

KIC 005790807

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})
005790807-01	OBS	0259.01	79.996235	207.125967	24262.8	6.332	906.5	965.6	2.49	6796	40.86	62.61
005790807-02	OBS	No	79.996152	207.377628	2485.9	27.889	16.8	24.8	2.49	6796	22.71	62.61
005790807-03	OBS	No	2.085085	133.485932	23.1	12.666	10.3	6.5	2.49	6796	1.21	8101.07
005790807-04	OBS	No	0.834015	131.838014	36.7	4.215	13.1	14.1	2.49	6796	1.74	27487.95
005790807-05	OBS	No	41.682256	151.886509	154.3	3.542	12.2	10.3	2.49	6796	3.56	149.32
005790807-07	OBS	No	22.683197	145.068615	164.5	5.392	11.8	7.6	2.49	6796	3.59	336.07
005790807-08	OBS	No	72.092786	190.659339	55.9	7.500	11.7	-1.0	2.49	6796	1.88	71.92

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
005790807-01	OBS	FP	0.35	0	1	0	0	MOD_SEC_ALT—CENT_SATURATED
005790807-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_SKYE_ZUMA—LPP_DV—MOD_NONUNIQ_DV—RESIDUAL_TCE—CENT_SATURATED
005790807-03	OBS	FP	0.00	1	0	0	0	LPP_DV—MOD_NONUNIQ_DV—CENT_SATURATED
005790807-04	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_SKYE_ZUMA—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_ALT—CENT_SATURATED
005790807-05	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_SATURATED
005790807-07	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—CENT_SATURATED
005790807-08	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_SATURATED

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

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

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

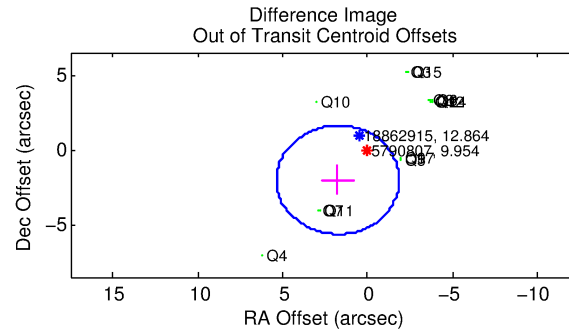
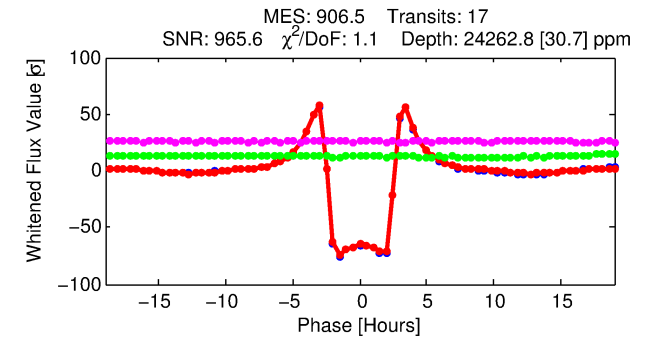
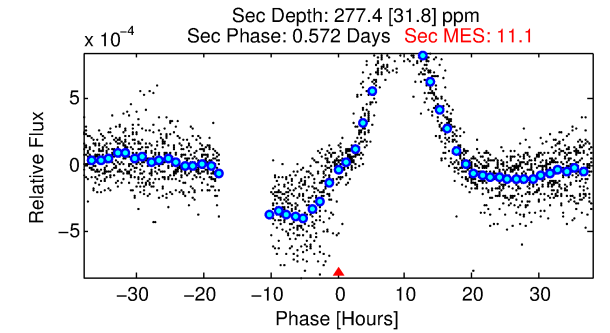
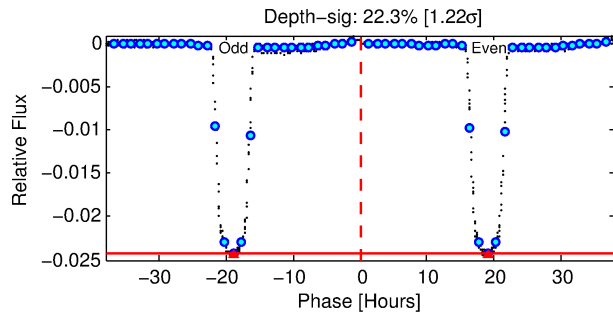
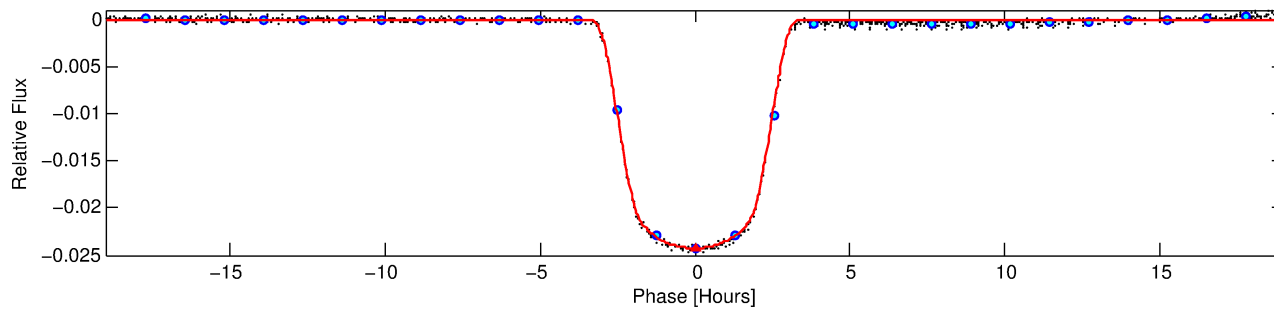
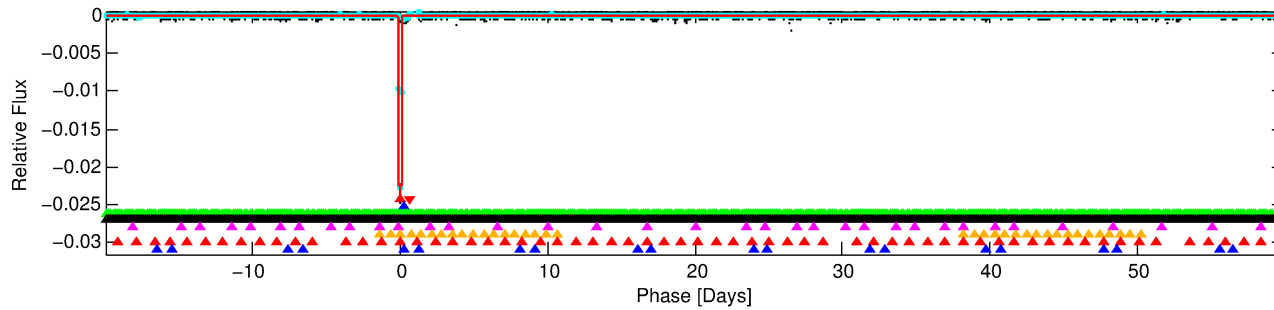
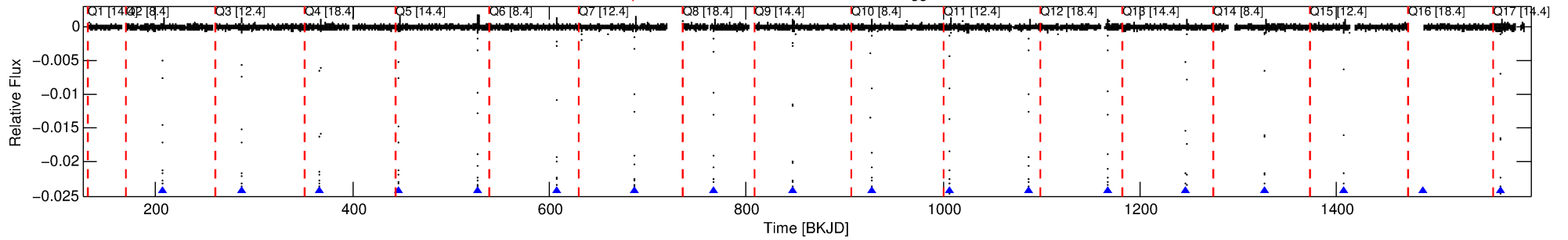
Ephemeris Match Information For 005790807-01

No Significant Match Found

DV One-Page Summary

KIC: 5790807 Candidate: 1 of 8 Period: 79.996 d
KOI: K00259.01 Corr: 0.994

Kp: 9.95 R*: 2.49 Rs Teff: 6796.0 K Logg: 3.88 Fe/H: 0.140



DV Fit Results:

Period = 79.99623 [0.00001] d
Epoch = 207.1260 [0.0001] BKJD
Rp/R* = 0.1504 [0.0001]
a/R* = 94.14 [0.15]
b = 0.61 [0.00]
Seff = 62.61 [24.95]
Teq = 717 [71] K
Rp = 40.86 [11.93] Re
a = 0.4351 [0.1130] AU
Ag = 17.30 [7.12] [2.29σ]
Teffp = 2262 [71] K [15.31σ]

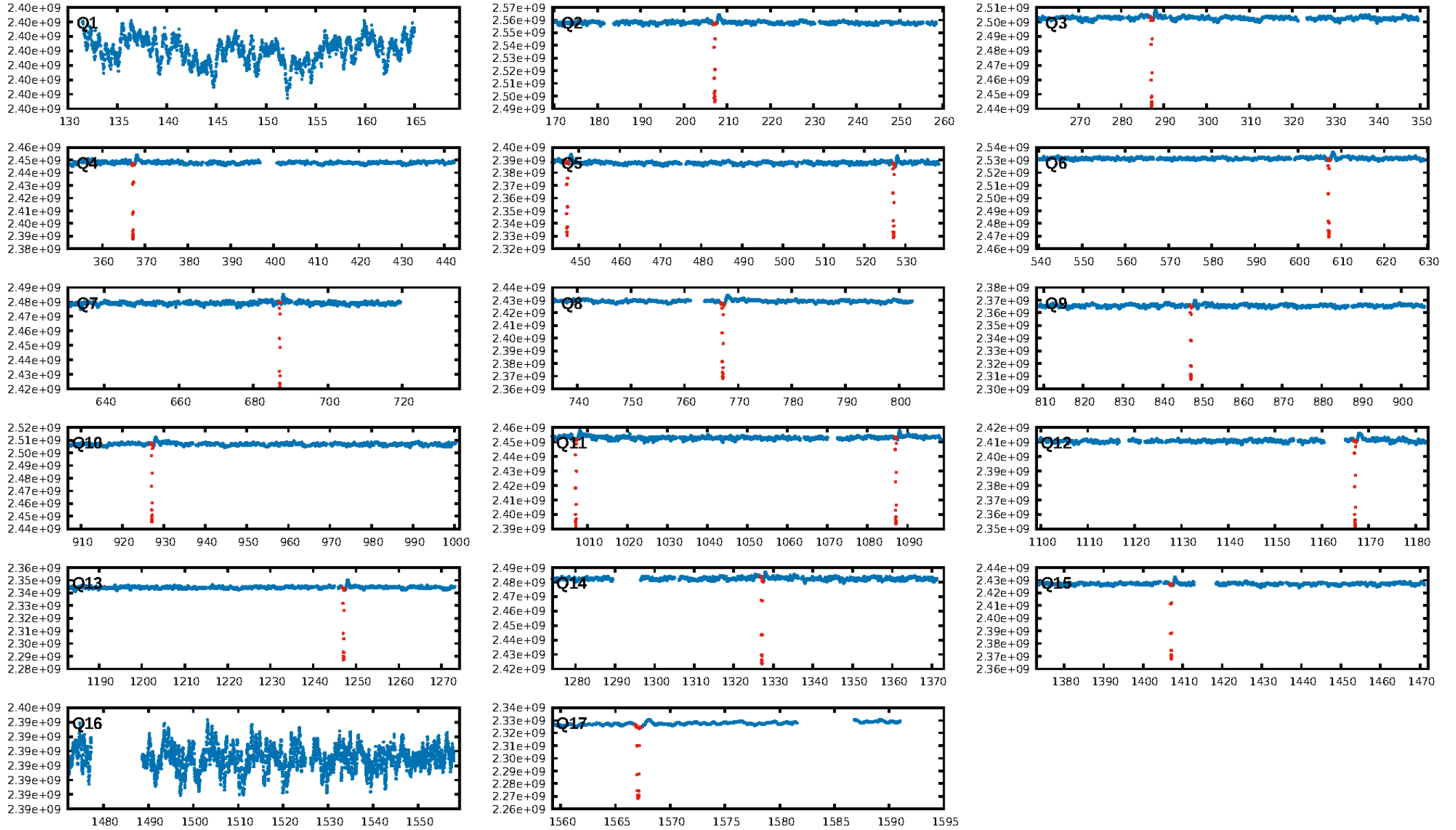
DV Diagnostic Results:

ShortPeriod-sig: 0.0% [0.00σ]
LongPeriod-sig: N/A
ModelChiSquare2-sig: 6.4%
ModelChiSquareGof-sig: 94.8%
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [16/16]
GhostDiagnostic-chr: N/A
Centroid-sig: 0.0%
Centroid-so: 0.431 arcsec [136.00σ]
OotOffset-rm: 2.663 arcsec [2.20σ]
OotOffset-st: 4/4/3/3 [14]
KicOffset-rm: 3.741 arcsec [3.07σ]
KicOffset-st: 4/4/3/3 [14]
DiffImageQuality-fgm: 0.00 [0/14]
DiffImageOverlap-fno: 0.00 [0/14]

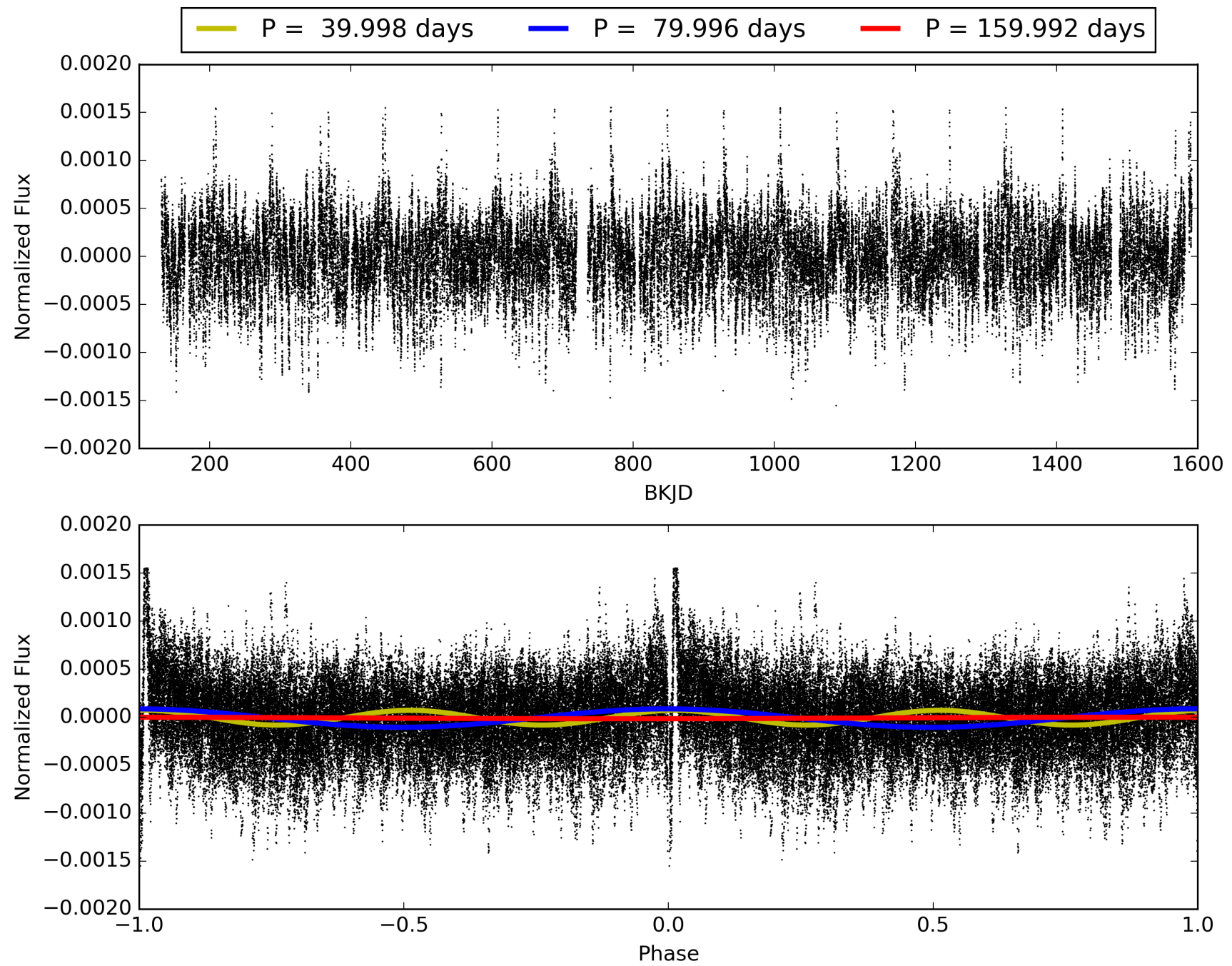
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This Data Validation Report Summary was produced in the Kepler Science Operations Center Pipeline at NASA Ames Research Center

TCE 005790807-01, PDC Light Curves

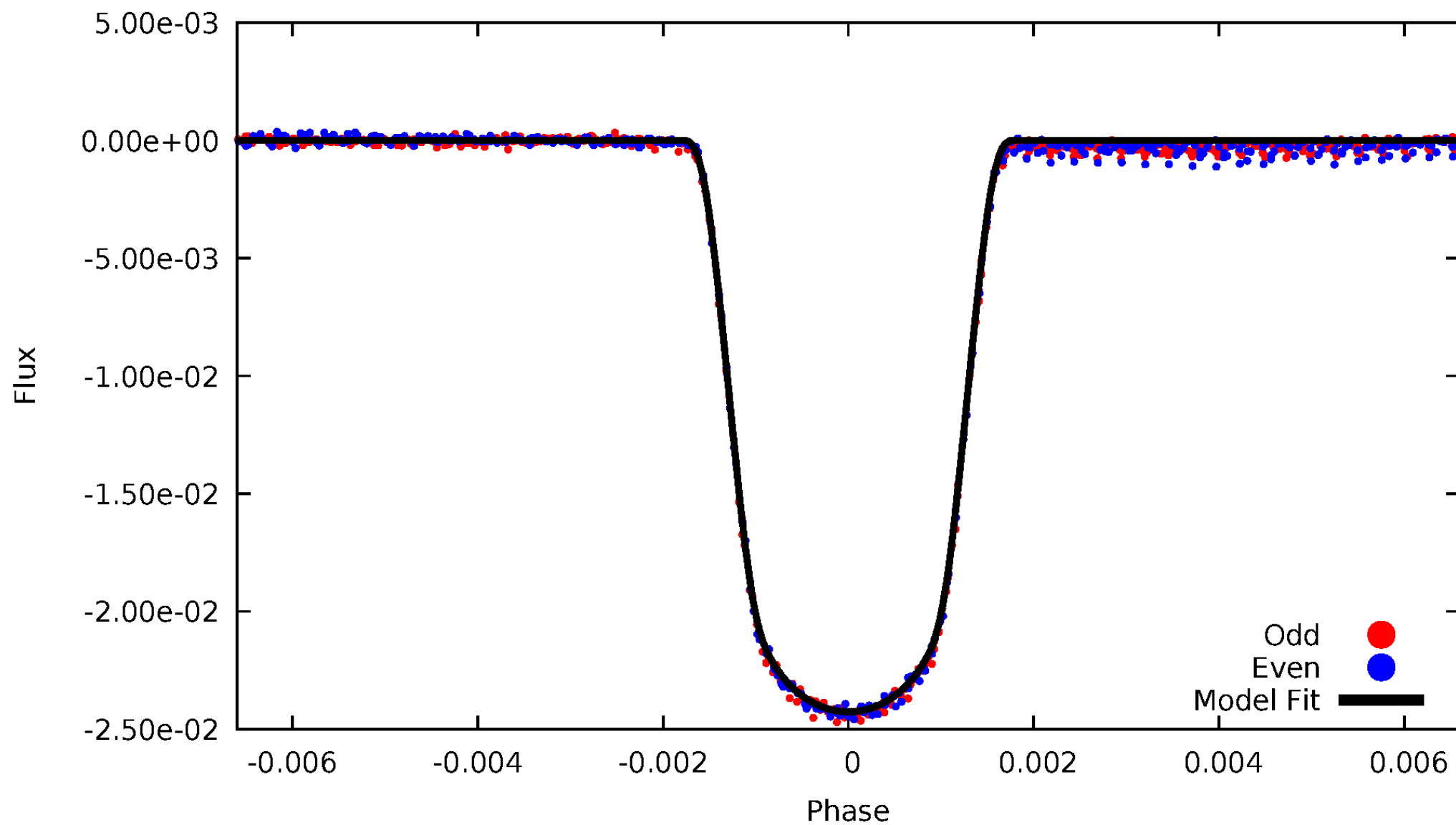


TCE 005790807-01



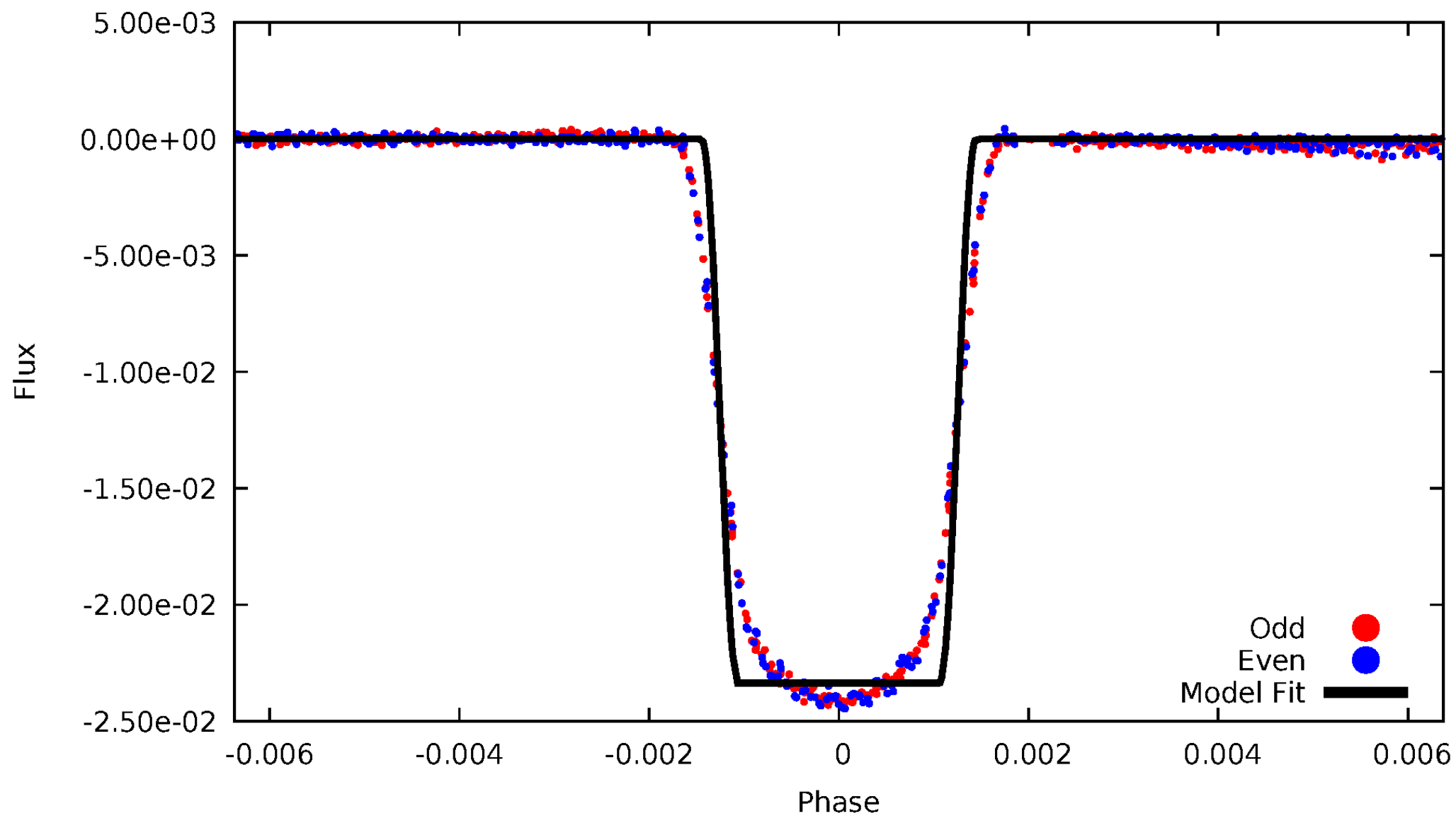
DV Odd/Even

TCE 005790807-01



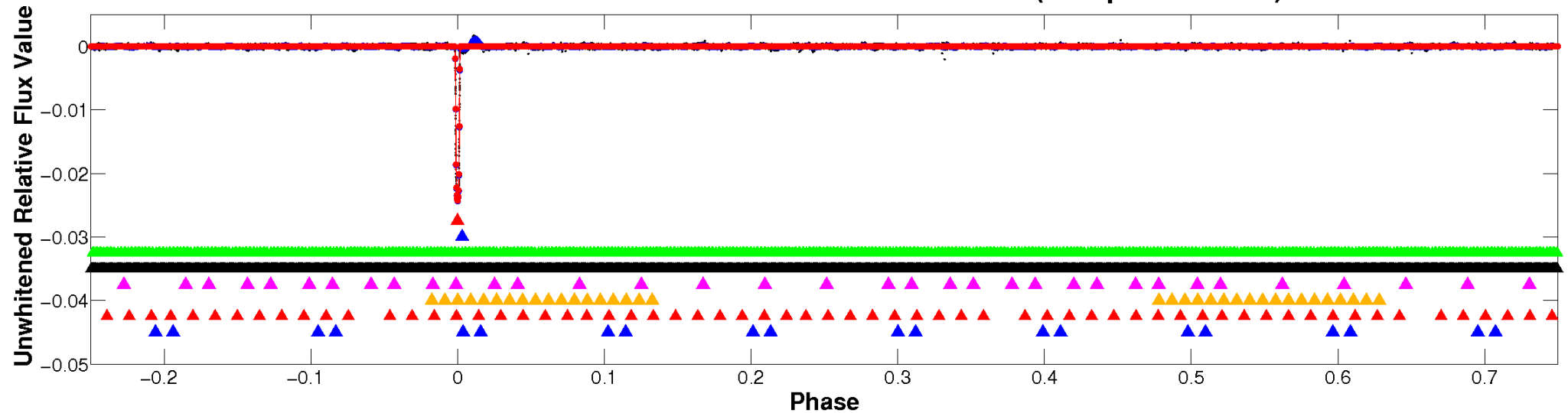
ALT Odd/Even

TCE 005790807-01

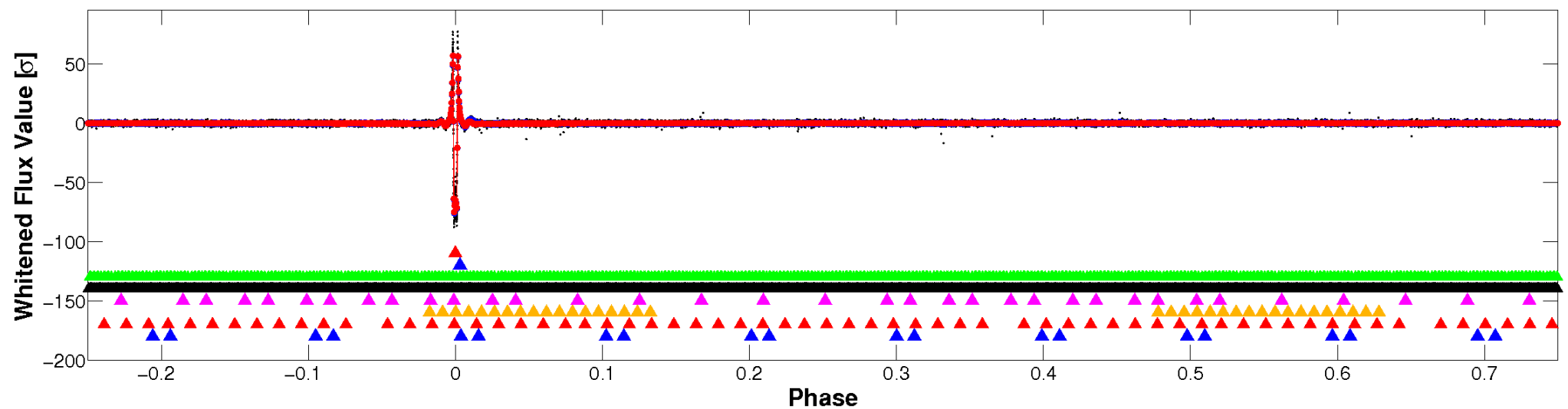


Non-Whitened Vs. Whitened Light Curve

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

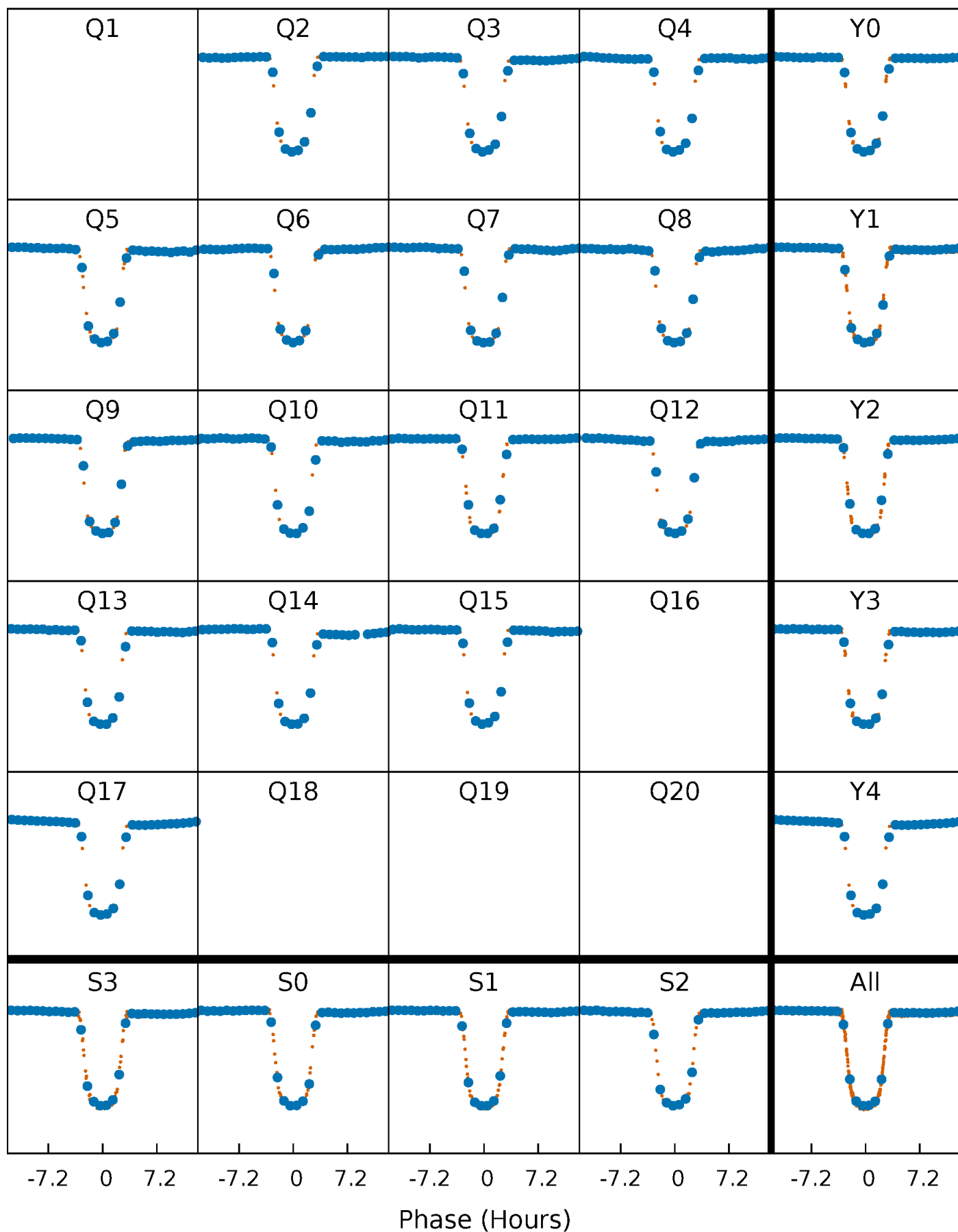


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



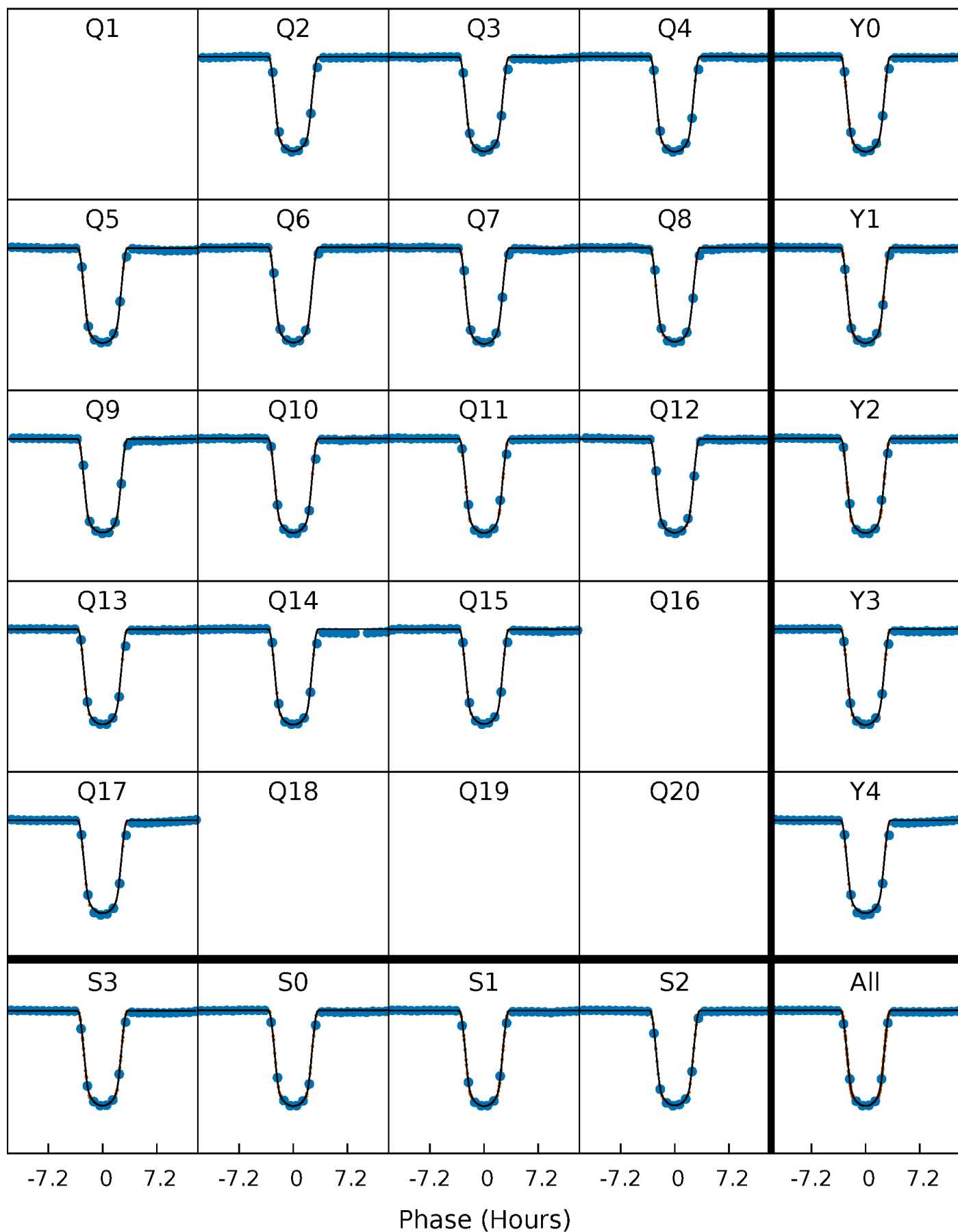
PDC Quarter-Phased Transit Curves

TCE 005790807-01 P= 79.996235 Days $T_0=207.125967$ (BKJD)



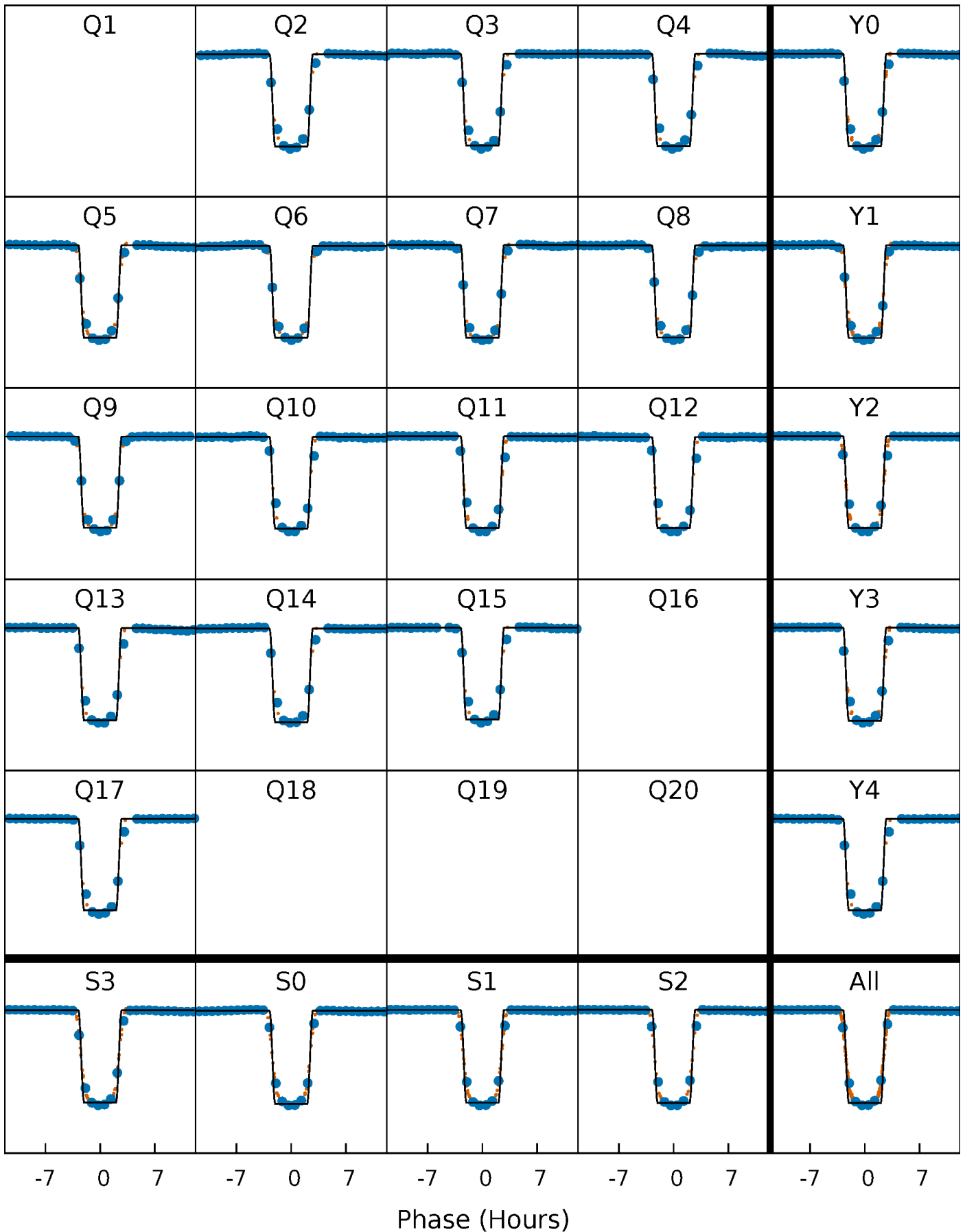
DV Quarter-Phased Transit Curves

TCE 005790807-01 P= 79.996235 Days $T_0=207.125967$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

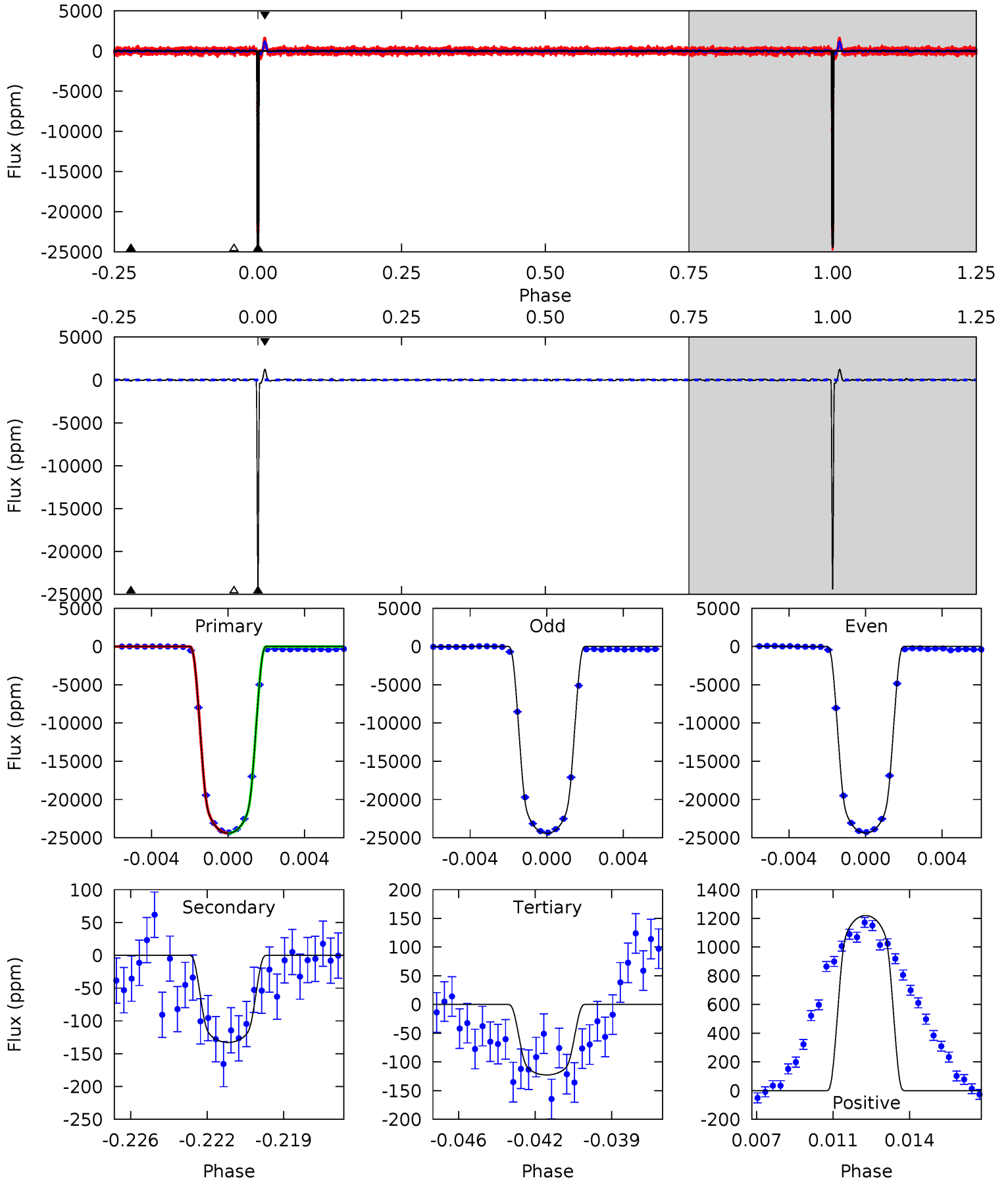
TCE 005790807-01 P= 79.996151 Days $T_0=207.126653$ (BKJD)



DV Model-Shift Uniqueness Test

005790807-01, P = 79.996235 Days, E = 127.129732 Days

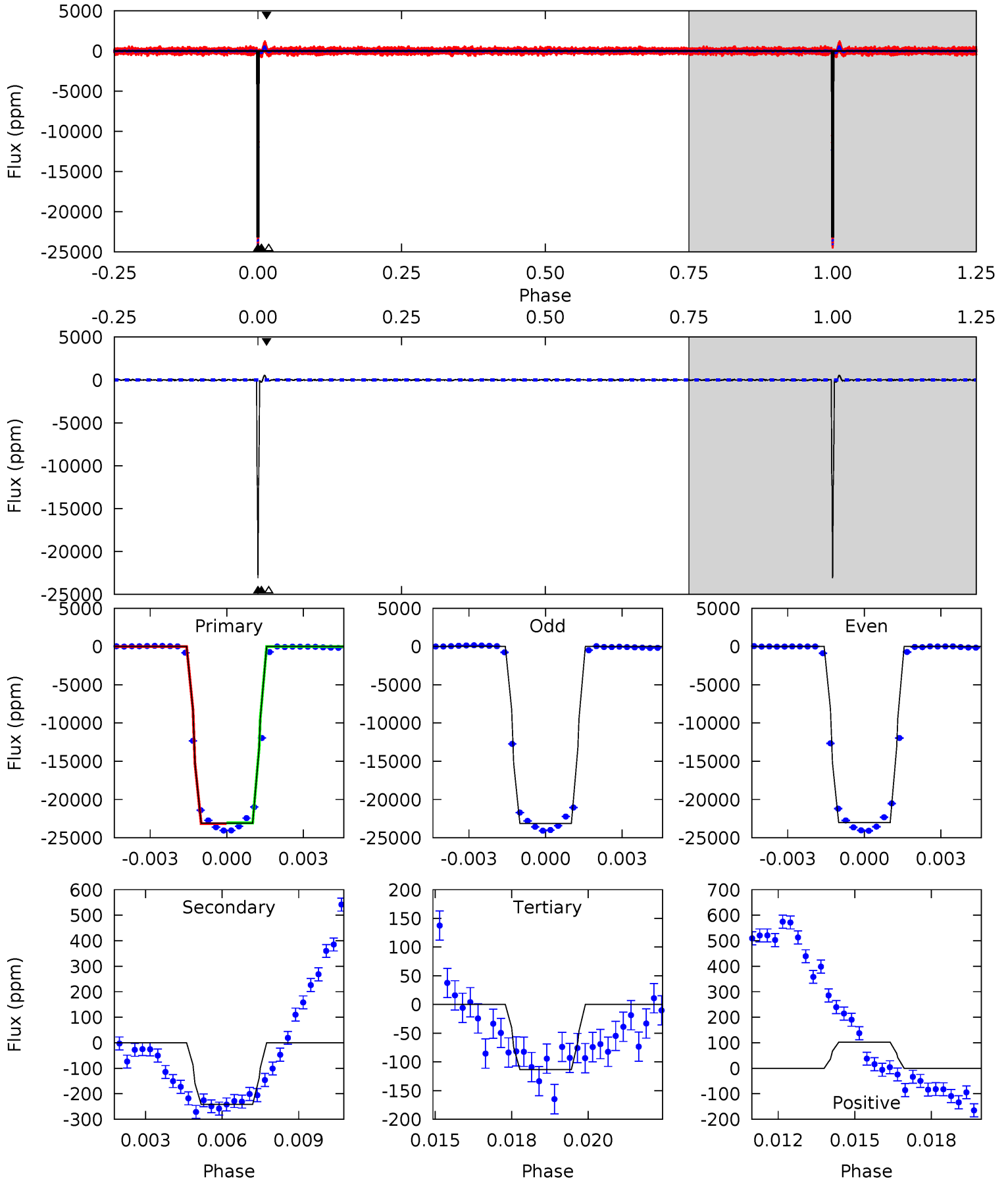
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
2122	11.5	10.7	106.1	5.22	2.92	7.85	2112	2016	0.87	-94.5	1.96	1.00	0.05	1.61



Alt Model-Shift Uniqueness Test

005790807-01, P = 79.996151 Days, E = 127.130502 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
1835	19.2	8.99	8.11	5.26	2.98	3.00	1826	1827	10.2	11.1	4.78	1.00	0.02	3.80



Stellar Parameters For KIC 005790807

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6796^{+67}_{-88}	$3.880^{+0.224}_{-0.096}$	$0.140^{+0.150}_{-0.150}$	$2.490^{+0.391}_{-0.727}$	$1.715^{+0.150}_{-0.244}$	$0.157^{+0.205}_{-0.047}$
	+1%/-1%	+6%/-2%	+107%/-107%	+16%/-29%	+9%/-14%	+131%/-30%
Source	SPE68	SPE68	SPE68	DSEP		

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

Secondary Eclipse Parameters for KIC 005790807-01 / KOI 0259.01

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-133 ± 11	$40.91^{+3.30}_{-6.18}$	995^{+43}_{-68}	2658^{+35}_{-38}	$8.473^{+3.010}_{-1.472}$
Alt.	-241 ± 13	$41.51^{+3.28}_{-6.20}$	997^{+43}_{-68}	2868^{+26}_{-25}	15^{+5}_{-2}

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

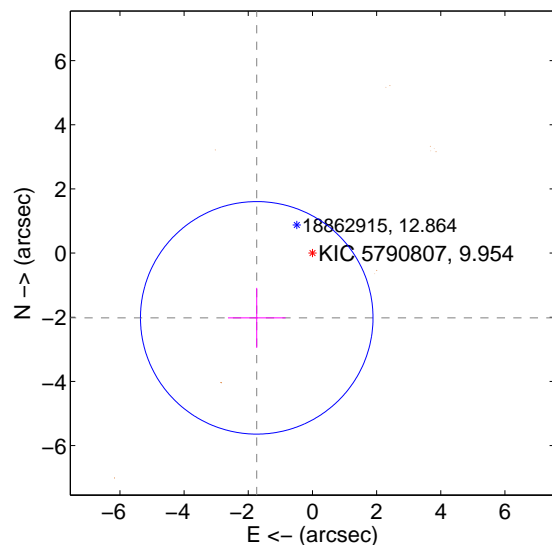
Supplemental centroid analysis for 005790807-01. **Kepler magnitude: 9.95.** Transit SNR 965.56

There are 0 quarters with good PRF difference image offsets

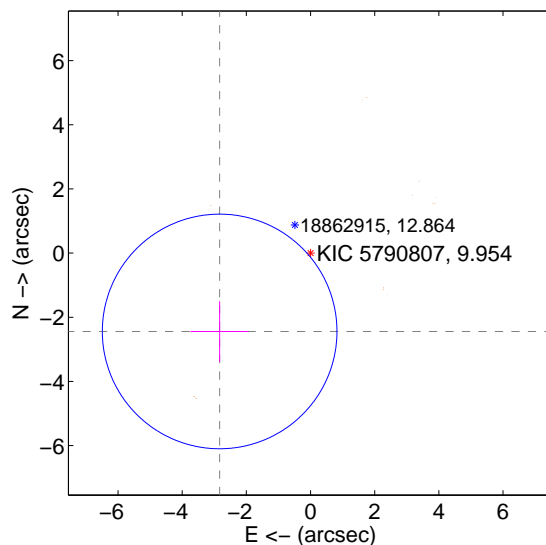
The direct PRF centroid is offset from the target star catalog position by about 0.60 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	2.663 ± 1.208	2.20	1.737 ± 0.898	-2.019 ± 0.935
PRF-fit source offset from KIC position	3.741 ± 1.219	3.07	2.833 ± 0.908	-2.443 ± 0.945
photometric centroid source offset	0.43 ± 0.00	136.00	0.42 ± 0.00	-0.07 ± 0.00

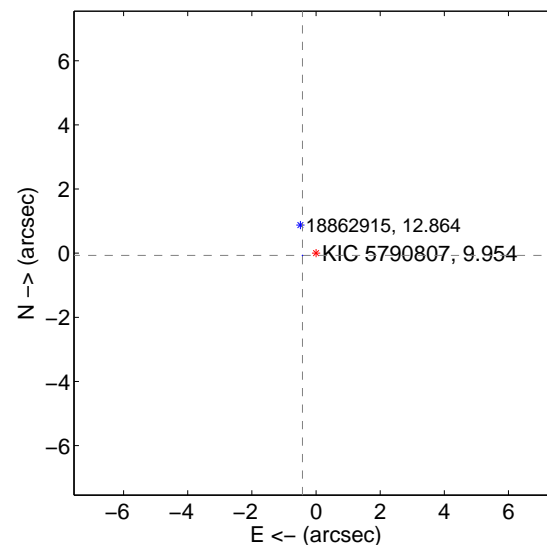
offset from difference PRF-fit to OOT PRF-fit



offset from difference PRF-fit to KIC position

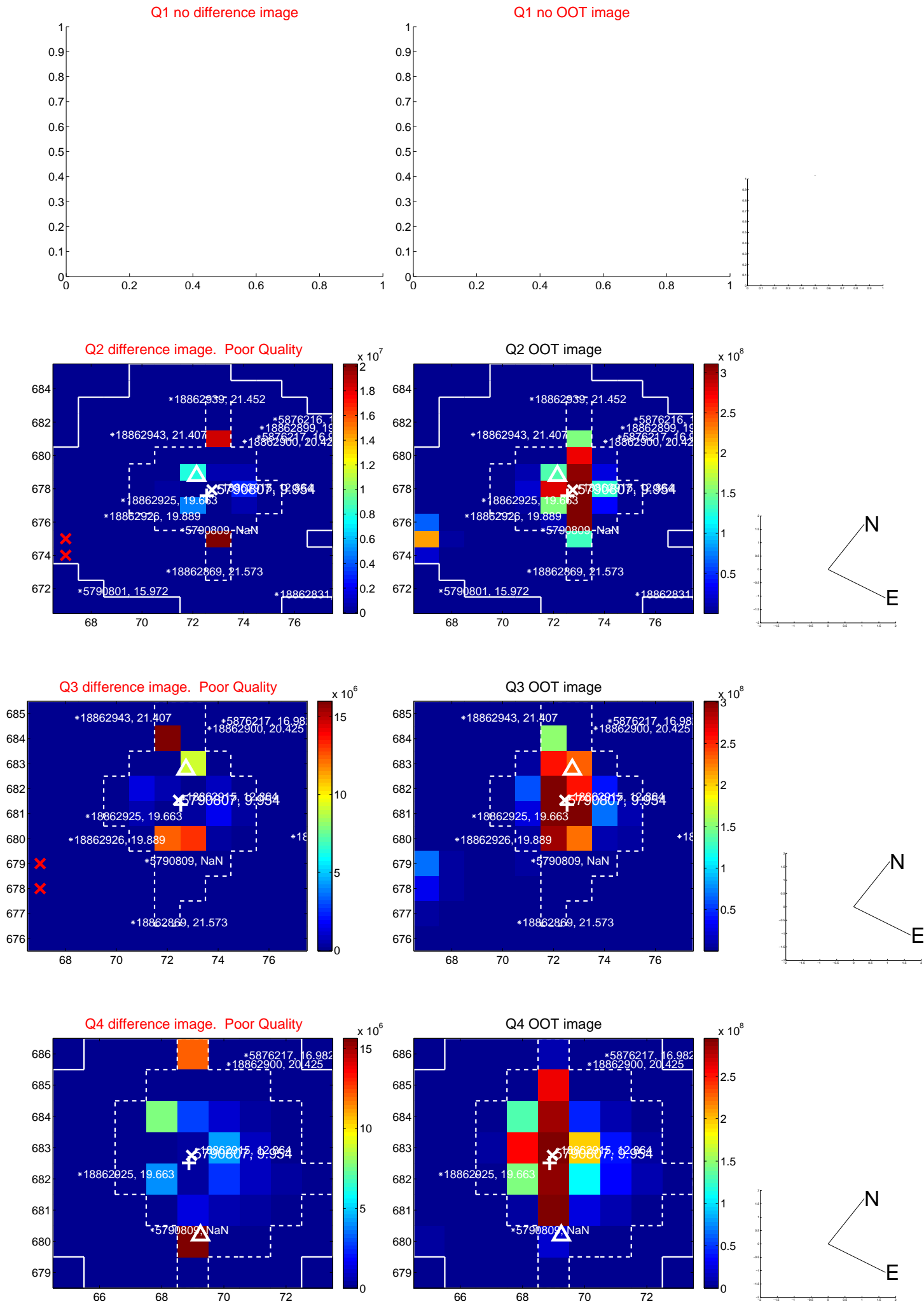


offset from photometric centroids

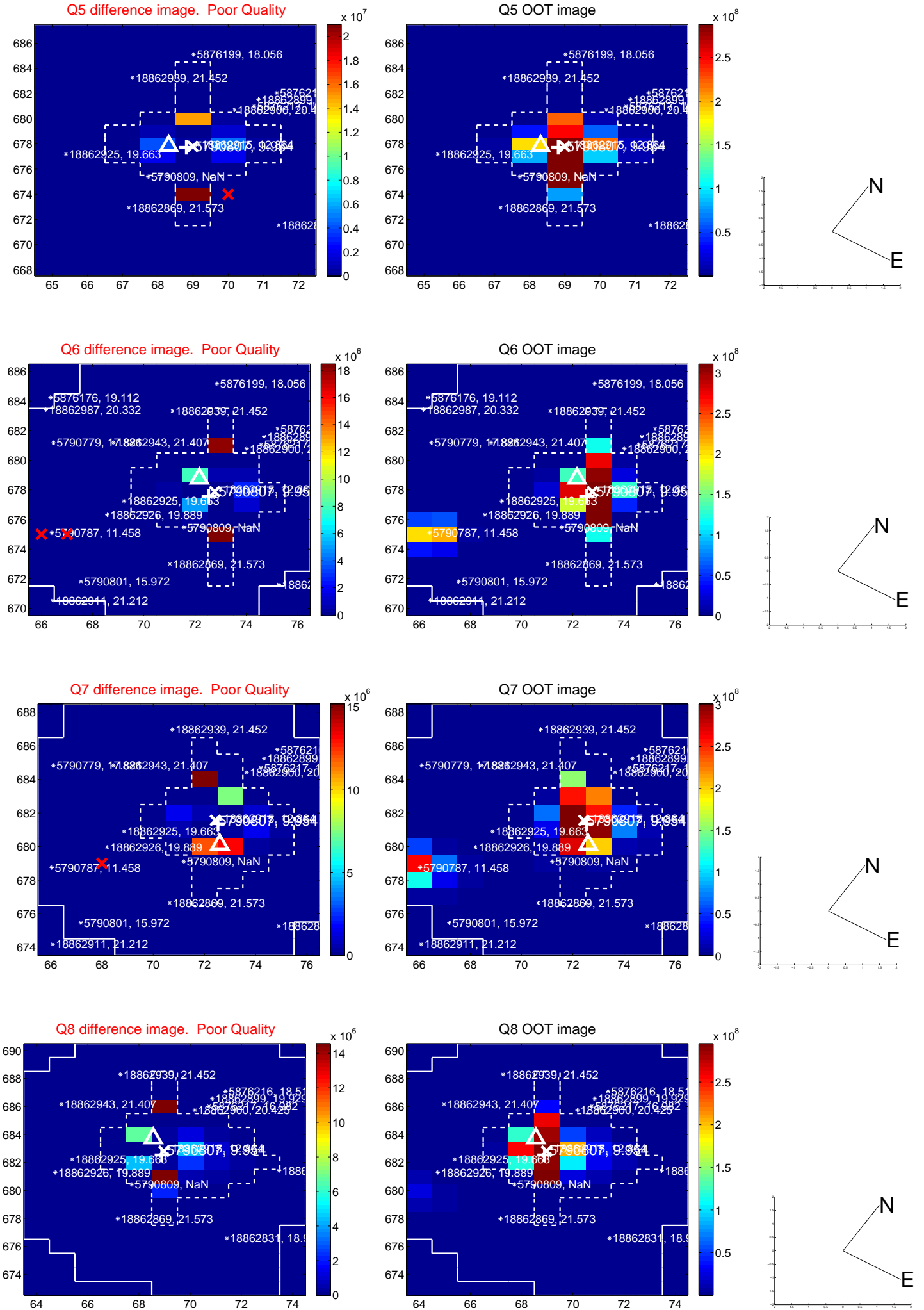


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets;** magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

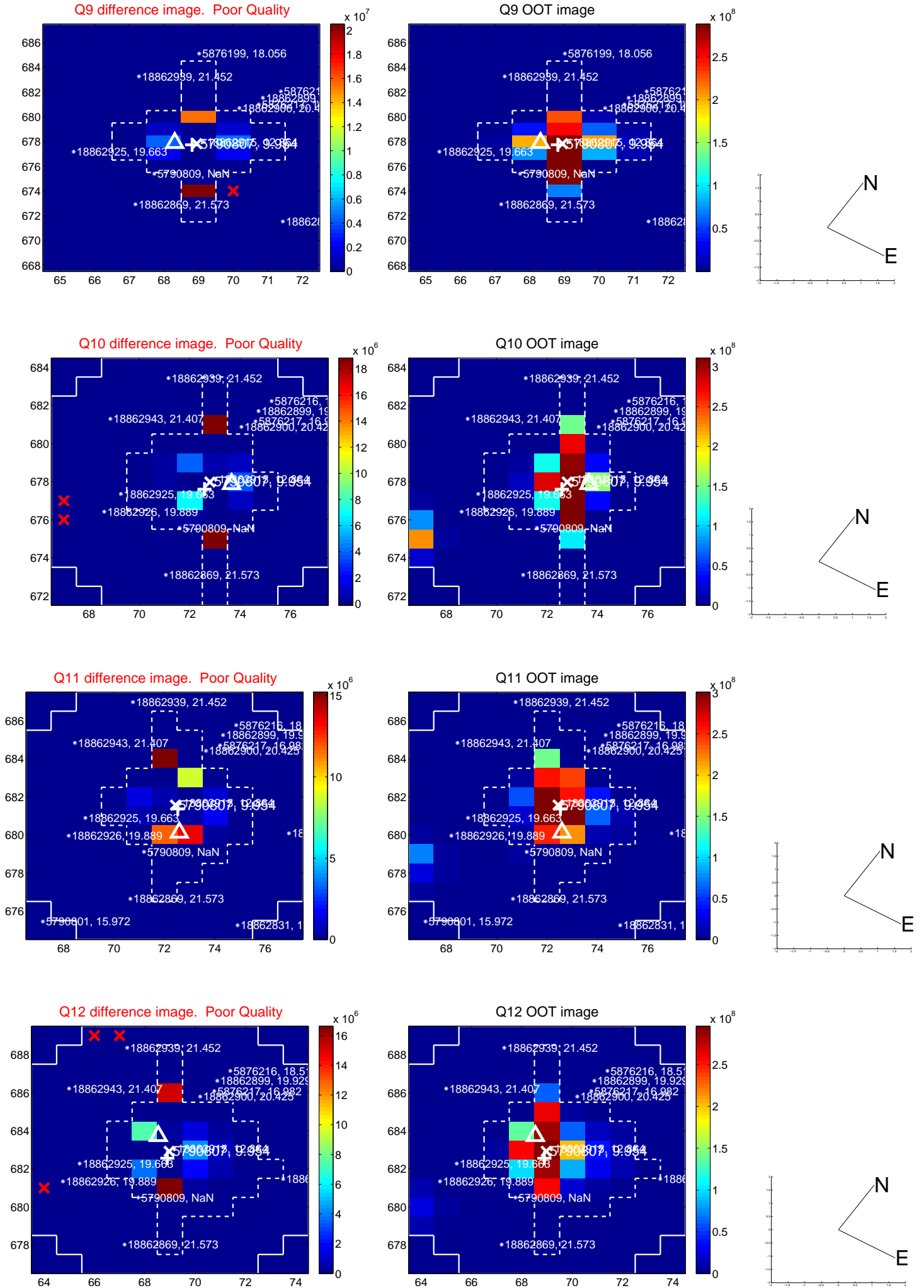
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



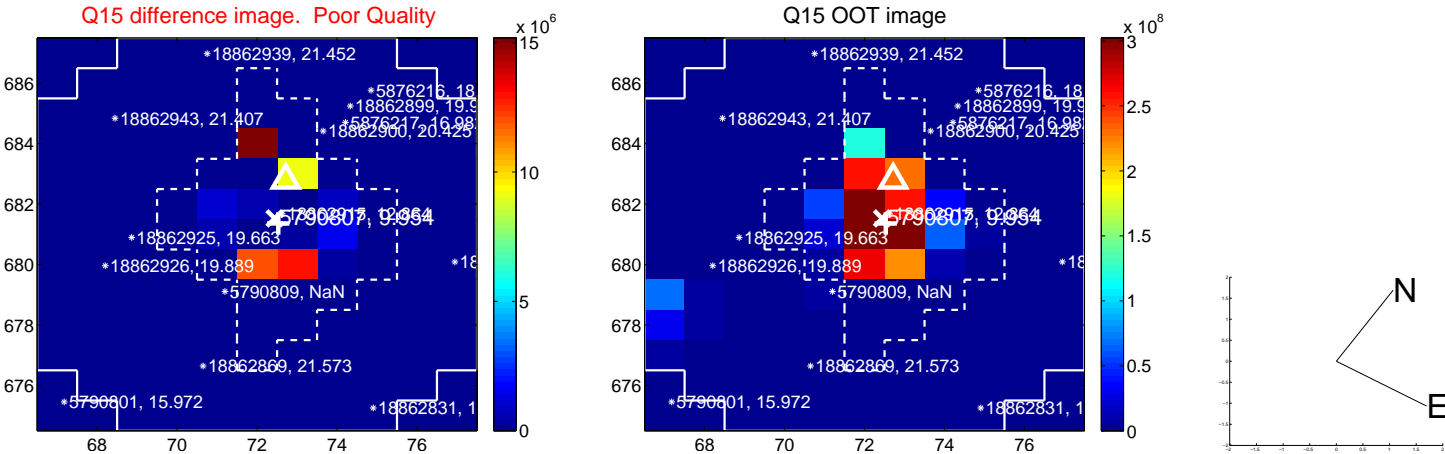
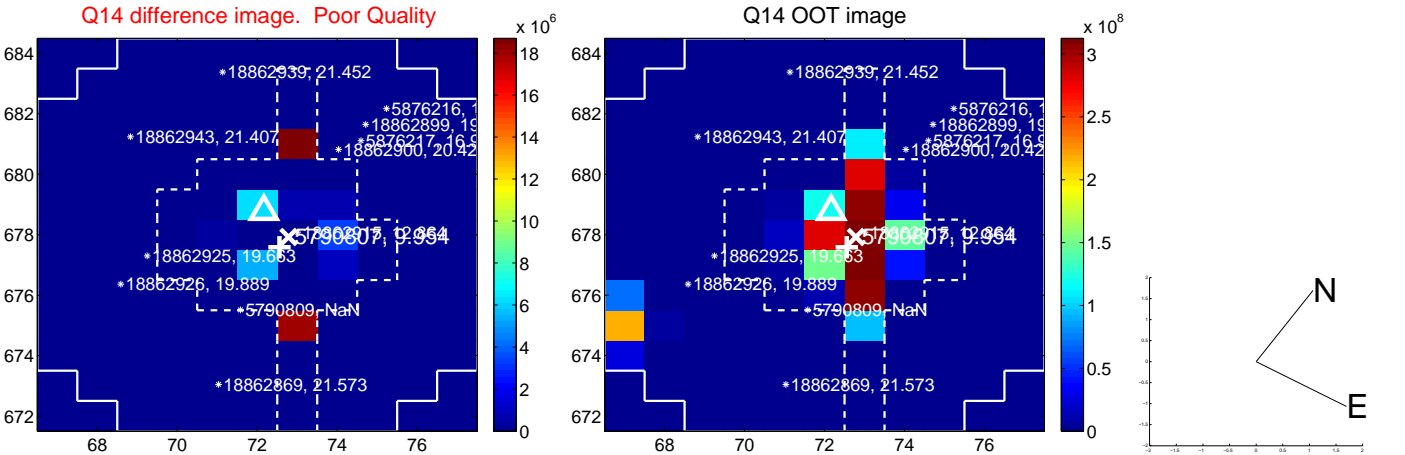
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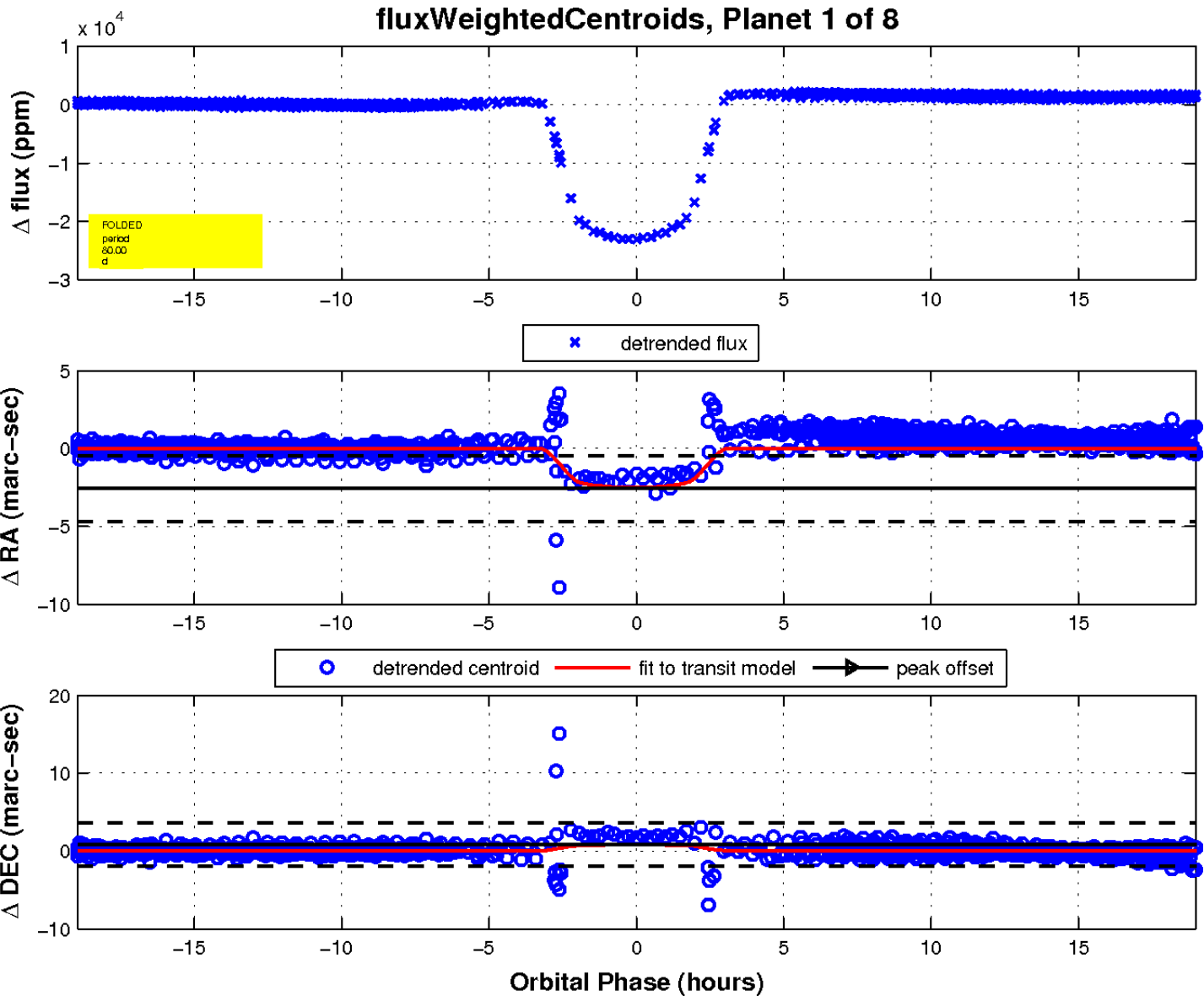
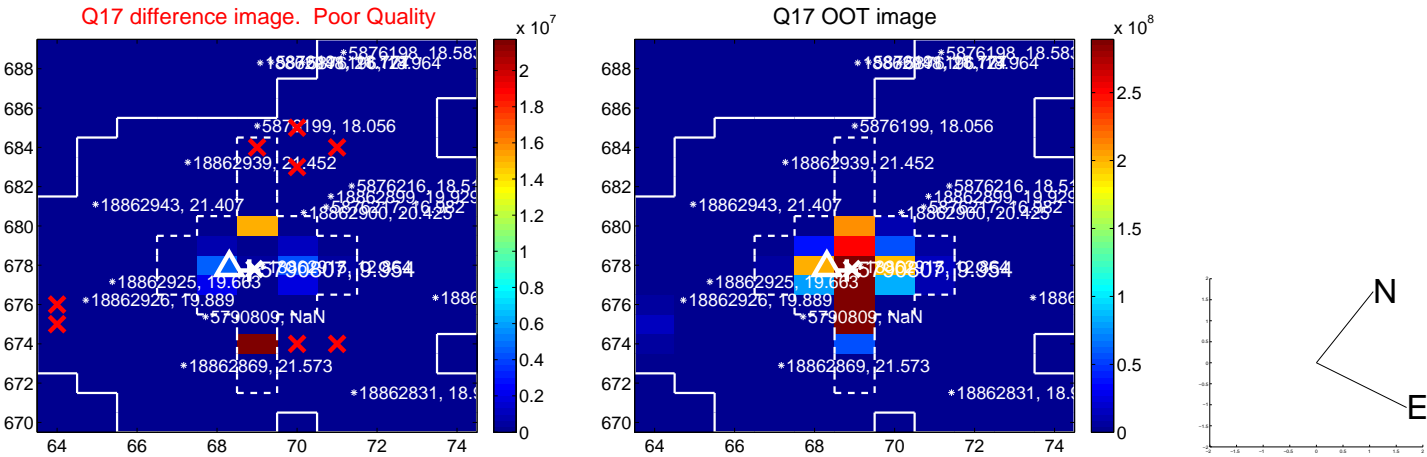
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

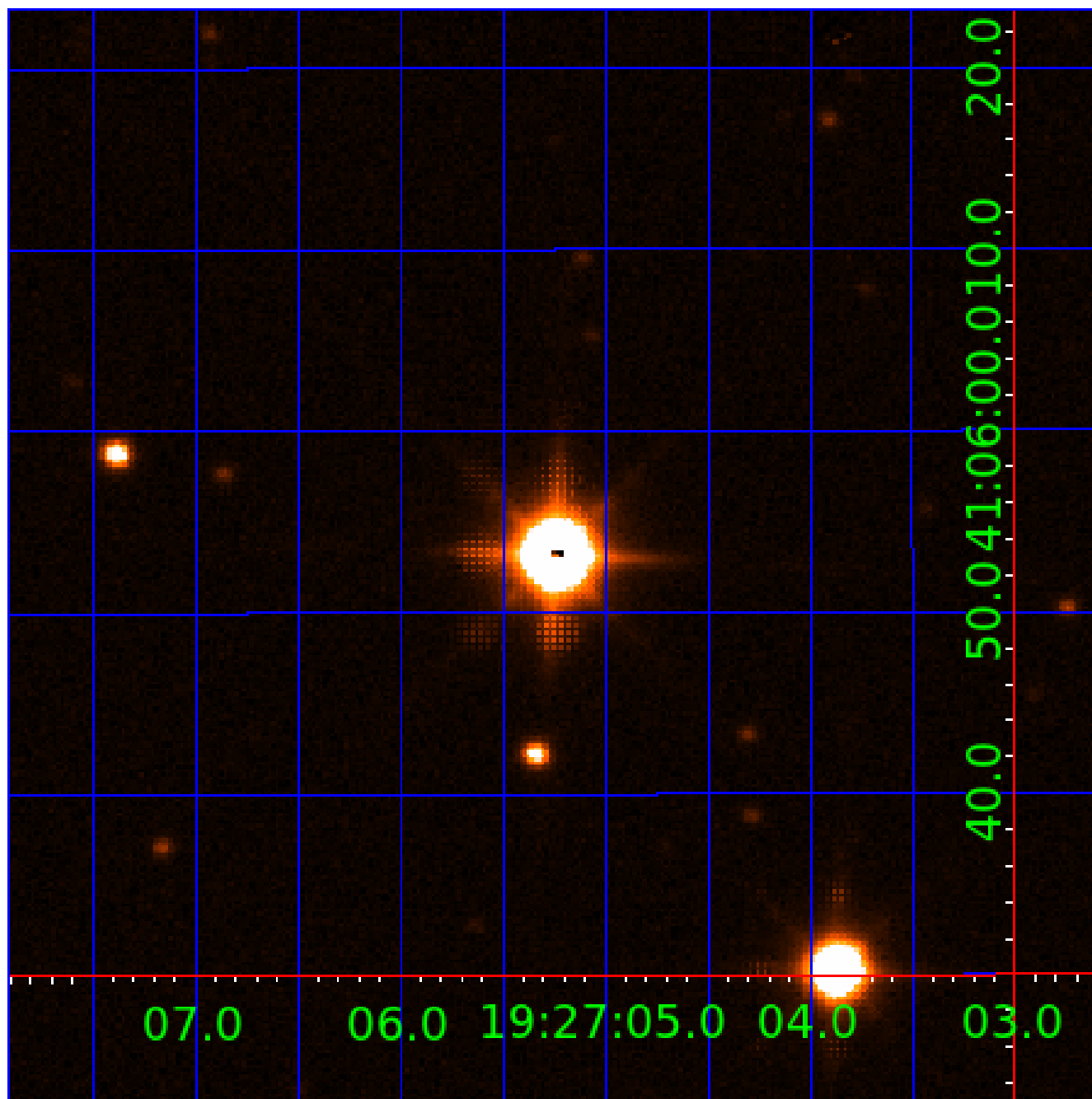


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 005790807

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})
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005790807-08	OBS	No	72.092786	190.659339	55.9	7.500	11.7	-1.0	2.49	6796	1.88	71.92

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
005790807-01	OBS	FP	0.35	0	1	0	0	MOD_SEC_ALT—CENT_SATURATED
005790807-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_SKYE_ZUMA—LPP_DV—MOD_NONUNIQ_DV—RESIDUAL_TCE—CENT_SATURATED
005790807-03	OBS	FP	0.00	1	0	0	0	LPP_DV—MOD_NONUNIQ_DV—CENT_SATURATED
005790807-04	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_SKYE_ZUMA—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_ALT—CENT_SATURATED
005790807-05	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_SATURATED
005790807-07	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—CENT_SATURATED
005790807-08	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_SATURATED

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

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

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

Ephemeris Match Information For 005790807-02

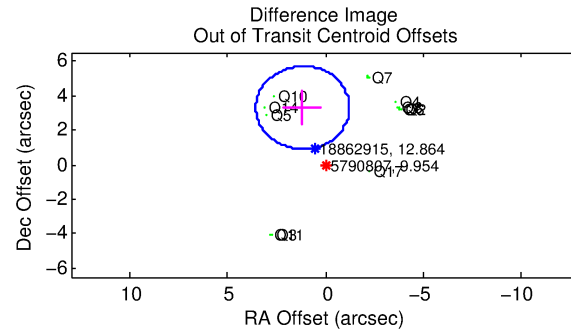
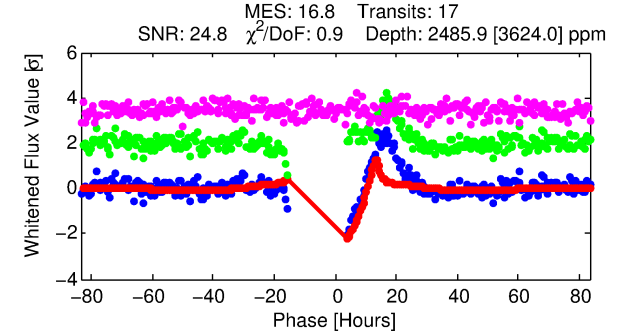
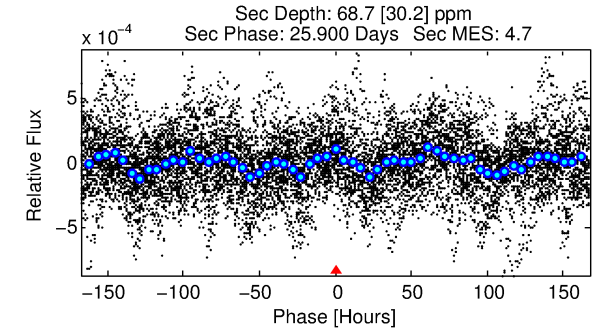
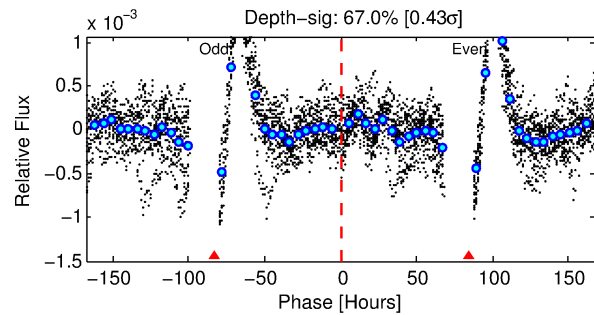
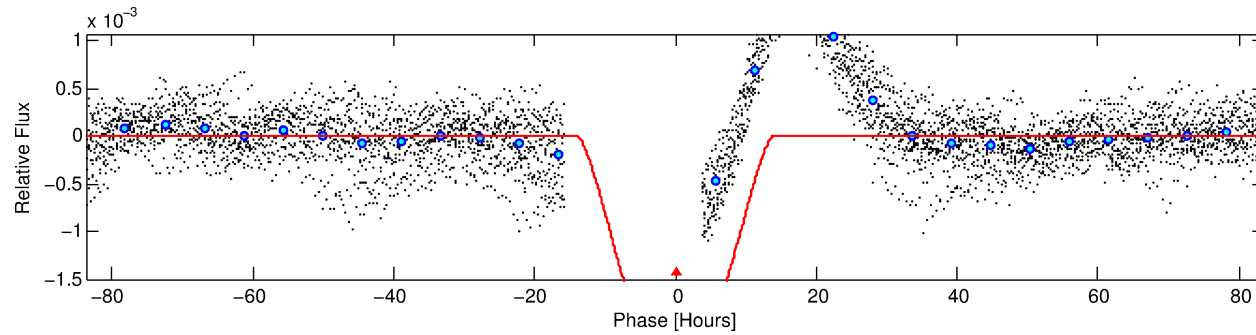
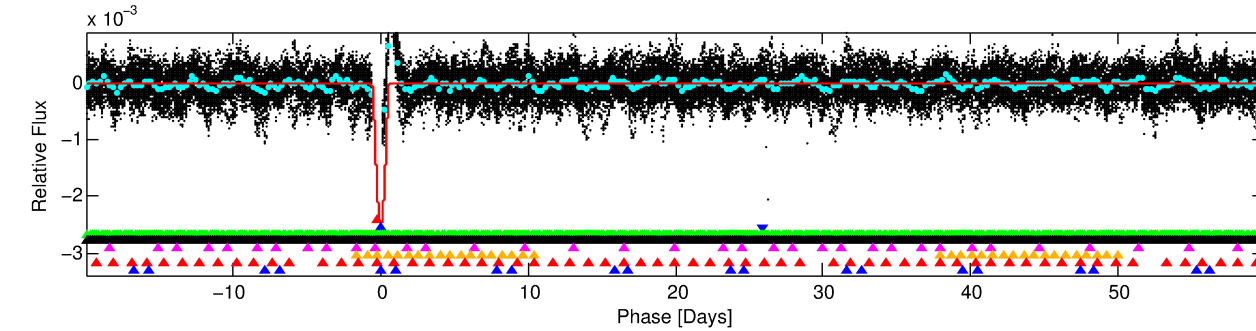
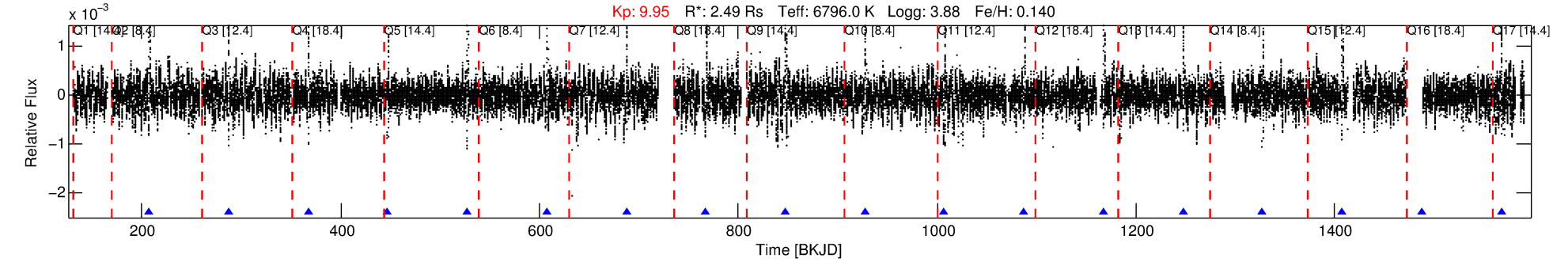
No Significant Match Found

DV One-Page Summary

KIC: 5790807 Candidate: 2 of 8 Period: 79.996 d

KOI: K00259 Corr: No Ephemeris Match

Kp: 9.95 R*: 2.49 Rs Teff: 6796.0 K Logg: 3.88 Fe/H: 0.140



DV Fit Results:

Period = 79.99615 [0.00120] d
Epoch = 207.3776 [0.0197] BKJD
Rp/R* = 0.0836 [0.0493]
a/R* = 9.20 [0.85]
b = 1.00 [0.15]
Seff = 62.61 [24.95]
Teff = 717 [71] K
Rp = 22.71 [14.96] Re
a = 0.4351 [0.1130] AU
Ag = 13.86 [18.31] [0.70σ]
Teffp = 2140 [675] K [2.10σ]

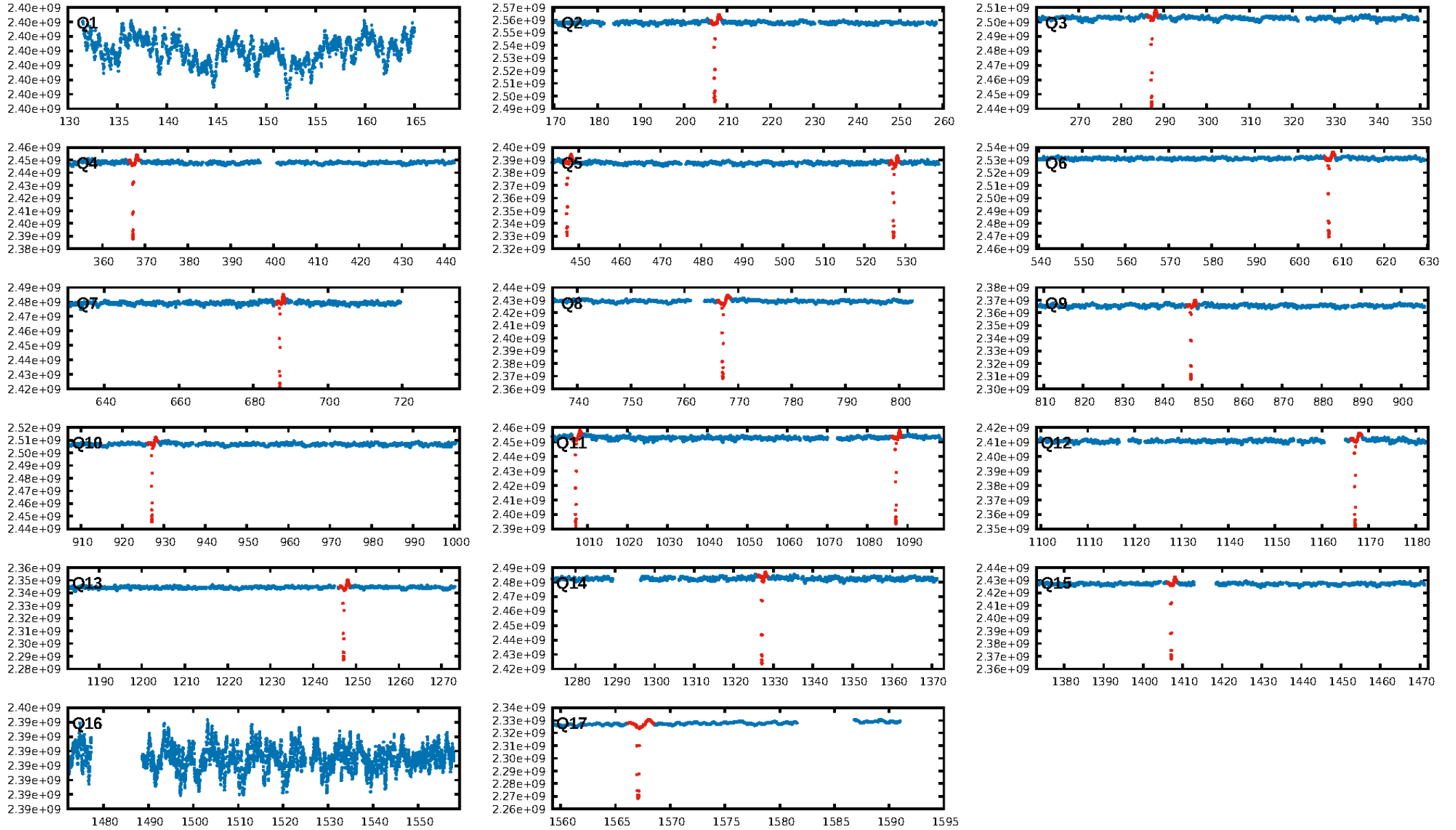
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [6.57σ]
LongPeriod-sig: 0.0% [0.00σ]
ModelChiSquare2-sig: 0.0%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [16/16]
GhostDiagnostic-chr: N/A
Centroid-sig: 0.0%
Centroid-so: 0.752 arcsec [19.97σ]
OotOffset-rm: 3.497 arcsec [4.37σ]
KicOffset-rm: 2.671 arcsec [3.94σ]
OotOffset-st: 4/3/2/2 [11]
KicOffset-st: 4/3/2/2 [11]
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DiffImageOverlap-fno: 0.00 [0/11]

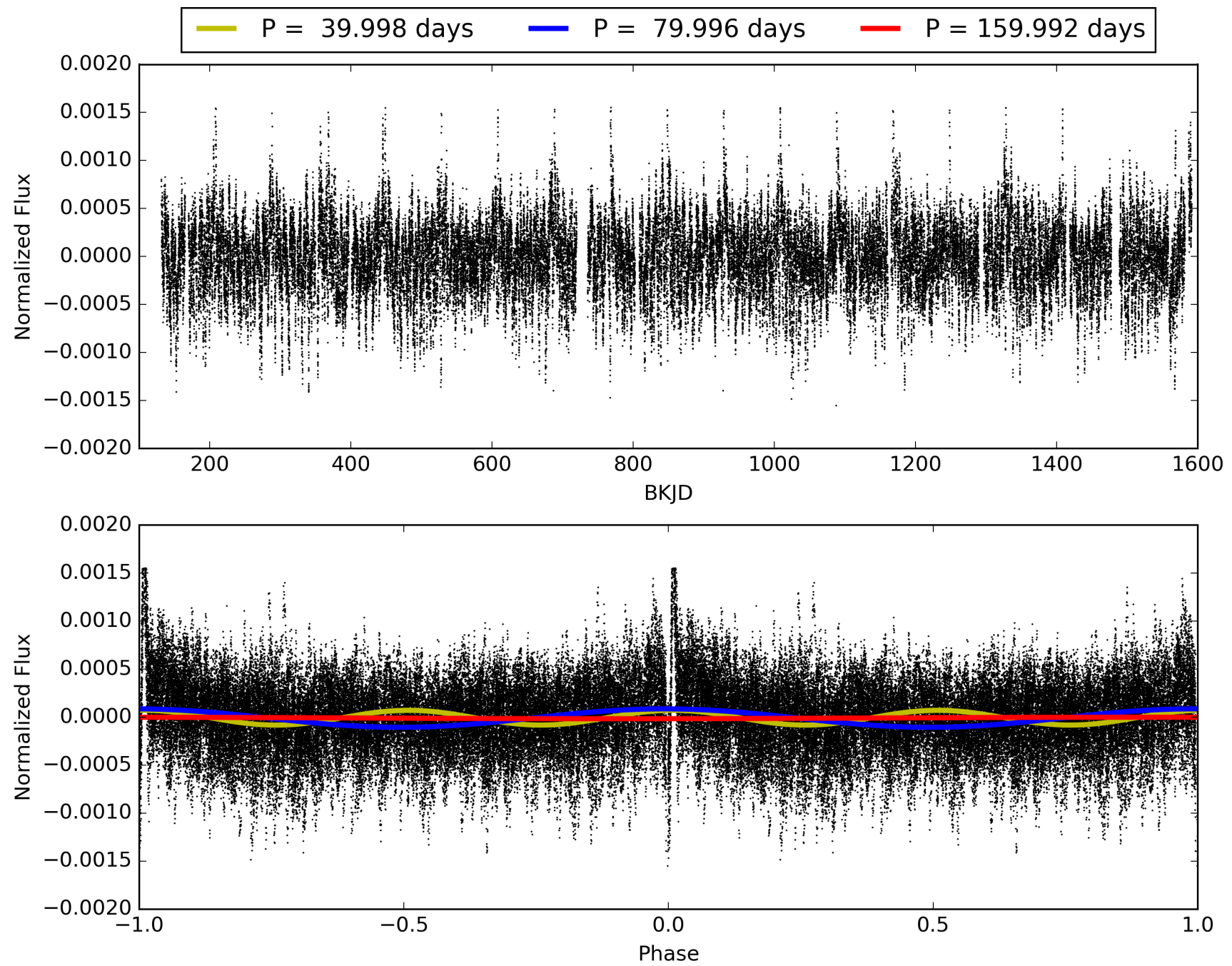
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This Data Validation Report Summary was produced in the Kepler Science Operations Center Pipeline at NASA Ames Research Center

TCE 005790807-02, PDC Light Curves

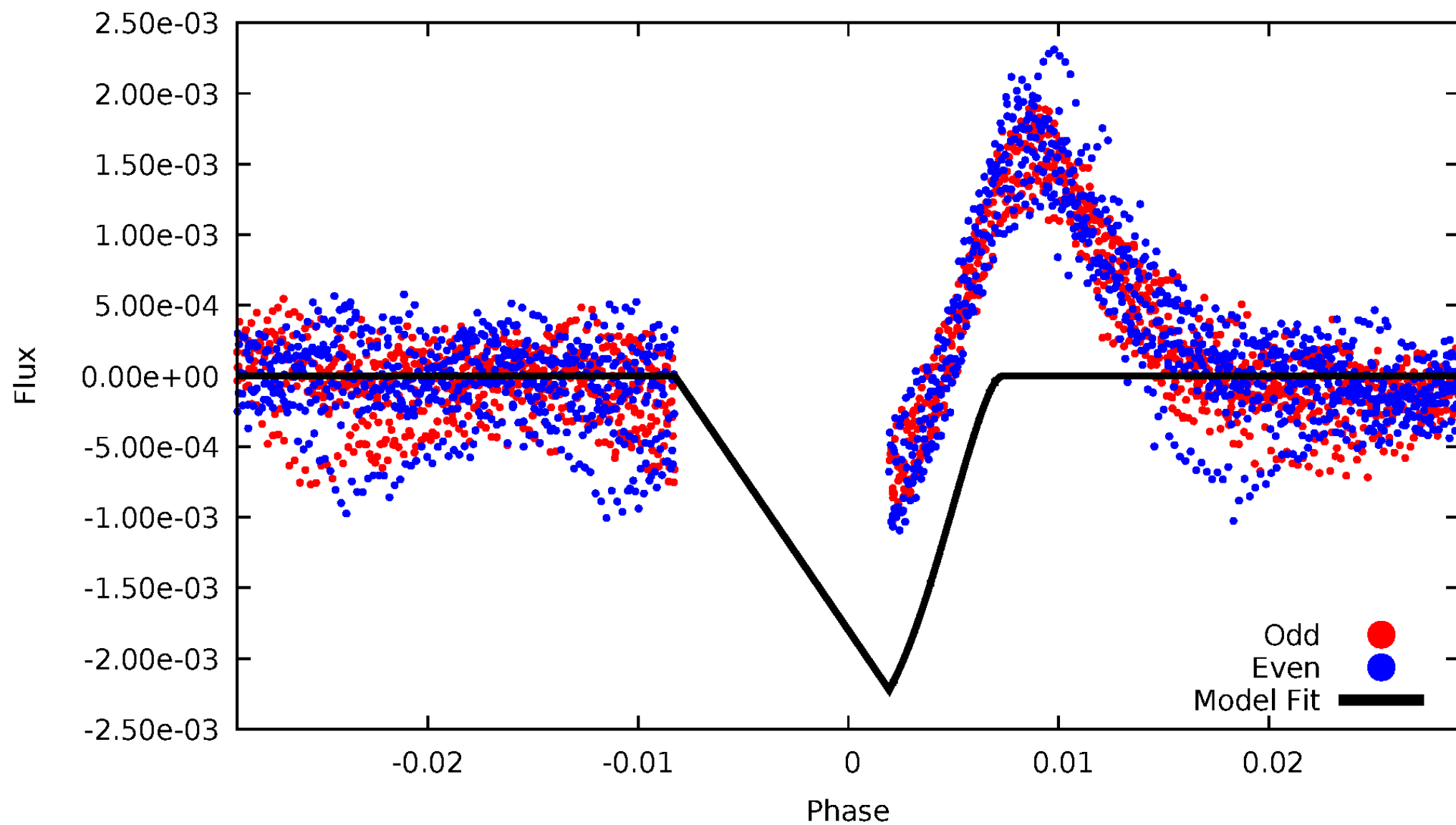


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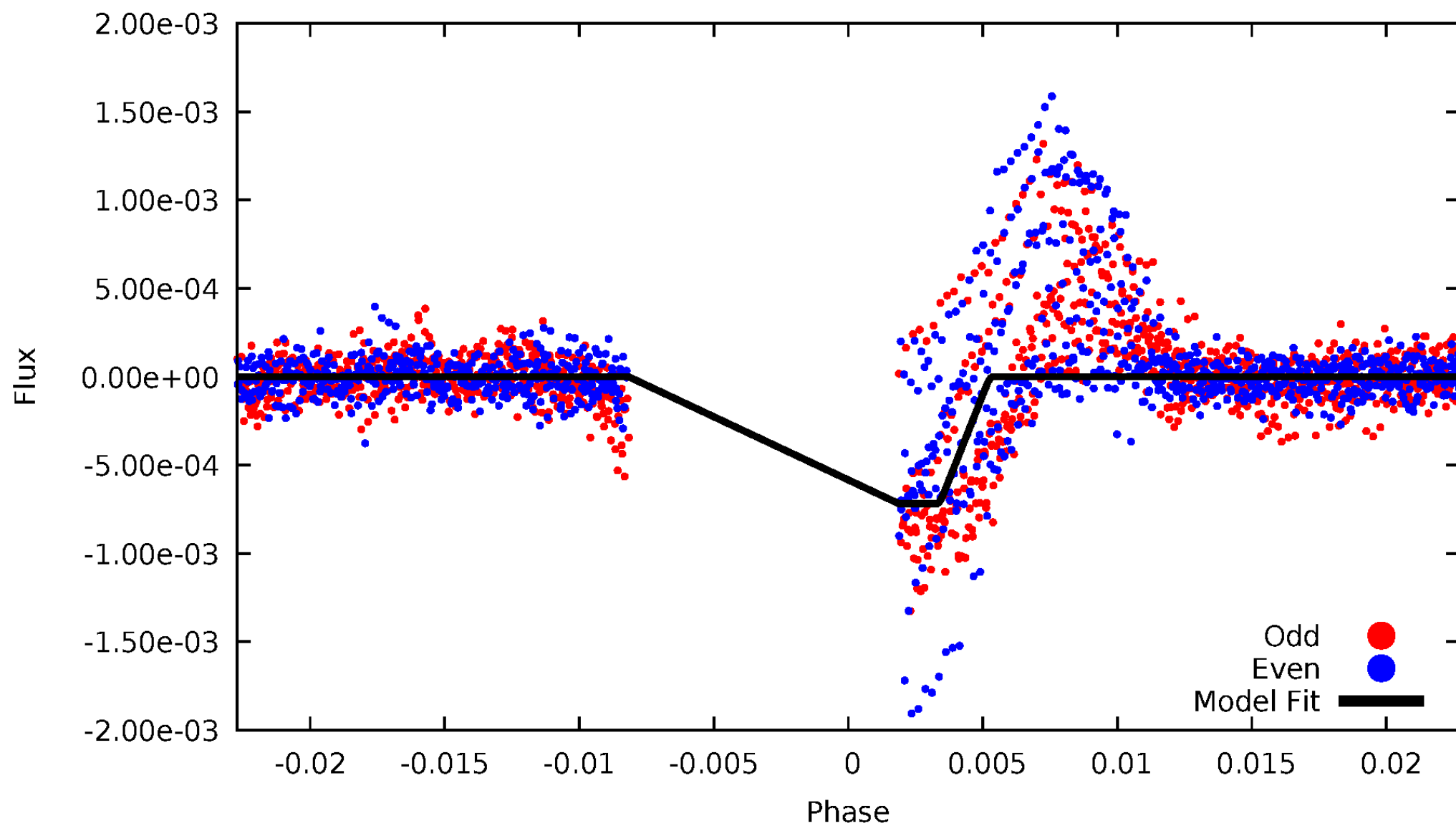
DV Odd/Even

TCE 005790807-02



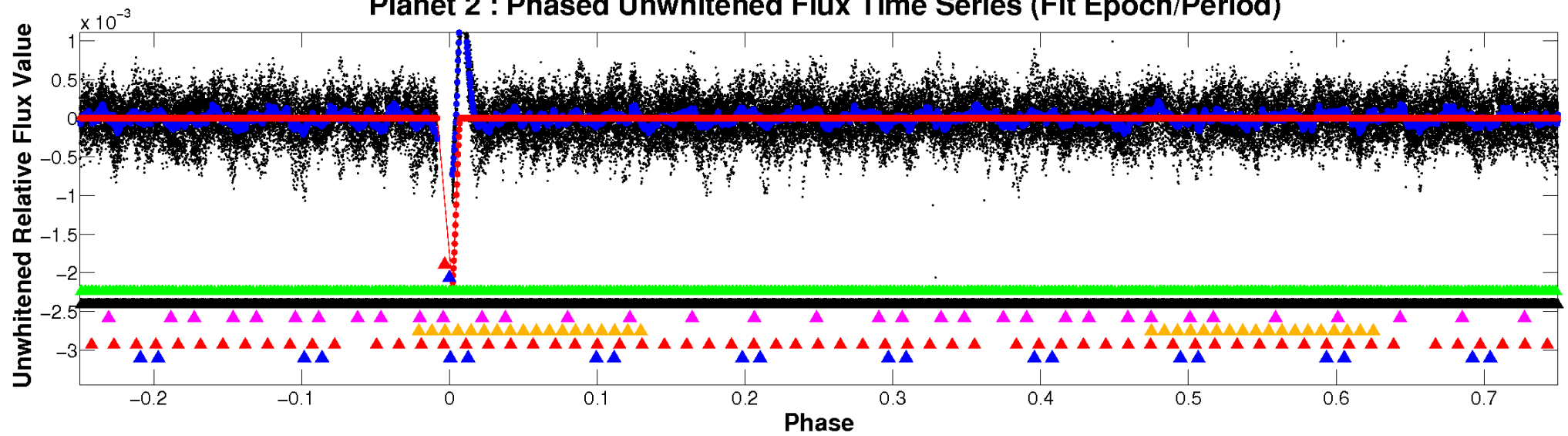
ALT Odd/Even

TCE 005790807-02

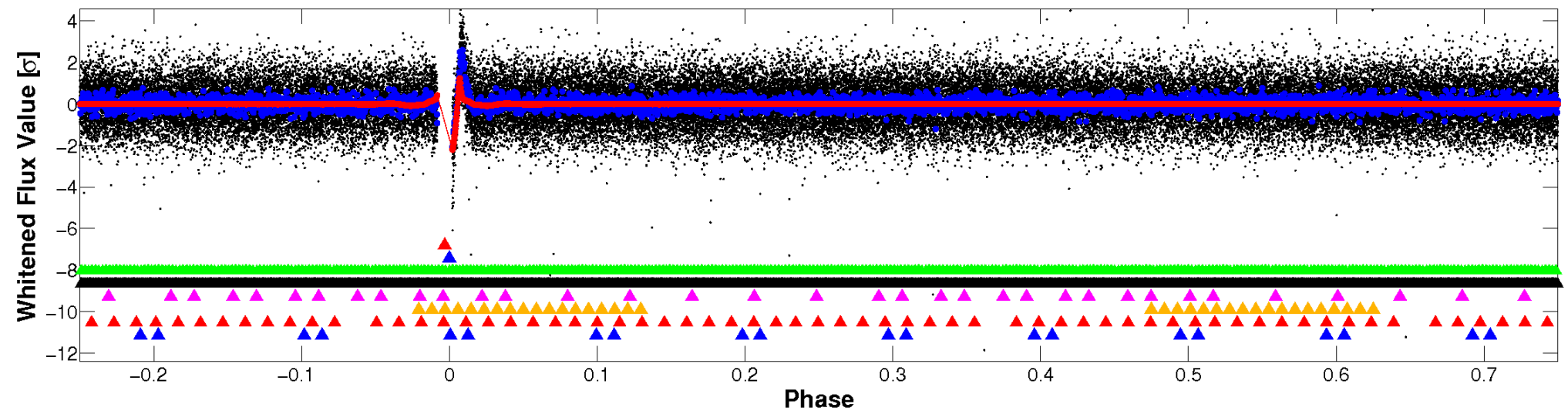


Non-Whitened Vs. Whitened Light Curve

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

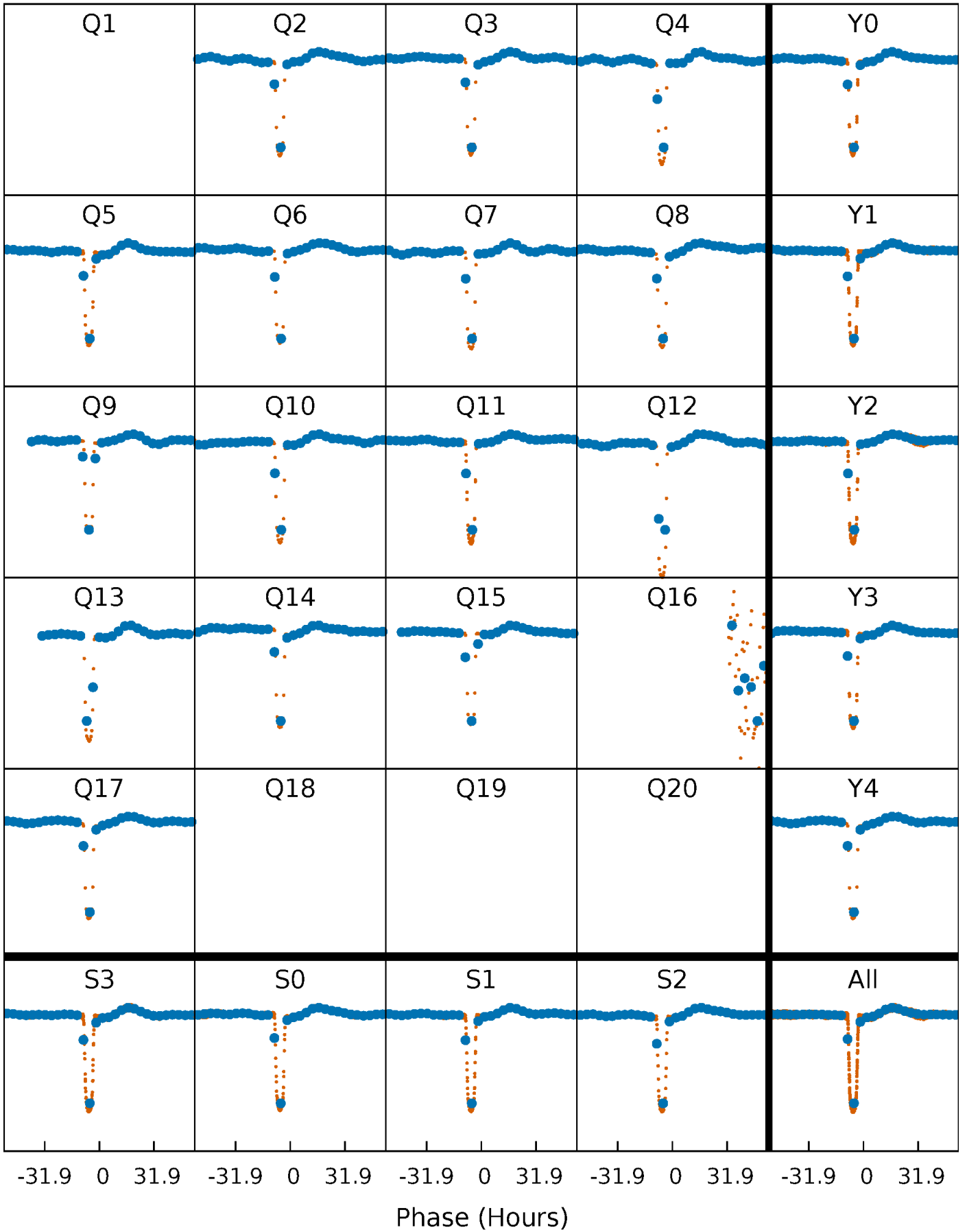


Planet 2 : Phased Whitened Flux Time Series (Fit Epoch/Period)



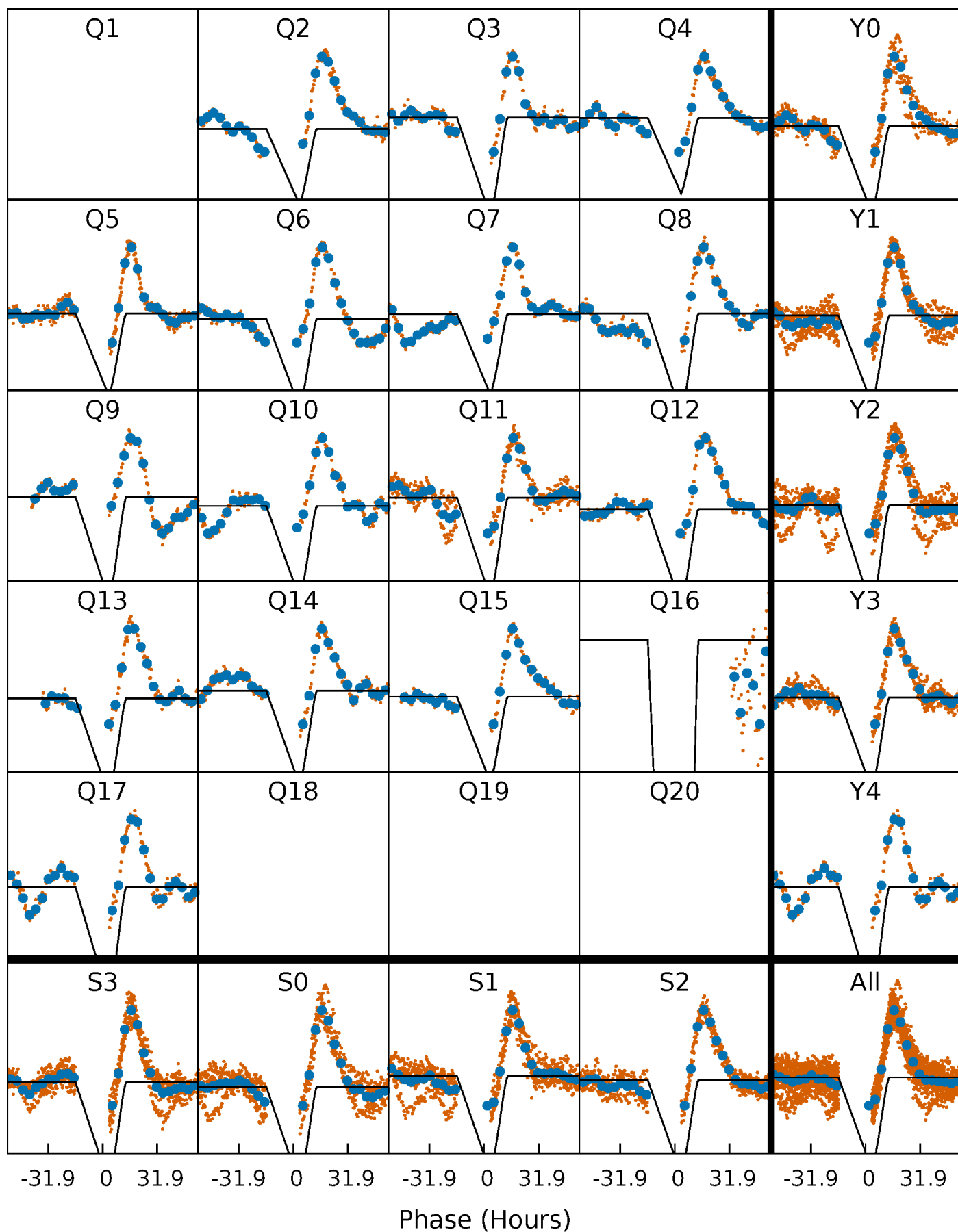
PDC Quarter-Phased Transit Curves

TCE 005790807-02 $P = 79.996152$ Days $T_0 = 207.377628$ (BKJD)



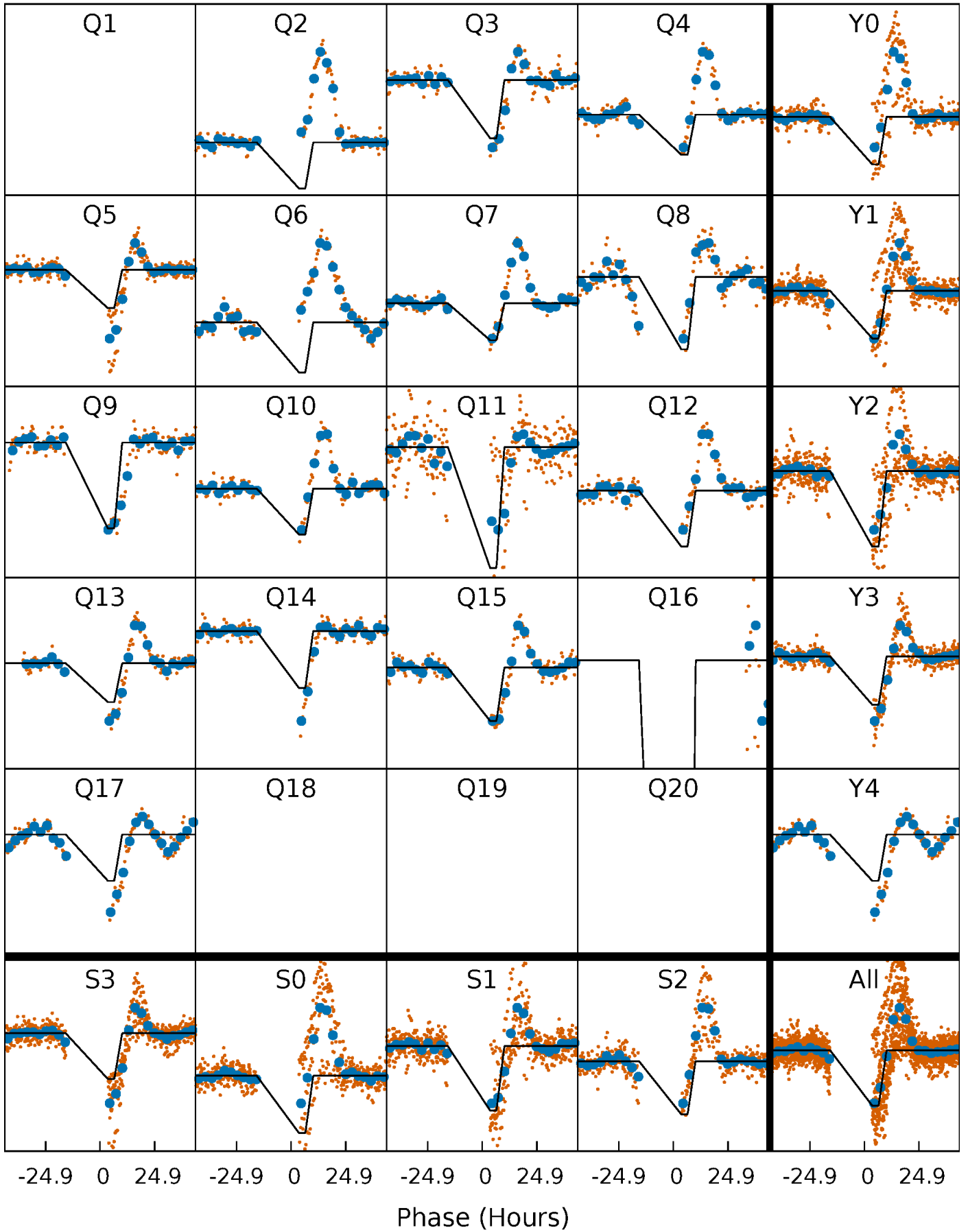
DV Quarter-Phased Transit Curves

TCE 005790807-02 P= 79.996152 Days $T_0=207.377628$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

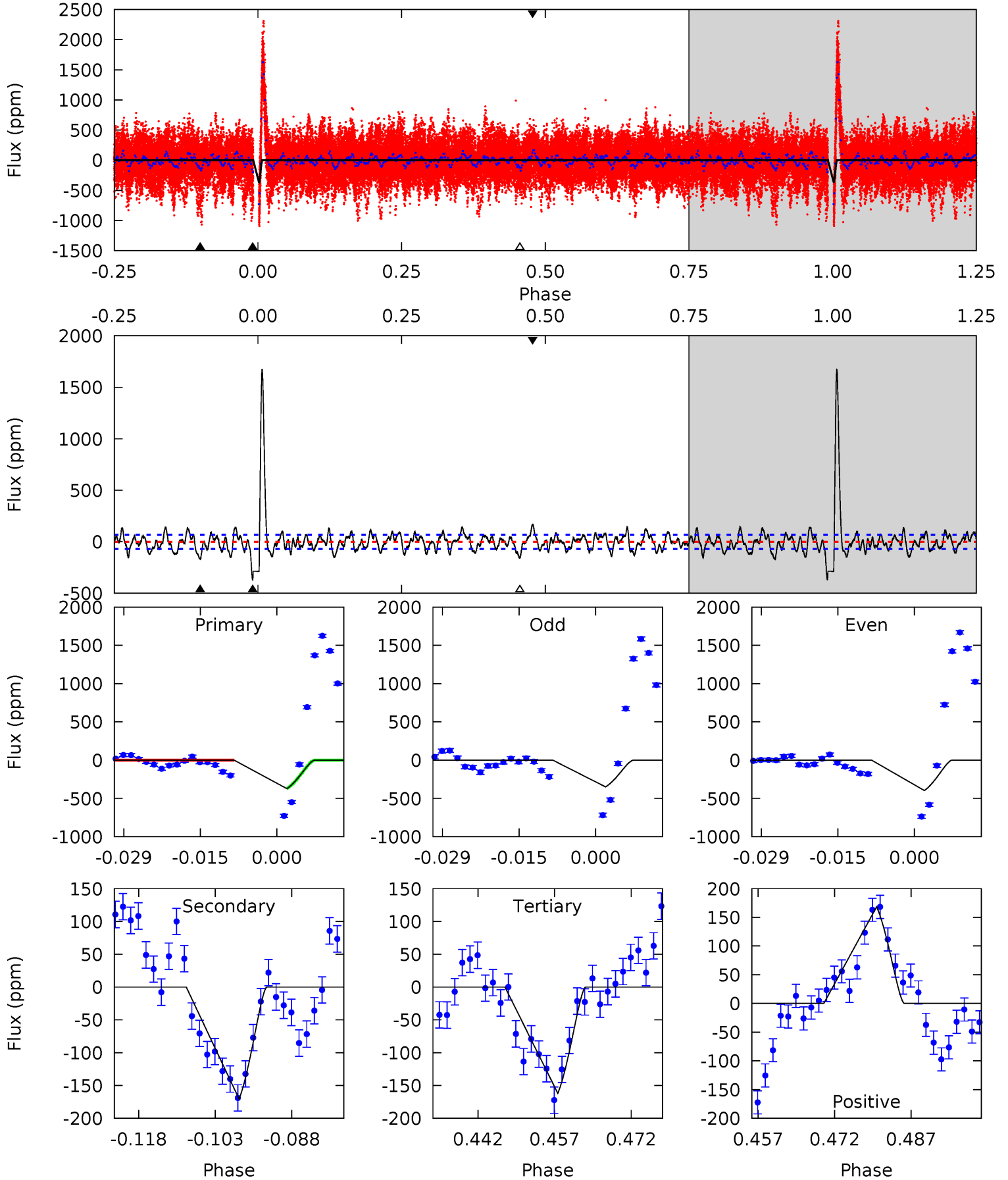
TCE 005790807-02 P= 79.994384 Days $T_0=207.392127$ (BKJD)



DV Model-Shift Uniqueness Test

005790807-02, P = 79.996152 Days, E = 127.381476 Days

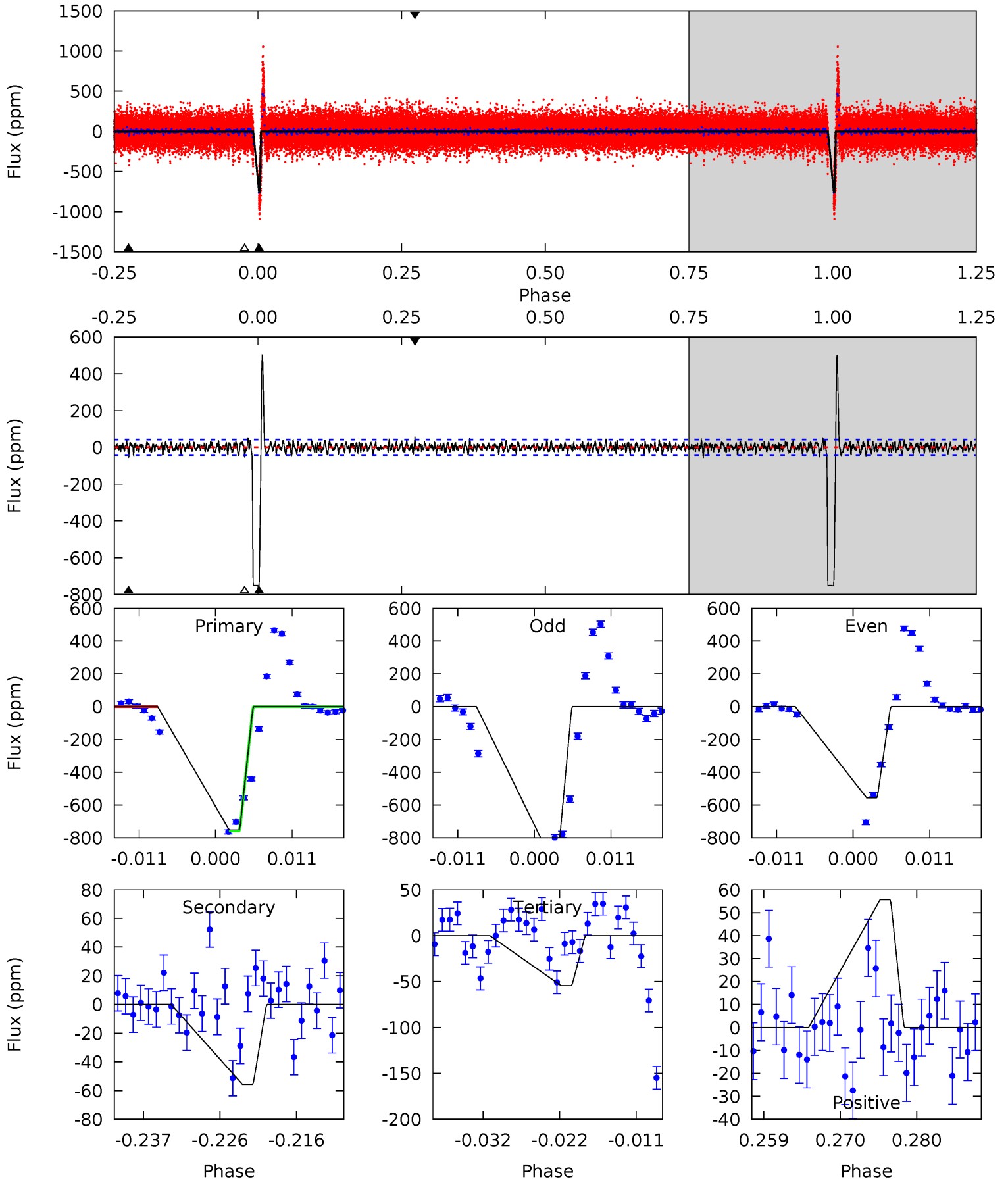
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
26.6	12.2	11.6	12.0	4.95	2.44	9.35	15.0	14.6	0.62	0.17	1.71	1.01	0.82	0



Alt Model-Shift Uniqueness Test

005790807-02, P = 79.994384 Days, E = 127.397743 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
89.5	6.63	6.50	6.62	5.01	2.55	2.21	83.0	82.9	0.13	0.01	20.5	0.89	0.40	0



Stellar Parameters For KIC 005790807

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6796^{+67}_{-88}	$3.880^{+0.224}_{-0.096}$	$0.140^{+0.150}_{-0.150}$	$2.490^{+0.391}_{-0.727}$	$1.715^{+0.150}_{-0.244}$	$0.157^{+0.205}_{-0.047}$
	+1%/-1%	+6%/-2%	+107%/-107%	+16%/-29%	+9%/-14%	+131%/-30%
Source	SPE68	SPE68	SPE68	DSEP		

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

Secondary Eclipse Parameters for KIC 005790807-02 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-171 ± 14	$22.38^{+12.44}_{-11.22}$	993^{+43}_{-67}	3206^{+848}_{-360}	35^{+105}_{-20}
Alt.	-56 ± 8	$12.30^{+10.54}_{-8.55}$	993^{+43}_{-71}	3243^{+1690}_{-506}	38^{+355}_{-27}

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

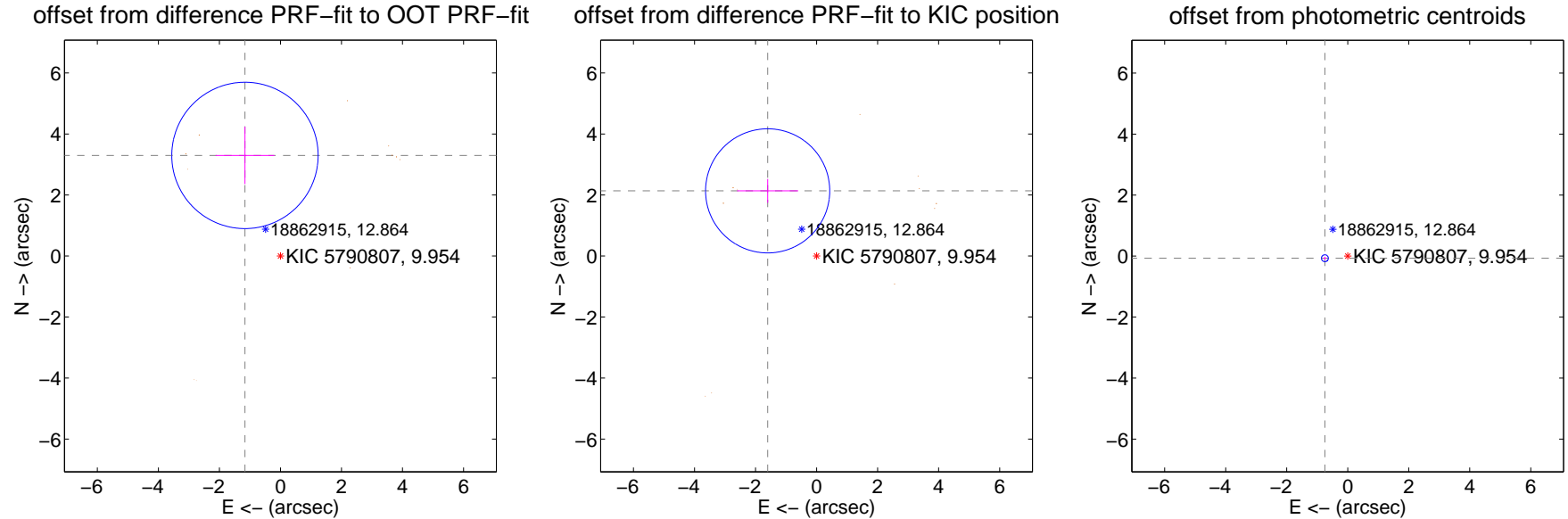
DV Centroid Data

Supplemental centroid analysis for 005790807-02. **Kepler magnitude: 9.95.** Transit SNR 24.77

There are 0 quarters with good PRF difference image offsets

The direct PRF centroid is offset from the target star catalog position by about 0.60 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	3.497 ± 0.799	4.37	1.163 ± 0.961	3.297 ± 0.938
PRF-fit source offset from KIC position	2.671 ± 0.678	3.94	1.603 ± 1.004	2.136 ± 0.389
photometric centroid source offset	0.75 ± 0.04	19.97	0.75 ± 0.04	-0.07 ± 0.05



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

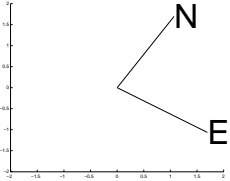
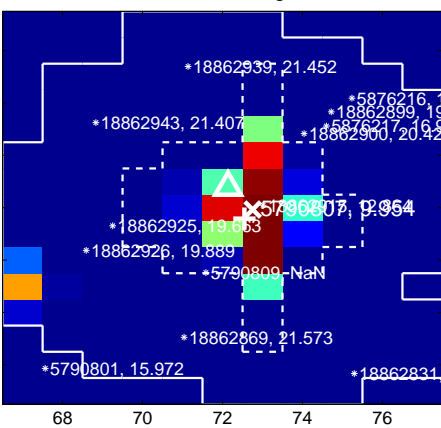
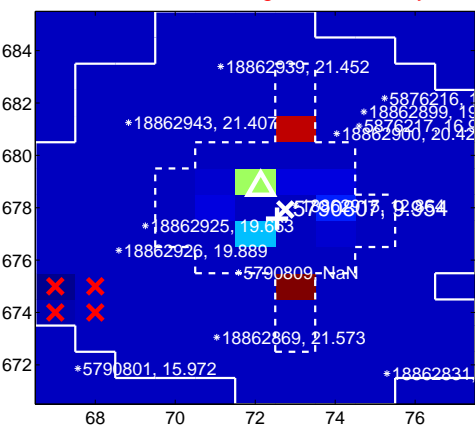


Q1 no OOT image



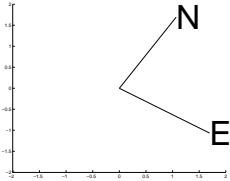
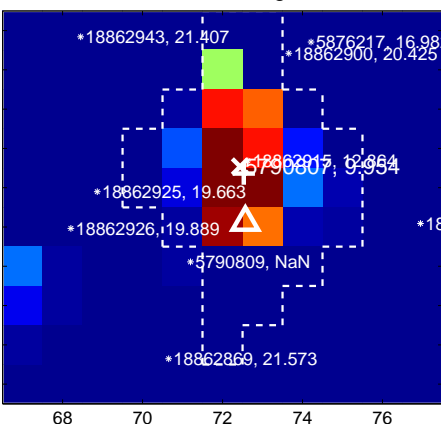
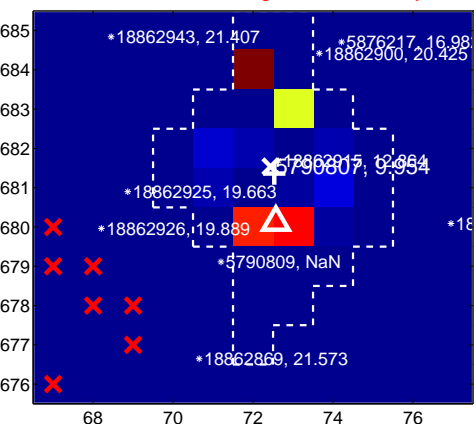
Q2 difference image. Poor Quality

Q2 OOT image



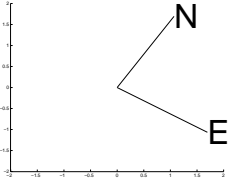
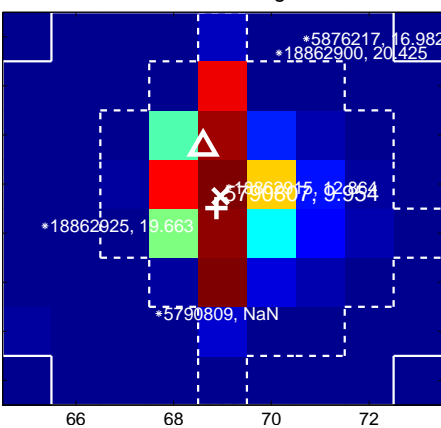
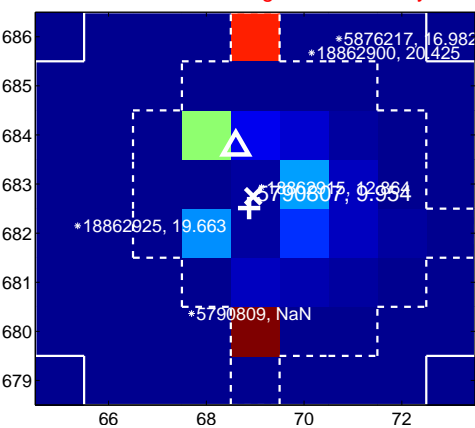
Q3 difference image. Poor Quality

Q3 OOT image

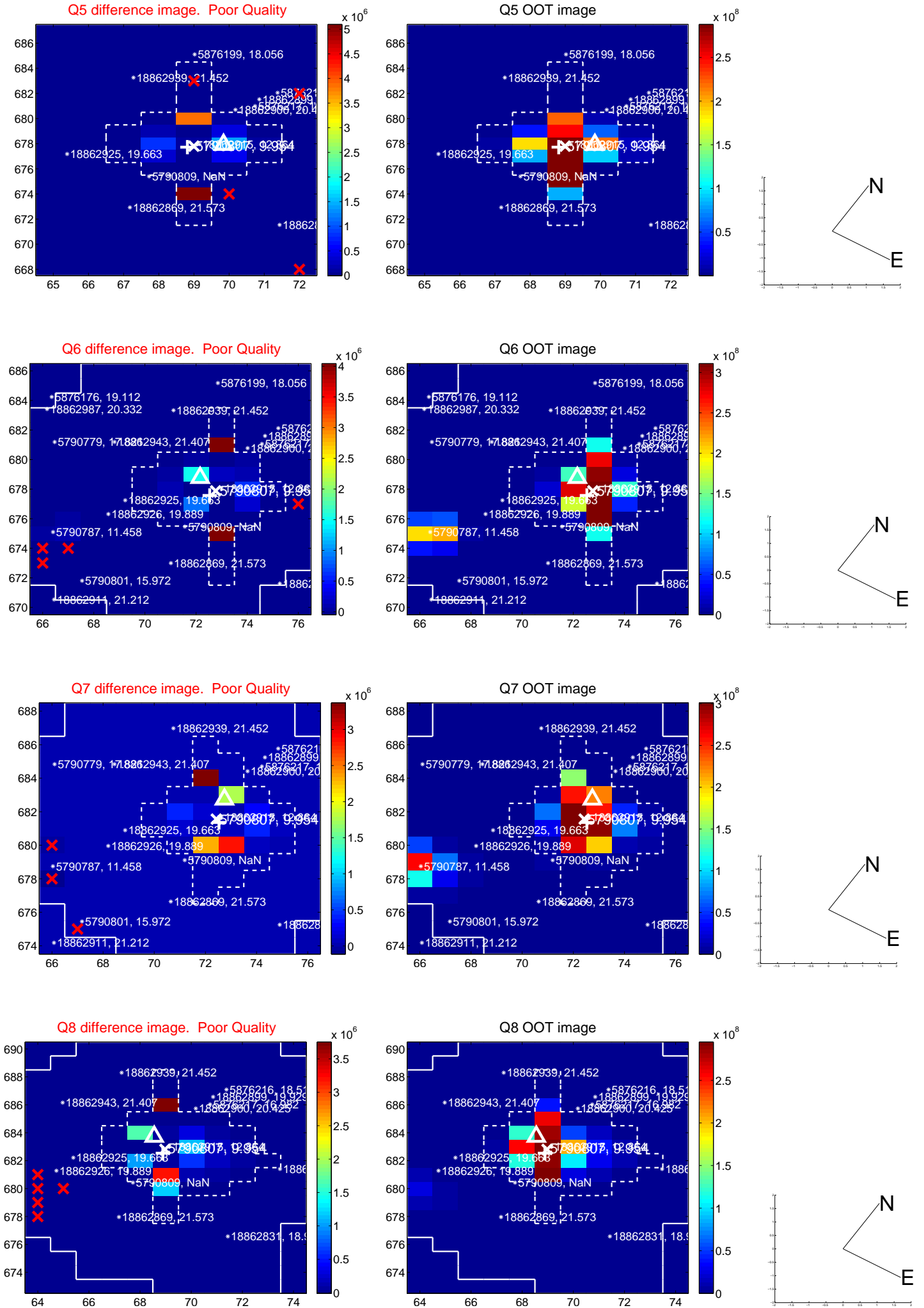


Q4 difference image. Poor Quality

Q4 OOT image



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



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

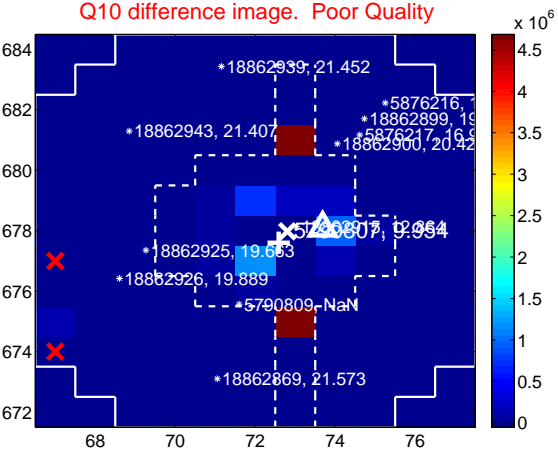
Q9 no difference image



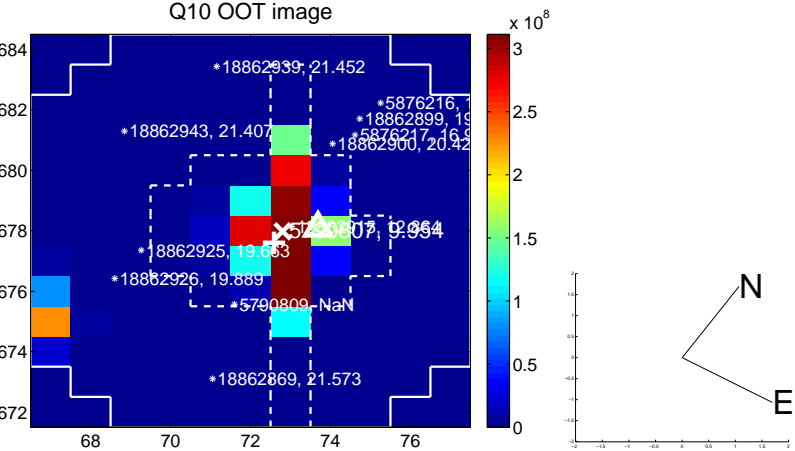
Q9 no OOT image



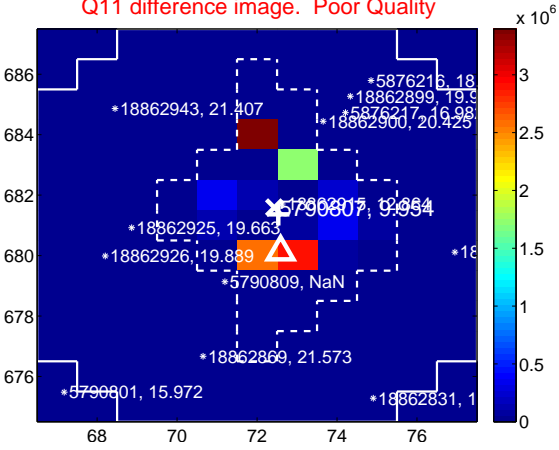
Q10 difference image. Poor Quality



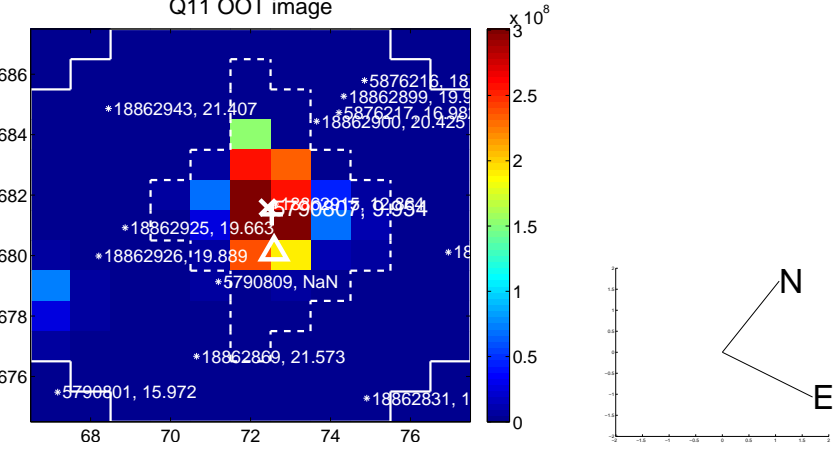
Q10 OOT image



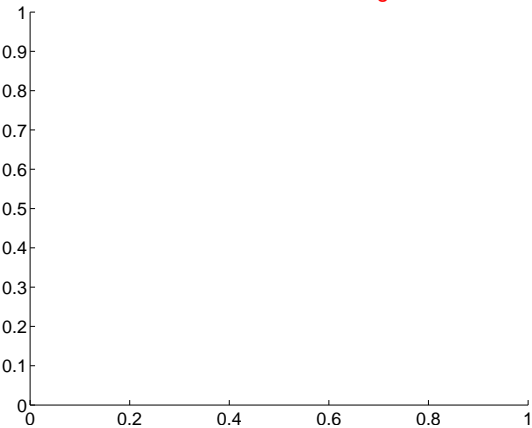
Q11 difference image. Poor Quality



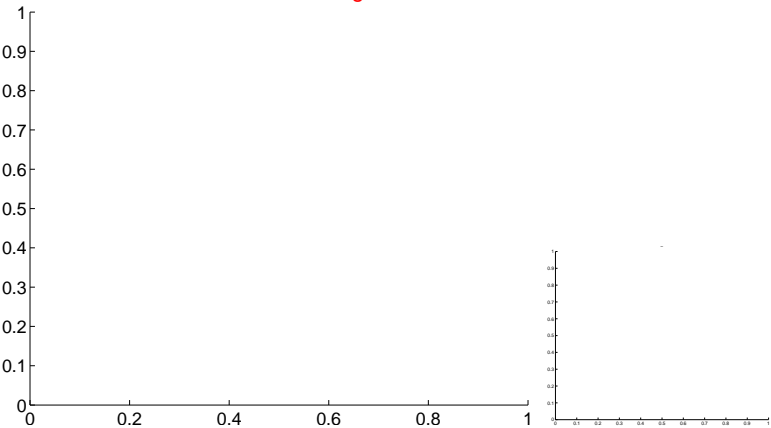
Q11 OOT image



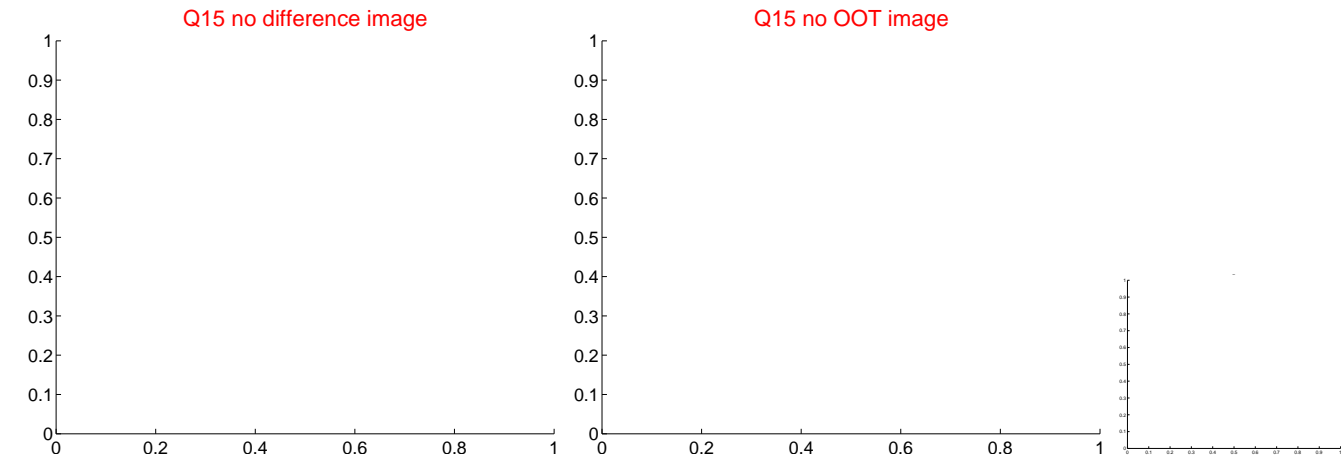
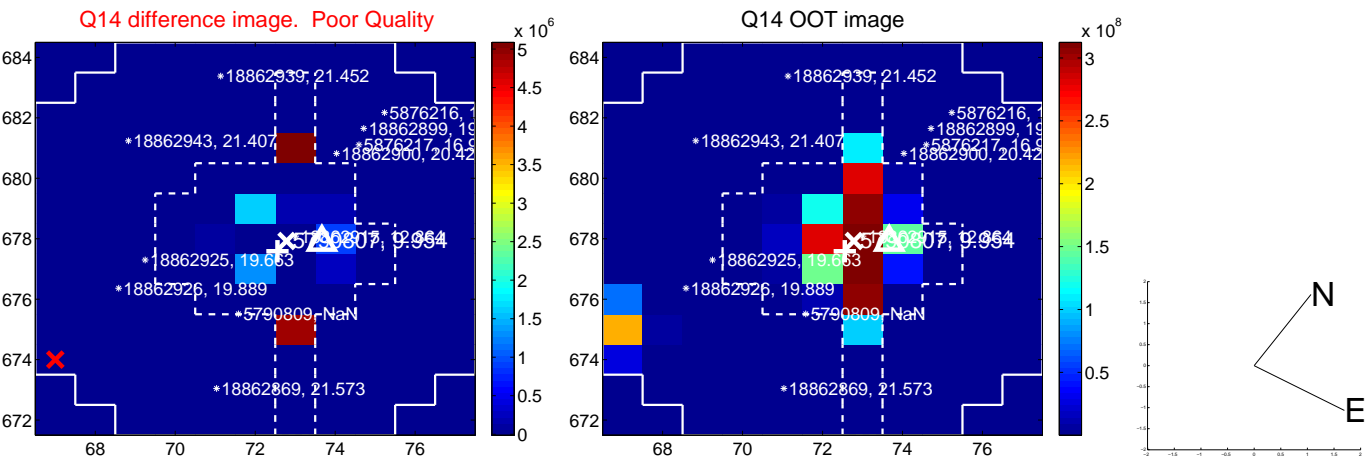
Q12 no difference image



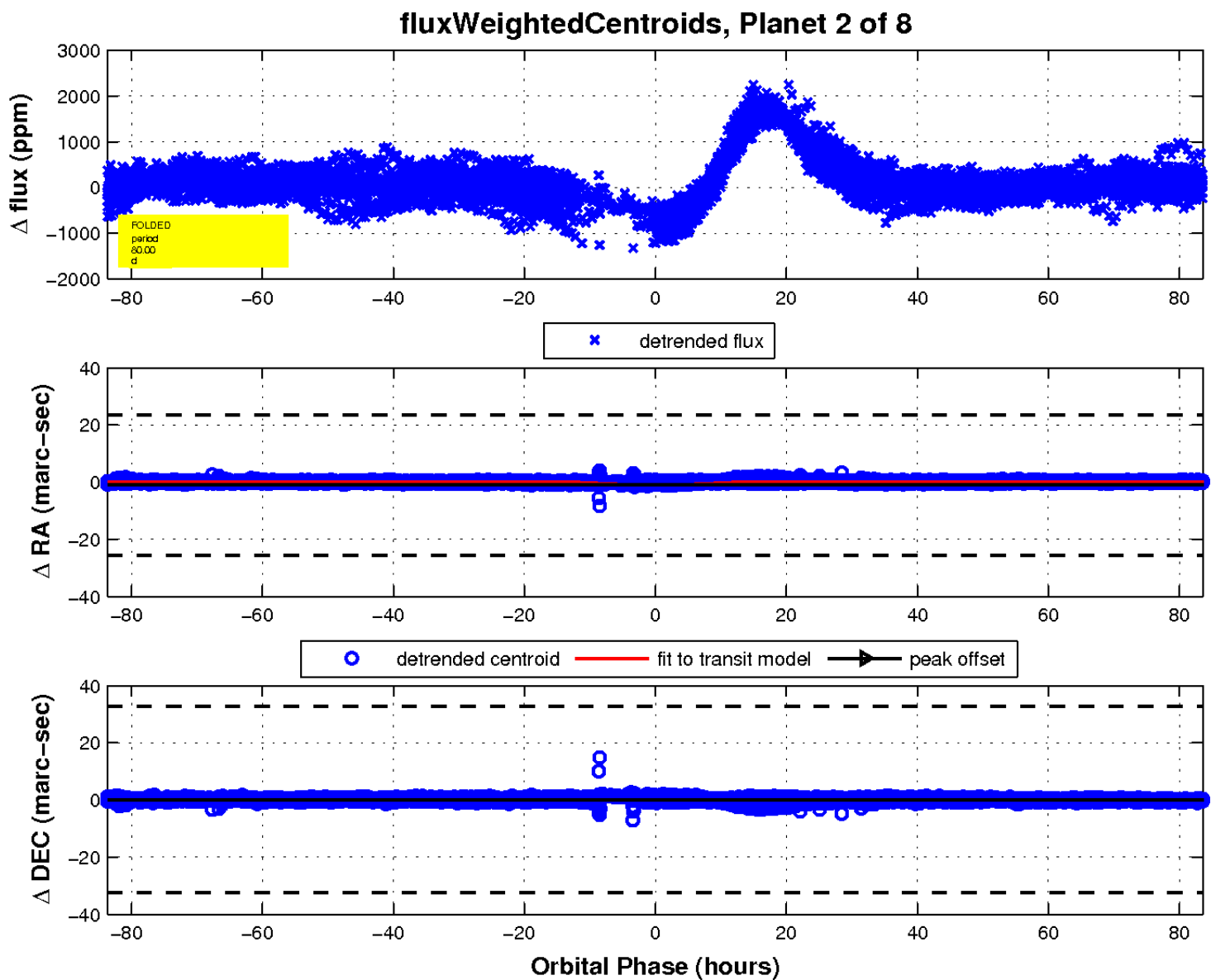
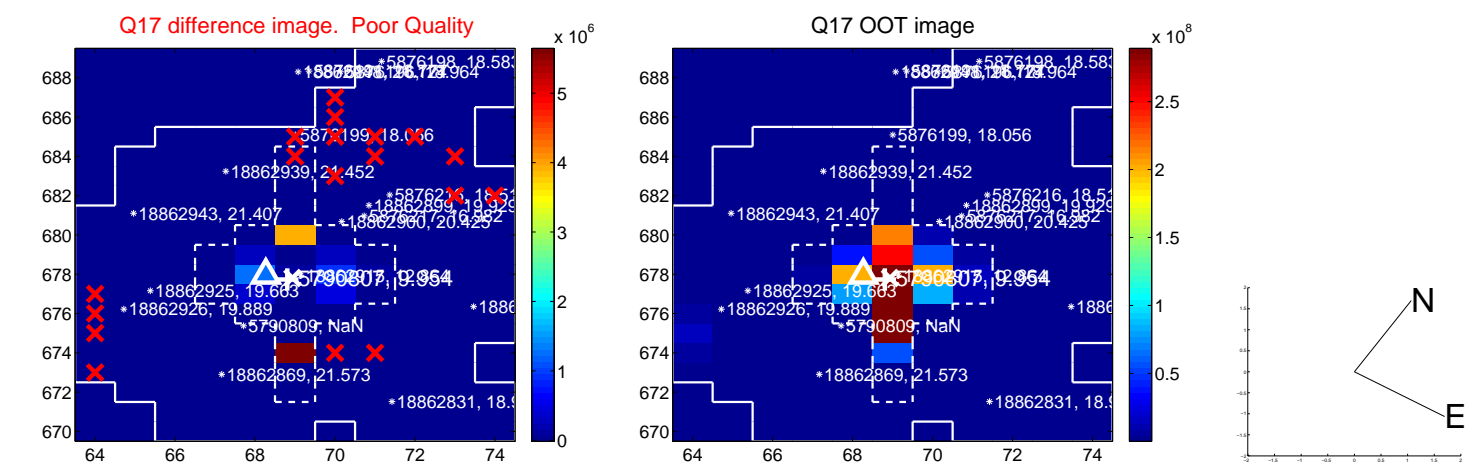
Q12 no OOT image



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

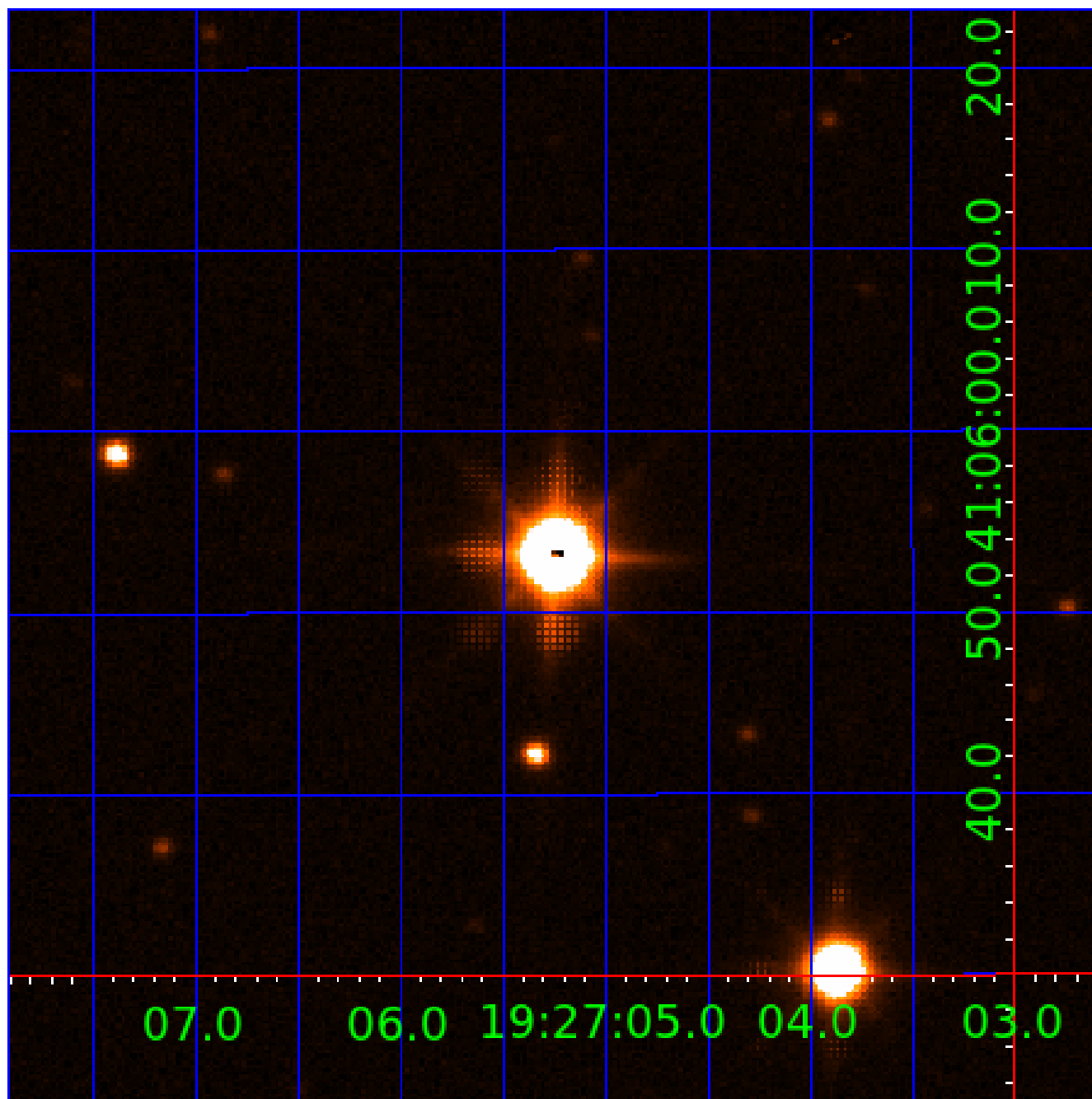


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 005790807

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})
005790807-01	OBS	0259.01	79.996235	207.125967	24262.8	6.332	906.5	965.6	2.49	6796	40.86	62.61
005790807-02	OBS	No	79.996152	207.377628	2485.9	27.889	16.8	24.8	2.49	6796	22.71	62.61
005790807-03	OBS	No	2.085085	133.485932	23.1	12.666	10.3	6.5	2.49	6796	1.21	8101.07
005790807-04	OBS	No	0.834015	131.838014	36.7	4.215	13.1	14.1	2.49	6796	1.74	27487.95
005790807-05	OBS	No	41.682256	151.886509	154.3	3.542	12.2	10.3	2.49	6796	3.56	149.32
005790807-07	OBS	No	22.683197	145.068615	164.5	5.392	11.8	7.6	2.49	6796	3.59	336.07
005790807-08	OBS	No	72.092786	190.659339	55.9	7.500	11.7	-1.0	2.49	6796	1.88	71.92

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
005790807-01	OBS	FP	0.35	0	1	0	0	MOD_SEC_ALT—CENT_SATURATED
005790807-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_SKYE_ZUMA—LPP_DV—MOD_NONUNIQ_DV—RESIDUAL_TCE—CENT_SATURATED
005790807-03	OBS	FP	0.00	1	0	0	0	LPP_DV—MOD_NONUNIQ_DV—CENT_SATURATED
005790807-04	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_SKYE_ZUMA—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_ALT—CENT_SATURATED
005790807-05	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_SATURATED
005790807-07	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—CENT_SATURATED
005790807-08	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_SATURATED

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

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

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

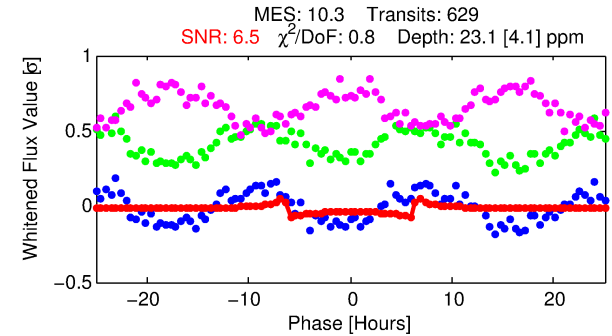
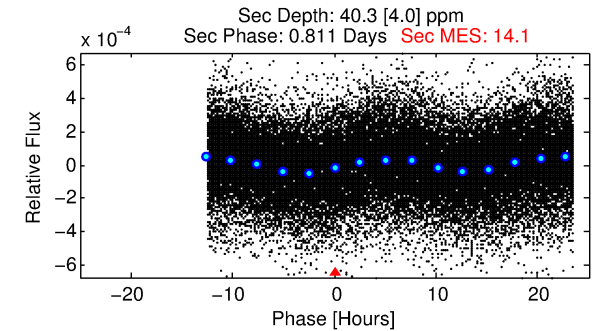
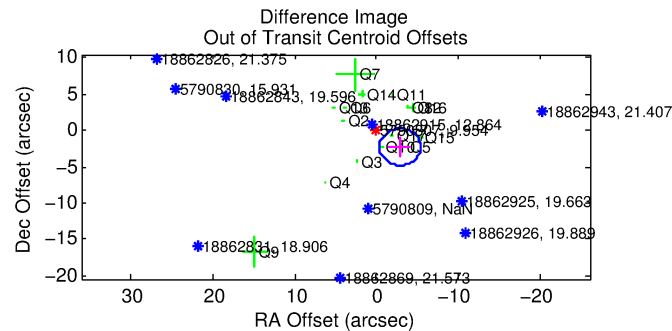
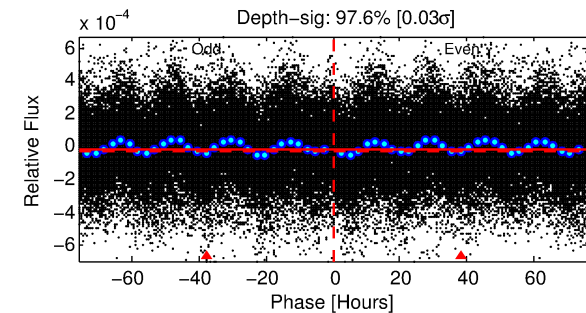
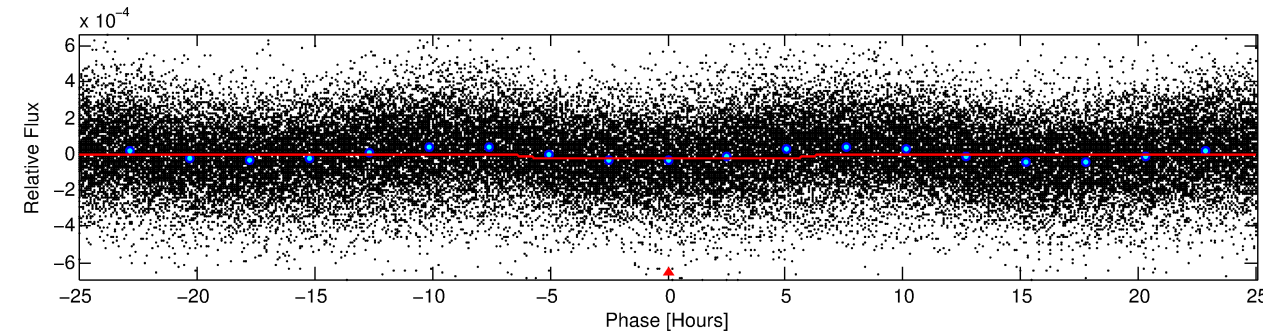
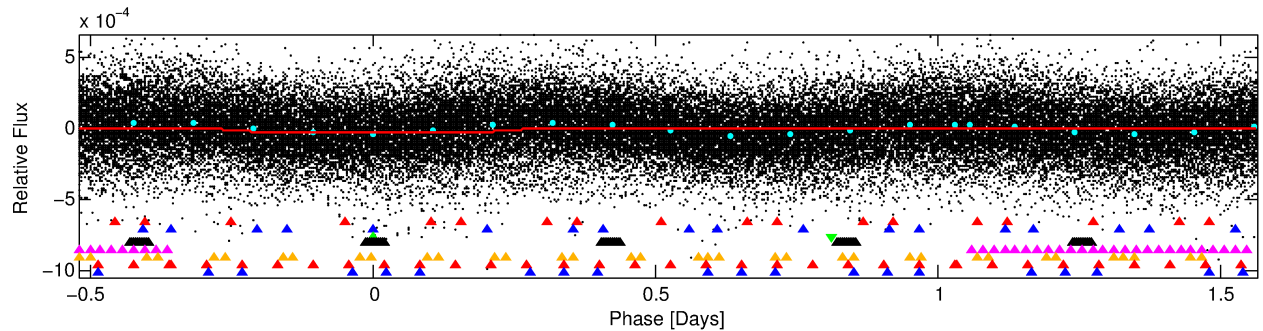
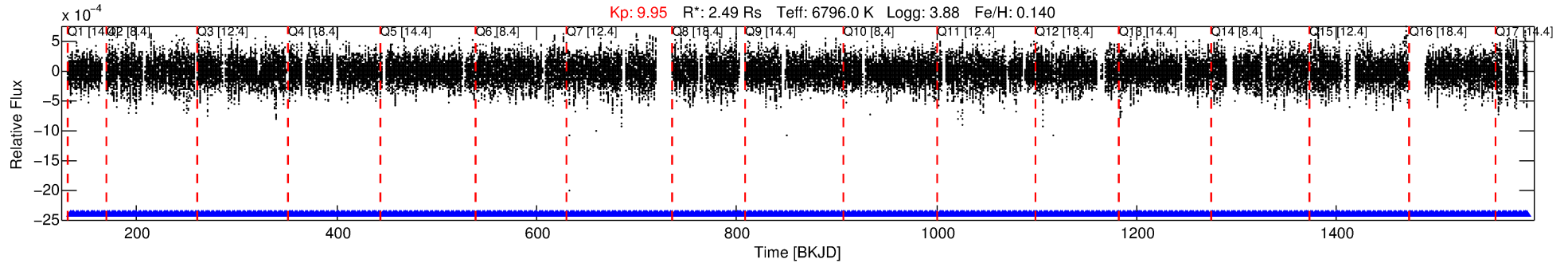
Ephemeris Match Information For 005790807-03

No Significant Match Found

DV One-Page Summary

KIC: 5790807 Candidate: 3 of 8 Period: 2.085 d

KOI: K00259 Corr: No Ephemeris Match



DV Fit Results:

Period = 2.08508 [0.00002] d
Epoch = 133.4859 [0.0043] BKJD
Rp/R* = 0.0044 [0.0027]
a/R* = 1.41 [2.34]
b = 0.01 [501.50]
Seff = 8101.07 [3228.30]
Teq = 2419 [241] K
Rp = 1.21 [0.80] Re
a = 0.0382 [0.0099] AU
Ag = 22.34 [28.21] [0.76 σ]
Teffp = 8131 [2441] K [2.33 σ]

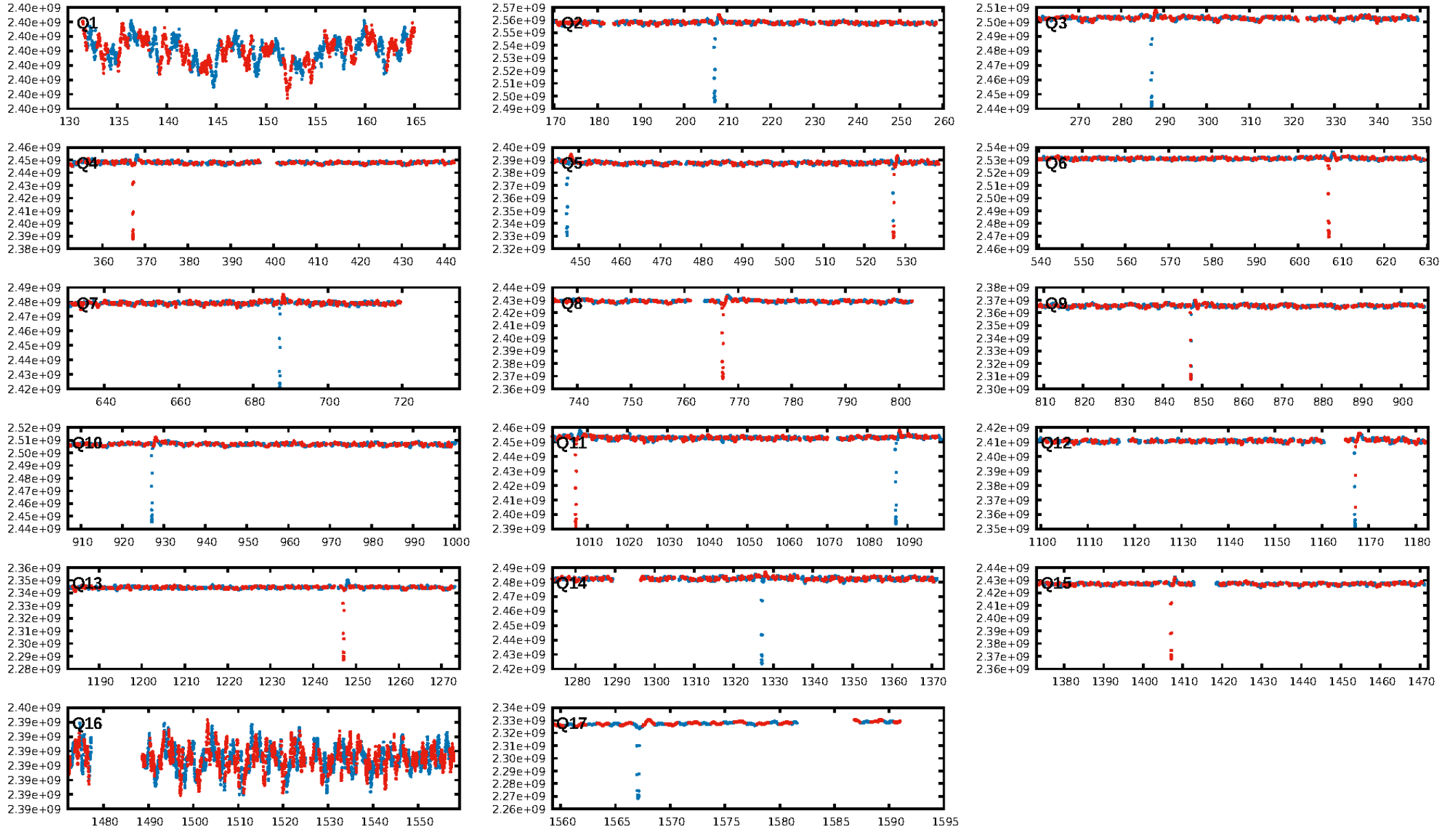
DV Diagnostic Results:

ShortPeriod-sig: 97.6% [2.25 σ]
LongPeriod-sig: 100.0% [35.91 σ]
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [600/600]
GhostDiagnostic-chr: N/A
Centroid-sig: 10.5%
Centroid-so: 0.773 arcsec [1.63 σ]
OotOffset-rm: 3.633 arcsec [4.32 σ]
KicOffset-rm: 2.876 arcsec [1.67 σ]
OotOffset-st: 4/4/4/4 [16]
KicOffset-st: 4/4/4/4 [16]
DiffImageQuality-fgm: 0.00 [0/16]
DiffImageOverlap-fno: 0.00 [0/17]

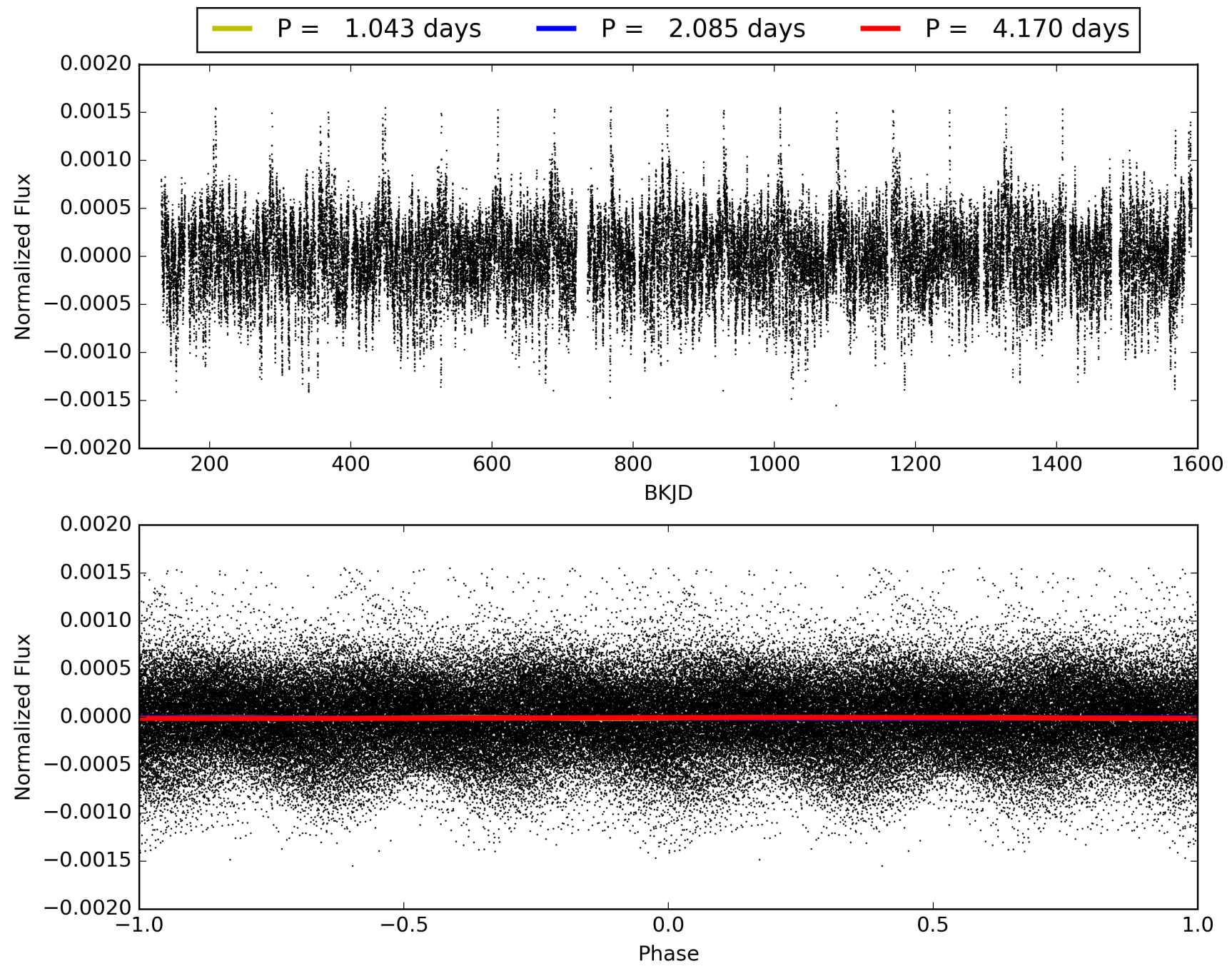
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 03-Feb-2016 08:11:35 Z

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

TCE 005790807-03, PDC Light Curves

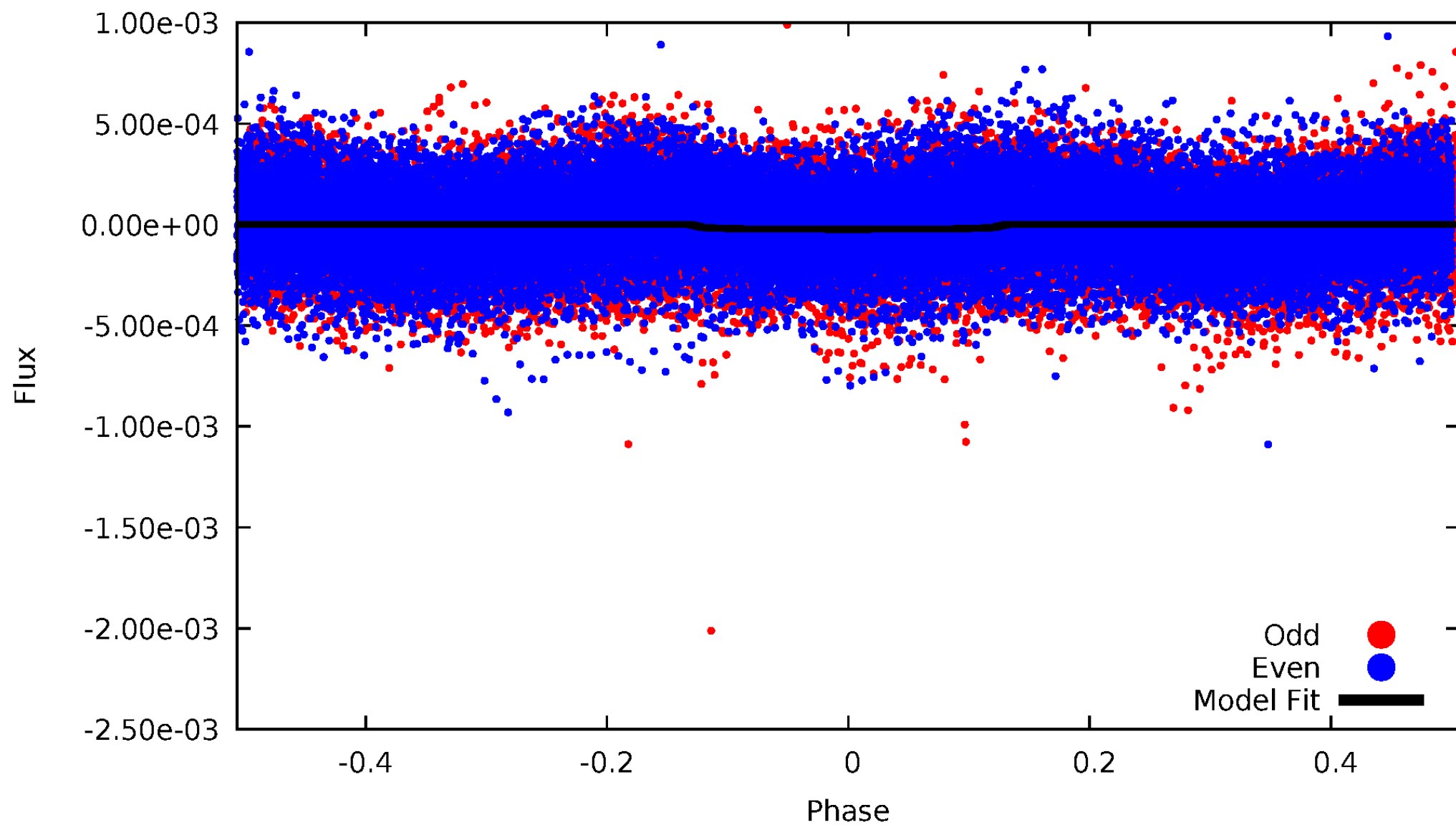


TCE 005790807-03



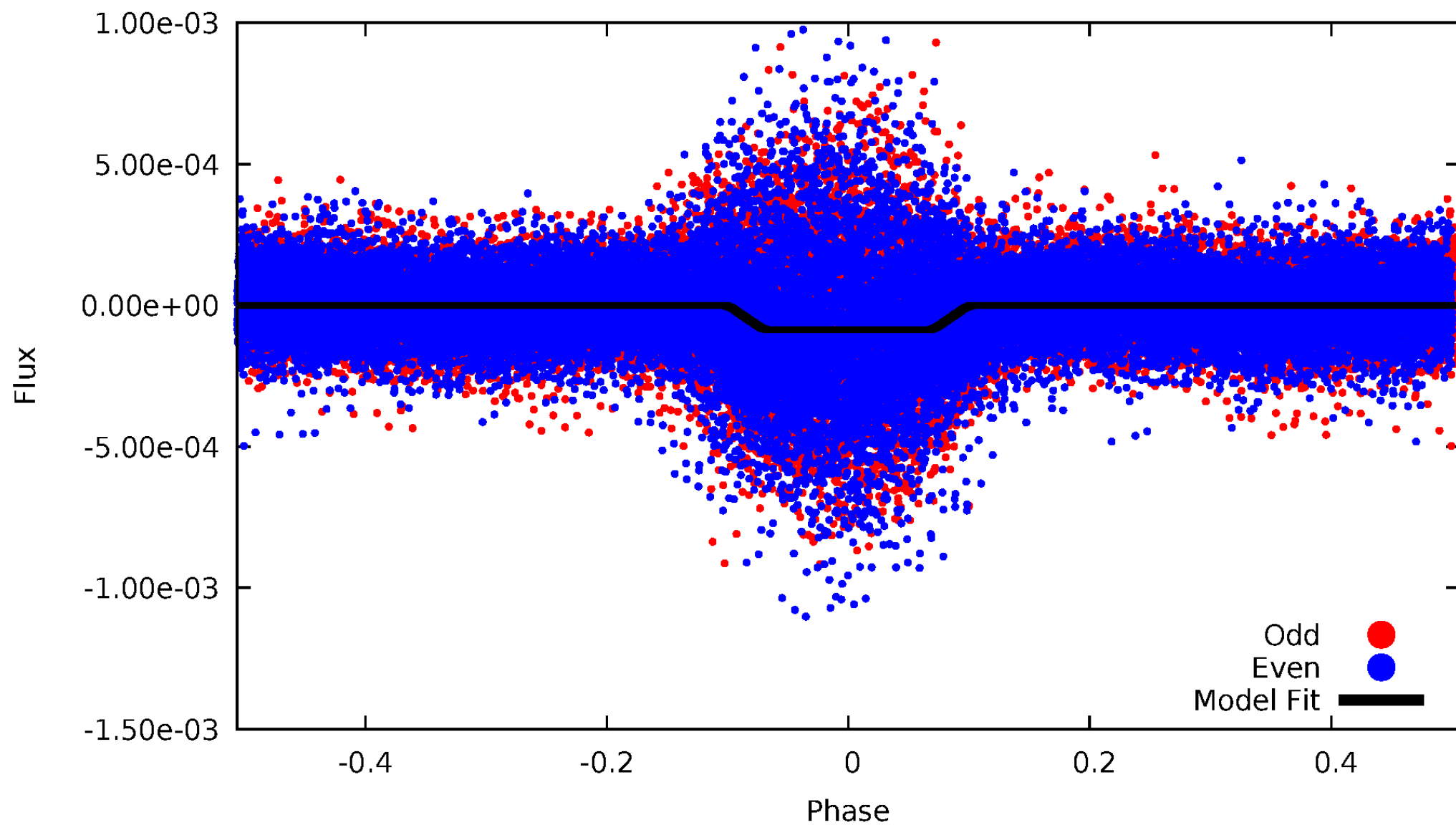
DV Odd/Even

TCE 005790807-03

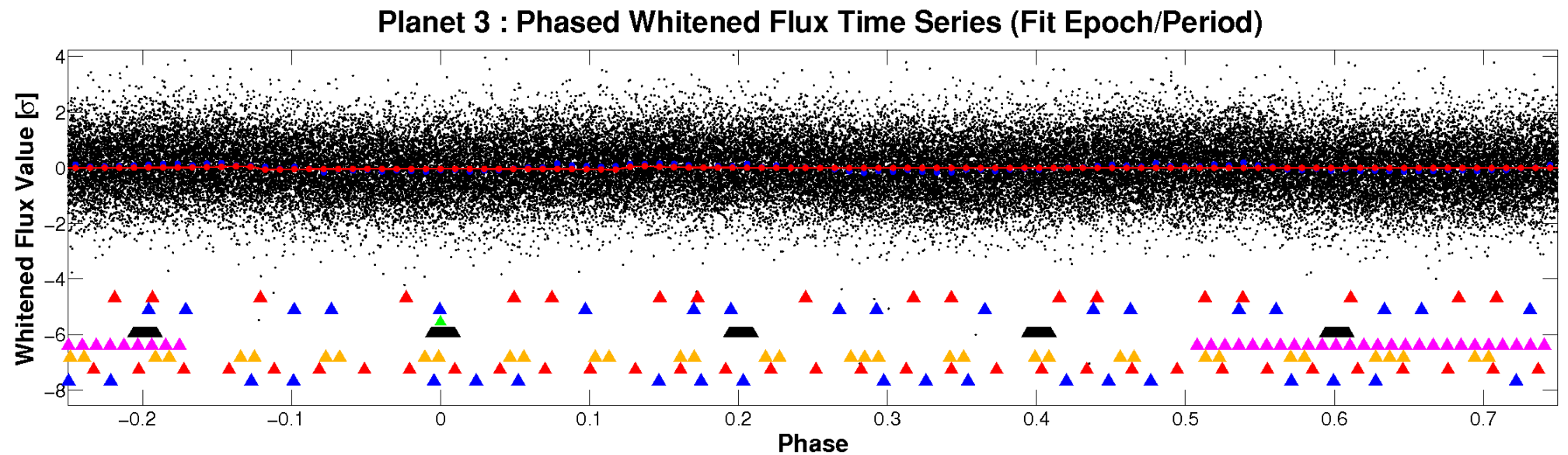
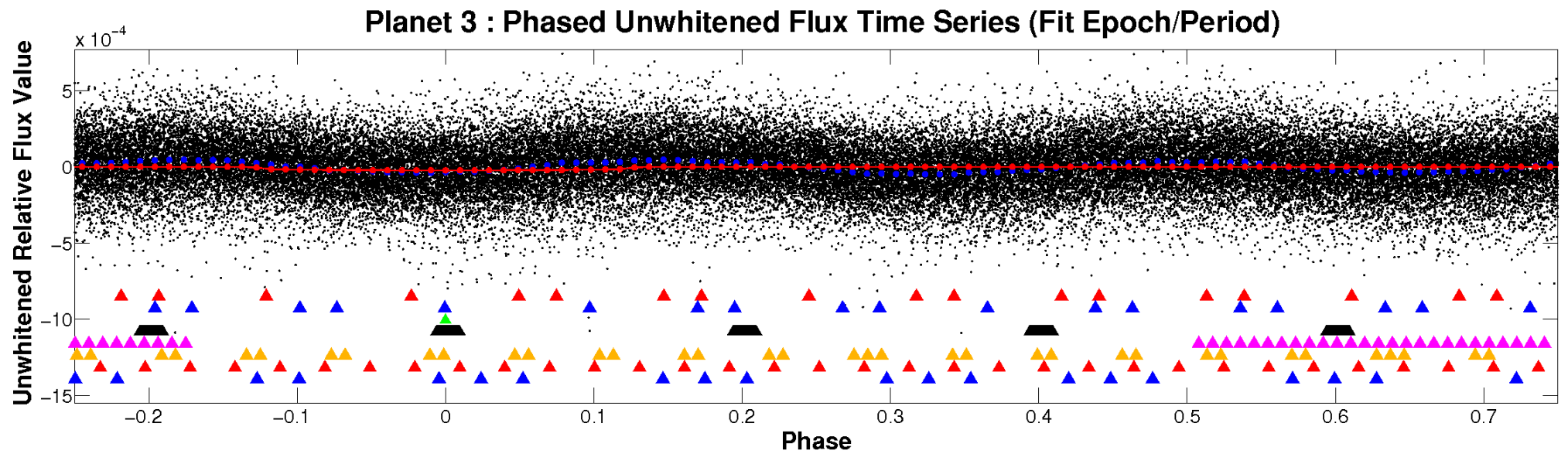


ALT Odd/Even

TCE 005790807-03

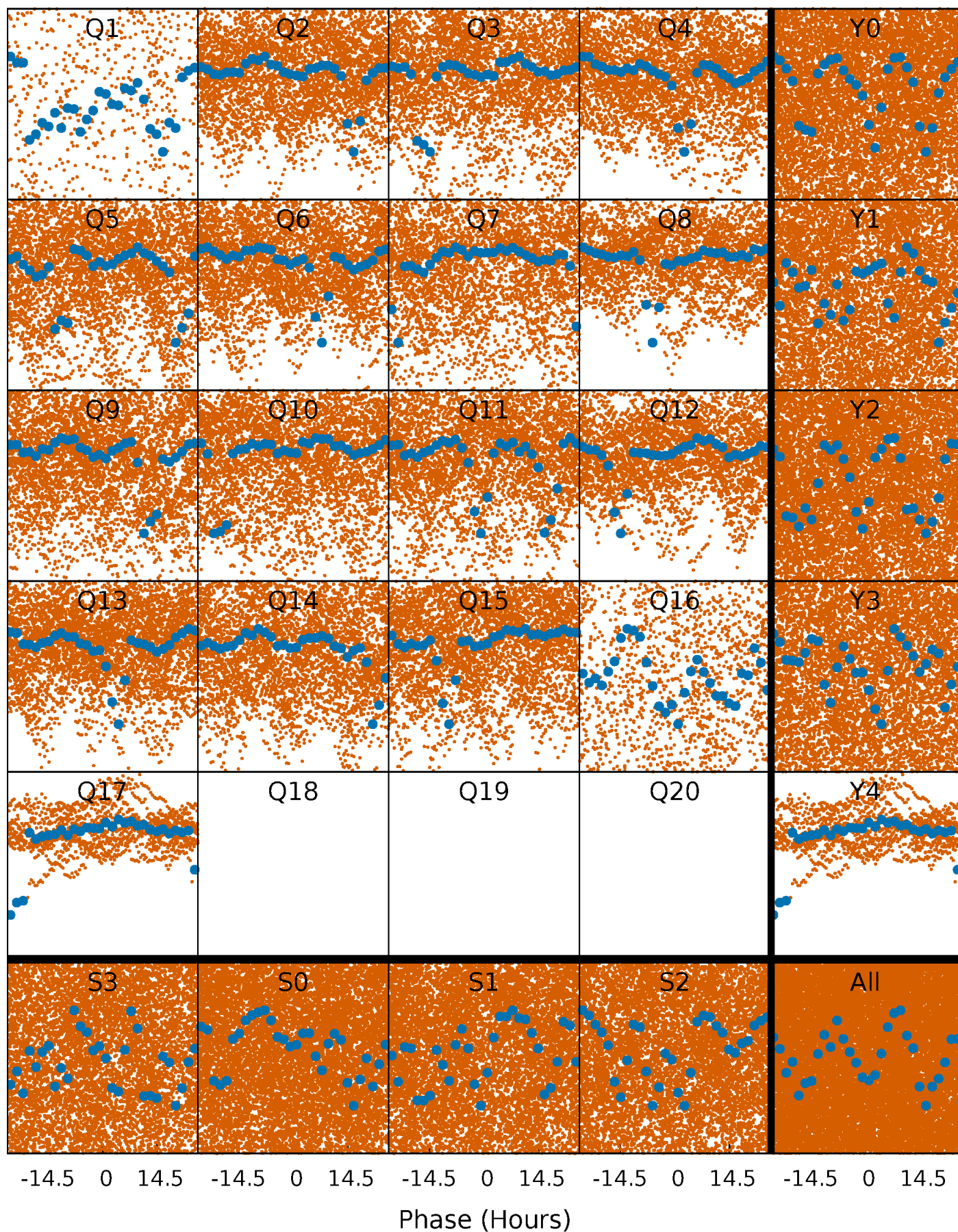


Non-Whitened Vs. Whitened Light Curve



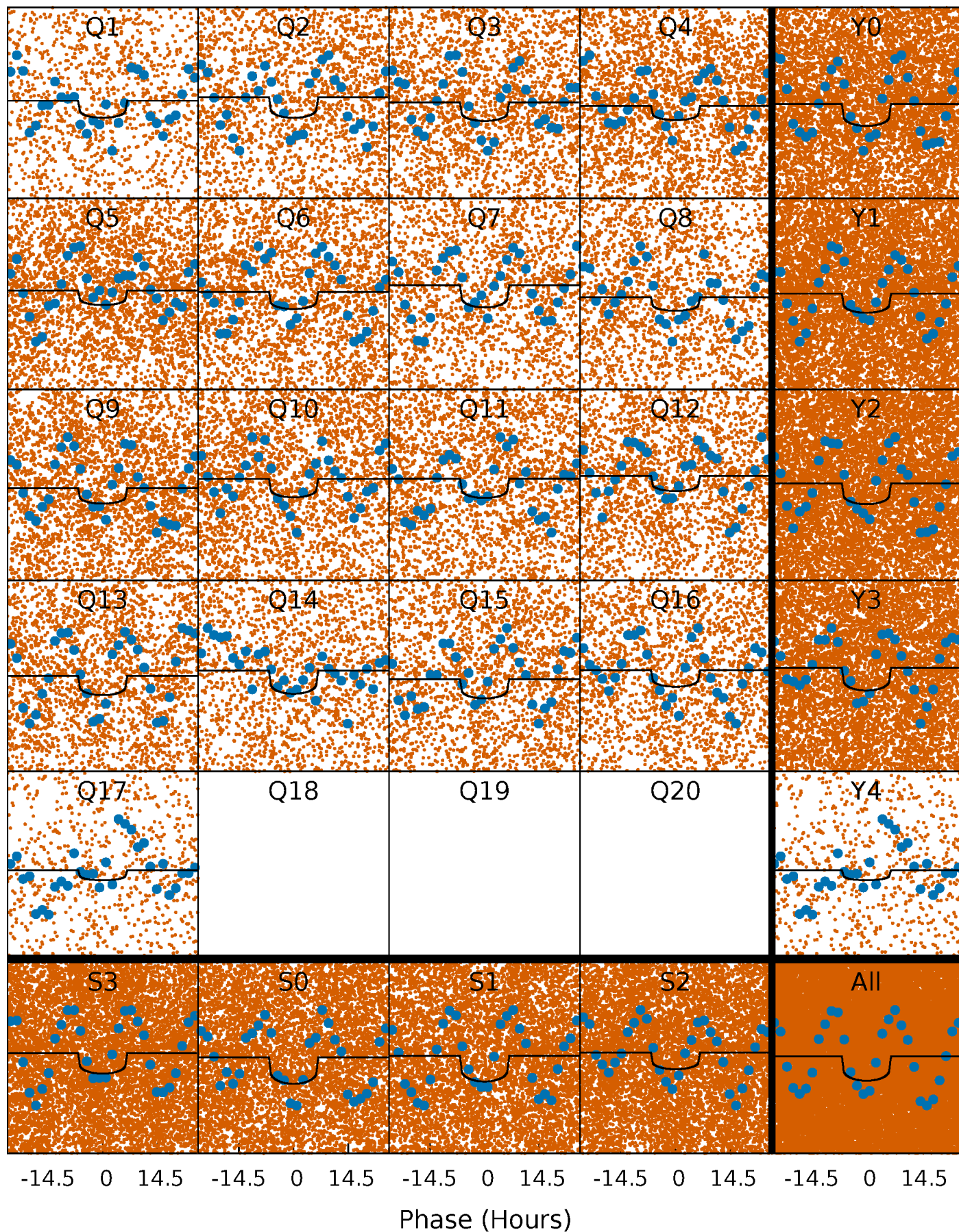
PDC Quarter-Phased Transit Curves

TCE 005790807-03 $P = 2.085085$ Days $T_0 = 133.485932$ (BKJD)



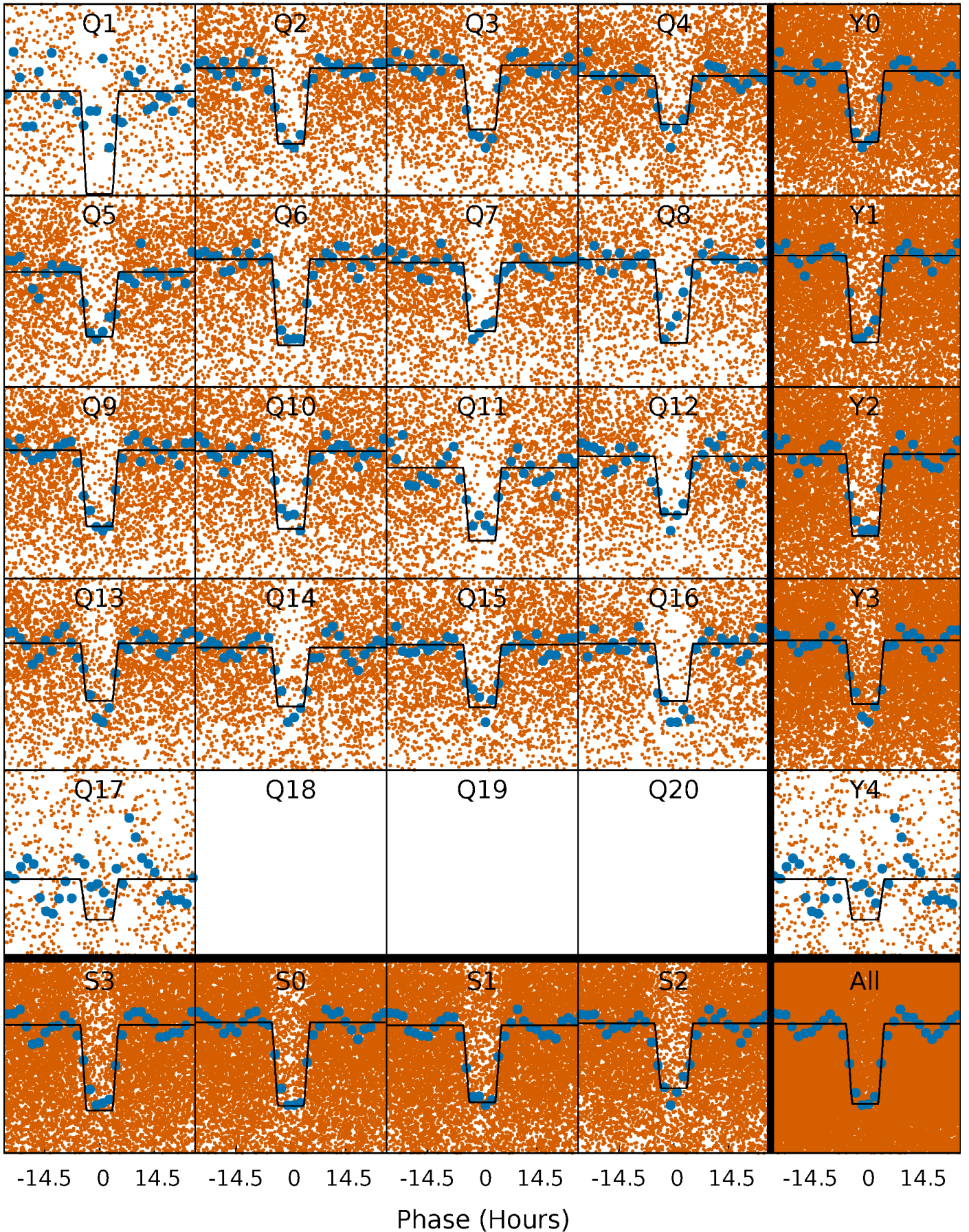
DV Quarter-Phased Transit Curves

TCE 005790807-03 P= 2.085085 Days $T_0=133.485932$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

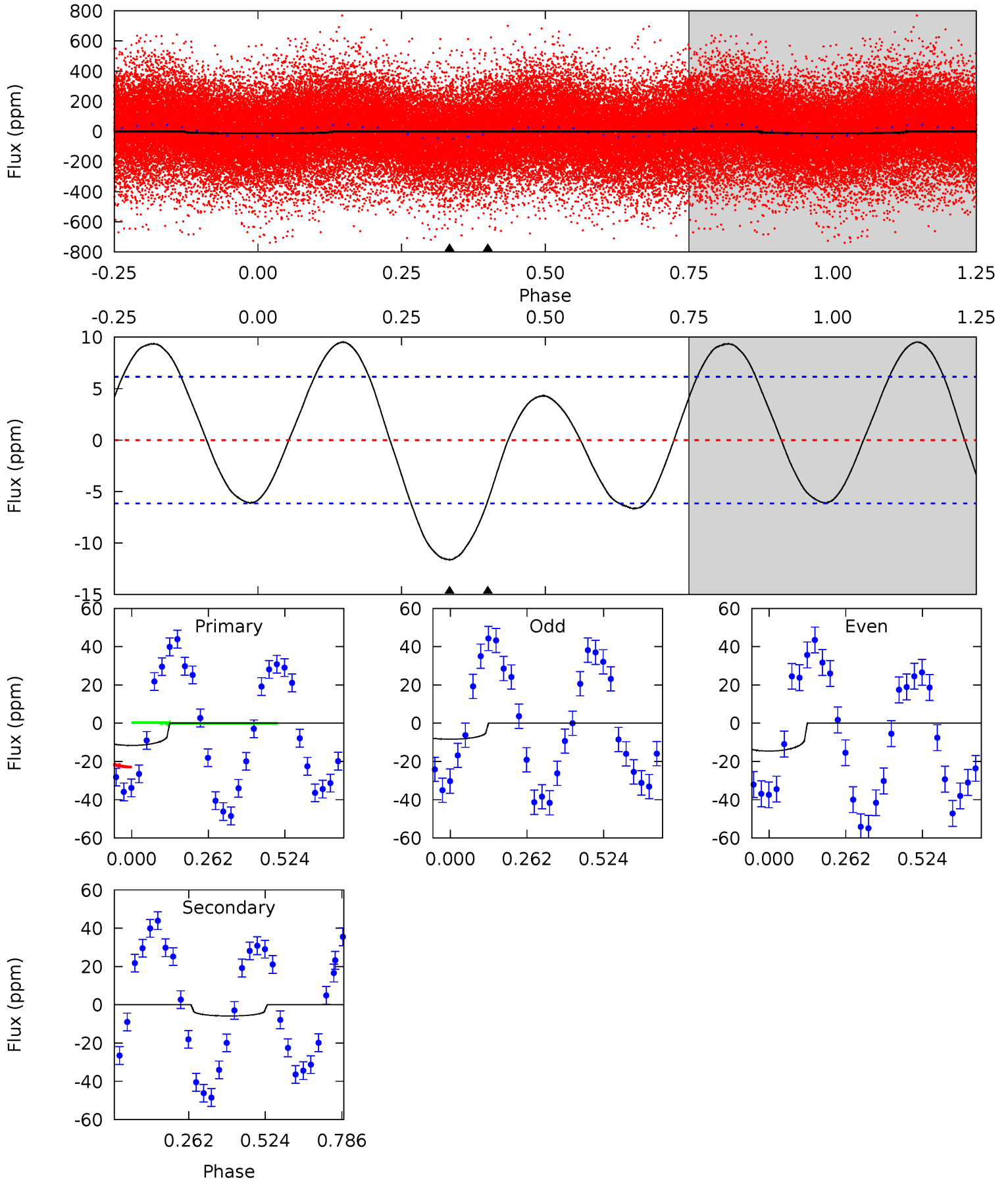
TCE 005790807-03 $P = 2.084922$ Days $T_0 = 133.479230$ (BKJD)



DV Model-Shift Uniqueness Test

005790807-03, P = 2.085085 Days, E = 131.400847 Days

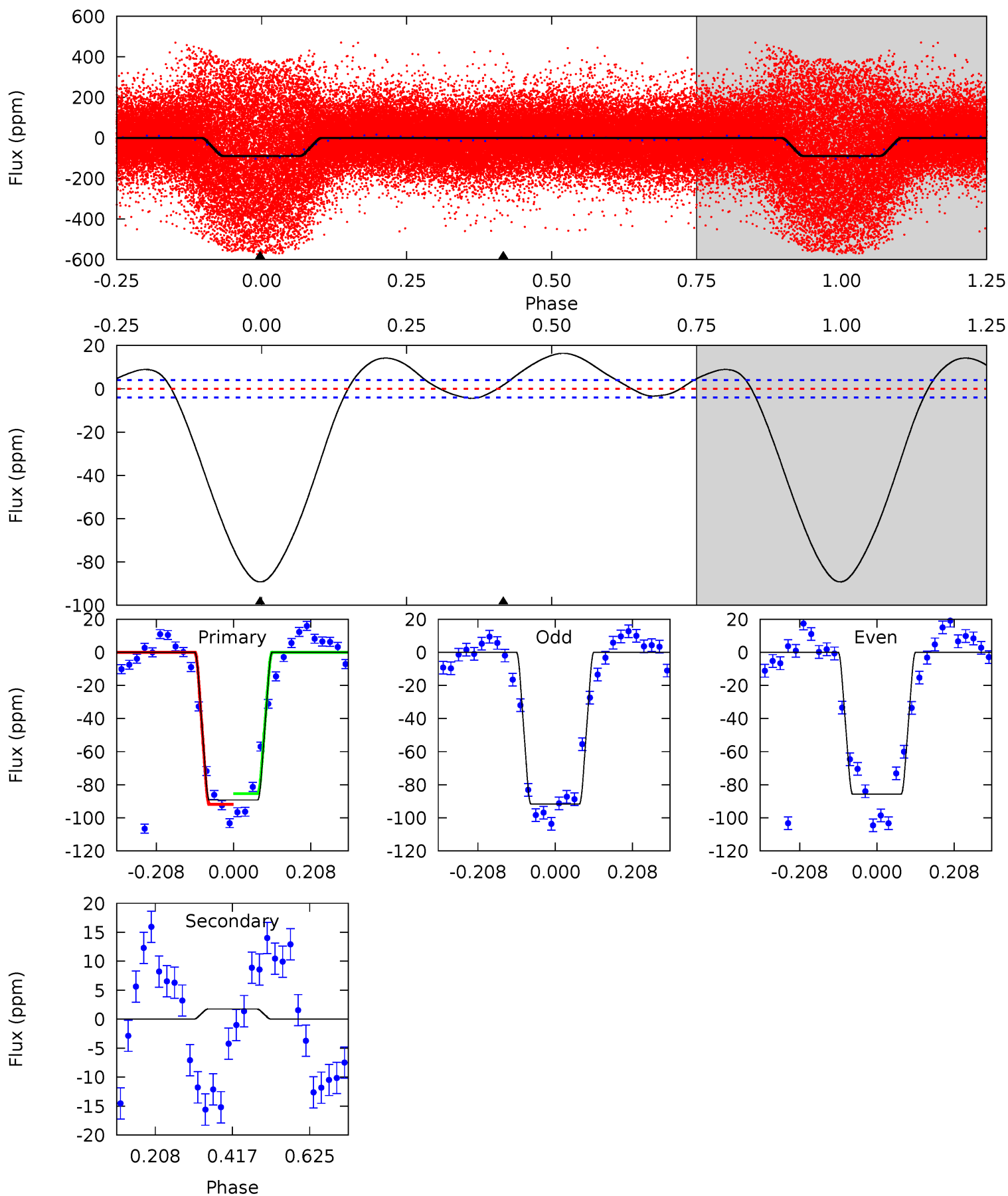
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
8.23	4.16	0	0	4.36	1.12	3.85	8.23	8.23	4.16	4.16	2.21	2.57	0.45	8.53



Alt Model-Shift Uniqueness Test

005790807-03, P = 2.084922 Days, E = 131.394308 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
97.5	-1.92	0	0	4.41	1.26	4.58	97.5	97.5	-1.92	-1.92	3.24	0.93	0.16	3.53



Stellar Parameters For KIC 005790807

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6796^{+67}_{-88}	$3.880^{+0.224}_{-0.096}$	$0.140^{+0.150}_{-0.150}$	$2.490^{+0.391}_{-0.727}$	$1.715^{+0.150}_{-0.244}$	$0.157^{+0.205}_{-0.047}$
	+1%/-1%	+6%/-2%	+107%/-107%	+16%/-29%	+9%/-14%	+131%/-30%
Source	SPE68	SPE68	SPE68	DSEP		

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

Secondary Eclipse Parameters for KIC 005790807-03 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-6 ± 1	$1.18^{+0.74}_{-0.57}$	3353^{+142}_{-235}	4844^{+2020}_{-911}	$3.259^{+9.817}_{-2.052}$
Alt.	2 ± 1	$2.42^{+0.79}_{-0.72}$	3354^{+151}_{-224}	-3602^{+198}_{-254}	$-0.231^{+0.141}_{-0.305}$

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

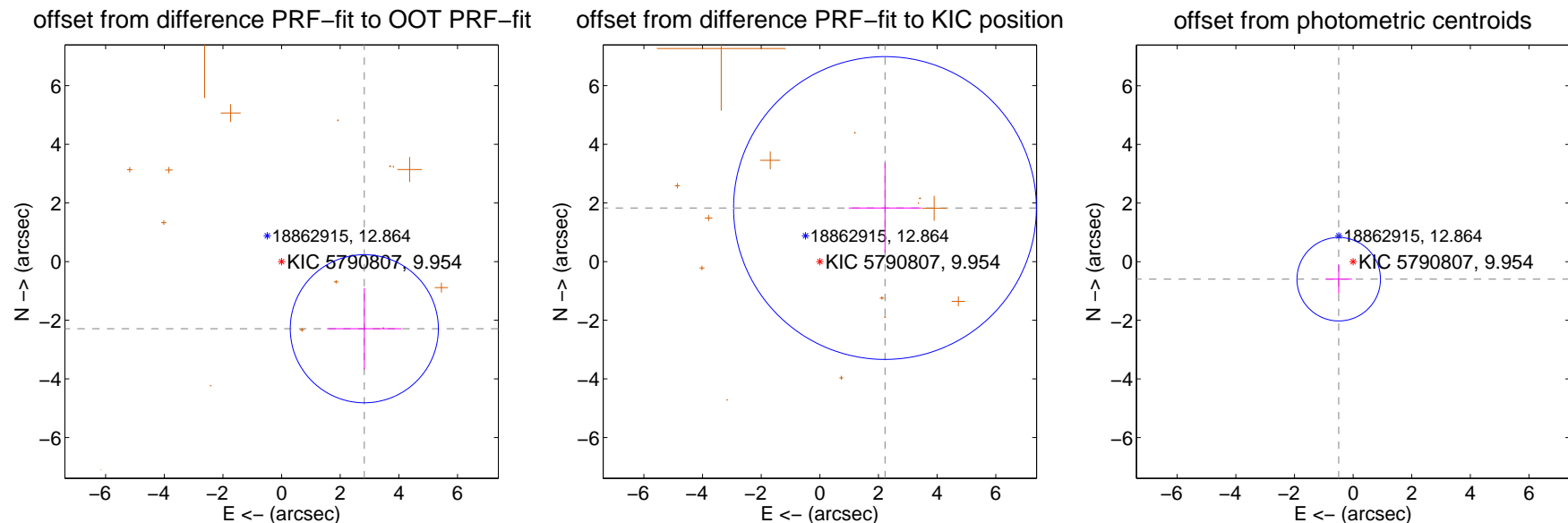
DV Centroid Data

Supplemental centroid analysis for 005790807-03. **Kepler magnitude: 9.95.** Transit SNR 6.49

There are 0 quarters with good PRF difference image offsets

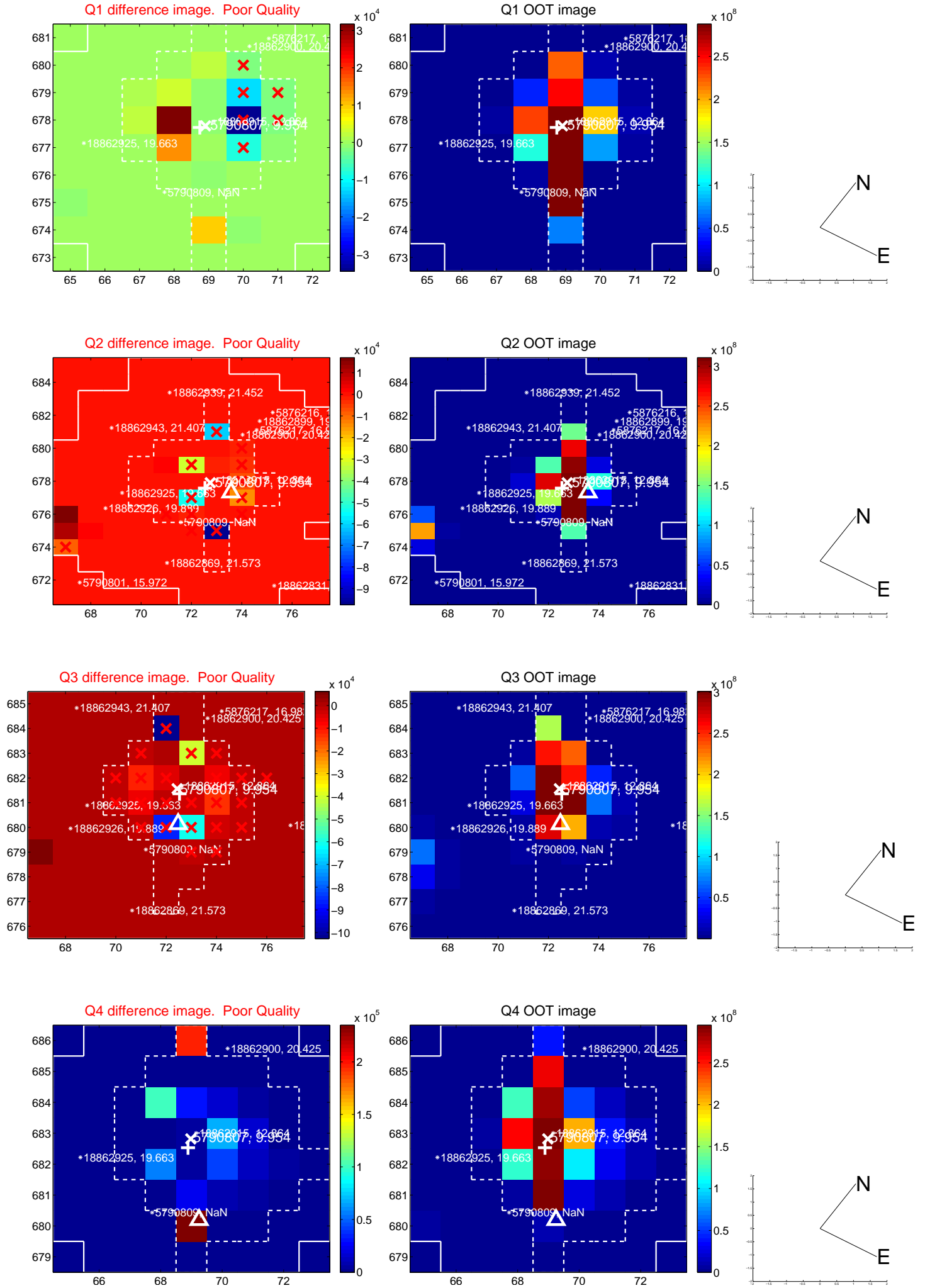
The direct PRF centroid is offset from the target star catalog position by about 0.61 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	3.633 ± 0.842	4.32	-2.821 ± 1.271	-2.290 ± 1.388
PRF-fit source offset from KIC position	2.876 ± 1.721	1.67	-2.221 ± 1.232	1.827 ± 1.526
photometric centroid source offset	0.77 ± 0.47	1.63	0.49 ± 0.45	-0.60 ± 0.49

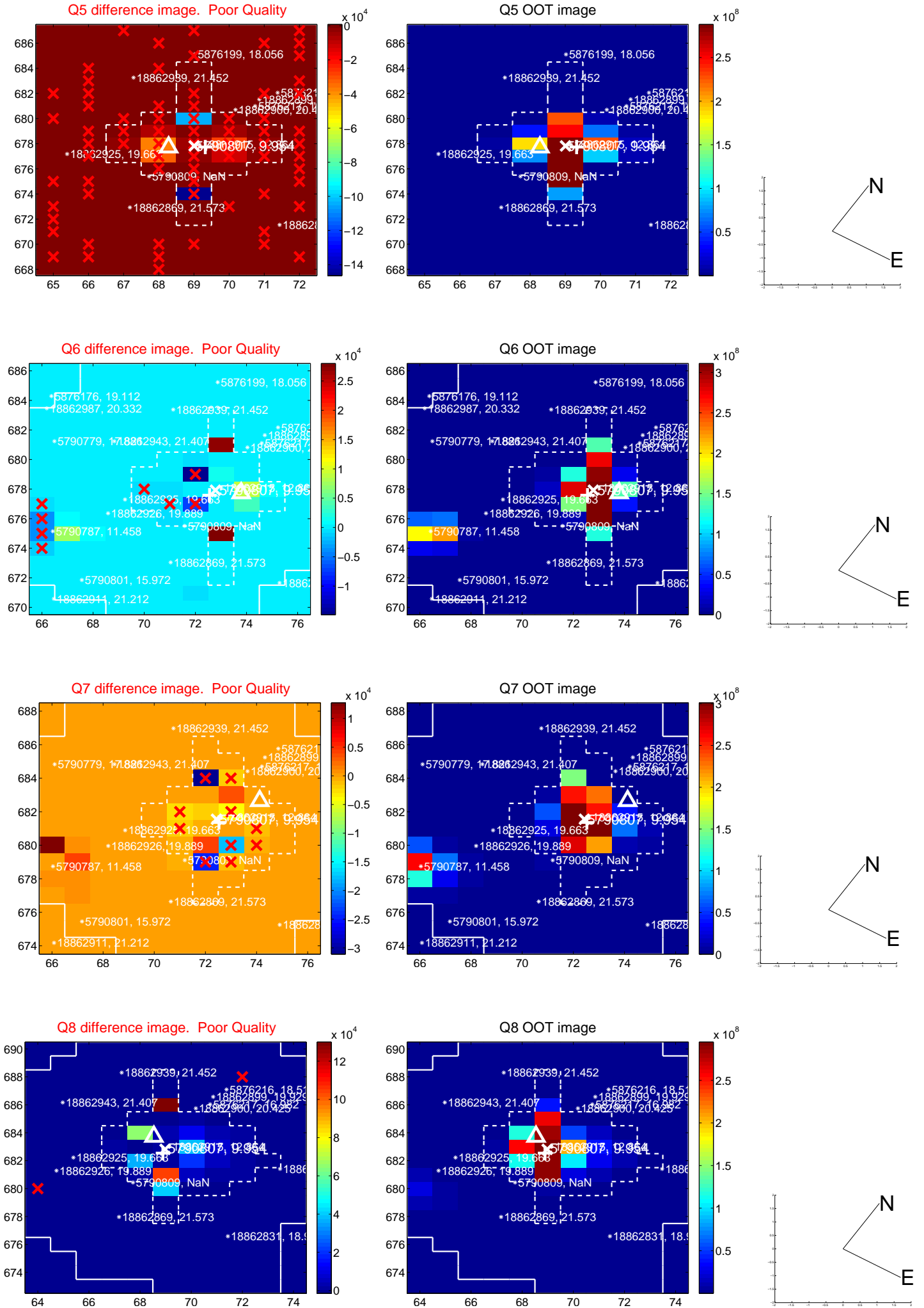


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets;** magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

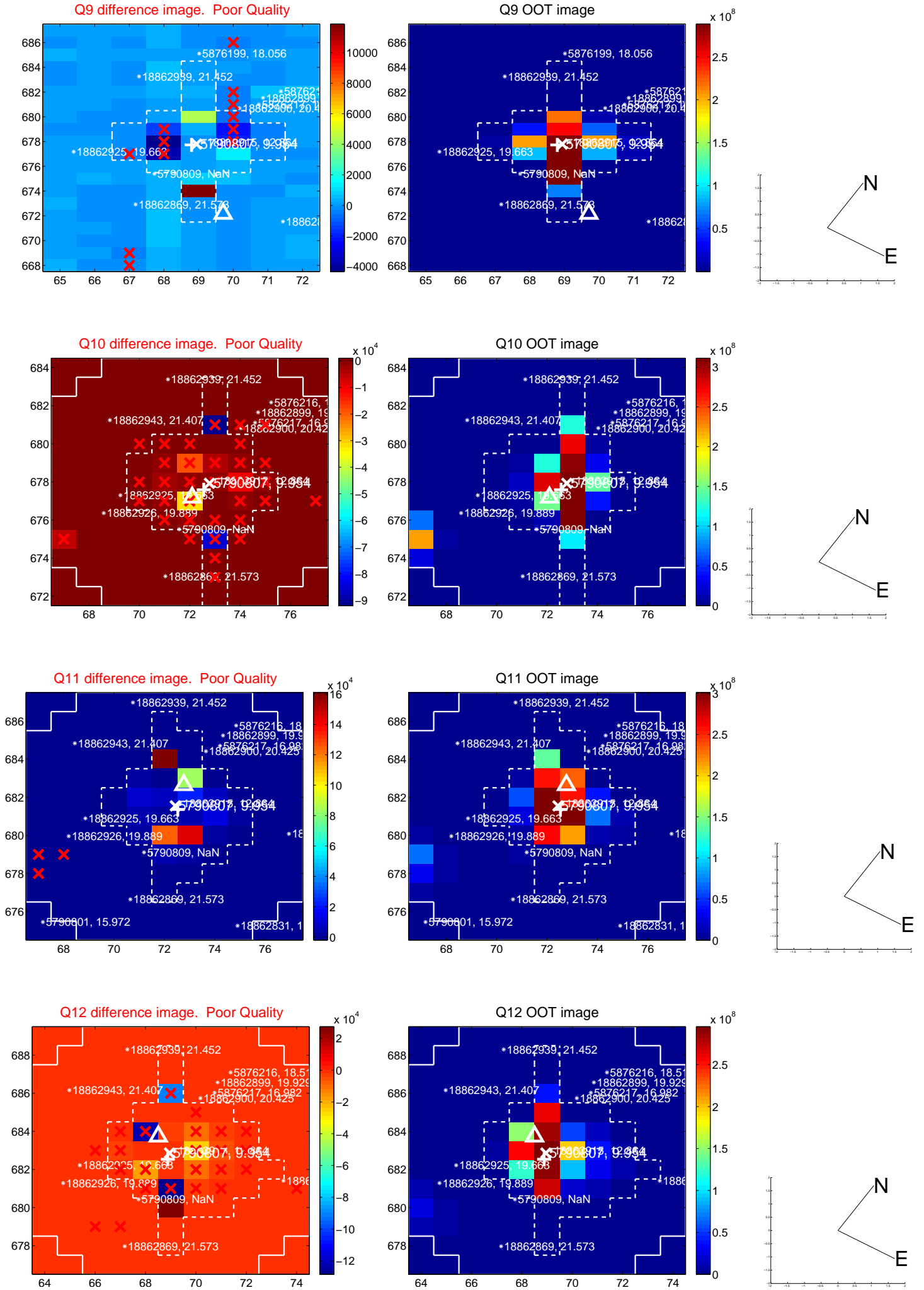
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



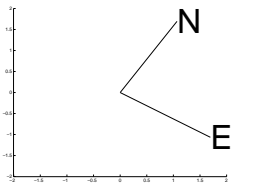
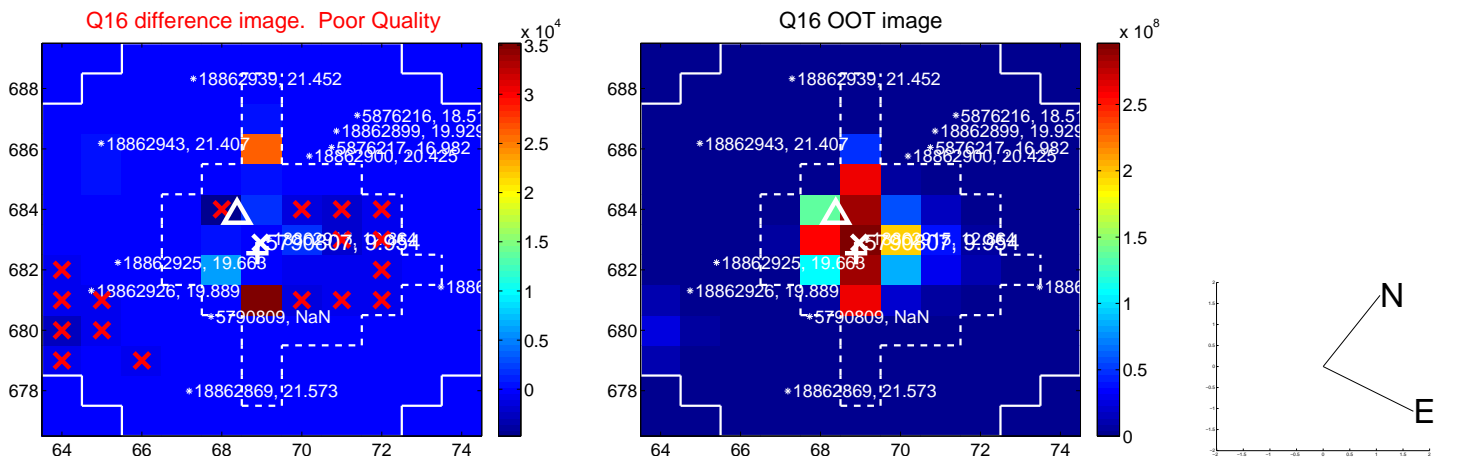
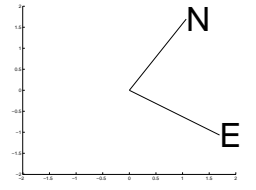
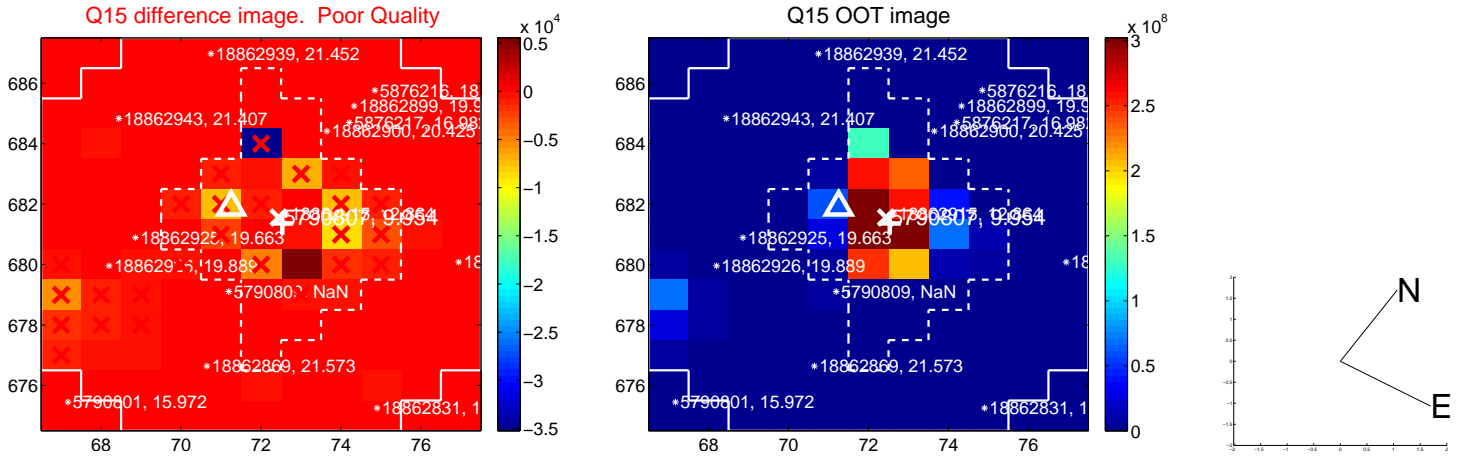
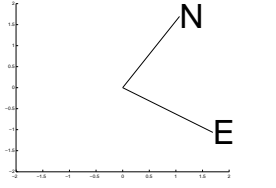
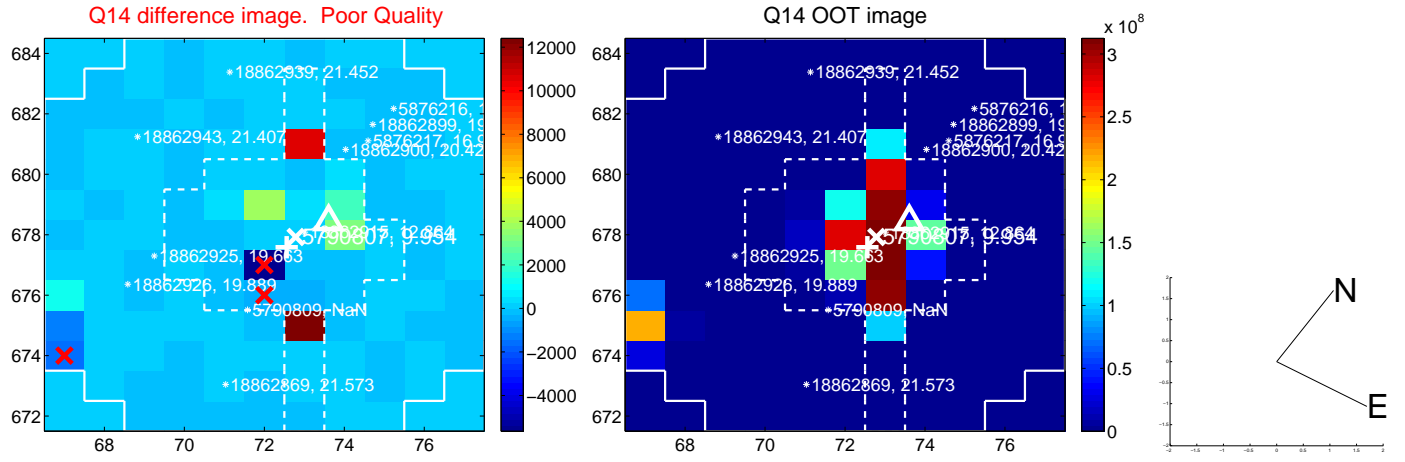
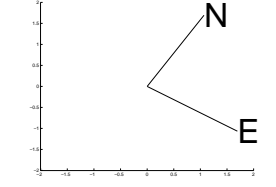
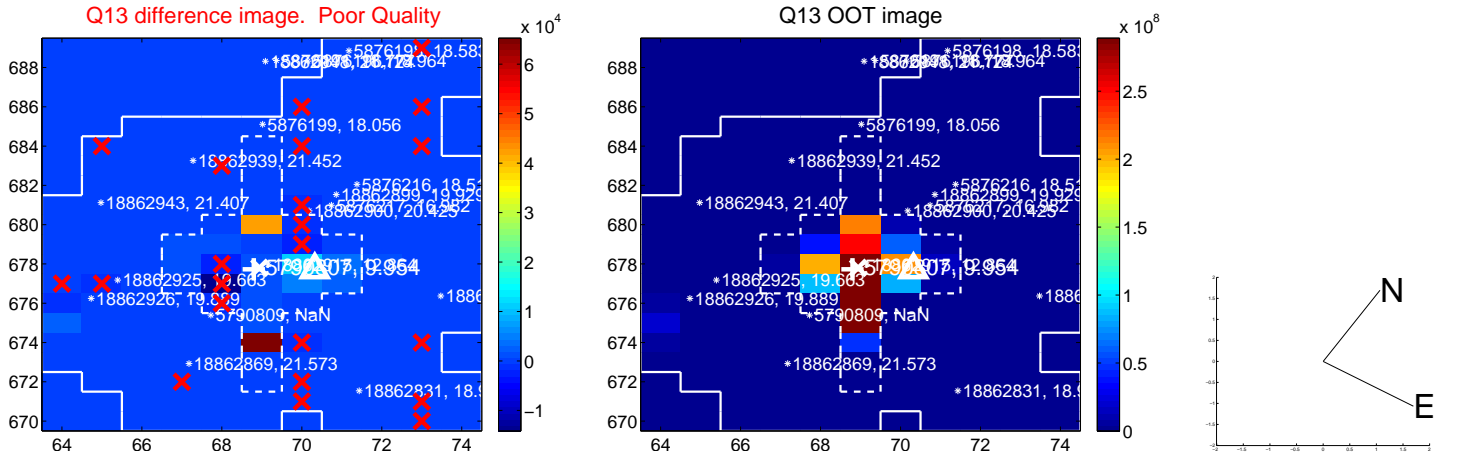
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



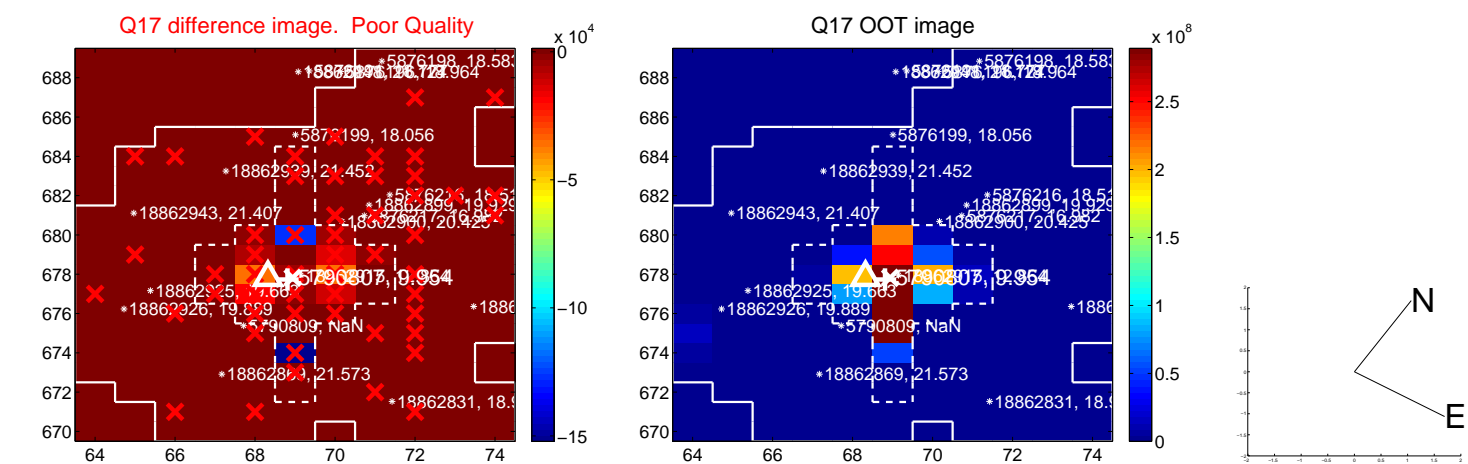
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



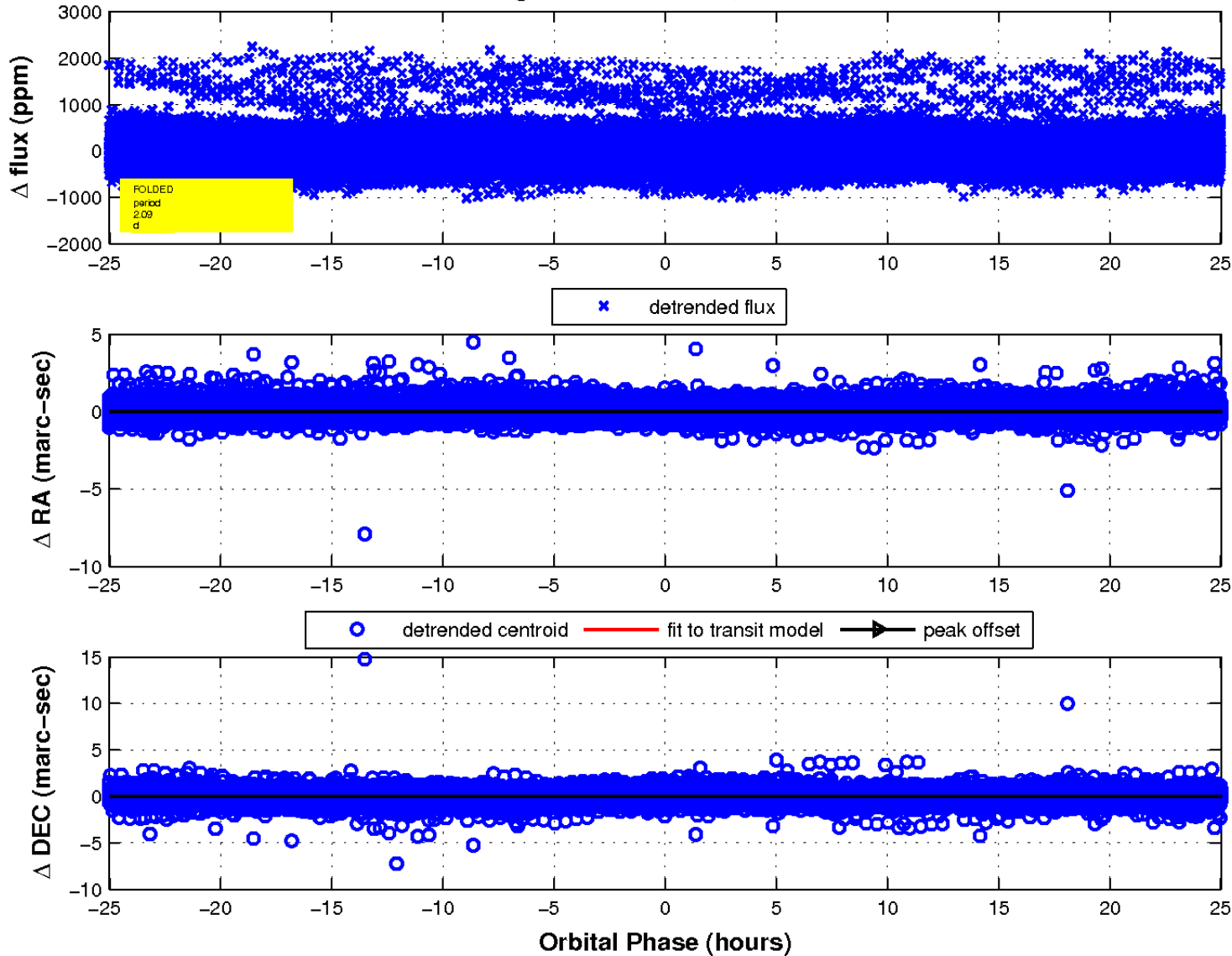
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white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.

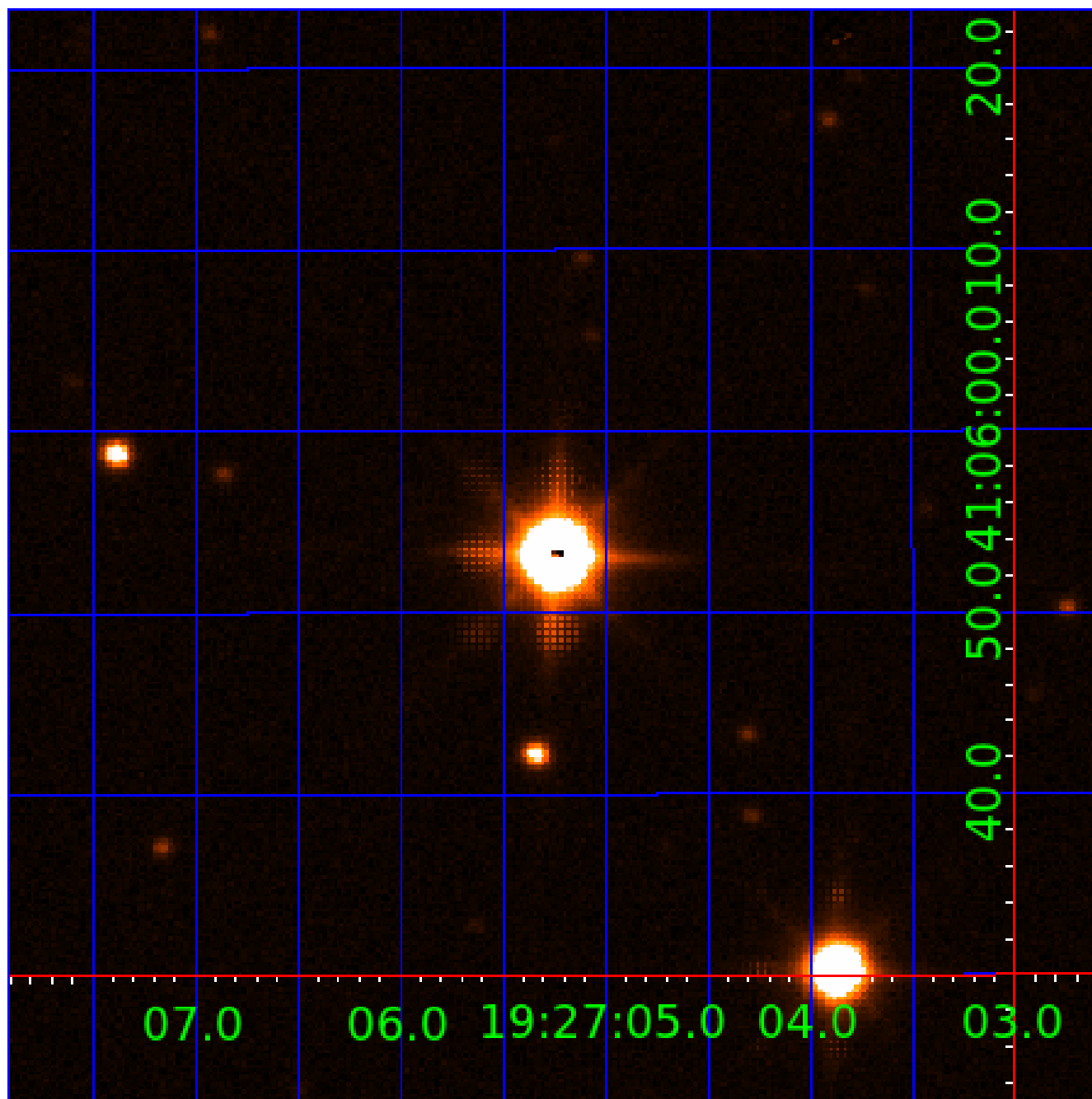


fluxWeightedCentroids, Planet 3 of 8



UKIRT Image

Declination



KIC 005790807

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})
005790807-01	OBS	0259.01	79.996235	207.125967	24262.8	6.332	906.5	965.6	2.49	6796	40.86	62.61
005790807-02	OBS	No	79.996152	207.377628	2485.9	27.889	16.8	24.8	2.49	6796	22.71	62.61
005790807-03	OBS	No	2.085085	133.485932	23.1	12.666	10.3	6.5	2.49	6796	1.21	8101.07
005790807-04	OBS	No	0.834015	131.838014	36.7	4.215	13.1	14.1	2.49	6796	1.74	27487.95
005790807-05	OBS	No	41.682256	151.886509	154.3	3.542	12.2	10.3	2.49	6796	3.56	149.32
005790807-07	OBS	No	22.683197	145.068615	164.5	5.392	11.8	7.6	2.49	6796	3.59	336.07
005790807-08	OBS	No	72.092786	190.659339	55.9	7.500	11.7	-1.0	2.49	6796	1.88	71.92

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
005790807-01	OBS	FP	0.35	0	1	0	0	MOD_SEC_ALT—CENT_SATURATED
005790807-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_SKYE_ZUMA—LPP_DV—MOD_NONUNIQ_DV—RESIDUAL_TCE—CENT_SATURATED
005790807-03	OBS	FP	0.00	1	0	0	0	LPP_DV—MOD_NONUNIQ_DV—CENT_SATURATED
005790807-04	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_SKYE_ZUMA—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_ALT—CENT_SATURATED
005790807-05	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_SATURATED
005790807-07	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—CENT_SATURATED
005790807-08	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_SATURATED

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

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

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

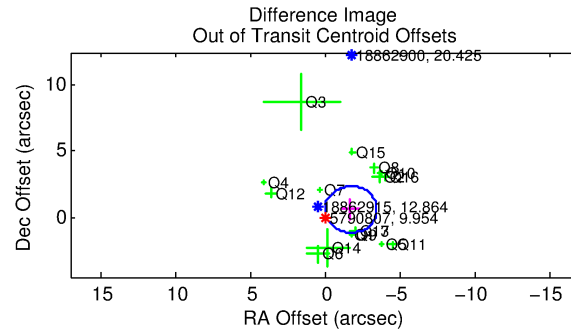
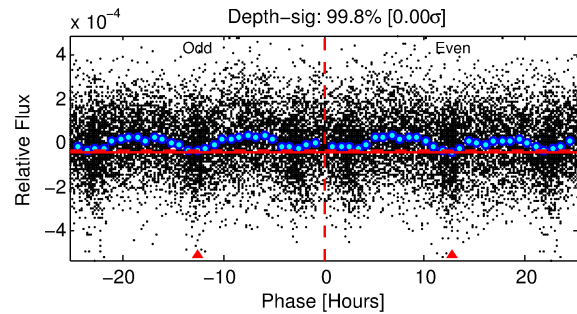
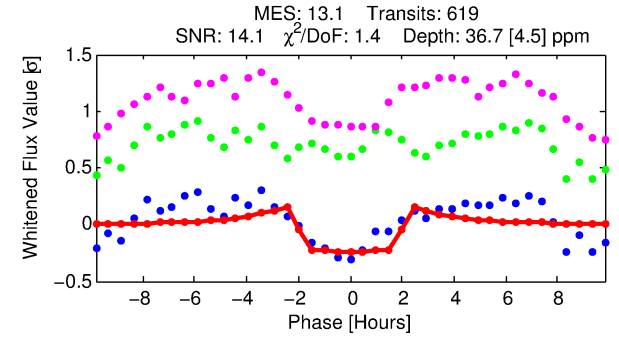
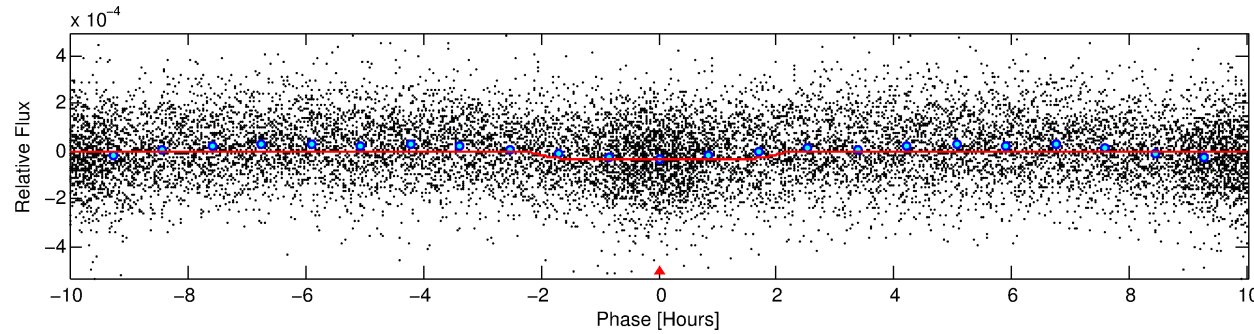
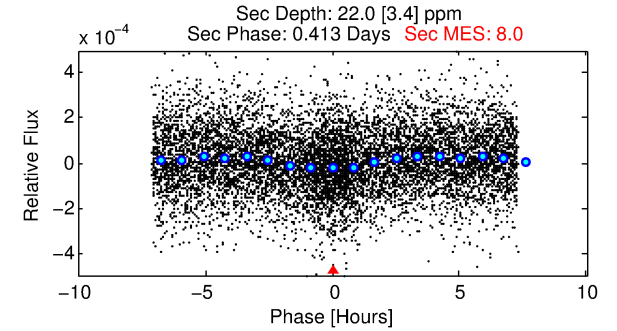
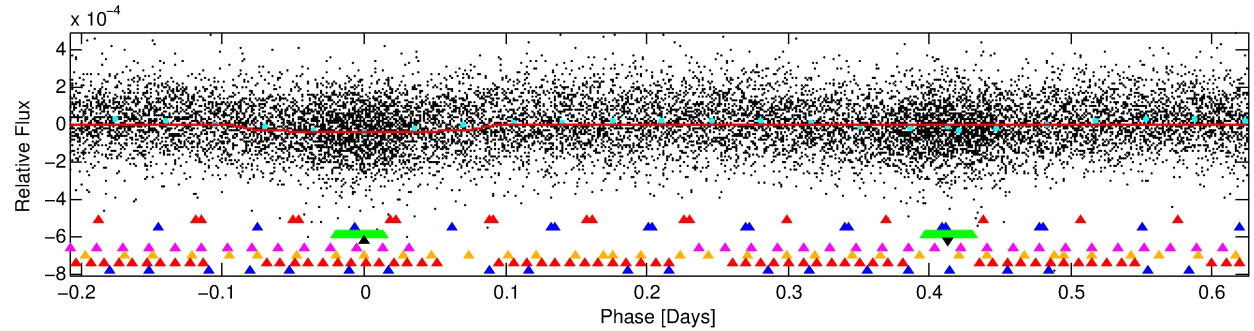
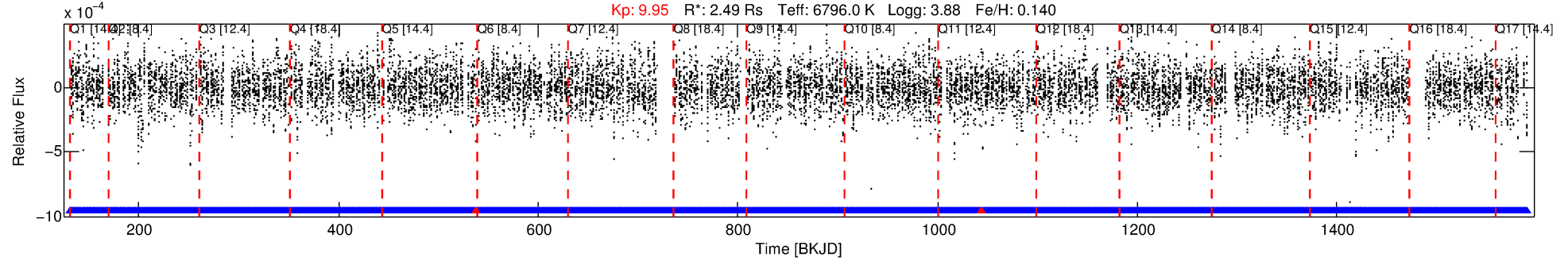
Ephemeris Match Information For 005790807-04

No Significant Match Found

DV One-Page Summary

KIC: 5790807 Candidate: 4 of 8 Period: 0.834 d

KOI: K00259 Corr: No Ephemeris Match



DV Fit Results:

Period = 0.83401 [0.00001] d
 Epoch = 131.8380 [0.0032] BKJD
 Rp/R* = 0.0064 [0.0027]
 a/R* = 1.17 [0.79]
 b = 0.89 [0.59]
 Seff = 27487.95 [10954.02]
 Teq = 3283 [327] K
 Rp = 1.74 [0.89] Re
 a = 0.0208 [0.0054] AU
 Ag = 1.72 [1.62] [0.44σ]
 Teffp = 5812 [1242] K [1.97σ]

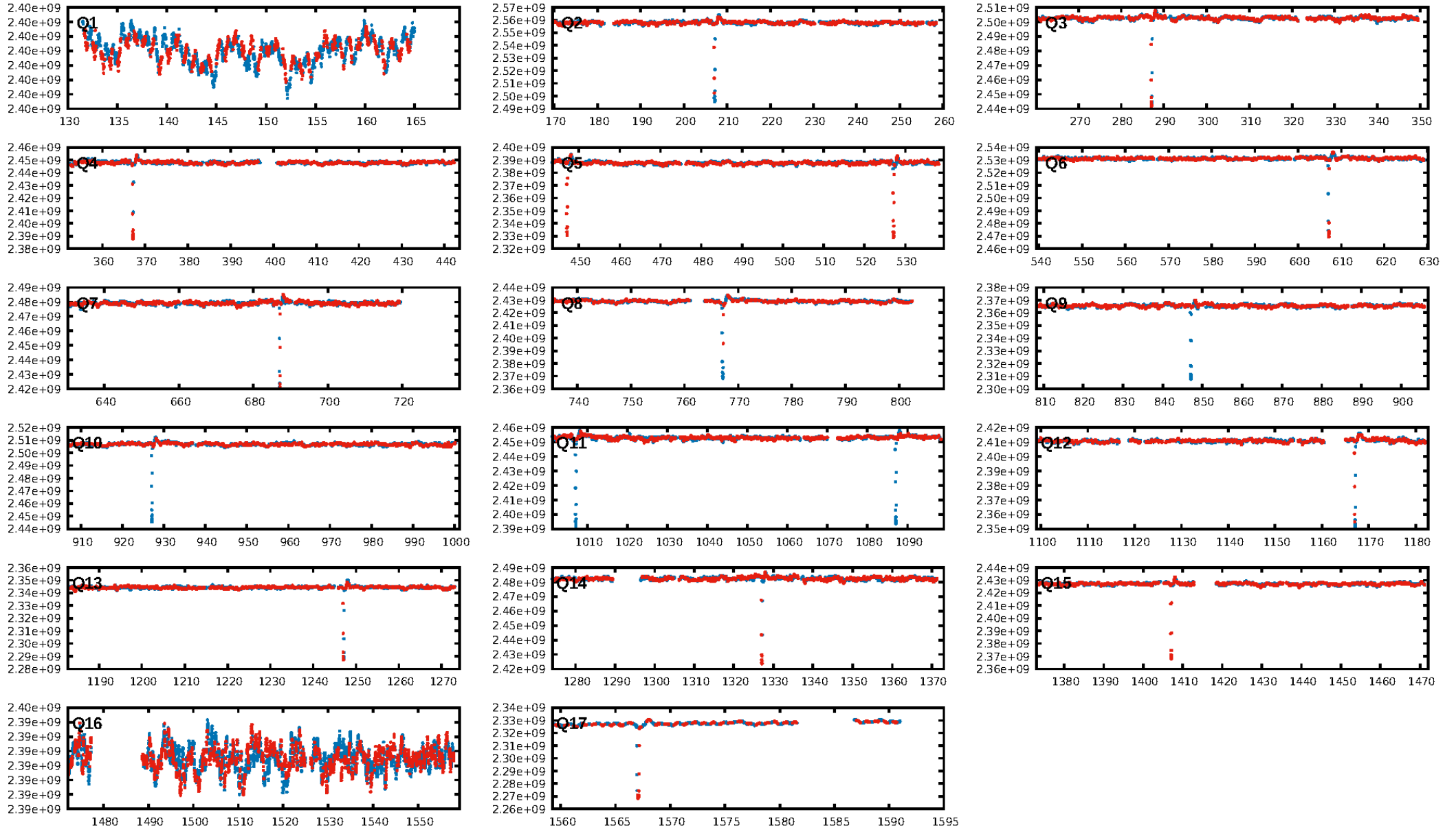
DV Diagnostic Results:

ShortPeriod-sig: N/A
 LongPeriod-sig: 97.6% [2.25σ]
 ModelChiSquare2-sig: N/A
 ModelChiSquareGof-sig: N/A
 Bootstrap-pfa: N/A
 RollingBand-fgt: 1.00 [590/592]
 GhostDiagnostic-chr: N/A
 Centroid-sig: 37.1%
 Centroid-so: 0.447 arcsec [2.18σ]
 OotOffset-rm: 1.850 arcsec [3.18σ]
 KicOffset-rm: 2.157 arcsec [3.27σ]
 OotOffset-st: 4/4/4/5 [17]
 KicOffset-st: 4/4/4/5 [17]
 DiffImageQuality-fgm: 0.06 [1/17]
 DiffImageOverlap-fno: 1.00 [17/17]

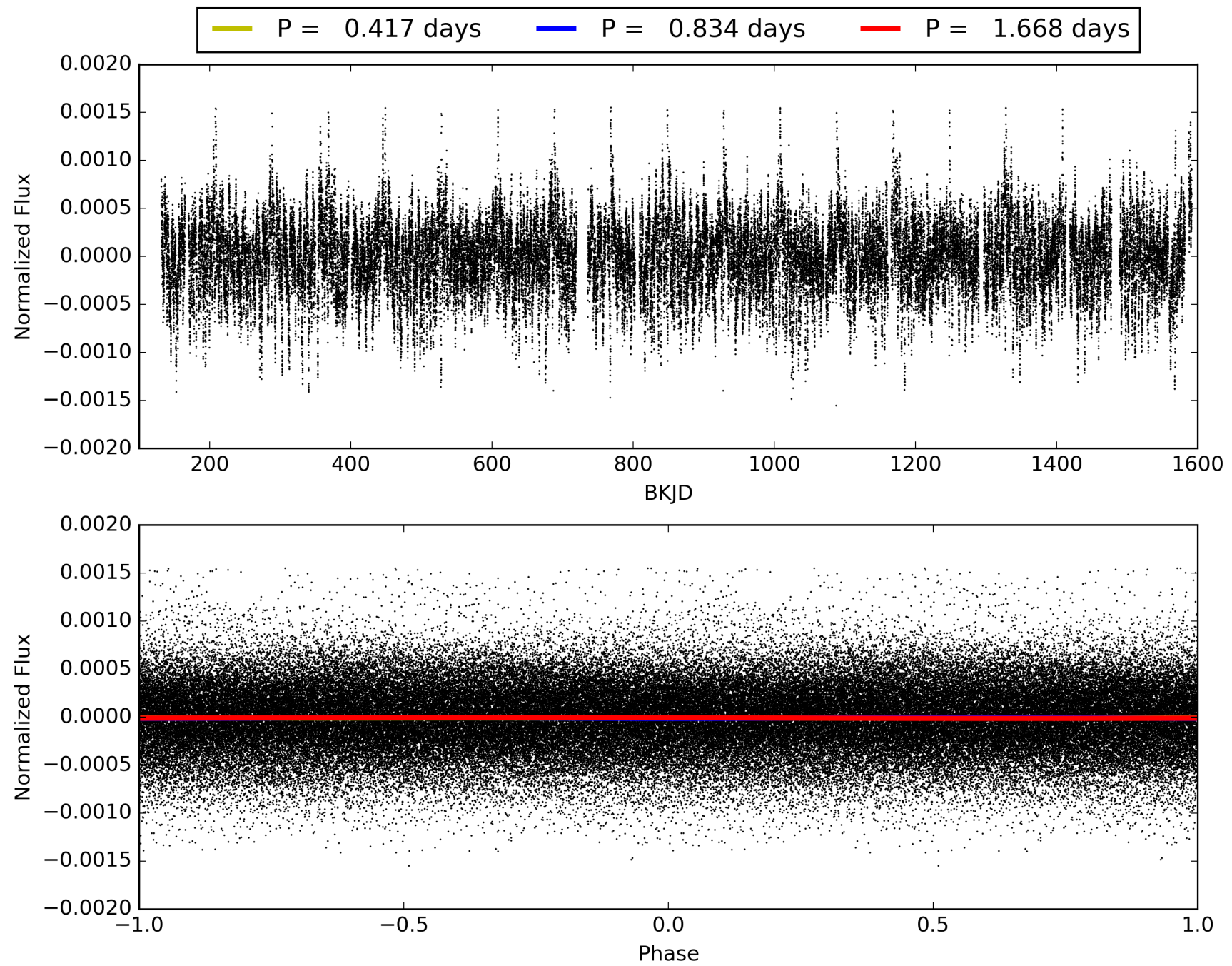
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 03-Feb-2016 08:11:48 Z

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

TCE 005790807-04, PDC Light Curves

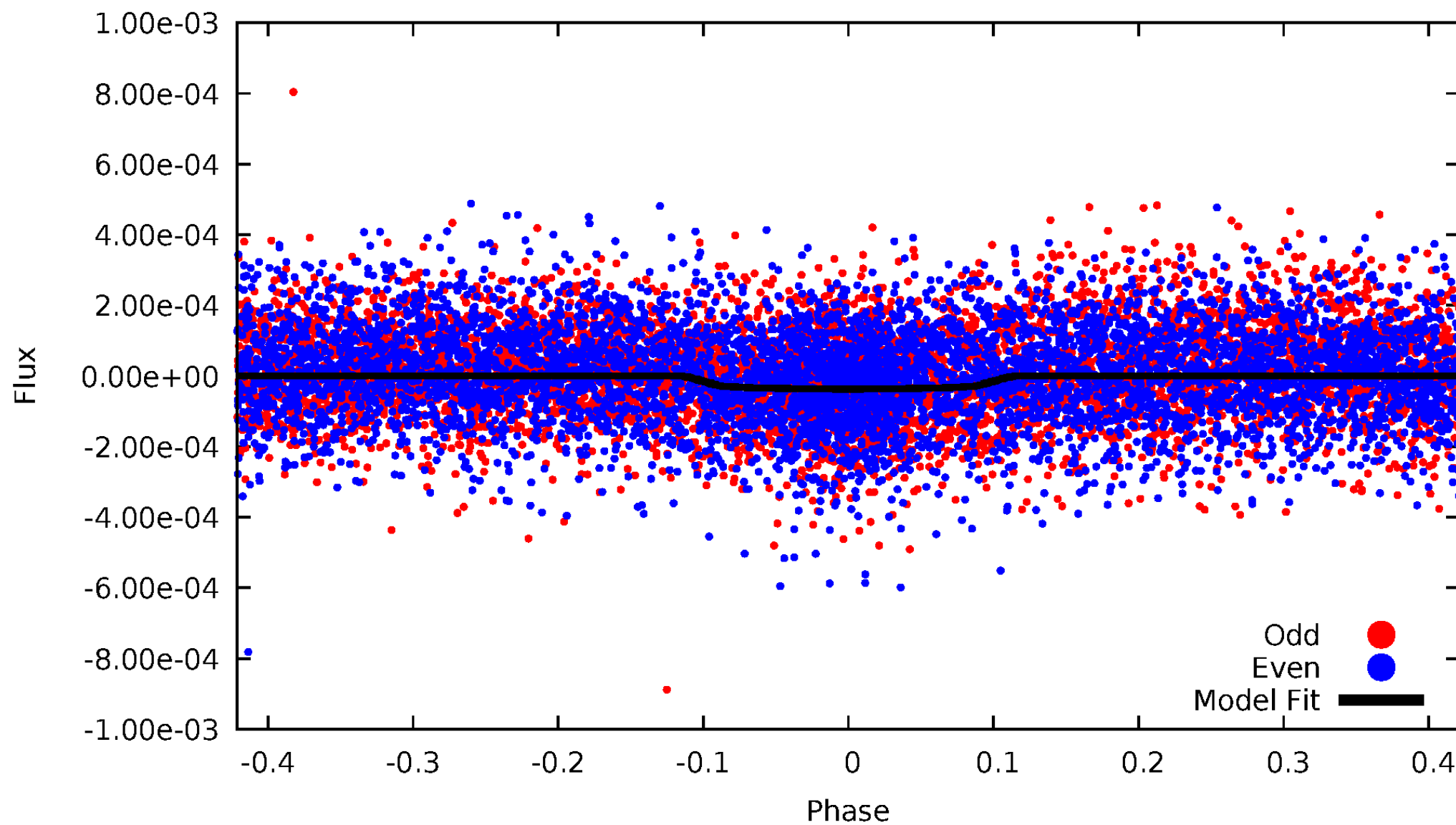


TCE 005790807-04



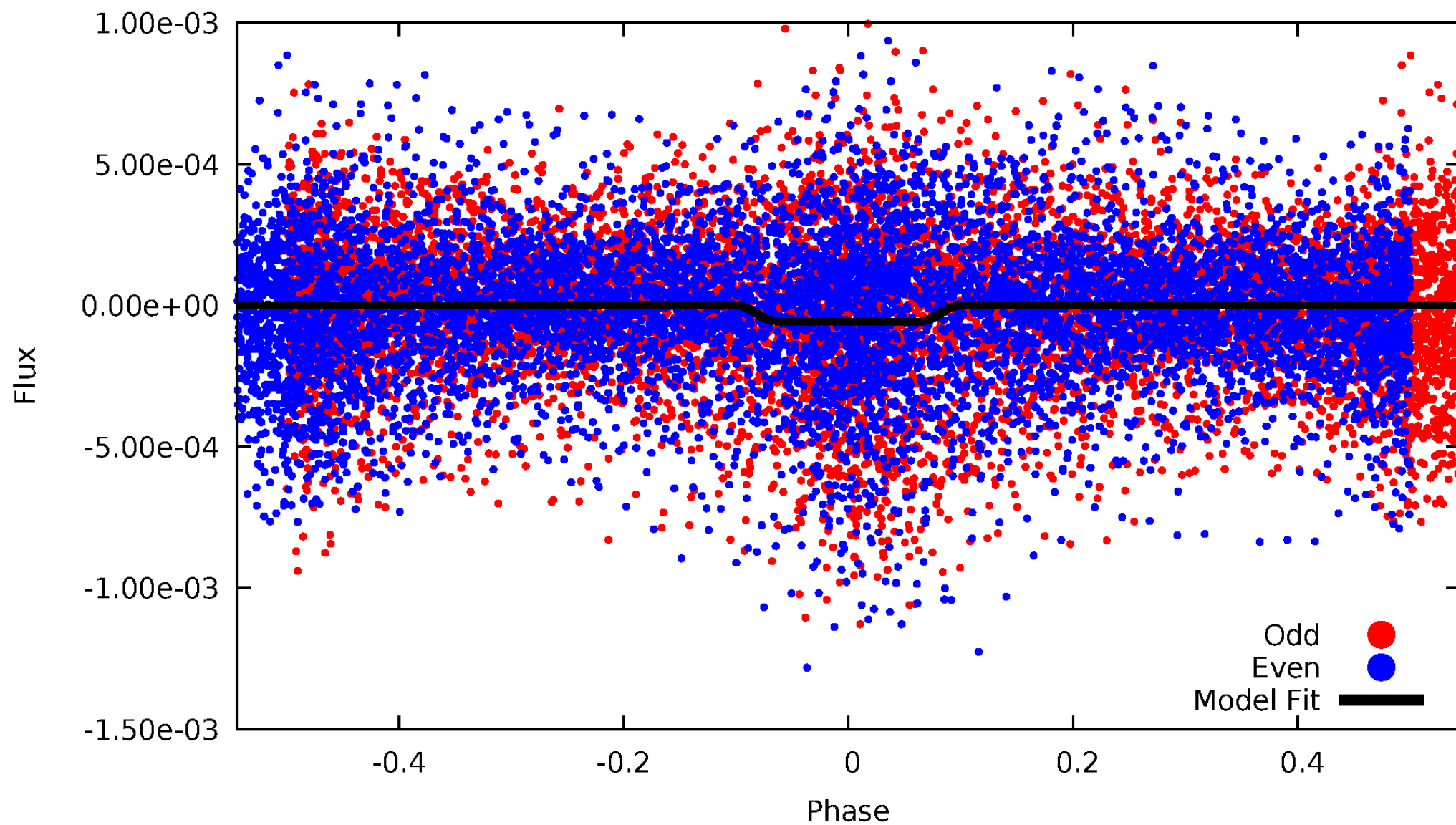
DV Odd/Even

TCE 005790807-04



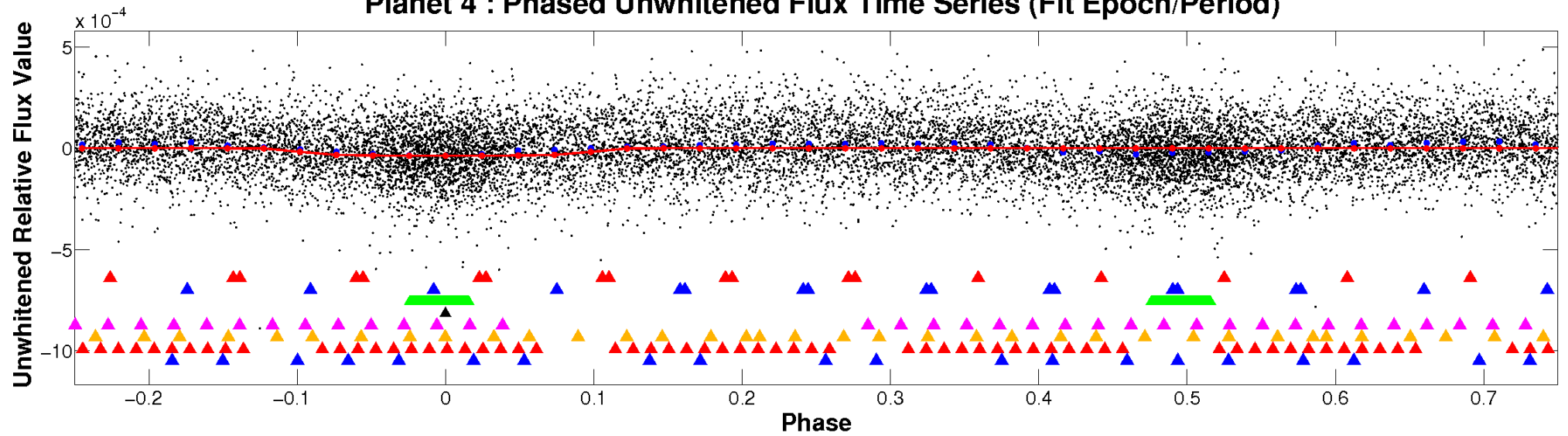
ALT Odd/Even

TCE 005790807-04

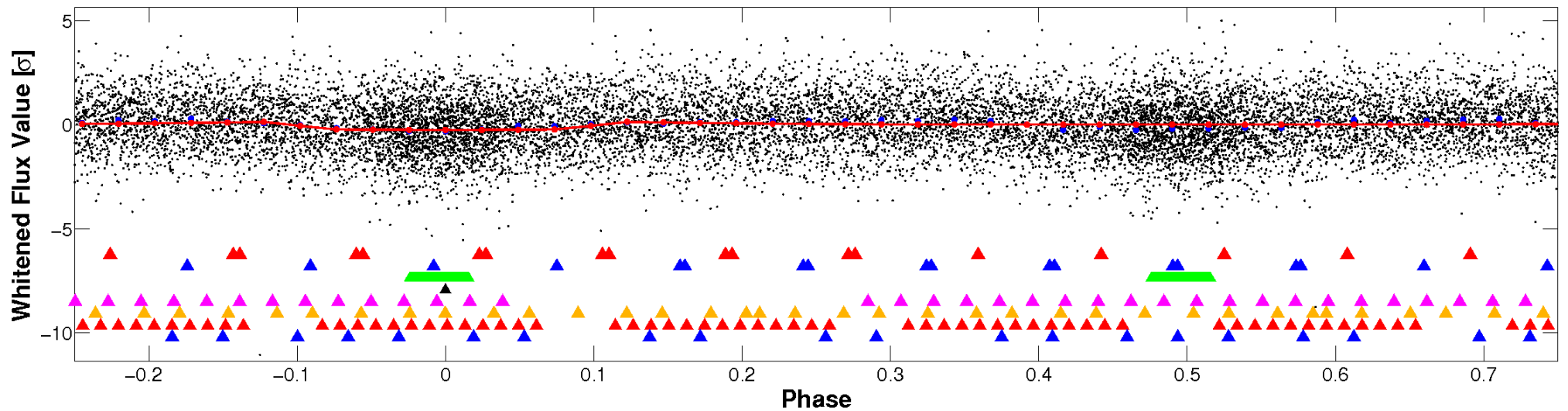


Non-Whitened Vs. Whitened Light Curve

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

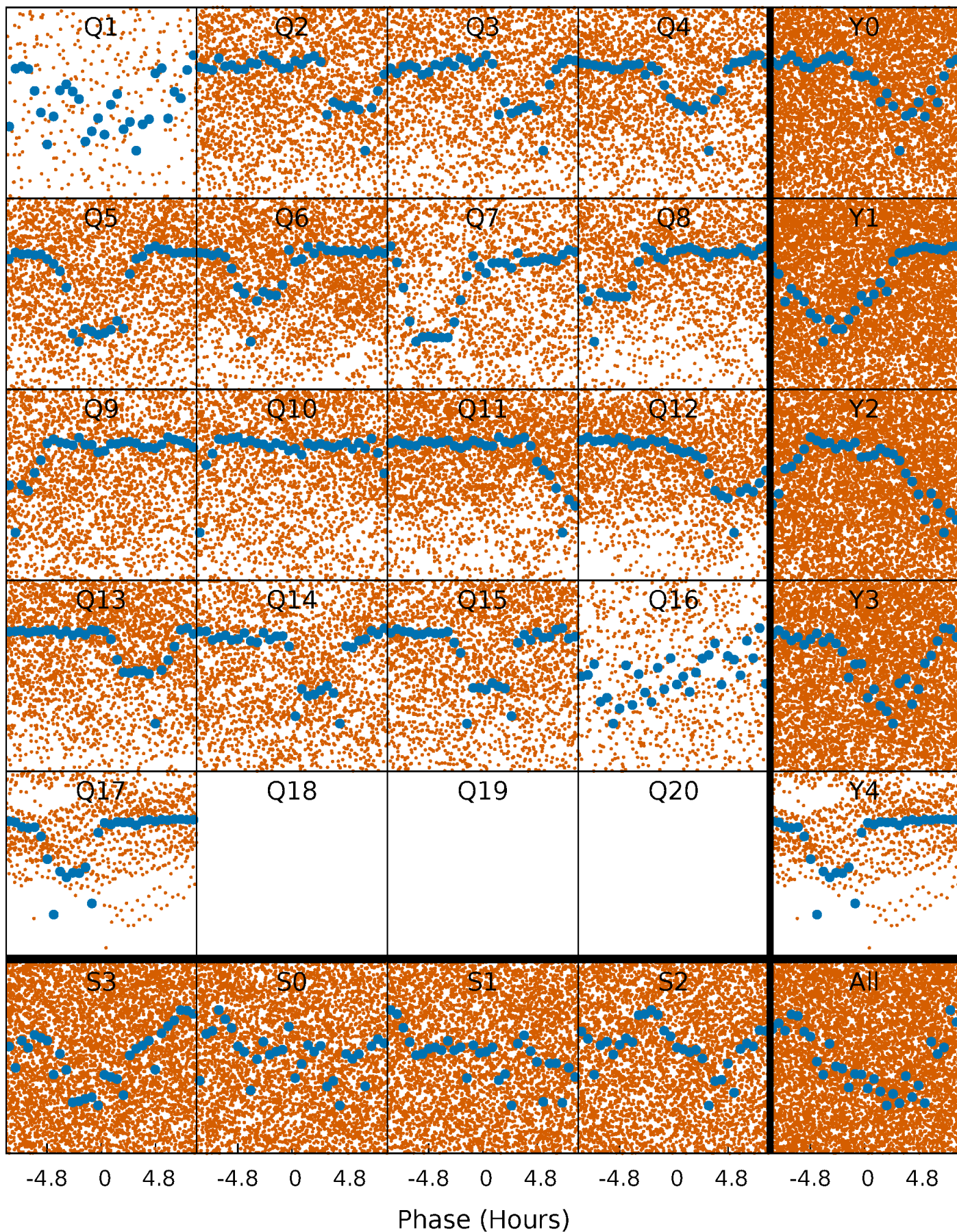


Planet 4 : Phased Whitened Flux Time Series (Fit Epoch/Period)



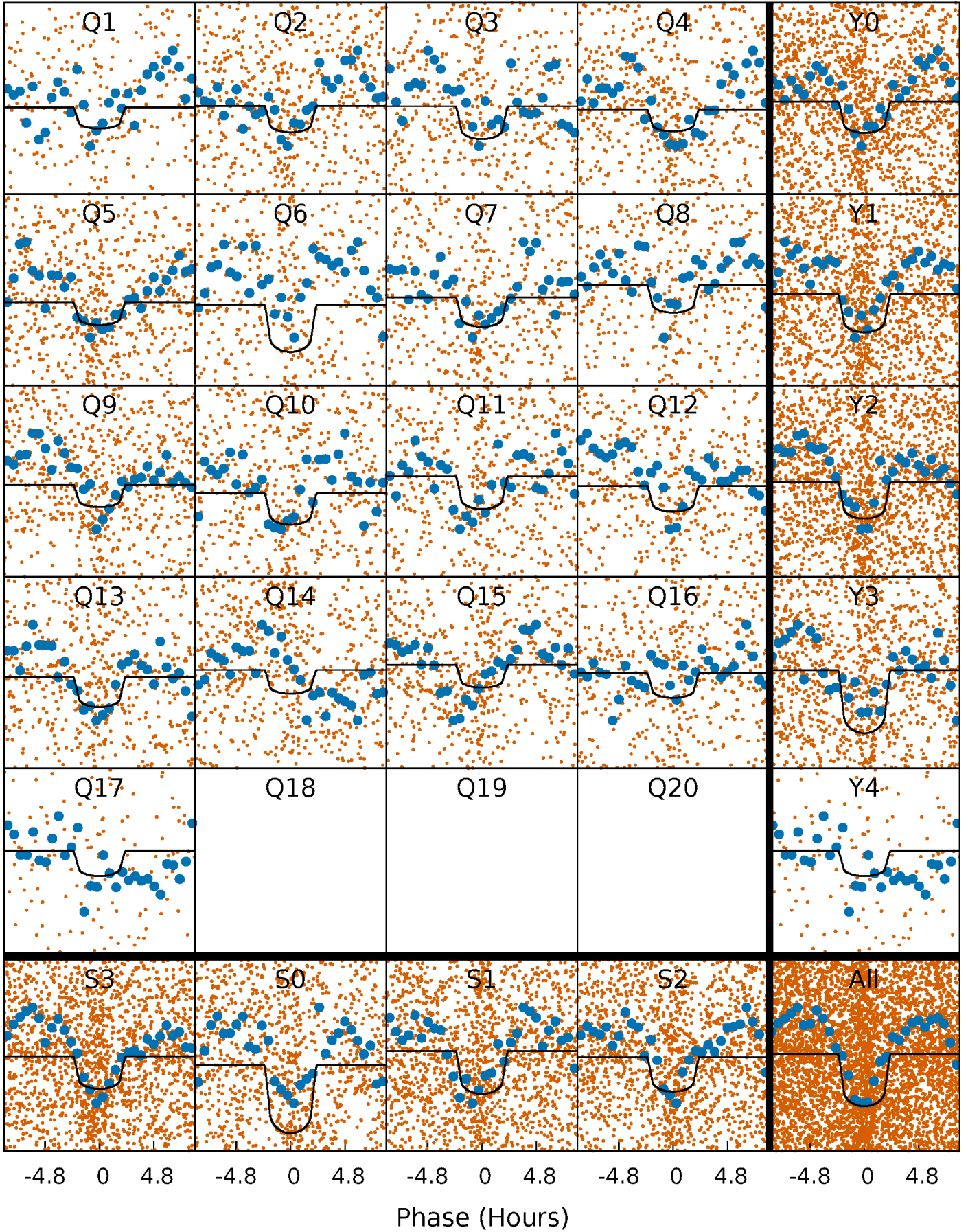
PDC Quarter-Phased Transit Curves

TCE 005790807-04 P= 0.834015 Days $T_0=131.838014$ (BKJD)



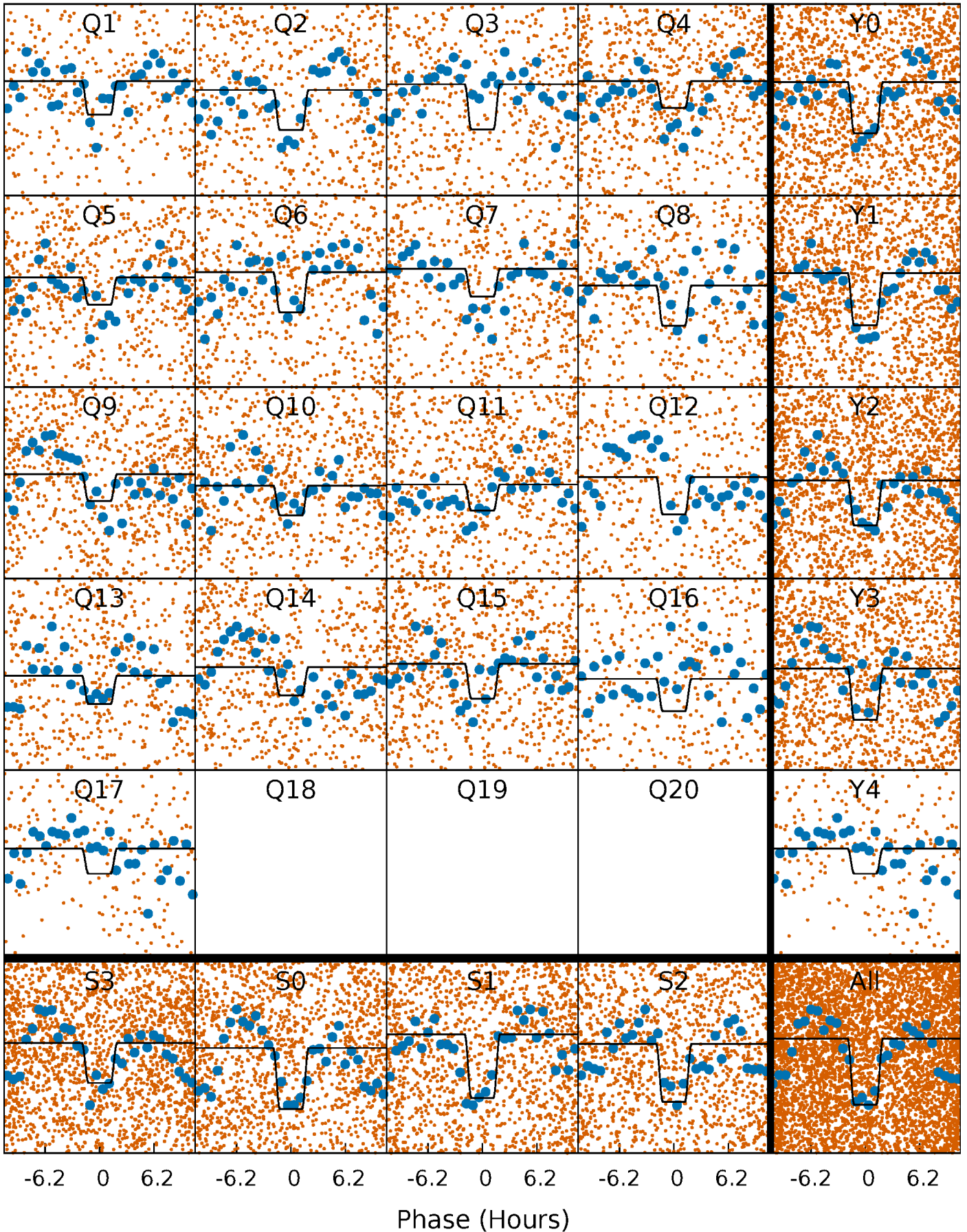
DV Quarter-Phased Transit Curves

TCE 005790807-04 P= 0.834015 Days $T_0=131.838014$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

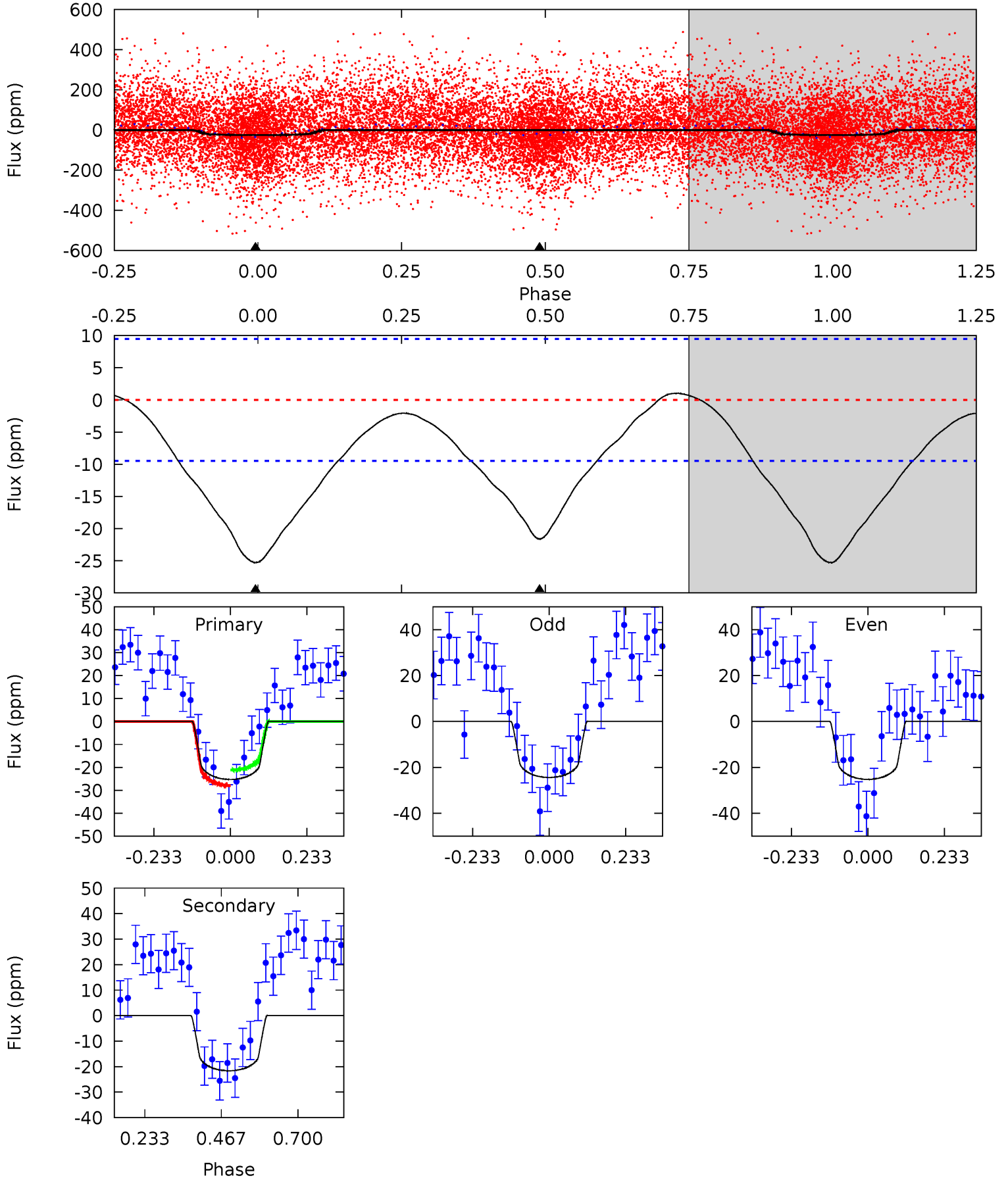
TCE 005790807-04 $P = 0.834006$ Days $T_0 = 131.834271$ (BKJD)



DV Model-Shift Uniqueness Test

005790807-04, P = 0.834015 Days, E = 131.838014 Days

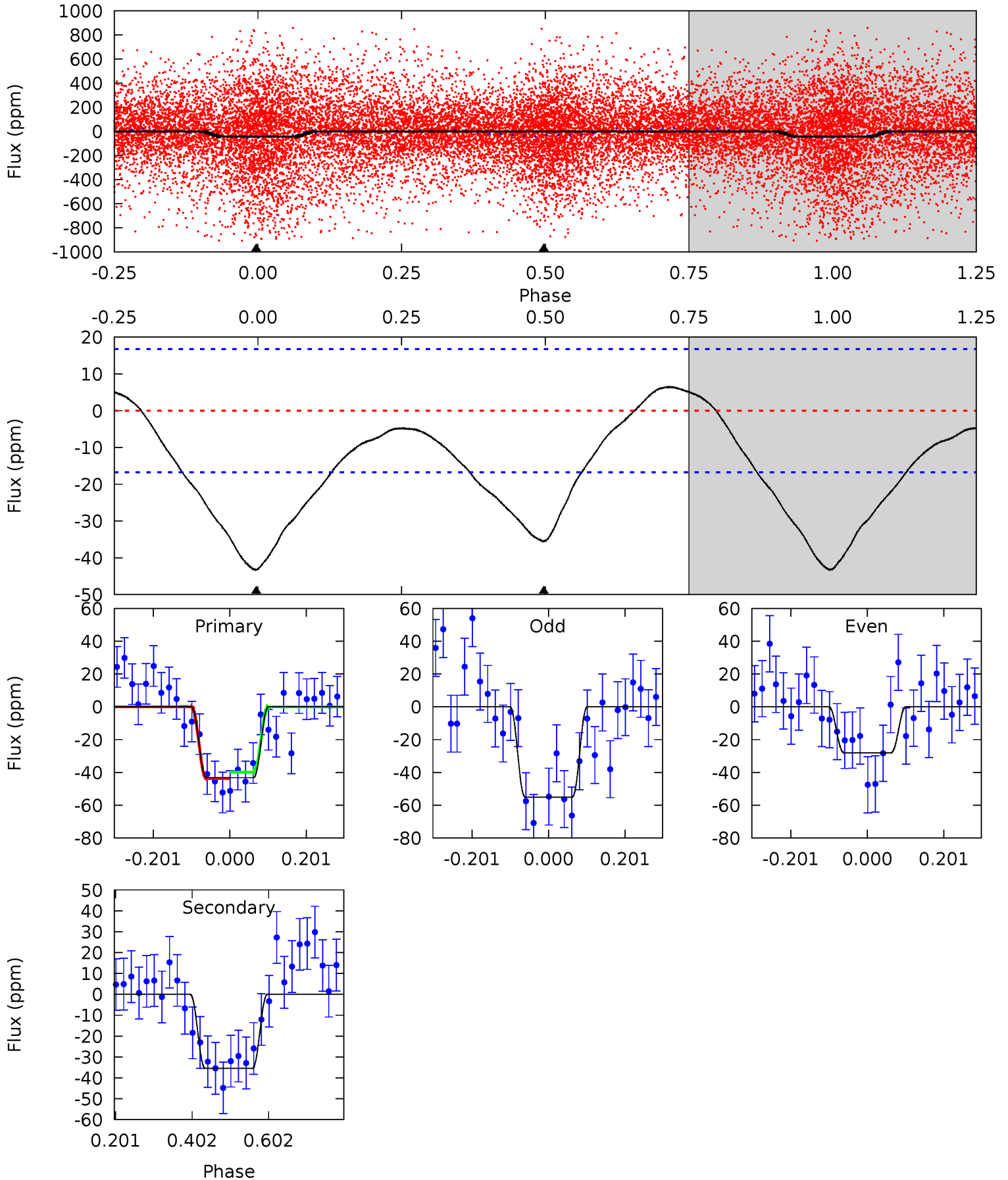
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
11.7	10.0	0	0	4.38	1.19	0.71	11.7	11.7	10.0	10.0	0.19	1.23	0.04	1.61



Alt Model-Shift Uniqueness Test

005790807-04, P = 0.834006 Days, E = 131.834271 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
11.4	9.35	0	0	4.42	1.28	1.41	11.4	11.4	9.35	9.35	3.55	2.26	0.13	0.51



Stellar Parameters For KIC 005790807

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6796^{+67}_{-88}	$3.880^{+0.224}_{-0.096}$	$0.140^{+0.150}_{-0.150}$	$2.490^{+0.391}_{-0.727}$	$1.715^{+0.150}_{-0.244}$	$0.157^{+0.205}_{-0.047}$
	+1%/-1%	+6%/-2%	+107%/-107%	+16%/-29%	+9%/-14%	+131%/-30%
Source	SPE68	SPE68	SPE68	DSEP		

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

Secondary Eclipse Parameters for KIC 005790807-04 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-22 ± 2	$1.67^{+0.77}_{-0.74}$	4539^{+199}_{-324}	5523^{+2074}_{-1044}	$1.853^{+3.935}_{-1.005}$
Alt.	-35 ± 4	$2.01^{+0.75}_{-0.73}$	4570^{+202}_{-292}	5752^{+1720}_{-910}	$2.045^{+3.140}_{-0.955}$

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 $A_{obs} \gg 1.0$

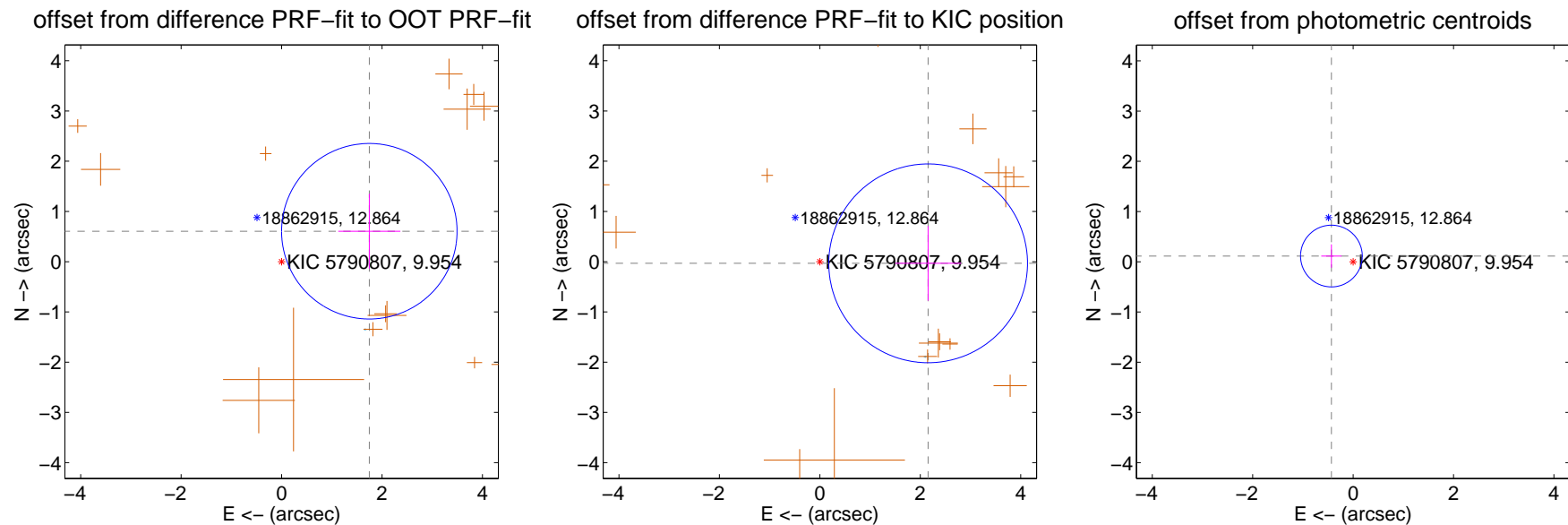
DV Centroid Data

Supplemental centroid analysis for 005790807-04. **Kepler magnitude: 9.95.** Transit SNR 14.10

There are 1 quarters with good PRF difference image offsets

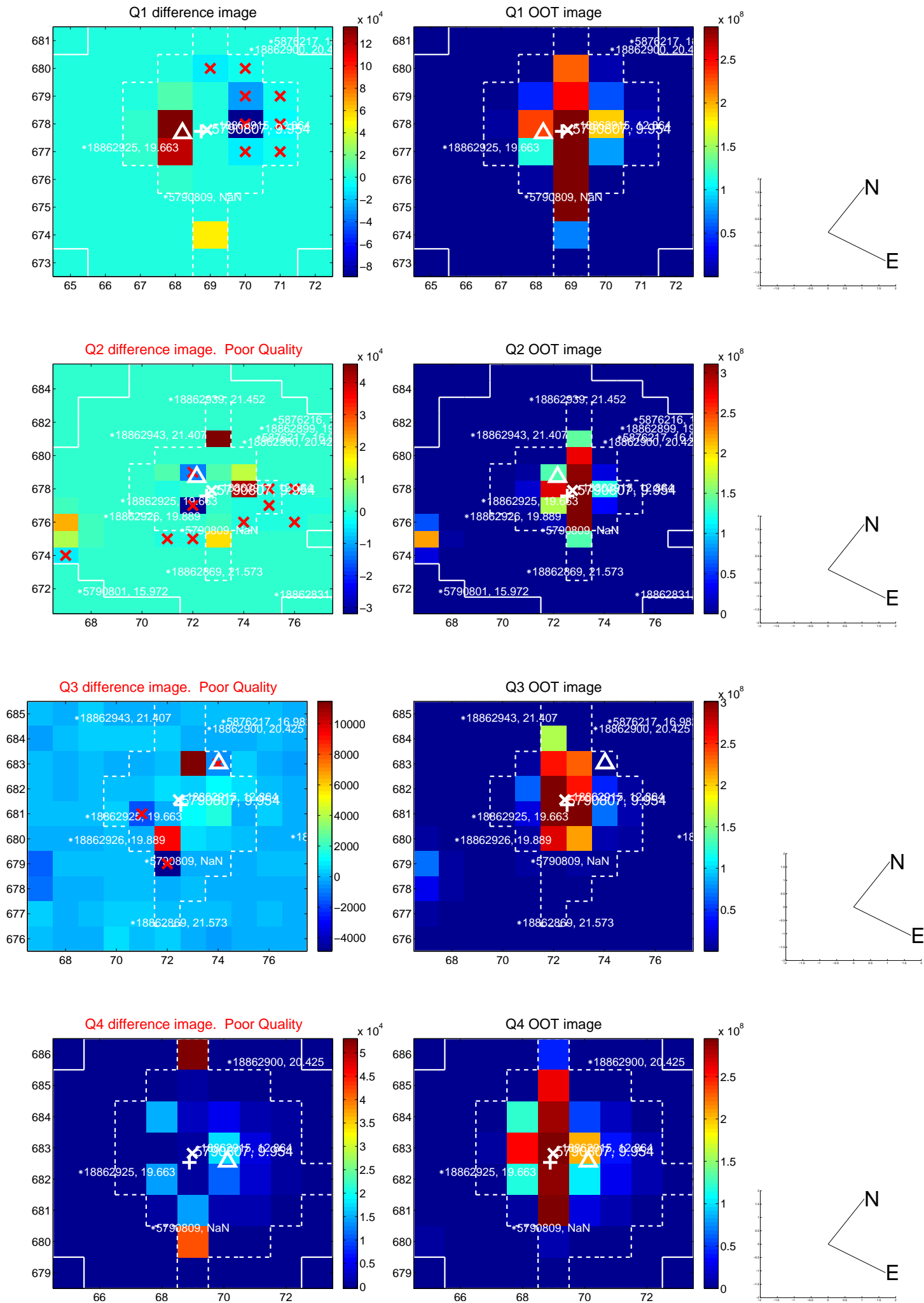
The direct PRF centroid is offset from the target star catalog position by about 0.61 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	1.850 ± 0.582	3.18	-1.747 ± 0.620	0.606 ± 0.746
PRF-fit source offset from KIC position	2.157 ± 0.660	3.27	-2.157 ± 0.657	-0.033 ± 0.742
photometric centroid source offset	0.45 ± 0.20	2.18	0.43 ± 0.20	0.11 ± 0.23

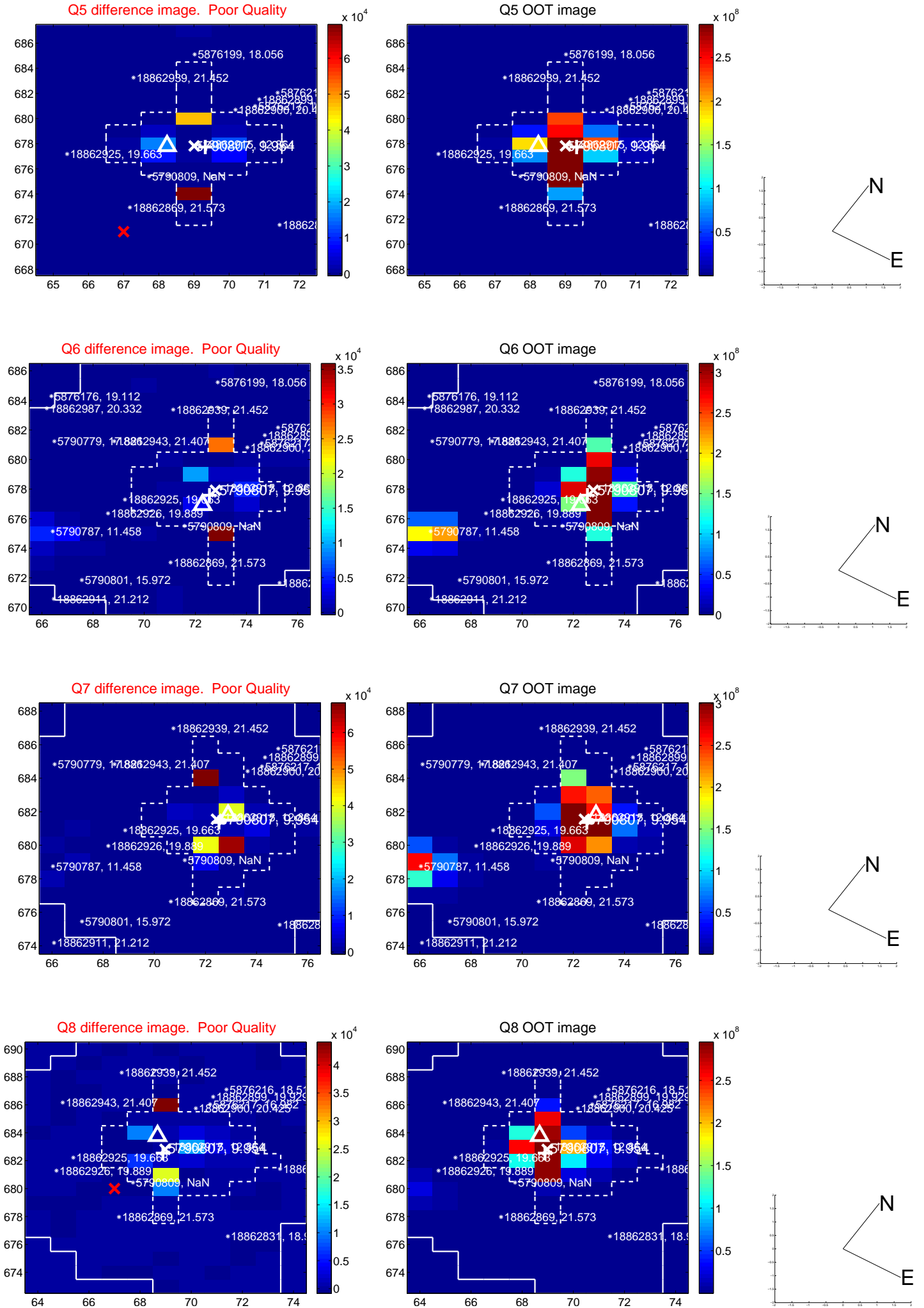


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

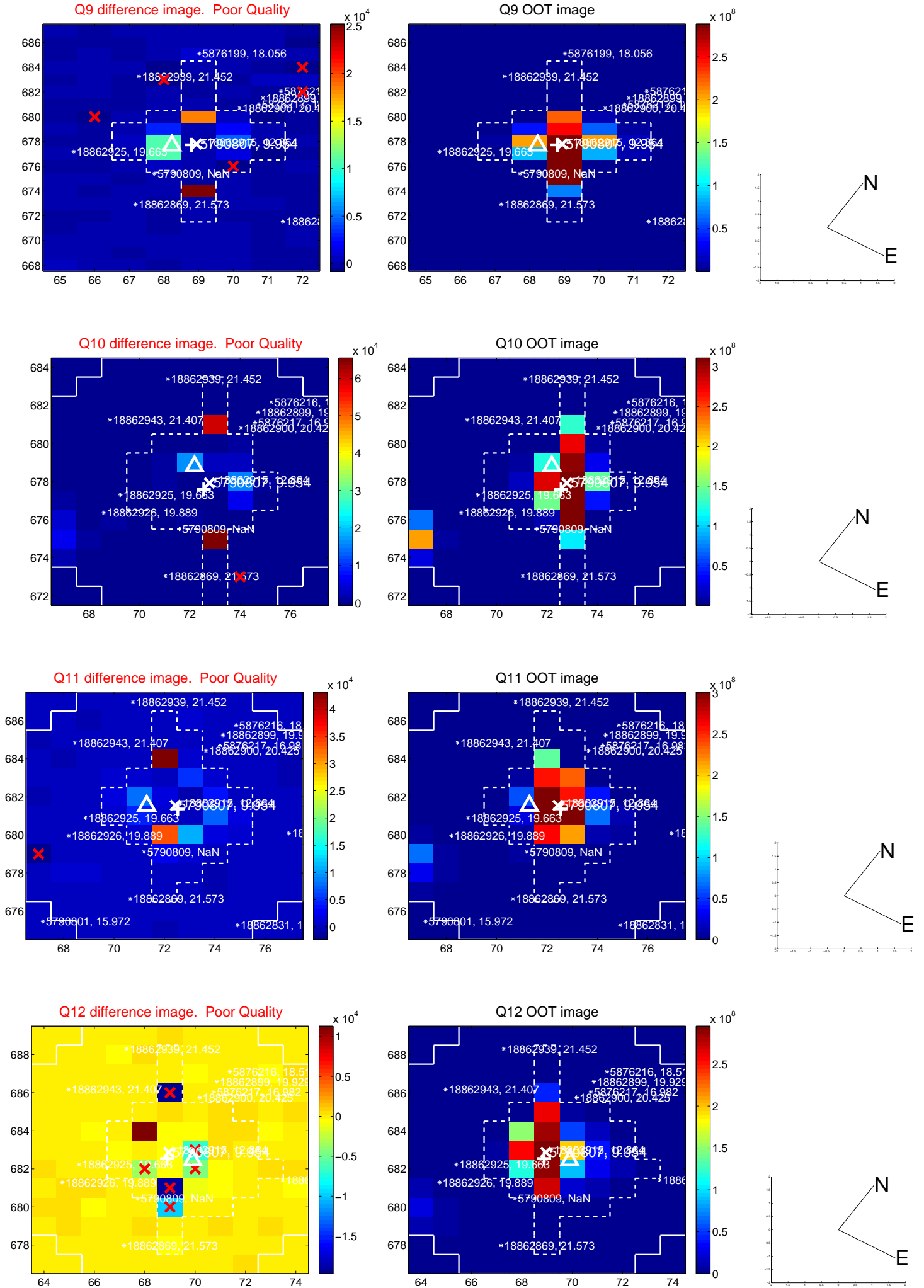
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



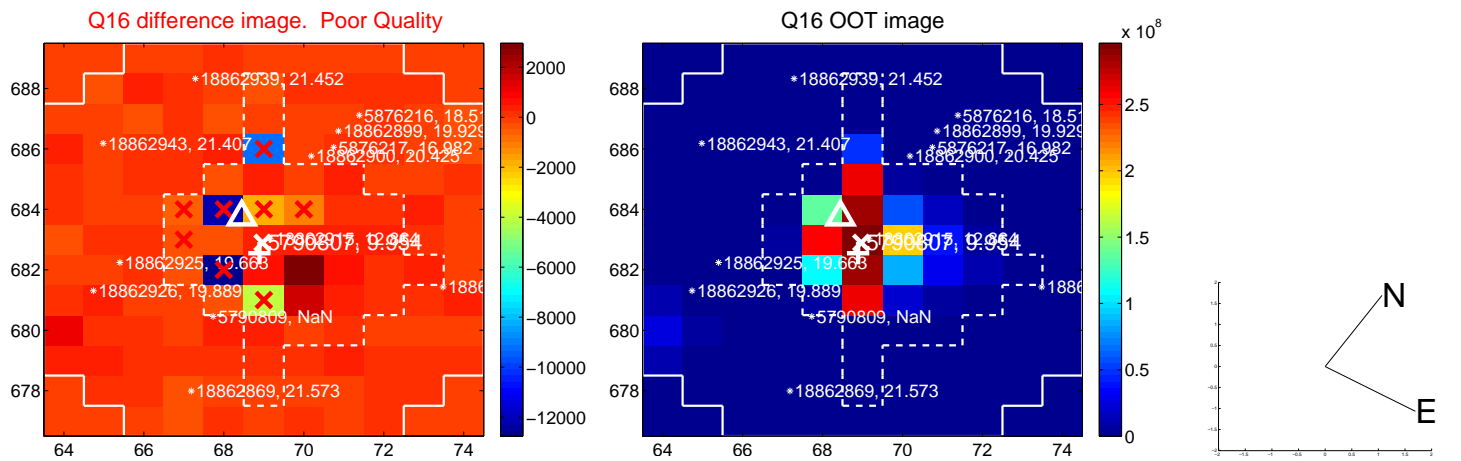
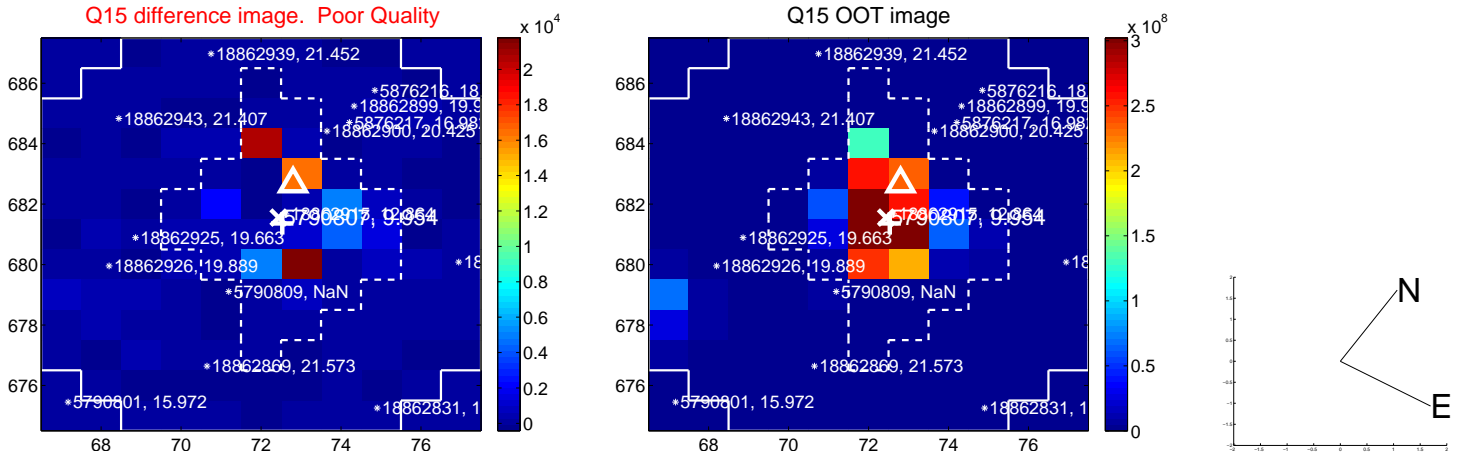
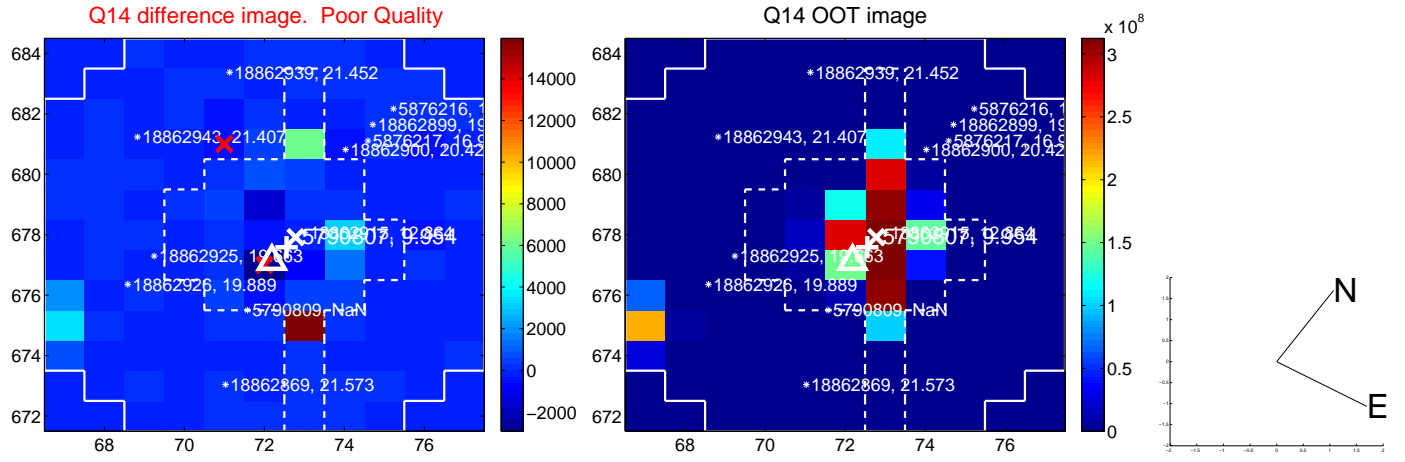
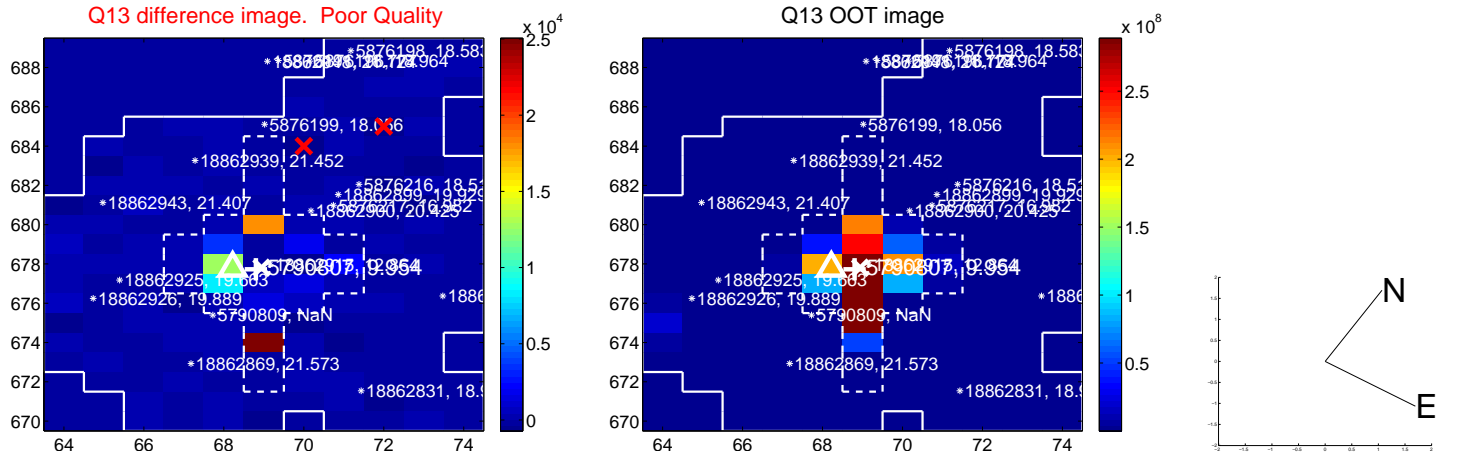
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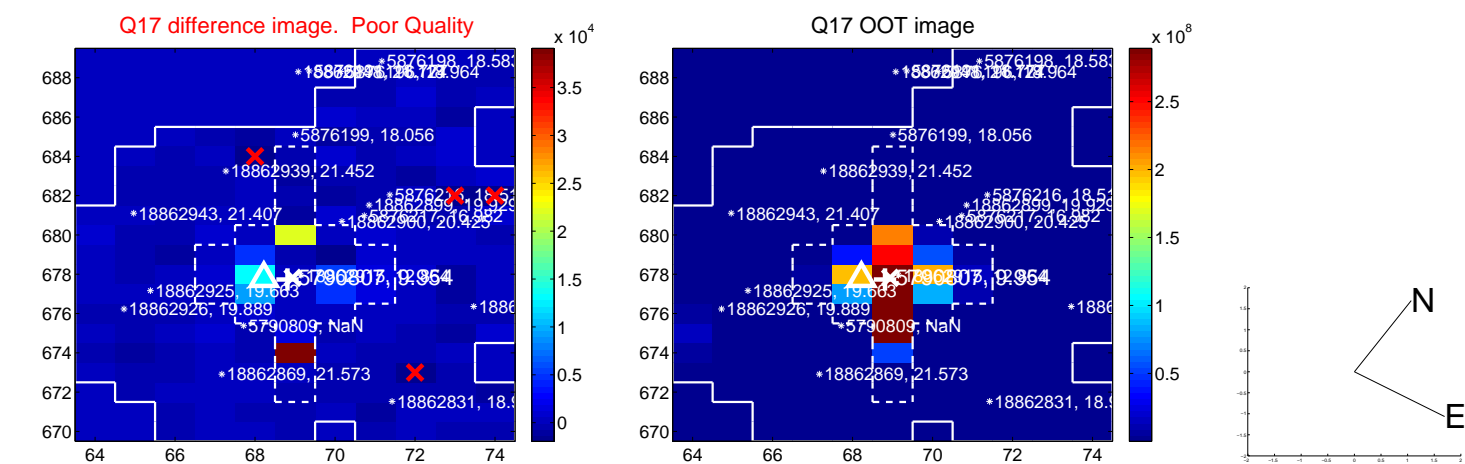
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



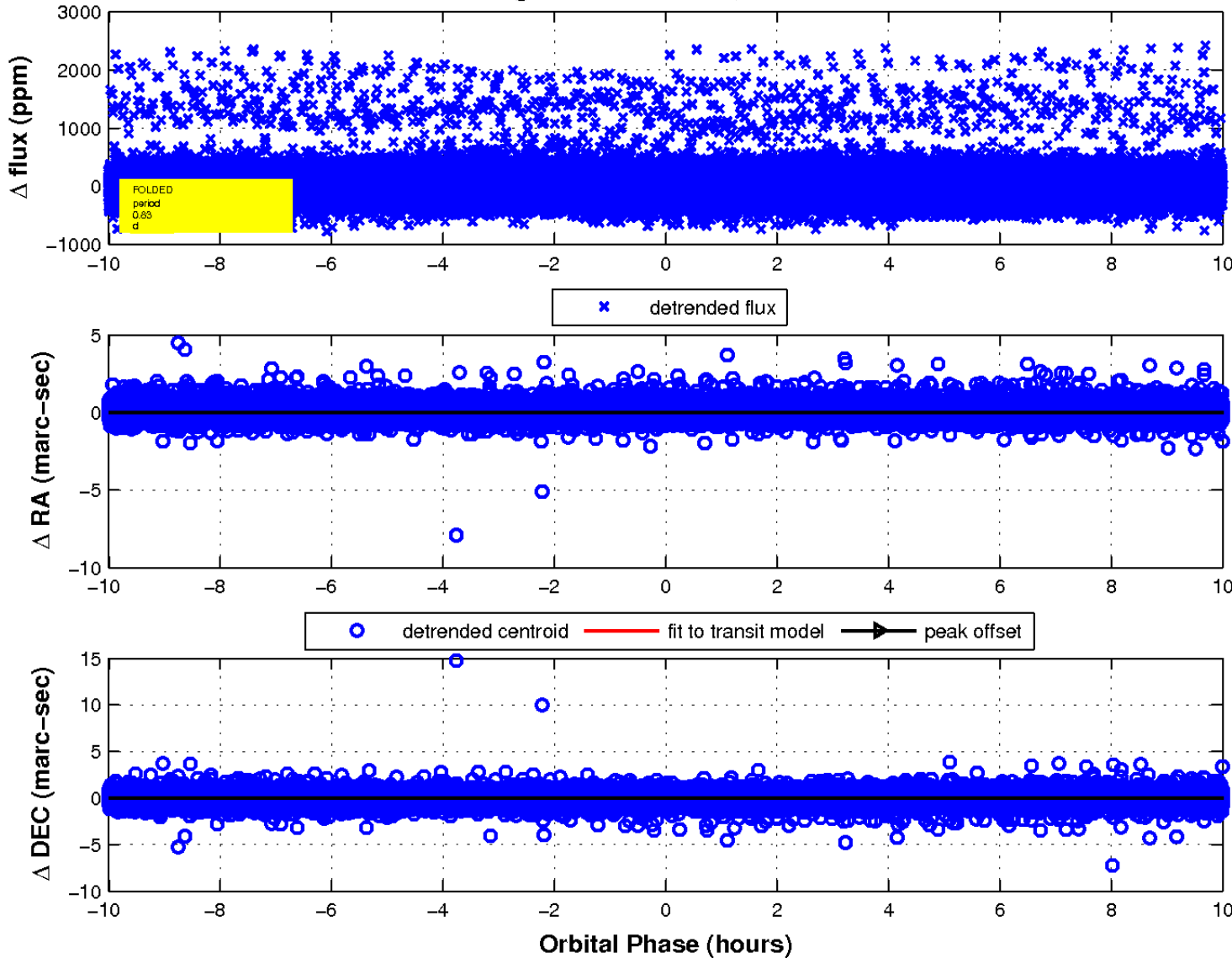
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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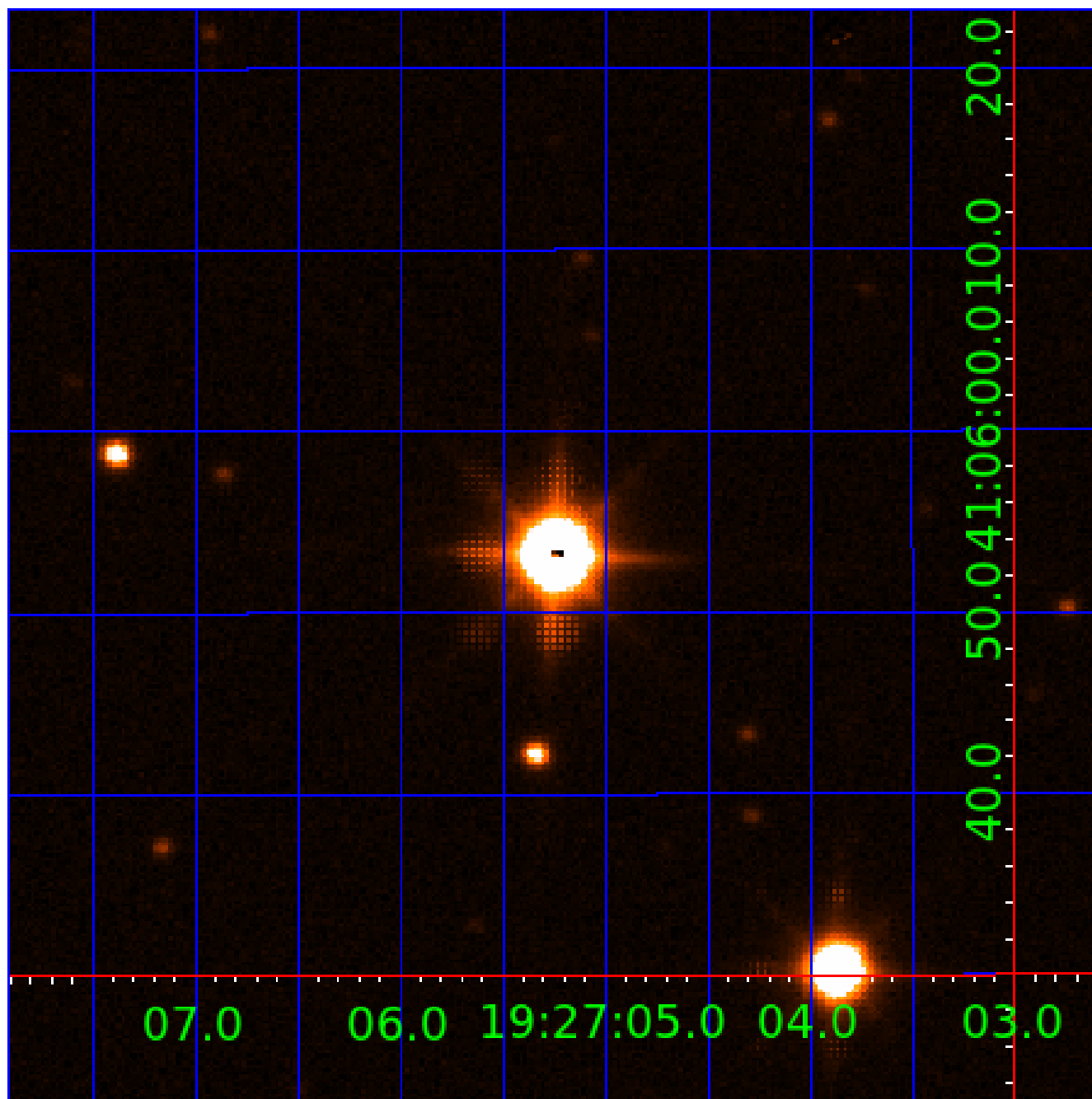


fluxWeightedCentroids, Planet 4 of 8



UKIRT Image

Declination



KIC 005790807

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})
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005790807-02	OBS	No	79.996152	207.377628	2485.9	27.889	16.8	24.8	2.49	6796	22.71	62.61
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Robovetter Results

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005790807-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_SKYE_ZUMA—LPP_DV—MOD_NONUNIQ_DV—RESIDUAL_TCE—CENT_SATURATED
005790807-03	OBS	FP	0.00	1	0	0	0	LPP_DV—MOD_NONUNIQ_DV—CENT_SATURATED
005790807-04	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_SKYE_ZUMA—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_ALT—CENT_SATURATED
005790807-05	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_SATURATED
005790807-07	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—CENT_SATURATED
005790807-08	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_SATURATED

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

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

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

Ephemeris Match Information For 005790807-05

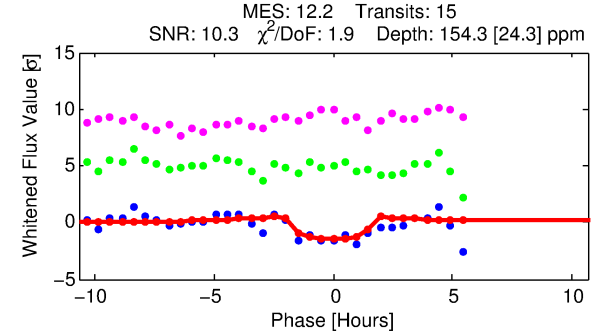
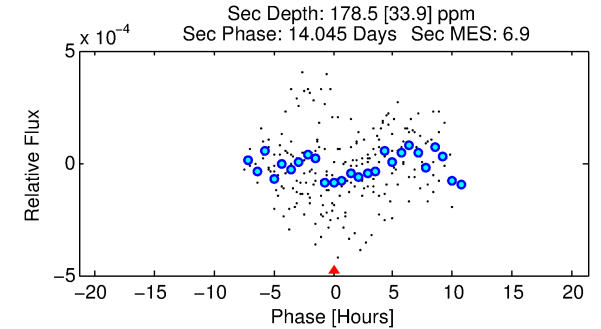
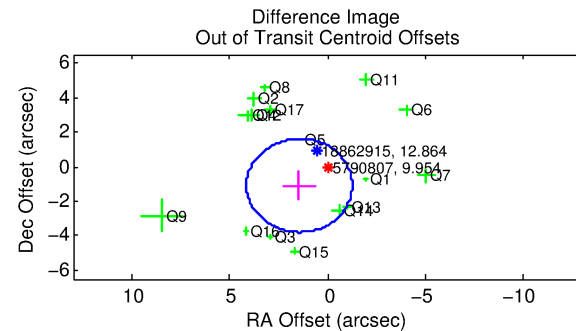
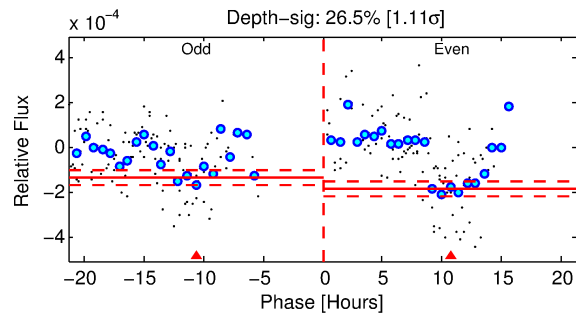
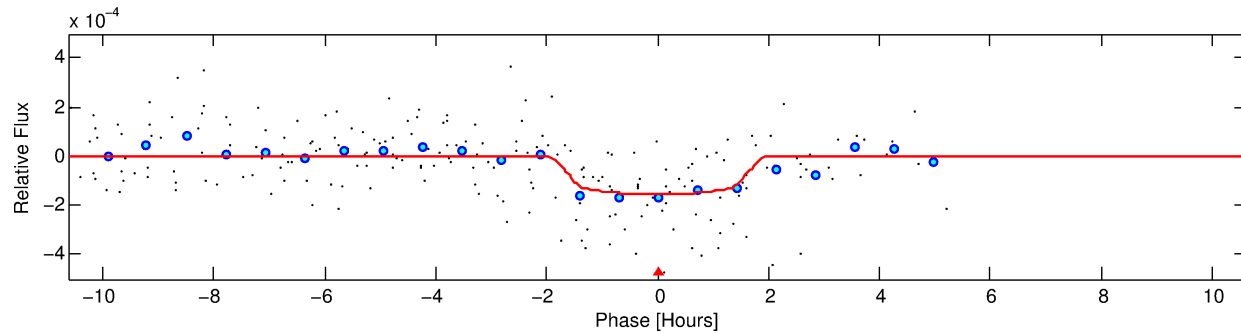
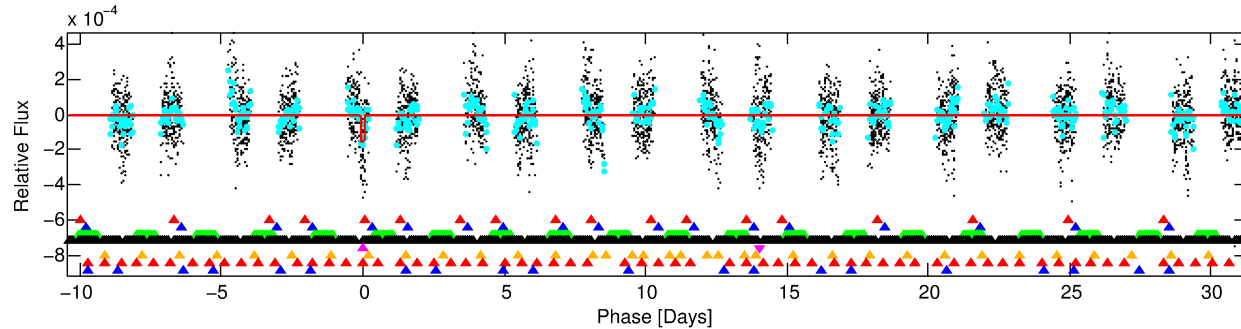
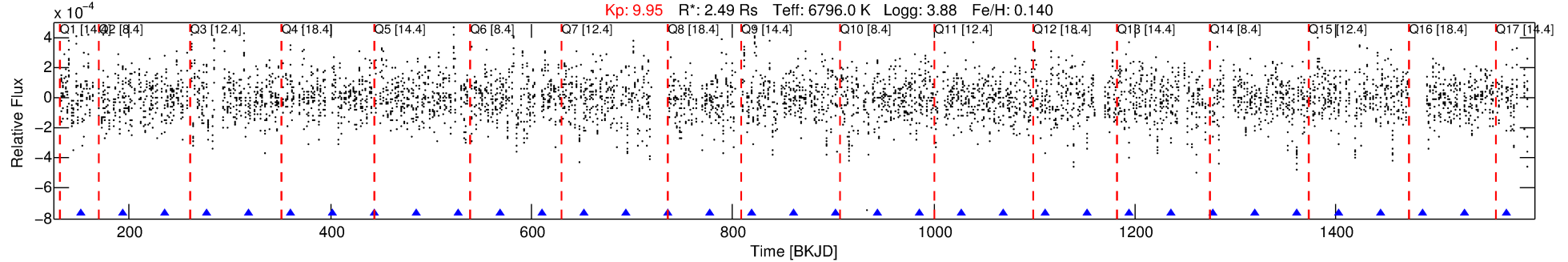
No Significant Match Found

DV One-Page Summary

KIC: 5790807 Candidate: 5 of 8 Period: 41.682 d

KOI: K00259 Corr: No Ephemeris Match

Kp: 9.95 R*: 2.49 Rs Teff: 6796.0 K Logg: 3.88 Fe/H: 0.140



DV Fit Results:

Period = 41.68226 [0.00157] d
Epoch = 151.8865 [0.0439] BKJD
Rp/R* = 0.0131 [0.0087]
a/R* = 44.67 [173.47]
b = 0.88 [0.98]
Seff = 149.32 [59.50]
Teq = 891 [89] K
Rp = 3.56 [2.57] Re
a = 0.2817 [0.0732] AU
Ag = 614.95 [856.22] [0.72σ]
Teffp = 6863 [2292] K [2.60σ]

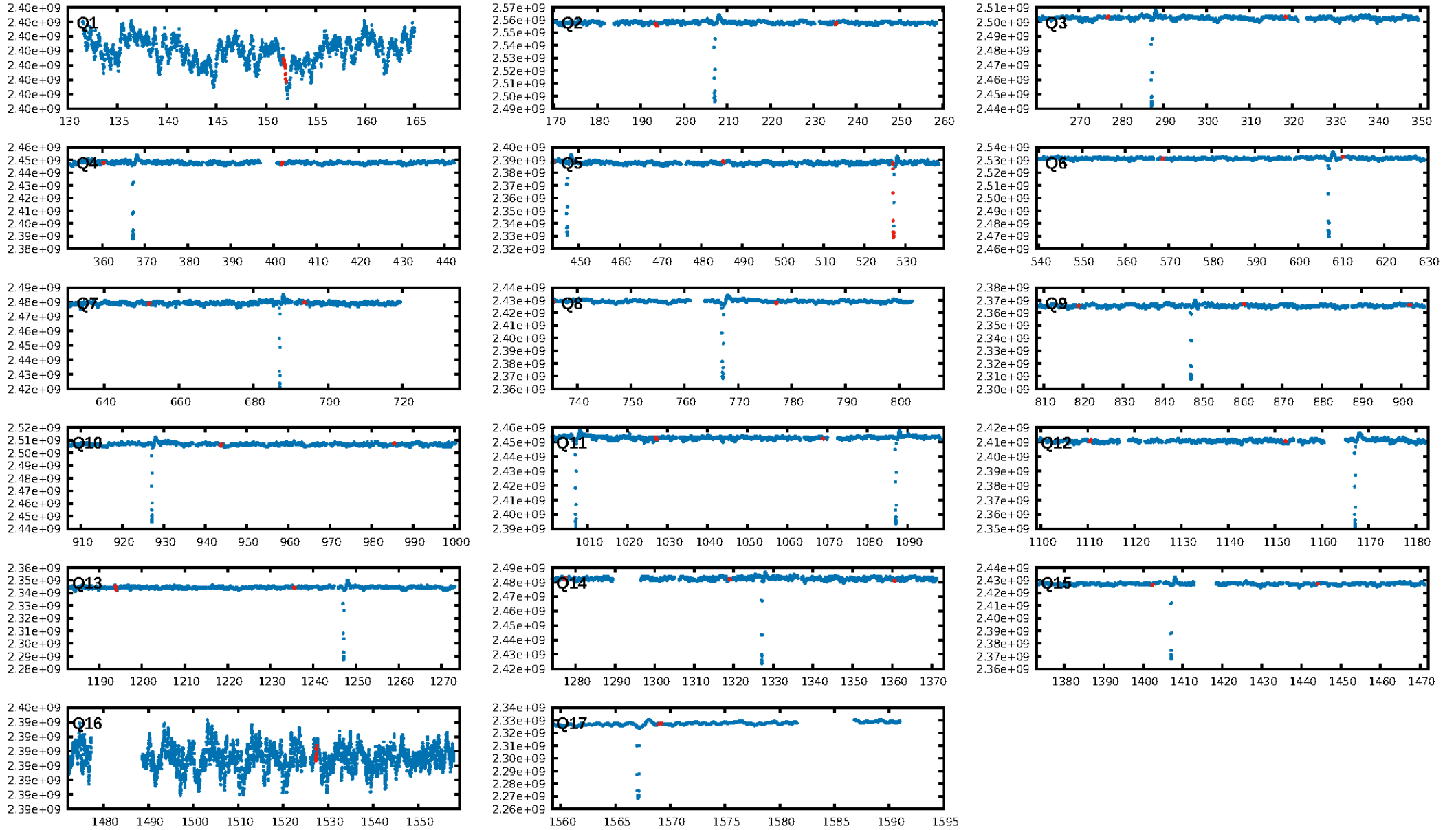
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [4.95σ]
LongPeriod-sig: 100.0% [88.00σ]
ModelChiSquare2-sig: 0.0%
ModelChiSquareGof-sig: 93.6%
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [14/14]
GhostDiagnostic-chr: N/A
Centroid-sig: 77.9%
Centroid-so: 0.396 arcsec [1.08σ]
OotOffset-rm: 1.807 arcsec [2.01σ]
OotOffset-st: 3/4/4/5 [16]
KicOffset-rm: 3.217 arcsec [3.76σ]
KicOffset-st: 3/4/4/5 [16]
DiffImageQuality-fgm: 0.12 [2/16]
DiffImageOverlap-fno: 0.00 [0/17]

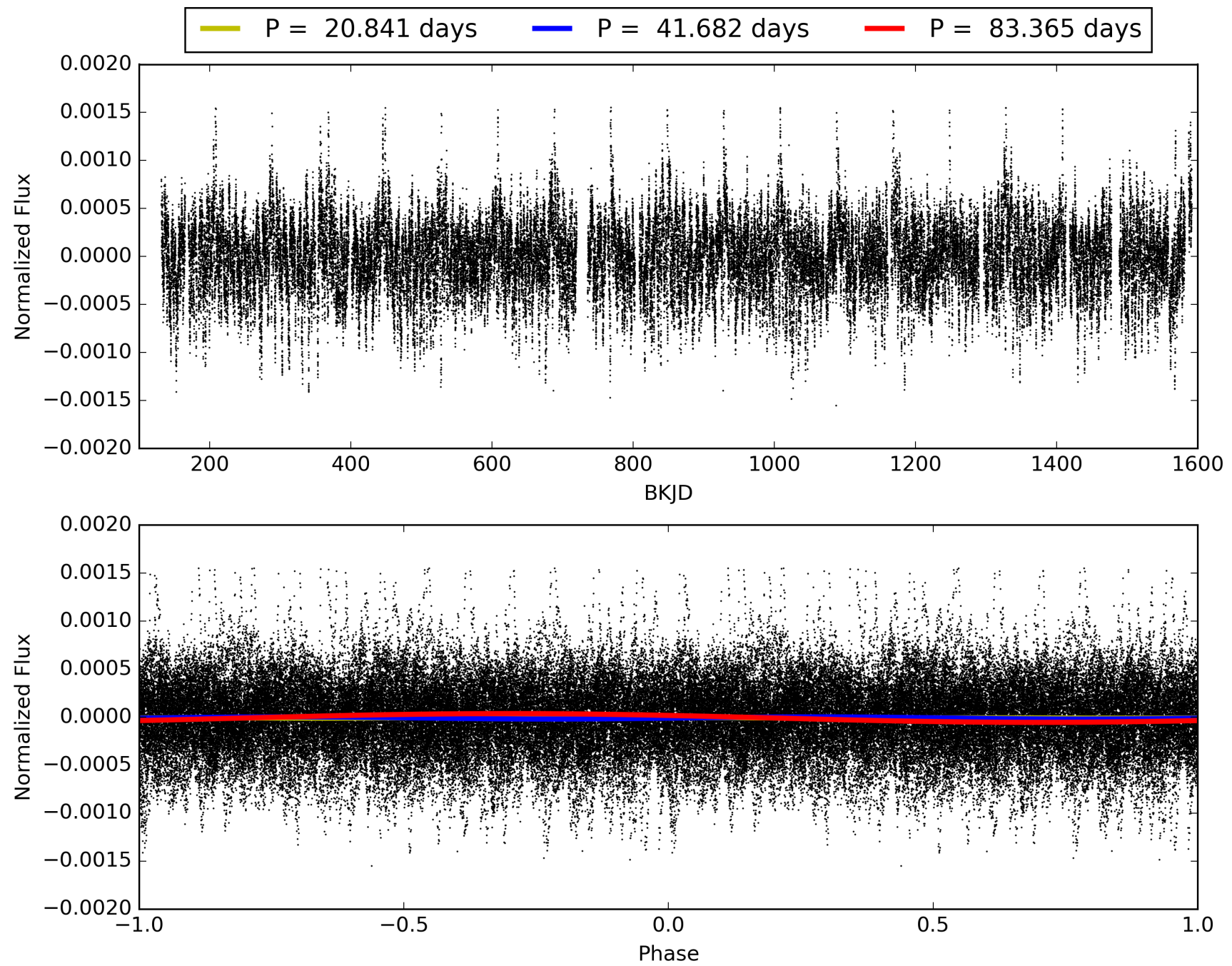
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 03-Feb-2016 08:11:53 Z

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

TCE 005790807-05, PDC Light Curves

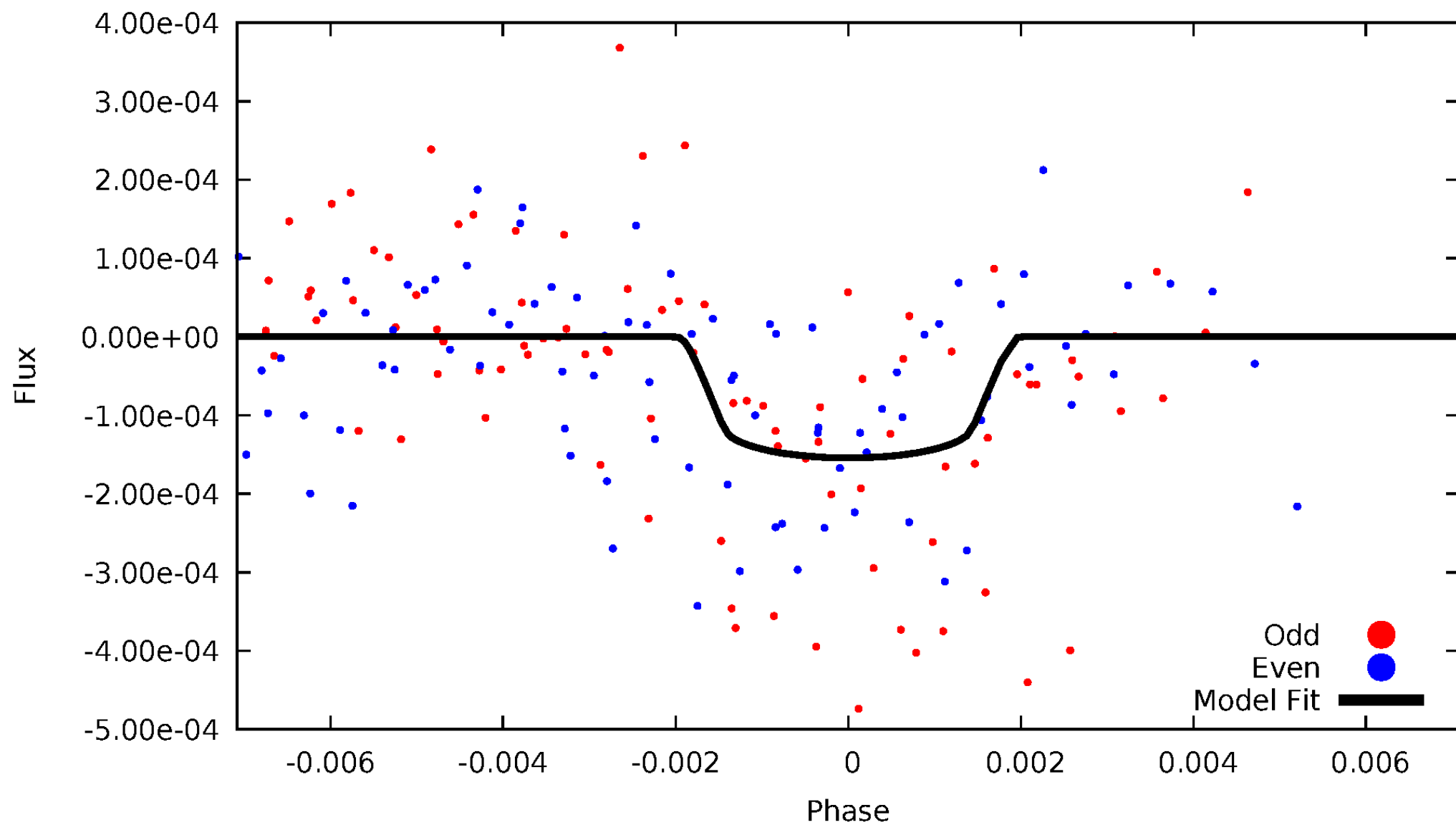


TCE 005790807-05



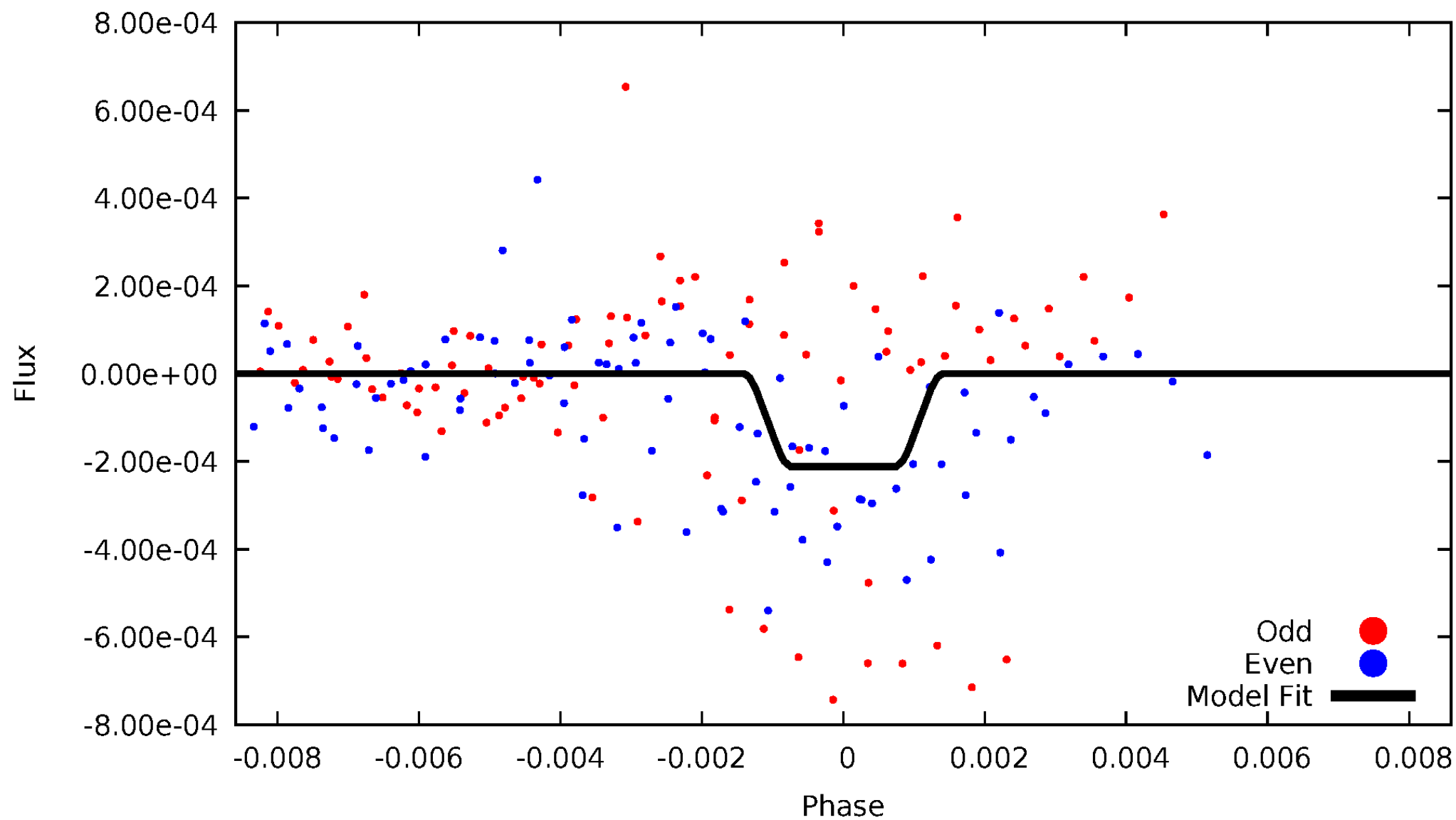
DV Odd/Even

TCE 005790807-05

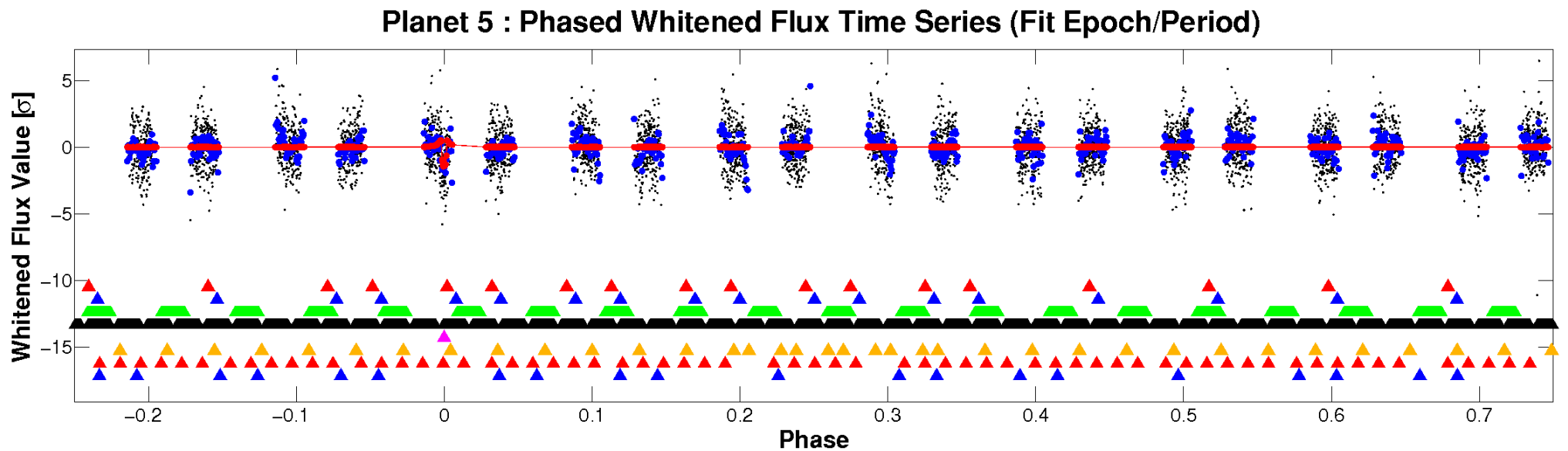
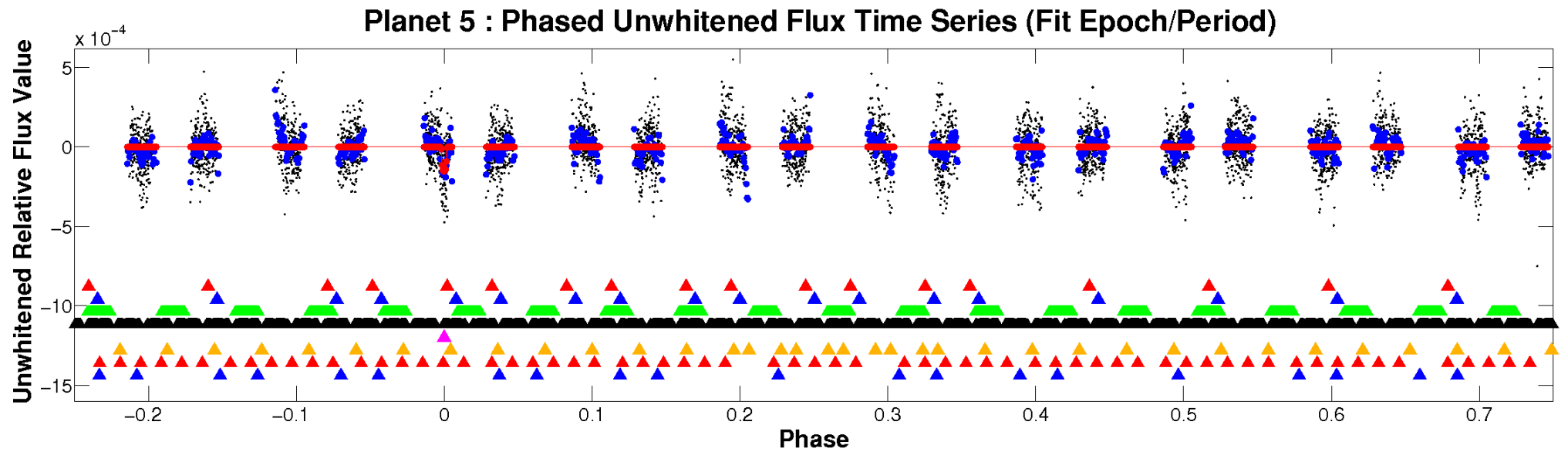


ALT Odd/Even

TCE 005790807-05

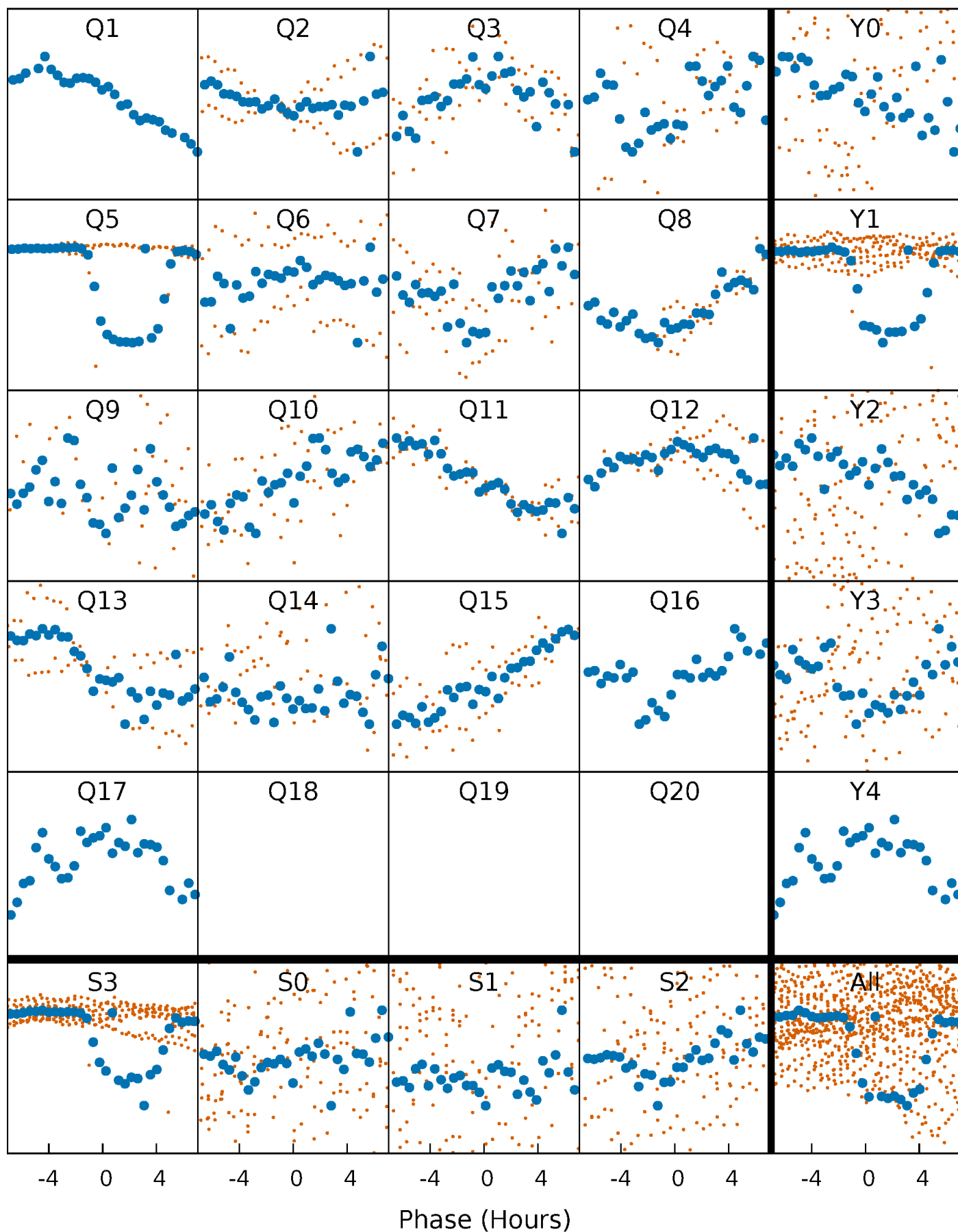


Non-Whitened Vs. Whitened Light Curve



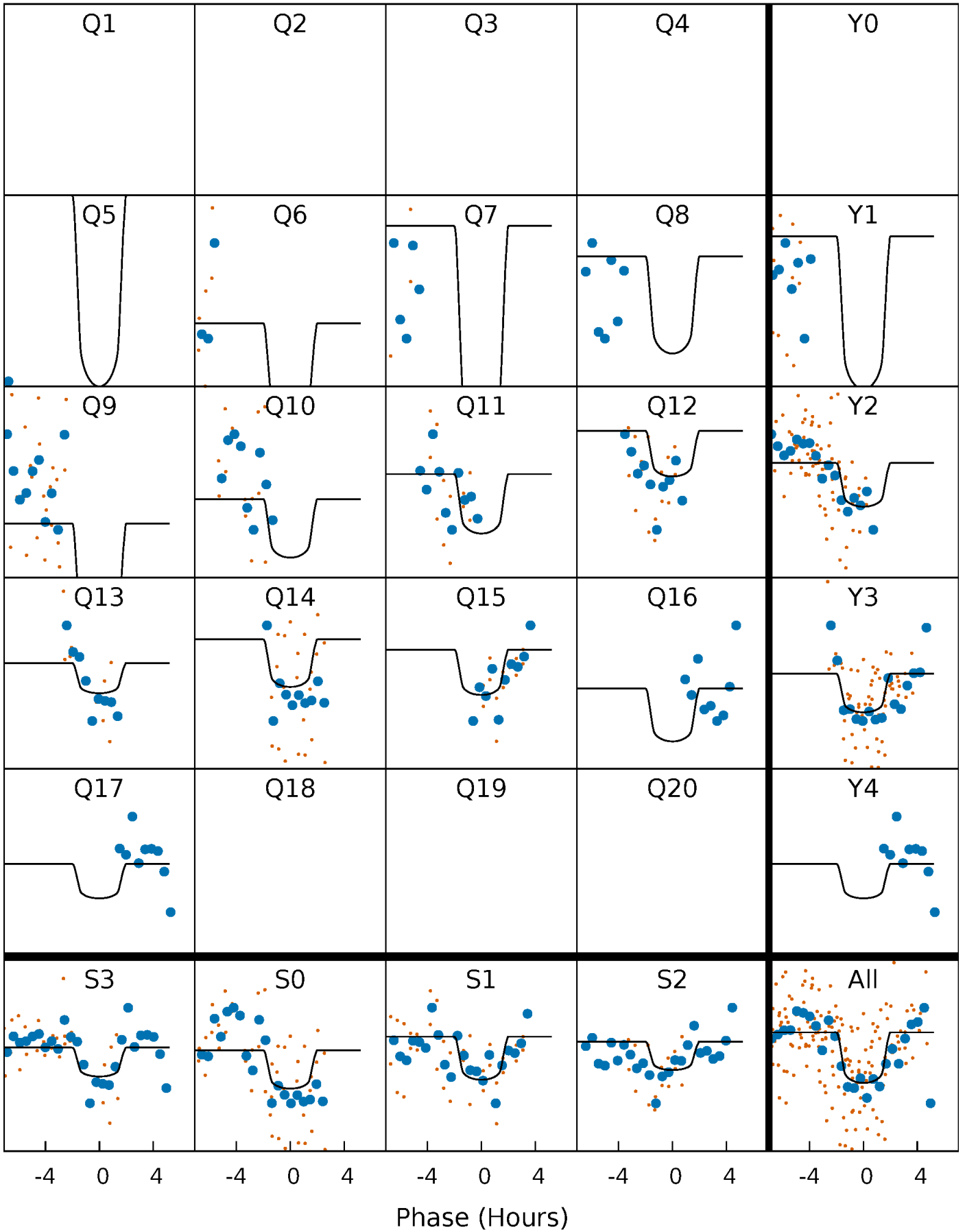
PDC Quarter-Phased Transit Curves

TCE 005790807-05 $P = 41.682256$ Days $T_0 = 151.886508$ (BKJD)



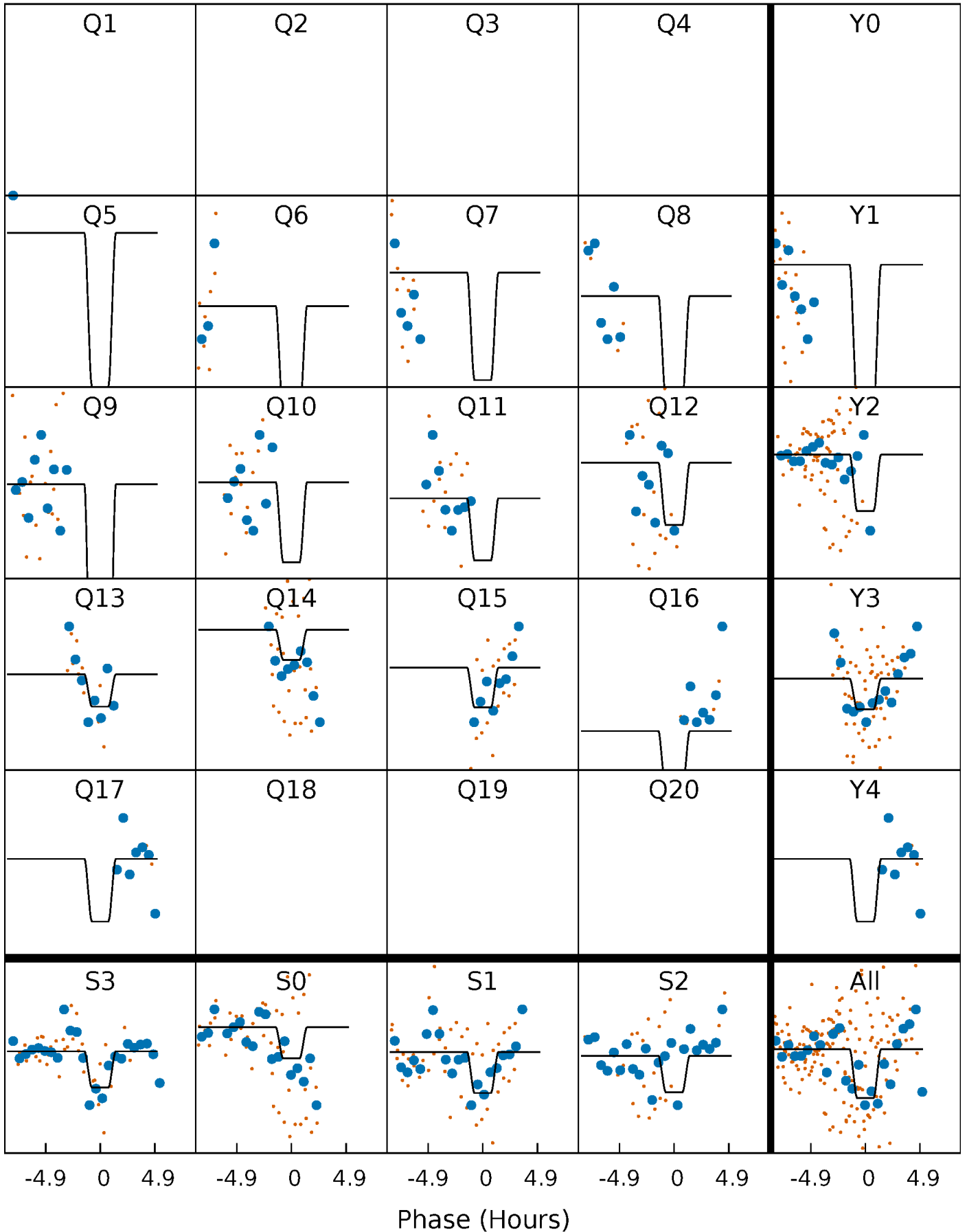
DV Quarter-Phased Transit Curves

TCE 005790807-05 $P = 41.682256$ Days $T_0 = 151.886508$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

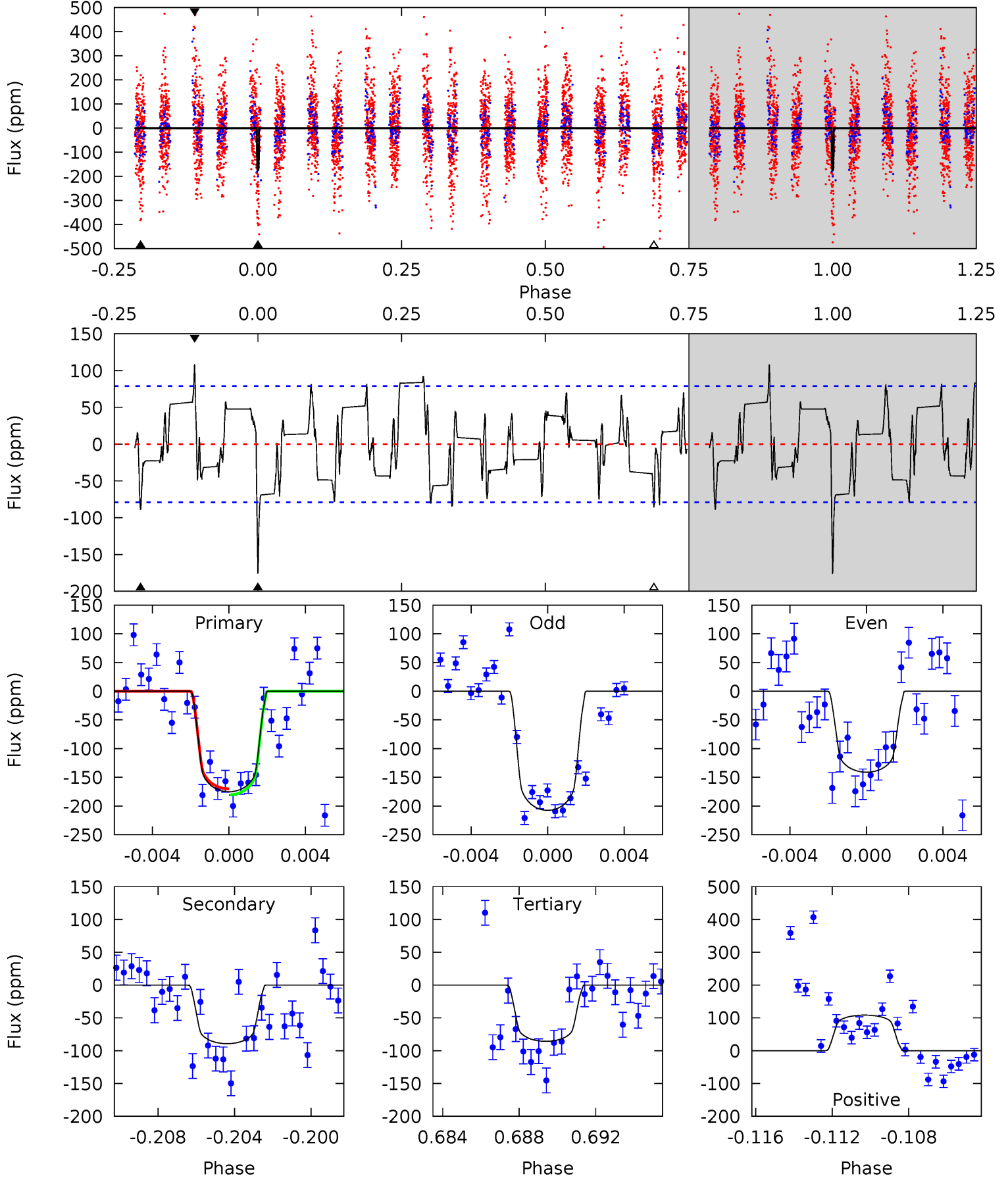
TCE 005790807-05 $P = 41.680537$ Days $T_0 = 151.947317$ (BKJD)



DV Model-Shift Uniqueness Test

005790807-05, P = 41.682256 Days, E = 110.204252 Days

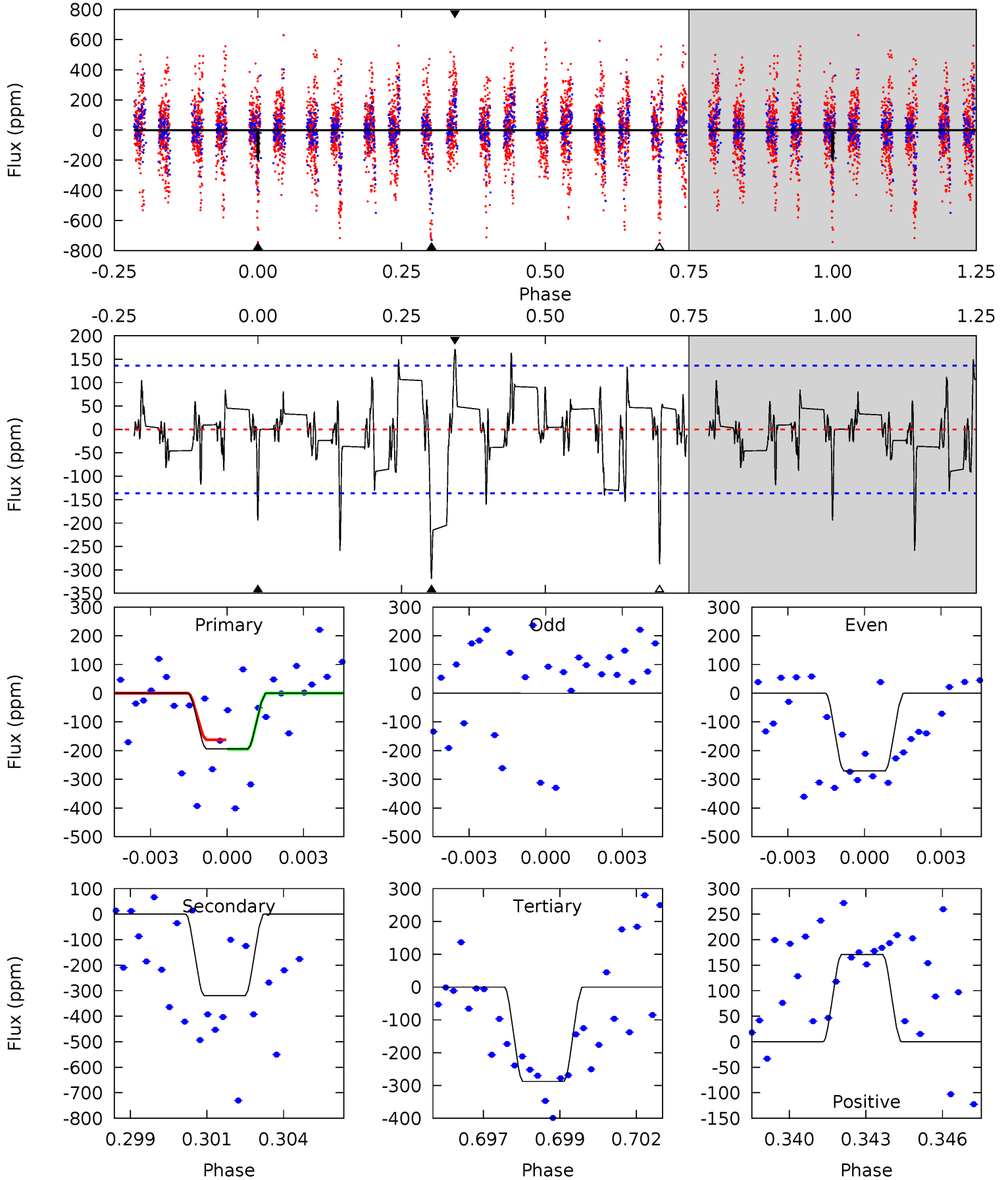
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
11.5	5.88	5.65	7.14	5.20	2.88	2.48	5.89	4.40	0.23	-1.26	2.20	0.96	0.38	0.34



Alt Model-Shift Uniqueness Test

005790807-05, P = 41.680537 Days, E = 110.266780 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
7.49	12.3	11.1	6.60	5.27	2.99	2.28	-3.62	0.89	1.19	5.70	4.79	1.00	0.35	0.64



Stellar Parameters For KIC 005790807

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6796^{+67}_{-88}	$3.880^{+0.224}_{-0.096}$	$0.140^{+0.150}_{-0.150}$	$2.490^{+0.391}_{-0.727}$	$1.715^{+0.150}_{-0.244}$	$0.157^{+0.205}_{-0.047}$
	+1%/-1%	+6%/-2%	+107%/-107%	+16%/-29%	+9%/-14%	+131%/-30%
Source	SPE68	SPE68	SPE68	DSEP		

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

Secondary Eclipse Parameters for KIC 005790807-05 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-89 ± 15	$3.65^{+2.29}_{-2.07}$	1235^{+53}_{-87}	5539^{+3213}_{-998}	290^{+1236}_{-184}
Alt.	-319 ± 26	$3.94^{+2.41}_{-2.07}$	1235^{+57}_{-88}	7428^{+4903}_{-1590}	888^{+3058}_{-538}

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

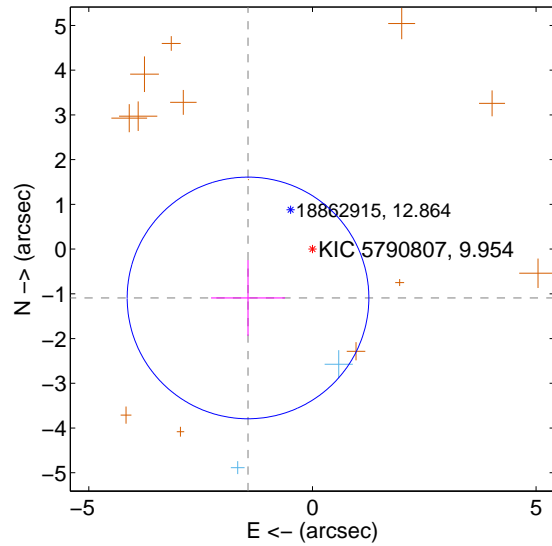
Supplemental centroid analysis for 005790807-05. **Kepler magnitude: 9.95.** Transit SNR 10.26

There are 2 quarters with good PRF difference image offsets

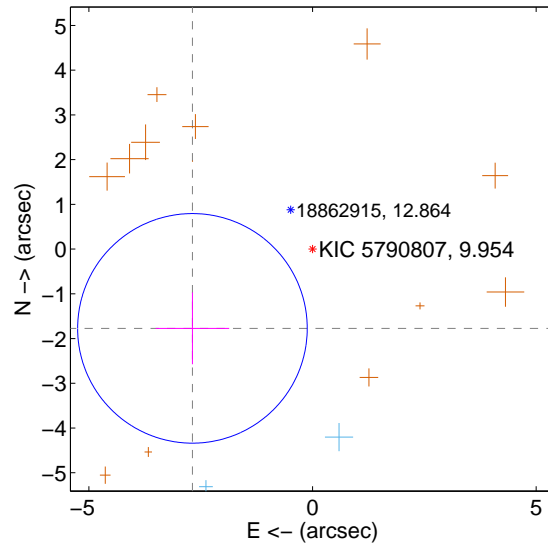
The direct PRF centroid is offset from the target star catalog position by about 0.60 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	1.807 ± 0.900	2.01	1.440 ± 0.827	-1.092 ± 0.844
PRF-fit source offset from KIC position	3.217 ± 0.855	3.76	2.685 ± 0.821	-1.772 ± 0.802
photometric centroid source offset	0.40 ± 0.37	1.08	0.34 ± 0.35	-0.21 ± 0.41

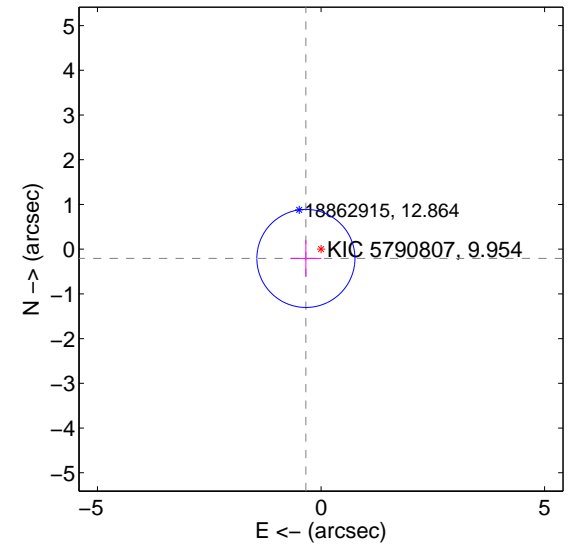
offset from difference PRF-fit to OOT PRF-fit



offset from difference PRF-fit to KIC position

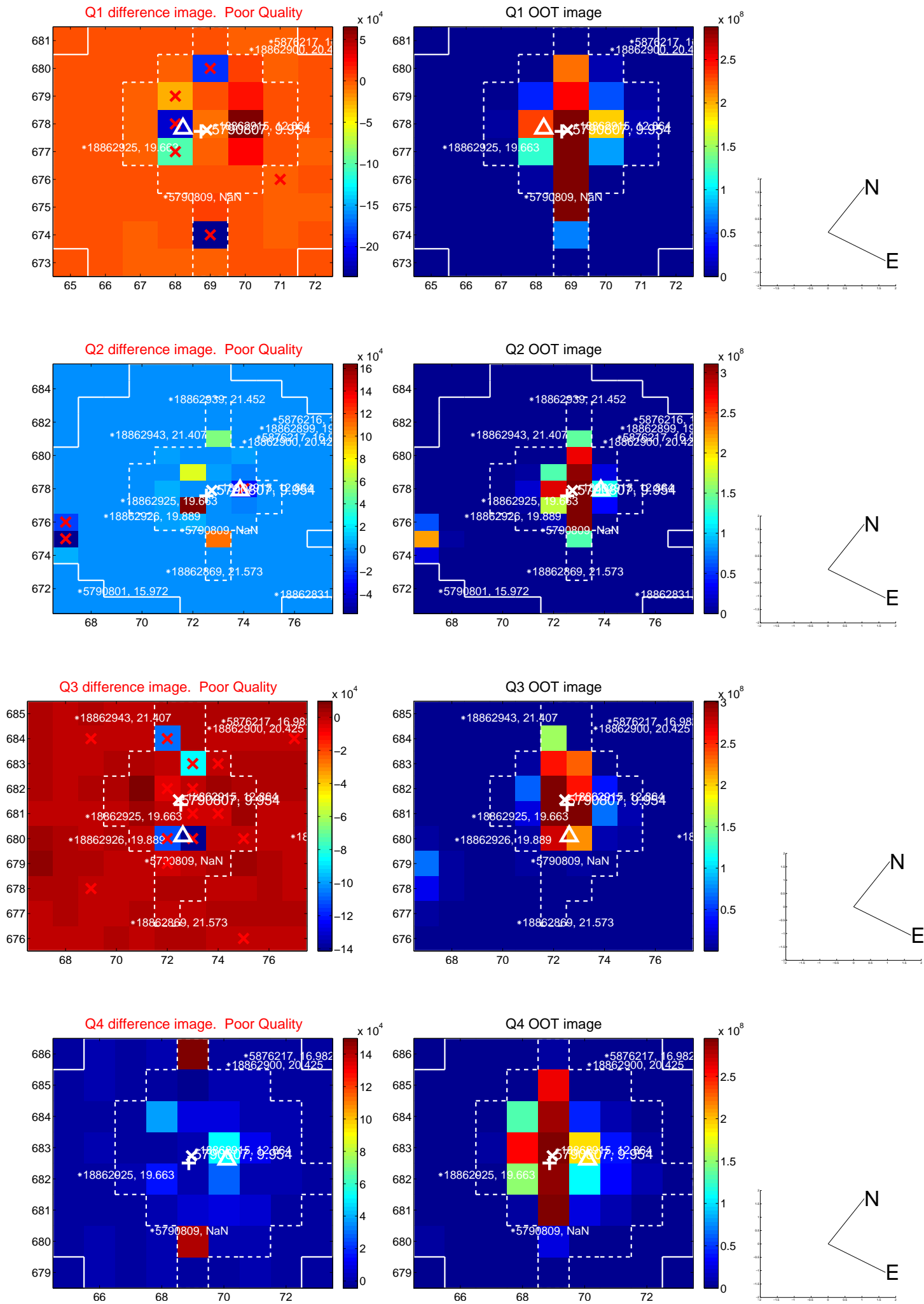


offset from photometric centroids

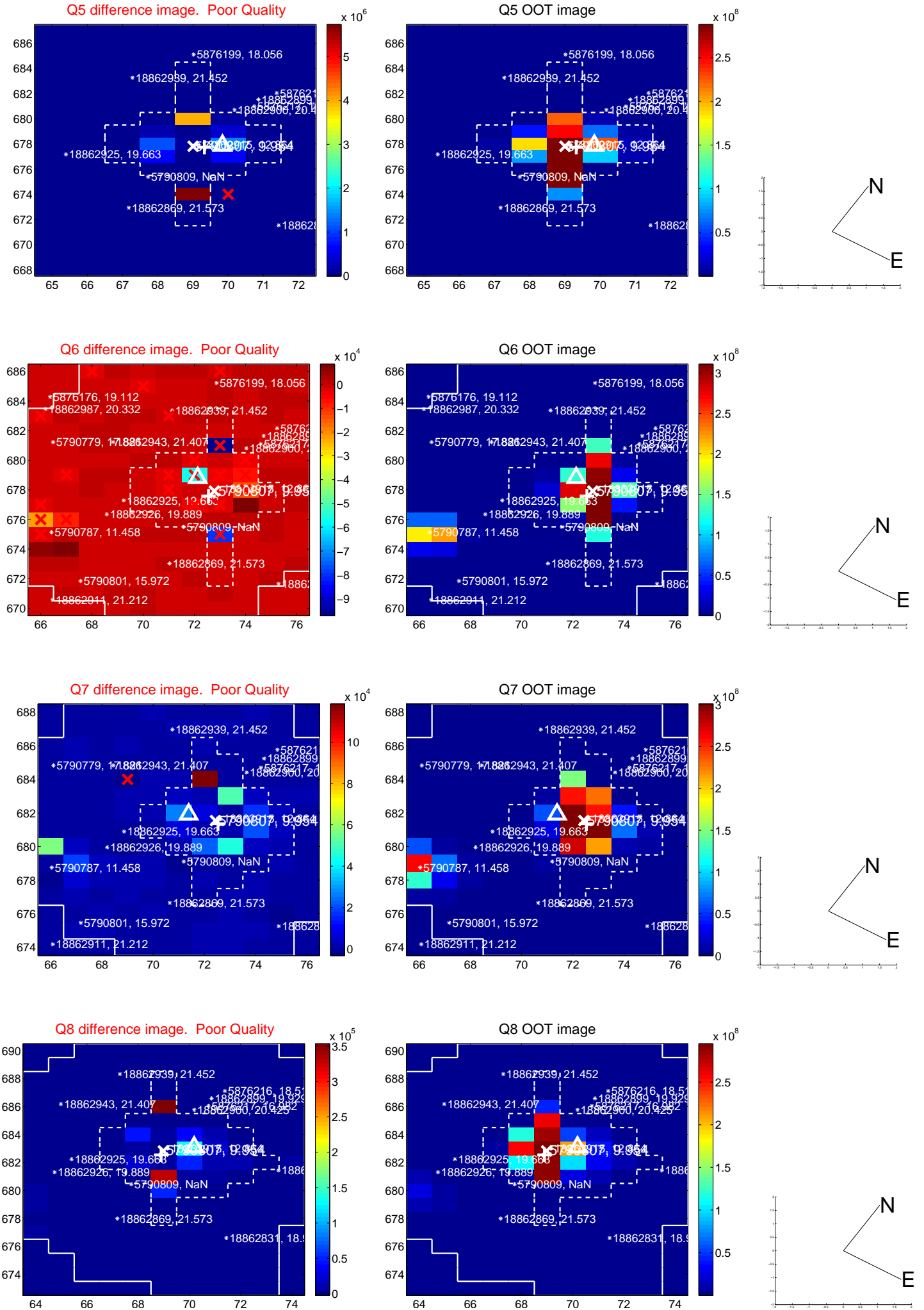


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets;** magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

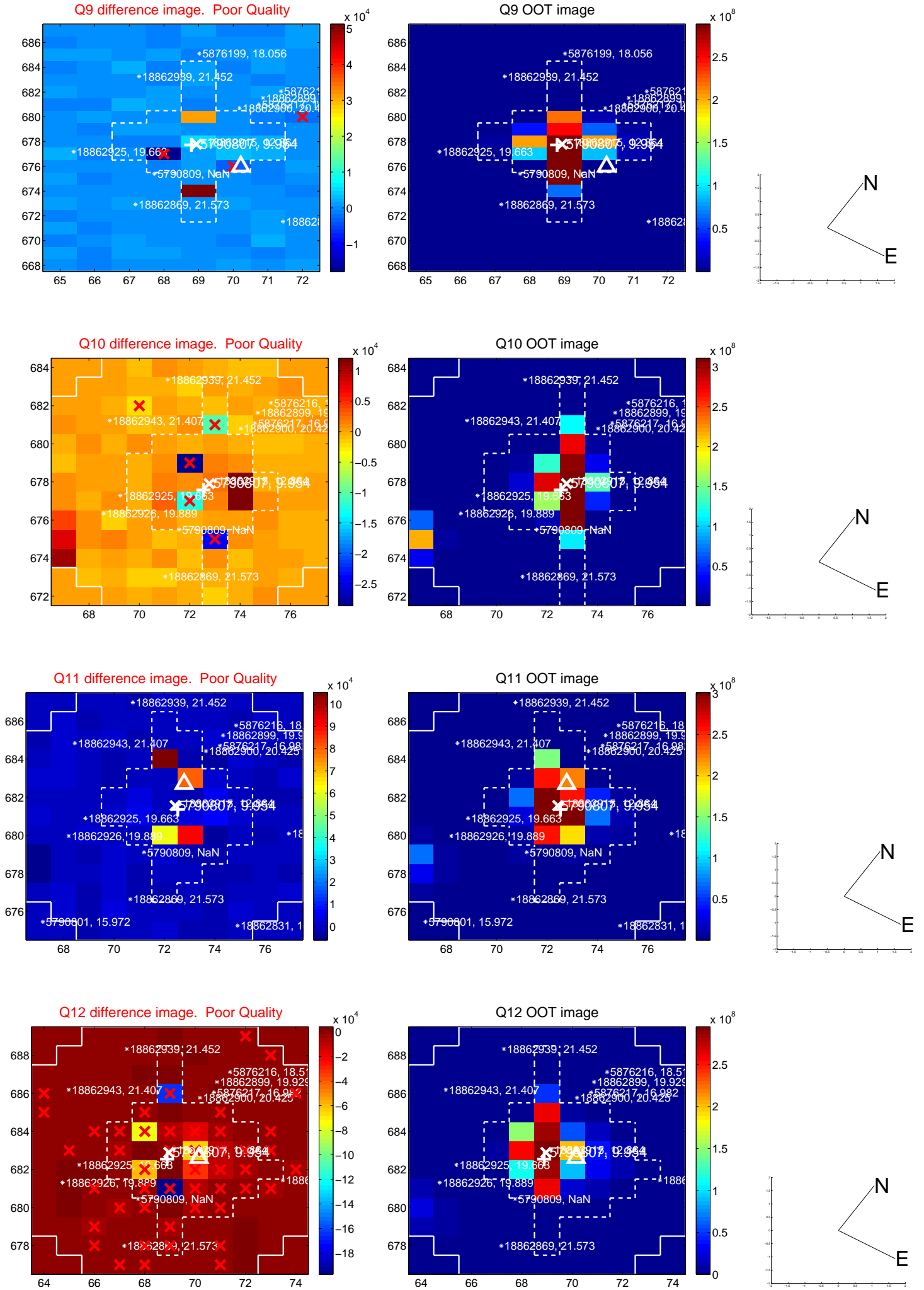
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



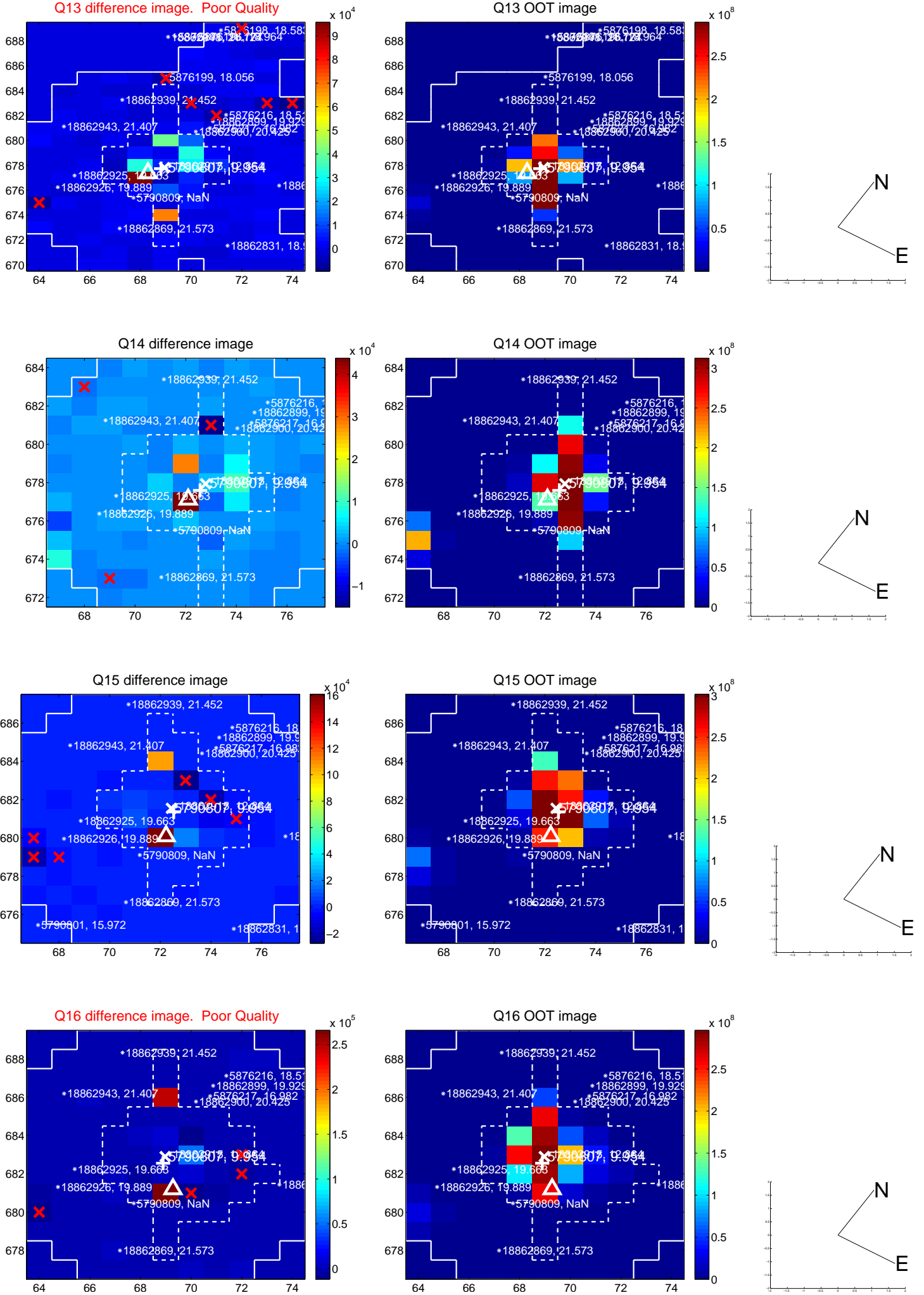
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



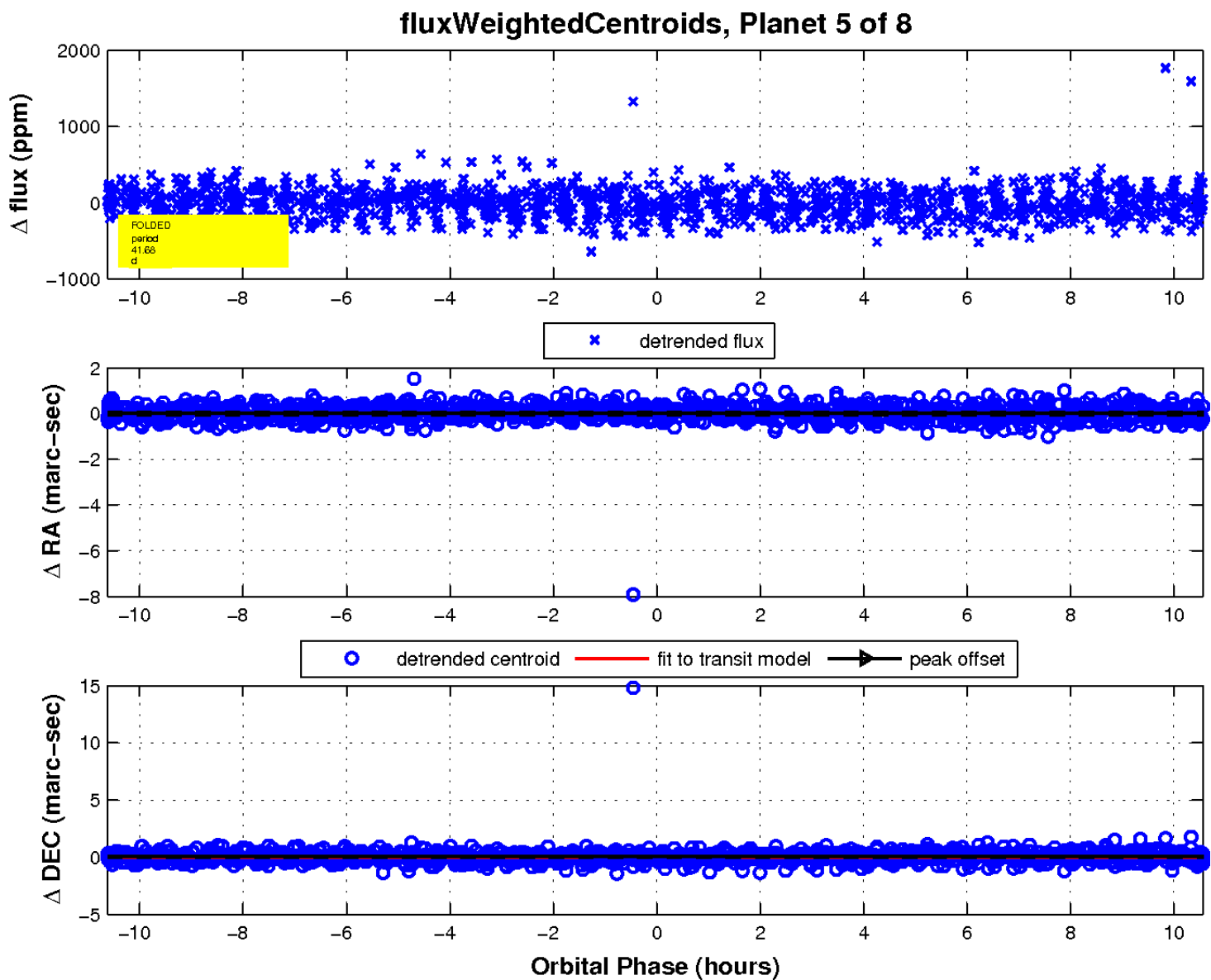
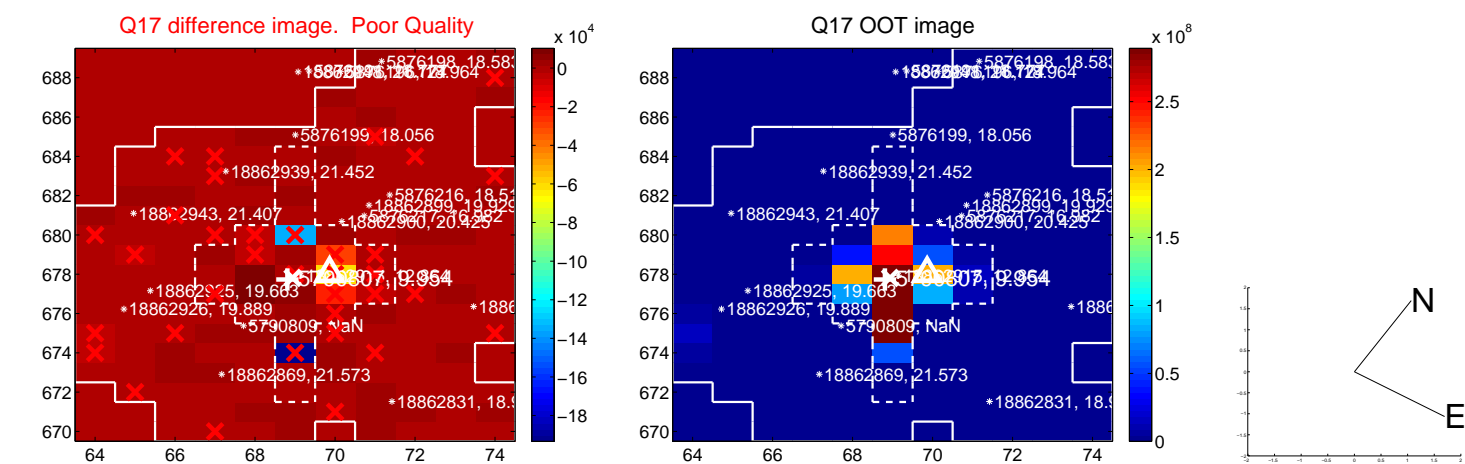
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

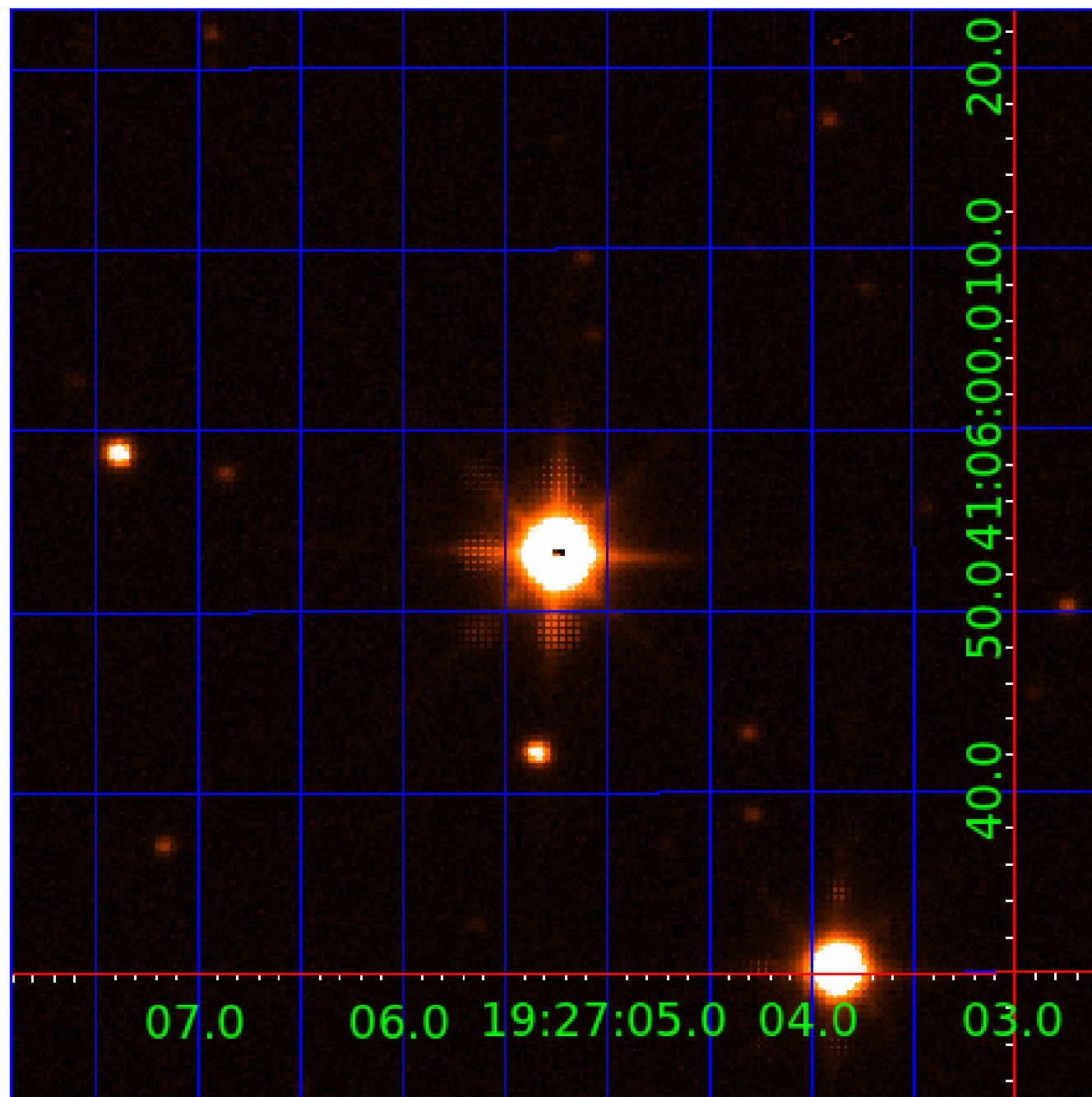


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 005790807

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})
005790807-01	OBS	0259.01	79.996235	207.125967	24262.8	6.332	906.5	965.6	2.49	6796	40.86	62.61
005790807-02	OBS	No	79.996152	207.377628	2485.9	27.889	16.8	24.8	2.49	6796	22.71	62.61
005790807-03	OBS	No	2.085085	133.485932	23.1	12.666	10.3	6.5	2.49	6796	1.21	8101.07
005790807-04	OBS	No	0.834015	131.838014	36.7	4.215	13.1	14.1	2.49	6796	1.74	27487.95
005790807-05	OBS	No	41.682256	151.886509	154.3	3.542	12.2	10.3	2.49	6796	3.56	149.32
005790807-07	OBS	No	22.683197	145.068615	164.5	5.392	11.8	7.6	2.49	6796	3.59	336.07
005790807-08	OBS	No	72.092786	190.659339	55.9	7.500	11.7	-1.0	2.49	6796	1.88	71.92

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
005790807-01	OBS	FP	0.35	0	1	0	0	MOD_SEC_ALT—CENT_SATURATED
005790807-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_SKYE_ZUMA—LPP_DV—MOD_NONUNIQ_DV—RESIDUAL_TCE—CENT_SATURATED
005790807-03	OBS	FP	0.00	1	0	0	0	LPP_DV—MOD_NONUNIQ_DV—CENT_SATURATED
005790807-04	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_SKYE_ZUMA—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_ALT—CENT_SATURATED
005790807-05	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_SATURATED
005790807-07	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—CENT_SATURATED
005790807-08	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_SATURATED

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

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

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

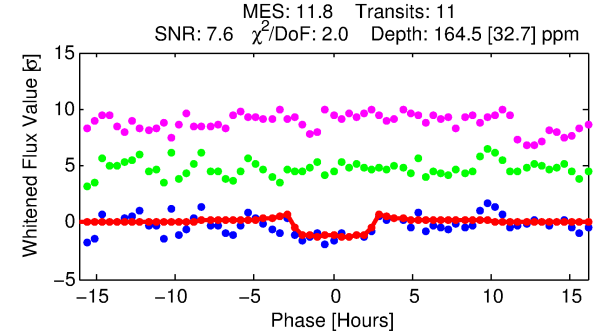
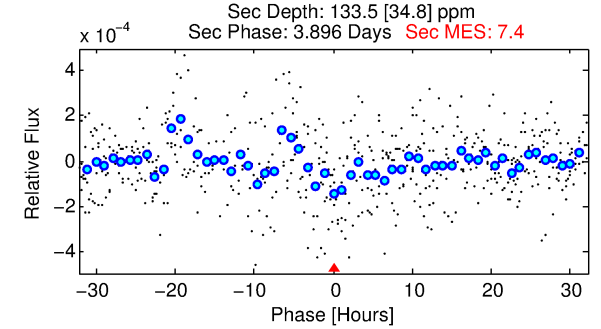
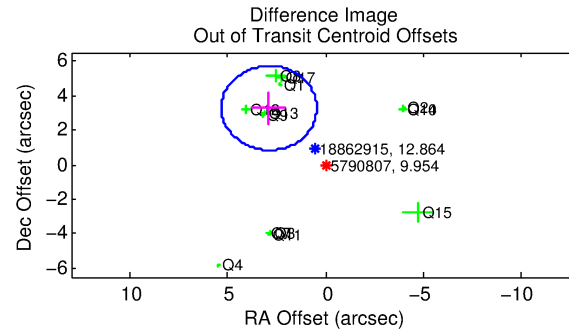
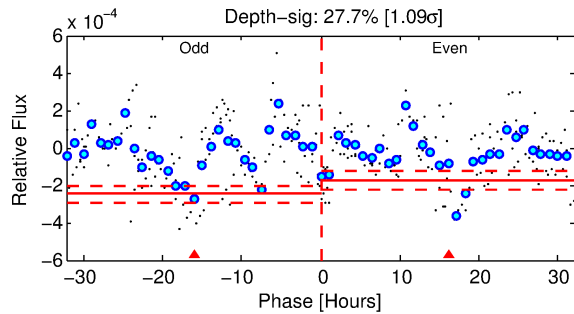
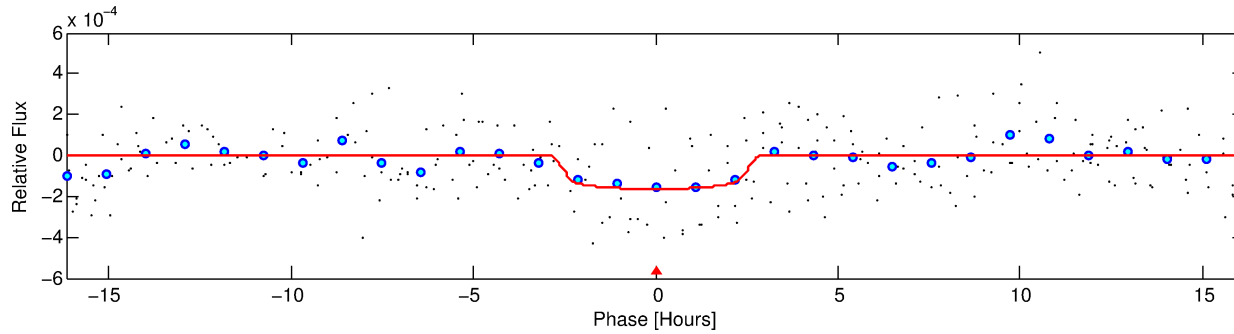
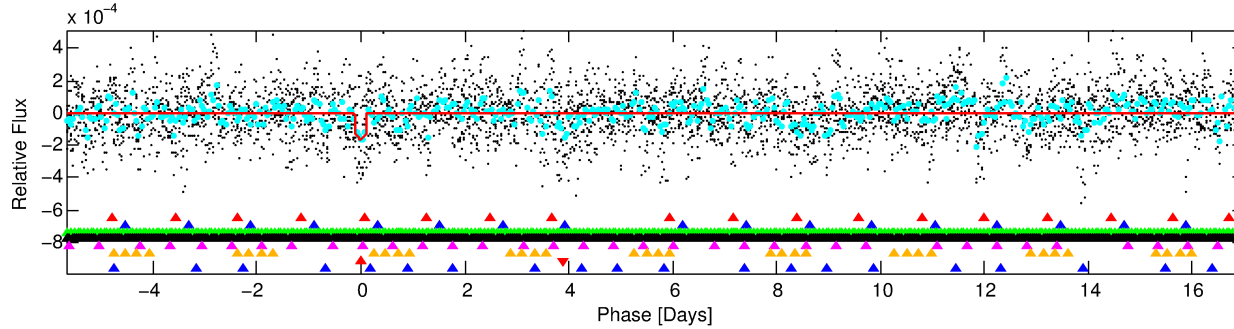
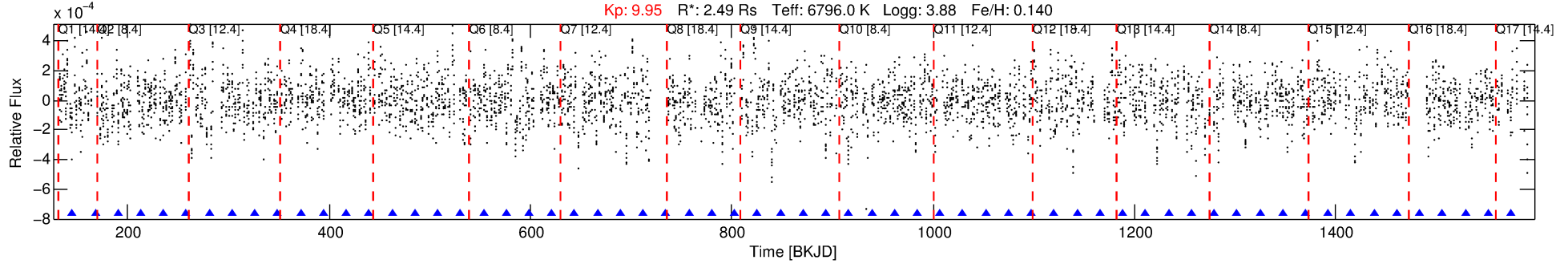
Ephemeris Match Information For 005790807-07

No Significant Match Found

DV One-Page Summary

KIC: 5790807 Candidate: 7 of 8 Period: 22.683 d
KOI: K00259 Corr: No Ephemeris Match

Kp: 9.95 R*: 2.49 Rs Teff: 6796.0 K Logg: 3.88 Fe/H: 0.140



DV Fit Results:

Period = 22.68320 [0.00040] d
Epoch = 145.0686 [0.0152] BKJD
Rp/R* = 0.0132 [0.0103]
a/R* = 18.01 [80.47]
b = 0.84 [1.53]
Seff = 336.07 [133.93]
Teq = 1092 [109] K
Rp = 3.59 [2.99] Re
a = 0.1878 [0.0488] AU
Ag = 200.60 [326.61] [0.61σ]
Teffp = 6353 [2510] K [2.09σ]

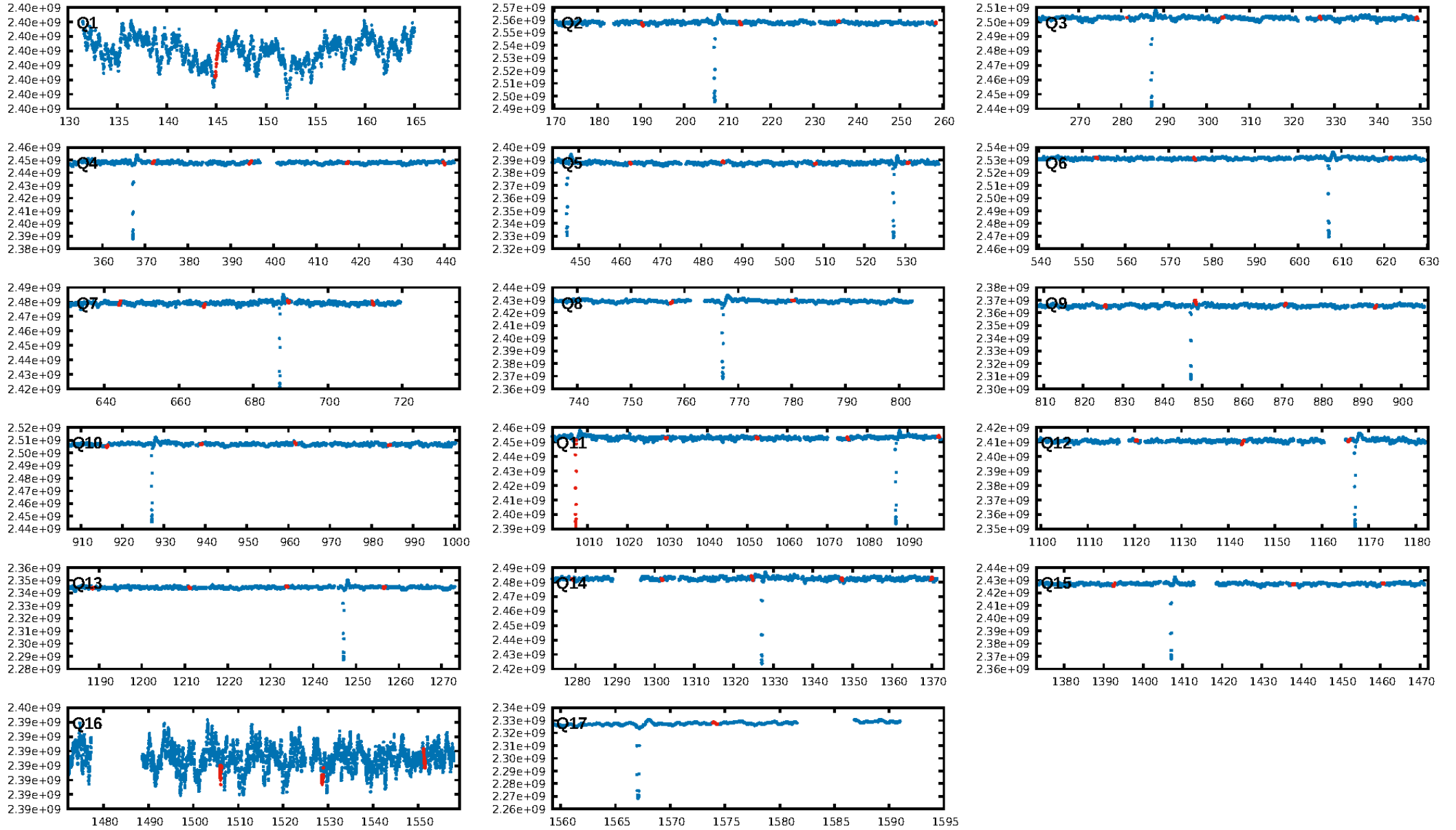
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [35.91σ]
LongPeriod-sig: 100.0% [55.61σ]
ModelChiSquare2-sig: 0.0%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [11/11]
GhostDiagnostic-chr: N/A
Centroid-sig: 0.1%
Centroid-so: 0.904 arcsec [3.62σ]
OotOffset-rm: 4.367 arcsec [5.37σ]
KicOffset-rm: 4.187 arcsec [5.20σ]
OotOffset-st: 3/4/4/4 [15]
KicOffset-st: 3/4/4/4 [15]
DiffImageQuality-fgm: 0.00 [0/15]
DiffImageOverlap-fno: 0.00 [0/17]

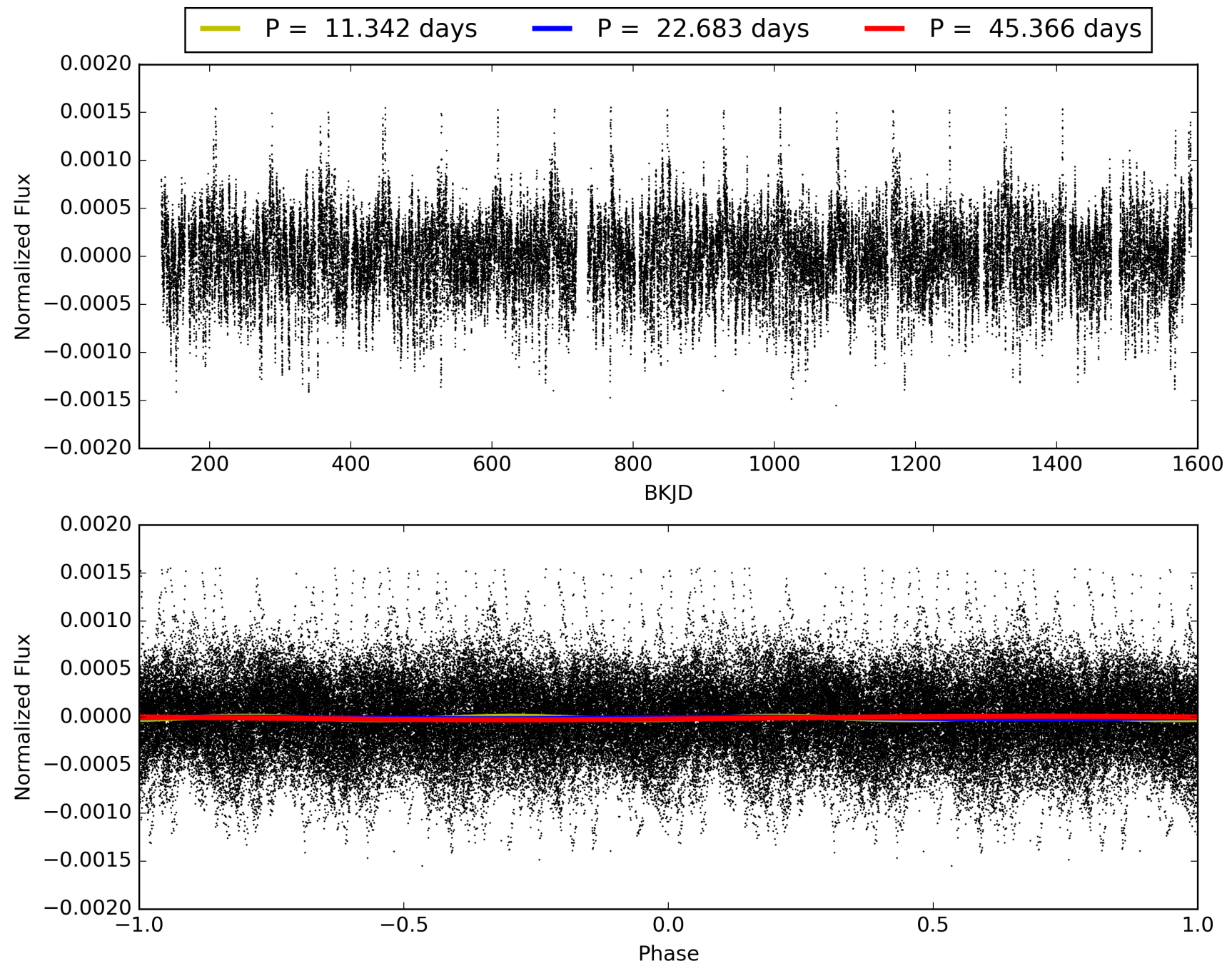
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 03-Feb-2016 08:11:59 Z

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

TCE 005790807-07, PDC Light Curves

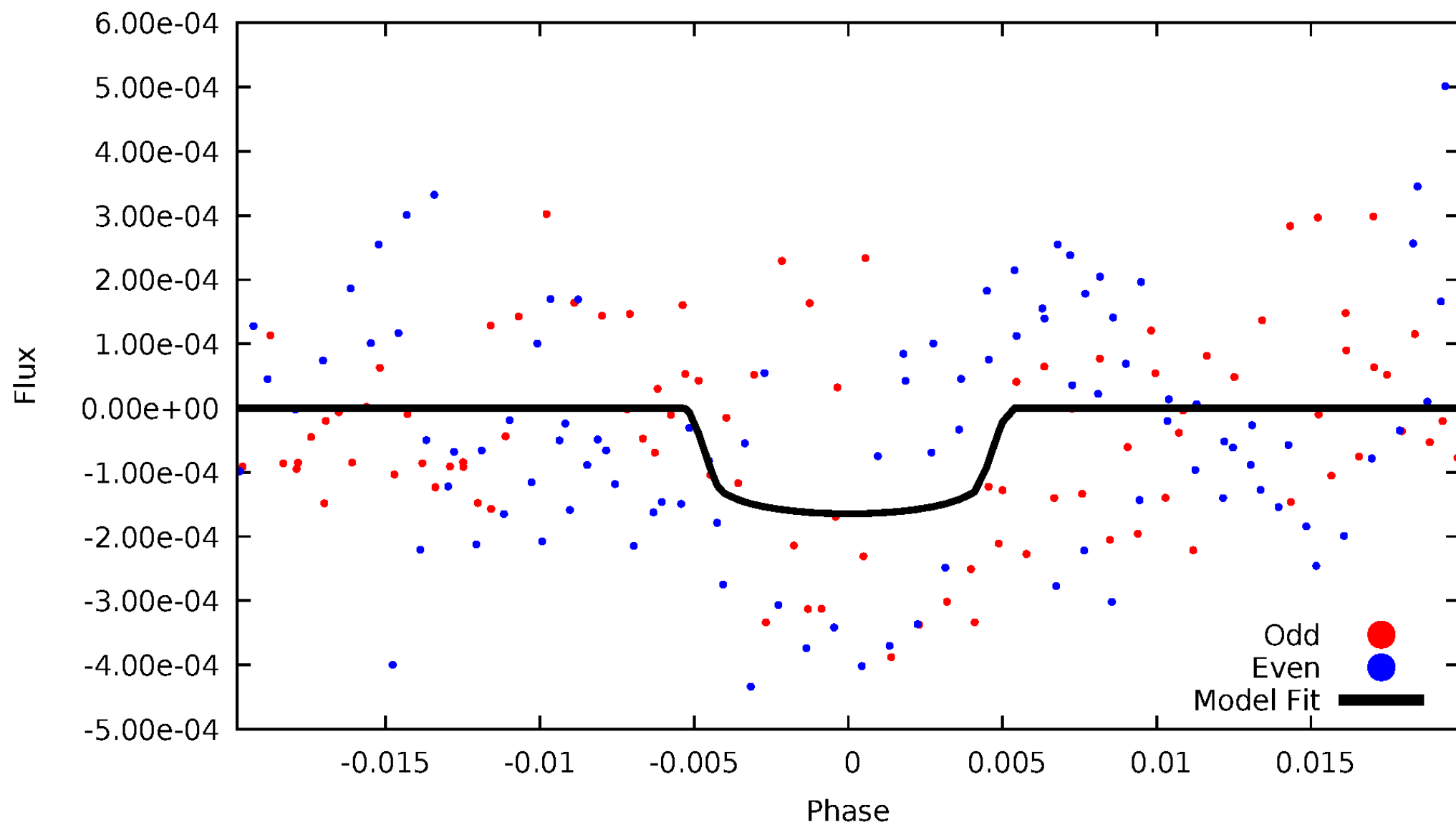


TCE 005790807-07



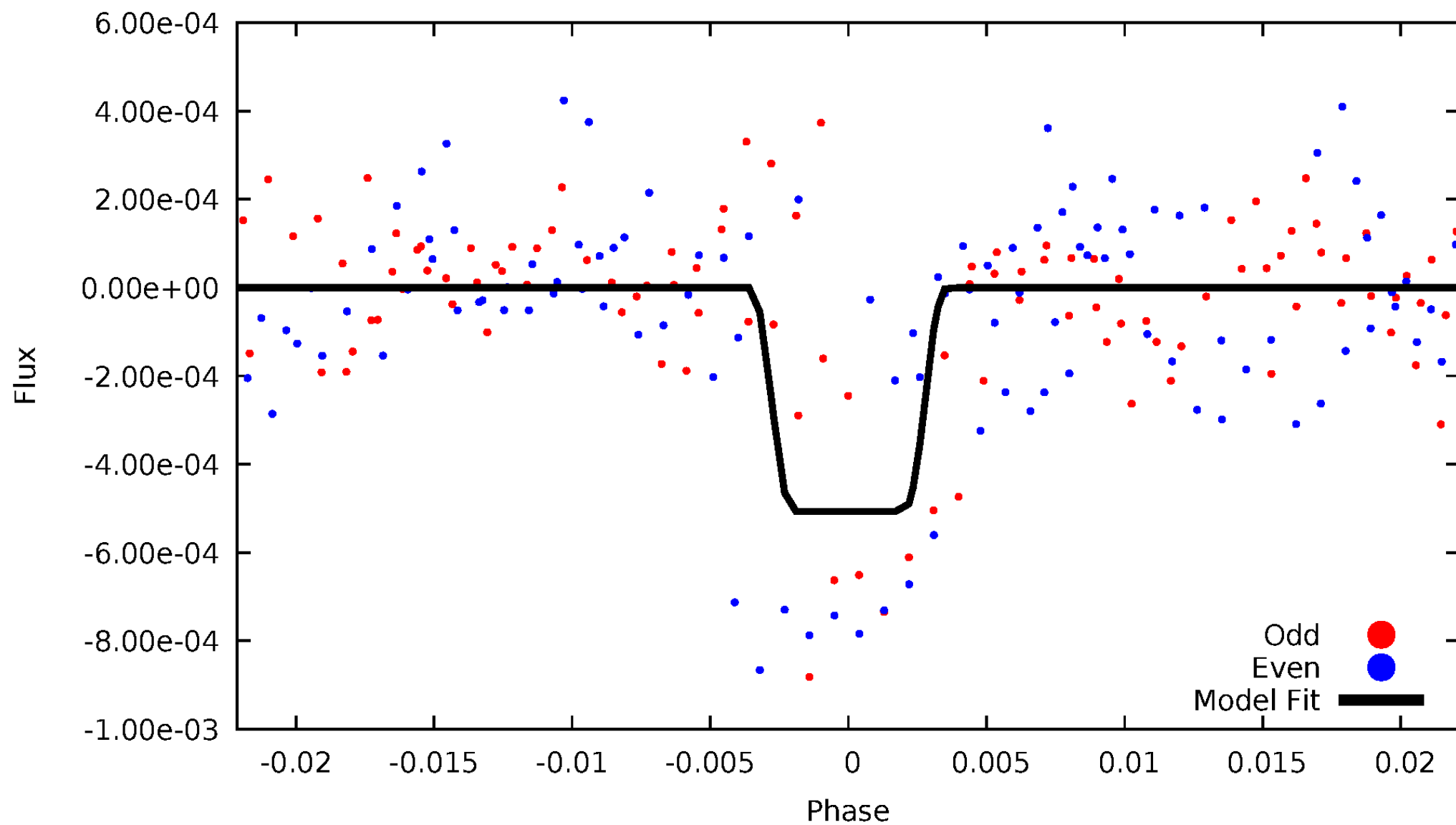
DV Odd/Even

TCE 005790807-07



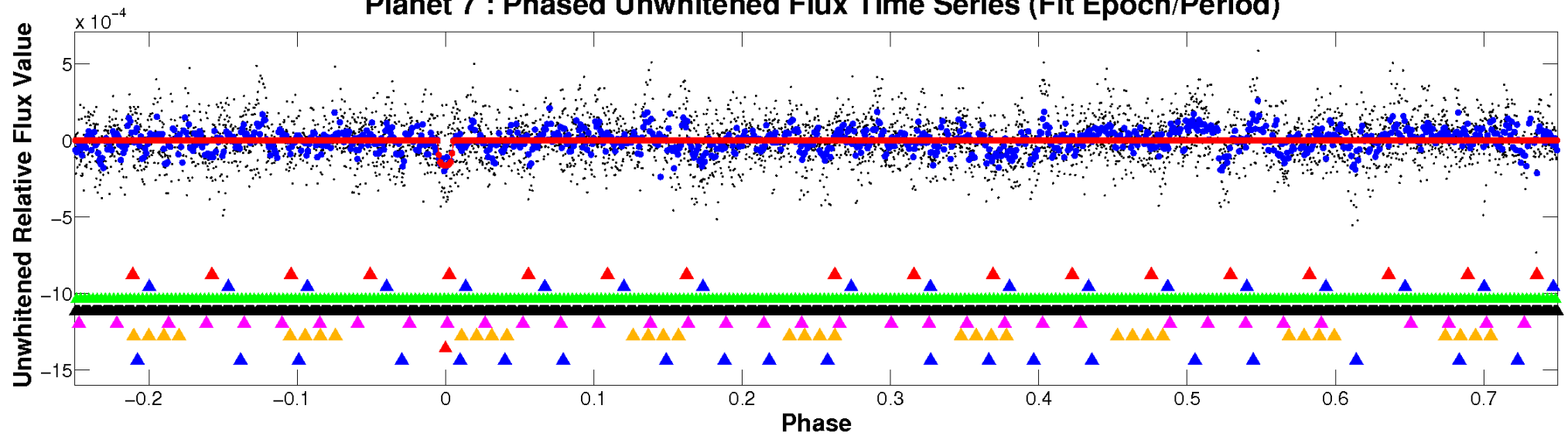
ALT Odd/Even

TCE 005790807-07

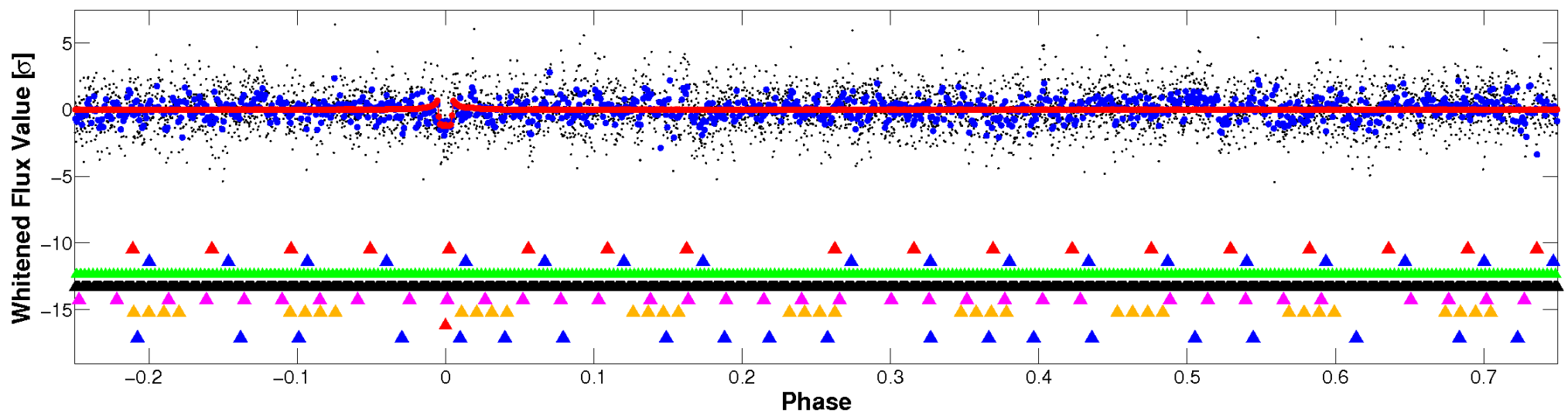


Non-Whitened Vs. Whitened Light Curve

Planet 7 : Phased Unwhitened Flux Time Series (Fit Epoch/Period)

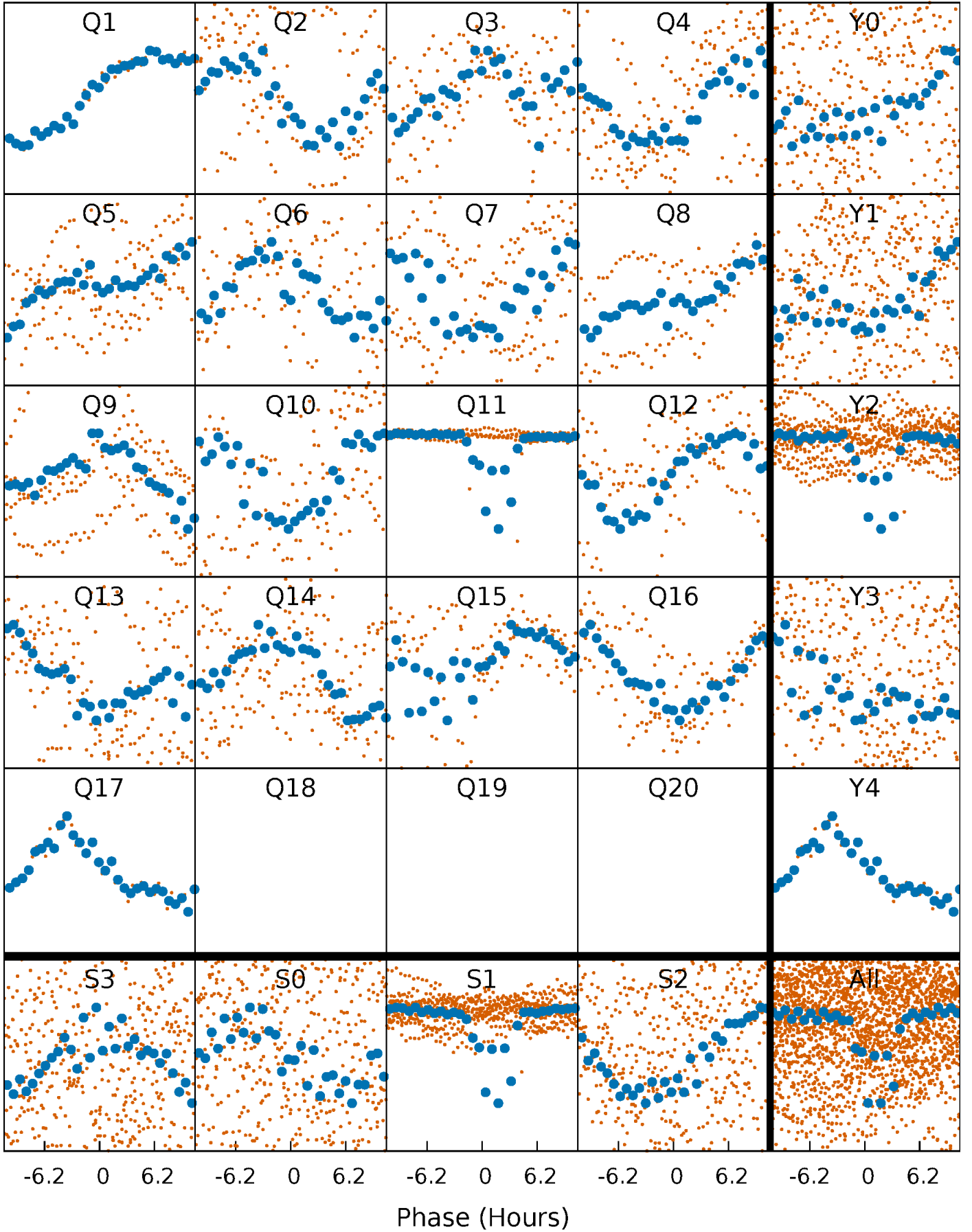


Planet 7 : Phased Whitened Flux Time Series (Fit Epoch/Period)



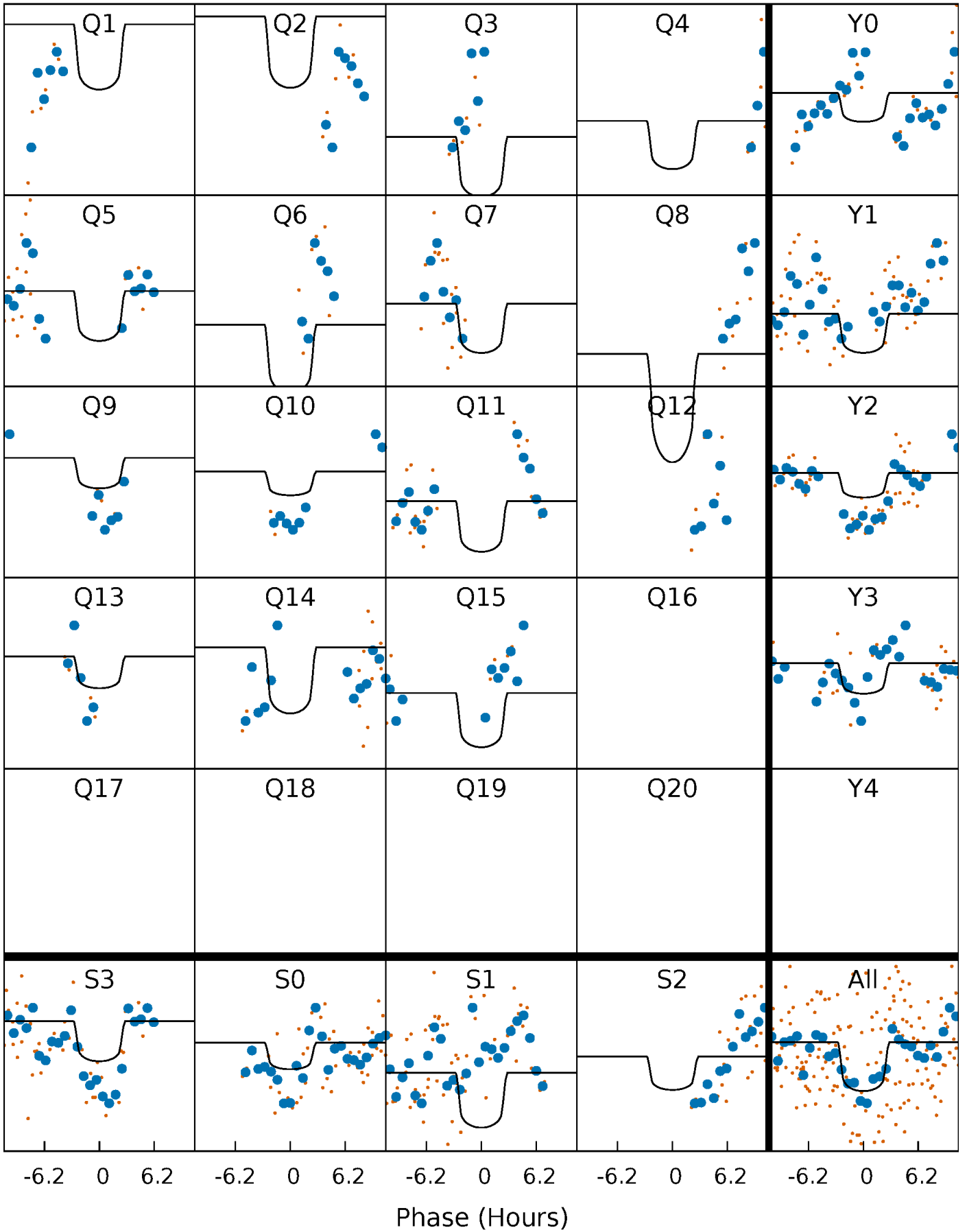
PDC Quarter-Phased Transit Curves

TCE 005790807-07 $P = 22.683197$ Days $T_0 = 145.068615$ (BKJD)



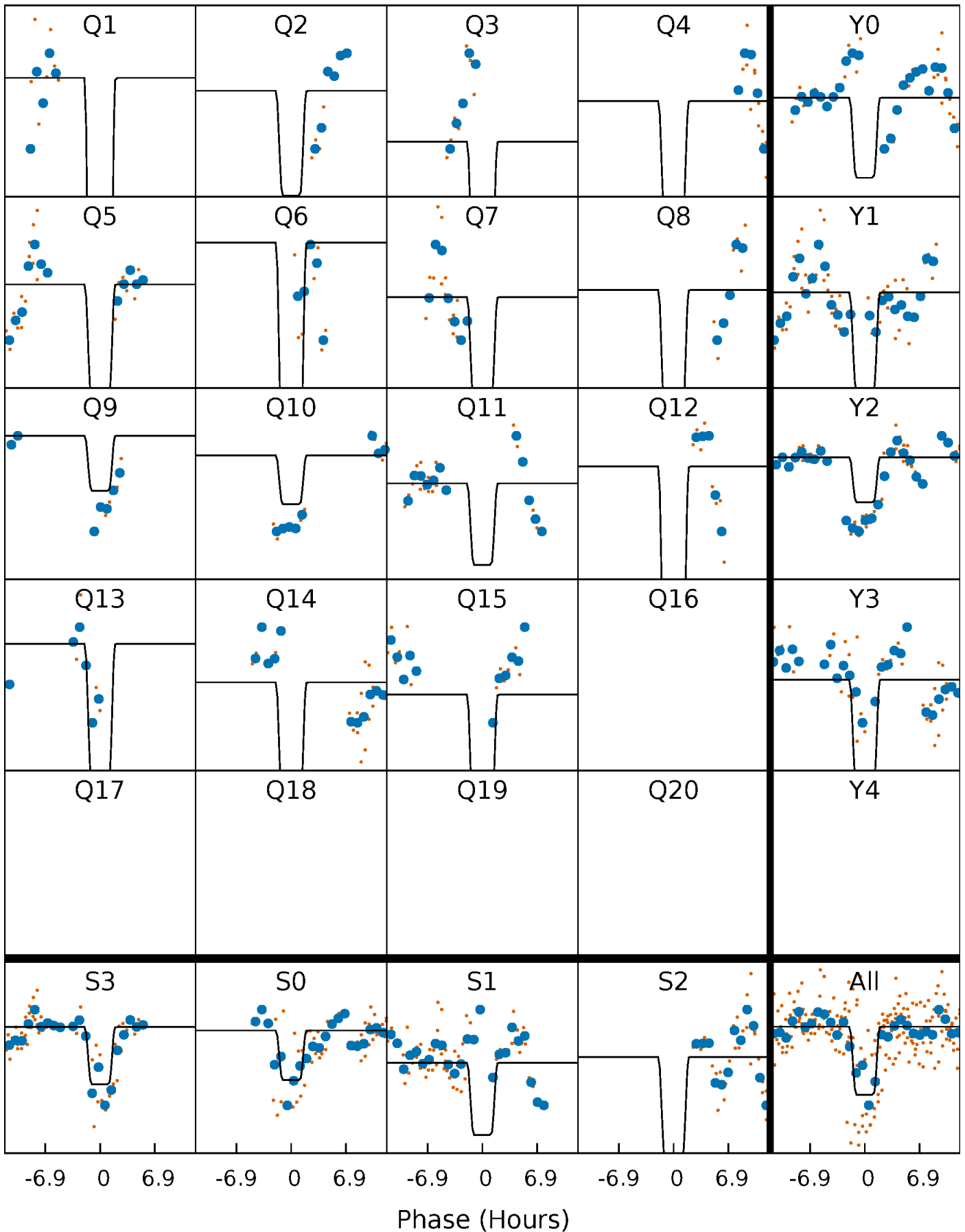
DV Quarter-Phased Transit Curves

TCE 005790807-07 $P = 22.683197$ Days $T_0 = 145.068615$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

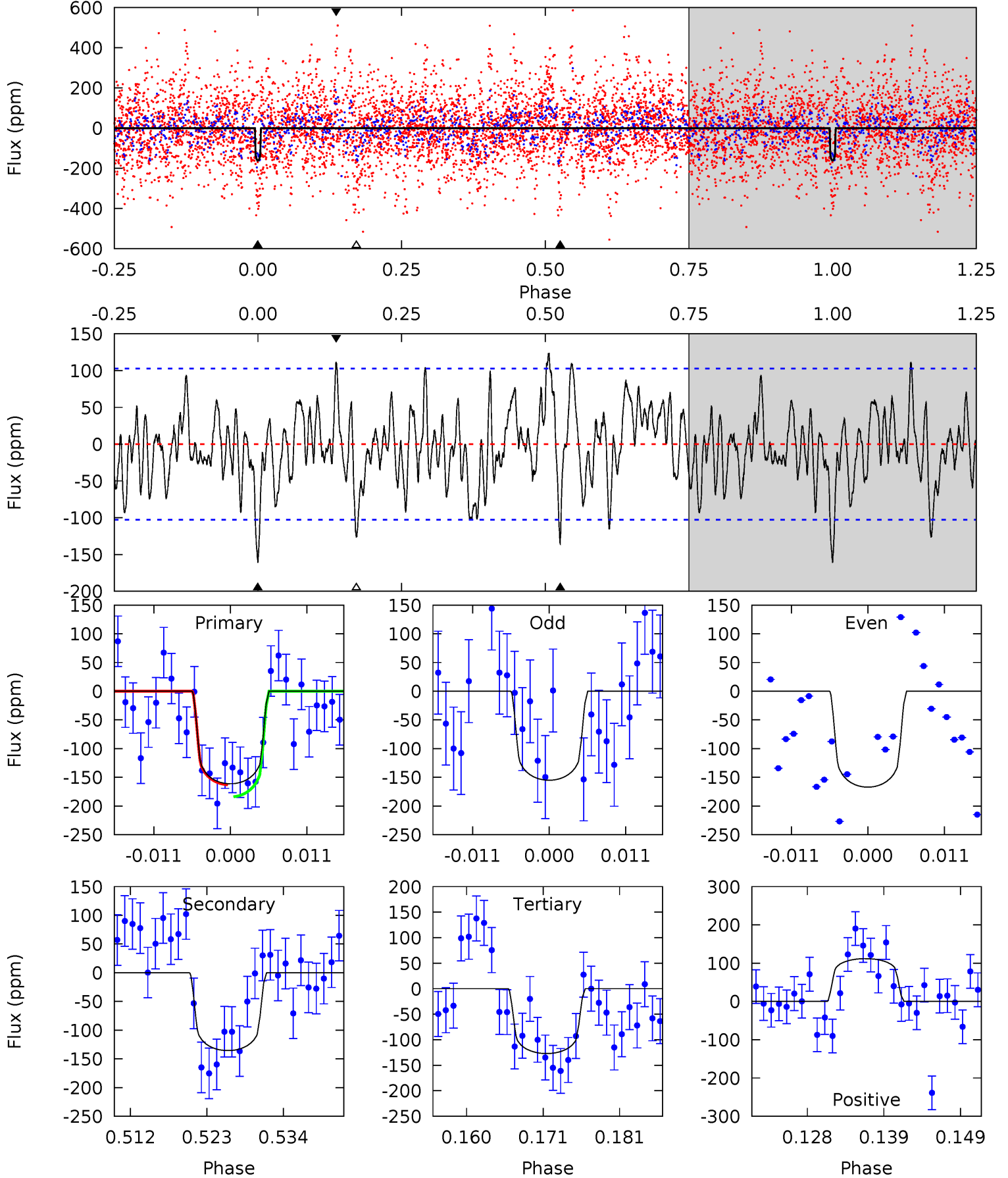
TCE 005790807-07 P= 22.681839 Days $T_0=145.115719$ (BKJD)



DV Model-Shift Uniqueness Test

005790807-07, P = 22.683197 Days, E = 122.385418 Days

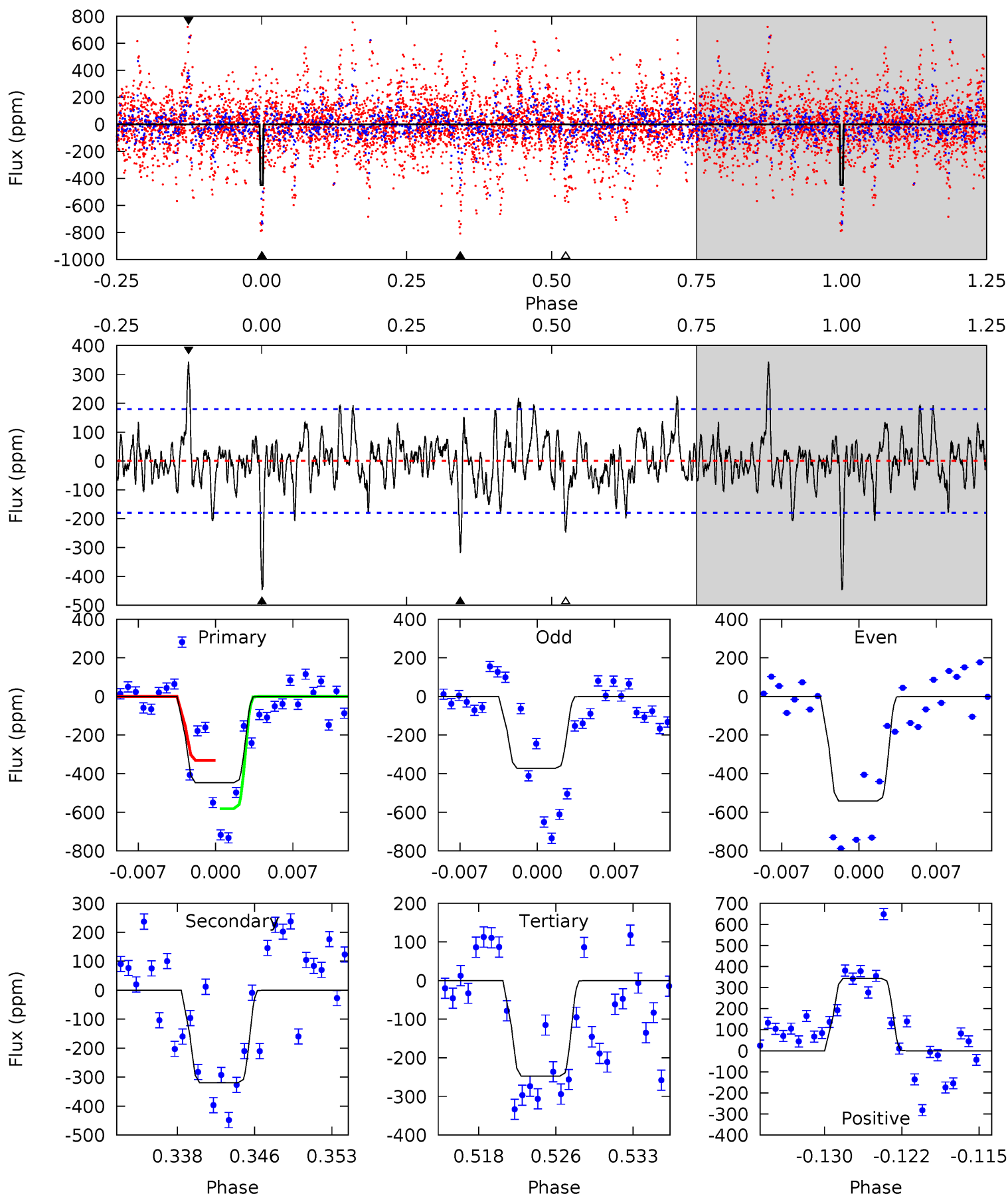
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
7.86	6.61	6.19	5.45	5.01	2.55	2.19	1.67	2.41	0.42	1.16	0.30	0.99	0.43	0.50



Alt Model-Shift Uniqueness Test

005790807-07, $P = 22.681839$ Days, $E = 122.433880$ Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
12.6	9.04	7.01	9.72	5.09	2.69	2.05	5.64	2.92	2.03	-0.69	2.35	1.51	0.43	3.52



Stellar Parameters For KIC 005790807

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6796^{+67}_{-88}	$3.880^{+0.224}_{-0.096}$	$0.140^{+0.150}_{-0.150}$	$2.490^{+0.391}_{-0.727}$	$1.715^{+0.150}_{-0.244}$	$0.157^{+0.205}_{-0.047}$
	+1%/-1%	+6%/-2%	+107%/-107%	+16%/-29%	+9%/-14%	+131%/-30%
Source	SPE68	SPE68	SPE68	DSEP		

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

Secondary Eclipse Parameters for KIC 005790807-07 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-136 ± 20	$3.88^{+2.70}_{-2.38}$	1513^{+70}_{-109}	5963^{+4655}_{-1242}	175^{+1043}_{-116}
Alt.	-319 ± 35	$5.77^{+2.97}_{-2.69}$	1511^{+68}_{-103}	6017^{+2677}_{-985}	184^{+469}_{-103}

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 $A_{obs} \gg 1.0$

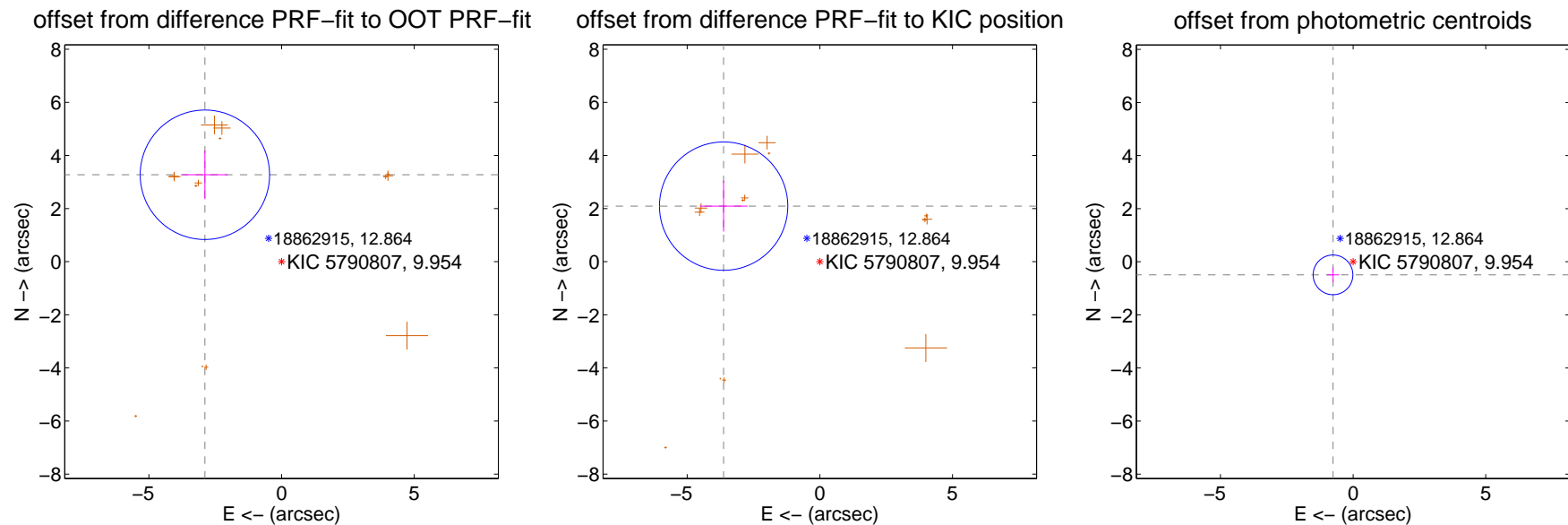
DV Centroid Data

Supplemental centroid analysis for 005790807-07. **Kepler magnitude: 9.95.** Transit SNR 7.63

There are 0 quarters with good PRF difference image offsets

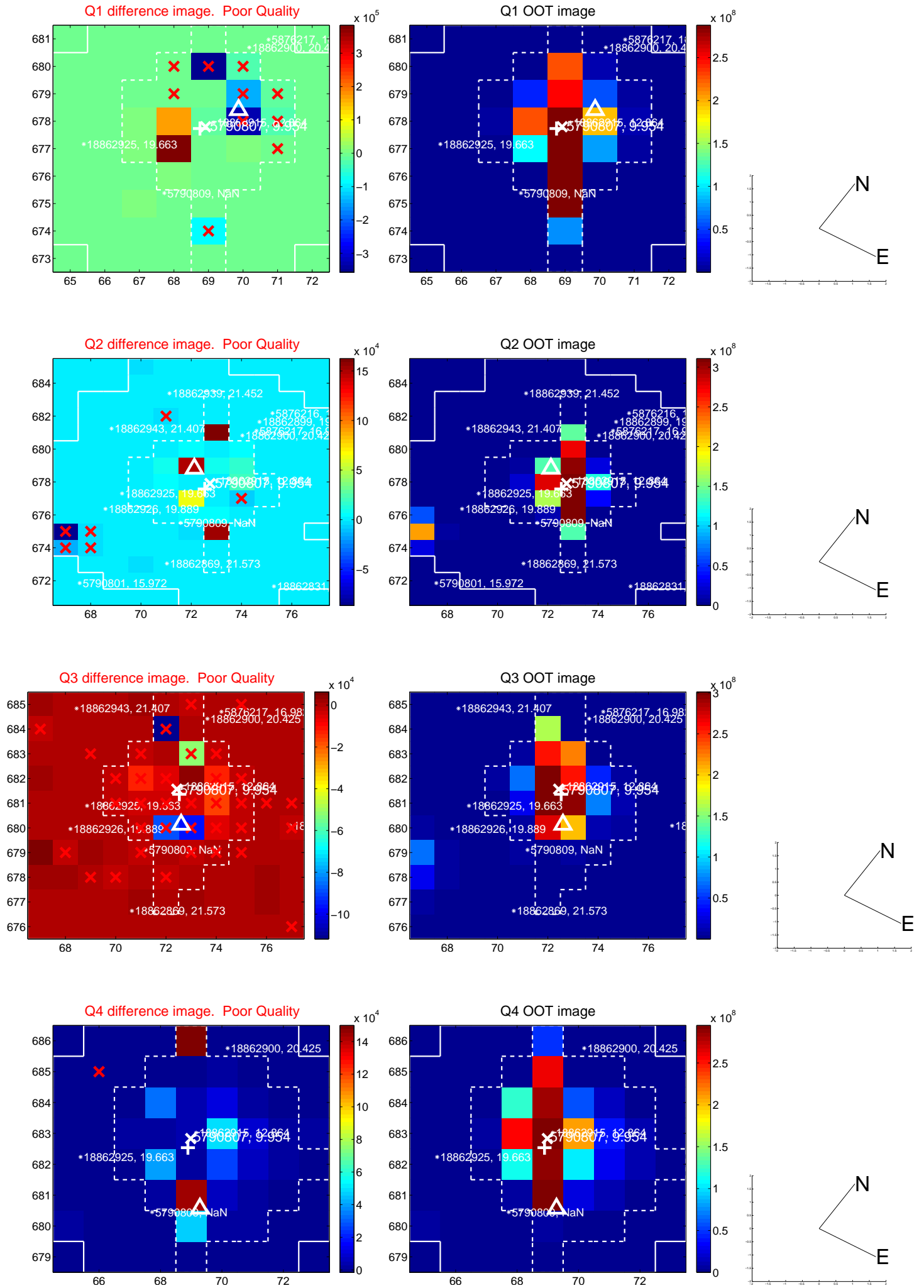
The direct PRF centroid is offset from the target star catalog position by about 0.61 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	4.367 ± 0.813	5.37	2.890 ± 0.857	3.274 ± 0.914
PRF-fit source offset from KIC position	4.187 ± 0.806	5.20	3.626 ± 0.900	2.093 ± 0.957
photometric centroid source offset	0.90 ± 0.25	3.62	0.76 ± 0.24	-0.49 ± 0.28

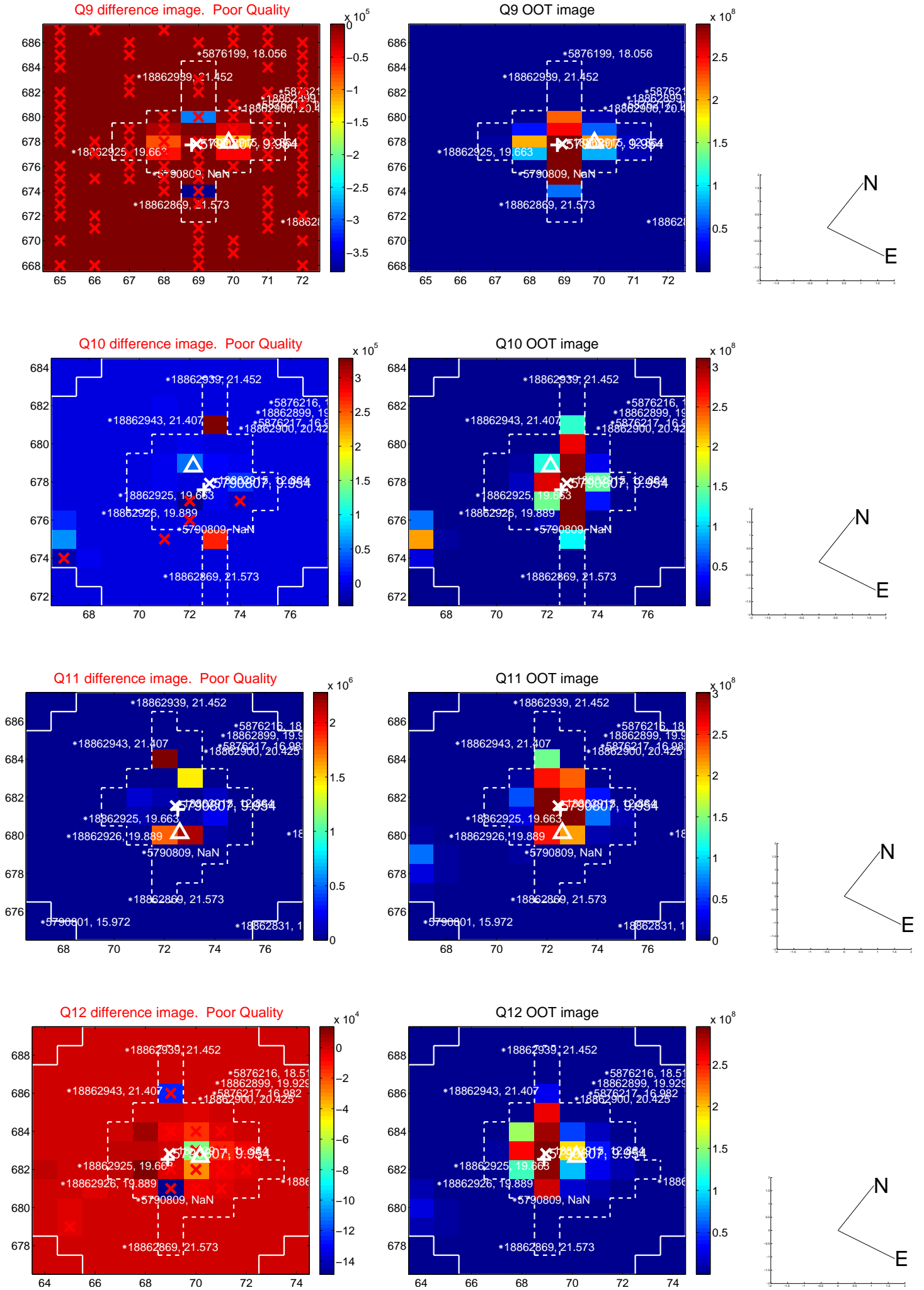


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets;** magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

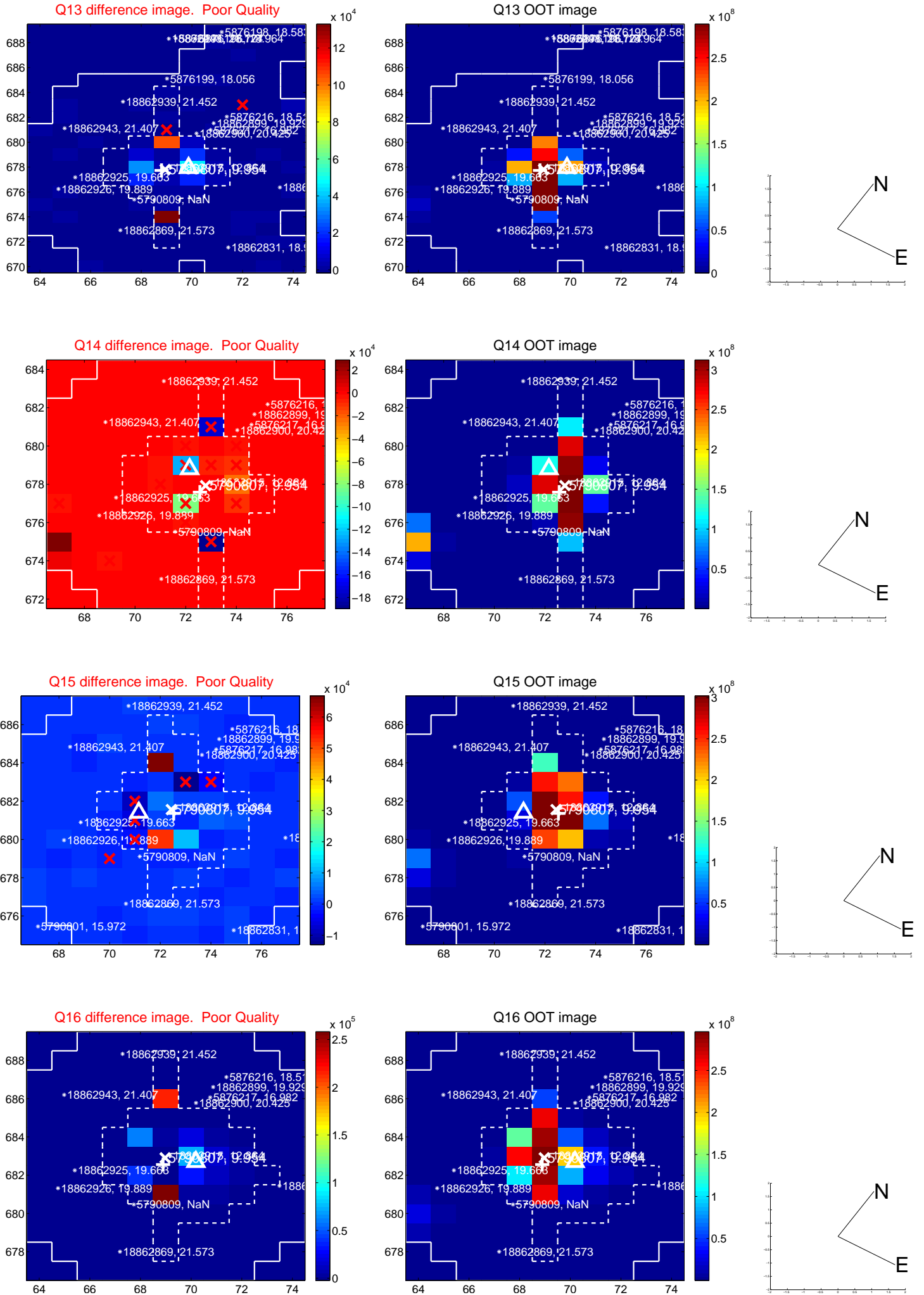
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



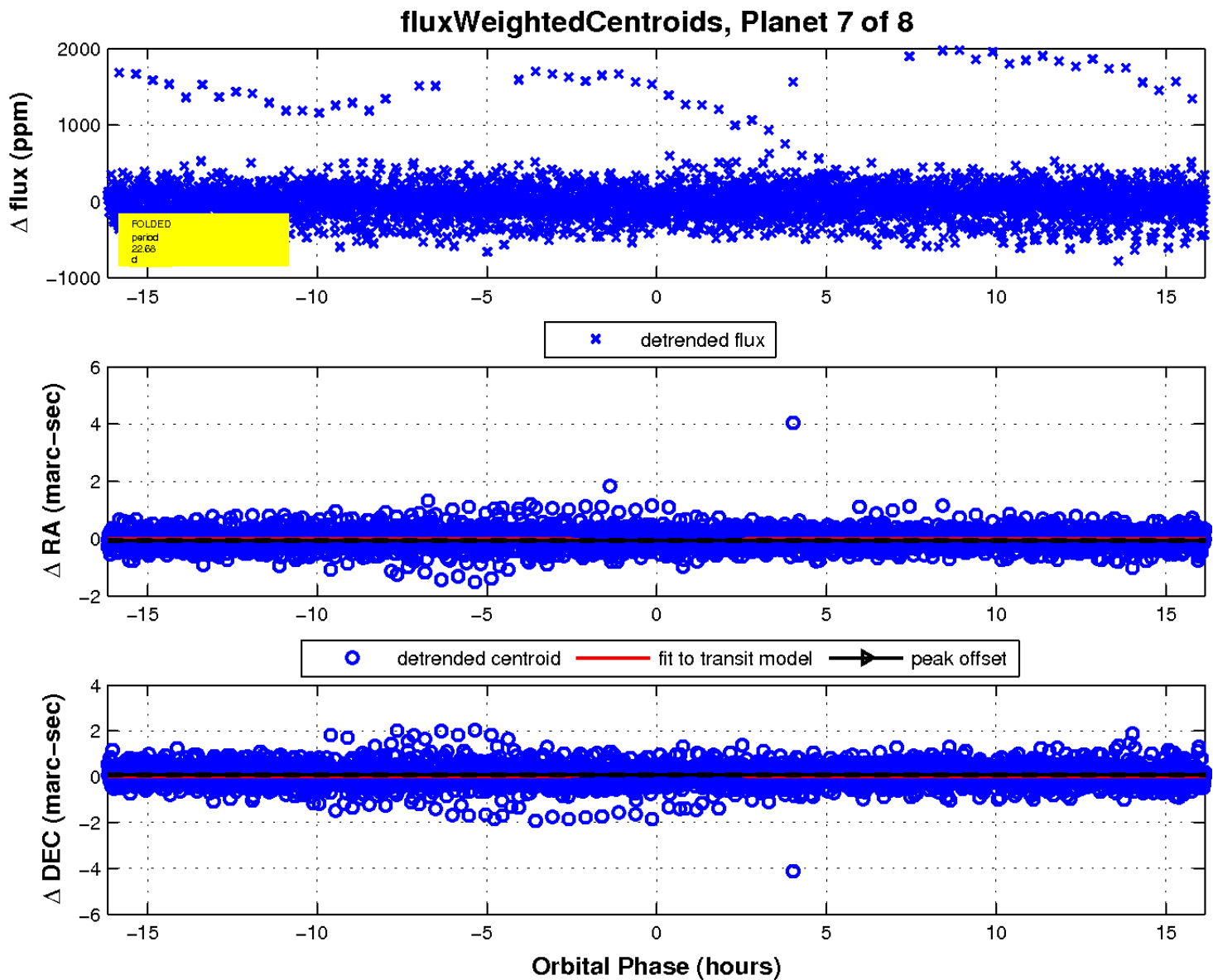
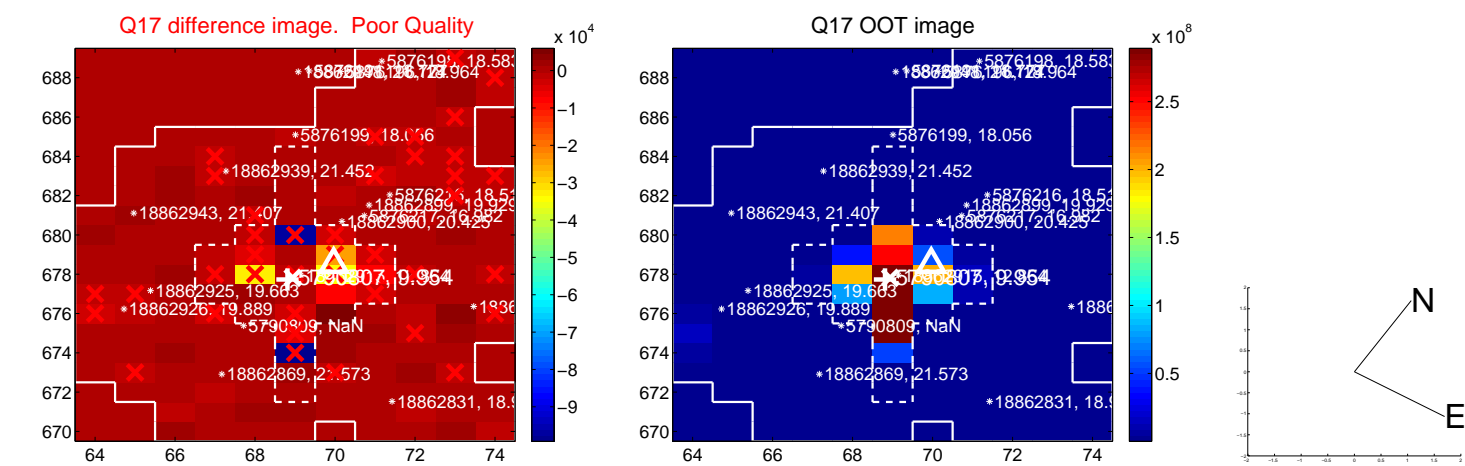
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

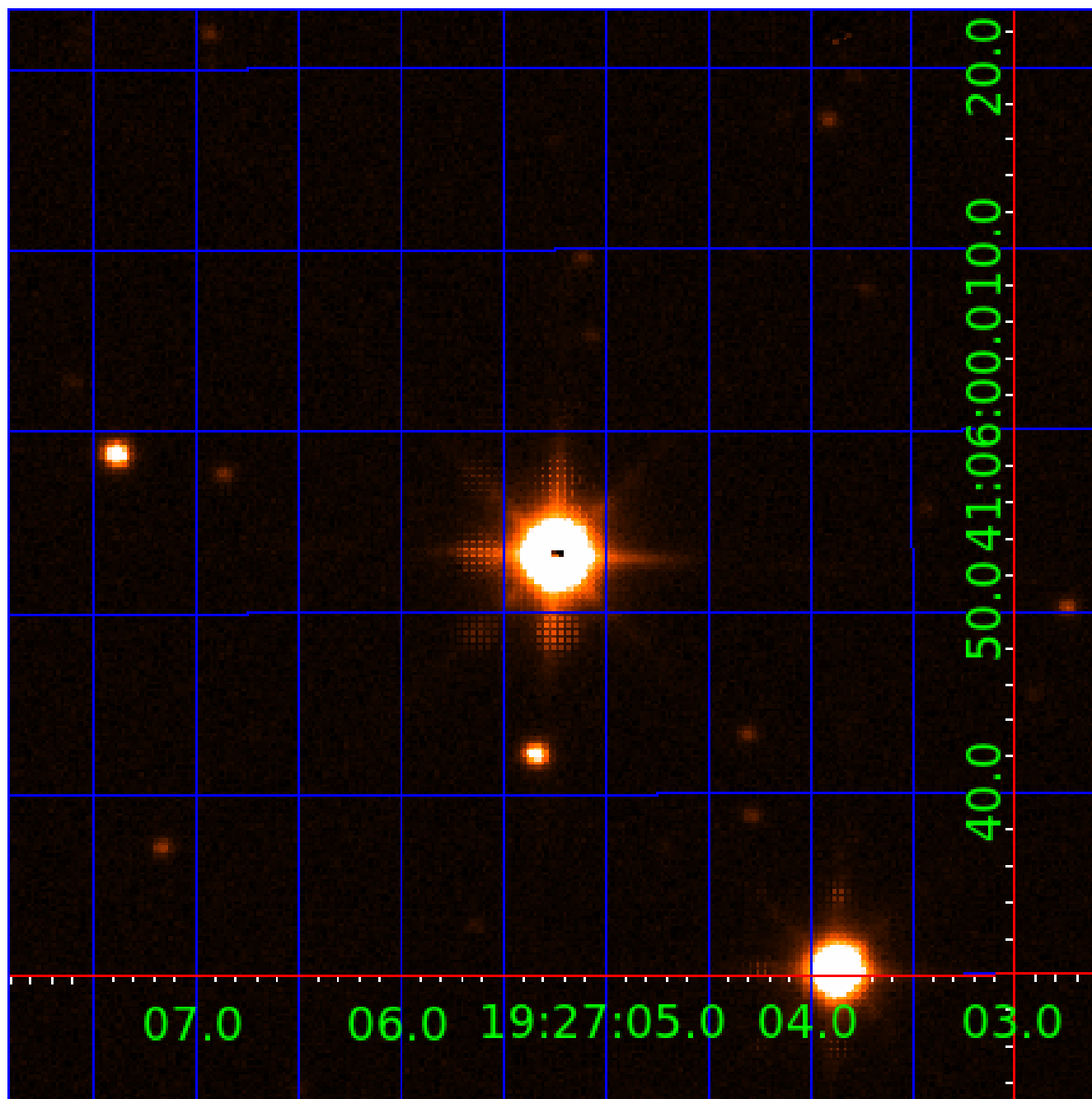


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 005790807

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})
005790807-01	OBS	0259.01	79.996235	207.125967	24262.8	6.332	906.5	965.6	2.49	6796	40.86	62.61
005790807-02	OBS	No	79.996152	207.377628	2485.9	27.889	16.8	24.8	2.49	6796	22.71	62.61
005790807-03	OBS	No	2.085085	133.485932	23.1	12.666	10.3	6.5	2.49	6796	1.21	8101.07
005790807-04	OBS	No	0.834015	131.838014	36.7	4.215	13.1	14.1	2.49	6796	1.74	27487.95
005790807-05	OBS	No	41.682256	151.886509	154.3	3.542	12.2	10.3	2.49	6796	3.56	149.32
005790807-07	OBS	No	22.683197	145.068615	164.5	5.392	11.8	7.6	2.49	6796	3.59	336.07
005790807-08	OBS	No	72.092786	190.659339	55.9	7.500	11.7	-1.0	2.49	6796	1.88	71.92

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
005790807-01	OBS	FP	0.35	0	1	0	0	MOD_SEC_ALT—CENT_SATURATED
005790807-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_SKYE_ZUMA—LPP_DV—MOD_NONUNIQ_DV—RESIDUAL_TCE—CENT_SATURATED
005790807-03	OBS	FP	0.00	1	0	0	0	LPP_DV—MOD_NONUNIQ_DV—CENT_SATURATED
005790807-04	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_SKYE_ZUMA—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_ALT—CENT_SATURATED
005790807-05	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_SATURATED
005790807-07	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—CENT_SATURATED
005790807-08	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_SATURATED

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

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

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

Ephemeris Match Information For 005790807-08

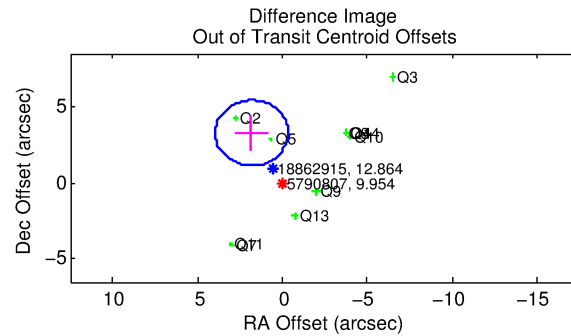
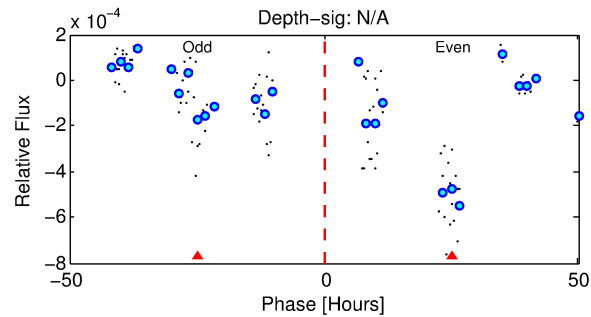
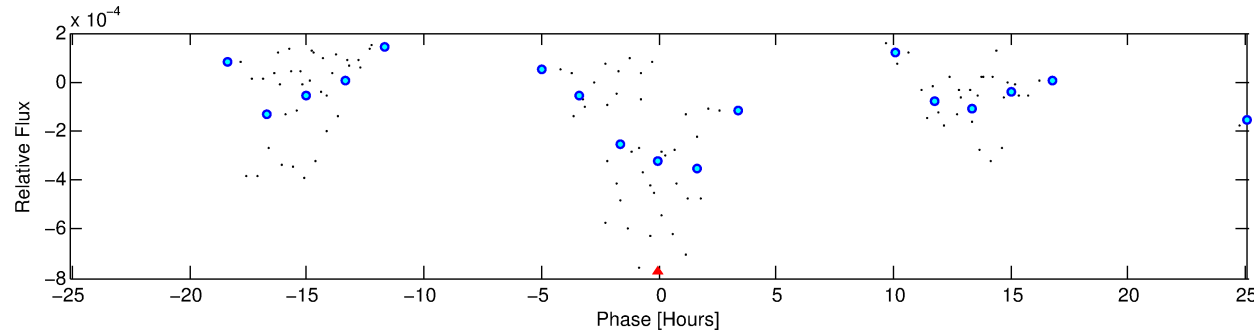
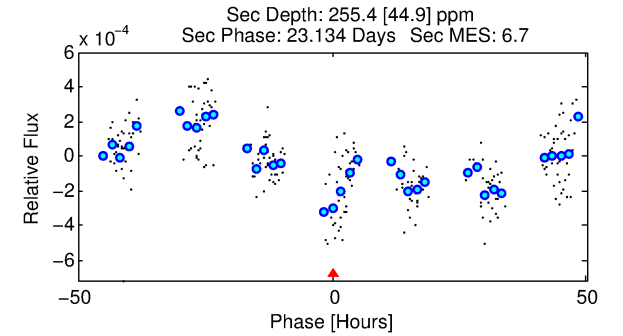
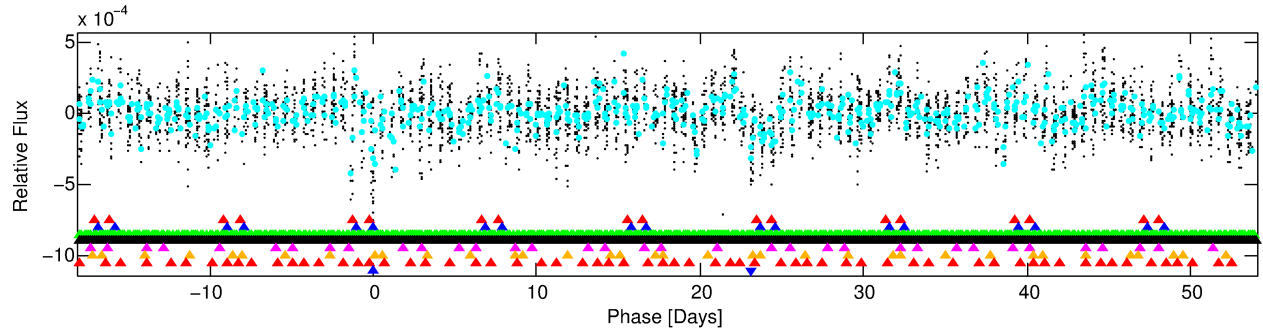
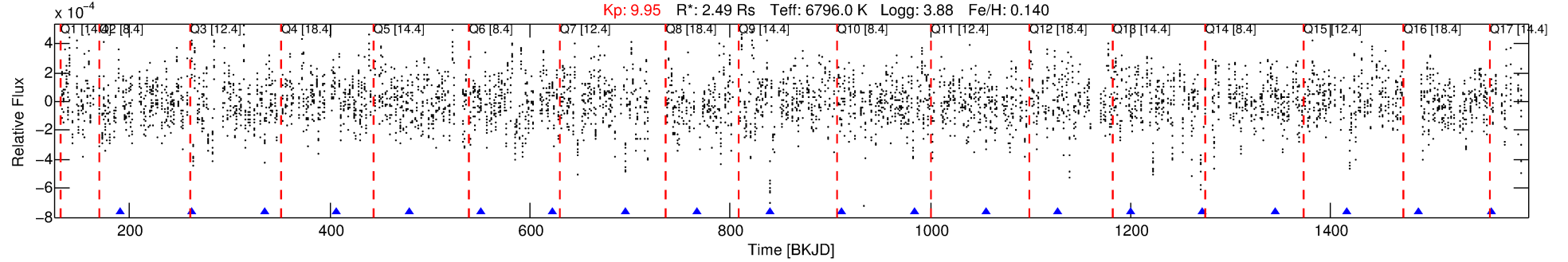
No Significant Match Found

DV One-Page Summary

KIC: 5790807 Candidate: 8 of 8 Period: 72.093 d

KOI: K00259 Corr: No Ephemeris Match

Kp: 9.95 R*: 2.49 Rs Teff: 6796.0 K Logg: 3.88 Fe/H: 0.140



TPS TCE Results:

Period = 72.09279 d
Epoch = 190.6593 BKJD

DV fit results are unavailable

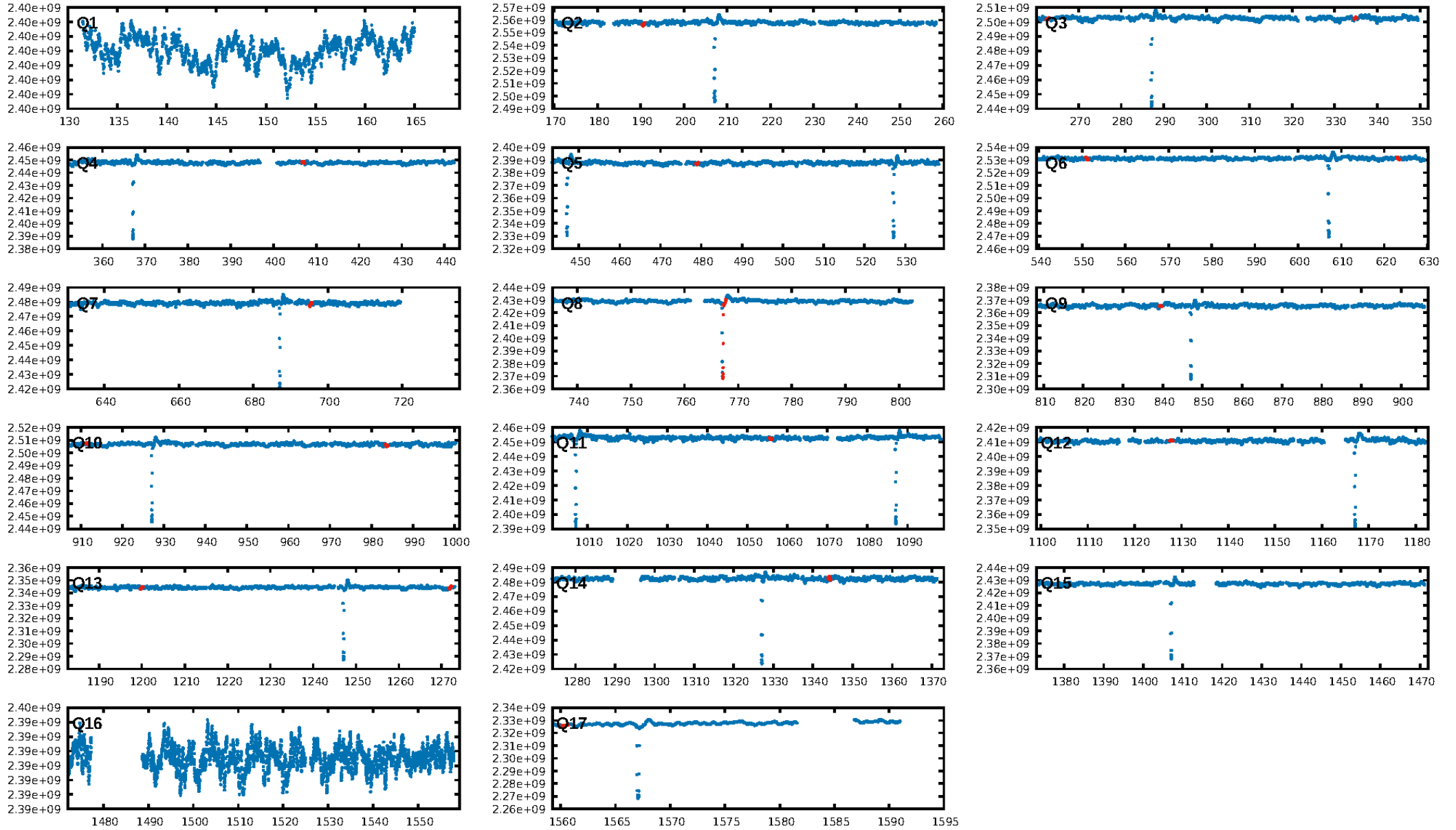
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [88.00σ]
LongPeriod-sig: 100.0% [6.57σ]
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [5/5]
GhostDiagnostic-chr: N/A
Centroid-sig: 0.4%
Centroid-so: 0.695 arcsec [1.85σ]
OotOffset-rm: 3.751 arcsec [5.23σ]
KicOffset-rm: 3.330 arcsec [5.45σ]
OotOffset-st: 3/3/2/3 [11]
KicOffset-st: 3/3/2/3 [11]
DiffImageQuality-fgm: 0.18 [2/11]
DiffImageOverlap-fno: 0.00 [0/12]

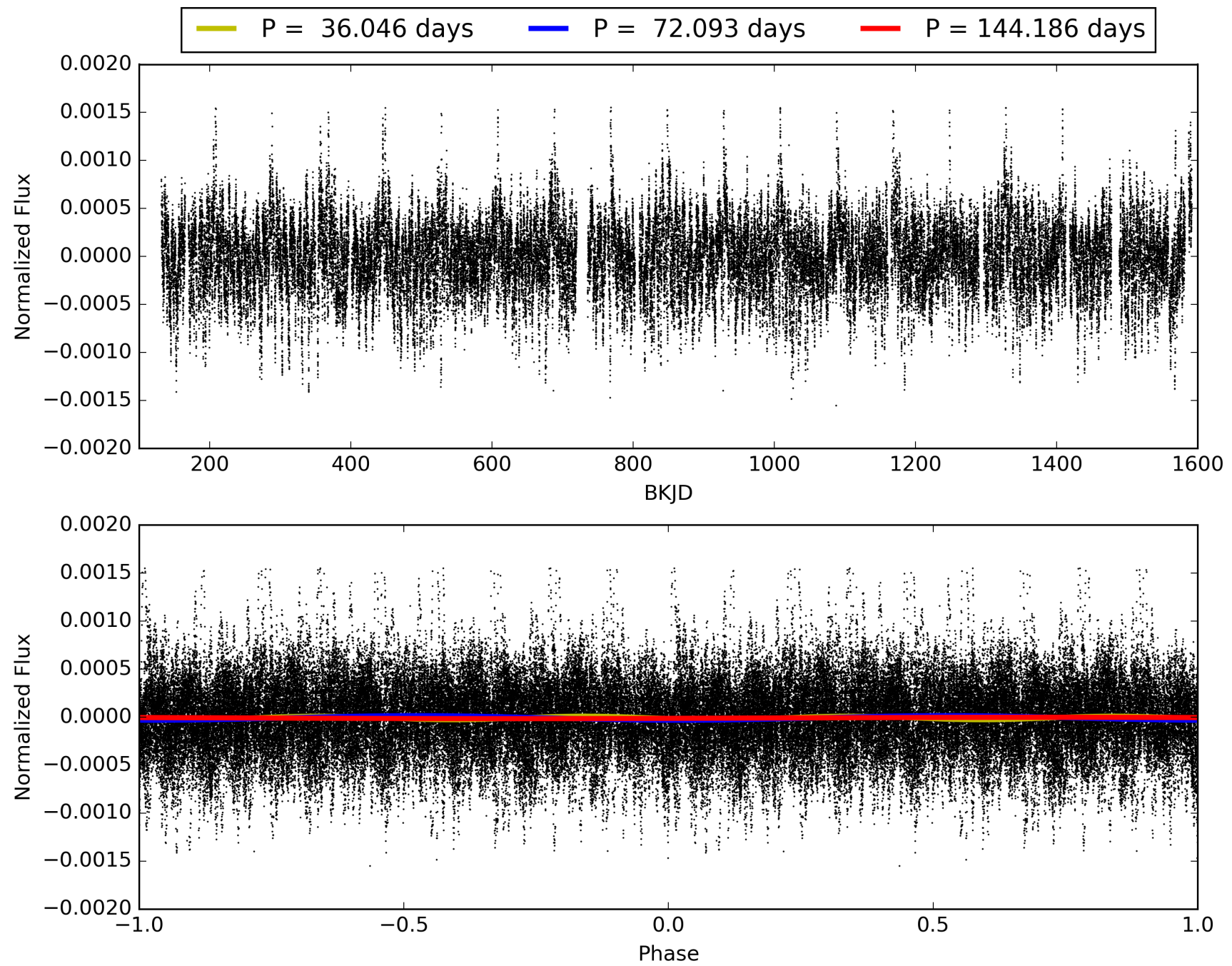
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 03-Feb-2016 08:12:02 Z

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

TCE 005790807-08, PDC Light Curves

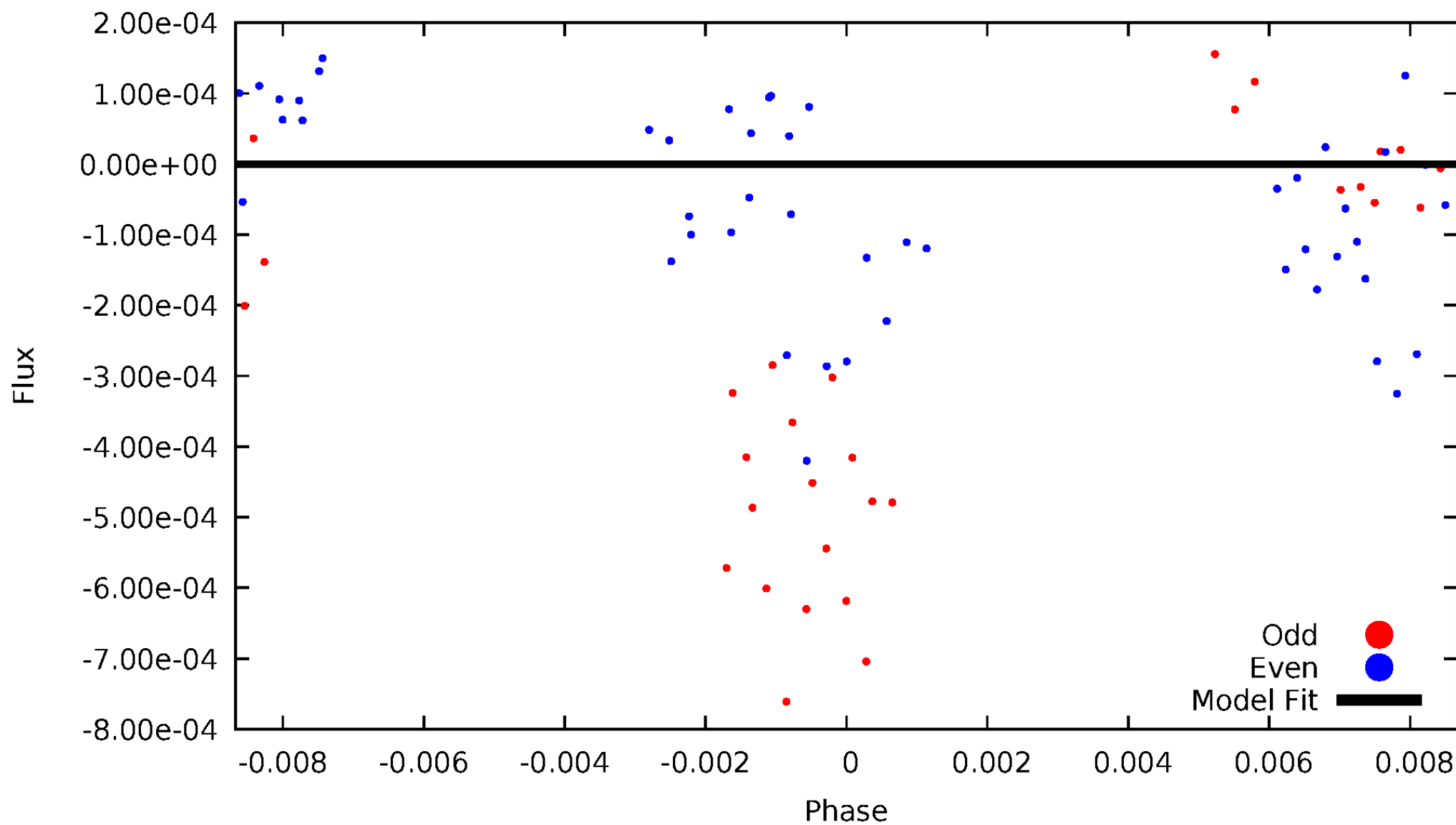


TCE 005790807-08



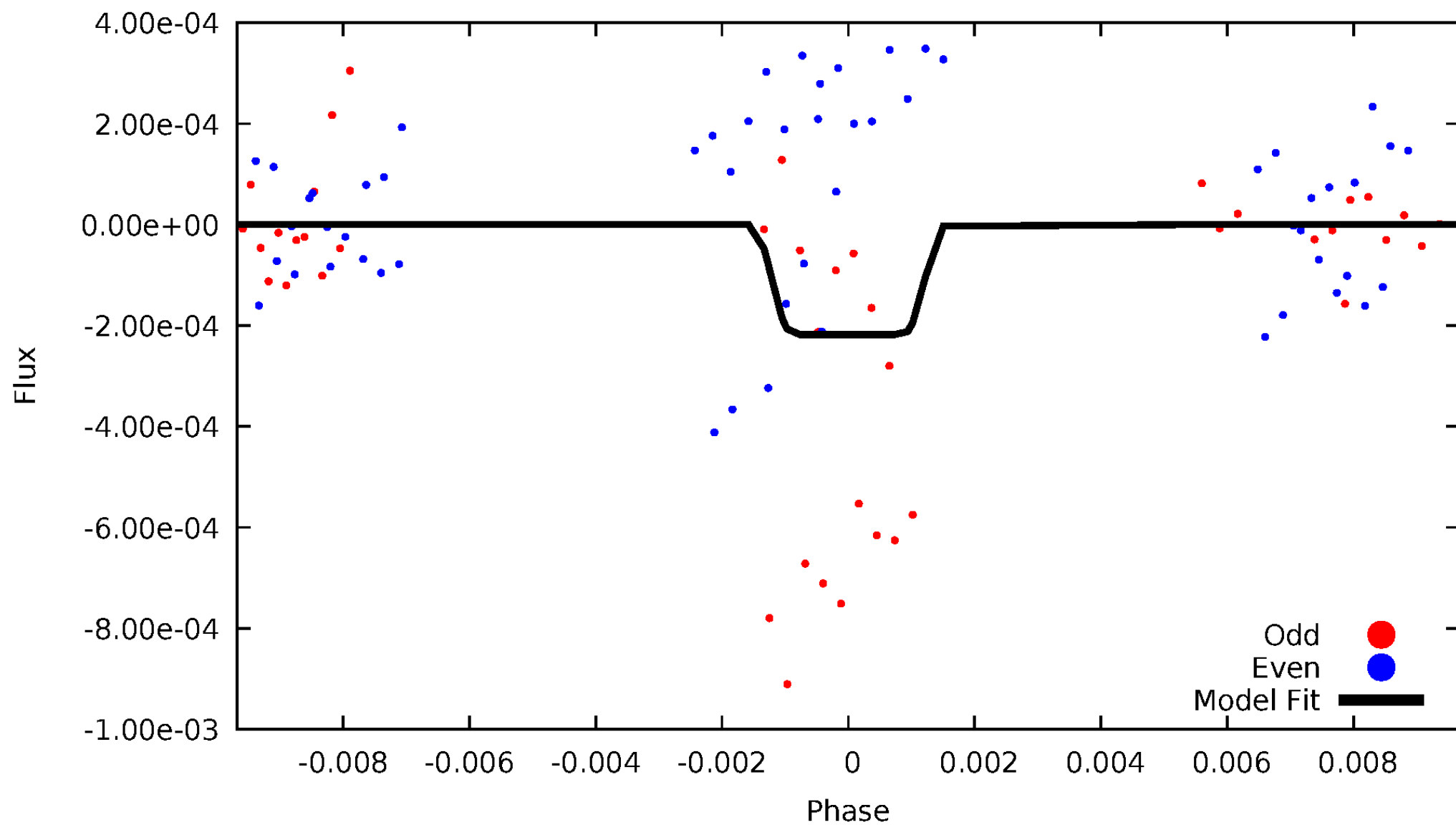
DV Odd/Even

TCE 005790807-08



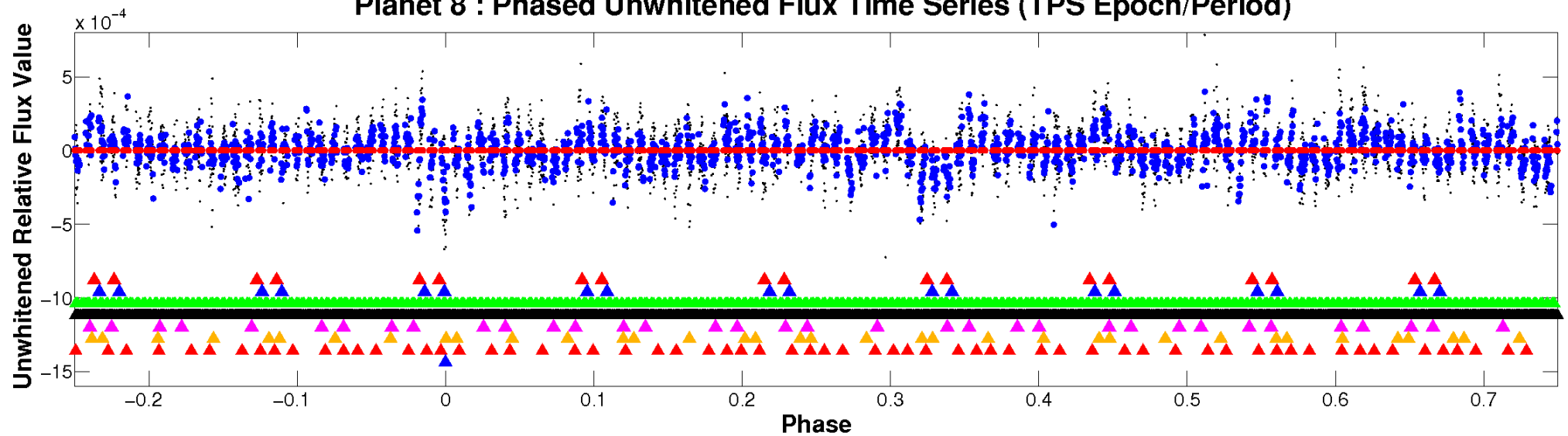
ALT Odd/Even

TCE 005790807-08



Non-Whitened Vs. Whitened Light Curve

Planet 8 : Phased Unwhitened Flux Time Series (TPS Epoch/Period)

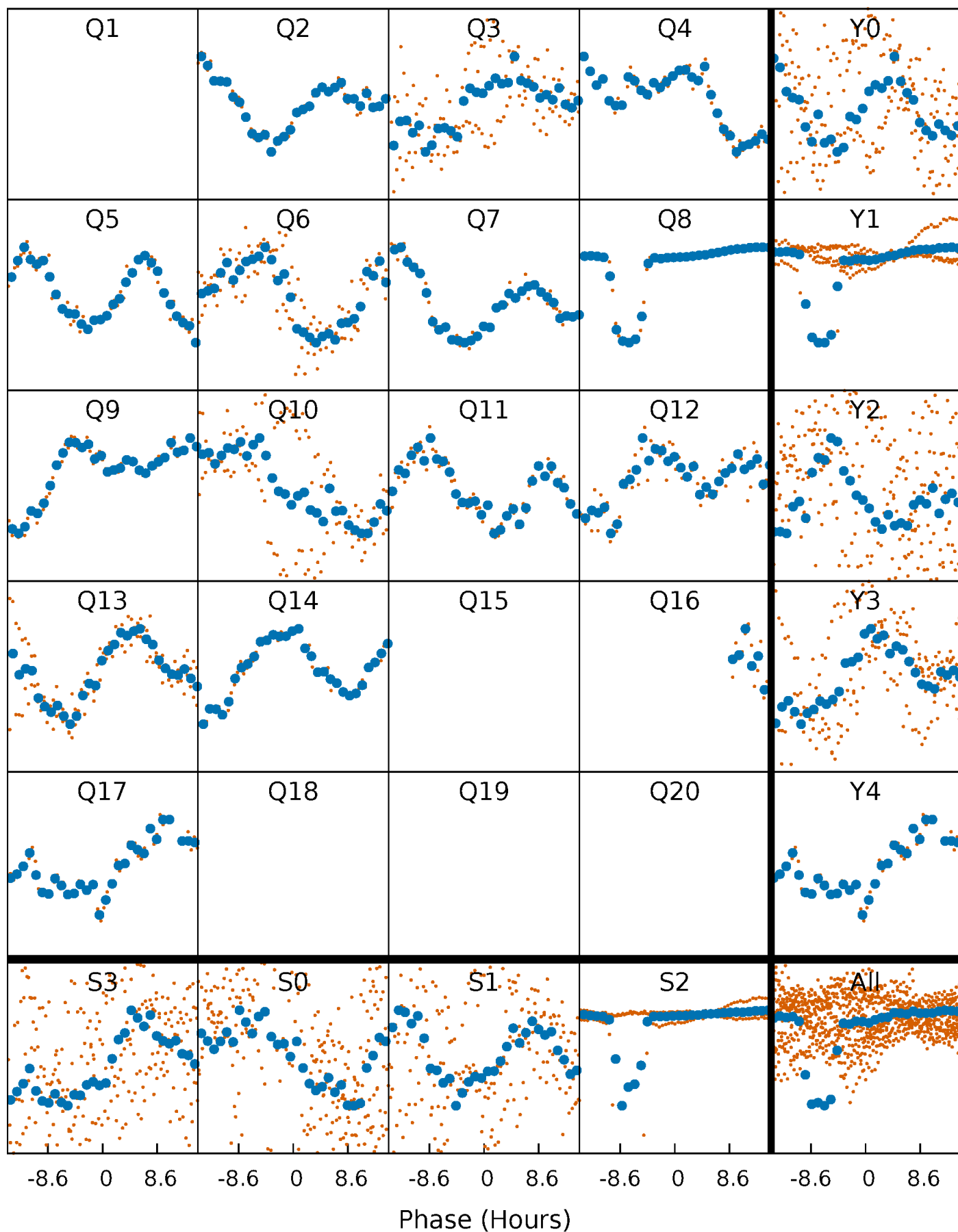


Planet 8 : Phased Whitened Flux Time Series (TPS Epoch/Period)



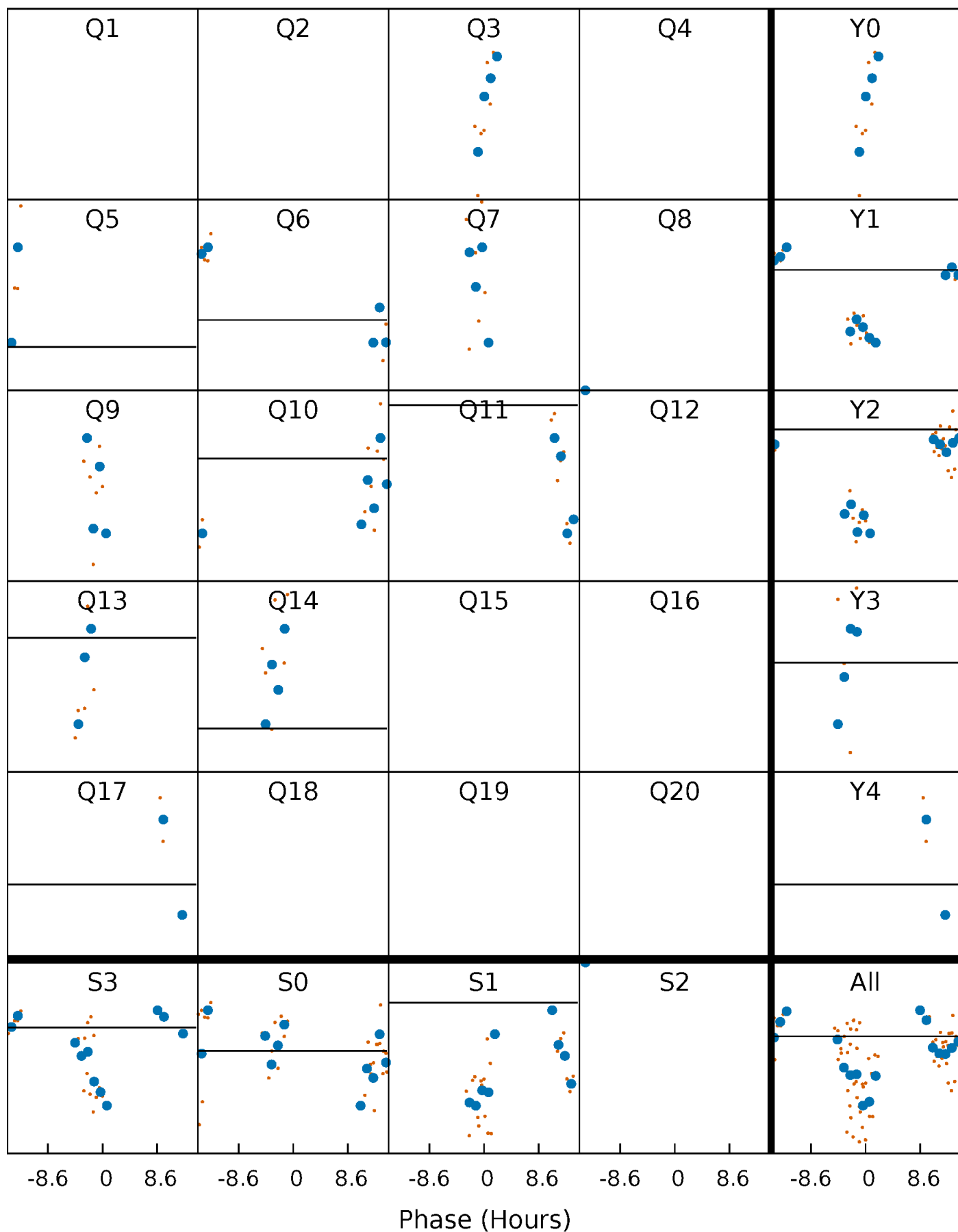
PDC Quarter-Phased Transit Curves

TCE 005790807-08 P= 72.092786 Days $T_0=190.659339$ (BKJD)



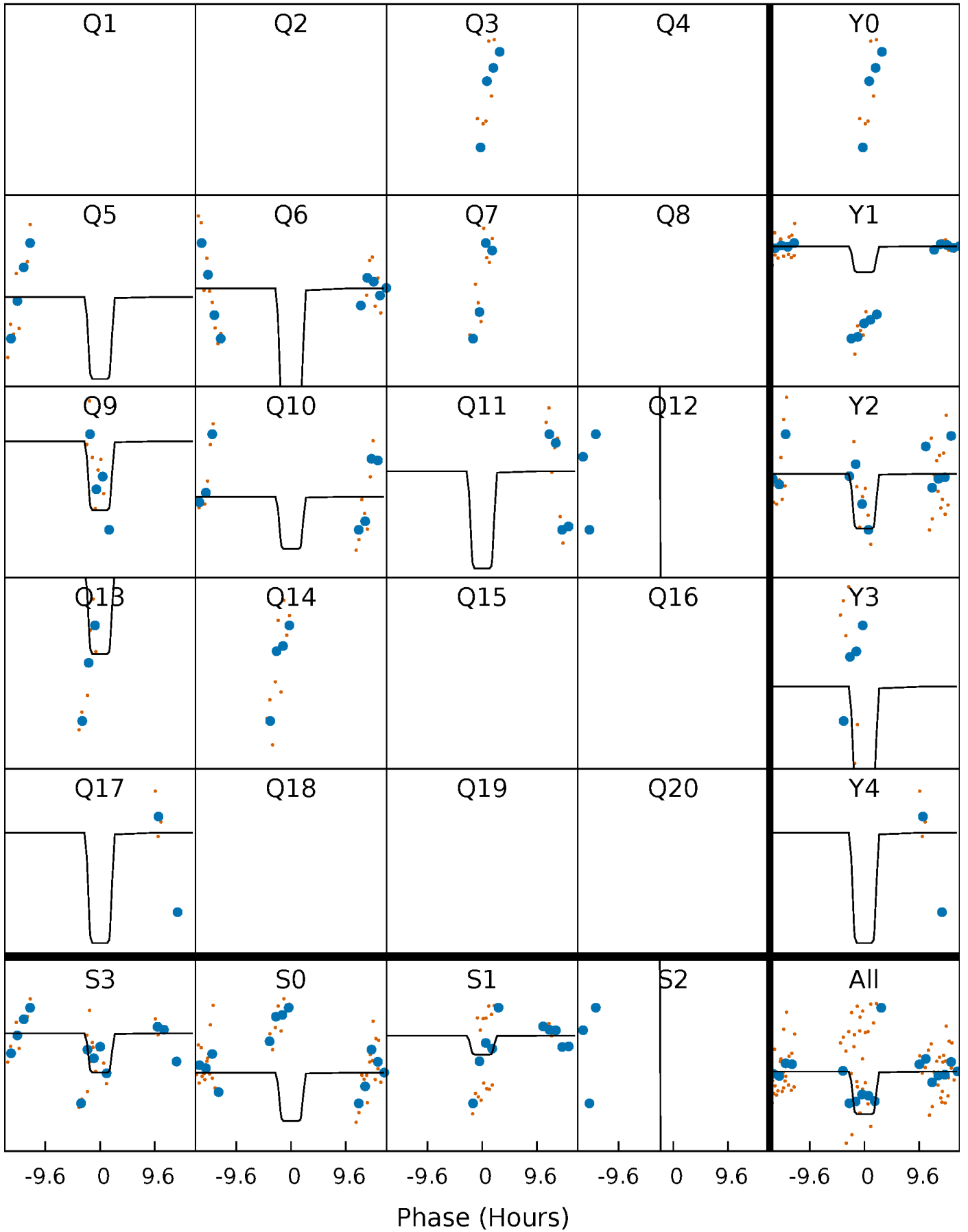
DV Quarter-Phased Transit Curves

TCE 005790807-08 $P = 72.092786$ Days $T_0 = 190.659339$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

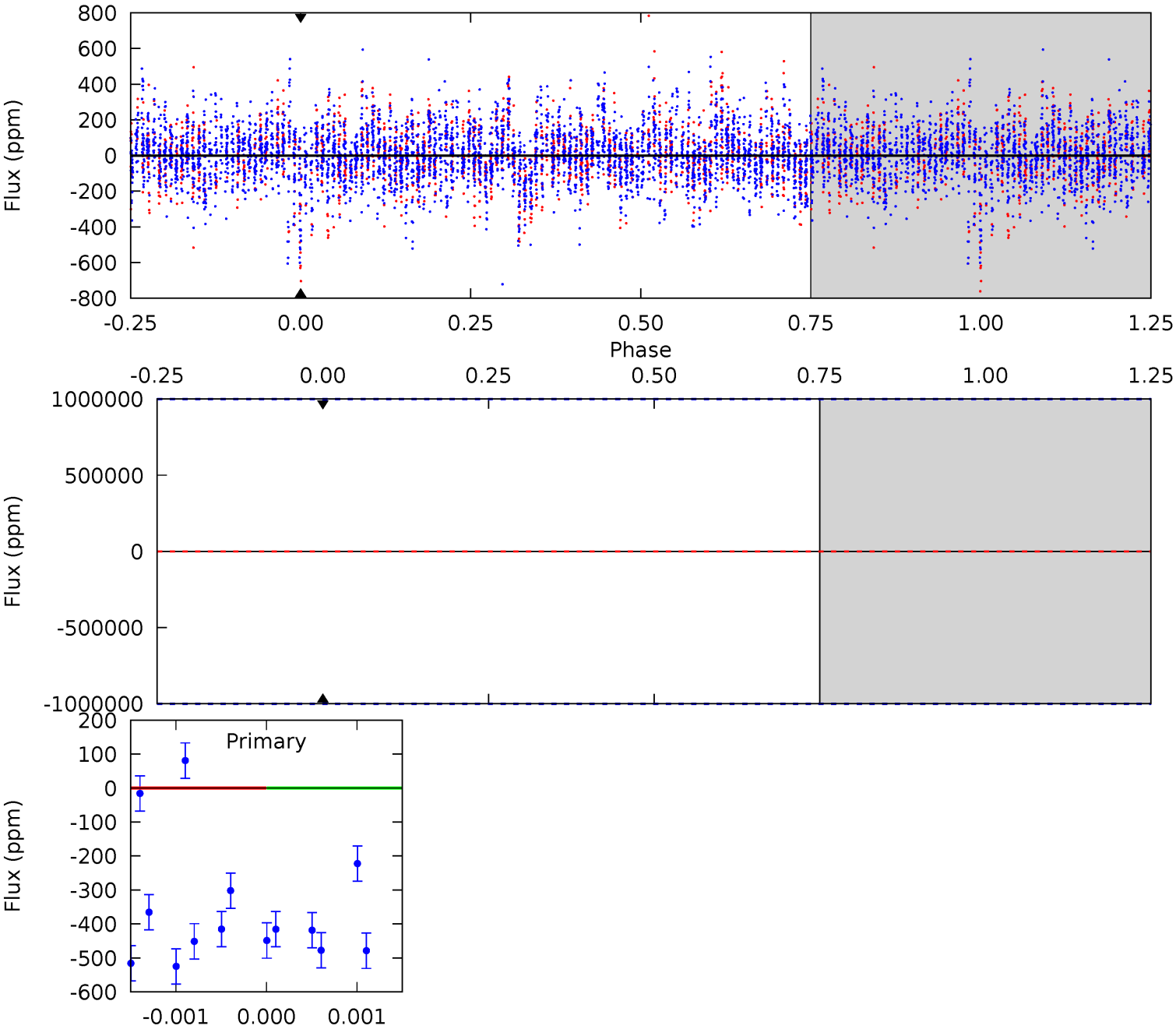
TCE 005790807-08 $P = 72.092786$ Days $T_0 = 190.632754$ (BKJD)



DV Model-Shift Uniqueness Test

005790807-08, P = 72.092786 Days, E = 118.566553 Days

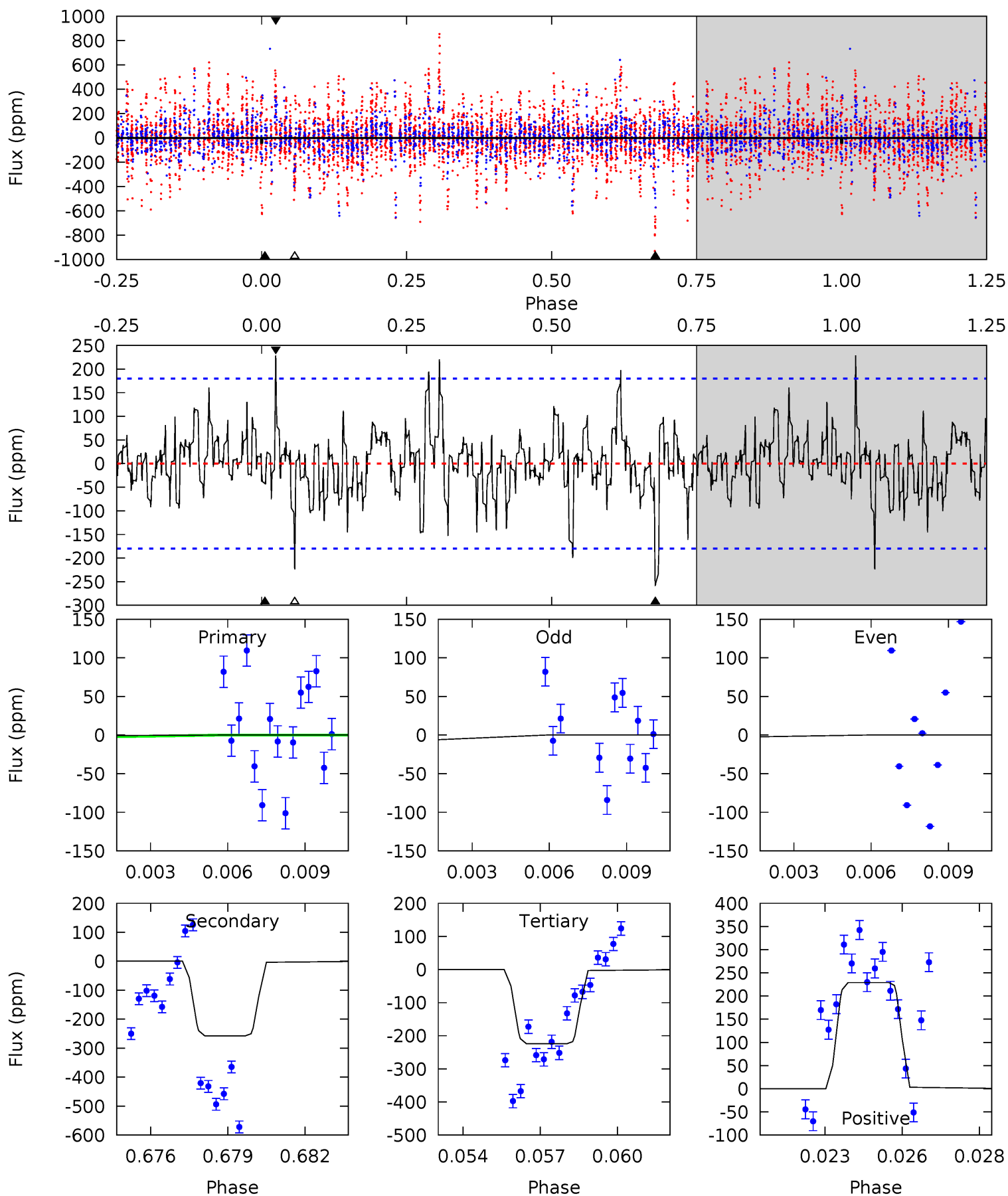
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
0	0	0	0	1.00	1.00	1.00	0	0	0	0	0	0	0	0



Alt Model-Shift Uniqueness Test

005790807-08, P = 72.092786 Days, E = 118.539968 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
1.23	7.52	6.54	6.69	5.26	2.98	1.76	-5.32	-5.46	0.98	0.83	4.33	0.85	0.47	0



Stellar Parameters For KIC 005790807

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6796^{+67}_{-88}	$3.880^{+0.224}_{-0.096}$	$0.140^{+0.150}_{-0.150}$	$2.490^{+0.391}_{-0.727}$	$1.715^{+0.150}_{-0.244}$	$0.157^{+0.205}_{-0.047}$
	+1%/-1%	+6%/-2%	+107%/-107%	+16%/-29%	+9%/-14%	+131%/-30%
Source	SPE68	SPE68	SPE68	DSEP		

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

Secondary Eclipse Parameters for KIC 005790807-08 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	0 ± 1000000	$18.18^{+20.44}_{-12.26}$	1031^{+45}_{-72}	-4041^{+34626}_{-26048}	$-135.096^{+43055.378}_{-40780.160}$
Alt.	-257 ± 34	$19.60^{+20.81}_{-13.49}$	1034^{+44}_{-76}	3605^{+2073}_{-702}	60^{+608}_{-46}

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

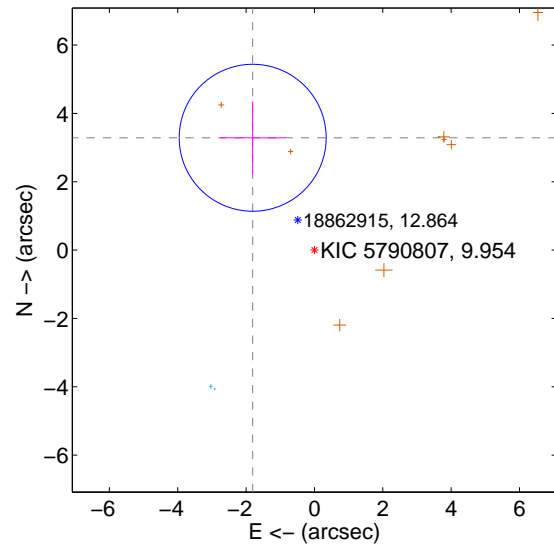
Supplemental centroid analysis for 005790807-08. **Kepler magnitude: 9.95.** Transit SNR -1.00

There are 2 quarters with good PRF difference image offsets

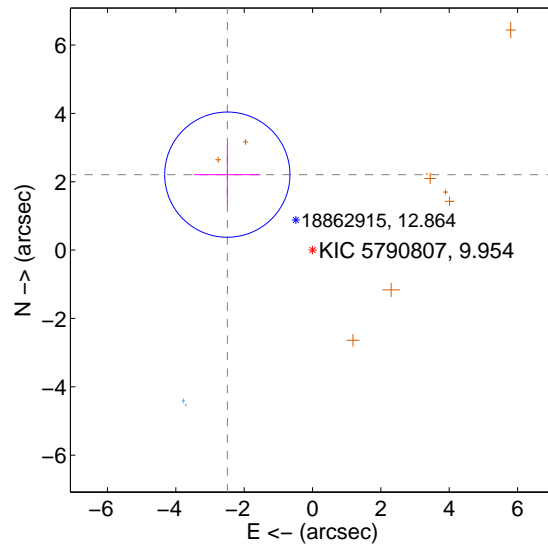
The direct PRF centroid is offset from the target star catalog position by about 1.55 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	3.751 ± 0.717	5.23	1.807 ± 0.956	3.287 ± 1.065
PRF-fit source offset from KIC position	3.330 ± 0.611	5.45	2.493 ± 0.969	2.208 ± 0.875
photometric centroid source offset	0.69 ± 0.38	1.85	-0.02 ± 0.31	-0.69 ± 0.38

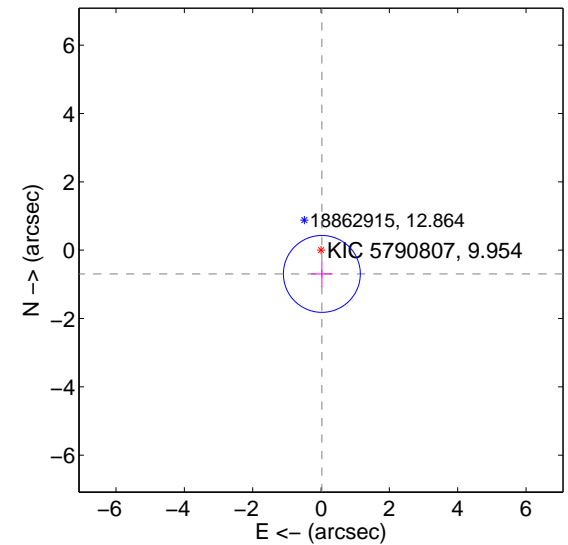
offset from difference PRF-fit to OOT PRF-fit



offset from difference PRF-fit to KIC position

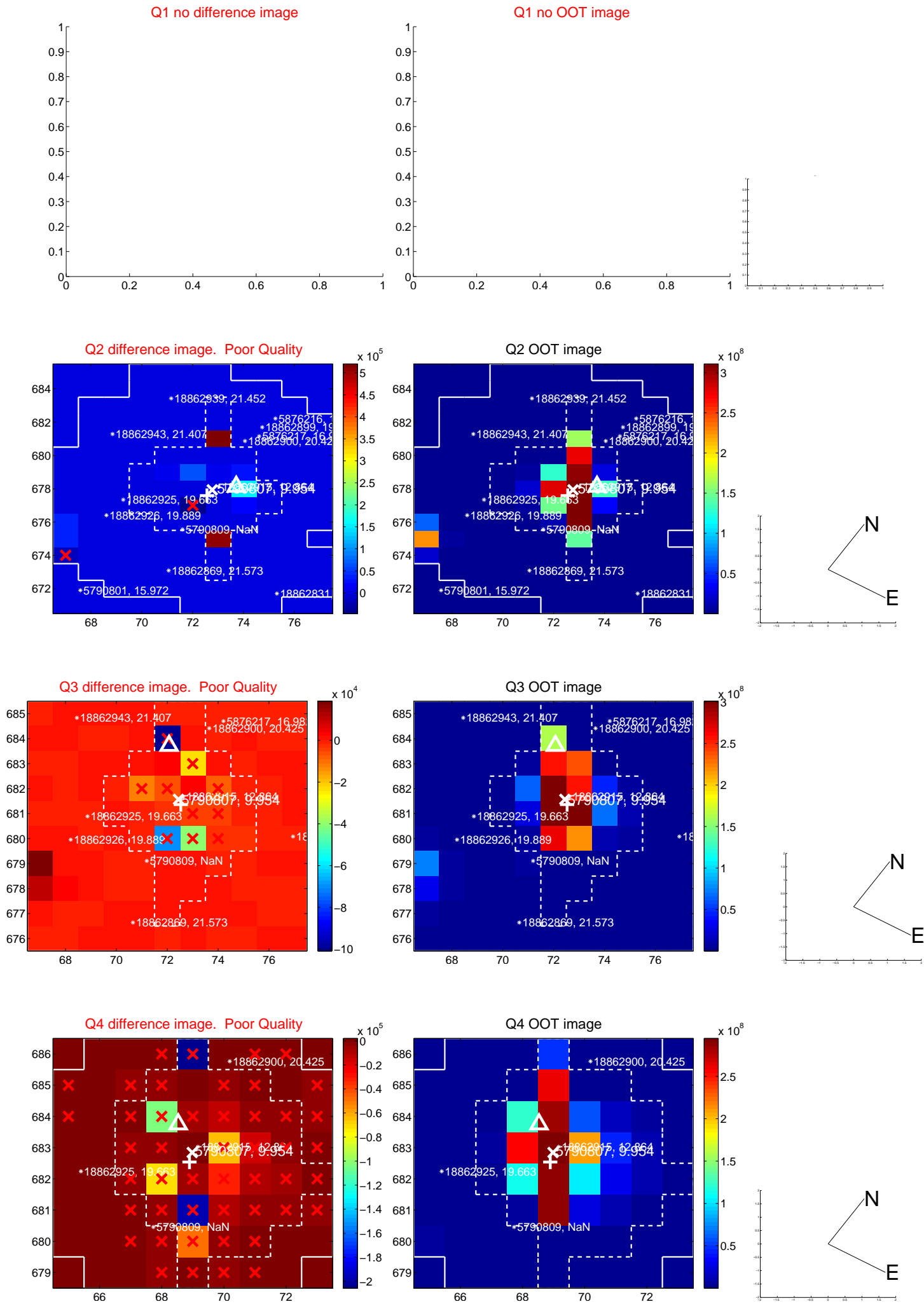


offset from photometric centroids

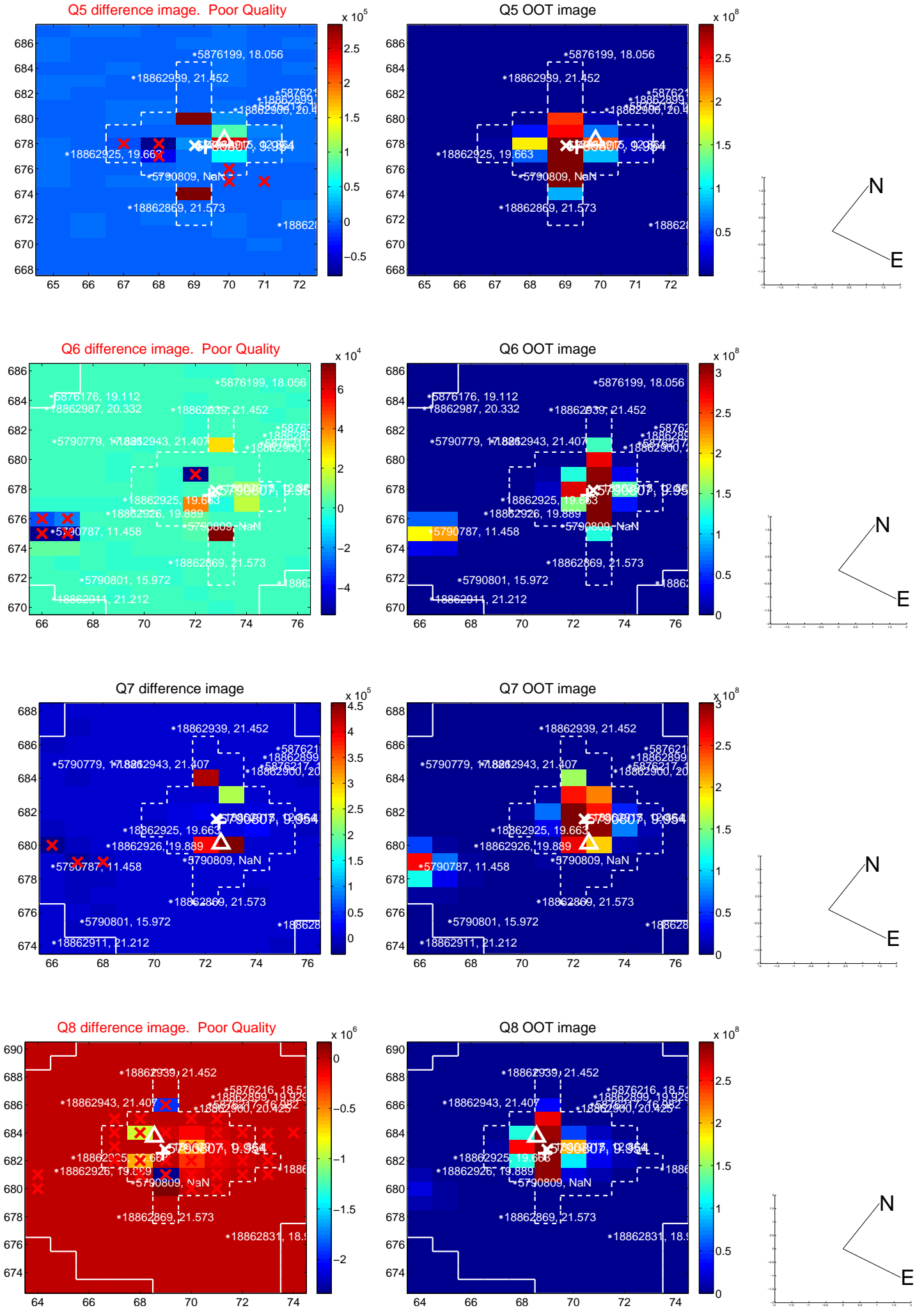


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets;** magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

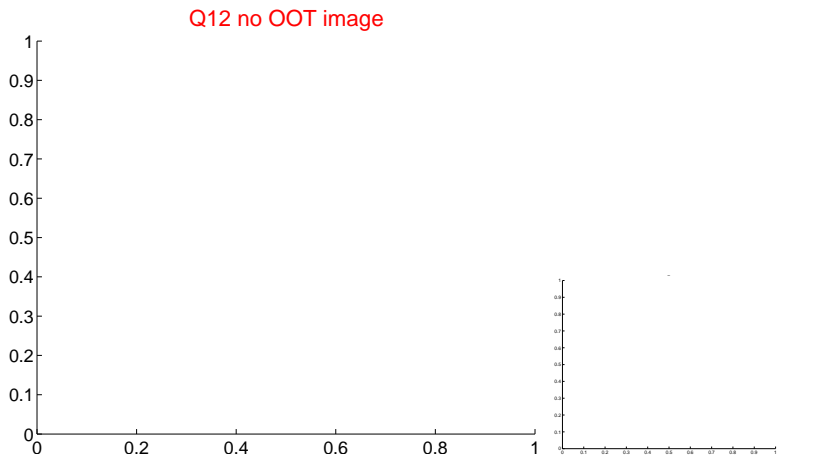
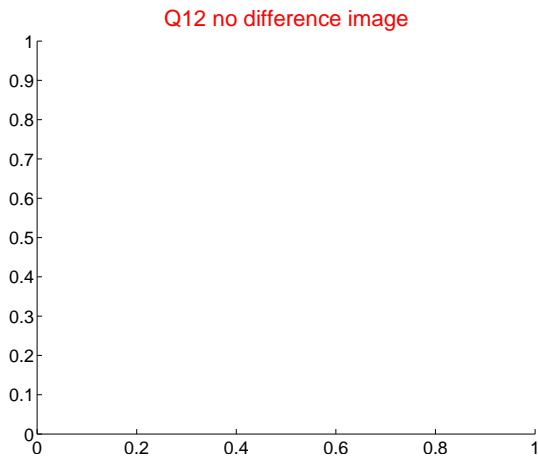
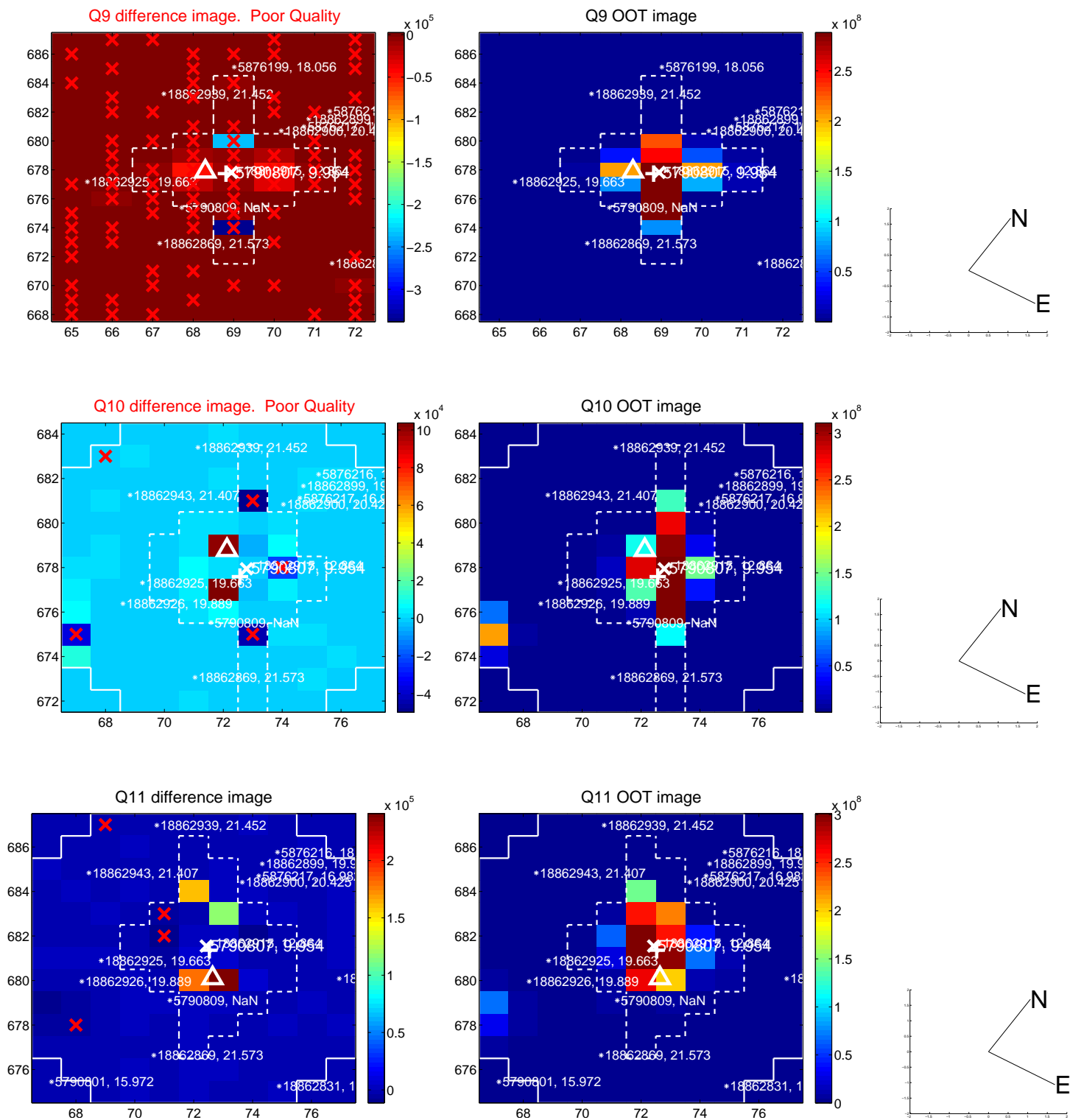
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



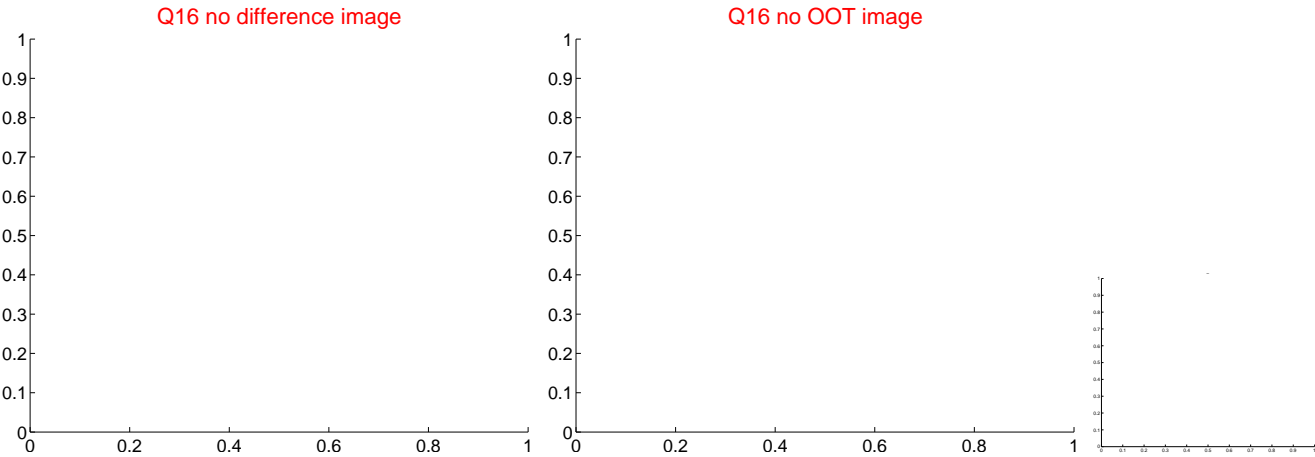
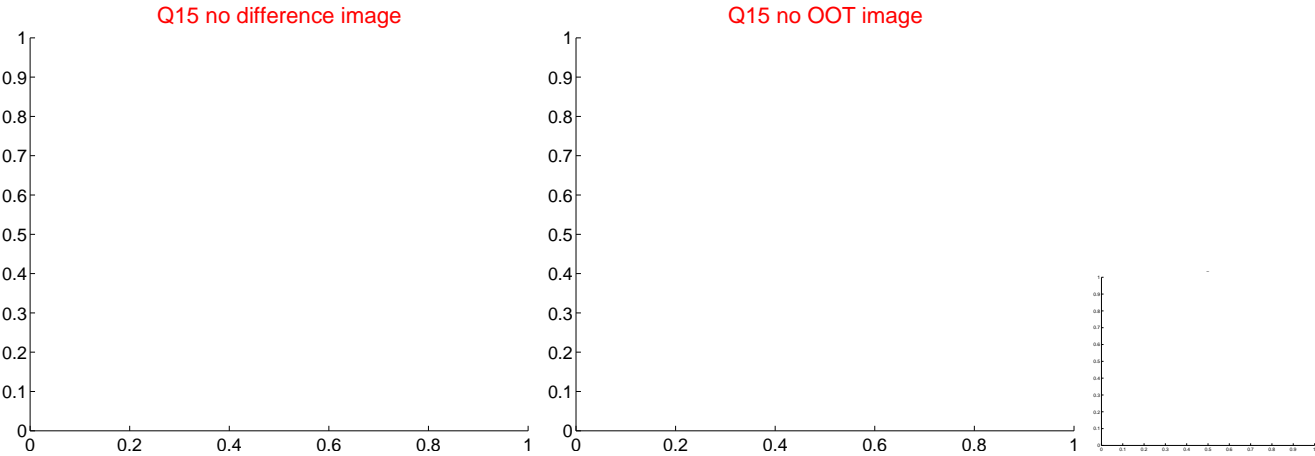
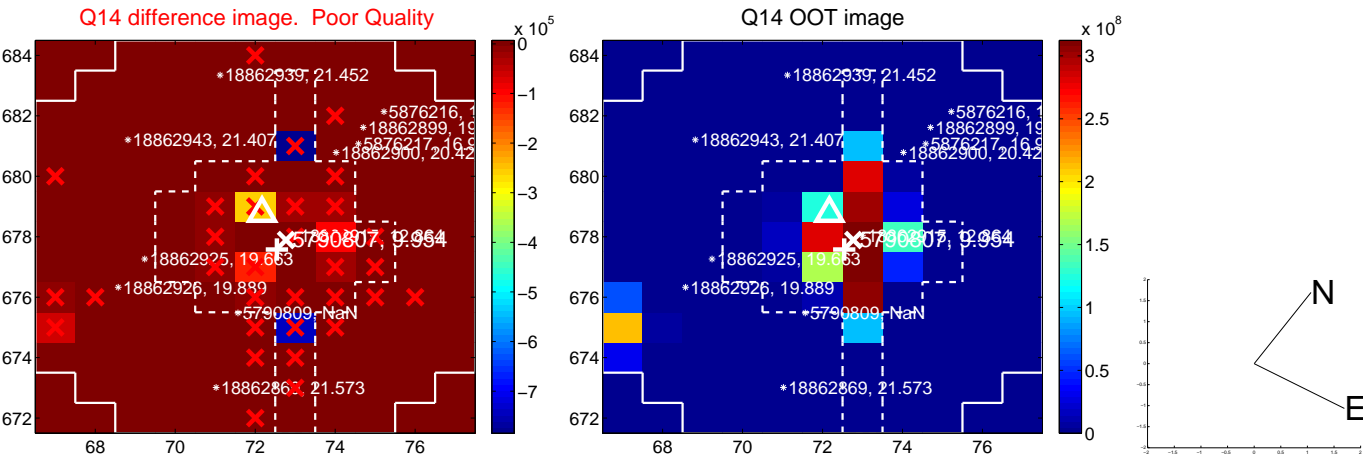
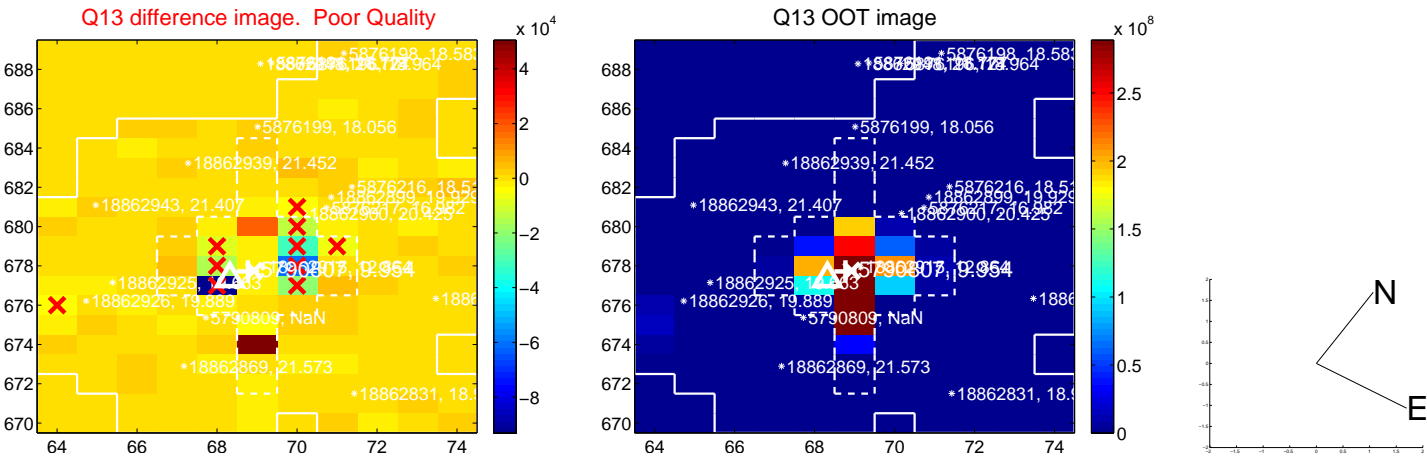
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



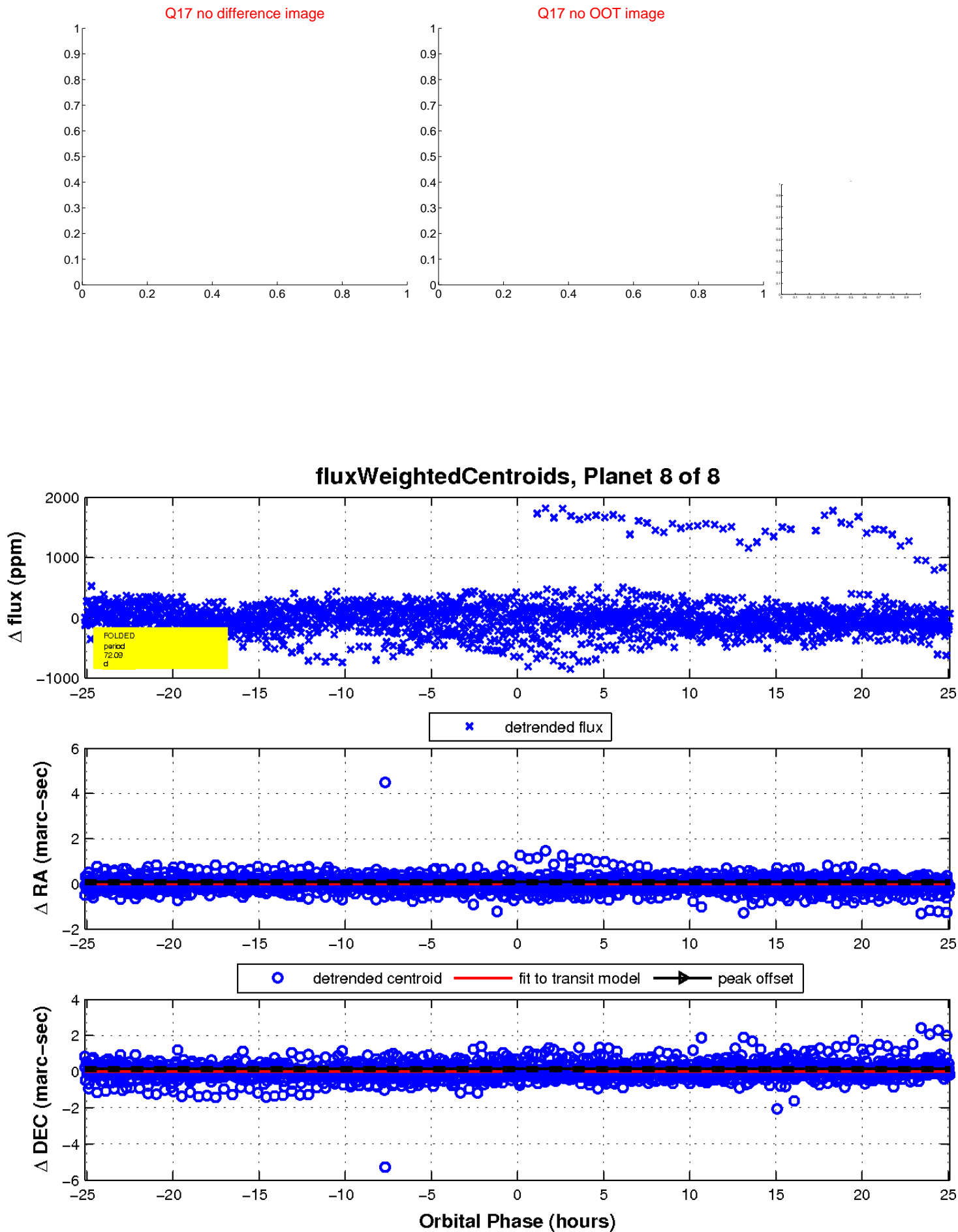
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

Declination

