

KIC 007045605

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})
007045605-01	OBS	No	1.162243	131.985197	10.2	6.337	8.1	5.5	1.92	7196	0.62	14087.99
007045605-02	OBS	7808.01	361.501843	339.358356	298.7	4.588	10.1	10.3	1.92	7196	3.71	6.68
007045605-03	OBS	No	82.810950	151.114675	251.5	4.006	8.2	8.3	1.92	7196	3.48	47.69

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
007045605-01	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT
007045605-02	OBS	FP	0.17	1	0	0	0	MOD_NONUNIQ_ALT
007045605-03	OBS	FP	0.00	1	0	0	0	TRANS_GAPPED—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT

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

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

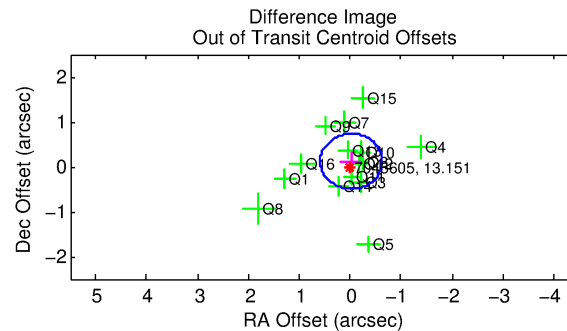
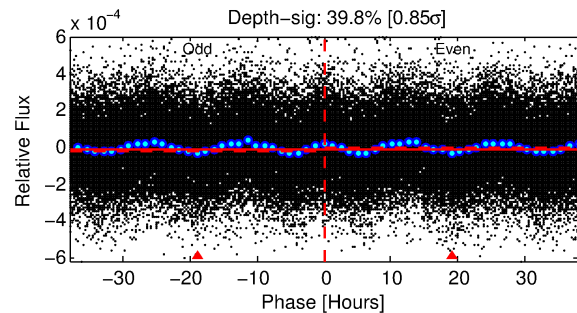
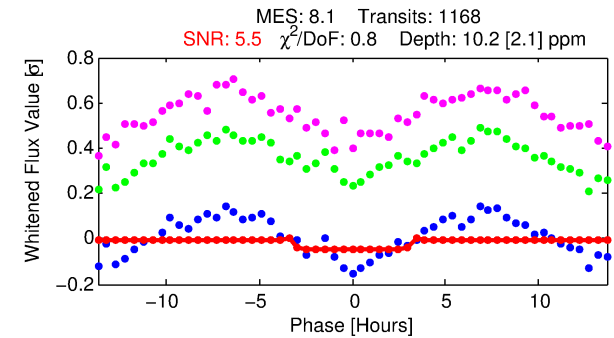
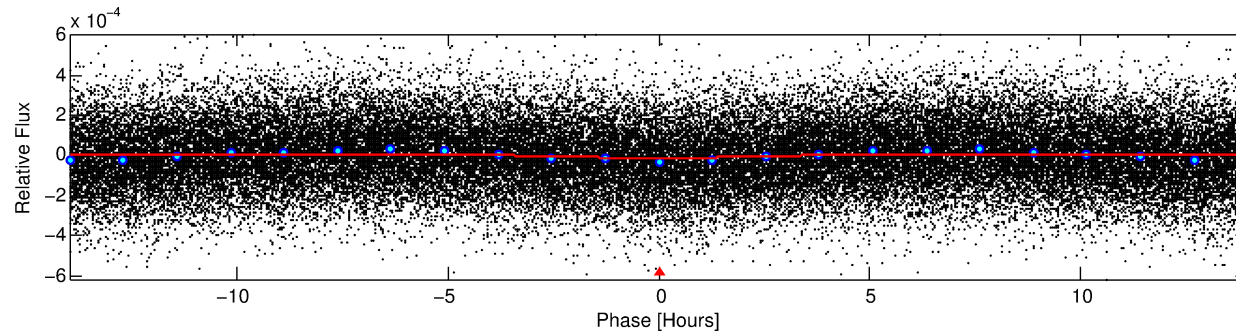
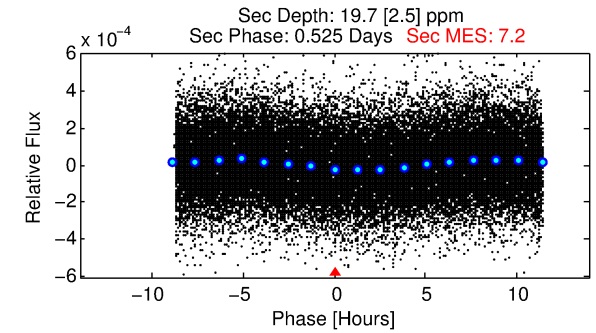
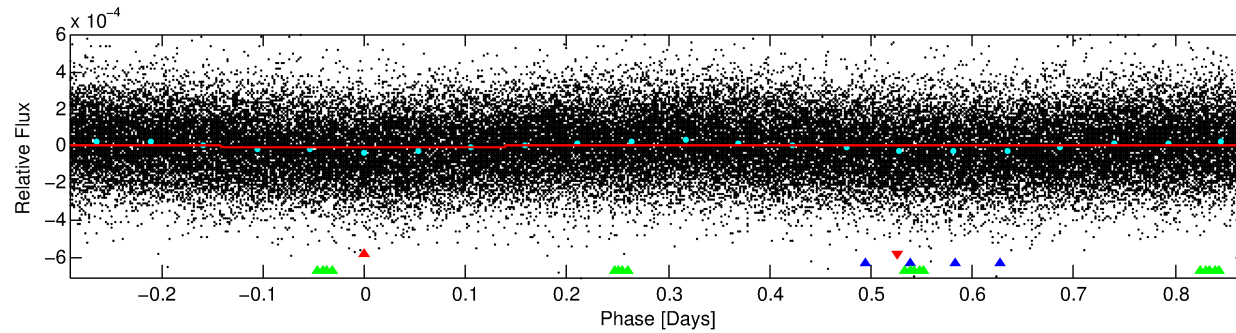
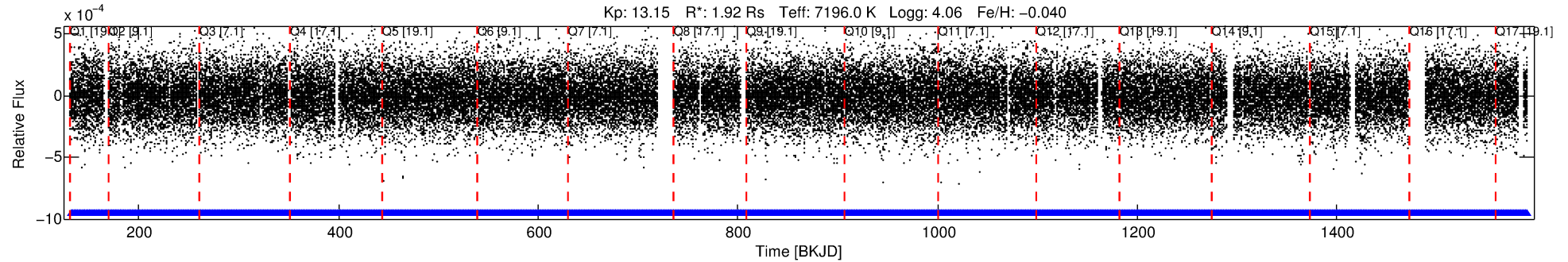
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 007045605-01

No Significant Match Found

DV One-Page Summary

KIC: 7045605 Candidate: 1 of 3 Period: 1.162 d



DV Fit Results:

Period = 1.16224 [0.00003] d
Epoch = 131.9852 [0.0091] BKJD
Rp/R* = 0.0030 [0.0035]
a/R* = 1.51 [5.91]
b = 0.25 [26.75]
Seff = 14087.99 [5249.16]
Teq = 2778 [259] K
Rp = 0.63 [0.77] Re
a = 0.0251 [0.0060] AU
Ag = 17.49 [41.96] [0.39σ]
Teffp = 8784 [5233] K [1.15σ]

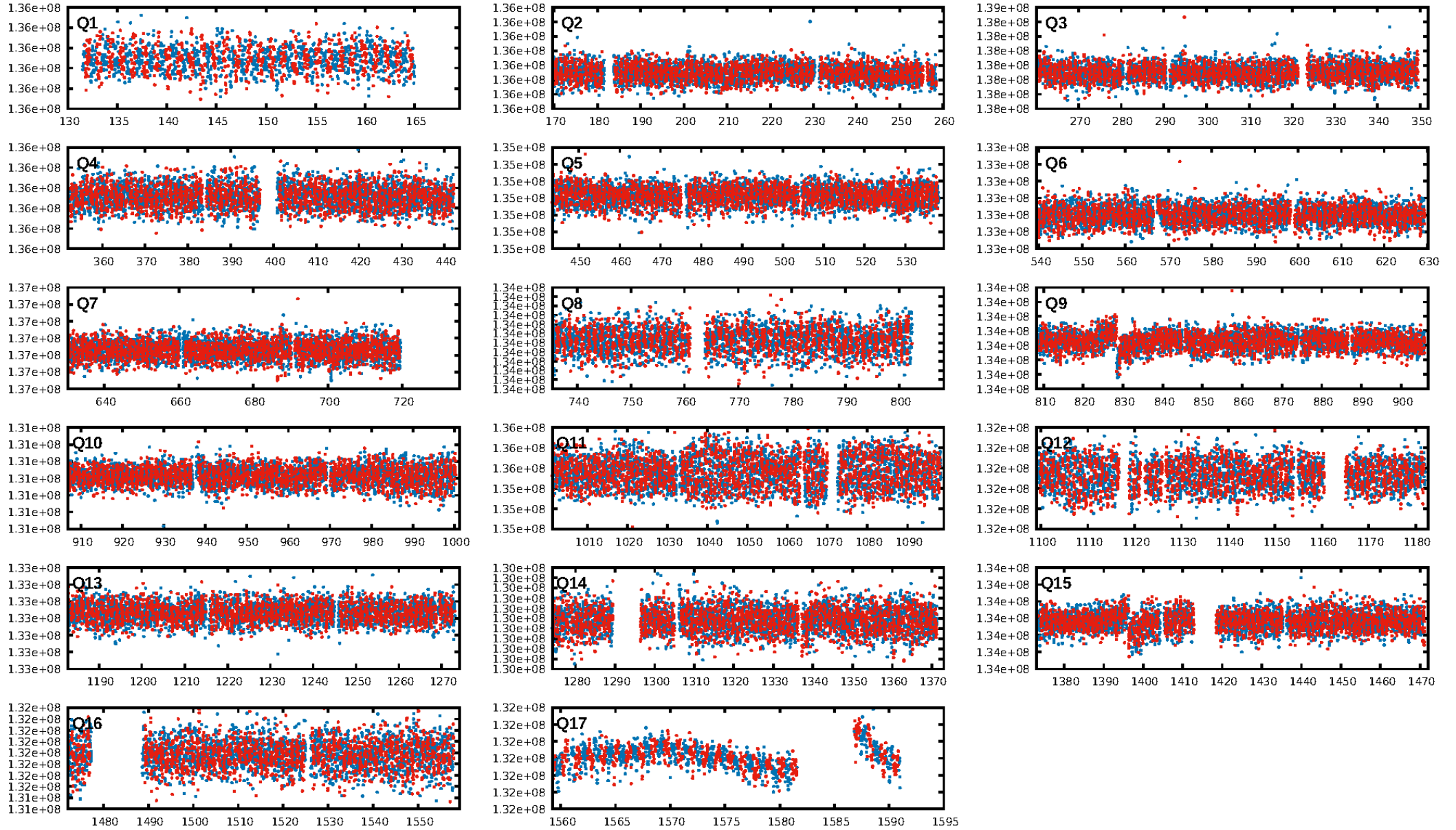
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: 100.0% [261.40σ]
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 1.28e-08
RollingBand-fgt: 1.00 [1115/1115]
GhostDiagnostic-chr: 2.929
Centroid-sig: 48.8%
Centroid-so: 0.173 arcsec [0.15σ]
OotOffset-rm: 0.119 arcsec [0.58σ]
KicOffset-rm: 0.115 arcsec [0.52σ]
OotOffset-st: 3/4/4/4 [15]
KicOffset-st: 3/4/4/4 [15]
DiffImageQuality-fgm: 1.00 [15/15]
DiffImageOverlap-fno: 1.00 [17/17]

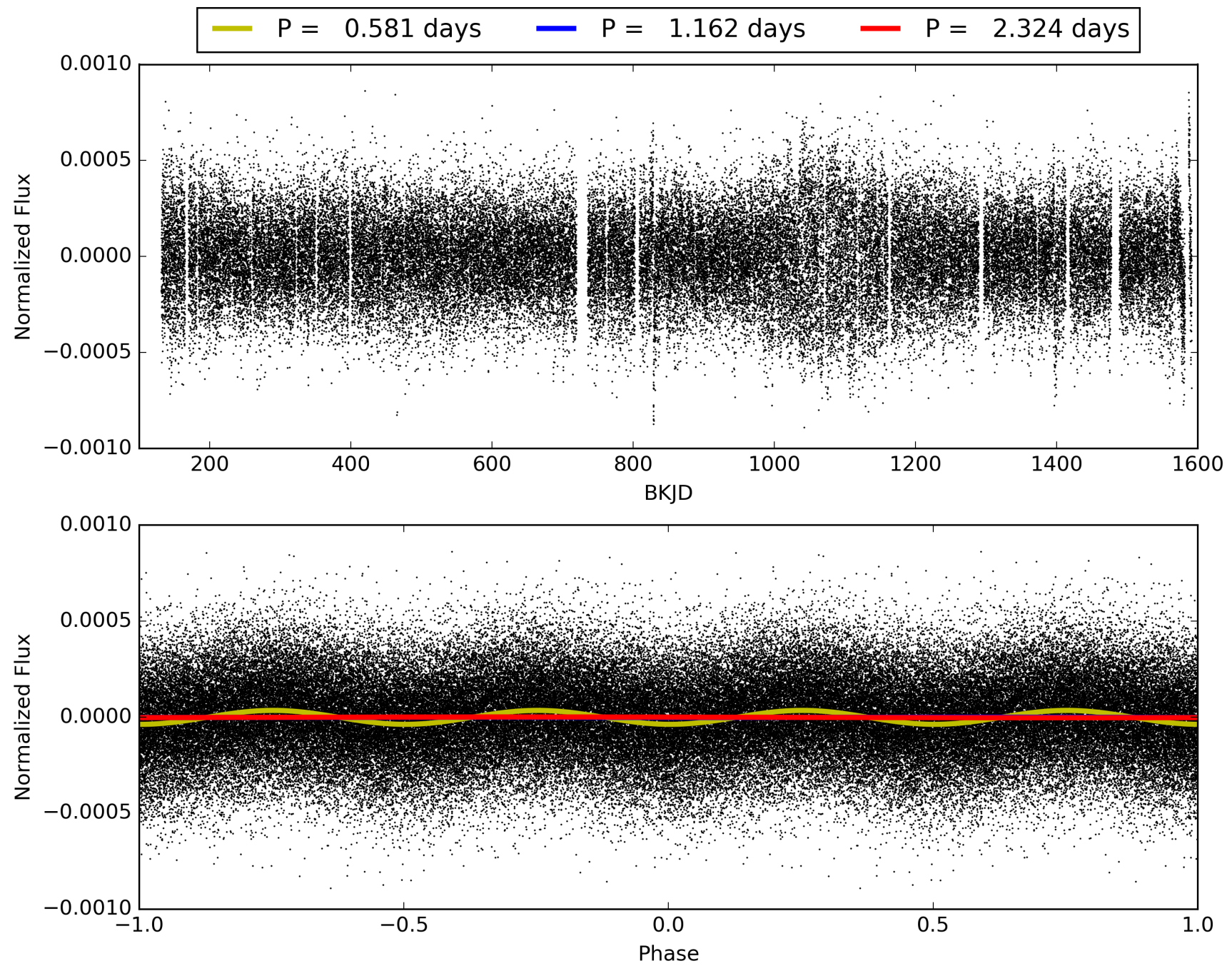
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 31-Jan-2016 08:40:13 Z

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

TCE 007045605-01, PDC Light Curves

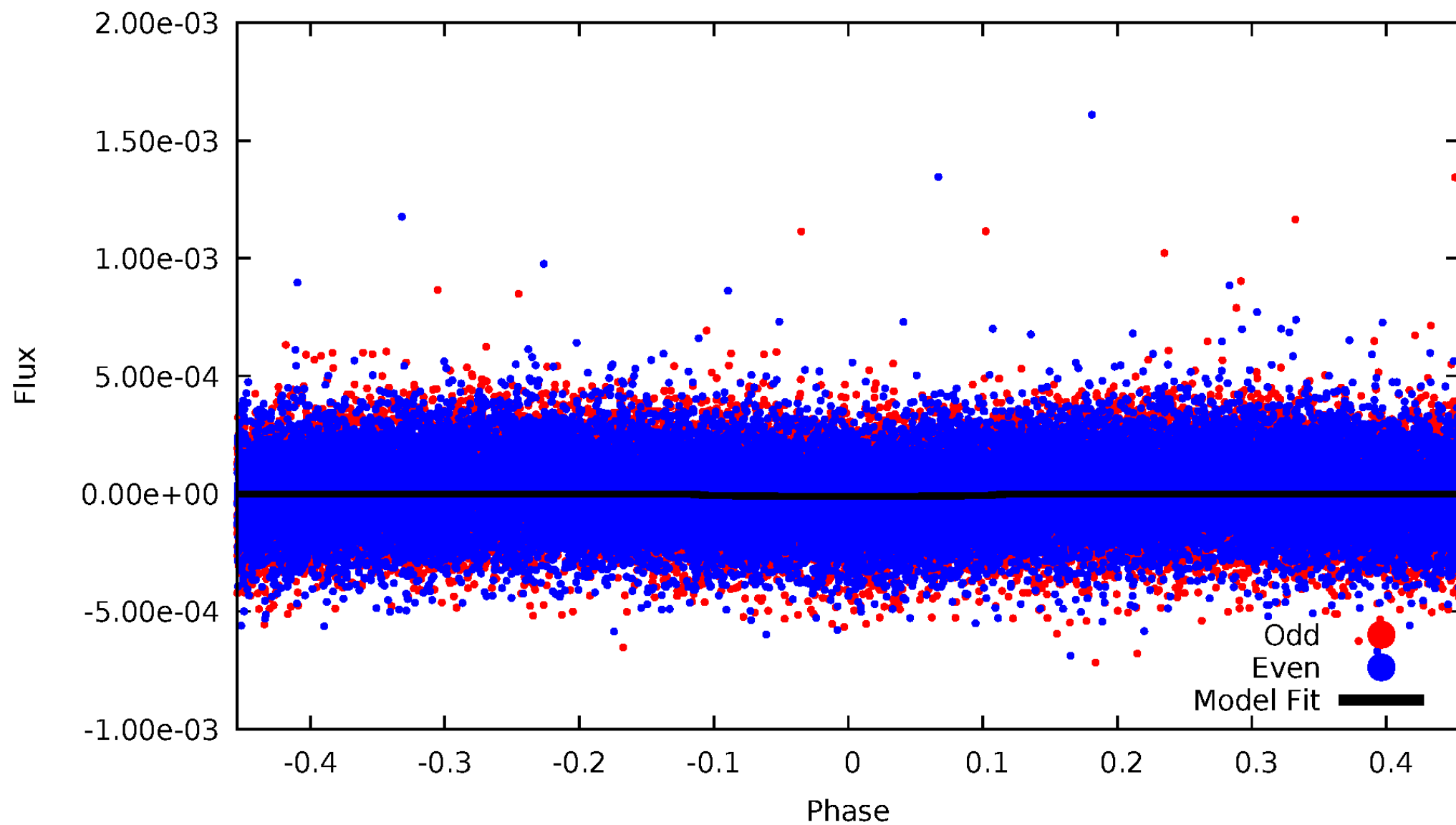


TCE 007045605-01



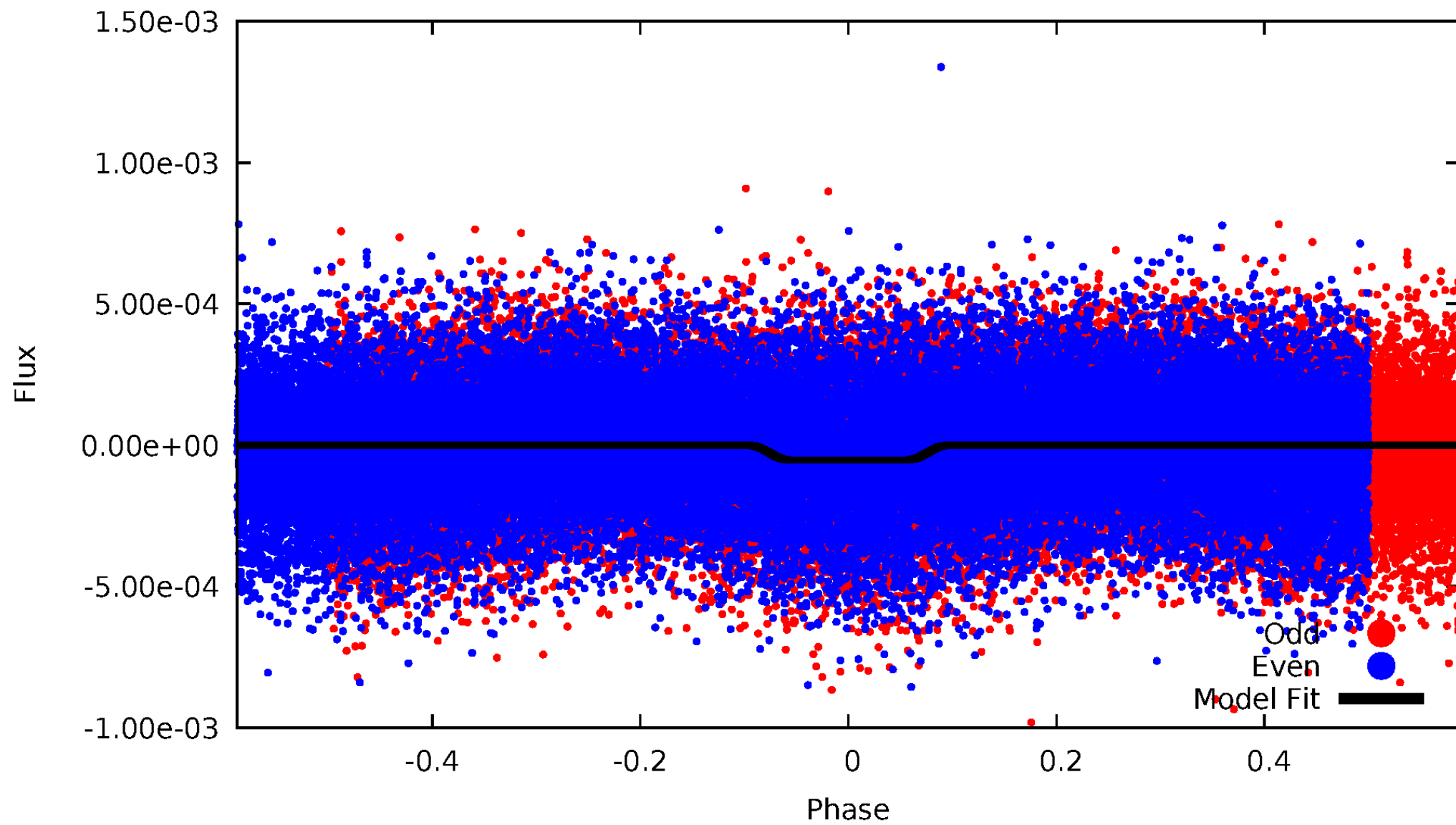
DV Odd/Even

TCE 007045605-01

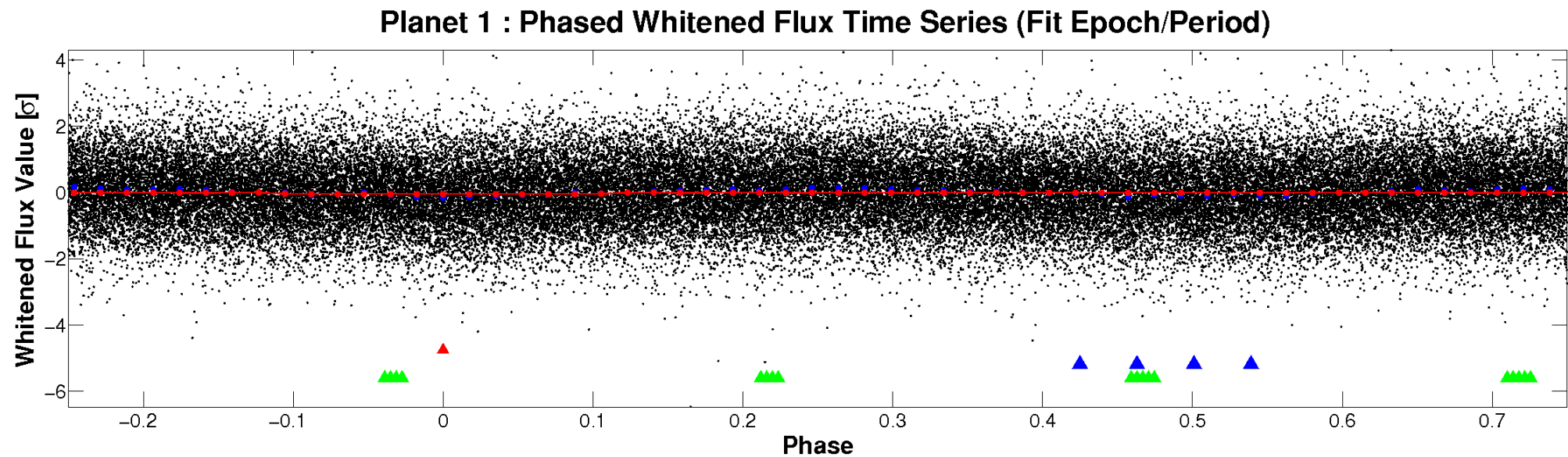
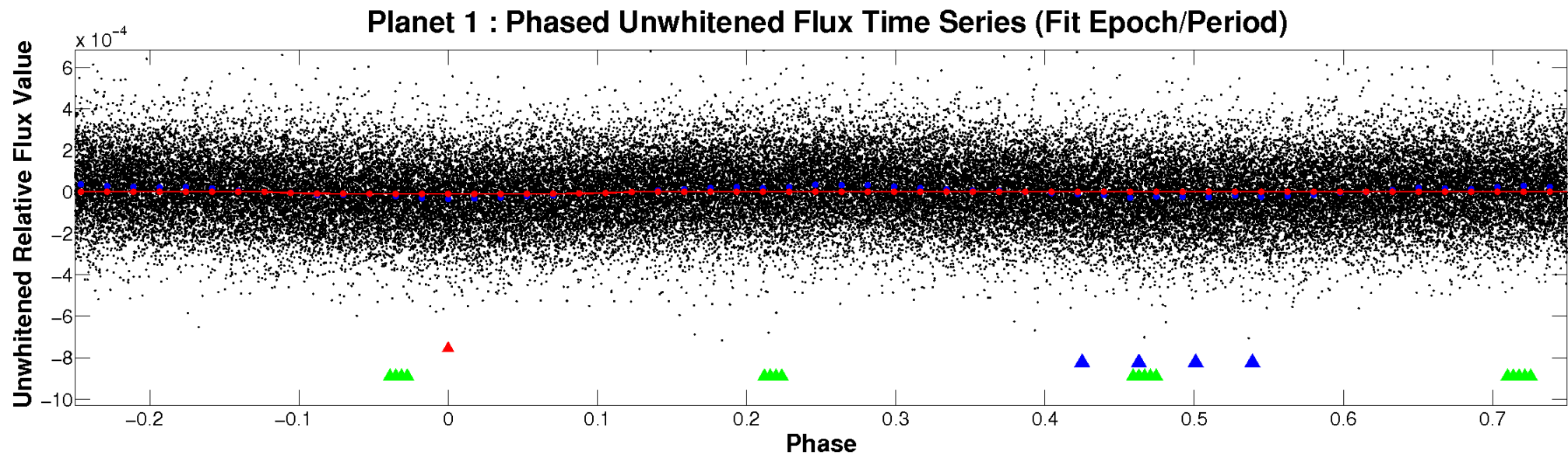


ALT Odd/Even

TCE 007045605-01

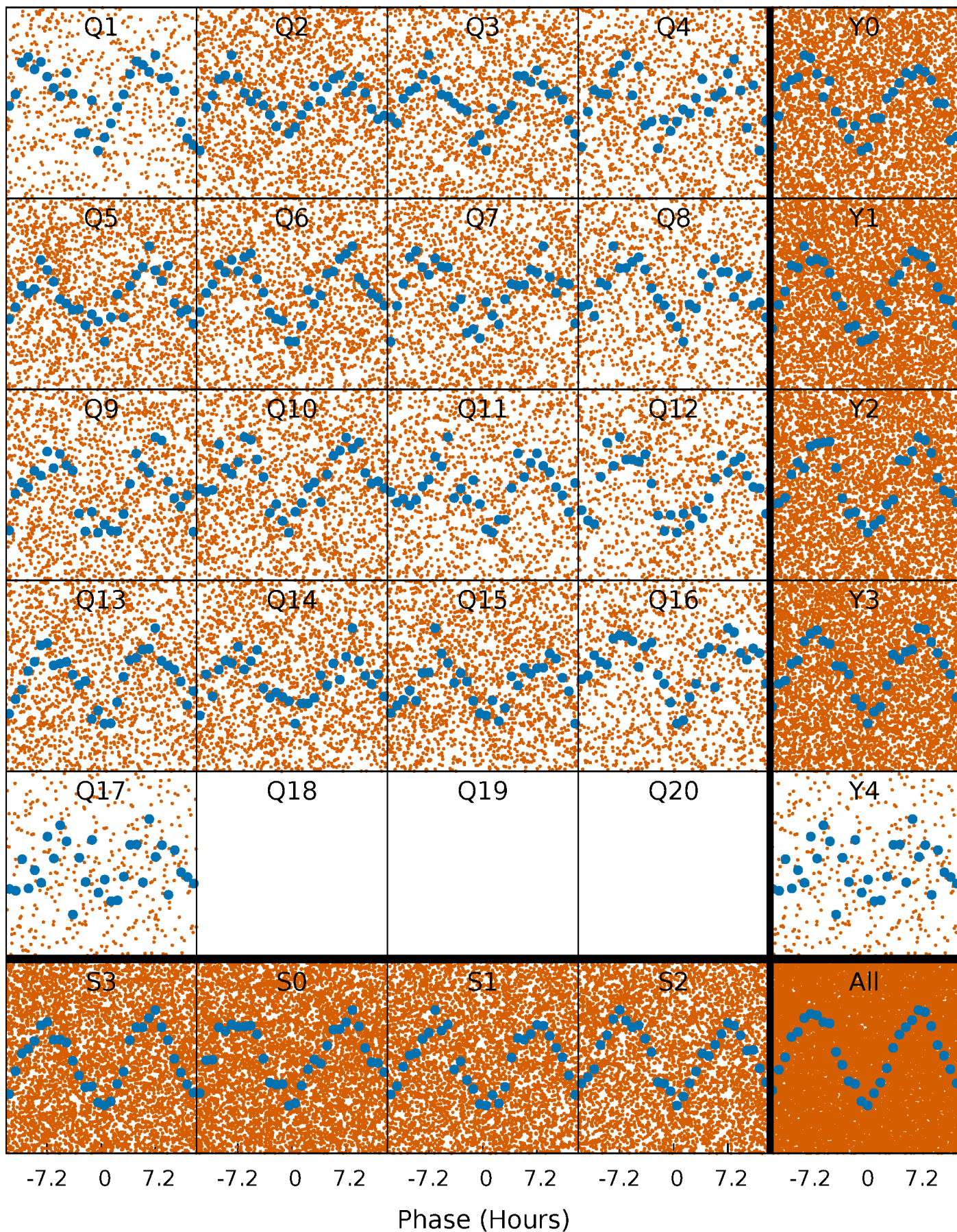


Non-Whitened Vs. Whitened Light Curve



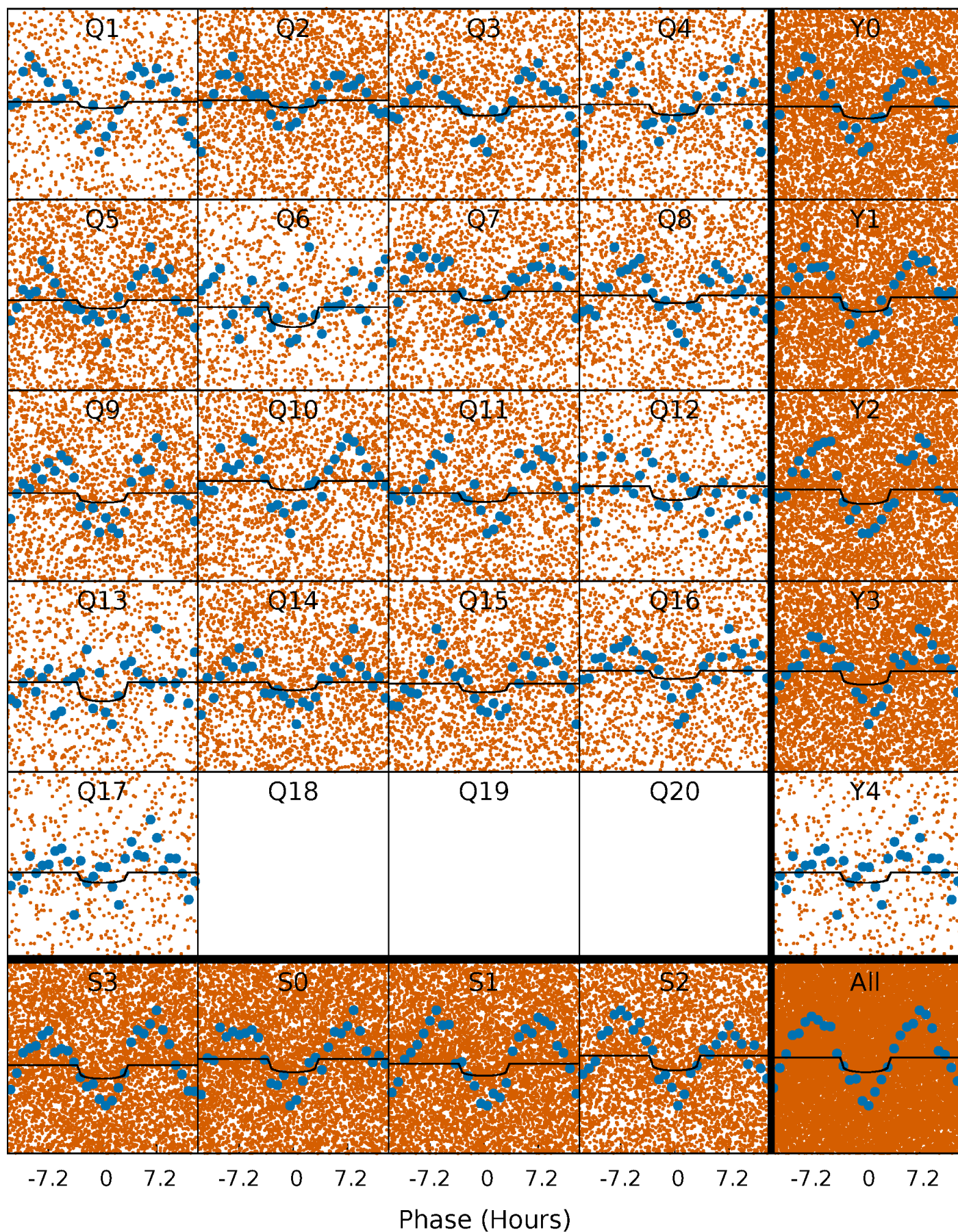
PDC Quarter-Phased Transit Curves

TCE 007045605-01 P= 1.162243 Days $T_0=131.985197$ (BKJD)



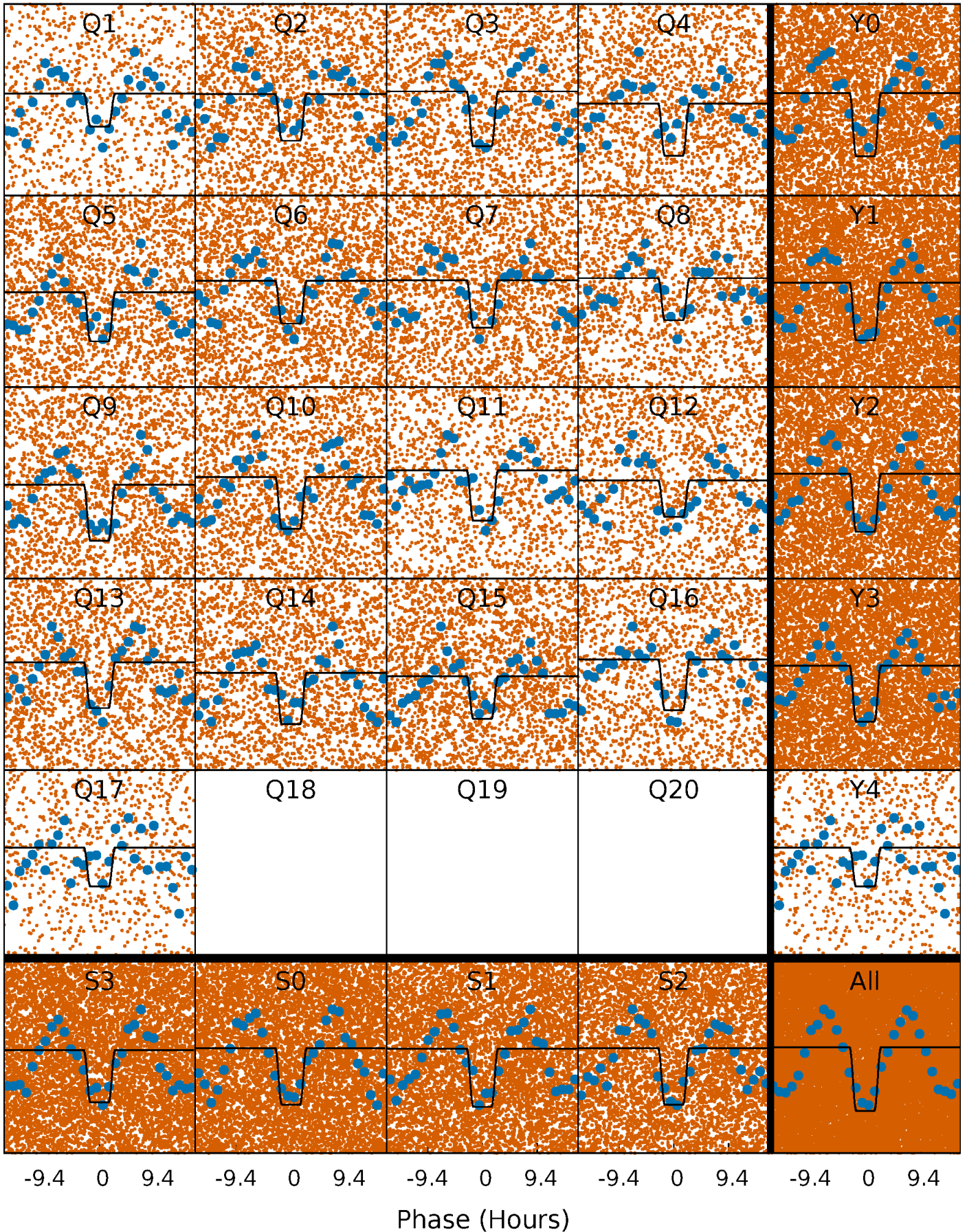
DV Quarter-Phased Transit Curves

TCE 007045605-01 P= 1.162243 Days $T_0=131.985197$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

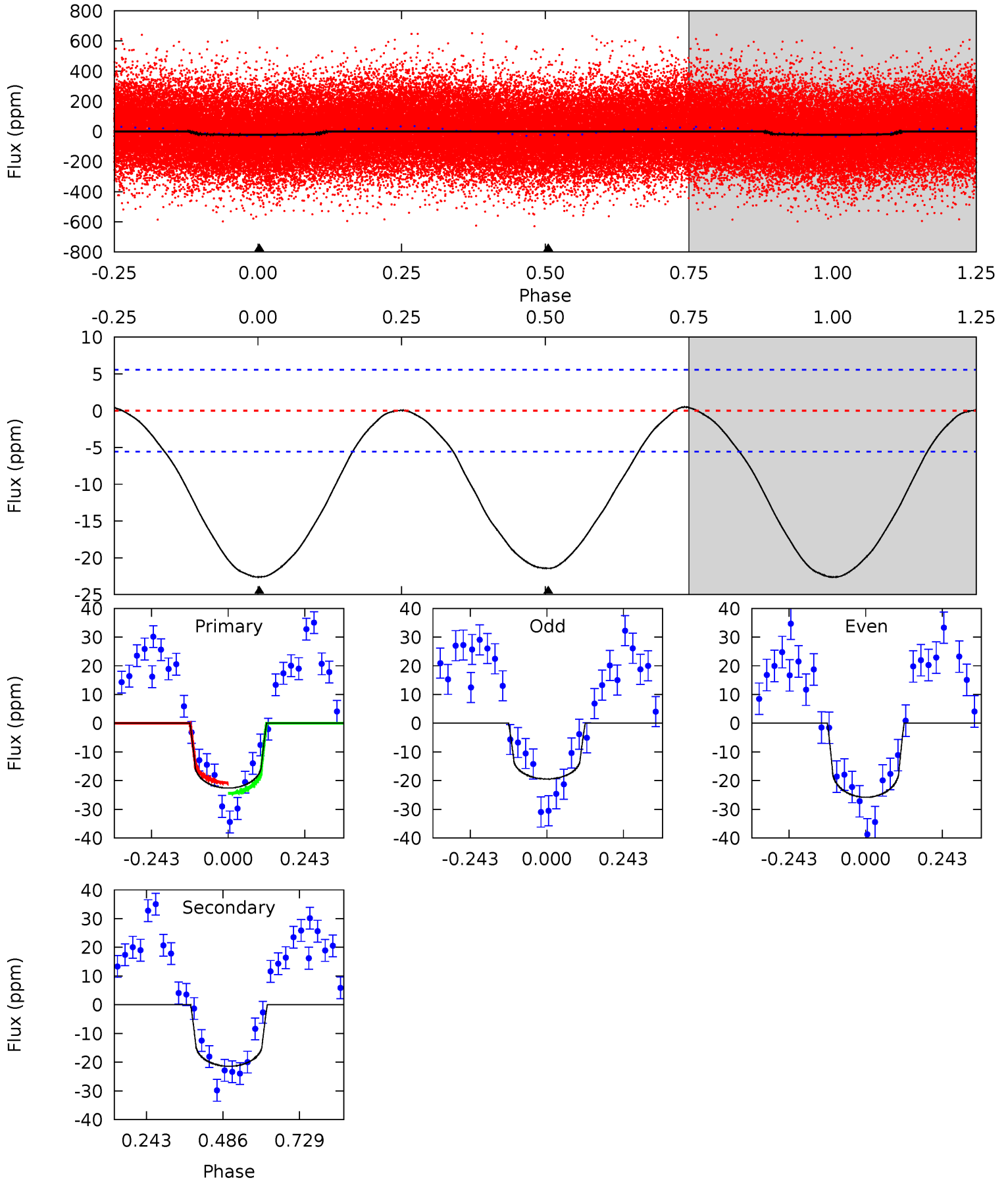
TCE 007045605-01 P= 1.162299 Days $T_0=131.951427$ (BKJD)



DV Model-Shift Uniqueness Test

007045605-01, P = 1.162243 Days, E = 130.822954 Days

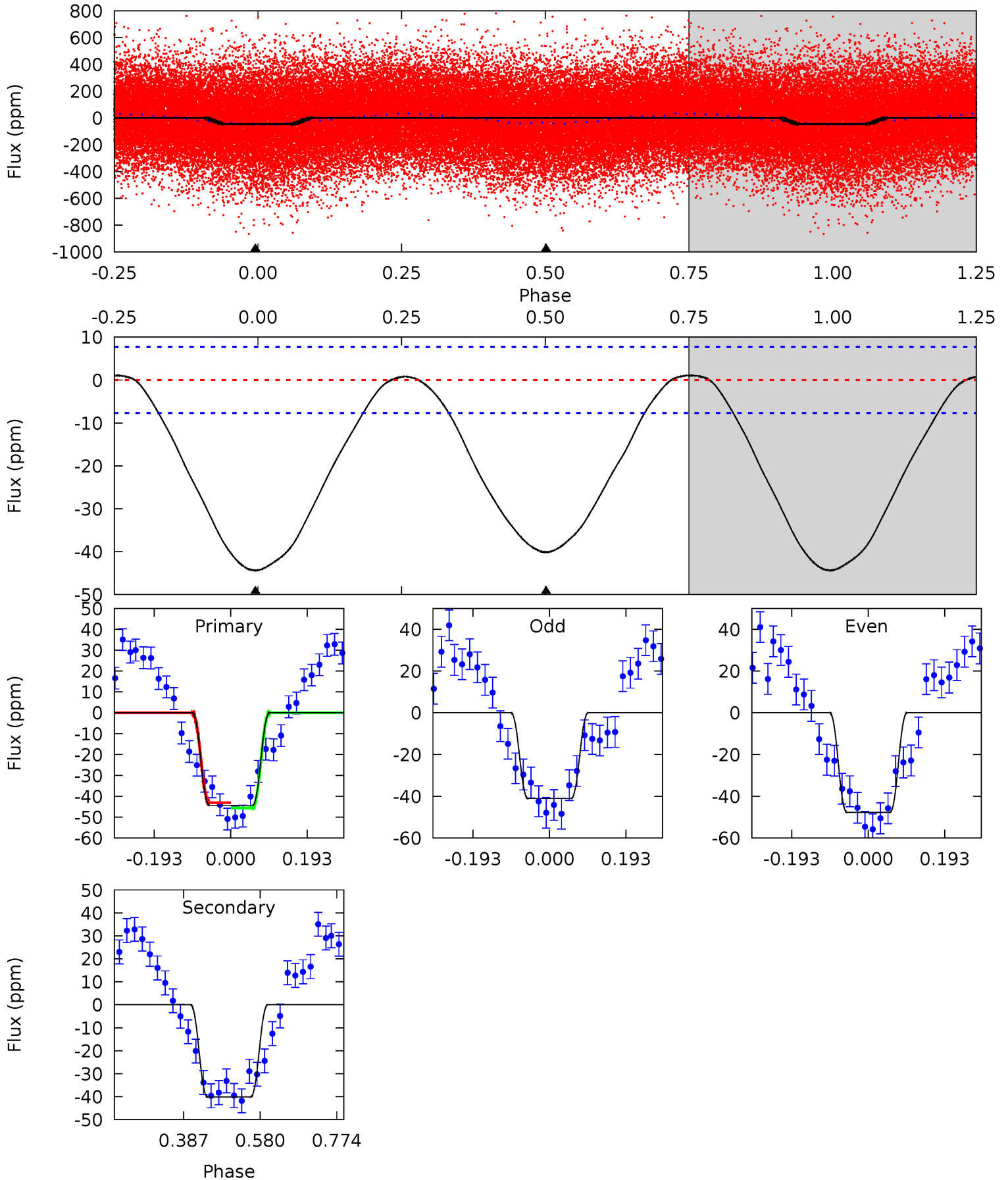
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
17.8	16.9	0	0	4.37	1.17	0.26	17.8	17.8	16.9	16.9	2.50	0.96	0.02	1.48



Alt Model-Shift Uniqueness Test

007045605-01, P = 1.162299 Days, E = 130.789128 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
25.5	23.0	0	0	4.42	1.30	0.94	25.5	25.5	23.0	23.0	1.89	1.09	0.02	0.71



Stellar Parameters For KIC 007045605

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	7196^{+230}_{-316}	$4.064^{+0.170}_{-0.170}$	$-0.040^{+0.250}_{-0.350}$	$1.923^{+0.576}_{-0.471}$	$1.562^{+0.212}_{-0.259}$	$0.309^{+0.296}_{-0.153}$
	+3%/-4%	+4%/-4%	+625%/-875%	+30%/-24%	+14%/-17%	+96%/-50%
Source	KIC0	KIC0	KIC0	DSEP		

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

Secondary Eclipse Parameters for KIC 007045605-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-21 ± 1	$0.78^{+0.72}_{-0.49}$	3875^{+284}_{-278}	8046^{+10453}_{-2435}	12^{+75}_{-9}
Alt.	-40 ± 2	$1.59^{+0.82}_{-0.75}$	3874^{+305}_{-274}	6442^{+3137}_{-1206}	$5.532^{+14.857}_{-3.039}$

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 $A_{obs} \gg 1.0$

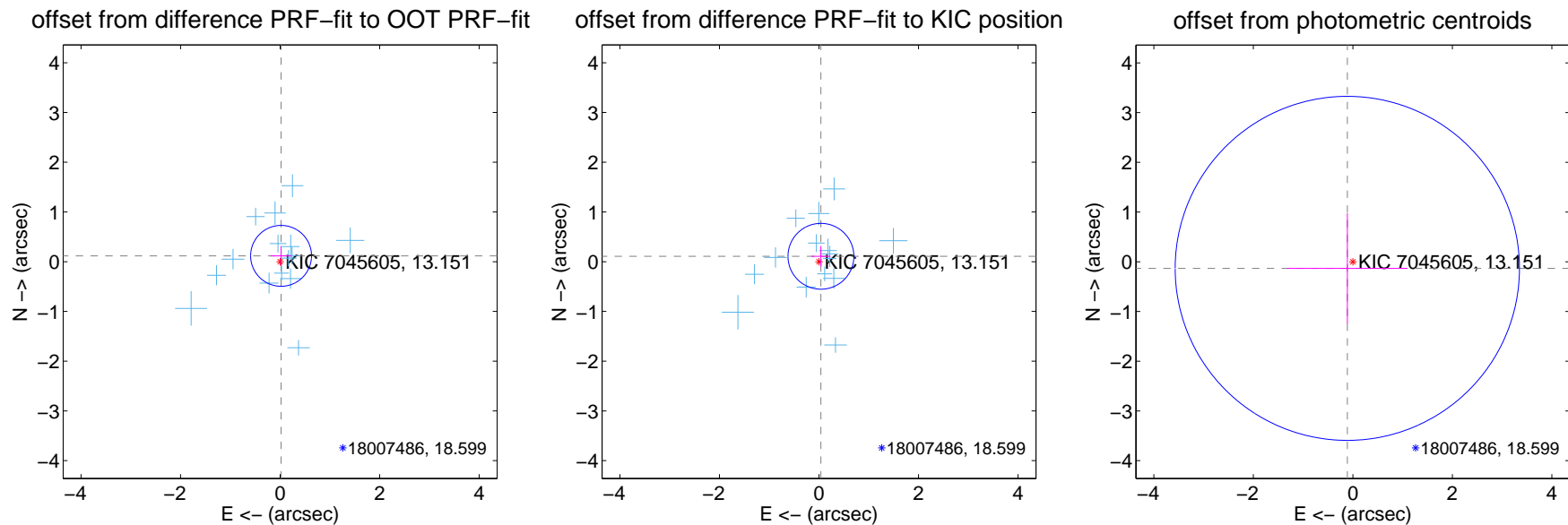
DV Centroid Data

Supplemental centroid analysis for 007045605-01. Kepler magnitude: 13.15. Transit SNR 5.53

There are 15 quarters with good PRF difference image offsets

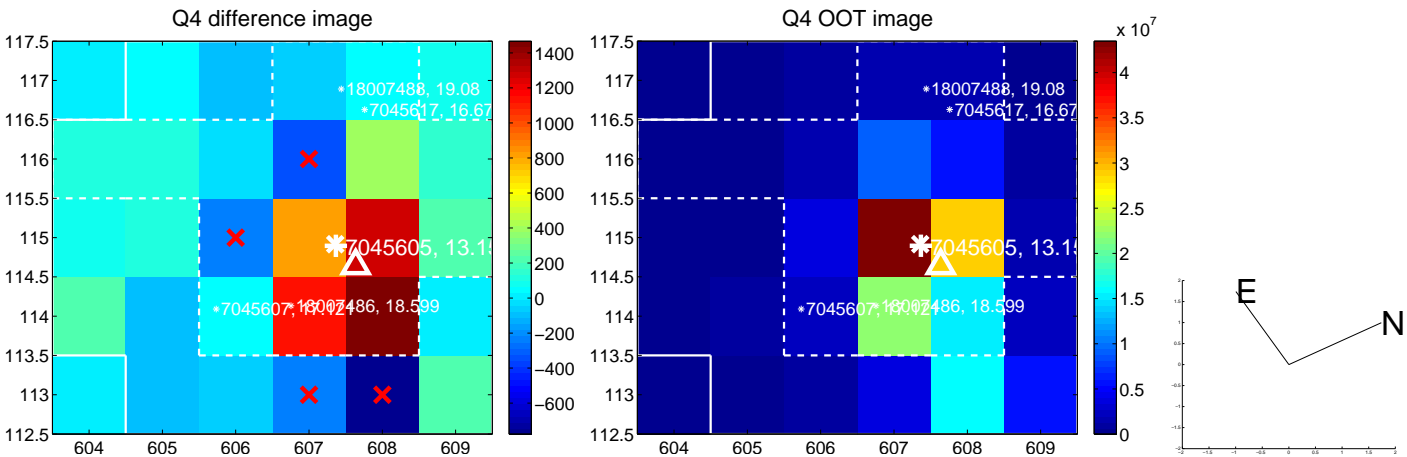
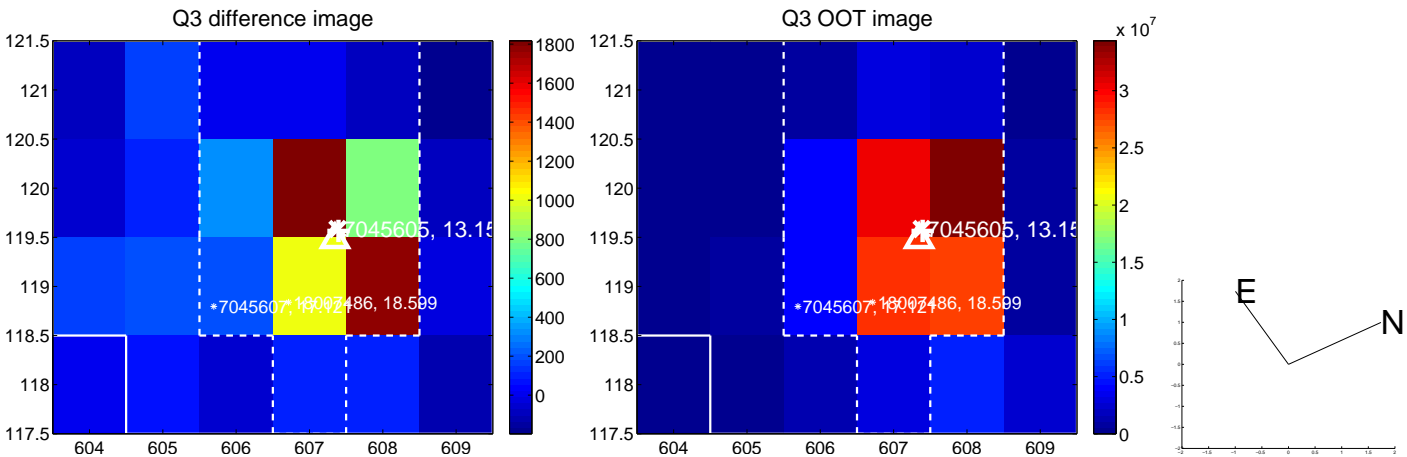
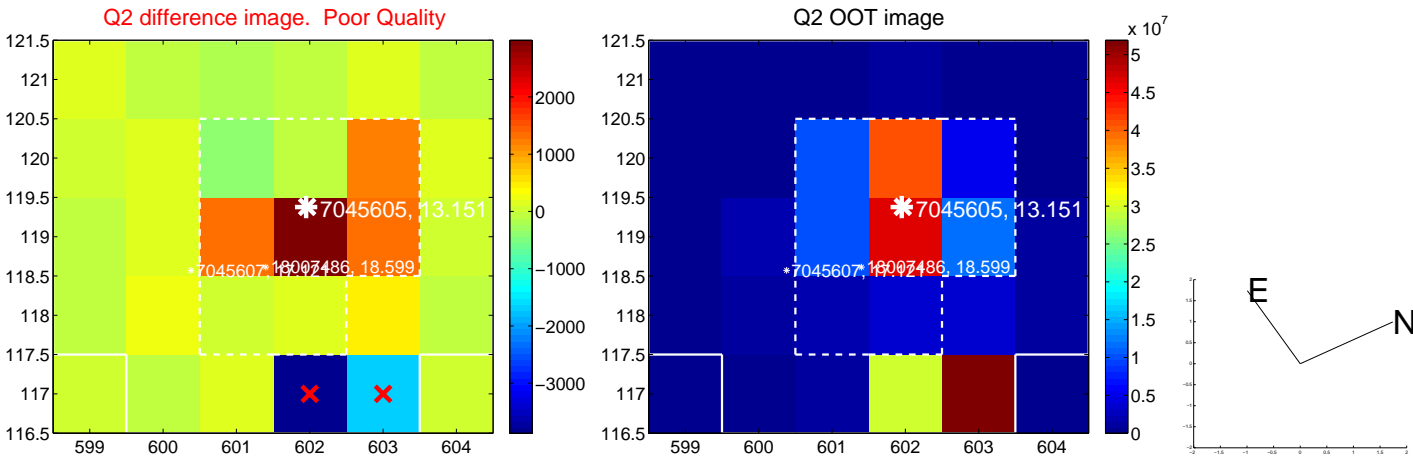
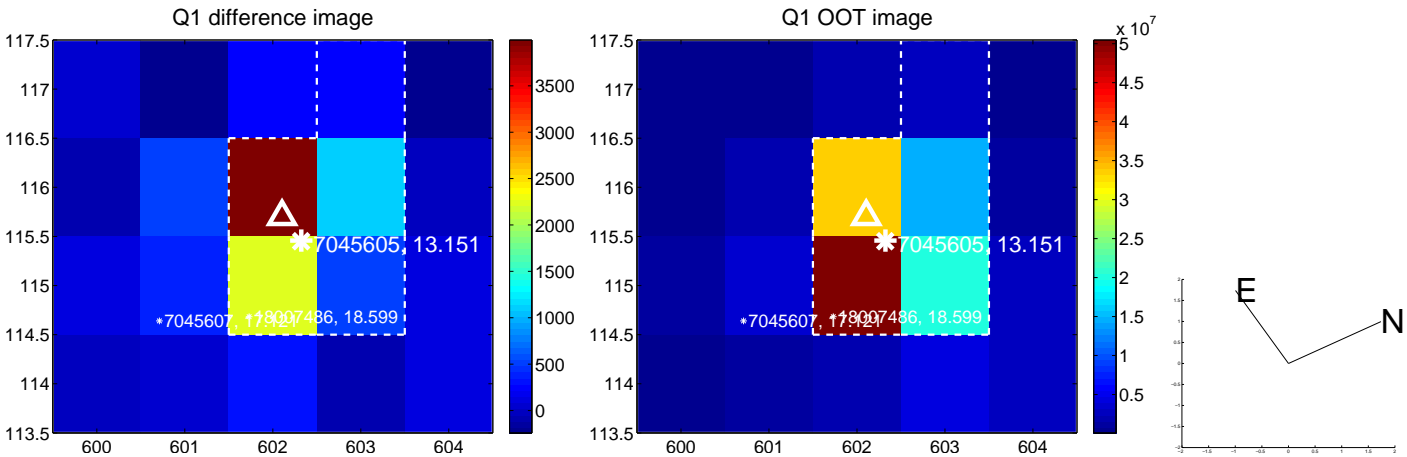
The direct PRF centroid is offset from the target star catalog position by about 0.08 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.119 ± 0.204	0.58	-0.019 ± 0.212	0.118 ± 0.197
PRF-fit source offset from KIC position	0.115 ± 0.221	0.52	-0.039 ± 0.193	0.109 ± 0.208
photometric centroid source offset	0.17 ± 1.15	0.15	0.11 ± 1.21	-0.13 ± 1.11

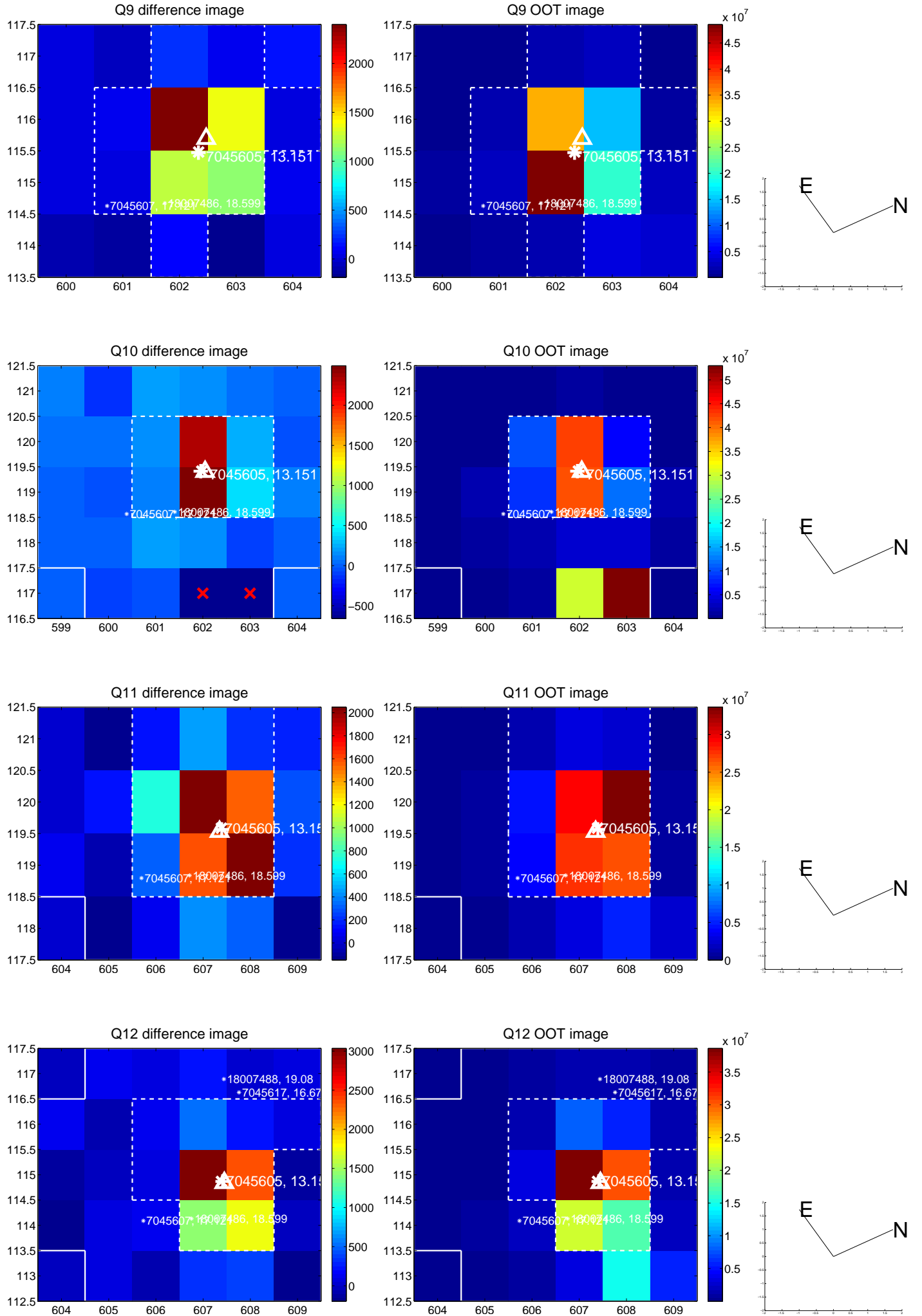


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses:** good quarterly centroid offsets; **Vermillion crosses:** bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ . Red *: target star. Blue *: Other stars. Text next to a star gives its KIC ID and kepmag. KIC IDs > 15,000,000 are from the UKIRT catalog.

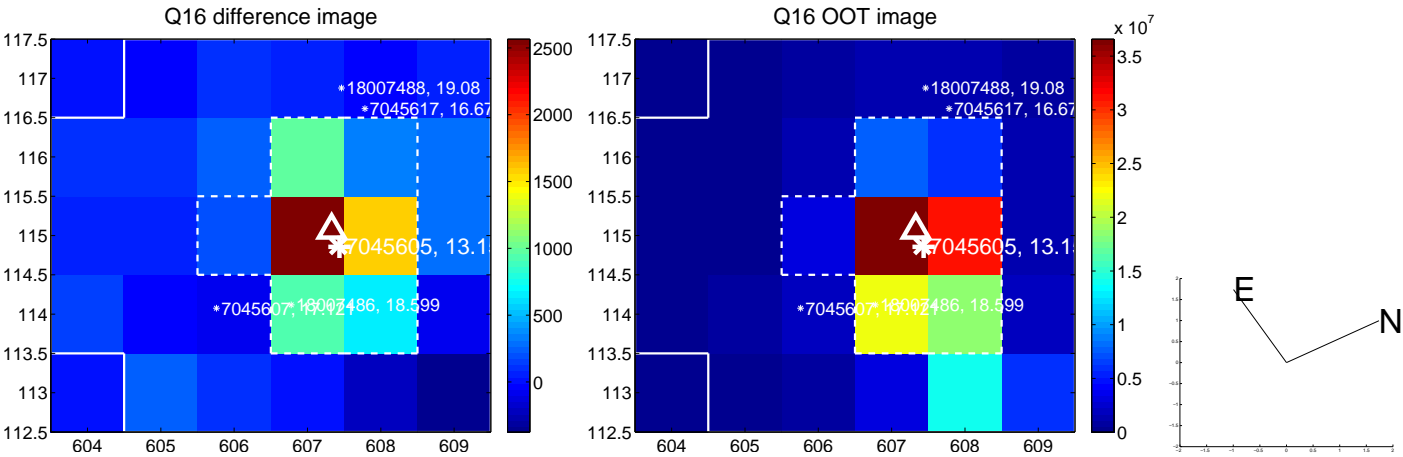
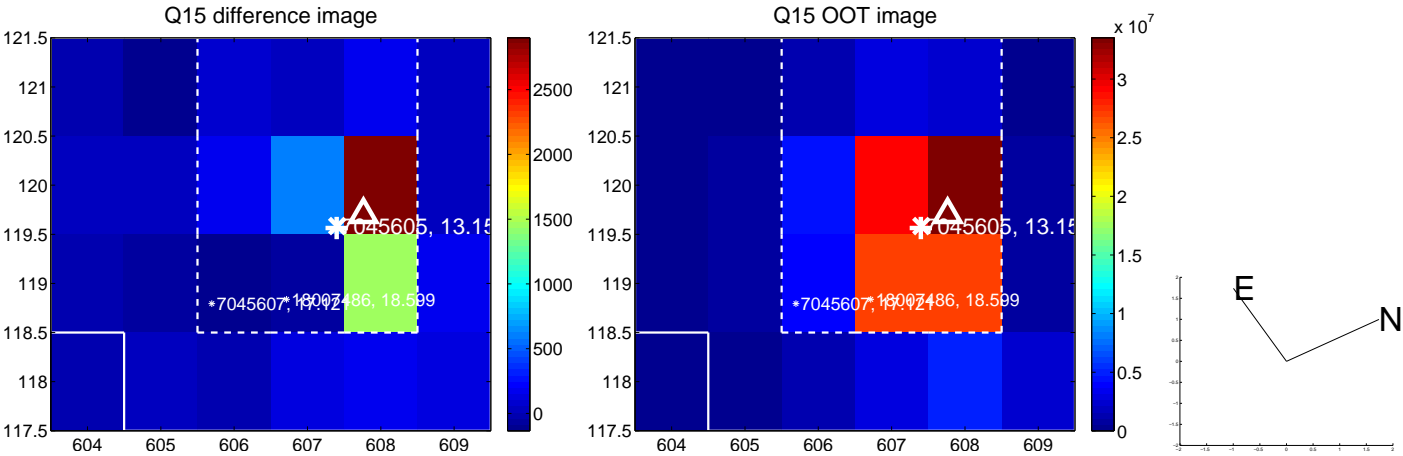
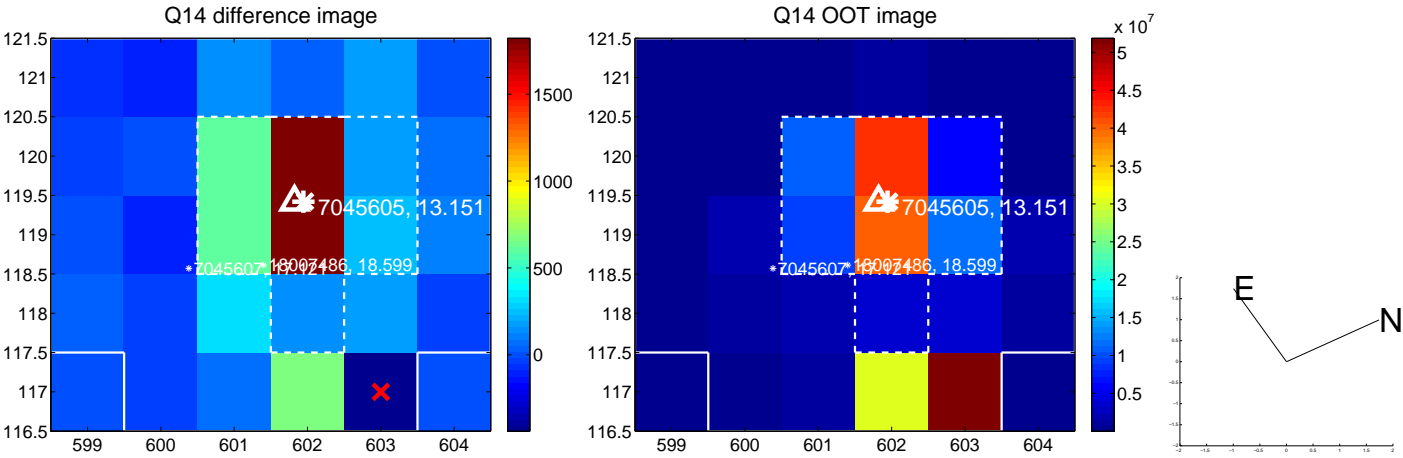
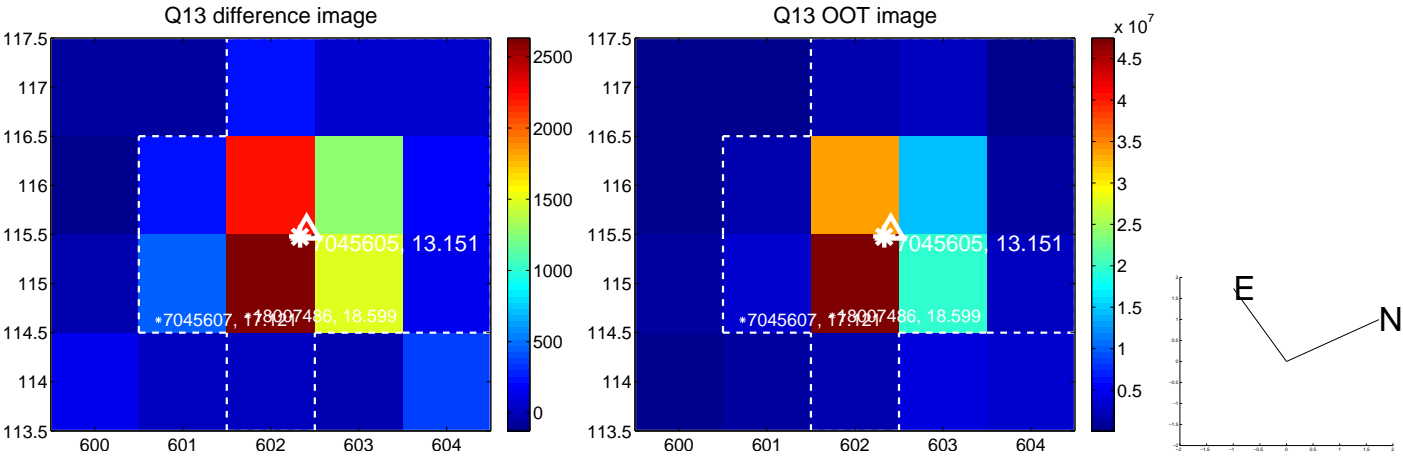
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



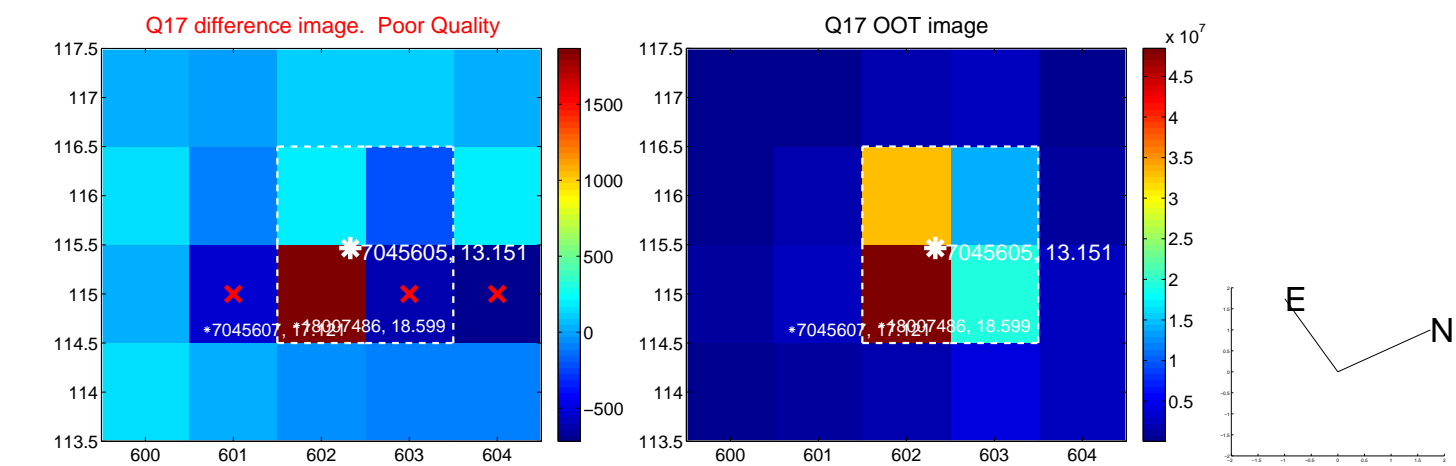
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



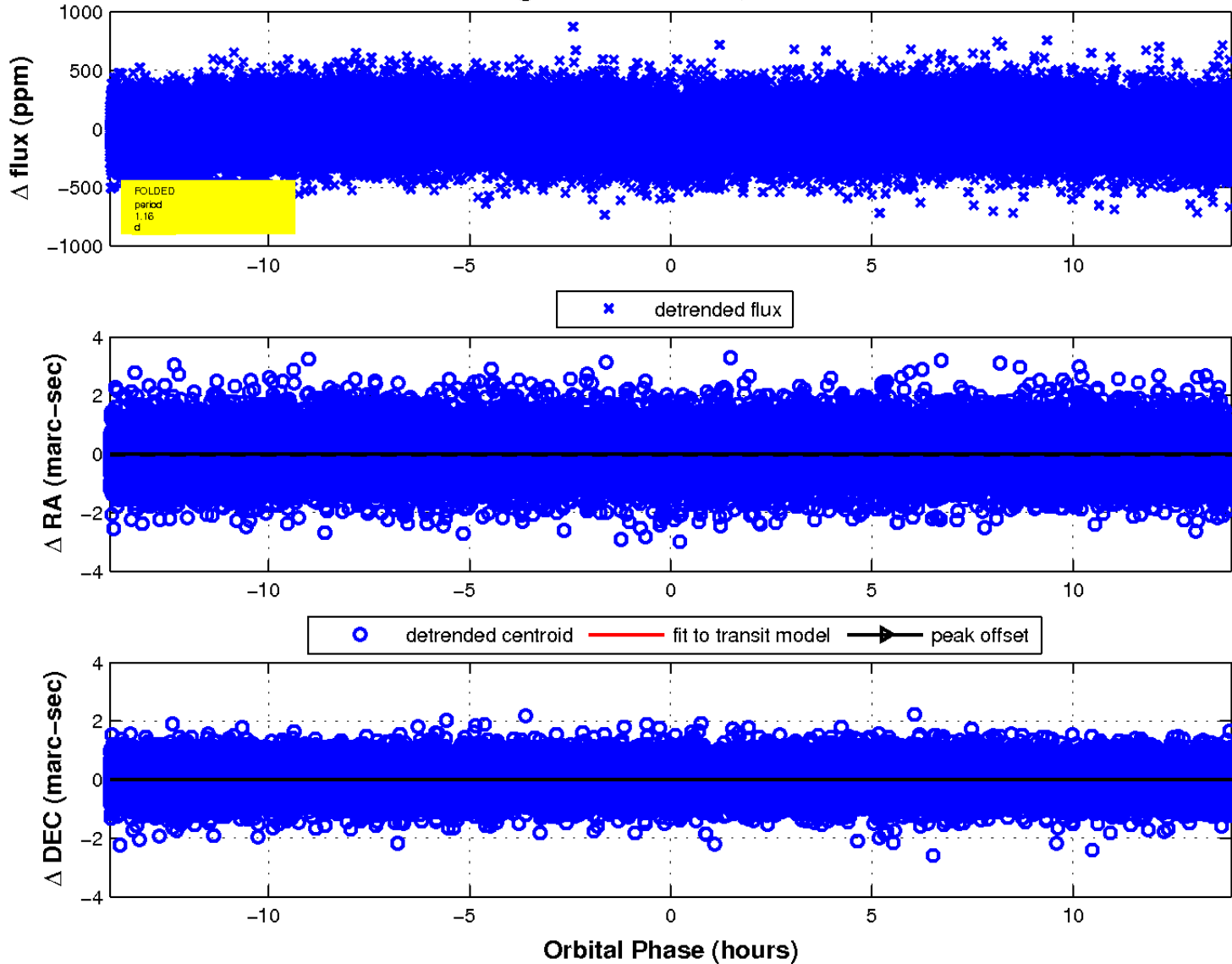
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



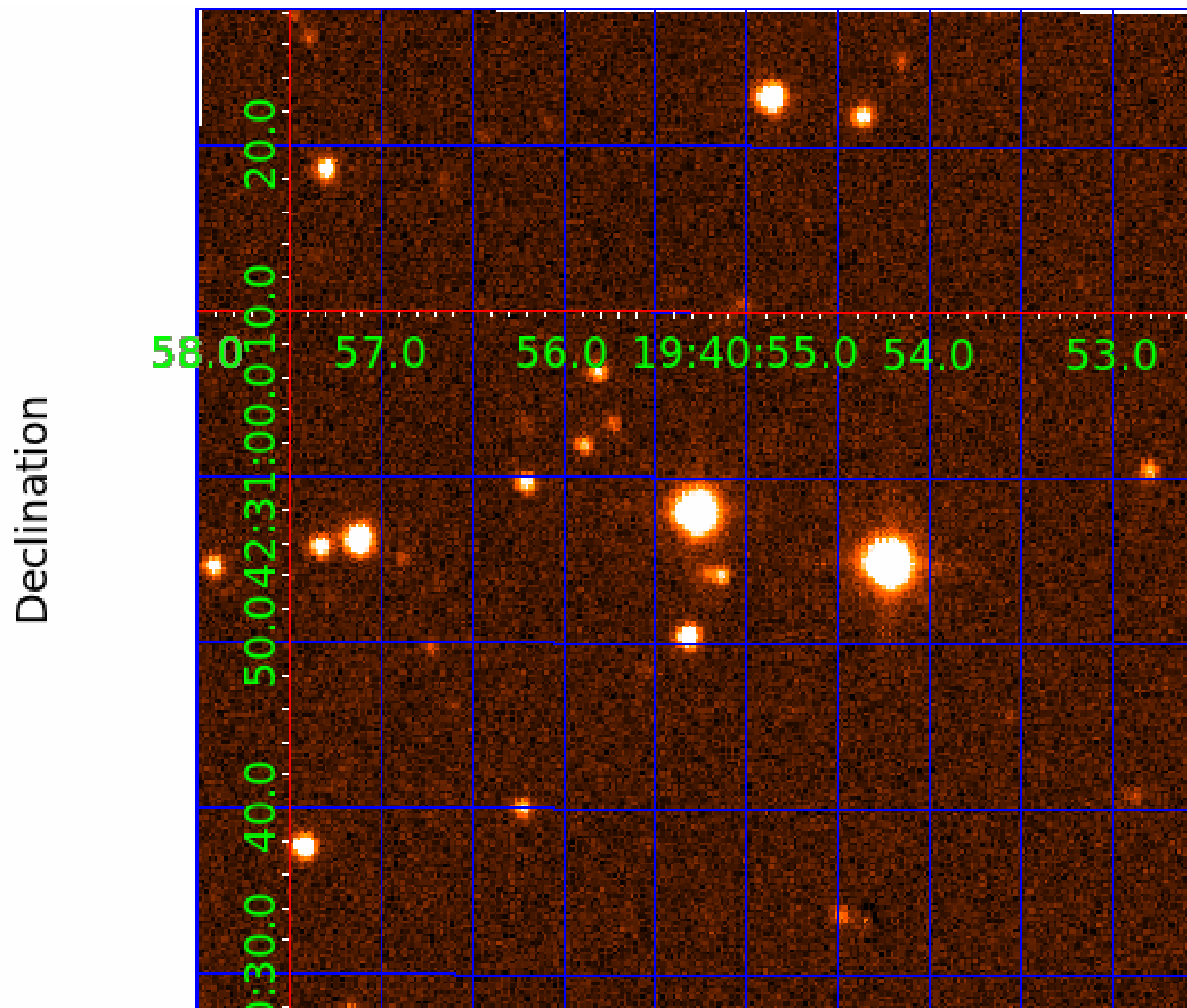
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



fluxWeightedCentroids, Planet 1 of 3



UKIRT Image



KIC 007045605

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})
007045605-01	OBS	No	1.162243	131.985197	10.2	6.337	8.1	5.5	1.92	7196	0.62	14087.99
007045605-02	OBS	7808.01	361.501843	339.358356	298.7	4.588	10.1	10.3	1.92	7196	3.71	6.68
007045605-03	OBS	No	82.810950	151.114675	251.5	4.006	8.2	8.3	1.92	7196	3.48	47.69

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
007045605-01	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT
007045605-02	OBS	FP	0.17	1	0	0	0	MOD_NONUNIQ_ALT
007045605-03	OBS	FP	0.00	1	0	0	0	TRANS_GAPPED—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT

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

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

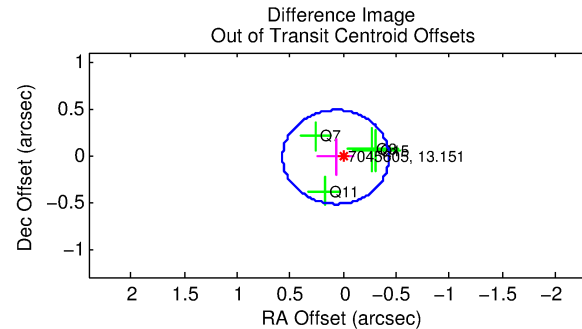
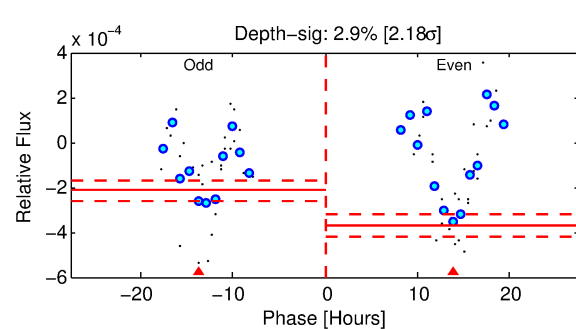
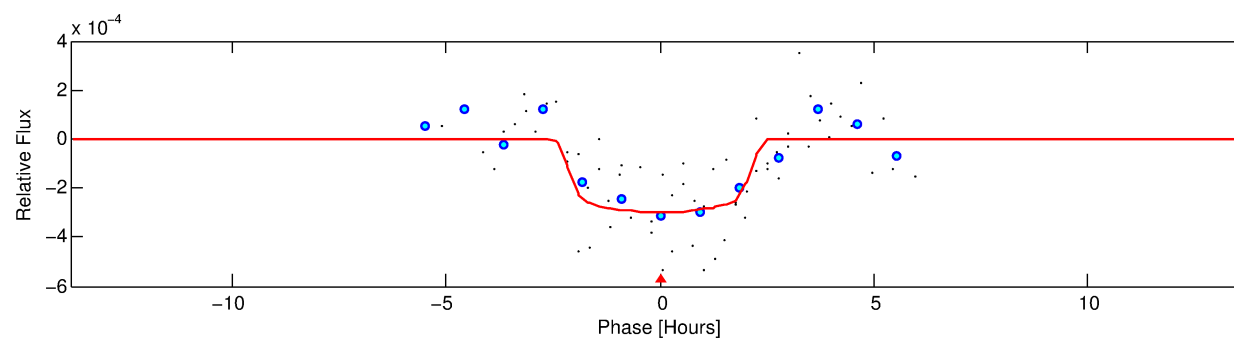
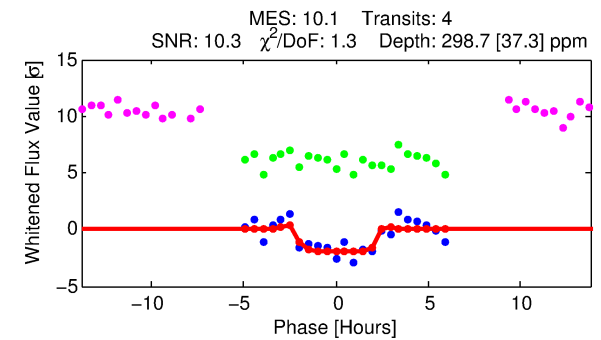
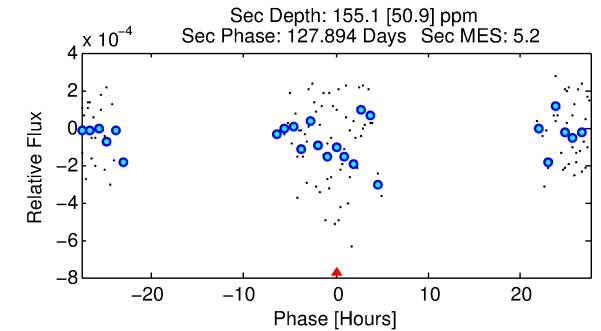
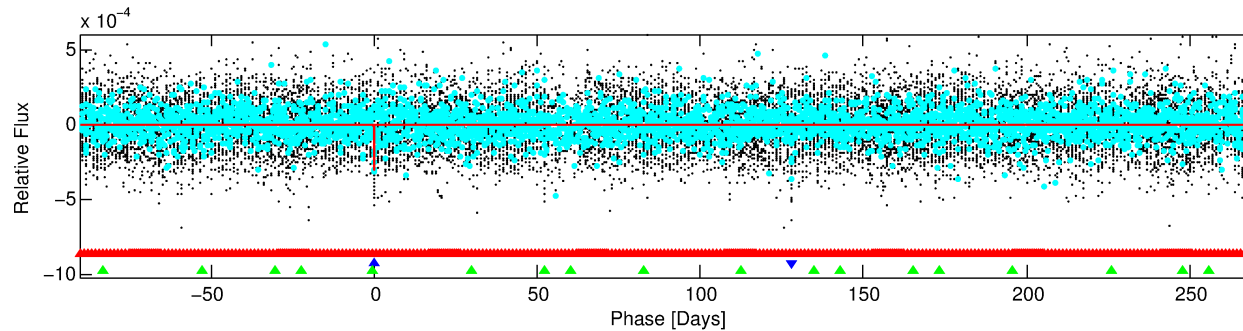
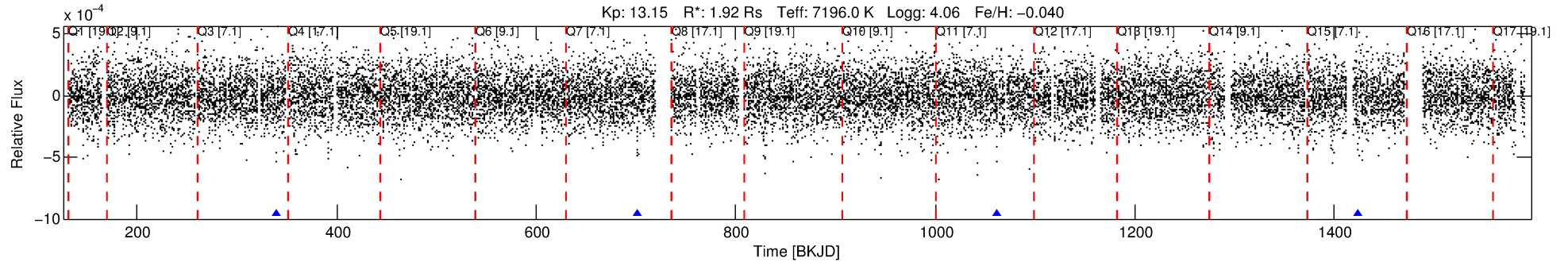
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 007045605-02

No Significant Match Found

DV One-Page Summary

KIC: 7045605 Candidate: 2 of 3 Period: 361.502 d



DV Fit Results:

Period = 361.50184 [0.00428] d
Epoch = 339.3584 [0.0089] BKJD
Rp/R* = 0.0177 [0.0063]
a/R* = 351.09 [763.69]
b = 0.83 [0.79]
Seff = 6.68 [2.49]
Teq = 410 [38] K
Rp = 3.71 [1.73] Re
a = 1.1528 [0.2750] AU
Ag = 8226.95 [6993.58] [1.18σ]
Teffp = 6037 [1213] K [4.64σ]

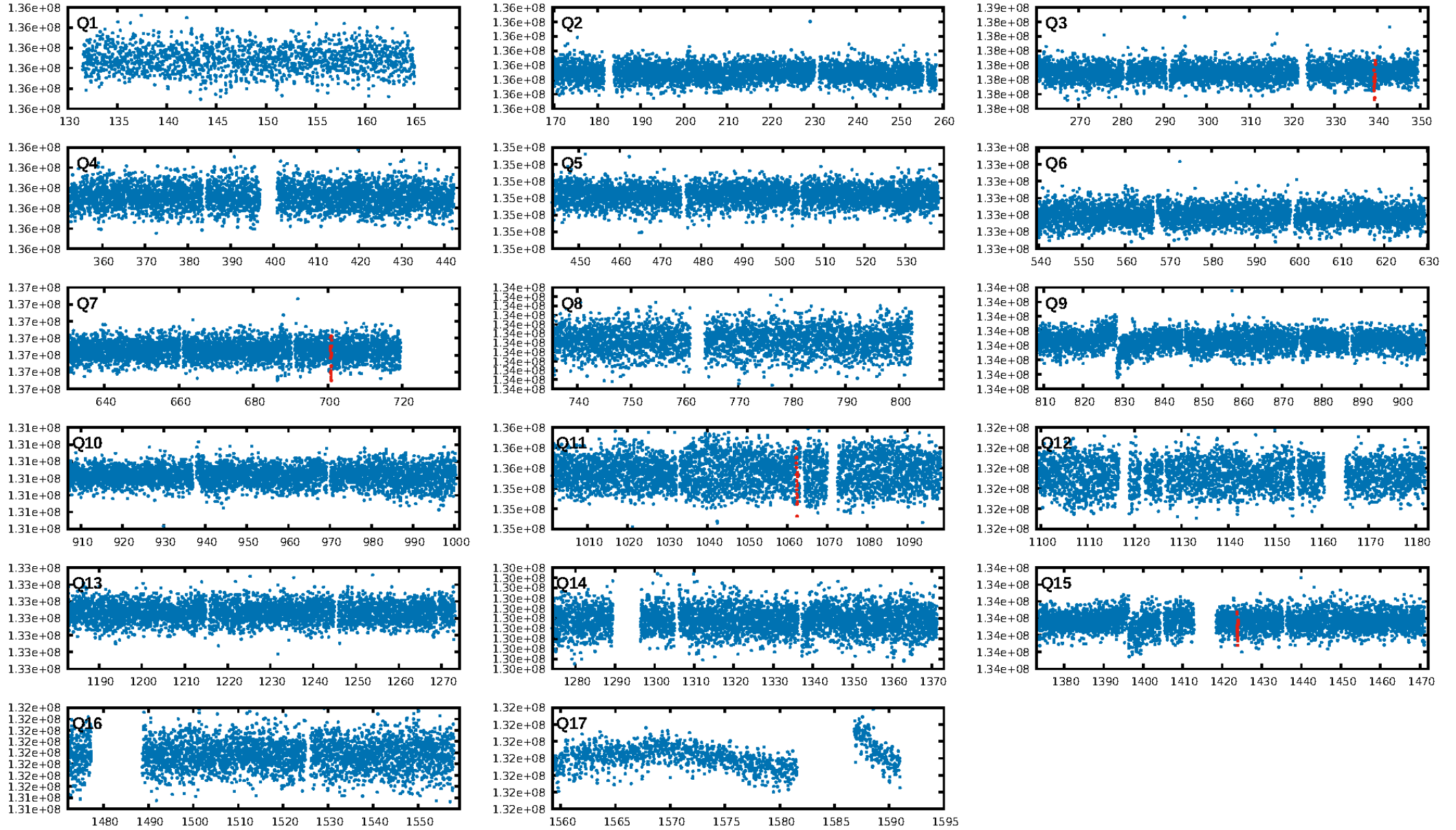
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [1098.21σ]
LongPeriod-sig: N/A
ModelChiSquare2-sig: 16.5%
ModelChiSquareGof-sig: 51.9%
Bootstrap-pfa: 1.51e-14
RollingBand-fgt: 1.00 [4/4]
GhostDiagnostic-chr: 1.13
Centroid-sig: 7.5%
Centroid-so: 0.757 arcsec [0.93σ]
OotOffset-rm: 0.070 arcsec [0.42σ]
OotOffset-st: 0/4/0/0 [4]
KicOffset-rm: 0.054 arcsec [0.29σ]
KicOffset-st: 0/4/0/0 [4]
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DiffImageOverlap-fno: 0.00 [0/4]

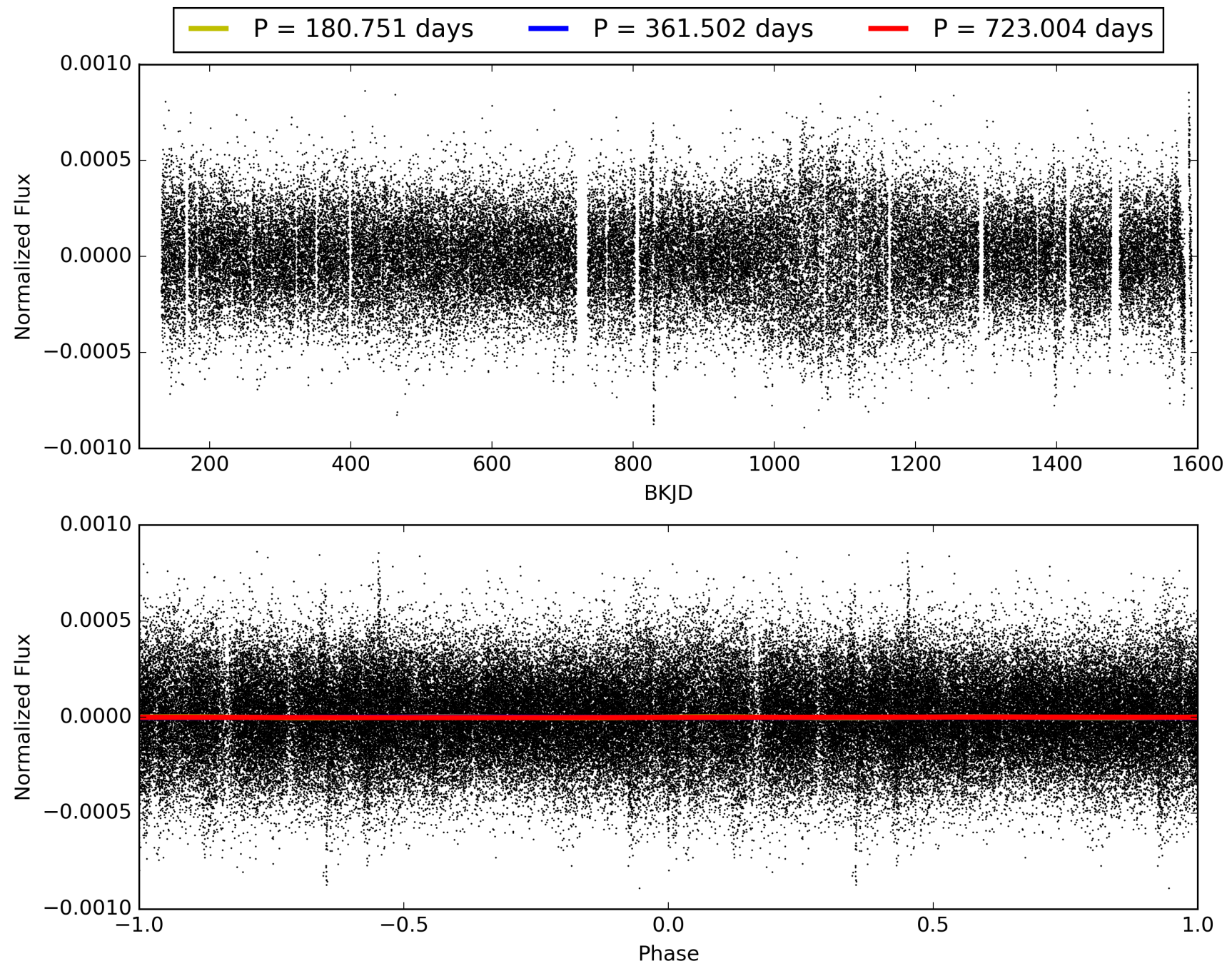
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 31-Jan-2016 08:40:26 Z

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

TCE 007045605-02, PDC Light Curves

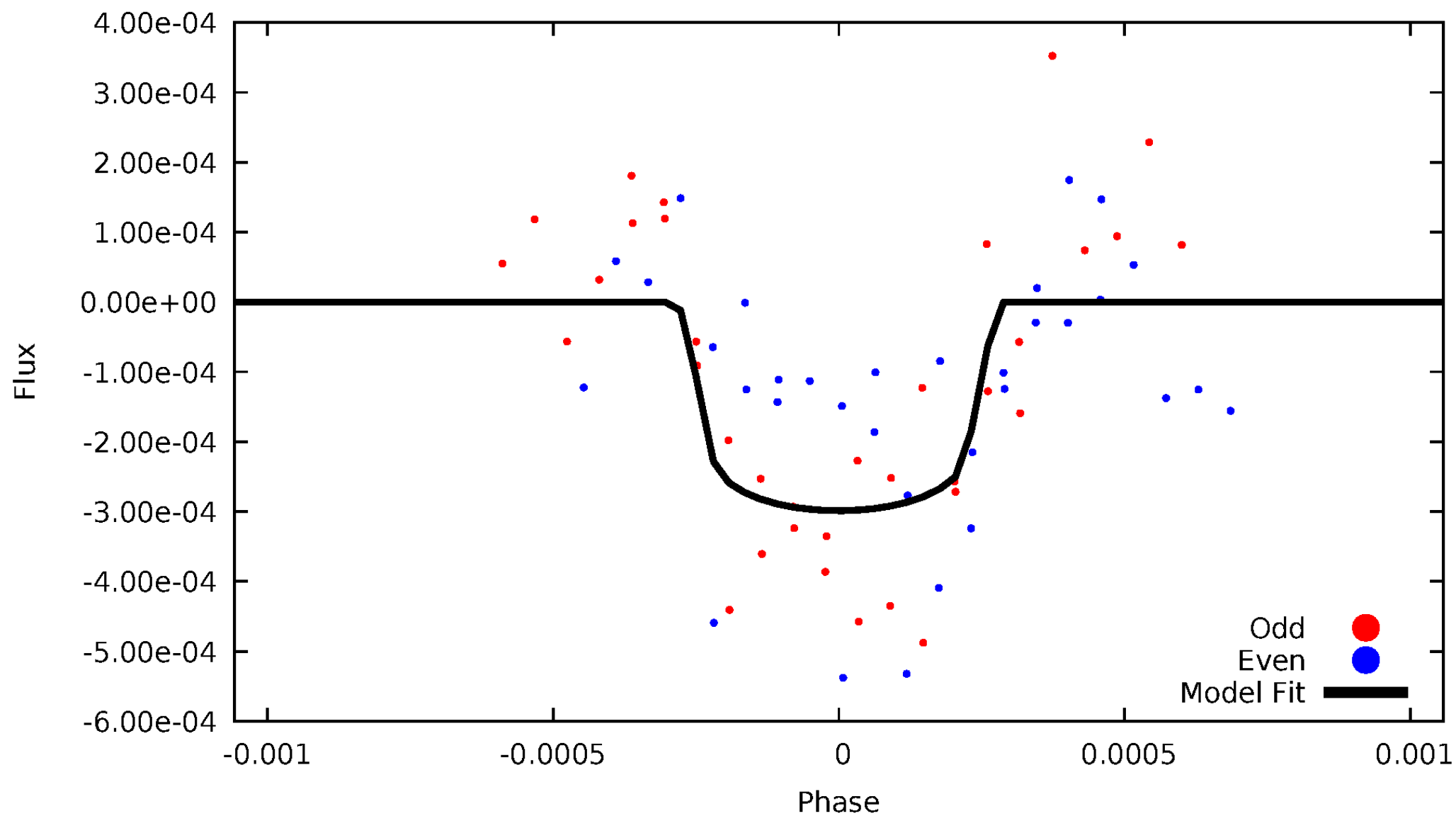


TCE 007045605-02



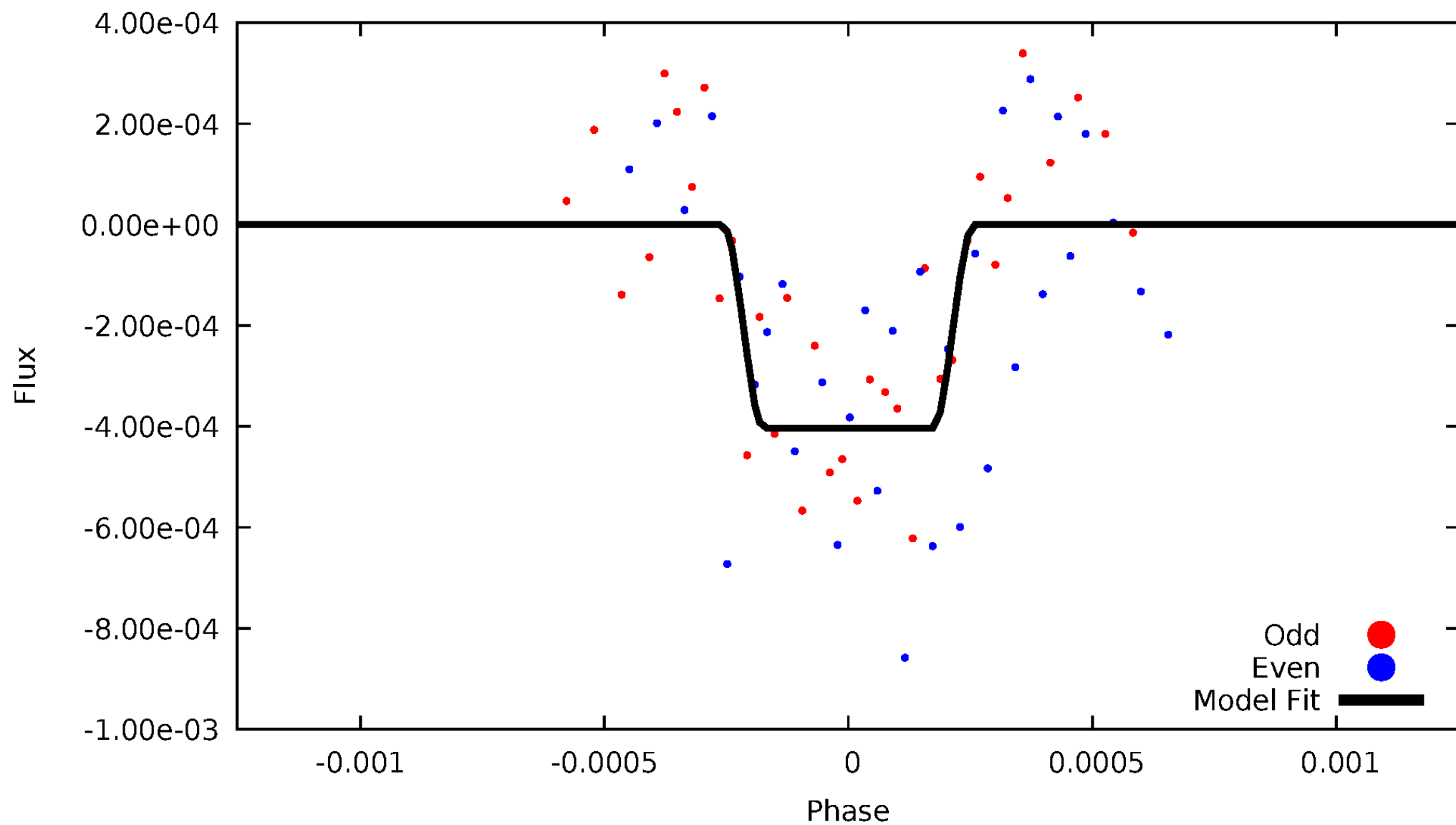
DV Odd/Even

TCE 007045605-02



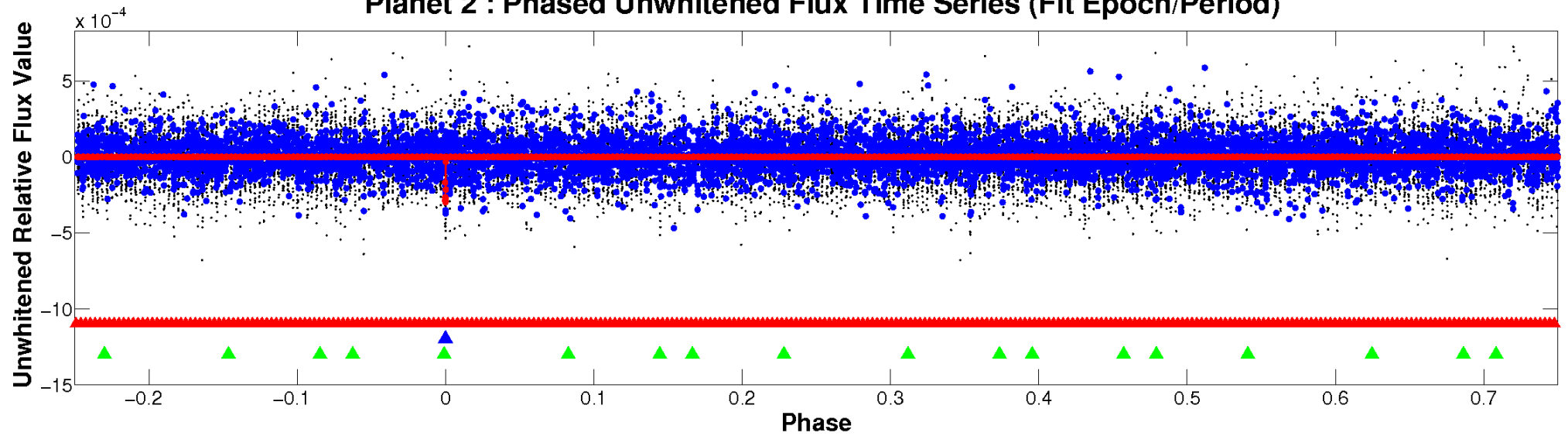
ALT Odd/Even

TCE 007045605-02

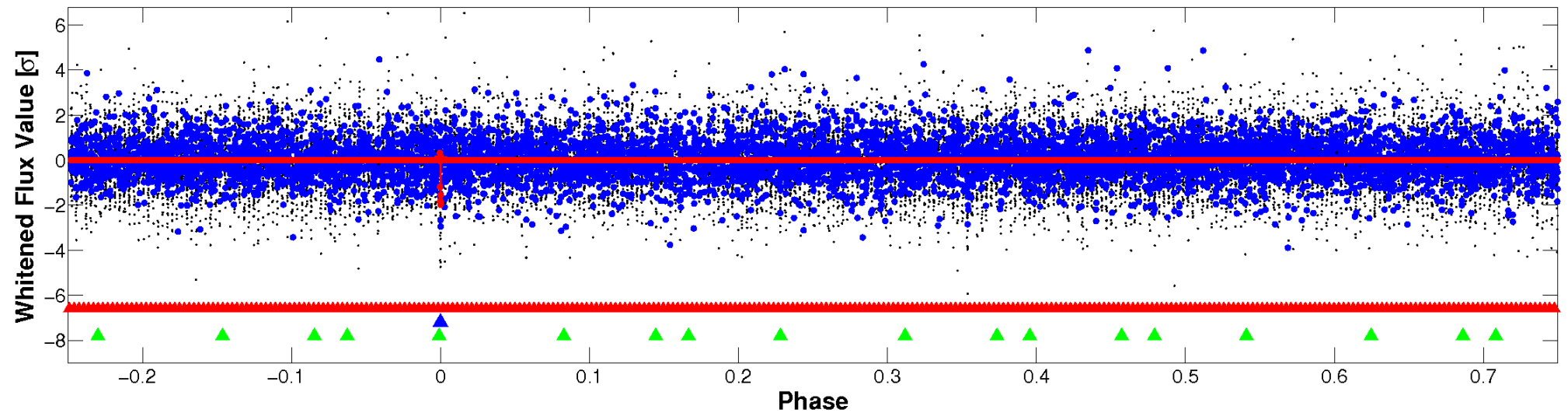


Non-Whitened Vs. Whitened Light Curve

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

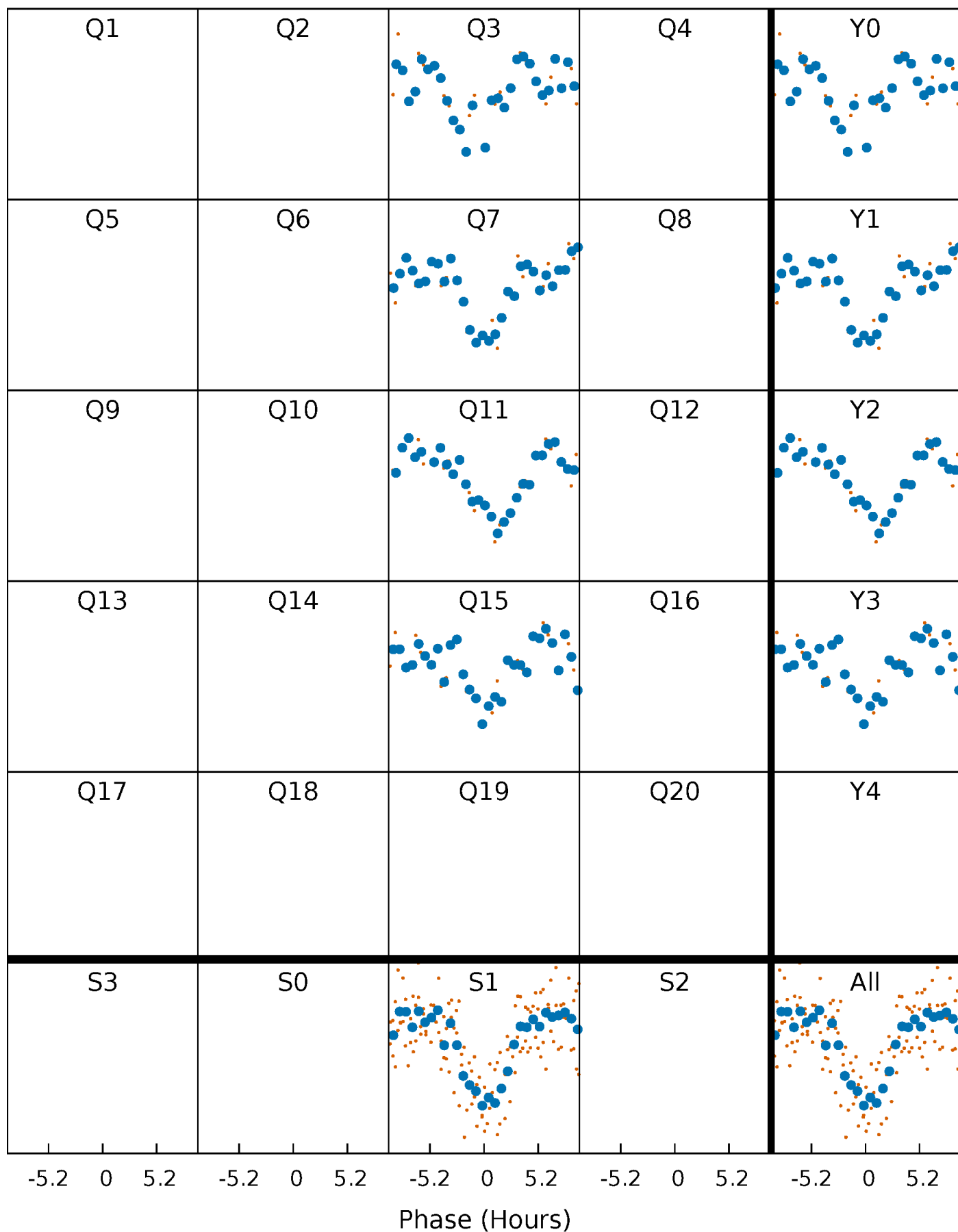


Planet 2 : Phased Whitened Flux Time Series (Fit Epoch/Period)



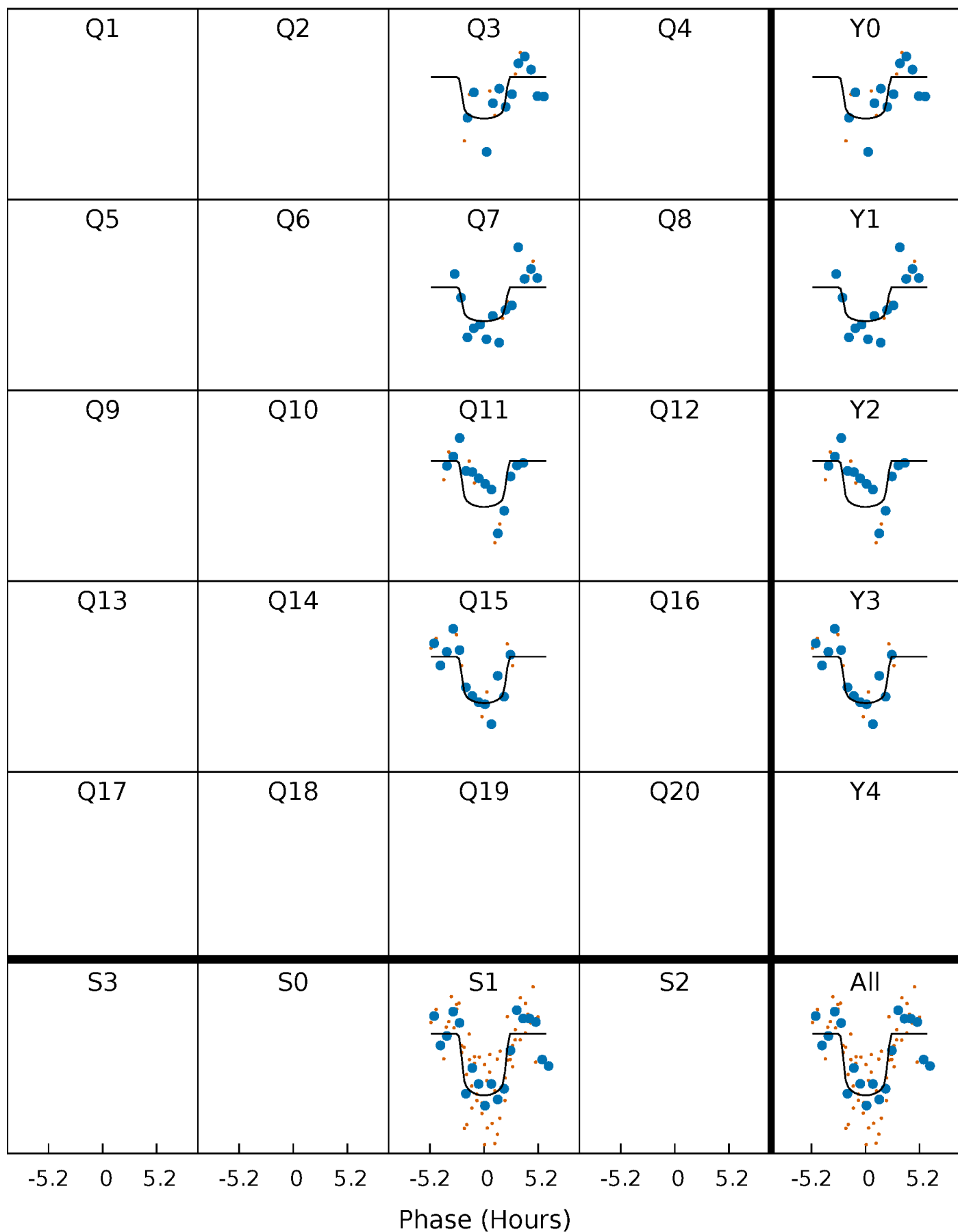
PDC Quarter-Phased Transit Curves

TCE 007045605-02 $P=361.501843$ Days $T_0=339.358356$ (BKJD)



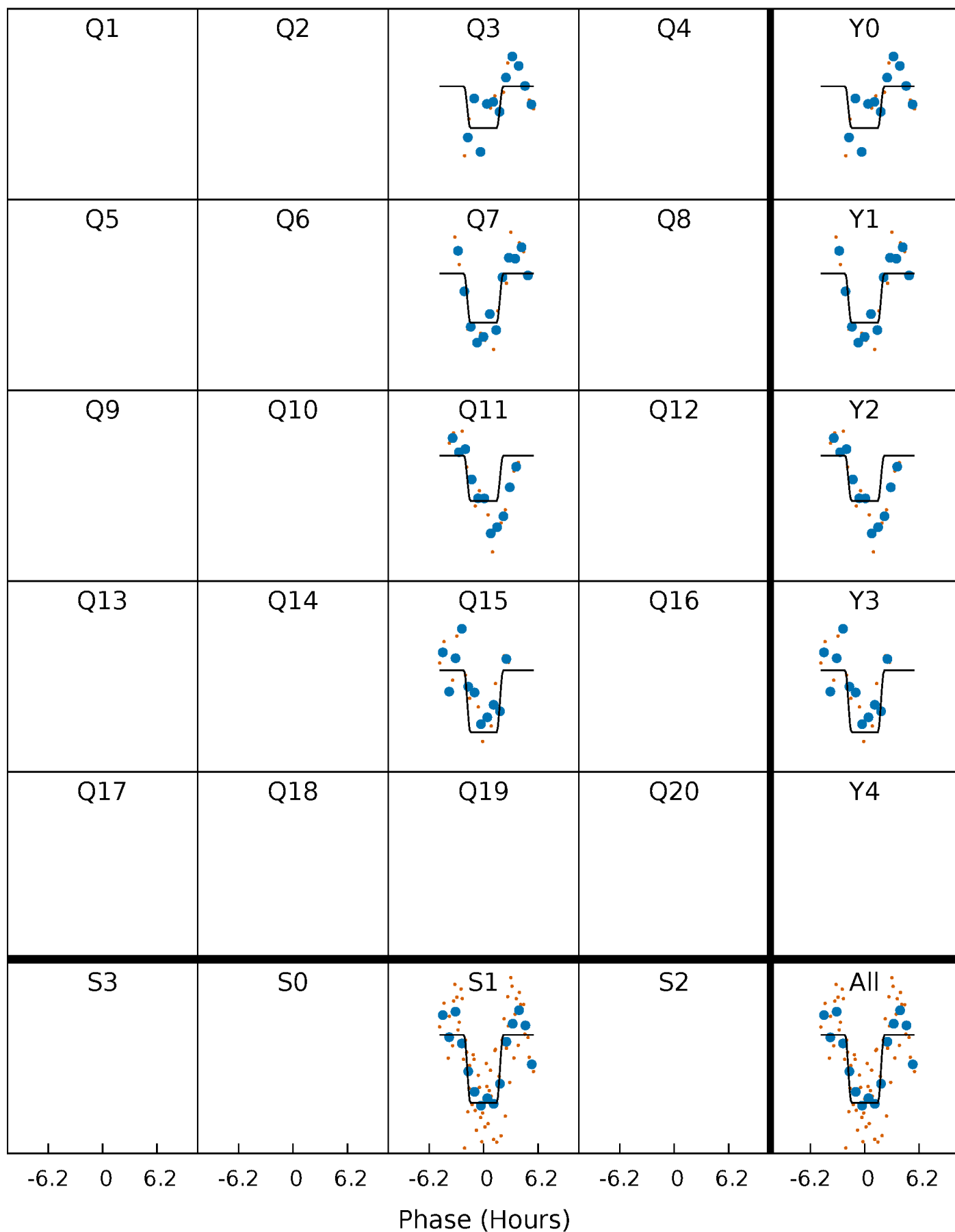
DV Quarter-Phased Transit Curves

TCE 007045605-02 P=361.501843 Days $T_0=339.358356$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

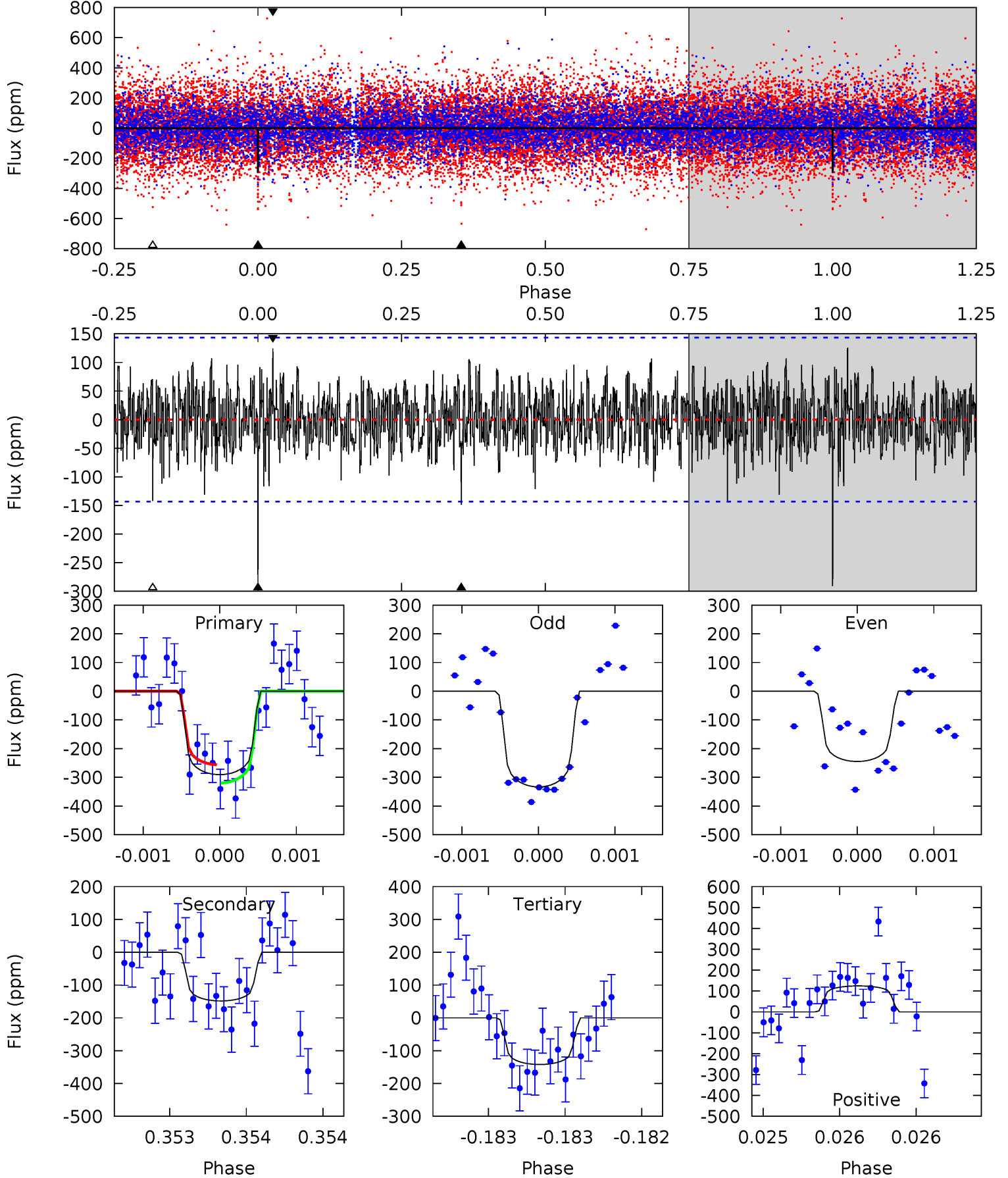
TCE 007045605-02 P=361.496921 Days $T_0=339.369072$ (BKJD)



DV Model-Shift Uniqueness Test

007045605-02, P = 361.501843 Days, E = 339.358356 Days

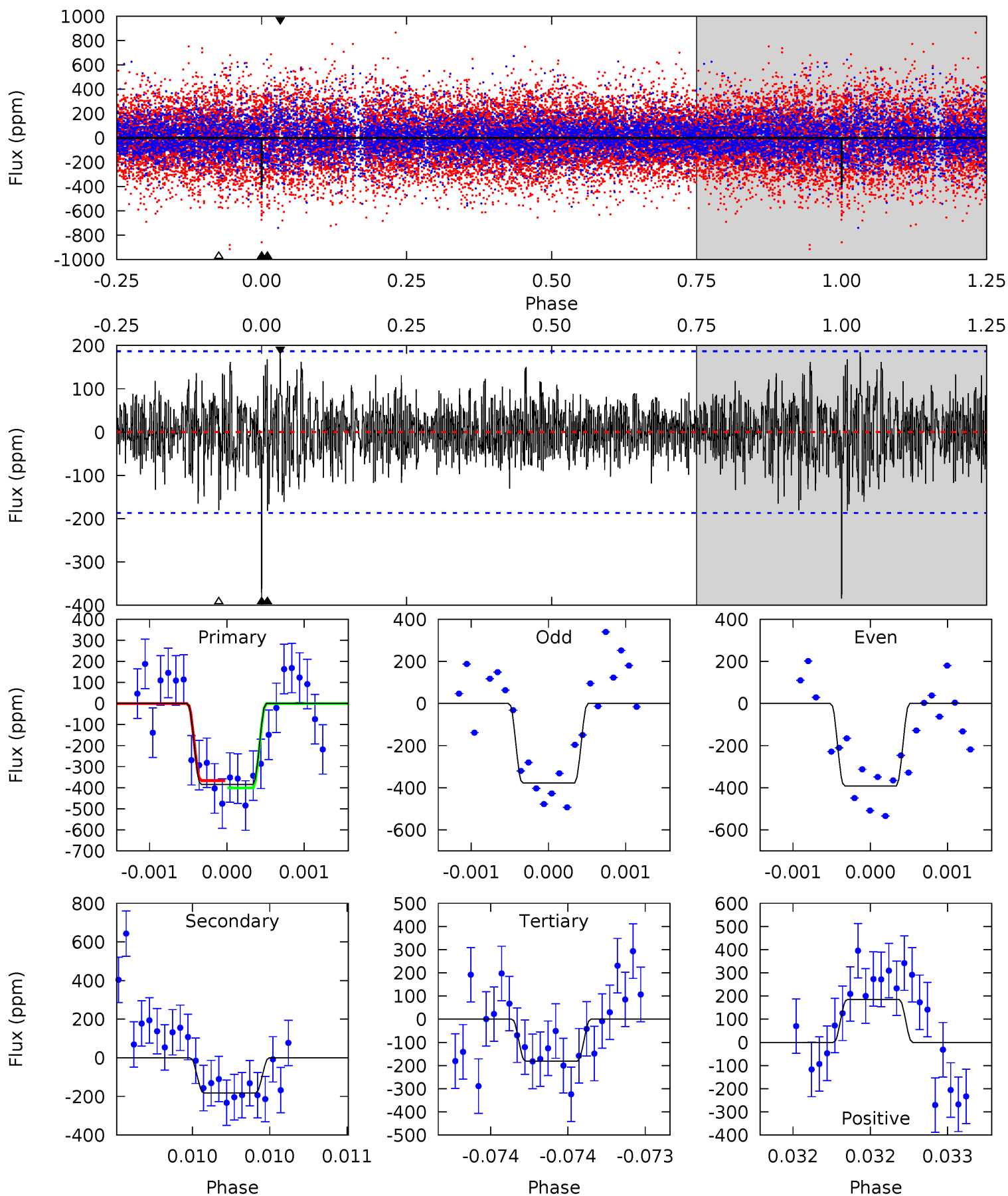
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
11.3	5.76	5.51	4.82	5.56	3.46	1.48	5.76	6.45	0.25	0.93	1.71	1.07	0.30	1.22



Alt Model-Shift Uniqueness Test

007045605-02, P = 361.496921 Days, E = 339.369072 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
11.5	5.42	5.39	5.52	5.57	3.48	1.41	6.08	5.95	0.04	-0.10	0.20	1.00	0.32	0.52



Stellar Parameters For KIC 007045605

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	7196^{+230}_{-316}	$4.064^{+0.170}_{-0.170}$	$-0.040^{+0.250}_{-0.350}$	$1.923^{+0.576}_{-0.471}$	$1.562^{+0.212}_{-0.259}$	$0.309^{+0.296}_{-0.153}$
	+3%/-4%	+4%/-4%	+625%/-875%	+30%/-24%	+14%/-17%	+96%/-50%
Source	KIC0	KIC0	KIC0	DSEP		

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

Secondary Eclipse Parameters for KIC 007045605-02 / KOI 7808.01

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-149 ± 26	$3.75^{+1.52}_{-1.39}$	574^{+46}_{-44}	5878^{+1544}_{-809}	7581^{+11909}_{-3777}
Alt.	-182 ± 34	$4.15^{+1.55}_{-1.33}$	573^{+42}_{-41}	5815^{+1302}_{-688}	7607^{+8537}_{-3576}

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

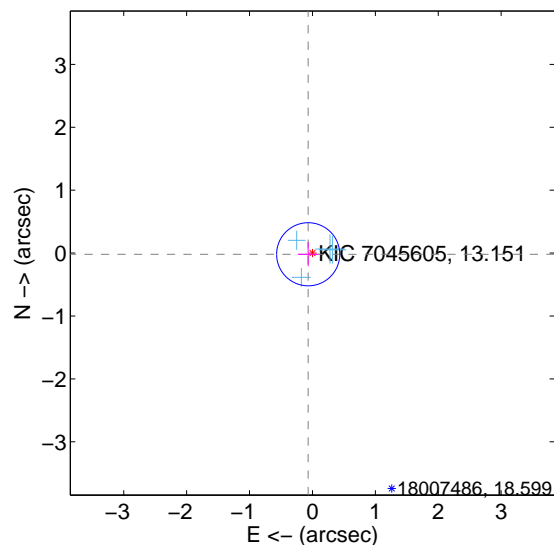
Supplemental centroid analysis for 007045605-02. Kepler magnitude: 13.15. Transit SNR 10.29

There are 4 quarters with good PRF difference image offsets

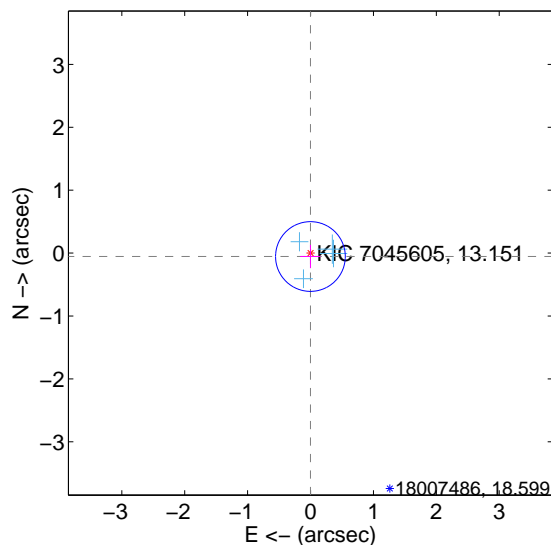
The direct PRF centroid is offset from the target star catalog position by about 0.08 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.070 ± 0.167	0.42	0.068 ± 0.165	-0.019 ± 0.190
PRF-fit source offset from KIC position	0.054 ± 0.185	0.29	0.001 ± 0.162	-0.054 ± 0.185
photometric centroid source offset	0.76 ± 0.82	0.93	0.24 ± 0.83	-0.72 ± 0.81

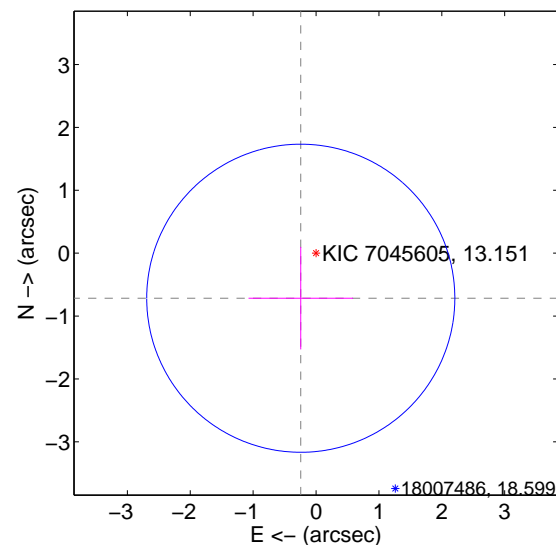
offset from difference PRF-fit to OOT PRF-fit



offset from difference PRF-fit to KIC position

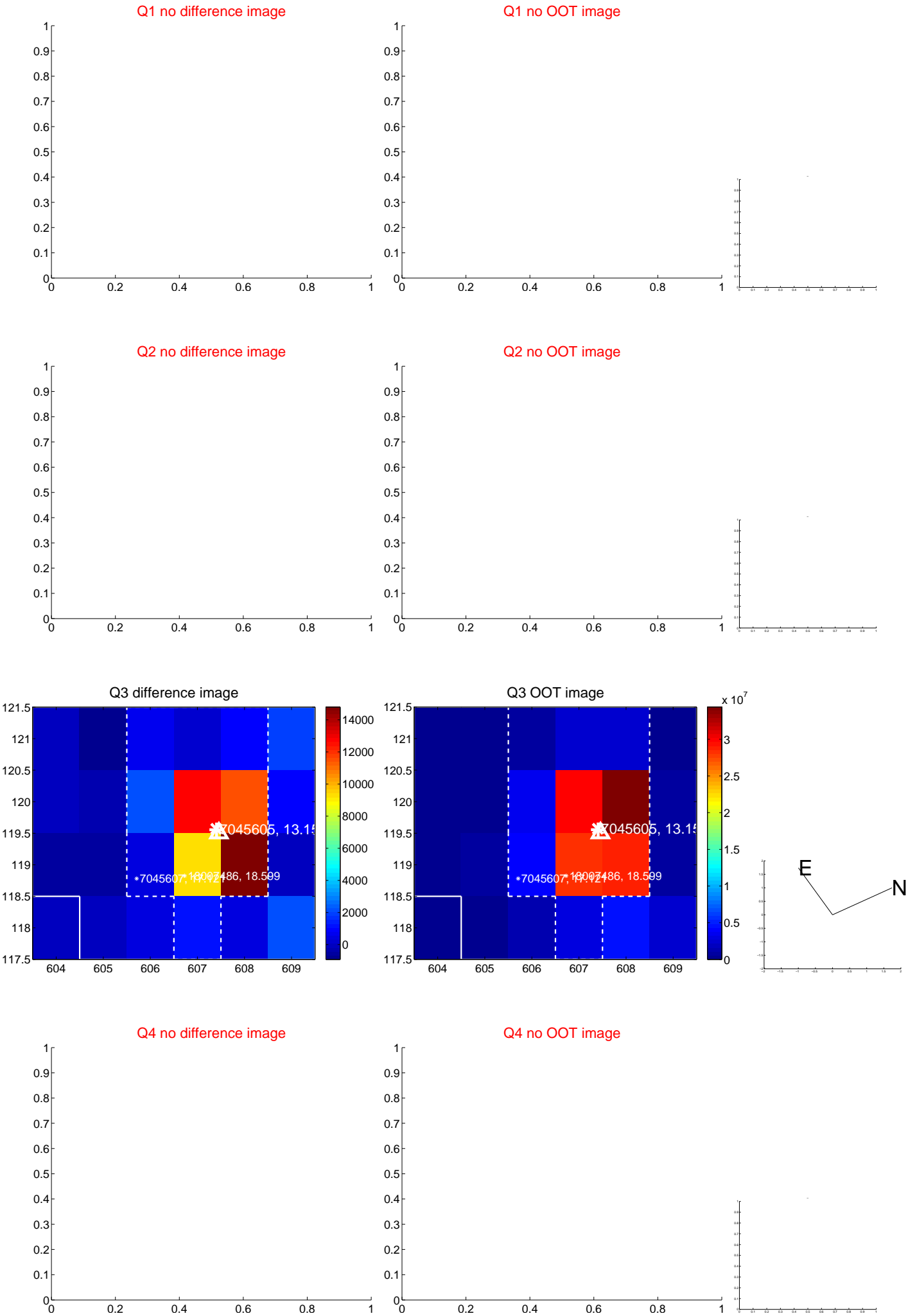


offset from photometric centroids

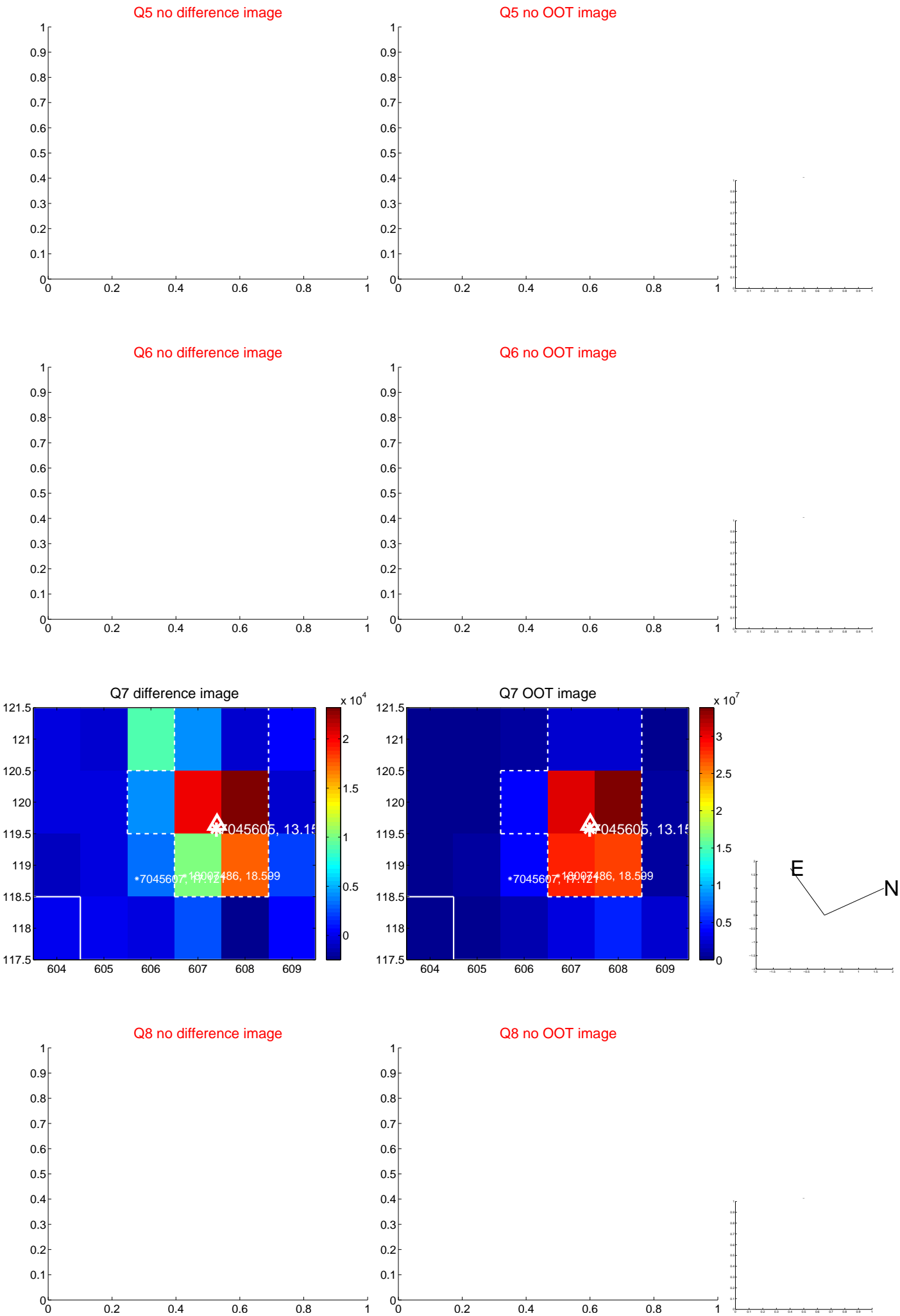


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets**; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

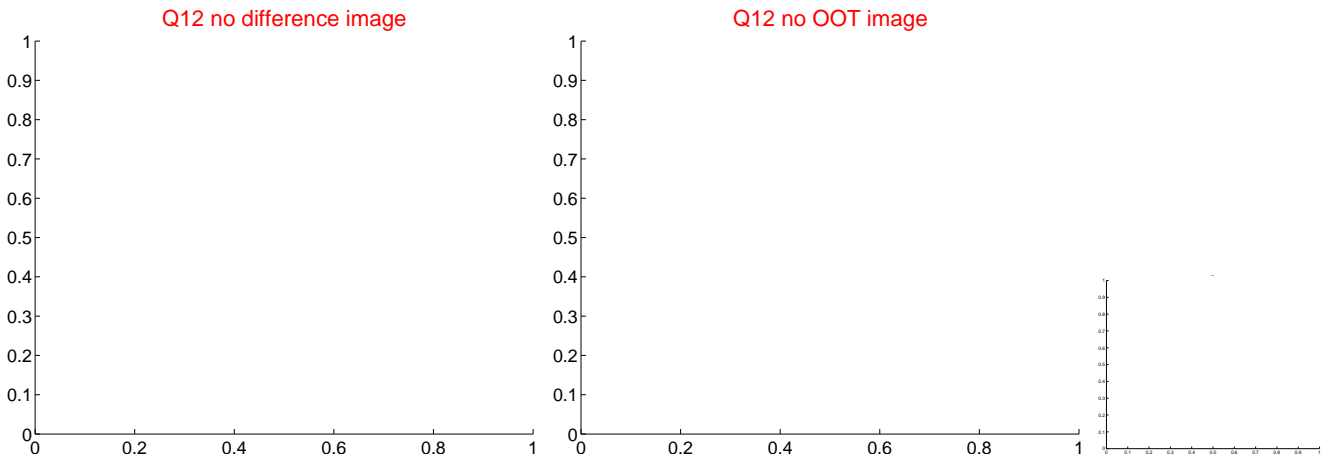
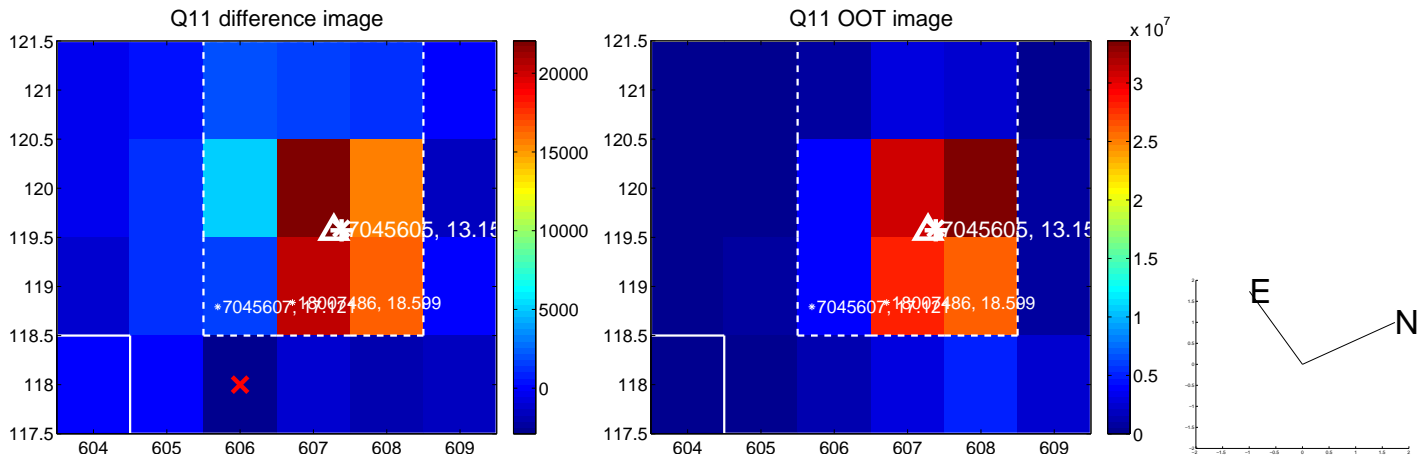
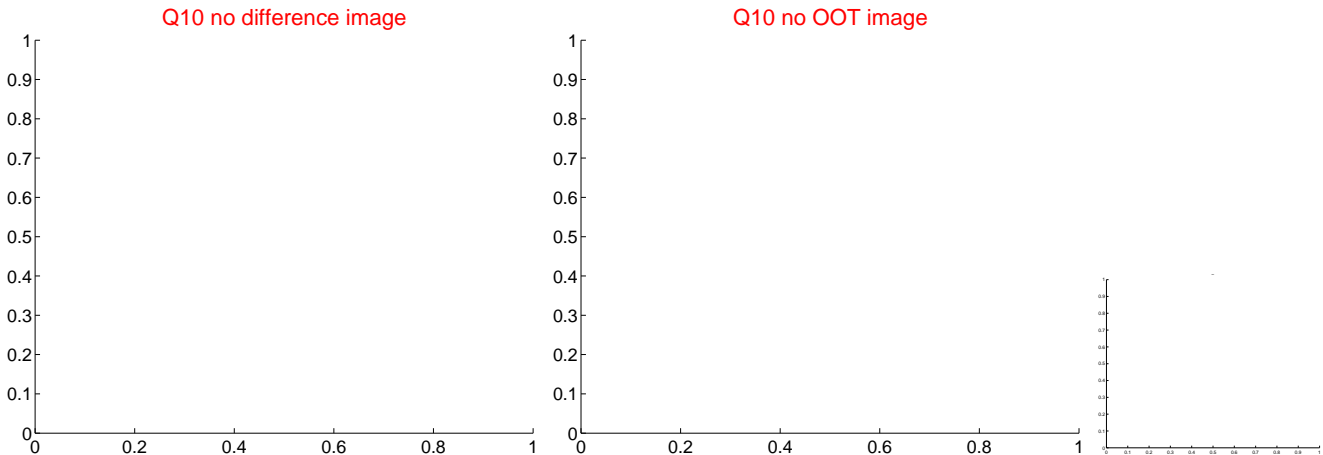
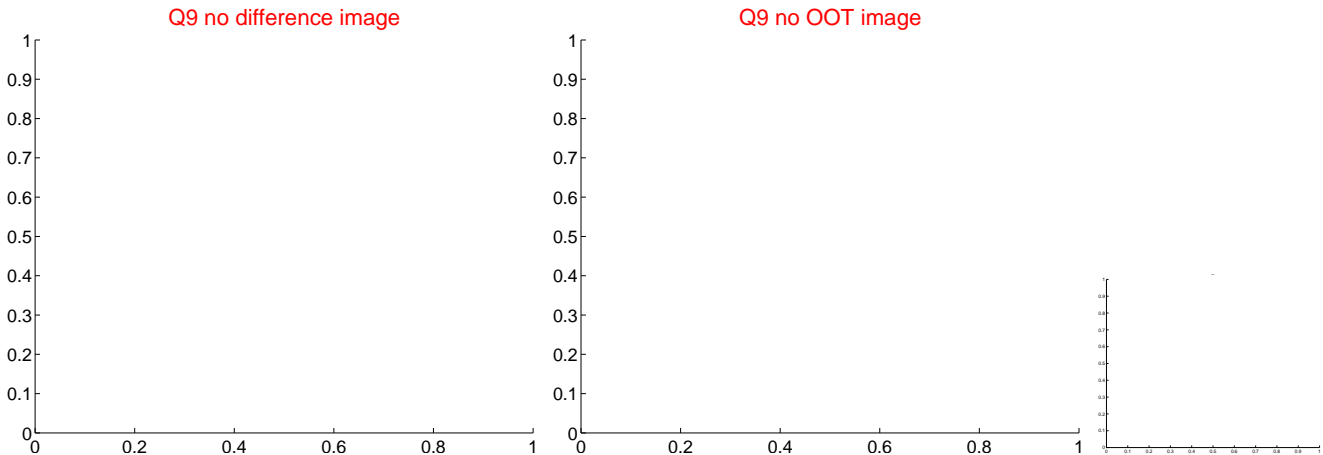
white ×: KIC target position; +: OOT centroid; △: difference centroid. red ✕: large negative pixel value.



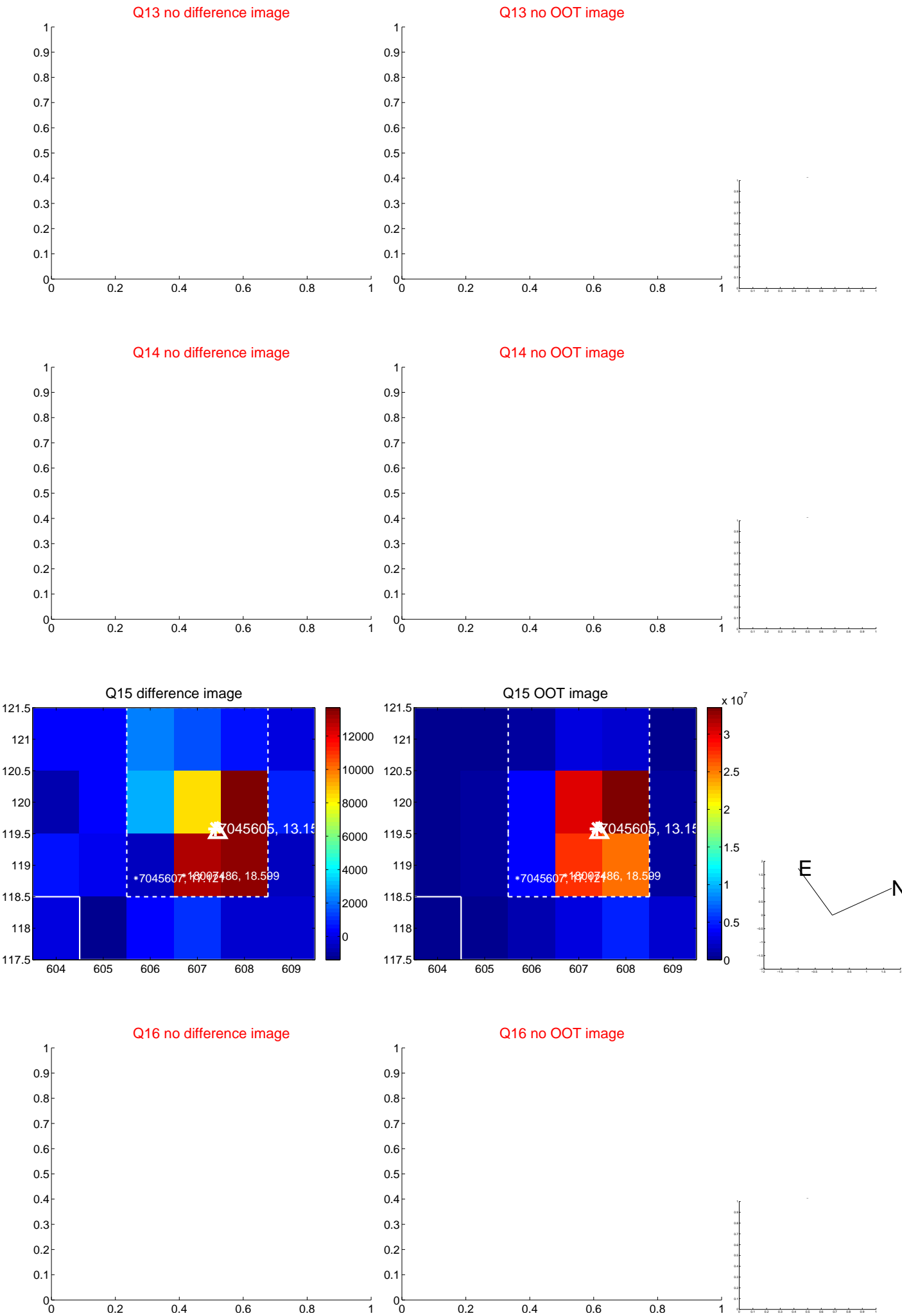
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



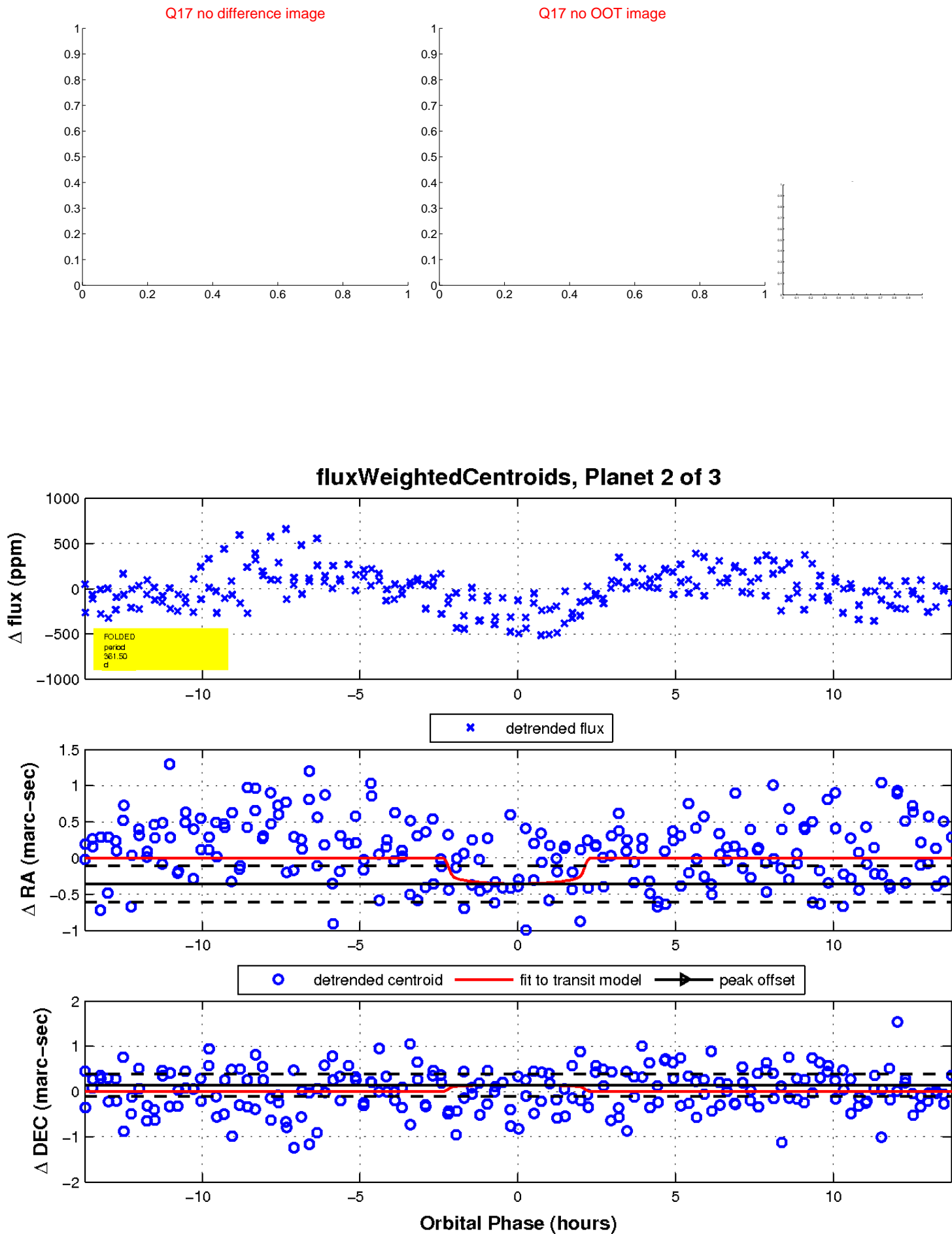
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value



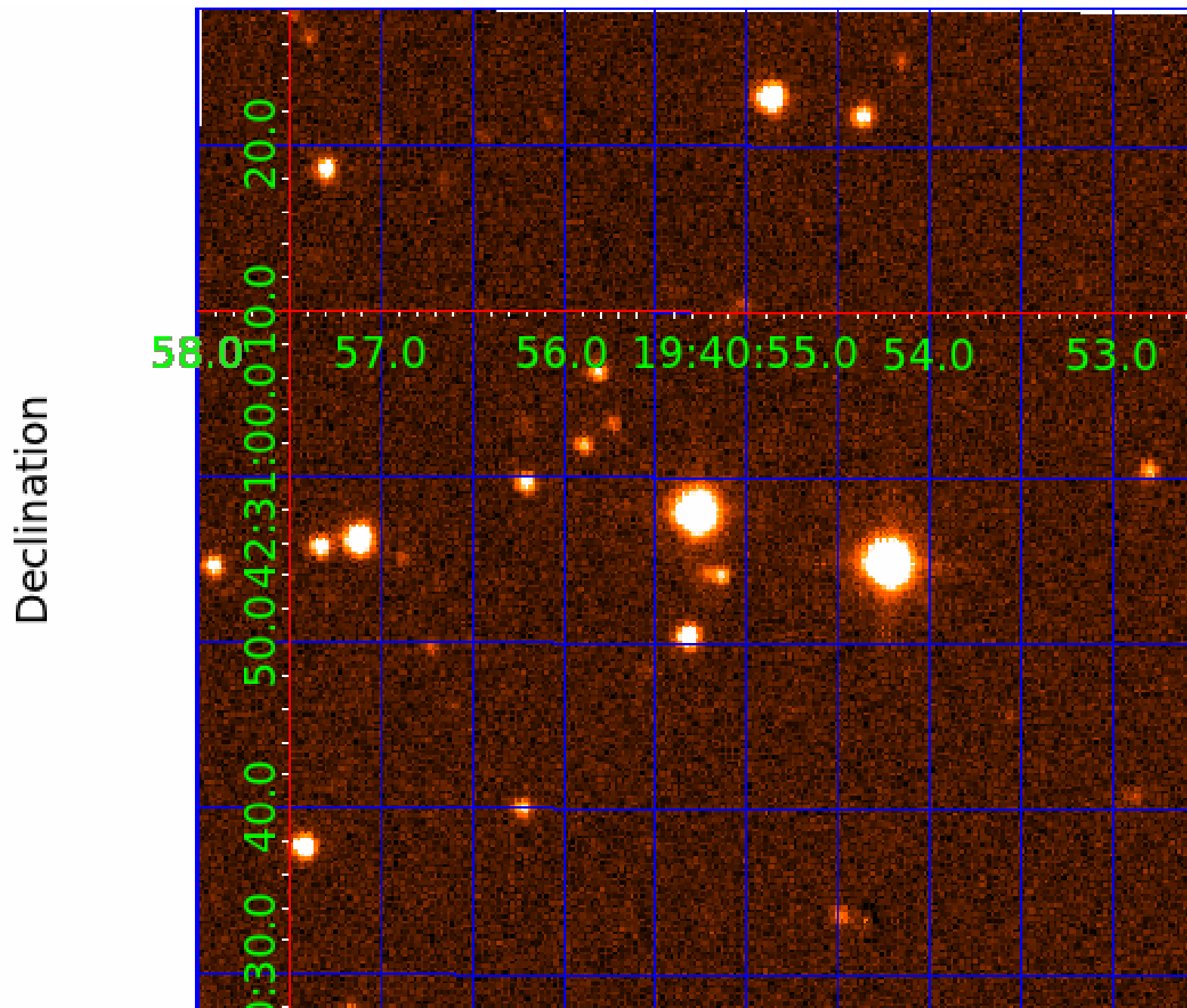
white ×: KIC target position; +: OOT centroid; △: difference centroid. red ✕: large negative pixel value.



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



UKIRT Image



KIC 007045605

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})
007045605-01	OBS	No	1.162243	131.985197	10.2	6.337	8.1	5.5	1.92	7196	0.62	14087.99
007045605-02	OBS	7808.01	361.501843	339.358356	298.7	4.588	10.1	10.3	1.92	7196	3.71	6.68
007045605-03	OBS	No	82.810950	151.114675	251.5	4.006	8.2	8.3	1.92	7196	3.48	47.69

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
007045605-01	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT
007045605-02	OBS	FP	0.17	1	0	0	0	MOD_NONUNIQ_ALT
007045605-03	OBS	FP	0.00	1	0	0	0	TRANS_GAPPED—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT

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

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

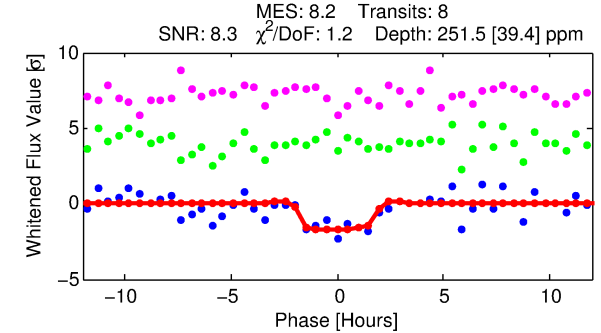
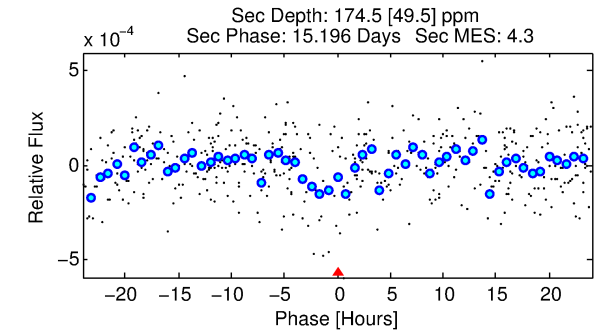
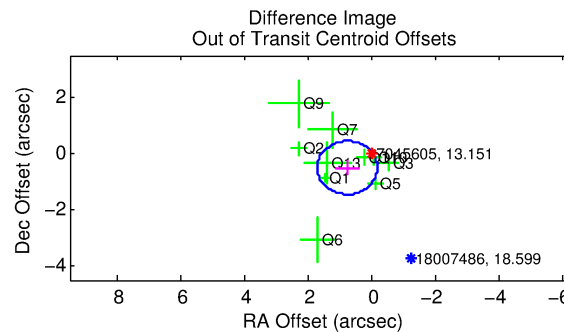
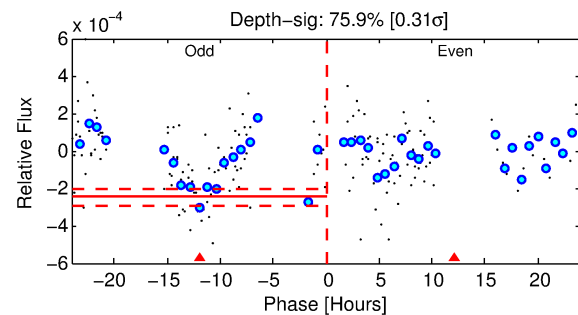
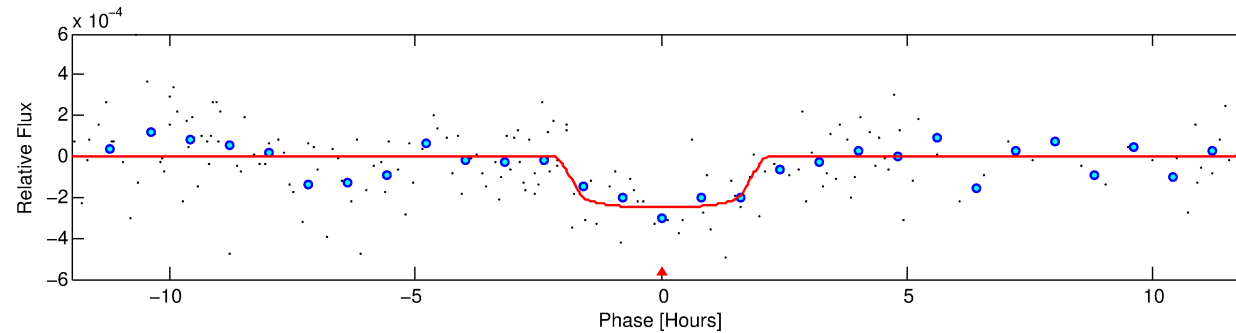
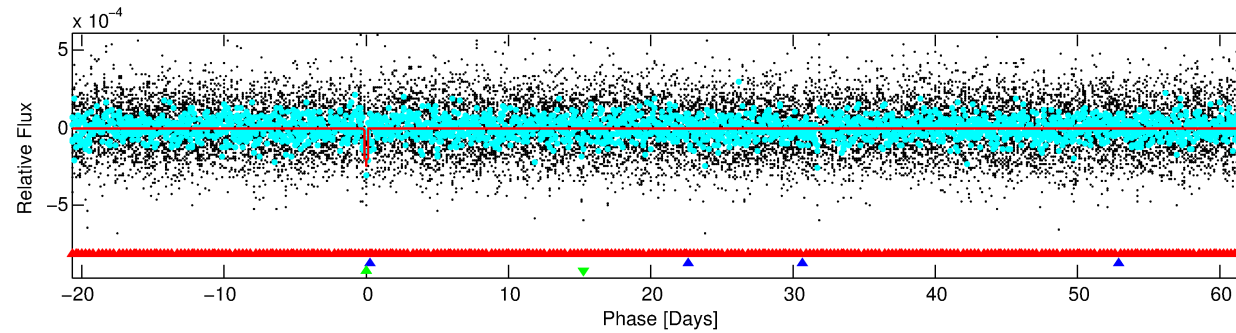
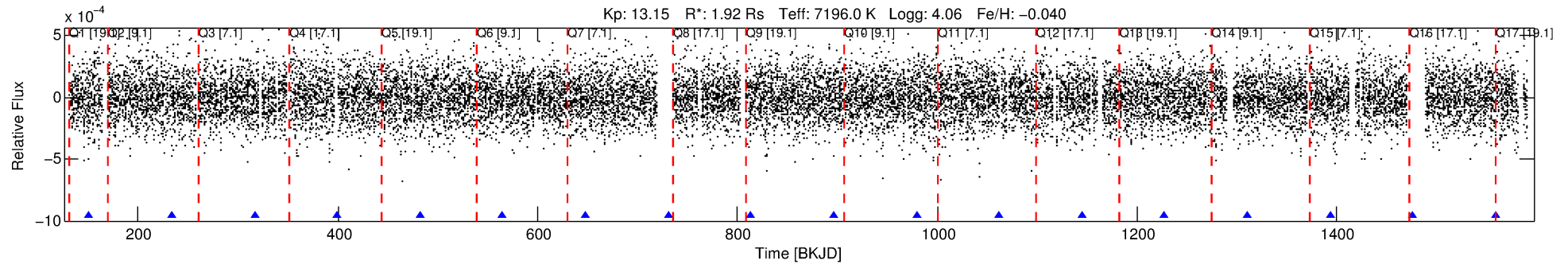
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 007045605-03

No Significant Match Found

DV One-Page Summary

KIC: 7045605 Candidate: 3 of 3 Period: 82.811 d



DV Fit Results:

Period = 82.81095 [0.00129] d
Epoch = 151.1147 [0.0088] BKJD
Rp/R* = 0.0166 [0.0068]
a/R* = 80.94 [198.50]
b = 0.88 [0.65]
Seff = 47.69 [17.77]
Teq = 670 [62] K
Rp = 3.48 [1.76] Re
a = 0.4316 [0.1030] AU
Ag = 1472.62 [1361.94] [1.08σ]
Teffp = 6418 [1415] K [4.06σ]

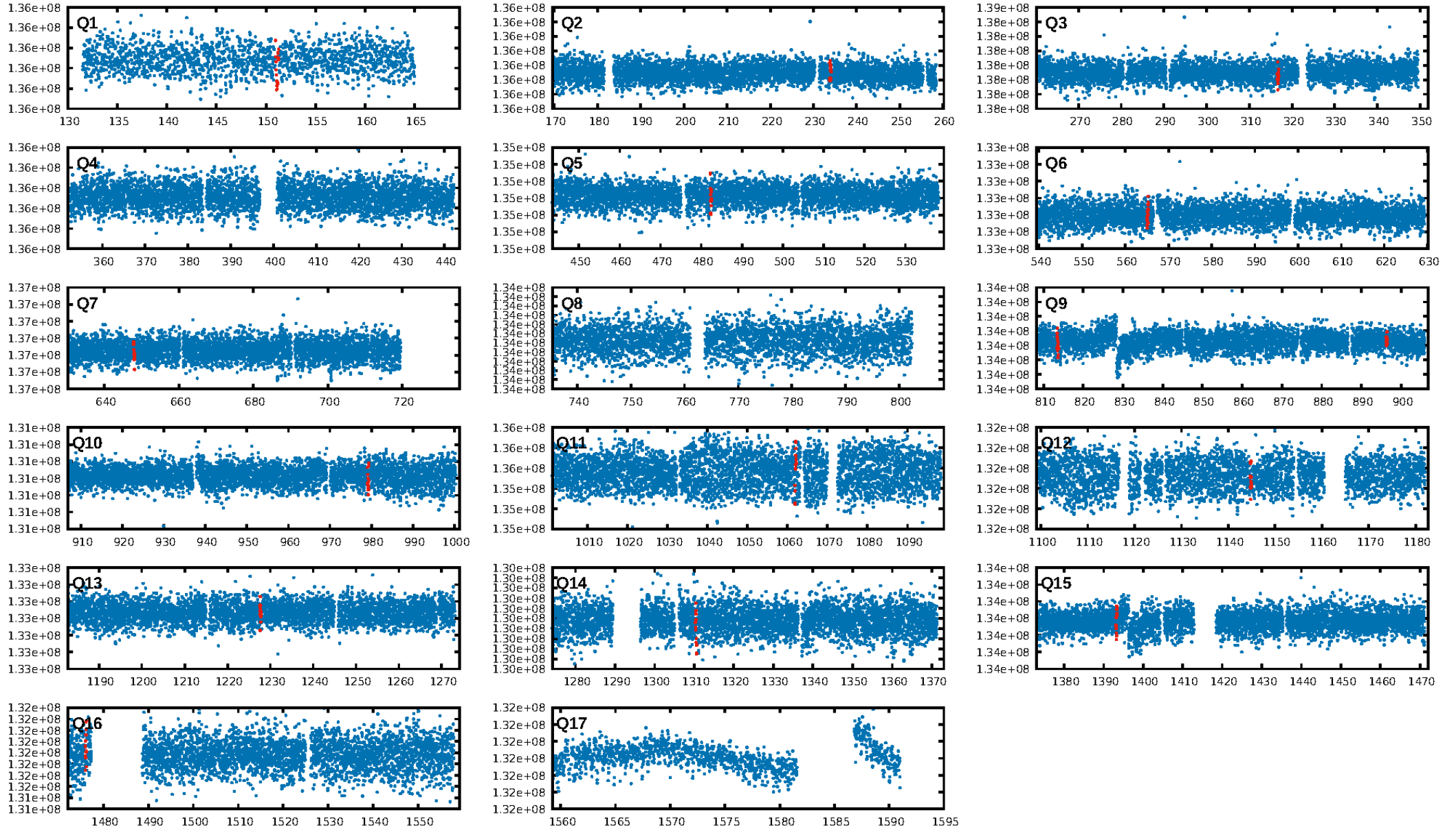
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [261.40σ]
LongPeriod-sig: 100.0% [1098.21σ]
ModelChiSquare2-sig: 66.2%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: 3.49e-09
RollingBand-fgt: 1.00 [7/7]
GhostDiagnostic-chr: -1.707
Centroid-sig: 2.3%
Centroid-so: 1.245 arcsec [2.30σ]
OotOffset-rm: 0.932 arcsec [2.96σ]
KicOffset-rm: 0.948 arcsec [3.02σ]
OotOffset-st: 3/3/0/4 [10]
KicOffset-st: 3/3/0/4 [10]
DiffImageQuality-fgm: 0.60 [6/10]
DiffImageOverlap-fno: 0.33 [4/12]

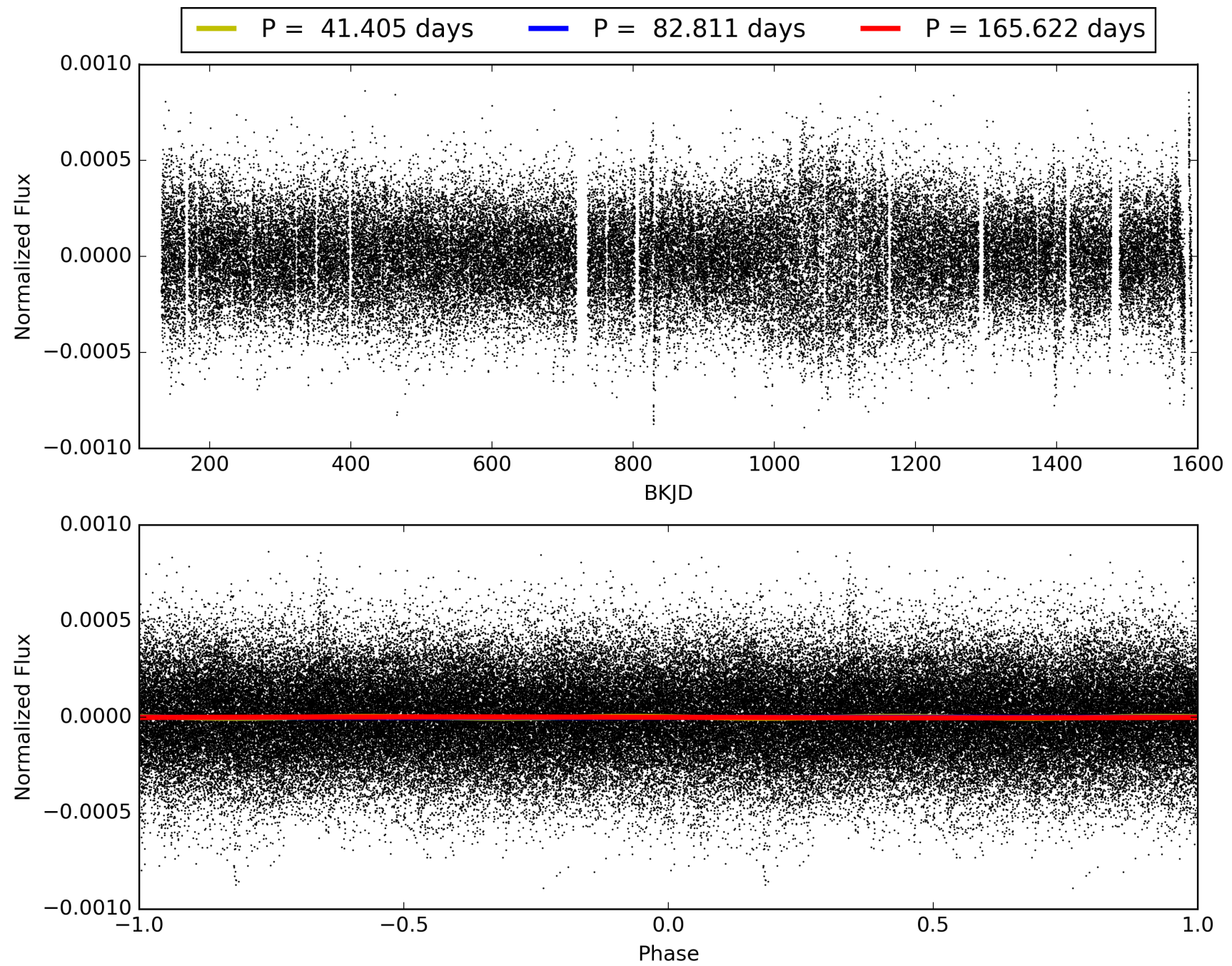
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 31-Jan-2016 08:40:31 Z

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

TCE 007045605-03, PDC Light Curves

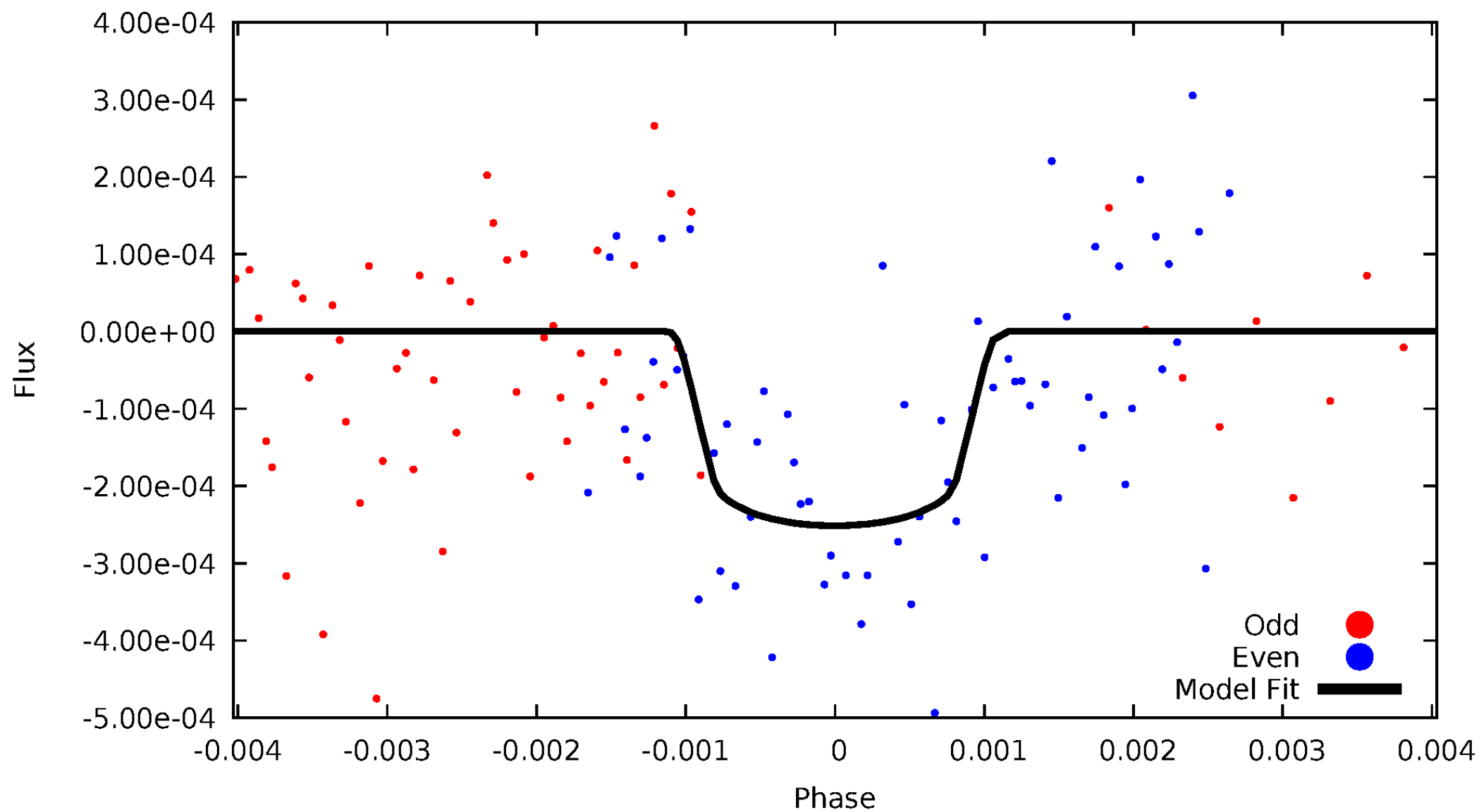


TCE 007045605-03



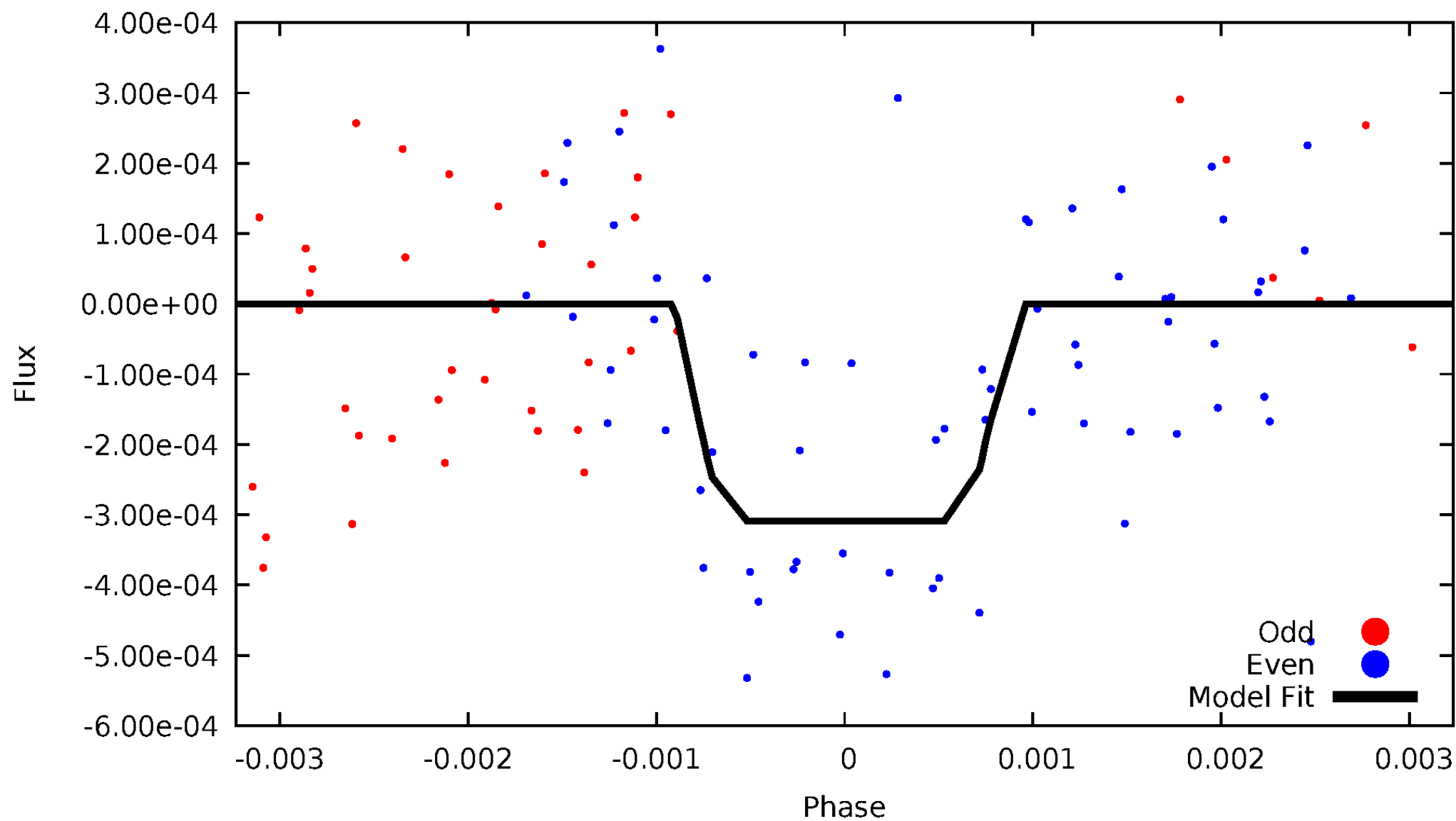
DV Odd/Even

TCE 007045605-03



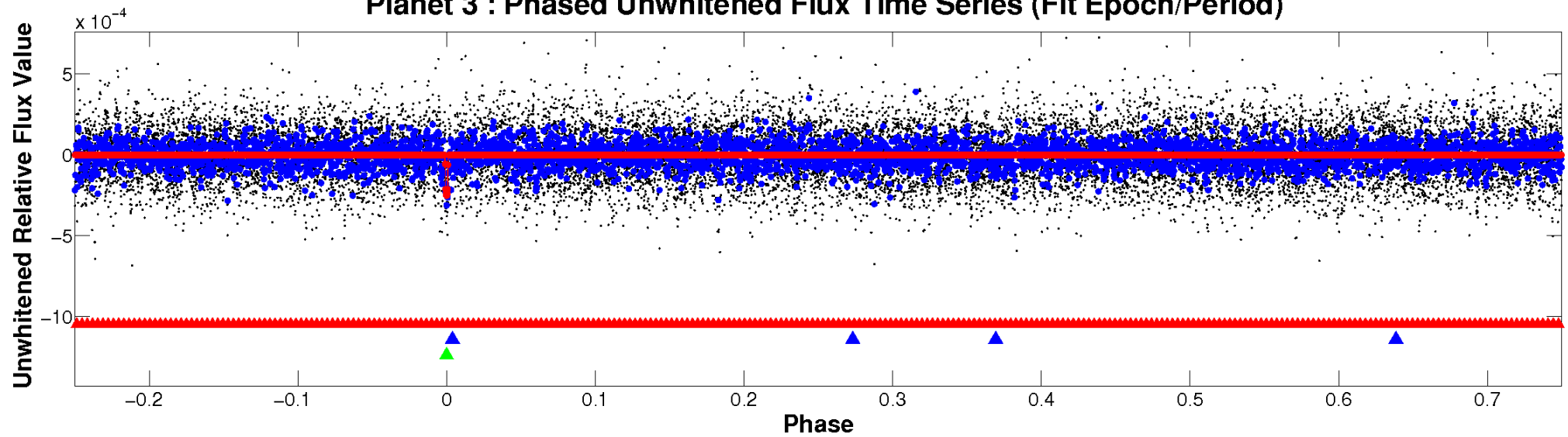
ALT Odd/Even

TCE 007045605-03

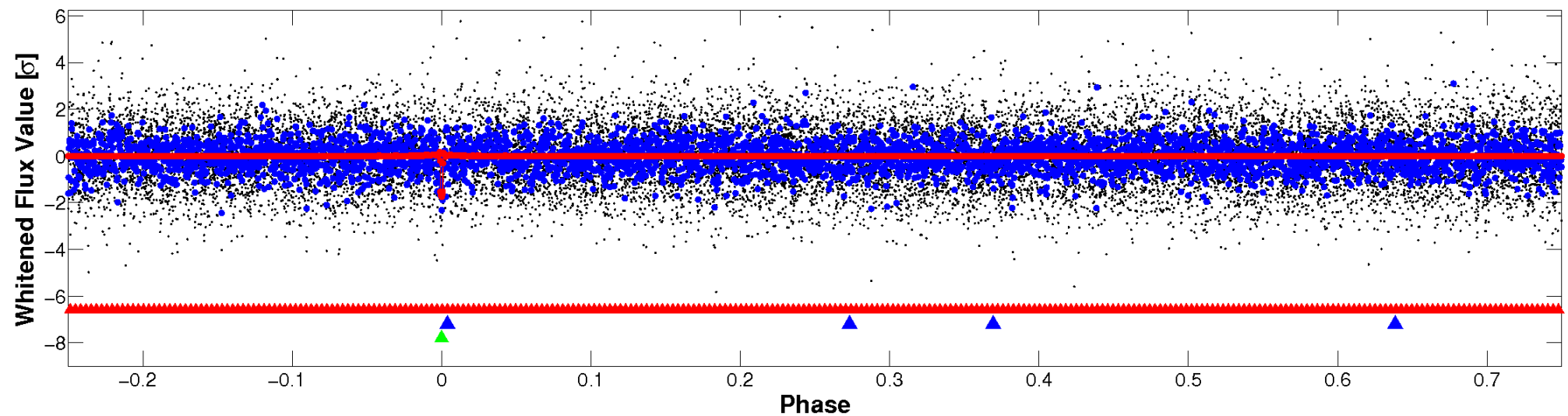


Non-Whitened Vs. Whitened Light Curve

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

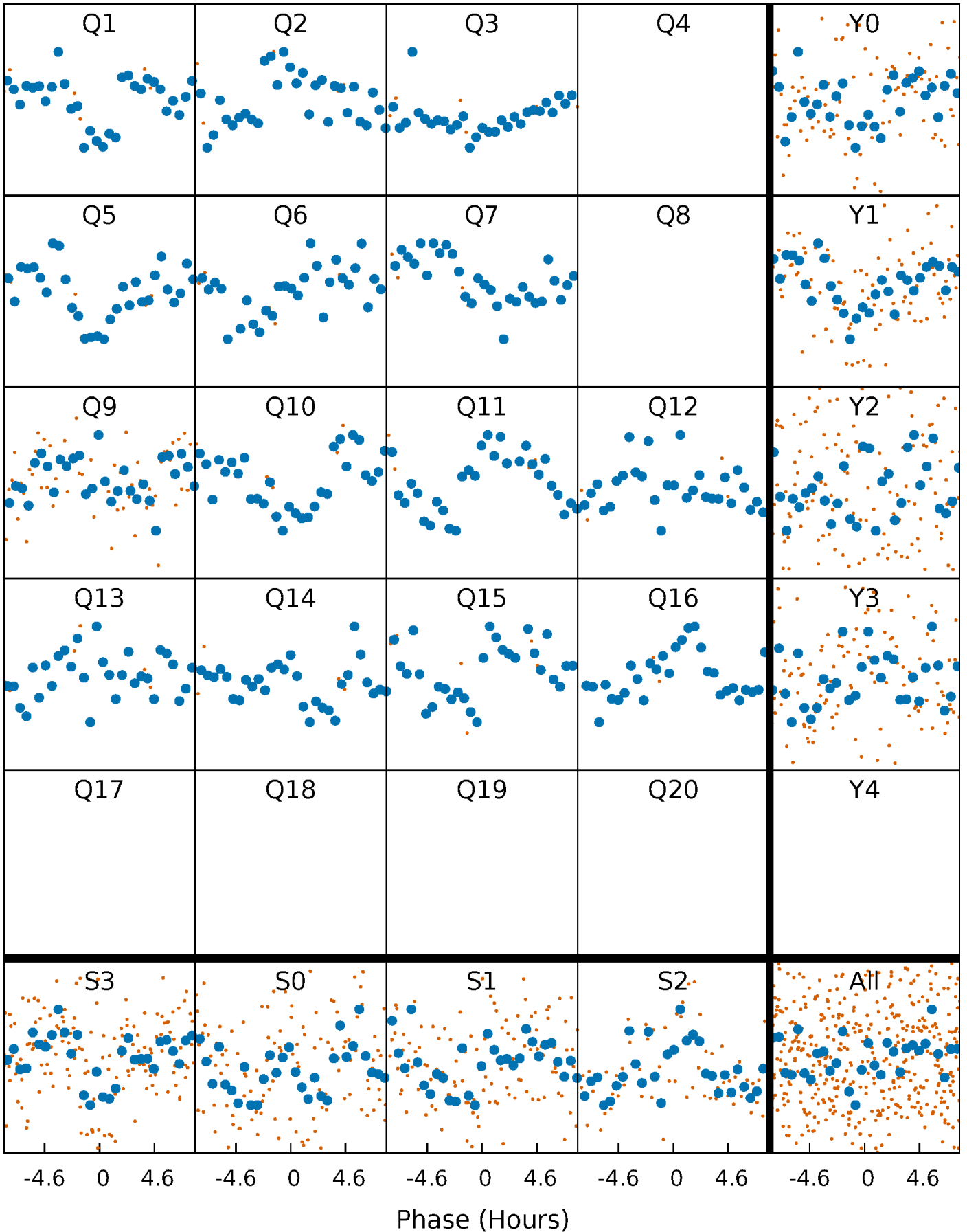


Planet 3 : Phased Whitened Flux Time Series (Fit Epoch/Period)



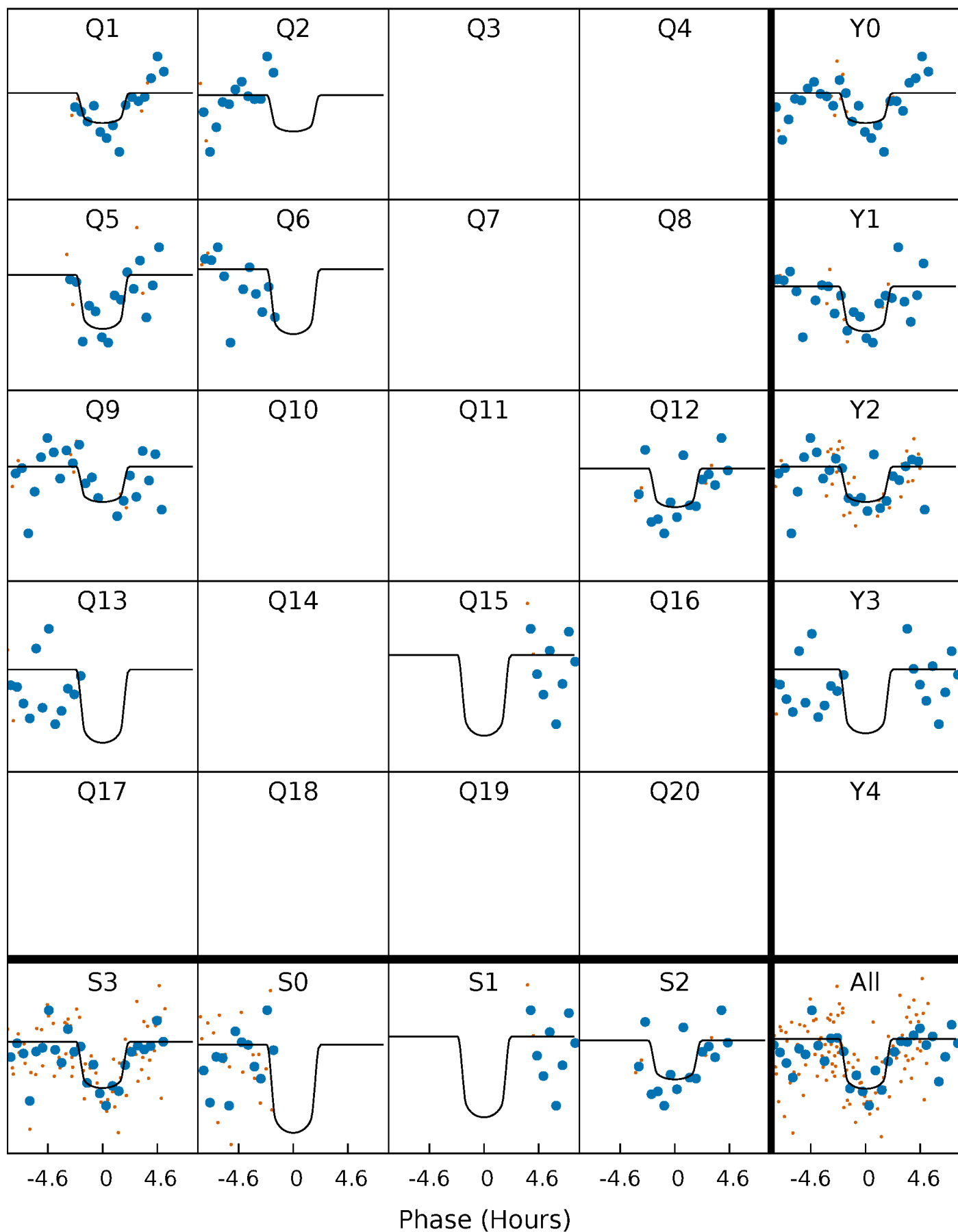
PDC Quarter-Phased Transit Curves

TCE 007045605-03 P= 82.810950 Days $T_0=151.114675$ (BKJD)



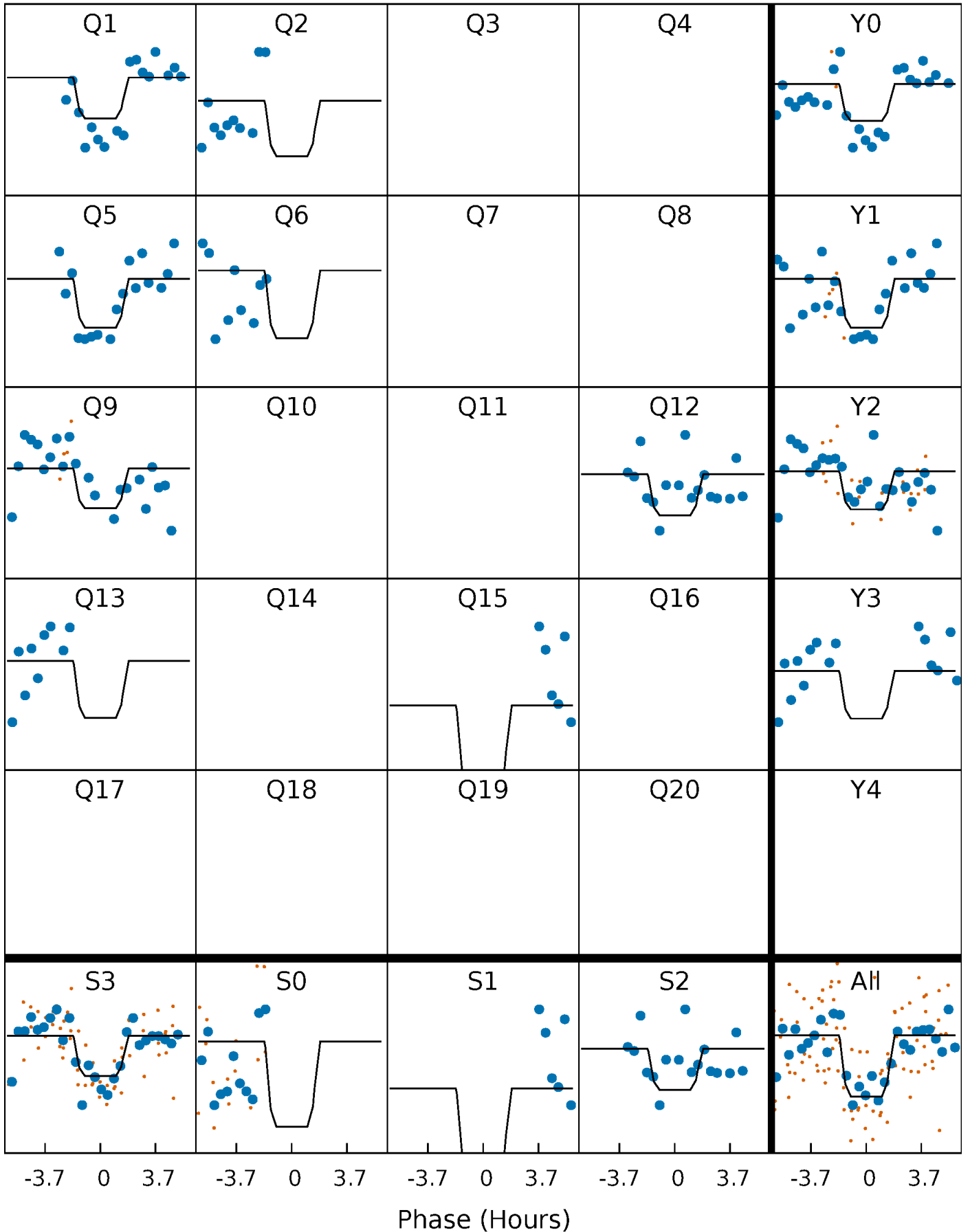
DV Quarter-Phased Transit Curves

TCE 007045605-03 $P = 82.810950$ Days $T_0 = 151.114675$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

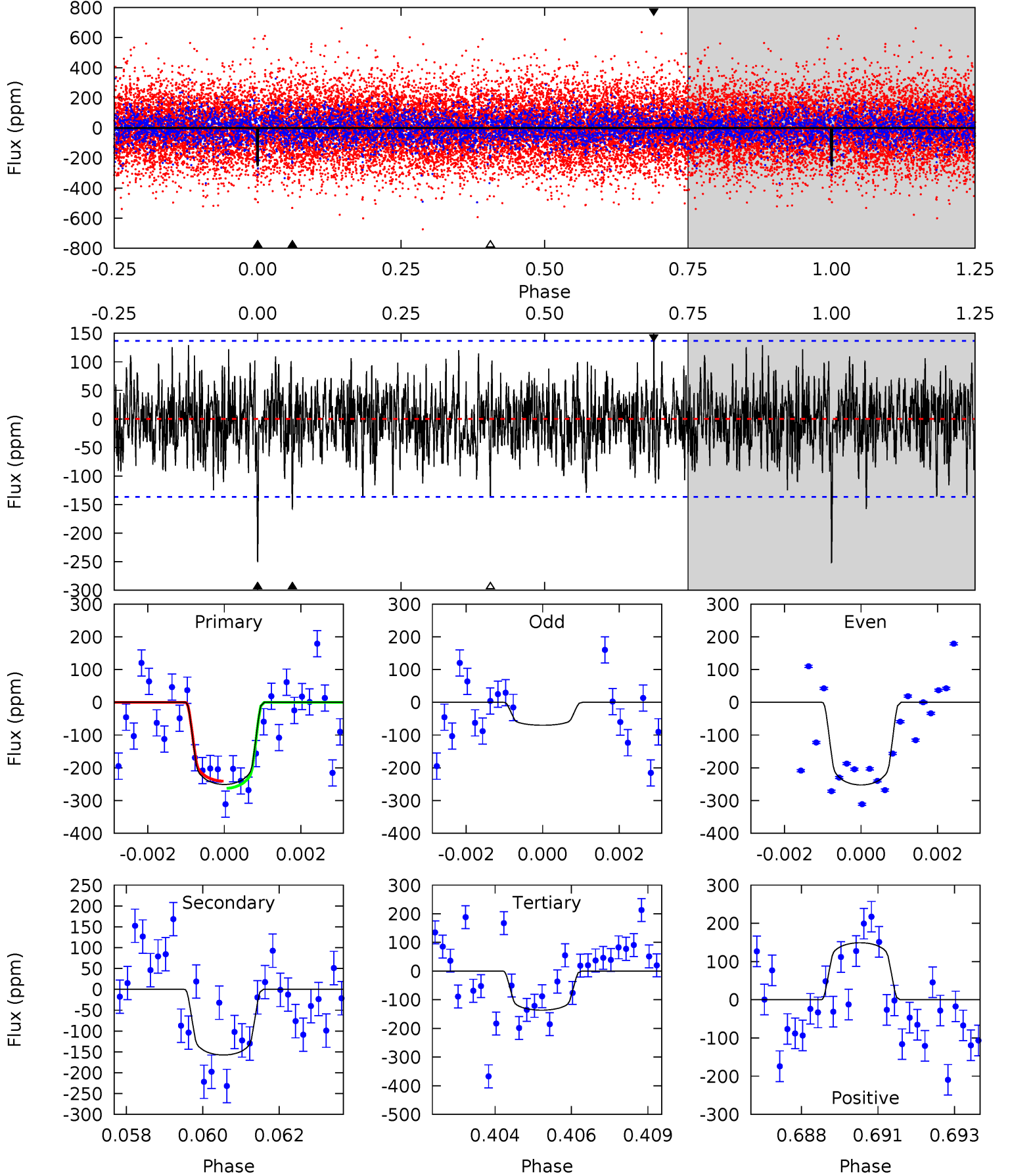
TCE 007045605-03 P= 82.811517 Days $T_0=151.110800$ (BKJD)



DV Model-Shift Uniqueness Test

007045605-03, P = 82.810950 Days, E = 68.303725 Days

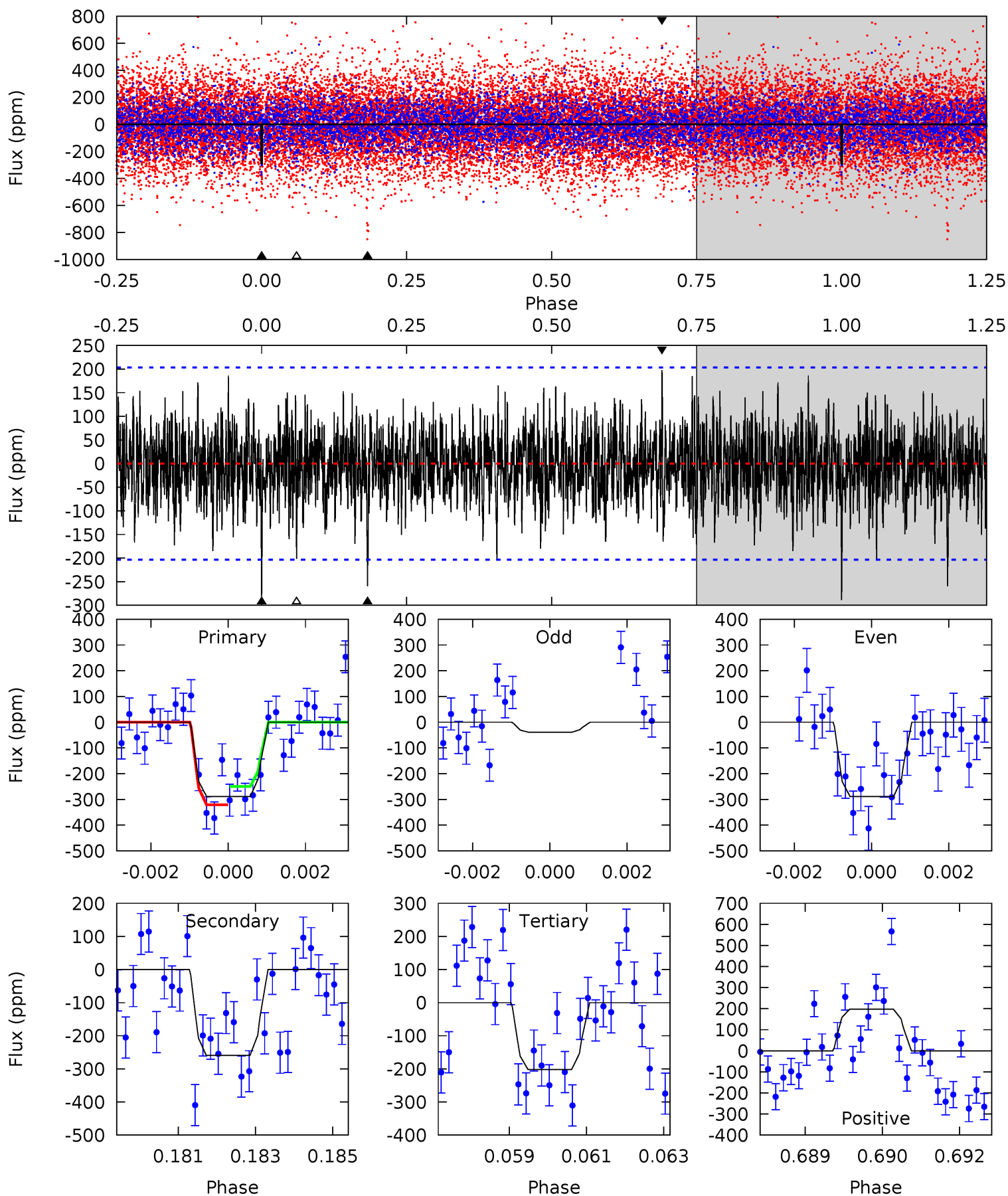
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
9.75	6.12	5.30	5.80	5.31	3.06	1.63	4.45	3.95	0.83	0.32	1.96	1.02	0.37	0.43



Alt Model-Shift Uniqueness Test

007045605-03, P = 82.811517 Days, E = 68.299283 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
7.57	6.80	5.29	5.18	5.34	3.11	1.55	2.28	2.39	1.51	1.62	3.70	1.06	0.41	0.93



Stellar Parameters For KIC 007045605

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	7196^{+230}_{-316}	$4.064^{+0.170}_{-0.170}$	$-0.040^{+0.250}_{-0.350}$	$1.923^{+0.576}_{-0.471}$	$1.562^{+0.212}_{-0.259}$	$0.309^{+0.296}_{-0.153}$
	+3%/-4%	+4%/-4%	+625%/-875%	+30%/-24%	+14%/-17%	+96%/-50%
Source	KIC0	KIC0	KIC0	DSEP		

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

Secondary Eclipse Parameters for KIC 007045605-03 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-158 ± 26	$3.45^{+1.63}_{-1.35}$	934^{+73}_{-74}	6116^{+2062}_{-902}	1353^{+2445}_{-738}
Alt.	-259 ± 38	$3.65^{+1.59}_{-1.44}$	932^{+72}_{-65}	6827^{+2192}_{-1113}	1953^{+3390}_{-1006}

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 $A_{obs} \gg 1.0$

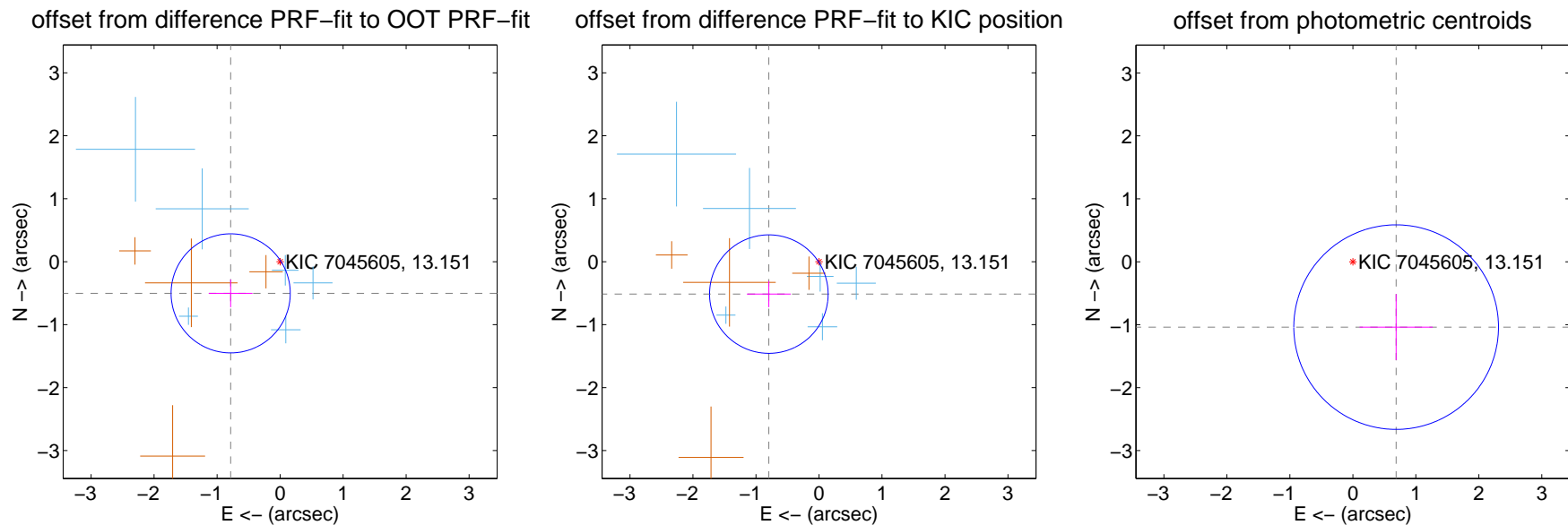
DV Centroid Data

Supplemental centroid analysis for 007045605-03. Kepler magnitude: 13.15. Transit SNR 8.33

There are 6 quarters with good PRF difference image offsets

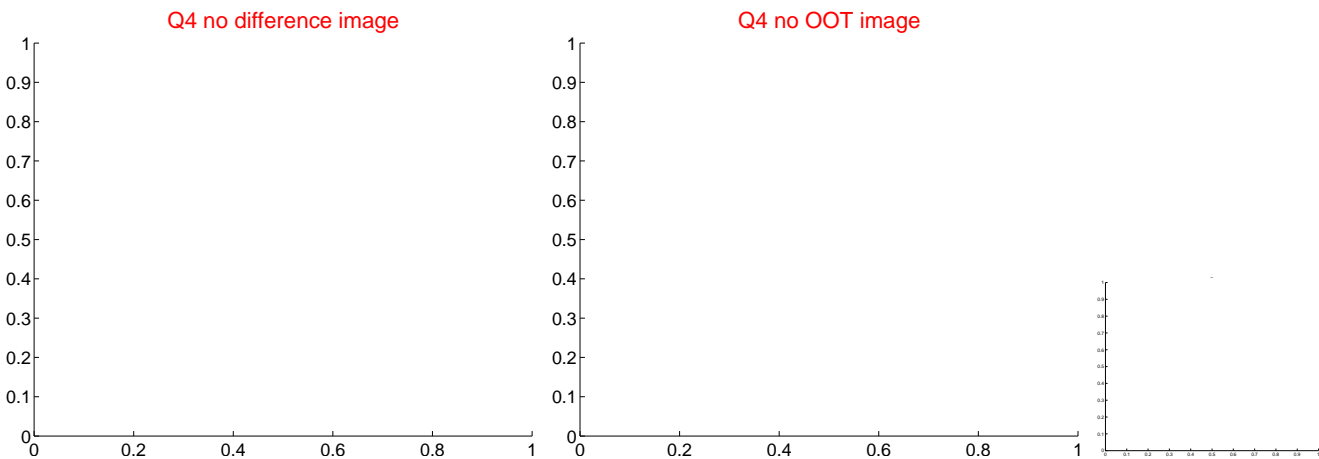
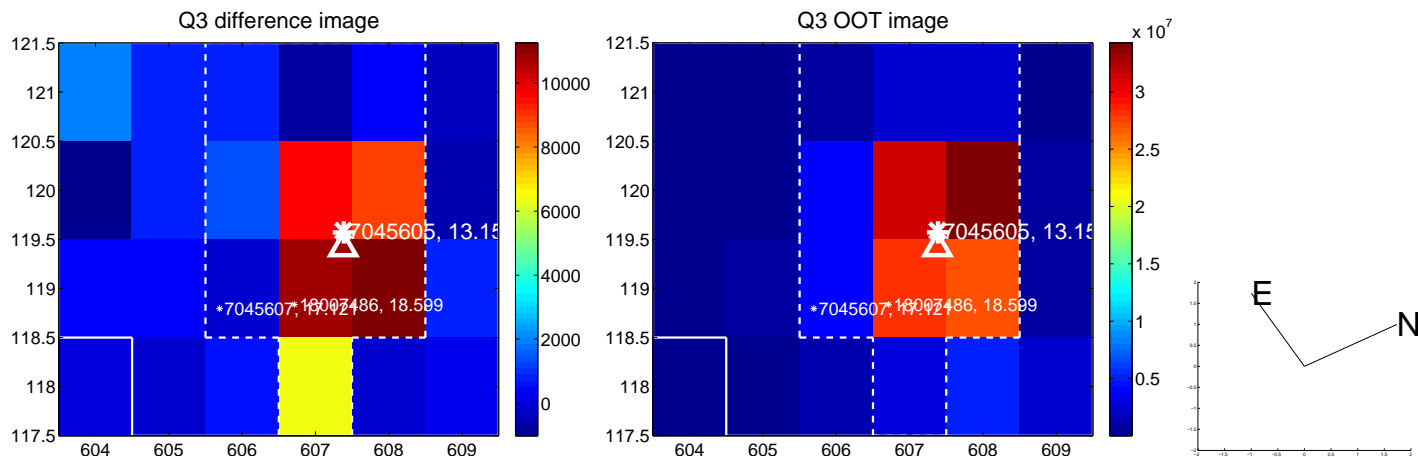
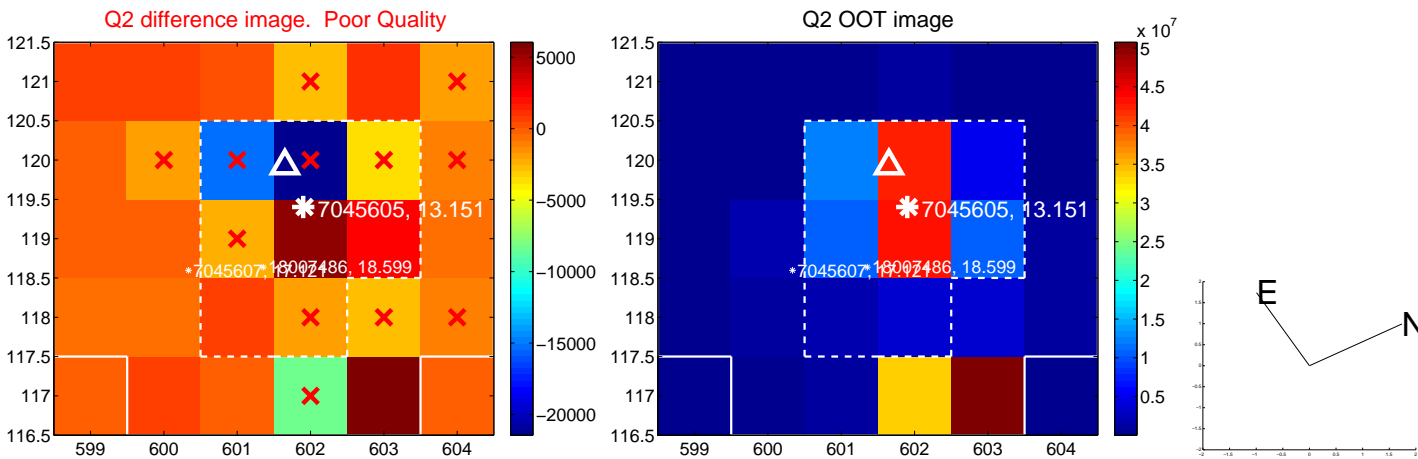
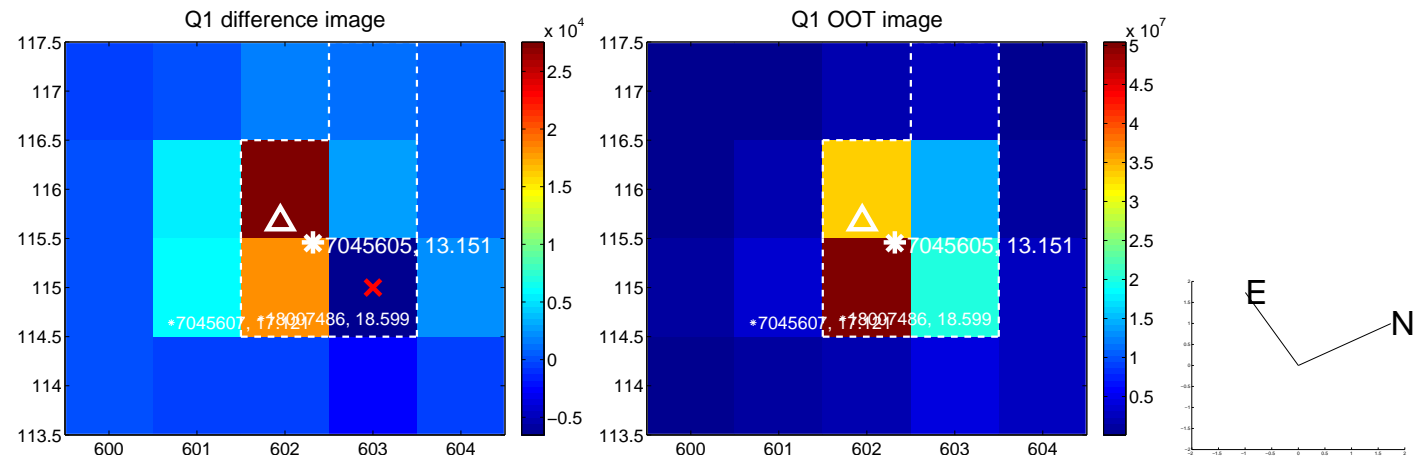
The direct PRF centroid is offset from the target star catalog position by about 0.01 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.932 ± 0.315	2.96	0.785 ± 0.347	-0.503 ± 0.220
PRF-fit source offset from KIC position	0.948 ± 0.314	3.02	0.796 ± 0.348	-0.515 ± 0.208
photometric centroid source offset	1.24 ± 0.54	2.30	-0.69 ± 0.58	-1.04 ± 0.52

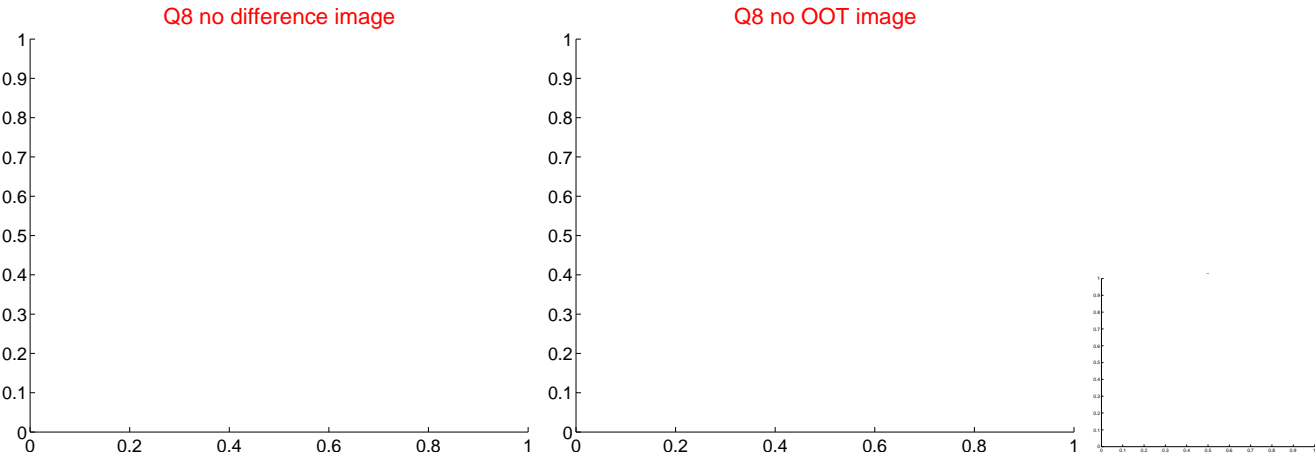
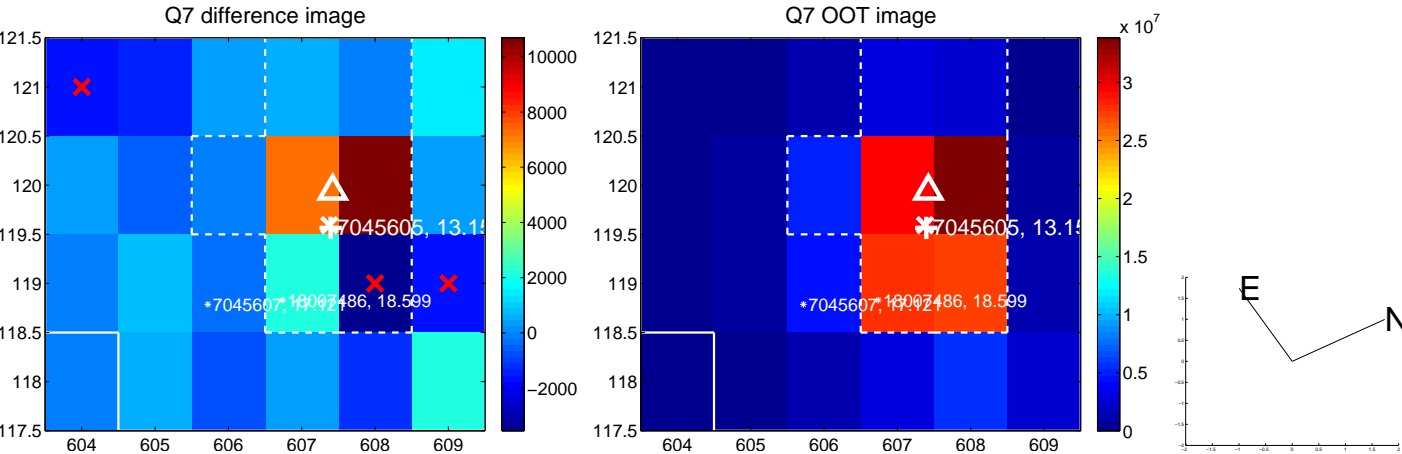
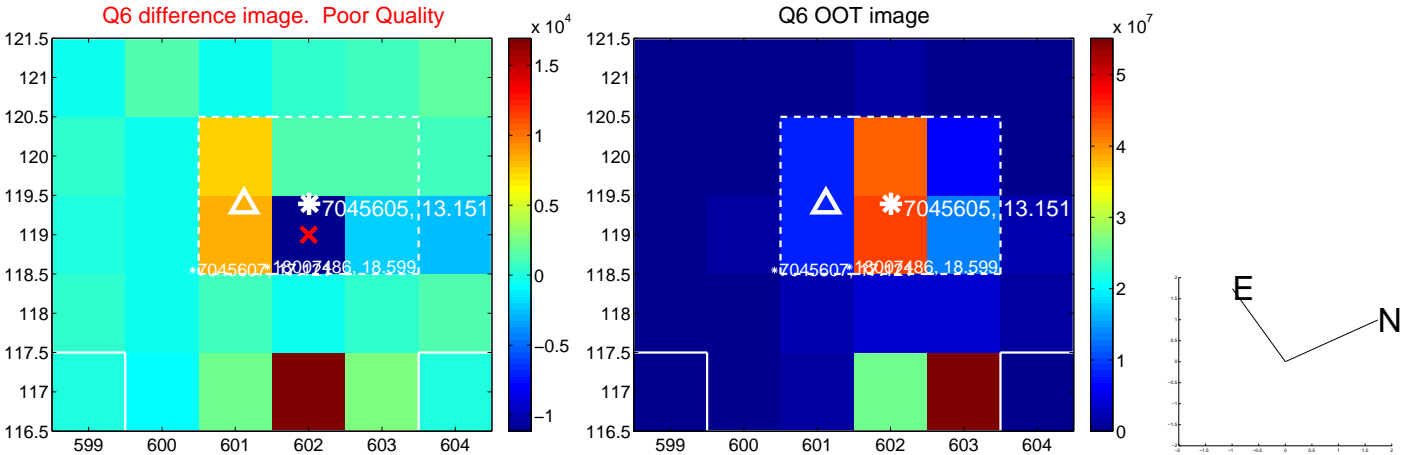
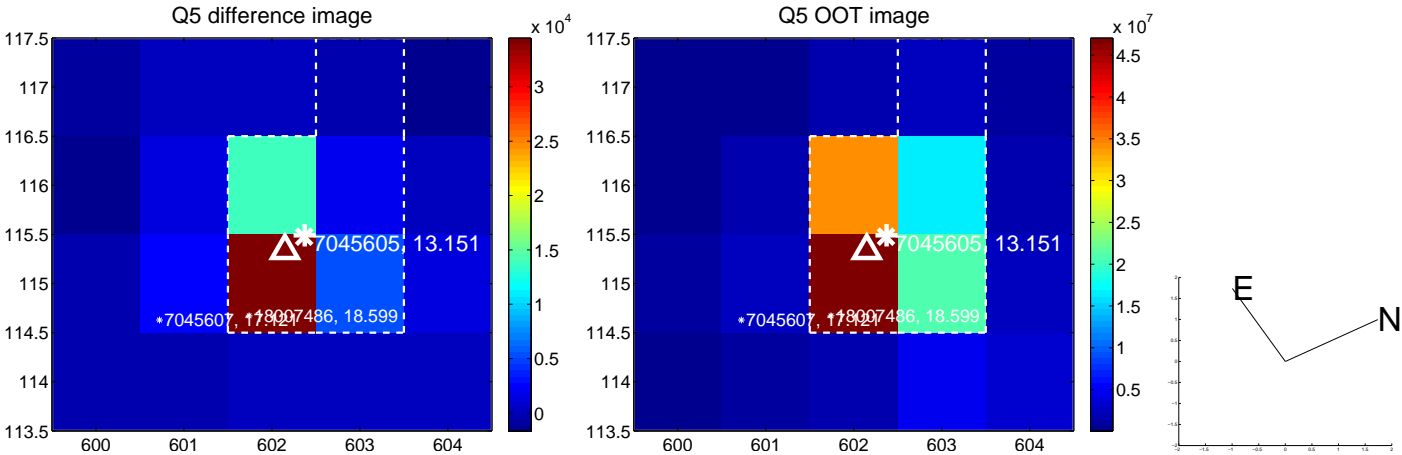


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets**; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

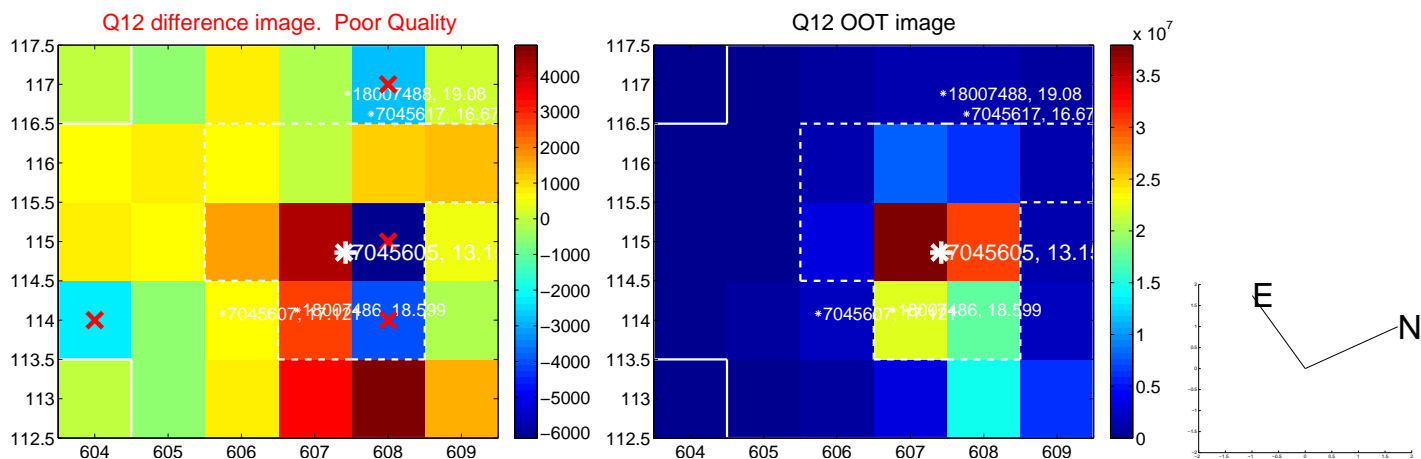
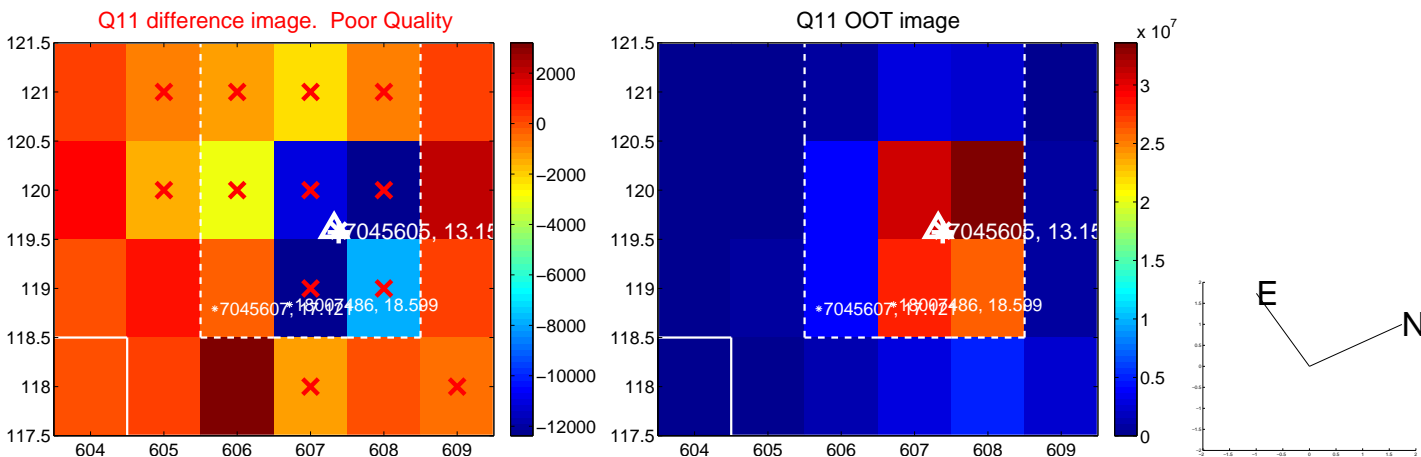
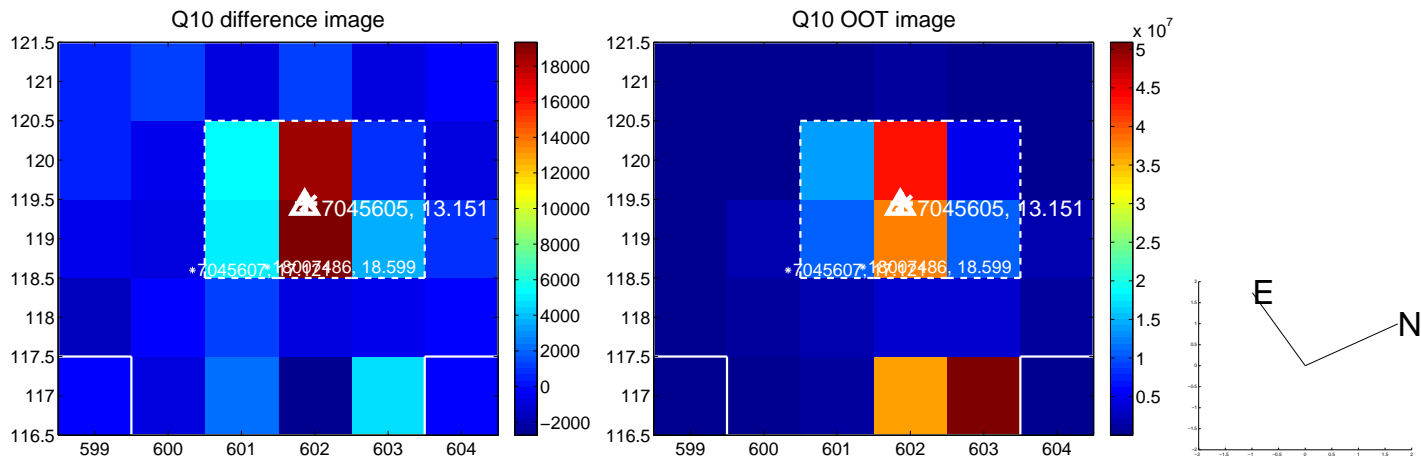
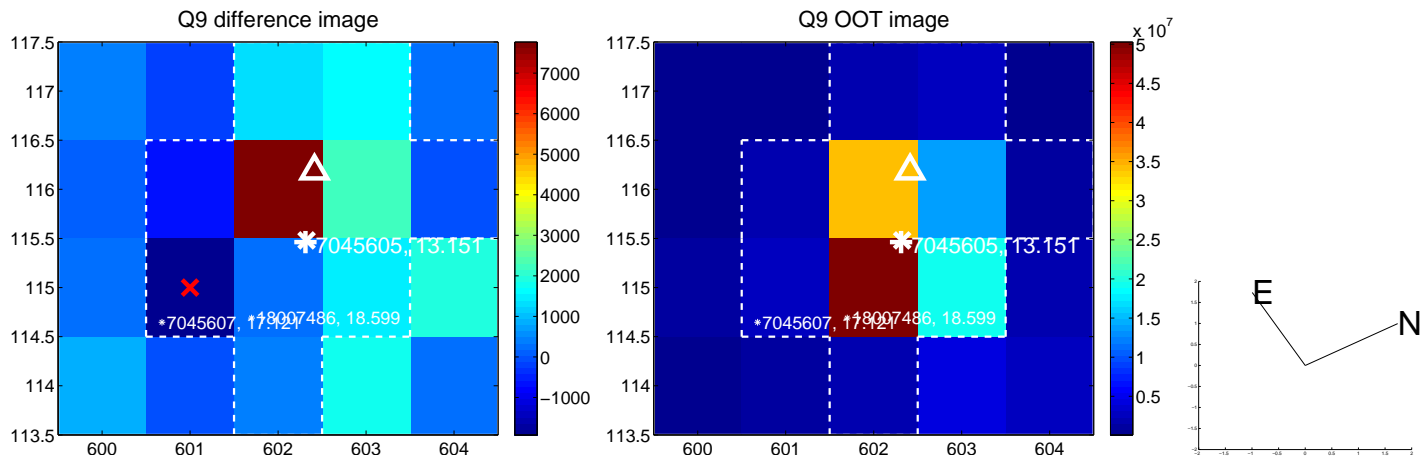
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



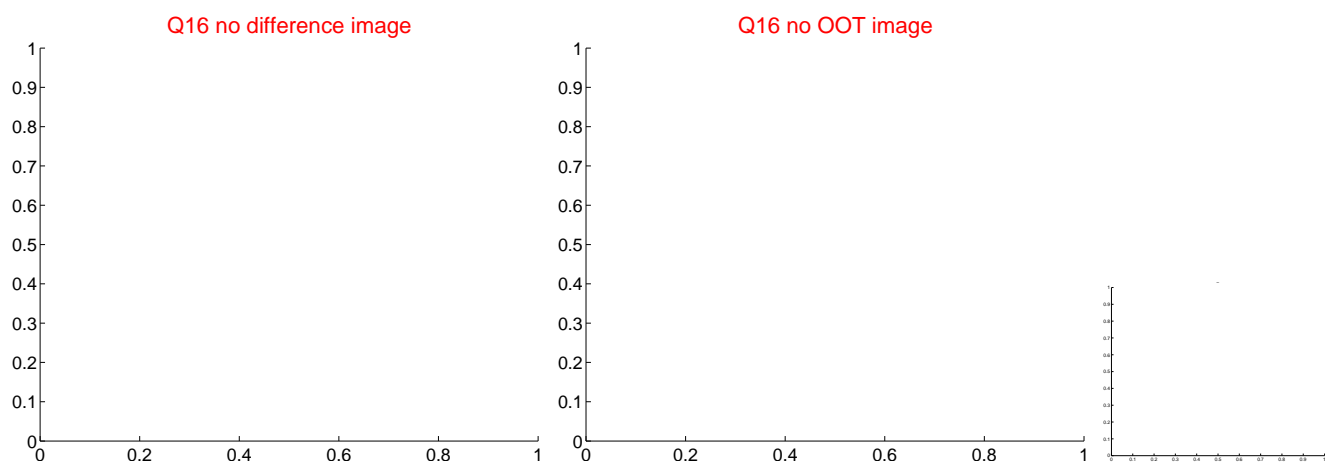
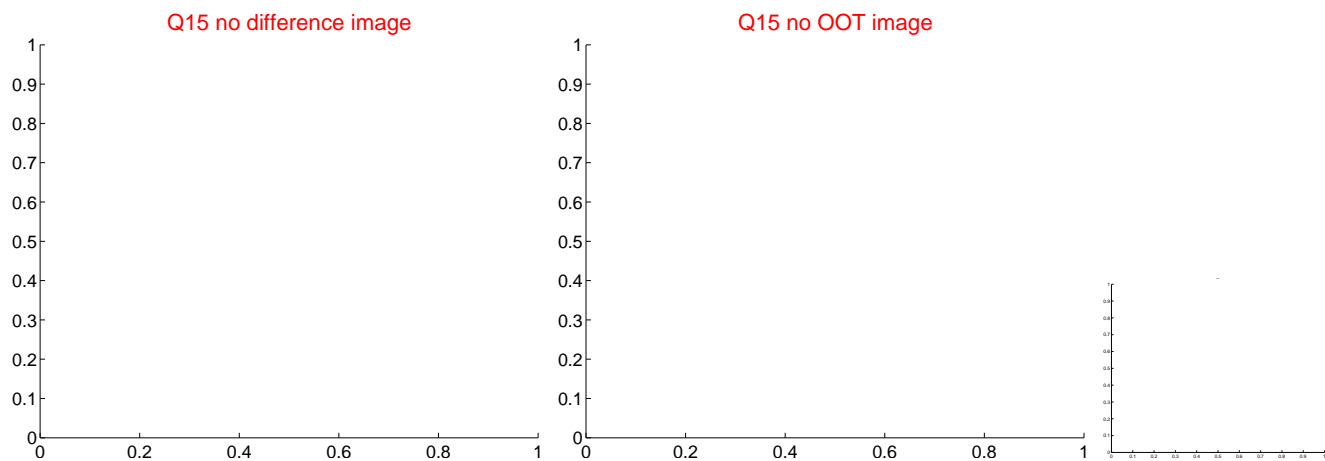
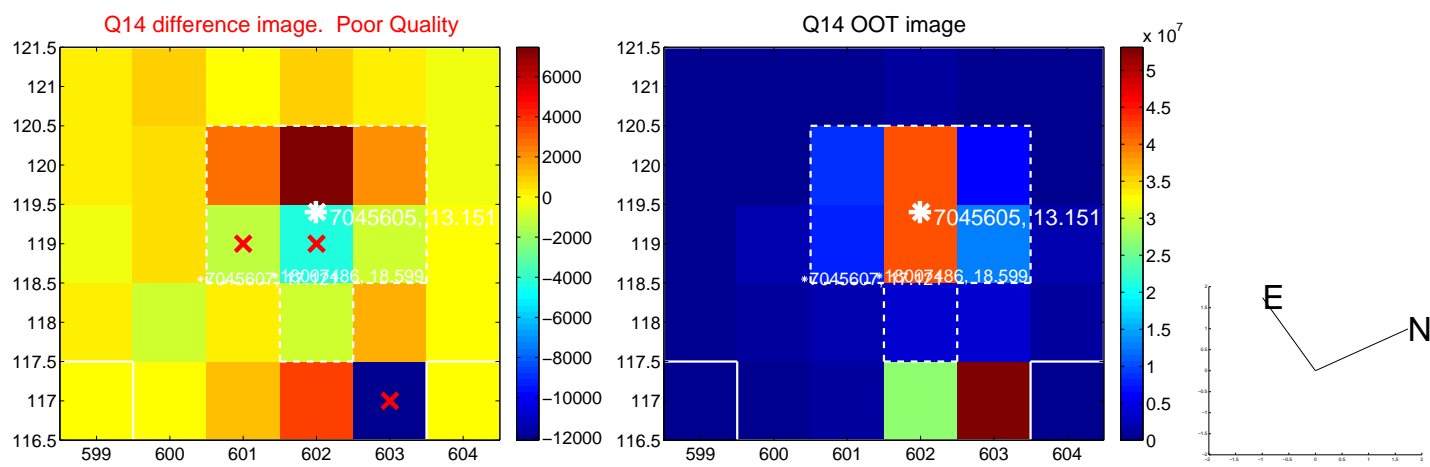
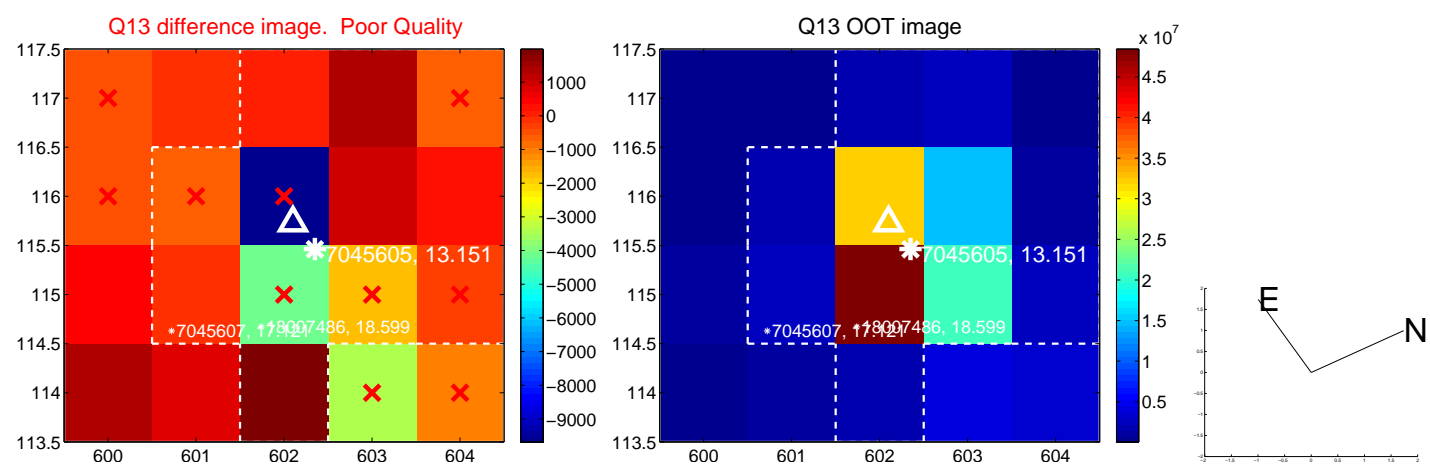
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



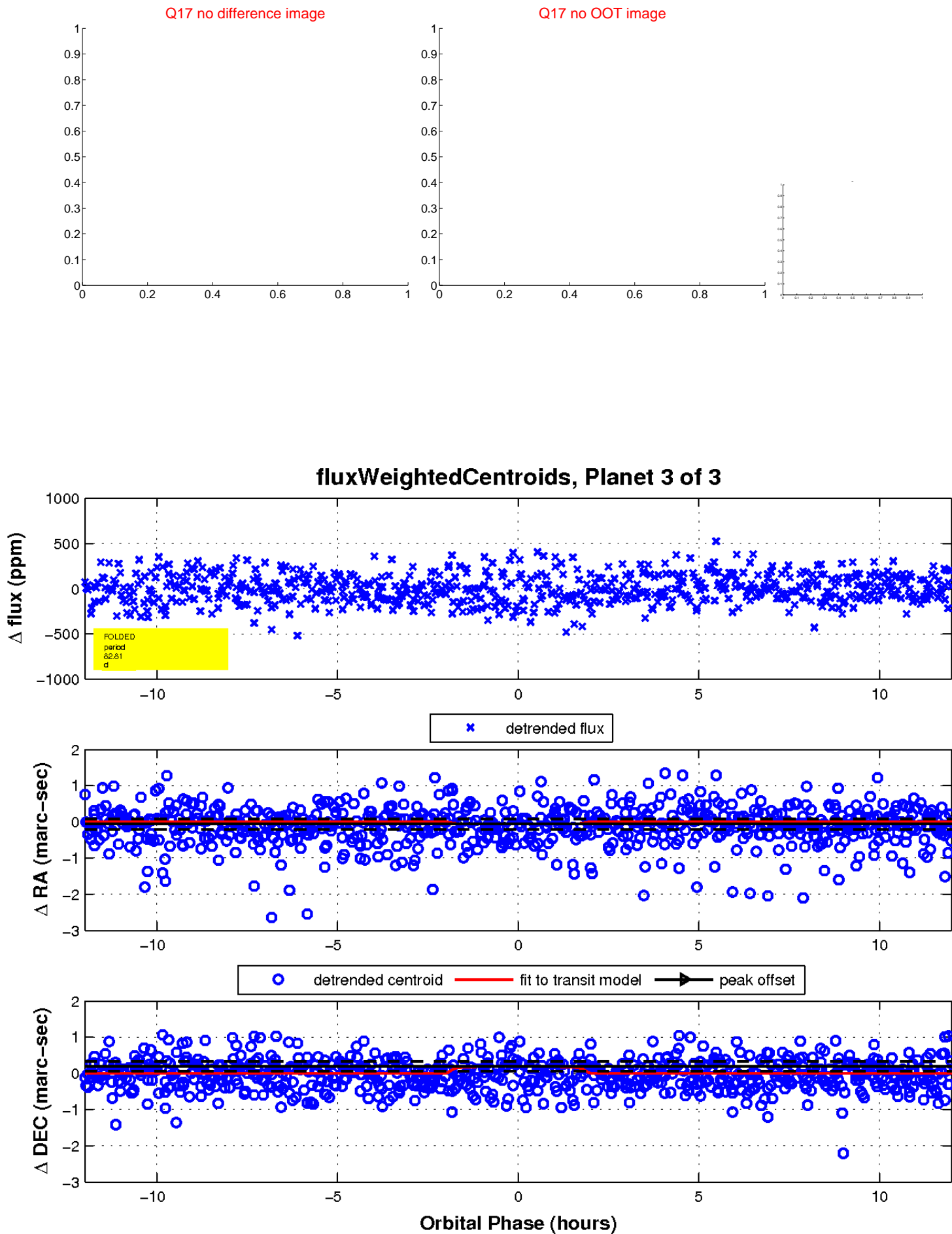
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



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



UKIRT Image

