

KIC 011559263

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})
011559263-01	OBS	No	0.628540	131.734150	24.6	1.705	8.7	9.3	8.43	5296	5.14	0.00

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
011559263-01	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_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.

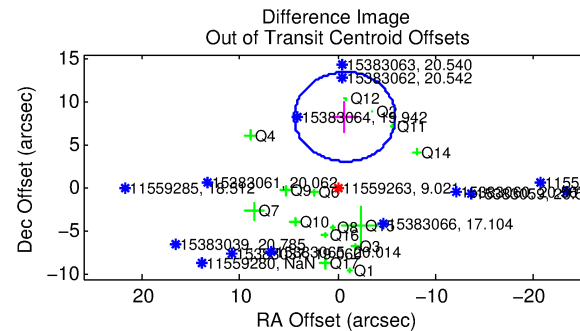
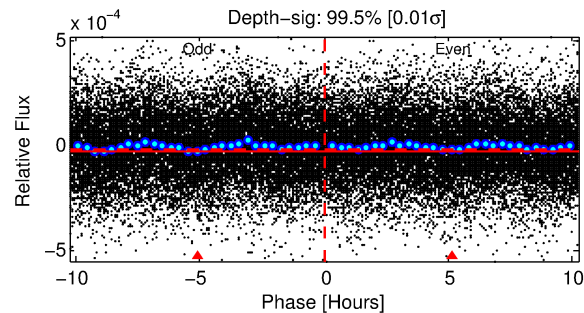
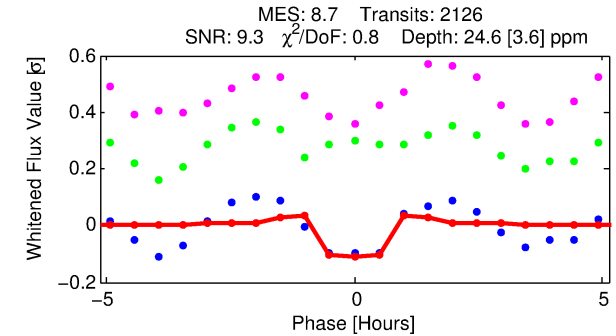
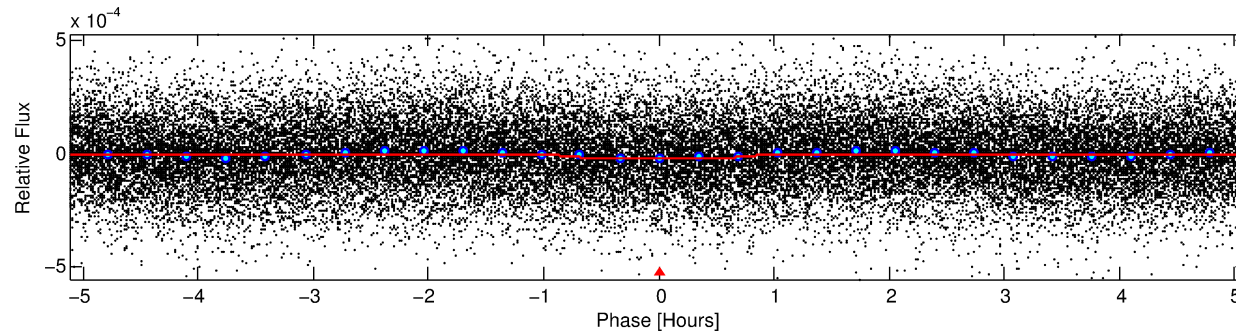
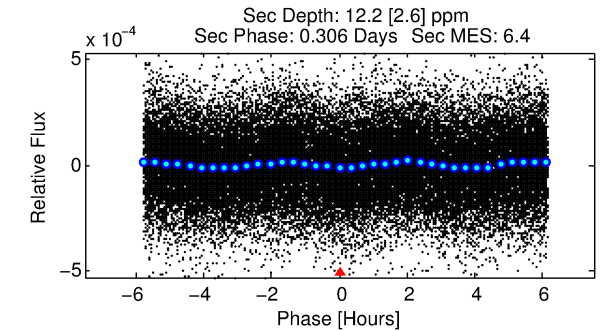
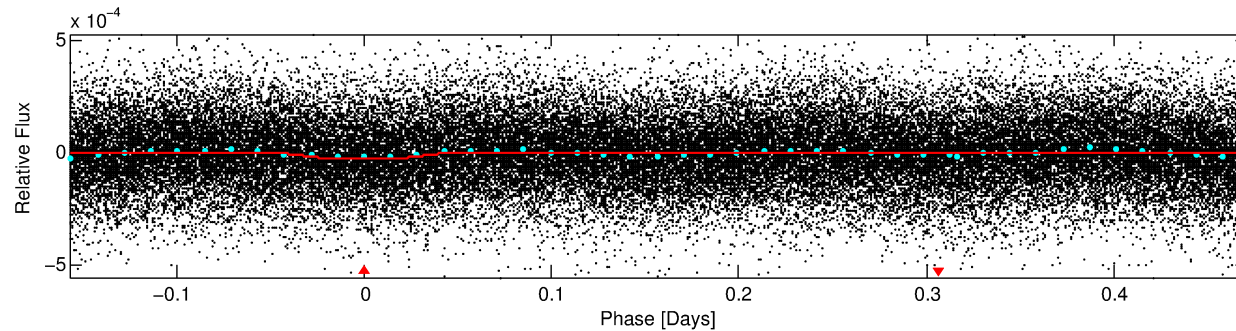
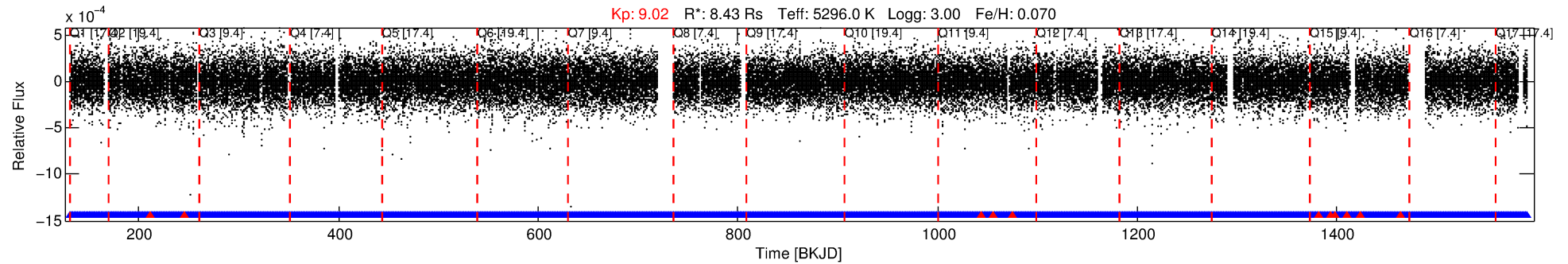
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 011559263-01

No Significant Match Found

DV One-Page Summary

KIC: 11559263 Candidate: 1 of 1 Period: 0.629 d



DV Fit Results:

Period = 0.62854 [0.00001] d
Epoch = 131.7342 [0.0016] BKJD
Rp/R* = 0.0056 [0.0020]
a/R* = 1.51 [1.33]
b = 0.92 [0.29]
Seff = N/A
Teq = N/A
Rp = 5.14 [2.91] Re
a = N/A
Ag = N/A
Teffp = N/A

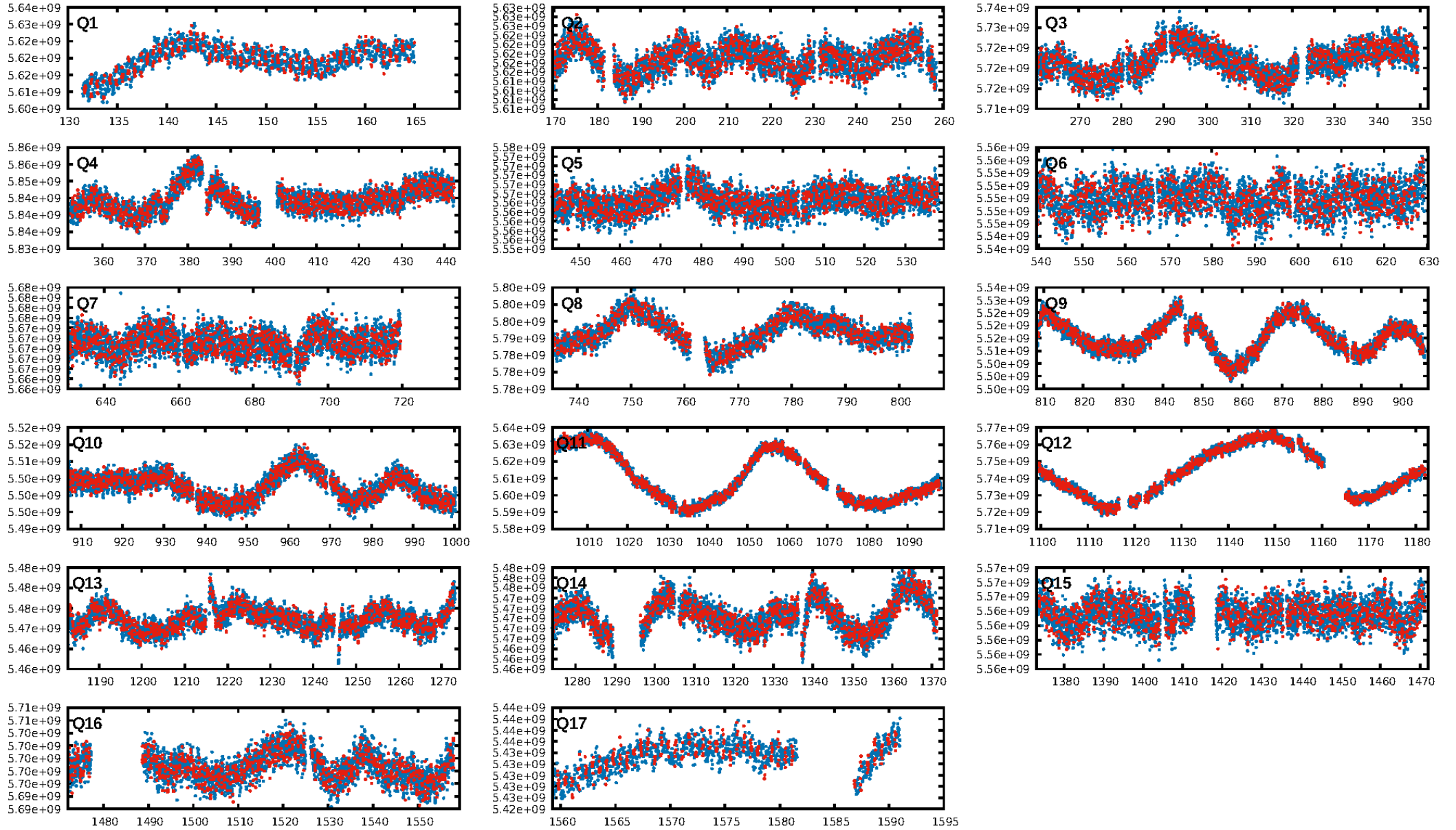
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 7.69e-14
RollingBand-fgt: 0.99 [2020/2031]
GhostDiagnostic-chr: N/A
Centroid-sig: 66.3%
Centroid-so: 0.865 arcsec [1.50σ]
OotOffset-rm: 8.307 arcsec [4.82σ]
KicOffset-rm: 3.734 arcsec [2.76σ]
OotOffset-st: 4/4/4/3 [15]
KicOffset-st: 4/4/4/3 [15]
DiffImageQuality-fgm: 0.00 [0/15]
DiffImageOverlap-fno: 1.00 [17/17]

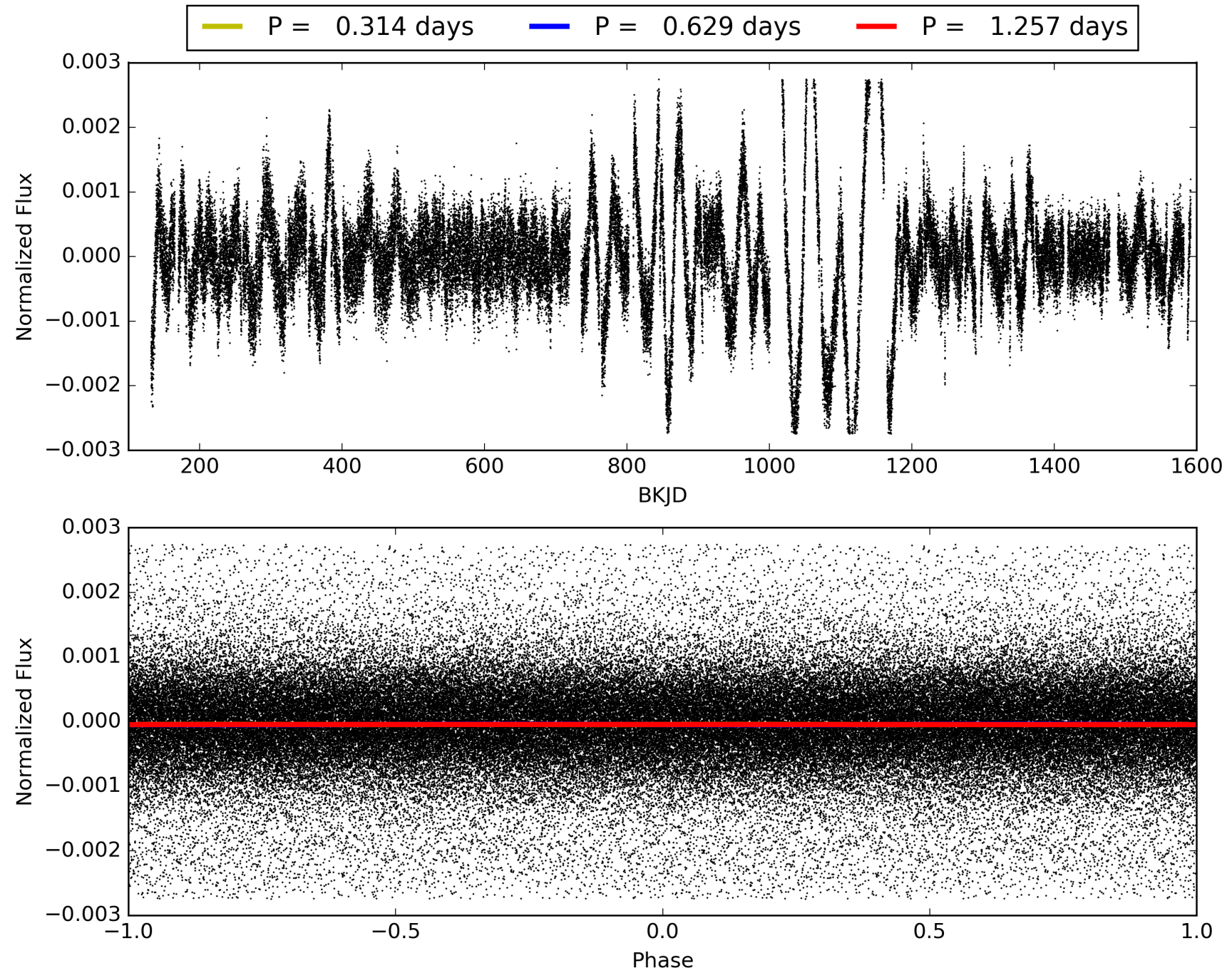
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 29-Jan-2016 05:14:45 Z

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

TCE 011559263-01, PDC Light Curves

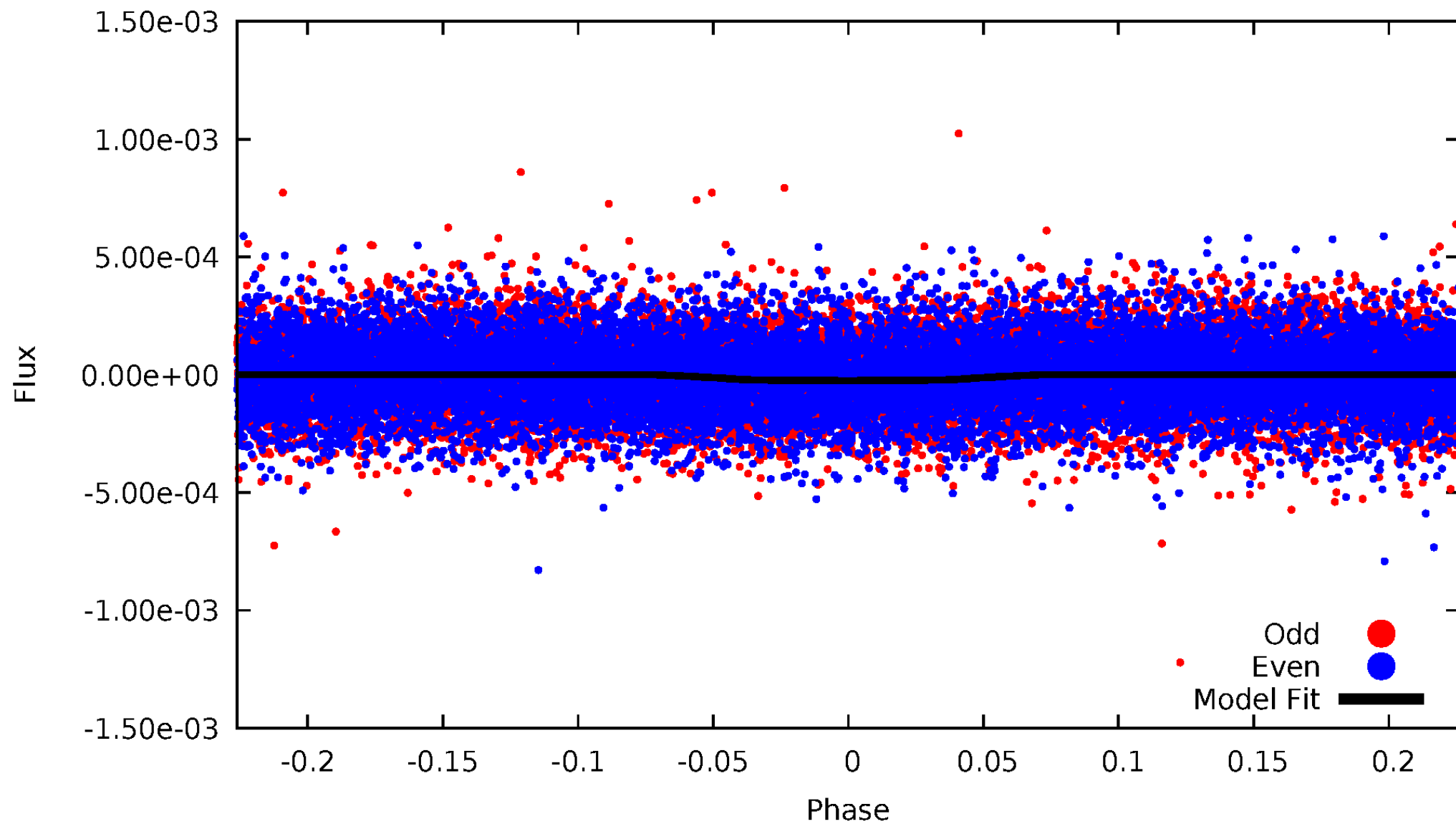


TCE 011559263-01



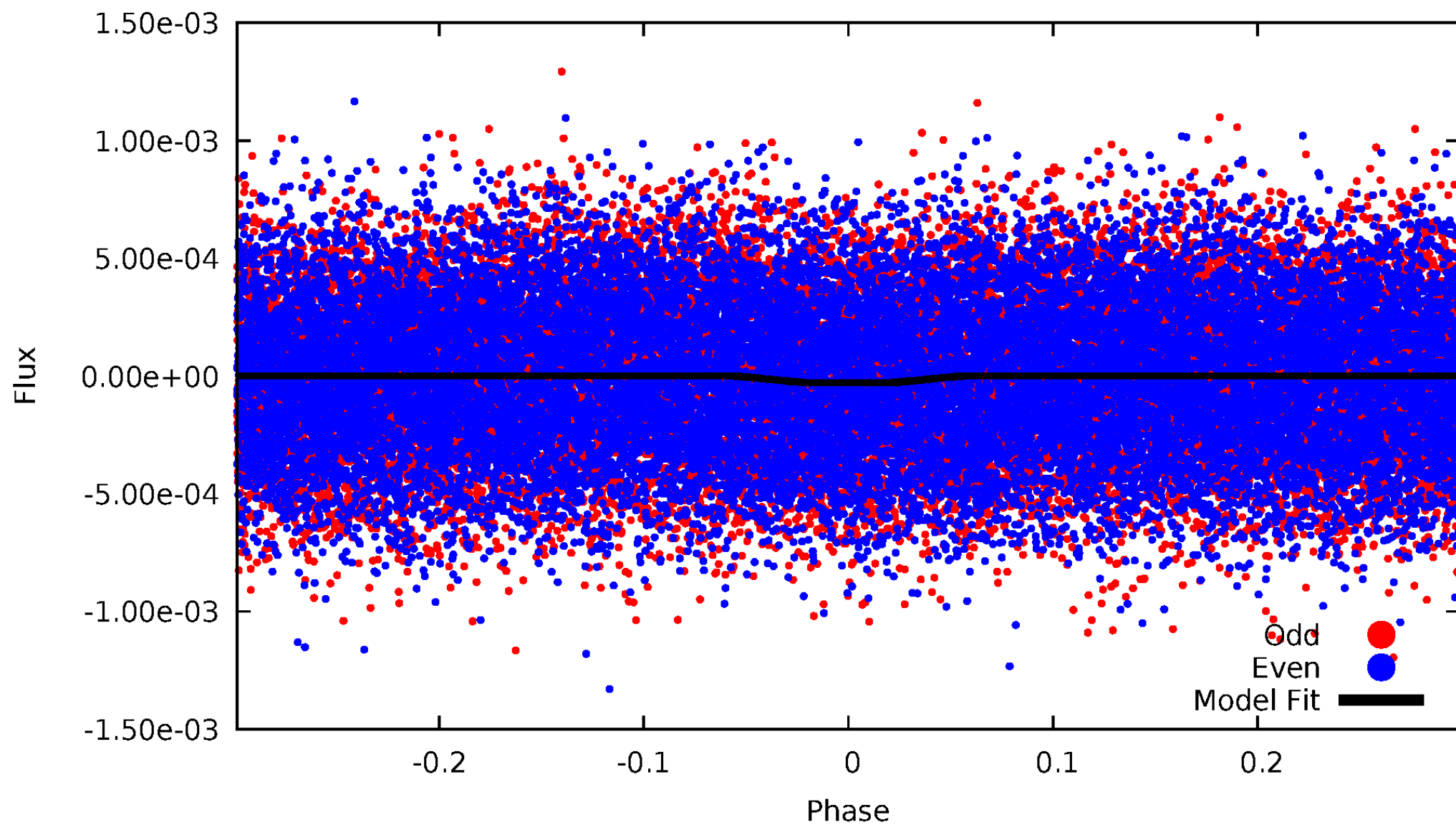
DV Odd/Even

TCE 011559263-01



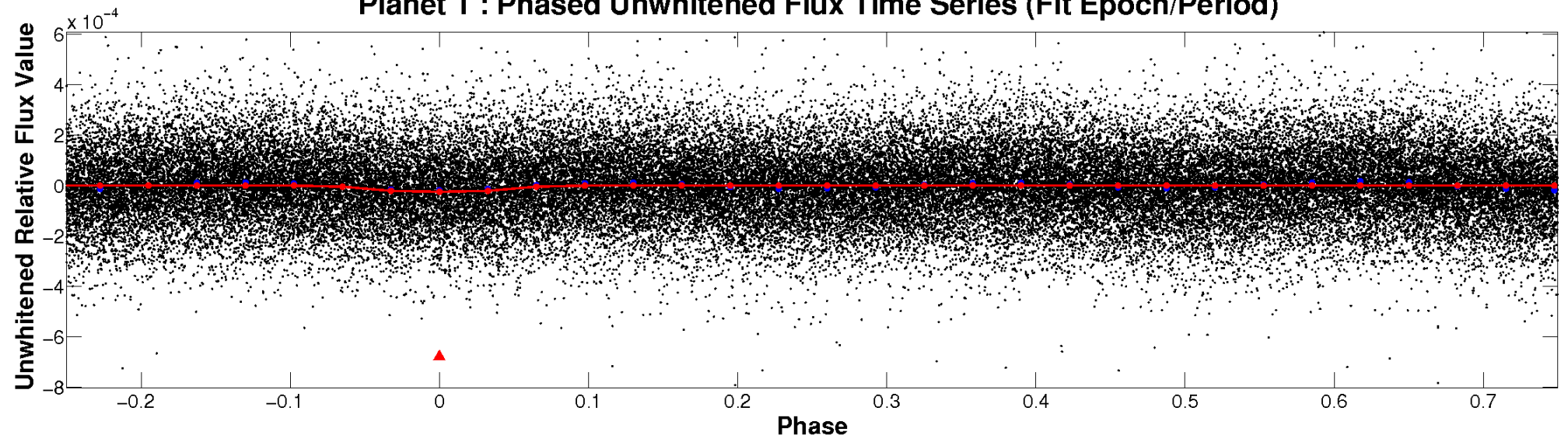
ALT Odd/Even

TCE 011559263-01

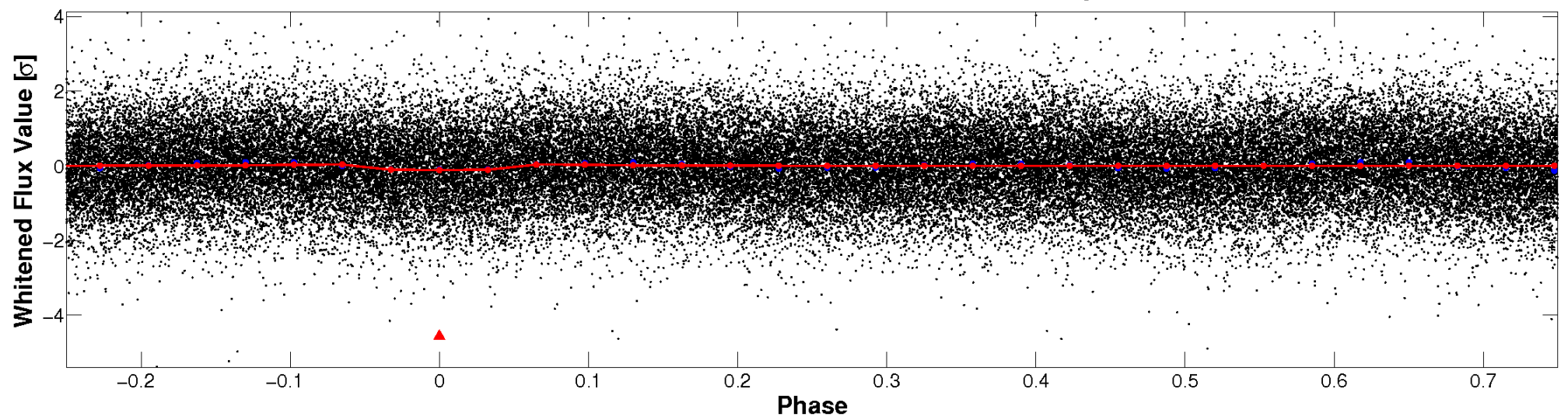


Non-Whitened Vs. Whitened Light Curve

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

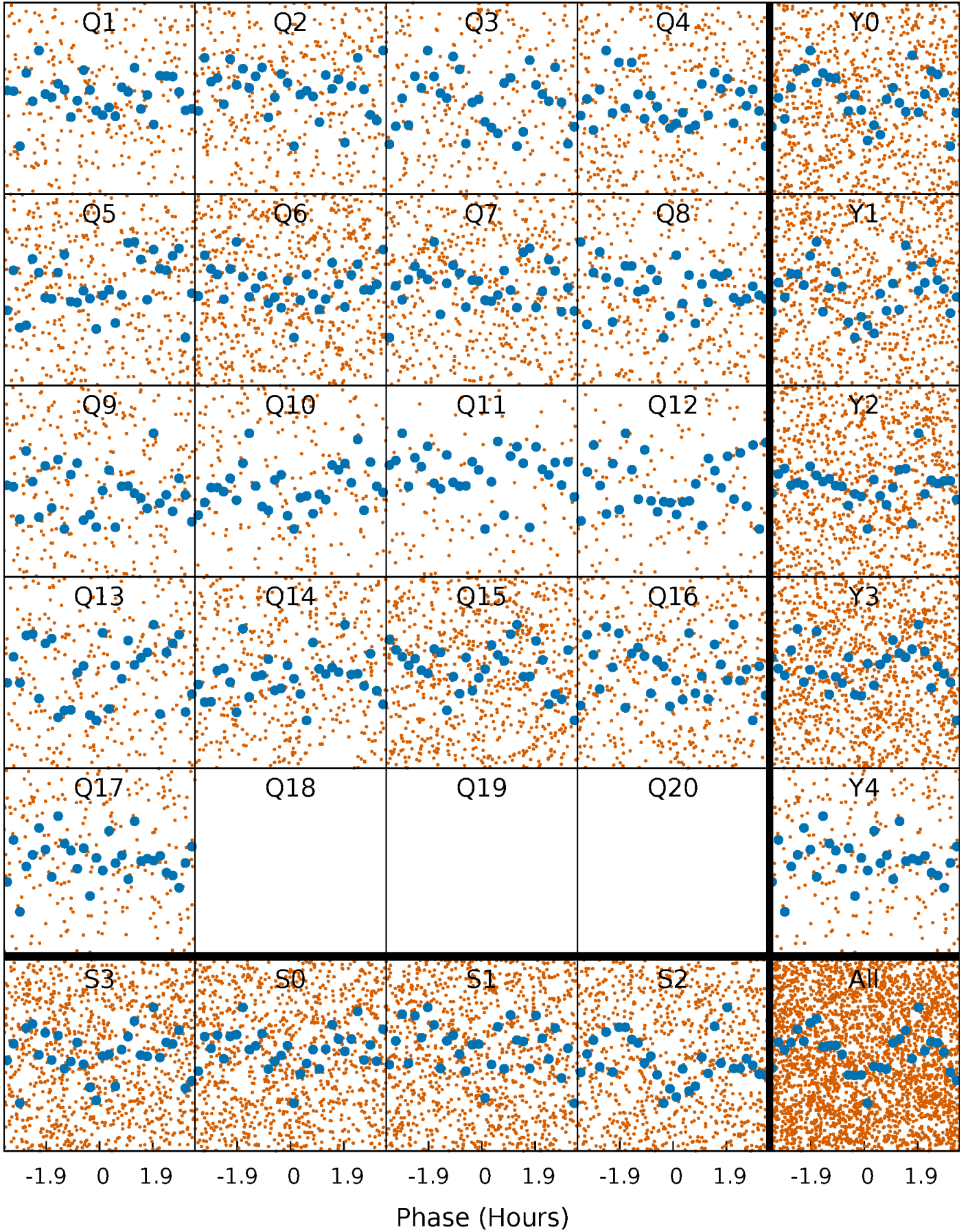


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



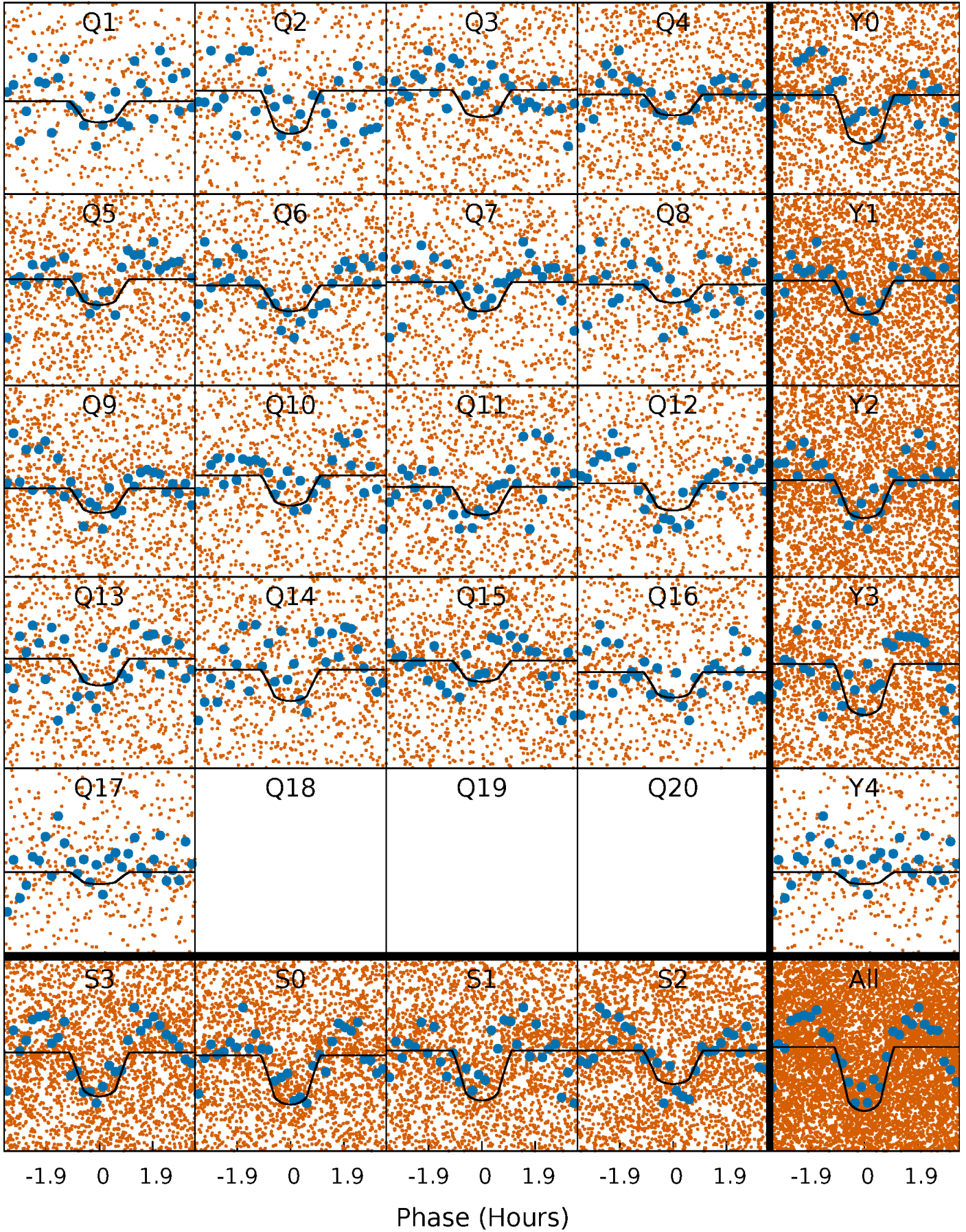
PDC Quarter-Phased Transit Curves

TCE 011559263-01 P= 0.628540 Days $T_0=131.734150$ (BKJD)



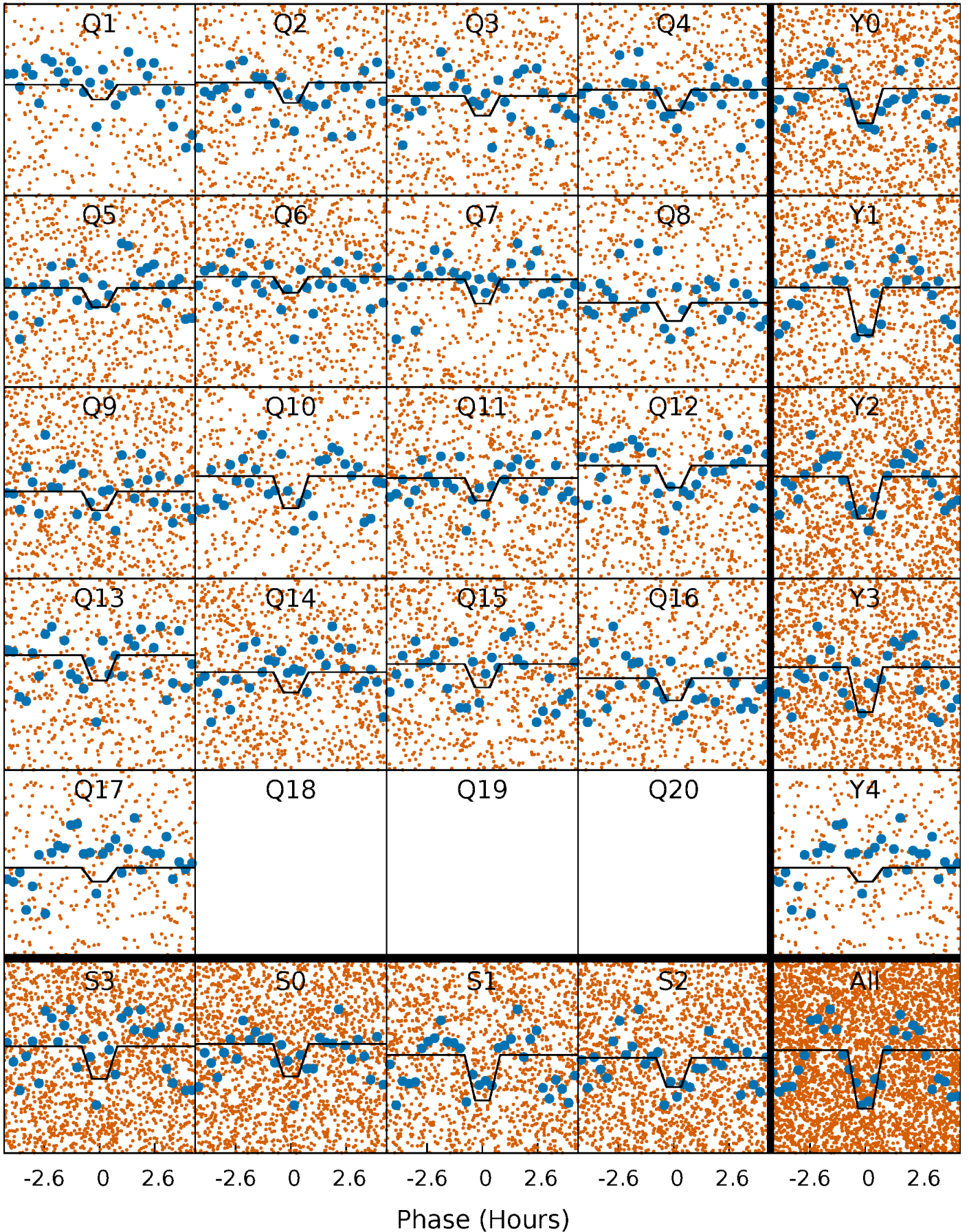
DV Quarter-Phased Transit Curves

TCE 011559263-01 P= 0.628540 Days $T_0=131.734150$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

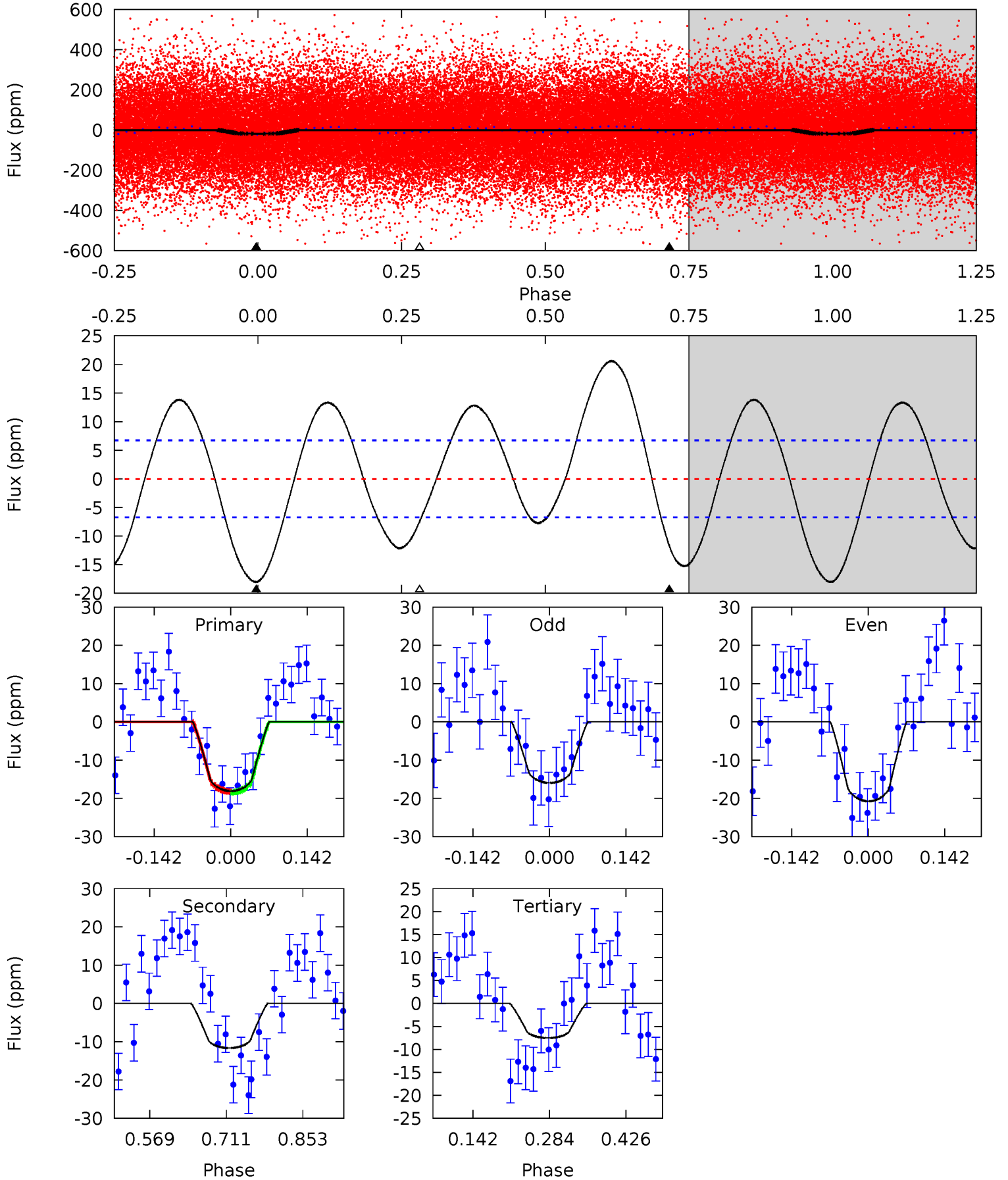
TCE 011559263-01 P= 0.628534 Days $T_0=131.738690$ (BKJD)



DV Model-Shift Uniqueness Test

011559263-01, P = 0.628540 Days, E = 131.105610 Days

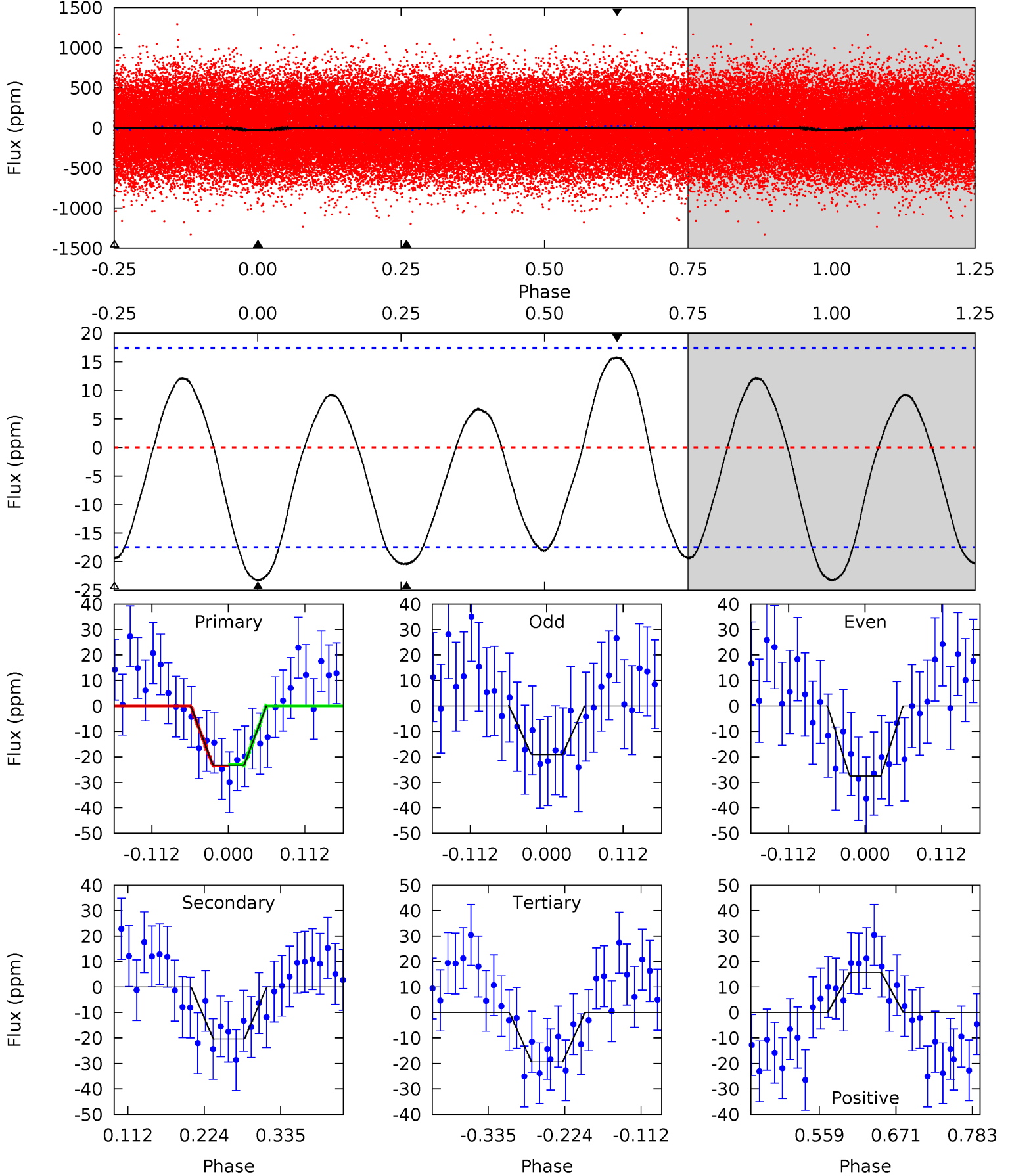
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
12.1	7.80	5.03	0	4.49	1.47	5.27	7.06	12.1	2.78	7.80	1.60	0.86	0.53	0.06



Alt Model-Shift Uniqueness Test

011559263-01, P = 0.628534 Days, E = 131.110156 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
6.06	5.32	5.05	4.11	4.54	1.59	2.95	1.01	1.95	0.27	1.21	1.10	0.99	0.40	0.06



Stellar Parameters For KIC 011559263

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	5296^{+78}_{-251}	$3.004^{+0.285}_{-0.095}$	$0.070^{+0.100}_{-0.350}$	$8.426^{+2.479}_{-3.719}$	$2.613^{+0.137}_{-1.168}$	$0.006^{+0.016}_{-0.002}$
	+1%/-5%	+9%/-3%	+143%/-500%	+29%/-44%	+5%/-45%	+254%/-39%
Source	SPE13	SPE13	SPE13	DSEP		

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

Secondary Eclipse Parameters for KIC 011559263-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-12 ± 1	$4.55^{+1.99}_{-1.74}$	6465^{+426}_{-648}	-4681^{+2025}_{-551}	$0.117^{+0.175}_{-0.063}$
Alt.	-20 ± 4	$4.28^{+1.88}_{-1.94}$	6440^{+471}_{-598}	-3874^{+9231}_{-1047}	$0.231^{+0.469}_{-0.121}$

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 $A_{obs} \gg 1.0$

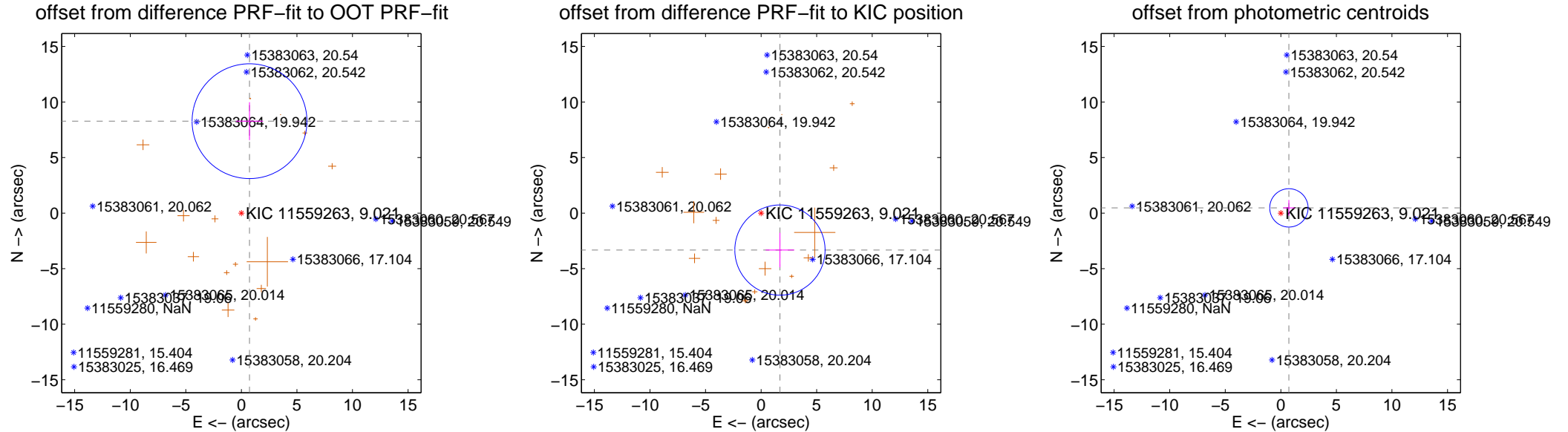
DV Centroid Data

Supplemental centroid analysis for 011559263-01. **Kepler magnitude: 9.02.** Transit SNR 9.31

There are 0 quarters with good PRF difference image offsets

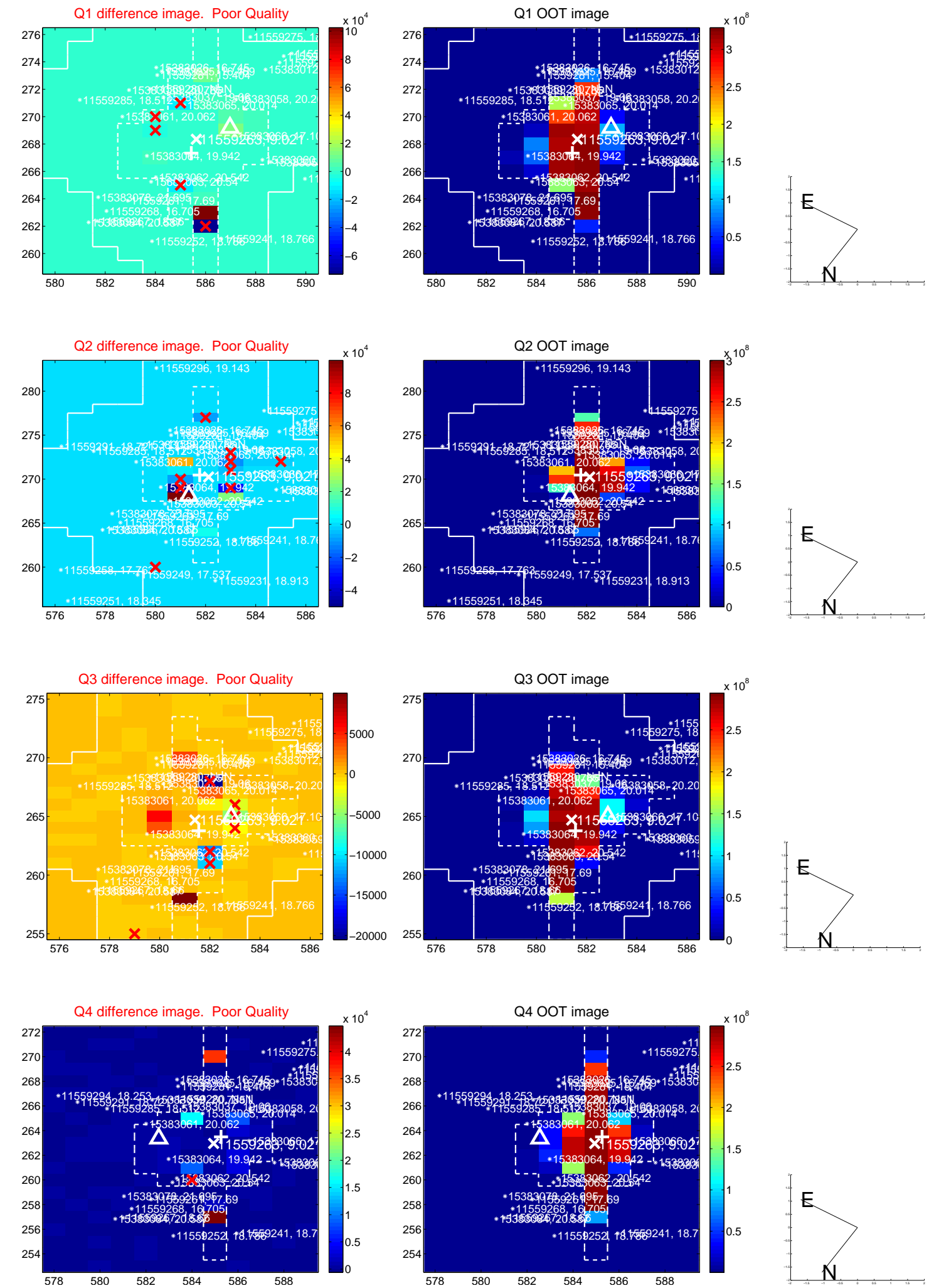
The OOT PRF centroid is offset from the target star catalog position by about 4.04 arcsec so the offset from difference PRF-fit to OOT-fit may be invalid.

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	8.307 ± 1.722	4.82	-0.733 ± 1.222	8.275 ± 1.704
PRF-fit source offset from KIC position	3.734 ± 1.354	2.76	-1.696 ± 1.285	-3.326 ± 1.552
photometric centroid source offset	0.87 ± 0.58	1.50	-0.73 ± 0.51	0.47 ± 0.71

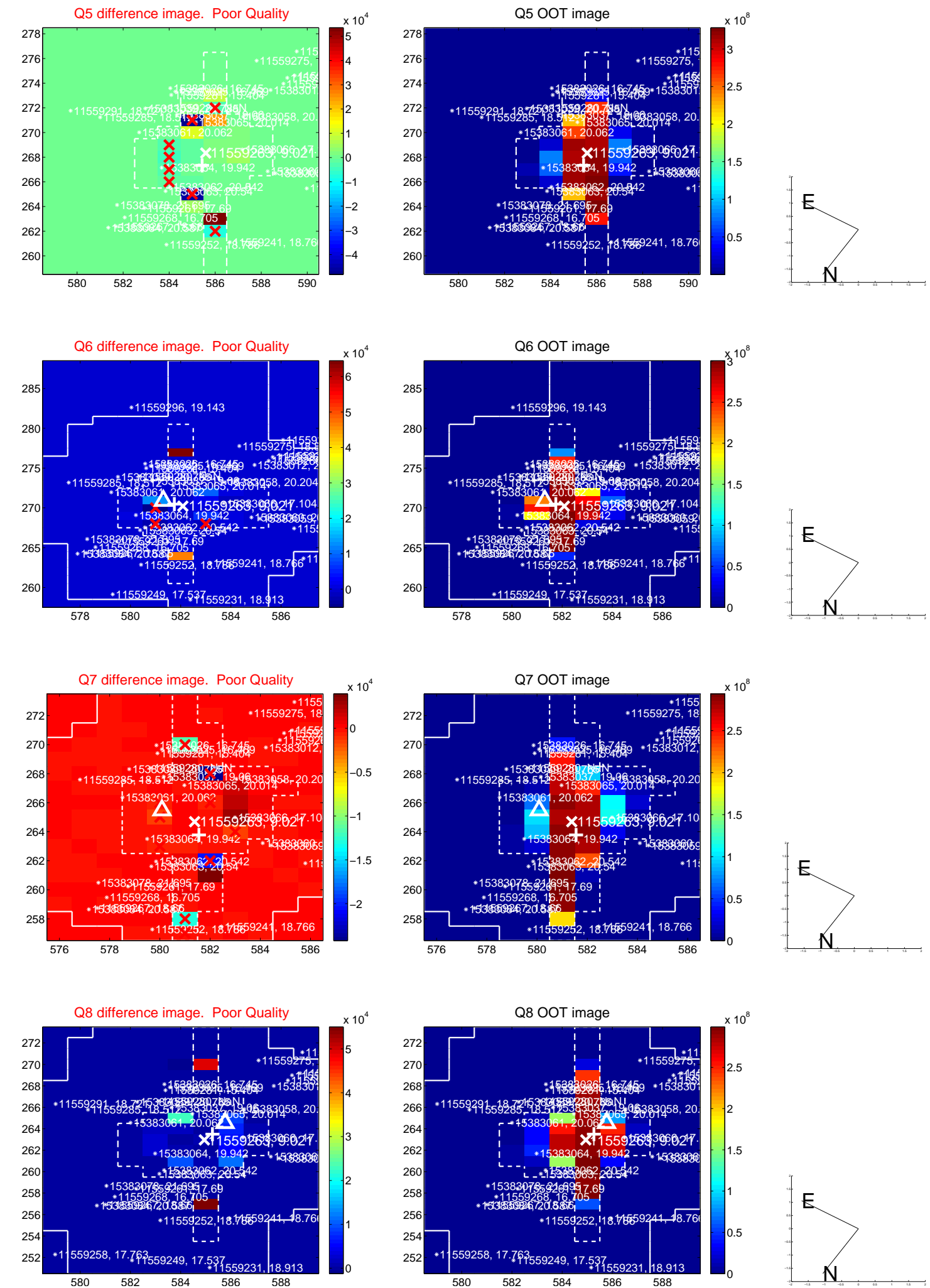


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets;** magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

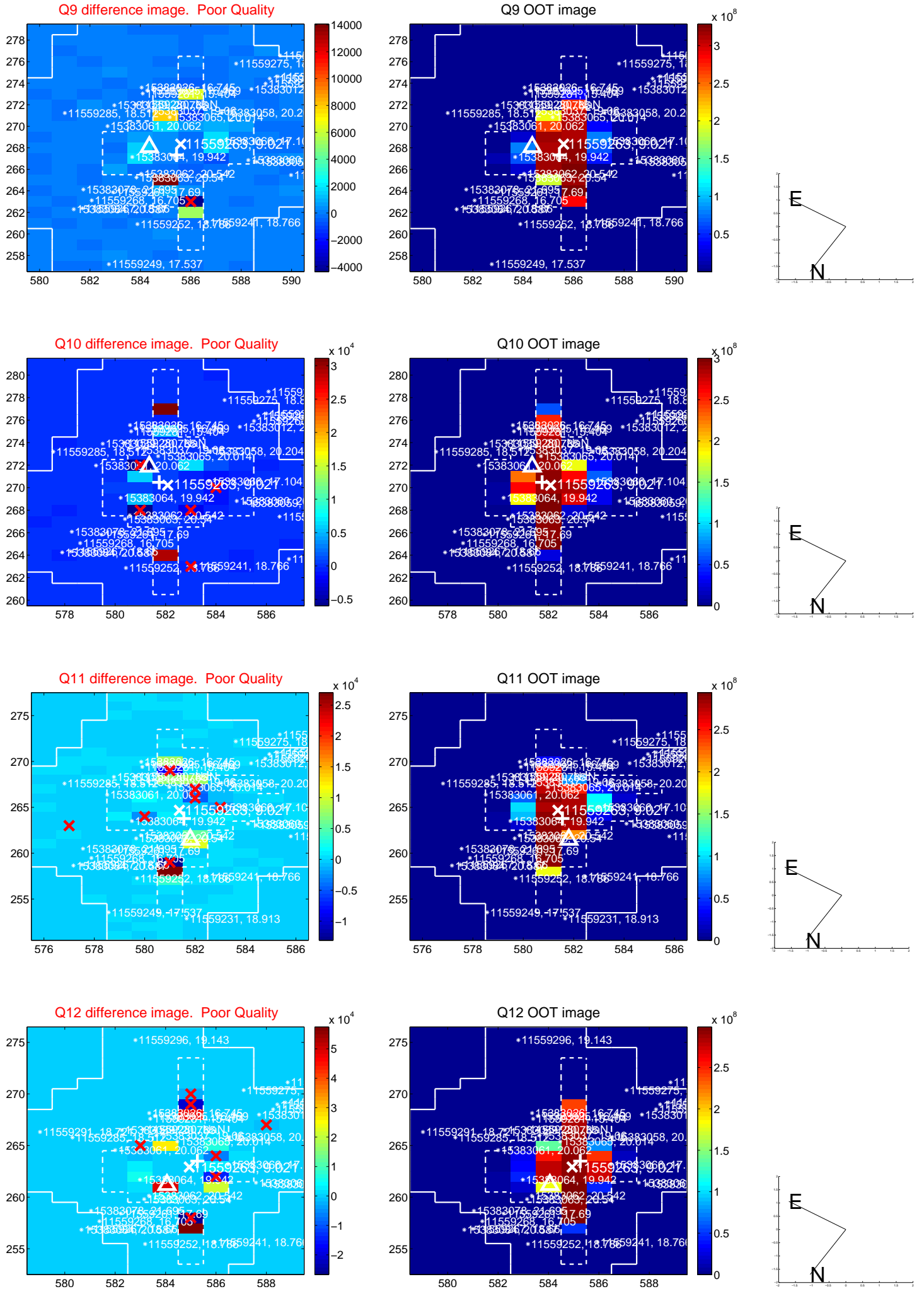
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



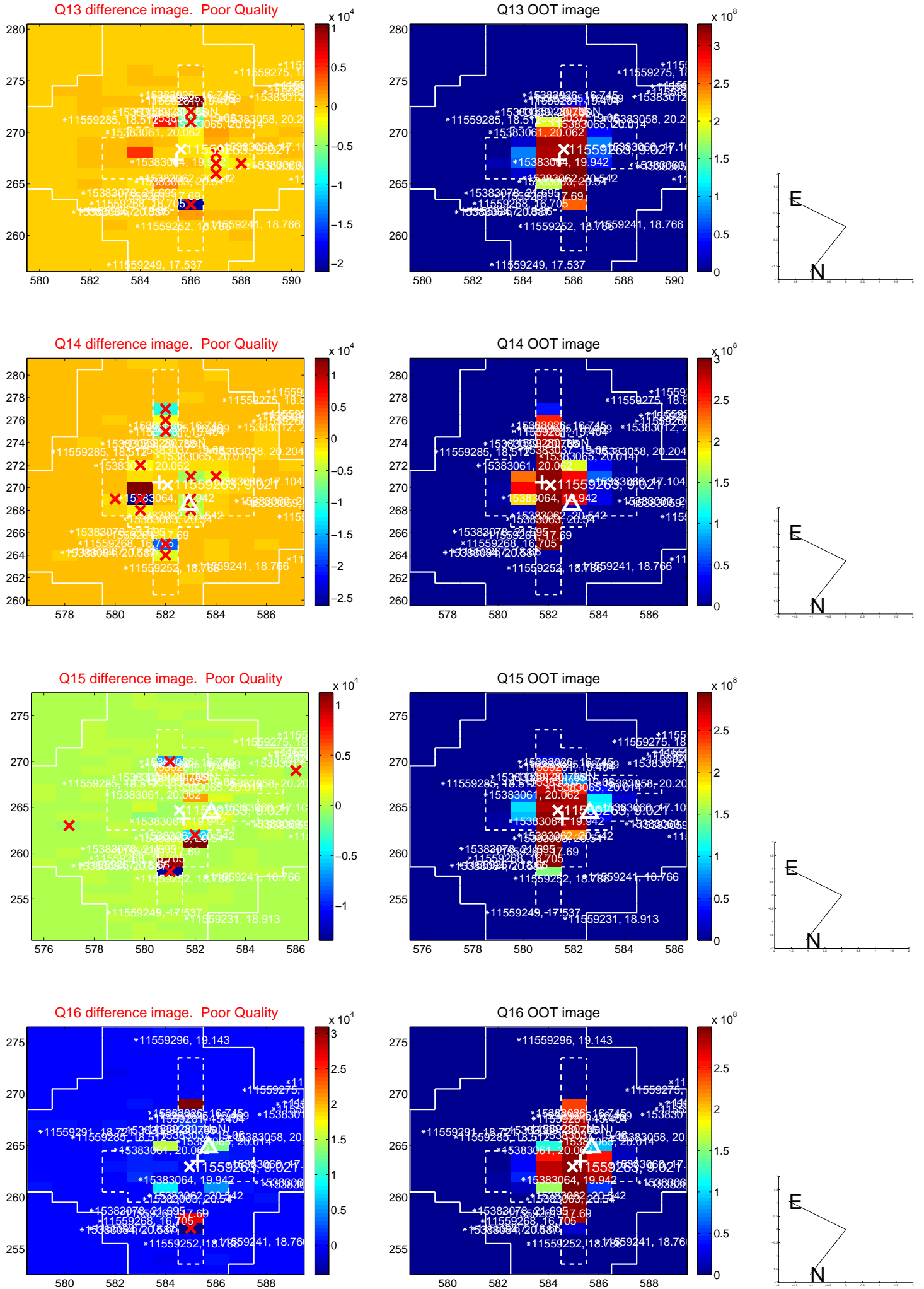
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



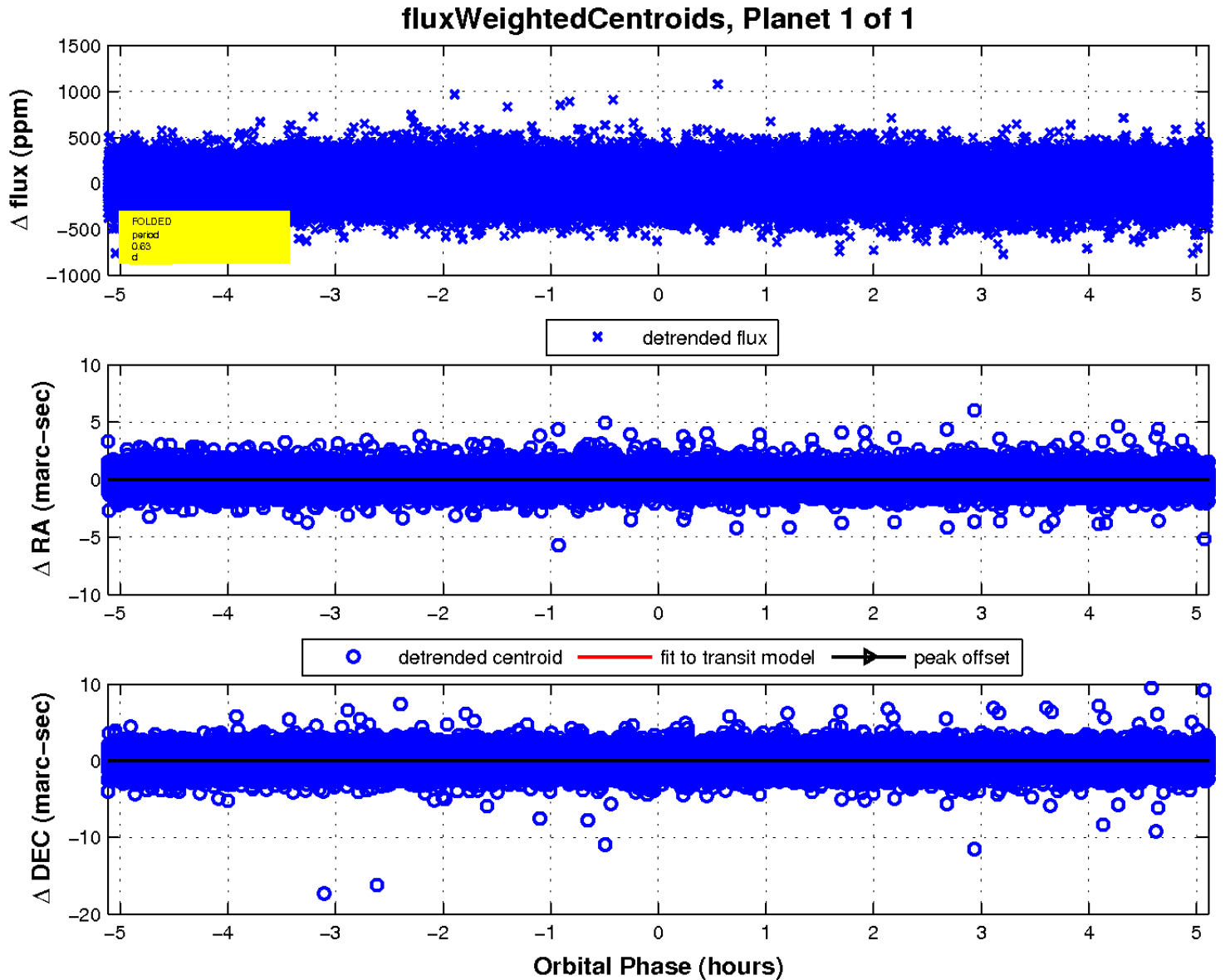
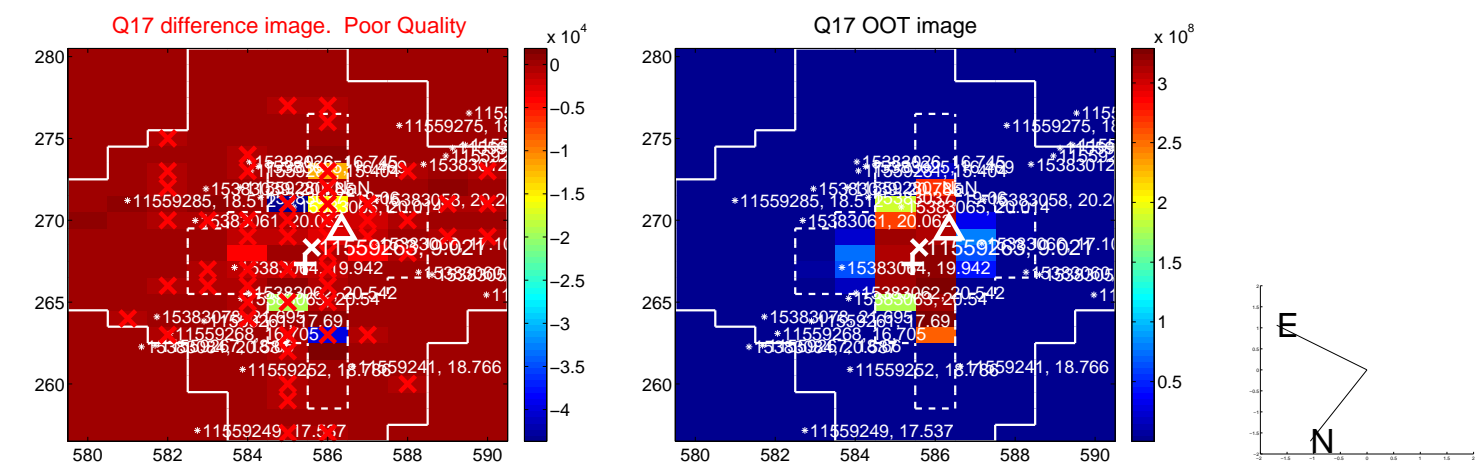
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UKIRT Image

Declination

