

KIC 006302008

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})
006302008-01	OBS	No	0.665869	131.973408	40.9	4.124	7.2	6.6	0.99	5689	0.76	4477.84
006302008-04	OBS	No	457.427330	355.529584	7059.6	32.563	10.3	6.9	0.99	5689	8.26	0.74
006302008-06	OBS	No	294.633170	151.619532	1764.8	3.000	9.8	-1.0	0.99	5689	4.14	1.33

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
006302008-01	OBS	FP	0.00	1	0	1	1	LPP_DV—CENT_RESOLVED_OFFSET—EPHEM_MATCH
006302008-04	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_MARSHALL—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_TER_ALT—MOD_POS_ALT—INCONSISTENT_TRANS—CENT_FEW_DIFFS
006302008-06	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_MARSHALL—LPP_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—INCONSISTENT_TRANS—CENT_NOFITS

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

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

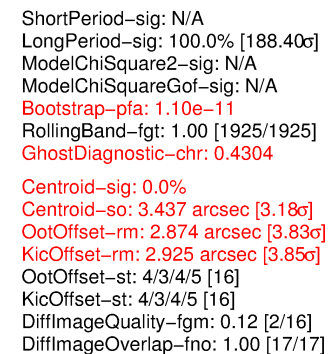
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 006302008-01

TCE (1)	KIC	Parent (2)	Parent KIC	$P_1:P_2$	Dist ($''$)	Δ Row	Δ Col	m_2	m_1	D_2/D_1	Mechanism	Flag	σ_P	σ_T
006302008-01	6302008	006302051-pri	6302051	1:1	29.3	-6	-4	13.33	15.09	4668.30	Direct-PRF	0	0.71	1.18

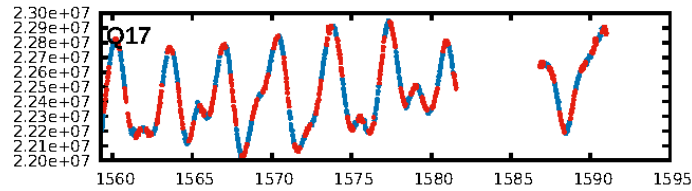
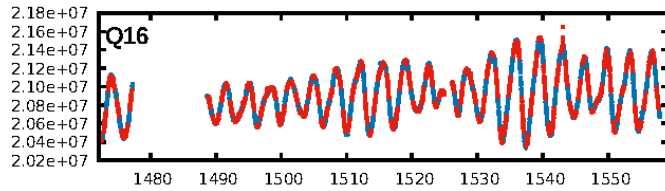
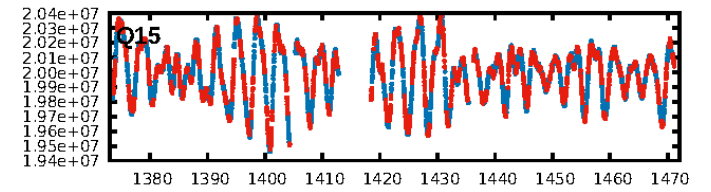
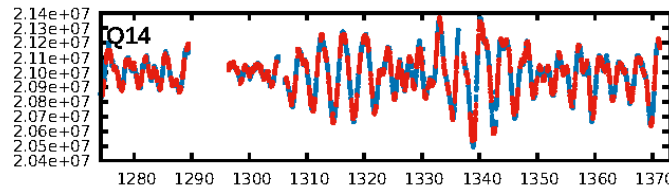
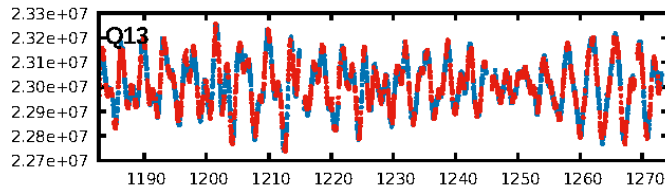
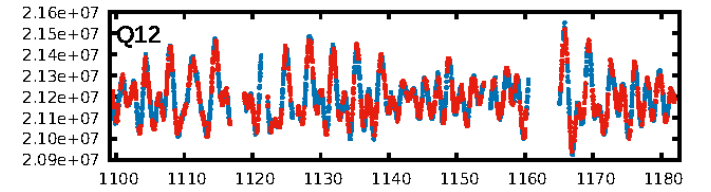
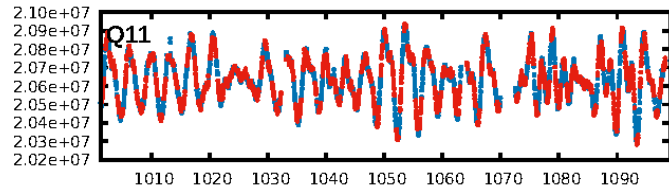
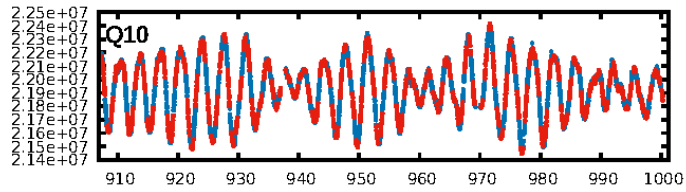
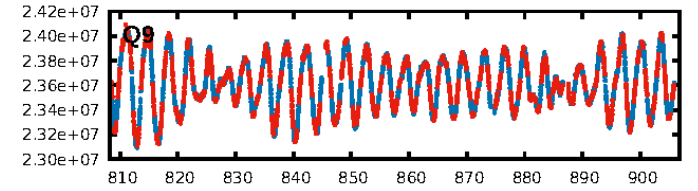
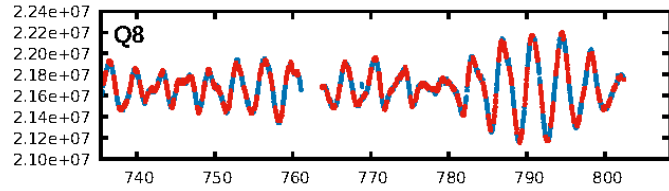
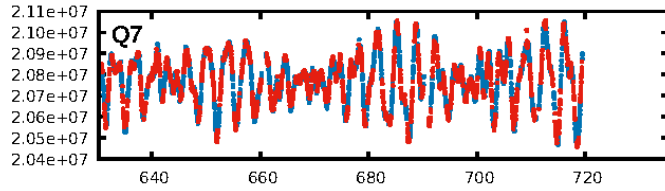
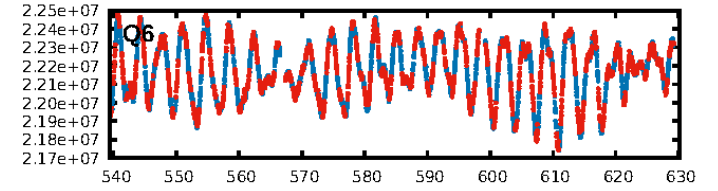
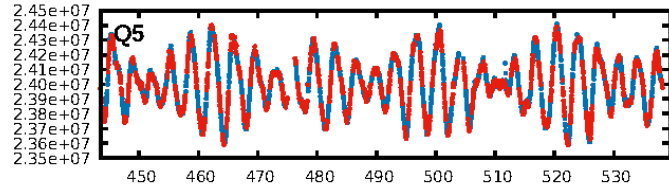
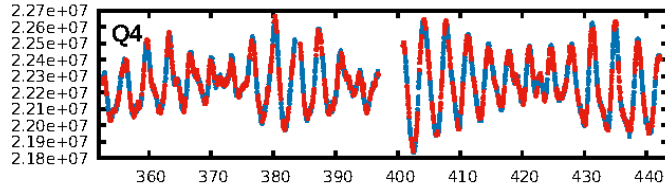
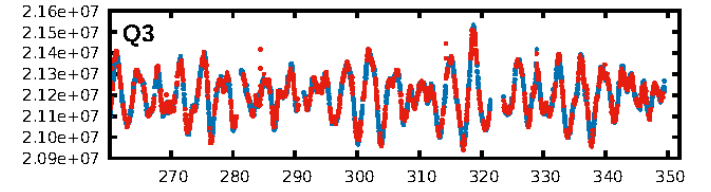
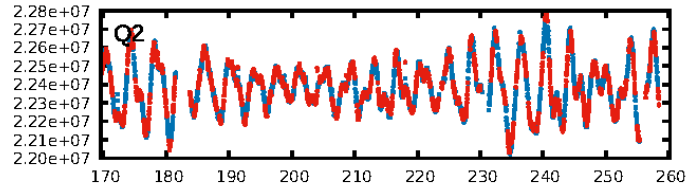
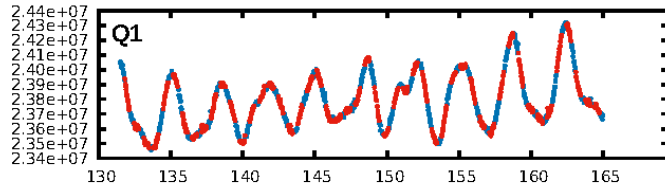
Notes: $P_1:P_2$ is the period ratio. Dist is the distance in arcseconds. Δ Row and Δ Col are the number of pixels apart in row and column. m_2 and m_1 are the magnitudes of the parent and child. D_2/D_1 is the parent's transit depth divided by the child's. σ_P and σ_T are the significance of the match in period and epoch. For a match to be considered significant $\sigma_P < 5.0$ and $\sigma_T < 5.0$. Matches which have σ_P and σ_T very close to this cutoff should receive extra scrutiny, especially if the period ratio is very large.

KIC: 6302008 Candidate: 1 of 6 Period: 0.666 d

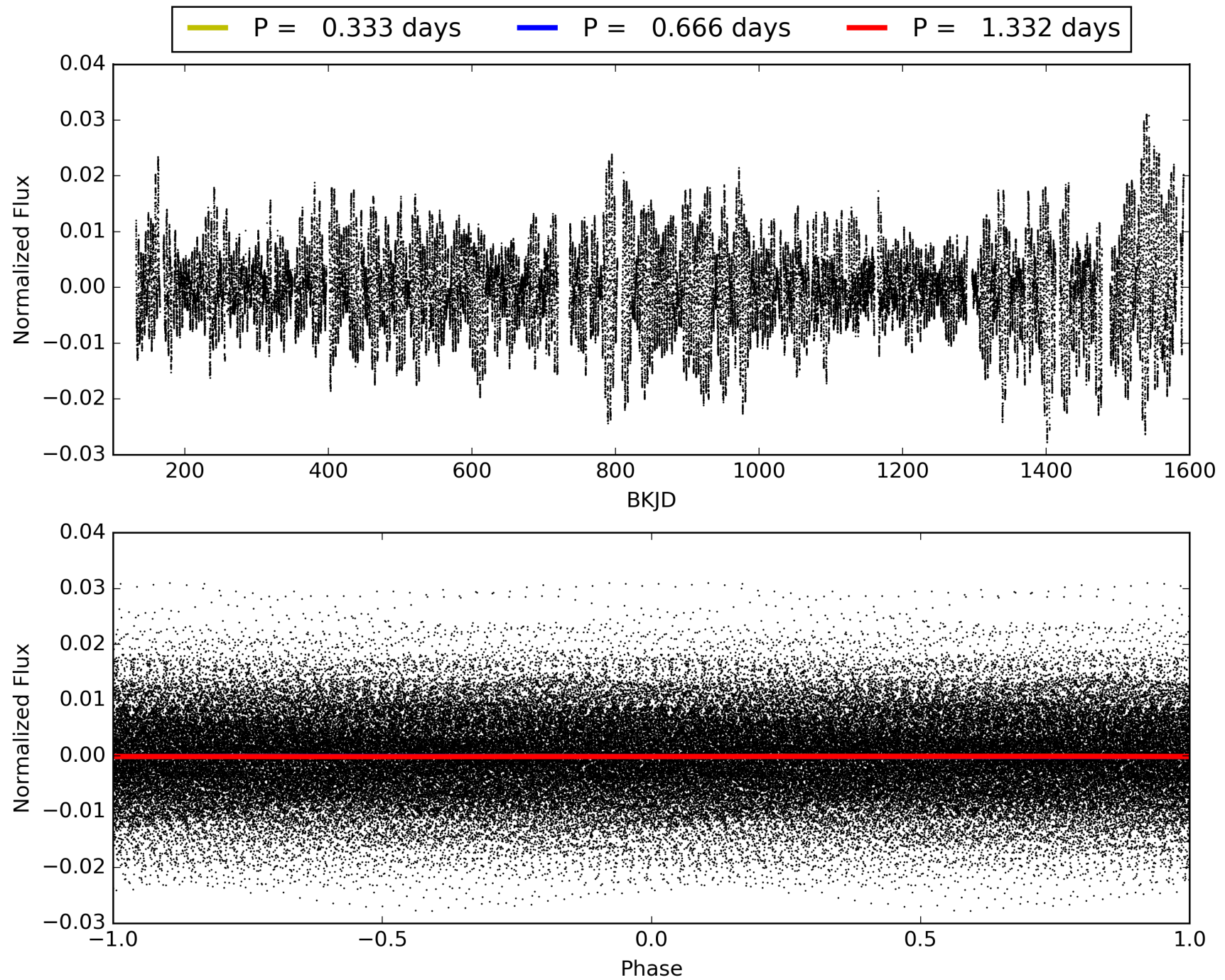


This Data Validation Report Summary was produced in the Kepler Science Operations Center Pipeline at NASA Ames Research Center

TCE 006302008-01, PDC Light Curves

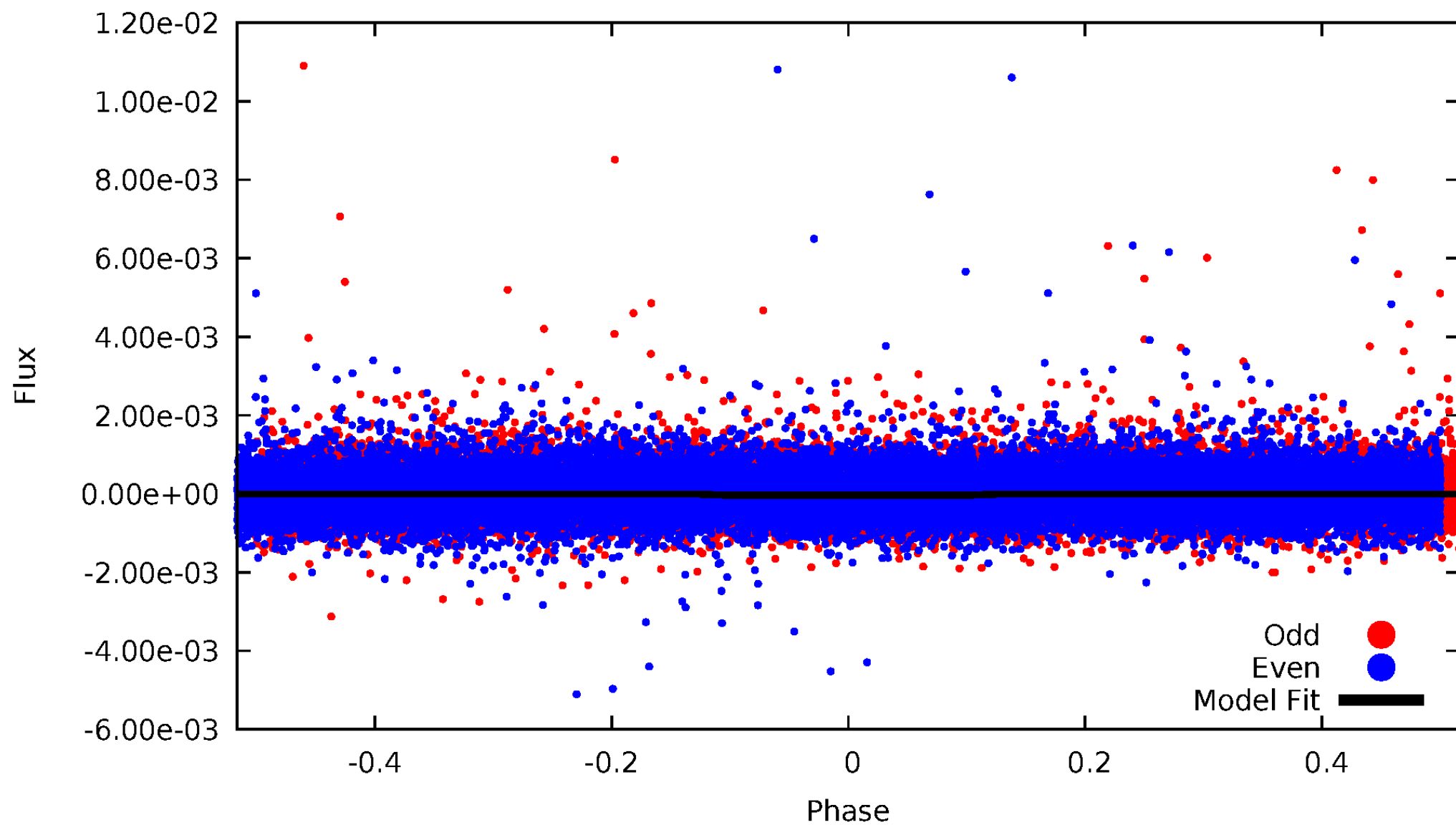


TCE 006302008-01



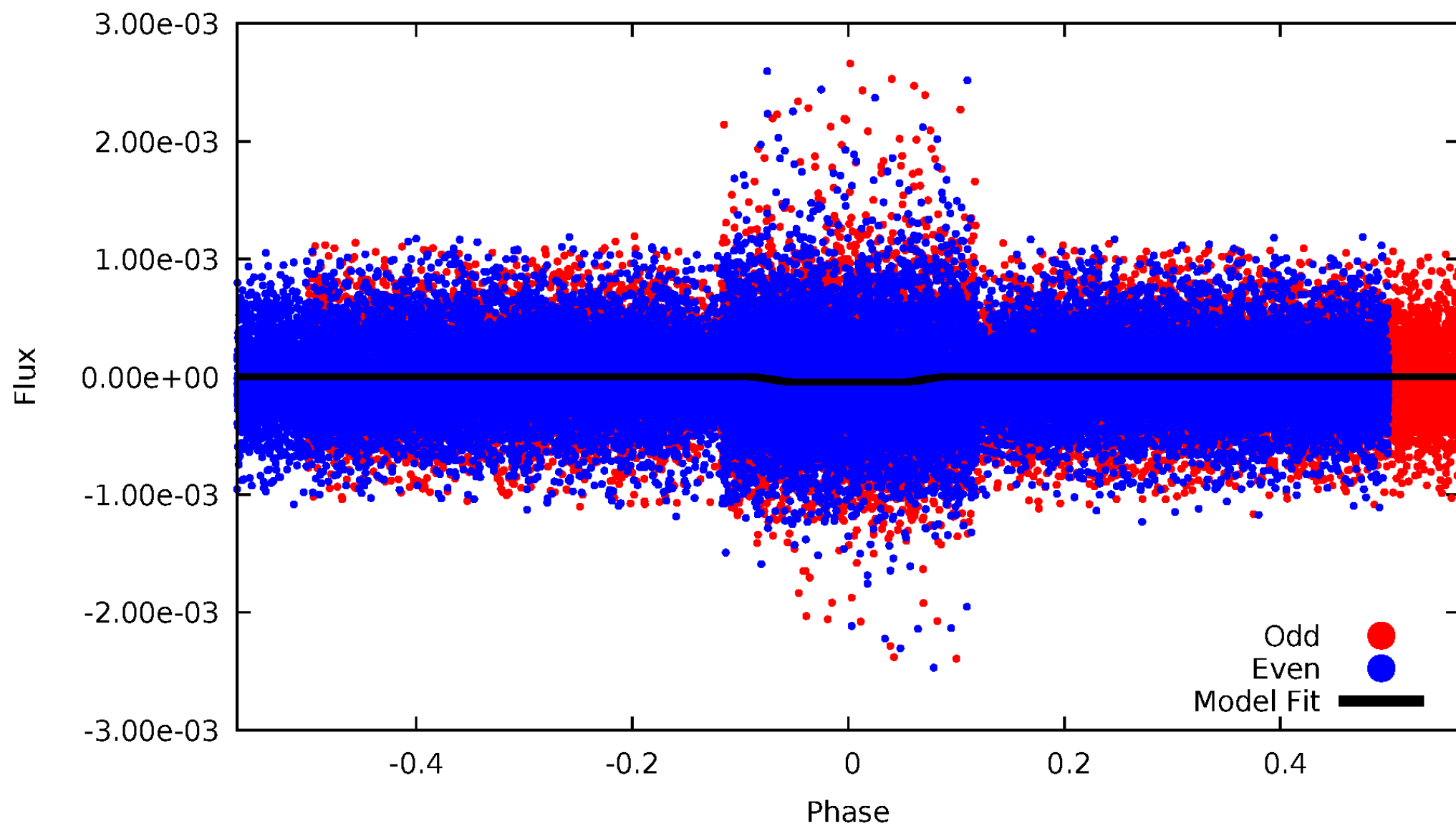
DV Odd/Even

TCE 006302008-01



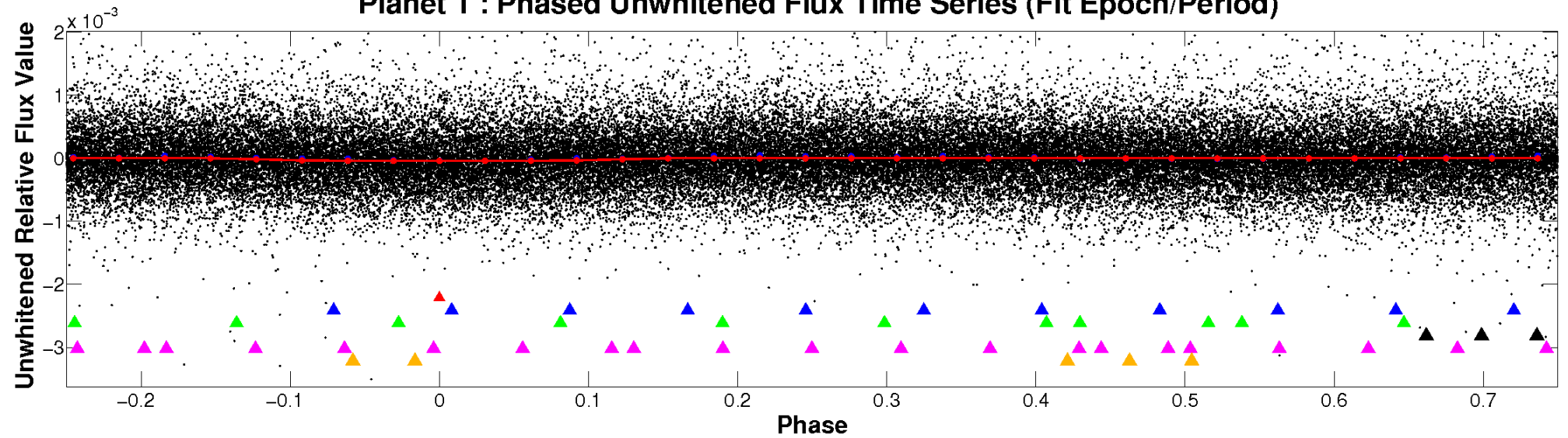
ALT Odd/Even

TCE 006302008-01

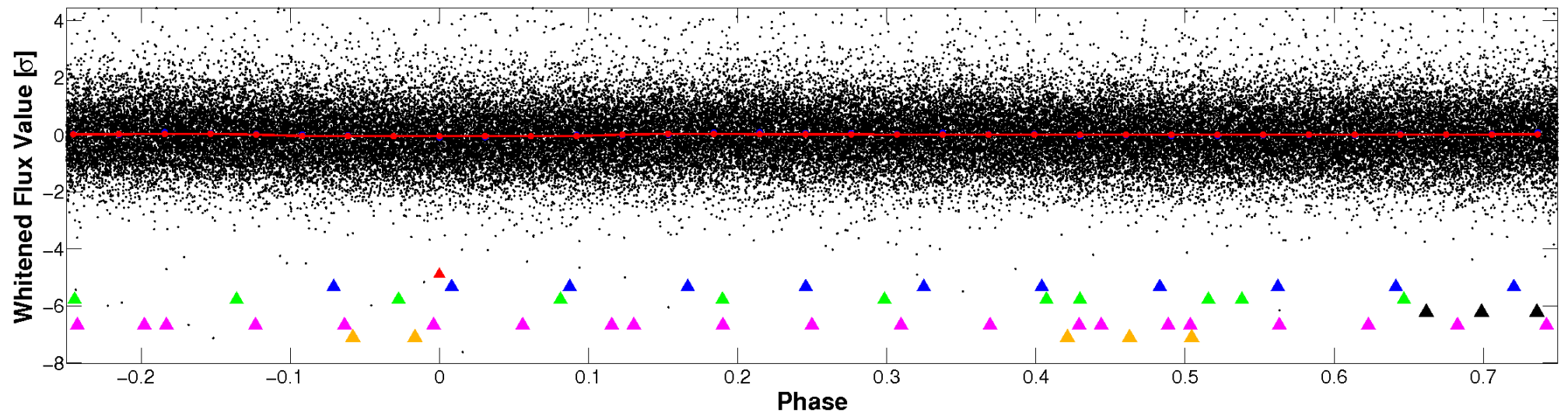


Non-Whitened Vs. Whitened Light Curve

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

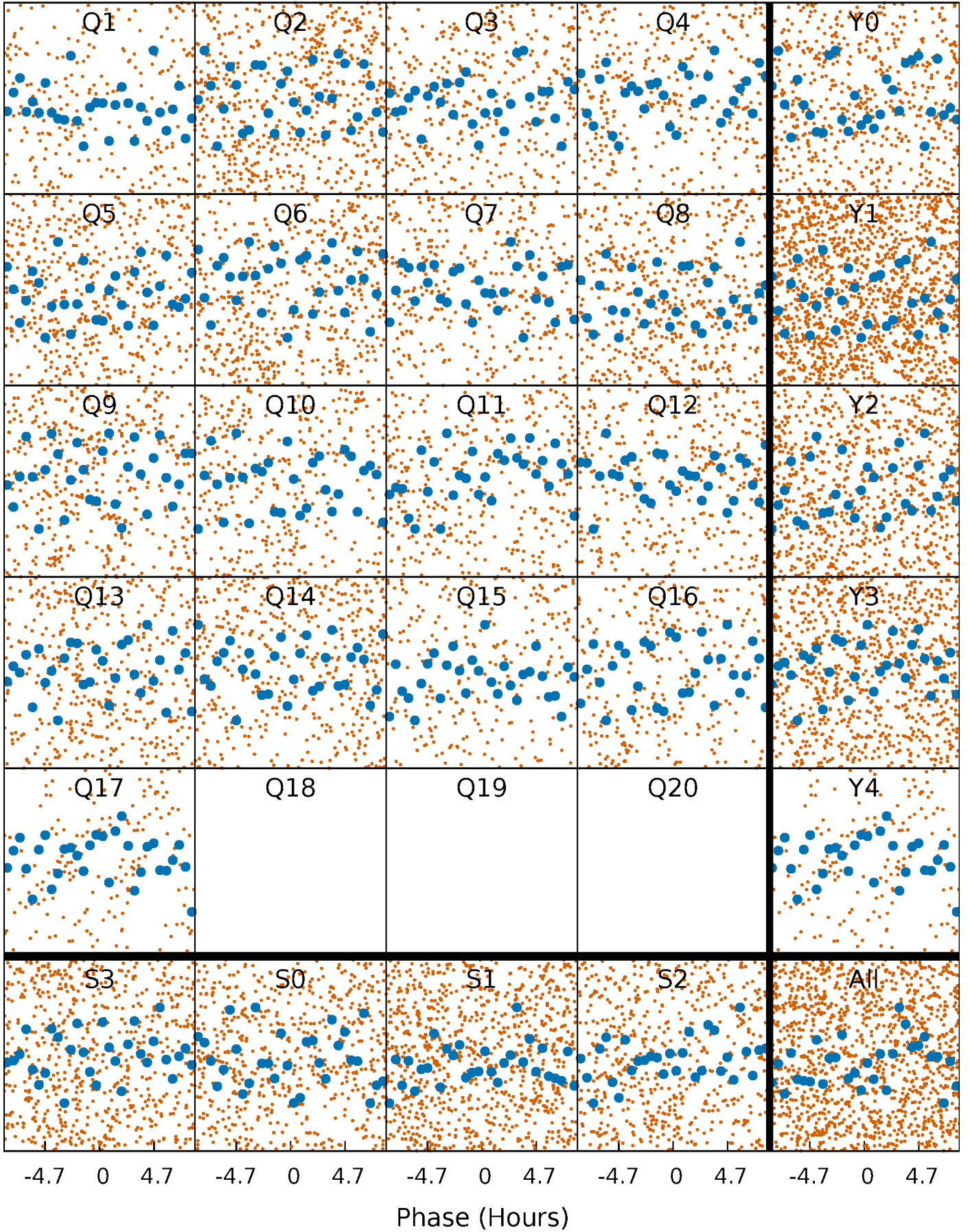


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



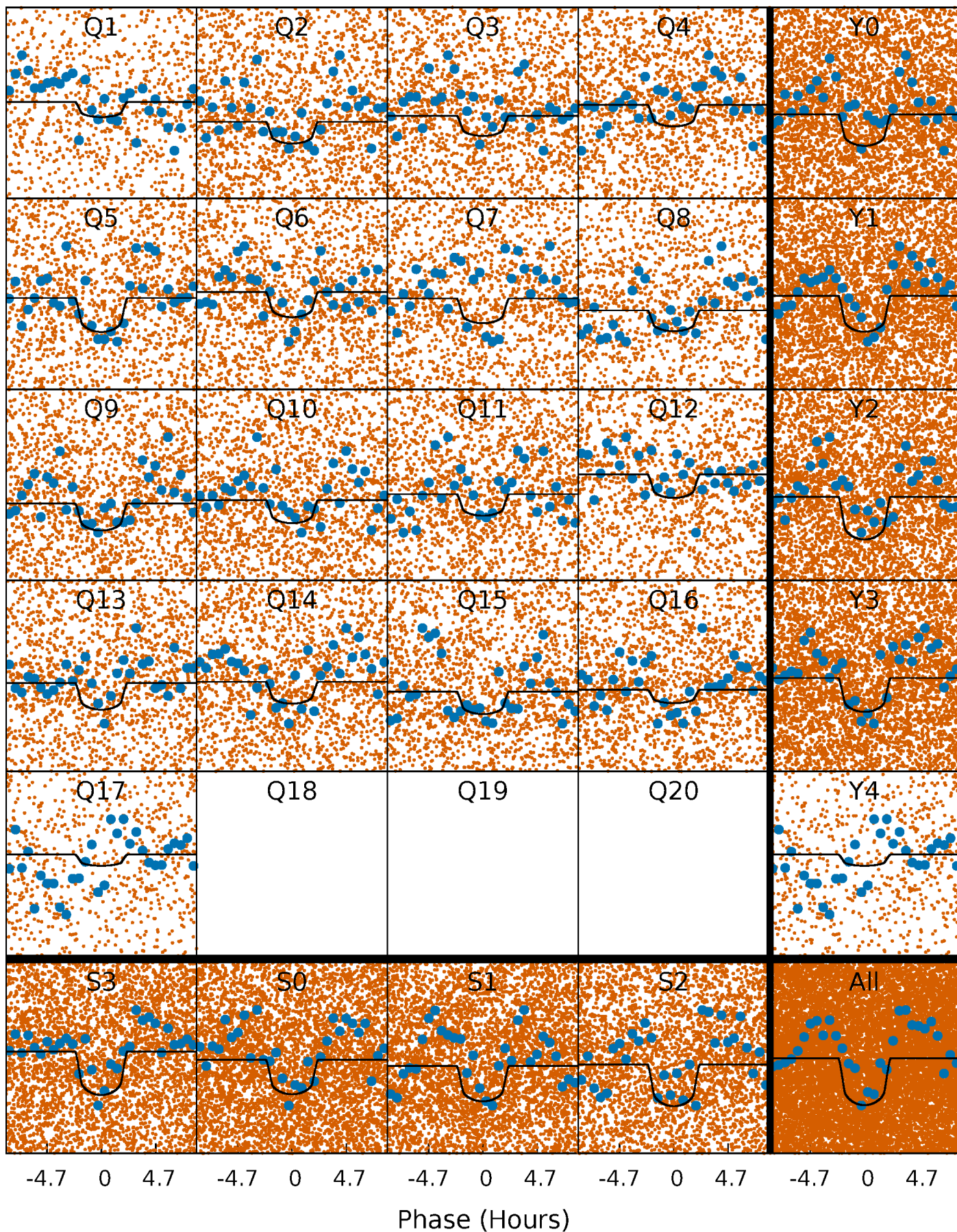
PDC Quarter-Phased Transit Curves

TCE 006302008-01 P= 0.665869 Days $T_0=131.973408$ (BKJD)



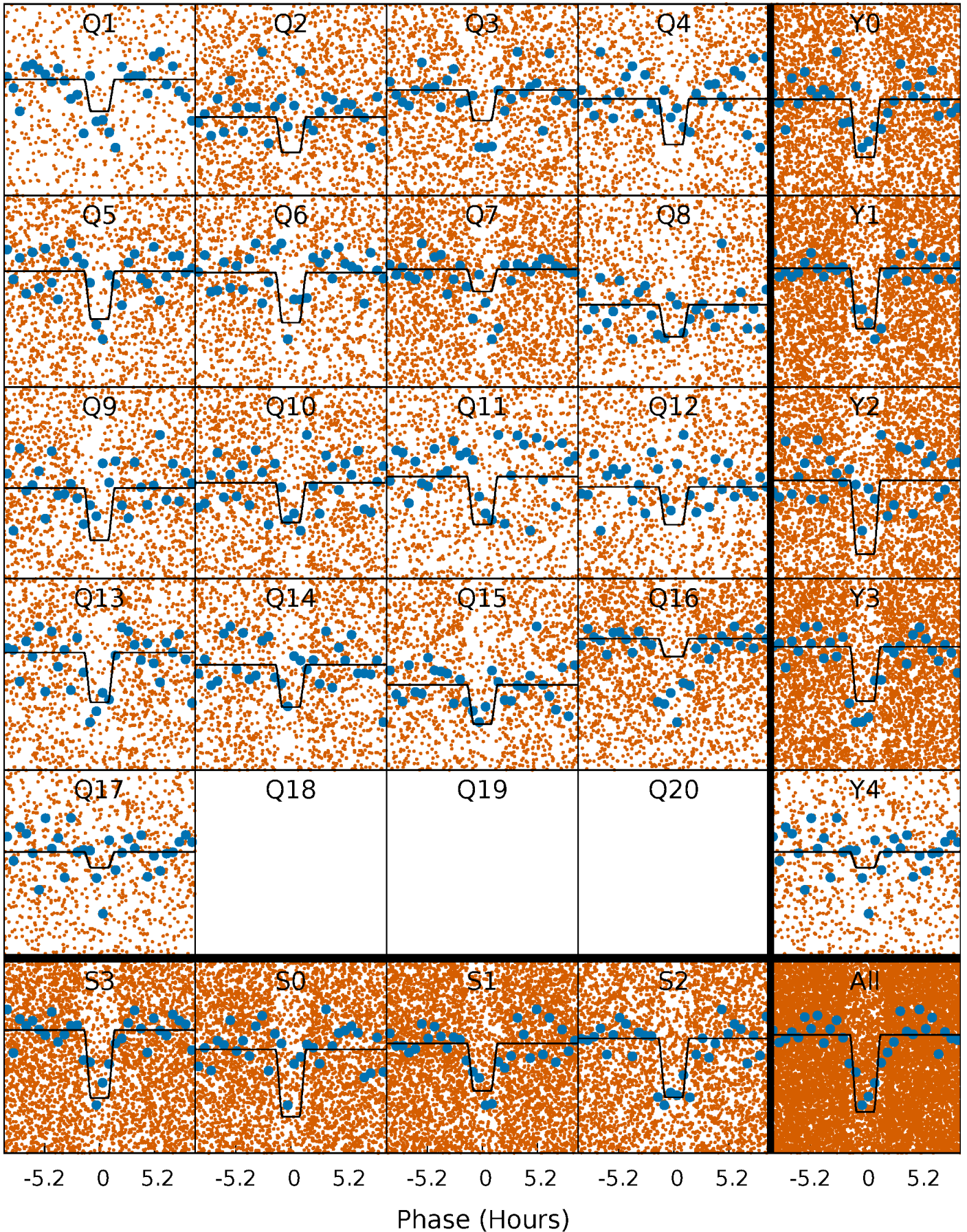
DV Quarter-Phased Transit Curves

TCE 006302008-01 P= 0.665869 Days $T_0=131.973408$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

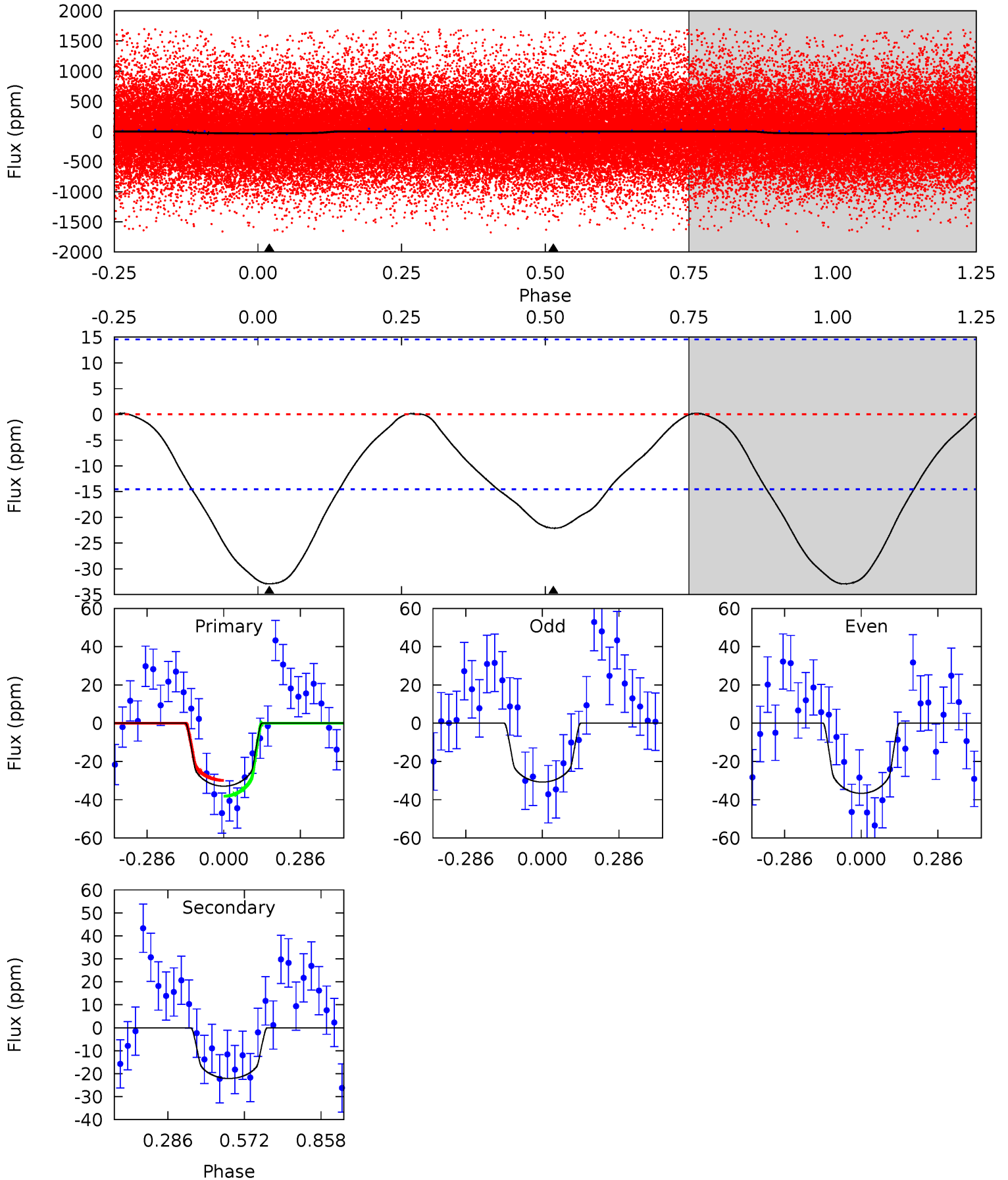
TCE 006302008-01 P= 0.665879 Days $T_0=131.961163$ (BKJD)



DV Model-Shift Uniqueness Test

006302008-01, P = 0.665869 Days, E = 131.307539 Days

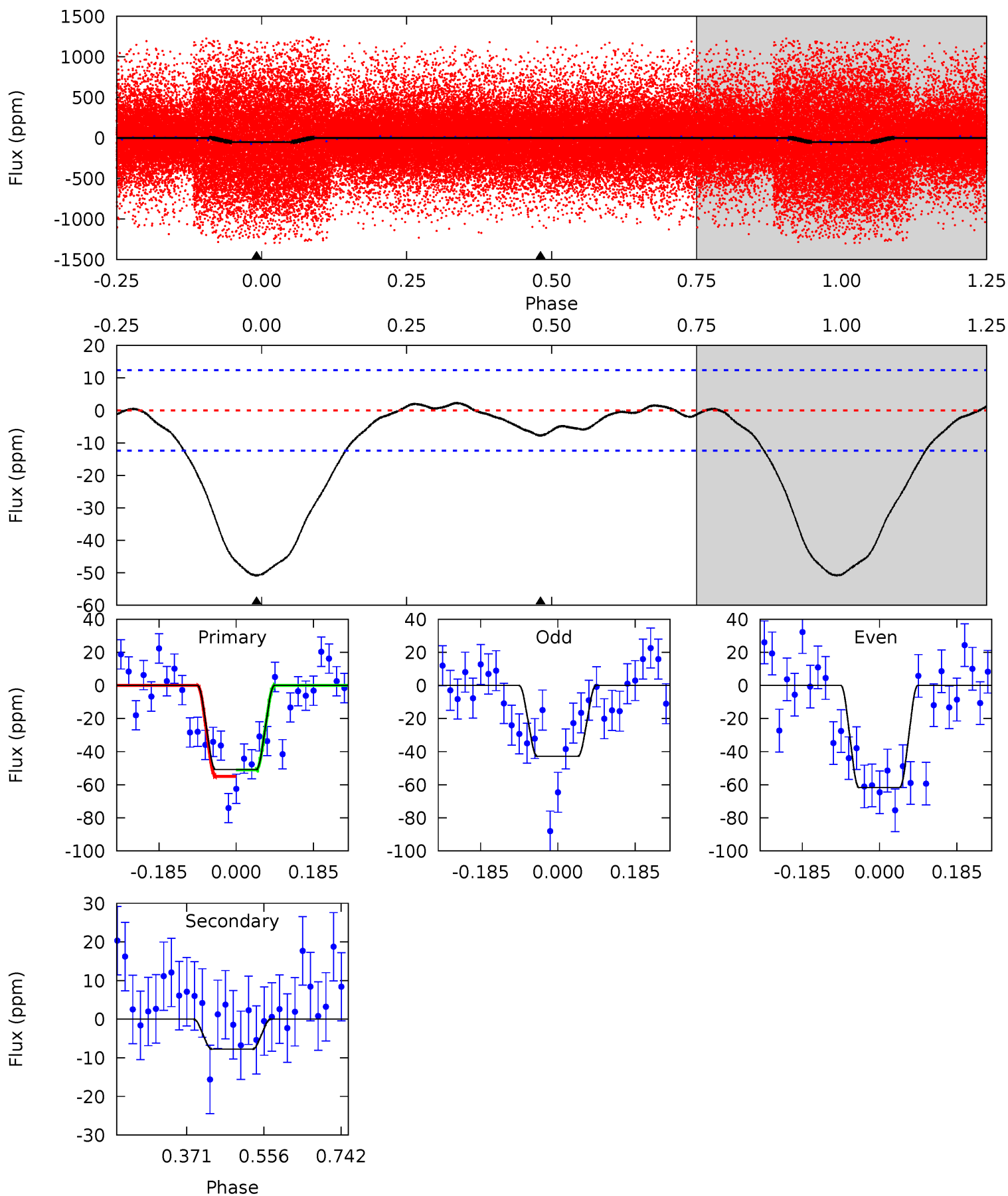
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
9.82	6.60	0	0	4.34	1.07	0.09	9.82	9.82	6.60	6.60	0.90	0.71	0.01	1.25



Alt Model-Shift Uniqueness Test

006302008-01, P = 0.665879 Days, E = 131.295284 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
18.2	2.77	0	0	4.43	1.32	0.64	18.2	18.2	2.77	2.77	3.36	1.09	0.04	0.70



Stellar Parameters For KIC 006302008

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	5689^{+169}_{-169}	$4.396^{+0.128}_{-0.192}$	$-0.100^{+0.300}_{-0.300}$	$0.995^{+0.280}_{-0.151}$	$0.899^{+0.125}_{-0.083}$	$1.285^{+0.716}_{-0.618}$
	+3%/-3%	+3%/-4%	+300%/-300%	+28%/-15%	+14%/-9%	+56%/-48%
Source	PHO1	KIC0	KIC0	DSEP		

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

Secondary Eclipse Parameters for KIC 006302008-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-22 ± 3	$0.81^{+0.55}_{-0.45}$	2939^{+225}_{-176}	4603^{+2236}_{-885}	$3.727^{+16.896}_{-2.365}$
Alt.	-8 ± 3	$0.78^{+0.52}_{-0.44}$	2935^{+215}_{-165}	3731^{+1682}_{-966}	$1.439^{+6.436}_{-0.985}$

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

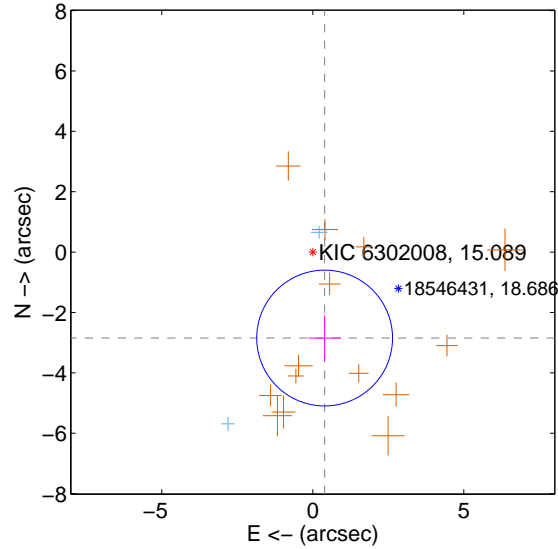
Supplemental centroid analysis for 006302008-01. Kepler magnitude: 15.09. Transit SNR 6.55

There are 2 quarters with good PRF difference image offsets

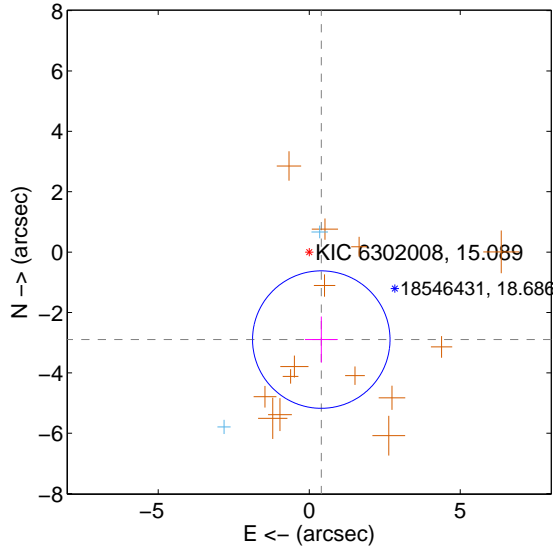
The direct PRF centroid is offset from the target star catalog position by about 0.07 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	2.874 ± 0.750	3.83	-0.393 ± 0.542	-2.847 ± 0.753
PRF-fit source offset from KIC position	2.925 ± 0.759	3.85	-0.399 ± 0.542	-2.897 ± 0.762
photometric centroid source offset	3.44 ± 1.08	3.18	2.98 ± 1.08	-1.71 ± 1.07

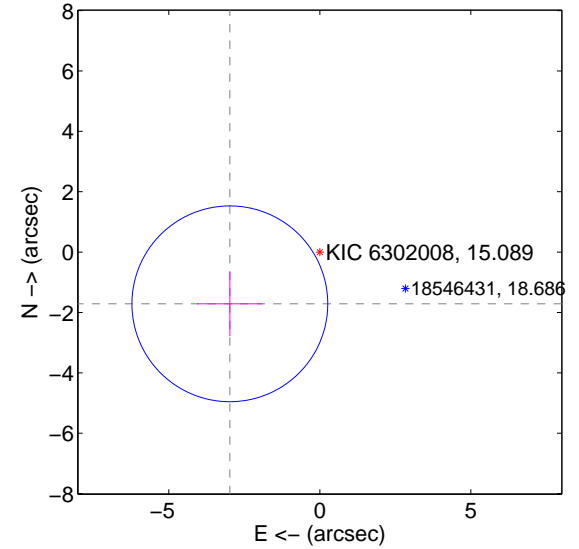
offset from difference PRF-fit to OOT PRF-fit



offset from difference PRF-fit to KIC position

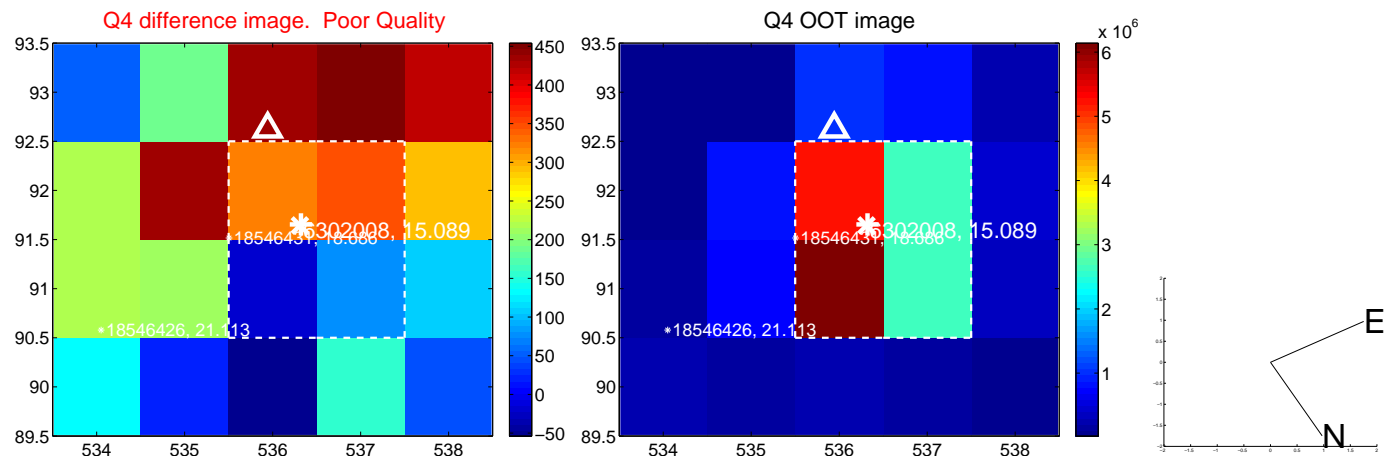
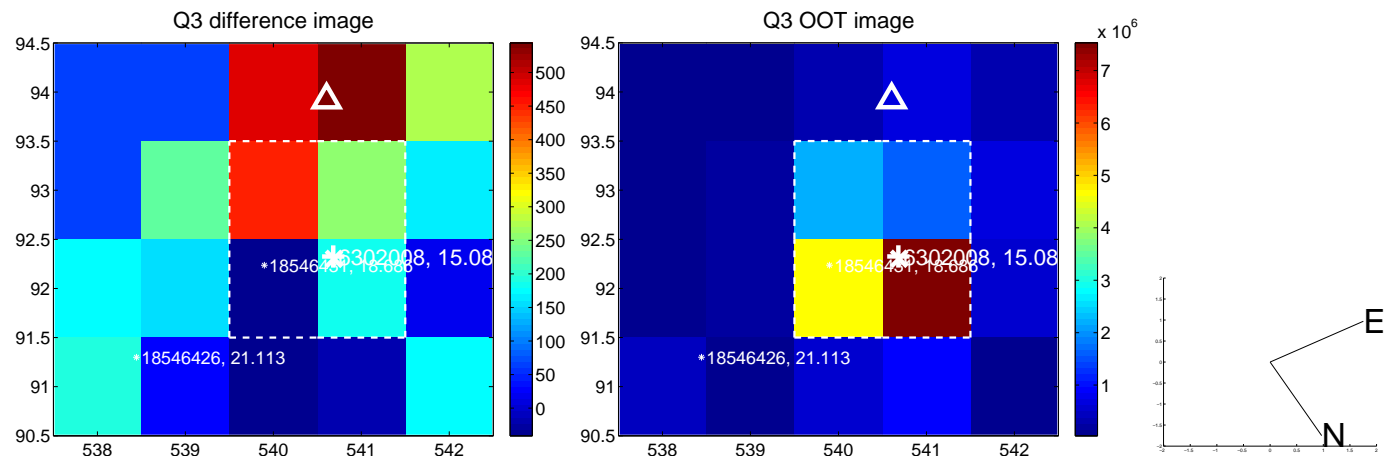
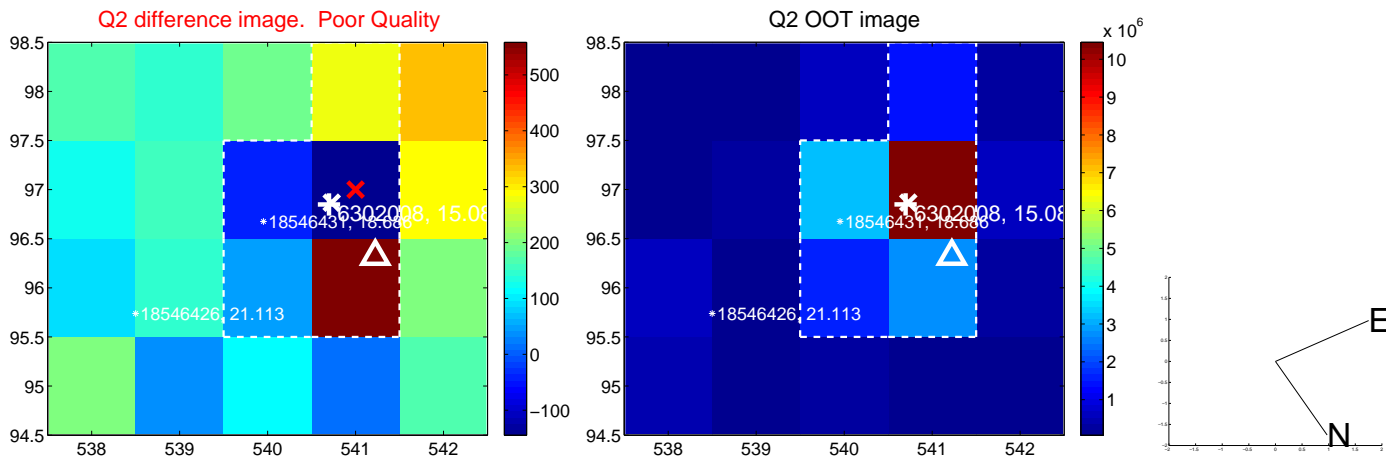
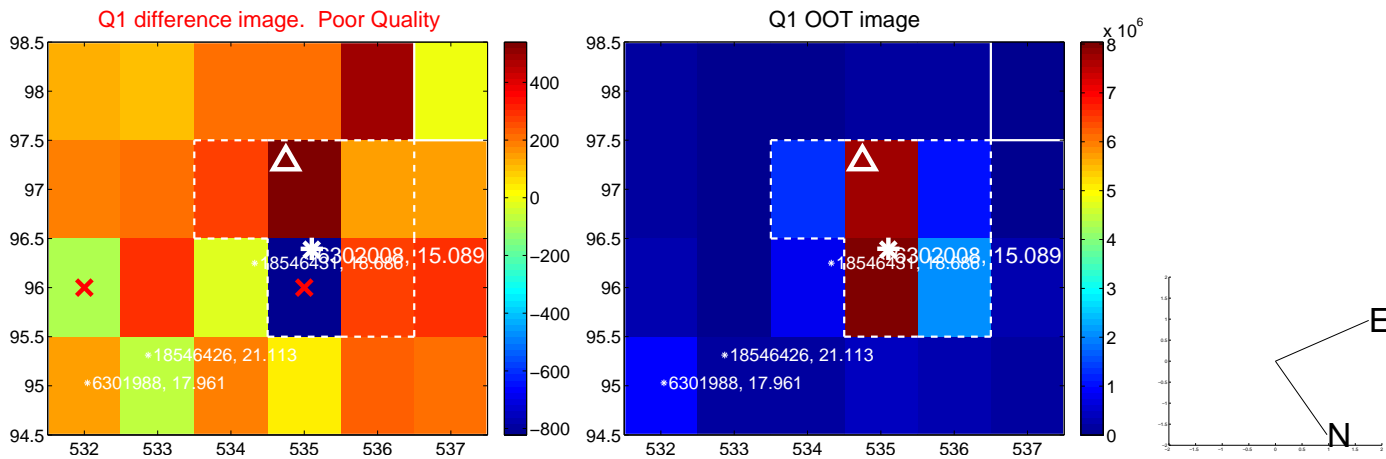


offset from photometric centroids

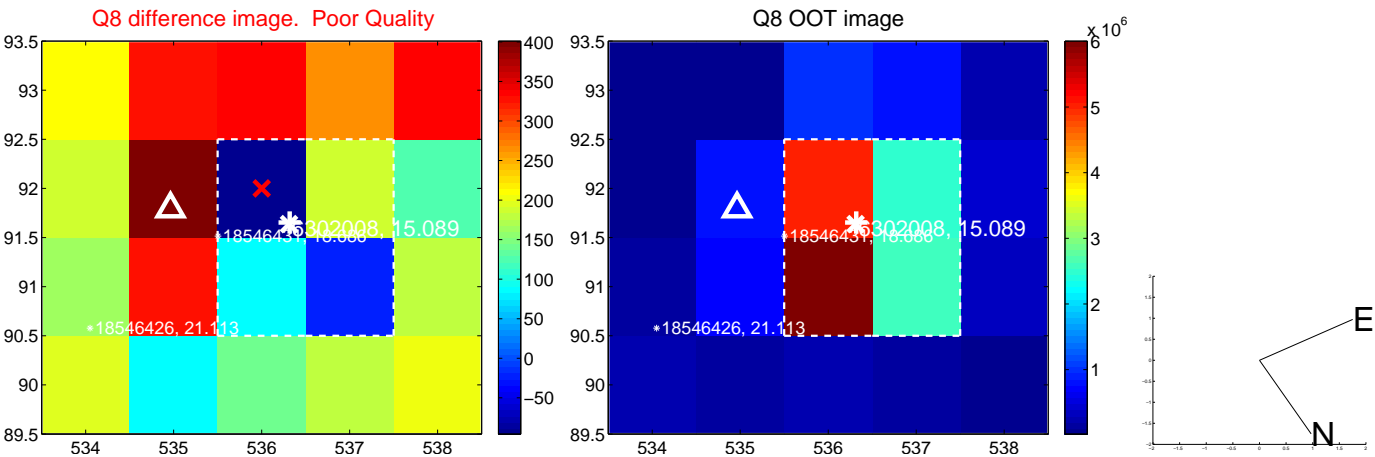
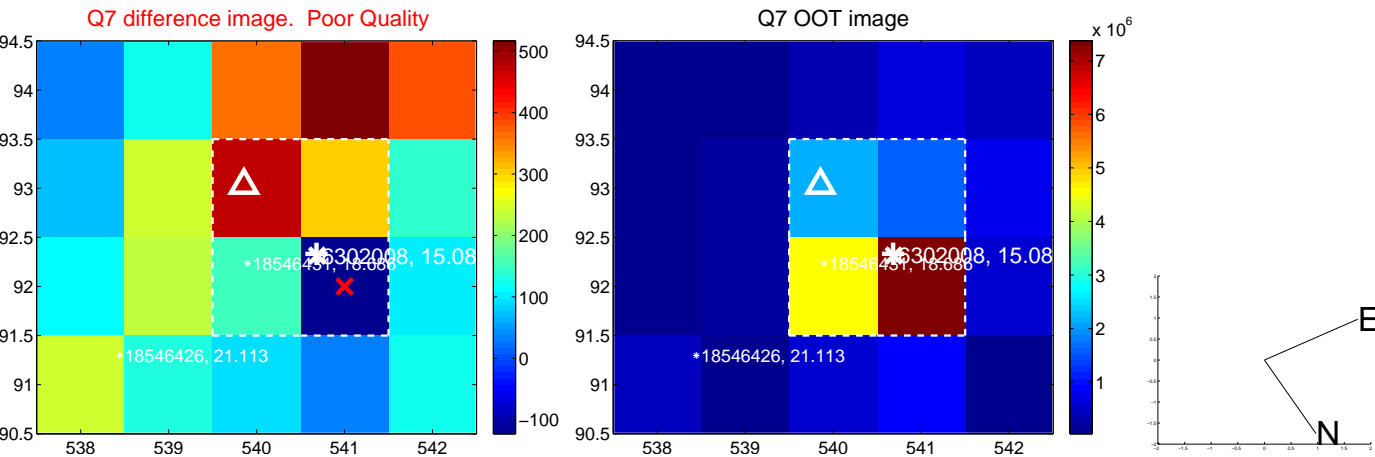
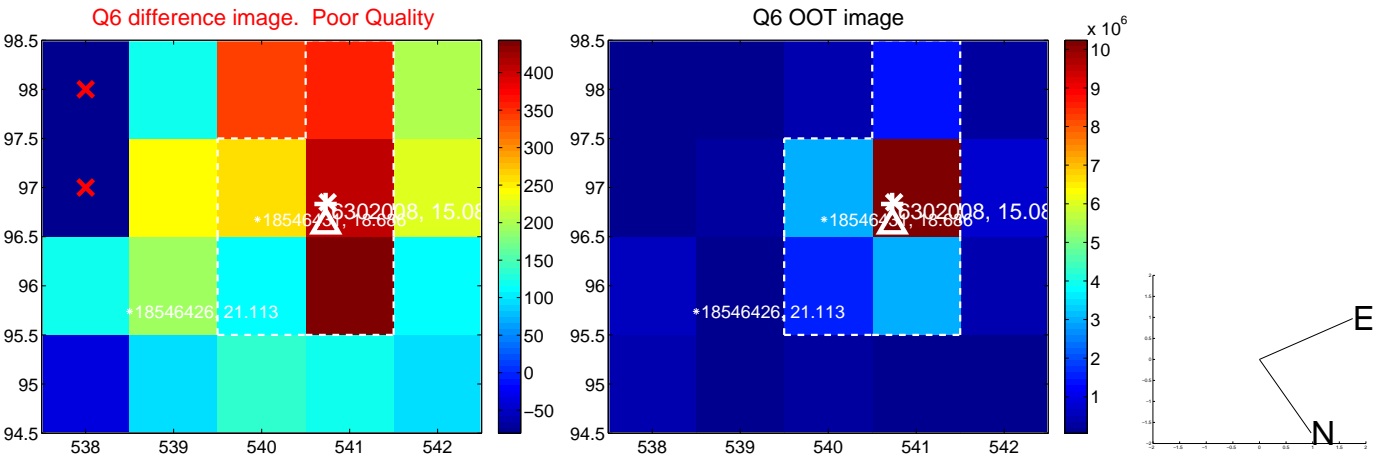
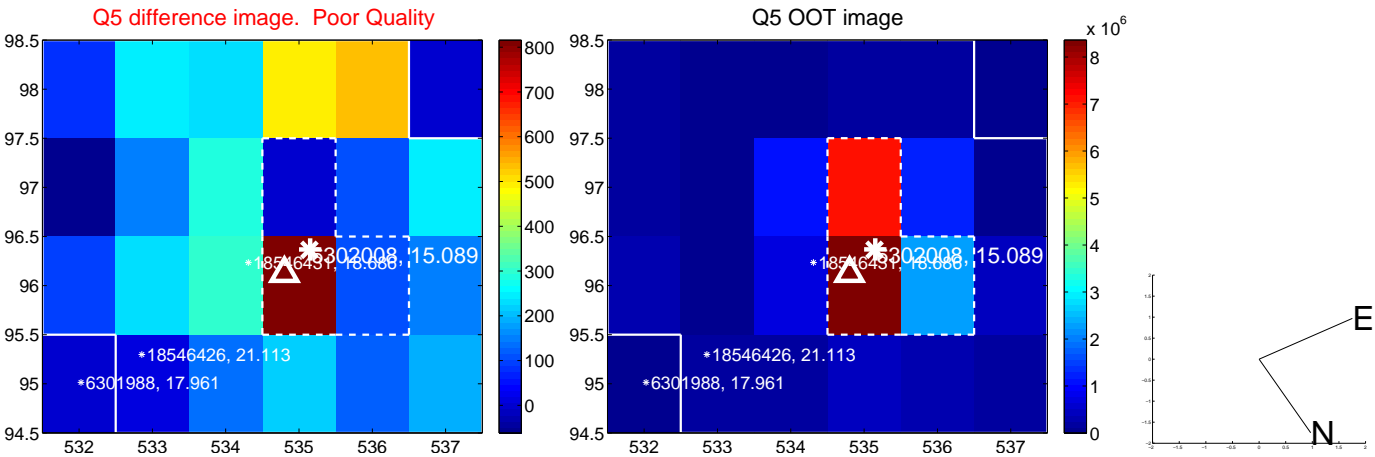


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

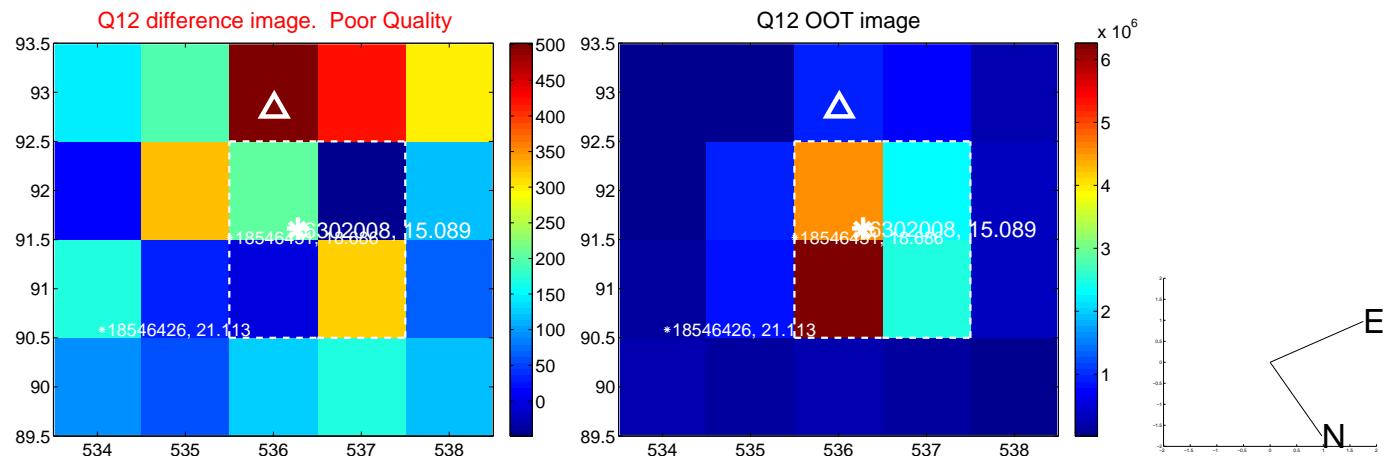
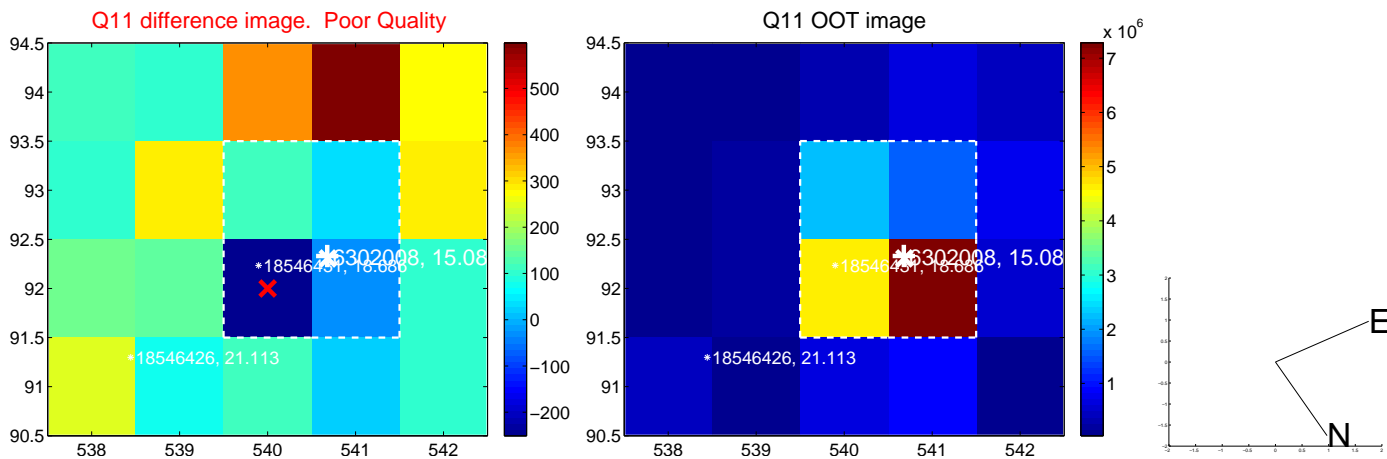
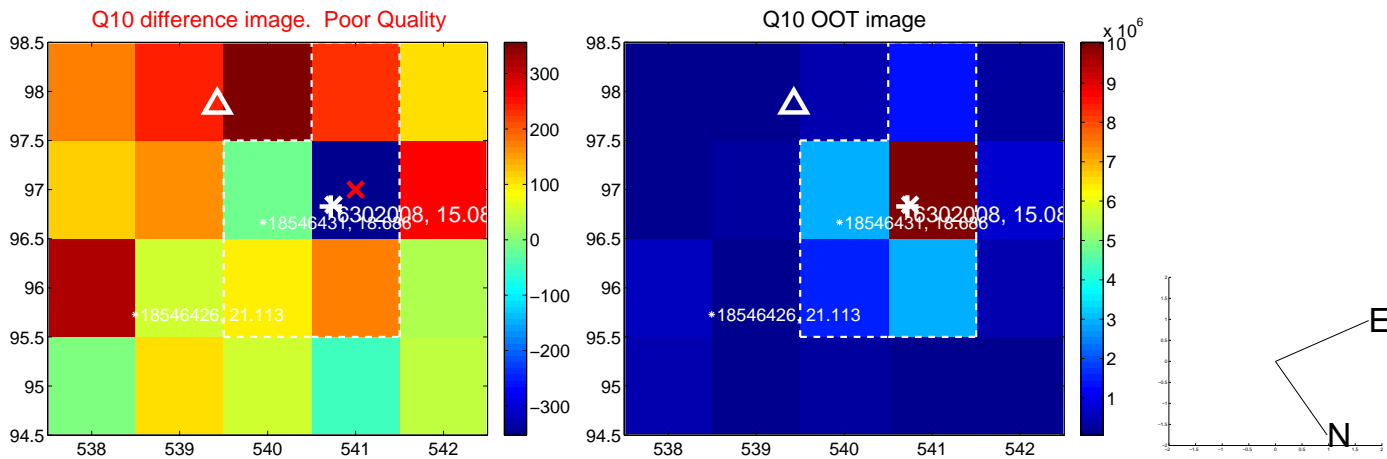
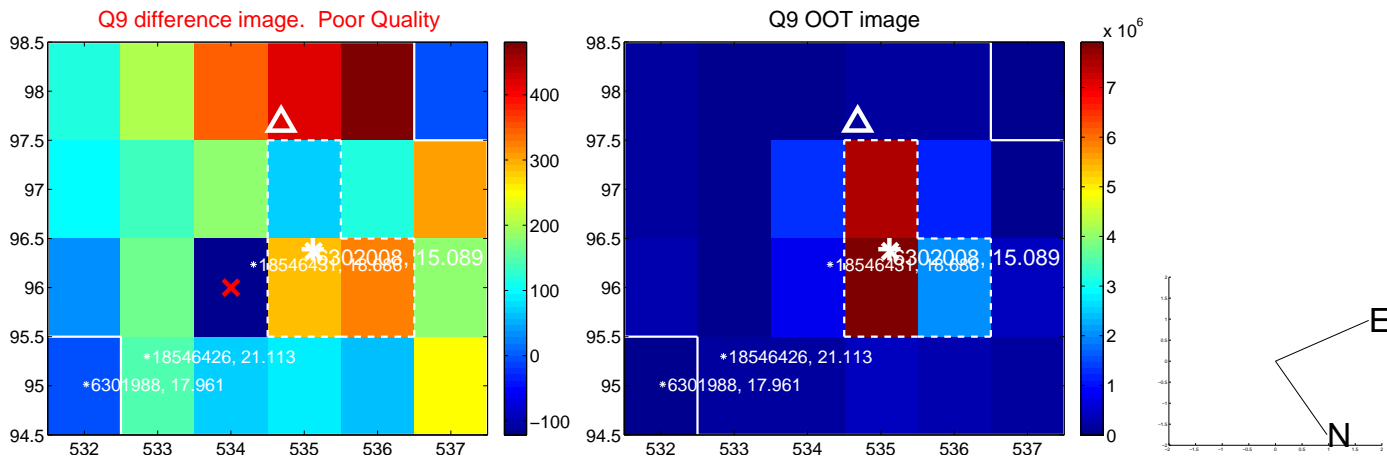
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



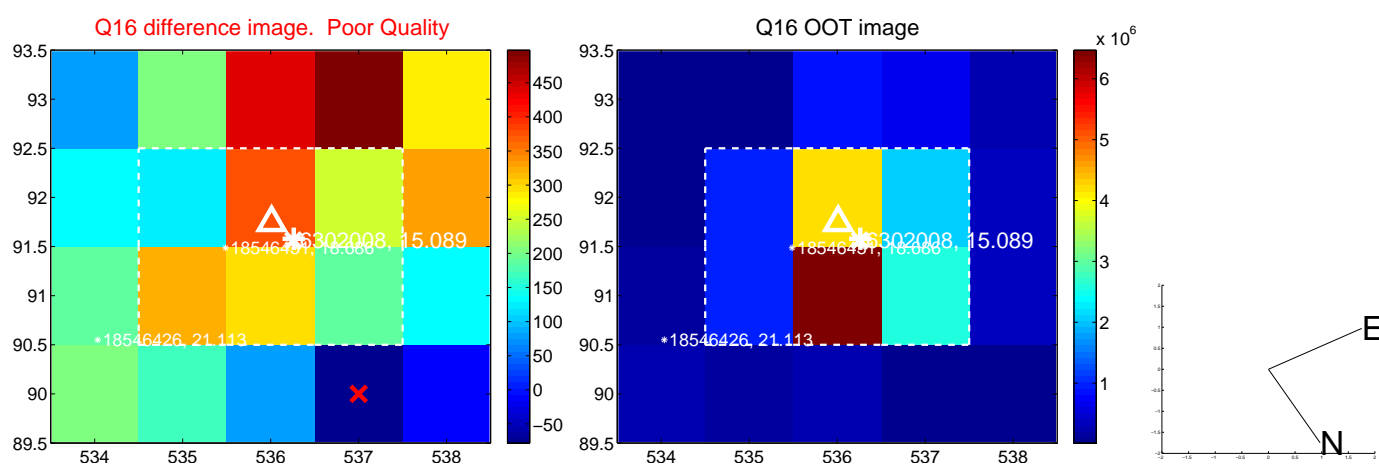
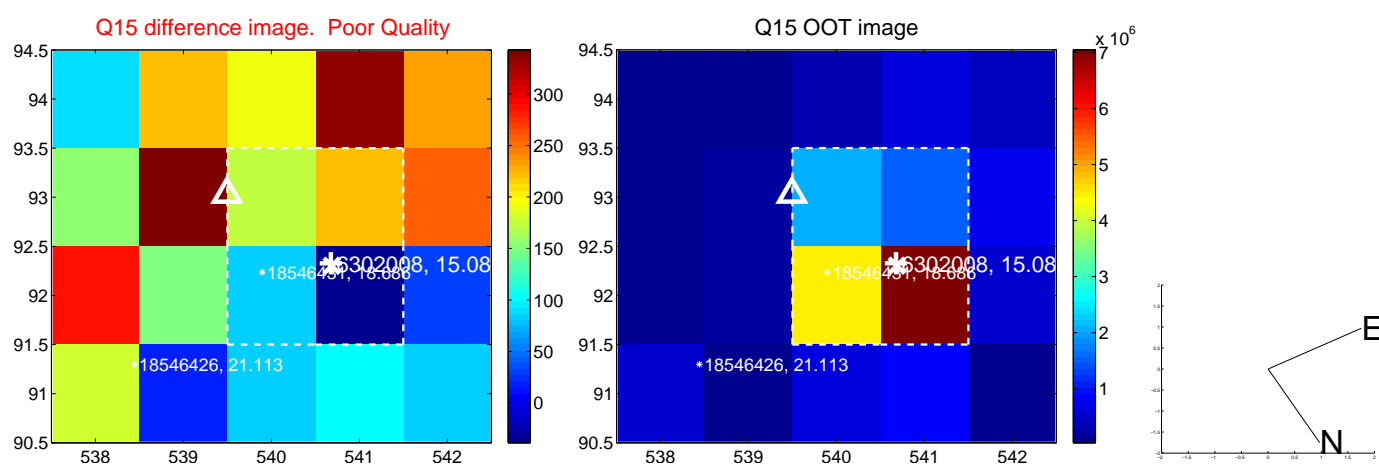
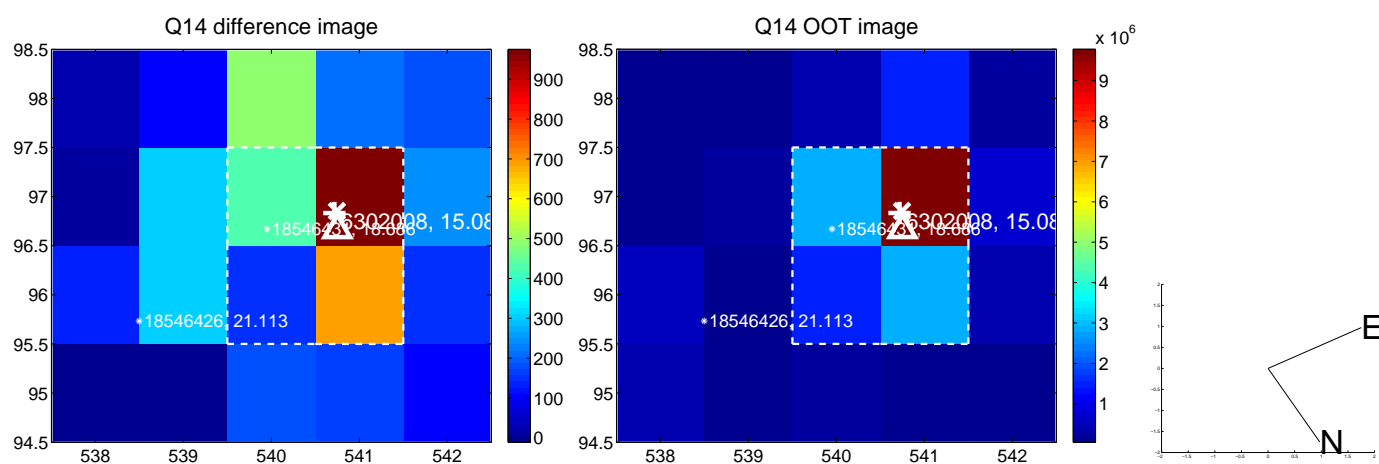
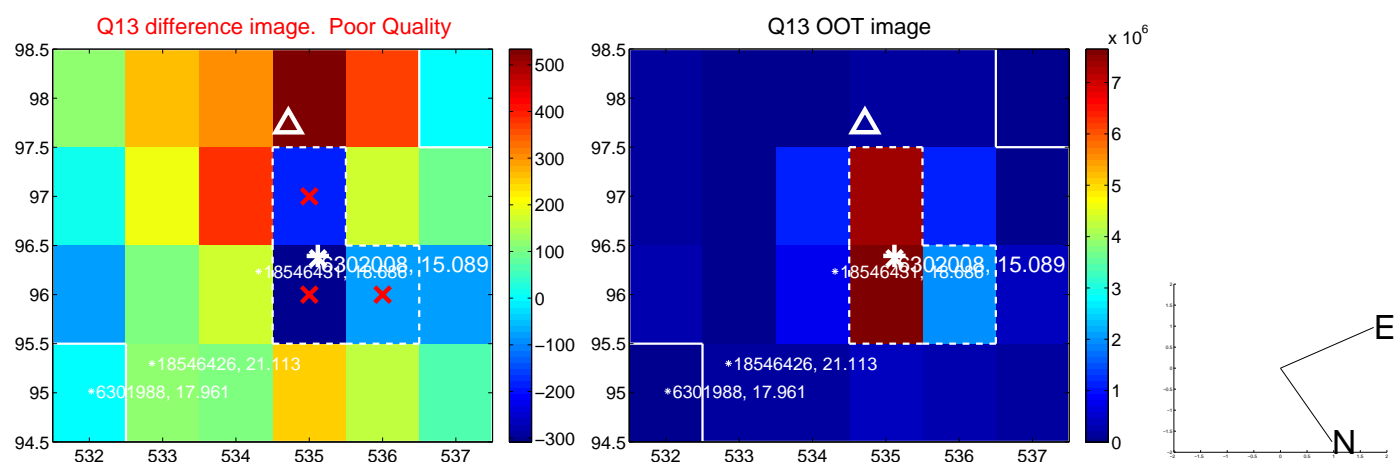
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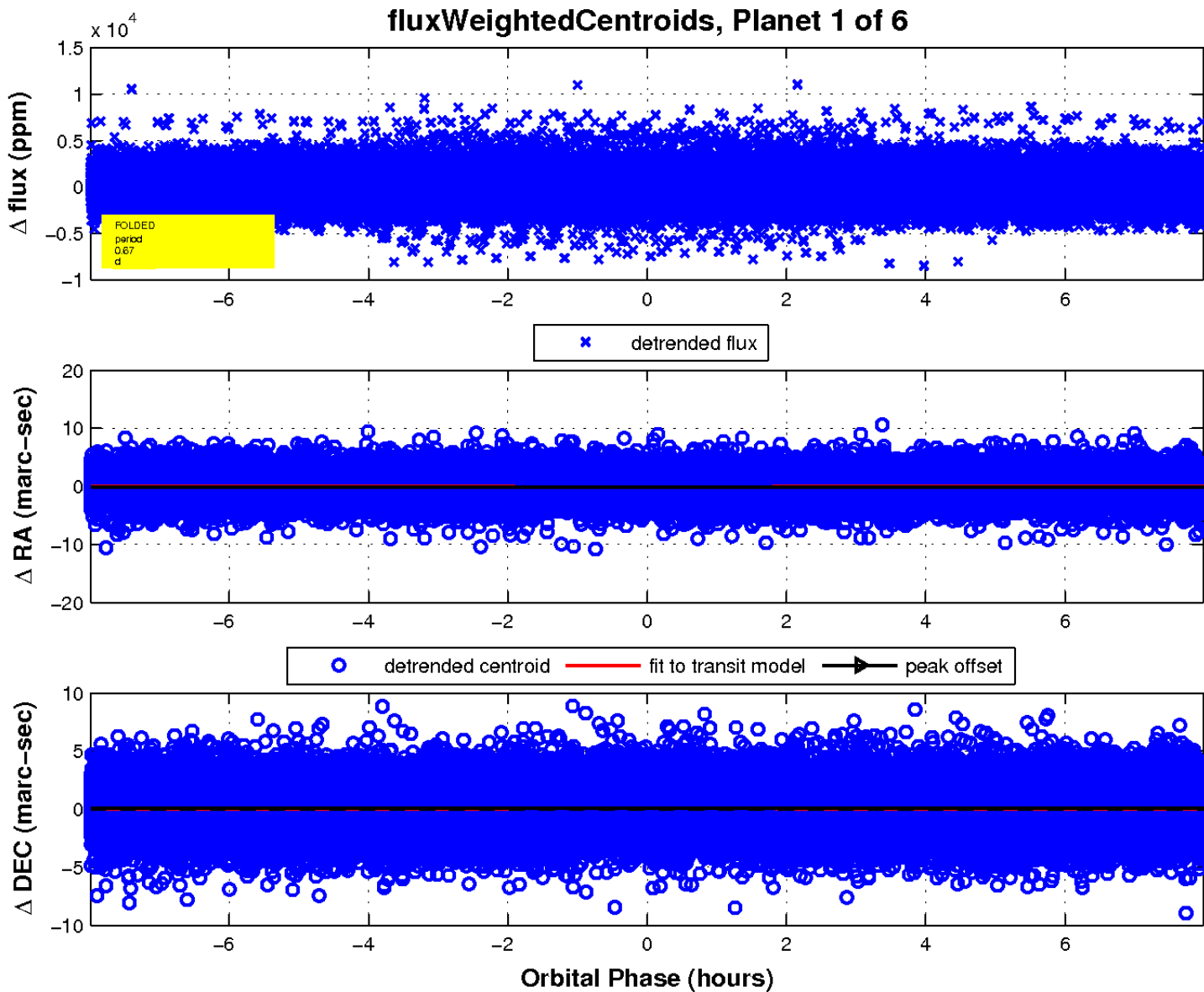
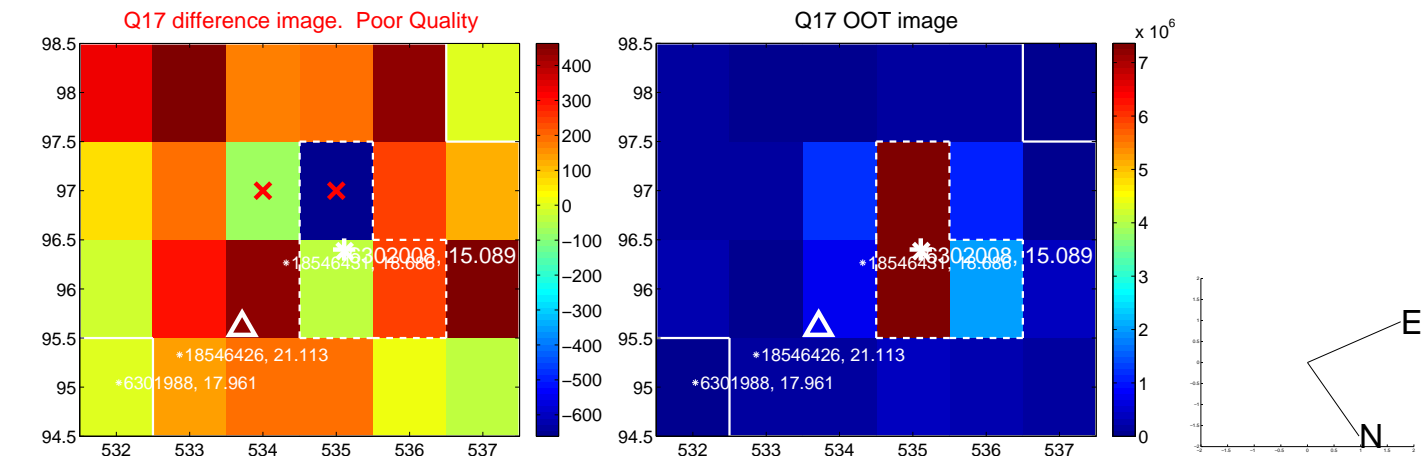
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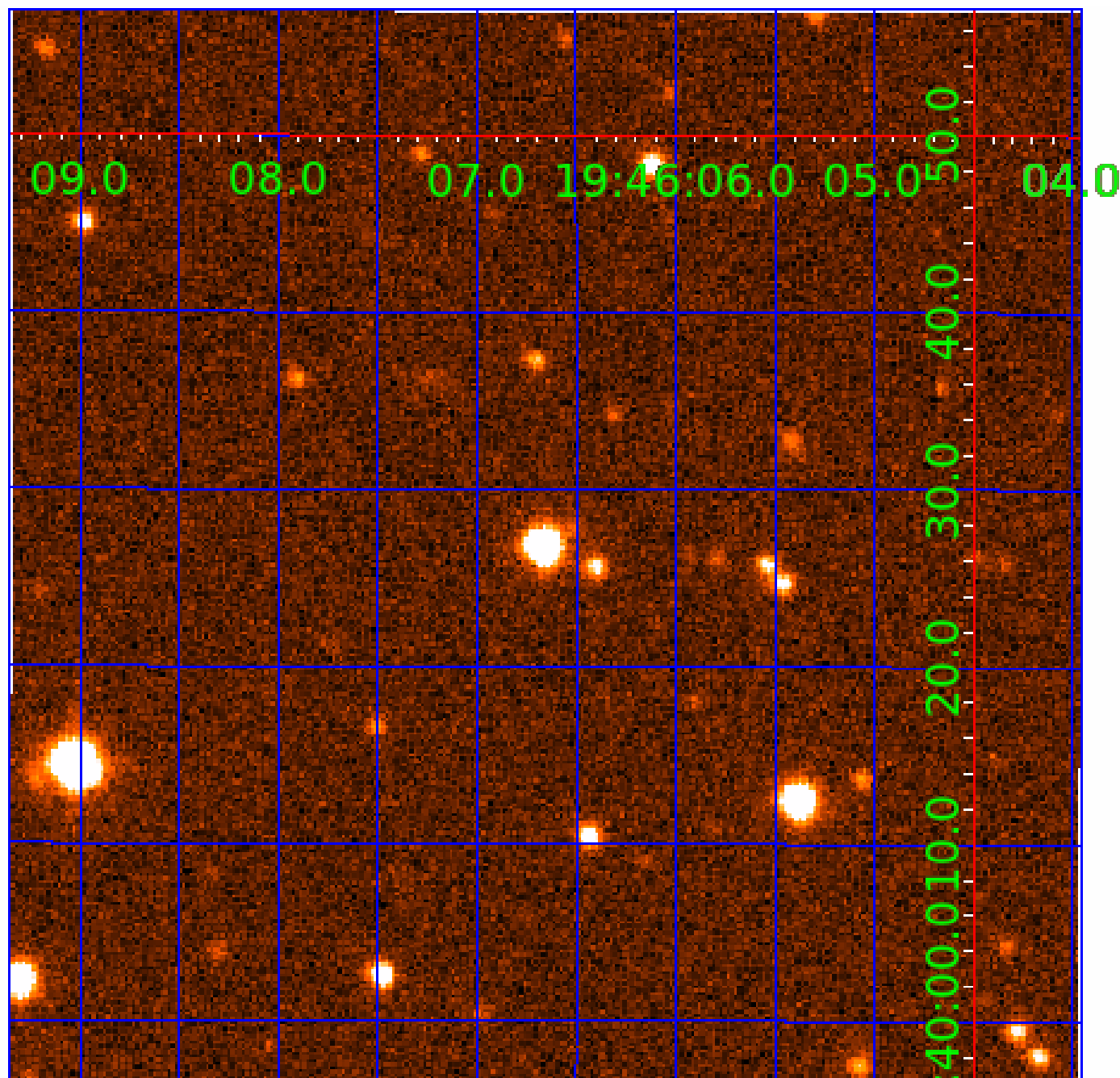


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 006302008

Q1-17 DR25 TCE Parameters

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006302008-06	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_MARSHALL—LPP_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—INCONSISTENT_TRANS—CENT_NOFITS

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

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

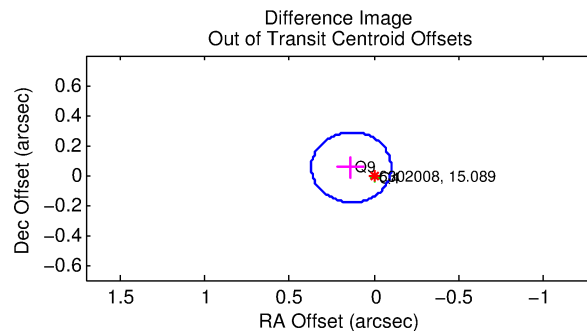
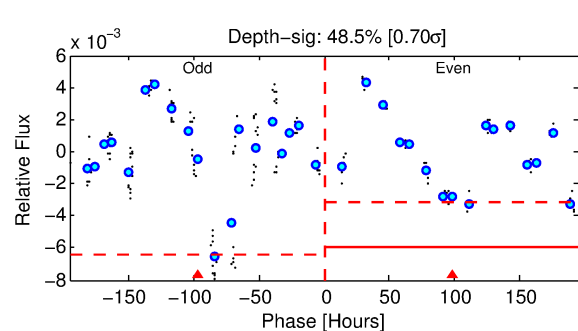
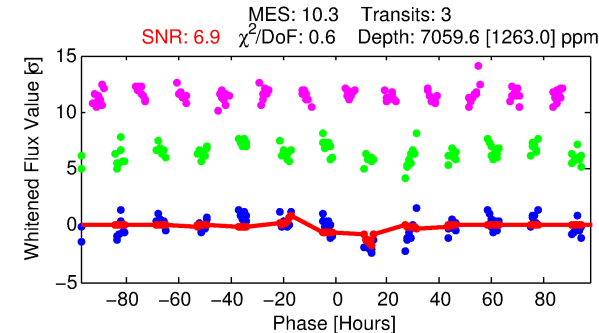
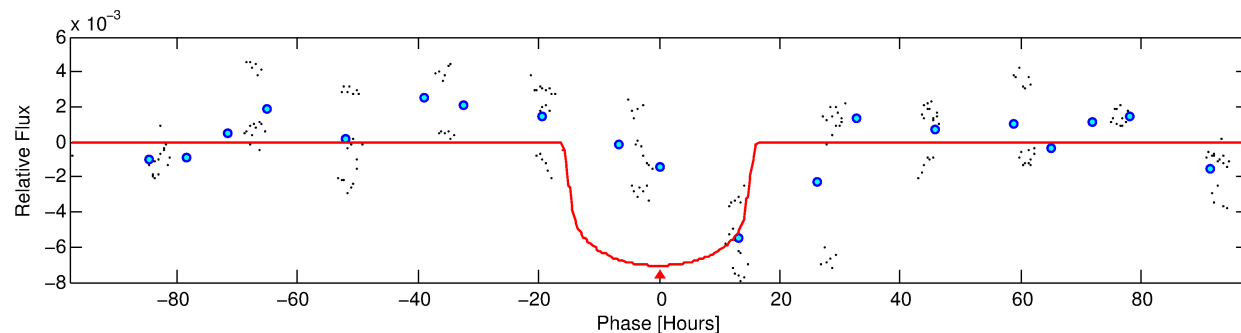
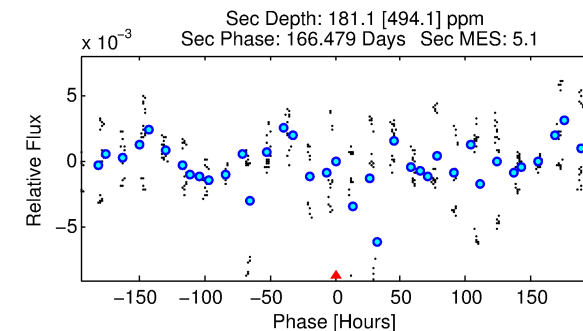
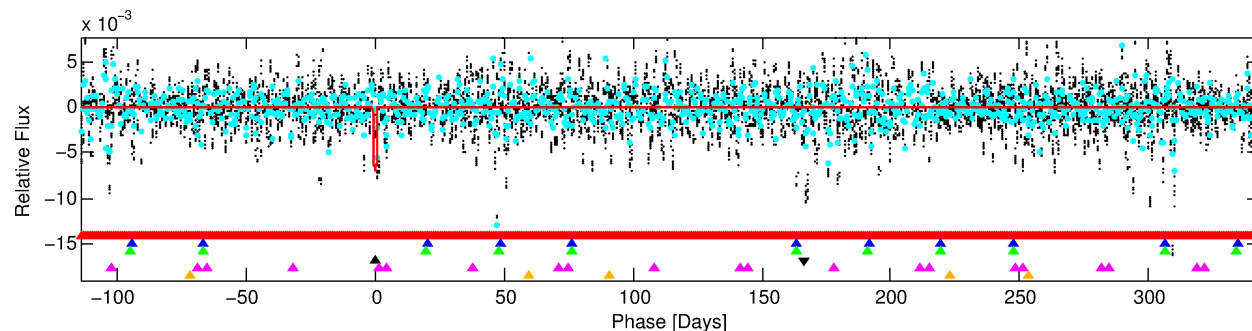
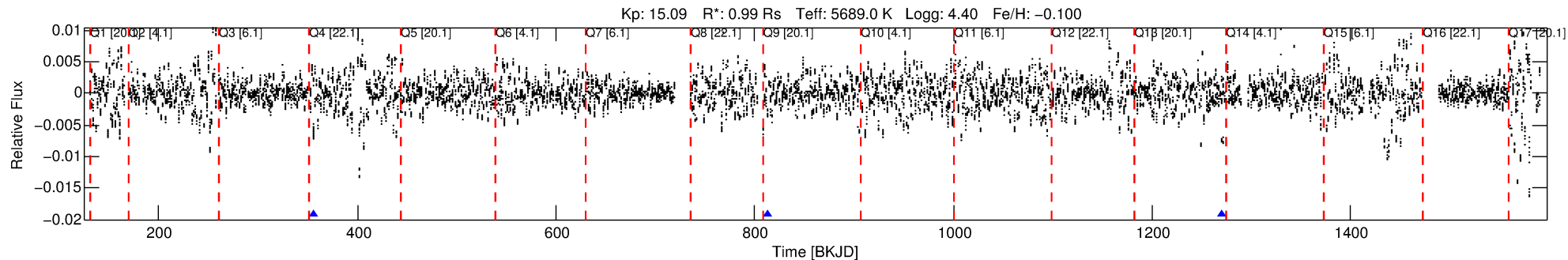
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 006302008-04

No Significant Match Found

DV One-Page Summary

KIC: 6302008 Candidate: 4 of 6 Period: 457.427 d



DV Fit Results:

Period = 457.42733 [0.02142] d
Epoch = 355.5296 [0.0434] BKJD
Rp/R* = 0.0761 [0.0139]
a/R* = 115.47 [60.44]
b = 0.02 [33.24]
Seff = 0.74 [0.27]
Teq = 236 [22] K
Rp = 8.26 [2.77] Re
a = 1.1215 [0.2675] AU
Ag = 1835.39 [5092.86] [0.36σ]
Teff = 2392 [1648] K [1.31σ]

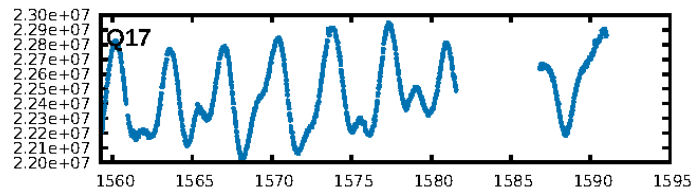
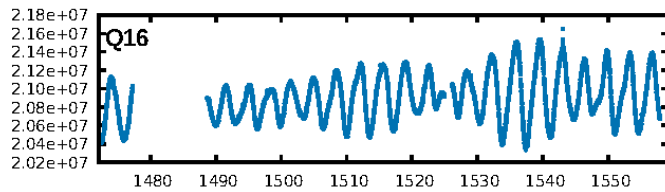
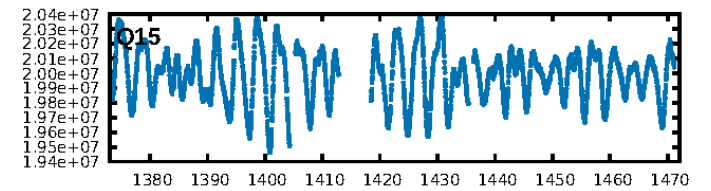
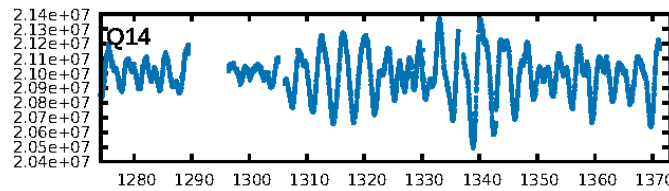
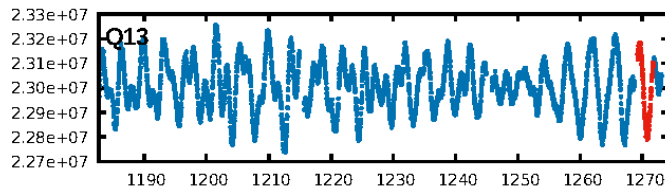
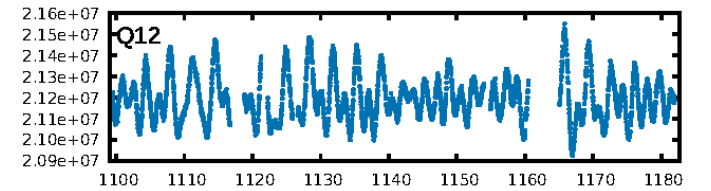
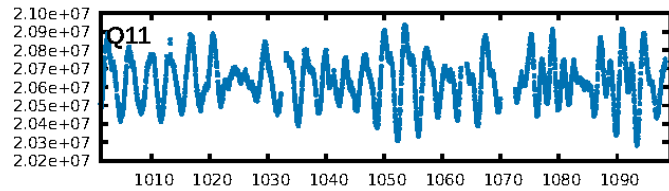
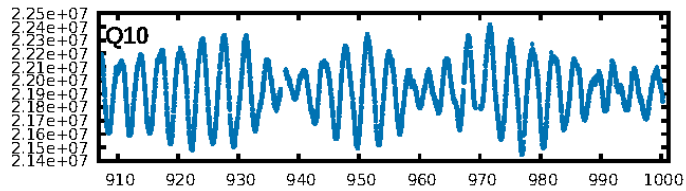
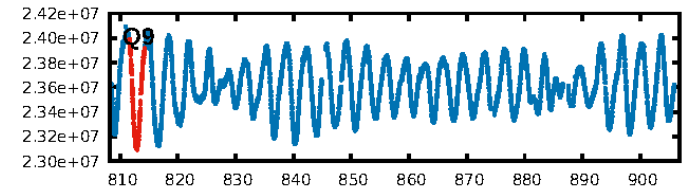
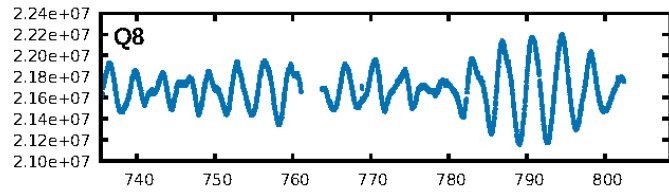
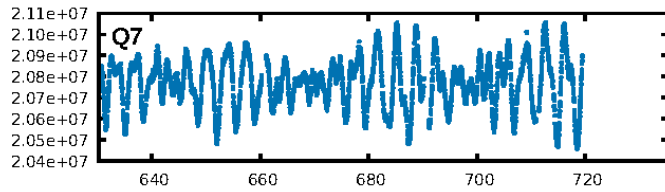
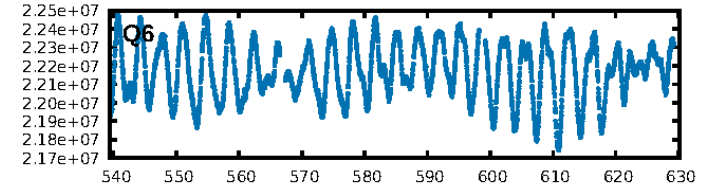
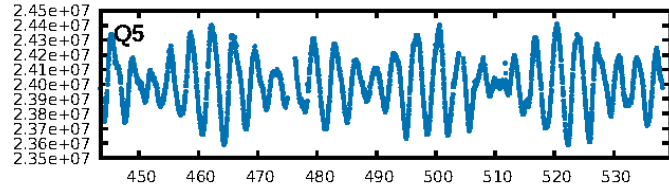
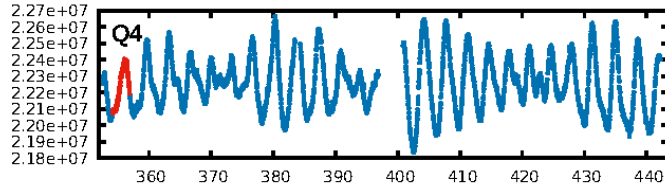
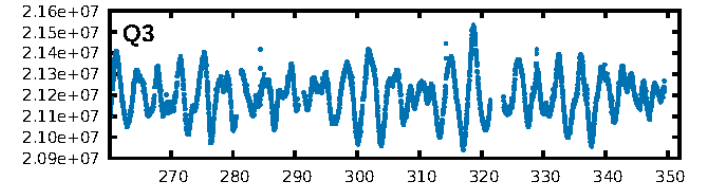
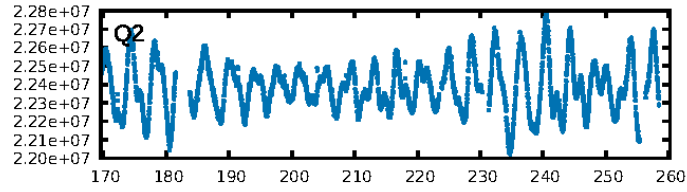
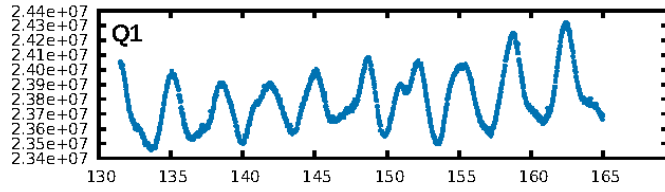
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [119.48σ]
LongPeriod-sig: N/A
ModelChiSquare2-sig: 20.3%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: 1.10e-09
RollingBand-fgt: 1.00 [3/3]
GhostDiagnostic-chr: 0.9932
Centroid-sig: 10.7%
Centroid-so: 0.097 arcsec [1.34σ]
OotOffset-rm: 0.145 arcsec [1.85σ]
KicOffset-rm: 0.157 arcsec [2.25σ]
OotOffset-st: 0/0/1/1 [2]
KicOffset-st: 0/0/1/1 [2]
DiffImageQuality-fgm: 0.50 [1/2]
DiffImageOverlap-fno: 0.00 [0/2]

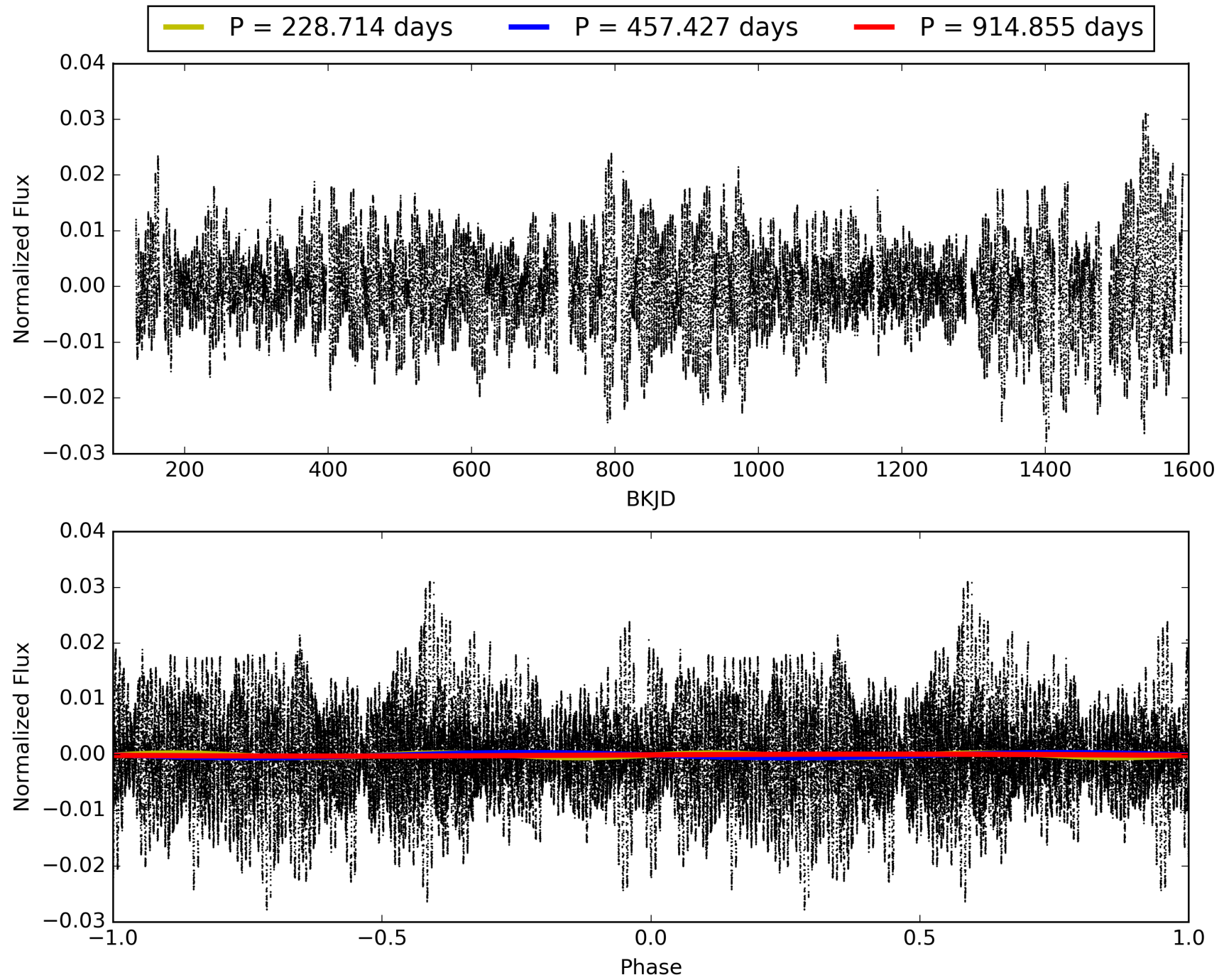
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 31-Jan-2016 06:32:13 Z

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

TCE 006302008-04, PDC Light Curves

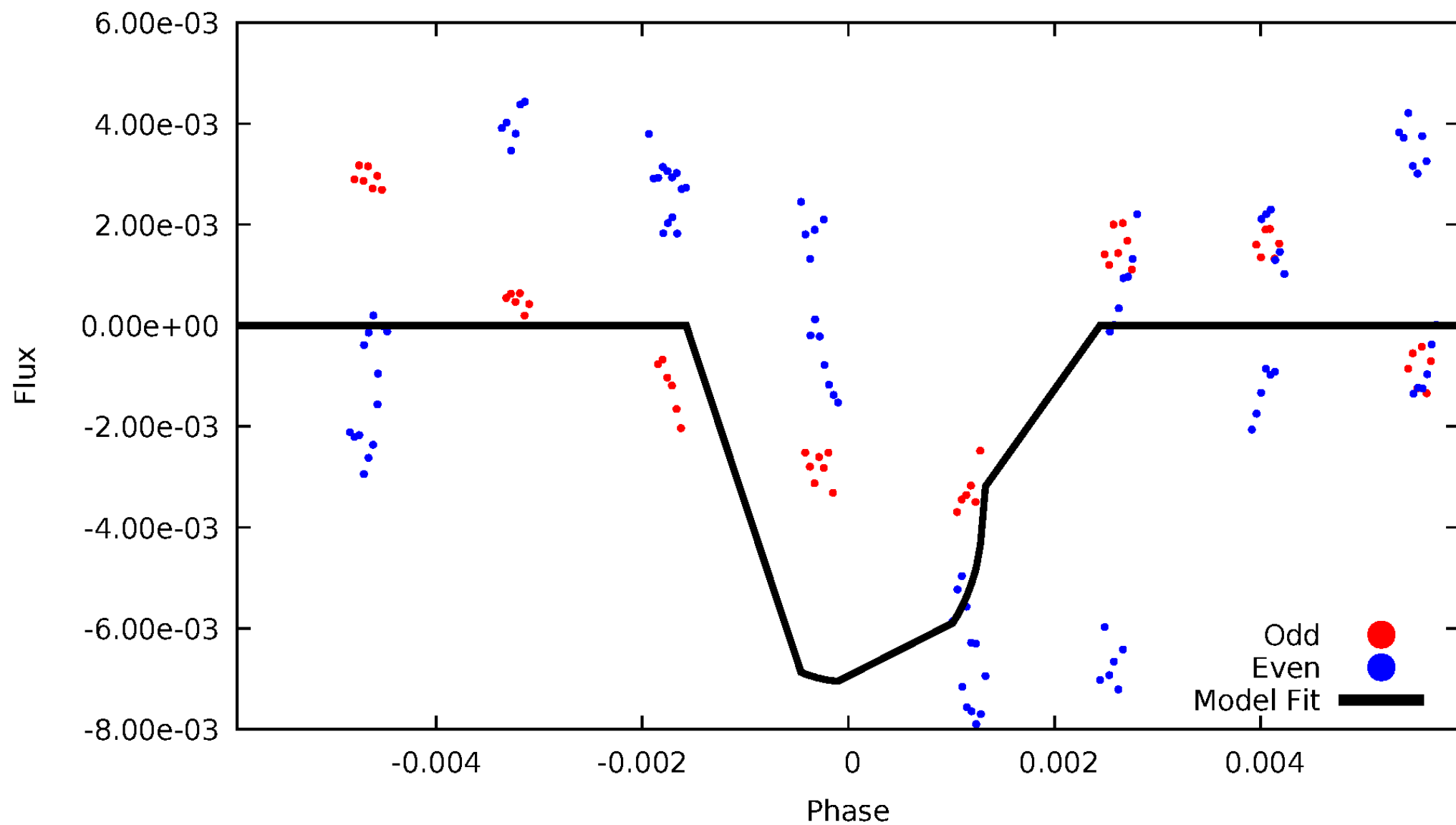


TCE 006302008-04



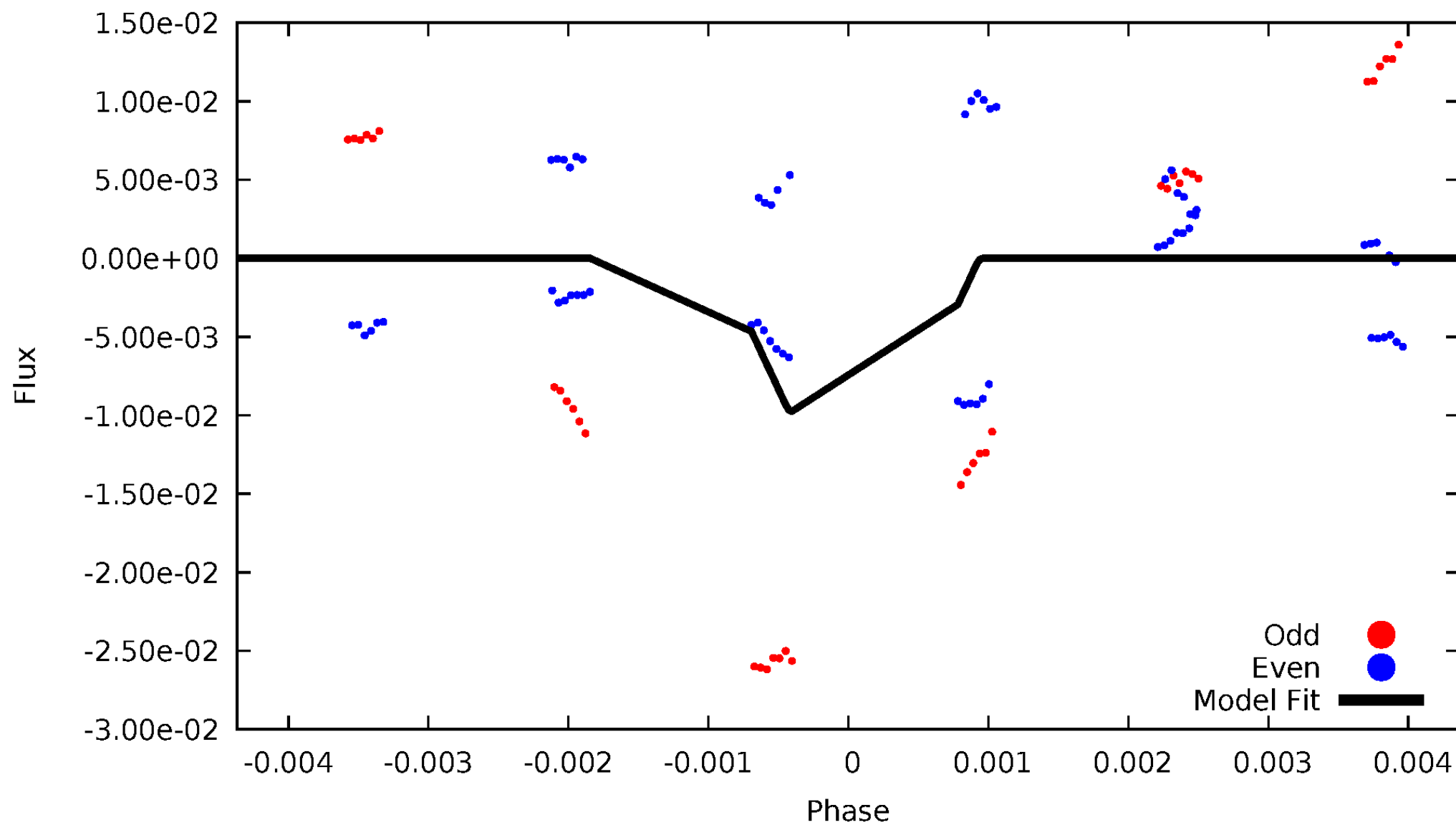
DV Odd/Even

TCE 006302008-04



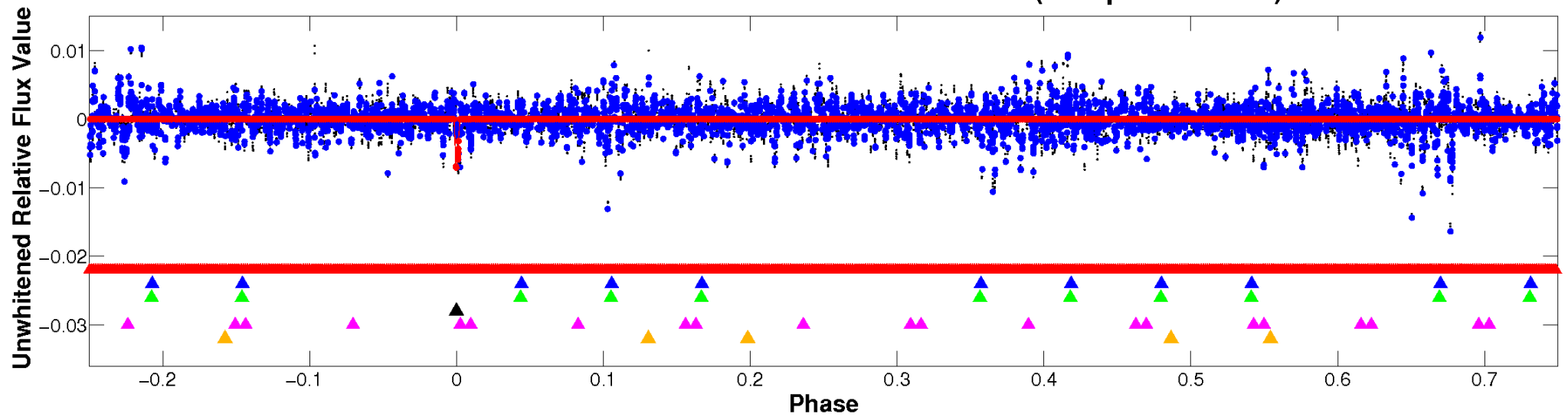
ALT Odd/Even

TCE 006302008-04

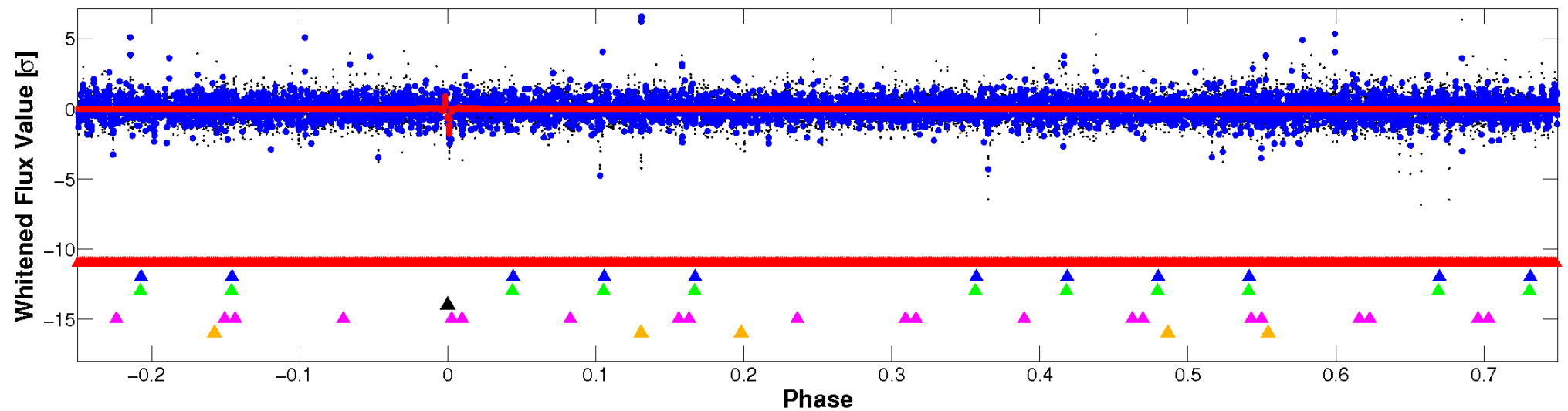


Non-Whitened Vs. Whitened Light Curve

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

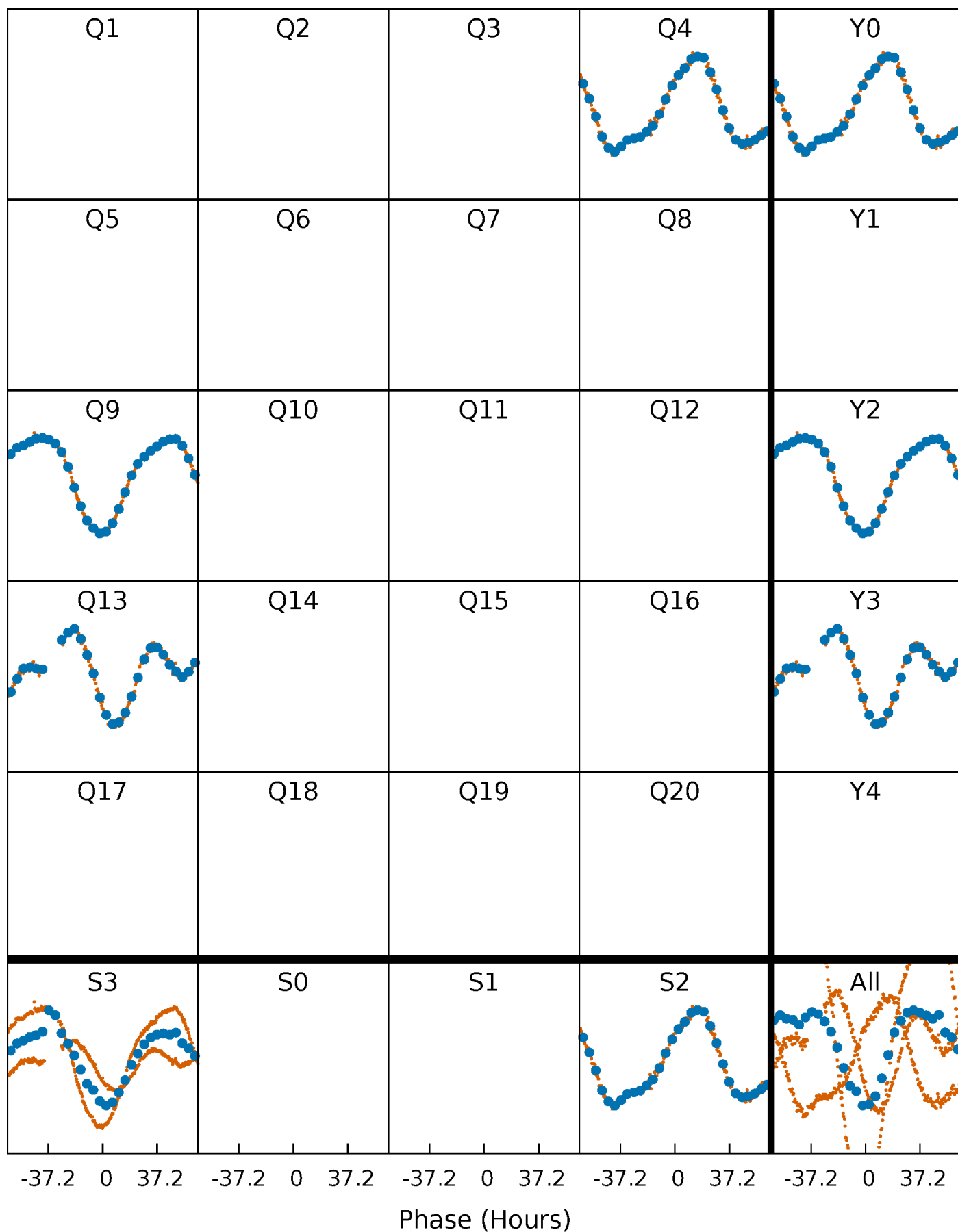


Planet 4 : Phased Whitened Flux Time Series (Fit Epoch/Period)



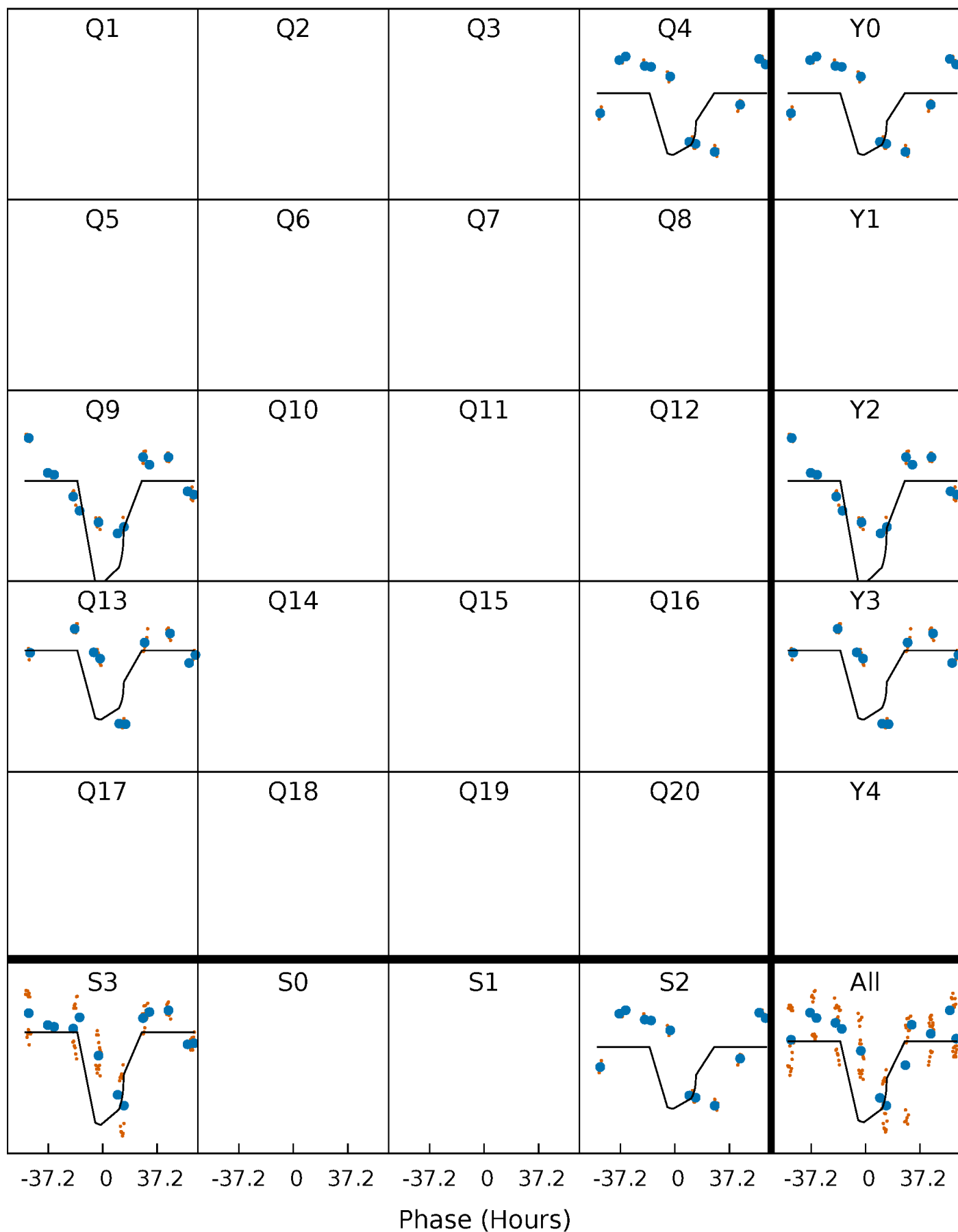
PDC Quarter-Phased Transit Curves

TCE 006302008-04 P=457.427330 Days $T_0=355.529584$ (BKJD)



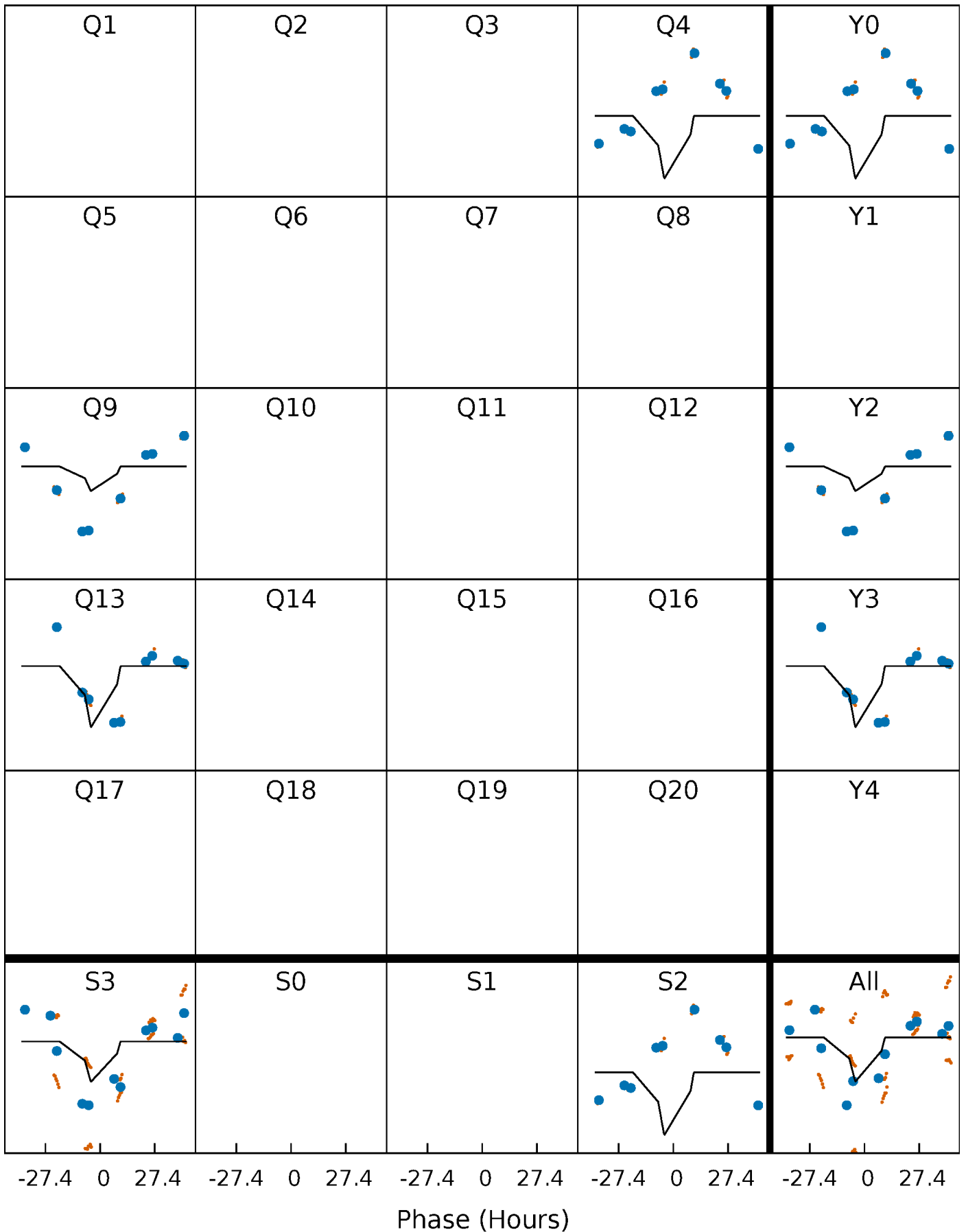
DV Quarter-Phased Transit Curves

TCE 006302008-04 P=457.427330 Days $T_0=355.529584$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

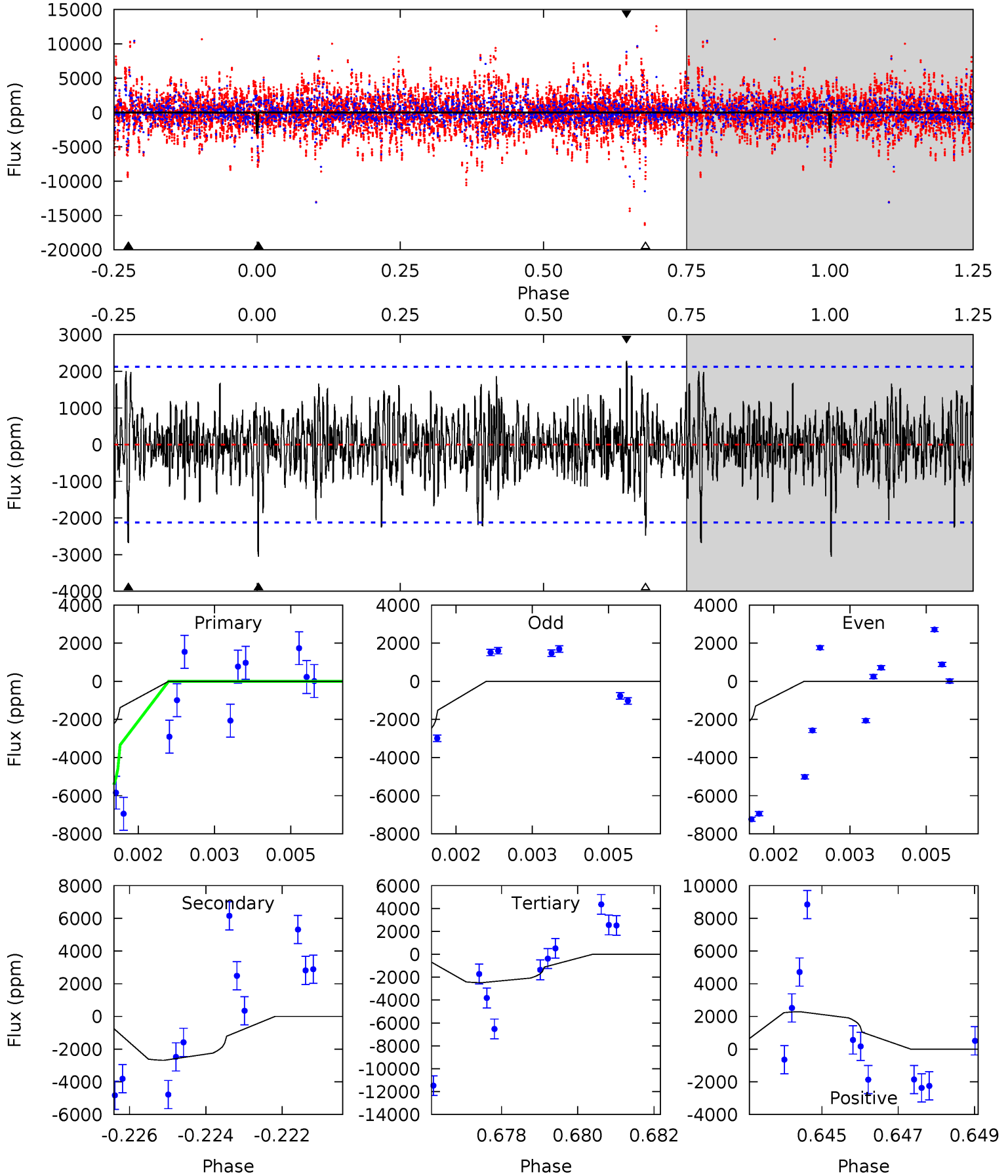
TCE 006302008-04 P=457.460534 Days $T_0=355.611984$ (BKJD)



DV Model-Shift Uniqueness Test

006302008-04, P = 457.427330 Days, E = 355.529584 Days

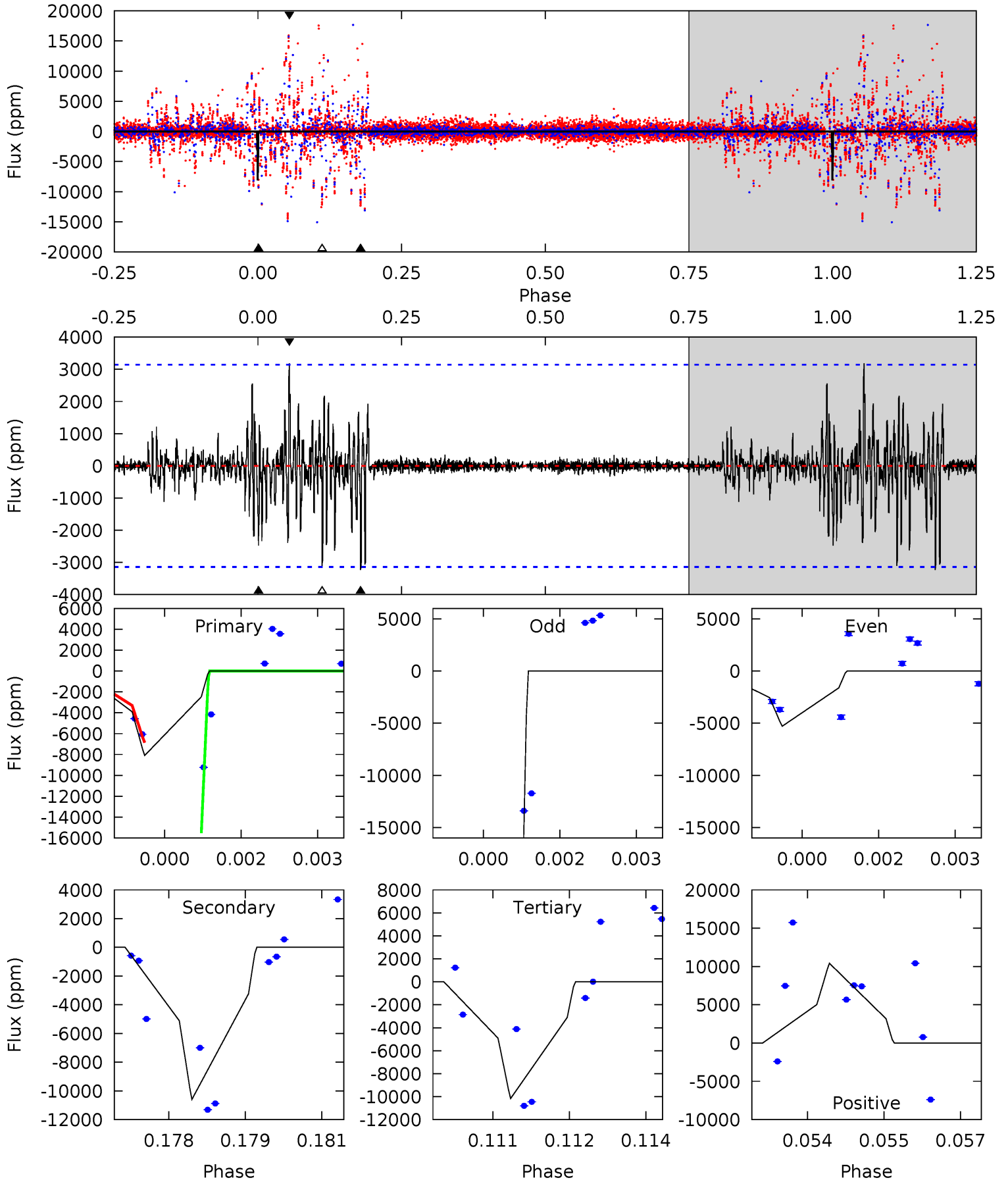
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
7.69	6.77	6.26	5.76	5.35	3.13	1.55	1.44	1.93	0.51	1.00	0.56	0.89	0.43	6.79



Alt Model-Shift Uniqueness Test

006302008-04, P = 457.460534 Days, E = 355.611984 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
4.22	5.52	5.30	5.43	5.36	3.15	0.62	-1.08	-1.21	0.22	0.09	26.1	1.40	0.50	0



Stellar Parameters For KIC 006302008

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	5689^{+169}_{-169}	$4.396^{+0.128}_{-0.192}$	$-0.100^{+0.300}_{-0.300}$	$0.995^{+0.280}_{-0.151}$	$0.899^{+0.125}_{-0.083}$	$1.285^{+0.716}_{-0.618}$
	+3%/-3%	+3%/-4%	+300%/-300%	+28%/-15%	+14%/-9%	+56%/-48%
Source	PHO1	KIC0	KIC0	DSEP		

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

Secondary Eclipse Parameters for KIC 006302008-04 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-2686 ± 397	$8.41^{+2.03}_{-1.79}$	331^{+26}_{-21}	4795^{+505}_{-356}	26079^{+17900}_{-9106}
Alt.	-3234 ± 586	$10.95^{+2.37}_{-1.77}$	332^{+24}_{-18}	4463^{+344}_{-275}	18155^{+9199}_{-5801}

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

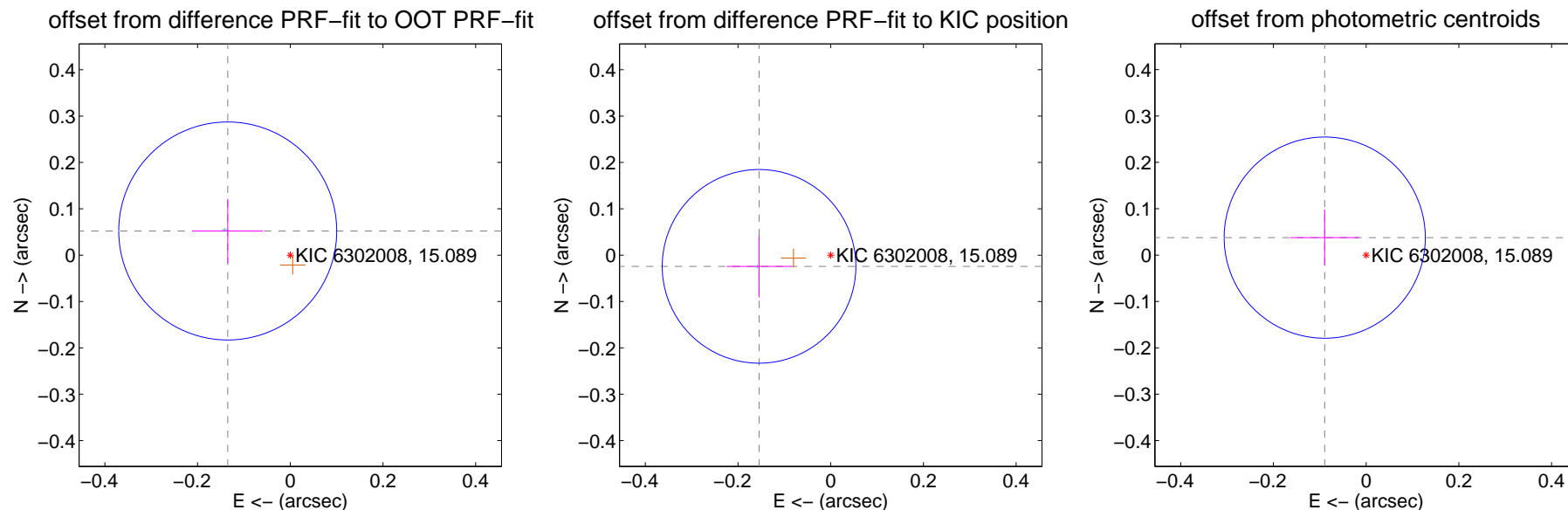
DV Centroid Data

Supplemental centroid analysis for 006302008-04. Kepler magnitude: 15.09. Transit SNR 6.86

There are 1 quarters with good PRF difference image offsets

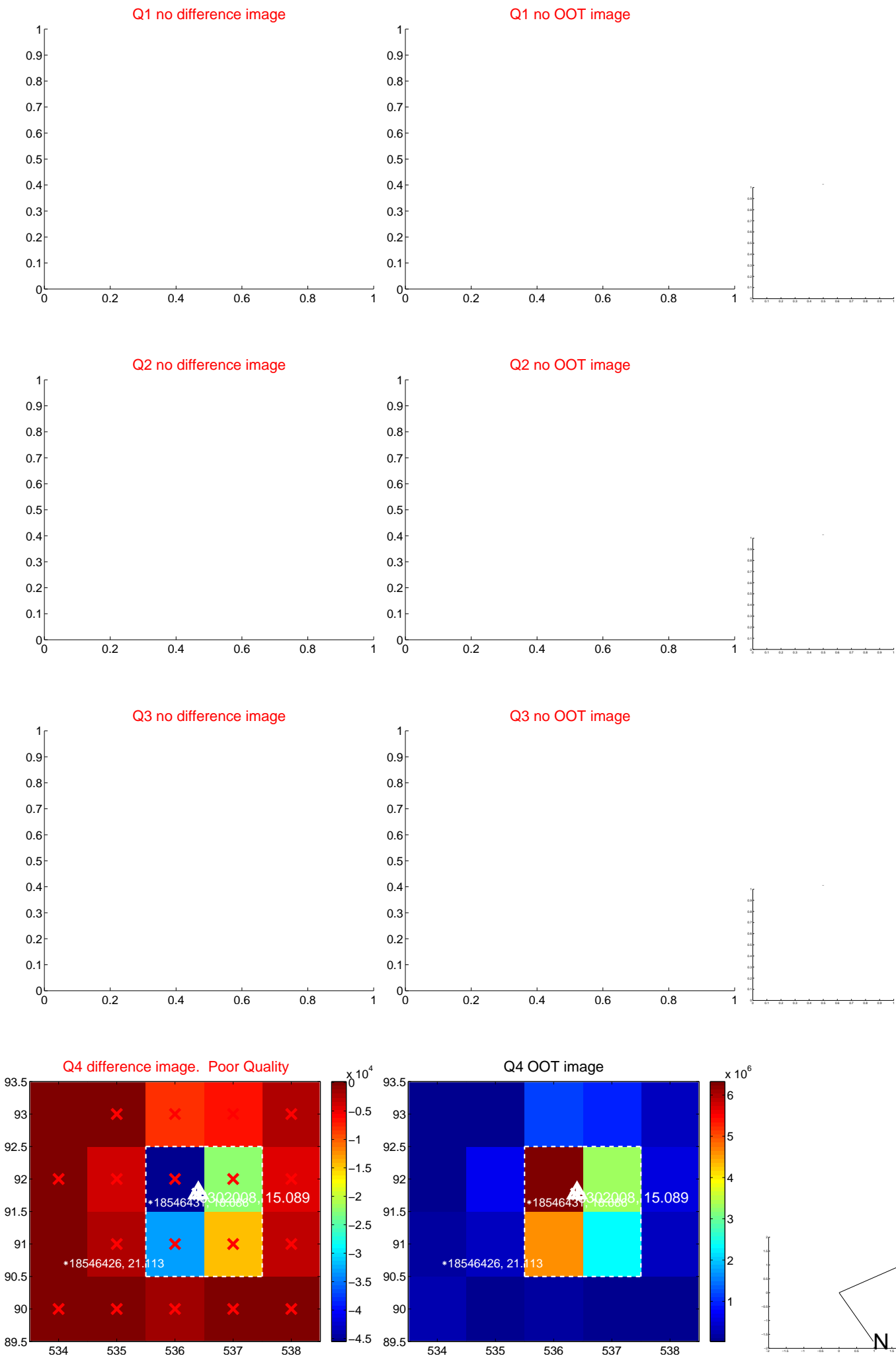
The direct PRF centroid is offset from the target star catalog position by about 0.08 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.145 ± 0.078	1.85	0.135 ± 0.076	0.052 ± 0.069
PRF-fit source offset from KIC position	0.157 ± 0.070	2.25	0.155 ± 0.069	-0.024 ± 0.067
photometric centroid source offset	0.10 ± 0.07	1.34	0.09 ± 0.07	0.04 ± 0.06

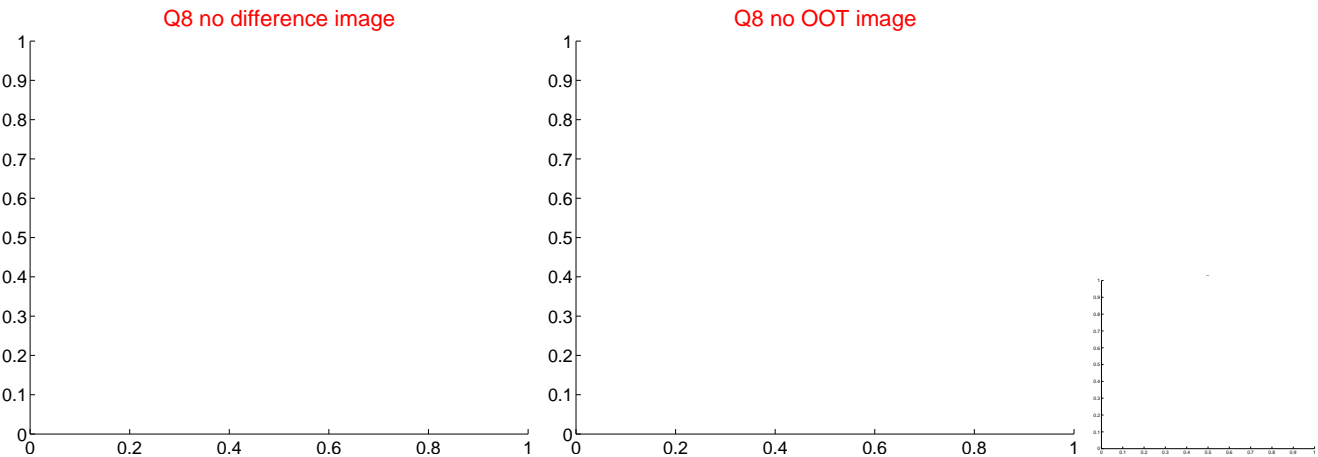
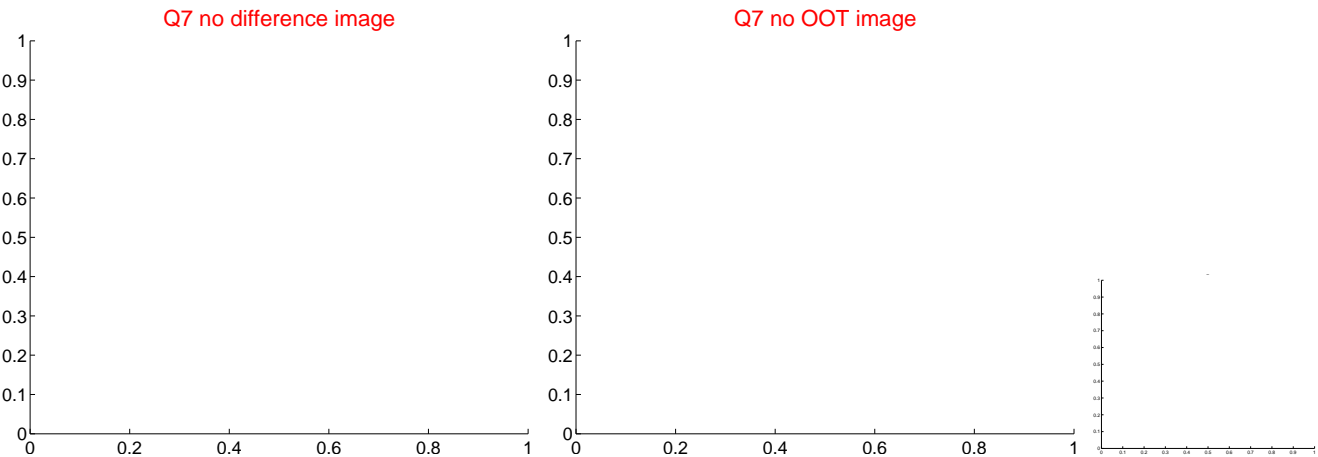
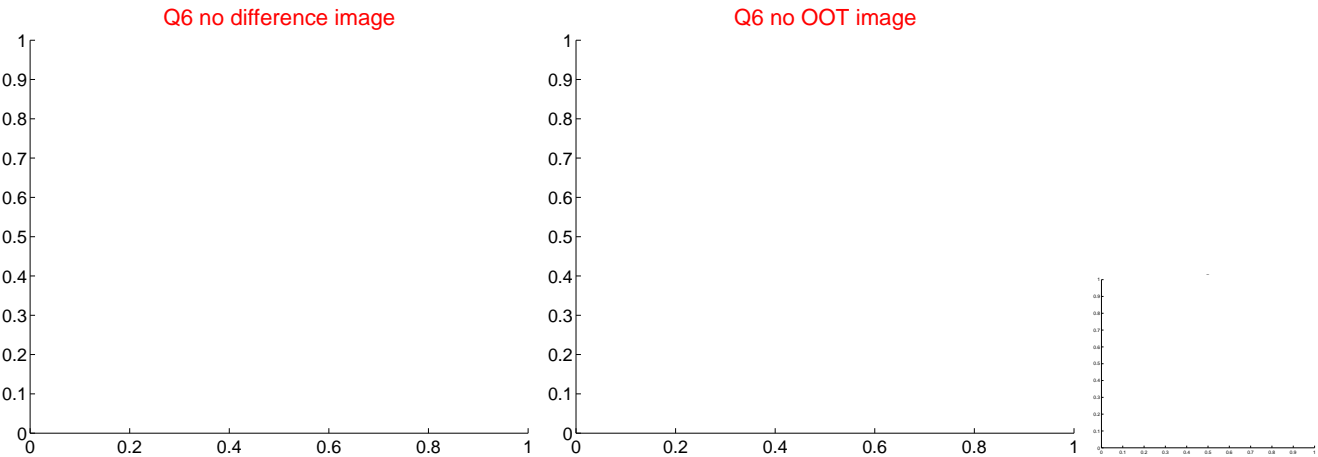
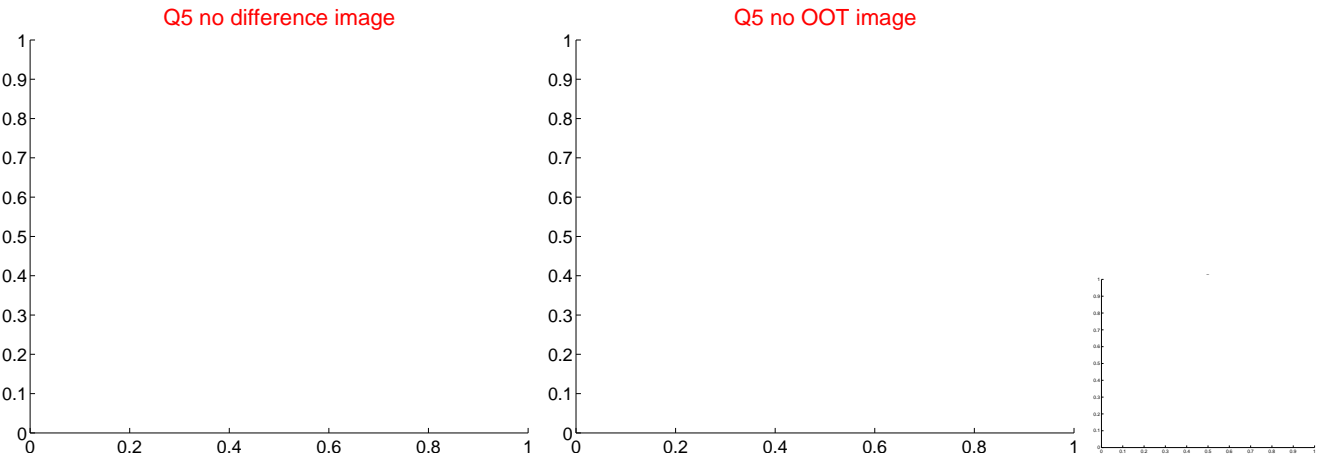


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

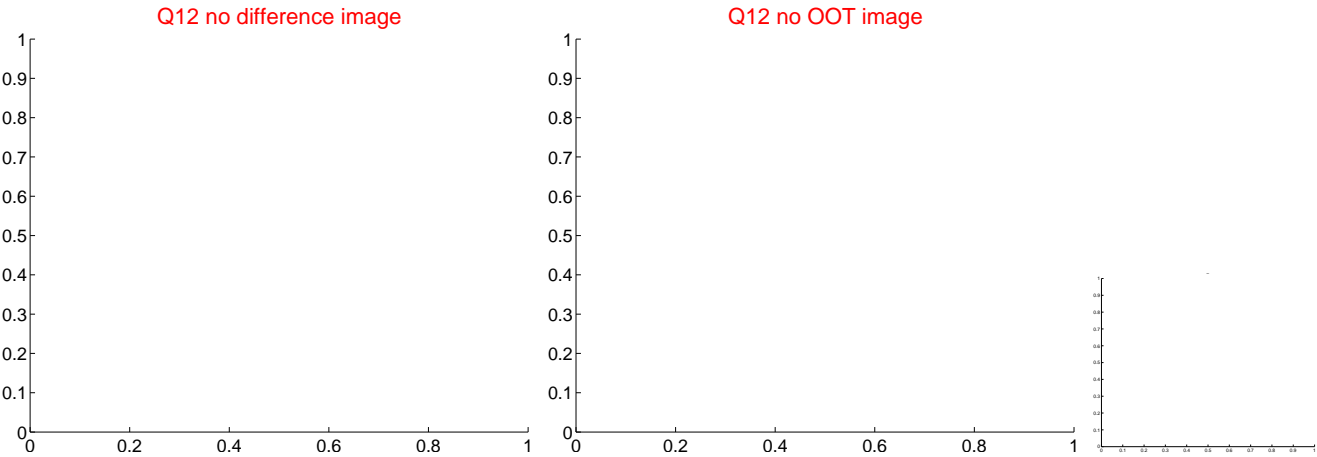
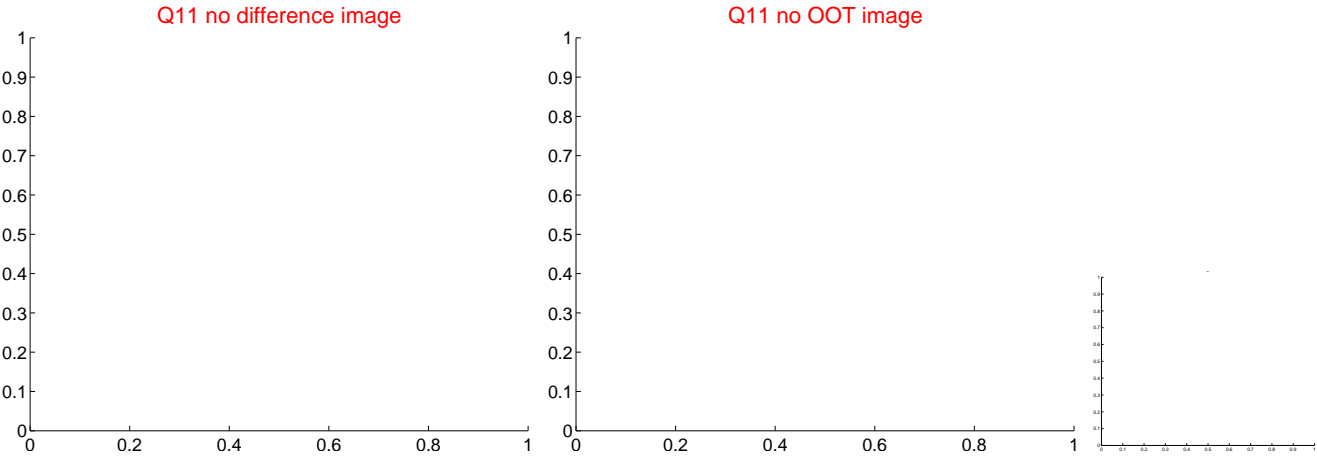
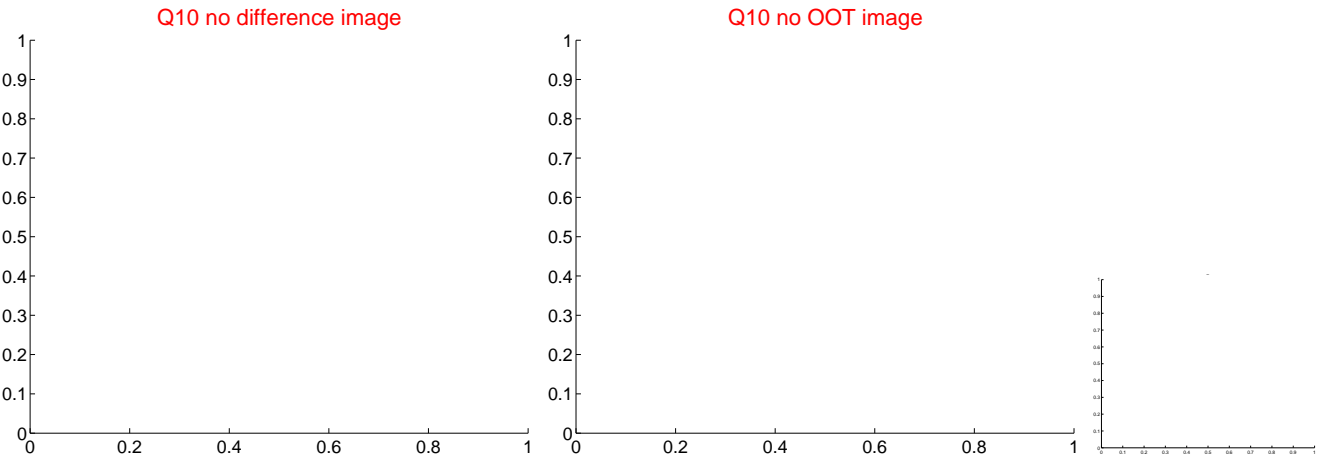
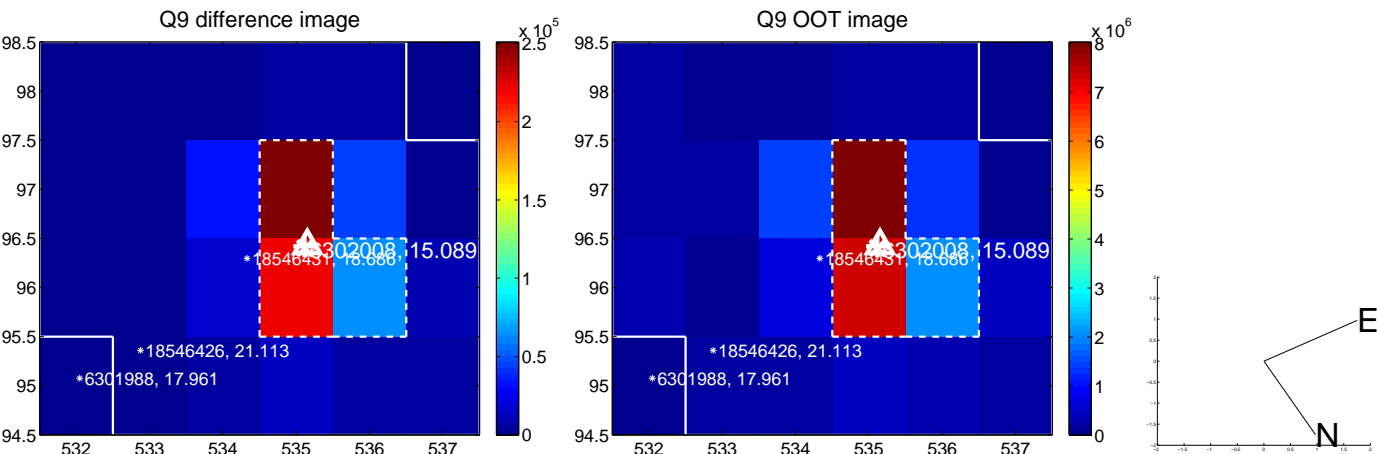
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



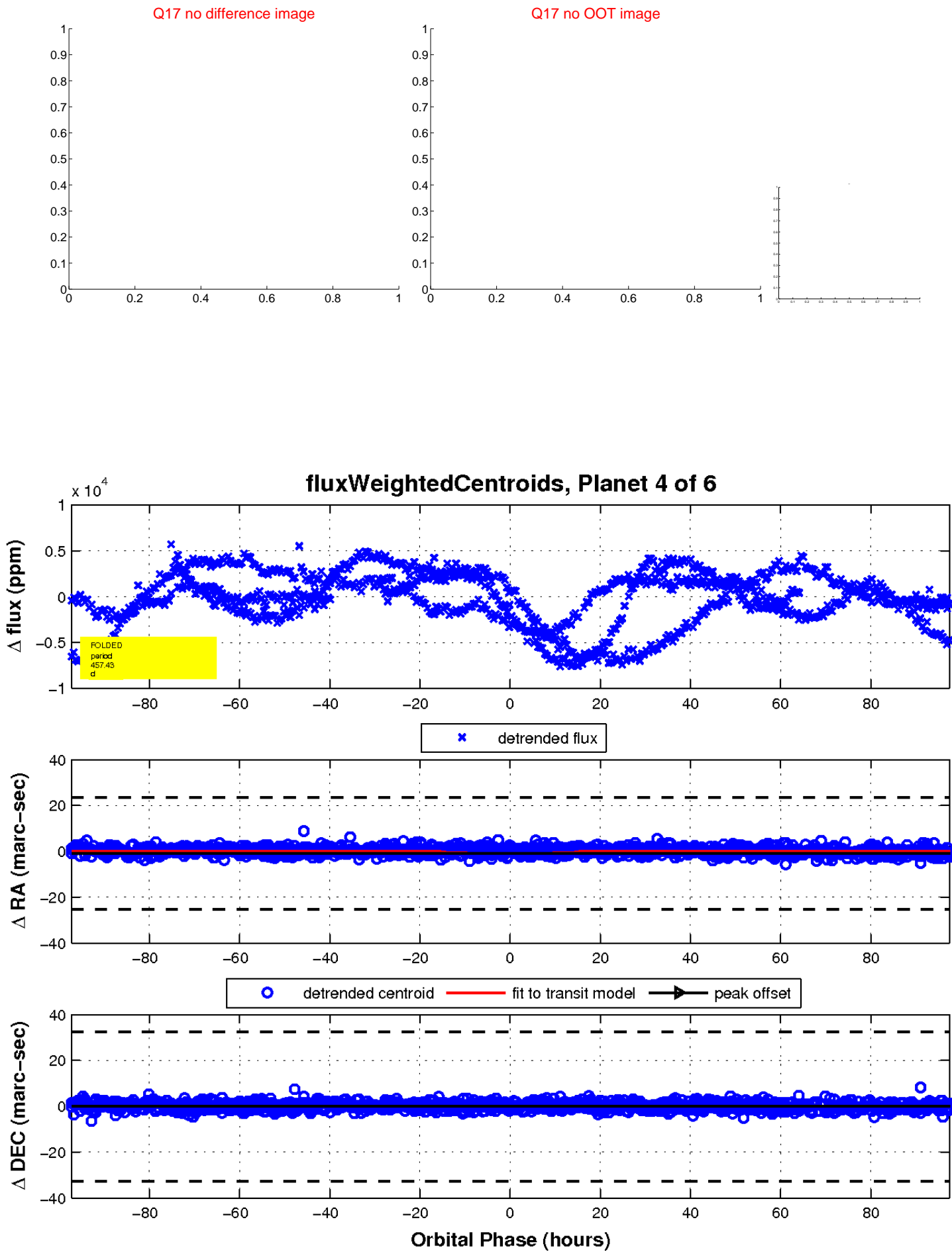
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

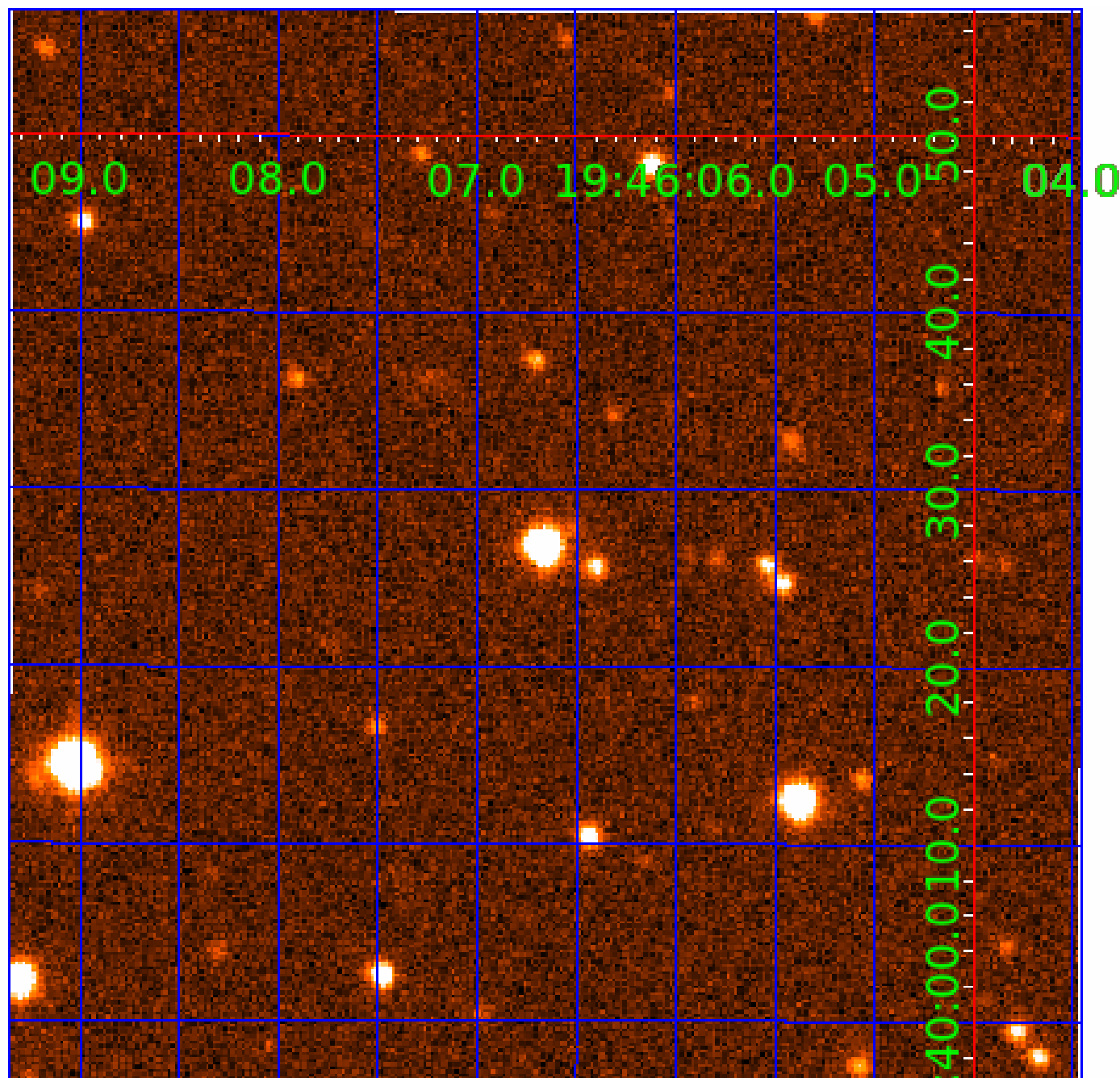


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 006302008

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})
006302008-01	OBS	No	0.665869	131.973408	40.9	4.124	7.2	6.6	0.99	5689	0.76	4477.84
006302008-04	OBS	No	457.427330	355.529584	7059.6	32.563	10.3	6.9	0.99	5689	8.26	0.74
006302008-06	OBS	No	294.633170	151.619532	1764.8	3.000	9.8	-1.0	0.99	5689	4.14	1.33

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
006302008-01	OBS	FP	0.00	1	0	1	1	LPP_DV—CENT_RESOLVED_OFFSET—EPHEM_MATCH
006302008-04	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_MARSHALL—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_TER_ALT—MOD_POS_ALT—INCONSISTENT_TRANS—CENT_FEW_DIFFS
006302008-06	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_MARSHALL—LPP_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—INCONSISTENT_TRANS—CENT_NOFITS

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

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

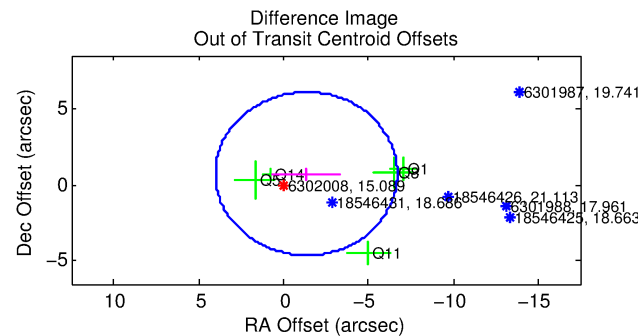
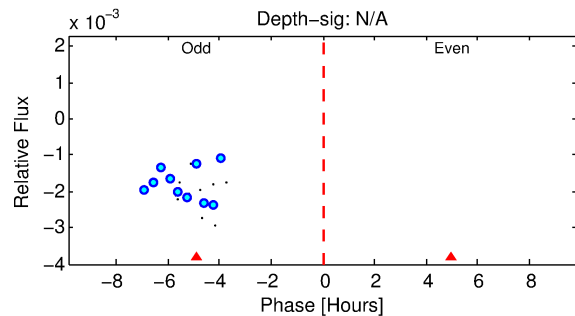
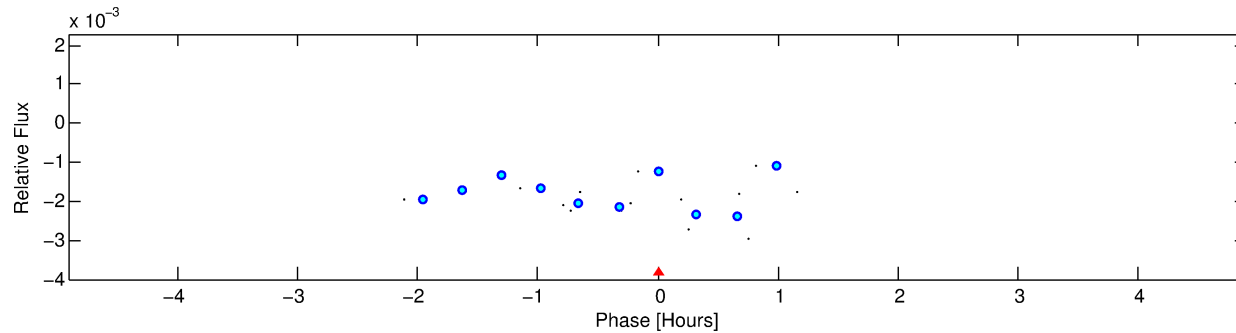
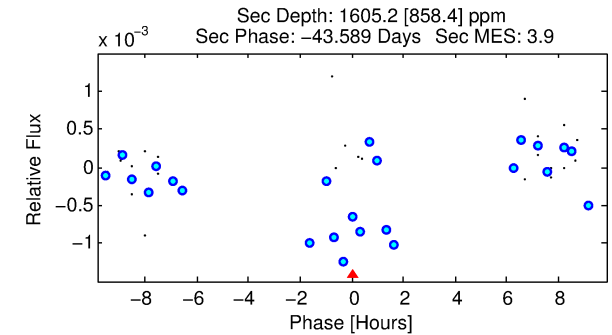
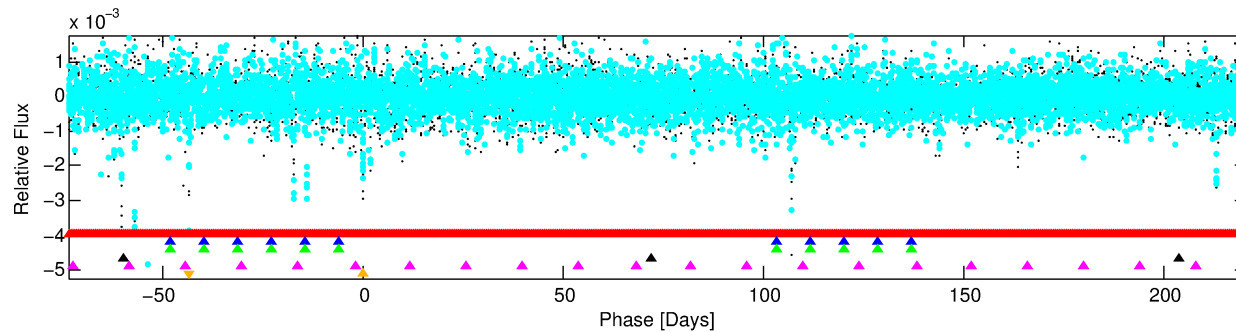
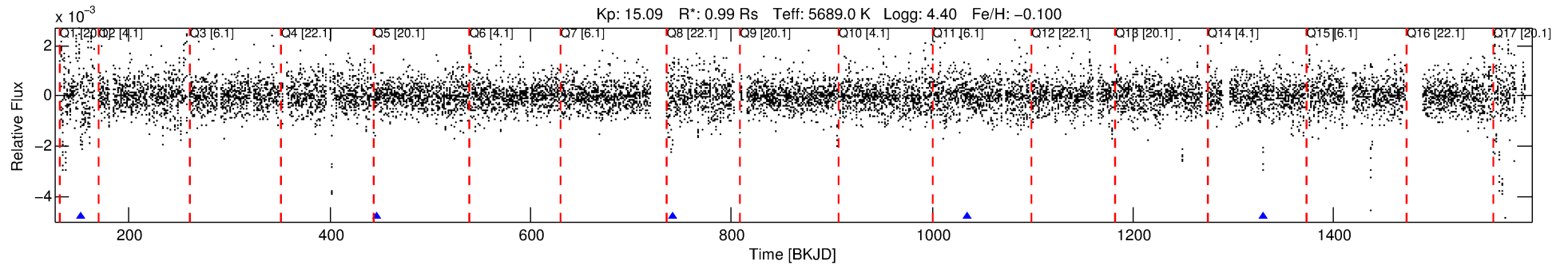
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 006302008-06

No Significant Match Found

DV One-Page Summary

KIC: 6302008 Candidate: 6 of 6 Period: 294.633 d



TPS TCE Results:

Period = 294.63317 d
Epoch = 151.6195 BKJD

DV fit results are unavailable

DV Diagnostic Results:

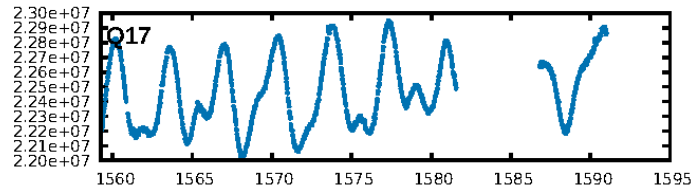
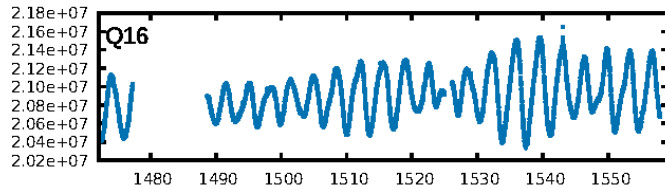
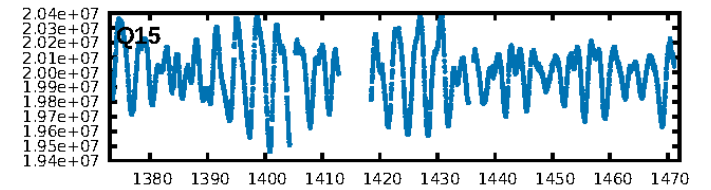
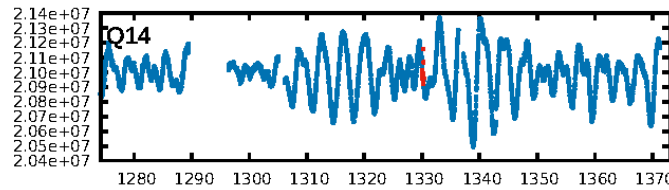
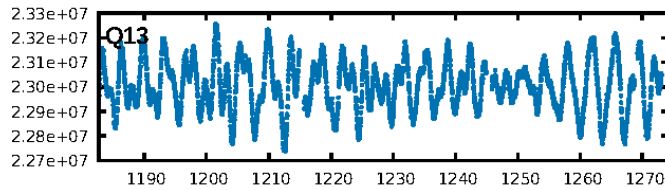
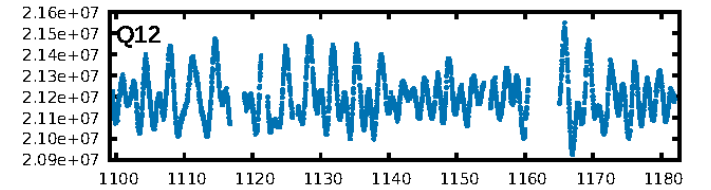
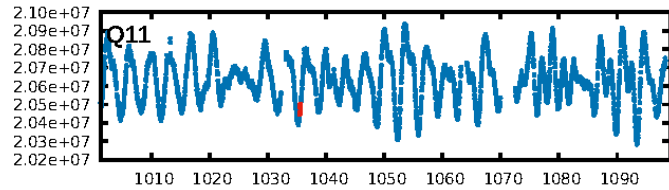
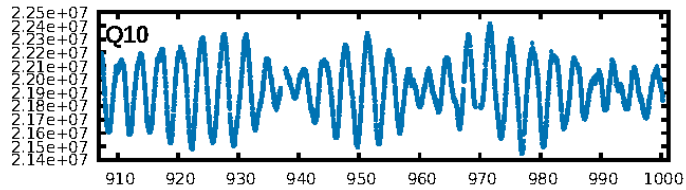
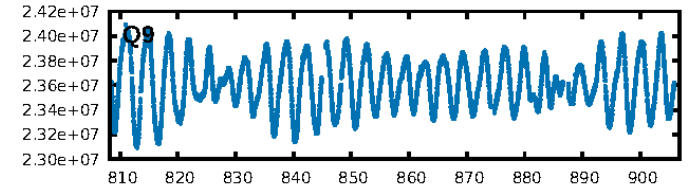
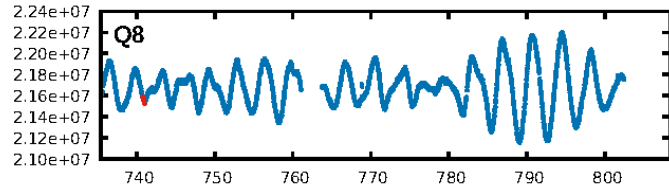
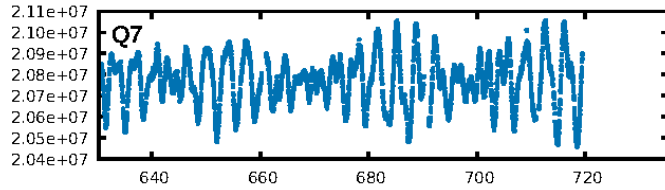
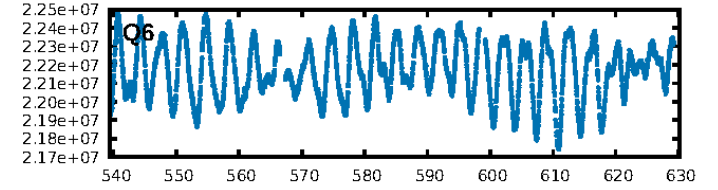
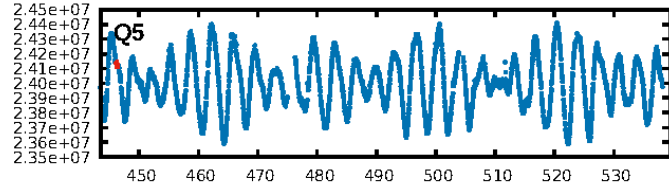
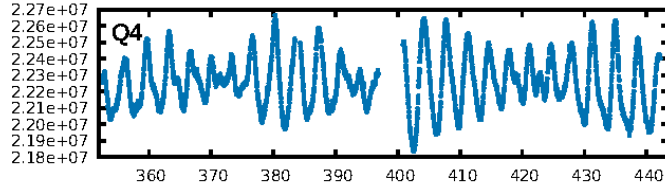
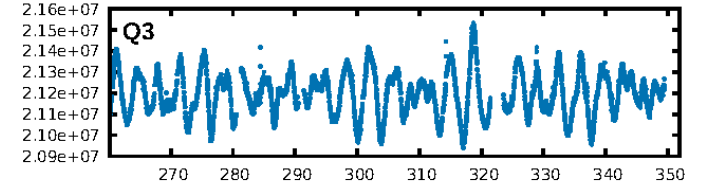
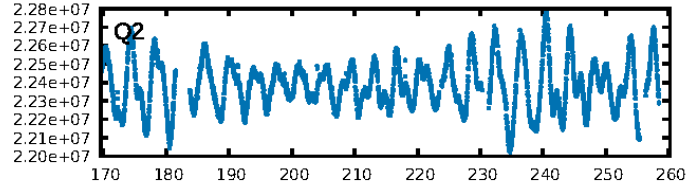
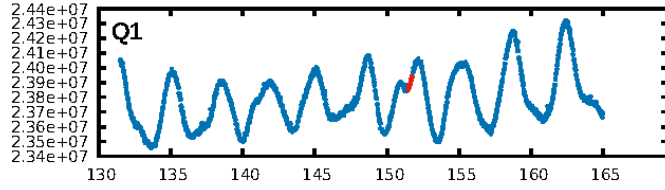
ShortPeriod-sig: 100.0% [1141.39 σ]
LongPeriod-sig: 100.0% [119.48 σ]
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 1.75e-10
RollingBand-fgt: 1.00 [2/2]
GhostDiagnostic-chr: 2.004

Centroid-sig: 72.3%
Centroid-so: 0.305 arcsec [0.54 σ]
OotOffset-rm: 1.542 arcsec [0.86 σ]
KicOffset-rm: 1.582 arcsec [0.88 σ]
OotOffset-st: 1/1/1/2 [5]
KicOffset-st: 1/1/1/2 [5]
DiffImageQuality-fgm: 0.20 [1/5]
DiffImageOverlap-fno: 0.20 [1/5]

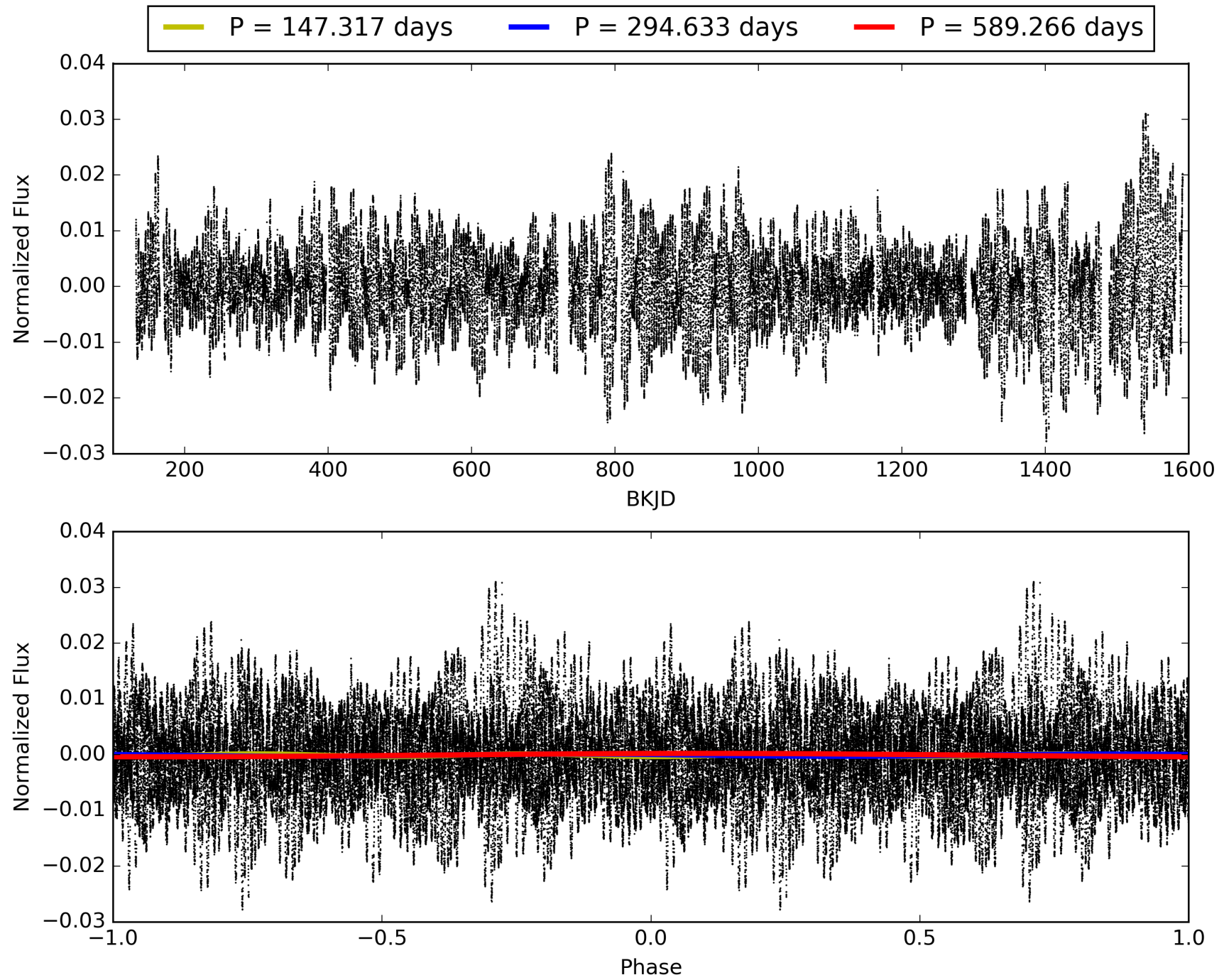
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 31-Jan-2016 06:32:24 Z

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

TCE 006302008-06, PDC Light Curves

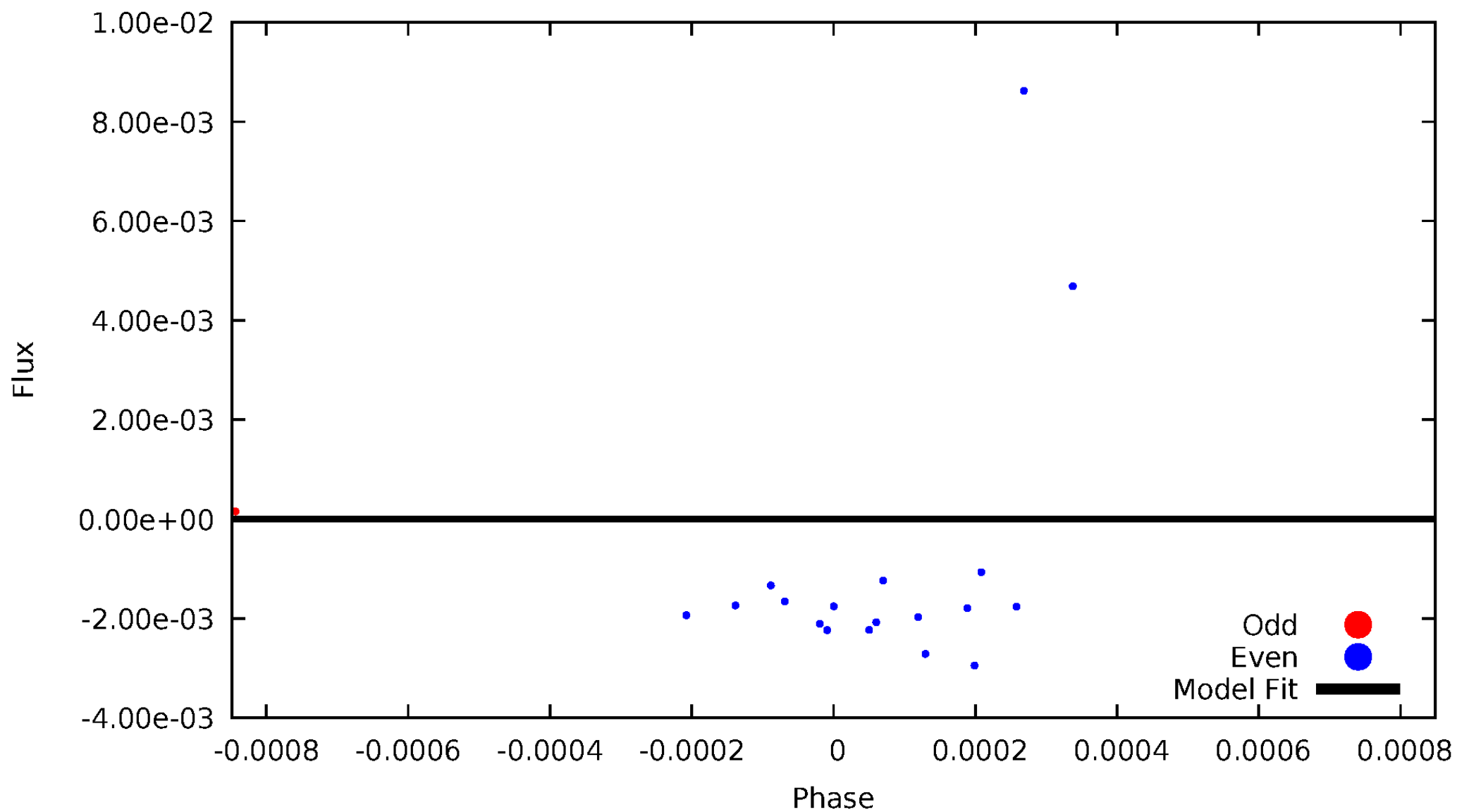


TCE 006302008-06



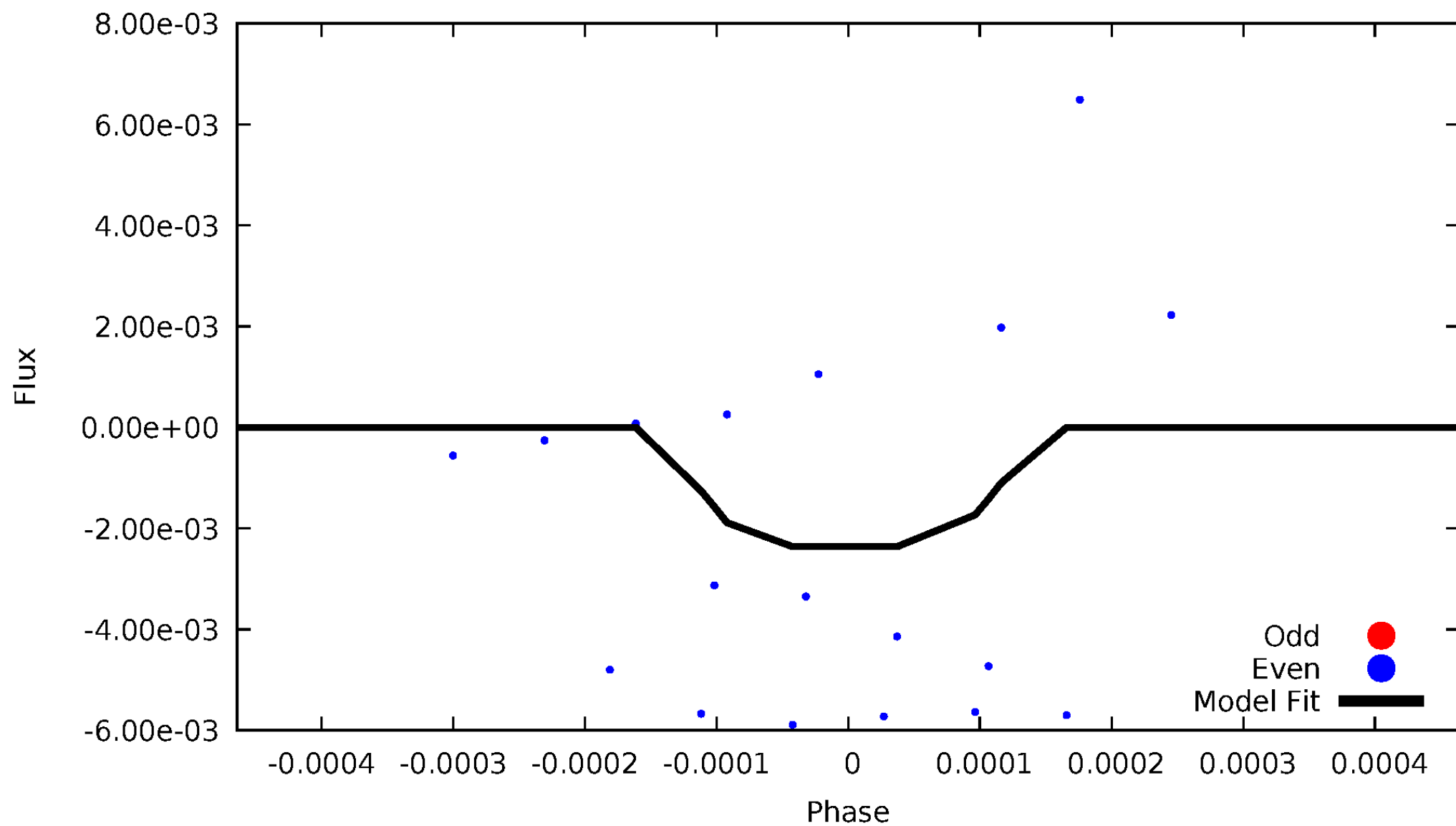
DV Odd/Even

TCE 006302008-06



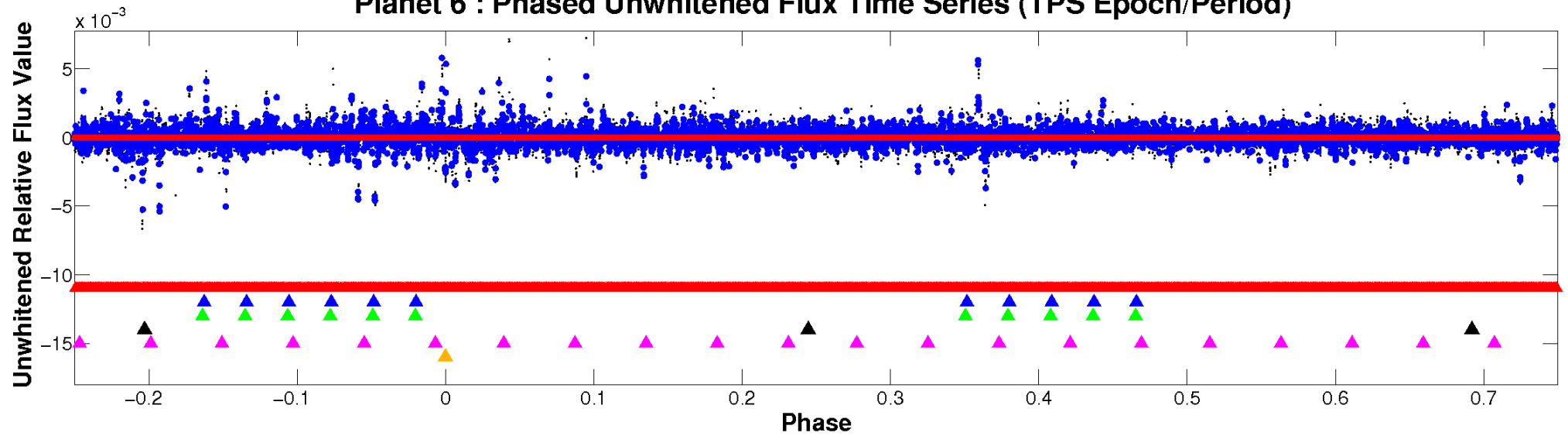
ALT Odd/Even

TCE 006302008-06

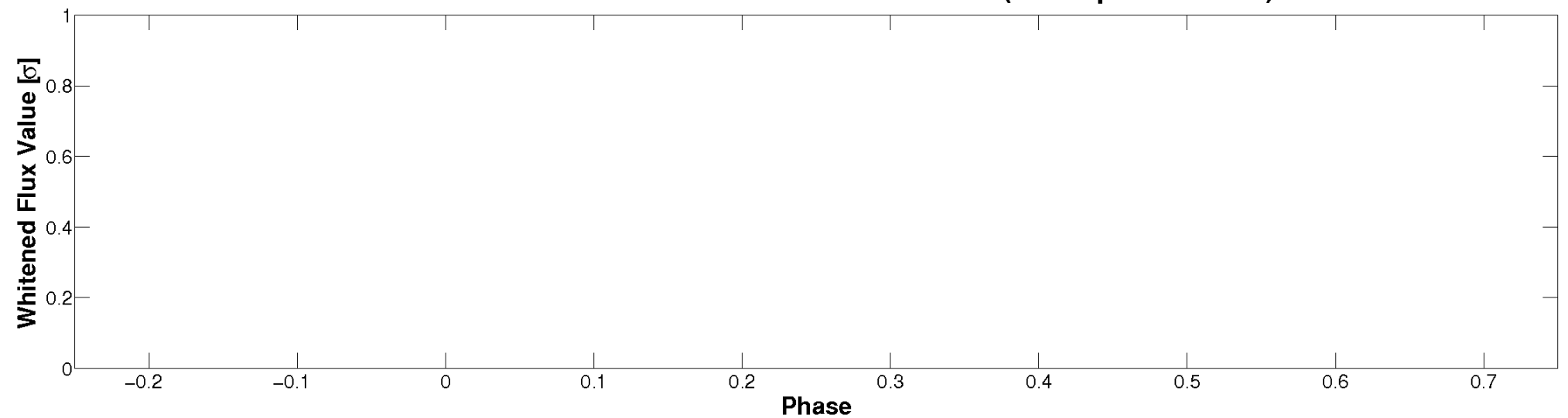


Non-Whitened Vs. Whitened Light Curve

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

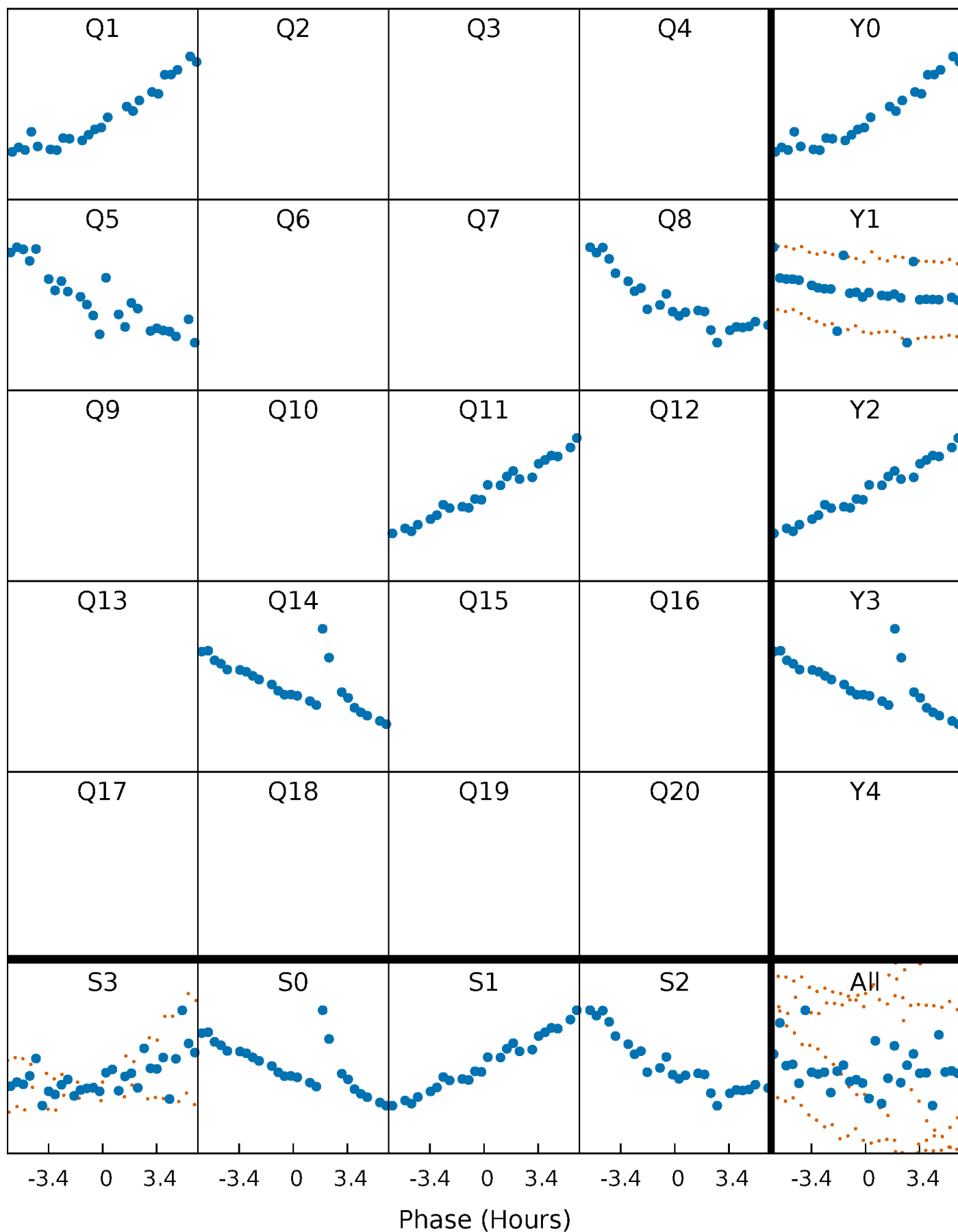


Planet 6 : Phased Whitened Flux Time Series (TPS Epoch/Period)



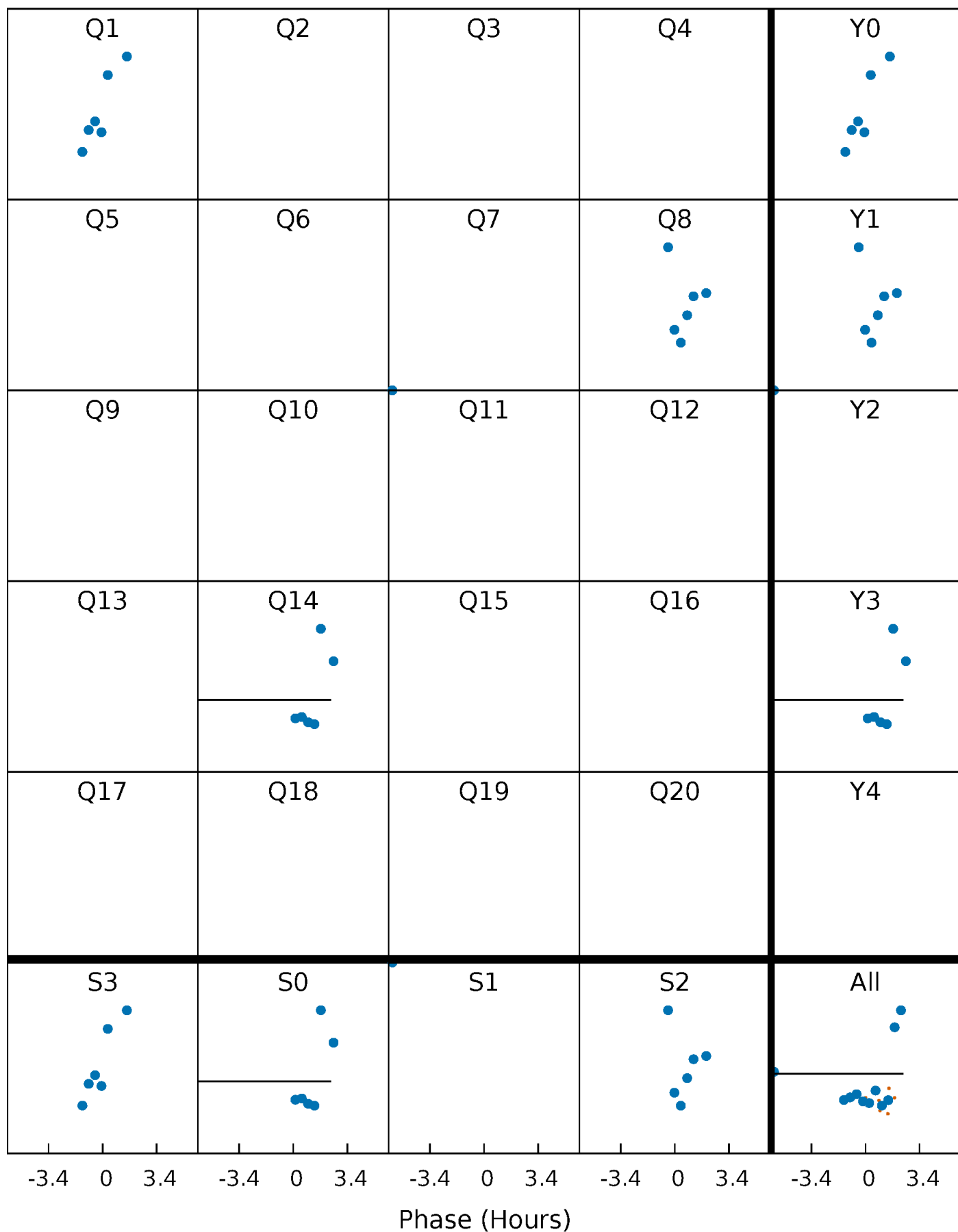
PDC Quarter-Phased Transit Curves

TCE 006302008-06 P=294.633170 Days $T_0=151.619532$ (BKJD)



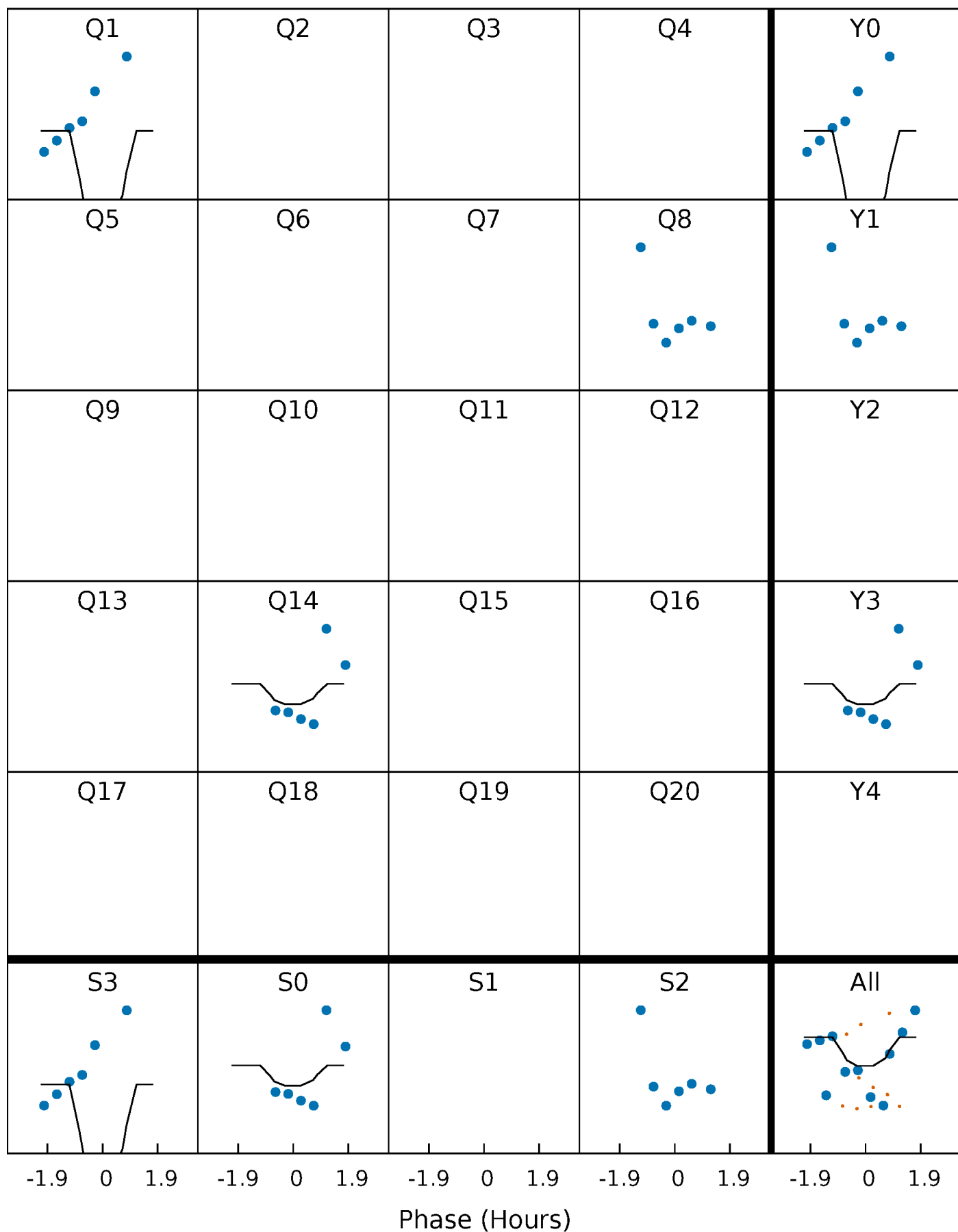
DV Quarter-Phased Transit Curves

TCE 006302008-06 P=294.633170 Days $T_0=151.619532$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

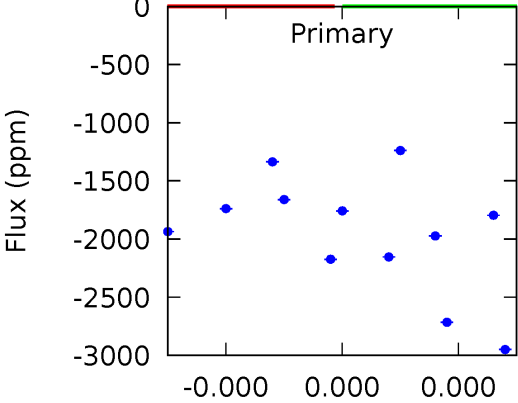
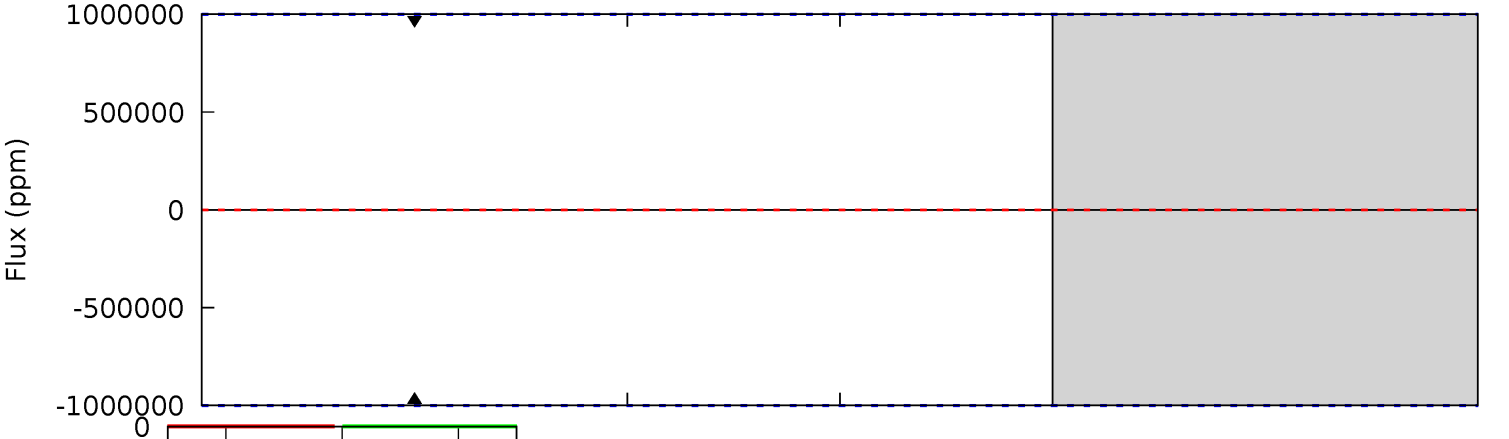
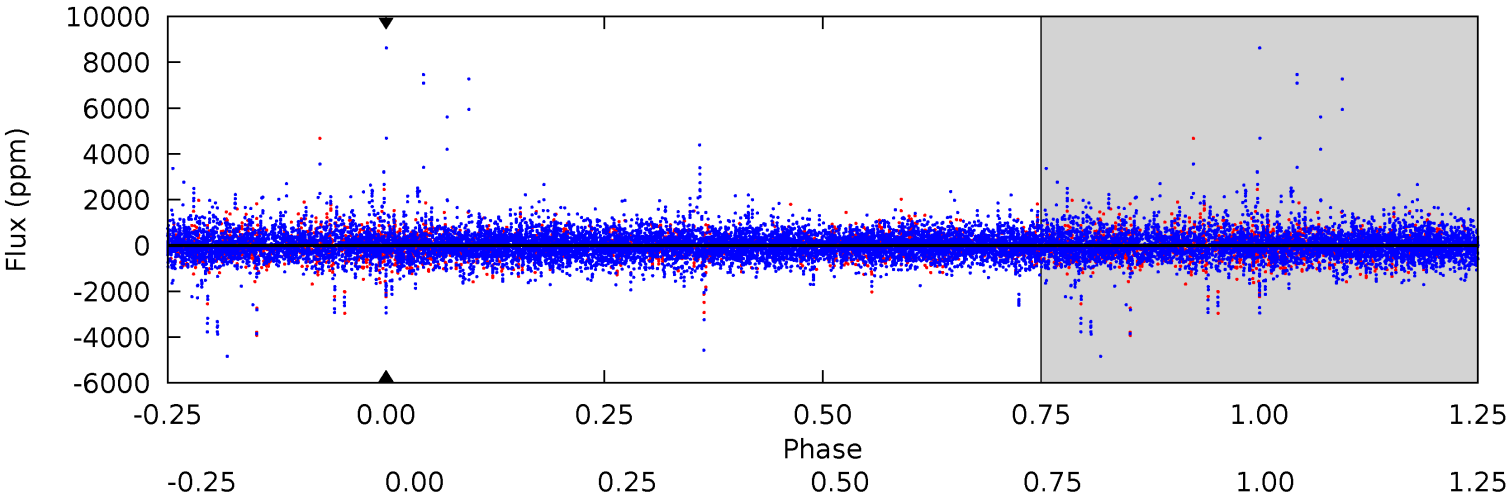
TCE 006302008-06 P=294.633170 Days $T_0=151.646779$ (BKJD)



DV Model-Shift Uniqueness Test

006302008-06, P = 294.633170 Days, E = 151.619532 Days

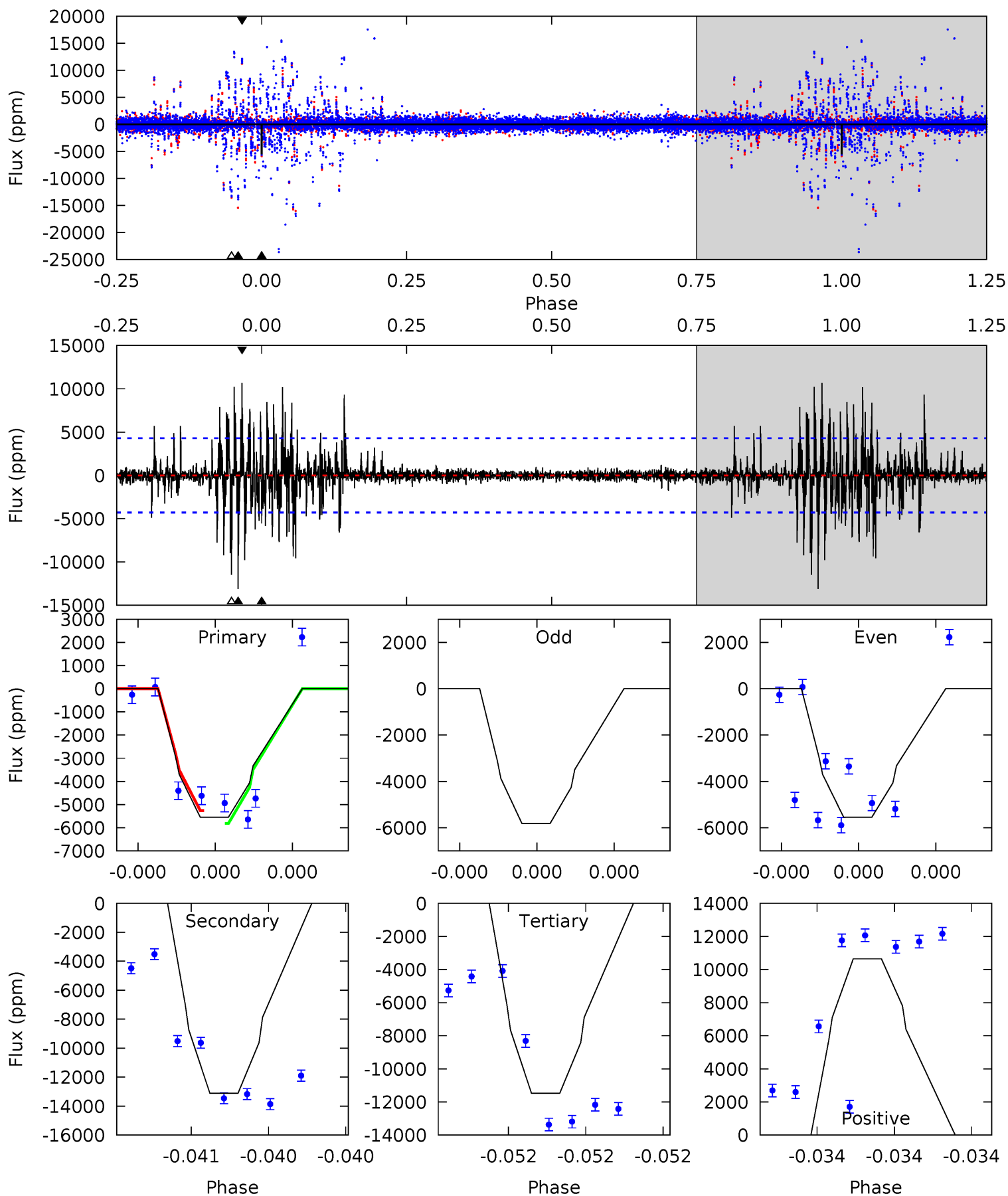
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
0	0	0	0	1.00	1.00	1.00	0	0	0	0	0	0	0	0



Alt Model-Shift Uniqueness Test

006302008-06, P = 294.633170 Days, E = 151.646779 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
7.37	17.4	15.3	14.2	5.72	3.70	1.78	-7.89	-6.78	2.17	3.28	0.19	0.75	0.45	0



Stellar Parameters For KIC 006302008

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	5689^{+169}_{-169}	$4.396^{+0.128}_{-0.192}$	$-0.100^{+0.300}_{-0.300}$	$0.995^{+0.280}_{-0.151}$	$0.899^{+0.125}_{-0.083}$	$1.285^{+0.716}_{-0.618}$
	+3%/-3%	+3%/-4%	+300%/-300%	+28%/-15%	+14%/-9%	+56%/-48%
Source	PHO1	KIC0	KIC0	DSEP		

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

Secondary Eclipse Parameters for KIC 006302008-06 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	0 ± 1000000	$8.60^{+9.61}_{-5.28}$	387^{+26}_{-24}	4892^{+15628}_{-18654}	$15971^{+1048458}_{-494032}$
Alt.	-13111 ± 752	$9.55^{+9.28}_{-6.21}$	385^{+27}_{-23}	6546^{+6905}_{-1747}	$56841^{+404754}_{-42642}$

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

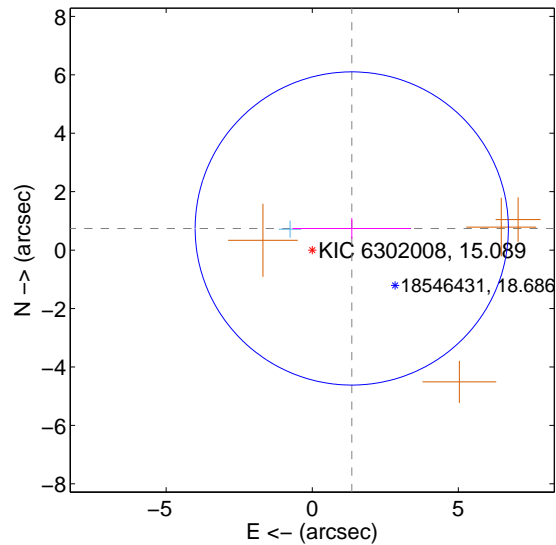
Supplemental centroid analysis for 006302008-06. Kepler magnitude: 15.09. Transit SNR -1.00

There are 1 quarters with good PRF difference image offsets

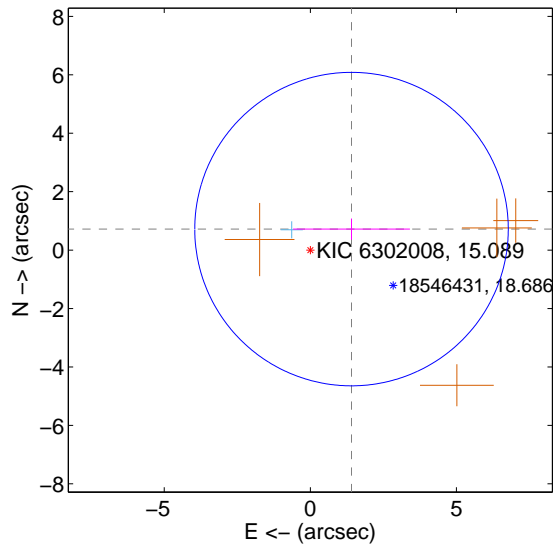
The direct PRF centroid is offset from the target star catalog position by about 0.12 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	1.542 ± 1.787	0.86	-1.353 ± 2.027	0.740 ± 0.358
PRF-fit source offset from KIC position	1.582 ± 1.788	0.88	-1.410 ± 1.999	0.719 ± 0.362
photometric centroid source offset	0.31 ± 0.57	0.54	0.25 ± 0.57	0.17 ± 0.58

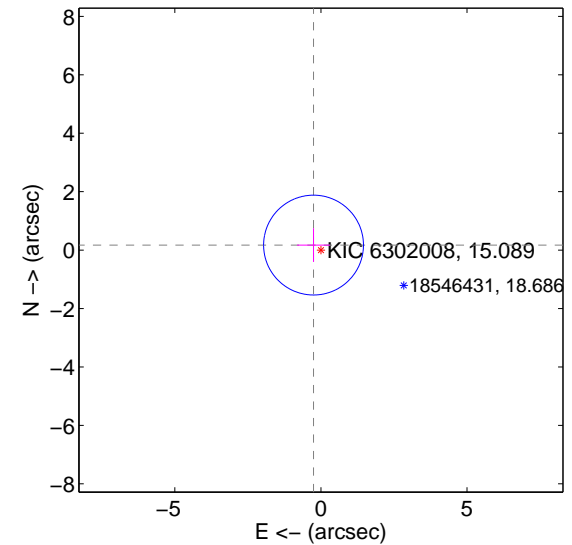
offset from difference PRF-fit to OOT PRF-fit



offset from difference PRF-fit to KIC position

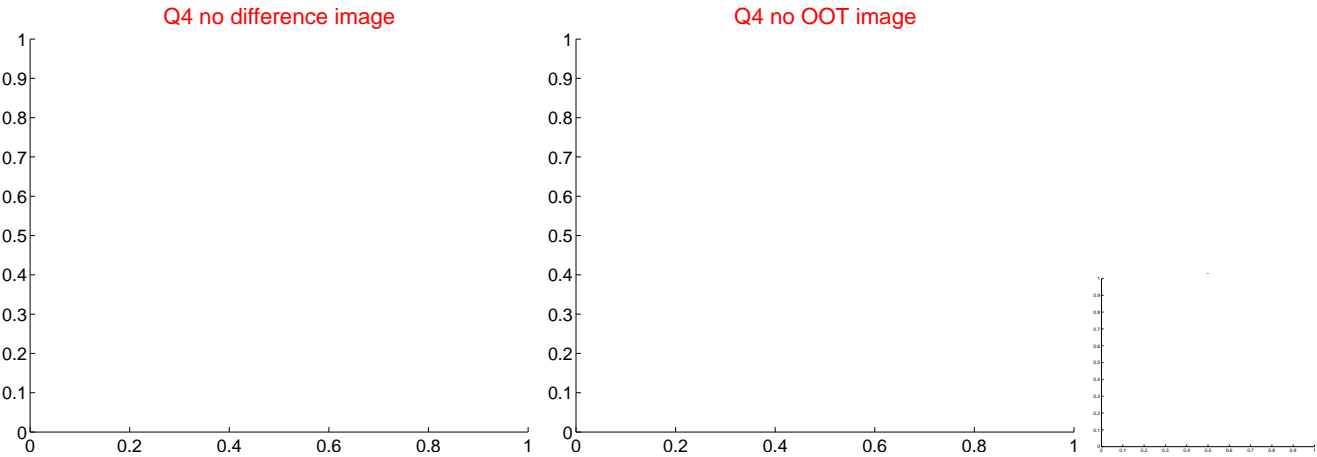
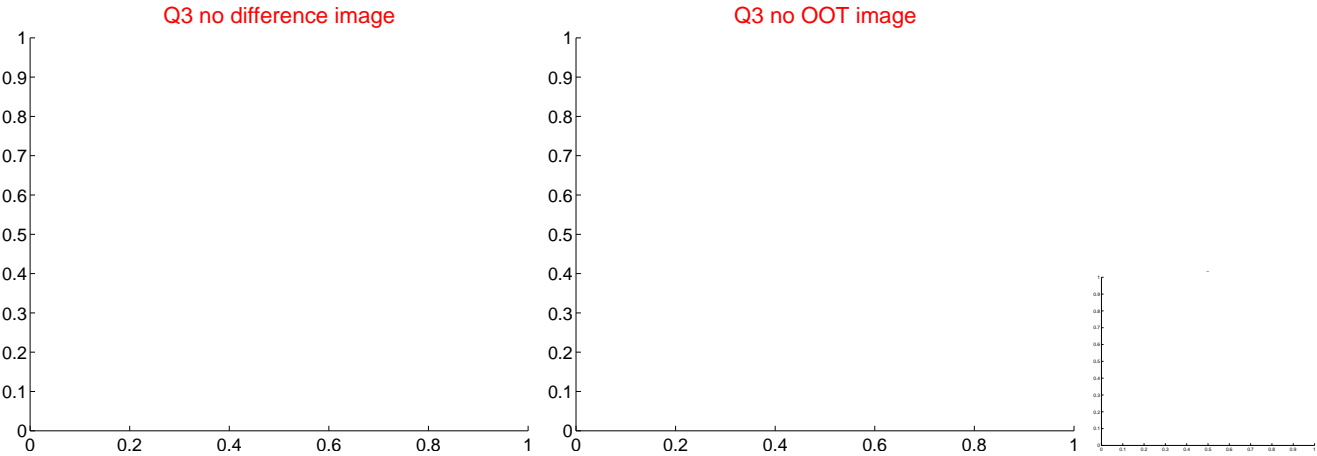
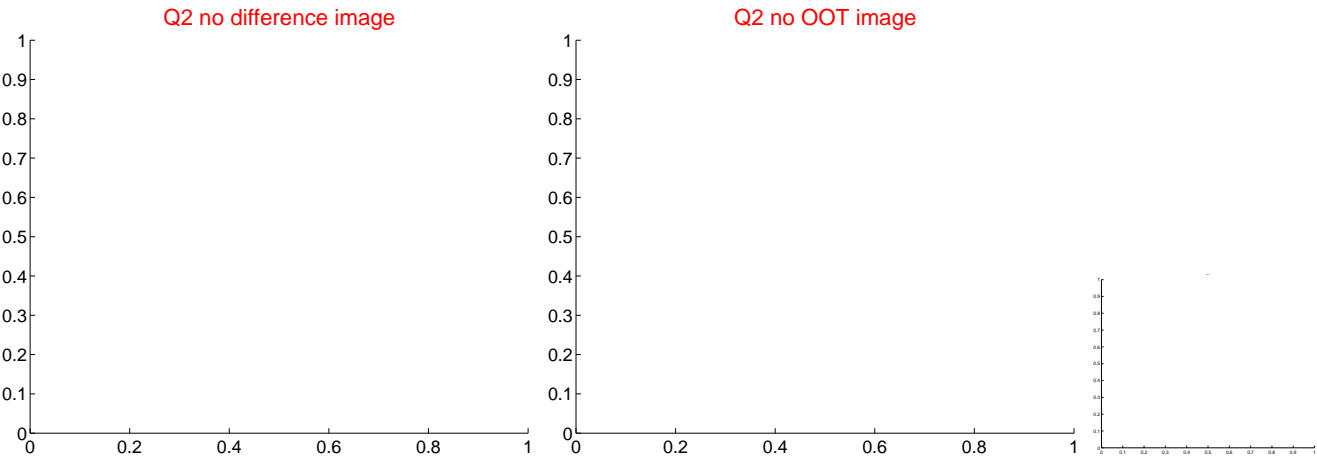
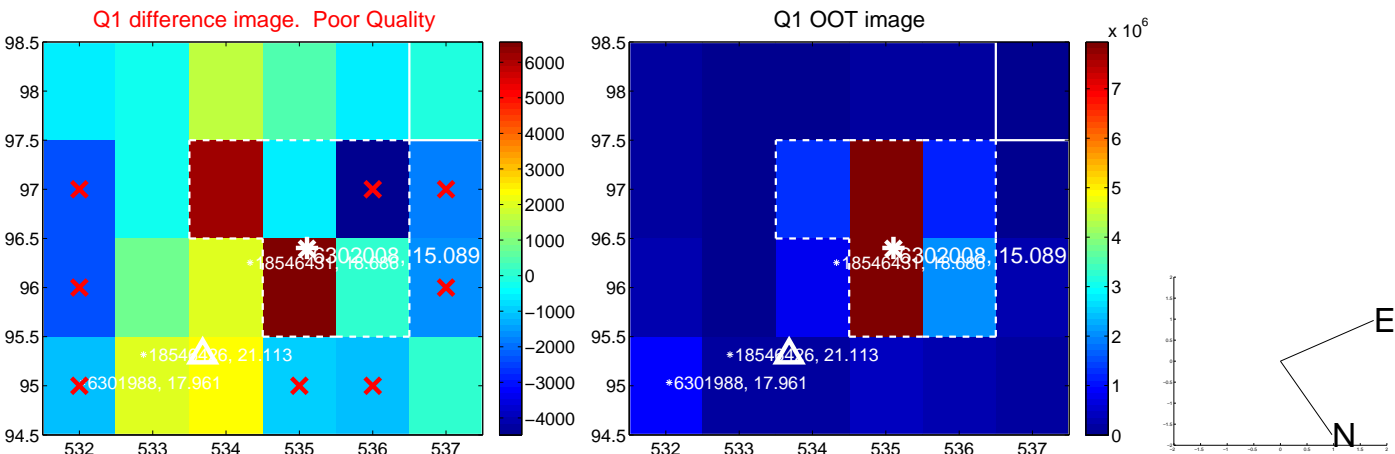


offset from photometric centroids

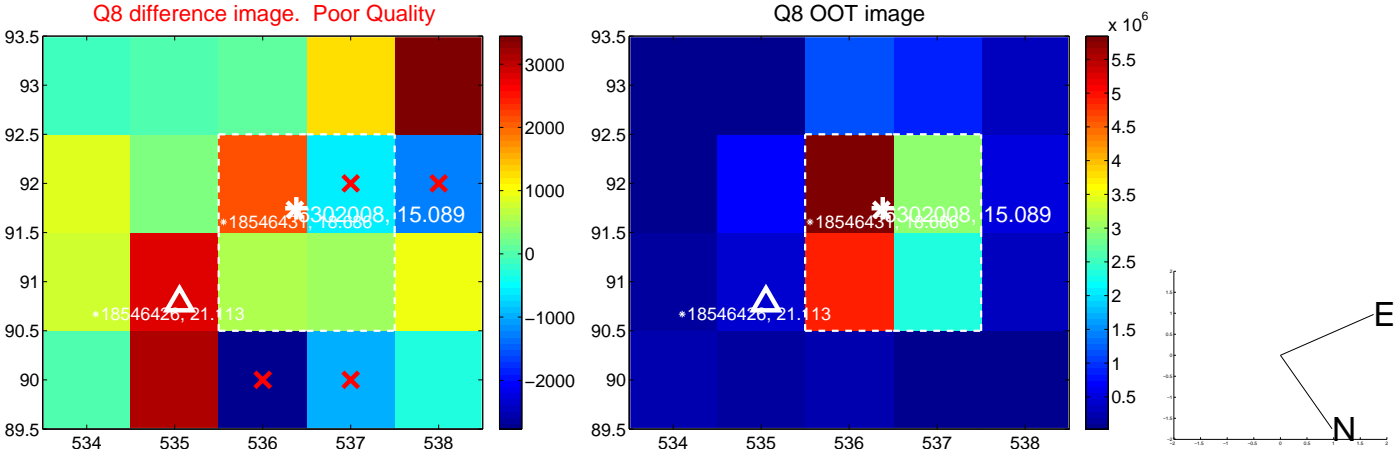
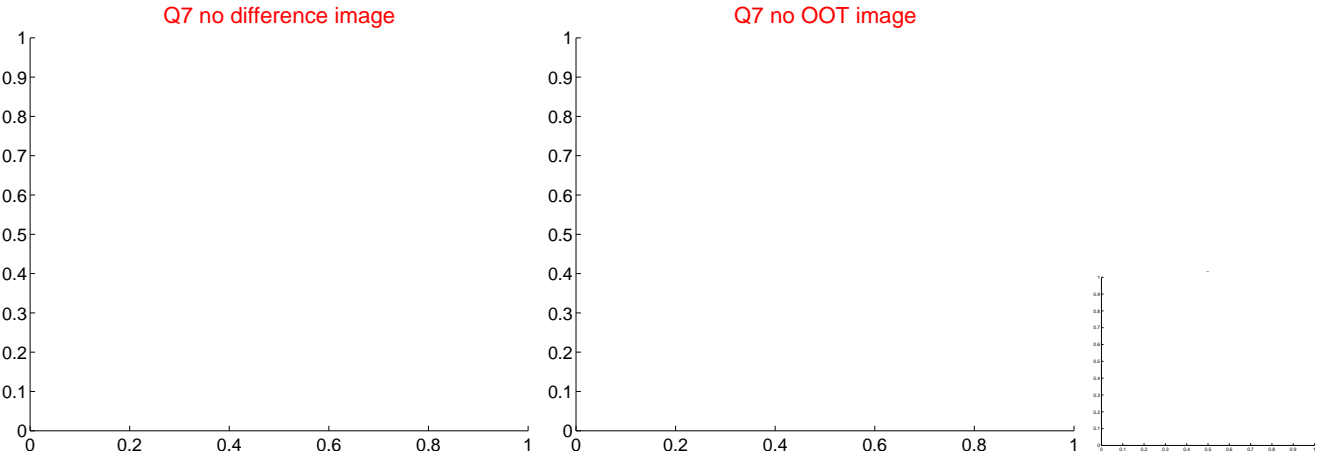
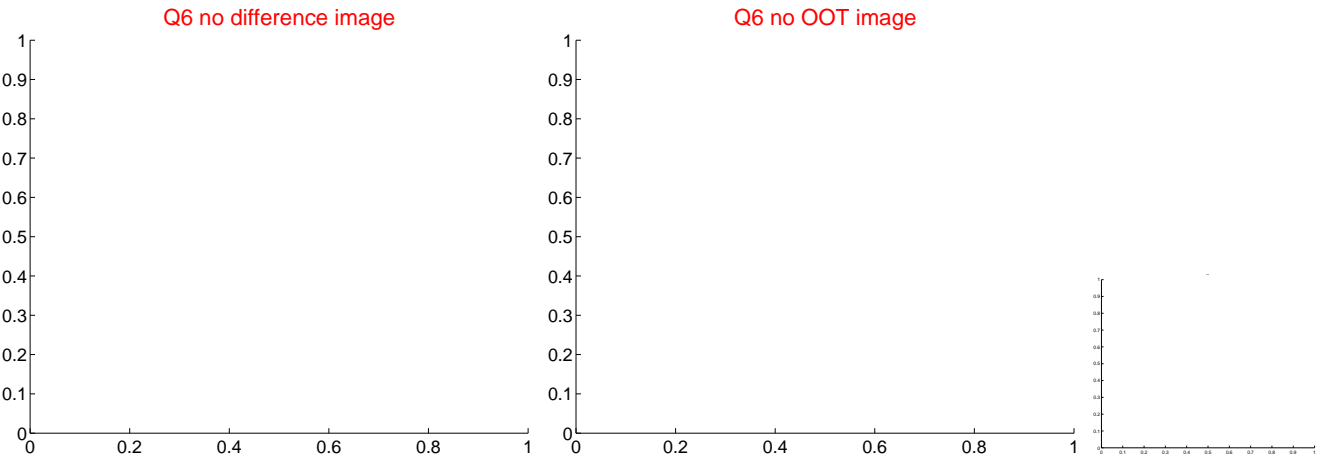
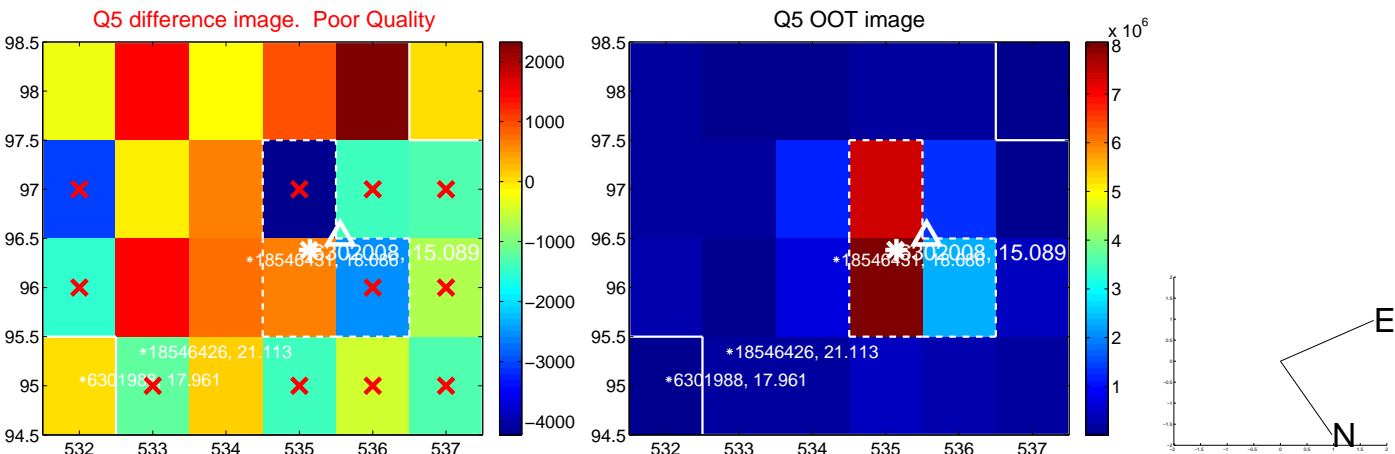


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

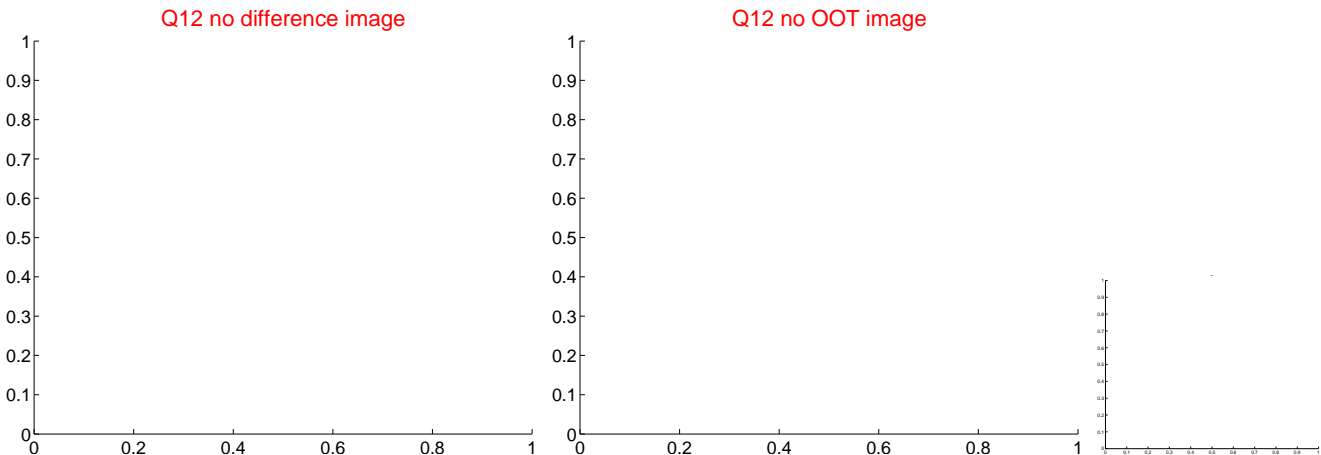
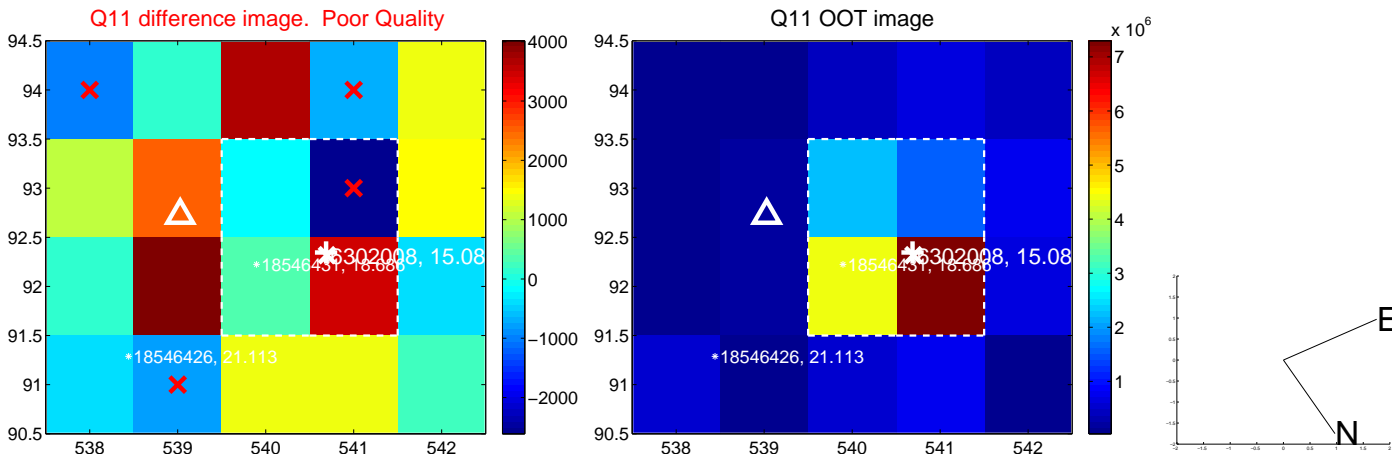
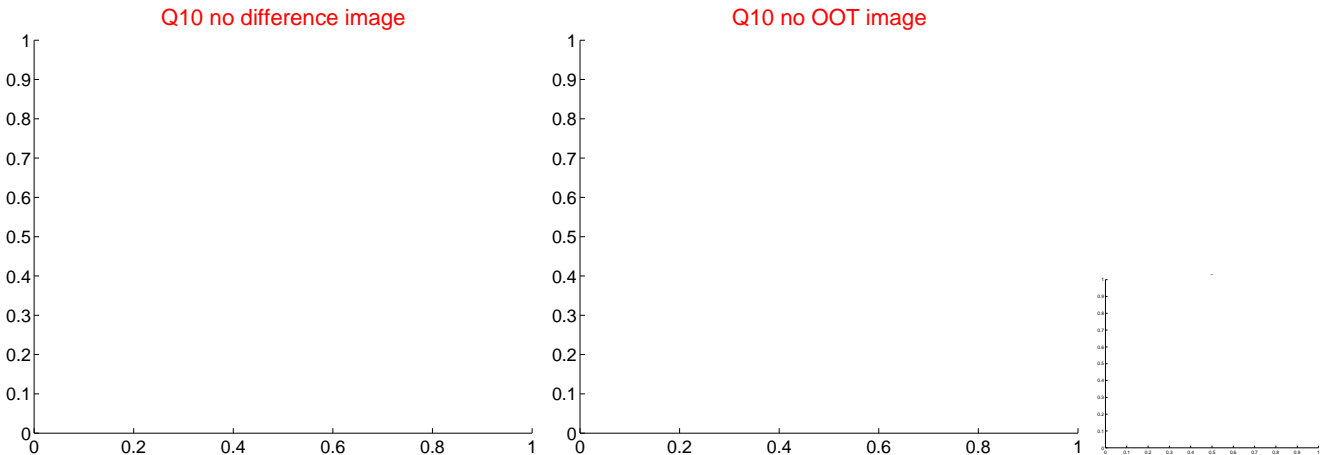
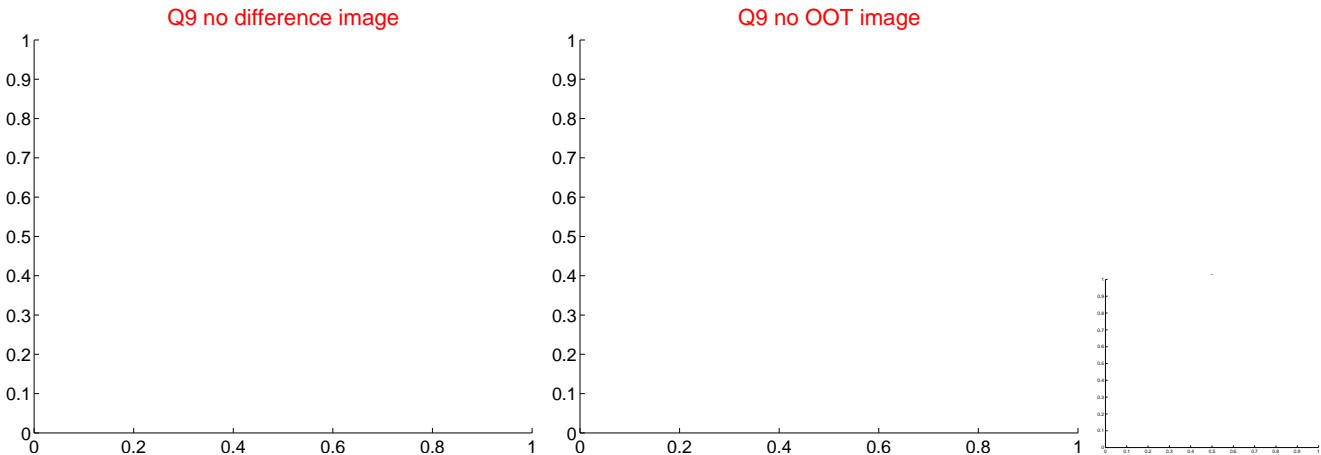
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

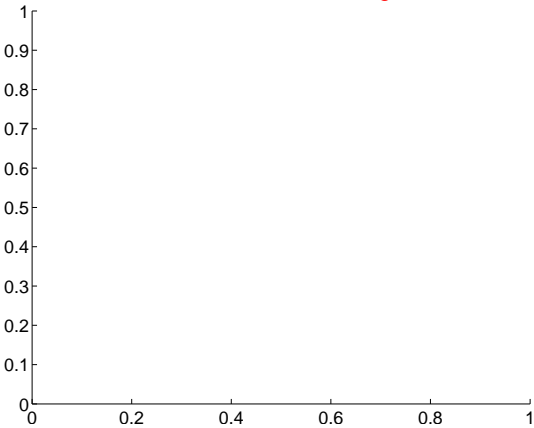


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value

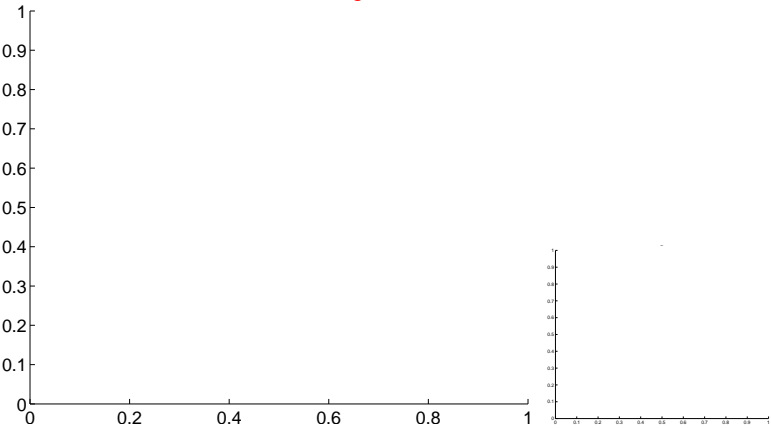


white ×: KIC target position; +: OOT centroid; △: difference centroid. red ✕: large negative pixel value.

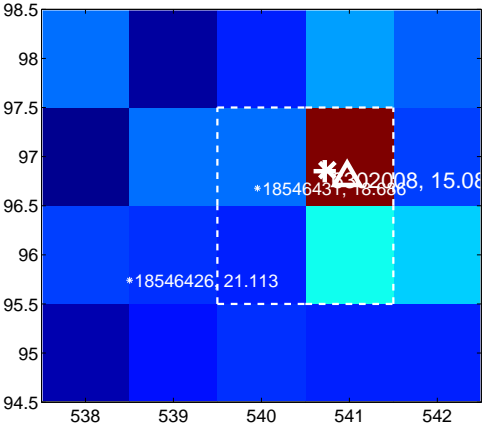
Q13 no difference image



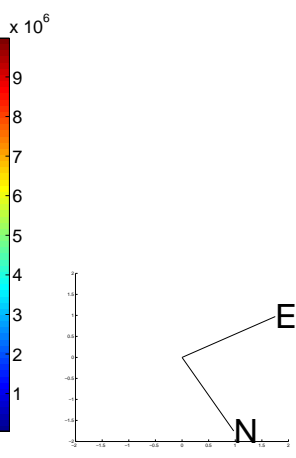
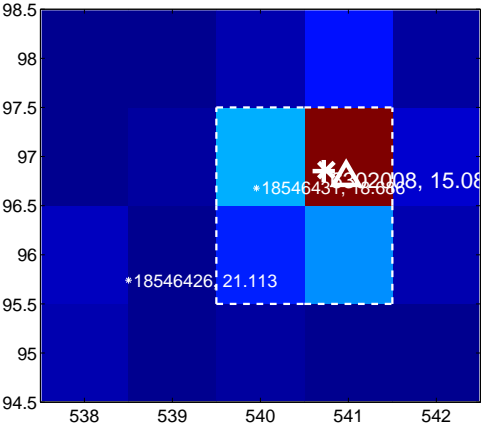
Q13 no OOT image



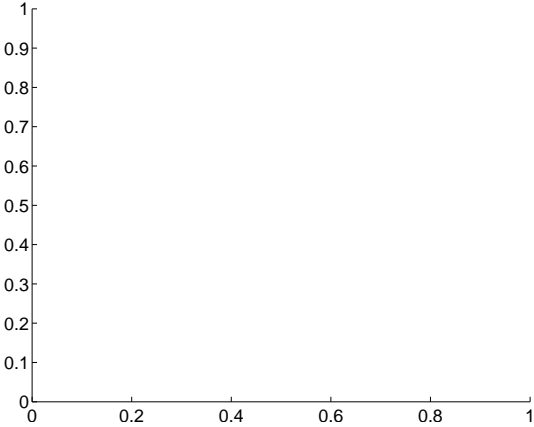
Q14 difference image



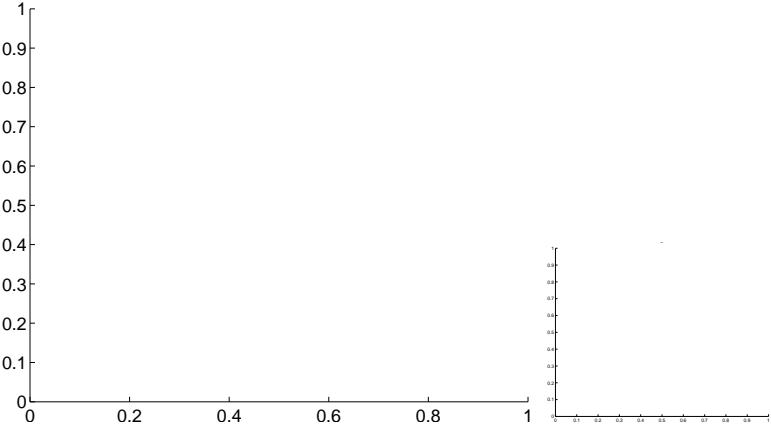
Q14 OOT image



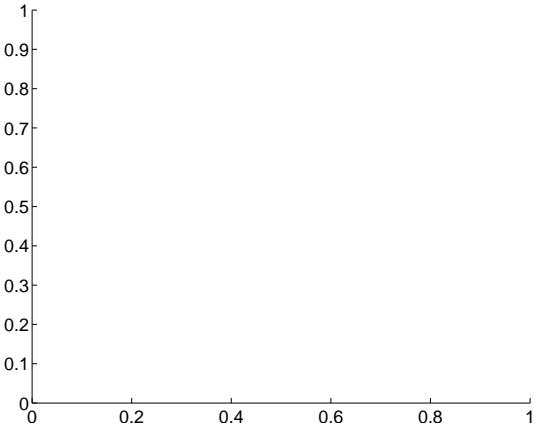
Q15 no difference image



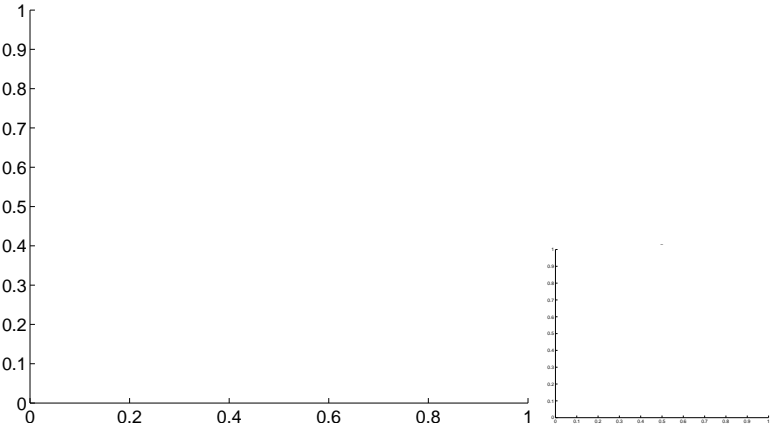
Q15 no OOT image



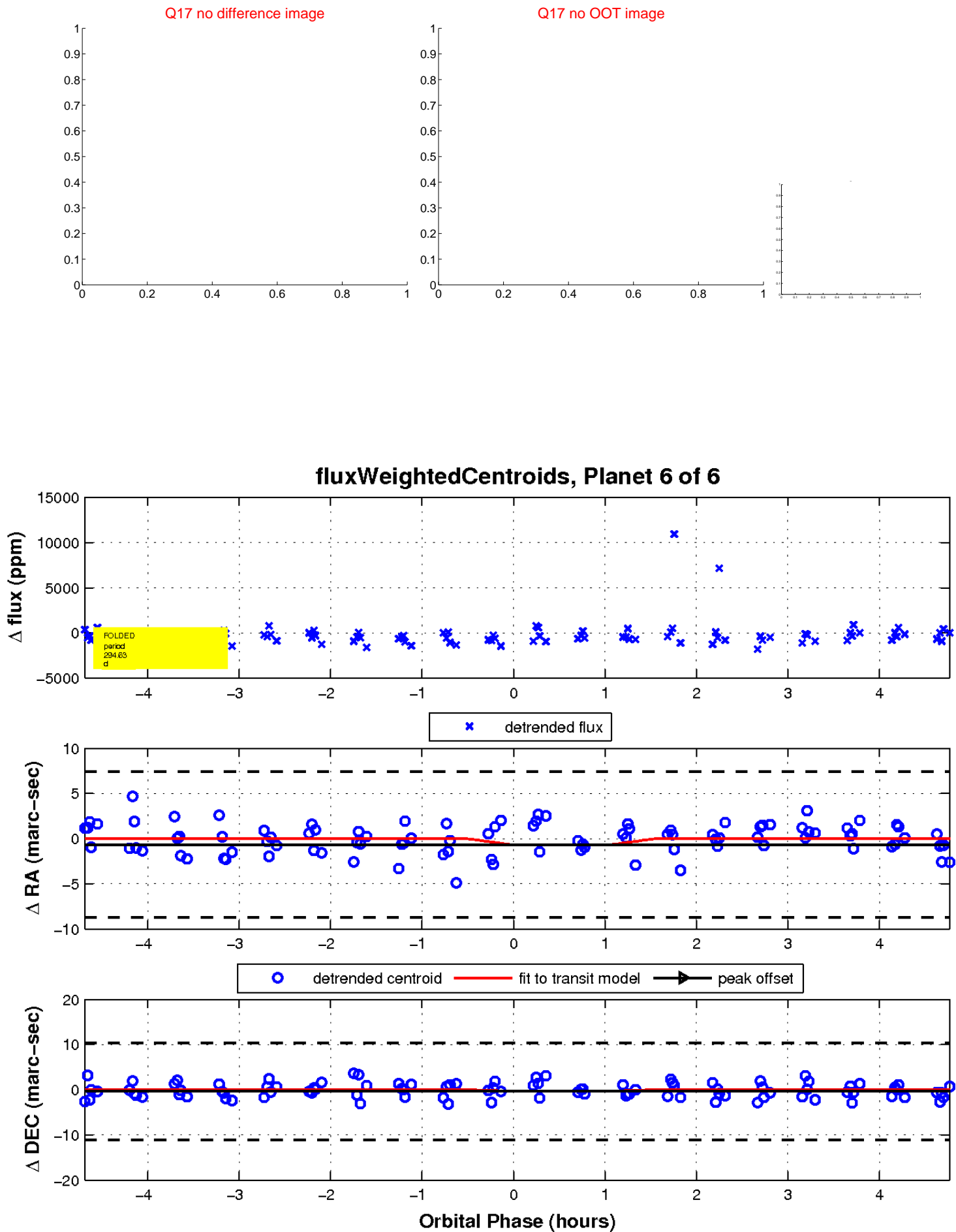
Q16 no difference image



Q16 no OOT image



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



UKIRT Image

Declination

