

KIC 005956342

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})
005956342-01	OBS	1052.01	17.028924	143.339422	566.2	4.744	24.1	26.1	1.07	5839	2.82	76.81
005956342-02	OBS	1052.02	6.846151	132.174605	260.0	3.733	16.3	17.3	1.07	5839	2.00	258.88
005956342-03	OBS	1052.03	67.832681	193.706136	557.4	7.535	12.3	13.6	1.07	5839	2.62	12.16
005956342-04	OBS	1052.04	43.130830	166.269919	409.4	3.227	8.9	9.7	1.07	5839	2.41	22.25

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
005956342-01	OBS	PC	1.00	0	0	0	0	NO_COMMENT
005956342-02	OBS	PC	0.94	0	0	0	0	NO_COMMENT
005956342-03	OBS	PC	0.77	0	0	0	0	NO_COMMENT
005956342-04	OBS	PC	0.81	0	0	0	0	NO_COMMENT

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.

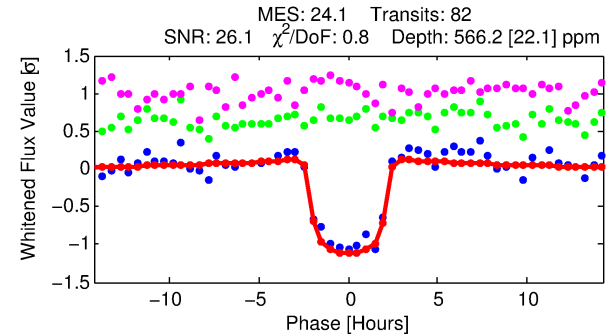
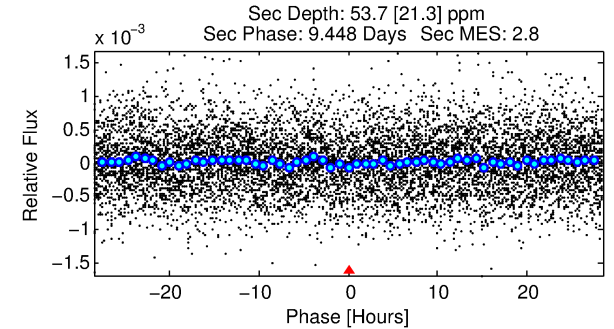
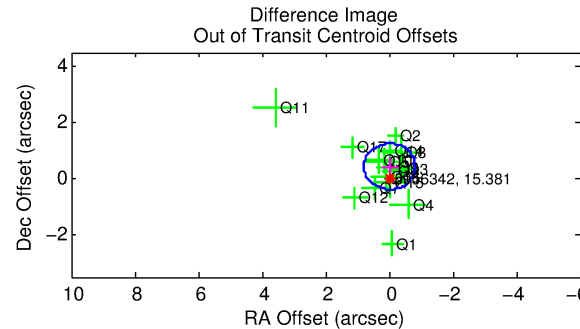
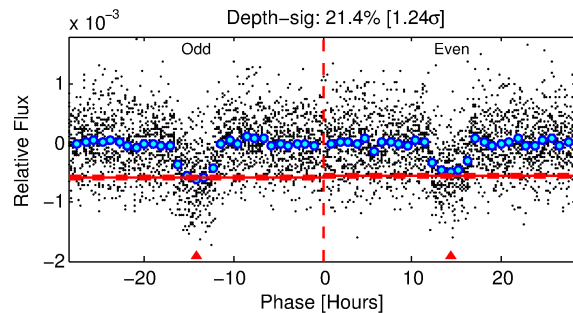
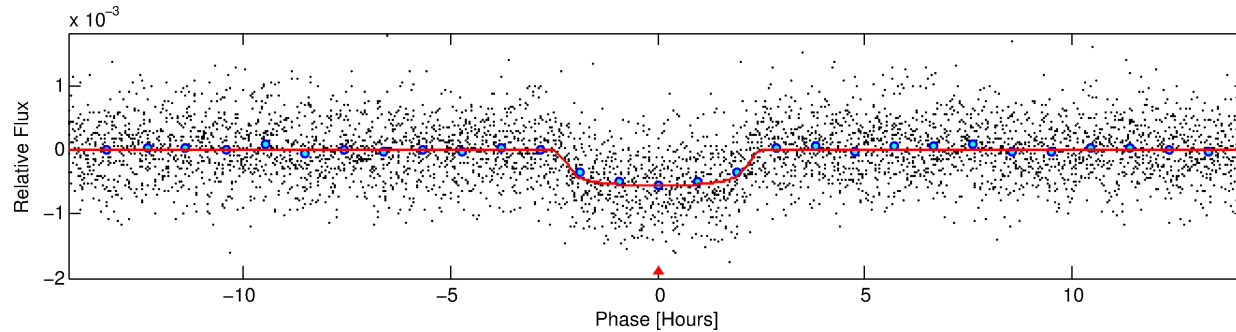
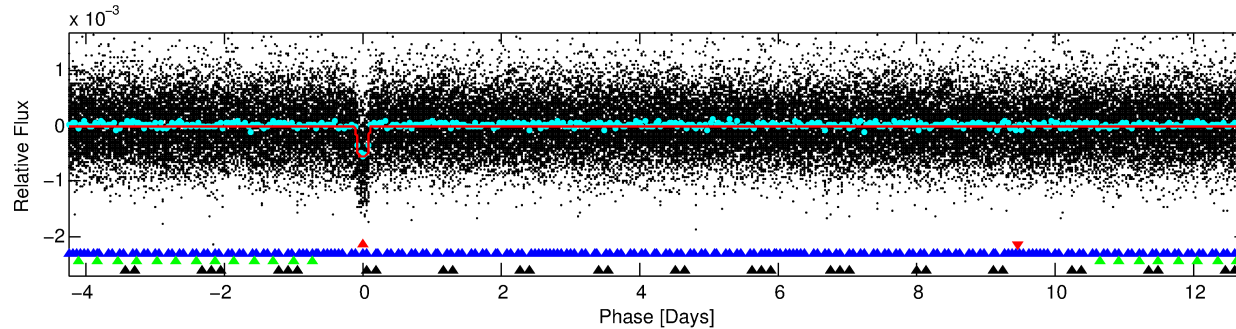
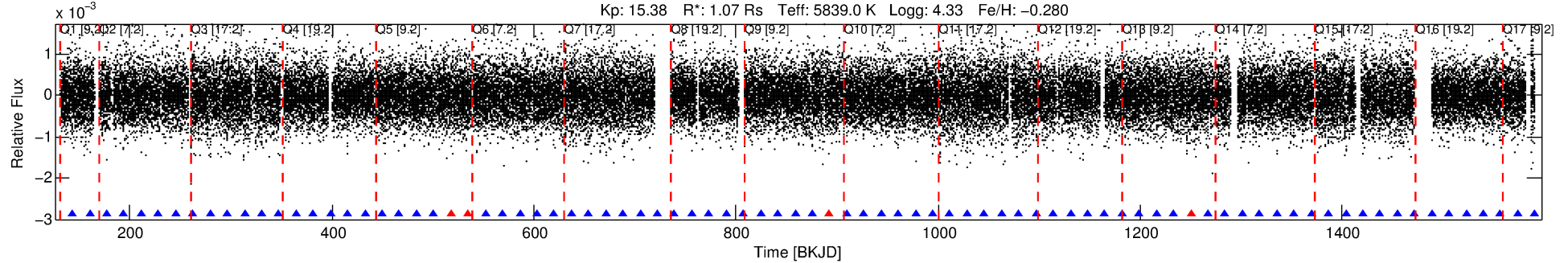
Ephemeris Match Information For 005956342-01

No Significant Match Found

DV One-Page Summary

KIC: 5956342 Candidate: 1 of 4 Period: 17.029 d
KOI: K01052.01 Name: Kepler-265c Corr: 0.988

Kp: 15.38 R*: 1.07 Rs Teff: 5839.0 K Logg: 4.33 Fe/H: -0.280



DV Fit Results:

Period = 17.02892 [0.00007] d
Epoch = 143.3394 [0.0036] BKJD
Rp/R* = 0.0242 [0.0042]
a/R* = 17.35 [13.99]
b = 0.81 [0.36]
Seff = 76.81 [20.91]
Teq = 755 [51] K
Rp = 2.82 [0.66] Re
a = 0.1242 [0.0200] AU
Ag = 57.25 [33.59] [1.67σ]
Teffp = 3211 [425] K [5.74σ]

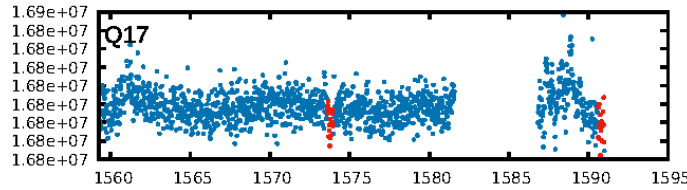
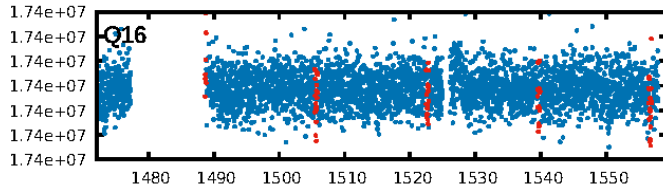
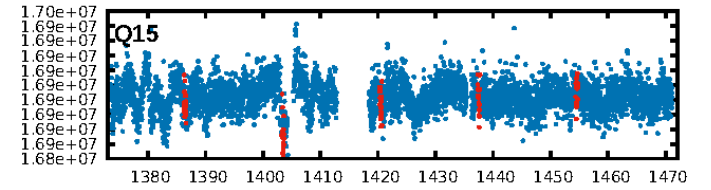
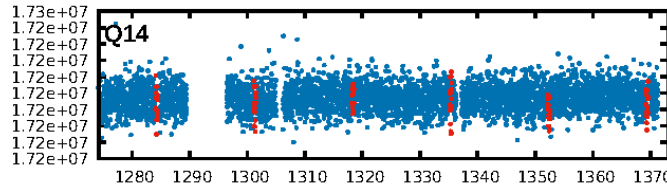
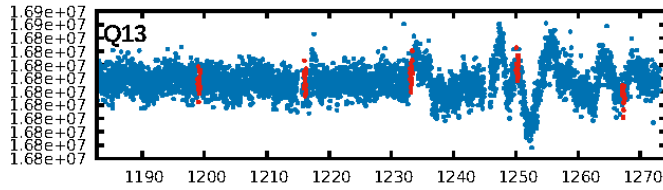
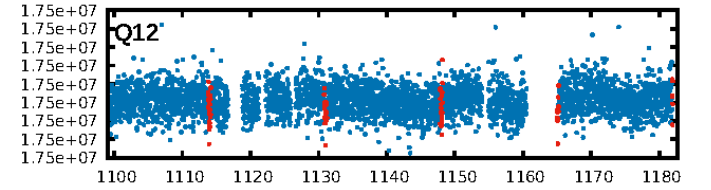
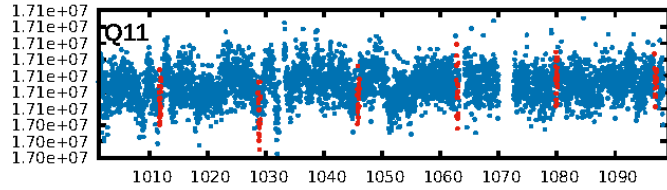
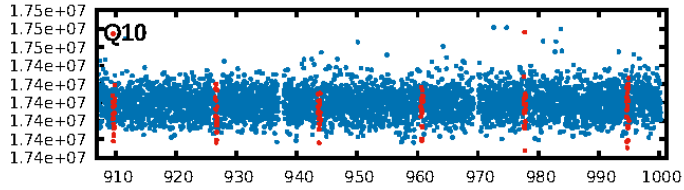
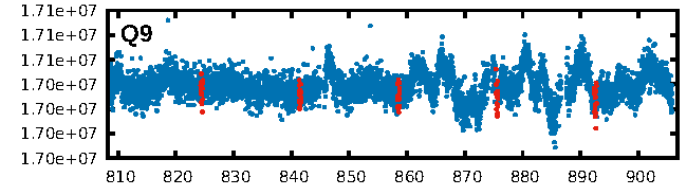
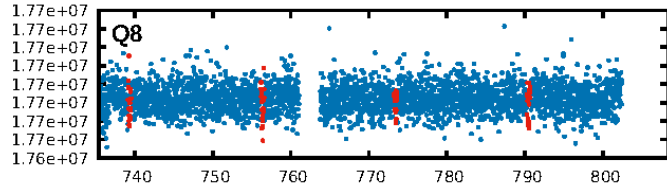
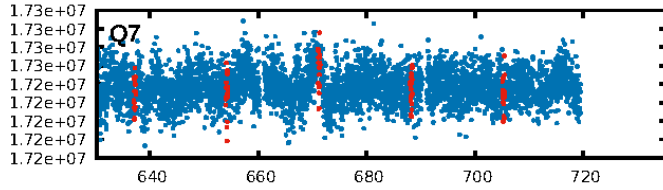
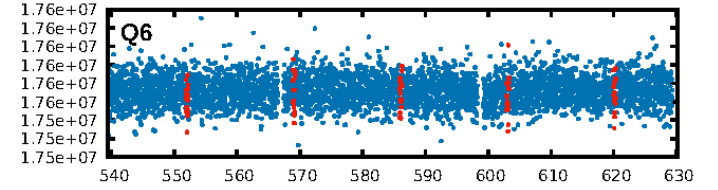
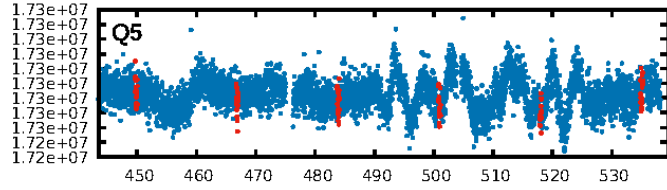
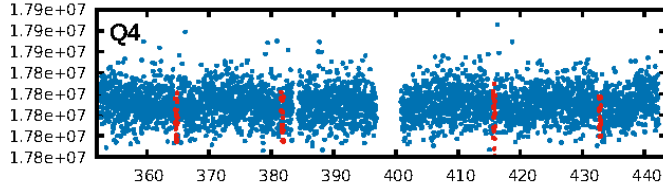
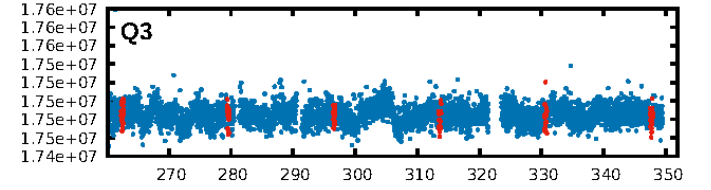
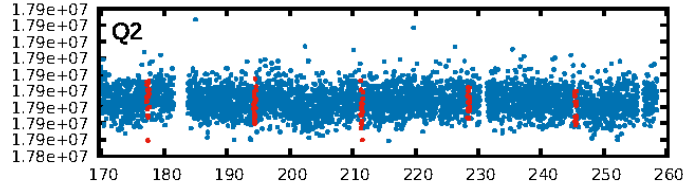
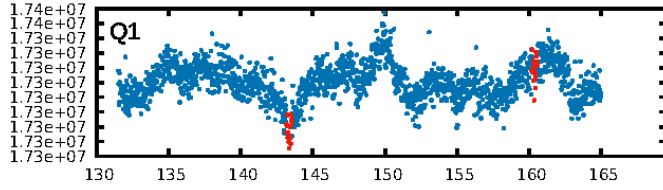
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [40.48σ]
LongPeriod-sig: 100.0% [109.18σ]
ModelChiSquare2-sig: 77.0%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: 1.05e-124
RollingBand-fgt: 0.95 [74/78]
GhostDiagnostic-chr: 3.052
Centroid-sig: 0.0%
Centroid-so: 1.239 arcsec [1.90σ]
OotOffset-rm: 0.433 arcsec [1.60σ]
KicOffset-rm: 0.244 arcsec [0.95σ]
OotOffset-st: 4/4/4/4 [16]
KicOffset-st: 4/4/4/4 [16]
DiffImageQuality-fgm: 0.94 [15/16]
DiffImageOverlap-fno: 1.00 [17/17]

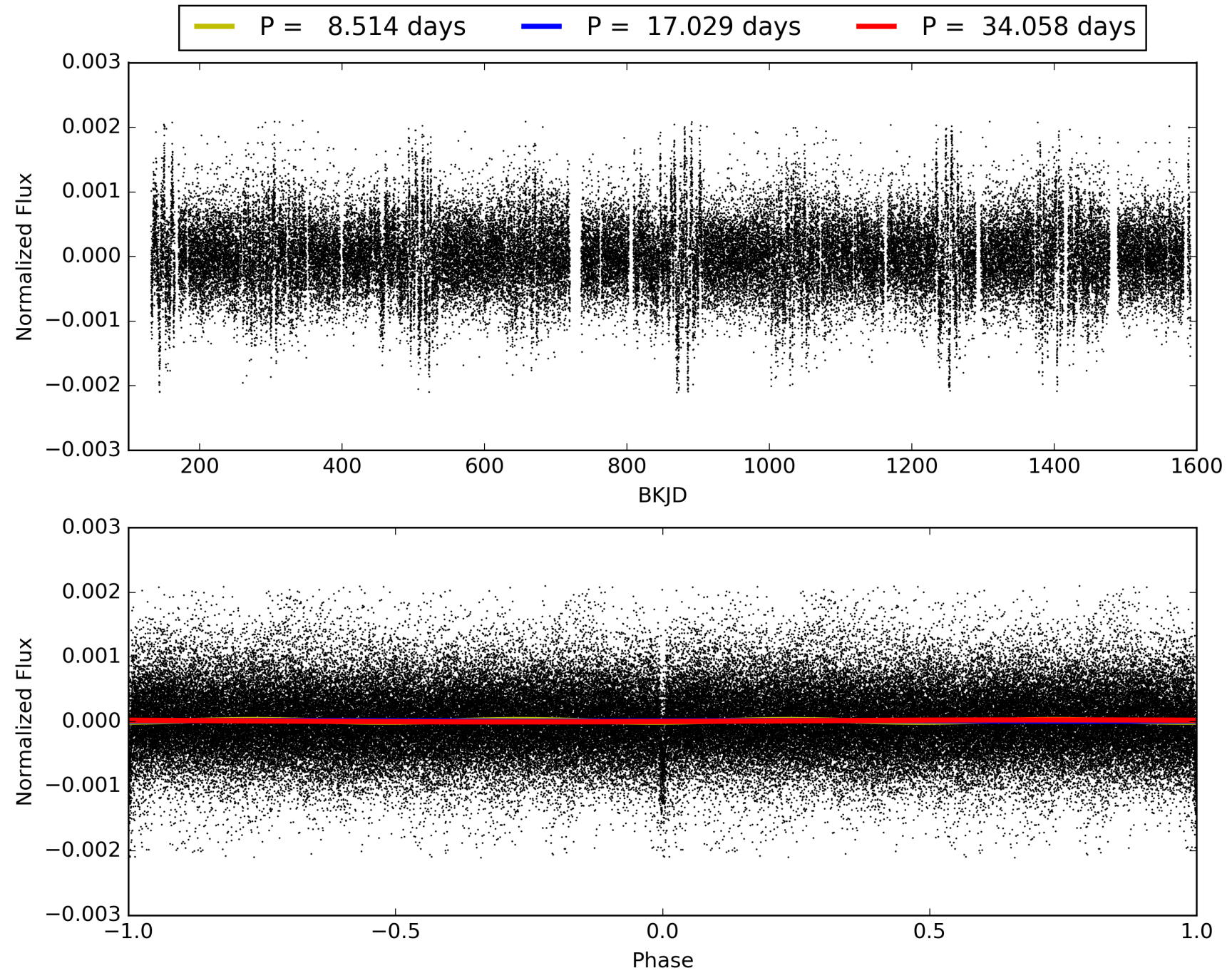
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This Data Validation Report Summary was produced in the Kepler Science Operations Center Pipeline at NASA Ames Research Center

TCE 005956342-01, PDC Light Curves

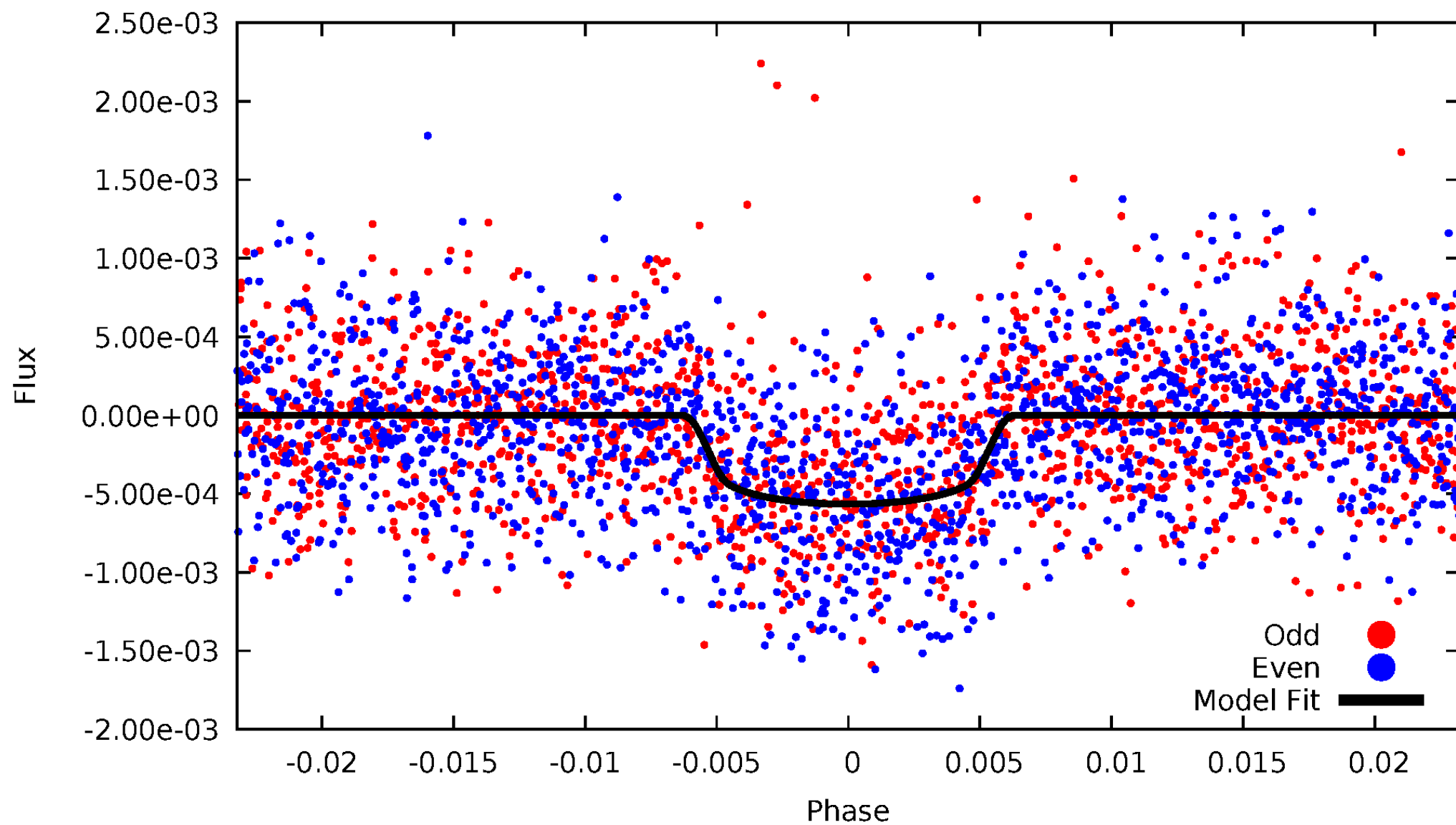


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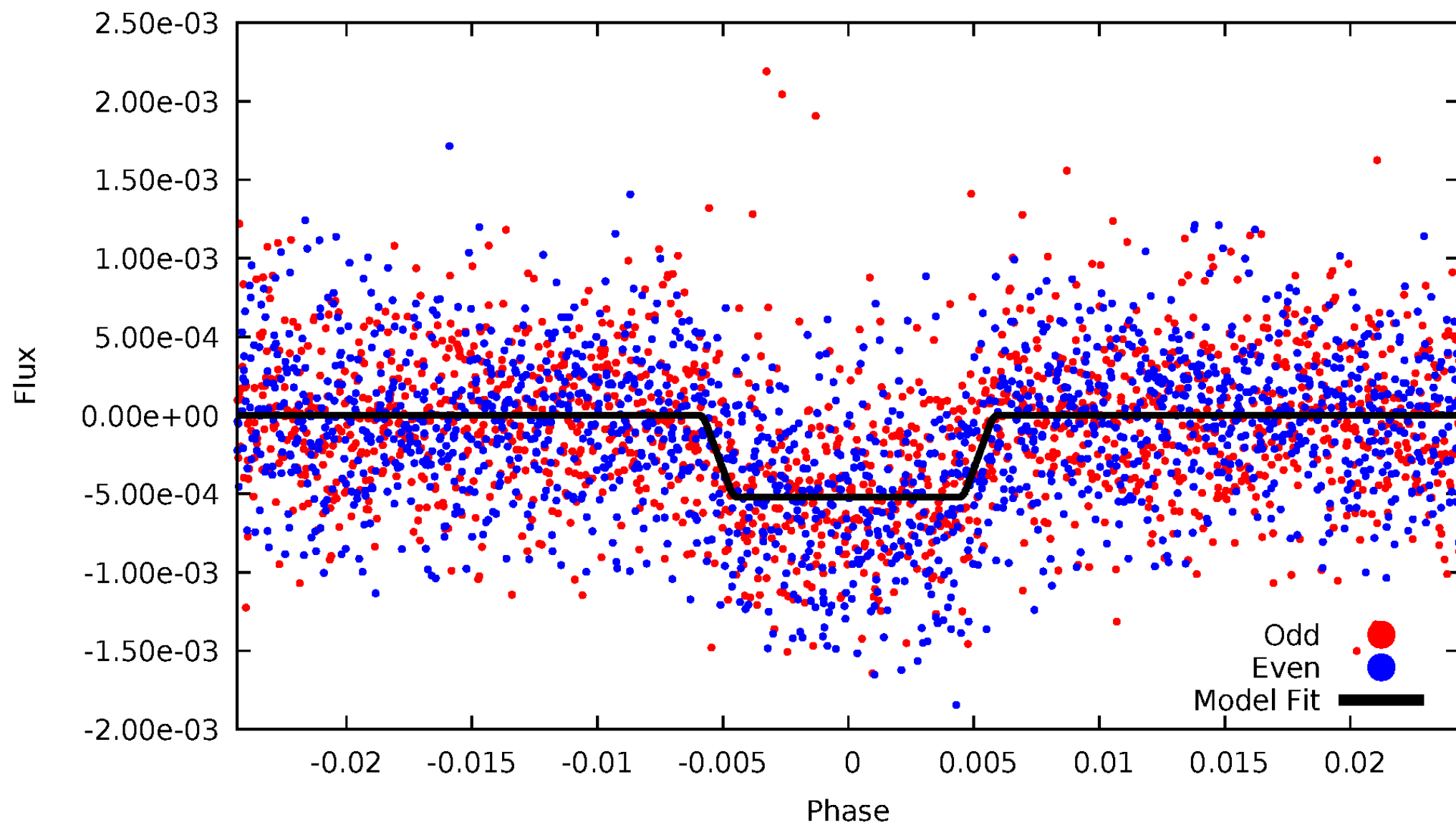
DV Odd/Even

TCE 005956342-01

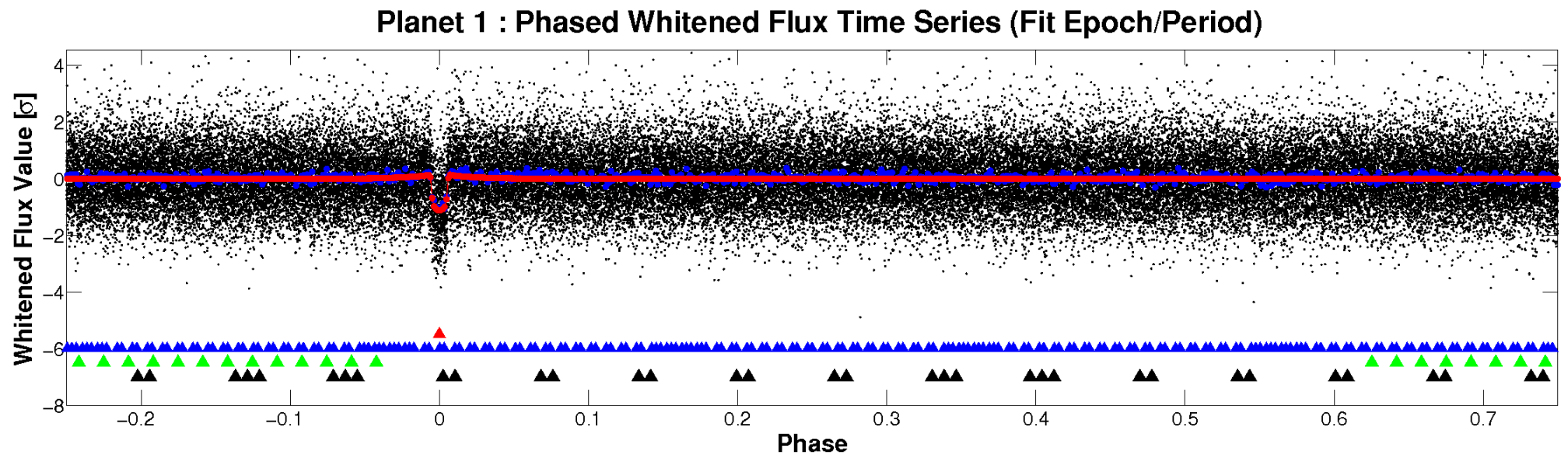
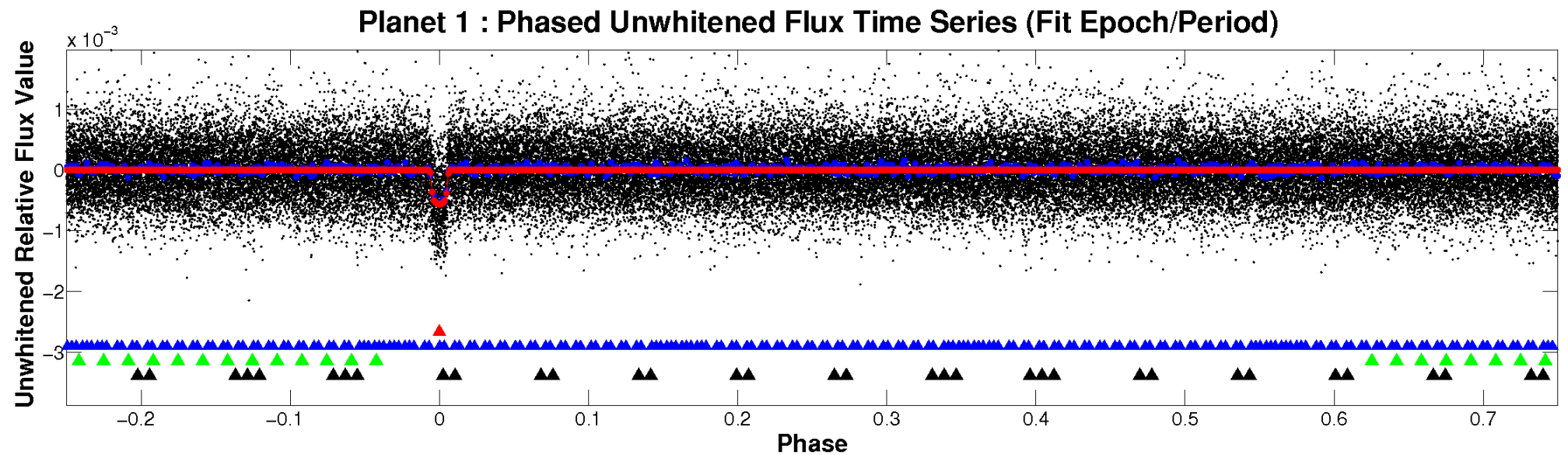


ALT Odd/Even

TCE 005956342-01

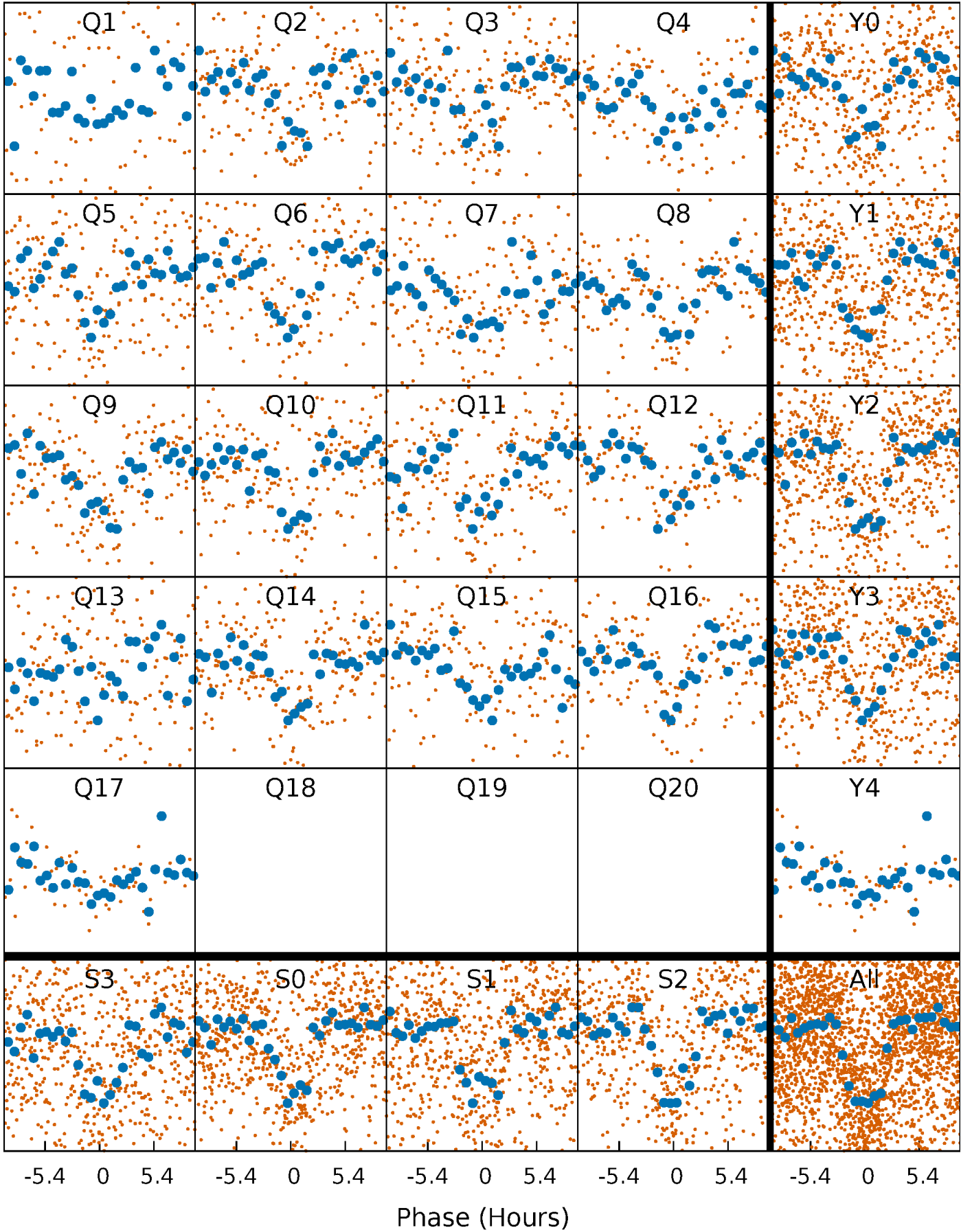


Non-Whitened Vs. Whitened Light Curve



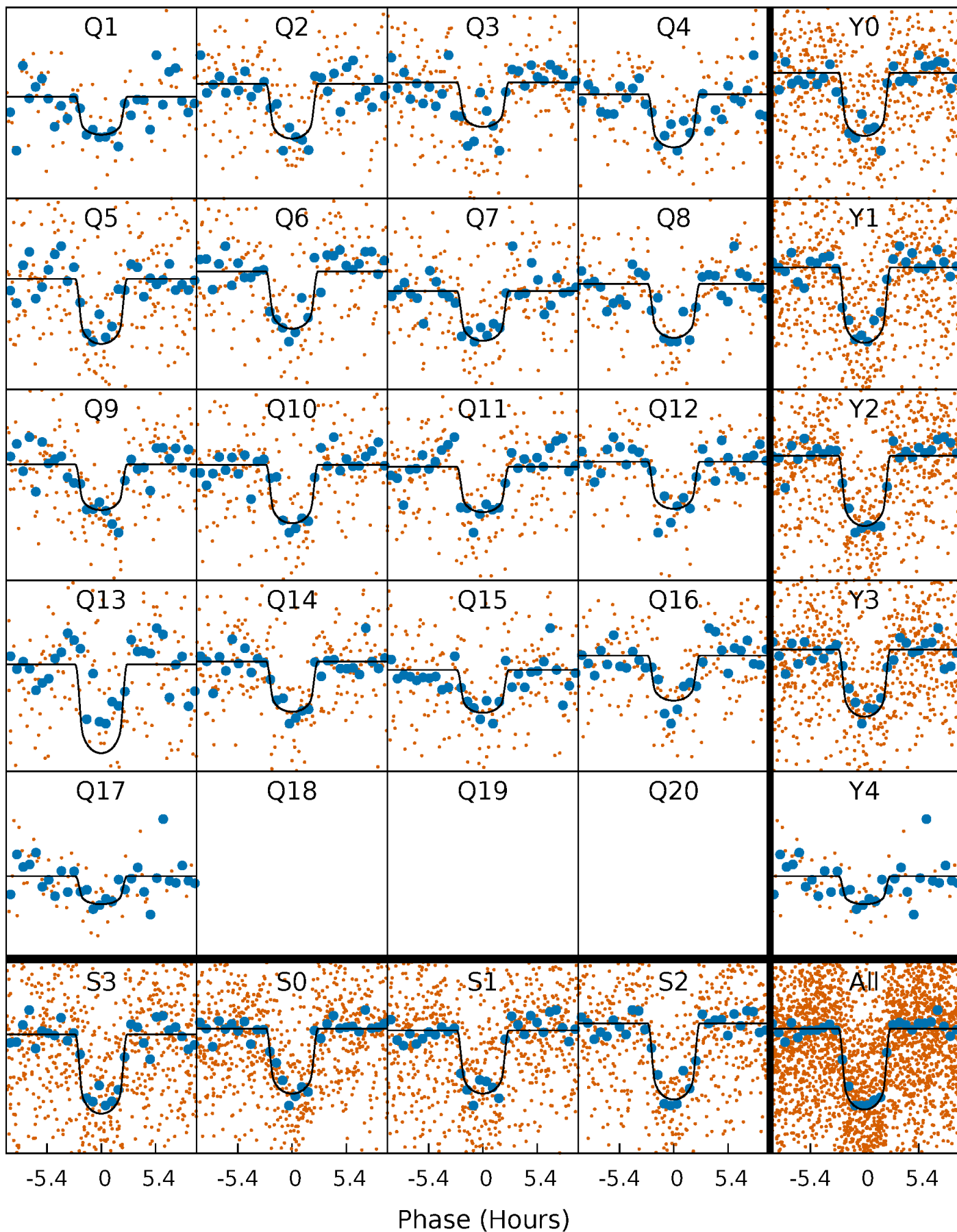
PDC Quarter-Phased Transit Curves

TCE 005956342-01 $P = 17.028924$ Days $T_0 = 143.339422$ (BKJD)



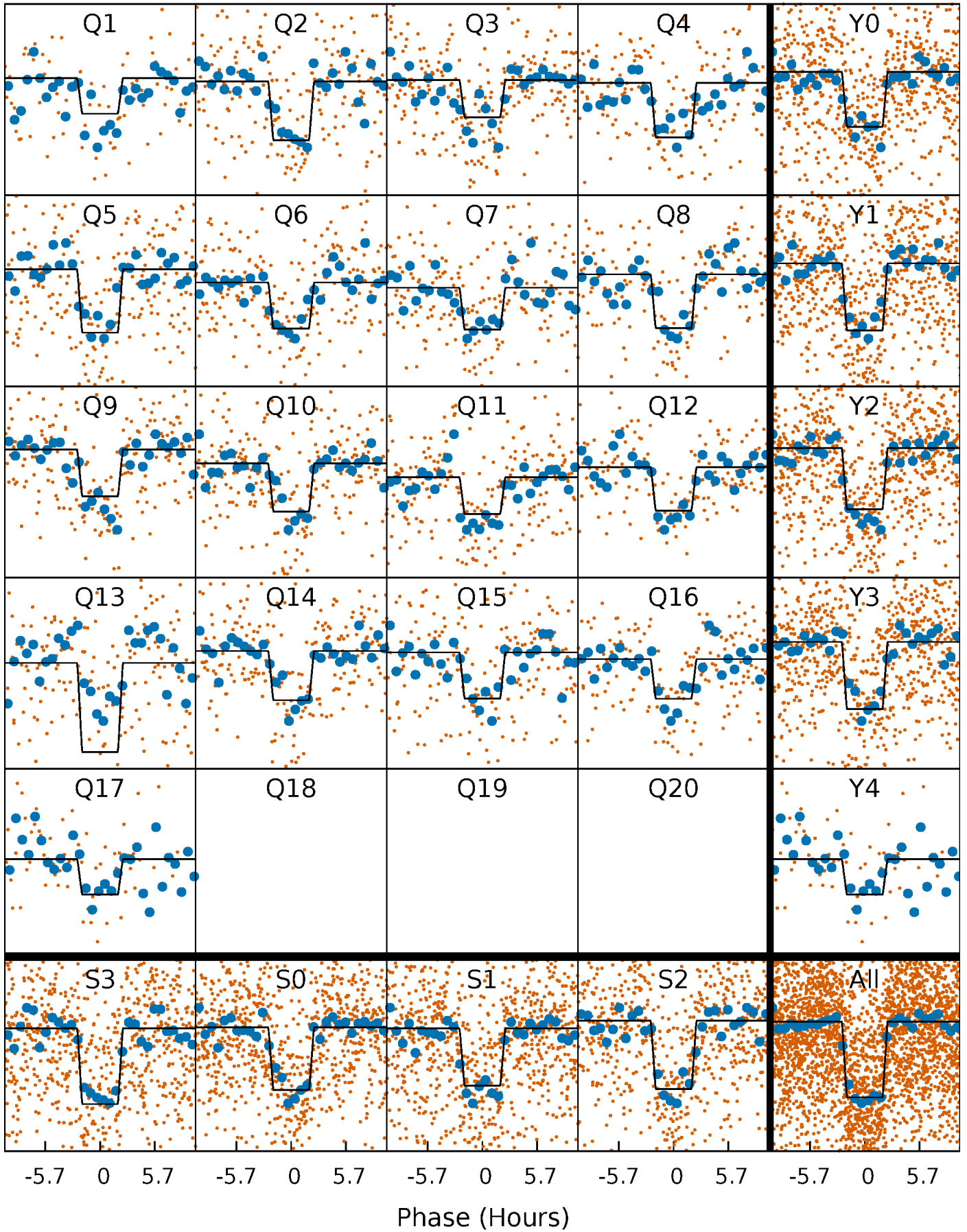
DV Quarter-Phased Transit Curves

TCE 005956342-01 P= 17.028924 Days $T_0=143.339422$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

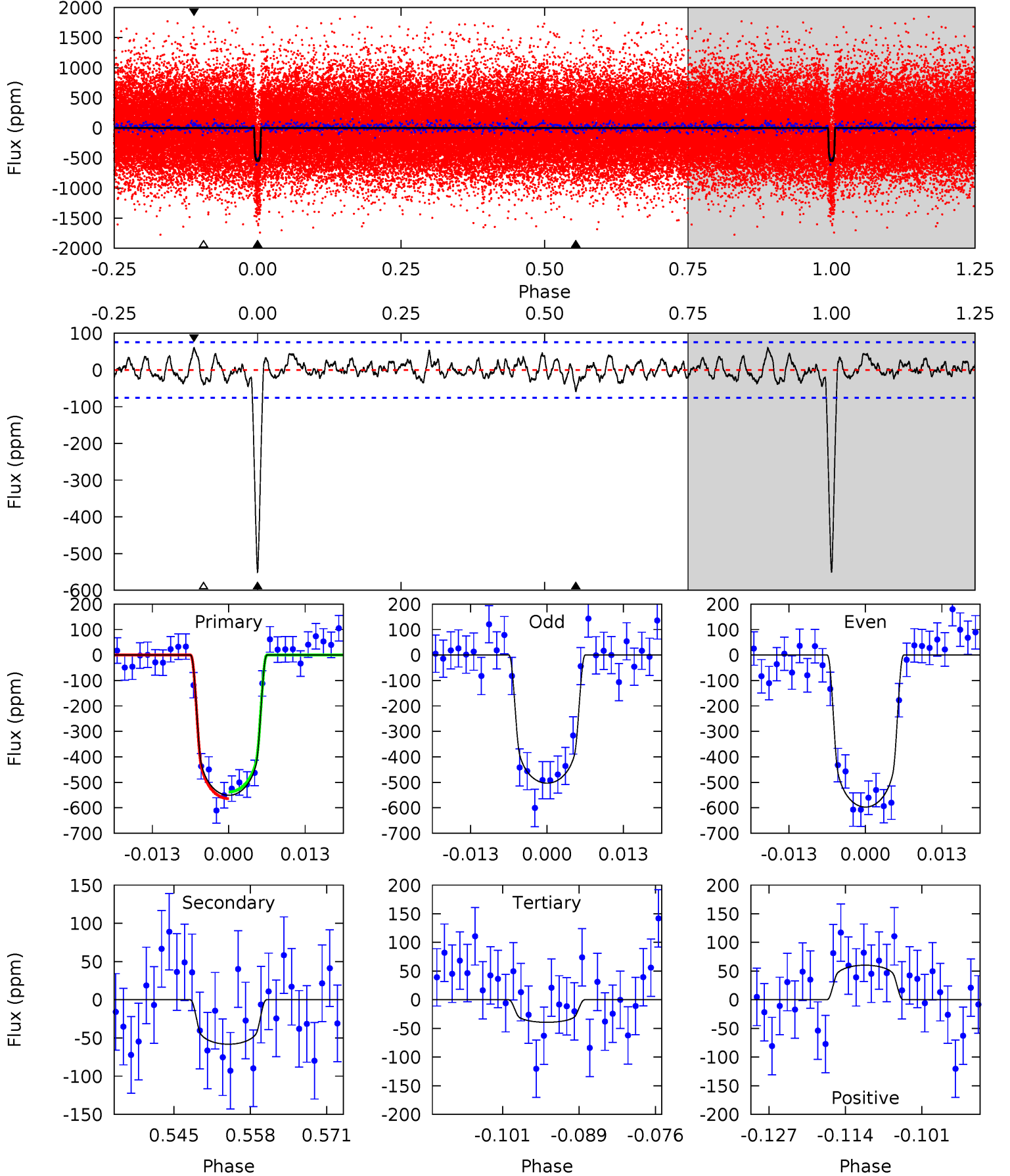
TCE 005956342-01 P= 17.028878 Days $T_0=143.340472$ (BKJD)



DV Model-Shift Uniqueness Test

005956342-01, P = 17.028924 Days, E = 126.310498 Days

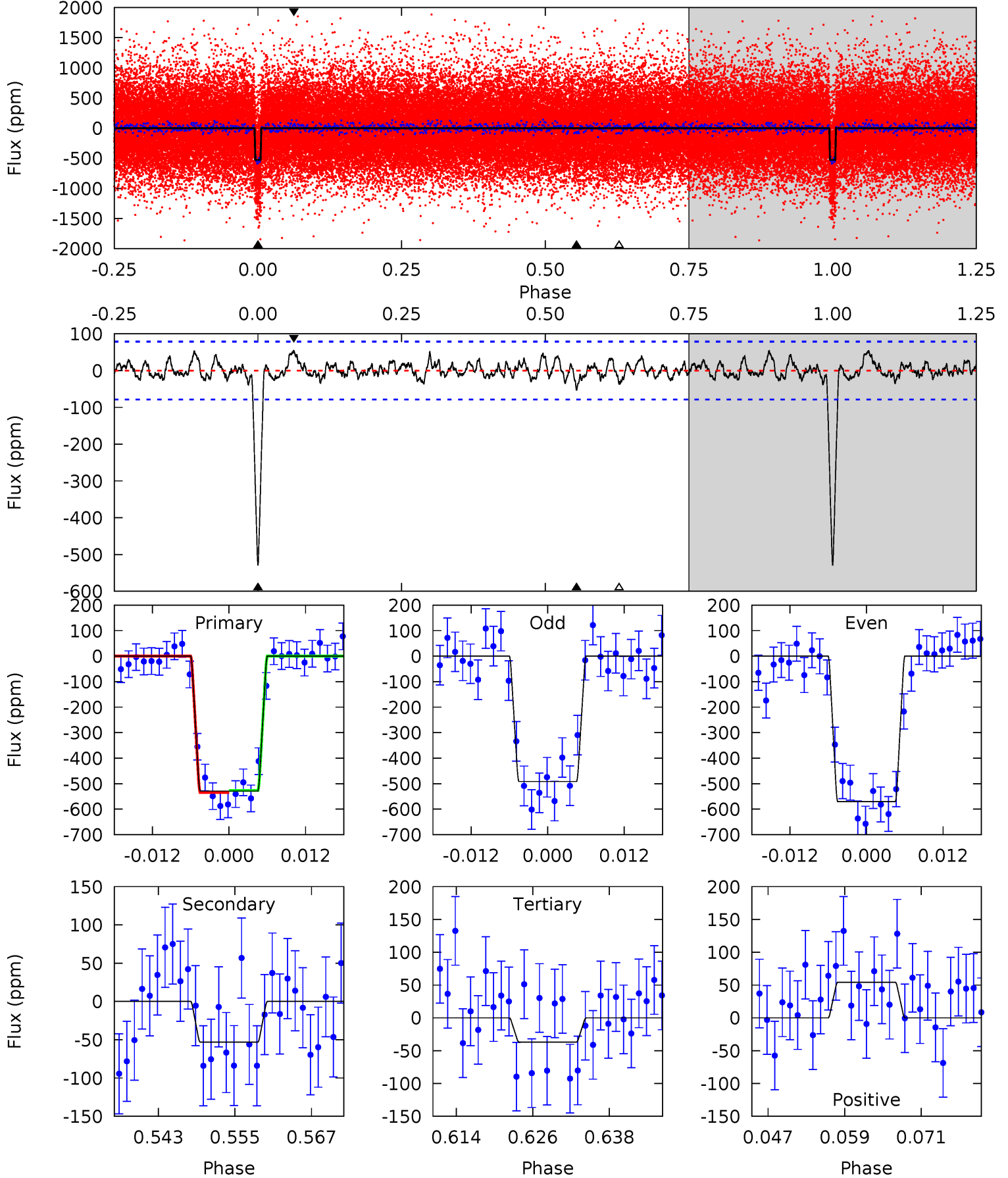
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
36.3	3.83	2.59	3.97	4.98	2.49	1.25	33.7	32.3	1.24	-0.14	3.09	0.98	0.10	0.86



Alt Model-Shift Uniqueness Test

005956342-01, P = 17.028878 Days, E = 126.311594 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
33.6	3.37	2.34	3.45	4.99	2.52	1.11	31.2	30.1	1.03	-0.08	2.50	1.00	0.09	0.27



Stellar Parameters For KIC 005956342

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	5839^{+105}_{-105}	$4.327^{+0.156}_{-0.104}$	$-0.280^{+0.150}_{-0.150}$	$1.067^{+0.156}_{-0.172}$	$0.881^{+0.070}_{-0.051}$	$1.023^{+0.659}_{-0.343}$
	+2%/-2%	+4%/-2%	+54%/-54%	+15%/-16%	+8%/-6%	+64%/-34%
Source	SPE58	SPE58	SPE58	DSEP		

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

Secondary Eclipse Parameters for KIC 005956342-01 / KOI 1052.01

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-58 ± 15	$2.77^{+0.56}_{-0.53}$	1050^{+48}_{-52}	3700^{+281}_{-270}	64^{+39}_{-24}
Alt.	-53 ± 16	$2.61^{+0.56}_{-0.53}$	1049^{+47}_{-51}	3689^{+363}_{-270}	65^{+48}_{-26}

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

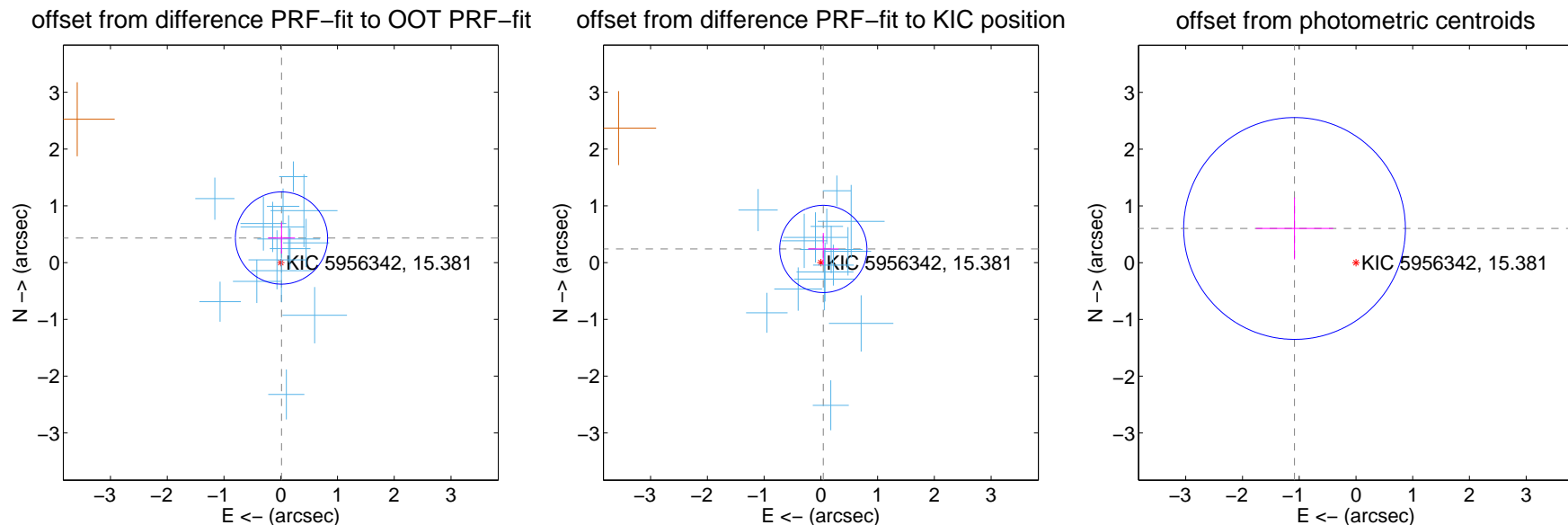
DV Centroid Data

Supplemental centroid analysis for 005956342-01. Kepler magnitude: 15.38. Transit SNR 26.07

There are 15 quarters with good PRF difference image offsets

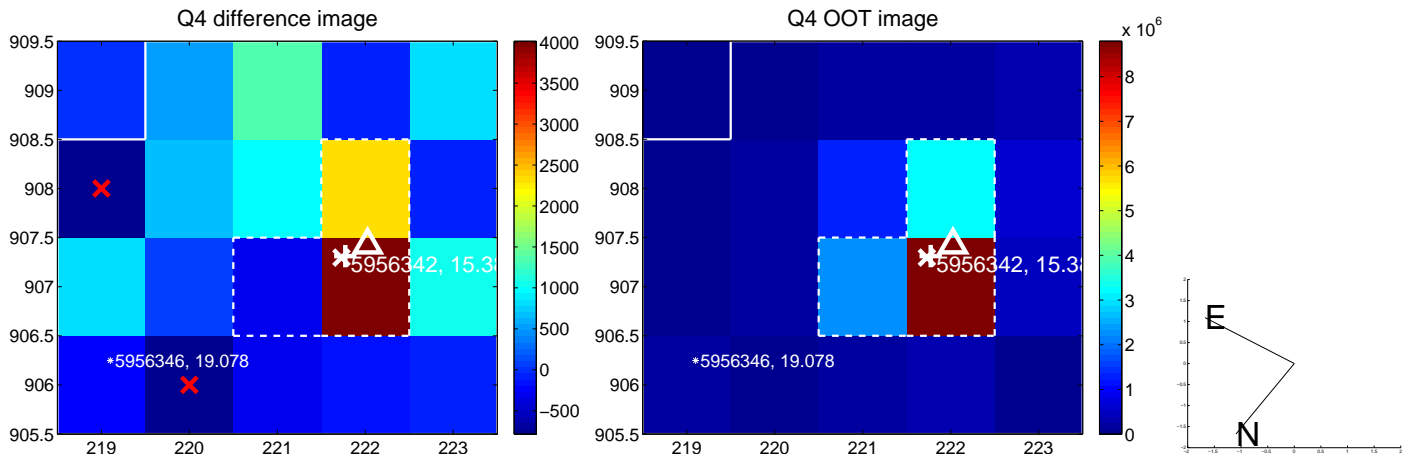
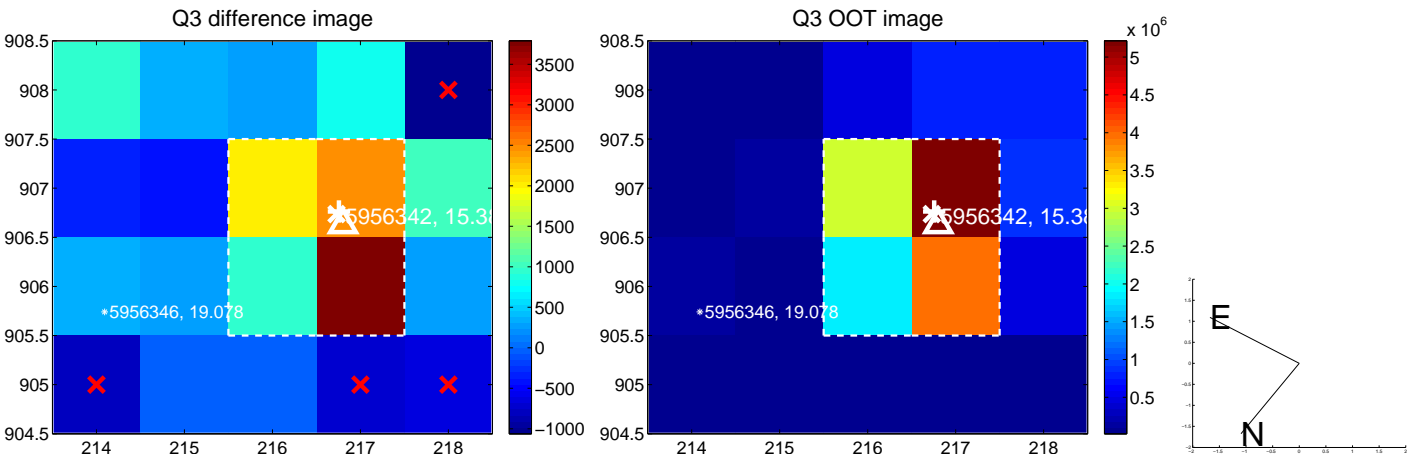
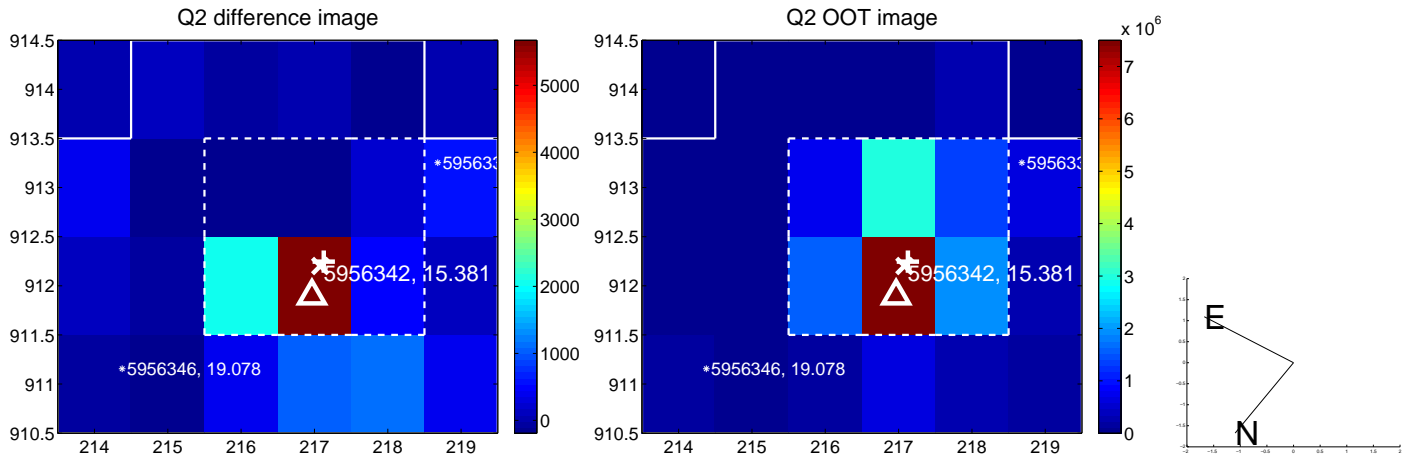
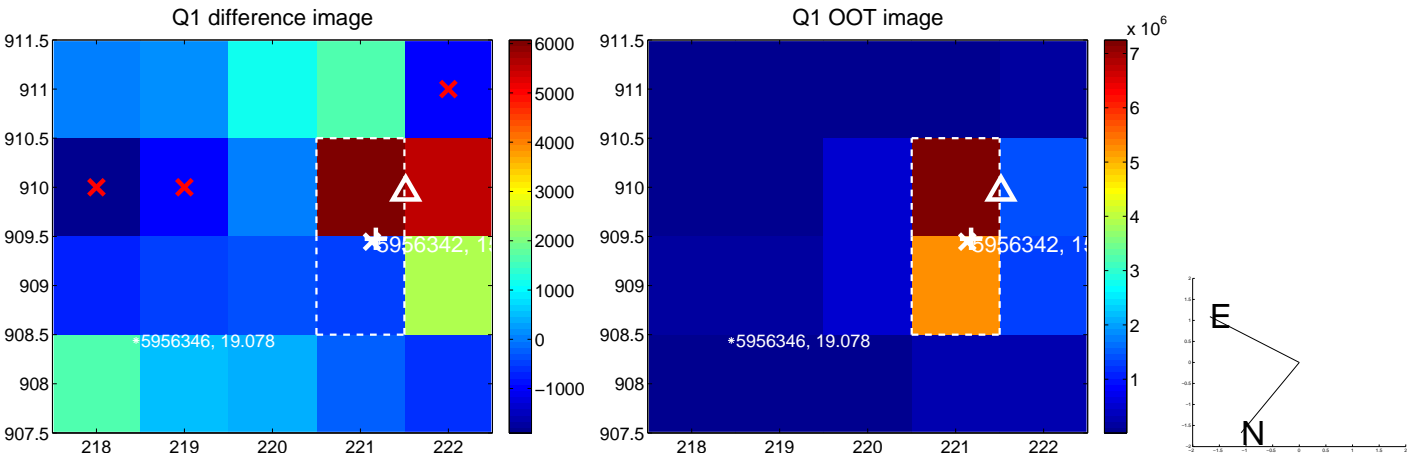
The direct PRF centroid is offset from the target star catalog position by about 0.21 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.433 ± 0.271	1.60	-0.013 ± 0.238	0.433 ± 0.274
PRF-fit source offset from KIC position	0.244 ± 0.256	0.95	-0.043 ± 0.268	0.240 ± 0.280
photometric centroid source offset	1.24 ± 0.65	1.90	1.08 ± 0.68	0.60 ± 0.55

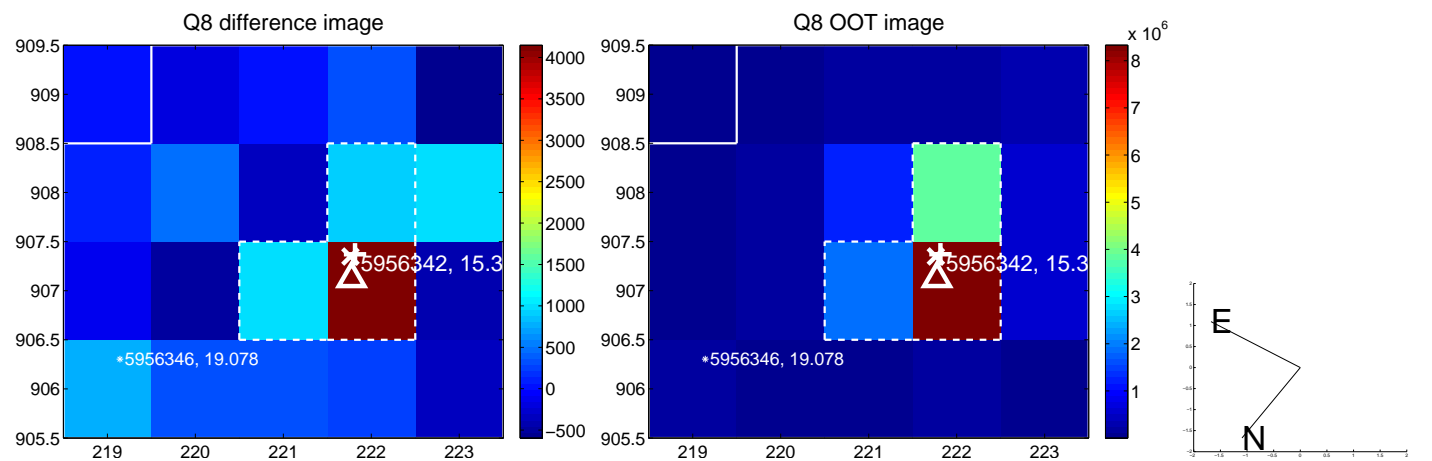
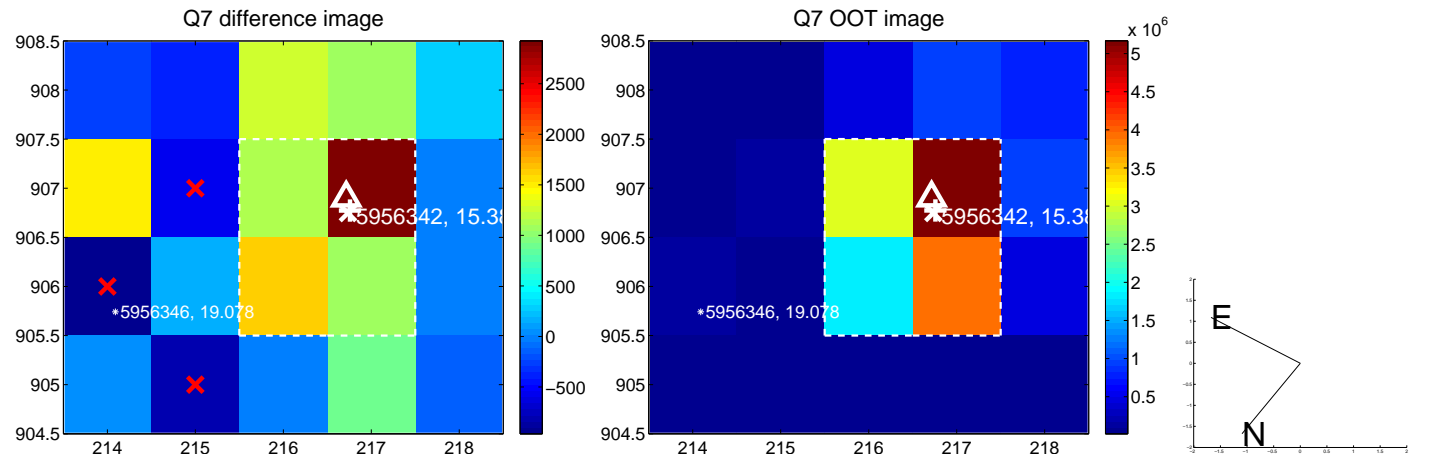
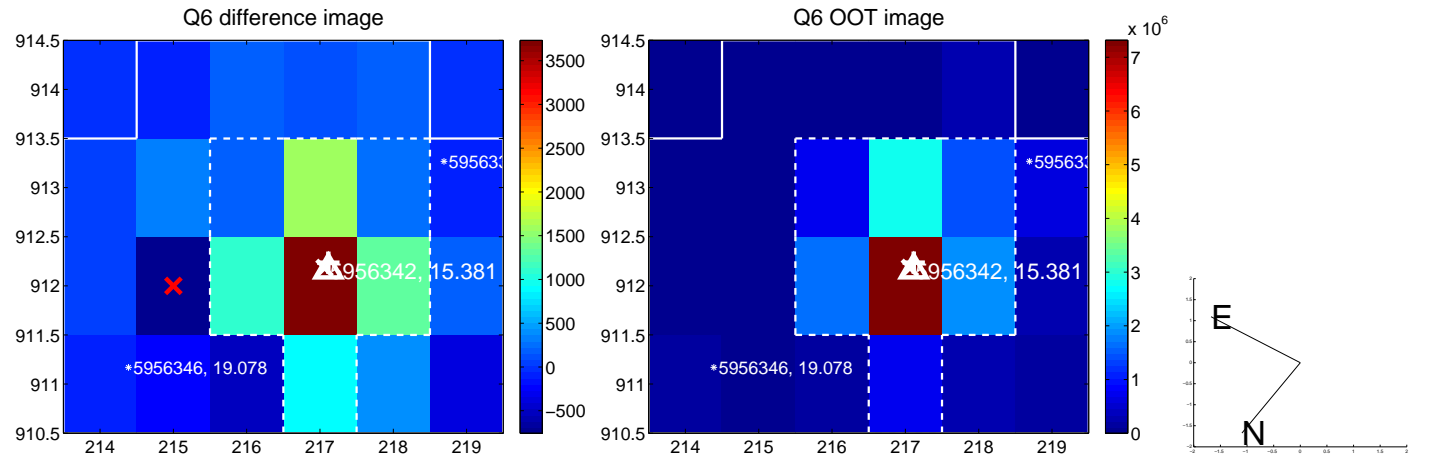
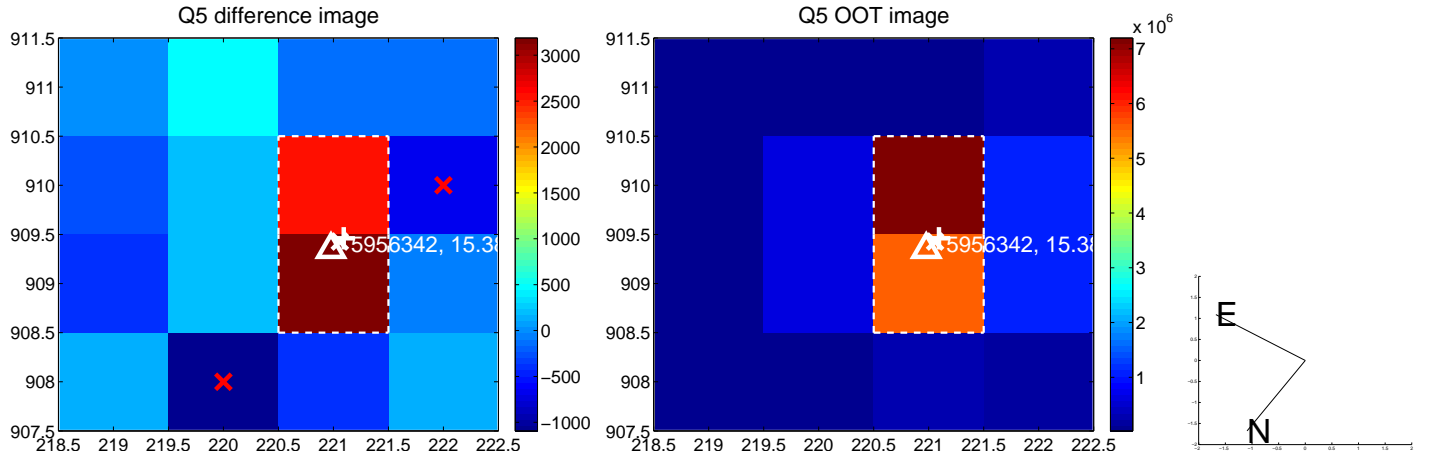


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses:** good quarterly centroid offsets; **Vermillion crosses:** bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

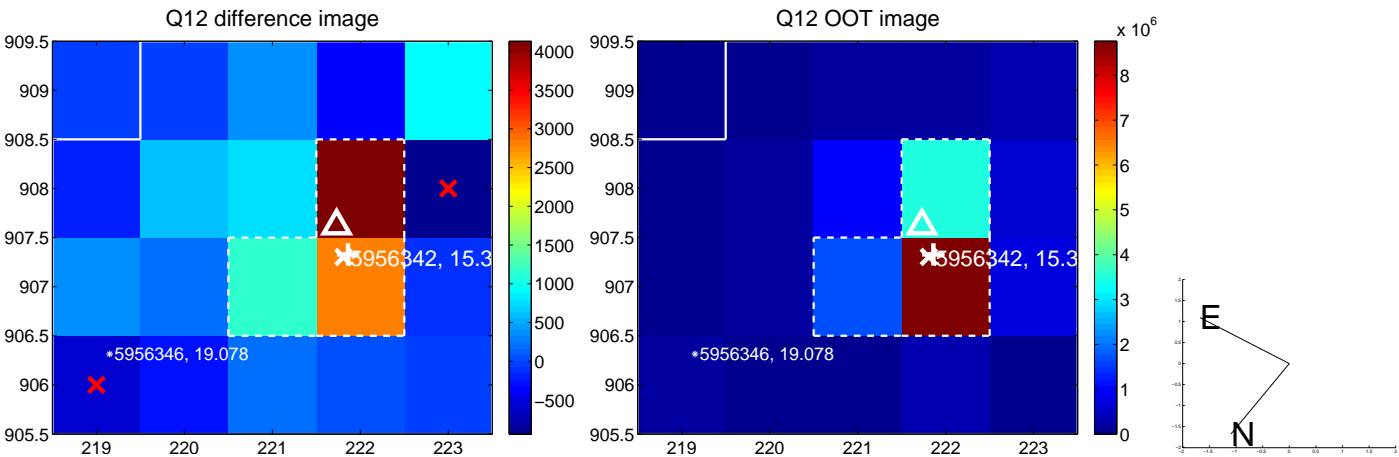
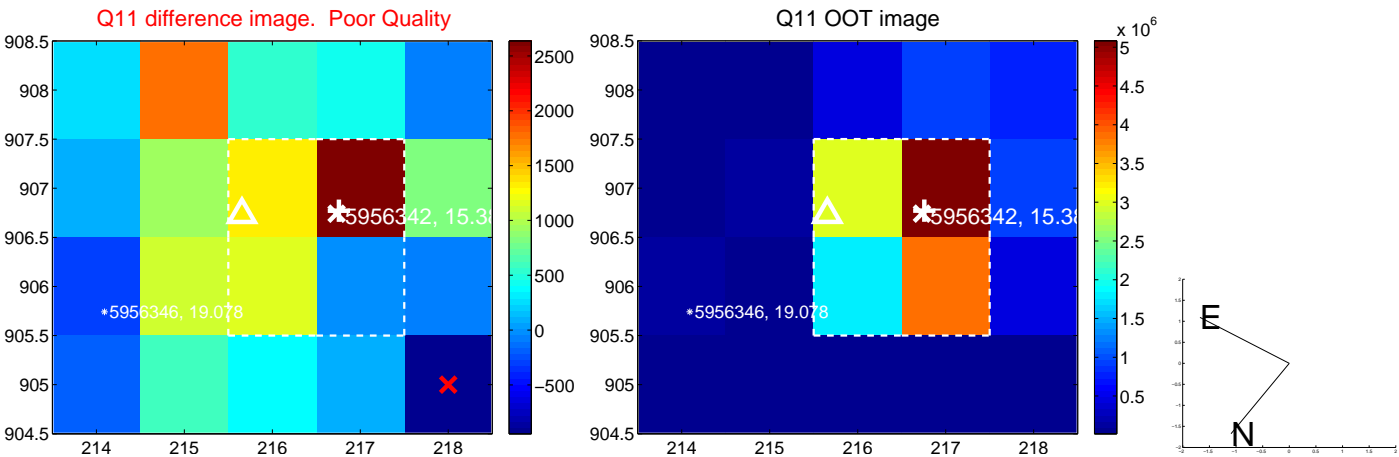
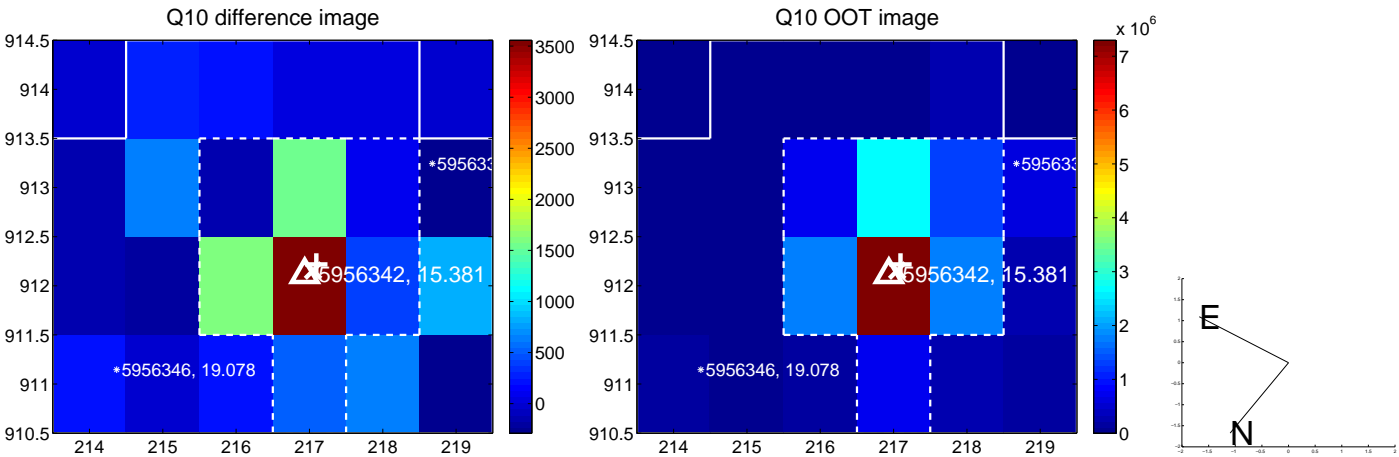
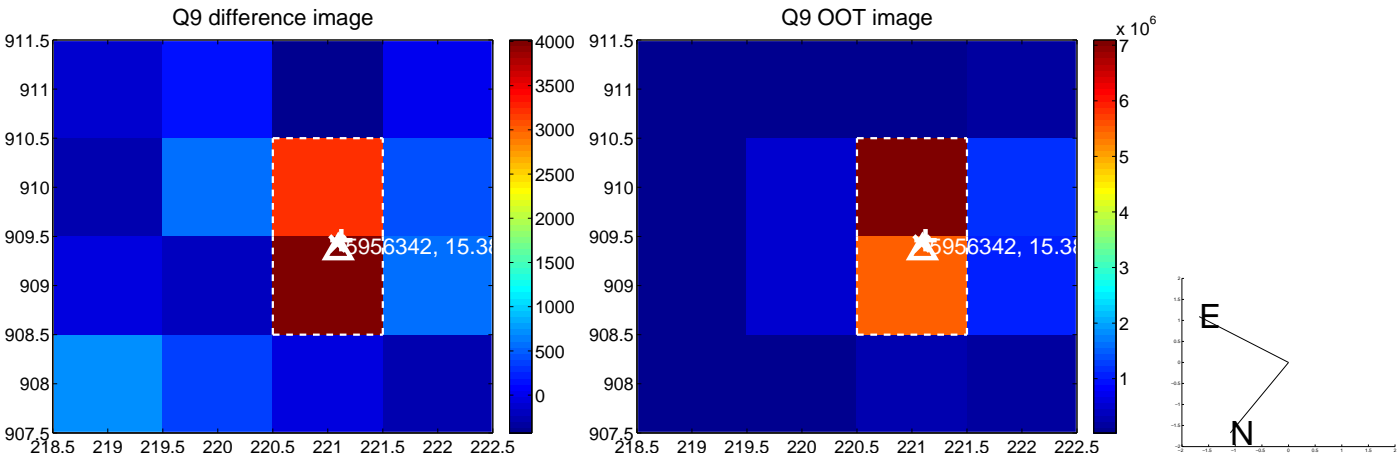
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



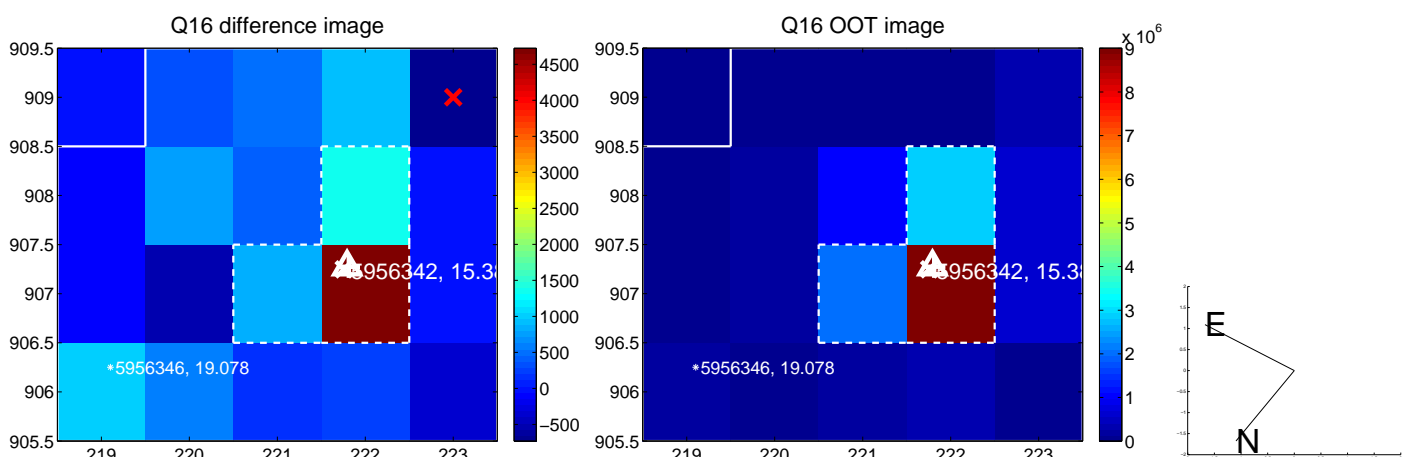
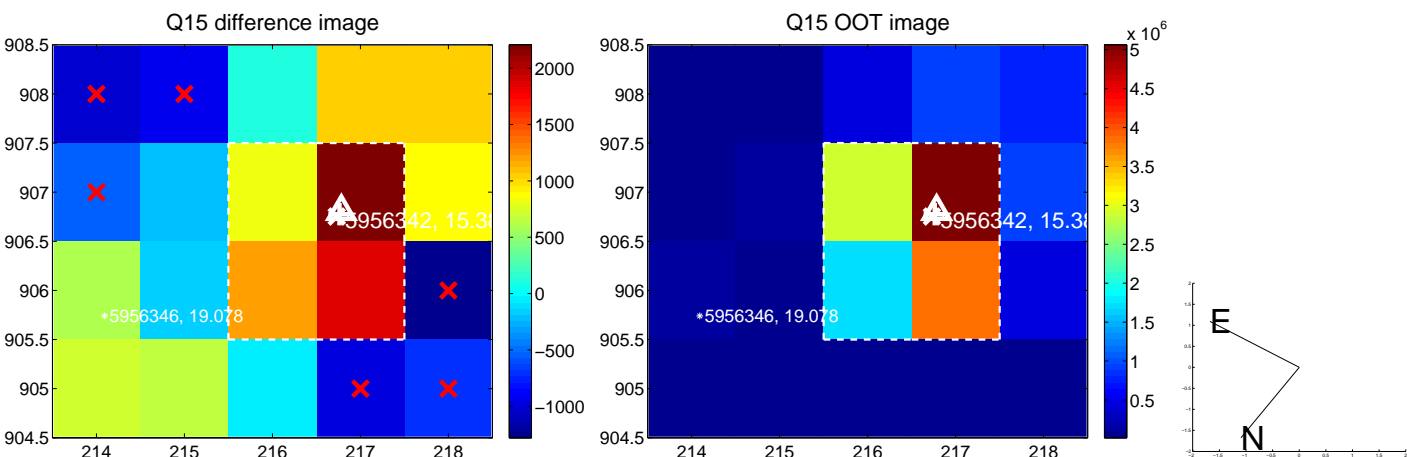
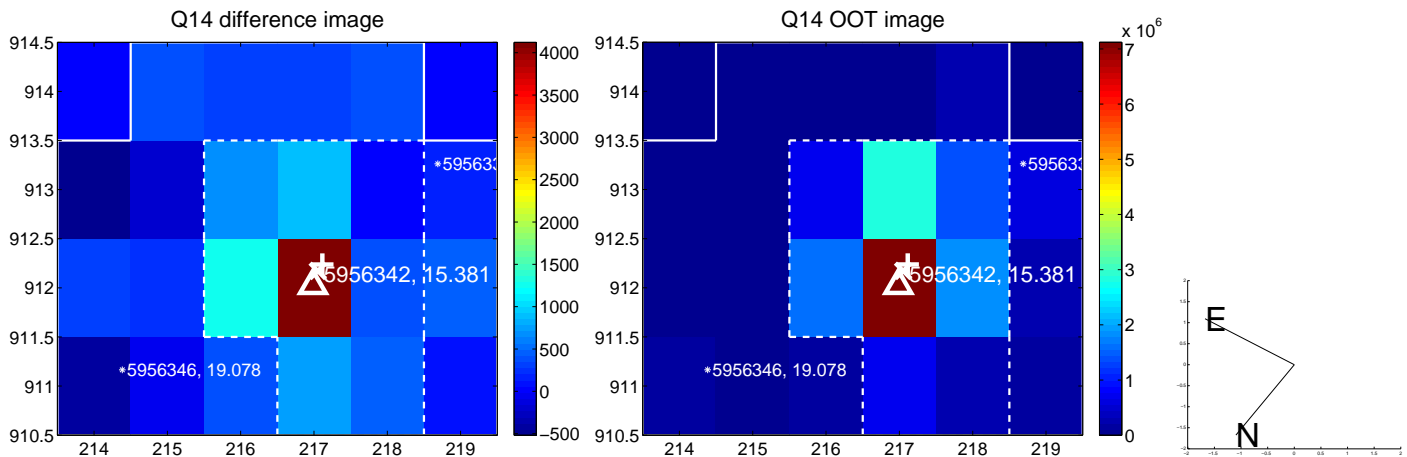
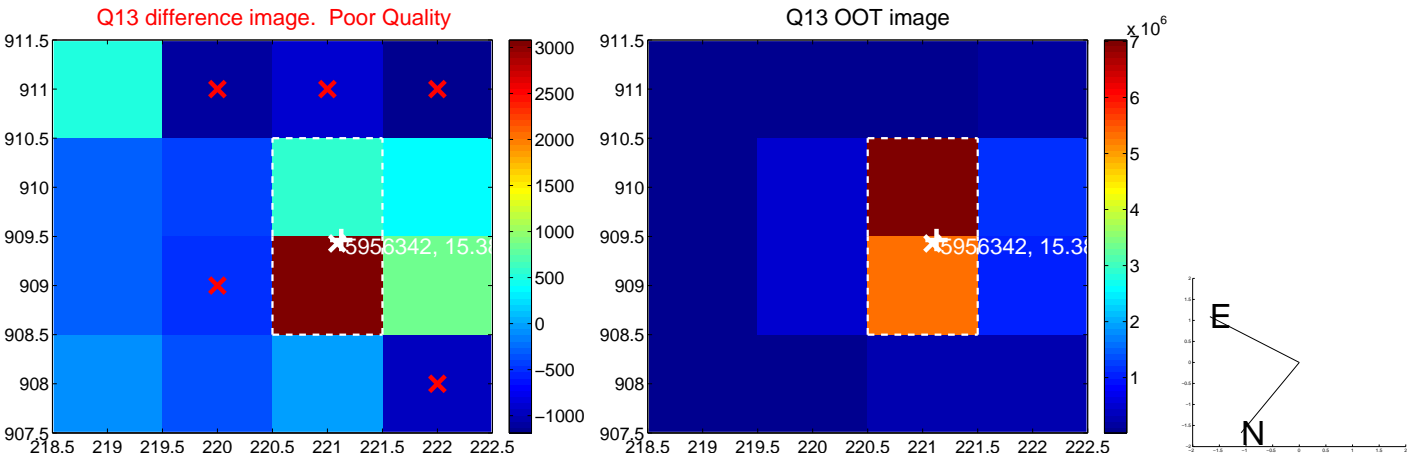
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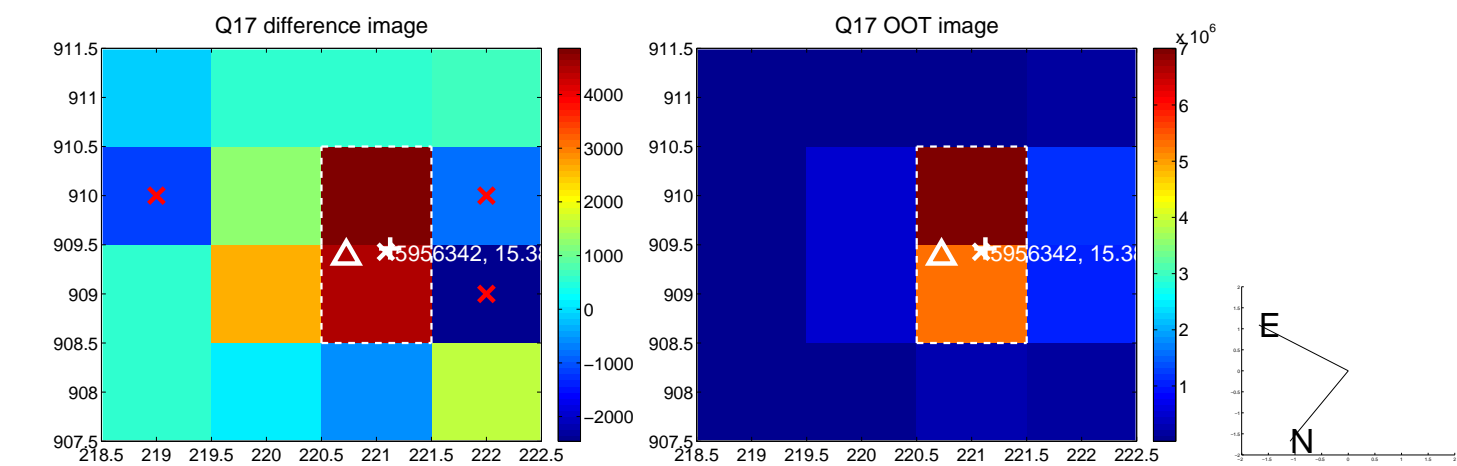
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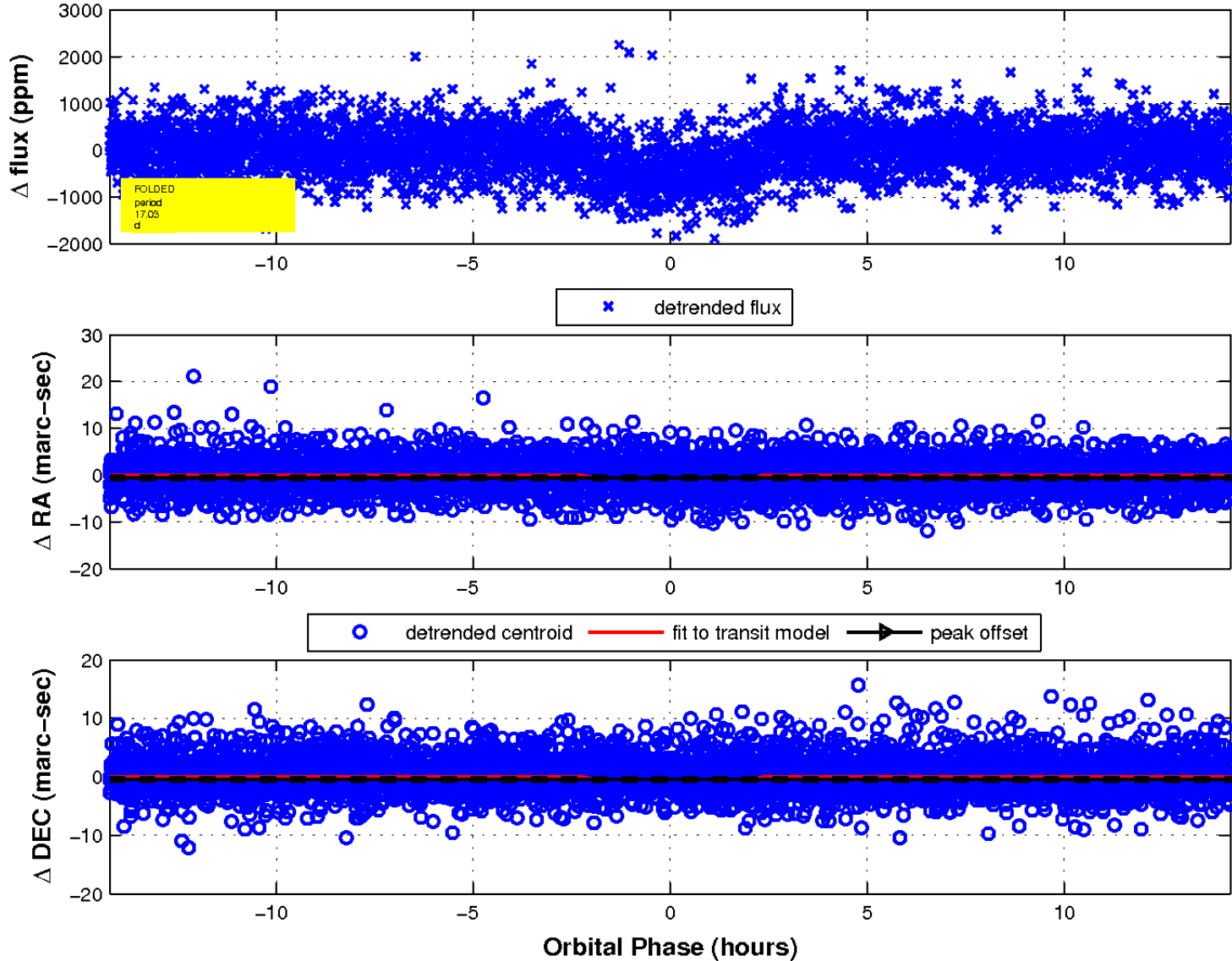
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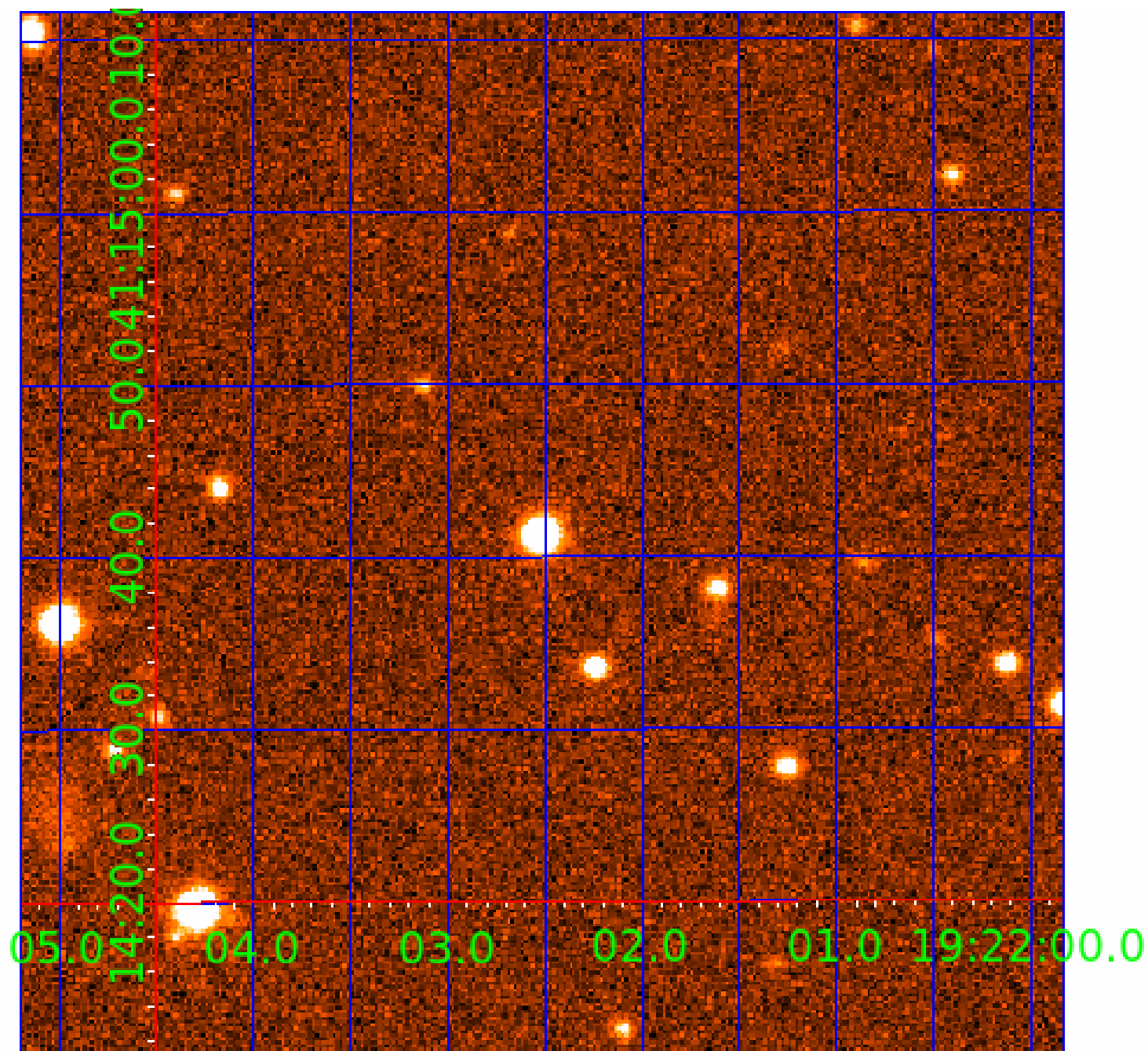


fluxWeightedCentroids, Planet 1 of 4



UKIRT Image

Declination



KIC 005956342

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005956342-04	OBS	PC	0.81	0	0	0	0	NO_COMMENT

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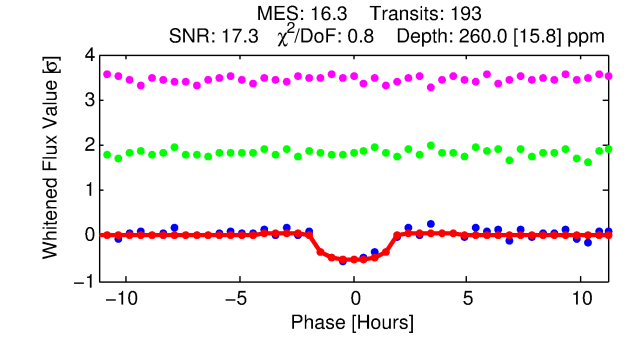
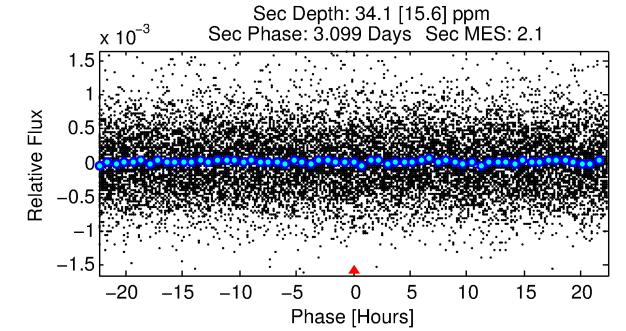
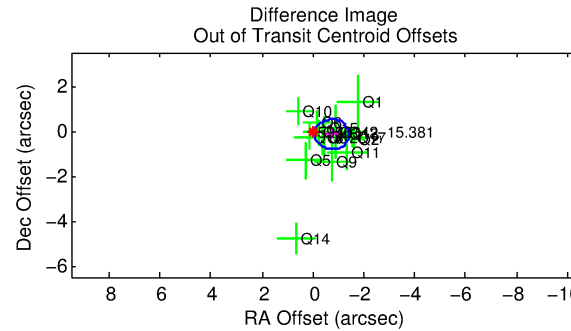
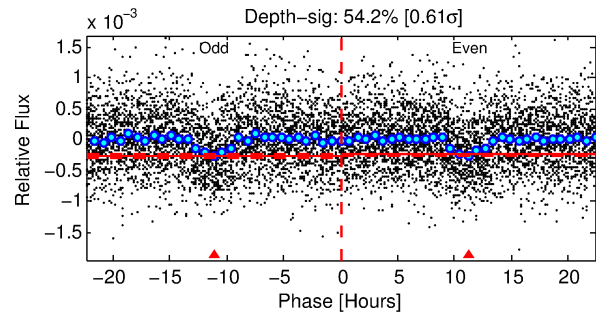
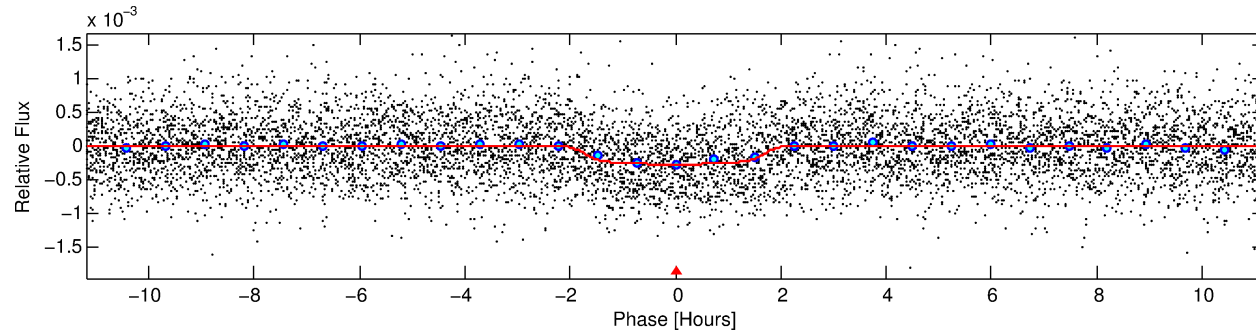
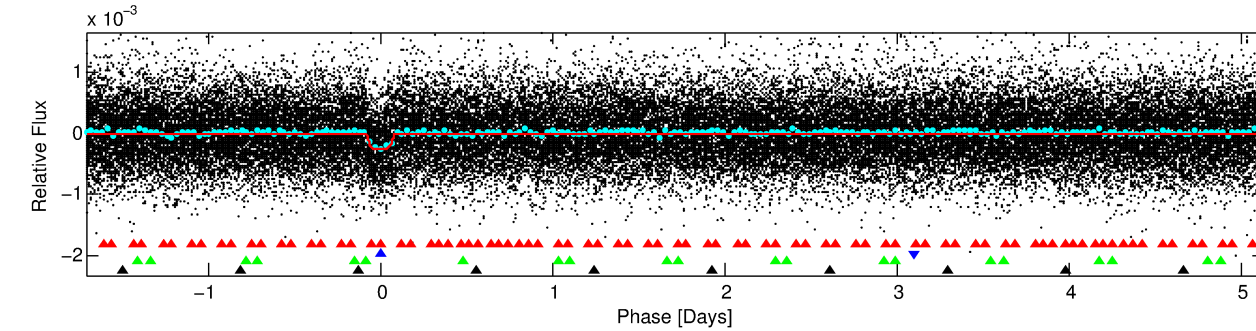
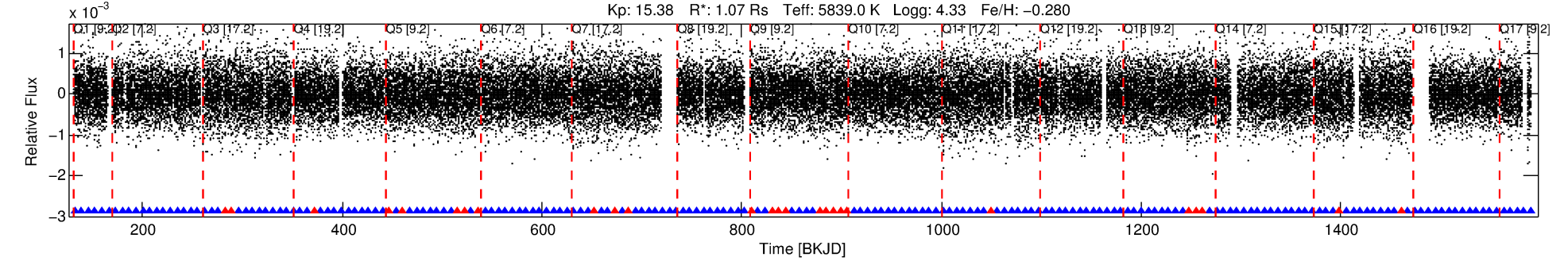
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 005956342-02

No Significant Match Found

DV One-Page Summary

KIC: 5956342 Candidate: 2 of 4 Period: 6.846 d
KOI: K01052.02 Name: Kepler-265b Corr: 0.976



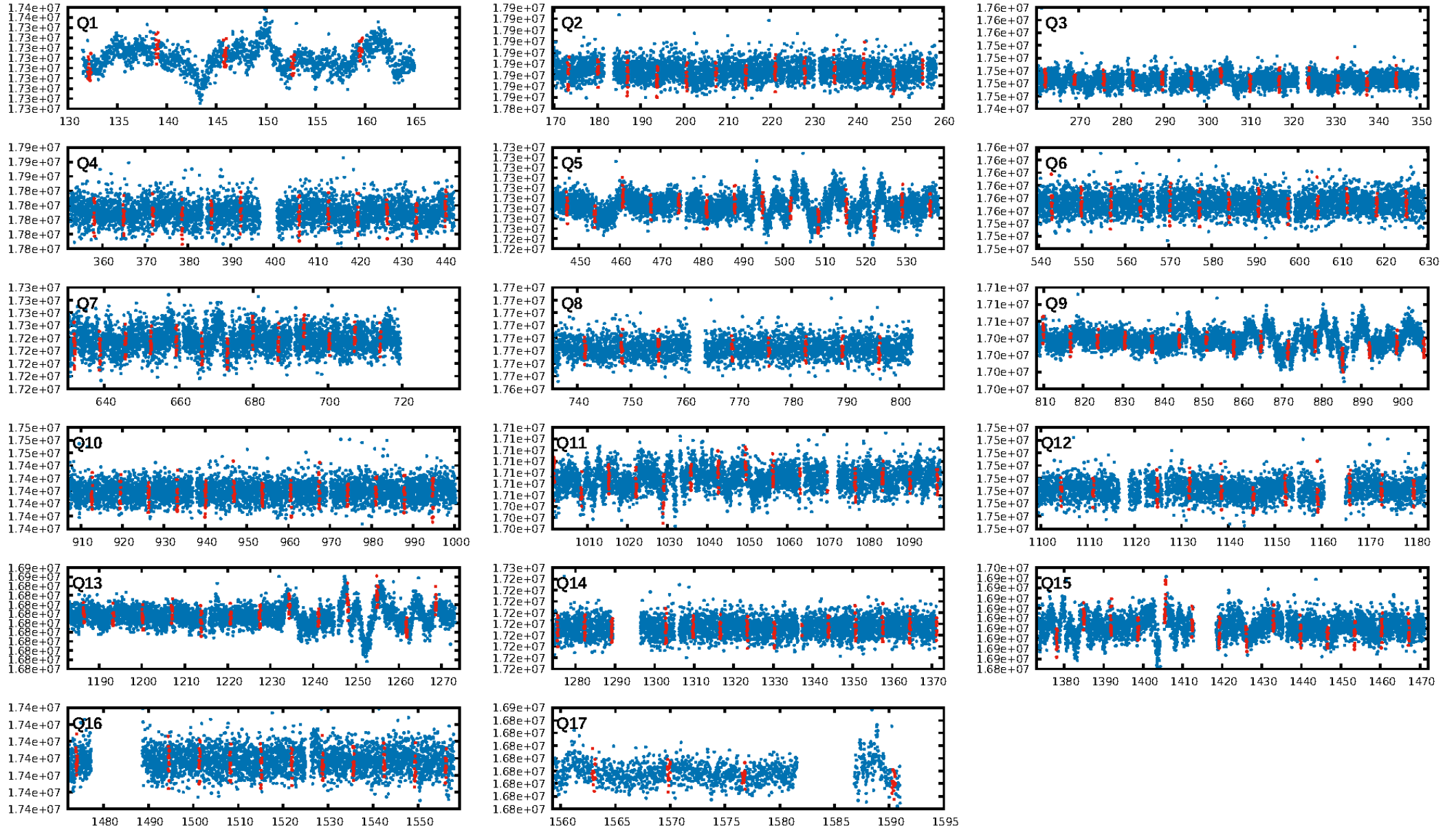
DV Fit Results:

Period = 6.84615 [0.00003] d
Epoch = 132.1746 [0.0038] BKJD
Rp/R* = 0.0172 [0.0047]
a/R* = 7.22 [9.60]
b = 0.88 [0.35]
Seff = 258.88 [70.46]
Teff = 1023 [70] K
Rp = 2.00 [0.64] Re
a = 0.0677 [0.0109] AU
Ag = 21.47 [16.39] [1.25 σ]
Teffp = 3404 [613] K [3.86 σ]

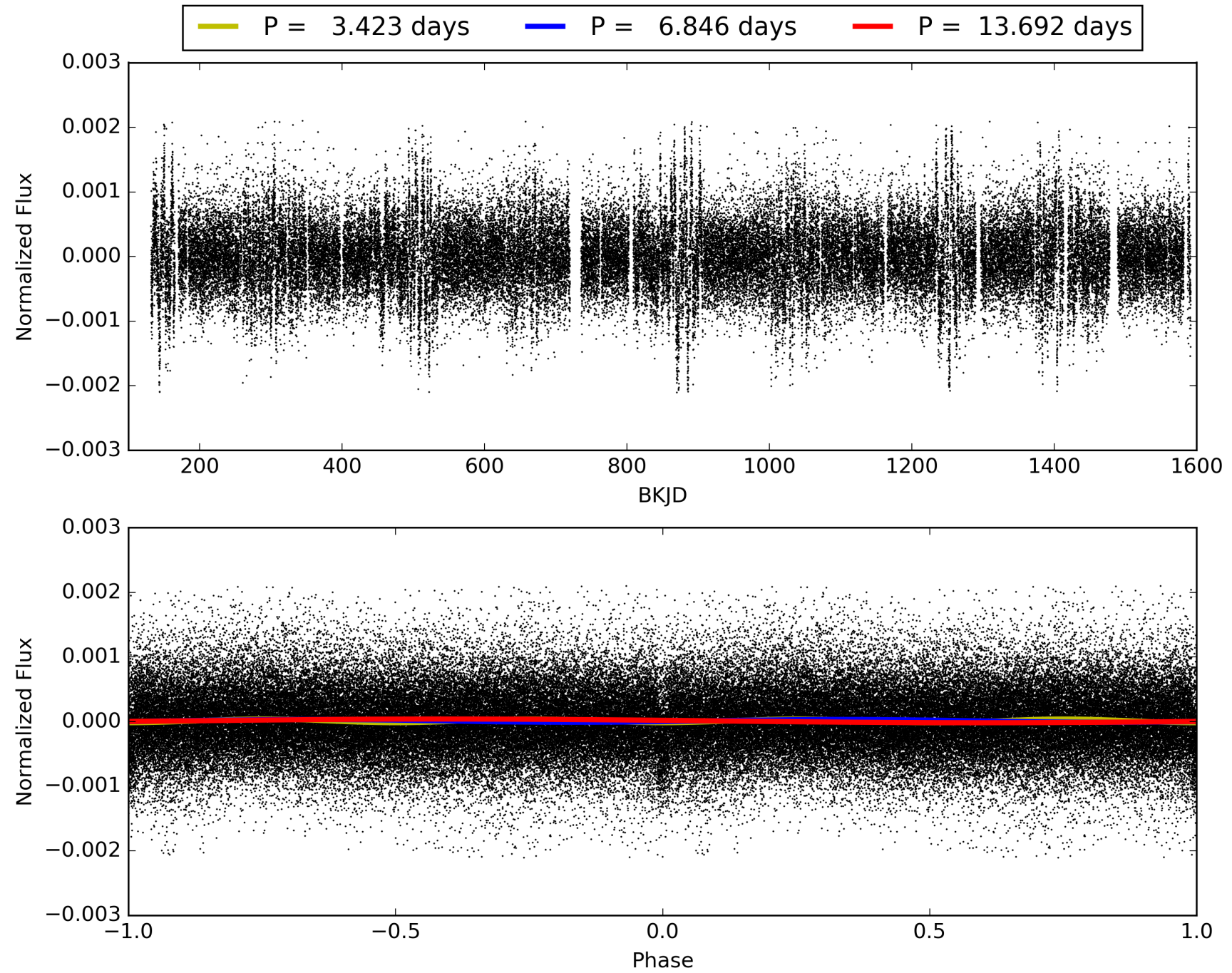
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: 100.0% [40.48 σ]
ModelChiSquare2-sig: 95.4%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: 1.33e-58
RollingBand-fgt: 0.86 [158/184]
GhostDiagnostic-chr: -24.35
Centroid-sig: 25.8%
Centroid-so: 0.570 arcsec [0.58 σ]
OotOffset-rm: 0.765 arcsec [3.40 σ]
KicOffset-rm: 0.887 arcsec [4.12 σ]
OotOffset-st: 4/3/4/5 [16]
KicOffset-st: 4/3/4/5 [16]
DiffImageQuality-fgm: 0.75 [12/16]
DiffImageOverlap-fno: 1.00 [17/17]

TCE 005956342-02, PDC Light Curves

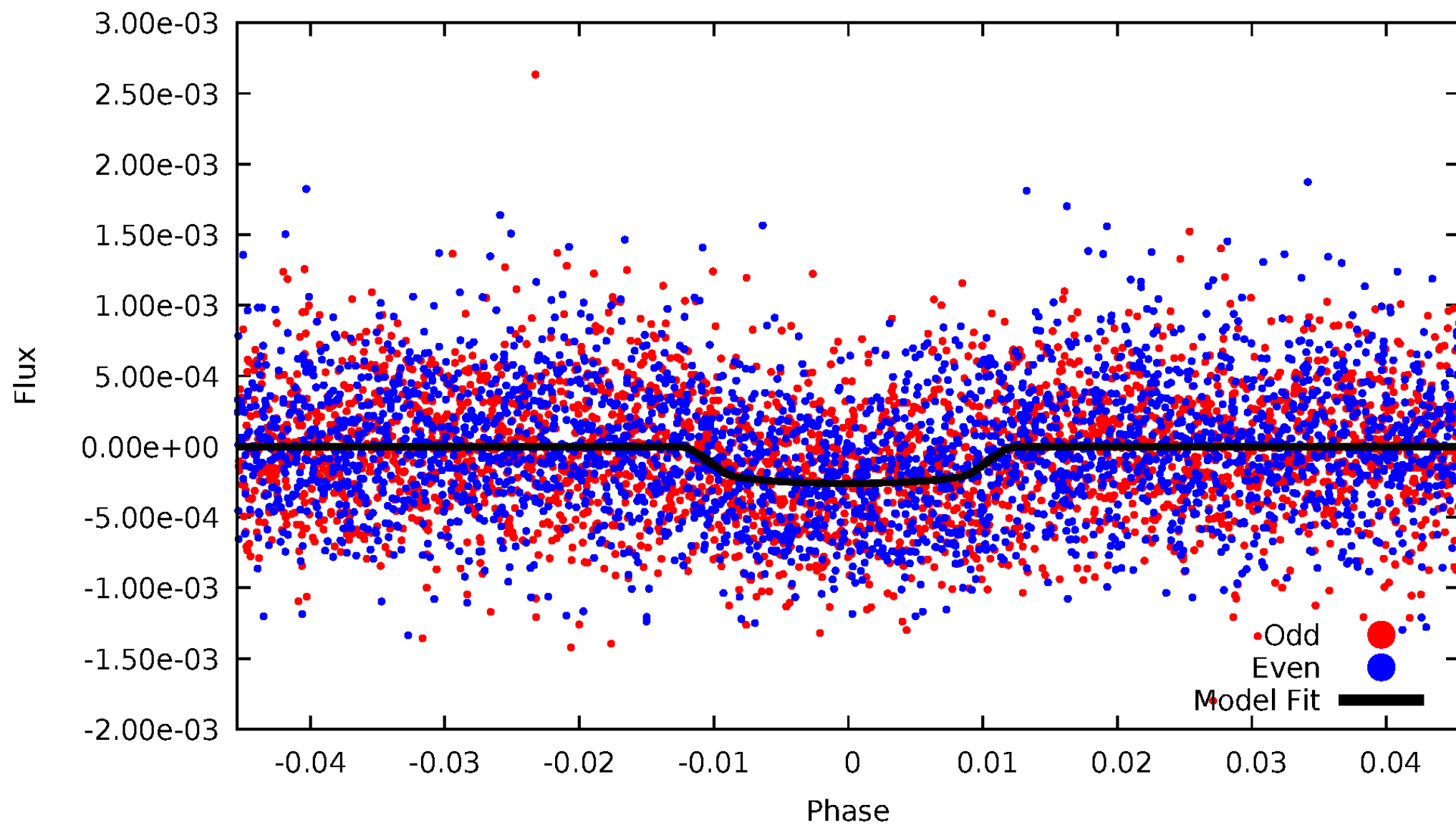


TCE 005956342-02



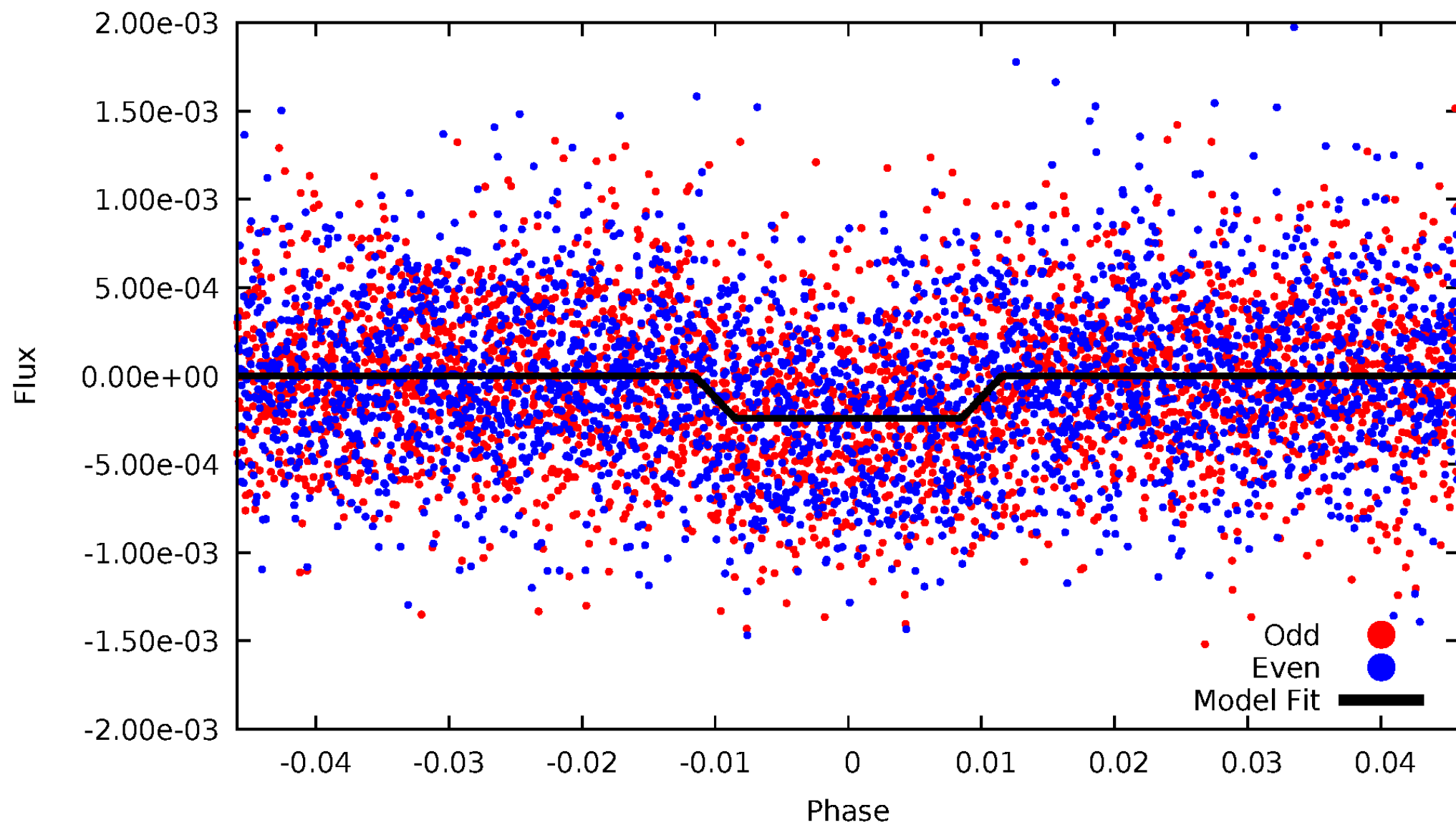
DV Odd/Even

TCE 005956342-02



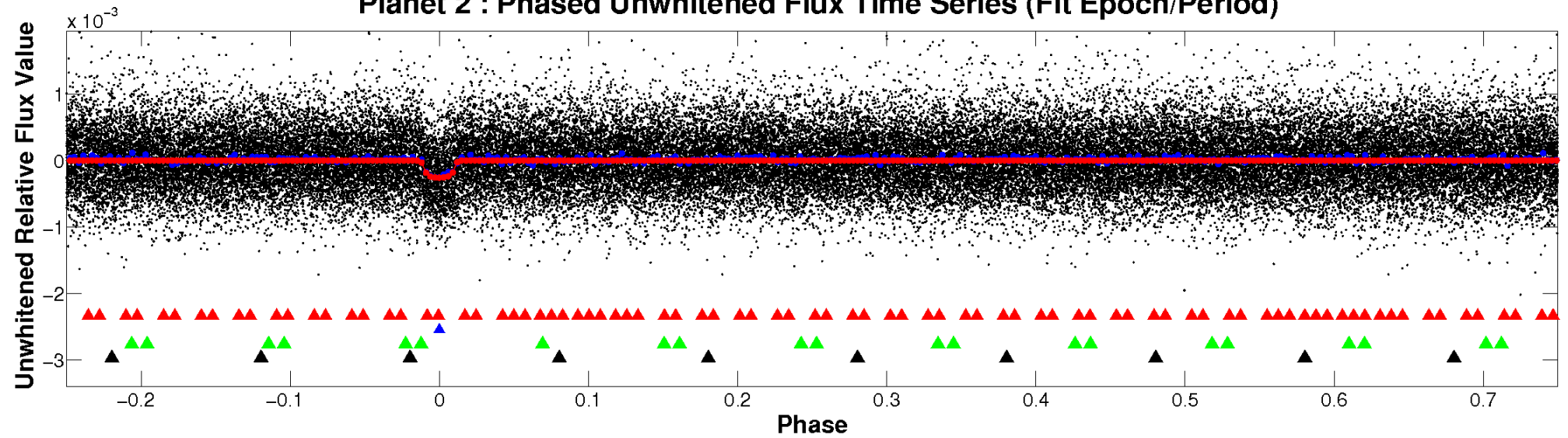
ALT Odd/Even

TCE 005956342-02

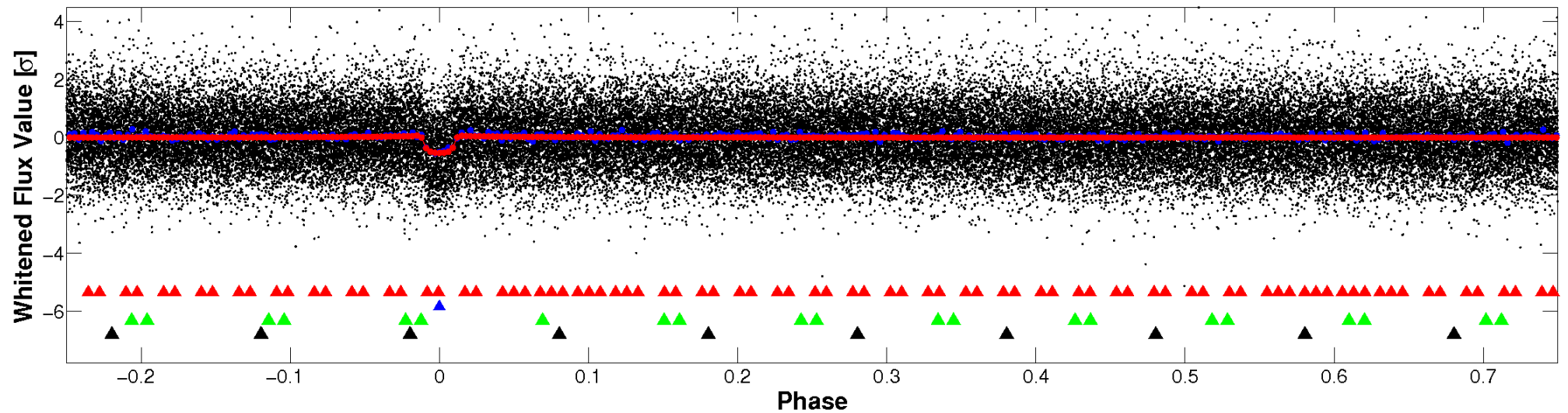


Non-Whitened Vs. Whitened Light Curve

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

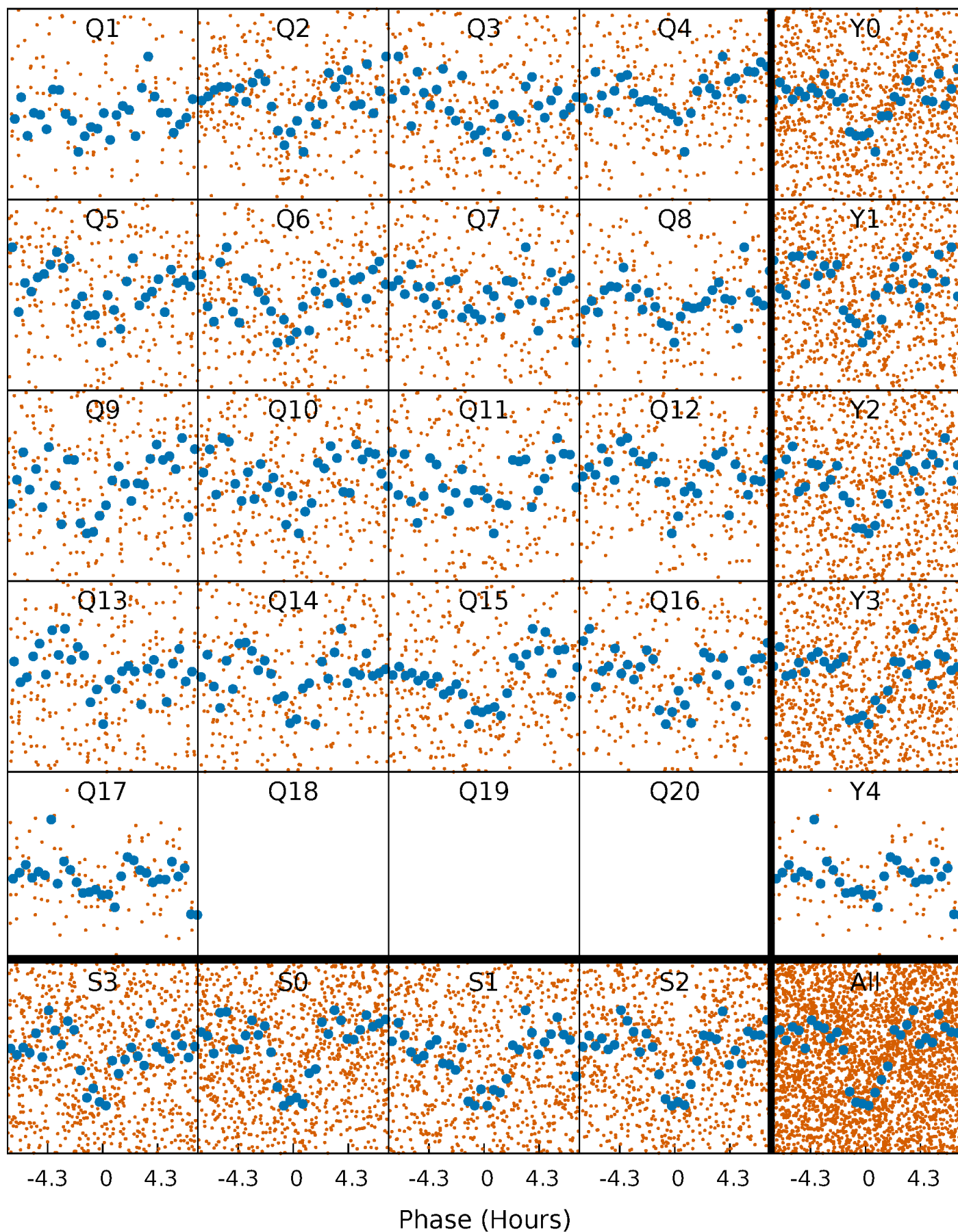


Planet 2 : Phased Whitened Flux Time Series (Fit Epoch/Period)



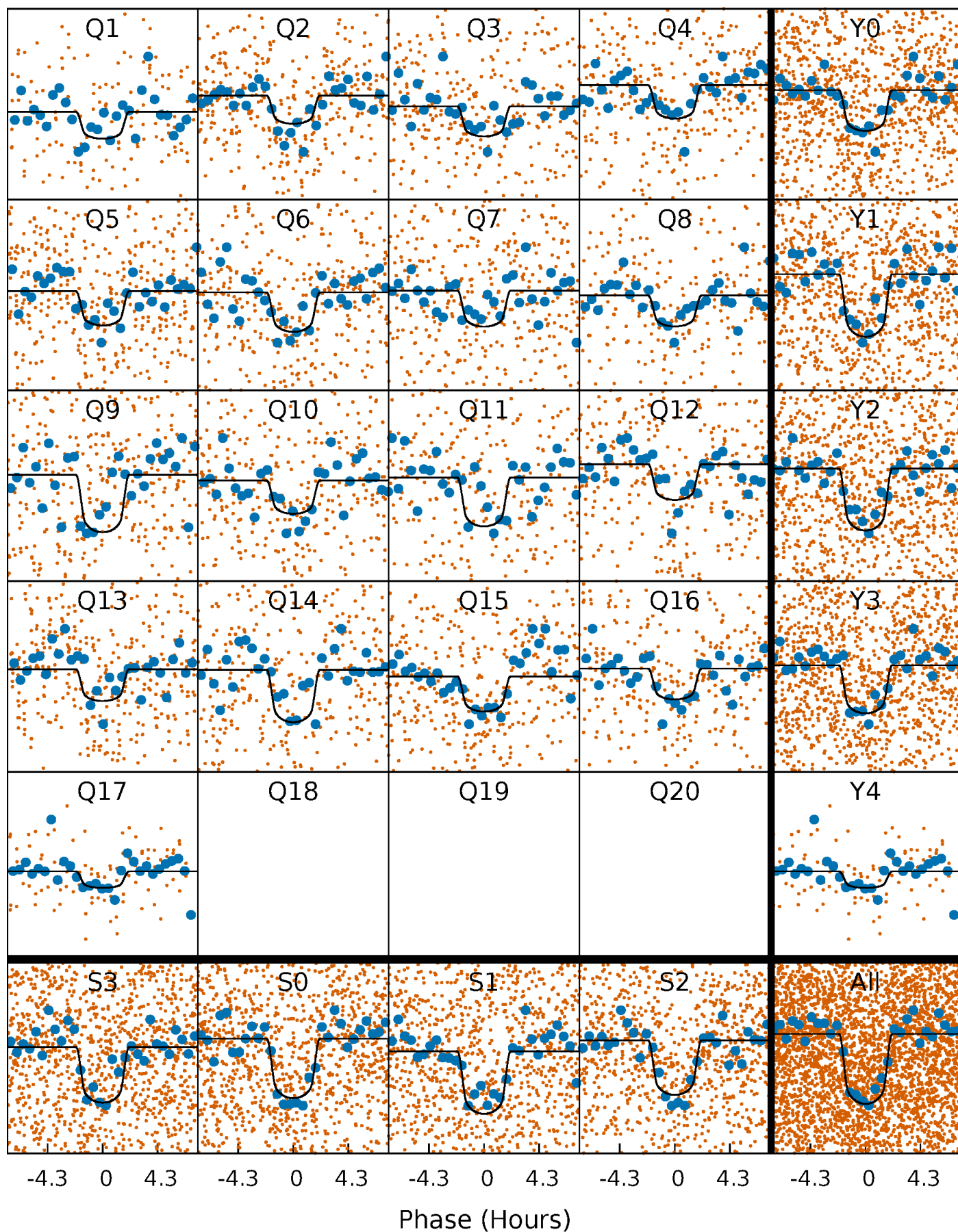
PDC Quarter-Phased Transit Curves

TCE 005956342-02 P= 6.846151 Days $T_0=132.174605$ (BKJD)



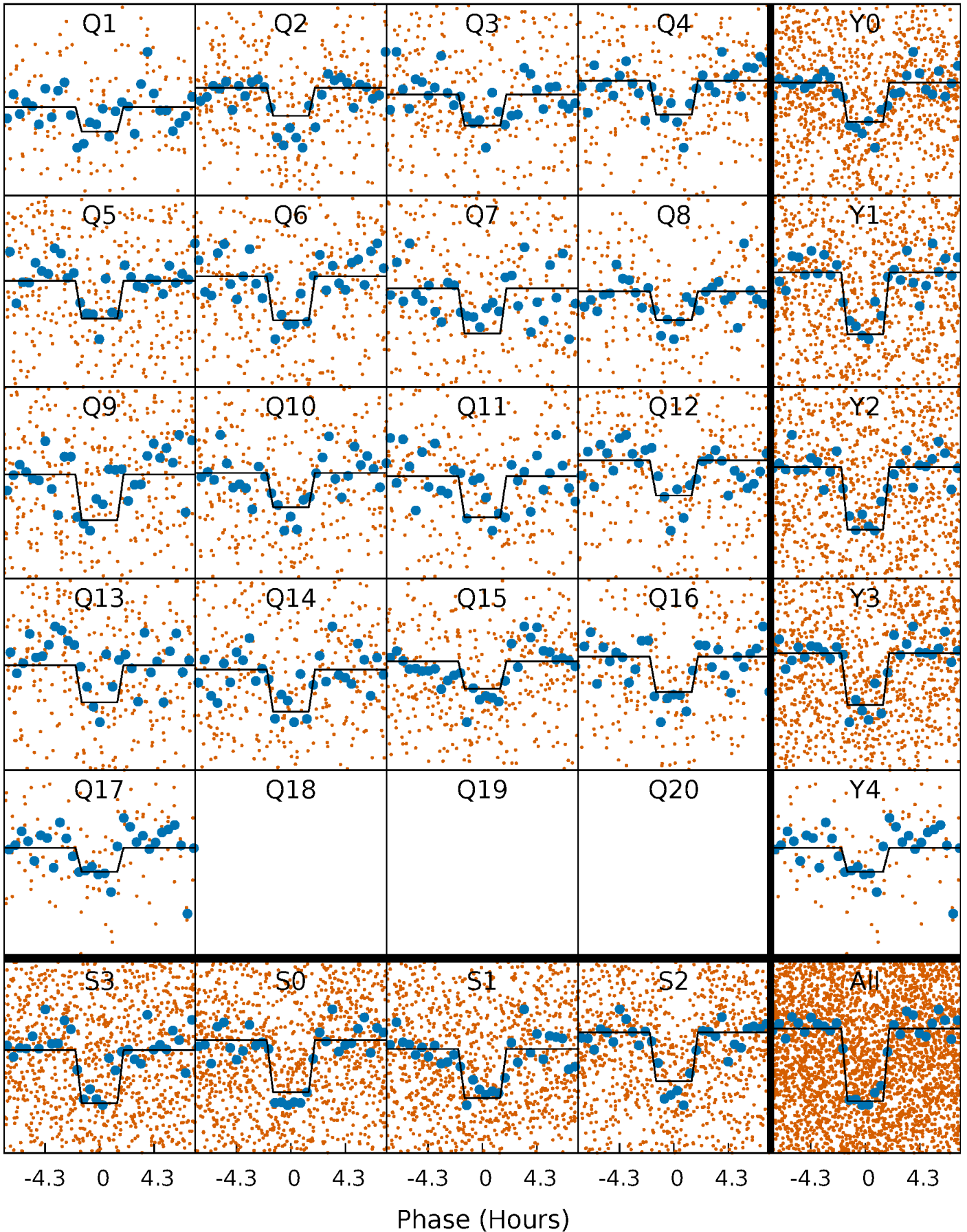
DV Quarter-Phased Transit Curves

TCE 005956342-02 P= 6.846151 Days $T_0=132.174605$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

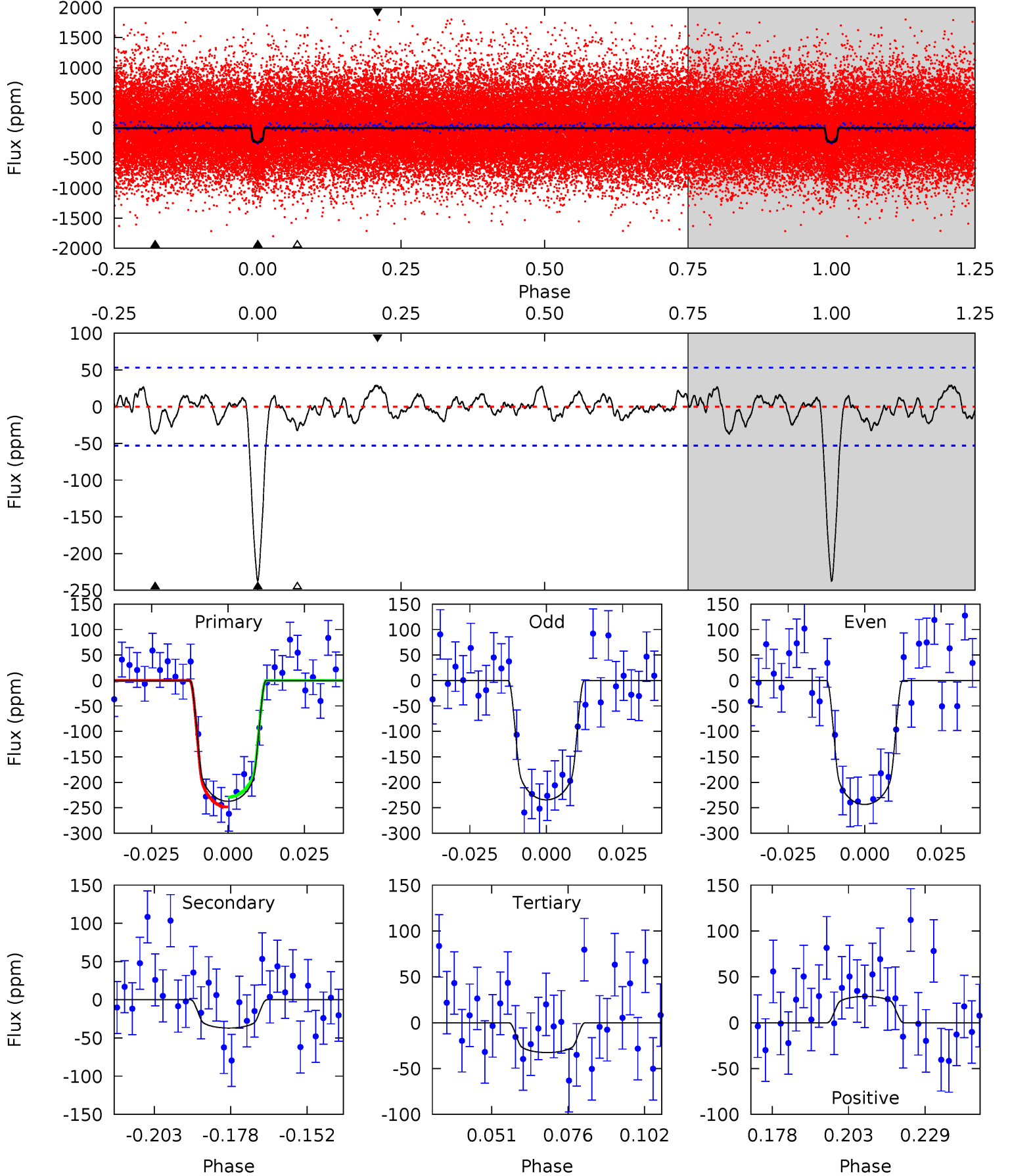
TCE 005956342-02 P= 6.846190 Days $T_0=132.171985$ (BKJD)



DV Model-Shift Uniqueness Test

005956342-02, P = 6.846151 Days, E = 125.328454 Days

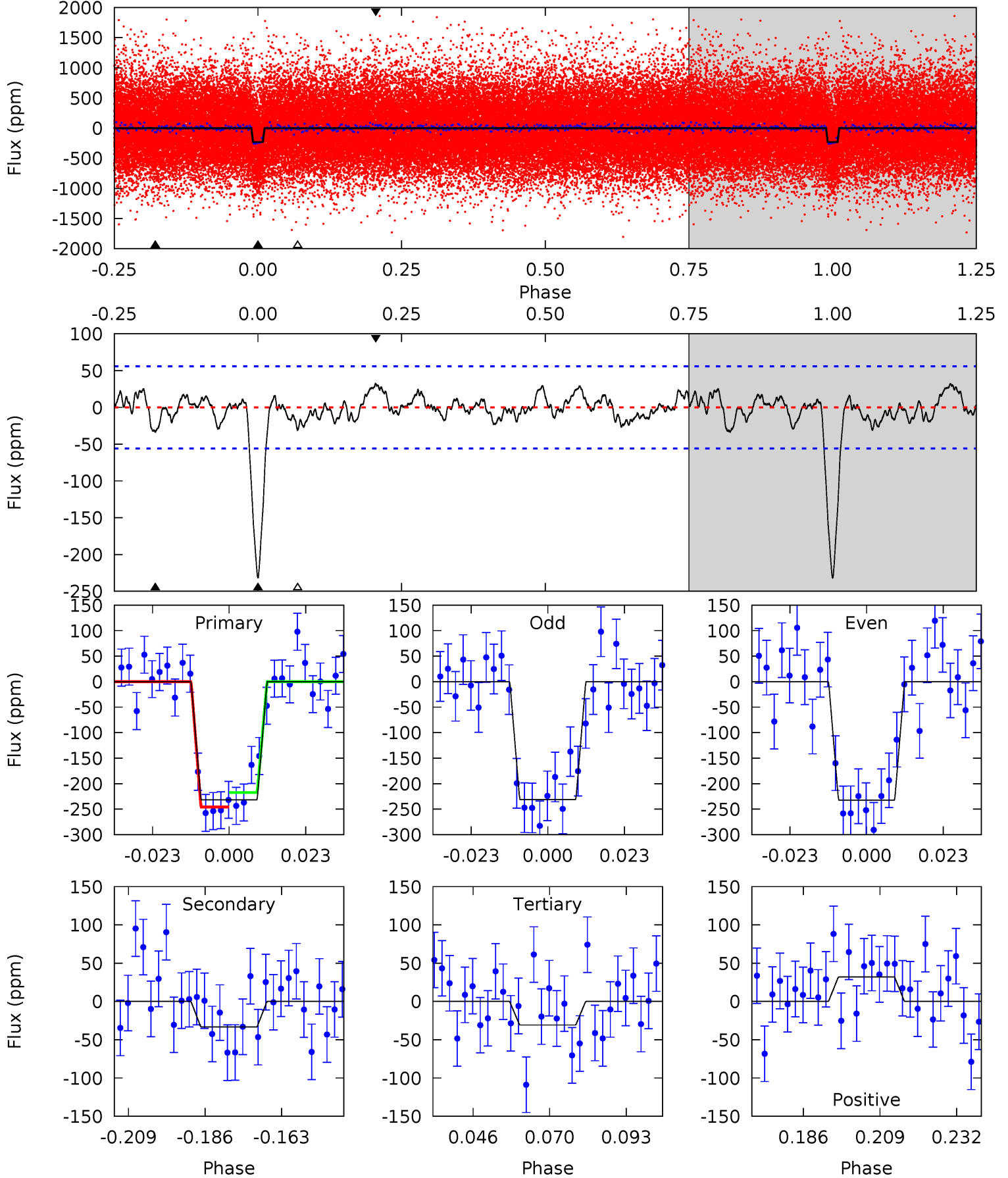
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
21.6	3.38	2.97	2.61	4.84	2.24	1.07	18.7	19.0	0.40	0.77	0.41	0.97	0.11	0.90



Alt Model-Shift Uniqueness Test

005956342-02, P = 6.846190 Days, E = 125.325795 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
20.2	2.90	2.68	2.78	4.86	2.27	1.13	17.5	17.4	0.22	0.12	0.05	1.00	0.12	1.23



Stellar Parameters For KIC 005956342

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	5839^{+105}_{-105}	$4.327^{+0.156}_{-0.104}$	$-0.280^{+0.150}_{-0.150}$	$1.067^{+0.156}_{-0.172}$	$0.881^{+0.070}_{-0.051}$	$1.023^{+0.659}_{-0.343}$
	+2%/-2%	+4%/-2%	+54%/-54%	+15%/-16%	+8%/-6%	+64%/-34%
Source	SPE58	SPE58	SPE58	DSEP		

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

Secondary Eclipse Parameters for KIC 005956342-02 / KOI 1052.02

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-37 ± 11	$1.97^{+0.58}_{-0.56}$	1424^{+63}_{-70}	3836^{+528}_{-364}	24^{+24}_{-12}
Alt.	-33 ± 11	$1.77^{+0.59}_{-0.48}$	1424^{+64}_{-70}	3889^{+566}_{-424}	26^{+26}_{-13}

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 $A_{obs} \gg 1.0$

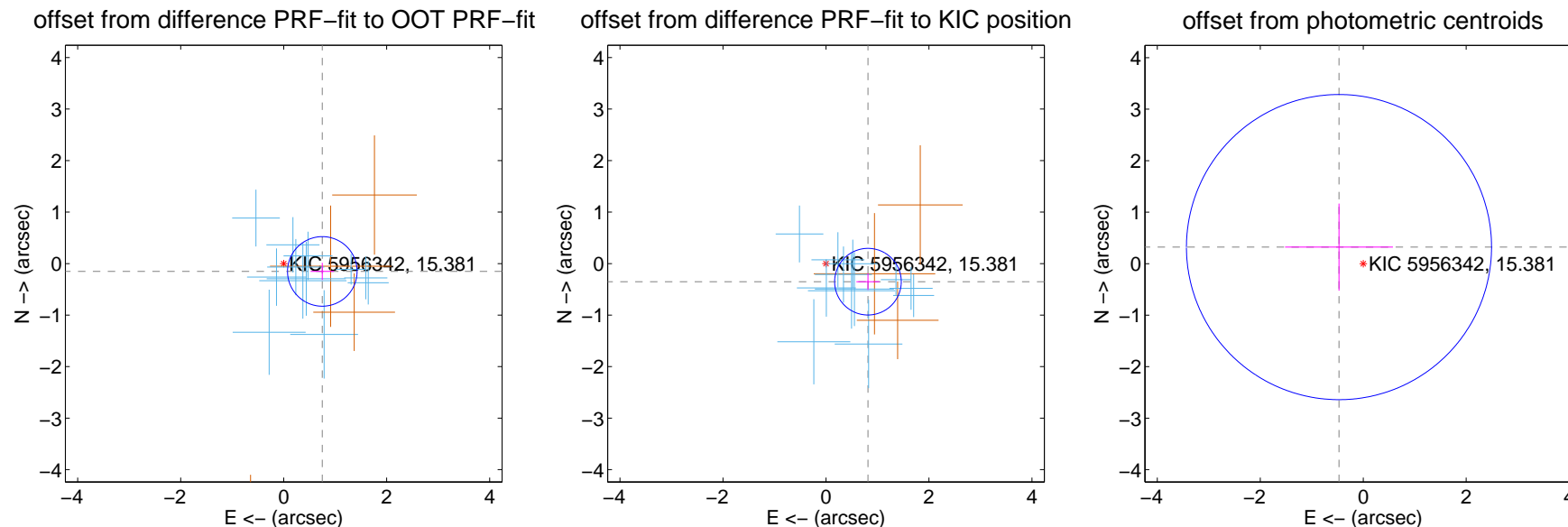
DV Centroid Data

Supplemental centroid analysis for 005956342-02. Kepler magnitude: 15.38. Transit SNR 17.26

There are 12 quarters with good PRF difference image offsets

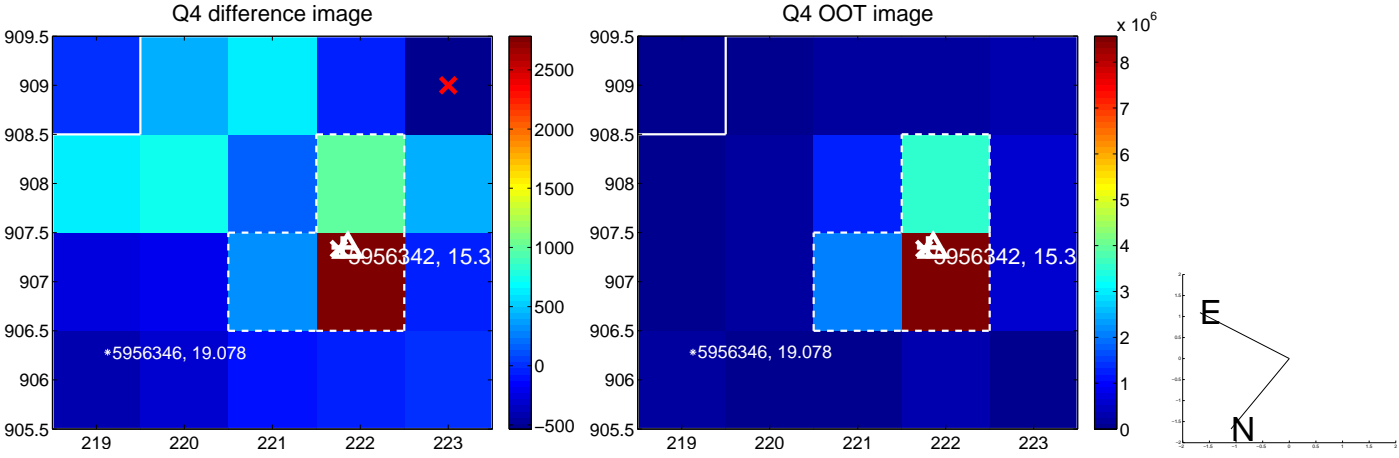
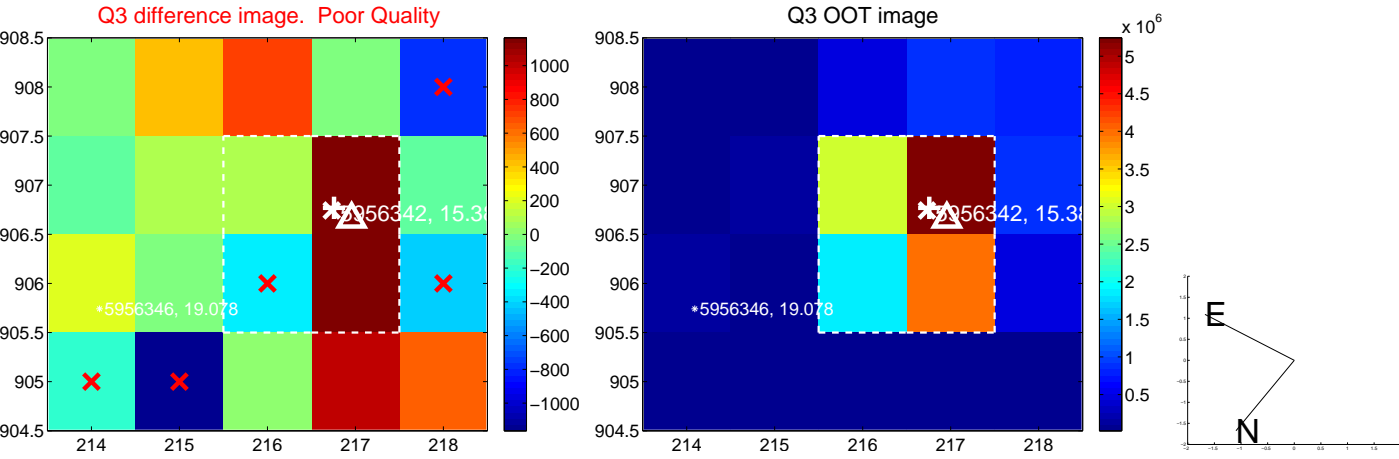
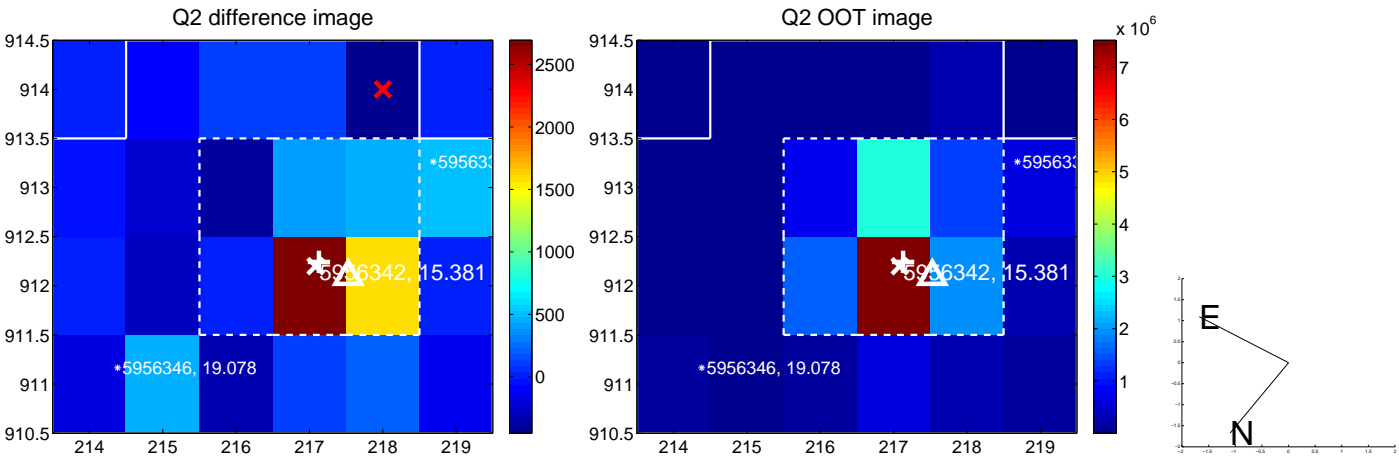
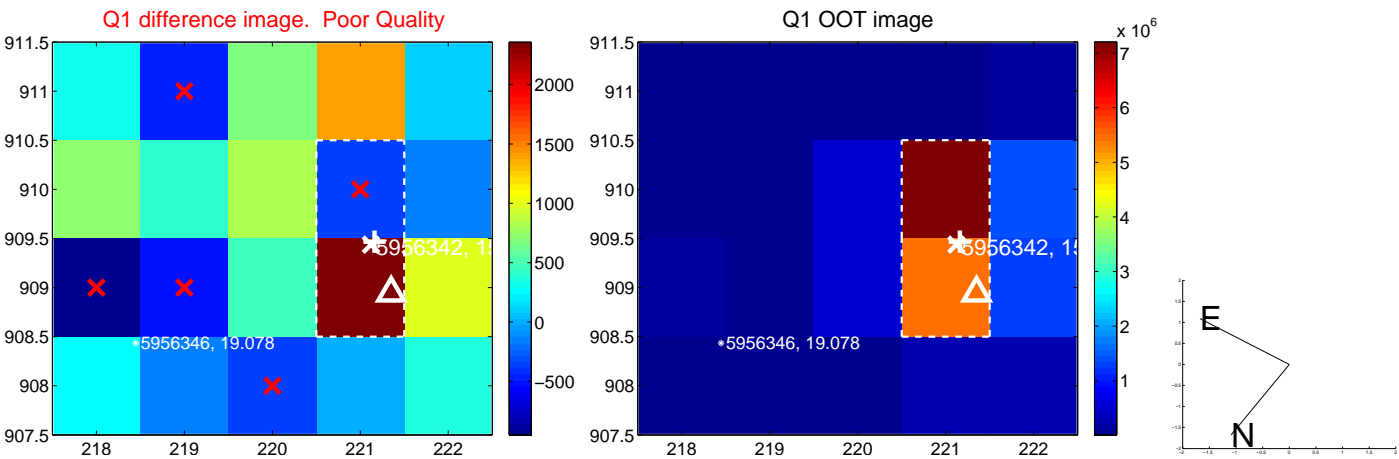
The direct PRF centroid is offset from the target star catalog position by about 0.21 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.765 ± 0.225	3.40	-0.750 ± 0.227	-0.152 ± 0.167
PRF-fit source offset from KIC position	0.887 ± 0.216	4.12	-0.815 ± 0.224	-0.351 ± 0.162
photometric centroid source offset	0.57 ± 0.99	0.58	0.47 ± 1.05	0.32 ± 0.85

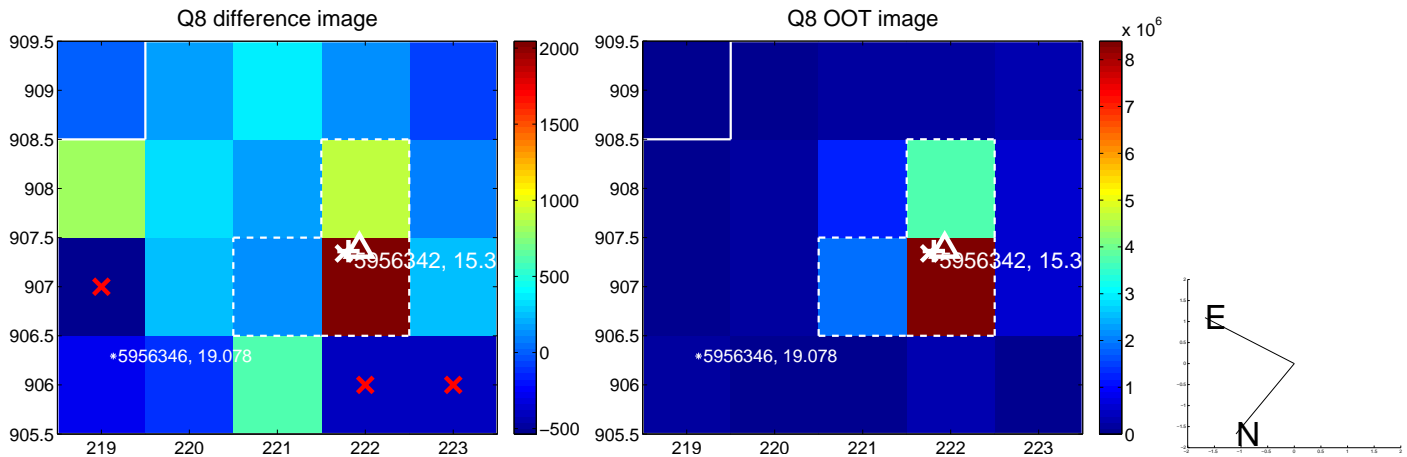
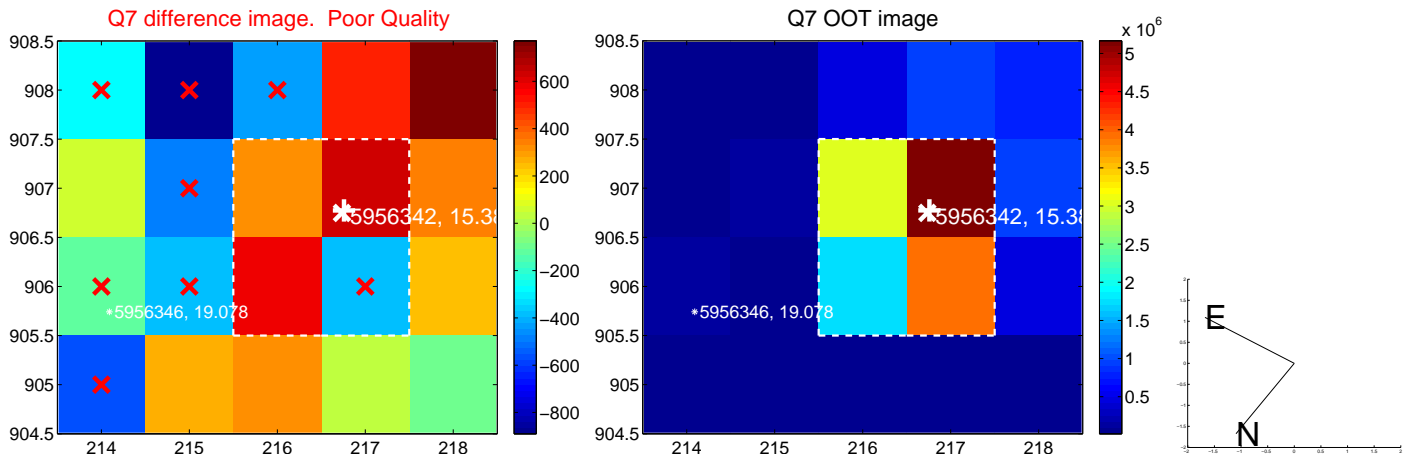
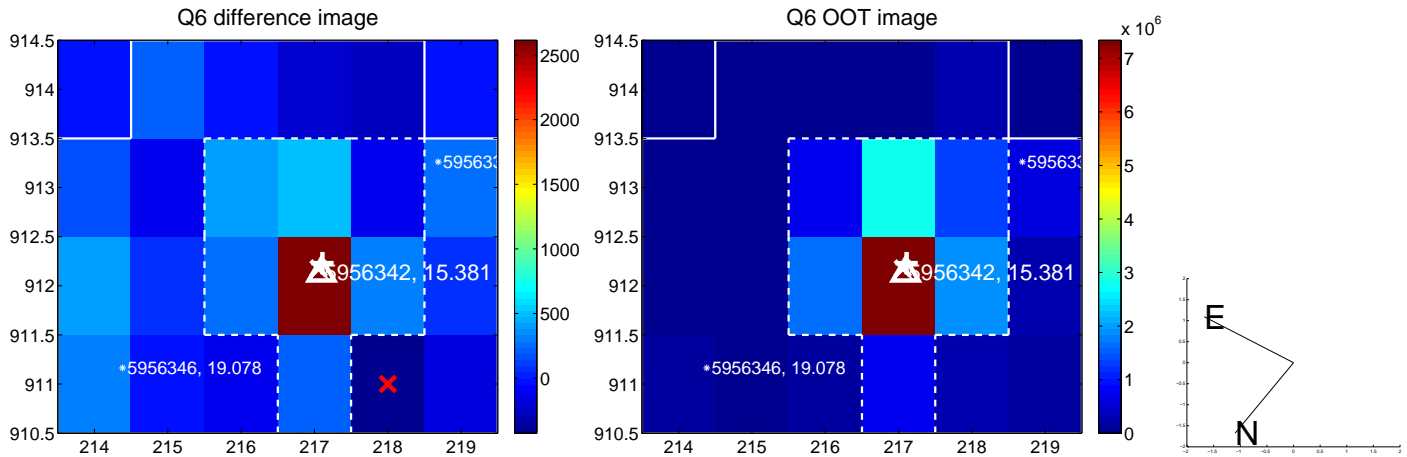
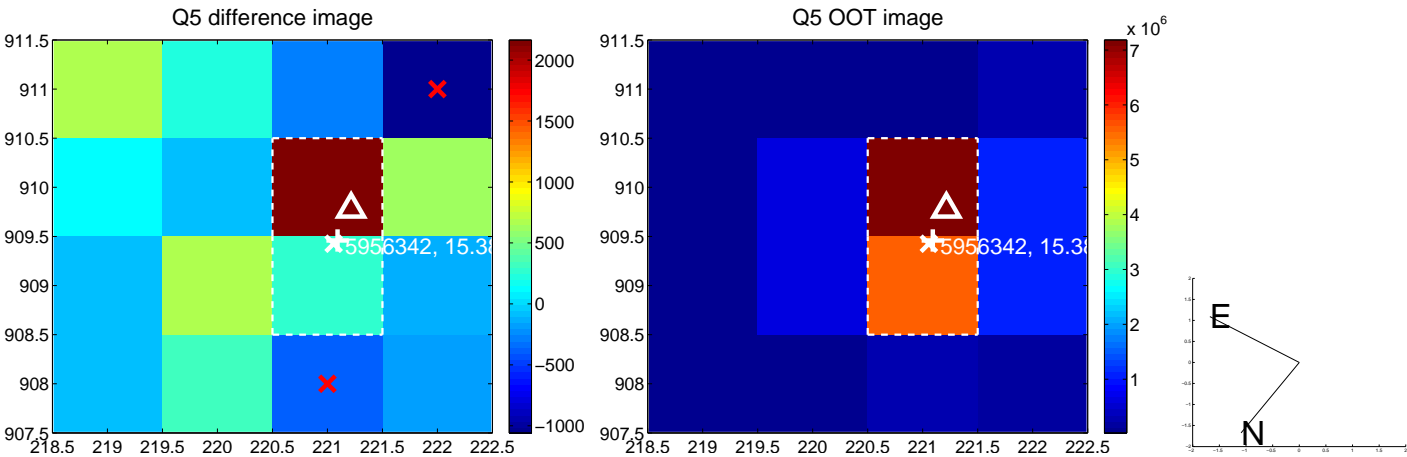


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets**; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

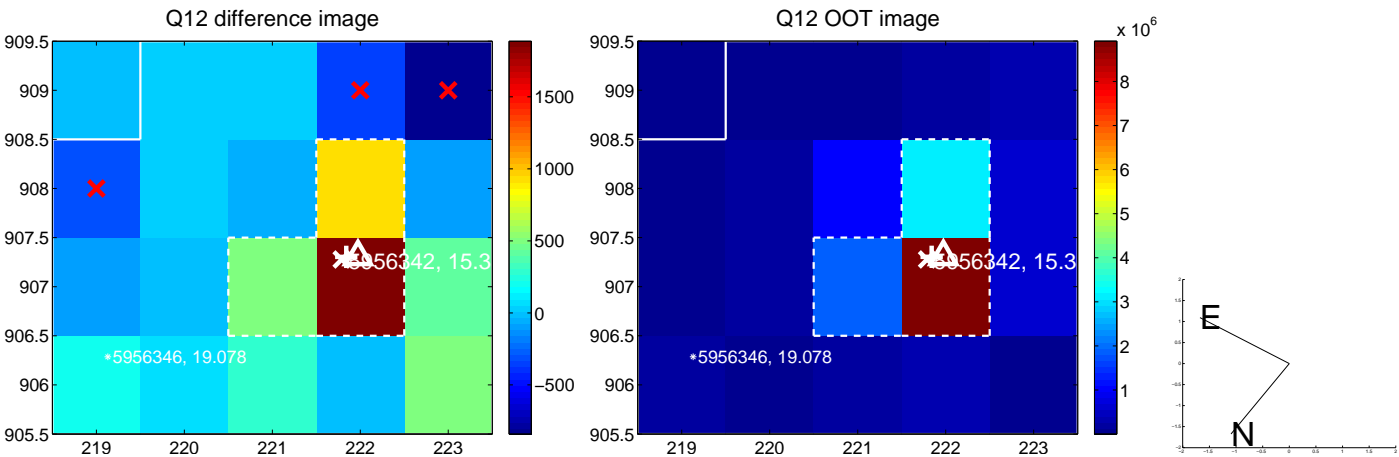
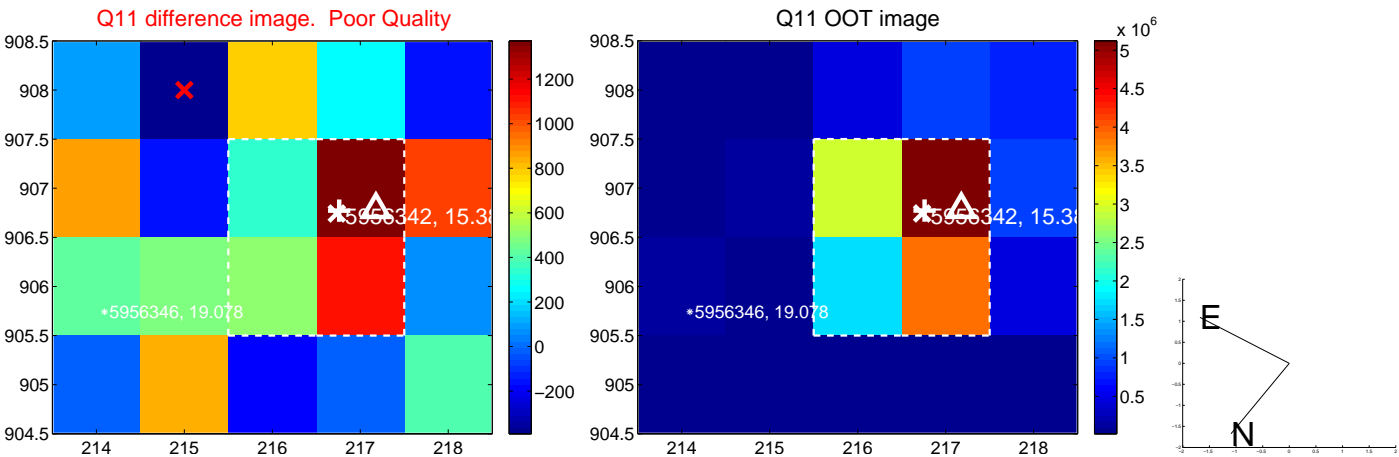
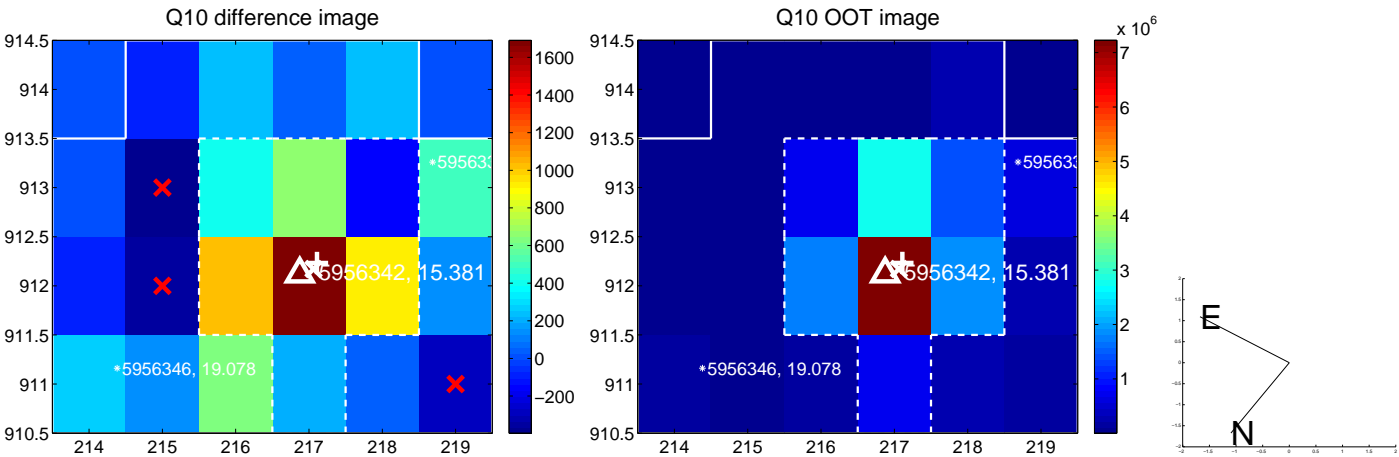
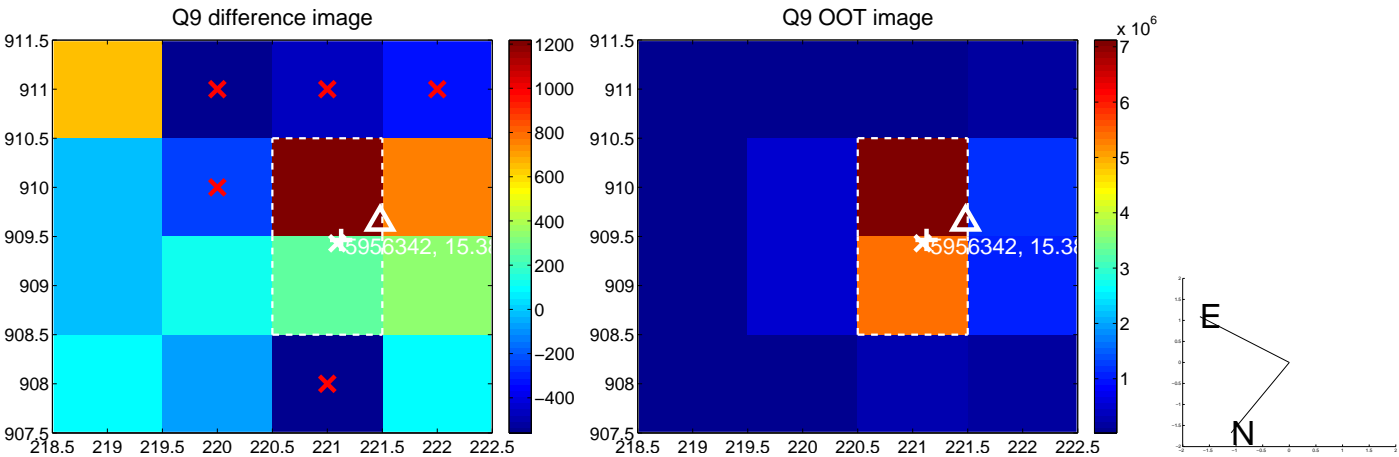
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



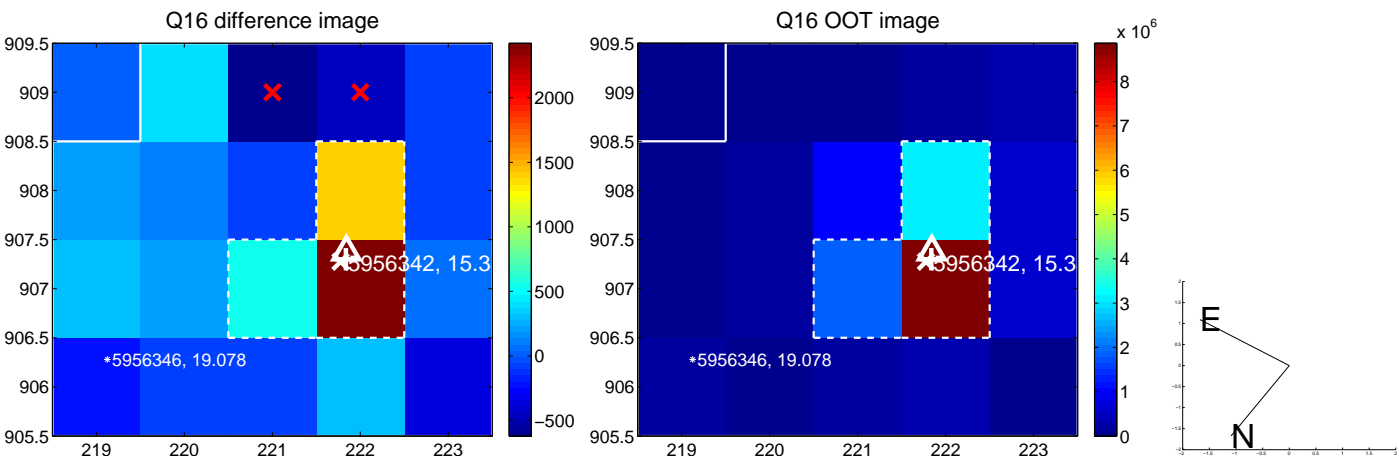
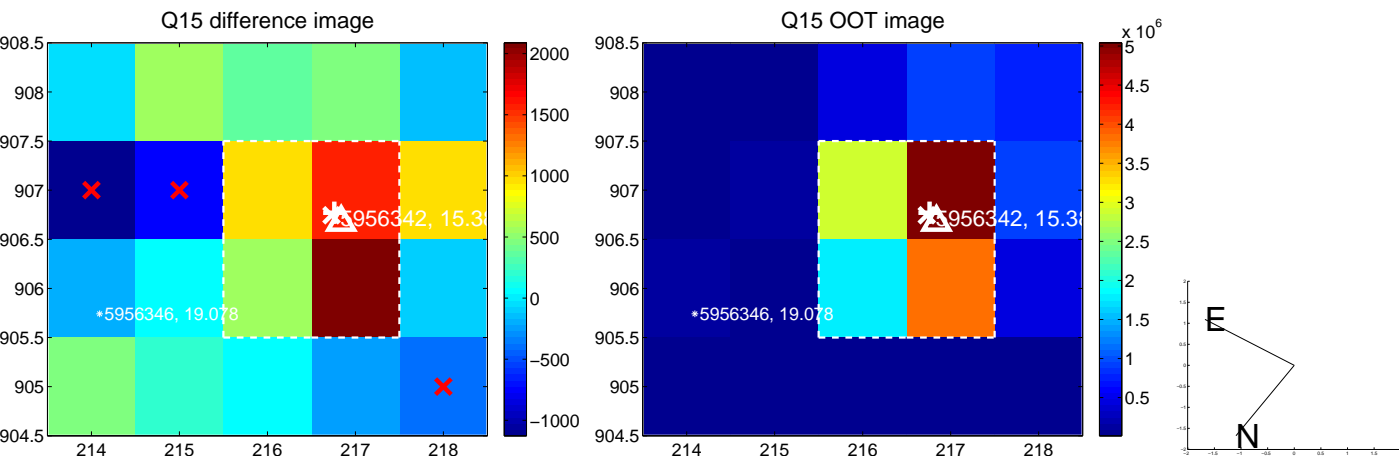
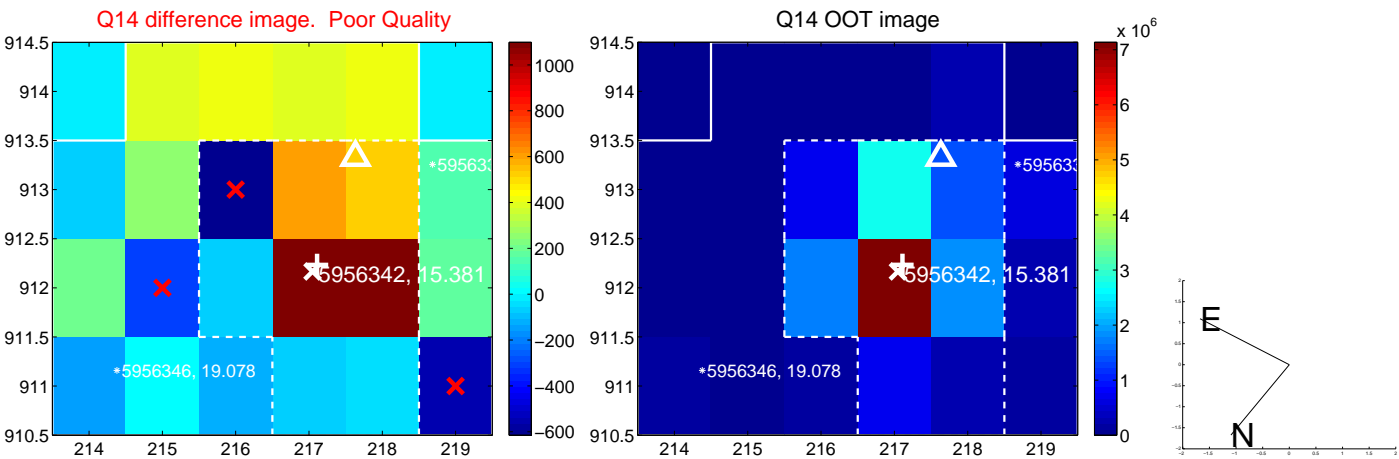
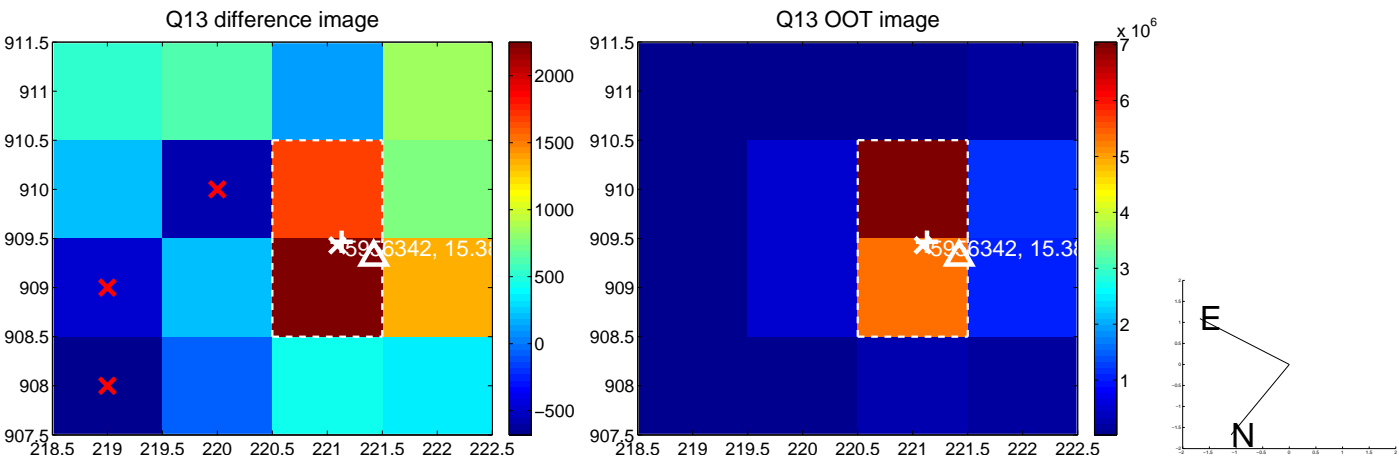
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



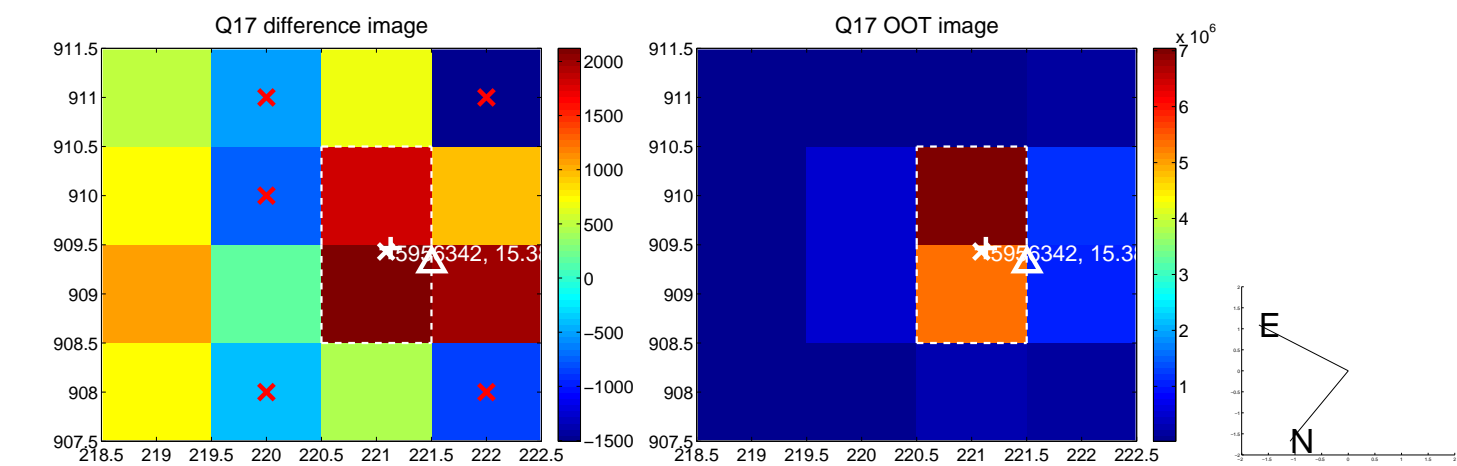
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



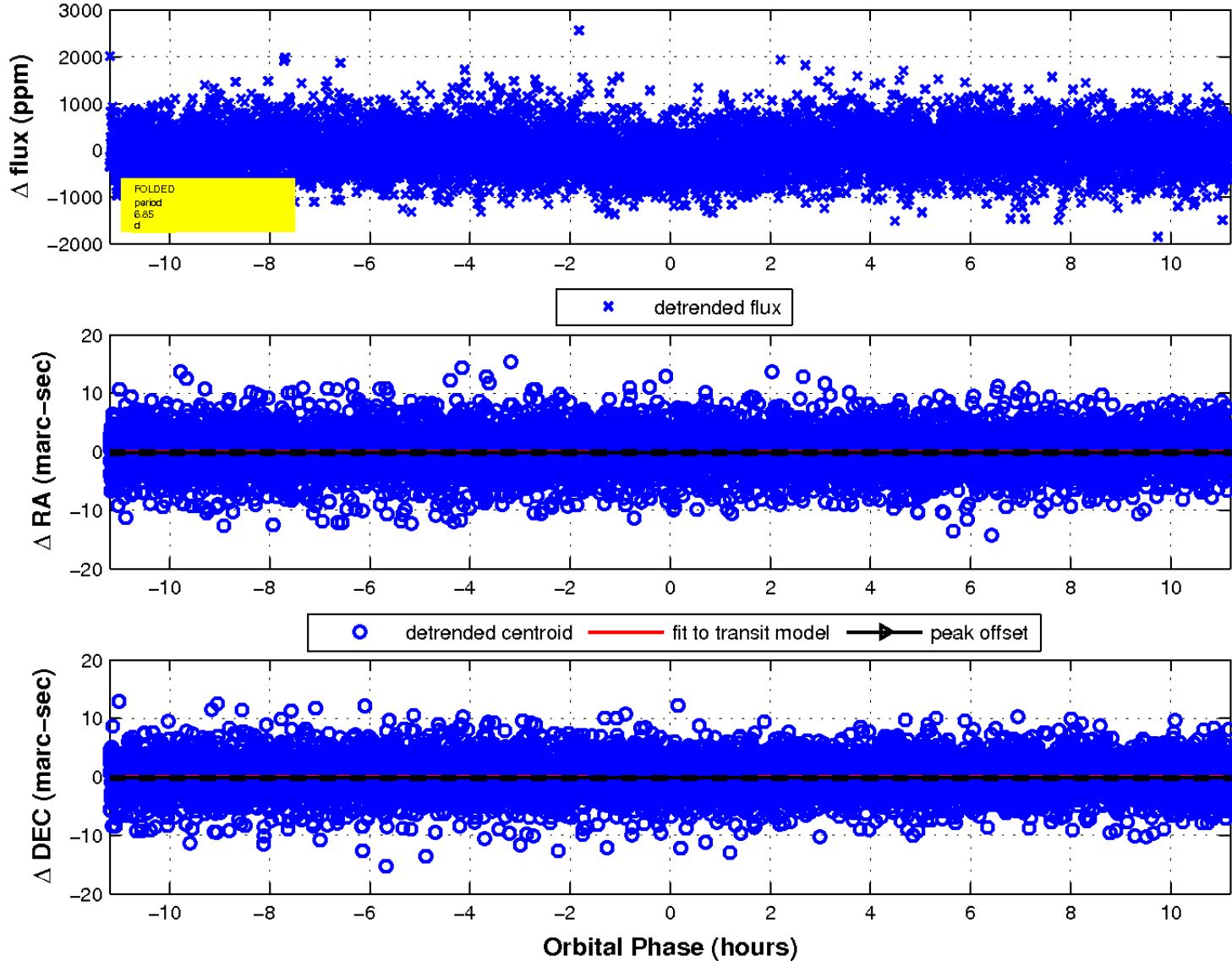
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

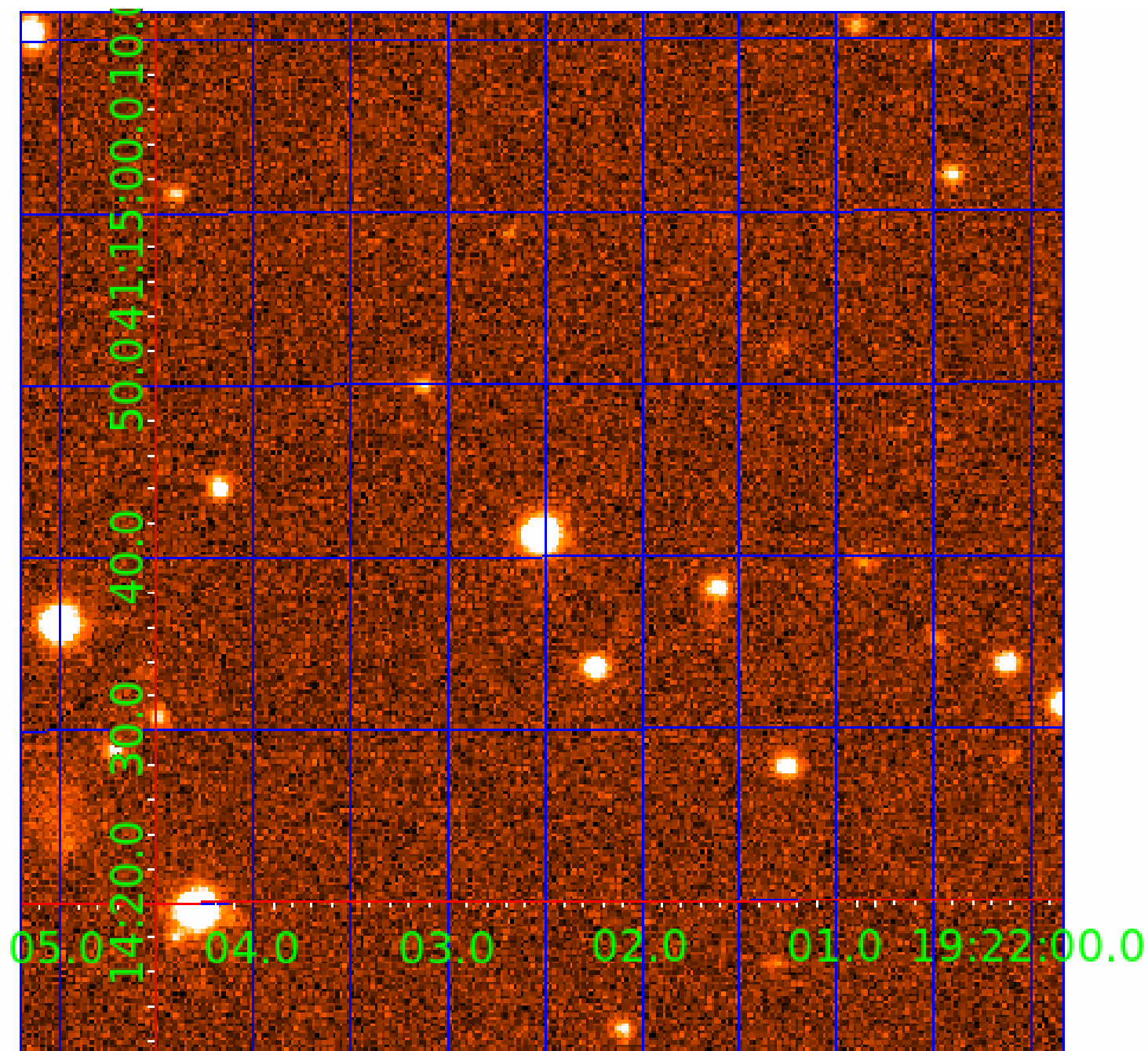


fluxWeightedCentroids, Planet 2 of 4



UKIRT Image

Declination



KIC 005956342

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})
005956342-01	OBS	1052.01	17.028924	143.339422	566.2	4.744	24.1	26.1	1.07	5839	2.82	76.81
005956342-02	OBS	1052.02	6.846151	132.174605	260.0	3.733	16.3	17.3	1.07	5839	2.00	258.88
005956342-03	OBS	1052.03	67.832681	193.706136	557.4	7.535	12.3	13.6	1.07	5839	2.62	12.16
005956342-04	OBS	1052.04	43.130830	166.269919	409.4	3.227	8.9	9.7	1.07	5839	2.41	22.25

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
005956342-01	OBS	PC	1.00	0	0	0	0	NO_COMMENT
005956342-02	OBS	PC	0.94	0	0	0	0	NO_COMMENT
005956342-03	OBS	PC	0.77	0	0	0	0	NO_COMMENT
005956342-04	OBS	PC	0.81	0	0	0	0	NO_COMMENT

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.

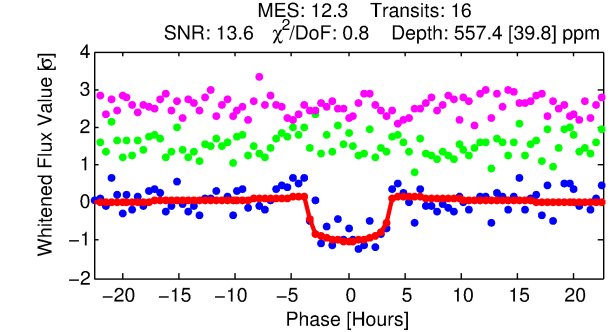
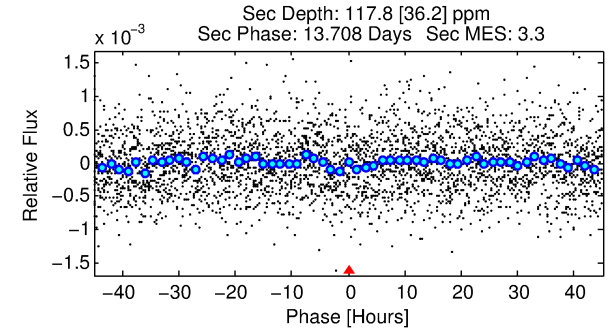
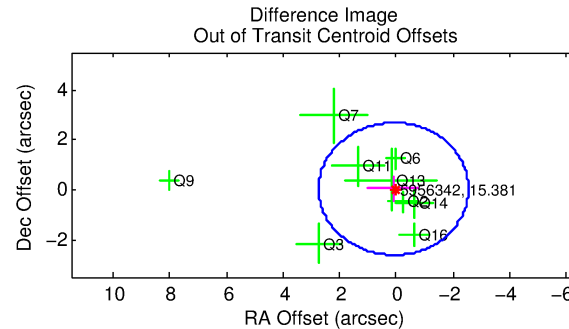
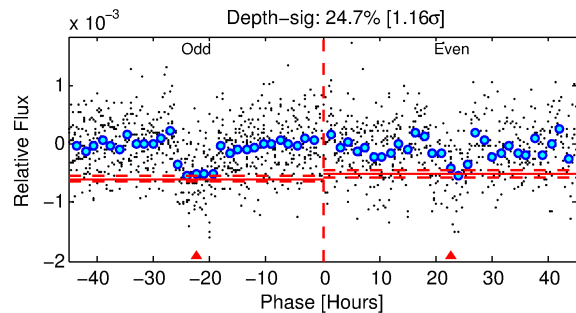
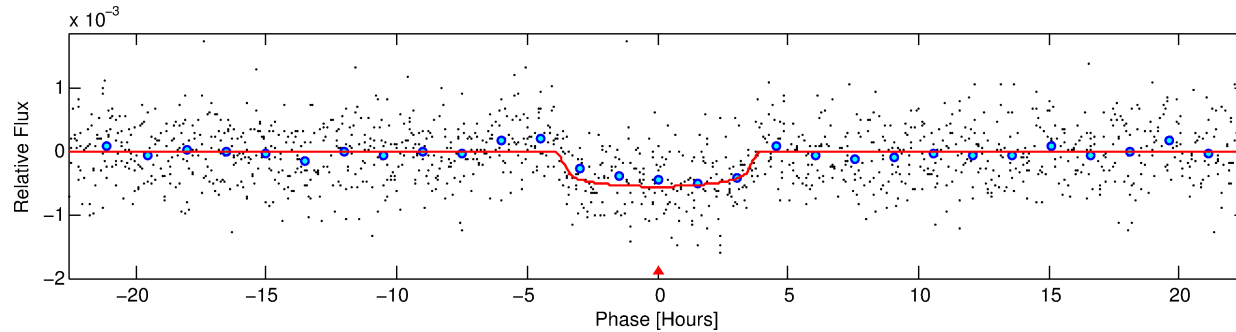
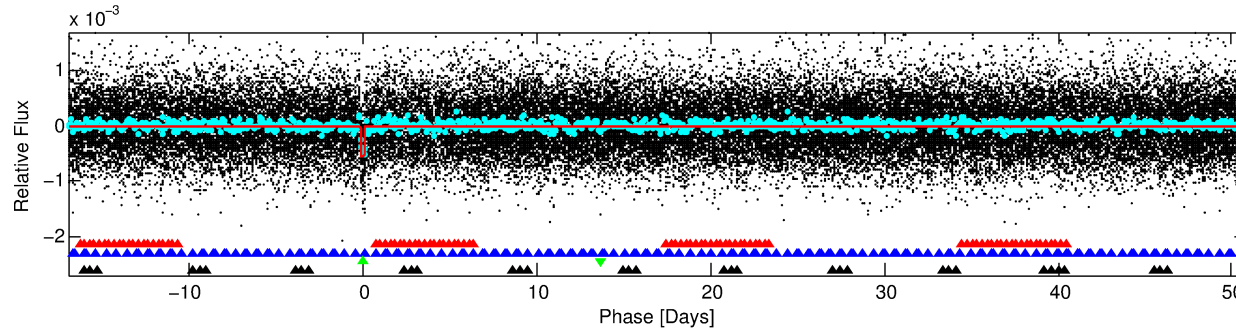
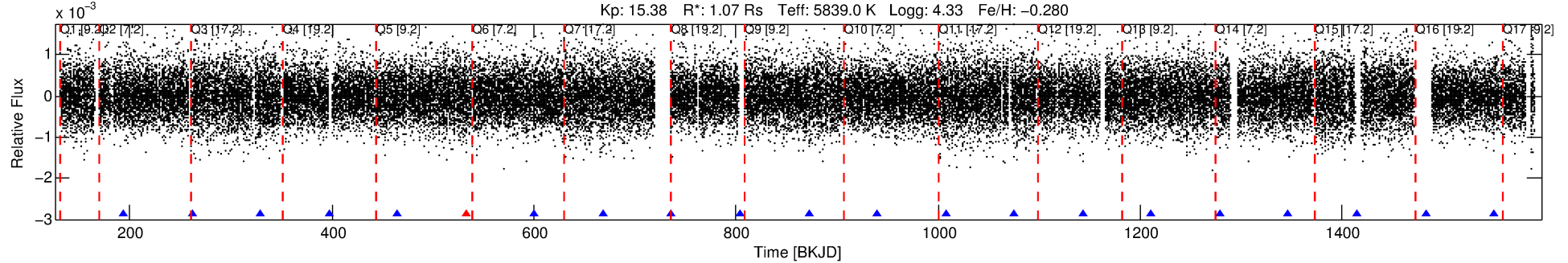
Ephemeris Match Information For 005956342-03

No Significant Match Found

DV One-Page Summary

KIC: 5956342 Candidate: 3 of 4 Period: 67.833 d
KOI: K01052.03 Name: Kepler-265e Corr: 0.977

Kp: 15.38 R*: 1.07 Rs Teff: 5839.0 K Logg: 4.33 Fe/H: -0.280



DV Fit Results:

Period = 67.83268 [0.00079] d
Epoch = 193.7061 [0.0093] BKJD
Rp/R* = 0.0225 [0.0123]
a/R* = 57.10 [144.92]
b = 0.60 [2.76]
Seff = 12.16 [3.31]
Teq = 476 [32] K
Rp = 2.63 [1.49] Re
a = 0.3122 [0.0502] AU
Ag = 916.27 [1064.99] [0.86σ]
Teff = 4051 [1149] K [3.11σ]

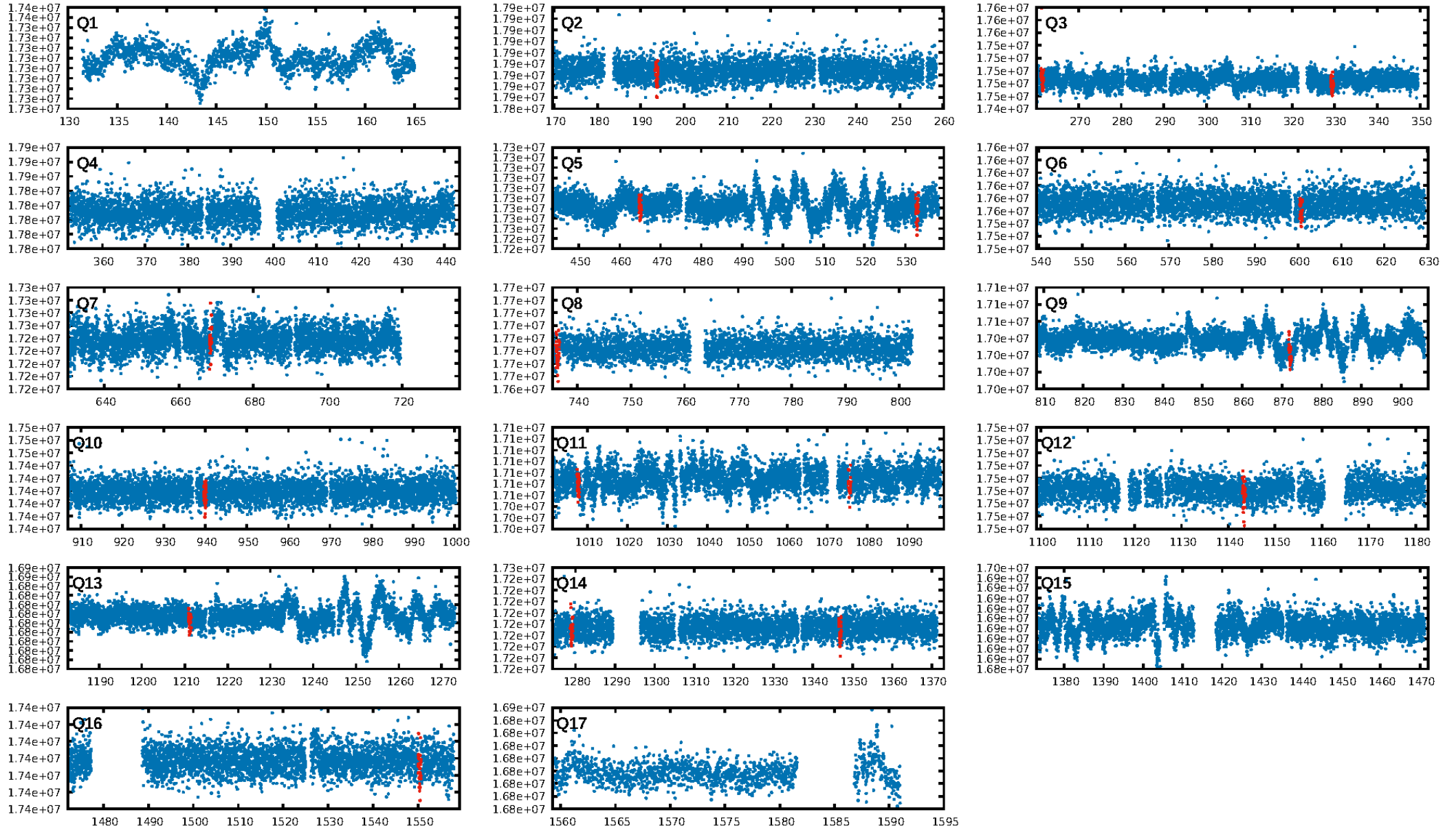
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [72.33σ]
LongPeriod-sig: N/A
ModelChiSquare2-sig: 94.0%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: 1.23e-33
RollingBand-fgt: 0.94 [15/16]
GhostDiagnostic-chr: 3.929
Centroid-sig: 0.1%
Centroid-so: 2.437 arcsec [2.30σ]
OotOffset-rm: 0.099 arcsec [0.11σ]
KicOffset-rm: 0.205 arcsec [0.38σ]
OotOffset-st: 3/3/1/2 [9]
KicOffset-st: 3/3/1/2 [9]
DiffImageQuality-fgm: 0.56 [5/9]
DiffImageOverlap-fno: 0.75 [9/12]

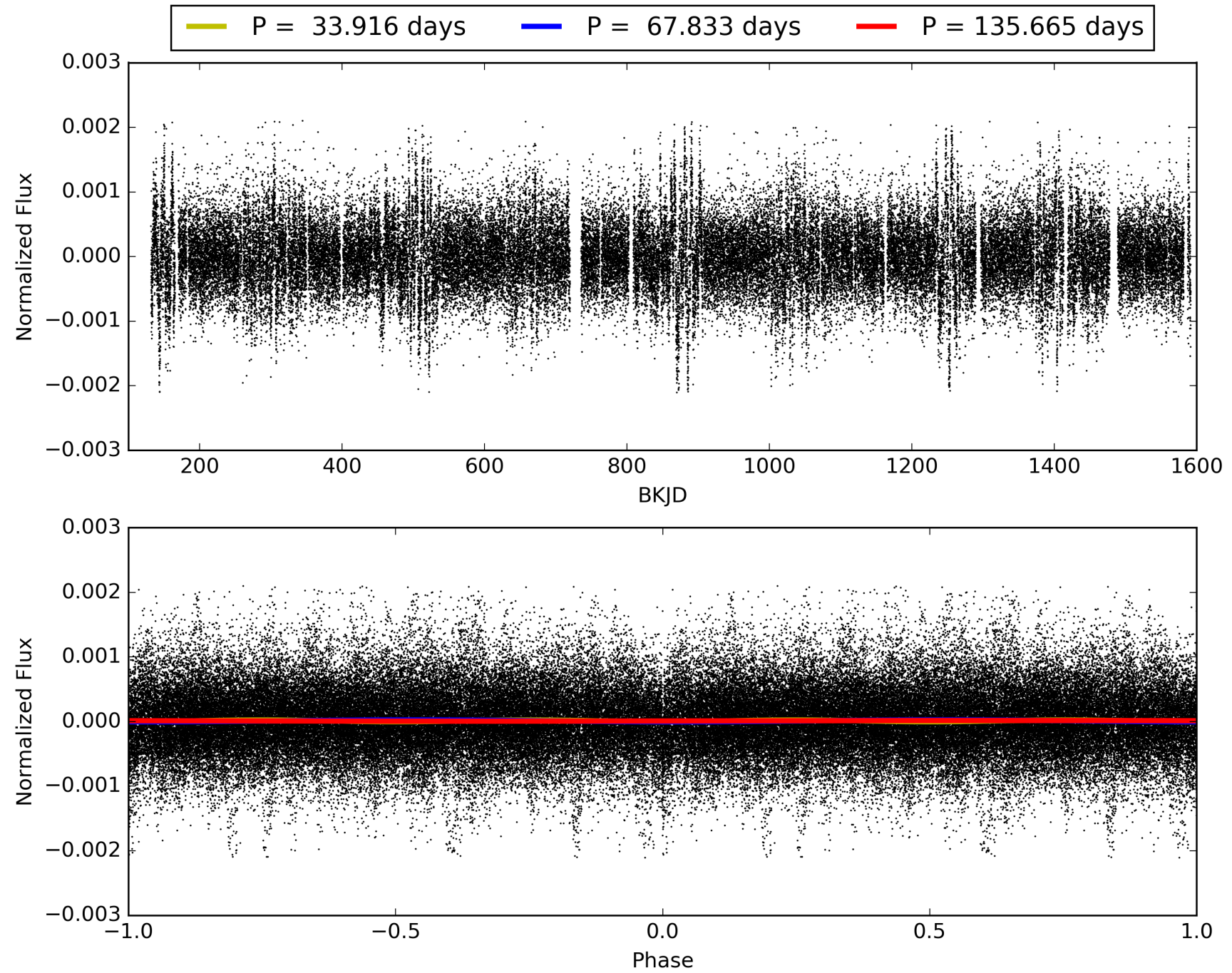
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 03:28:55 Z

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

TCE 005956342-03, PDC Light Curves

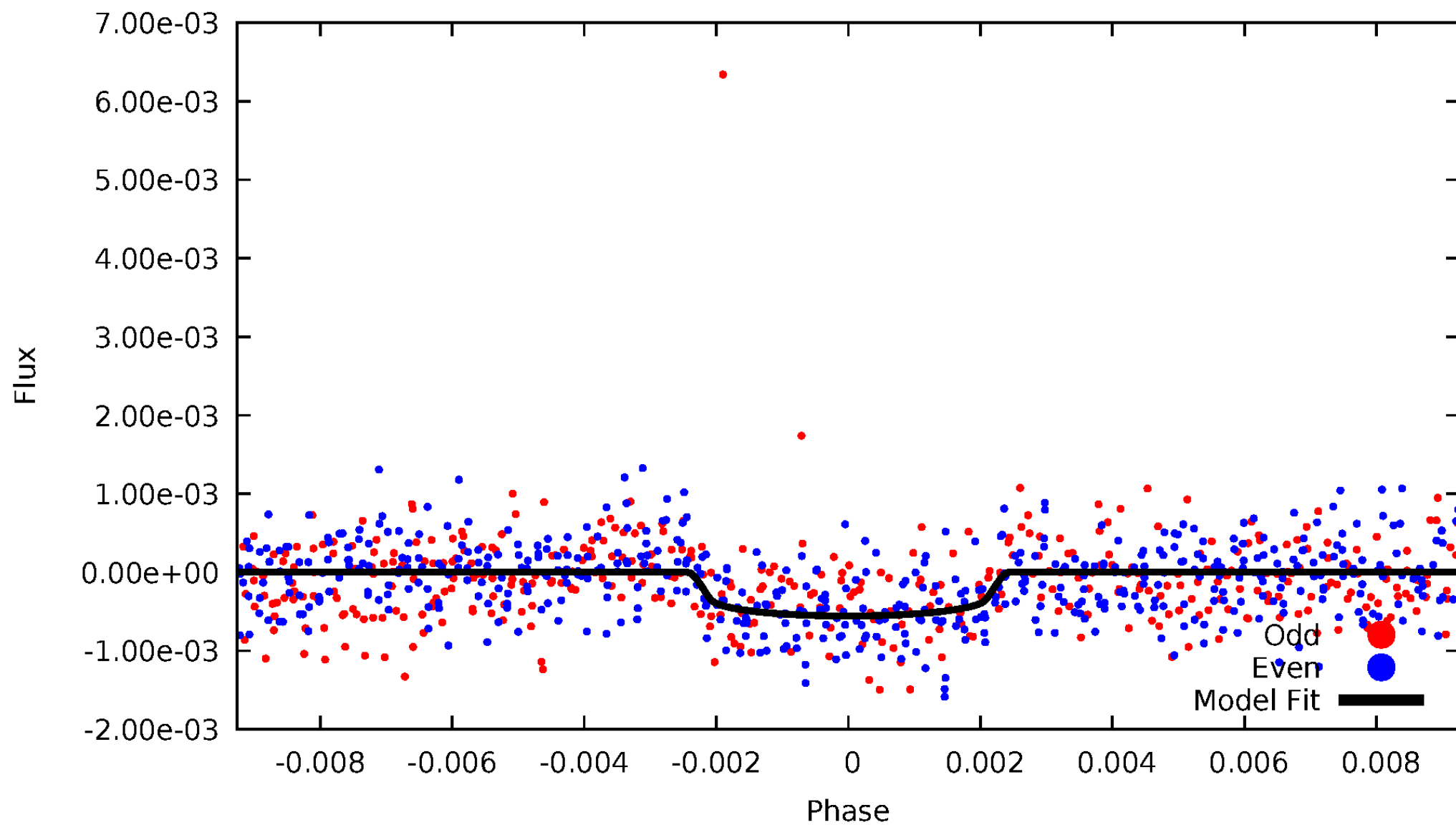


TCE 005956342-03



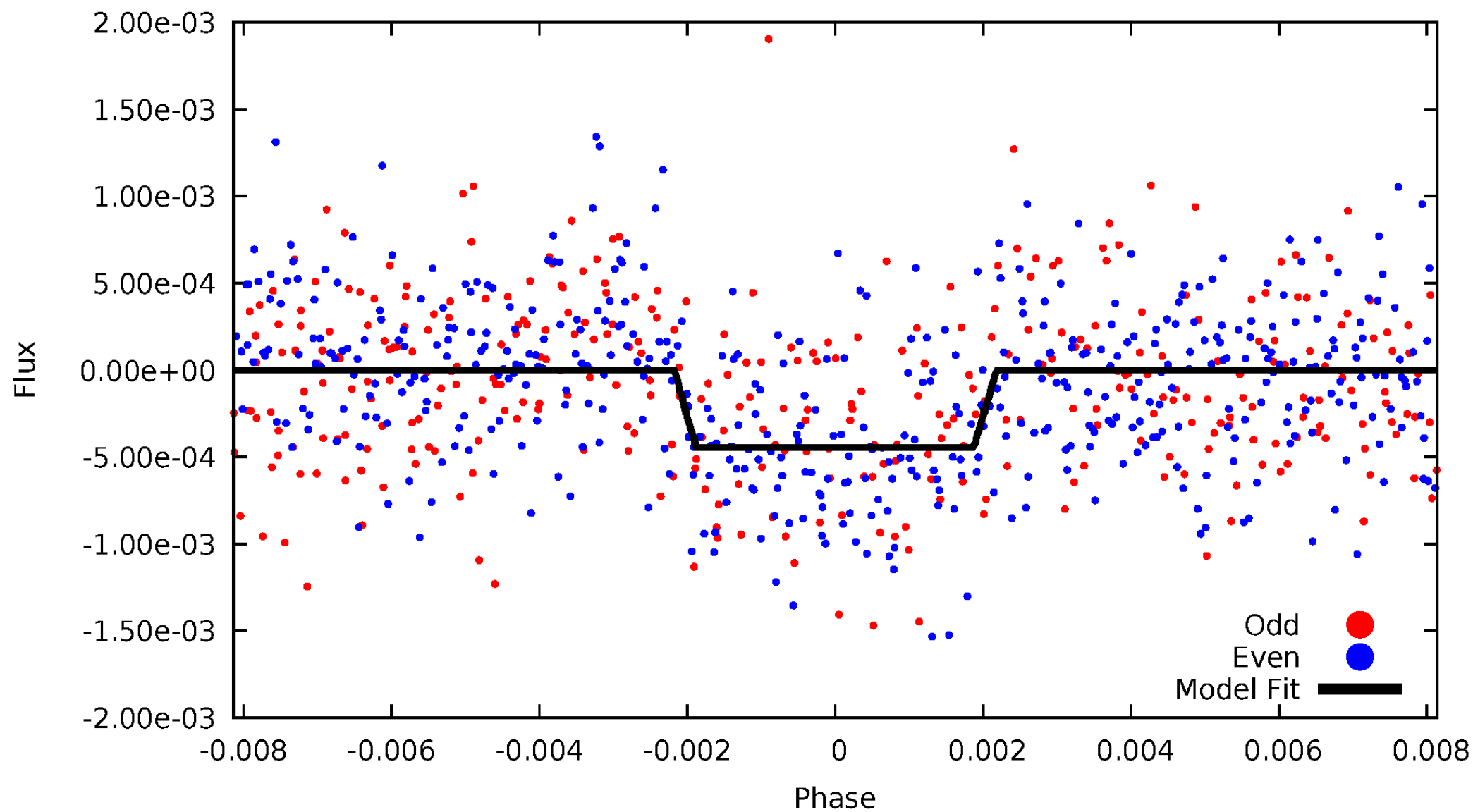
DV Odd/Even

TCE 005956342-03



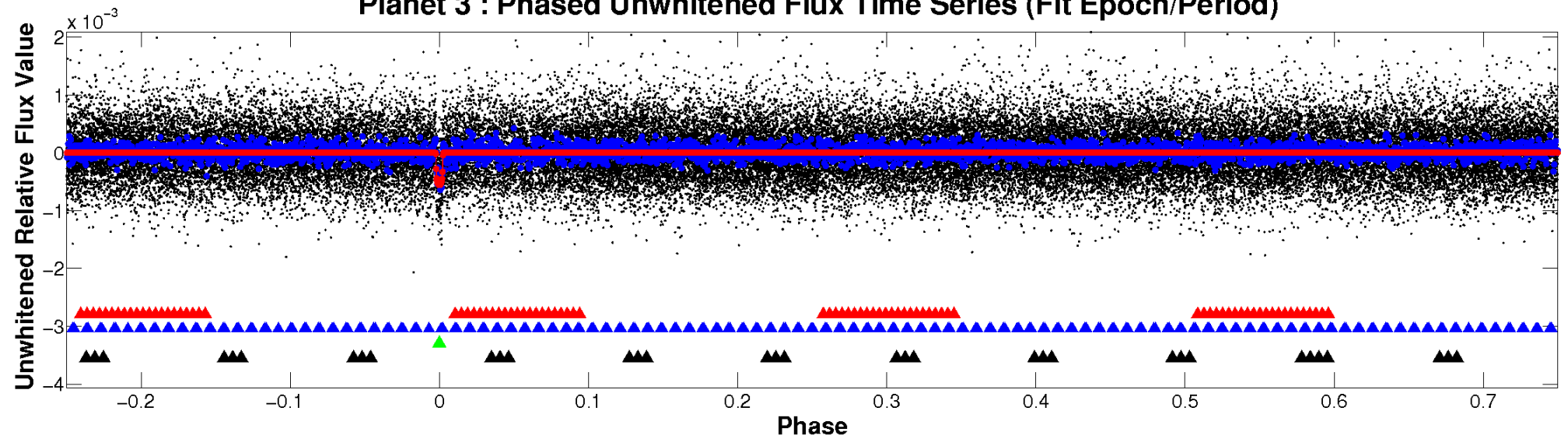
ALT Odd/Even

TCE 005956342-03

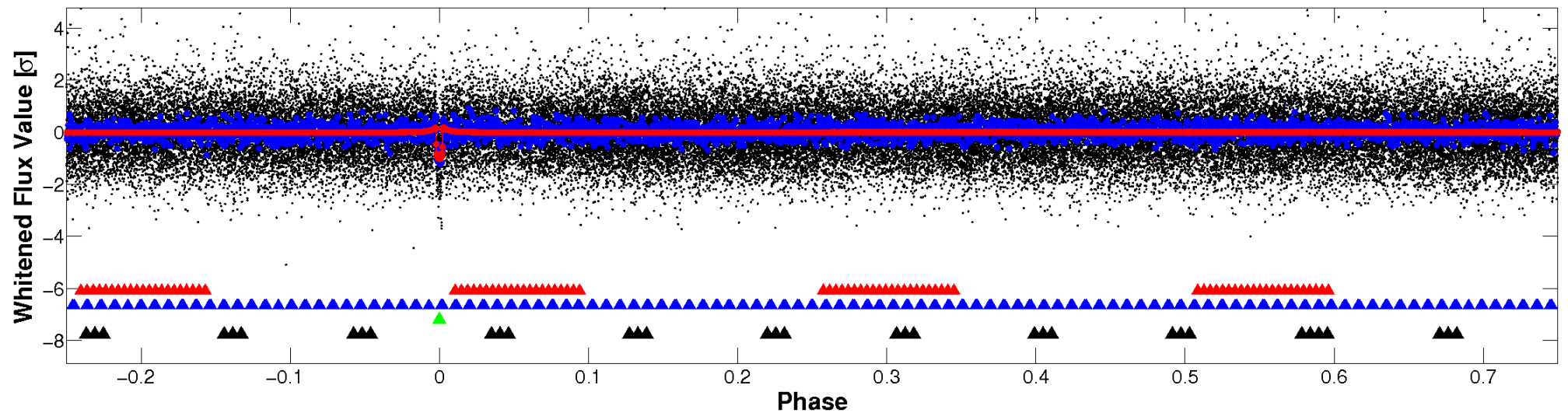


Non-Whitened Vs. Whitened Light Curve

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

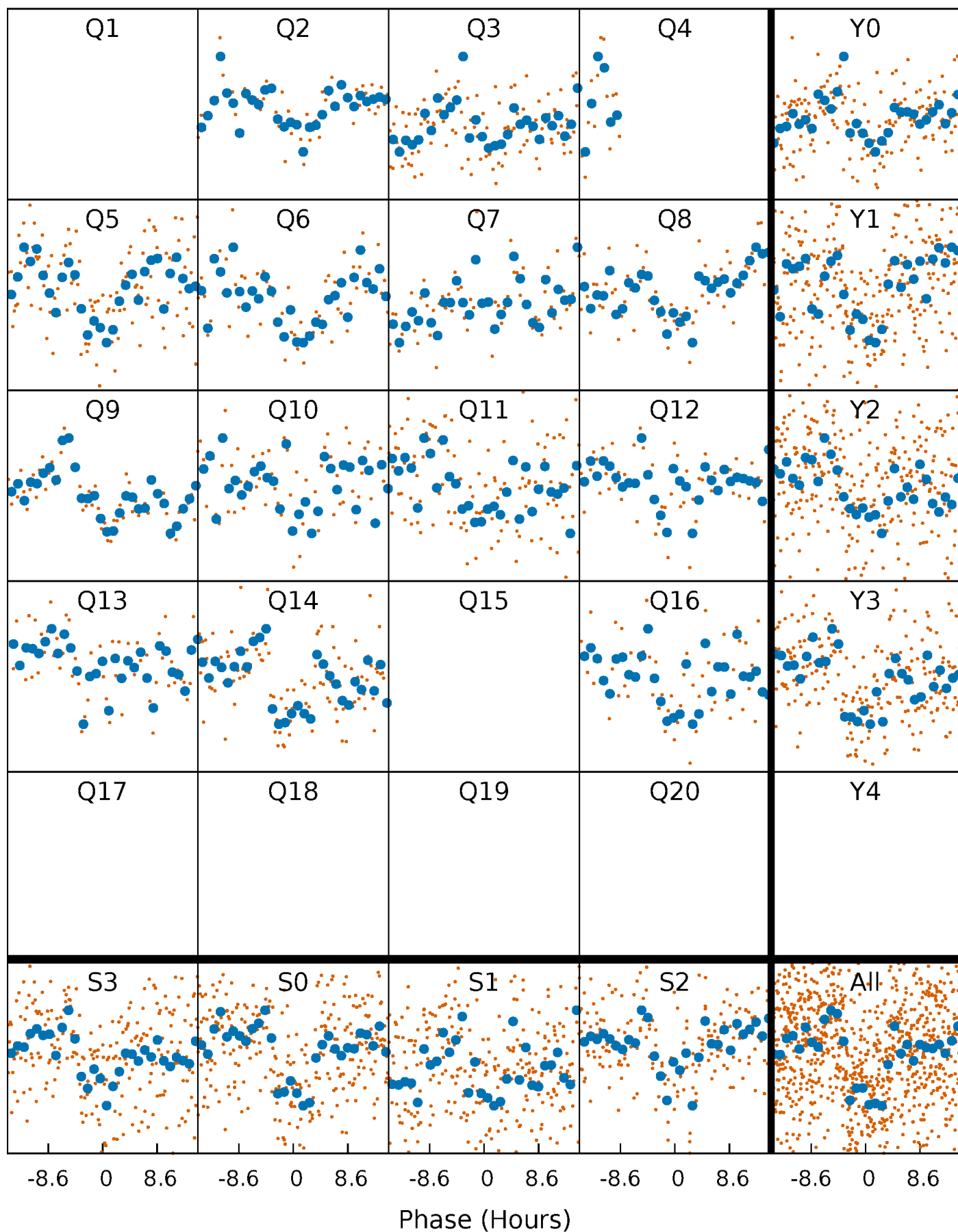


Planet 3 : Phased Whitened Flux Time Series (Fit Epoch/Period)



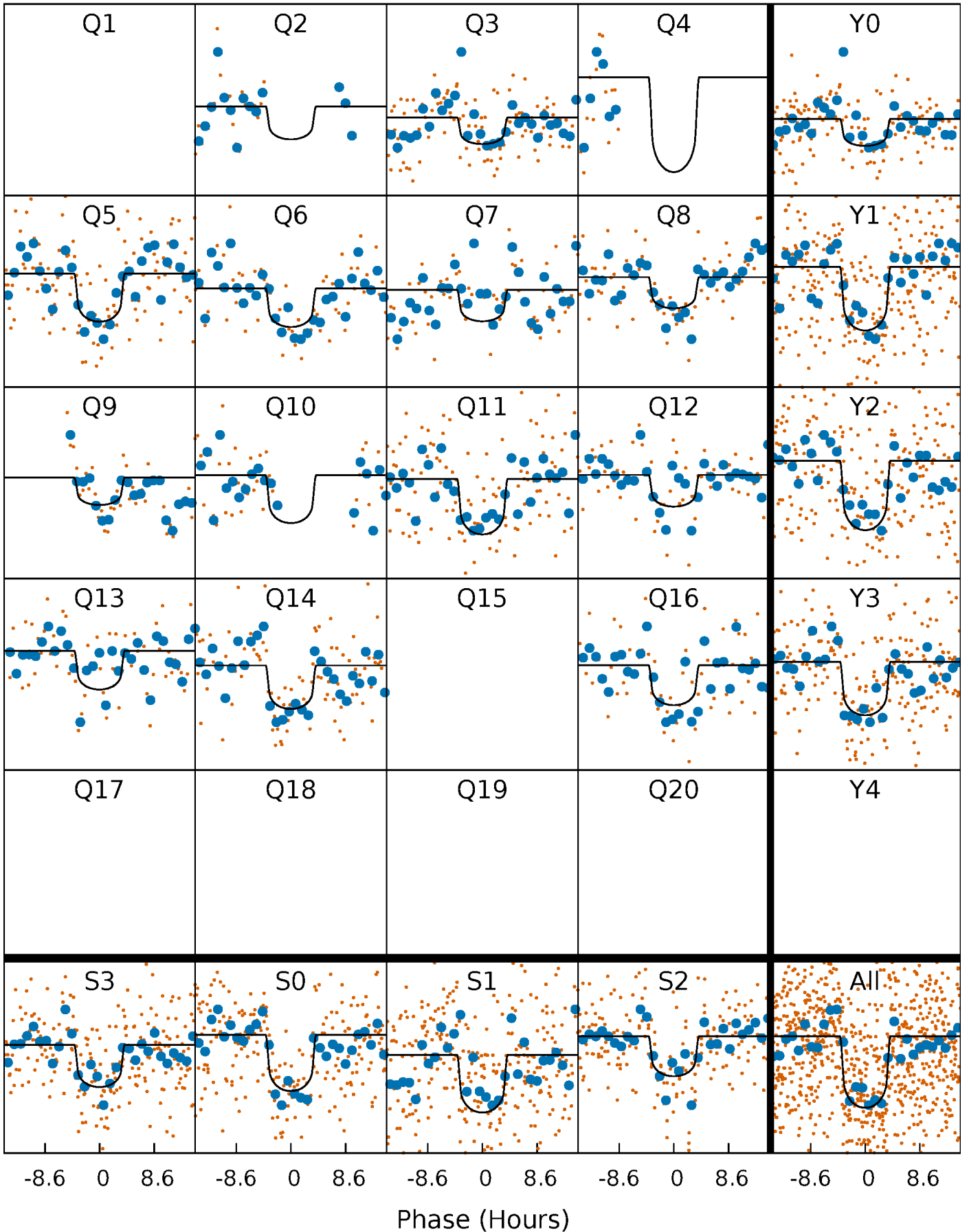
PDC Quarter-Phased Transit Curves

TCE 005956342-03 P= 67.832681 Days $T_0=193.706136$ (BKJD)



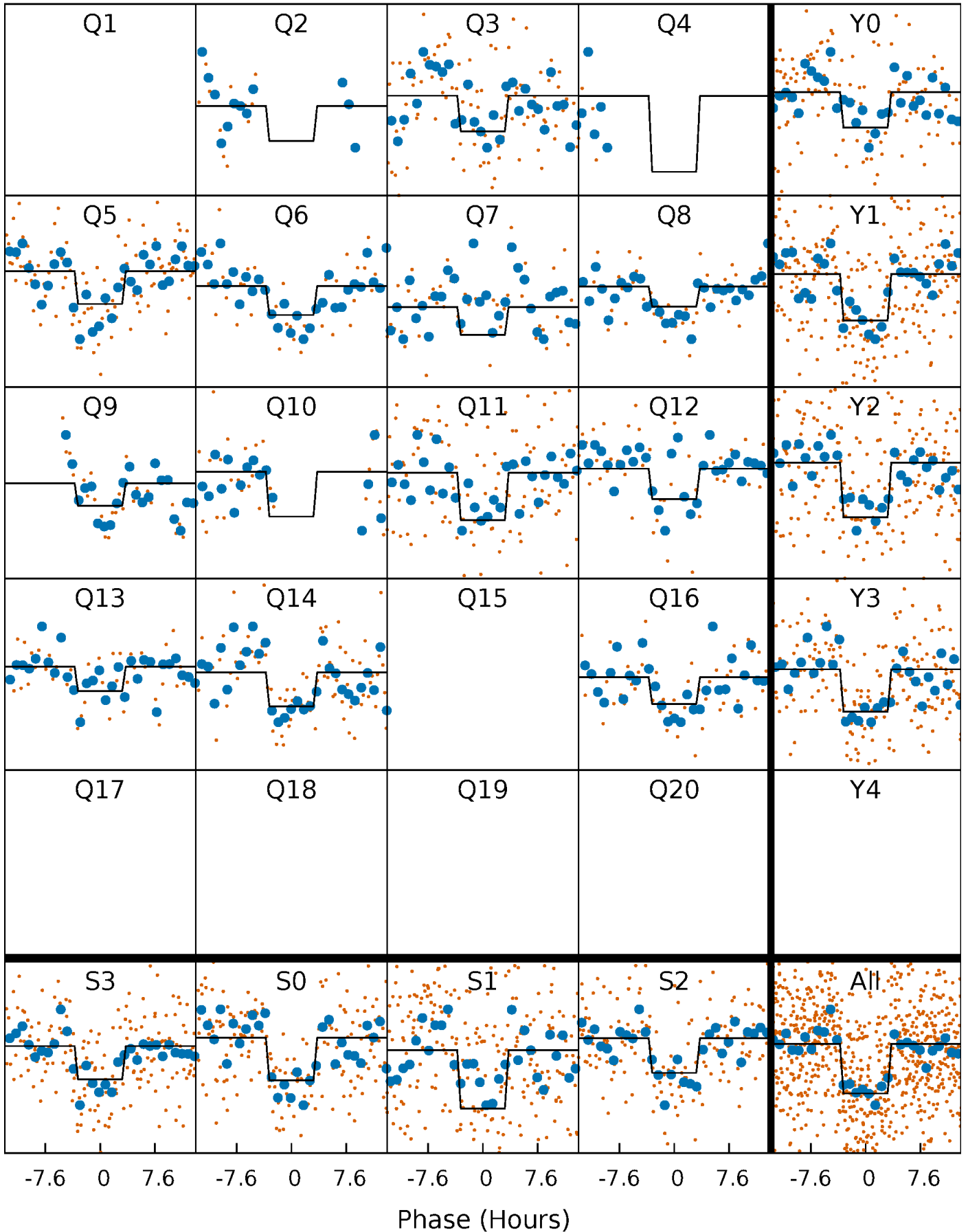
DV Quarter-Phased Transit Curves

TCE 005956342-03 P= 67.832681 Days $T_0=193.706136$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

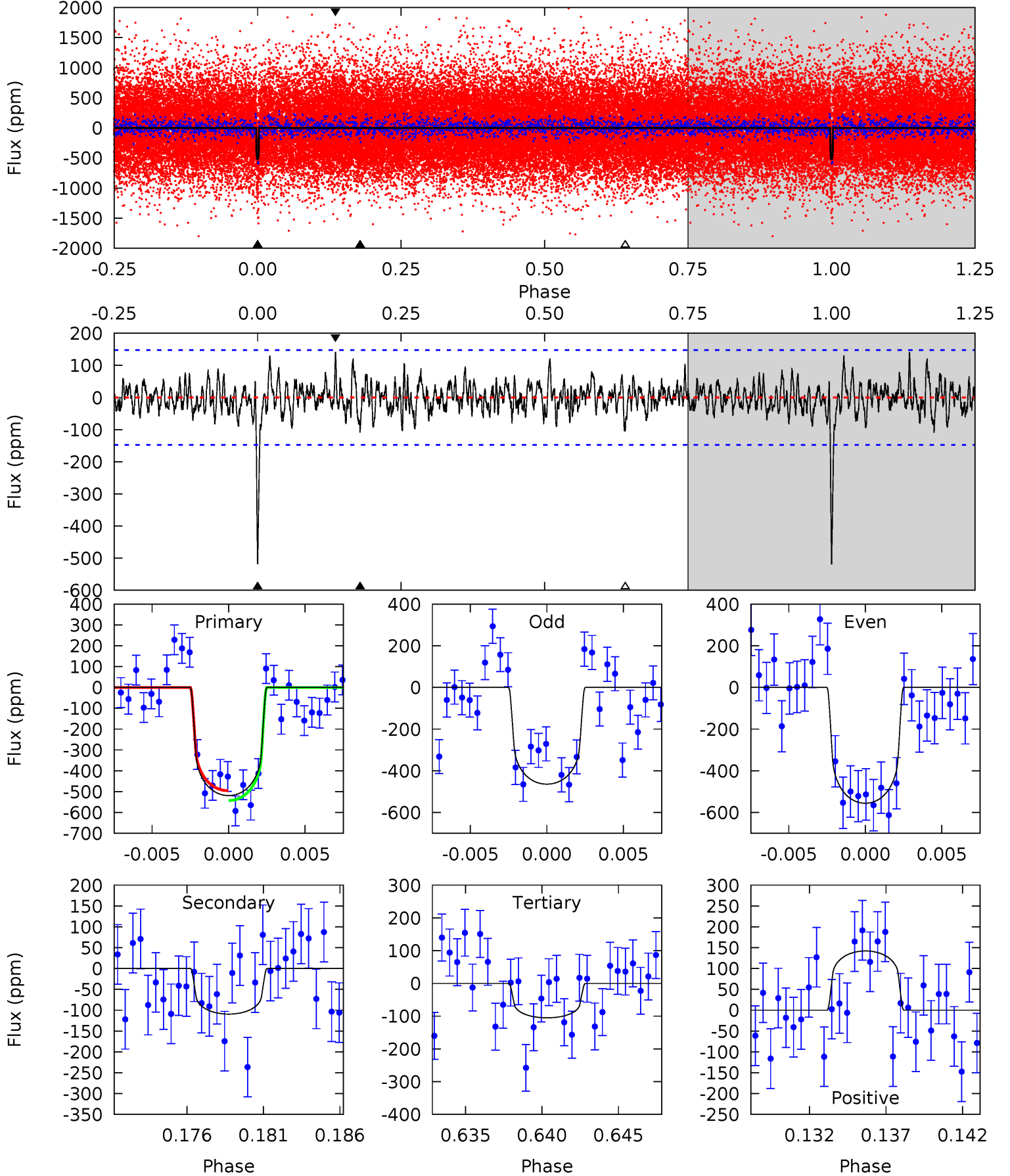
TCE 005956342-03 P= 67.830068 Days $T_0=193.737137$ (BKJD)



DV Model-Shift Uniqueness Test

005956342-03, P = 67.832681 Days, E = 125.873455 Days

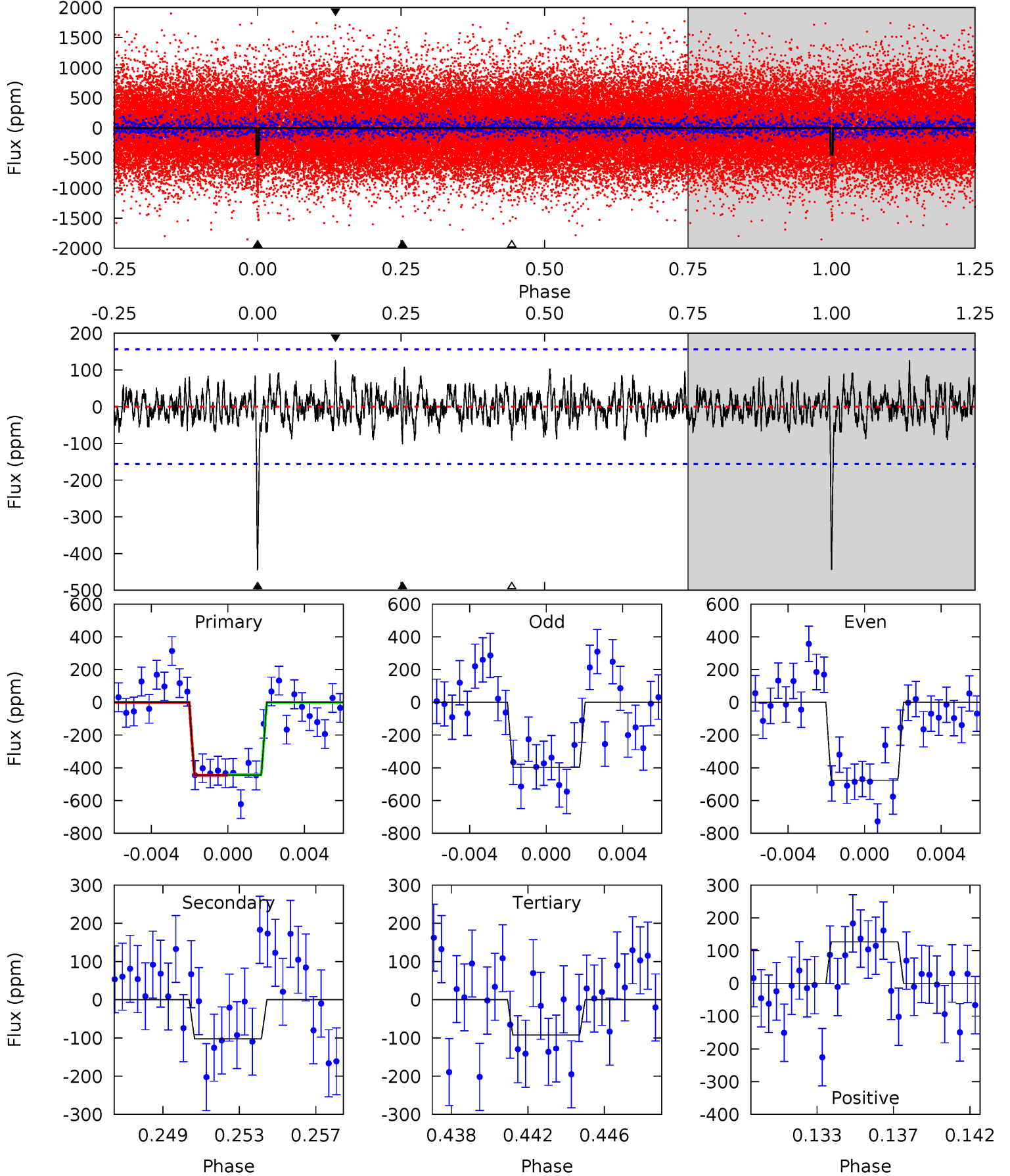
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
18.1	3.82	3.67	4.96	5.16	2.81	1.28	14.5	13.2	0.15	-1.14	1.58	0.91	0.21	0.83



Alt Model-Shift Uniqueness Test

005956342-03, P = 67.830068 Days, E = 125.907069 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
14.8	3.40	3.07	4.22	5.19	2.86	1.08	11.7	10.5	0.34	-0.81	1.28	0.97	0.22	0.07



Stellar Parameters For KIC 005956342

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	5839^{+105}_{-105}	$4.327^{+0.156}_{-0.104}$	$-0.280^{+0.150}_{-0.150}$	$1.067^{+0.156}_{-0.172}$	$0.881^{+0.070}_{-0.051}$	$1.023^{+0.659}_{-0.343}$
	+2%/-2%	+4%/-2%	+54%/-54%	+15%/-16%	+8%/-6%	+64%/-34%
Source	SPE58	SPE58	SPE58	DSEP		

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

Secondary Eclipse Parameters for KIC 005956342-03 / KOI 1052.03

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-109 ± 29	$2.58^{+1.46}_{-1.27}$	661^{+33}_{-31}	4205^{+1389}_{-582}	871^{+2689}_{-518}
Alt.	-102 ± 30	$2.45^{+1.29}_{-1.25}$	663^{+31}_{-33}	4245^{+1408}_{-624}	895^{+2811}_{-539}

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 $A_{obs} \gg 1.0$

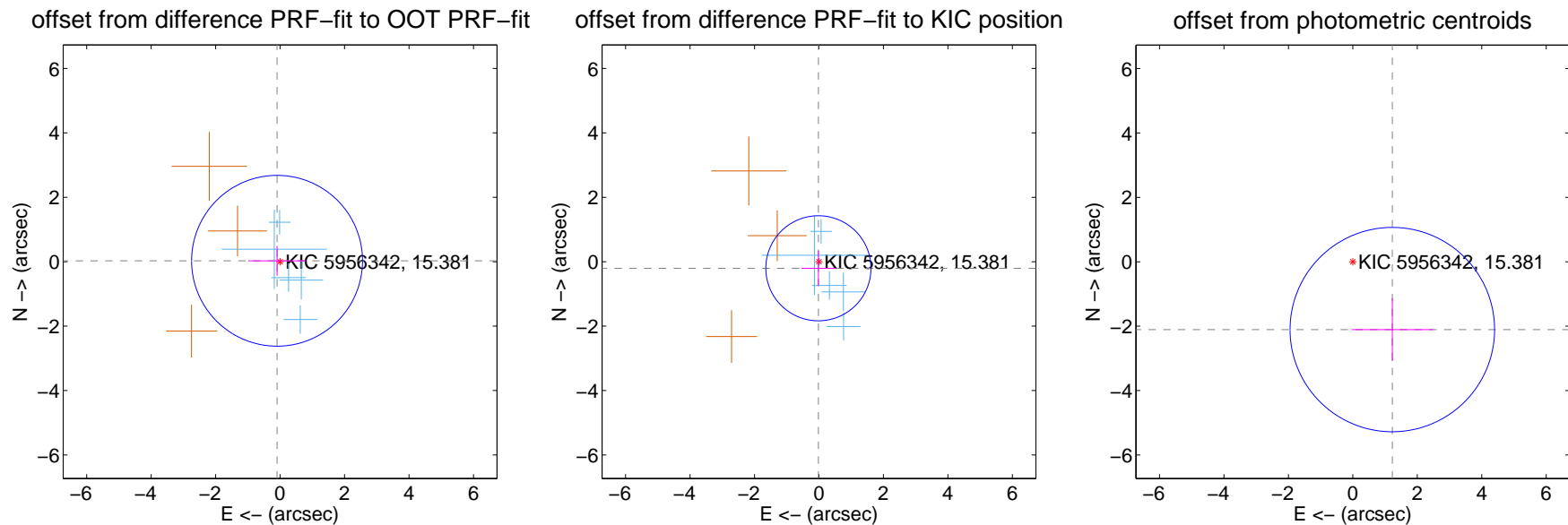
DV Centroid Data

Supplemental centroid analysis for 005956342-03. Kepler magnitude: 15.38. Transit SNR 13.65

There are 5 quarters with good PRF difference image offsets

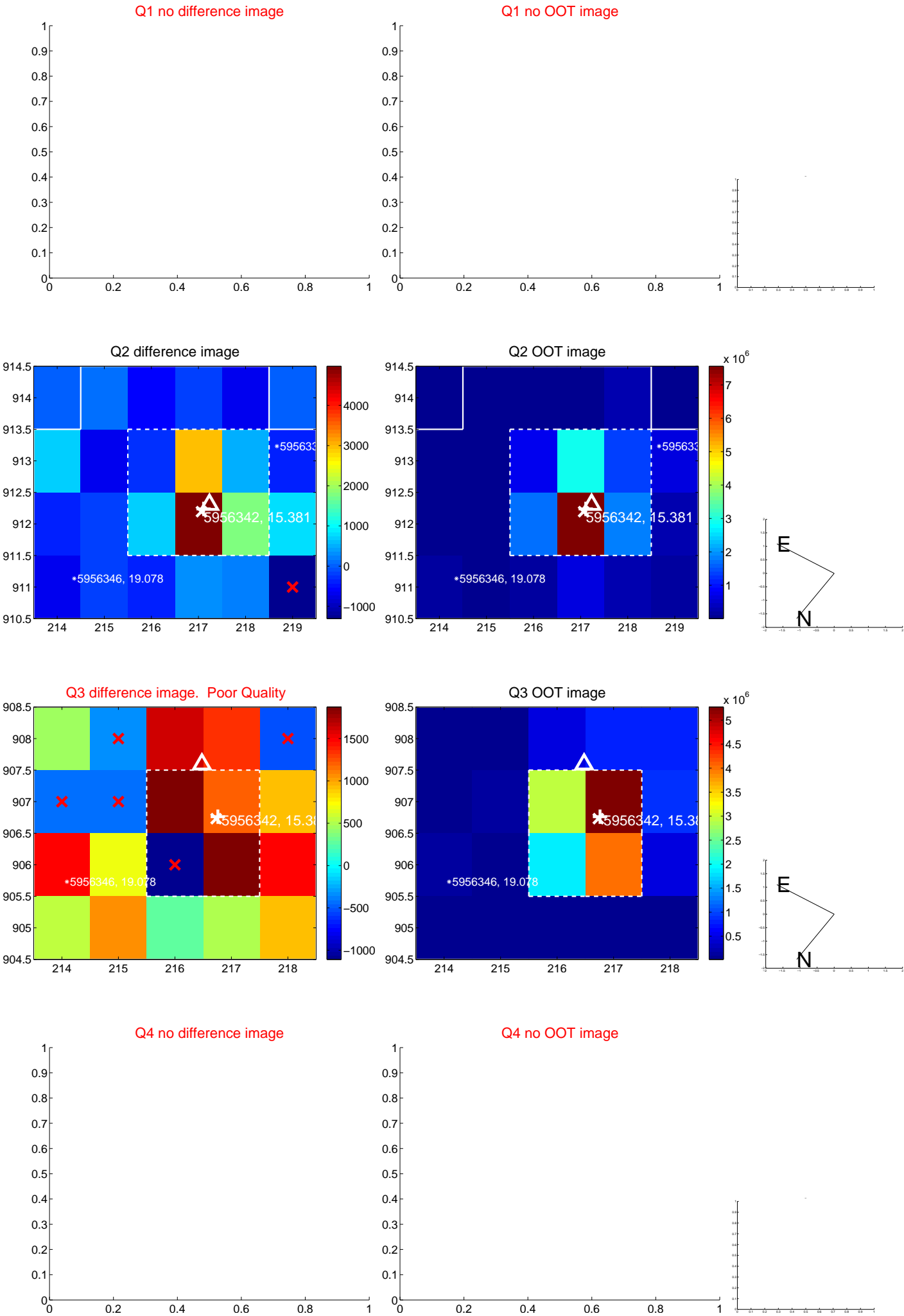
The direct PRF centroid is offset from the target star catalog position by about 0.26 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.099 ± 0.884	0.11	0.095 ± 0.894	0.028 ± 0.465
PRF-fit source offset from KIC position	0.205 ± 0.544	0.38	0.019 ± 0.529	-0.204 ± 0.544
photometric centroid source offset	2.44 ± 1.06	2.30	-1.22 ± 1.27	-2.11 ± 0.98

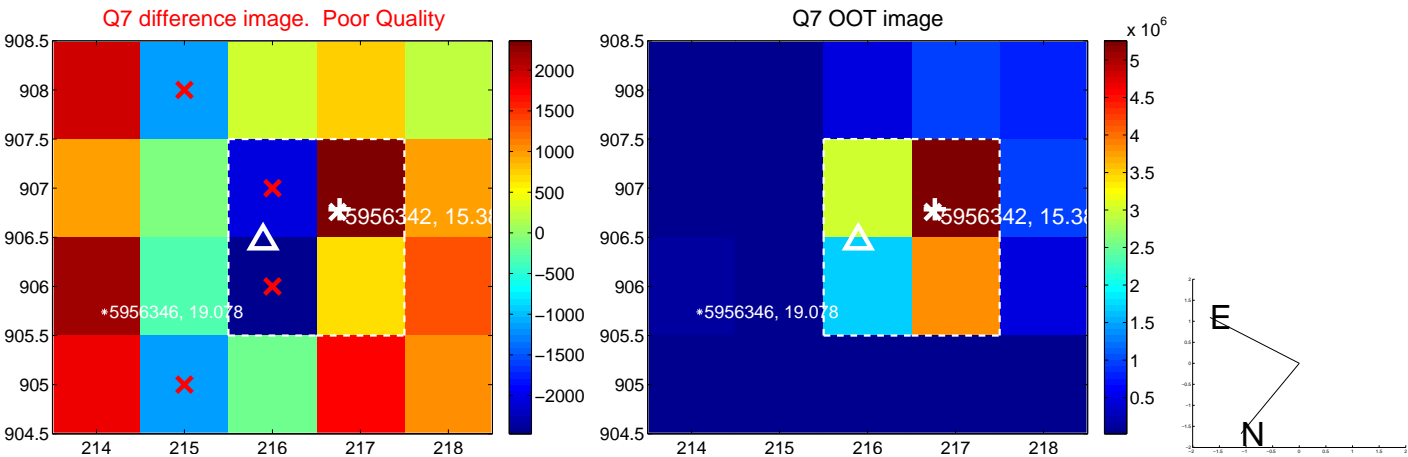
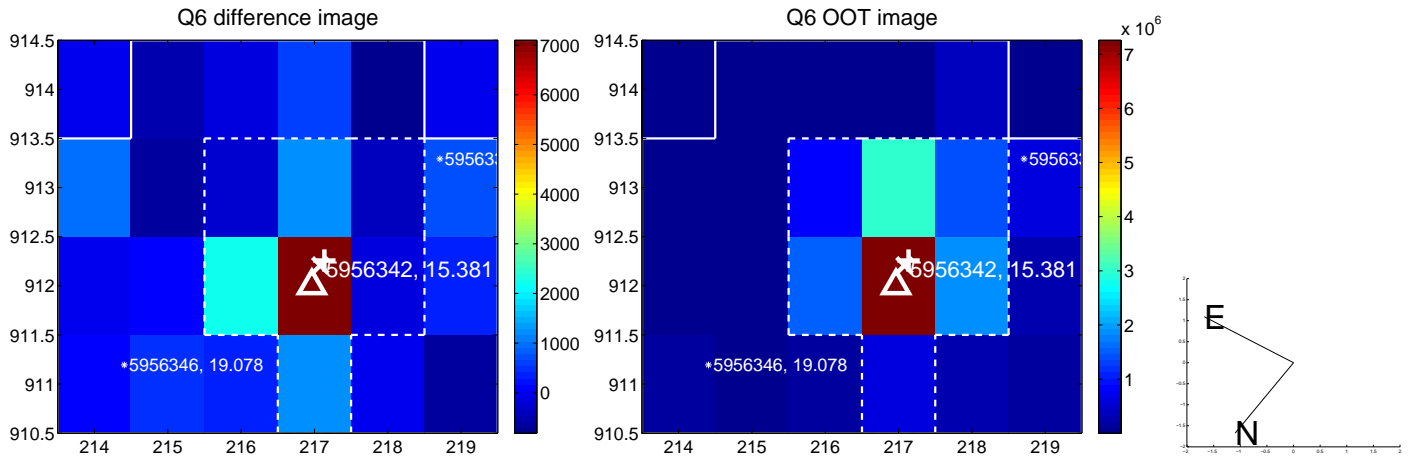
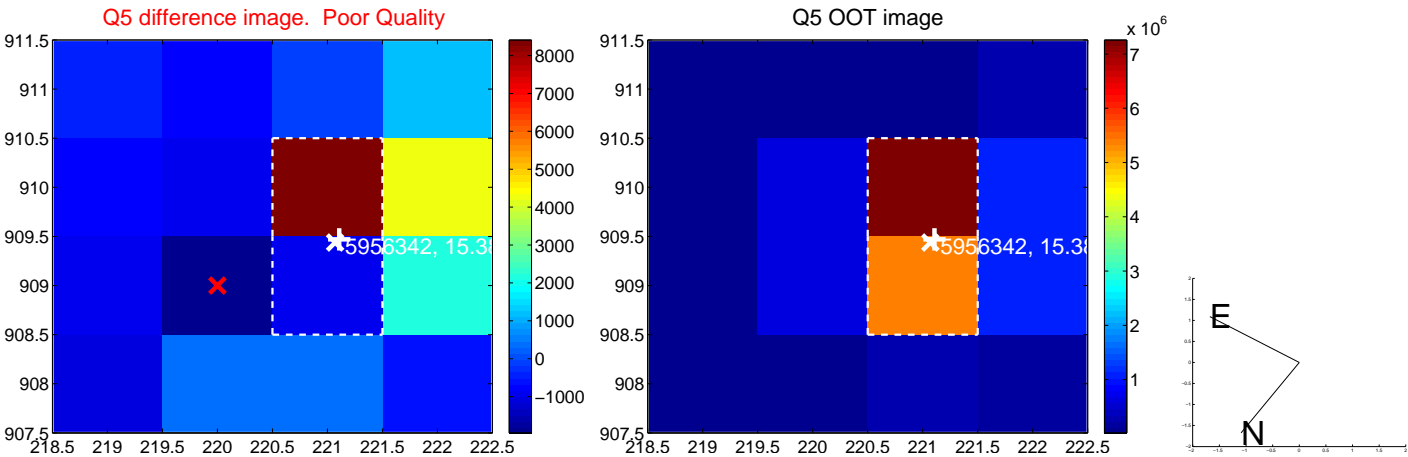


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses:** good quarterly centroid offsets; **Vermillion crosses:** bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

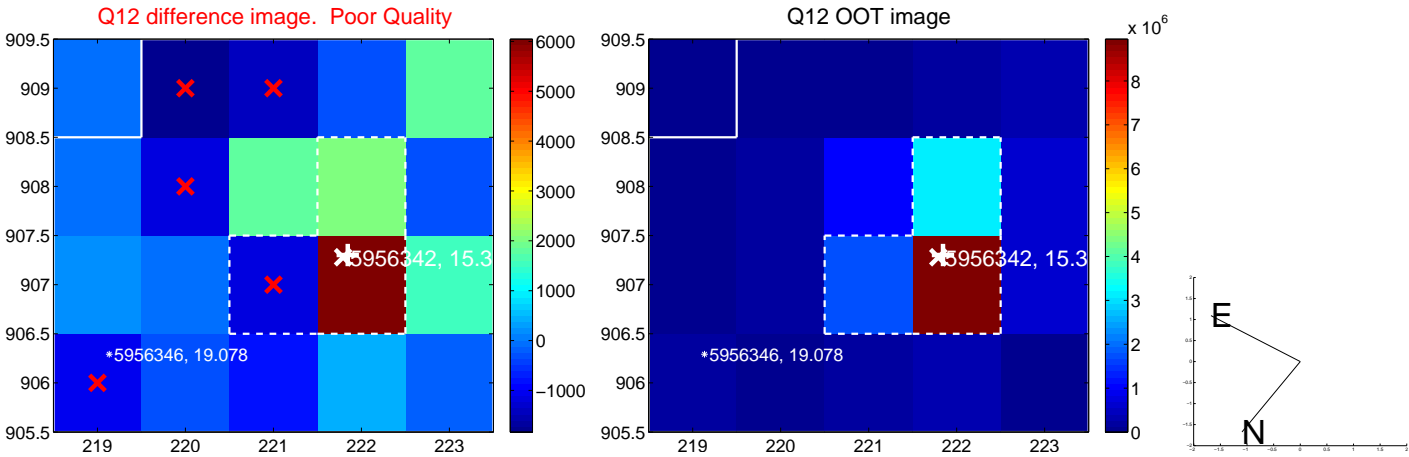
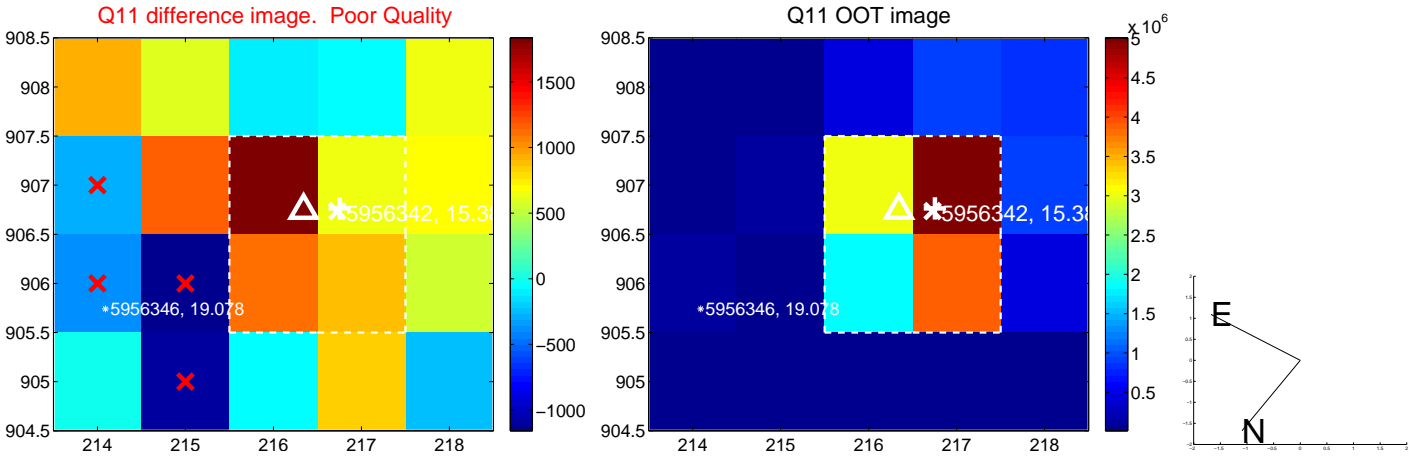
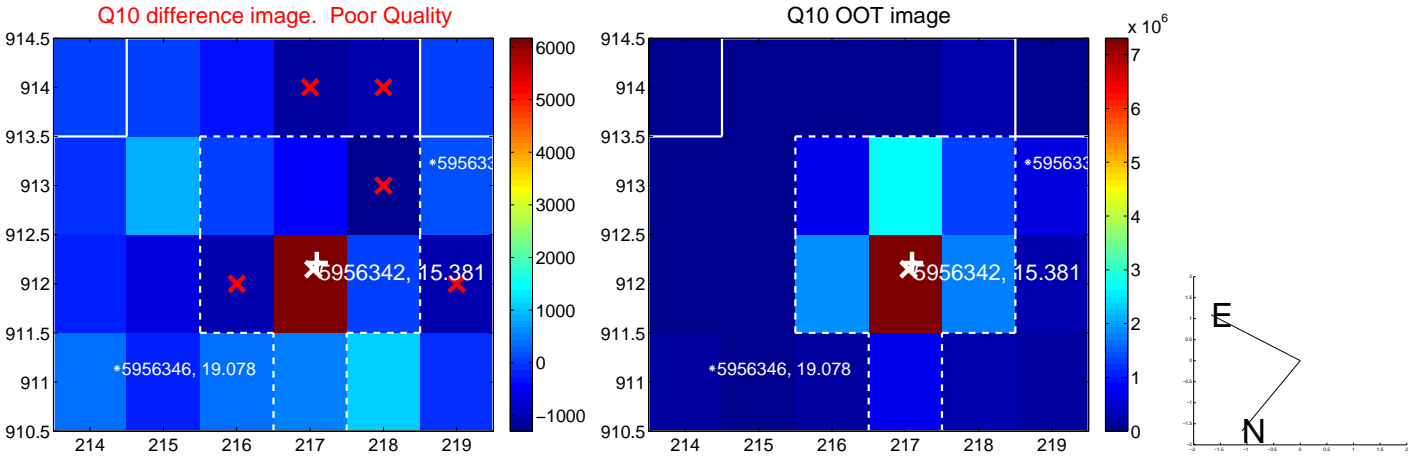
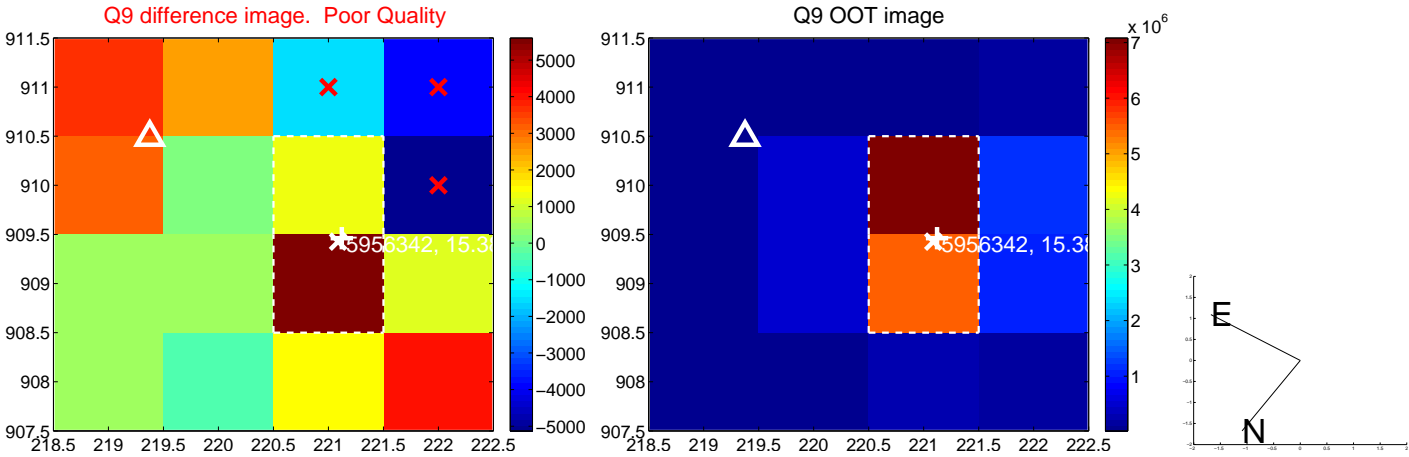
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



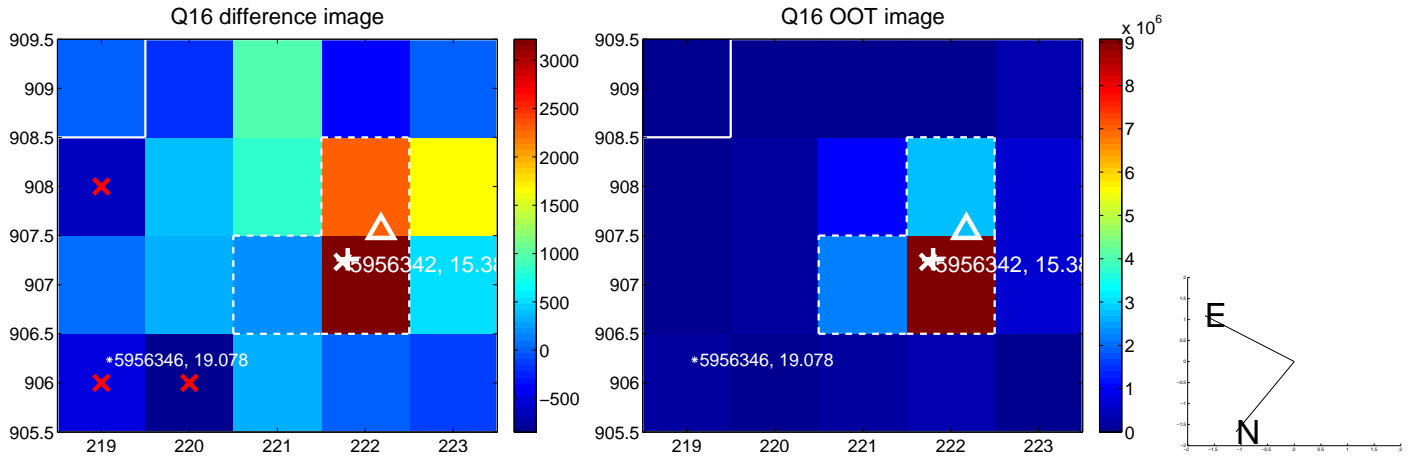
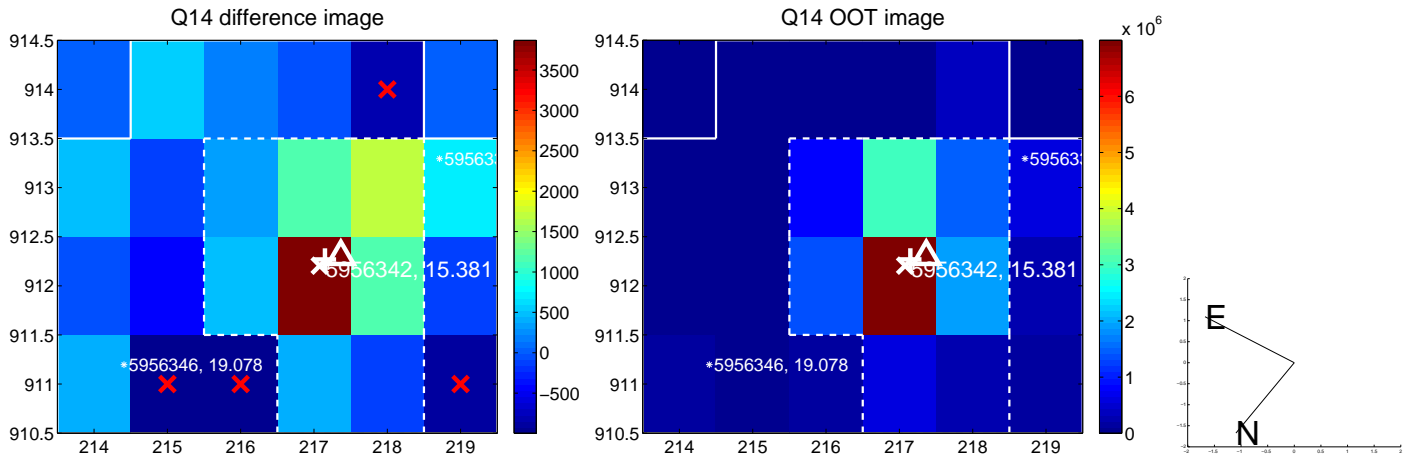
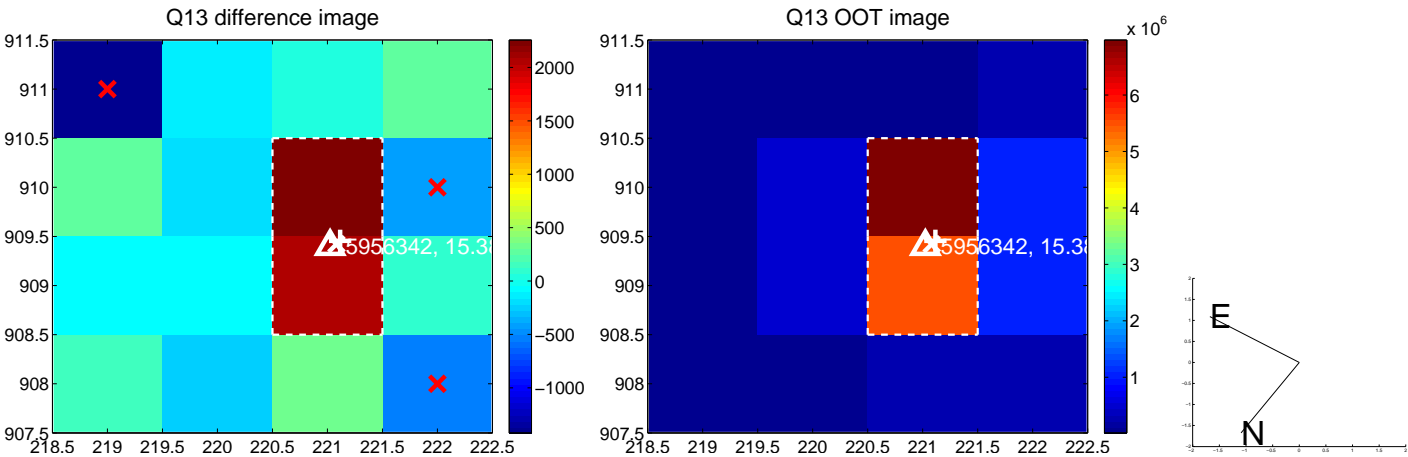
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



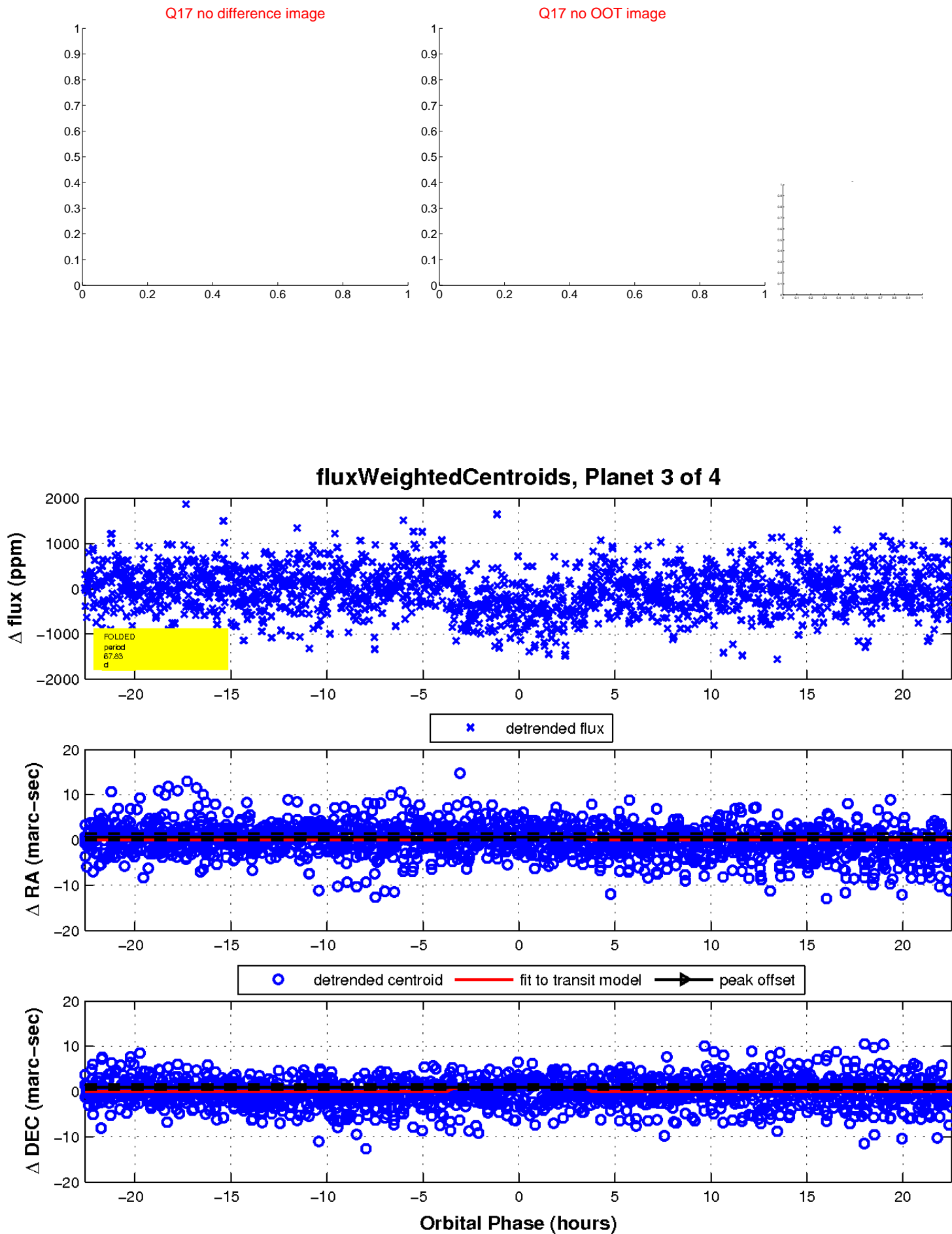
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

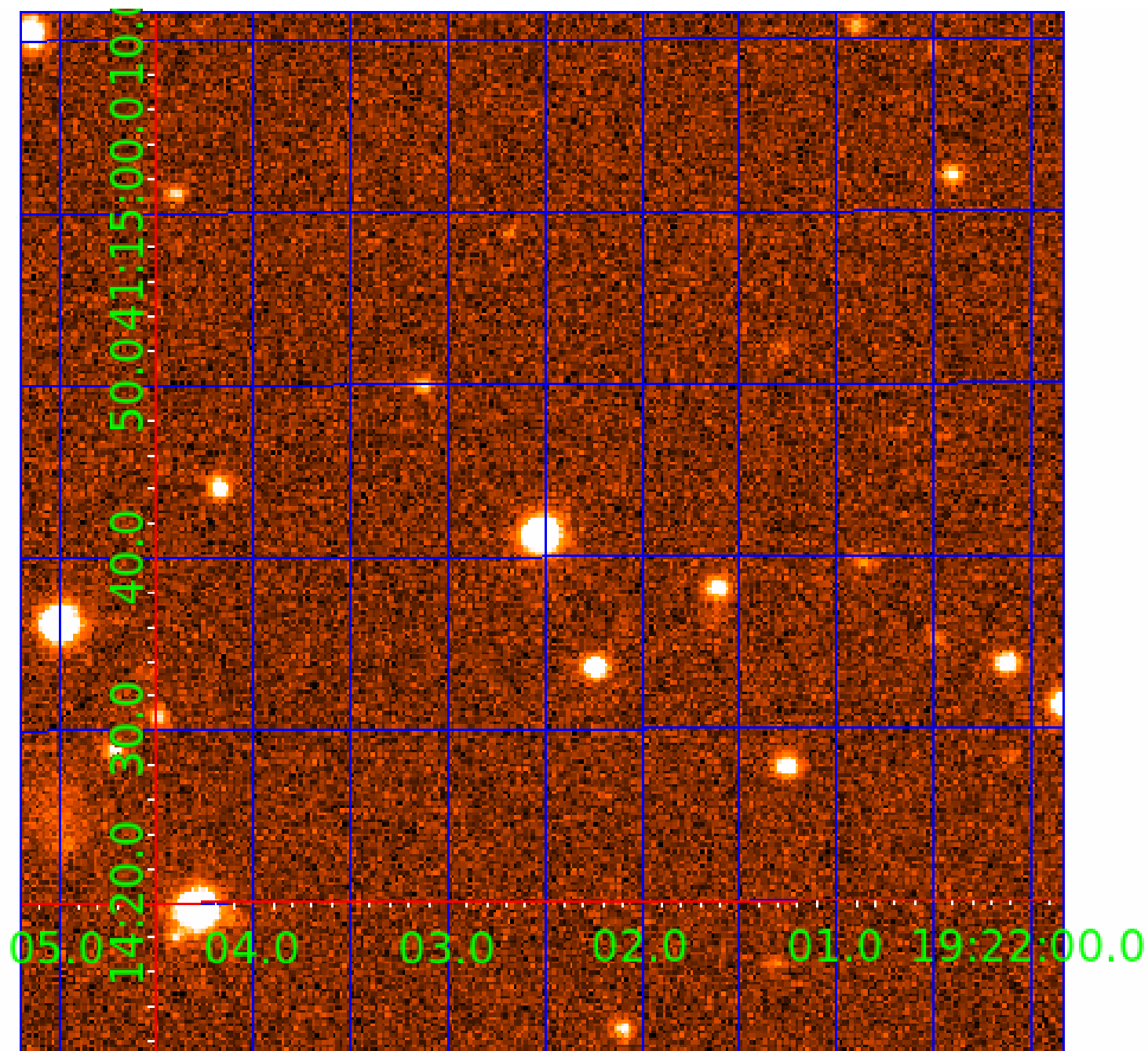


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 005956342

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})
005956342-01	OBS	1052.01	17.028924	143.339422	566.2	4.744	24.1	26.1	1.07	5839	2.82	76.81
005956342-02	OBS	1052.02	6.846151	132.174605	260.0	3.733	16.3	17.3	1.07	5839	2.00	258.88
005956342-03	OBS	1052.03	67.832681	193.706136	557.4	7.535	12.3	13.6	1.07	5839	2.62	12.16
005956342-04	OBS	1052.04	43.130830	166.269919	409.4	3.227	8.9	9.7	1.07	5839	2.41	22.25

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
005956342-01	OBS	PC	1.00	0	0	0	0	NO_COMMENT
005956342-02	OBS	PC	0.94	0	0	0	0	NO_COMMENT
005956342-03	OBS	PC	0.77	0	0	0	0	NO_COMMENT
005956342-04	OBS	PC	0.81	0	0	0	0	NO_COMMENT

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.

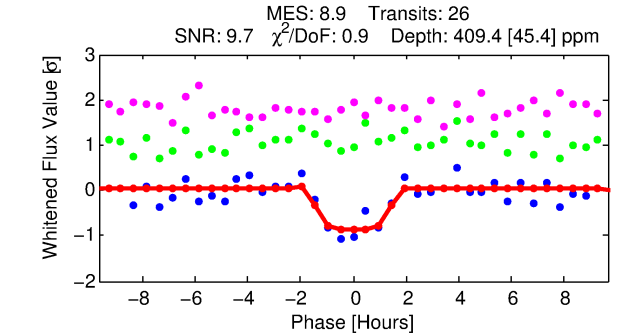
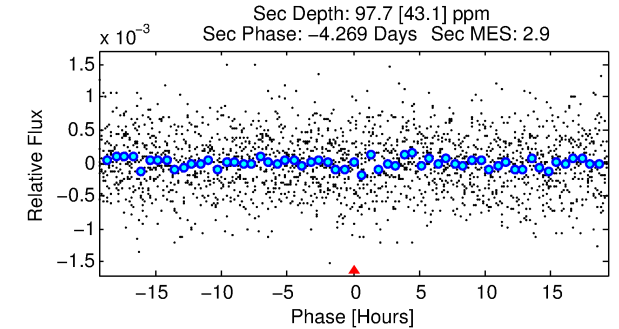
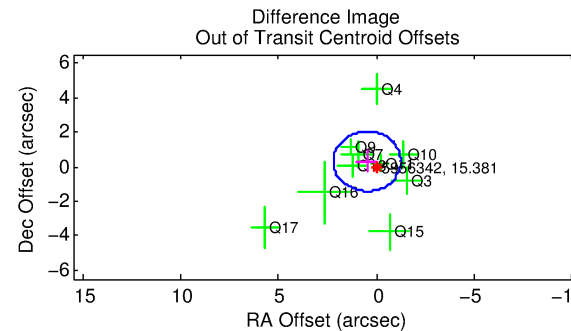
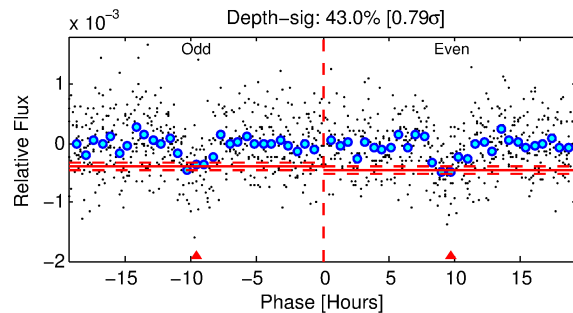
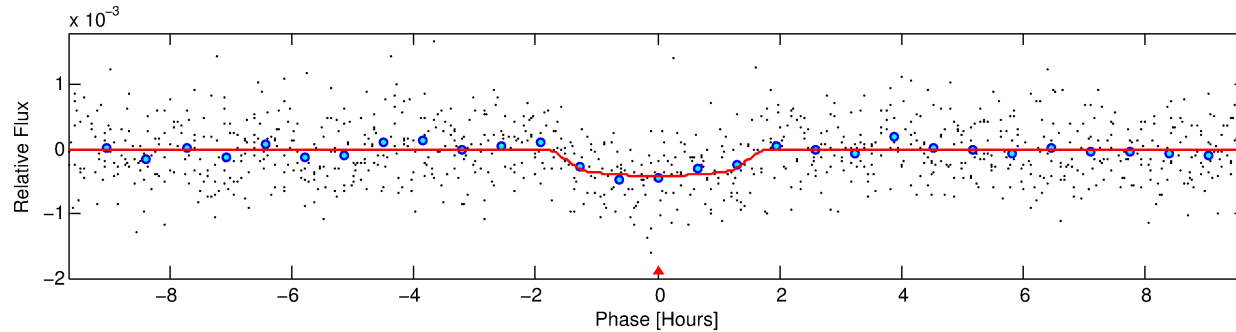
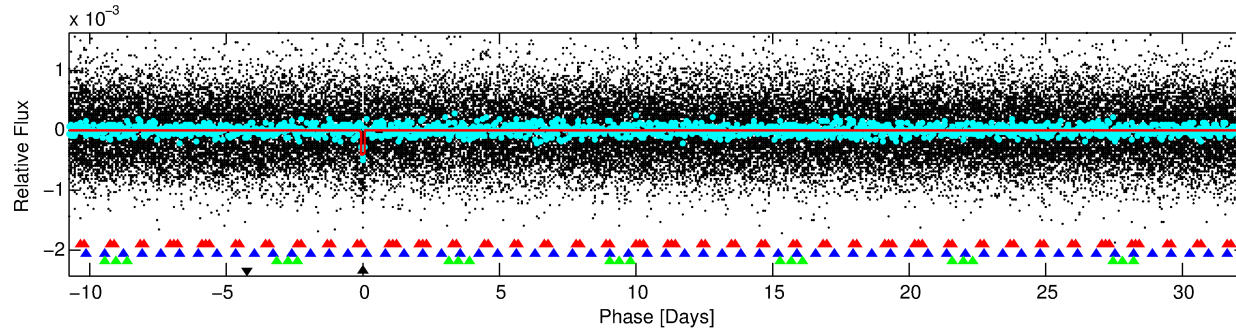
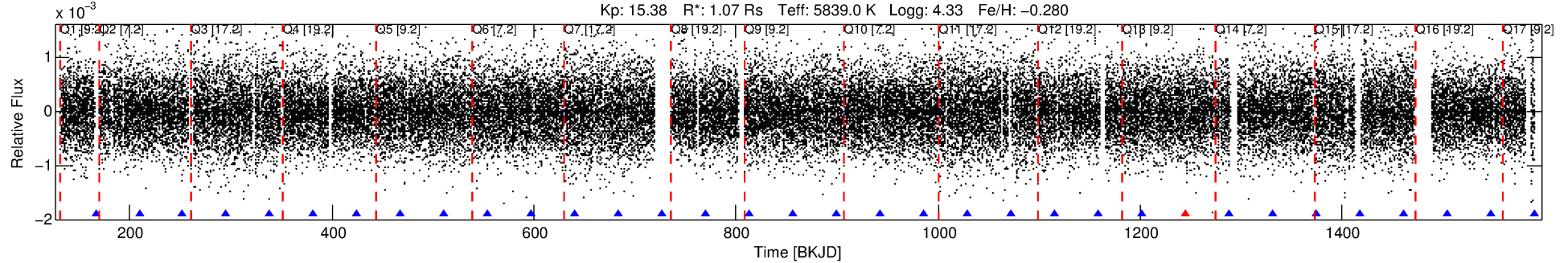
Ephemeris Match Information For 005956342-04

No Significant Match Found

DV One-Page Summary

KIC: 5956342 Candidate: 4 of 4 Period: 43.131 d
KOI: K01052.04 Name: Kepler-265d Corr: 0.970

Kp: 15.38 R*: 1.07 Rs Teff: 5839.0 K Logg: 4.33 Fe/H: -0.280



DV Fit Results:

Period = 43.13083 [0.00040] d
Epoch = 166.2699 [0.0079] BKJD
Rp/R* = 0.0207 [0.0193]
a/R* = 62.58 [278.91]
b = 0.82 [1.85]
Seff = 22.25 [6.06]
Teq = 554 [38] K
Rp = 2.41 [2.28] Re
a = 0.2309 [0.0371] AU
Ag = 492.28 [950.75] [0.52σ]
Teff = 4033 [1931] K [1.80σ]

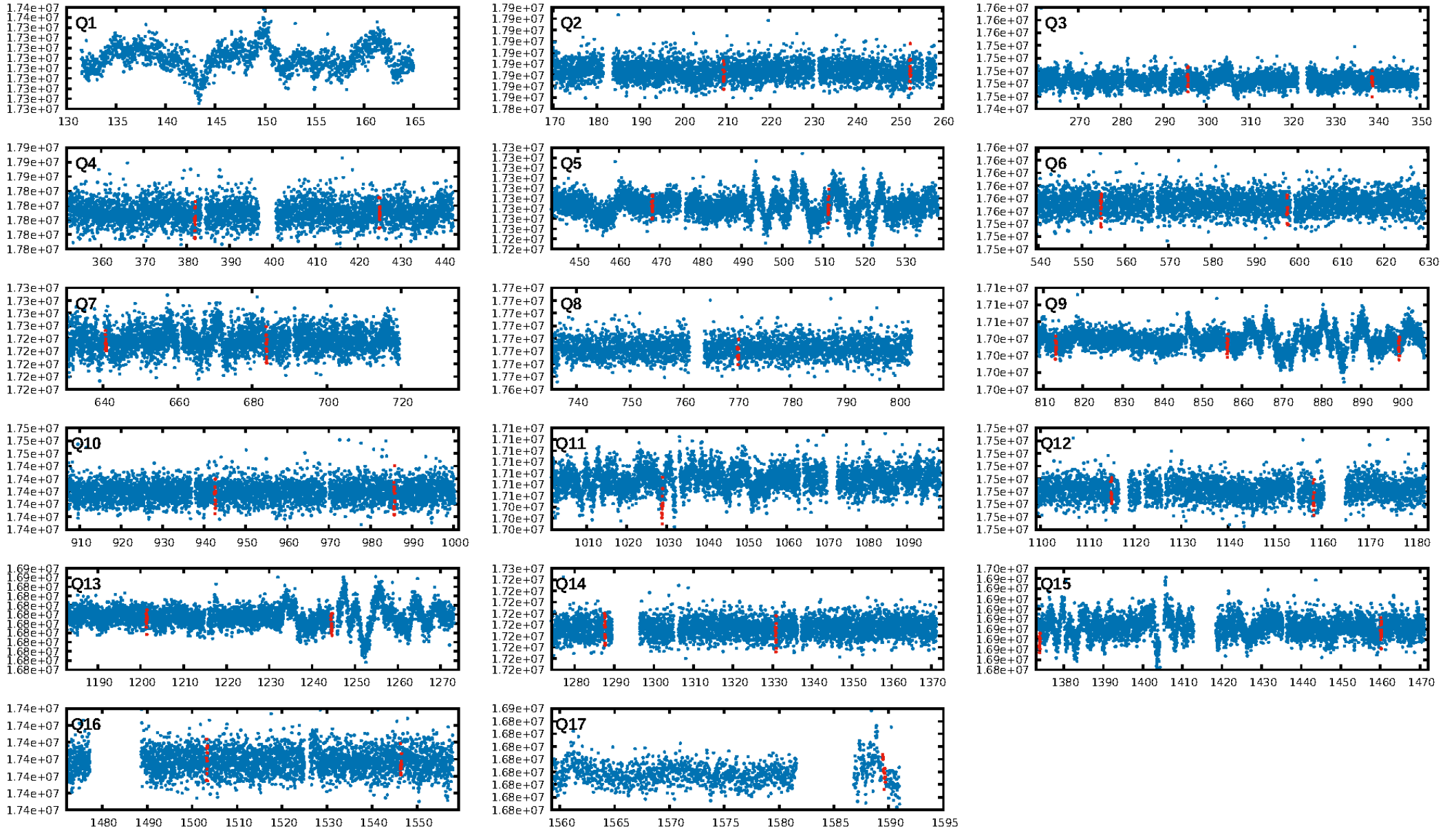
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [109.18σ]
LongPeriod-sig: 100.0% [72.33σ]
ModelChiSquare2-sig: 87.4%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: 6.64e-19
RollingBand-fgt: 0.96 [24/25]
GhostDiagnostic-chr: 14.83
Centroid-sig: 66.3%
Centroid-so: 0.424 arcsec [0.27σ]
OotOffset-rm: 0.570 arcsec [0.99σ]
KicOffset-rm: 0.414 arcsec [0.73σ]
OotOffset-st: 1/4/2/3 [10]
KicOffset-st: 1/4/2/3 [10]
DiffImageQuality-fgm: 0.50 [5/10]
DiffImageOverlap-fno: 0.88 [14/16]

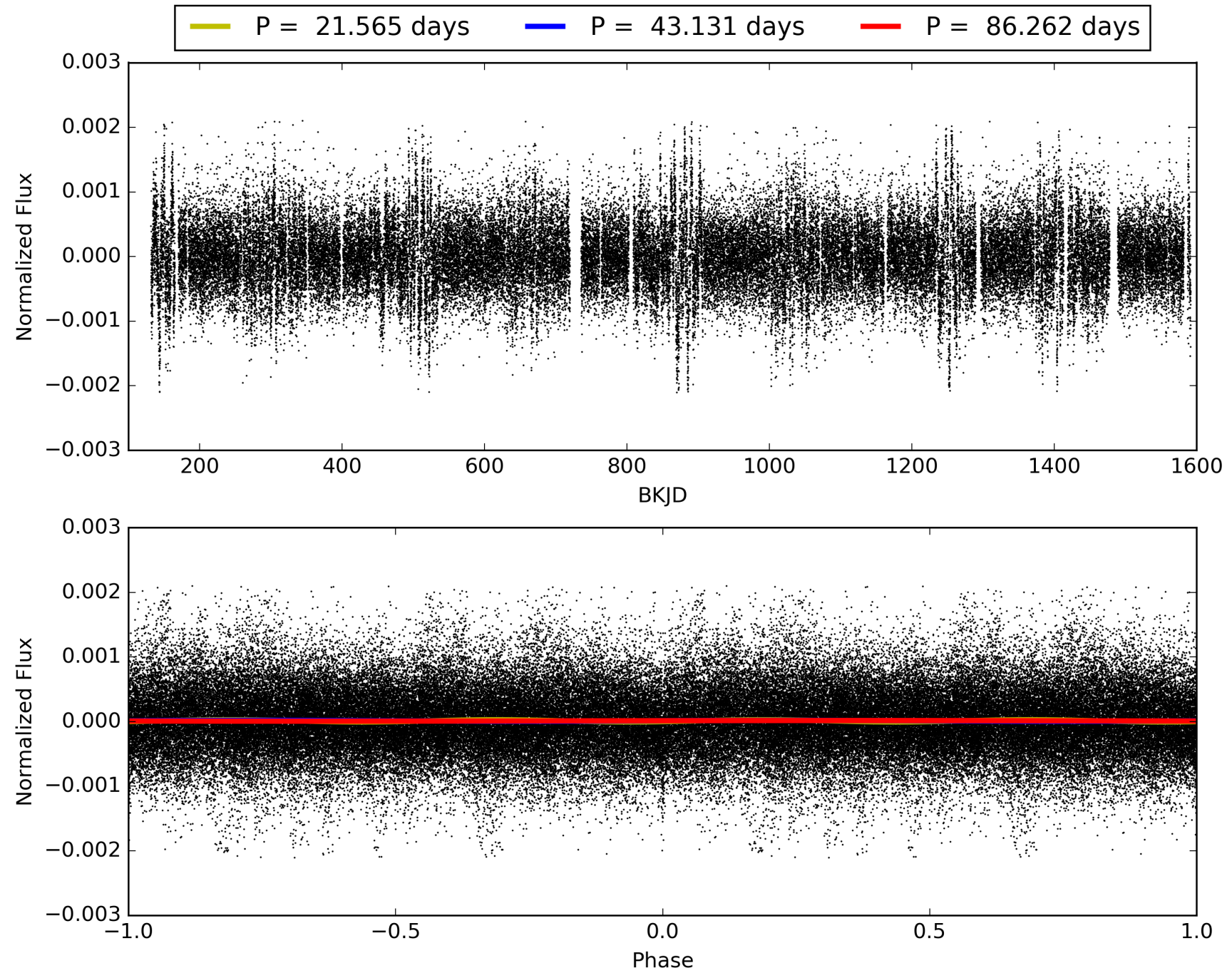
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 03:29:02 Z

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

TCE 005956342-04, PDC Light Curves

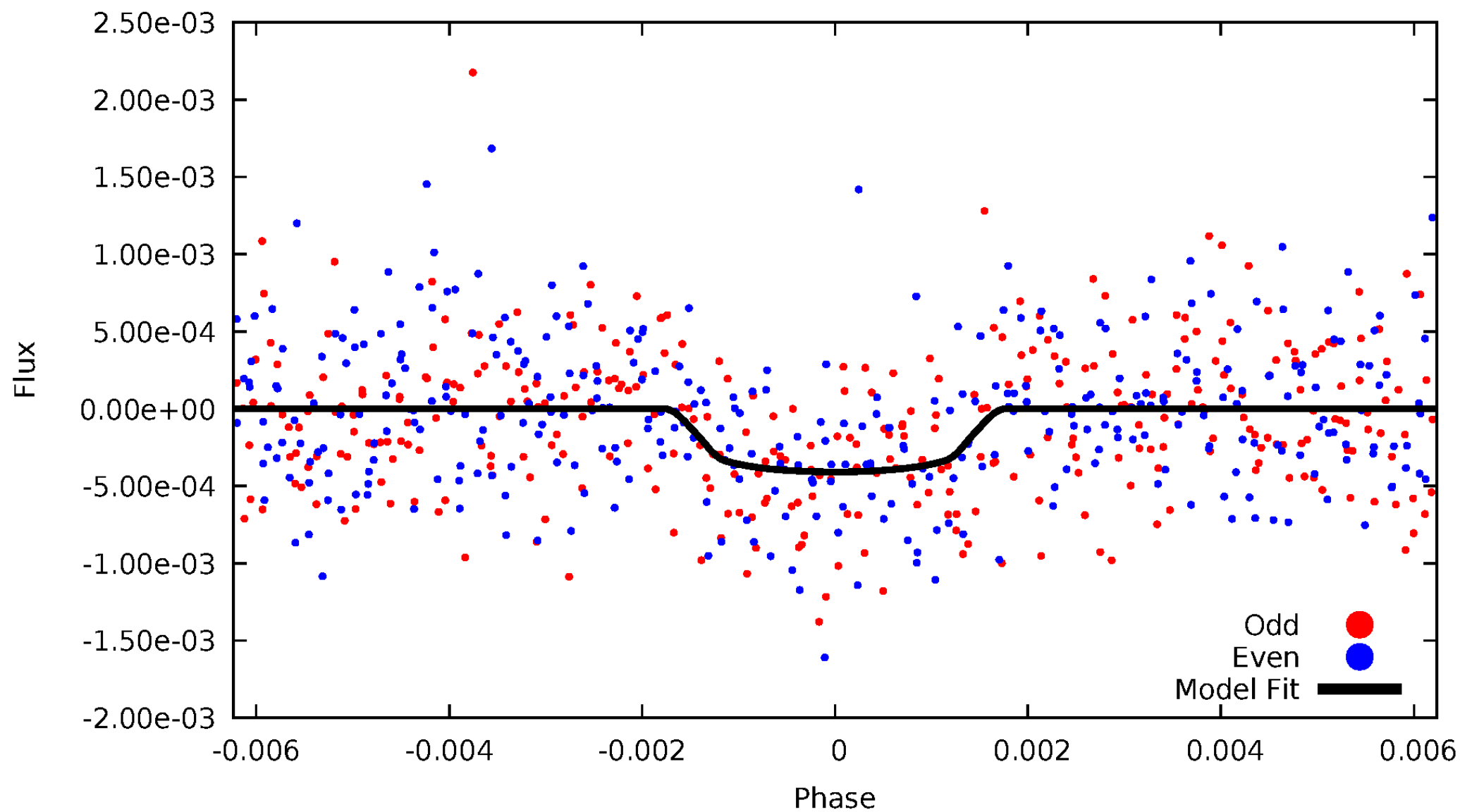


TCE 005956342-04



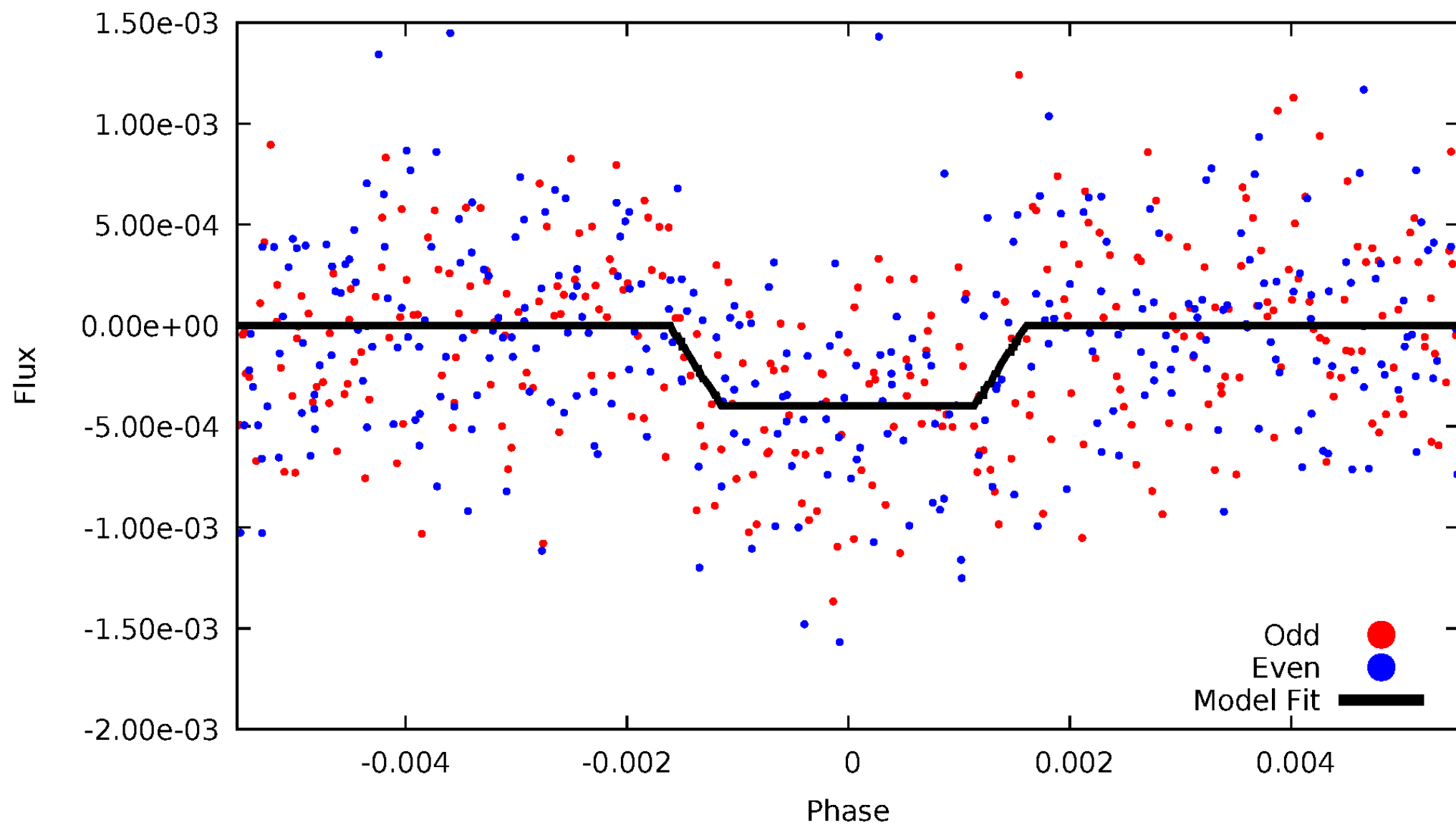
DV Odd/Even

TCE 005956342-04



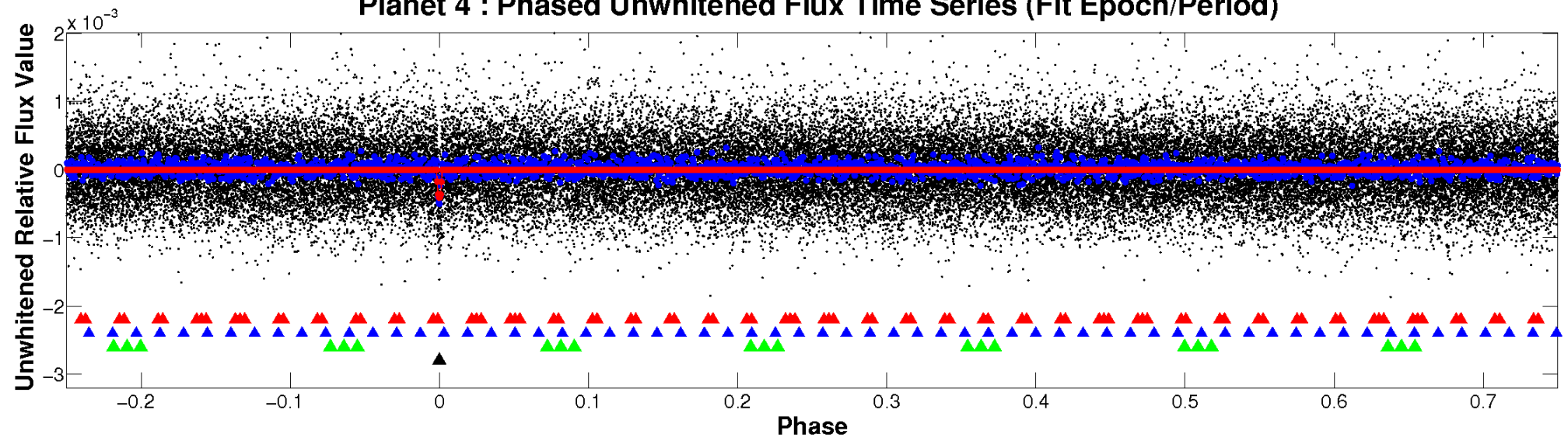
ALT Odd/Even

TCE 005956342-04

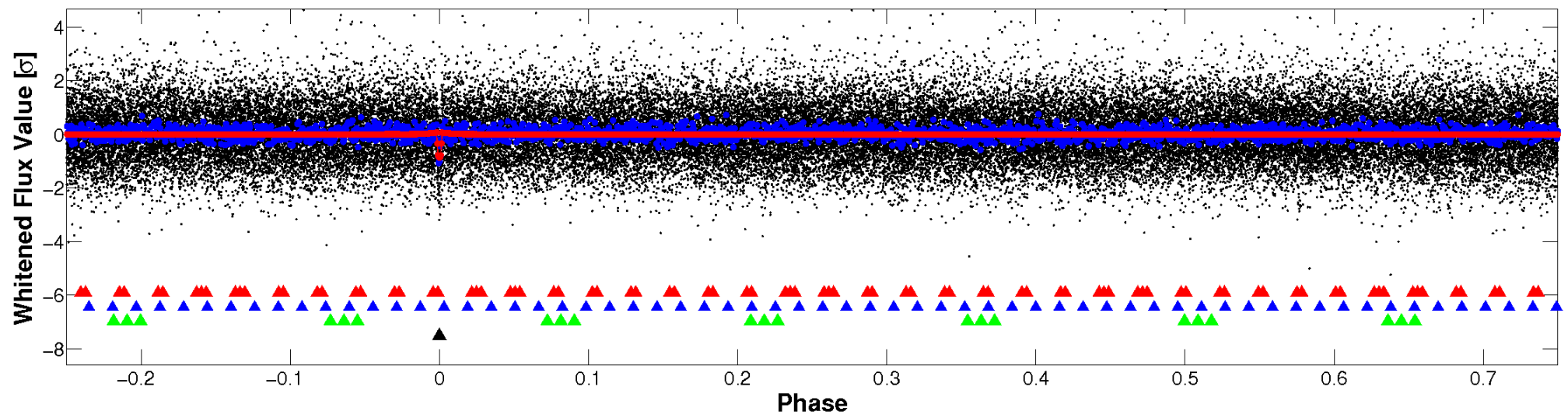


Non-Whitened Vs. Whitened Light Curve

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

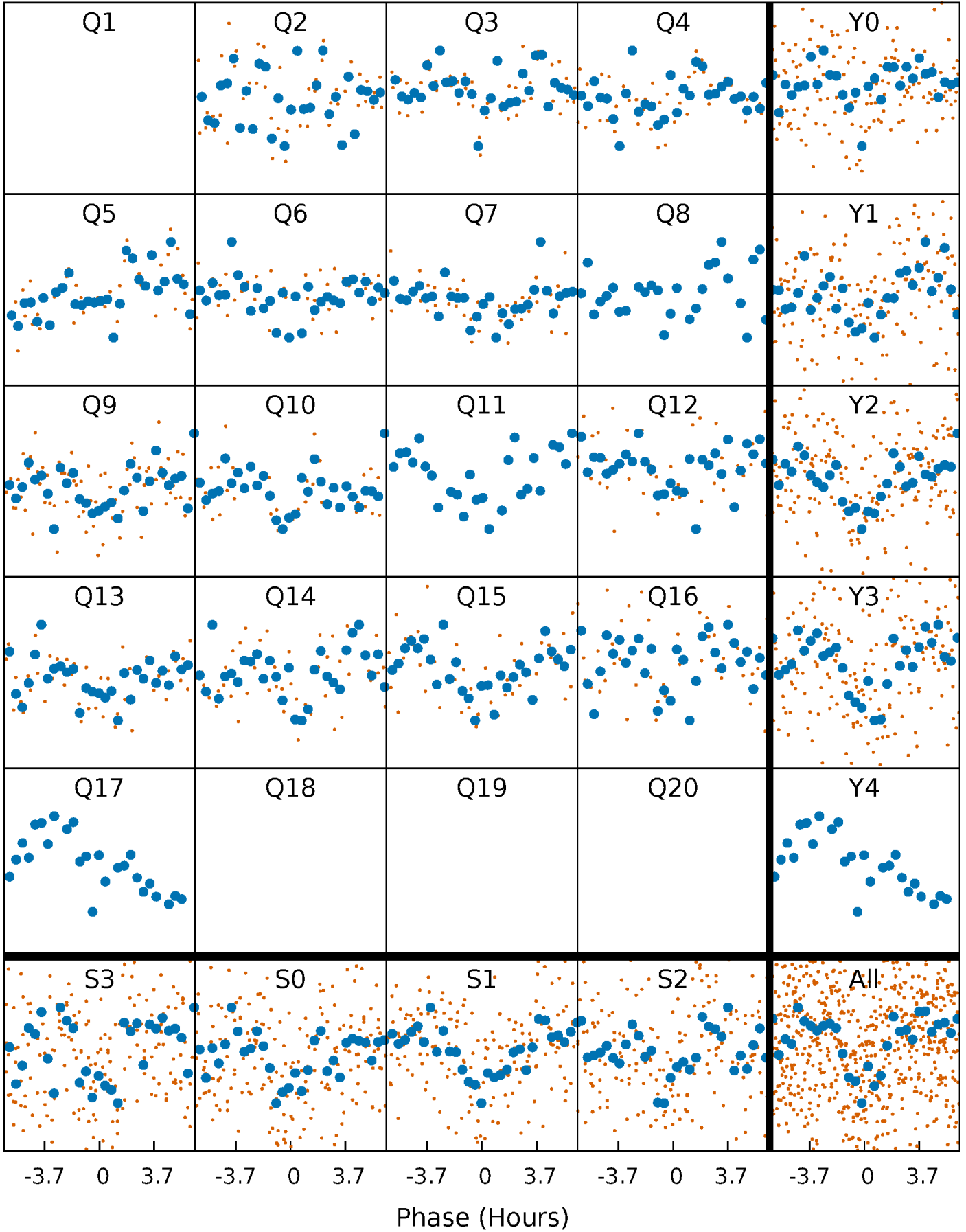


Planet 4 : Phased Whitened Flux Time Series (Fit Epoch/Period)



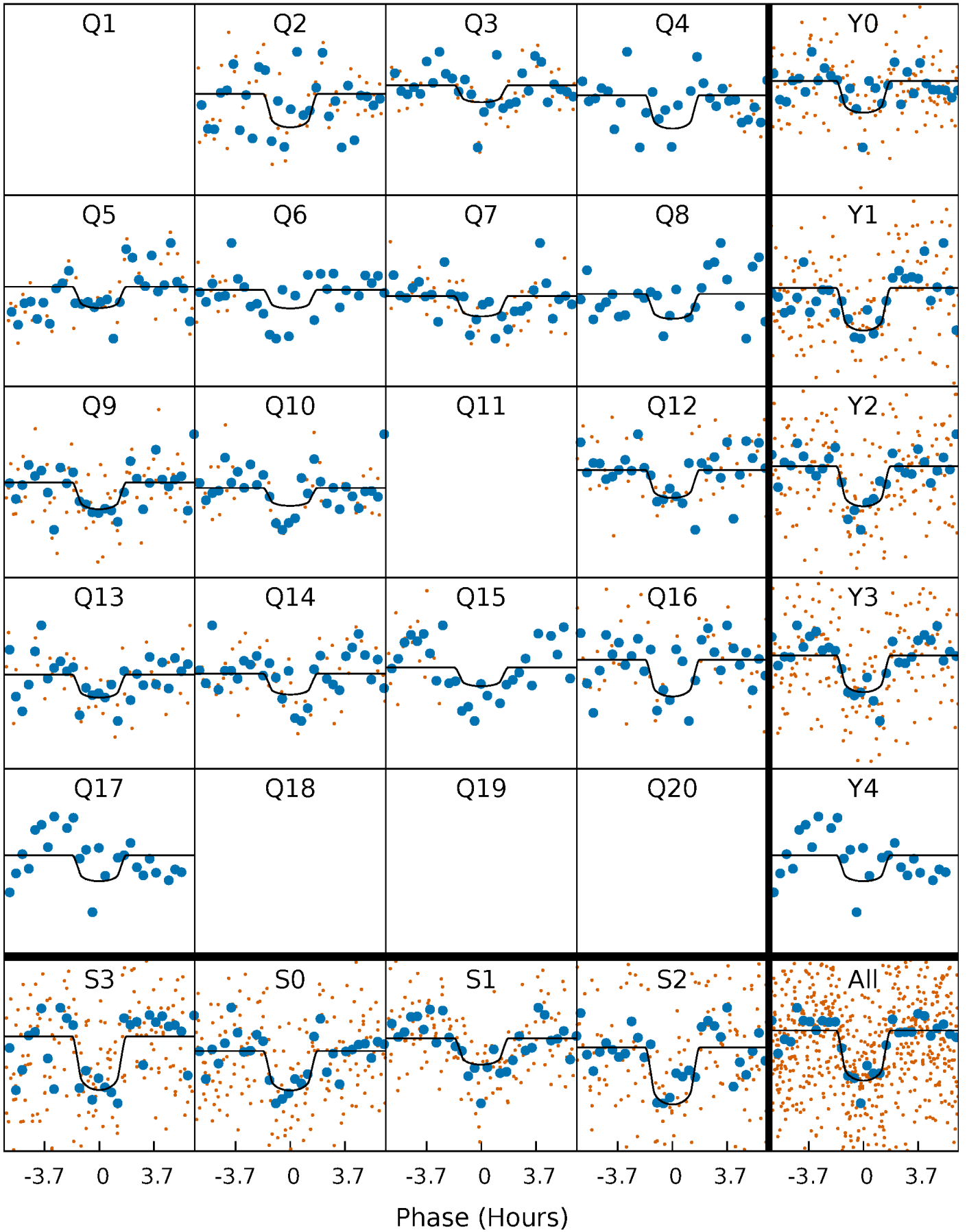
PDC Quarter-Phased Transit Curves

TCE 005956342-04 P= 43.130830 Days $T_0=166.269919$ (BKJD)



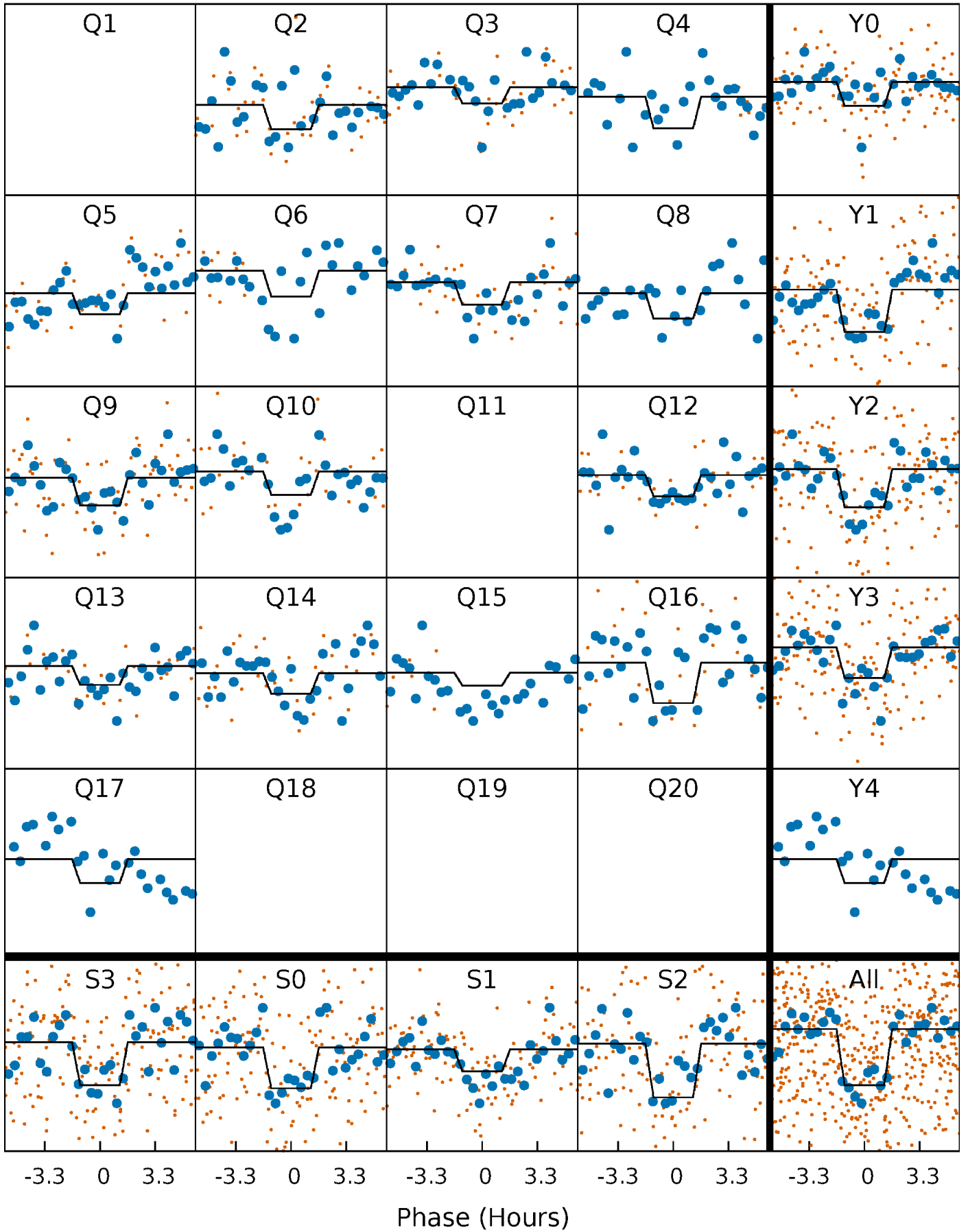
DV Quarter-Phased Transit Curves

TCE 005956342-04 P= 43.130830 Days $T_0=166.269919$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

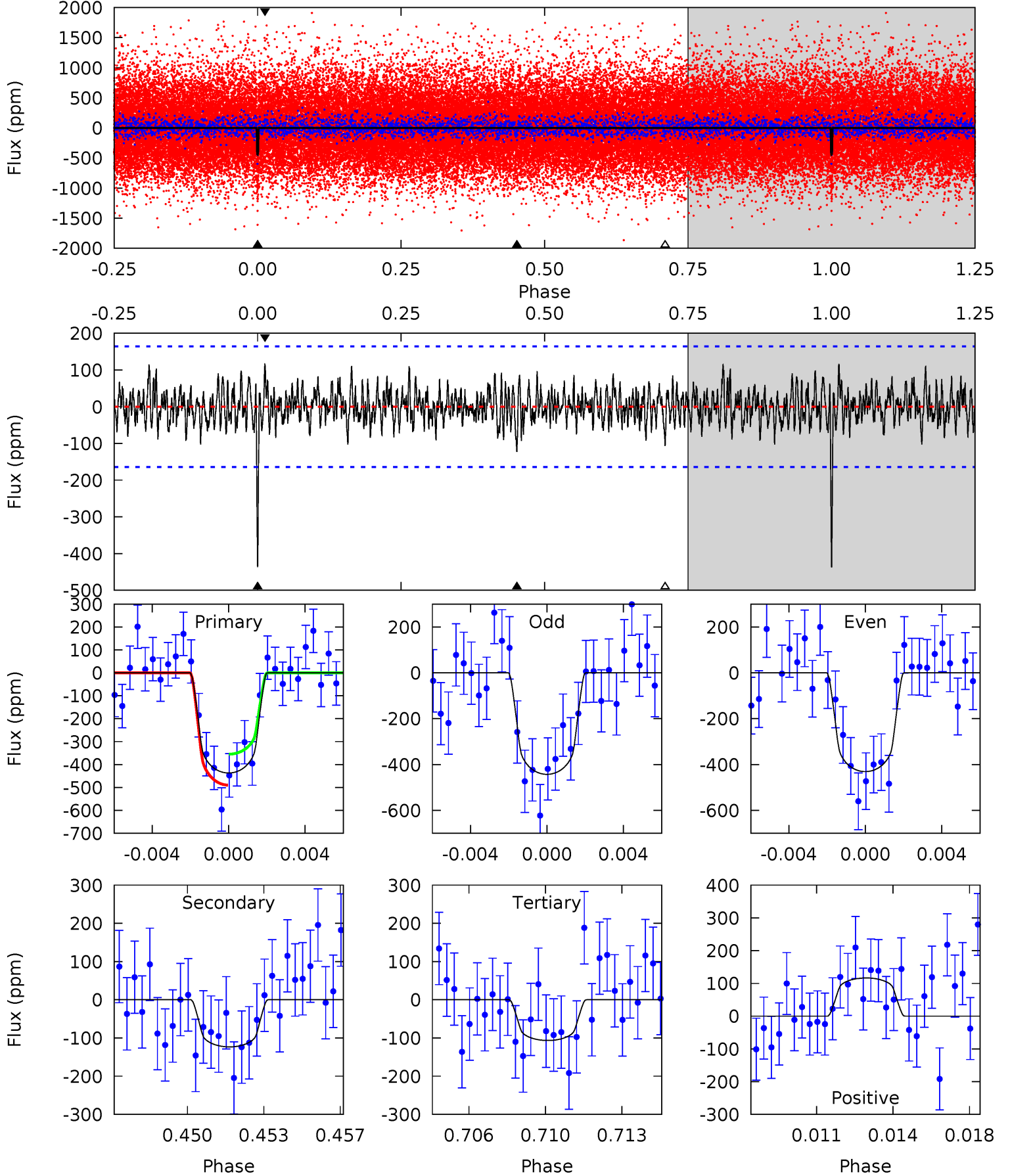
TCE 005956342-04 P= 43.130934 Days $T_0=166.268358$ (BKJD)



DV Model-Shift Uniqueness Test

005956342-04, P = 43.130830 Days, E = 123.139089 Days

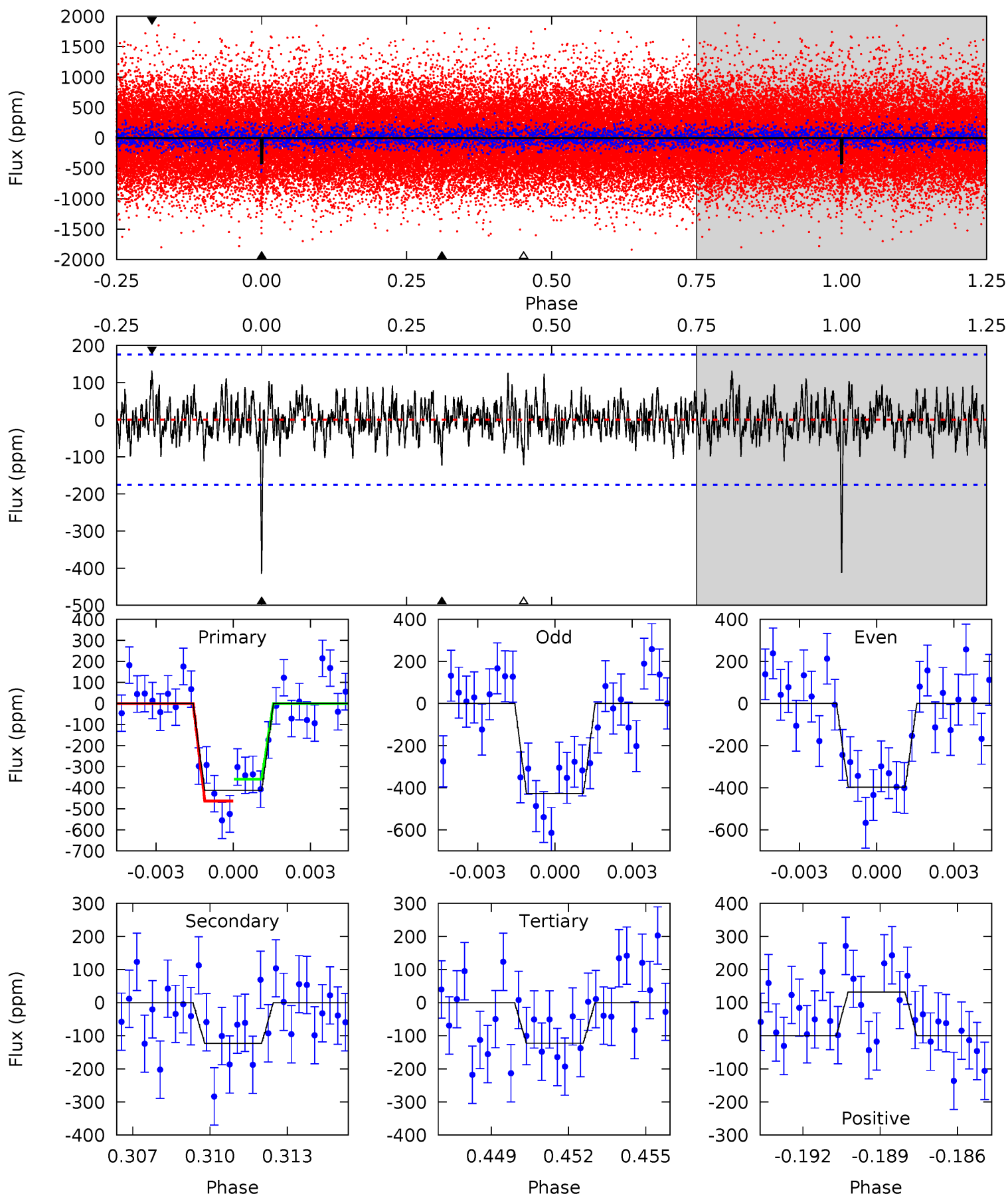
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
13.9	3.92	3.39	3.70	5.22	2.92	1.19	10.5	10.2	0.53	0.22	0.19	1.07	0.21	2.15



Alt Model-Shift Uniqueness Test

005956342-04, P = 43.130934 Days, E = 123.137424 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
12.3	3.68	3.66	3.94	5.25	2.96	1.15	8.66	8.39	0.02	-0.26	0.46	1.04	0.24	1.53



Stellar Parameters For KIC 005956342

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	5839^{+105}_{-105}	$4.327^{+0.156}_{-0.104}$	$-0.280^{+0.150}_{-0.150}$	$1.067^{+0.156}_{-0.172}$	$0.881^{+0.070}_{-0.051}$	$1.023^{+0.659}_{-0.343}$
	+2%/-2%	+4%/-2%	+54%/-54%	+15%/-16%	+8%/-6%	+64%/-34%
Source	SPE58	SPE58	SPE58	DSEP		

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

Secondary Eclipse Parameters for KIC 005956342-04 / KOI 1052.04

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-123 ± 31	$2.89^{+2.02}_{-1.95}$	771^{+36}_{-35}	4184^{+2381}_{-741}	442^{+3240}_{-301}
Alt.	-123 ± 33	$2.68^{+2.24}_{-1.67}$	770^{+35}_{-37}	4241^{+2325}_{-790}	488^{+2962}_{-346}

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 $A_{obs} \gg 1.0$

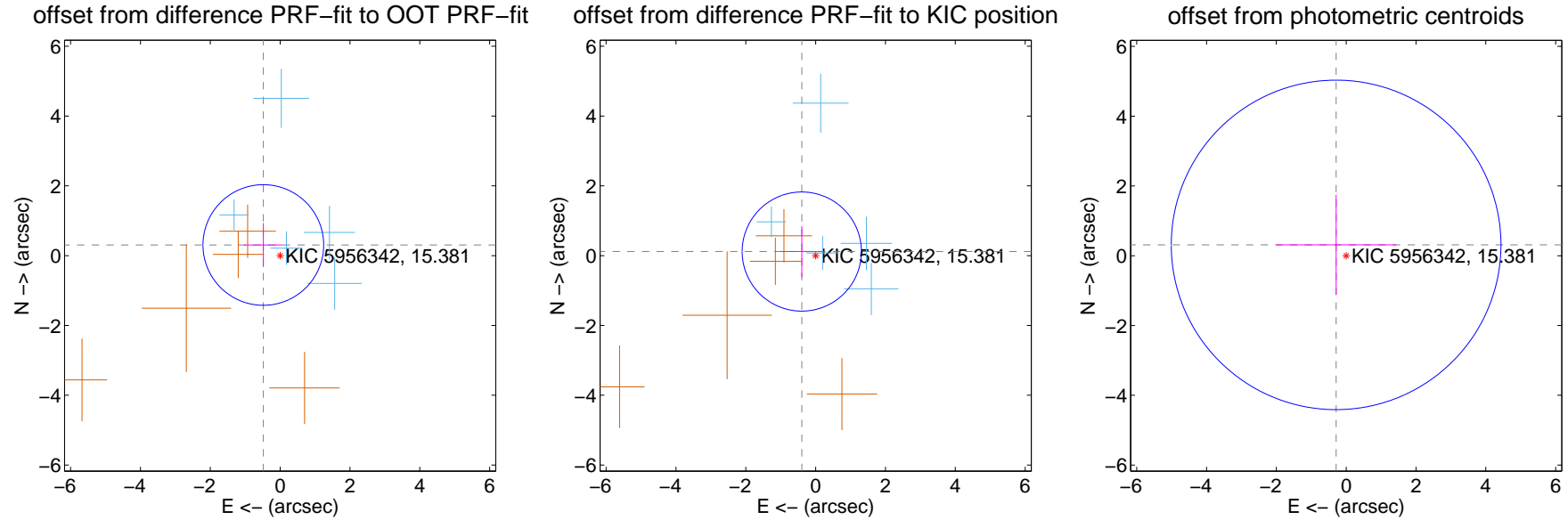
DV Centroid Data

Supplemental centroid analysis for 005956342-04. Kepler magnitude: 15.38. Transit SNR 9.70

There are 5 quarters with good PRF difference image offsets

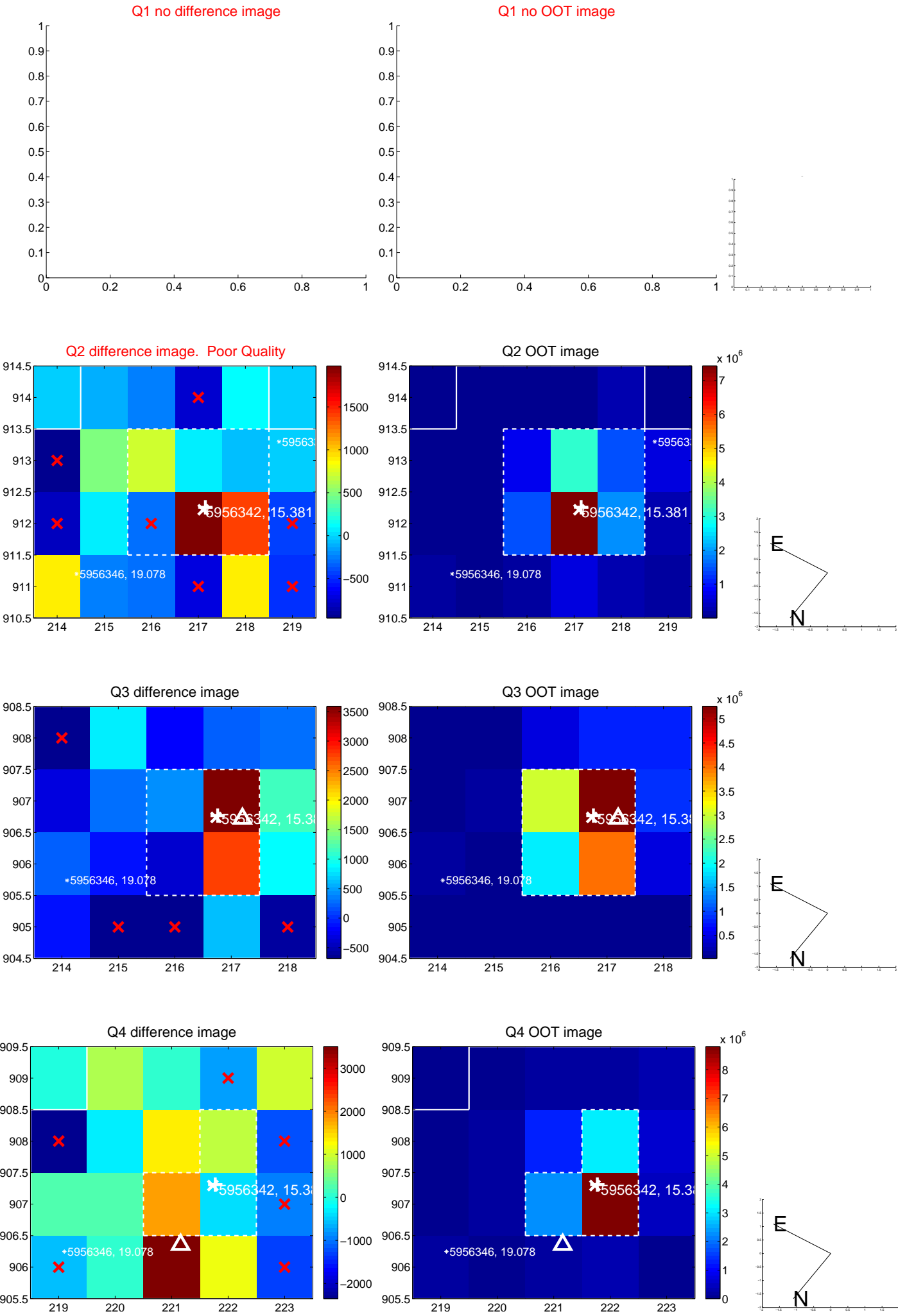
The direct PRF centroid is offset from the target star catalog position by about 0.21 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.570 ± 0.576	0.99	0.482 ± 0.553	0.305 ± 0.630
PRF-fit source offset from KIC position	0.414 ± 0.569	0.73	0.397 ± 0.613	0.117 ± 0.730
photometric centroid source offset	0.42 ± 1.57	0.27	0.29 ± 1.72	0.31 ± 1.43

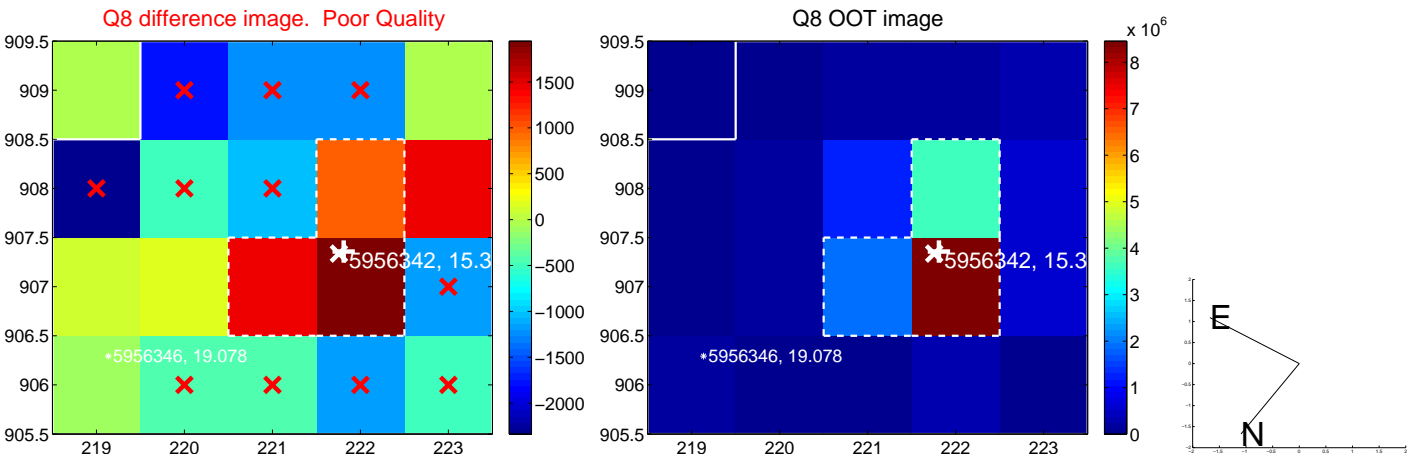
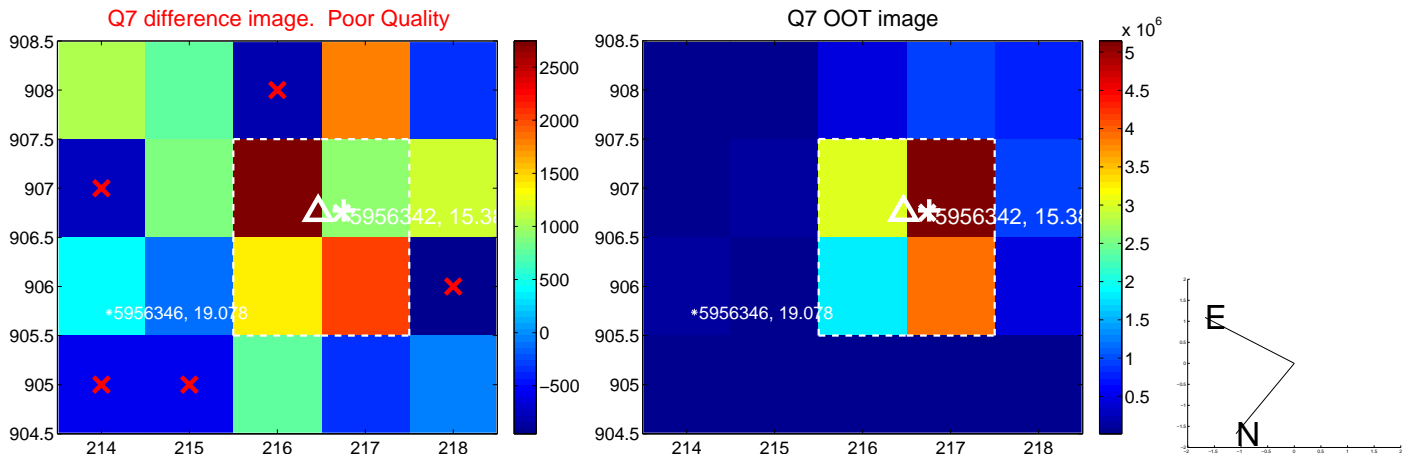
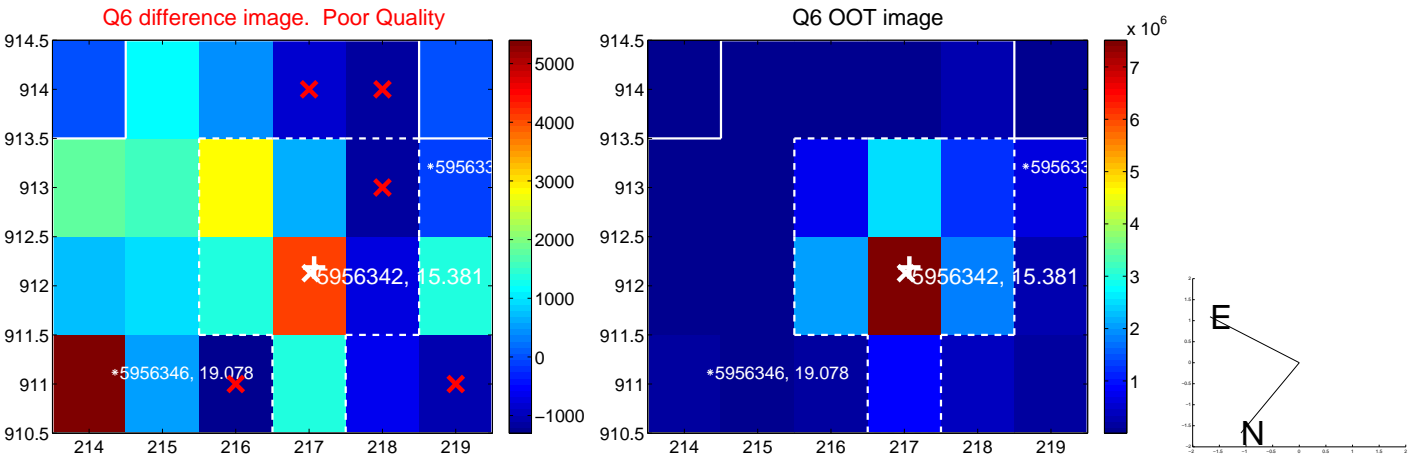
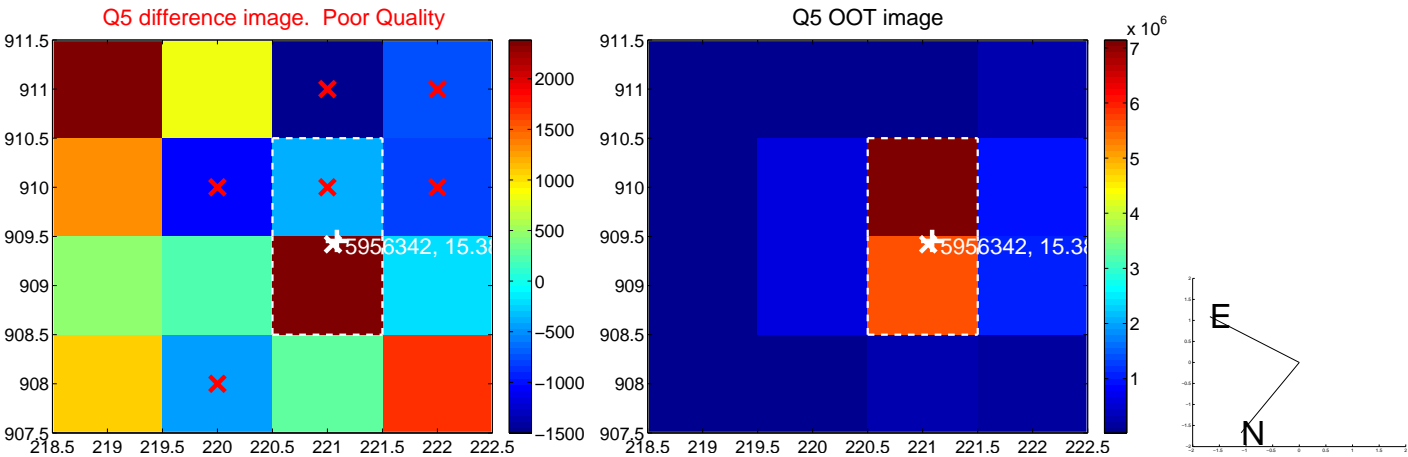


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets**; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

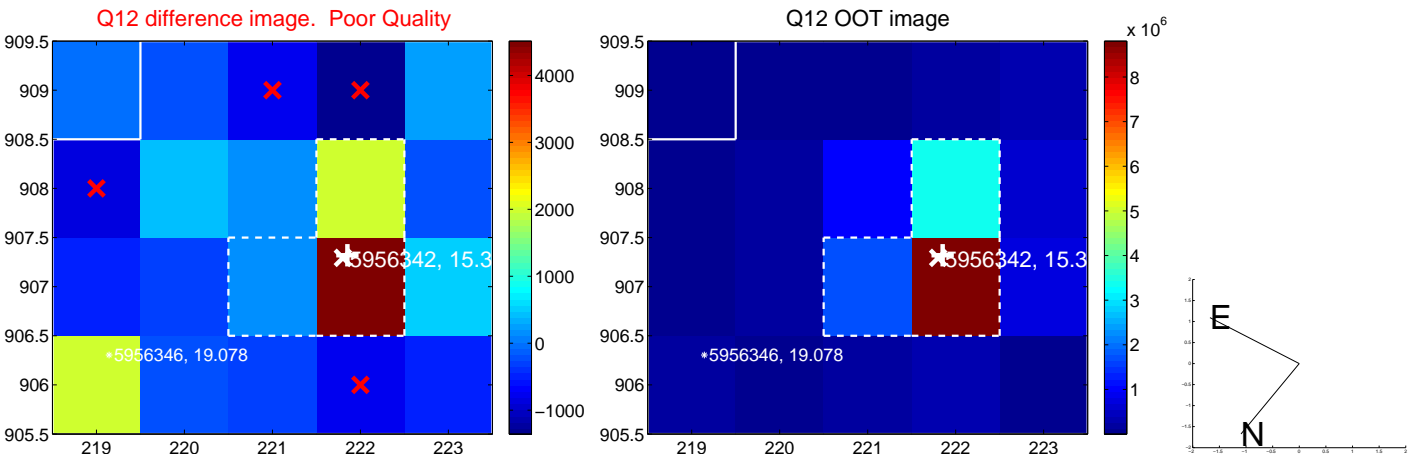
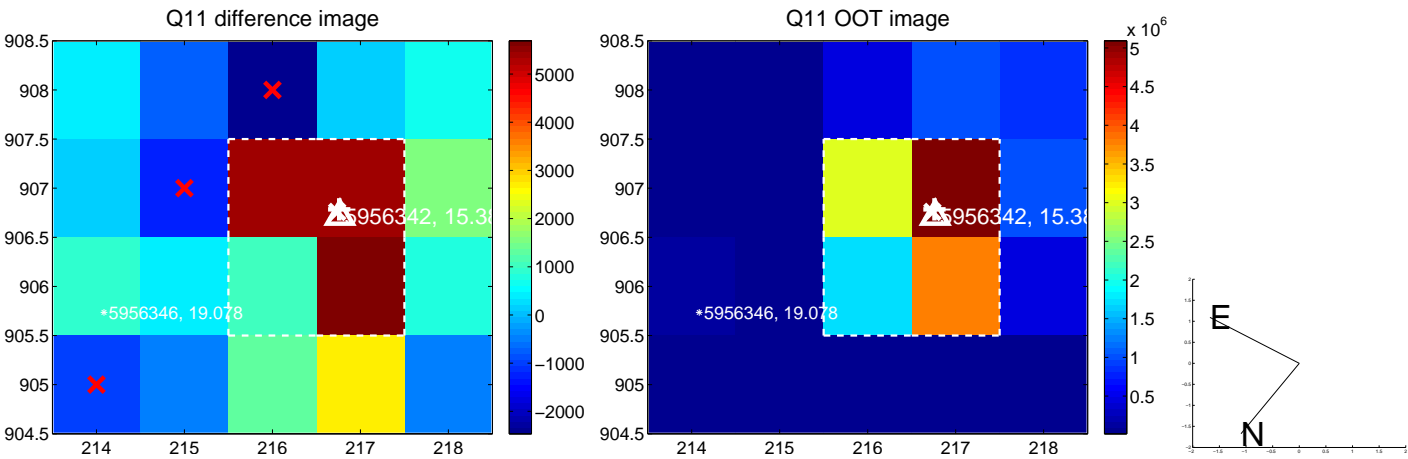
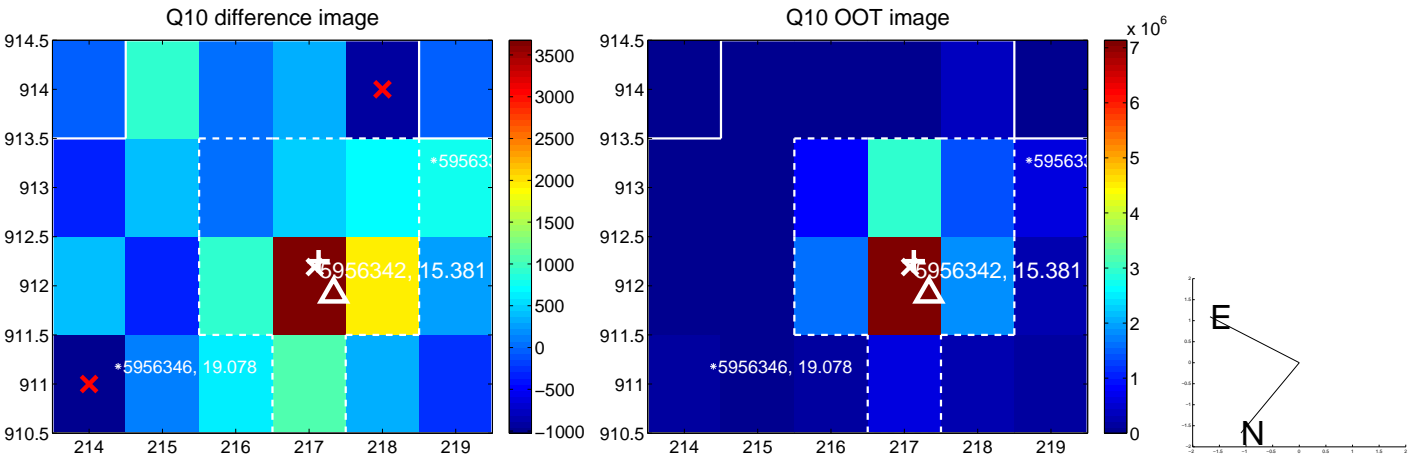
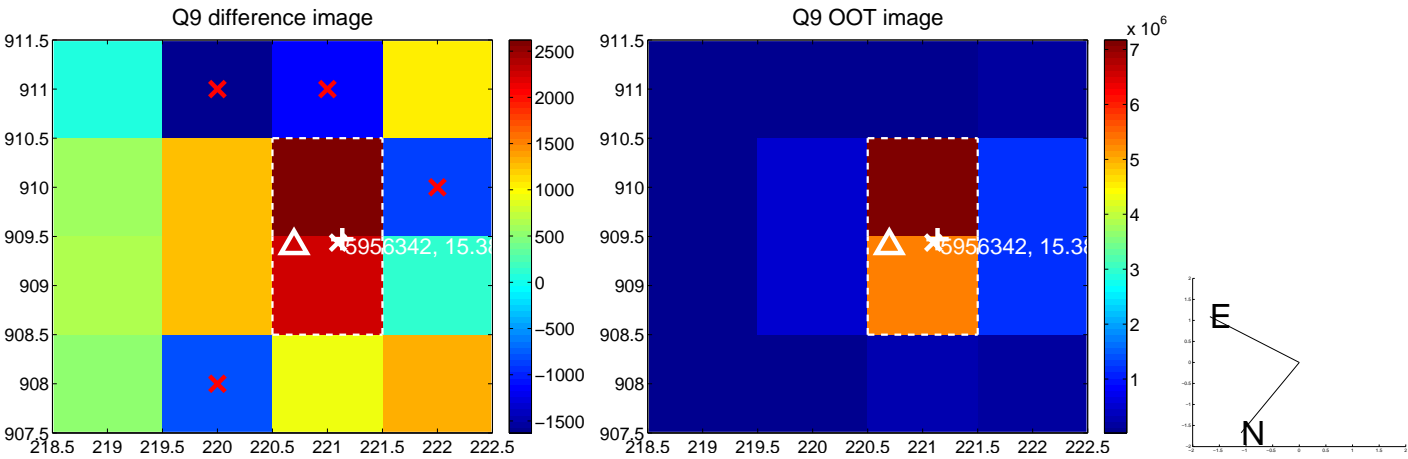
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



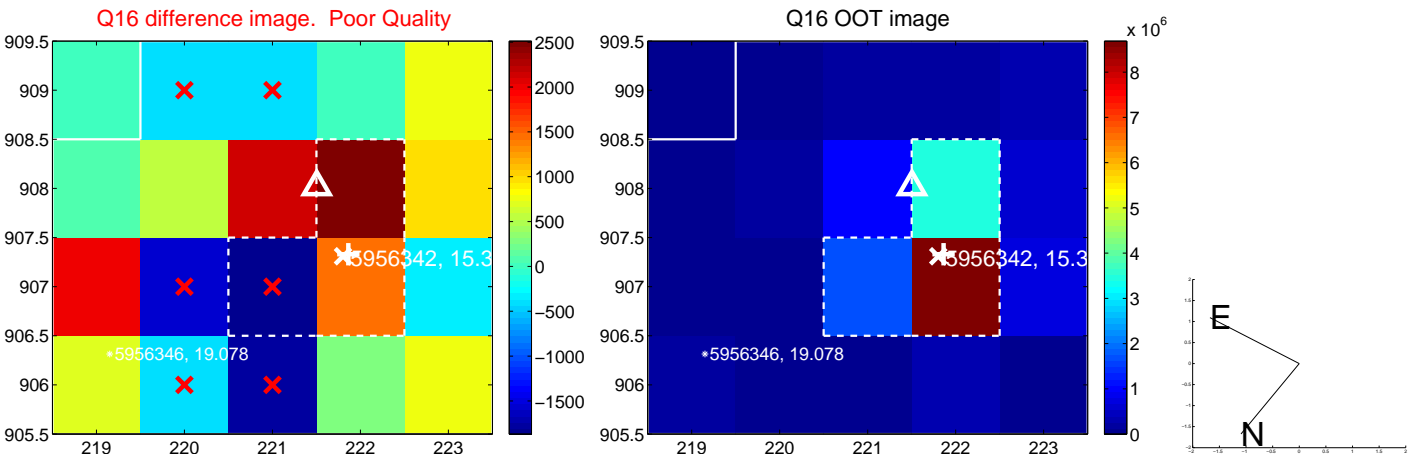
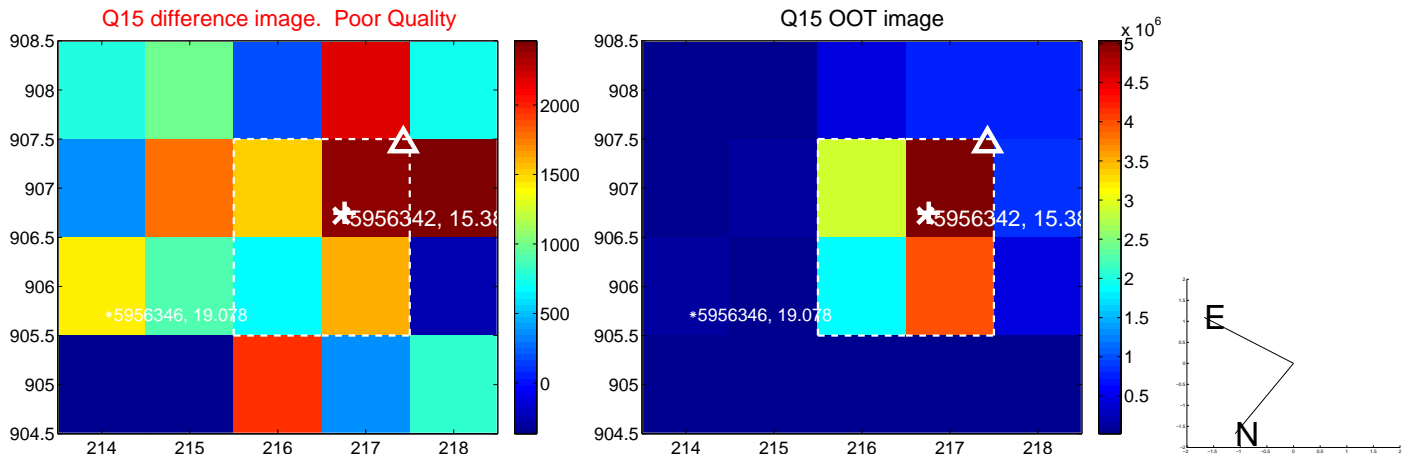
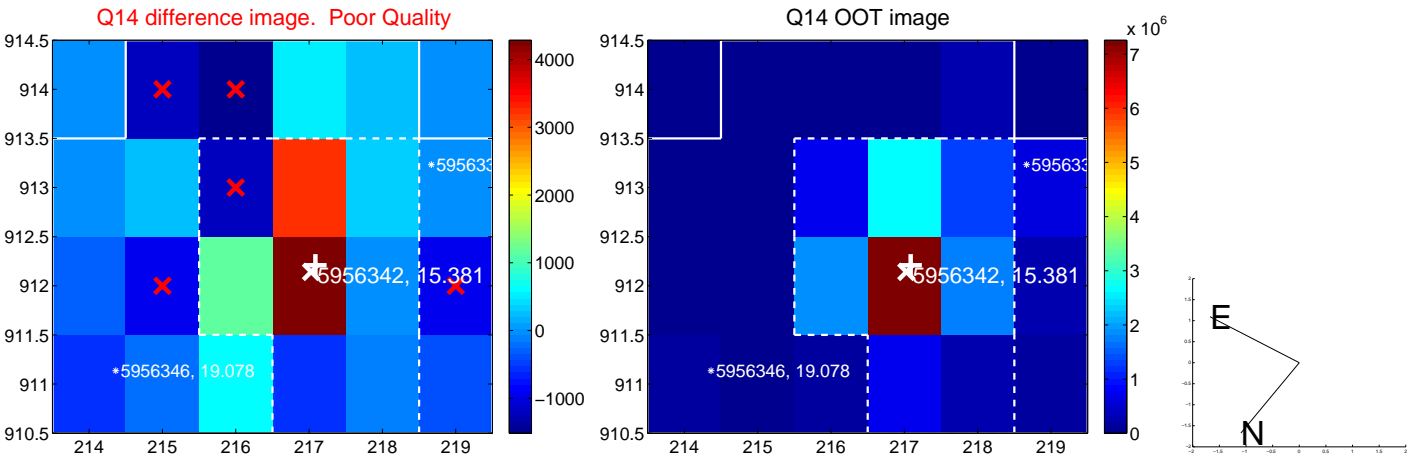
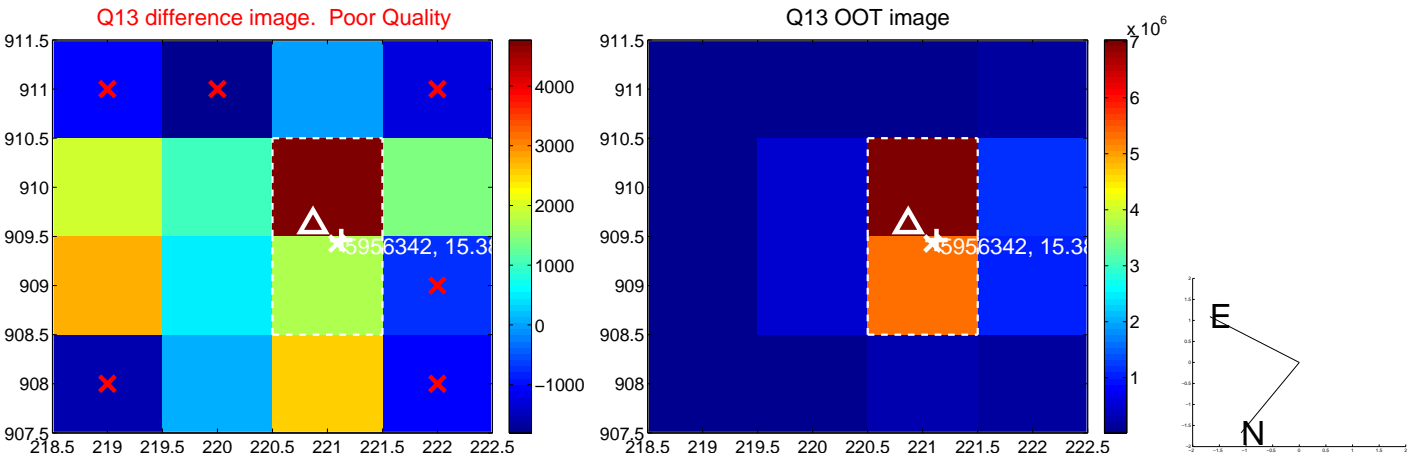
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



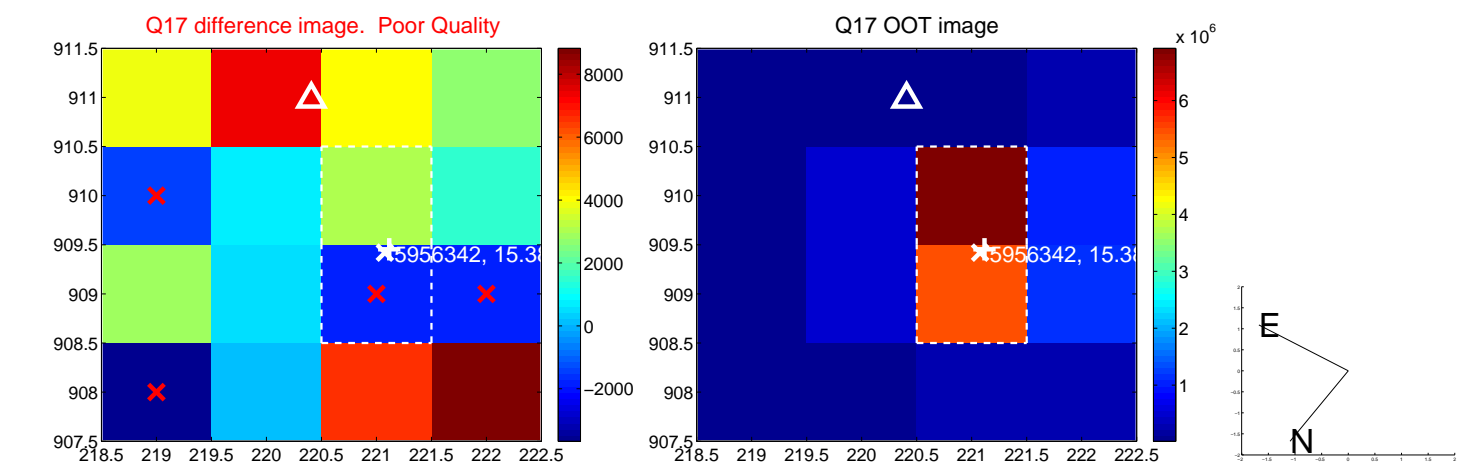
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



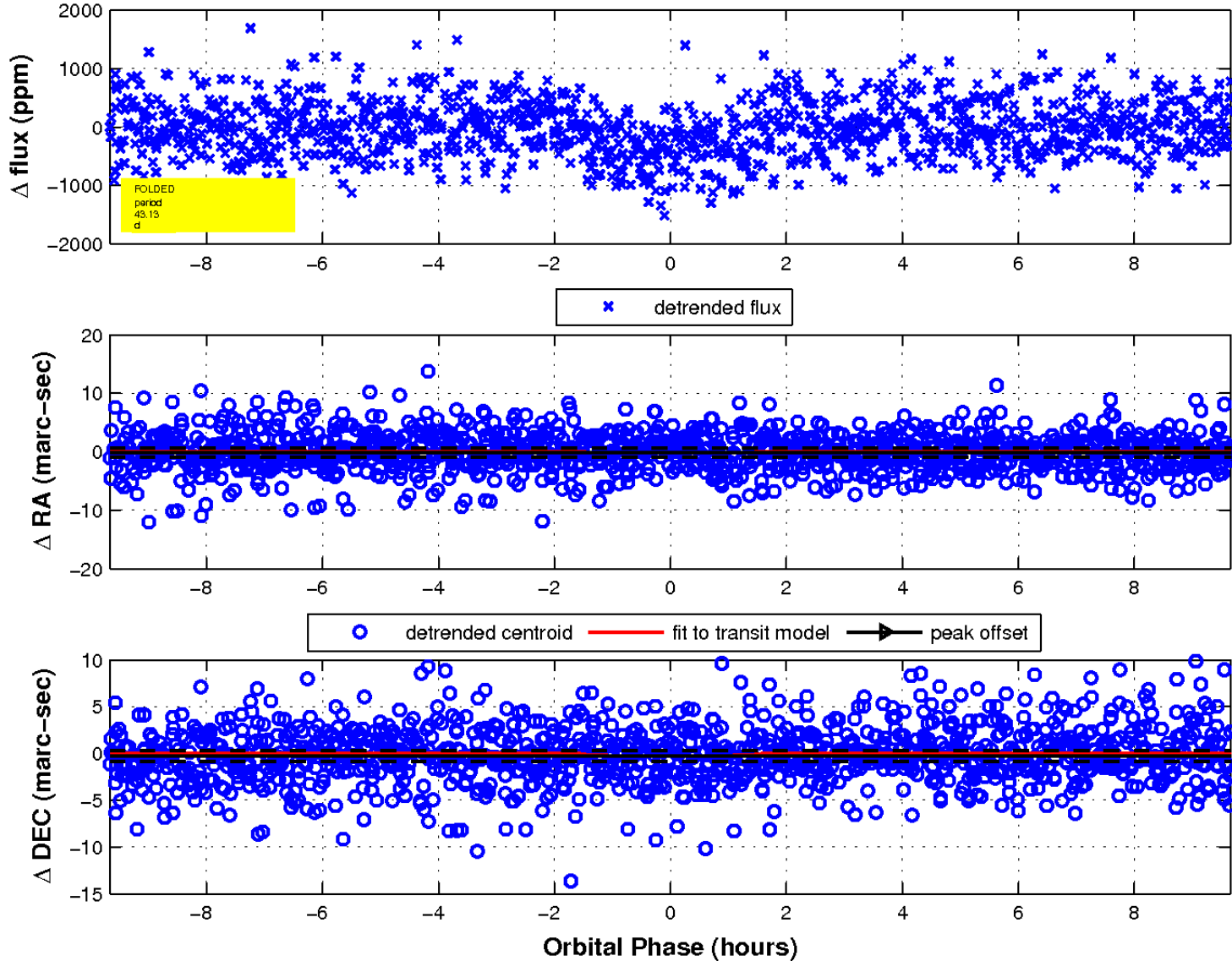
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



fluxWeightedCentroids, Planet 4 of 4



UKIRT Image

Declination

