

KIC 007988343

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})
007988343-01	OBS	No	1.162284	131.594327	2418.1	2.500	247.9	-1.0	1.80	6306	8.90	9002.07
007988343-02	OBS	No	1.162277	132.188277	2799.1	2.000	91.8	-1.0	1.80	6306	9.58	9002.14

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
007988343-01	OBS	FP	0.00	1	0	0	0	SWEET_NTL—LPP_DV—LPP_ALT—CENT_NOFITS
007988343-02	OBS	FP	0.00	1	0	0	0	SWEET_NTL—LPP_DV—LPP_ALT—MOD_NONUNIQ_ALT—SAME_NTL_PERIOD—CENT_NOFITS

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

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

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

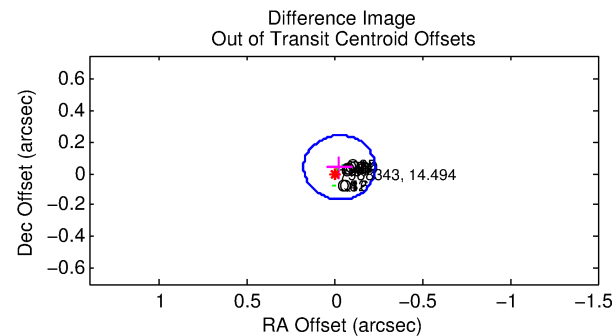
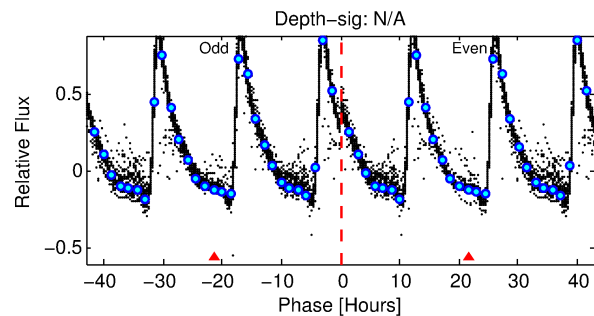
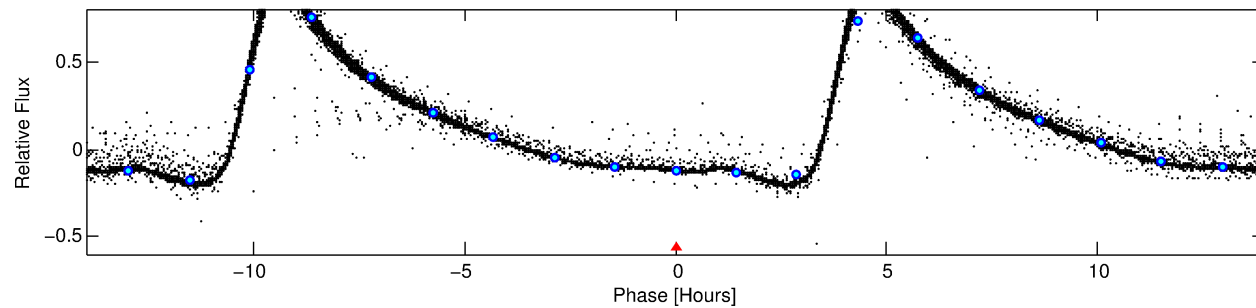
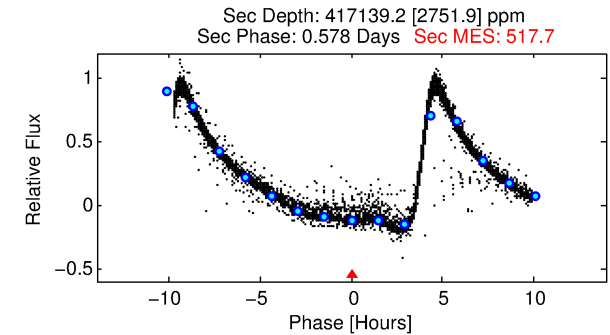
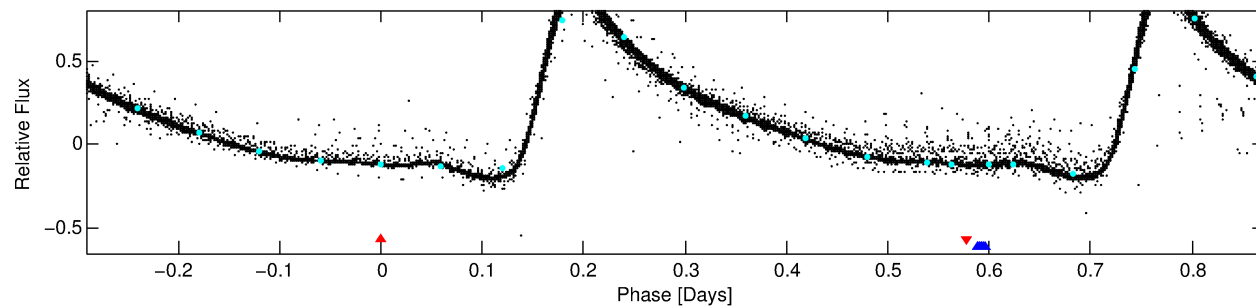
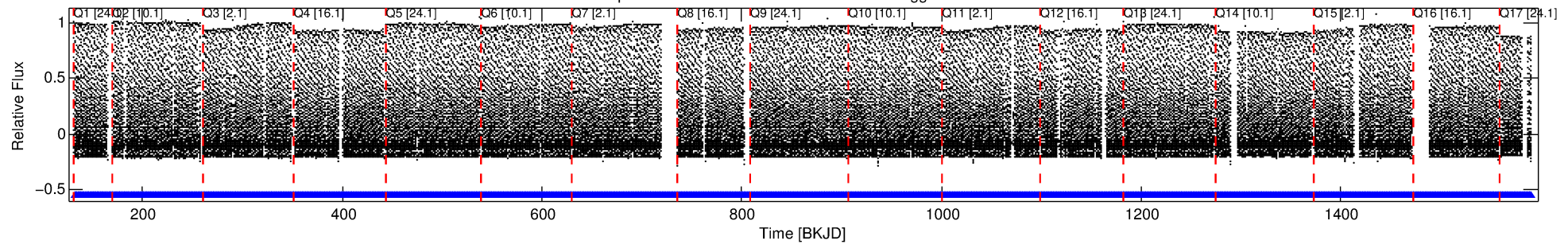
Ephemeris Match Information For 007988343-01

No Significant Match Found

DV One-Page Summary

KIC: 7988343 Candidate: 1 of 2 Period: 1.162 d

Kp: 14.49 R*: 1.80 Rs Teff: 6306.0 K Logg: 3.98 Fe/H: -0.280



TPS TCE Results:

Period = 1.16228 d
Epoch = 131.5943 BKJD

DV fit results are unavailable

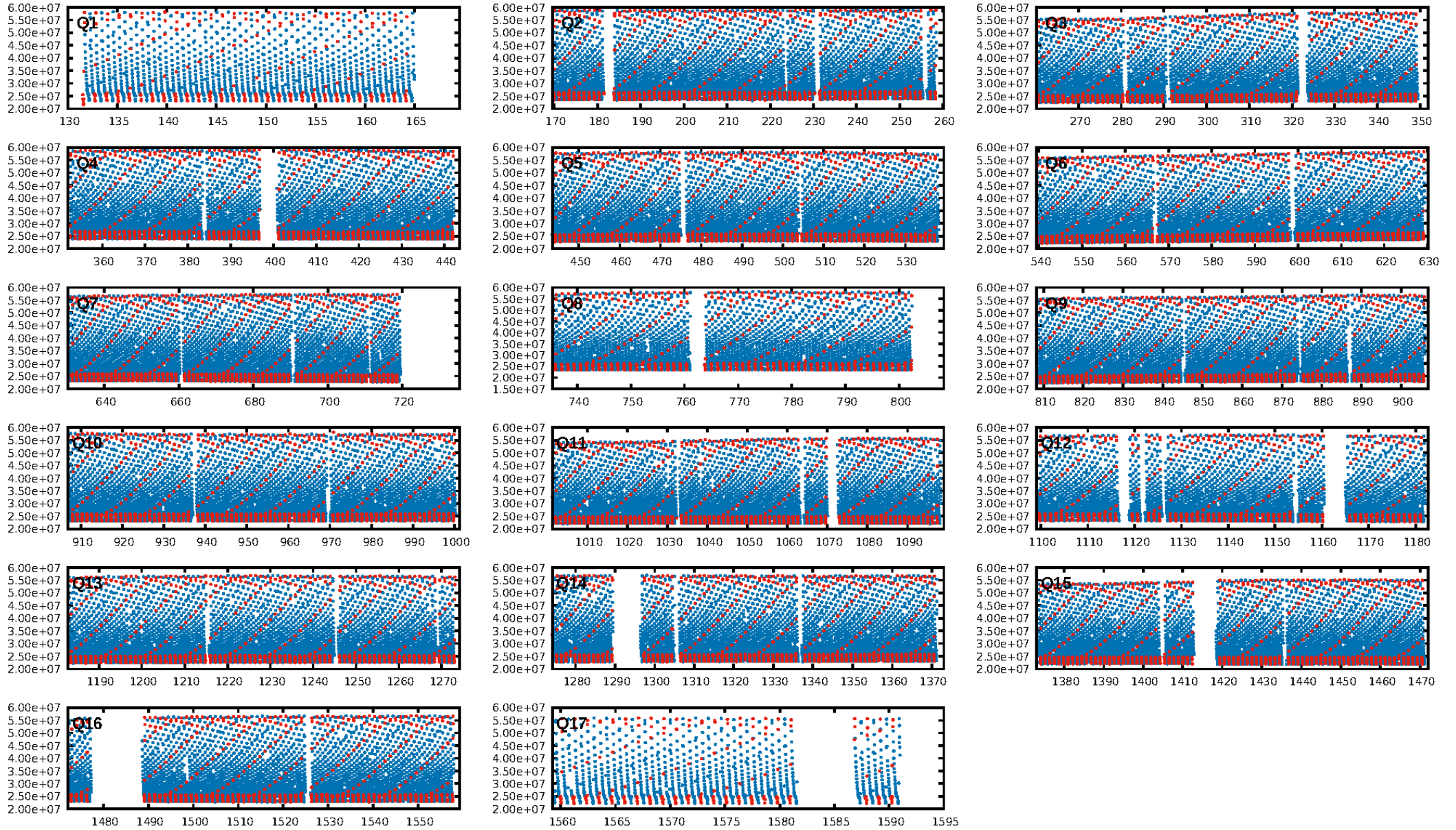
DV Diagnostic Results:

ShortPeriod-sig: 0.0% [0.00σ]
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [1110/1110]
GhostDiagnostic-chr: 1.205
Centroid-sig: N/A
Centroid-so: N/A
OotOffset-rm: 0.048 arcsec [0.71σ]
KicOffset-rm: 0.208 arcsec [2.97σ]
OotOffset-st: 4/4/4/5 [17]
KicOffset-st: 4/4/4/5 [17]
DiffImageQuality-fgm: 1.00 [17/17]
DiffImageOverlap-fno: 0.00 [0/17]

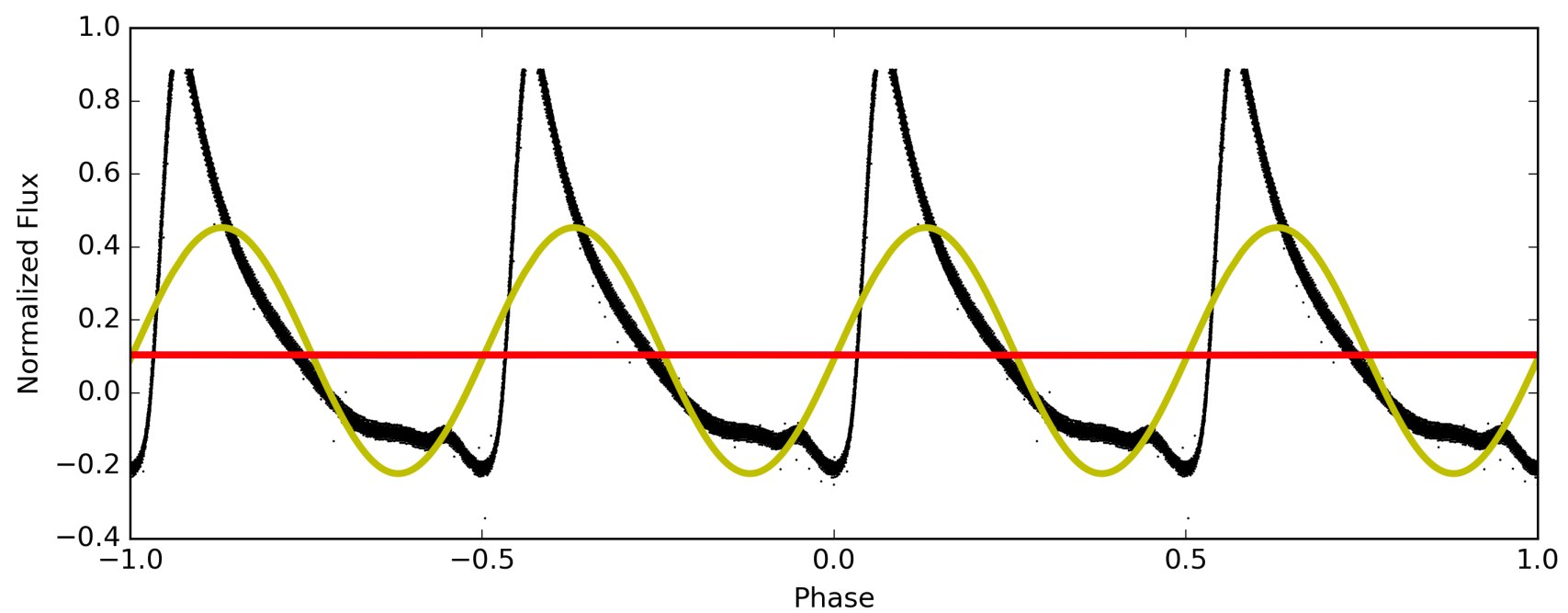
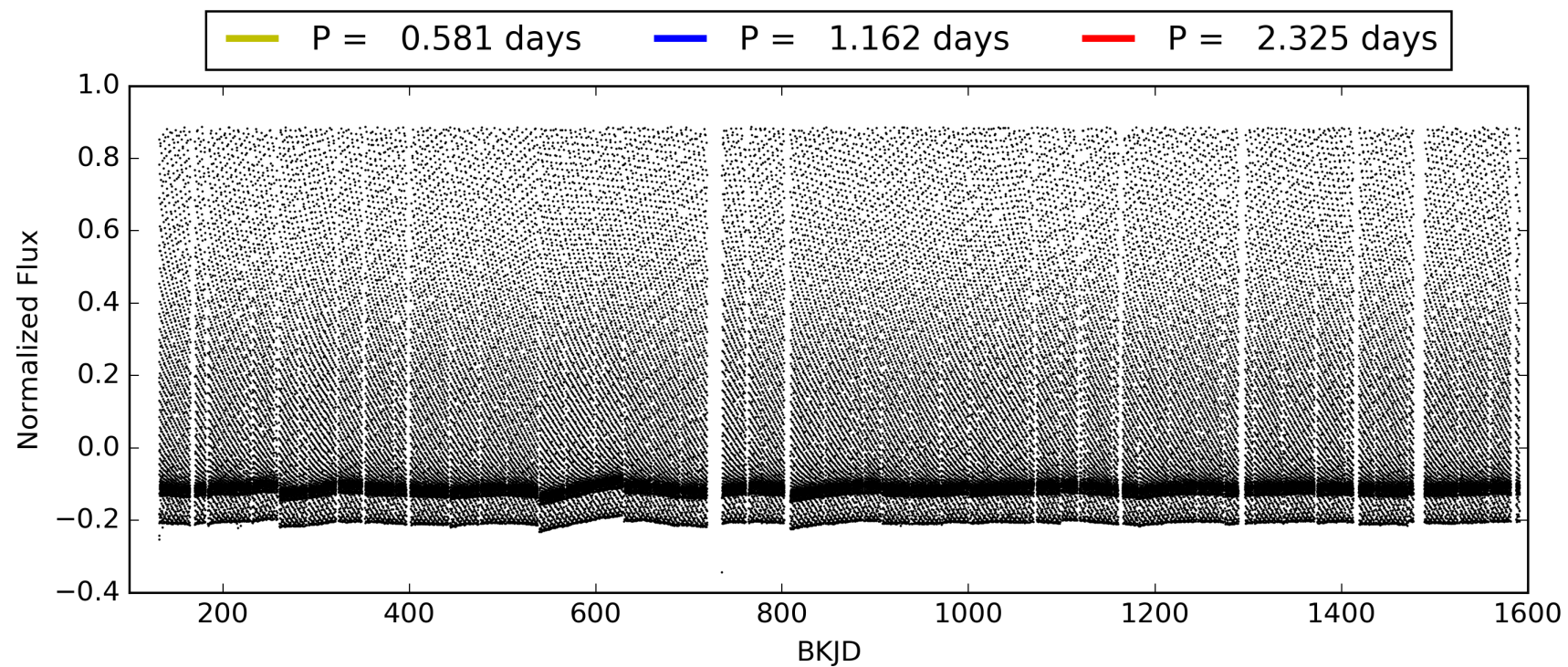
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 01-Feb-2016 01:27:36 Z

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

TCE 007988343-01, PDC Light Curves

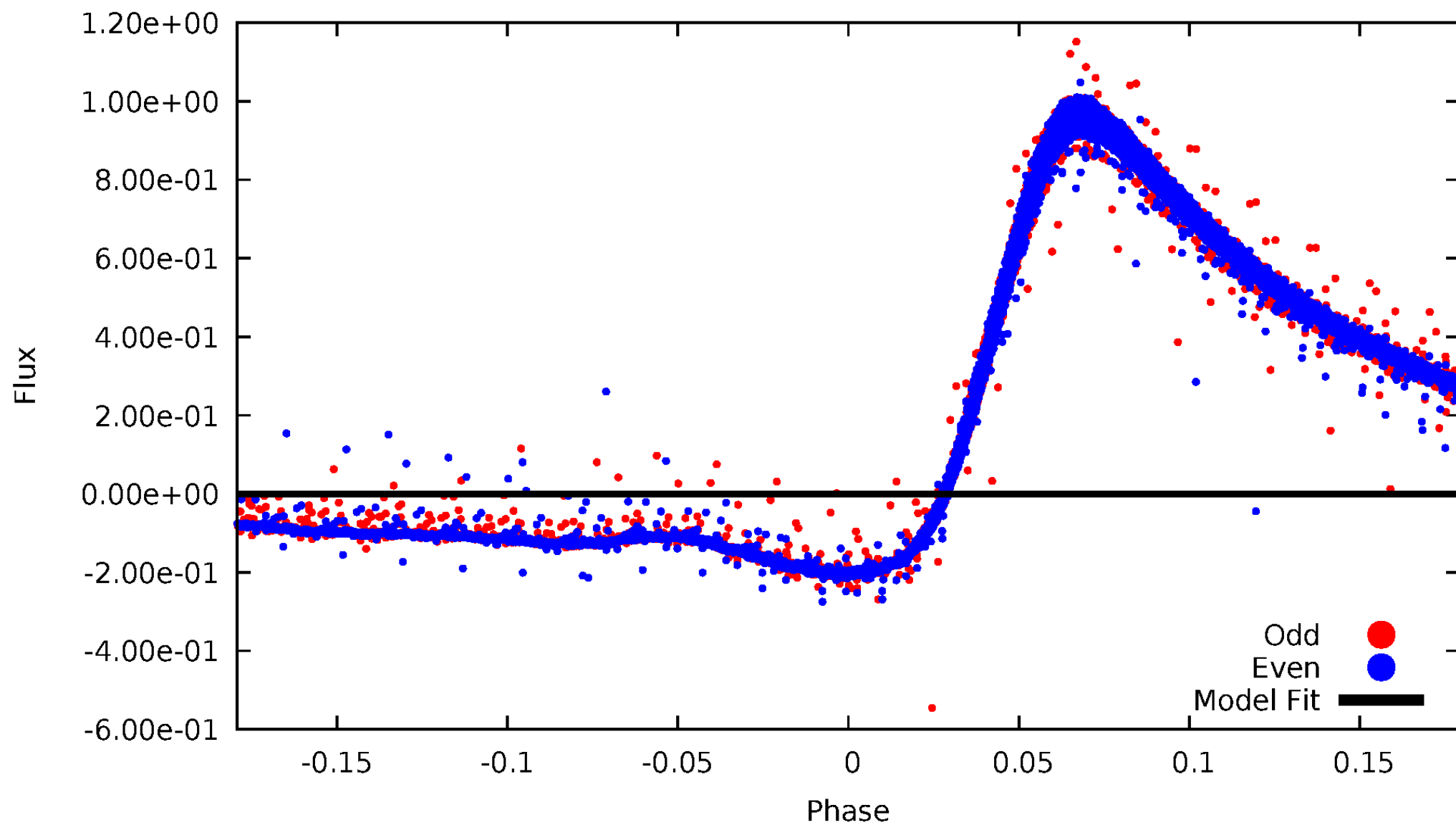


TCE 007988343-01



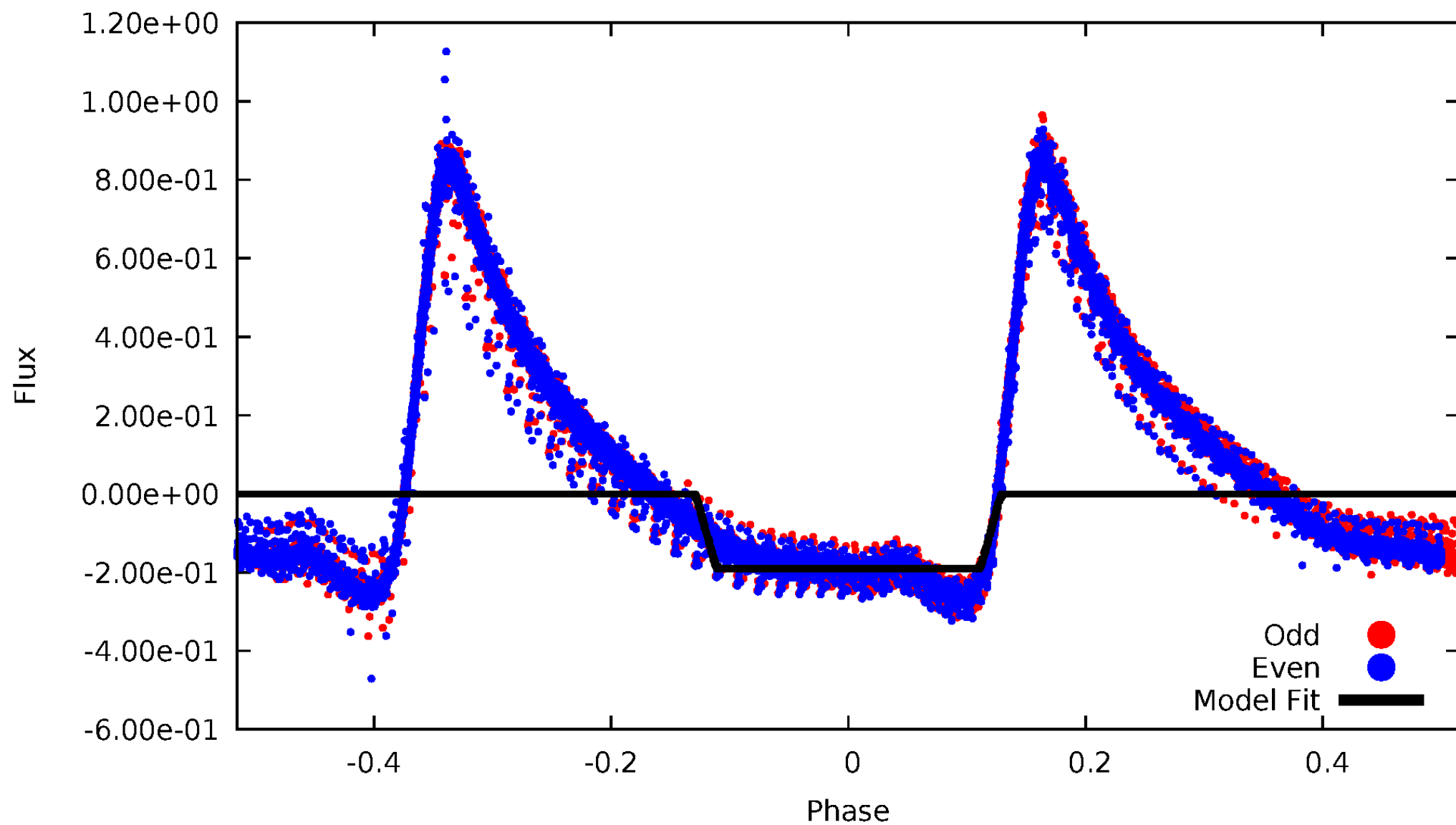
DV Odd/Even

TCE 007988343-01



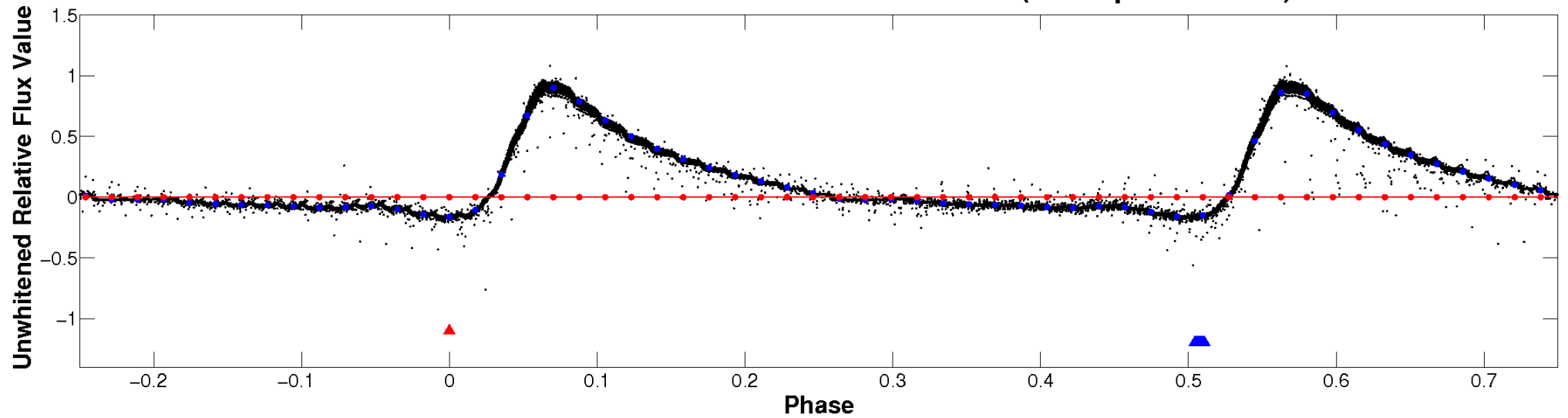
ALT Odd/Even

TCE 007988343-01



Non-Whitened Vs. Whitened Light Curve

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

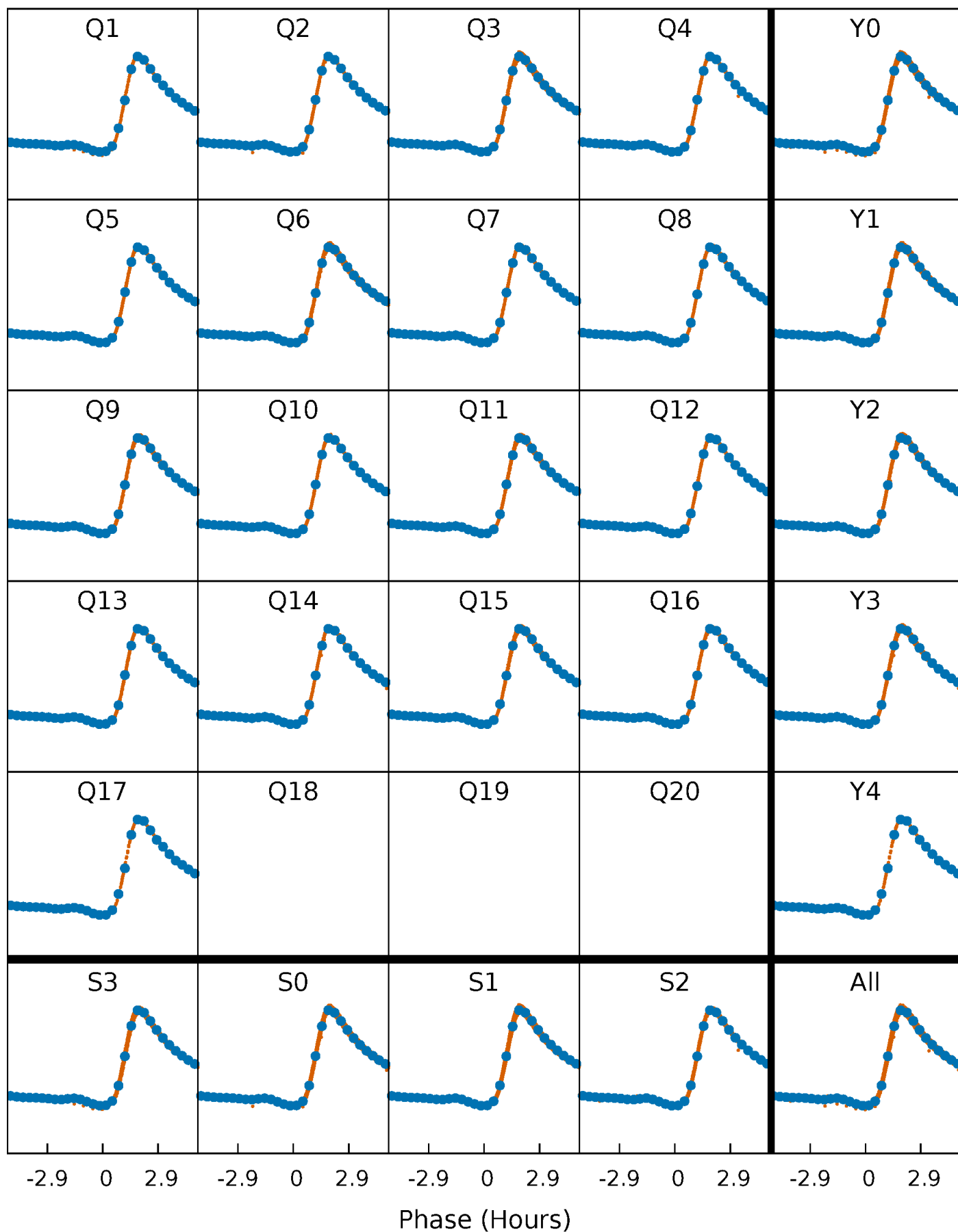


Planet 1 : Phased Whitened Flux Time Series (TPS Epoch/Period)



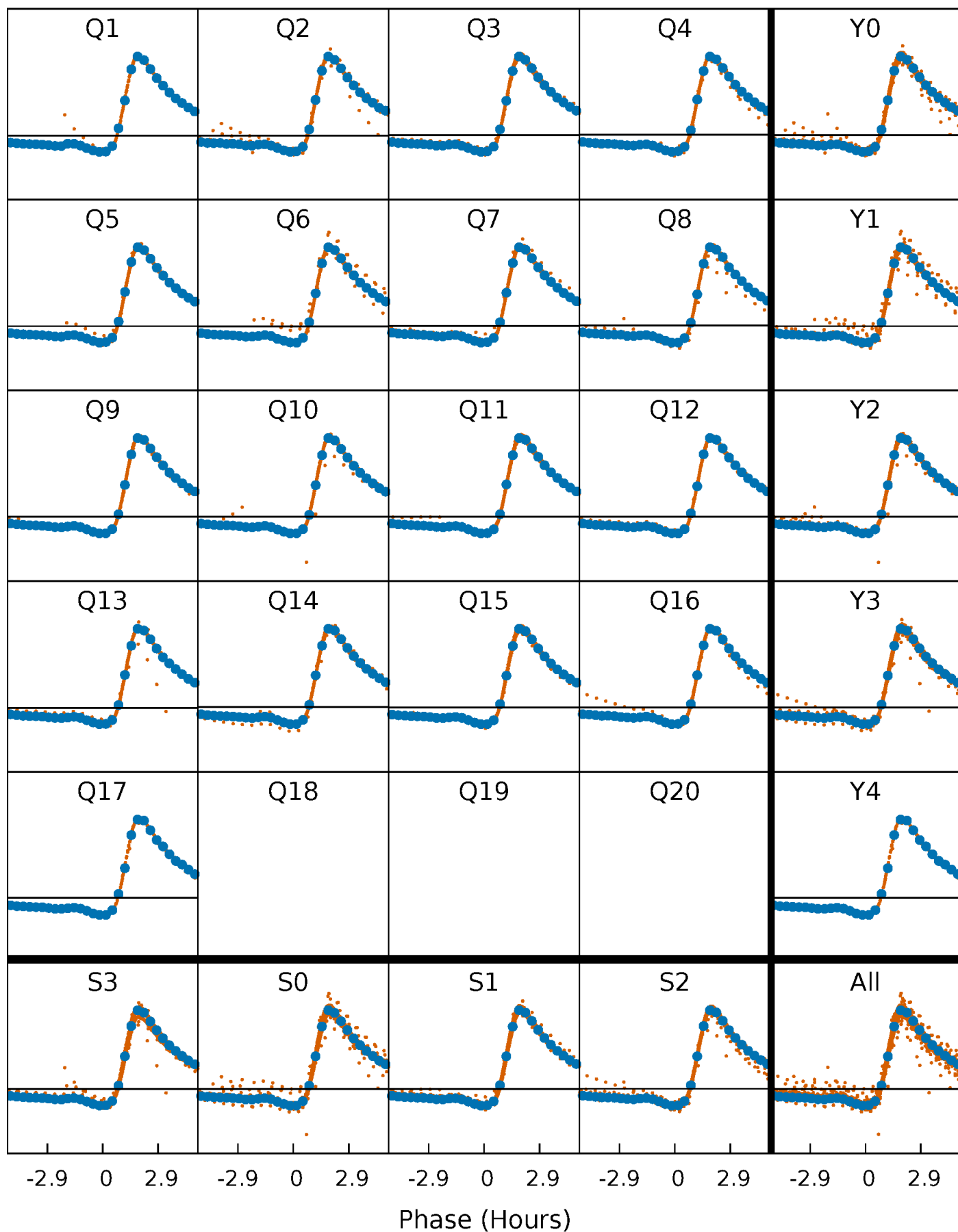
PDC Quarter-Phased Transit Curves

TCE 007988343-01 P= 1.162284 Days $T_0=131.594327$ (BKJD)



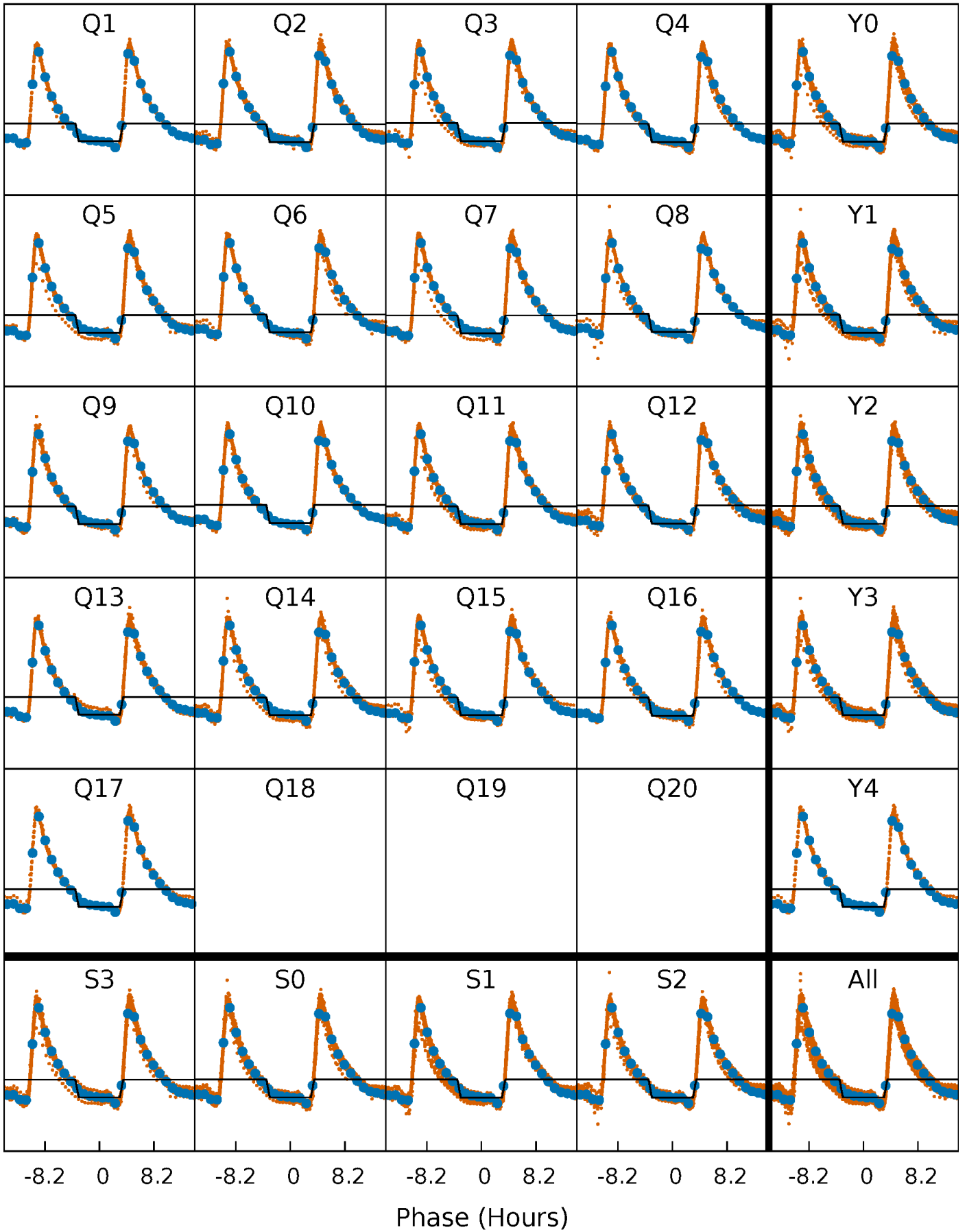
DV Quarter-Phased Transit Curves

TCE 007988343-01 P= 1.162284 Days $T_0=131.594327$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

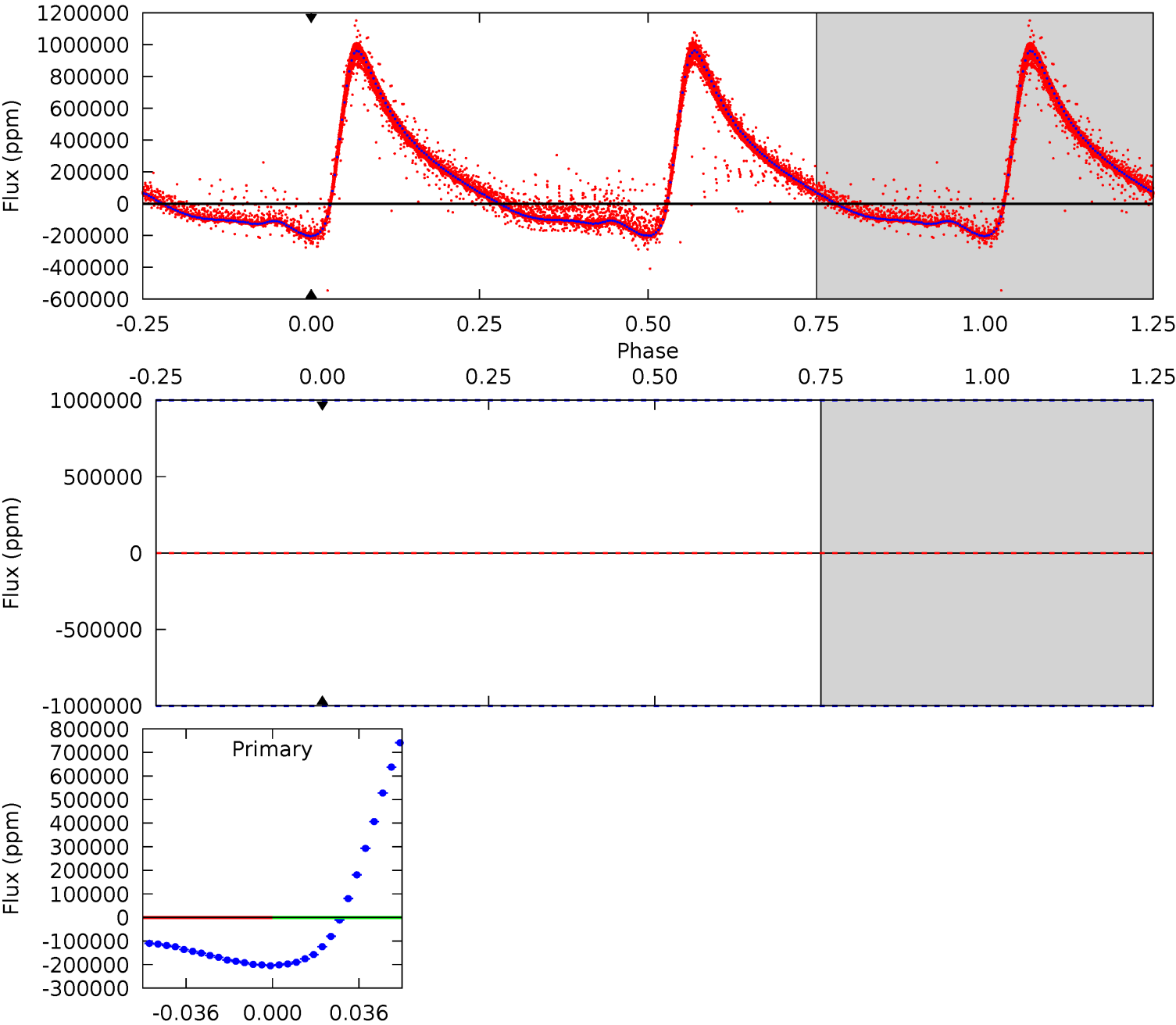
TCE 007988343-01 P= 1.162284 Days $T_0=132.646636$ (BKJD)



DV Model-Shift Uniqueness Test

007988343-01, P = 1.162284 Days, E = 130.432043 Days

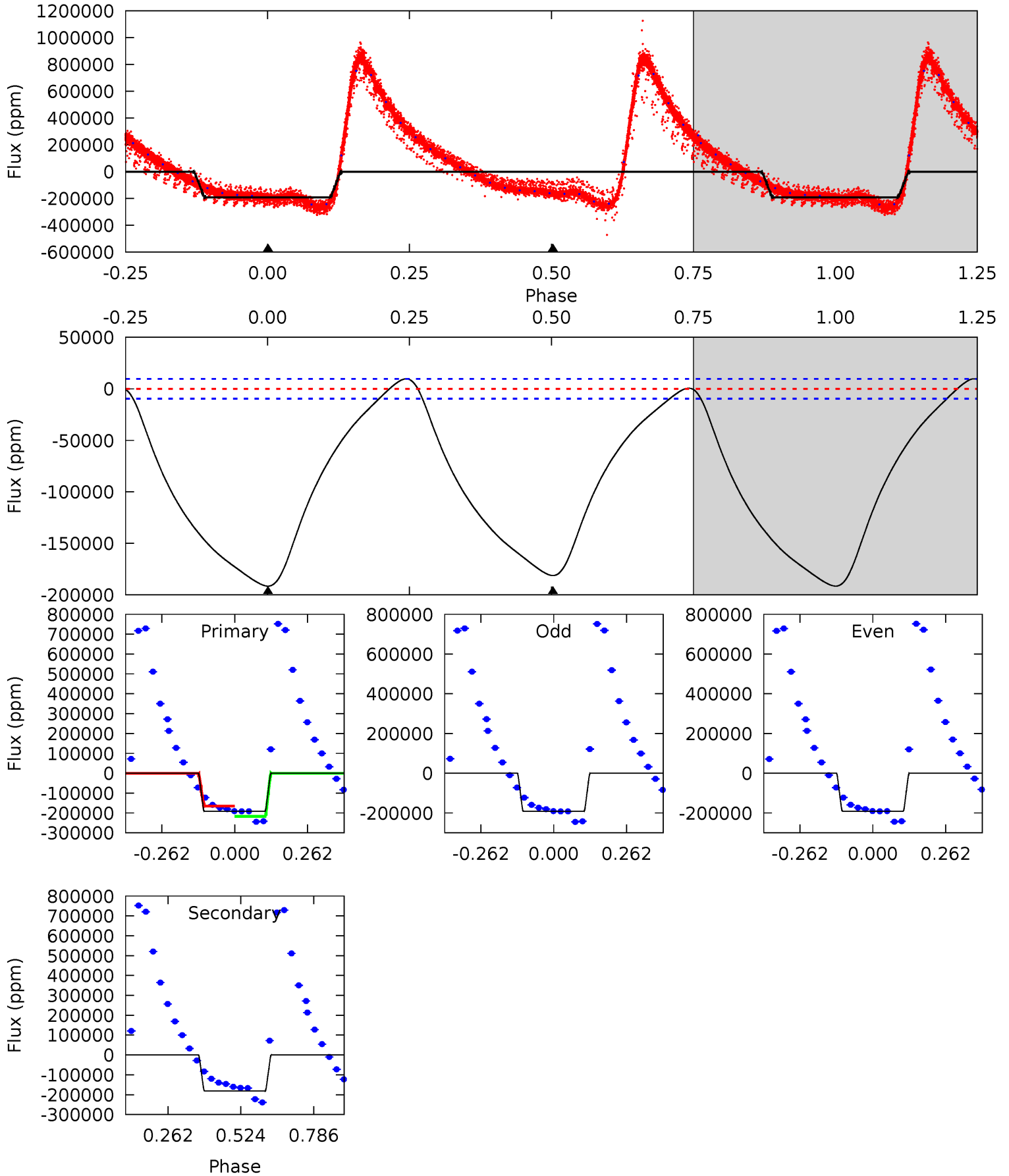
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
0	0	0	0	1.00	1.00	1.00	0	0	0	0	0	0	0	0



Alt Model-Shift Uniqueness Test

007988343-01, P = 1.162284 Days, E = 131.484352 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
86.7	82.1	0	0	4.36	1.12	4.08	86.7	86.7	82.1	82.1	0.11	1.01	0.05	11.5



Stellar Parameters For KIC 007988343

	$T_{\text{eff}} (K)$	$\log(g)$	$[\text{Fe}/\text{H}]$	$R (R_{\odot})$	$M (M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6306^{+263}_{-321}	$3.983^{+0.371}_{-0.159}$	$-0.280^{+0.300}_{-0.300}$	$1.800^{+0.468}_{-0.761}$	$1.137^{+0.201}_{-0.201}$	$0.275^{+0.833}_{-0.126}$
	+4%/-5%	+9%/-4%	+107%/-107%	+26%/-42%	+18%/-18%	+303%/-46%
Source	PHO1	KIC0	KIC0	DSEP		

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

Secondary Eclipse Parameters for KIC 007988343-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	0 ± 1000000	$16.60^{+16.70}_{-11.77}$	3419^{+324}_{-366}	5407^{+17690}_{-22737}	$3.815^{+194.726}_{-138.815}$
Alt.	-181195 ± 2207	$82.35^{+26.07}_{-24.11}$	3410^{+296}_{-399}	6466^{+1061}_{-716}	$9.402^{+8.863}_{-4.010}$

T_{max} = Theoretical Maximum Planetary Temperature
 T_{obs} = Observed Planetary Temperature (Assuming $A=0.3$)
 A_{obs} = Observed Albedo (Assuming $T=0$)

If a secondary eclipse is present, the system is likely an EB if $T_{obs} \gg T_{max}$ AND $A_{obs} \gg 1.0$

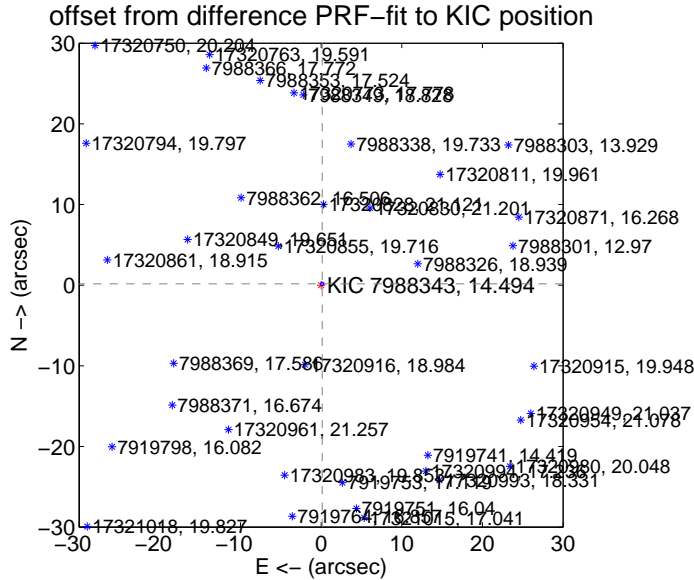
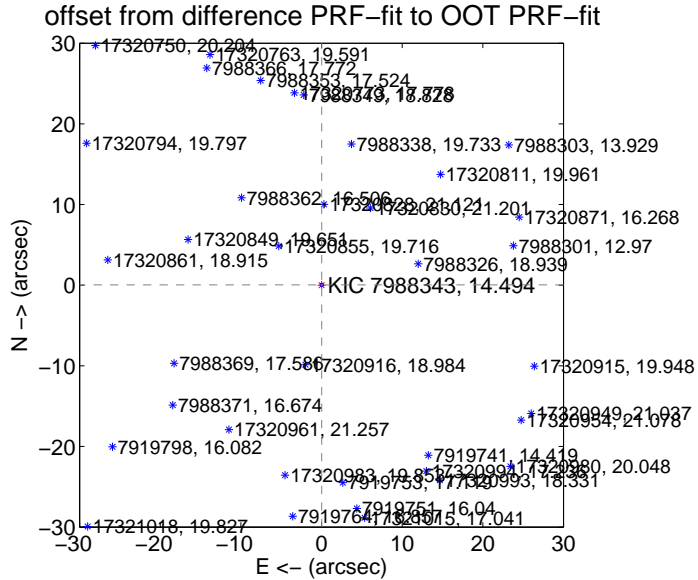
DV Centroid Data

Supplemental centroid analysis for 007988343-01. Kepler magnitude: 14.49. Transit SNR -1.00

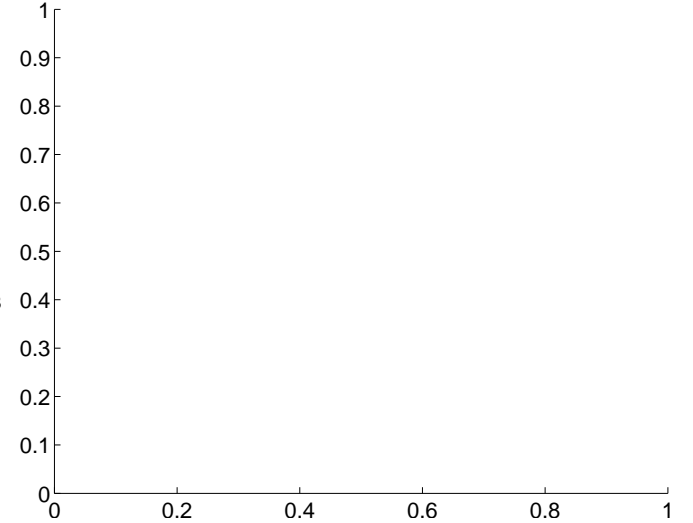
There are 17 quarters with good PRF difference image offsets

The direct PRF centroid is offset from the target star catalog position by about 0.24 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.048 ± 0.068	0.71	-0.028 ± 0.067	0.040 ± 0.068
PRF-fit source offset from KIC position	0.208 ± 0.070	2.97	-0.128 ± 0.074	0.164 ± 0.068
photometric centroid source offset	—	—	—	—

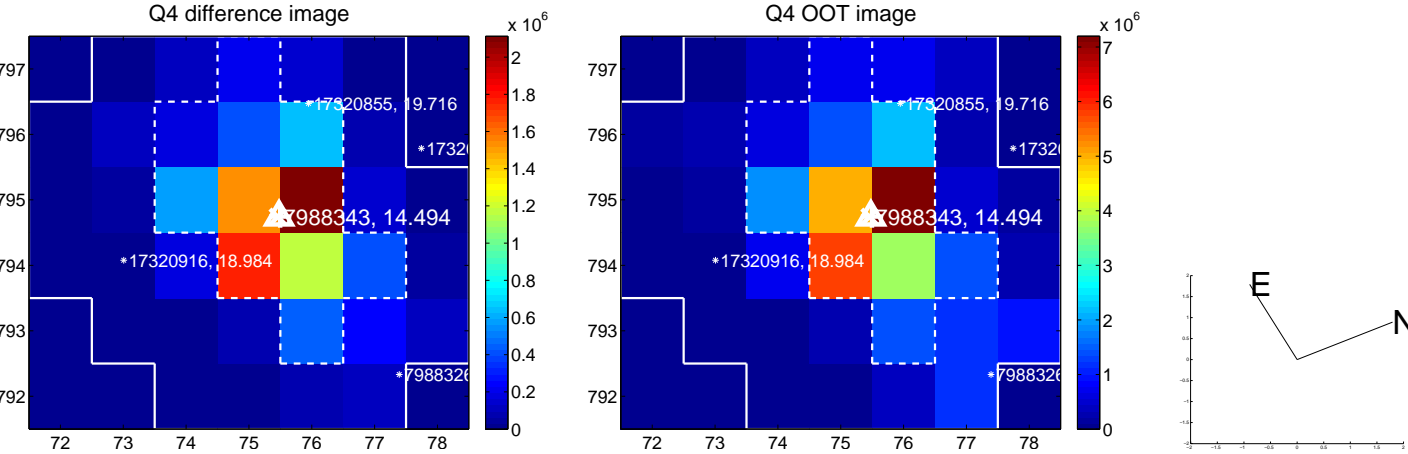
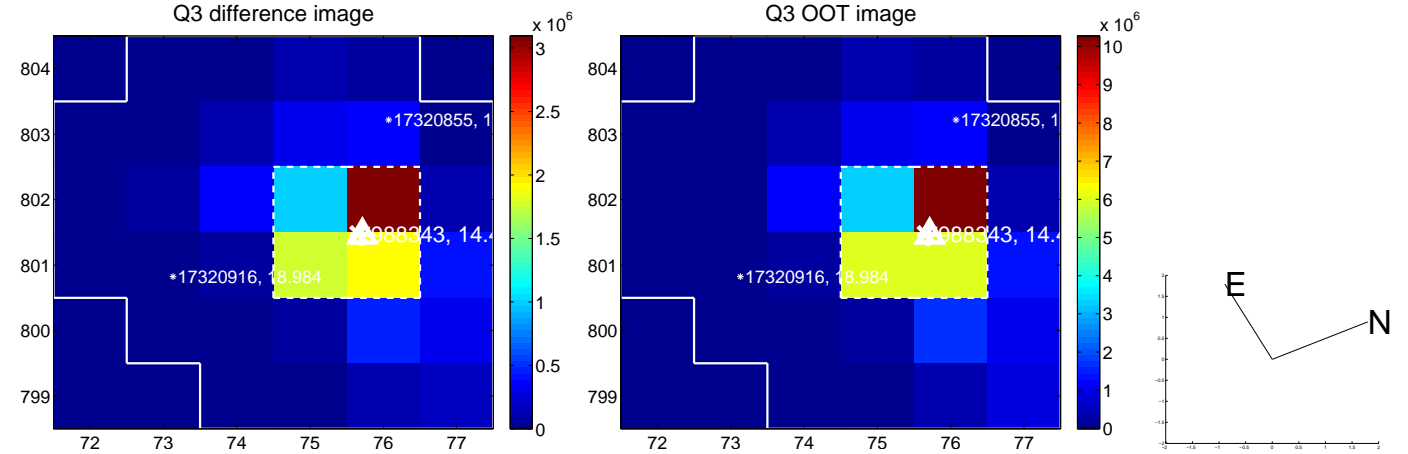
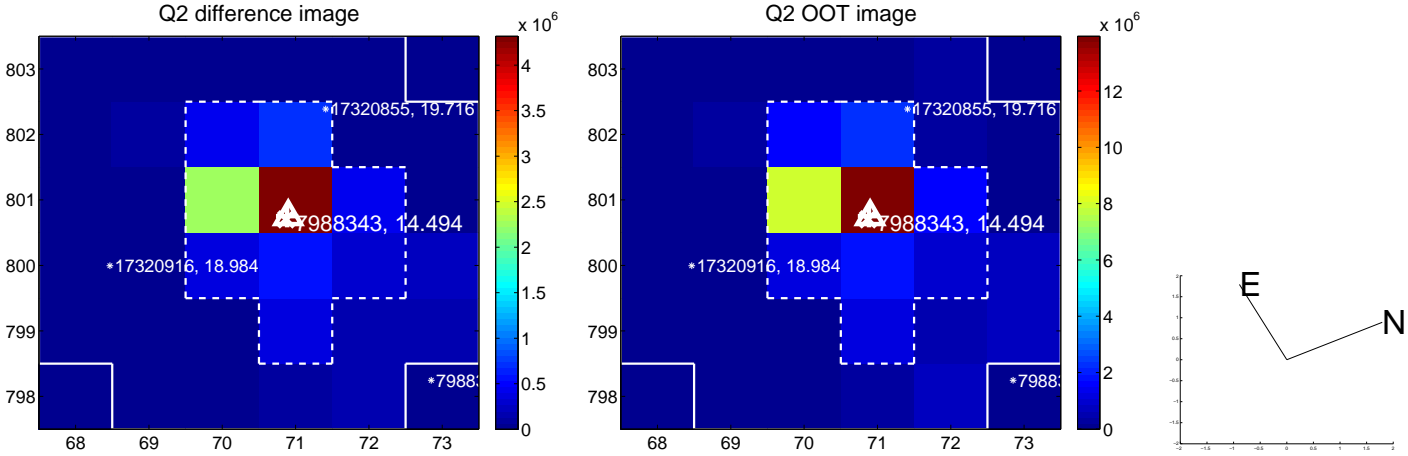
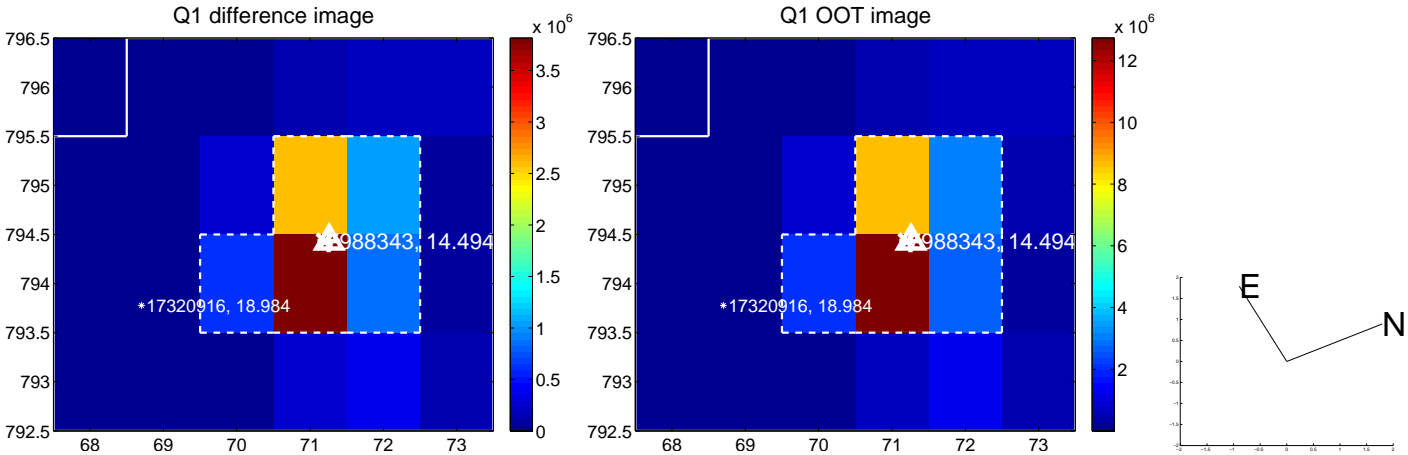


There are no photometric centroids

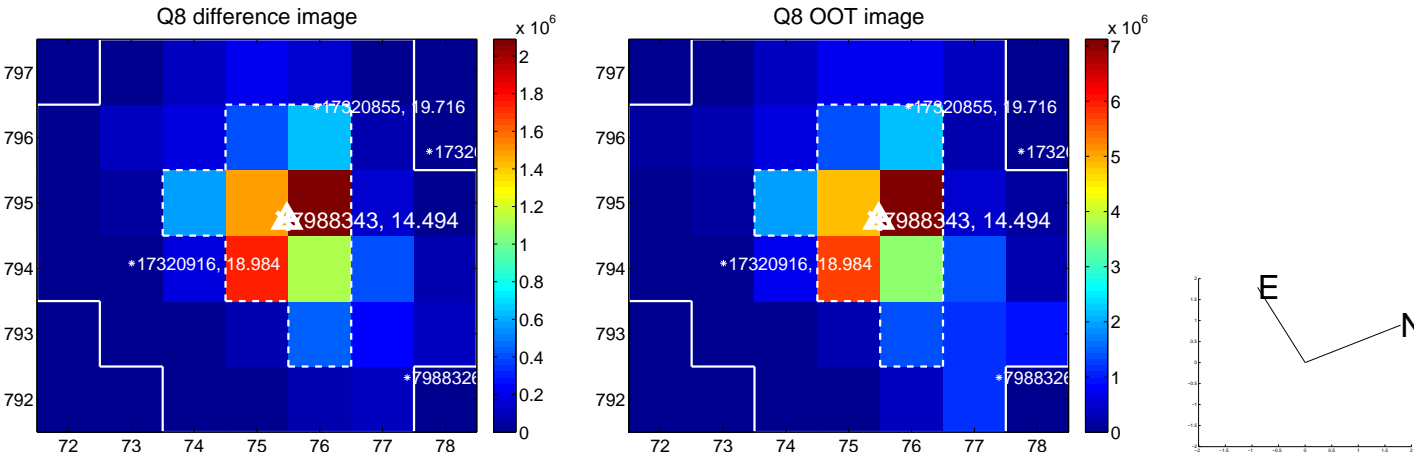
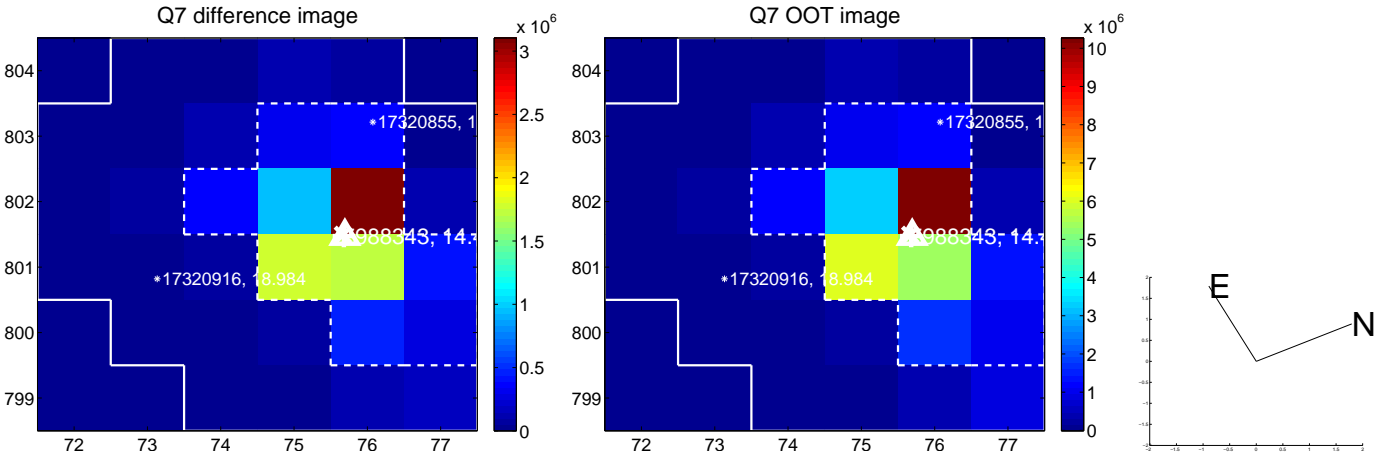
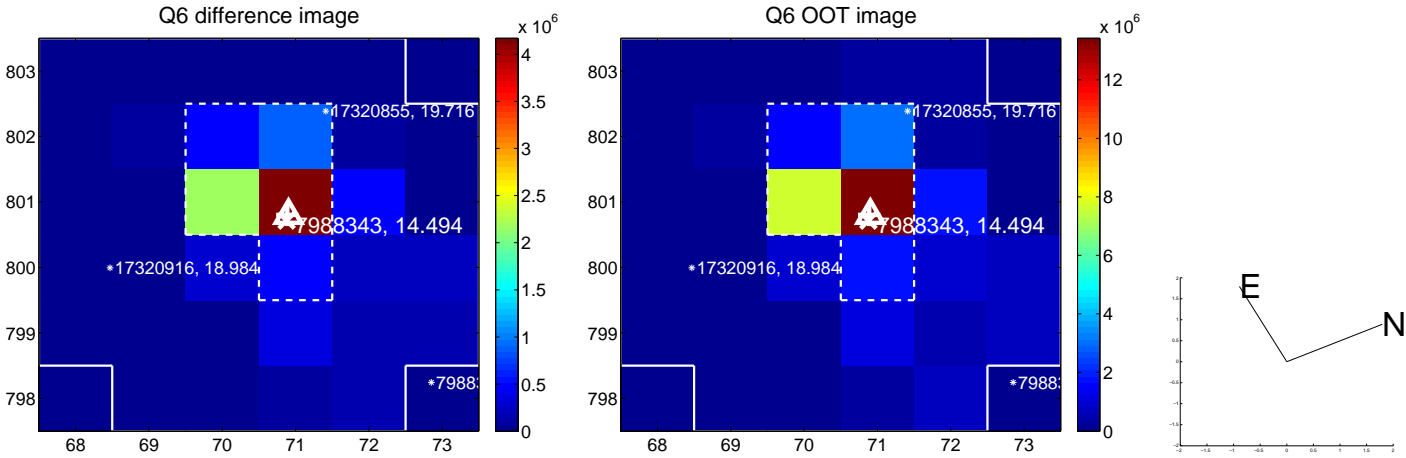
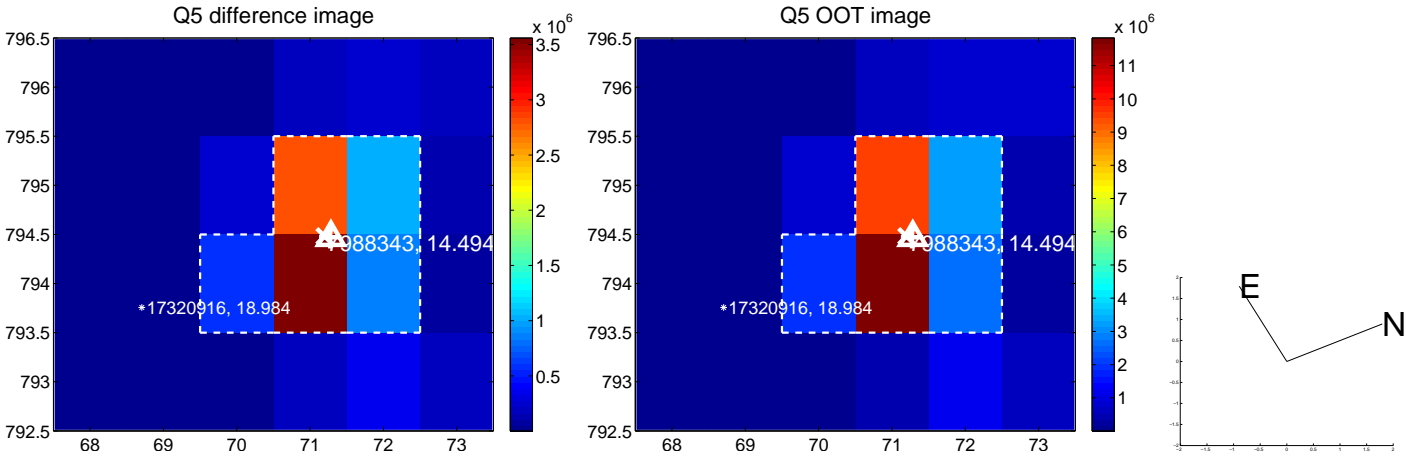


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses:** good quarterly centroid offsets; **Vermillion crosses:** bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

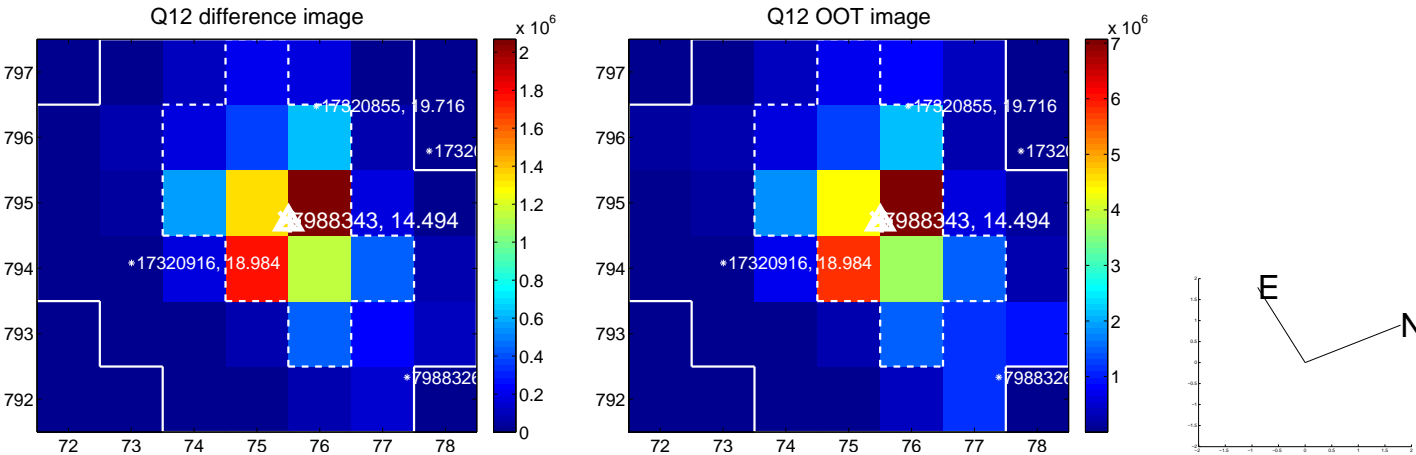
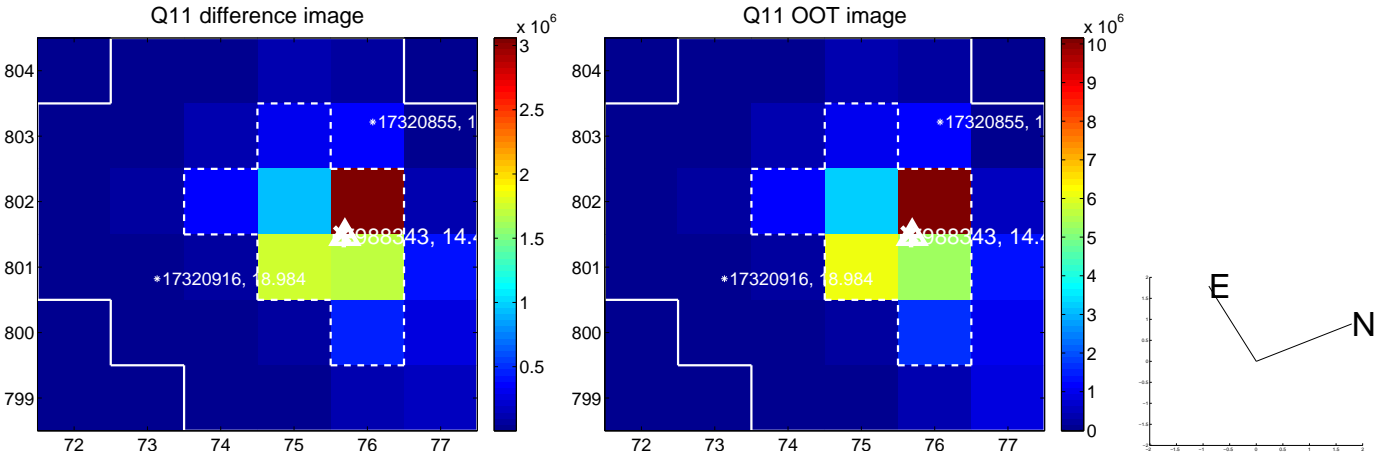
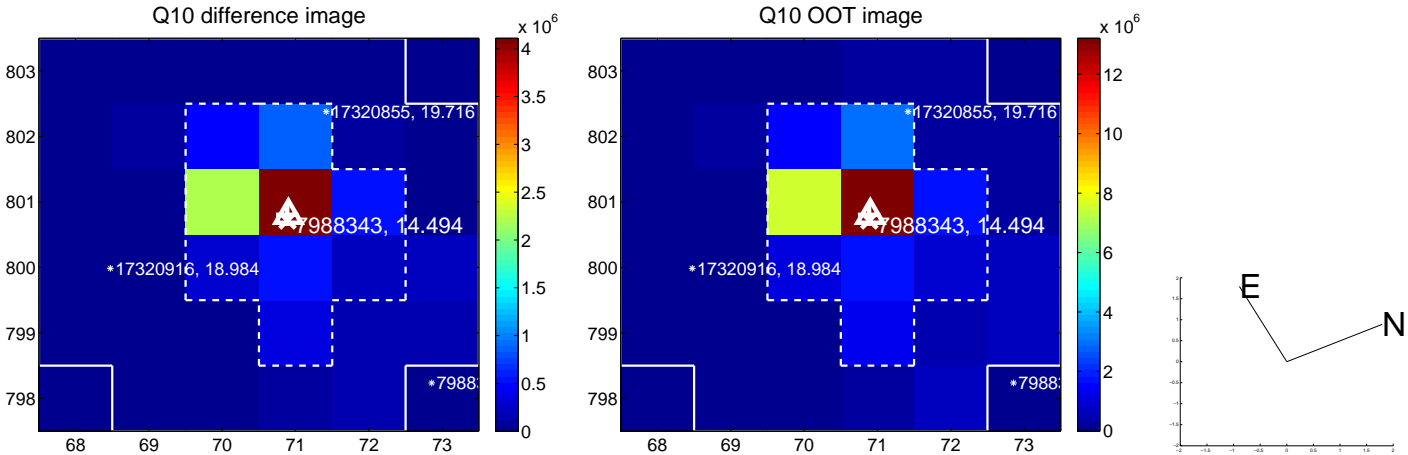
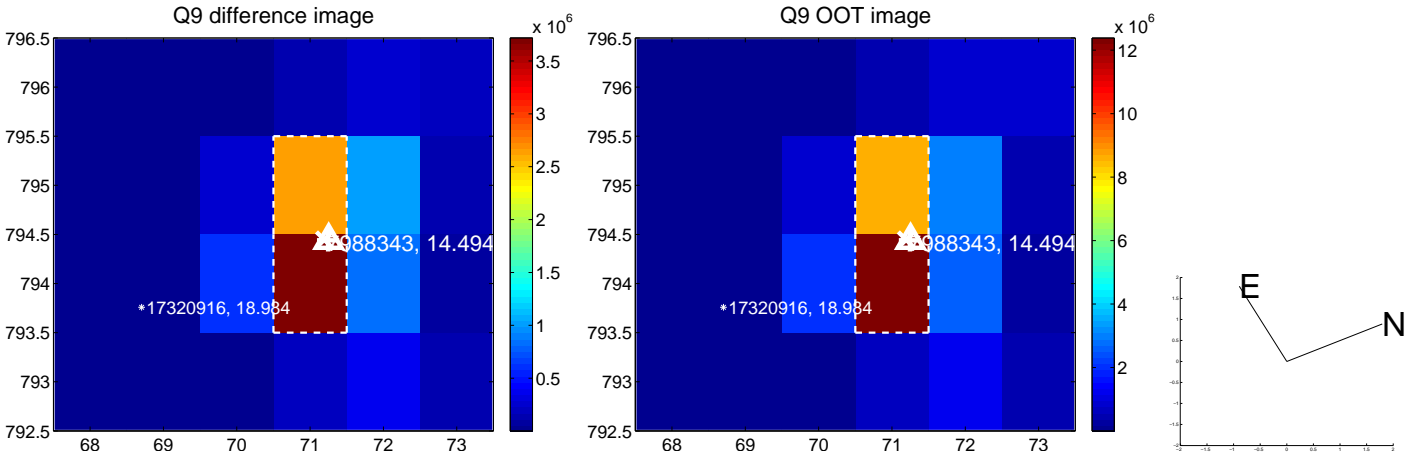
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



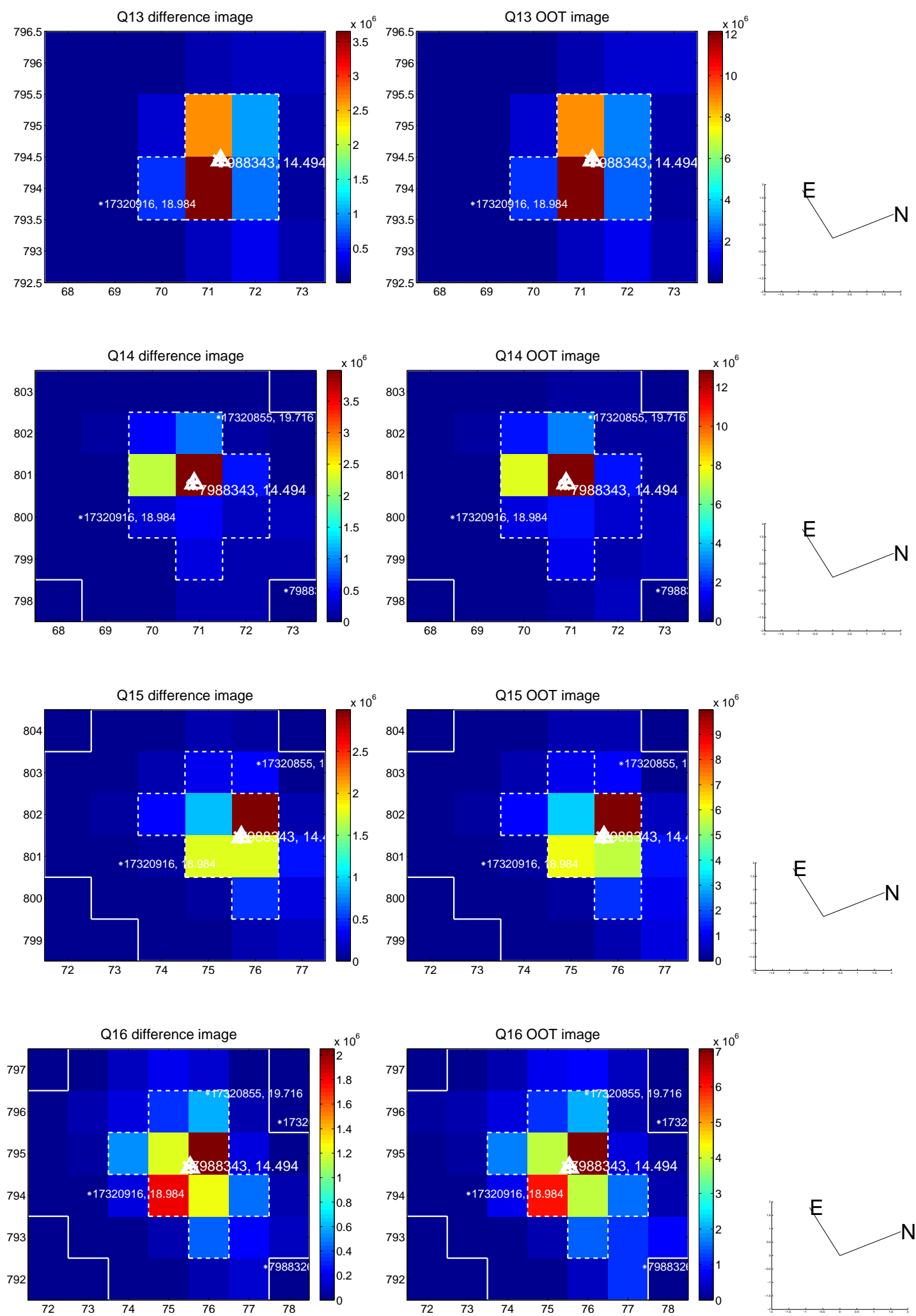
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



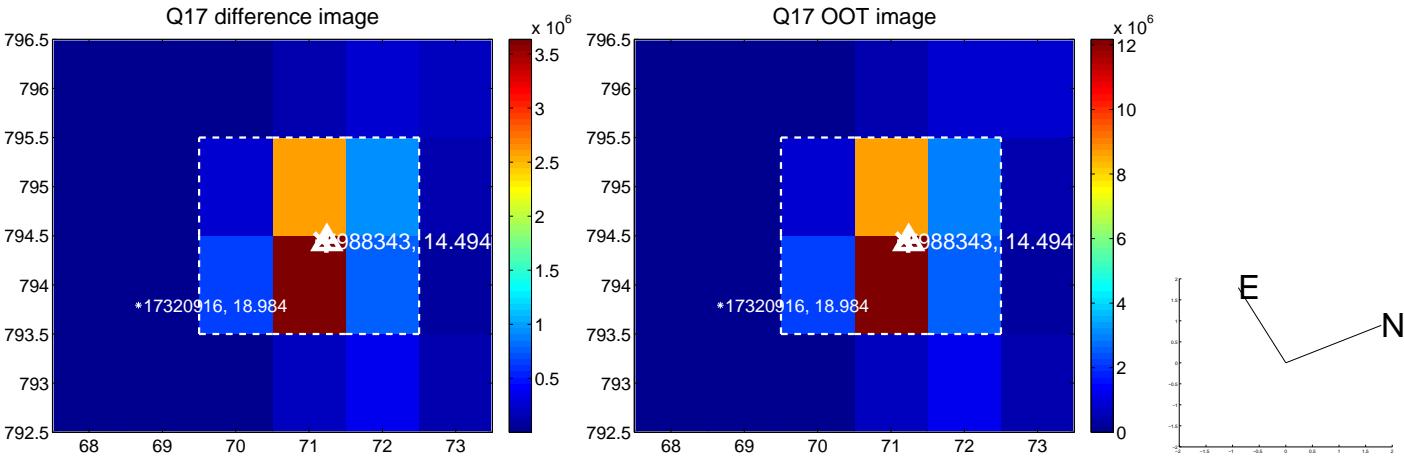
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



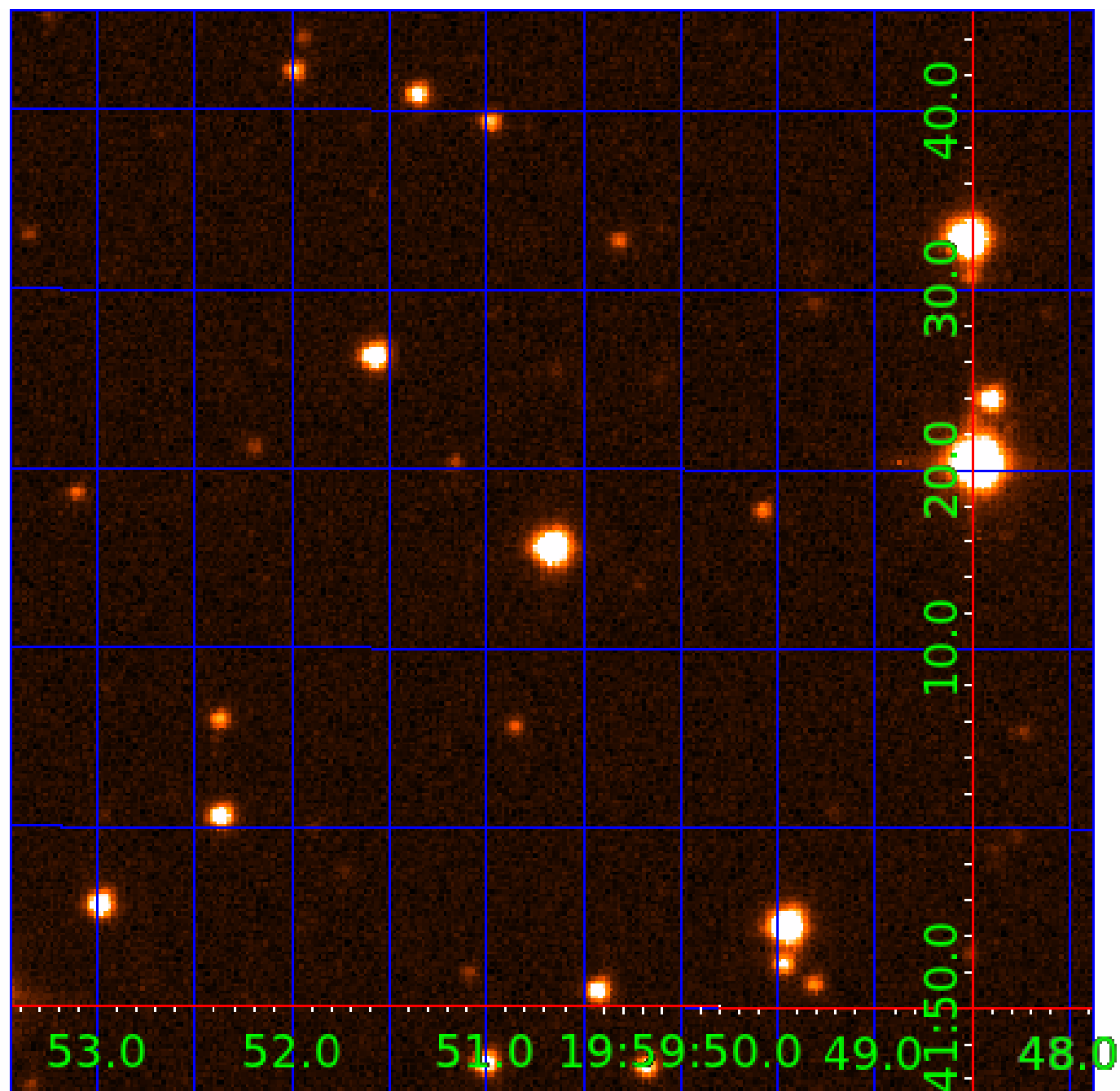
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



folded centroid time series figure for this object.

UKIRT Image

Declination



KIC 007988343

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})
007988343-01	OBS	No	1.162284	131.594327	2418.1	2.500	247.9	-1.0	1.80	6306	8.90	9002.07
007988343-02	OBS	No	1.162277	132.188277	2799.1	2.000	91.8	-1.0	1.80	6306	9.58	9002.14

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
007988343-01	OBS	FP	0.00	1	0	0	0	SWEET_NTL—LPP_DV—LPP_ALT—CENT_NOFITS
007988343-02	OBS	FP	0.00	1	0	0	0	SWEET_NTL—LPP_DV—LPP_ALT—MOD_NONUNIQ_ALT—SAME_NTL_PERIOD—CENT_NOFITS

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

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

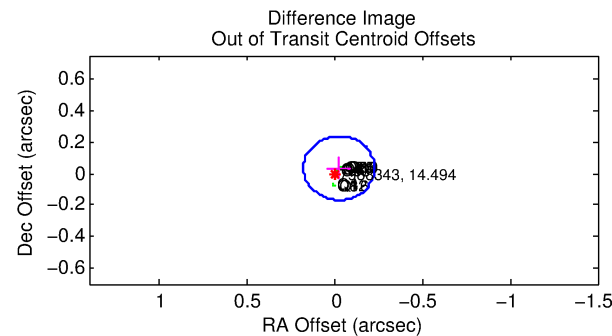
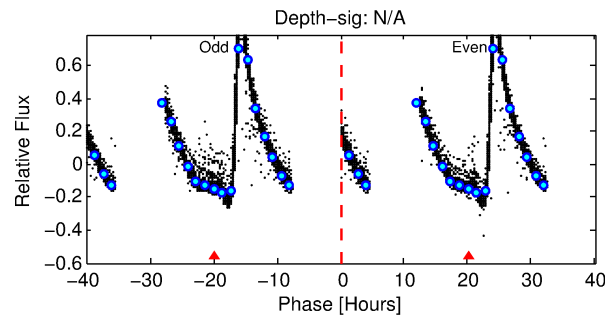
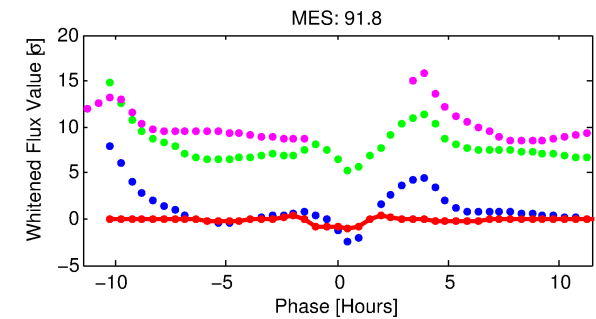
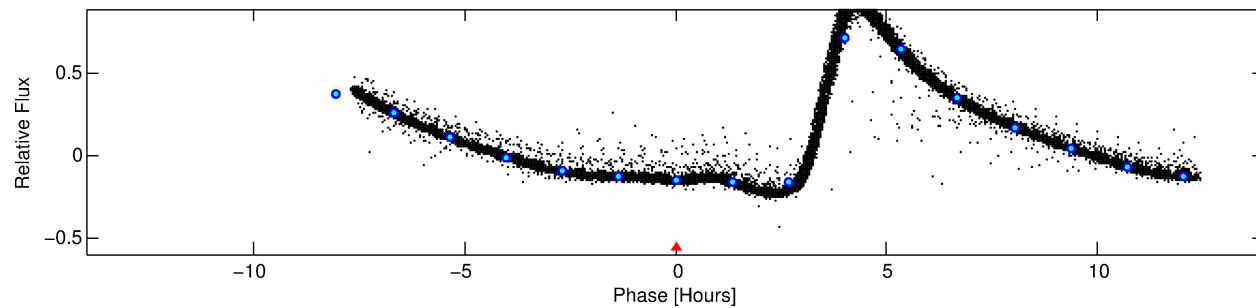
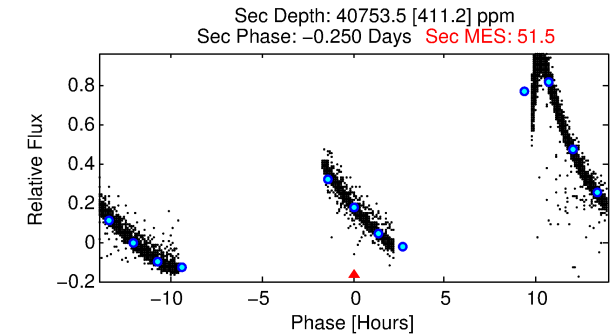
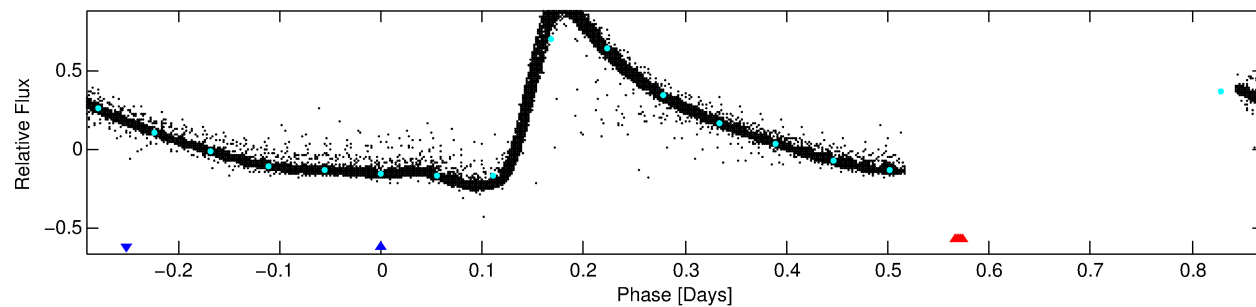
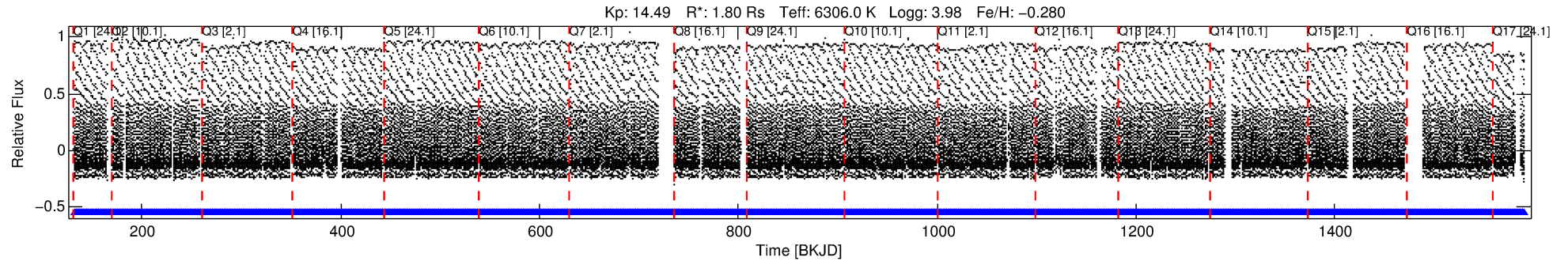
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 007988343-02

No Significant Match Found

DV One-Page Summary

KIC: 7988343 Candidate: 2 of 2 Period: 1.162 d



TPS TCE Results:

Period = 1.16228 d
Epoch = 132.1883 BKJD

DV fit results are unavailable

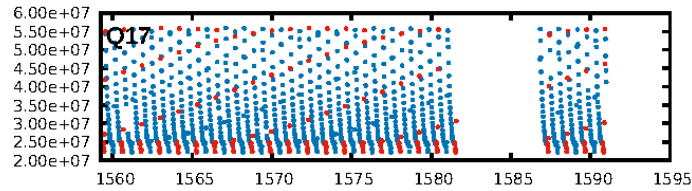
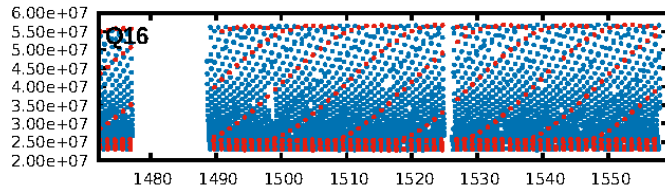
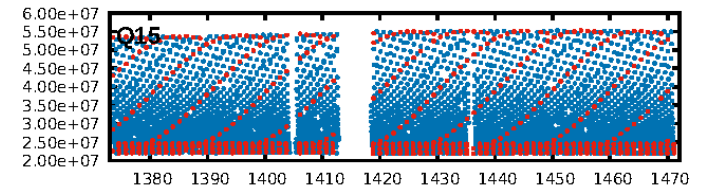
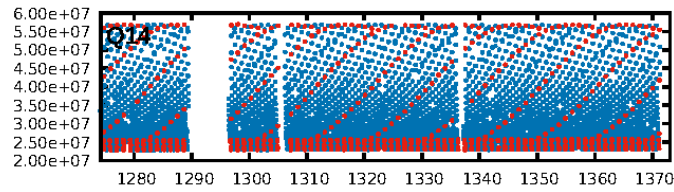
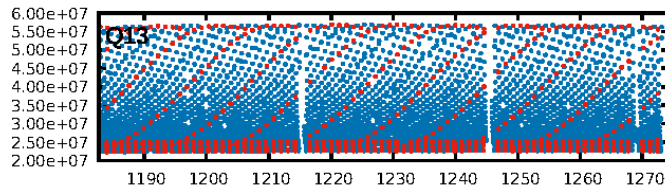
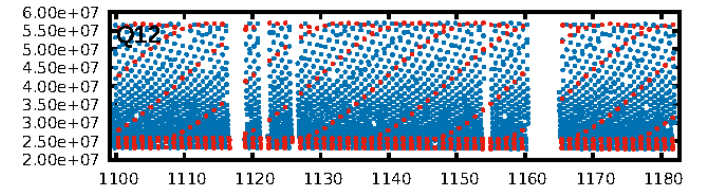
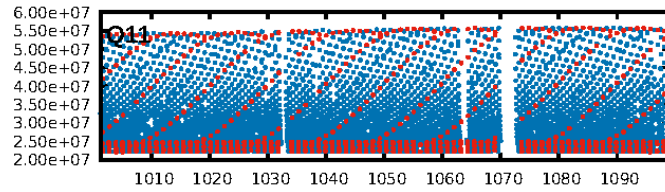
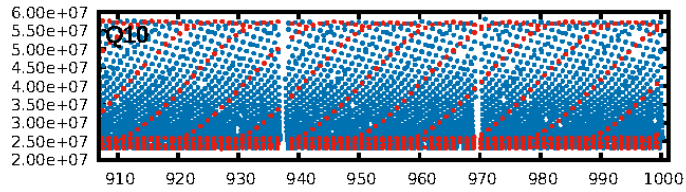
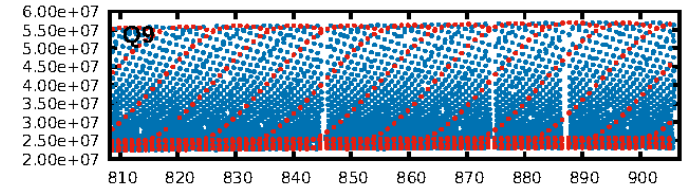
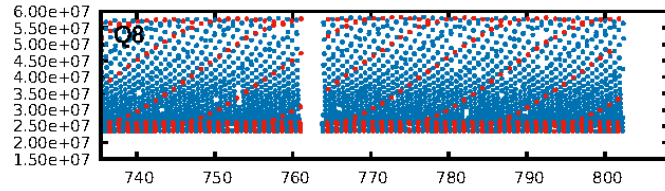
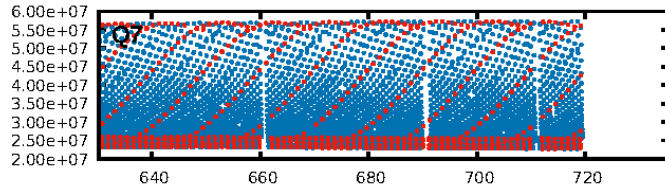
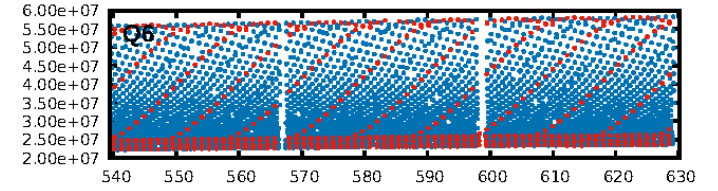
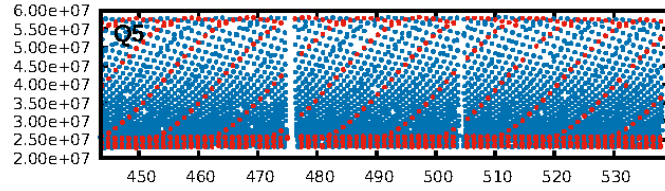
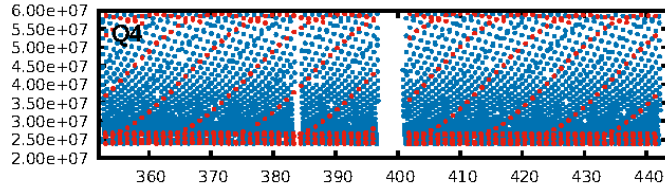
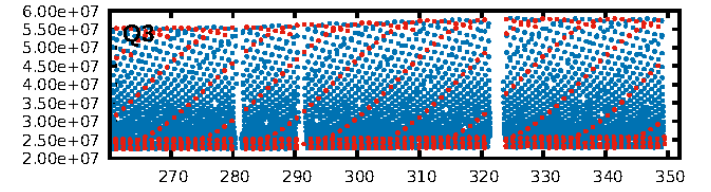
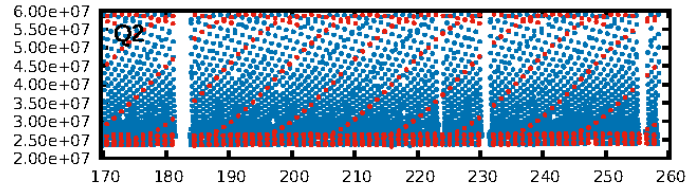
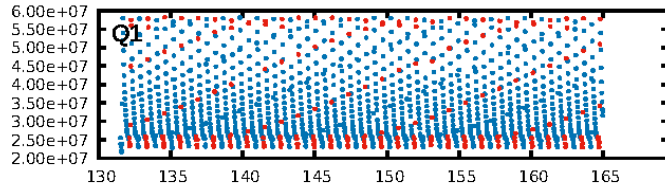
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: 0.0% [0.00σ]
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [1112/1112]
GhostDiagnostic-chr: 1.186
Centroid-sig: N/A
Centroid-so: N/A
OotOffset-rm: 0.043 arcsec [0.64σ]
KicOffset-rm: 0.207 arcsec [2.95σ]
OotOffset-st: 4/4/4/5 [17]
KicOffset-st: 4/4/4/5 [17]
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DiffImageOverlap-fno: 0.00 [0/17]

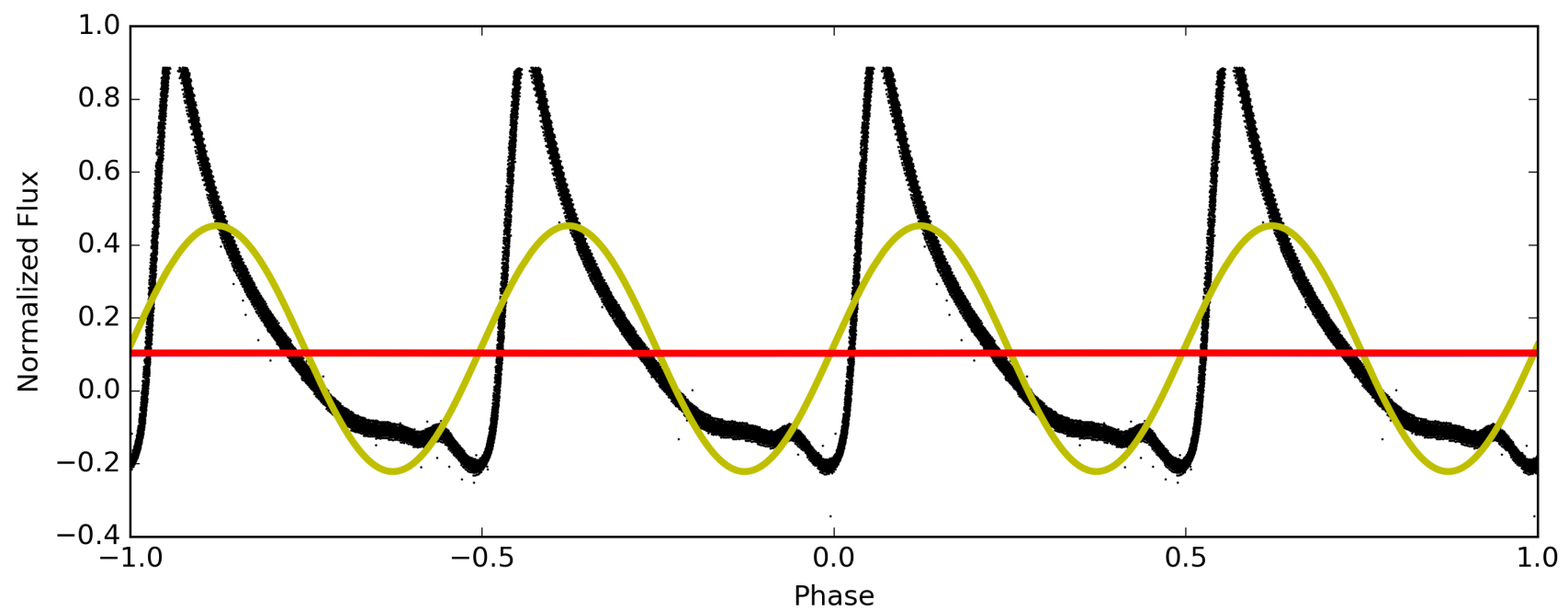
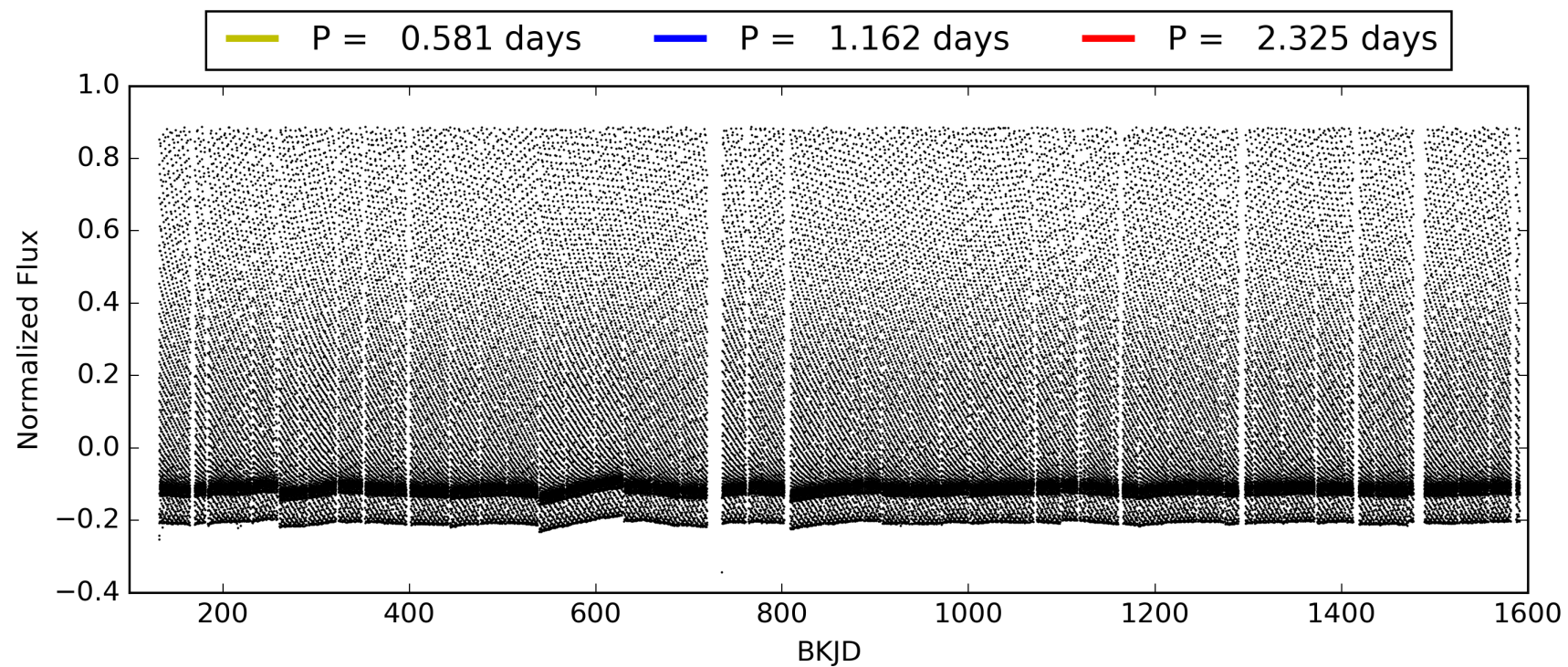
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This Data Validation Report Summary was produced in the Kepler Science Operations Center Pipeline at NASA Ames Research Center

TCE 007988343-02, PDC Light Curves

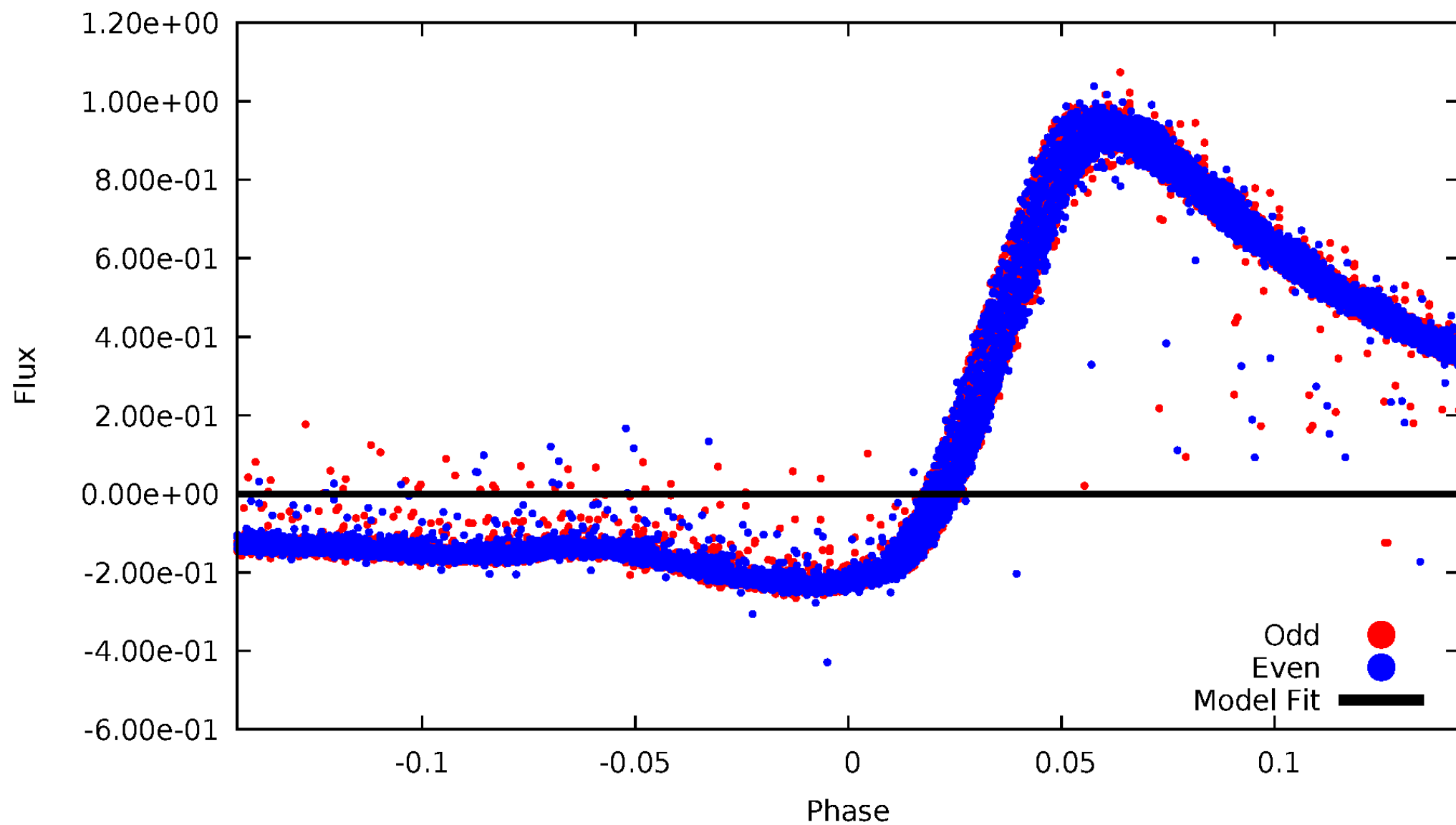


TCE 007988343-02



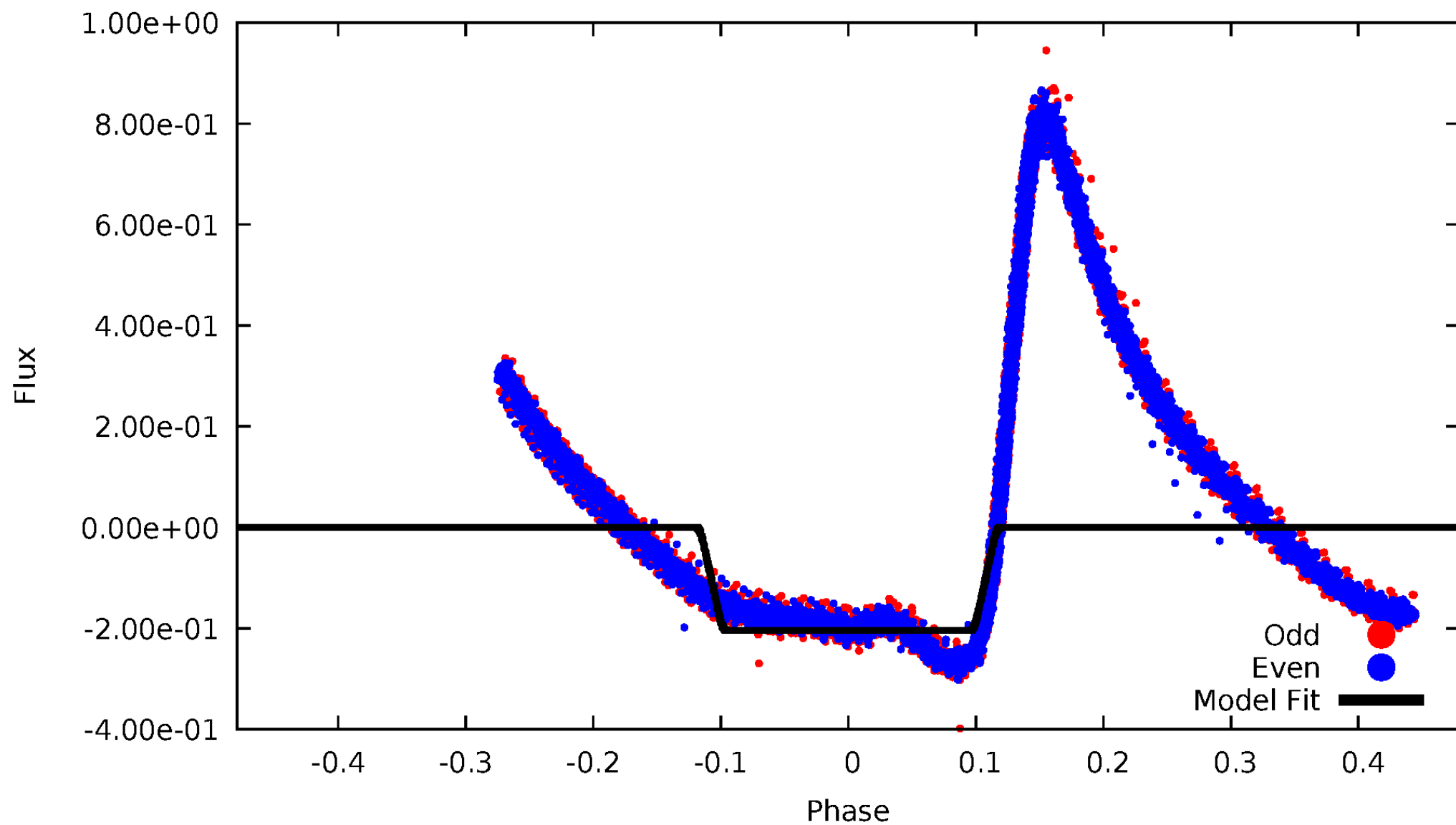
DV Odd/Even

TCE 007988343-02



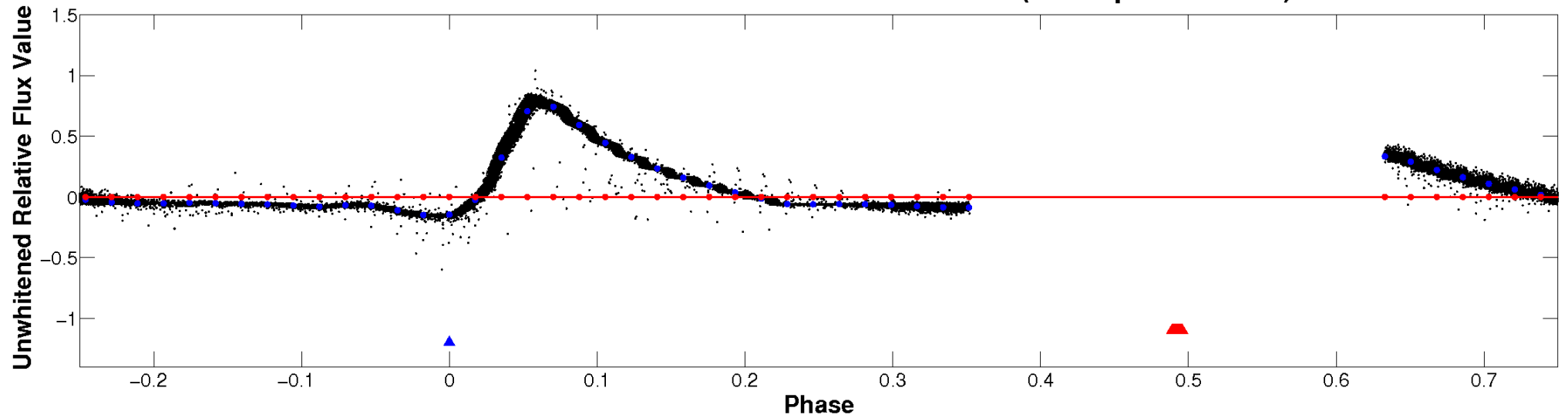
ALT Odd/Even

TCE 007988343-02



Non-Whitened Vs. Whitened Light Curve

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

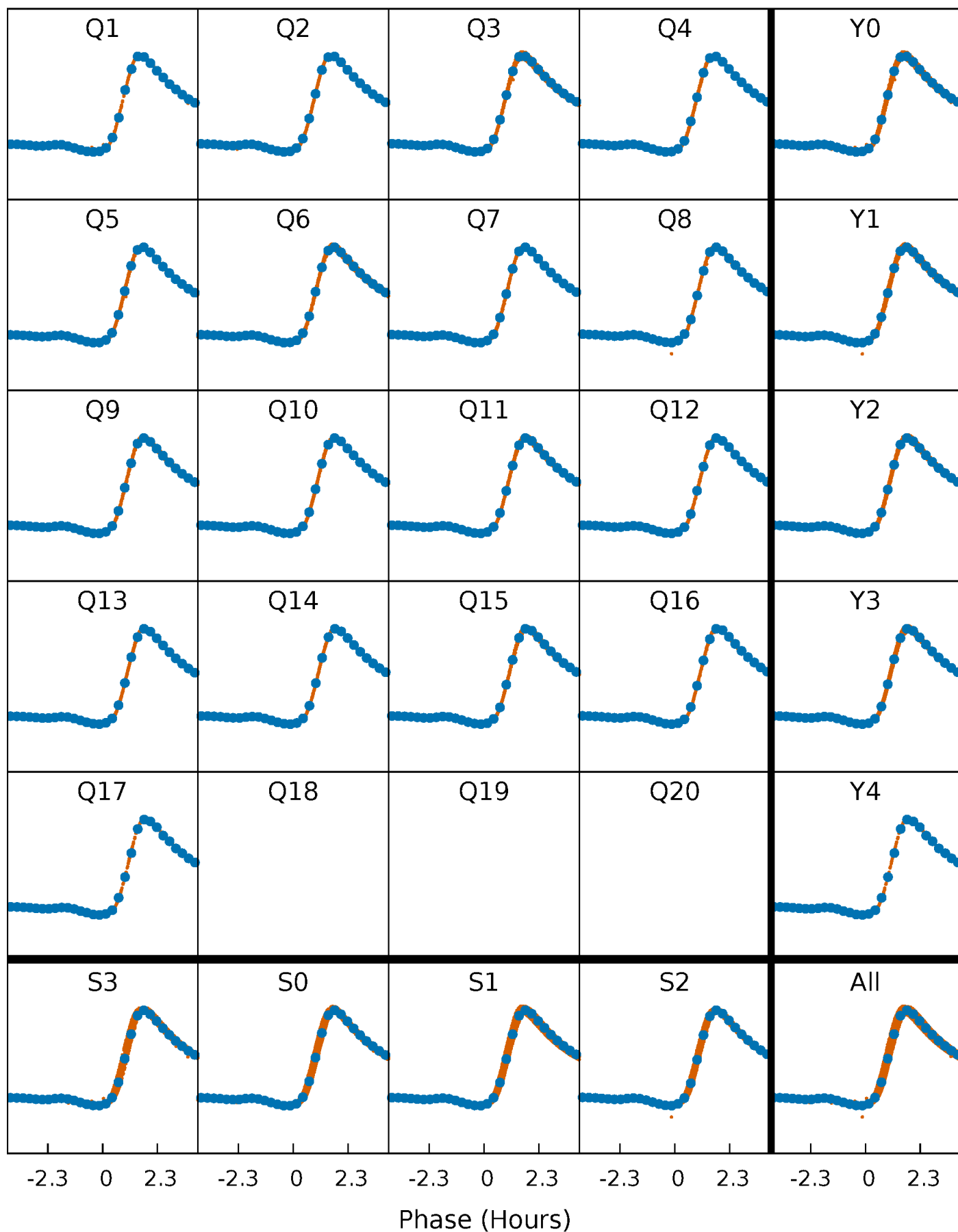


Planet 2 : Phased Whitened Flux Time Series (TPS Epoch/Period)



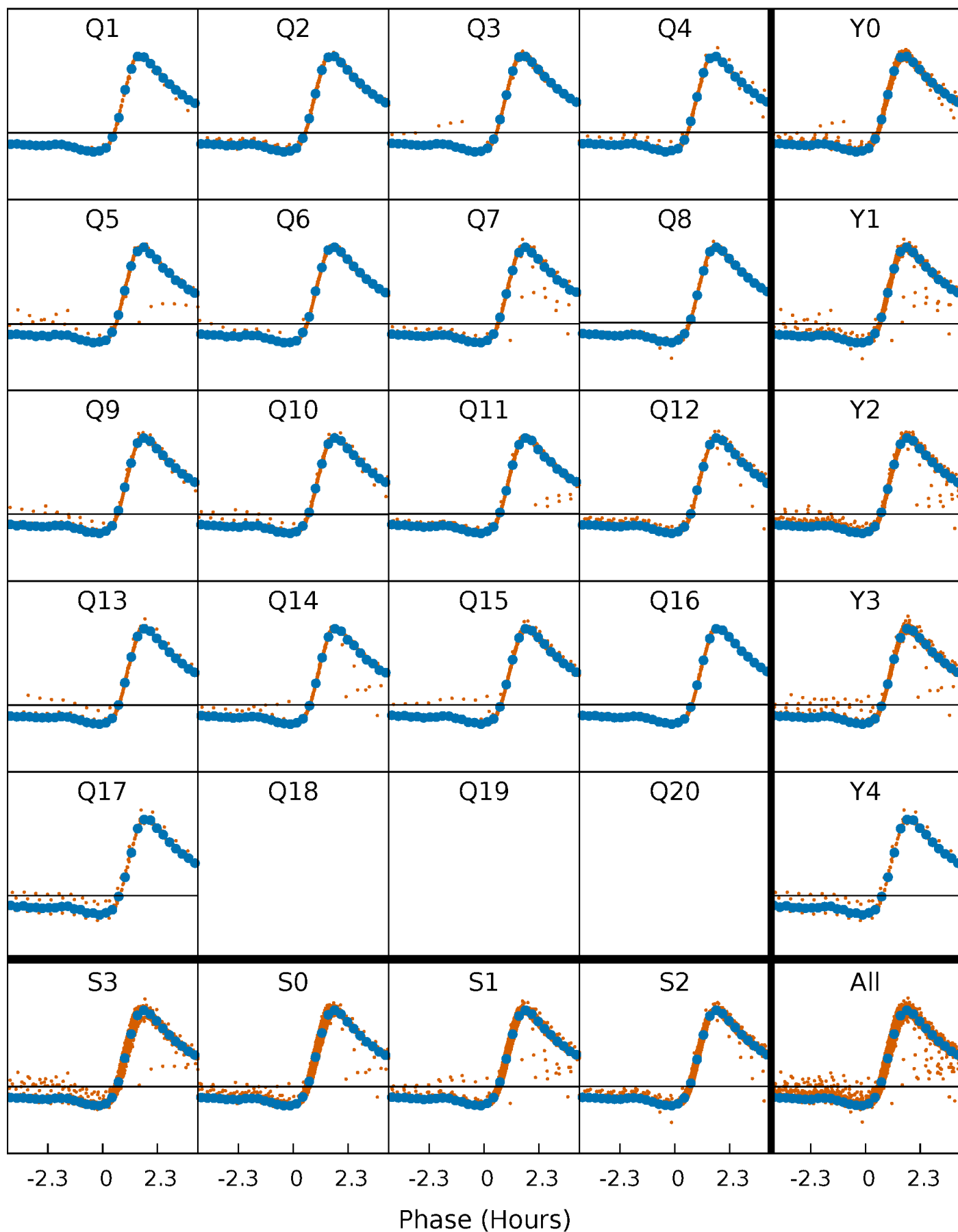
PDC Quarter-Phased Transit Curves

TCE 007988343-02 P= 1.162277 Days $T_0=132.188277$ (BKJD)



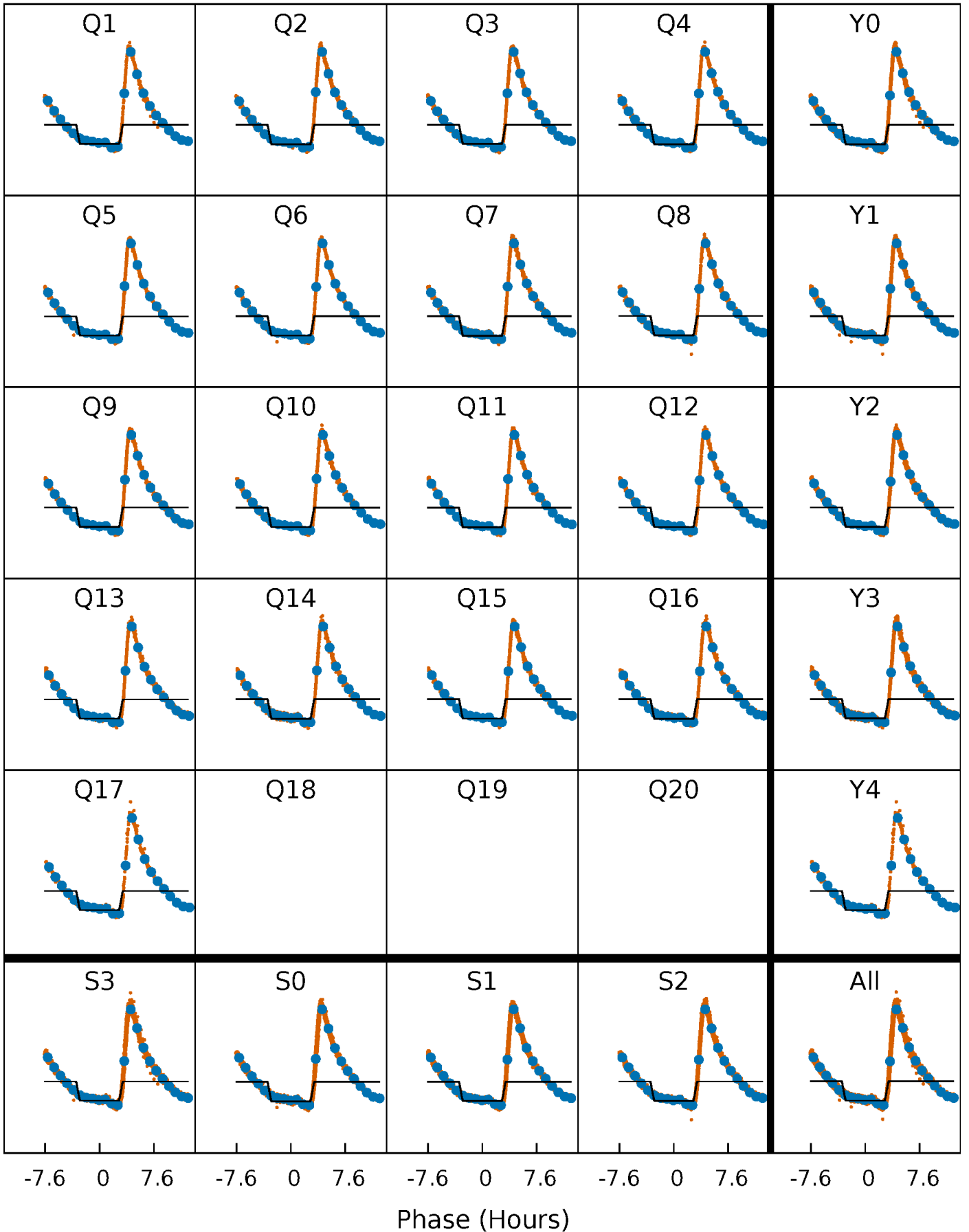
DV Quarter-Phased Transit Curves

TCE 007988343-02 P= 1.162277 Days $T_0=132.188277$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

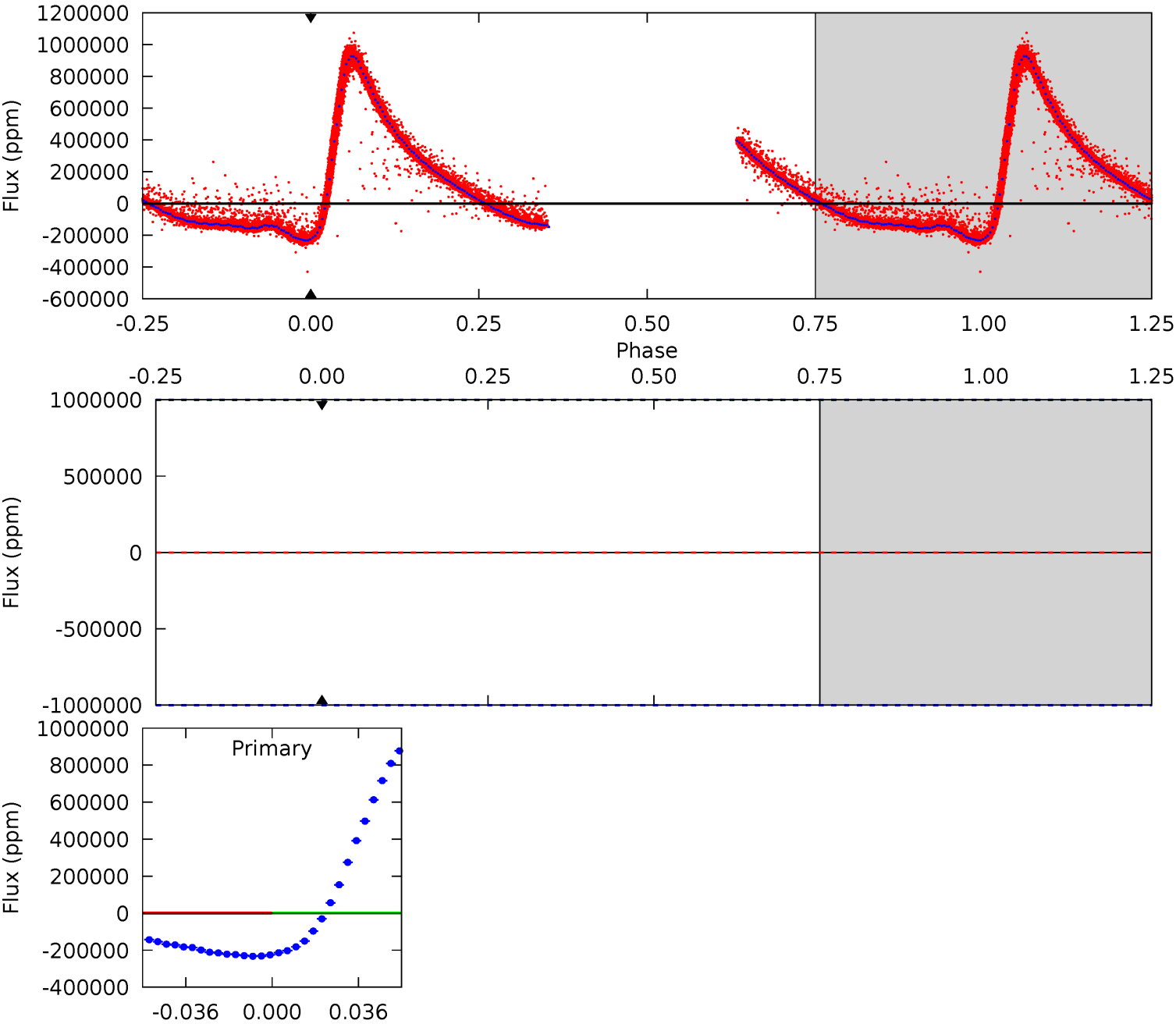
TCE 007988343-02 $P = 1.162277$ Days $T_0 = 132.080739$ (BKJD)



DV Model-Shift Uniqueness Test

007988343-02, P = 1.162277 Days, E = 131.026000 Days

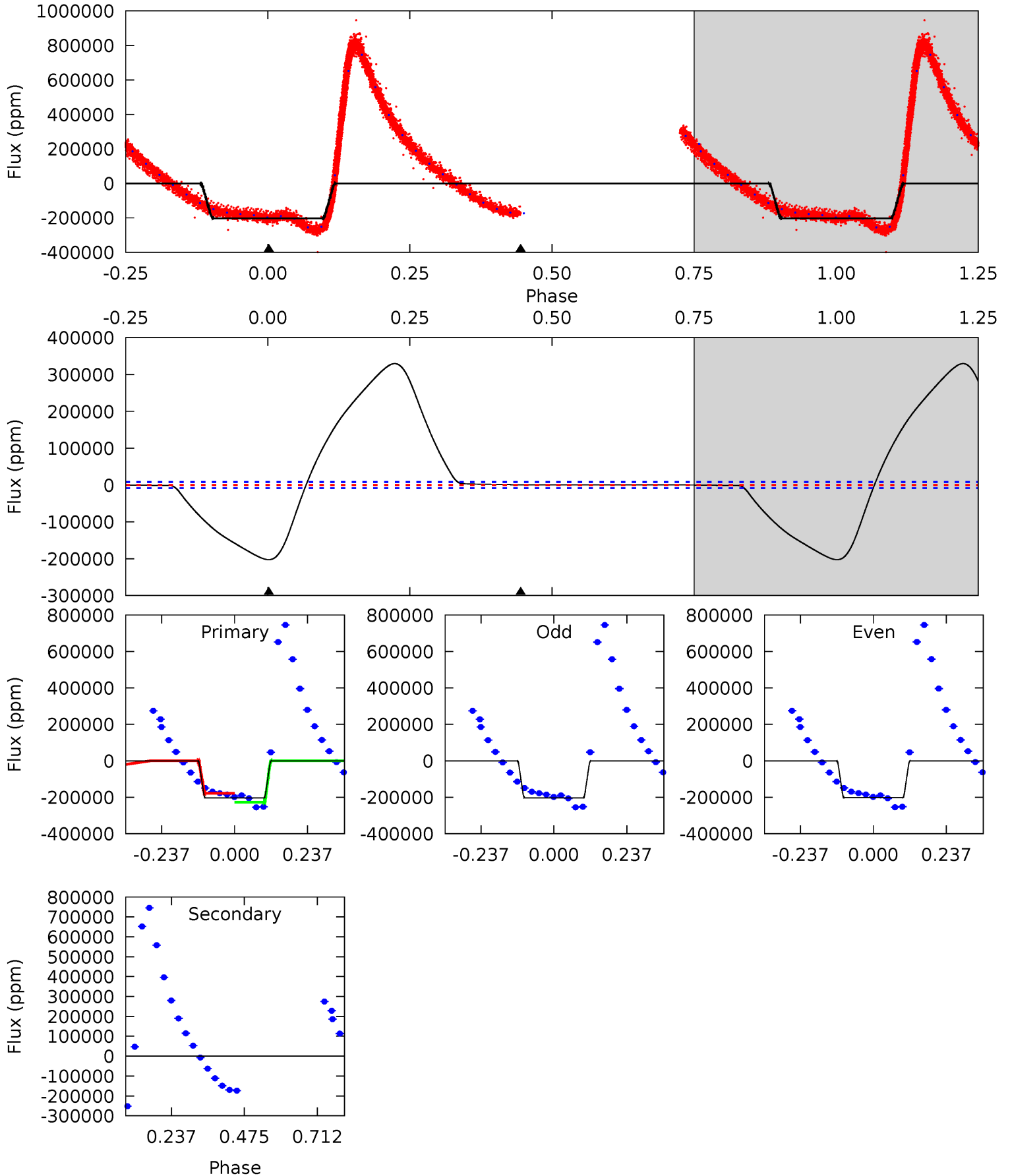
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
0	0	0	0	1.00	1.00	1.00	0	0	0	0	0	0	0	0



Alt Model-Shift Uniqueness Test

007988343-02, P = 1.162277 Days, E = 130.918462 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
104.3	-0.27	0	0	4.38	1.18	65.6	104.3	104.3	-0.27	-0.27	0.08	1.00	0.62	9.03



Stellar Parameters For KIC 007988343

	$T_{\text{eff}} (K)$	$\log(g)$	$[\text{Fe}/\text{H}]$	$R (R_{\odot})$	$M (M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6306^{+263}_{-321}	$3.983^{+0.371}_{-0.159}$	$-0.280^{+0.300}_{-0.300}$	$1.800^{+0.468}_{-0.761}$	$1.137^{+0.201}_{-0.201}$	$0.275^{+0.833}_{-0.126}$
	+4%/-5%	+9%/-4%	+107%/-107%	+26%/-42%	+18%/-18%	+303%/-46%
Source	PHO1	KIC0	KIC0	DSEP		

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

Secondary Eclipse Parameters for KIC 007988343-02 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	0 ± 1000000	$16.67^{+16.13}_{-11.78}$	3415^{+312}_{-421}	3336^{+18459}_{-21197}	$0.542^{+213.097}_{-155.317}$
Alt.	531 ± 1943	$84.65^{+28.19}_{-24.27}$	3396^{+320}_{-363}	-3360^{+266}_{-221}	$-0.014^{+0.080}_{-0.096}$

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

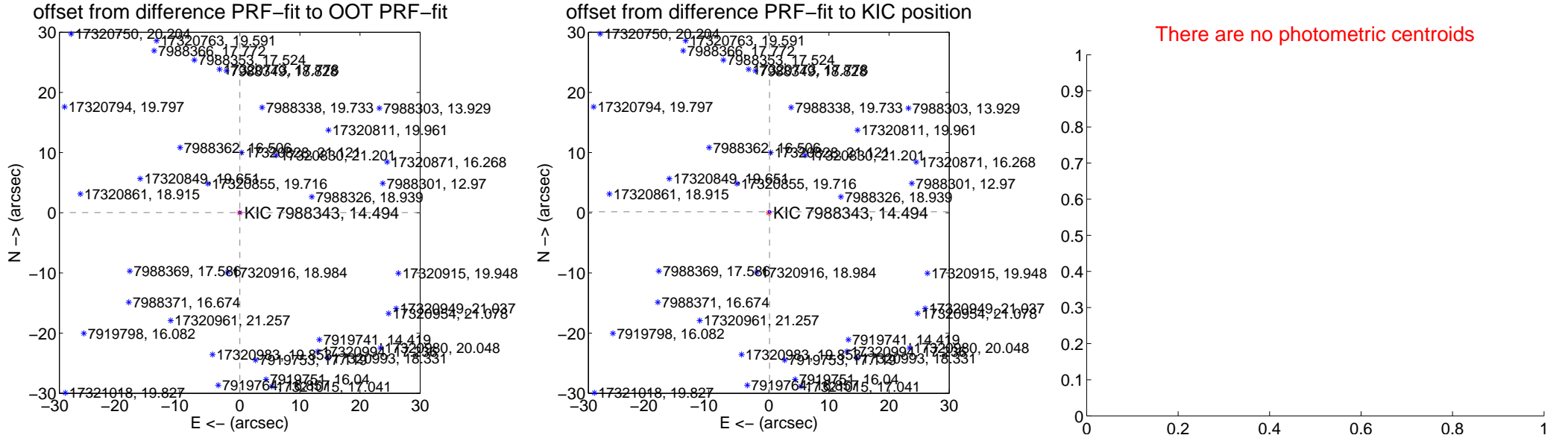
DV Centroid Data

Supplemental centroid analysis for 007988343-02. Kepler magnitude: 14.49. Transit SNR -1.00

There are 17 quarters with good PRF difference image offsets

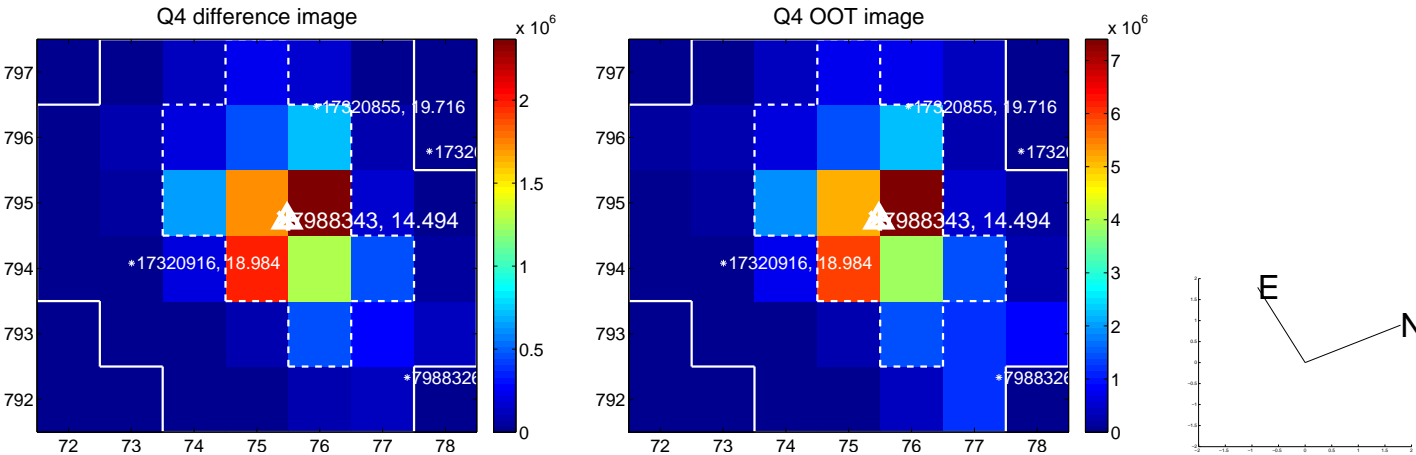
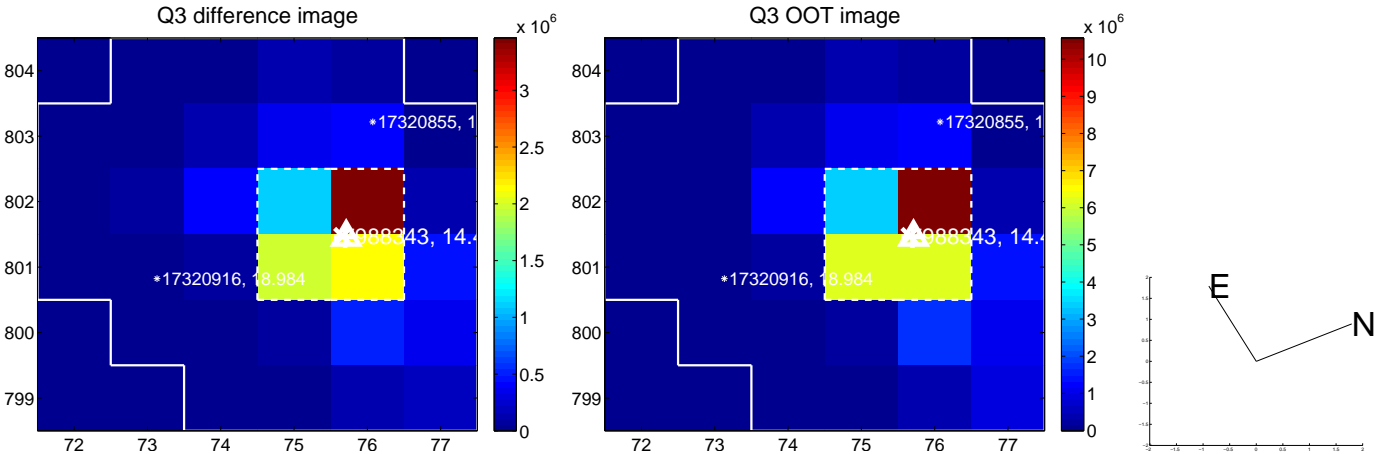
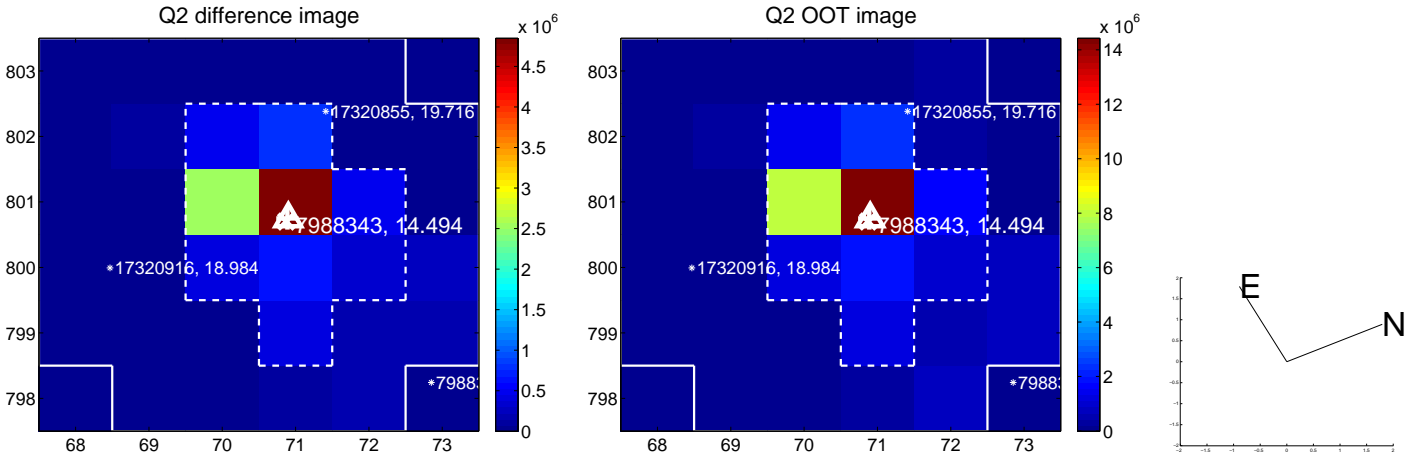
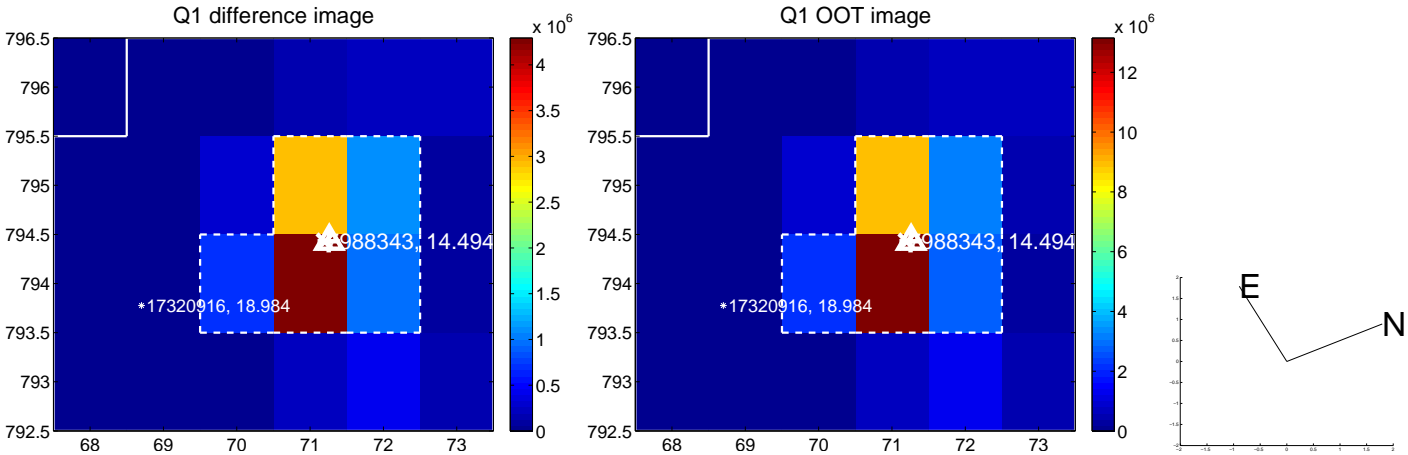
The direct PRF centroid is offset from the target star catalog position by about 0.24 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.043 ± 0.068	0.64	-0.024 ± 0.067	0.036 ± 0.068
PRF-fit source offset from KIC position	0.207 ± 0.070	2.95	-0.126 ± 0.075	0.164 ± 0.069
photometric centroid source offset	—	—	—	—

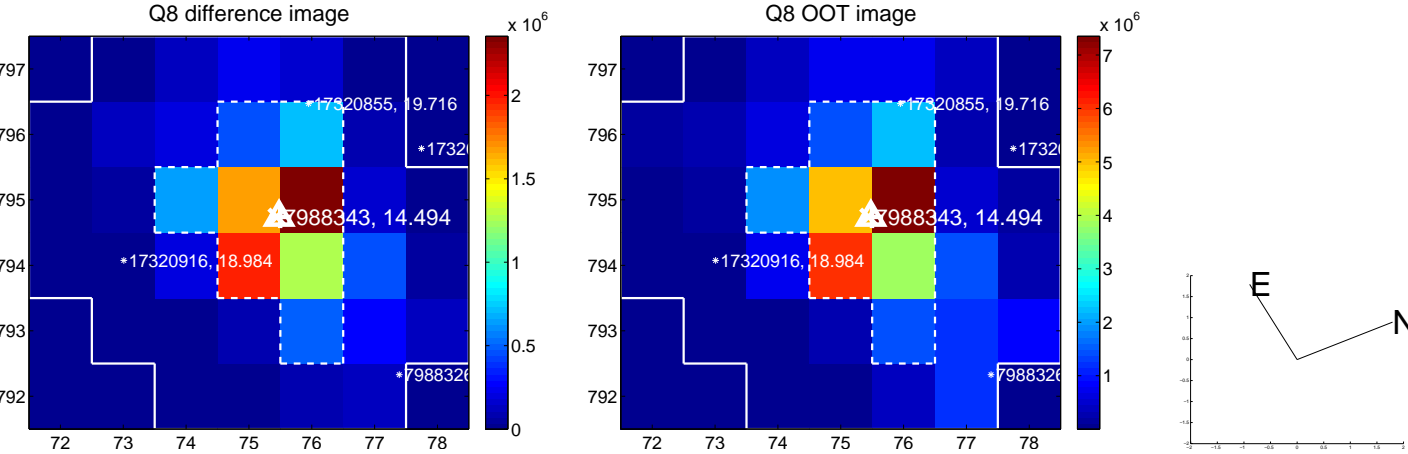
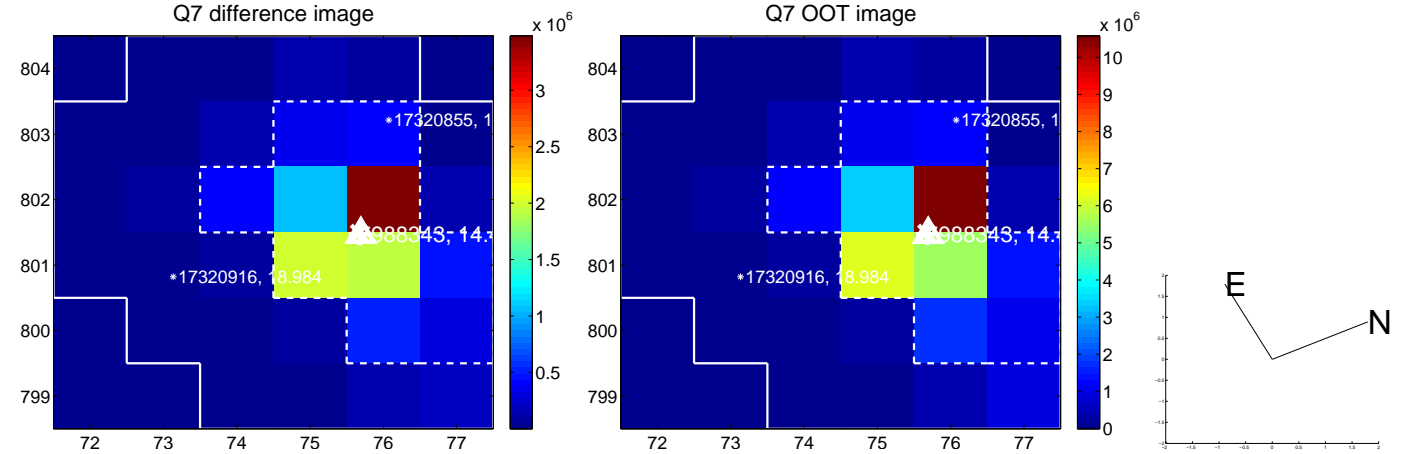
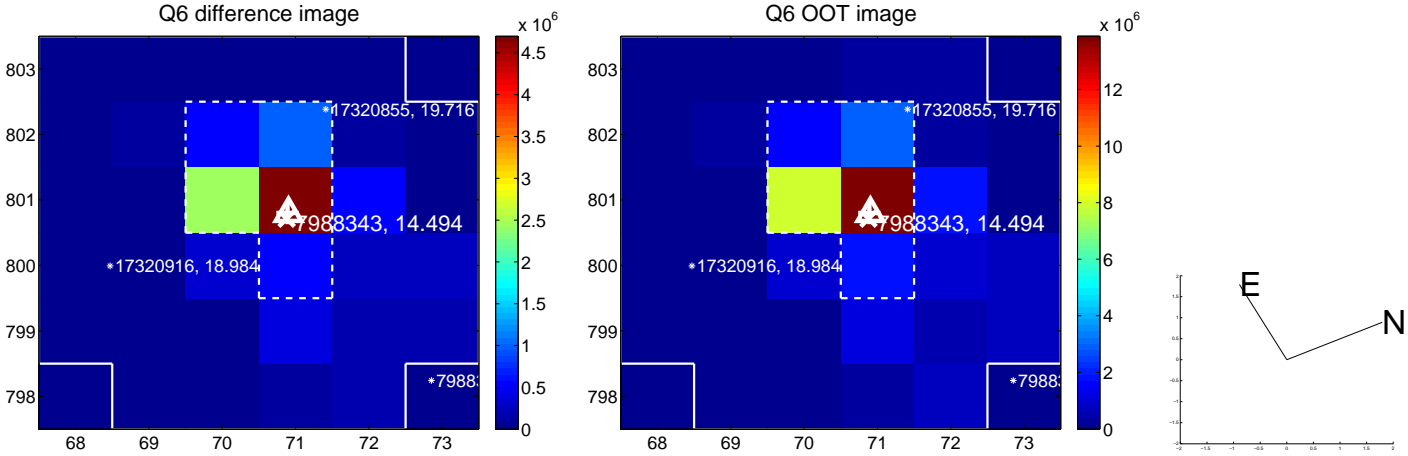
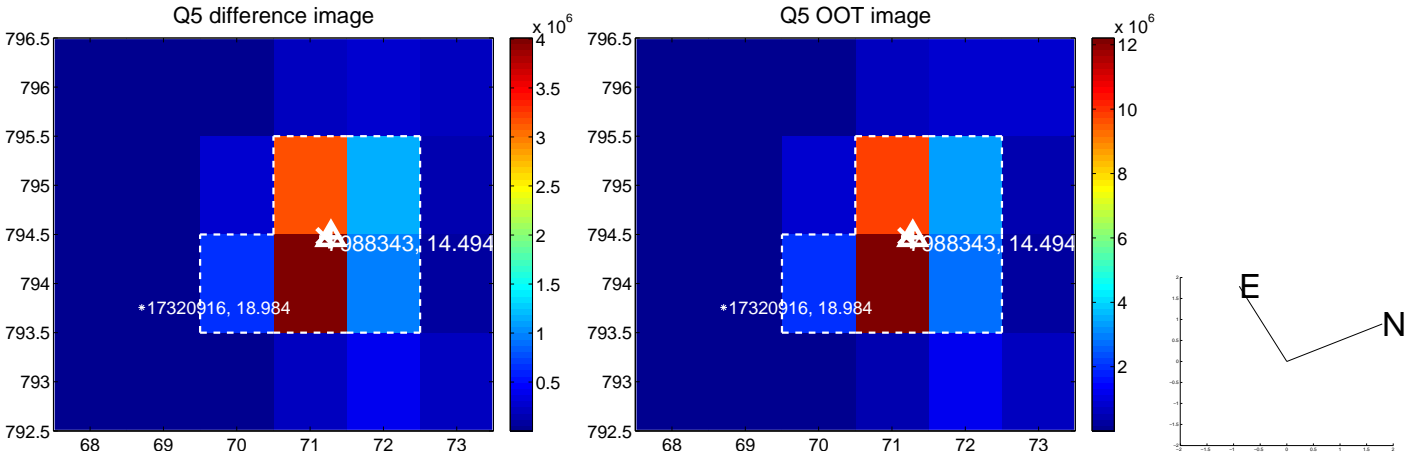


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses:** good quarterly centroid offsets; **Vermillion crosses:** bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

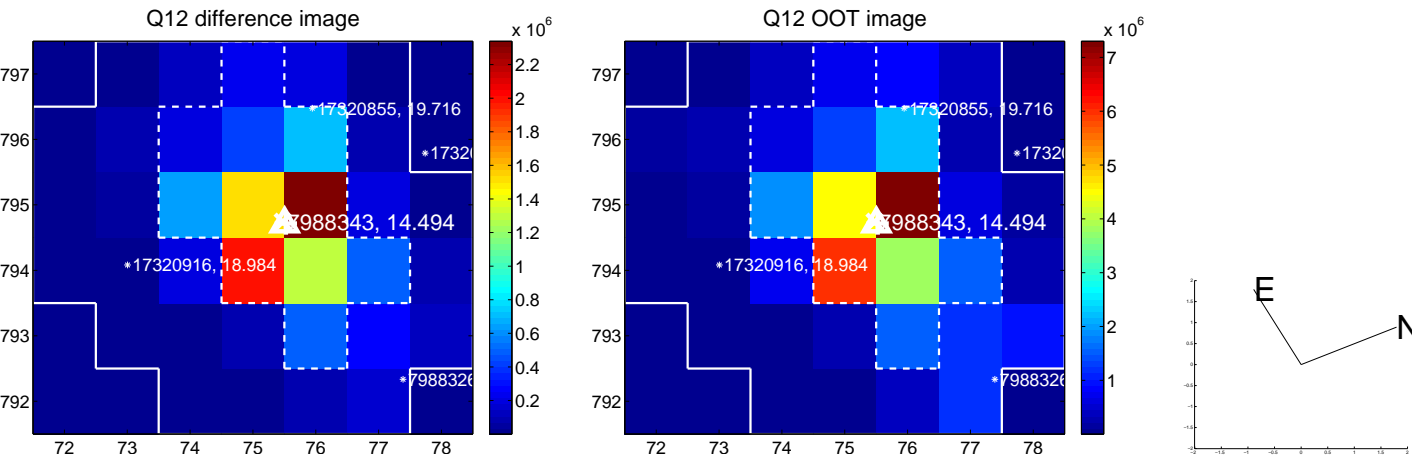
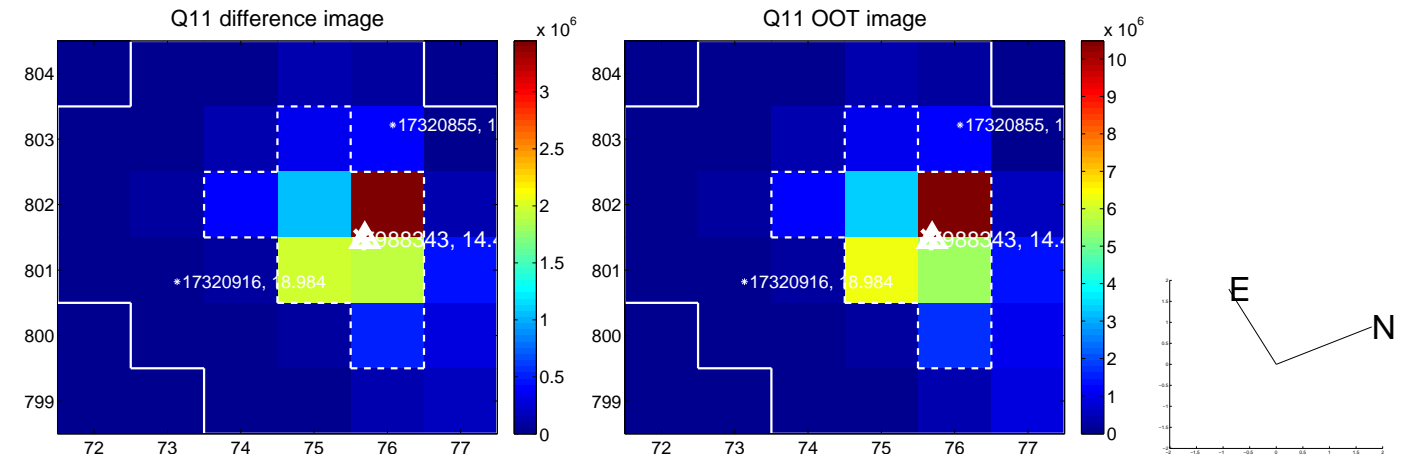
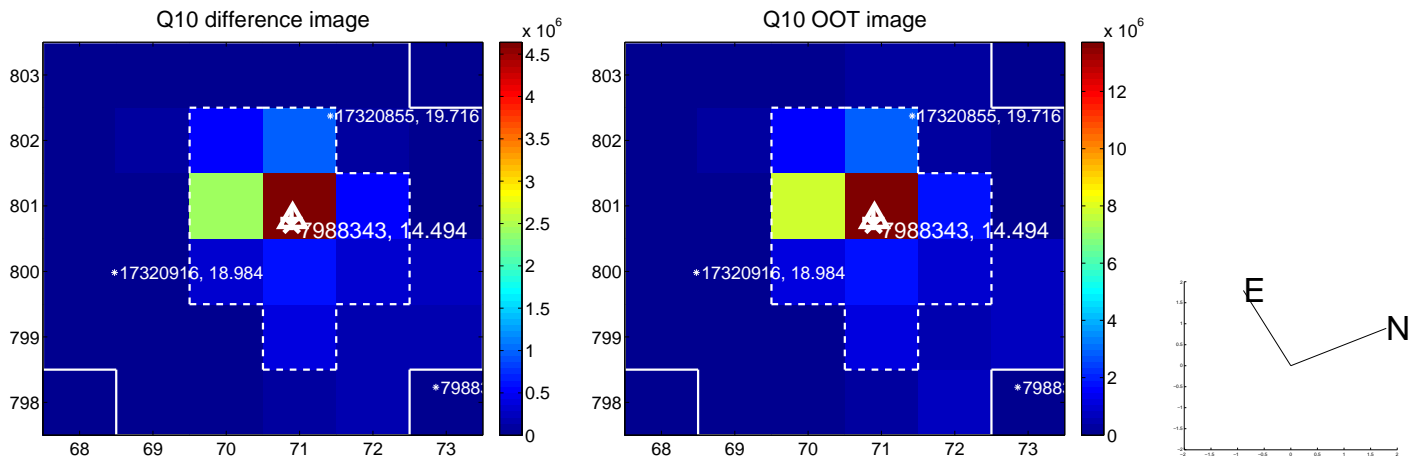
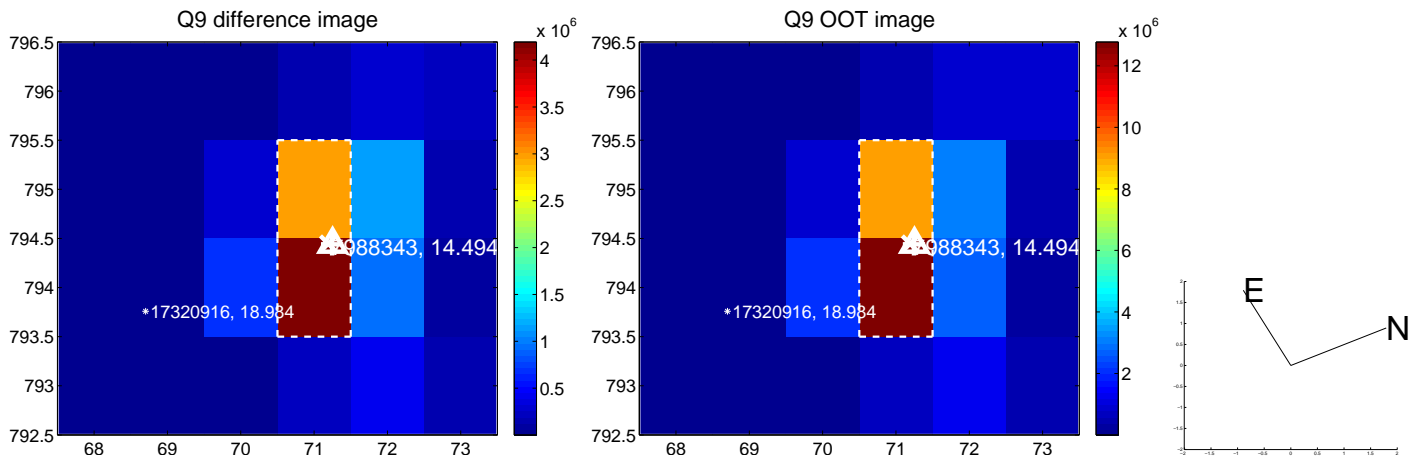
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



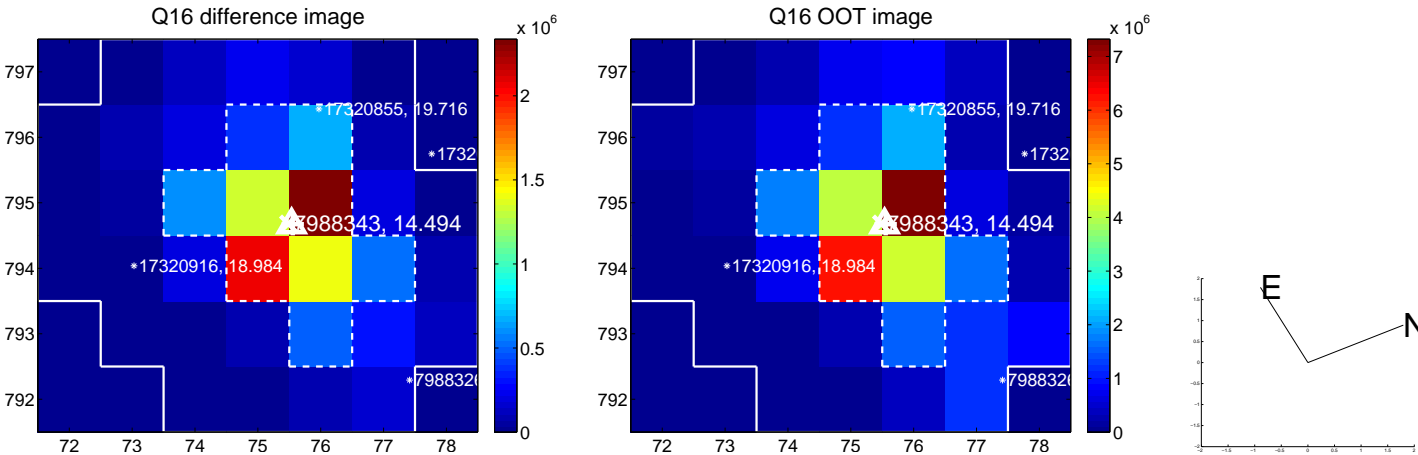
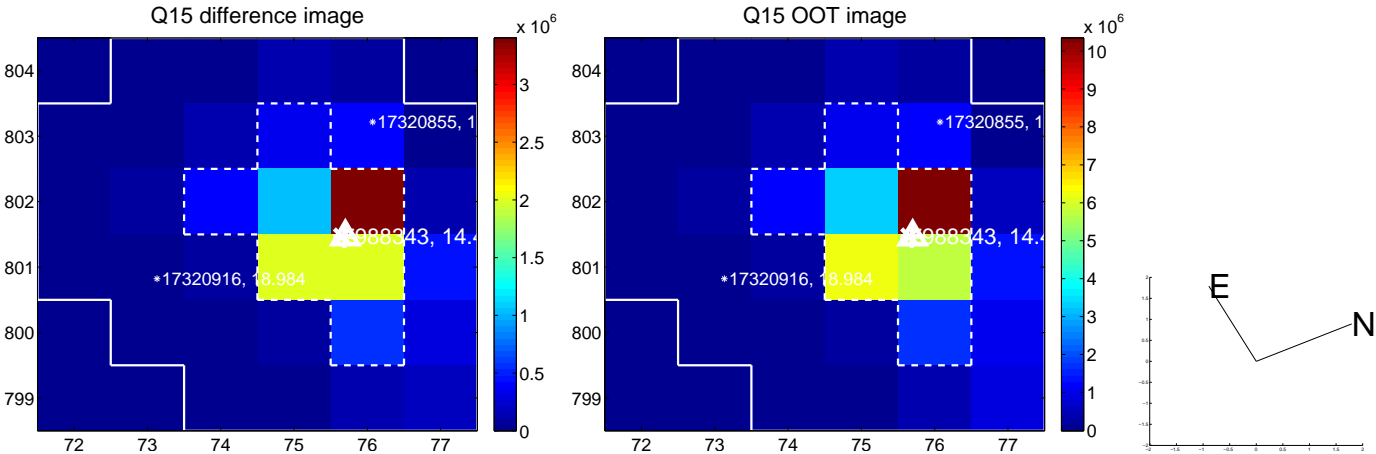
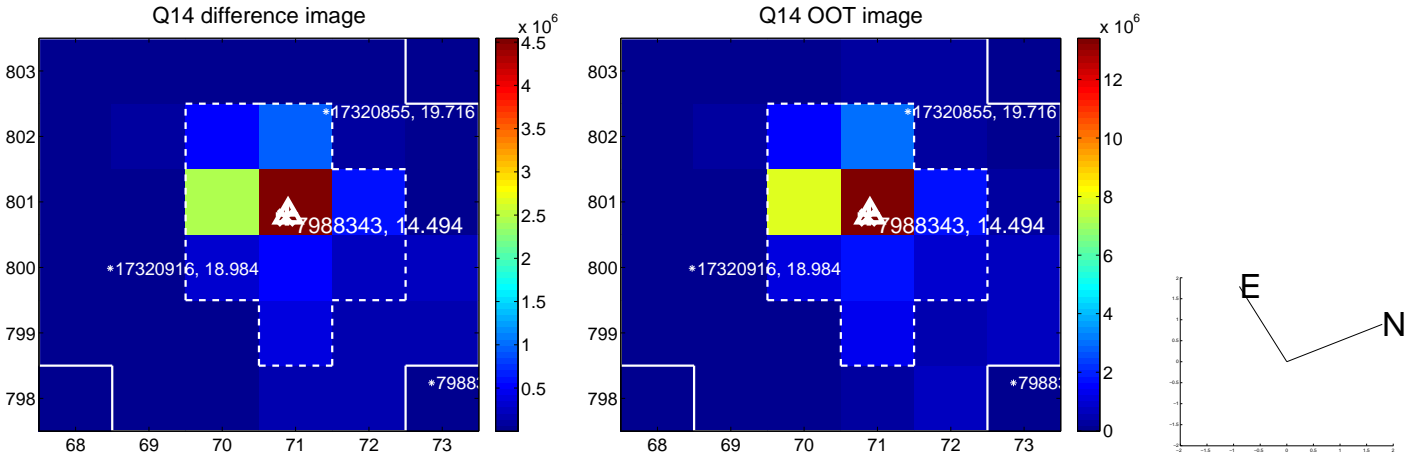
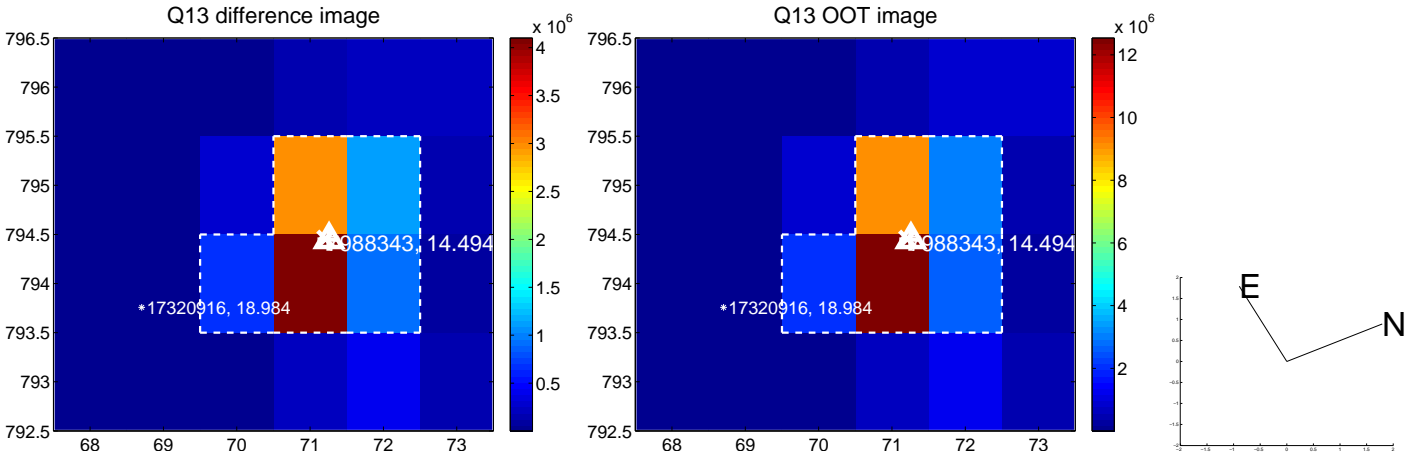
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



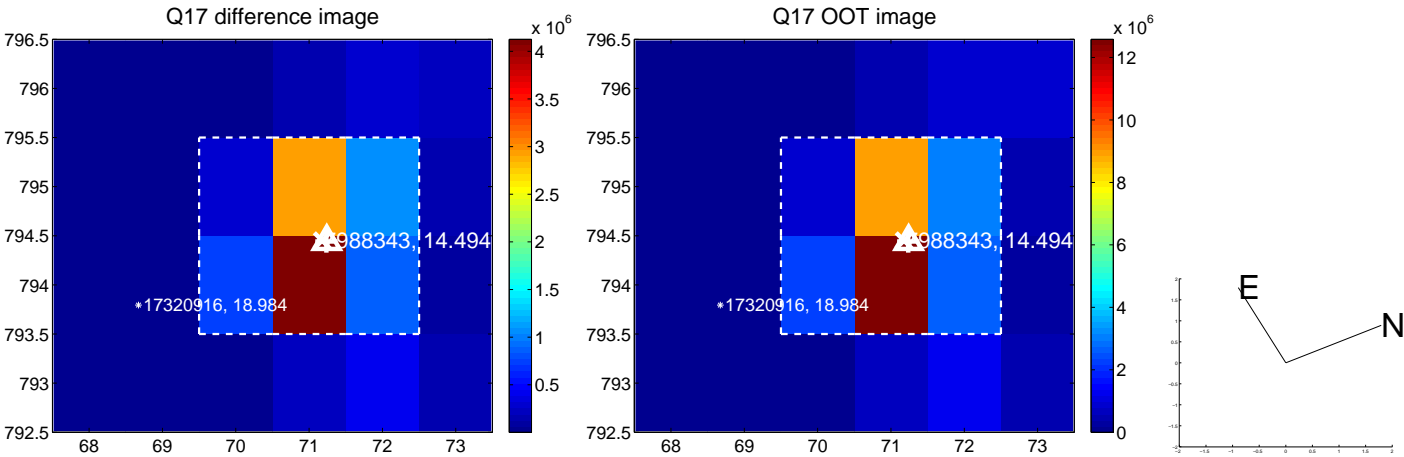
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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.



folded centroid time series figure for this object.

UKIRT Image

Declination

