

KIC 007117585

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})
007117585-01	OBS	No	423.253949	134.900860	631.5	10.600	10.8	10.5	1.11	5792	3.12	1.05
007117585-02	OBS	No	0.566759	131.851934	11.8	4.187	8.9	4.1	1.11	5792	0.39	7119.39
007117585-03	OBS	No	16.284636	134.485465	462.1	1.501	8.0	10.3	1.11	5792	2.37	80.90

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
007117585-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_MARSHALL—ALL_TRANS_CHASES—INCONSISTENT_TRANS
007117585-02	OBS	FP	0.00	1	0	1	1	LPP_DV—CENT_UNRESOLVED_OFFSET—HALO_GHOST—EPHEM_MATCH
007117585-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV—MOD_TER_DV—CENT_FEW_DIFFS

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

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

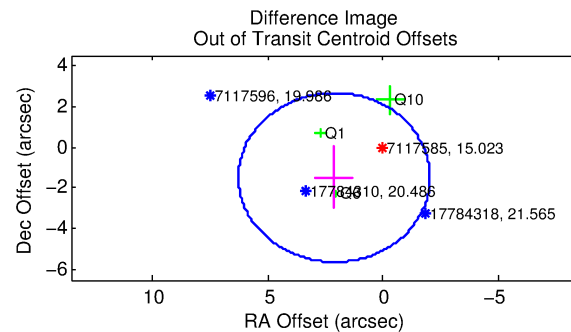
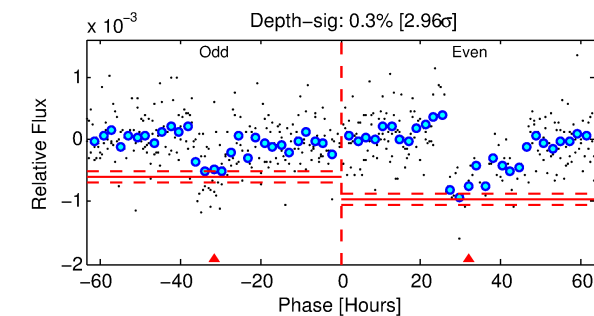
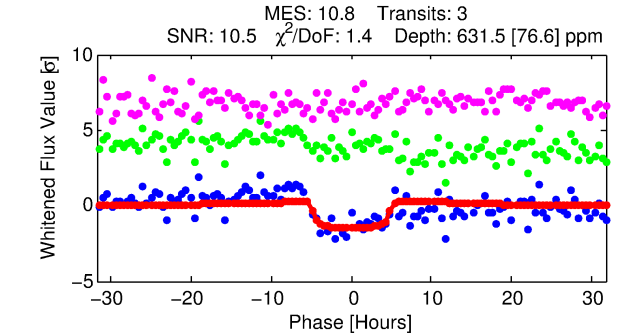
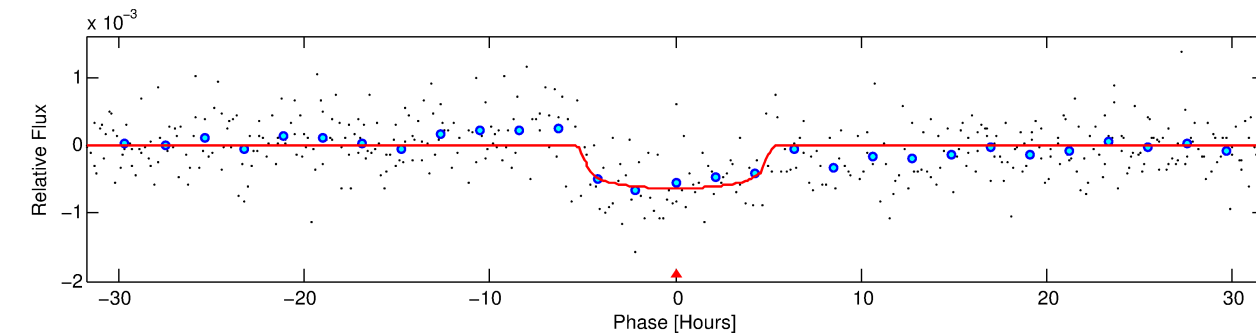
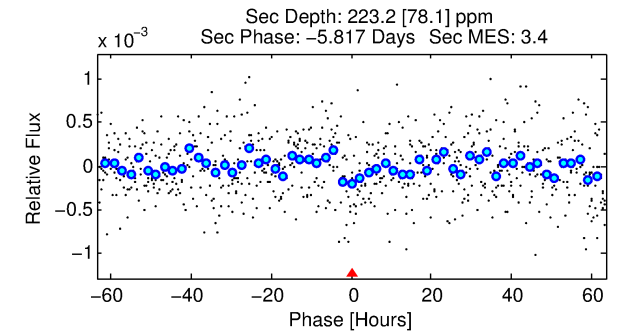
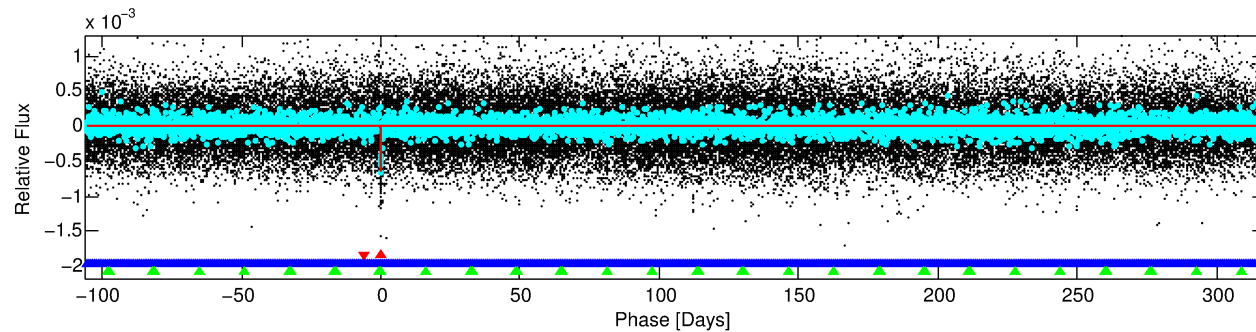
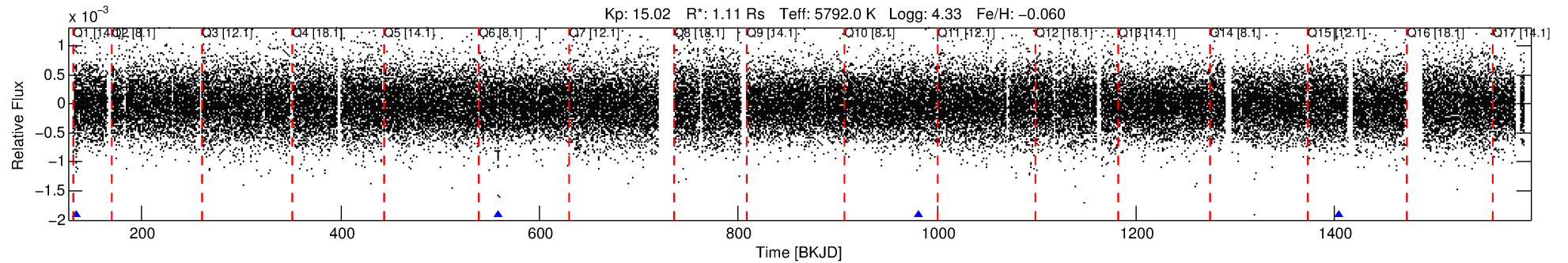
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 007117585-01

No Significant Match Found

DV One-Page Summary

KIC: 7117585 Candidate: 1 of 3 Period: 423.254 d



DV Fit Results:

Period = 423.25395 [0.01335] d
Epoch = 134.9009 [0.0168] BKJD
Rp/R* = 0.0258 [0.0067]
a/R* = 187.54 [214.07]
b = 0.82 [0.46]
Seff = 1.05 [0.37]
Teff = 258 [23] K
Rp = 3.12 [1.19] Re
a = 1.0844 [0.2519] AU
Ag = 14833.16 [10505.64] [1.41σ]
Teffp = 4405 [701] K [5.92σ]

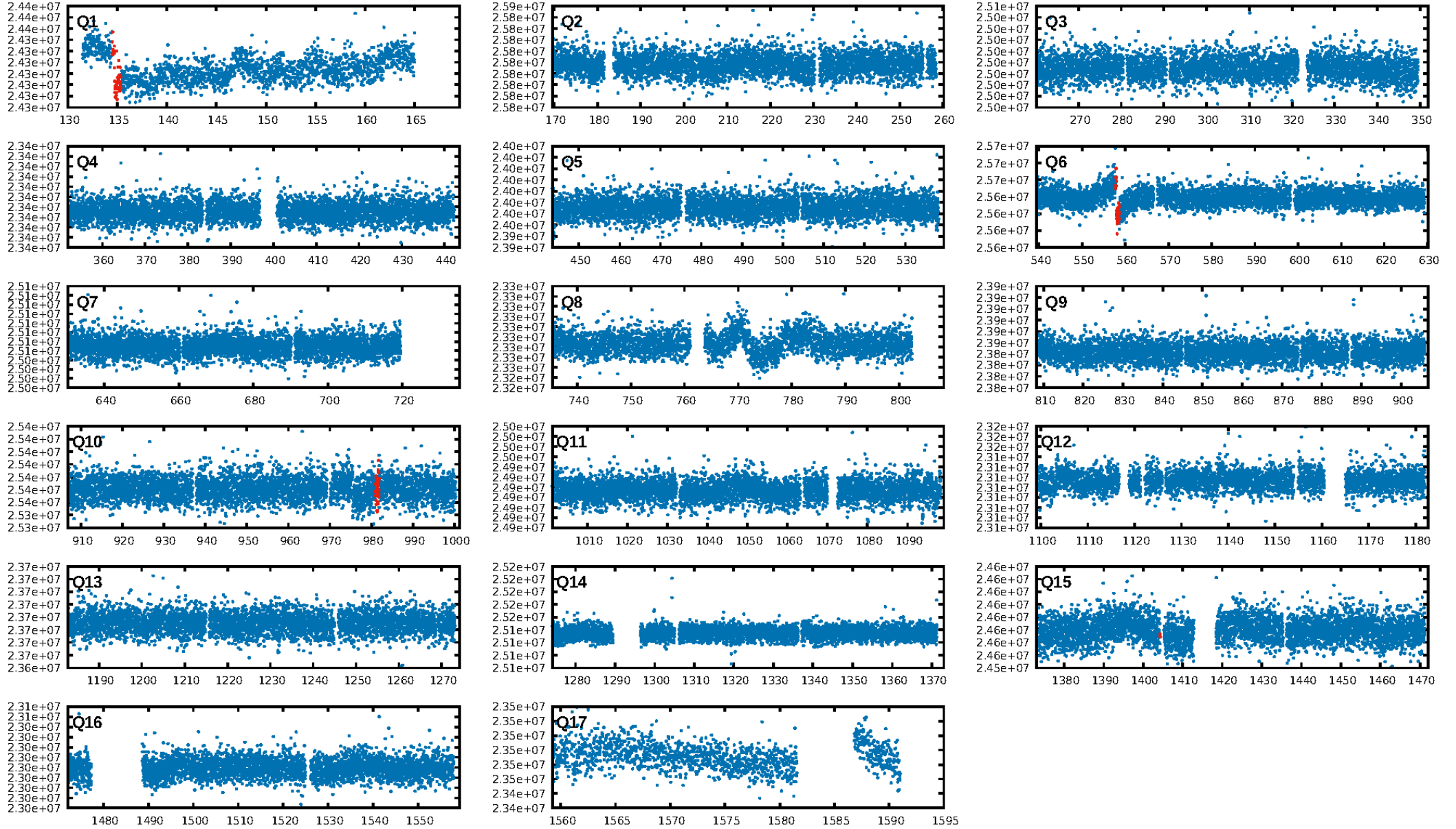
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [912.36σ]
LongPeriod-sig: N/A
ModelChiSquare2-sig: 0.0%
ModelChiSquareGof-sig: 49.5%
Bootstrap-pfa: 2.21e-32
RollingBand-fgt: 1.00 [2/2]
GhostDiagnostic-chr: 1.85
Centroid-sig: 0.0%
Centroid-so: 4.561 arcsec [4.56σ]
OotOffset-rm: 2.587 arcsec [1.87σ]
OotOffset-st: 2/0/0/1 [3]
KicOffset-rm: 2.519 arcsec [3.12σ]
KicOffset-st: 2/0/0/1 [3]
DiffImageQuality-fgm: 1.00 [3/3]
DiffImageOverlap-fno: 0.00 [0/3]

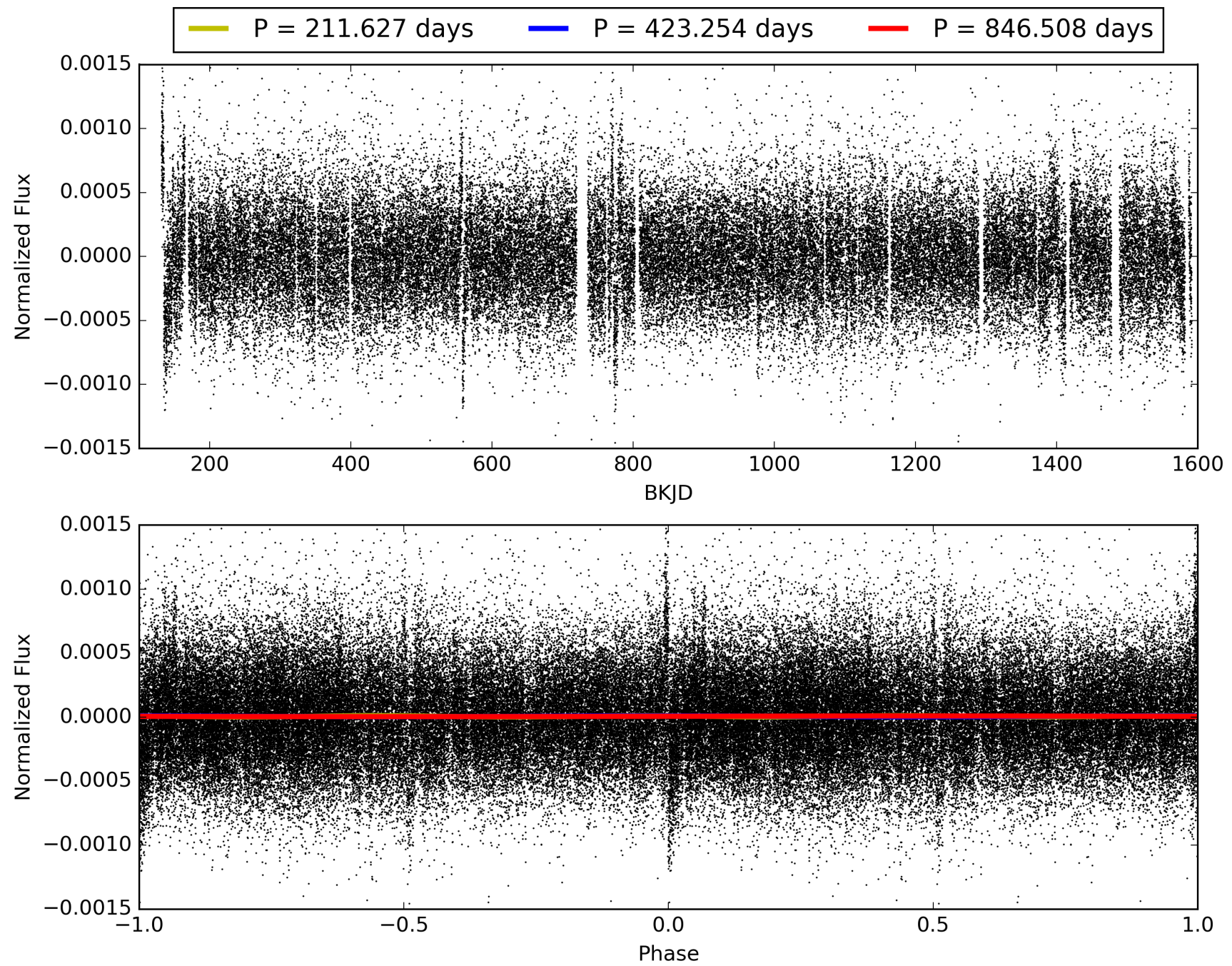
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 29-Jan-2016 20:59:30 Z

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

TCE 007117585-01, PDC Light Curves

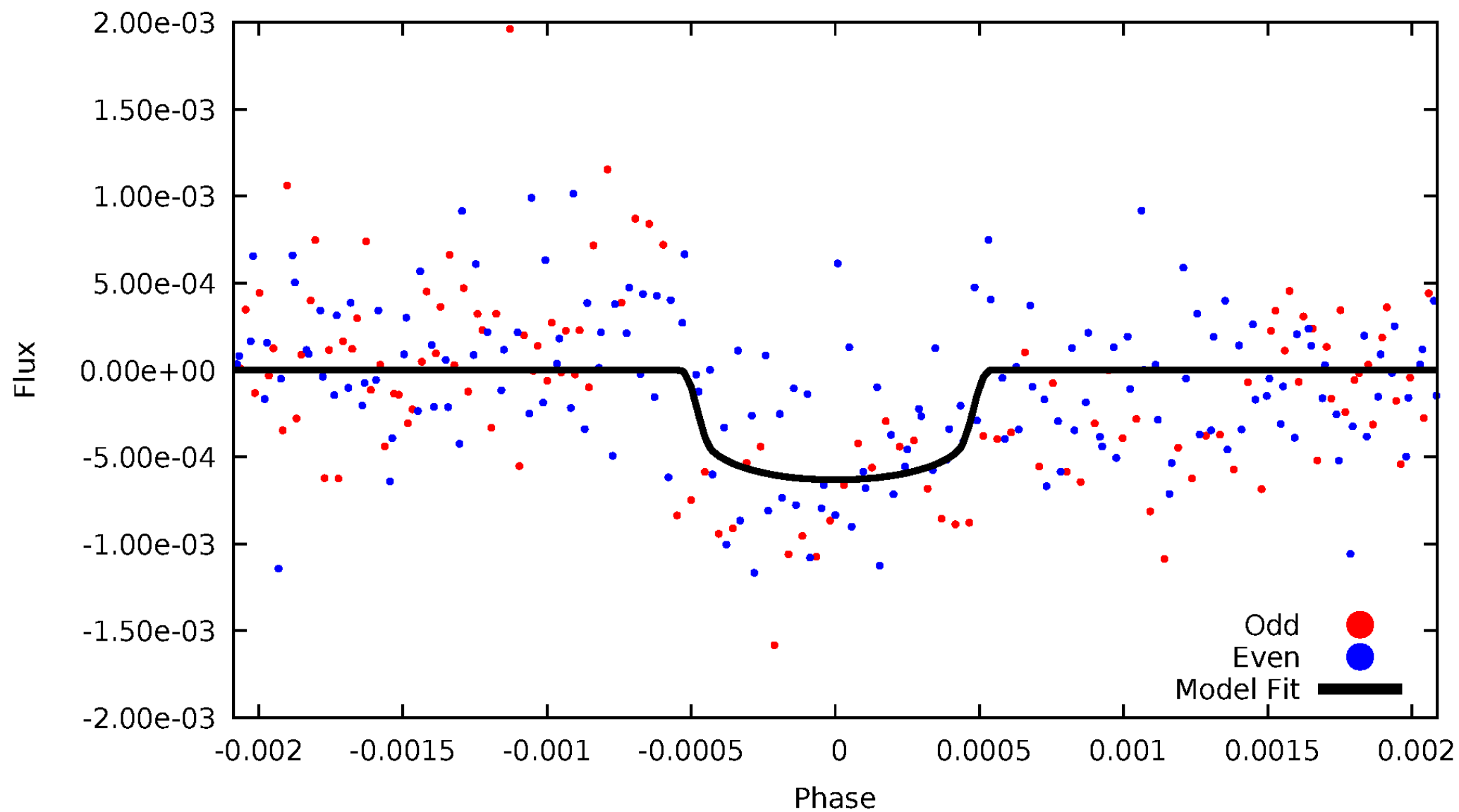


TCE 007117585-01



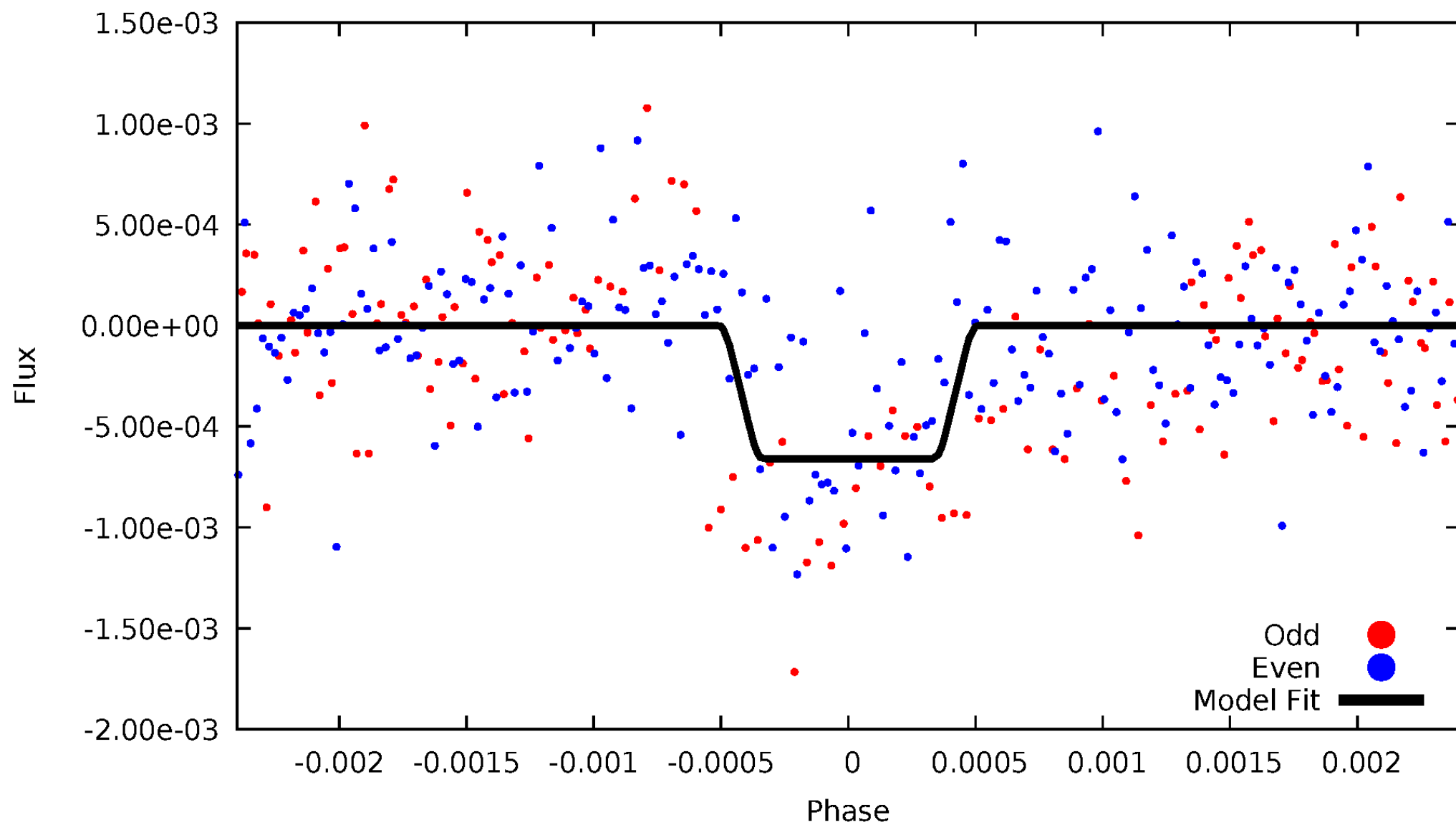
DV Odd/Even

TCE 007117585-01



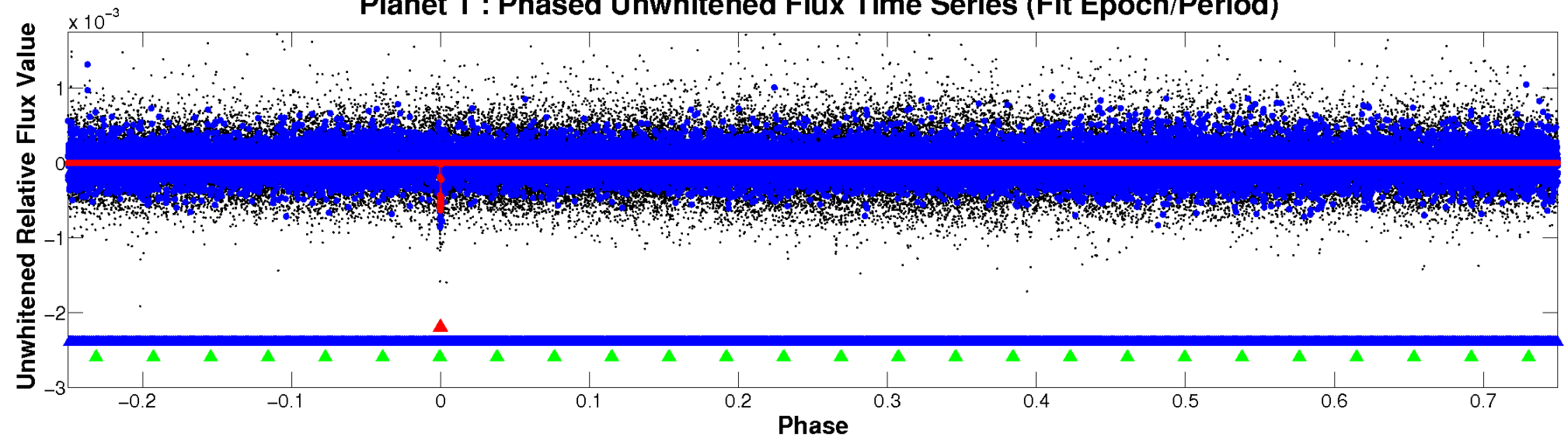
ALT Odd/Even

TCE 007117585-01

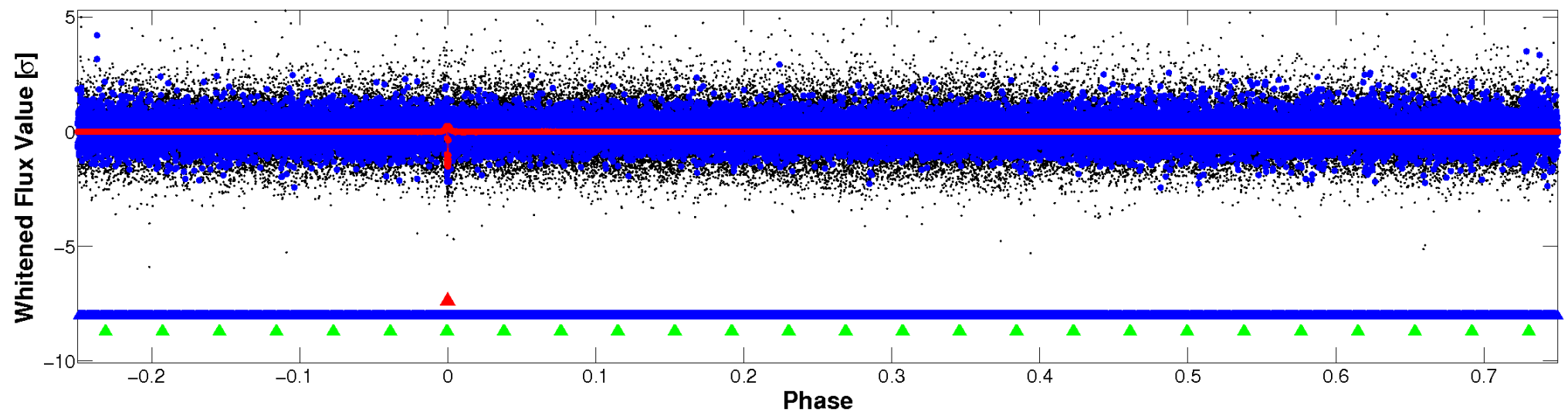


Non-Whitened Vs. Whitened Light Curve

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

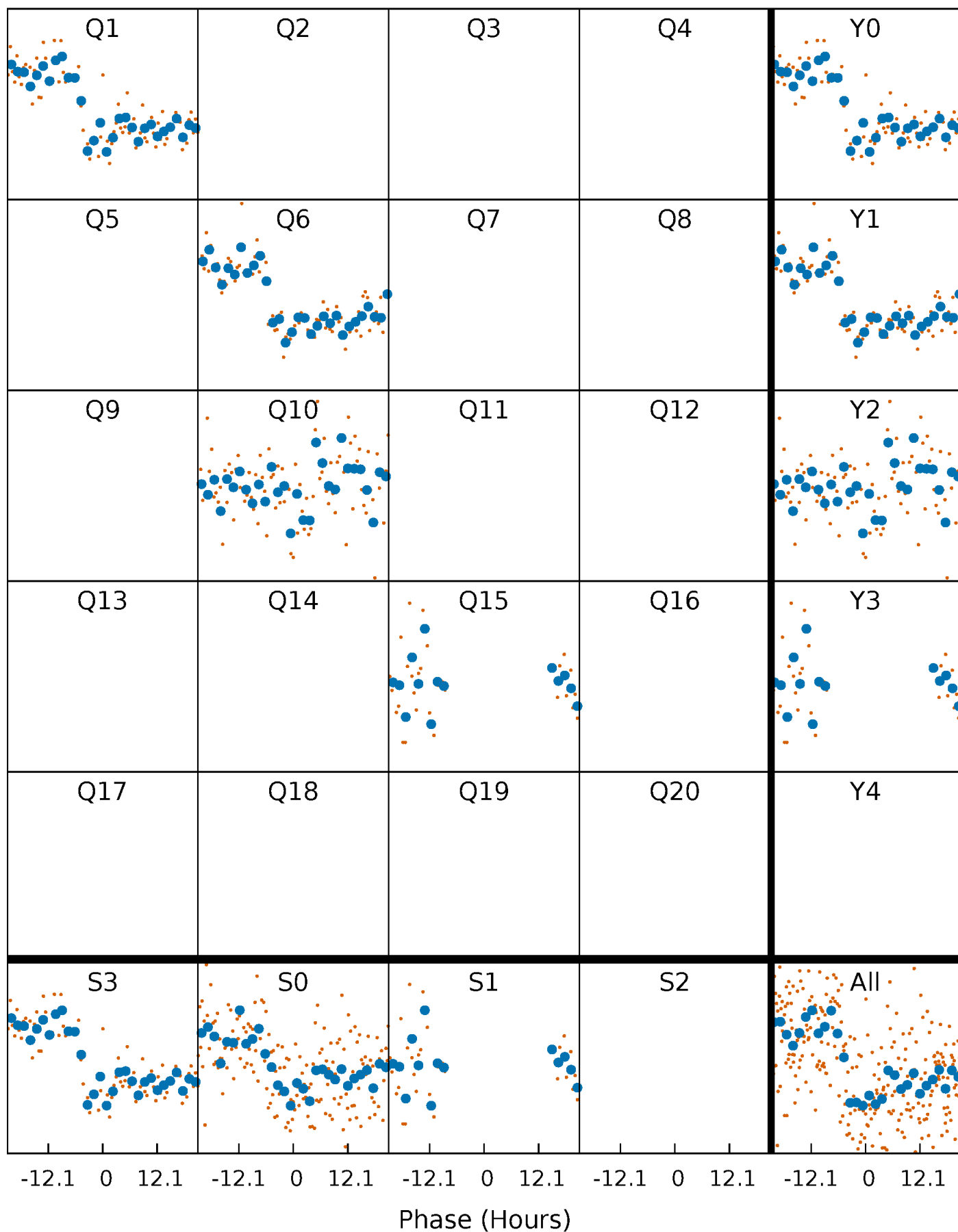


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



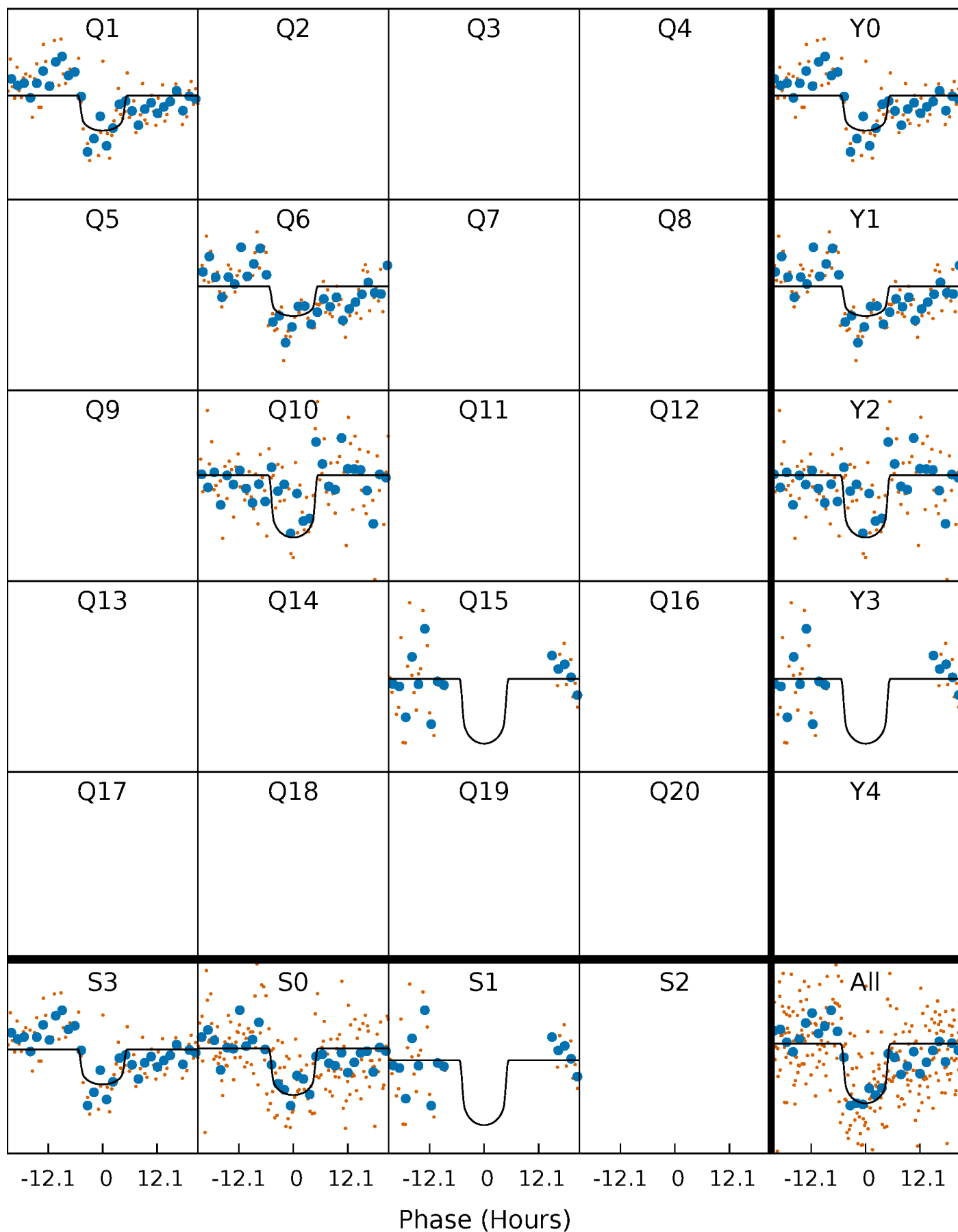
PDC Quarter-Phased Transit Curves

TCE 007117585-01 P=423.253949 Days $T_0=134.900860$ (BKJD)



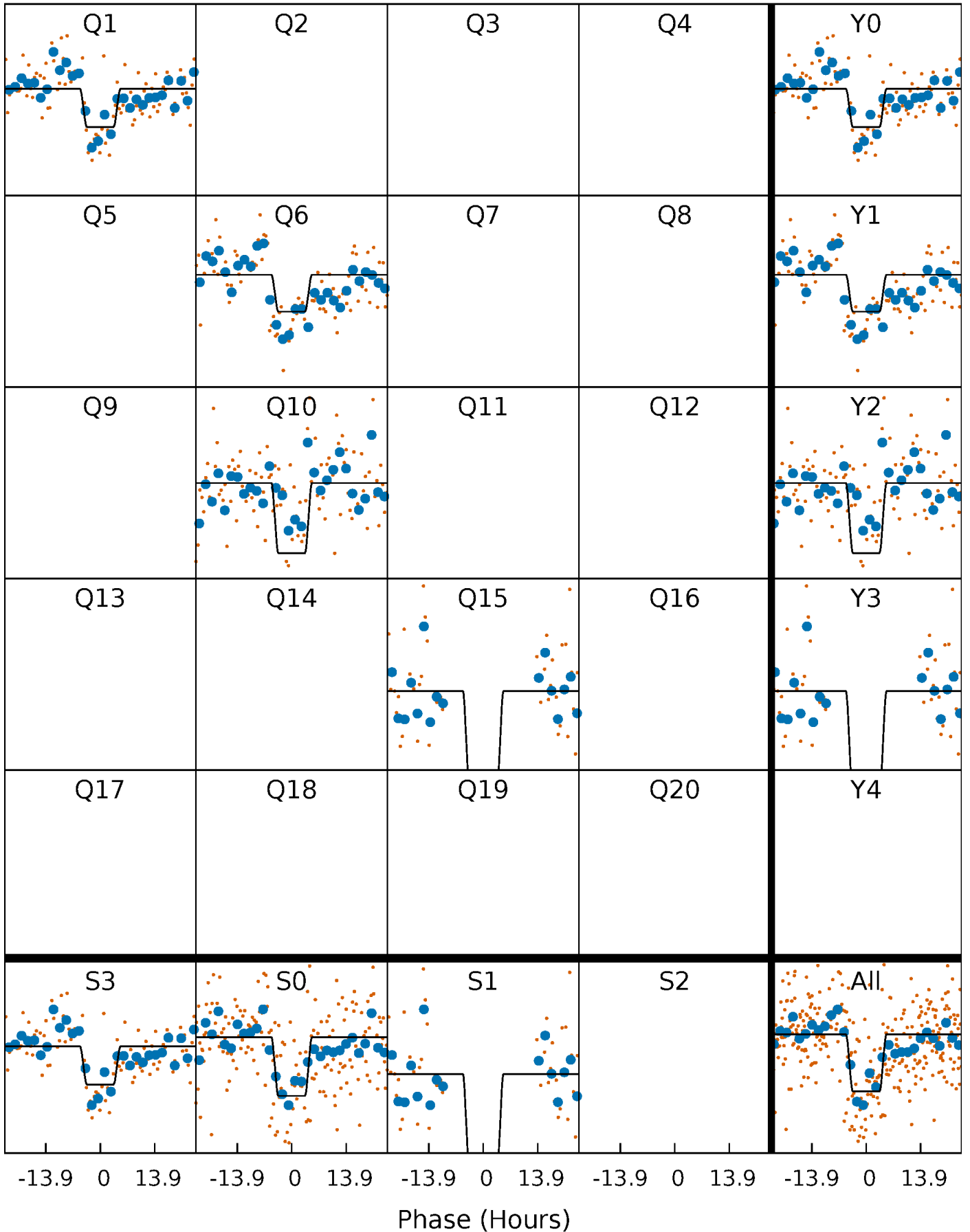
DV Quarter-Phased Transit Curves

TCE 007117585-01 P=423.253949 Days $T_0=134.900860$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

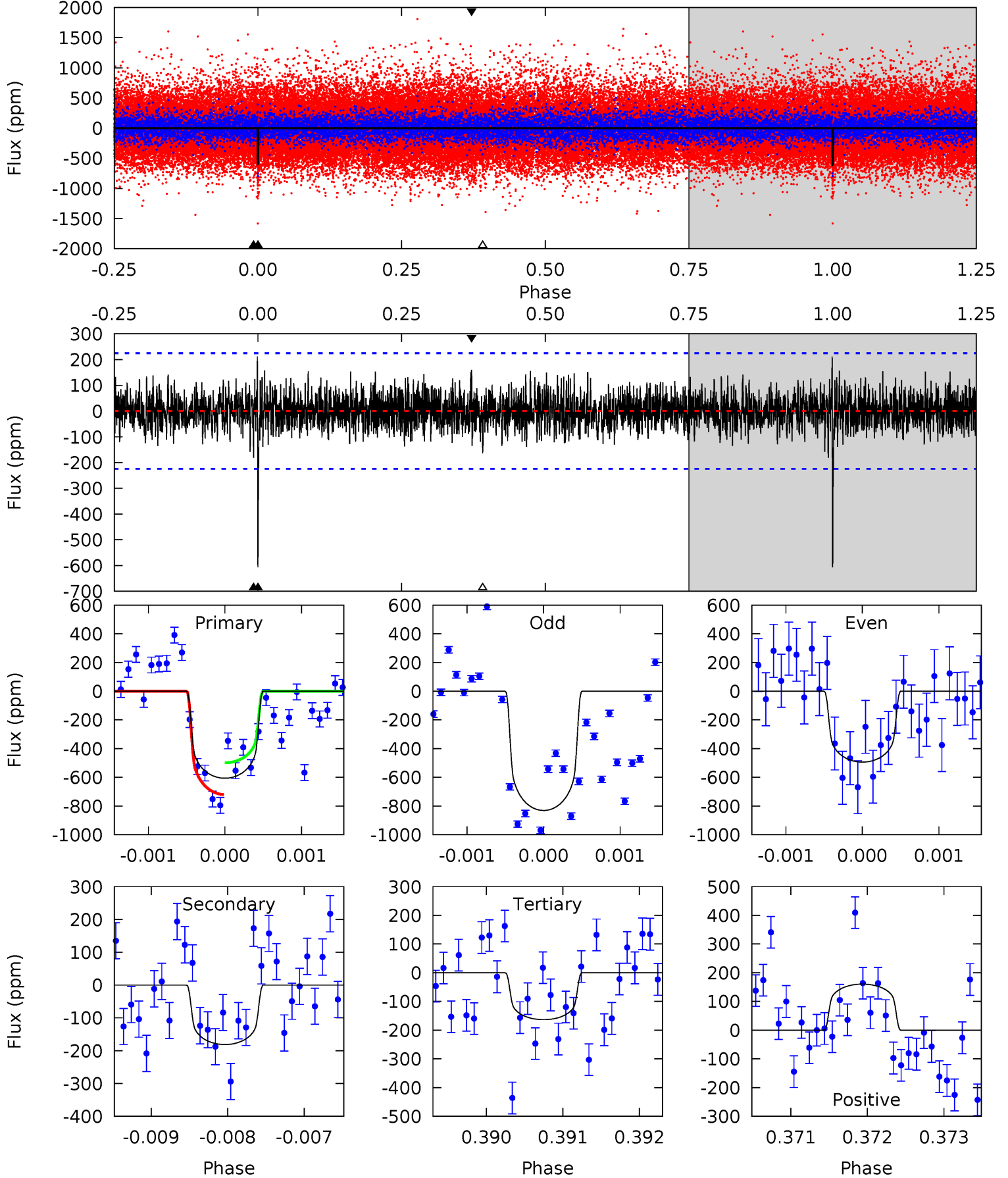
TCE 007117585-01 P=423.288007 Days $T_0=134.867042$ (BKJD)



DV Model-Shift Uniqueness Test

007117585-01, $P = 423.253949$ Days, $E = 134.900860$ Days

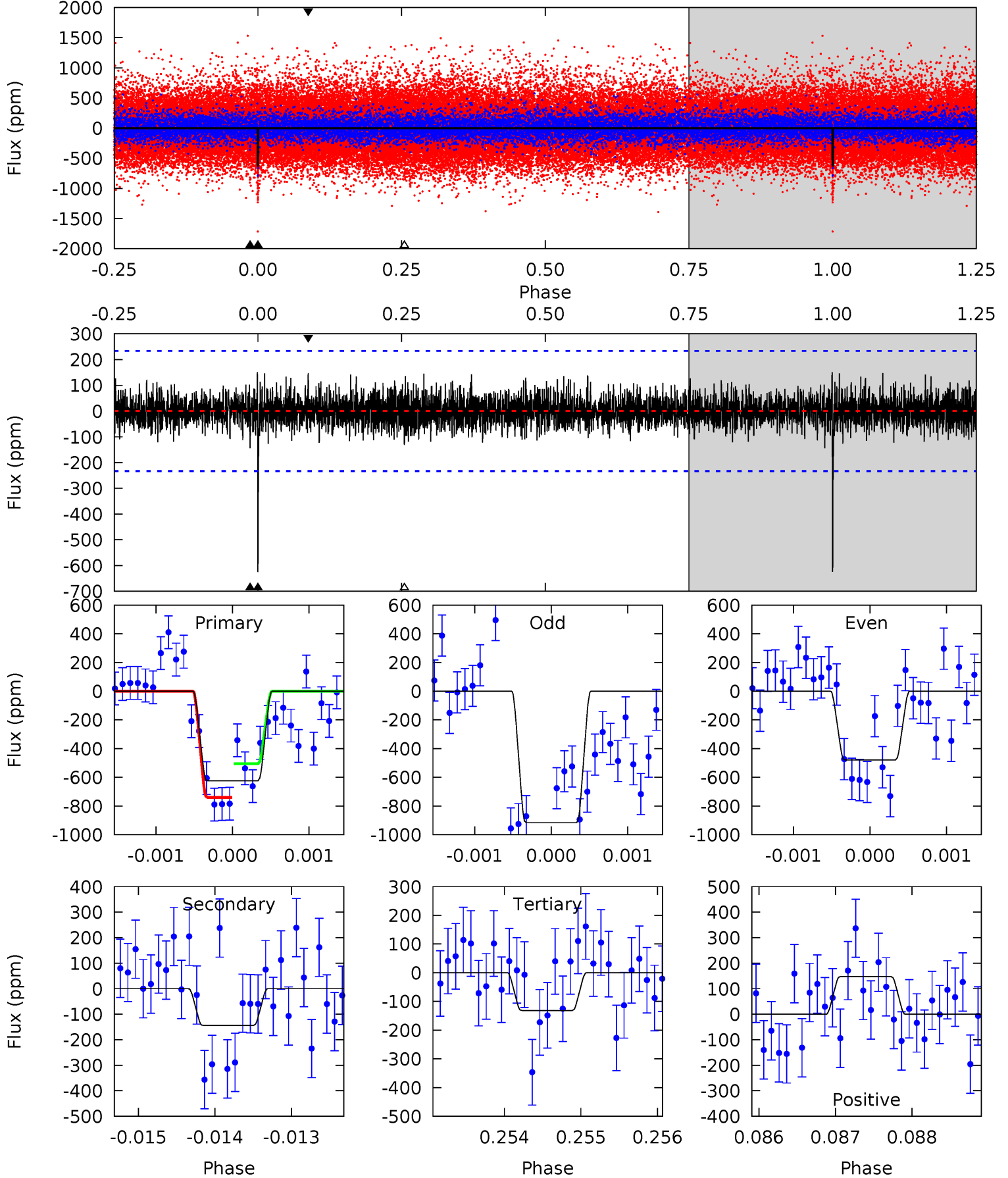
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
14.7	4.39	3.96	3.88	5.44	3.27	1.20	10.7	10.8	0.43	0.51	3.84	0.89	0.26	2.69



Alt Model-Shift Uniqueness Test

007117585-01, P = 423.288007 Days, E = 134.867042 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
14.6	3.36	3.07	3.45	5.45	3.29	0.98	11.5	11.1	0.29	-0.09	4.84	0.87	0.20	2.75



Stellar Parameters For KIC 007117585

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	5792^{+156}_{-173}	$4.327^{+0.162}_{-0.180}$	$-0.060^{+0.300}_{-0.300}$	$1.107^{+0.310}_{-0.207}$	$0.947^{+0.136}_{-0.102}$	$0.984^{+0.734}_{-0.485}$
	+3%/-3%	+4%/-4%	+500%/-500%	+28%/-19%	+14%/-11%	+75%/-49%
Source	PHO1	KIC0	KIC0	DSEP		

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

Secondary Eclipse Parameters for KIC 007117585-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-181 ± 41	$3.14^{+0.90}_{-0.80}$	361^{+26}_{-22}	4357^{+519}_{-385}	11522^{+9496}_{-4864}
Alt.	-144 ± 43	$3.10^{+1.02}_{-0.86}$	360^{+27}_{-22}	4201^{+558}_{-435}	9656^{+8882}_{-4869}

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

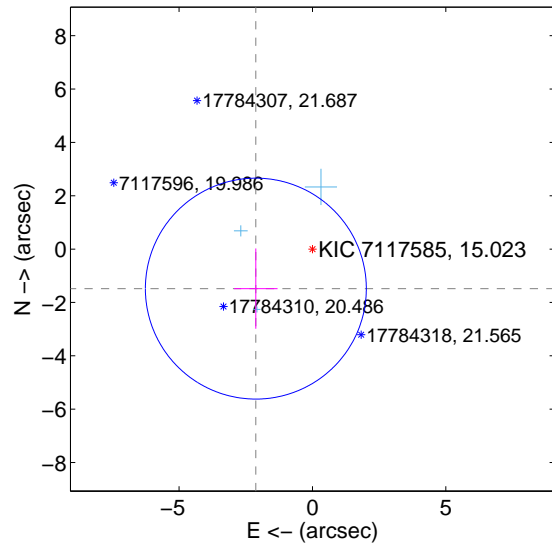
Supplemental centroid analysis for 007117585-01. Kepler magnitude: 15.02. Transit SNR 10.47

There are 3 quarters with good PRF difference image offsets

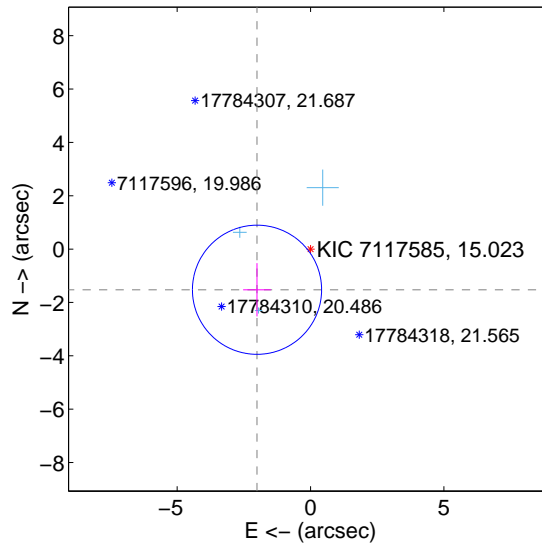
The direct PRF centroid is offset from the target star catalog position by about 0.14 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	2.587 ± 1.380	1.87	2.121 ± 0.816	-1.481 ± 1.505
PRF-fit source offset from KIC position	2.519 ± 0.807	3.12	2.005 ± 0.521	-1.524 ± 1.000
photometric centroid source offset	4.56 ± 1.00	4.56	4.41 ± 1.00	-1.16 ± 1.05

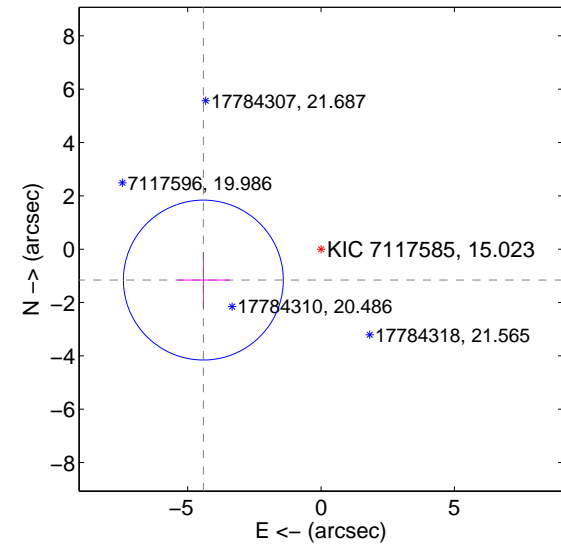
offset from difference PRF-fit to OOT PRF-fit



offset from difference PRF-fit to KIC position

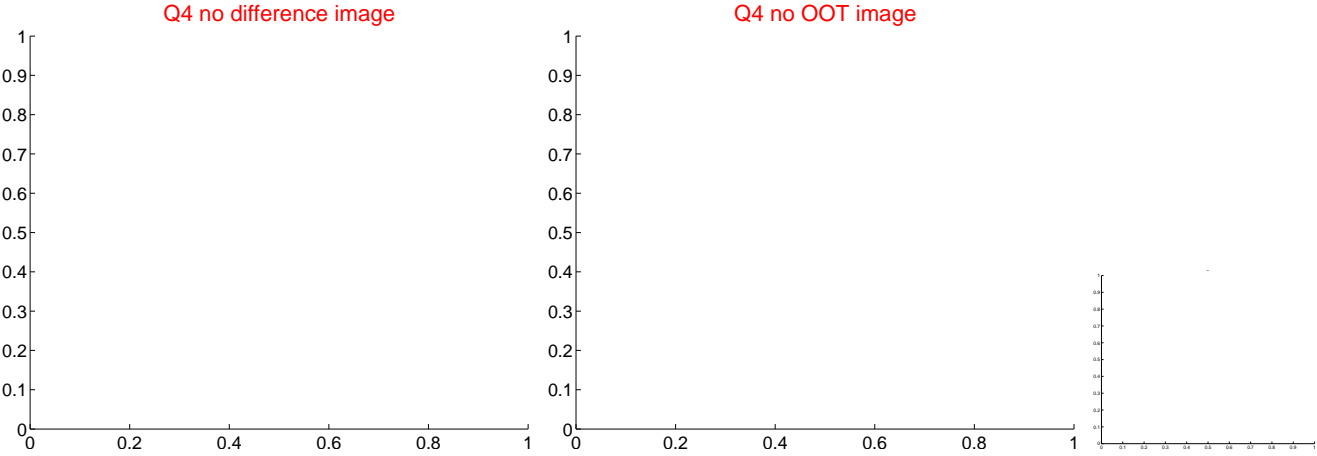
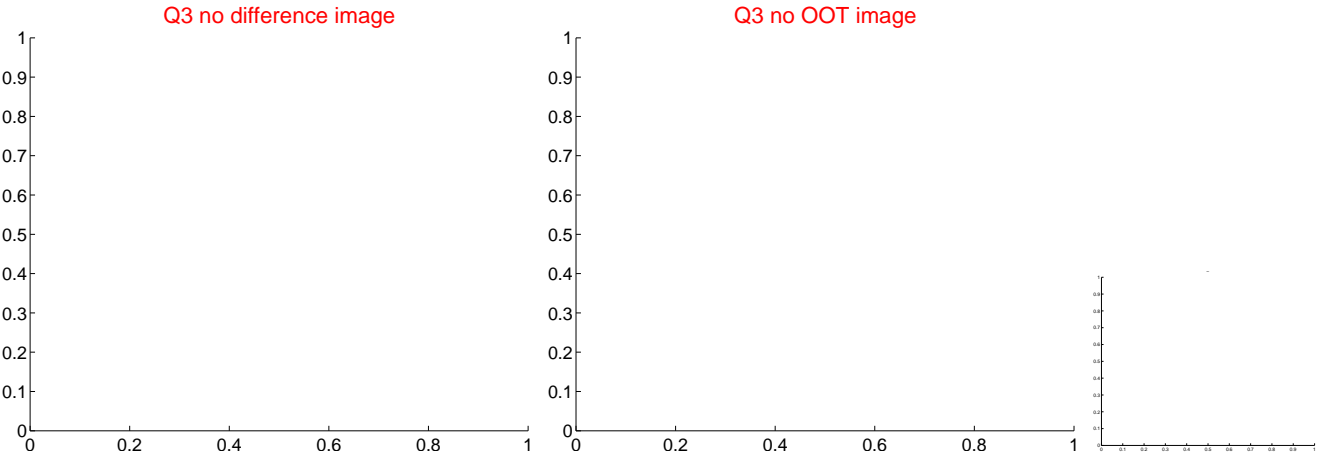
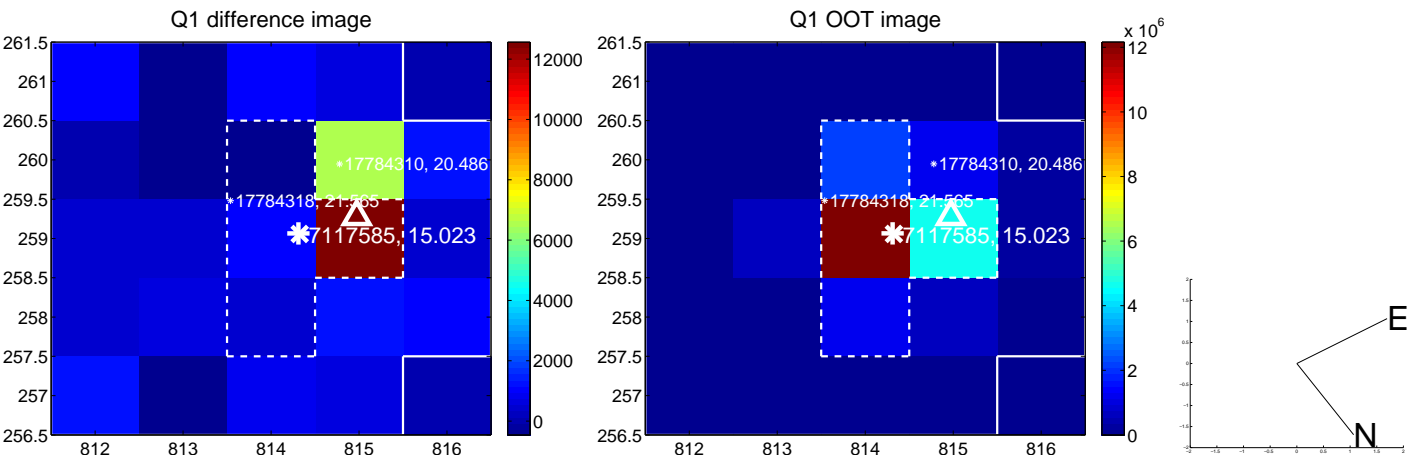


offset from photometric centroids



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

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



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

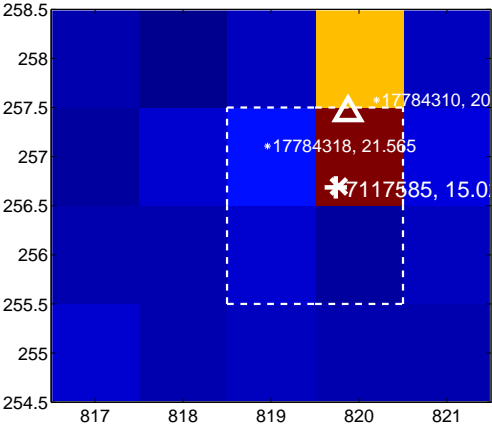
Q5 no difference image



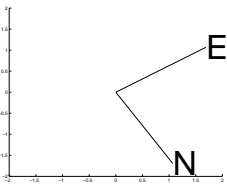
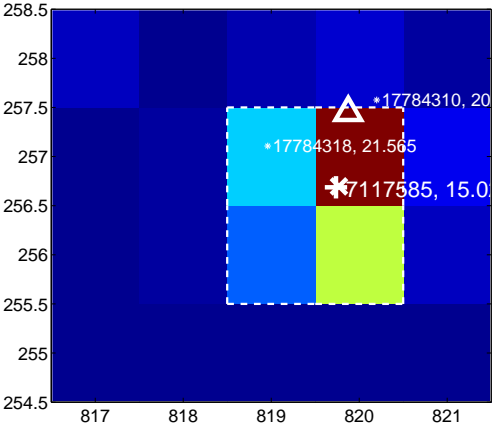
Q5 no OOT image



Q6 difference image



Q6 OOT image



Q7 no difference image



Q7 no OOT image



Q8 no difference image



Q8 no OOT image



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

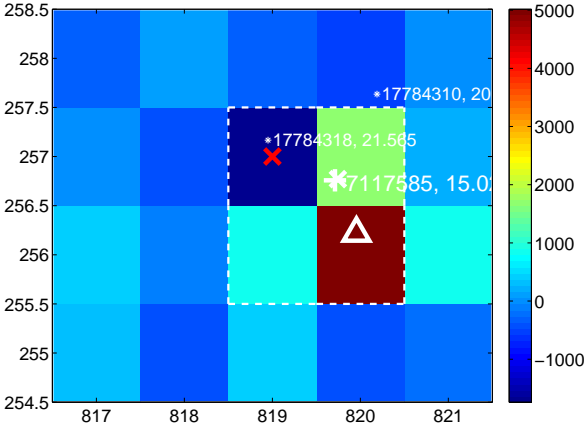
Q9 no difference image



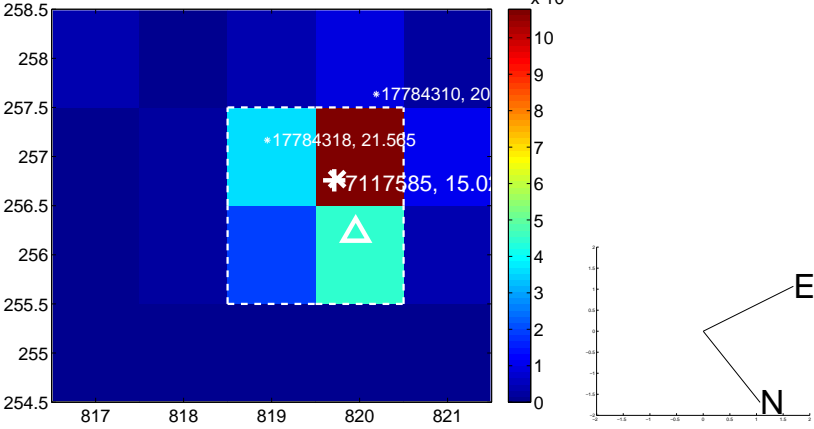
Q9 no OOT image



Q10 difference image



Q10 OOT image



Q11 no difference image



Q11 no OOT image



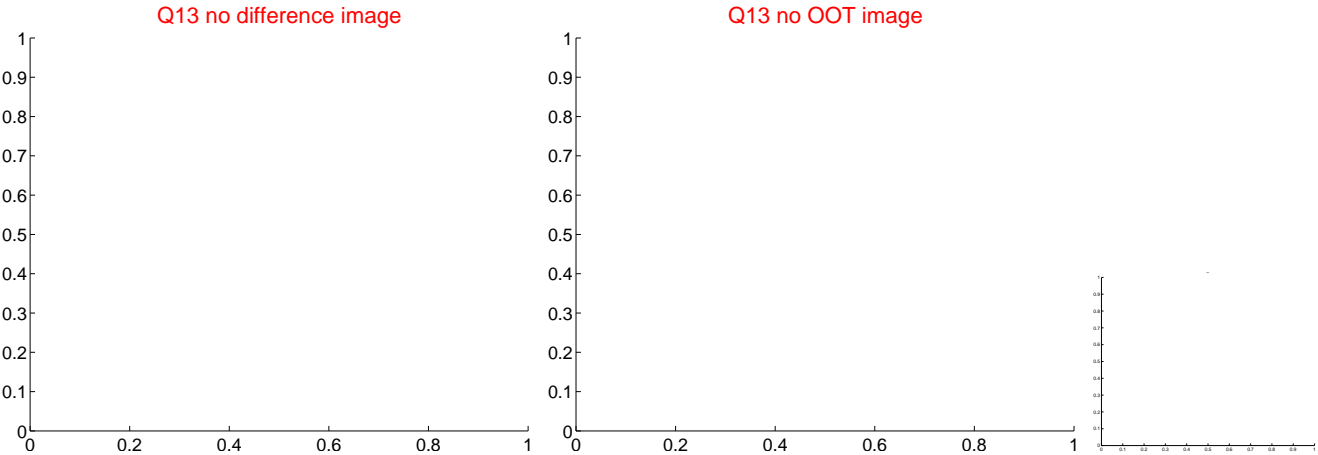
Q12 no difference image



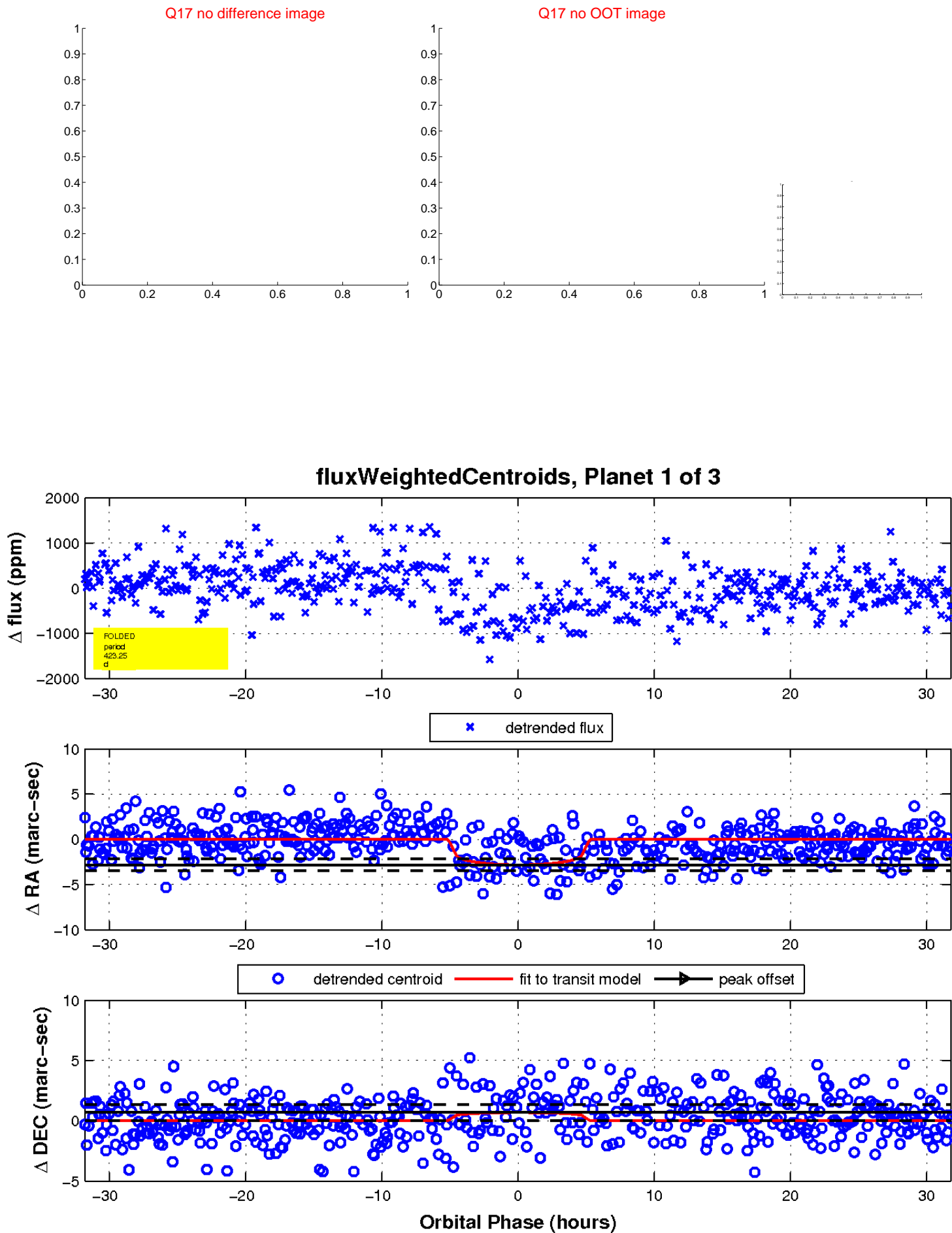
Q12 no OOT image



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

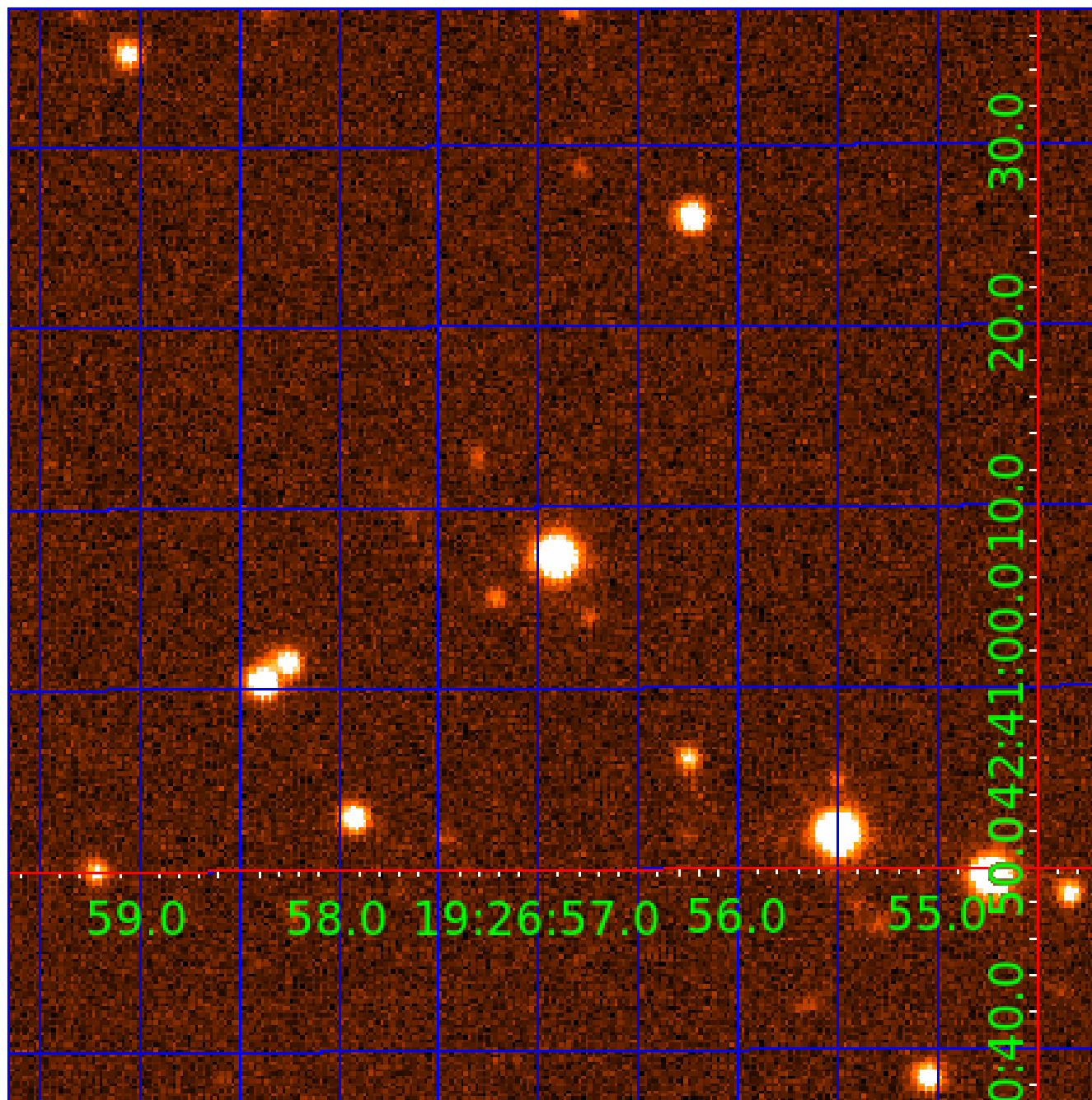


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 007117585

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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007117585-02	OBS	No	0.566759	131.851934	11.8	4.187	8.9	4.1	1.11	5792	0.39	7119.39
007117585-03	OBS	No	16.284636	134.485465	462.1	1.501	8.0	10.3	1.11	5792	2.37	80.90

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
007117585-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_MARSHALL—ALL_TRANS_CHASES—INCONSISTENT_TRANS
007117585-02	OBS	FP	0.00	1	0	1	1	LPP_DV—CENT_UNRESOLVED_OFFSET—HALO_GHOST—EPHEM_MATCH
007117585-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV—MOD_TER_DV—CENT_FEW_DIFFS

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.

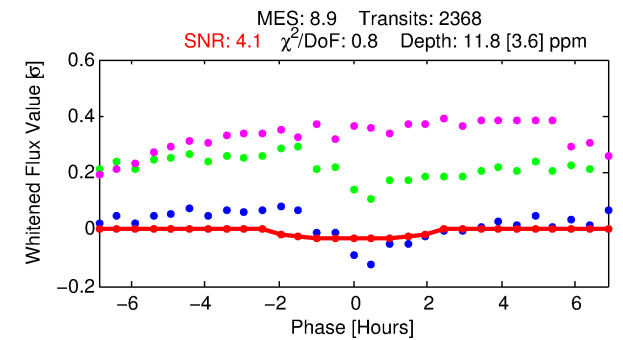
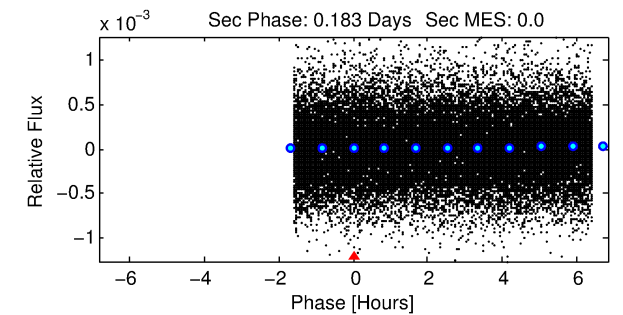
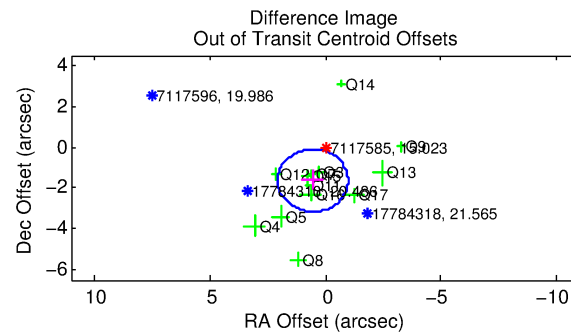
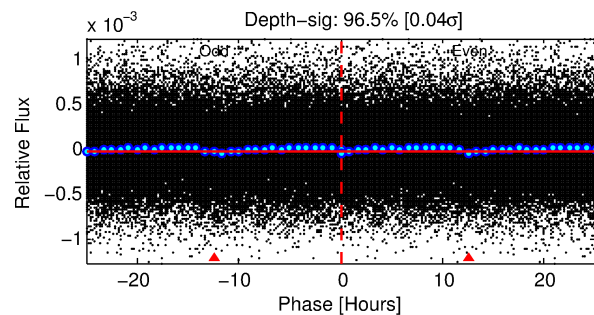
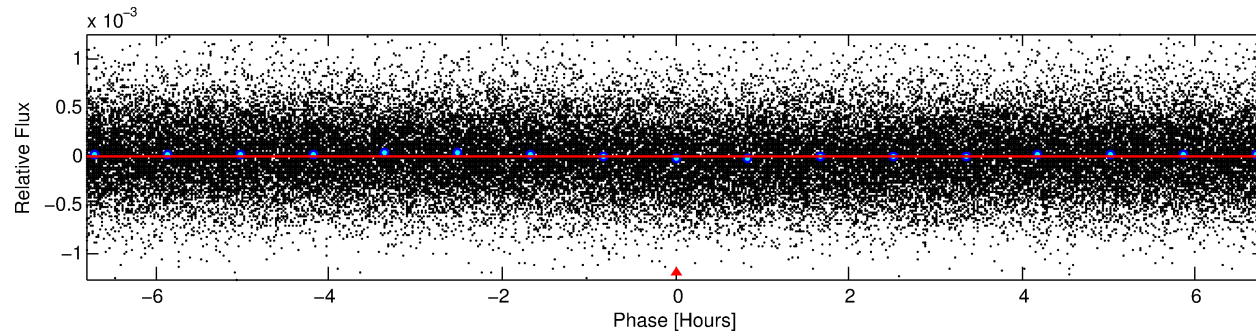
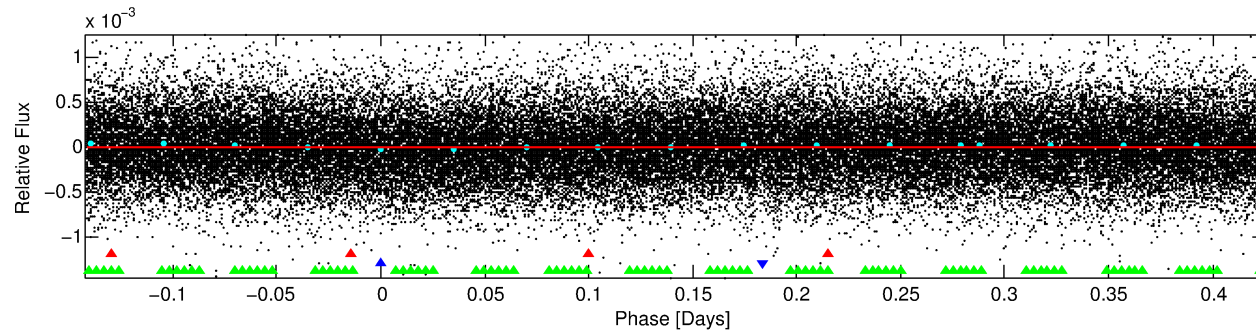
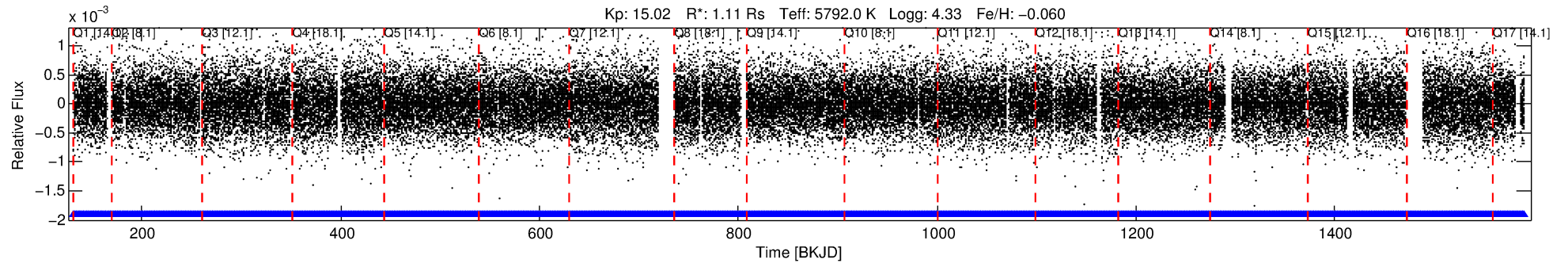
Ephemeris Match Information For 007117585-02

TCE (1)	KIC	Parent (2)	Parent KIC	P ₁ :P ₂	Dist (μ)	Δ Row	Δ Col	m ₂	m ₁	D ₂ /D ₁	Mechanism	Flag	σ_P	σ_T
007117585-02	7117585	RR-Lyr-pri	7198959	1:1	1043.4	208	160	7.86	15.02	51941.00	Direct-PRF	0	2.24	23.10

Notes: P₁:P₂ is the period ratio. Dist is the distance in arcseconds. Δ Row and Δ Col are the number of pixels apart in row and column. m₂ and m₁ are the magnitudes of the parent and child. D₂/D₁ is the parent's transit depth divided by the child's. σ_P and σ_T are the significance of the match in period and epoch. For a match to be considered significant $\sigma_P < 5.0$ and $\sigma_T < 5.0$. Matches which have σ_P and σ_T very close to this cutoff should receive extra scrutiny, especially if the period ratio is very large.

DV One-Page Summary

KIC: 7117585 Candidate: 2 of 3 Period: 0.567 d



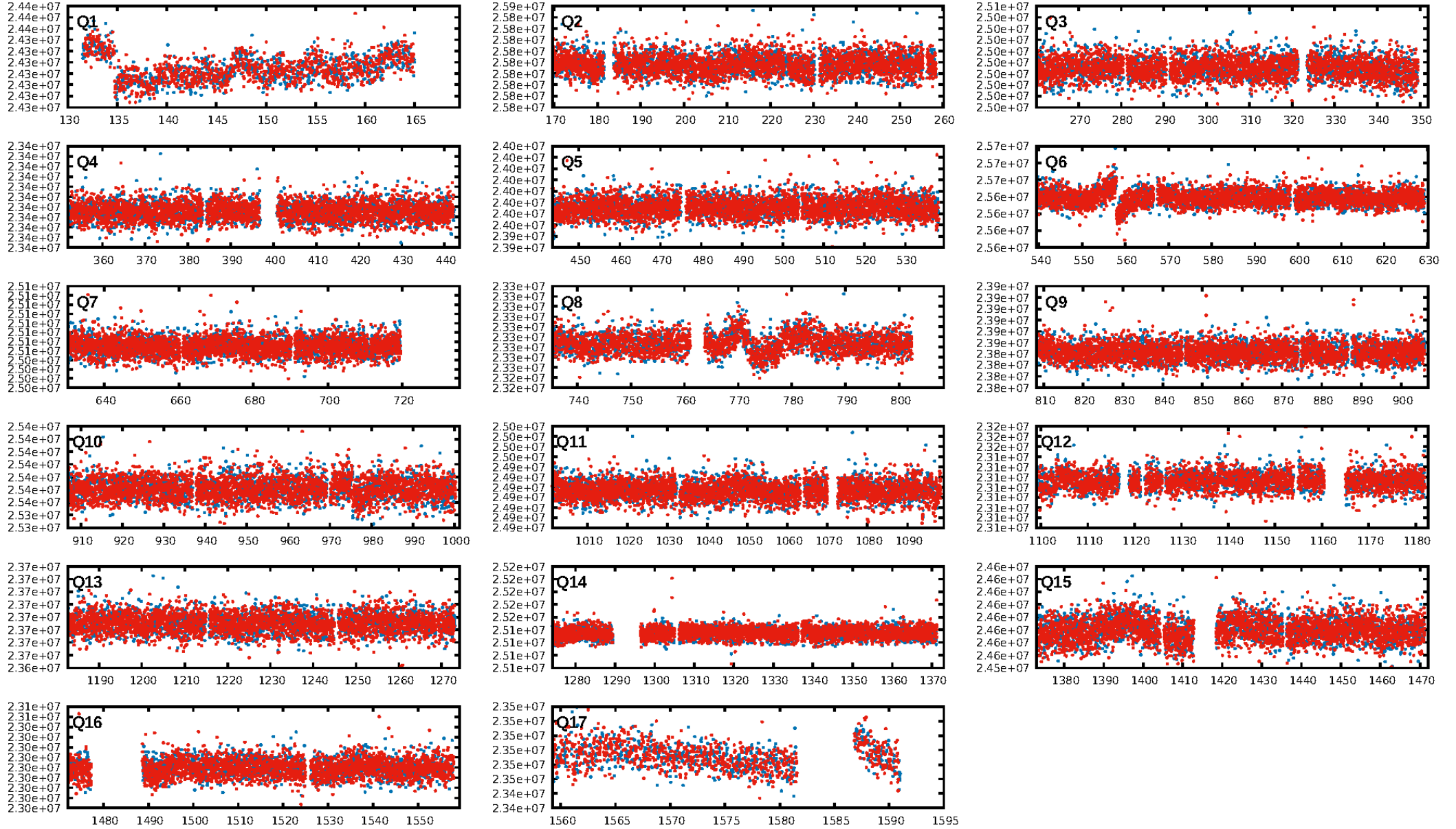
DV Fit Results:

Period = 0.56676 [0.00003] d
Epoch = 131.8519 [0.0119] BKJD
Rp/R* = 0.0033 [0.0064]
a/R* = 1.15 [2.52]
b = 0.56 [10.77]
Seff = 7119.39 [2521.86]
Teff = 2342 [207] K
Rp = 0.39 [0.78] Re
a = 0.0132 [0.0031] AU
Ag = N/A
Teffp = N/A

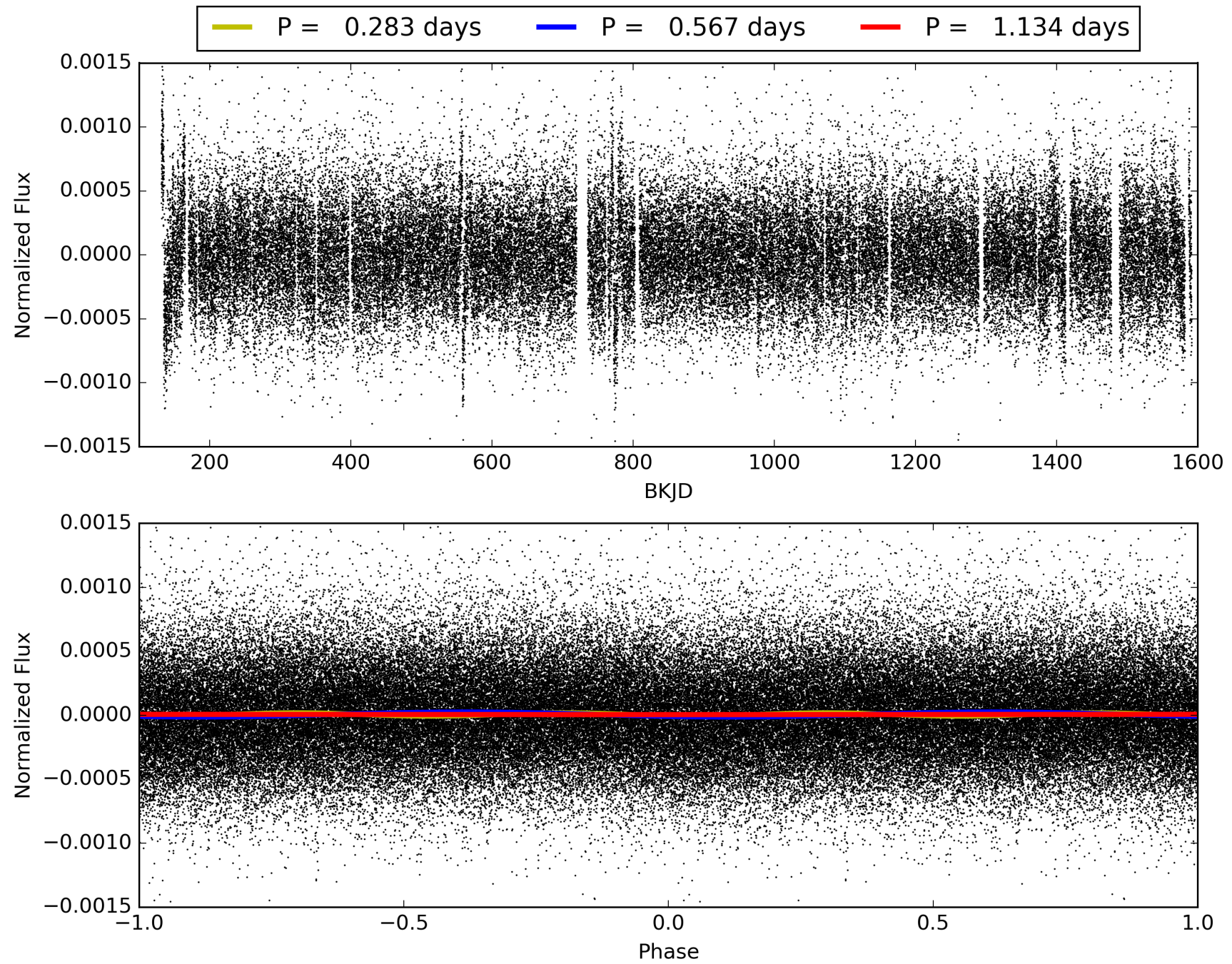
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: 100.0% [84.80 σ]
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 8.26e-10
RollingBand-fgt: 1.00 [2264/2264]
GhostDiagnostic-chr: 0.06103
Centroid-sig: 17.9%
Centroid-so: 3.579 arcsec [1.06 σ]
OotOffset-rm: 1.717 arcsec [3.37 σ]
KicOffset-st: 1/4/4/4 [13]
KicOffset-st: 1/4/4/4 [13]
DiffImageQuality-fgm: 0.38 [5/13]
DiffImageOverlap-fno: 1.00 [17/17]

TCE 007117585-02, PDC Light Curves

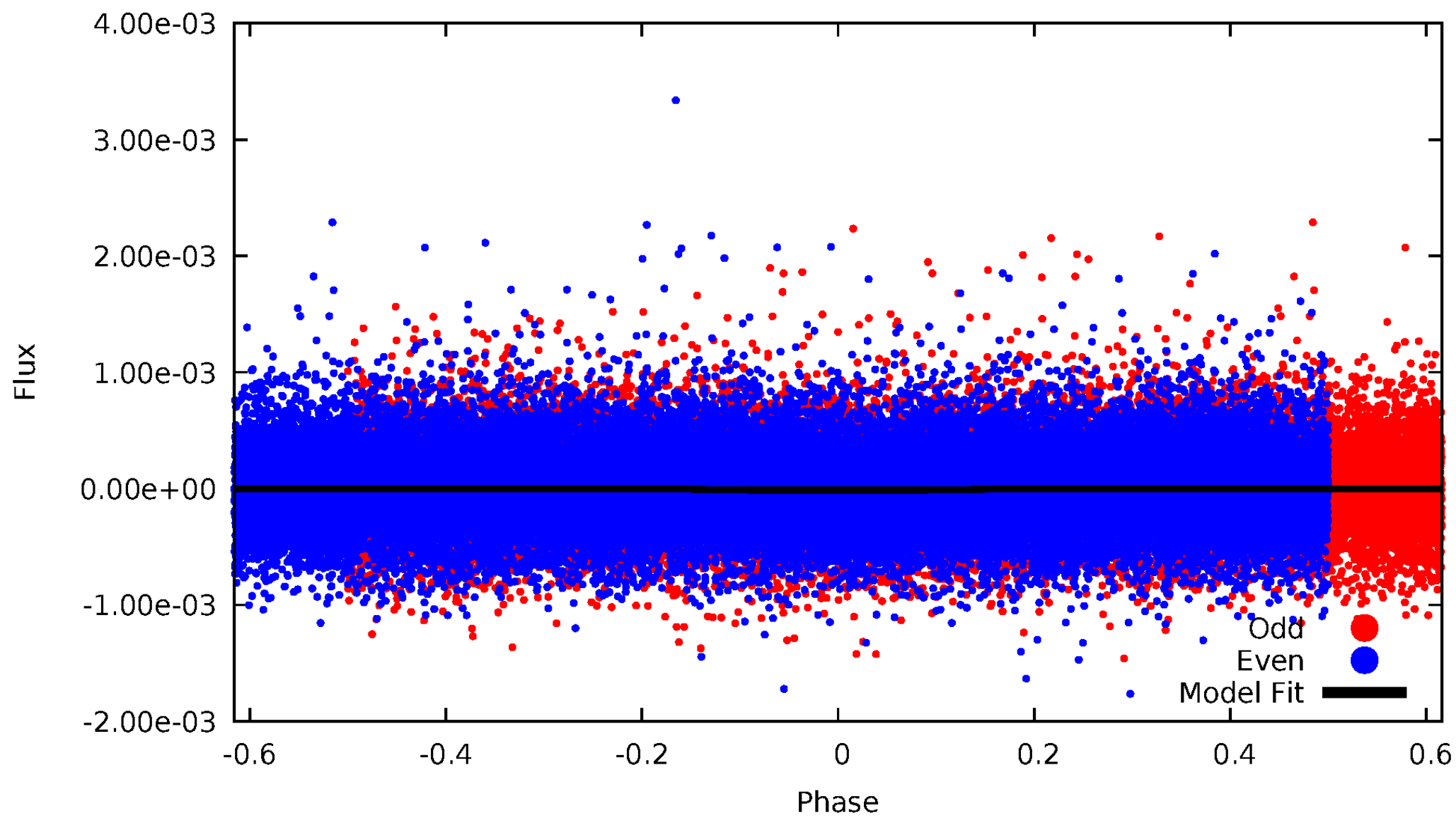


TCE 007117585-02



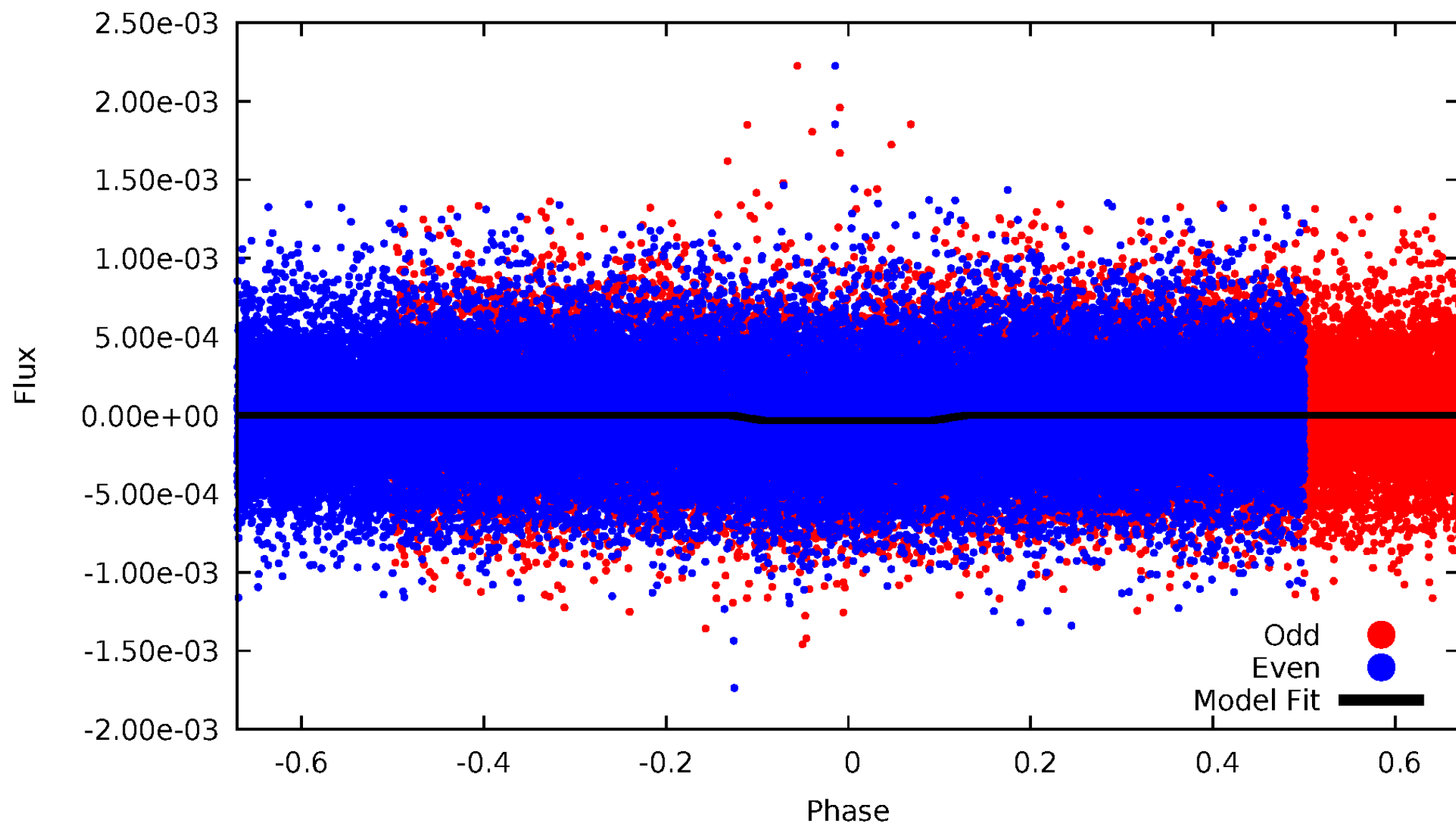
DV Odd/Even

TCE 007117585-02



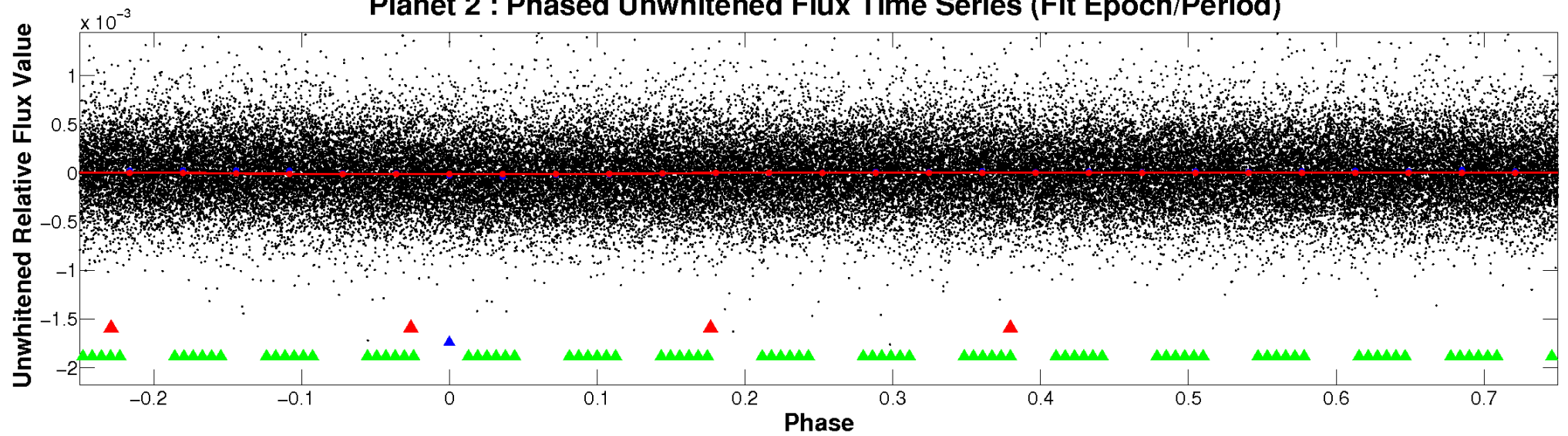
ALT Odd/Even

TCE 007117585-02

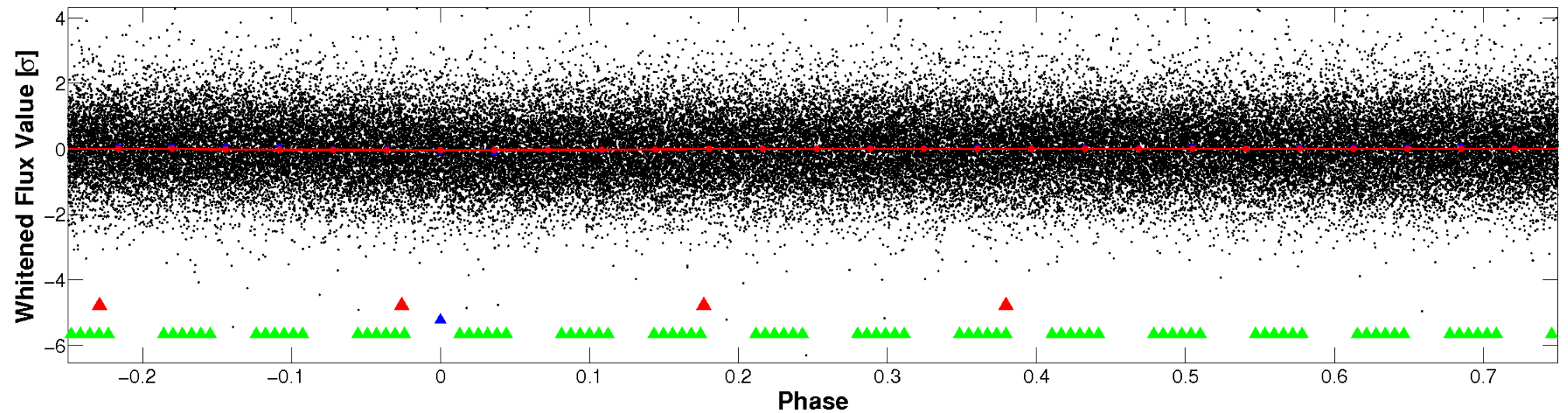


Non-Whitened Vs. Whitened Light Curve

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

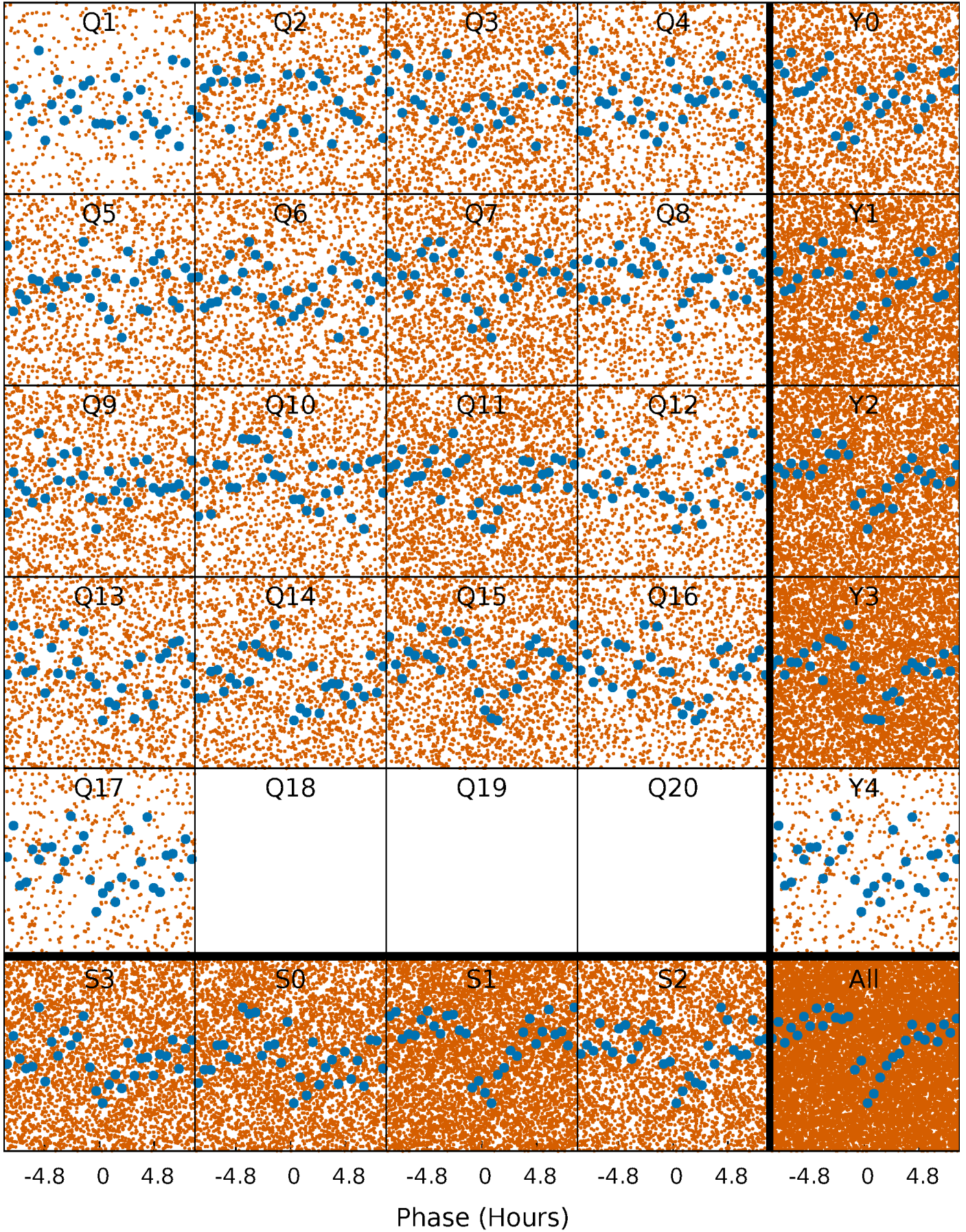


Planet 2 : Phased Whitened Flux Time Series (Fit Epoch/Period)



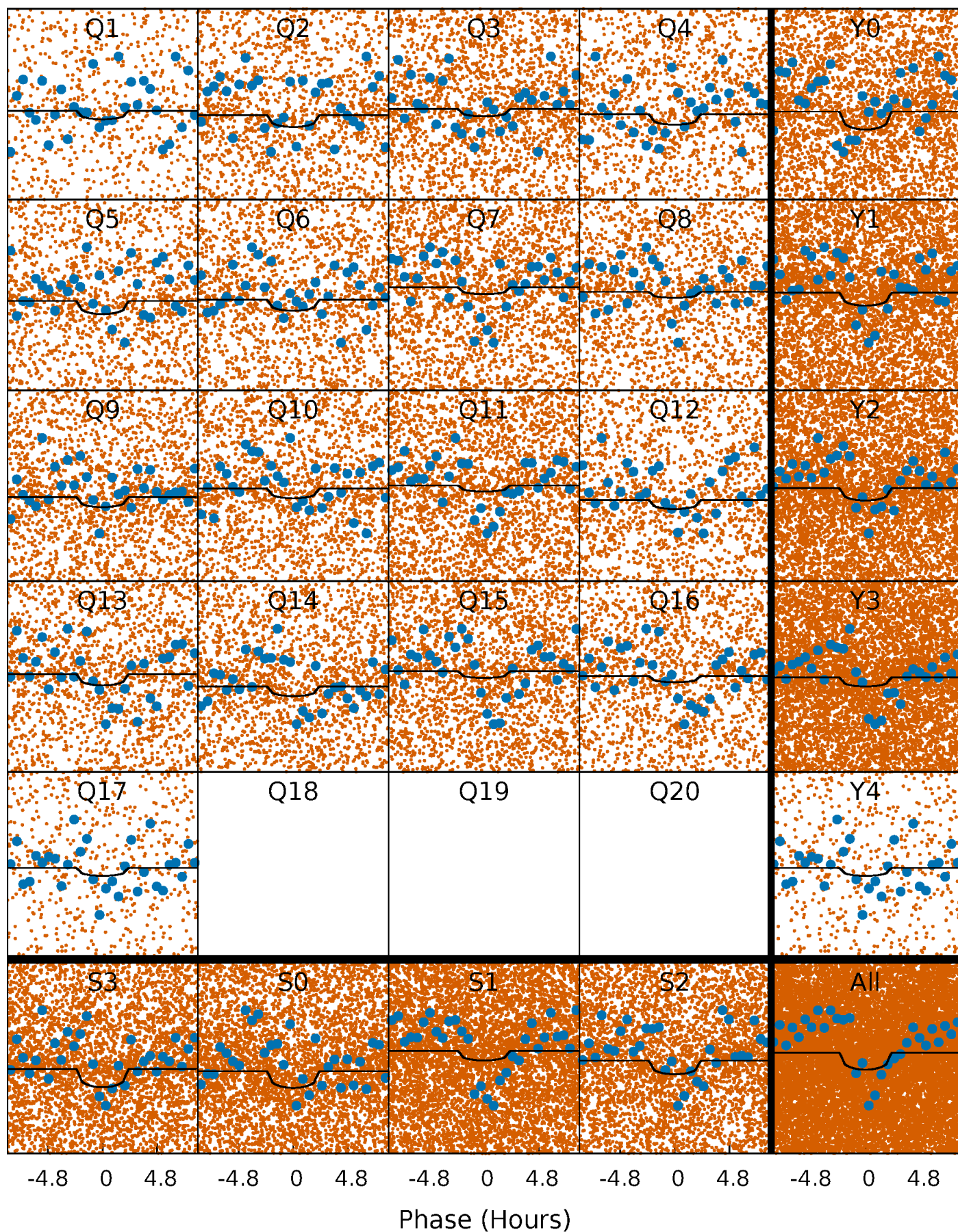
PDC Quarter-Phased Transit Curves

TCE 007117585-02 P= 0.566759 Days $T_0=131.851934$ (BKJD)



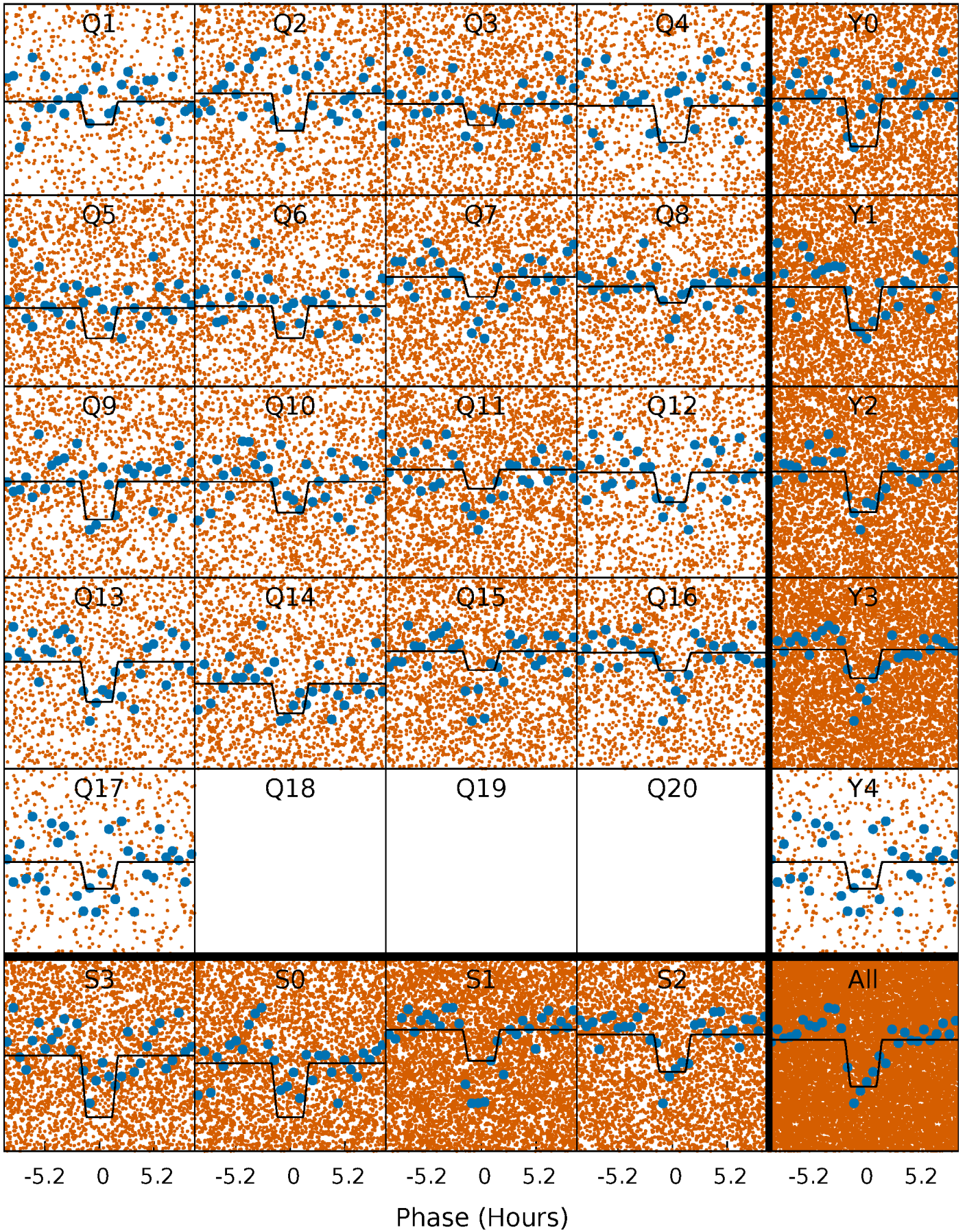
DV Quarter-Phased Transit Curves

TCE 007117585-02 P= 0.566759 Days $T_0=131.851934$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

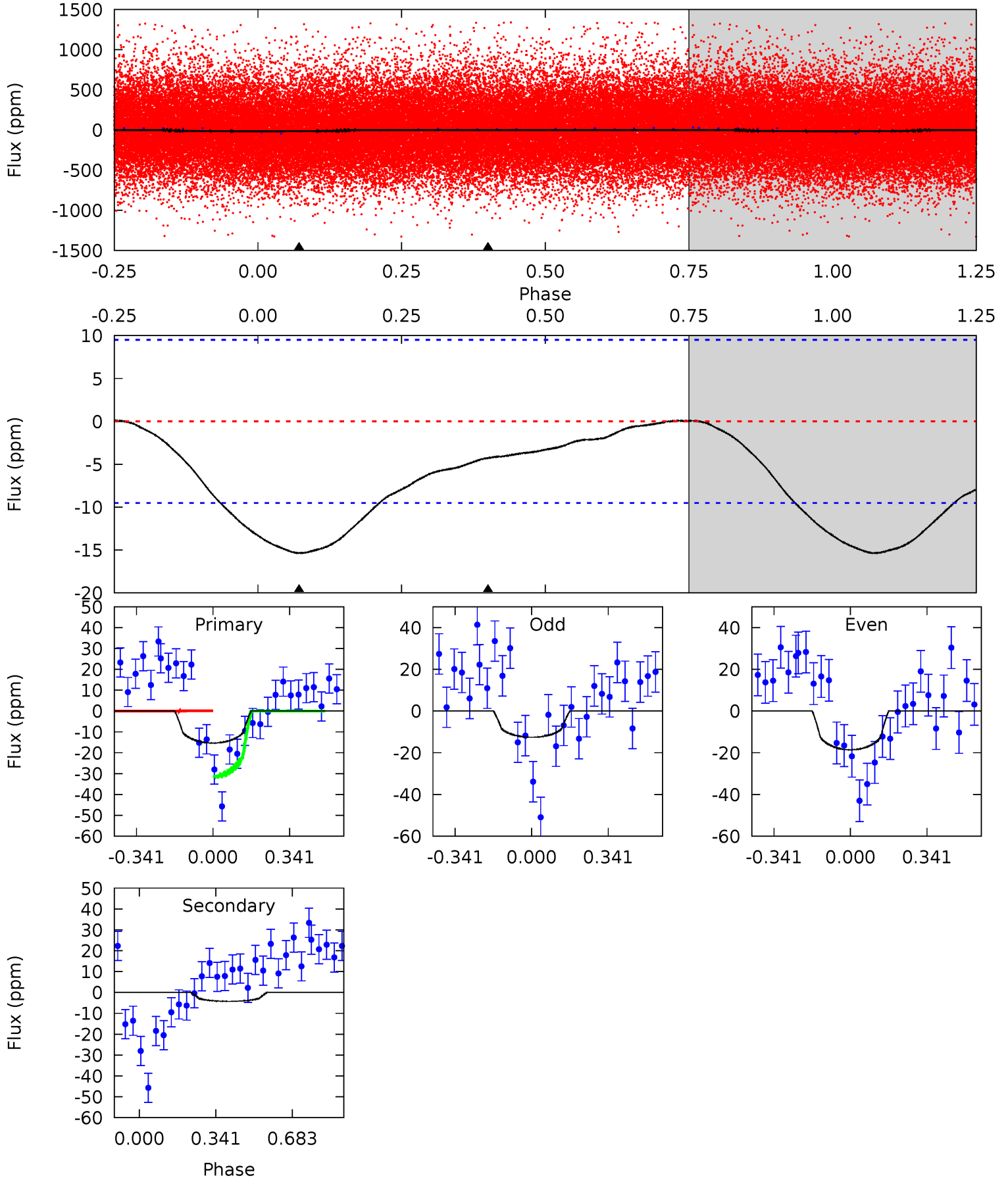
TCE 007117585-02 P= 0.566801 Days $T_0=131.815786$ (BKJD)



DV Model-Shift Uniqueness Test

007117585-02, P = 0.566759 Days, E = 131.285175 Days

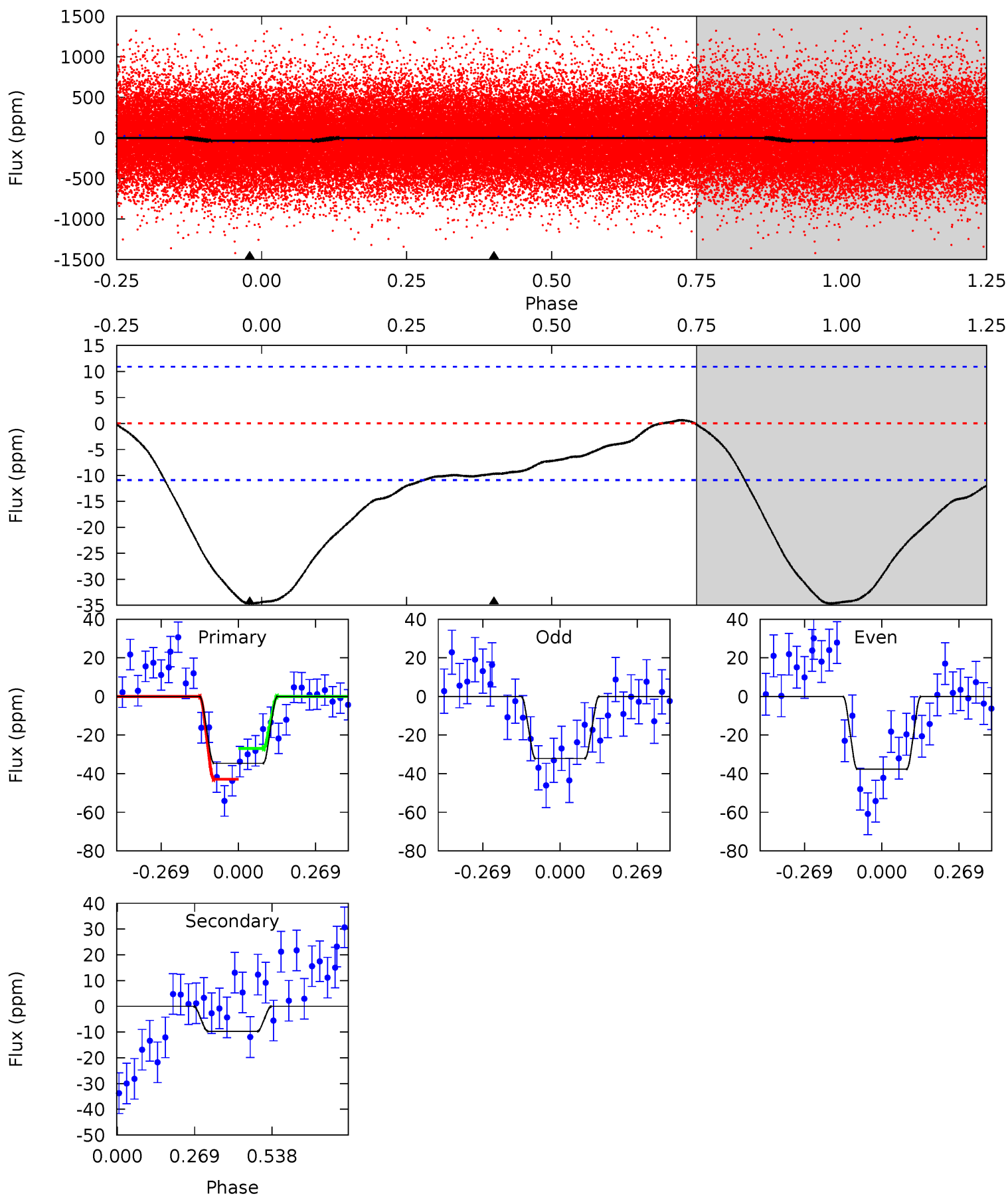
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
6.95	1.93	0	0	4.30	0.95	0.06	6.95	6.95	1.93	1.93	1.37	0.85	0.01	7.11



Alt Model-Shift Uniqueness Test

007117585-02, P = 0.566801 Days, E = 131.248985 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
13.8	3.87	0	0	4.35	1.11	0.44	13.8	13.8	3.87	3.87	1.11	0.99	0.02	3.18



Stellar Parameters For KIC 007117585

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	5792^{+156}_{-173}	$4.327^{+0.162}_{-0.180}$	$-0.060^{+0.300}_{-0.300}$	$1.107^{+0.310}_{-0.207}$	$0.947^{+0.136}_{-0.102}$	$0.984^{+0.734}_{-0.485}$
	+3%/-3%	+4%/-4%	+500%/-500%	+28%/-19%	+14%/-11%	+75%/-49%
Source	PHO1	KIC0	KIC0	DSEP		

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

Secondary Eclipse Parameters for KIC 007117585-02 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-4 ± 2	$0.70^{+0.64}_{-0.46}$	3281^{+227}_{-202}	3440^{+2334}_{-6378}	$0.711^{+5.693}_{-0.554}$
Alt.	-10 ± 3	$0.90^{+0.75}_{-0.58}$	3278^{+242}_{-204}	3842^{+2251}_{-1648}	$1.177^{+7.690}_{-0.859}$

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 $A_{obs} \gg 1.0$

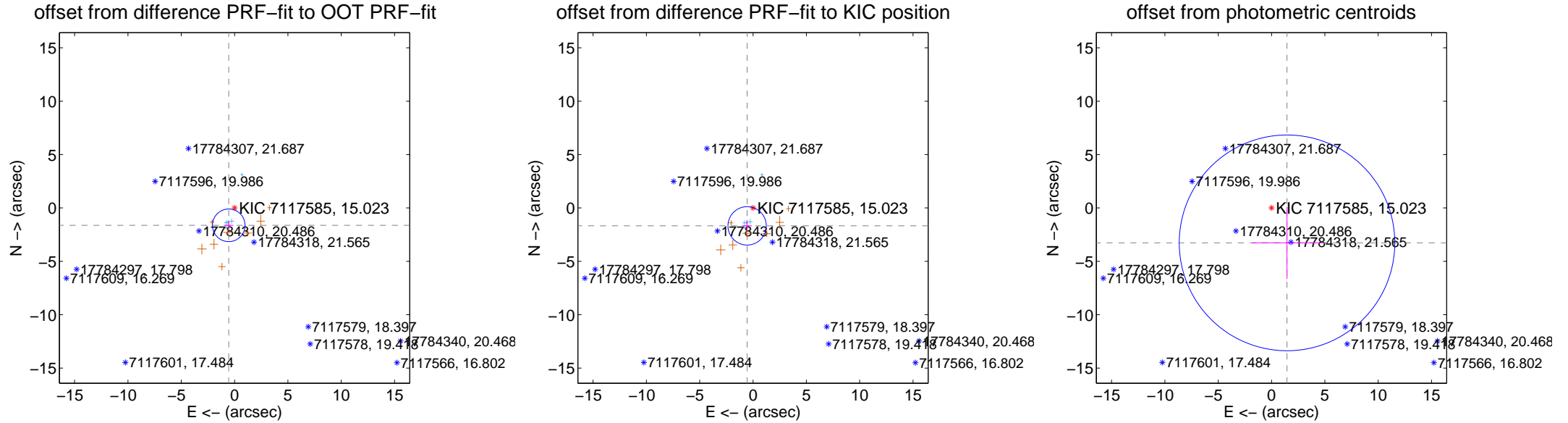
DV Centroid Data

Supplemental centroid analysis for 007117585-02. Kepler magnitude: 15.02. Transit SNR 4.08

There are 5 quarters with good PRF difference image offsets

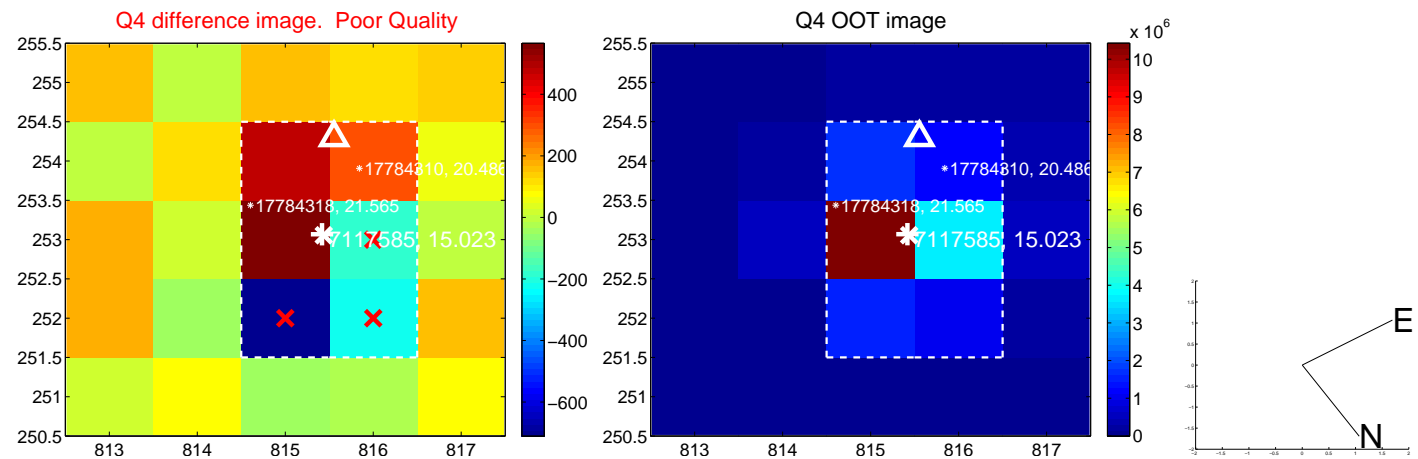
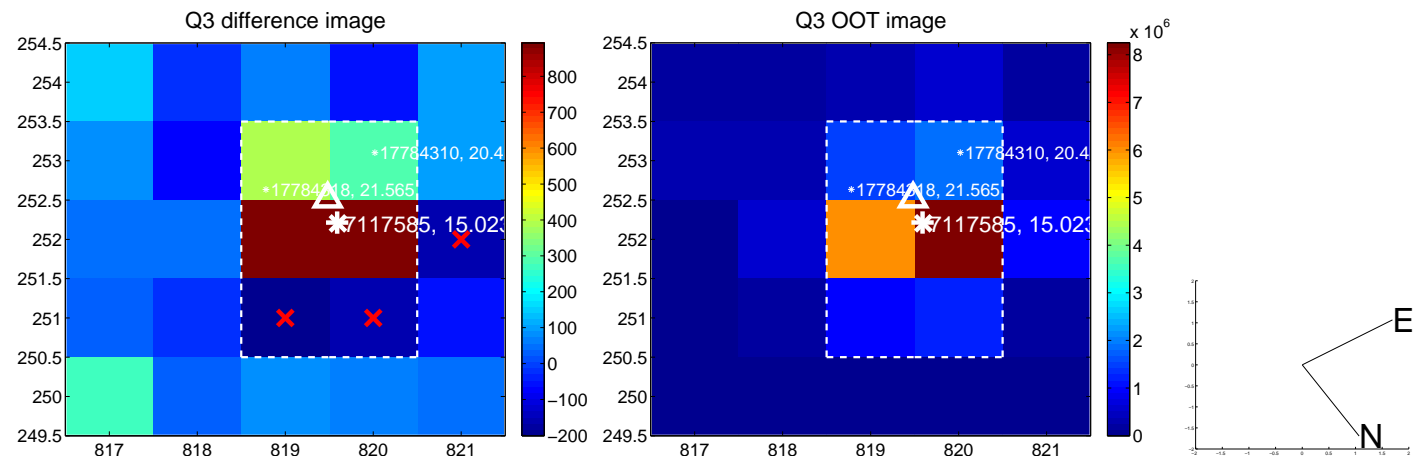
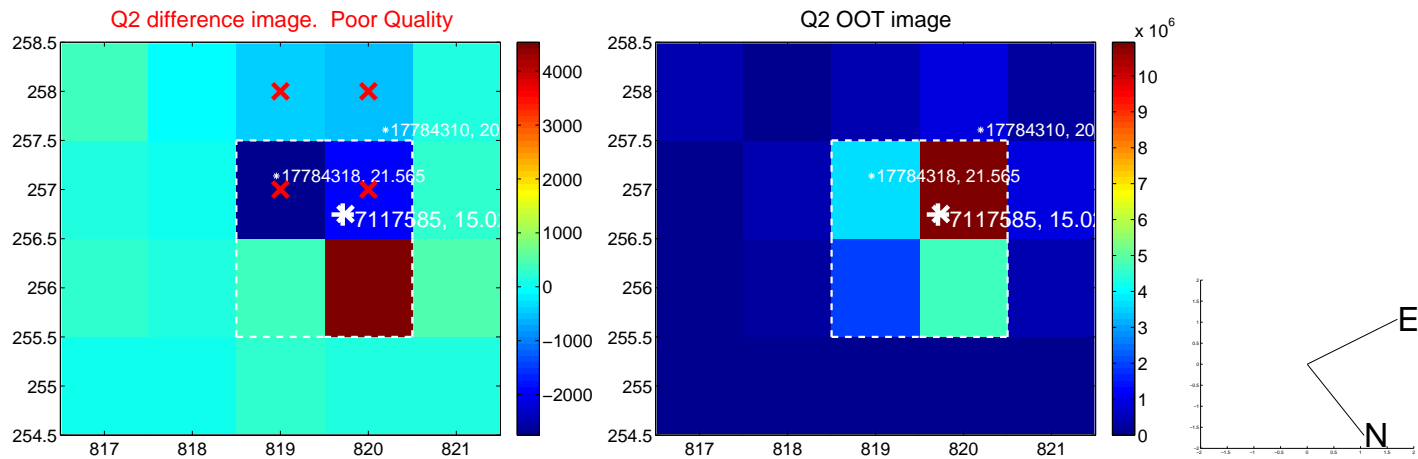
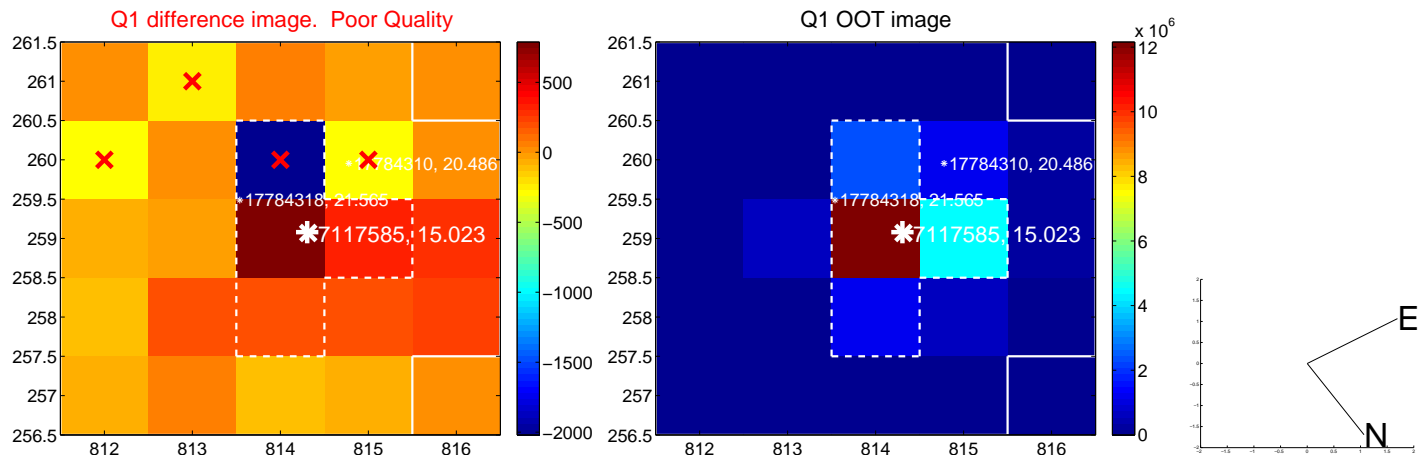
The direct PRF centroid is offset from the target star catalog position by about 0.08 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	1.717 \pm 0.509	3.37	0.548 \pm 0.446	-1.627 \pm 0.449
PRF-fit source offset from KIC position	1.767 \pm 0.599	2.95	0.556 \pm 0.458	-1.677 \pm 0.536
photometric centroid source offset	3.58 \pm 3.37	1.06	-1.45 \pm 3.28	-3.27 \pm 3.39

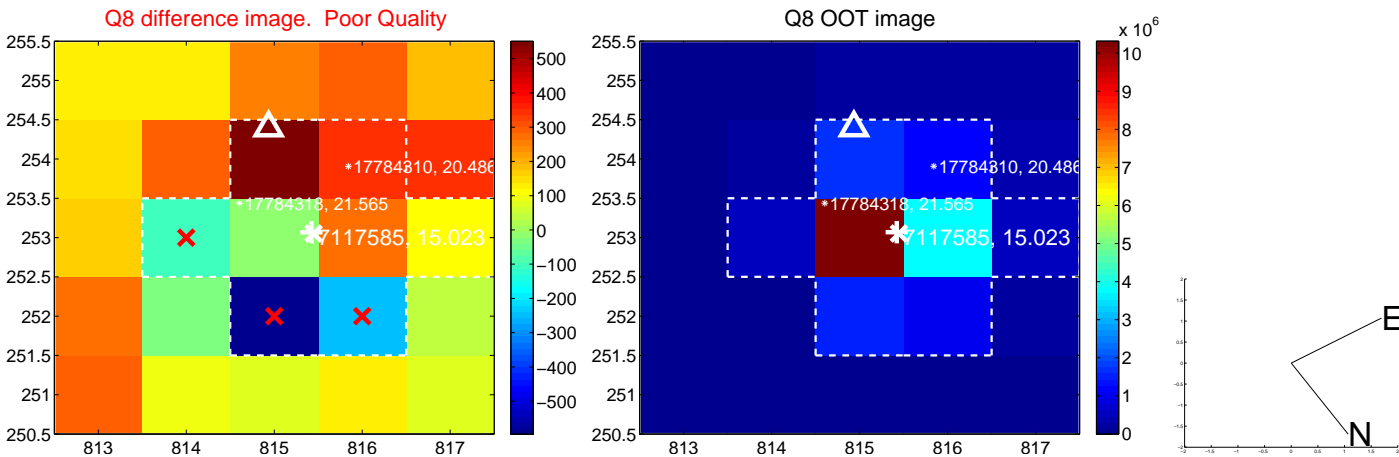
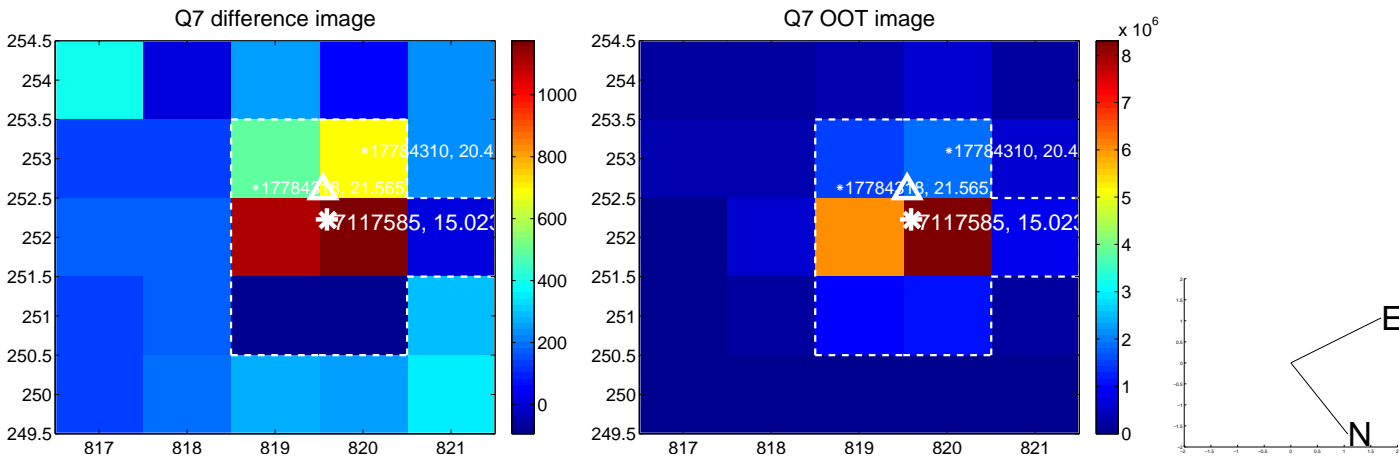
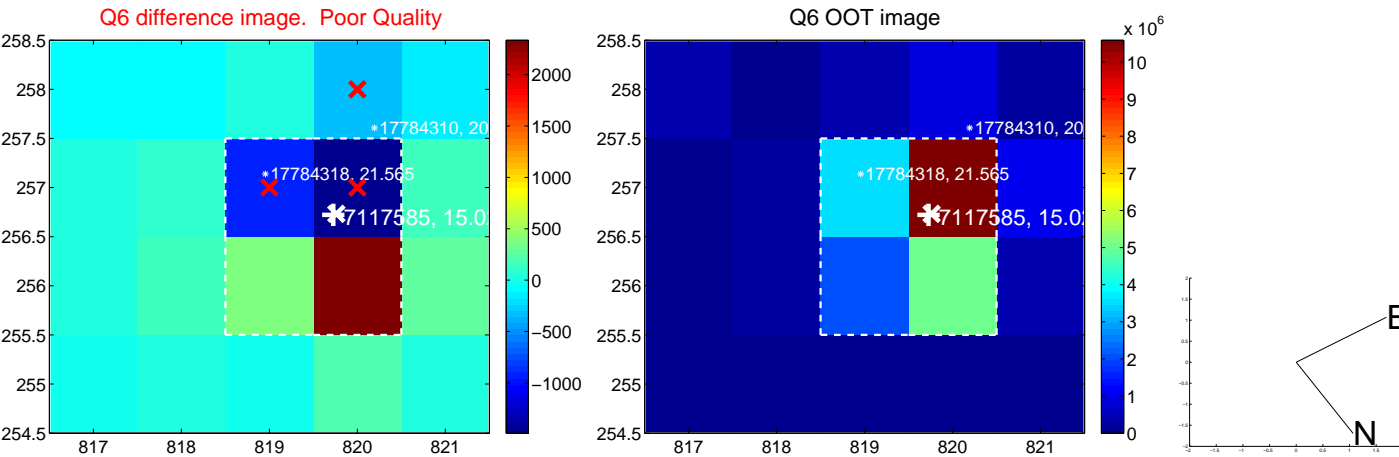
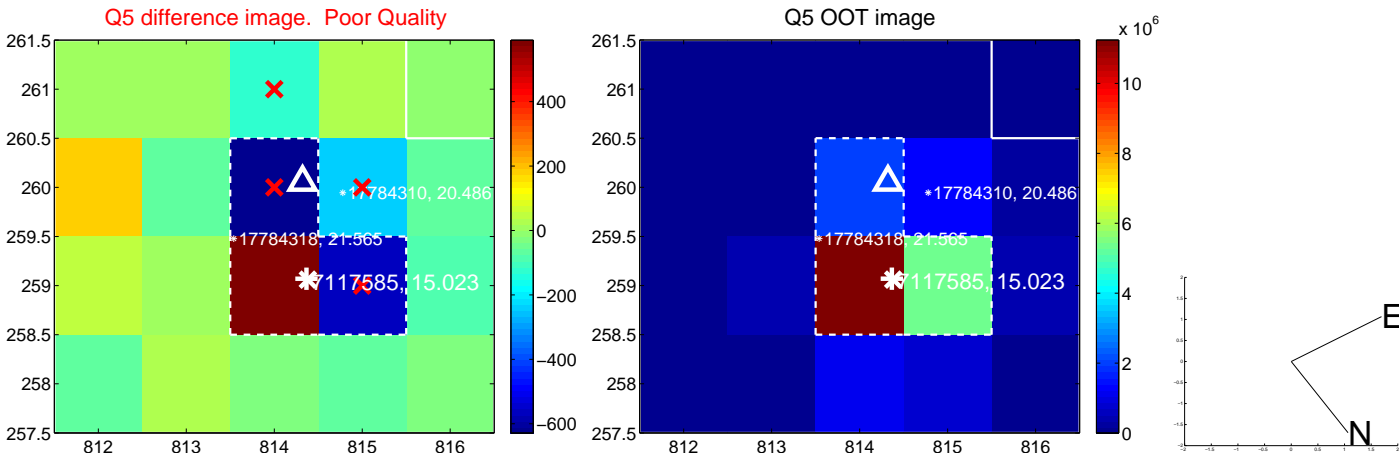


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets**; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

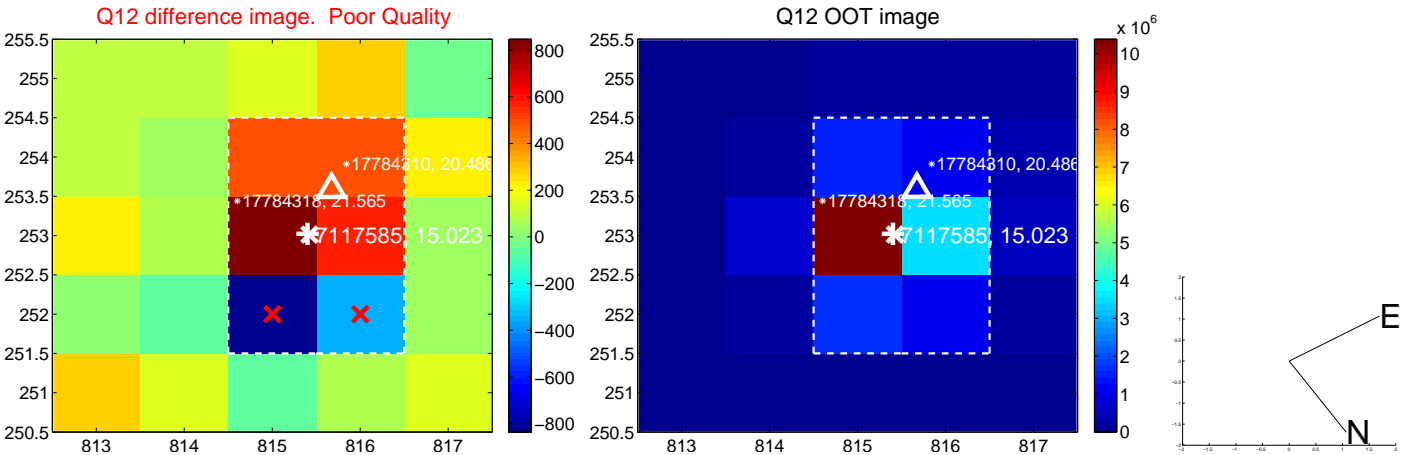
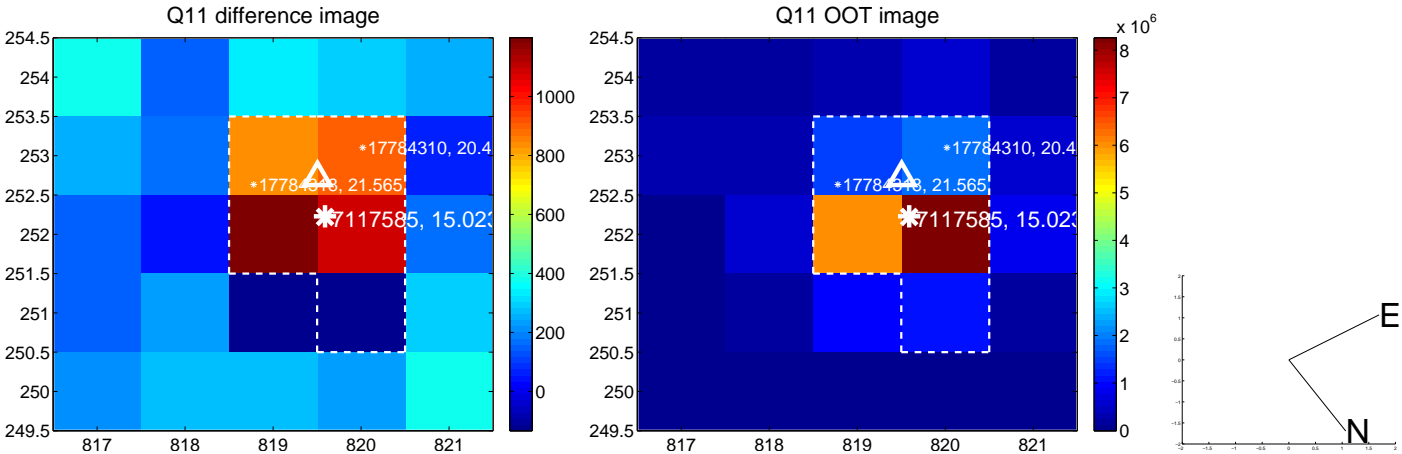
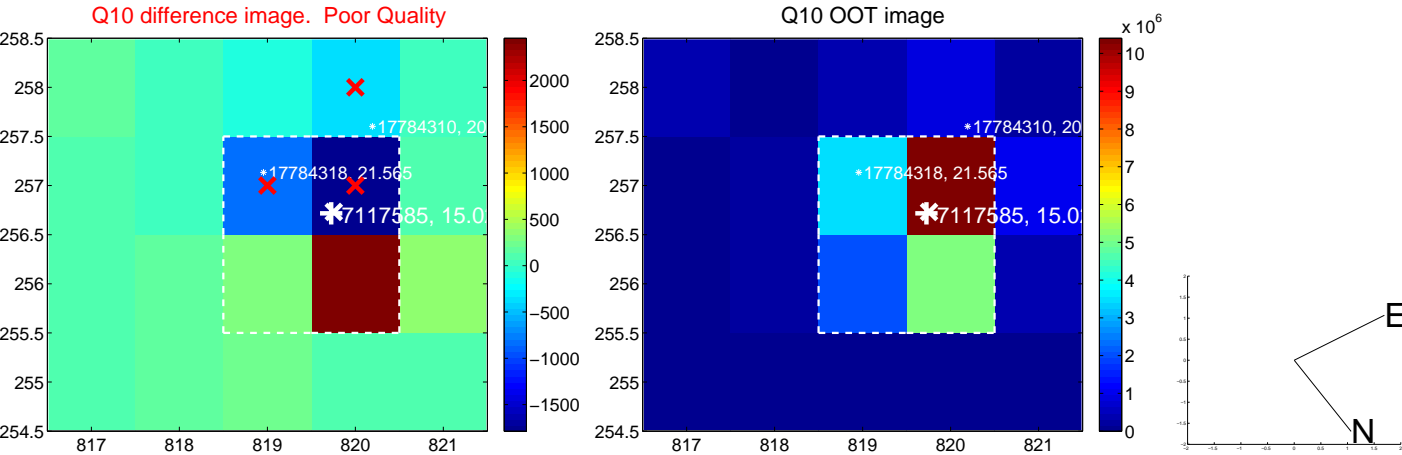
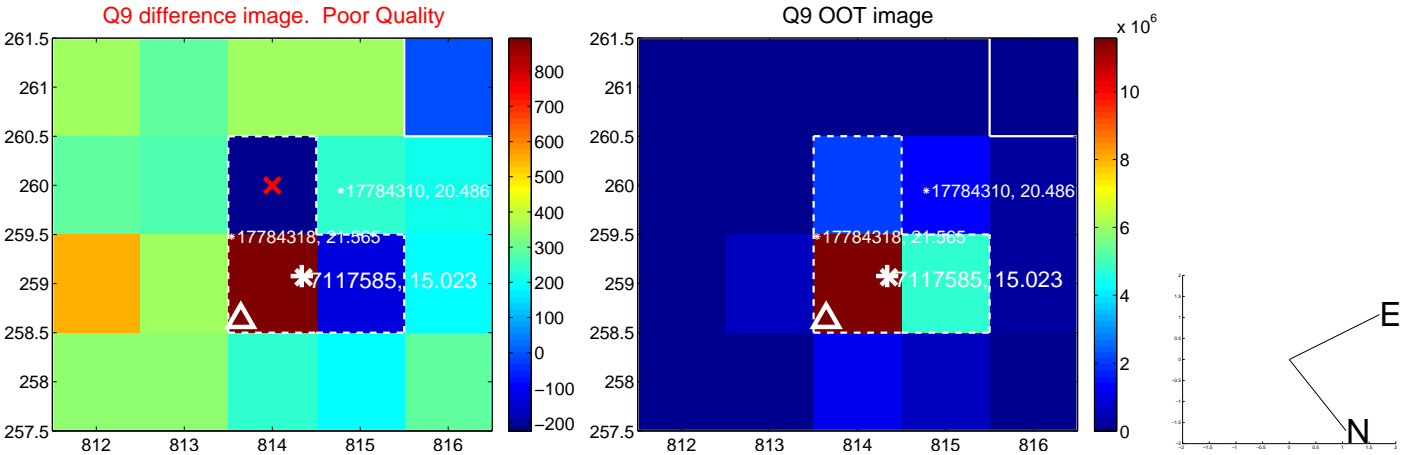
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



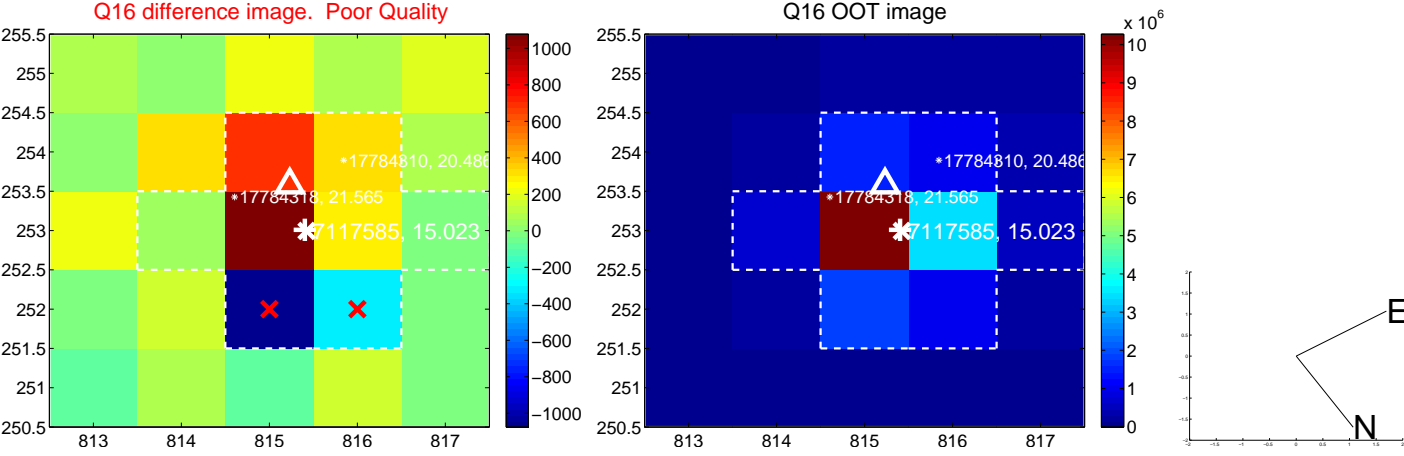
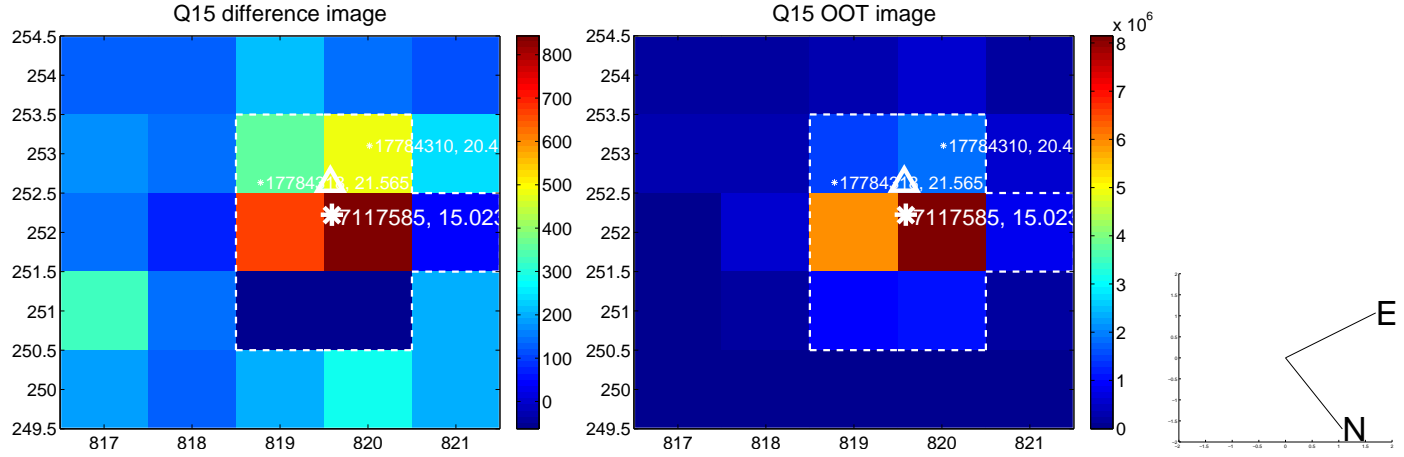
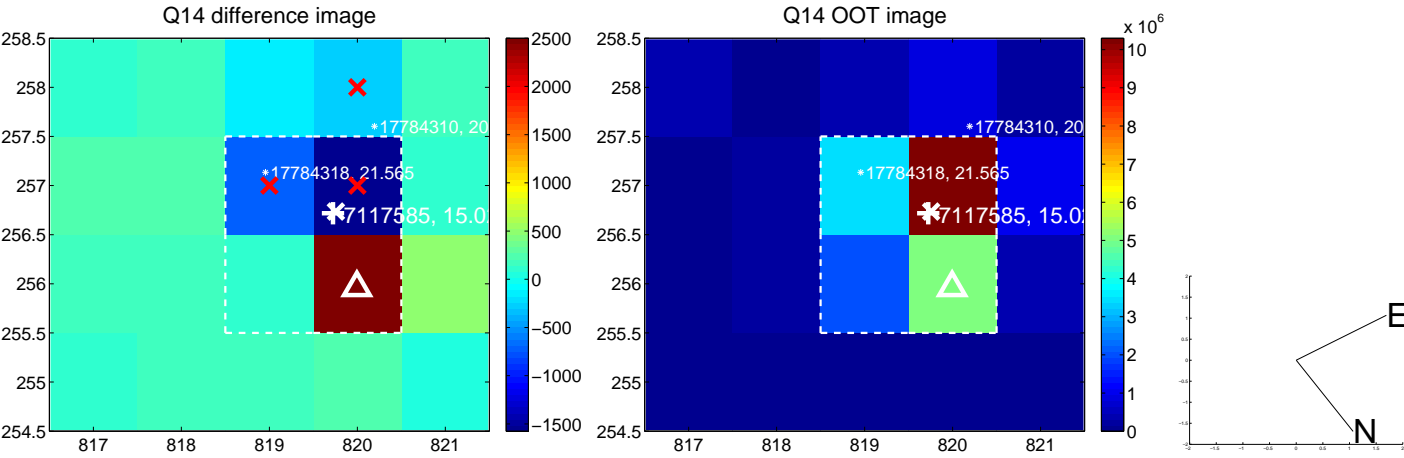
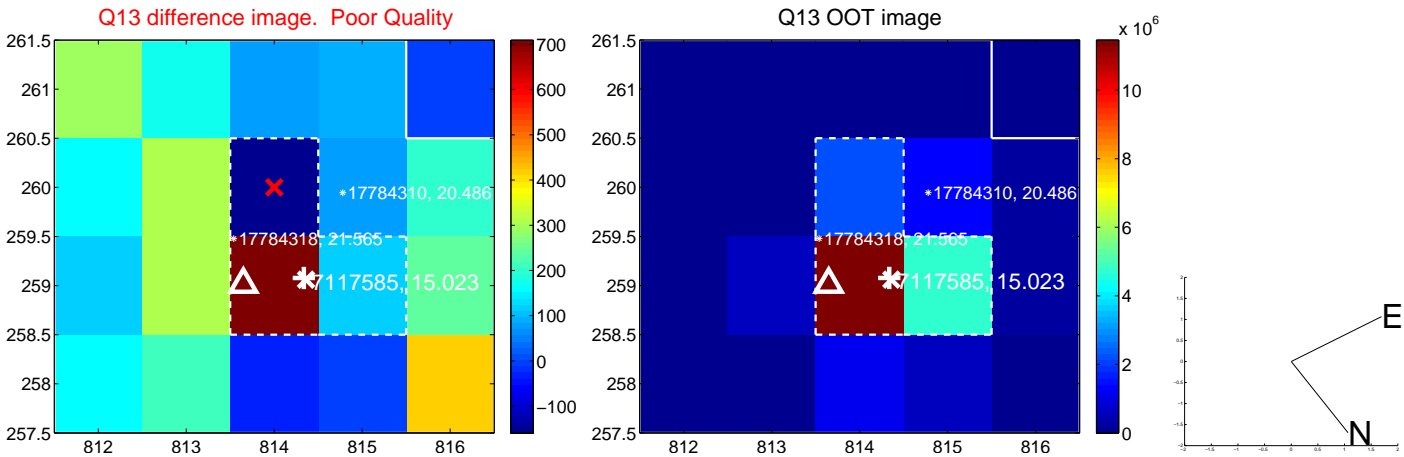
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



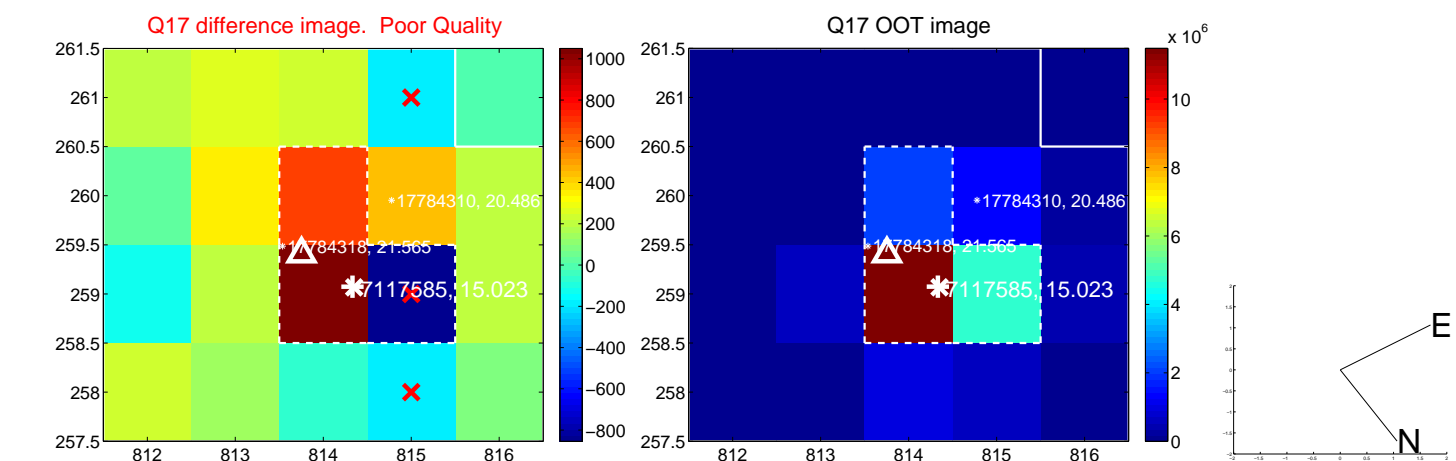
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



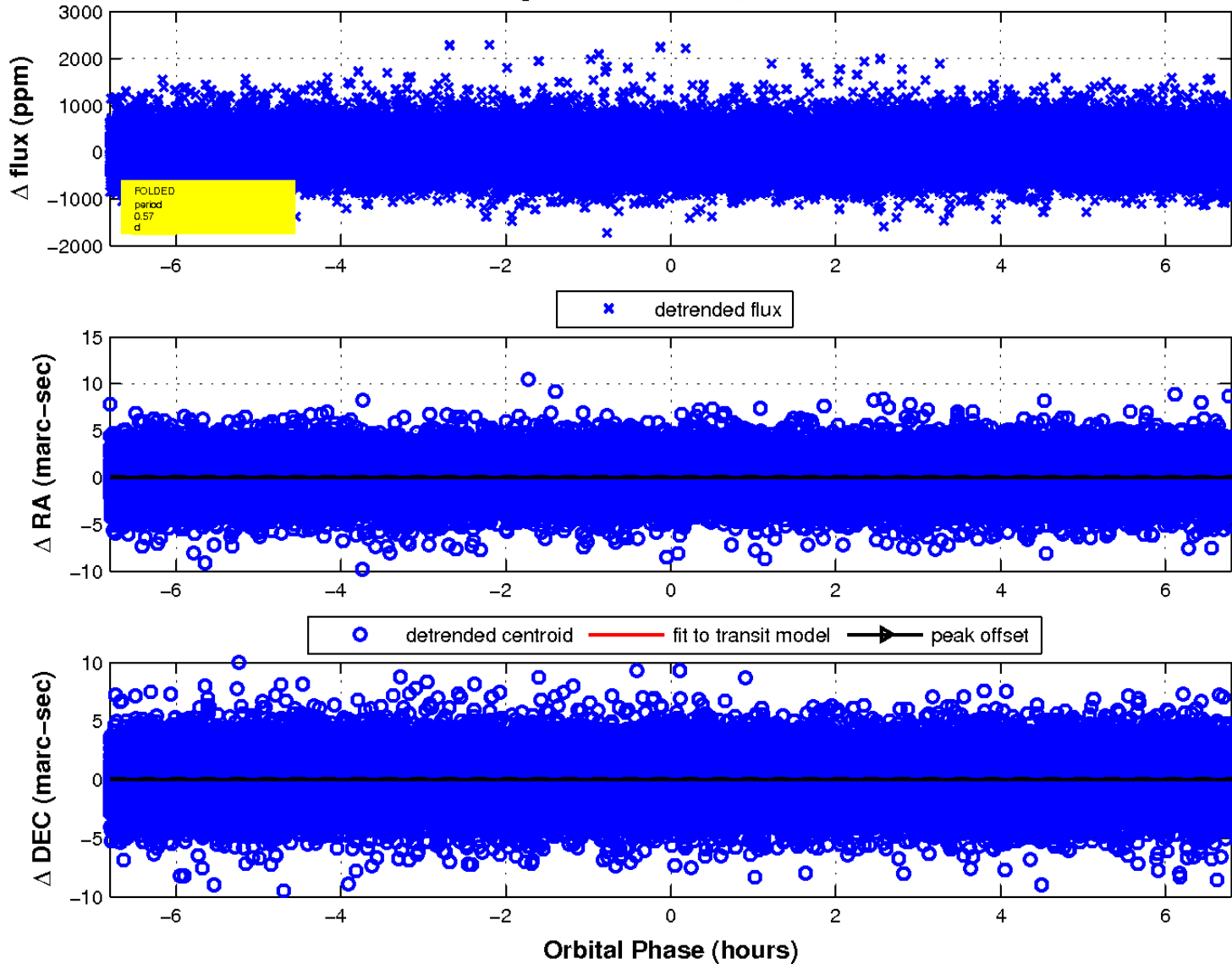
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

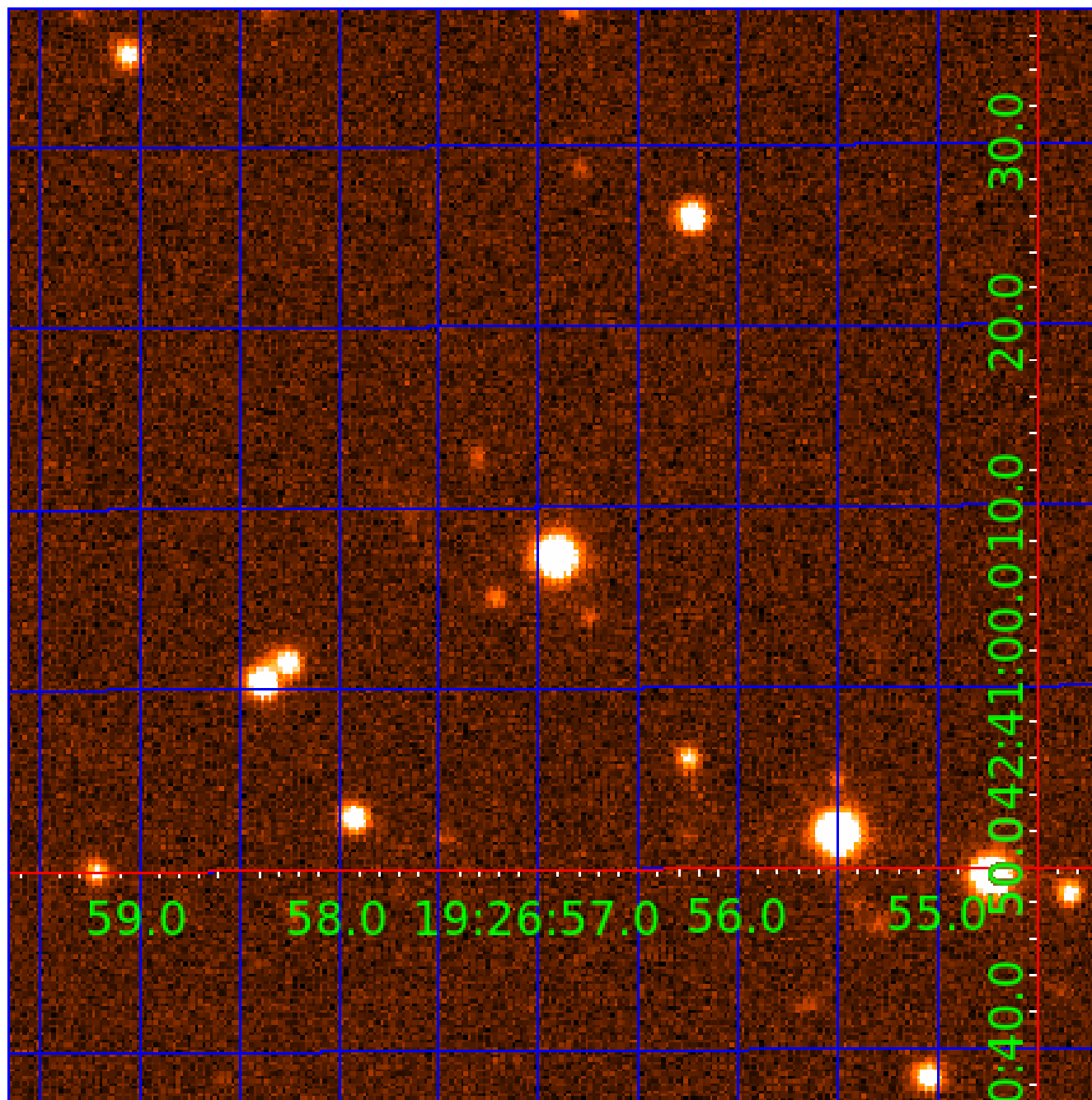


fluxWeightedCentroids, Planet 2 of 3



UKIRT Image

Declination



KIC 007117585

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})
007117585-01	OBS	No	423.253949	134.900860	631.5	10.600	10.8	10.5	1.11	5792	3.12	1.05
007117585-02	OBS	No	0.566759	131.851934	11.8	4.187	8.9	4.1	1.11	5792	0.39	7119.39
007117585-03	OBS	No	16.284636	134.485465	462.1	1.501	8.0	10.3	1.11	5792	2.37	80.90

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
007117585-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_MARSHALL—ALL_TRANS_CHASES—INCONSISTENT_TRANS
007117585-02	OBS	FP	0.00	1	0	1	1	LPP_DV—CENT_UNRESOLVED_OFFSET—HALO_GHOST—EPHEM_MATCH
007117585-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV—MOD_TER_DV—CENT_FEW_DIFFS

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

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

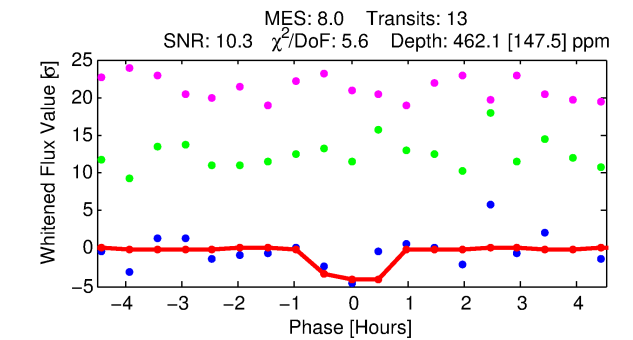
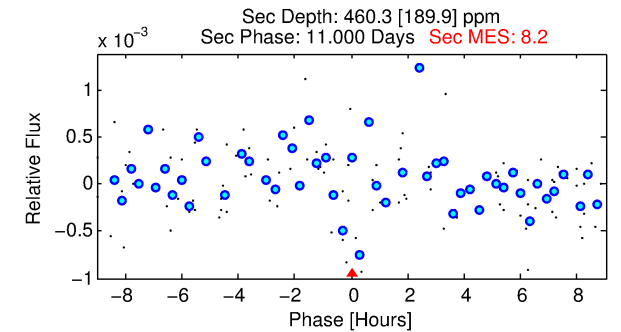
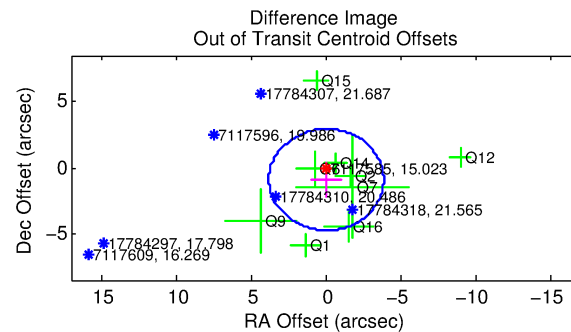
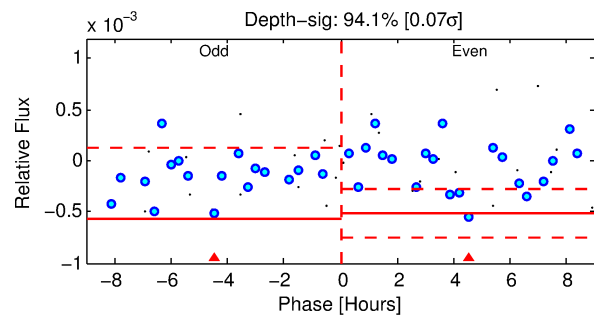
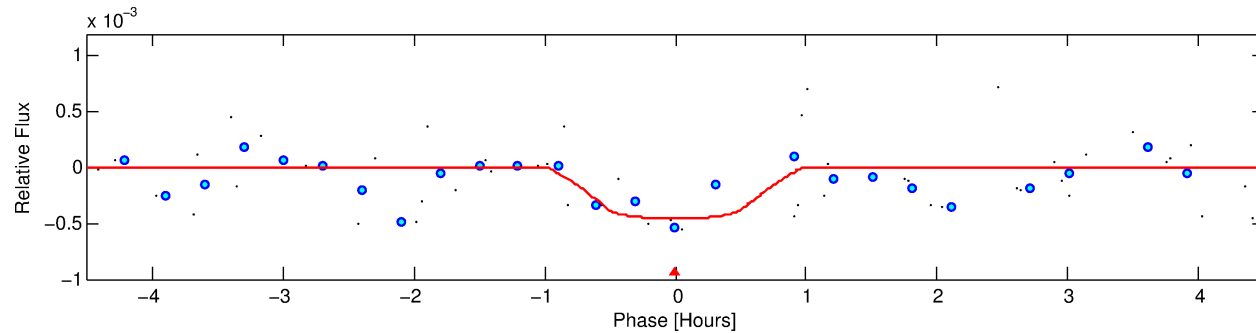
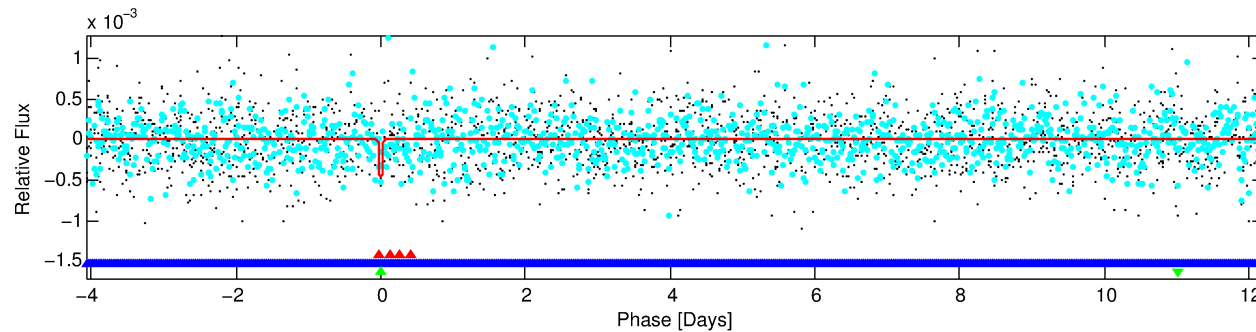
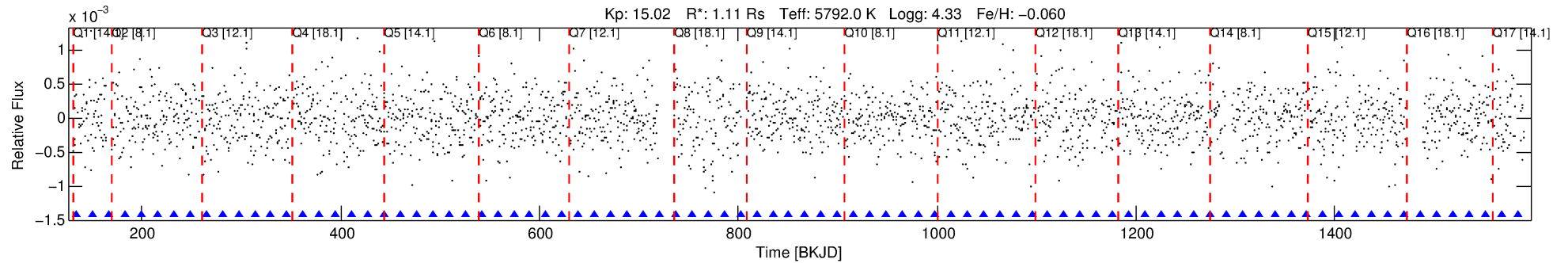
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 007117585-03

No Significant Match Found

DV One-Page Summary

KIC: 7117585 Candidate: 3 of 3 Period: 16.285 d



DV Fit Results:

Period = 16.28464 [0.00029] d
Epoch = 134.4855 [0.0142] BKJD
Rp/R* = 0.0196 [0.0796]
a/R* = 84.47 [1518.55]
b = 0.02 [920.67]
Seff = 80.90 [28.66]
Teff = 765 [68] K
Rp = 2.37 [9.63] Re
a = 0.1236 [0.0287] AU
Ag = 690.82 [5623.40] [0.12σ]
Teffp = 6062 [12327] K [0.43σ]

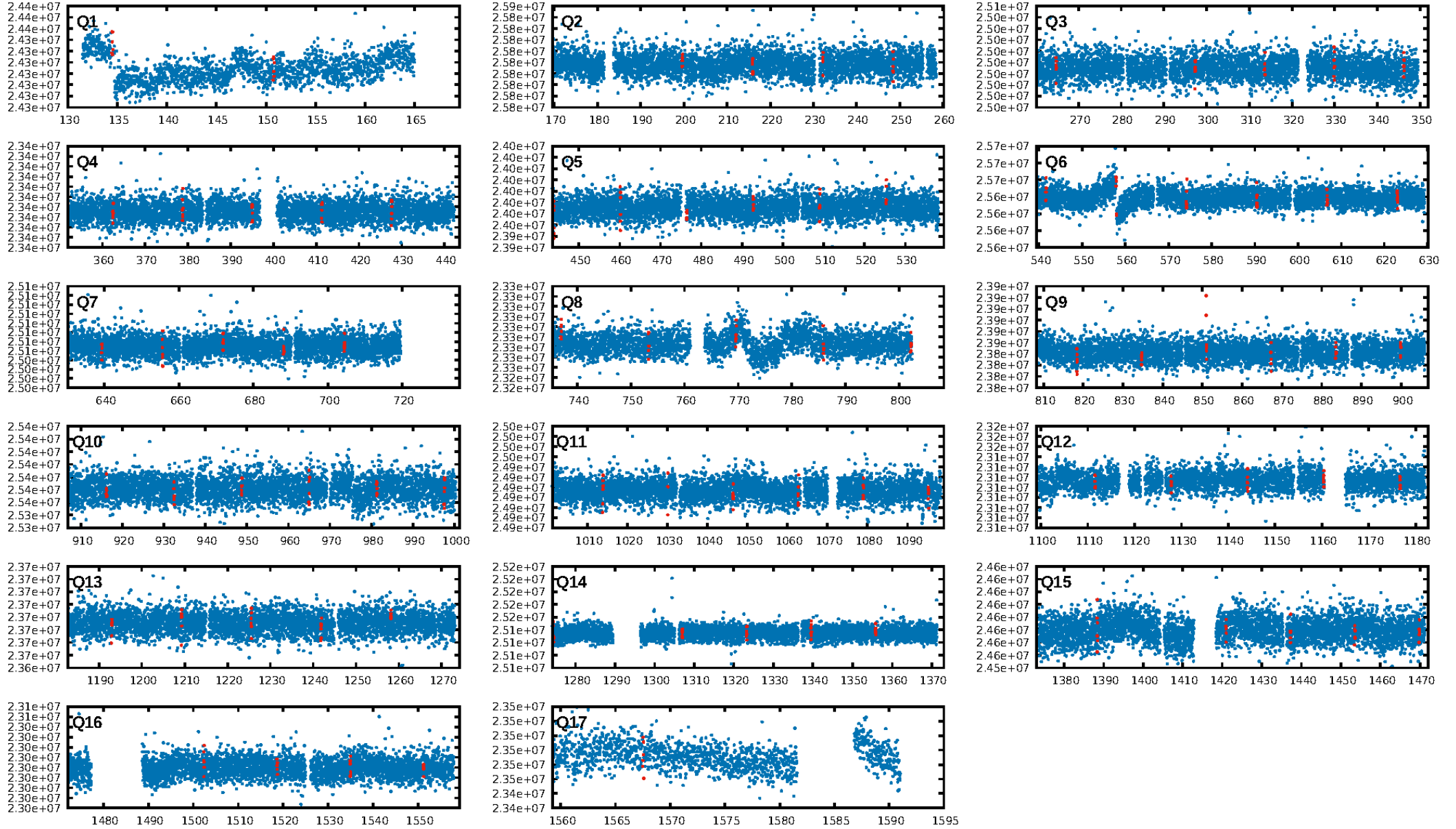
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [84.80σ]
LongPeriod-sig: 100.0% [912.36σ]
ModelChiSquare2-sig: 0.0%
ModelChiSquareGof-sig: 84.0%
Bootstrap-pfa: 5.97e-04
RollingBand-fgt: 1.00 [13/13]
GhostDiagnostic-chr: 0.3636
Centroid-sig: 61.7%
Centroid-so: 0.317 arcsec [0.41σ]
OotOffset-rm: 0.912 arcsec [0.71σ]
KicOffset-rm: 0.963 arcsec [0.80σ]
OotOffset-st: 3/2/2/2 [9]
KicOffset-st: 3/2/2/2 [9]
DiffImageQuality-fgm: 0.00 [0/9]
DiffImageOverlap-fno: 0.00 [0/17]

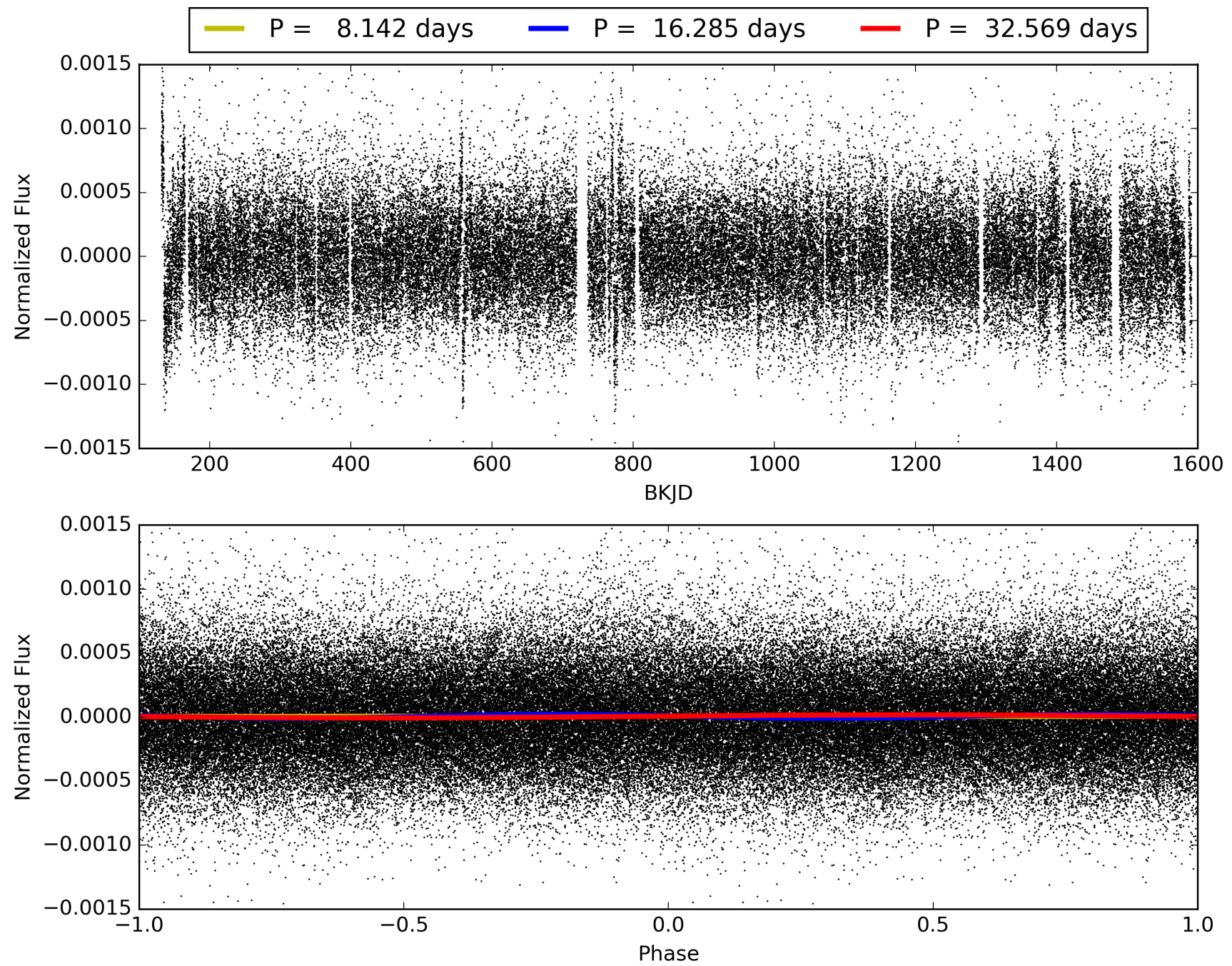
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 29-Jan-2016 20:59:52 Z

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

TCE 007117585-03, PDC Light Curves

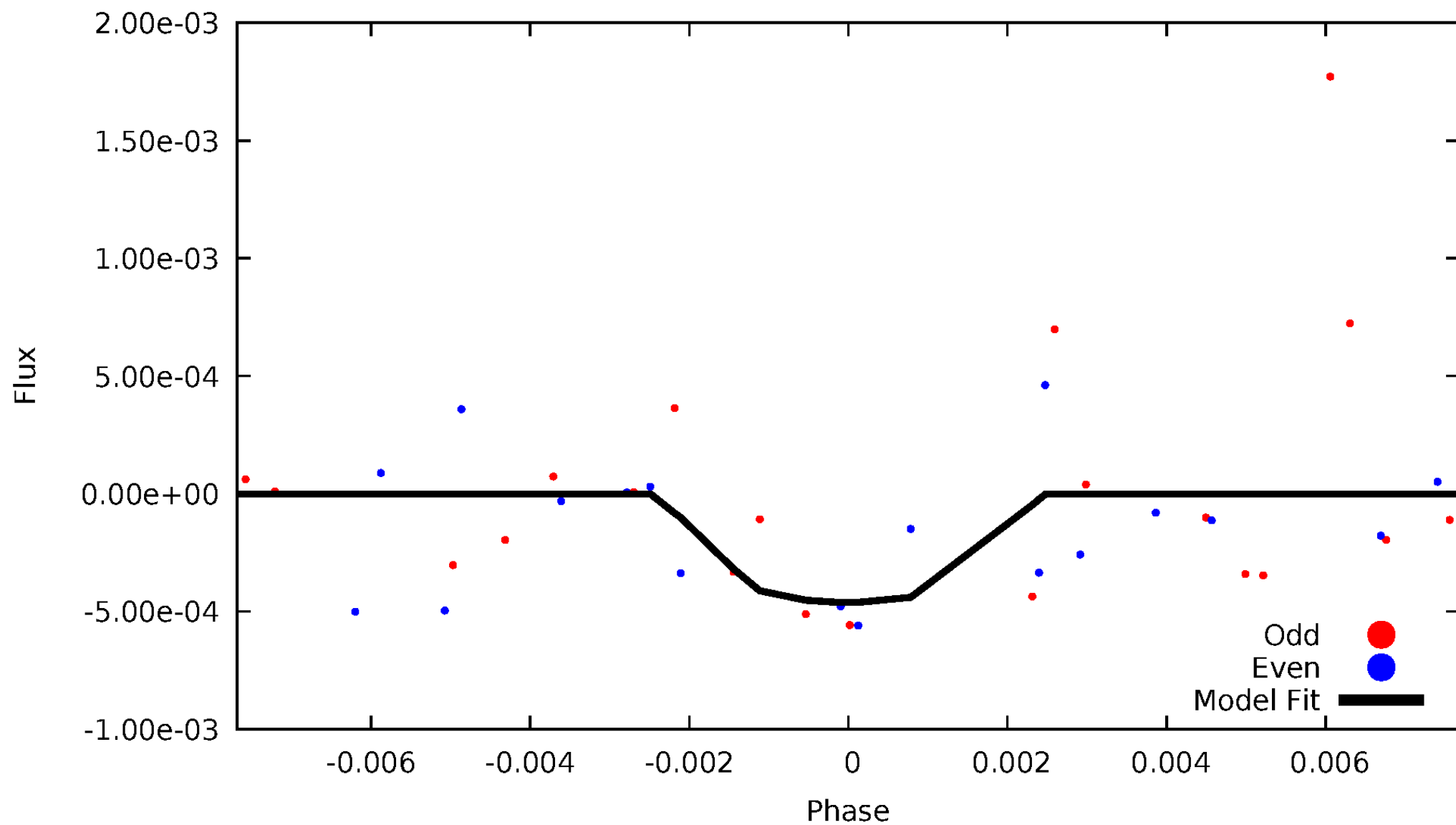


TCE 007117585-03



DV Odd/Even

TCE 007117585-03

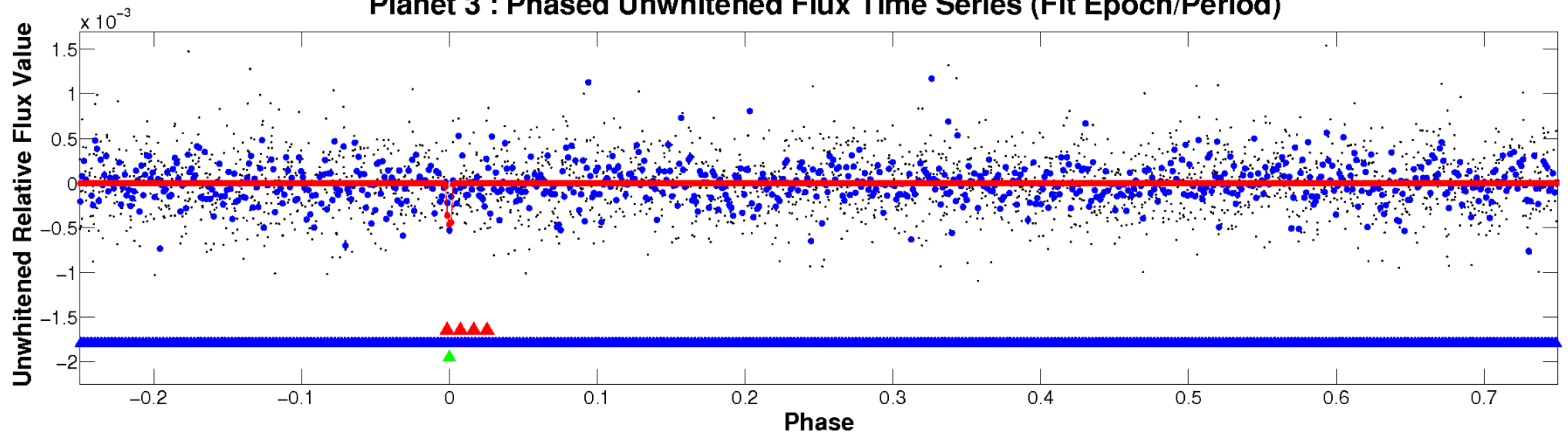


ALT Odd/Even

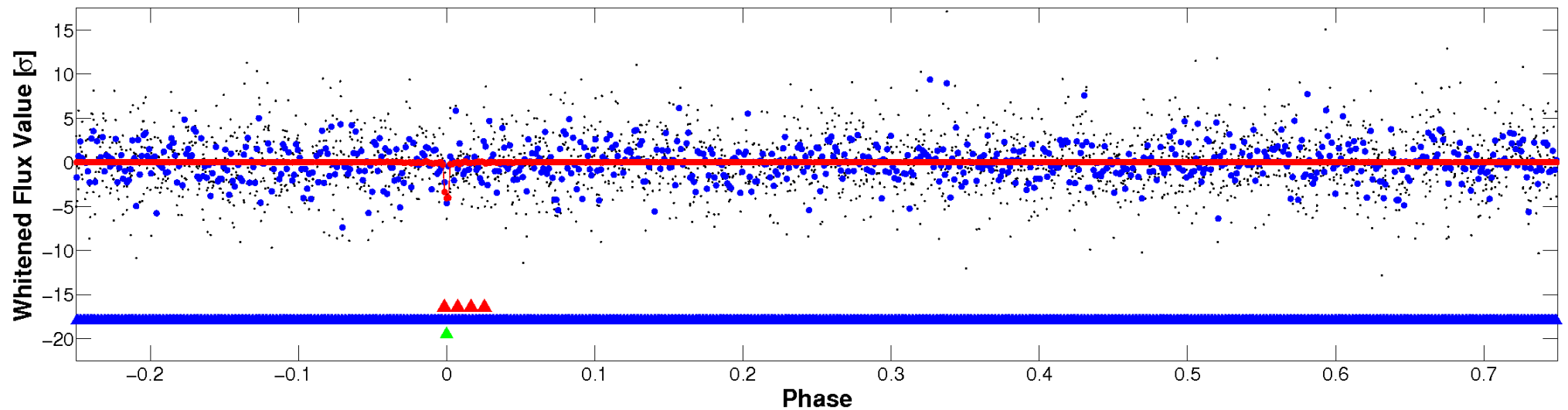
This plot does not exist for this TCE.

Non-Whitened Vs. Whitened Light Curve

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

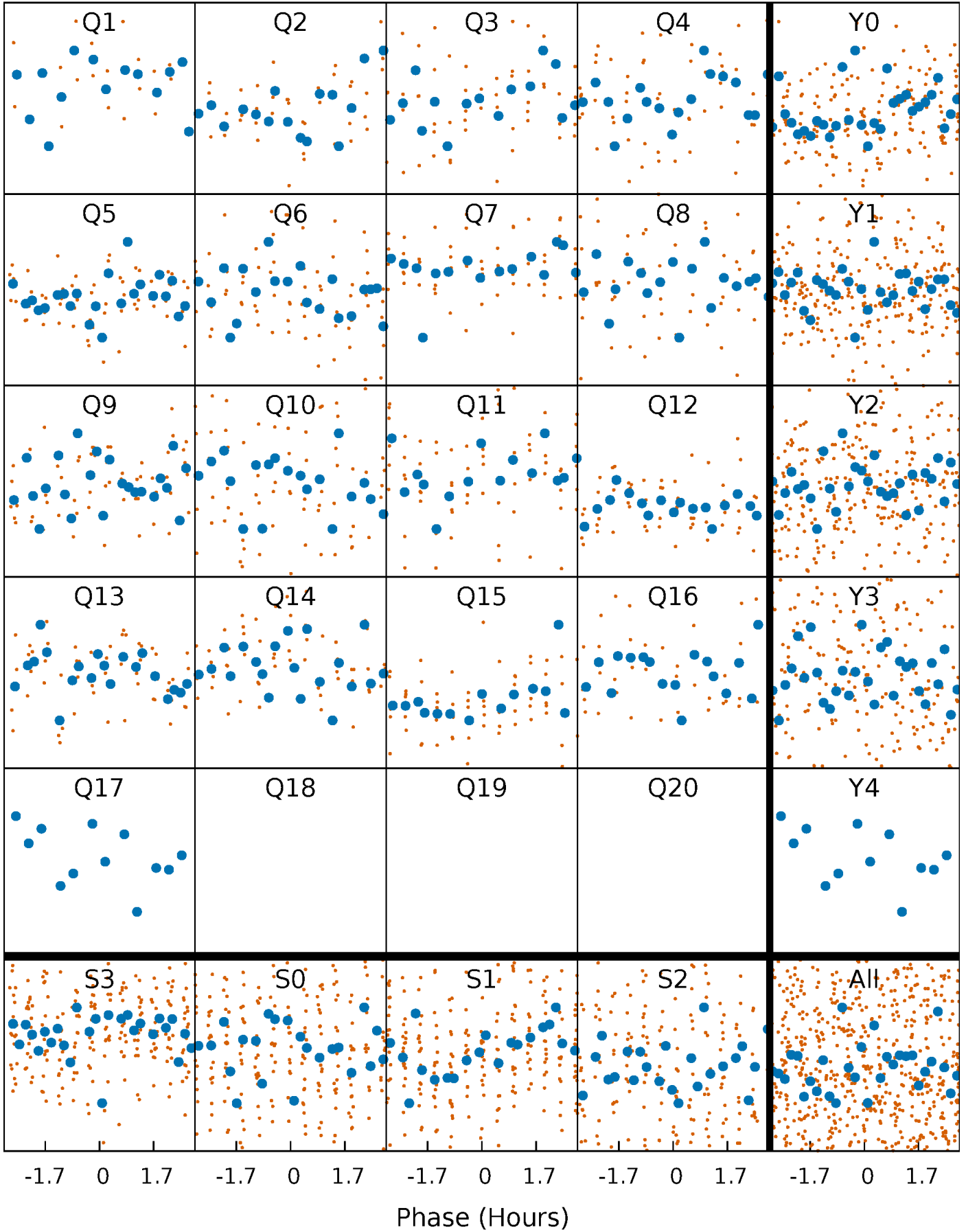


Planet 3 : Phased Whitened Flux Time Series (Fit Epoch/Period)



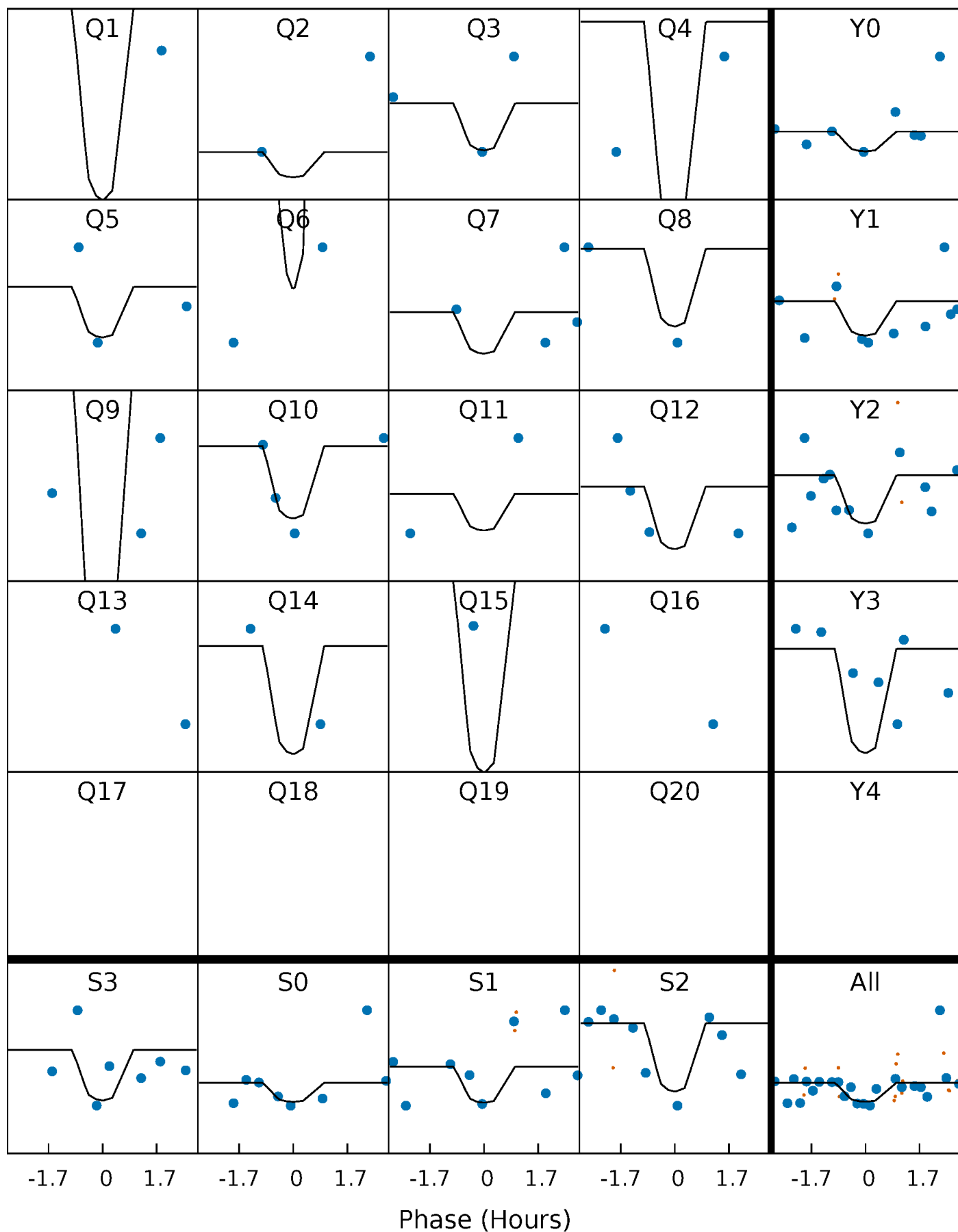
PDC Quarter-Phased Transit Curves

TCE 007117585-03 P= 16.284636 Days $T_0=134.485465$ (BKJD)



DV Quarter-Phased Transit Curves

TCE 007117585-03 P= 16.284636 Days $T_0=134.485465$ (BKJD)

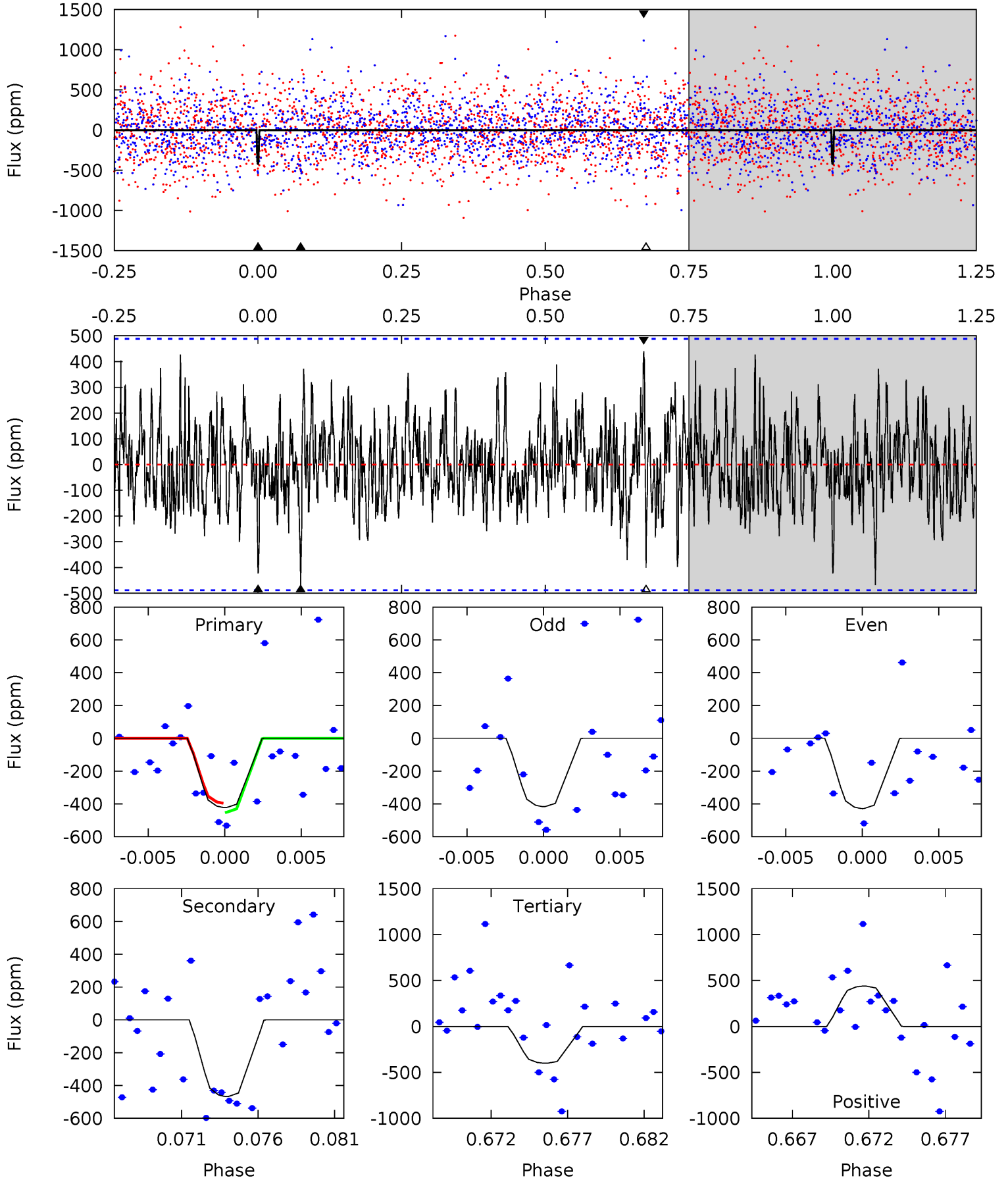


This plot does not exist for this TCE.

DV Model-Shift Uniqueness Test

007117585-03, P = 16.284636 Days, E = 118.200829 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
4.46	4.94	4.23	4.64	5.15	2.80	1.39	0.23	-0.18	0.70	0.30	0.06	0	0.48	0.29



Alt Model-Shift Uniqueness Test

This plot does not exist for this TCE.

Stellar Parameters For KIC 007117585

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	5792^{+156}_{-173}	$4.327^{+0.162}_{-0.180}$	$-0.060^{+0.300}_{-0.300}$	$1.107^{+0.310}_{-0.207}$	$0.947^{+0.136}_{-0.102}$	$0.984^{+0.734}_{-0.485}$
	+3%/-3%	+4%/-4%	+500%/-500%	+28%/-19%	+14%/-11%	+75%/-49%
Source	PHO1	KIC0	KIC0	DSEP		

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

Secondary Eclipse Parameters for KIC 007117585-03 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-468 ± 95	$7.18^{+7.91}_{-4.97}$	1074^{+78}_{-68}	3867^{+2360}_{-787}	75^{+681}_{-58}
Alt.	N/A	N/A	N/A	N/A	N/A

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

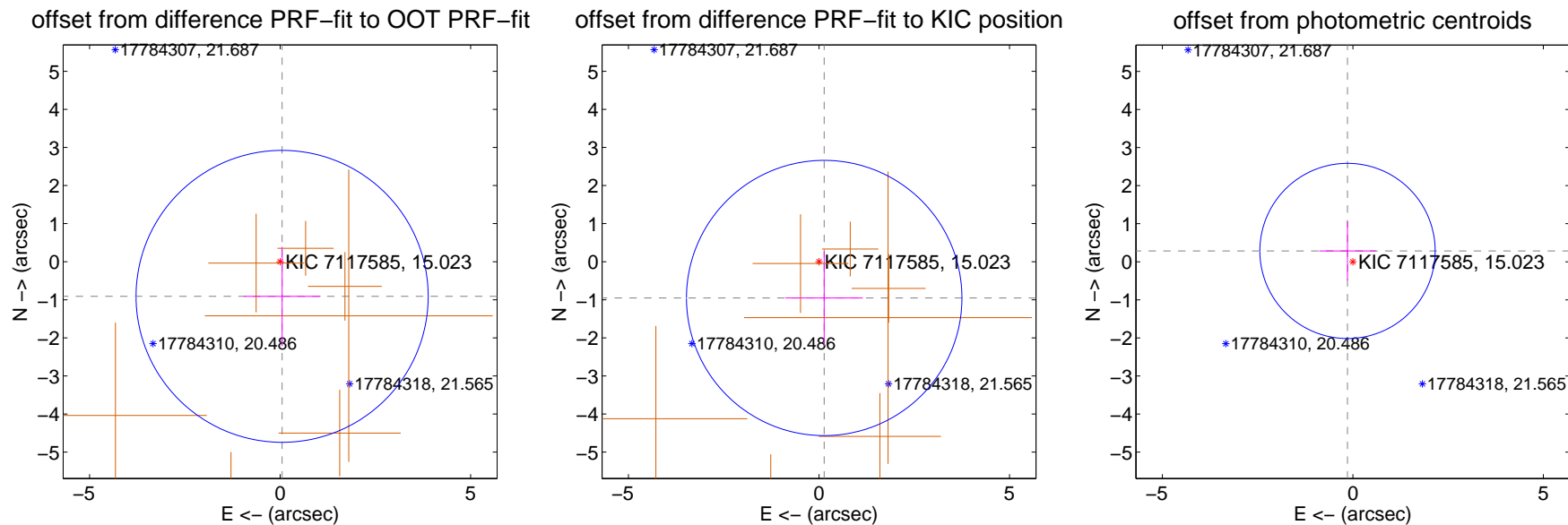
DV Centroid Data

Supplemental centroid analysis for 007117585-03. Kepler magnitude: 15.02. Transit SNR 10.27

There are 0 quarters with good PRF difference image offsets

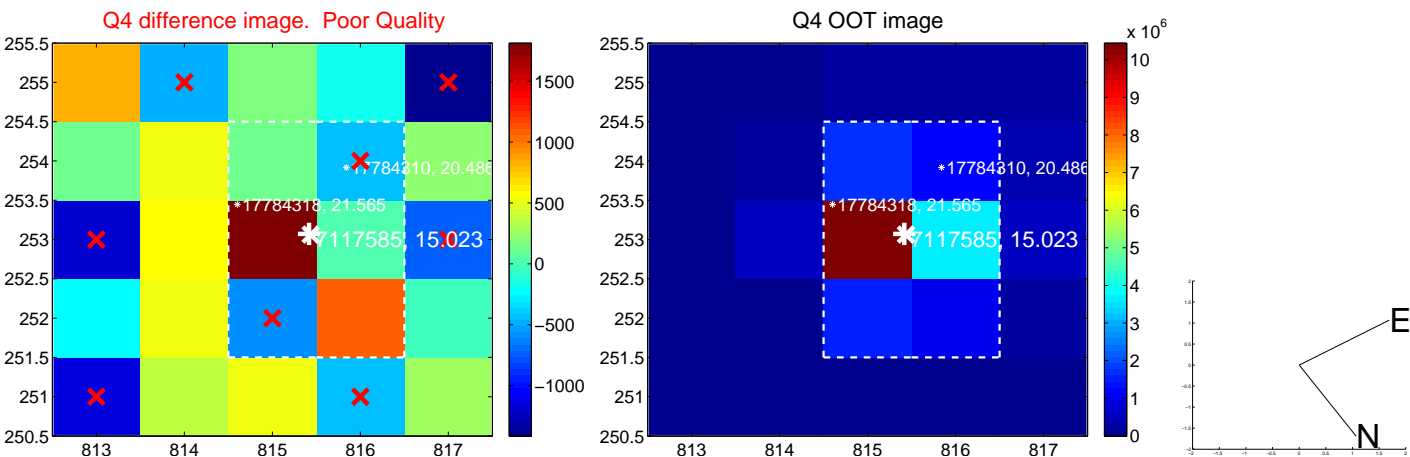
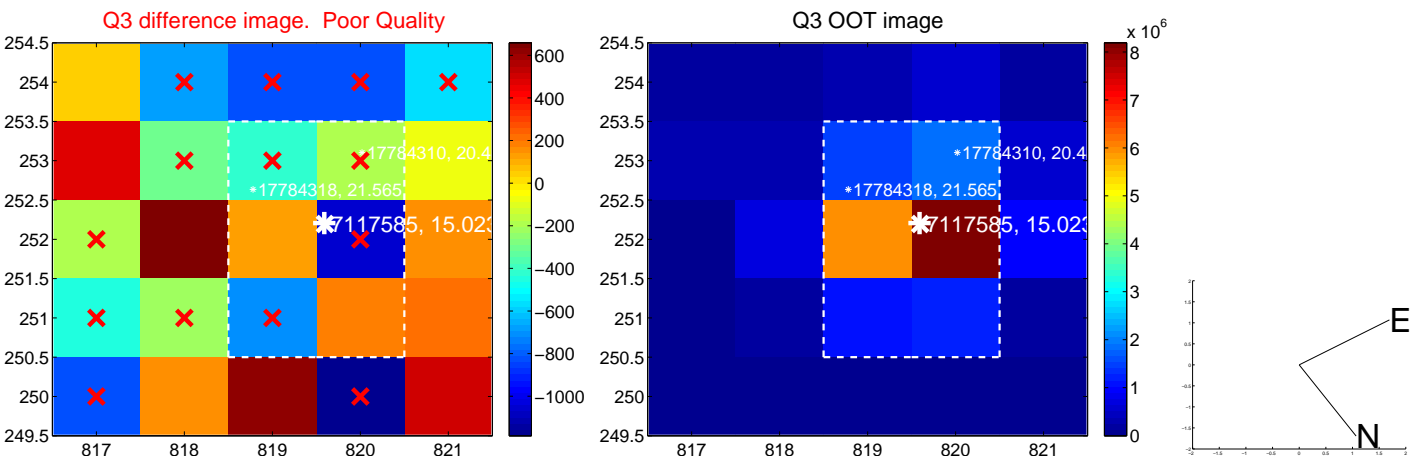
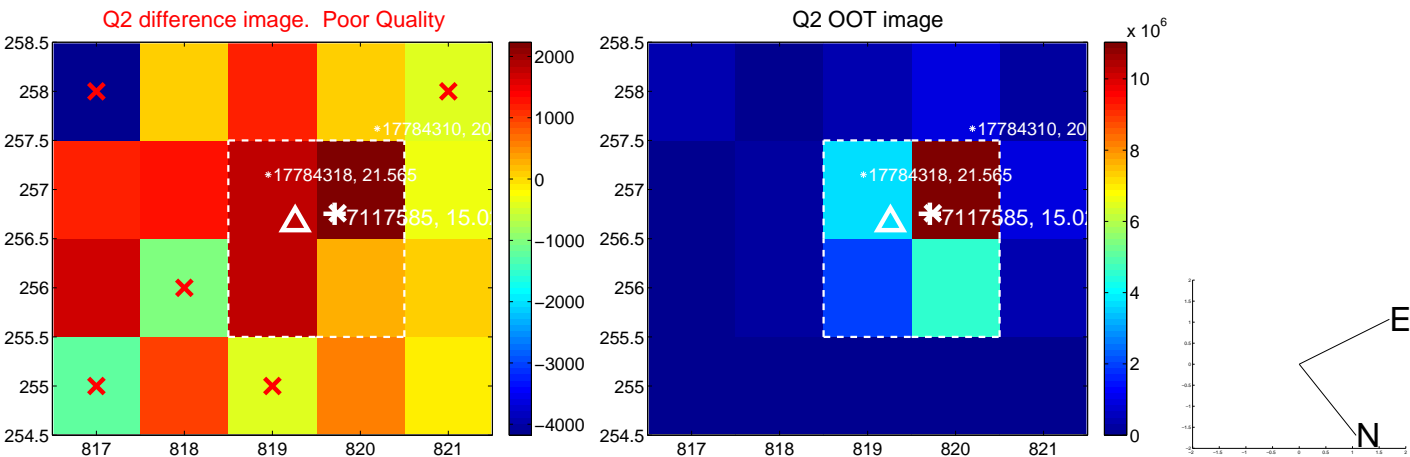
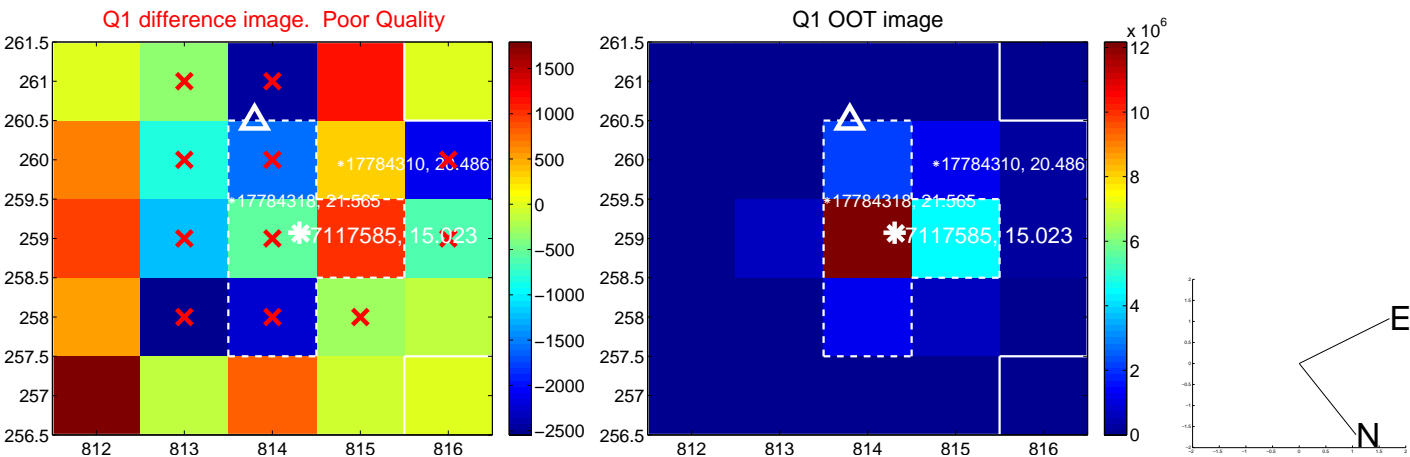
The direct PRF centroid is offset from the target star catalog position by about 0.09 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.912 ± 1.278	0.71	-0.053 ± 1.006	-0.910 ± 1.300
PRF-fit source offset from KIC position	0.963 ± 1.205	0.80	-0.137 ± 1.015	-0.953 ± 1.222
photometric centroid source offset	0.32 ± 0.77	0.41	0.14 ± 0.74	0.28 ± 0.77

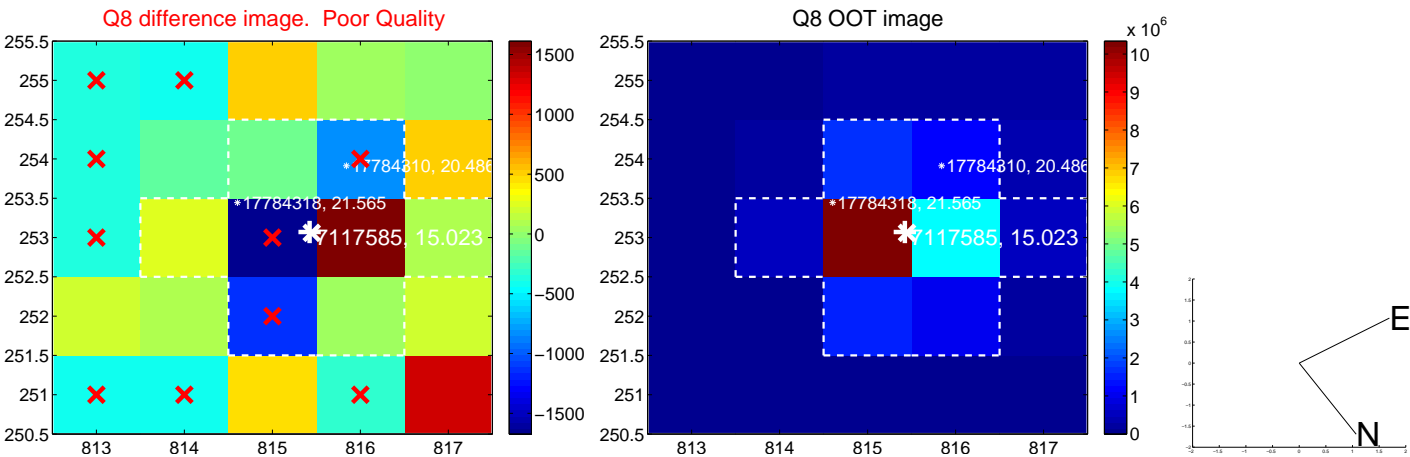
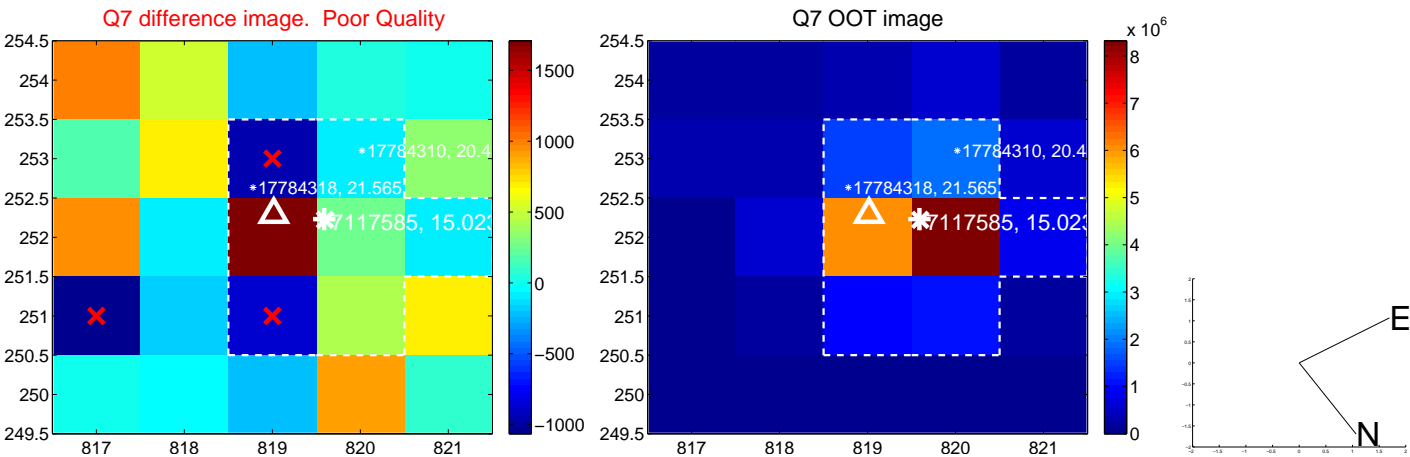
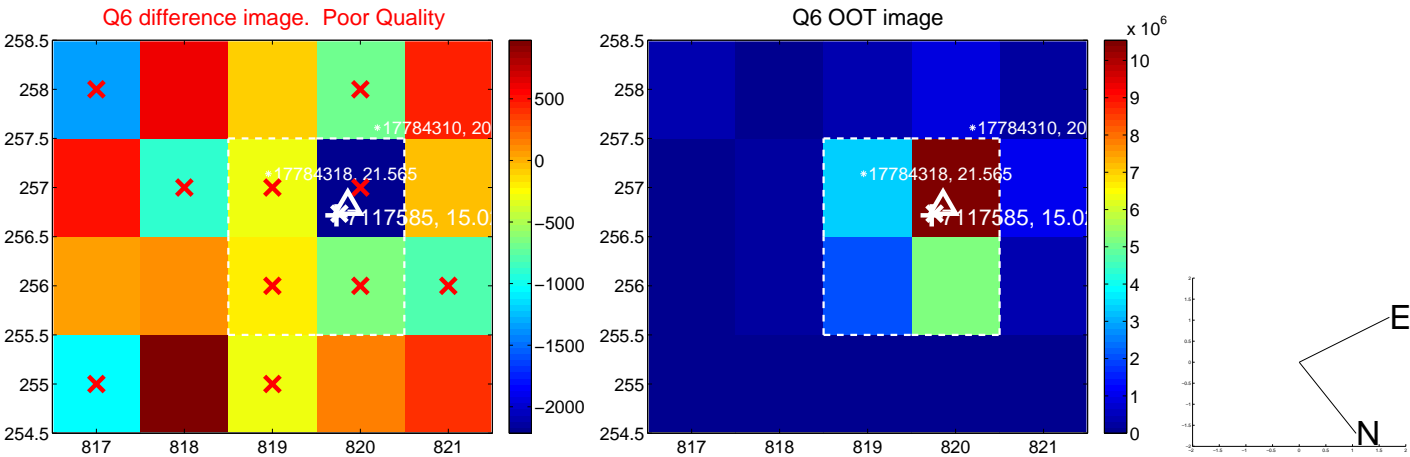
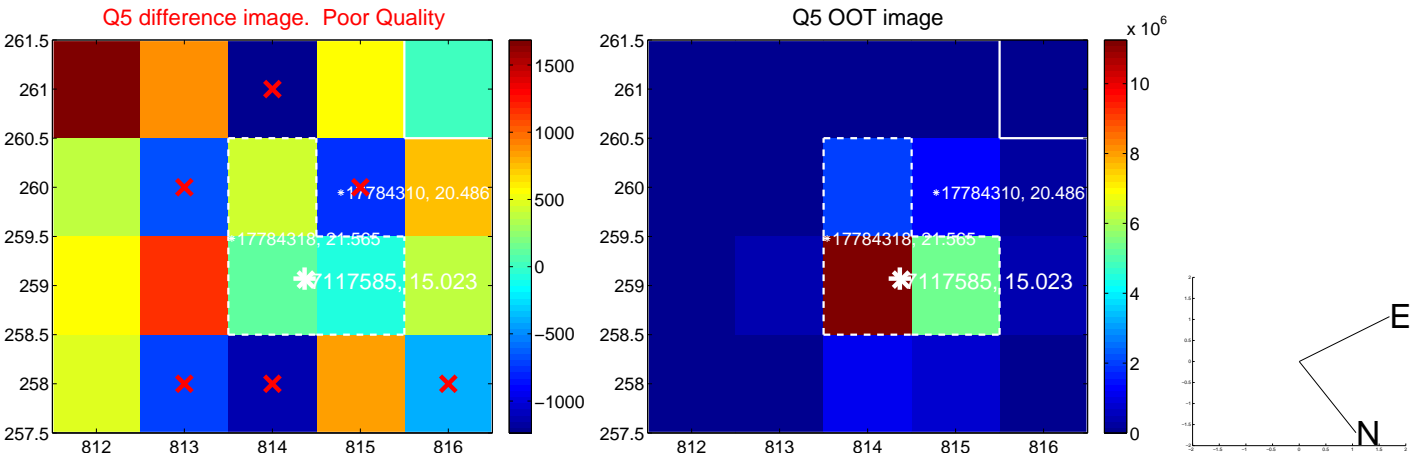


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

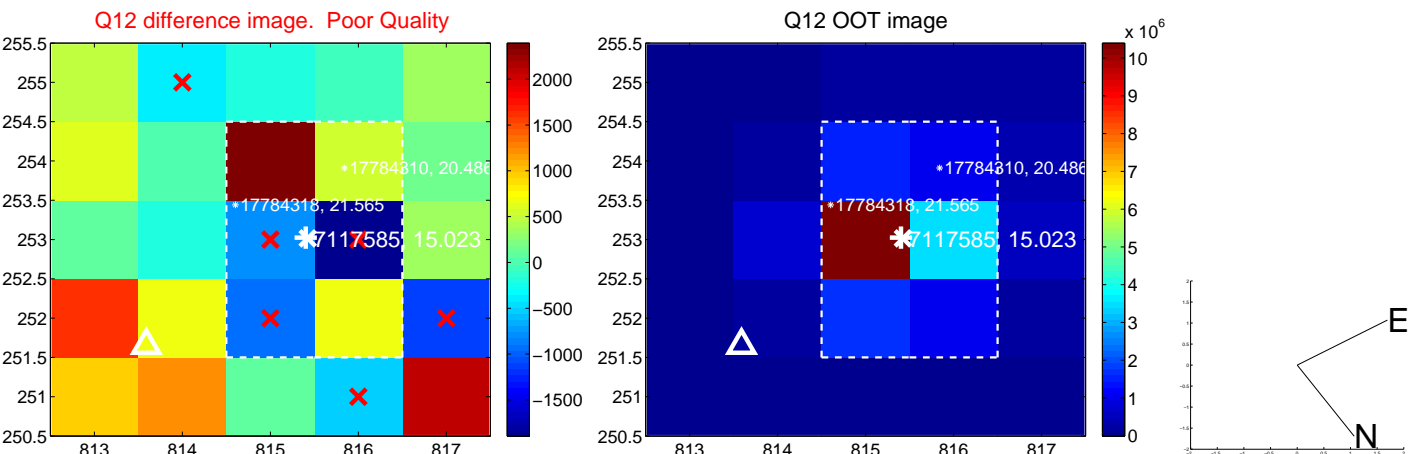
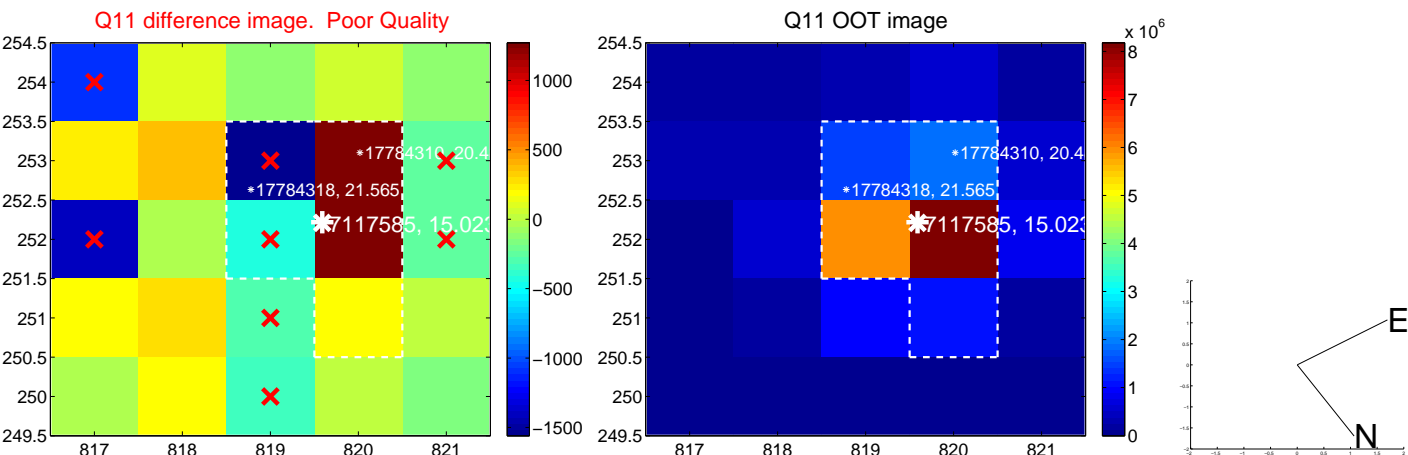
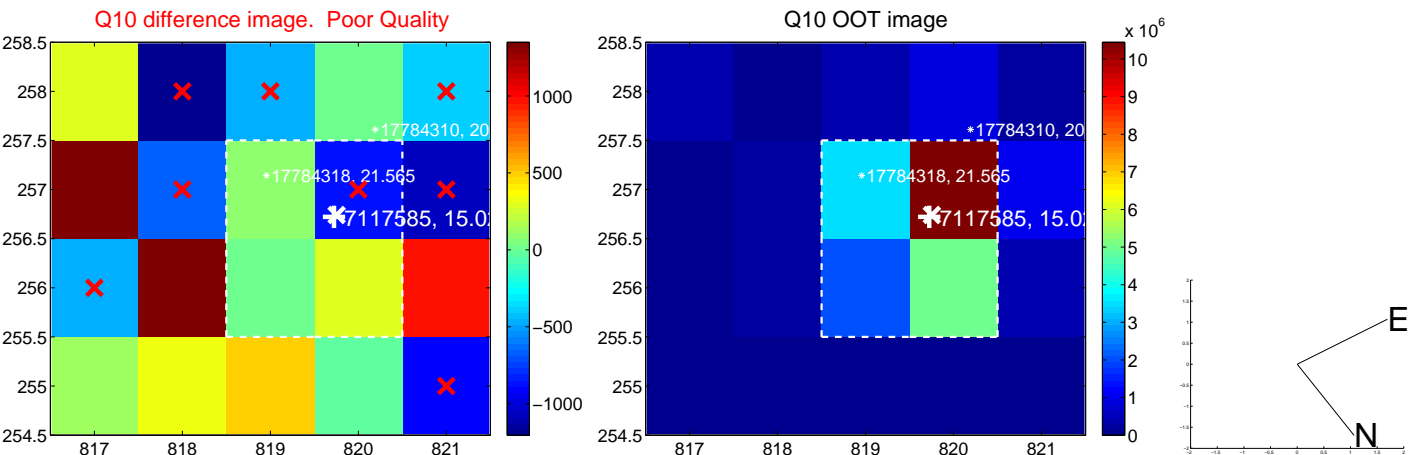
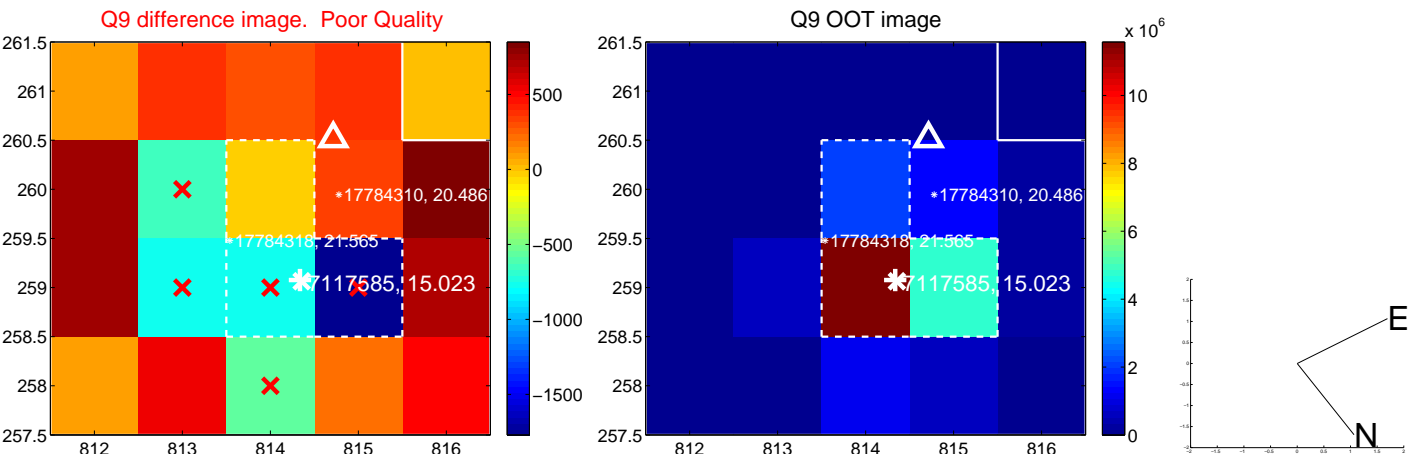
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



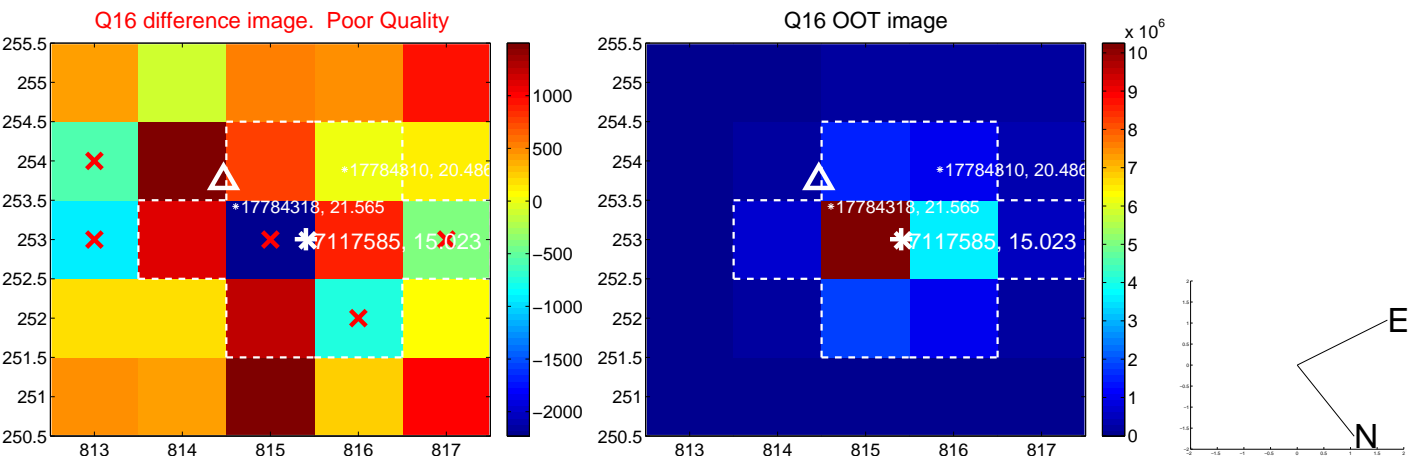
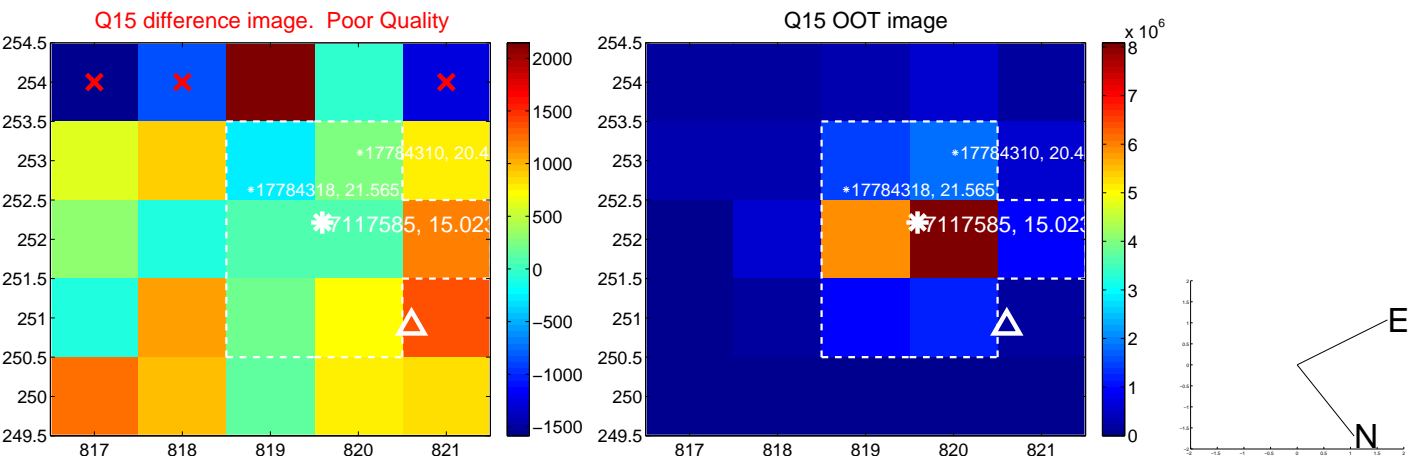
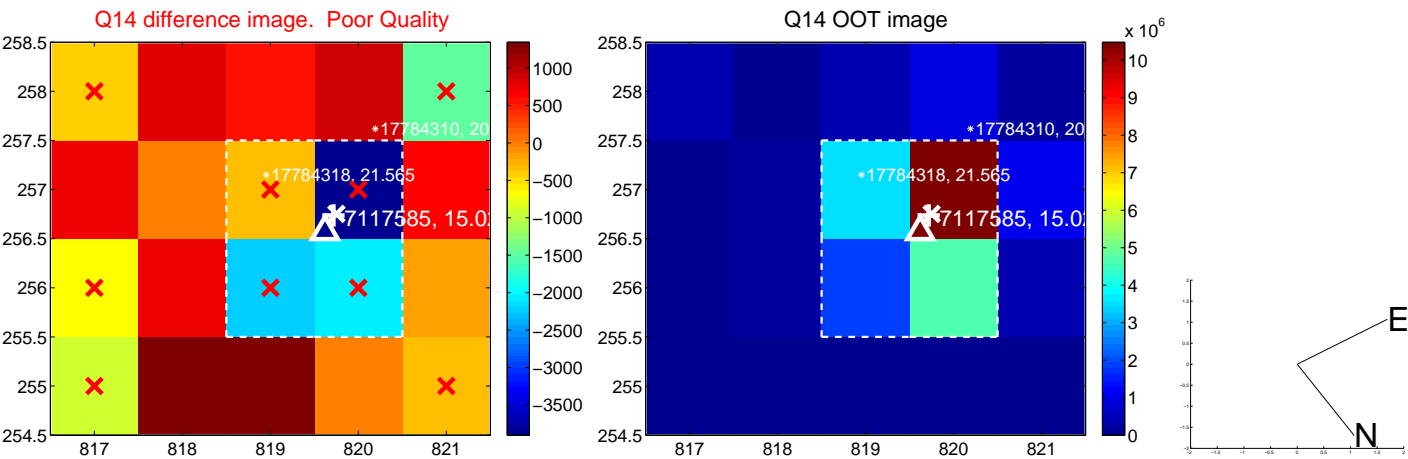
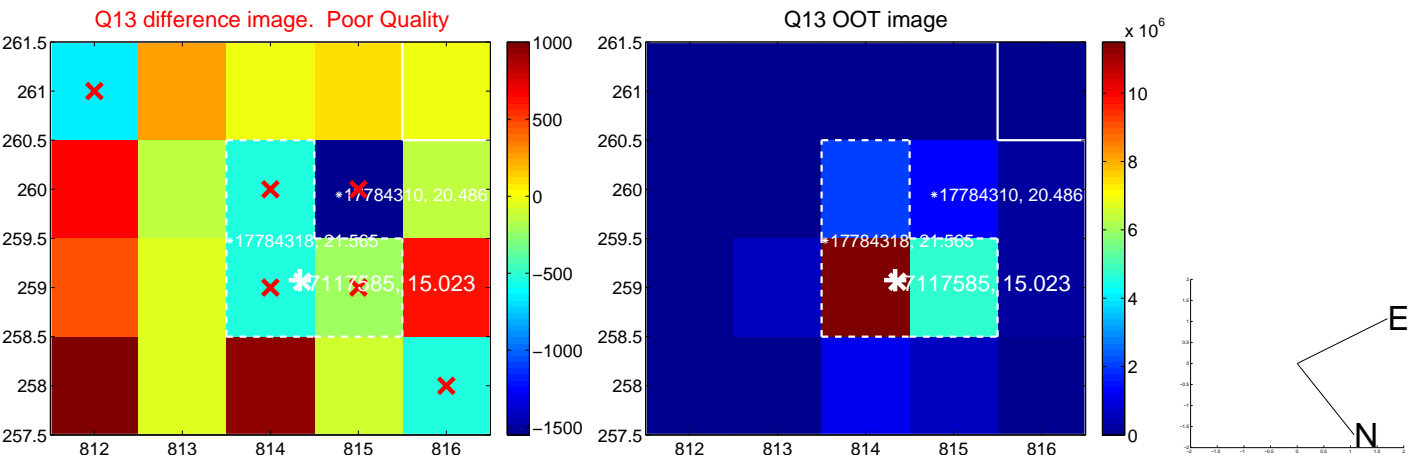
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



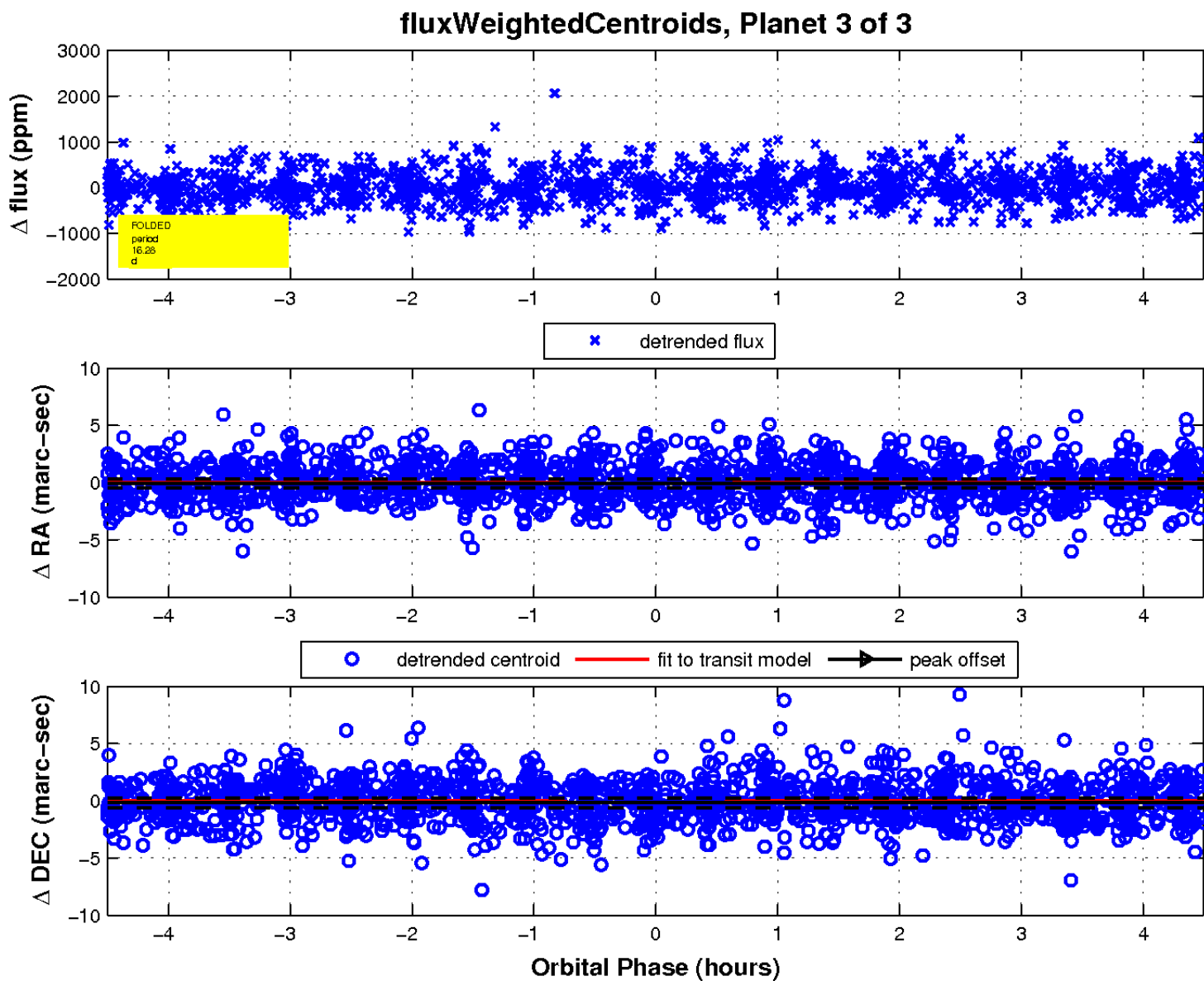
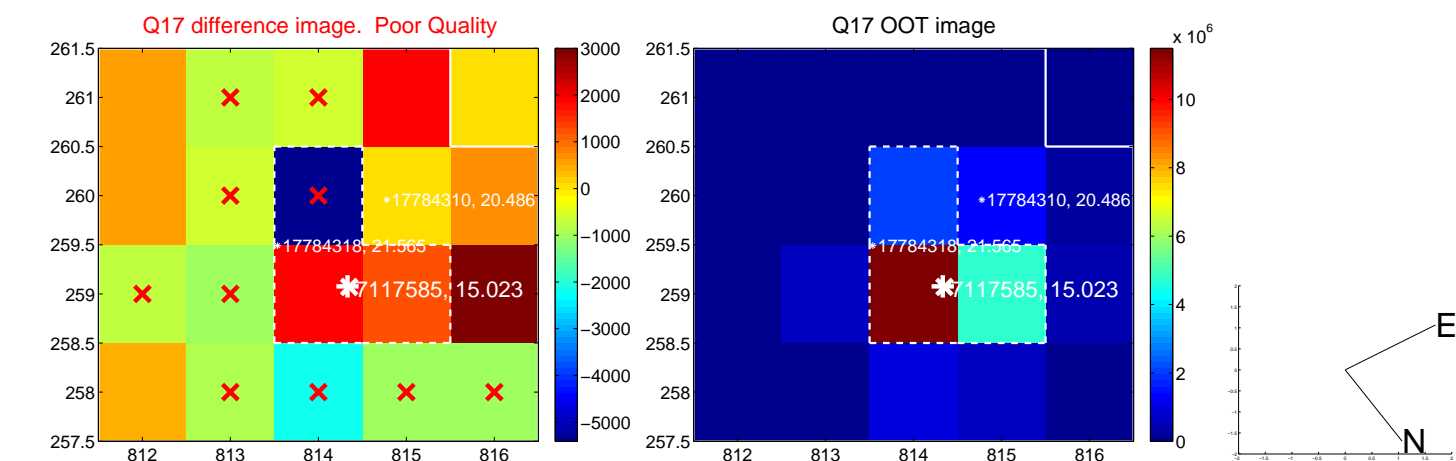
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



UKIRT Image

Declination

