

KIC 006070714

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})
006070714-01	OBS	No	0.535054	131.950398	75.4	1.213	17.2	2.7	1.38	6521	1.41	16442.20
006070714-02	OBS	No	253.833257	250.955817	16968.5	6.317	16.5	14.6	1.38	6521	31.13	4.44
006070714-03	OBS	No	0.535118	131.692244	7281.3	1.500	11.2	-1.0	1.38	6521	11.91	16439.58

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
006070714-01	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT
006070714-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_CHASES—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—INCONSISTENT_TRANS
006070714-03	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—SAME_NTL_PERIOD—CENT_NOFITS

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

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

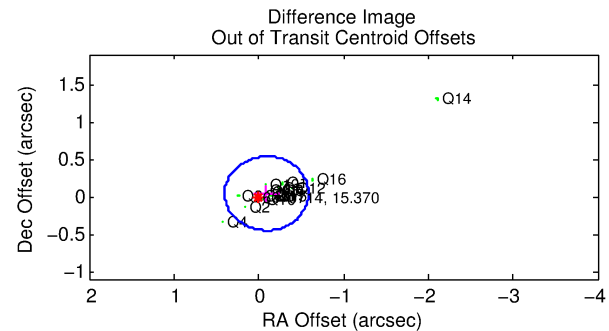
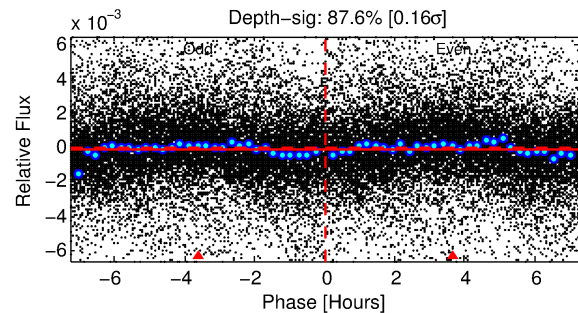
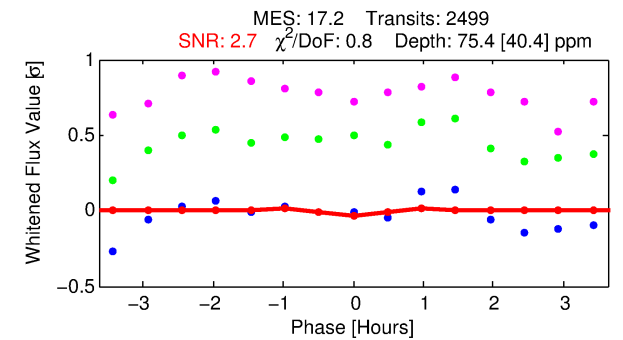
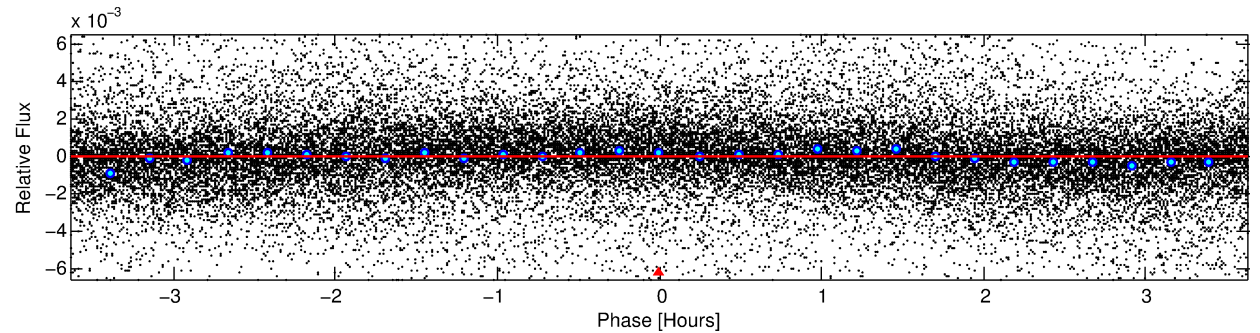
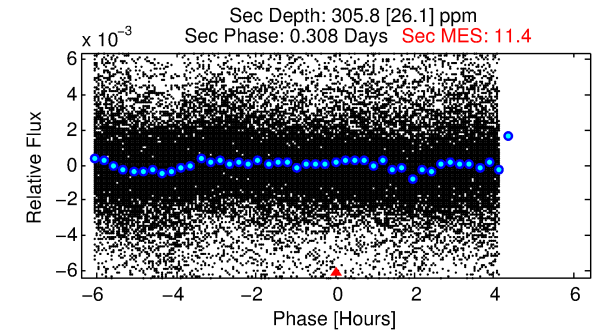
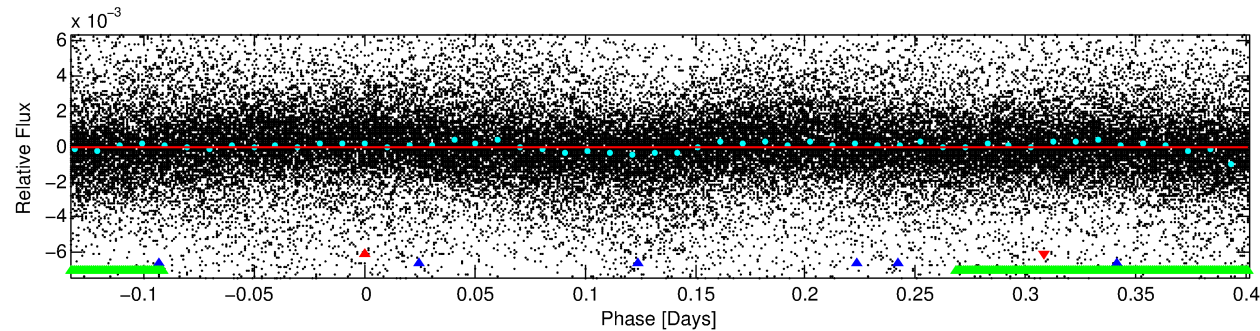
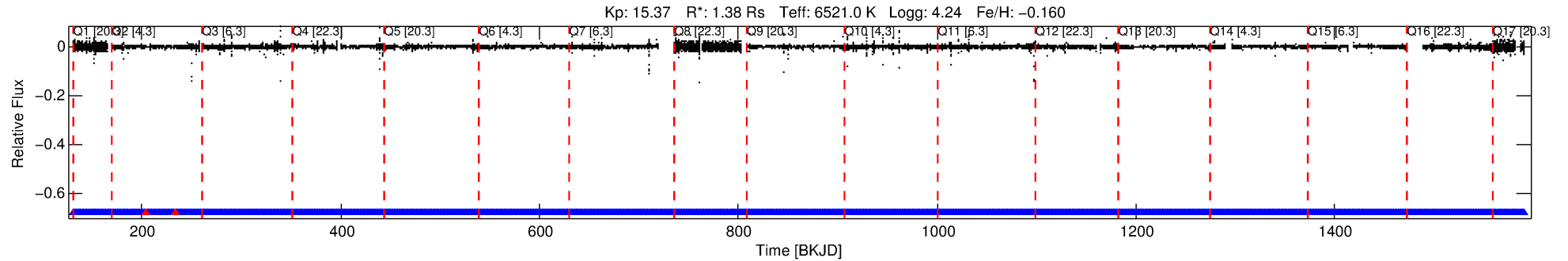
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 006070714-01

No Significant Match Found

DV One-Page Summary

KIC: 6070714 Candidate: 1 of 3 Period: 0.535 d



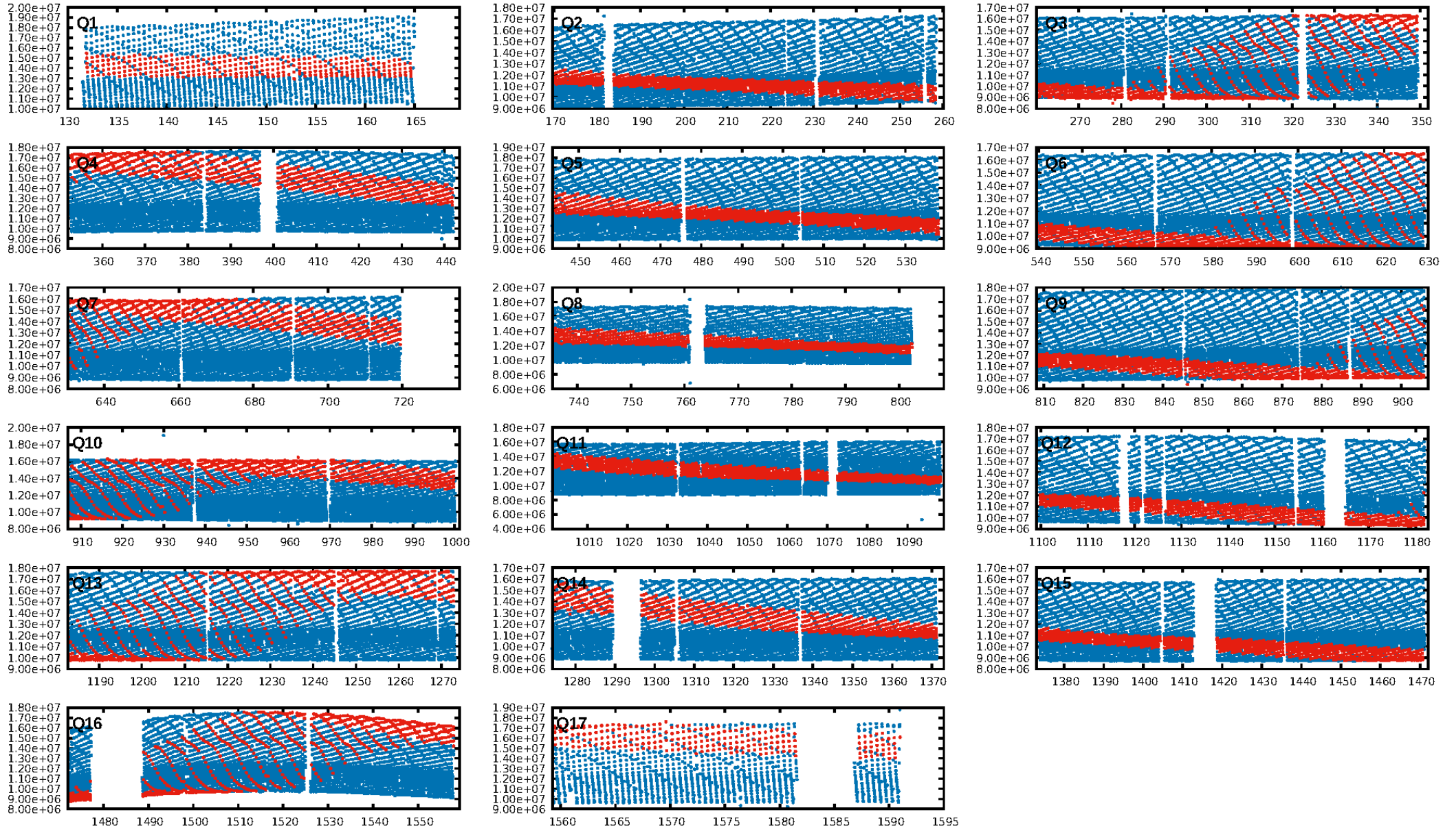
DV Fit Results:

Period = 0.53505 [0.00004] d
Epoch = 131.9504 [0.0052] BKJD
Rp/R* = 0.0093 [0.0130]
a/R* = 1.81 [9.93]
b = 0.90 [1.72]
Seff = 16442.20 [6383.67]
Teff = 2887 [280] K
Rp = 1.41 [2.01] Re
a = 0.0137 [0.0035] AU
Ag = 16.00 [44.94] [0.33σ]
Teffp = 8929 [6231] K [0.97σ]

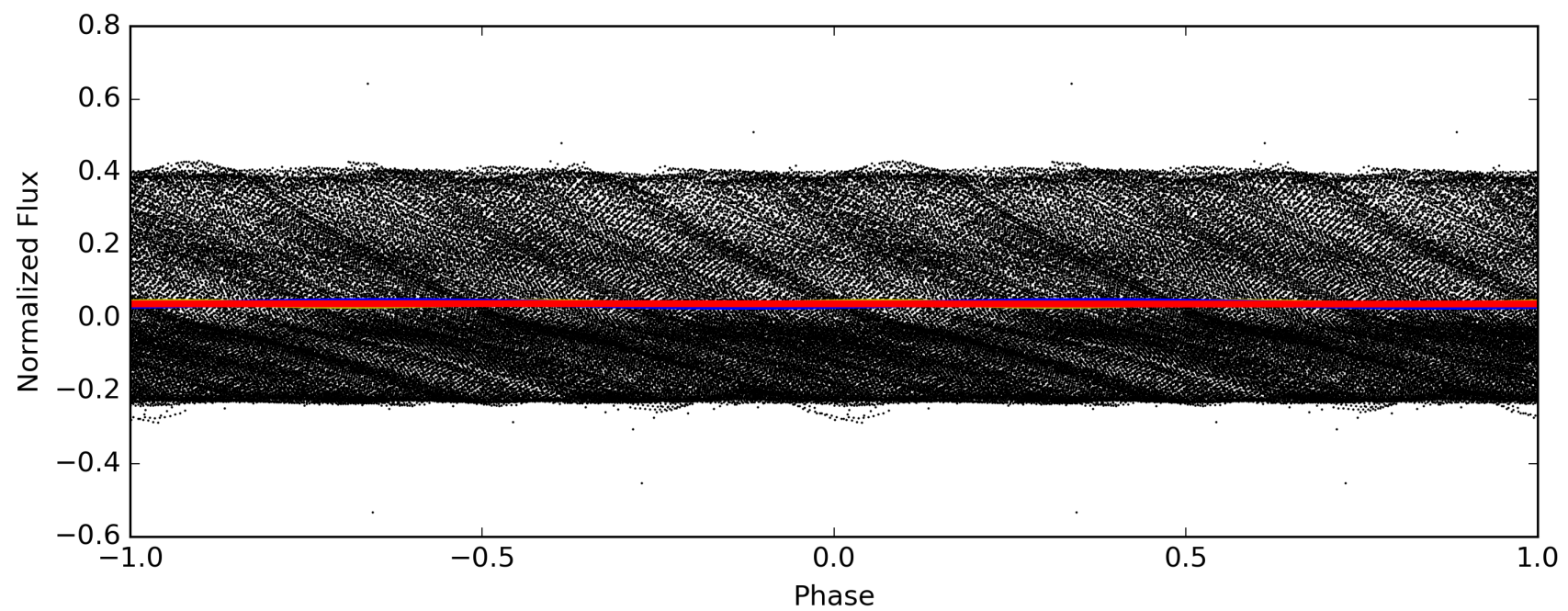
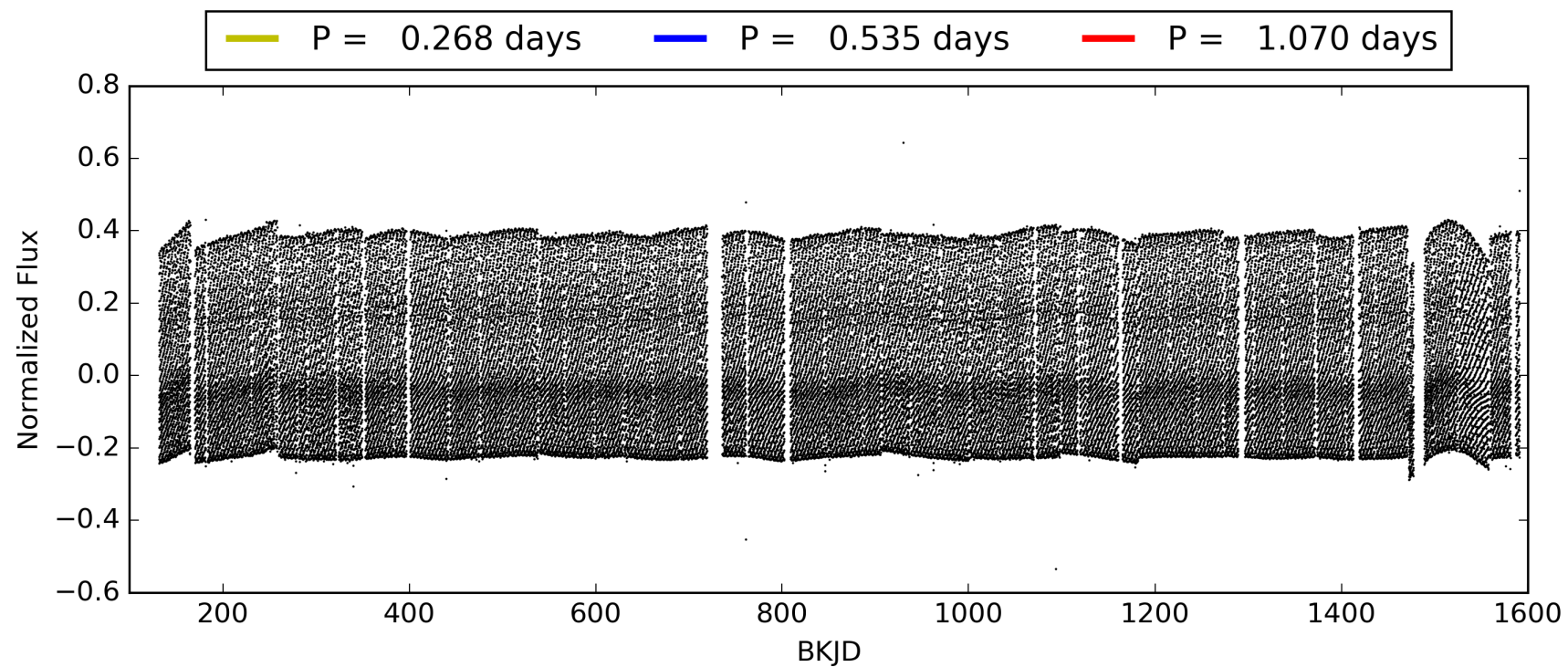
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: 0.1% [0.00σ]
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [2385/2387]
GhostDiagnostic-chr: -9.171
Centroid-sig: 10.0%
Centroid-so: 4.053 arcsec [1.17σ]
OotOffset-rm: 0.102 arcsec [0.62σ]
KicOffset-rm: 0.050 arcsec [0.53σ]
OotOffset-st: 4/4/4/5 [17]
KicOffset-st: 4/4/4/5 [17]
DiffImageQuality-fgm: 0.59 [10/17]
DiffImageOverlap-fno: 0.00 [0/17]

TCE 006070714-01, PDC Light Curves

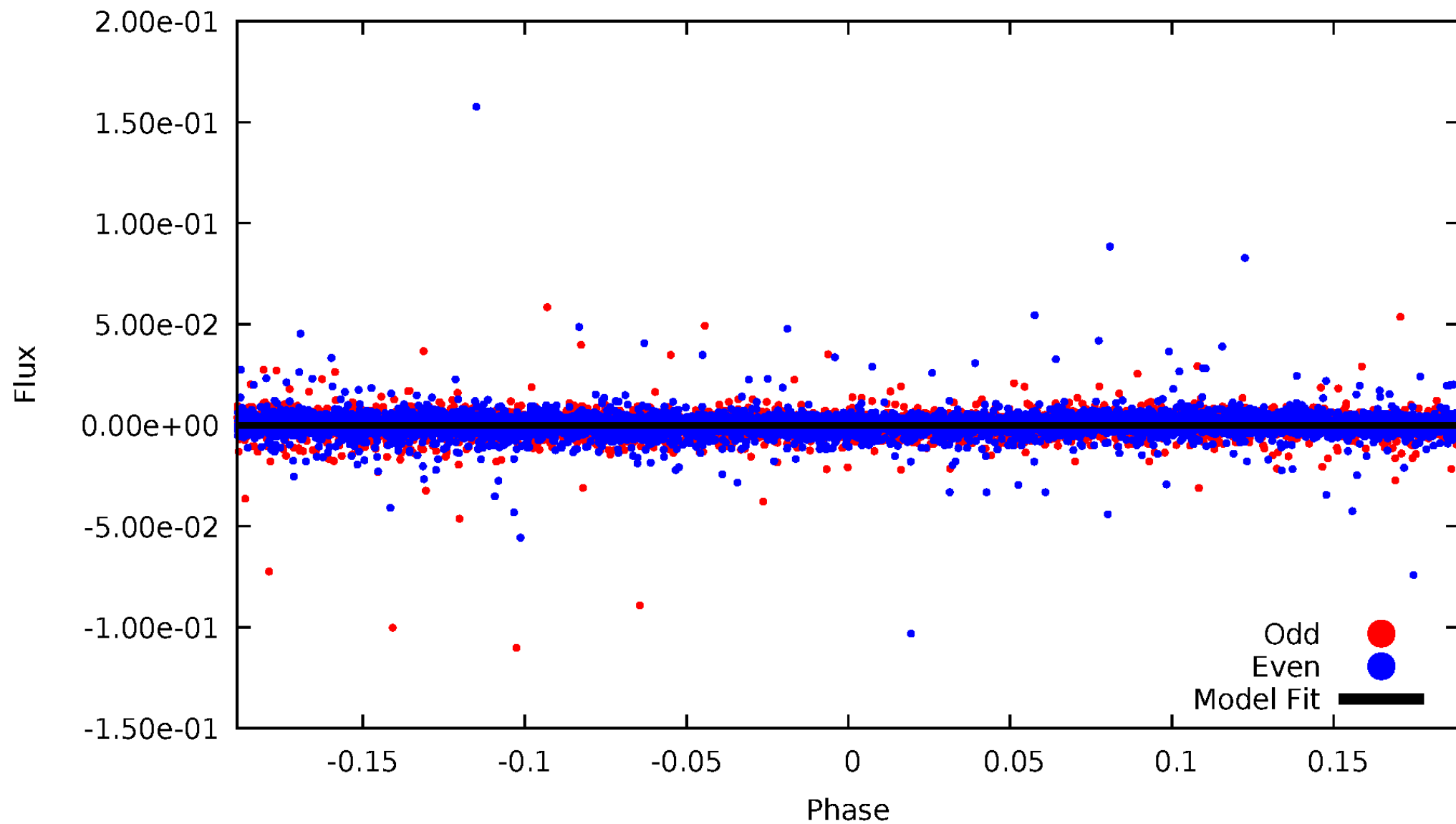


TCE 006070714-01



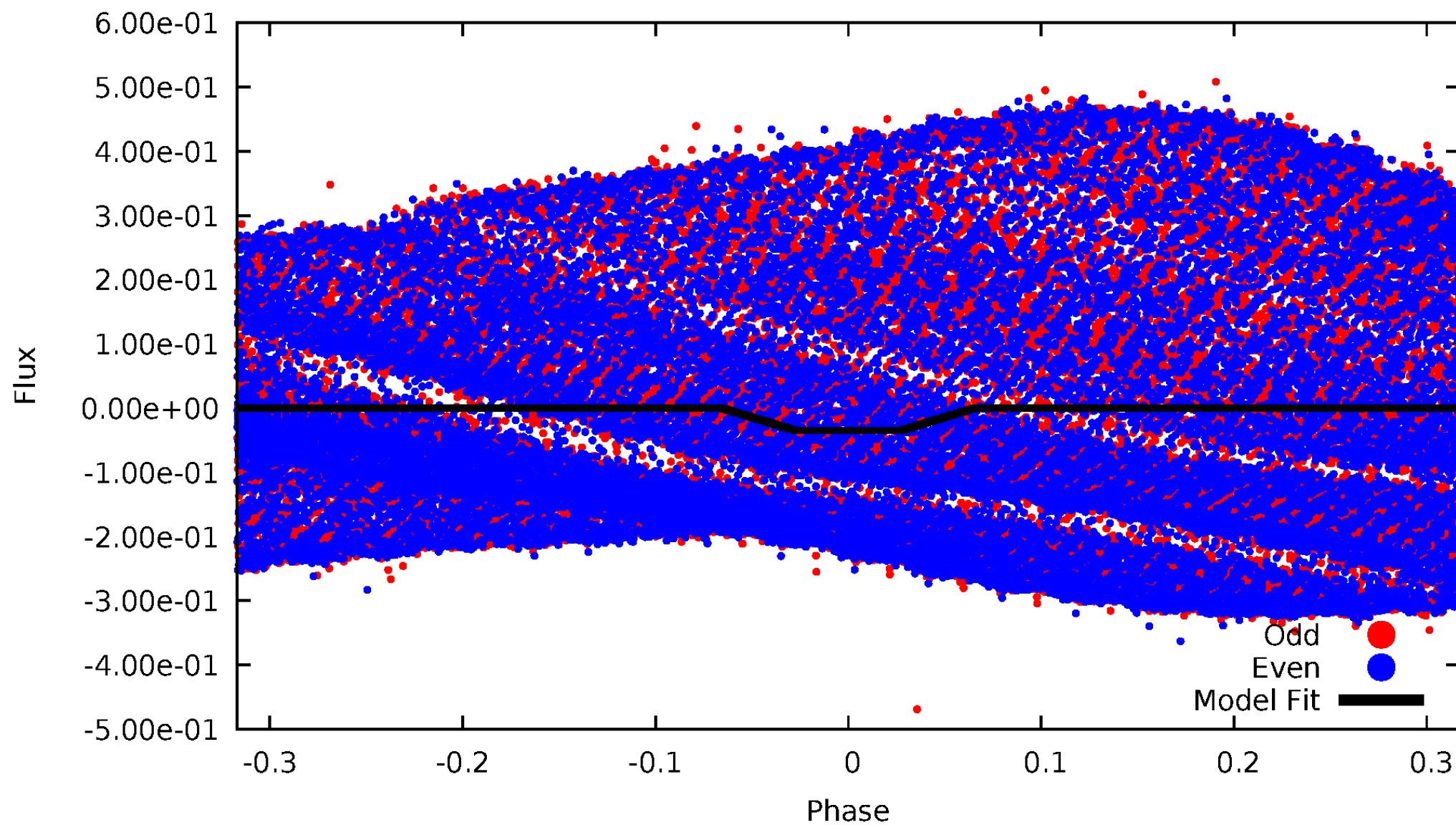
DV Odd/Even

TCE 006070714-01



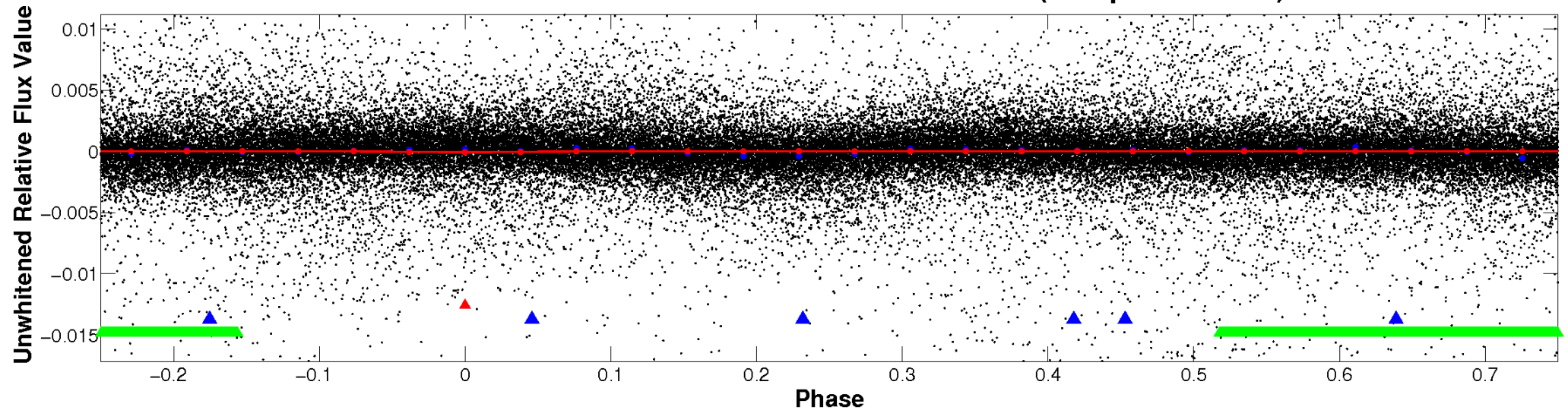
ALT Odd/Even

TCE 006070714-01

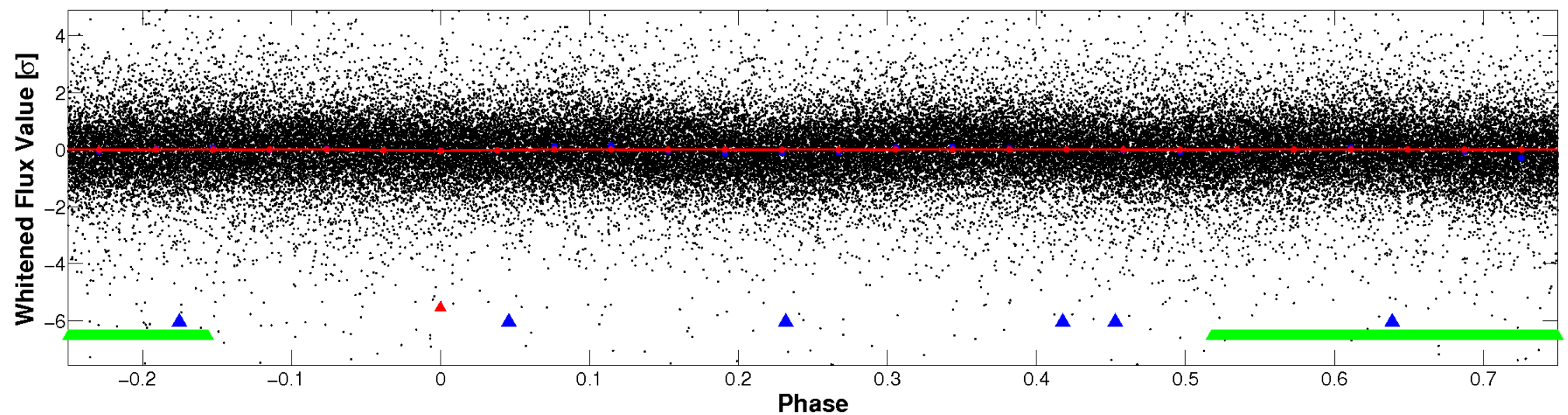


Non-Whitened Vs. Whitened Light Curve

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

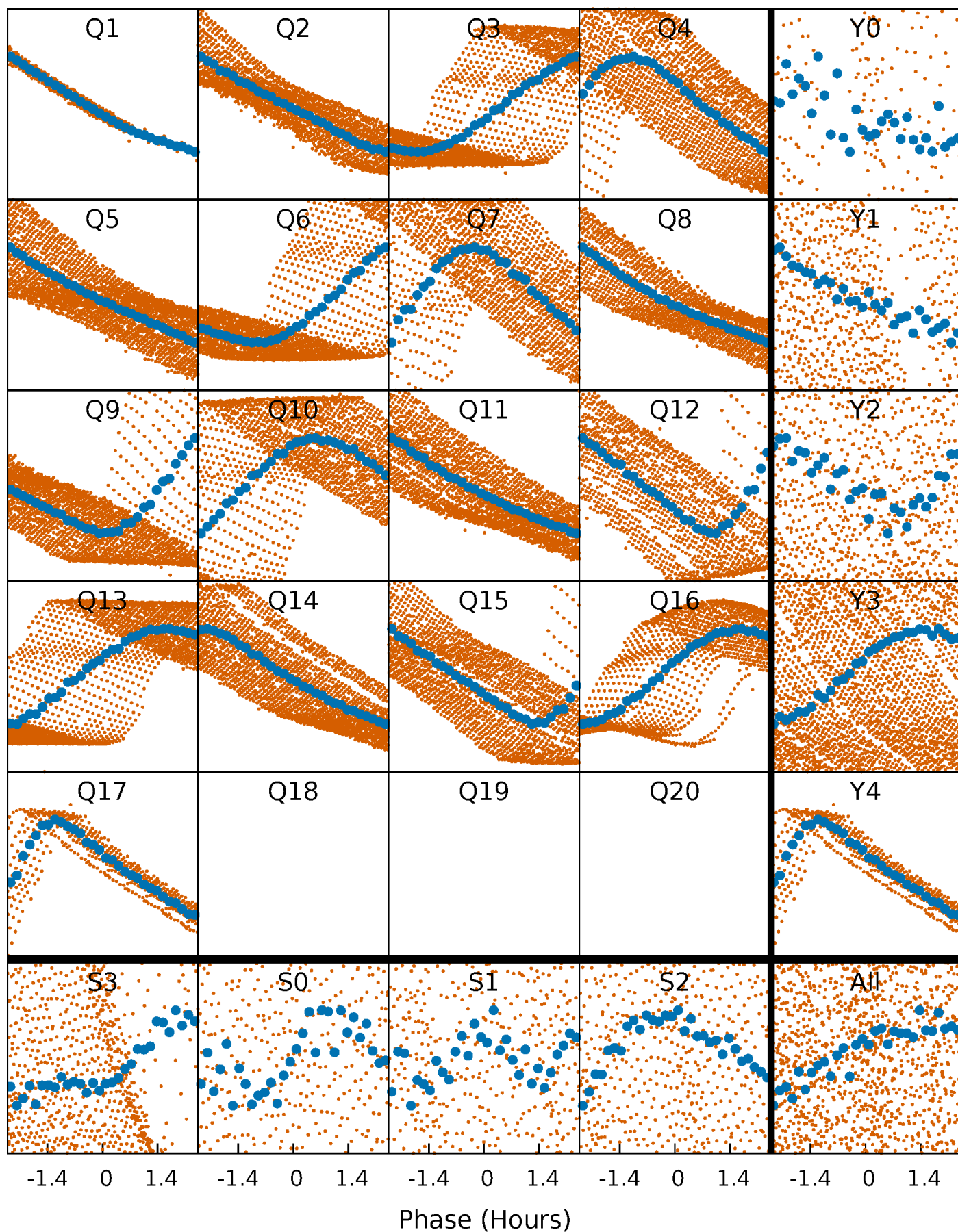


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



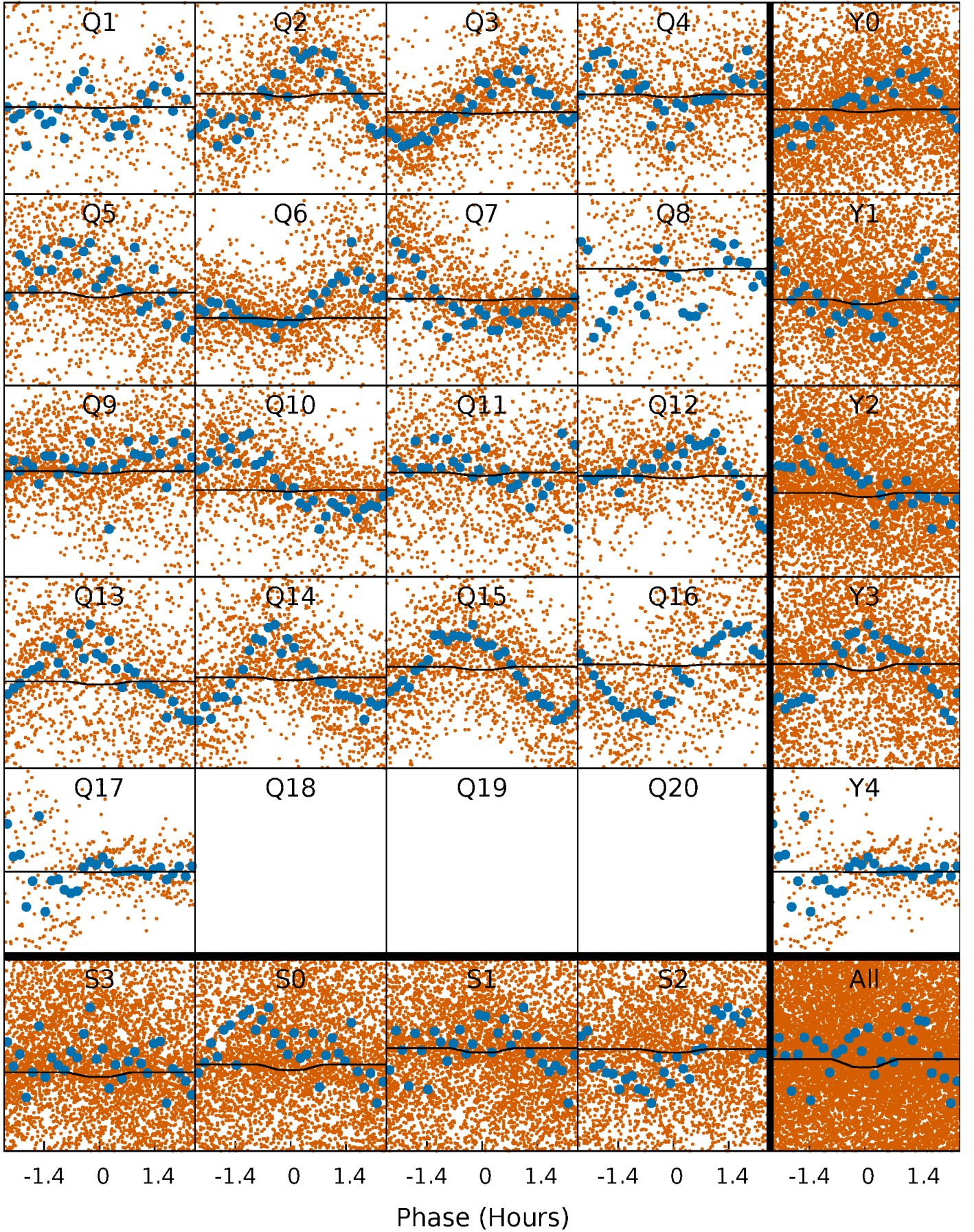
PDC Quarter-Phased Transit Curves

TCE 006070714-01 P= 0.535054 Days $T_0=131.950398$ (BKJD)



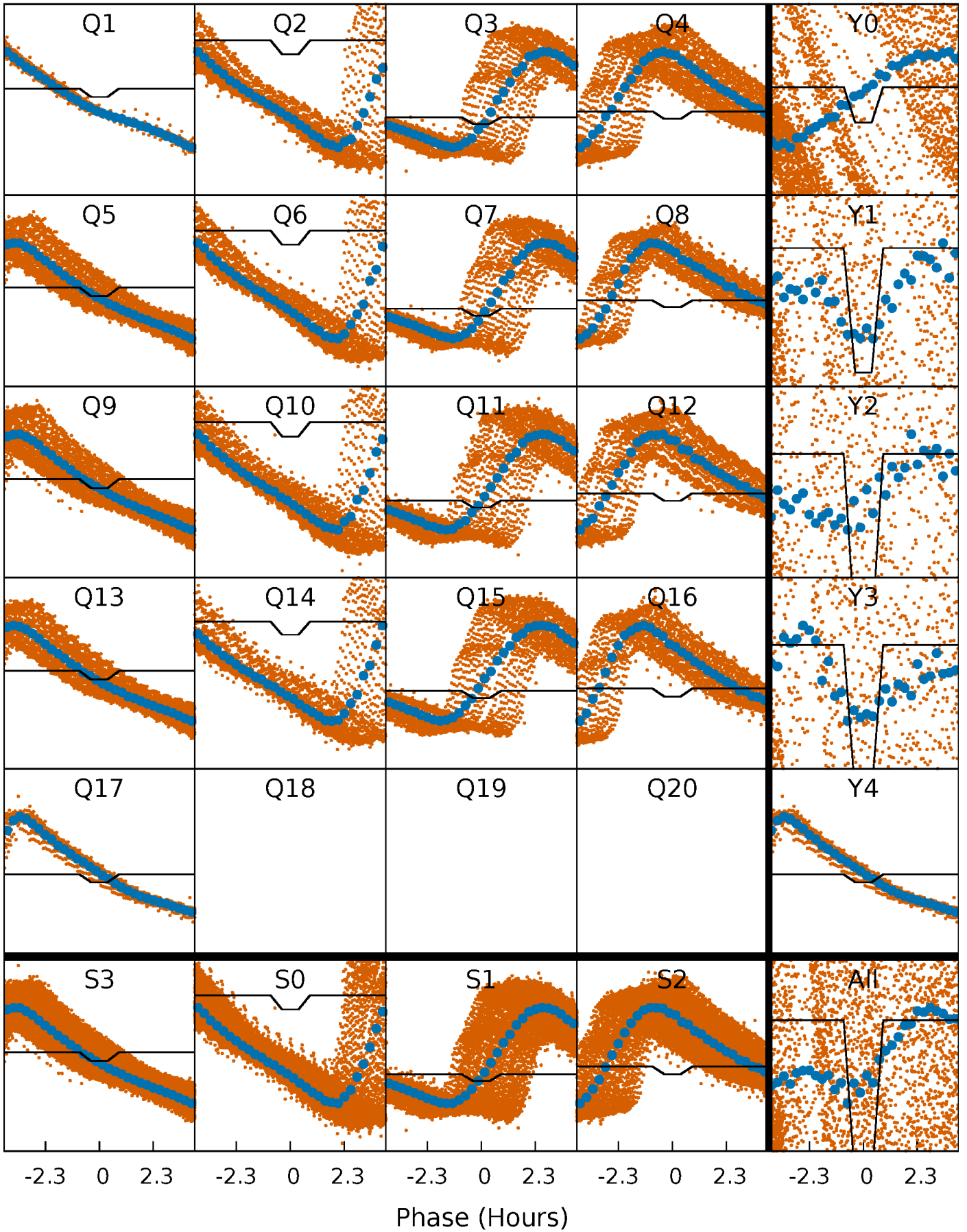
DV Quarter-Phased Transit Curves

TCE 006070714-01 P= 0.535054 Days $T_0=131.950398$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

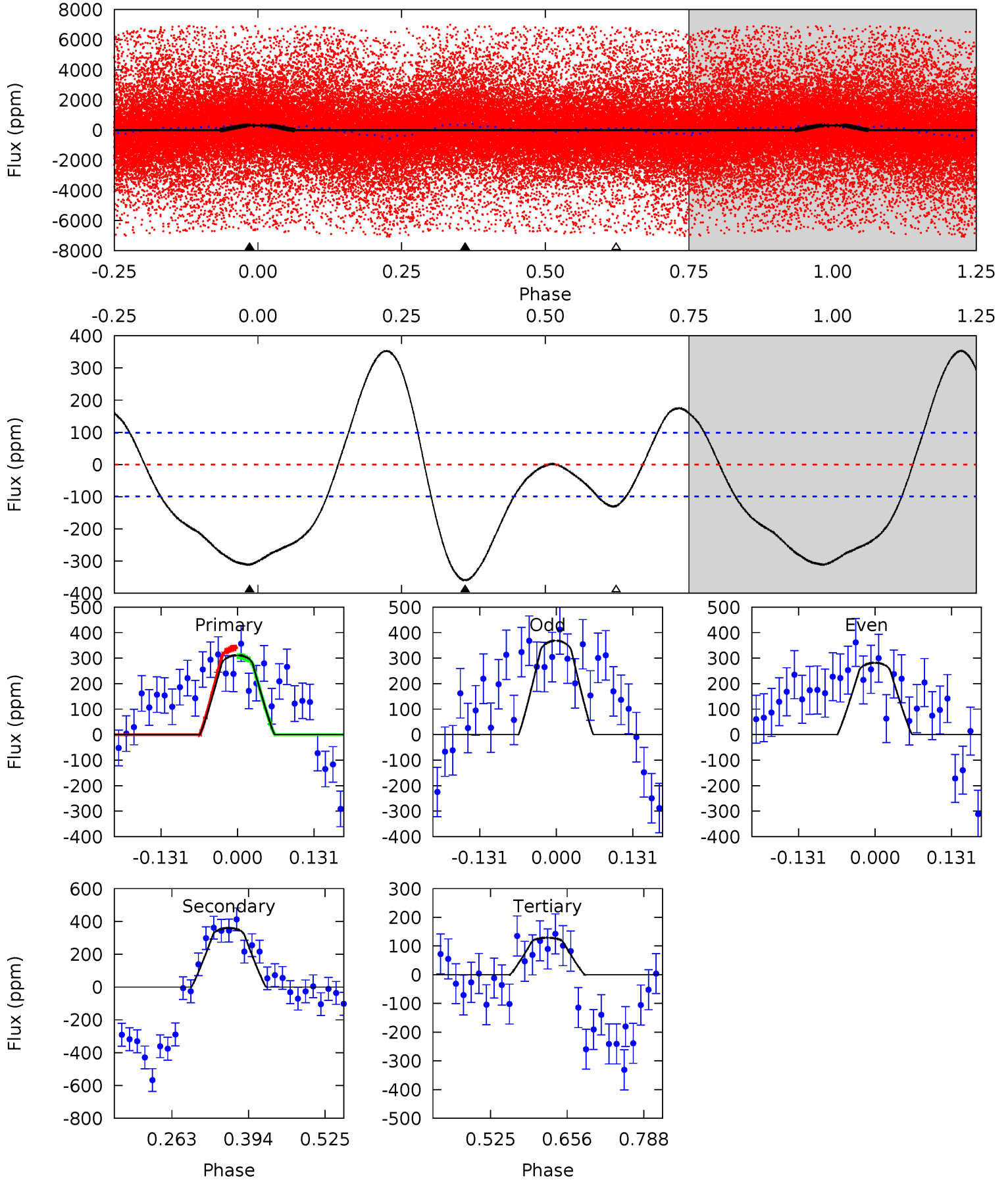
TCE 006070714-01 P= 0.534868 Days $T_0=132.002885$ (BKJD)



DV Model-Shift Uniqueness Test

006070714-01, P = 0.535054 Days, E = 131.415344 Days

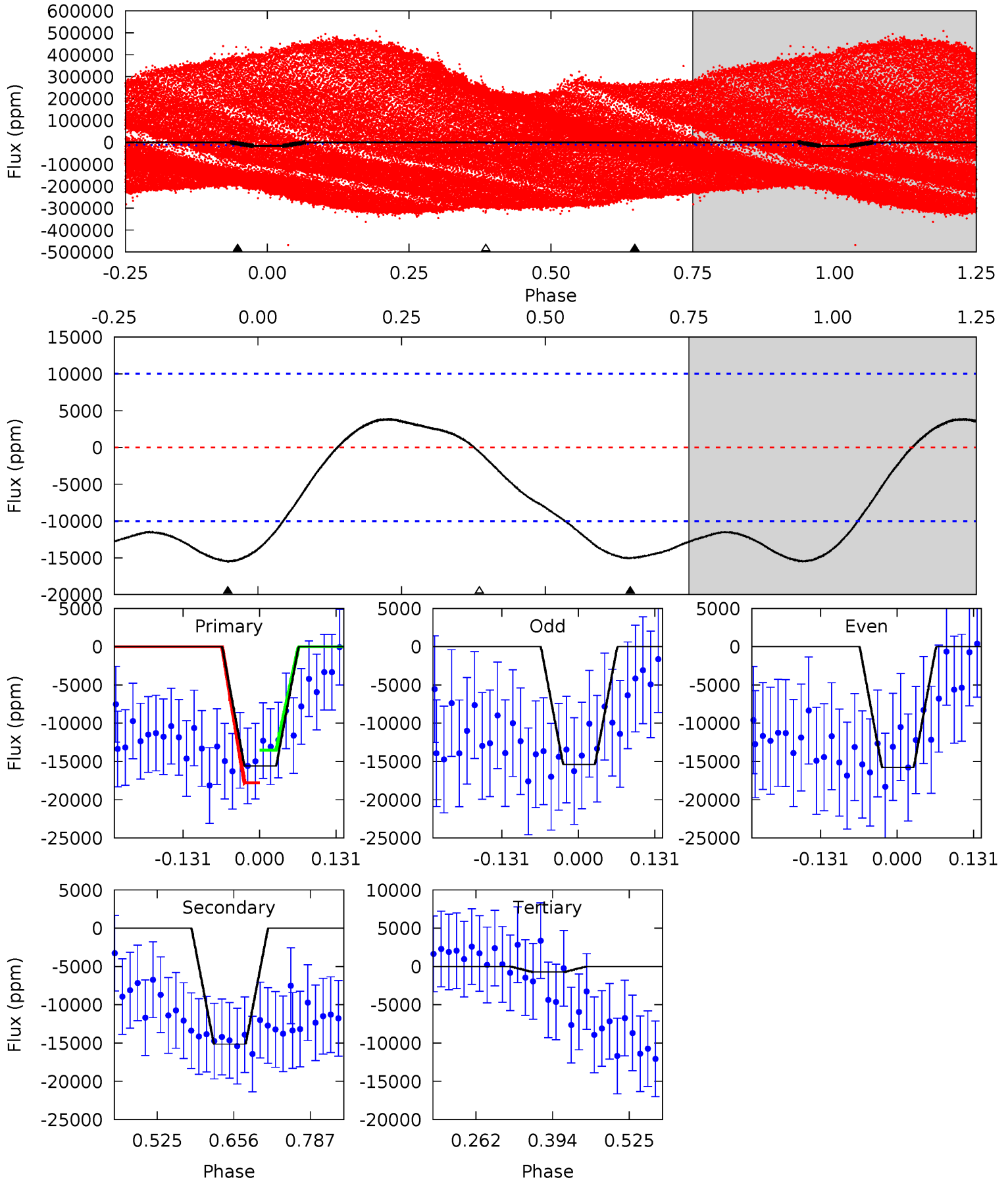
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
14.2	16.4	5.88	0	4.51	1.51	6.12	8.31	14.2	10.5	16.4	2.01	0.48	0.50	0.73



Alt Model-Shift Uniqueness Test

006070714-01, P = 0.534868 Days, E = 131.468017 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
7.02	6.82	0.33	0	4.51	1.51	2.16	6.70	7.02	6.49	6.82	0.09	0.17	0.20	1.03



Stellar Parameters For KIC 006070714

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	M (M_{\odot})	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	6521^{+204}_{-272}	$4.237^{+0.149}_{-0.182}$	$-0.160^{+0.250}_{-0.300}$	$1.382^{+0.439}_{-0.293}$	$1.206^{+0.188}_{-0.188}$	$0.644^{+0.473}_{-0.312}$
	+3%/-4%	+4%/-4%	+156%/-188%	+32%/-21%	+16%/-16%	+73%/-49%
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 006070714-01 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-360 ± 22	$1.93^{+1.76}_{-1.24}$	4053^{+334}_{-287}	8052^{+11983}_{-2407}	$9.739^{+64.065}_{-6.942}$
Alt.	-15135 ± 2219	$28.49^{+5.32}_{-3.79}$	4043^{+310}_{-272}	5112^{+325}_{-295}	$1.946^{+0.684}_{-0.567}$

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

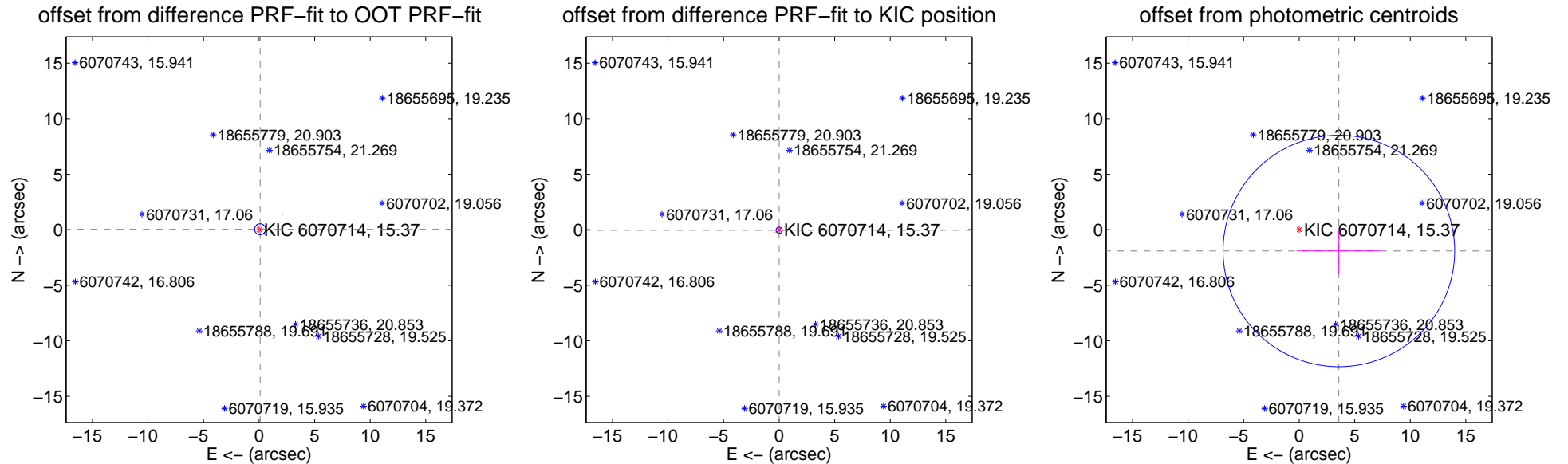
DV Centroid Data

Supplemental centroid analysis for 006070714-01. Kepler magnitude: 15.37. Transit SNR 2.65

There are 10 quarters with good PRF difference image offsets

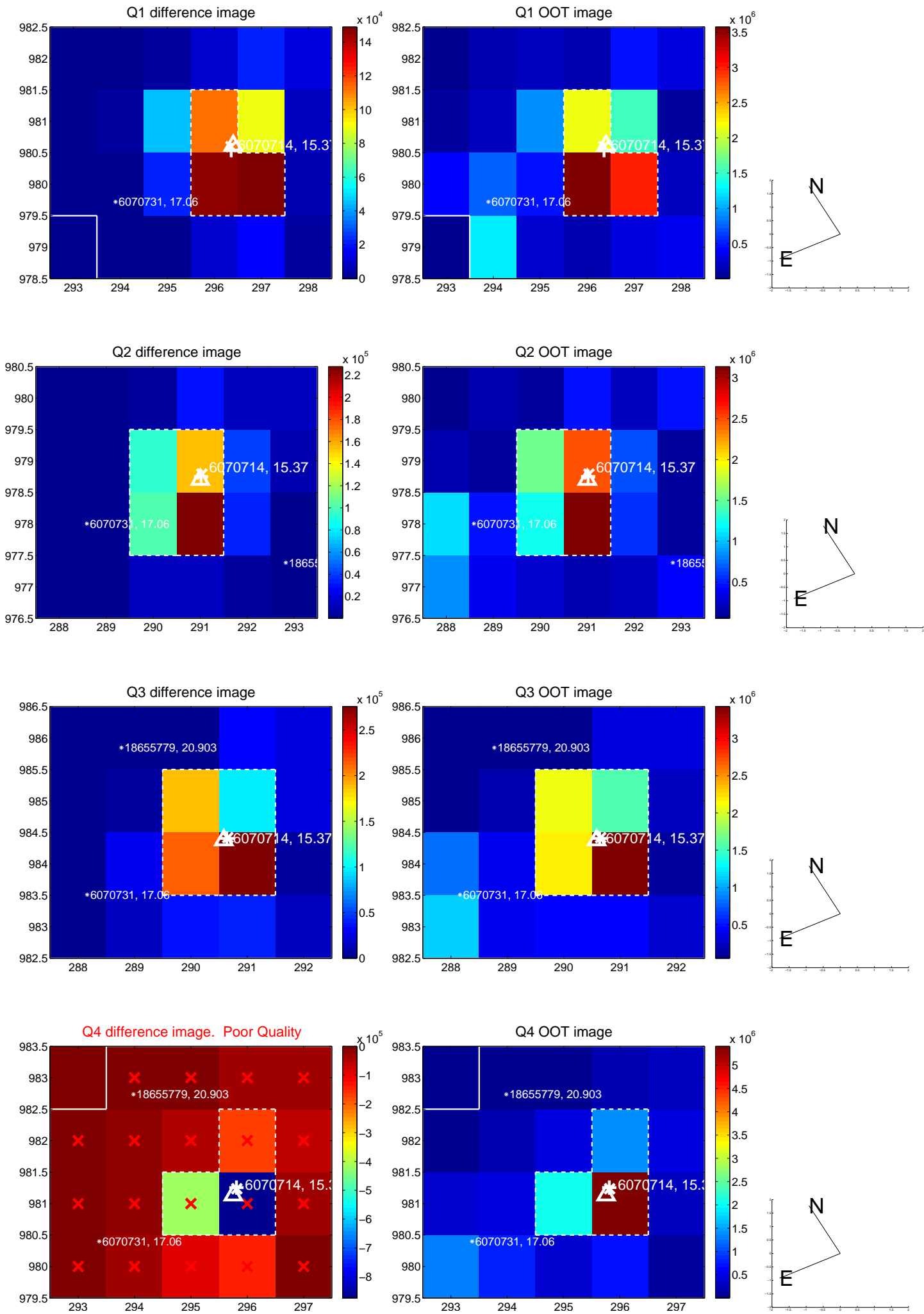
The direct PRF centroid is offset from the target star catalog position by about 0.18 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.102 ± 0.165	0.62	-0.093 ± 0.146	0.041 ± 0.104
PRF-fit source offset from KIC position	0.050 ± 0.095	0.53	-0.003 ± 0.148	-0.050 ± 0.101
photometric centroid source offset	4.05 ± 3.48	1.17	-3.57 ± 3.80	-1.91 ± 1.97

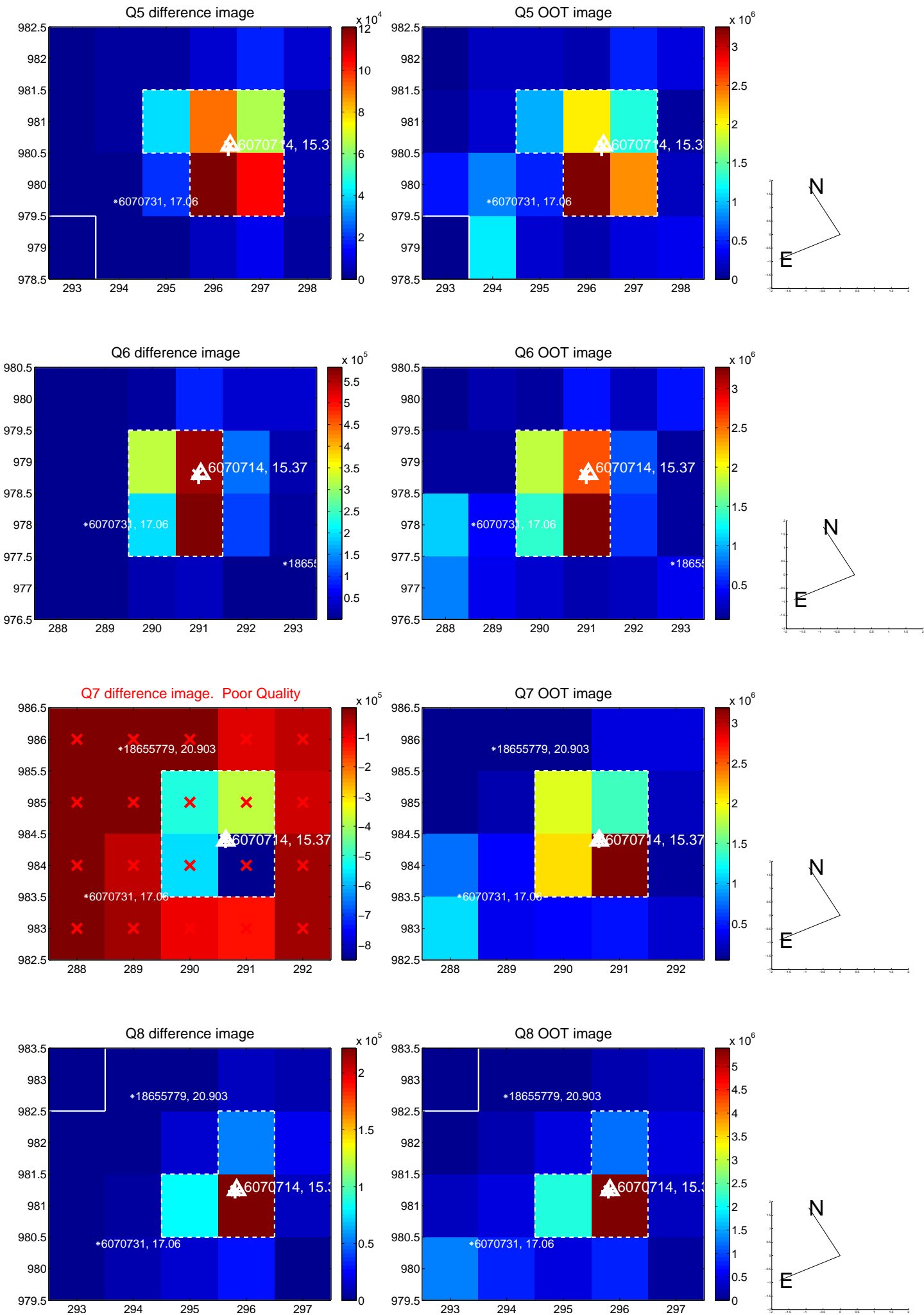


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses:** good quarterly centroid offsets; **Vermillion crosses:** bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

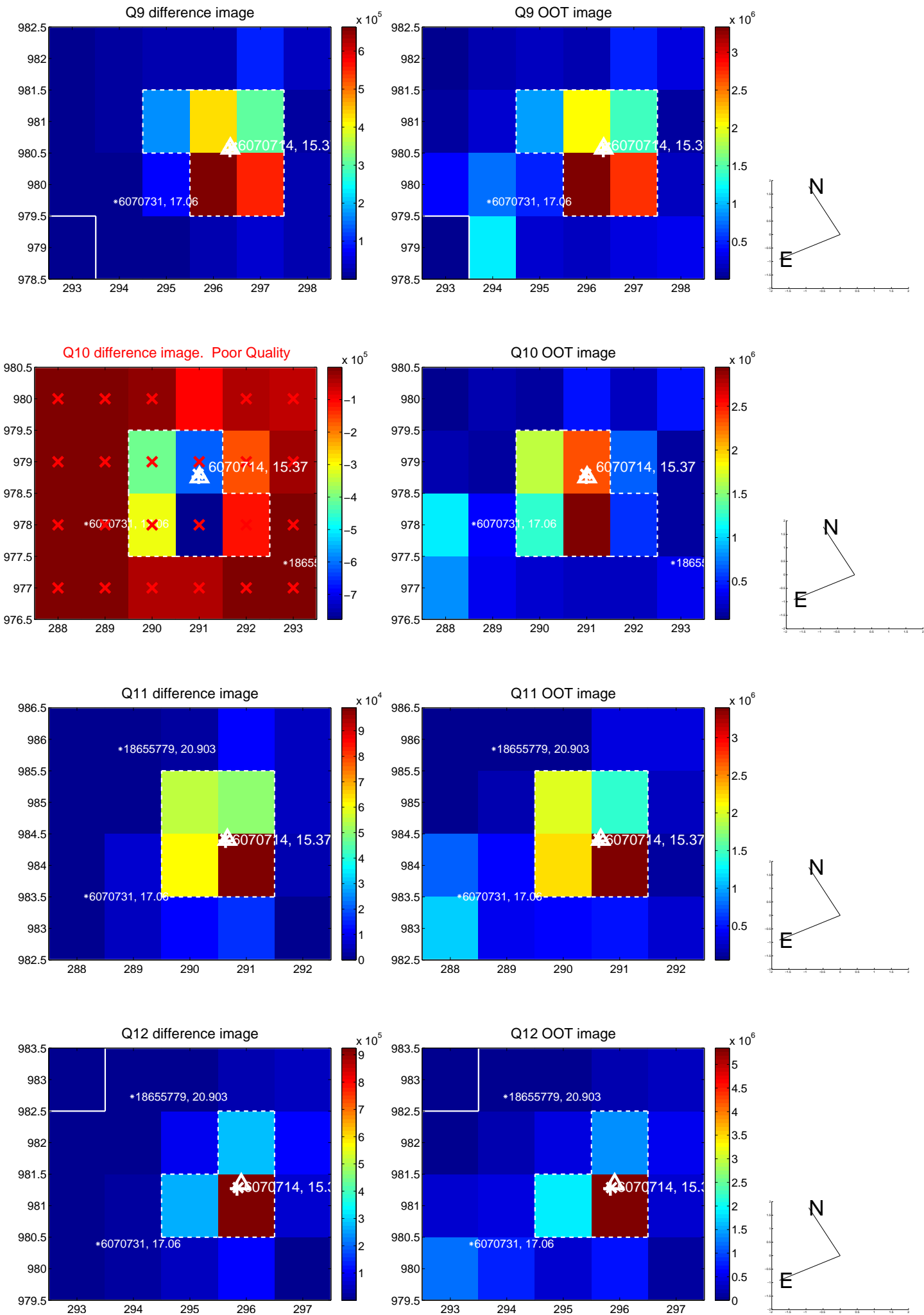
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



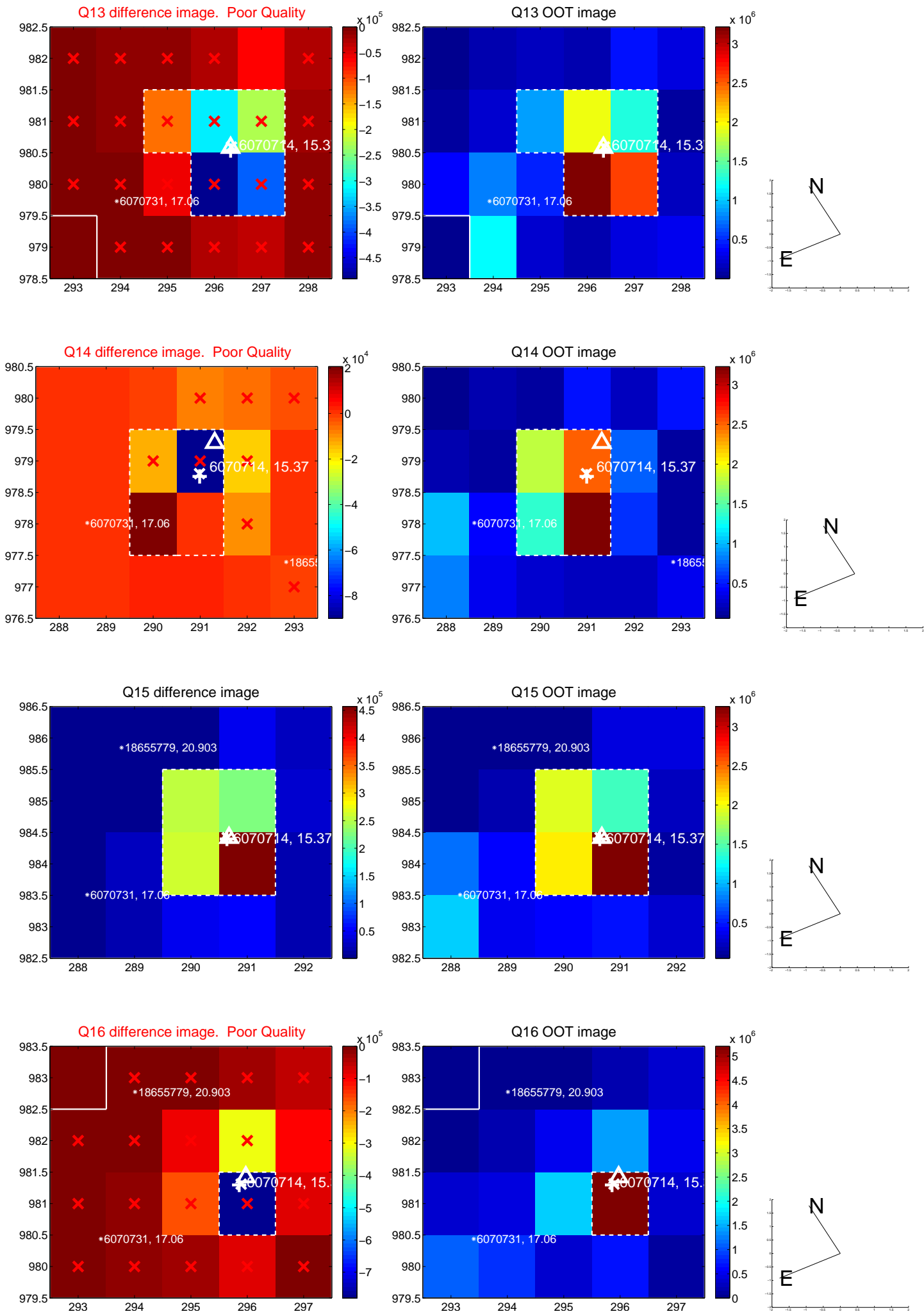
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



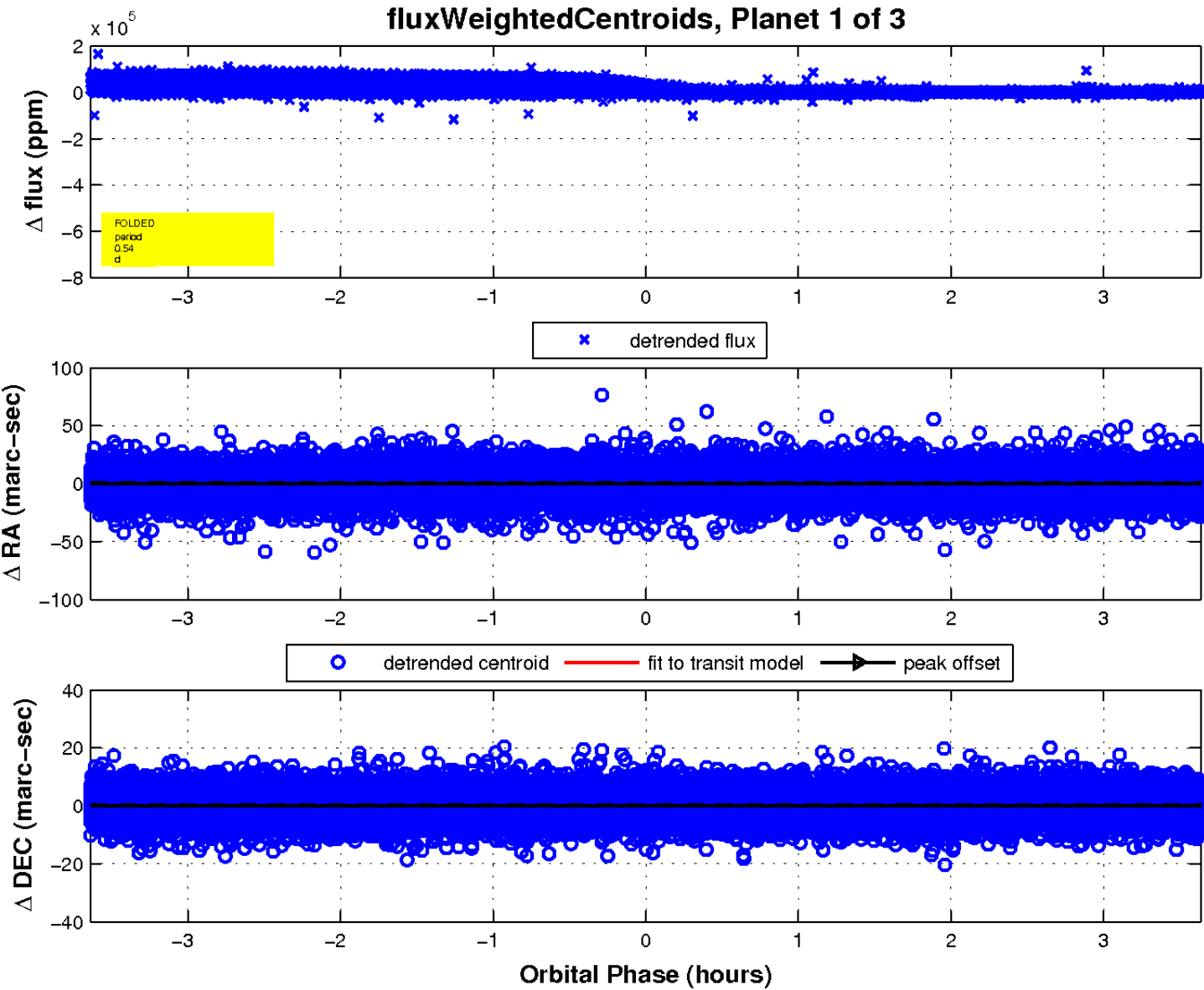
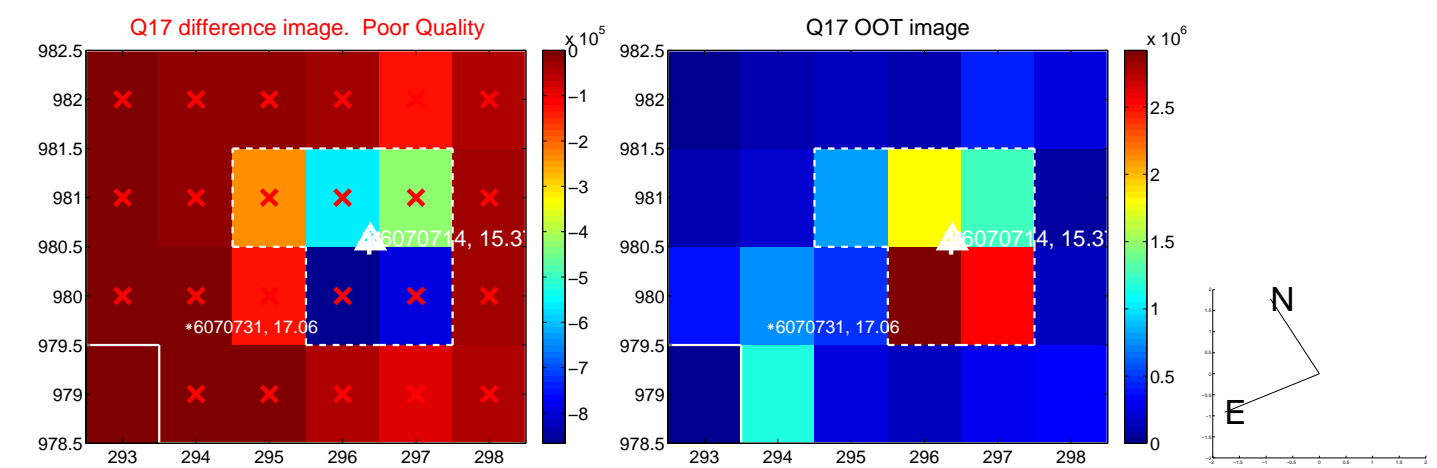
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

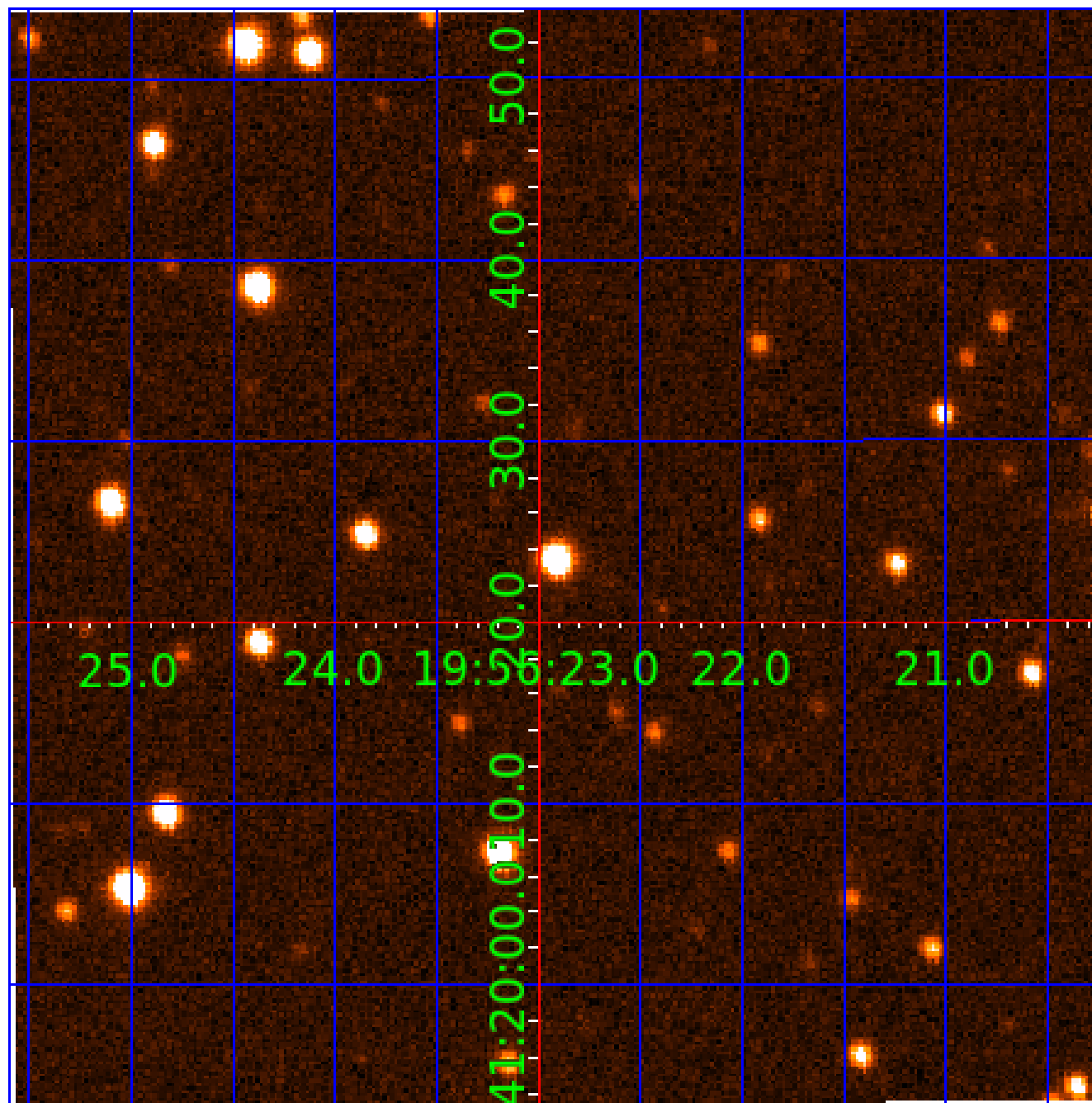


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 006070714

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})
006070714-01	OBS	No	0.535054	131.950398	75.4	1.213	17.2	2.7	1.38	6521	1.41	16442.20
006070714-02	OBS	No	253.833257	250.955817	16968.5	6.317	16.5	14.6	1.38	6521	31.13	4.44
006070714-03	OBS	No	0.535118	131.692244	7281.3	1.500	11.2	-1.0	1.38	6521	11.91	16439.58

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
006070714-01	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT
006070714-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_CHASES—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—INCONSISTENT_TRANS
006070714-03	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—SAME_NTL_PERIOD—CENT_NOFITS

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

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

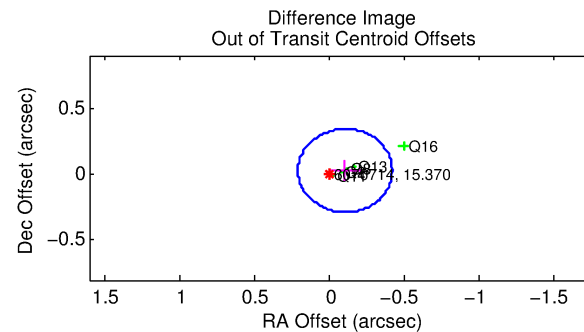
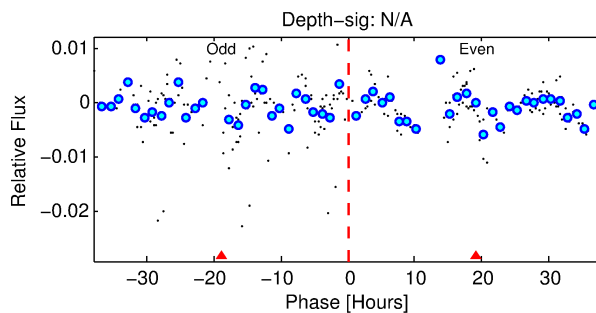
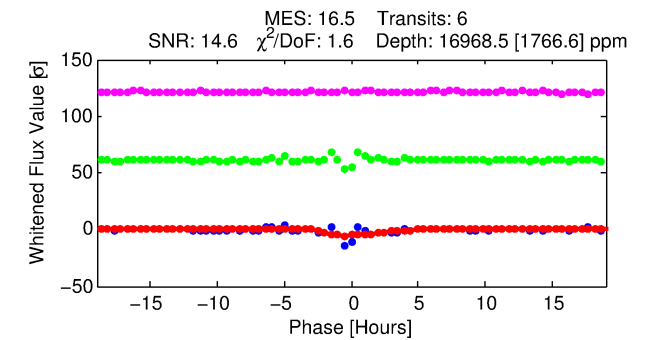
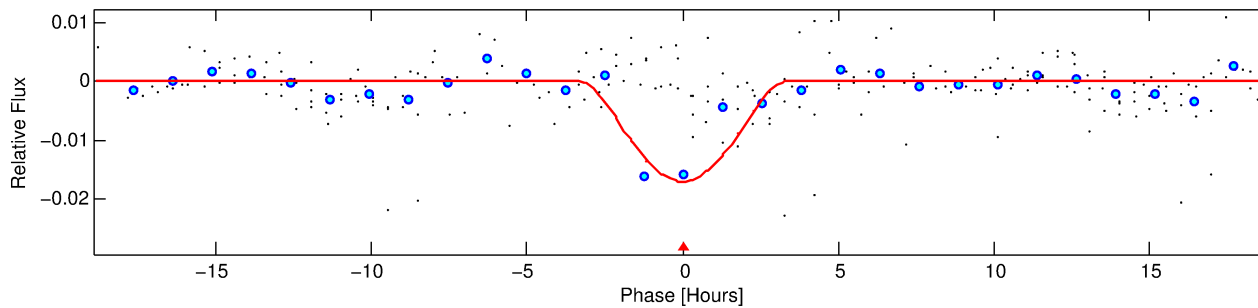
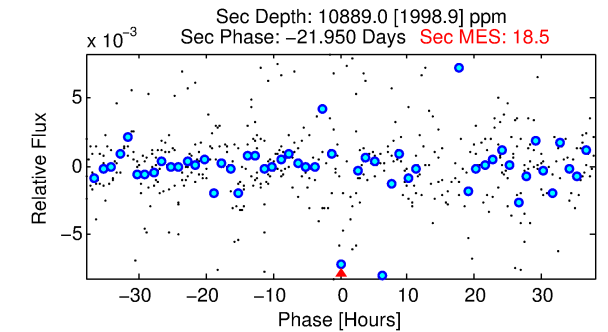
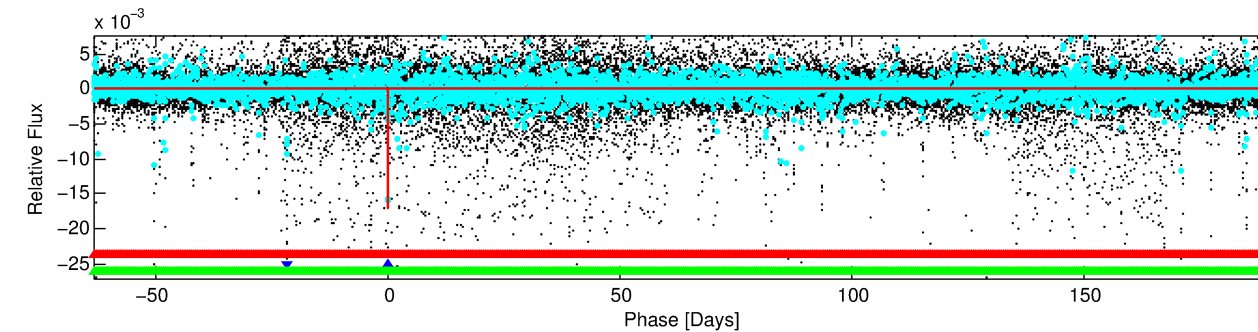
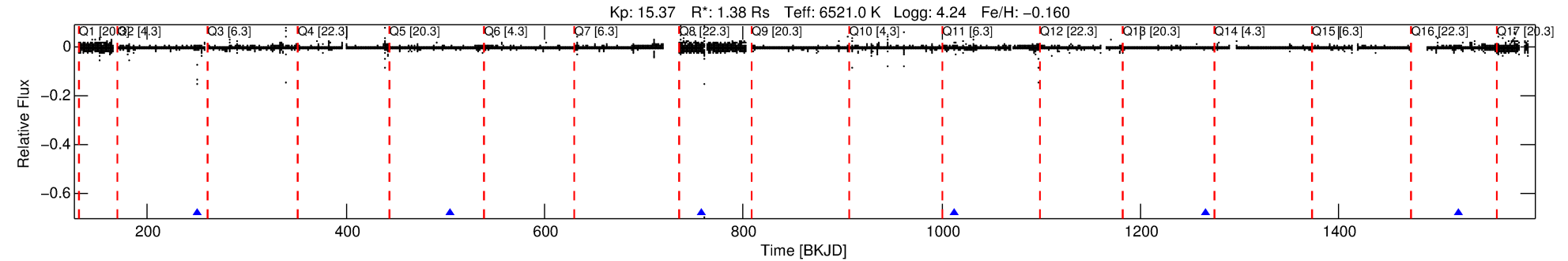
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 006070714-02

No Significant Match Found

DV One-Page Summary

KIC: 6070714 Candidate: 2 of 3 Period: 253.833 d



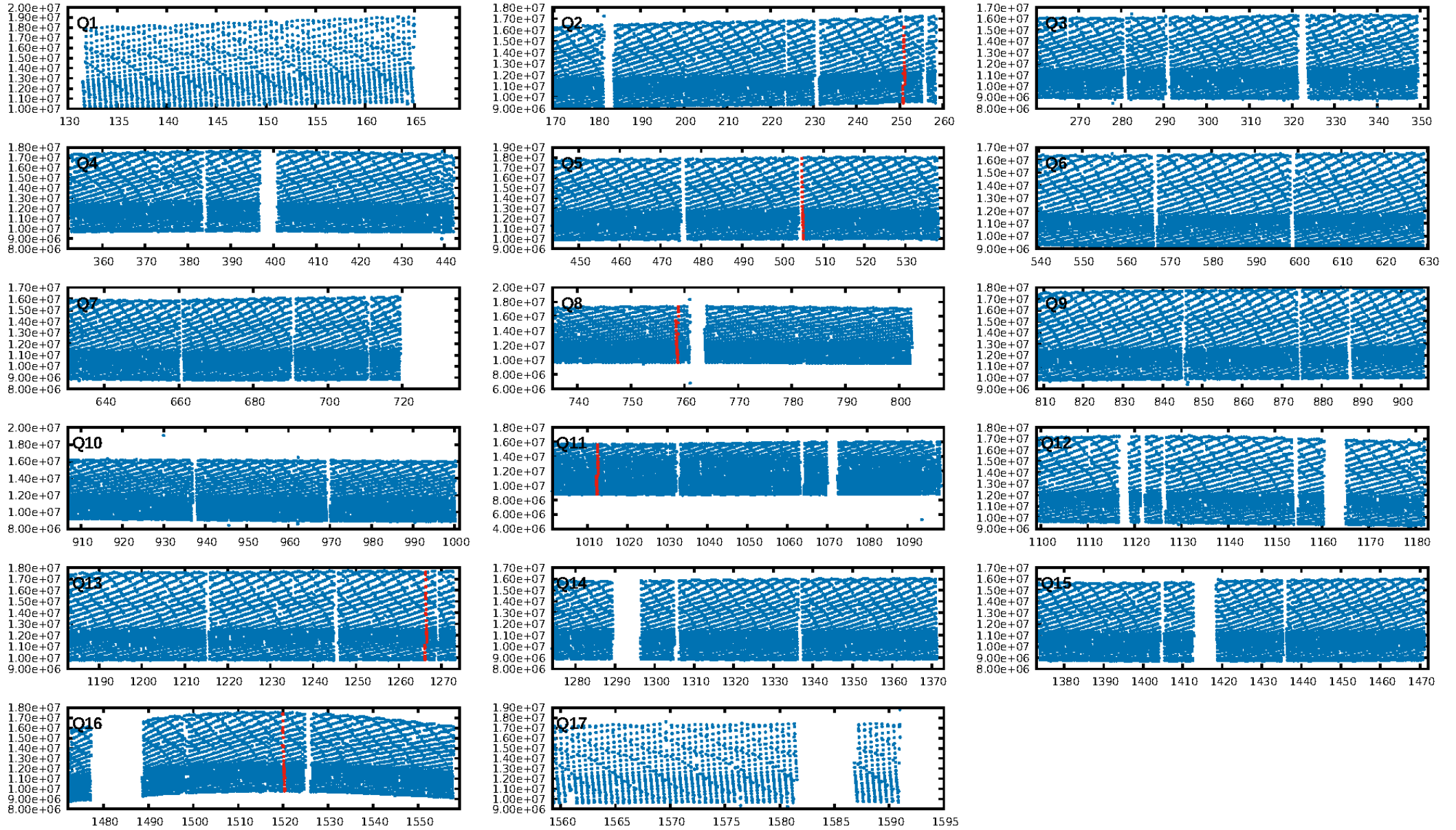
DV Fit Results:

Period = 253.83326 [0.00392] d
Epoch = 250.9558 [0.0111] BKJD
Rp/R* = 0.2064 [0.7405]
a/R* = 208.33 [87.82]
b = 1.00 [1.03]
Seff = 4.44 [1.73]
Teq = 370 [36] K
Rp = 31.13 [112.12] Re
a = 0.8345 [0.2117] AU
Ag = 4304.13 [30928.64] [0.14σ]
Teffp = 4636 [8321] K [0.51σ]

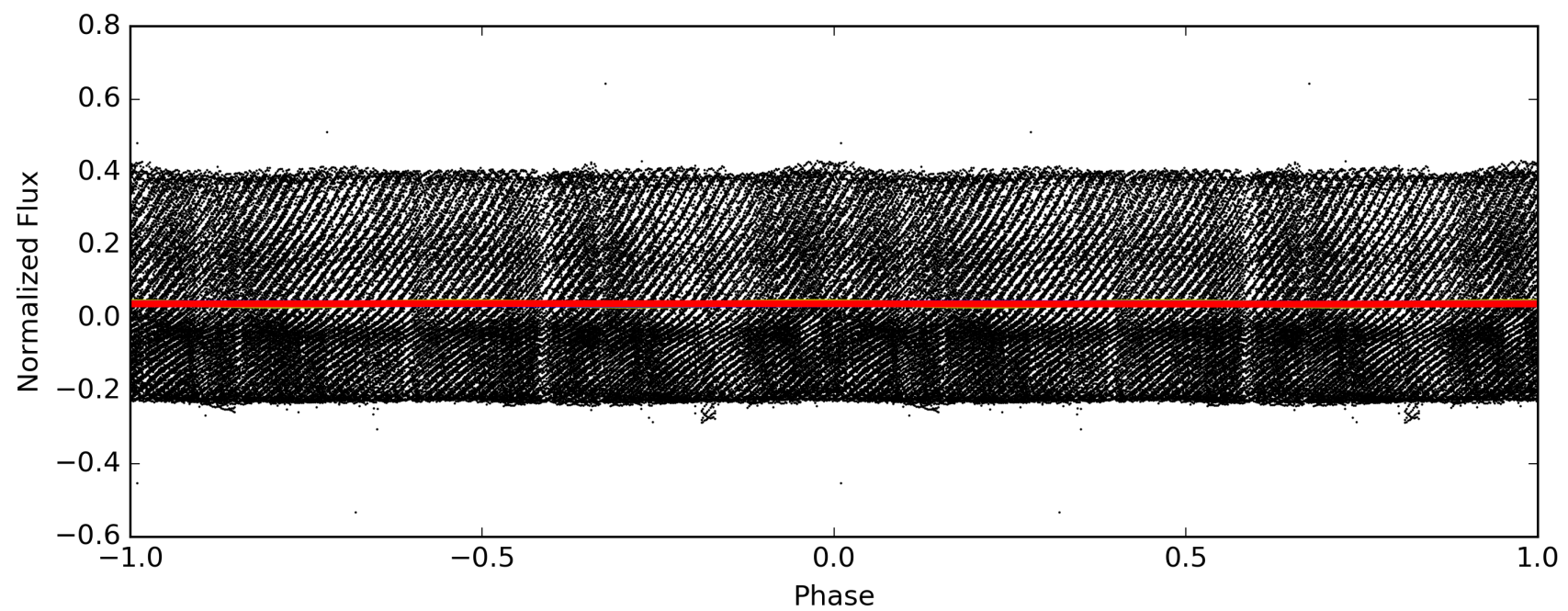
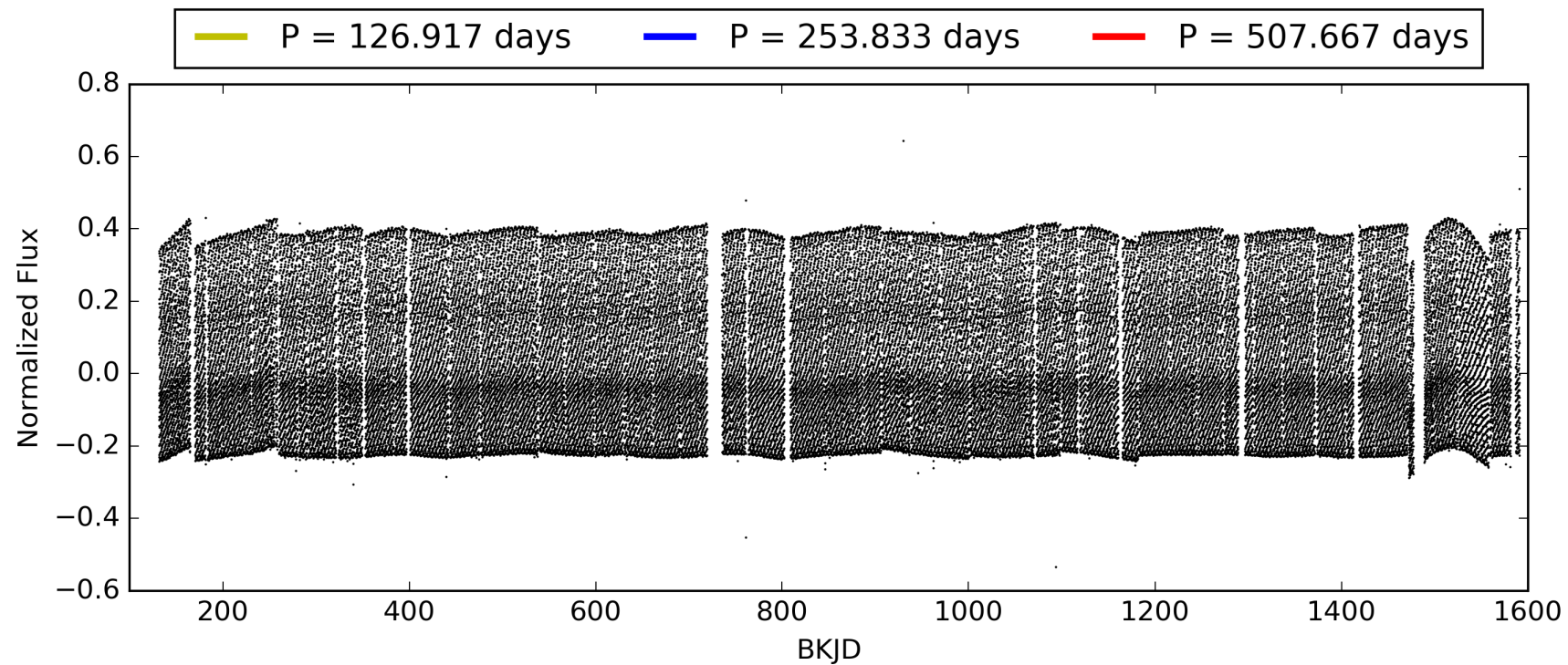
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [936.30σ]
LongPeriod-sig: N/A
ModelChiSquare2-sig: 0.0%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [6/6]
GhostDiagnostic-chr: 1.559
Centroid-sig: 83.8%
Centroid-so: 1.109 arcsec [4.77σ]
OotOffset-rm: 0.113 arcsec [1.08σ]
KicOffset-rm: 0.129 arcsec [1.79σ]
OotOffset-st: 1/1/2/1 [5]
KicOffset-st: 1/1/2/1 [5]
DiffImageQuality-fgm: 0.60 [3/5]
DiffImageOverlap-fno: 0.00 [0/5]

TCE 006070714-02, PDC Light Curves

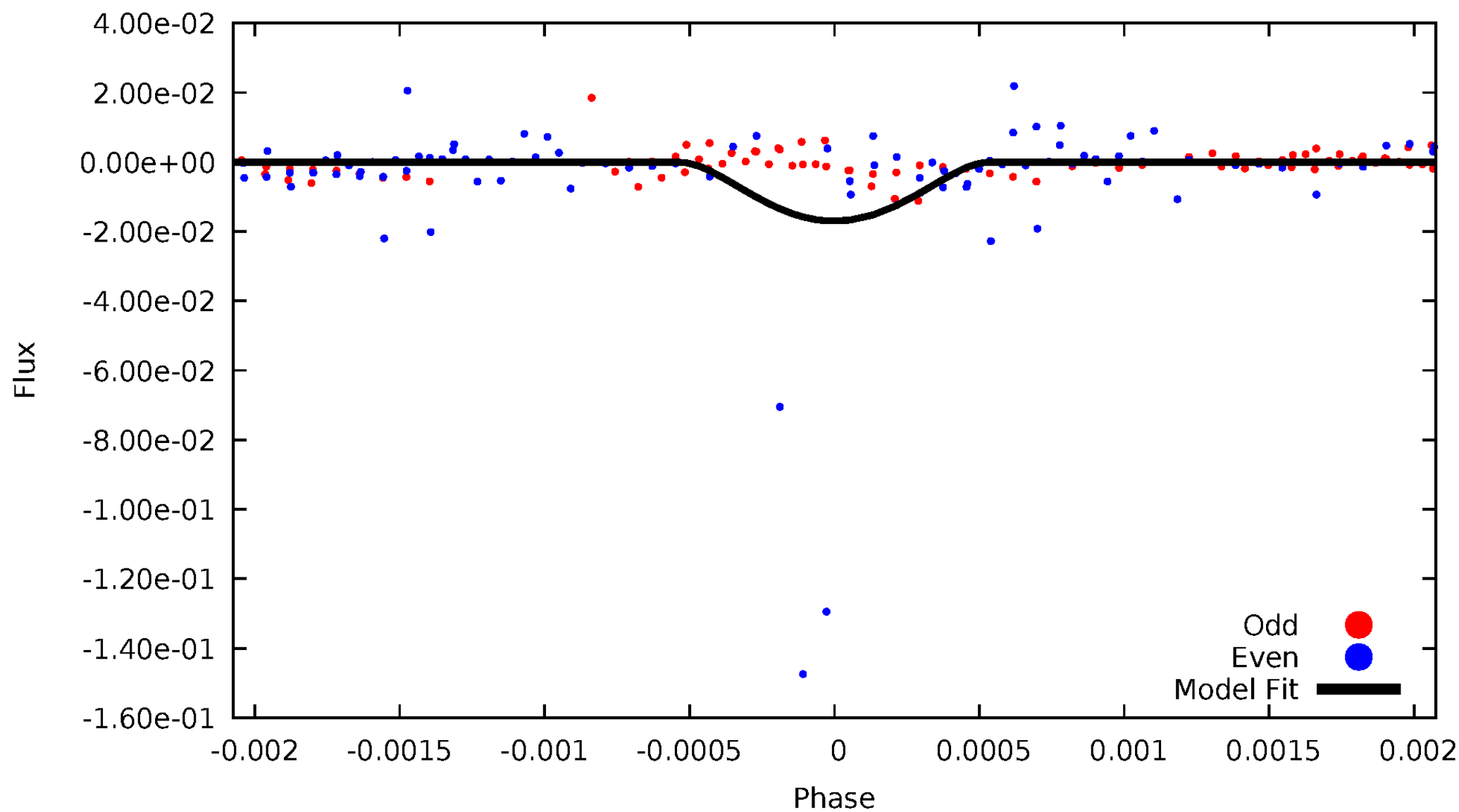


TCE 006070714-02



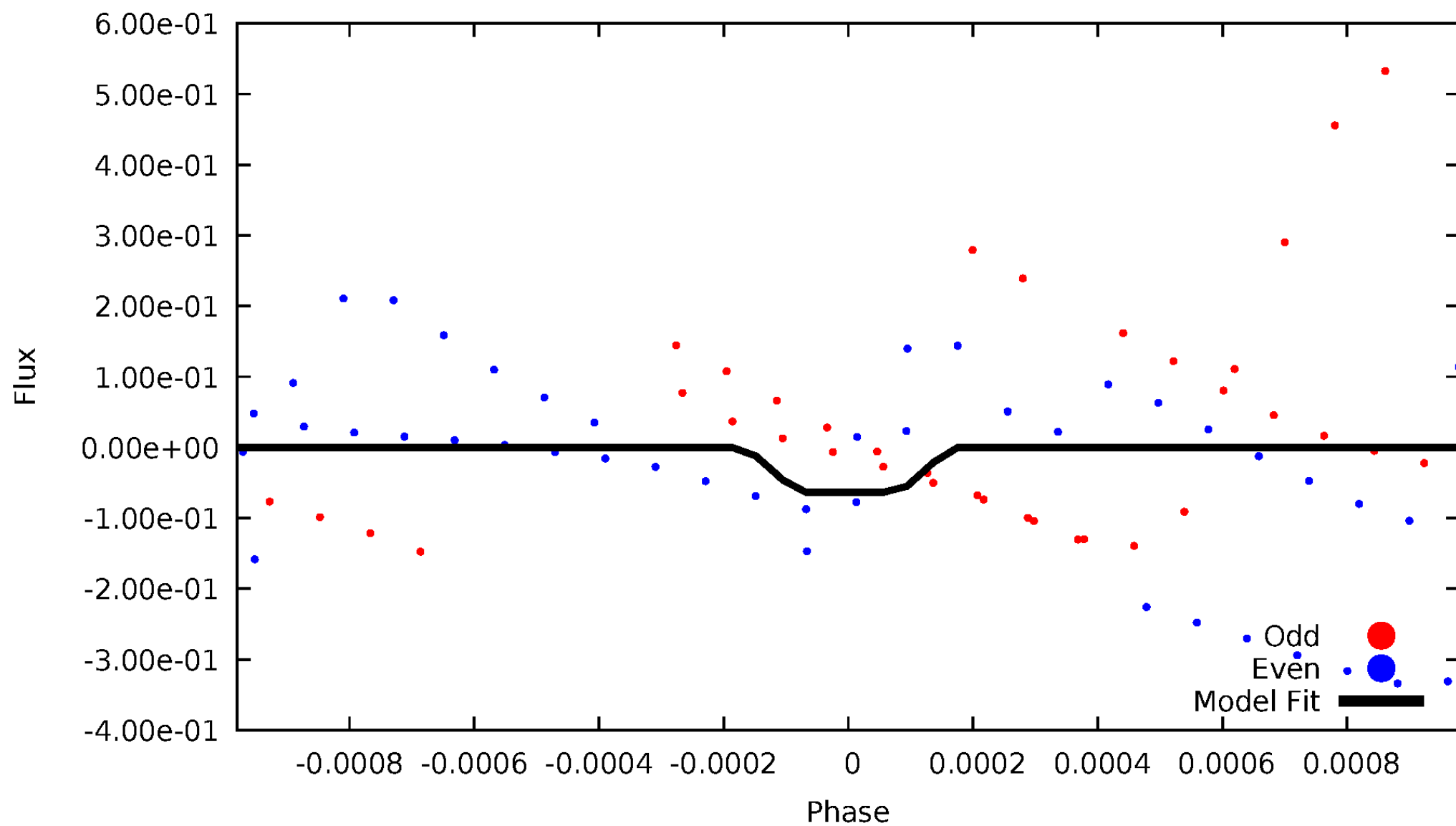
DV Odd/Even

TCE 006070714-02



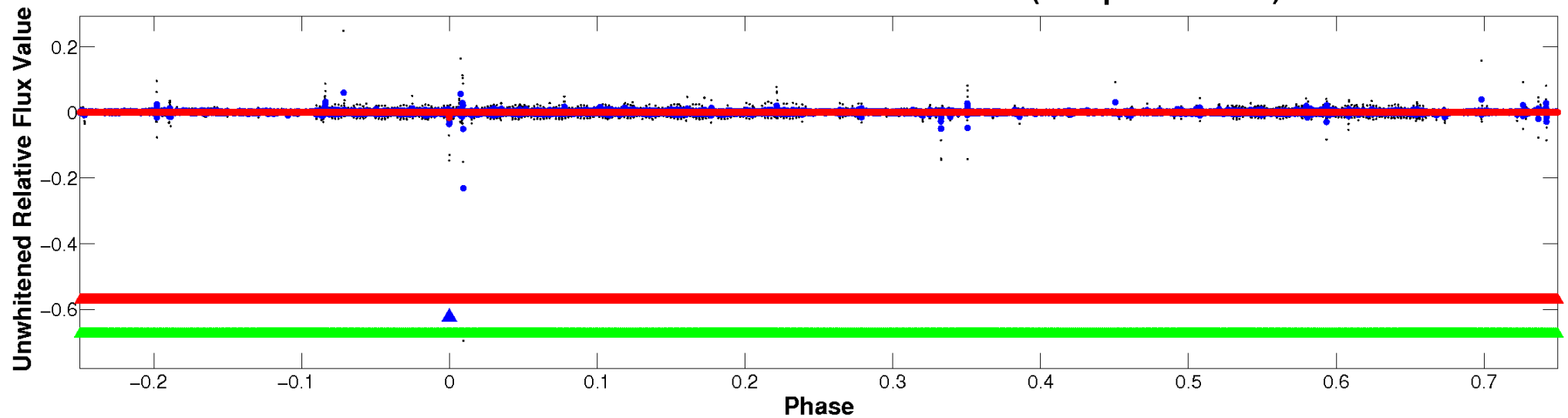
ALT Odd/Even

TCE 006070714-02

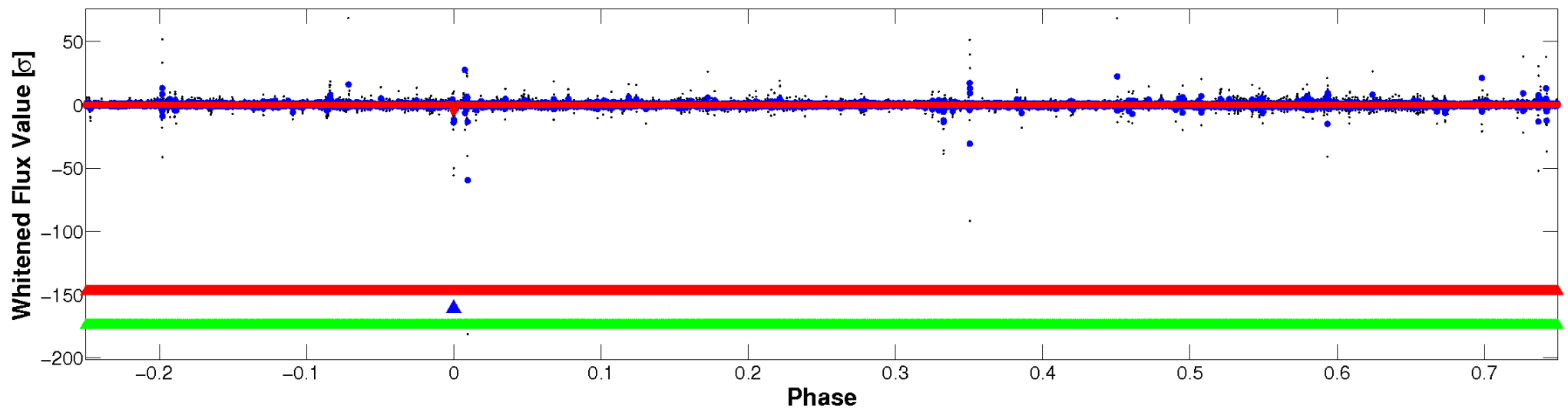


Non-Whitened Vs. Whitened Light Curve

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

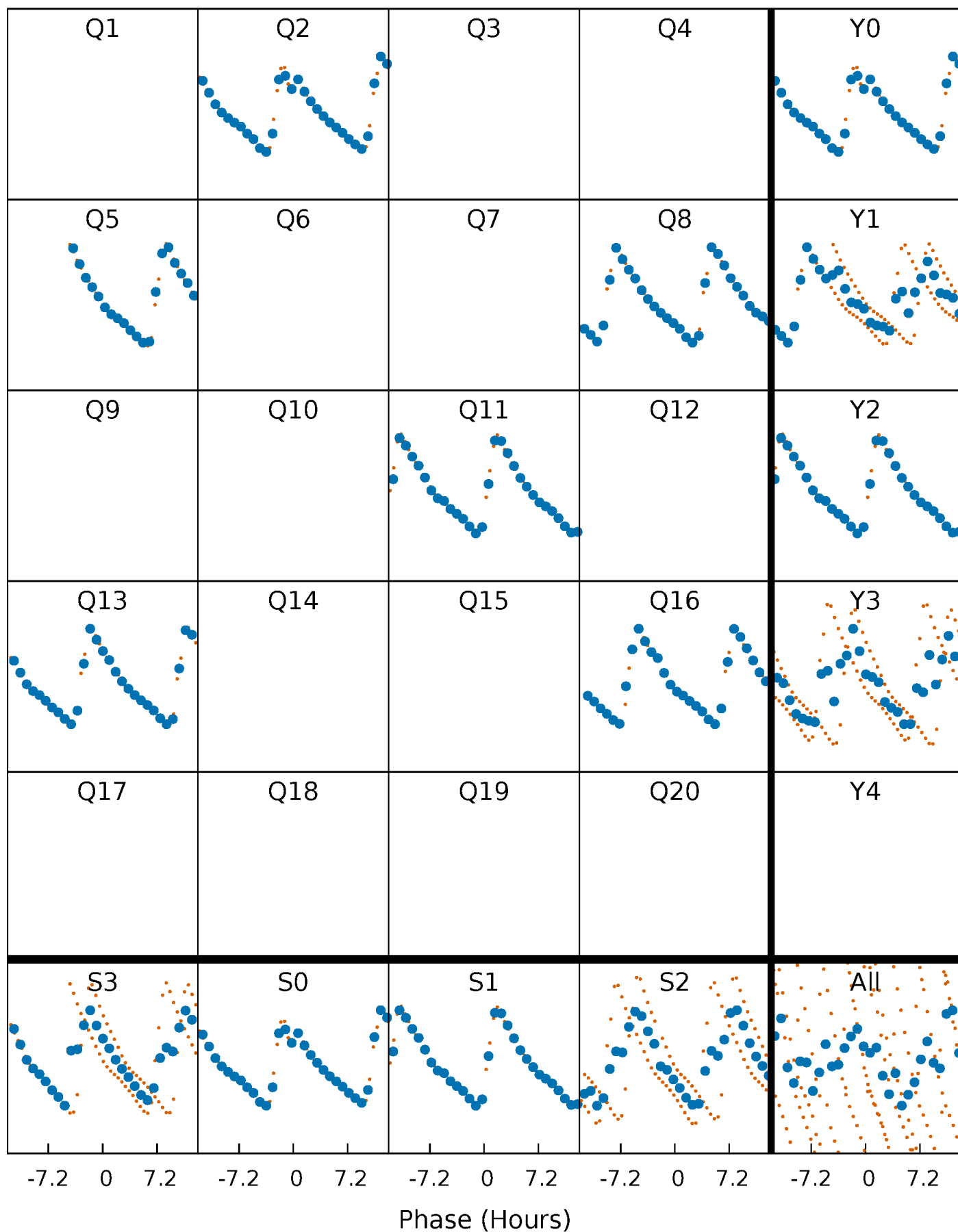


Planet 2 : Phased Whitened Flux Time Series (Fit Epoch/Period)



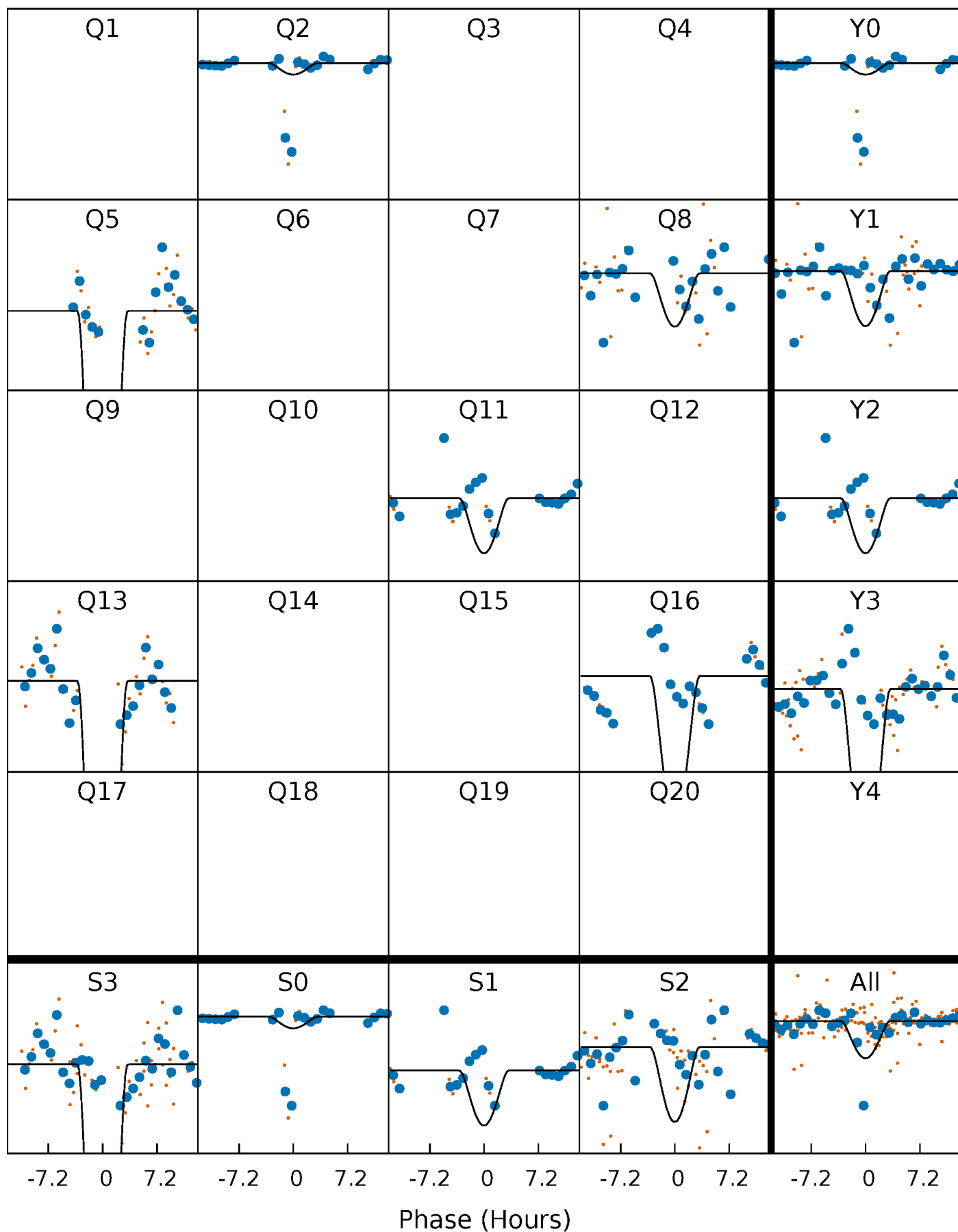
PDC Quarter-Phased Transit Curves

TCE 006070714-02 P=253.833257 Days $T_0=250.955817$ (BKJD)



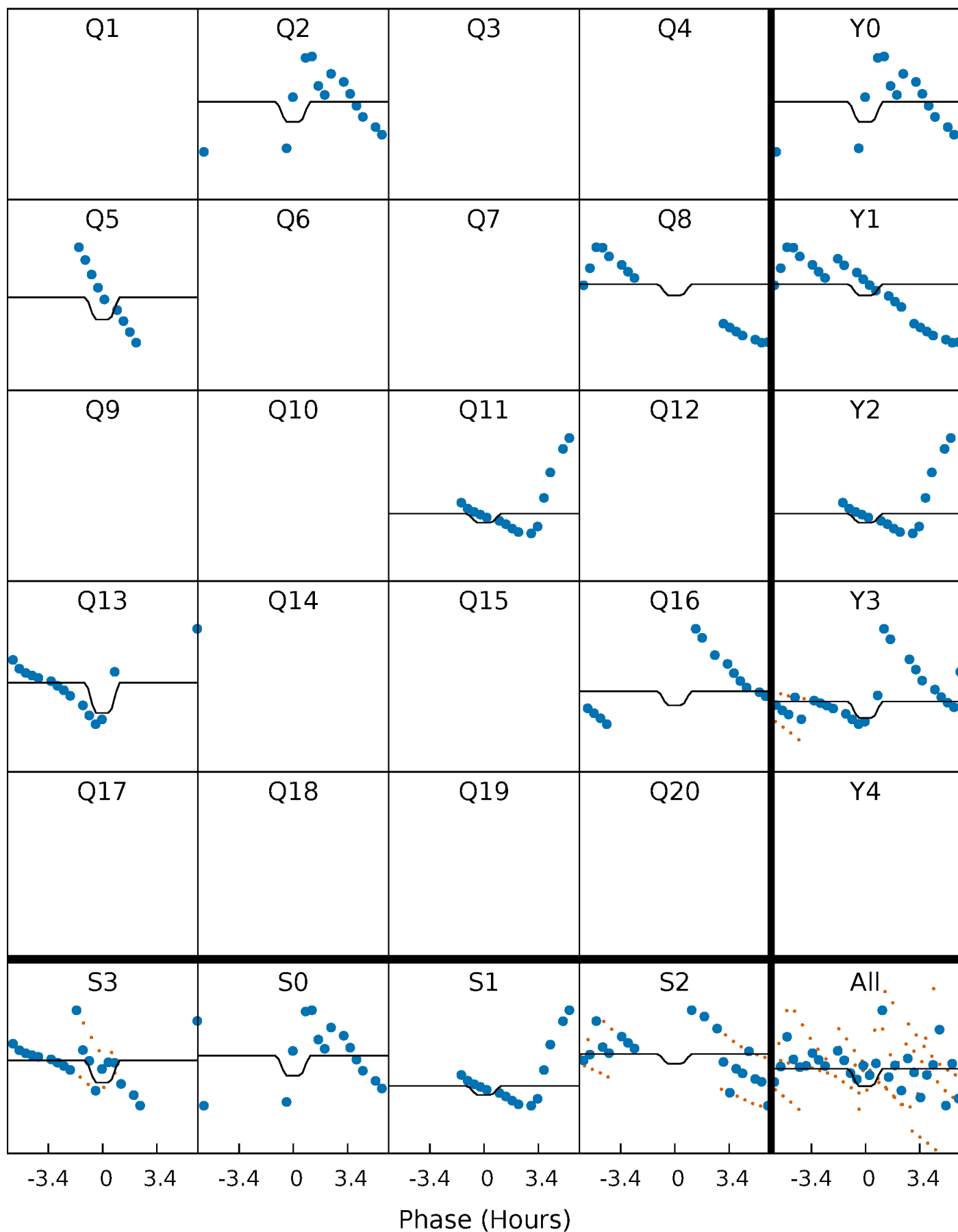
DV Quarter-Phased Transit Curves

TCE 006070714-02 P=253.833257 Days $T_0=250.955817$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

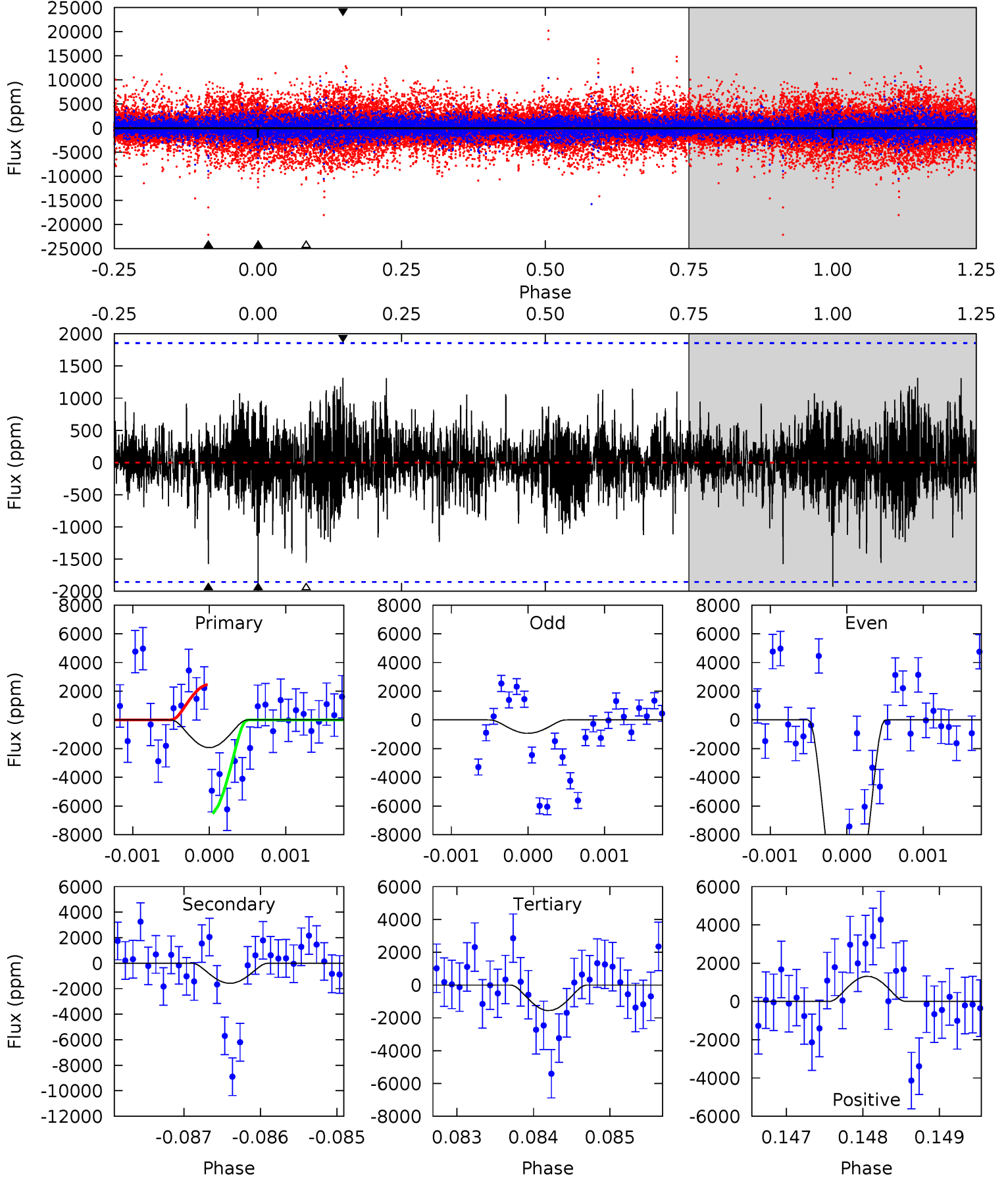
TCE 006070714-02 P=253.815660 Days $T_0=250.863449$ (BKJD)



DV Model-Shift Uniqueness Test

006070714-02, P = 253.833257 Days, E = 250.955817 Days

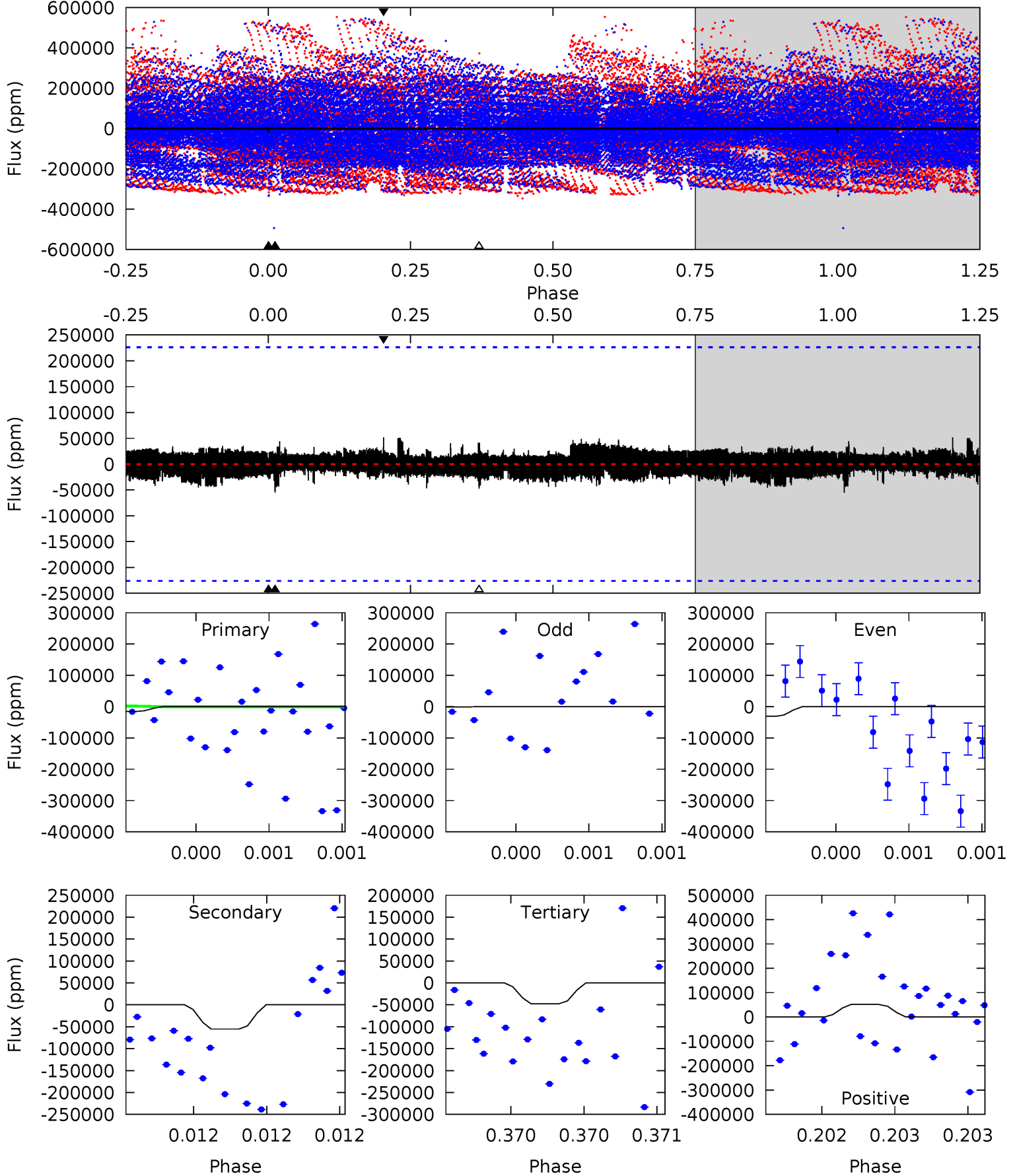
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
5.65	4.61	4.56	3.85	5.44	3.27	1.04	1.09	1.80	0.05	0.77	18.6	5.06	0.41	5.97



Alt Model-Shift Uniqueness Test

006070714-02, P = 253.815660 Days, E = 250.863449 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
0.38	1.38	1.18	1.28	5.65	3.60	0.37	-0.80	-0.90	0.19	0.10	0.37	1.46	0.48	0.42



Stellar Parameters For KIC 006070714

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6521^{+204}_{-272}	$4.237^{+0.149}_{-0.182}$	$-0.160^{+0.250}_{-0.300}$	$1.382^{+0.439}_{-0.293}$	$1.206^{+0.188}_{-0.188}$	$0.644^{+0.473}_{-0.312}$
	+3%/-4%	+4%/-4%	+156%/-188%	+32%/-21%	+16%/-16%	+73%/-49%
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 006070714-02 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-1575 ± 341	$92.38^{+93.66}_{-63.51}$	521^{+41}_{-36}	2513^{+989}_{-367}	69^{+650}_{-51}
Alt.	-55180 ± 40065	$91.53^{+98.83}_{-61.56}$	519^{+40}_{-37}	4106^{+2744}_{-1157}	1892^{+17426}_{-1625}

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

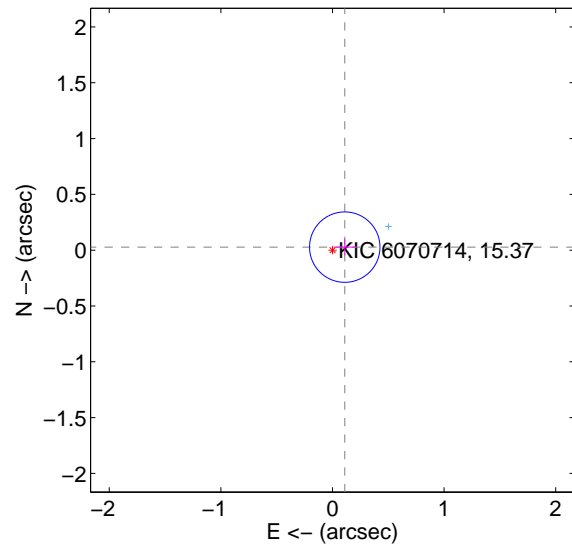
Supplemental centroid analysis for 006070714-02. Kepler magnitude: 15.37. Transit SNR 14.58

There are 3 quarters with good PRF difference image offsets

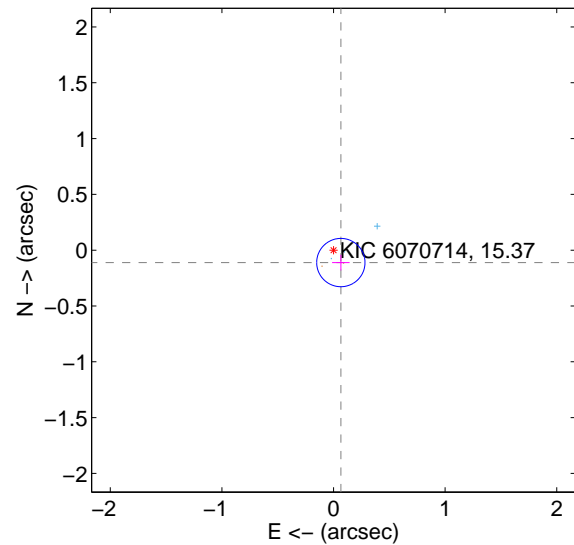
The direct PRF centroid is offset from the target star catalog position by about 0.11 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.113 ± 0.105	1.08	-0.110 ± 0.100	0.027 ± 0.075
PRF-fit source offset from KIC position	0.129 ± 0.072	1.79	-0.066 ± 0.078	-0.111 ± 0.070
photometric centroid source offset	1.11 ± 0.23	4.77	1.06 ± 0.24	-0.34 ± 0.10

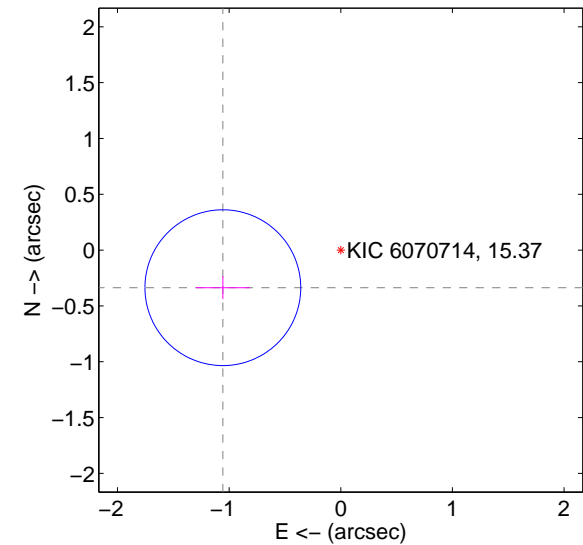
offset from difference PRF-fit to OOT PRF-fit



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.

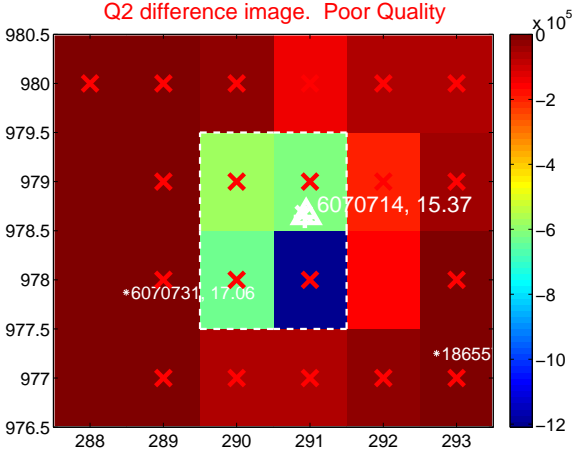
Q1 no difference image



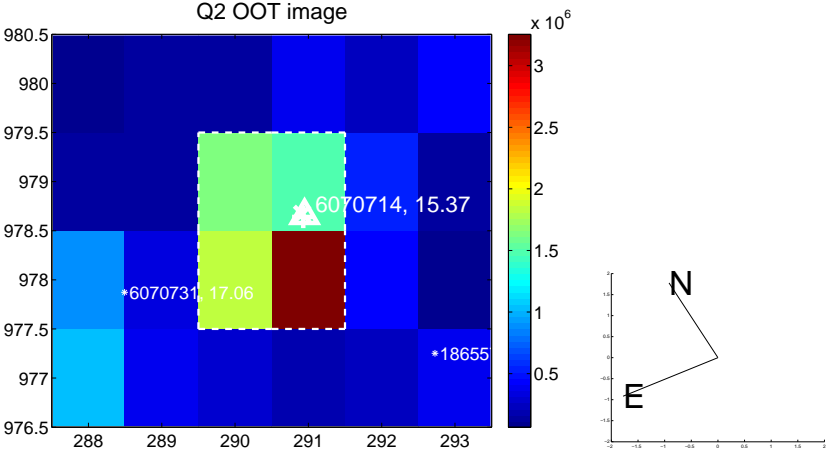
Q1 no OOT image



Q2 difference image. Poor Quality



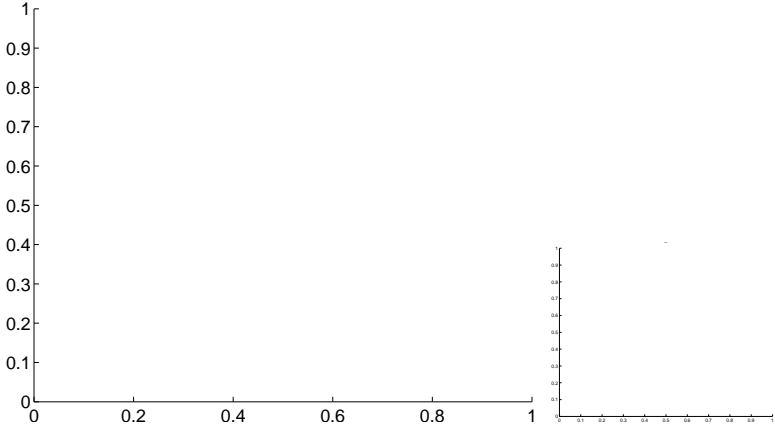
Q2 OOT image



Q3 no difference image



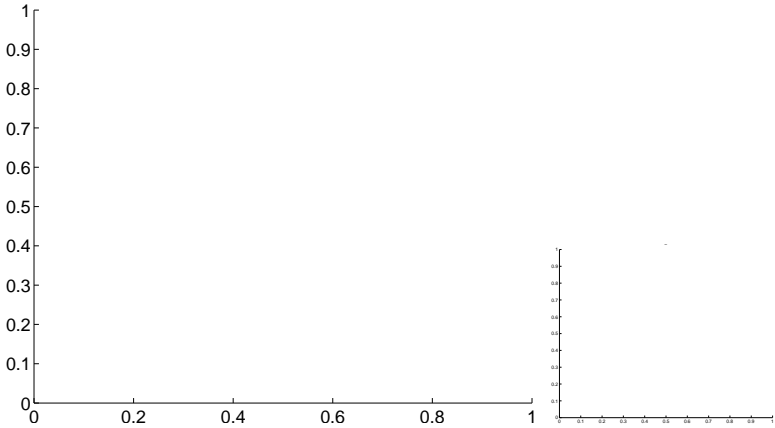
Q3 no OOT image



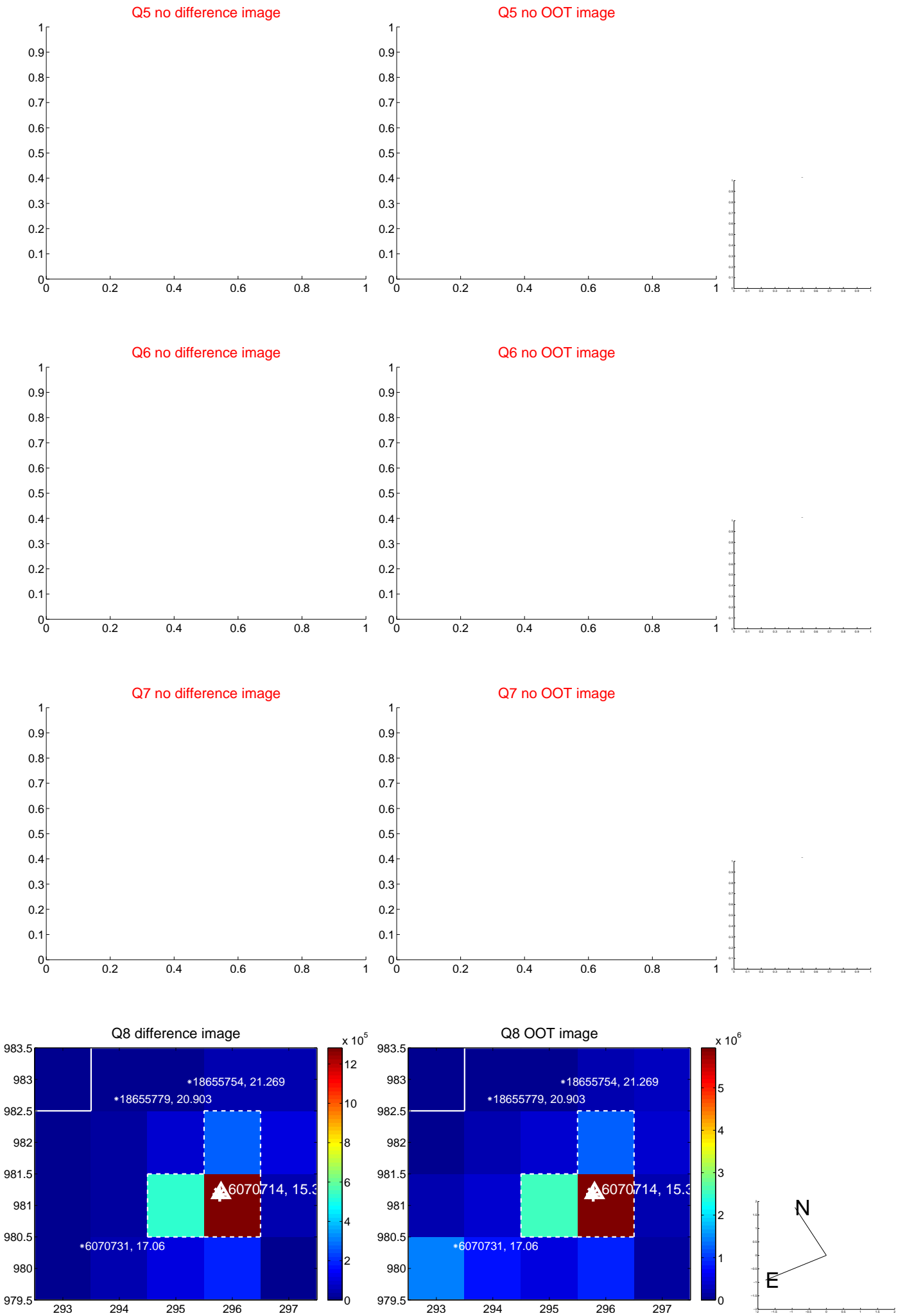
Q4 no difference image



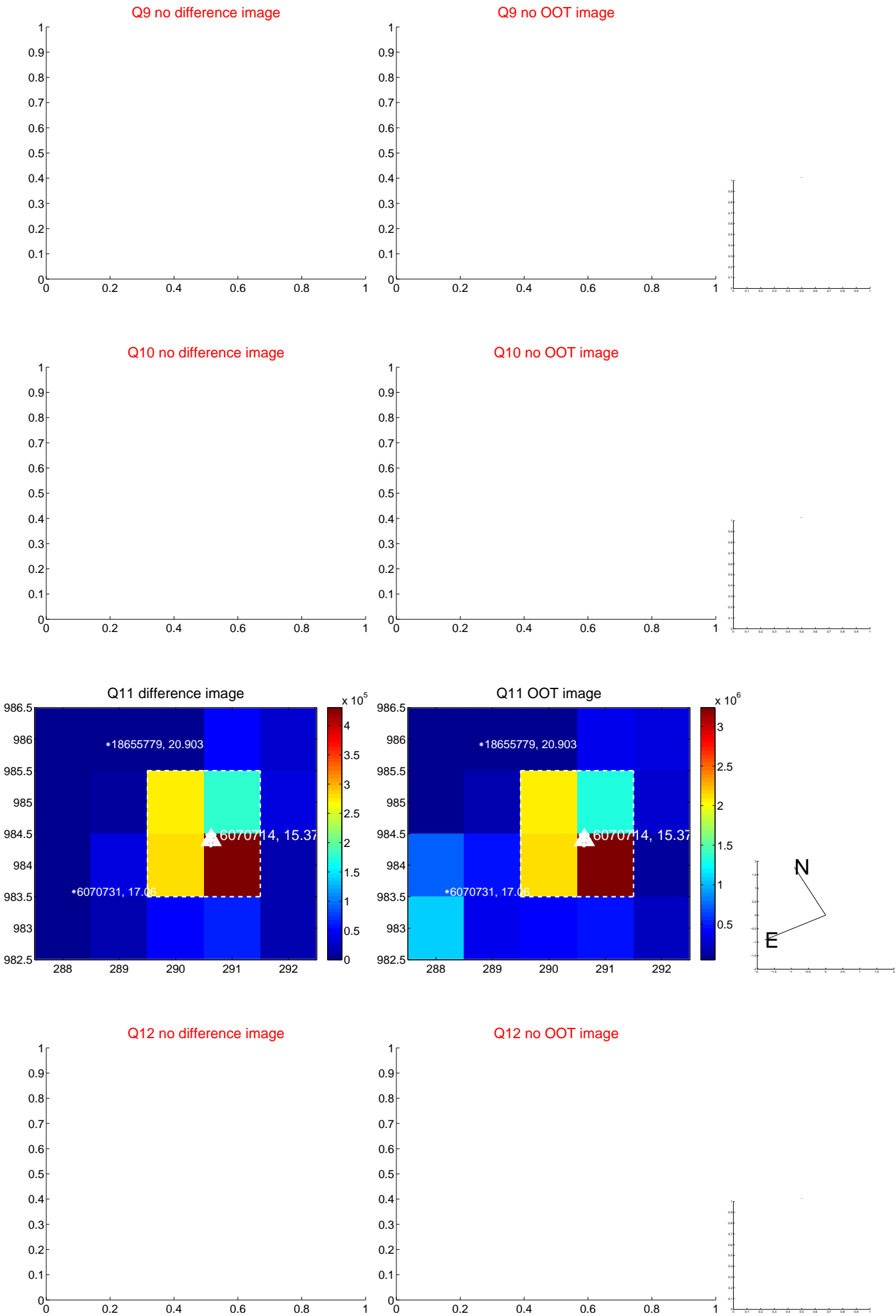
Q4 no OOT image



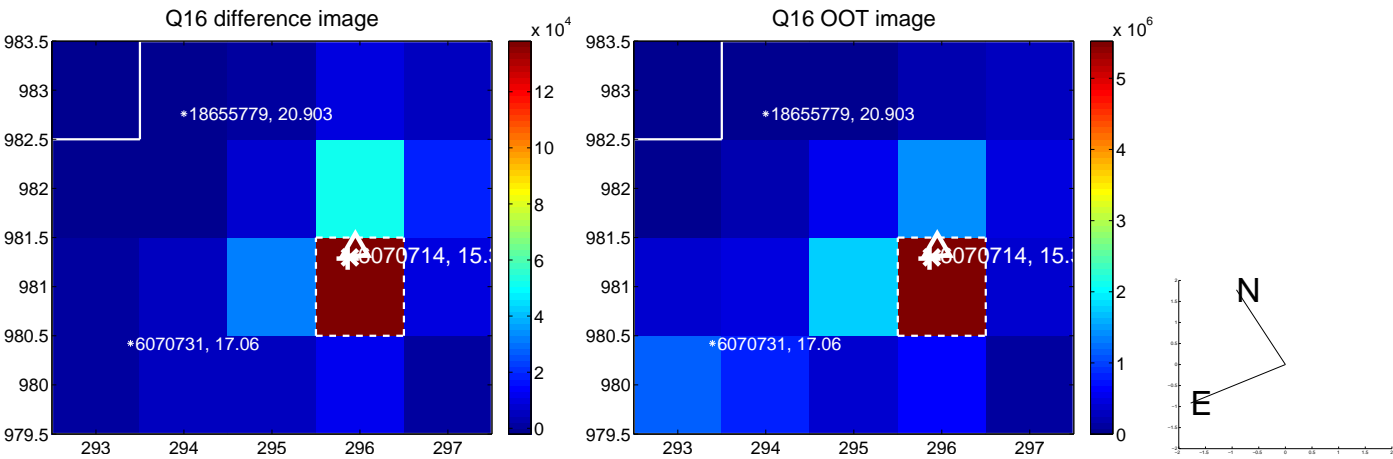
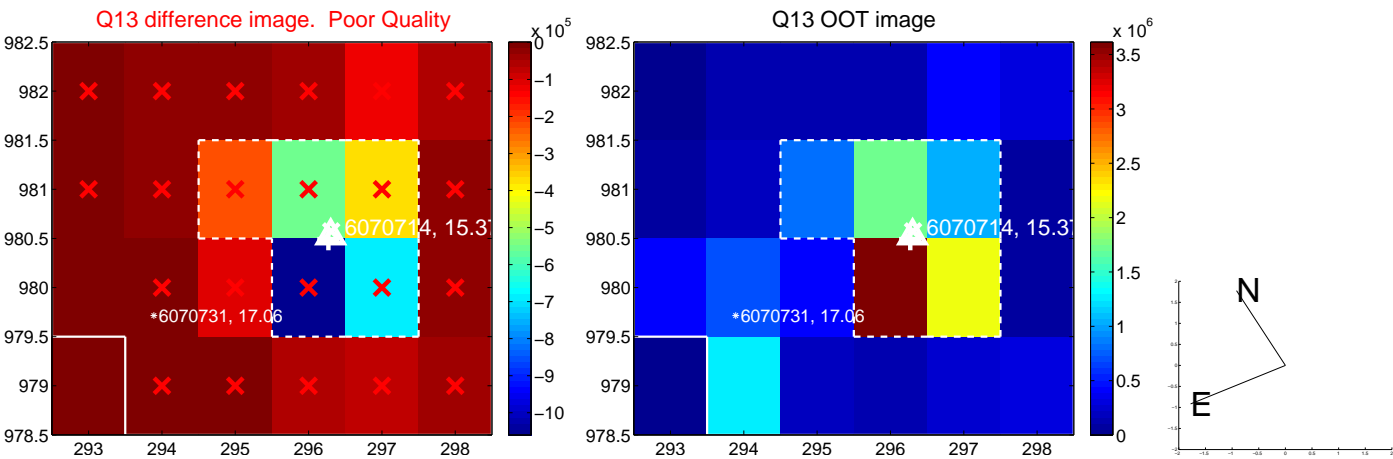
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



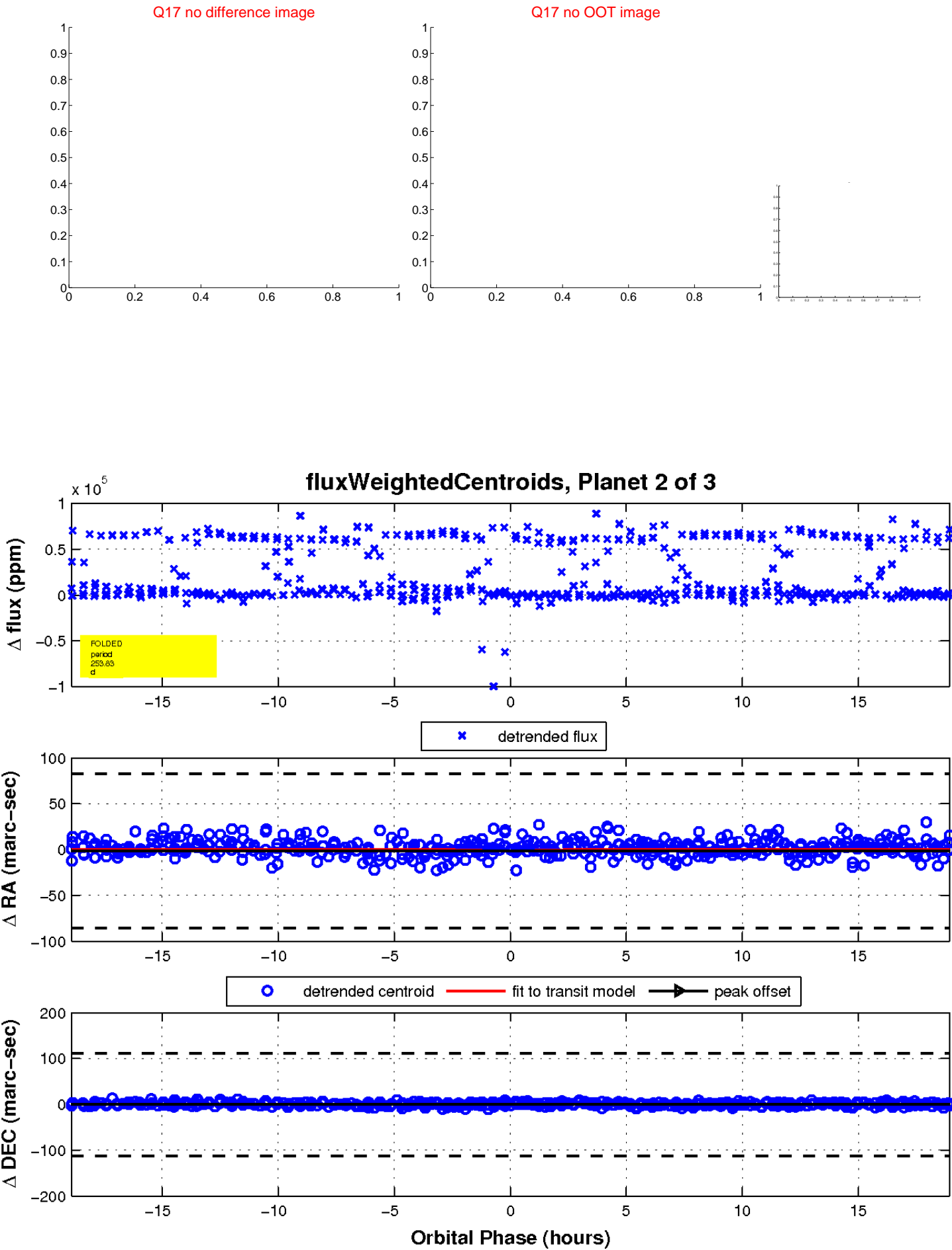
white ×: KIC target position; +: OOT centroid; △: difference centroid. red ✕: large negative pixel value.



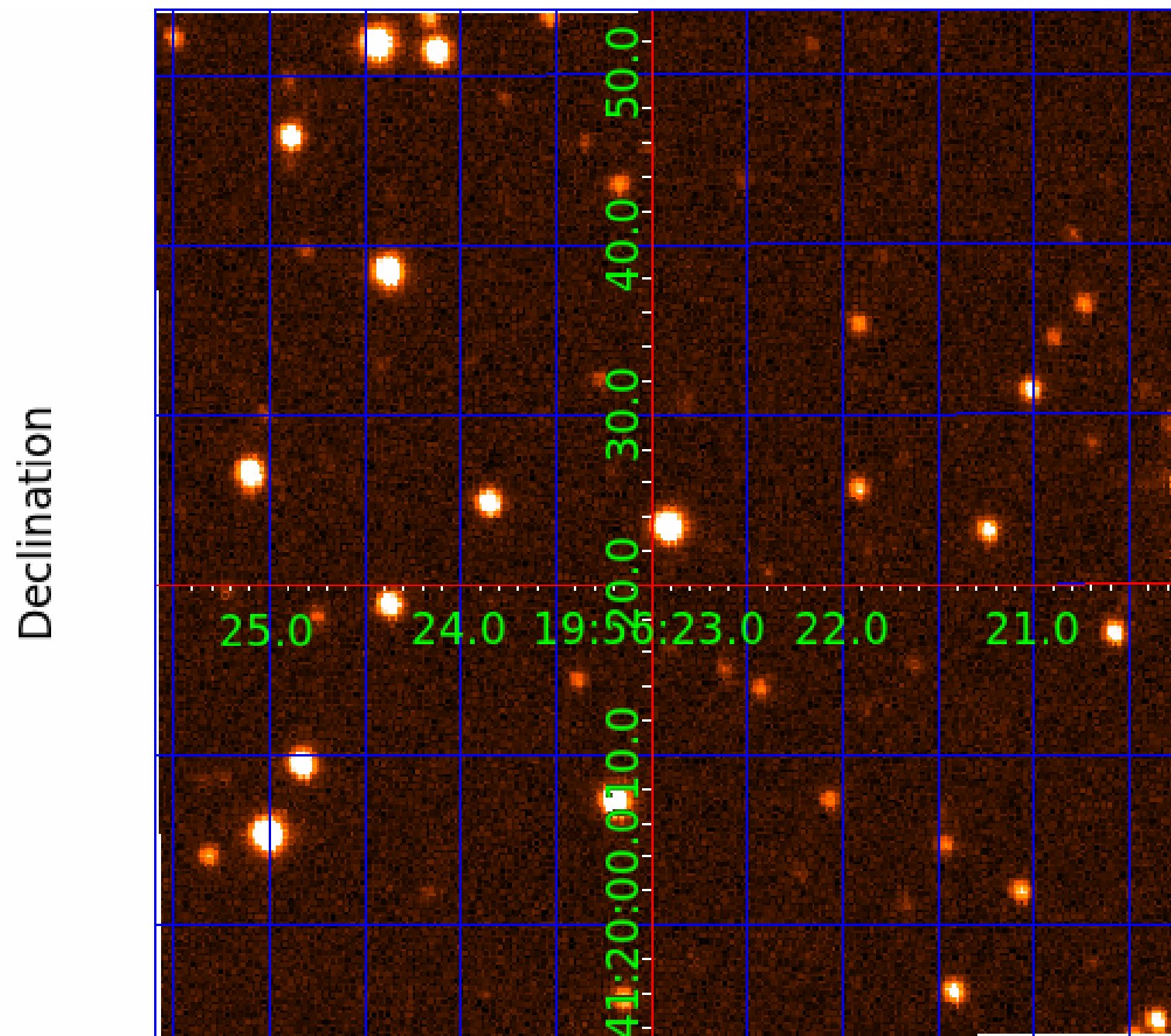
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



UKIRT Image



KIC 006070714

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})
006070714-01	OBS	No	0.535054	131.950398	75.4	1.213	17.2	2.7	1.38	6521	1.41	16442.20
006070714-02	OBS	No	253.833257	250.955817	16968.5	6.317	16.5	14.6	1.38	6521	31.13	4.44
006070714-03	OBS	No	0.535118	131.692244	7281.3	1.500	11.2	-1.0	1.38	6521	11.91	16439.58

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
006070714-01	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT
006070714-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_CHASES—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—INCONSISTENT_TRANS
006070714-03	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—SAME_NTL_PERIOD—CENT_NOFITS

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

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

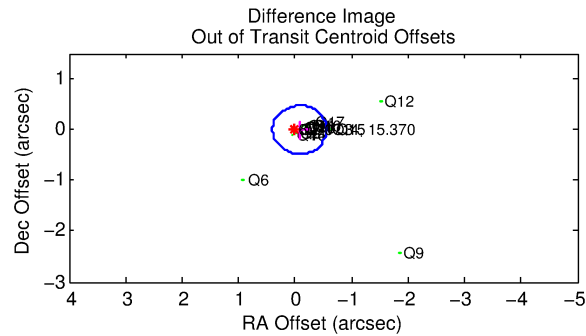
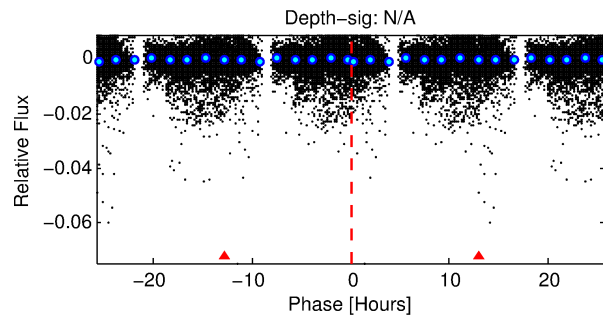
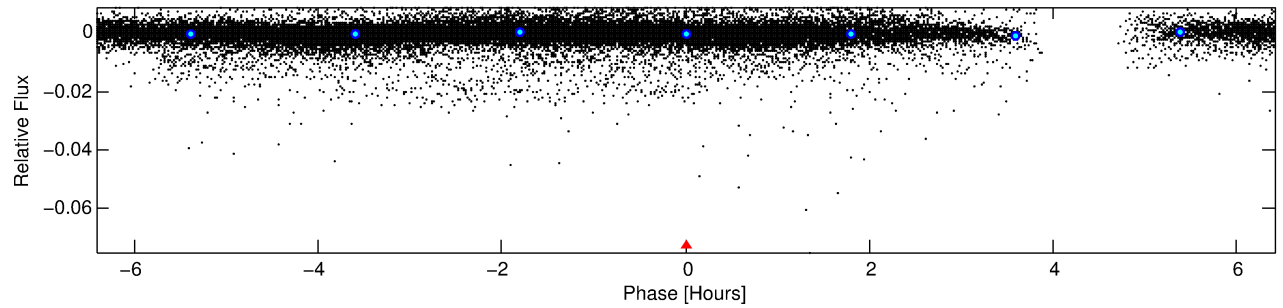
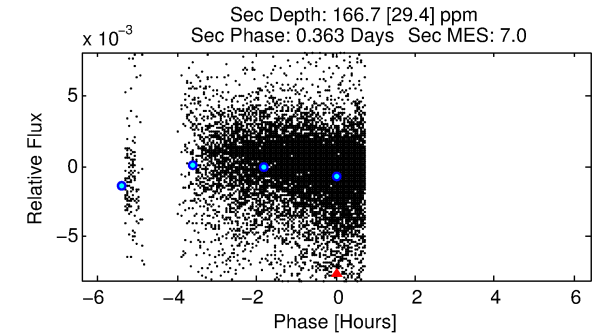
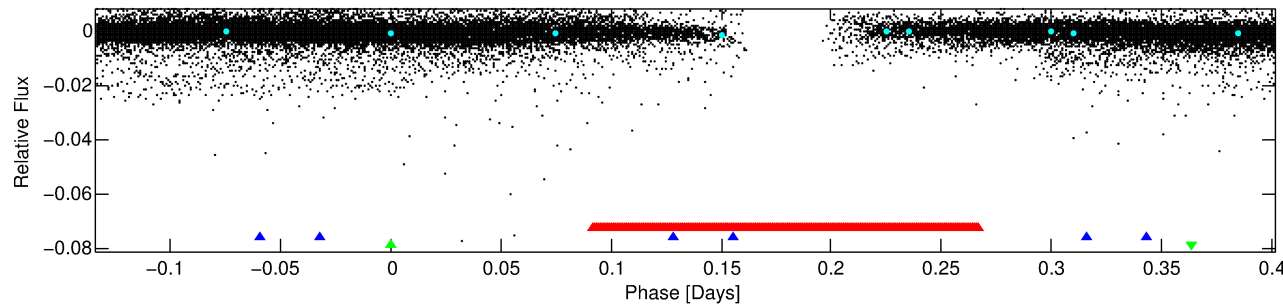
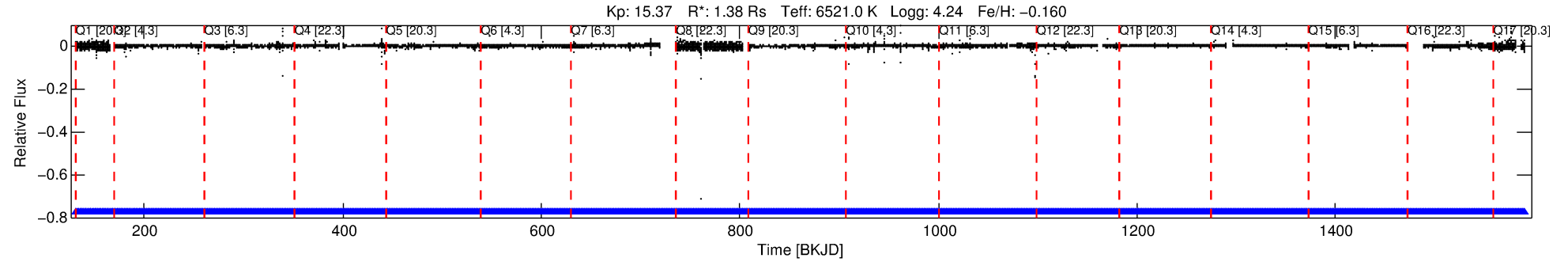
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 006070714-03

No Significant Match Found

DV One-Page Summary

KIC: 6070714 Candidate: 3 of 3 Period: 0.535 d



TPS TCE Results:

Period = 0.53512 d
Epoch = 131.6922 BKJD

DV fit results are unavailable

DV Diagnostic Results:

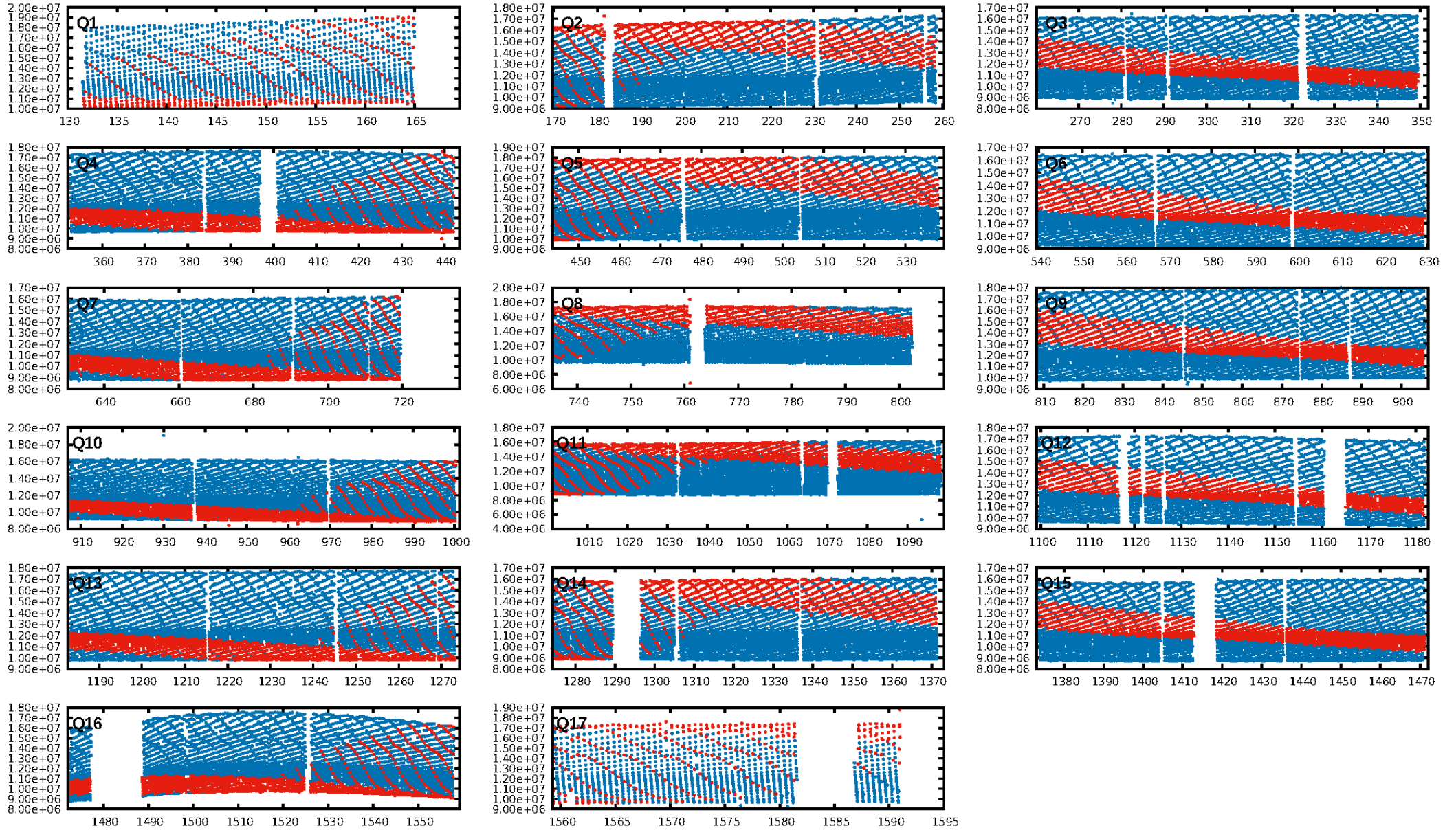
ShortPeriod-sig: 0.1% [0.00σ]
LongPeriod-sig: 100.0% [936.30σ]
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [2384/2384]
GhostDiagnostic-chr: 2.81

Centroid-sig: 24.7%
Centroid-so: 1.031 arcsec [441.41σ]
OotOffset-rm: 0.079 arcsec [0.50σ]
KicOffset-rm: 0.076 arcsec [0.48σ]
OotOffset-st: 4/4/4/5 [17]
KicOffset-st: 4/4/4/5 [17]
DiffImageQuality-fgm: 0.59 [10/17]
DiffImageOverlap-fno: 0.00 [0/17]

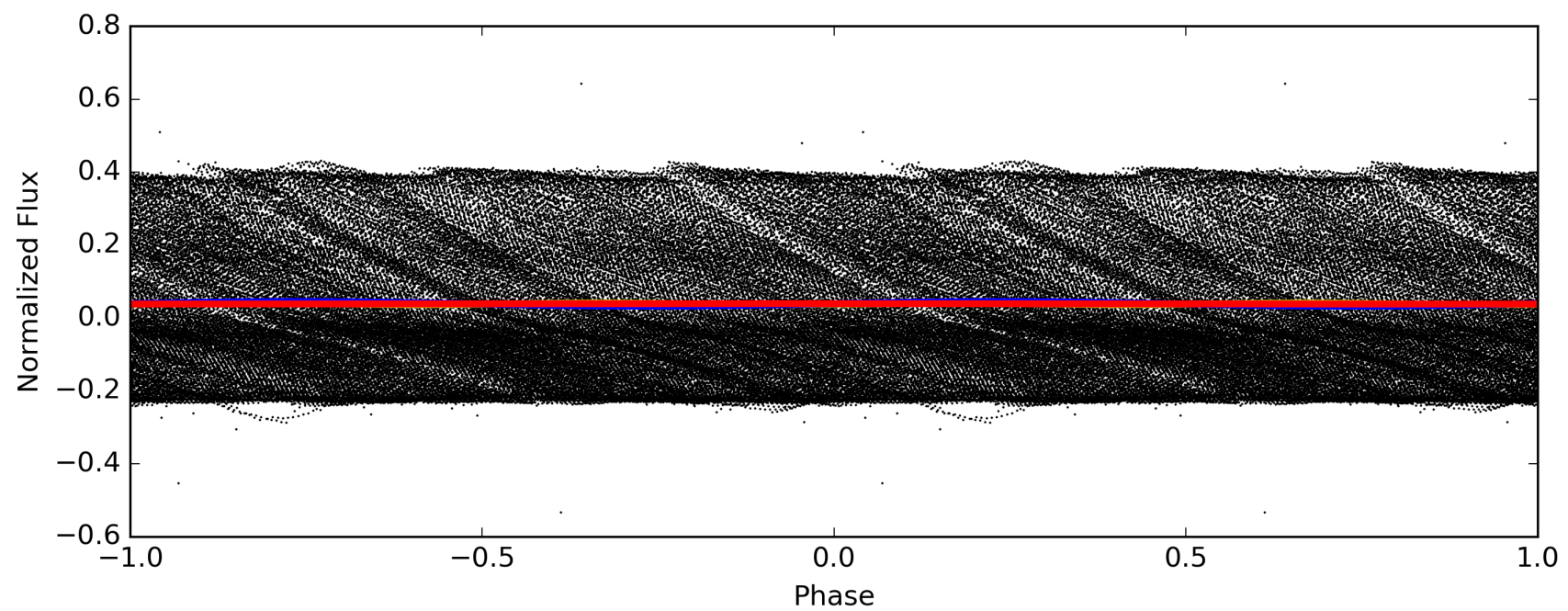
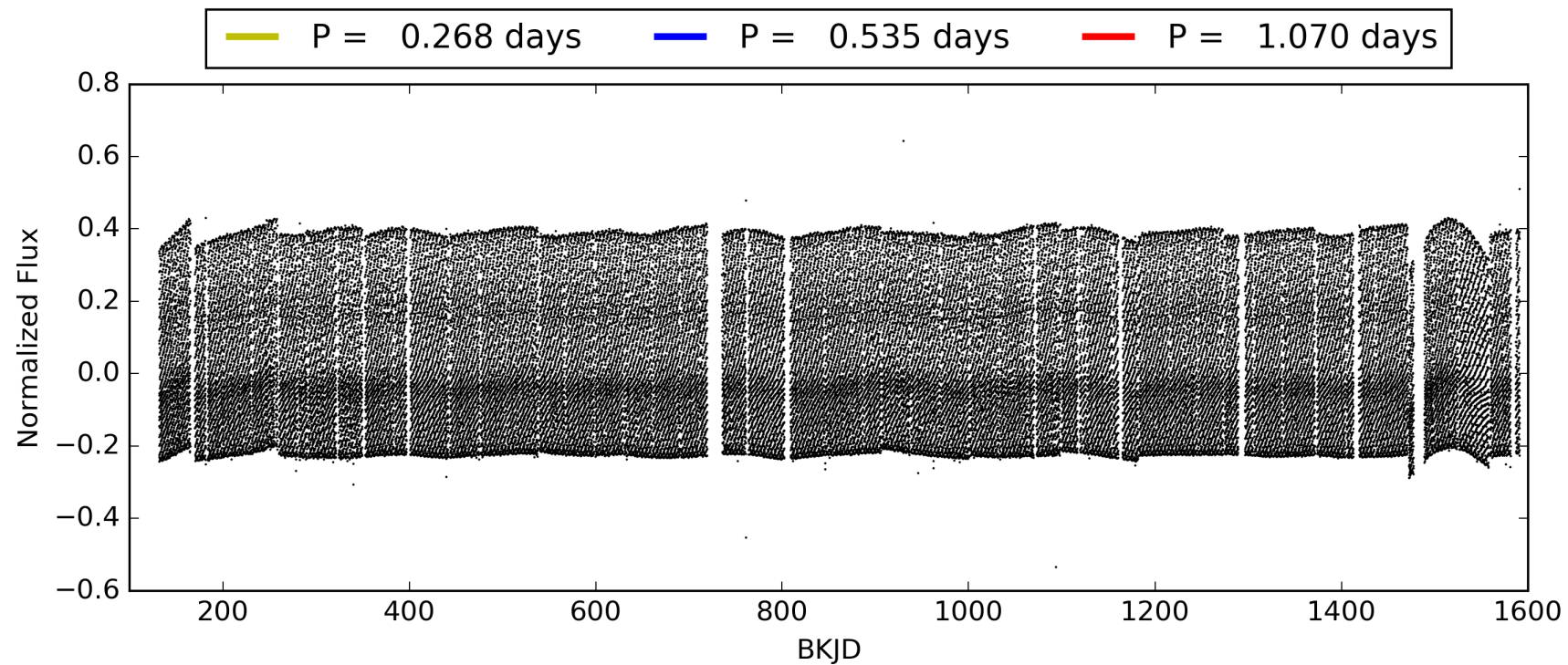
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 16:51:50 Z

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

TCE 006070714-03, PDC Light Curves

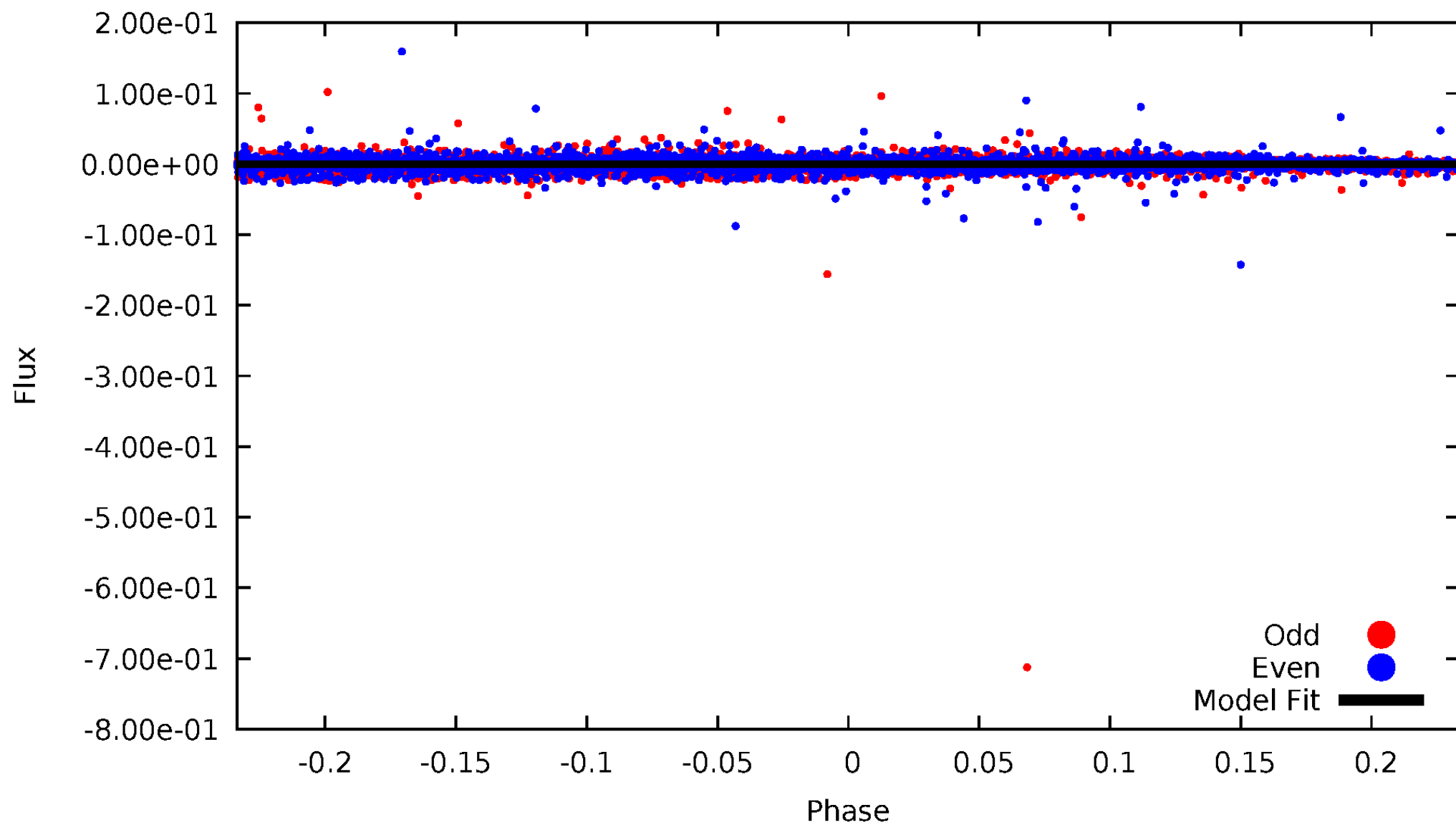


TCE 006070714-03



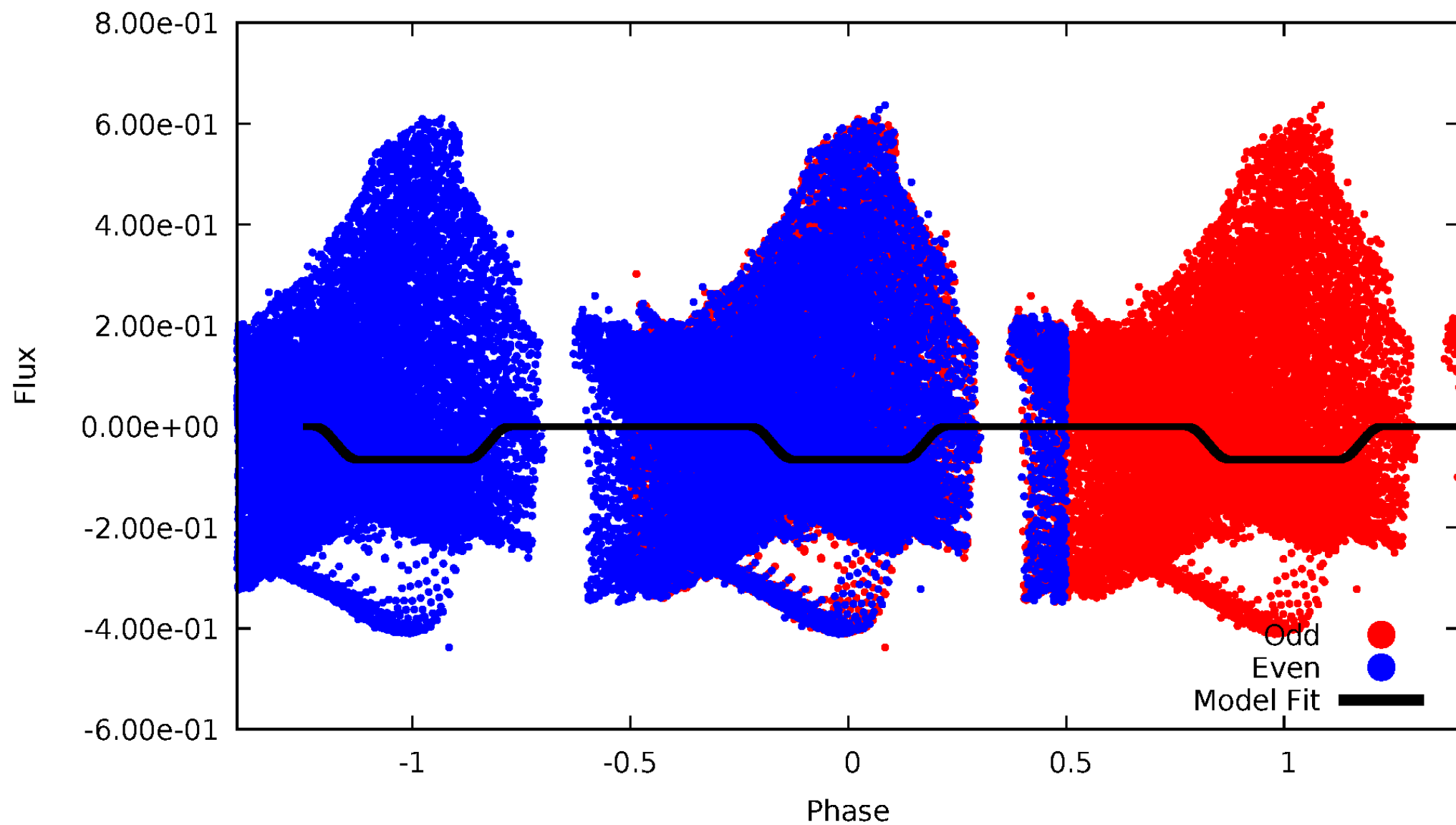
DV Odd/Even

TCE 006070714-03



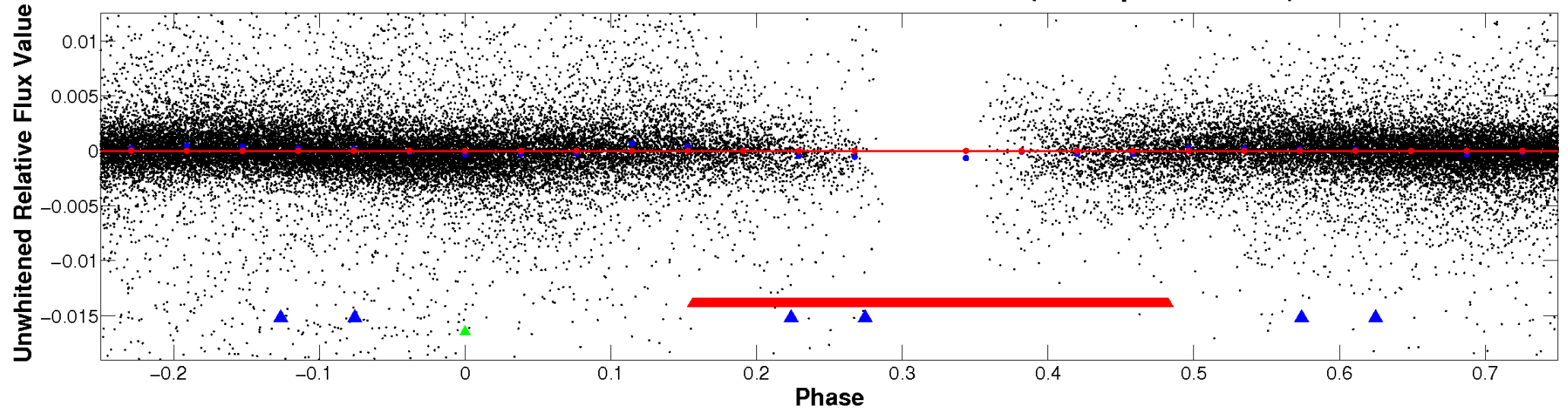
ALT Odd/Even

TCE 006070714-03

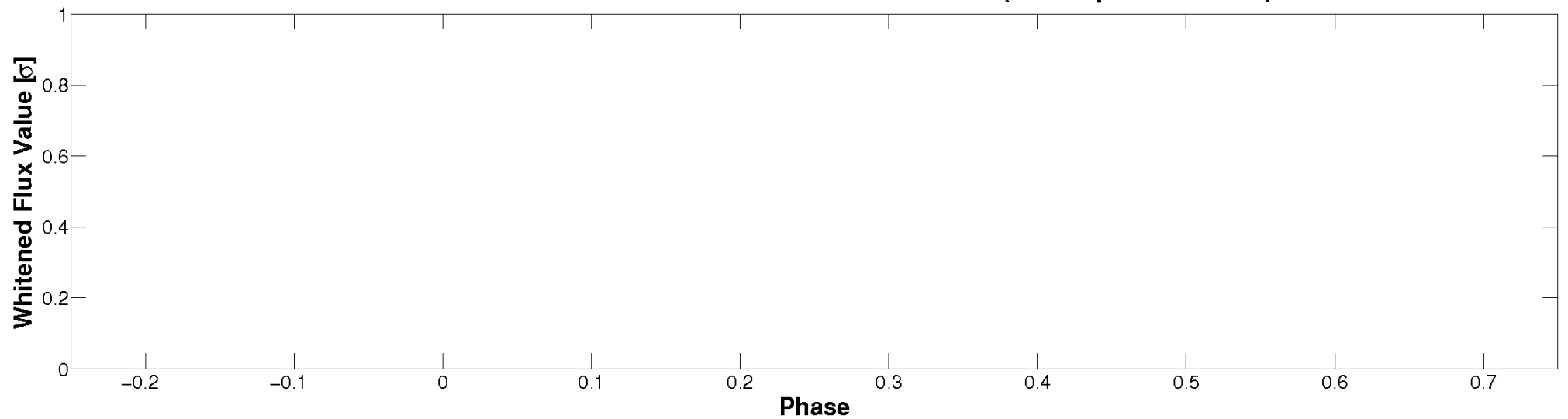


Non-Whitened Vs. Whitened Light Curve

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

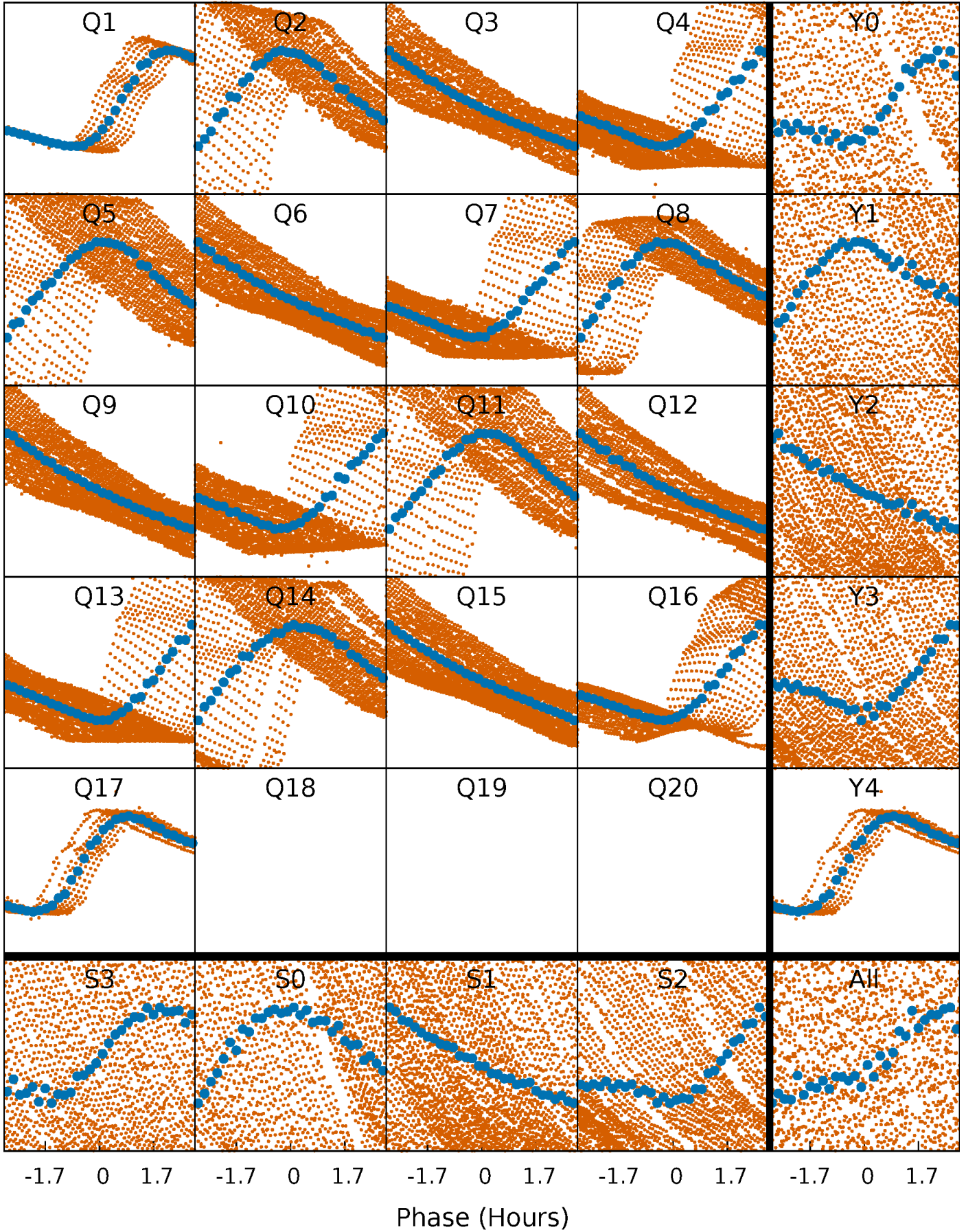


Planet 3 : Phased Whitened Flux Time Series (TPS Epoch/Period)



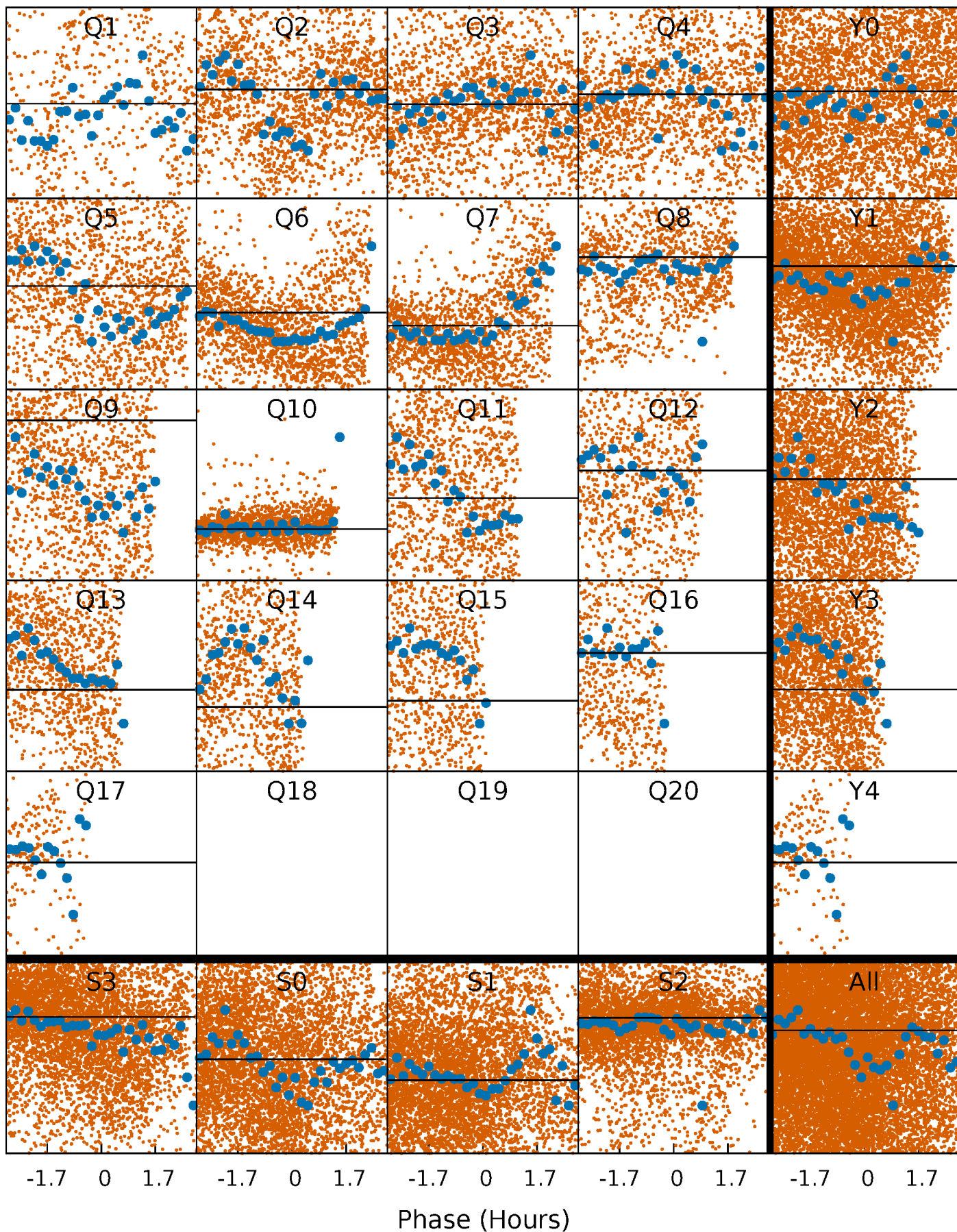
PDC Quarter-Phased Transit Curves

TCE 006070714-03 P= 0.535118 Days $T_0=131.692244$ (BKJD)



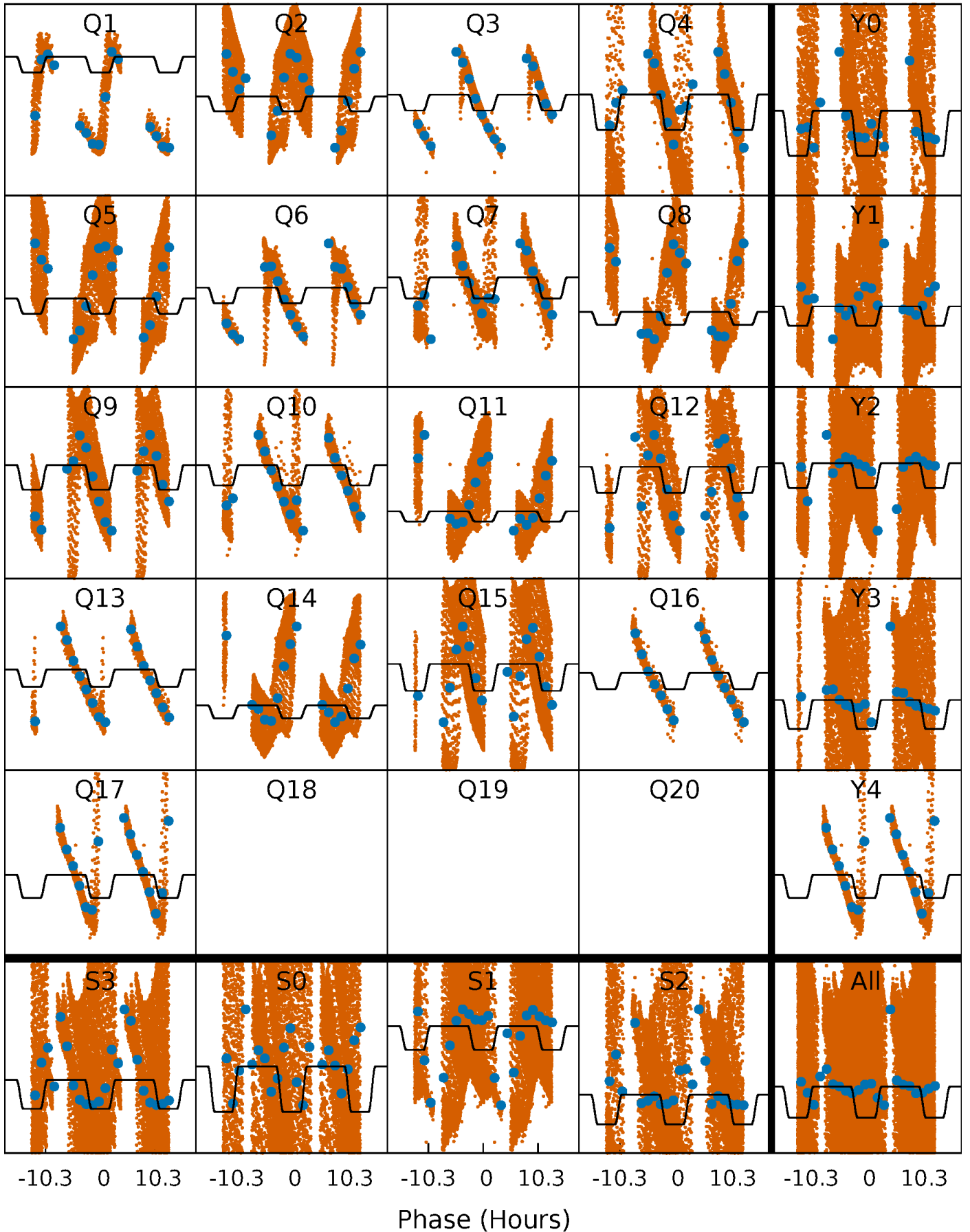
DV Quarter-Phased Transit Curves

TCE 006070714-03 P= 0.535118 Days $T_0=131.692244$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

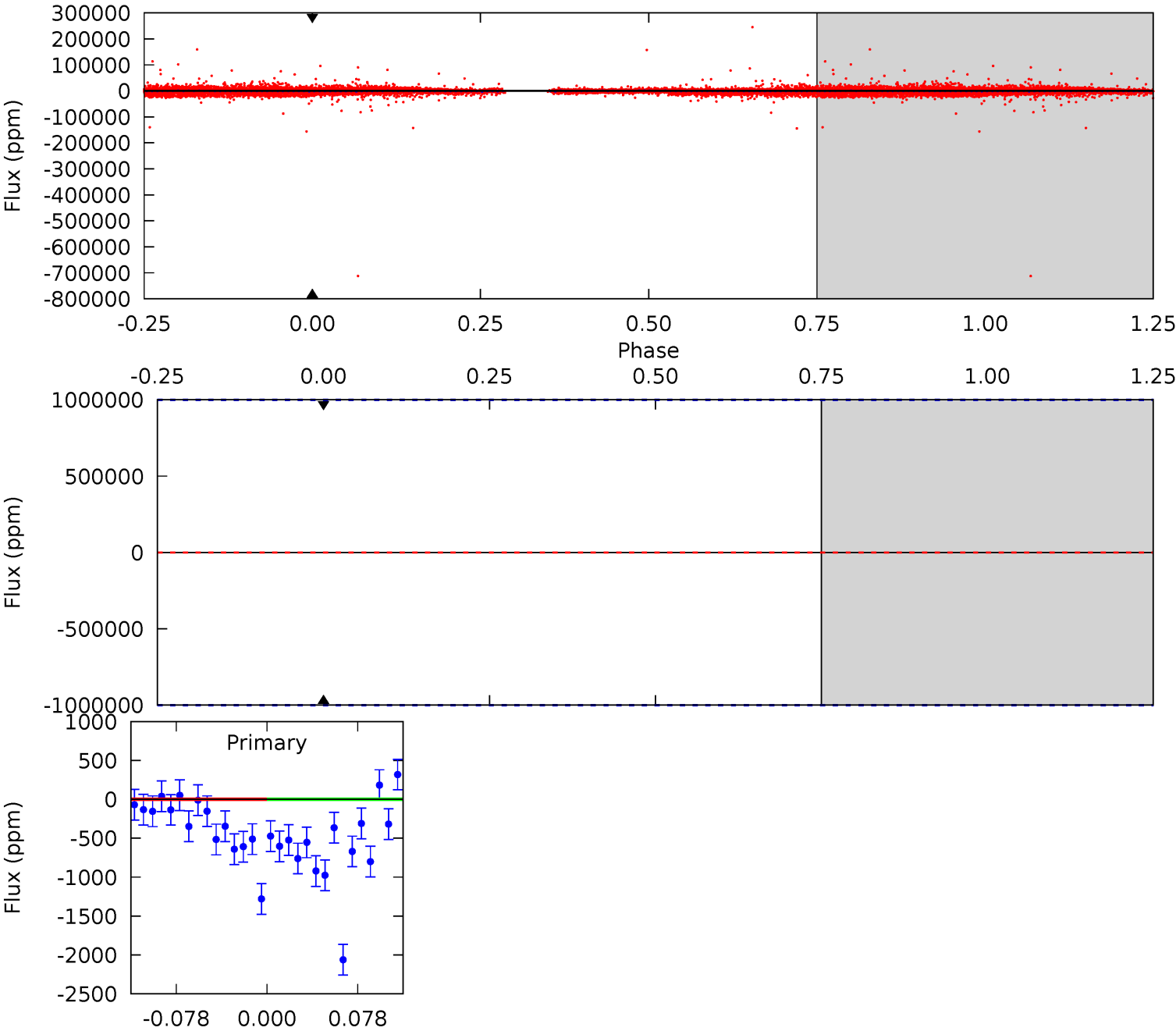
TCE 006070714-03 $P = 0.535118$ Days $T_0 = 131.683670$ (BKJD)



DV Model-Shift Uniqueness Test

006070714-03, P = 0.535118 Days, E = 131.157126 Days

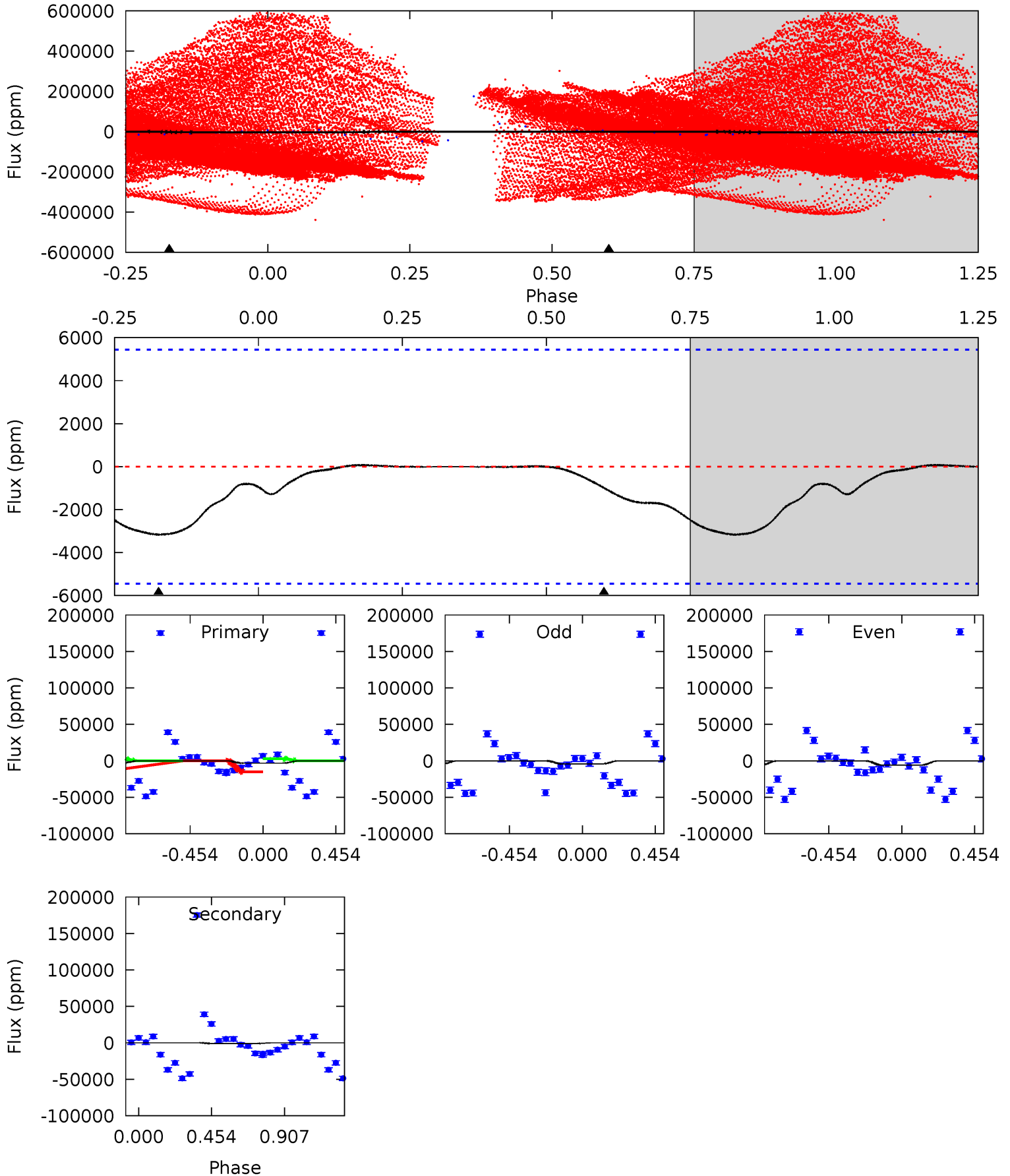
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
0	0	0	0	1.00	1.00	1.00	0	0	0	0	0	0	0	0



Alt Model-Shift Uniqueness Test

006070714-03, P = 0.535118 Days, E = 131.148552 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
2.46	0.77	0	0	4.24	0.75	0.07	2.46	2.46	0.77	0.77	0.63	0.05	0.02	4.38



Stellar Parameters For KIC 006070714

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6521^{+204}_{-272}	$4.237^{+0.149}_{-0.182}$	$-0.160^{+0.250}_{-0.300}$	$1.382^{+0.439}_{-0.293}$	$1.206^{+0.188}_{-0.188}$	$0.644^{+0.473}_{-0.312}$
	+3%/-4%	+4%/-4%	+156%/-188%	+32%/-21%	+16%/-16%	+73%/-49%
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 006070714-03 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	0 ± 1000000	$16.51^{+14.16}_{-10.60}$	4064^{+319}_{-293}	-3892^{+20702}_{-12475}	$-0.112^{+67.467}_{-55.490}$
Alt.	-990 ± 1285	$38.88^{+16.81}_{-15.06}$	4052^{+318}_{-288}	-3582^{+641}_{-309}	$0.056^{+0.179}_{-0.074}$

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

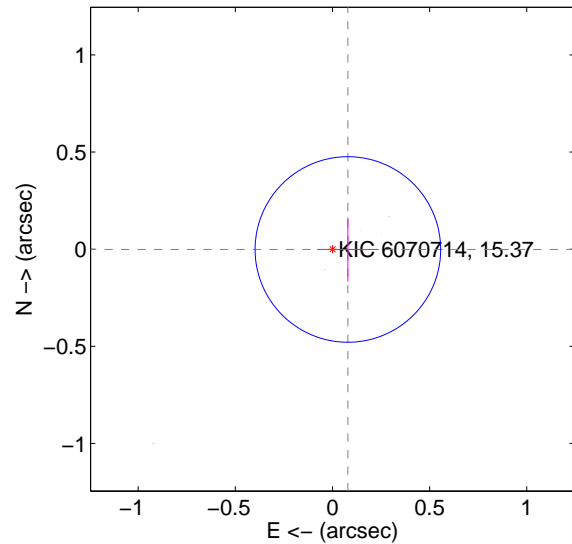
Supplemental centroid analysis for 006070714-03. Kepler magnitude: 15.37. Transit SNR -1.00

There are 10 quarters with good PRF difference image offsets

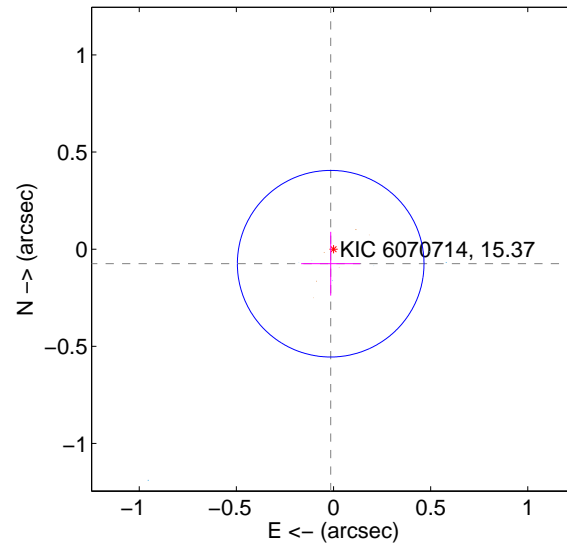
The direct PRF centroid is offset from the target star catalog position by about 0.19 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.079 ± 0.159	0.50	-0.079 ± 0.159	-0.002 ± 0.165
PRF-fit source offset from KIC position	0.076 ± 0.160	0.48	0.015 ± 0.152	-0.075 ± 0.164
photometric centroid source offset	1.03 ± 0.00	441.41	0.97 ± 0.00	-0.35 ± 0.00

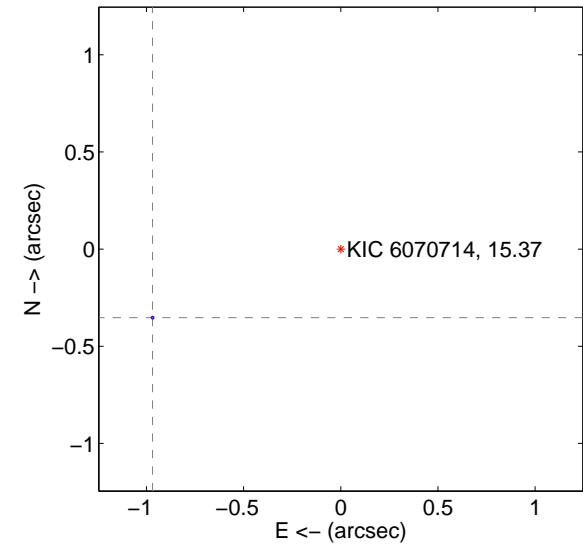
offset from difference PRF-fit to OOT PRF-fit



offset from difference PRF-fit to KIC position

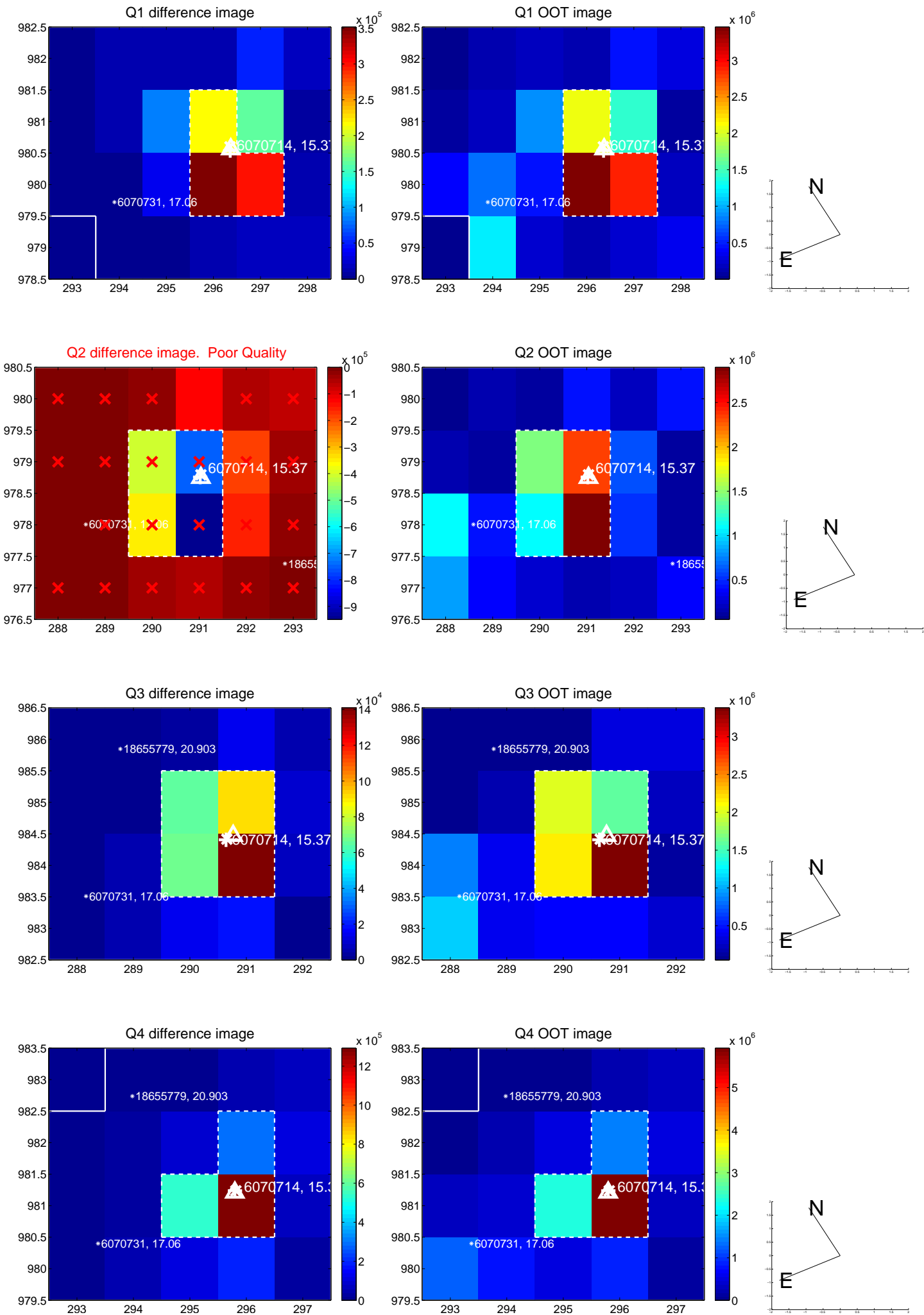


offset from photometric centroids

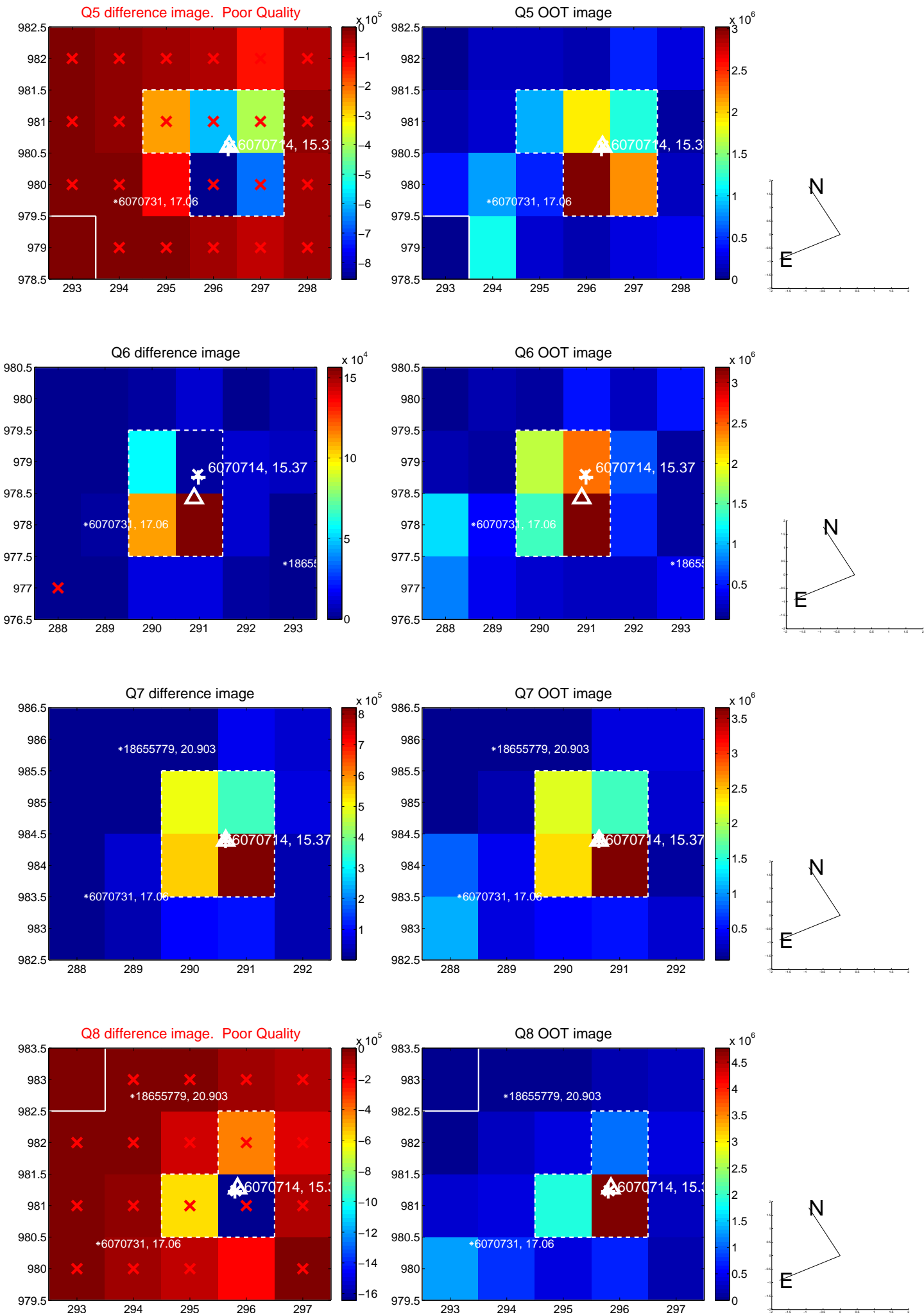


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets**; **Vermillion crosses: bad quarterly centroid offsets**; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

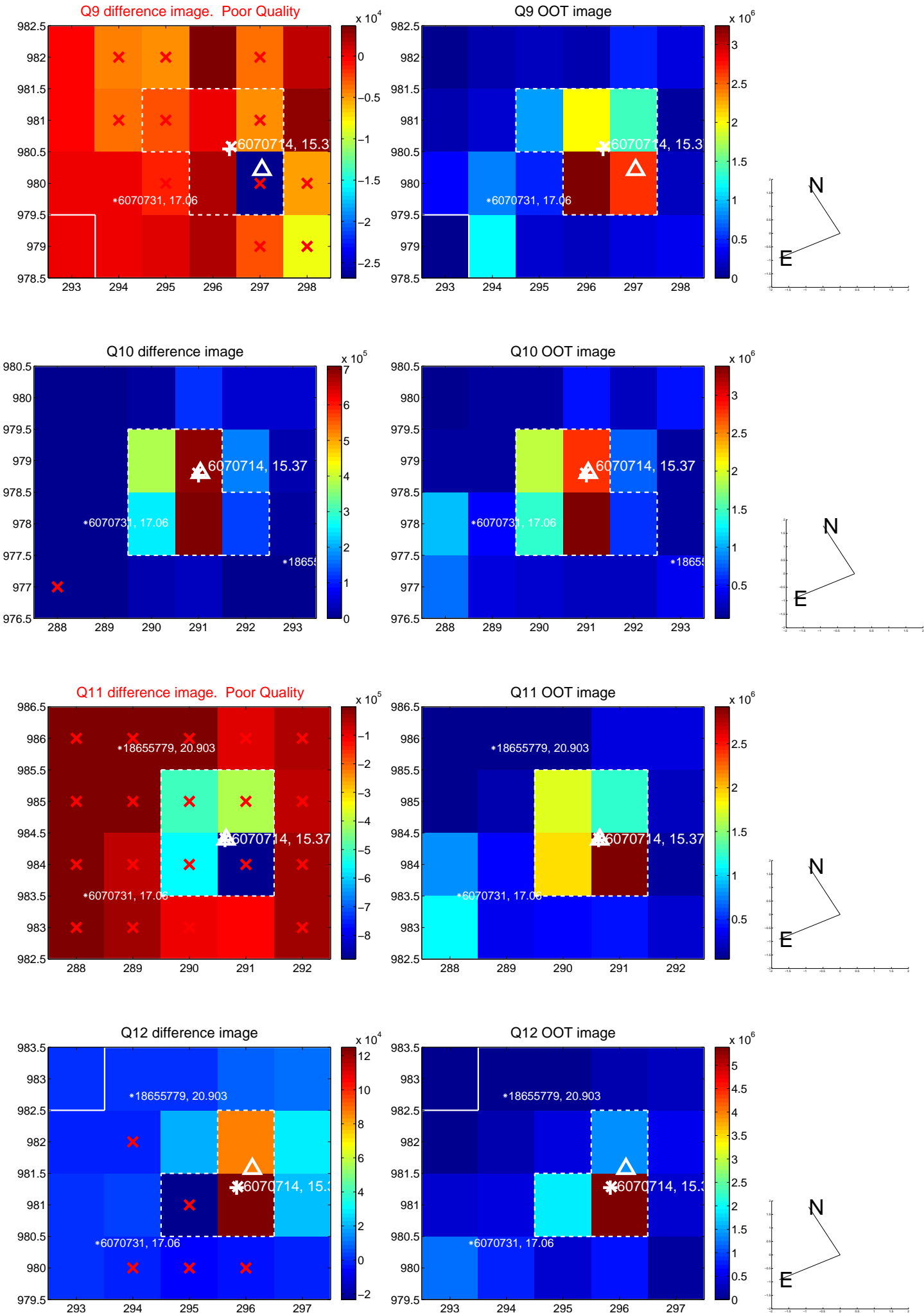
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



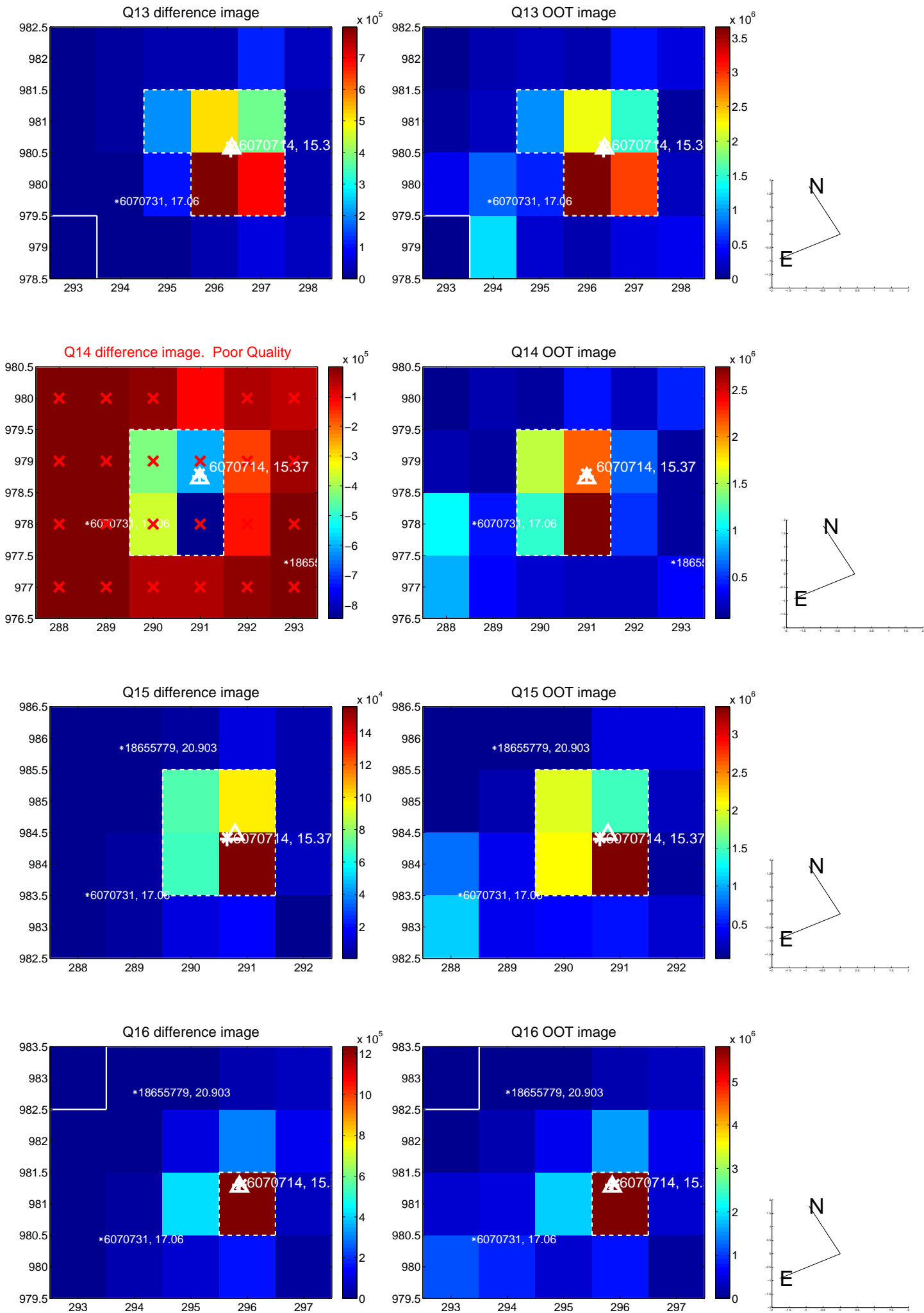
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



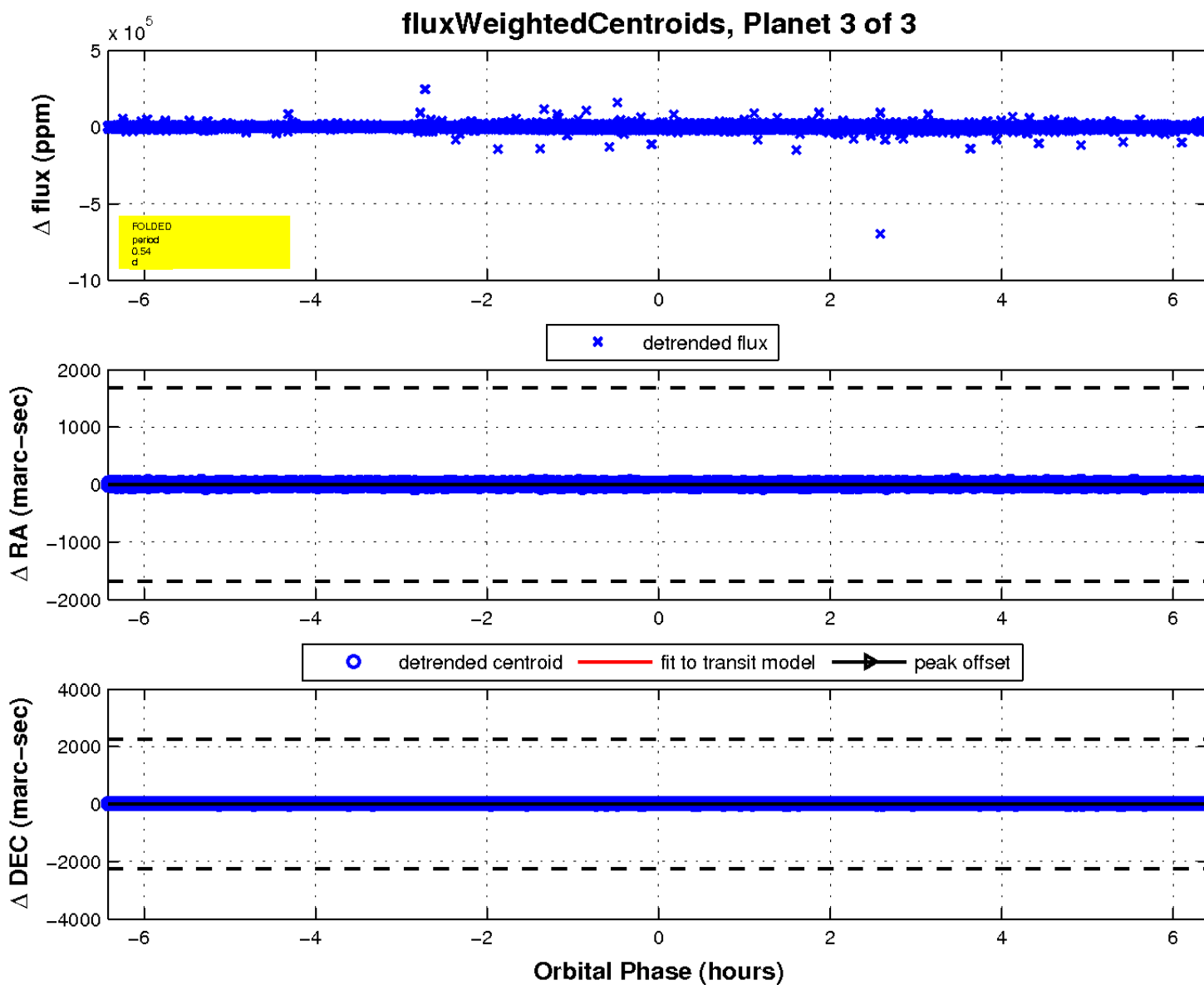
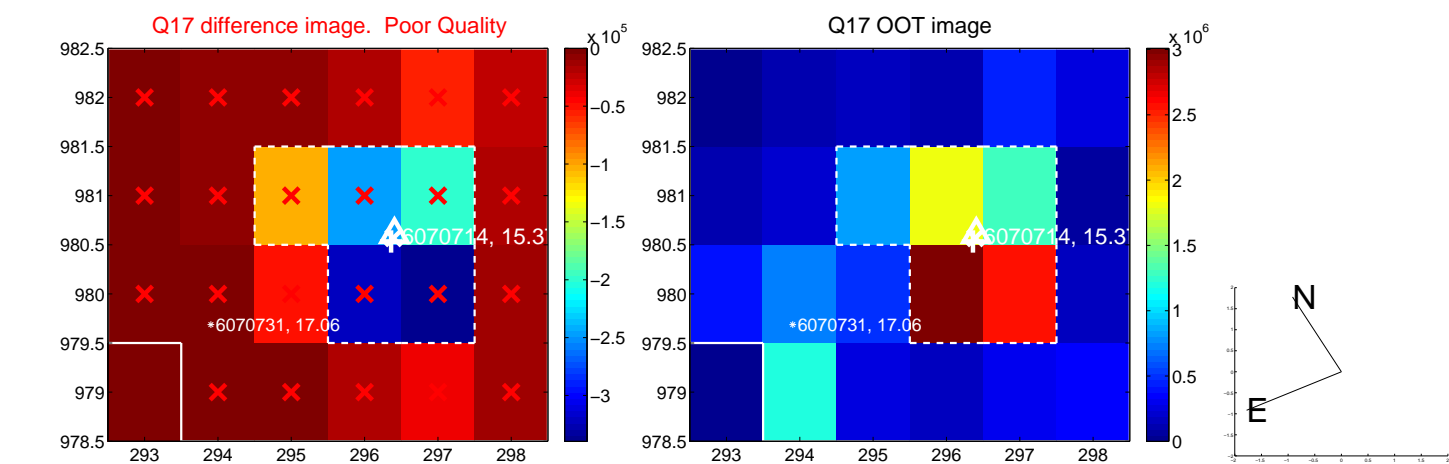
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



white \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

