

KIC 006192847

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})
006192847-01	OBS	No	111.799038	200.971741	11.0	2.049	27.5	3.1	67.44	3916	24.08	3154.65
006192847-02	OBS	No	145.863849	259.216103	26.0	4.412	16.9	7.6	67.44	3916	42.78	2212.78
006192847-03	OBS	No	311.264136	344.923662	12.1	5.141	14.1	3.7	67.44	3916	28.64	805.43
006192847-04	OBS	No	103.976930	211.806049	36.0	2.429	13.4	10.8	67.44	3916	48.01	3474.98
006192847-05	OBS	No	208.899997	167.034907	29.3	8.687	11.6	7.8	67.44	3916	46.34	1370.72
006192847-06	OBS	No	305.852595	158.214222	35.3	2.457	15.5	12.0	67.44	3916	52.79	824.49
006192847-07	OBS	No	239.018162	199.755679	123.3	6.000	12.3	-1.0	67.44	3916	69.98	1145.41

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
006192847-01	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_SATURATED
006192847-02	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—INCONSISTENT_TRANS—CENT_SATURATED
006192847-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_MARSHALL_ZUMA—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—INCONSISTENT_TRANS—CENT_SATURATED
006192847-04	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_SKYE_ZUMA_TRACKER—LPP_ALT—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—INCONSISTENT_TRANS—CENT_SATURATED
006192847-05	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_MARSHALL_ZUMA—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—CENT_SATURATED
006192847-06	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_MARSHALL_ZUMA_TRACKER—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—CENT_SATURATED
006192847-07	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_MARSHALL_ZUMA—LPP_DV—CENT_SATURATED

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

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

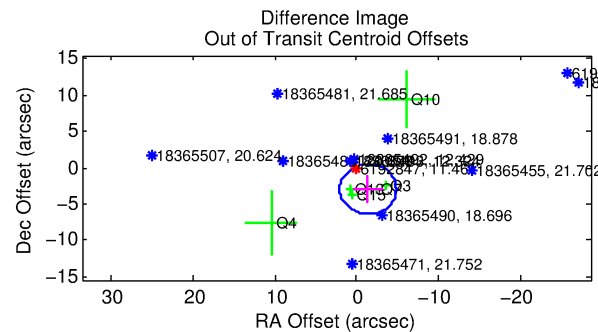
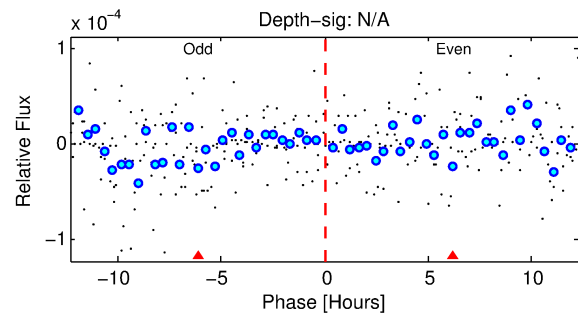
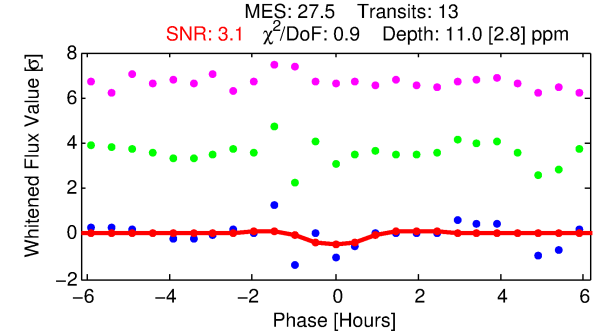
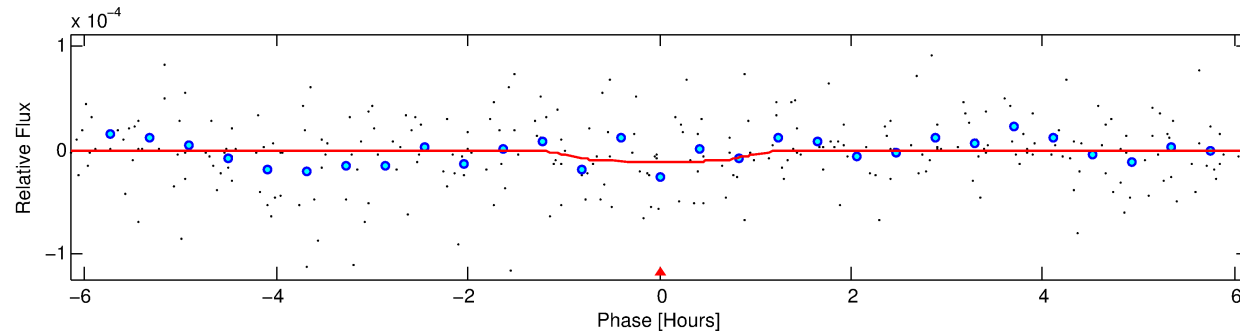
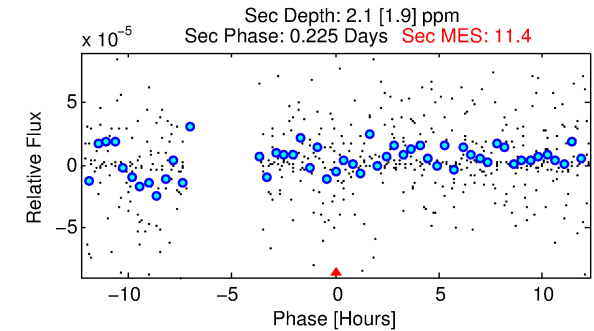
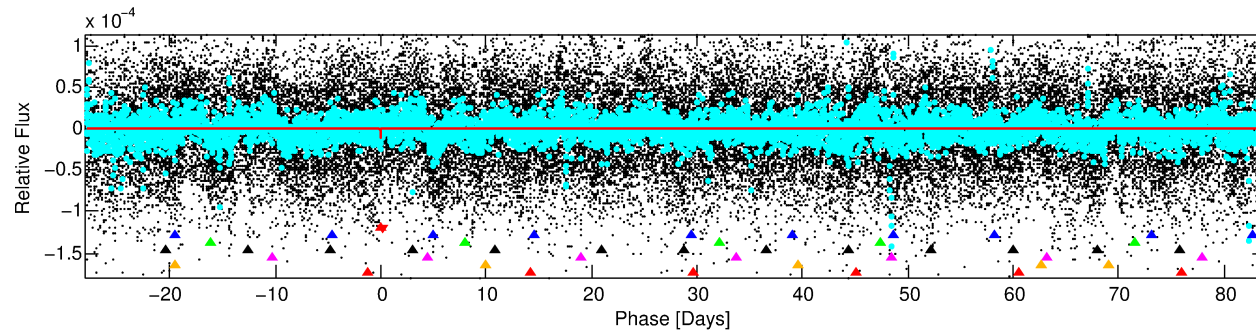
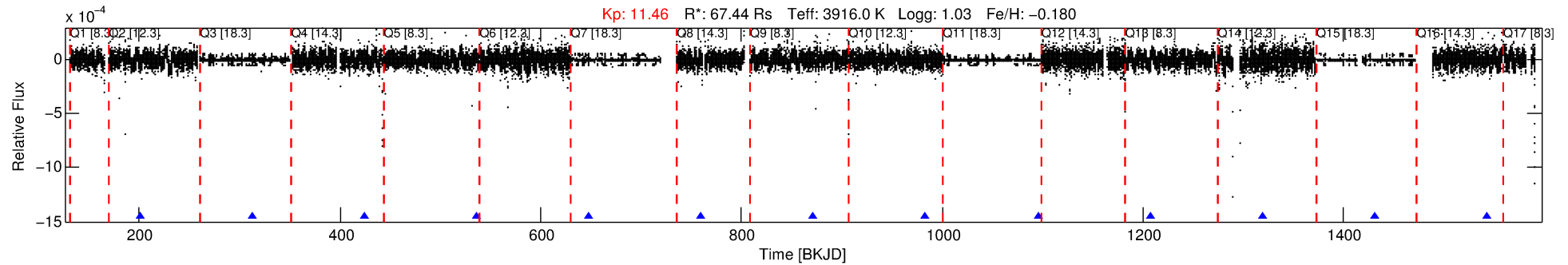
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 006192847-01

No Significant Match Found

DV One-Page Summary

KIC: 6192847 Candidate: 1 of 7 Period: 111.799 d



DV Fit Results:

Period = 111.79904 [0.00281] d
Epoch = 200.9717 [0.0246] BKJD
Rp/R* = 0.0033 [0.0036]
a/R* = 296.22 [871.56]
b = 0.71 [2.12]
Seff = 3154.65 [588.52]
Teff = 1911 [89] K
Rp = 24.08 [27.16] Re
a = 0.5511 [0.0804] AU
Ag = 0.60 [1.45] [-0.27σ]
Teffp = 2605 [1559] K [0.44σ]

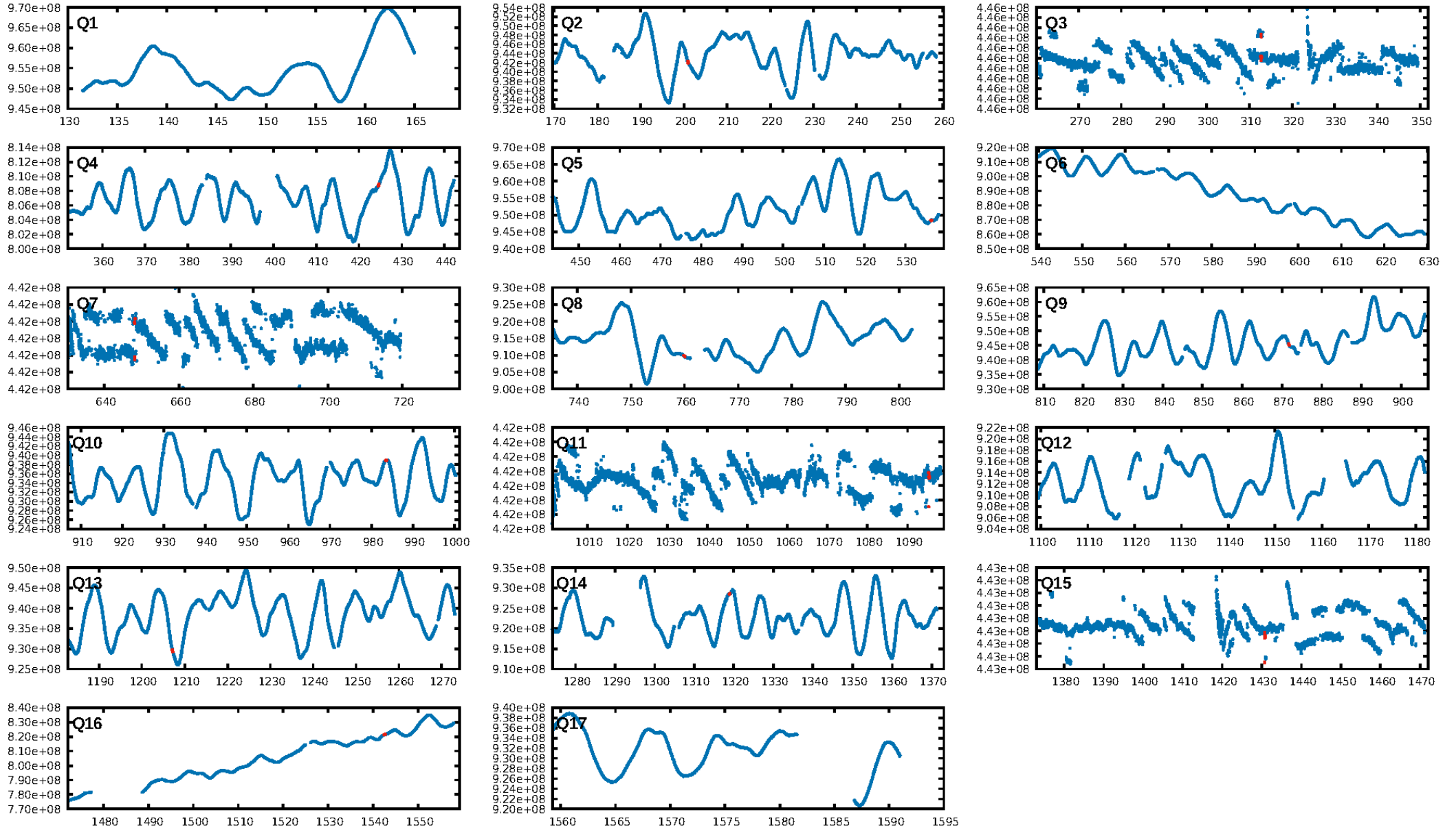
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [59.08σ]
LongPeriod-sig: 100.0% [168.07σ]
ModelChiSquare2-sig: 72.7%
ModelChiSquareGof-sig: 99.2%
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [13/13]
GhostDiagnostic-chr: 0.9109
Centroid-sig: 61.3%
Centroid-so: 7.244 arcsec [0.51σ]
OotOffset-rm: 3.260 arcsec [2.83σ]
KicOffset-rm: 2.594 arcsec [1.72σ]
OotOffset-st: 1/3/1/1 [6]
KicOffset-st: 1/3/1/1 [6]
DiffImageQuality-fgm: 0.33 [2/6]
DiffImageOverlap-fno: 1.00 [13/13]

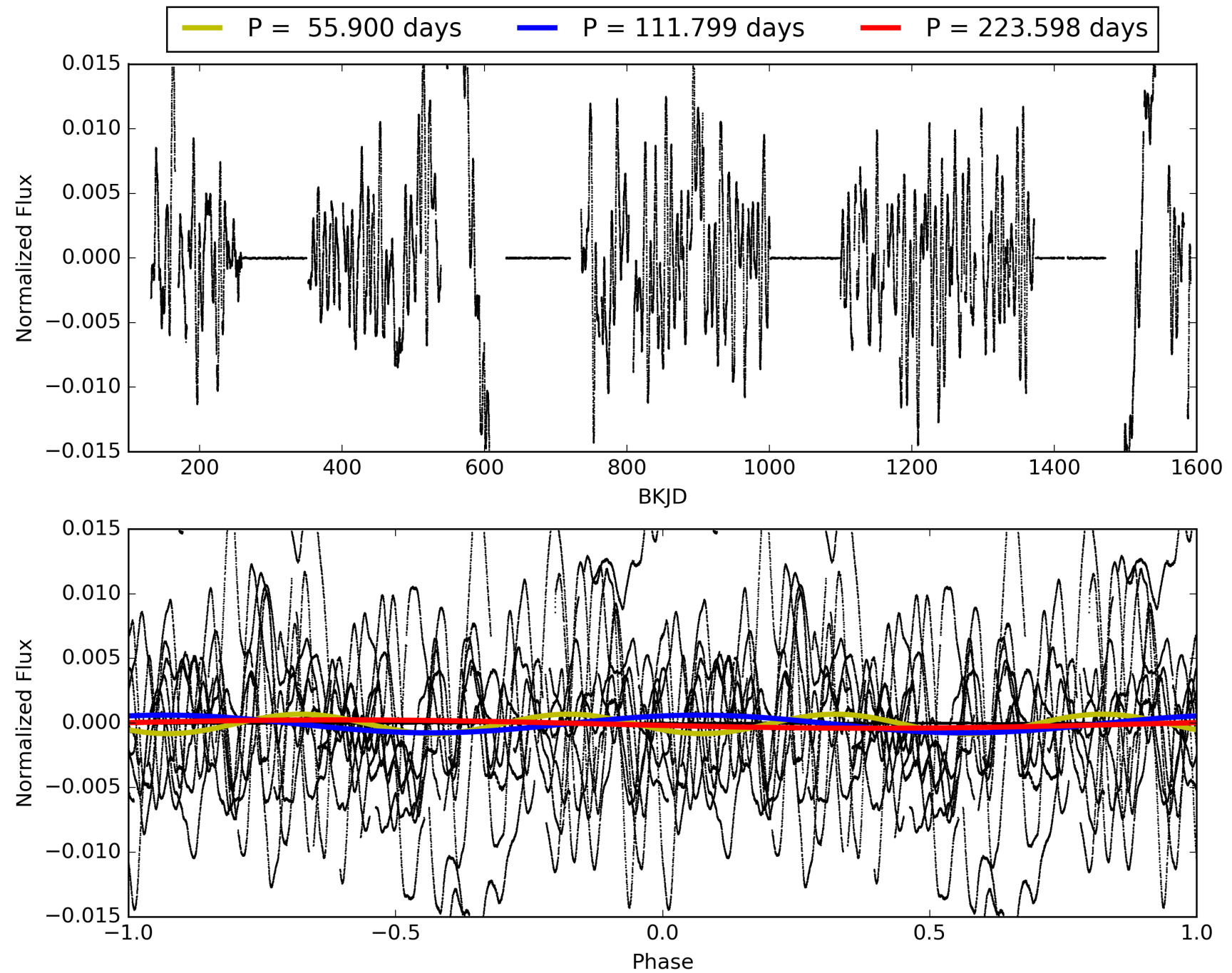
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This Data Validation Report Summary was produced in the Kepler Science Operations Center Pipeline at NASA Ames Research Center

TCE 006192847-01, PDC Light Curves

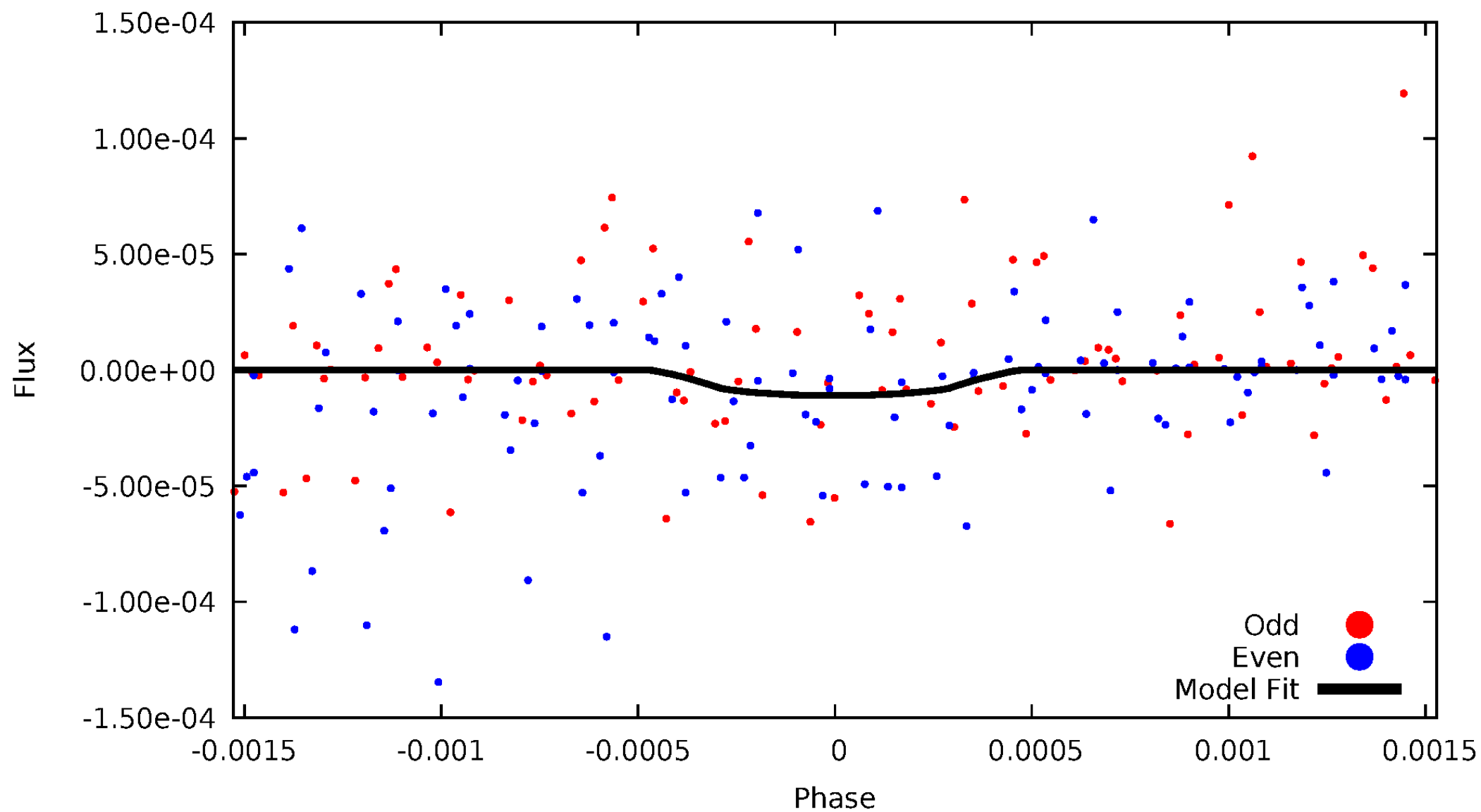


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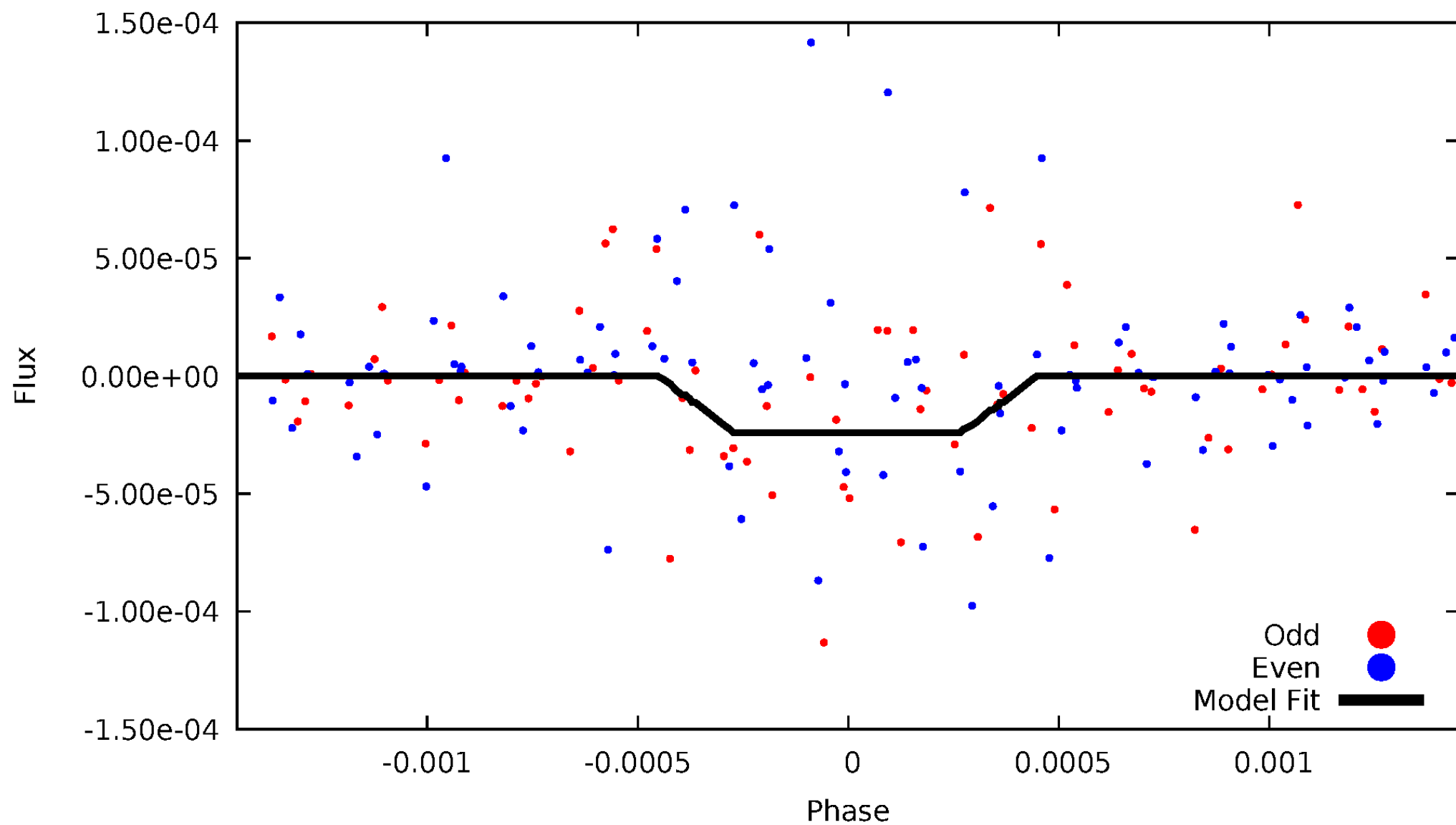
DV Odd/Even

TCE 006192847-01



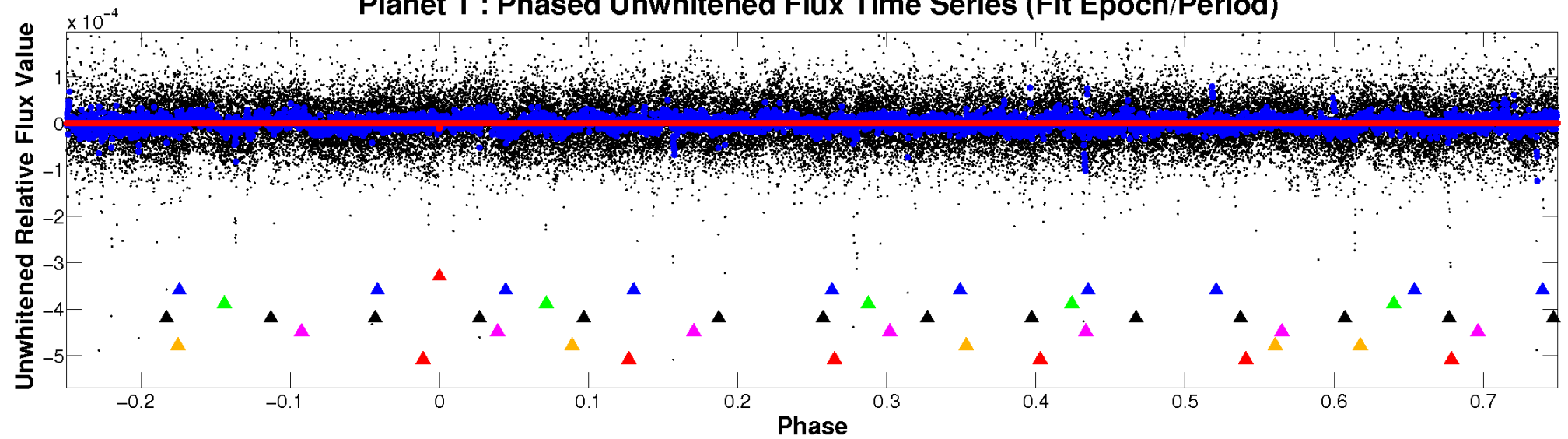
ALT Odd/Even

TCE 006192847-01

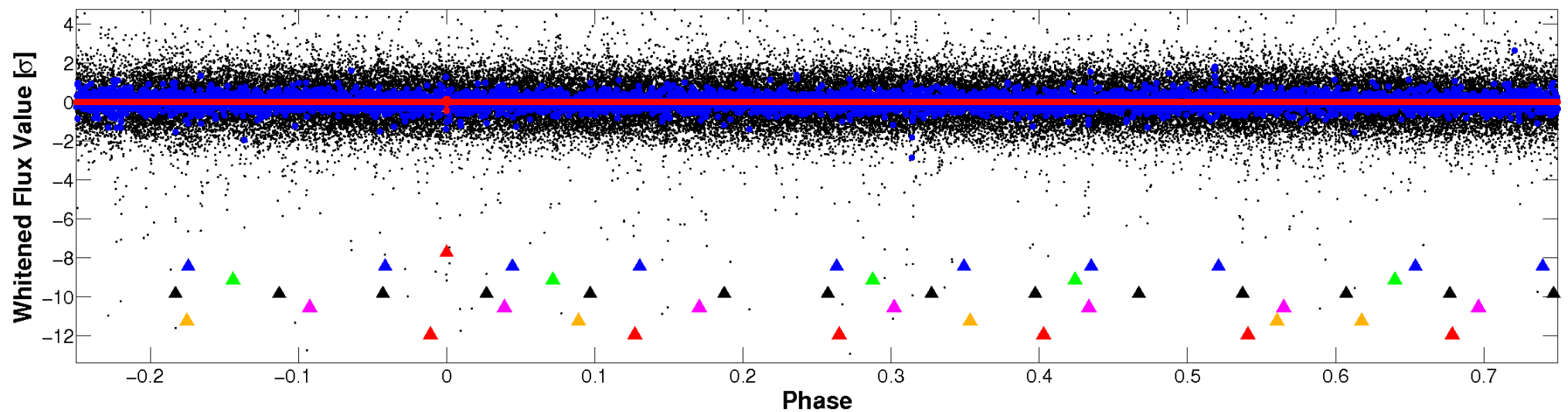


Non-Whitened Vs. Whitened Light Curve

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

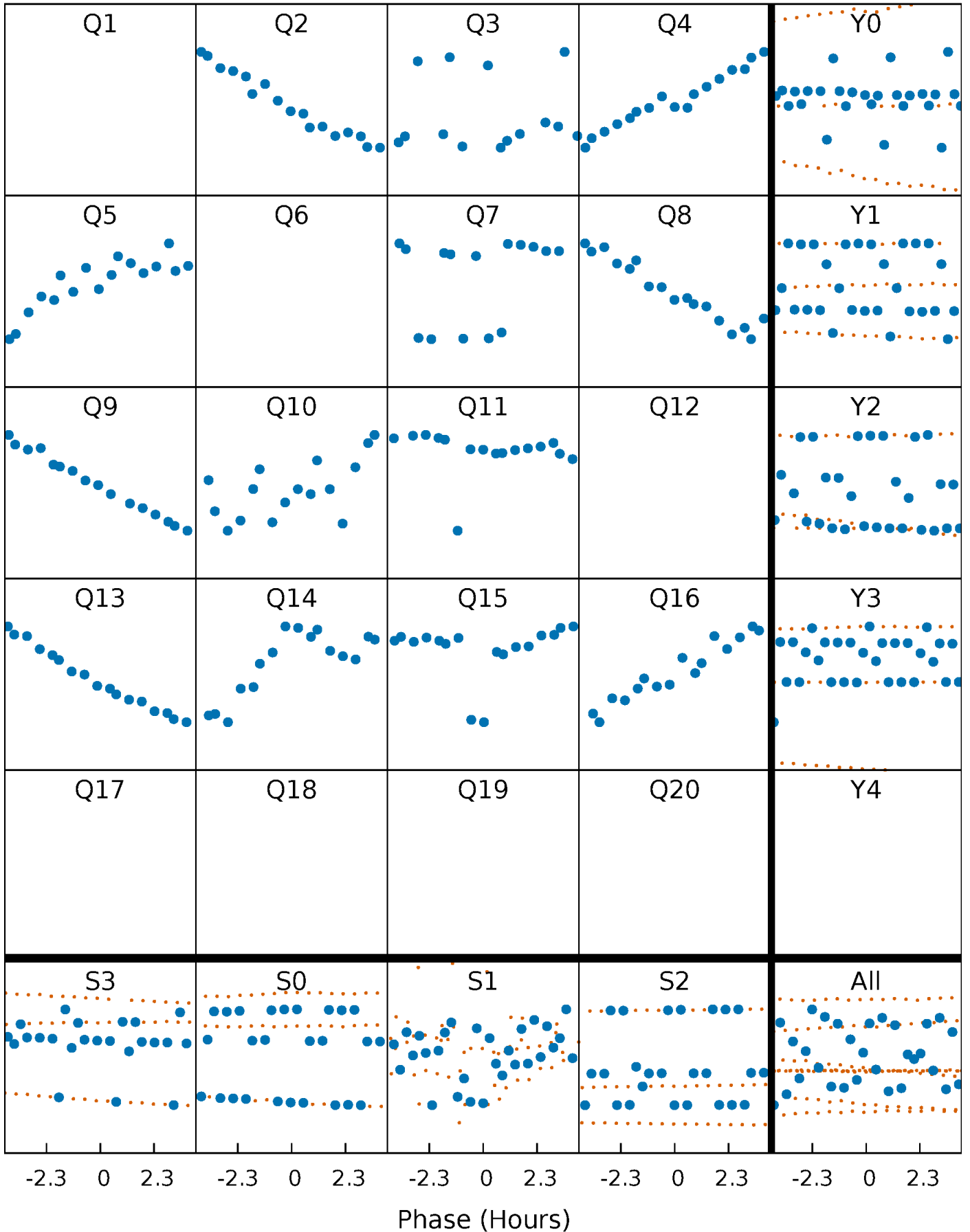


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



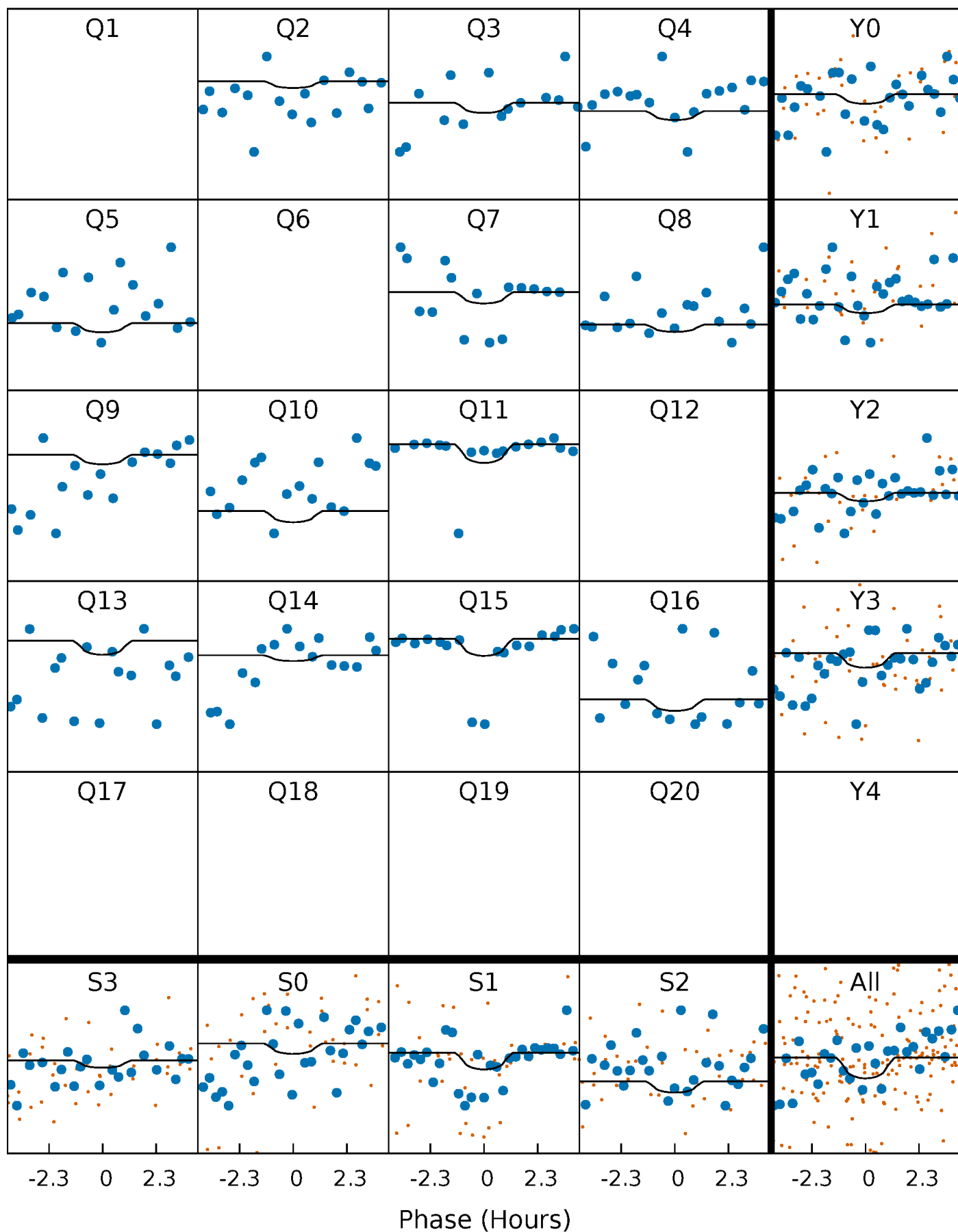
PDC Quarter-Phased Transit Curves

TCE 006192847-01 P=111.799038 Days $T_0=200.971741$ (BKJD)



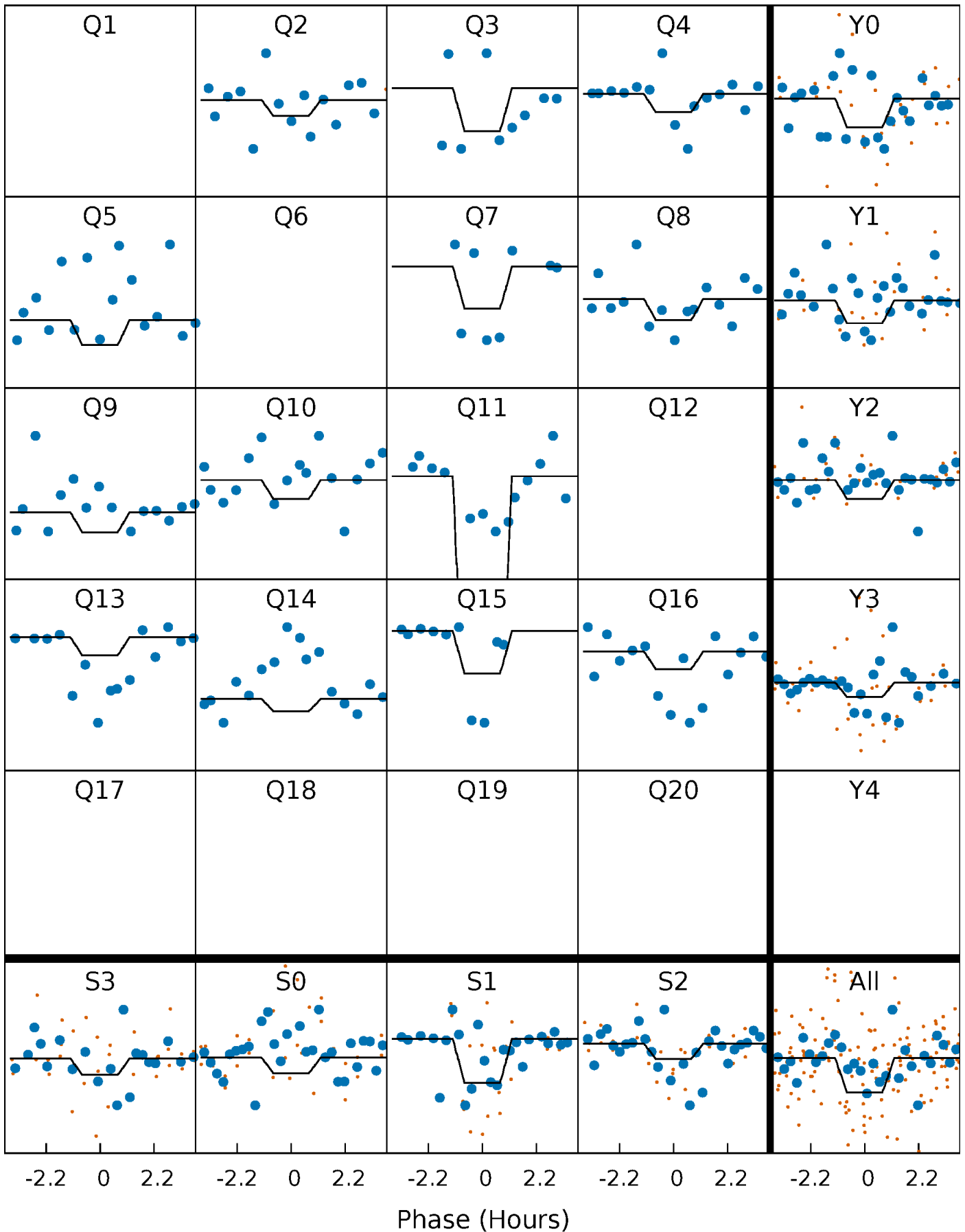
DV Quarter-Phased Transit Curves

TCE 006192847-01 P=111.799038 Days $T_0=200.971741$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

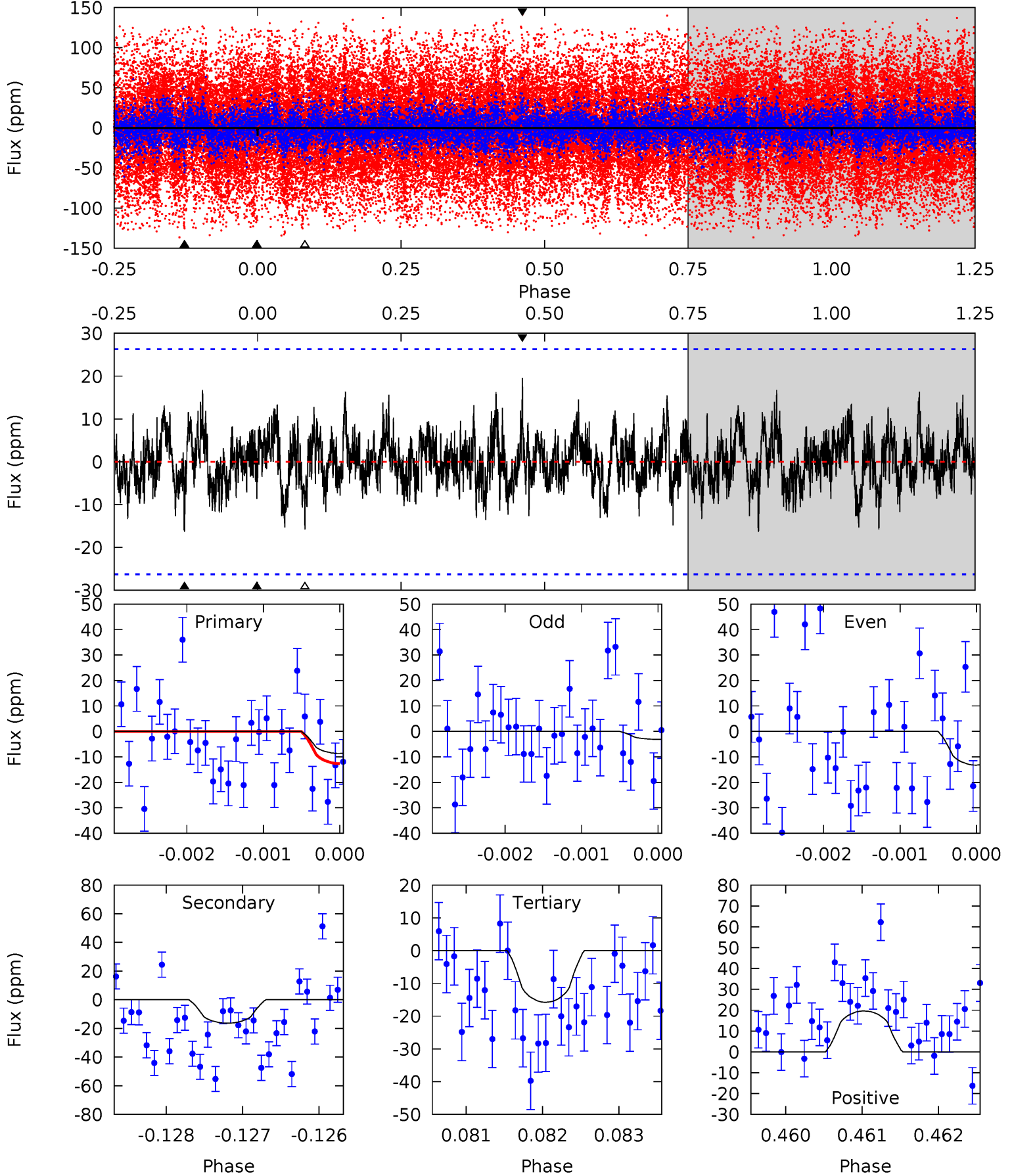
TCE 006192847-01 P=111.799093 Days $T_0=200.970715$ (BKJD)



DV Model-Shift Uniqueness Test

006192847-01, $P = 111.799038$ Days, $E = 89.172703$ Days

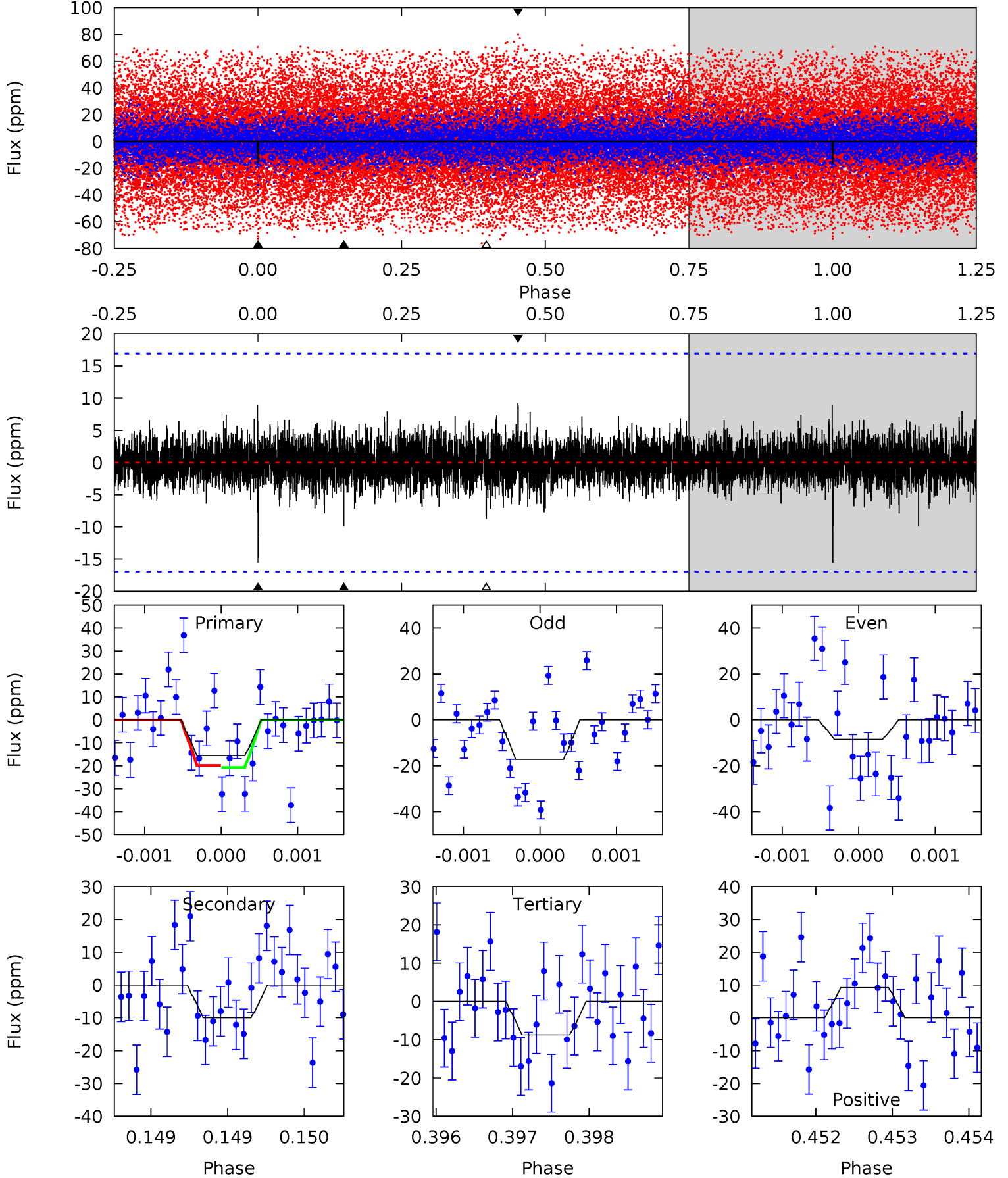
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
1.80	3.40	3.28	4.08	5.46	3.31	1.05	-1.48	-2.28	0.12	-0.68	1.11	-4.15	0.55	0.95



Alt Model-Shift Uniqueness Test

006192847-01, $P = 111.799093$ Days, $E = 89.171622$ Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
5.04	3.21	2.82	2.97	5.48	3.33	0.70	2.22	2.07	0.40	0.24	1.49	0.67	0.37	0.15



Stellar Parameters For KIC 006192847

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	M (M_{\odot})	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	3916^{+88}_{-107}	$1.032^{+0.030}_{-0.030}$	$-0.180^{+0.200}_{-0.250}$	$67.438^{+2.428}_{-14.567}$	$1.785^{+0.071}_{-0.643}$	$0.000^{+0.000}_{-0.000}$
	+2%/-3%	+3%/-3%	+111%/-139%	+4%/-22%	+4%/-36%	+29%/-8%
Source	PHO54	AST54	PHO54	DSEP		

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

Secondary Eclipse Parameters for KIC 006192847-01 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-16 ± 5	$31.22^{+24.35}_{-19.84}$	2676^{+68}_{-86}	3758^{+1957}_{-767}	$2.714^{+17.014}_{-1.877}$
Alt.	-10 ± 3	$38.06^{+25.42}_{-22.24}$	2673^{+67}_{-70}	3193^{+1229}_{-912}	$1.144^{+5.042}_{-0.781}$

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 $A_{obs} \gg 1.0$

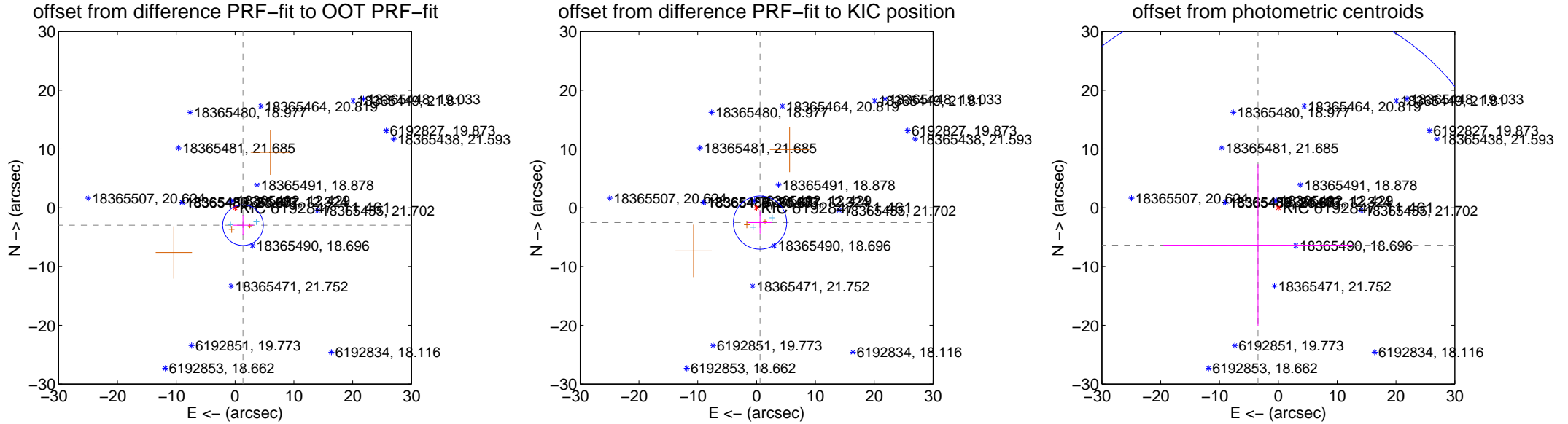
DV Centroid Data

Supplemental centroid analysis for 006192847-01. **Kepler magnitude: 11.46.** Transit SNR 3.08

There are 2 quarters with good PRF difference image offsets

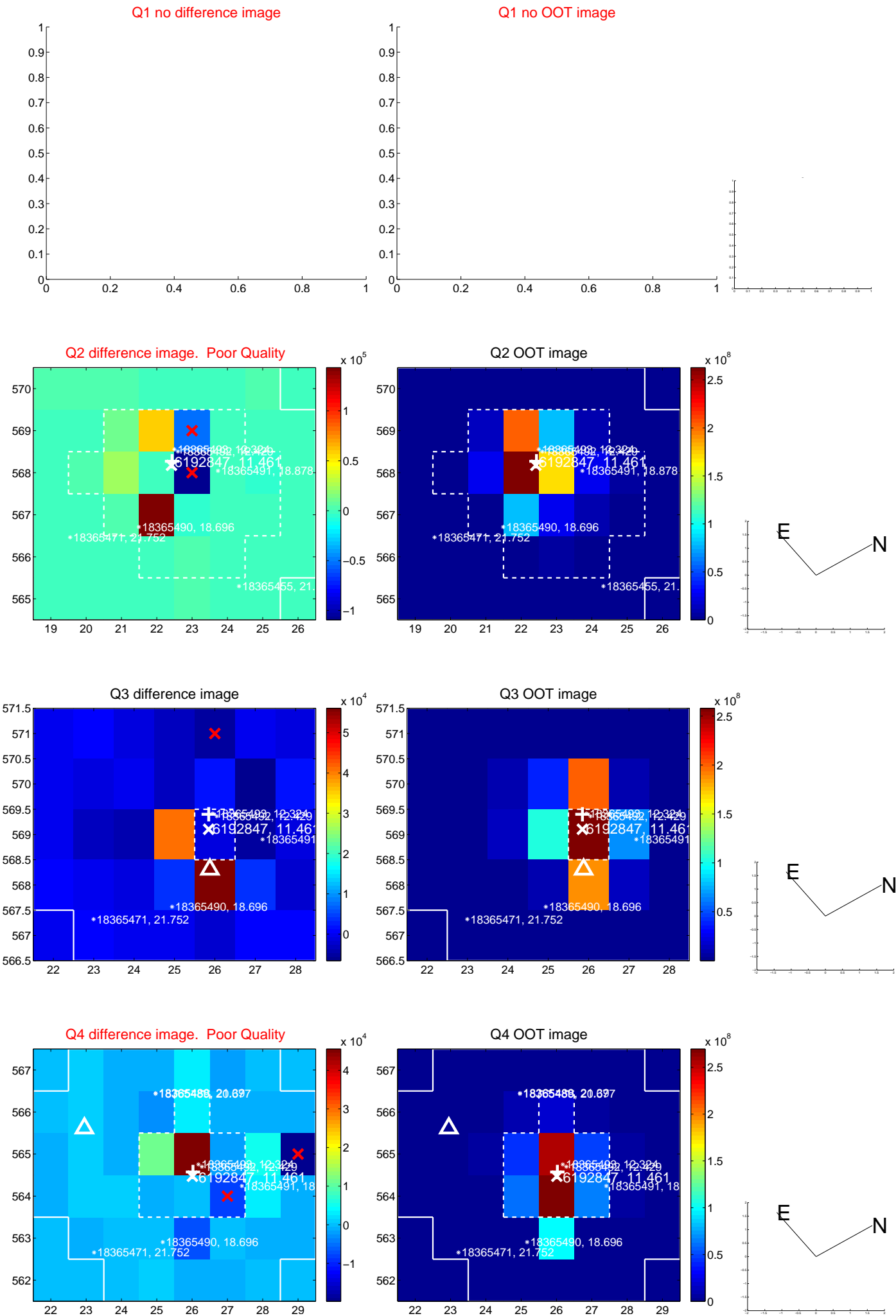
The direct PRF centroid is offset from the target star catalog position by about 1.33 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	3.260 ± 1.150	2.83	-1.344 ± 1.786	-2.971 ± 1.718
PRF-fit source offset from KIC position	2.594 ± 1.511	1.72	-0.591 ± 2.026	-2.525 ± 1.897
photometric centroid source offset	7.24 ± 14.33	0.51	3.45 ± 16.07	-6.37 ± 13.78

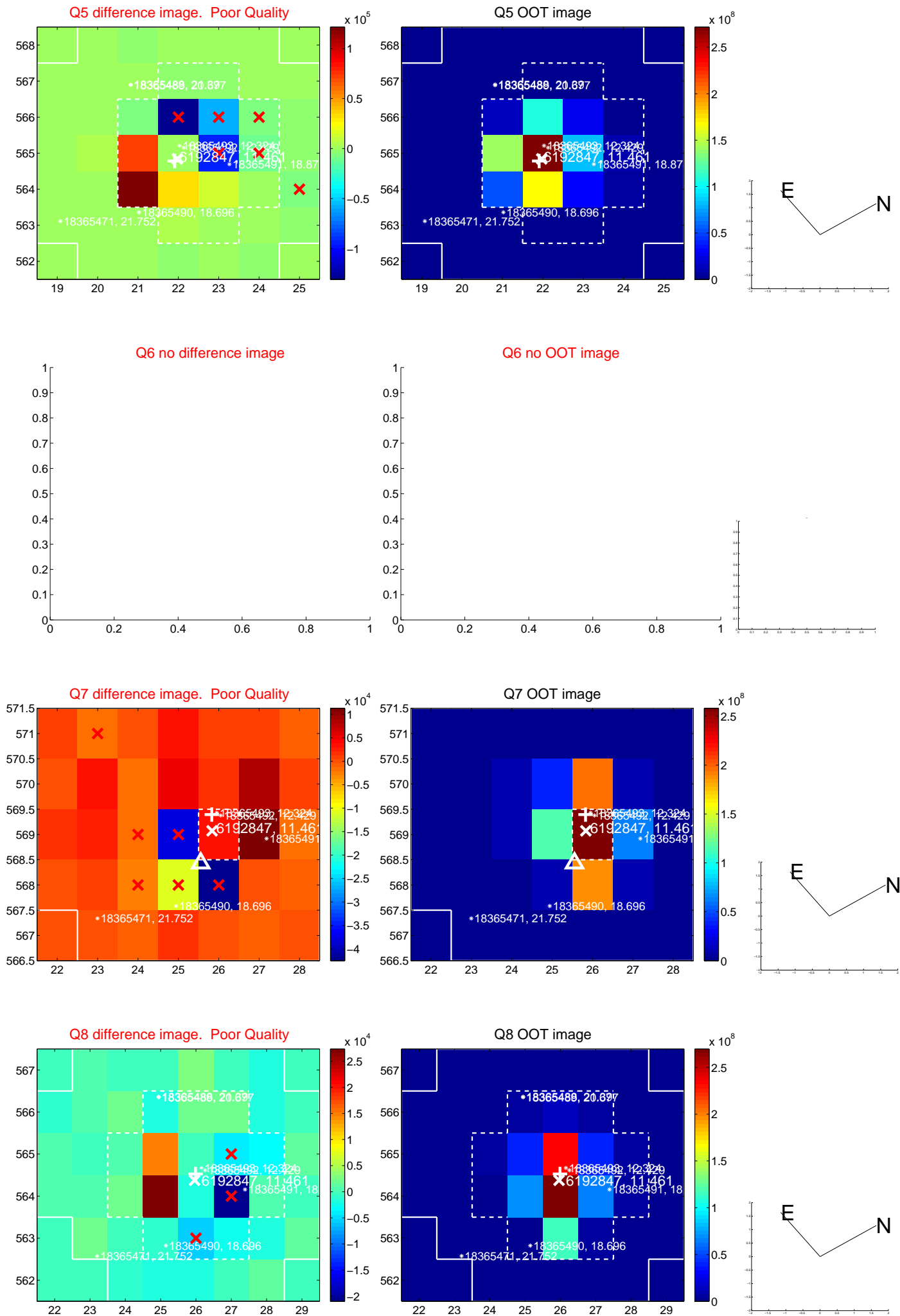


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets;** magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

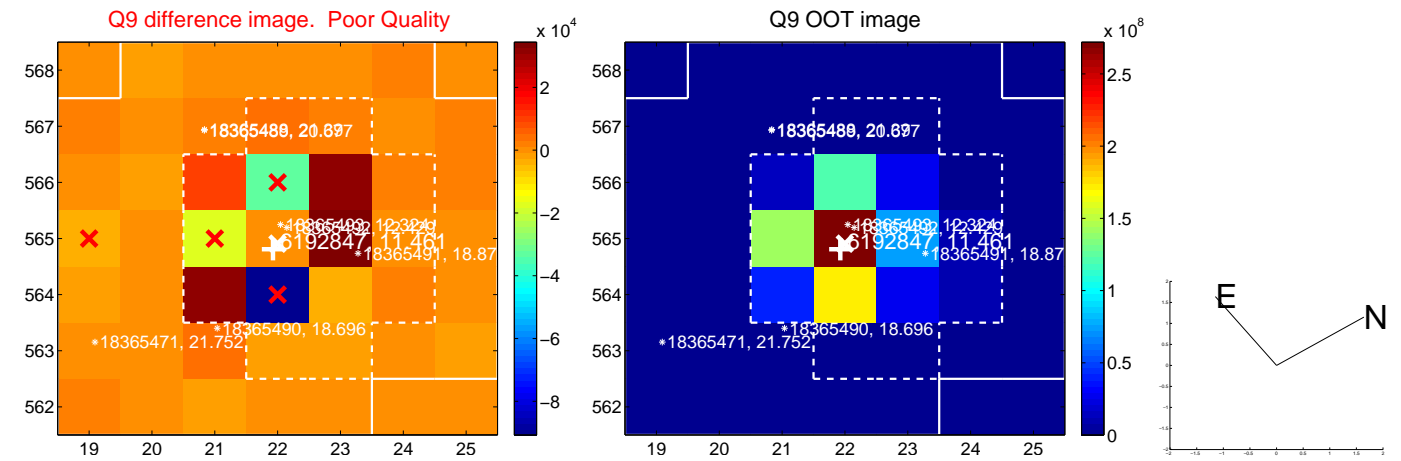
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



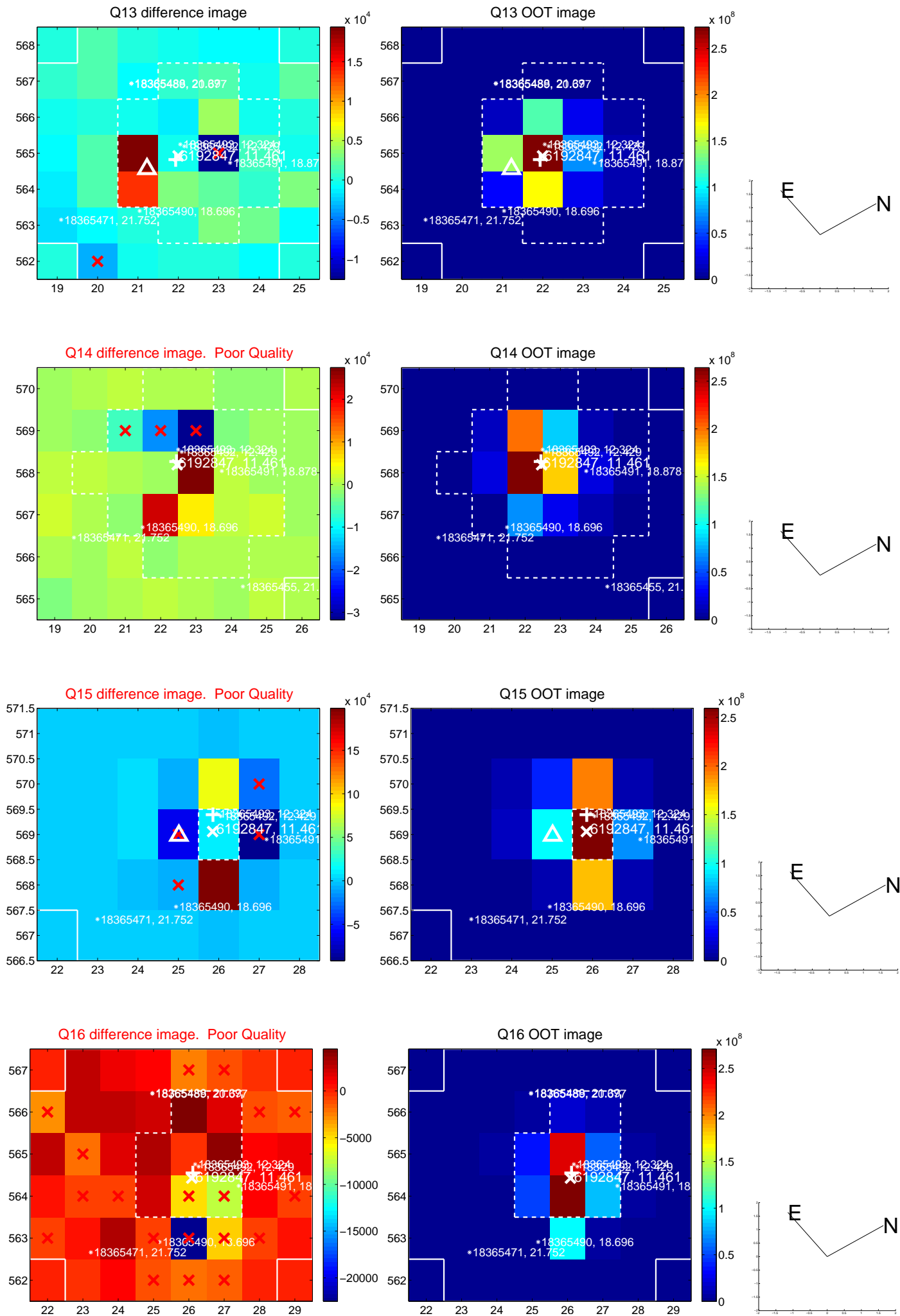
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



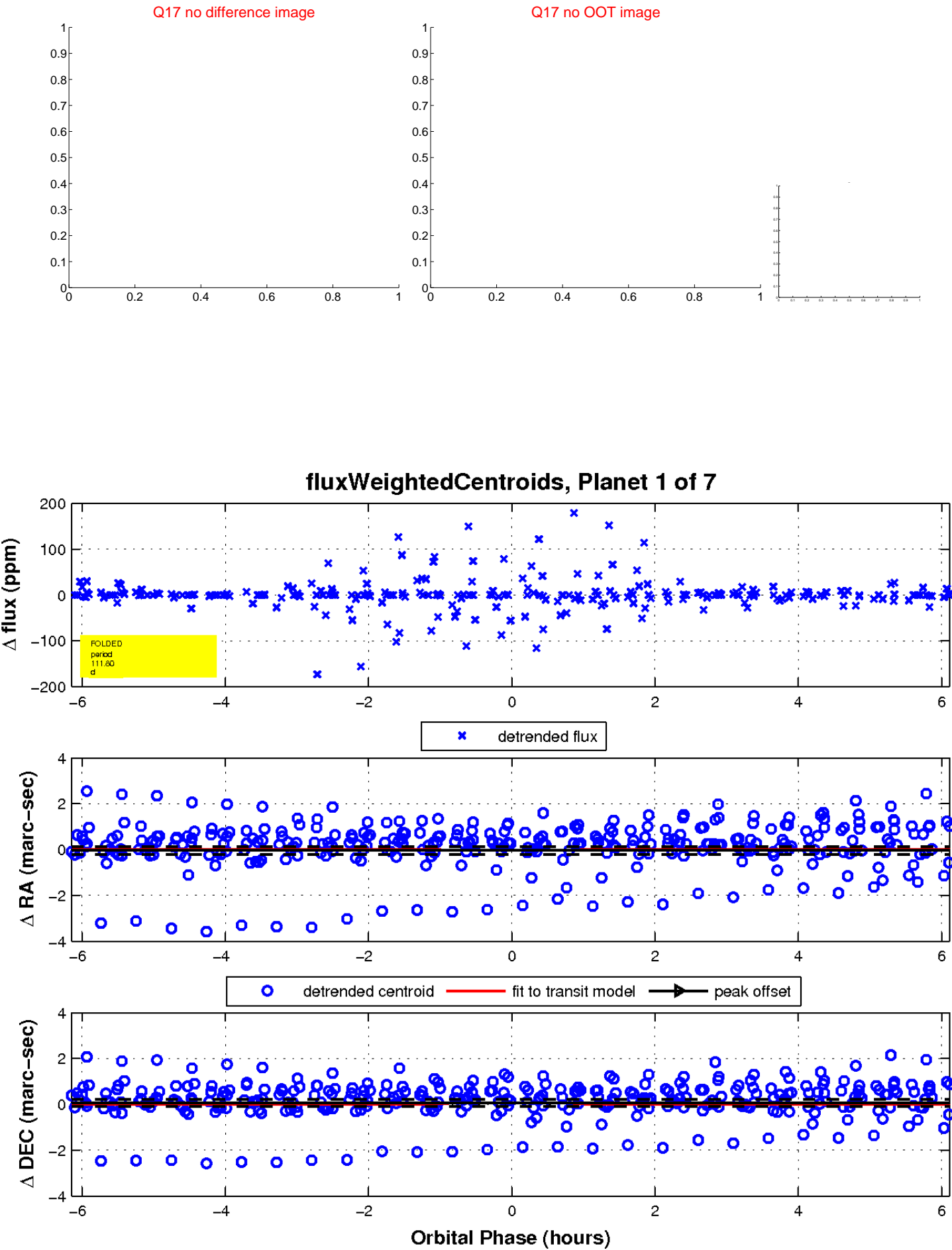
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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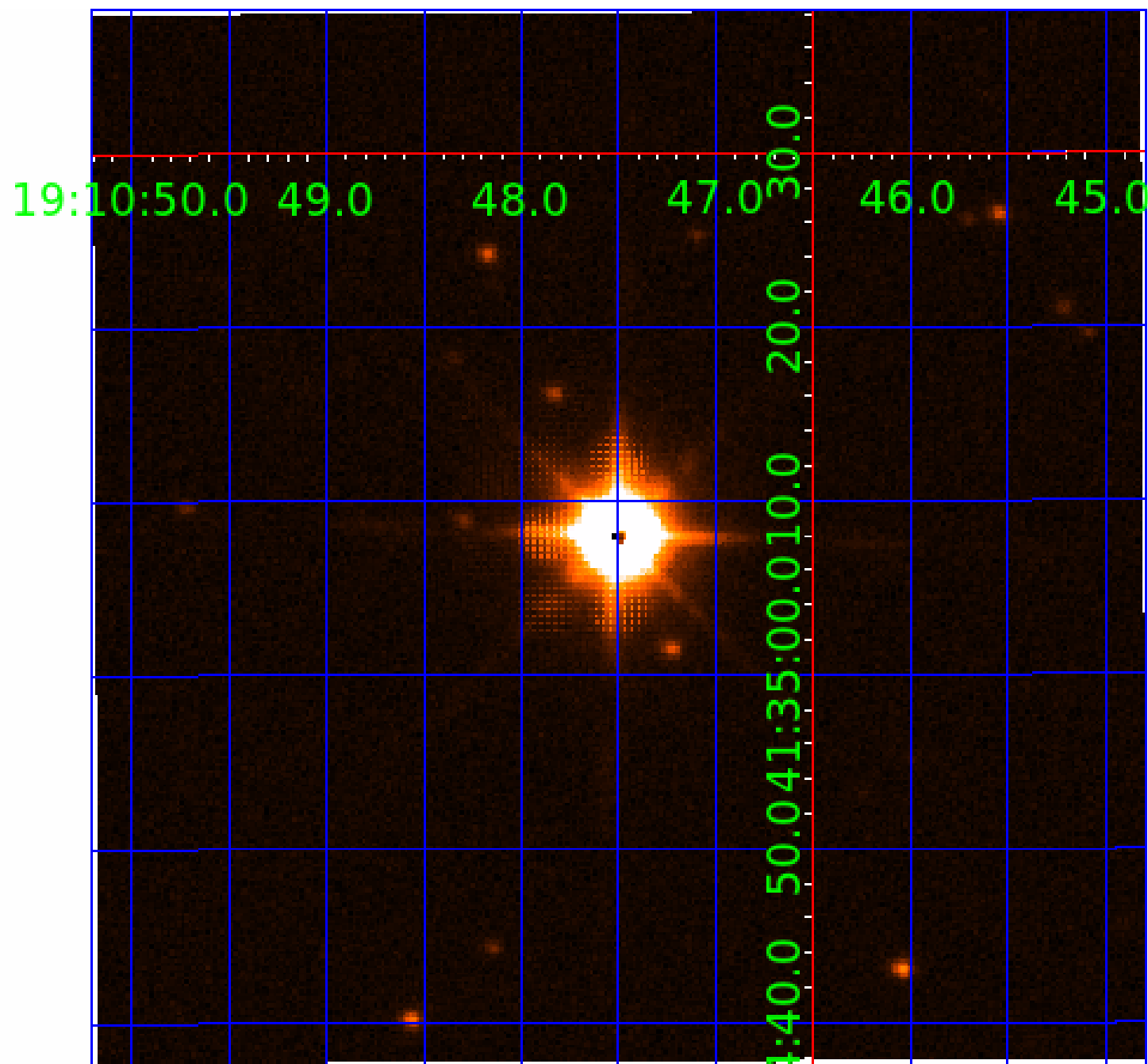


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 006192847

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})
006192847-01	OBS	No	111.799038	200.971741	11.0	2.049	27.5	3.1	67.44	3916	24.08	3154.65
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Robovetter Results

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006192847-01	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_SATURATED
006192847-02	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—INCONSISTENT_TRANS—CENT_SATURATED
006192847-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_MARSHALL_ZUMA—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—INCONSISTENT_TRANS—CENT_SATURATED
006192847-04	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_SKYE_ZUMA_TRACKER—LPP_ALT—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—INCONSISTENT_TRANS—CENT_SATURATED
006192847-05	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_MARSHALL_ZUMA—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—CENT_SATURATED
006192847-06	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_MARSHALL_ZUMA_TRACKER—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—CENT_SATURATED
006192847-07	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_MARSHALL_ZUMA—LPP_DV—CENT_SATURATED

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

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

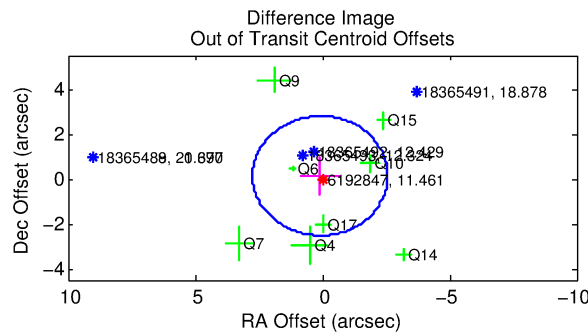
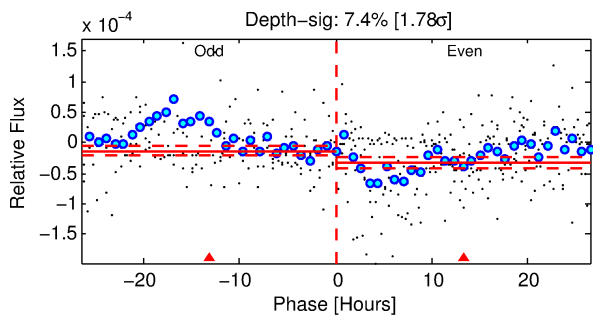
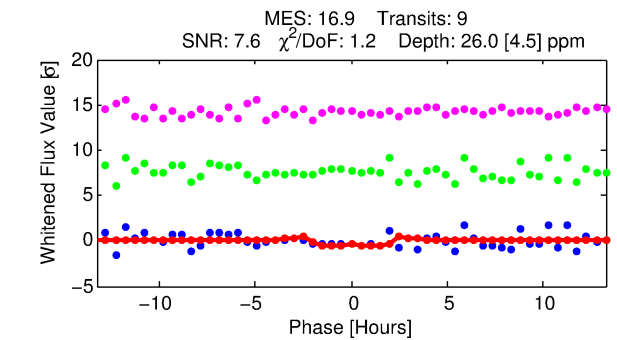
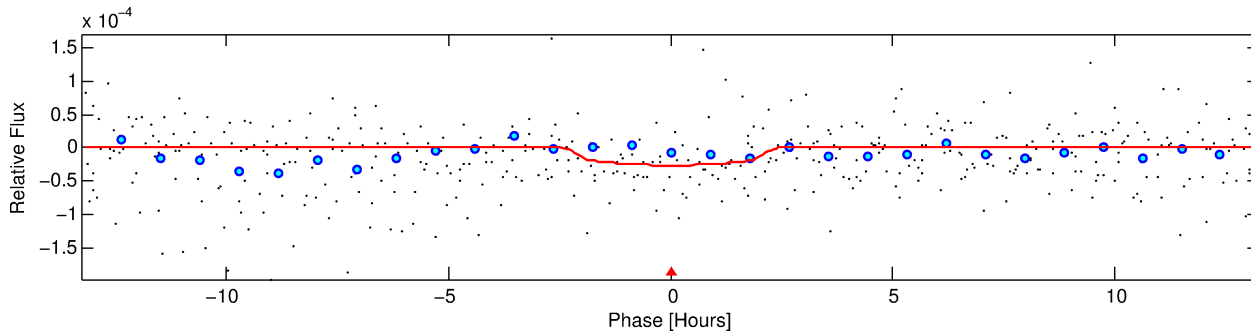
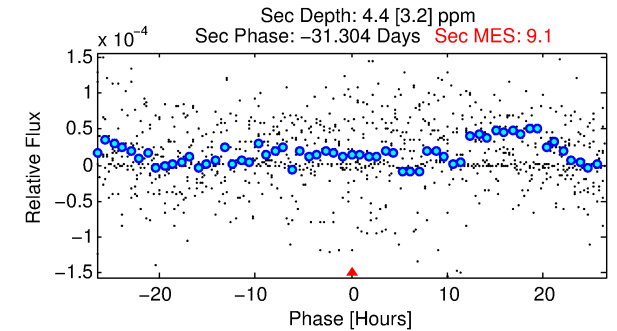
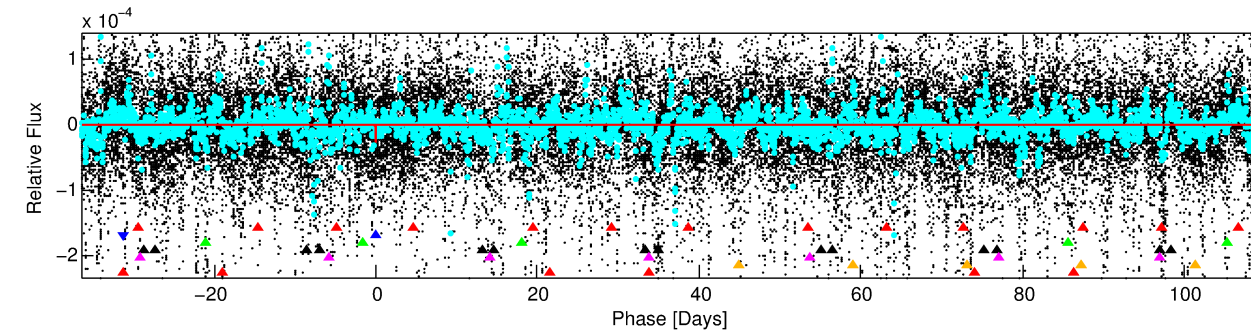
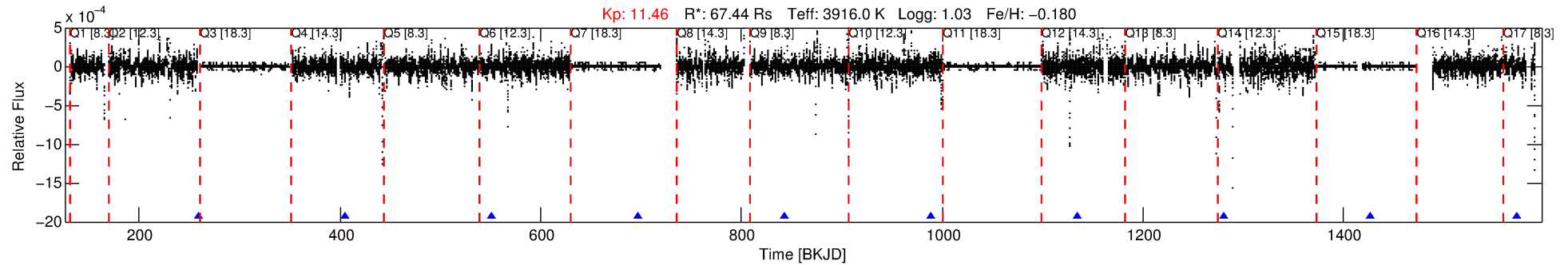
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 006192847-02

No Significant Match Found

DV One-Page Summary

KIC: 6192847 Candidate: 2 of 7 Period: 145.864 d



DV Fit Results:

Period = 145.86385 [0.00271] d
Epoch = 259.2161 [0.0193] BKJD
Rp/R* = 0.0058 [0.0024]
a/R* = 118.83 [167.40]
b = 0.89 [0.35]
Seff = 2212.78 [412.81]
Teff = 1749 [82] K
Rp = 42.79 [20.16] Re
a = 0.6581 [0.0960] AU
Ag = 0.58 [0.64] [-0.66 σ]
Teffp = 2357 [655] K [0.92 σ]

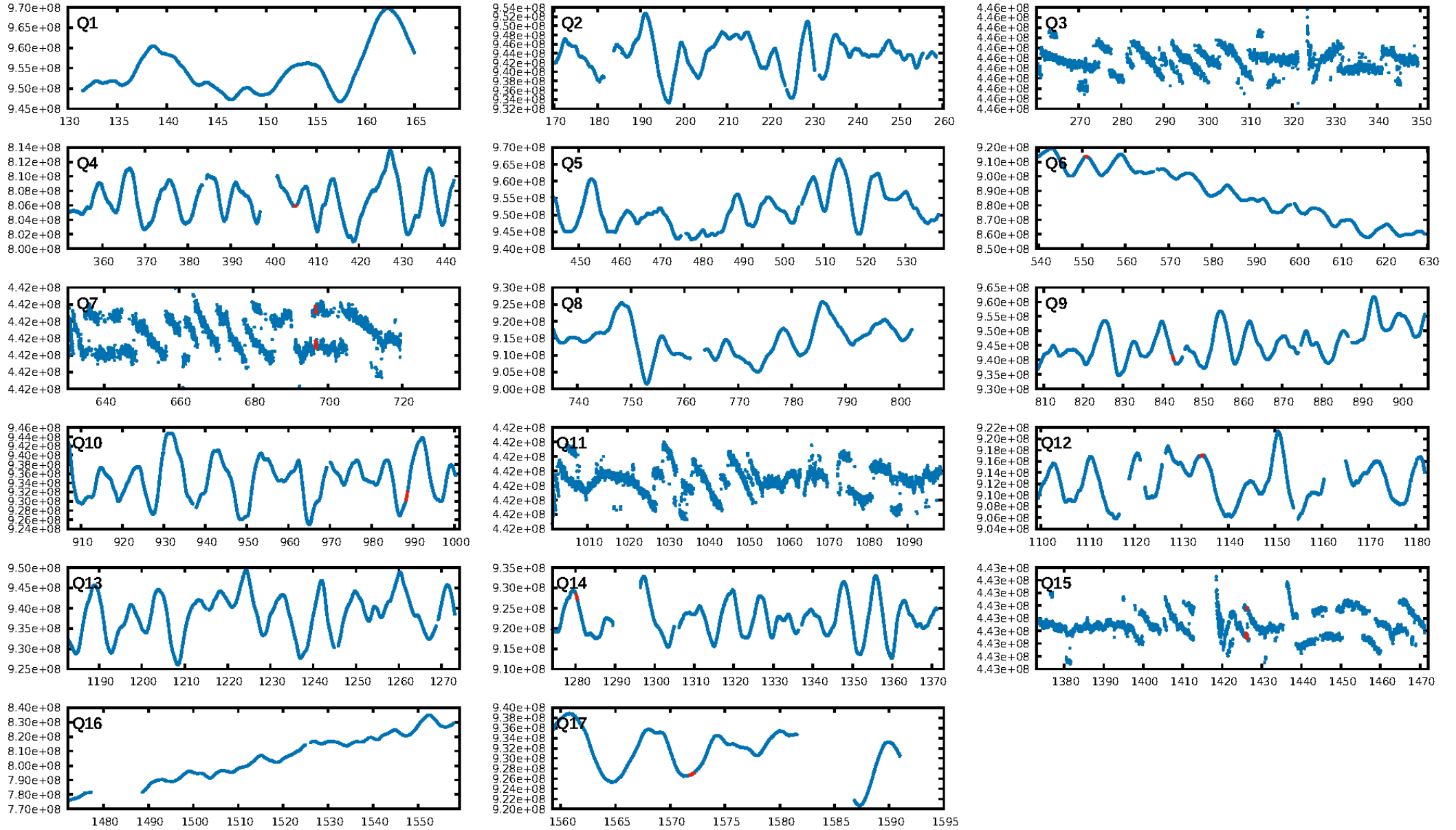
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [168.07 σ]
LongPeriod-sig: 100.0% [155.27 σ]
ModelChiSquare2-sig: 14.9%
ModelChiSquareGof-sig: 97.8%
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [8/8]
GhostDiagnostic-chr: 0.2733
Centroid-sig: 18.5%
Centroid-so: 5.298 arcsec [0.90 σ]
OotOffset-rm: 0.162 arcsec [0.18 σ]
OotOffset-st: 3/2/1/2 [8]
KicOffset-rm: 0.512 arcsec [0.66 σ]
KicOffset-st: 3/2/1/2 [8]
DiffImageQuality-fgm: 0.38 [3/8]
DiffImageOverlap-fno: 1.00 [9/9]

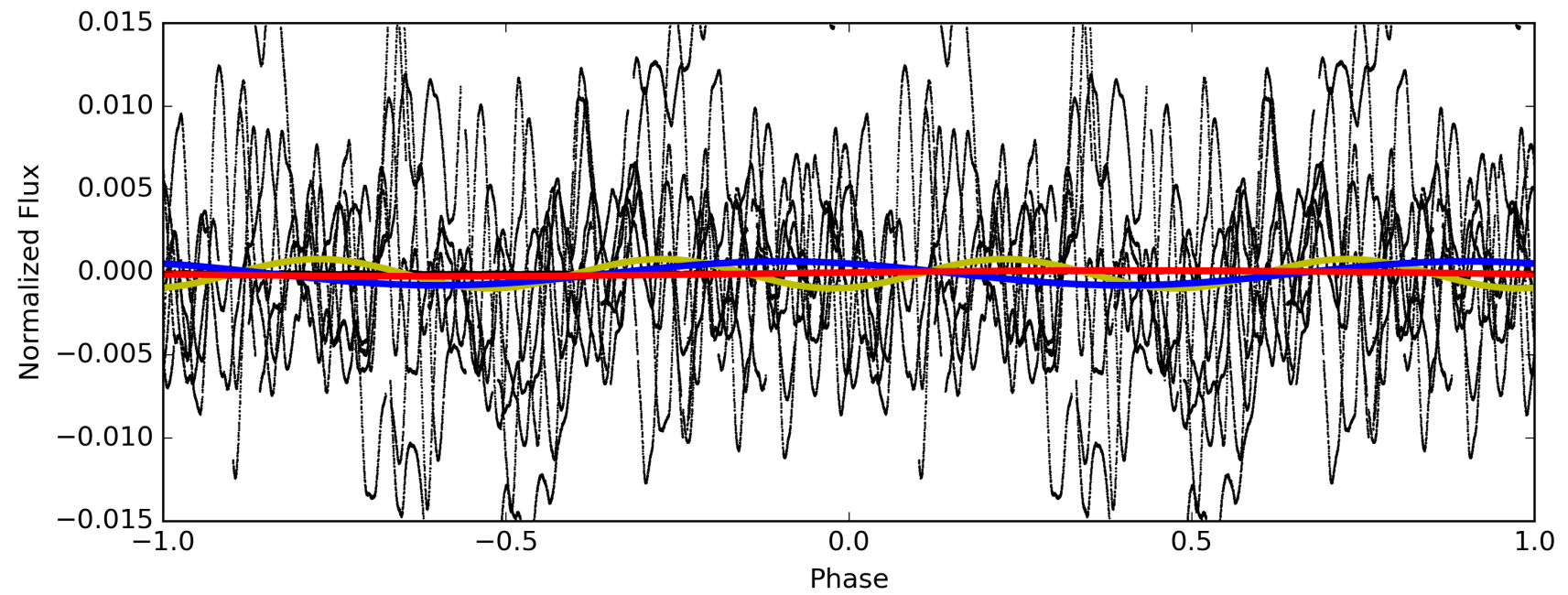
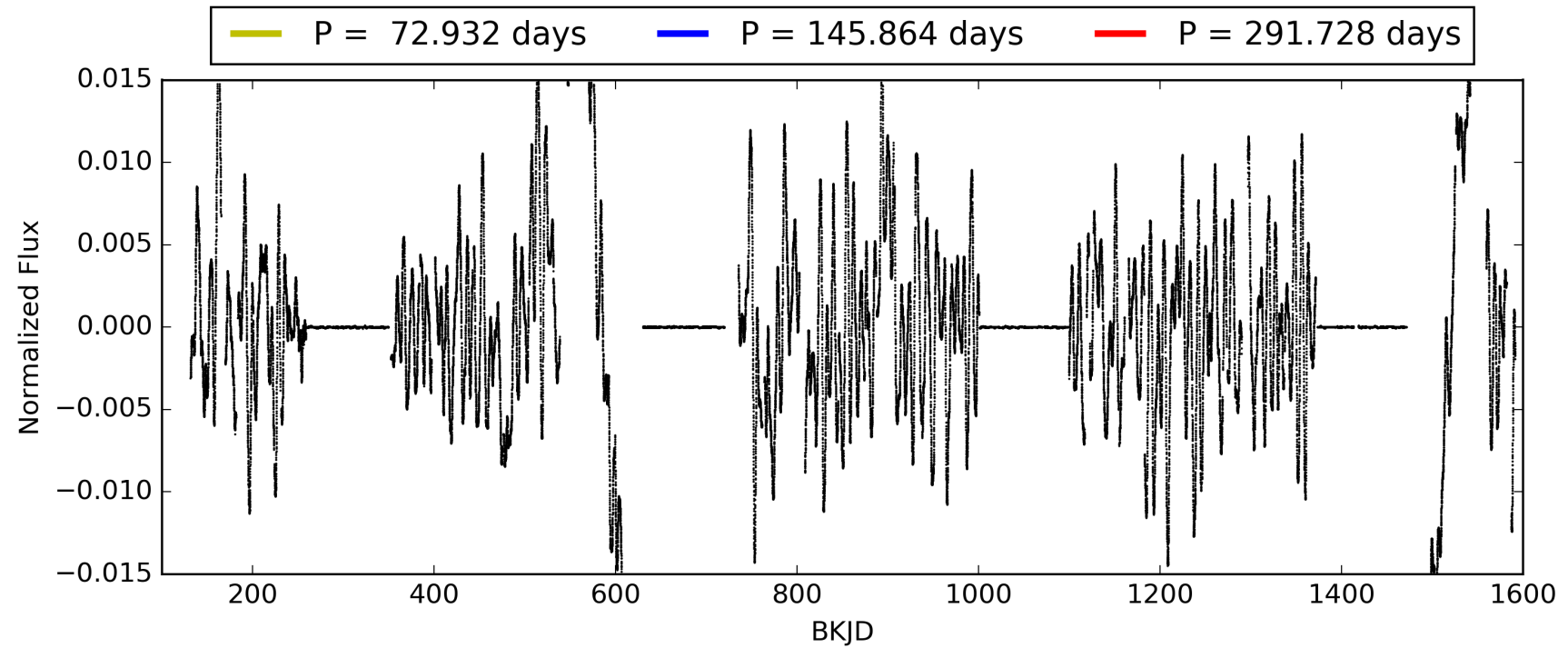
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This Data Validation Report Summary was produced in the Kepler Science Operations Center Pipeline at NASA Ames Research Center

TCE 006192847-02, PDC Light Curves

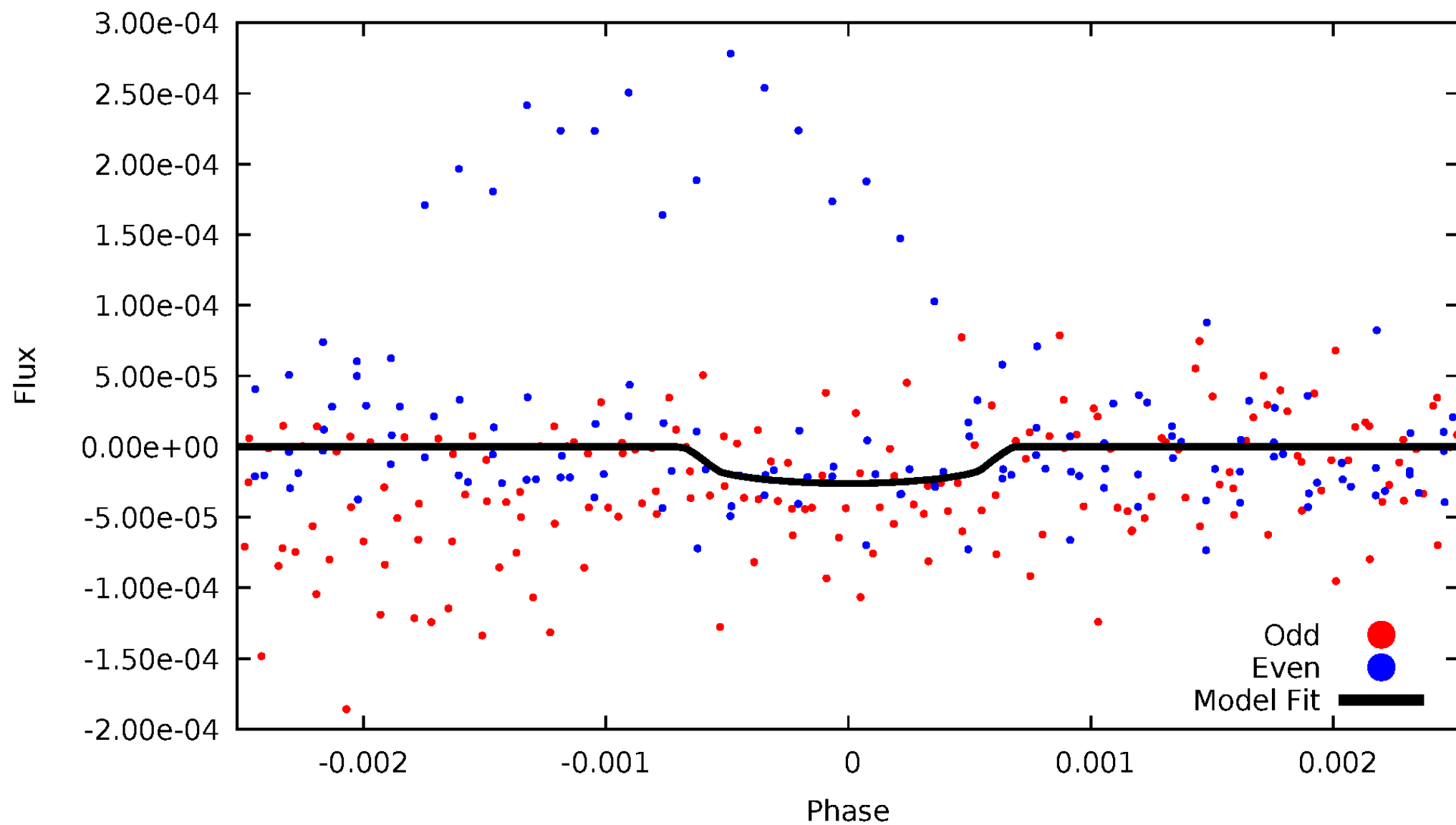


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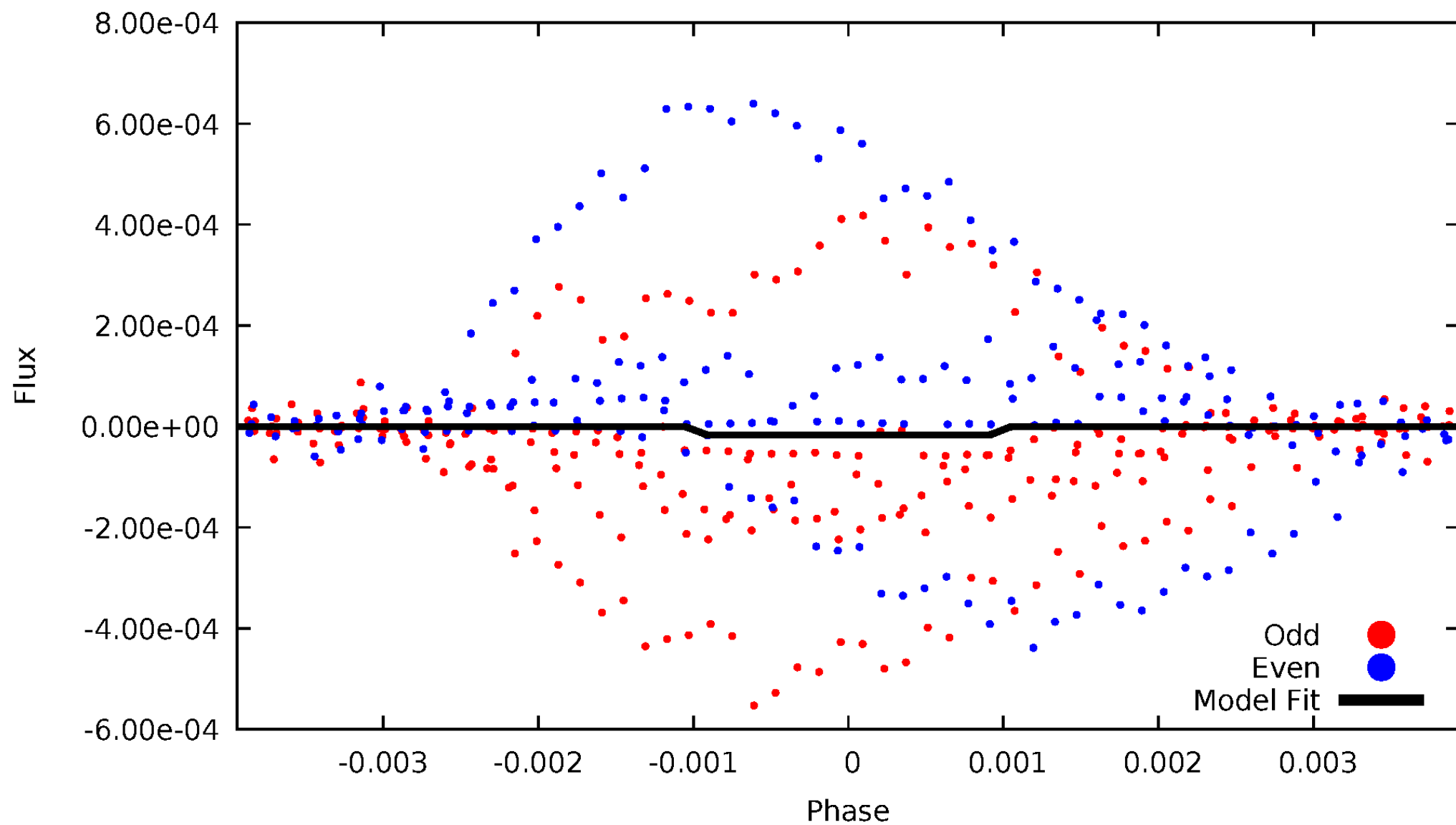
DV Odd/Even

TCE 006192847-02



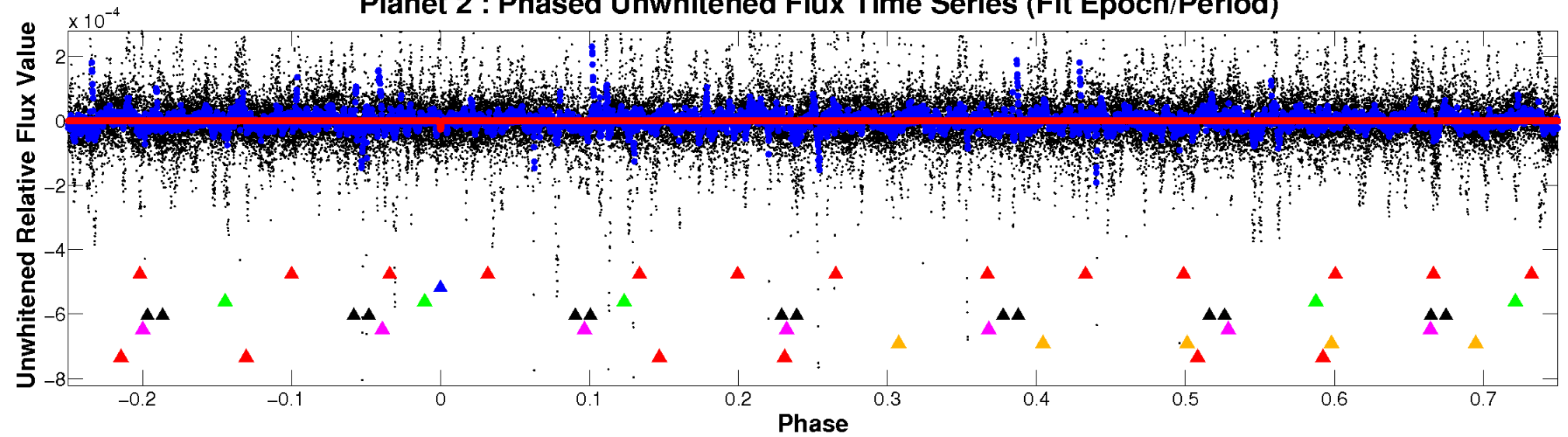
ALT Odd/Even

TCE 006192847-02

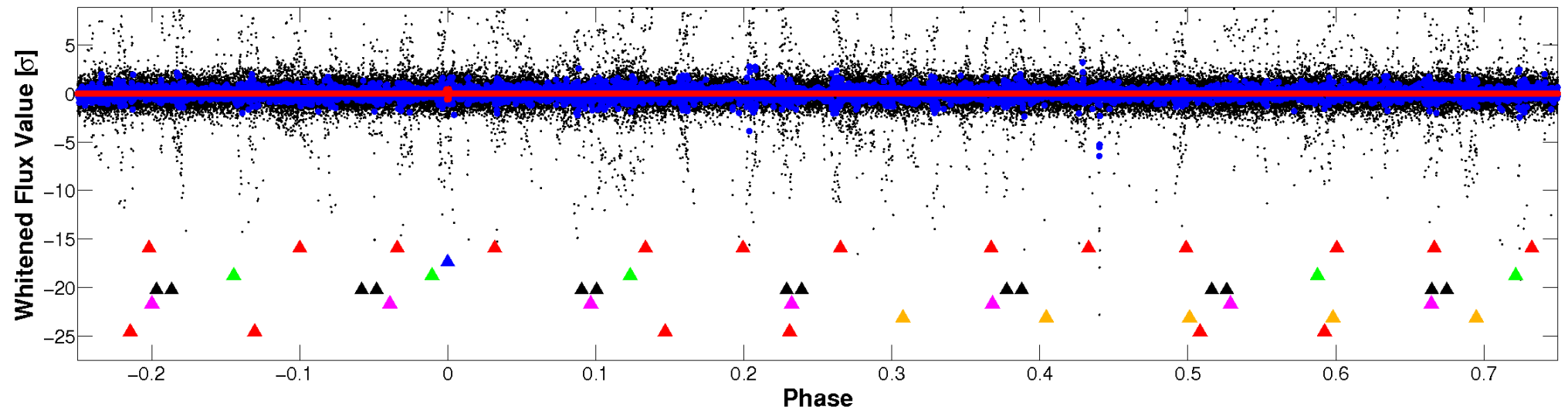


Non-Whitened Vs. Whitened Light Curve

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

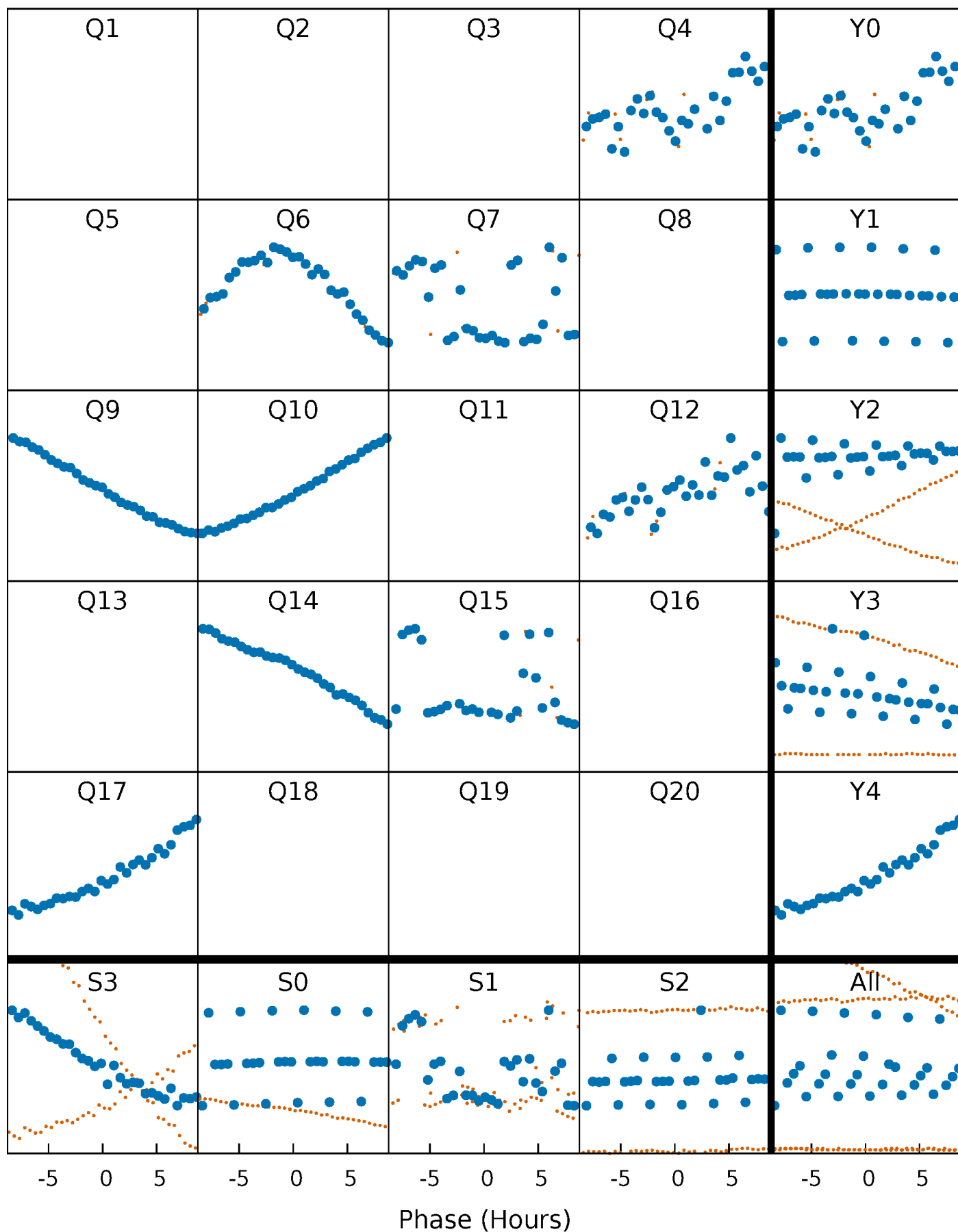


Planet 2 : Phased Whitened Flux Time Series (Fit Epoch/Period)



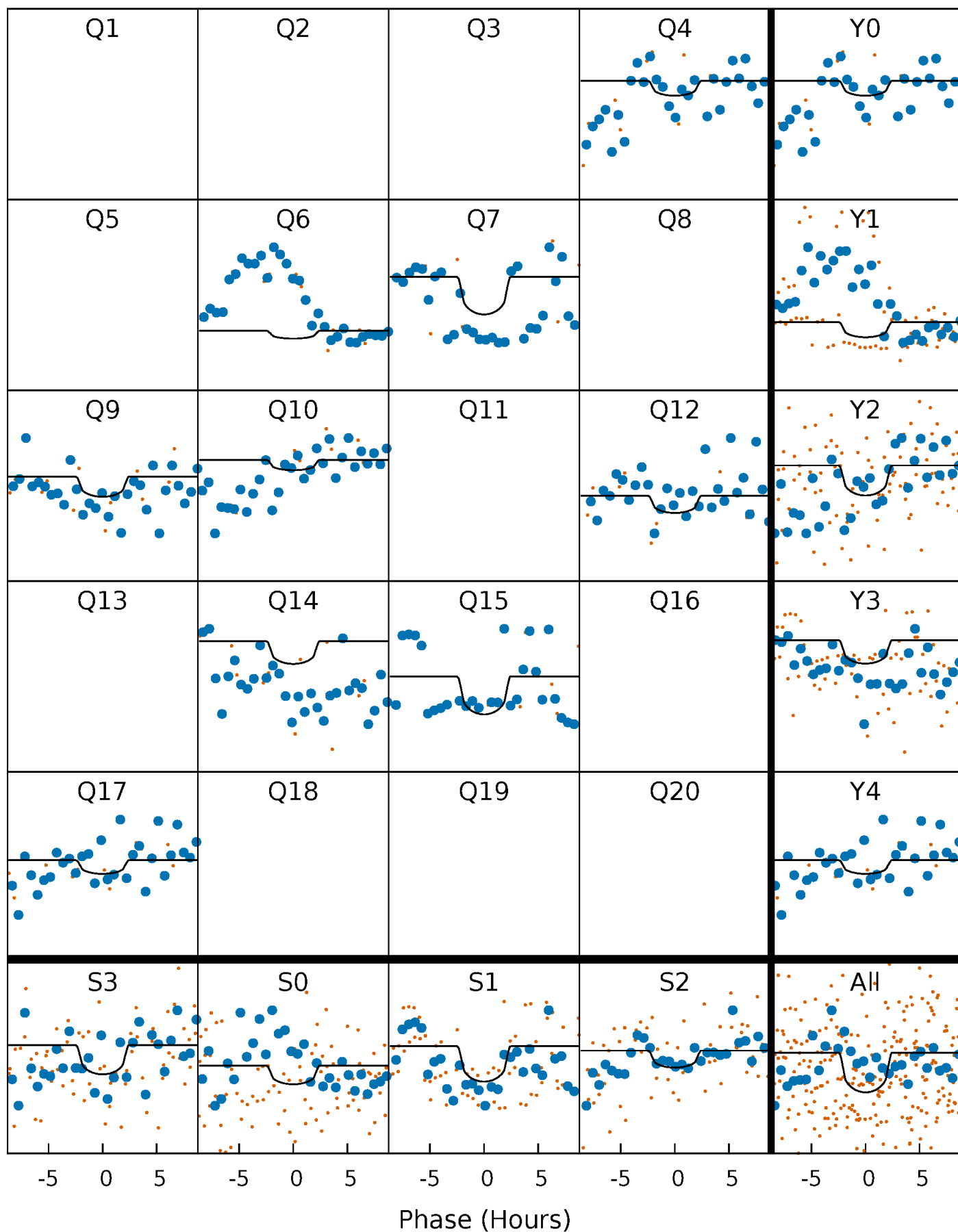
PDC Quarter-Phased Transit Curves

TCE 006192847-02 P=145.863849 Days $T_0=259.216103$ (BKJD)



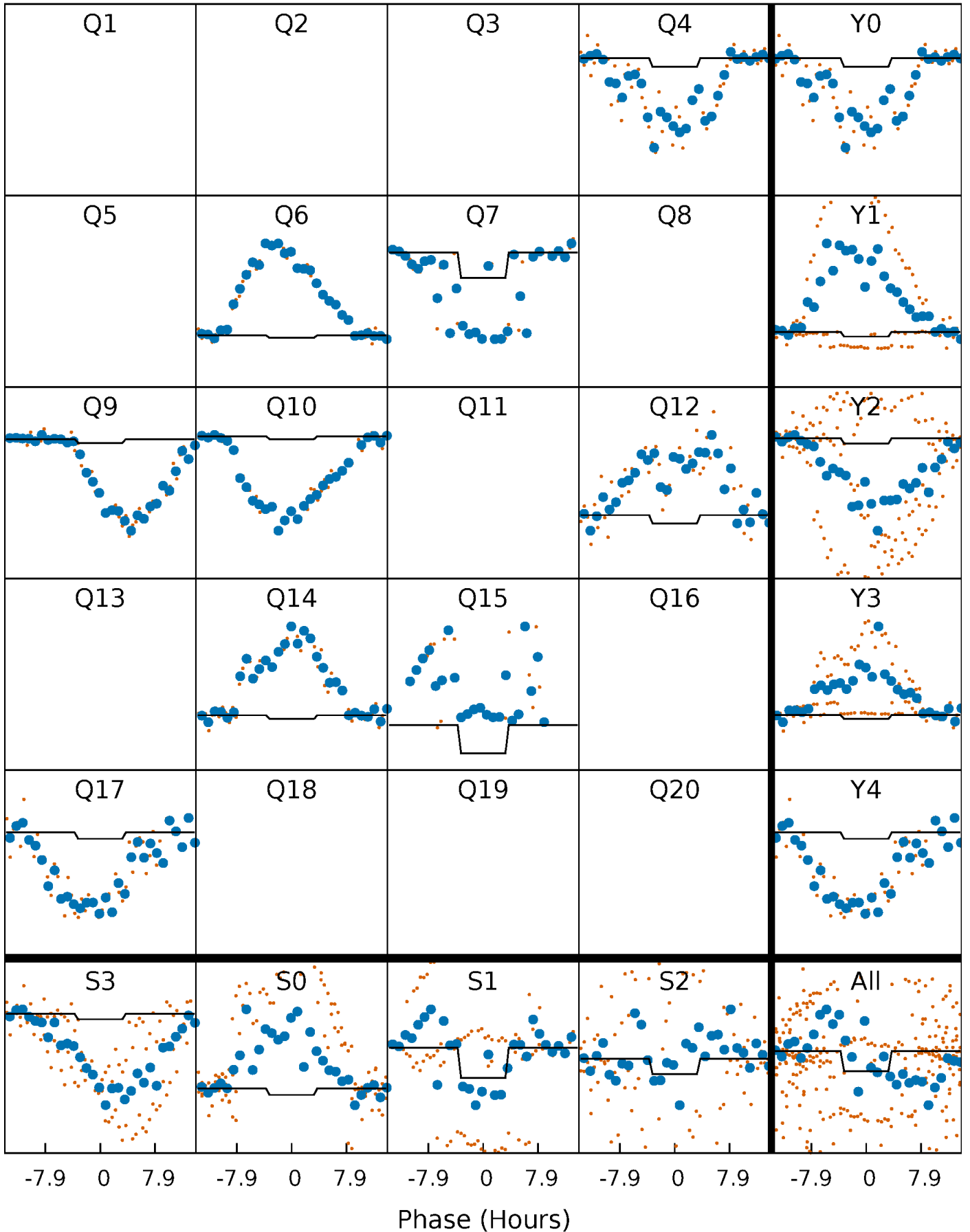
DV Quarter-Phased Transit Curves

TCE 006192847-02 $P=145.863849$ Days $T_0=259.216103$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

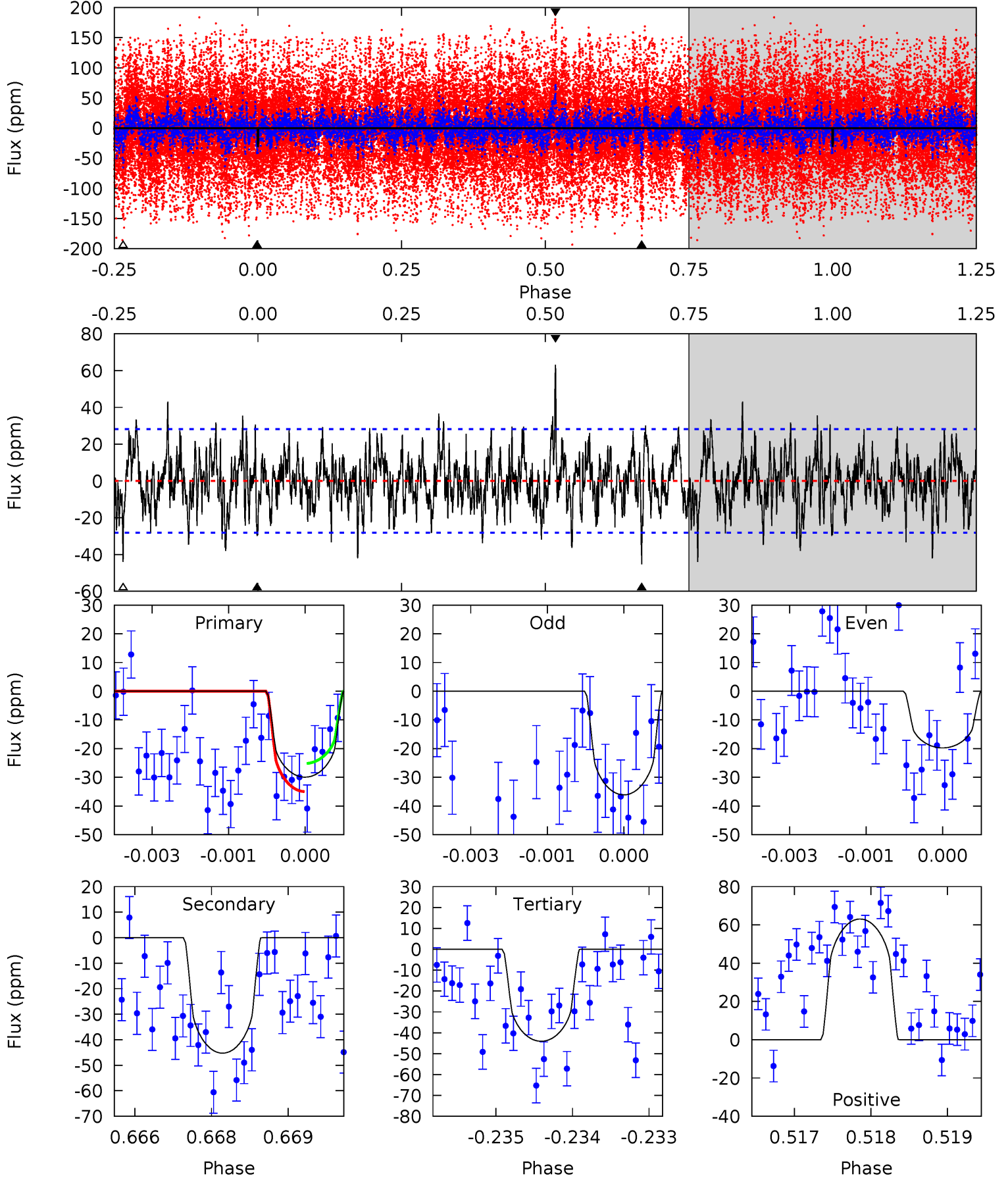
TCE 006192847-02 P=145.834318 Days $T_0=259.375365$ (BKJD)



DV Model-Shift Uniqueness Test

006192847-02, P = 145.863849 Days, E = 113.352254 Days

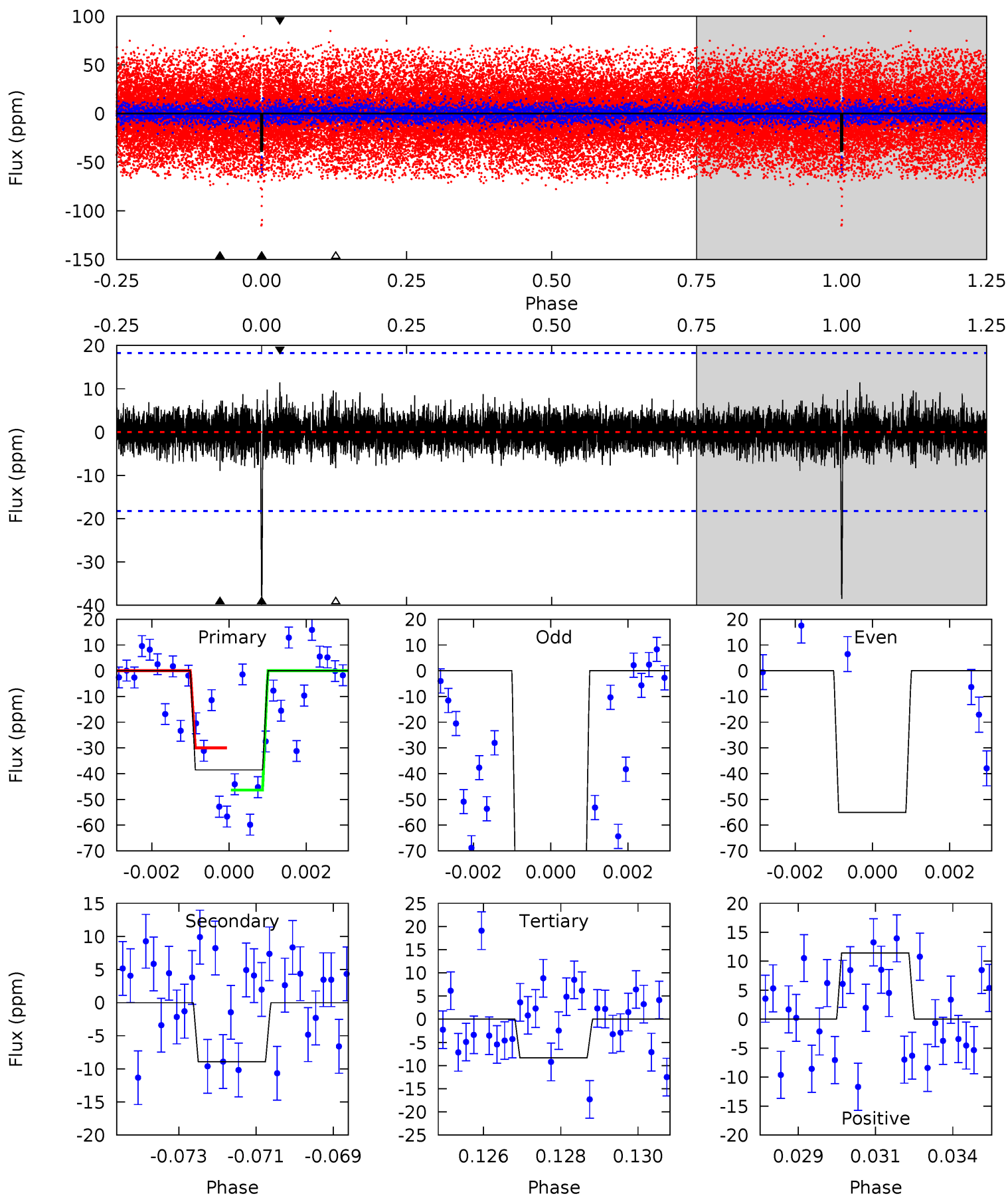
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
5.73	8.67	8.44	12.1	5.39	3.20	2.39	-2.71	-6.35	0.23	-3.41	1.51	0.31	0.58	0.95



Alt Model-Shift Uniqueness Test

006192847-02, P = 145.834318 Days, E = 113.541047 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
11.2	2.60	2.43	3.33	5.32	3.08	0.68	8.79	7.89	0.17	-0.73	11.8	0.12	0.23	0



Stellar Parameters For KIC 006192847

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	3916^{+88}_{-107}	$1.032^{+0.030}_{-0.030}$	$-0.180^{+0.200}_{-0.250}$	$67.438^{+2.428}_{-14.567}$	$1.785^{+0.071}_{-0.643}$	$0.000^{+0.000}_{-0.000}$
	+2%/-3%	+3%/-3%	+111%/-139%	+4%/-22%	+4%/-36%	+29%/-8%
Source	PHO54	AST54	PHO54	DSEP		

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

Secondary Eclipse Parameters for KIC 006192847-02 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-45 ± 5	$43.20^{+18.17}_{-18.75}$	2449^{+61}_{-74}	4088^{+1072}_{-537}	$5.805^{+12.189}_{-2.983}$
Alt.	-9 ± 3	$30.49^{+17.69}_{-15.27}$	2439^{+68}_{-76}	3372^{+1064}_{-631}	$2.105^{+6.868}_{-1.398}$

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 $A_{obs} \gg 1.0$

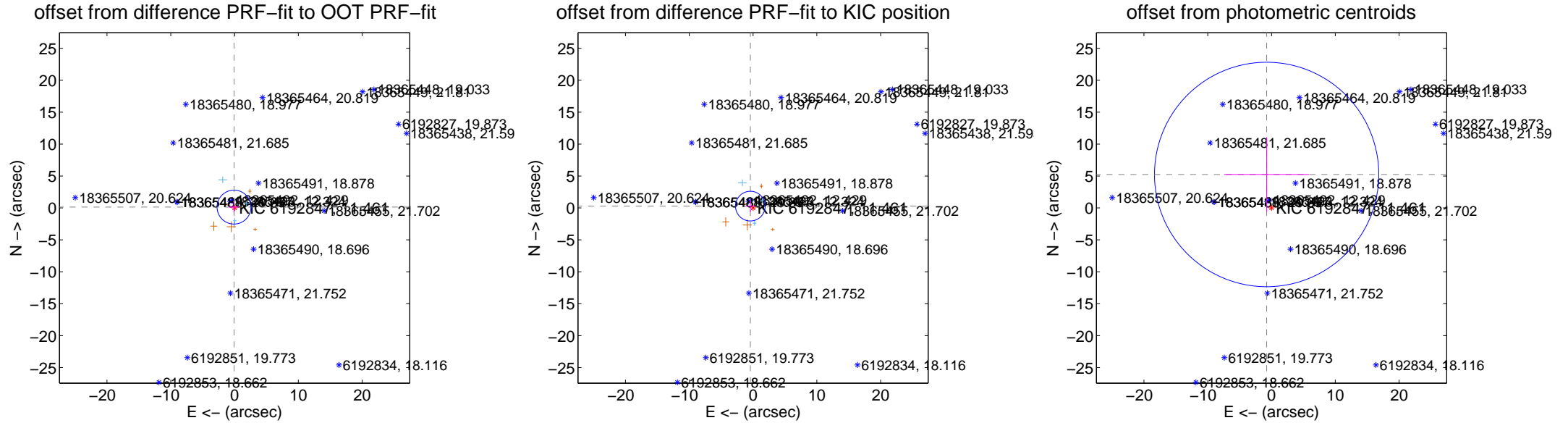
DV Centroid Data

Supplemental centroid analysis for 006192847-02. **Kepler magnitude: 11.46.** Transit SNR 7.60

There are 3 quarters with good PRF difference image offsets

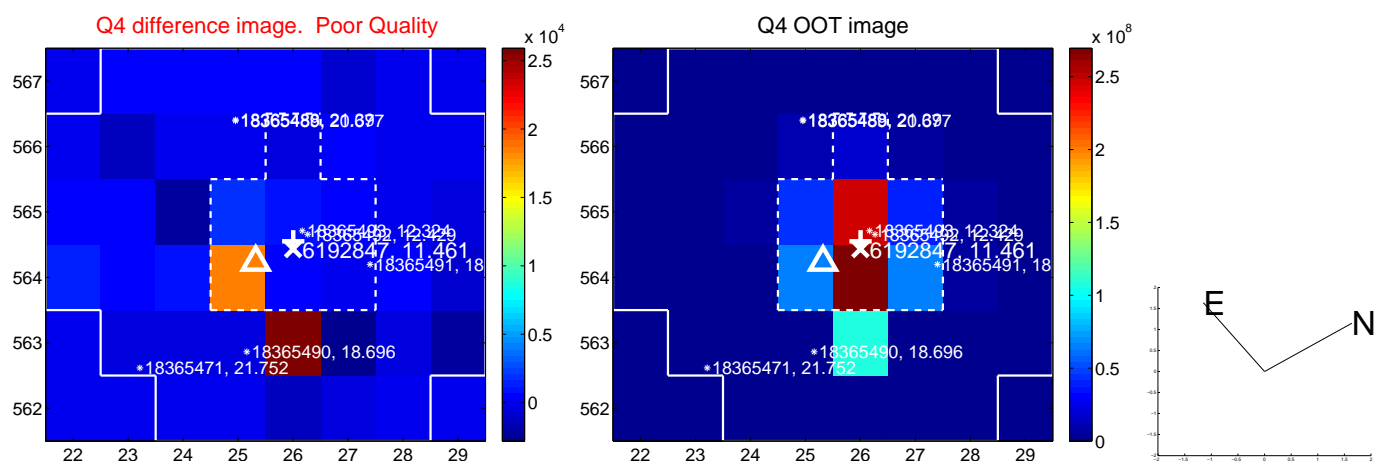
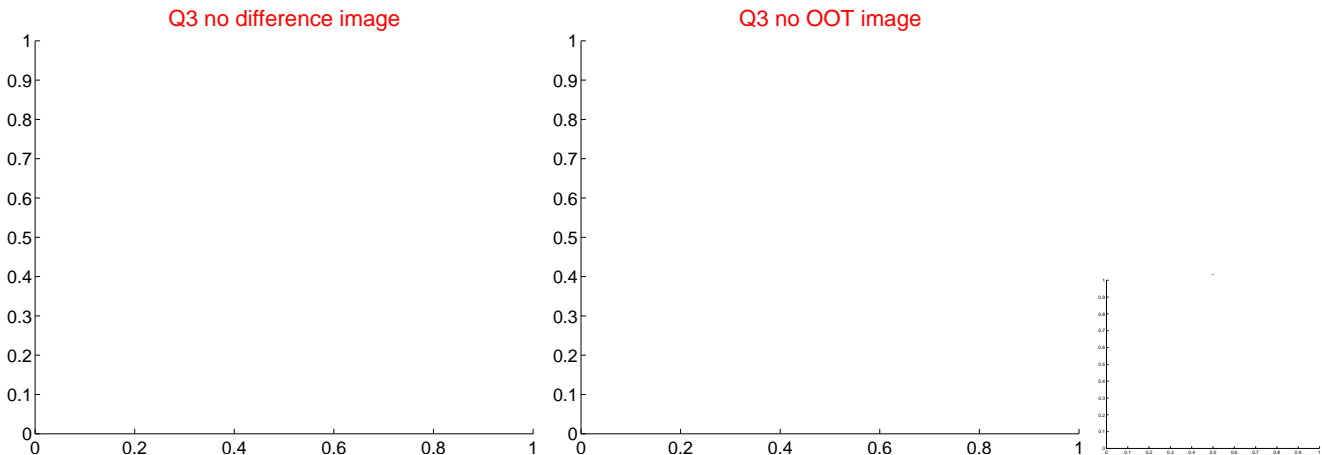
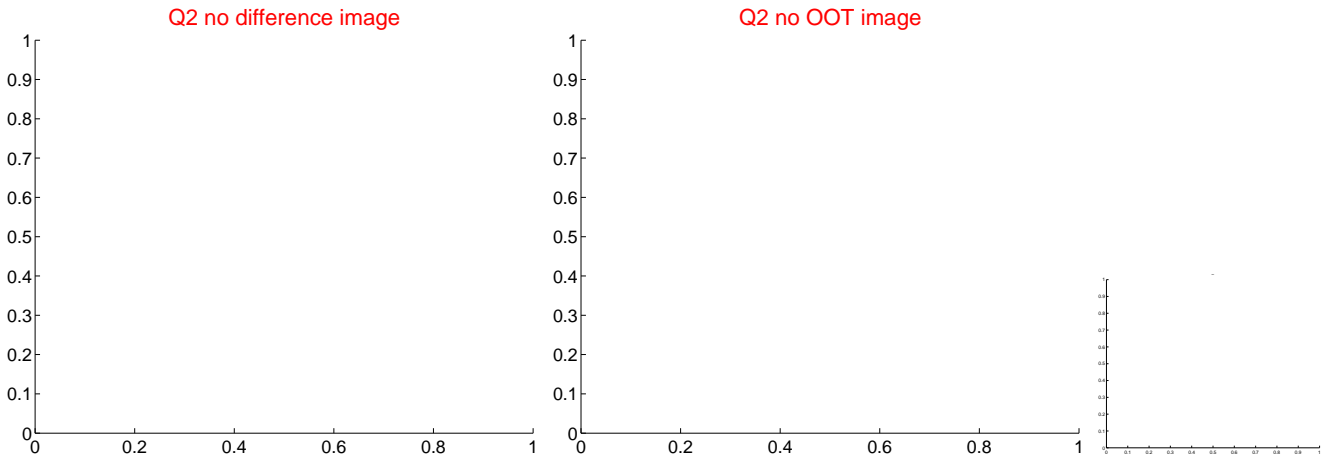
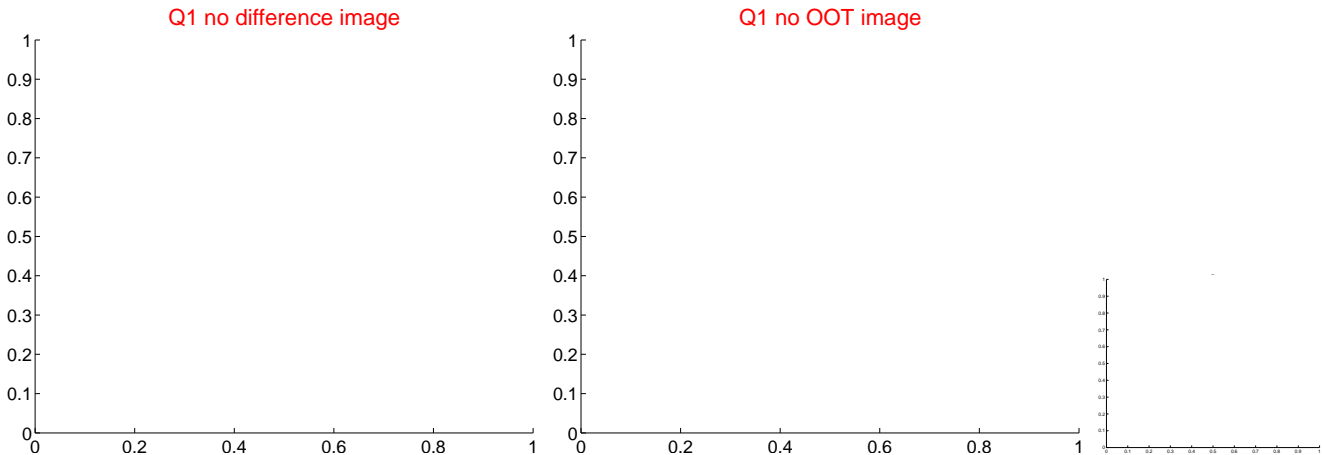
The direct PRF centroid is offset from the target star catalog position by about 0.43 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.162 ± 0.886	0.18	0.090 ± 0.779	0.135 ± 0.864
PRF-fit source offset from KIC position	0.512 ± 0.775	0.66	0.424 ± 0.742	0.286 ± 0.918
photometric centroid source offset	5.30 ± 5.86	0.90	0.77 ± 6.66	5.24 ± 5.84



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.

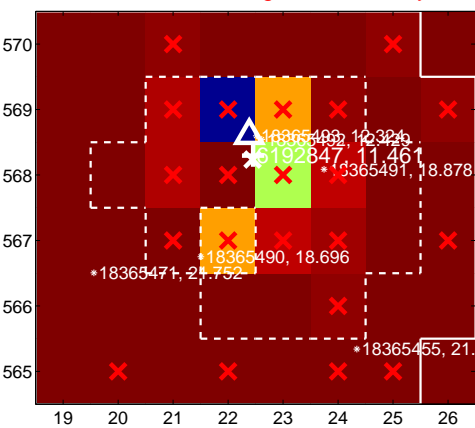
Q5 no difference image



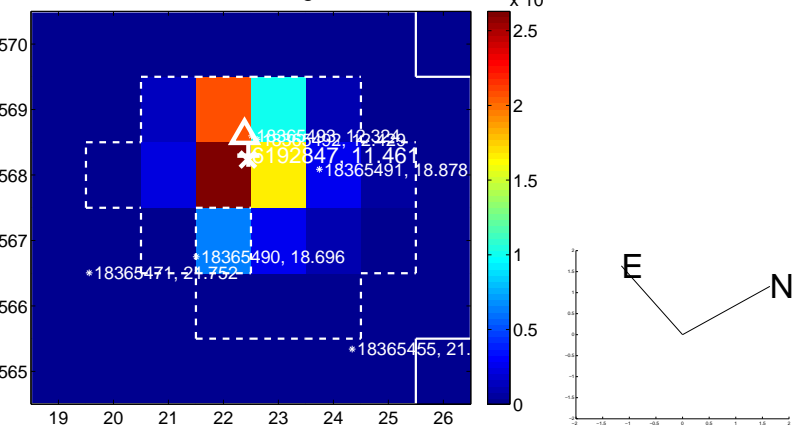
Q5 no OOT image



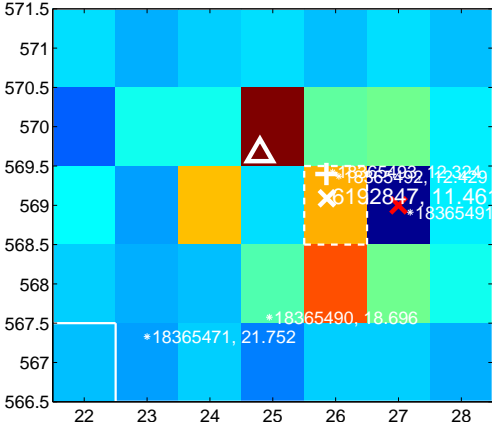
Q6 difference image. Poor Quality



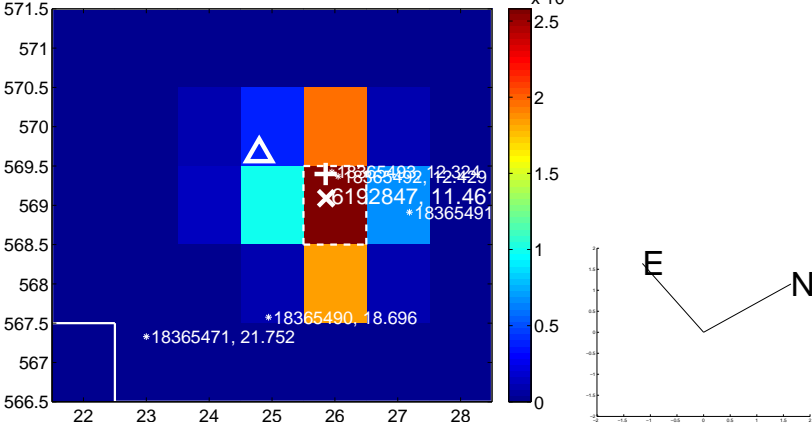
Q6 OOT image



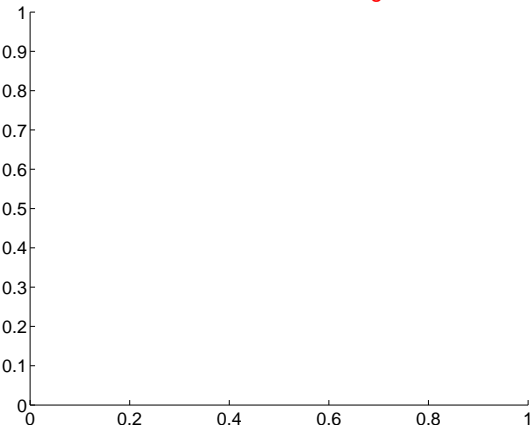
Q7 difference image. Poor Quality



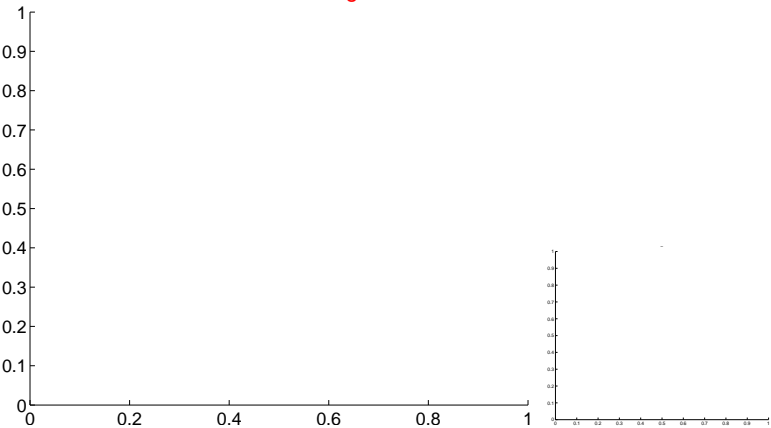
Q7 OOT image



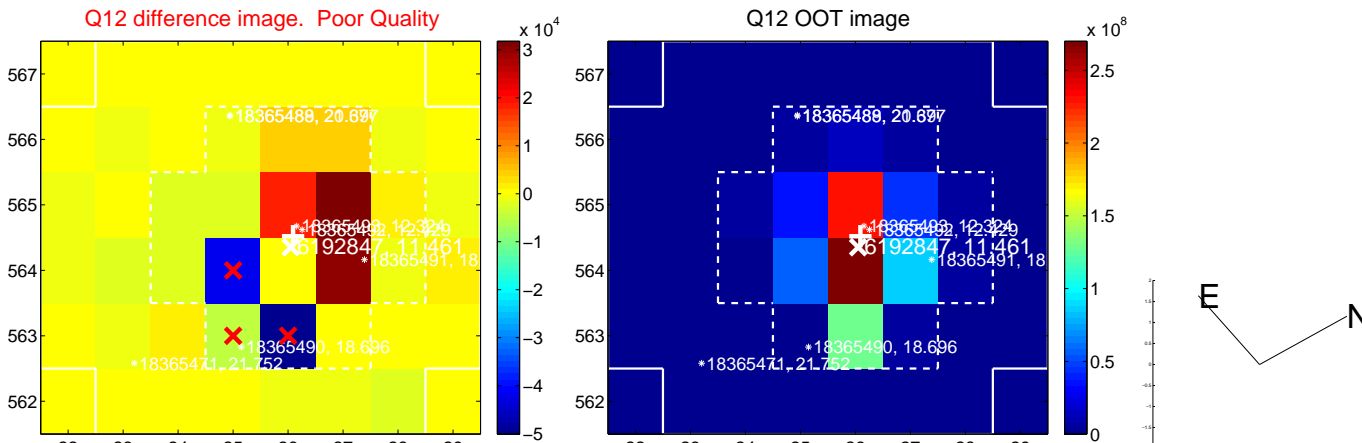
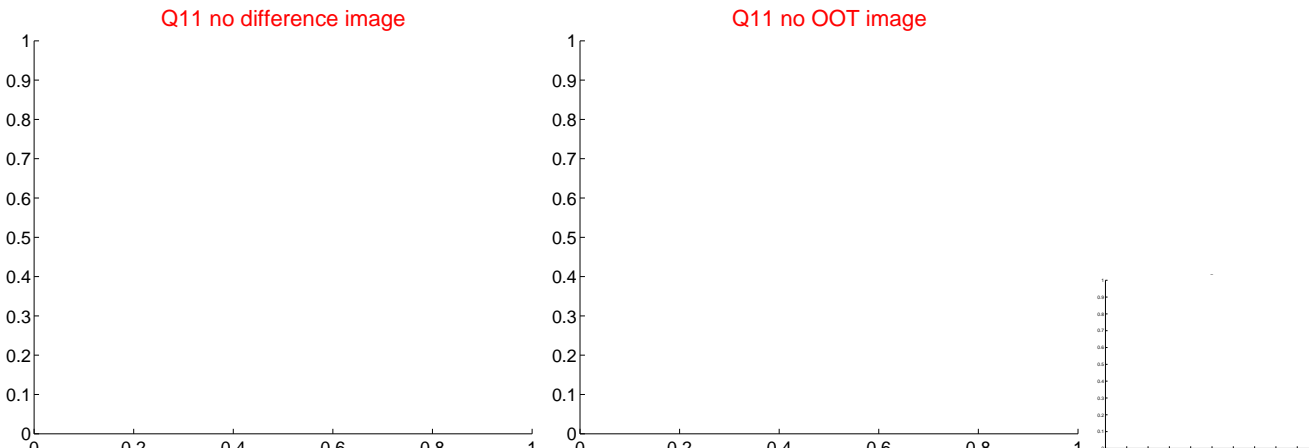
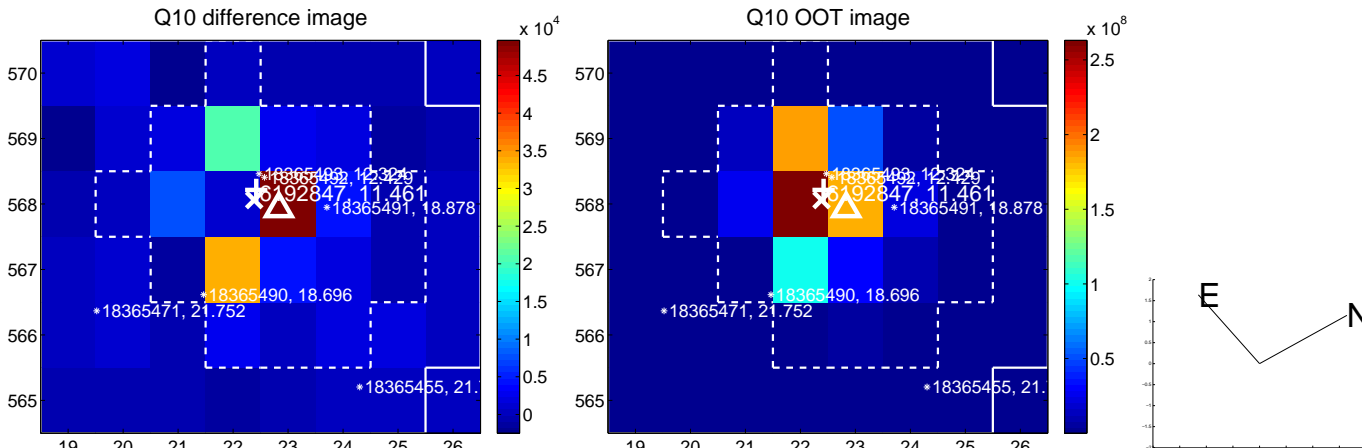
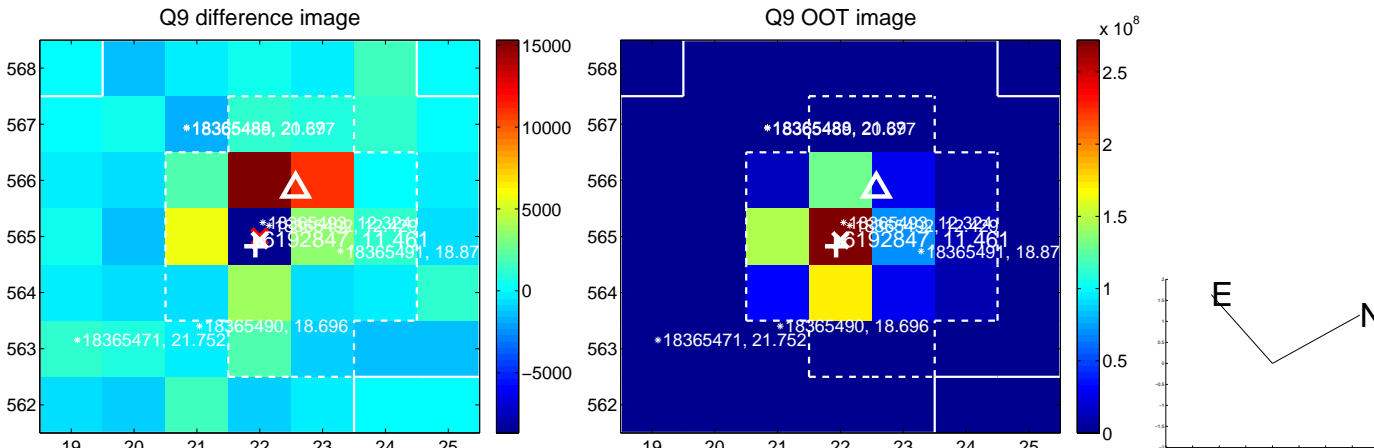
Q8 no difference image



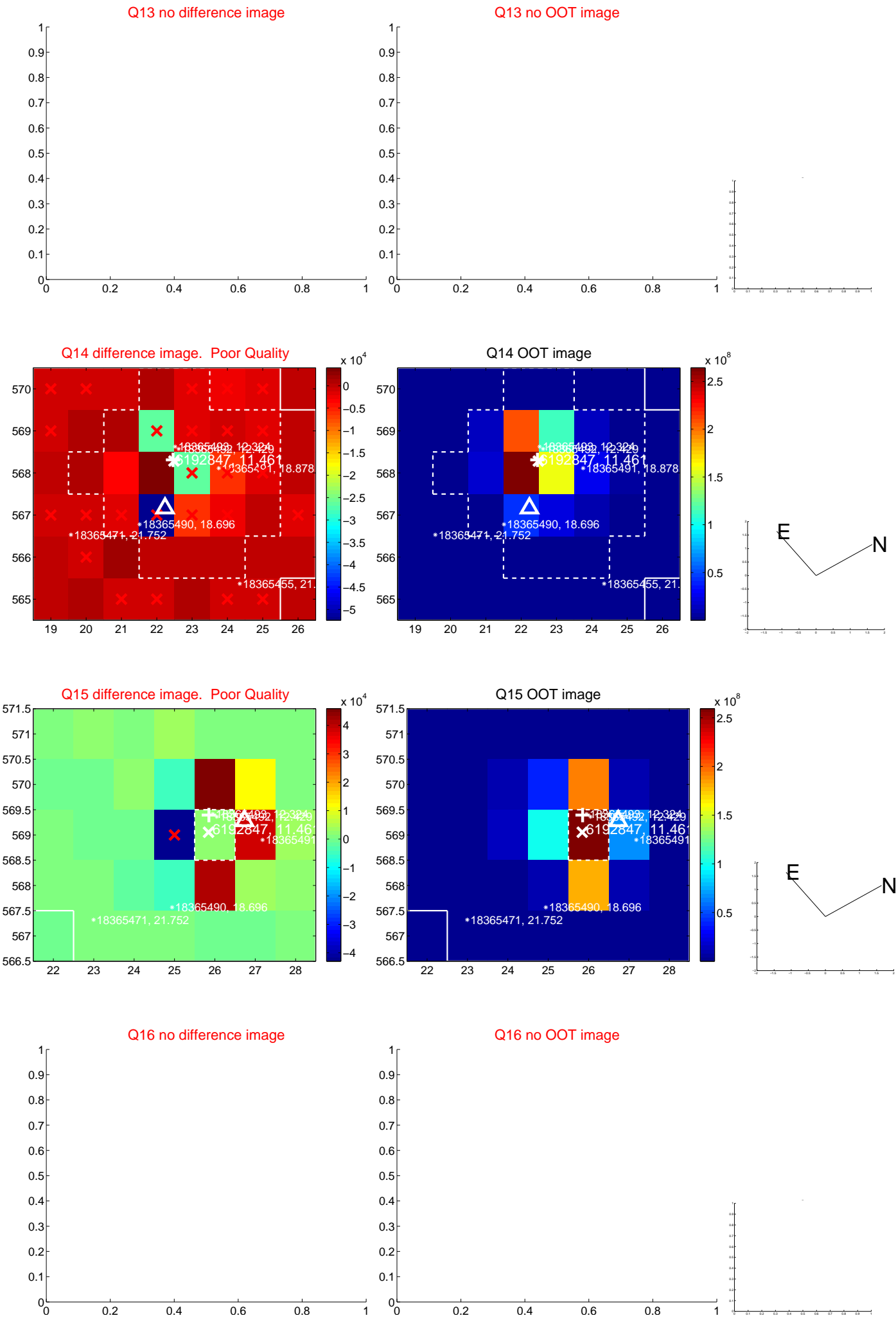
Q8 no OOT image



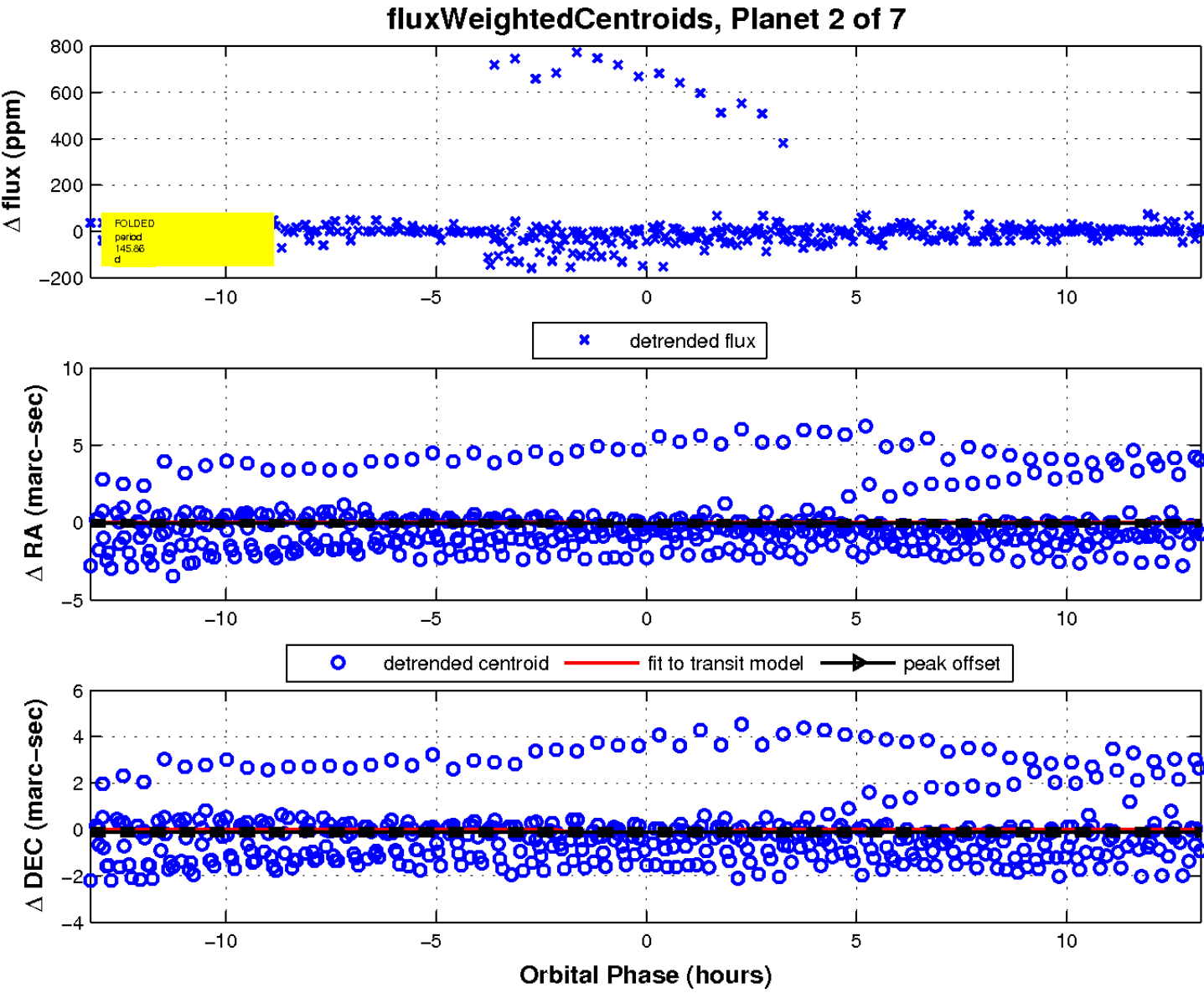
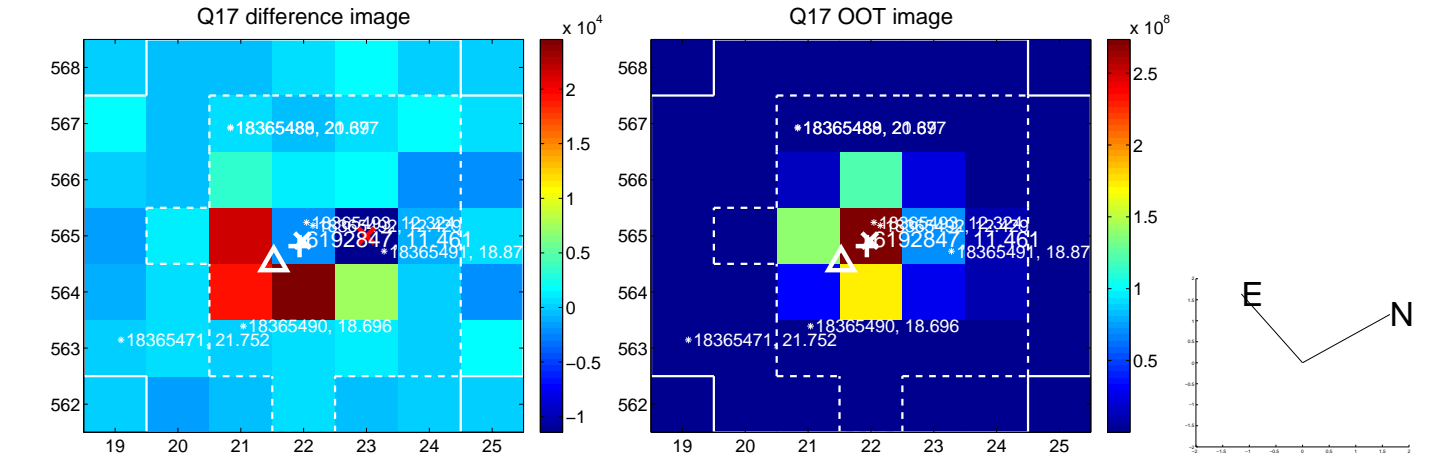
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

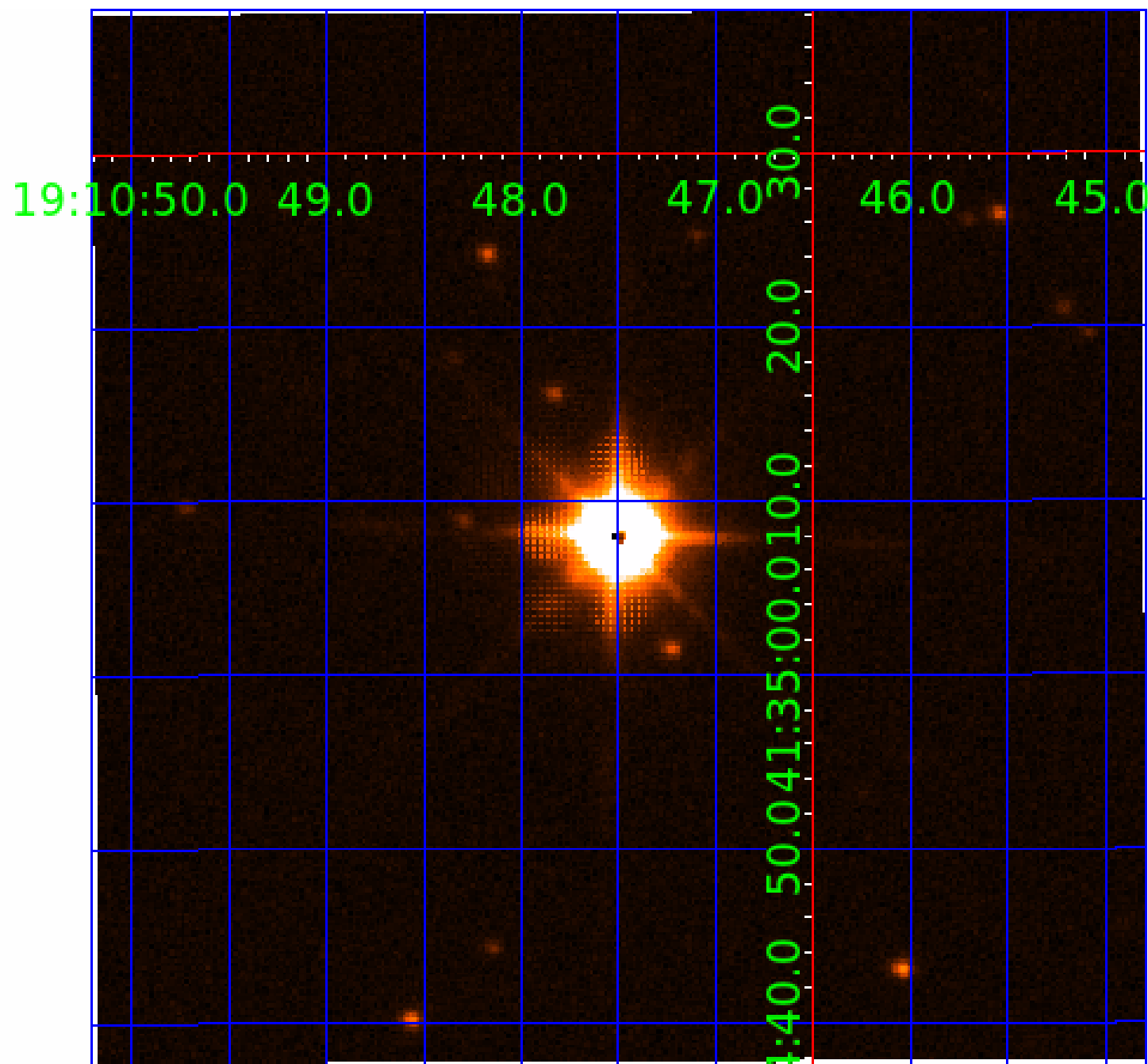


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 006192847

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})
006192847-01	OBS	No	111.799038	200.971741	11.0	2.049	27.5	3.1	67.44	3916	24.08	3154.65
006192847-02	OBS	No	145.863849	259.216103	26.0	4.412	16.9	7.6	67.44	3916	42.78	2212.78
006192847-03	OBS	No	311.264136	344.923662	12.1	5.141	14.1	3.7	67.44	3916	28.64	805.43
006192847-04	OBS	No	103.976930	211.806049	36.0	2.429	13.4	10.8	67.44	3916	48.01	3474.98
006192847-05	OBS	No	208.899997	167.034907	29.3	8.687	11.6	7.8	67.44	3916	46.34	1370.72
006192847-06	OBS	No	305.852595	158.214222	35.3	2.457	15.5	12.0	67.44	3916	52.79	824.49
006192847-07	OBS	No	239.018162	199.755679	123.3	6.000	12.3	-1.0	67.44	3916	69.98	1145.41

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
006192847-01	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_SATURATED
006192847-02	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—INCONSISTENT_TRANS—CENT_SATURATED
006192847-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_MARSHALL_ZUMA—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV— INCONSISTENT_TRANS—CENT_SATURATED
006192847-04	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_SKYE_ZUMA_TRACKER—LPP_ALT—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT— INCONSISTENT_TRANS—CENT_SATURATED
006192847-05	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_MARSHALL_ZUMA—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—CENT_SATURATED
006192847-06	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_MARSHALL_ZUMA_TRACKER—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV— CENT_SATURATED
006192847-07	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_MARSHALL_ZUMA—LPP_DV—CENT_SATURATED

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

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

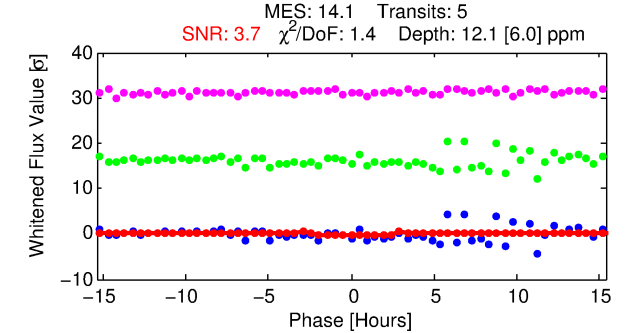
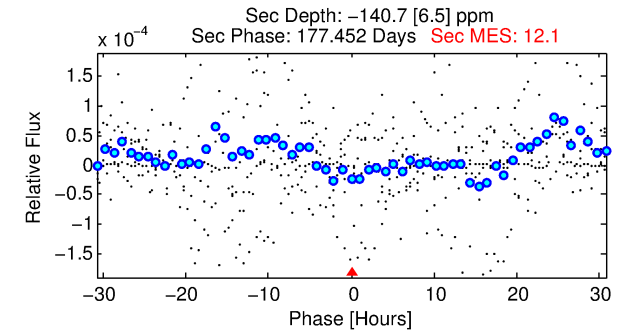
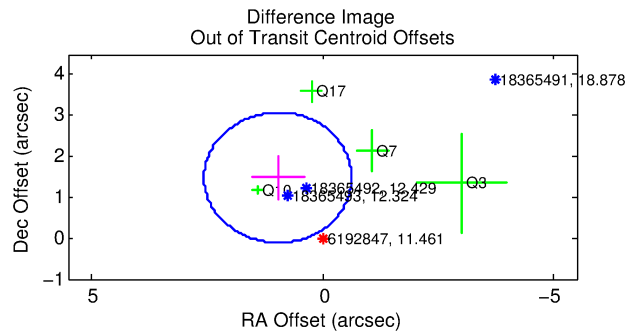
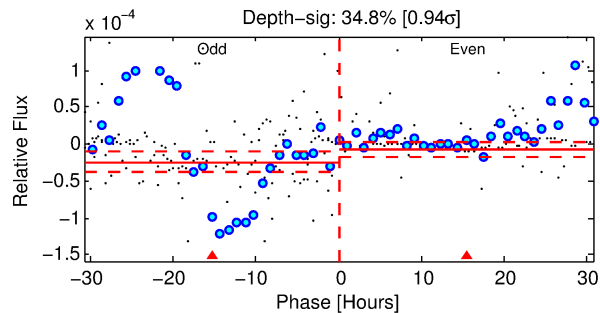
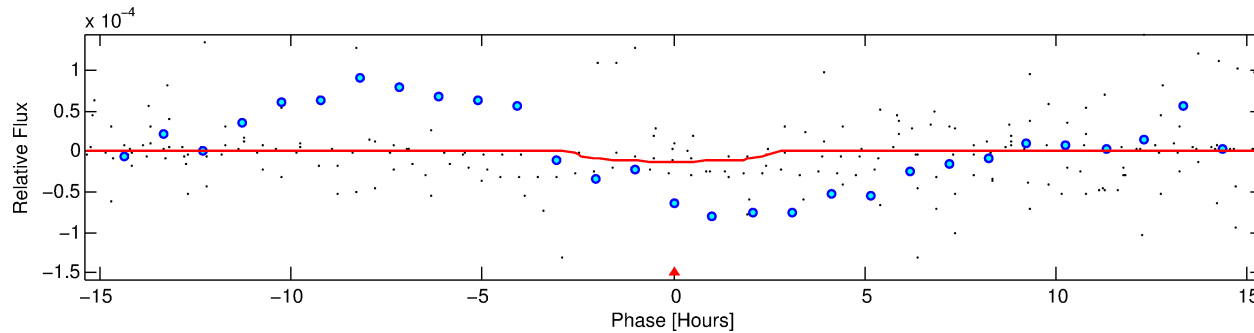
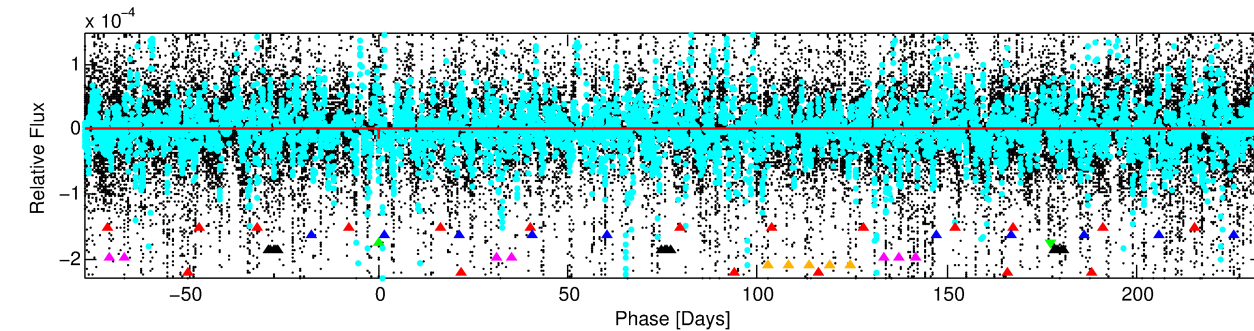
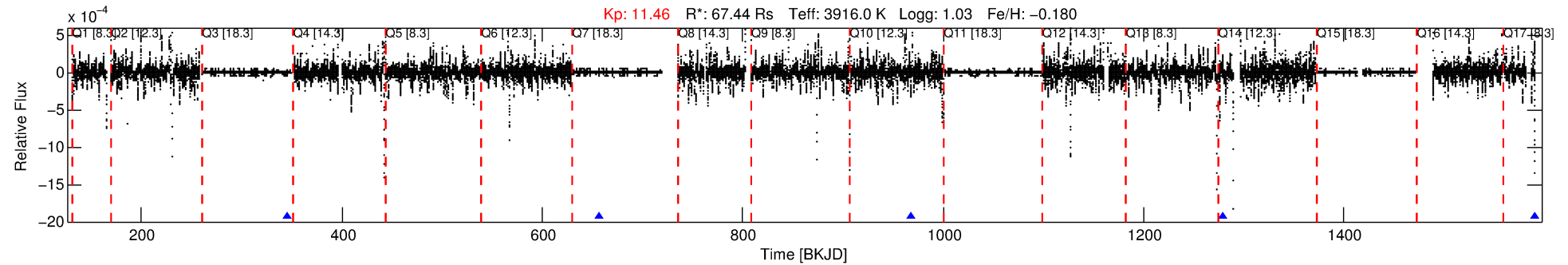
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 006192847-03

No Significant Match Found

DV One-Page Summary

KIC: 6192847 Candidate: 3 of 7 Period: 311.264 d



DV Fit Results:

Period = 311.26414 [0.01999] d
Epoch = 344.9237 [0.0209] BKJD
Rp/R* = 0.0039 [0.0035]
a/R* = 227.57 [732.33]
b = 0.88 [0.86]
Seff = 805.43 [150.26]
Teff = 1358 [63] K
Rp = 28.64 [26.78] Re
a = 1.0907 [0.1591] AU
Ag = N/A
Teffp = N/A

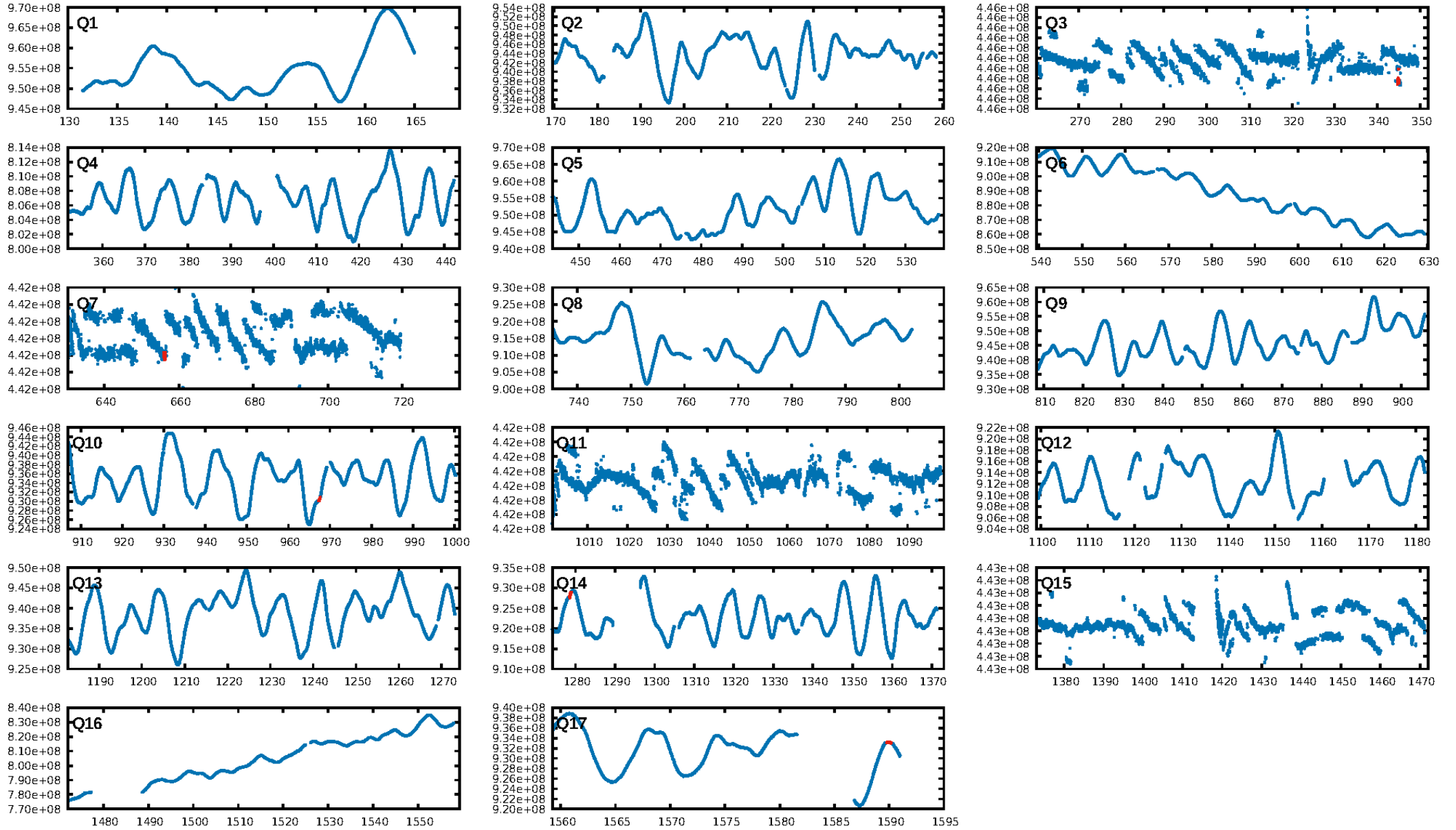
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [22.79 σ]
LongPeriod-sig: N/A
ModelChiSquare2-sig: 61.3%
ModelChiSquareGof-sig: 99.6%
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [4/4]
GhostDiagnostic-chr: -0.6733
Centroid-sig: 8.6%
Centroid-so: 21.286 arcsec [1.32 σ]
OotOffset-rm: 1.767 arcsec [3.32 σ]
KicOffset-rm: 2.214 arcsec [4.85 σ]
OotOffset-st: 1/2/0/1 [4]
KicOffset-st: 1/2/0/1 [4]
DiffImageQuality-fgm: 0.50 [2/4]
DiffImageOverlap-fno: 1.00 [4/4]

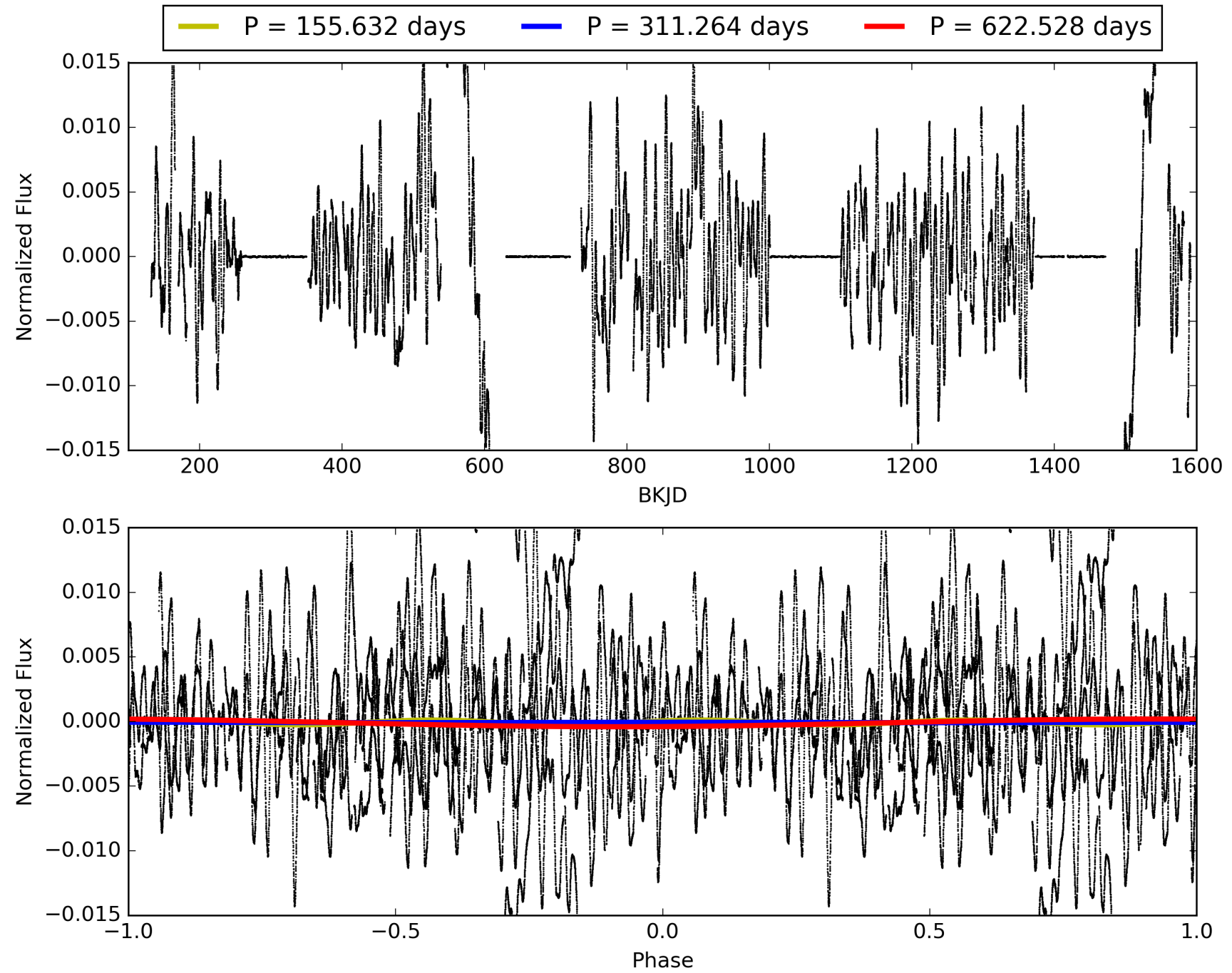
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 02-Feb-2016 00:59:10 Z

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

TCE 006192847-03, PDC Light Curves

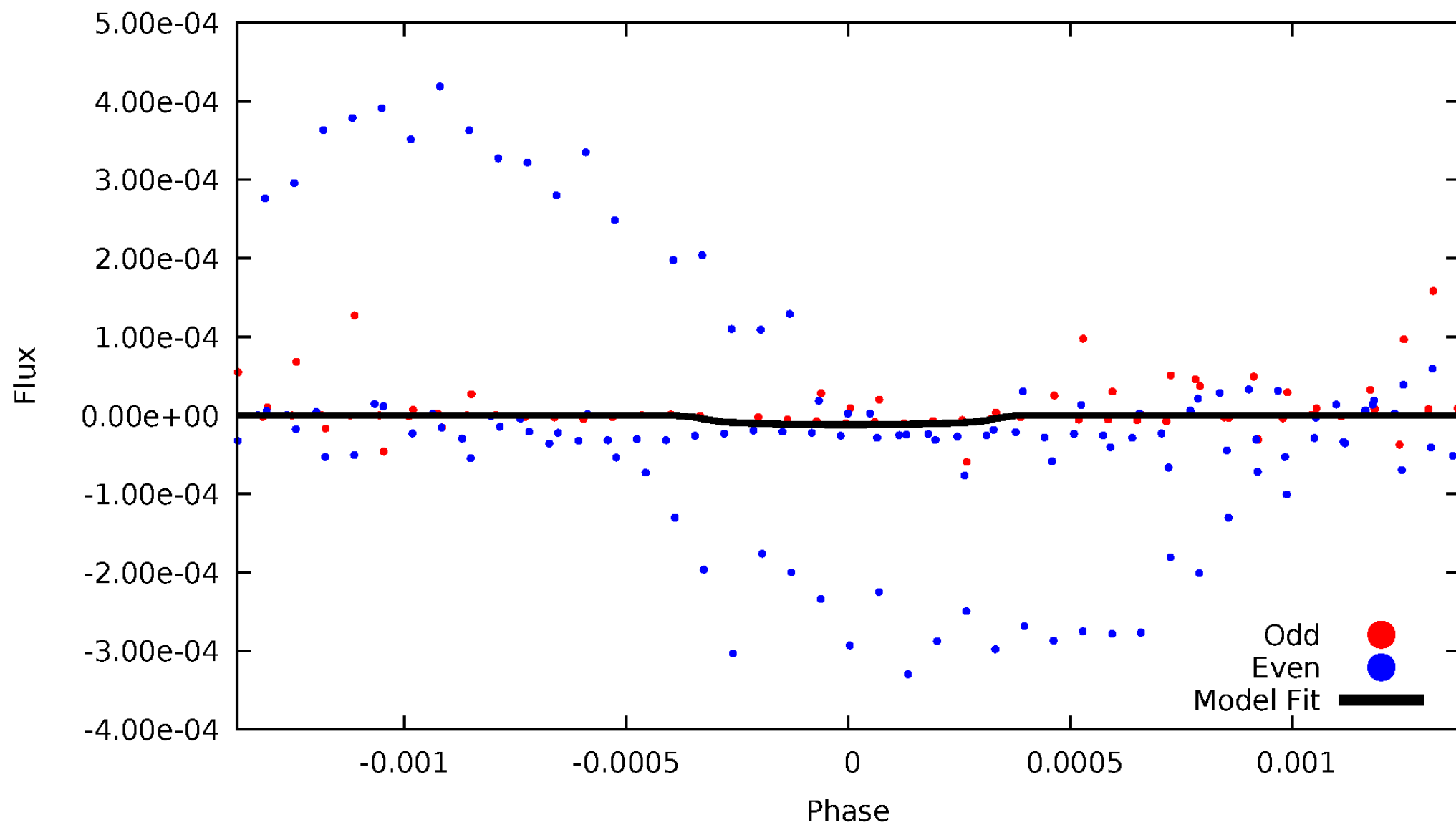


TCE 006192847-03



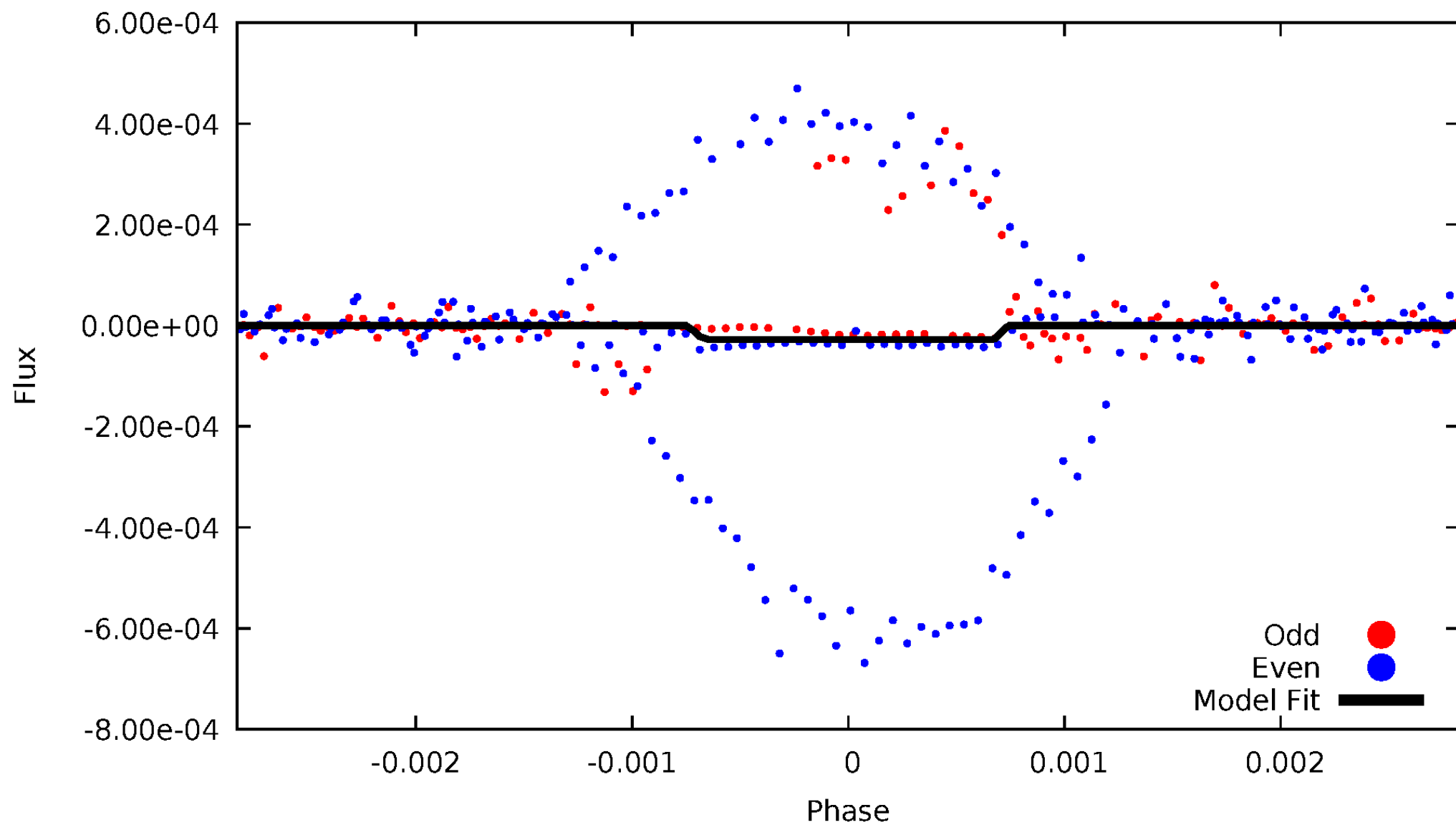
DV Odd/Even

TCE 006192847-03



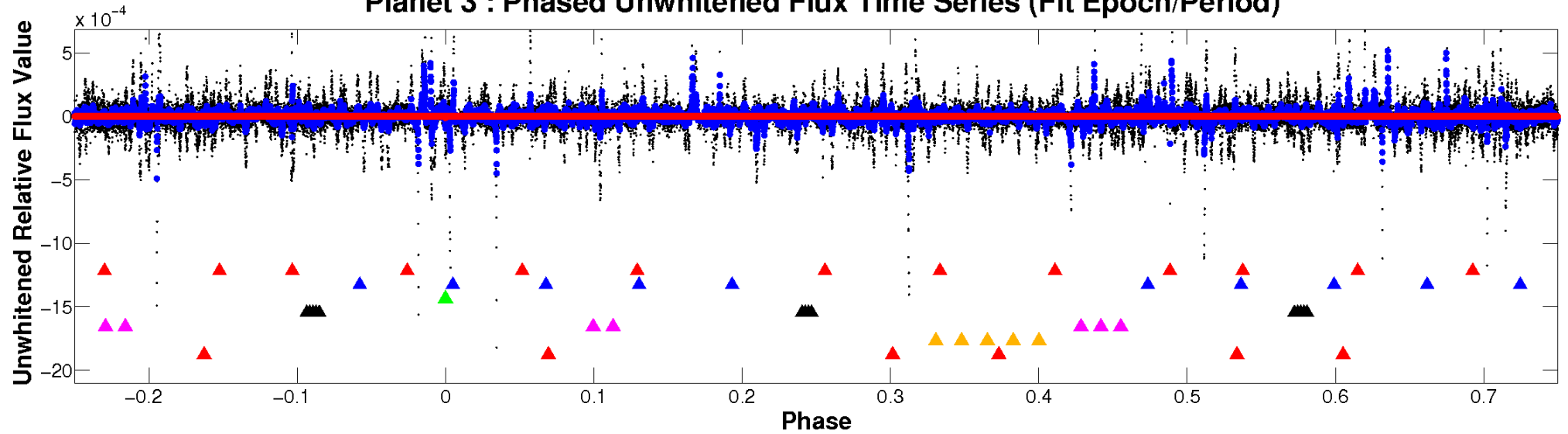
ALT Odd/Even

TCE 006192847-03

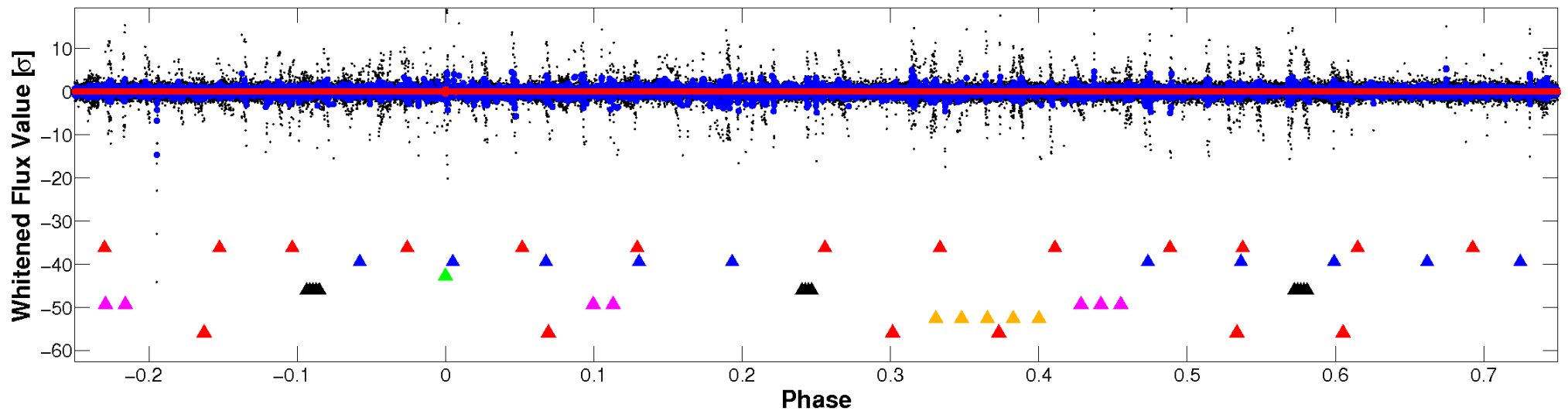


Non-Whitened Vs. Whitened Light Curve

Planet 3 : Phased Unwhitened Flux Time Series (Fit Epoch/Period)

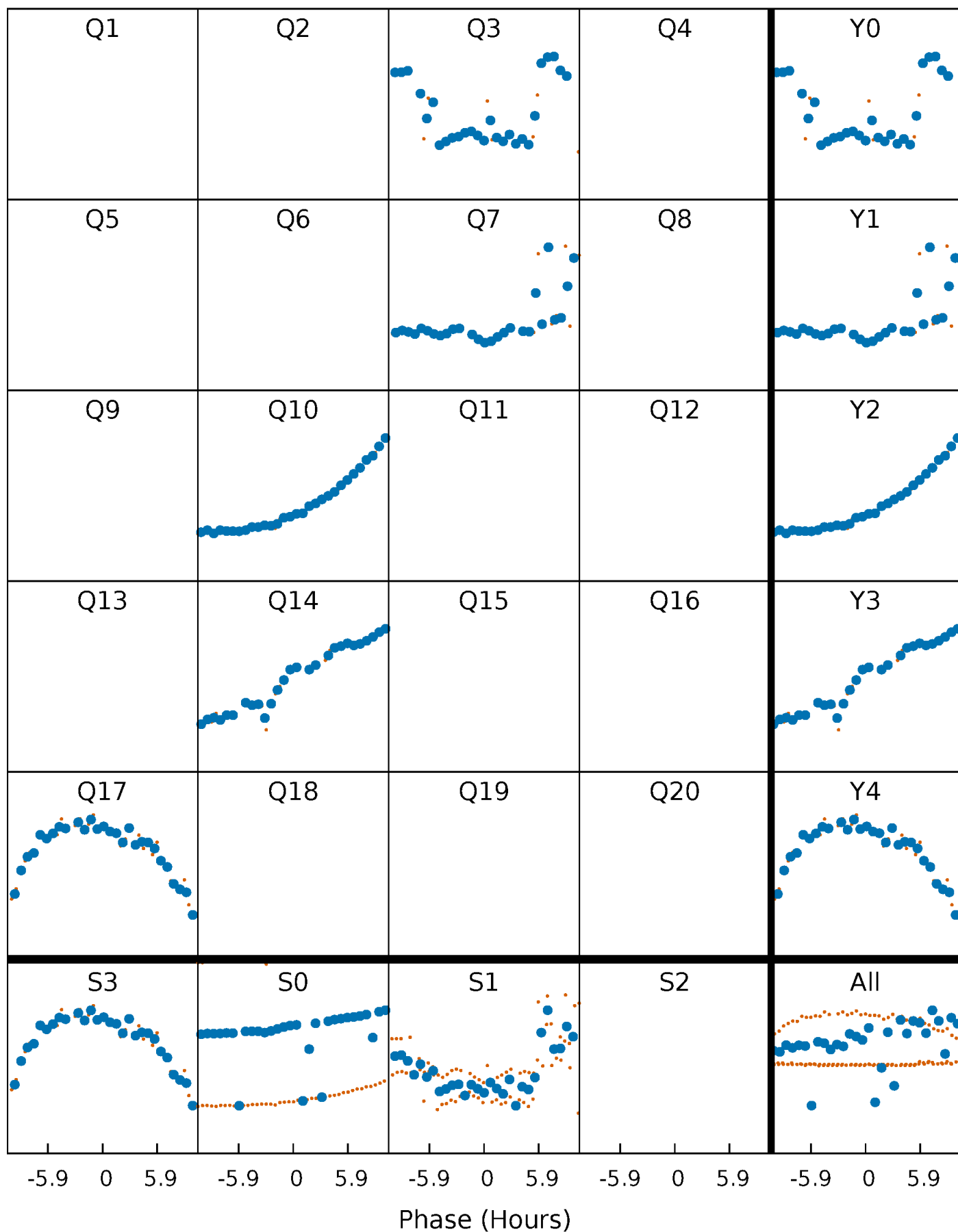


Planet 3 : Phased Whitened Flux Time Series (Fit Epoch/Period)



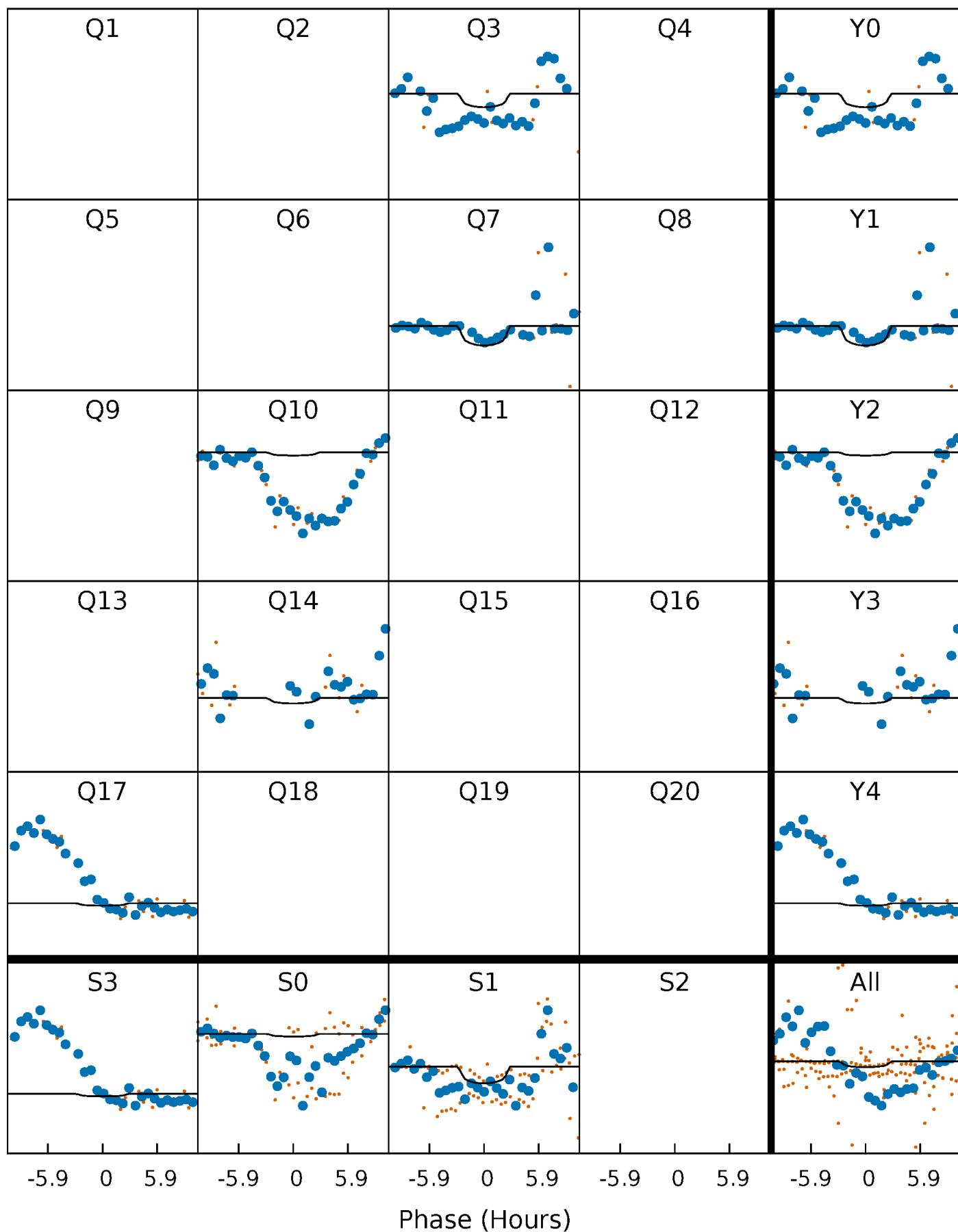
PDC Quarter-Phased Transit Curves

TCE 006192847-03 $P=311.264136$ Days $T_0=344.923662$ (BKJD)



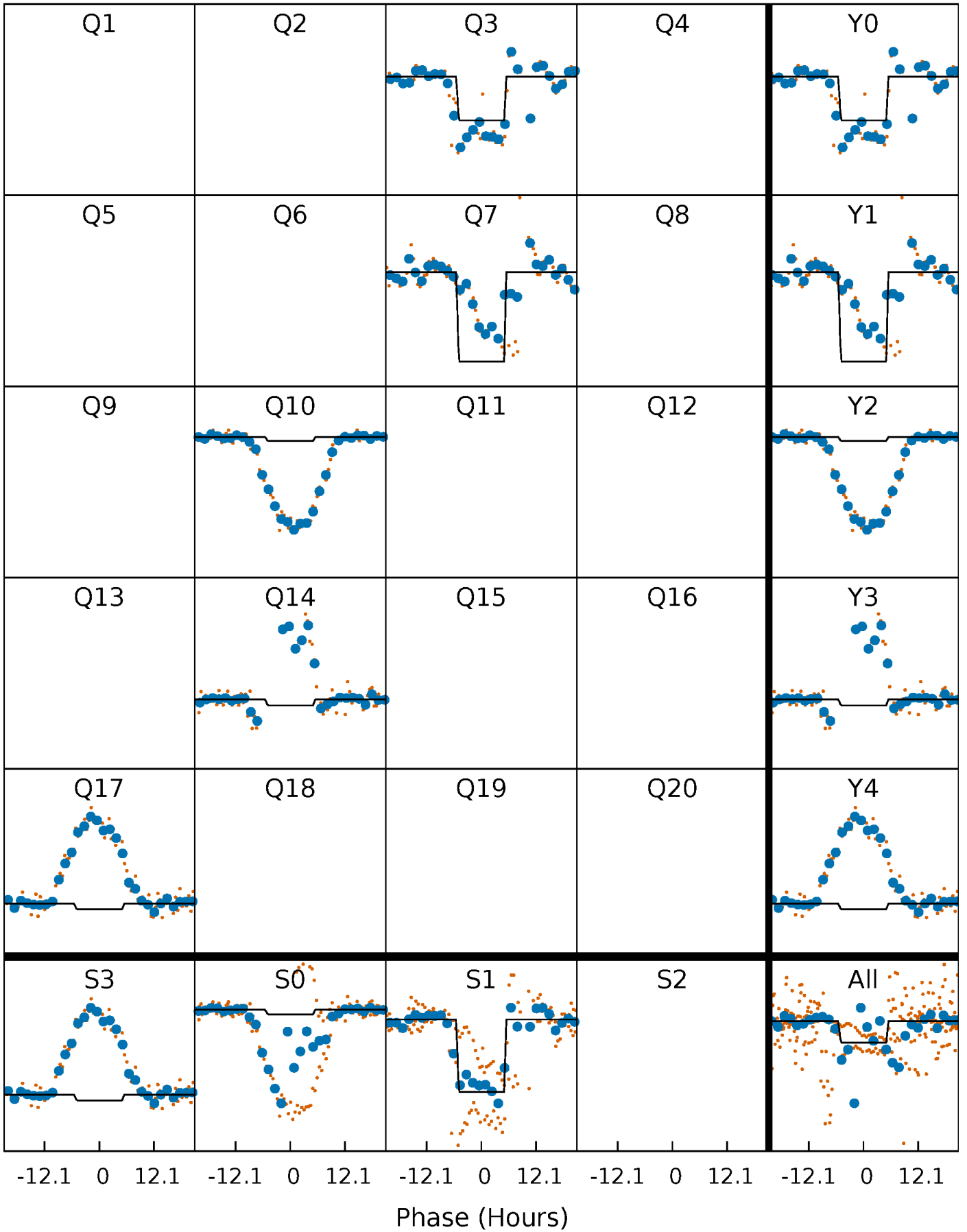
DV Quarter-Phased Transit Curves

TCE 006192847-03 $P=311.264136$ Days $T_0=344.923662$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

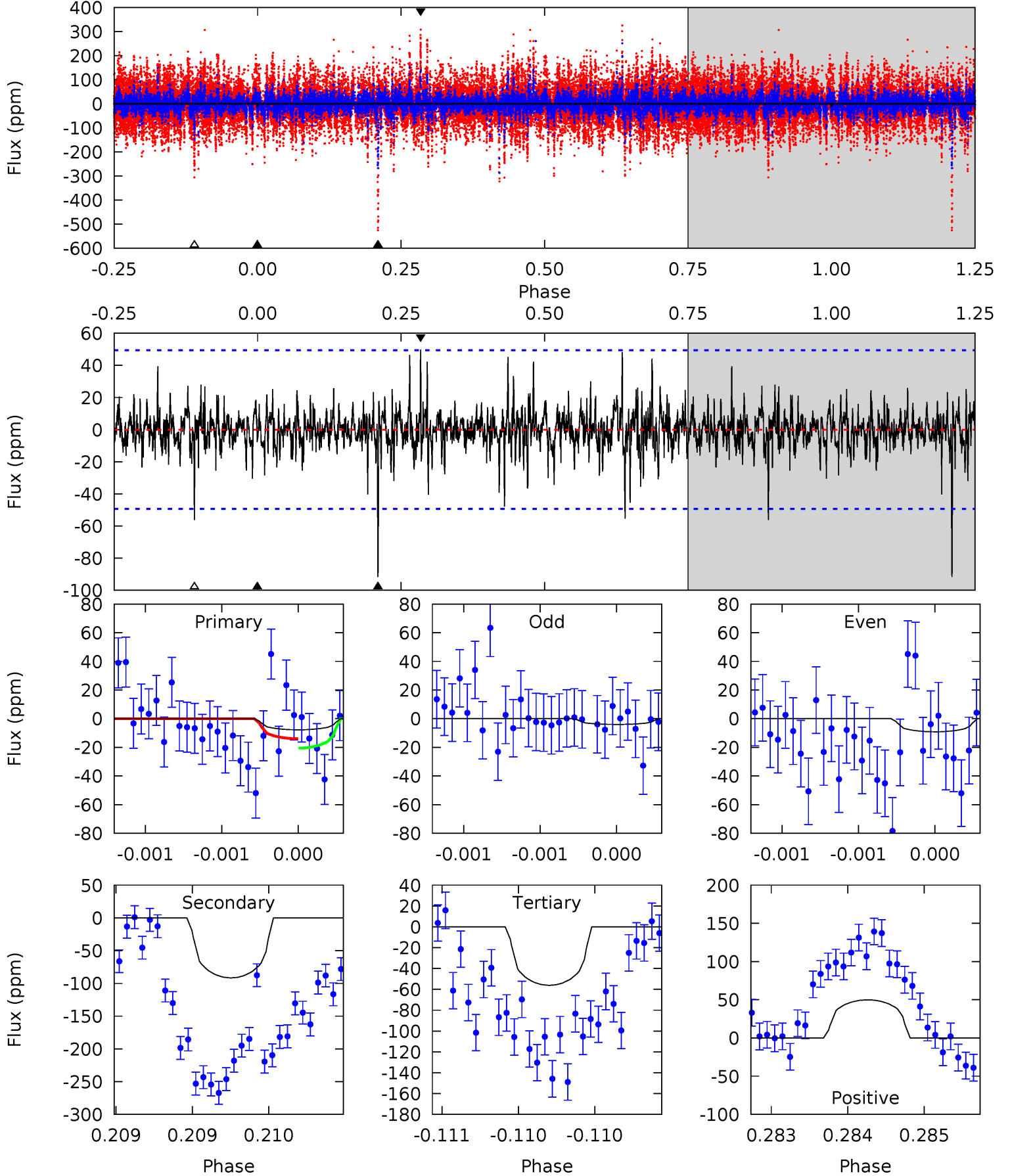
TCE 006192847-03 $P=311.271231$ Days $T_0=344.927812$ (BKJD)



DV Model-Shift Uniqueness Test

006192847-03, P = 311.264136 Days, E = 33.659526 Days

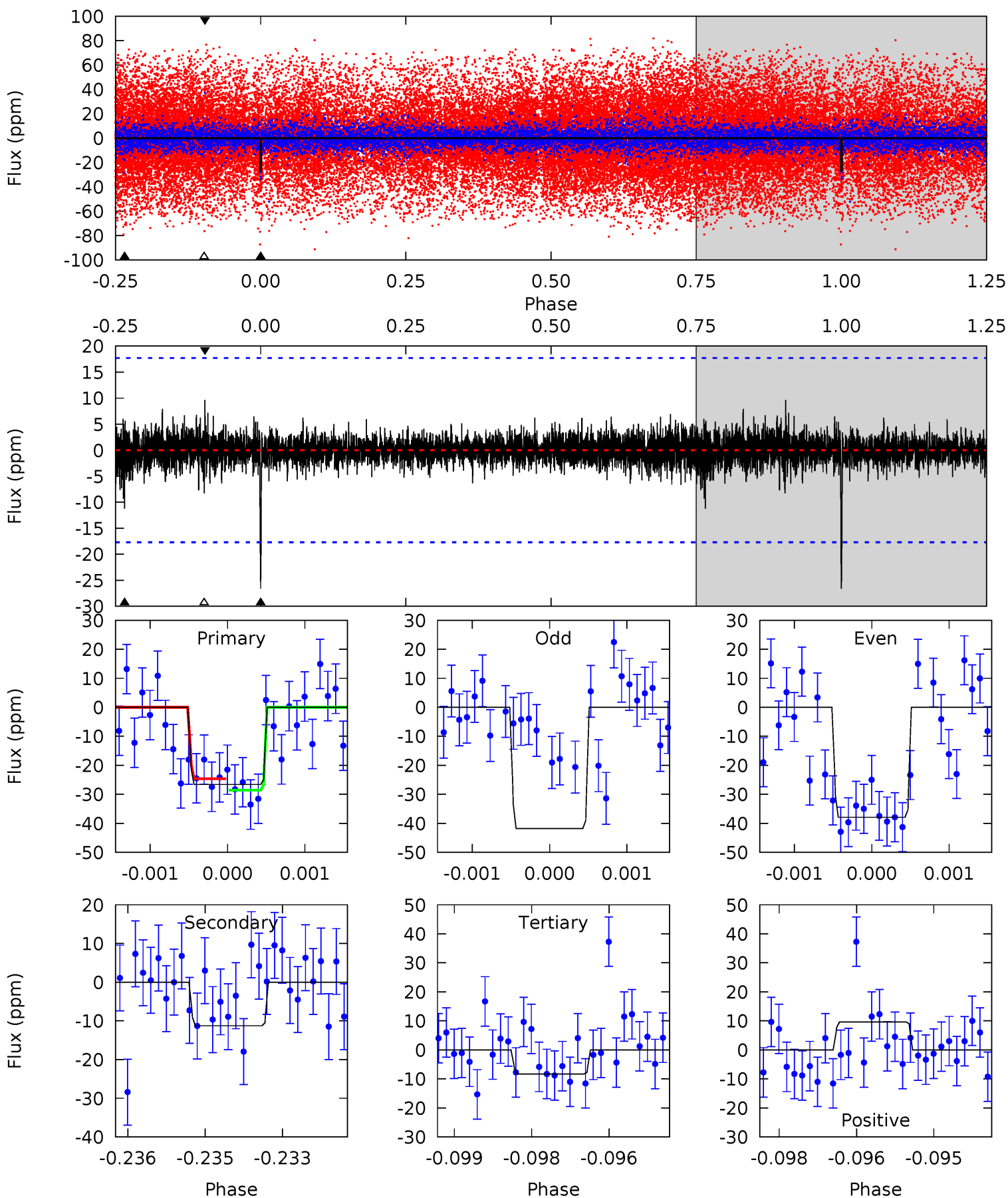
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
0.87	10.2	6.27	5.57	5.52	3.40	1.09	-5.40	-4.71	3.96	4.66	0.18	7.35	0.35	0.39



Alt Model-Shift Uniqueness Test

006192847-03, P = 311.271231 Days, E = 33.656581 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
8.09	3.42	2.52	2.93	5.38	3.18	0.54	5.58	5.17	0.90	0.49	0.61	-0.84	0.27	0



Stellar Parameters For KIC 006192847

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	3916^{+88}_{-107}	$1.032^{+0.030}_{-0.030}$	$-0.180^{+0.200}_{-0.250}$	$67.438^{+2.428}_{-14.567}$	$1.785^{+0.071}_{-0.643}$	$0.000^{+0.000}_{-0.000}$
	+2%/-3%	+3%/-3%	+111%/-139%	+4%/-22%	+4%/-36%	+29%/-8%
Source	PHO54	AST54	PHO54	DSEP		

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

Secondary Eclipse Parameters for KIC 006192847-03 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-92 ± 9	$31.64^{+24.73}_{-19.24}$	1891^{+51}_{-54}	5298^{+3368}_{-1101}	58^{+313}_{-40}
Alt.	-11 ± 3	$41.95^{+25.00}_{-24.74}$	1900^{+47}_{-60}	3248^{+1115}_{-485}	$4.112^{+19.527}_{-2.590}$

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

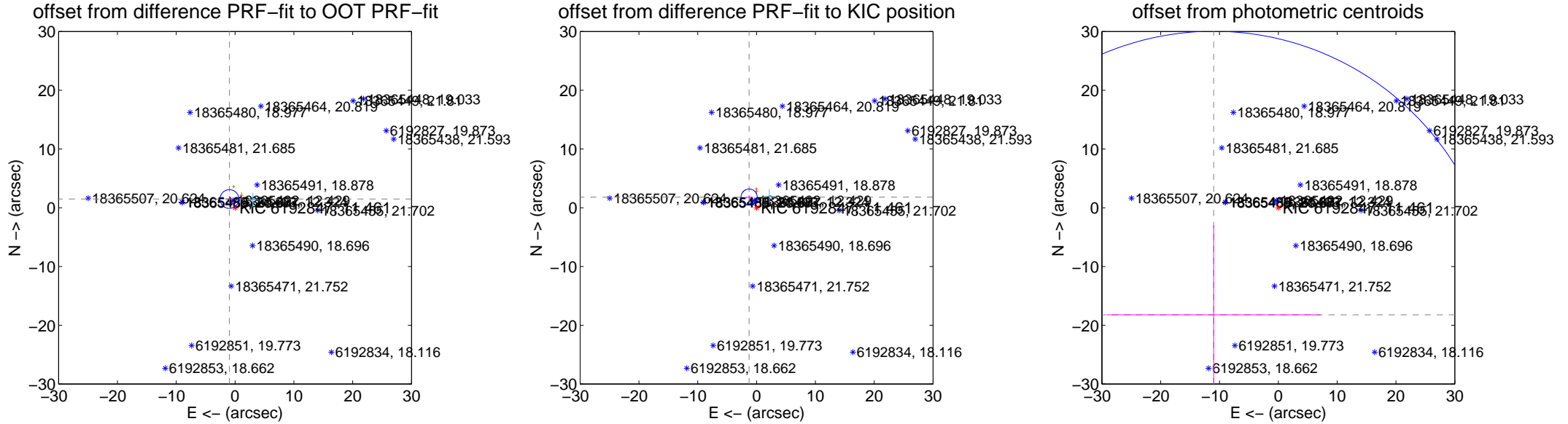
DV Centroid Data

Supplemental centroid analysis for 006192847-03. **Kepler magnitude: 11.46.** Transit SNR 3.73

There are 2 quarters with good PRF difference image offsets

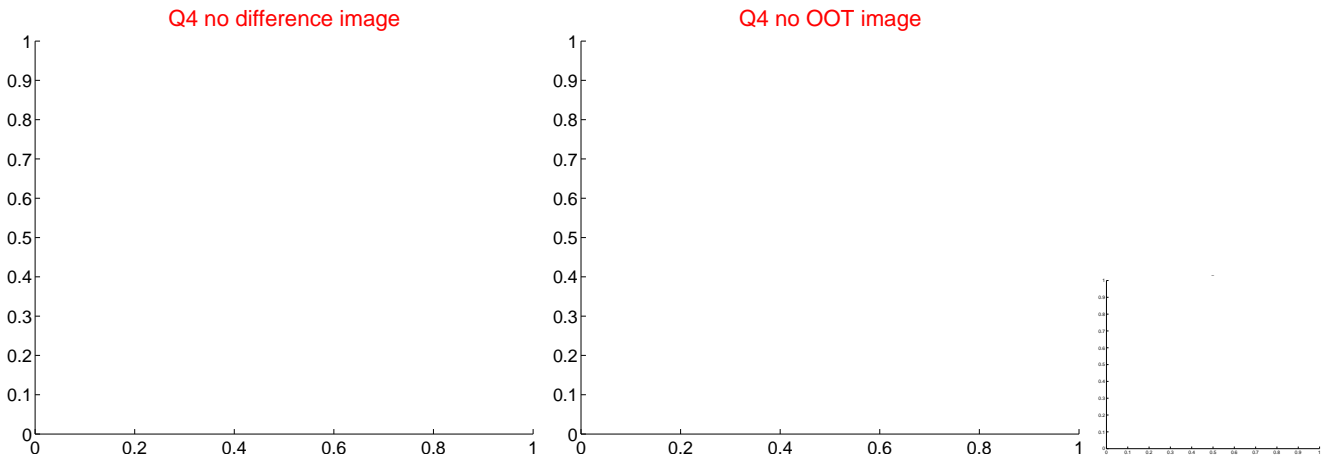
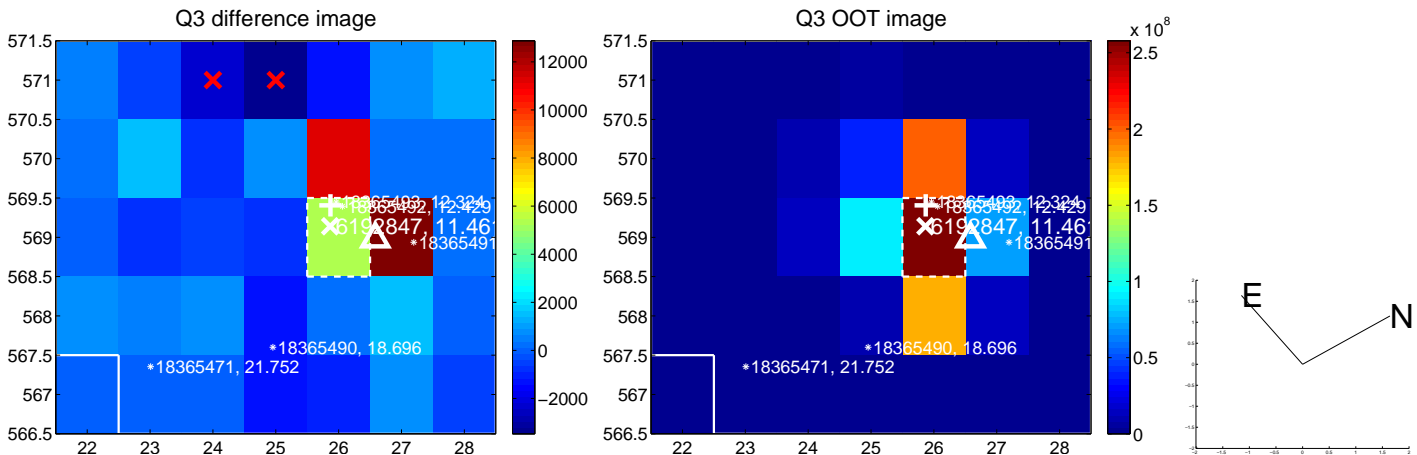
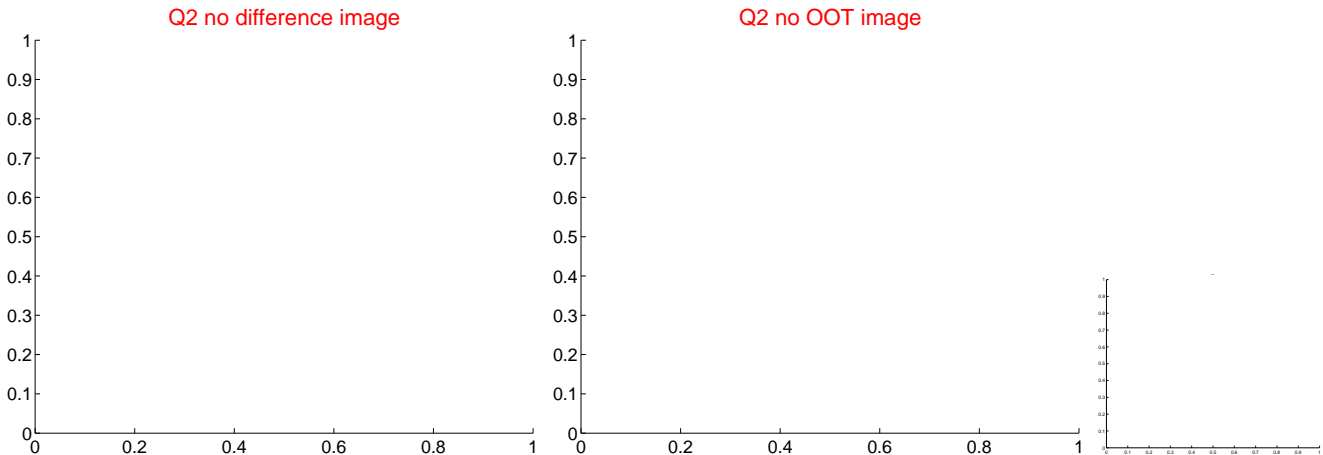
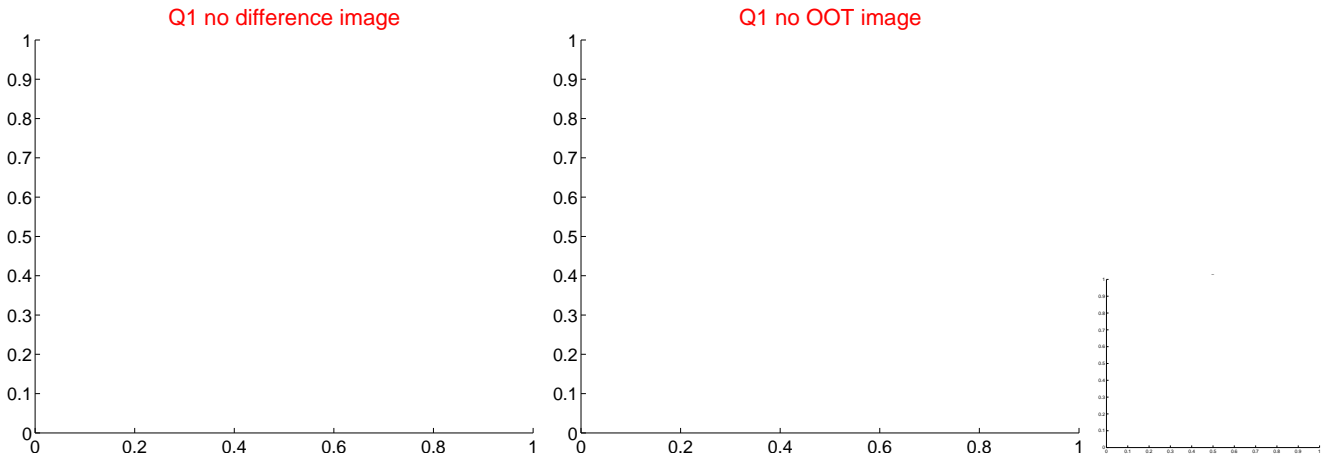
The direct PRF centroid is offset from the target star catalog position by about 0.44 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	1.767 ± 0.532	3.32	0.964 ± 0.563	1.481 ± 0.518
PRF-fit source offset from KIC position	2.214 ± 0.457	4.85	1.268 ± 0.622	1.816 ± 0.310
photometric centroid source offset	21.29 ± 16.09	1.32	11.00 ± 18.17	-18.22 ± 15.26

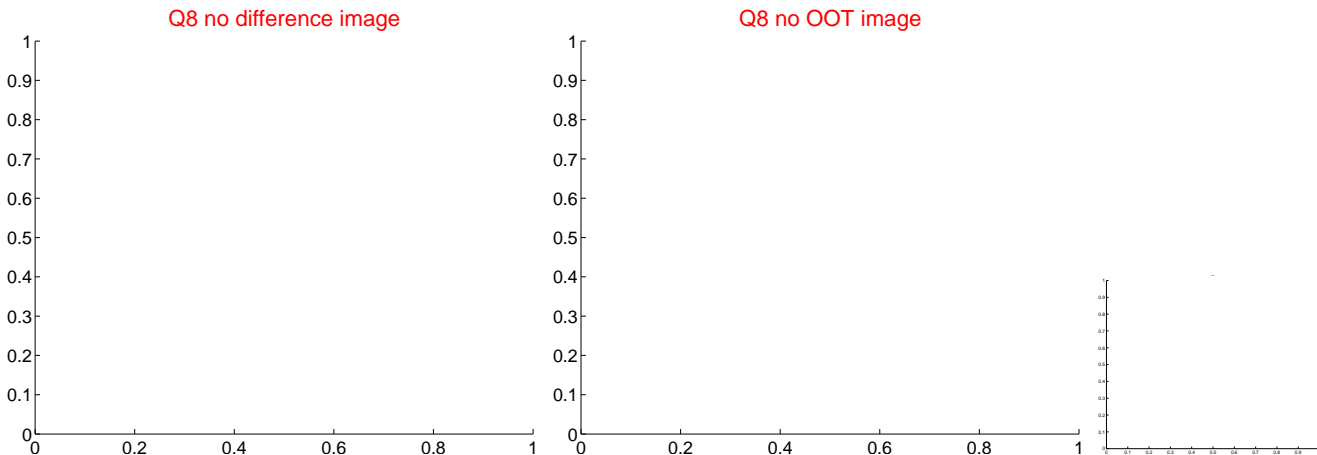
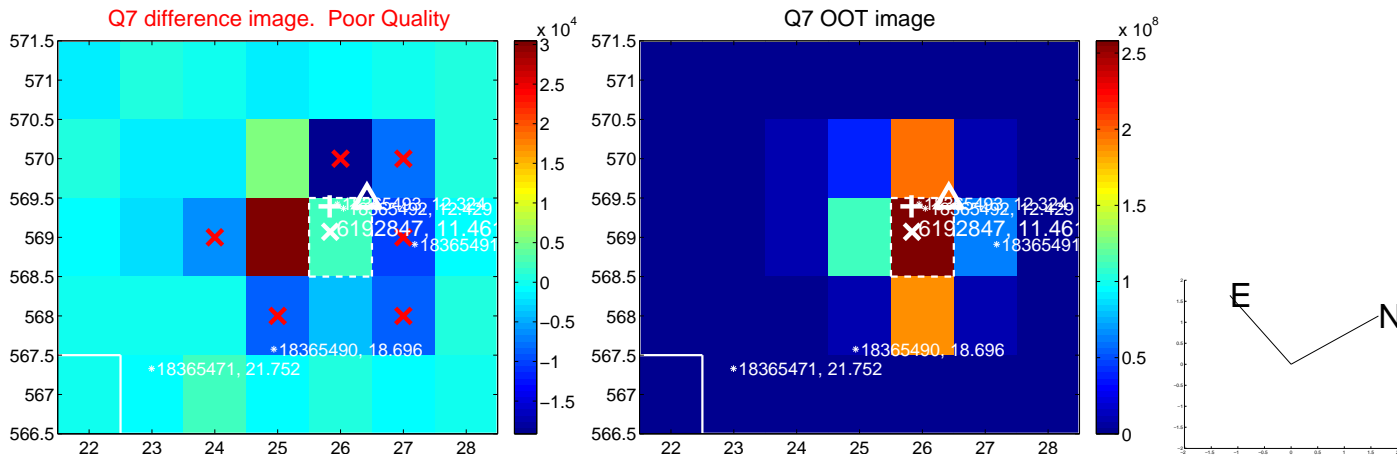
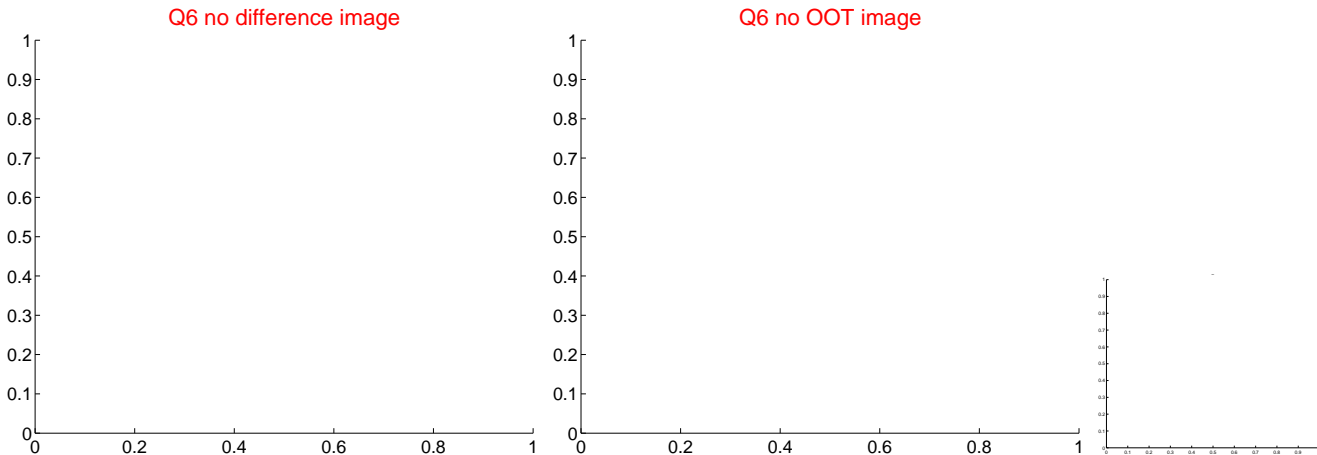
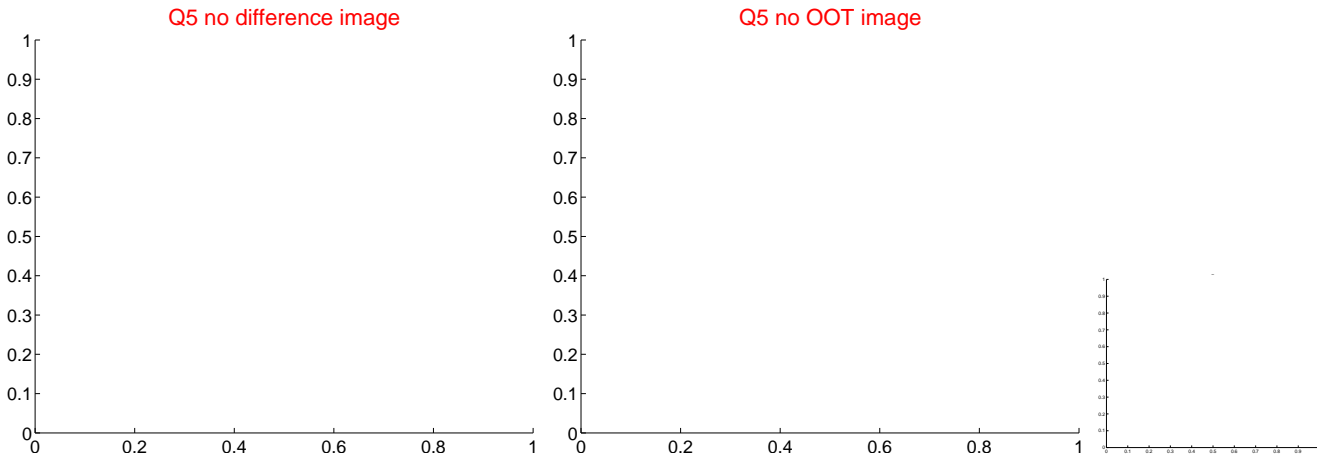


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets;** magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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



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

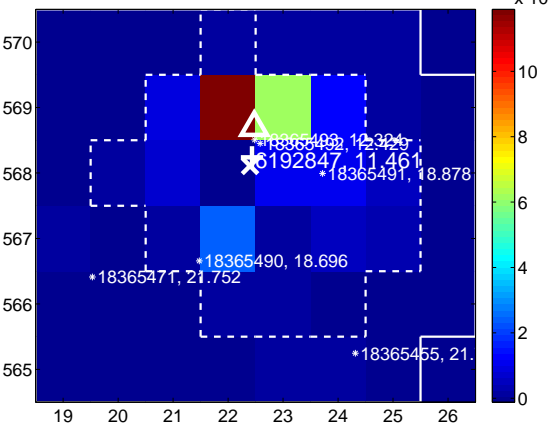
Q9 no difference image



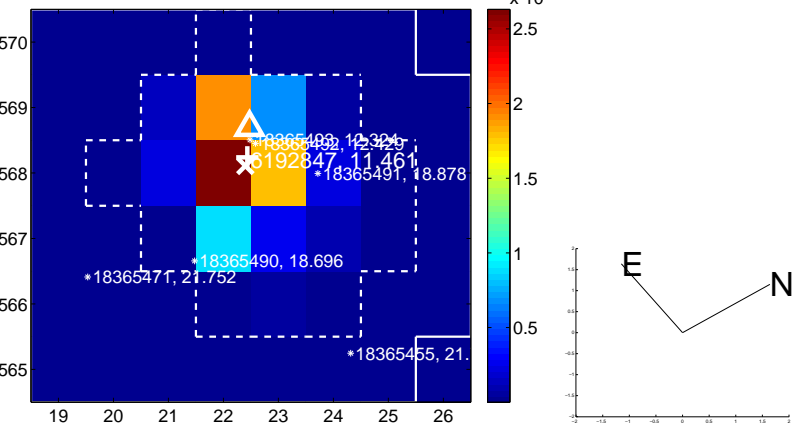
Q9 no OOT image



Q10 difference image



Q10 OOT image



Q11 no difference image



Q11 no OOT image



Q12 no difference image



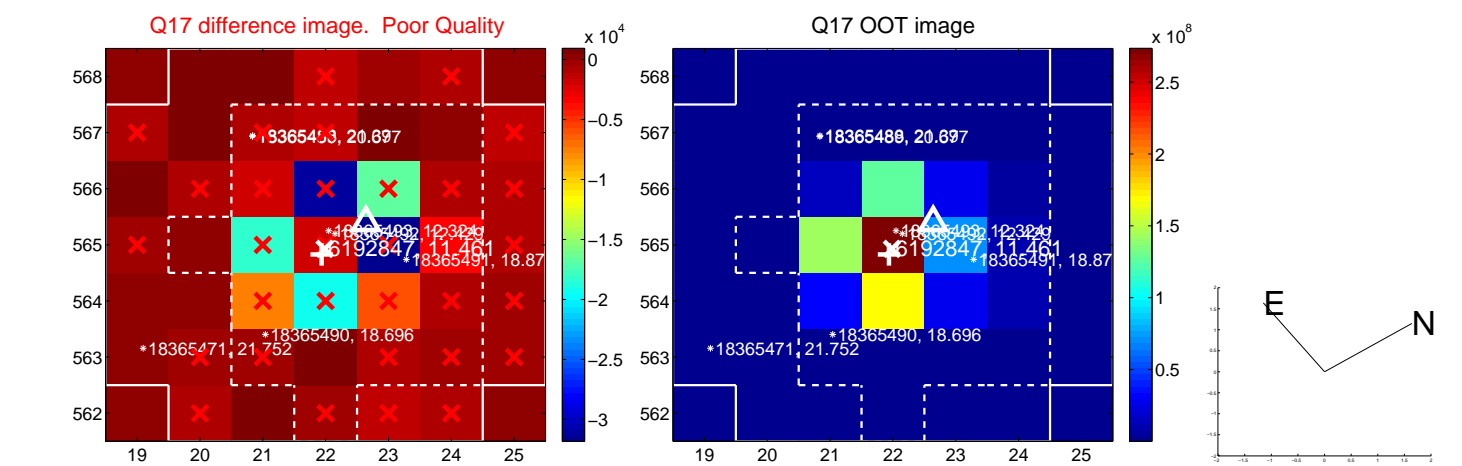
Q12 no OOT image



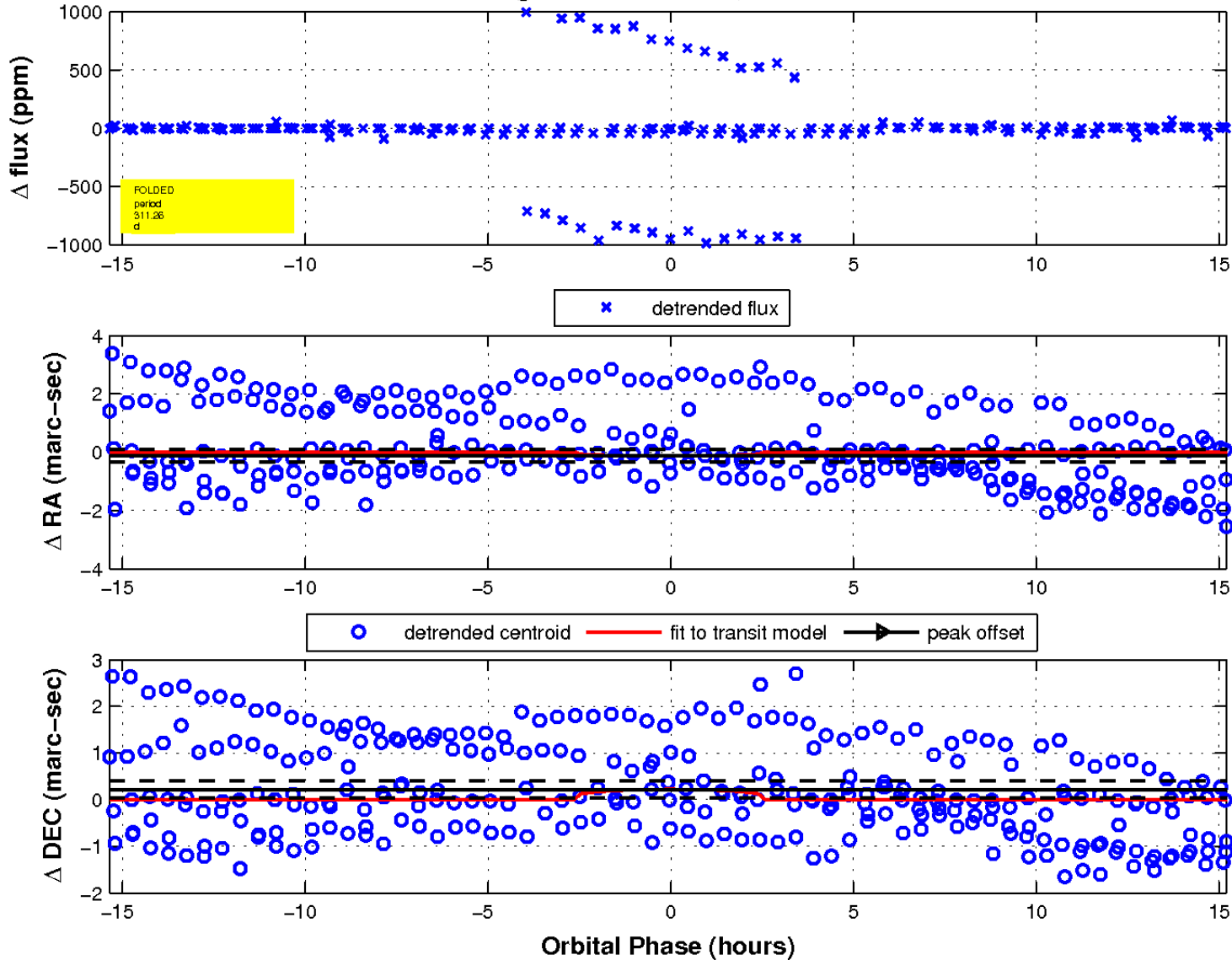
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

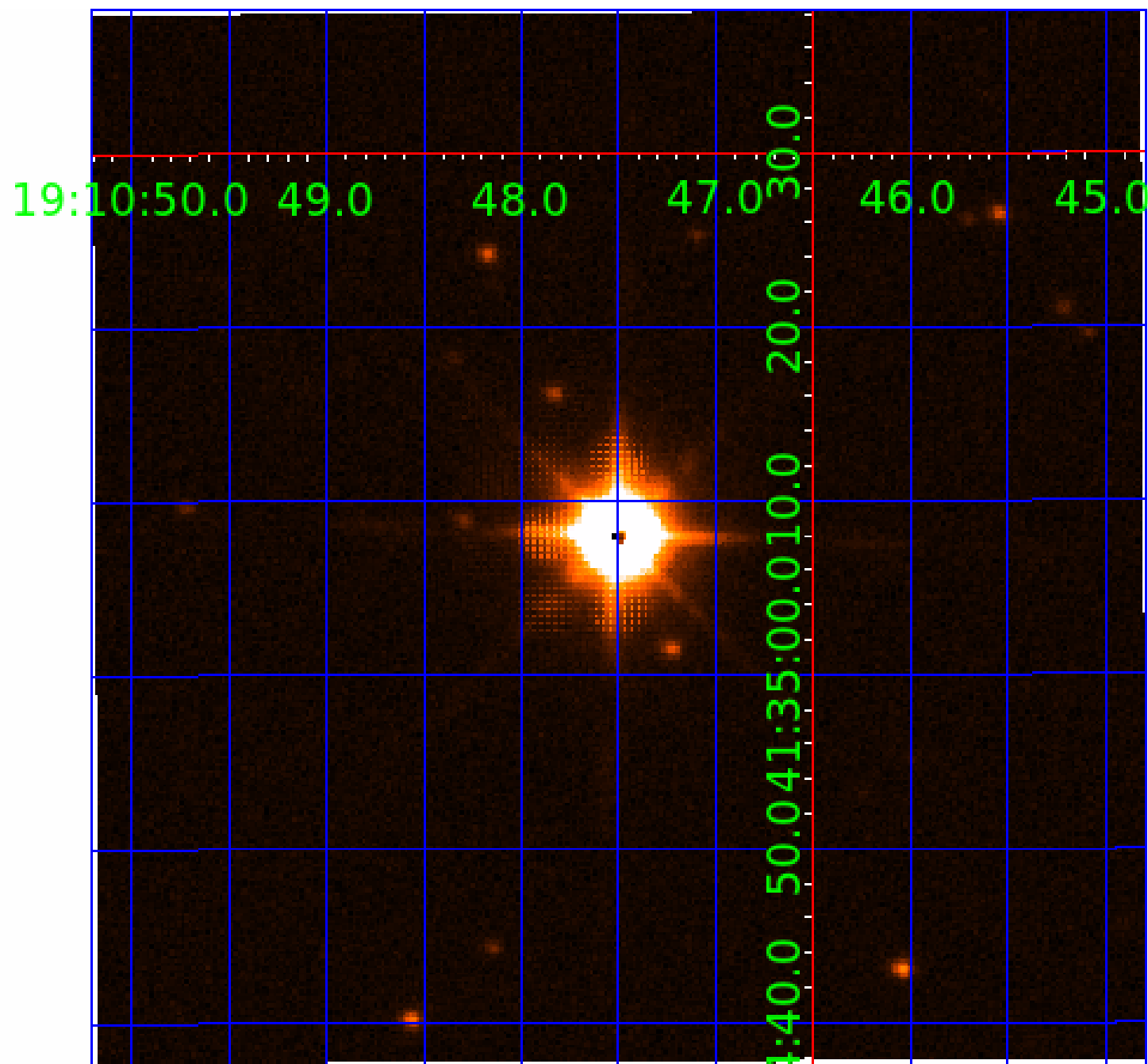


fluxWeightedCentroids, Planet 3 of 7



UKIRT Image

Declination



KIC 006192847

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})
006192847-01	OBS	No	111.799038	200.971741	11.0	2.049	27.5	3.1	67.44	3916	24.08	3154.65
006192847-02	OBS	No	145.863849	259.216103	26.0	4.412	16.9	7.6	67.44	3916	42.78	2212.78
006192847-03	OBS	No	311.264136	344.923662	12.1	5.141	14.1	3.7	67.44	3916	28.64	805.43
006192847-04	OBS	No	103.976930	211.806049	36.0	2.429	13.4	10.8	67.44	3916	48.01	3474.98
006192847-05	OBS	No	208.899997	167.034907	29.3	8.687	11.6	7.8	67.44	3916	46.34	1370.72
006192847-06	OBS	No	305.852595	158.214222	35.3	2.457	15.5	12.0	67.44	3916	52.79	824.49
006192847-07	OBS	No	239.018162	199.755679	123.3	6.000	12.3	-1.0	67.44	3916	69.98	1145.41

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
006192847-01	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_SATURATED
006192847-02	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—INCONSISTENT_TRANS—CENT_SATURATED
006192847-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_MARSHALL_ZUMA—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV— INCONSISTENT_TRANS—CENT_SATURATED
006192847-04	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_SKYE_ZUMA_TRACKER—LPP_ALT—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT— INCONSISTENT_TRANS—CENT_SATURATED
006192847-05	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_MARSHALL_ZUMA—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—CENT_SATURATED
006192847-06	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_MARSHALL_ZUMA_TRACKER—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV— CENT_SATURATED
006192847-07	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_MARSHALL_ZUMA—LPP_DV—CENT_SATURATED

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

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

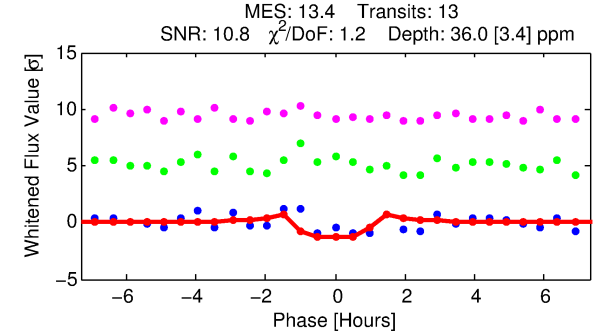
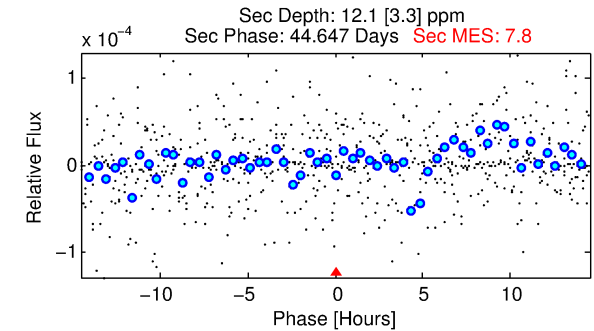
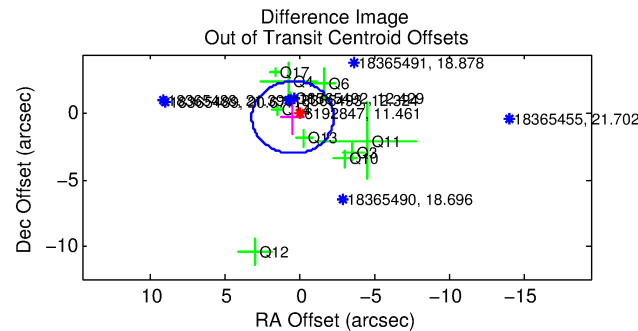
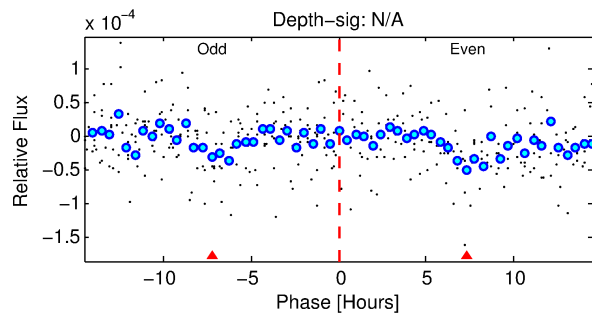
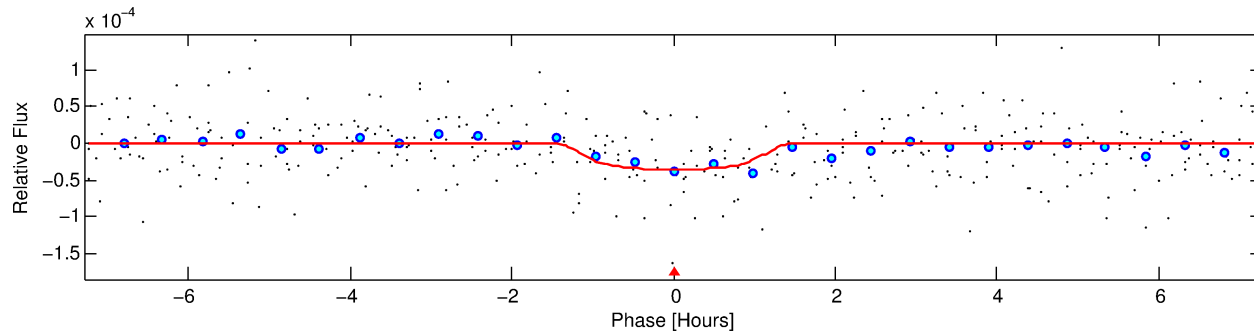
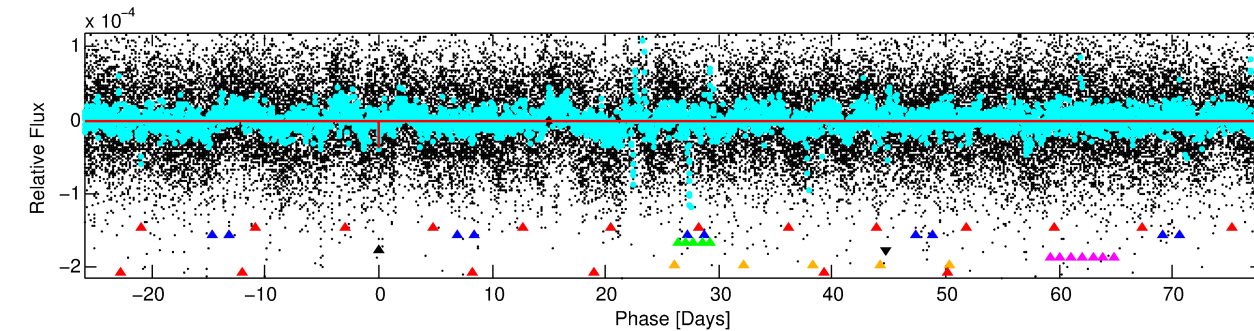
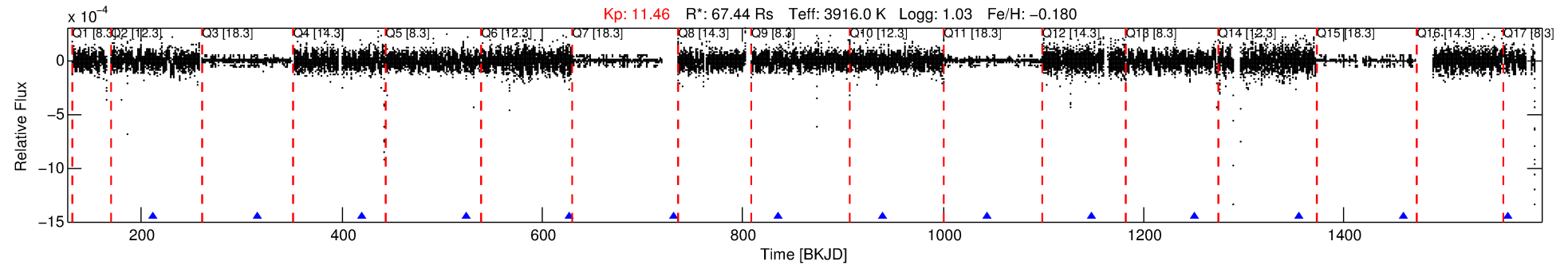
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 006192847-04

No Significant Match Found

DV One-Page Summary

KIC: 6192847 Candidate: 4 of 7 Period: 103.977 d



DV Fit Results:

Period = 103.97693 [0.00057] d
Epoch = 211.8060 [0.0065] BKJD
Rp/R* = 0.0065 [0.0033]
a/R* = 178.40 [270.28]
b = 0.85 [0.53]
Seff = 3474.98 [648.28]
Teff = 1958 [91] K
Rp = 48.01 [26.68] Re
a = 0.5251 [0.0766] AU
Ag = 0.80 [0.85] [-0.24] σ
Teffp = 2861 [762] K [1.18] σ

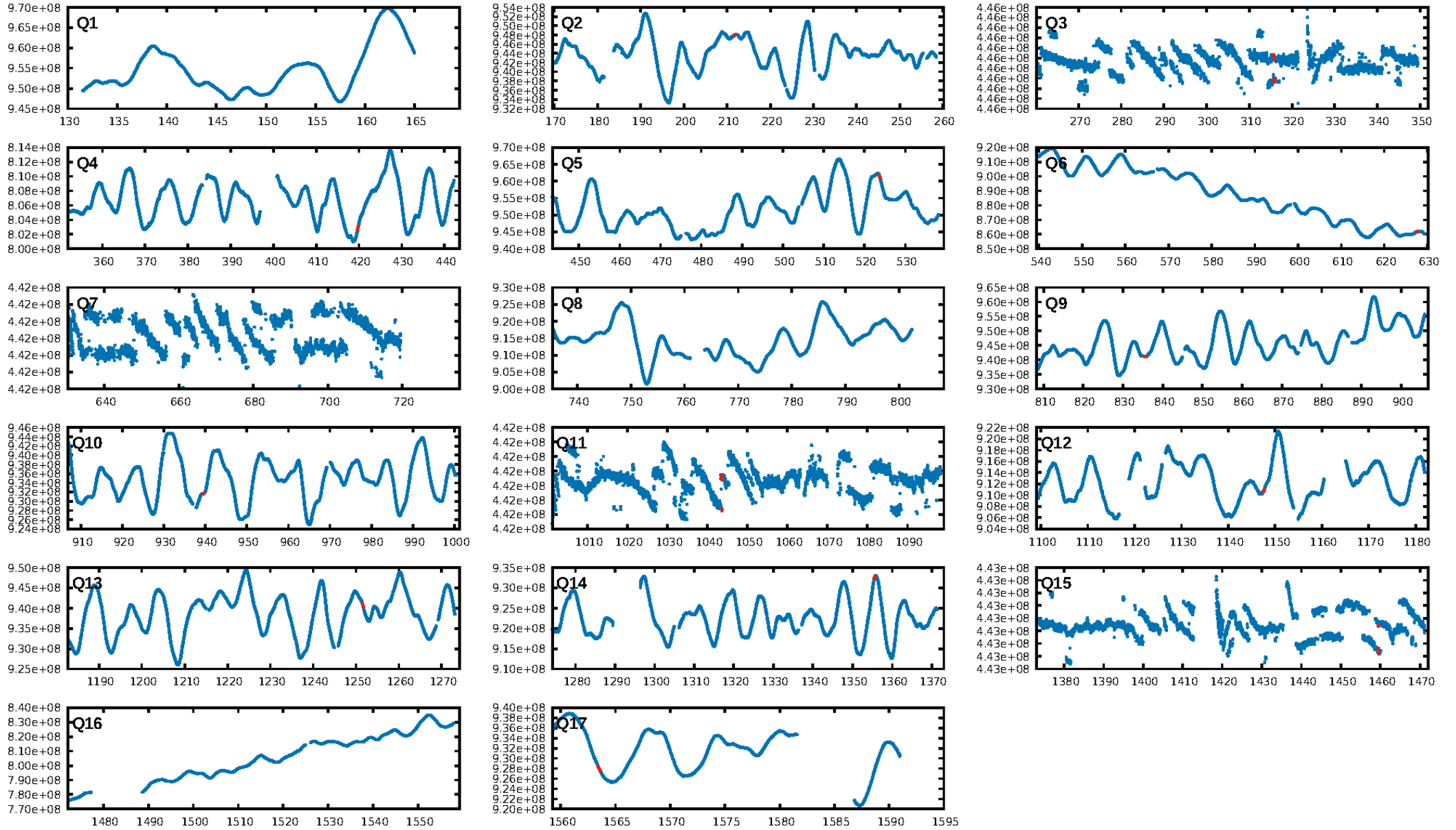
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: 100.0% [59.08] σ
ModelChiSquare2-sig: 11.9%
ModelChiSquareGof-sig: 86.4%
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [12/12]
GhostDiagnostic-chr: -0.6216
Centroid-sig: 59.5%
Centroid-so: 1.802 arcsec [0.50] σ
OotOffset-rm: 0.498 arcsec [0.55] σ
KicOffset-rm: 1.020 arcsec [1.09] σ
OotOffset-st: 3/3/2/2 [10]
KicOffset-st: 3/3/2/2 [10]
DiffImageQuality-fgm: 0.00 [0/10]
DiffImageOverlap-fno: 1.00 [13/13]

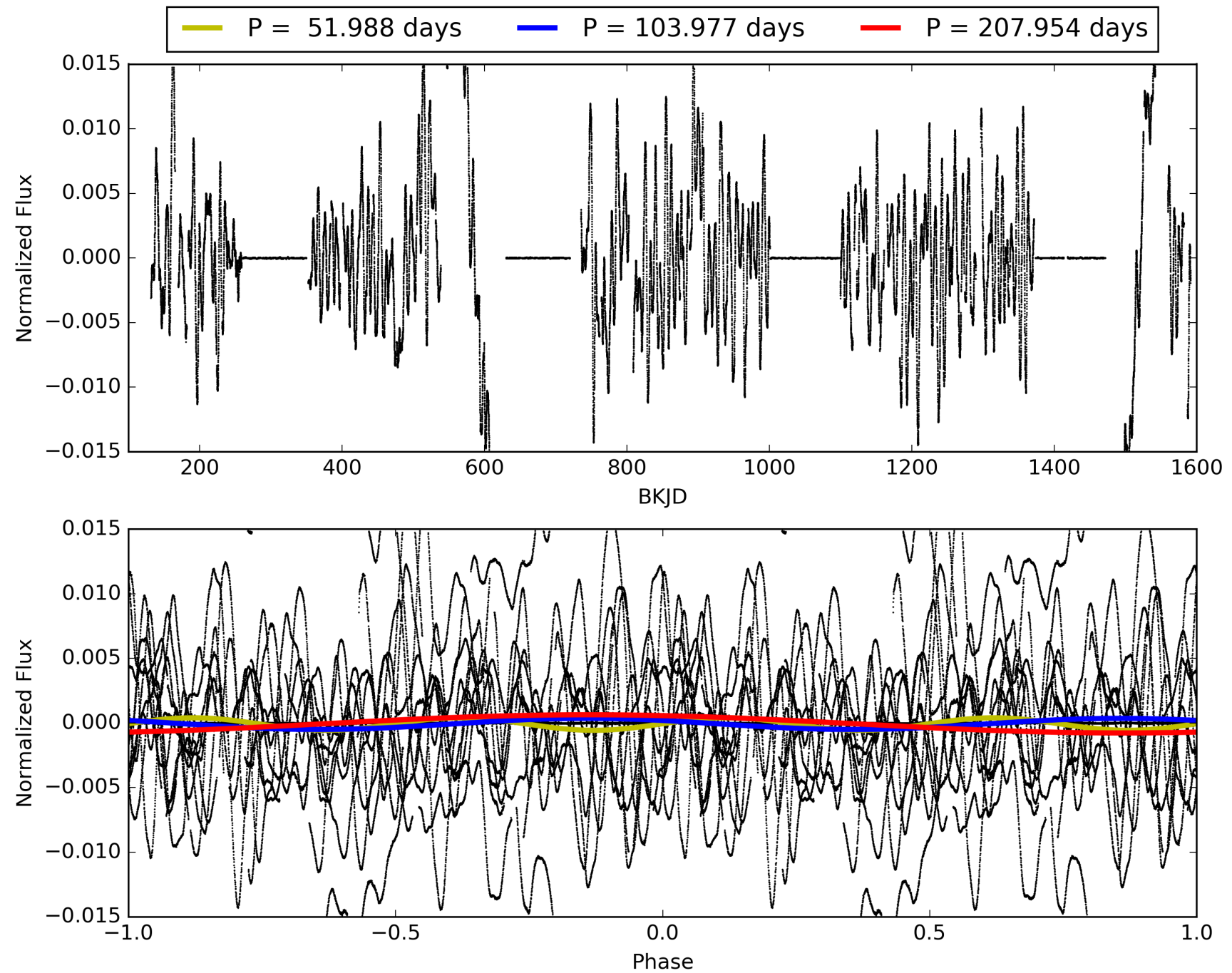
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 02-Feb-2016 00:59:20 Z

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

TCE 006192847-04, PDC Light Curves

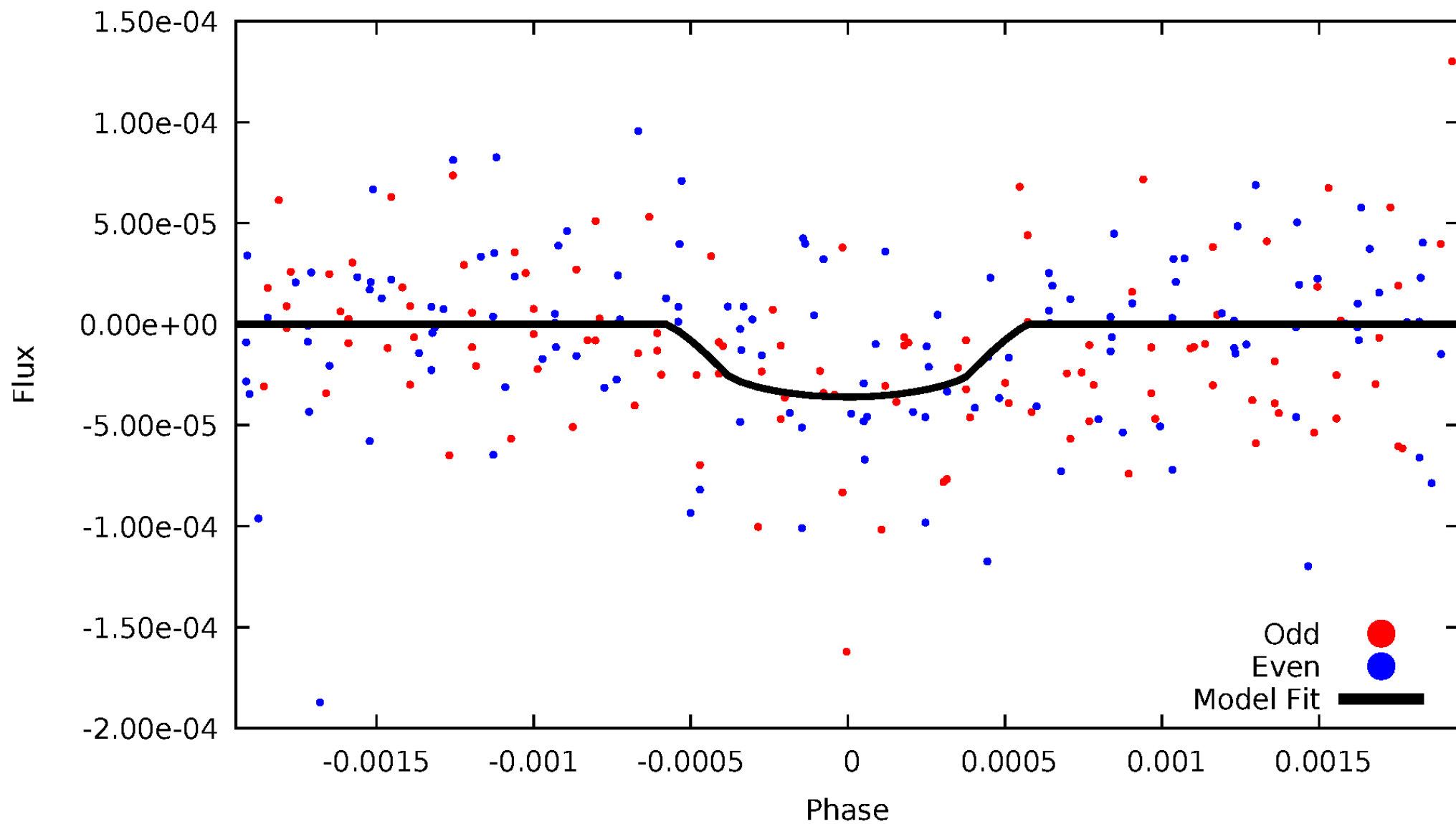


TCE 006192847-04



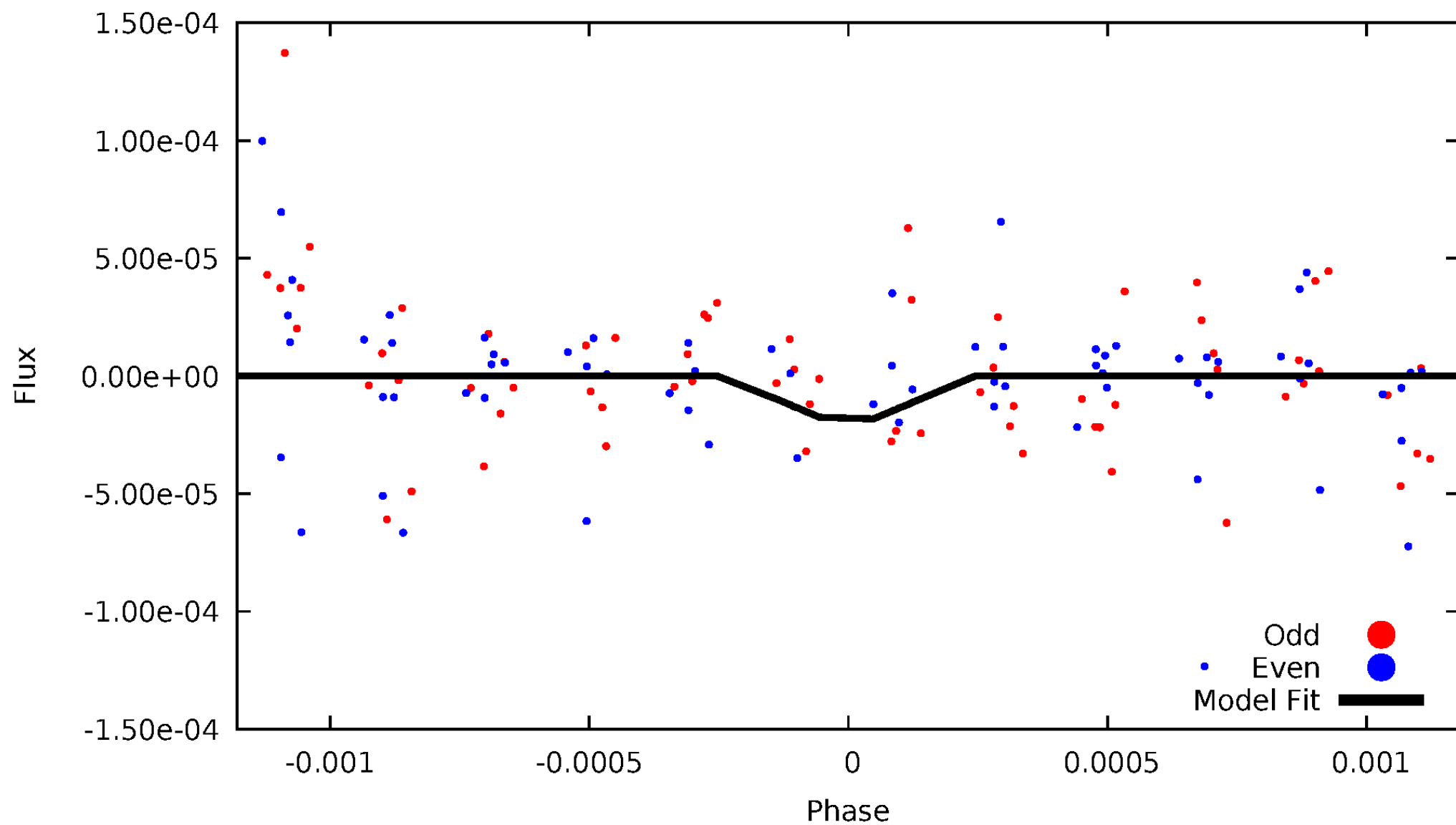
DV Odd/Even

TCE 006192847-04



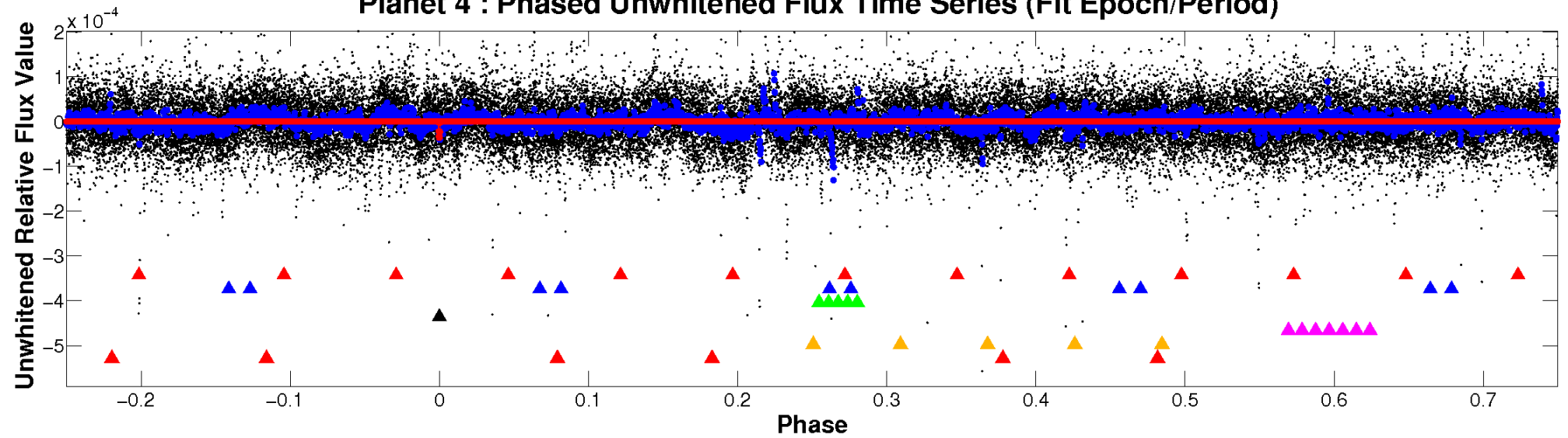
ALT Odd/Even

TCE 006192847-04

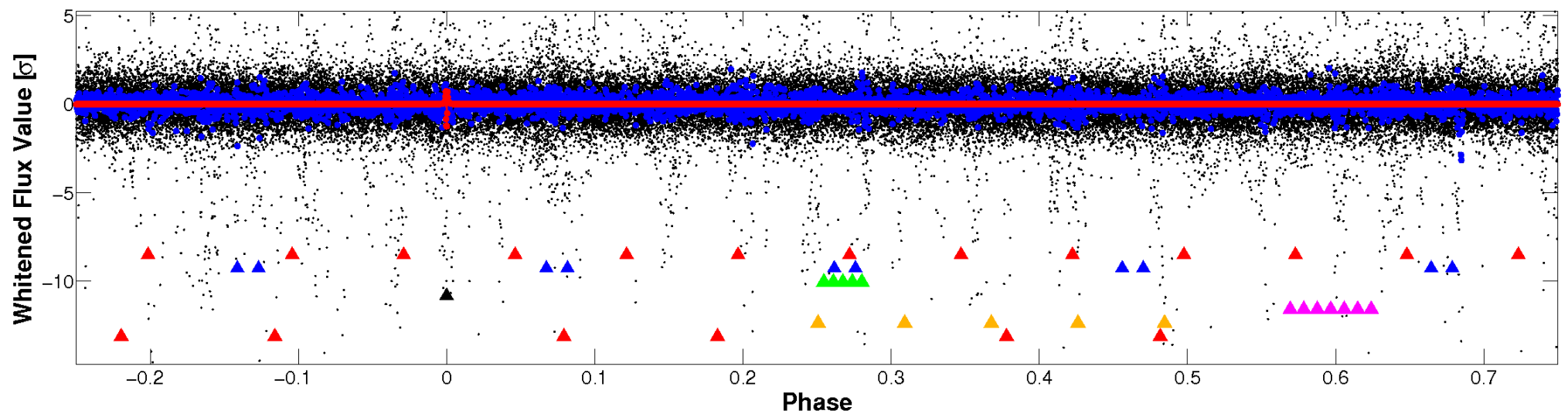


Non-Whitened Vs. Whitened Light Curve

Planet 4 : Phased Unwhitened Flux Time Series (Fit Epoch/Period)

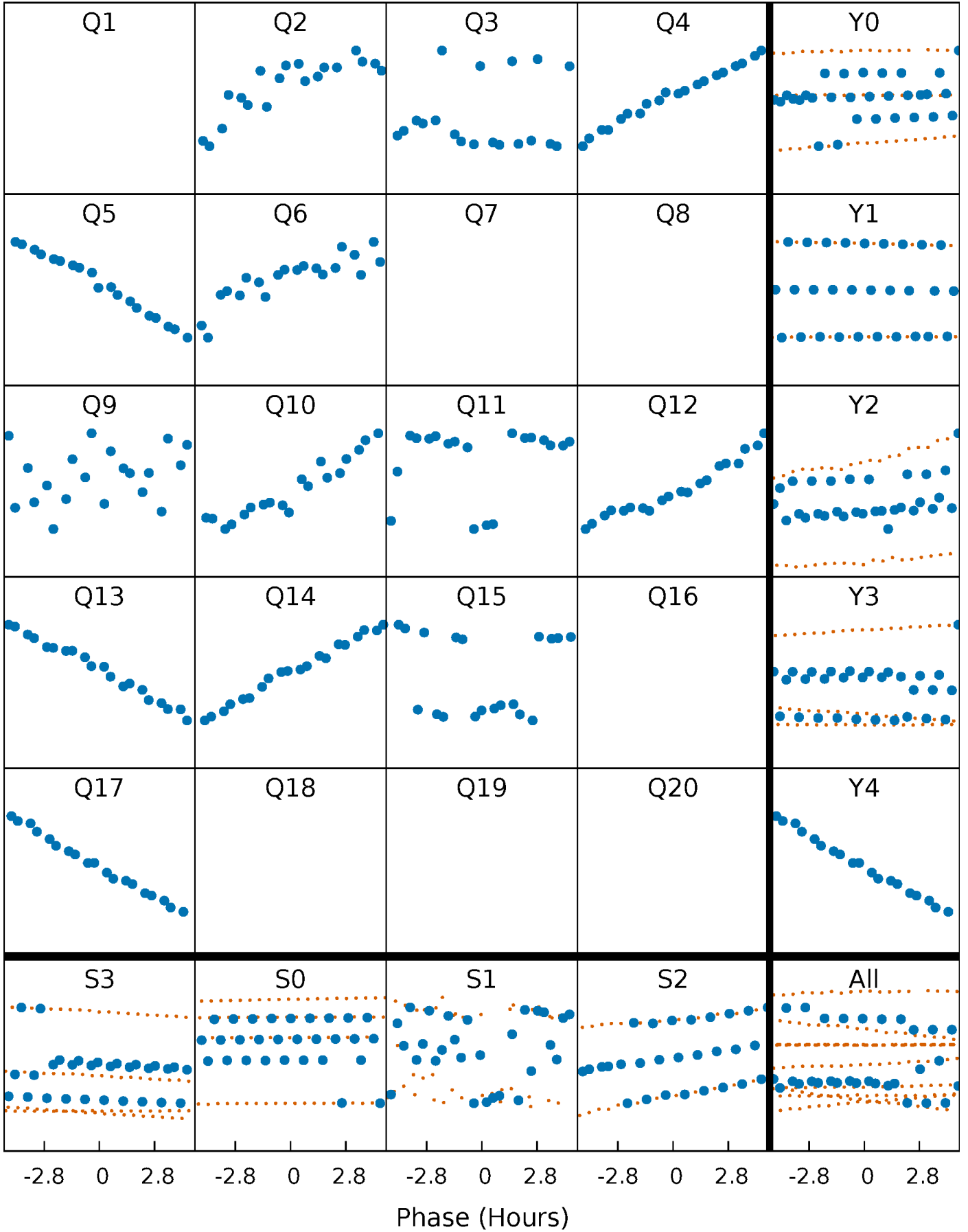


Planet 4 : Phased Whitened Flux Time Series (Fit Epoch/Period)



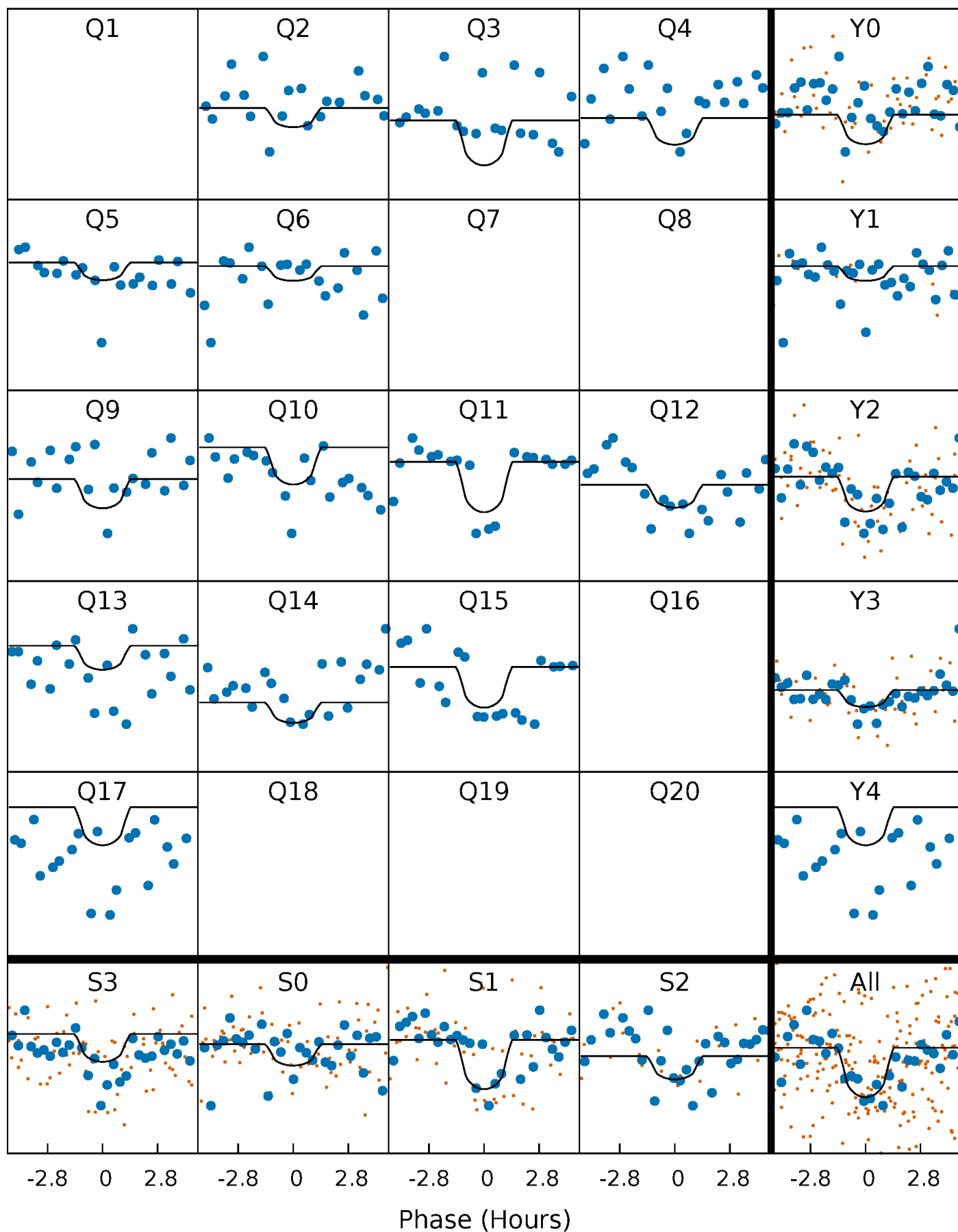
PDC Quarter-Phased Transit Curves

TCE 006192847-04 $P=103.976929$ Days $T_0=211.806049$ (BKJD)



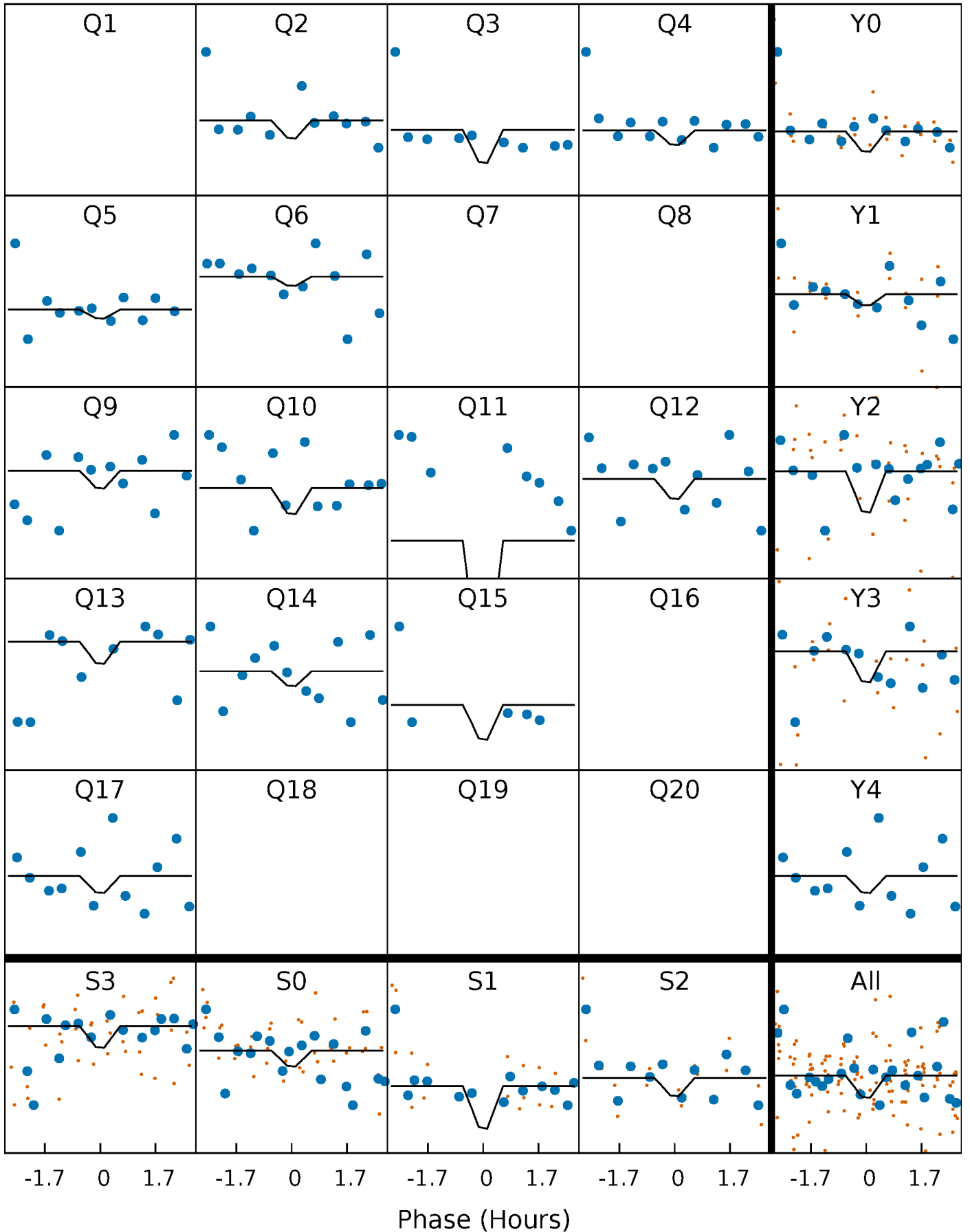
DV Quarter-Phased Transit Curves

TCE 006192847-04 $P=103.976929$ Days $T_0=211.806049$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

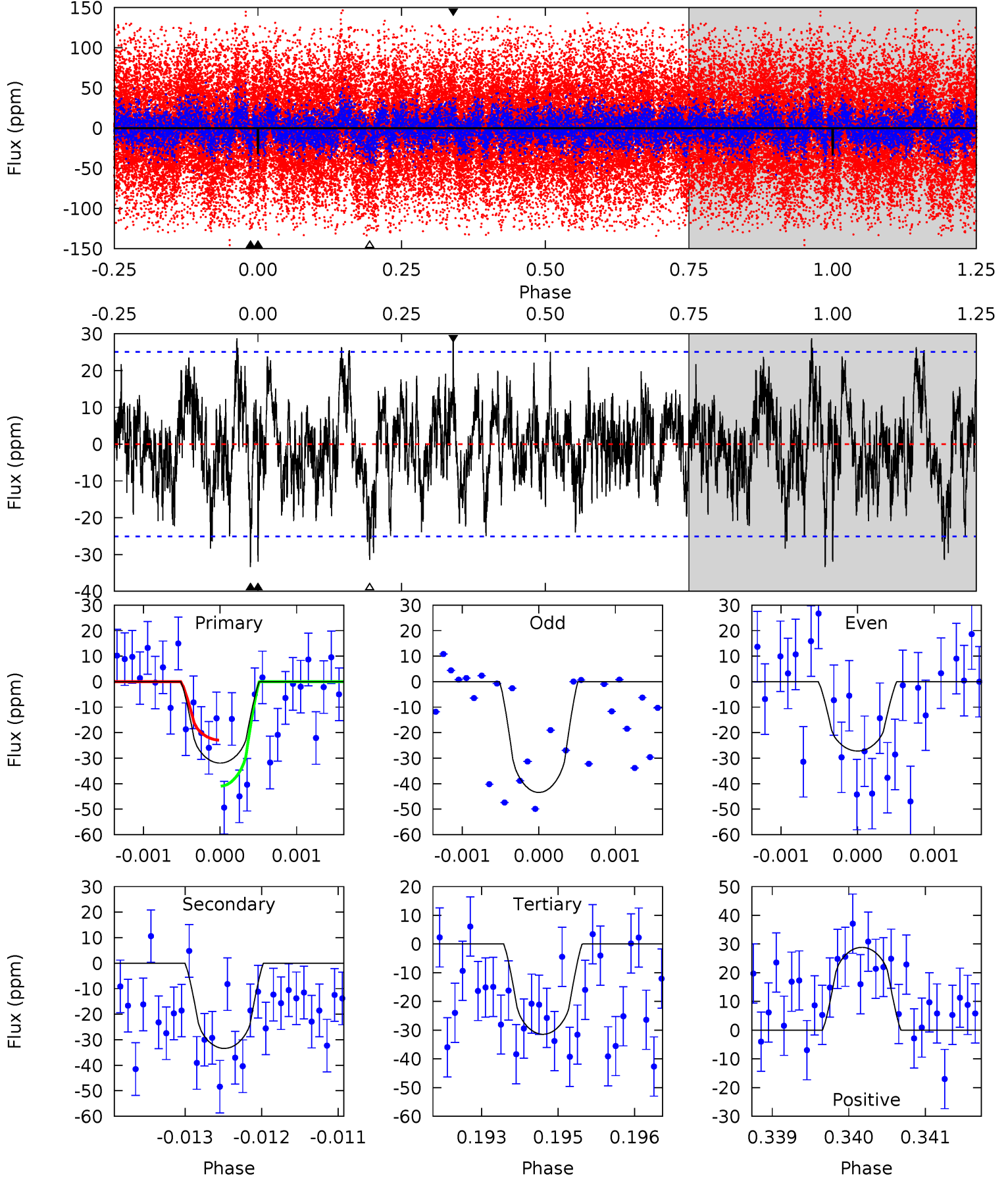
TCE 006192847-04 P=103.965594 Days $T_0=211.932241$ (BKJD)



DV Model-Shift Uniqueness Test

006192847-04, P = 103.976929 Days, E = 107.829120 Days

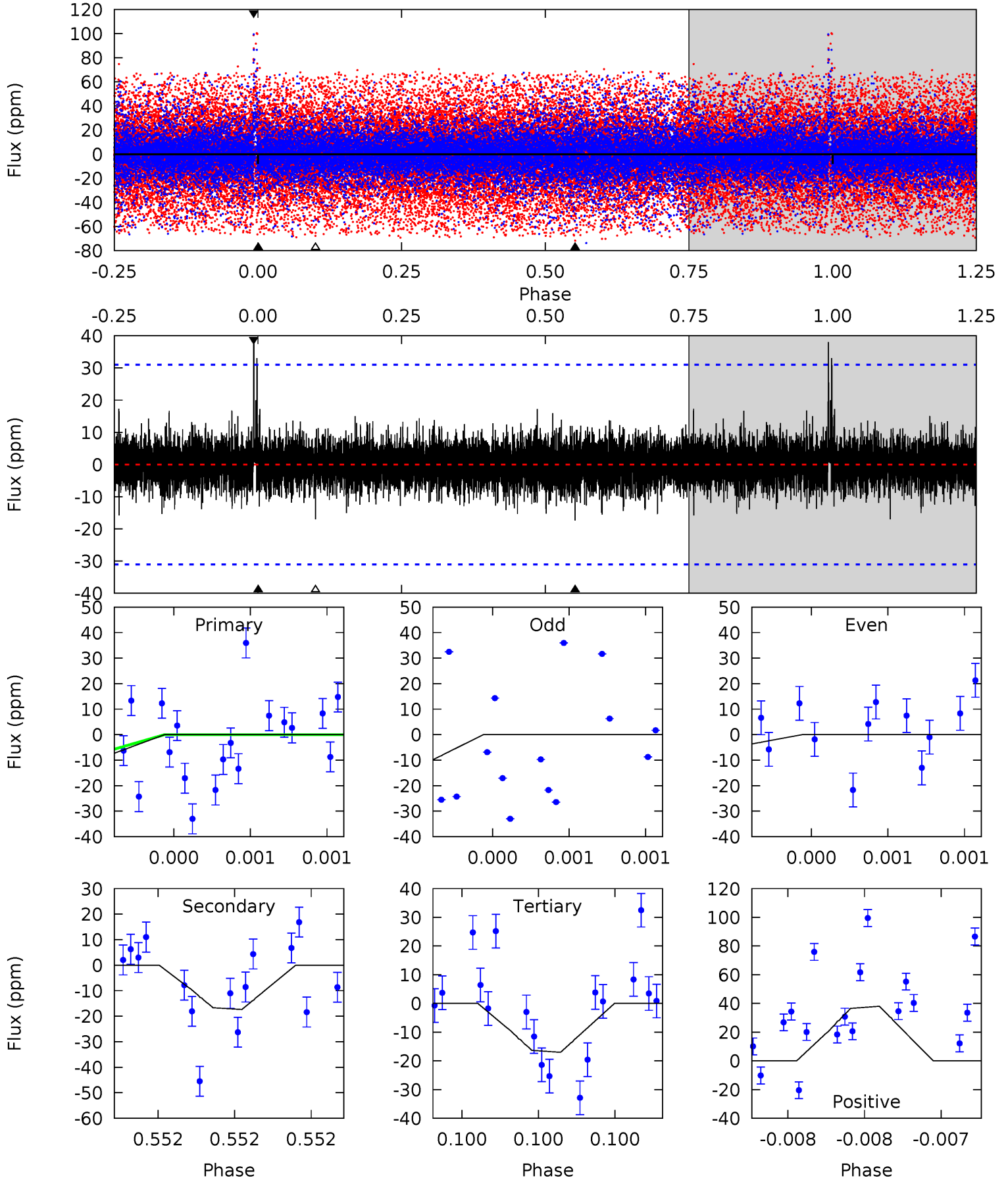
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
6.91	7.23	6.80	6.24	5.43	3.26	2.02	0.11	0.67	0.43	0.99	1.79	0.87	0.46	0



Alt Model-Shift Uniqueness Test

006192847-04, P = 103.965594 Days, E = 107.966647 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
1.43	3.17	3.11	6.96	5.67	3.63	0.80	-1.68	-5.52	0.06	-3.78	0.61	0.82	0.69	0.29



Stellar Parameters For KIC 006192847

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	3916^{+88}_{-107}	$1.032^{+0.030}_{-0.030}$	$-0.180^{+0.200}_{-0.250}$	$67.438^{+2.428}_{-14.567}$	$1.785^{+0.071}_{-0.643}$	$0.000^{+0.000}_{-0.000}$
	+2%/-3%	+3%/-3%	+111%/-139%	+4%/-22%	+4%/-36%	+29%/-8%
Source	PHO54	AST54	PHO54	DSEP		

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

Secondary Eclipse Parameters for KIC 006192847-04 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-33 ± 5	$48.69^{+22.93}_{-24.14}$	2739^{+73}_{-85}	3655^{+1130}_{-539}	$2.134^{+6.444}_{-1.149}$
Alt.	-17 ± 5	$34.78^{+25.71}_{-20.14}$	2738^{+74}_{-84}	3608^{+1516}_{-720}	$2.058^{+9.695}_{-1.377}$

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 $A_{obs} \gg 1.0$

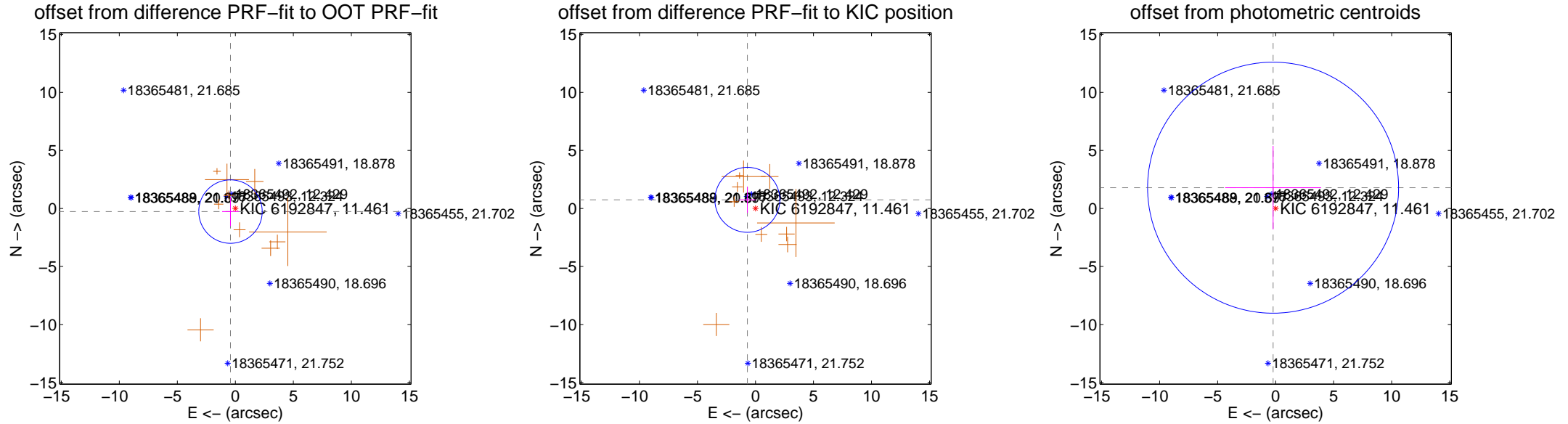
DV Centroid Data

Supplemental centroid analysis for 006192847-04. **Kepler magnitude: 11.46.** Transit SNR 10.77

There are 0 quarters with good PRF difference image offsets

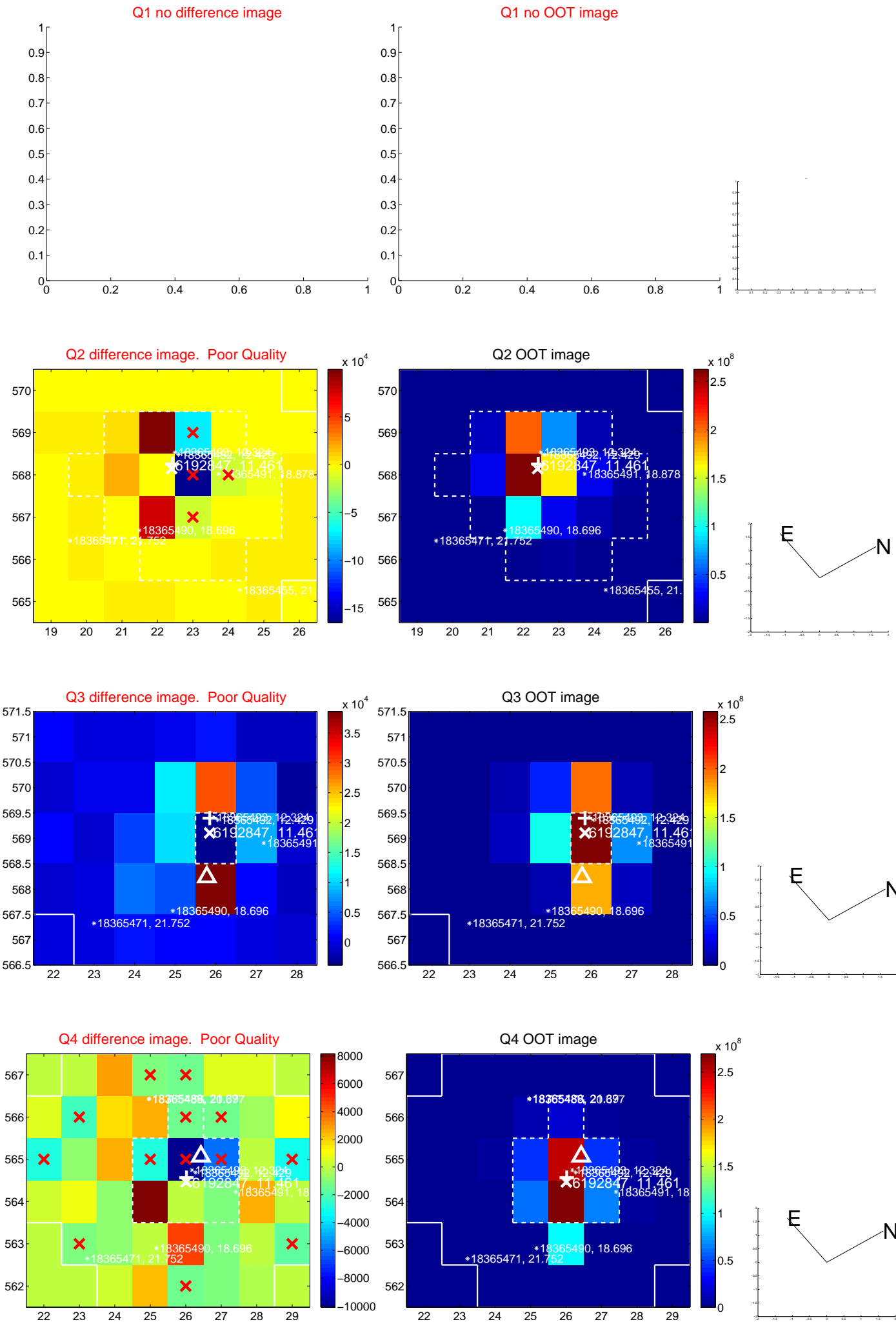
The direct PRF centroid is offset from the target star catalog position by about 0.42 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.498 ± 0.911	0.55	0.418 ± 0.716	-0.271 ± 1.244
PRF-fit source offset from KIC position	1.020 ± 0.933	1.09	0.699 ± 0.705	0.742 ± 1.121
photometric centroid source offset	1.80 ± 3.61	0.50	0.22 ± 4.14	1.79 ± 3.60

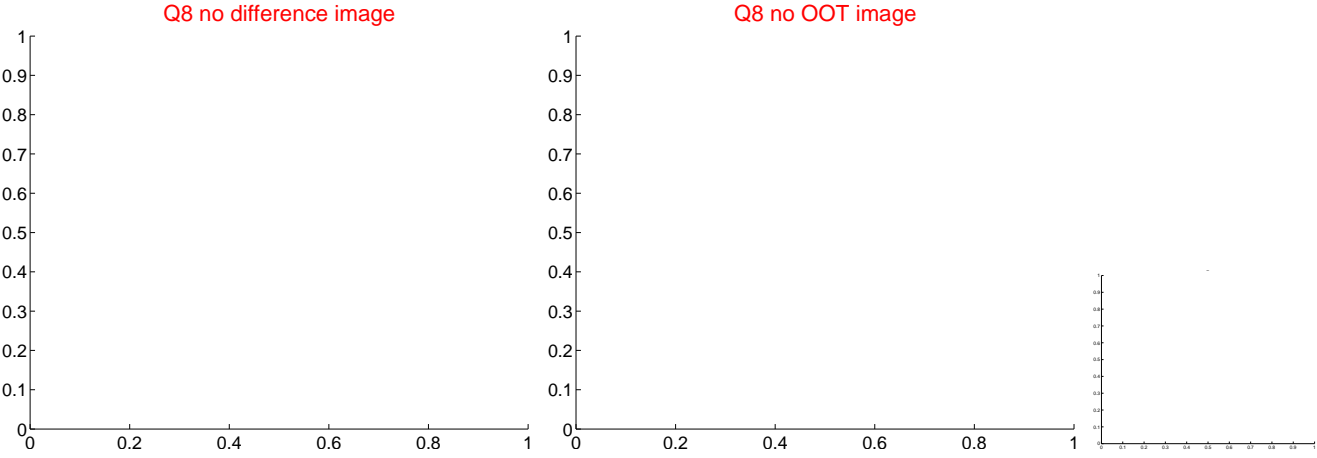
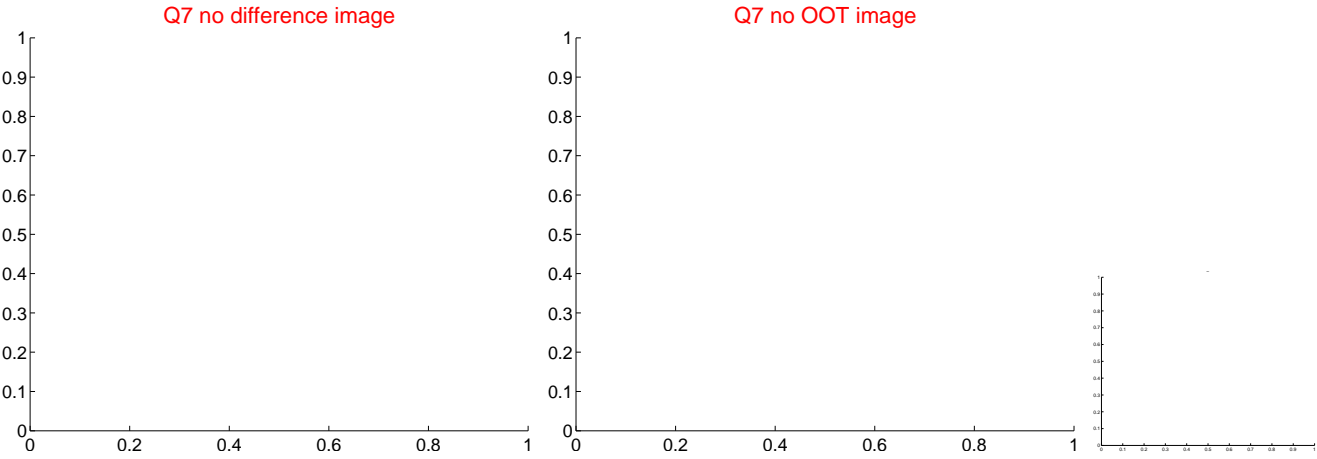
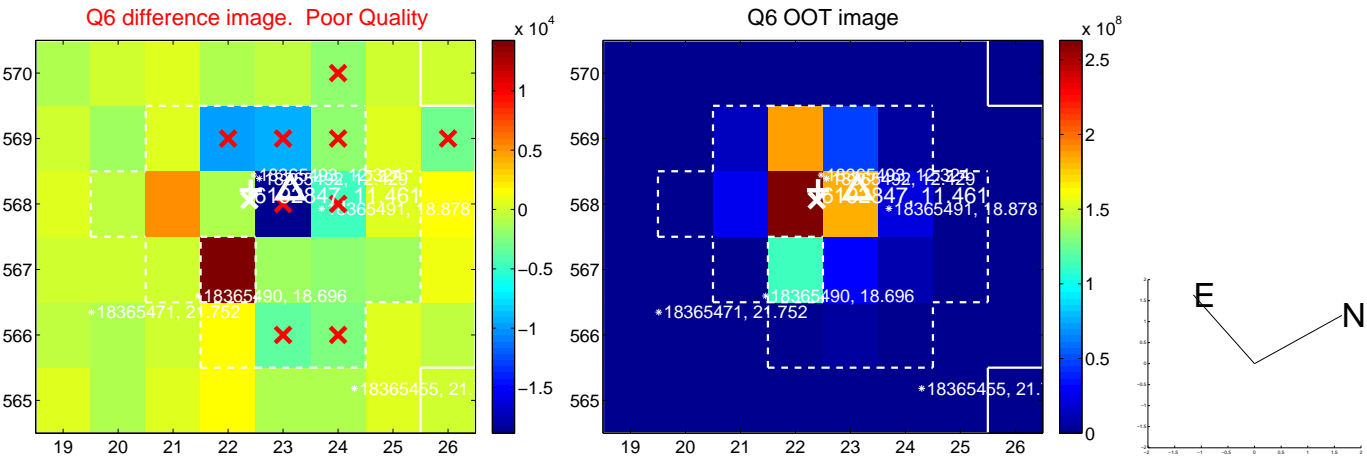
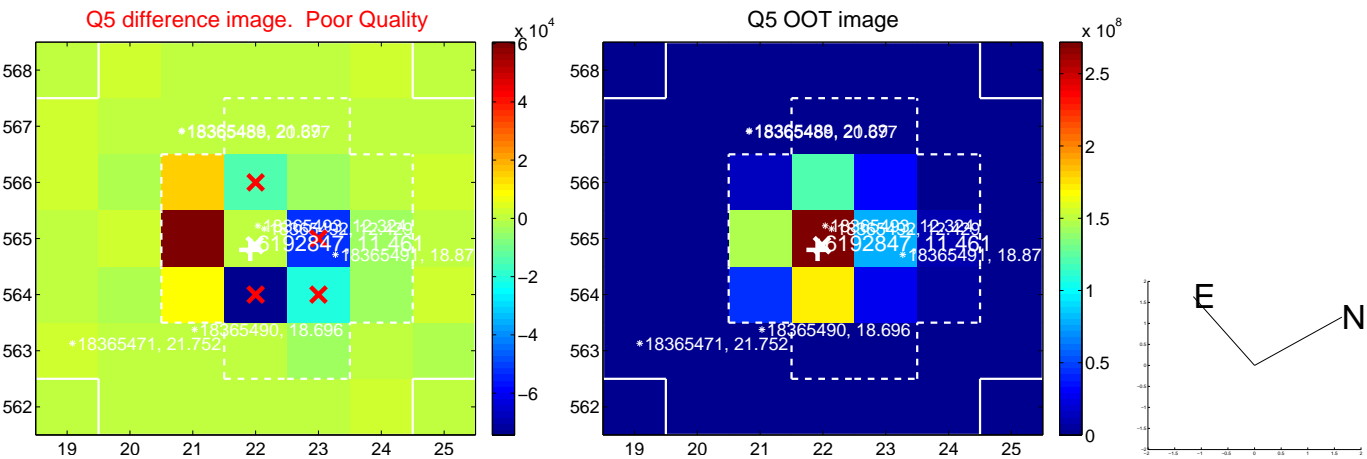


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets;** magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

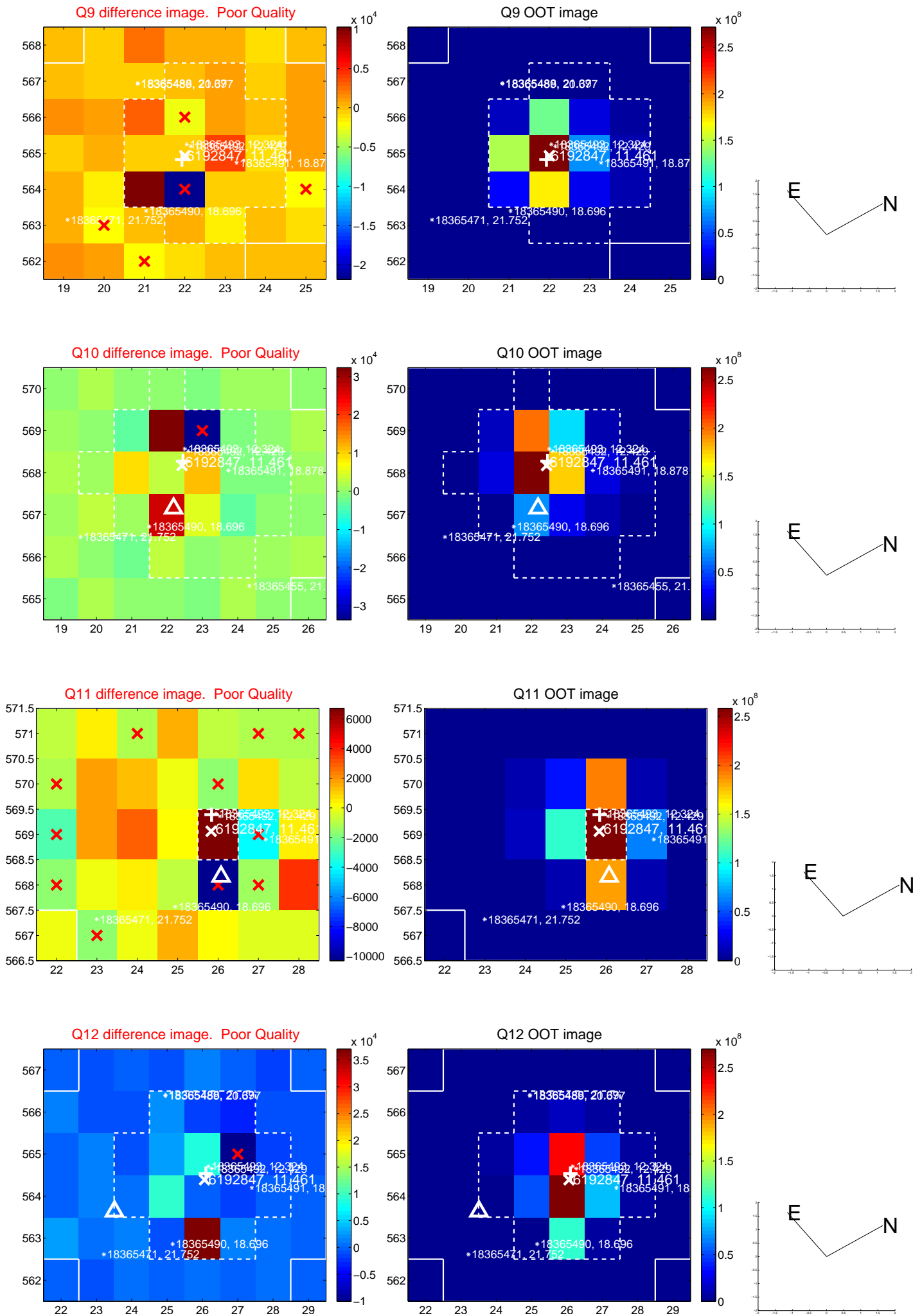
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



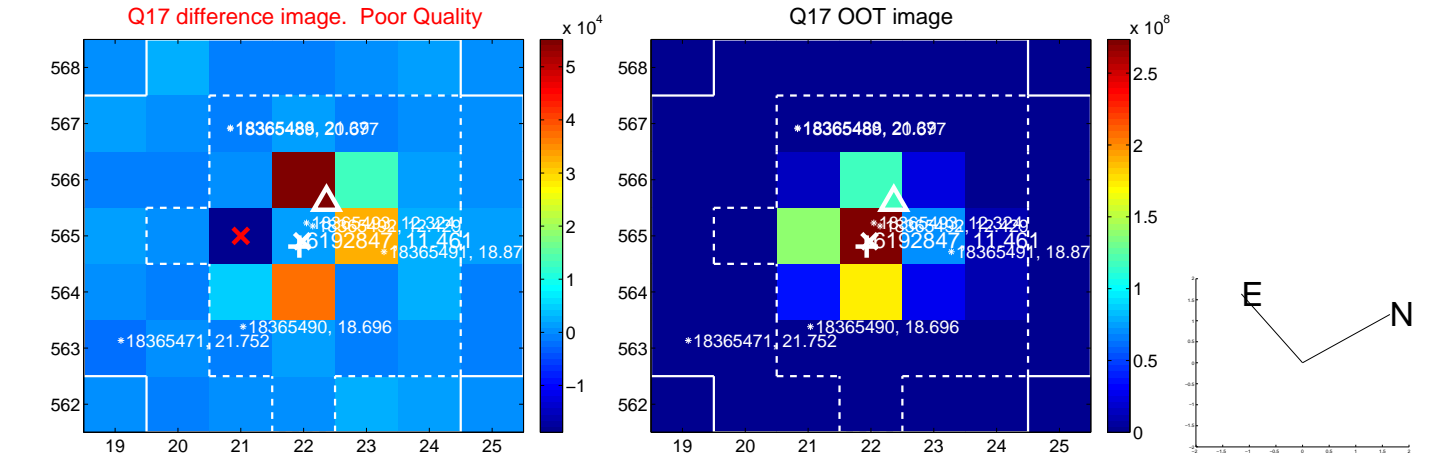
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



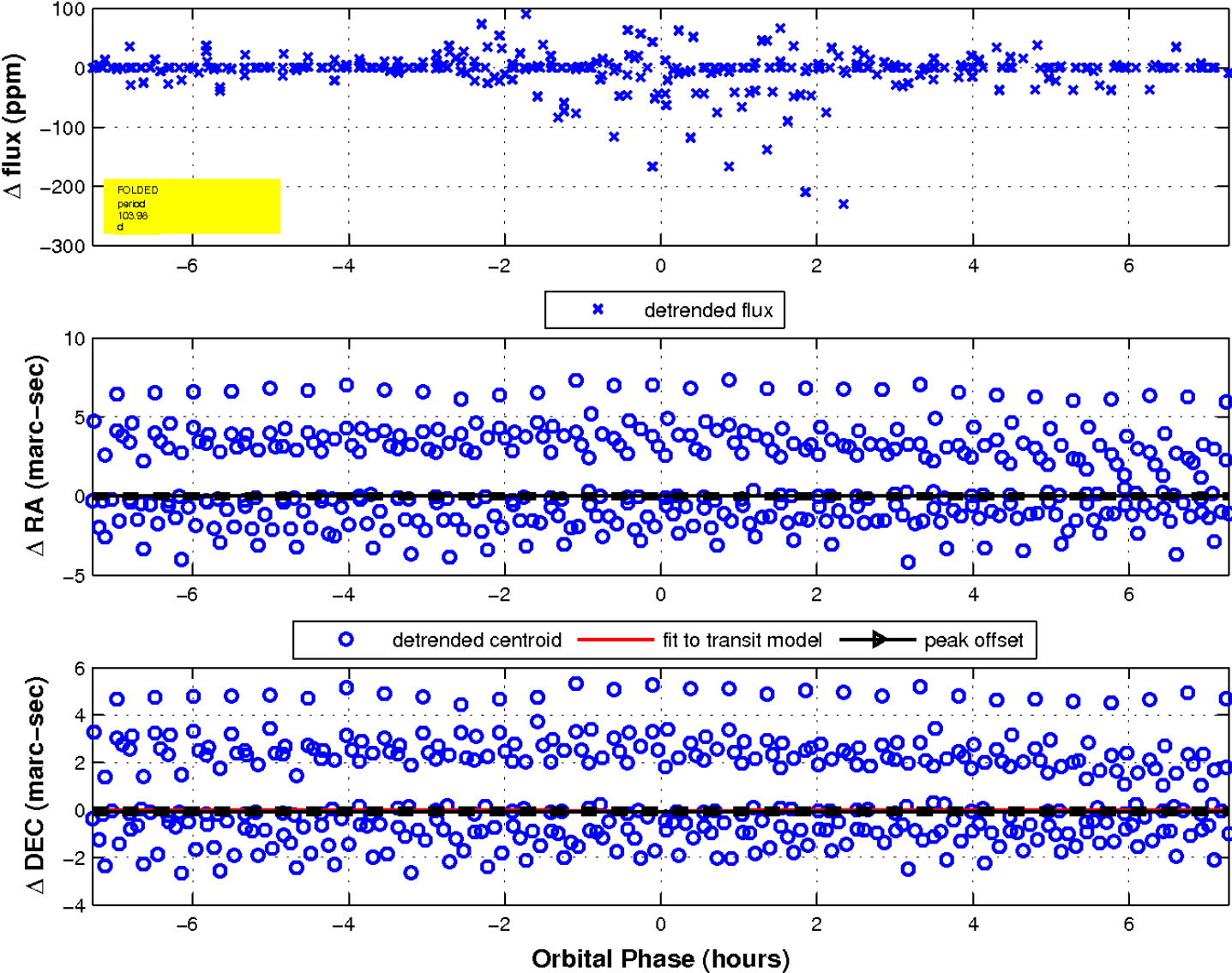
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

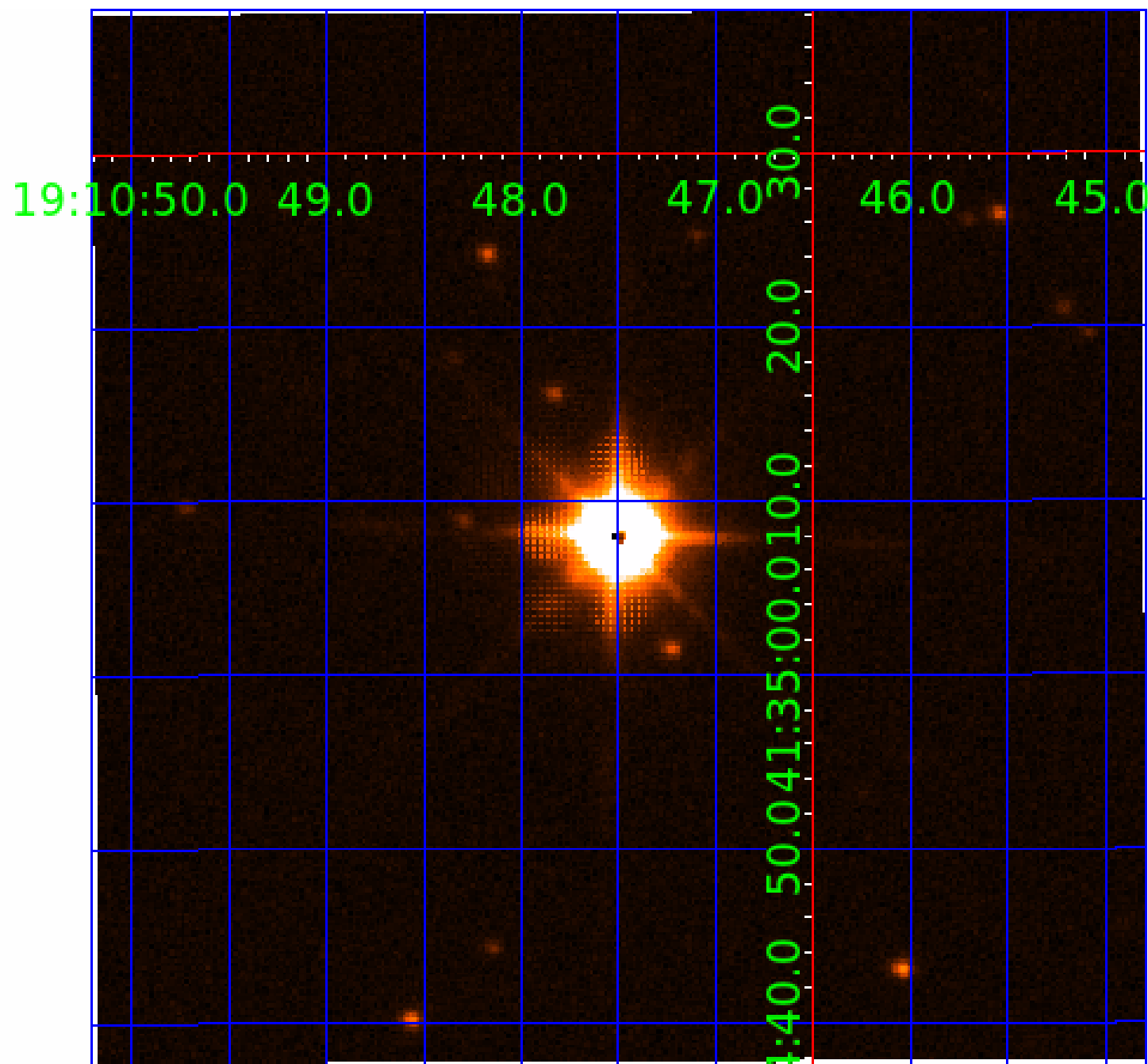


fluxWeightedCentroids, Planet 4 of 7



UKIRT Image

Declination



KIC 006192847

Q1-17 DR25 TCE Parameters

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006192847-06	OBS	No	305.852595	158.214222	35.3	2.457	15.5	12.0	67.44	3916	52.79	824.49
006192847-07	OBS	No	239.018162	199.755679	123.3	6.000	12.3	-1.0	67.44	3916	69.98	1145.41

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
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006192847-02	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—INCONSISTENT_TRANS—CENT_SATURATED
006192847-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_MARSHALL_ZUMA—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV— INCONSISTENT_TRANS—CENT_SATURATED
006192847-04	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_SKYE_ZUMA_TRACKER—LPP_ALT—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT— INCONSISTENT_TRANS—CENT_SATURATED
006192847-05	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_MARSHALL_ZUMA—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—CENT_SATURATED
006192847-06	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_MARSHALL_ZUMA_TRACKER—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV— CENT_SATURATED
006192847-07	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_MARSHALL_ZUMA—LPP_DV—CENT_SATURATED

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

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

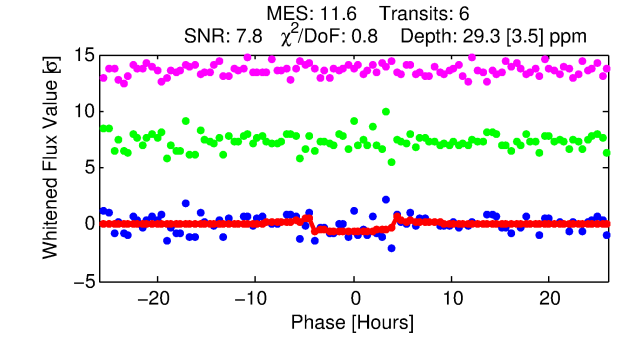
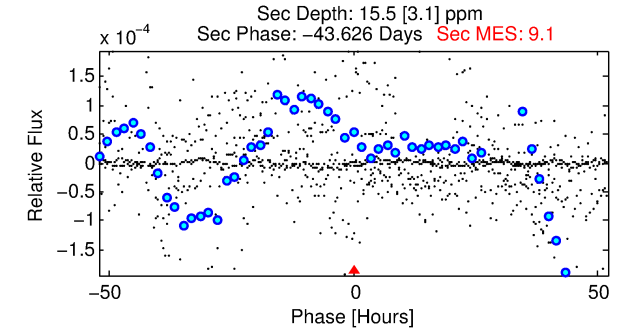
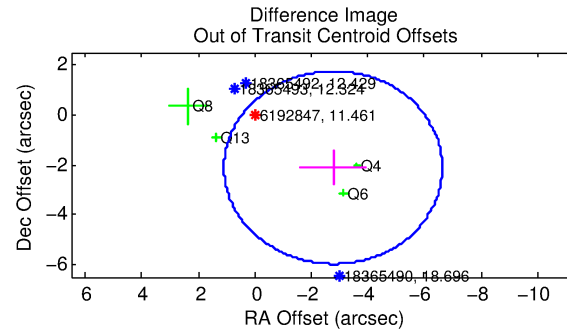
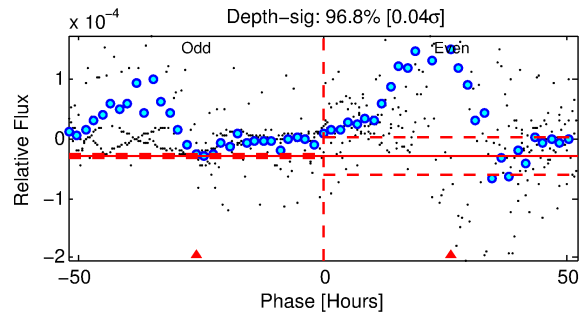
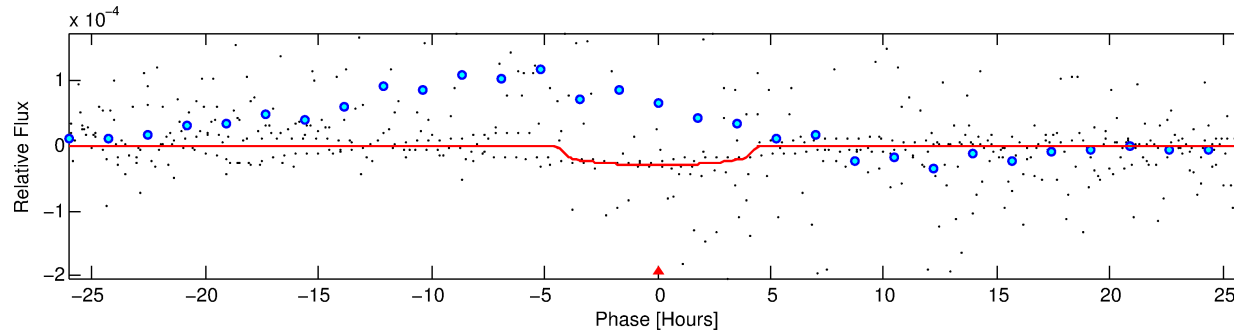
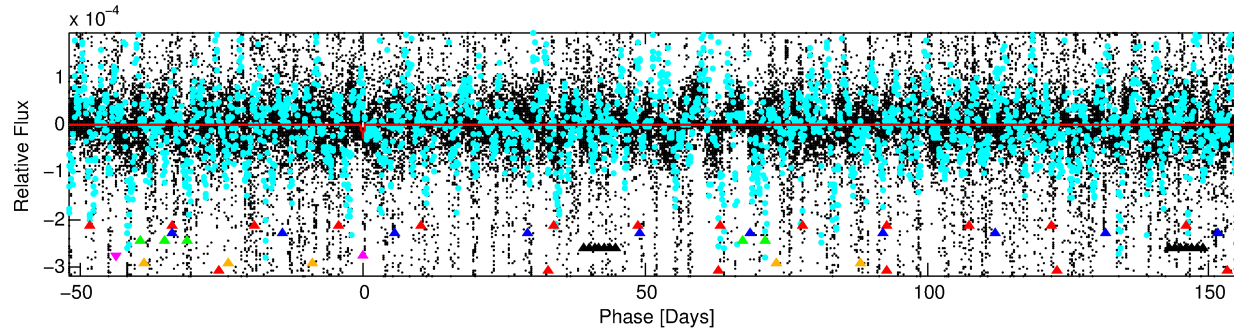
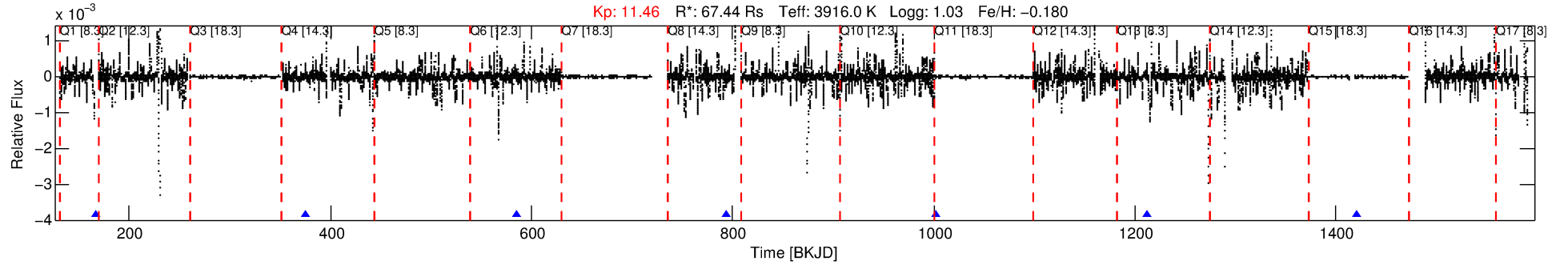
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 006192847-05

No Significant Match Found

DV One-Page Summary

KIC: 6192847 Candidate: 5 of 7 Period: 208.900 d



DV Fit Results:

Period = 208.90000 [0.00277] d
Epoch = 167.0349 [0.0159] BKJD
Rp/R* = 0.0063 [0.0010]
a/R* = 81.15 [41.94]
b = 0.90 [0.11]
Seff = 1370.72 [255.72]
Teq = 1552 [72] K
Rp = 46.34 [12.59] Re
a = 0.8361 [0.1219] AU
Ag = 2.78 [1.15] [1.55 σ]
Teffp = 3098 [311] K [4.85 σ]

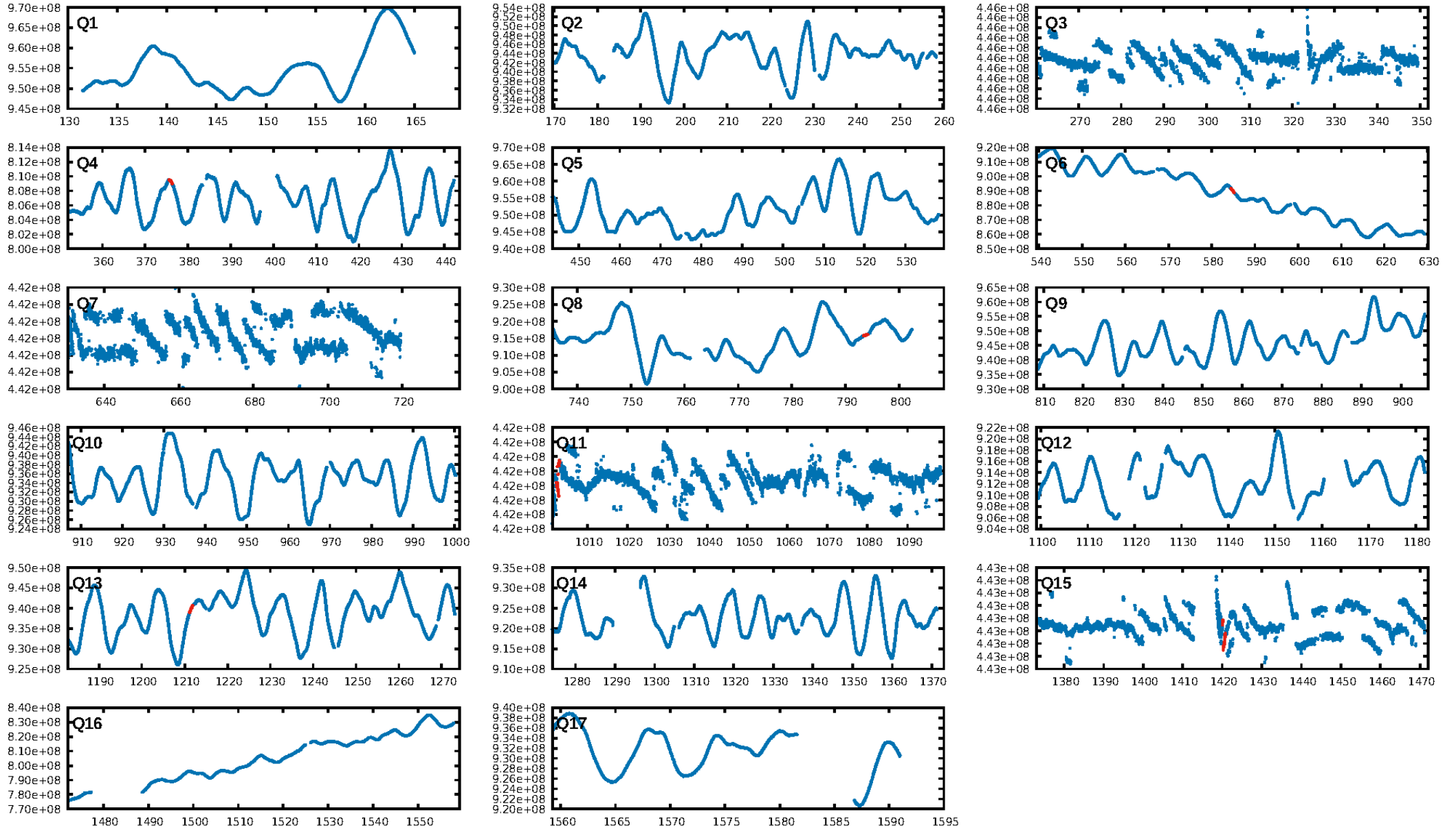
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [155.27 σ]
LongPeriod-sig: 100.0% [68.46 σ]
ModelChiSquare2-sig: 61.7%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [6/6]
GhostDiagnostic-chr: -2.187
Centroid-sig: 88.0%
Centroid-so: 2.653 arcsec [0.28 σ]
OotOffset-rm: 3.490 arcsec [2.71 σ]
OotOffset-st: 1/0/2/1 [4]
KicOffset-rm: 3.029 arcsec [1.83 σ]
KicOffset-st: 1/0/2/1 [4]
DiffImageQuality-fgm: 0.00 [0/4]
DiffImageOverlap-fno: 1.00 [5/5]

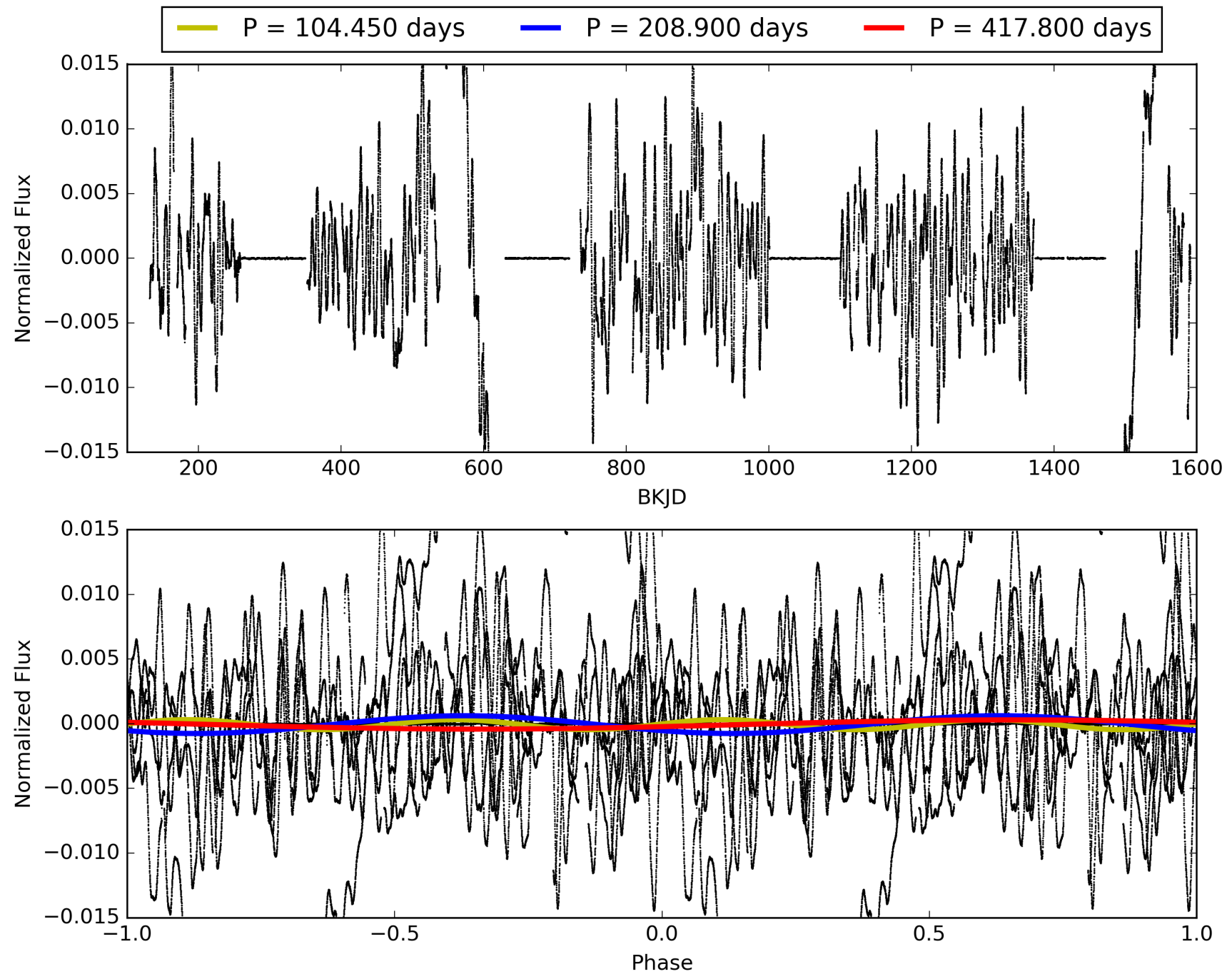
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 02-Feb-2016 00:59:28 Z

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

TCE 006192847-05, PDC Light Curves

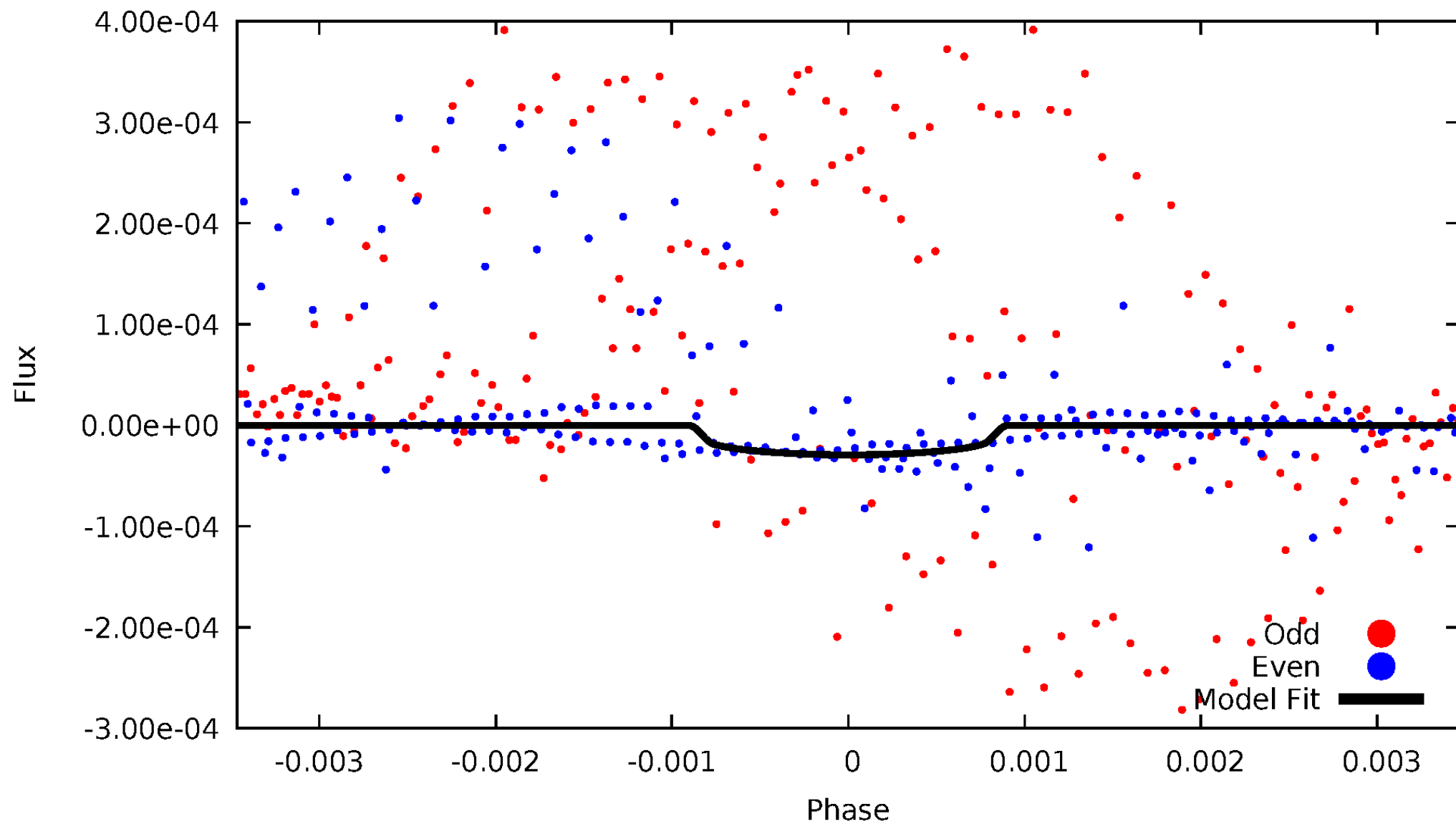


TCE 006192847-05



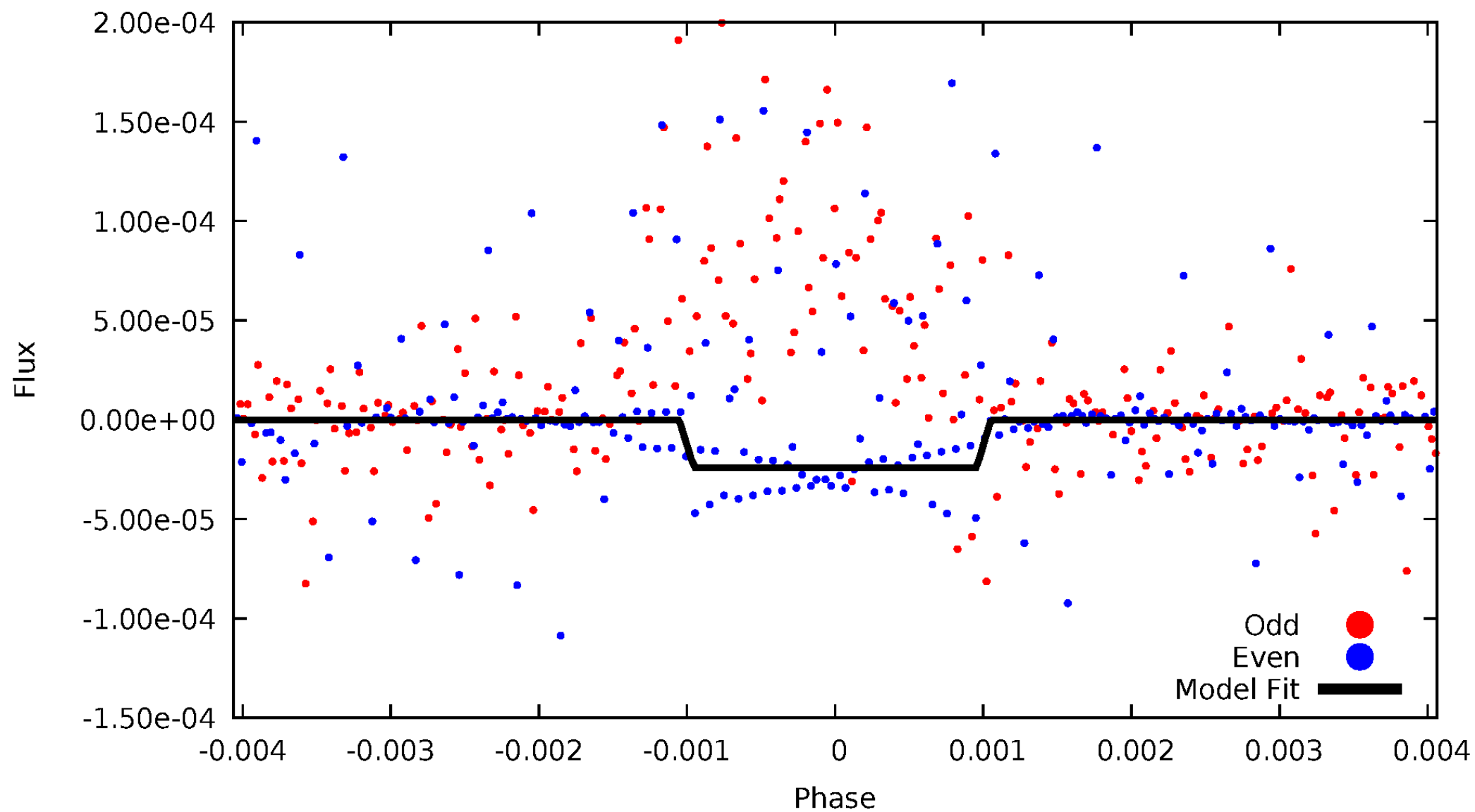
DV Odd/Even

TCE 006192847-05



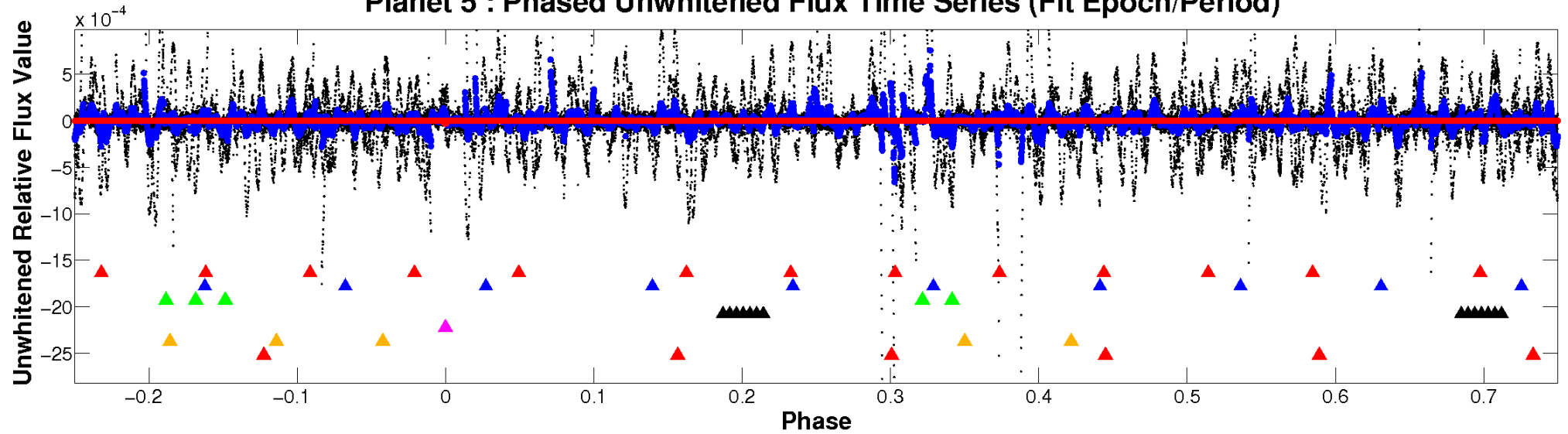
ALT Odd/Even

TCE 006192847-05

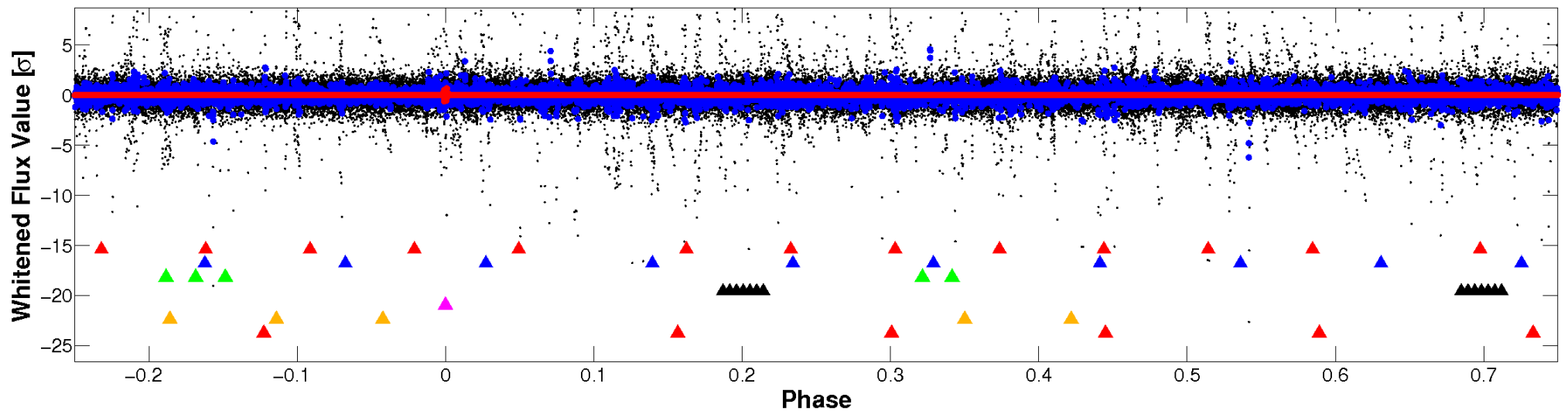


Non-Whitened Vs. Whitened Light Curve

Planet 5 : Phased Unwhitened Flux Time Series (Fit Epoch/Period)

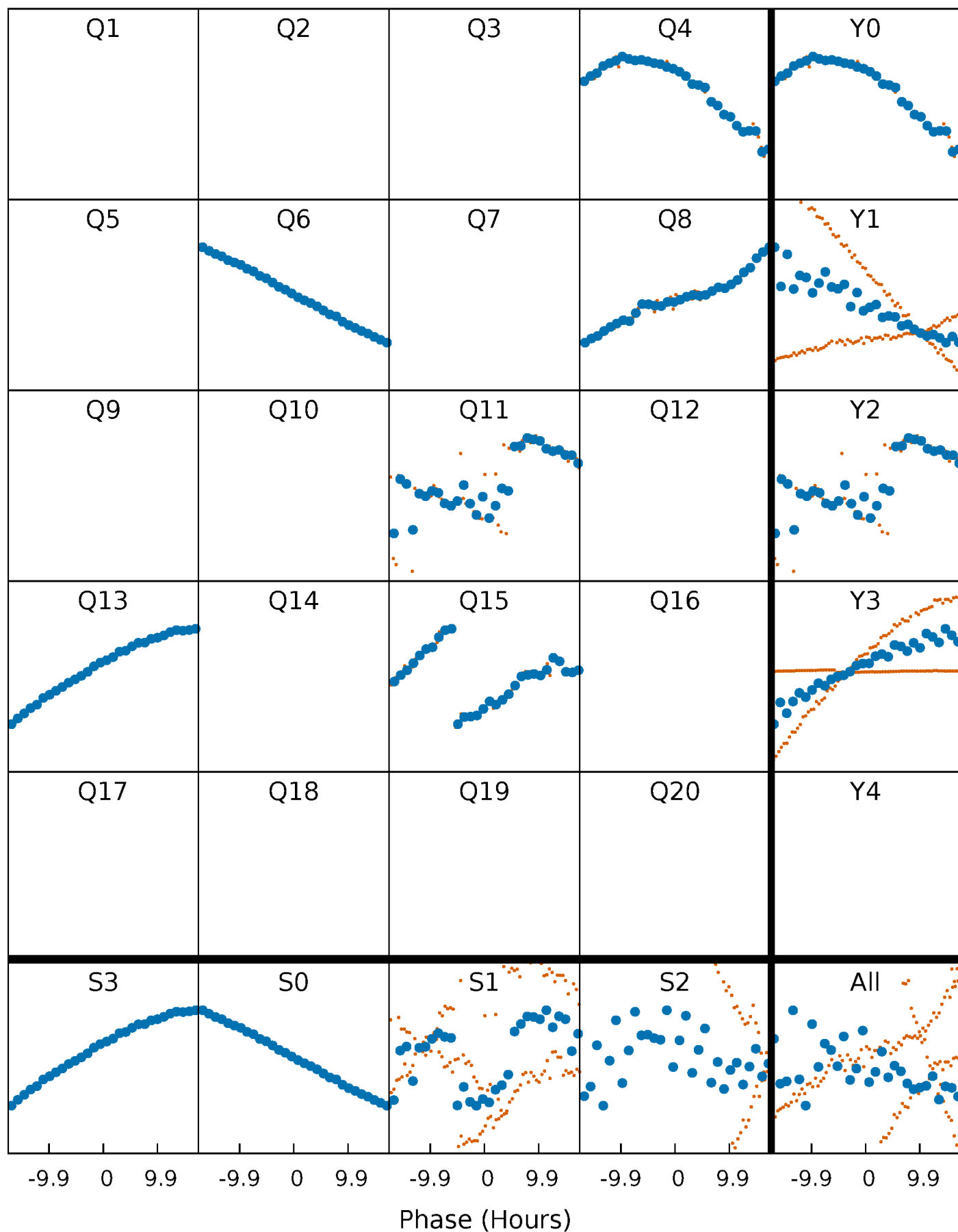


Planet 5 : Phased Whitened Flux Time Series (Fit Epoch/Period)



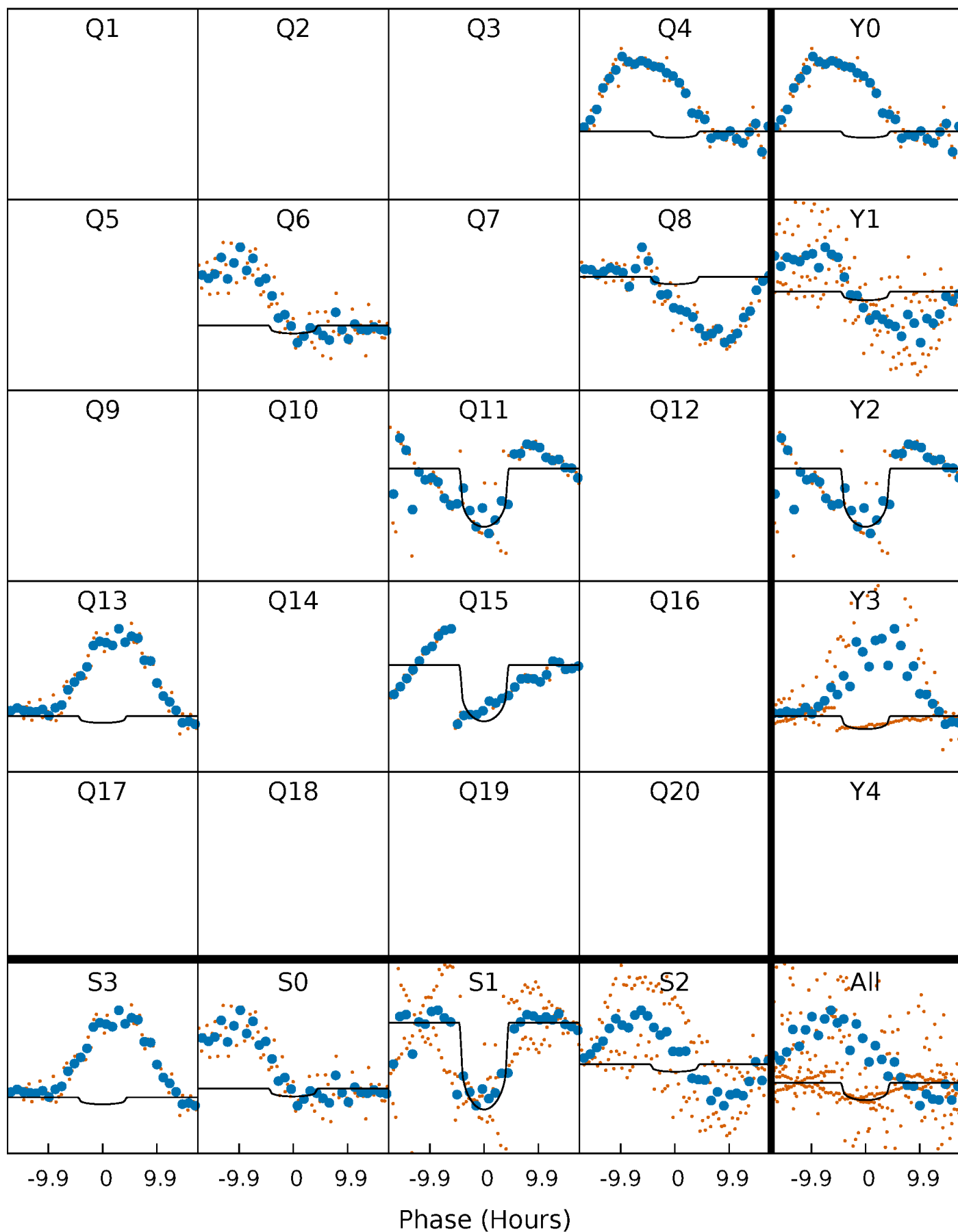
PDC Quarter-Phased Transit Curves

TCE 006192847-05 $P=208.899997$ Days $T_0=167.034907$ (BKJD)



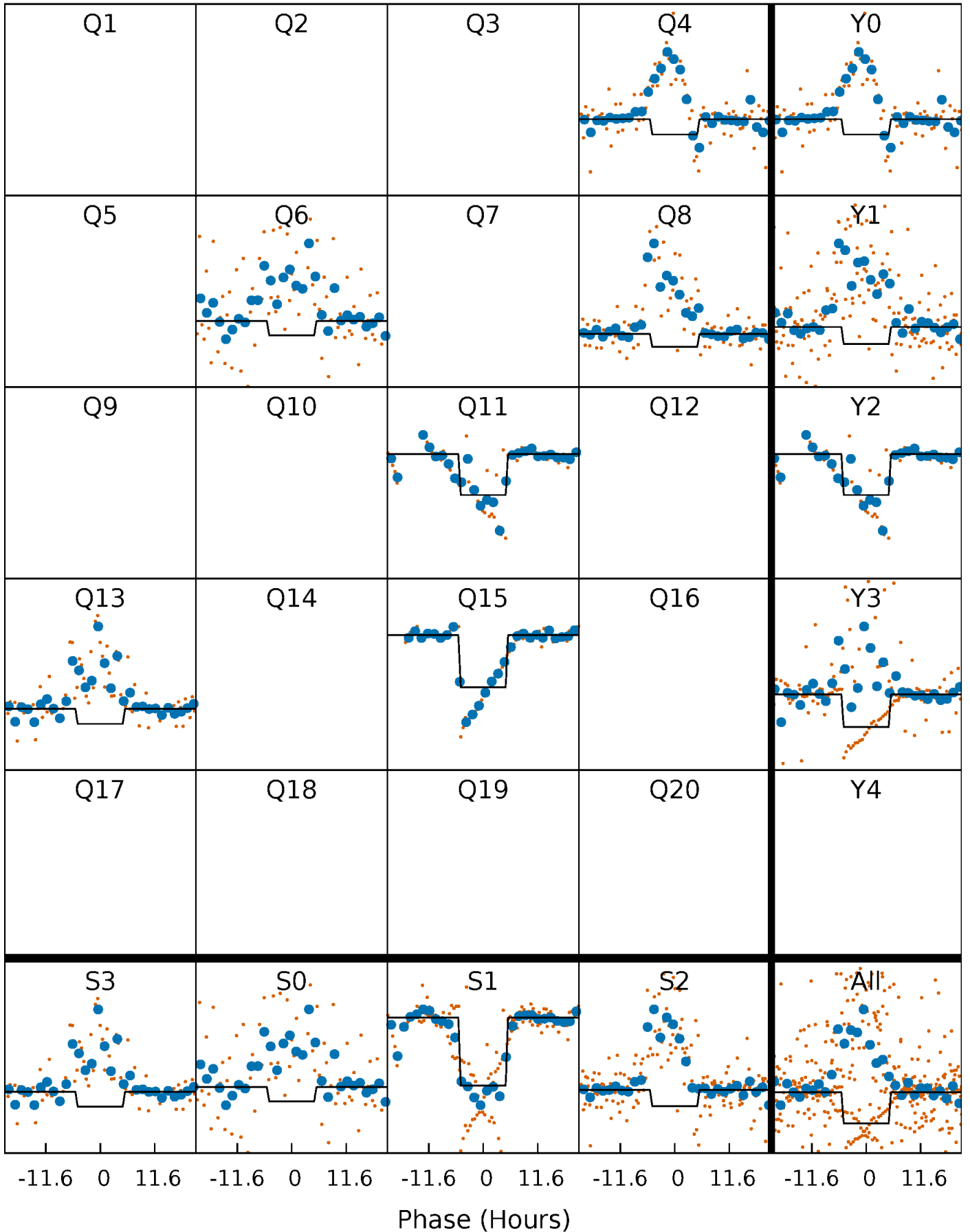
DV Quarter-Phased Transit Curves

TCE 006192847-05 $P=208.899997$ Days $T_0=167.034907$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

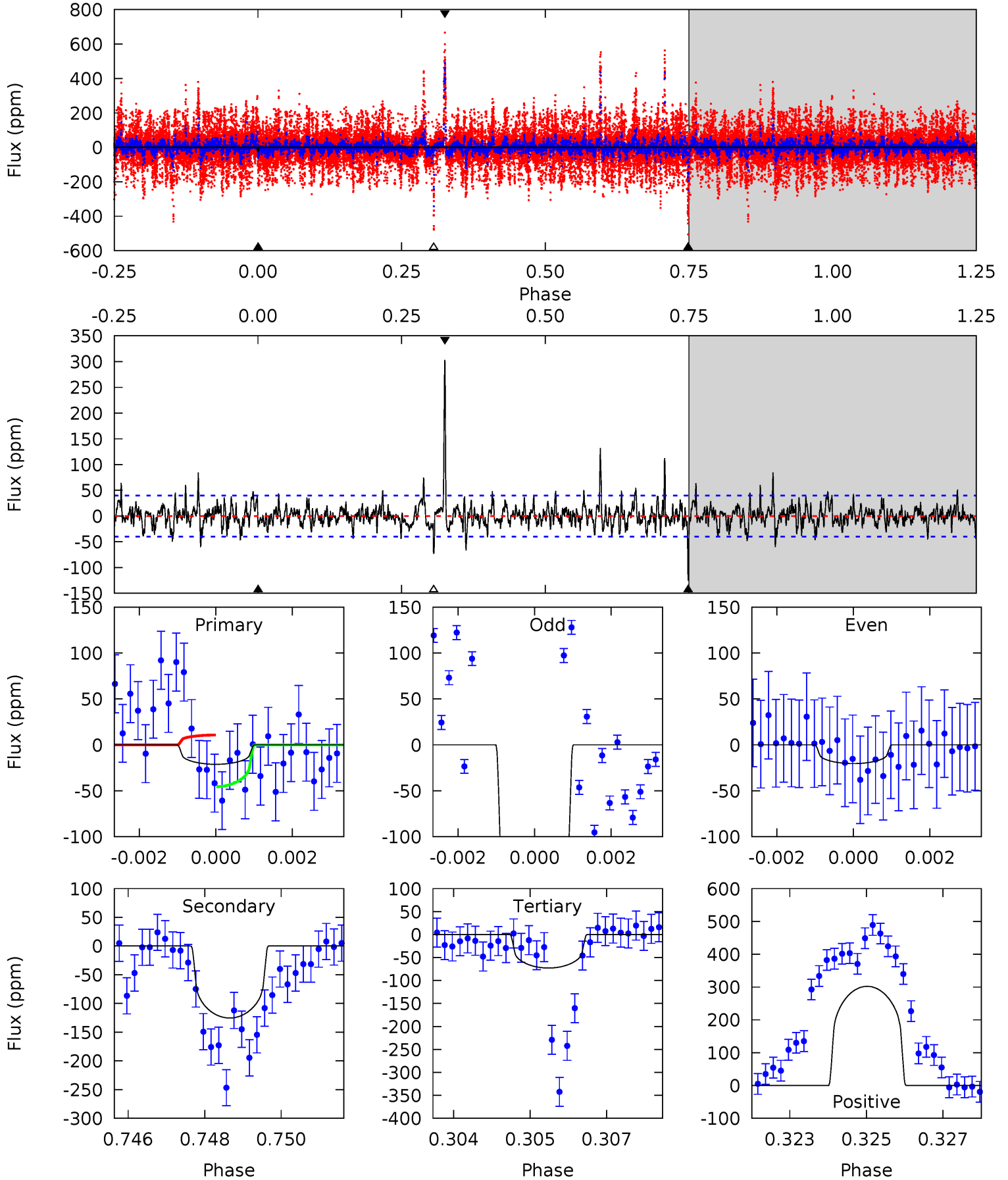
TCE 006192847-05 $P=208.905906$ Days $T_0=166.980031$ (BKJD)



DV Model-Shift Uniqueness Test

006192847-05, $P = 208.899997$ Days, $E = 167.034907$ Days

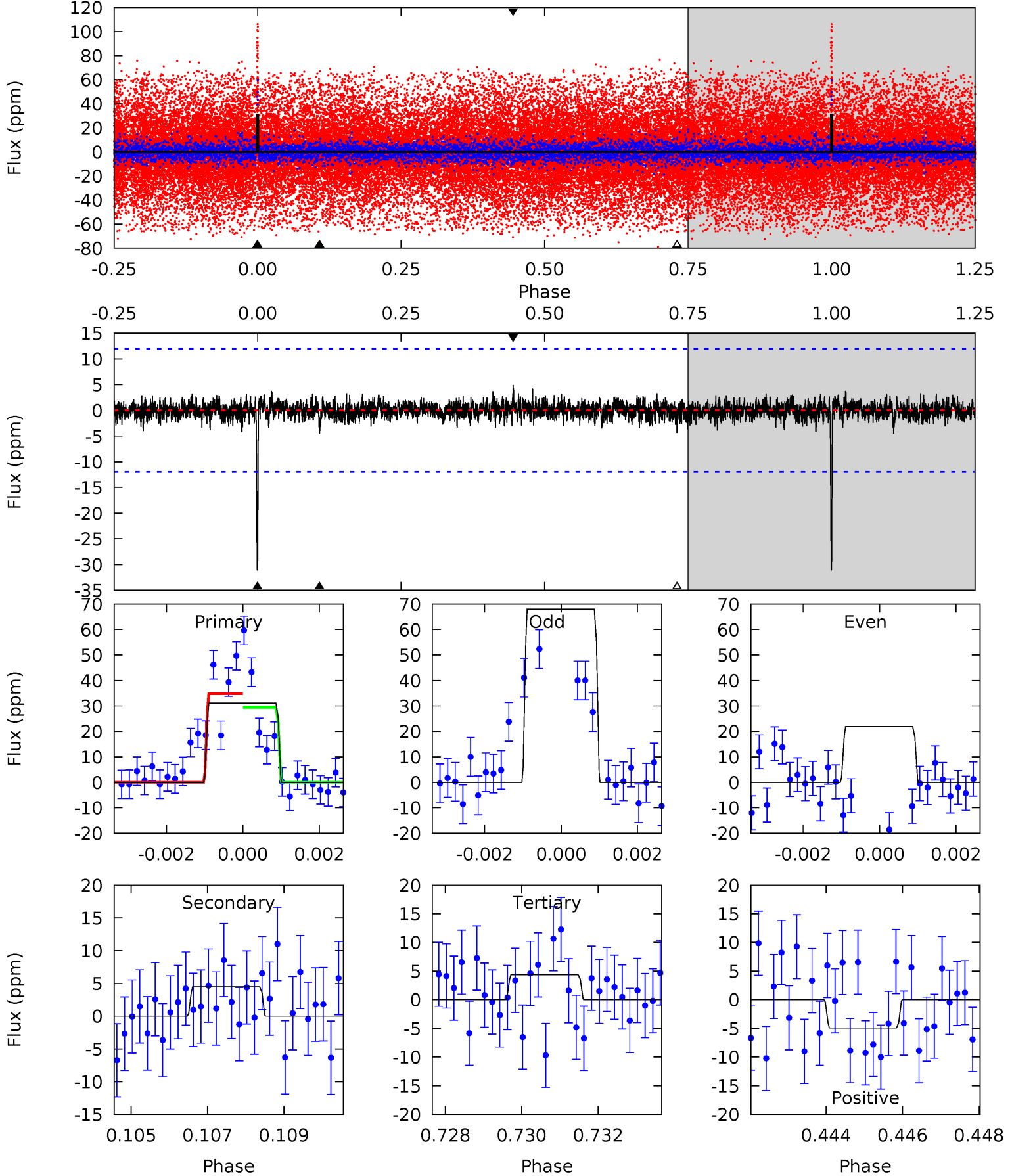
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
2.85	16.8	9.78	40.6	5.35	3.12	2.75	-6.94	-37.7	7.04	-23.7	9.60	-6.18	0.71	2.33



Alt Model-Shift Uniqueness Test

006192847-05, P = 208.905906 Days, E = 166.980031 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
13.8	1.98	1.95	2.18	5.32	3.08	0.47	11.9	11.6	0.03	-0.20	11.4	0.62	0.14	1.17



Stellar Parameters For KIC 006192847

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	3916^{+88}_{-107}	$1.032^{+0.030}_{-0.030}$	$-0.180^{+0.200}_{-0.250}$	$67.438^{+2.428}_{-14.567}$	$1.785^{+0.071}_{-0.643}$	$0.000^{+0.000}_{-0.000}$
	+2%/-3%	+3%/-3%	+111%/-139%	+4%/-22%	+4%/-36%	+29%/-8%
Source	PHO54	AST54	PHO54	DSEP		

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

Secondary Eclipse Parameters for KIC 006192847-05 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-125 ± 7	$46.68^{+8.16}_{-7.76}$	2169^{+54}_{-63}	4840^{+381}_{-346}	22^{+10}_{-6}
Alt.	-4 ± 2	$35.75^{+7.83}_{-7.82}$	2168^{+59}_{-71}	2911^{+319}_{-435}	$1.355^{+1.117}_{-0.755}$

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 $A_{obs} \gg 1.0$

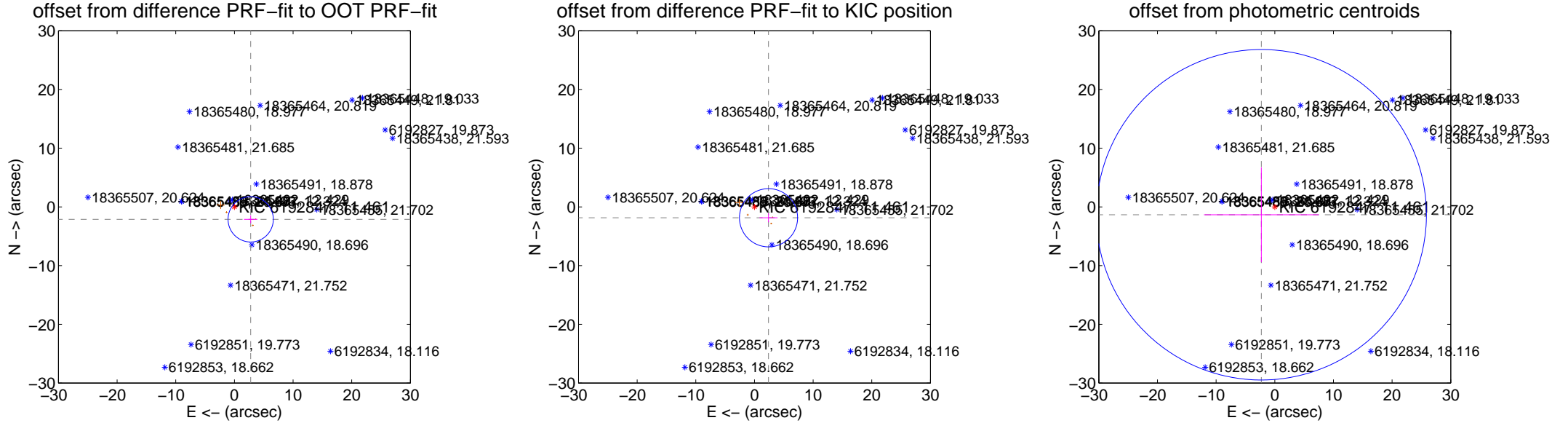
DV Centroid Data

Supplemental centroid analysis for 006192847-05. **Kepler magnitude: 11.46.** Transit SNR 7.80

There are 0 quarters with good PRF difference image offsets

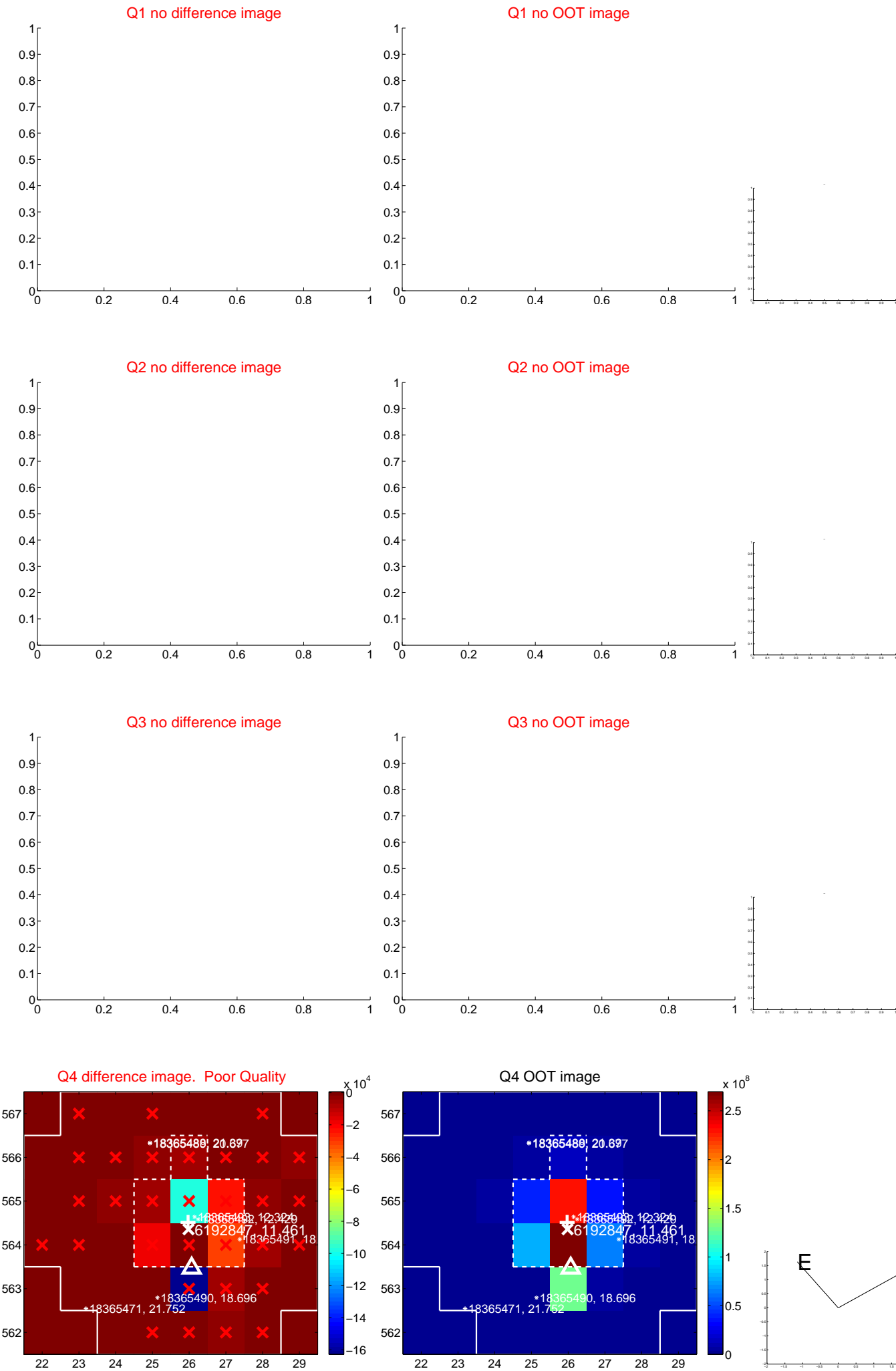
The direct PRF centroid is offset from the target star catalog position by about 0.49 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	3.490 ± 1.287	2.71	-2.773 ± 1.140	-2.119 ± 0.662
PRF-fit source offset from KIC position	3.029 ± 1.652	1.83	-2.397 ± 1.545	-1.851 ± 0.748
photometric centroid source offset	2.65 ± 9.38	0.28	2.29 ± 9.79	-1.34 ± 8.07

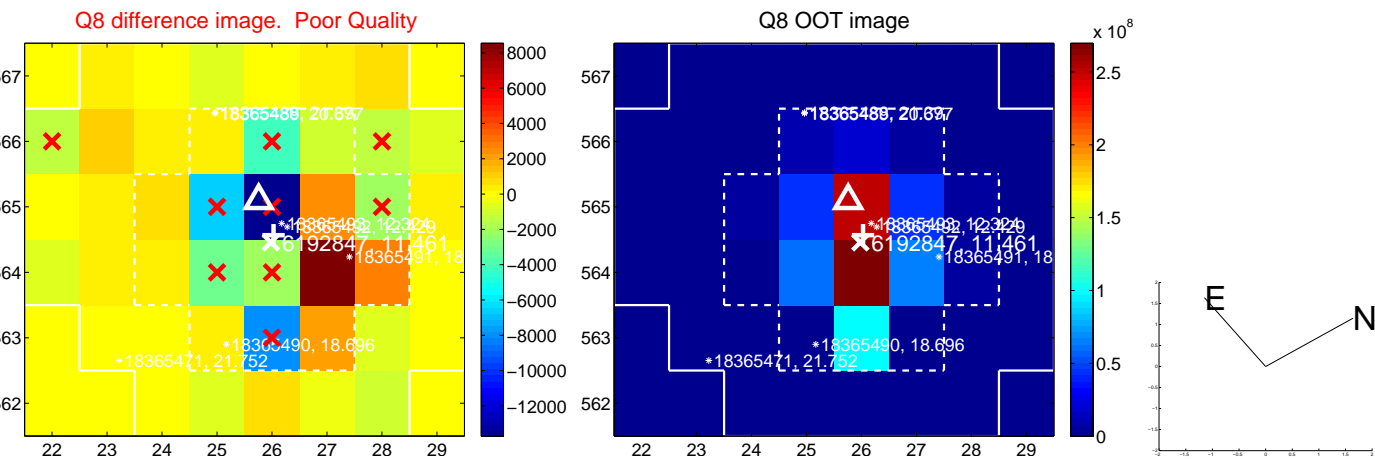
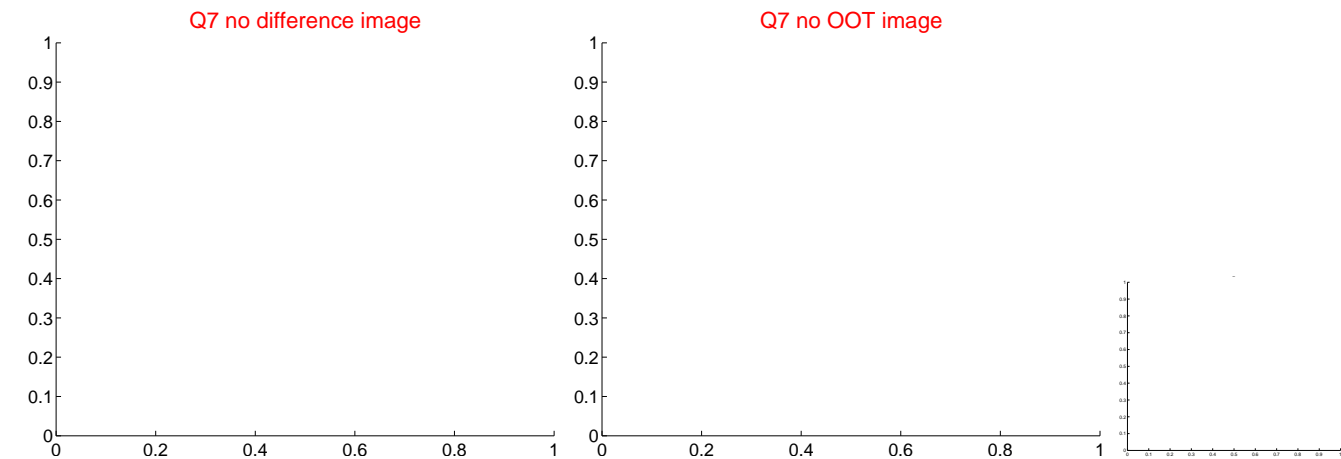
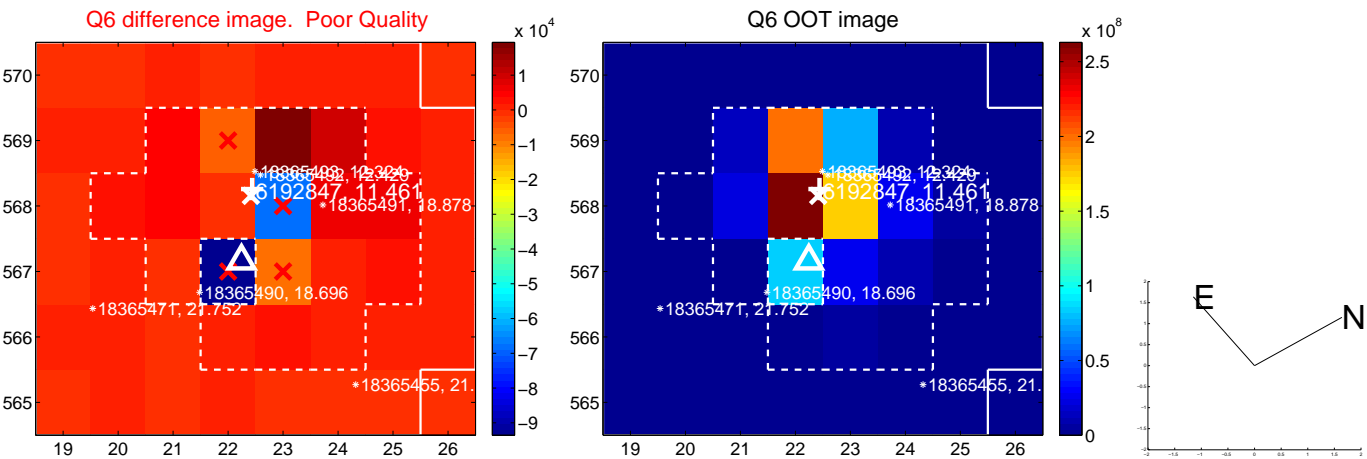


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets;** magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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



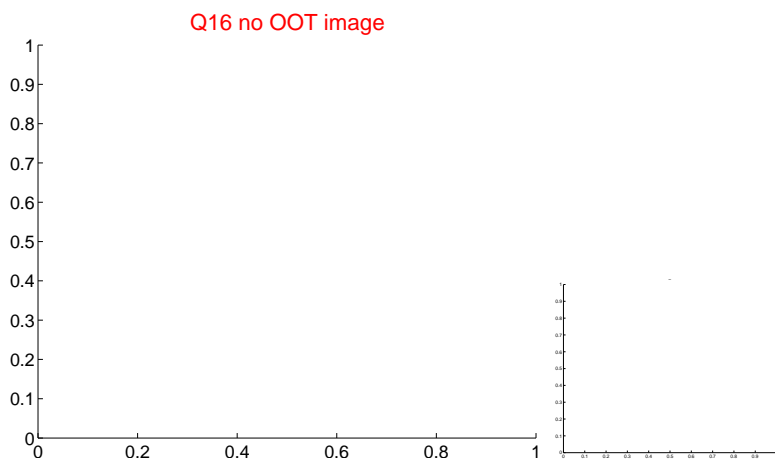
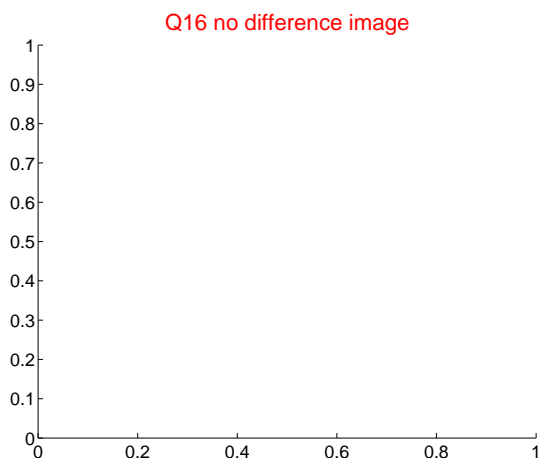
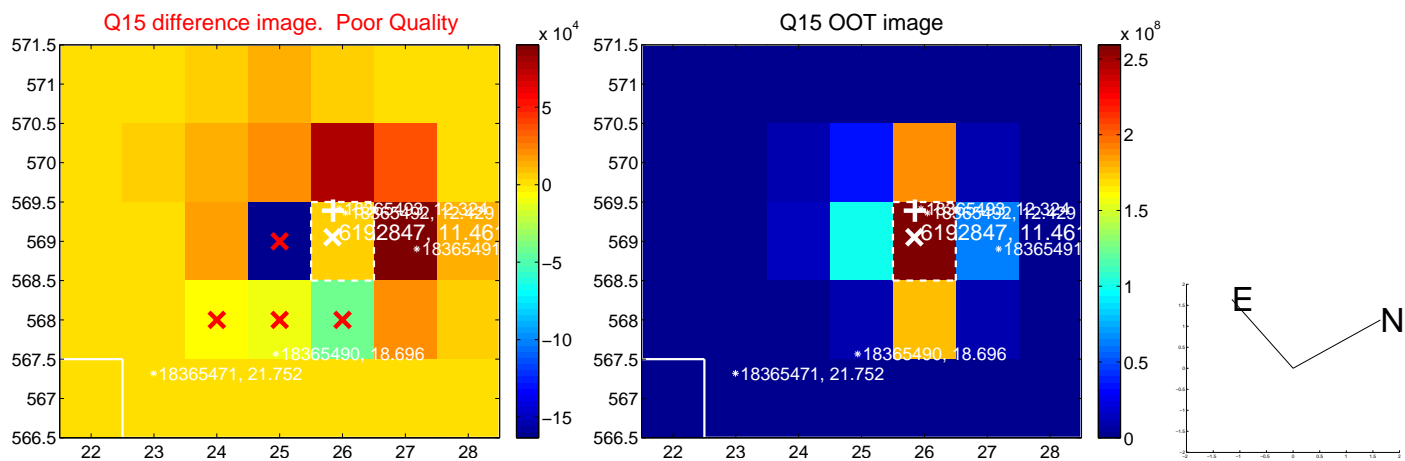
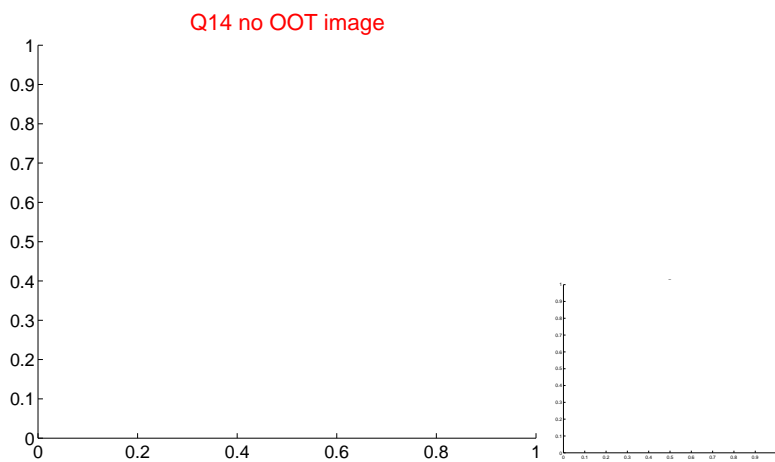
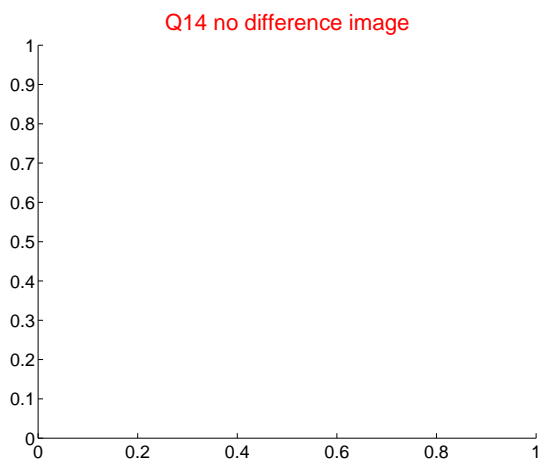
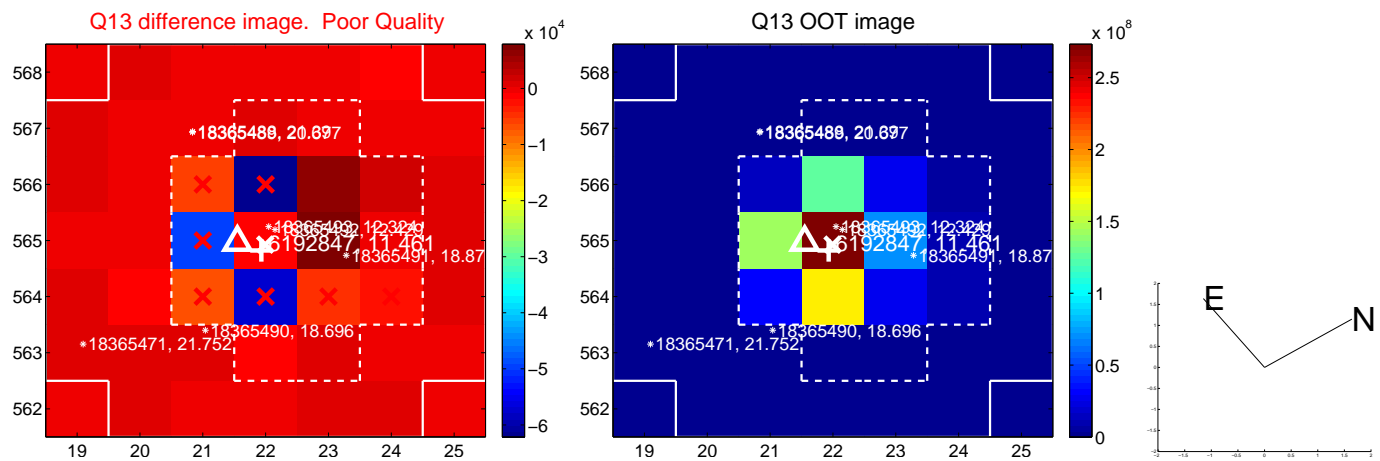
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



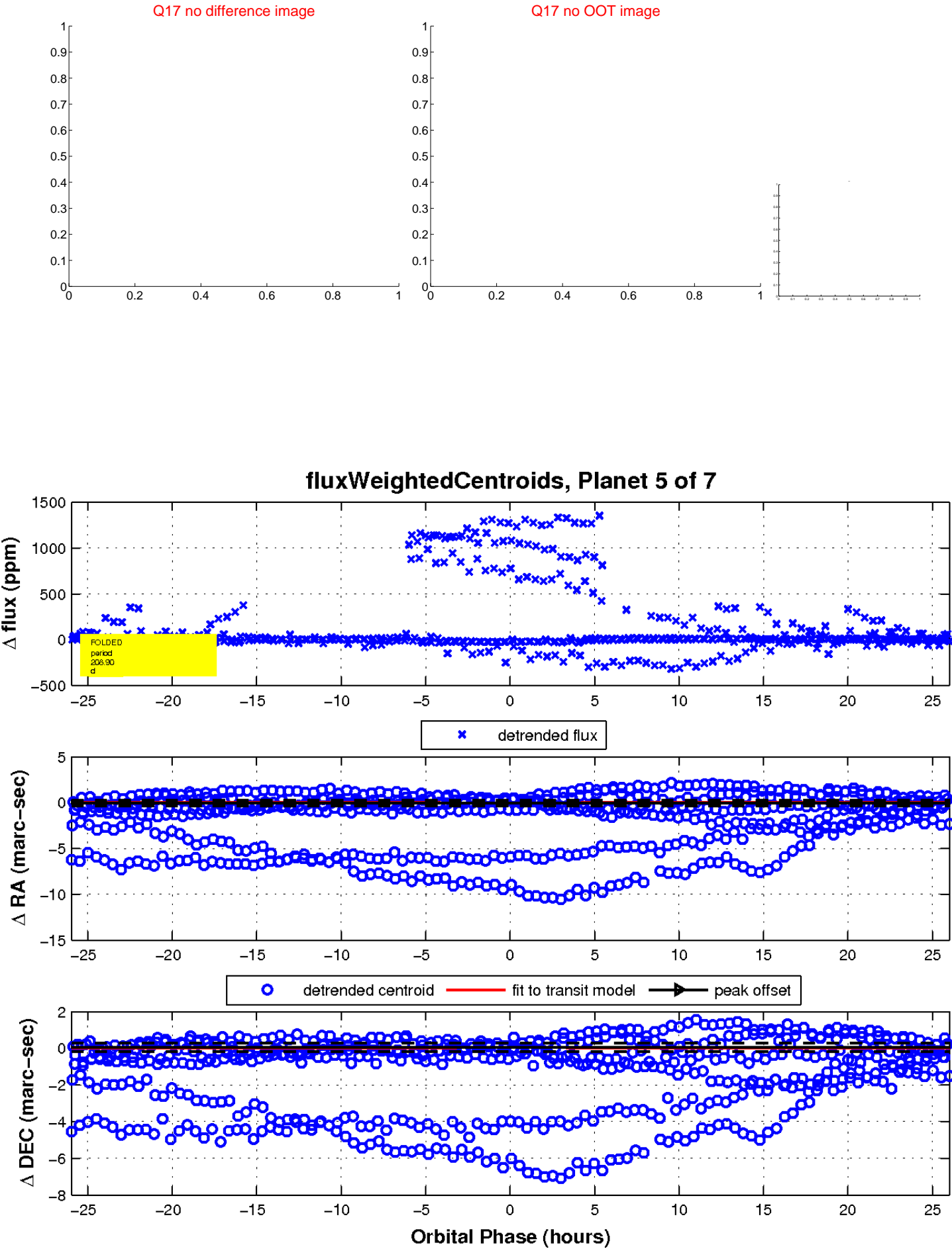
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

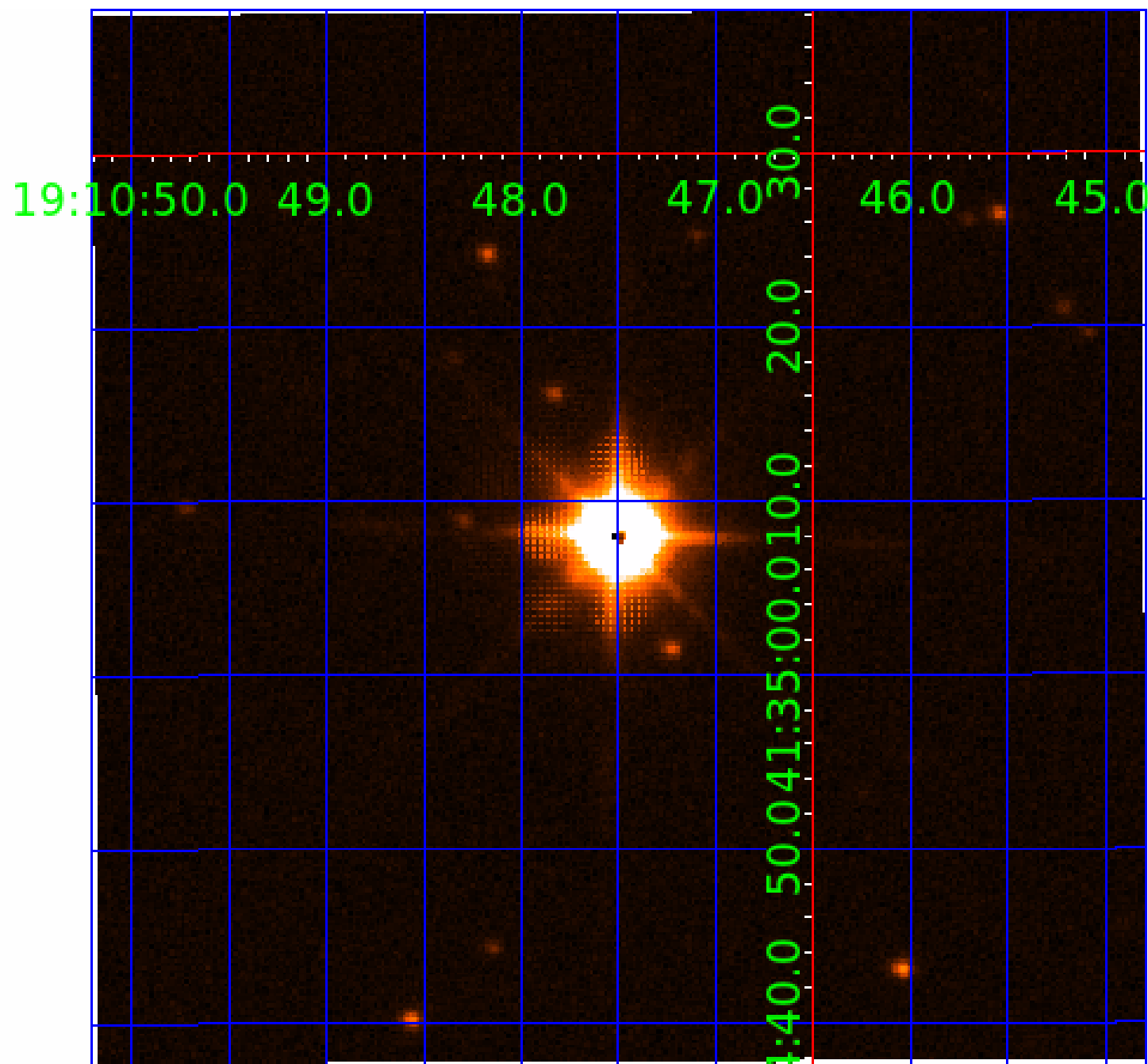


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 006192847

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})
006192847-01	OBS	No	111.799038	200.971741	11.0	2.049	27.5	3.1	67.44	3916	24.08	3154.65
006192847-02	OBS	No	145.863849	259.216103	26.0	4.412	16.9	7.6	67.44	3916	42.78	2212.78
006192847-03	OBS	No	311.264136	344.923662	12.1	5.141	14.1	3.7	67.44	3916	28.64	805.43
006192847-04	OBS	No	103.976930	211.806049	36.0	2.429	13.4	10.8	67.44	3916	48.01	3474.98
006192847-05	OBS	No	208.899997	167.034907	29.3	8.687	11.6	7.8	67.44	3916	46.34	1370.72
006192847-06	OBS	No	305.852595	158.214222	35.3	2.457	15.5	12.0	67.44	3916	52.79	824.49
006192847-07	OBS	No	239.018162	199.755679	123.3	6.000	12.3	-1.0	67.44	3916	69.98	1145.41

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
006192847-01	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_SATURATED
006192847-02	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—INCONSISTENT_TRANS—CENT_SATURATED
006192847-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_MARSHALL_ZUMA—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV— INCONSISTENT_TRANS—CENT_SATURATED
006192847-04	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_SKYE_ZUMA_TRACKER—LPP_ALT—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT— INCONSISTENT_TRANS—CENT_SATURATED
006192847-05	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_MARSHALL_ZUMA—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—CENT_SATURATED
006192847-06	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_MARSHALL_ZUMA_TRACKER—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV— CENT_SATURATED
006192847-07	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_MARSHALL_ZUMA—LPP_DV—CENT_SATURATED

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

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

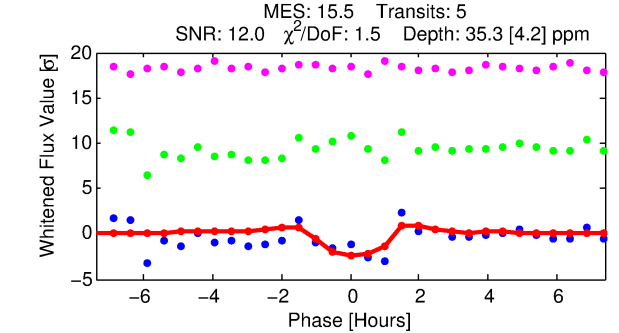
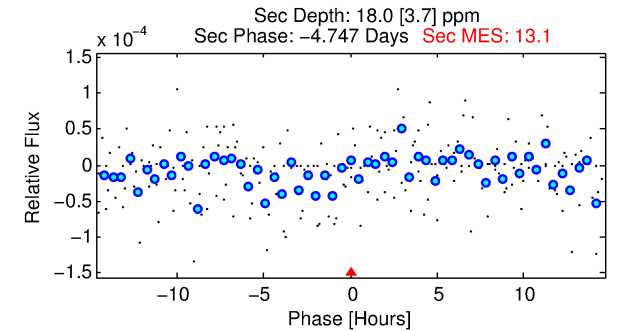
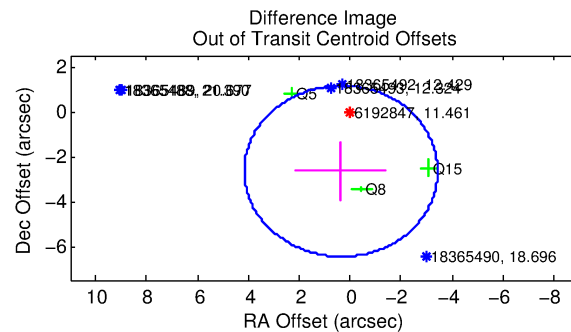
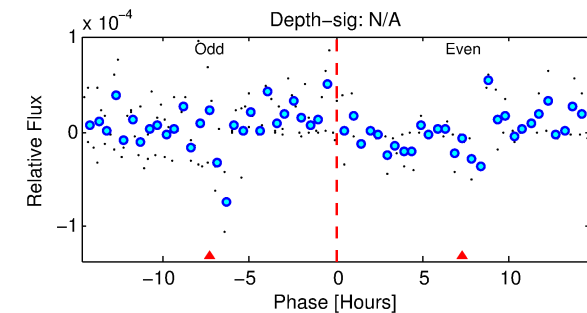
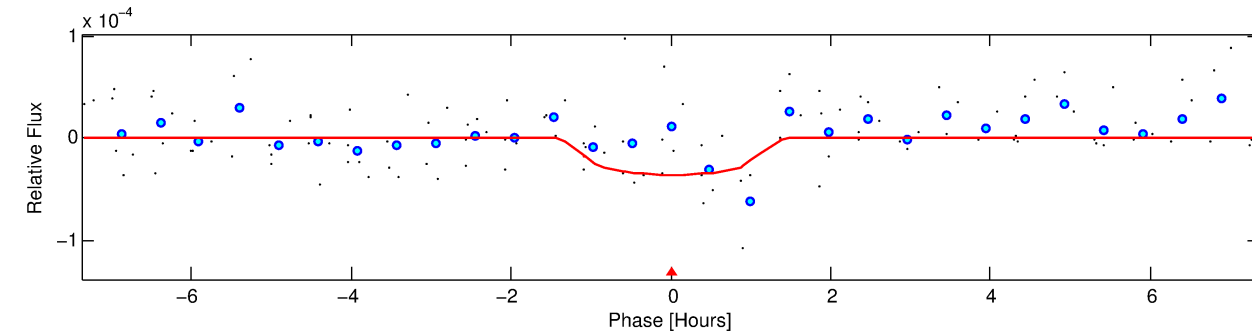
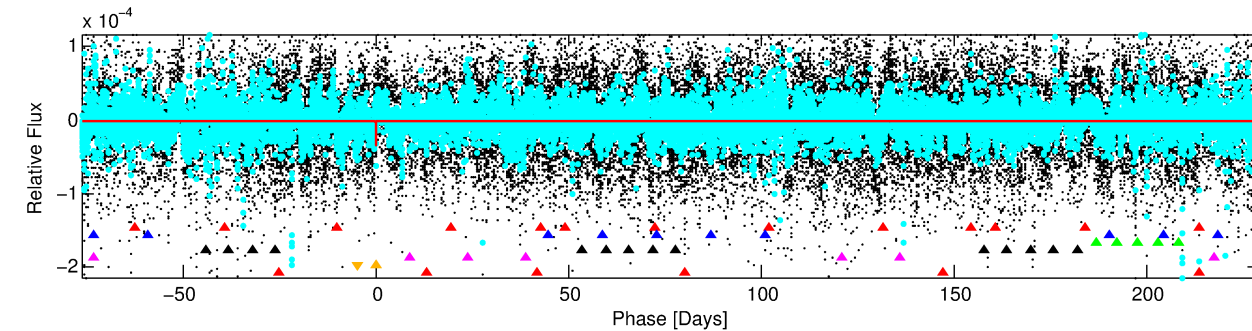
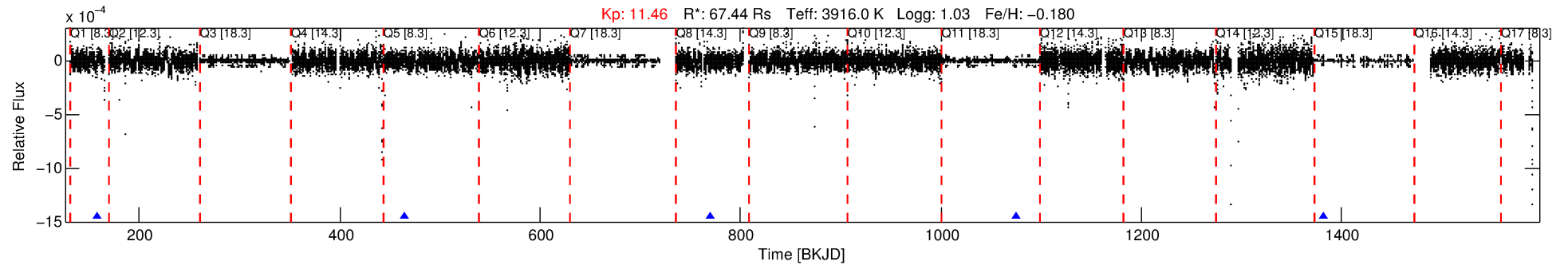
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 006192847-06

No Significant Match Found

DV One-Page Summary

KIC: 6192847 Candidate: 6 of 7 Period: 305.853 d



DV Fit Results:

Period = 305.85260 [0.00442] d
Epoch = 158.2142 [0.0154] BKJD
Rp/R* = 0.0072 [0.0078]
a/R* = 377.57 [1402.63]
b = 0.93 [0.61]
Seff = 824.49 [153.81]
Teq = 1366 [64] K
Rp = 52.79 [58.18] Re
a = 1.0781 [0.1572] AU
Ag = 4.12 [8.97] [0.35σ]
Teffp = 3010 [1636] K [1.00σ]

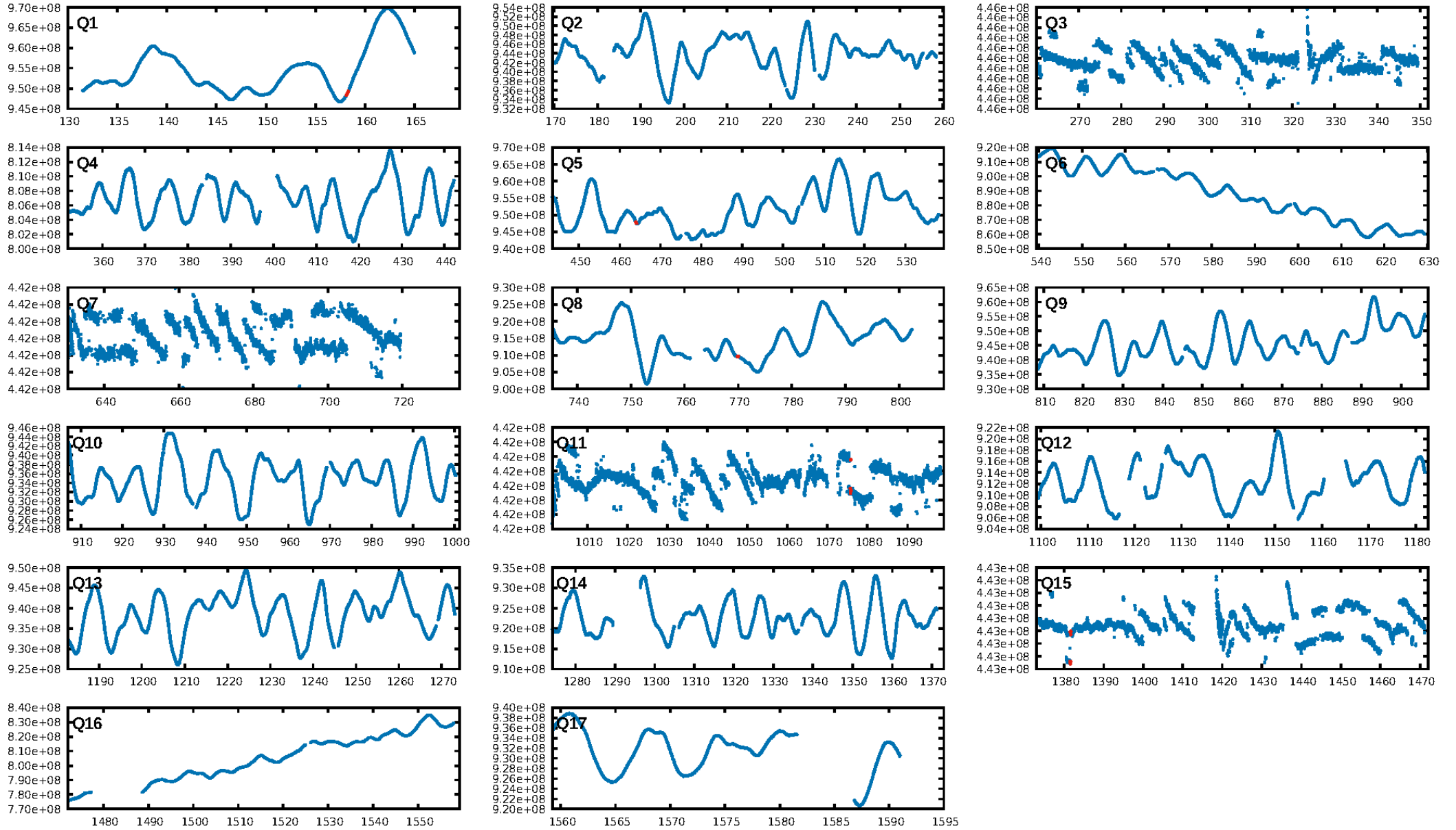
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [247.40σ]
LongPeriod-sig: 100.0% [22.79σ]
ModelChiSquare2-sig: 27.0%
ModelChiSquareGof-sig: 76.8%
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [4/4]
GhostDiagnostic-chr: 0.8945
Centroid-sig: 69.9%
Centroid-so: 3.552 arcsec [0.58σ]
OotOffset-rm: 2.683 arcsec [2.11σ]
KicOffset-rm: 2.451 arcsec [2.37σ]
OotOffset-st: 0/1/1/1 [3]
KicOffset-st: 0/1/1/1 [3]
DiffImageQuality-fgm: 0.67 [2/3]
DiffImageOverlap-fno: 1.00 [5/5]

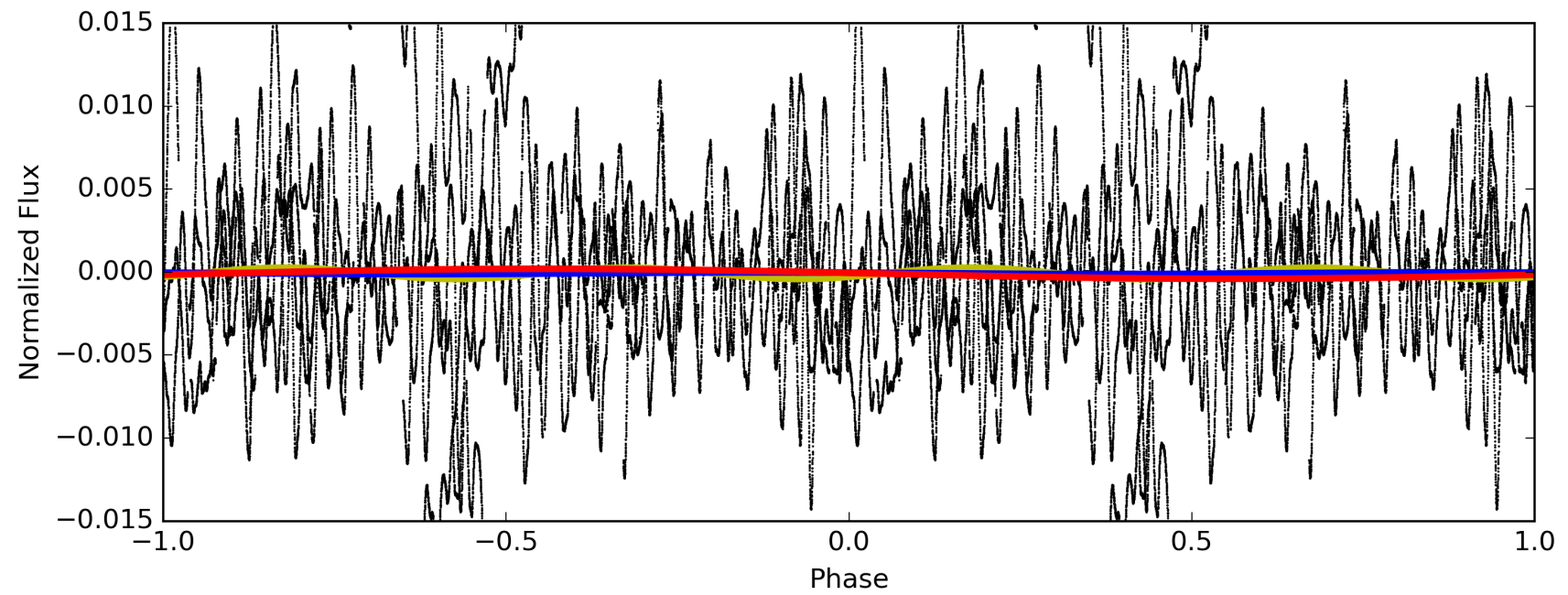
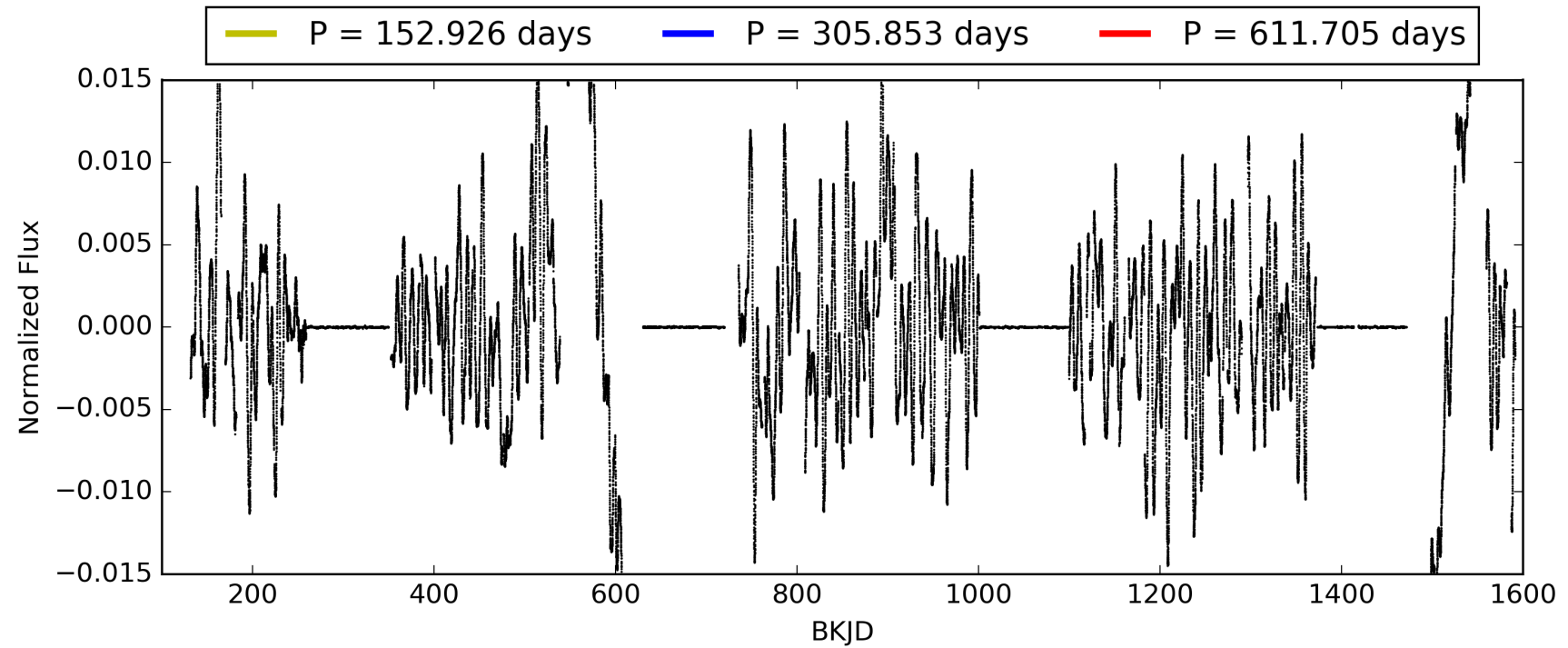
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 02-Feb-2016 00:59:44 Z

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

TCE 006192847-06, PDC Light Curves

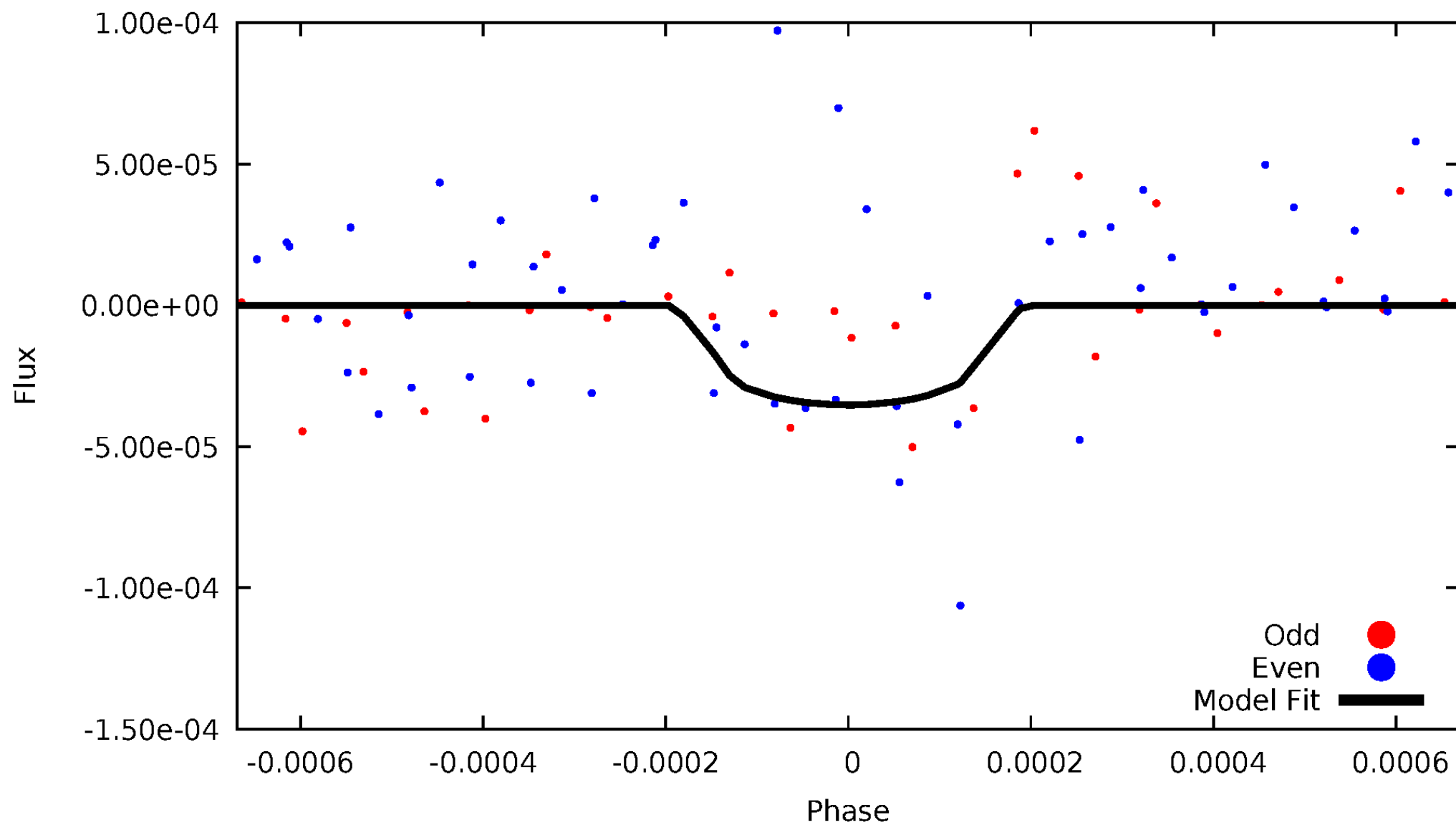


TCE 006192847-06



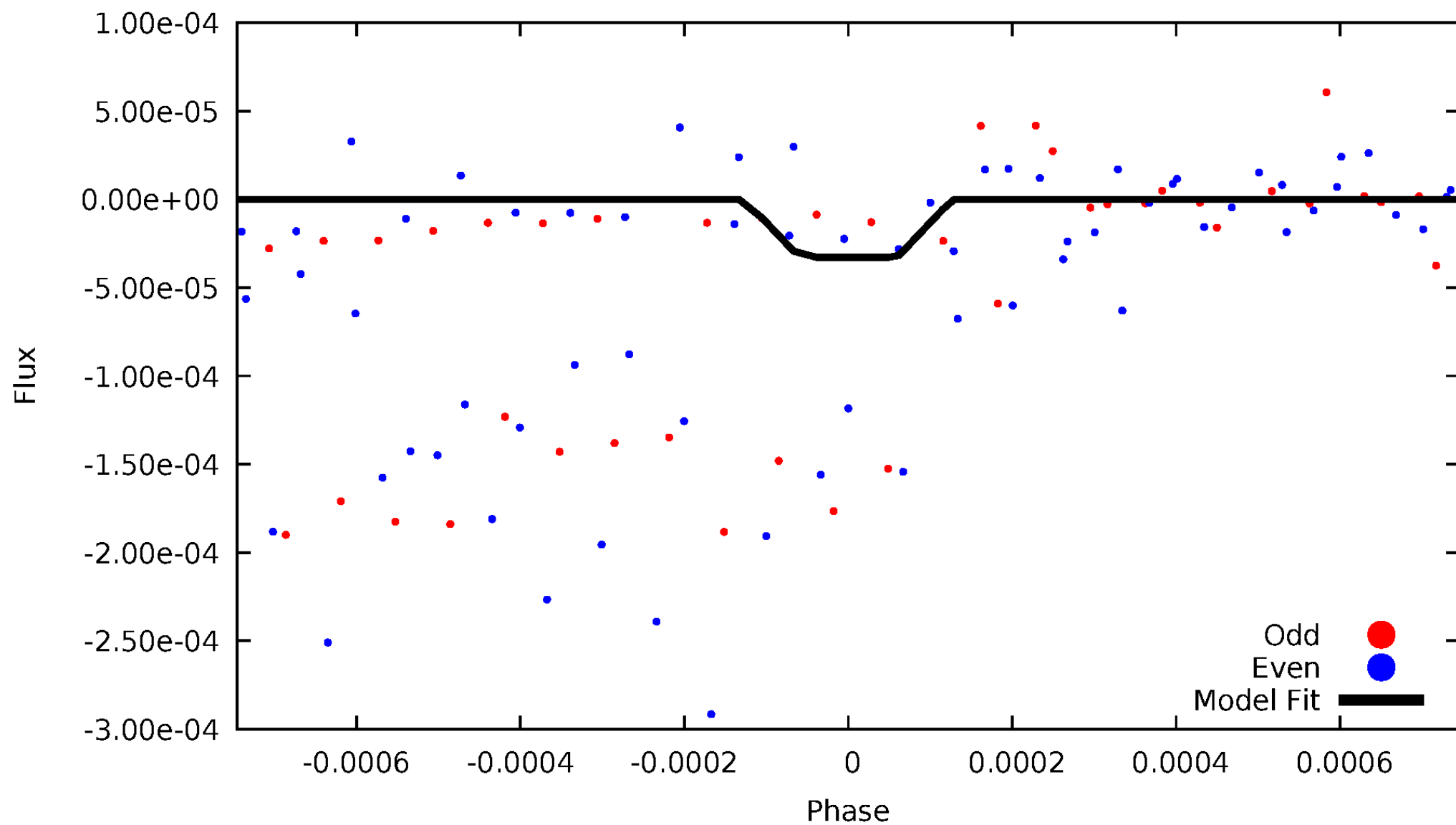
DV Odd/Even

TCE 006192847-06



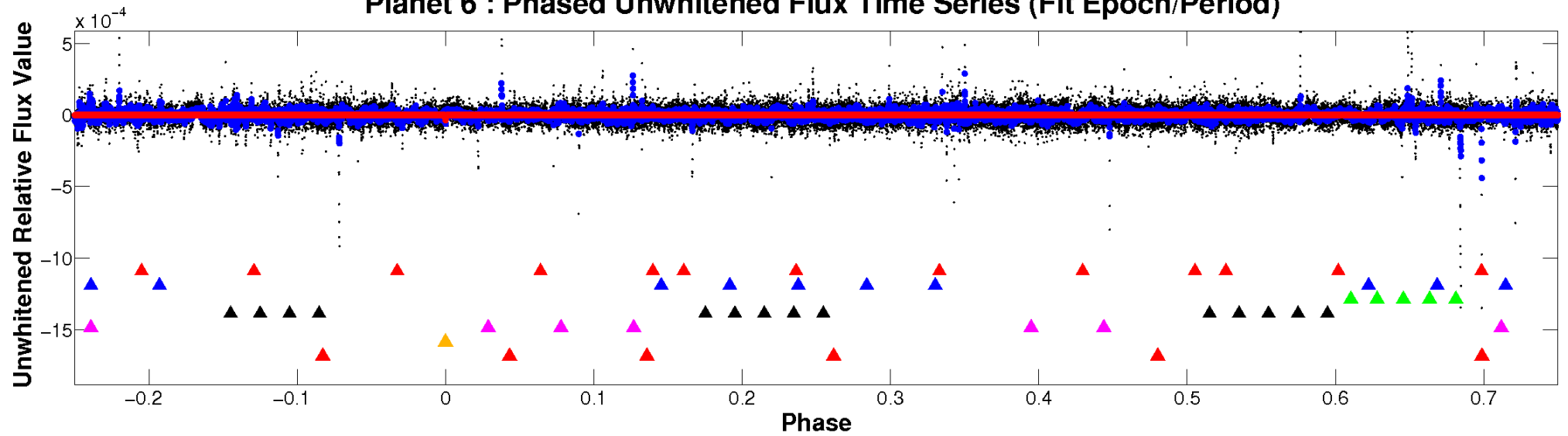
ALT Odd/Even

TCE 006192847-06

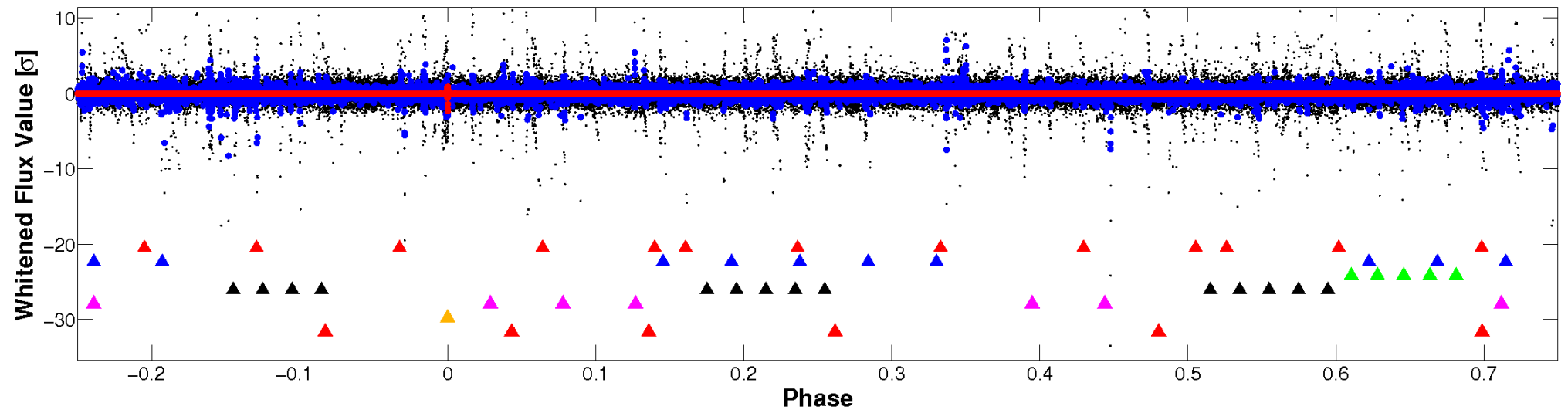


Non-Whitened Vs. Whitened Light Curve

Planet 6 : Phased Unwhitened Flux Time Series (Fit Epoch/Period)

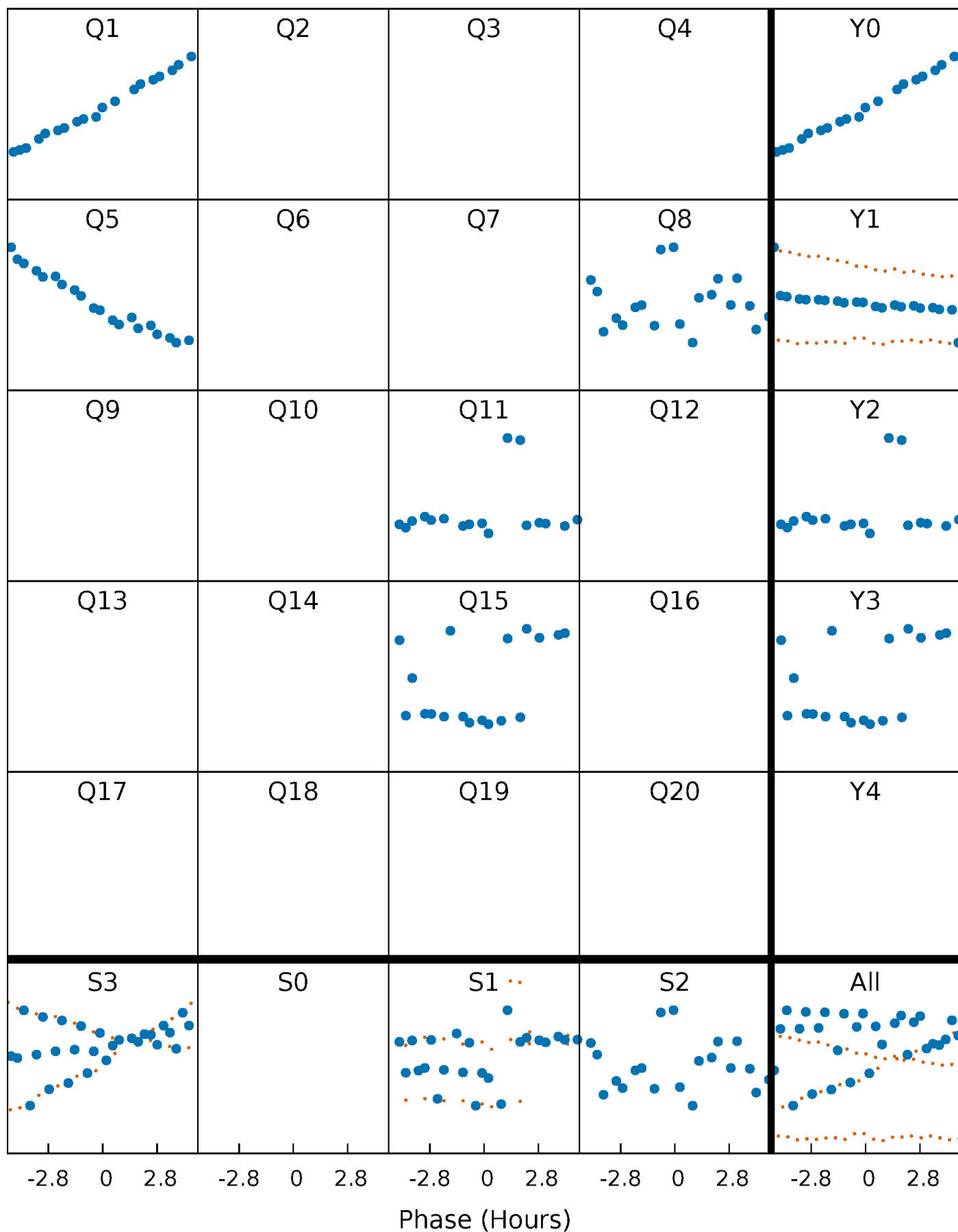


Planet 6 : Phased Whitened Flux Time Series (Fit Epoch/Period)



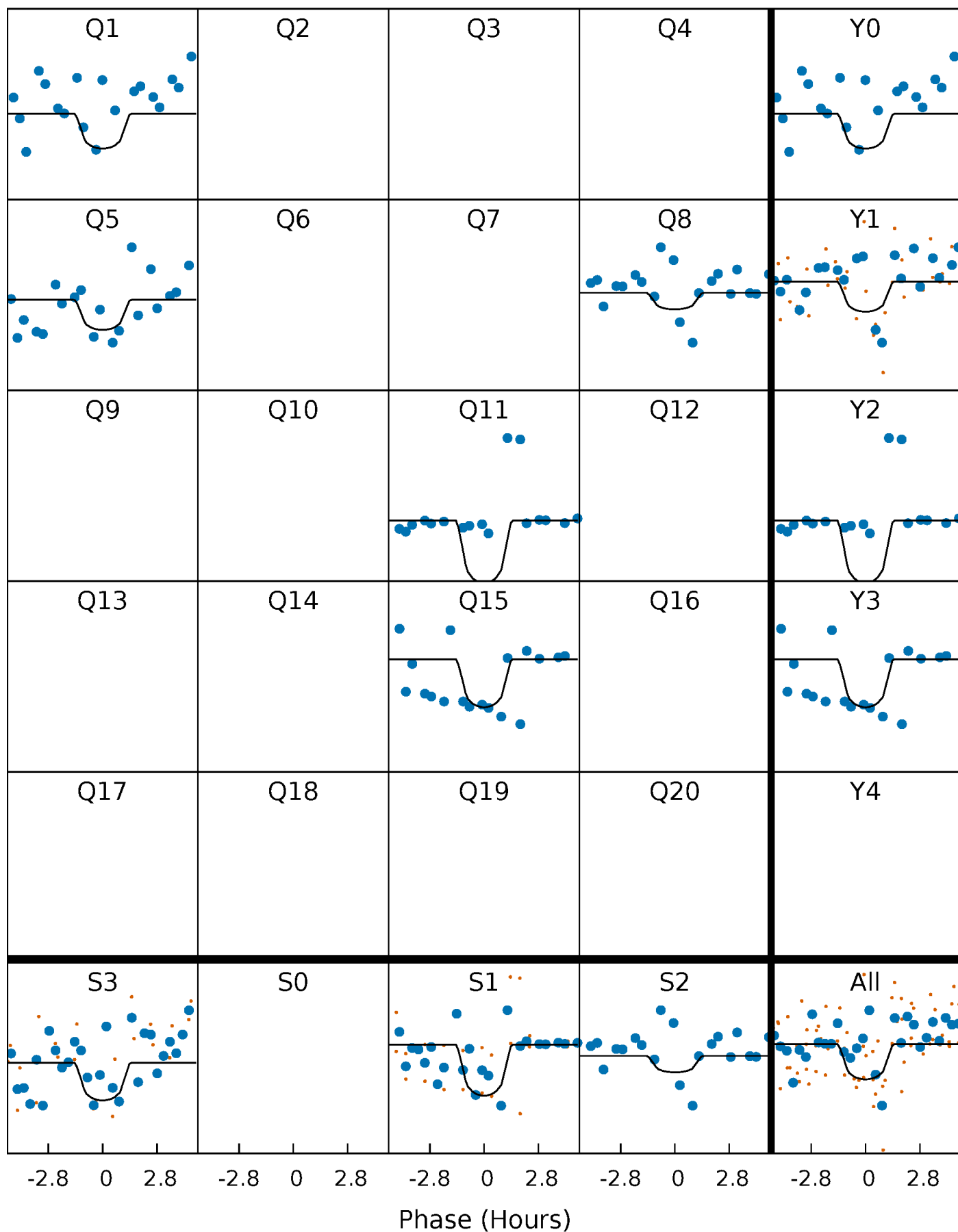
PDC Quarter-Phased Transit Curves

TCE 006192847-06 $P=305.852595$ Days $T_0=158.214222$ (BKJD)



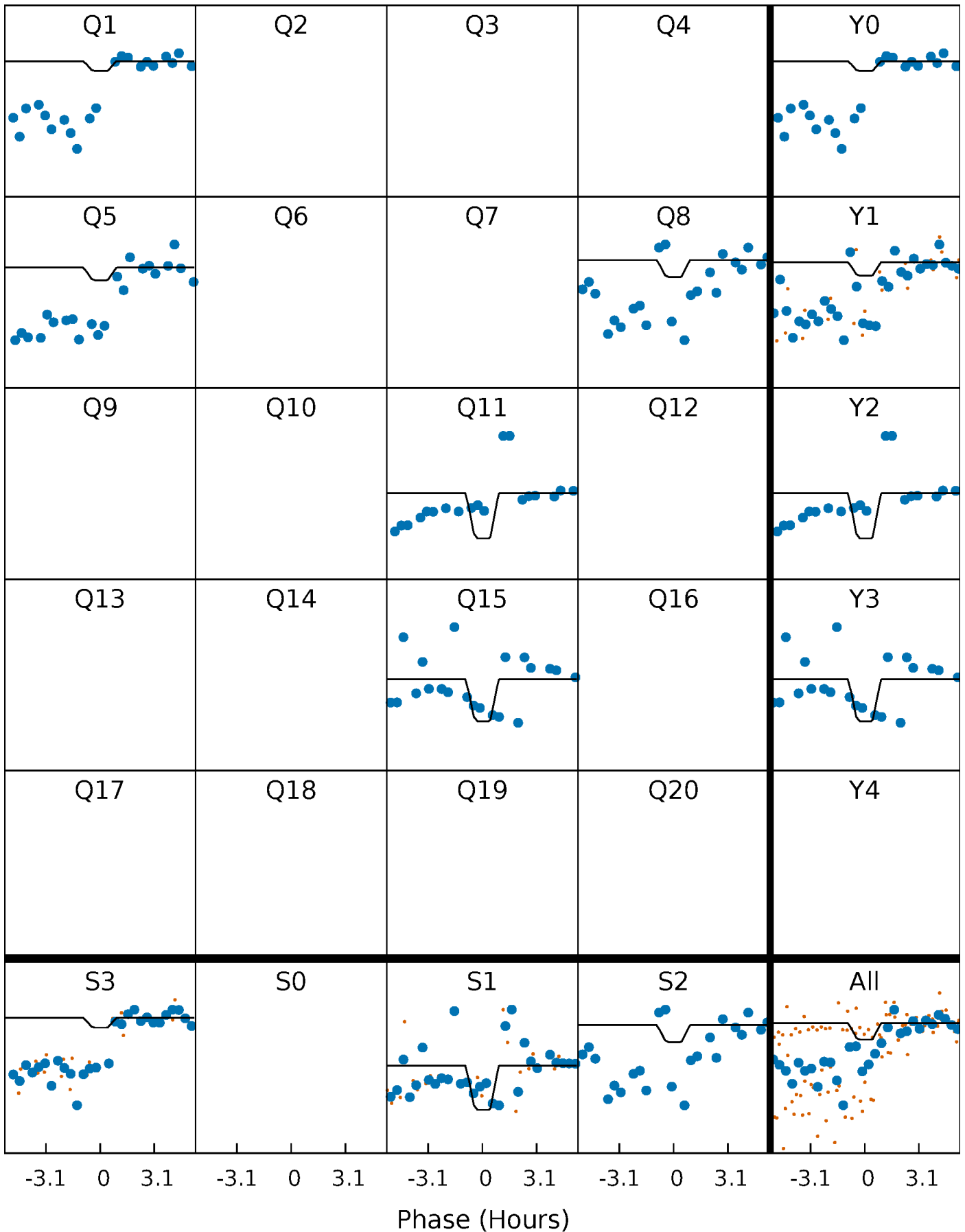
DV Quarter-Phased Transit Curves

TCE 006192847-06 $P=305.852595$ Days $T_0=158.214222$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

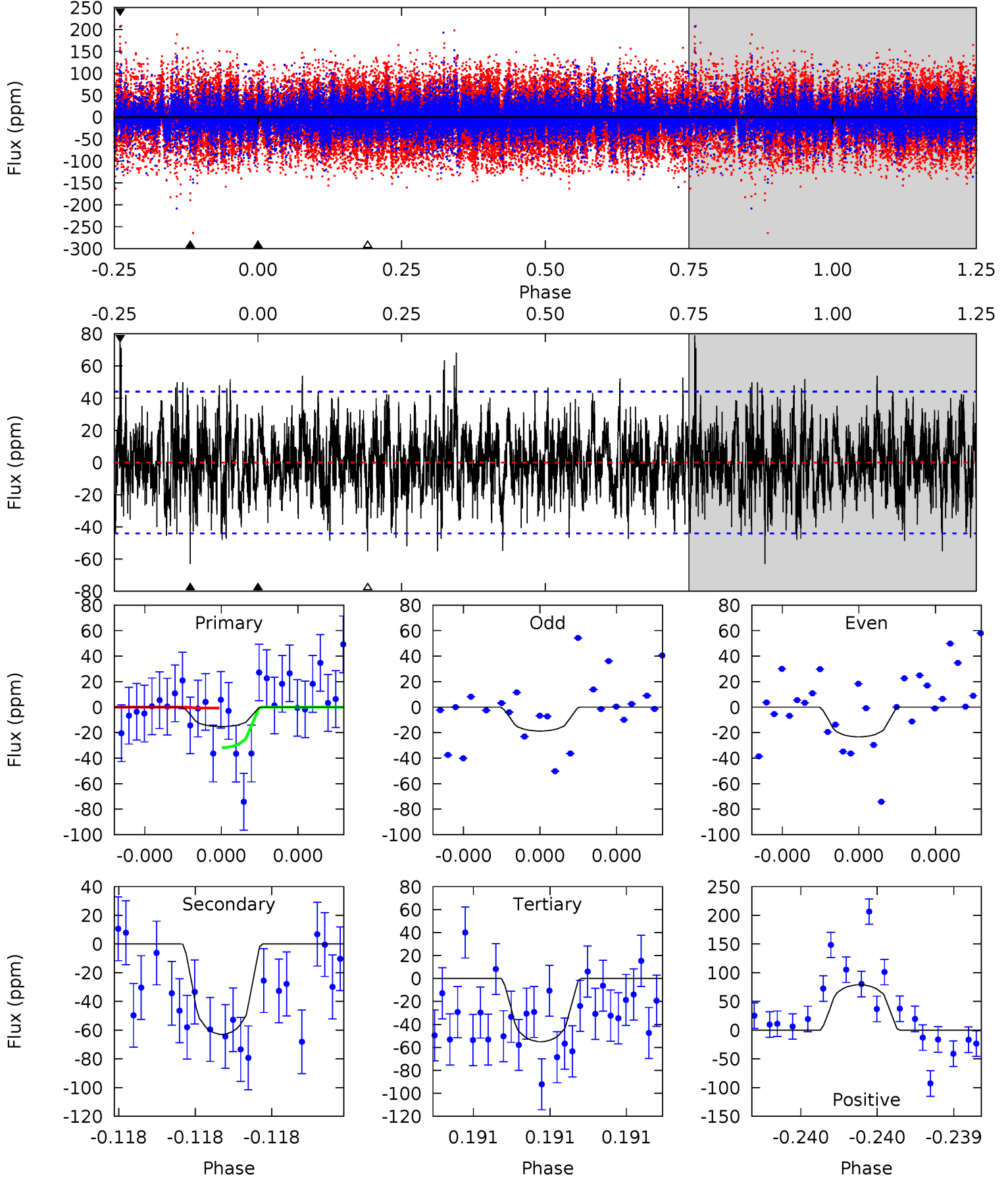
TCE 006192847-06 $P=305.842715$ Days $T_0=158.251080$ (BKJD)



DV Model-Shift Uniqueness Test

006192847-06, P = 305.852595 Days, E = 158.214222 Days

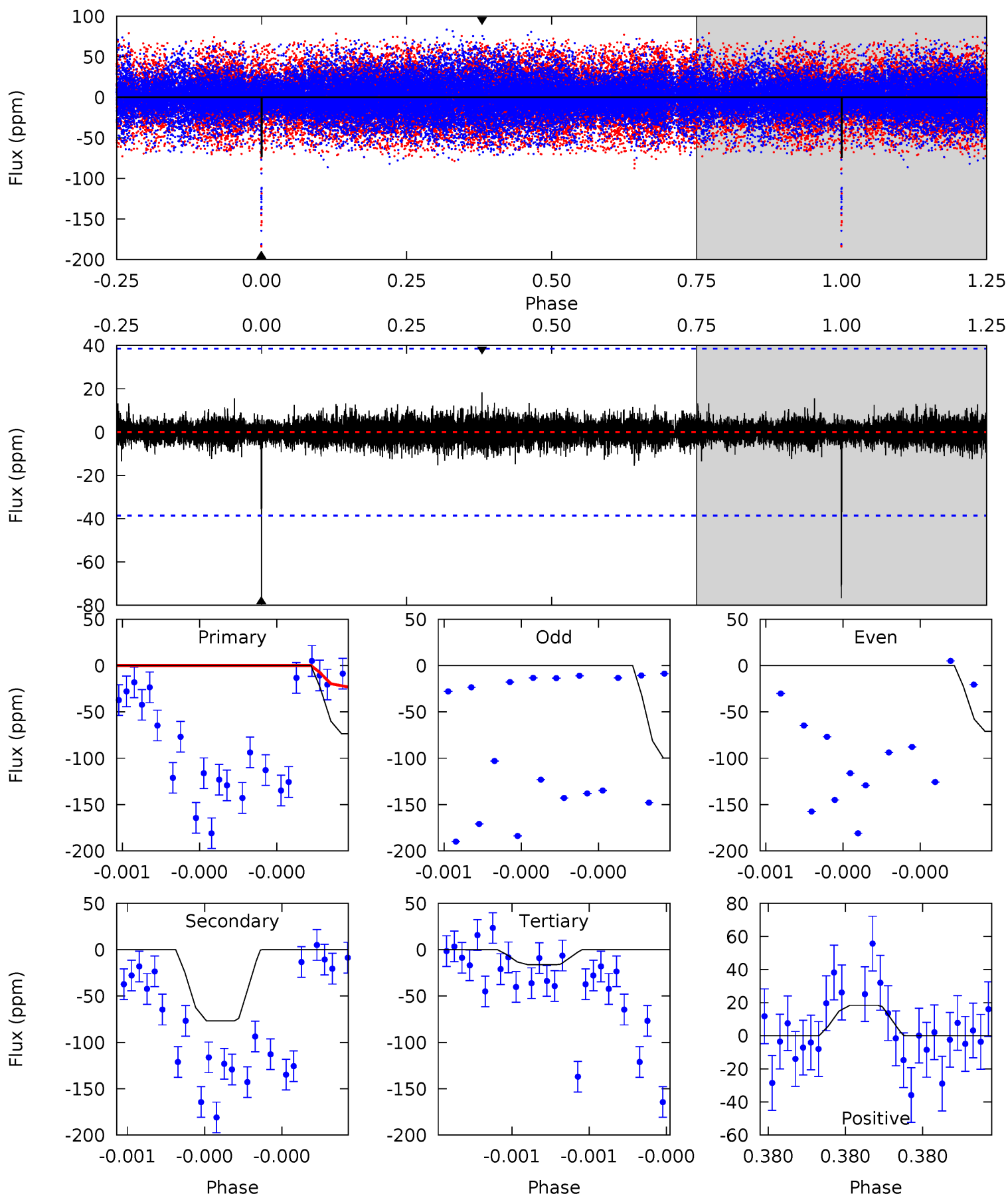
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
1.94	8.03	7.02	10.1	5.62	3.55	1.99	-5.08	-8.13	1.01	-2.05	0.27	4.11	0.56	2.02



Alt Model-Shift Uniqueness Test

006192847-06, P = 305.842715 Days, E = 158.251080 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
10.9	11.3	2.41	2.71	5.70	3.67	0.49	8.48	8.18	8.93	8.63	2.40	1.08	0.19	7.13



Stellar Parameters For KIC 006192847

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	3916^{+88}_{-107}	$1.032^{+0.030}_{-0.030}$	$-0.180^{+0.200}_{-0.250}$	$67.438^{+2.428}_{-14.567}$	$1.785^{+0.071}_{-0.643}$	$0.000^{+0.000}_{-0.000}$
	+2%/-3%	+3%/-3%	+111%/-139%	+4%/-22%	+4%/-36%	+29%/-8%
Source	PHO54	AST54	PHO54	DSEP		

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

Secondary Eclipse Parameters for KIC 006192847-06 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-63 ± 8	$62.70^{+57.99}_{-40.92}$	1912^{+52}_{-58}	3792^{+1960}_{-748}	10^{+70}_{-7}
Alt.	-77 ± 7	$56.69^{+49.78}_{-37.35}$	1912^{+52}_{-56}	4096^{+2452}_{-810}	15^{+114}_{-11}

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 $A_{obs} \gg 1.0$

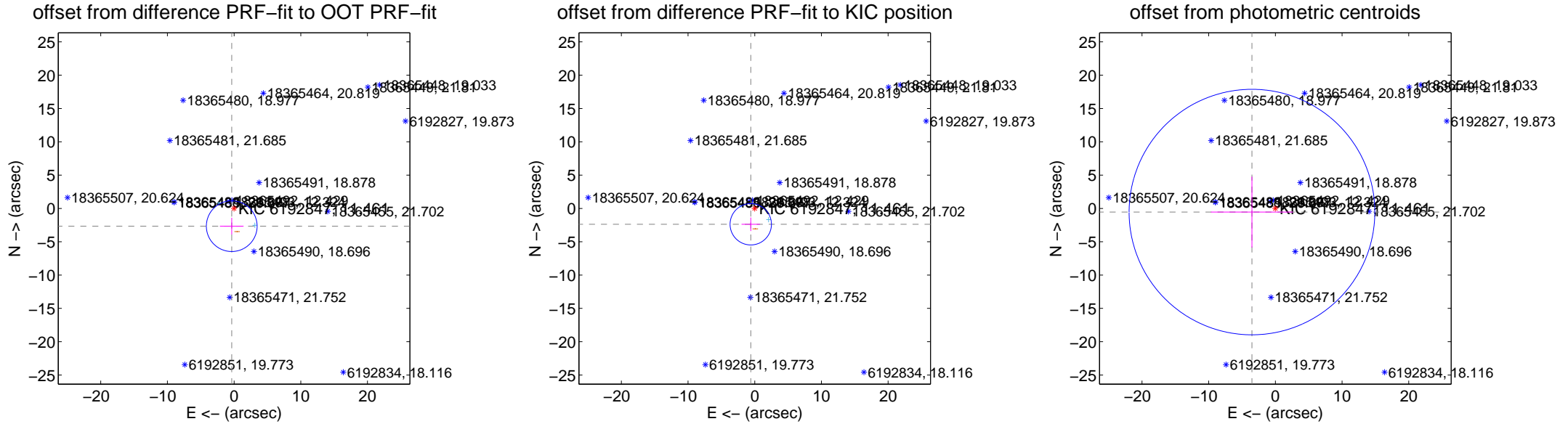
DV Centroid Data

Supplemental centroid analysis for 006192847-06. **Kepler magnitude: 11.46.** Transit SNR 12.05

There are 2 quarters with good PRF difference image offsets

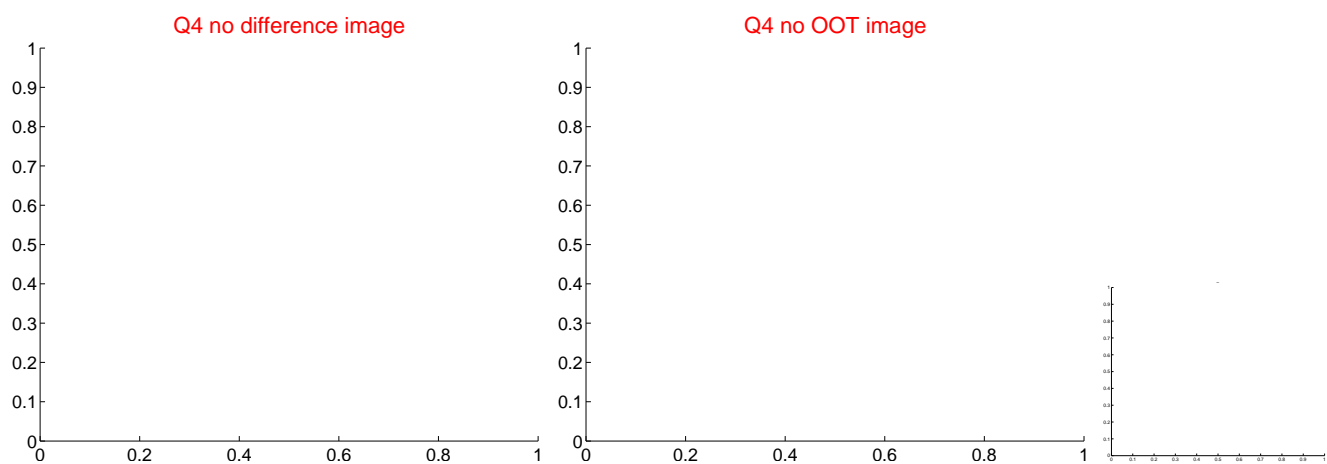
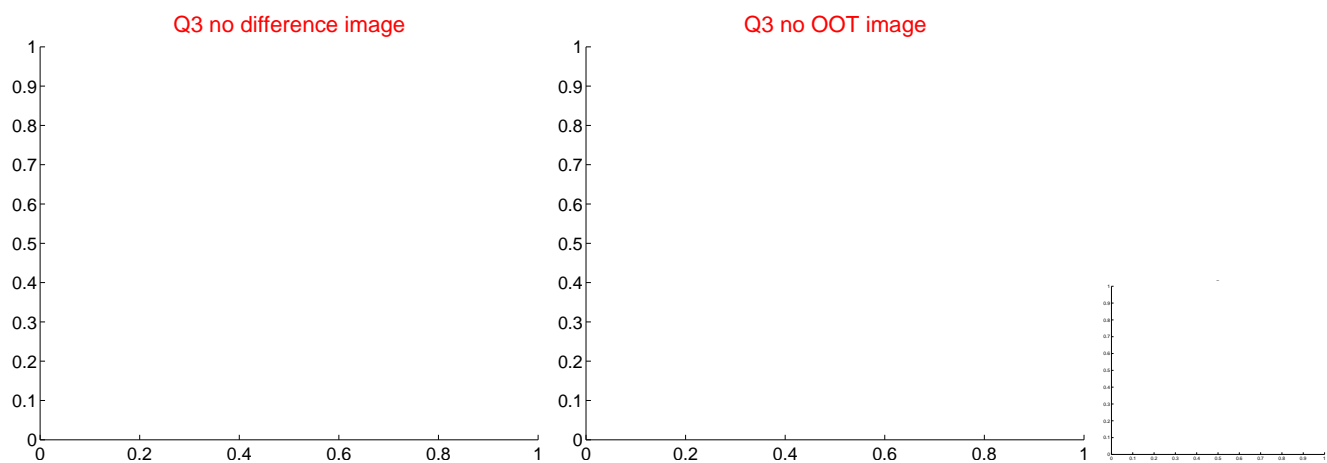
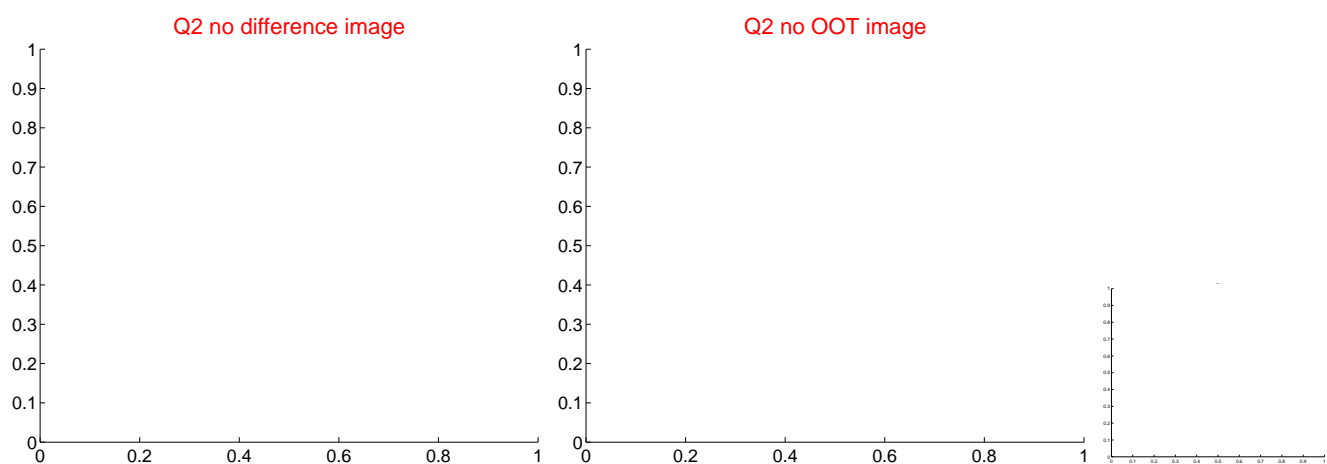
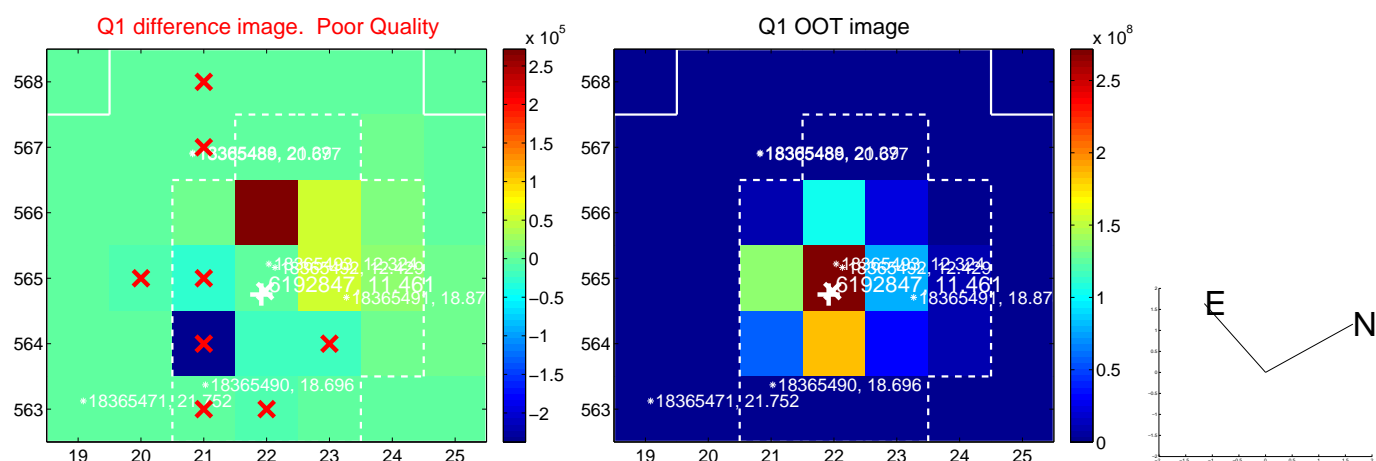
The direct PRF centroid is offset from the target star catalog position by about 1.33 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	2.683 ± 1.269	2.11	0.355 ± 1.768	-2.659 ± 1.258
PRF-fit source offset from KIC position	2.451 ± 1.034	2.37	0.597 ± 1.377	-2.377 ± 1.008
photometric centroid source offset	3.55 ± 6.14	0.58	3.51 ± 6.16	-0.54 ± 5.32

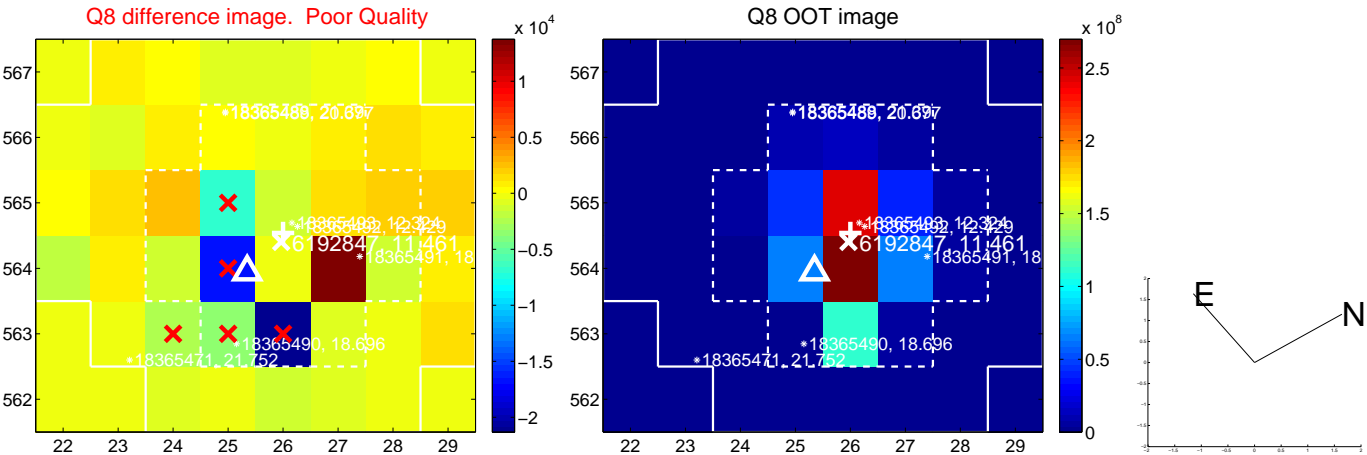
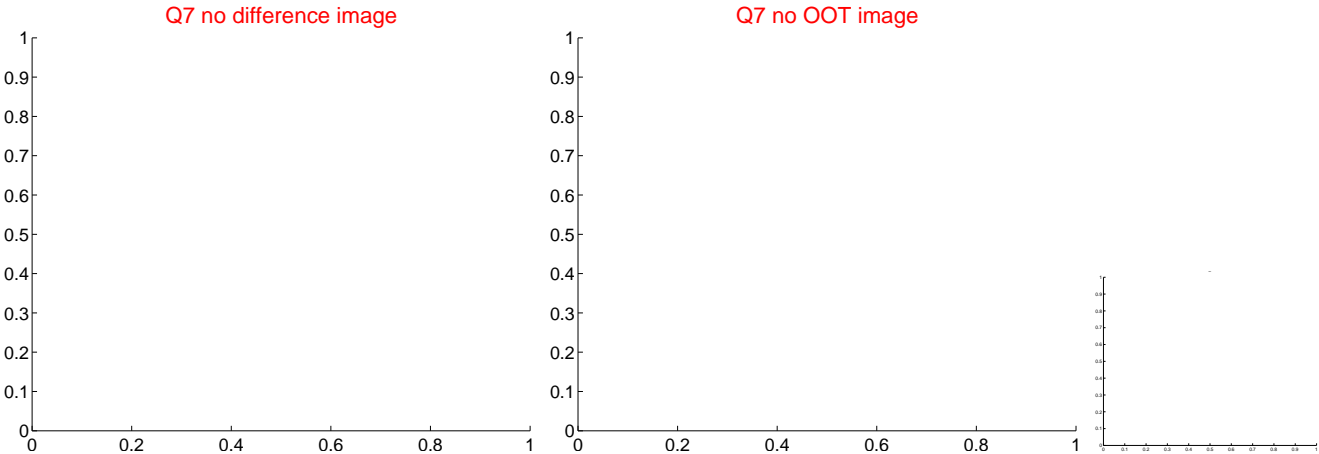
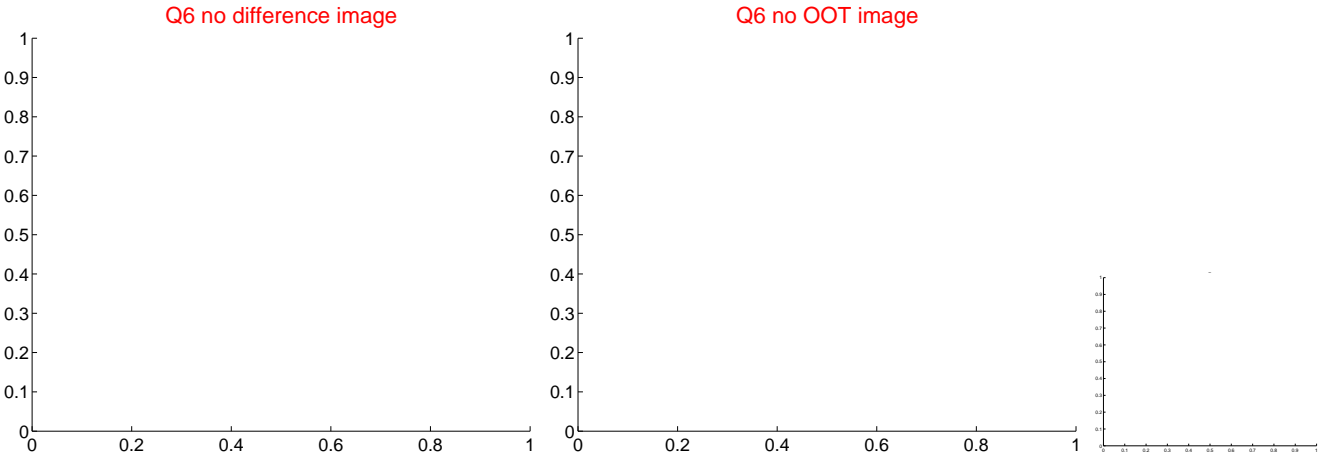
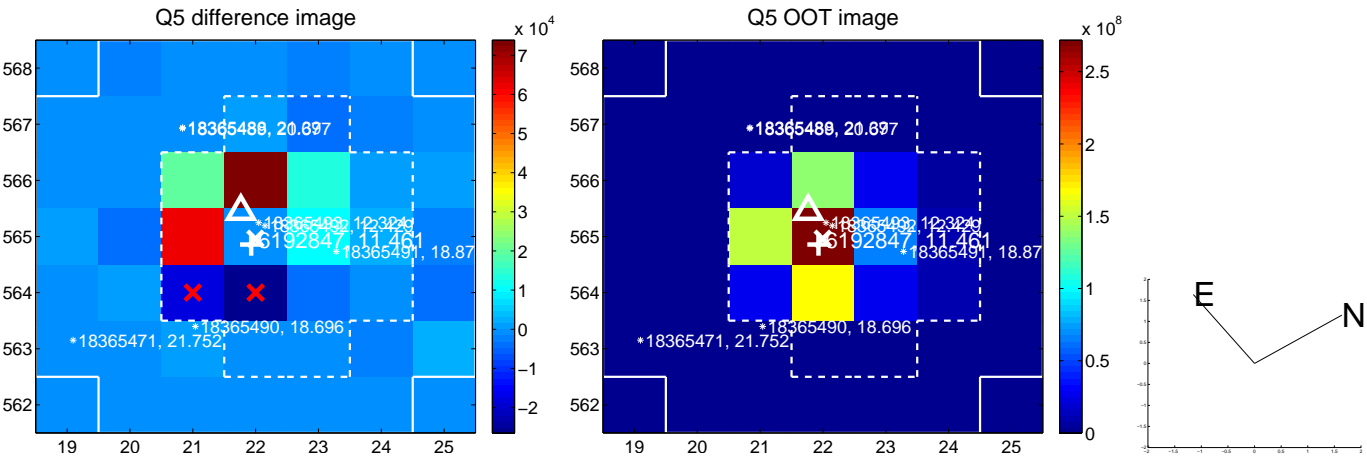


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets;** magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

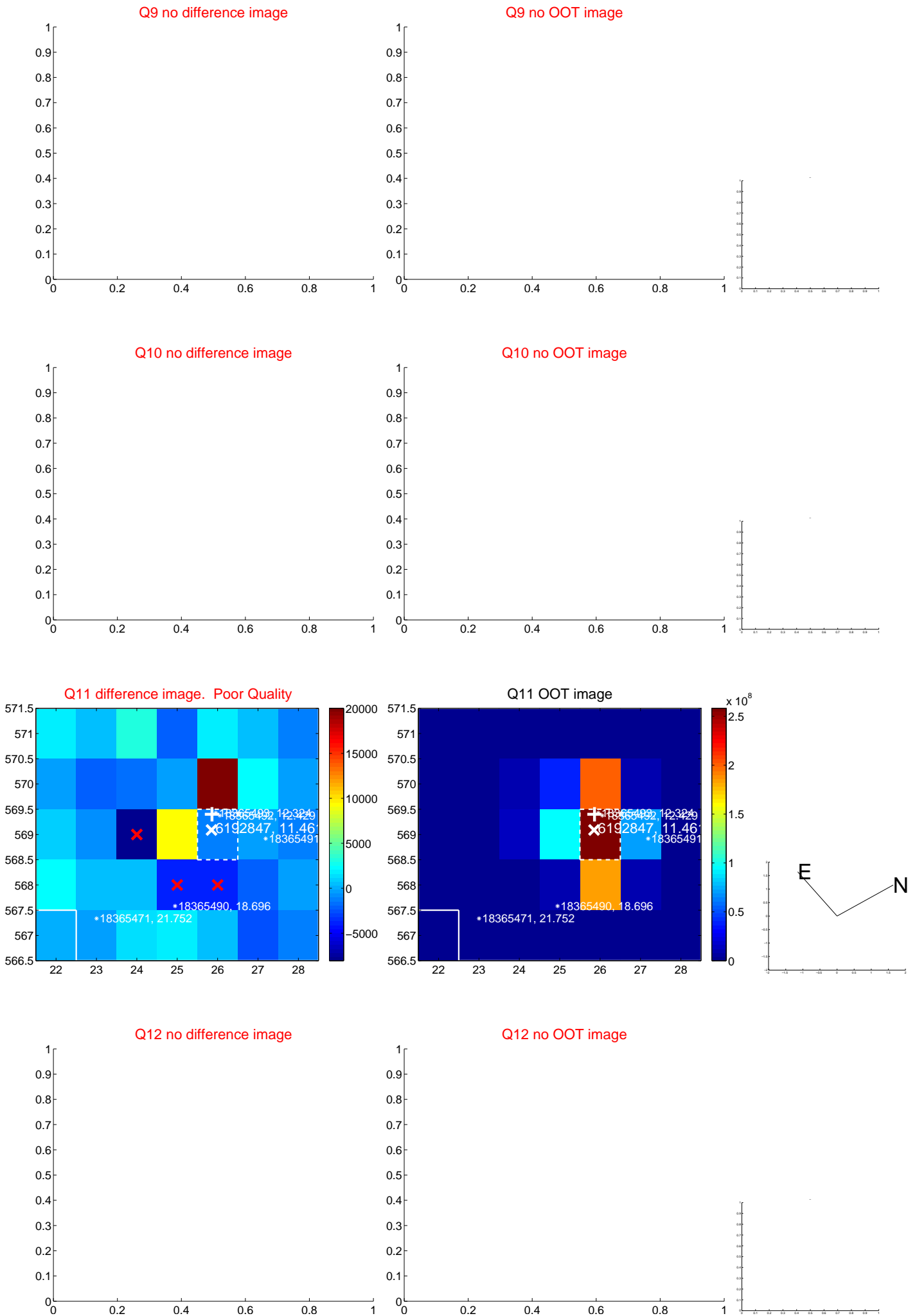
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value



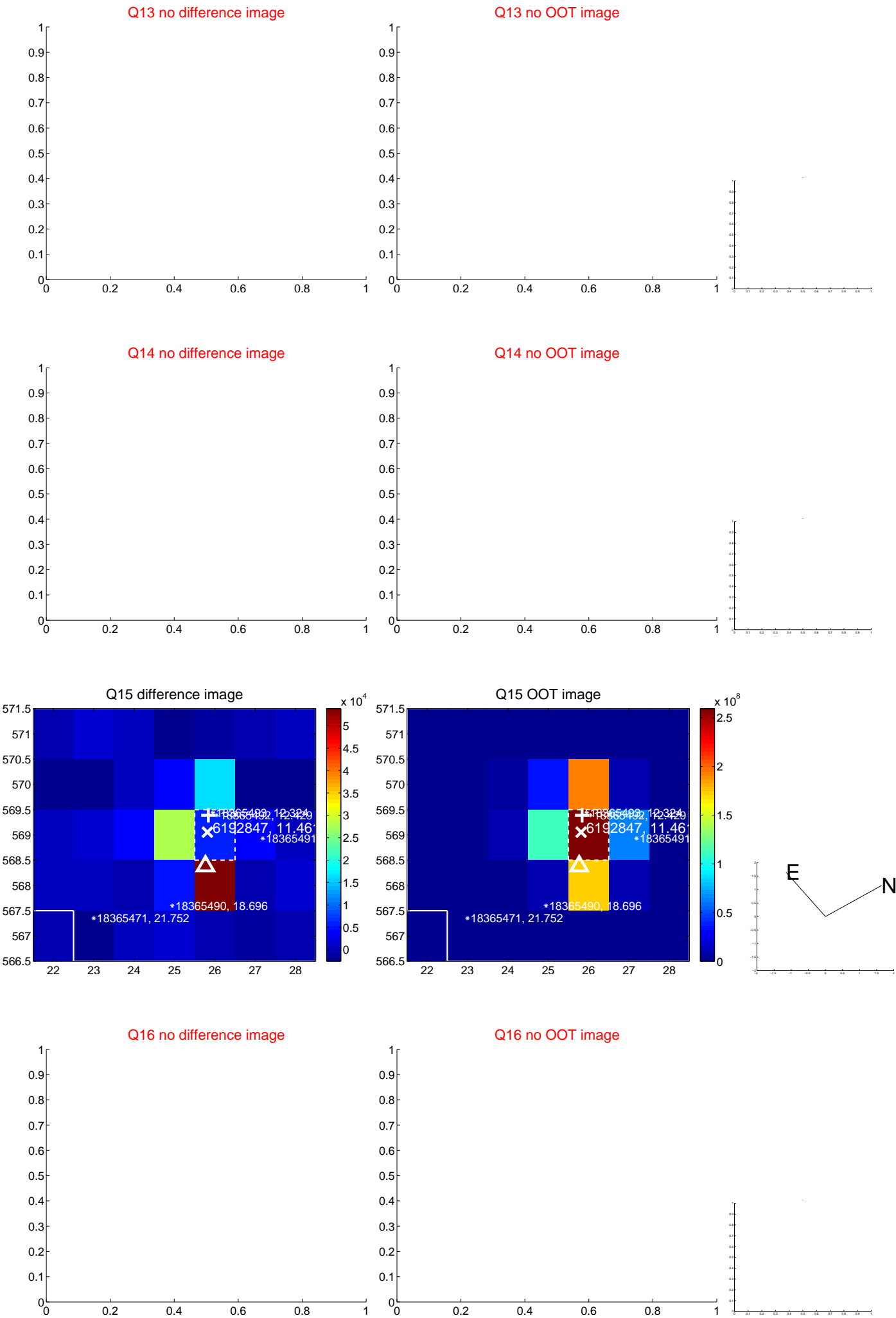
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



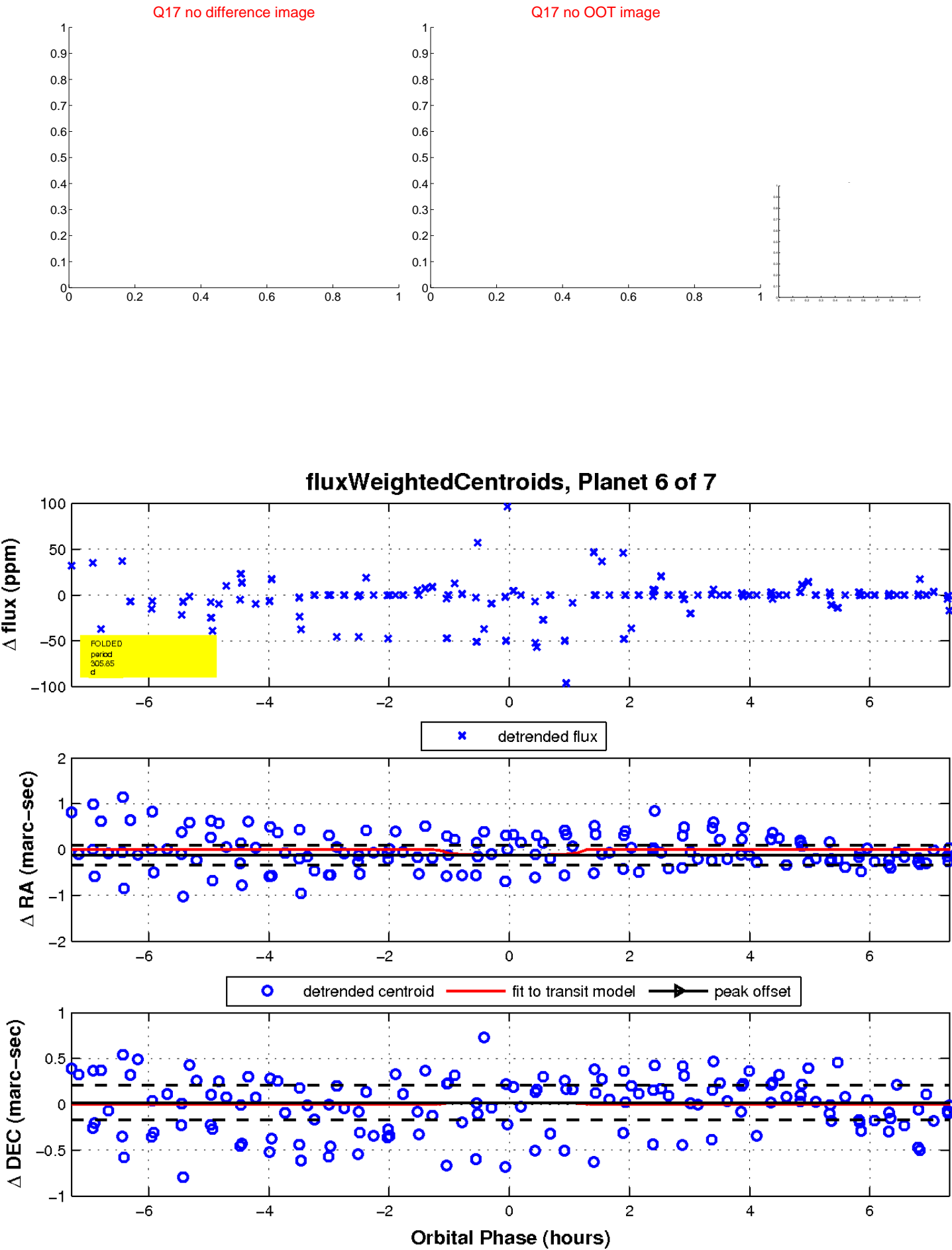
white ×: KIC target position; +: OOT centroid; △: difference centroid. red ✕: large negative pixel value.



white ×: KIC target position; +: OOT centroid; △: difference centroid. red ✕: large negative pixel value.

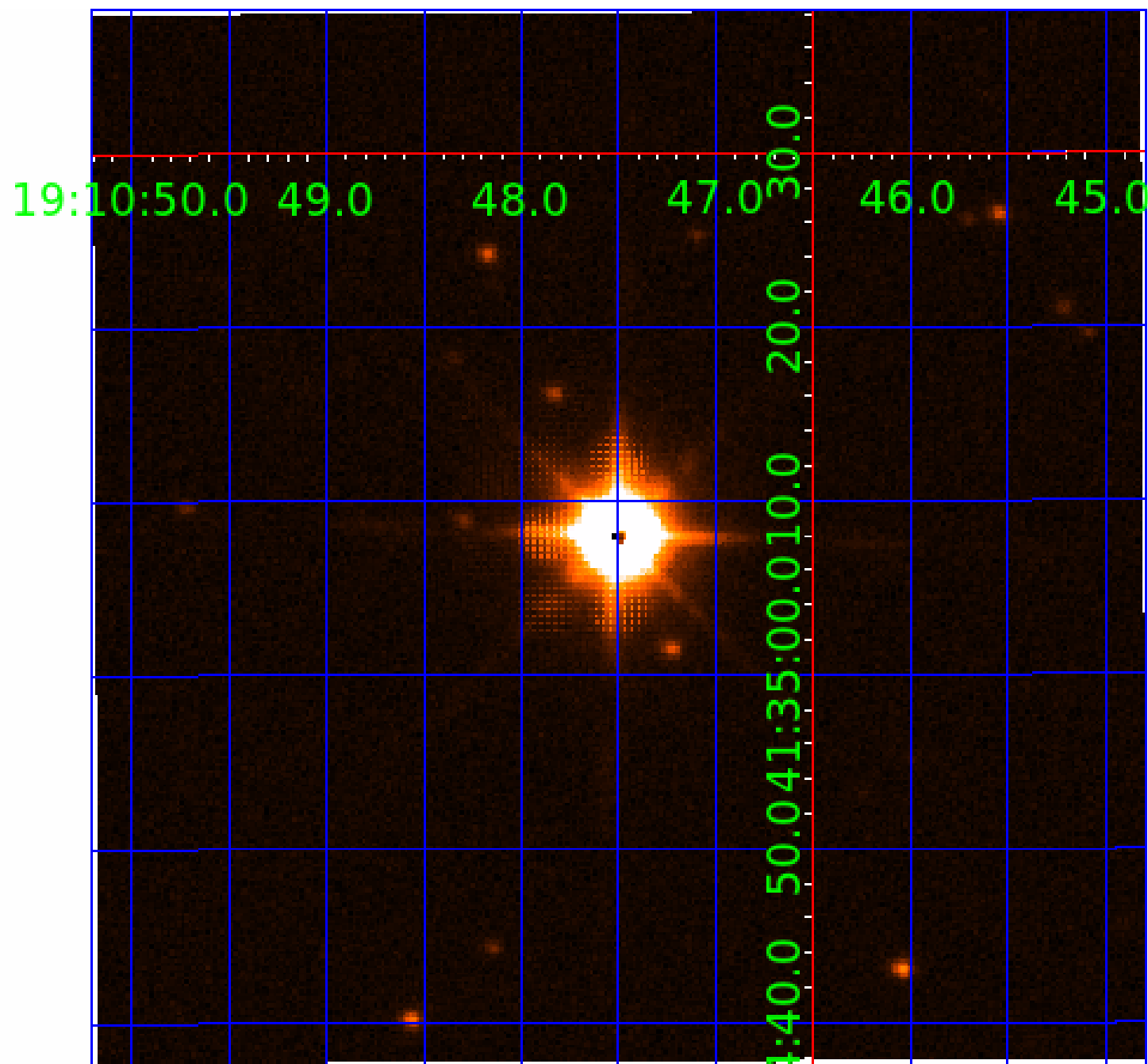


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 006192847

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})
006192847-01	OBS	No	111.799038	200.971741	11.0	2.049	27.5	3.1	67.44	3916	24.08	3154.65
006192847-02	OBS	No	145.863849	259.216103	26.0	4.412	16.9	7.6	67.44	3916	42.78	2212.78
006192847-03	OBS	No	311.264136	344.923662	12.1	5.141	14.1	3.7	67.44	3916	28.64	805.43
006192847-04	OBS	No	103.976930	211.806049	36.0	2.429	13.4	10.8	67.44	3916	48.01	3474.98
006192847-05	OBS	No	208.899997	167.034907	29.3	8.687	11.6	7.8	67.44	3916	46.34	1370.72
006192847-06	OBS	No	305.852595	158.214222	35.3	2.457	15.5	12.0	67.44	3916	52.79	824.49
006192847-07	OBS	No	239.018162	199.755679	123.3	6.000	12.3	-1.0	67.44	3916	69.98	1145.41

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
006192847-01	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_SATURATED
006192847-02	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—INCONSISTENT_TRANS—CENT_SATURATED
006192847-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_MARSHALL_ZUMA—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—INCONSISTENT_TRANS—CENT_SATURATED
006192847-04	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_SKYE_ZUMA_TRACKER—LPP_ALT—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—INCONSISTENT_TRANS—CENT_SATURATED
006192847-05	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_MARSHALL_ZUMA—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—CENT_SATURATED
006192847-06	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_MARSHALL_ZUMA_TRACKER—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—CENT_SATURATED
006192847-07	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_MARSHALL_ZUMA—LPP_DV—CENT_SATURATED

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

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

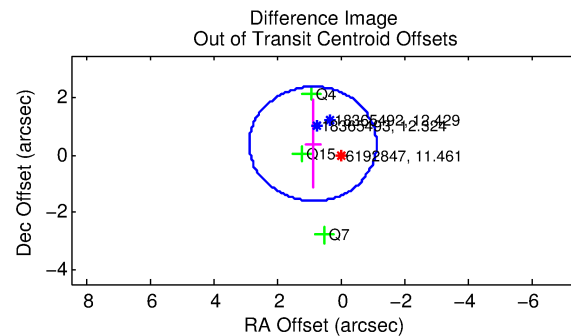
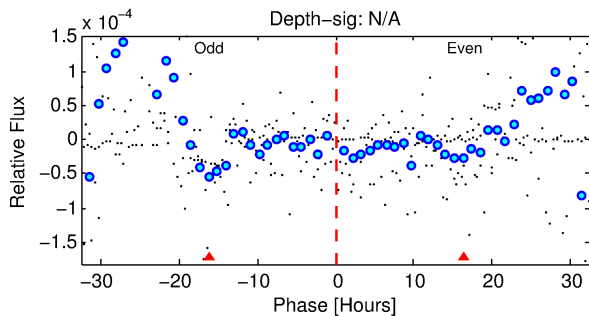
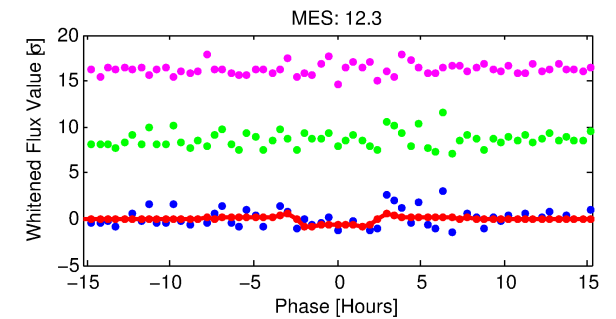
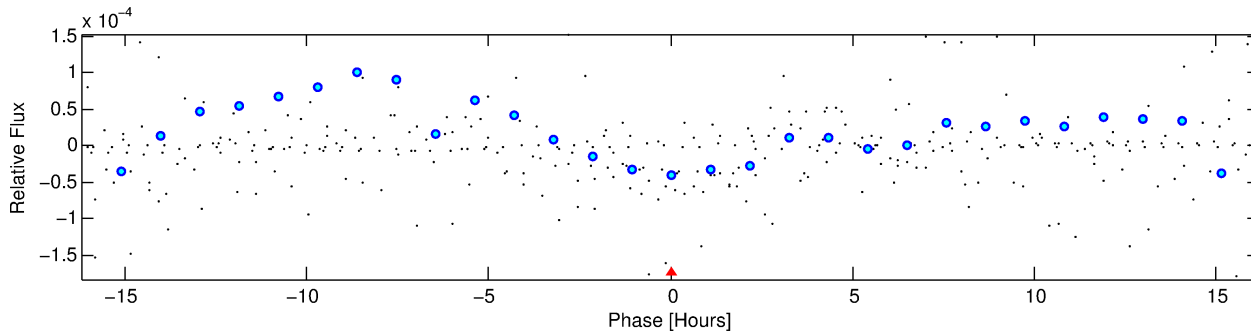
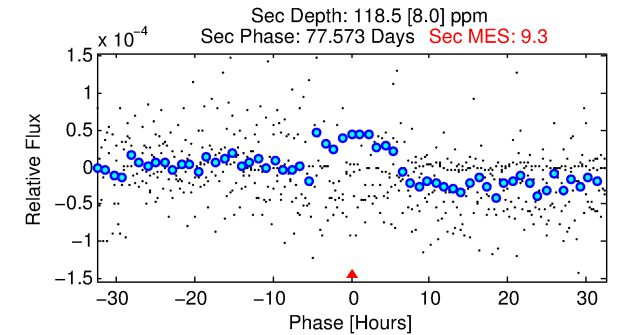
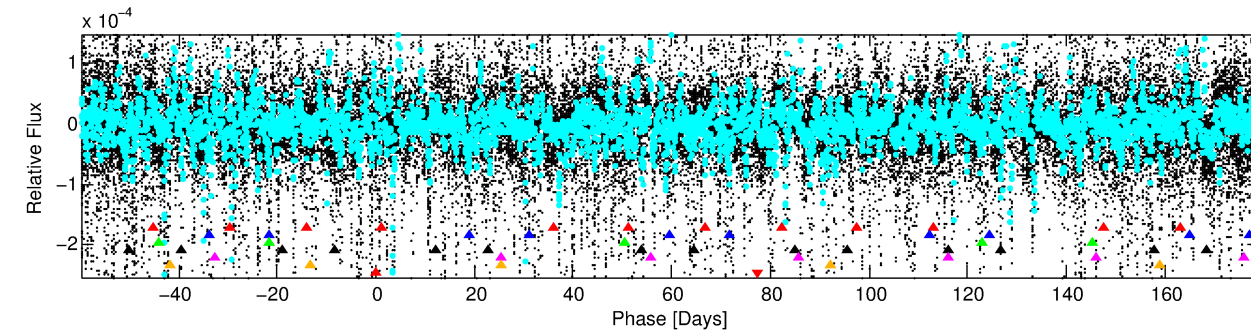
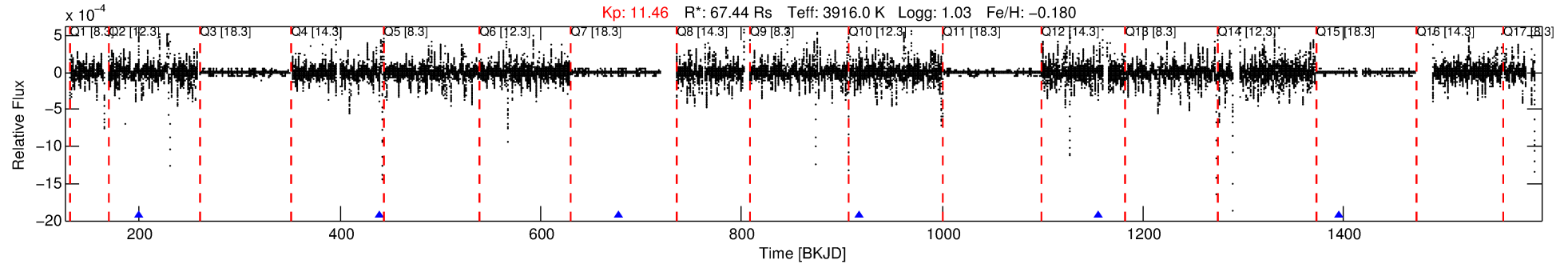
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 006192847-07

No Significant Match Found

DV One-Page Summary

KIC: 6192847 Candidate: 7 of 7 Period: 239.018 d



TPS TCE Results:

Period = 239.01816 d
Epoch = 199.7557 BKJD

DV fit results are unavailable

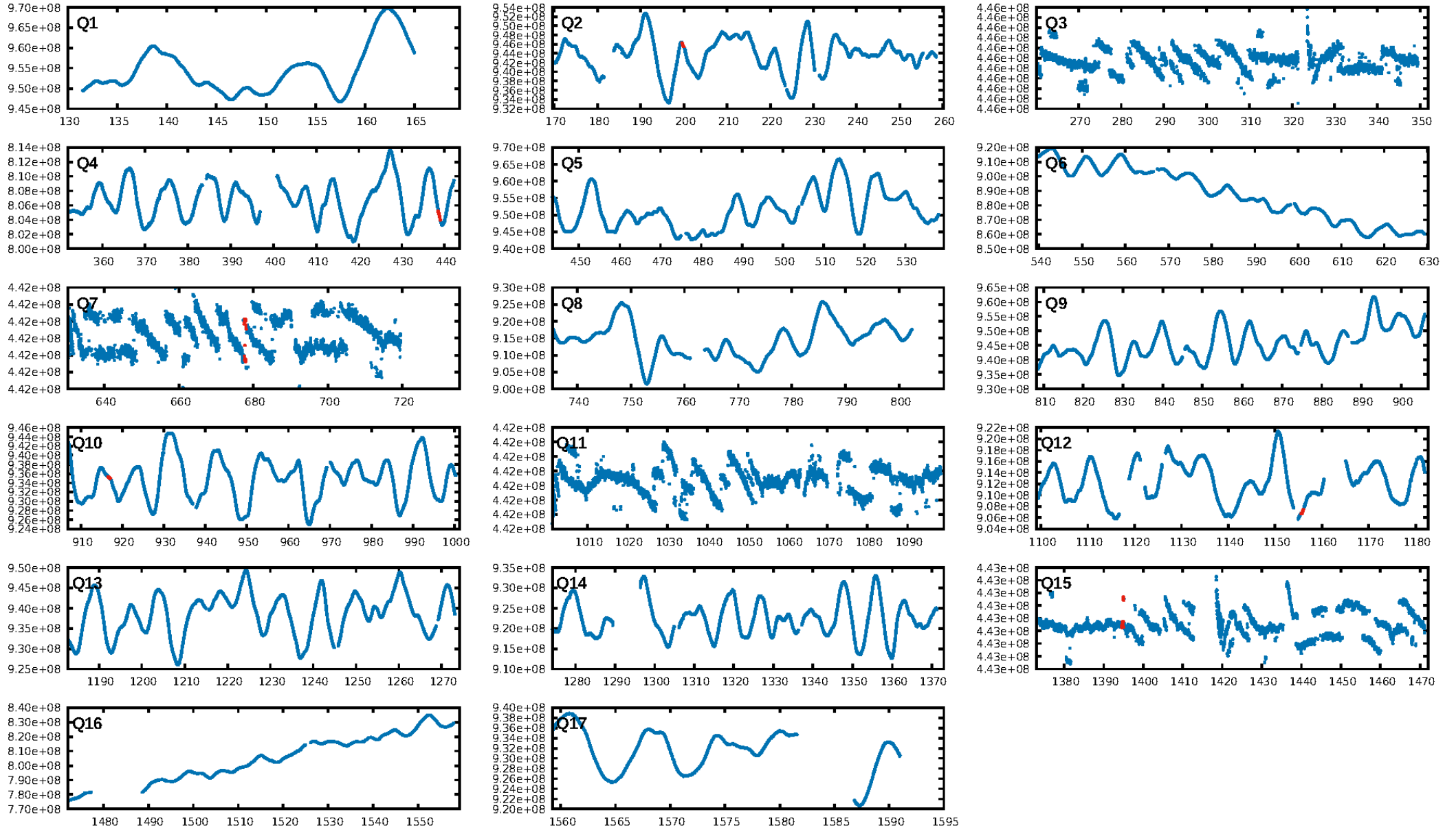
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [68.46σ]
LongPeriod-sig: 100.0% [247.40σ]
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [6/6]
GhostDiagnostic-chr: -2.607
Centroid-sig: 74.0%
Centroid-so: 3.925 arcsec [0.46σ]
OotOffset-rm: 0.984 arcsec [1.47σ]
KicOffset-rm: 1.924 arcsec [2.54σ]
OotOffset-st: 0/2/1/0 [3]
KicOffset-st: 0/2/1/0 [3]
DiffImageQuality-fgm: 0.33 [1/3]
DiffImageOverlap-fno: 1.00 [5/5]

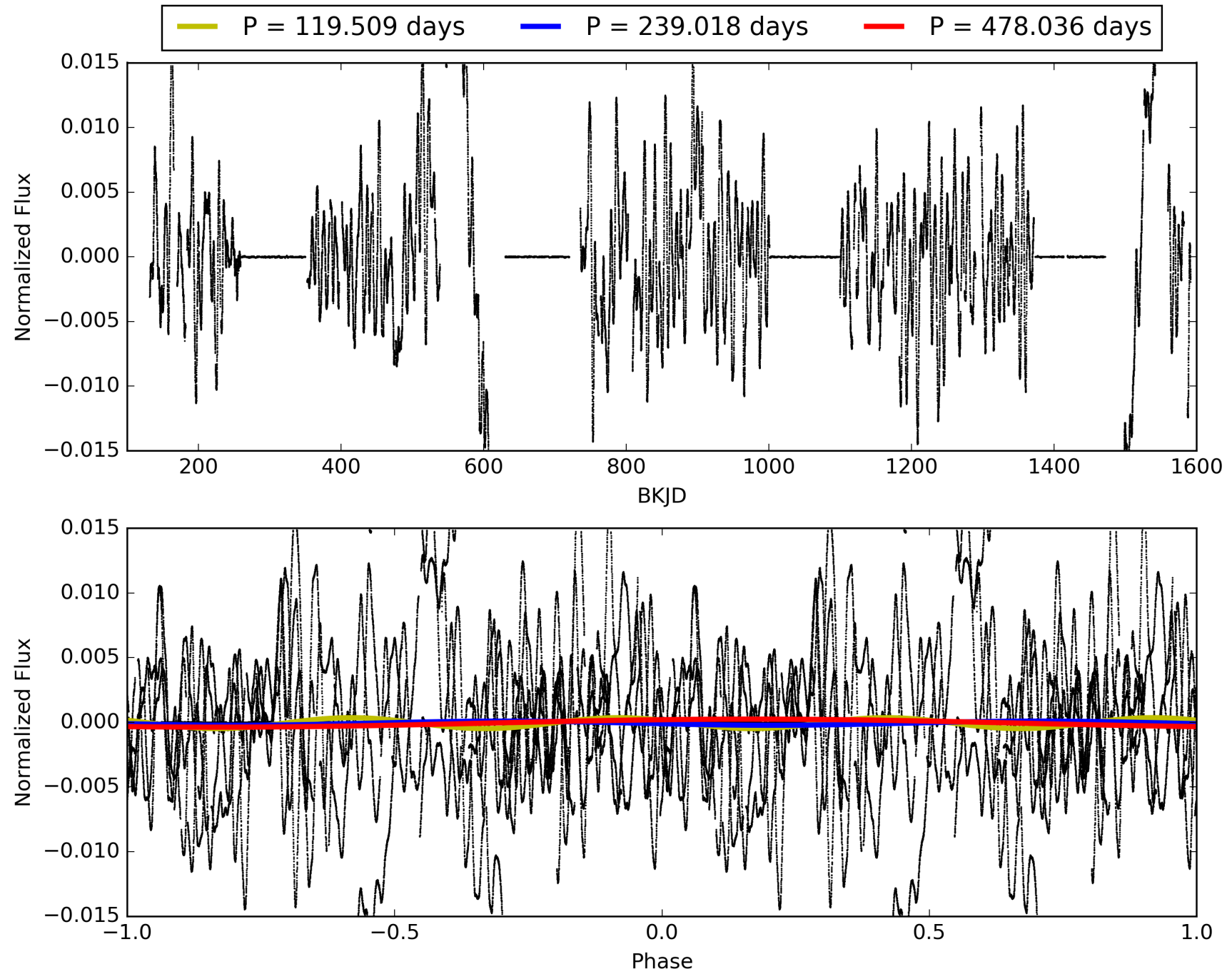
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 02-Feb-2016 00:59:55 Z

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

TCE 006192847-07, PDC Light Curves

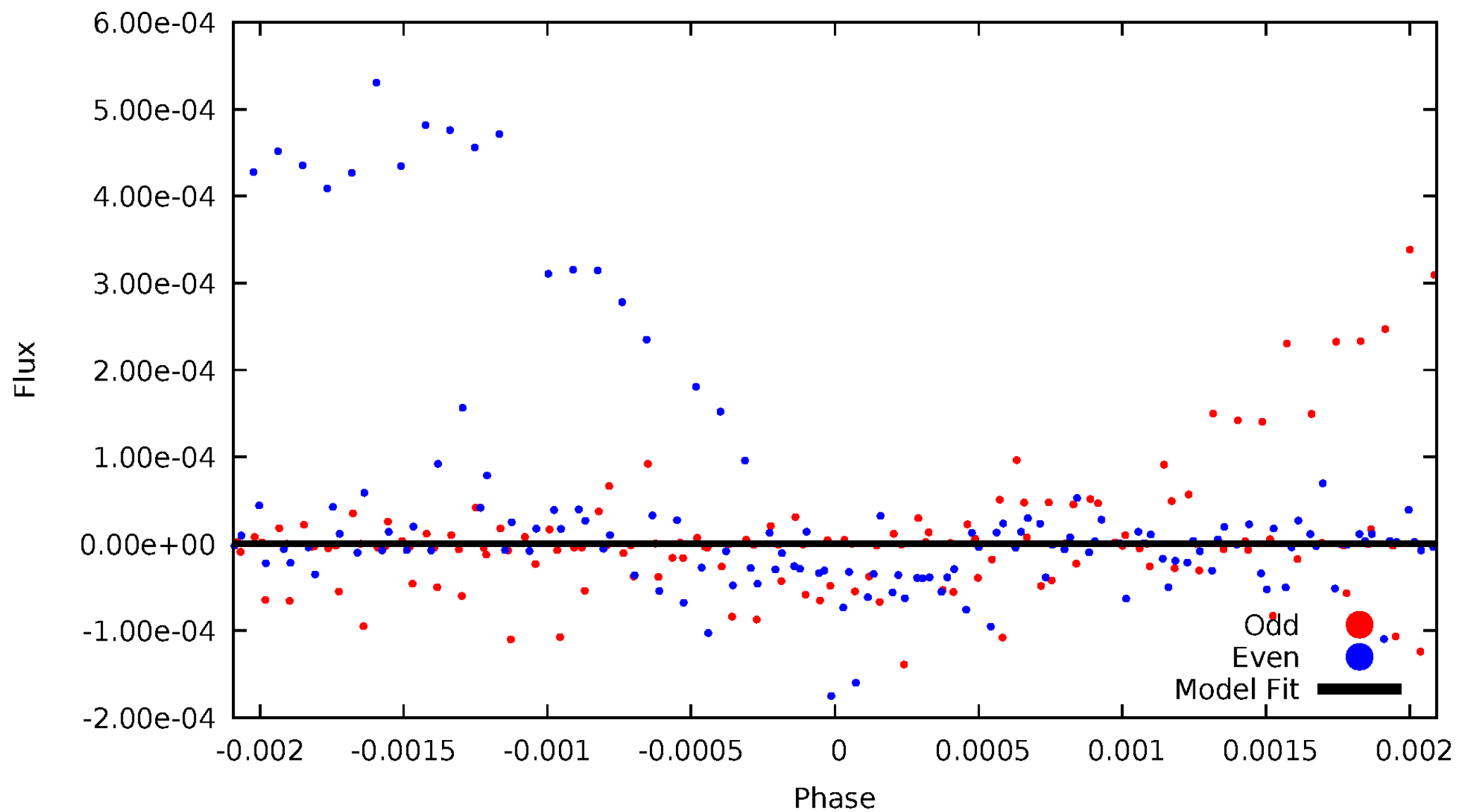


TCE 006192847-07



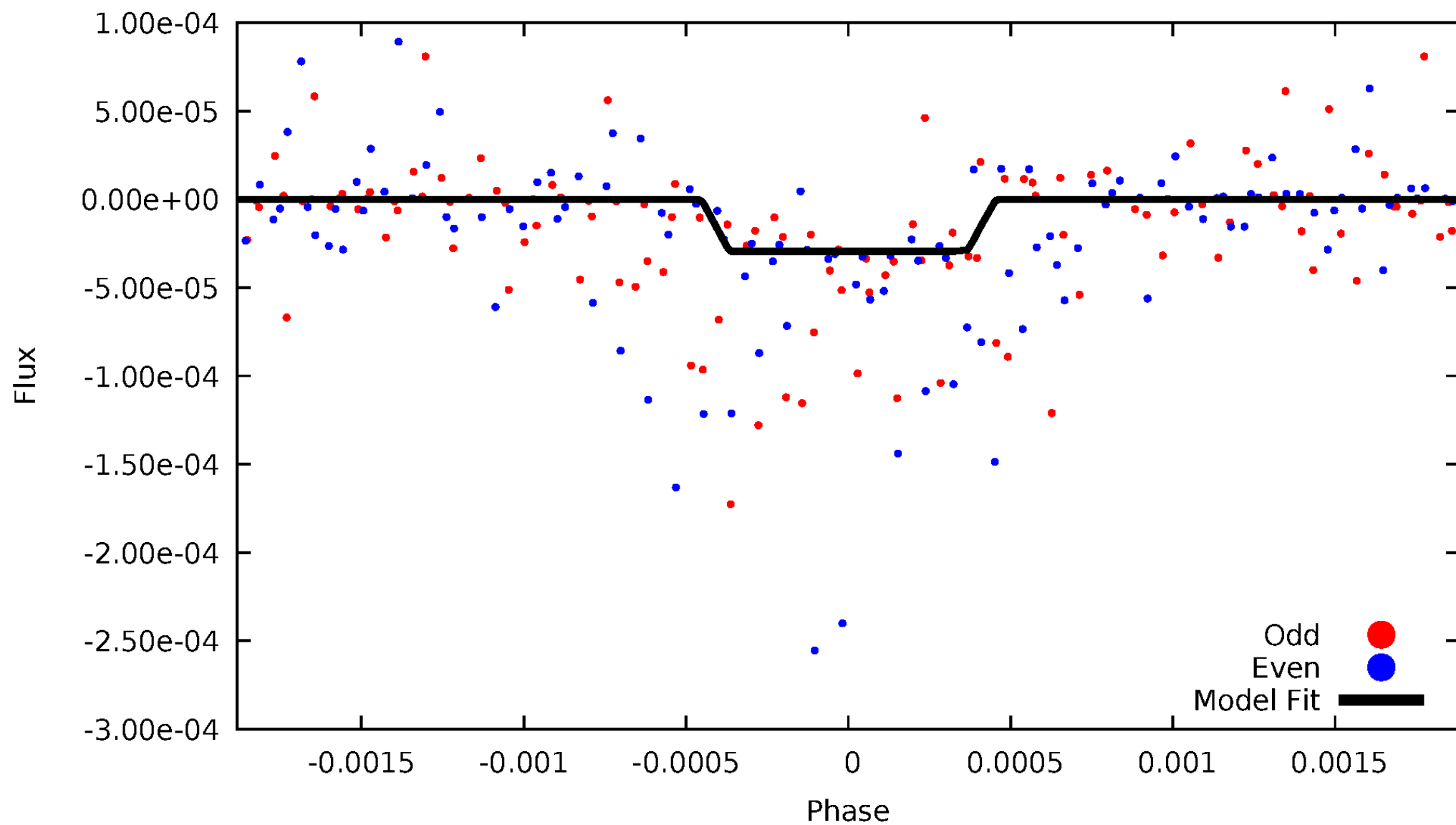
DV Odd/Even

TCE 006192847-07

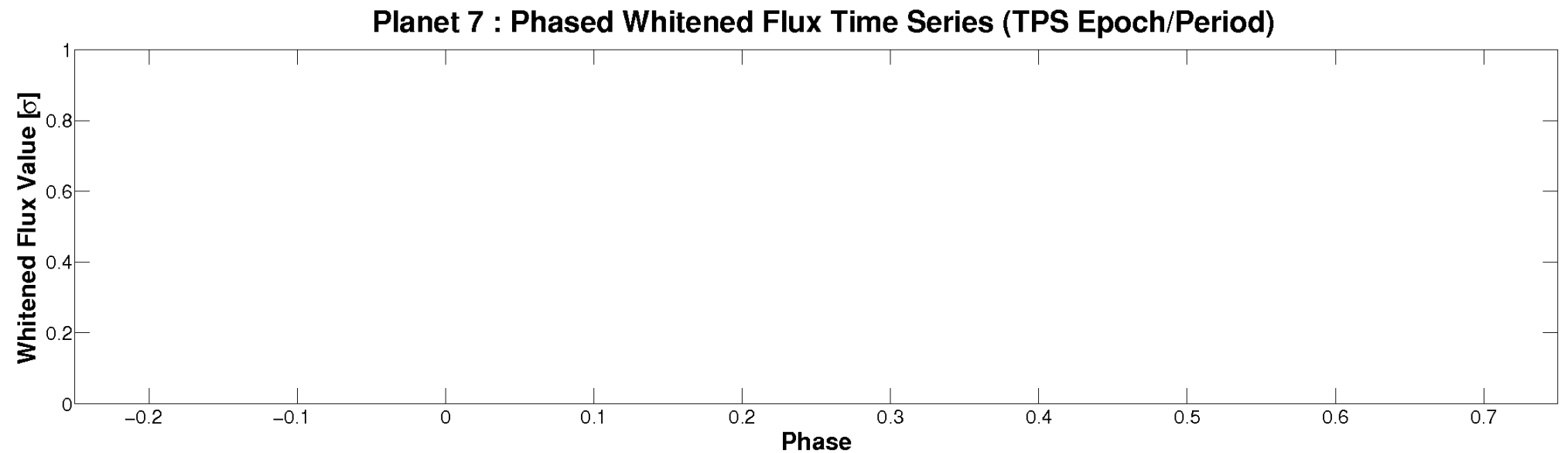
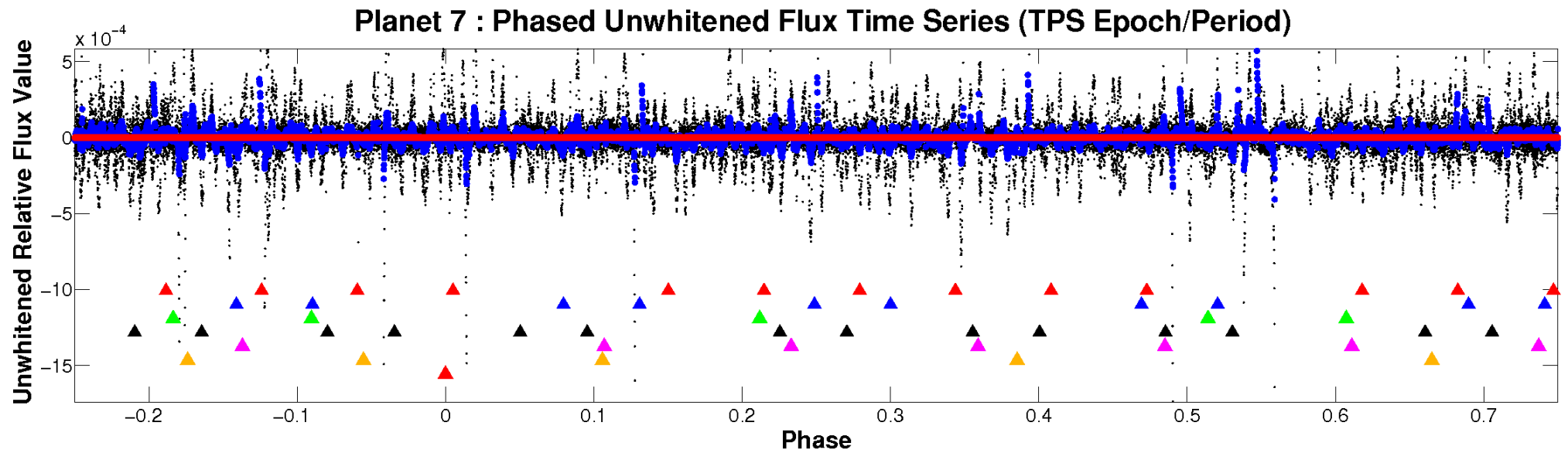


ALT Odd/Even

TCE 006192847-07

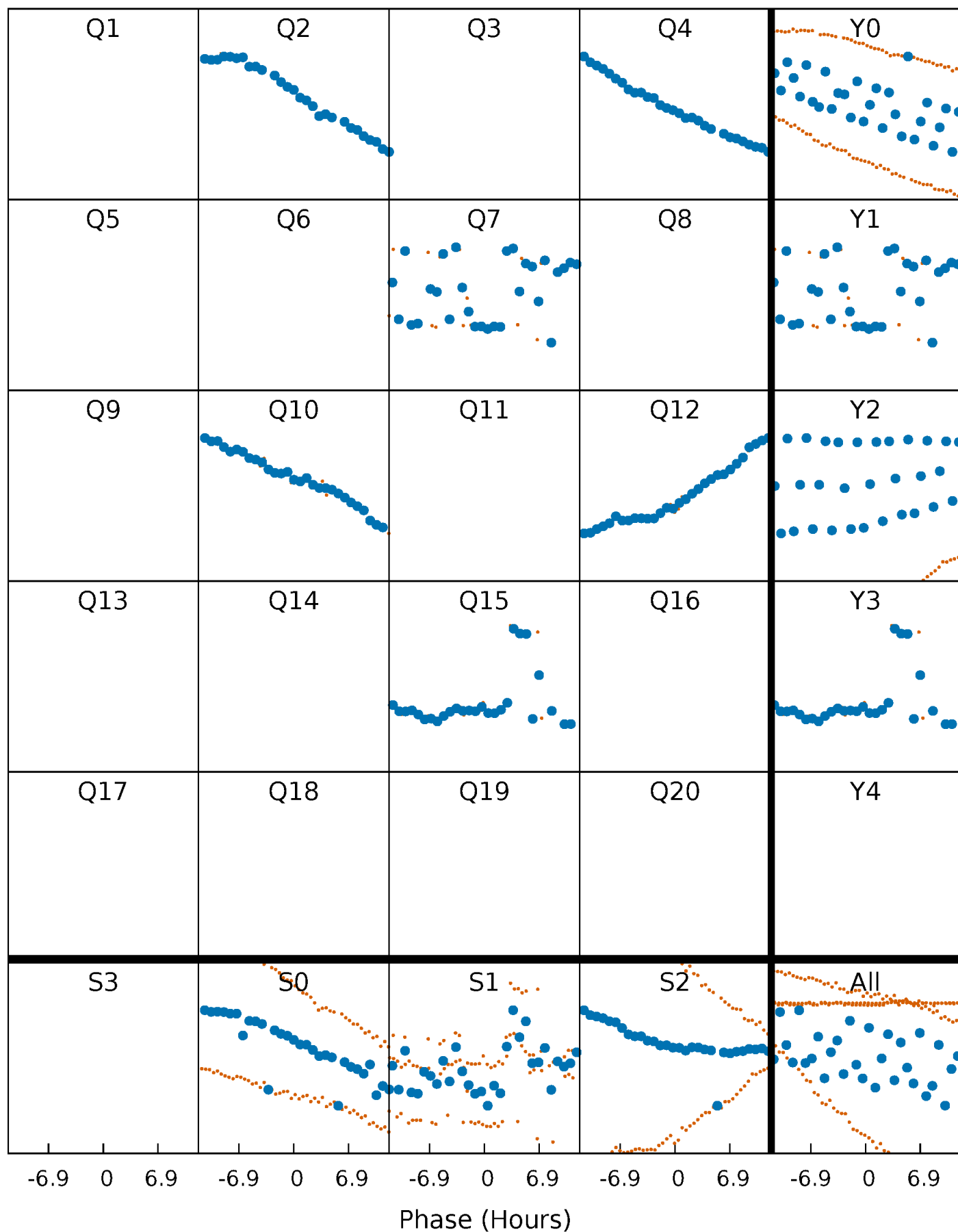


Non-Whitened Vs. Whitened Light Curve



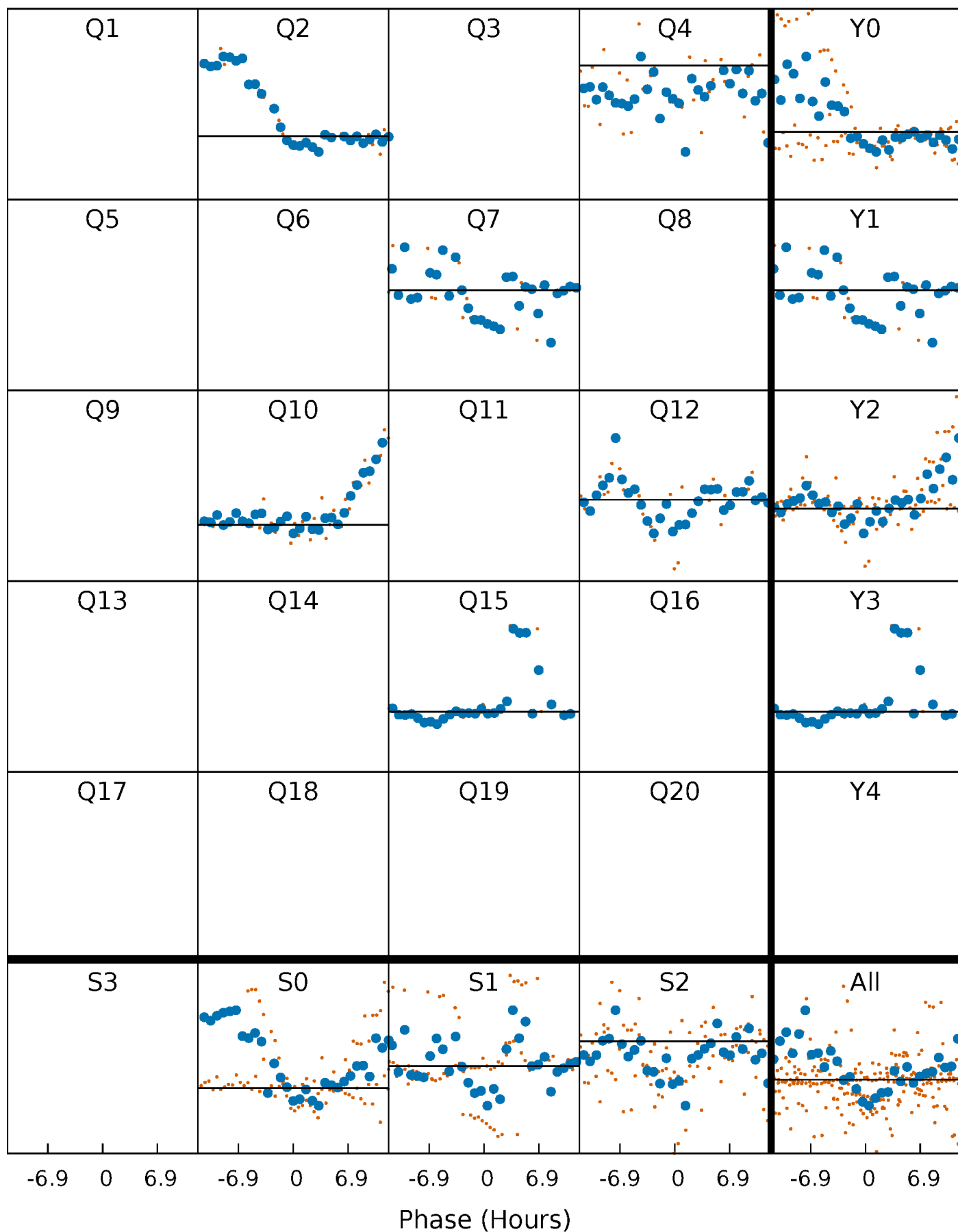
PDC Quarter-Phased Transit Curves

TCE 006192847-07 $P=239.018162$ Days $T_0=199.755679$ (BKJD)



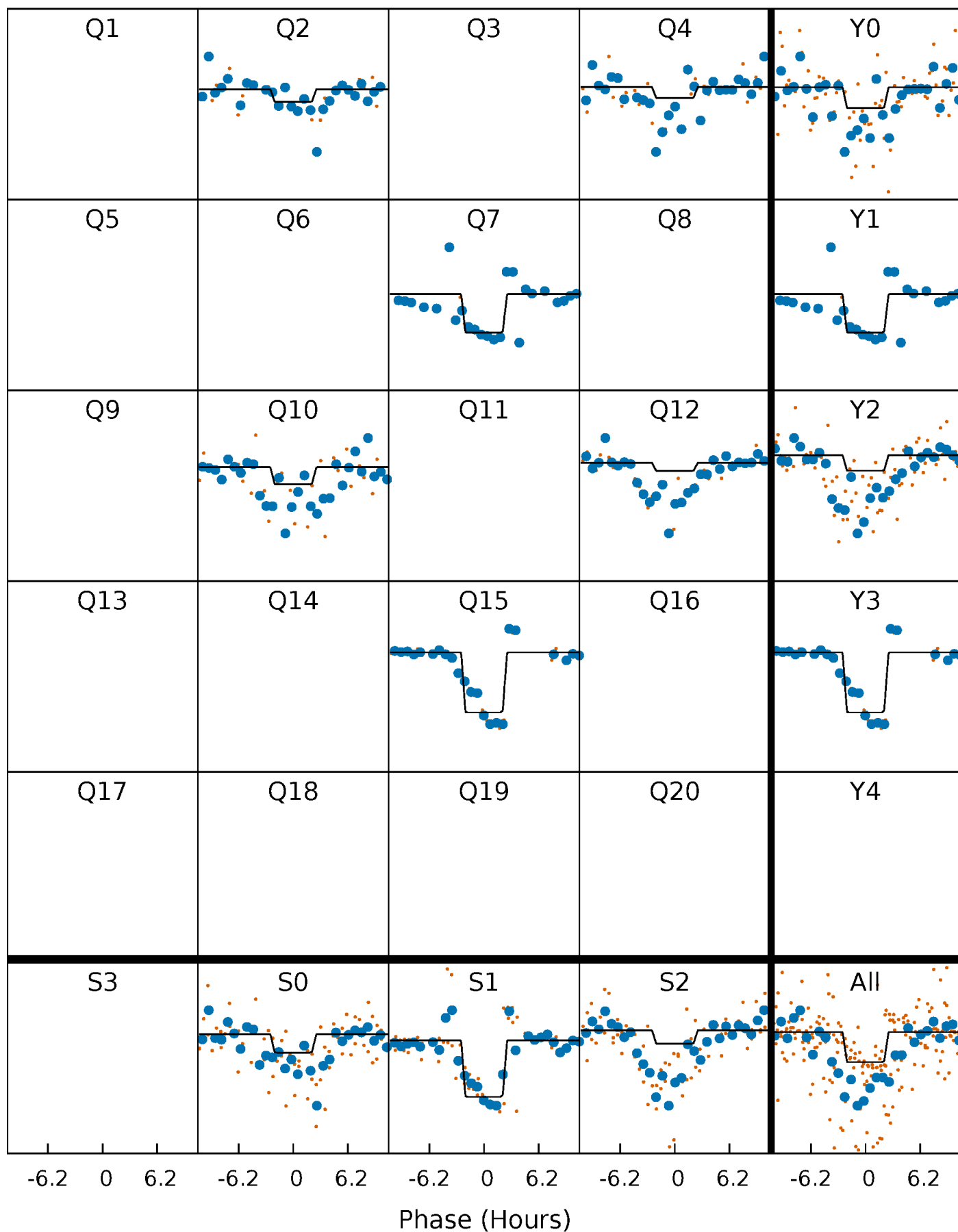
DV Quarter-Phased Transit Curves

TCE 006192847-07 $P=239.018162$ Days $T_0=199.755679$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

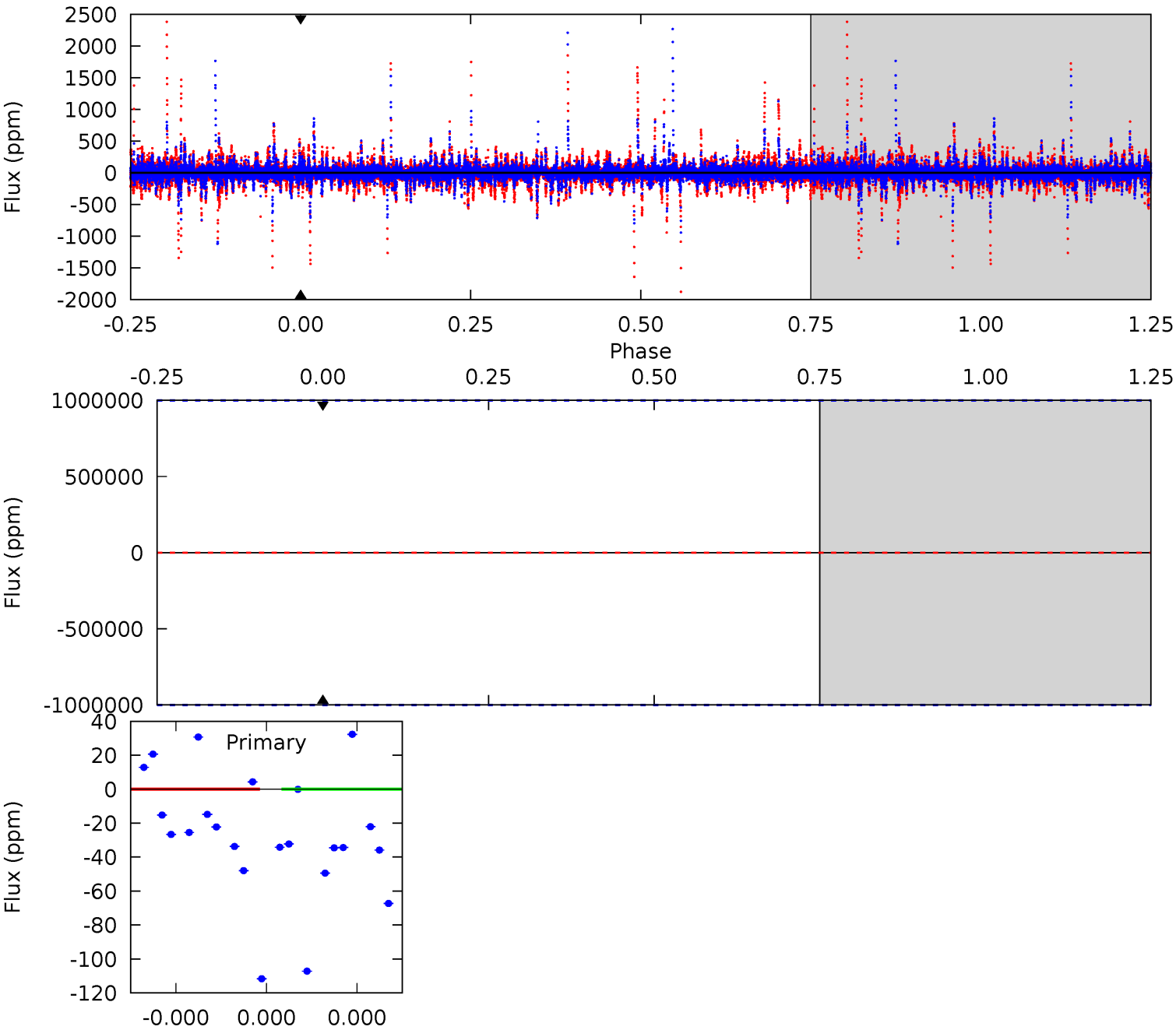
TCE 006192847-07 $P=239.018162$ Days $T_0=199.777344$ (BKJD)



DV Model-Shift Uniqueness Test

006192847-07, P = 239.018162 Days, E = 199.755679 Days

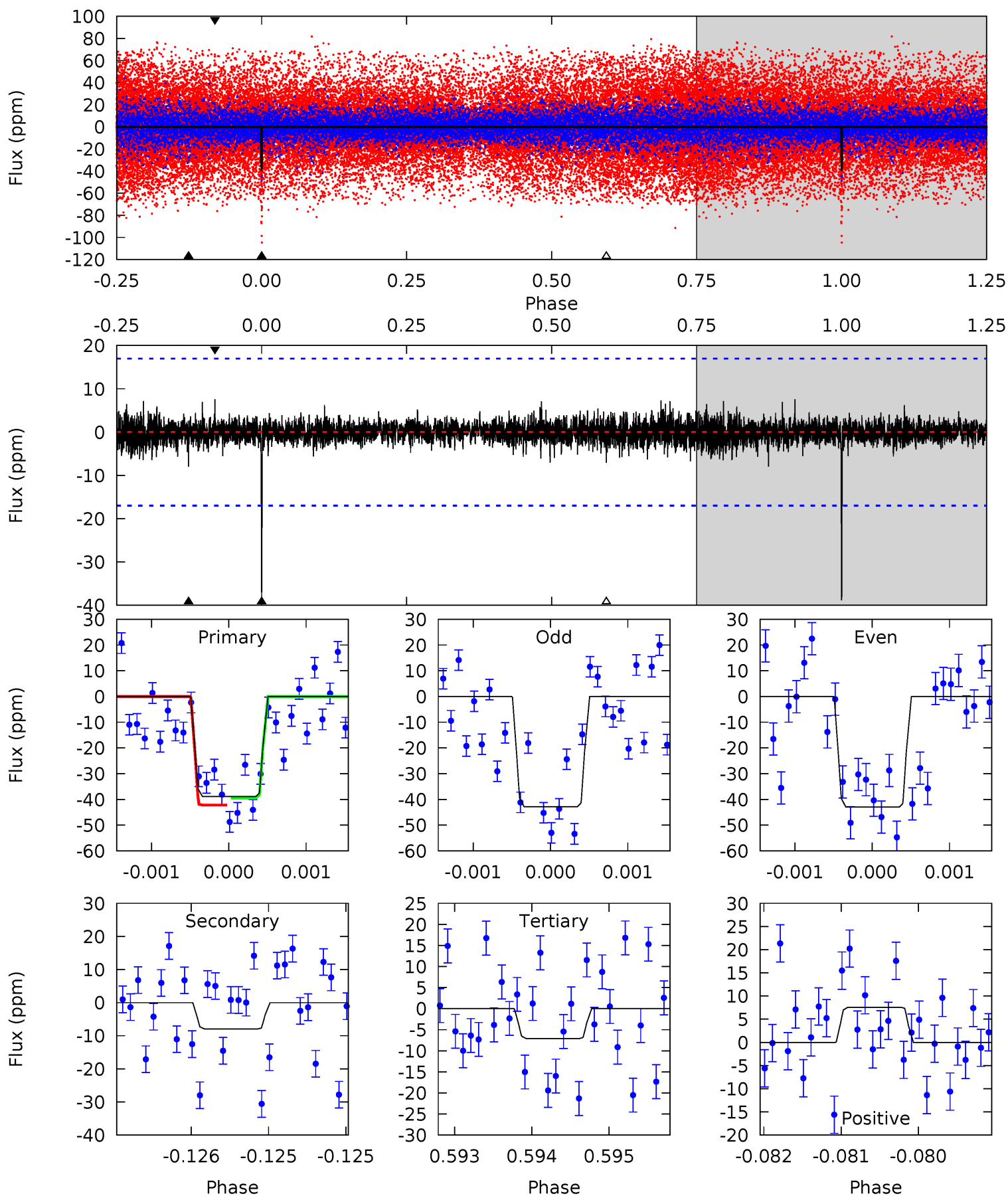
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
0	0	0	0	1.00	1.00	1.00	0	0	0	0	0	0	0	0



Alt Model-Shift Uniqueness Test

006192847-07, P = 239.018162 Days, E = 199.777344 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
12.5	2.56	2.28	2.44	5.46	3.31	0.53	10.2	10.1	0.28	0.12	0.03	1.27	0.16	0



Stellar Parameters For KIC 006192847

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (g \cdot \text{cm}^{-3})$
	3916^{+88}_{-107}	$1.032^{+0.030}_{-0.030}$	$-0.180^{+0.200}_{-0.250}$	$67.438^{+2.428}_{-14.567}$	$1.785^{+0.071}_{-0.643}$	$0.000^{+0.000}_{-0.000}$
	+2%/-3%	+3%/-3%	+111%/-139%	+4%/-22%	+4%/-36%	+29%/-8%
Source	PHO54	AST54	PHO54	DSEP		

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

Secondary Eclipse Parameters for KIC 006192847-07 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	0 ± 1000000	$536.17^{+530.07}_{-357.62}$	2078^{+51}_{-66}	2328^{+7575}_{-10613}	$0.500^{+357.583}_{-217.916}$
Alt.	-8 ± 3	$522.65^{+548.80}_{-372.49}$	2075^{+52}_{-62}	-2396^{+172}_{-54}	$0.013^{+0.142}_{-0.010}$

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 $A_{obs} \gg 1.0$

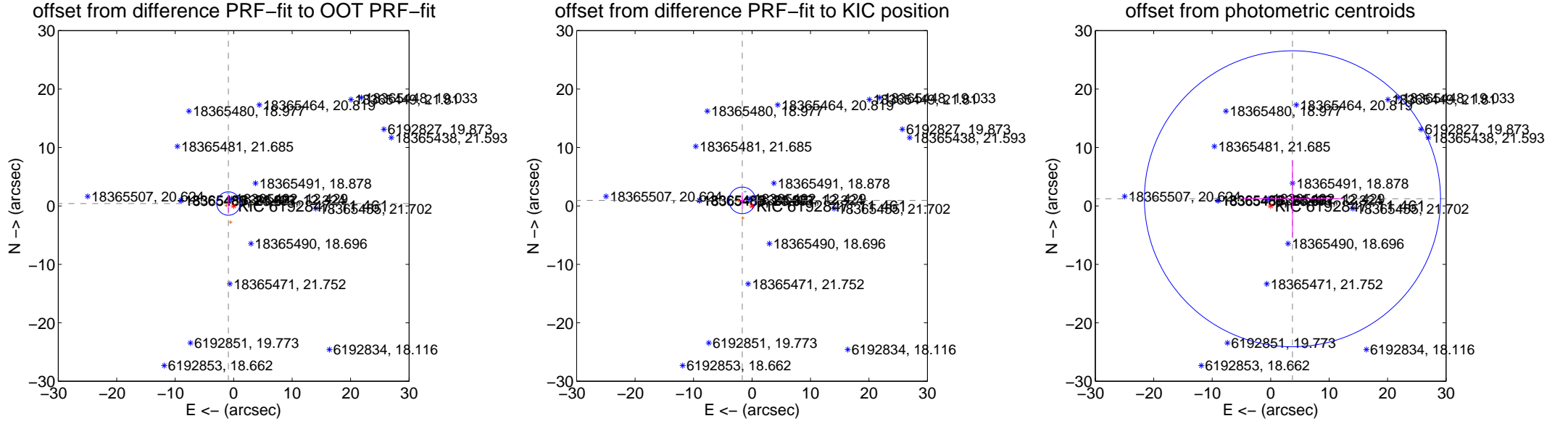
DV Centroid Data

Supplemental centroid analysis for 006192847-07. **Kepler magnitude: 11.46.** Transit SNR -1.00

There are 1 quarters with good PRF difference image offsets

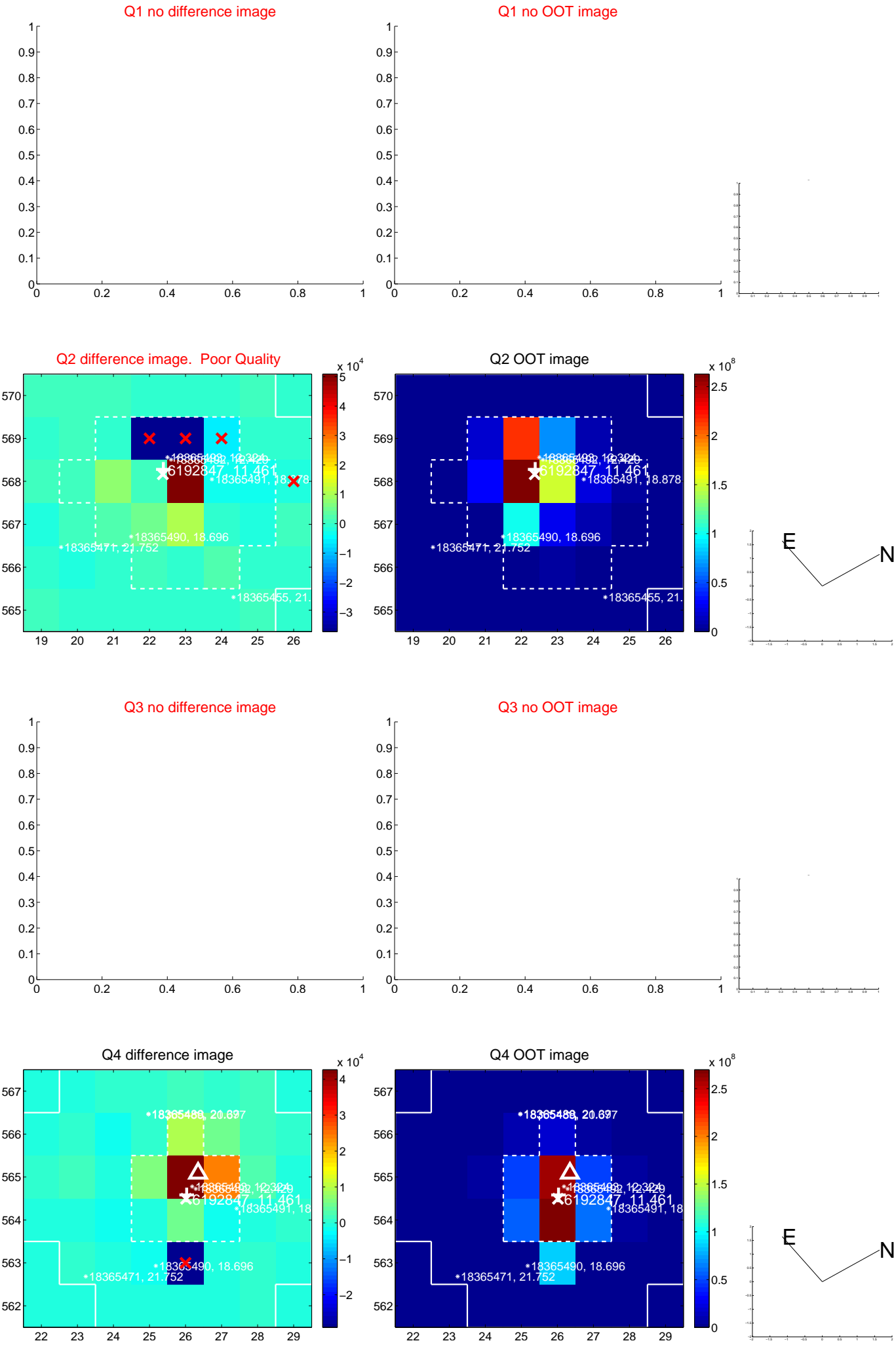
The direct PRF centroid is offset from the target star catalog position by about 1.37 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.984 ± 0.668	1.47	0.895 ± 0.240	0.408 ± 1.521
PRF-fit source offset from KIC position	1.924 ± 0.757	2.54	1.675 ± 0.377	0.947 ± 1.387
photometric centroid source offset	3.92 ± 8.44	0.46	-3.73 ± 8.62	1.22 ± 6.58

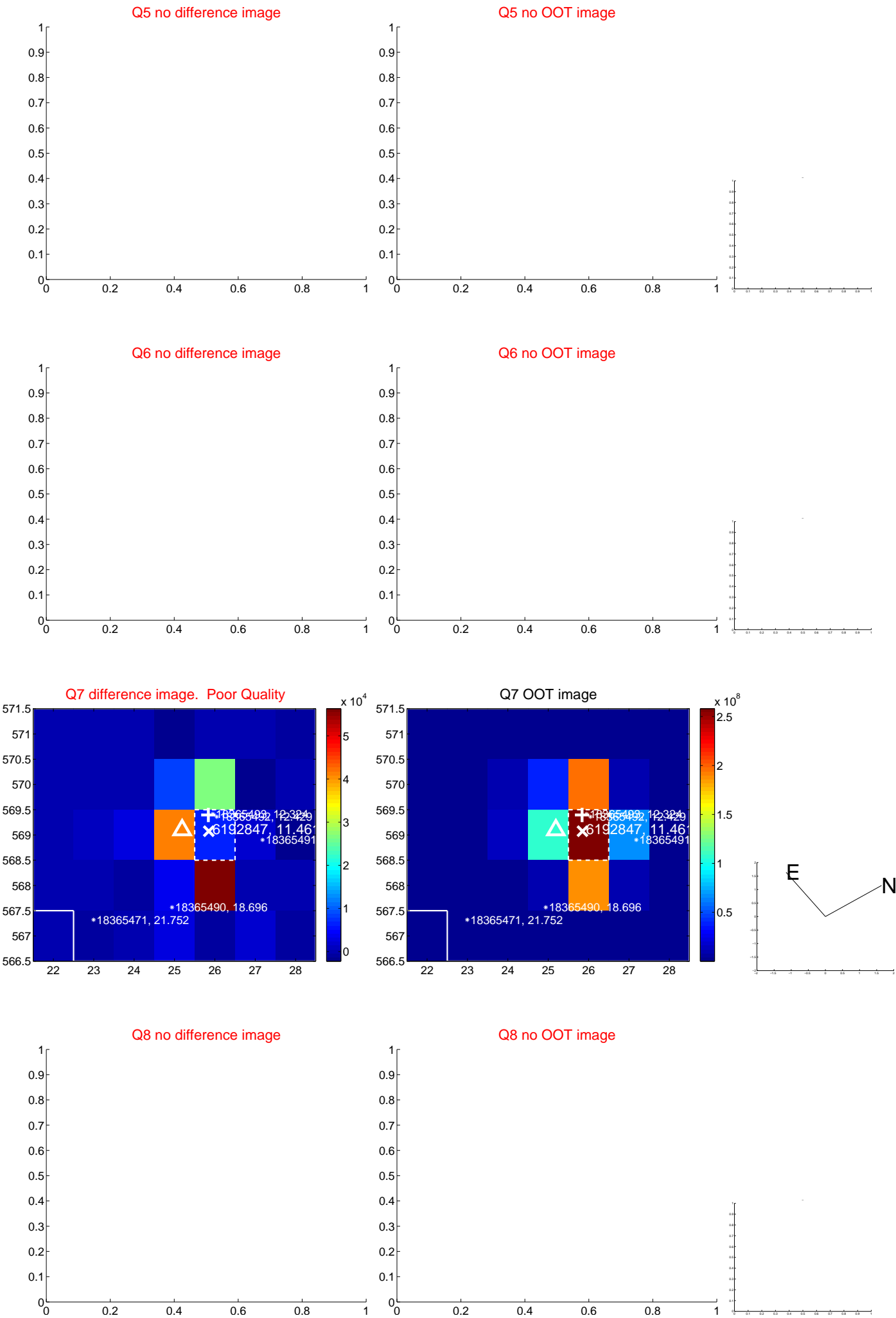


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets;** magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

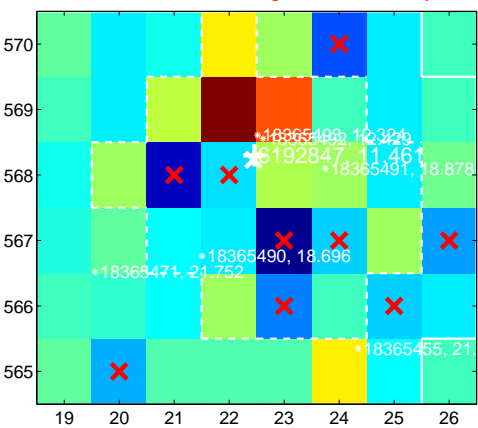
Q9 no difference image



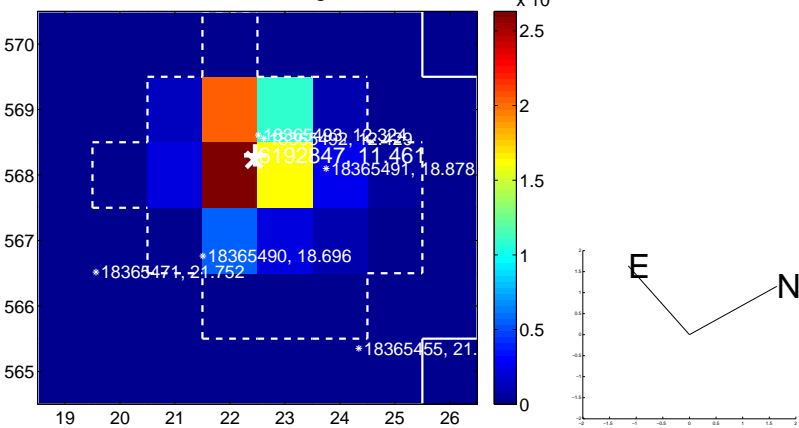
Q9 no OOT image



Q10 difference image. Poor Quality



Q10 OOT image



Q11 no difference image



Q11 no OOT image



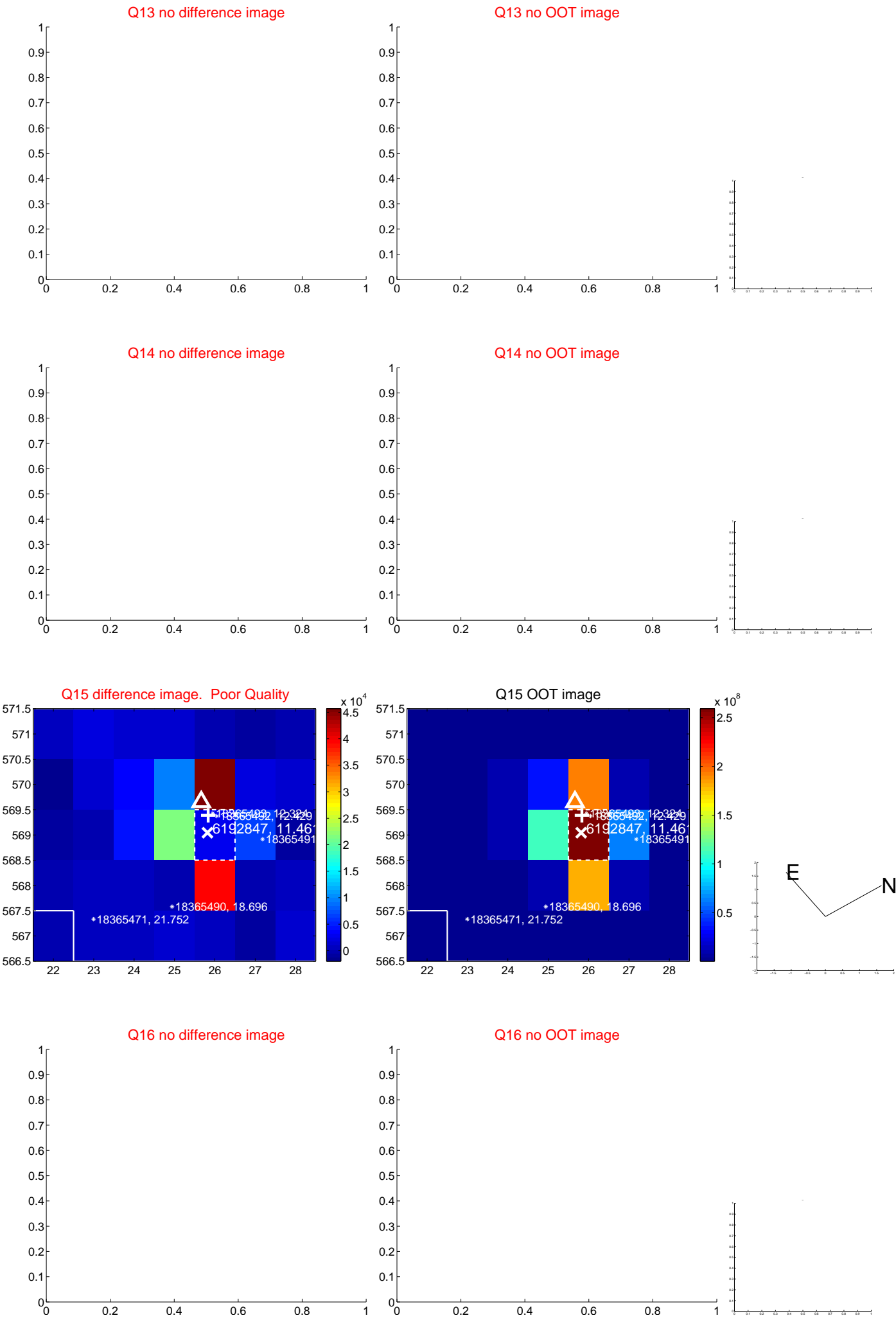
Q12 no difference image



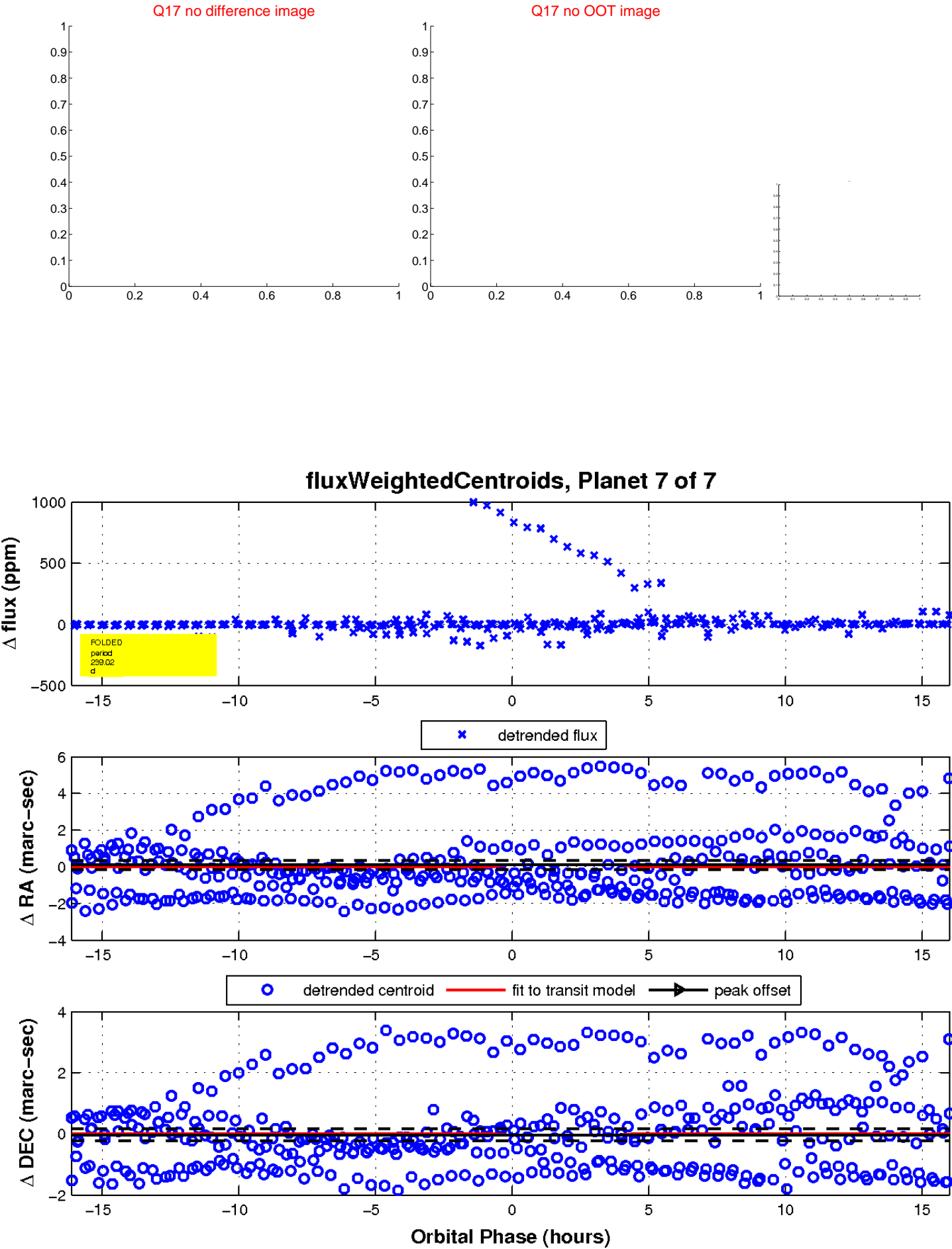
Q12 no OOT image



white ×: KIC target position; +: OOT centroid; △: difference centroid. red ✕: large negative pixel value.



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



UKIRT Image

Declination

