

KIC 005683219

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})
005683219-01	OBS	8257.01	9.460959	138.786983	48.6	4.990	7.1	7.1	0.79	5485	0.63	82.04

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
005683219-01	OBS	PC	0.35	0	0	0	0	NO_COMMENT

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

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

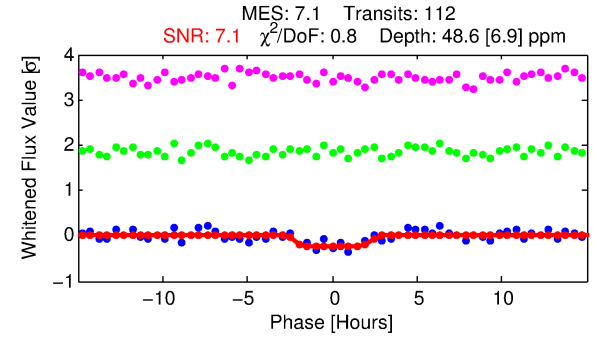
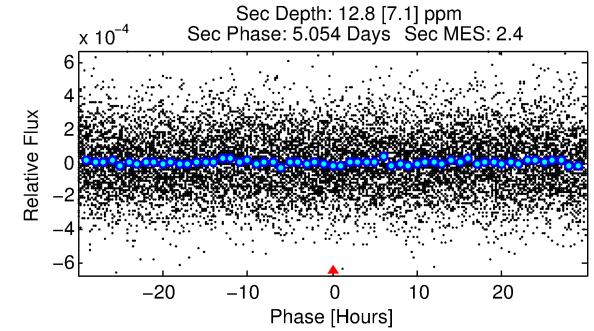
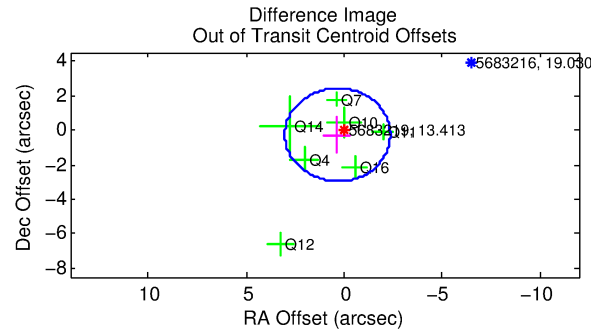
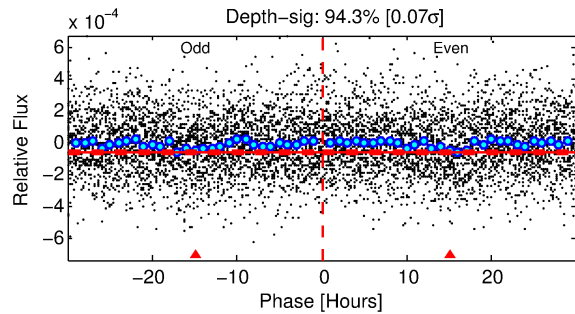
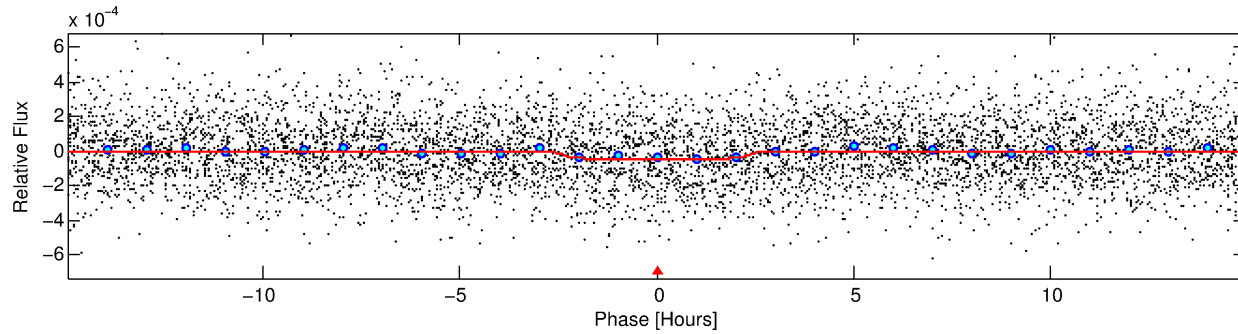
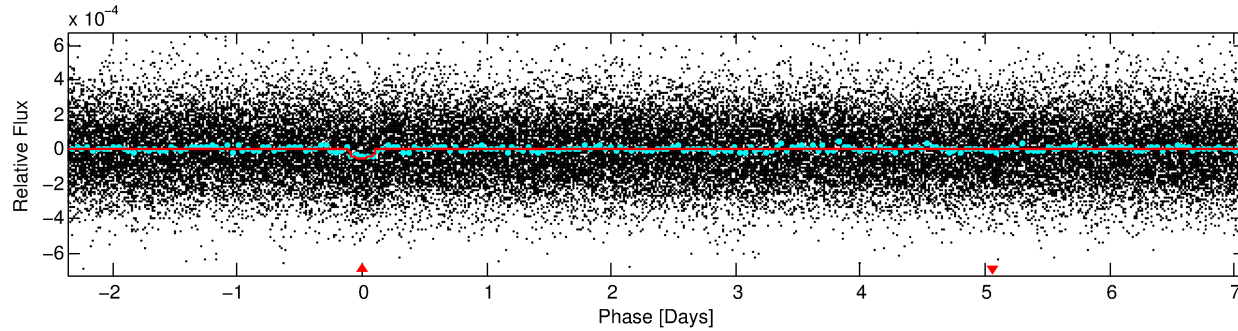
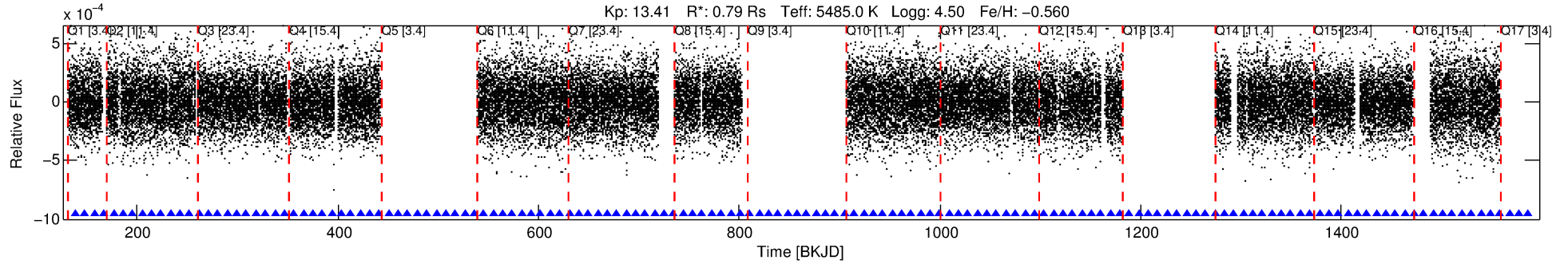
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 005683219-01

No Significant Match Found

DV One-Page Summary

KIC: 5683219 Candidate: 1 of 1 Period: 9.461 d



DV Fit Results:

Period = 9.46096 [0.00015] d
Epoch = 138.7870 [0.0121] BKJD
Rp/R* = 0.0073 [0.0050]
a/R* = 7.88 [24.83]
b = 0.85 [1.06]
Seff = 82.04 [21.33]
Teq = 767 [50] K
Rp = 0.63 [0.45] Re
a = 0.0783 [0.0120] AU
Ag = 110.36 [165.94] [0.66 σ]
Teffp = 3846 [1433] K [2.15 σ]

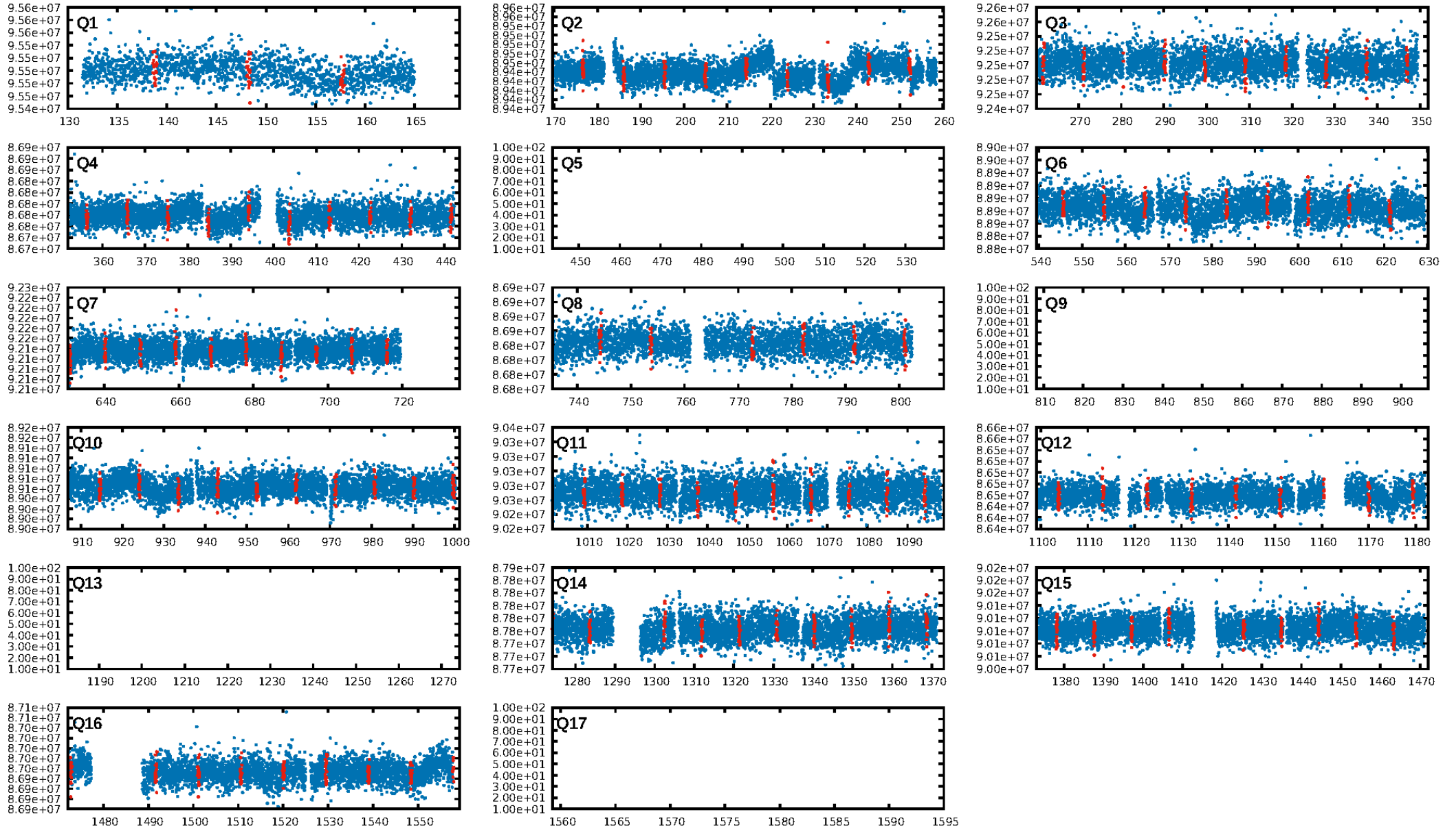
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: 100.0%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: 1.10e-12
RollingBand-fgt: 1.00 [109/109]
GhostDiagnostic-chr: 6.143
Centroid-sig: 2.5%
Centroid-so: 3.751 arcsec [1.67 σ]
OotOffset-rm: 0.435 arcsec [0.48 σ]
OotOffset-st: 2/2/3/0 [7]
KicOffset-rm: 0.413 arcsec [0.45 σ]
KicOffset-st: 2/2/3/0 [7]
DiffImageQuality-fgm: 0.57 [4/7]
DiffImageOverlap-fno: 1.00 [13/13]

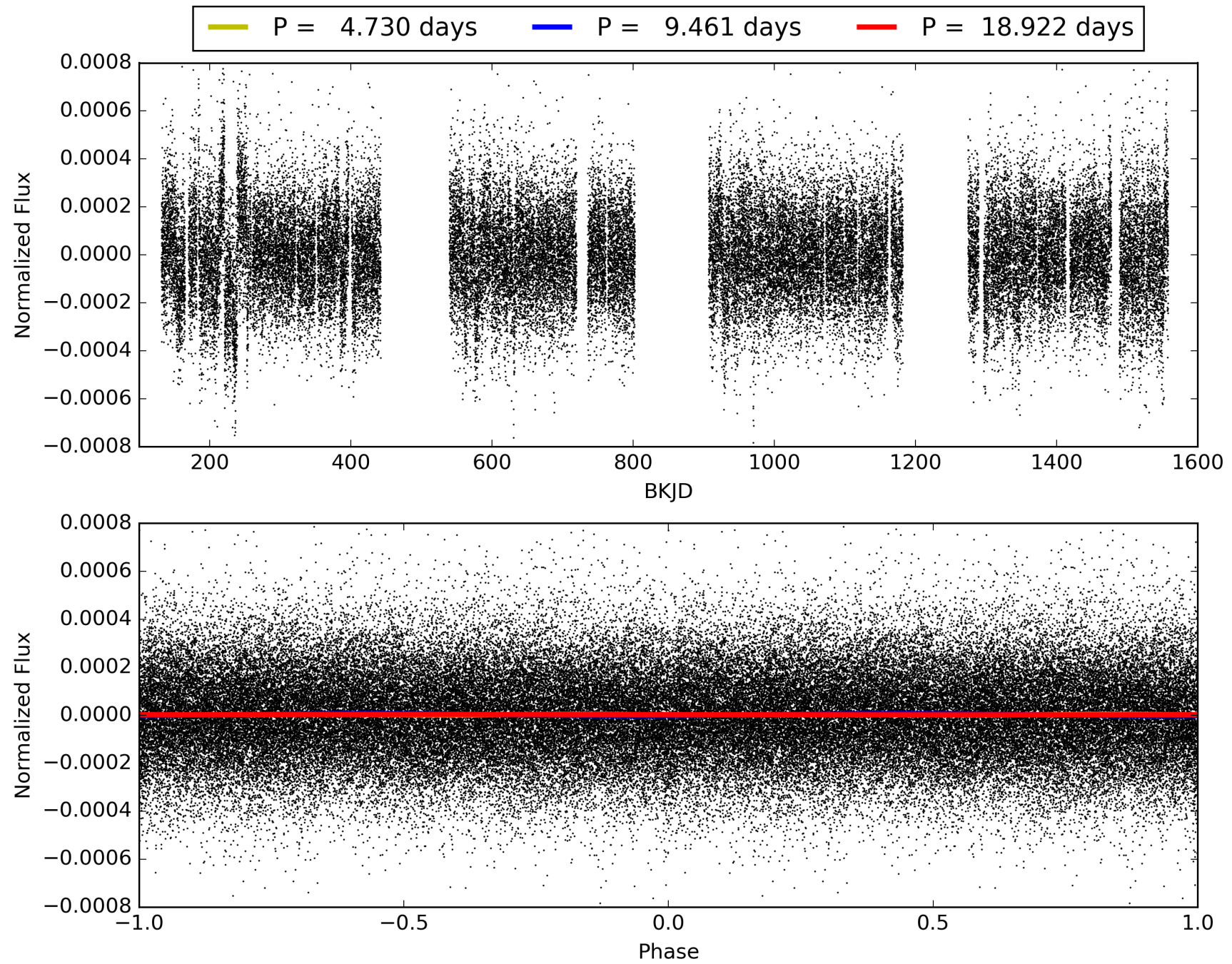
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 31-Jan-2016 23:13:00 Z

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

TCE 005683219-01, PDC Light Curves

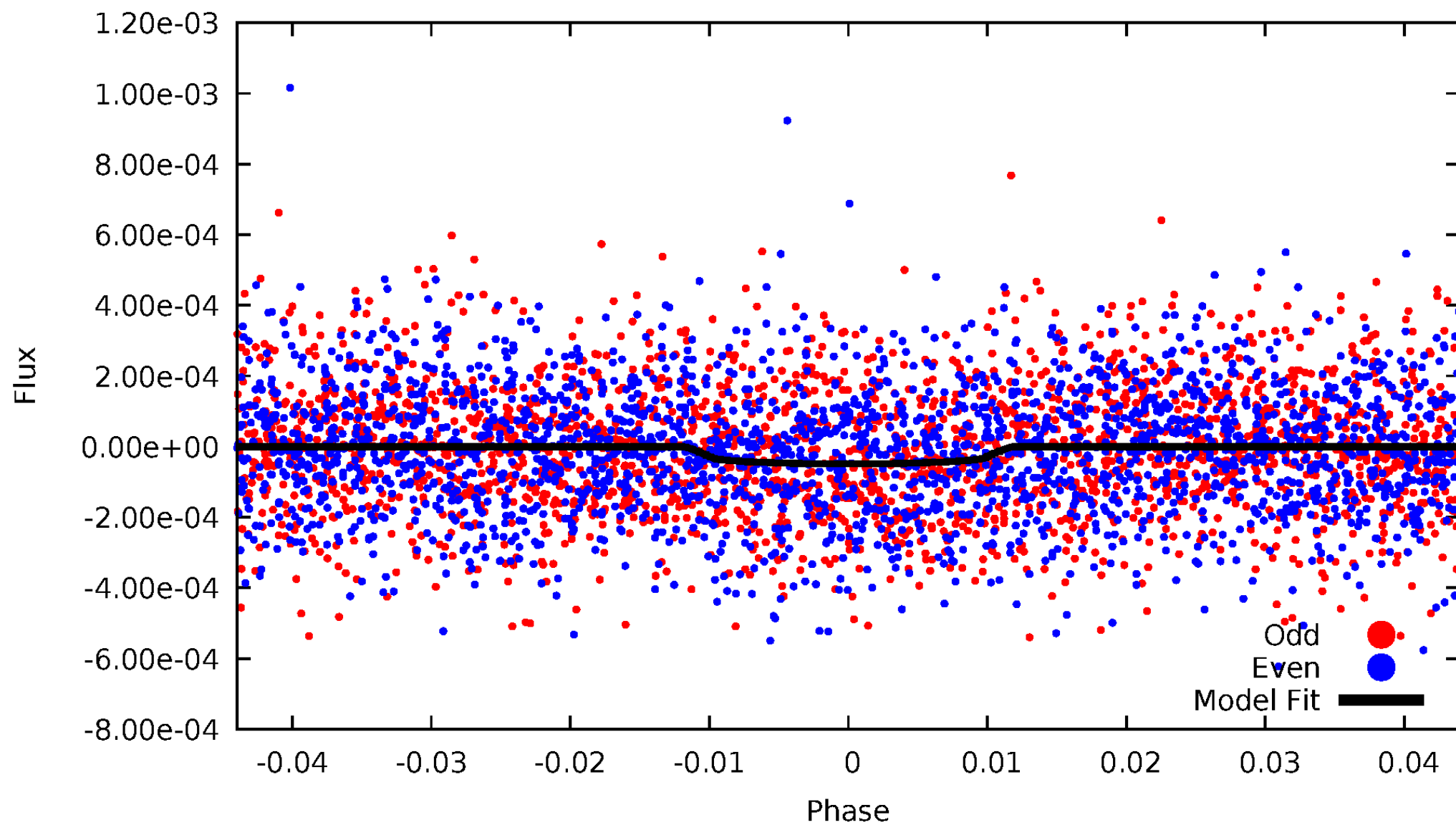


TCE 005683219-01



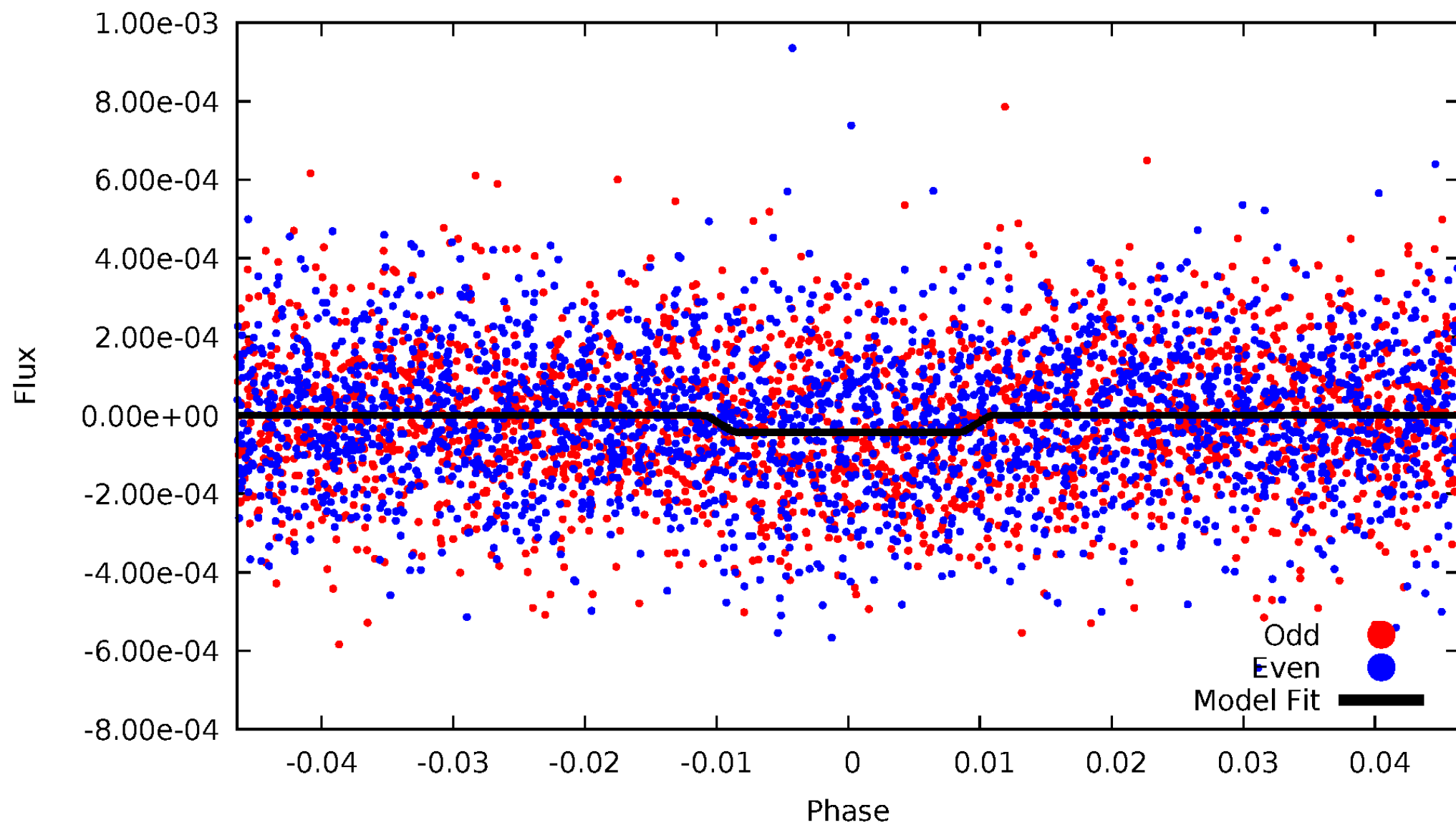
DV Odd/Even

TCE 005683219-01



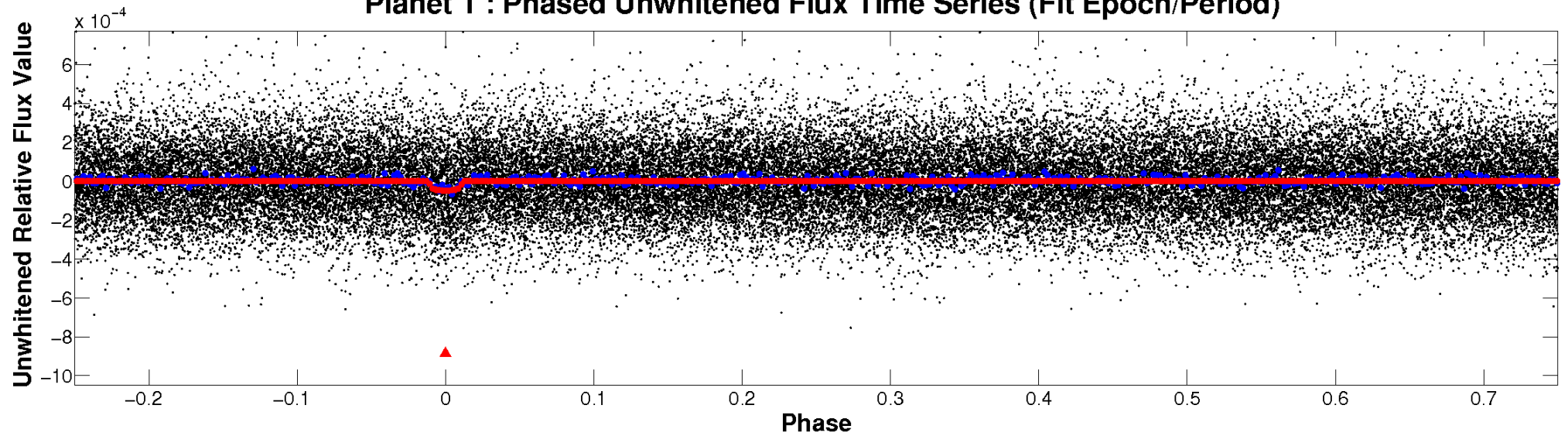
ALT Odd/Even

TCE 005683219-01

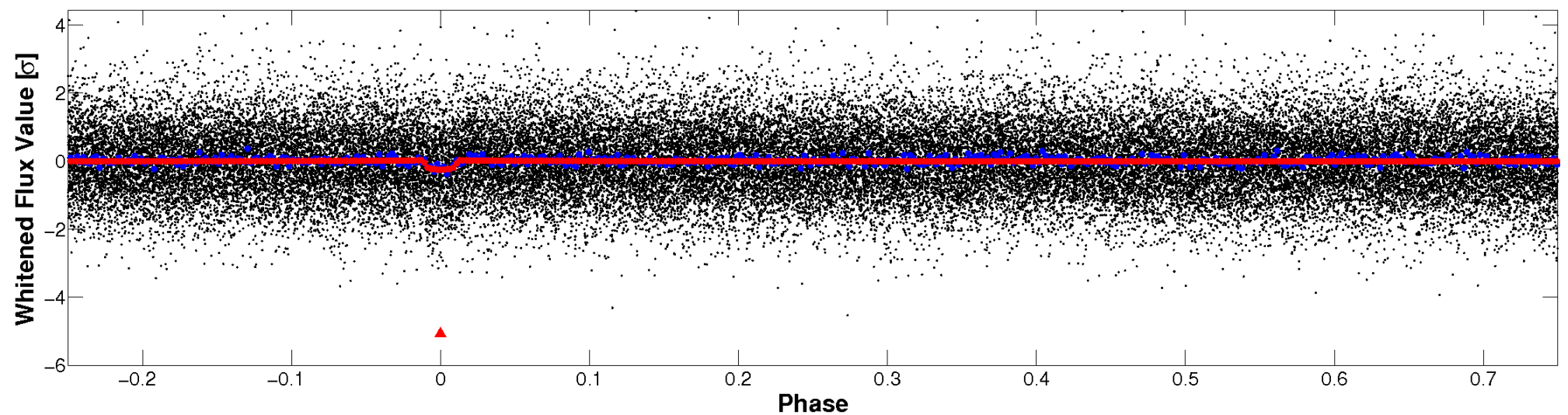


Non-Whitened Vs. Whitened Light Curve

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

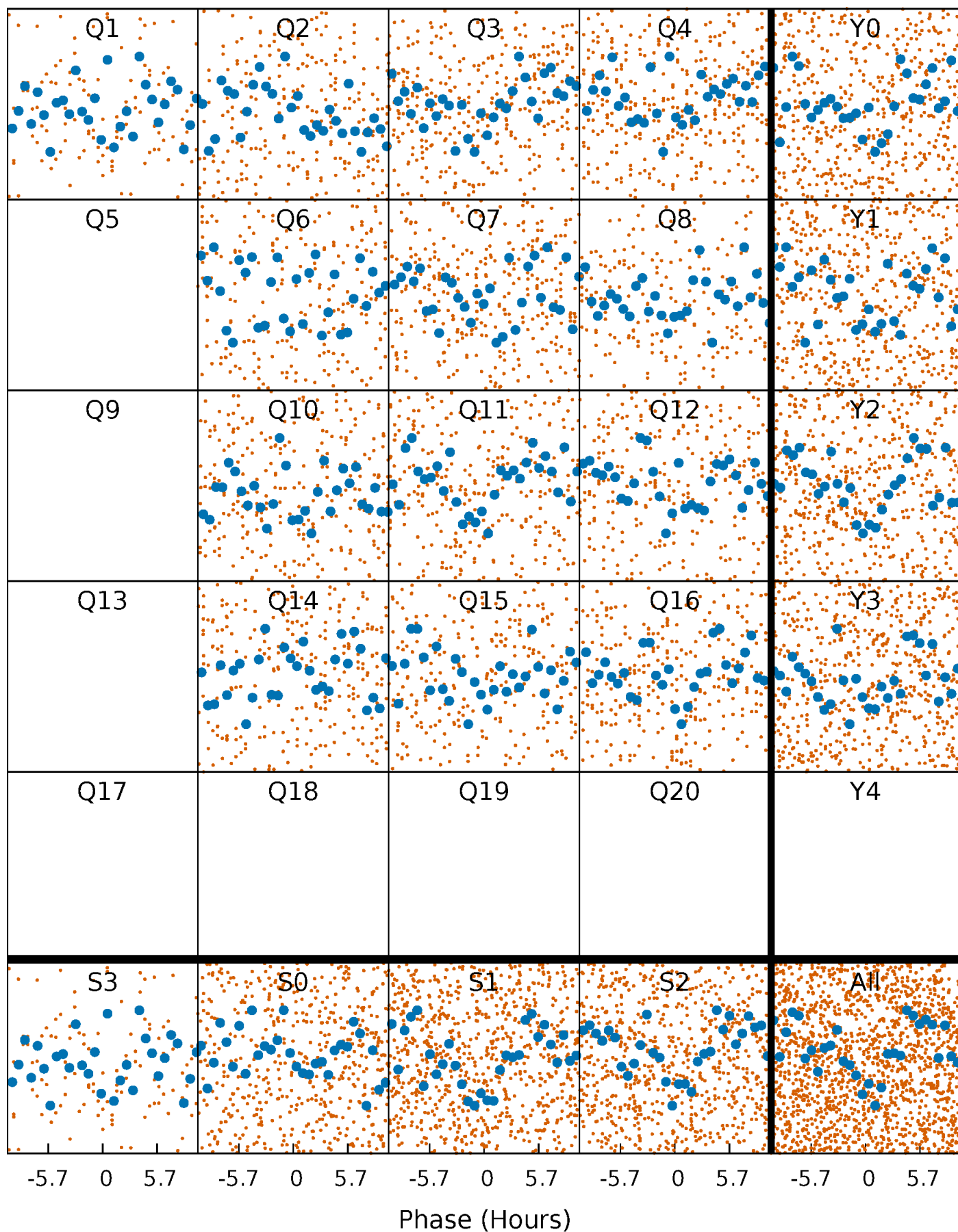


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



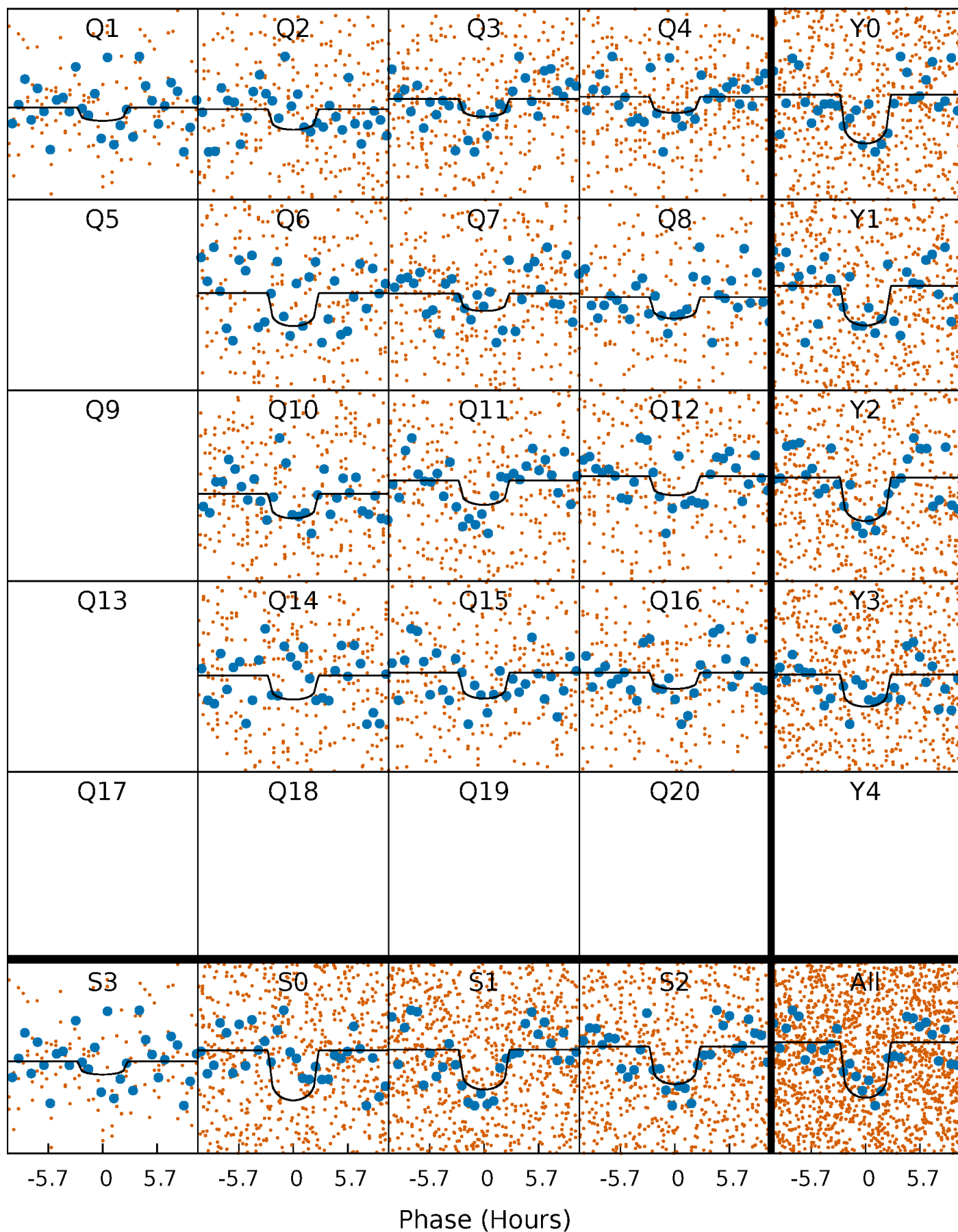
PDC Quarter-Phased Transit Curves

TCE 005683219-01 P= 9.460959 Days $T_0=138.786983$ (BKJD)



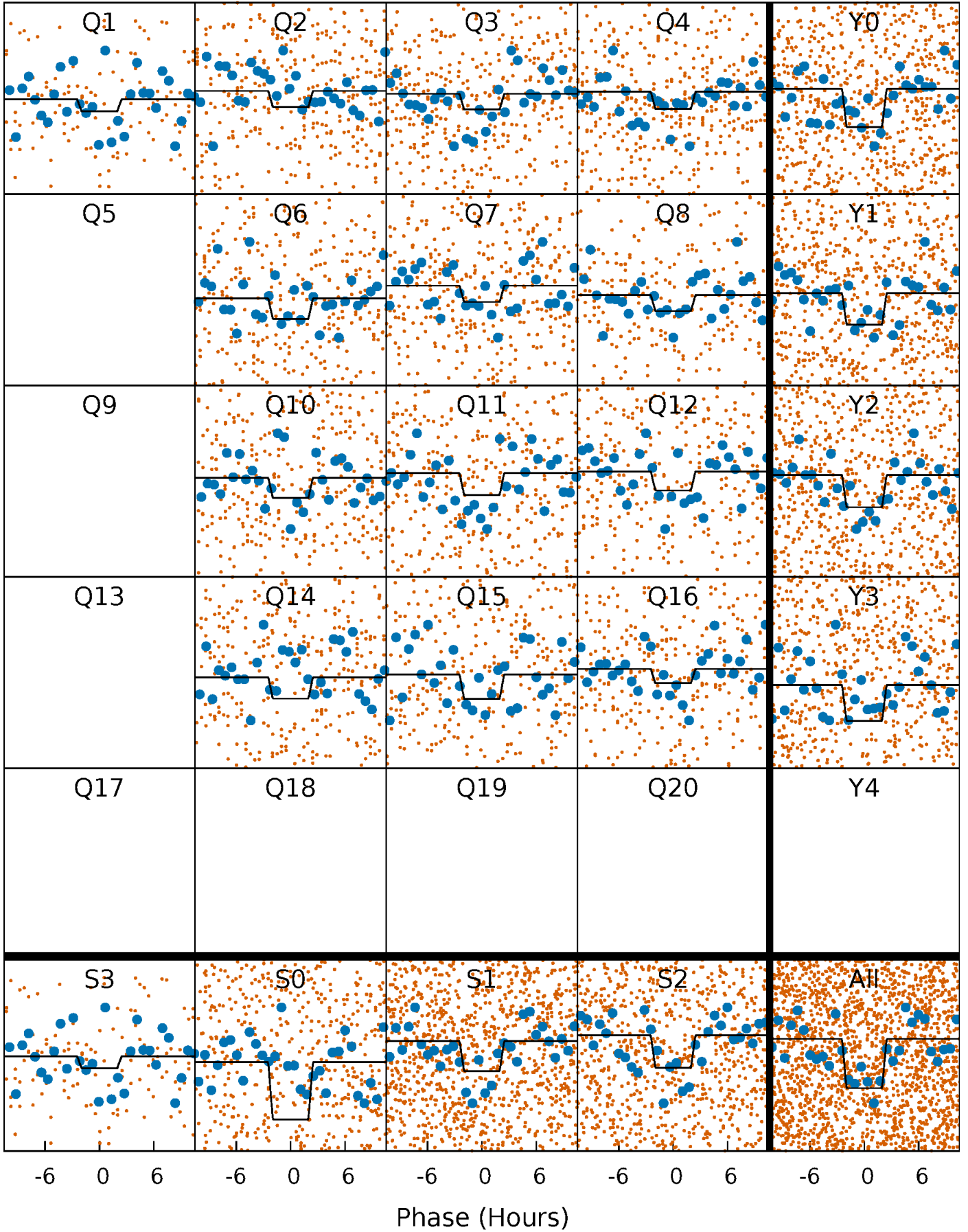
DV Quarter-Phased Transit Curves

TCE 005683219-01 P= 9.460959 Days $T_0=138.786983$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

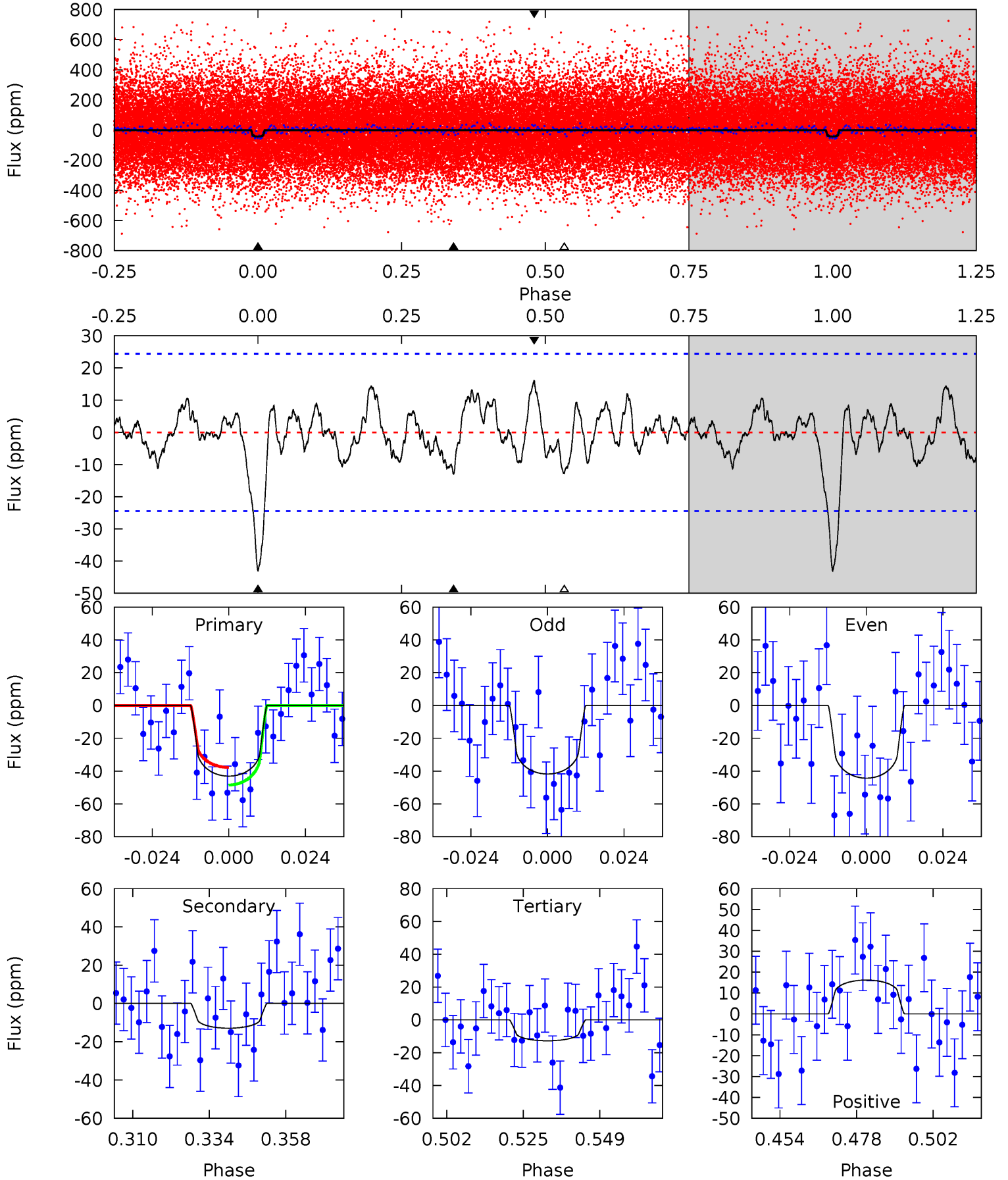
TCE 005683219-01 P= 9.460950 Days $T_0=138.785798$ (BKJD)



DV Model-Shift Uniqueness Test

005683219-01, P = 9.460959 Days, E = 129.326024 Days

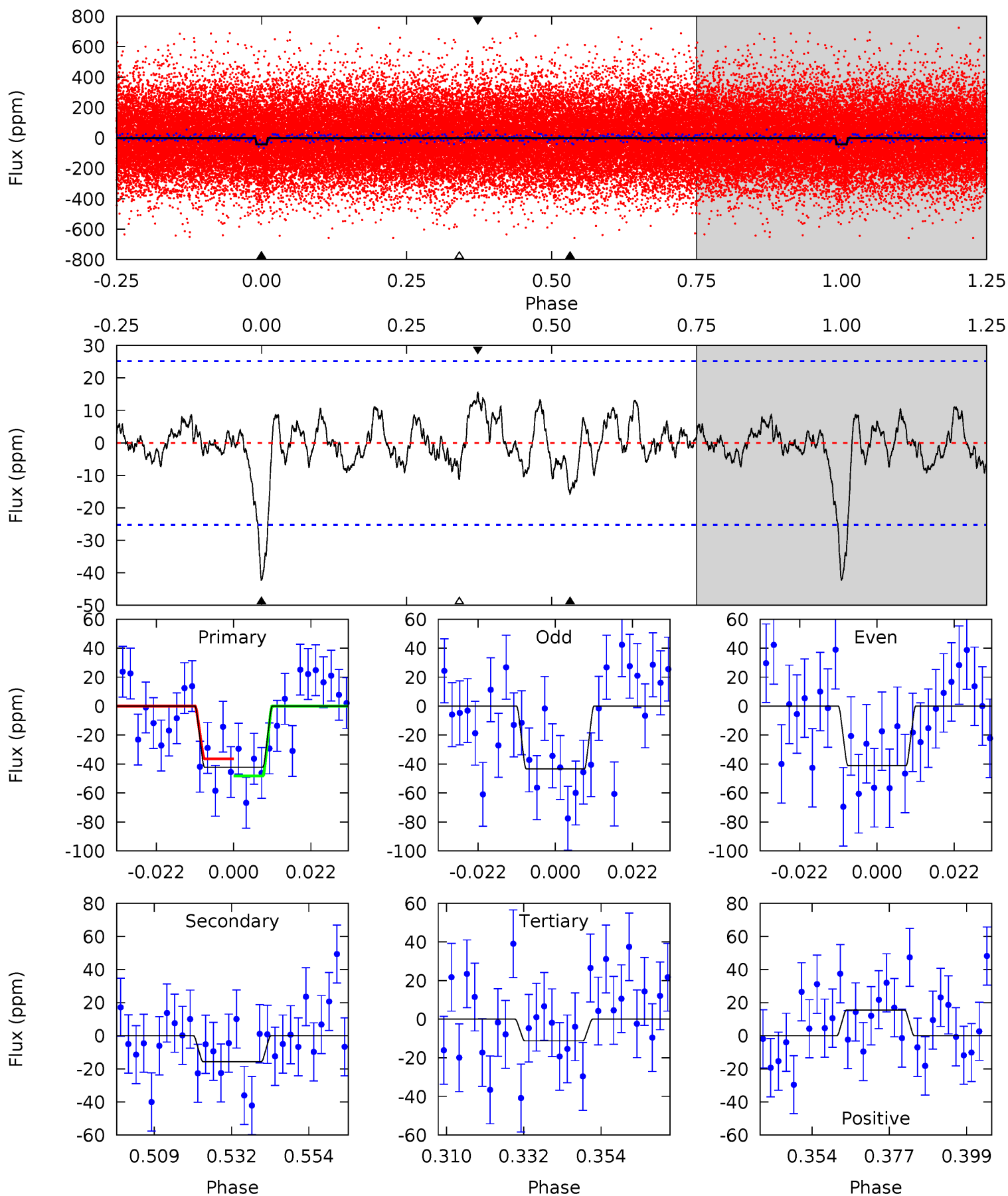
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
8.56	2.57	2.53	3.22	4.86	2.26	1.14	6.02	5.34	0.04	-0.65	0.25	0.94	0.27	1.06



Alt Model-Shift Uniqueness Test

005683219-01, P = 9.460950 Days, E = 129.324848 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
8.15	3.03	2.17	3.00	4.87	2.29	1.03	5.98	5.15	0.86	0.03	0.22	0.84	0.27	1.15



Stellar Parameters For KIC 005683219

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	5485^{+163}_{-147}	$4.500^{+0.117}_{-0.130}$	$-0.560^{+0.350}_{-0.300}$	$0.788^{+0.138}_{-0.101}$	$0.716^{+0.111}_{-0.037}$	$2.063^{+1.046}_{-0.745}$
	+3%/-3%	+3%/-3%	+62%/-54%	+18%/-13%	+16%/-5%	+51%/-36%
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 005683219-01 / KOI 8257.01

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-13 ± 5	$0.67^{+0.48}_{-0.39}$	1077^{+57}_{-57}	3987^{+1656}_{-681}	93^{+459}_{-64}
Alt.	-16 ± 5	$0.65^{+0.42}_{-0.37}$	1079^{+59}_{-57}	4227^{+1662}_{-709}	126^{+527}_{-83}

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 $A_{obs} \gg 1.0$

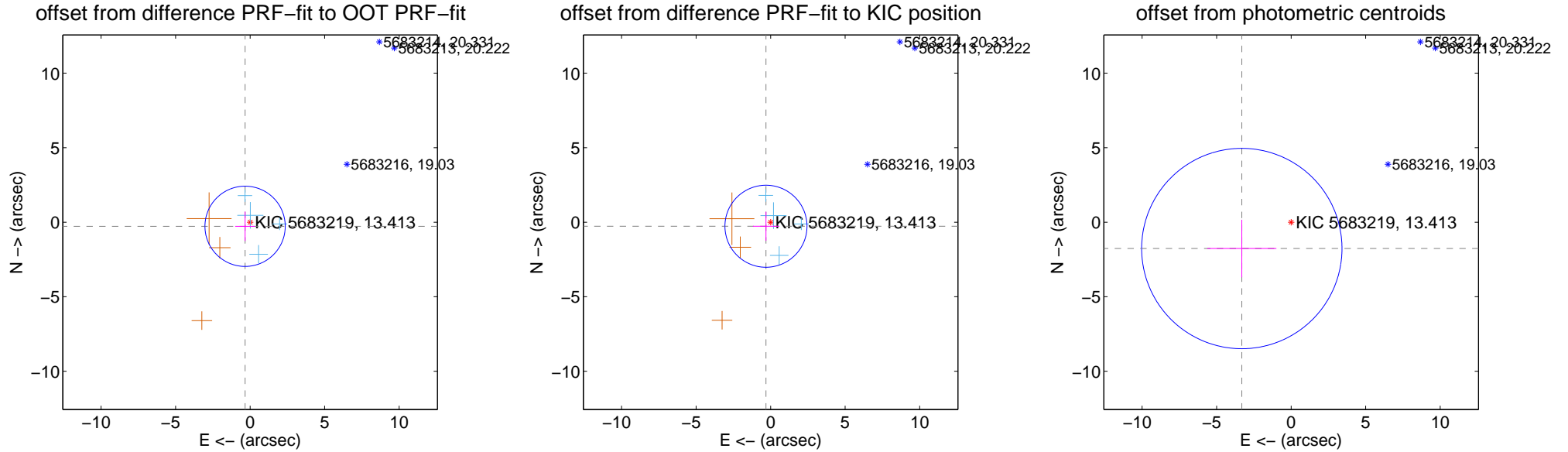
DV Centroid Data

Supplemental centroid analysis for 005683219-01. Kepler magnitude: 13.41. Transit SNR 7.06

There are 4 quarters with good PRF difference image offsets

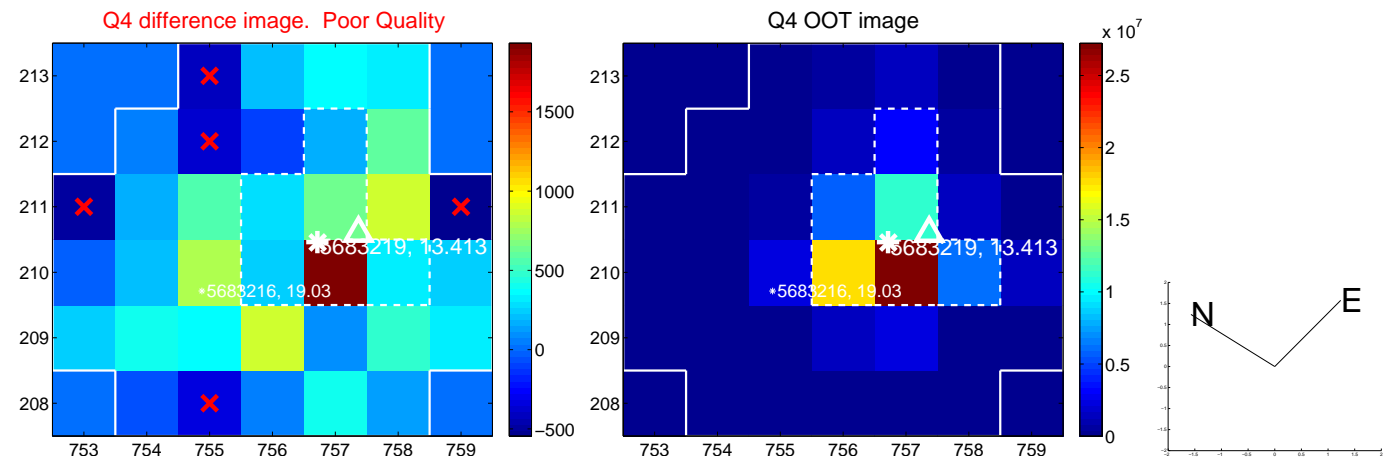
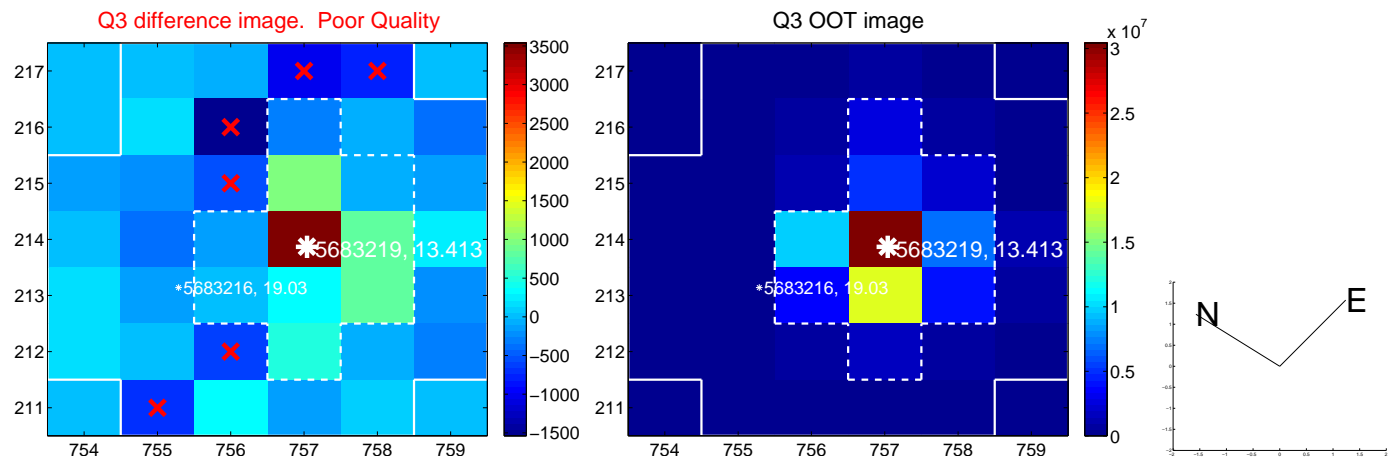
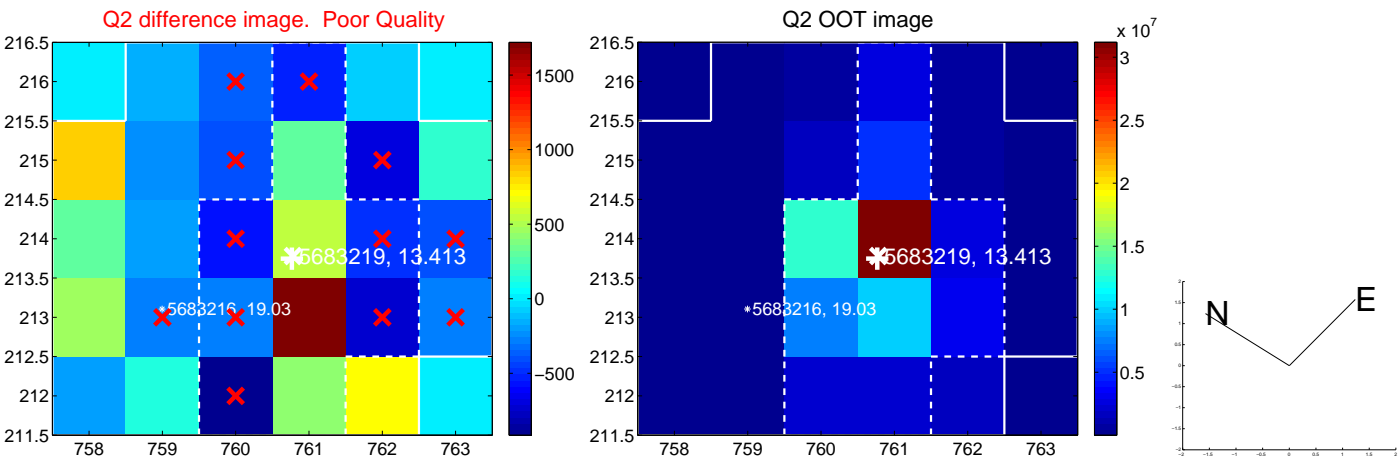
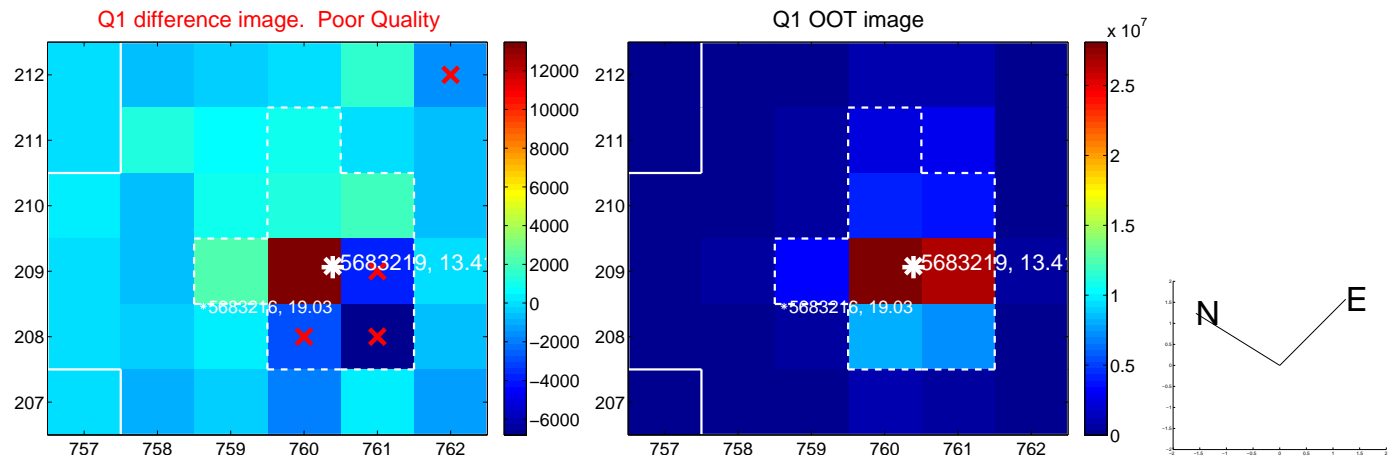
The direct PRF centroid is offset from the target star catalog position by about 0.08 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.435 ± 0.897	0.48	0.337 ± 0.666	-0.275 ± 0.986
PRF-fit source offset from KIC position	0.413 ± 0.917	0.45	0.312 ± 0.875	-0.270 ± 0.970
photometric centroid source offset	3.75 ± 2.24	1.67	3.31 ± 2.32	-1.77 ± 1.93

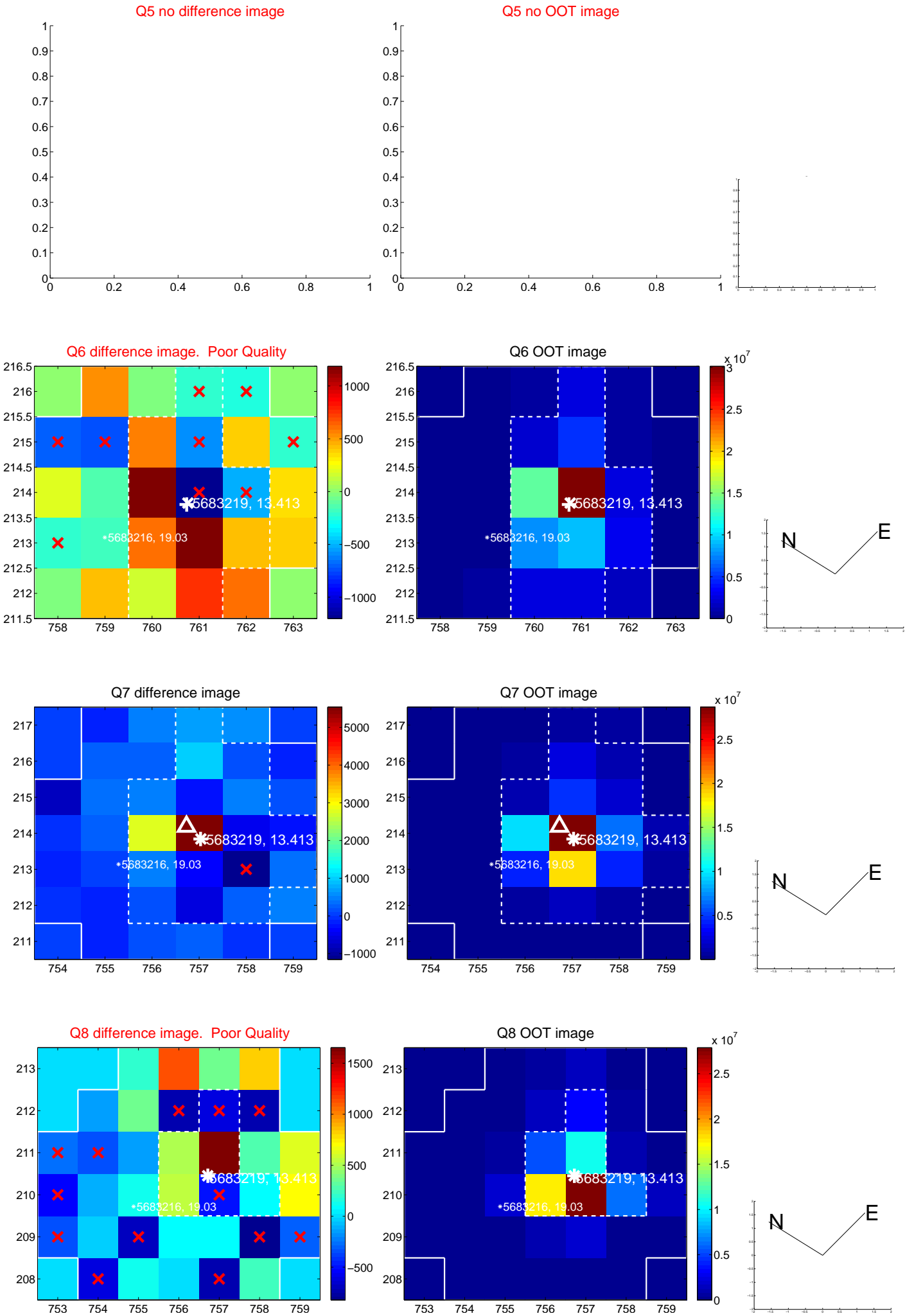


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses:** good quarterly centroid offsets; **Vermillion crosses:** bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

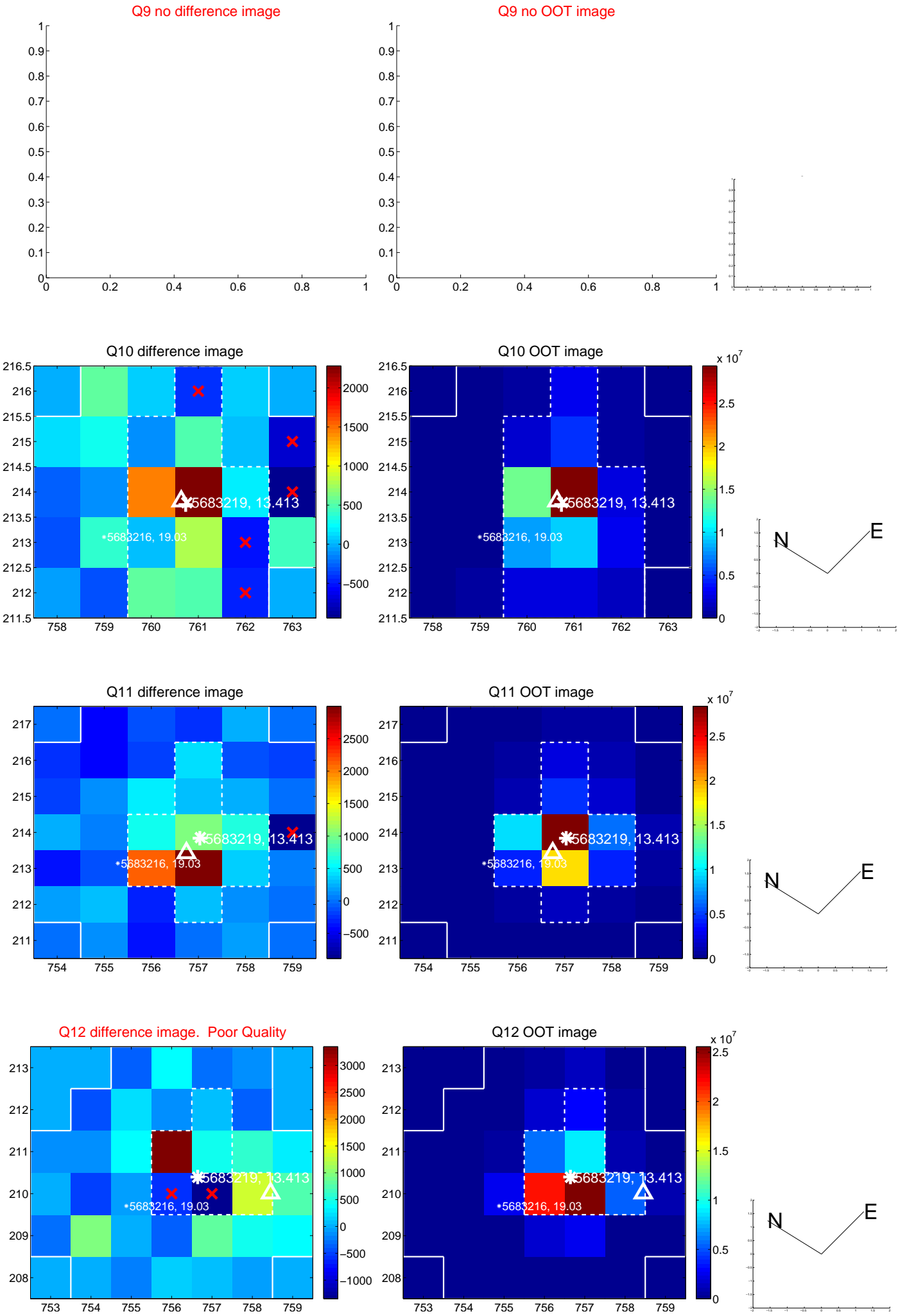
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



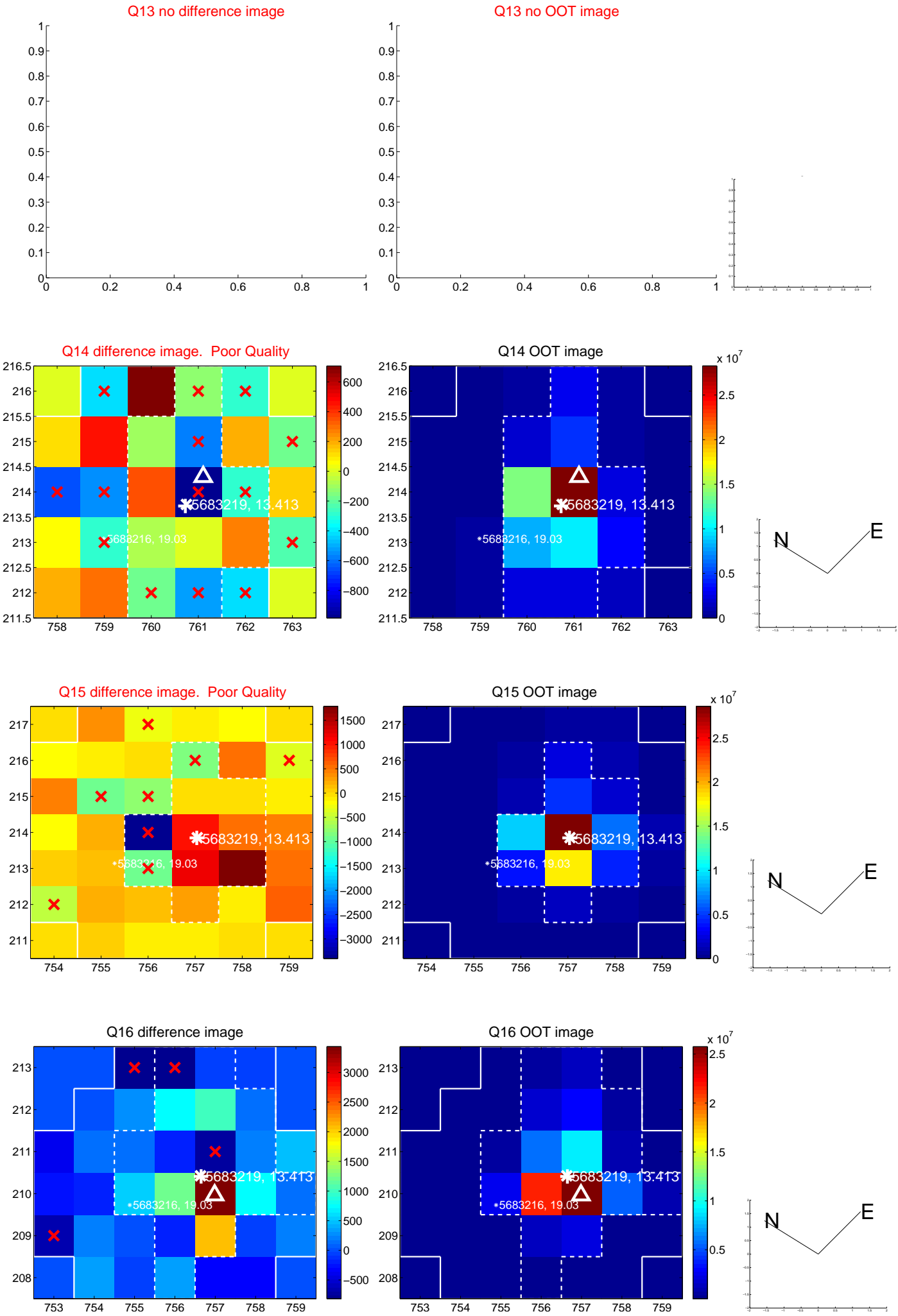
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



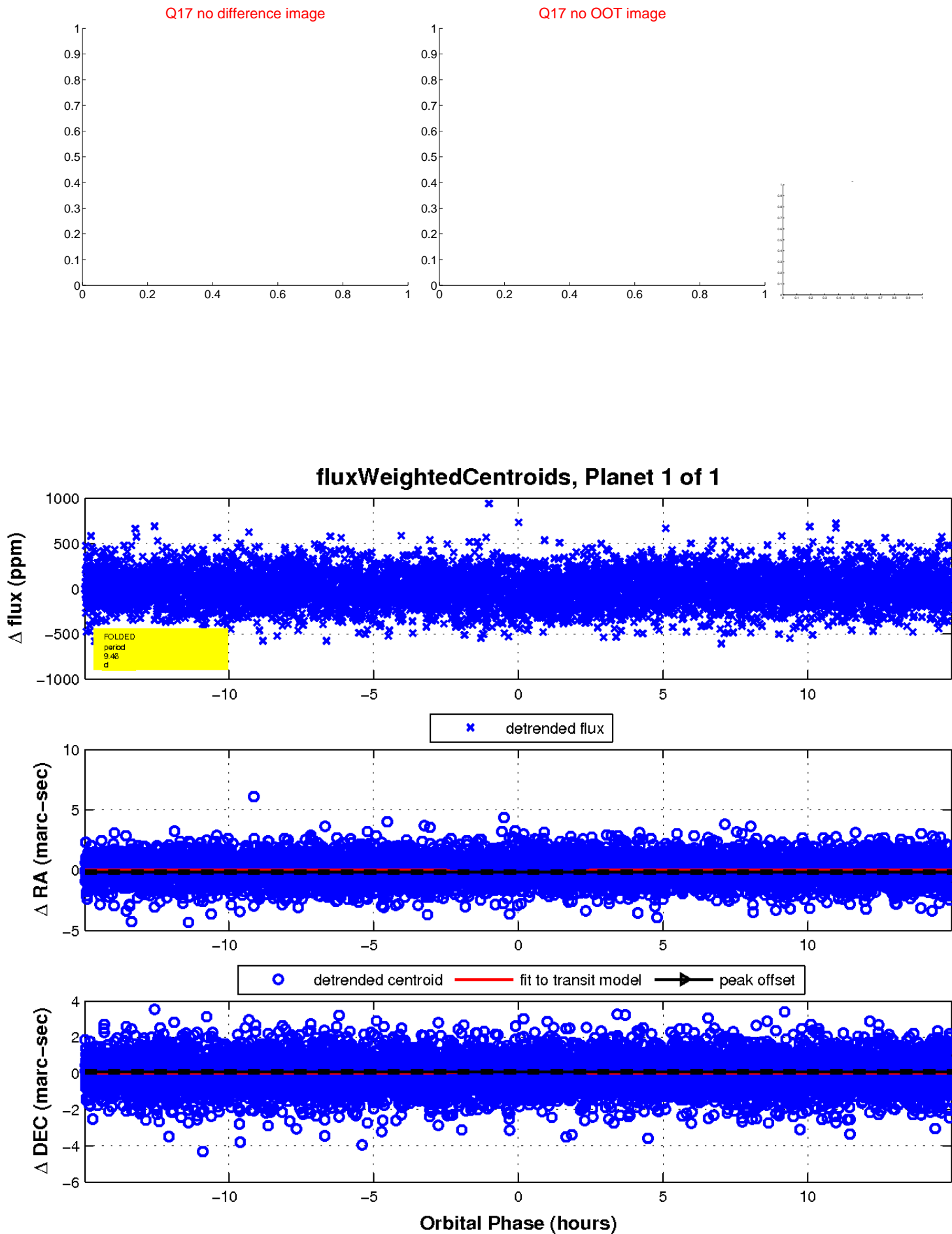
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white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination

