

KIC 011957183

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})
011957183-01	OBS	No	2.054065	132.183023	18.5	7.922	8.3	8.5	1.46	7153	0.85	4063.10
011957183-02	OBS	No	247.250476	154.484292	143.6	18.421	11.0	6.7	1.46	7153	1.94	6.84
011957183-03	OBS	No	2.054100	133.201861	16.2	11.645	10.3	10.8	1.46	7153	0.60	4063.01

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
011957183-01	OBS	FP	0.00	1	0	0	0	LPP_DV
011957183-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_MARSHALL—TRANS_GAPPED—LPP_DV—ALL_TRANS_CHASES—CENT_FEW_DIFFS
011957183-03	OBS	FP	0.00	1	0	0	0	LPP_DV—SAME_NTL_PERIOD

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

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

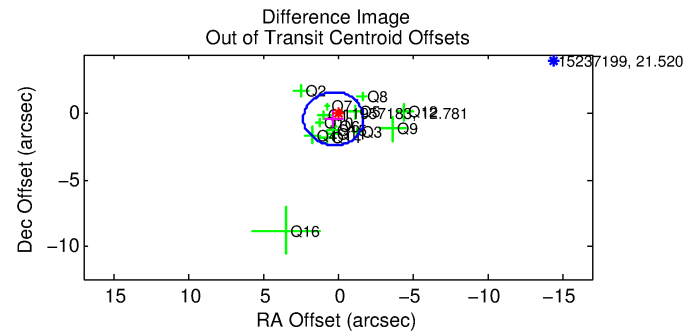
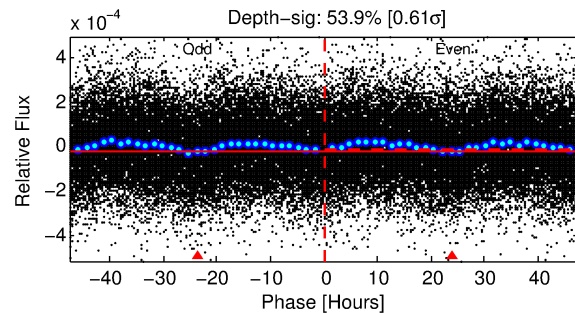
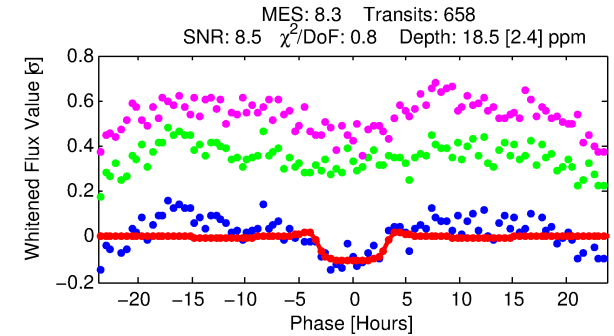
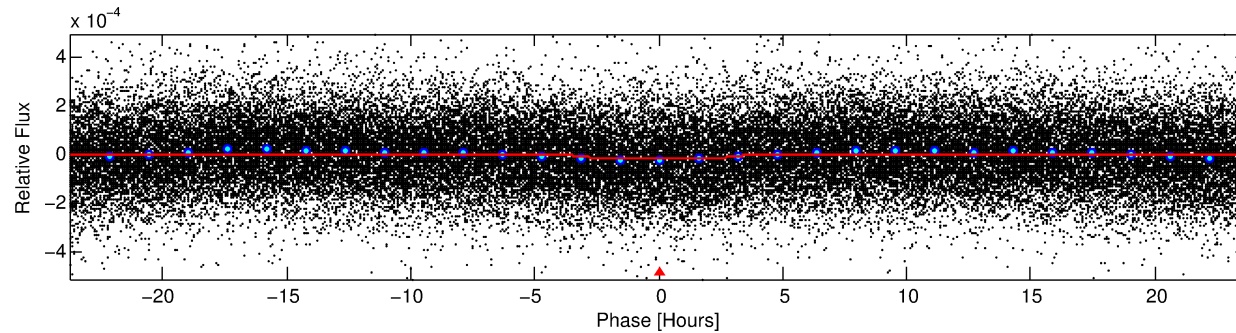
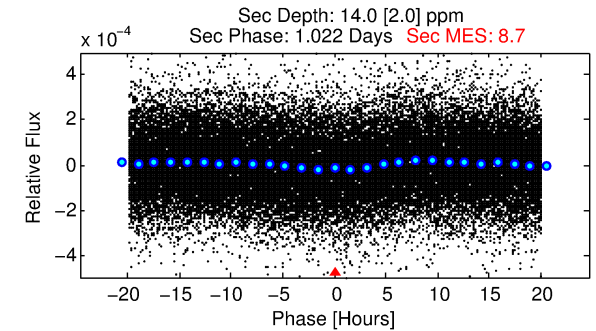
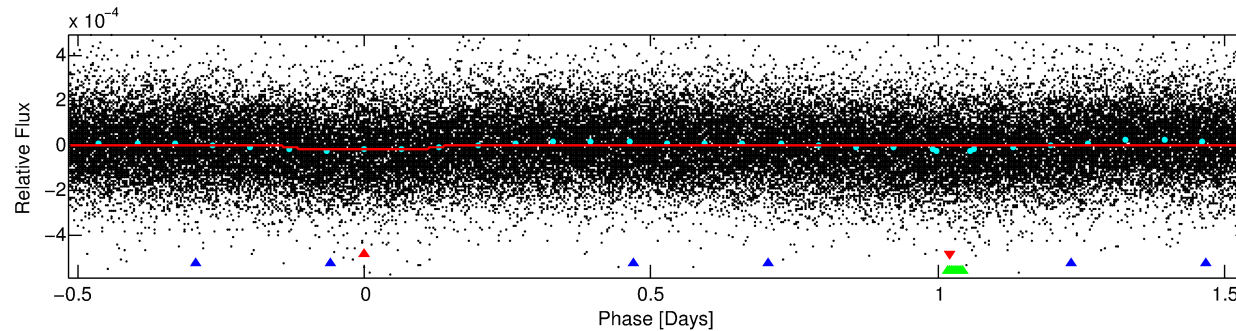
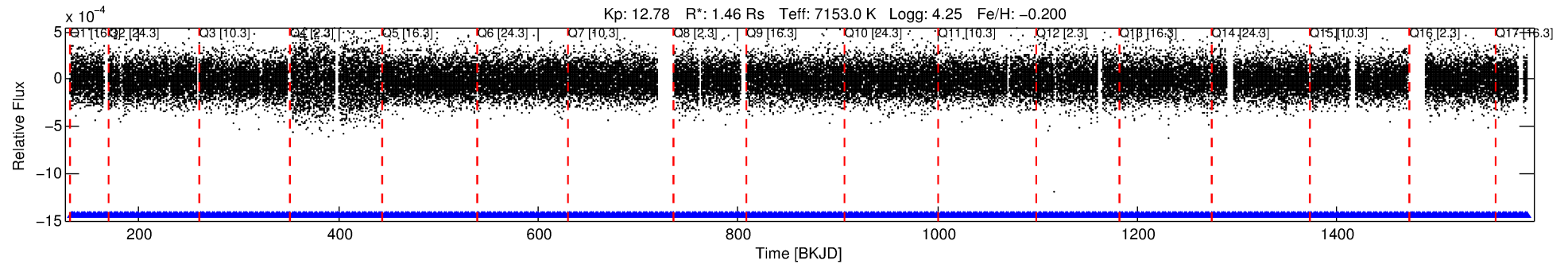
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 011957183-01

No Significant Match Found

DV One-Page Summary

KIC: 11957183 Candidate: 1 of 3 Period: 2.054 d



DV Fit Results:

Period = 2.05406 [0.00004] d
Epoch = 132.1830 [0.0121] BKJD
Rp/R* = 0.0053 [0.0004]
a/R* = 1.06 [0.03]
b = 0.99 [0.01]
Seff = 4063.10 [1736.42]
Teq = 2036 [218] K
Rp = 0.85 [0.31] Re
a = 0.0352 [0.0100] AU
Ag = 13.19 [5.97] [2.04σ]
Teffp = 5999 [395] K [8.80σ]

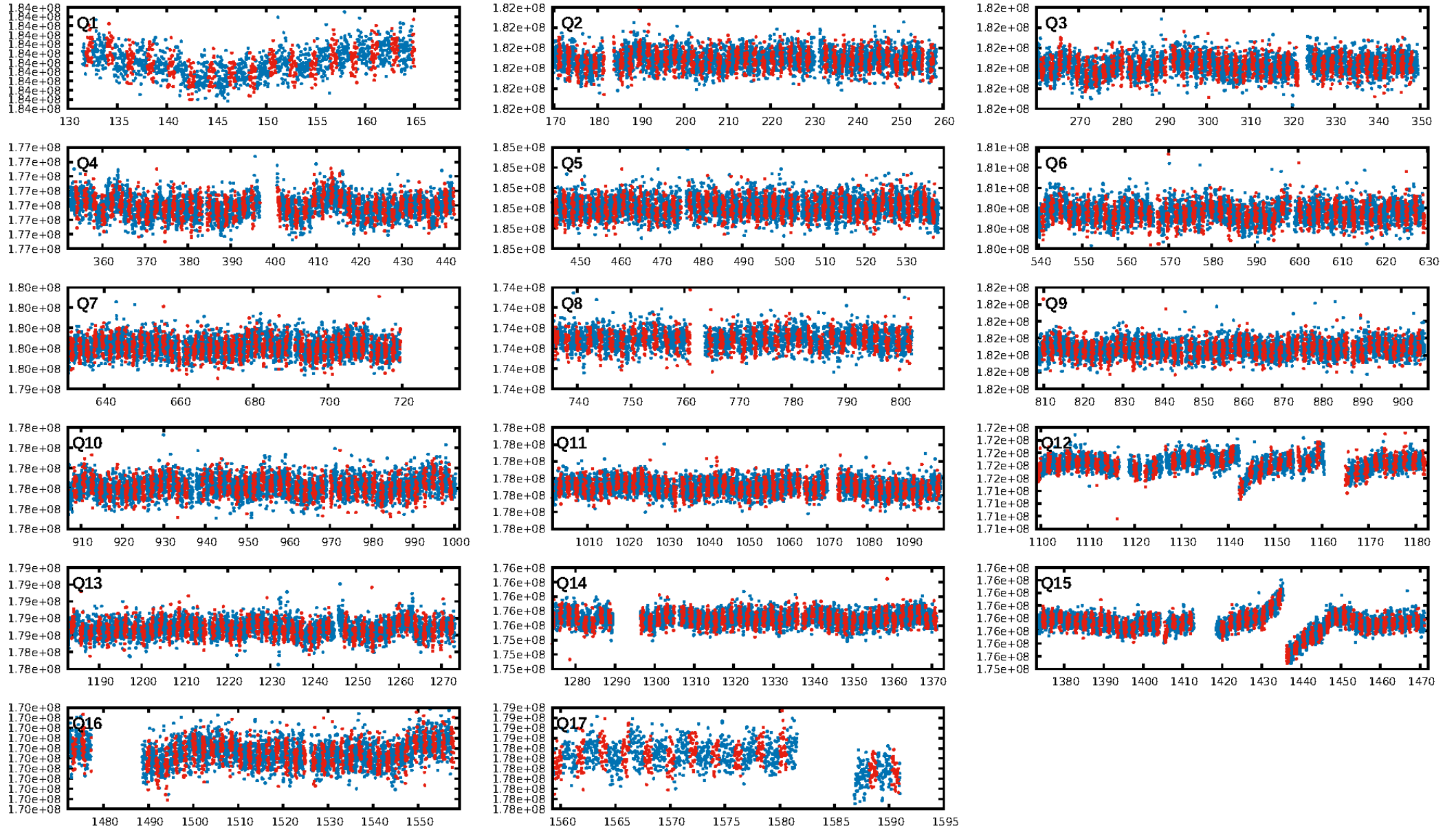
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: 0.0% [0.00σ]
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [628/628]
GhostDiagnostic-chr: 2.076
Centroid-sig: 10.9%
Centroid-so: 1.165 arcsec [1.15σ]
OotOffset-rm: 0.451 arcsec [0.67σ]
KicOffset-rm: 0.502 arcsec [0.66σ]
OotOffset-st: 4/4/4/3 [15]
KicOffset-st: 4/4/4/3 [15]
DiffImageQuality-fgm: 0.73 [11/15]
DiffImageOverlap-fno: 1.00 [17/17]

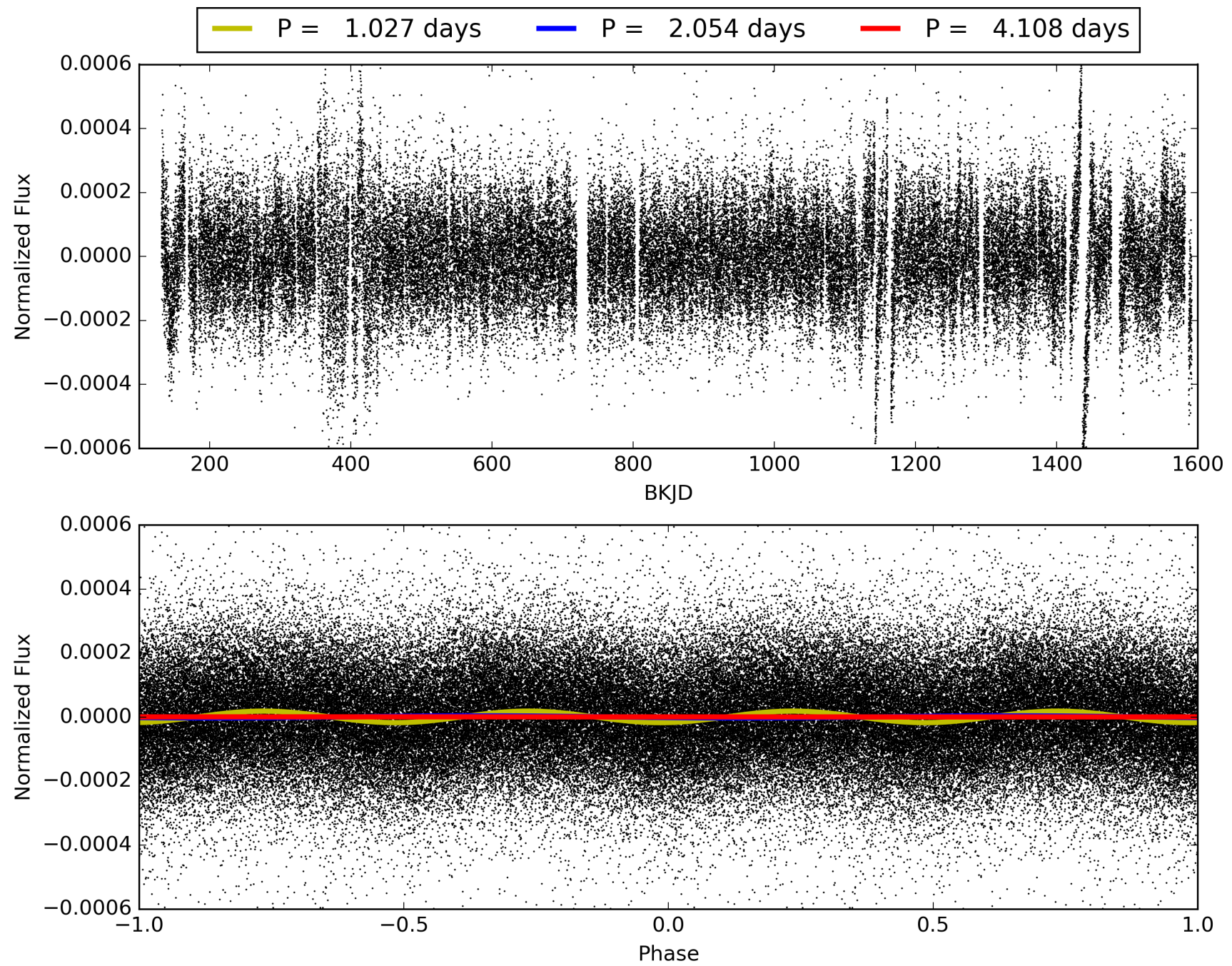
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 29-Jan-2016 12:47:39 Z

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

TCE 011957183-01, PDC Light Curves

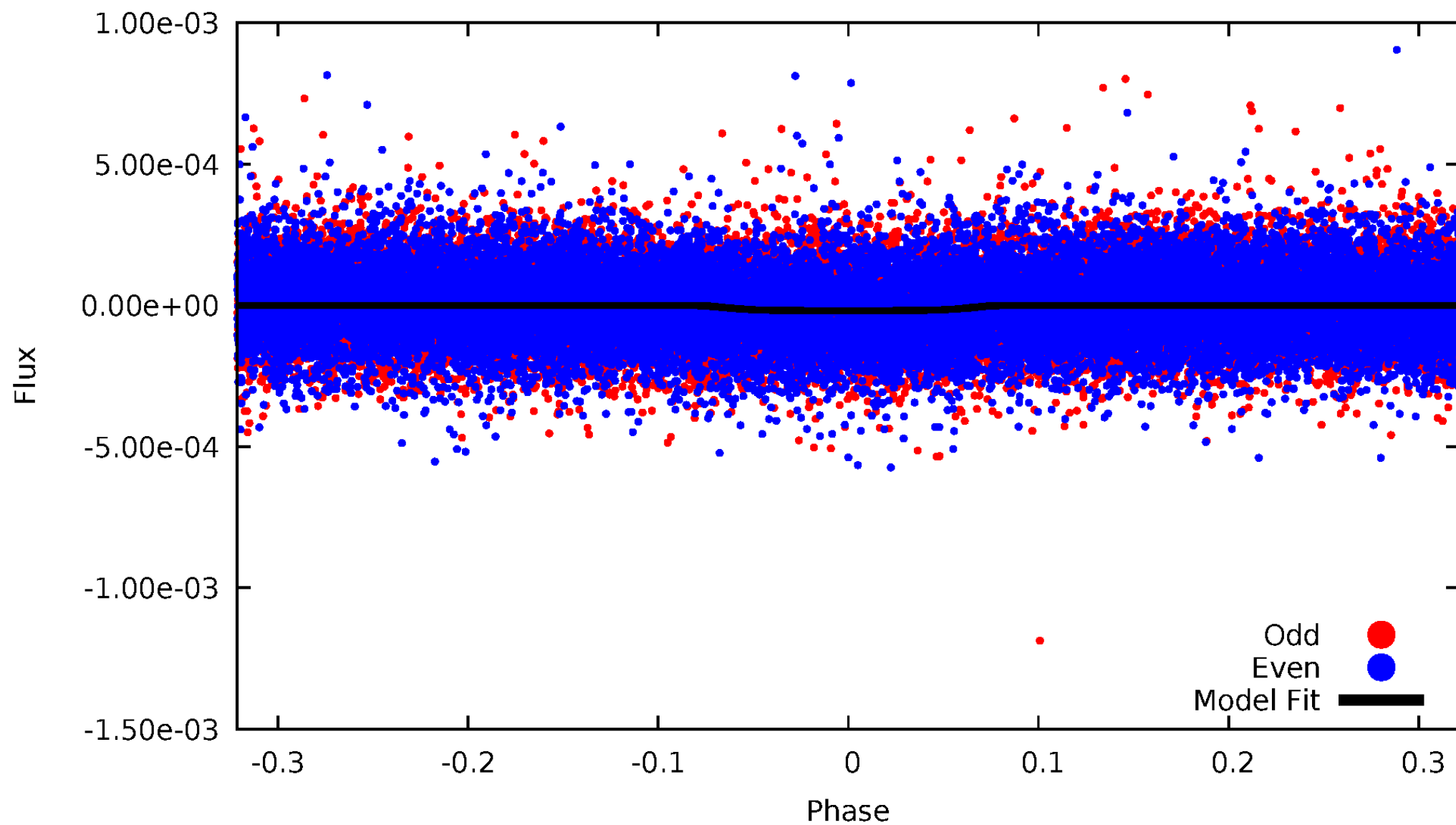


TCE 011957183-01



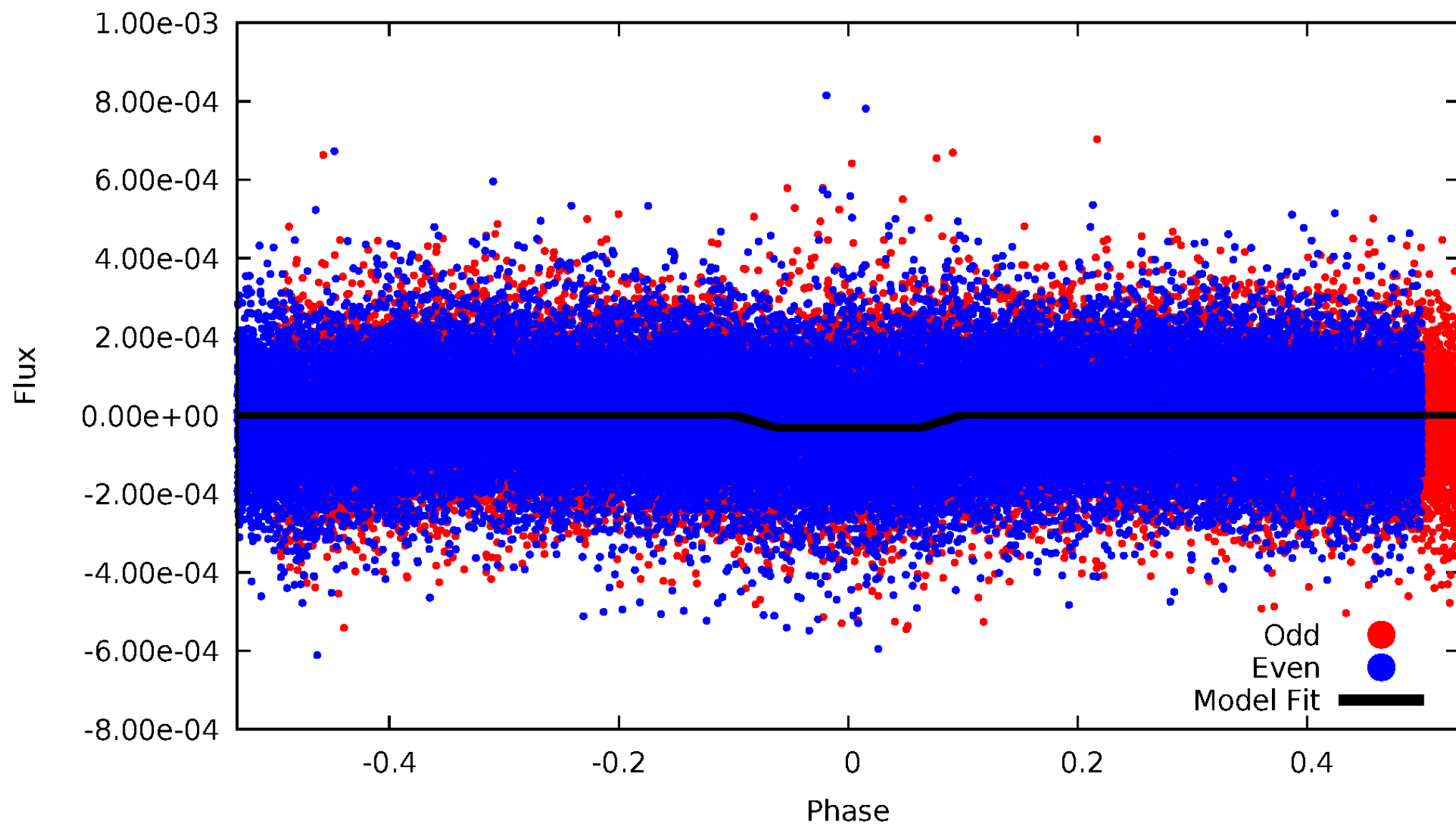
DV Odd/Even

TCE 011957183-01



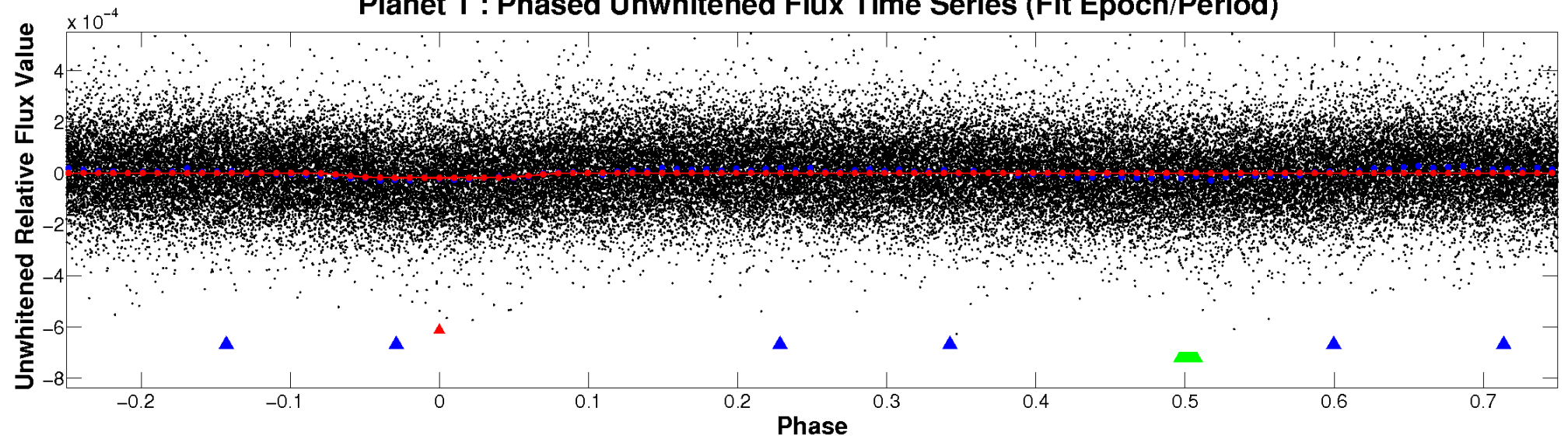
ALT Odd/Even

TCE 011957183-01

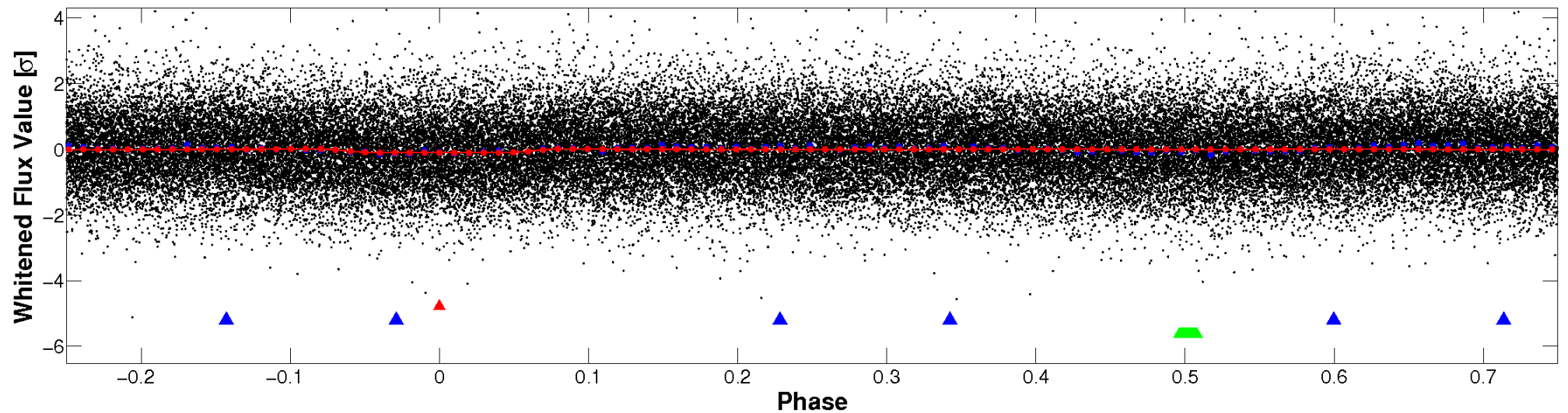


Non-Whitened Vs. Whitened Light Curve

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

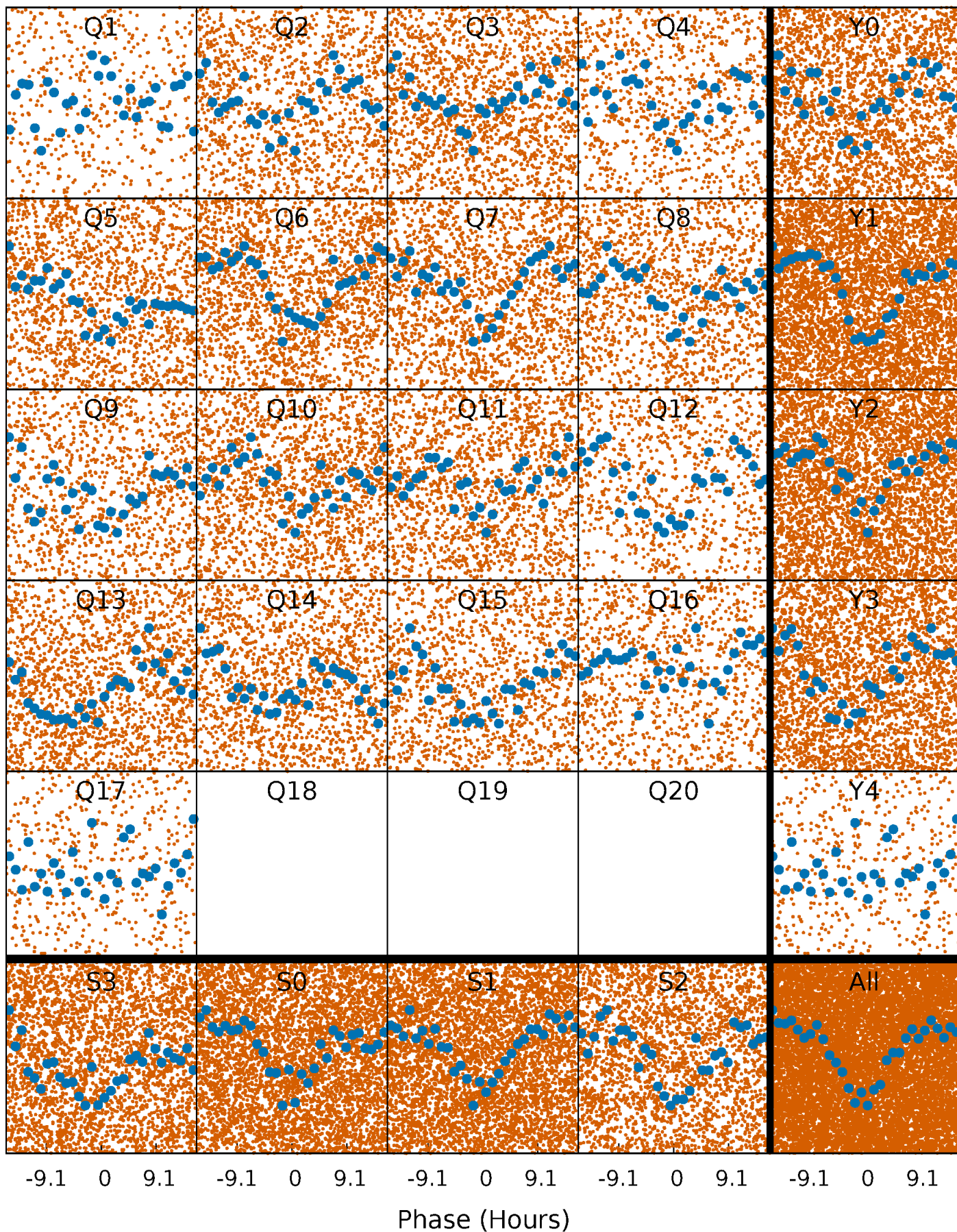


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



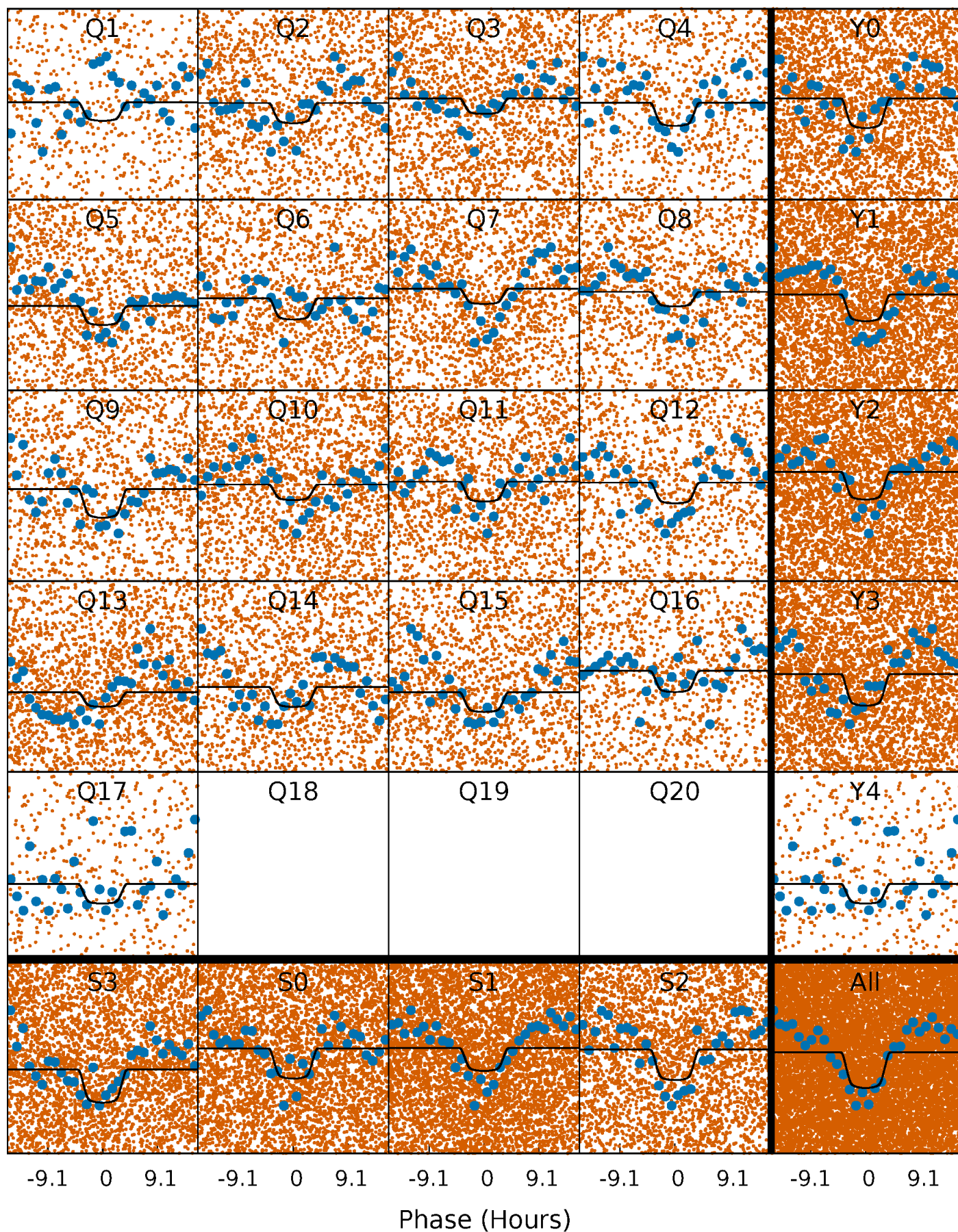
PDC Quarter-Phased Transit Curves

TCE 011957183-01 P= 2.054065 Days $T_0=132.183023$ (BKJD)



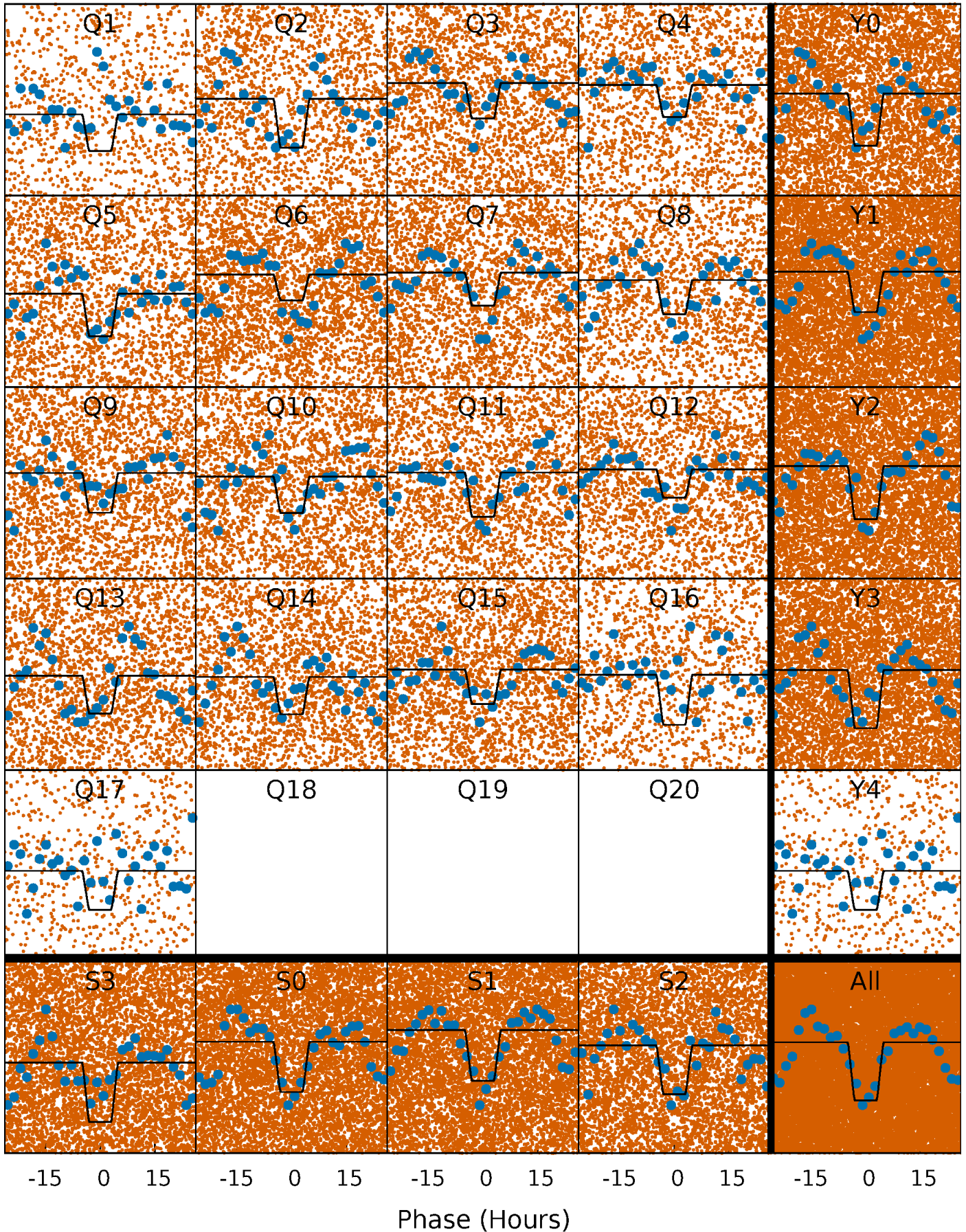
DV Quarter-Phased Transit Curves

TCE 011957183-01 P= 2.054065 Days $T_0=132.183023$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

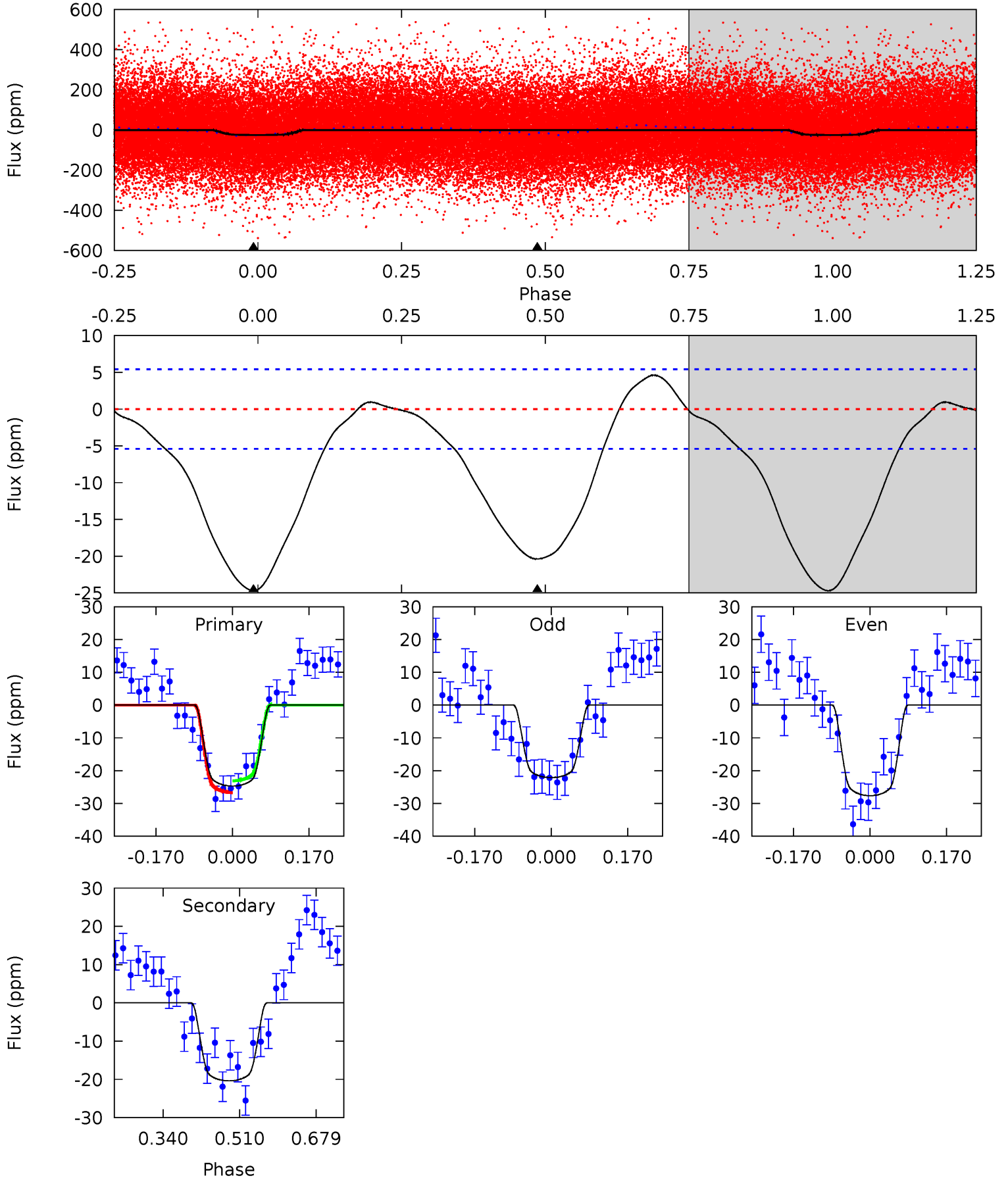
TCE 011957183-01 P= 2.054017 Days $T_0=132.180574$ (BKJD)



DV Model-Shift Uniqueness Test

011957183-01, P = 2.054065 Days, E = 130.128958 Days

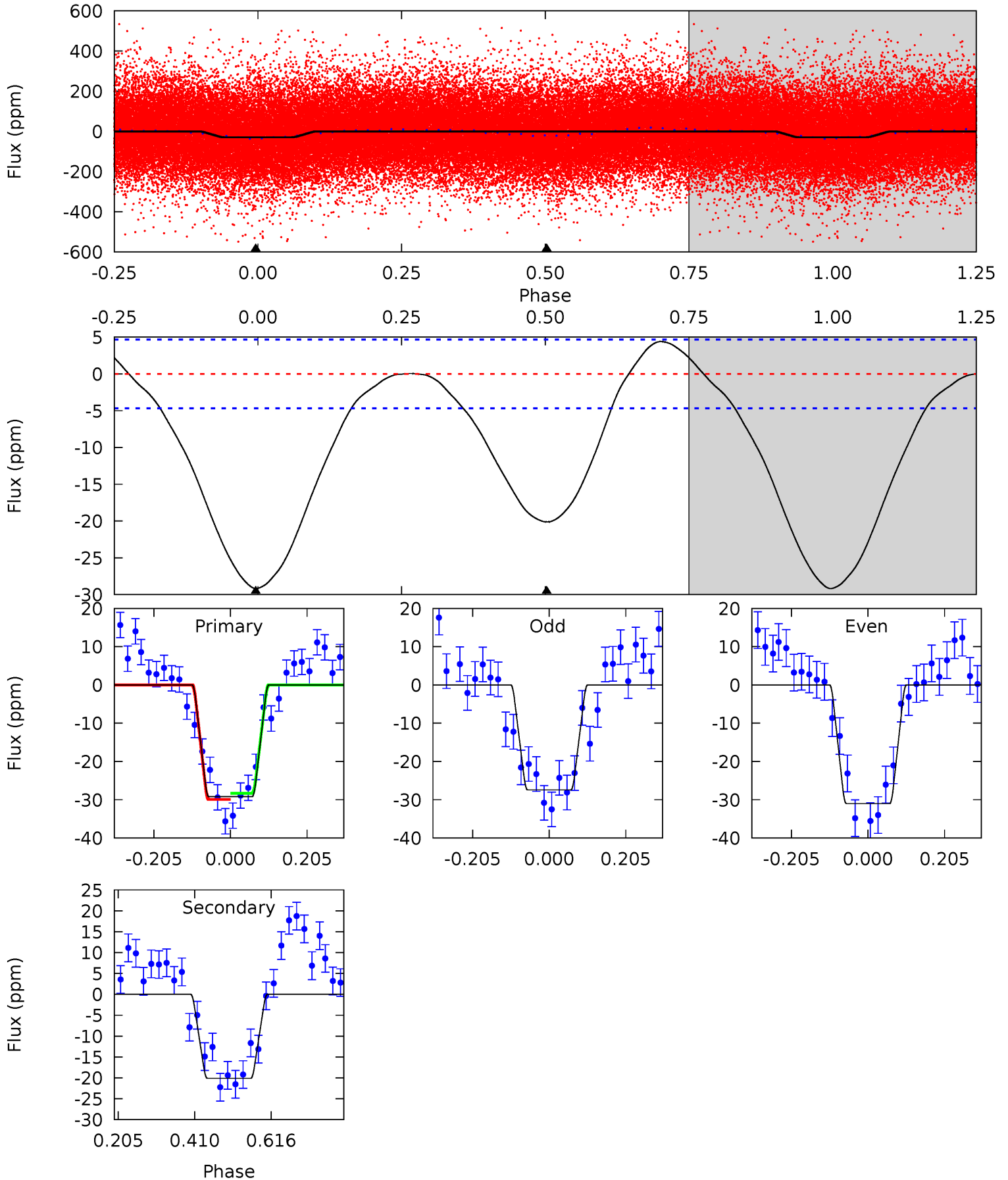
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
20.3	16.8	0	0	4.45	1.37	1.89	20.3	20.3	16.8	16.8	2.27	0.99	0.16	0



Alt Model-Shift Uniqueness Test

011957183-01, P = 2.054017 Days, E = 130.126557 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
27.5	19.0	0	0	4.41	1.27	1.61	27.5	27.5	19.0	19.0	1.69	0.91	0.13	0.75



Stellar Parameters For KIC 011957183

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	7153^{+200}_{-275}	$4.245^{+0.090}_{-0.210}$	$-0.200^{+0.250}_{-0.350}$	$1.463^{+0.515}_{-0.257}$	$1.377^{+0.223}_{-0.203}$	$0.620^{+0.316}_{-0.336}$
	+3%/-4%	+2%/-5%	+125%/-175%	+35%/-18%	+16%/-15%	+51%/-54%
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 011957183-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-20 ± 1	$0.88^{+0.16}_{-0.12}$	2877^{+244}_{-155}	6515^{+337}_{-362}	18^{+5}_{-5}
Alt.	-20 ± 1	$0.93^{+0.18}_{-0.12}$	2886^{+243}_{-159}	6289^{+326}_{-329}	16^{+4}_{-4}

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

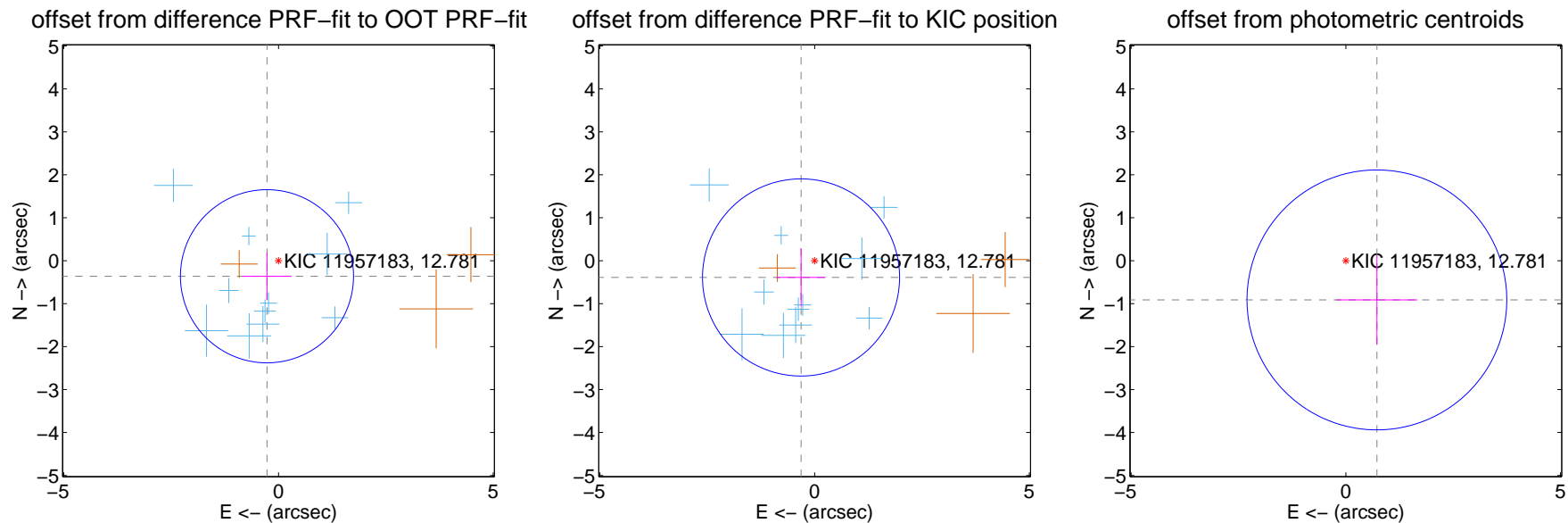
DV Centroid Data

Supplemental centroid analysis for 011957183-01. Kepler magnitude: 12.78. Transit SNR 8.49

There are 11 quarters with good PRF difference image offsets

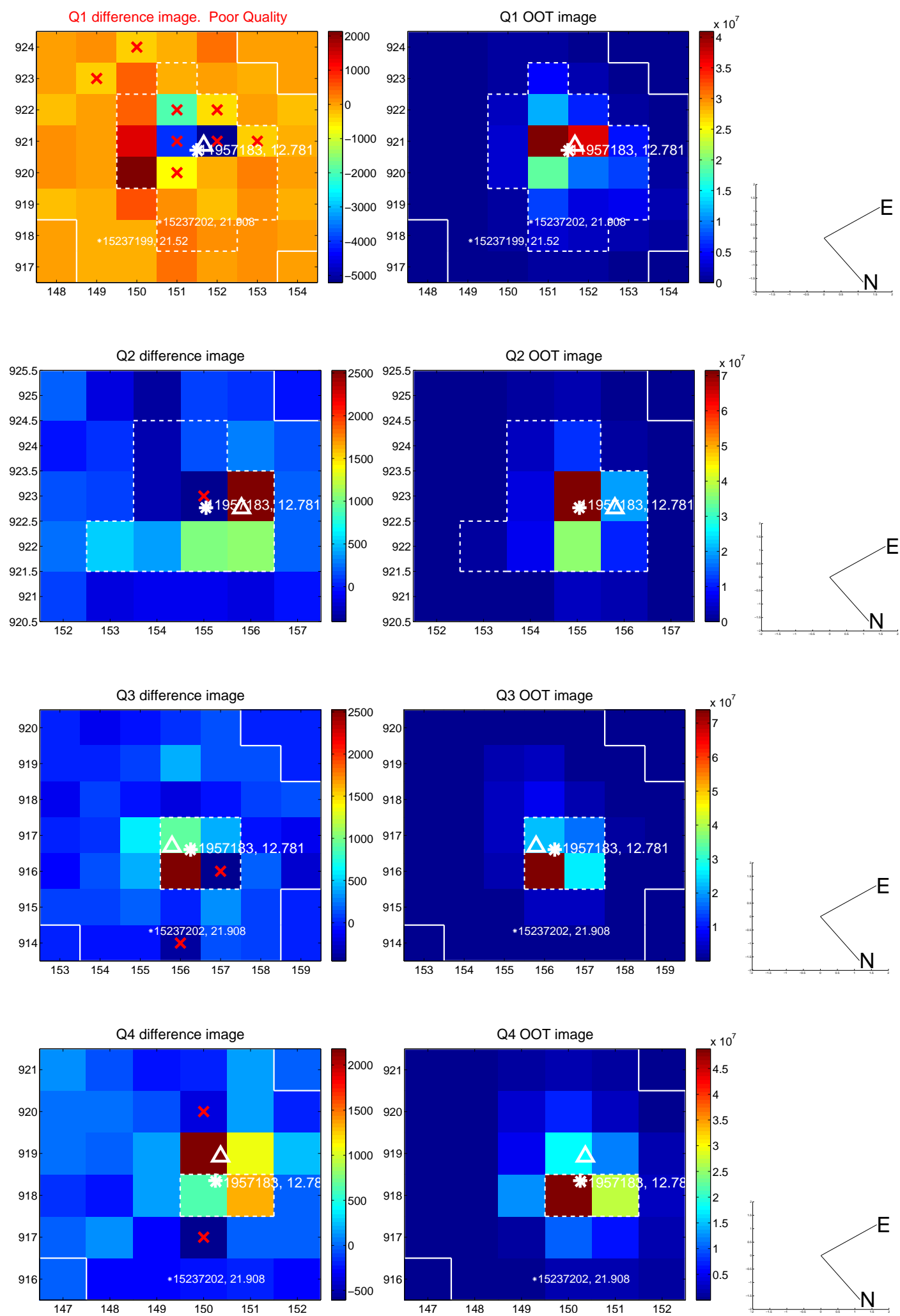
The direct PRF centroid is offset from the target star catalog position by about 0.11 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.451 ± 0.672	0.67	0.268 ± 0.574	-0.362 ± 0.552
PRF-fit source offset from KIC position	0.502 ± 0.765	0.66	0.316 ± 0.572	-0.390 ± 0.680
photometric centroid source offset	1.16 ± 1.01	1.15	-0.72 ± 0.94	-0.91 ± 1.05

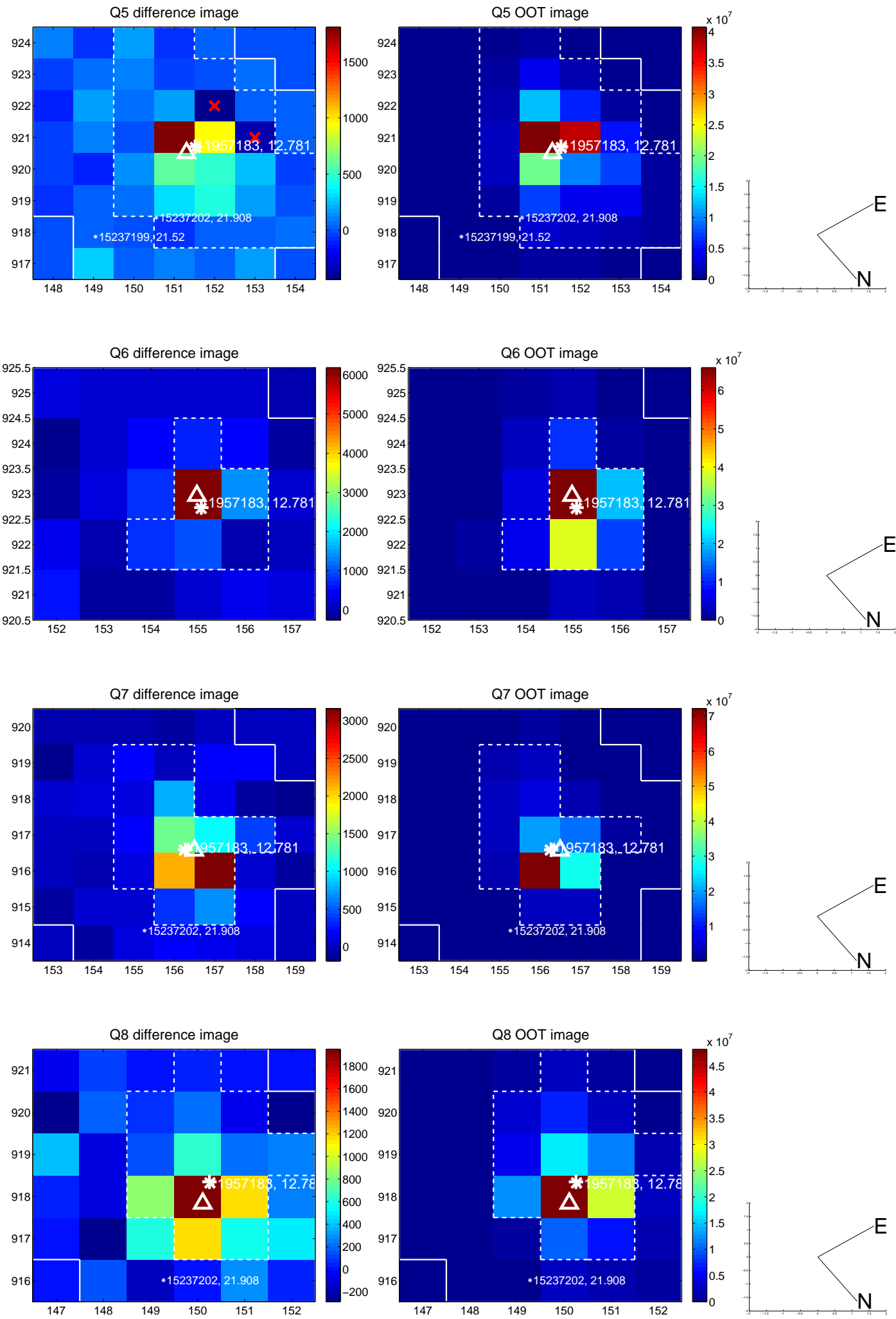


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses:** good quarterly centroid offsets; **Vermillion crosses:** bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

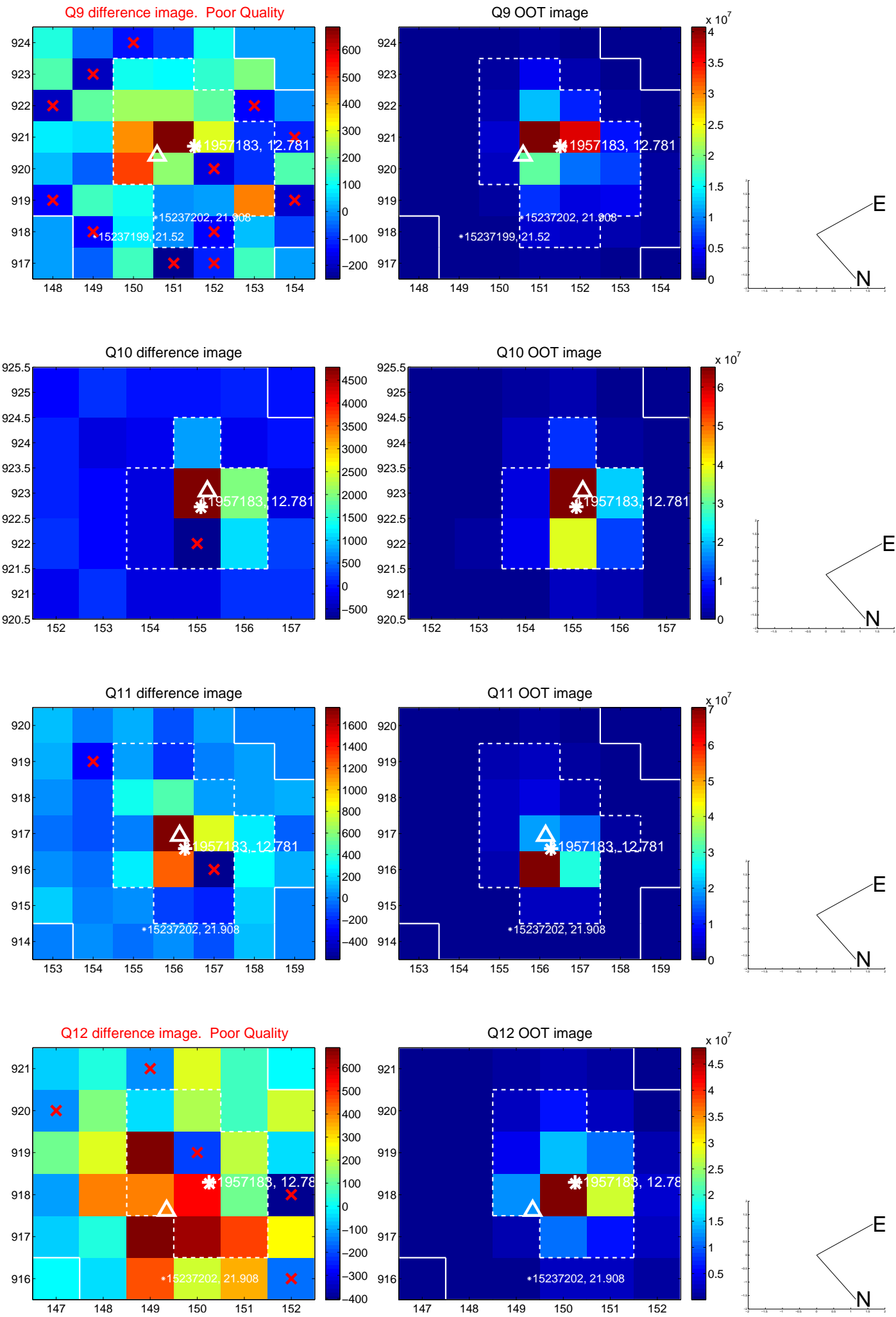
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



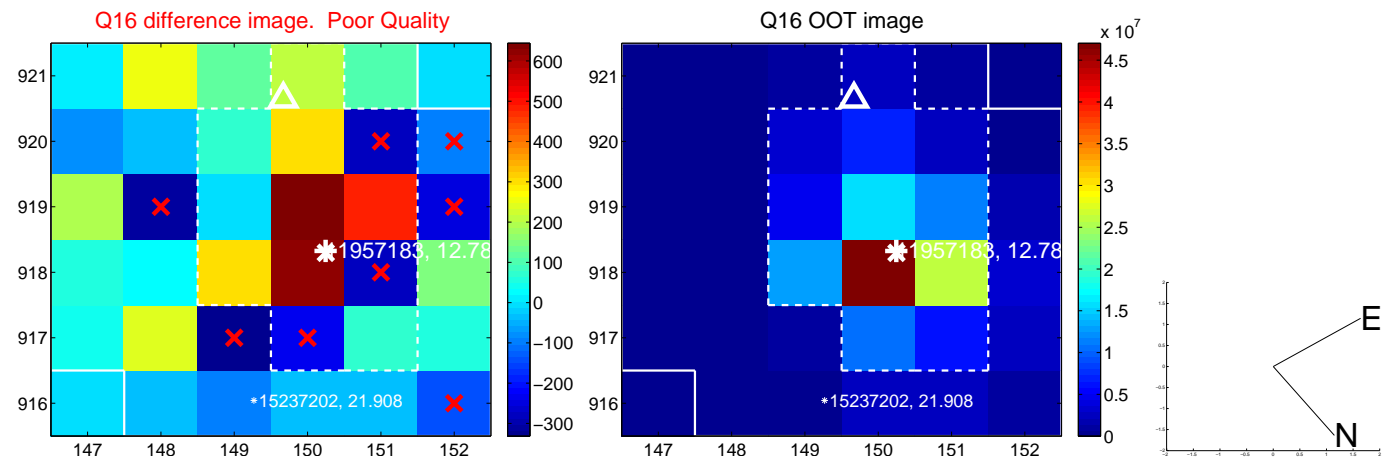
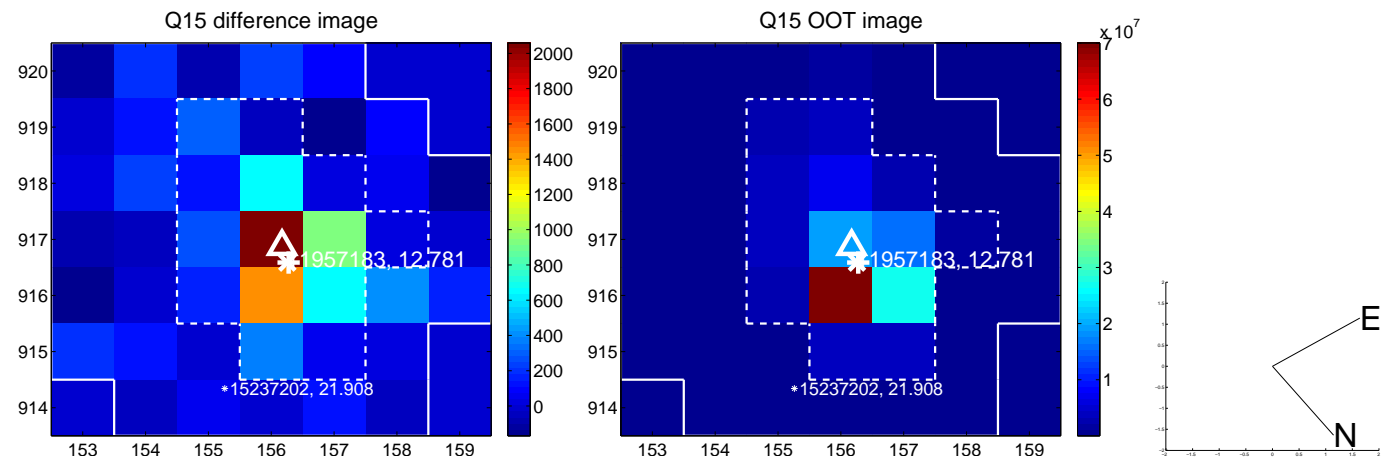
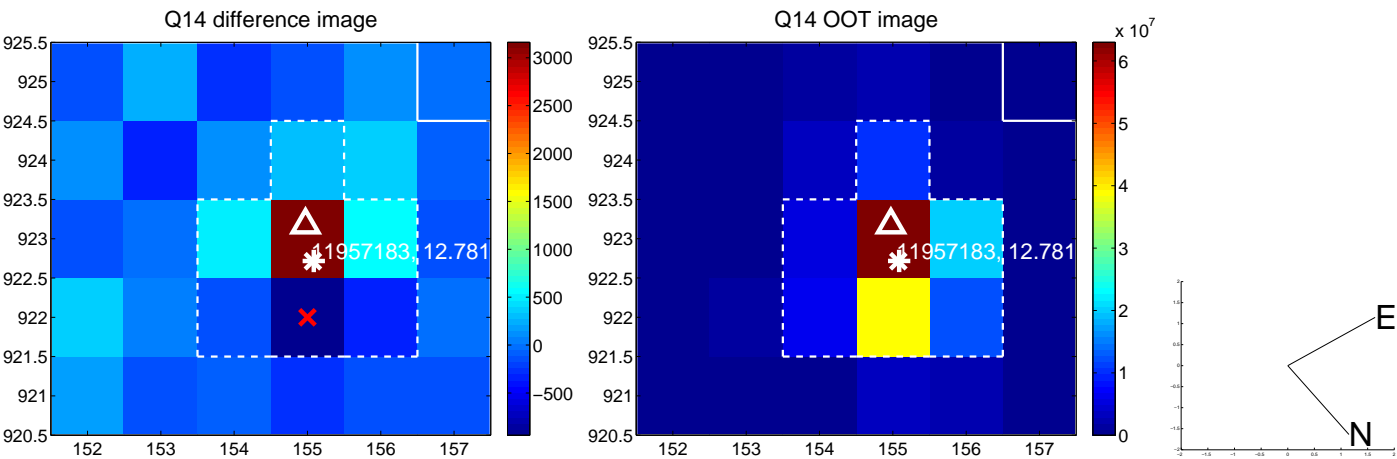
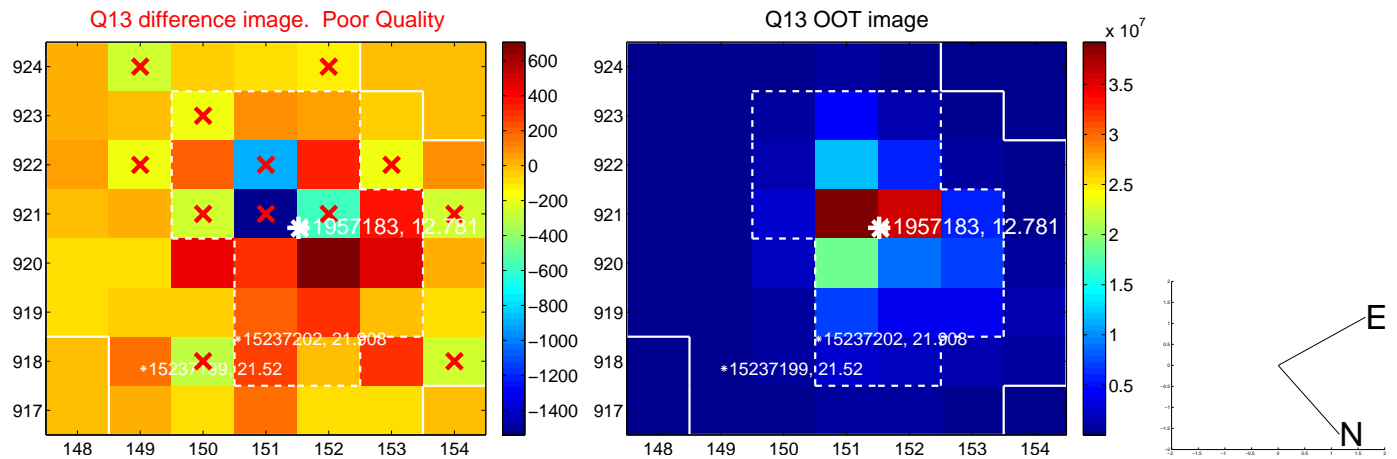
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



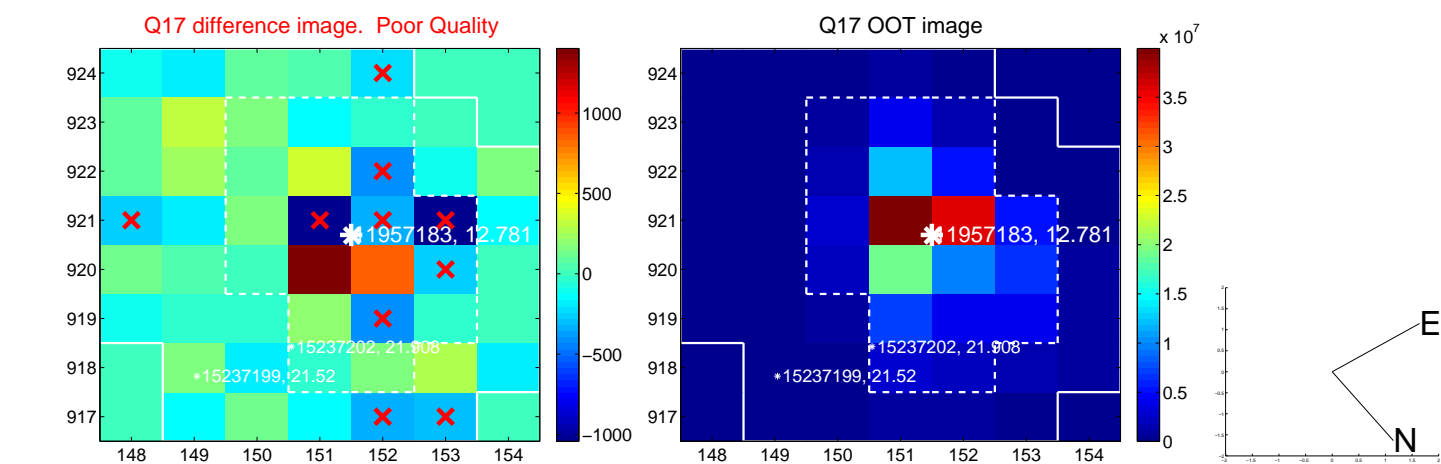
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



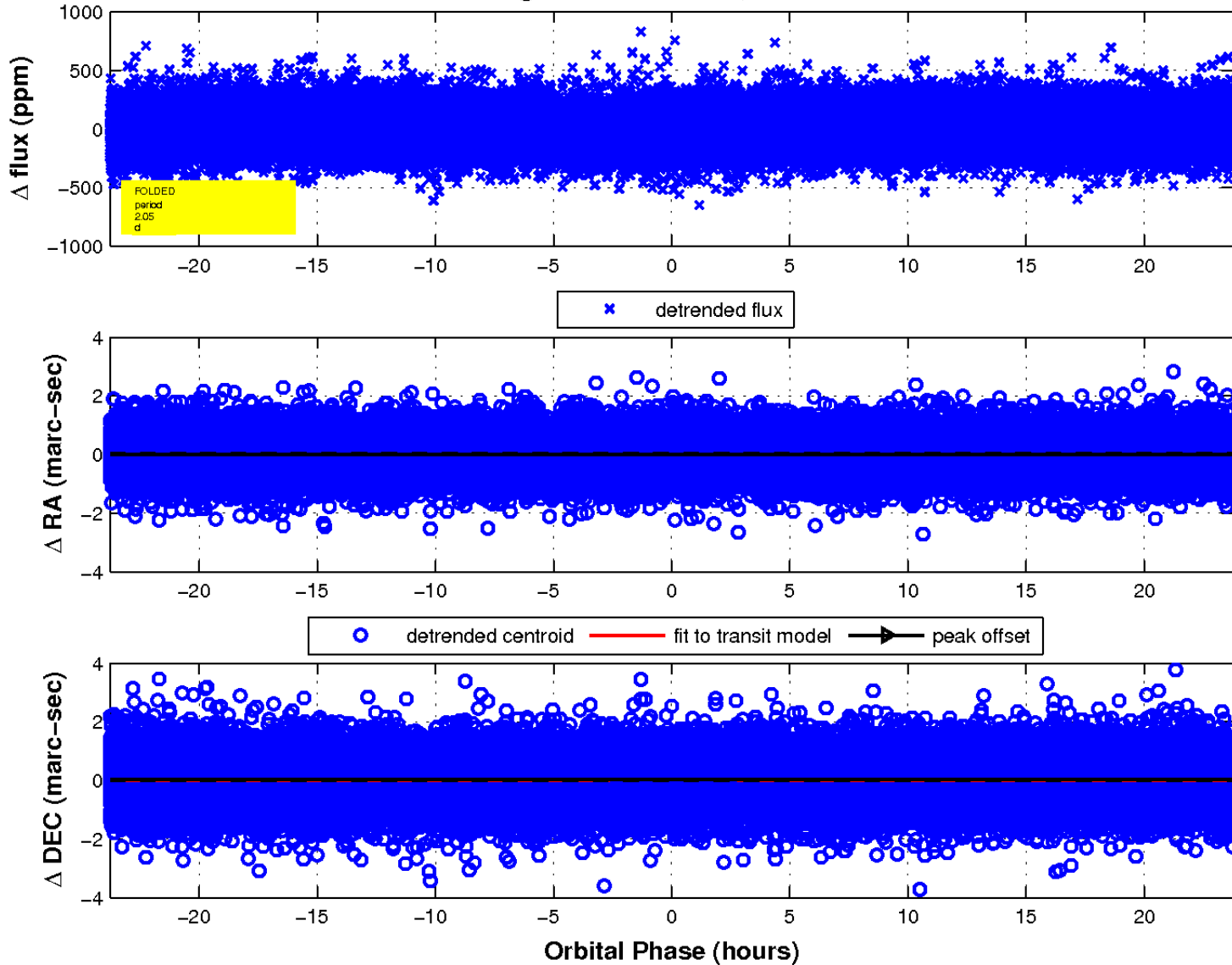
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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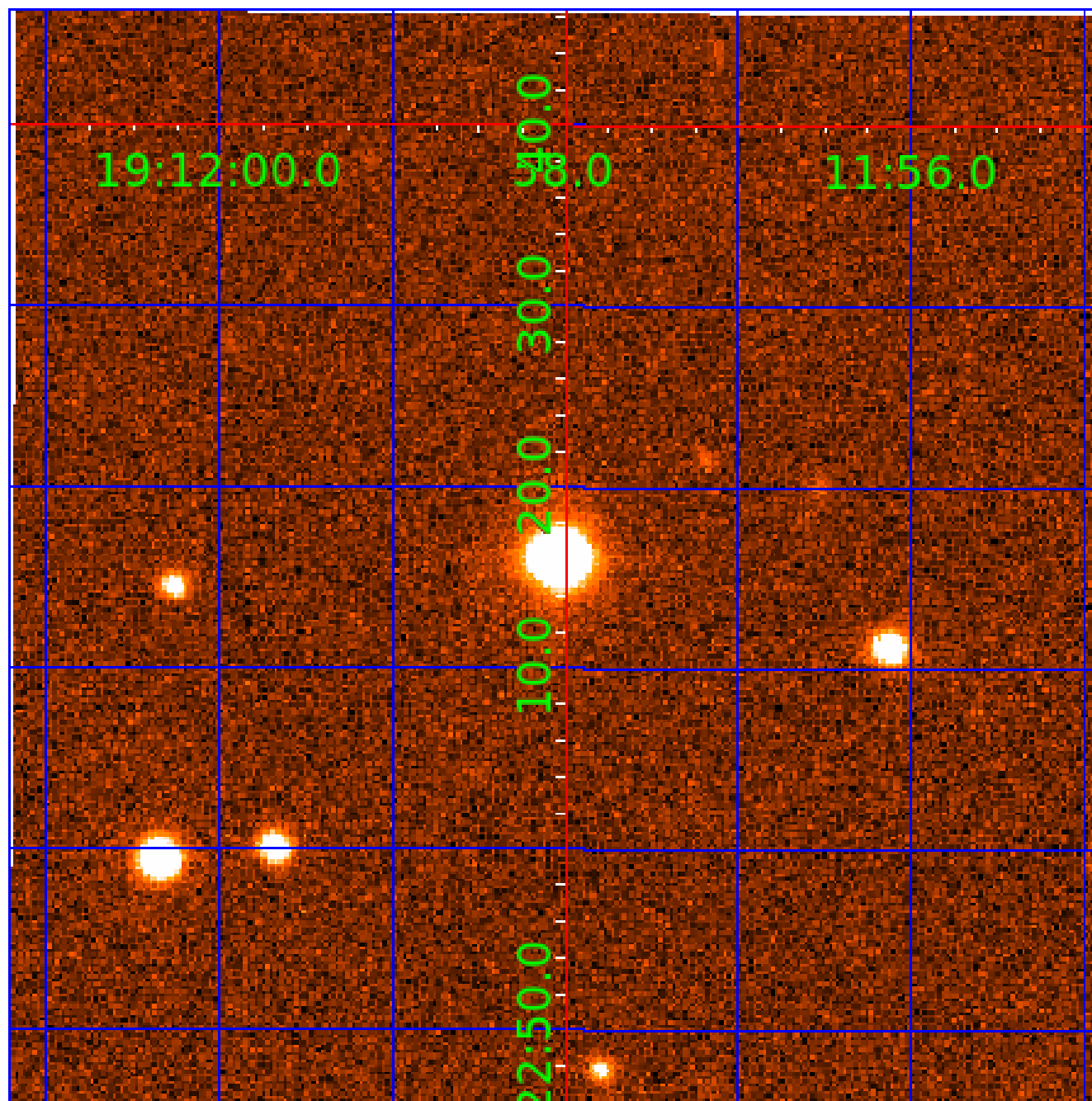


fluxWeightedCentroids, Planet 1 of 3



UKIRT Image

Declination



KIC 011957183

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})
011957183-01	OBS	No	2.054065	132.183023	18.5	7.922	8.3	8.5	1.46	7153	0.85	4063.10
011957183-02	OBS	No	247.250476	154.484292	143.6	18.421	11.0	6.7	1.46	7153	1.94	6.84
011957183-03	OBS	No	2.054100	133.201861	16.2	11.645	10.3	10.8	1.46	7153	0.60	4063.01

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
011957183-01	OBS	FP	0.00	1	0	0	0	LPP_DV
011957183-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_MARSHALL—TRANS_GAPPED—LPP_DV—ALL_TRANS_CHASES—CENT_FEW_DIFFS
011957183-03	OBS	FP	0.00	1	0	0	0	LPP_DV—SAME_NTL_PERIOD

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

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

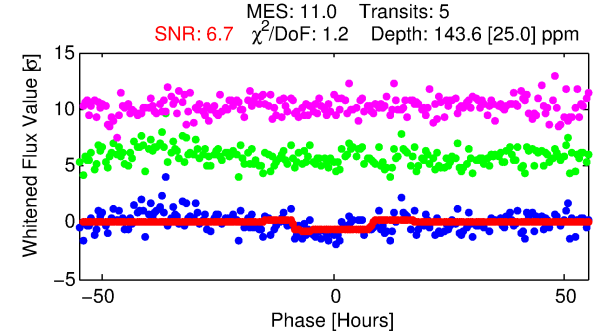
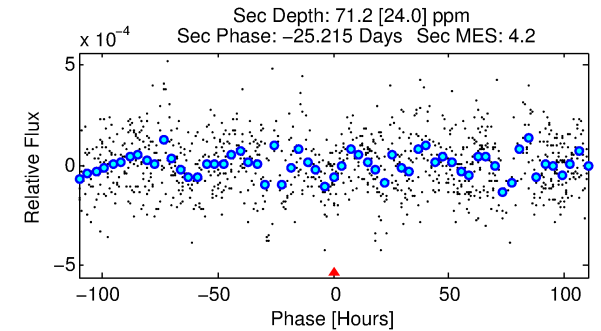
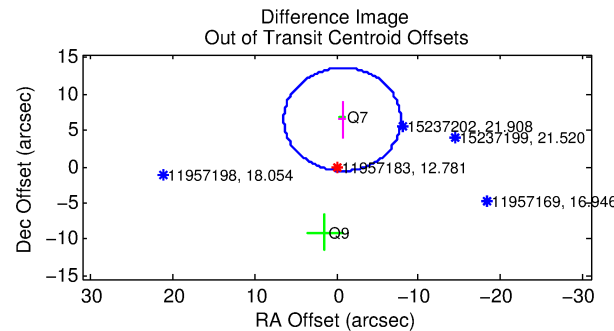
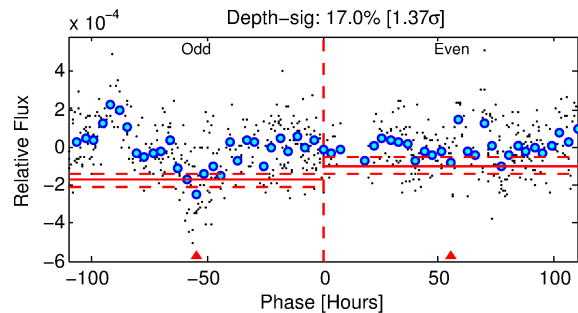
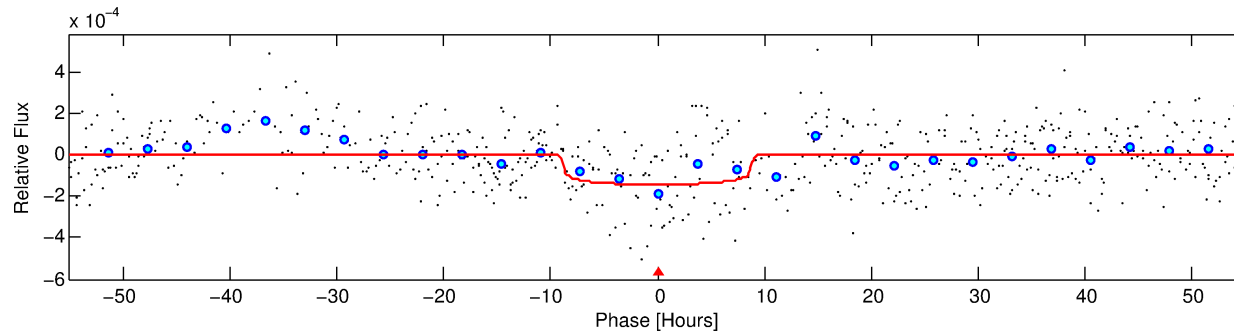
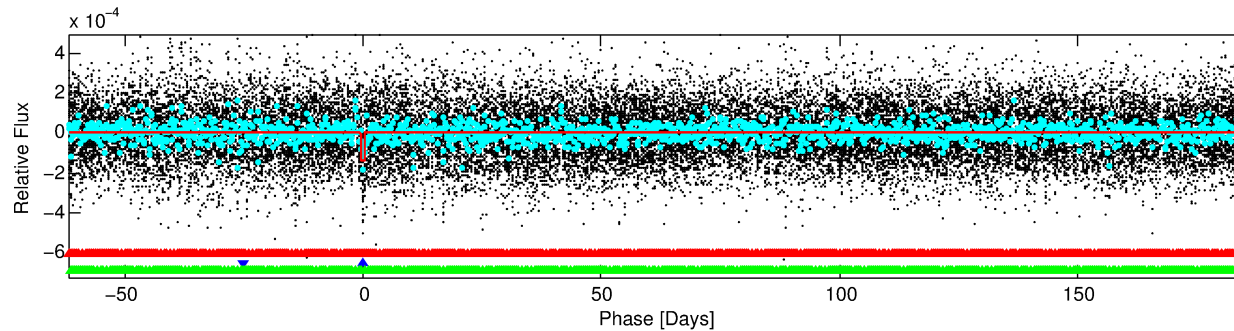
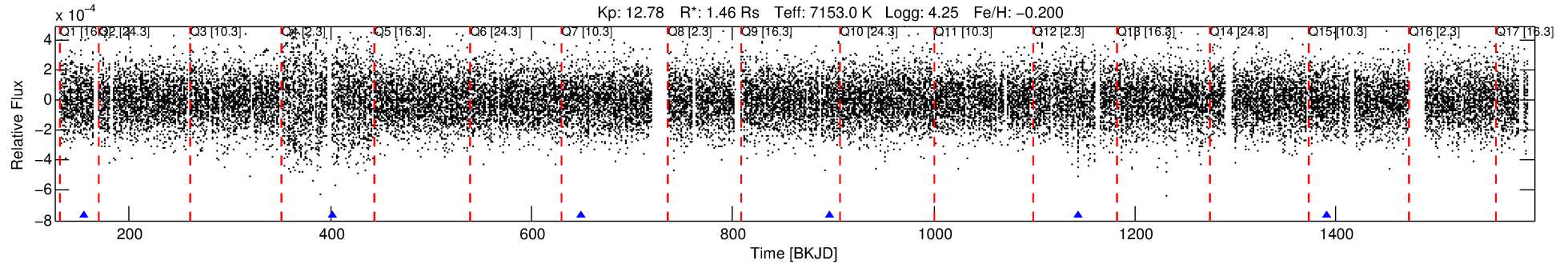
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 011957183-02

No Significant Match Found

DV One-Page Summary

KIC: 11957183 Candidate: 2 of 3 Period: 247.250 d



DV Fit Results:

Period = 247.25048 [0.00812] d
Epoch = 154.4843 [0.0283] BKJD
Rp/R* = 0.0121 [0.0028]
a/R* = 62.33 [78.18]
b = 0.81 [0.54]
Seff = 6.84 [2.92]
Teq = 412 [44] K
Rp = 1.94 [0.81] Re
a = 0.8569 [0.2440] AU
Ag = 7644.89 [5285.80] [1.45 σ]
Teffp = 5961 [872] K [6.35 σ]

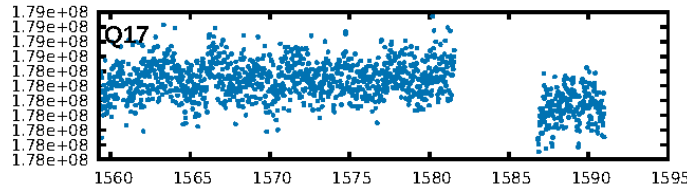
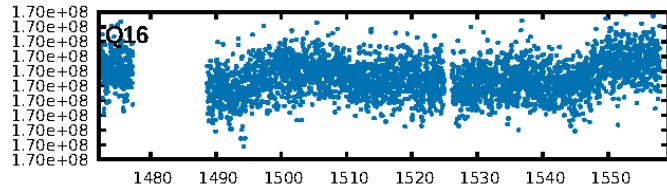
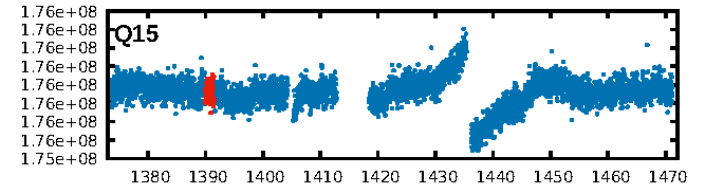
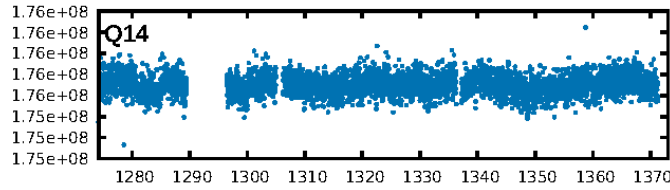
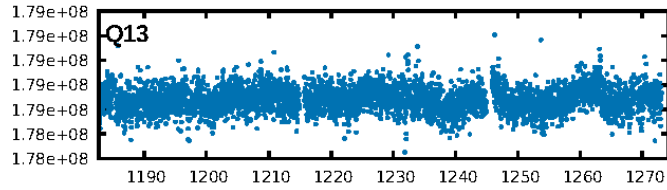
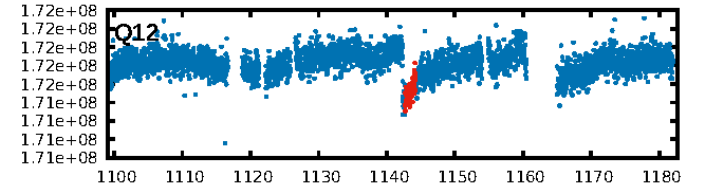
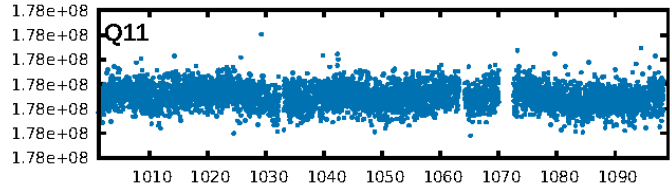
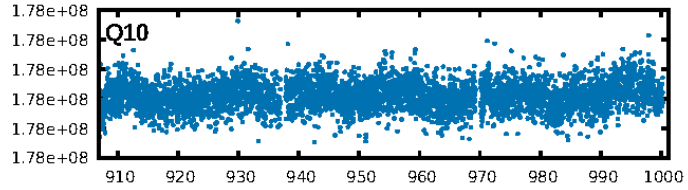
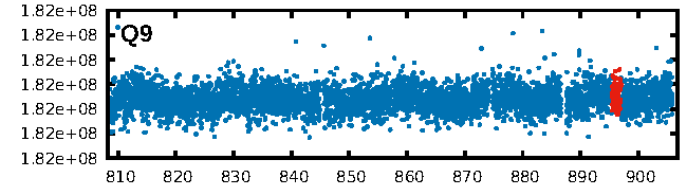
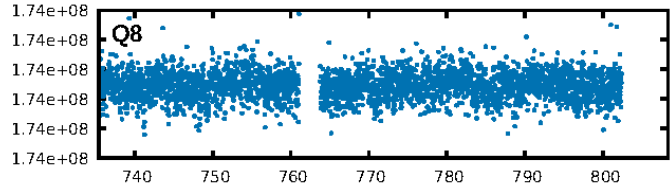
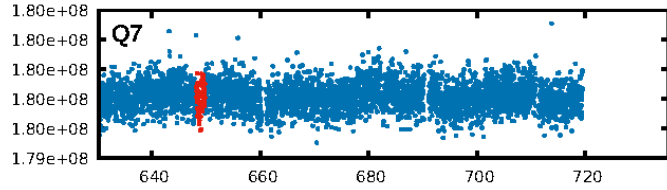
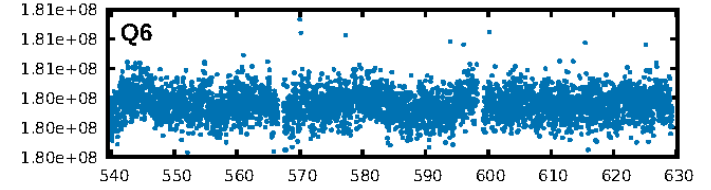
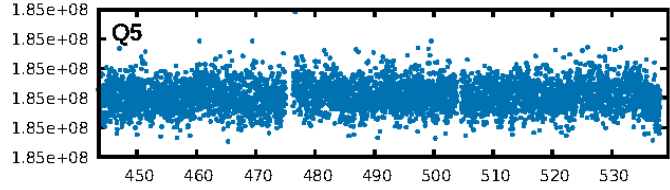
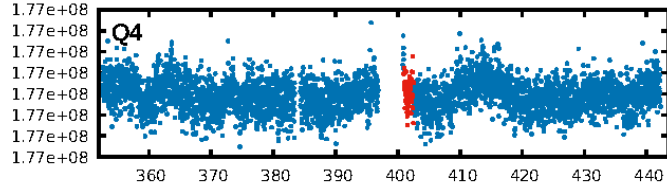
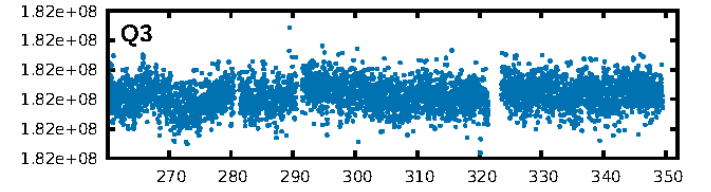
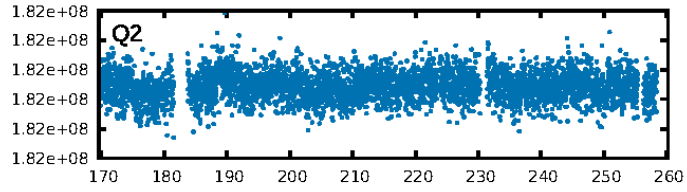
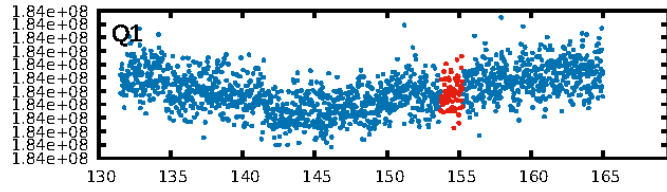
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [270.03 σ]
LongPeriod-sig: N/A
ModelChiSquare2-sig: 0.0%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [4/4]
GhostDiagnostic-chr: 1.847
Centroid-sig: 10.5%
Centroid-so: 1.575 arcsec [1.69 σ]
OotOffset-rm: 6.542 arcsec [2.76 σ]
KicOffset-rm: 6.542 arcsec [0.85 σ]
OotOffset-st: 0/1/0/1 [2]
KicOffset-st: 0/1/0/1 [2]
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DiffImageOverlap-fno: 0.00 [0/5]

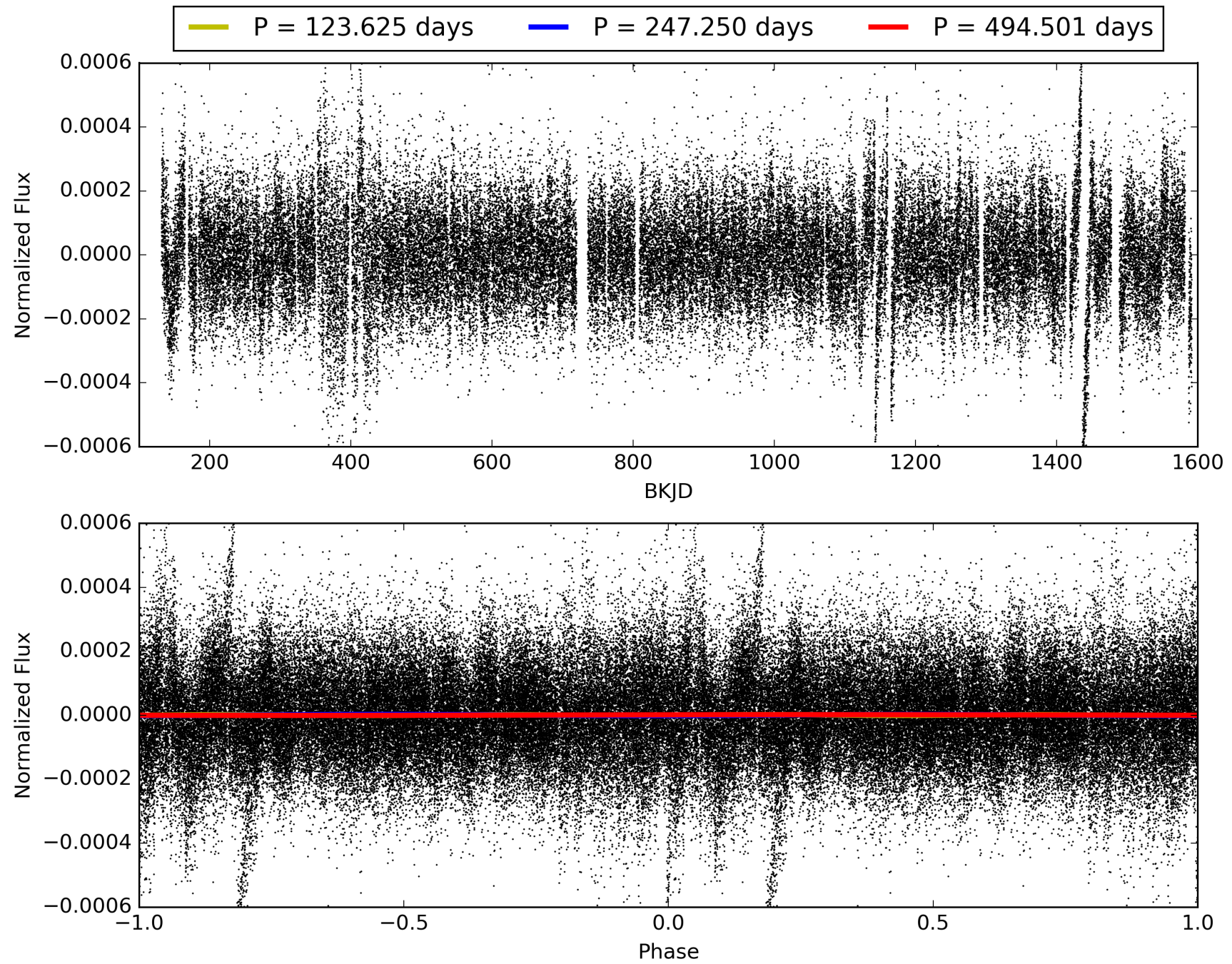
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This Data Validation Report Summary was produced in the Kepler Science Operations Center Pipeline at NASA Ames Research Center

TCE 011957183-02, PDC Light Curves

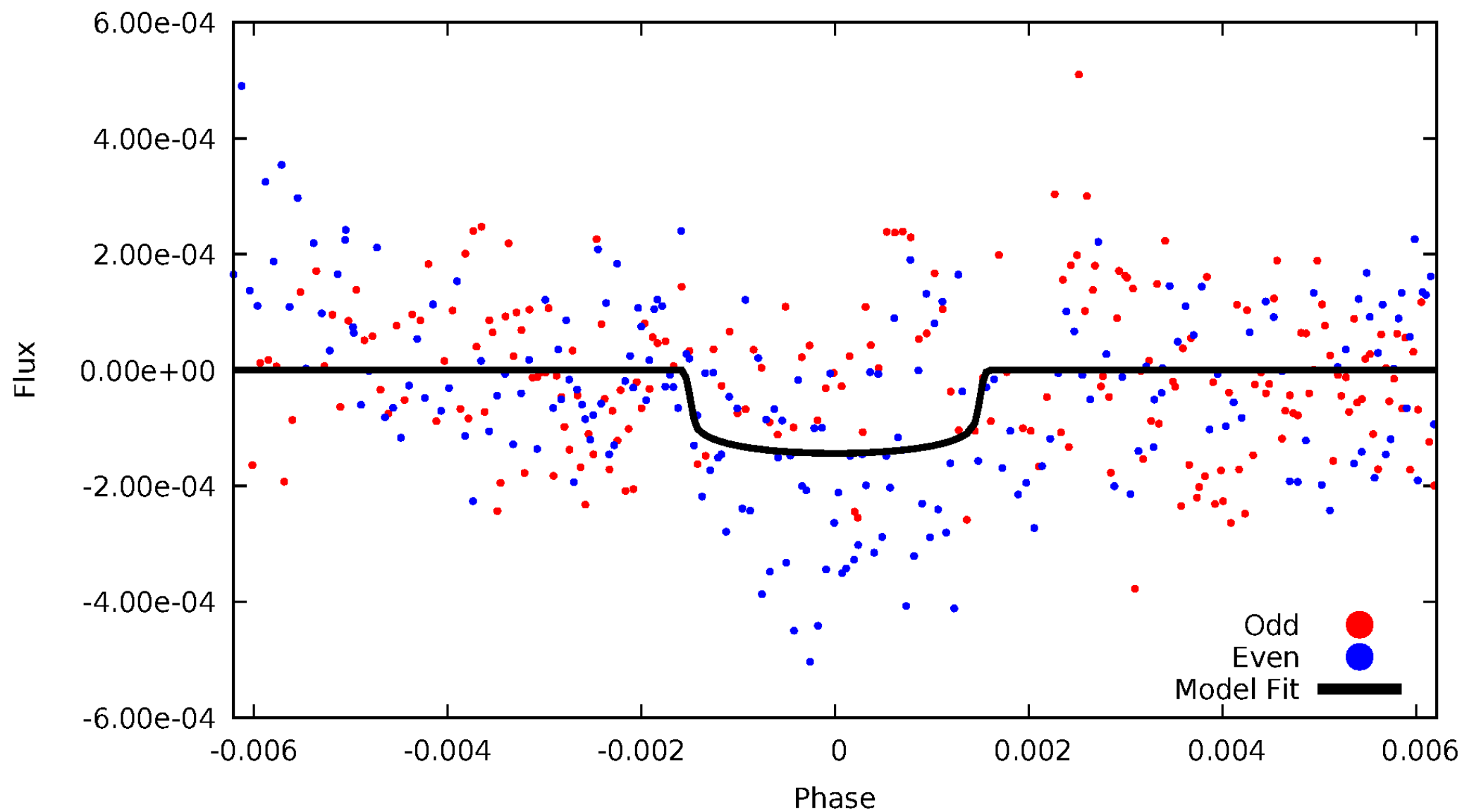


TCE 011957183-02



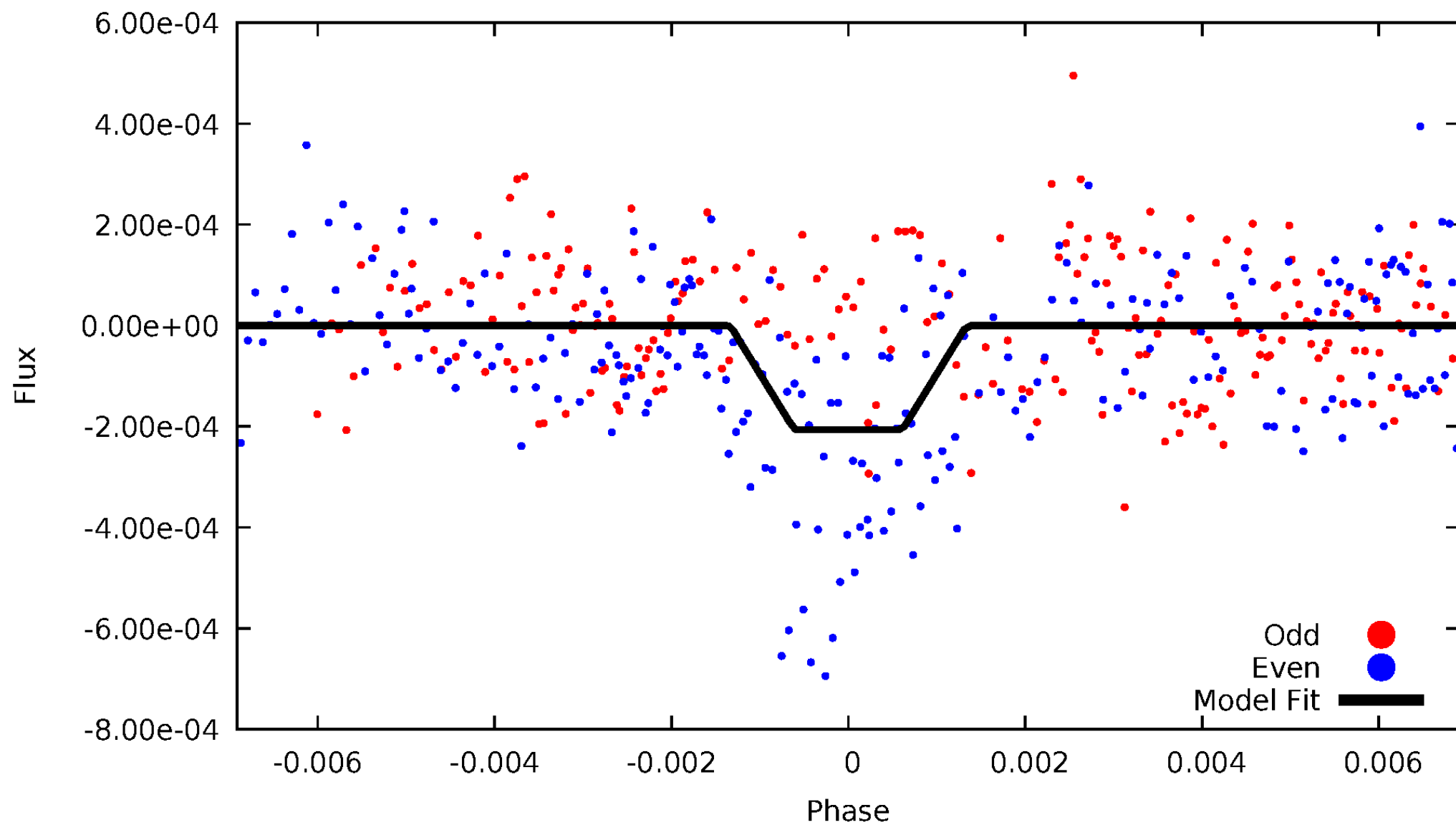
DV Odd/Even

TCE 011957183-02



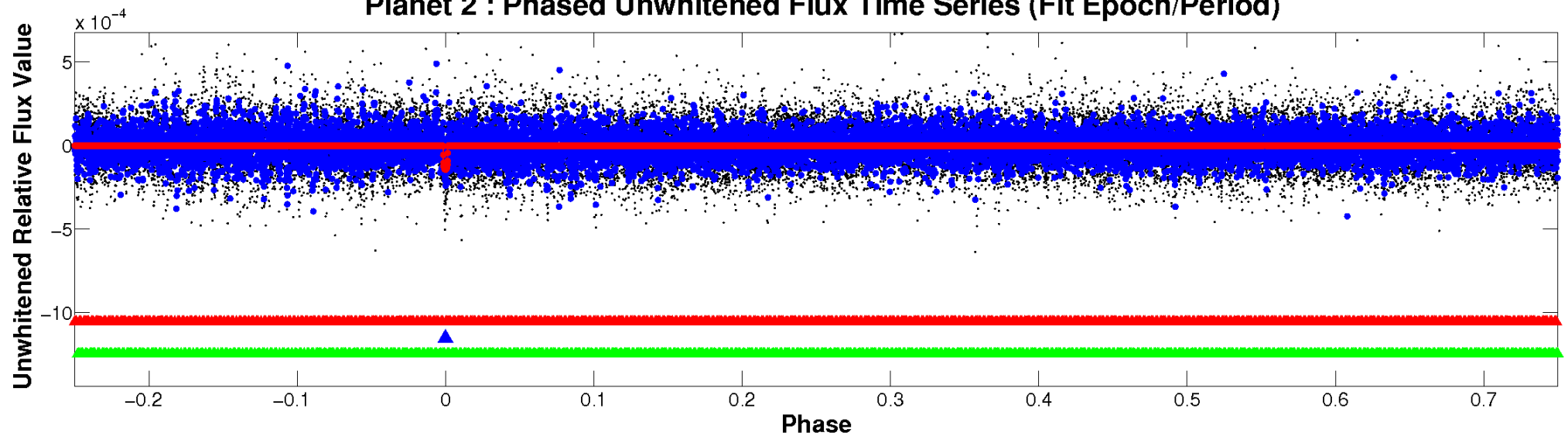
ALT Odd/Even

TCE 011957183-02

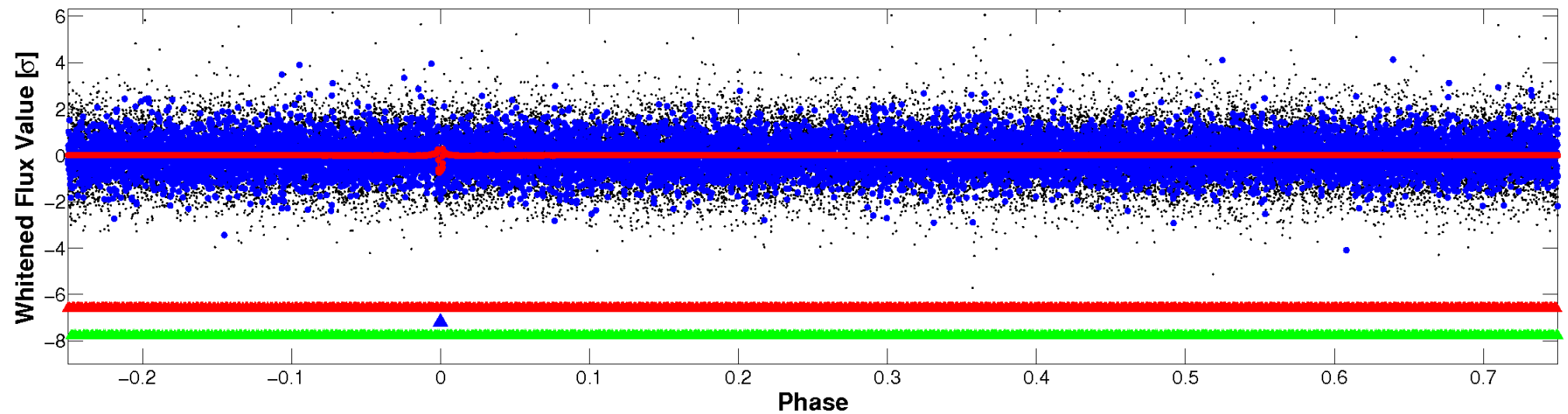


Non-Whitened Vs. Whitened Light Curve

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

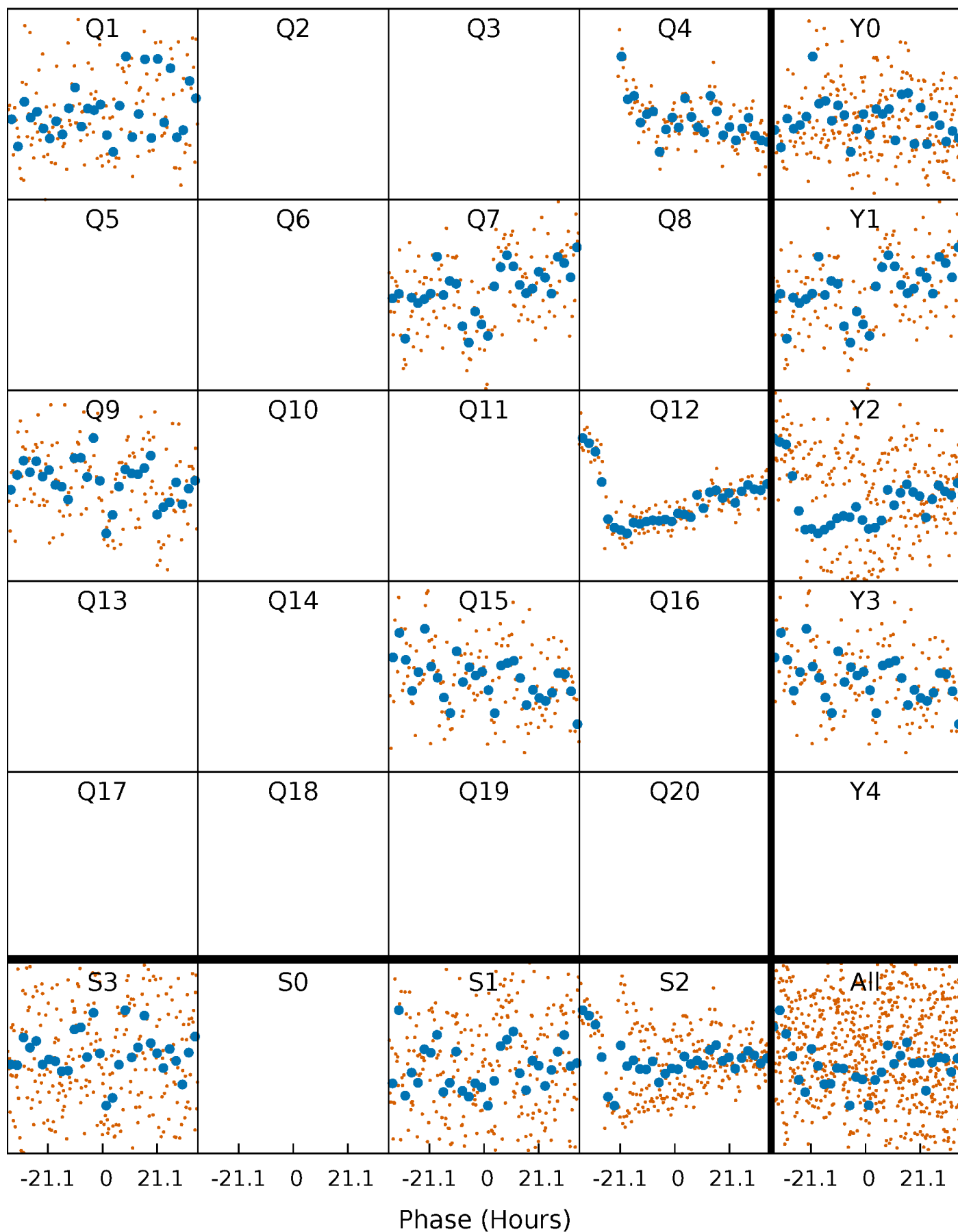


Planet 2 : Phased Whitened Flux Time Series (Fit Epoch/Period)



PDC Quarter-Phased Transit Curves

TCE 011957183-02 P=247.250476 Days $T_0=154.484292$ (BKJD)



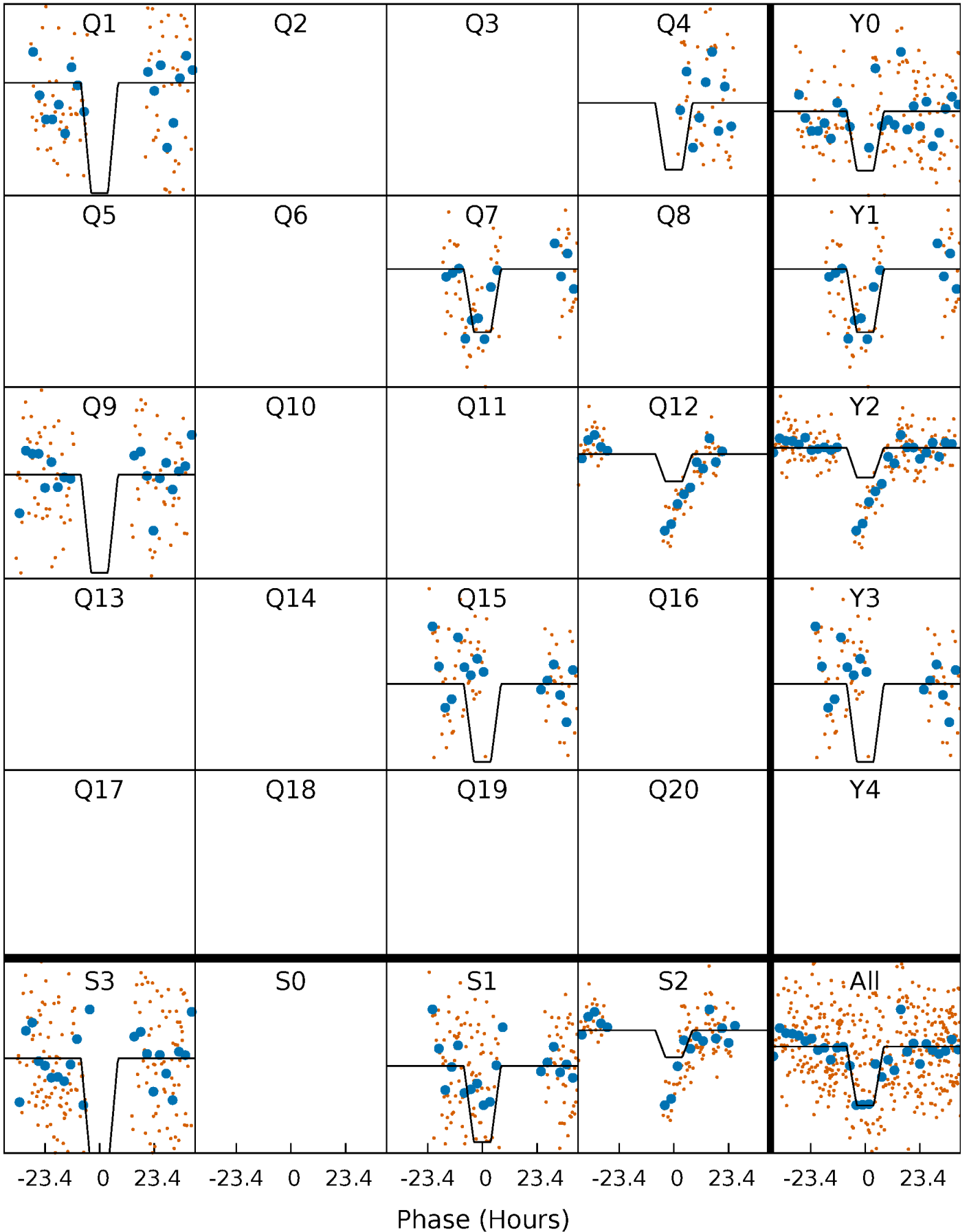
DV Quarter-Phased Transit Curves

TCE 011957183-02 $P=247.250476$ Days $T_0=154.484292$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

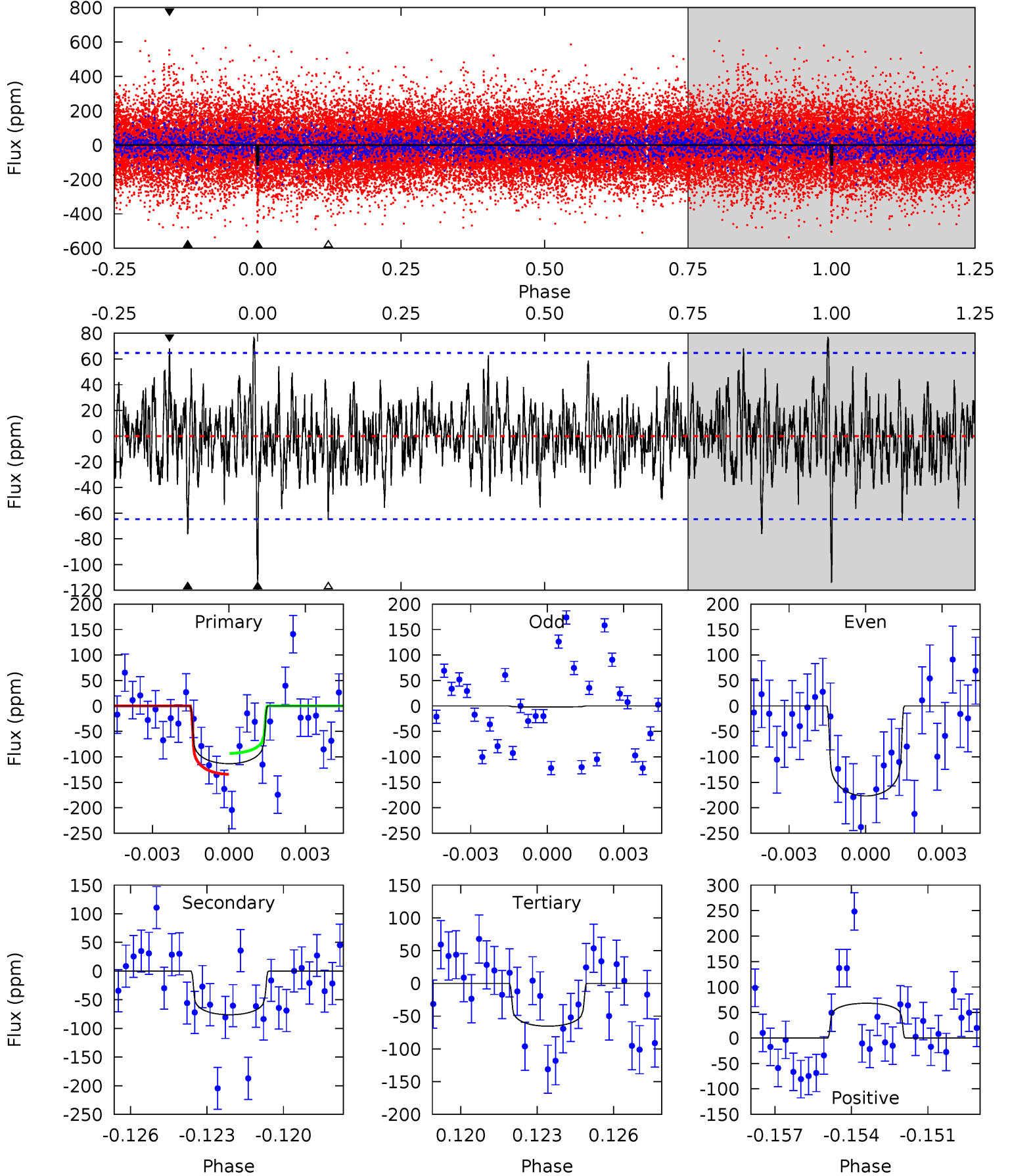
TCE 011957183-02 P=247.252887 Days $T_0=154.475047$ (BKJD)



DV Model-Shift Uniqueness Test

011957183-02, $P = 247.250476$ Days, $E = 154.484292$ Days

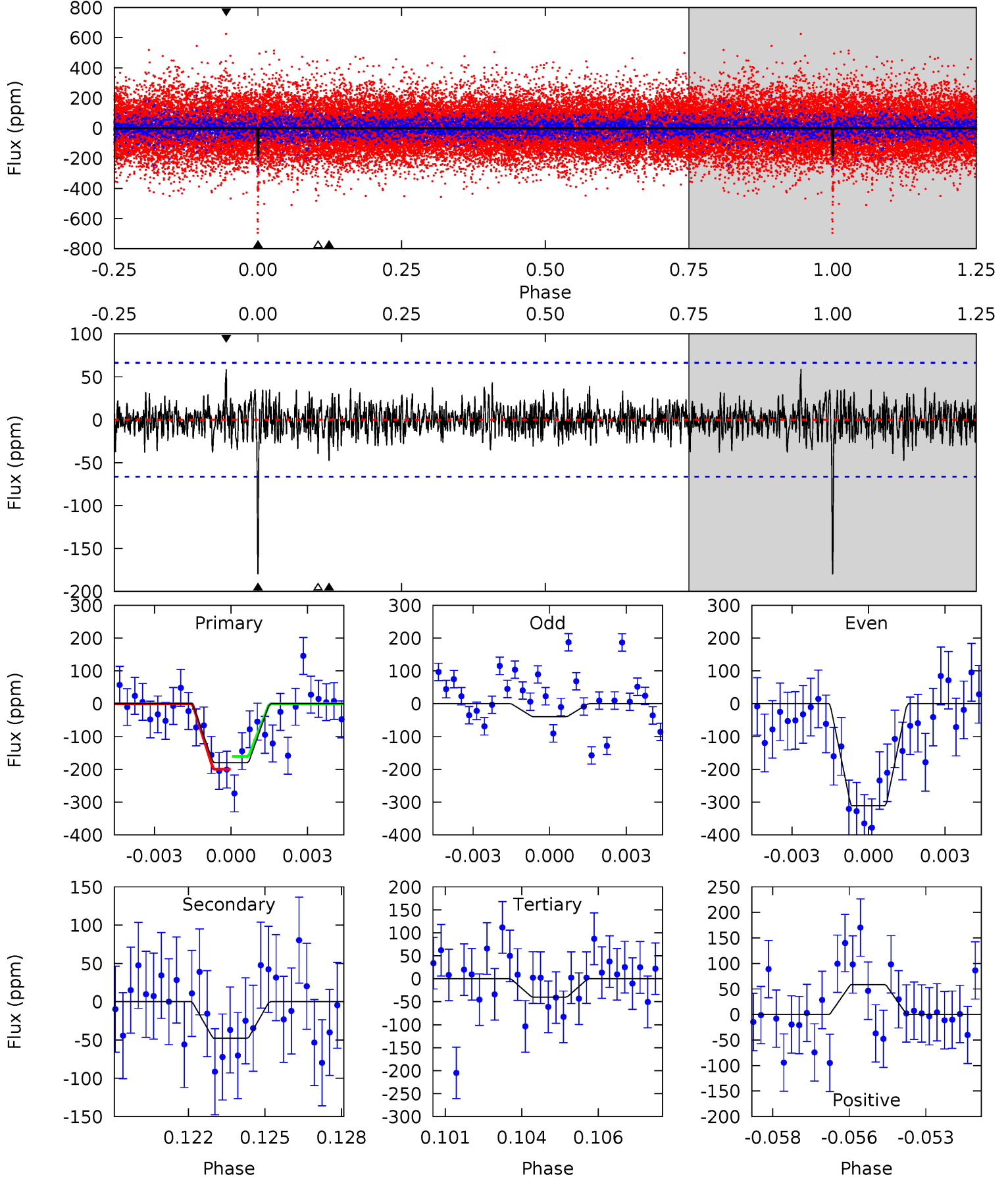
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
9.19	6.18	5.30	5.53	5.24	2.95	1.58	3.89	3.67	0.88	0.65	6.82	2.50	0.41	1.66



Alt Model-Shift Uniqueness Test

011957183-02, P = 247.252887 Days, E = 154.475047 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
14.3	3.80	3.17	4.67	5.27	3.00	1.05	11.1	9.65	0.62	-0.87	10.3	1.50	0.25	1.56



Stellar Parameters For KIC 011957183

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	7153^{+200}_{-275}	$4.245^{+0.090}_{-0.210}$	$-0.200^{+0.250}_{-0.350}$	$1.463^{+0.515}_{-0.257}$	$1.377^{+0.223}_{-0.203}$	$0.620^{+0.316}_{-0.336}$
	+3%/-4%	+2%/-5%	+125%/-175%	+35%/-18%	+16%/-15%	+51%/-54%
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 011957183-02 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-76 ± 12	$2.05^{+0.55}_{-0.51}$	584^{+44}_{-36}	5936^{+865}_{-593}	7216^{+5643}_{-2838}
Alt.	-48 ± 13	$2.38^{+0.63}_{-0.52}$	584^{+50}_{-35}	4967^{+621}_{-487}	3266^{+2429}_{-1403}

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 $A_{obs} \gg 1.0$

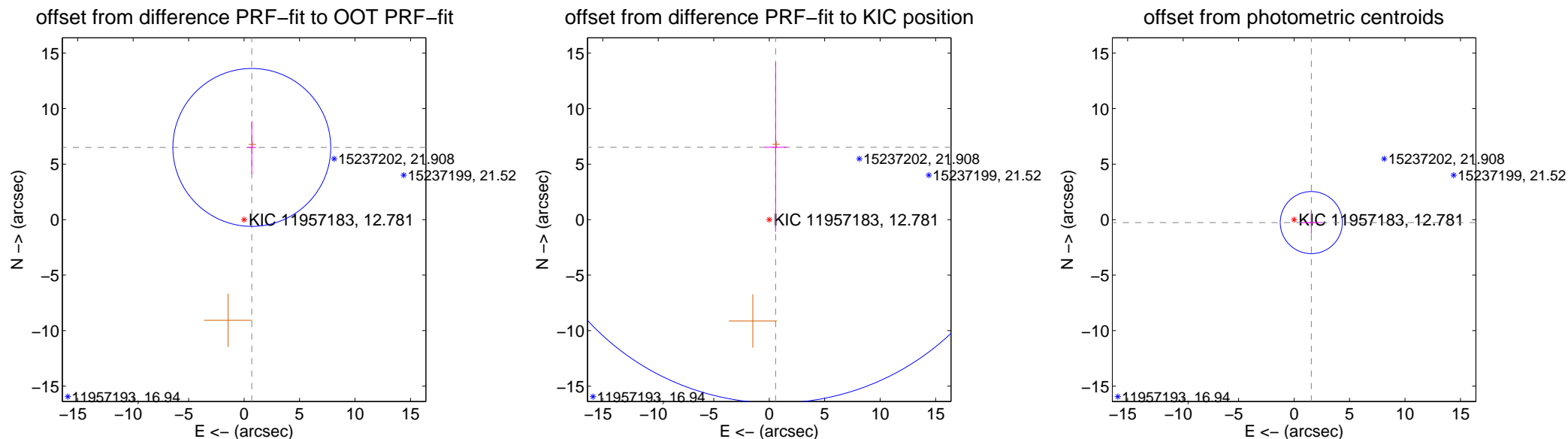
DV Centroid Data

Supplemental centroid analysis for 011957183-02. Kepler magnitude: 12.78. Transit SNR 6.69

There are 0 quarters with good PRF difference image offsets

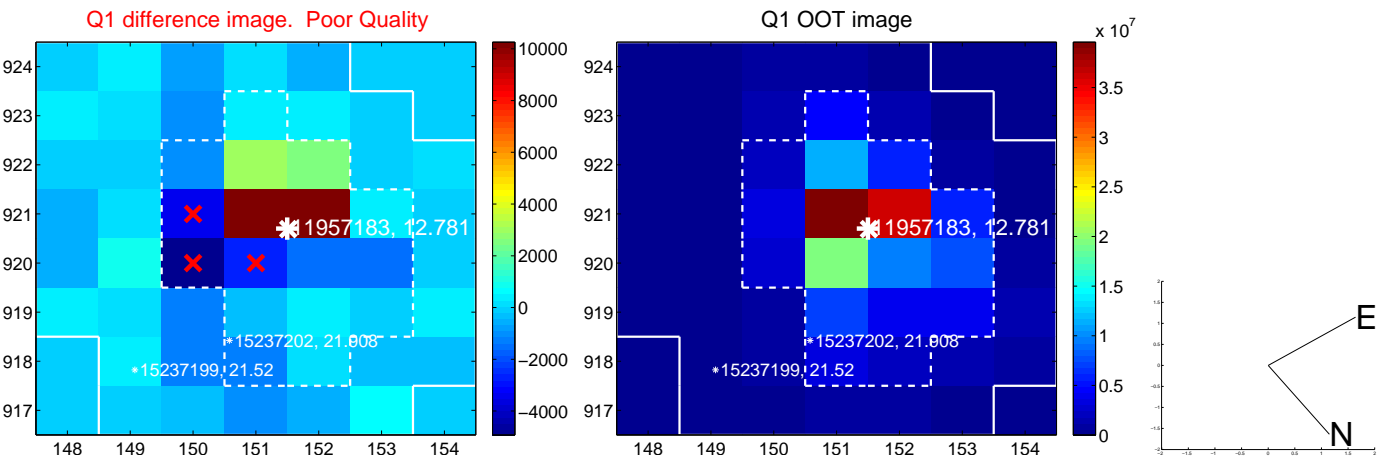
The direct PRF centroid is offset from the target star catalog position by about 0.07 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	6.542 ± 2.371	2.76	-0.697 ± 0.391	6.505 ± 2.384
PRF-fit source offset from KIC position	6.542 ± 7.679	0.85	-0.581 ± 1.010	6.517 ± 7.620
photometric centroid source offset	1.57 ± 0.93	1.69	-1.55 ± 0.93	-0.27 ± 1.01

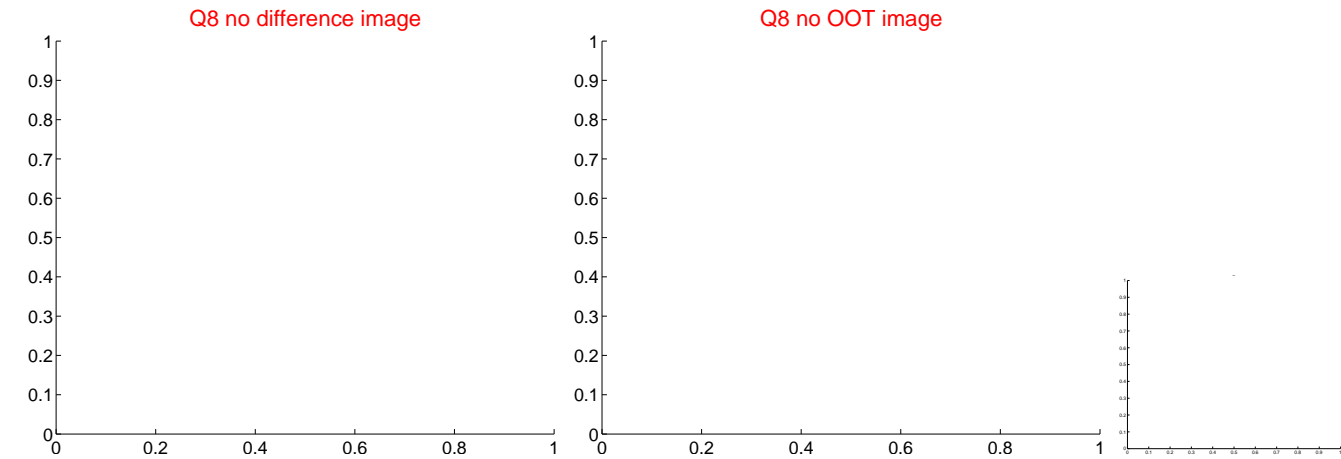
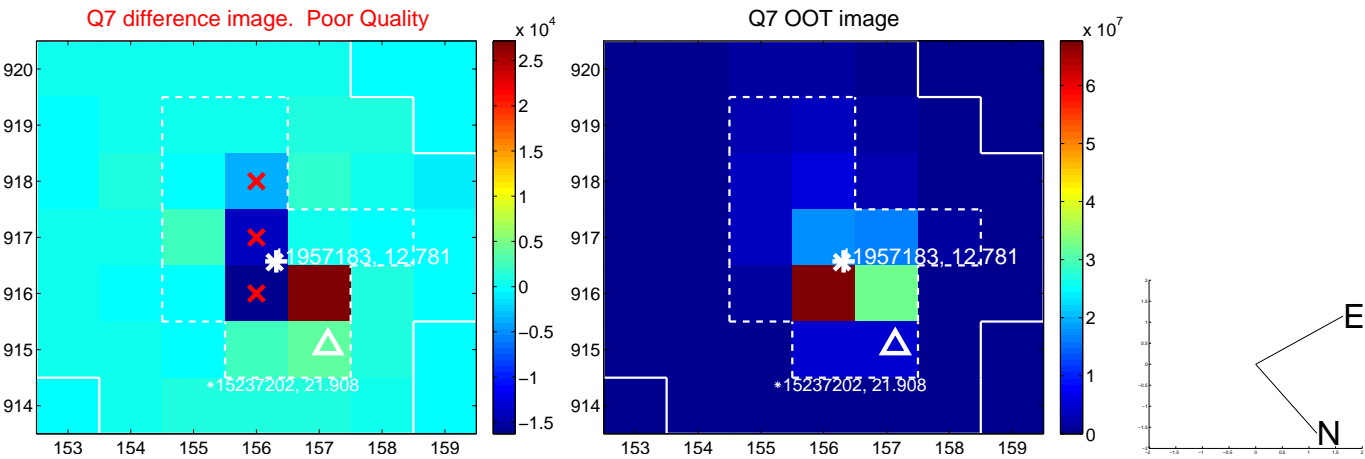
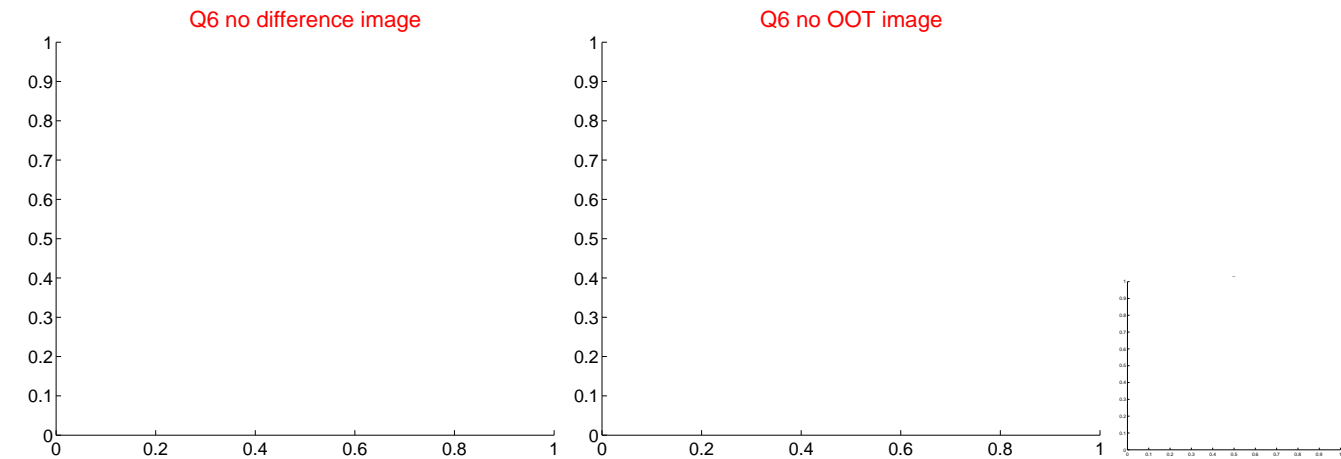


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets**; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

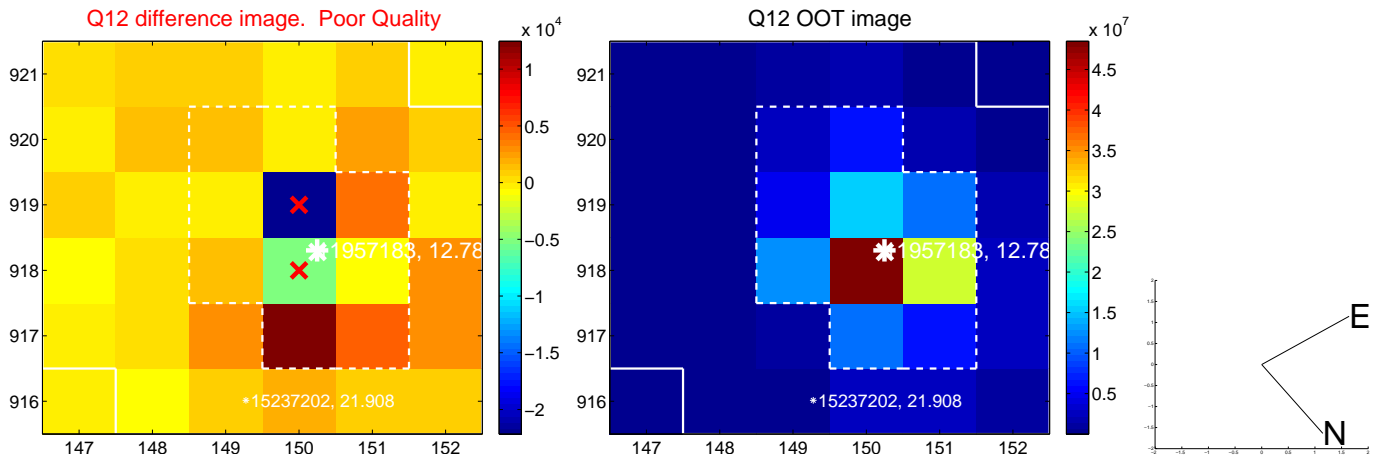
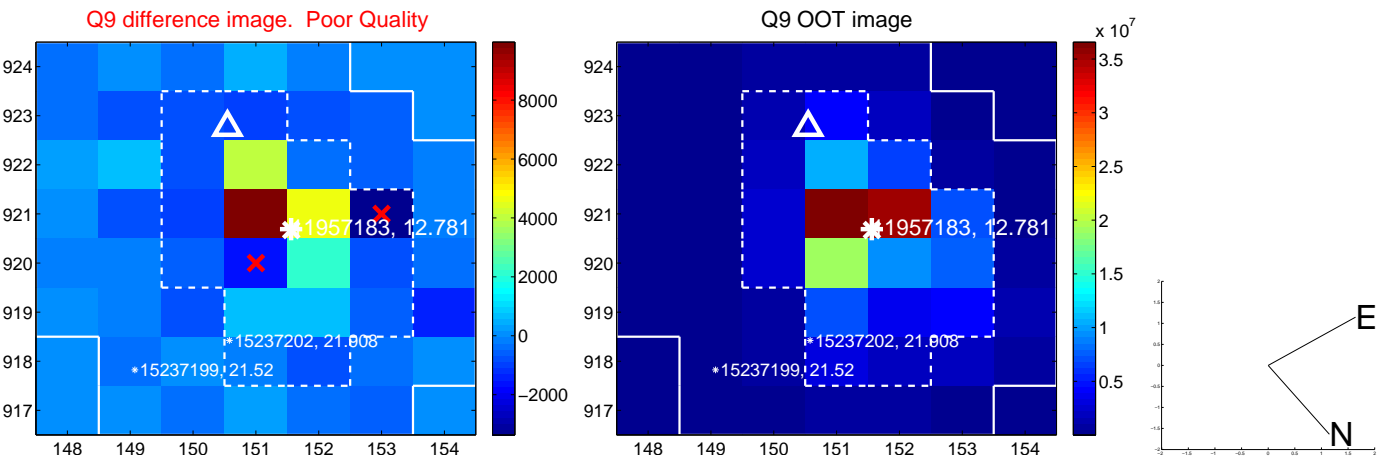
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



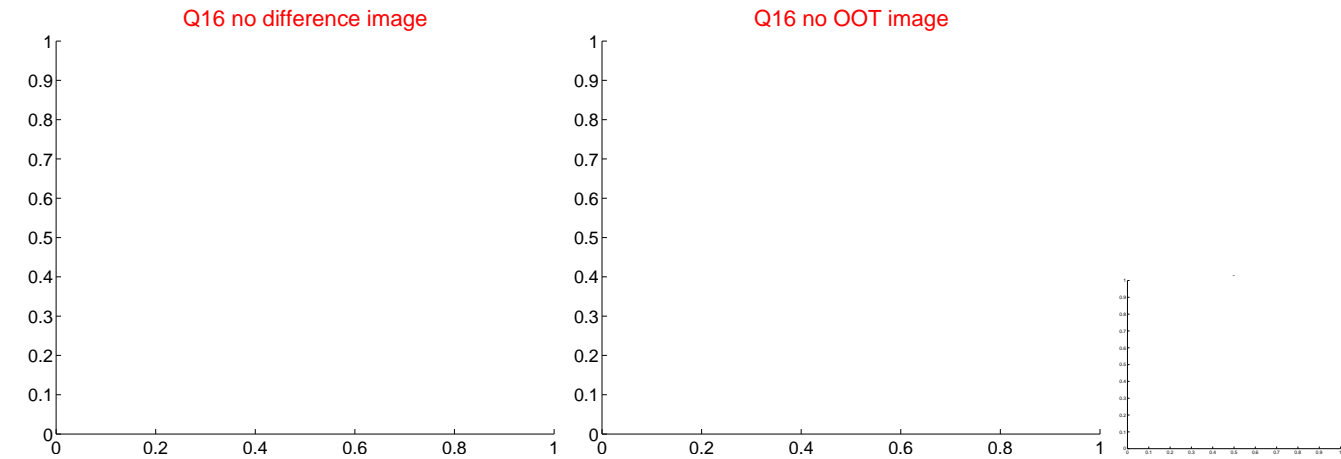
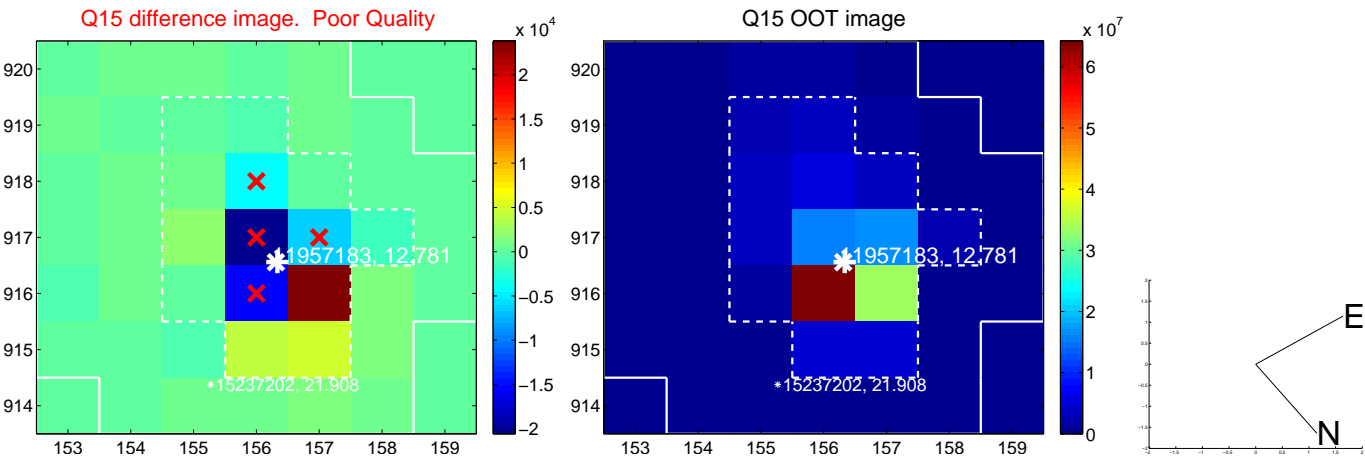
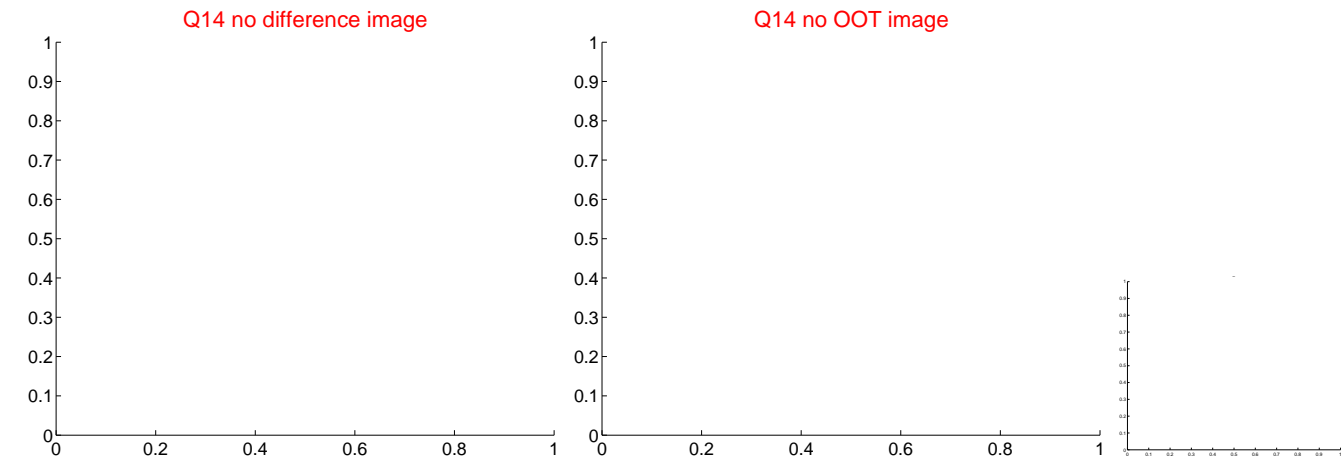
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



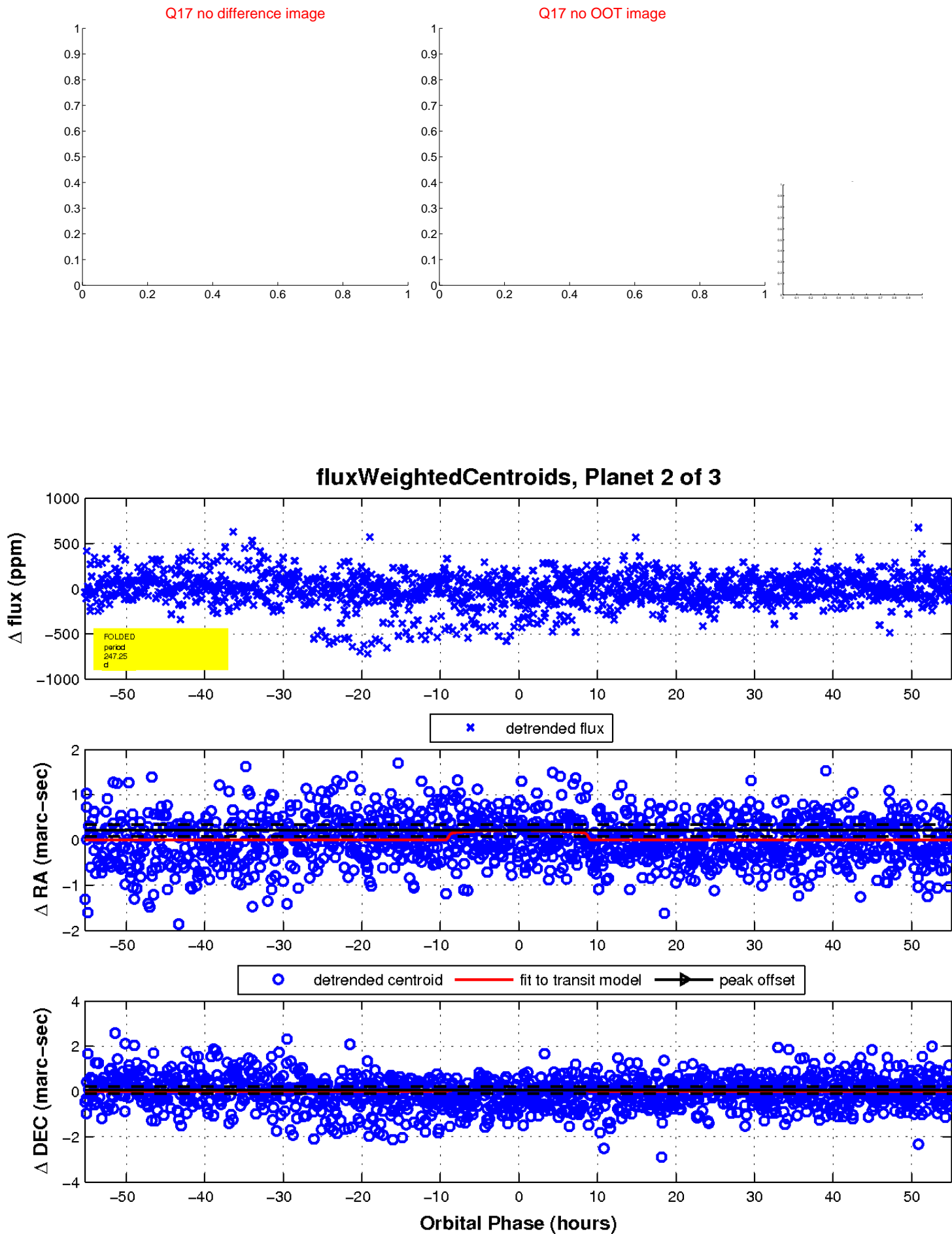
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

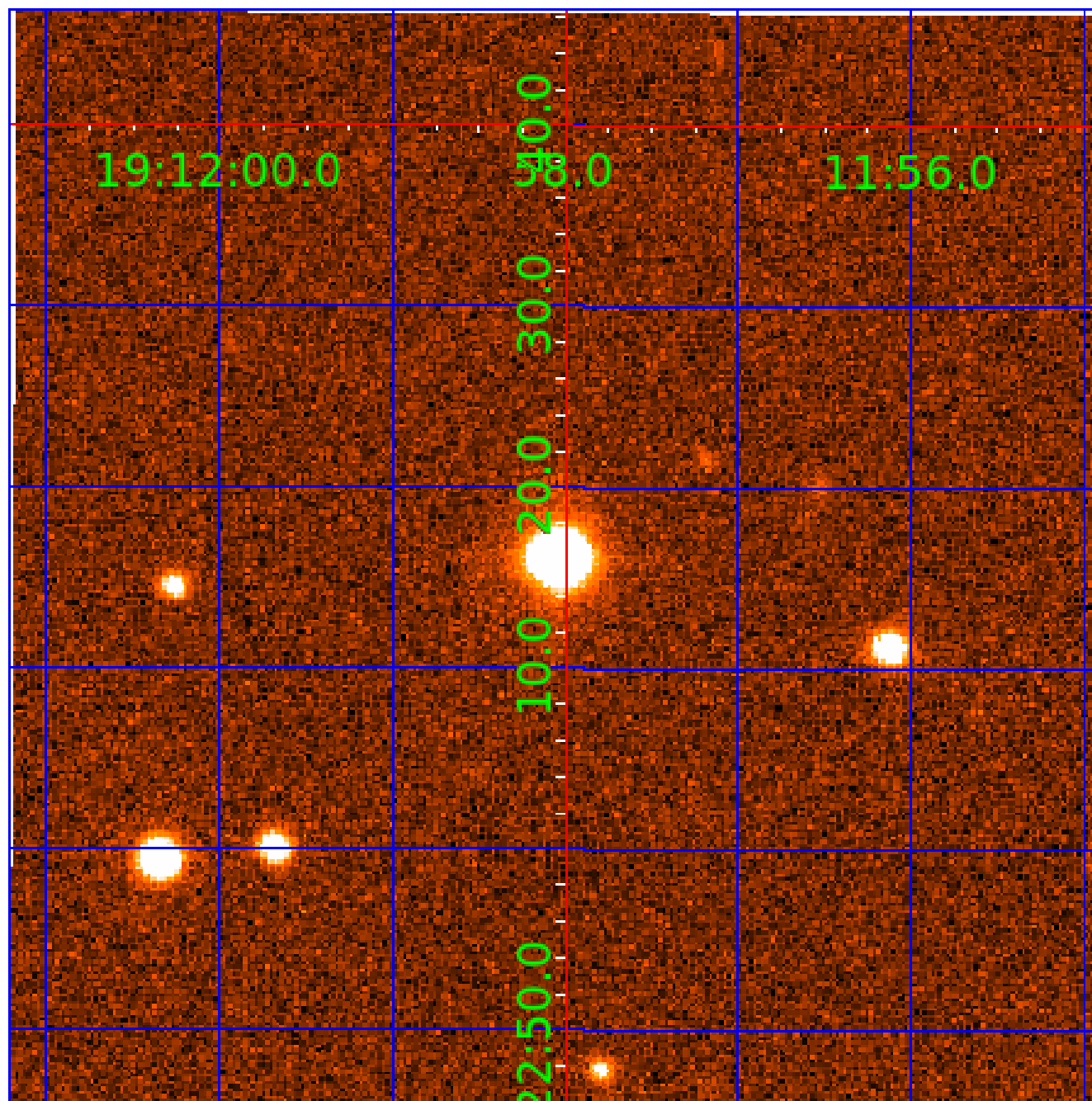


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 011957183

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})
011957183-01	OBS	No	2.054065	132.183023	18.5	7.922	8.3	8.5	1.46	7153	0.85	4063.10
011957183-02	OBS	No	247.250476	154.484292	143.6	18.421	11.0	6.7	1.46	7153	1.94	6.84
011957183-03	OBS	No	2.054100	133.201861	16.2	11.645	10.3	10.8	1.46	7153	0.60	4063.01

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
011957183-01	OBS	FP	0.00	1	0	0	0	LPP_DV
011957183-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_MARSHALL—TRANS_GAPPED—LPP_DV—ALL_TRANS_CHASES—CENT_FEW_DIFFS
011957183-03	OBS	FP	0.00	1	0	0	0	LPP_DV—SAME_NTL_PERIOD

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

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

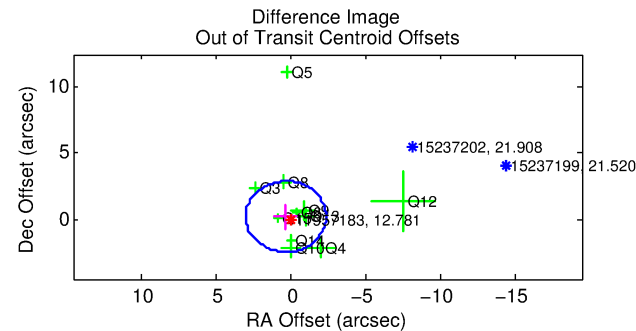
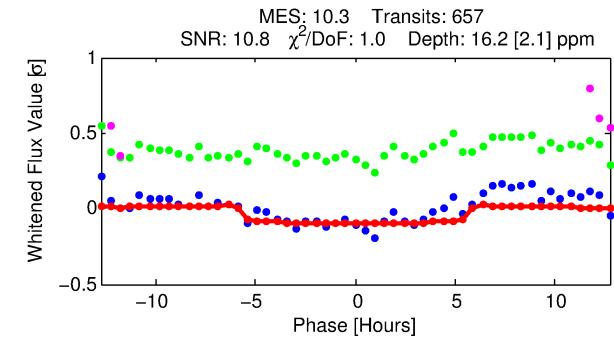
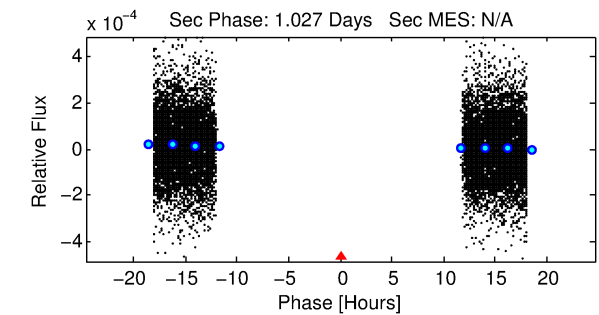
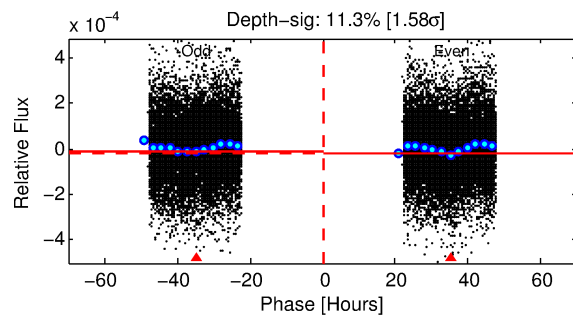
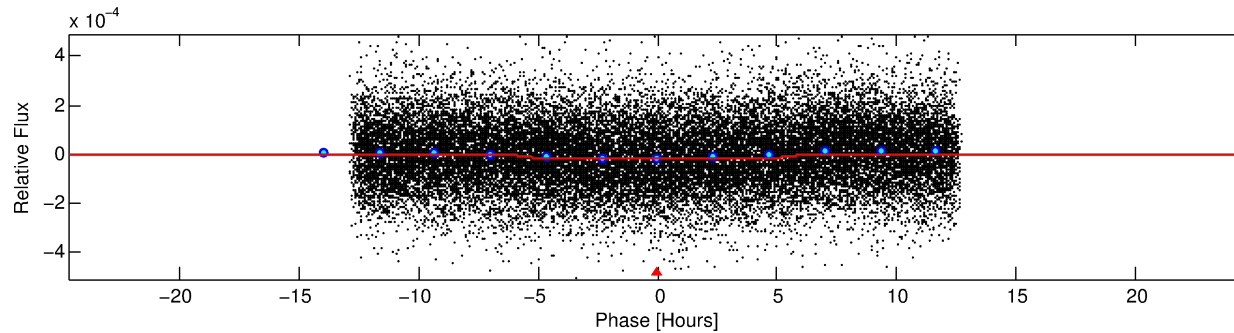
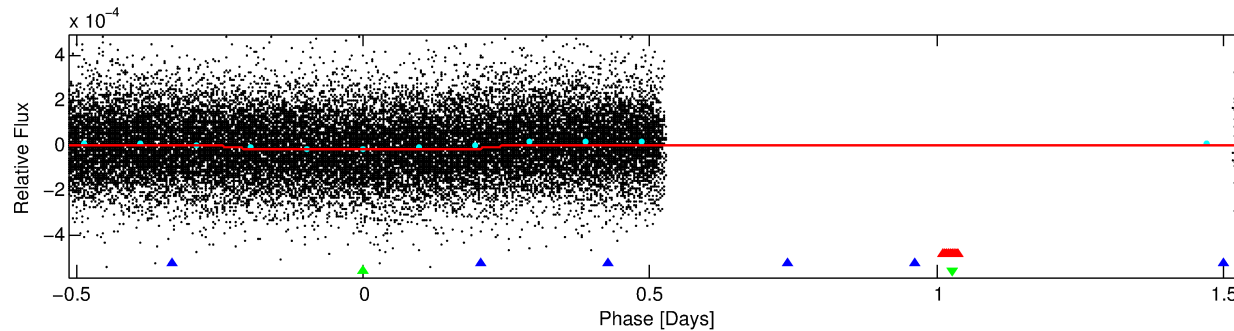
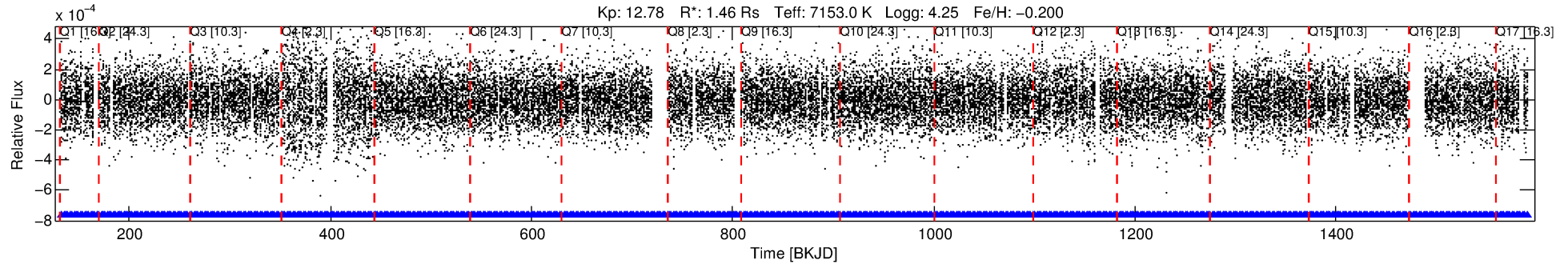
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 011957183-03

No Significant Match Found

DV One-Page Summary

KIC: 11957183 Candidate: 3 of 3 Period: 2.054 d



DV Fit Results:

Period = 2.05410 [0.00003] d
Epoch = 133.2019 [0.0079] BKJD
Rp/R* = 0.0037 [0.0036]
a/R* = 1.48 [4.55]
b = 0.11 [52.85]
Seff = 4063.01 [1736.38]
Teq = 2036 [218] K
Rp = 0.60 [0.61] Re
a = 0.0352 [0.0100] AU

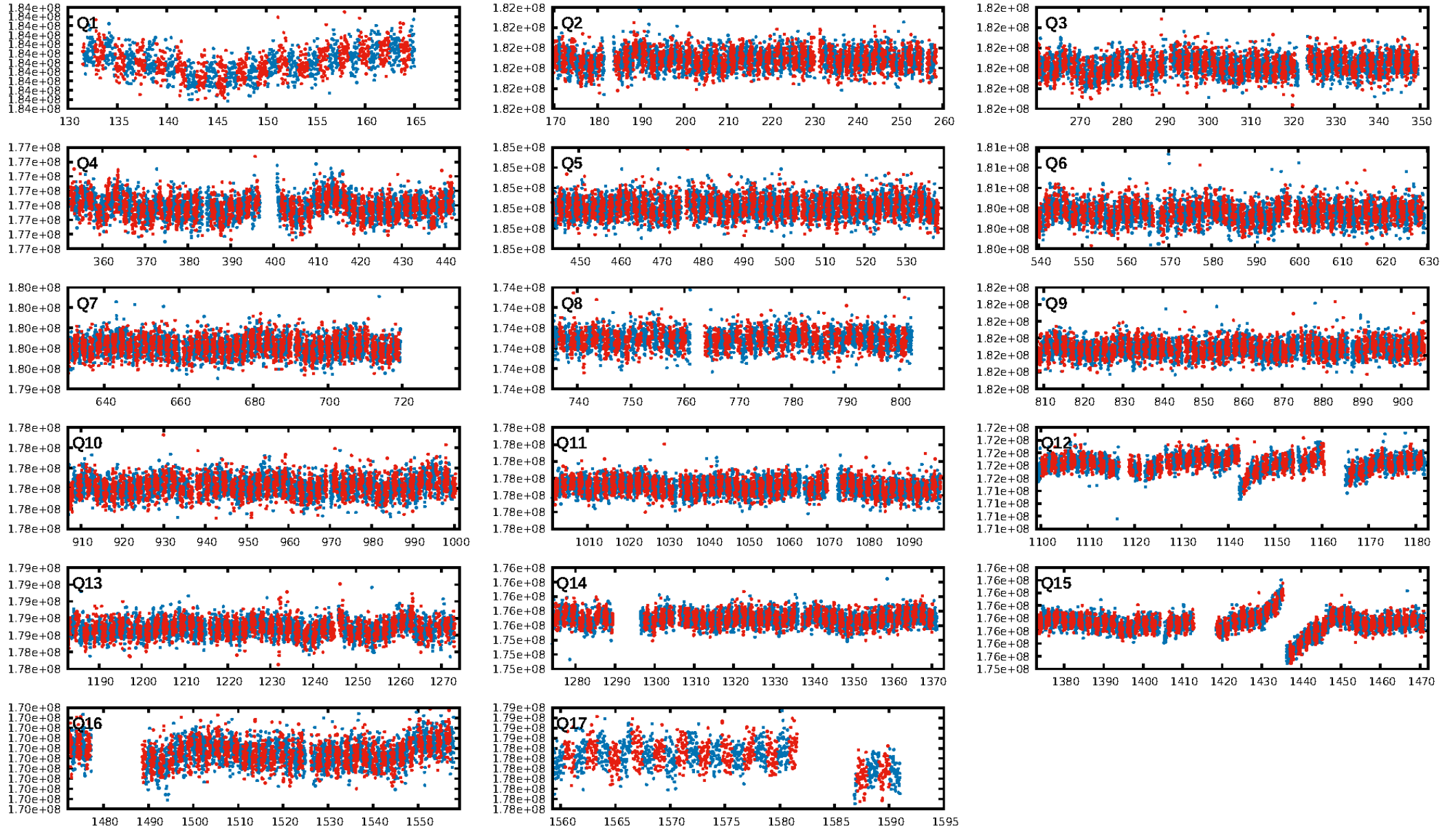
DV Diagnostic Results:

ShortPeriod-sig: 0.0% [0.00 σ]
LongPeriod-sig: 100.0% [270.03 σ]
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [629/629]
GhostDiagnostic-chr: 1.743
Centroid-sig: 27.5%
Centroid-so: 1.036 arcsec [1.15 σ]
OotOffset-rm: 0.360 arcsec [0.40 σ]
KicOffset-rm: 0.386 arcsec [0.45 σ]
OotOffset-st: 3/2/3/3 [11]
KicOffset-st: 3/2/3/3 [11]
DiffImageQuality-fgm: 0.64 [7/11]
DiffImageOverlap-fno: 0.71 [12/17]

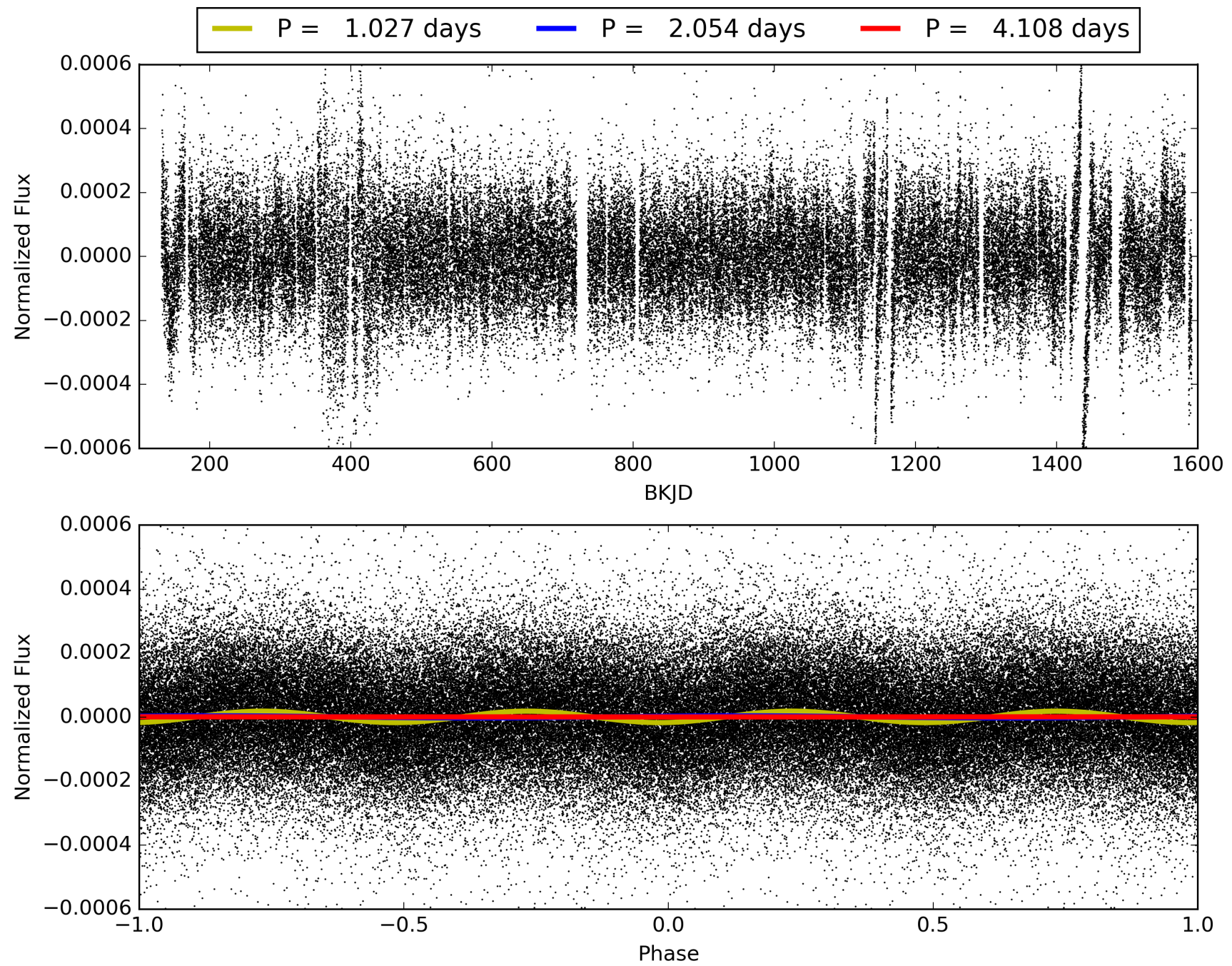
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 29-Jan-2016 12:47:58 Z

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

TCE 011957183-03, PDC Light Curves

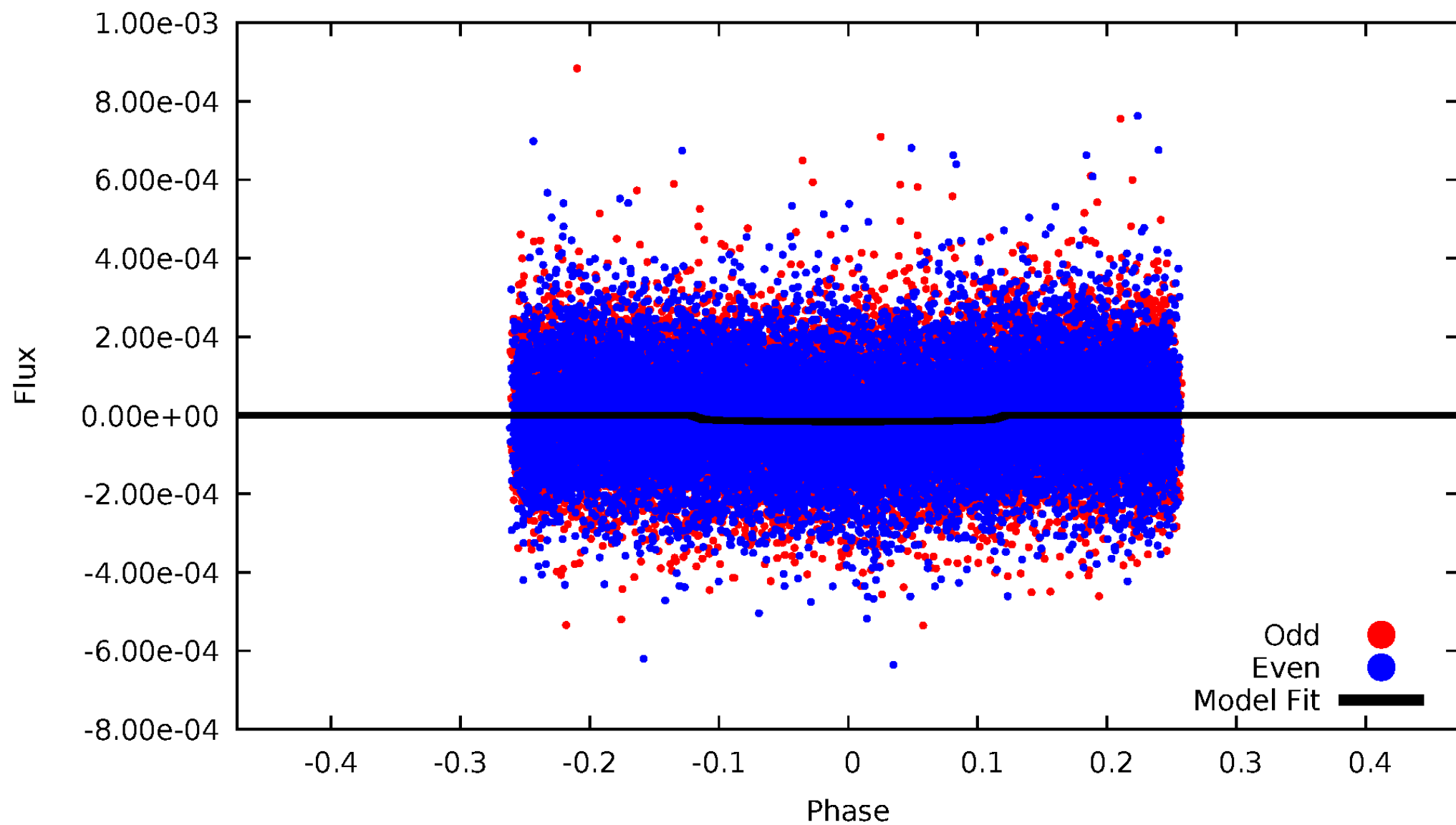


TCE 011957183-03



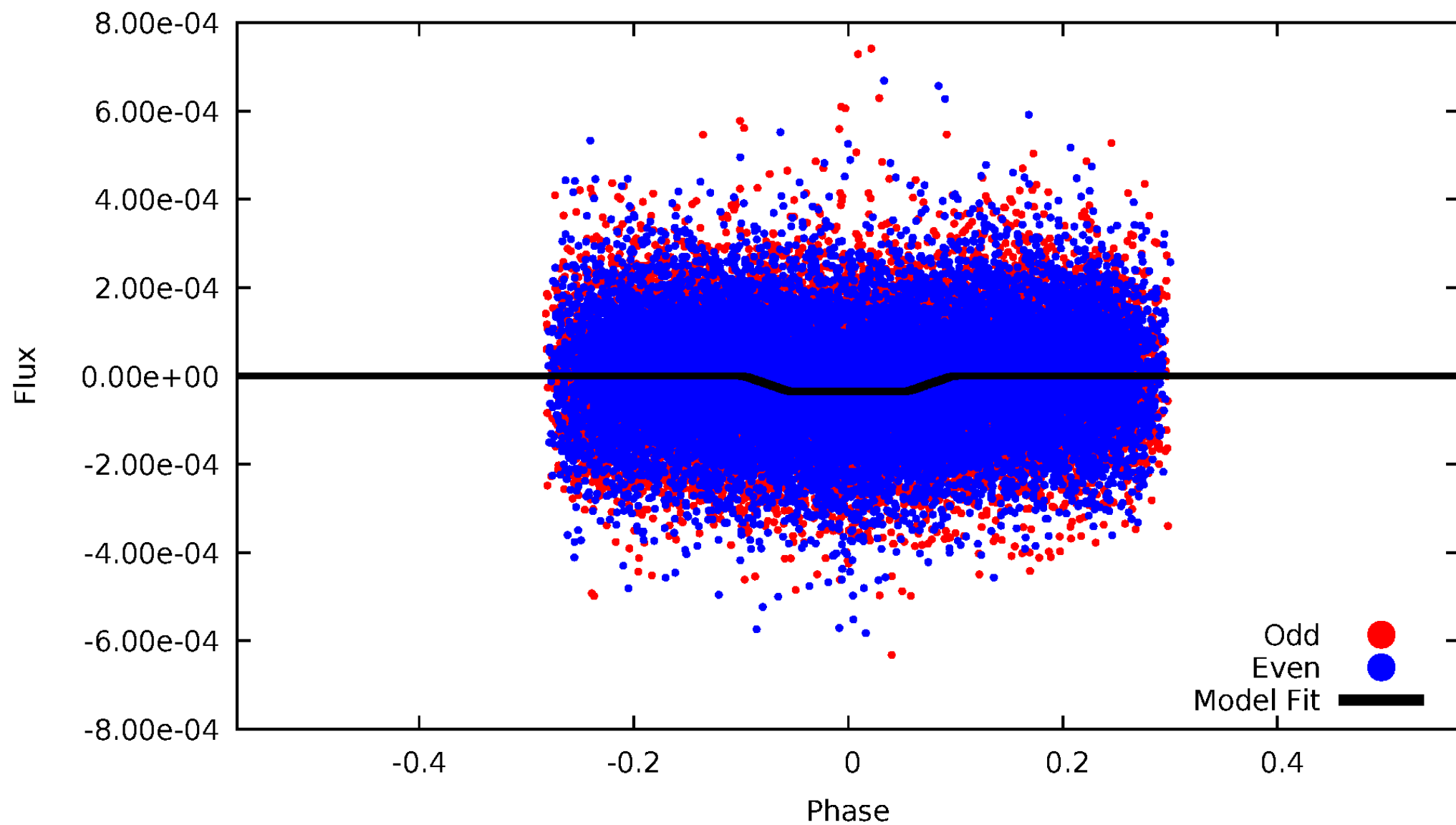
DV Odd/Even

TCE 011957183-03



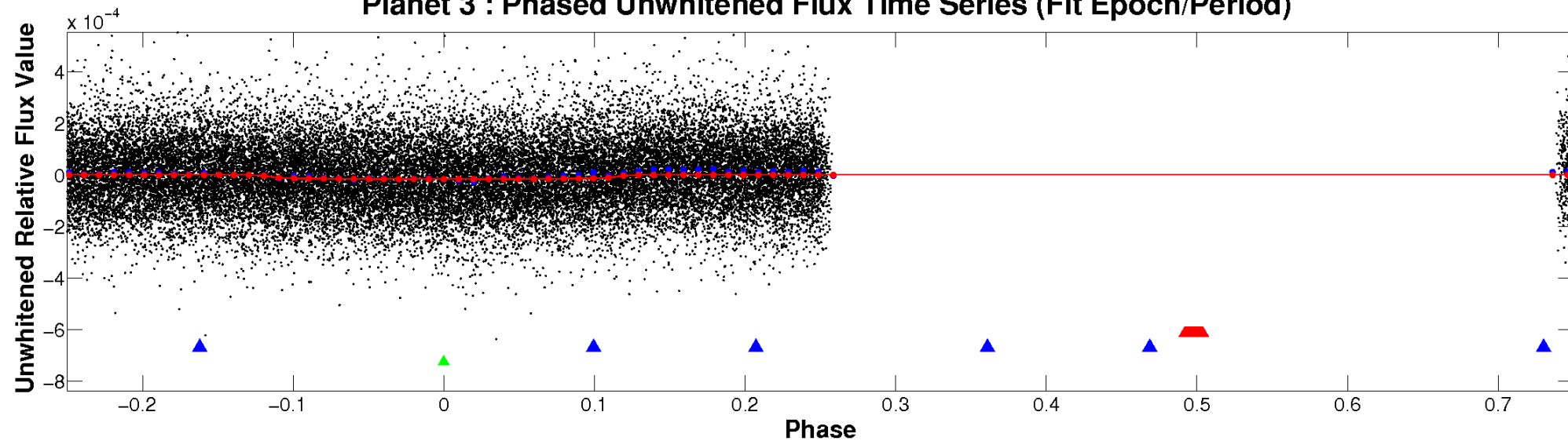
ALT Odd/Even

TCE 011957183-03

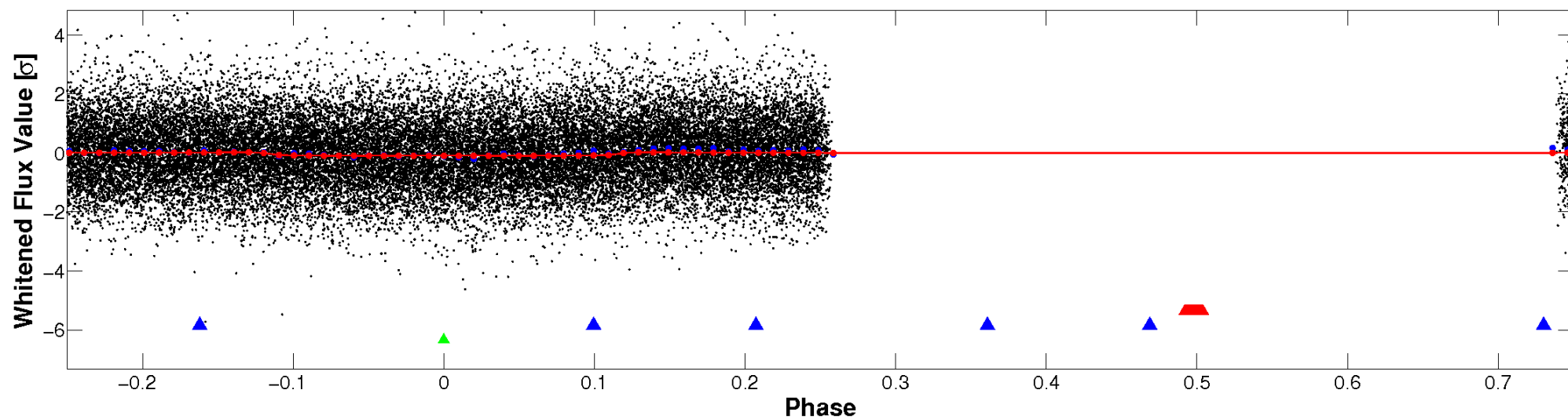


Non-Whitened Vs. Whitened Light Curve

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

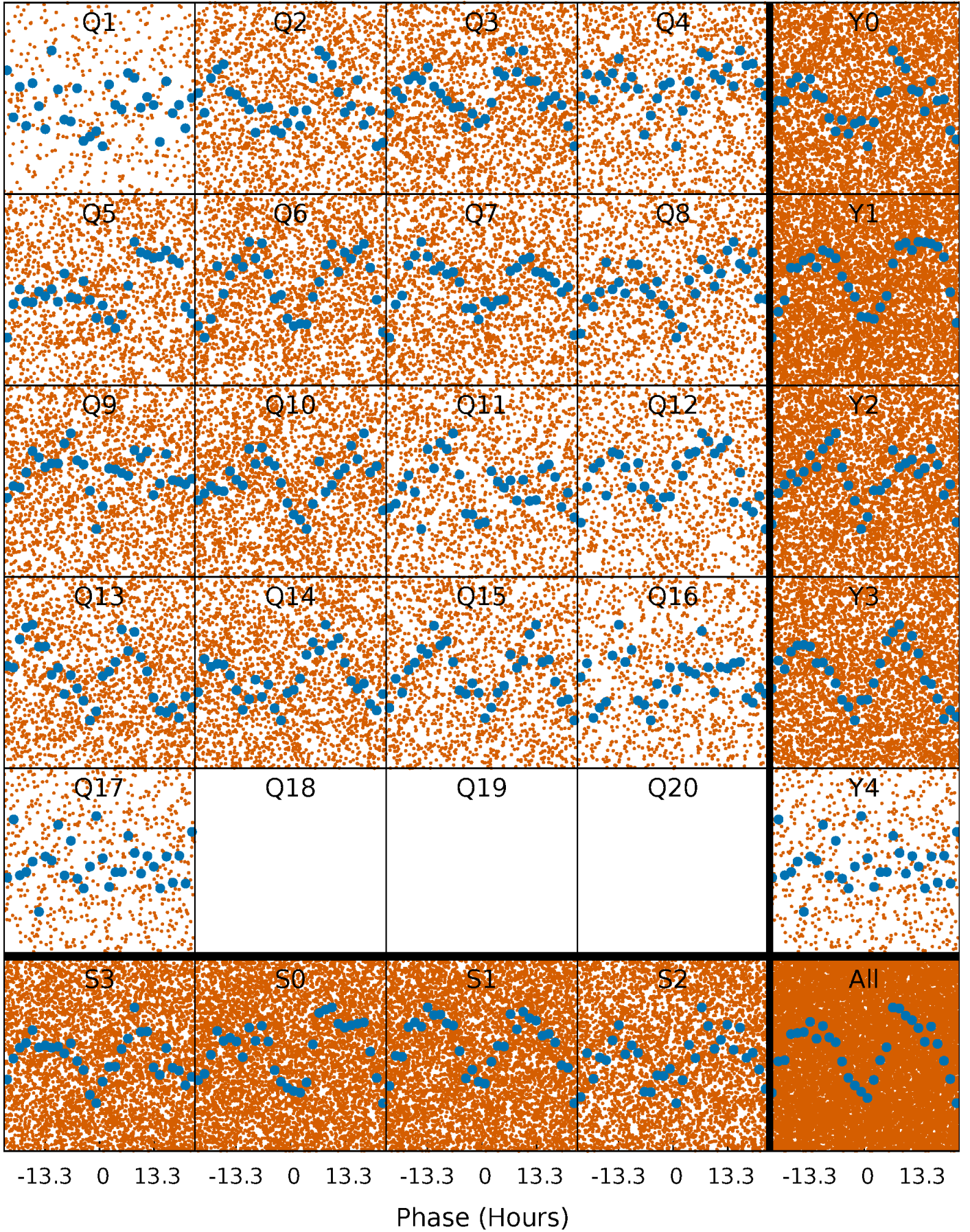


Planet 3 : Phased Whitened Flux Time Series (Fit Epoch/Period)



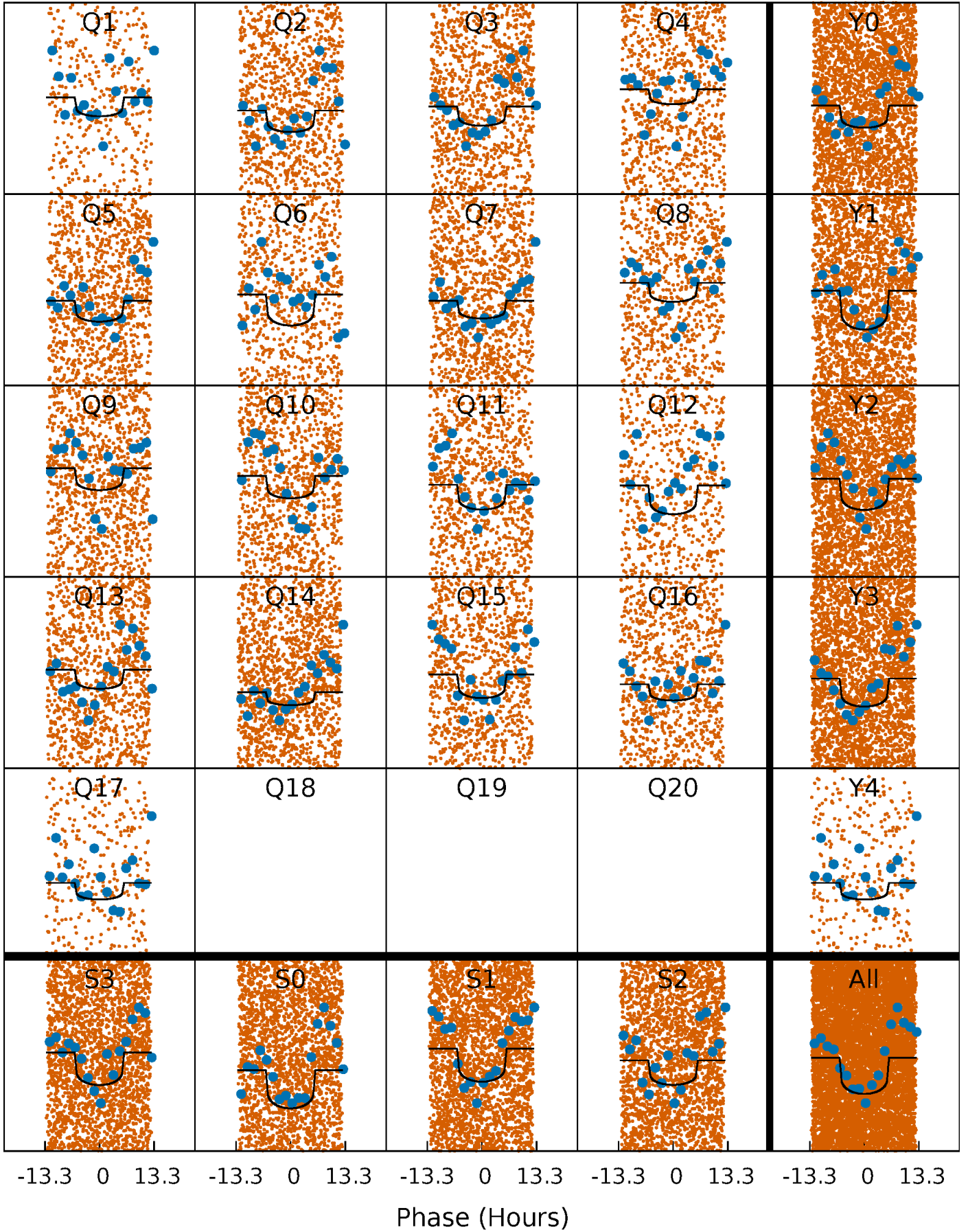
PDC Quarter-Phased Transit Curves

TCE 011957183-03 P= 2.054100 Days $T_0=133.201861$ (BKJD)



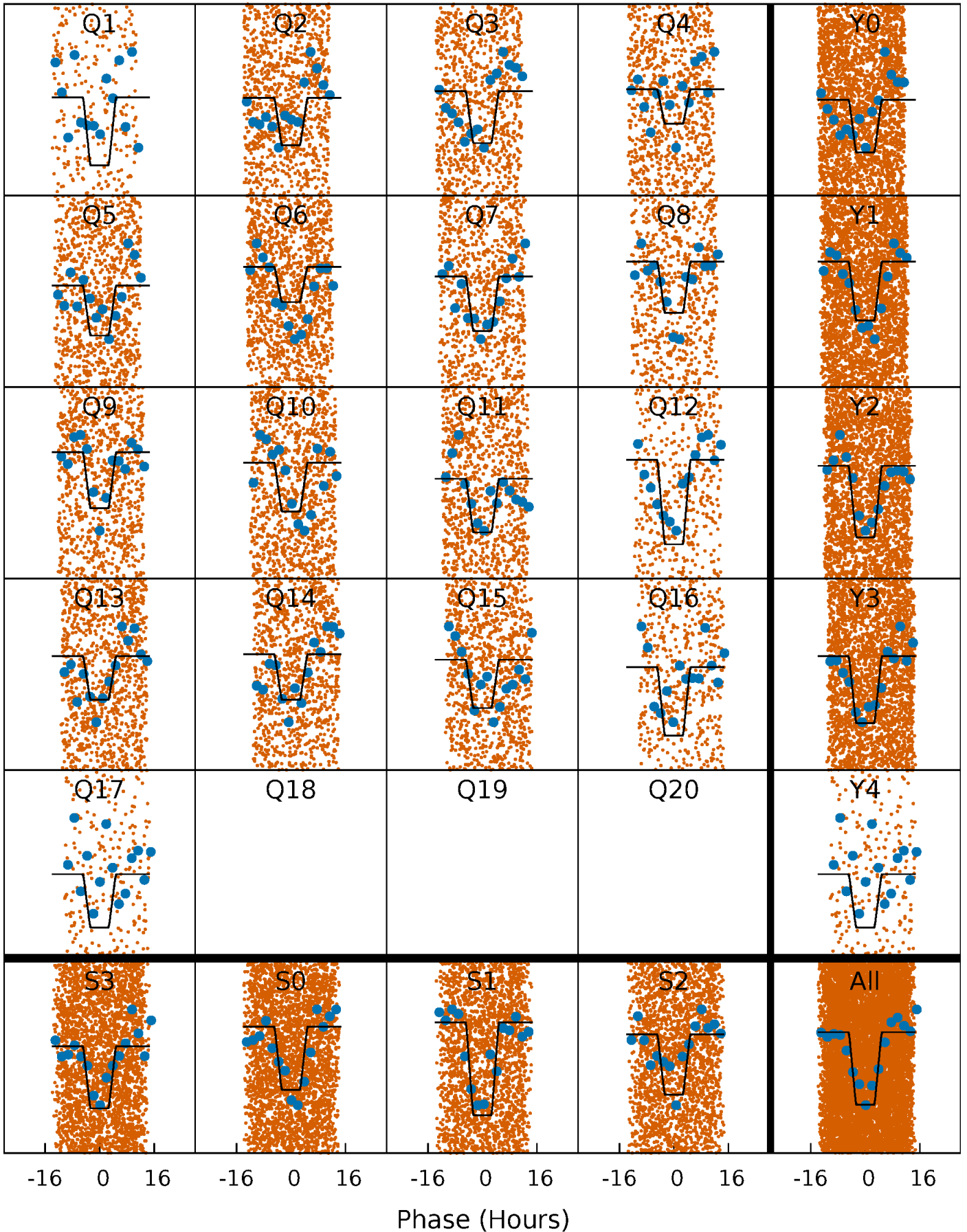
DV Quarter-Phased Transit Curves

TCE 011957183-03 P= 2.054100 Days $T_0=133.201861$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

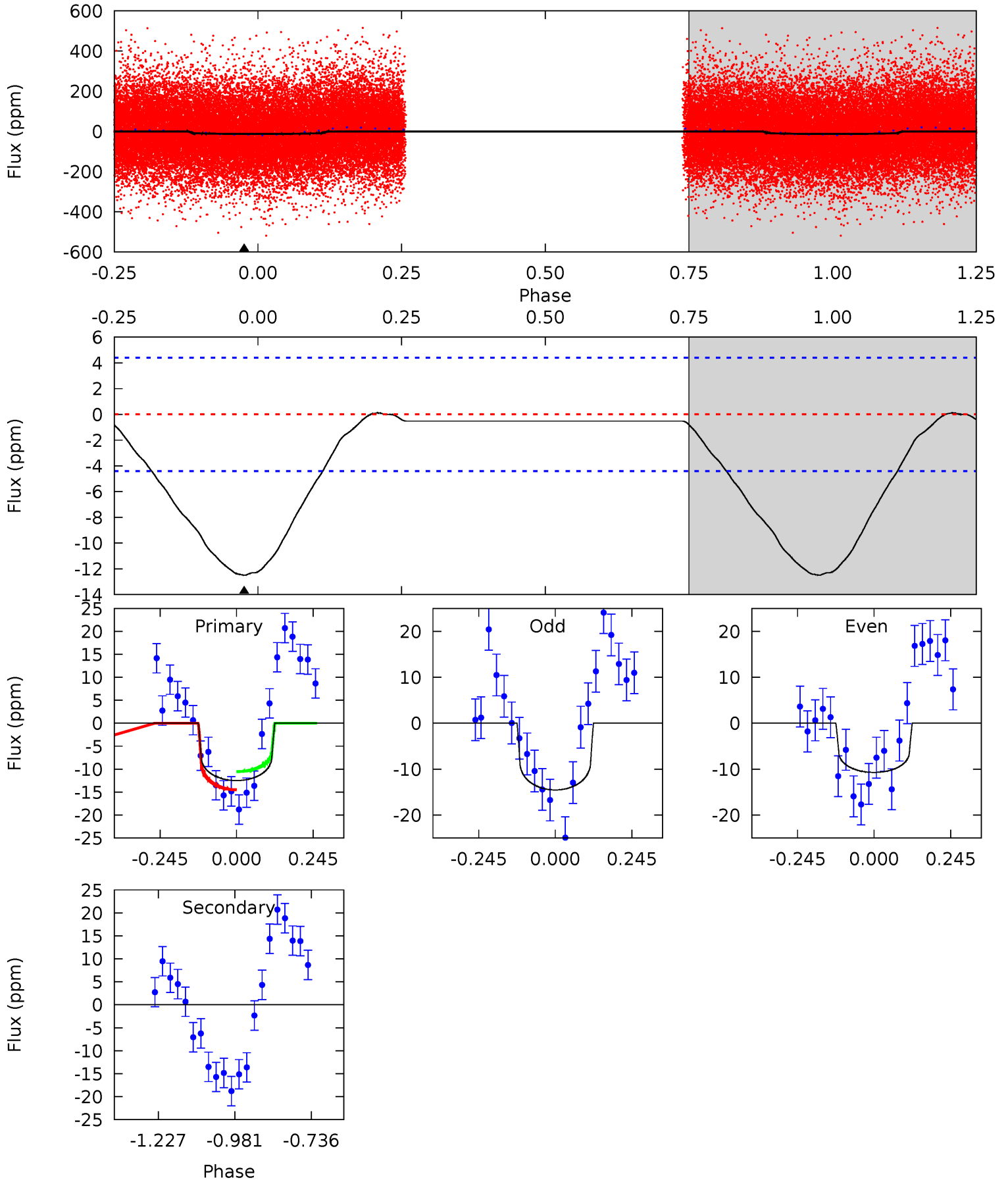
TCE 011957183-03 P= 2.053841 Days $T_0=133.272094$ (BKJD)



DV Model-Shift Uniqueness Test

011957183-03, P = 2.054100 Days, E = 131.147761 Days

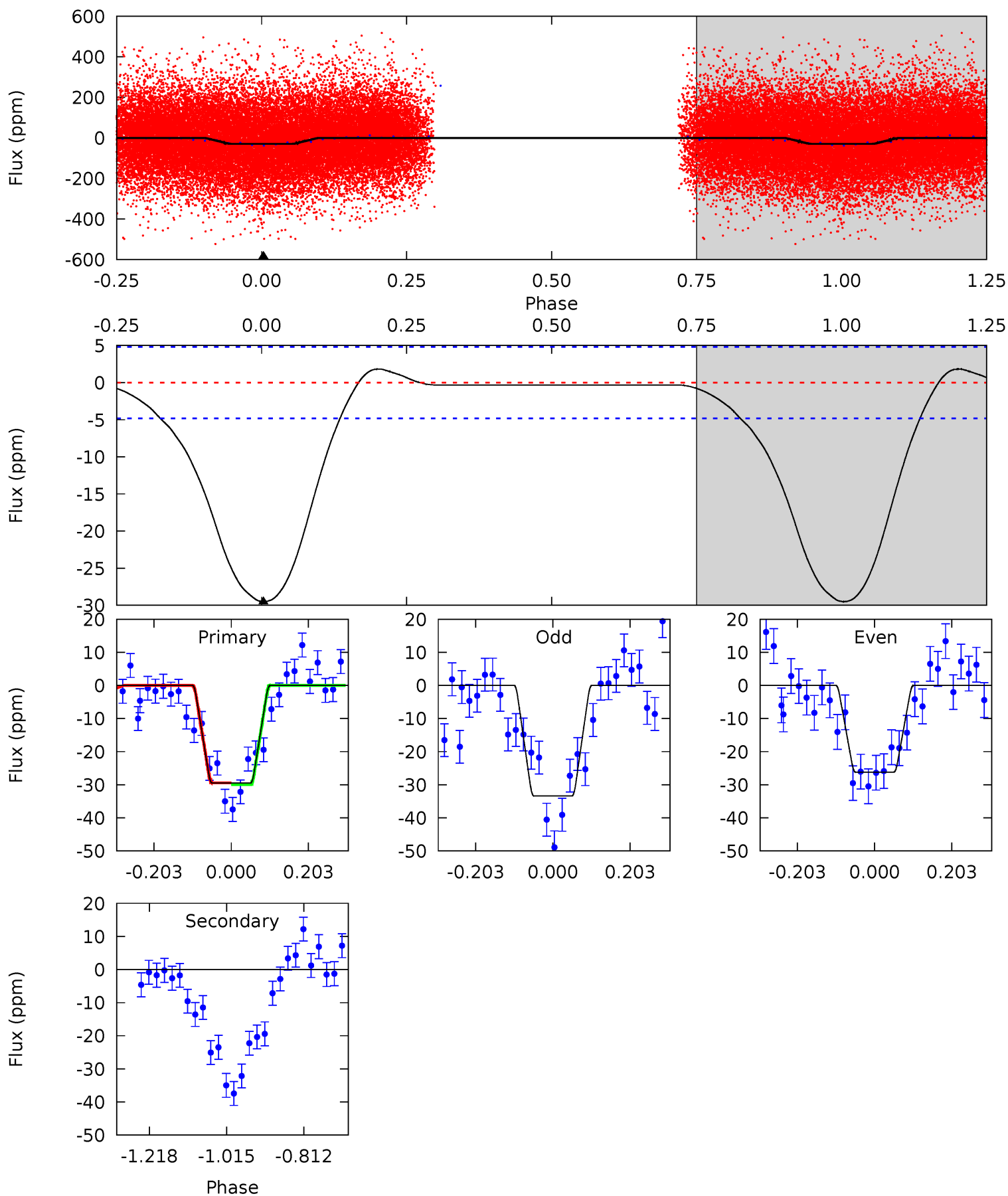
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
12.4	0	0	0	4.37	1.16	0.21	12.4	12.4	0	0	1.89	0.93	0.01	1.91



Alt Model-Shift Uniqueness Test

011957183-03, P = 2.053841 Days, E = 131.218253 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
27.1	0	0	0	4.41	1.27	1.36	27.1	27.1	0	0	3.29	1.03	0.06	0.27



Stellar Parameters For KIC 011957183

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	7153^{+200}_{-275}	$4.245^{+0.090}_{-0.210}$	$-0.200^{+0.250}_{-0.350}$	$1.463^{+0.515}_{-0.257}$	$1.377^{+0.223}_{-0.203}$	$0.620^{+0.316}_{-0.336}$
	+3%/-4%	+2%/-5%	+125%/-175%	+35%/-18%	+16%/-15%	+51%/-54%
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 011957183-03 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	0 ± 1	$0.77^{+0.60}_{-0.48}$	2882^{+240}_{-173}	-2947^{+6825}_{-1069}	$0.049^{+1.729}_{-1.536}$
Alt.	0 ± 1	$1.03^{+0.70}_{-0.57}$	2884^{+232}_{-183}	-3056^{+6420}_{-692}	$-0.021^{+0.923}_{-0.975}$

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 $A_{obs} \gg 1.0$

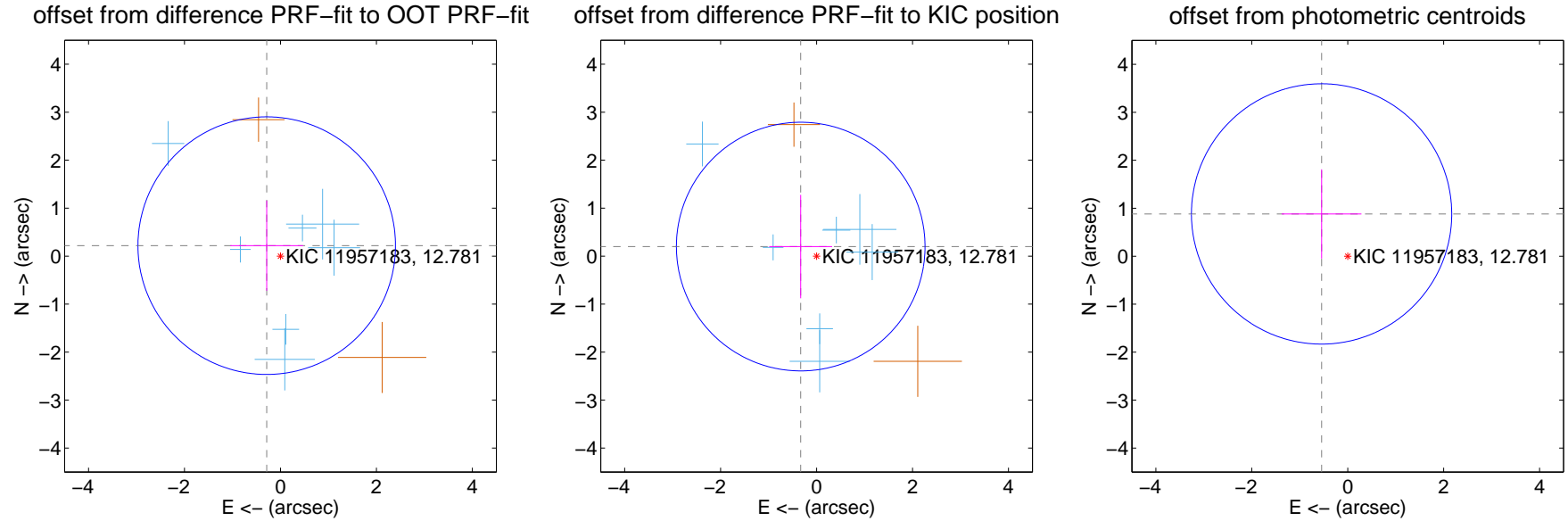
DV Centroid Data

Supplemental centroid analysis for 011957183-03. Kepler magnitude: 12.78. Transit SNR 10.80

There are 7 quarters with good PRF difference image offsets

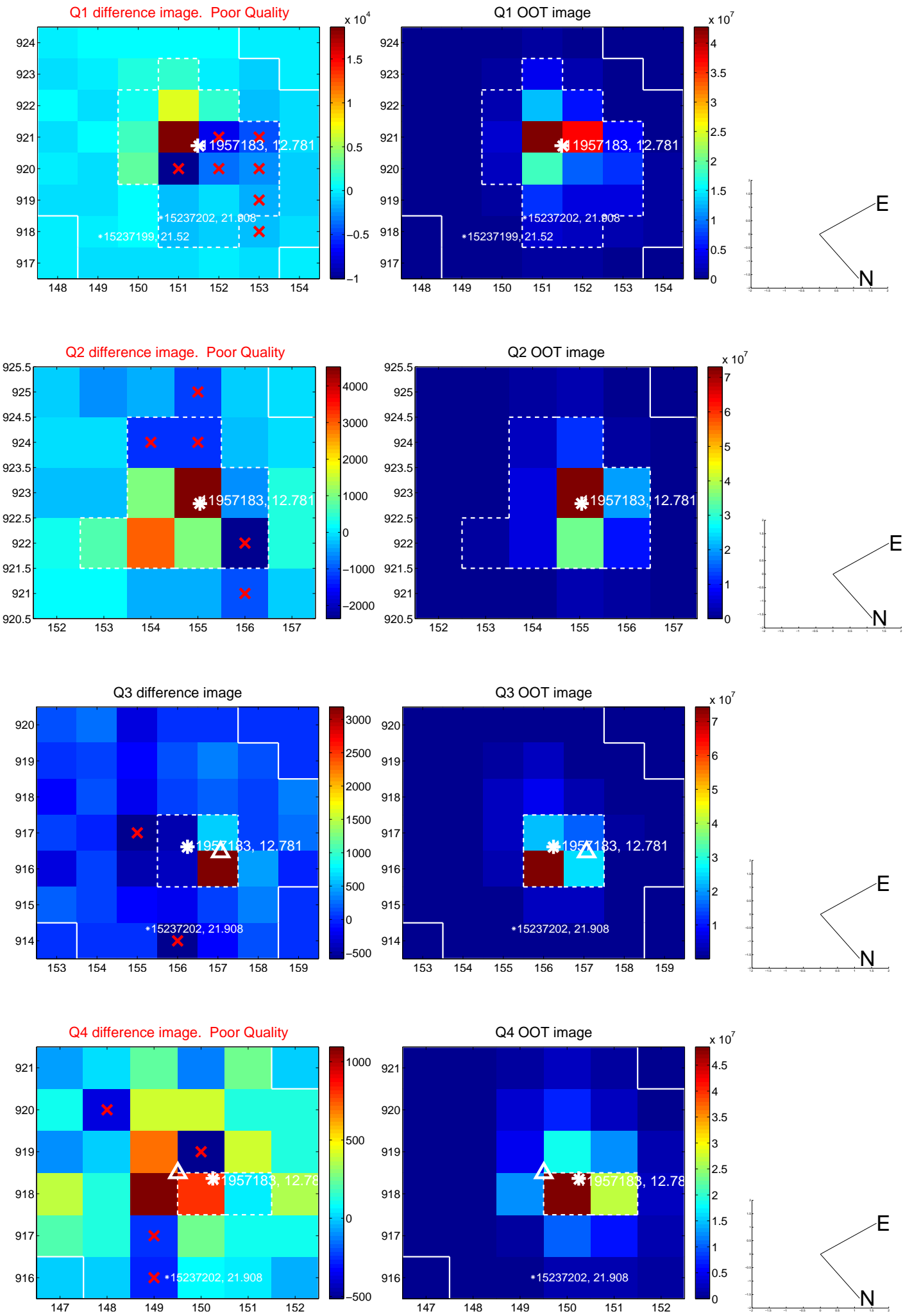
The direct PRF centroid is offset from the target star catalog position by about 0.08 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.360 ± 0.895	0.40	0.286 ± 0.759	0.219 ± 0.940
PRF-fit source offset from KIC position	0.386 ± 0.864	0.45	0.331 ± 0.656	0.199 ± 1.077
photometric centroid source offset	1.04 ± 0.90	1.15	0.55 ± 0.83	0.88 ± 0.93

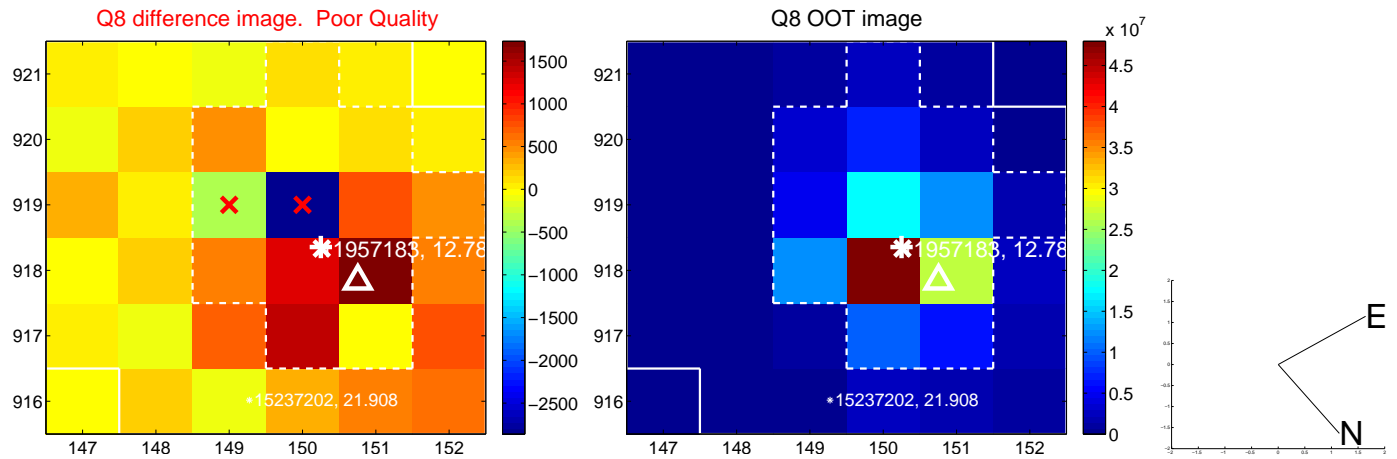
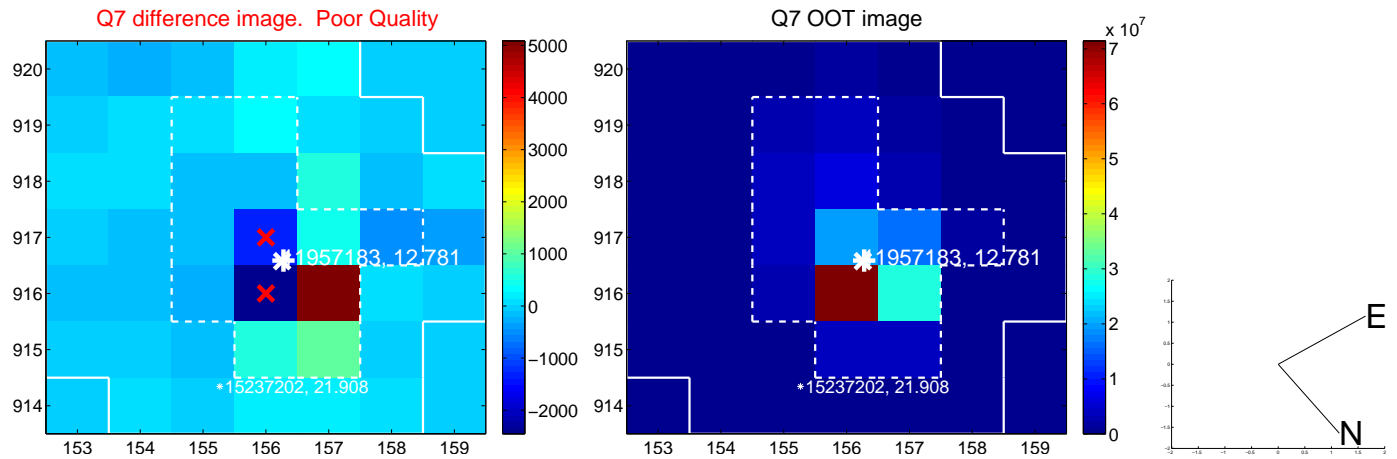
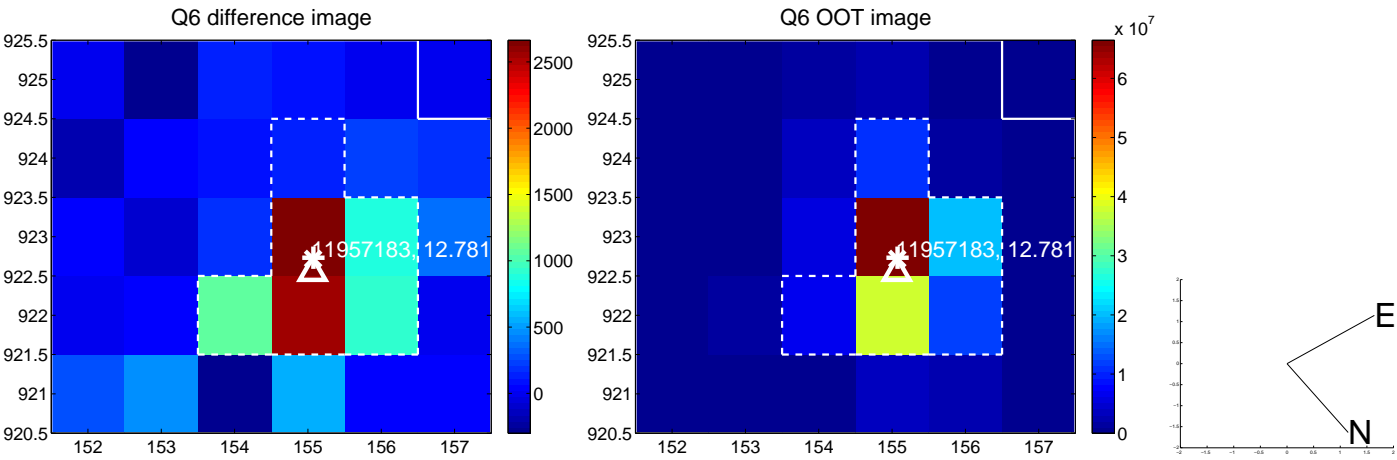
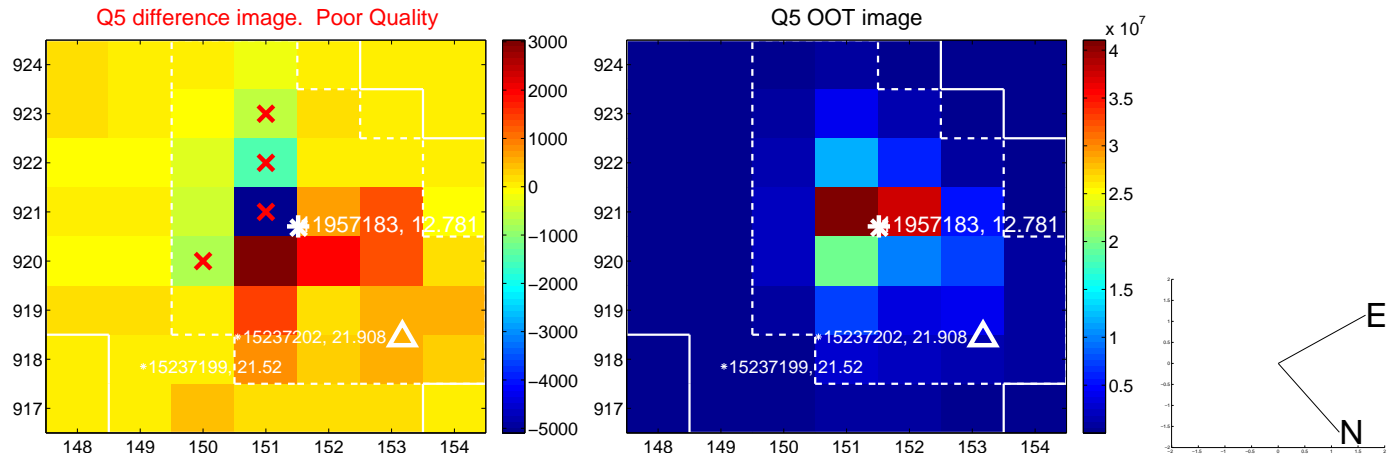


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses:** good quarterly centroid offsets; **Vermillion crosses:** bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

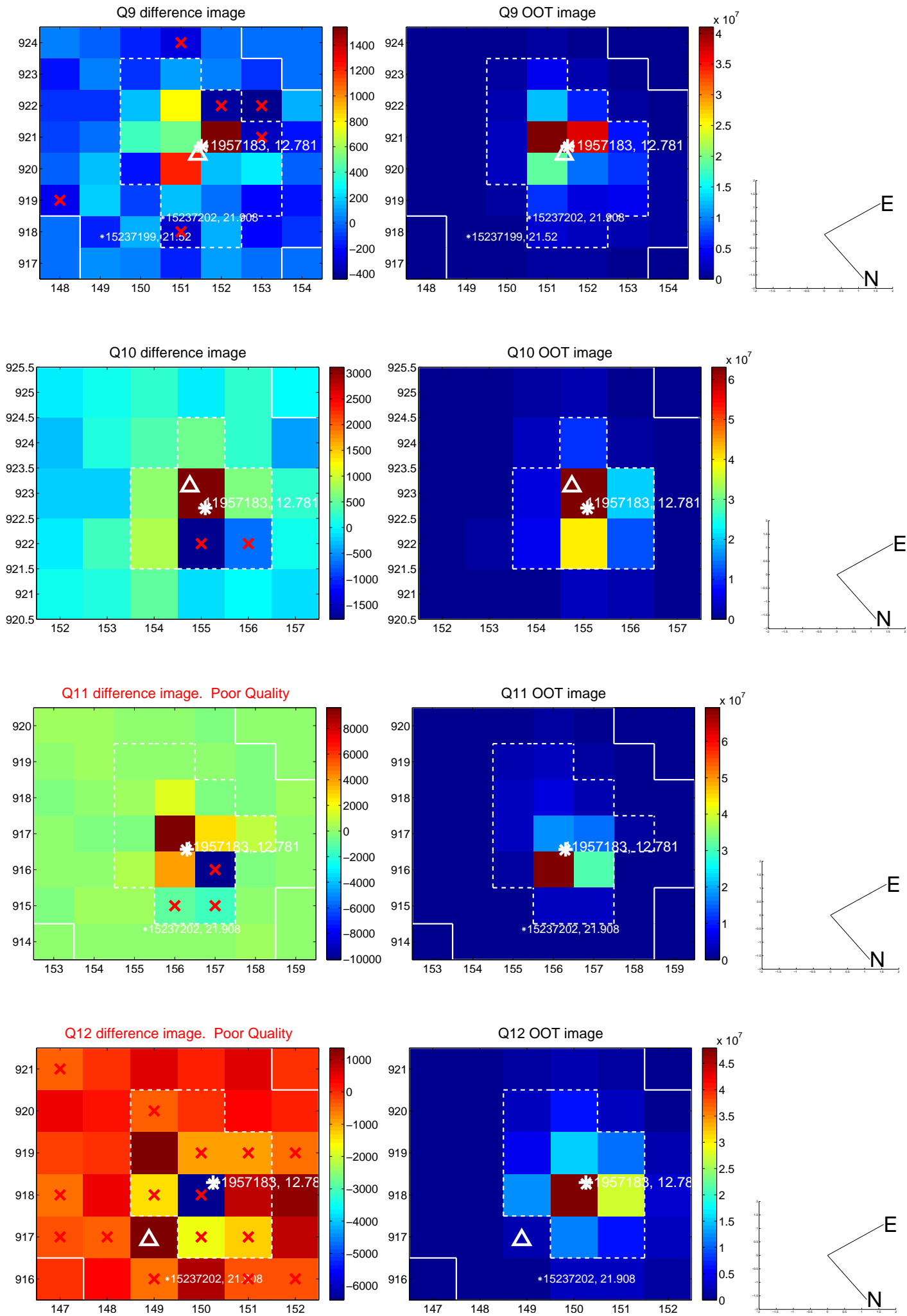
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



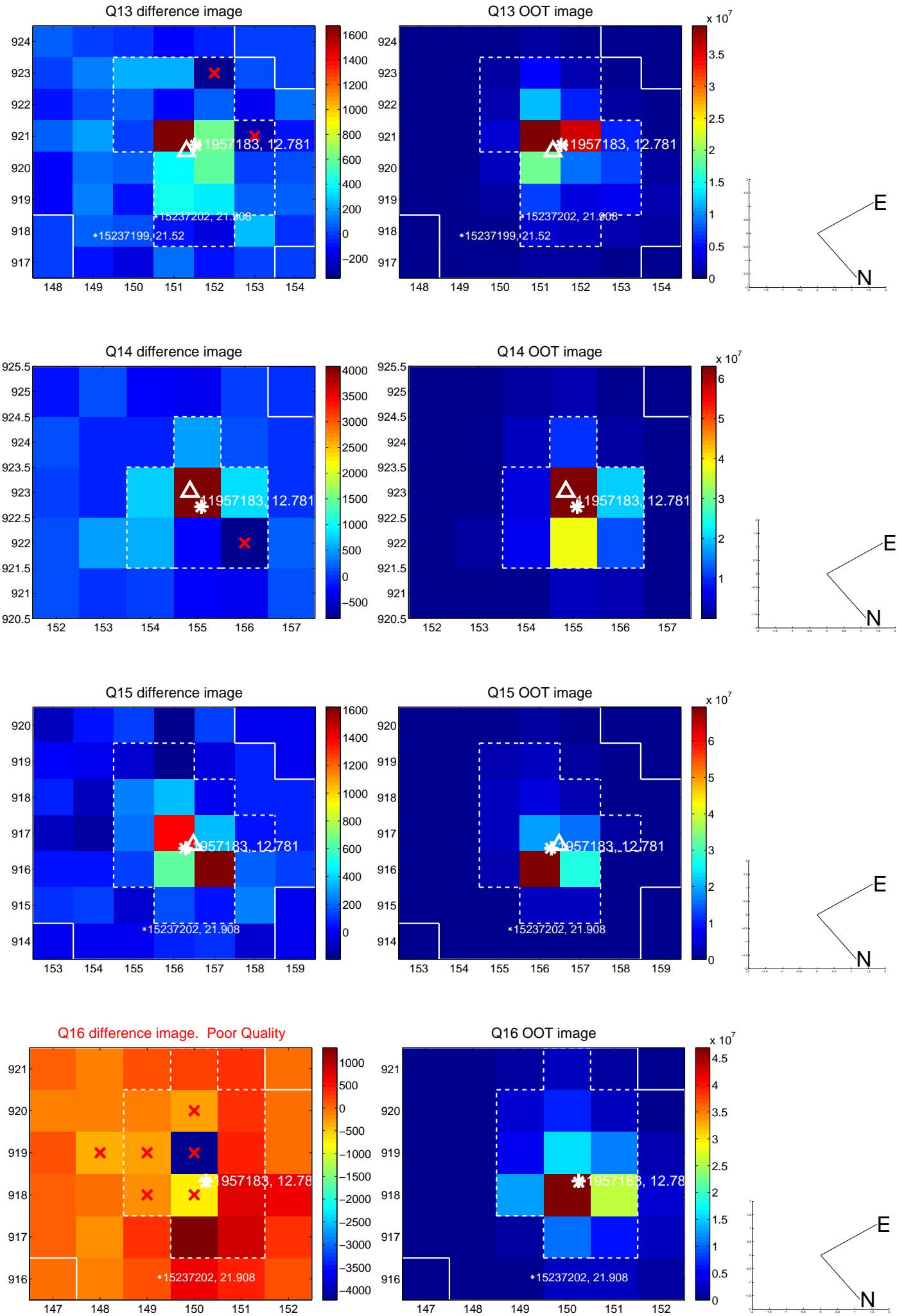
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



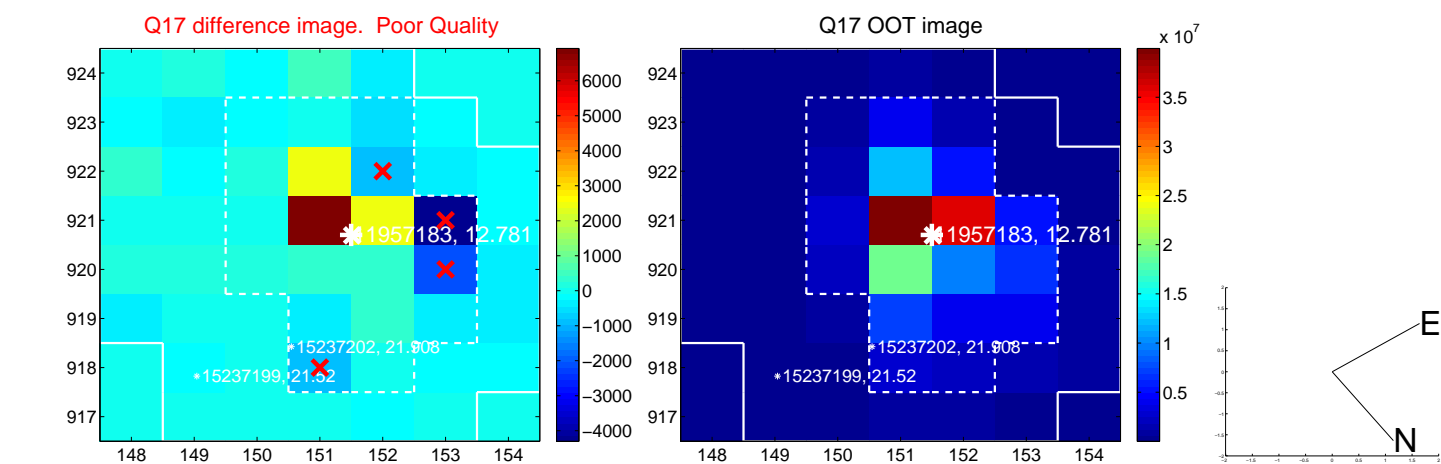
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



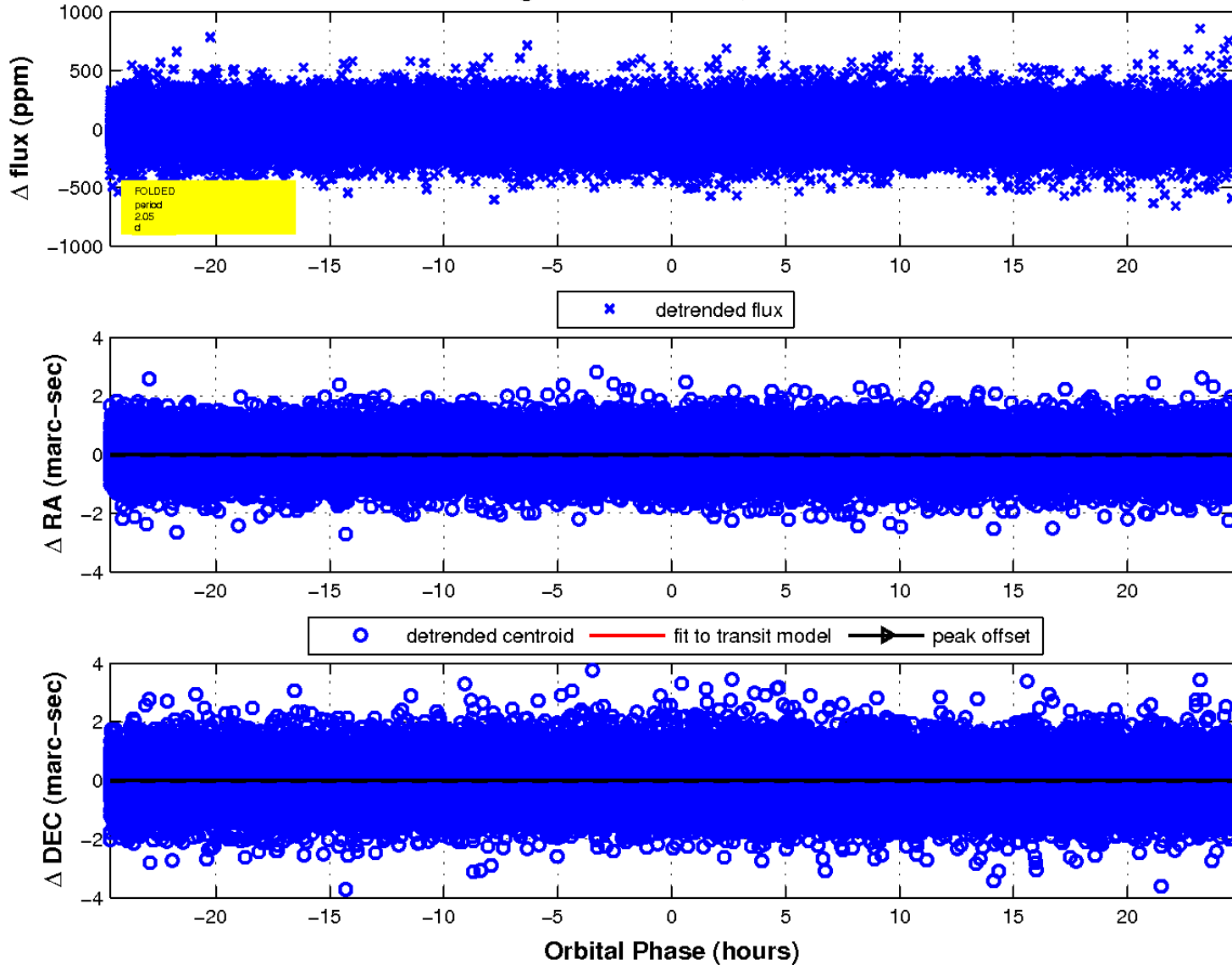
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



fluxWeightedCentroids, Planet 3 of 3



UKIRT Image

Declination

