

KIC 008608260

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})
008608260-01	OBS	No	0.804626	131.791293	53.2	5.365	11.6	6.7	2.43	8105	1.79	52627.09
008608260-02	OBS	No	54.596464	141.648211	1297.1	1.973	8.6	8.6	2.43	8105	9.40	190.16

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
008608260-01	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—CENT_SATURATED
008608260-02	OBS	FP	0.00	1	0	1	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_SATURATED—HALO_GHOST

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

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

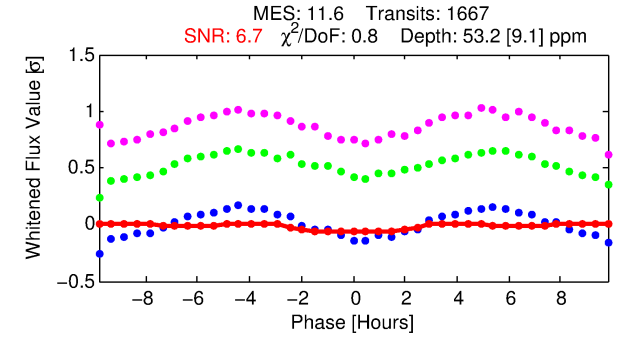
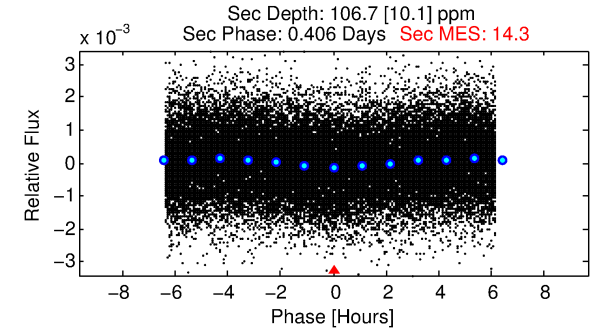
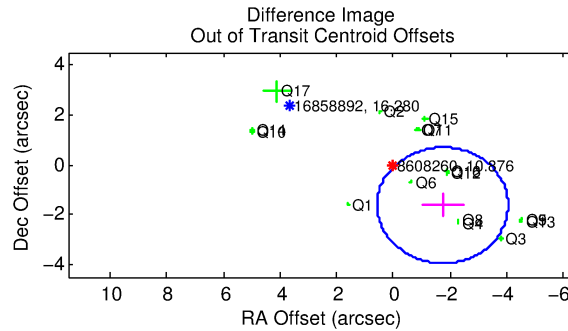
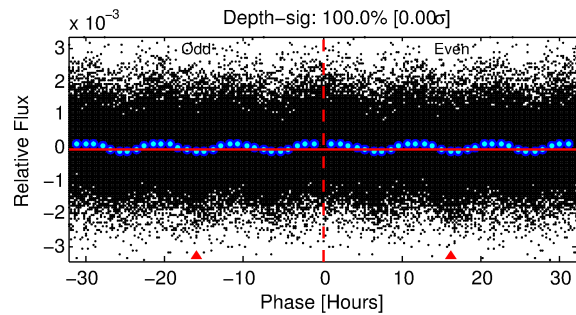
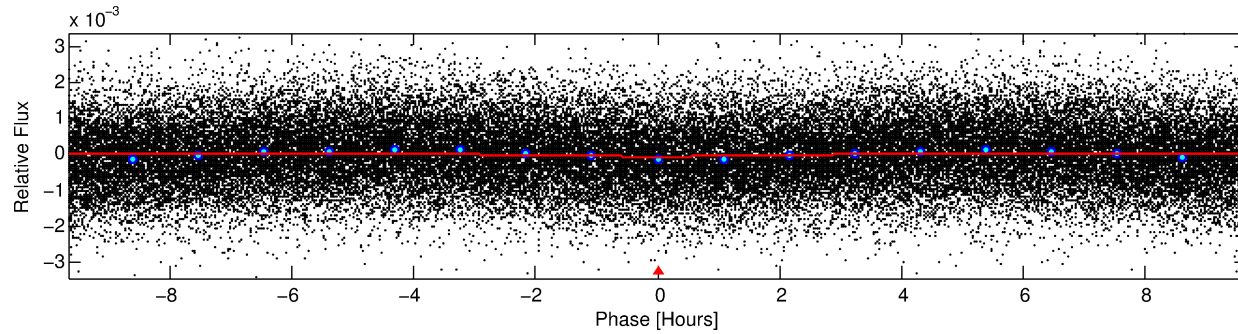
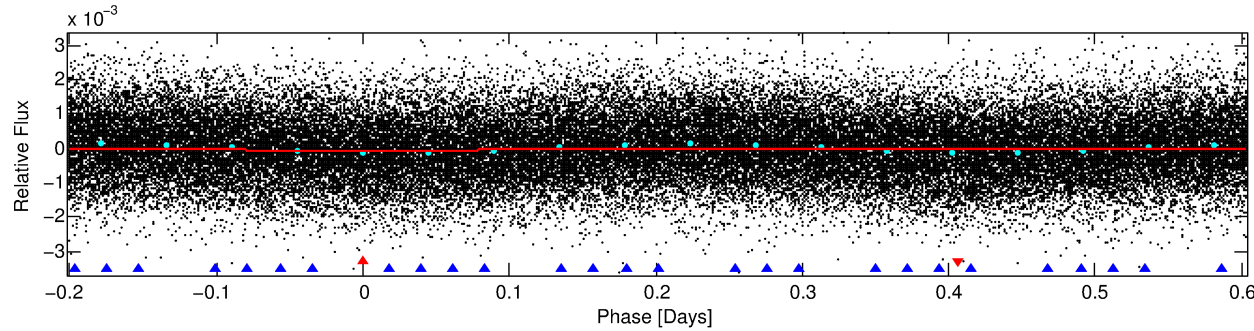
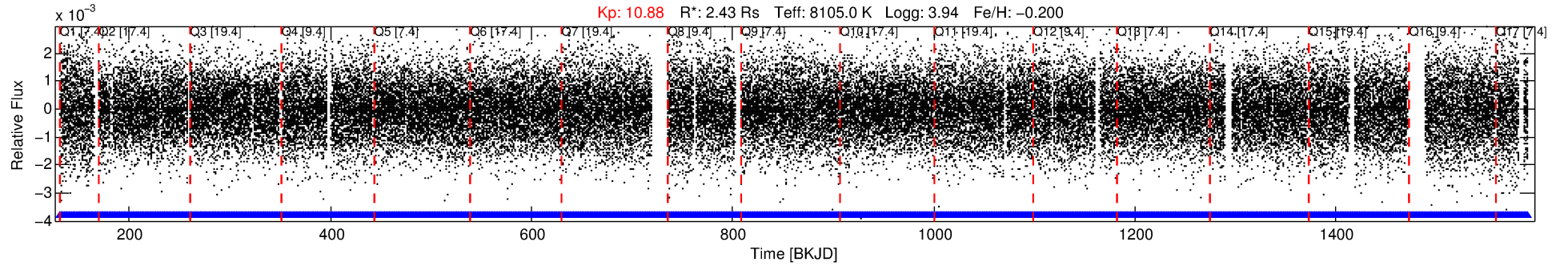
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 008608260-01

No Significant Match Found

DV One-Page Summary

KIC: 8608260 Candidate: 1 of 2 Period: 0.805 d



DV Fit Results:

Period = 0.80463 [0.00002] d
Epoch = 131.7913 [0.0084] BKJD
Rp/R* = 0.0067 [0.0136]
a/R* = 1.31 [6.16]
b = 0.10 [112.61]
Seff = 52627.09 [27187.82]
Teq = 3862 [499] K
Rp = 1.79 [3.65] Re
a = 0.0209 [0.0064] AU
Ag = 7.95 [32.27] [0.22σ]
Teffp = 10028 [10105] K [0.61σ]

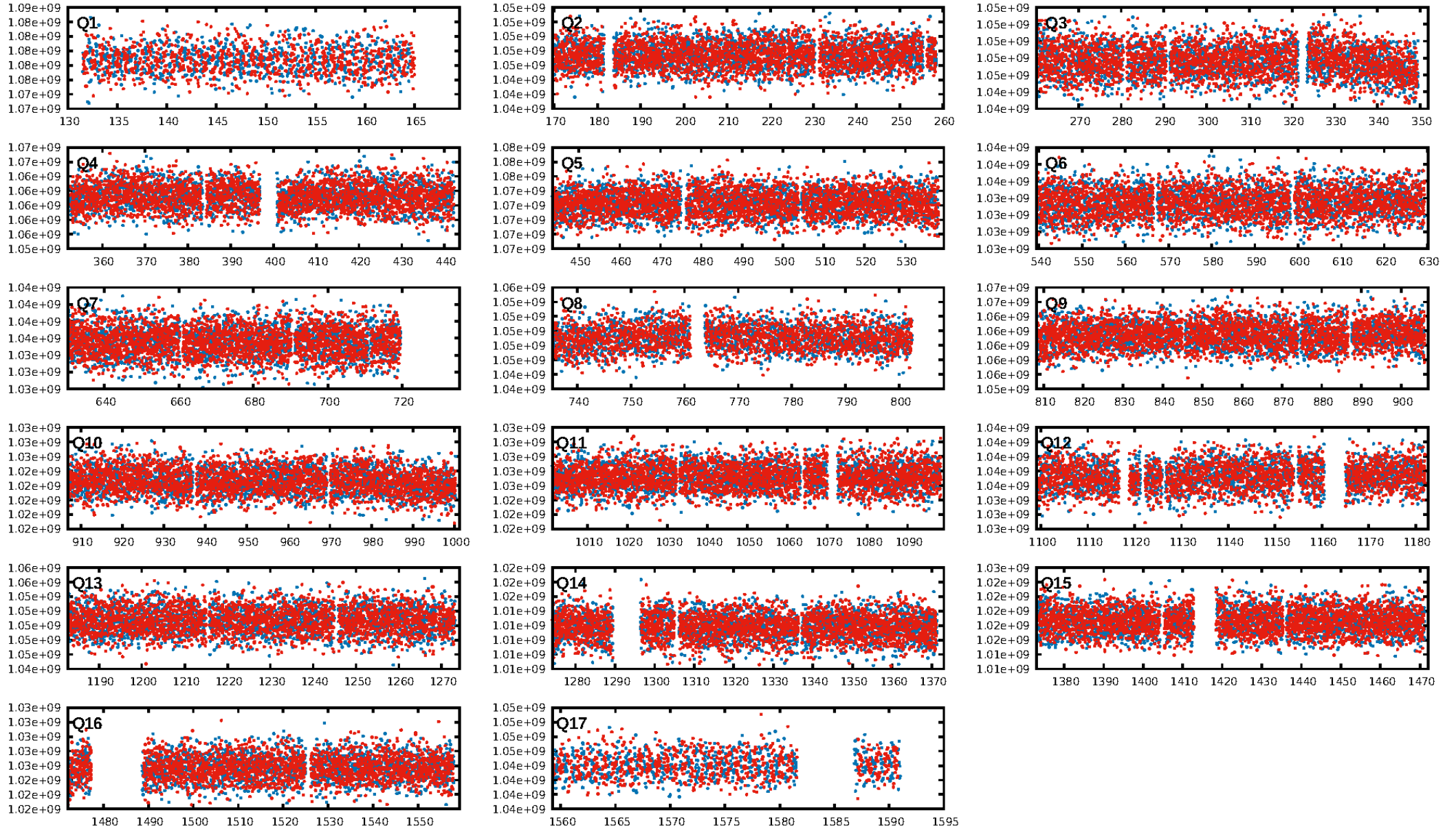
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: 100.0% [225.84σ]
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 2.40e-17
RollingBand-fgt: 1.00 [1592/1592]
GhostDiagnostic-chr: 0.9902
Centroid-sig: N/A
Centroid-so: 1.015 arcsec [4.14σ]
OotOffset-rm: 2.389 arcsec [3.09σ]
KicOffset-rm: 2.834 arcsec [3.61σ]
OotOffset-st: 4/4/4/5 [17]
KicOffset-st: 4/4/4/5 [17]
DiffImageQuality-fgm: 0.47 [8/17]
DiffImageOverlap-fno: 1.00 [17/17]

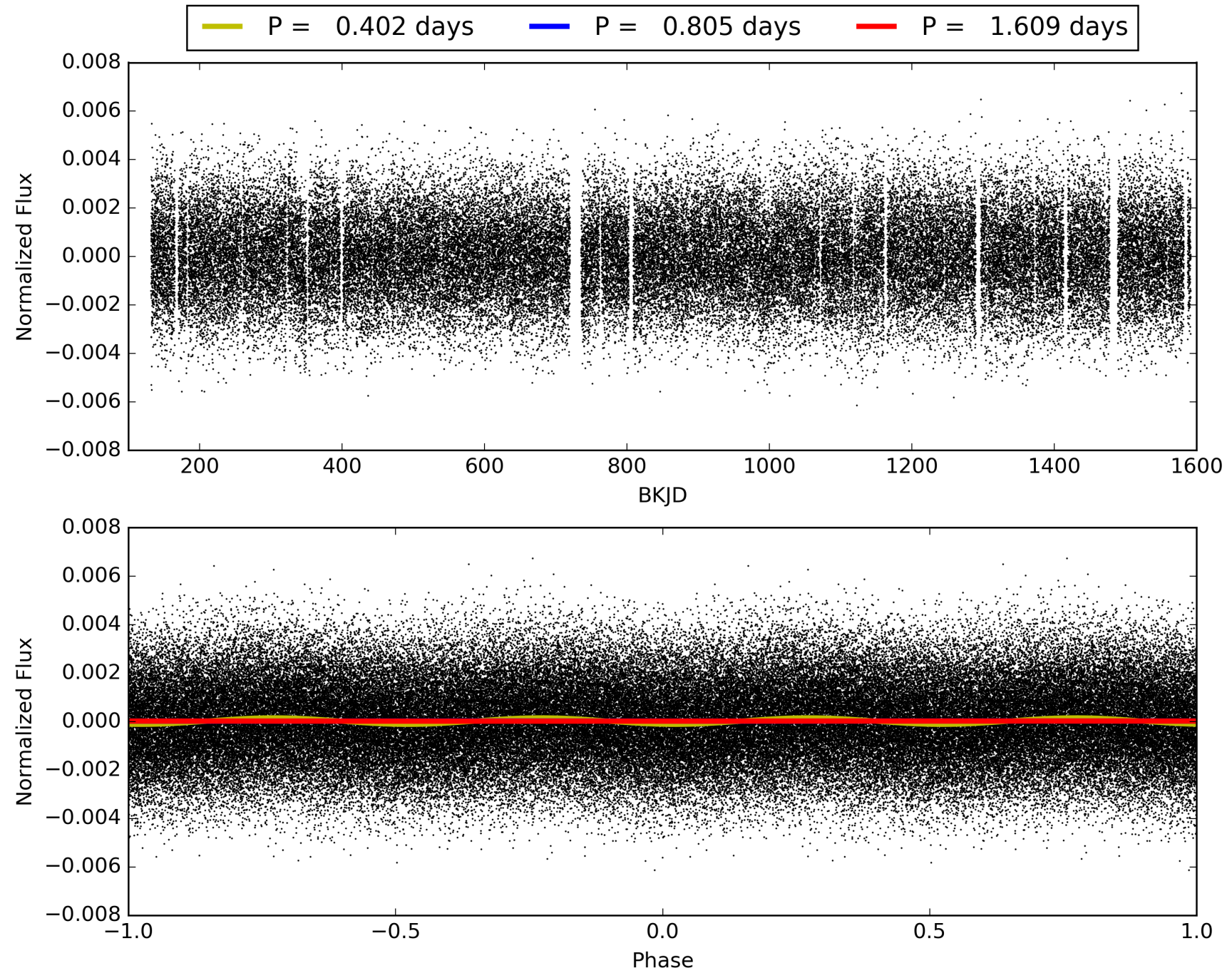
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 01-Feb-2016 07:12:45 Z

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

TCE 008608260-01, PDC Light Curves

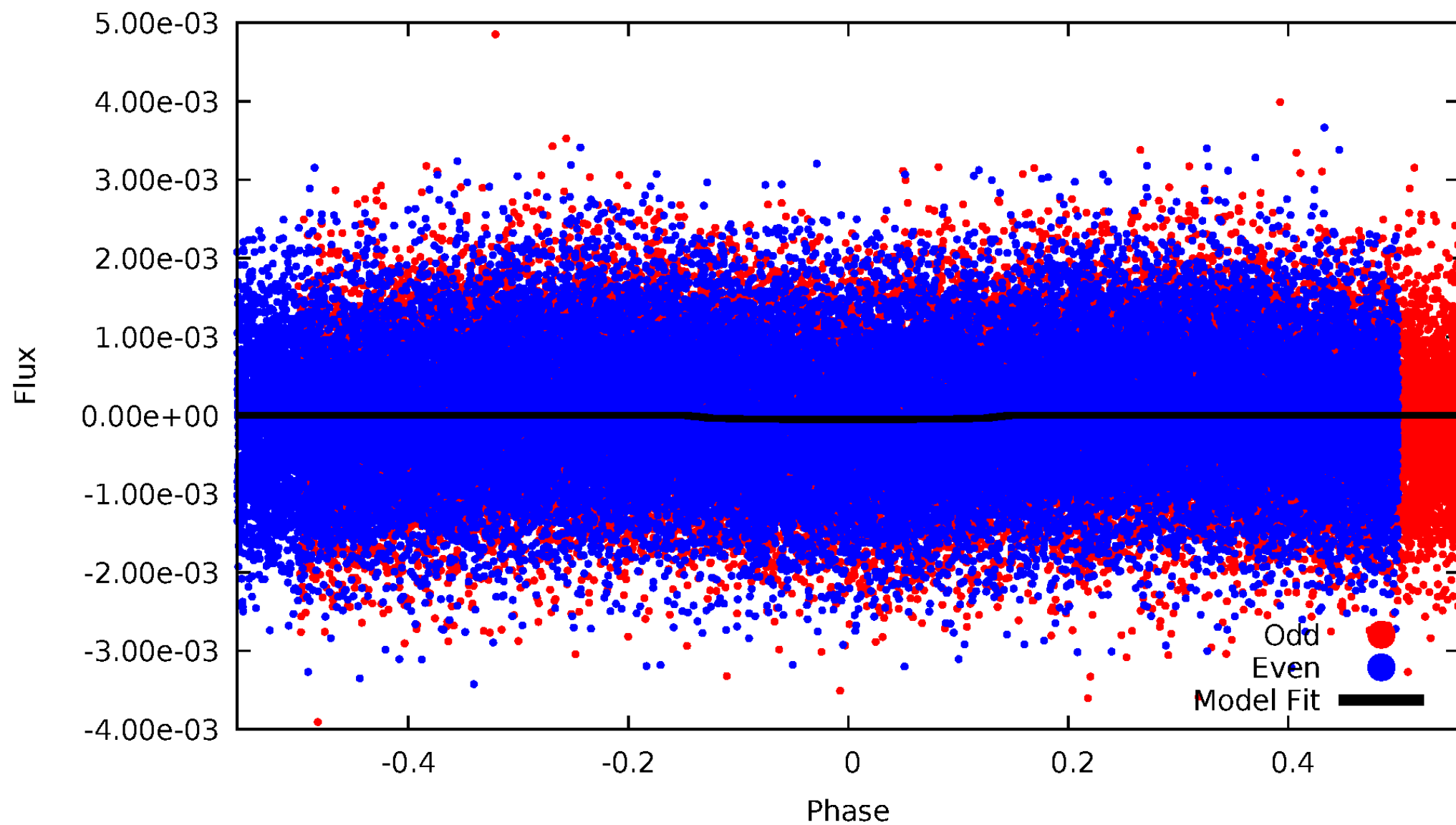


TCE 008608260-01



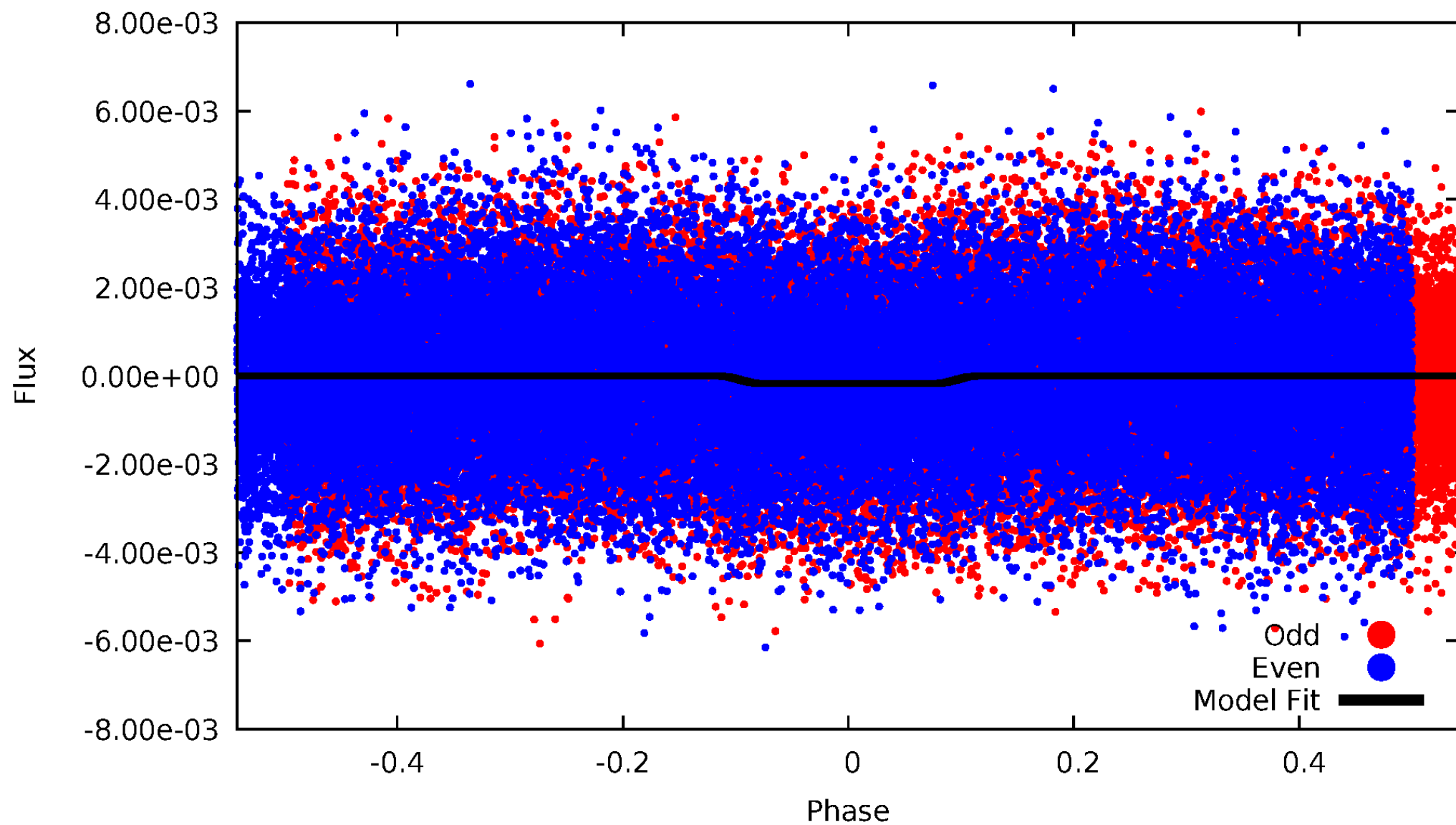
DV Odd/Even

TCE 008608260-01

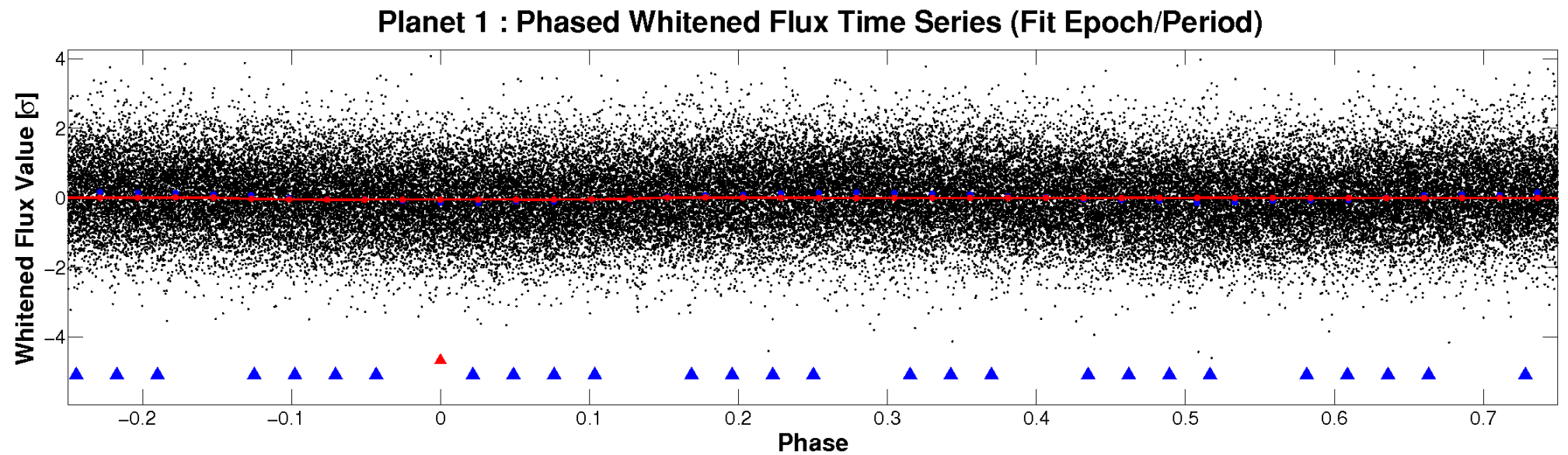
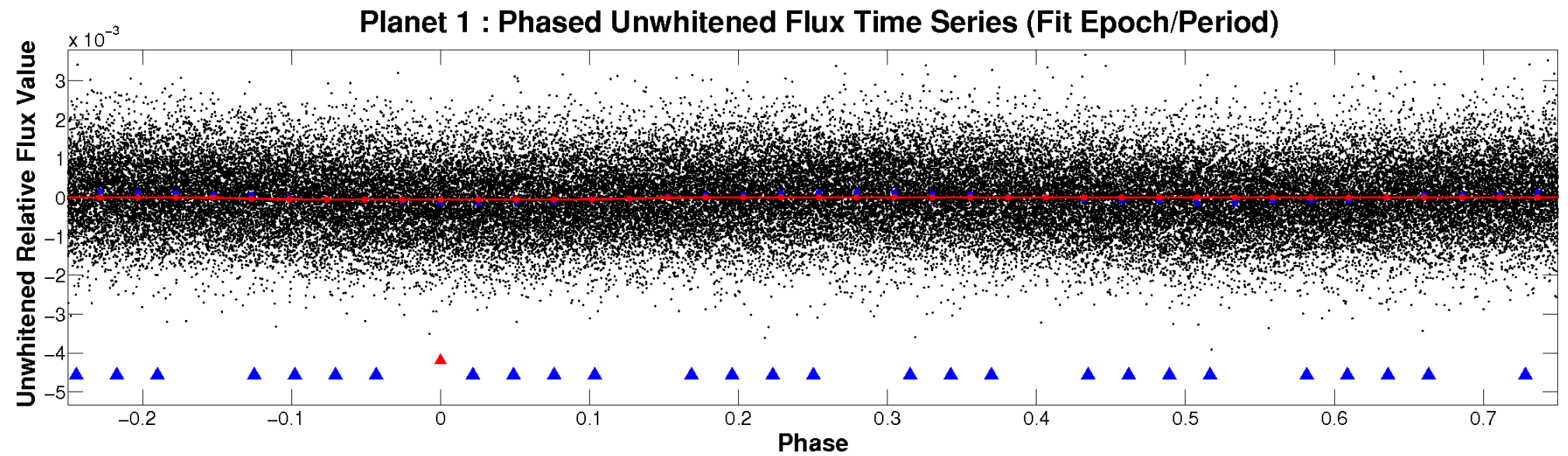


ALT Odd/Even

TCE 008608260-01

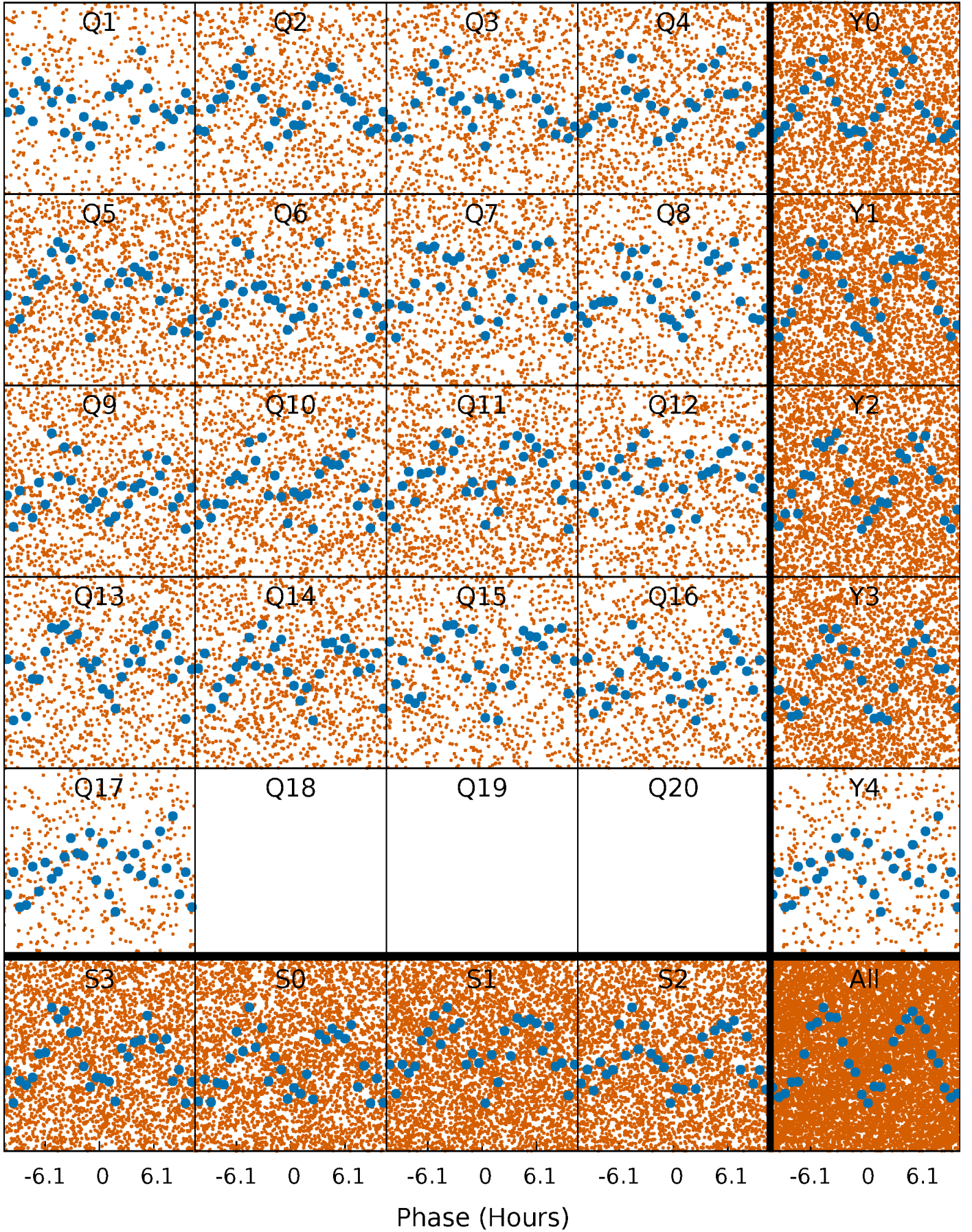


Non-Whitened Vs. Whitened Light Curve



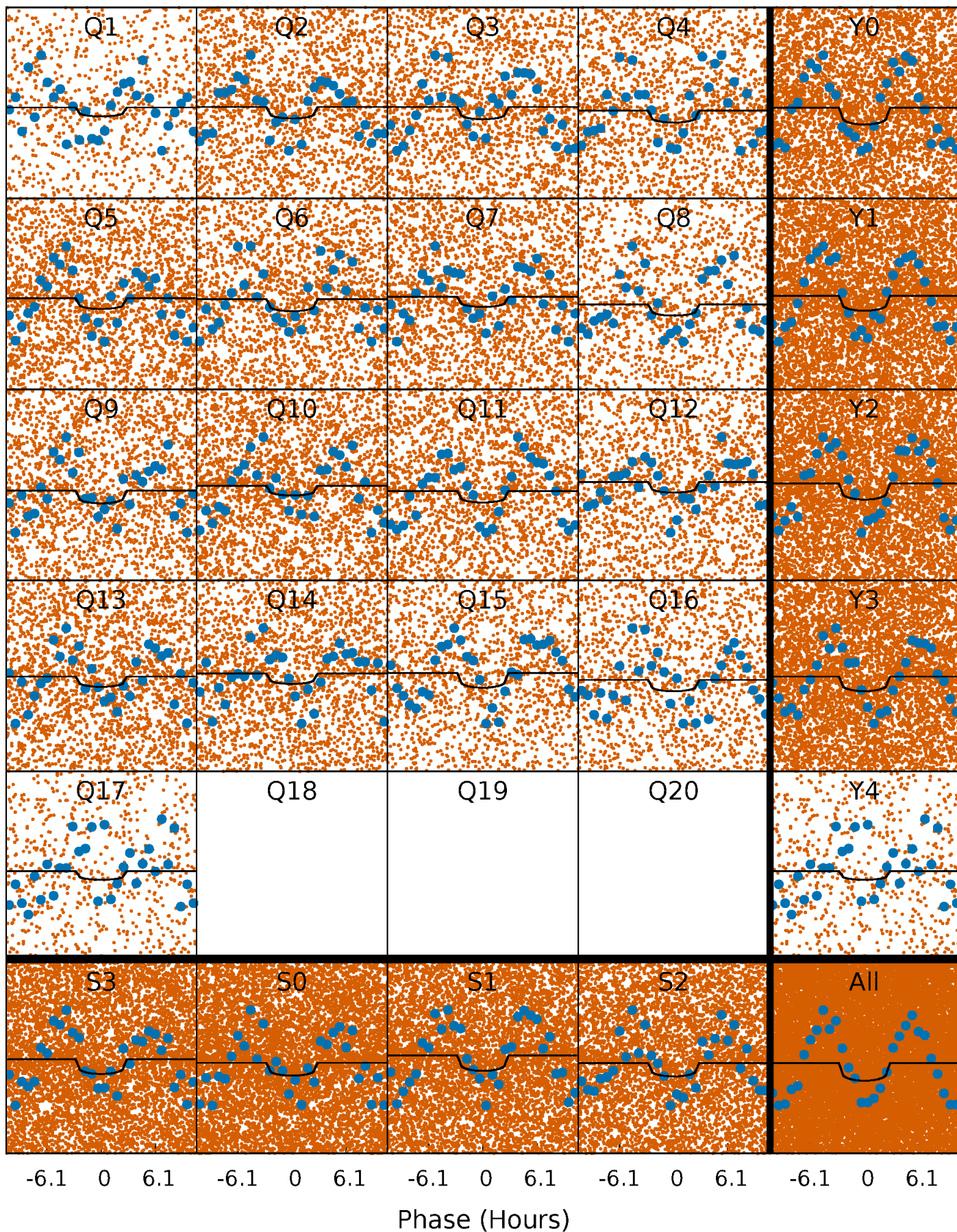
PDC Quarter-Phased Transit Curves

TCE 008608260-01 P= 0.804626 Days $T_0=131.791293$ (BKJD)



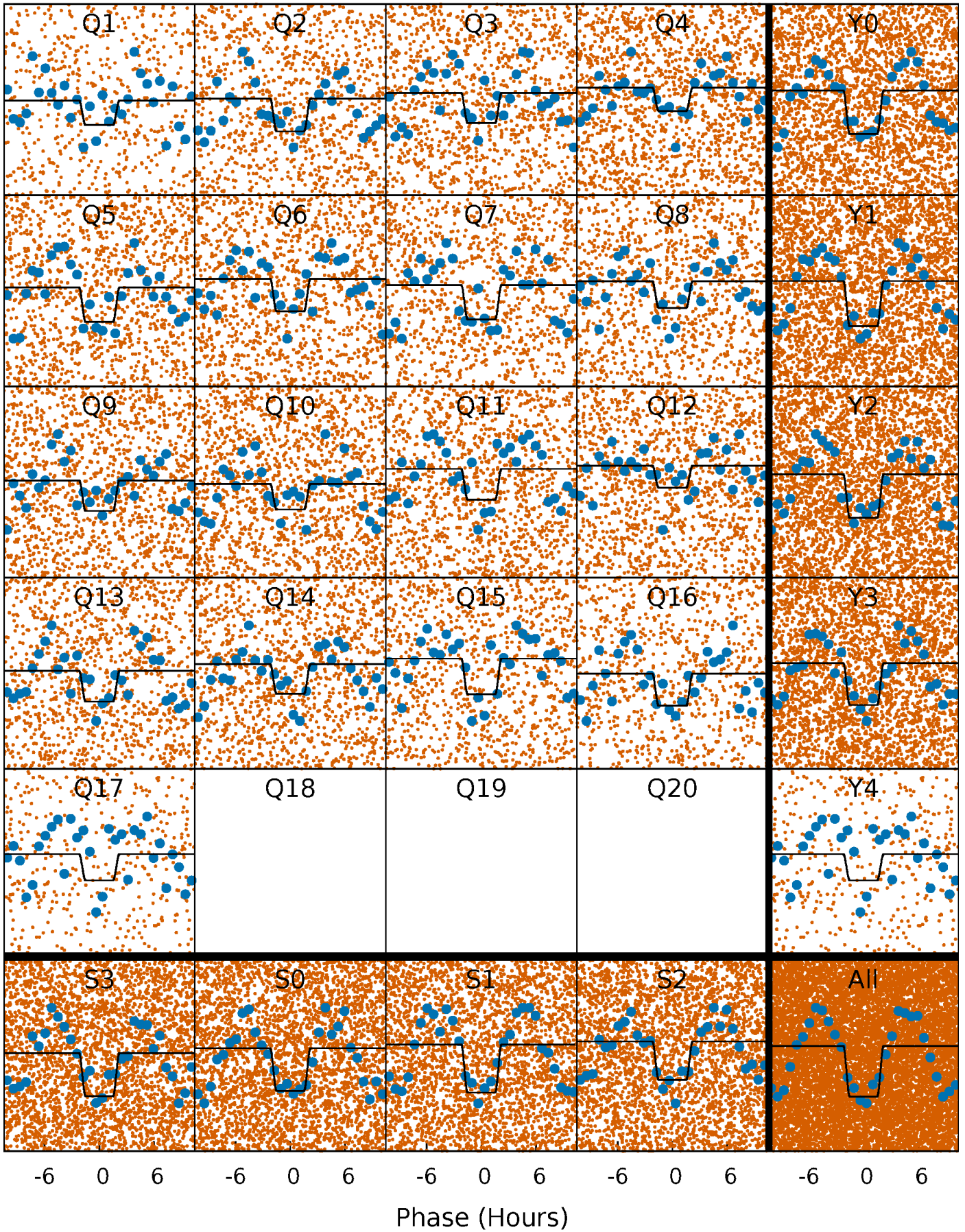
DV Quarter-Phased Transit Curves

TCE 008608260-01 P= 0.804626 Days $T_0=131.791293$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

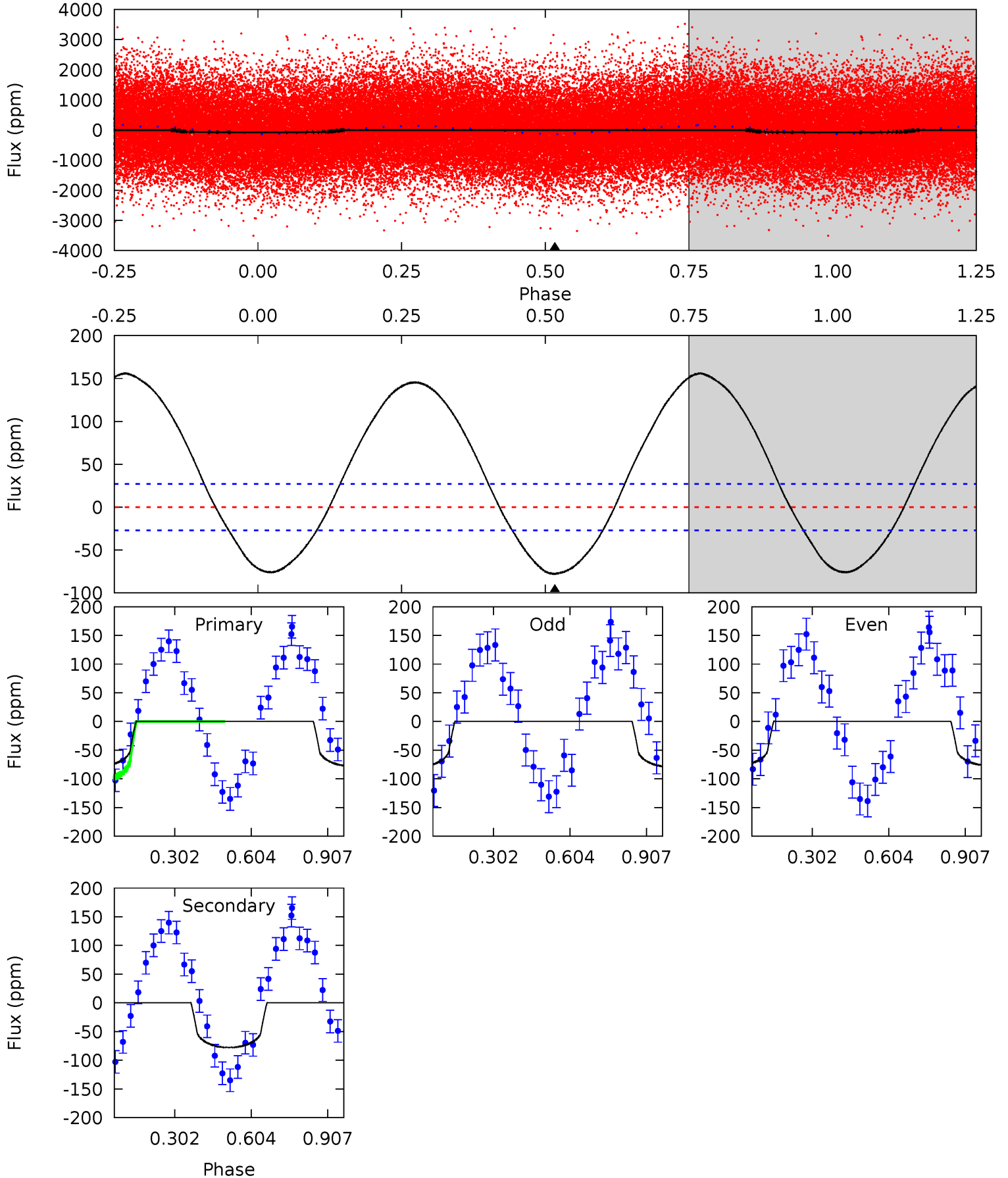
TCE 008608260-01 P= 0.804686 Days $T_0=131.757461$ (BKJD)



DV Model-Shift Uniqueness Test

008608260-01, P = 0.804626 Days, E = 130.986667 Days

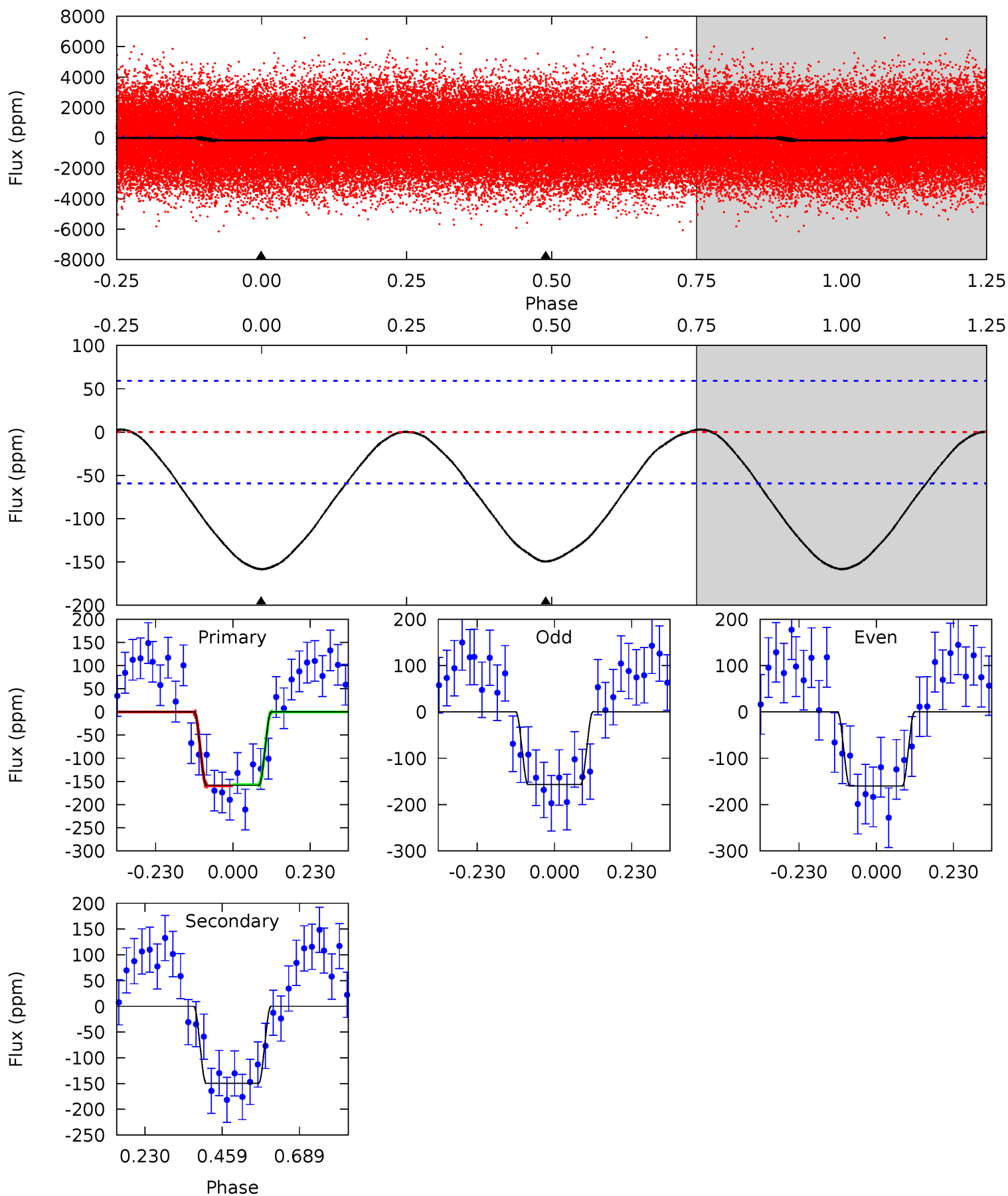
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
12.4	12.4	0	0	4.33	1.03	10.6	12.4	12.4	12.4	12.4	0.18	0.96	0.67	4.07



Alt Model-Shift Uniqueness Test

008608260-01, P = 0.804686 Days, E = 130.952775 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
11.7	11.1	0	0	4.39	1.20	0.15	11.7	11.7	11.1	11.1	0.11	0.99	0.02	0.08



Stellar Parameters For KIC 008608260

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	8105^{+226}_{-340}	$3.937^{+0.285}_{-0.114}$	$-0.200^{+0.200}_{-0.350}$	$2.433^{+0.367}_{-0.794}$	$1.868^{+0.096}_{-0.384}$	$0.183^{+0.318}_{-0.064}$
	+3%/-4%	+7%/-3%	+100%/-175%	+15%/-33%	+5%/-21%	+174%/-35%
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 008608260-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-78 ± 6	$3.06^{+2.96}_{-2.07}$	5266^{+348}_{-493}	6275^{+7597}_{-2189}	$1.936^{+15.861}_{-1.436}$
Alt.	-150 ± 14	$3.88^{+3.31}_{-2.52}$	5295^{+348}_{-436}	6714^{+7439}_{-2104}	$2.300^{+15.663}_{-1.614}$

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

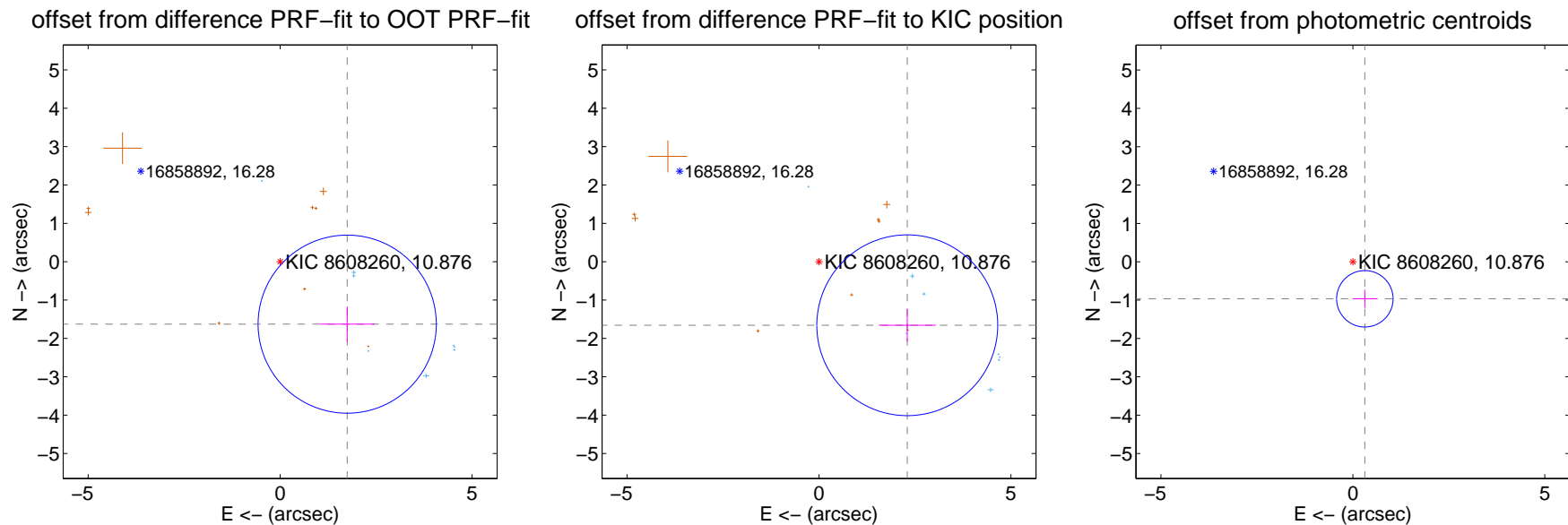
DV Centroid Data

Supplemental centroid analysis for 008608260-01. **Kepler magnitude: 10.88.** Transit SNR 6.74

There are 8 quarters with good PRF difference image offsets

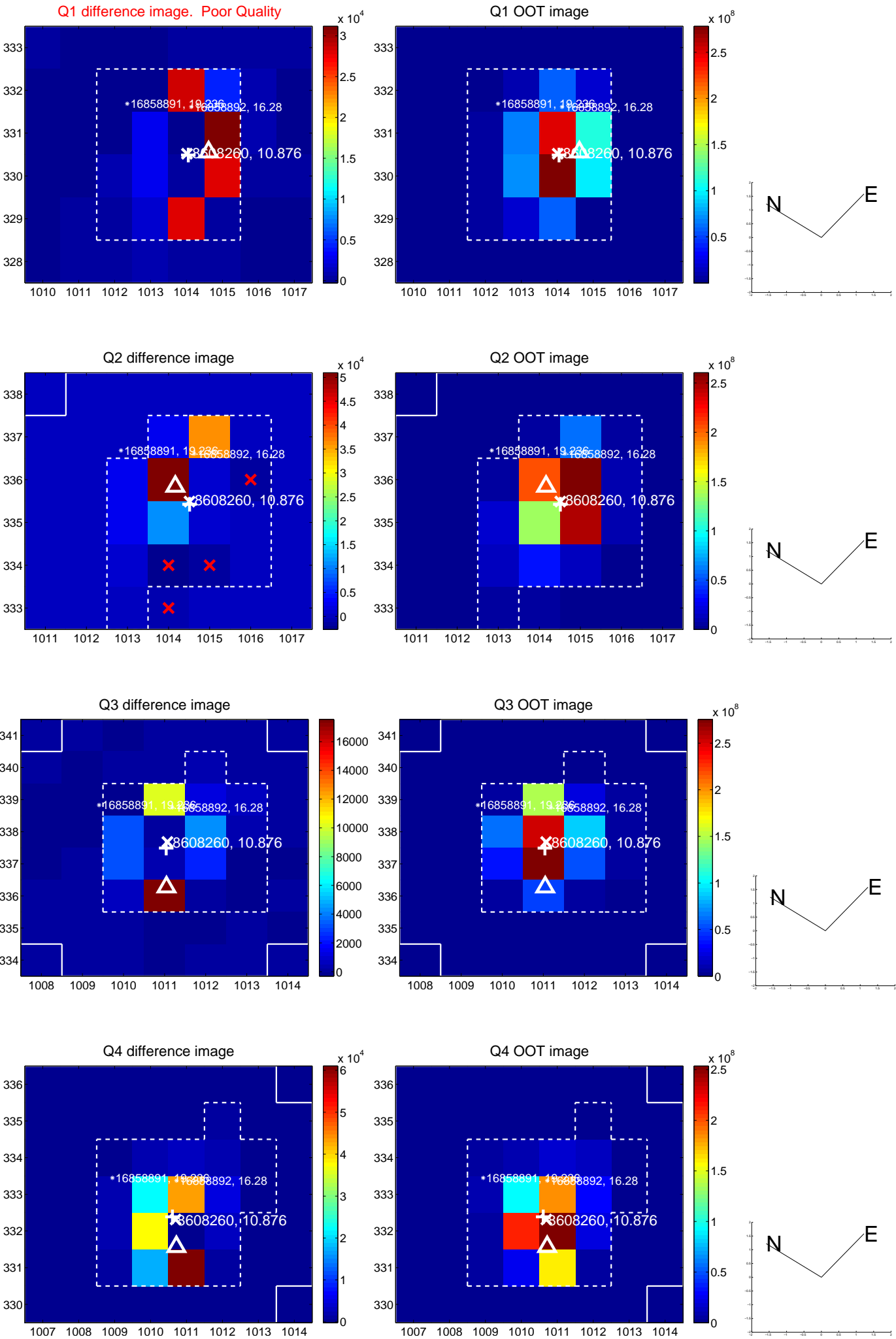
The direct PRF centroid is offset from the target star catalog position by about 0.27 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	2.389 ± 0.774	3.09	-1.748 ± 0.717	-1.628 ± 0.459
PRF-fit source offset from KIC position	2.834 ± 0.786	3.61	-2.300 ± 0.744	-1.657 ± 0.426
photometric centroid source offset	1.01 ± 0.25	4.14	-0.31 ± 0.32	-0.97 ± 0.24

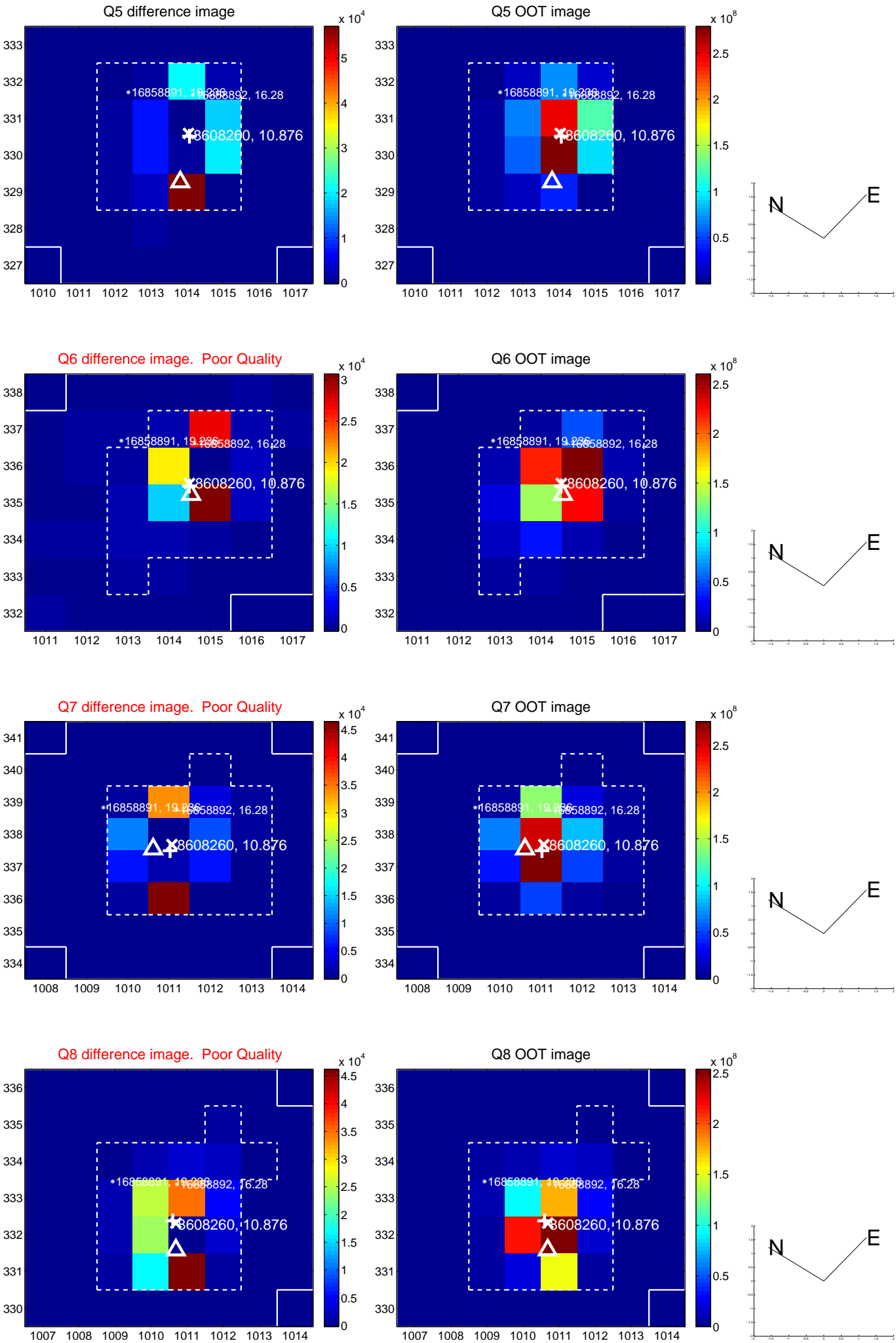


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets;** magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

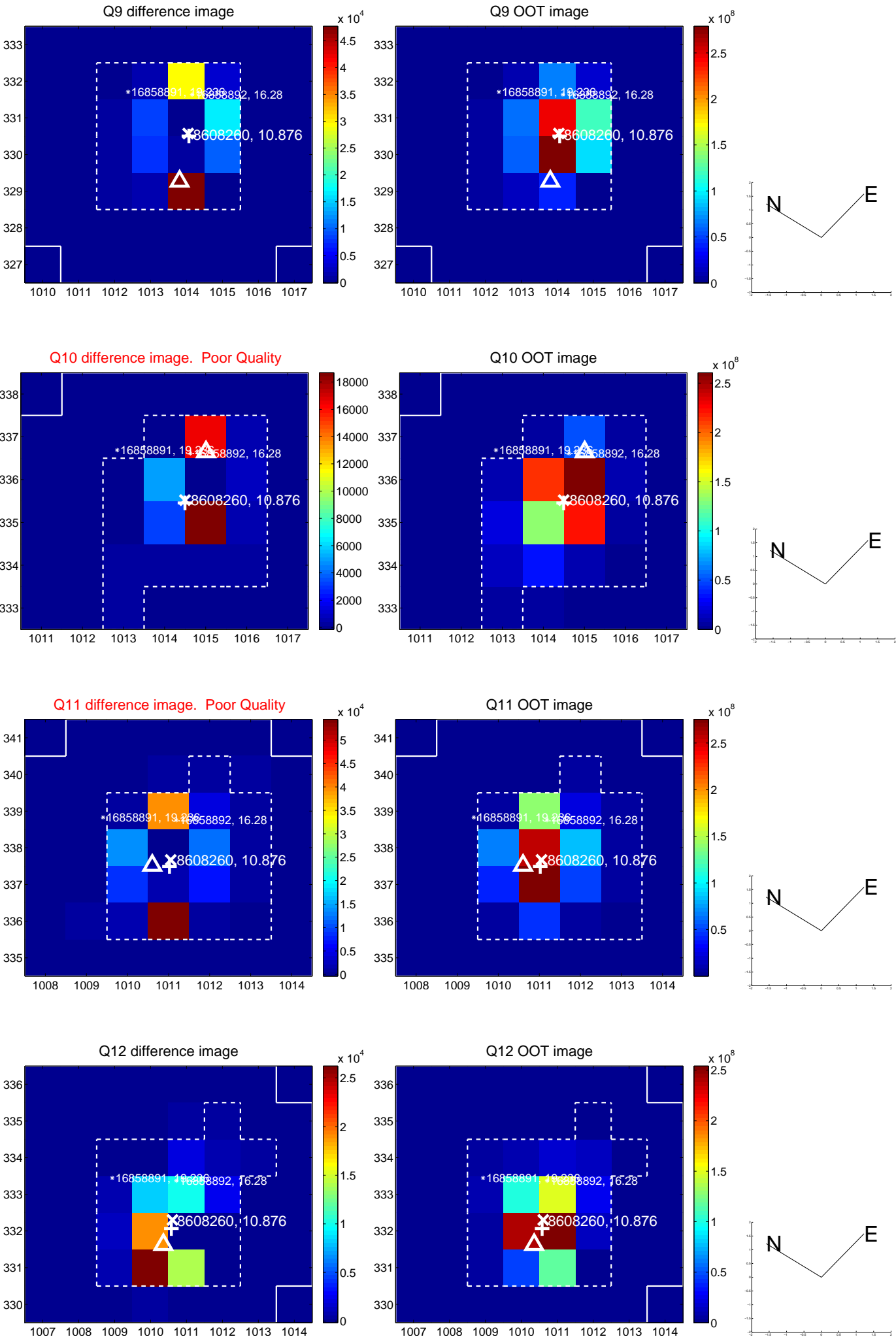
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



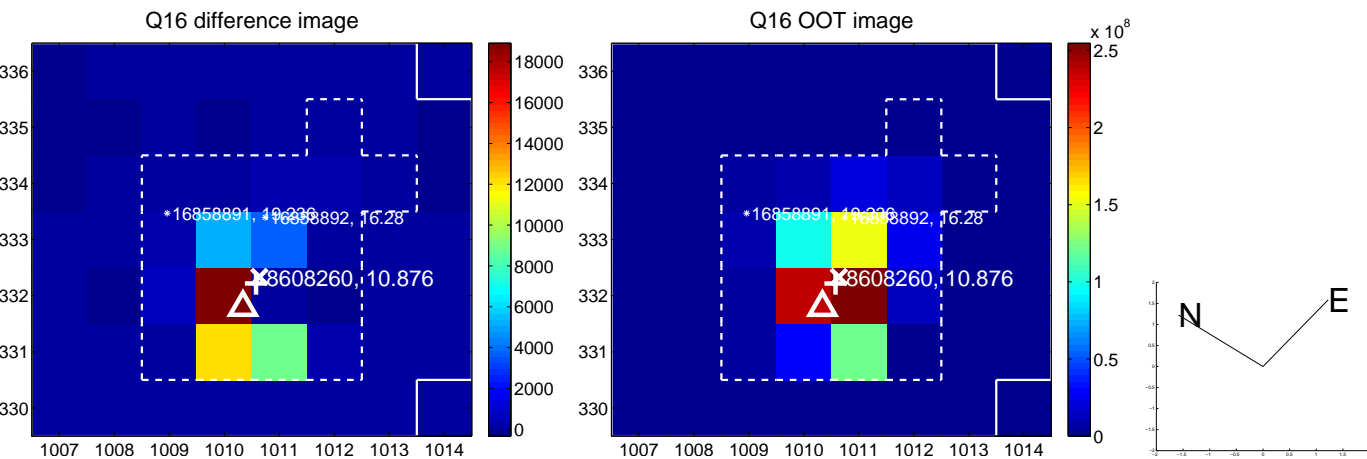
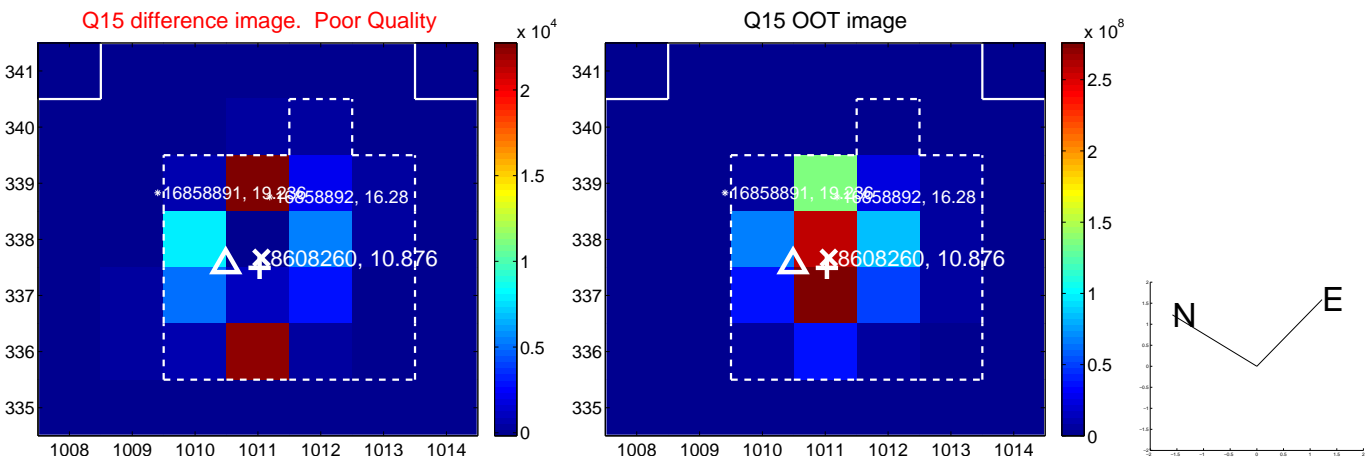
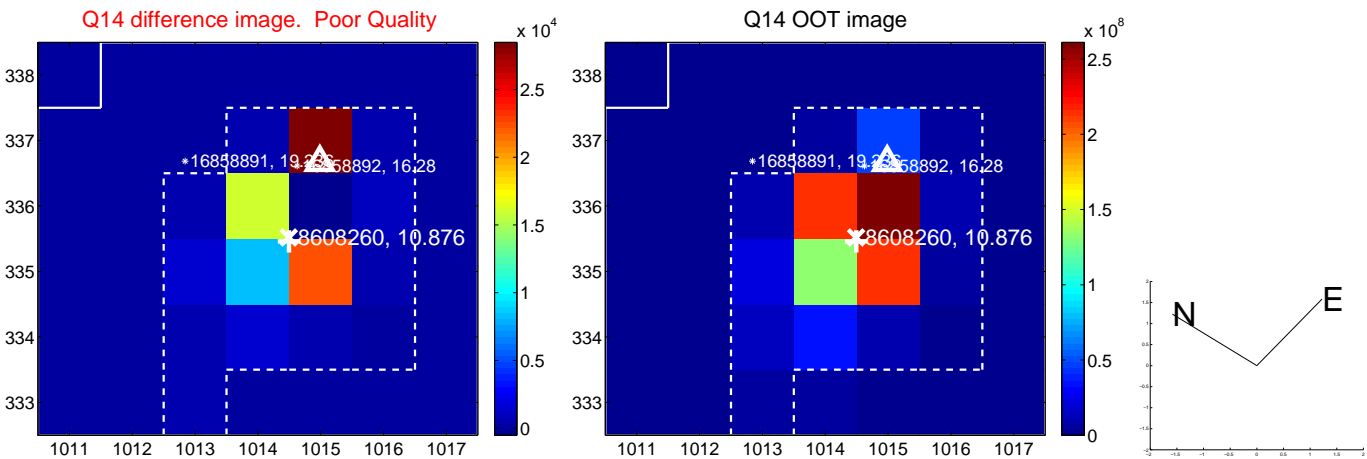
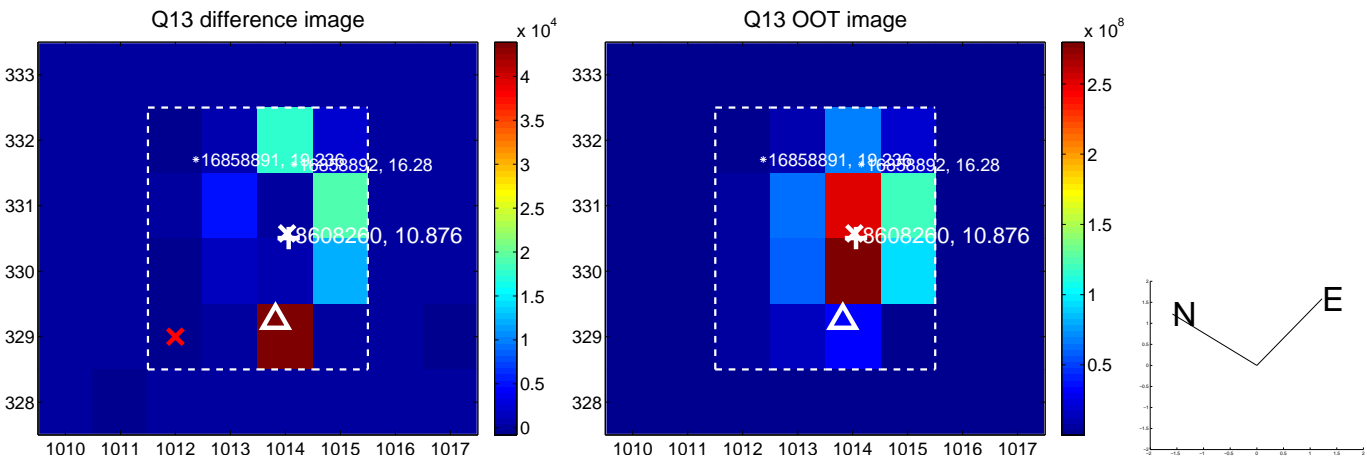
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



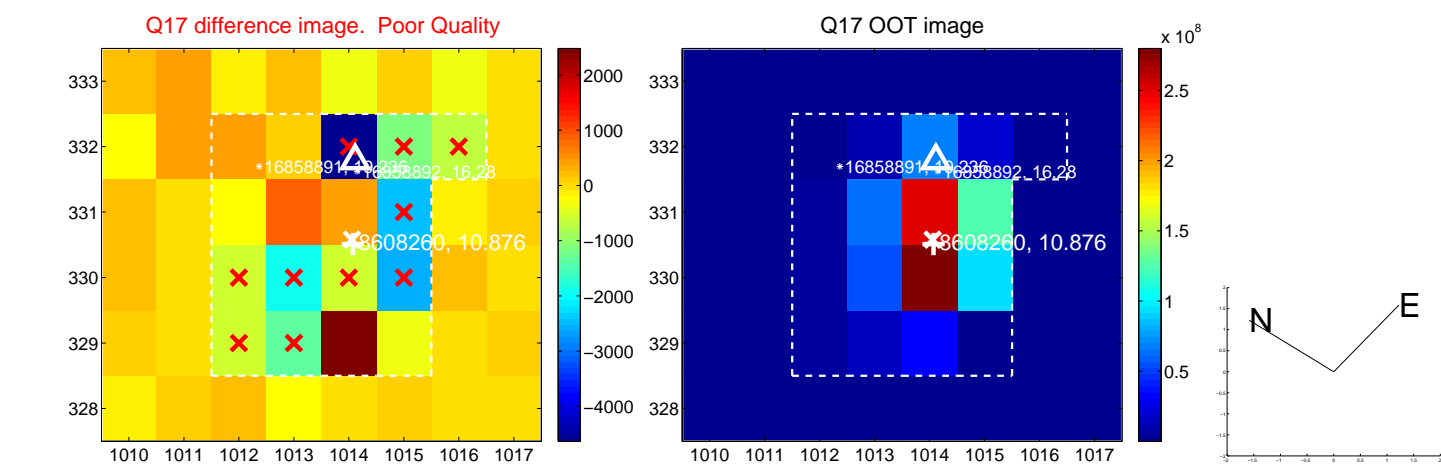
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



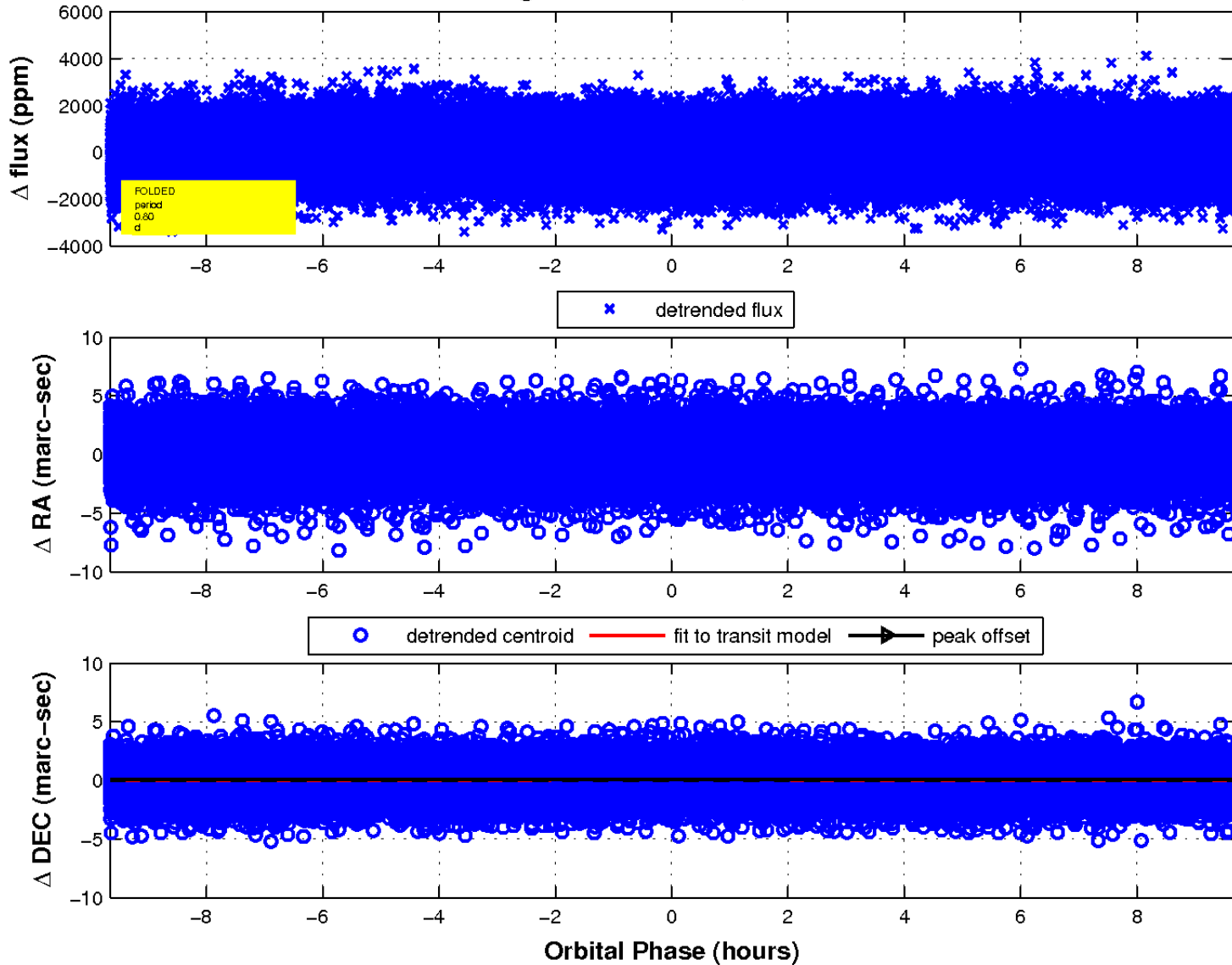
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

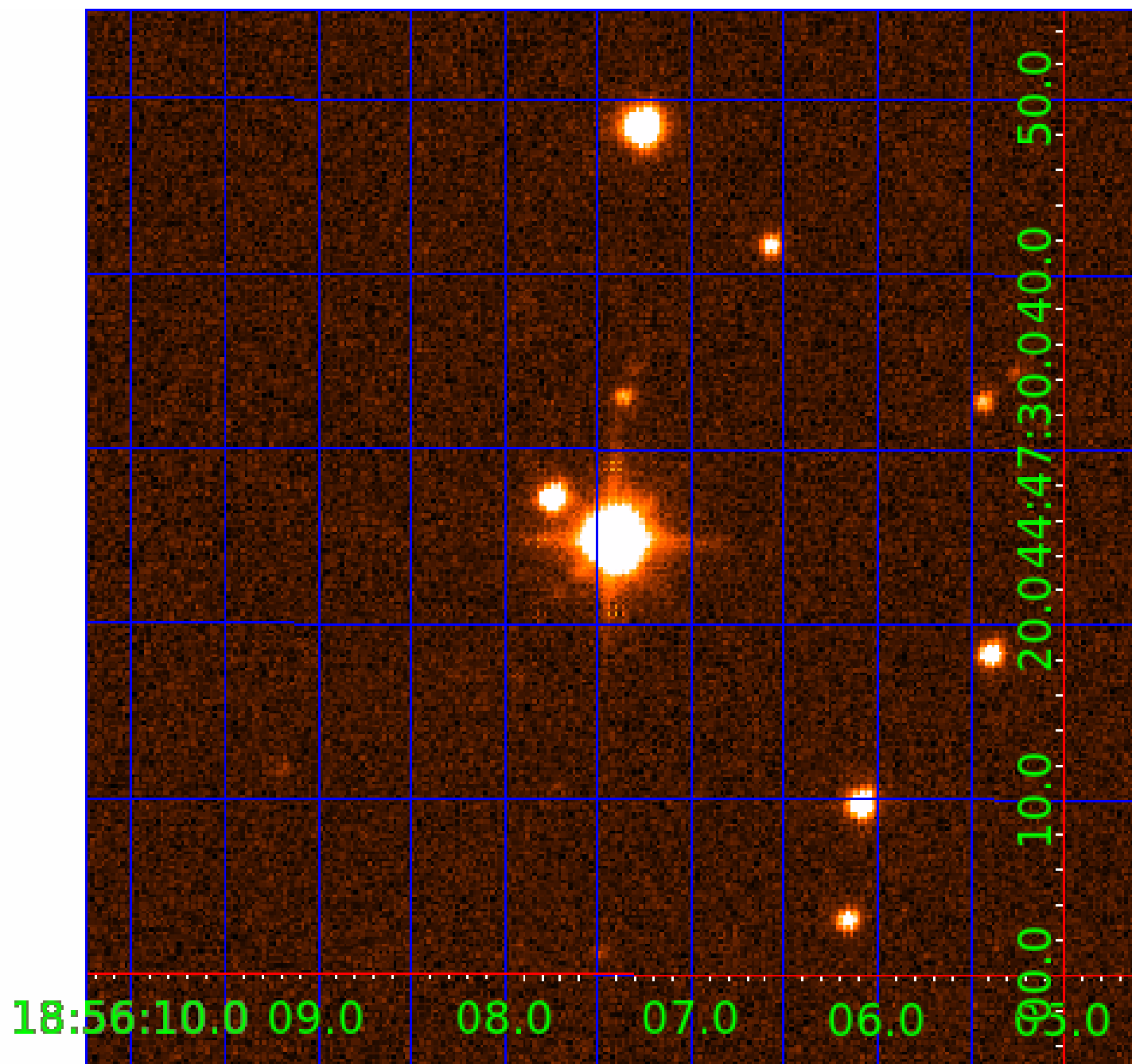


fluxWeightedCentroids, Planet 1 of 2



UKIRT Image

Declination



KIC 008608260

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})
008608260-01	OBS	No	0.804626	131.791293	53.2	5.365	11.6	6.7	2.43	8105	1.79	52627.09
008608260-02	OBS	No	54.596464	141.648211	1297.1	1.973	8.6	8.6	2.43	8105	9.40	190.16

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
008608260-01	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—CENT_SATURATED
008608260-02	OBS	FP	0.00	1	0	1	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_SATURATED—HALO_GHOST

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

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

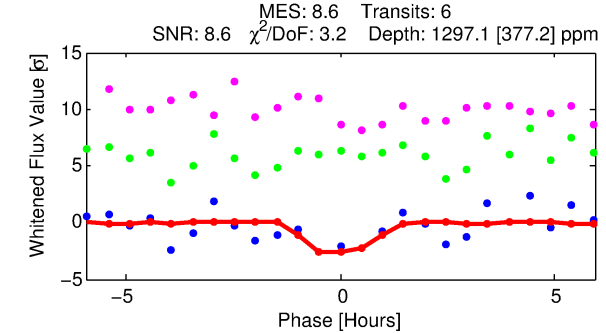
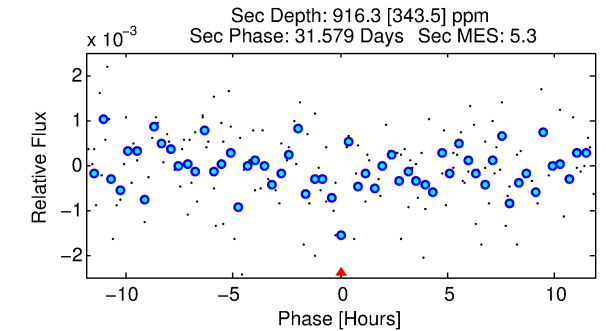
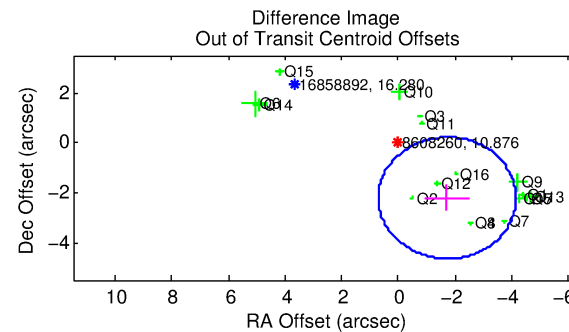
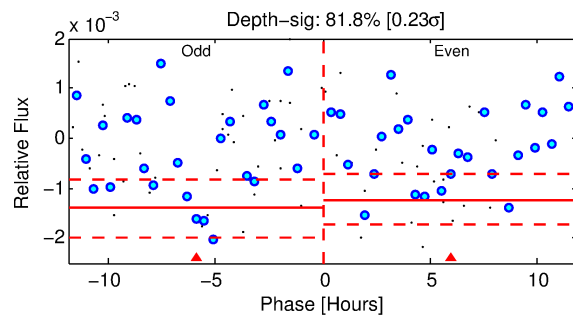
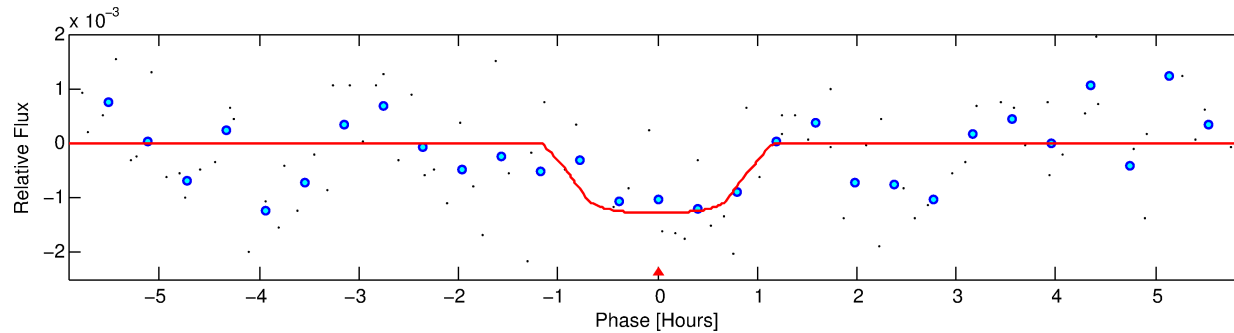
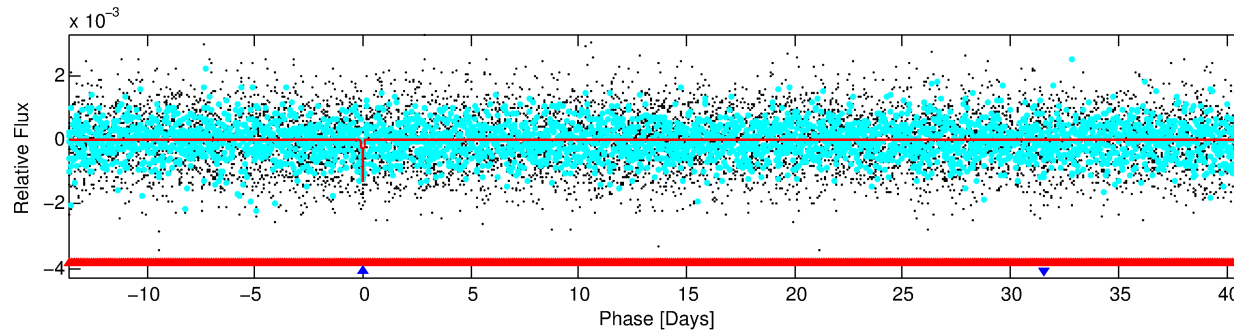
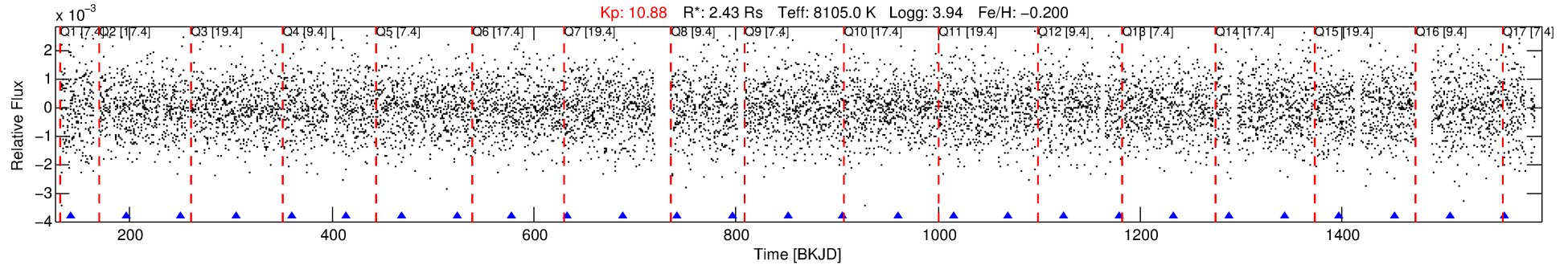
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 008608260-02

No Significant Match Found

DV One-Page Summary

KIC: 8608260 Candidate: 2 of 2 Period: 54.596 d



DV Fit Results:

Period = 54.59646 [0.00091] d
Epoch = 141.6482 [0.0156] BKJD
Rp/R* = 0.0354 [0.1289]
a/R* = 161.54 [3176.75]
b = 0.70 [14.70]
Seff = 190.16 [98.24]
Teq = 947 [122] K
Rp = 9.40 [34.37] Re
a = 0.3469 [0.1070] AU
Ag = 686.75 [5020.23] [0.14 σ]
Teffp = 7495 [13669] K [0.48 σ]

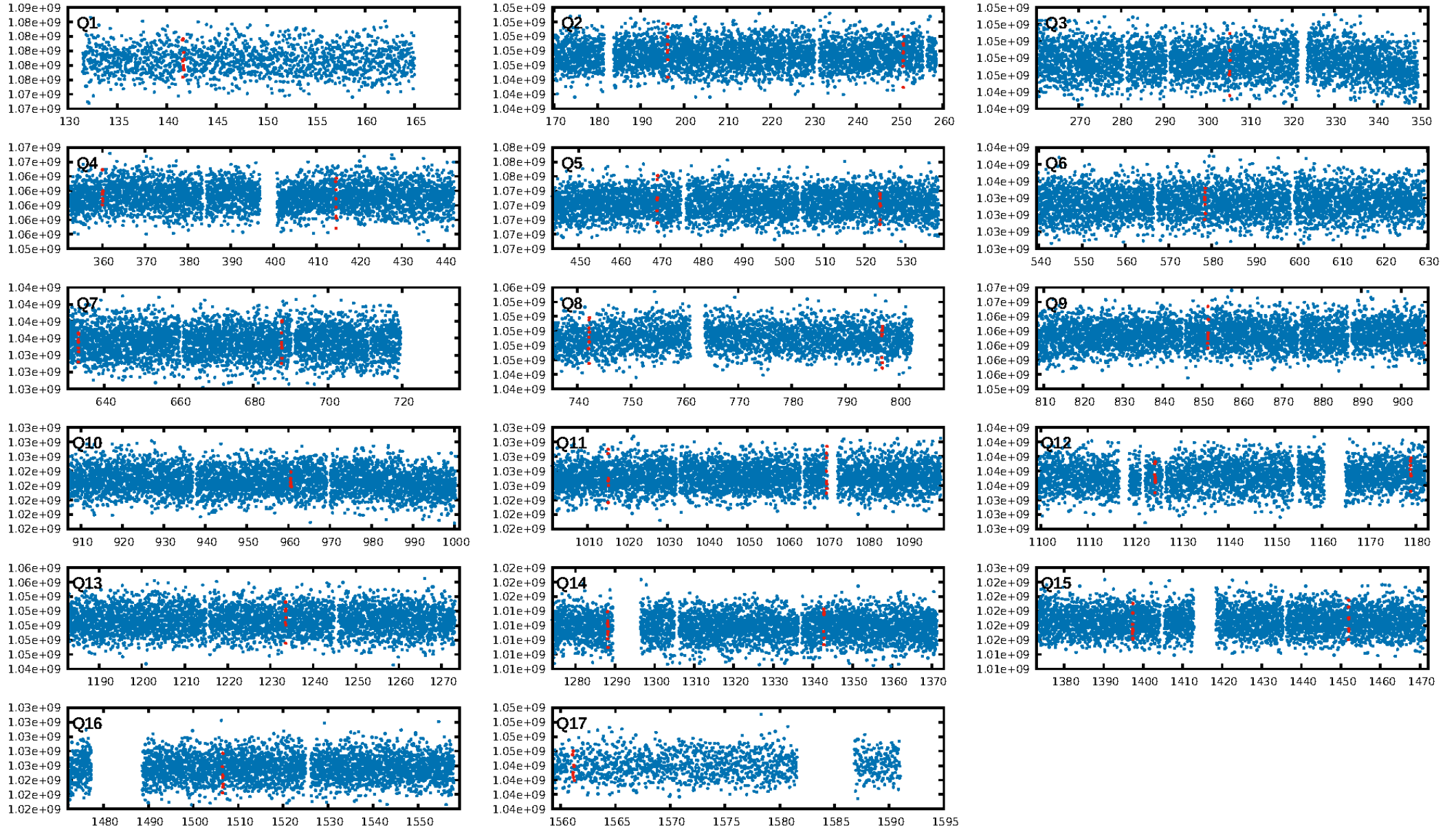
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [225.84 σ]
LongPeriod-sig: N/A
ModelChiSquare2-sig: 0.2%
ModelChiSquareGof-sig: 84.4%
Bootstrap-pfa: 5.41e-09
RollingBand-fgt: 1.00 [5/5]
GhostDiagnostic-chr: 0.003227
Centroid-sig: N/A
Centroid-so: 0.646 arcsec [4.47 σ]
OotOffset-rm: 2.810 arcsec [3.46 σ]
KicOffset-rm: 3.353 arcsec [4.12 σ]
OotOffset-st: 4/4/4/5 [17]
KicOffset-st: 4/4/4/5 [17]
DiffImageQuality-fgm: 0.35 [6/17]
DiffImageOverlap-fno: 0.12 [2/17]

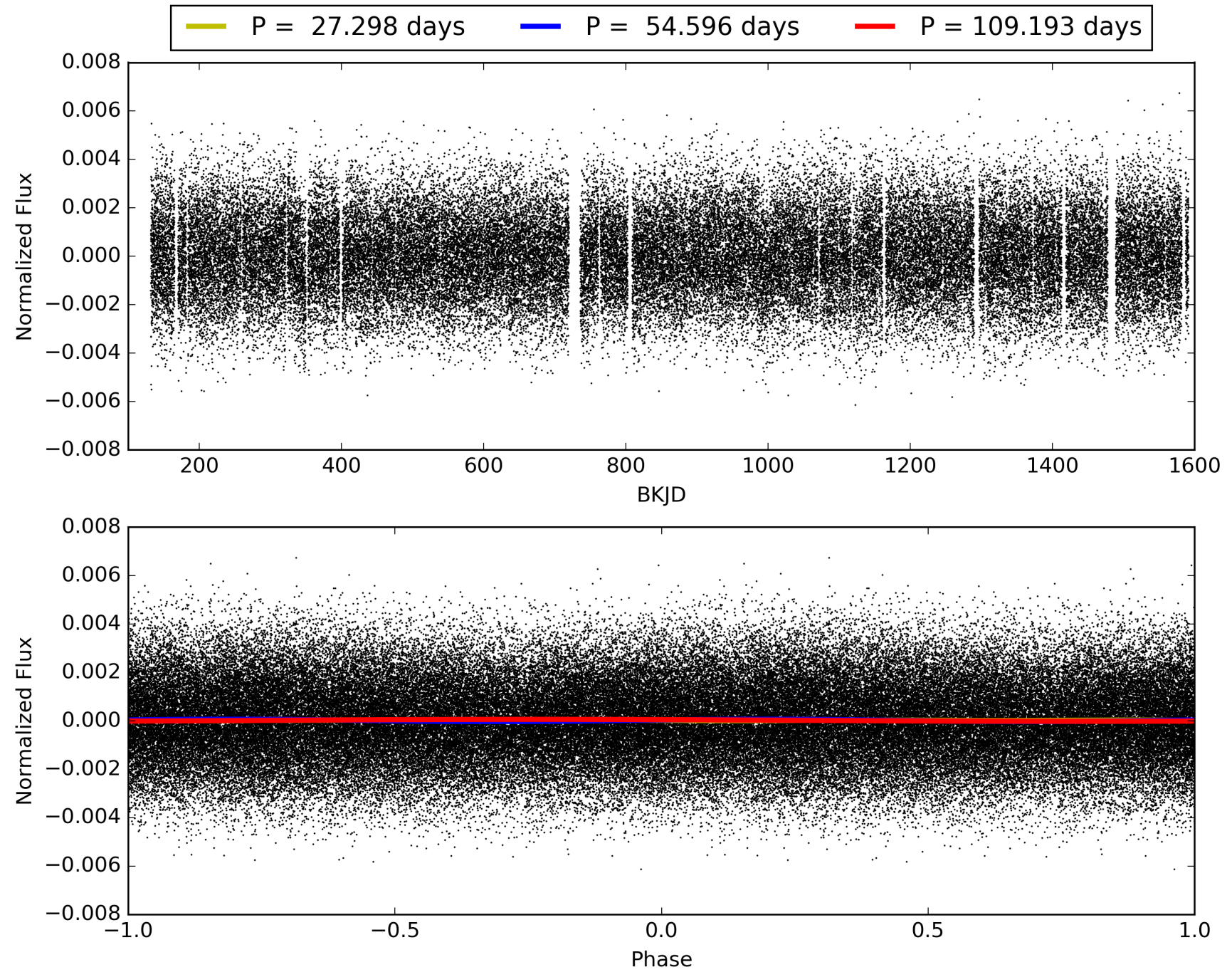
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 01-Feb-2016 07:12:57 Z

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

TCE 008608260-02, PDC Light Curves

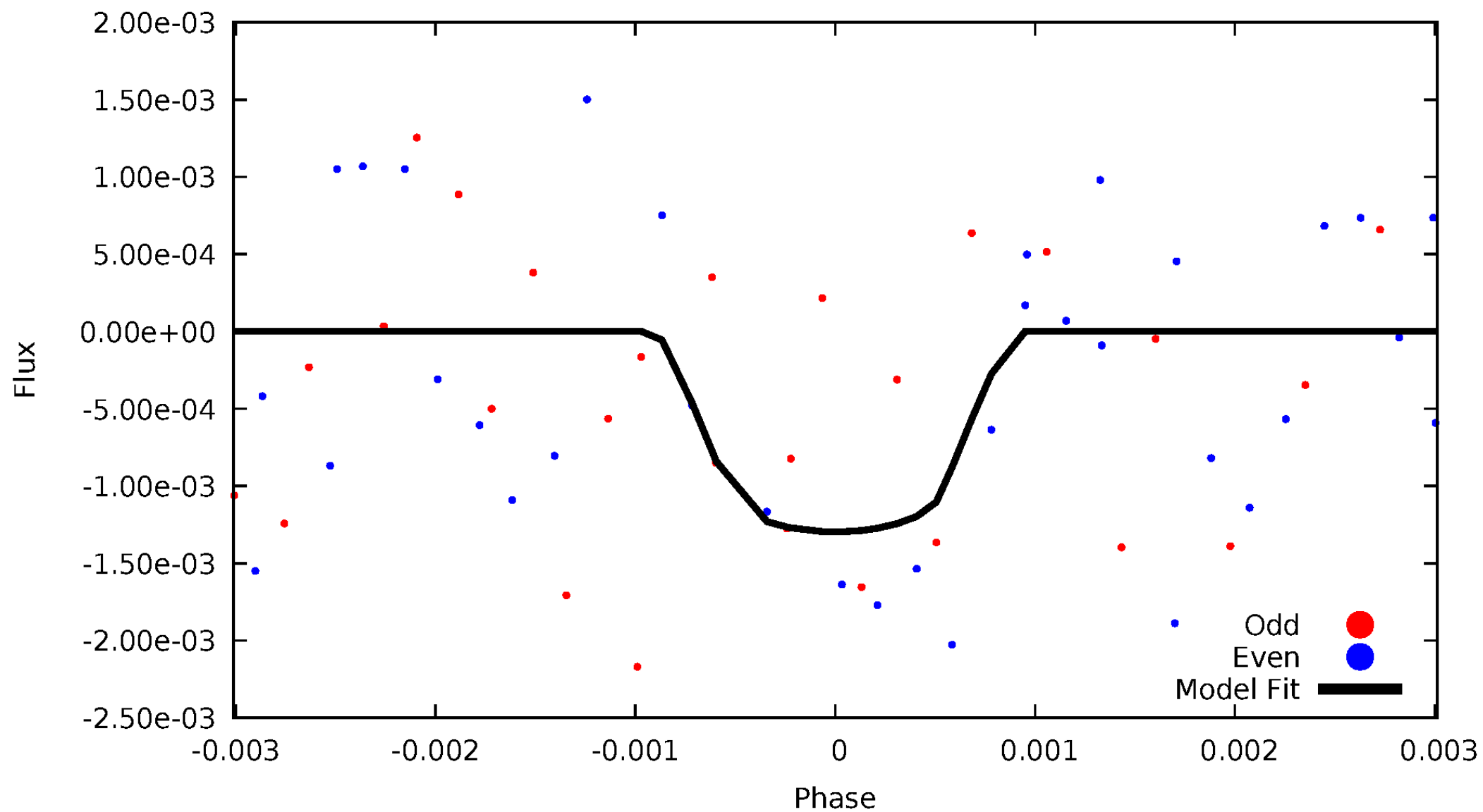


TCE 008608260-02



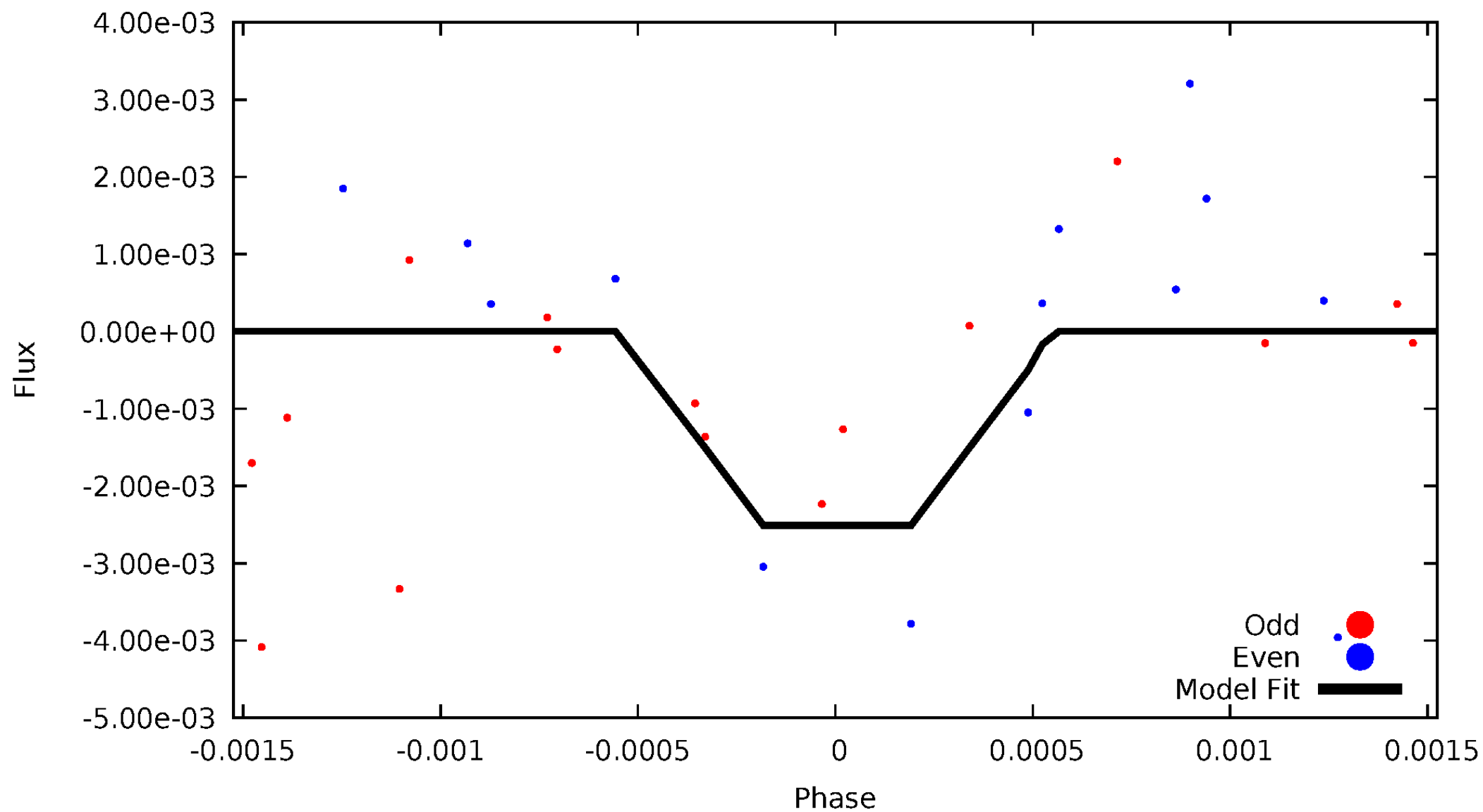
DV Odd/Even

TCE 008608260-02



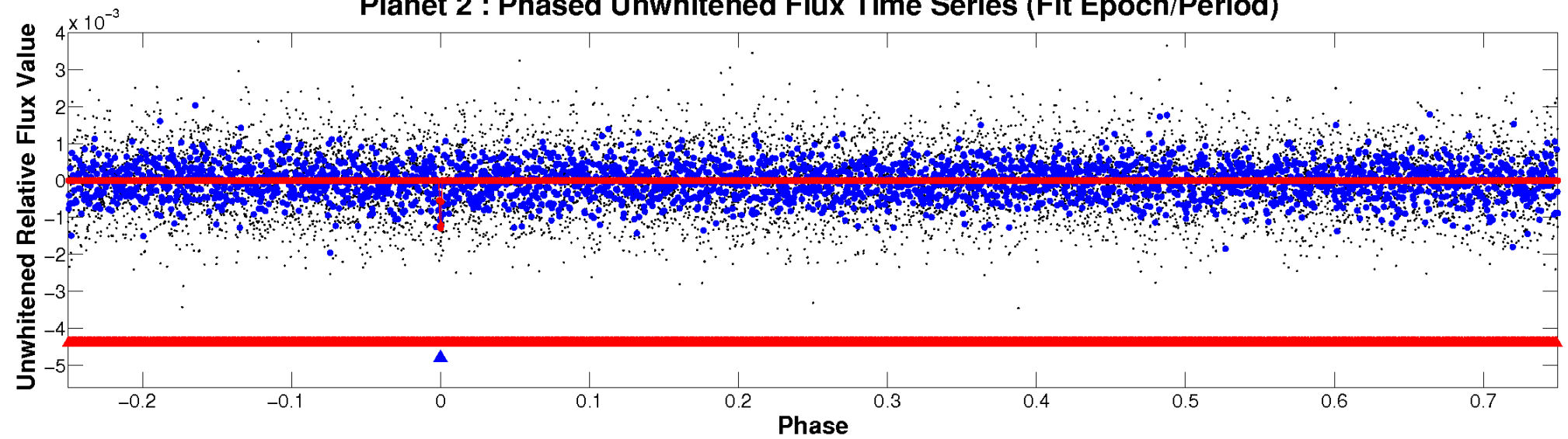
ALT Odd/Even

TCE 008608260-02

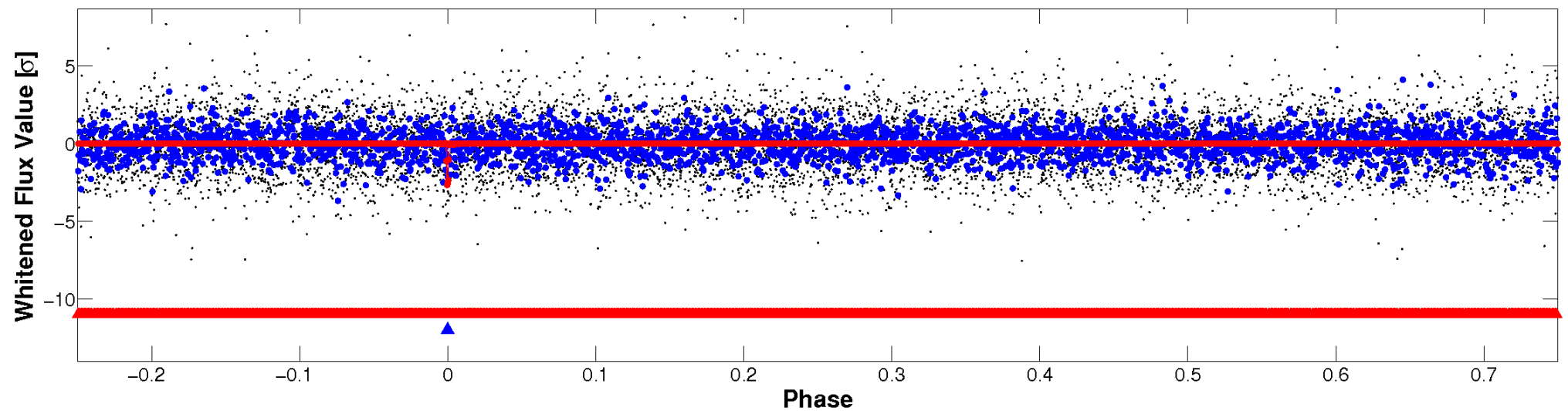


Non-Whitened Vs. Whitened Light Curve

Planet 2 : Phased Unwhitened Flux Time Series (Fit Epoch/Period)

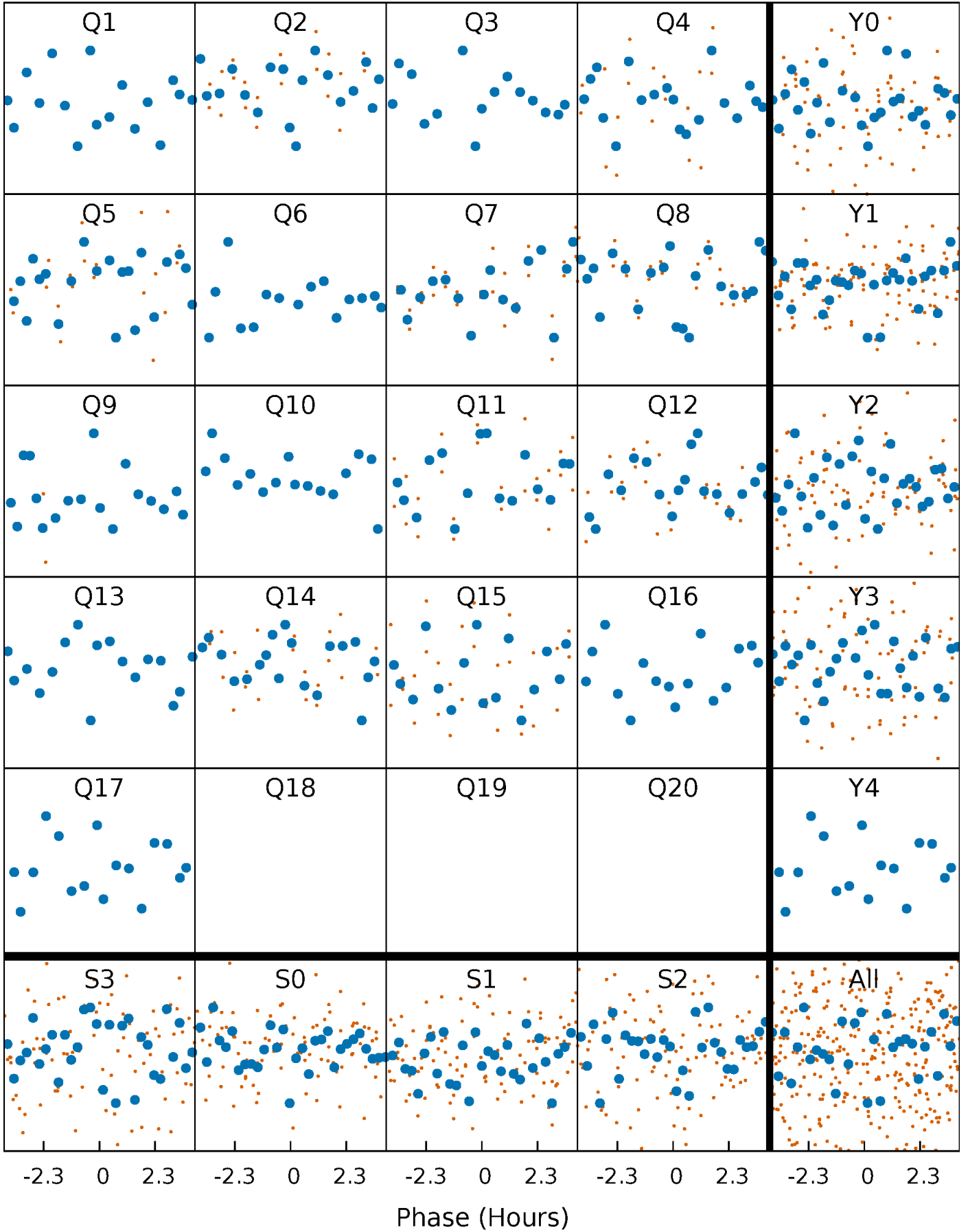


Planet 2 : Phased Whitened Flux Time Series (Fit Epoch/Period)



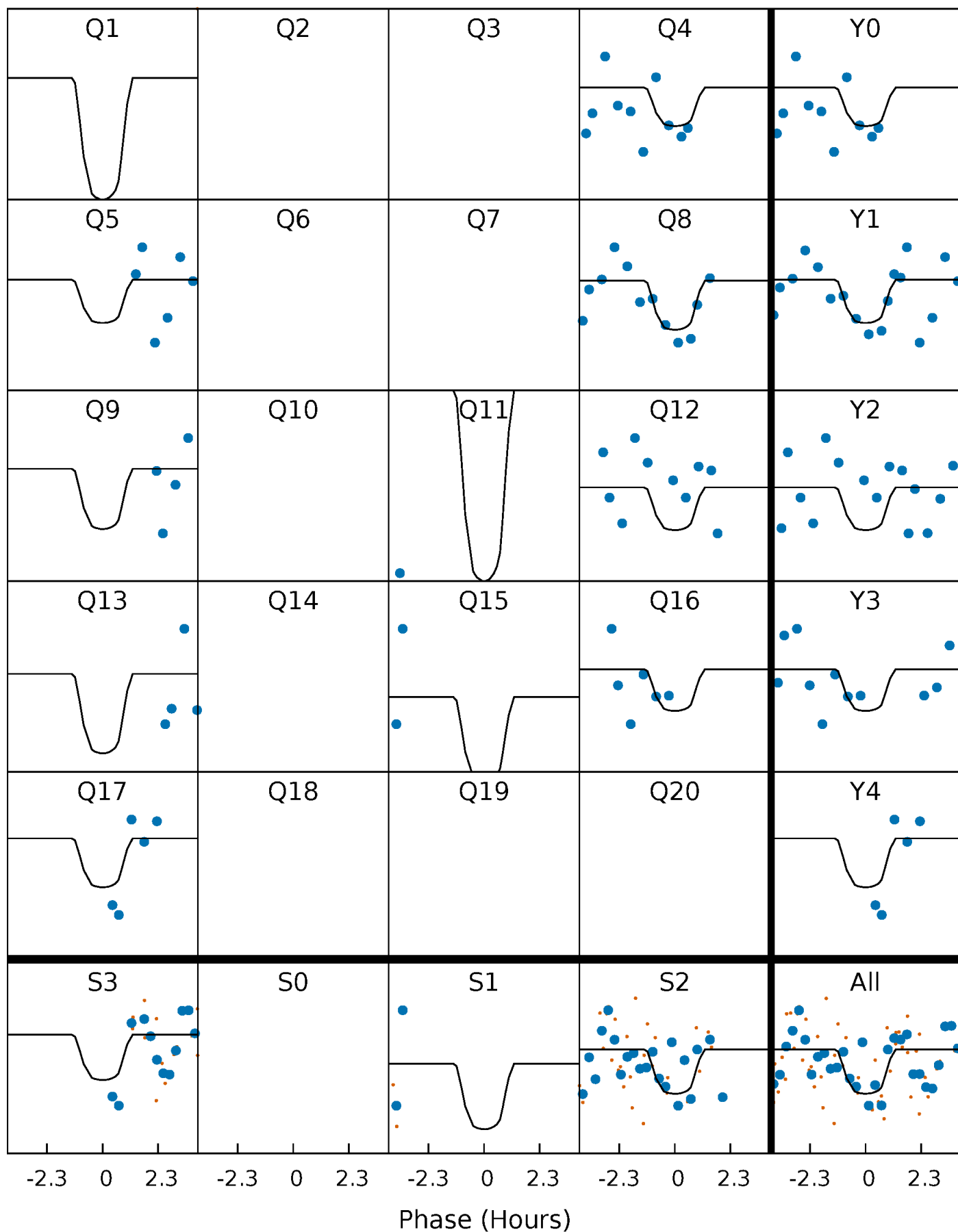
PDC Quarter-Phased Transit Curves

TCE 008608260-02 P= 54.596464 Days $T_0=141.648211$ (BKJD)



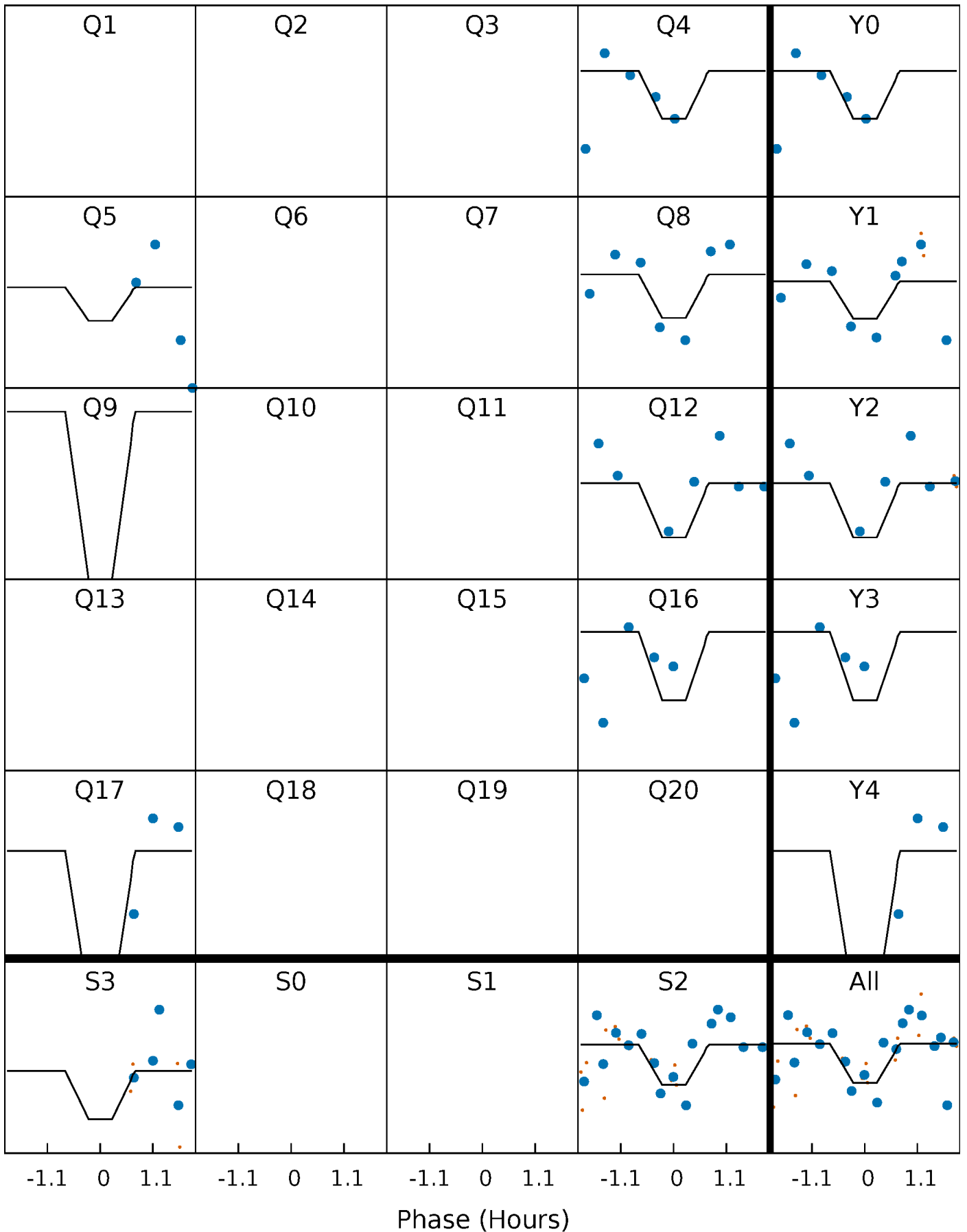
DV Quarter-Phased Transit Curves

TCE 008608260-02 P= 54.596464 Days $T_0=141.648211$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

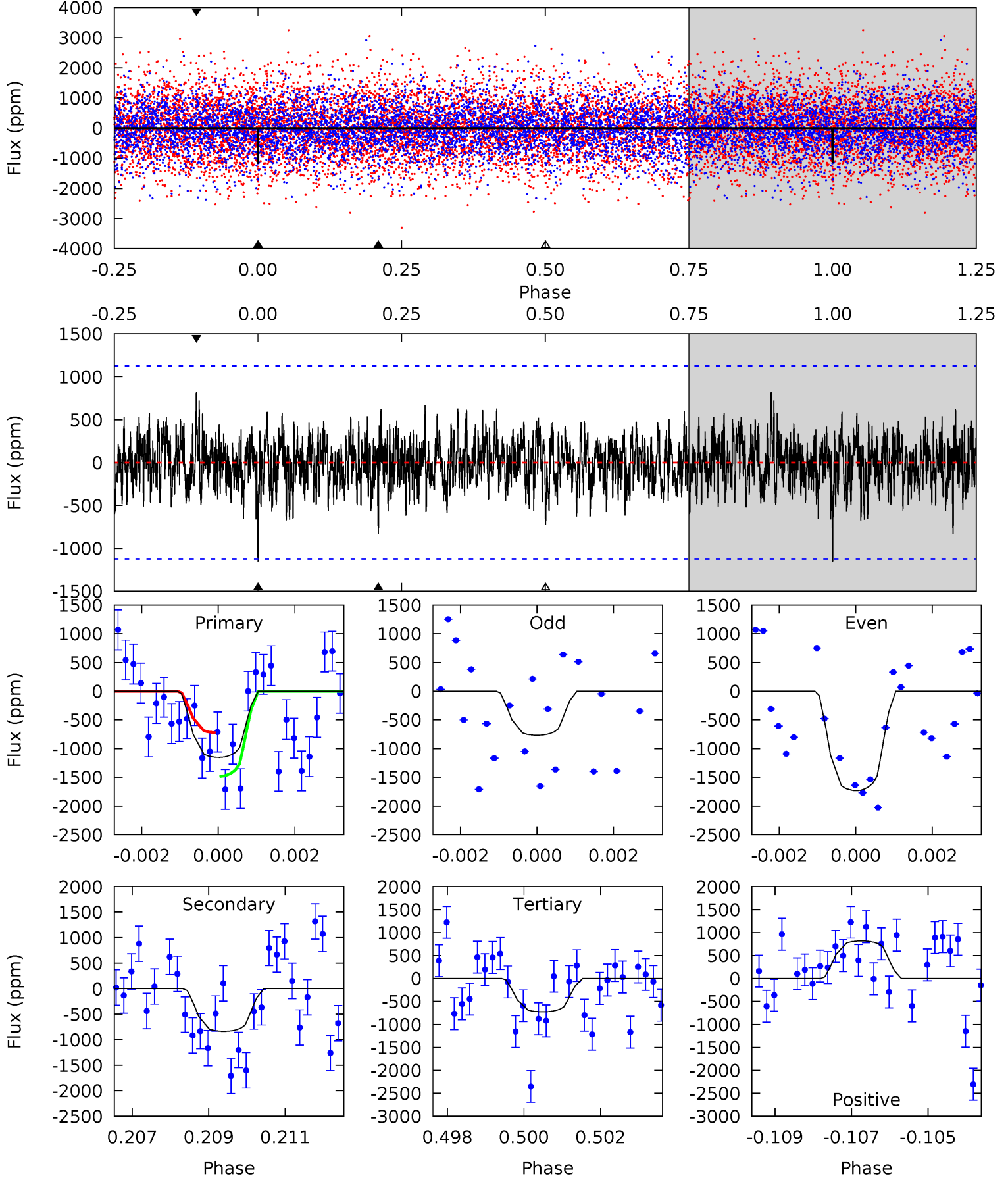
TCE 008608260-02 P= 54.594542 Days $T_0=141.683038$ (BKJD)



DV Model-Shift Uniqueness Test

008608260-02, P = 54.596464 Days, E = 87.051747 Days

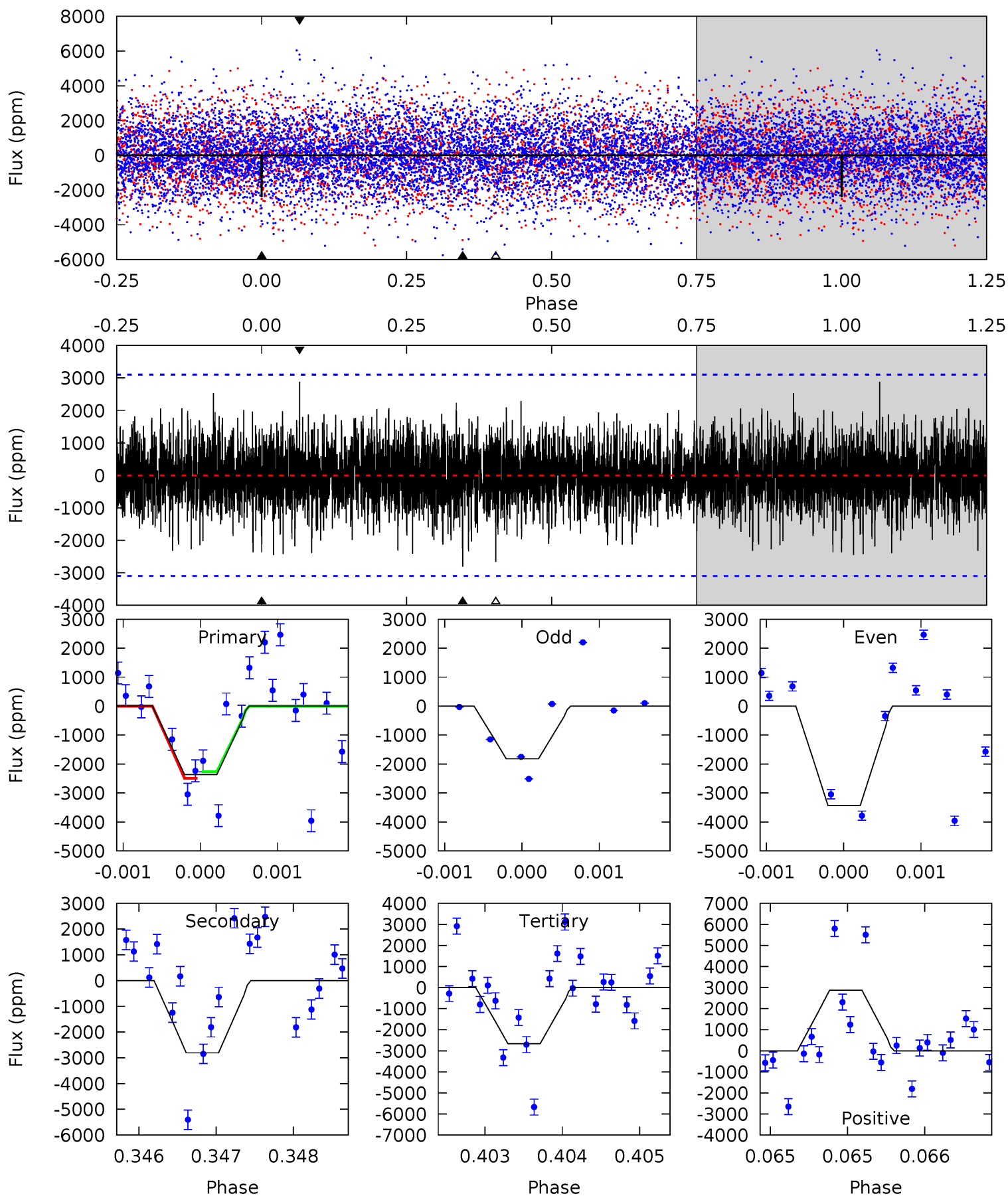
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
5.49	3.97	3.45	3.90	5.34	3.12	1.13	2.04	1.60	0.52	0.08	2.29	0.92	0.41	1.80



Alt Model-Shift Uniqueness Test

008608260-02, P = 54.594542 Days, E = 87.088496 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
4.17	4.96	4.69	5.08	5.47	3.32	1.33	-0.52	-0.91	0.26	-0.12	1.50	1.09	0.51	0.18



Stellar Parameters For KIC 008608260

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	8105^{+226}_{-340}	$3.937^{+0.285}_{-0.114}$	$-0.200^{+0.200}_{-0.350}$	$2.433^{+0.367}_{-0.794}$	$1.868^{+0.096}_{-0.384}$	$0.183^{+0.318}_{-0.064}$
	+3%/-4%	+7%/-3%	+100%/-175%	+15%/-33%	+5%/-21%	+174%/-35%
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 008608260-02 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-836 ± 210	$25.43^{+26.45}_{-17.20}$	1300^{+83}_{-113}	4351^{+3029}_{-961}	83^{+697}_{-64}
Alt.	-2810 ± 567	$25.70^{+27.56}_{-17.79}$	1305^{+80}_{-117}	5551^{+5615}_{-1397}	263^{+2611}_{-201}

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

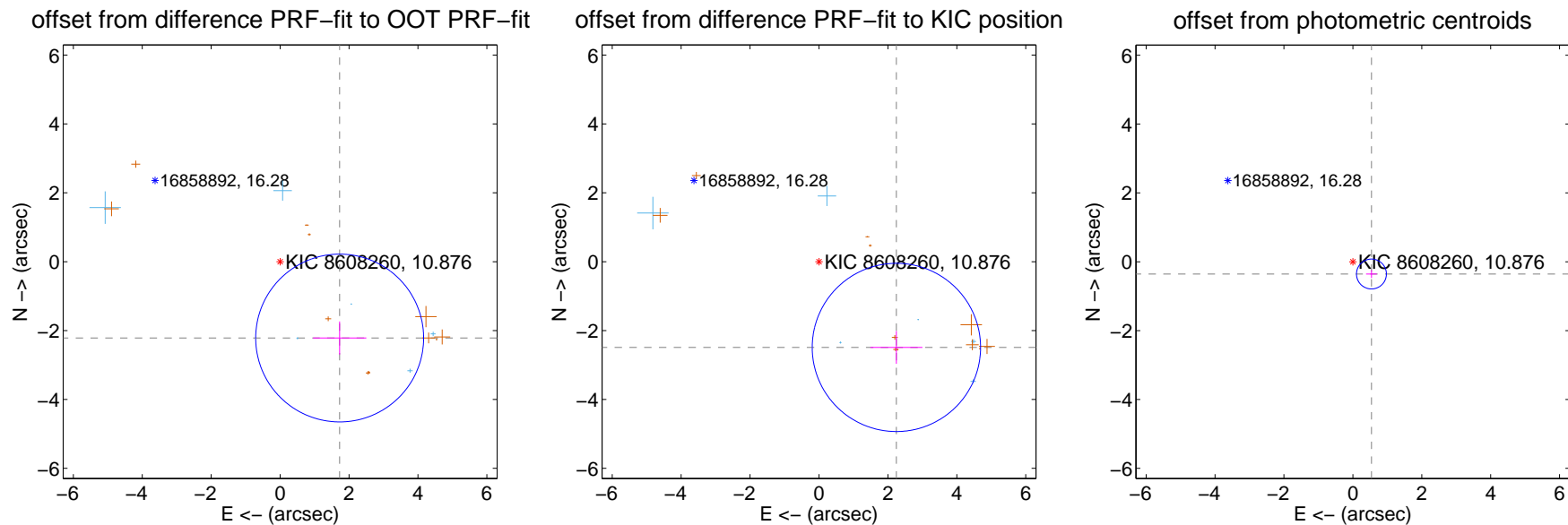
DV Centroid Data

Supplemental centroid analysis for 008608260-02. **Kepler magnitude: 10.88.** Transit SNR 8.59

There are 6 quarters with good PRF difference image offsets

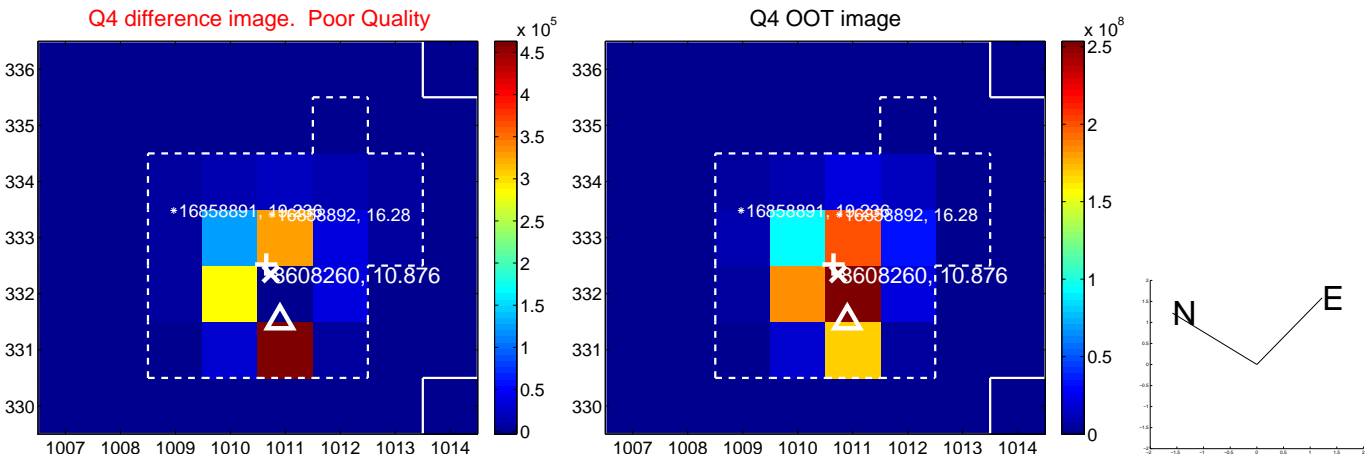
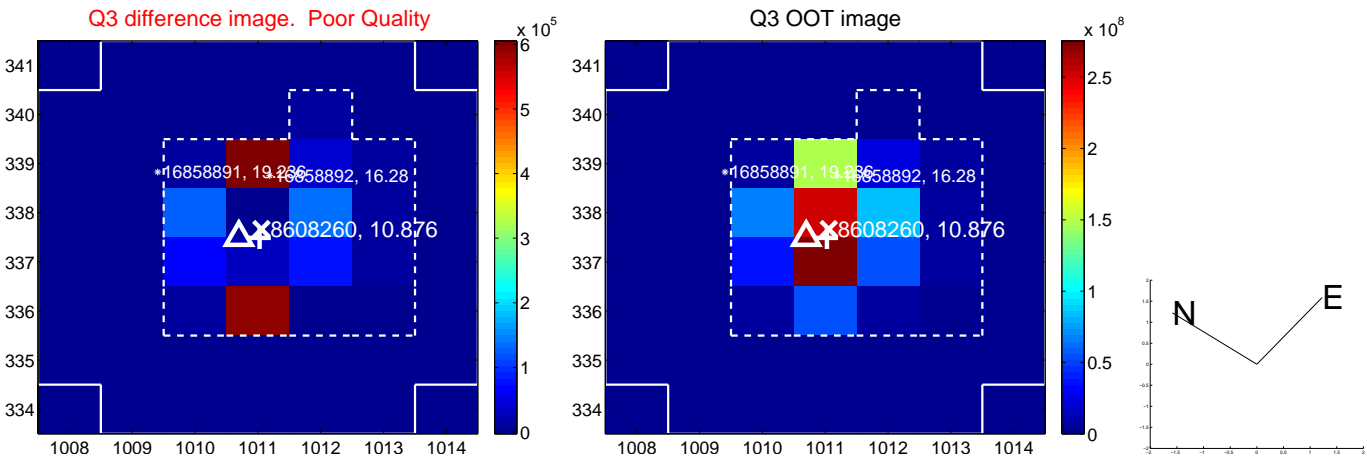
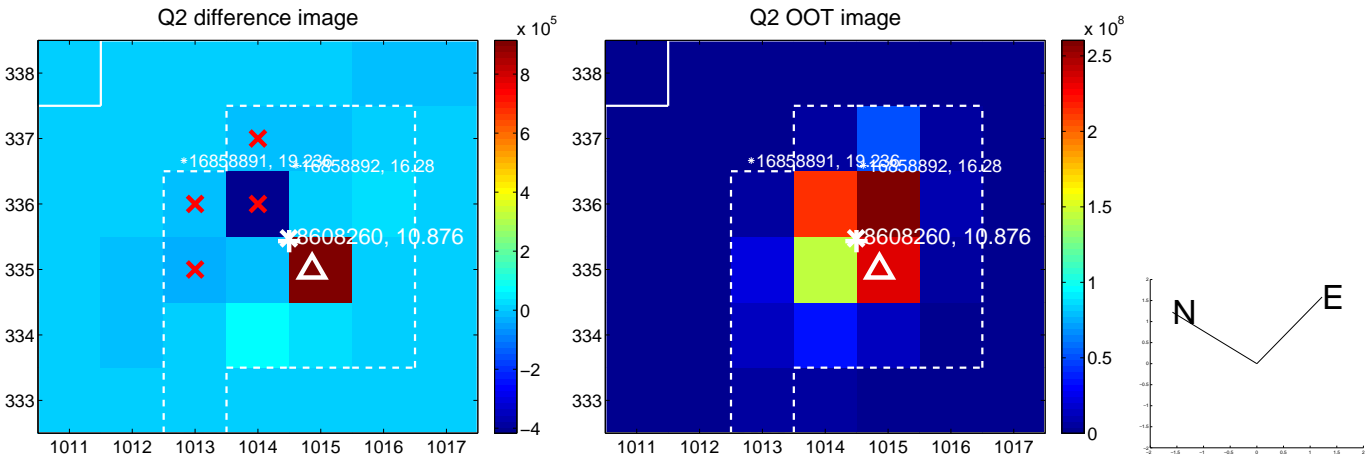
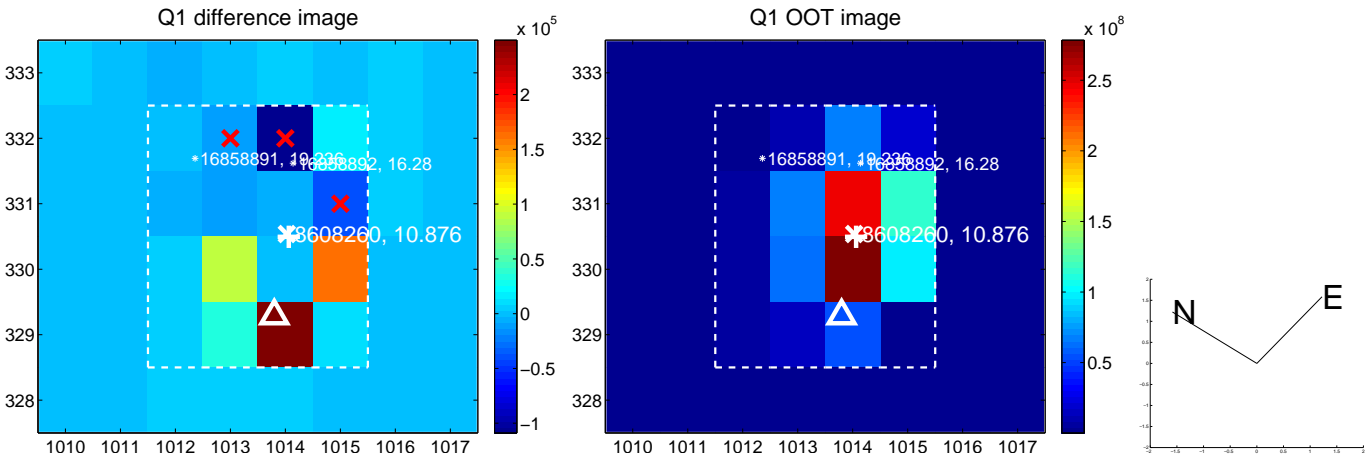
The direct PRF centroid is offset from the target star catalog position by about 0.24 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	2.810 ± 0.812	3.46	-1.728 ± 0.772	-2.216 ± 0.481
PRF-fit source offset from KIC position	3.353 ± 0.814	4.12	-2.246 ± 0.755	-2.489 ± 0.478
photometric centroid source offset	0.65 ± 0.14	4.47	-0.54 ± 0.16	-0.36 ± 0.11

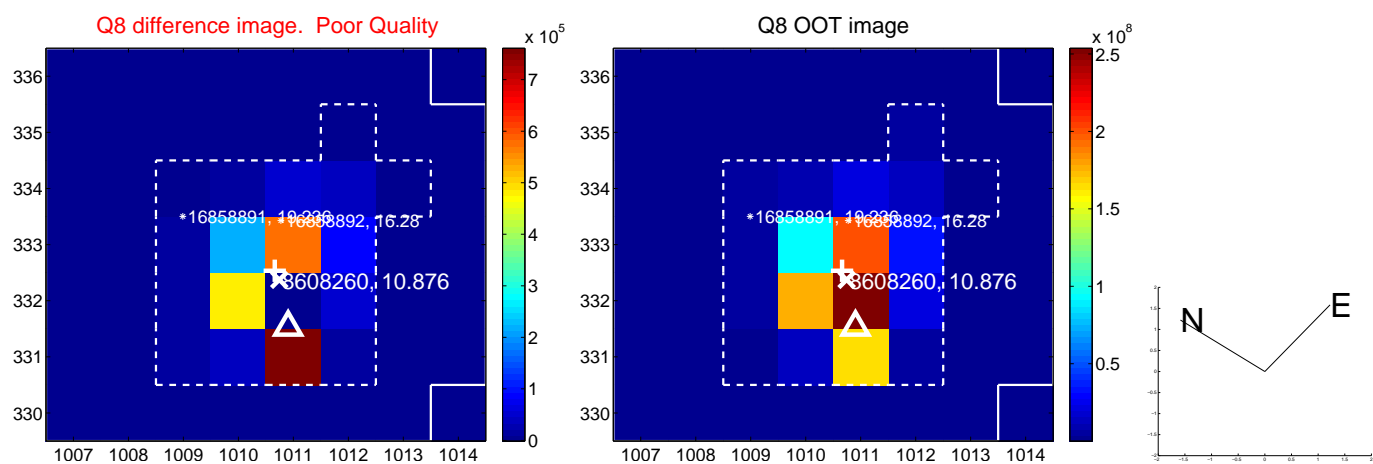
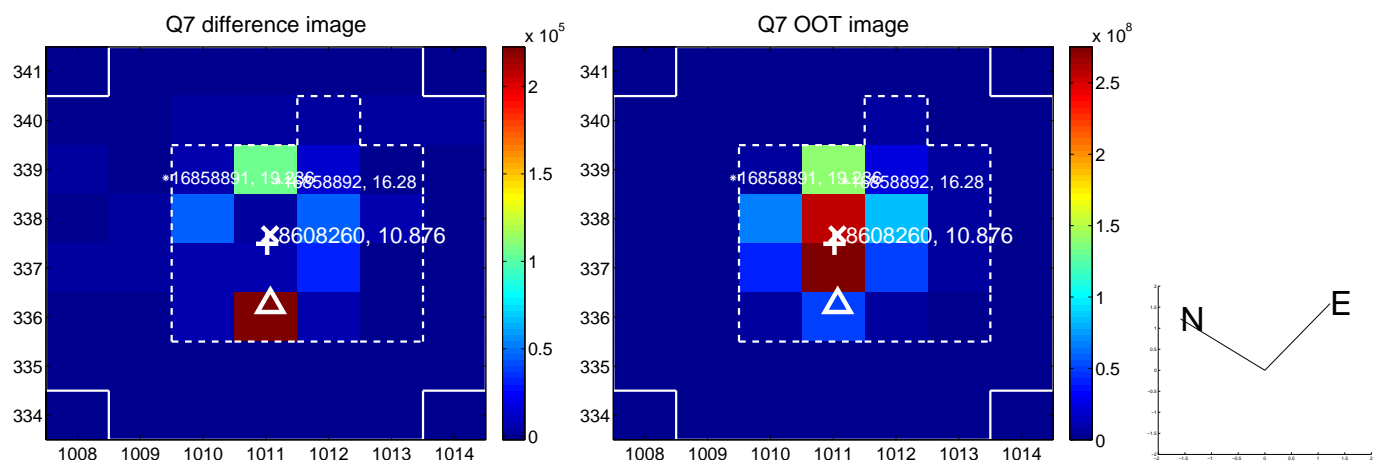
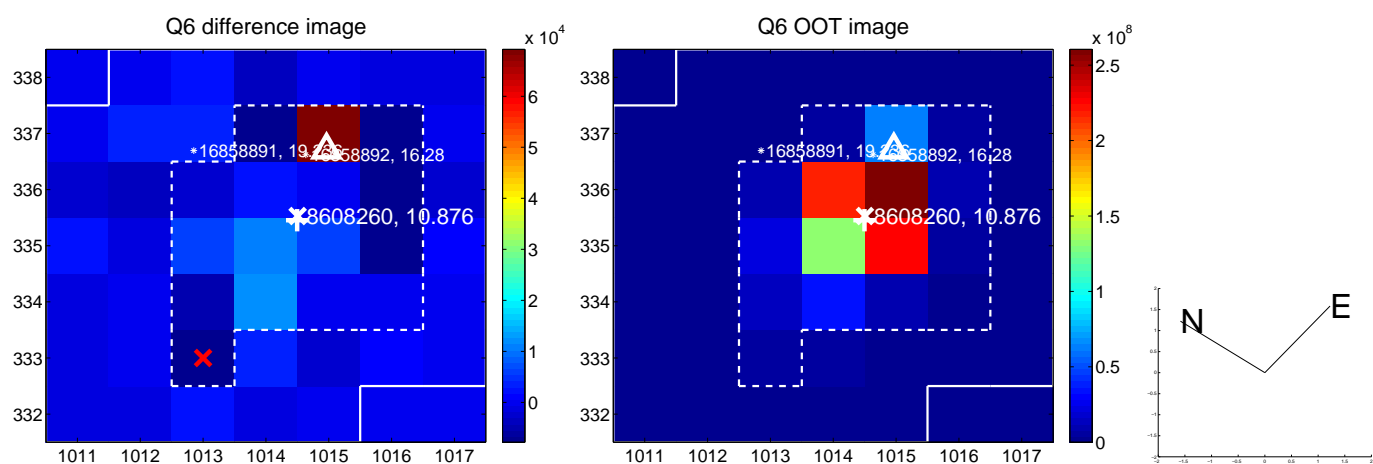
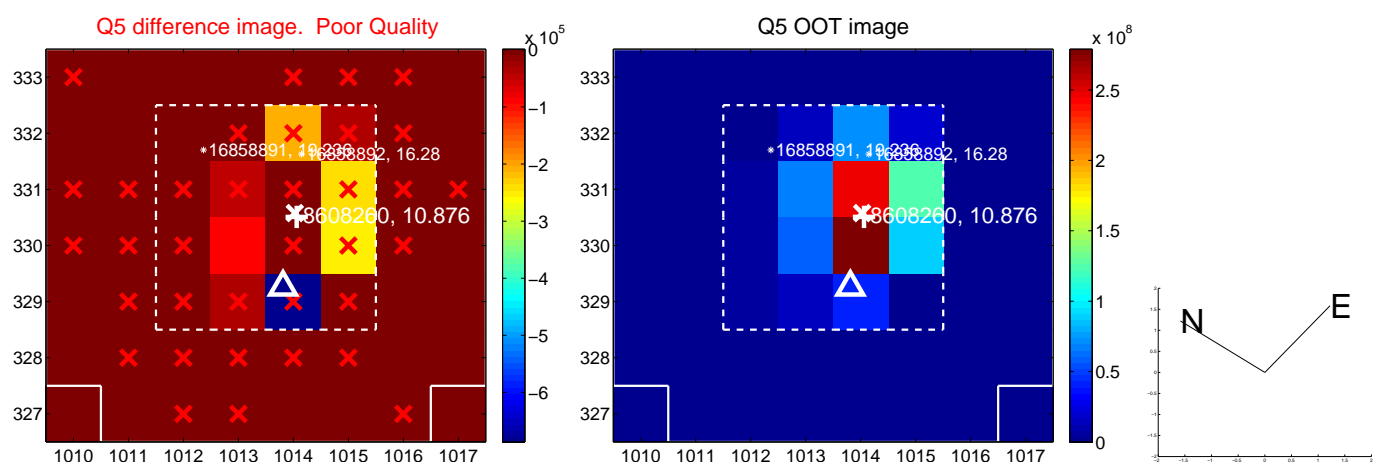


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets;** magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

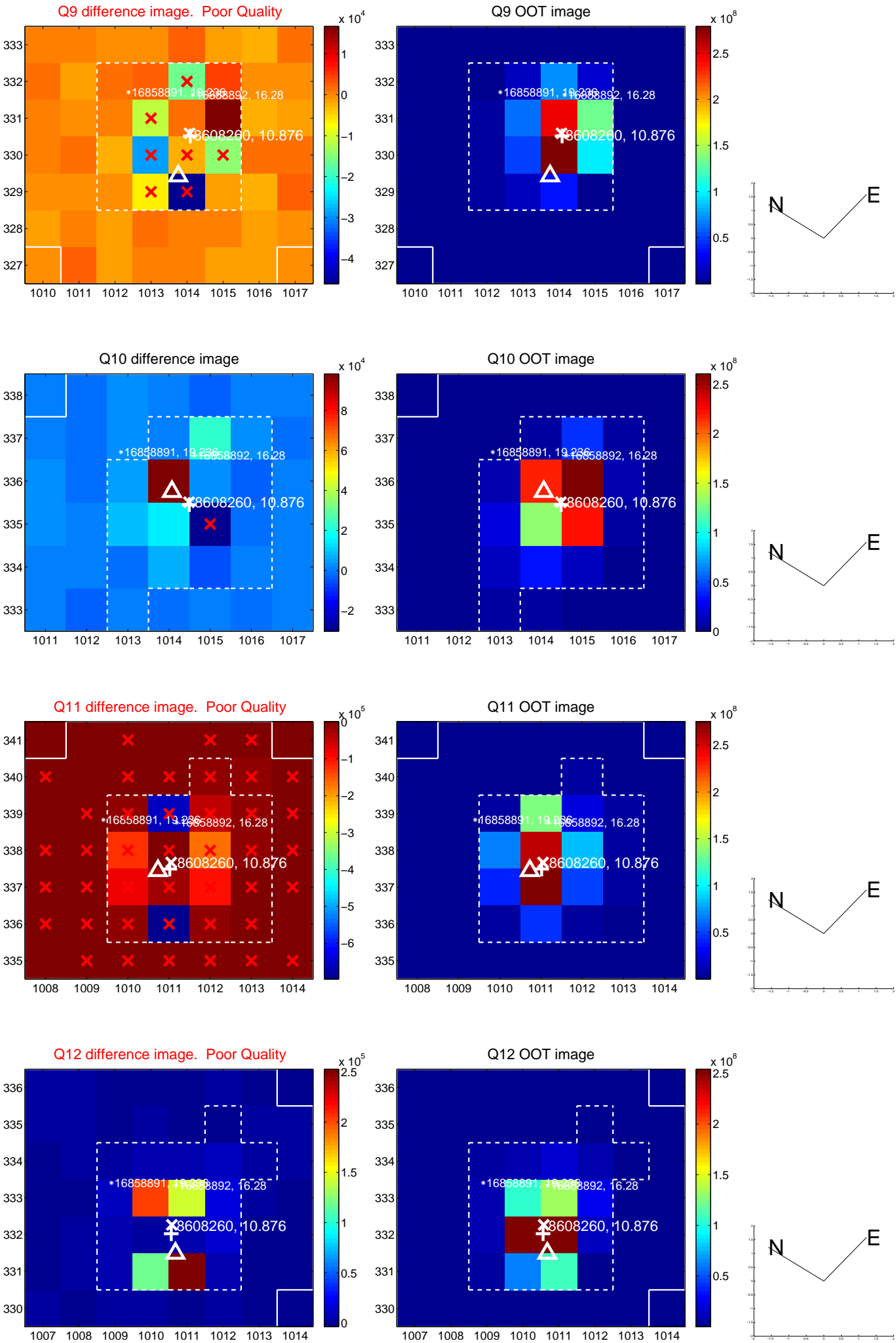
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



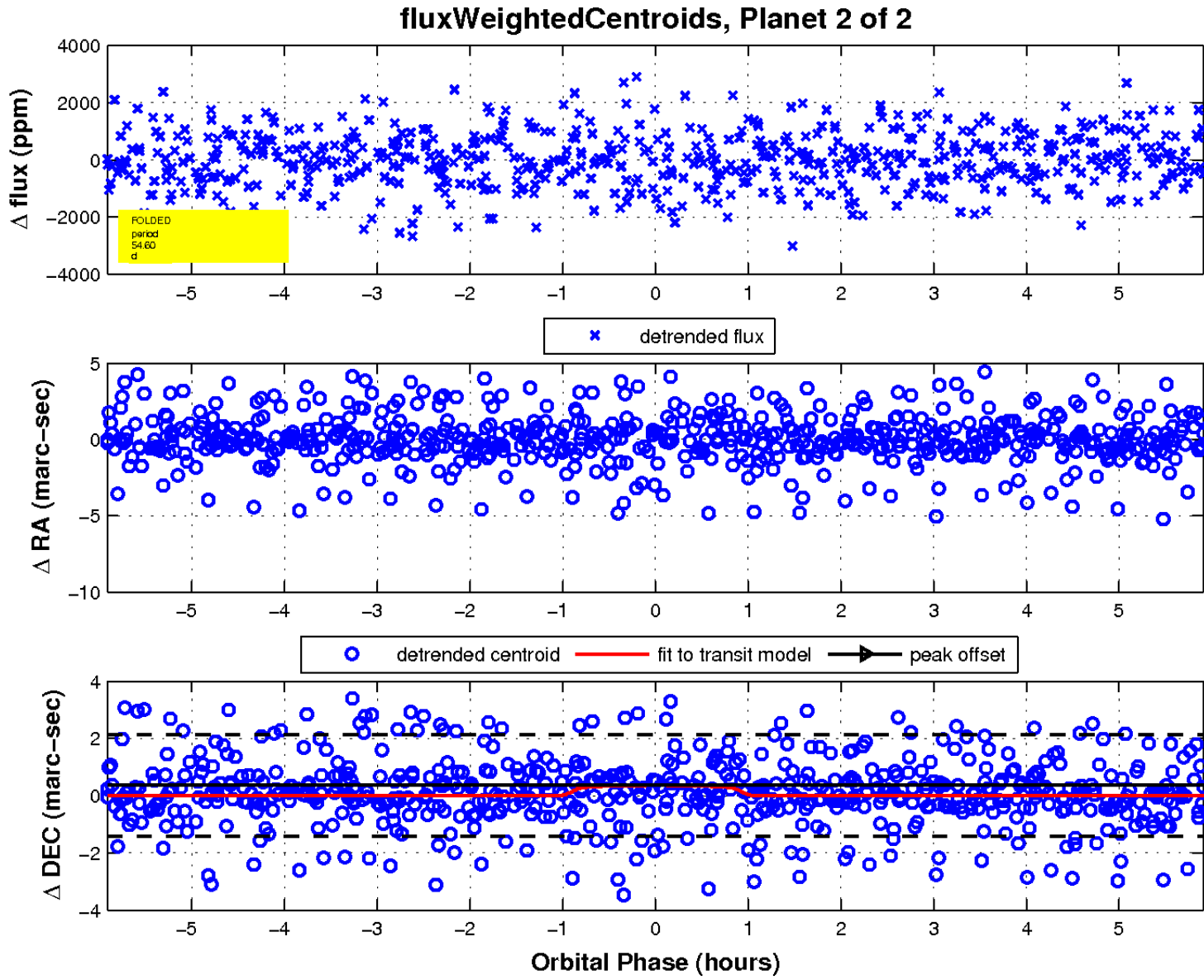
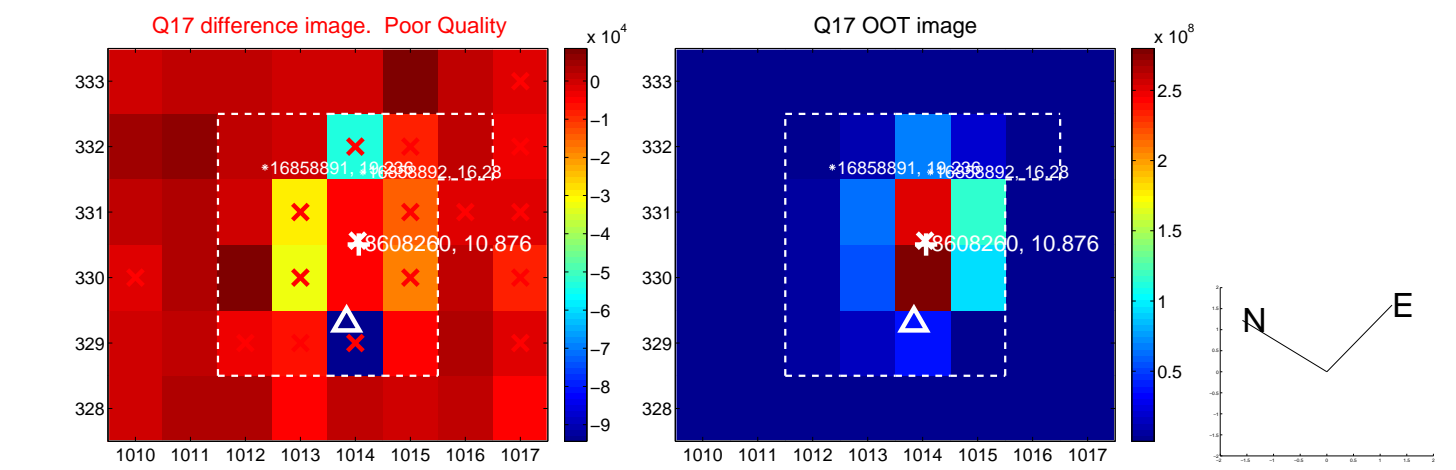
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

Declination

