

KIC 006794857

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})
006794857-01	OBS	No	1.056646	132.172019	9.9	6.632	11.7	10.7	2.63	8402	0.84	44959.94
006794857-02	OBS	No	38.642241	161.549358	121.8	1.561	8.3	7.7	2.63	8402	3.37	370.38

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
006794857-01	OBS	FP	0.00	1	0	0	0	LPP_DV
006794857-02	OBS	FP	0.00	1	0	0	0	TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_FEW_MEAS

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

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

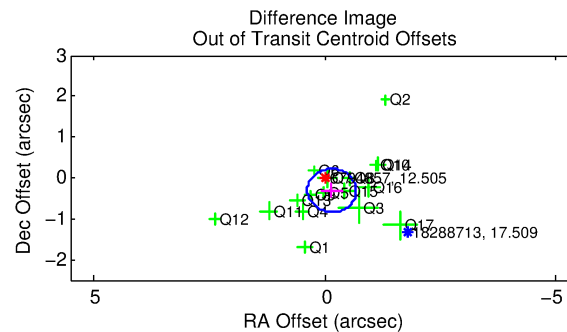
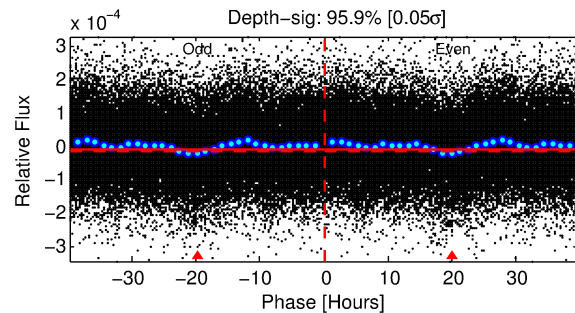
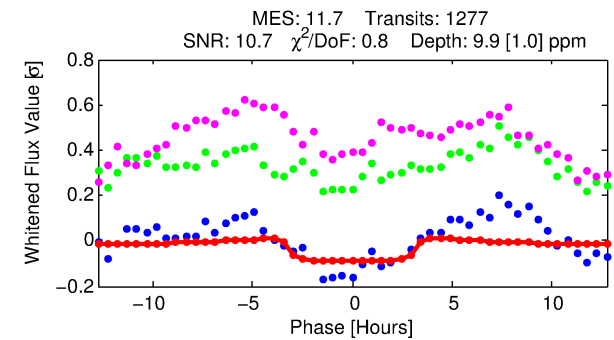
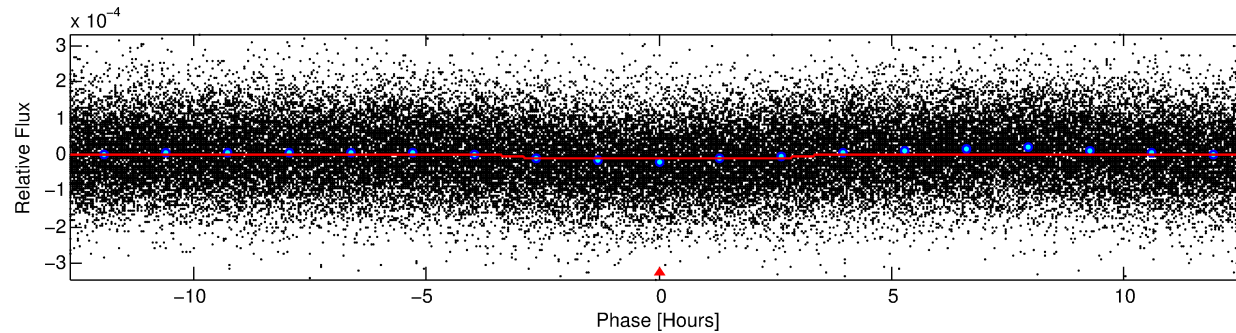
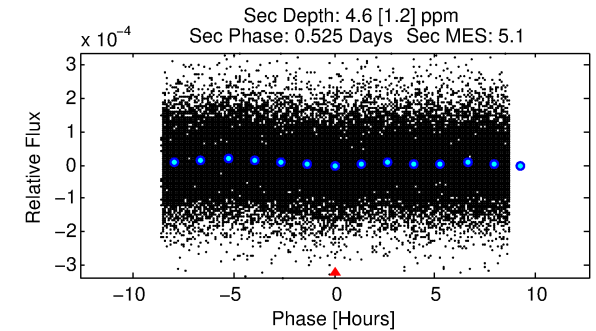
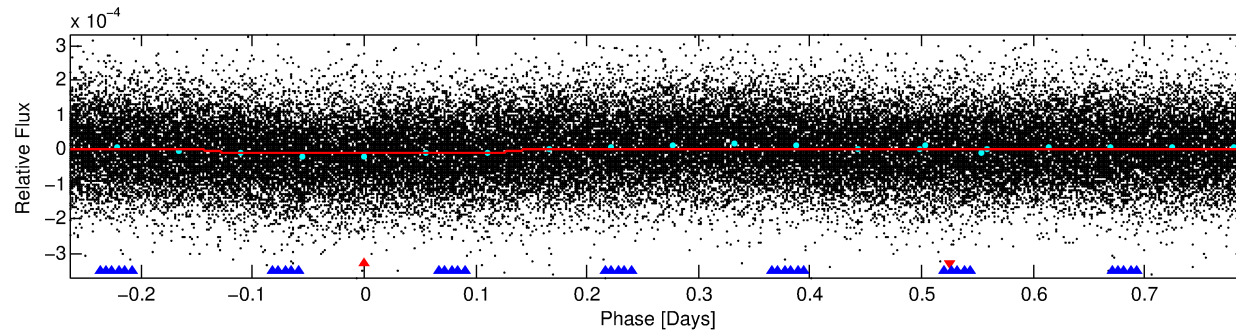
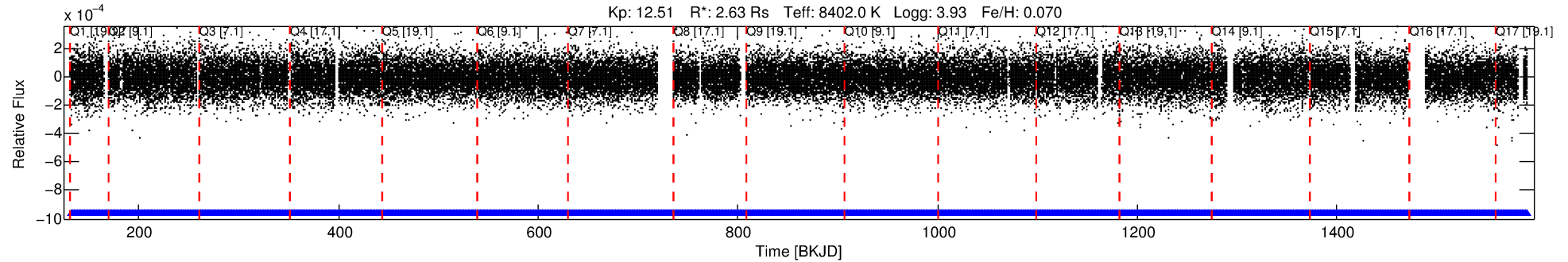
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 006794857-01

No Significant Match Found

DV One-Page Summary

KIC: 6794857 Candidate: 1 of 2 Period: 1.057 d



DV Fit Results:

Period = 1.05665 [0.00001] d
Epoch = 132.1720 [0.0053] BKJD
Rp/R* = 0.0029 [0.0024]
a/R* = 1.37 [3.10]
b = 0.00 [6099.28]
Seff = 44959.94 [23016.34]
Teq = 3713 [475] K
Rp = 0.84 [0.75] Re
a = 0.0262 [0.0083] AU
Ag = 2.47 [4.29] [0.34σ]
Teffp = 7198 [3015] K [1.14σ]

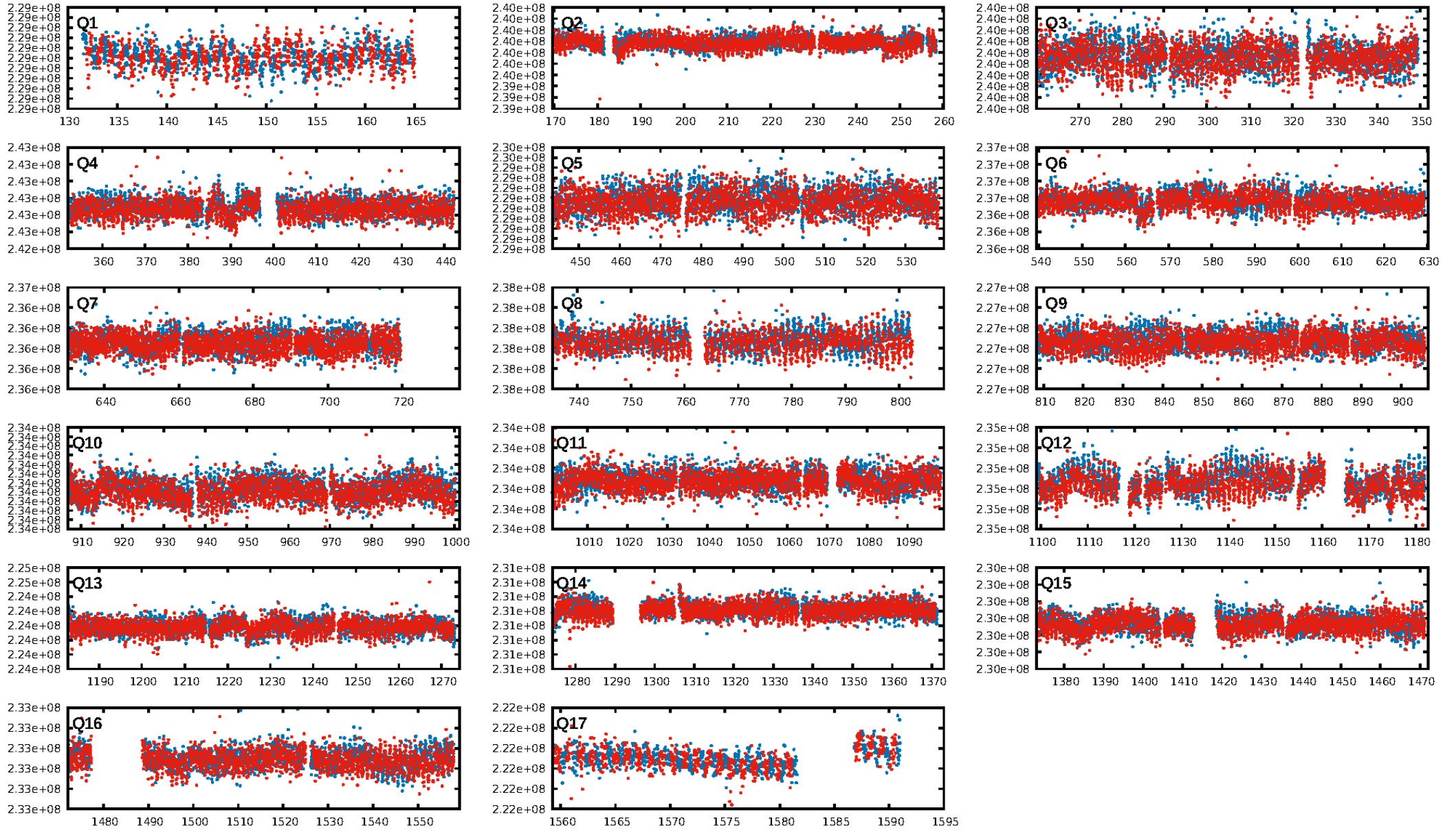
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: 100.0% [132.40σ]
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 1.44e-18
RollingBand-fgt: 1.00 [1220/1220]
GhostDiagnostic-chr: 2.936
Centroid-sig: 0.0%
Centroid-so: 2.426 arcsec [2.70σ]
OotOffset-rm: 0.345 arcsec [1.96σ]
KicOffset-st: 4/4/4/5 [17]
KicOffset-st: 4/4/4/5 [17]
DiffImageQuality-fgm: 1.00 [17/17]
DiffImageOverlap-fno: 1.00 [17/17]

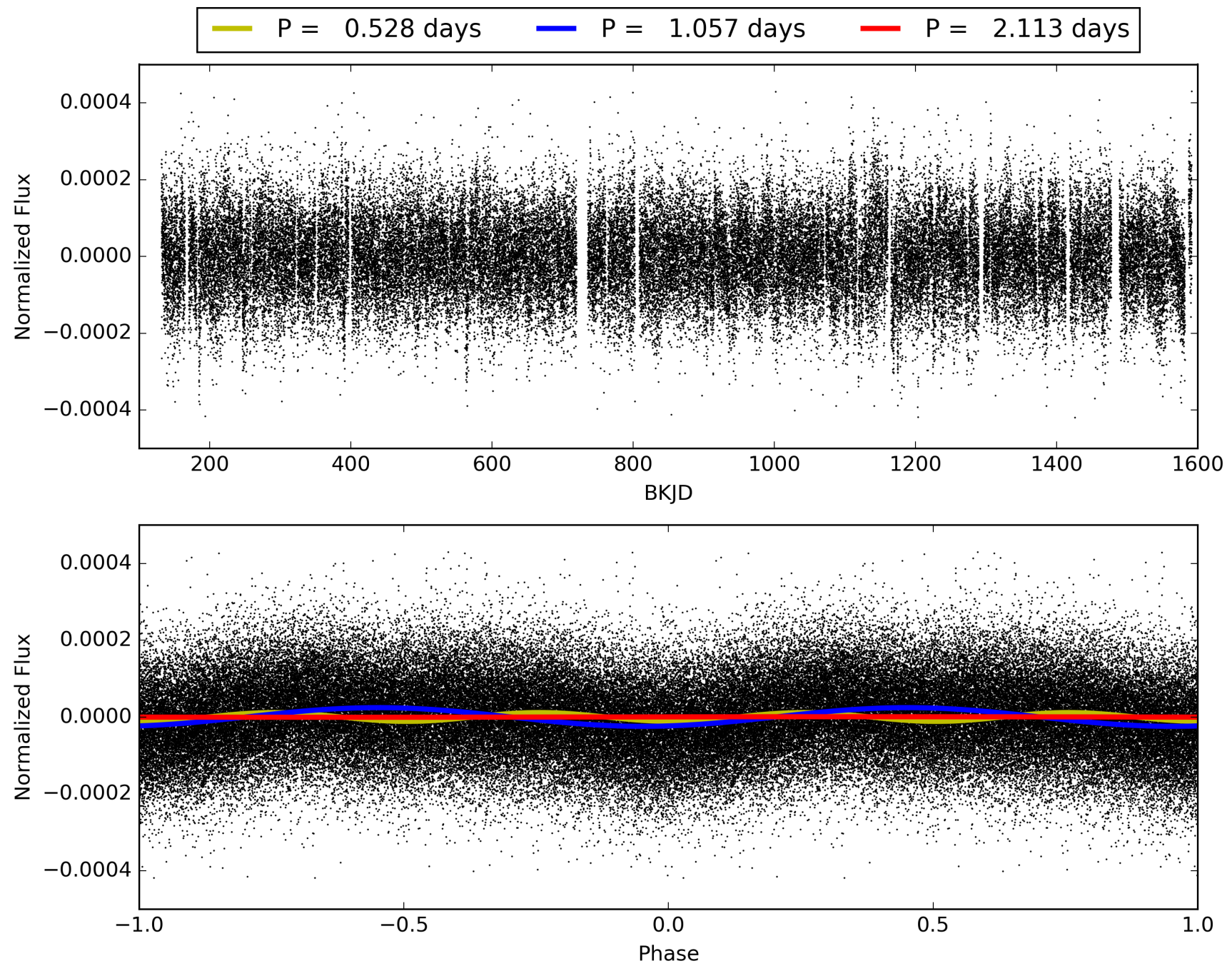
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 20:37:31 Z

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

TCE 006794857-01, PDC Light Curves

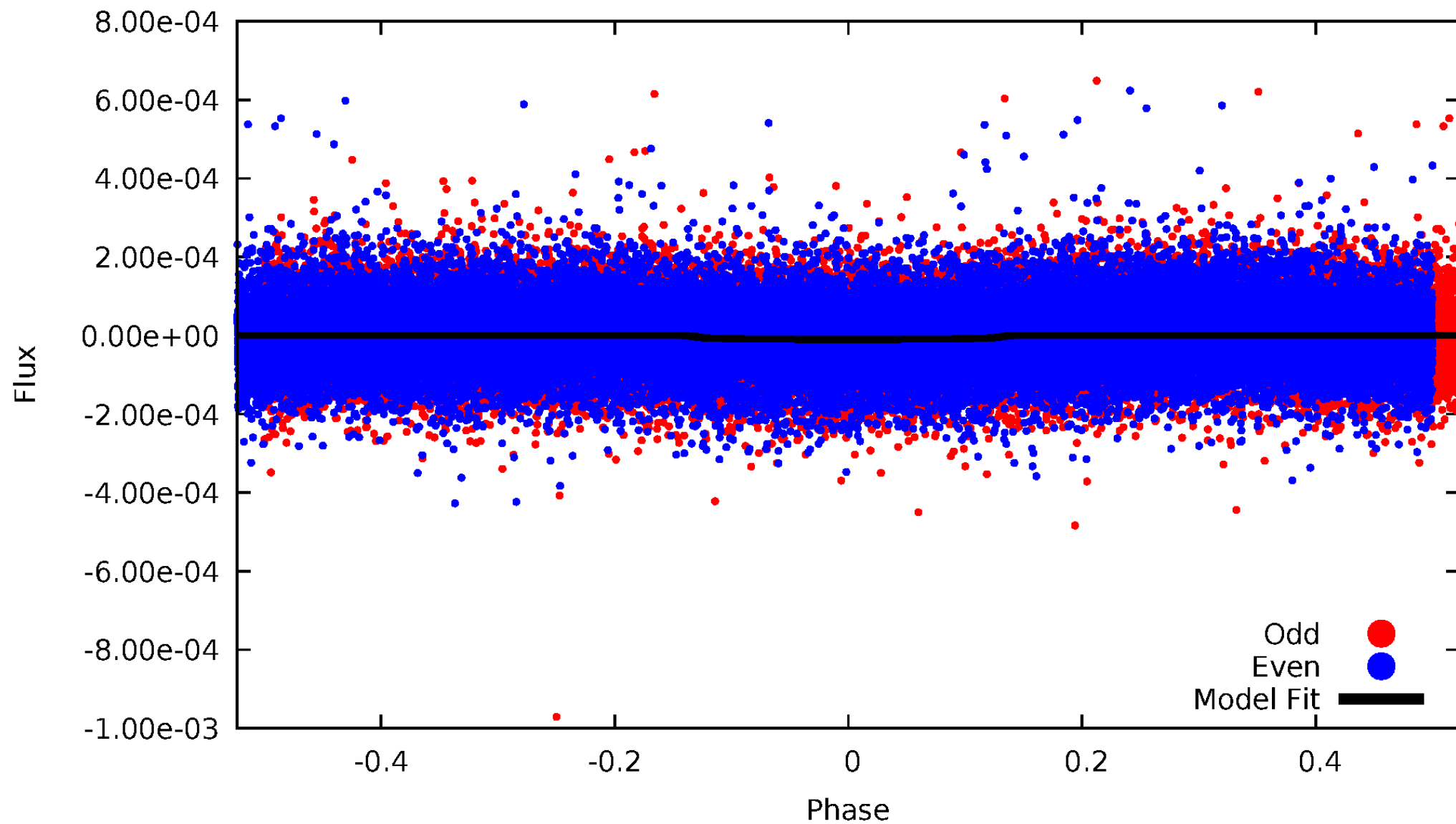


TCE 006794857-01



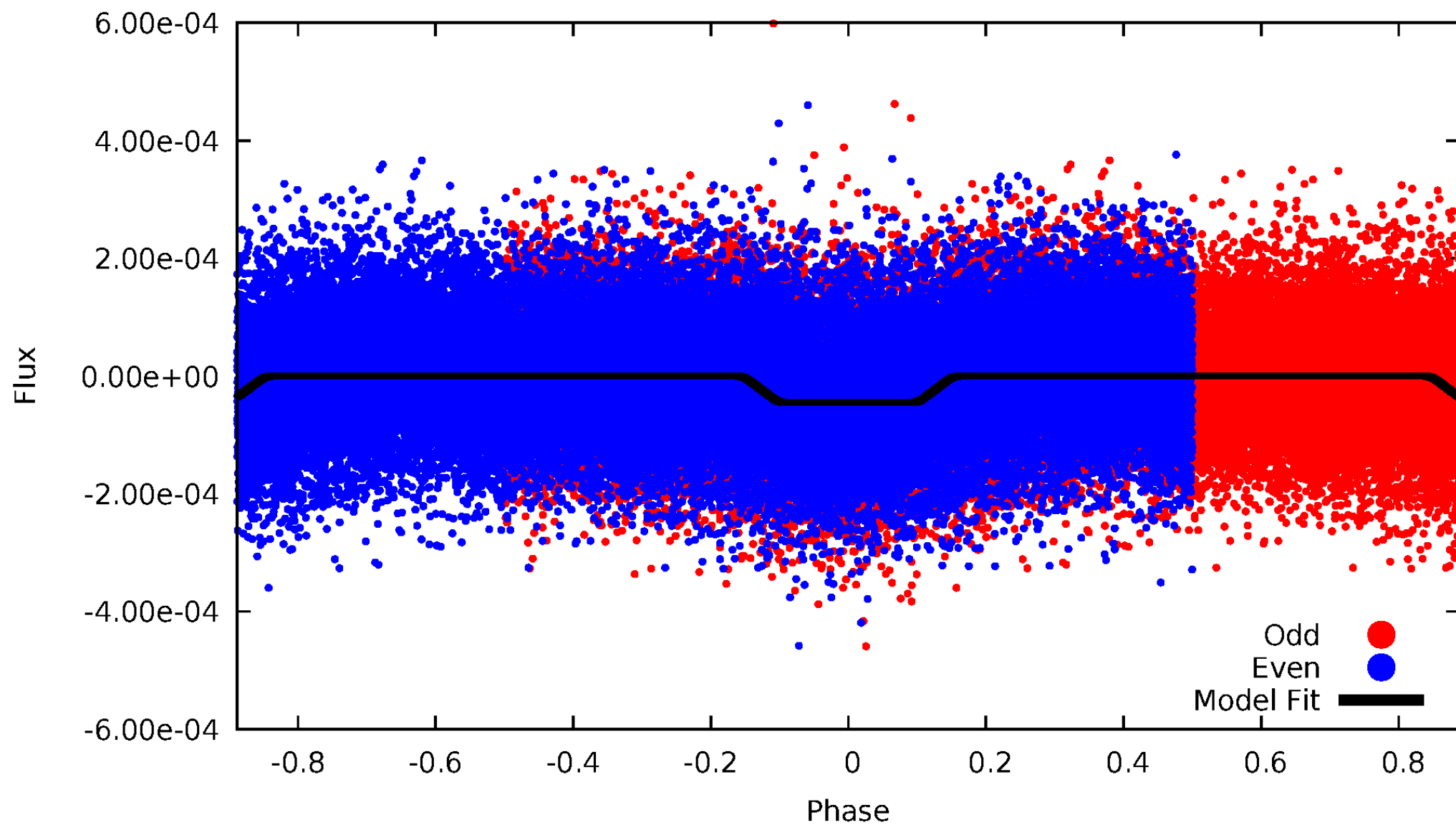
DV Odd/Even

TCE 006794857-01



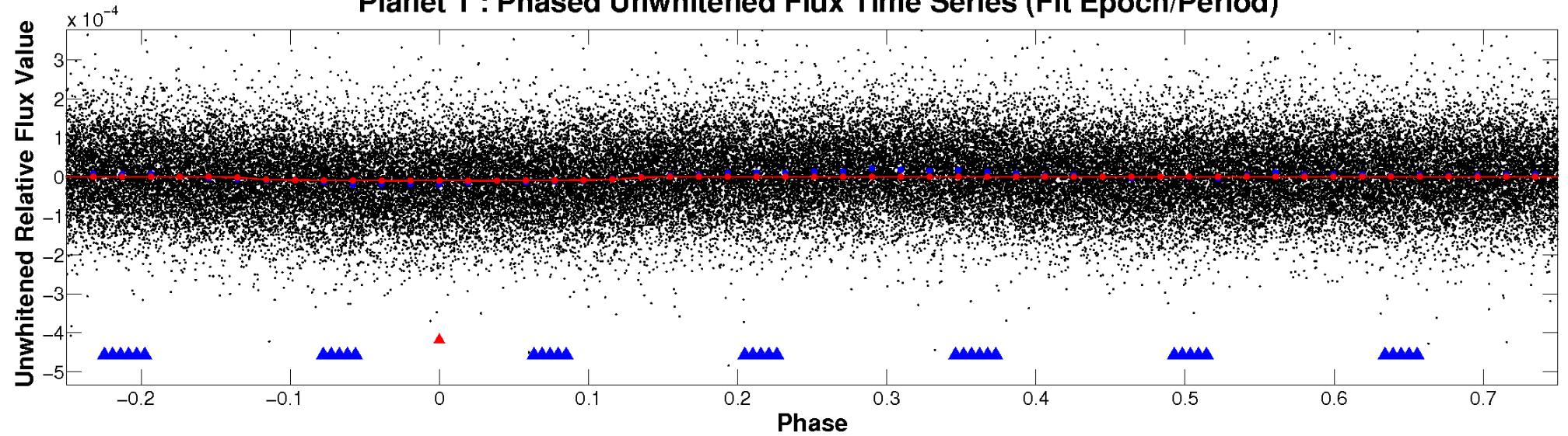
ALT Odd/Even

TCE 006794857-01

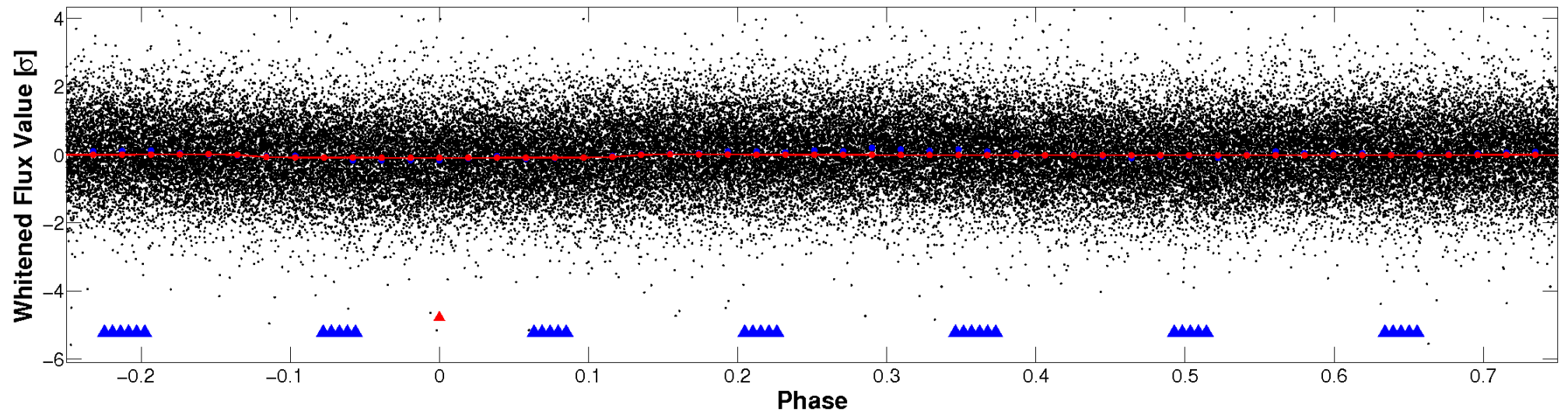


Non-Whitened Vs. Whitened Light Curve

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

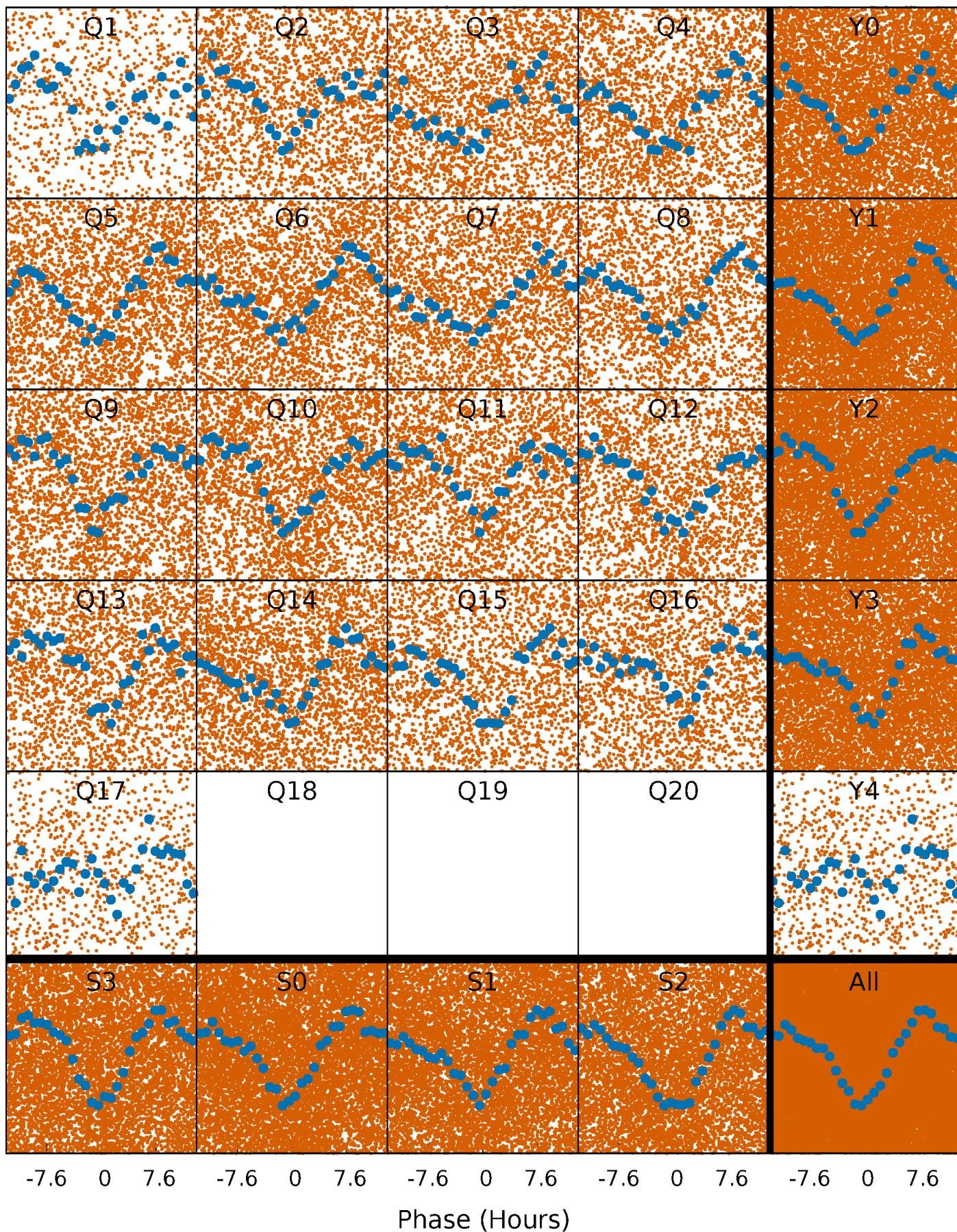


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



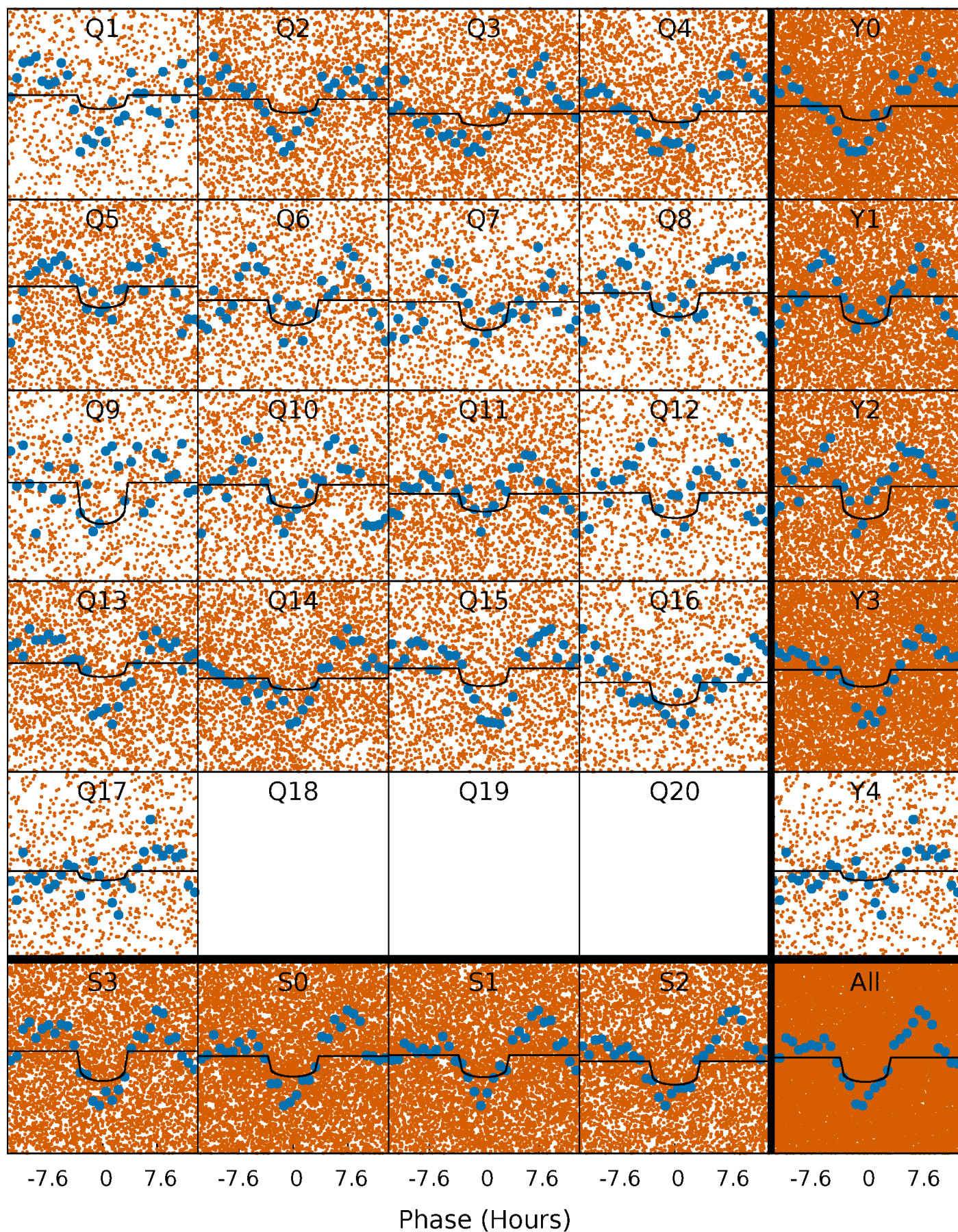
PDC Quarter-Phased Transit Curves

TCE 006794857-01 P= 1.056646 Days $T_0=132.172019$ (BKJD)



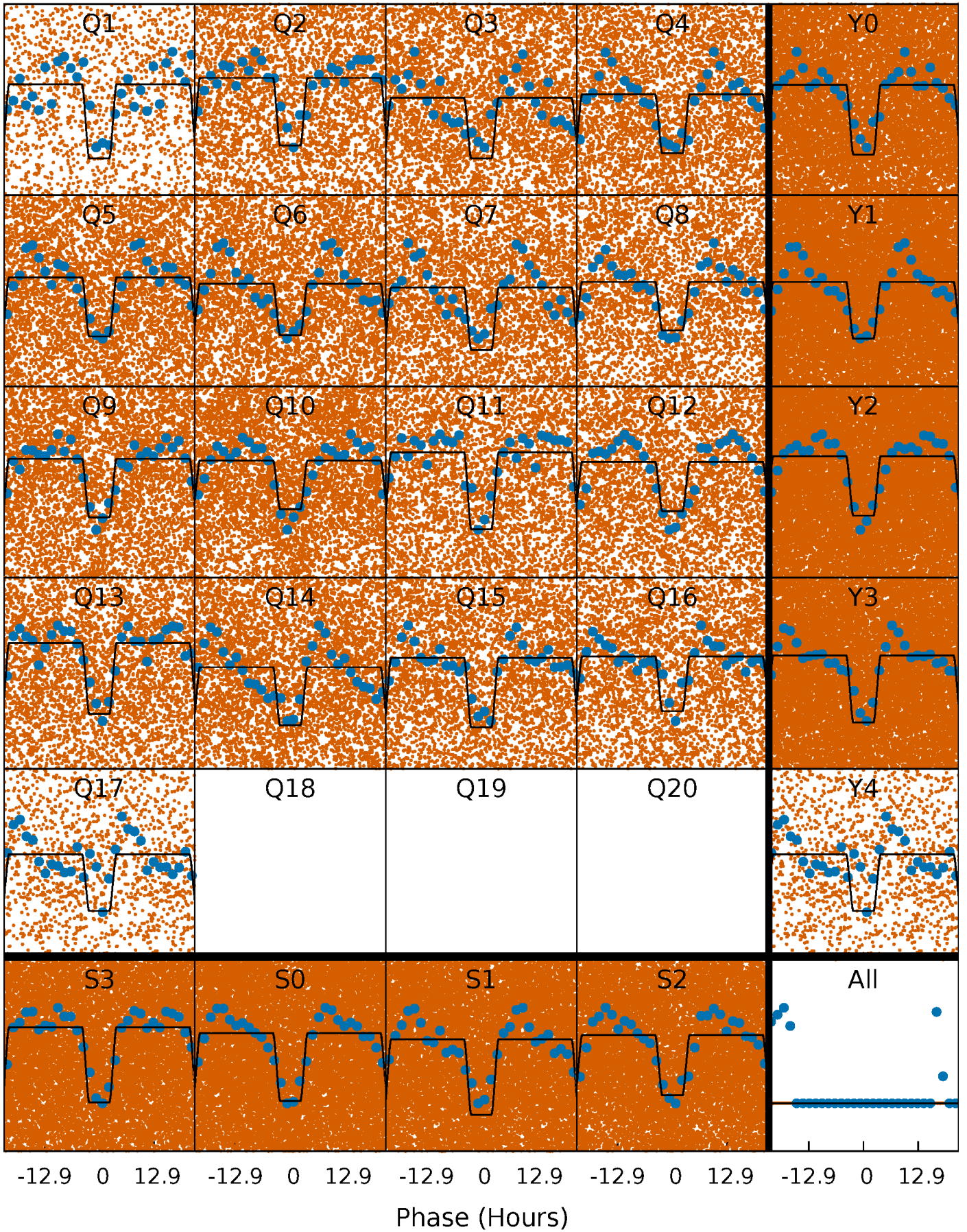
DV Quarter-Phased Transit Curves

TCE 006794857-01 P= 1.056646 Days $T_0=132.172019$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

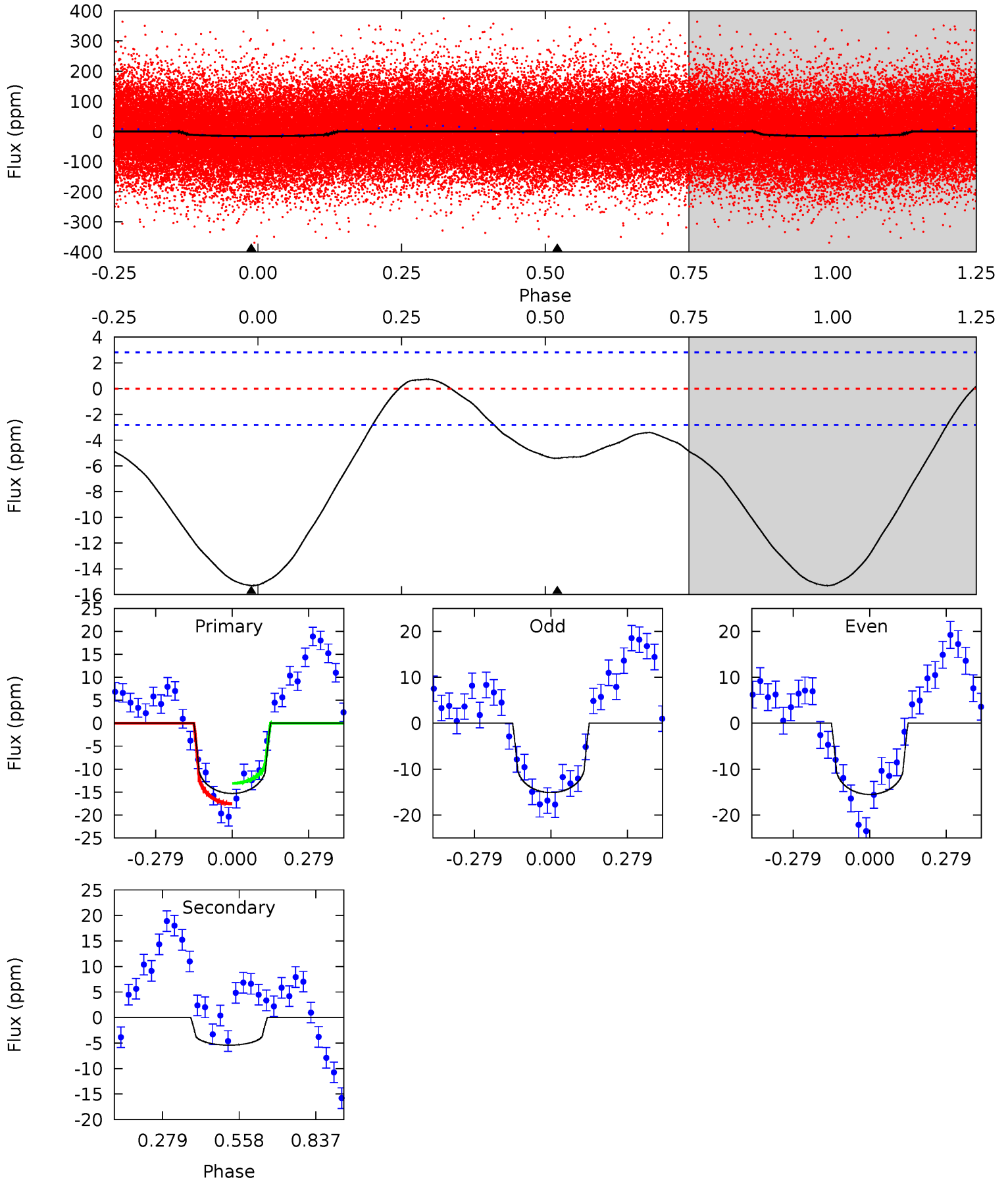
TCE 006794857-01 P= 1.056731 Days $T_0=132.092215$ (BKJD)



DV Model-Shift Uniqueness Test

006794857-01, P = 1.056646 Days, E = 131.115373 Days

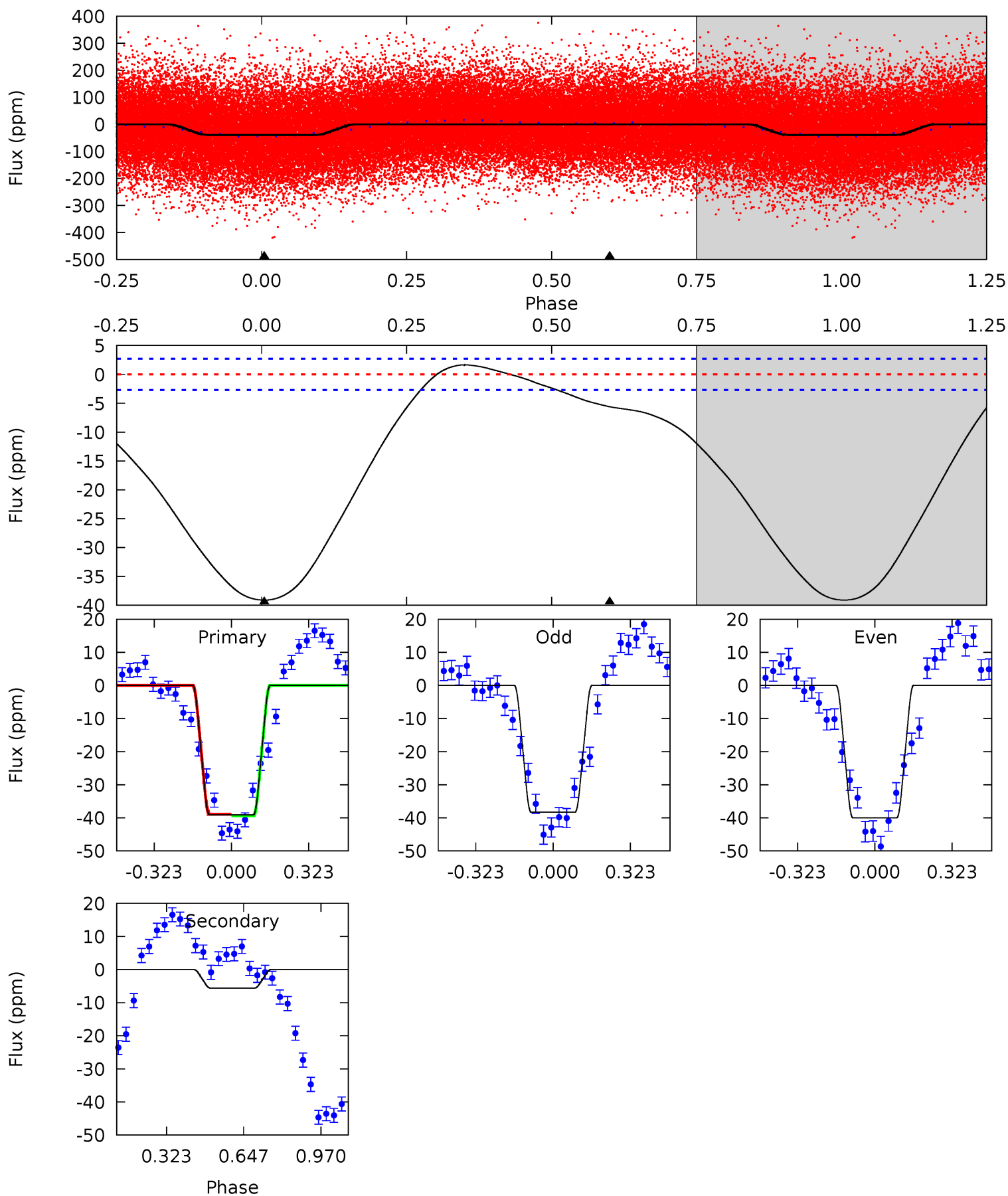
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
23.6	8.35	0	0	4.34	1.08	3.14	23.6	23.6	8.35	8.35	0.30	1.12	0.05	3.46



Alt Model-Shift Uniqueness Test

006794857-01, P = 1.056731 Days, E = 131.035484 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
61.9	8.88	0	0	4.31	0.99	3.45	61.9	61.9	8.88	8.88	1.33	1.07	0.04	0.38



Stellar Parameters For KIC 006794857

	$T_{\text{eff}} (K)$	$\log(g)$	$[\text{Fe}/\text{H}]$	$R (R_{\odot})$	$M (M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	8402^{+232}_{-364}	$3.930^{+0.273}_{-0.136}$	$0.070^{+0.250}_{-0.550}$	$2.627^{+0.624}_{-0.936}$	$2.140^{+0.348}_{-0.566}$	$0.166^{+0.299}_{-0.066}$
	+3%/-4%	+7%/-3%	+357%/-786%	+24%/-36%	+16%/-26%	+180%/-40%
Source	KIC0	KIC0	KIC0	DSEP		

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

Secondary Eclipse Parameters for KIC 006794857-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-5 ± 1	$0.88^{+0.67}_{-0.55}$	5097^{+370}_{-462}	6576^{+6748}_{-1851}	$2.491^{+17.574}_{-1.654}$
Alt.	-6 ± 1	$1.82^{+0.82}_{-0.70}$	5089^{+406}_{-402}	4308^{+1440}_{-2065}	$0.640^{+1.001}_{-0.338}$

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

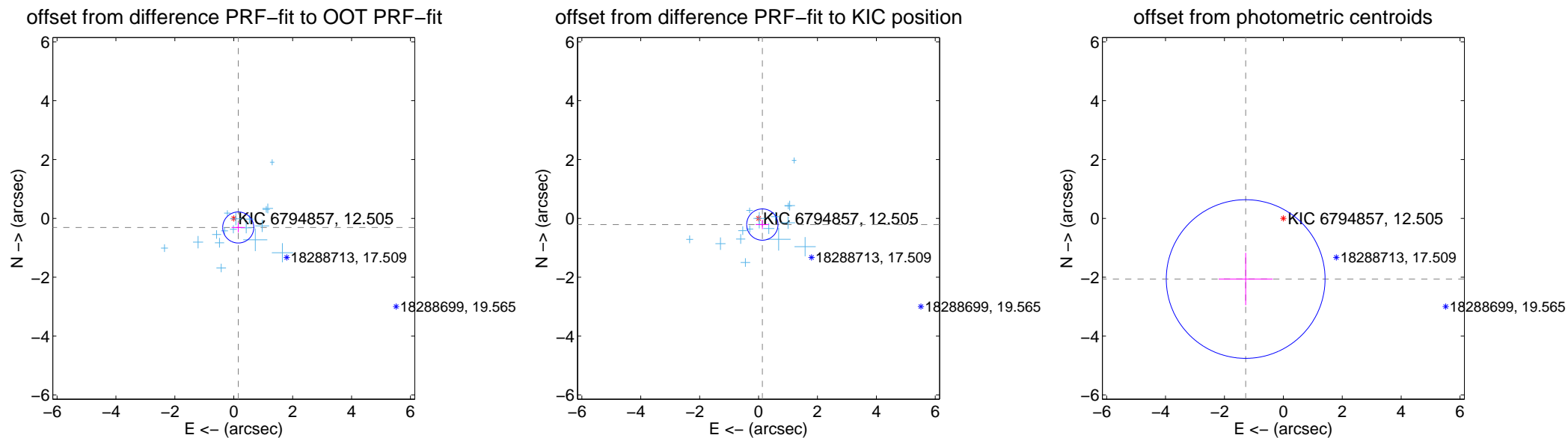
DV Centroid Data

Supplemental centroid analysis for 006794857-01. Kepler magnitude: 12.51. Transit SNR 10.68

There are 17 quarters with good PRF difference image offsets

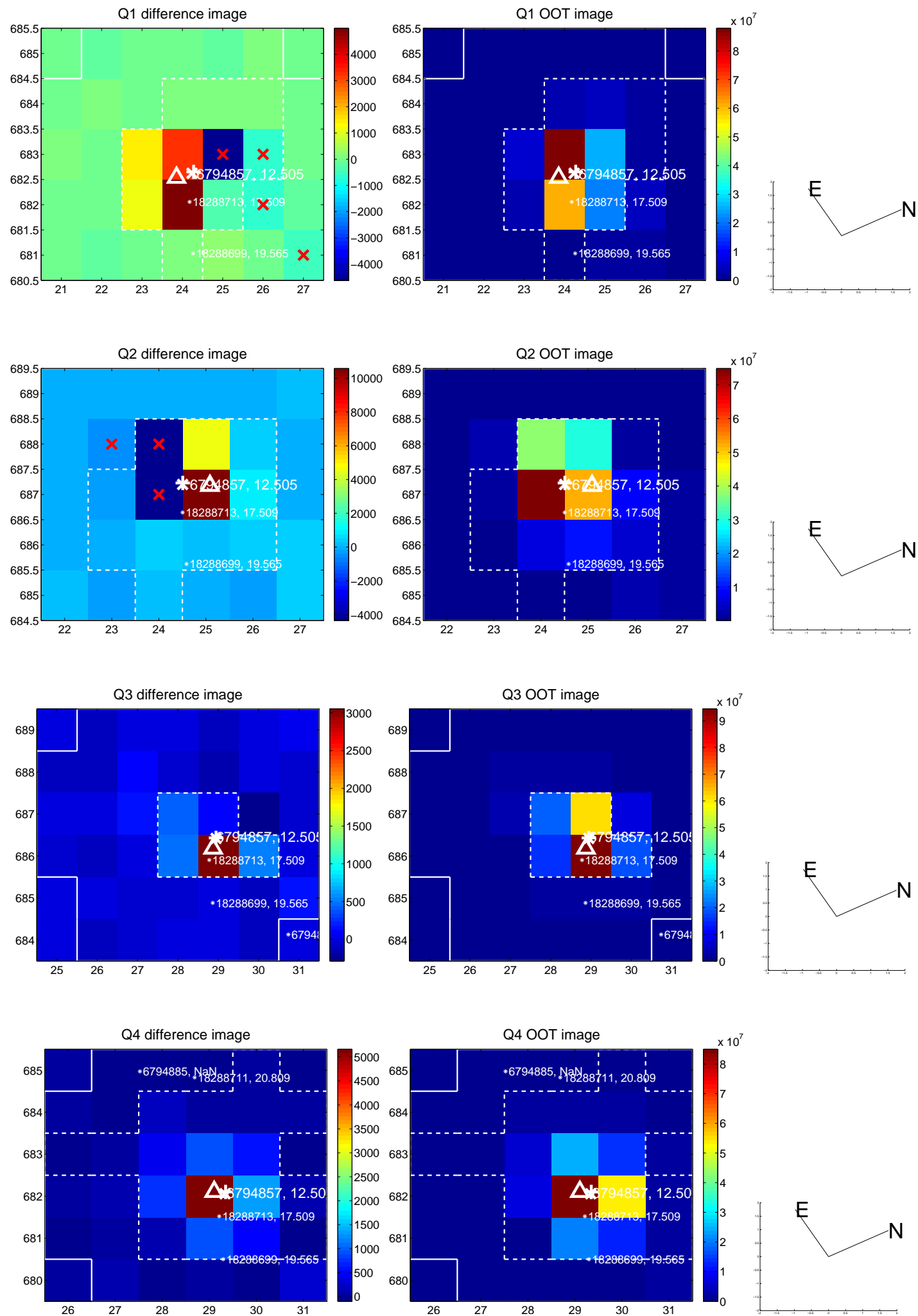
The direct PRF centroid is offset from the target star catalog position by about 0.22 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.345 ± 0.176	1.96	-0.152 ± 0.227	-0.309 ± 0.161
PRF-fit source offset from KIC position	0.247 ± 0.177	1.39	-0.129 ± 0.225	-0.210 ± 0.155
photometric centroid source offset	2.43 ± 0.90	2.70	1.28 ± 0.92	-2.06 ± 0.89

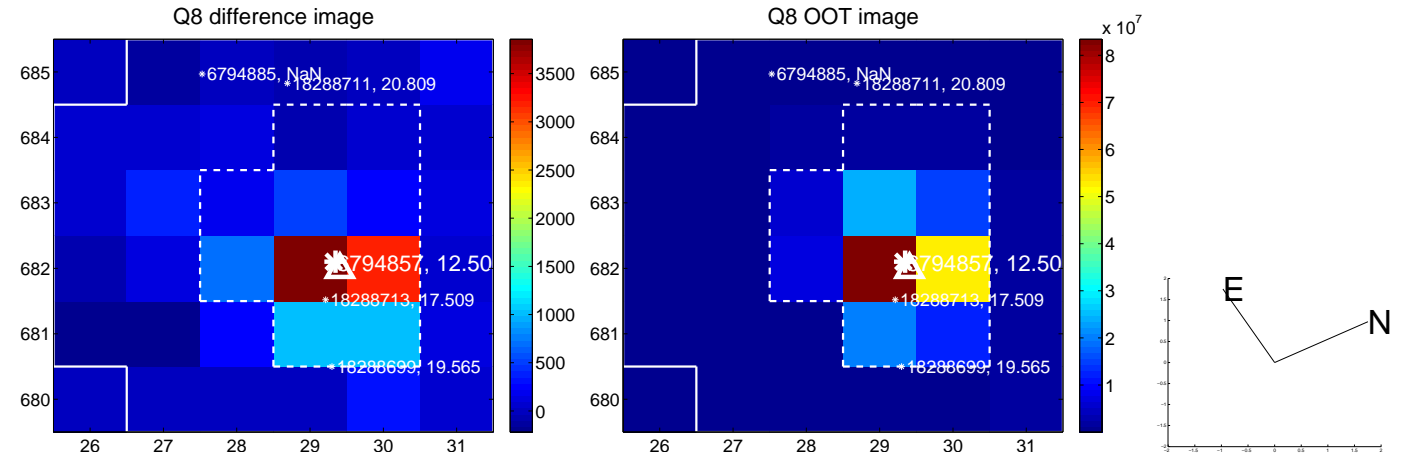
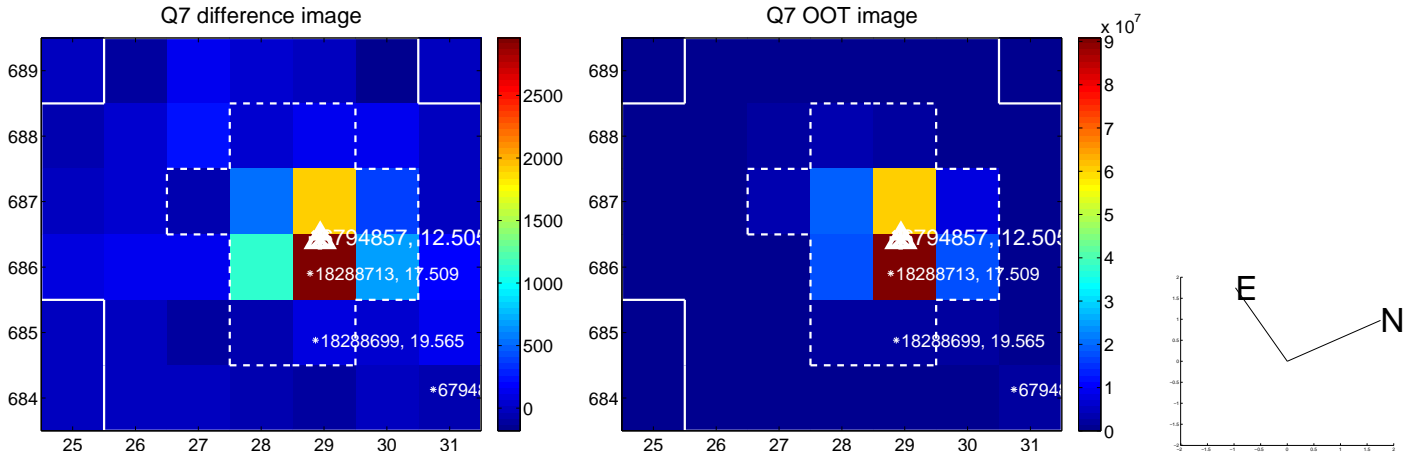
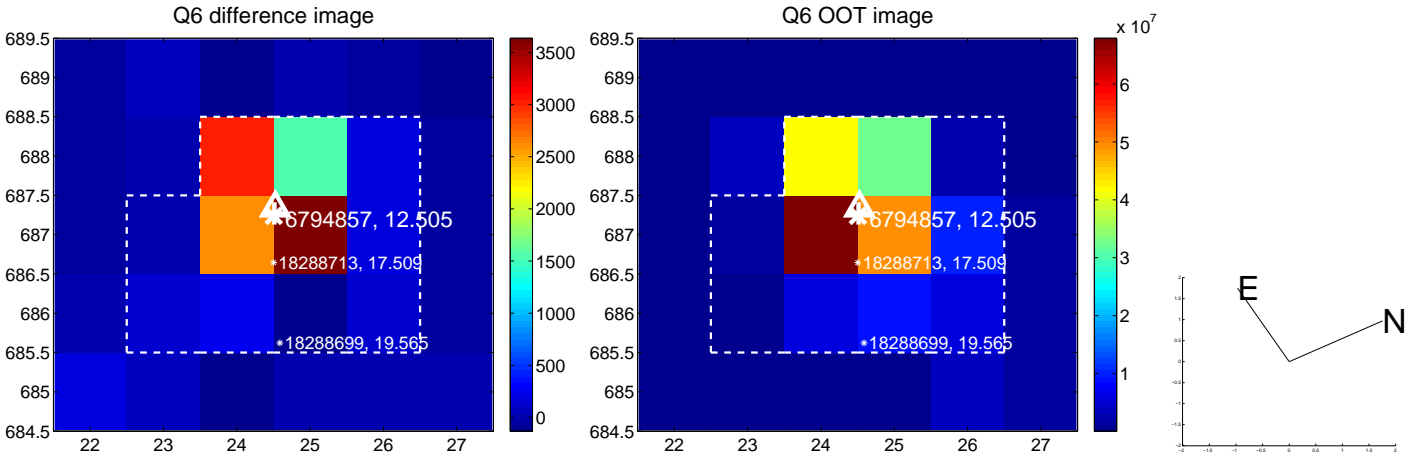
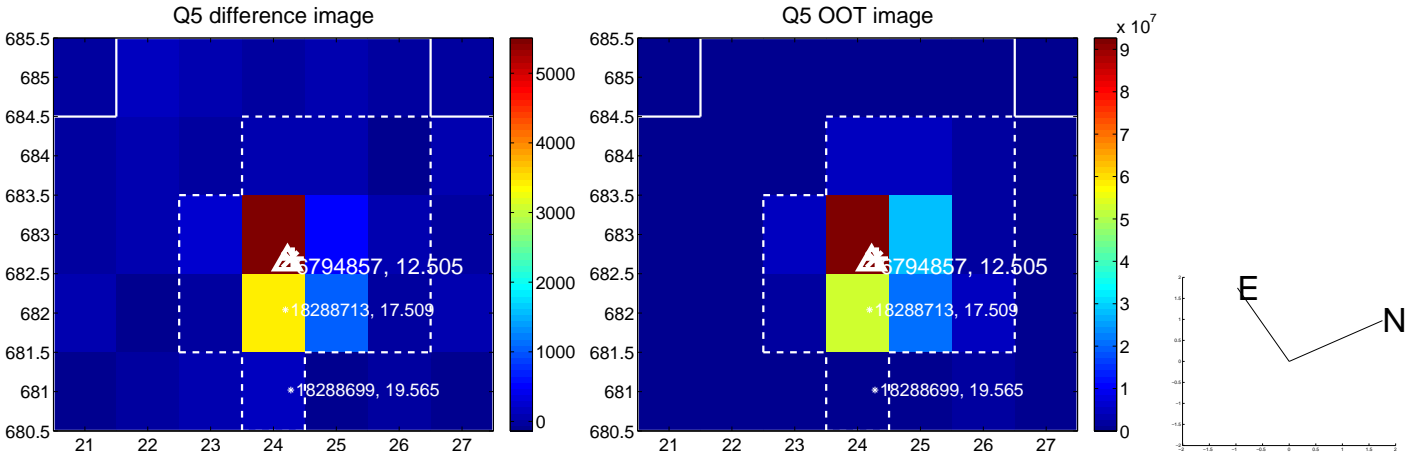


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets**; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

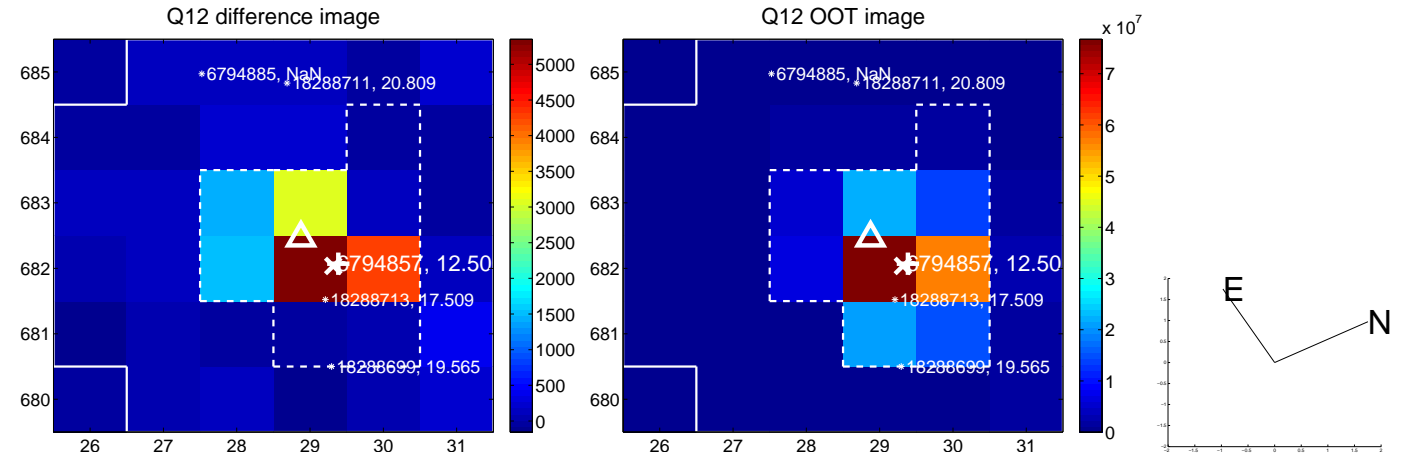
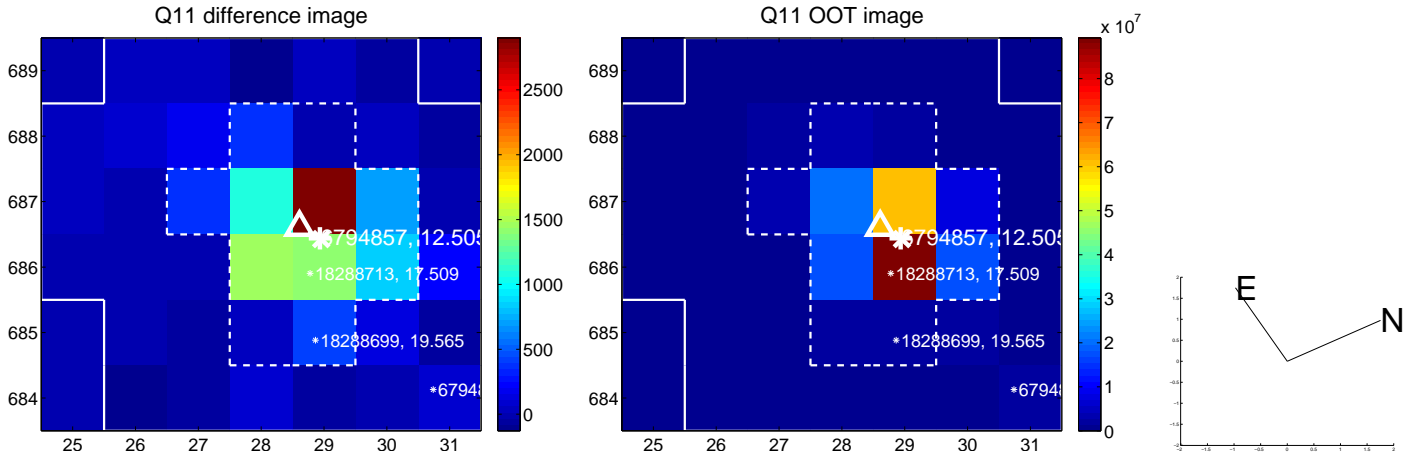
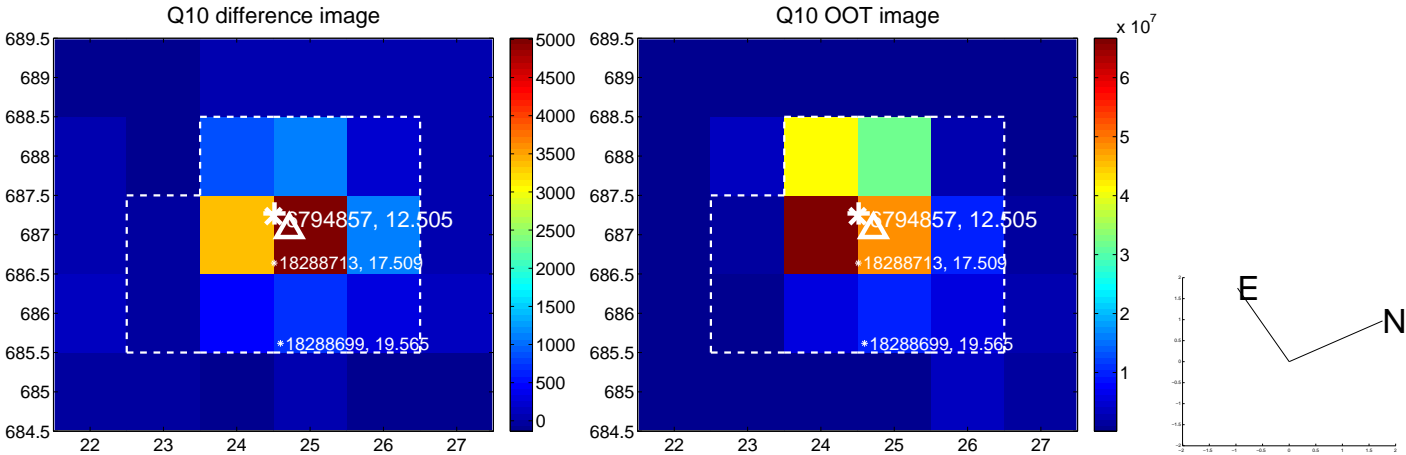
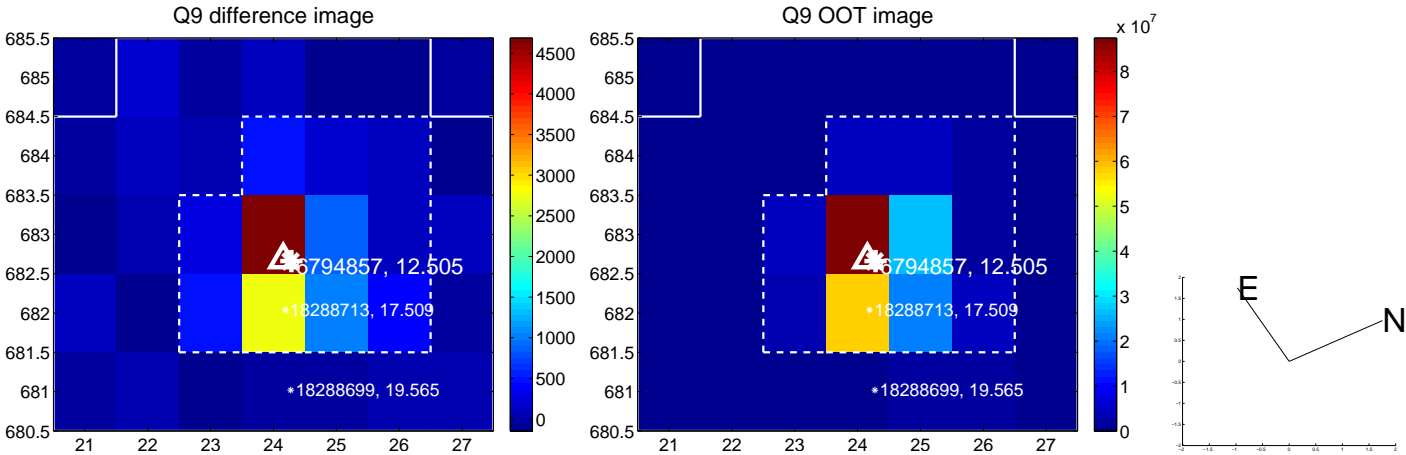
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



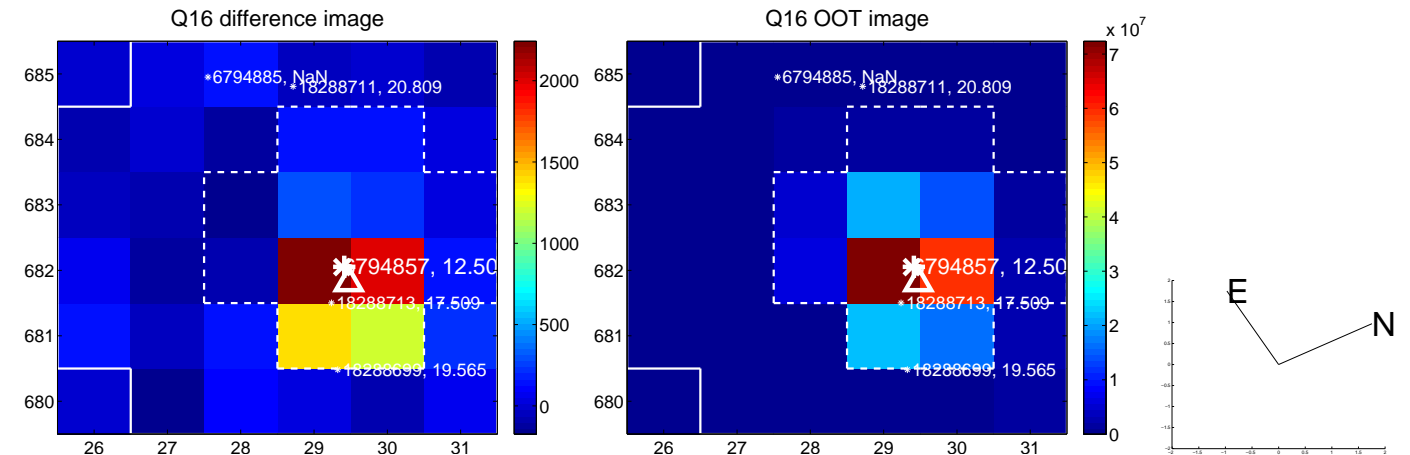
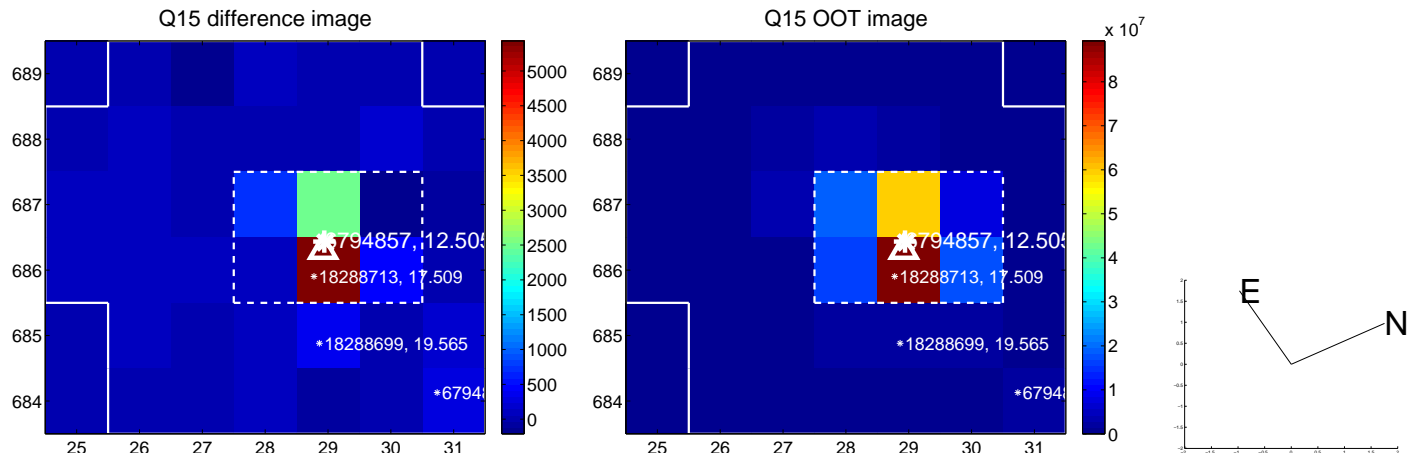
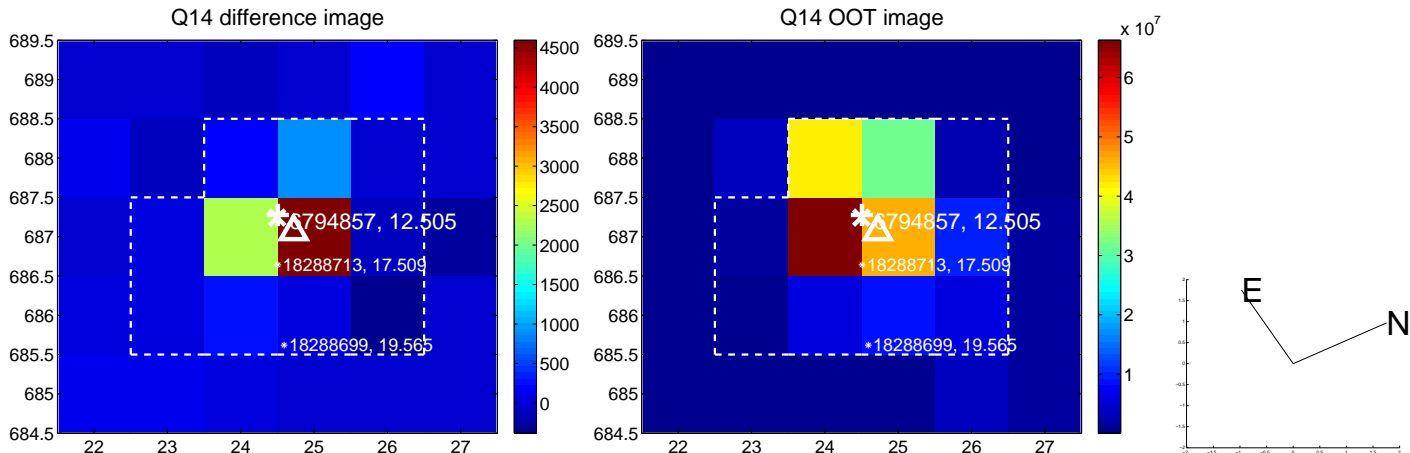
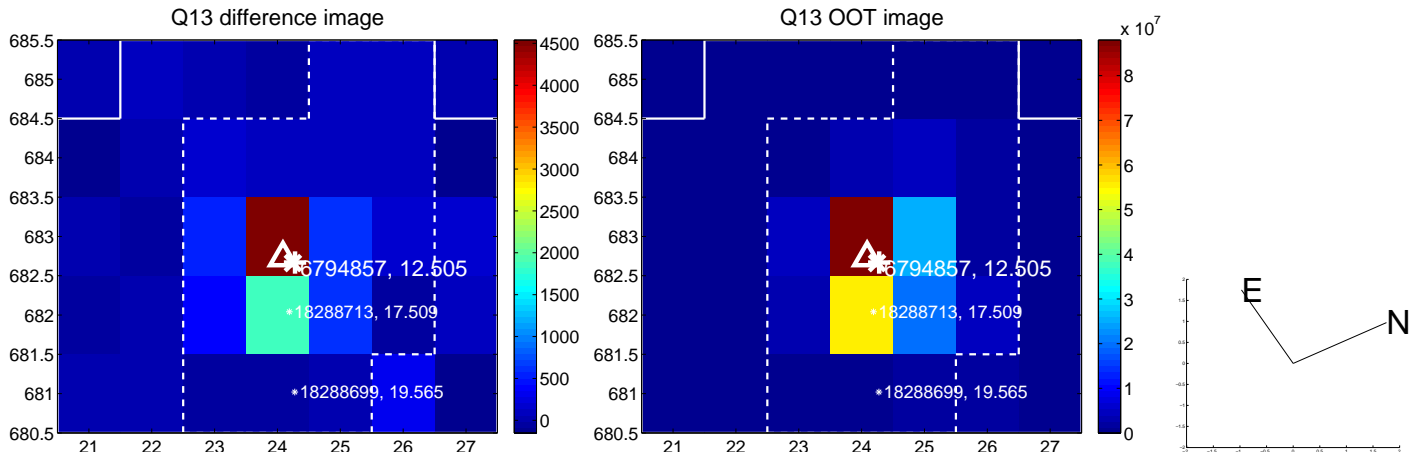
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



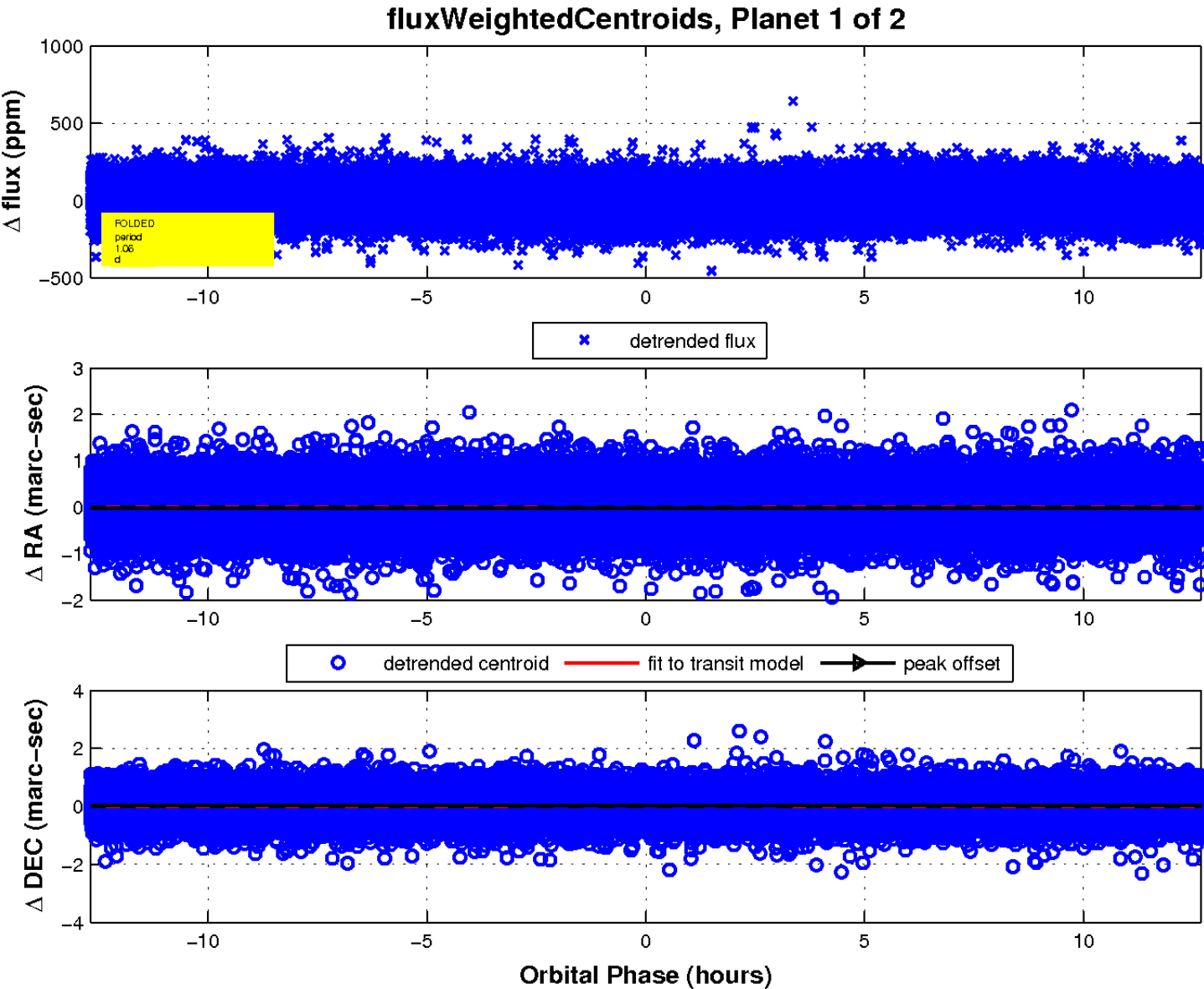
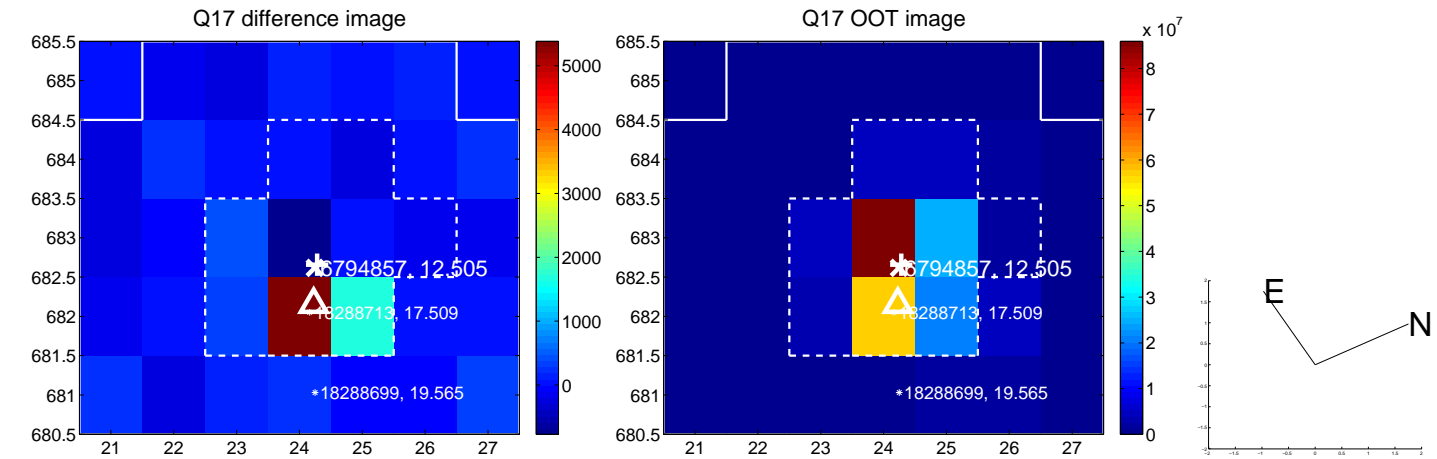
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

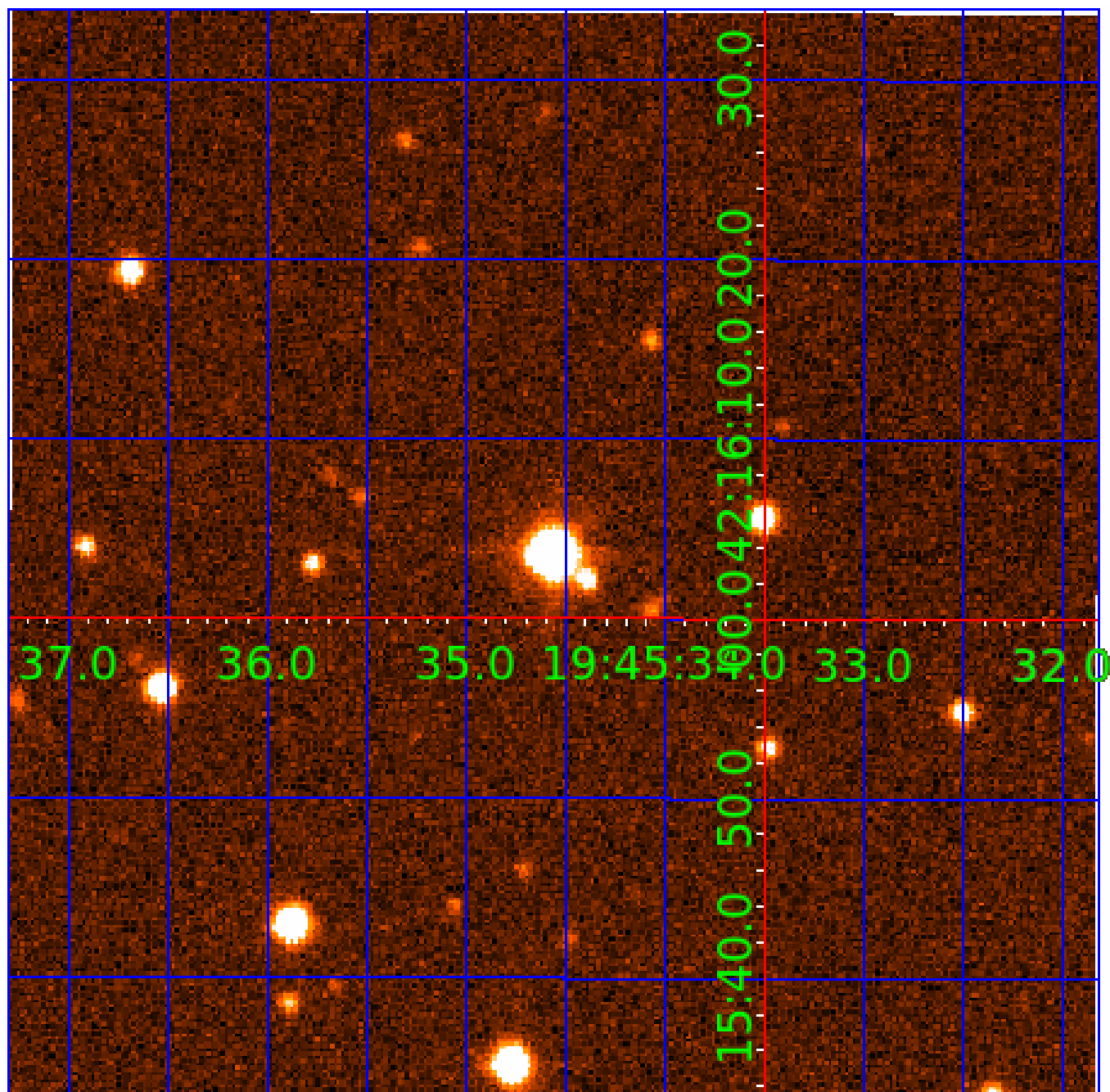


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 006794857

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})
006794857-01	OBS	No	1.056646	132.172019	9.9	6.632	11.7	10.7	2.63	8402	0.84	44959.94
006794857-02	OBS	No	38.642241	161.549358	121.8	1.561	8.3	7.7	2.63	8402	3.37	370.38

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
006794857-01	OBS	FP	0.00	1	0	0	0	LPP_DV
006794857-02	OBS	FP	0.00	1	0	0	0	TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_FEW_MEAS

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

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

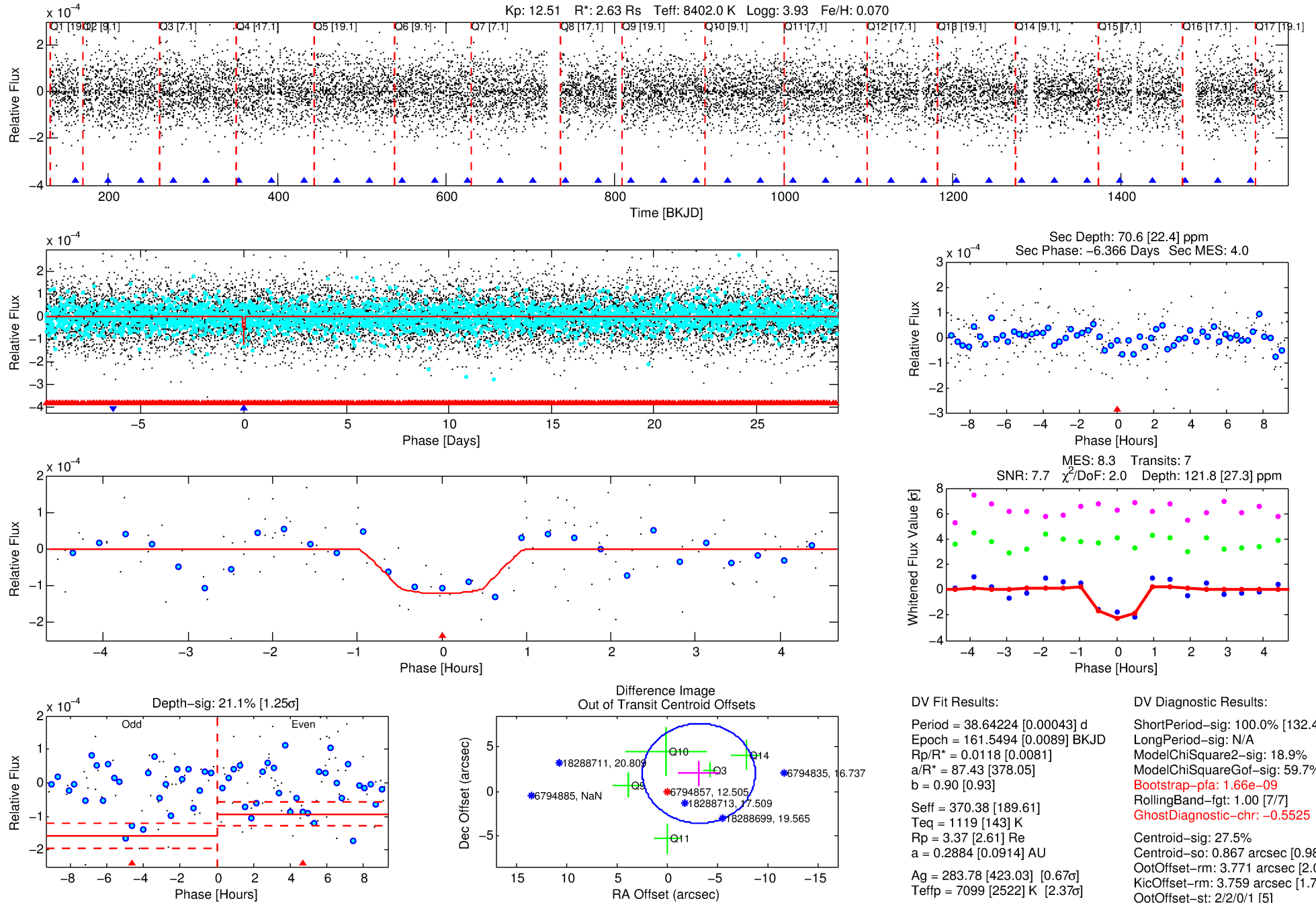
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 006794857-02

No Significant Match Found

DV One-Page Summary

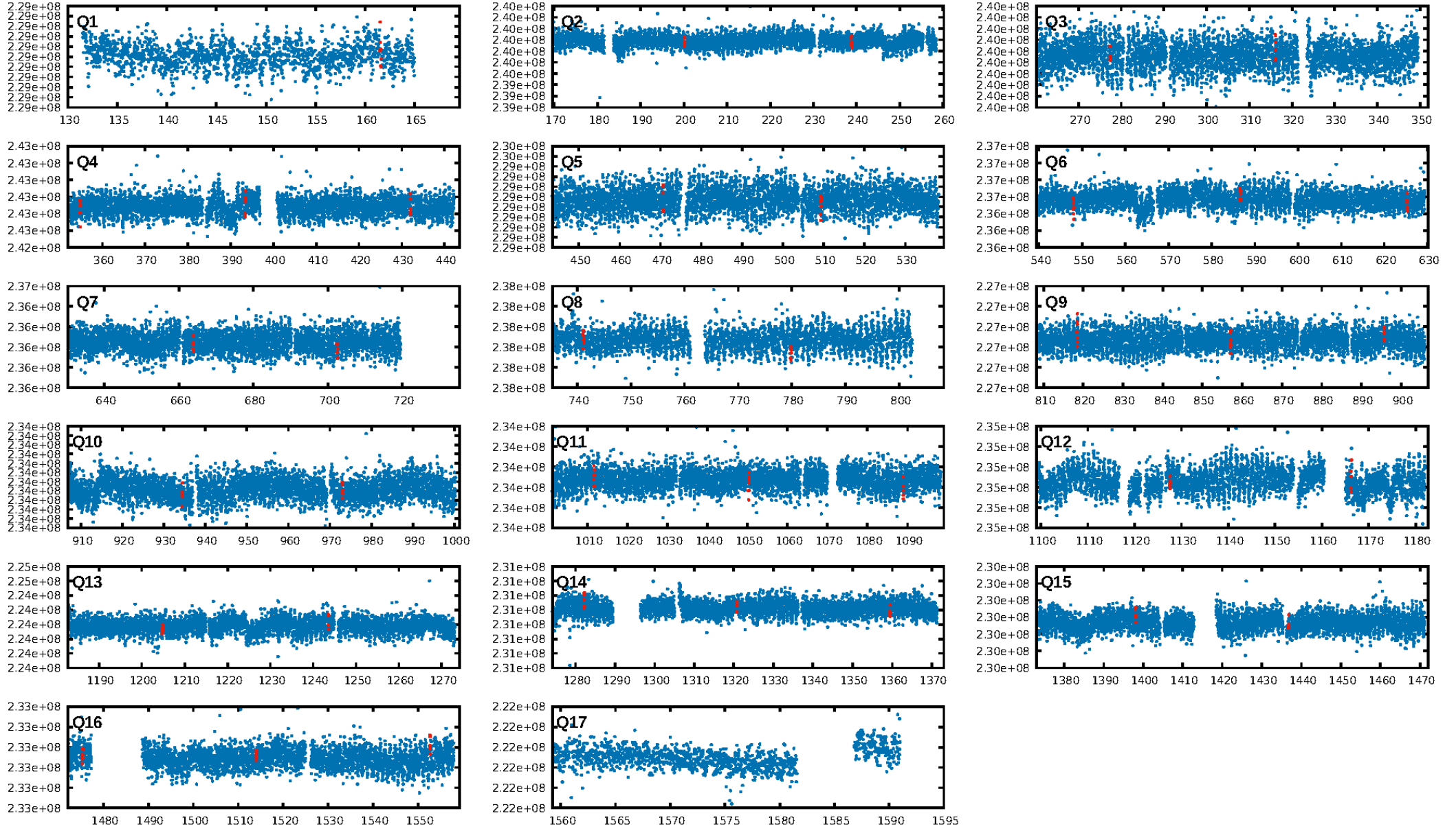
KIC: 6794857 Candidate: 2 of 2 Period: 38.642 d



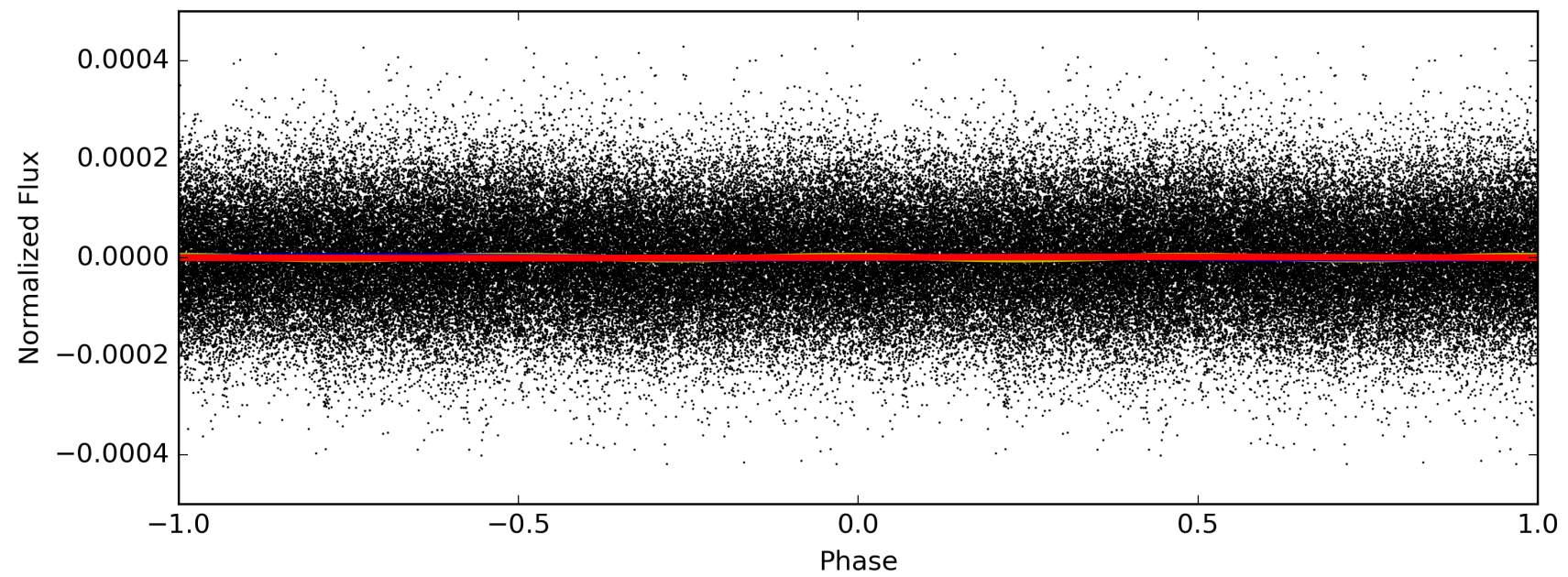
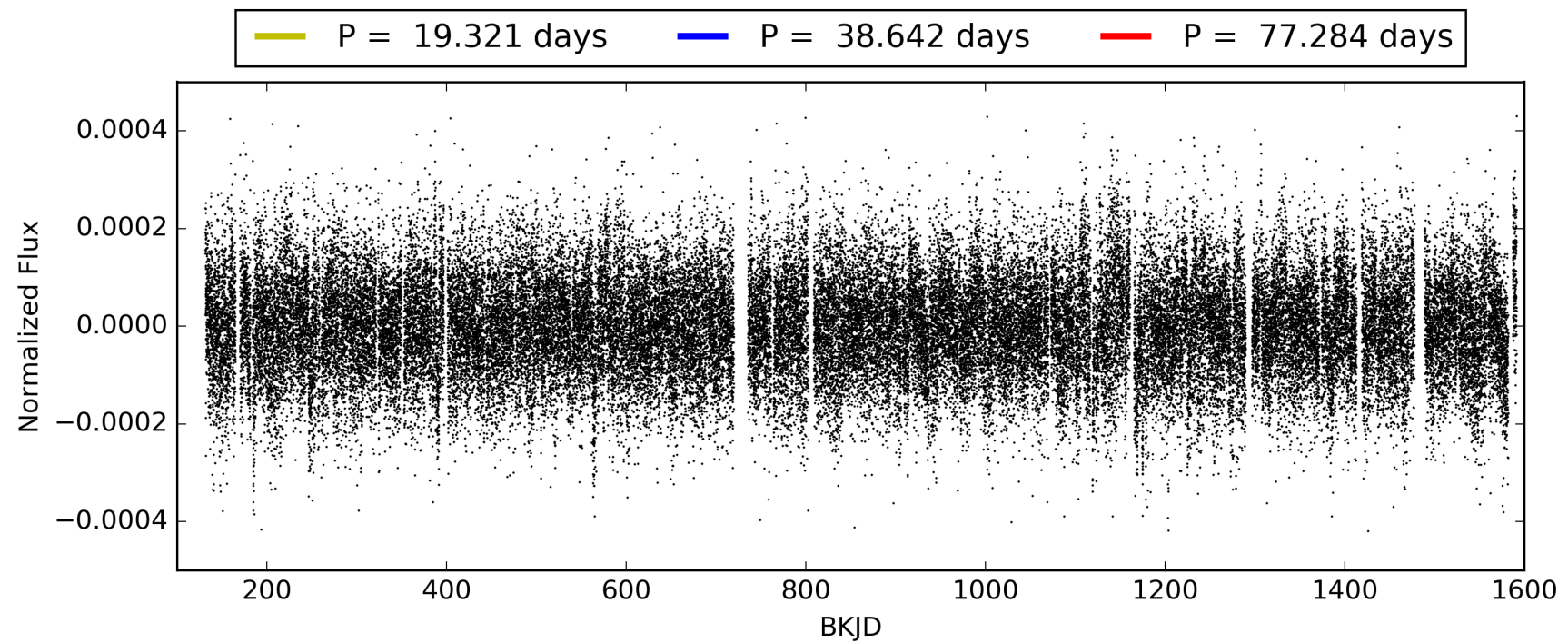
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 20:37:43 Z

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

TCE 006794857-02, PDC Light Curves

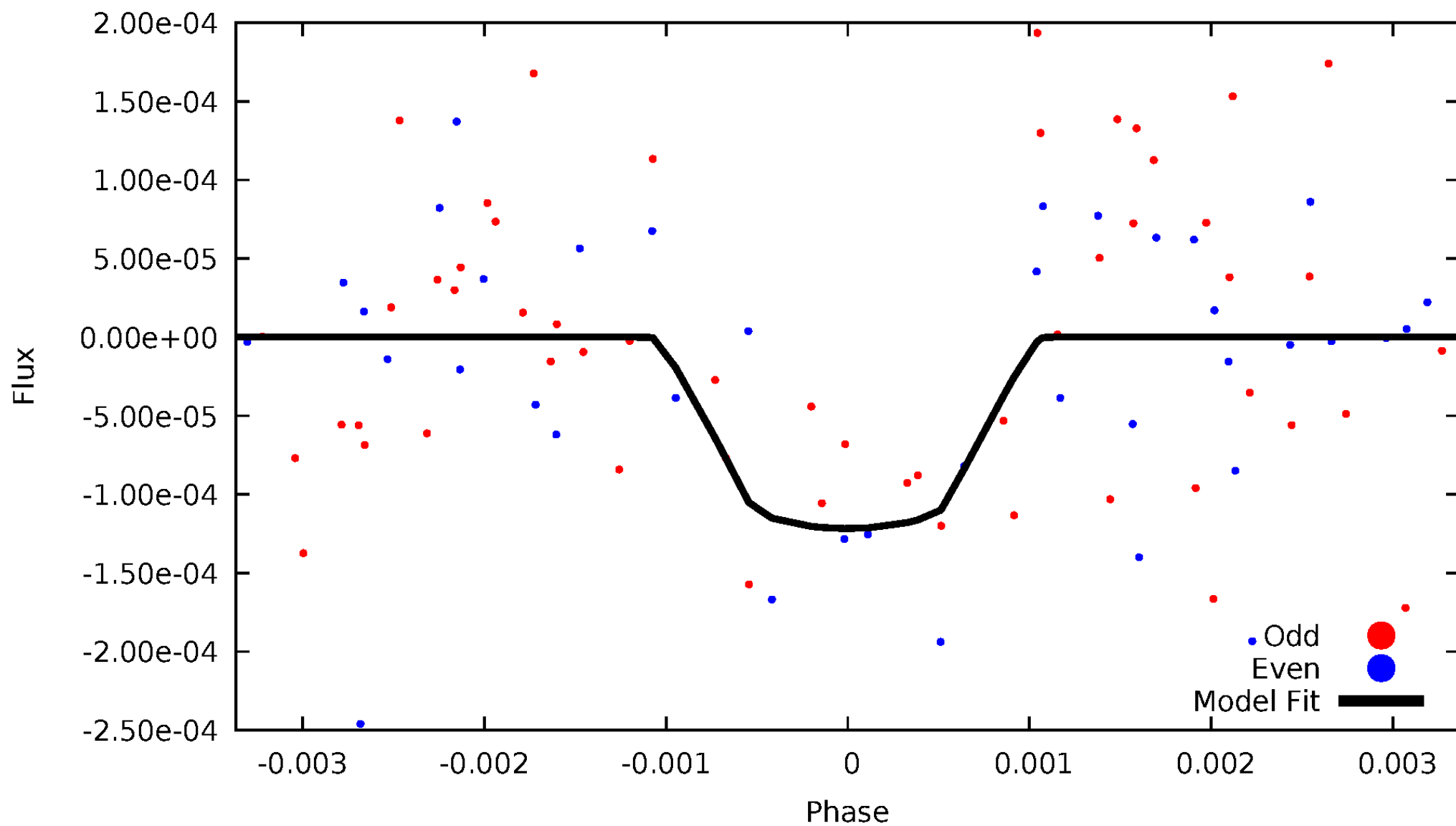


TCE 006794857-02



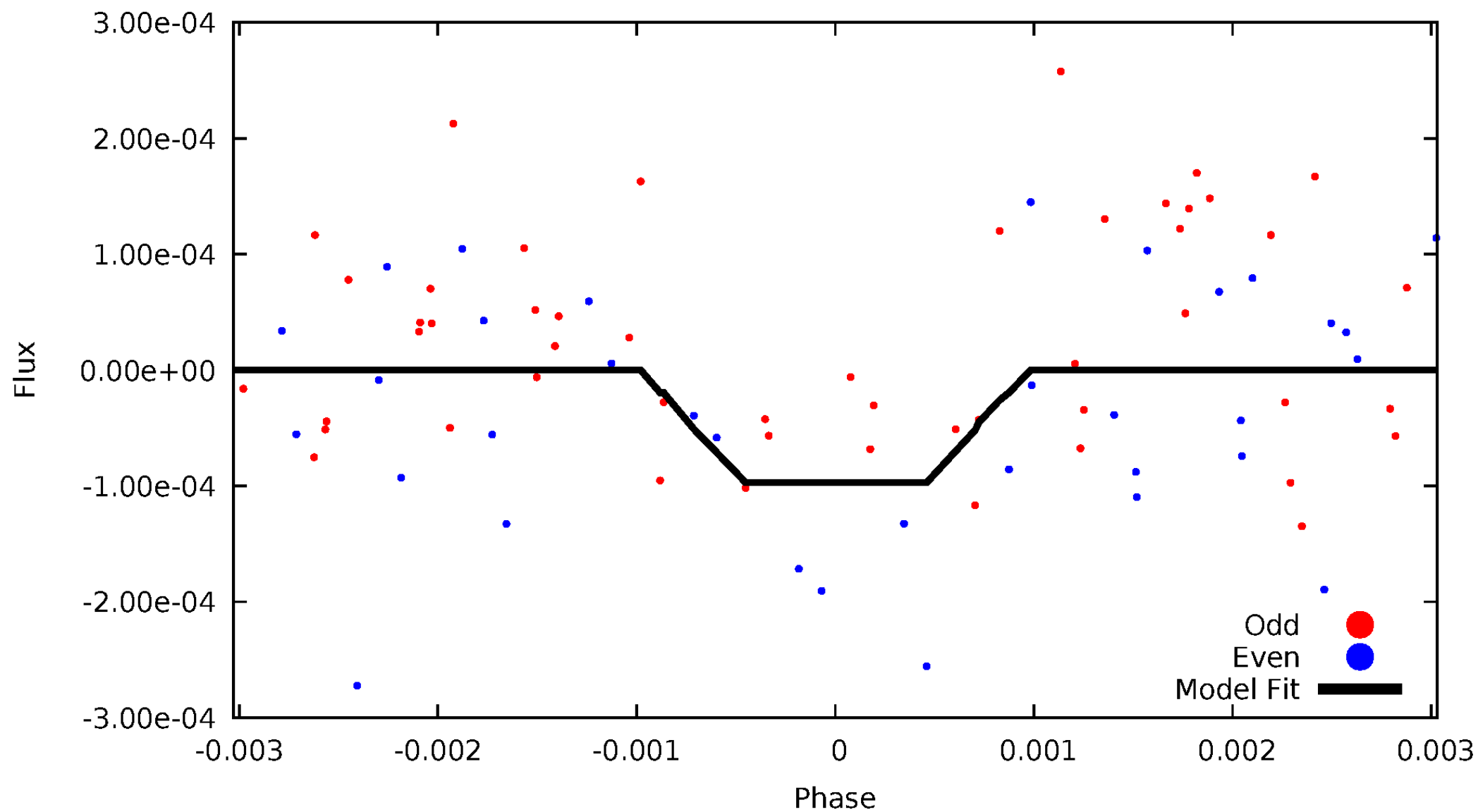
DV Odd/Even

TCE 006794857-02



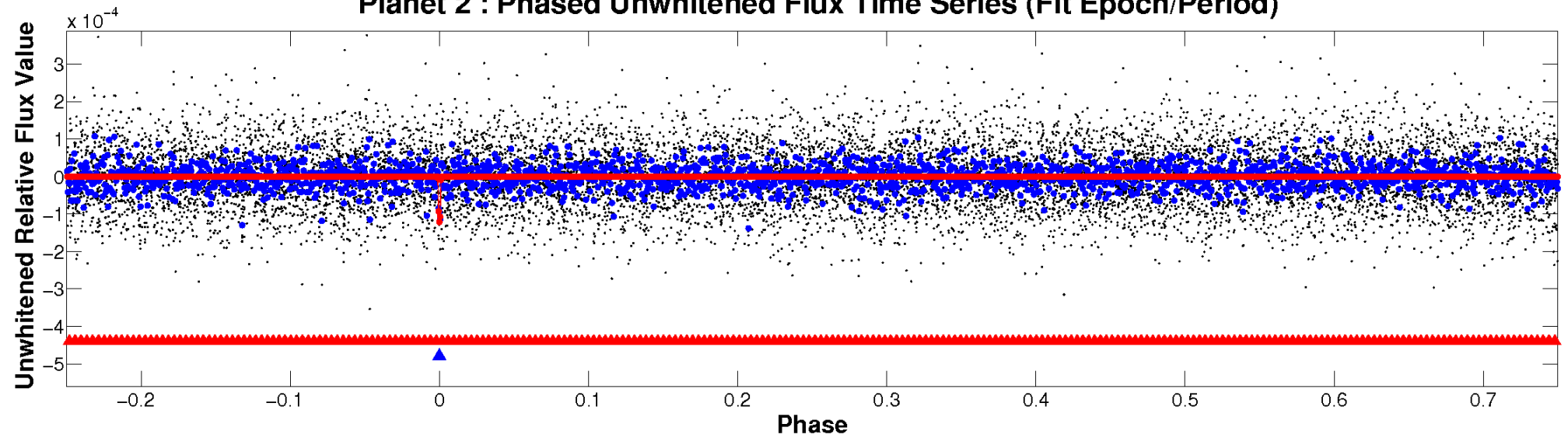
ALT Odd/Even

TCE 006794857-02

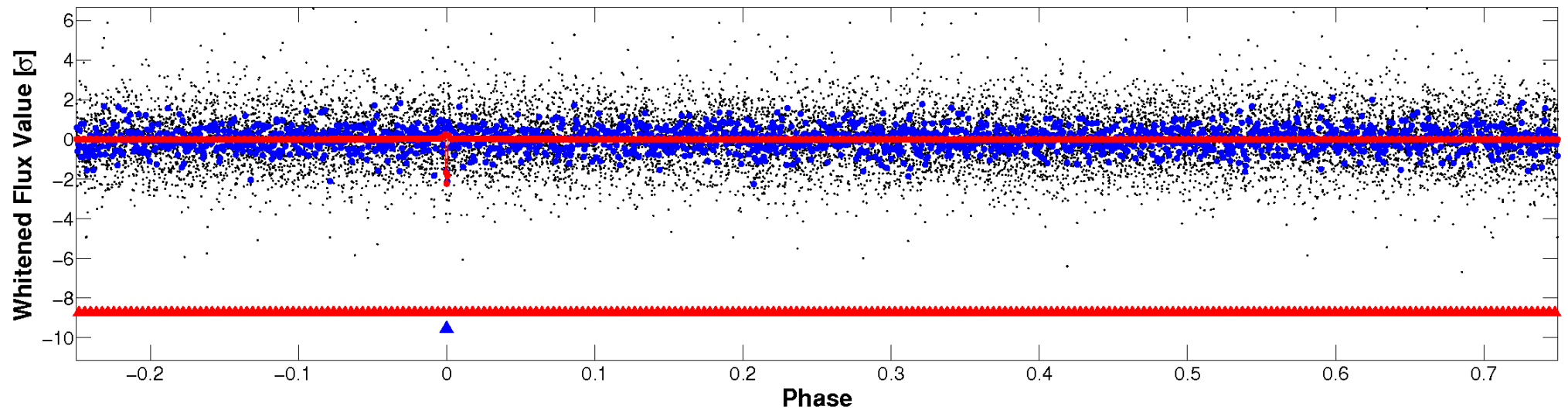


Non-Whitened Vs. Whitened Light Curve

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

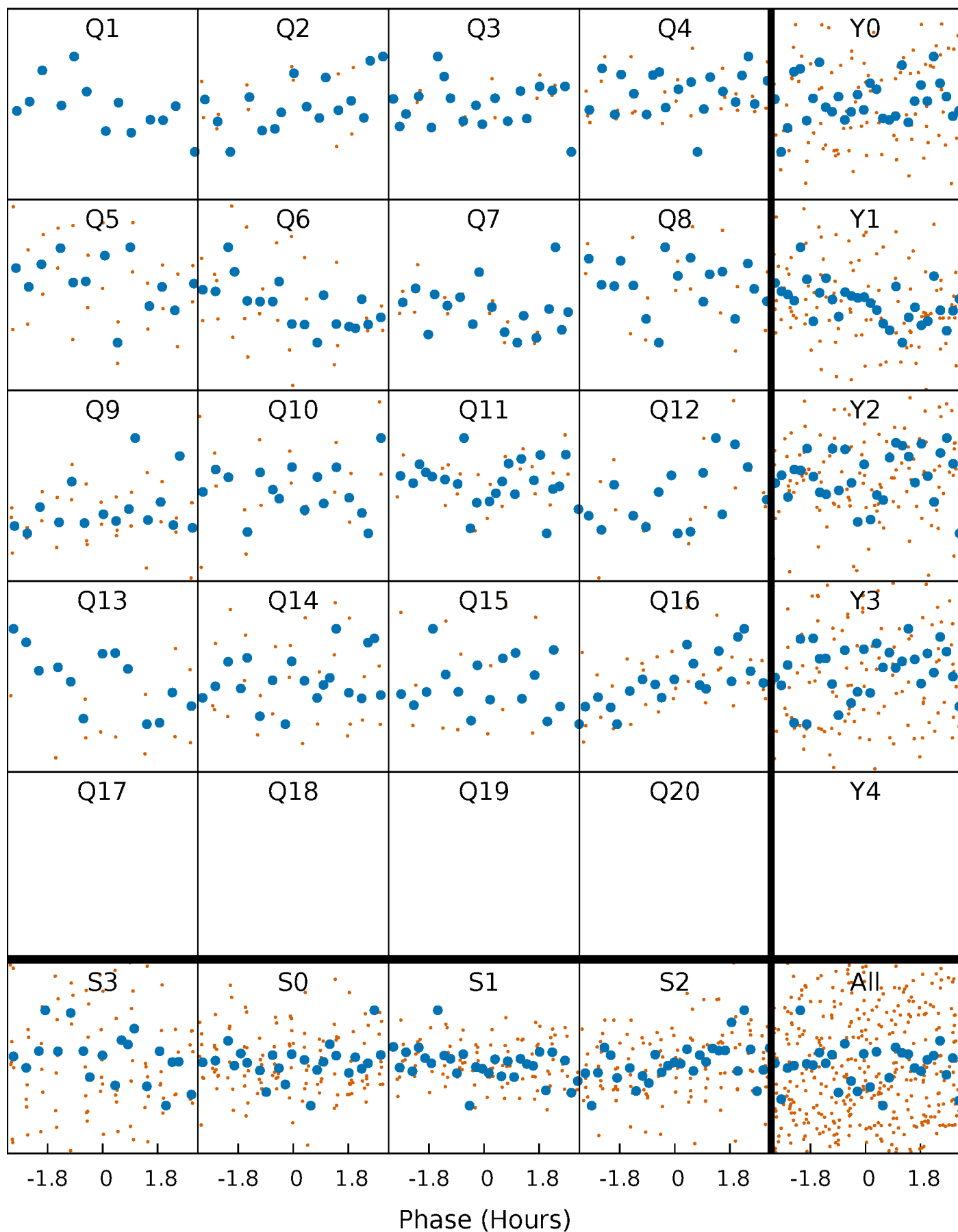


Planet 2 : Phased Whitened Flux Time Series (Fit Epoch/Period)



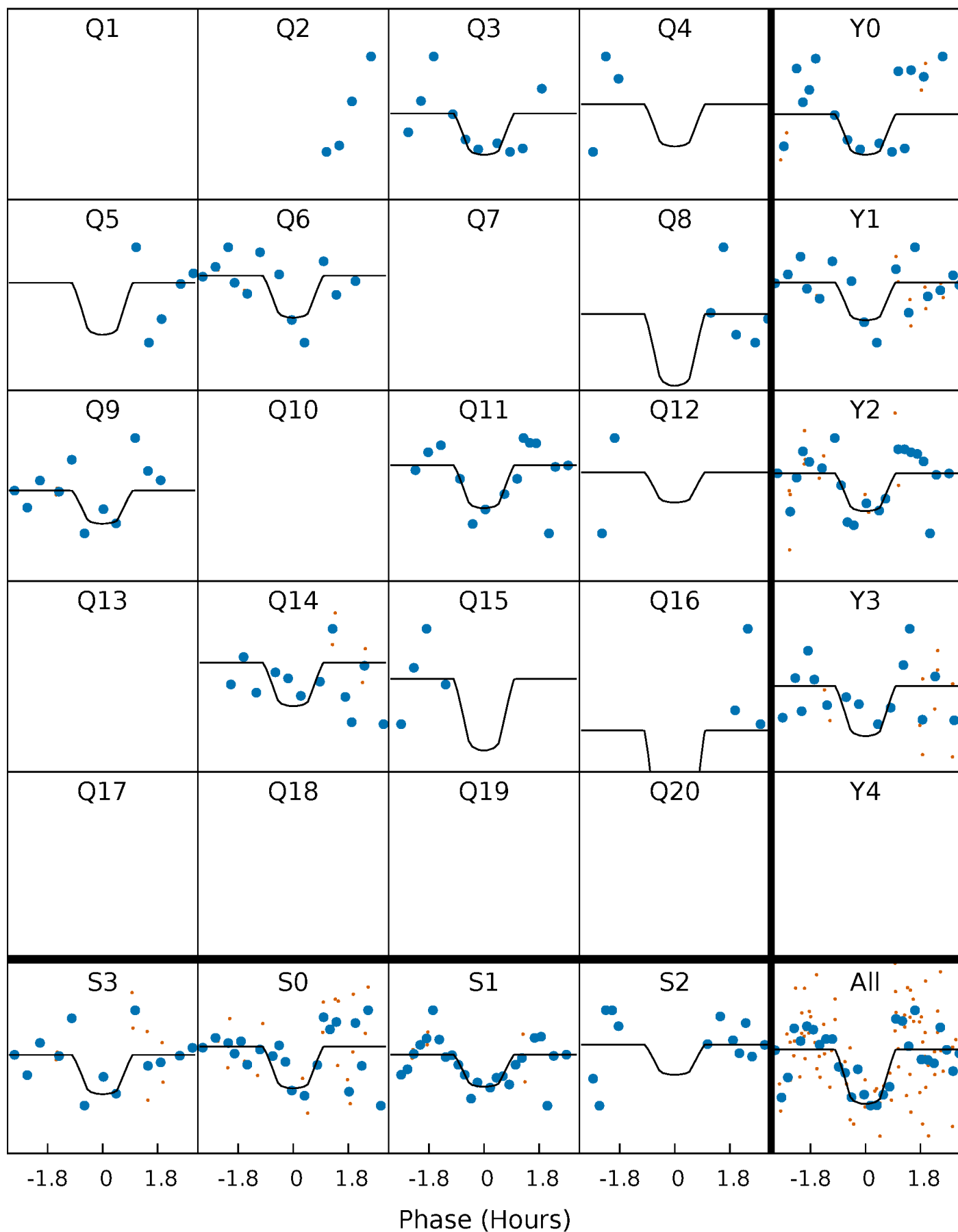
PDC Quarter-Phased Transit Curves

TCE 006794857-02 P= 38.642241 Days $T_0=161.549358$ (BKJD)



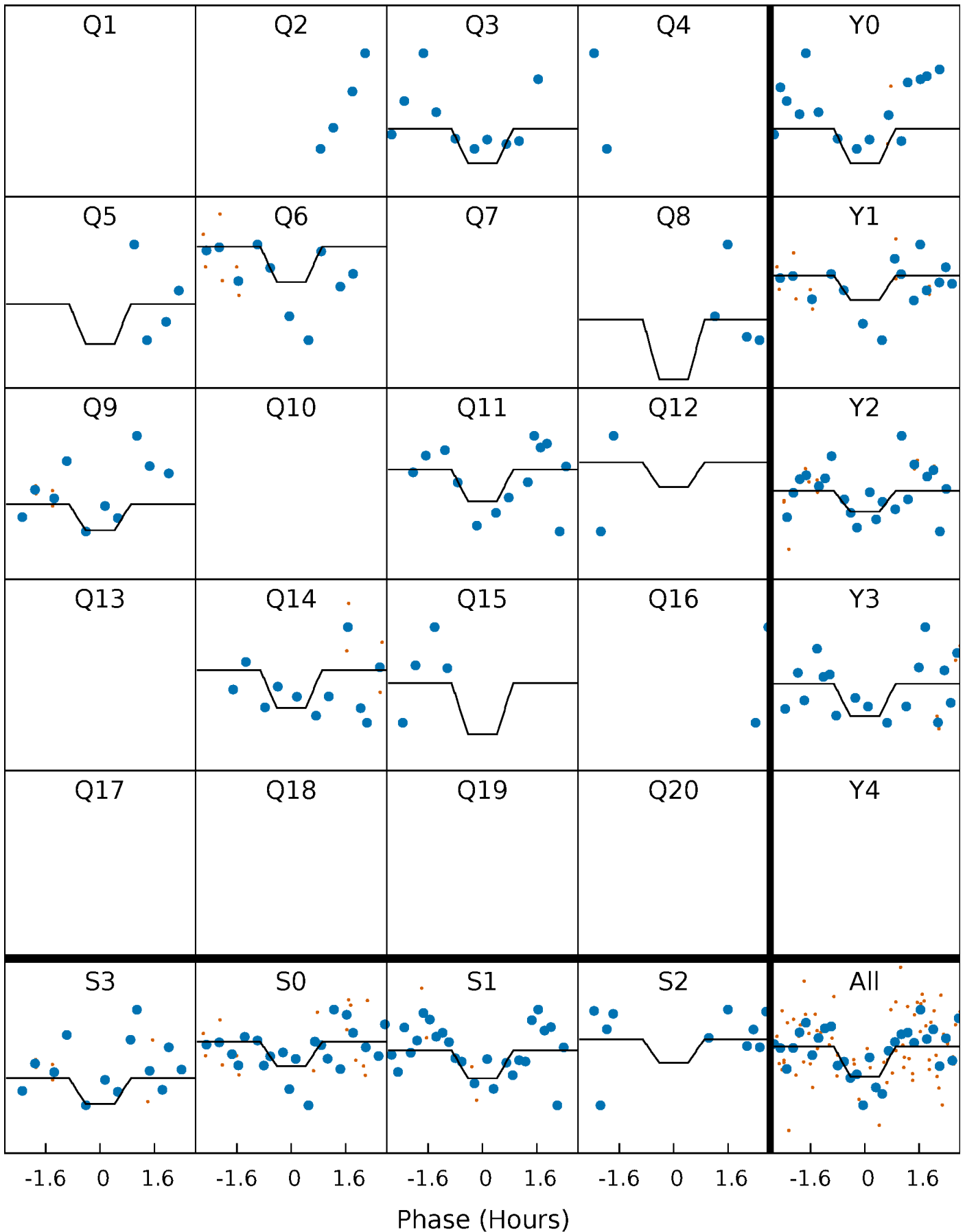
DV Quarter-Phased Transit Curves

TCE 006794857-02 P= 38.642241 Days $T_0=161.549358$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

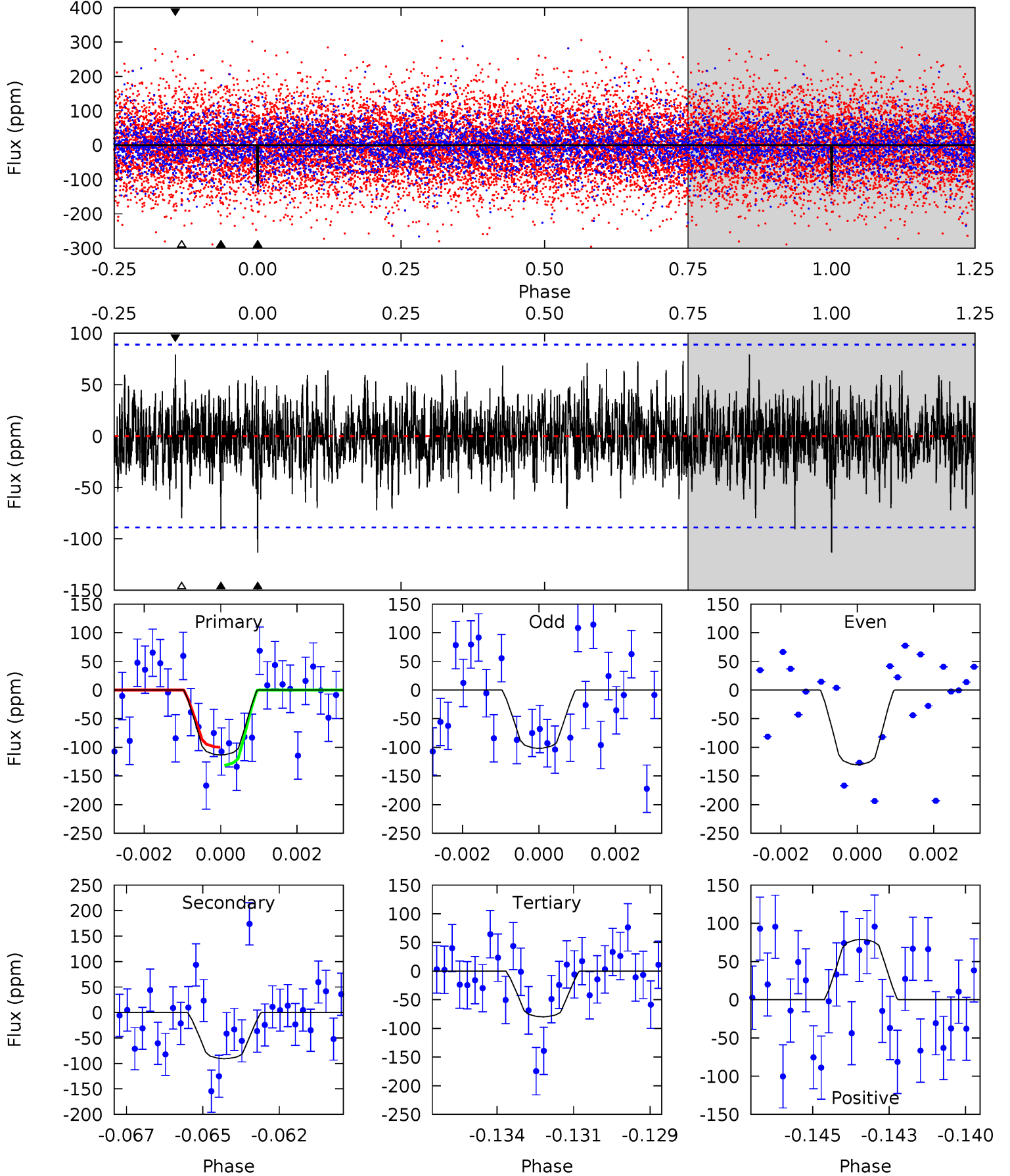
TCE 006794857-02 P= 38.641455 Days $T_0=161.559162$ (BKJD)



DV Model-Shift Uniqueness Test

006794857-02, P = 38.642241 Days, E = 122.907117 Days

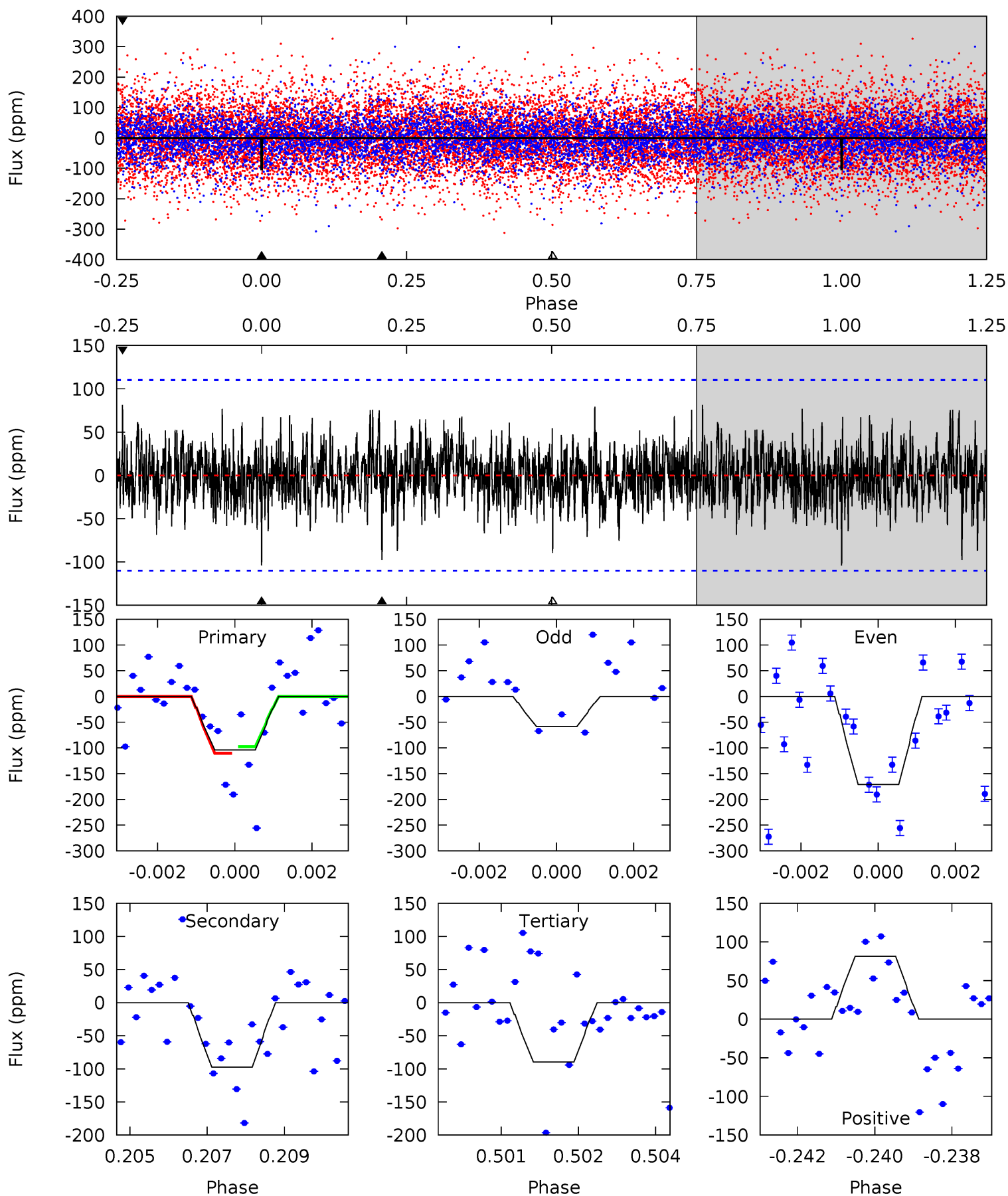
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
6.76	5.40	4.76	4.70	5.31	3.06	1.30	2.01	2.06	0.65	0.70	0.84	0.97	0.41	0.94



Alt Model-Shift Uniqueness Test

006794857-02, P = 38.641455 Days, E = 122.917707 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
5.05	4.73	4.37	3.95	5.35	3.13	1.17	0.68	1.09	0.37	0.78	2.81	1.28	0.44	0.31



Stellar Parameters For KIC 006794857

	$T_{\text{eff}} (K)$	$\log(g)$	$[\text{Fe}/\text{H}]$	$R (R_{\odot})$	$M (M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	8402^{+232}_{-364}	$3.930^{+0.273}_{-0.136}$	$0.070^{+0.250}_{-0.550}$	$2.627^{+0.624}_{-0.936}$	$2.140^{+0.348}_{-0.566}$	$0.166^{+0.299}_{-0.066}$
	+3%/-4%	+7%/-3%	+357%/-786%	+24%/-36%	+16%/-26%	+180%/-40%
Source	KIC0	KIC0	KIC0	DSEP		

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

Secondary Eclipse Parameters for KIC 006794857-02 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-91 ± 17	$3.56^{+2.27}_{-1.99}$	1540^{+115}_{-145}	6882^{+5340}_{-1381}	322^{+1380}_{-206}
Alt.	-97 ± 21	$3.09^{+2.00}_{-1.96}$	1536^{+119}_{-137}	7653^{+8228}_{-1755}	446^{+2888}_{-279}

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

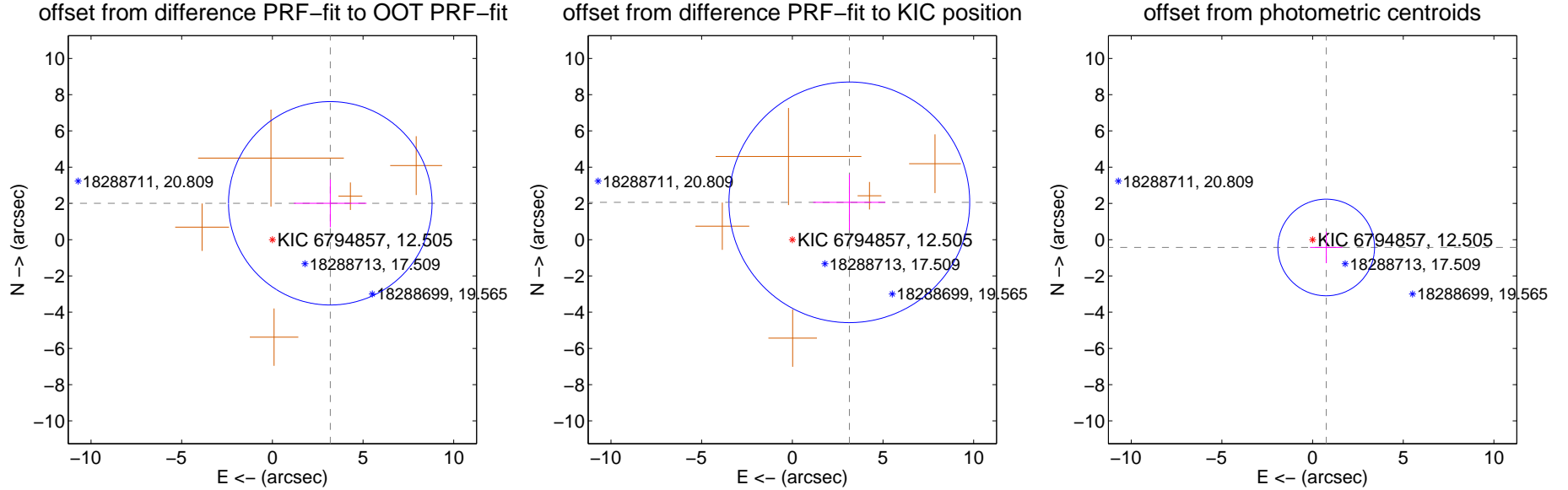
DV Centroid Data

Supplemental centroid analysis for 006794857-02. Kepler magnitude: 12.51. Transit SNR 7.67

There are 0 quarters with good PRF difference image offsets

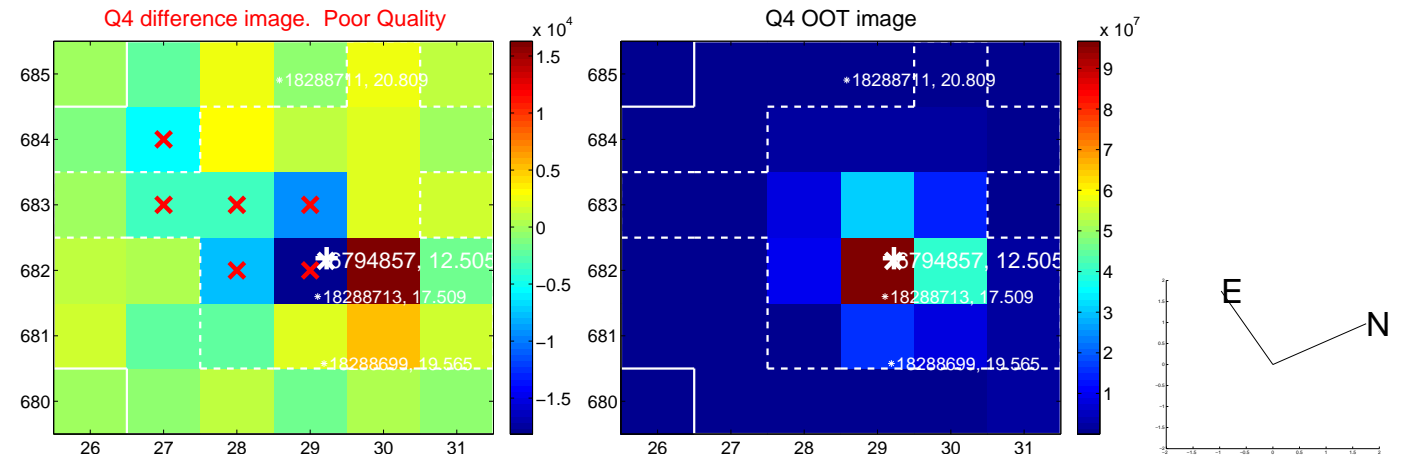
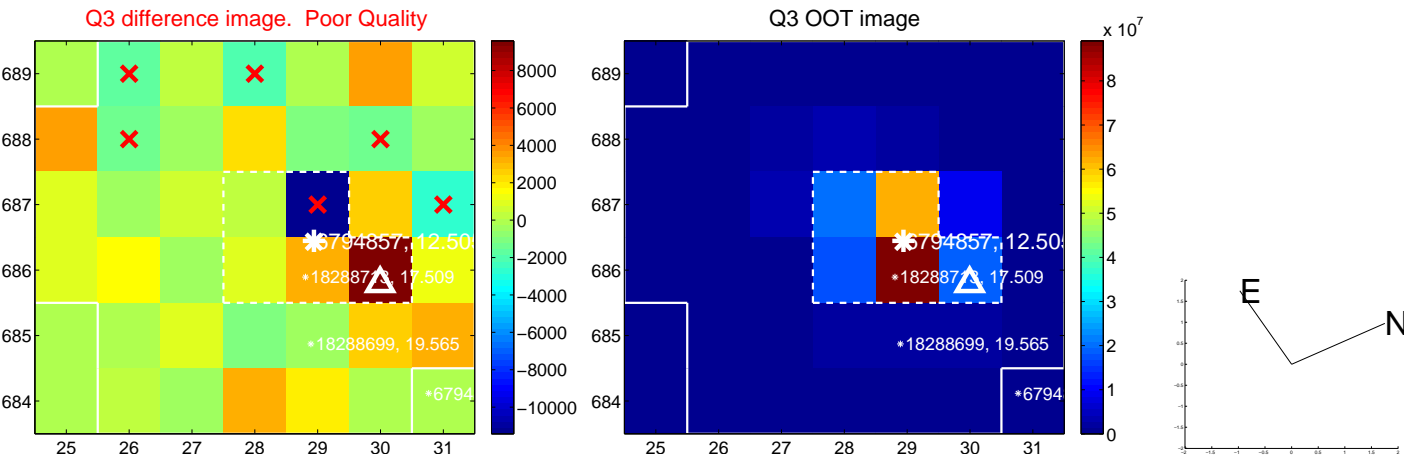
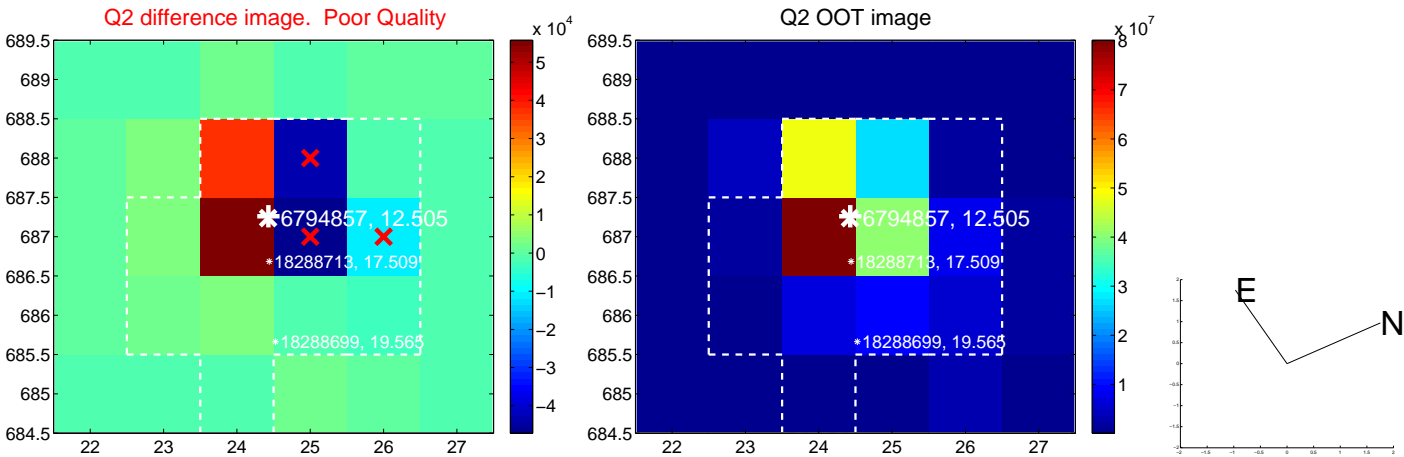
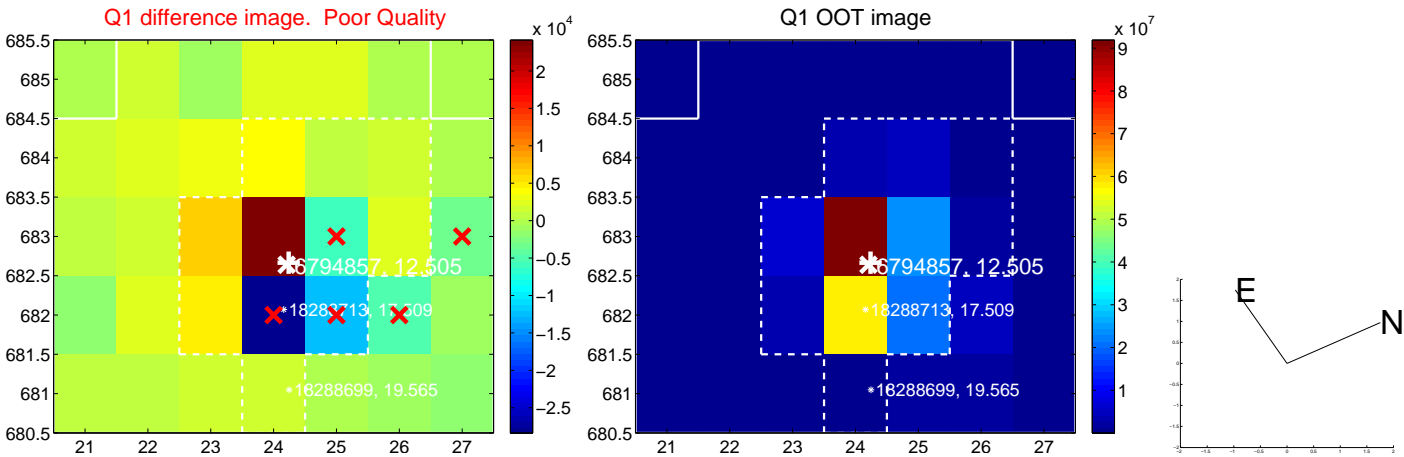
The direct PRF centroid is offset from the target star catalog position by about 0.12 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	3.771 ± 1.870	2.02	-3.193 ± 2.001	2.007 ± 1.322
PRF-fit source offset from KIC position	3.759 ± 2.213	1.70	-3.144 ± 1.992	2.061 ± 1.541
photometric centroid source offset	0.87 ± 0.89	0.98	-0.75 ± 0.90	-0.43 ± 0.87

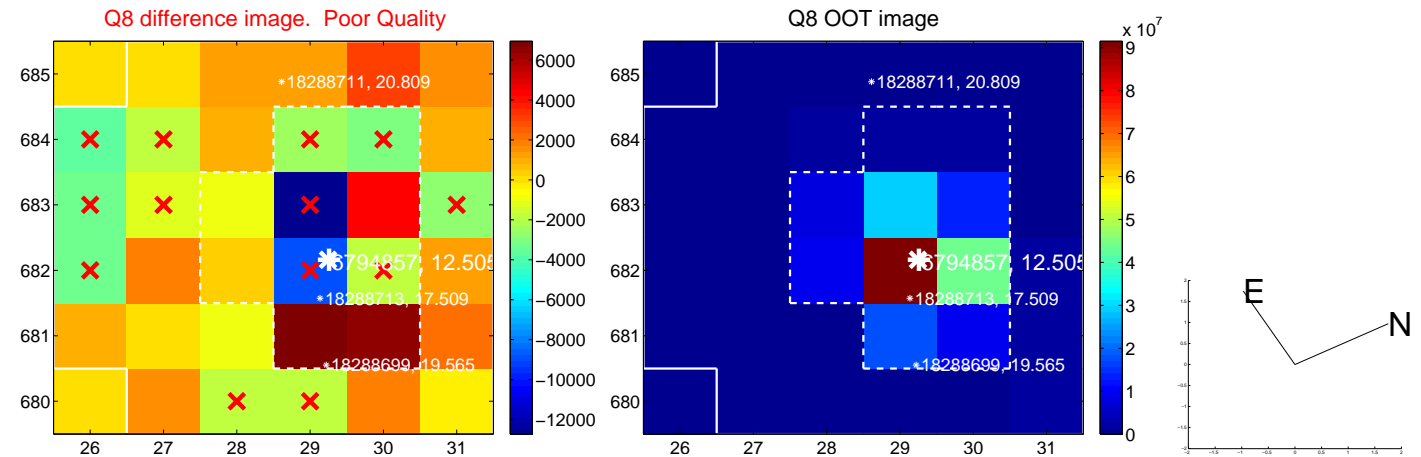
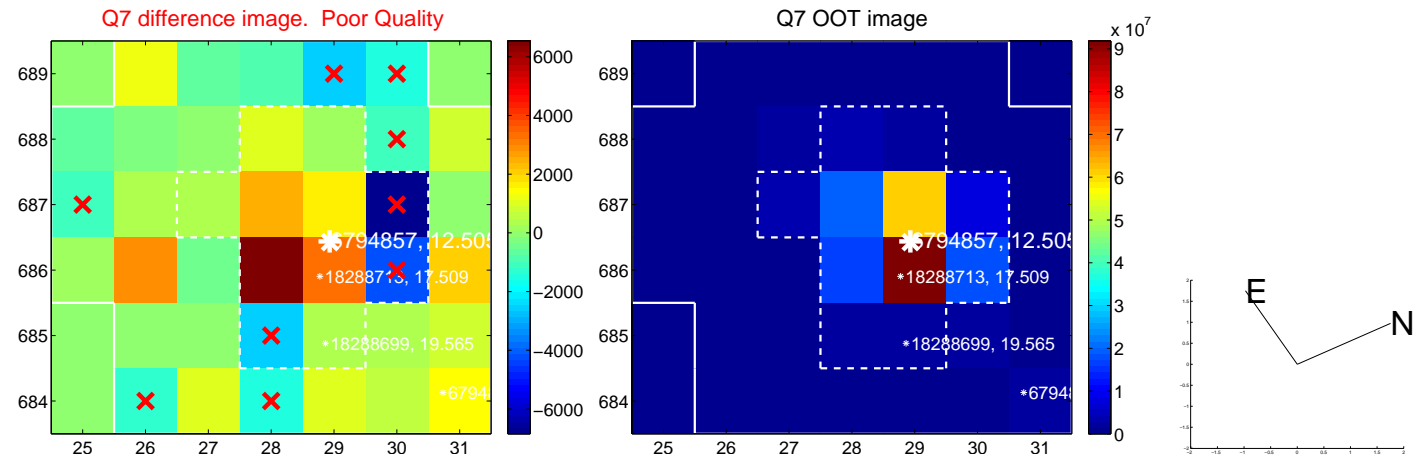
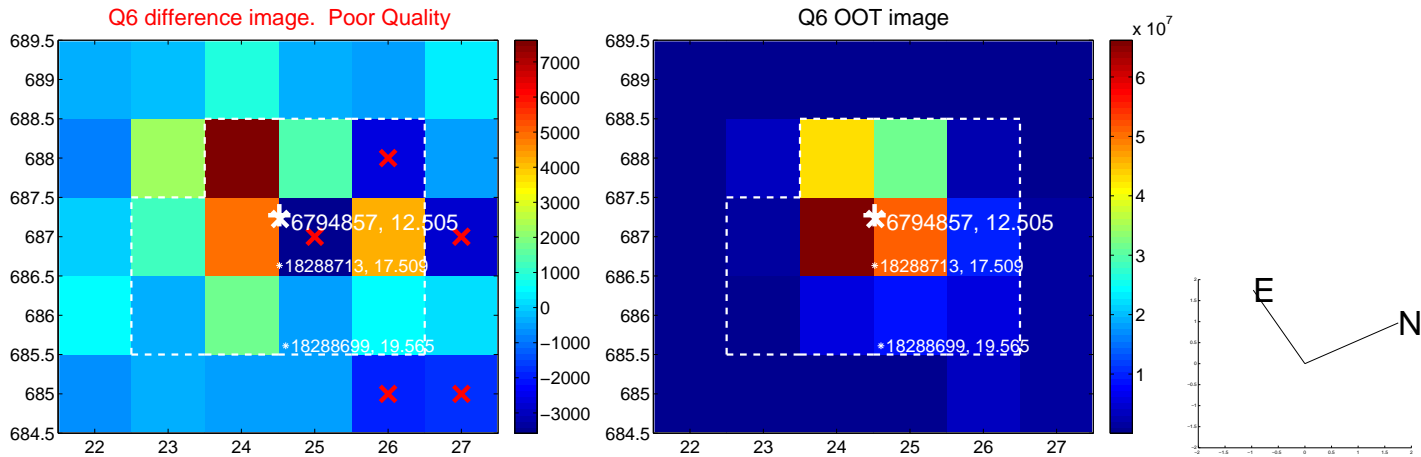
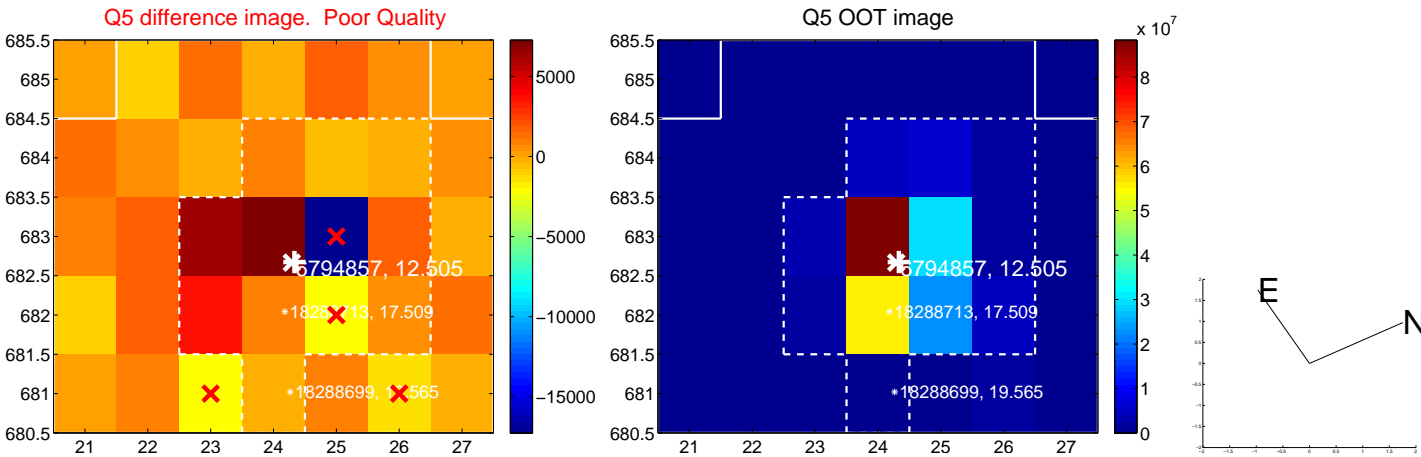


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

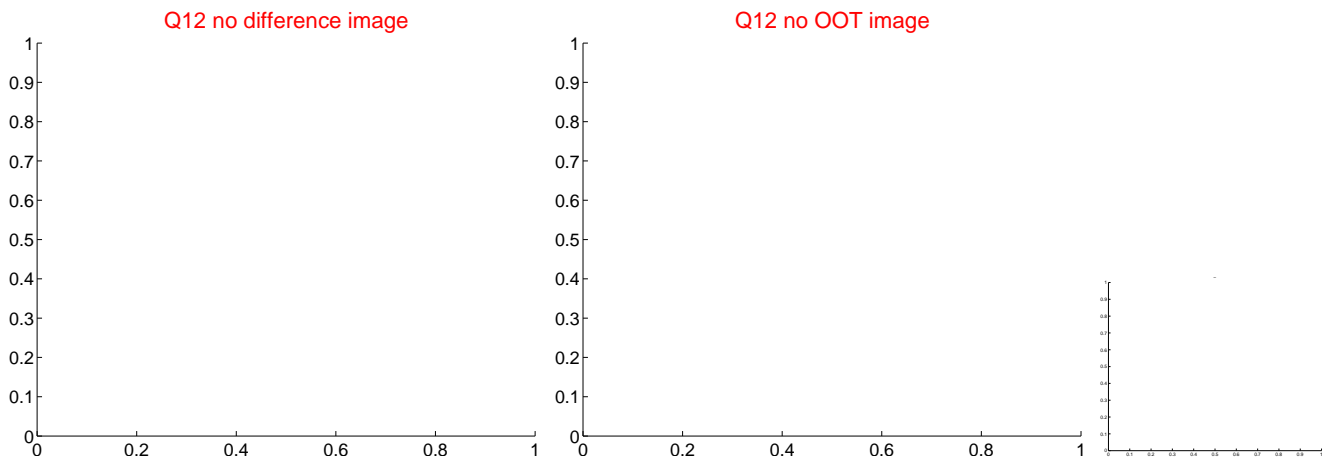
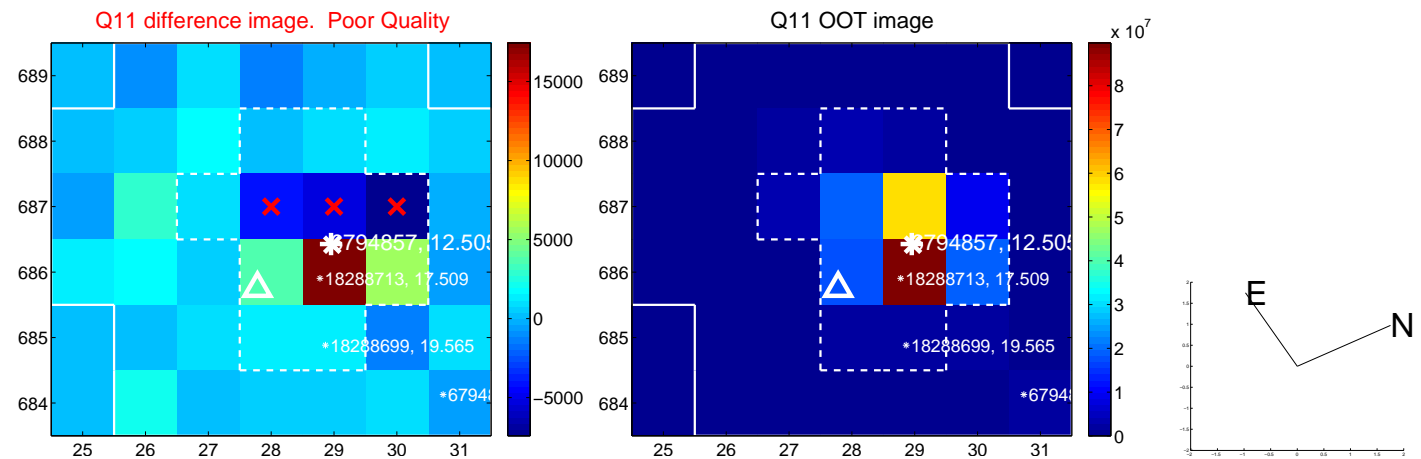
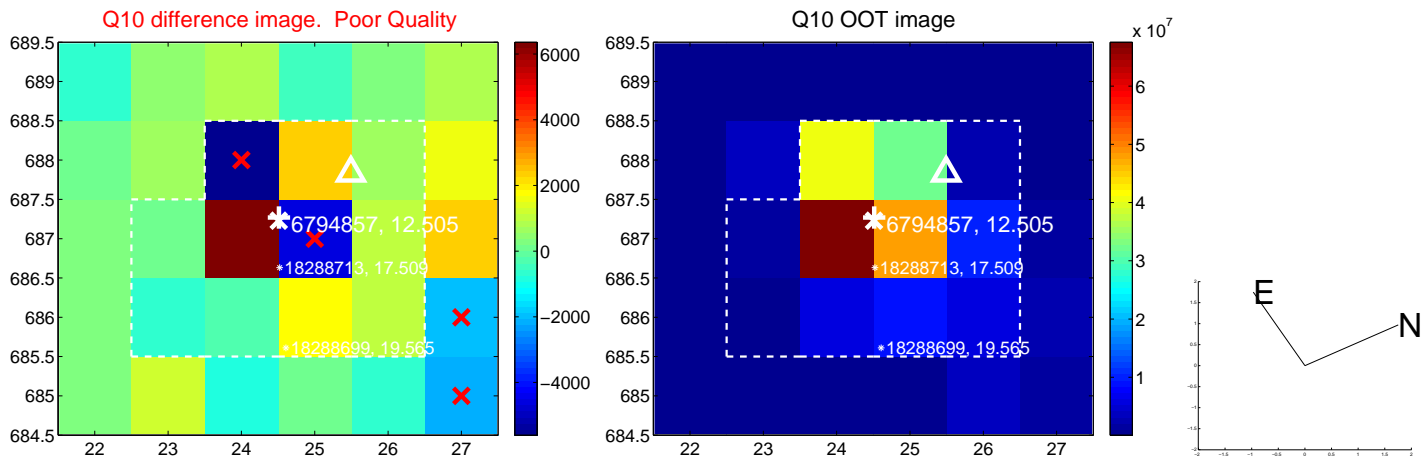
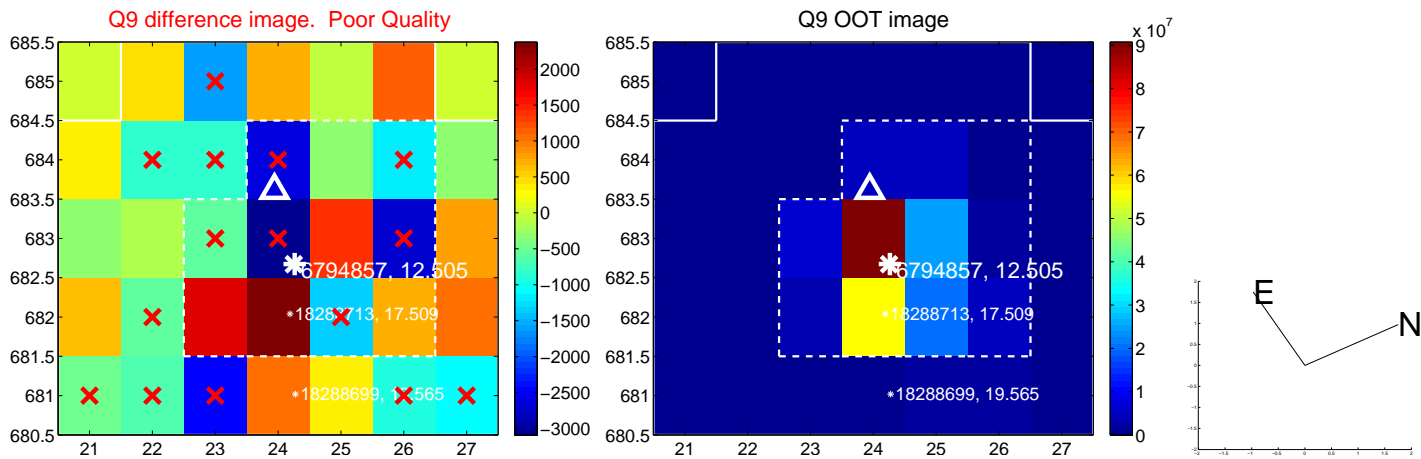
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



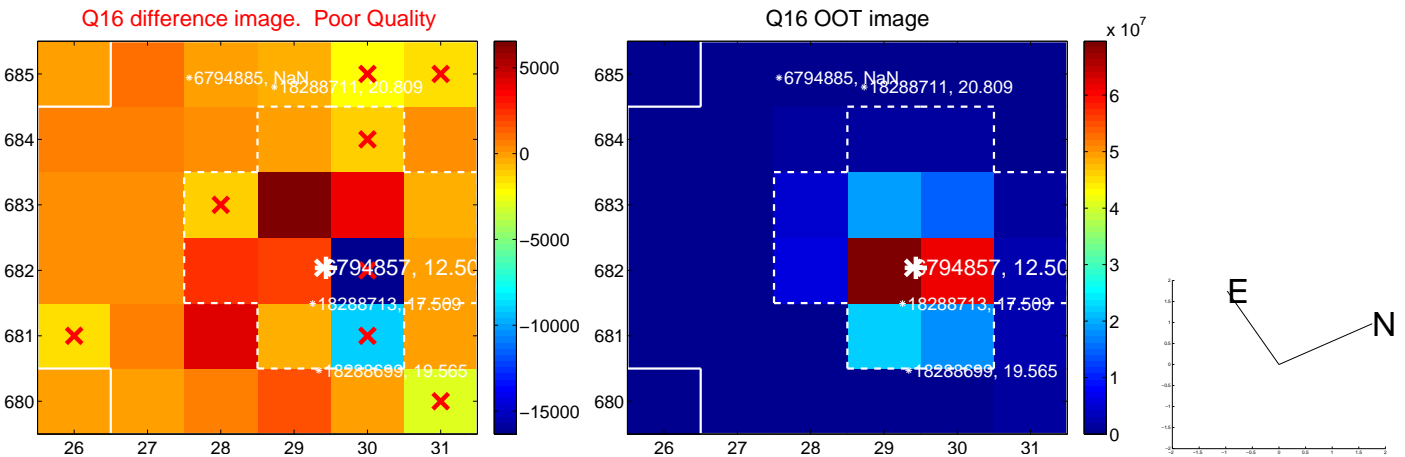
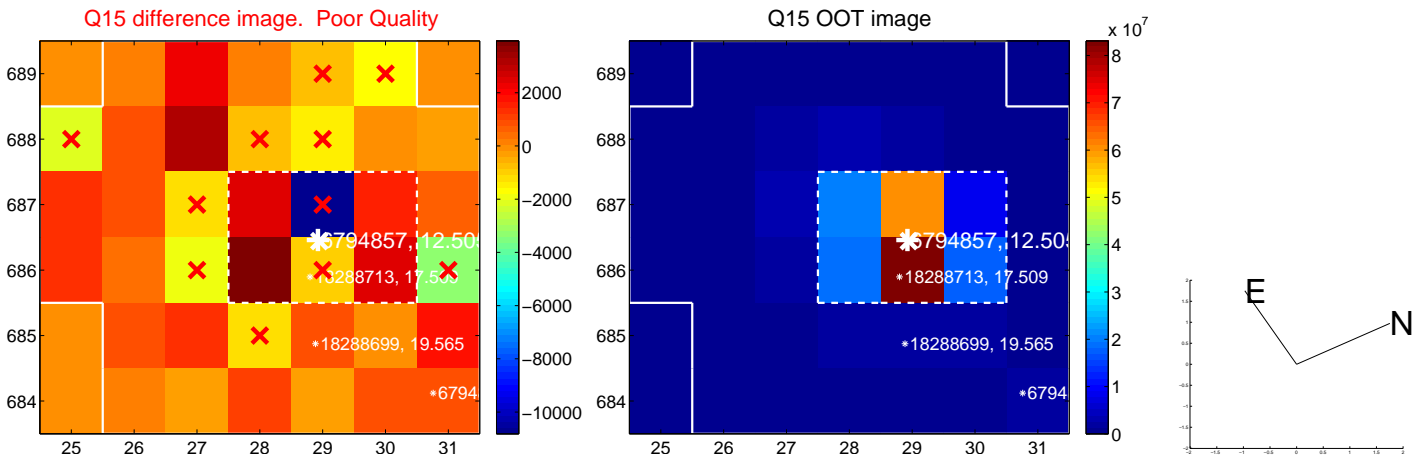
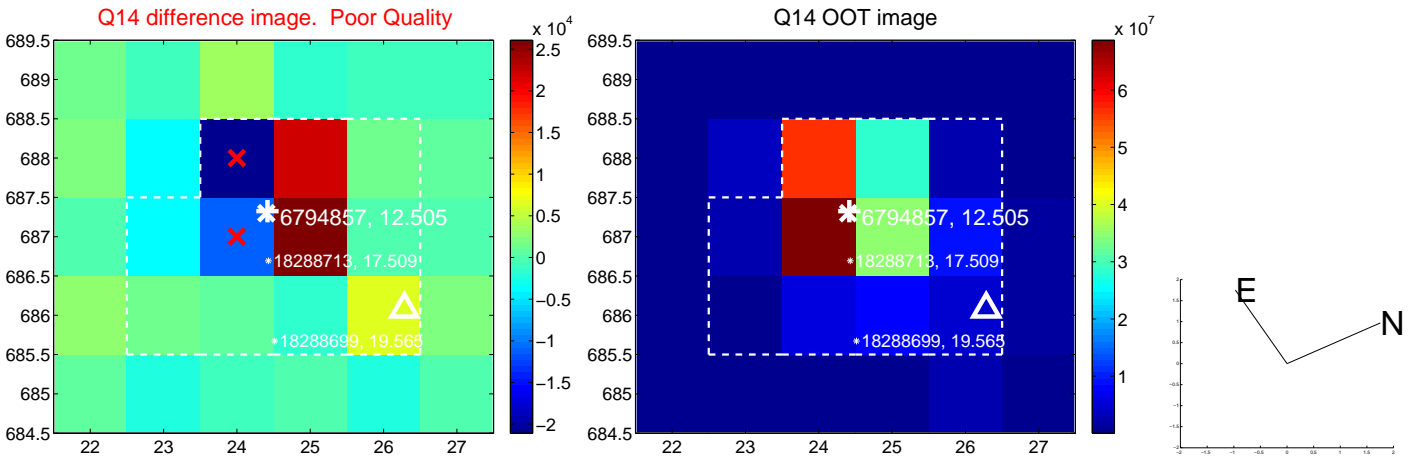
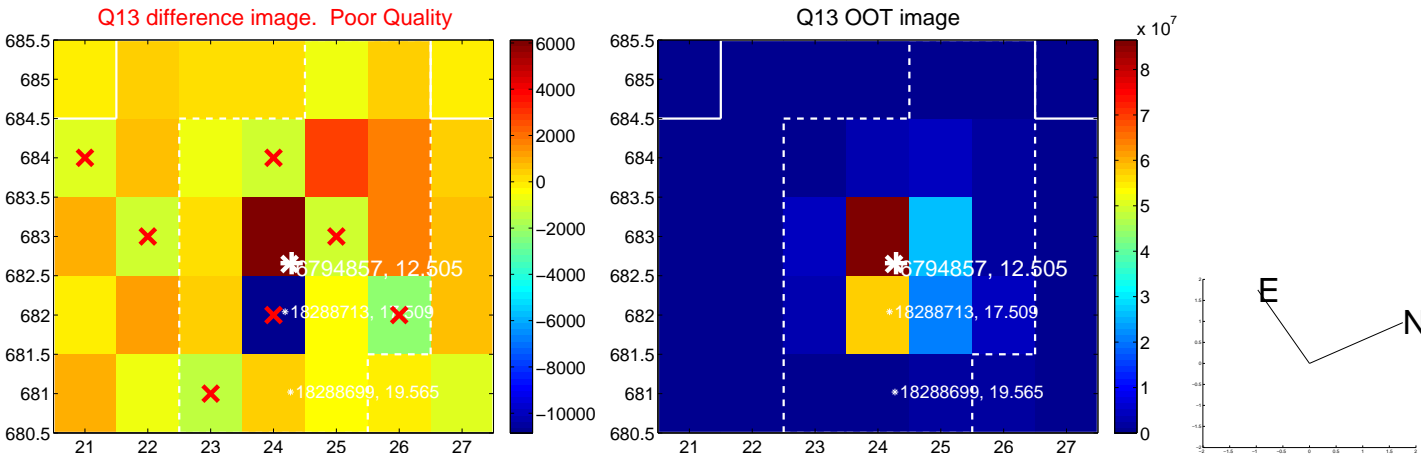
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



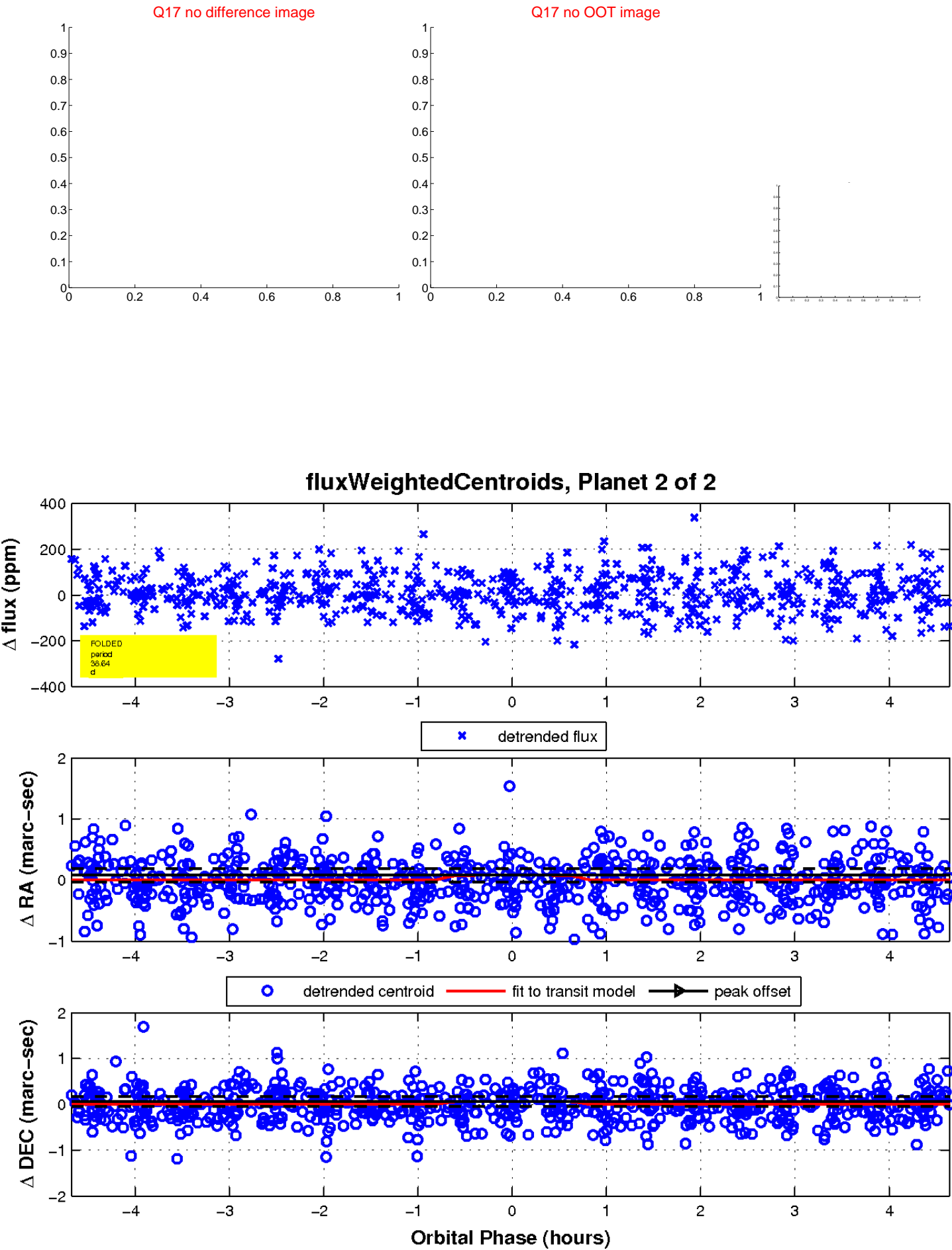
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

