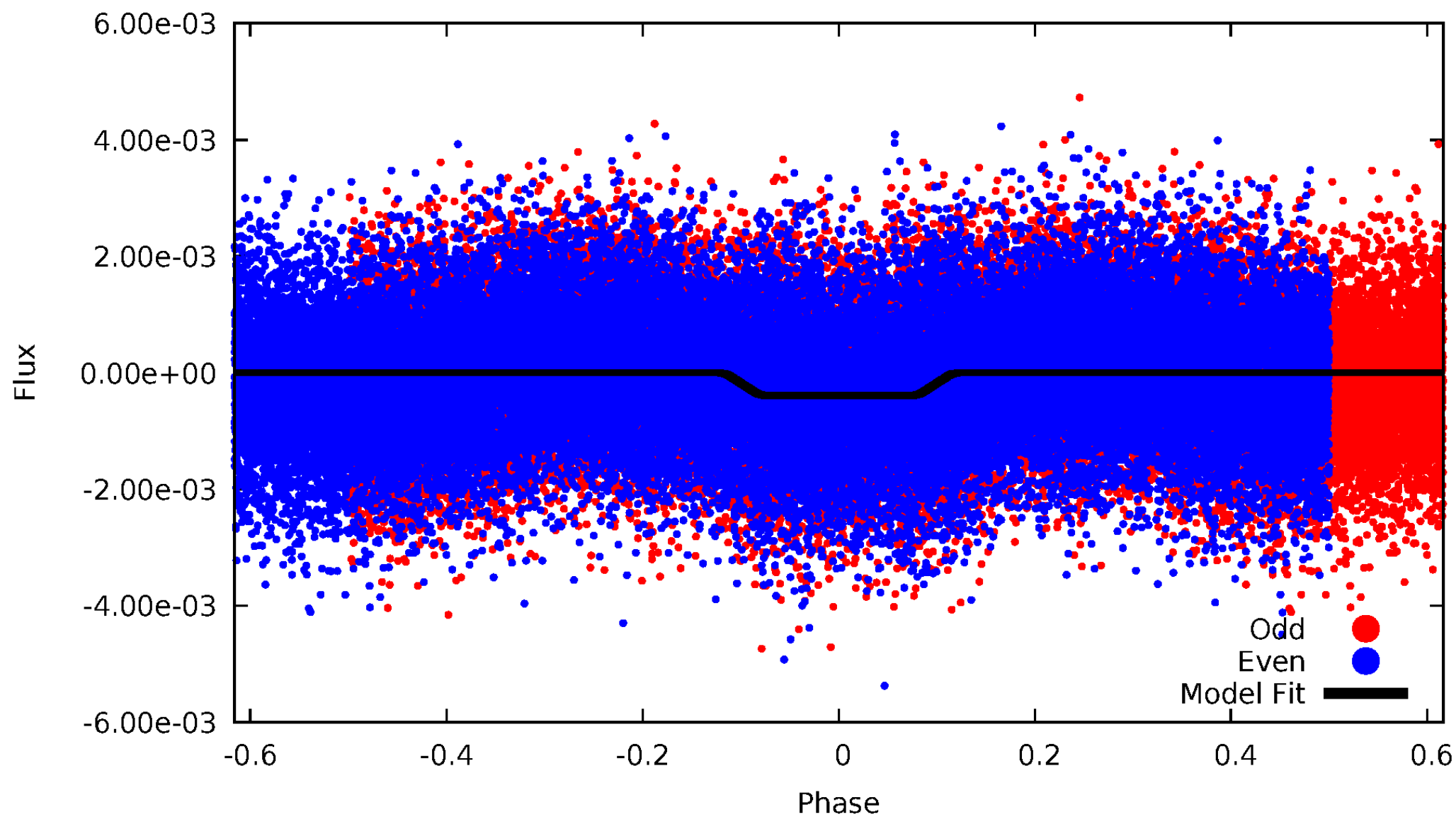
DV Odd/Even

TCE 006206125-01



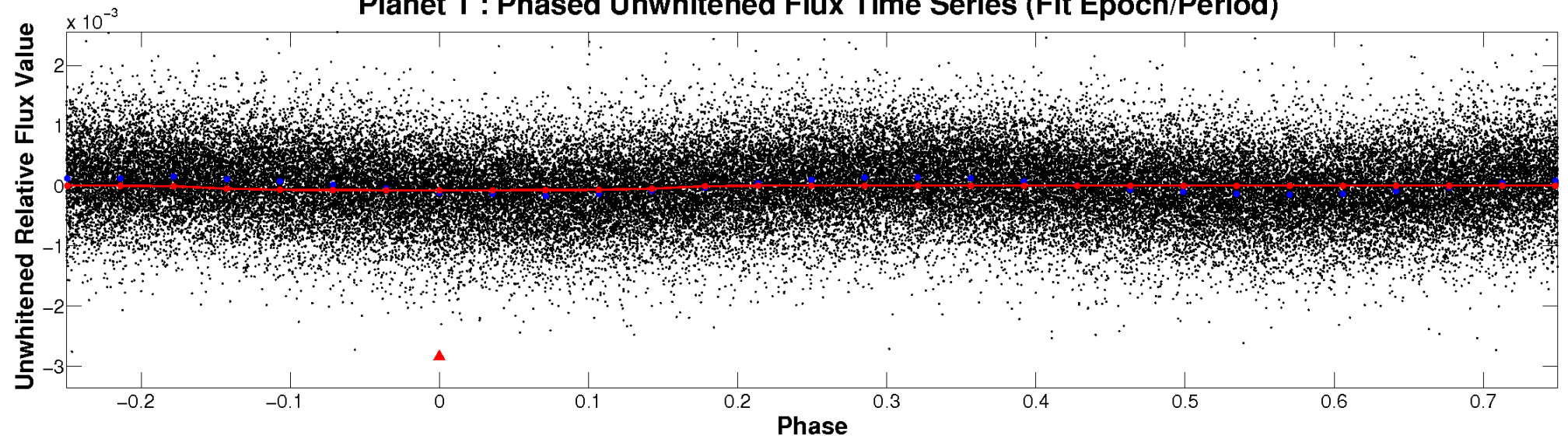
ALT Odd/Even

TCE 006206125-01

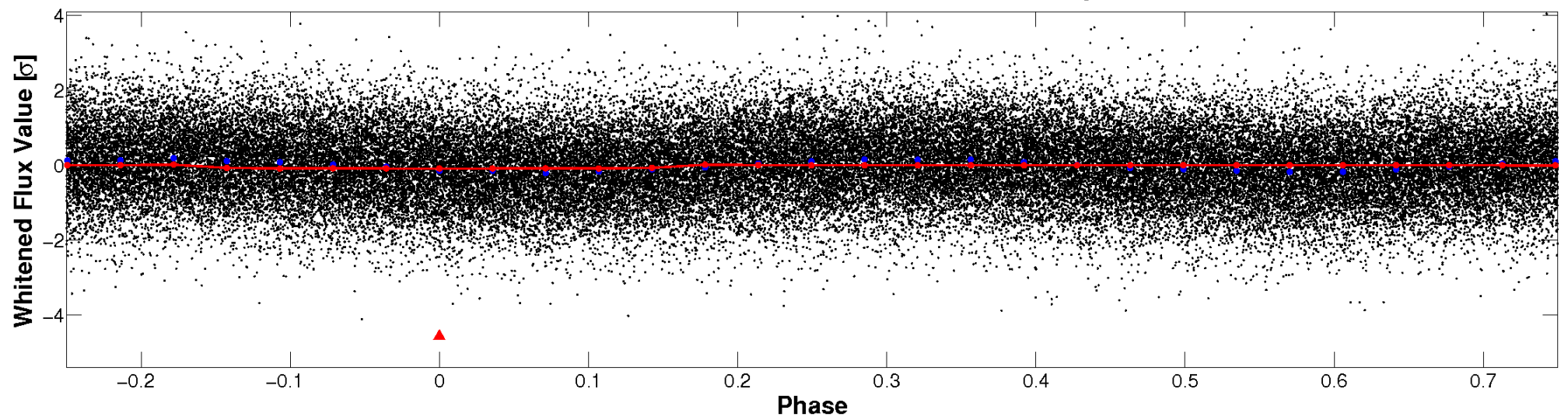


Non-Whitened Vs. Whitened Light Curve

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

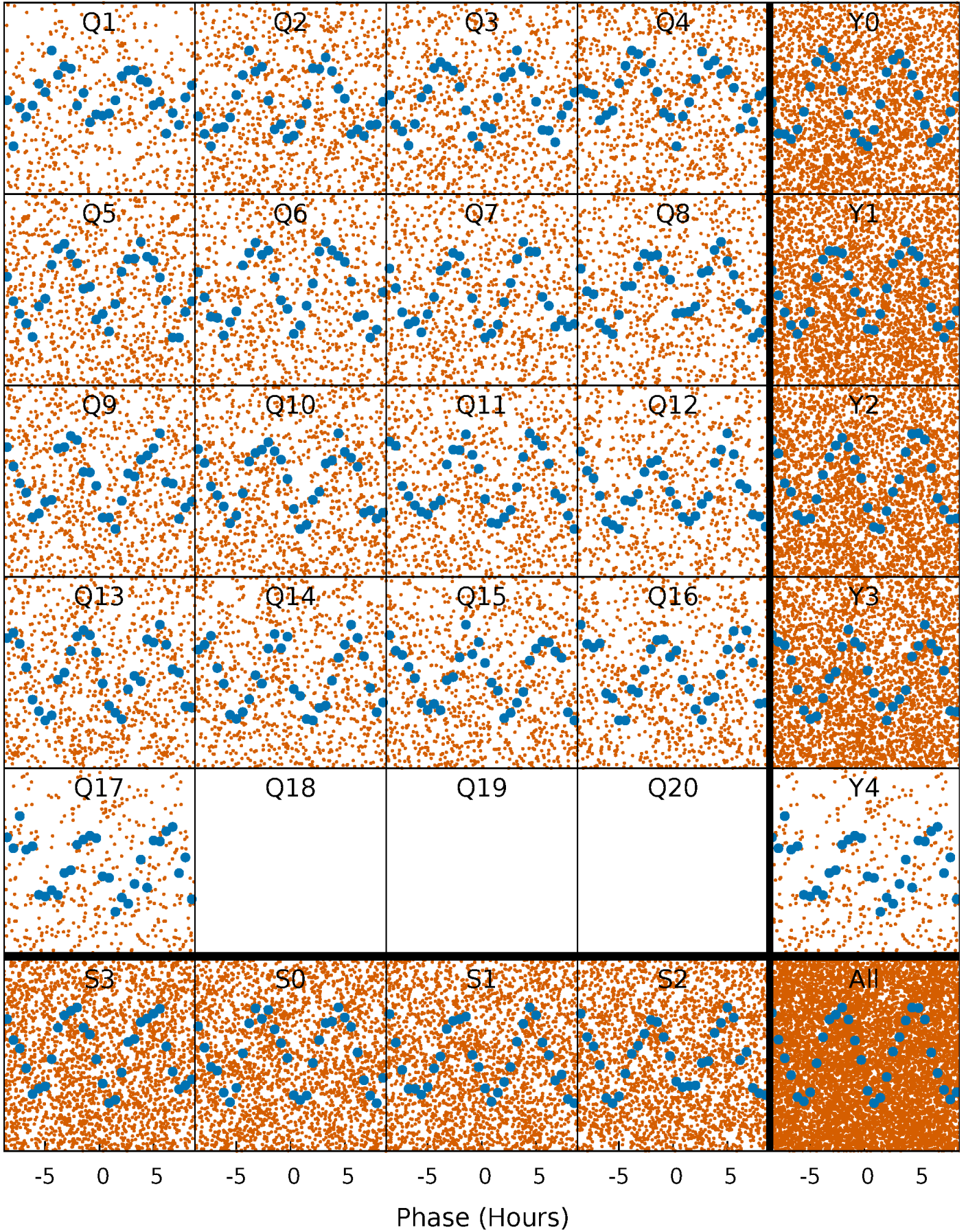


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



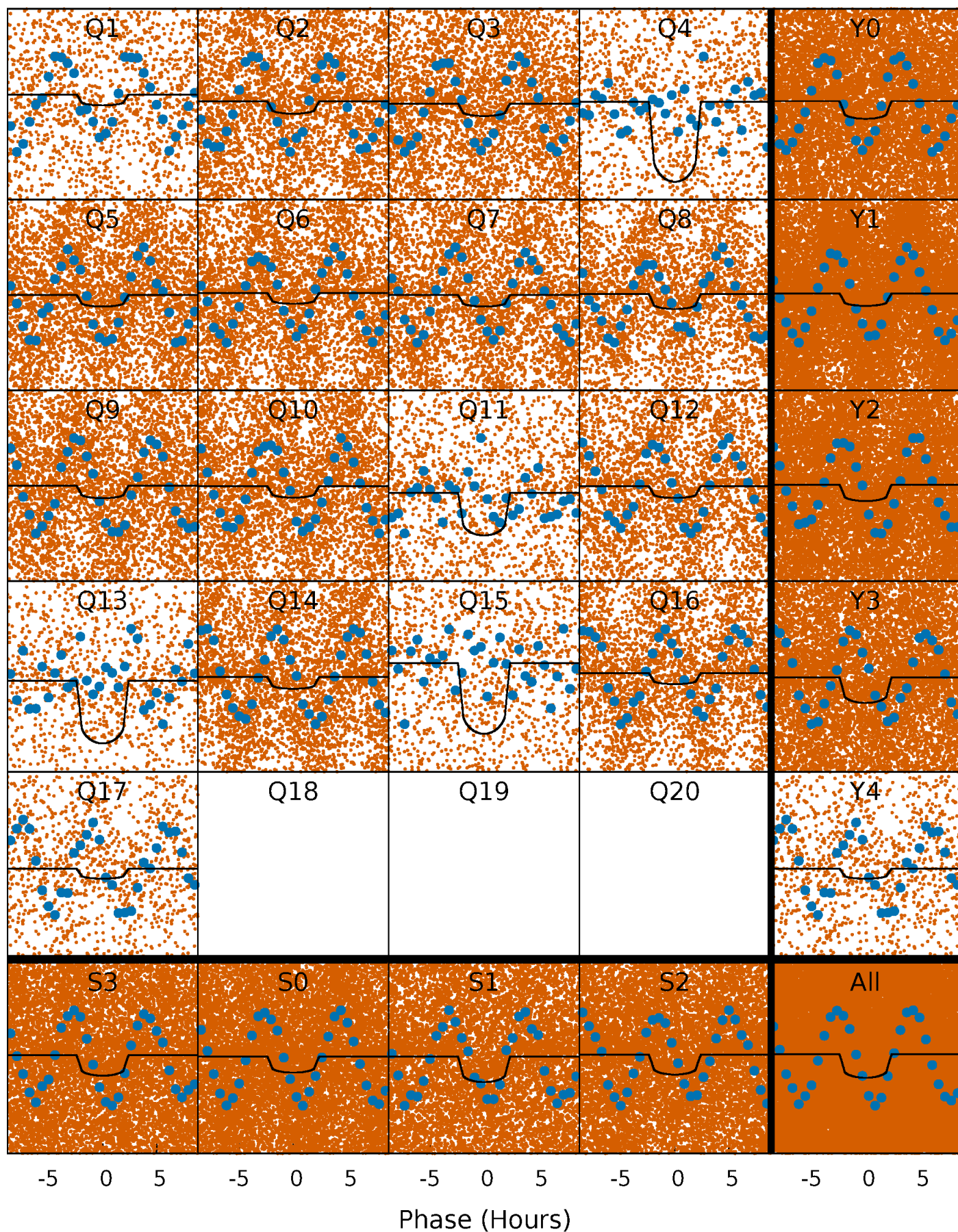
PDC Quarter-Phased Transit Curves

TCE 006206125-01 P= 0.573326 Days $T_0=131.536392$ (BKJD)



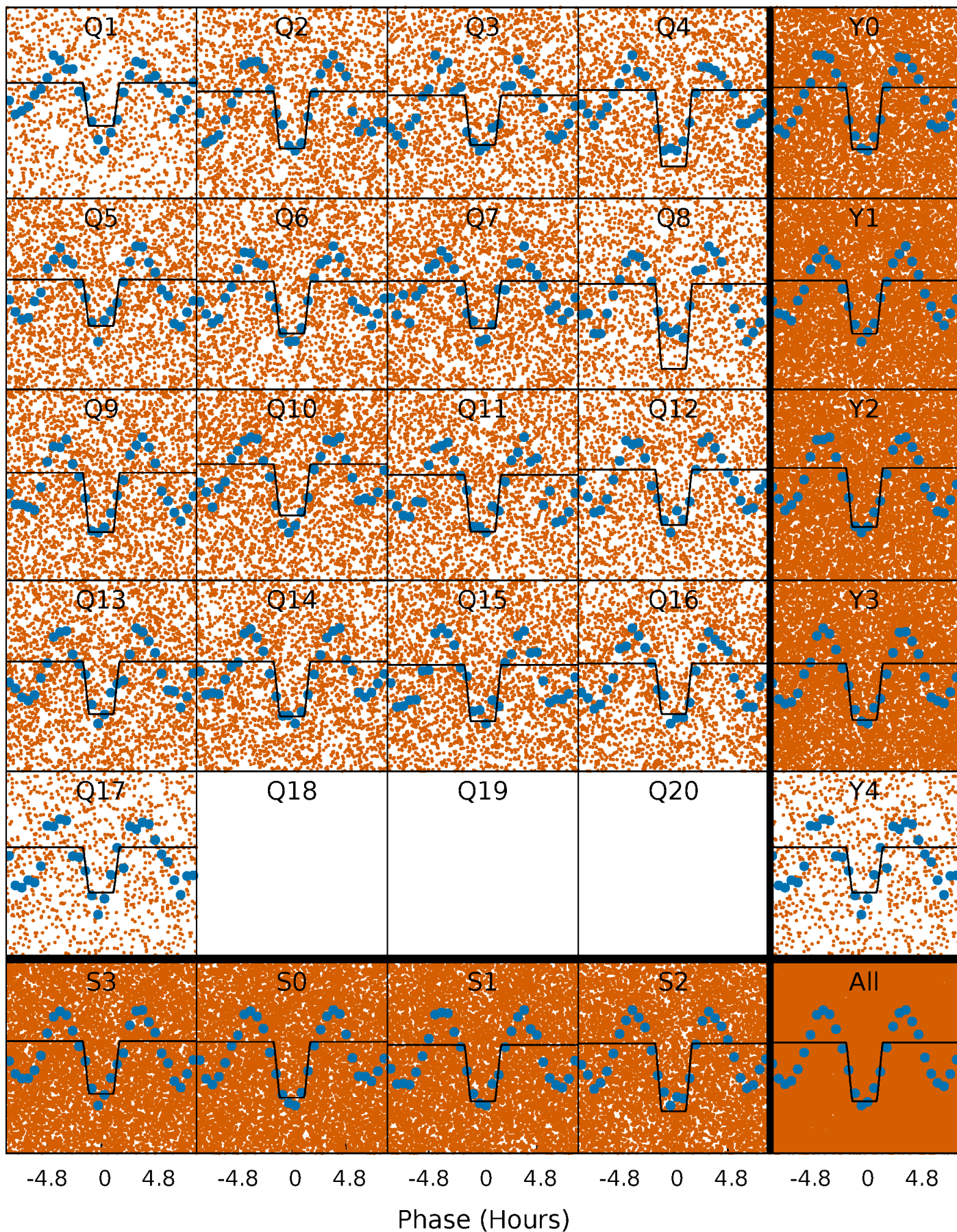
DV Quarter-Phased Transit Curves

TCE 006206125-01 P= 0.573326 Days $T_0=131.536392$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

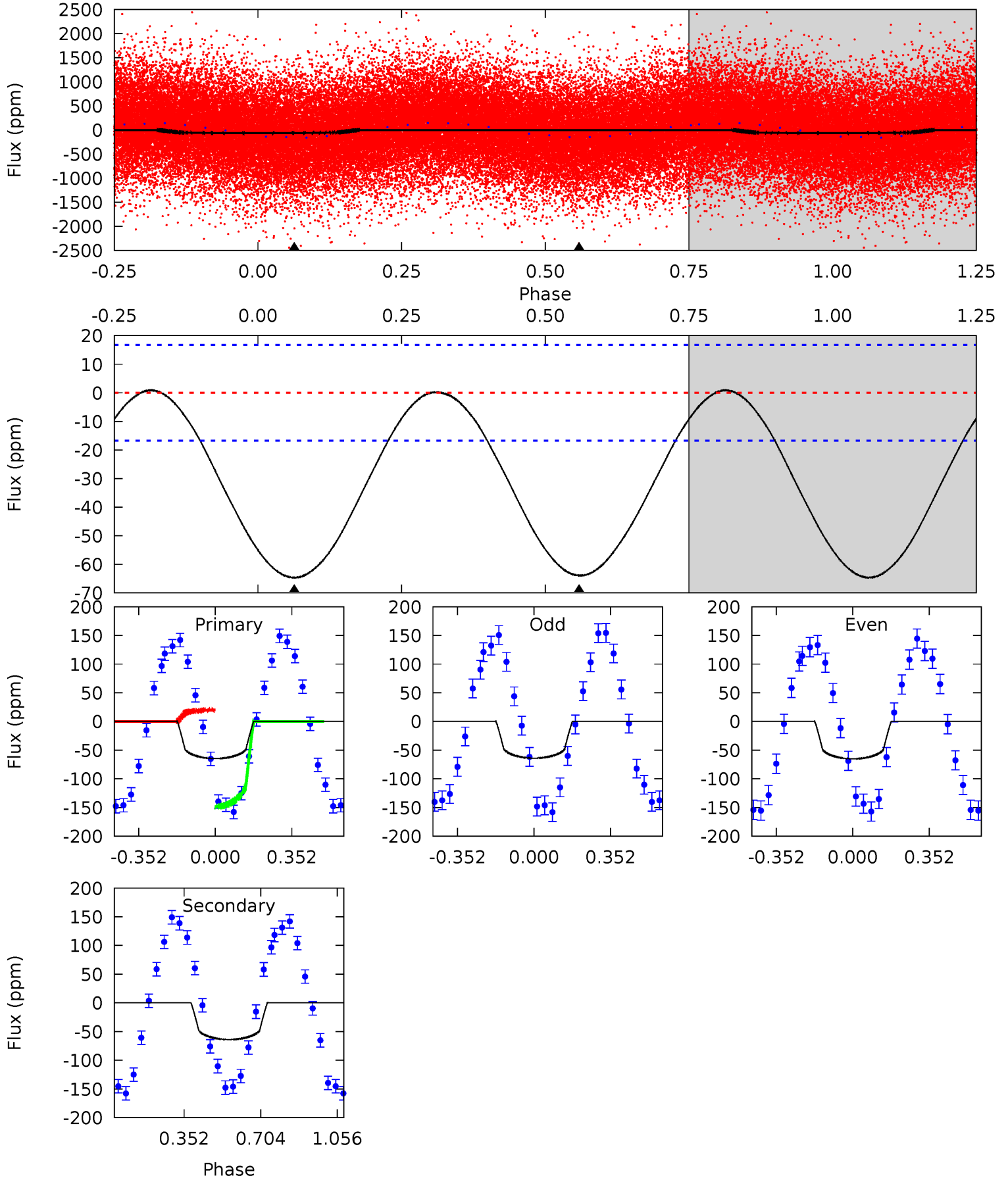
TCE 006206125-01 P= 0.573375 Days $T_0=131.520543$ (BKJD)



DV Model-Shift Uniqueness Test

006206125-01, P = 0.573326 Days, E = 130.963066 Days

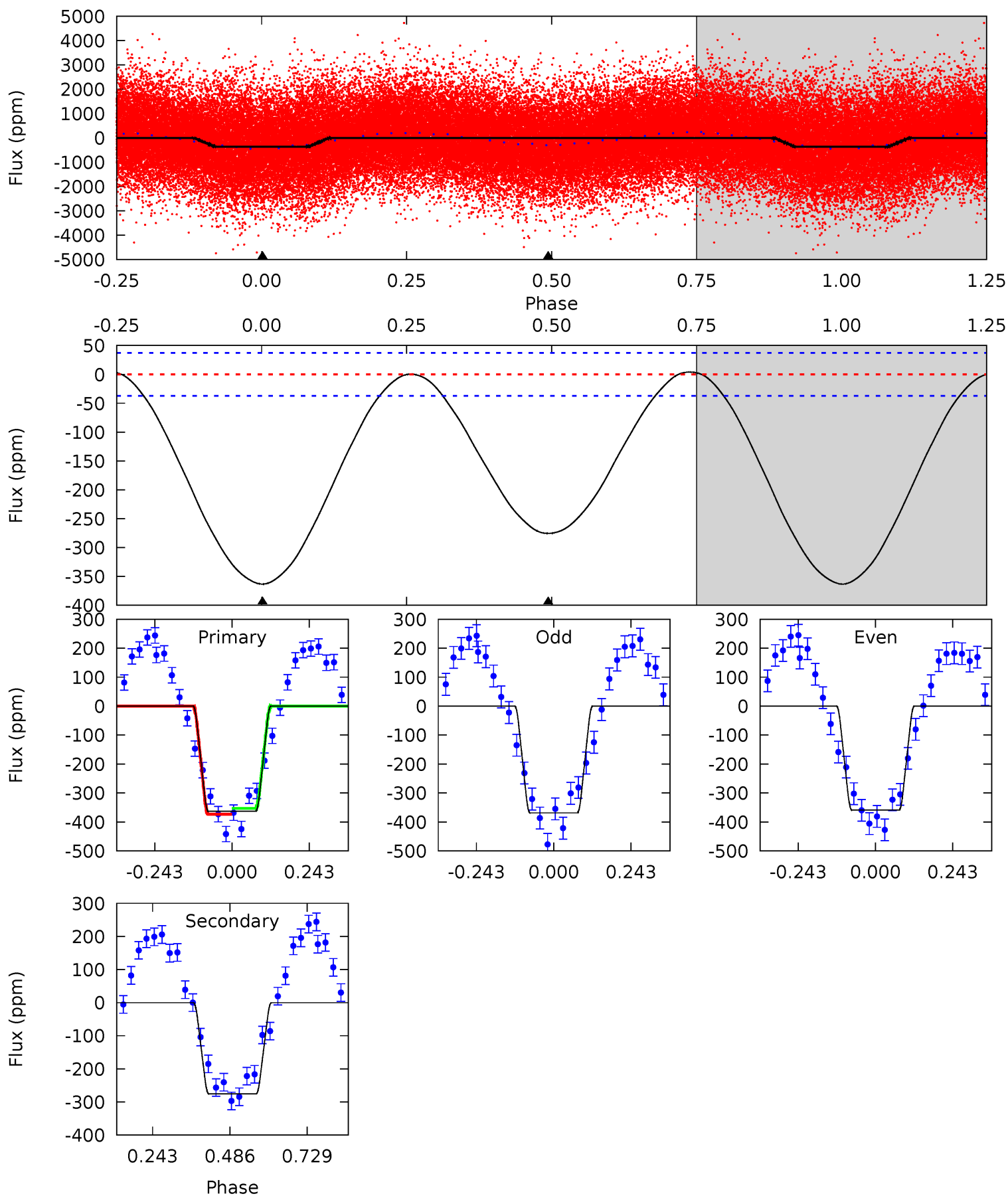
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
16.6	16.4	0	0	4.29	0.93	0.16	16.6	16.6	16.4	16.4	0.15	1.23	0.01	16.9



Alt Model-Shift Uniqueness Test

006206125-01, P = 0.573375 Days, E = 130.947168 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
42.6	32.3	0	0	4.37	1.17	0.54	42.6	42.6	32.3	32.3	0.58	1.02	0.01	1.18



Stellar Parameters For KIC 006206125

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	9591^{+378}_{-648}	$3.602^{+0.476}_{-0.084}$	$0.210^{+0.150}_{-0.150}$	$4.685^{+0.431}_{-2.444}$	$3.198^{+0.159}_{-0.901}$	$0.044^{+0.219}_{-0.012}$
	+4%/-7%	+13%/-2%	+71%/-71%	+9%/-52%	+5%/-28%	+500%/-27%
Source	SPE68	SPE68	SPE68	DSEP		

KIC = Kepler Input Catalog; PHO = Photometry; SPE = Spectroscopy; AST = Asteroseismology
 TRA = Transits; DESP = Dartmouth Models; MULT = Multiple Models

Secondary Eclipse Parameters for KIC 006206125-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-64 ± 4	$3.79^{+2.18}_{-1.96}$	8739^{+741}_{-1103}	8135^{+7198}_{-3269}	$0.941^{+3.194}_{-0.562}$
Alt.	-276 ± 9	$9.40^{+2.69}_{-3.06}$	8742^{+724}_{-1075}	7007^{+1925}_{-1643}	$0.667^{+0.719}_{-0.263}$

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 $A_{obs} \gg 1.0$

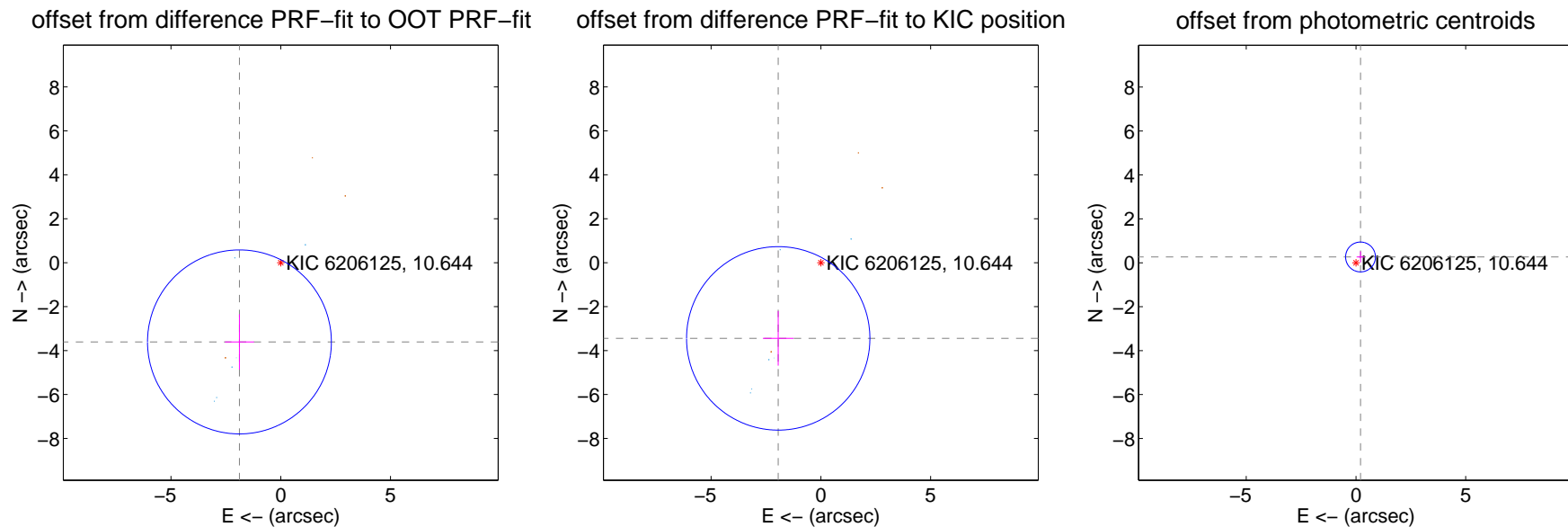
DV Centroid Data

Supplemental centroid analysis for 006206125-01. **Kepler magnitude: 10.64.** Transit SNR 12.21

There are 6 quarters with good PRF difference image offsets

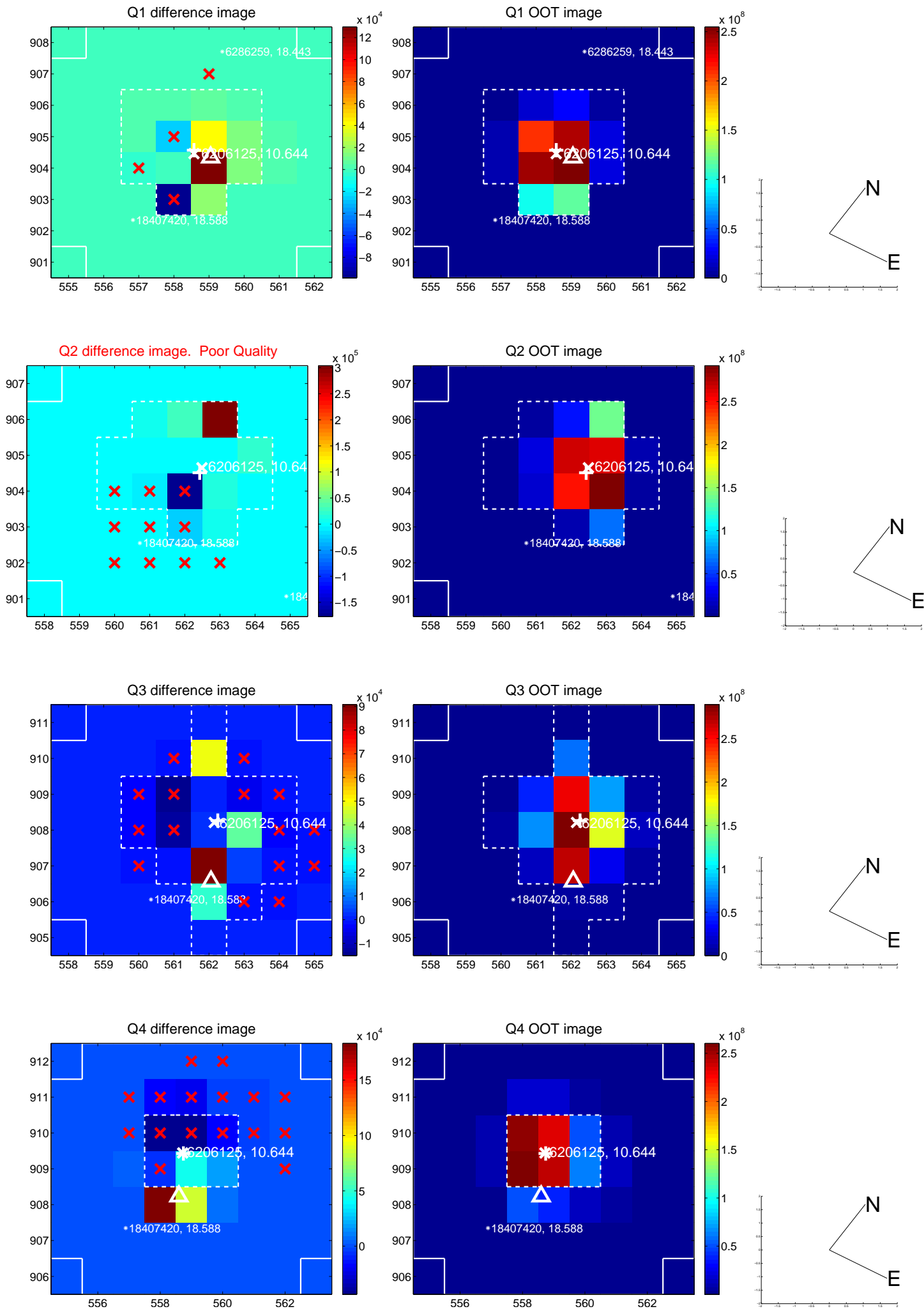
The direct PRF centroid is offset from the target star catalog position by about 0.40 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	4.068 ± 1.396	2.91	1.882 ± 0.663	-3.606 ± 1.255
PRF-fit source offset from KIC position	3.955 ± 1.392	2.84	1.942 ± 0.698	-3.445 ± 1.242
photometric centroid source offset	0.34 ± 0.23	1.48	-0.21 ± 0.18	0.26 ± 0.25

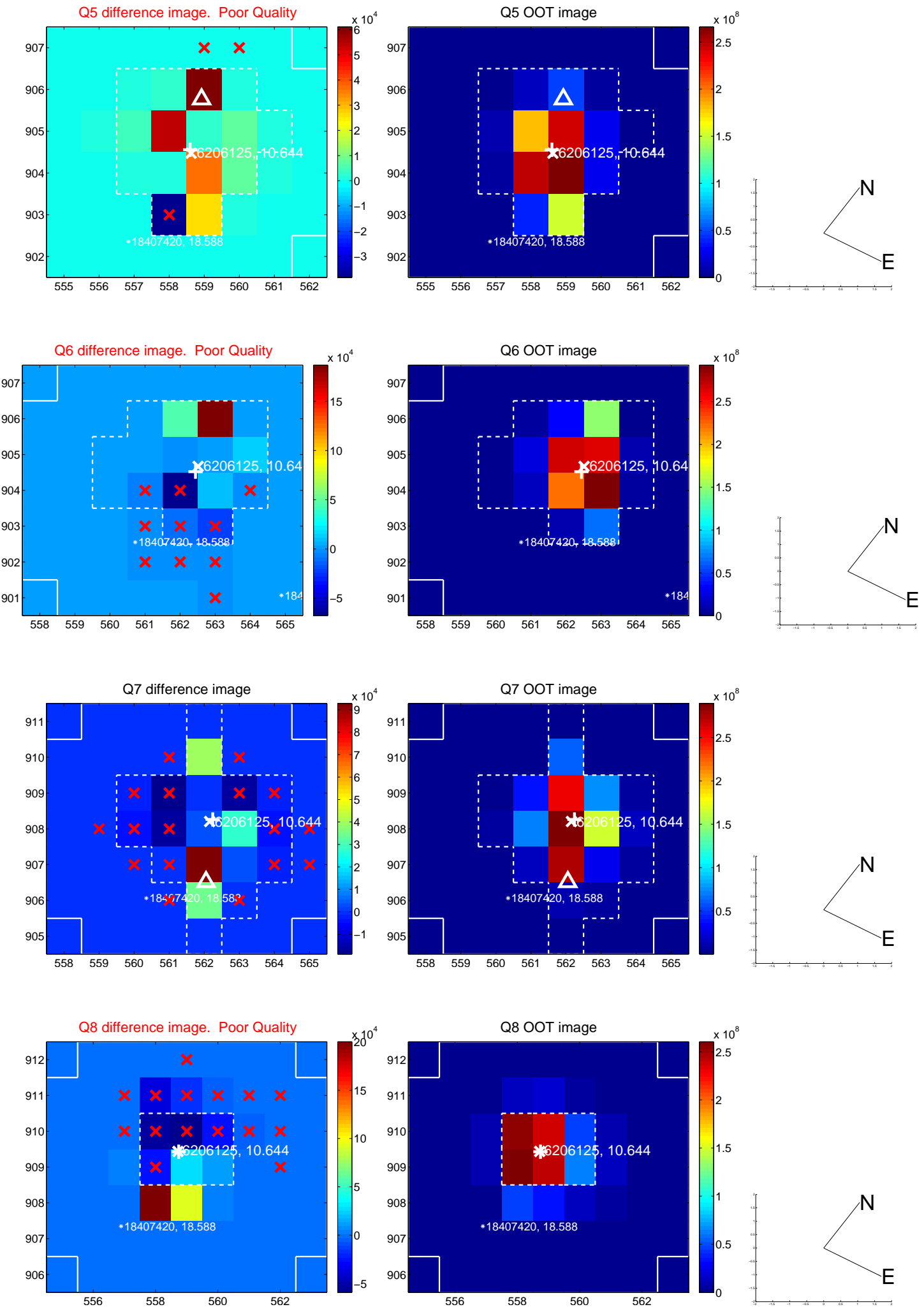


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets;** magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

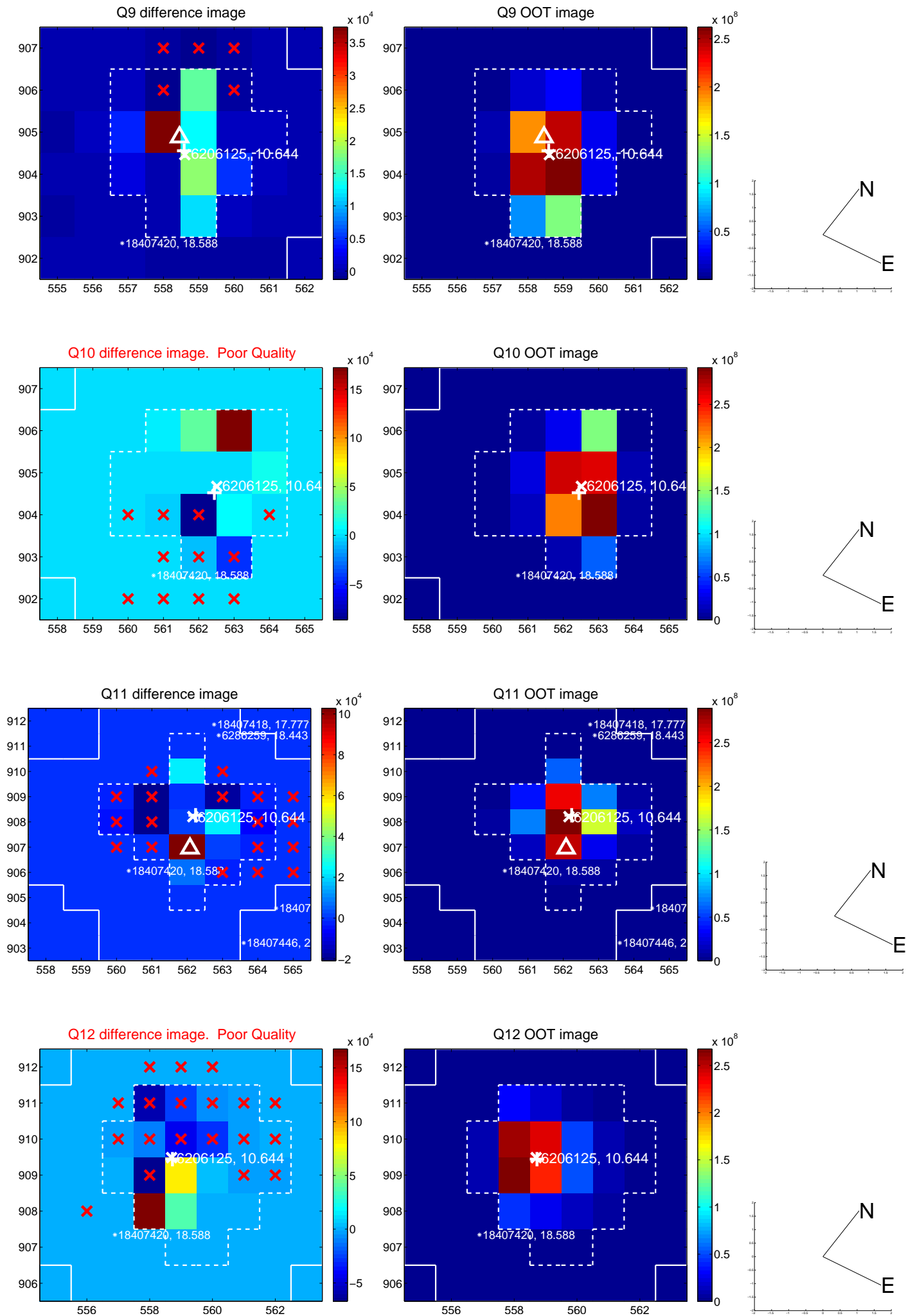
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



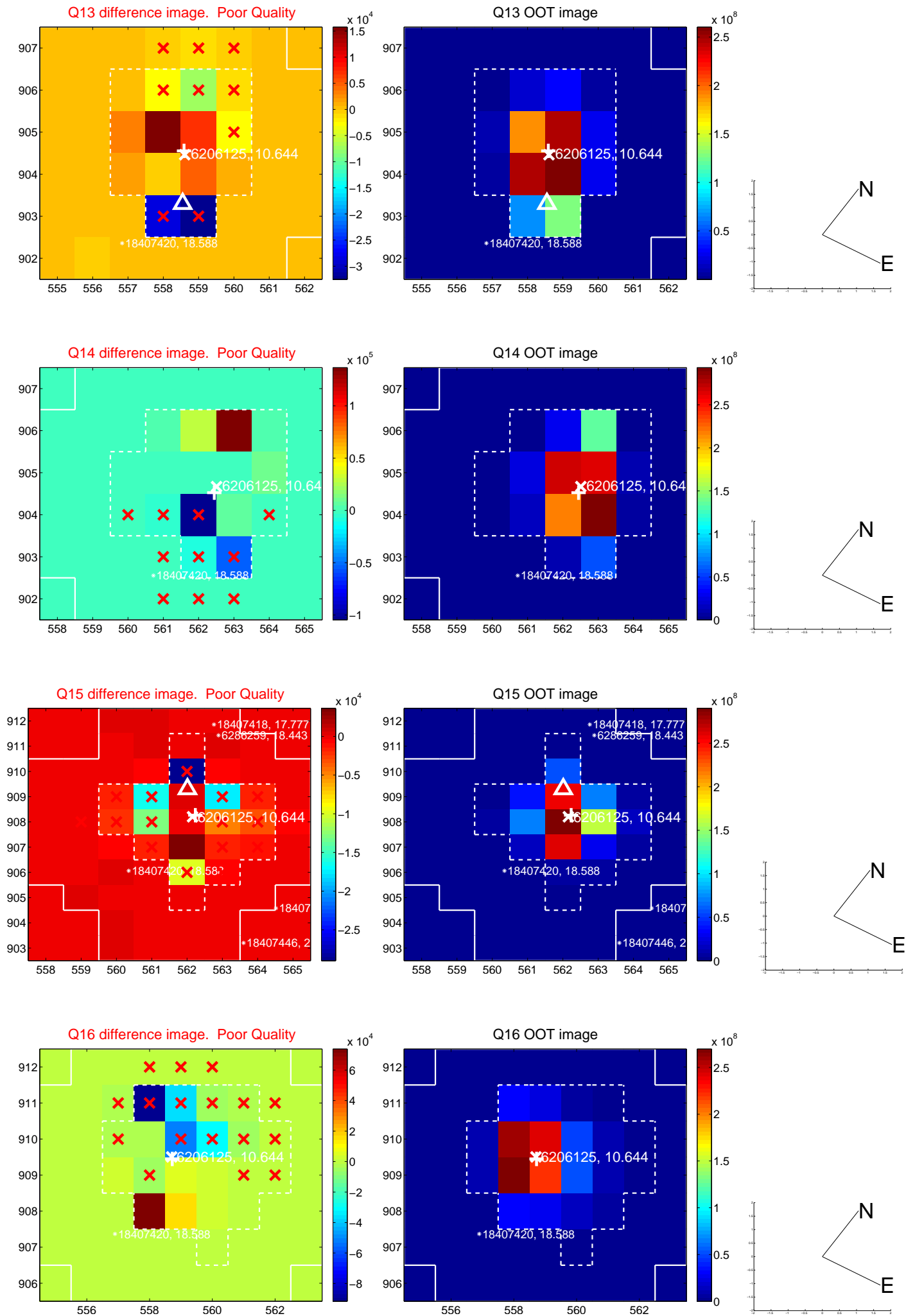
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



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



UKIRT Image

