

KIC 007363962

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})
007363962-01	OBS	No	2.618924	133.585166	44.8	12.278	8.1	9.4	0.94	5236	0.69	484.59
007363962-02	OBS	No	119.343126	149.551057	206.4	28.404	13.9	4.5	0.94	5236	1.35	2.98
007363962-03	OBS	No	52.989563	166.118094	275.6	2.853	7.1	7.1	0.94	5236	1.82	8.79

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
007363962-01	OBS	FP	0.00	1	0	1	0	LPP_DV—CENT_UNRESOLVED_OFFSET
007363962-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV— MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—INCONSISTENT_TRANS—CENT_FEW_DIFFS
007363962-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_SKYE—TRANS_GAPPED—MOD_NONUNIQ_ALT—CENT_FEW_DIFFS

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

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

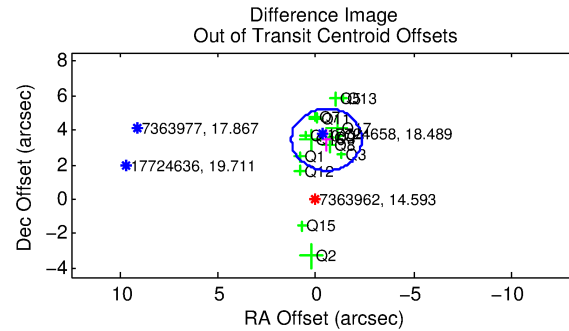
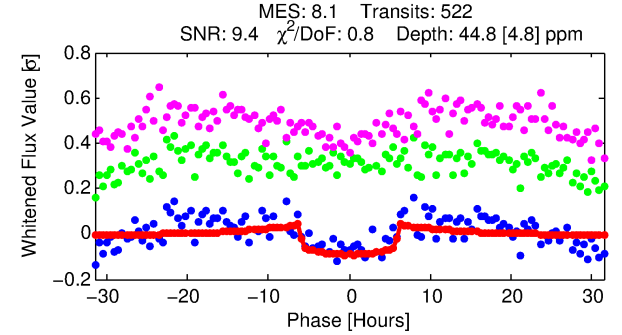
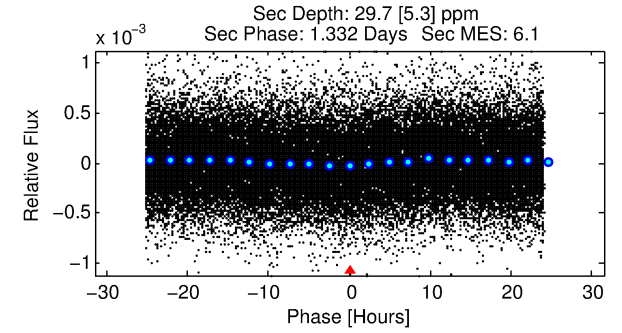
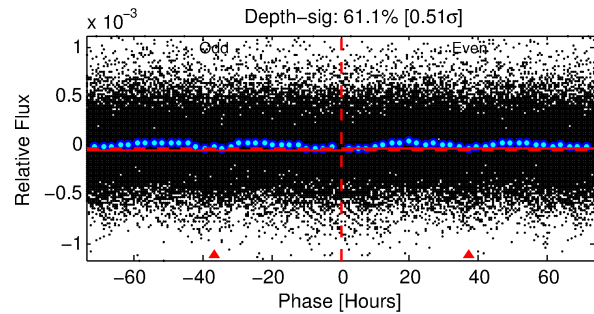
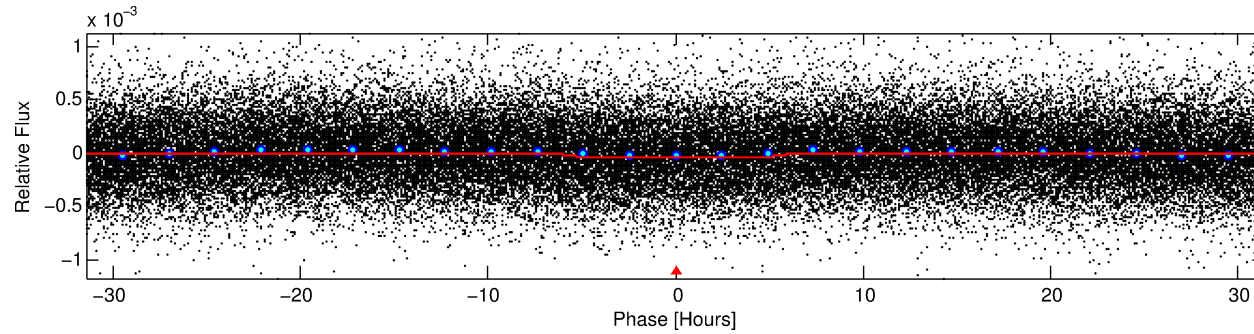
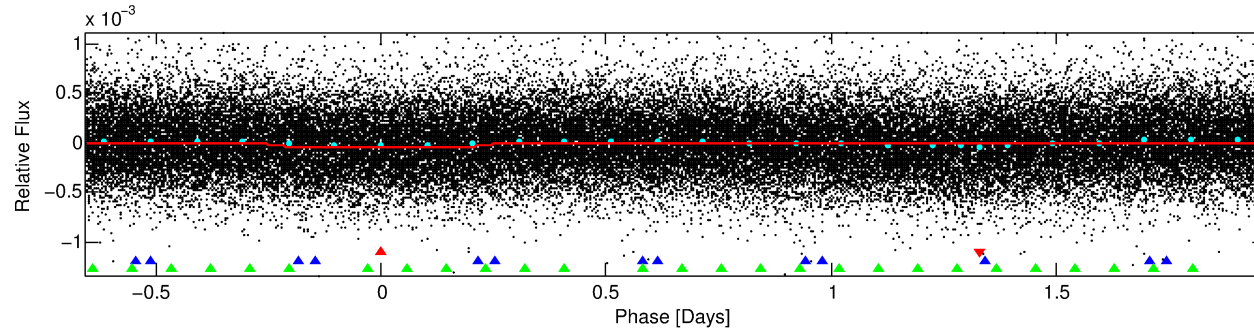
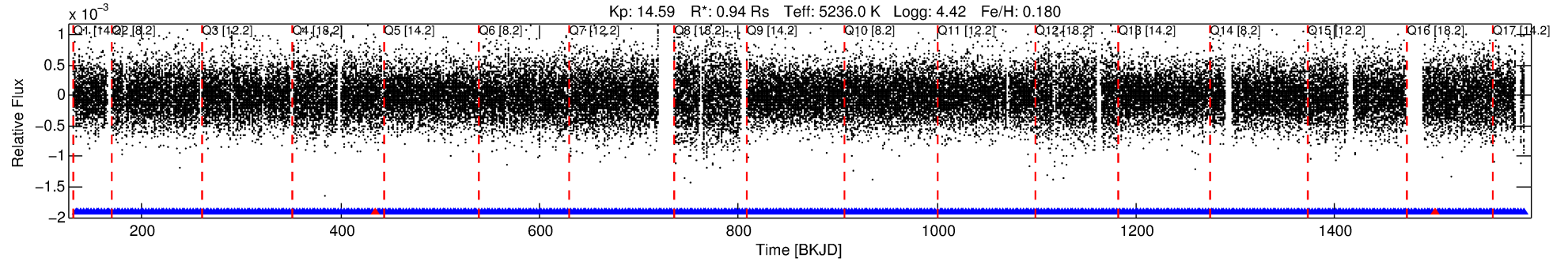
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 007363962-01

No Significant Match Found

DV One-Page Summary

KIC: 7363962 Candidate: 1 of 3 Period: 2.619 d



DV Fit Results:

Period = 2.61892 [0.00004] d
Epoch = 133.5852 [0.0090] BKJD
Rp/R* = 0.0067 [0.0029]
a/R* = 1.37 [1.03]
b = 0.77 [0.88]
Seff = 484.59 [226.13]
Teff = 1196 [140] K
Rp = 0.69 [0.36] Re
a = 0.0352 [0.0098] AU
Ag = 42.04 [41.47] [0.99 σ]
Teffp = 4710 [1043] K [3.34 σ]

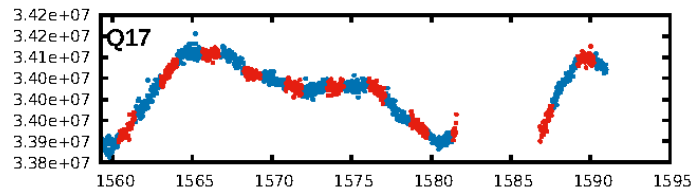
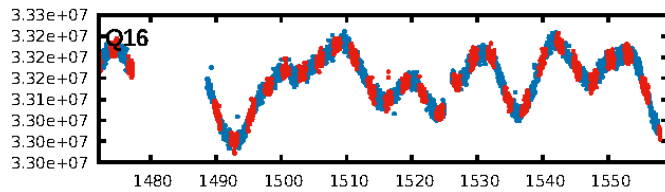
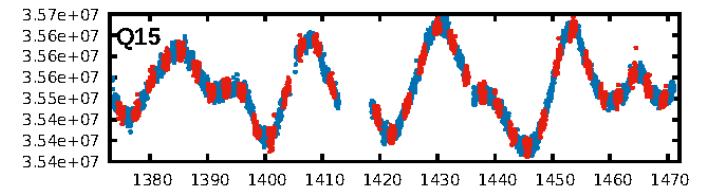
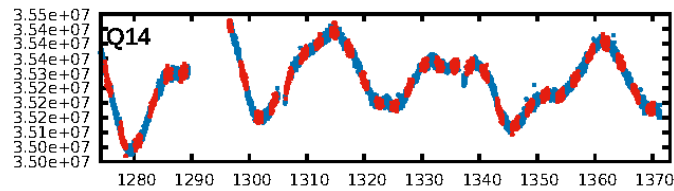
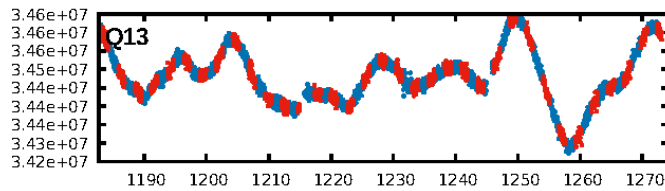
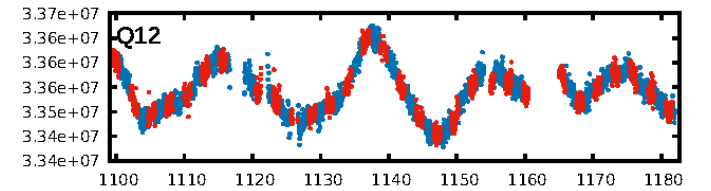
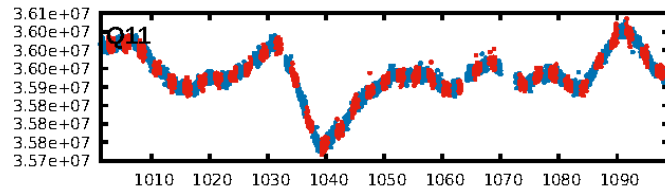
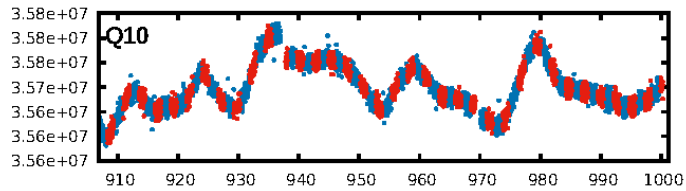
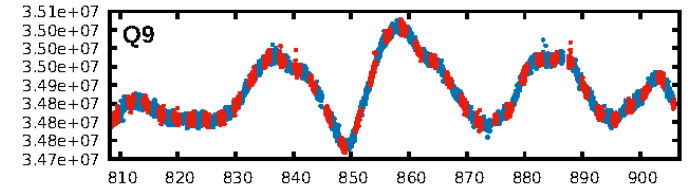
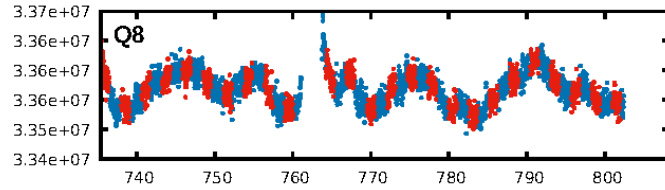
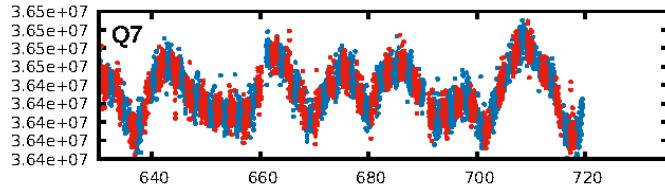
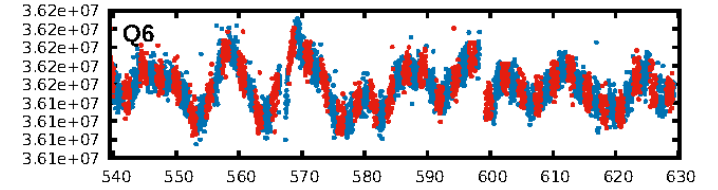
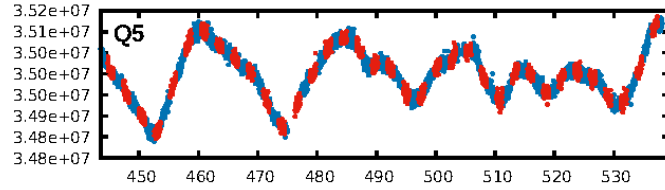
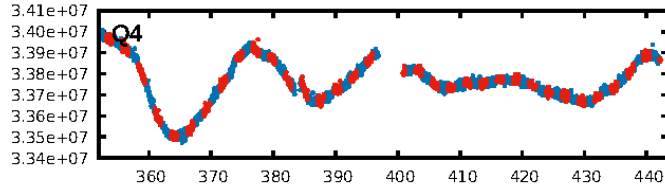
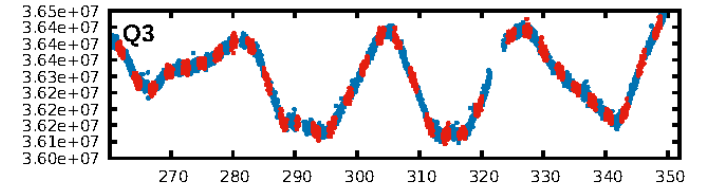
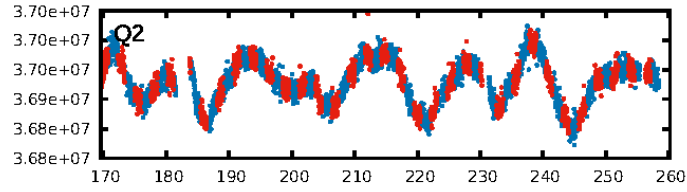
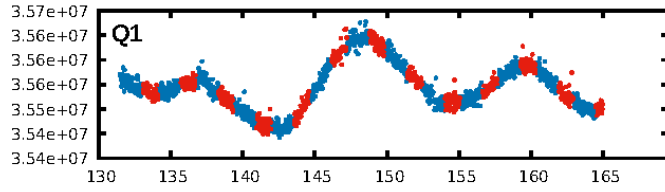
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: 100.0% [95.91 σ]
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 6.12e-11
RollingBand-fgt: 1.00 [497/499]
GhostDiagnostic-chr: 0.4205
Centroid-sig: 0.0%
Centroid-so: 3.564 arcsec [4.10 σ]
OotOffset-rm: 3.491 arcsec [5.86 σ]
KicOffset-rm: 3.563 arcsec [5.31 σ]
OotOffset-st: 2/4/4/5 [15]
KicOffset-st: 2/4/4/5 [15]
DiffImageQuality-fgm: 0.73 [11/15]
DiffImageOverlap-fno: 1.00 [17/17]

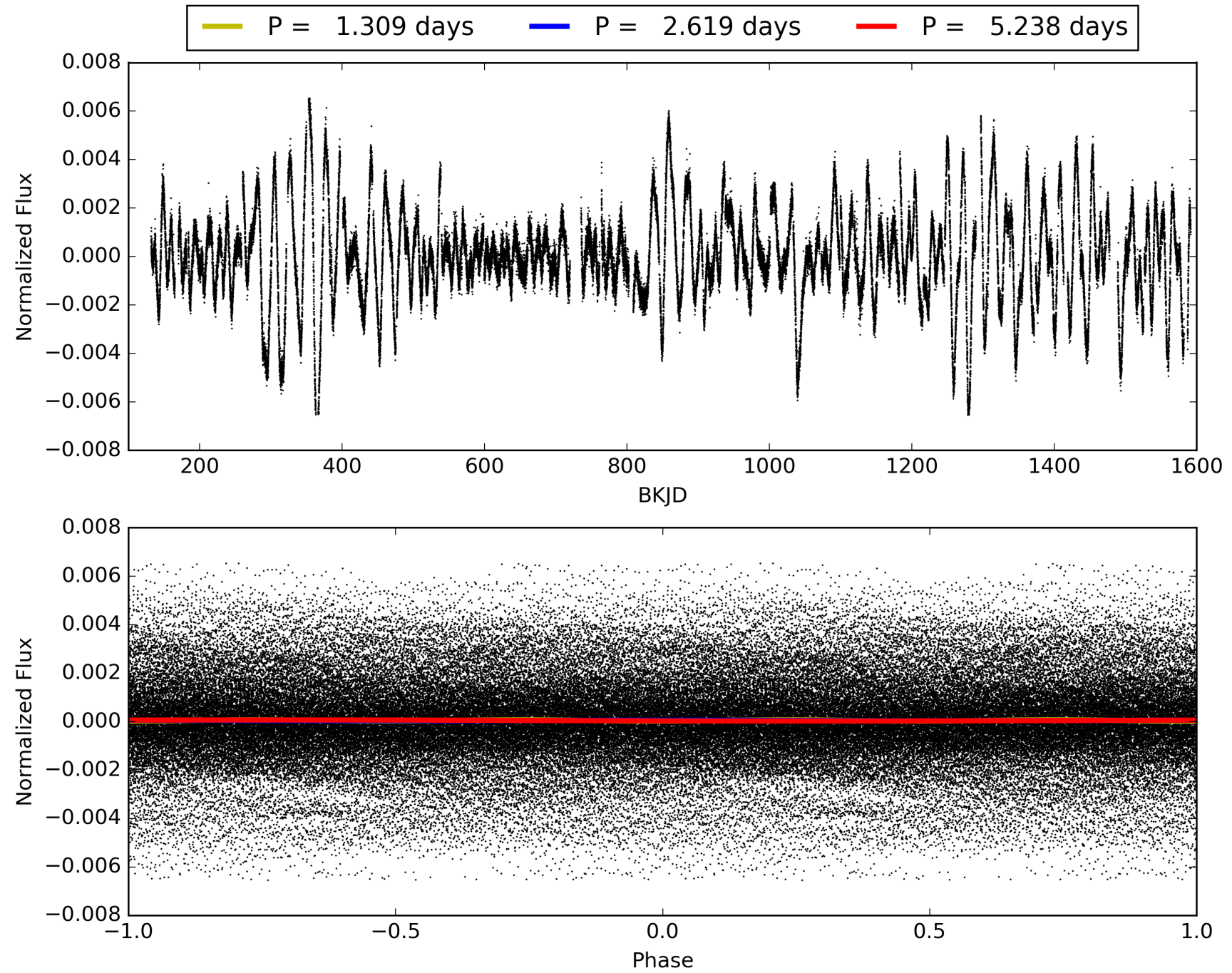
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This Data Validation Report Summary was produced in the Kepler Science Operations Center Pipeline at NASA Ames Research Center

TCE 007363962-01, PDC Light Curves

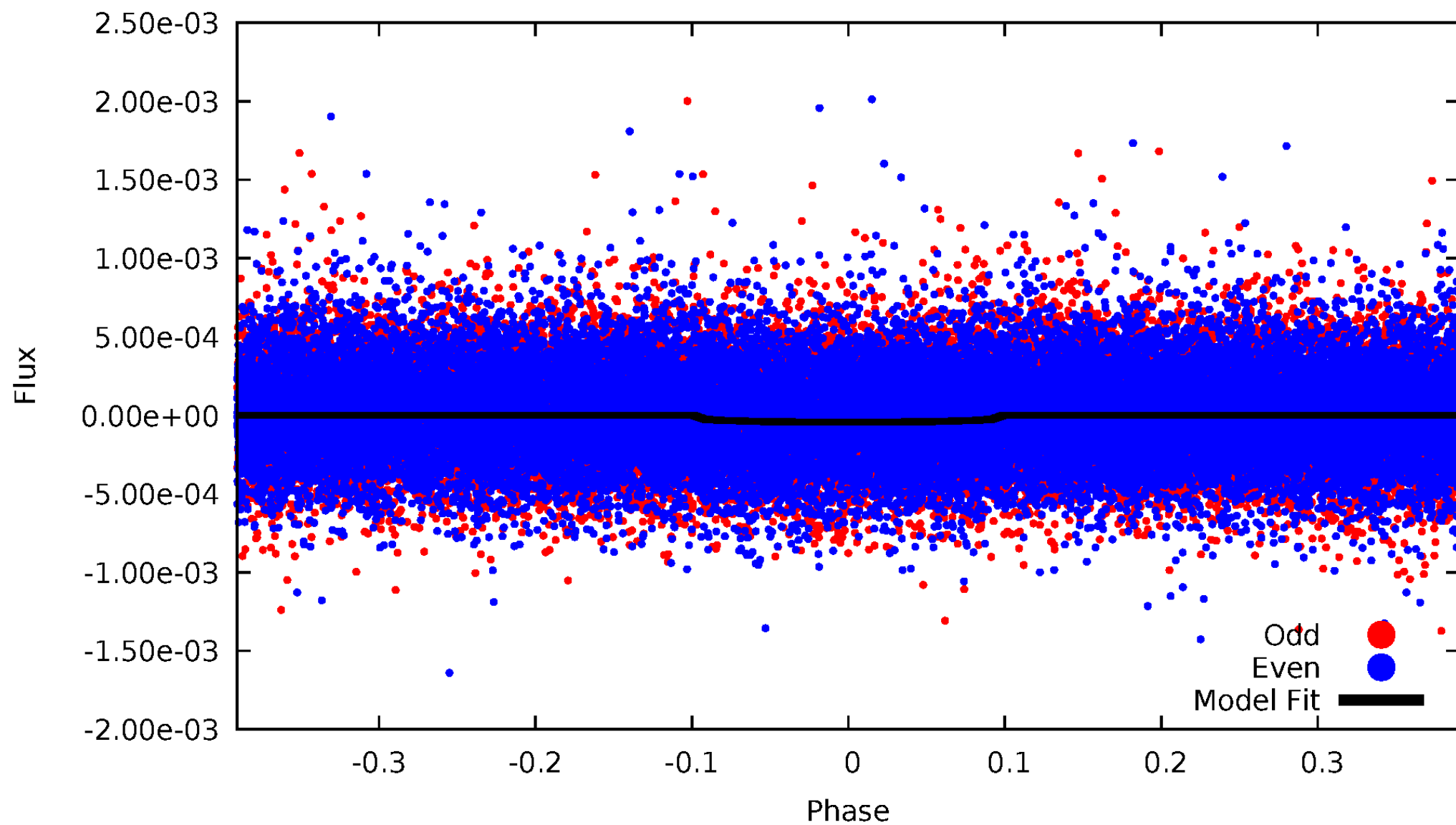


TCE 007363962-01



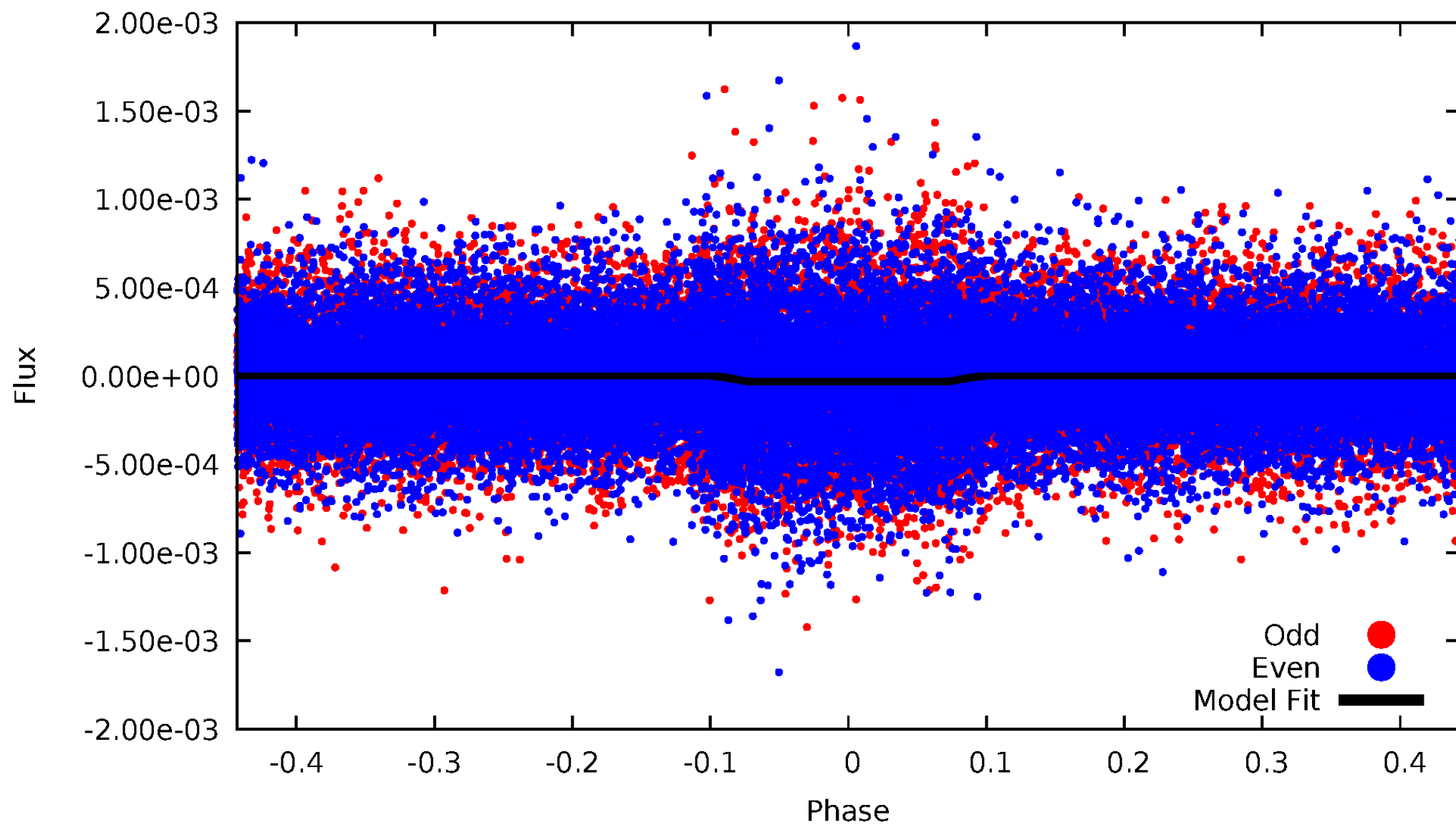
DV Odd/Even

TCE 007363962-01

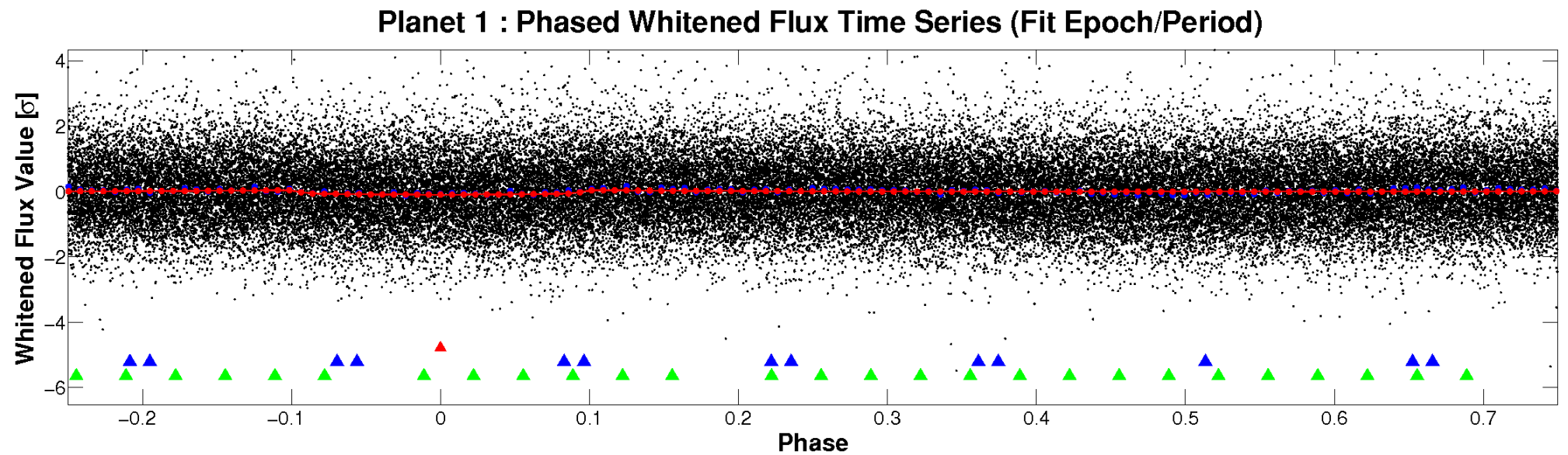
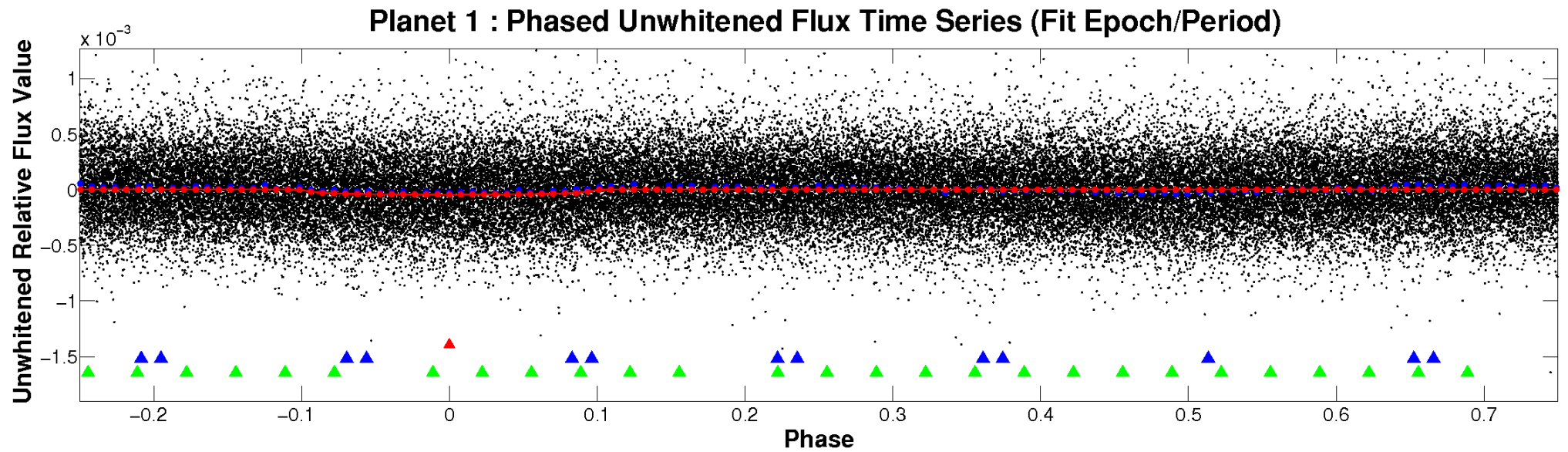


ALT Odd/Even

TCE 007363962-01

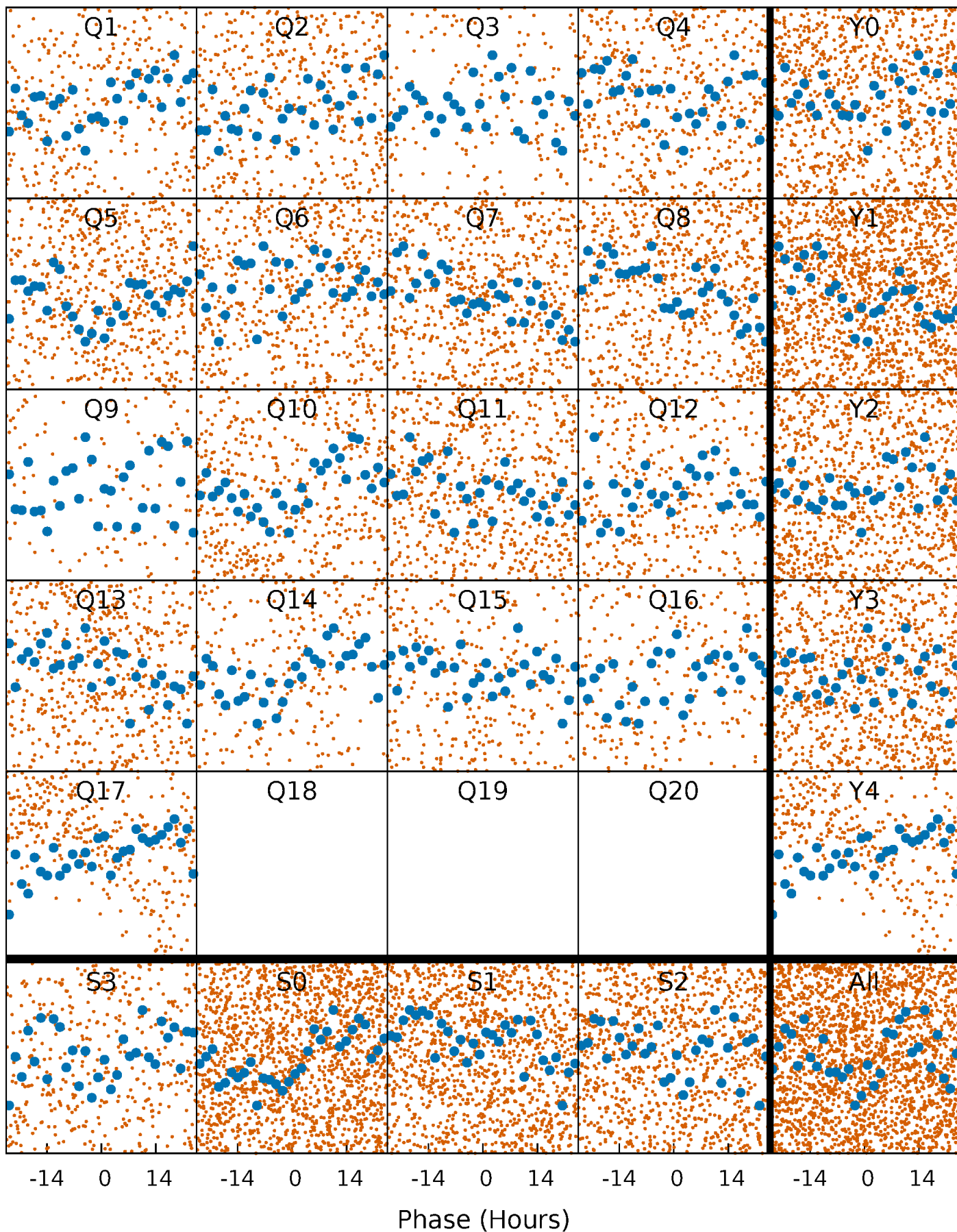


Non-Whitened Vs. Whitened Light Curve



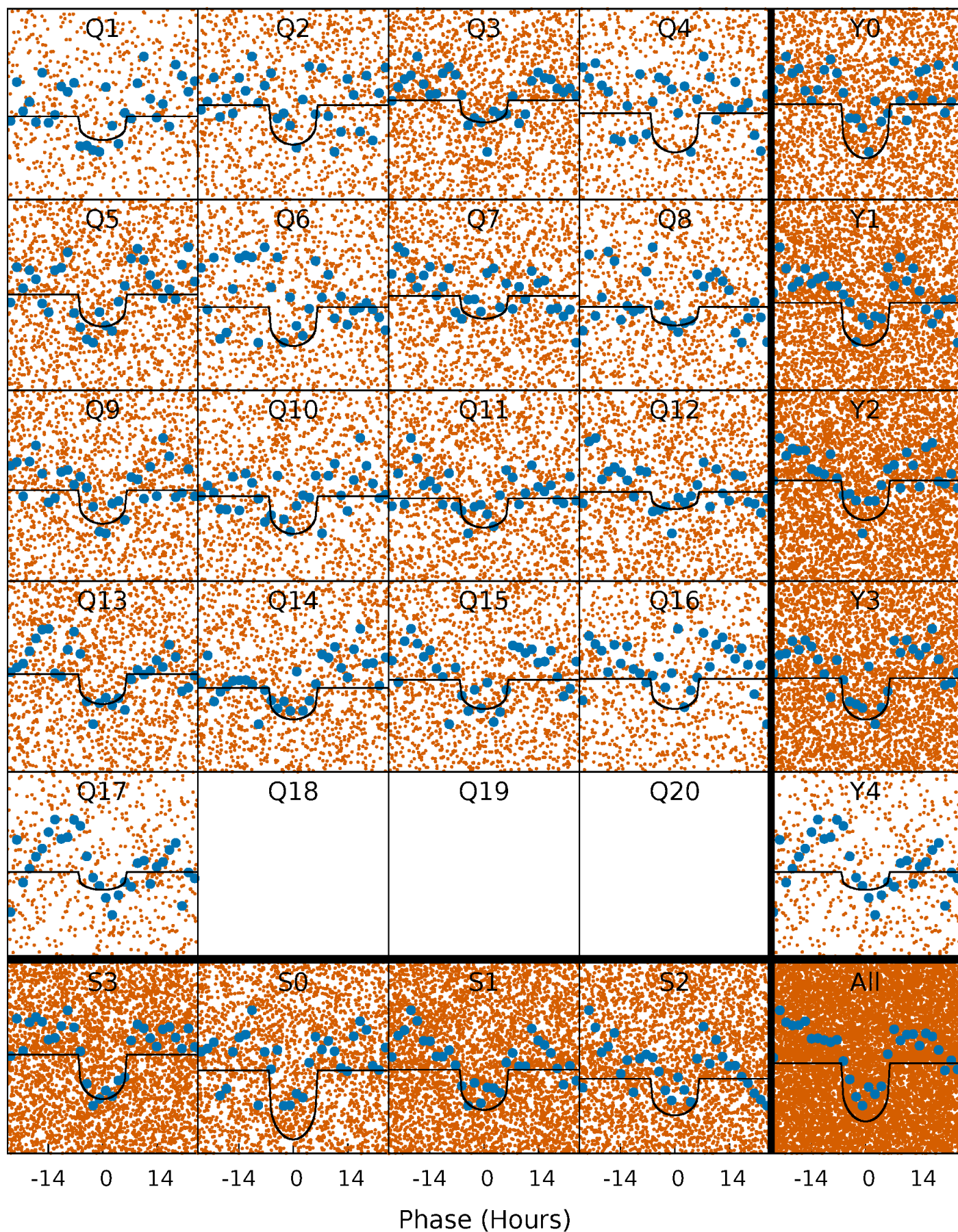
PDC Quarter-Phased Transit Curves

TCE 007363962-01 P= 2.618924 Days $T_0=133.585166$ (BKJD)



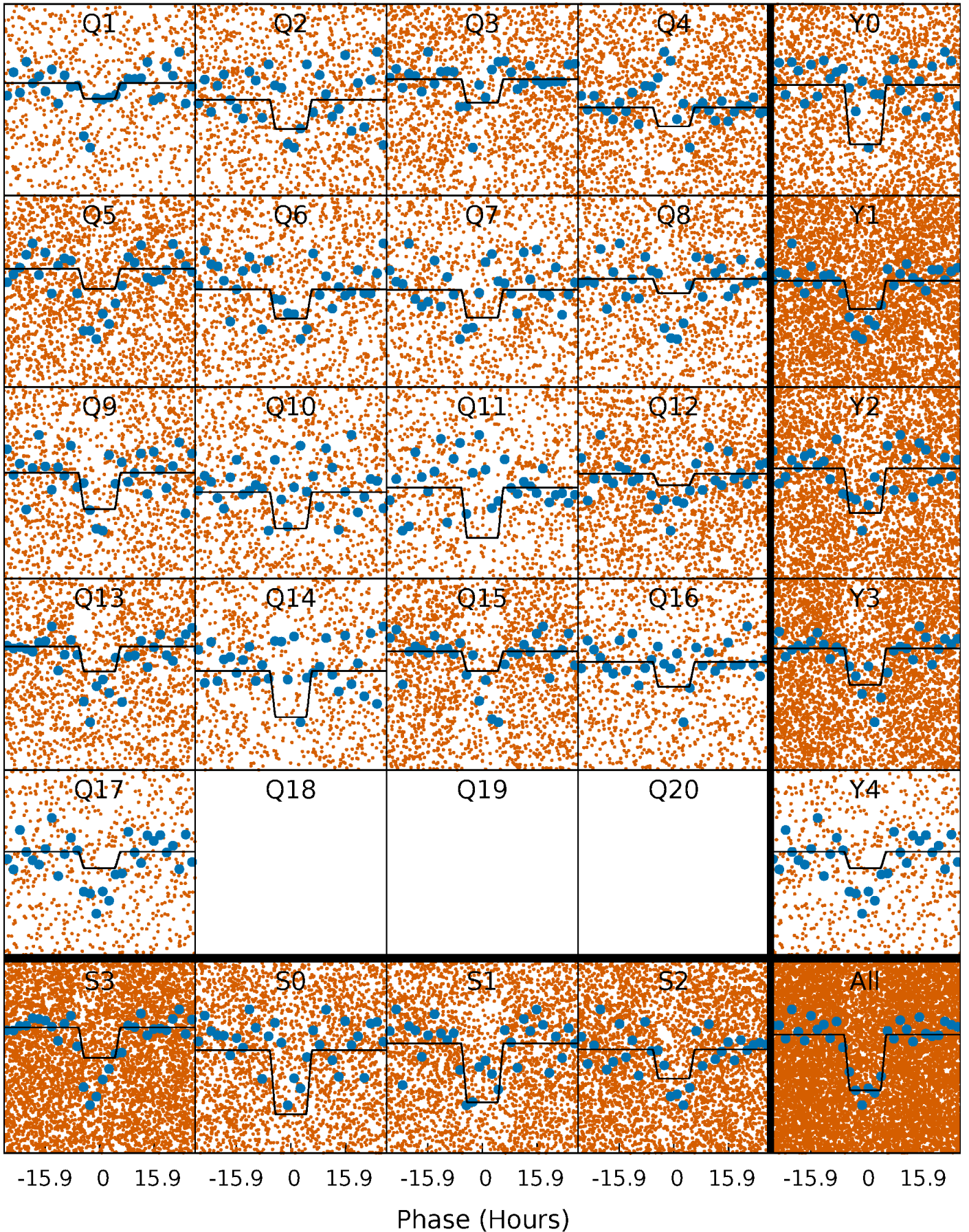
DV Quarter-Phased Transit Curves

TCE 007363962-01 P= 2.618924 Days $T_0=133.585166$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

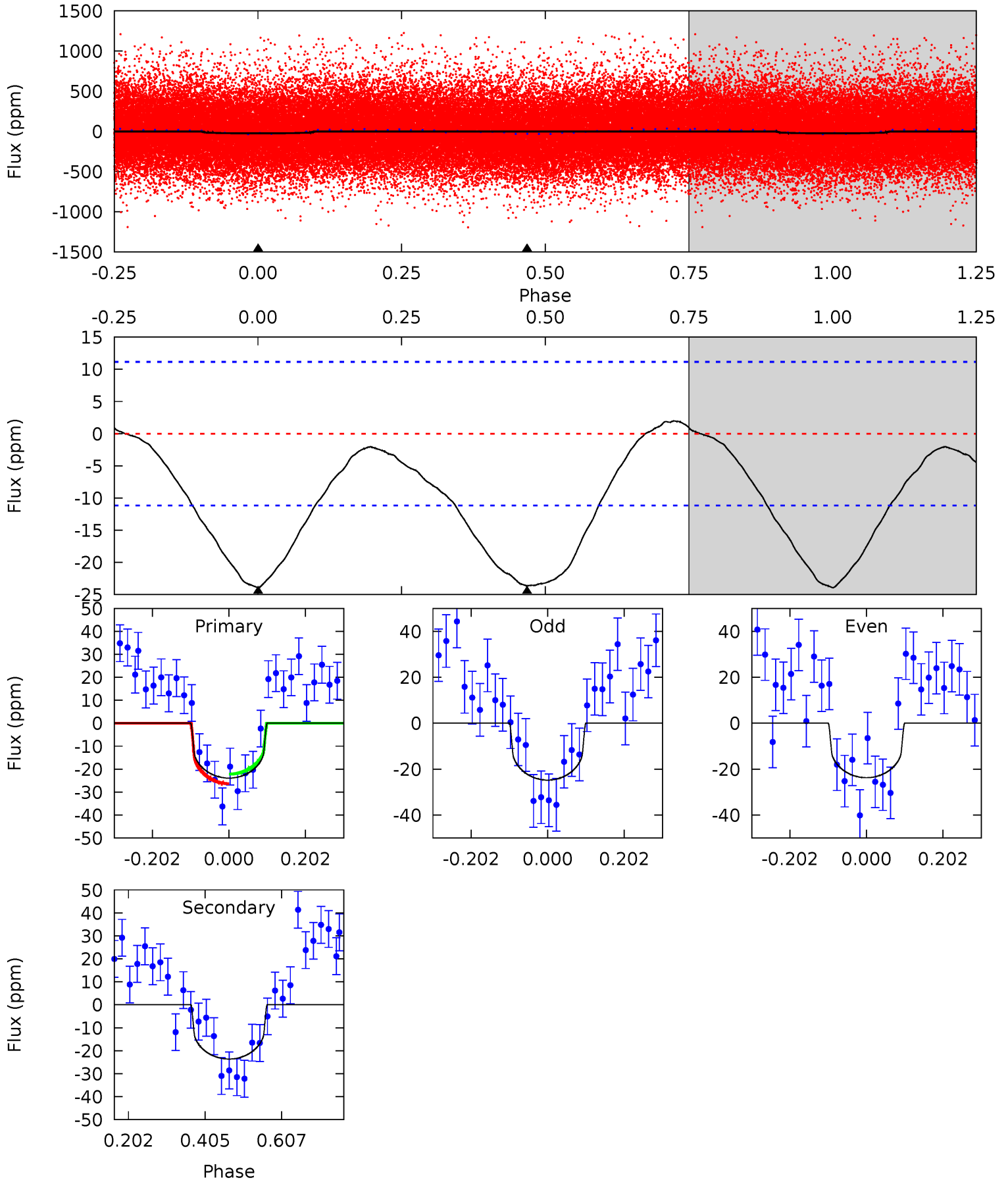
TCE 007363962-01 P= 2.619034 Days $T_0=133.552268$ (BKJD)



DV Model-Shift Uniqueness Test

007363962-01, P = 2.618924 Days, E = 130.966242 Days

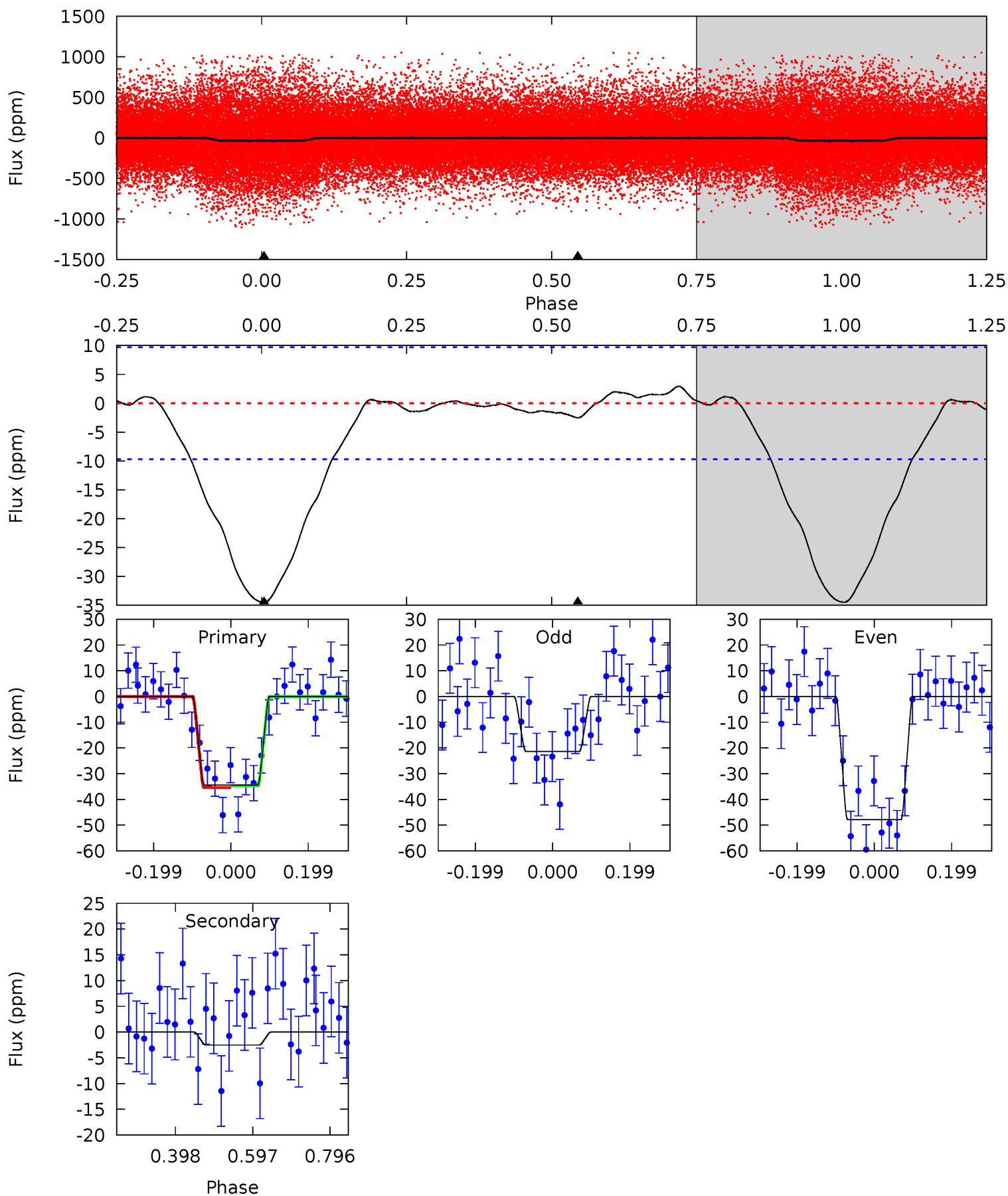
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
9.47	9.36	0	0	4.41	1.27	0.88	9.47	9.47	9.36	9.36	0.21	0.75	0.08	0.82



Alt Model-Shift Uniqueness Test

007363962-01, P = 2.619034 Days, E = 130.933234 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
15.7	1.15	0	0	4.42	1.28	0.33	15.7	15.7	1.15	1.15	6.06	0.94	0.08	0



Stellar Parameters For KIC 007363962

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	M (M_{\odot})	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	5236^{+157}_{-157}	$4.416^{+0.133}_{-0.266}$	$0.180^{+0.250}_{-0.250}$	$0.944^{+0.271}_{-0.125}$	$0.846^{+0.095}_{-0.061}$	$1.416^{+0.929}_{-0.818}$
	+3%/-3%	+3%/-6%	+139%/-139%	+29%/-13%	+11%/-7%	+66%/-58%
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 007363962-01 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-24 ± 3	$0.73^{+0.30}_{-0.32}$	1687^{+144}_{-102}	4570^{+1066}_{-598}	30^{+64}_{-16}
Alt.	-3 ± 2	$0.60^{+0.32}_{-0.29}$	1689^{+153}_{-98}	3205^{+934}_{-1116}	$4.222^{+14.503}_{-3.795}$

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

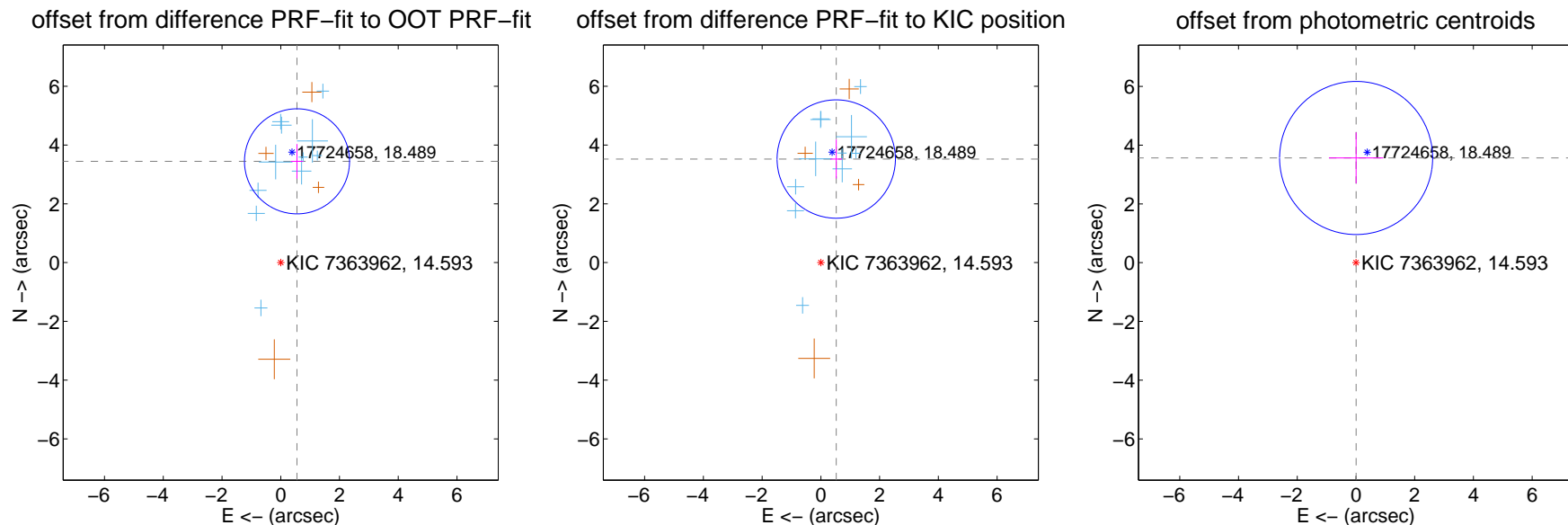
DV Centroid Data

Supplemental centroid analysis for 007363962-01. Kepler magnitude: 14.59. Transit SNR 9.45

There are 11 quarters with good PRF difference image offsets

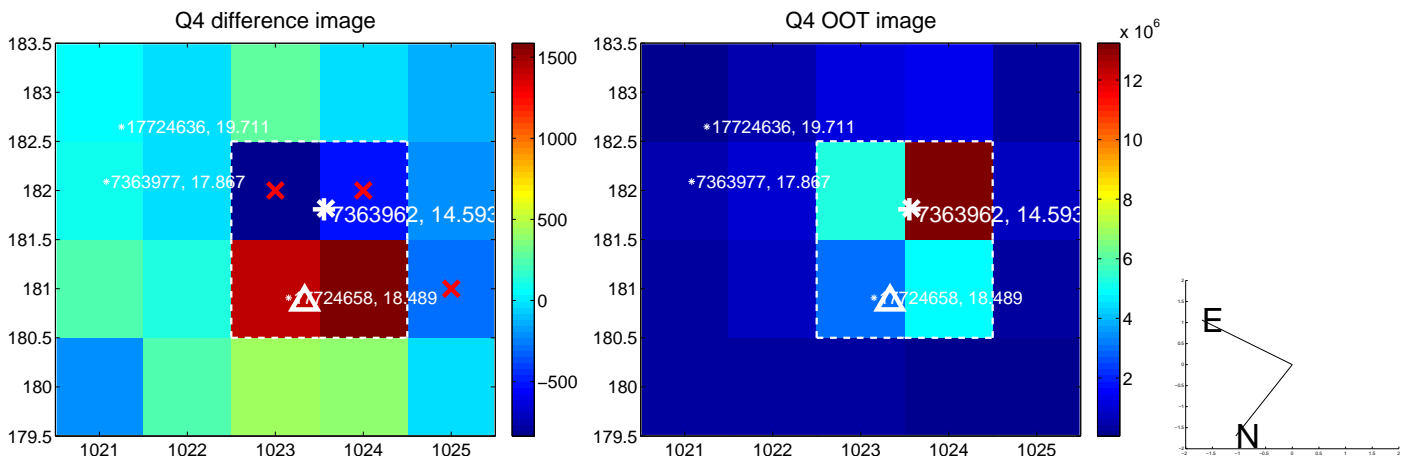
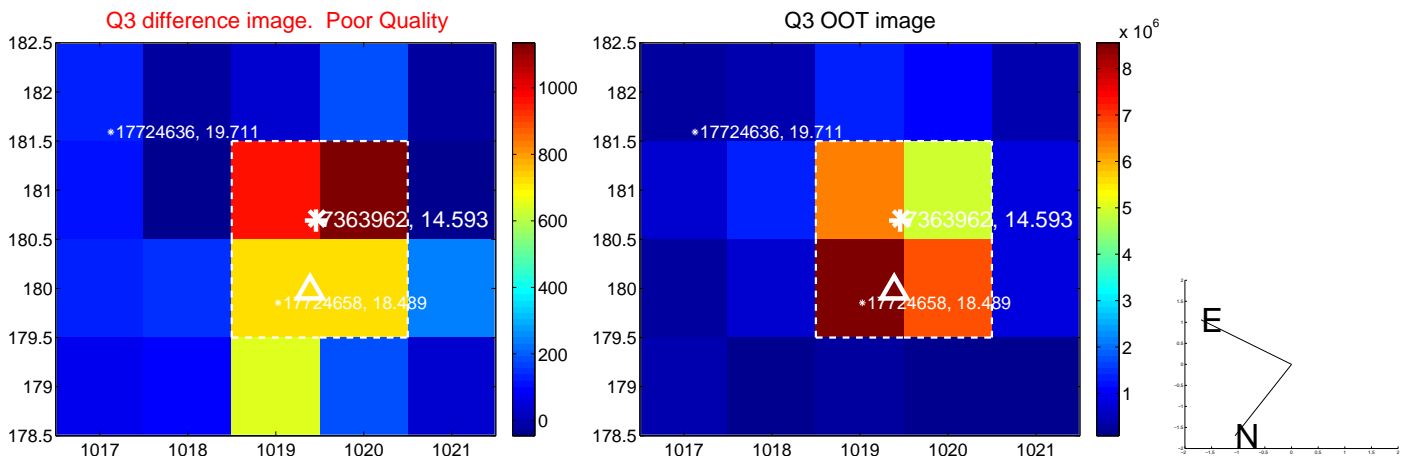
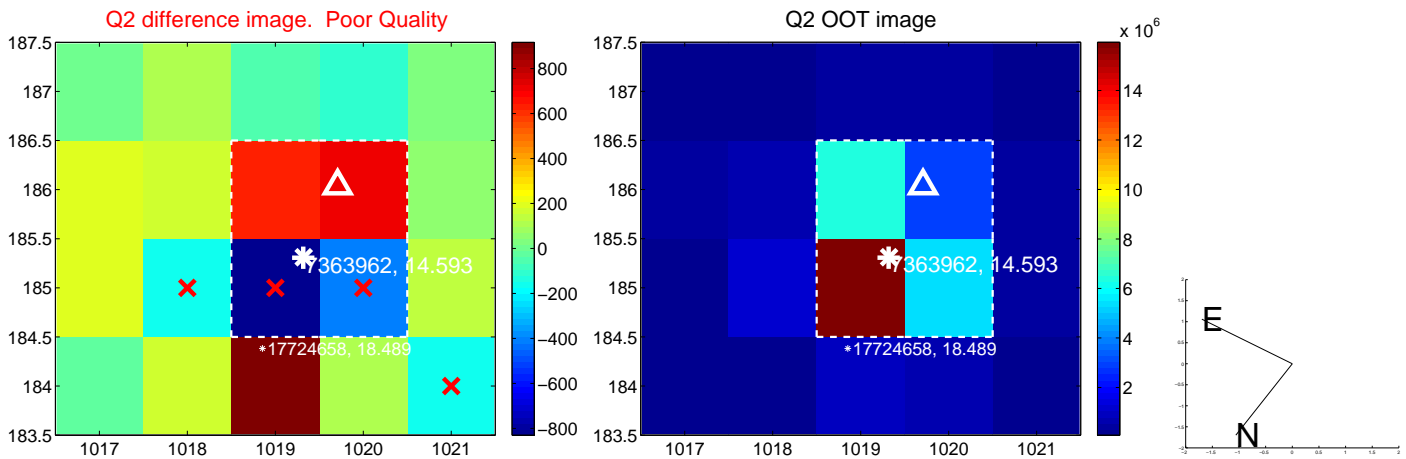
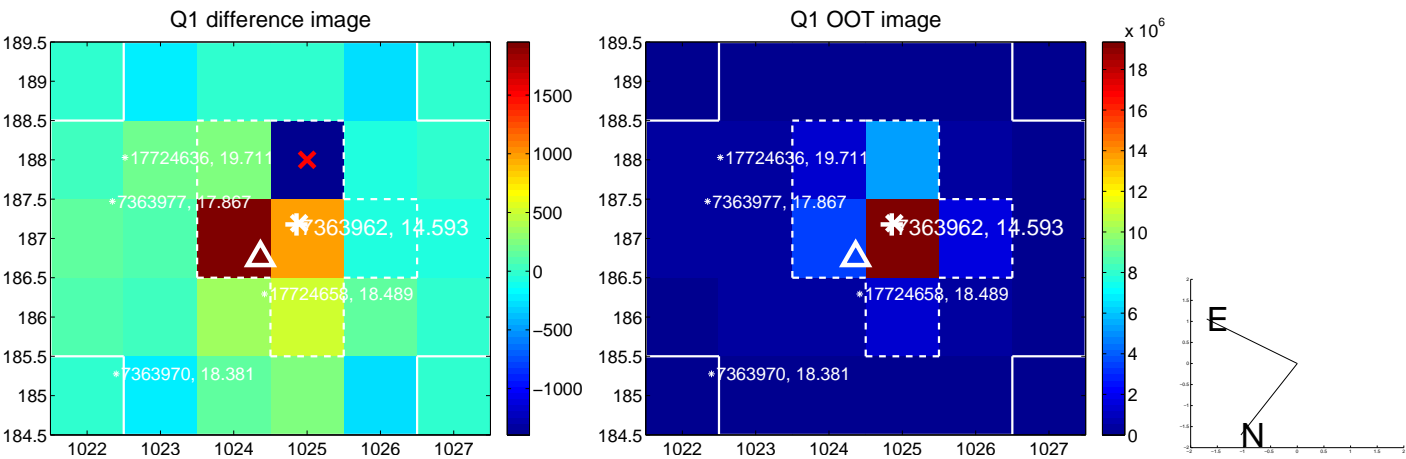
The direct PRF centroid is offset from the target star catalog position by about 0.15 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	3.491 ± 0.596	5.86	-0.554 ± 0.209	3.447 ± 0.588
PRF-fit source offset from KIC position	3.563 ± 0.672	5.31	-0.524 ± 0.204	3.525 ± 0.664
photometric centroid source offset	3.56 ± 0.87	4.10	-0.01 ± 0.93	3.56 ± 0.87

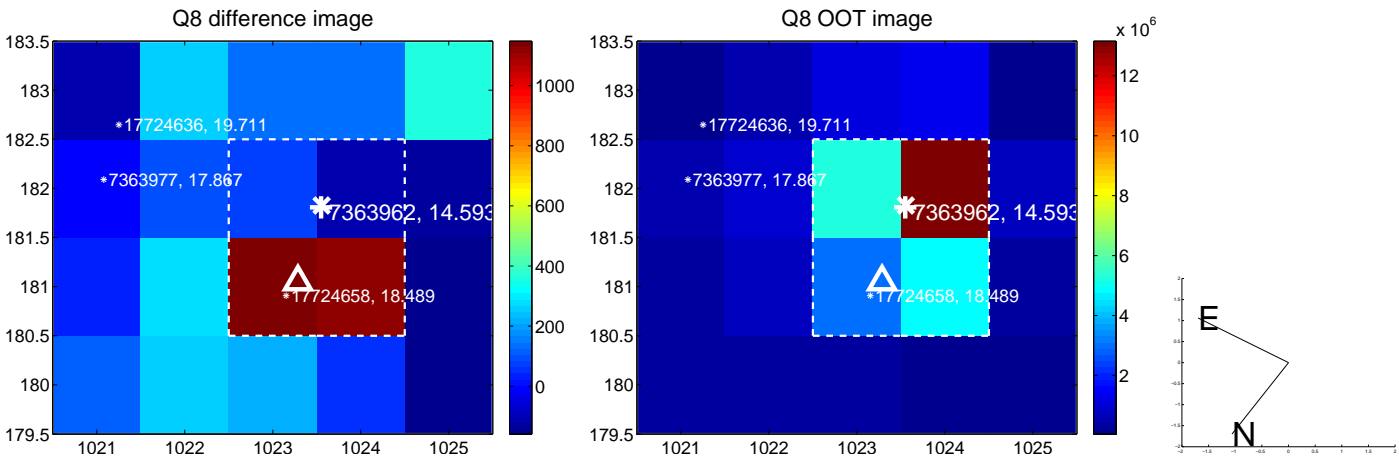
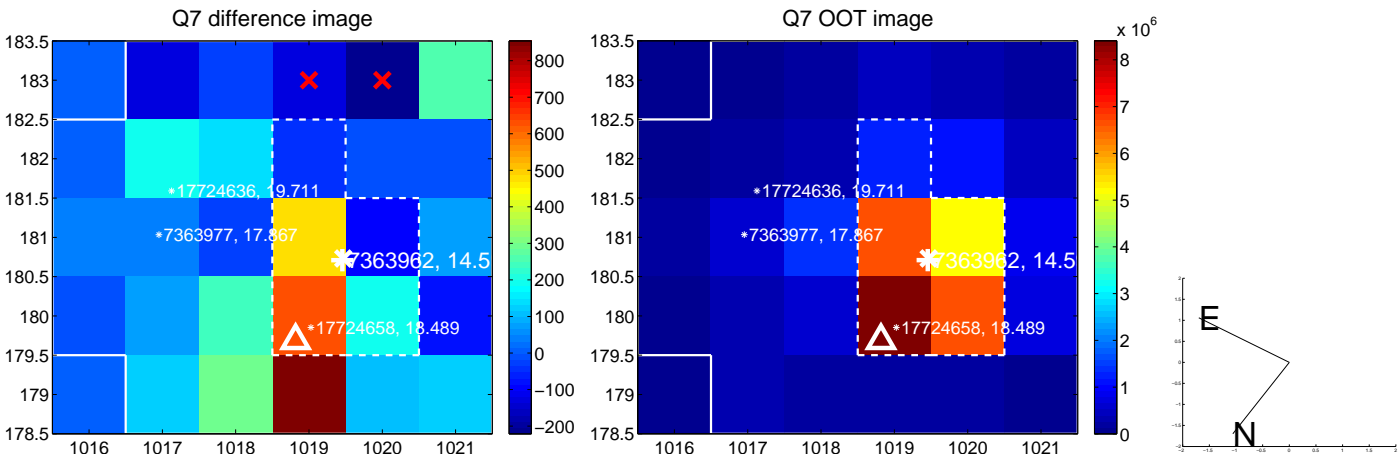
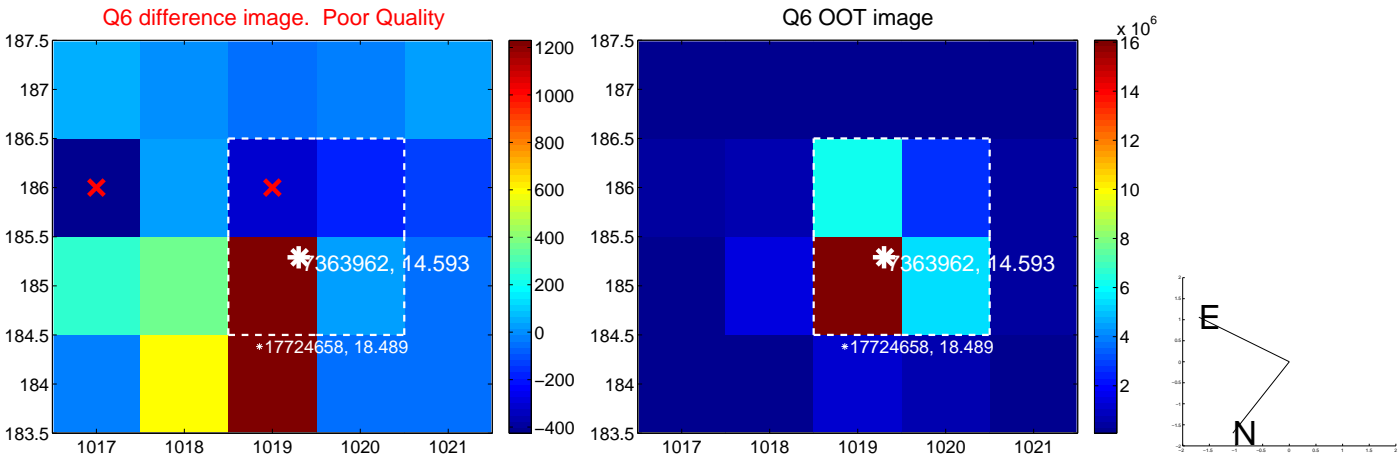
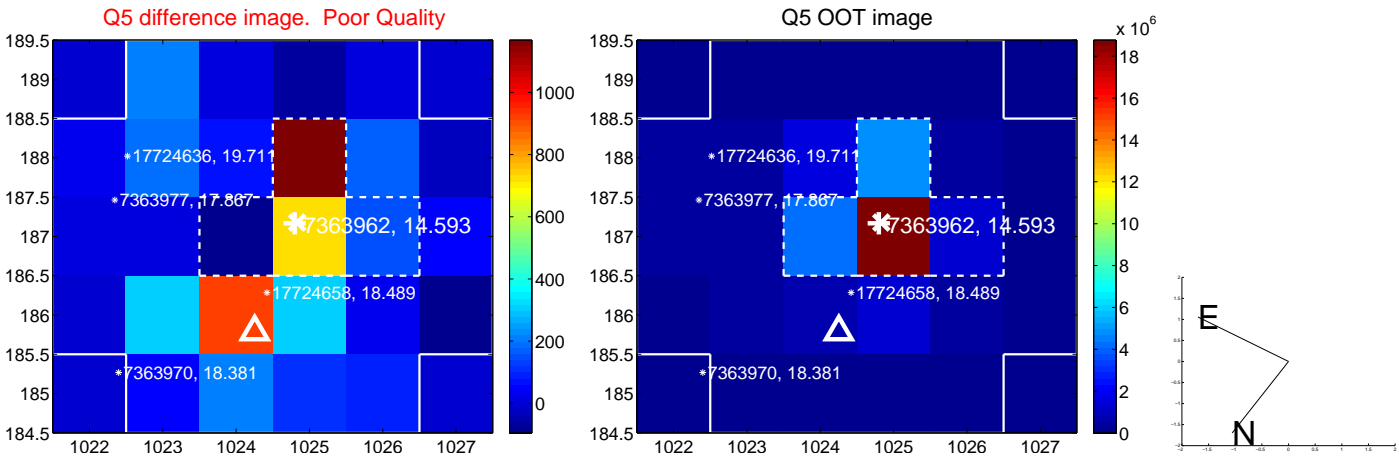


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets**; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

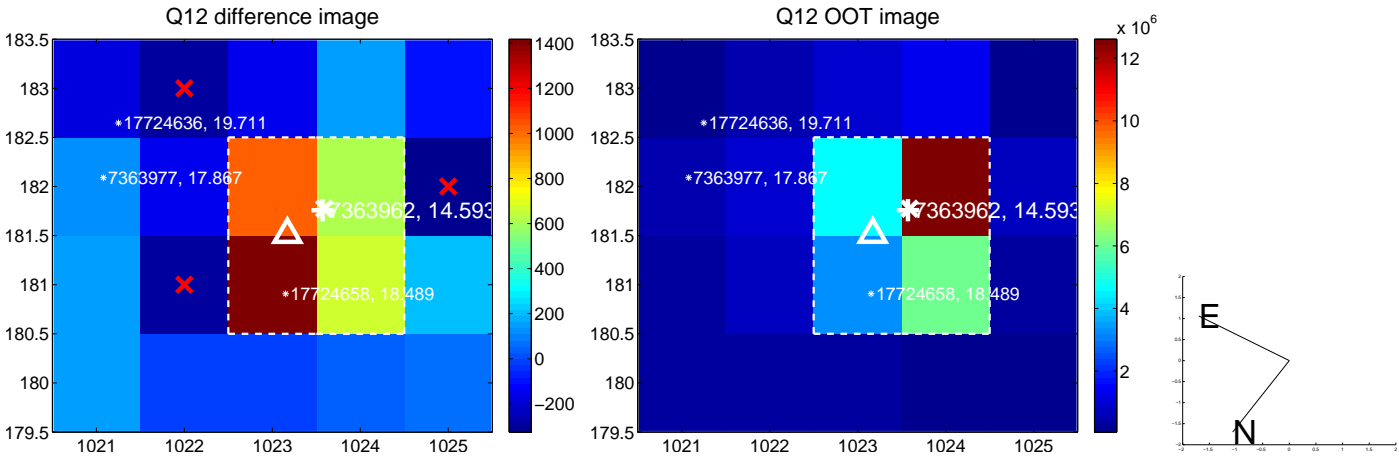
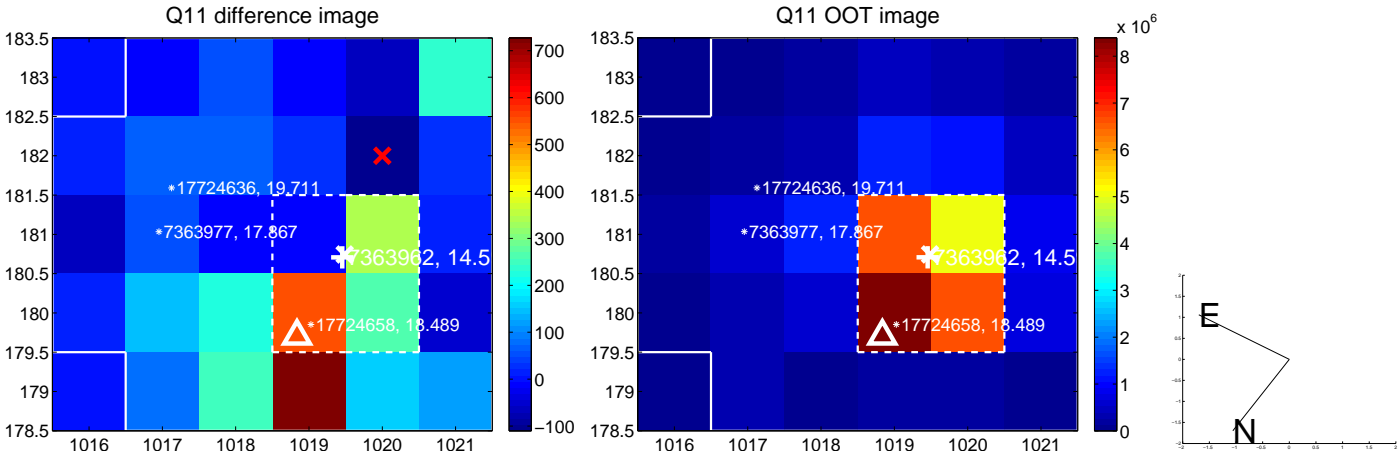
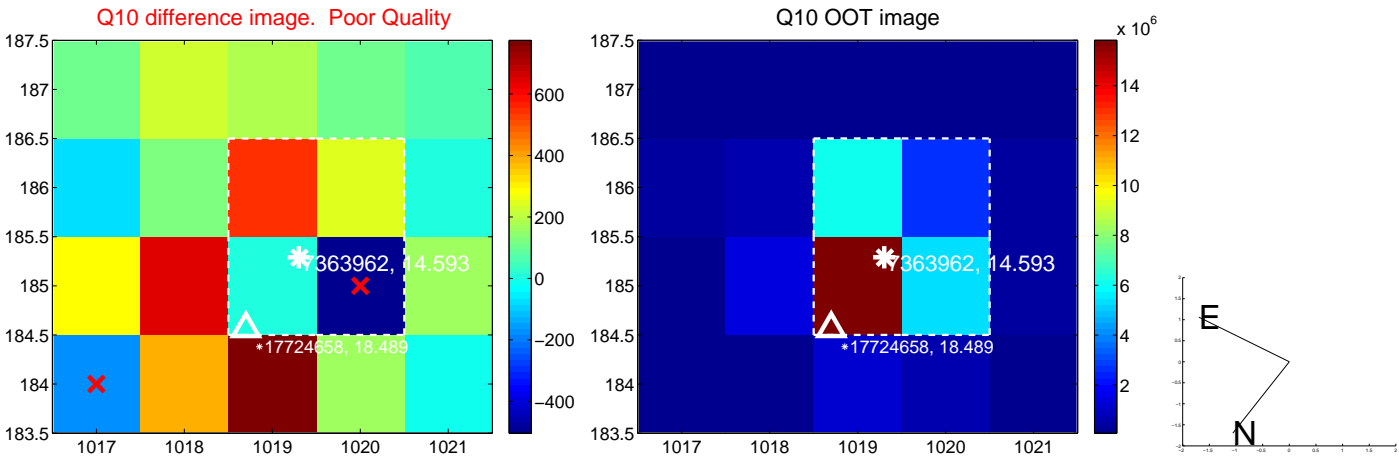
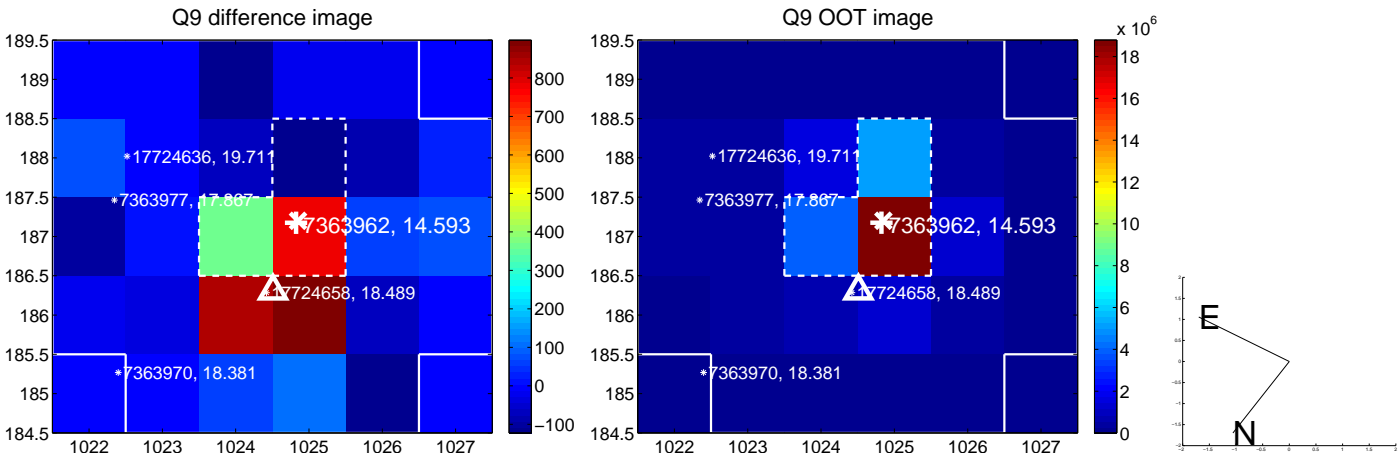
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



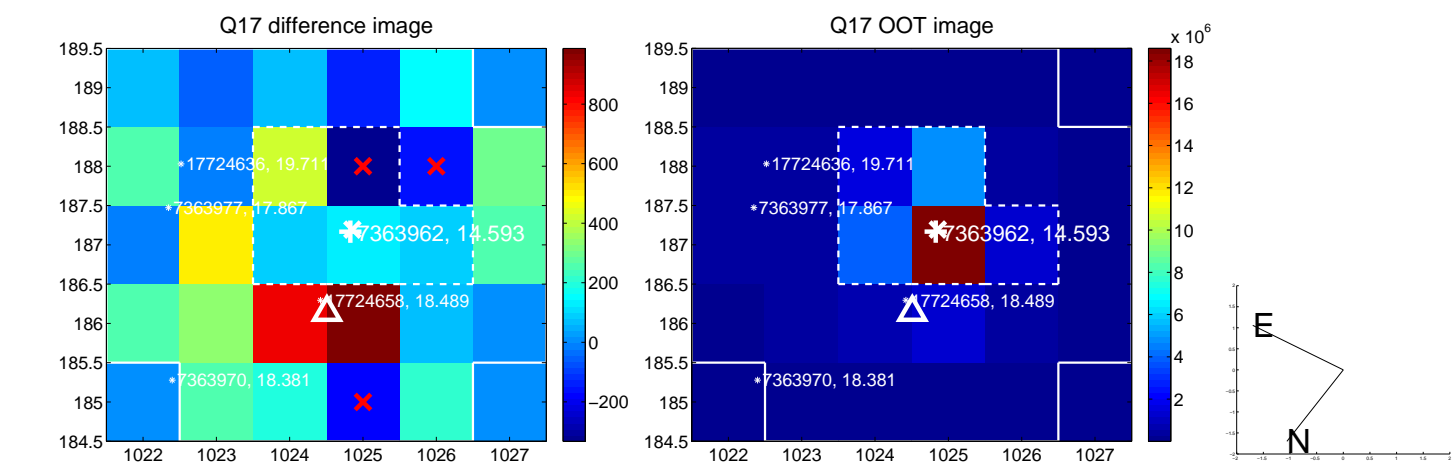
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



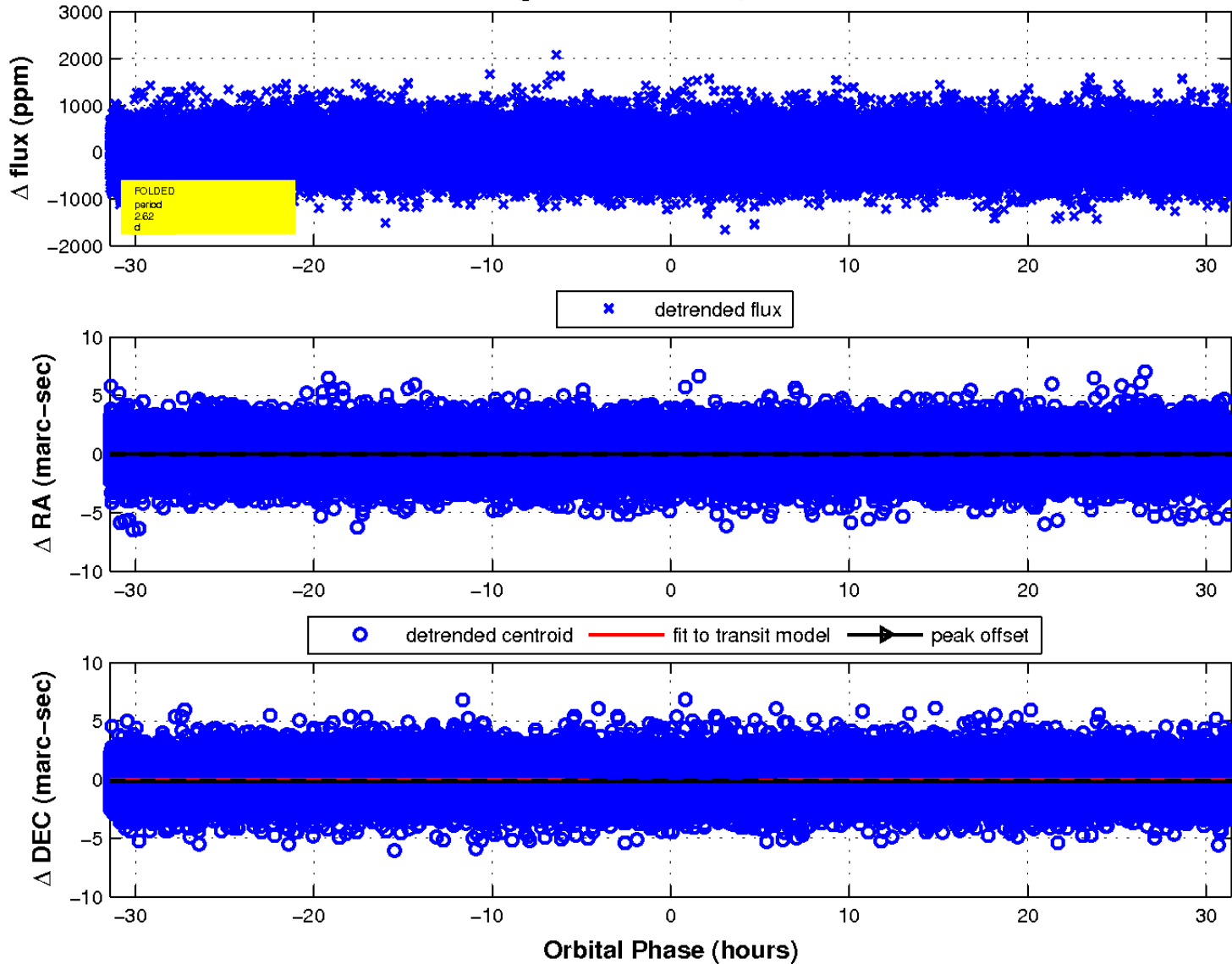
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

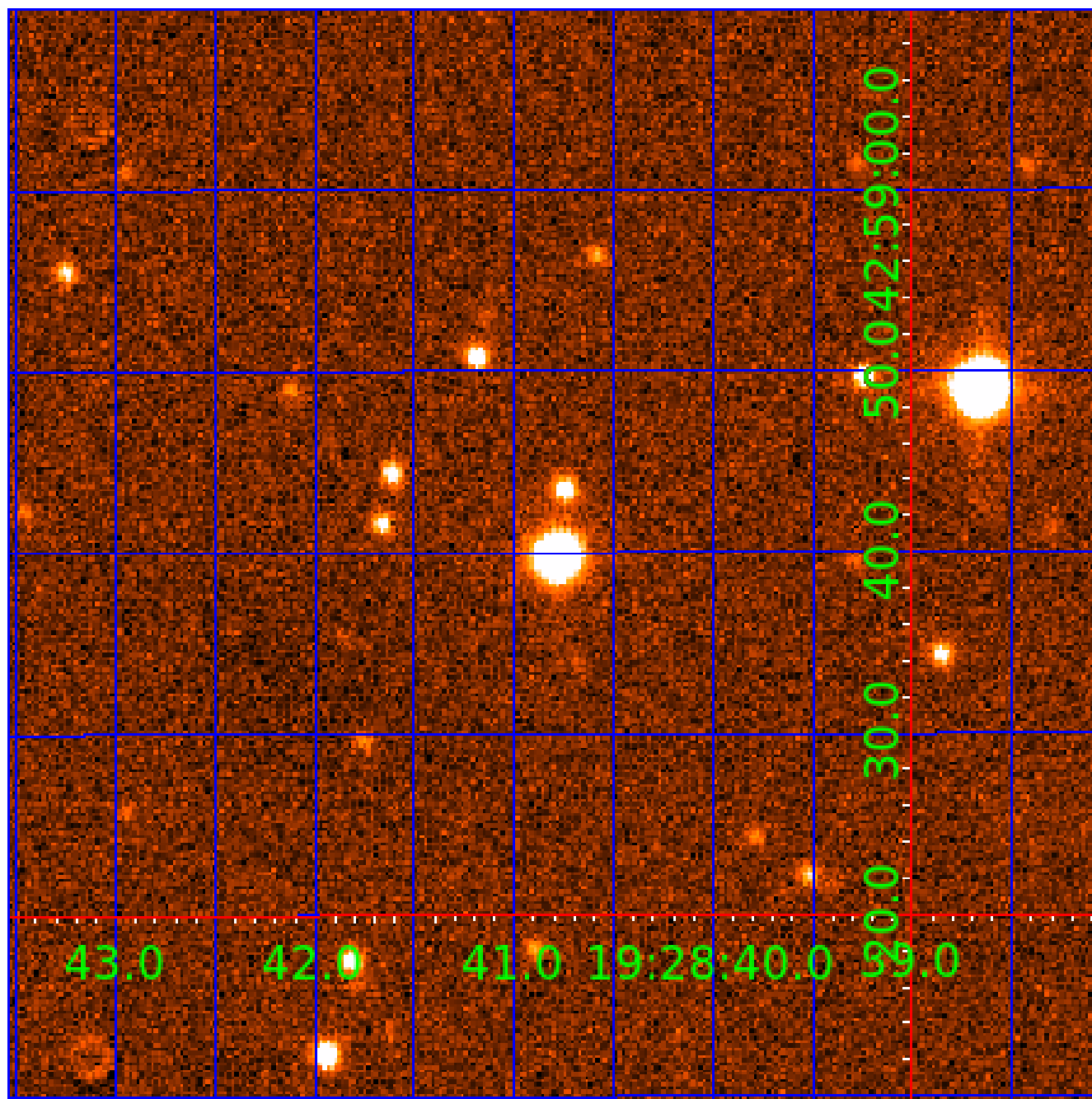


fluxWeightedCentroids, Planet 1 of 3



UKIRT Image

Declination



KIC 007363962

Q1-17 DR25 TCE Parameters

TCE	Run Type	KOI?	Period (Days)	Epoch (BKJD)	Depth (ppm)	Duration (Hours)	MES	SNR	R_{\star} (R_{\odot})	T_{\star} (K)	R_p (R_{\oplus})	S_p (S_{\oplus})
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Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
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007363962-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV— MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—INCONSISTENT_TRANS—CENT_FEW_DIFFS
007363962-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_SKYE—TRANS_GAPPED—MOD_NONUNIQ_ALT—CENT_FEW_DIFFS

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

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

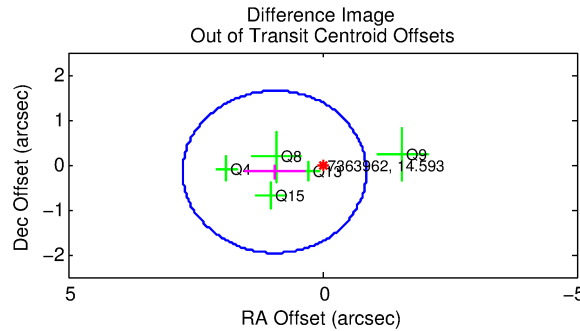
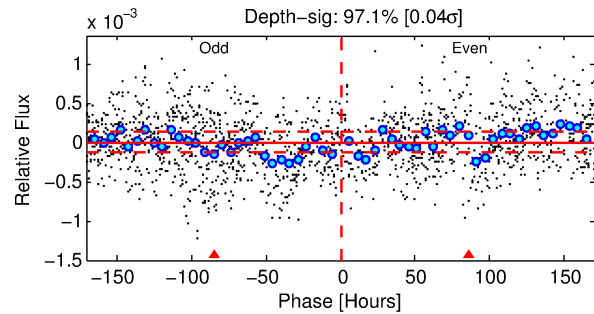
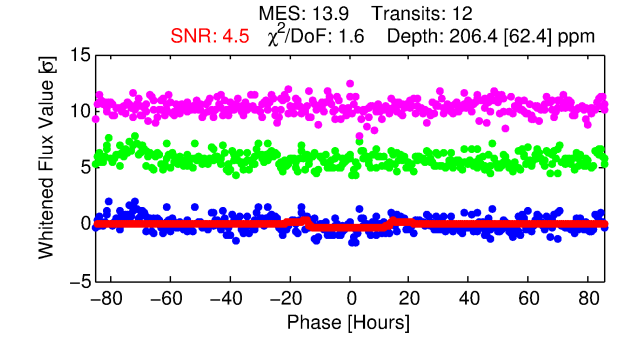
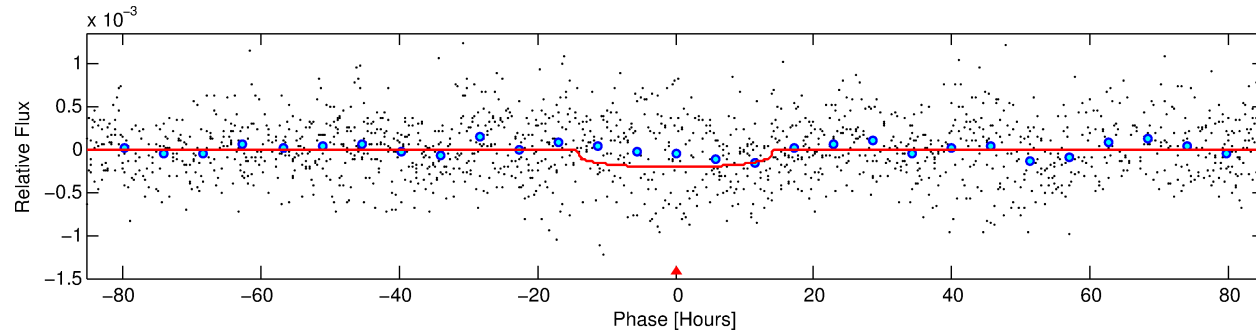
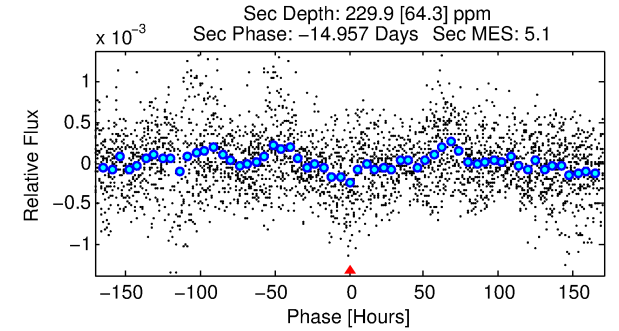
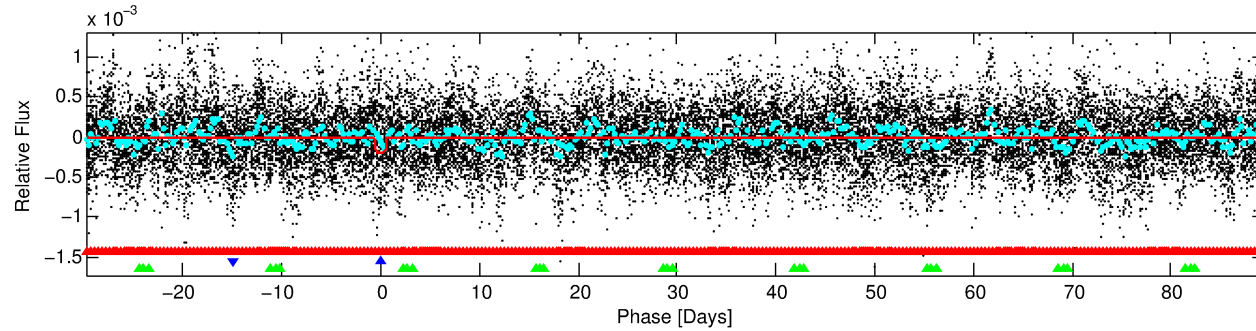
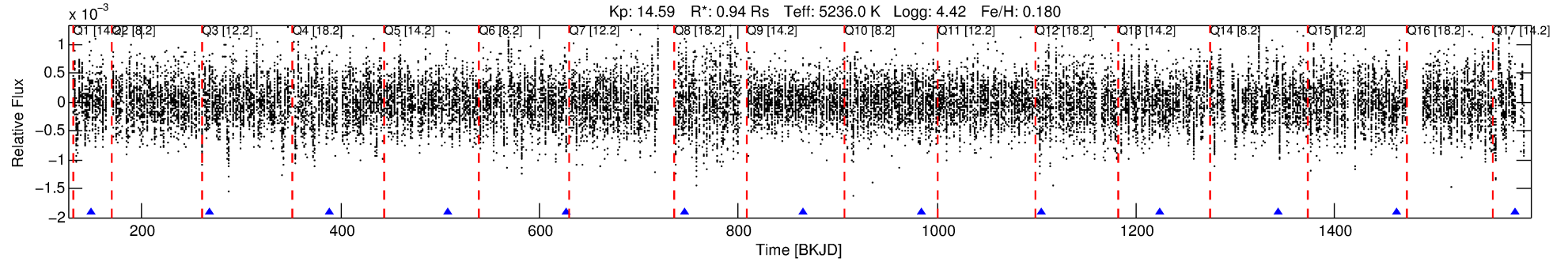
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 007363962-02

No Significant Match Found

DV One-Page Summary

KIC: 7363962 Candidate: 2 of 3 Period: 119.343 d



DV Fit Results:

Period = 119.34313 [0.00773] d
Epoch = 149.5511 [0.0655] BKJD
Rp/R* = 0.0131 [0.0130]
a/R* = 29.56 [104.74]
b = 0.42 [6.92]
Seff = 2.98 [1.39]
Teff = 335 [39] K
Rp = 1.35 [1.39] Re
a = 0.4490 [0.1256] AU
Ag = 13910.86 [28436.49] [0.49 σ]
Teffp = 5624 [2808] K [1.88 σ]

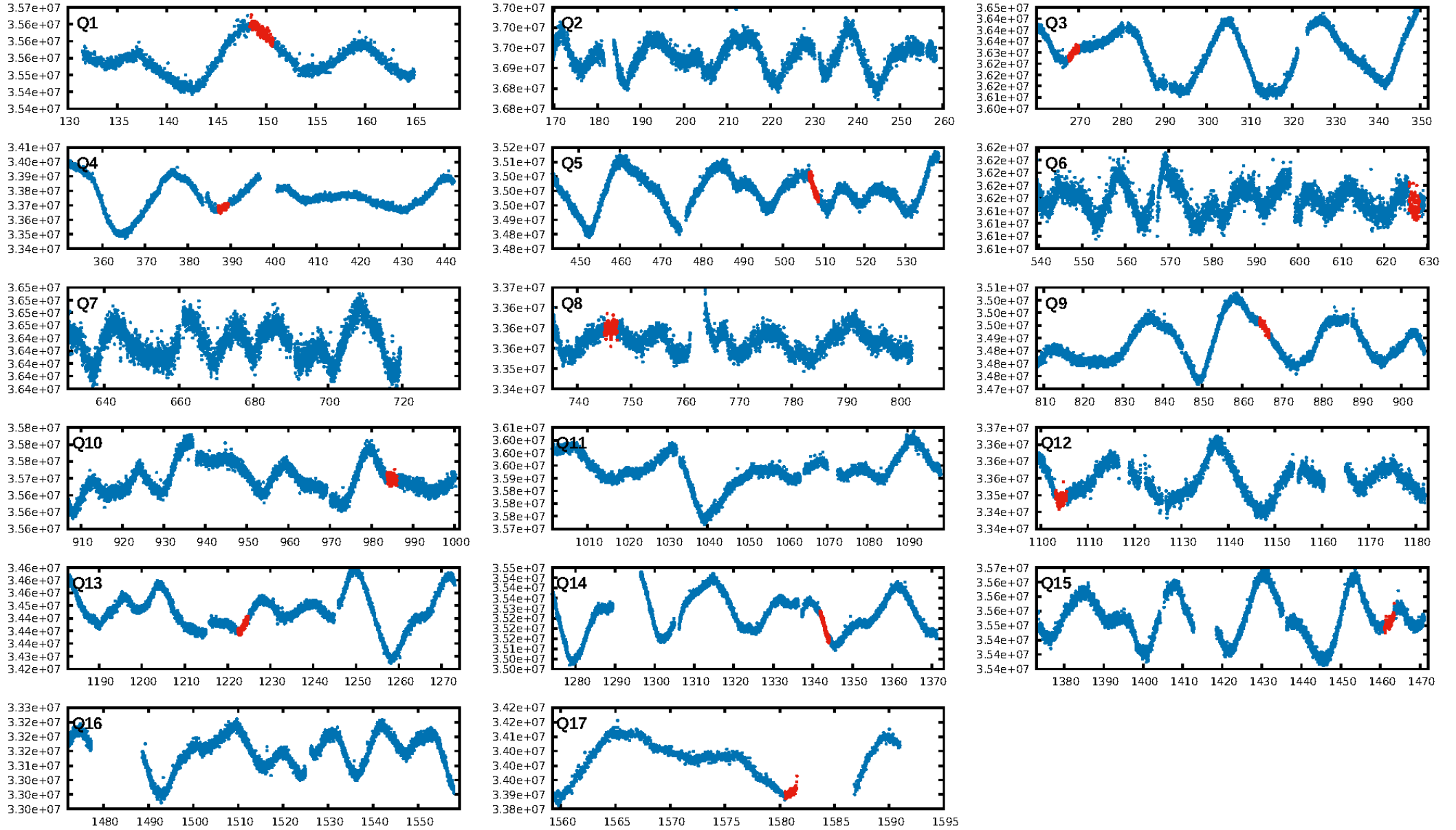
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [55.78 σ]
LongPeriod-sig: N/A
ModelChiSquare2-sig: 0.0%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: 3.72e-22
RollingBand-fgt: 1.00 [10/10]
GhostDiagnostic-chr: 0.8194
Centroid-sig: 1.0%
Centroid-so: 1.617 arcsec [1.92 σ]
OotOffset-rm: 0.955 arcsec [1.59 σ]
KicOffset-rm: 0.970 arcsec [1.85 σ]
OotOffset-st: 0/1/2/2 [5]
KicOffset-st: 0/1/2/2 [5]
DiffImageQuality-fgm: 0.60 [3/5]
DiffImageOverlap-fno: 0.00 [0/10]

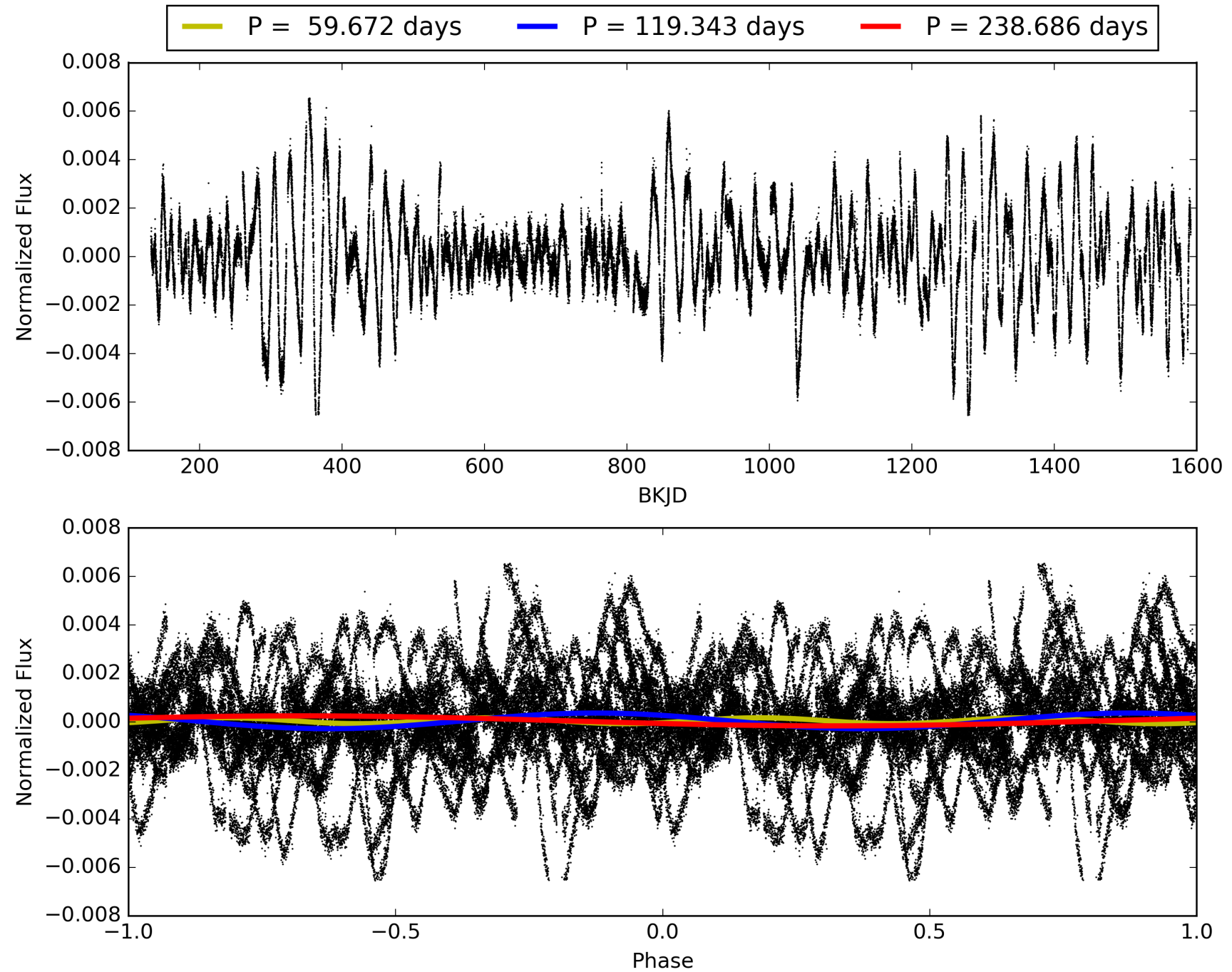
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 31-Jan-2016 10:27:29 Z

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

TCE 007363962-02, PDC Light Curves

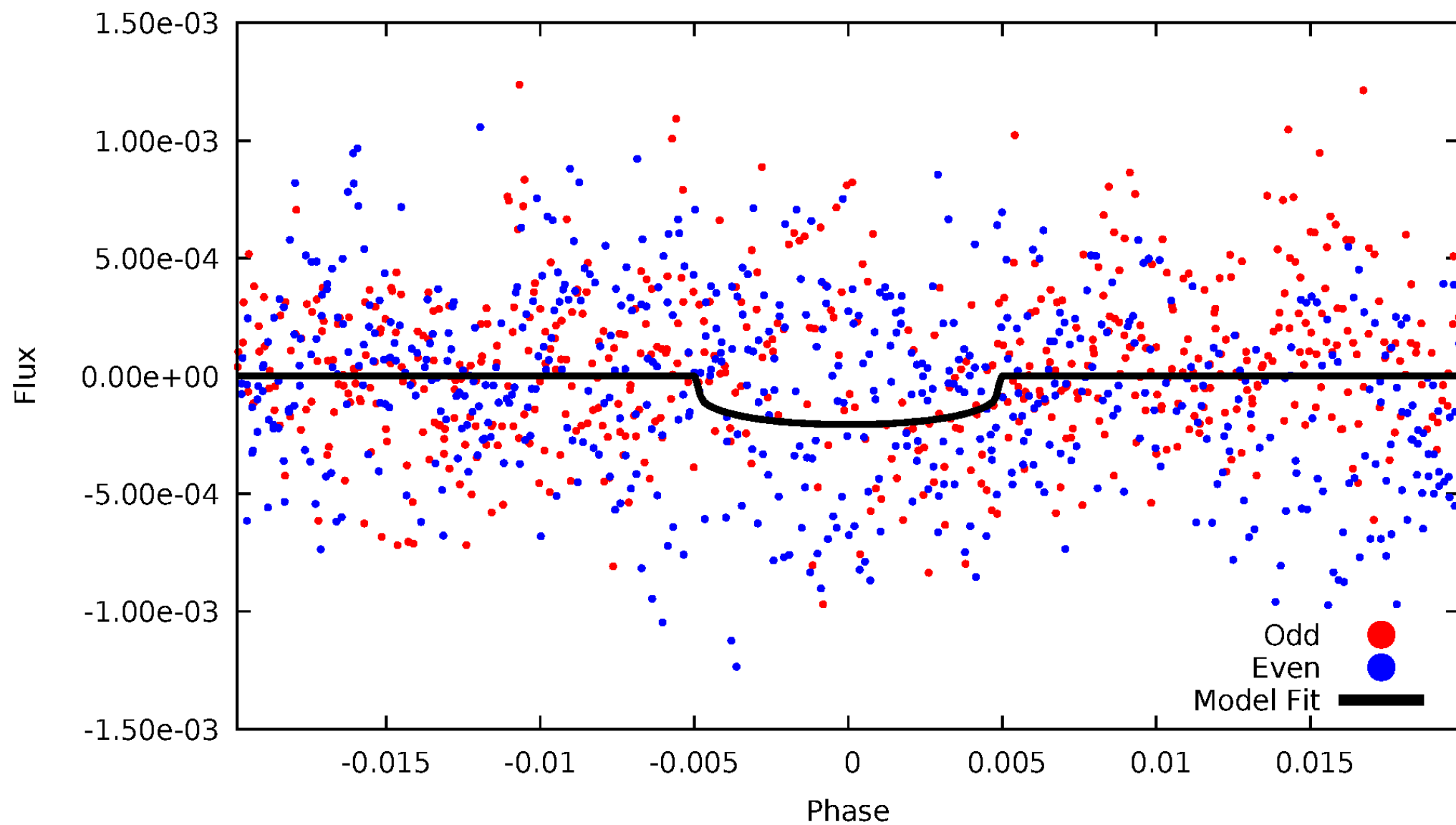


TCE 007363962-02



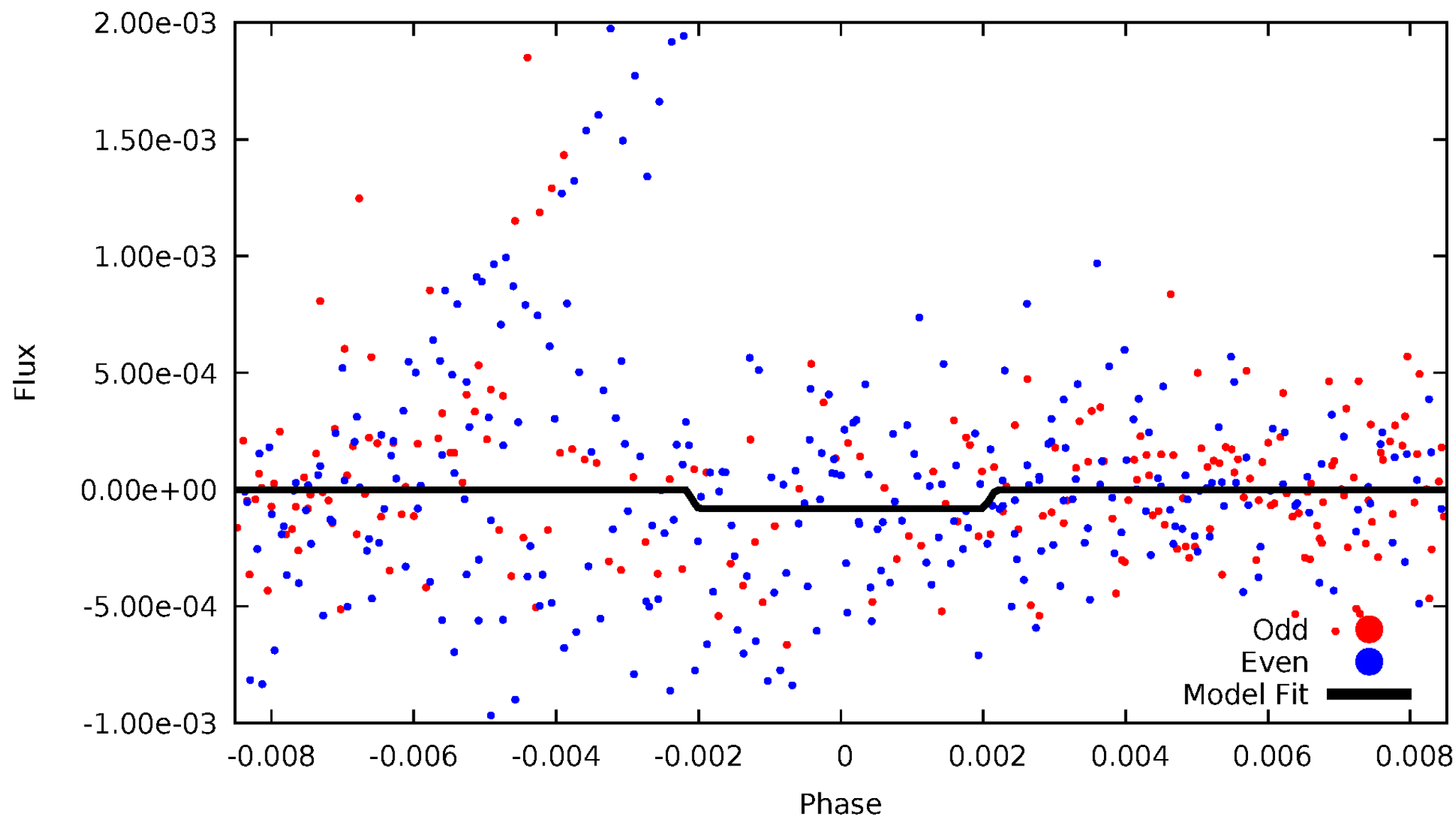
DV Odd/Even

TCE 007363962-02



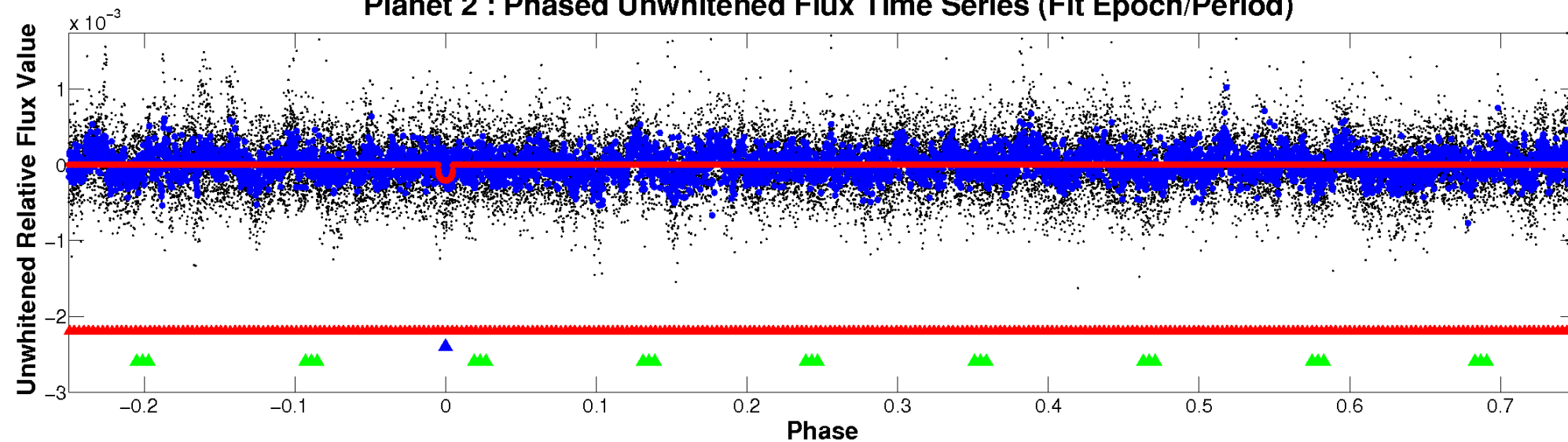
ALT Odd/Even

TCE 007363962-02

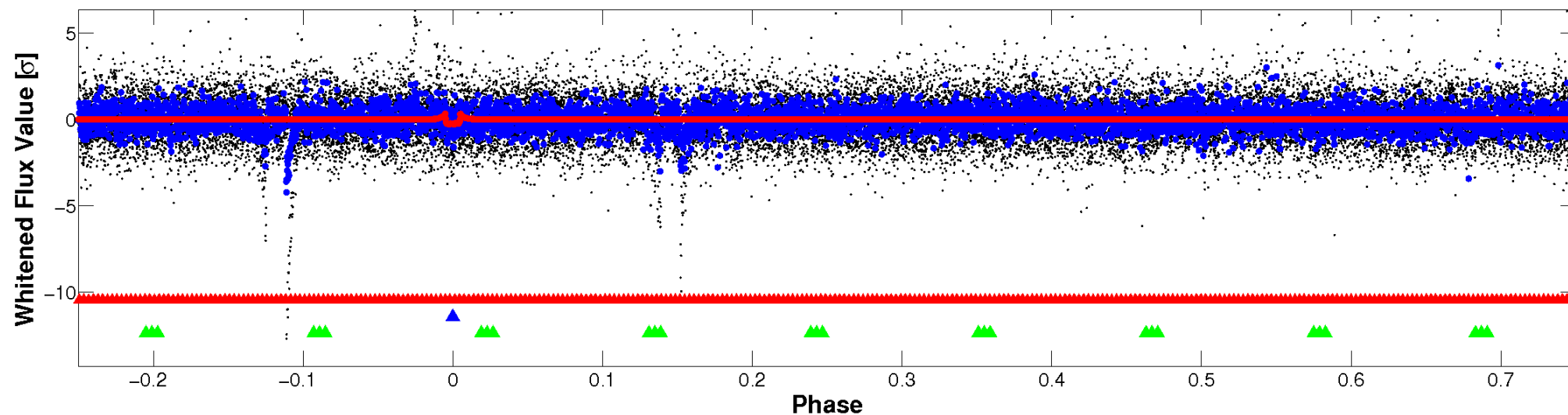


Non-Whitened Vs. Whitened Light Curve

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

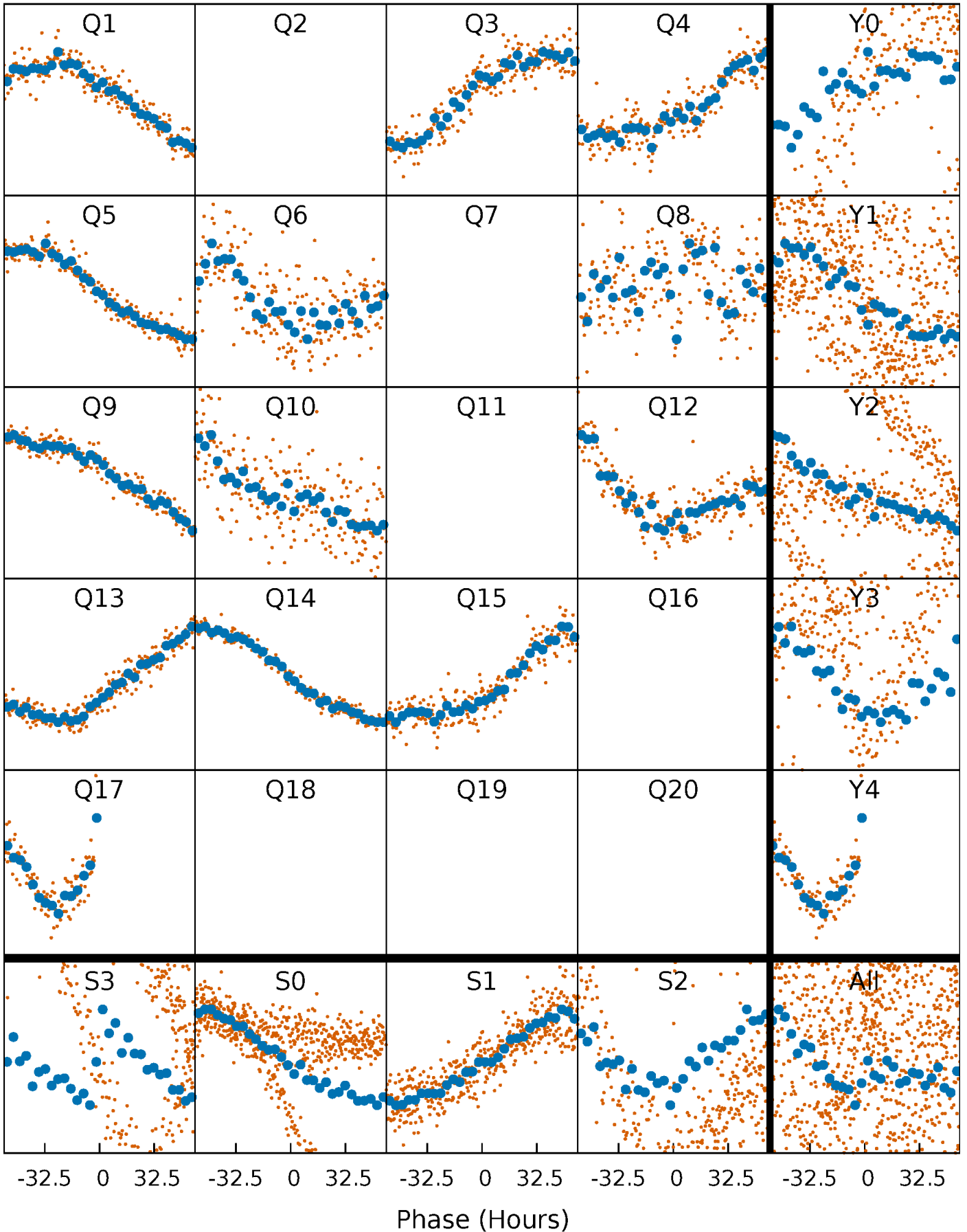


Planet 2 : Phased Whitened Flux Time Series (Fit Epoch/Period)



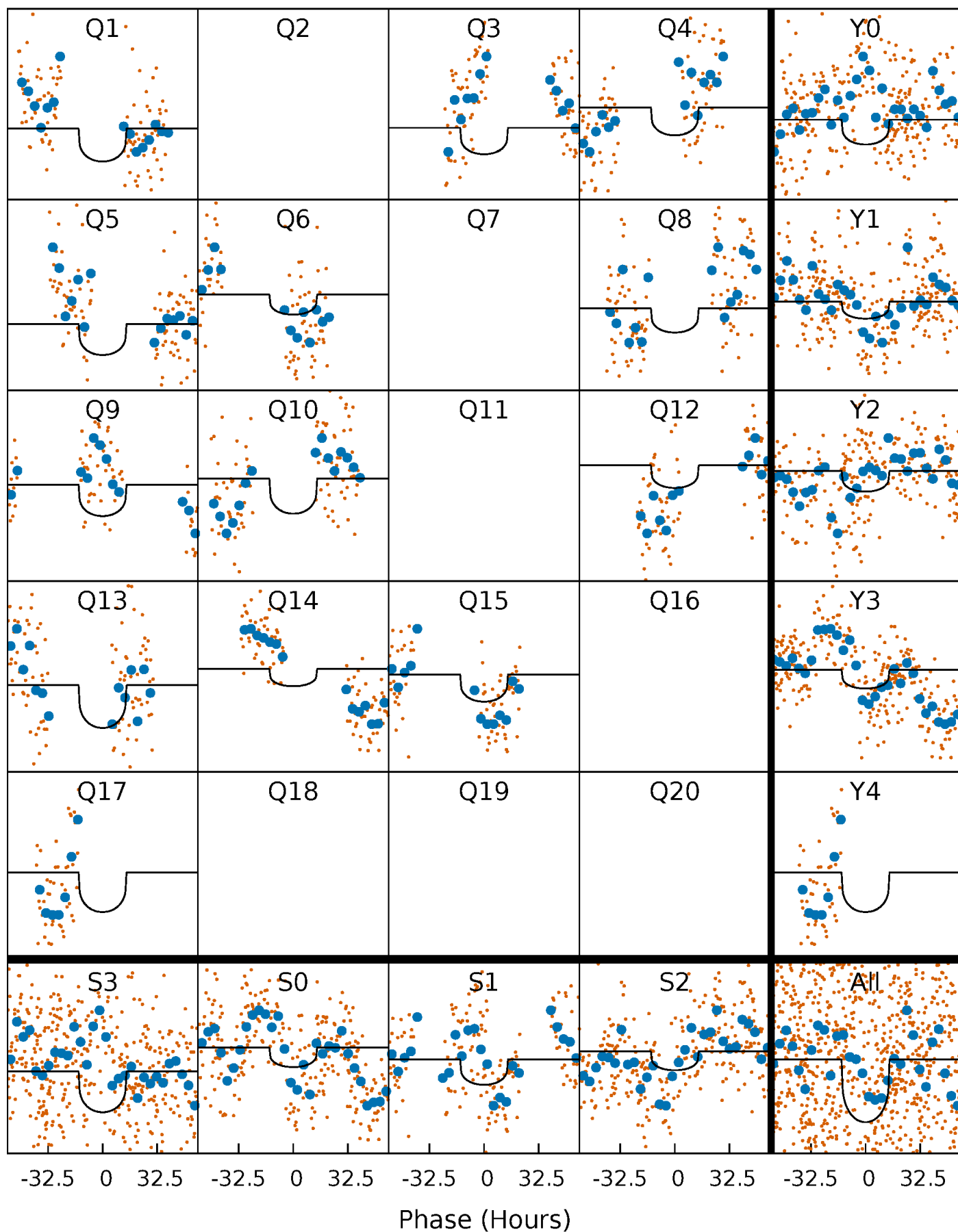
PDC Quarter-Phased Transit Curves

TCE 007363962-02 P=119.343126 Days $T_0=149.551056$ (BKJD)



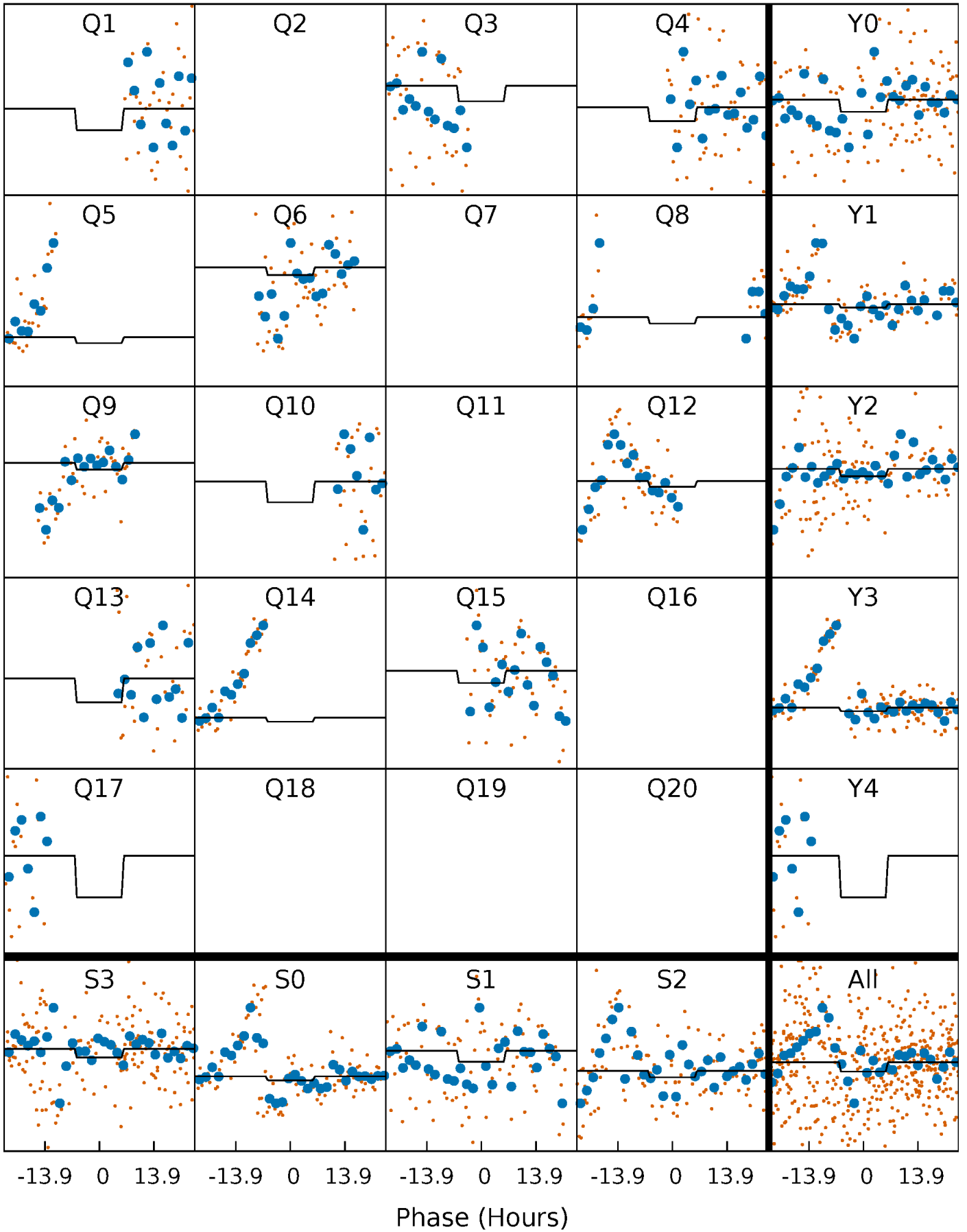
DV Quarter-Phased Transit Curves

TCE 007363962-02 P=119.343126 Days $T_0=149.551056$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

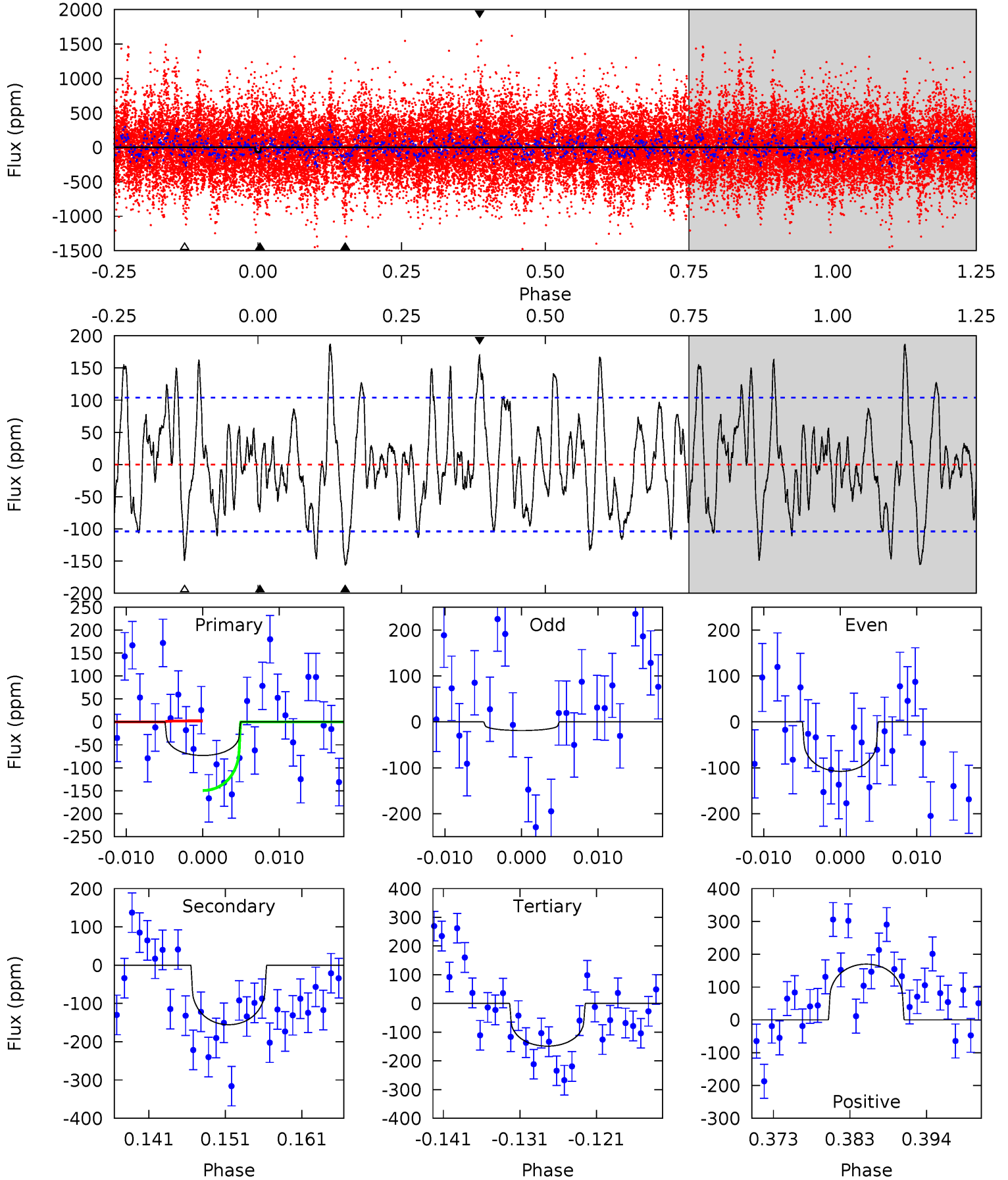
TCE 007363962-02 P=119.318368 Days $T_0=149.816087$ (BKJD)



DV Model-Shift Uniqueness Test

007363962-02, P = 119.343126 Days, E = 30.207930 Days

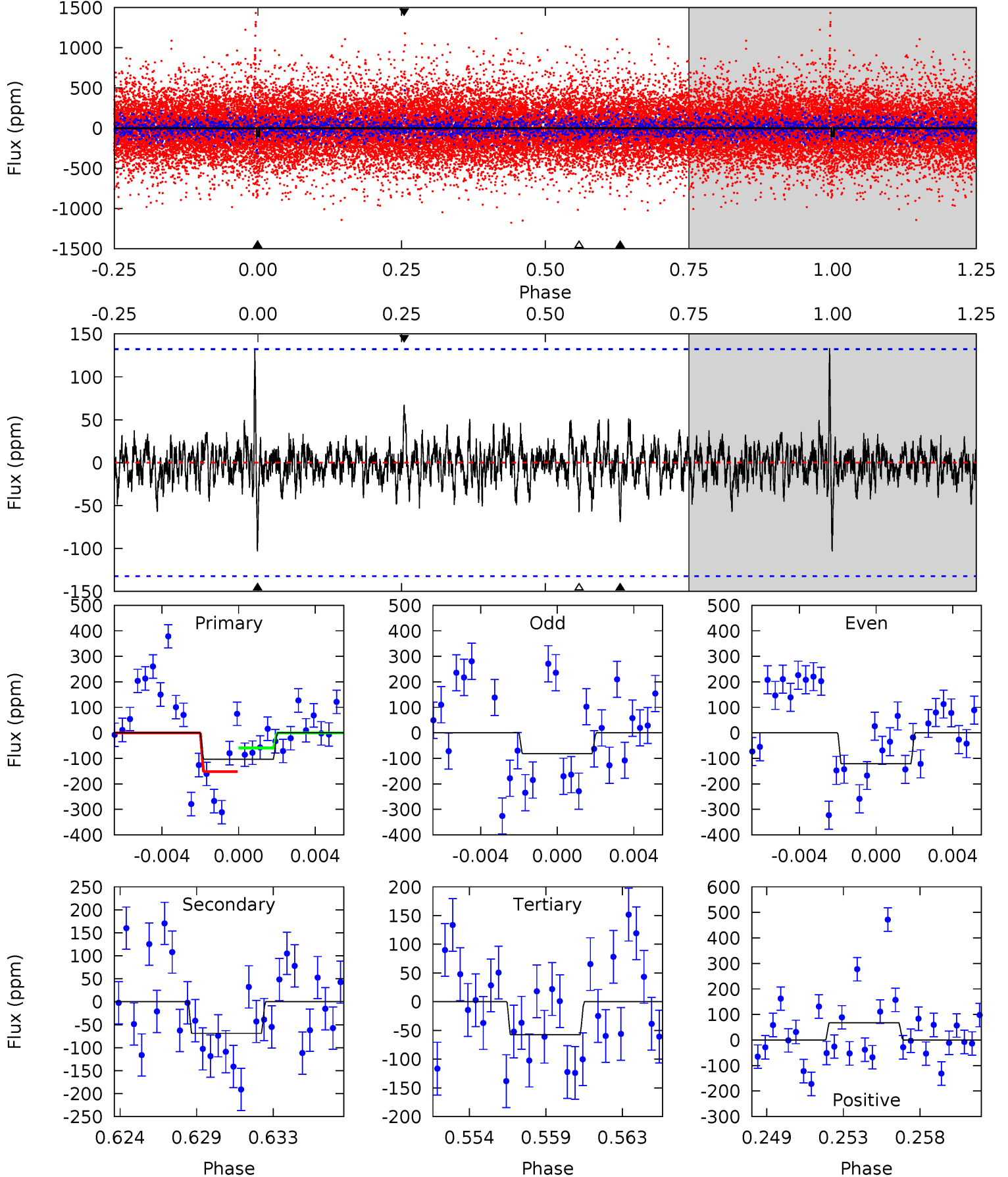
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
3.54	7.52	7.19	8.21	5.02	2.57	3.19	-3.65	-4.67	0.33	-0.69	2.11	1.43	0.55	3.57



Alt Model-Shift Uniqueness Test

007363962-02, P = 119.318368 Days, E = 30.497719 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
4.05	2.70	2.26	2.64	5.18	2.85	0.70	1.80	1.41	0.44	0.06	0.72	1.60	0.56	1.83



Stellar Parameters For KIC 007363962

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	M (M_{\odot})	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	5236^{+157}_{-157}	$4.416^{+0.133}_{-0.266}$	$0.180^{+0.250}_{-0.250}$	$0.944^{+0.271}_{-0.125}$	$0.846^{+0.095}_{-0.061}$	$1.416^{+0.929}_{-0.818}$
	+3%/-3%	+3%/-6%	+139%/-139%	+29%/-13%	+11%/-7%	+66%/-58%
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 007363962-02 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-156 ± 21	$1.66^{+1.19}_{-1.06}$	473^{+40}_{-28}	4722^{+3085}_{-841}	6214^{+39245}_{-4157}
Alt.	-69 ± 25	$1.33^{+1.21}_{-0.86}$	472^{+40}_{-27}	4372^{+2644}_{-913}	4190^{+29087}_{-3156}

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 $A_{obs} \gg 1.0$

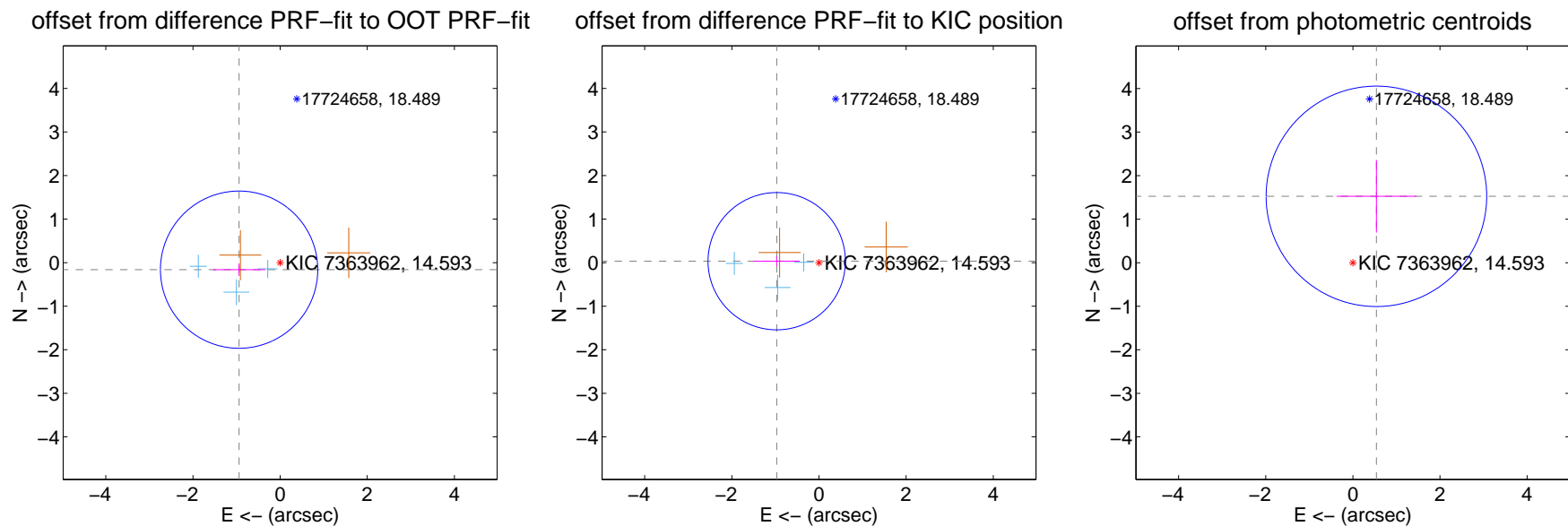
DV Centroid Data

Supplemental centroid analysis for 007363962-02. Kepler magnitude: 14.59. Transit SNR 4.53

There are 3 quarters with good PRF difference image offsets

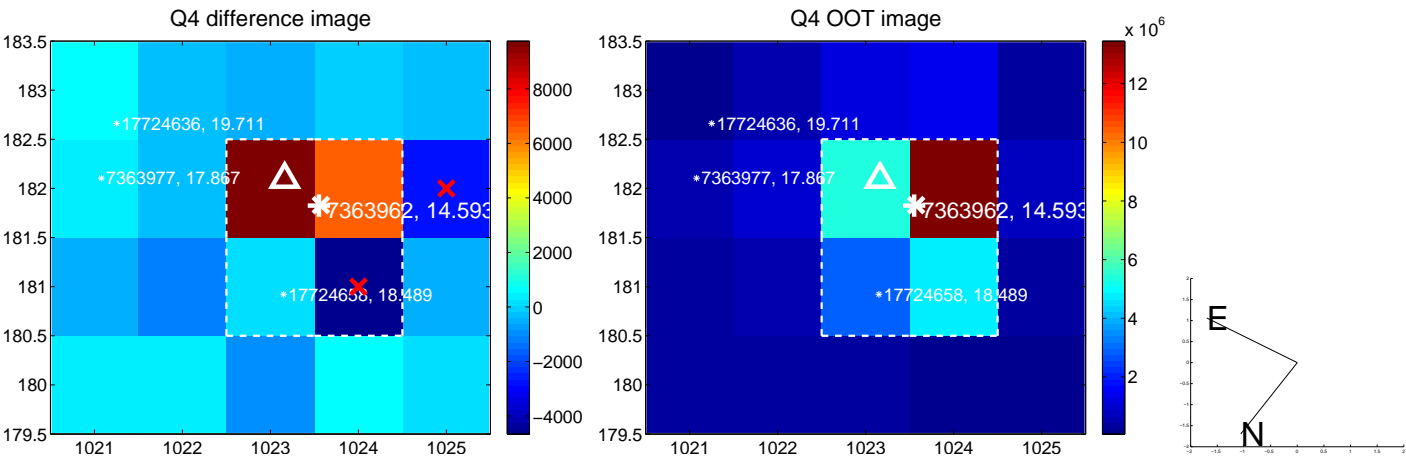
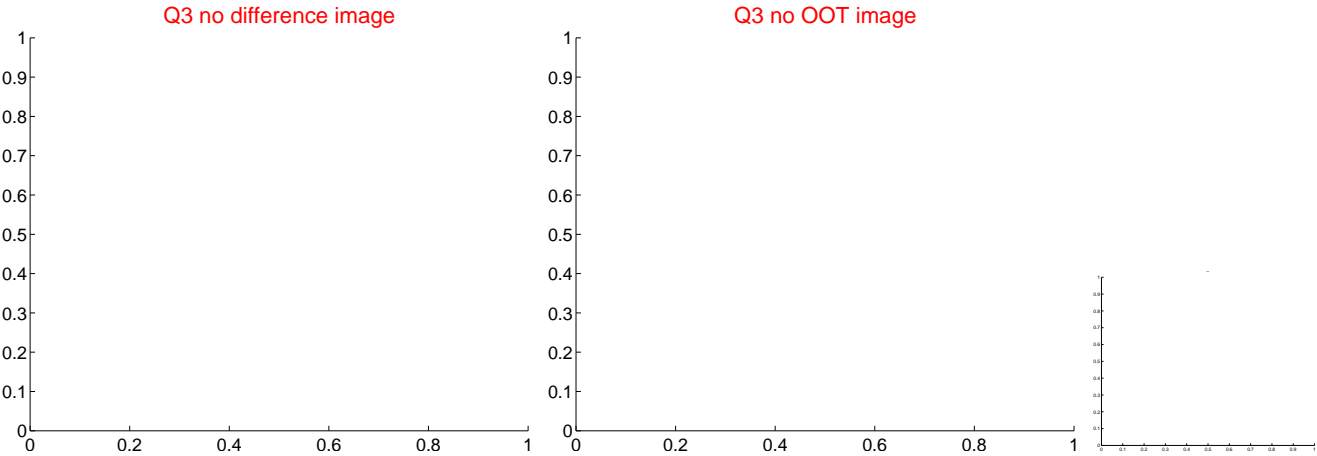
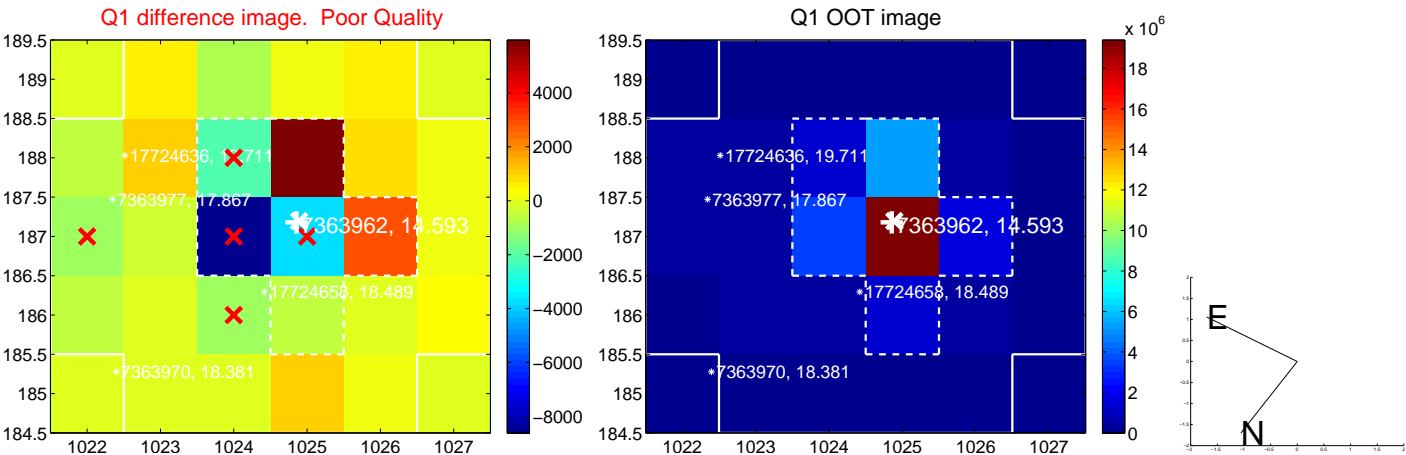
The direct PRF centroid is offset from the target star catalog position by about 0.12 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.955 ± 0.602	1.59	0.941 ± 0.600	-0.161 ± 0.143
PRF-fit source offset from KIC position	0.970 ± 0.525	1.85	0.970 ± 0.525	0.033 ± 0.114
photometric centroid source offset	1.62 ± 0.84	1.92	-0.54 ± 0.92	1.52 ± 0.83

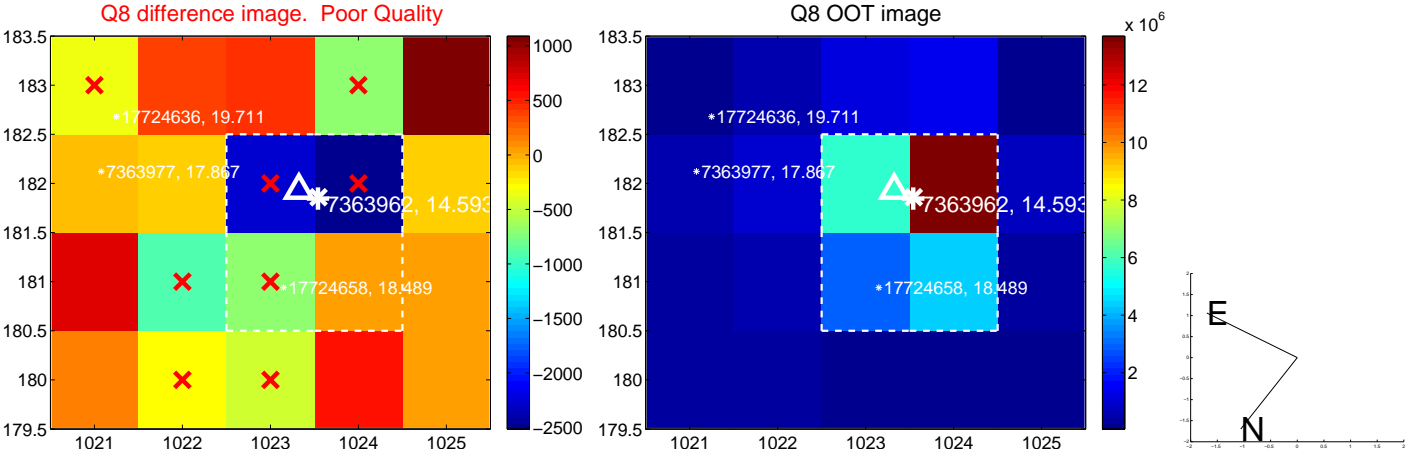
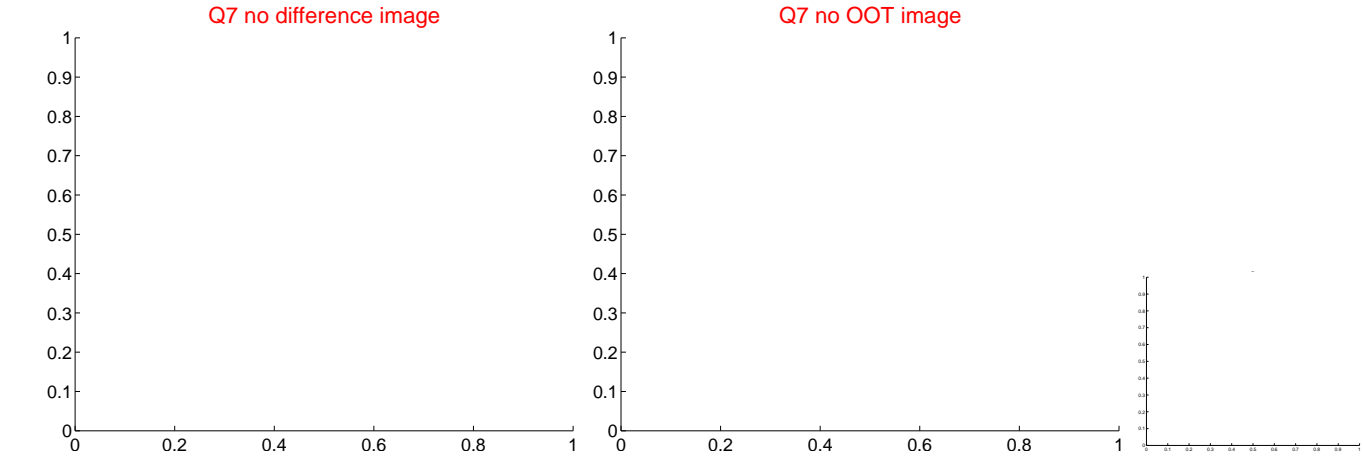
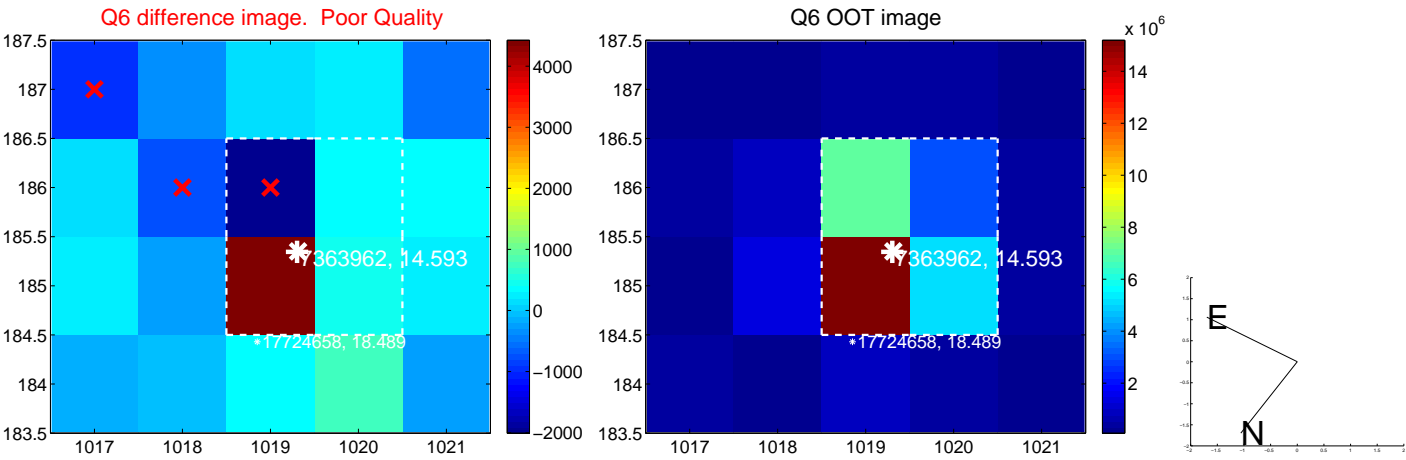
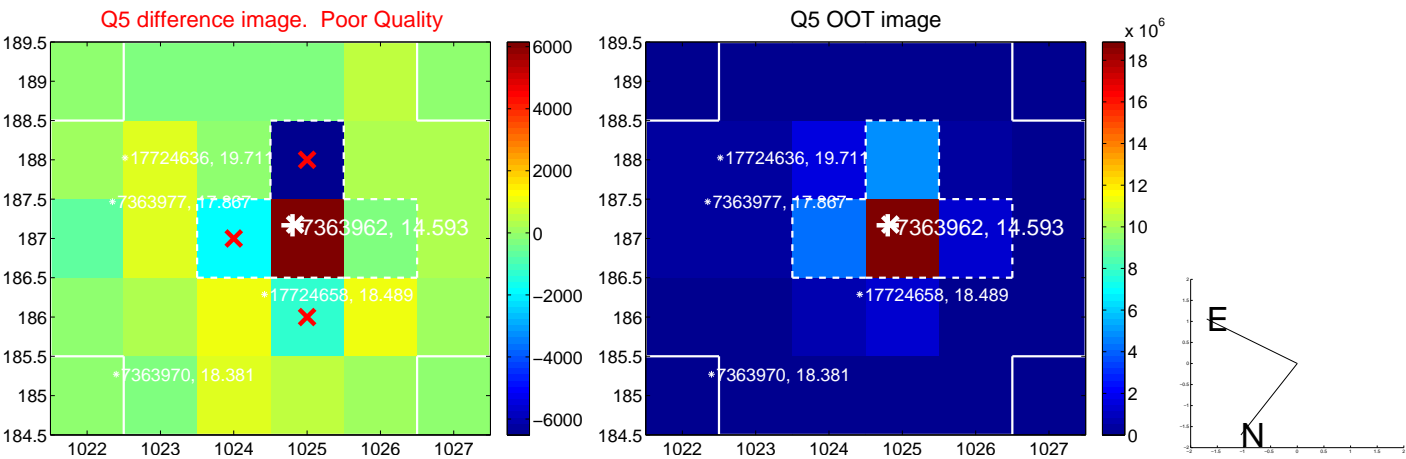


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

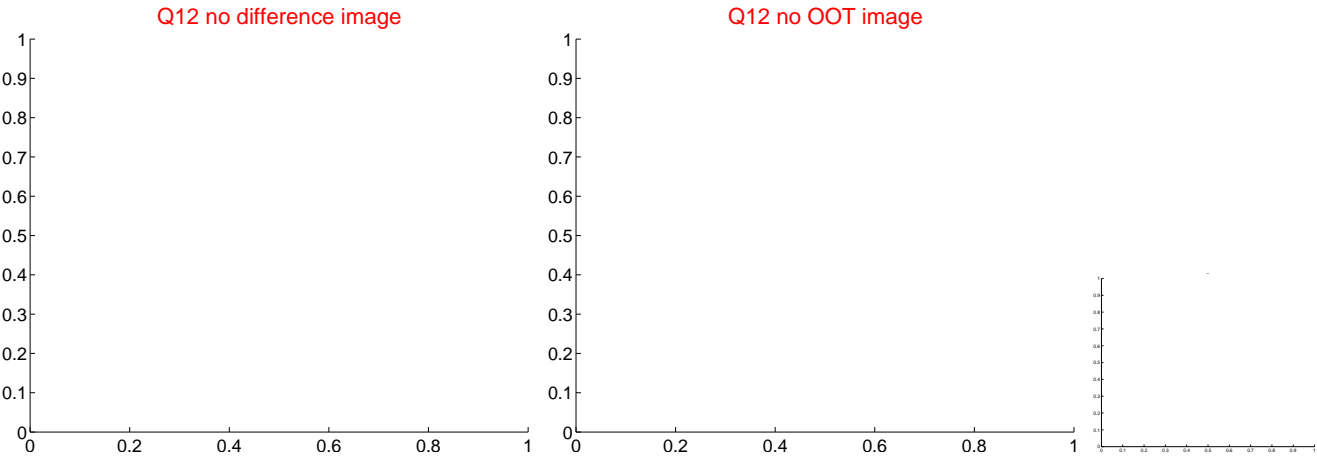
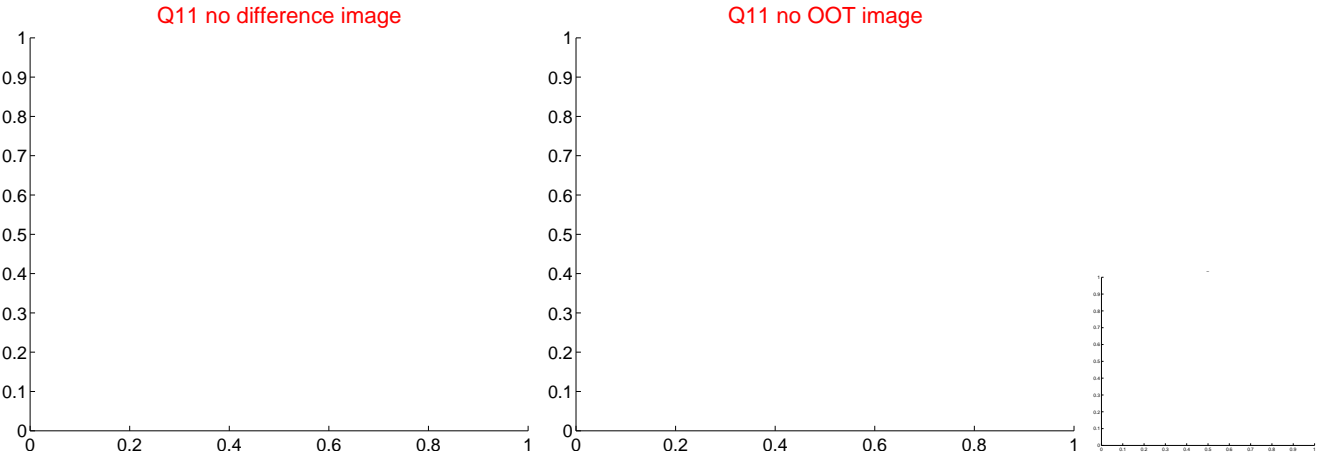
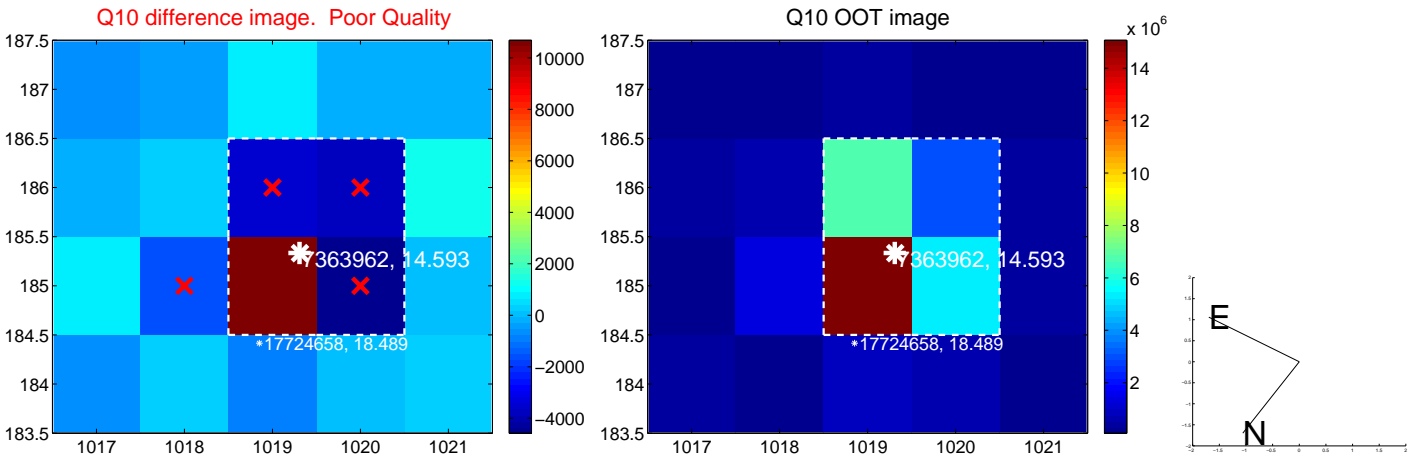
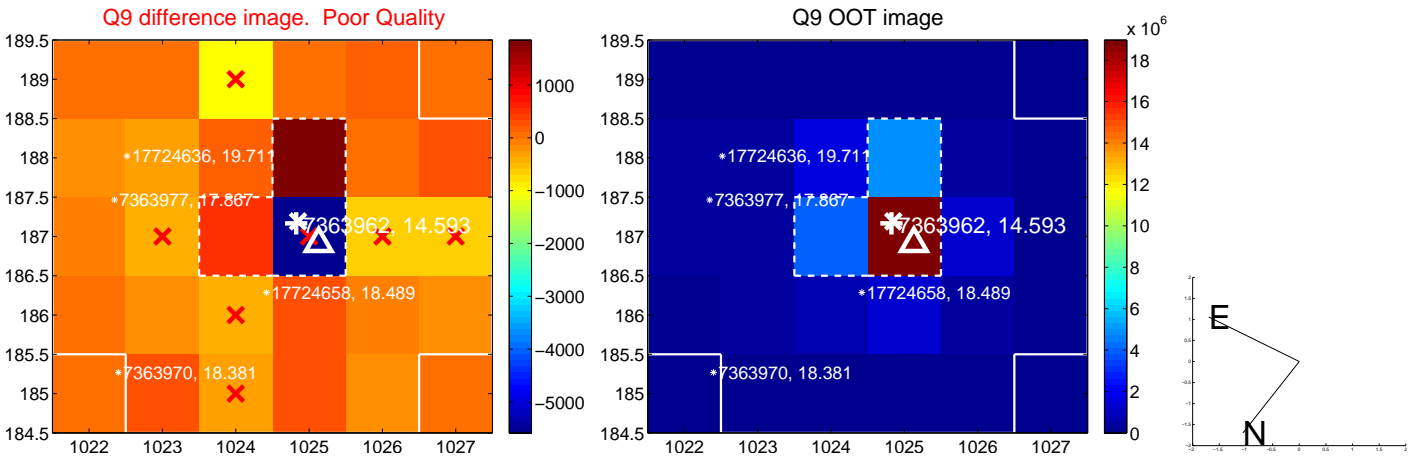
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



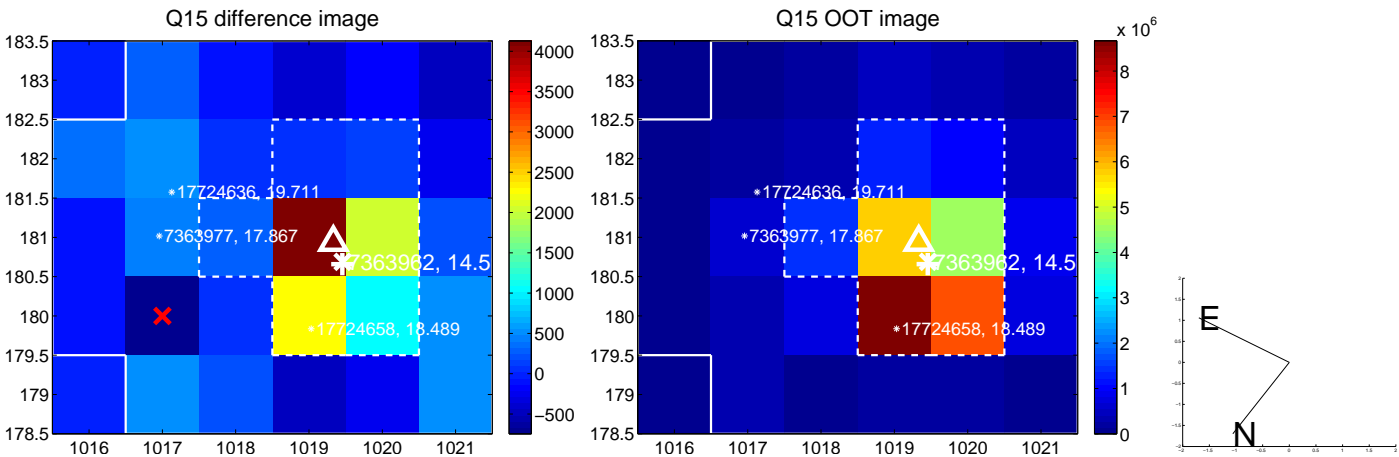
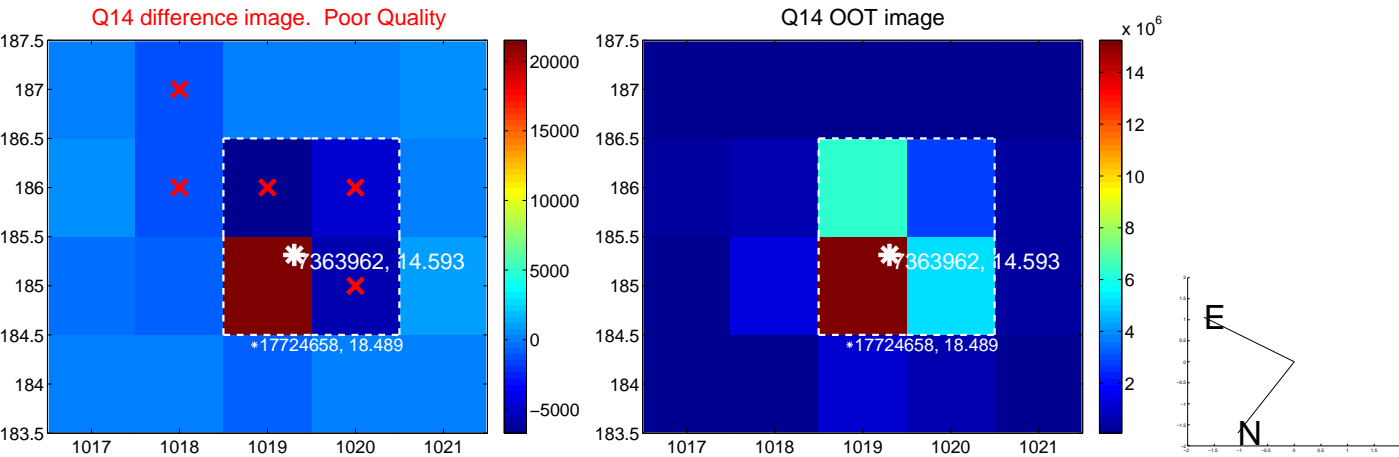
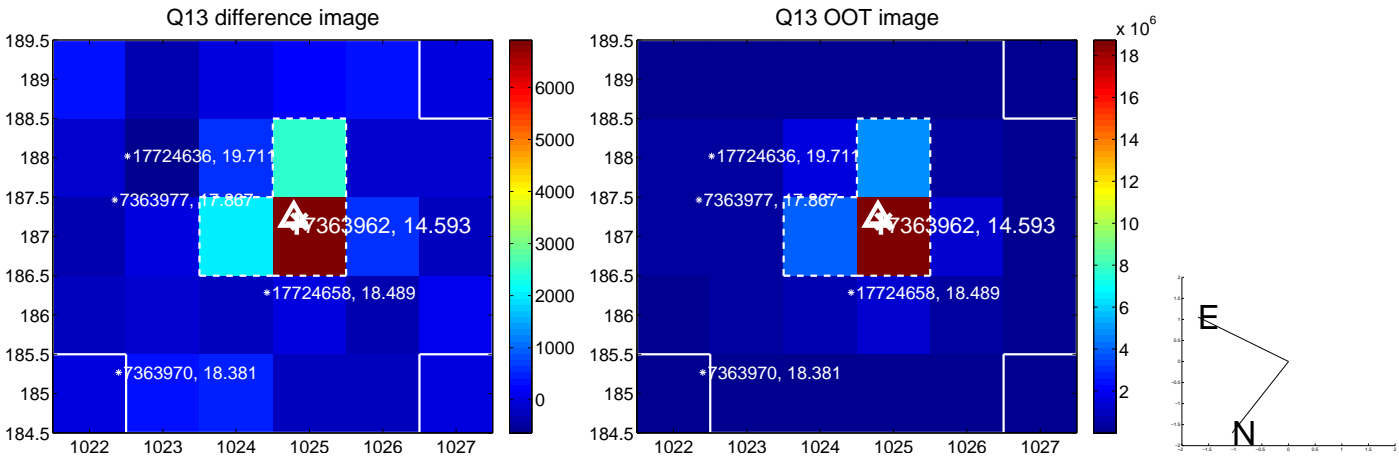
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



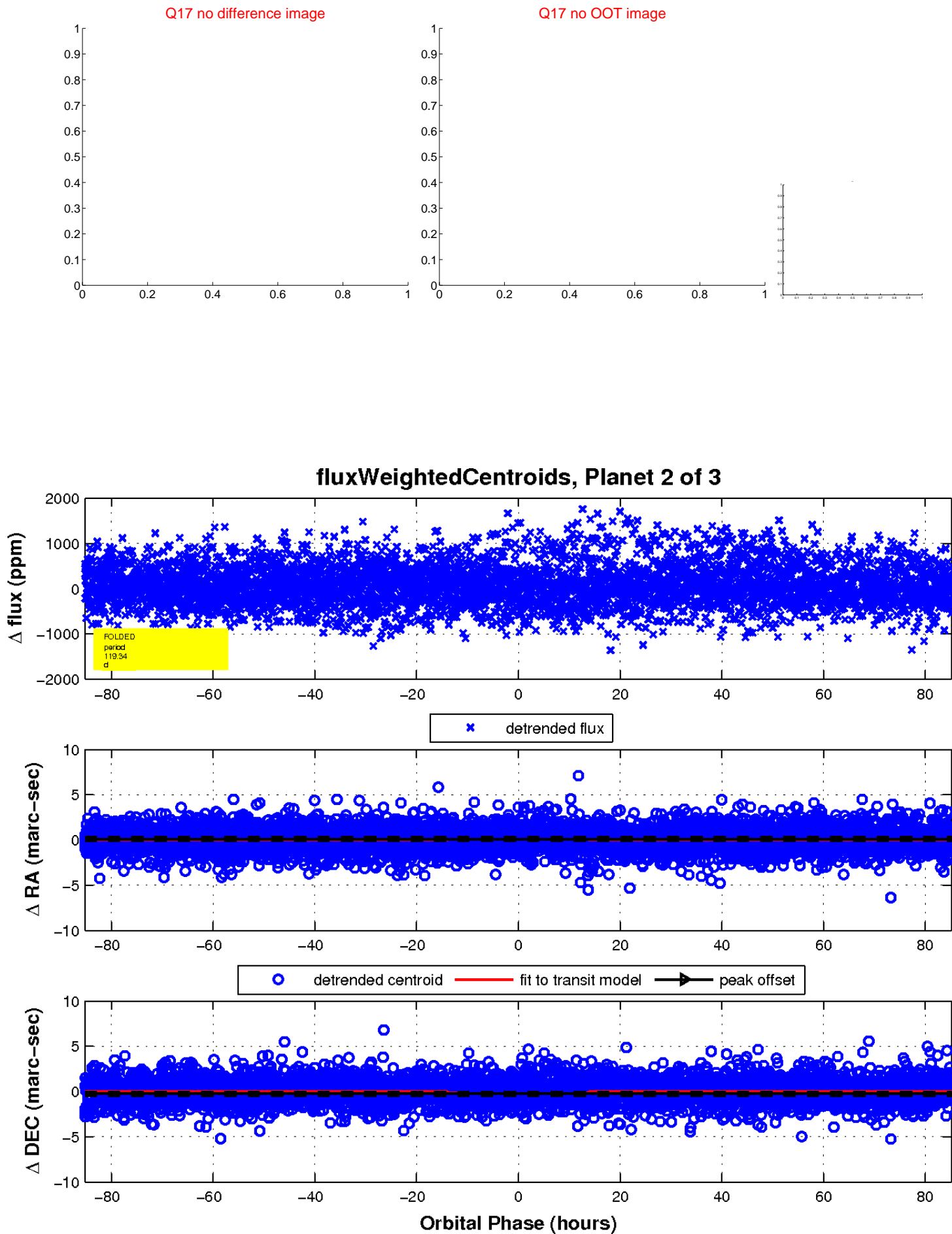
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

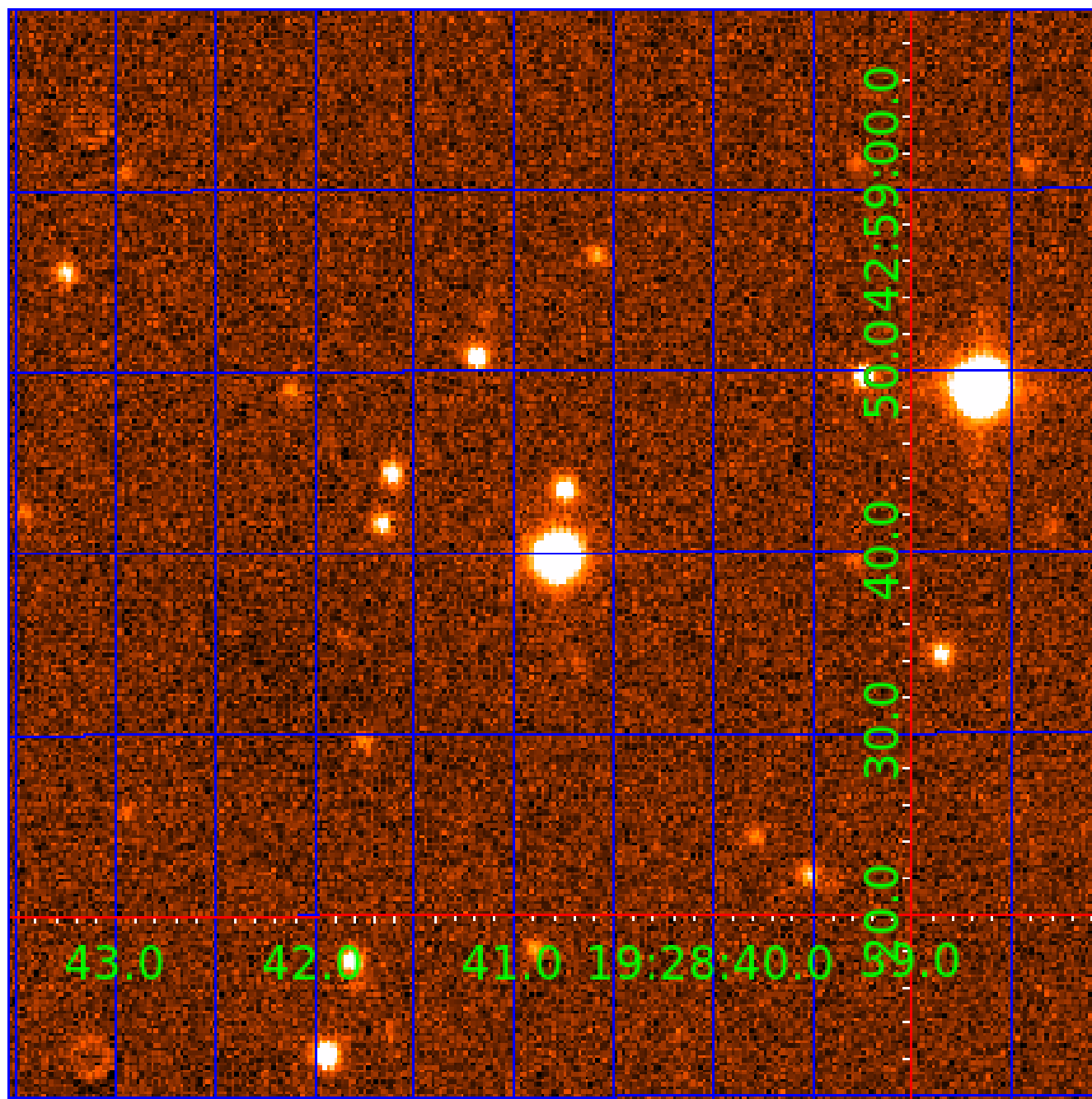


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 007363962

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})
007363962-01	OBS	No	2.618924	133.585166	44.8	12.278	8.1	9.4	0.94	5236	0.69	484.59
007363962-02	OBS	No	119.343126	149.551057	206.4	28.404	13.9	4.5	0.94	5236	1.35	2.98
007363962-03	OBS	No	52.989563	166.118094	275.6	2.853	7.1	7.1	0.94	5236	1.82	8.79

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
007363962-01	OBS	FP	0.00	1	0	1	0	LPP_DV—CENT_UNRESOLVED_OFFSET
007363962-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV— MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—INCONSISTENT_TRANS—CENT_FEW_DIFFS
007363962-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_SKYE—TRANS_GAPPED—MOD_NONUNIQ_ALT—CENT_FEW_DIFFS

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

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

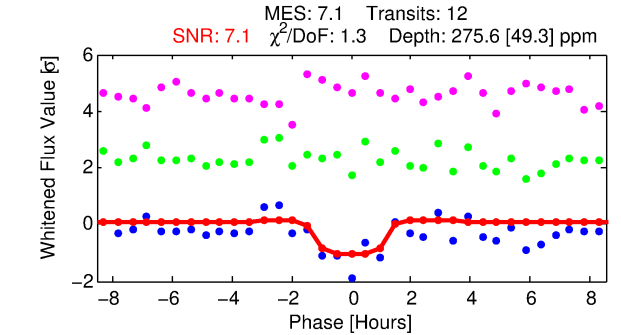
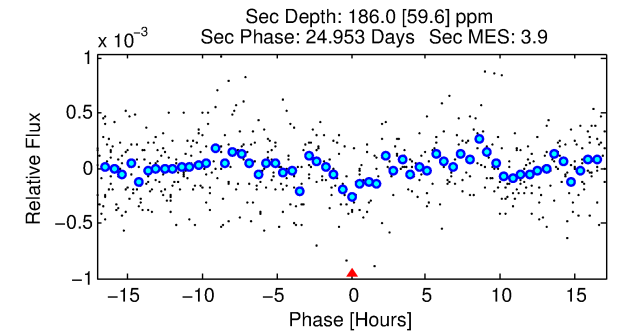
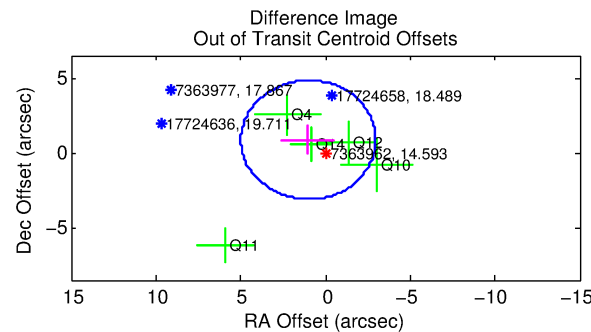
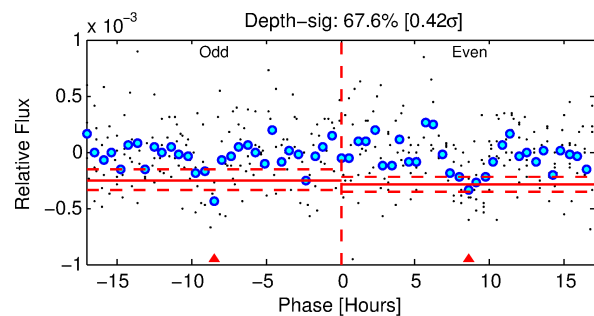
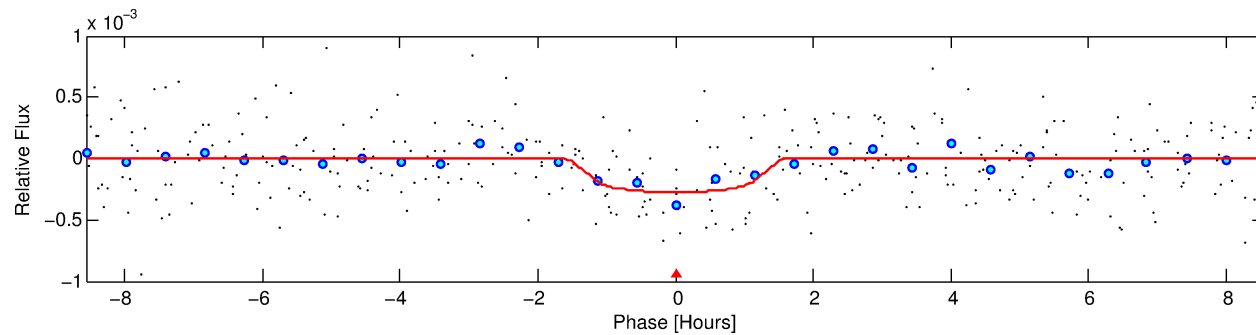
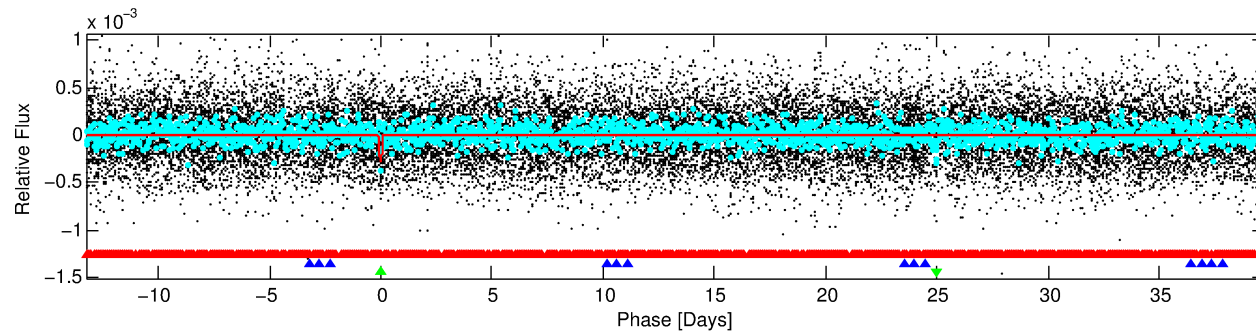
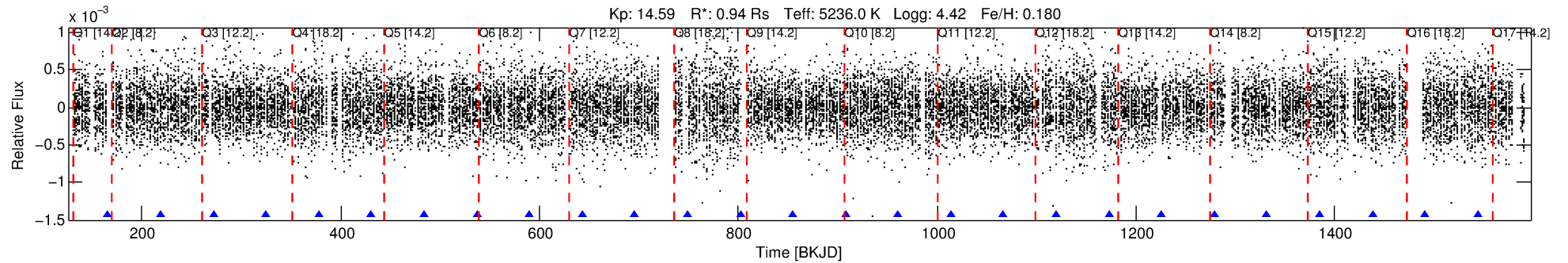
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 007363962-03

No Significant Match Found

DV One-Page Summary

KIC: 7363962 Candidate: 3 of 3 Period: 52.990 d



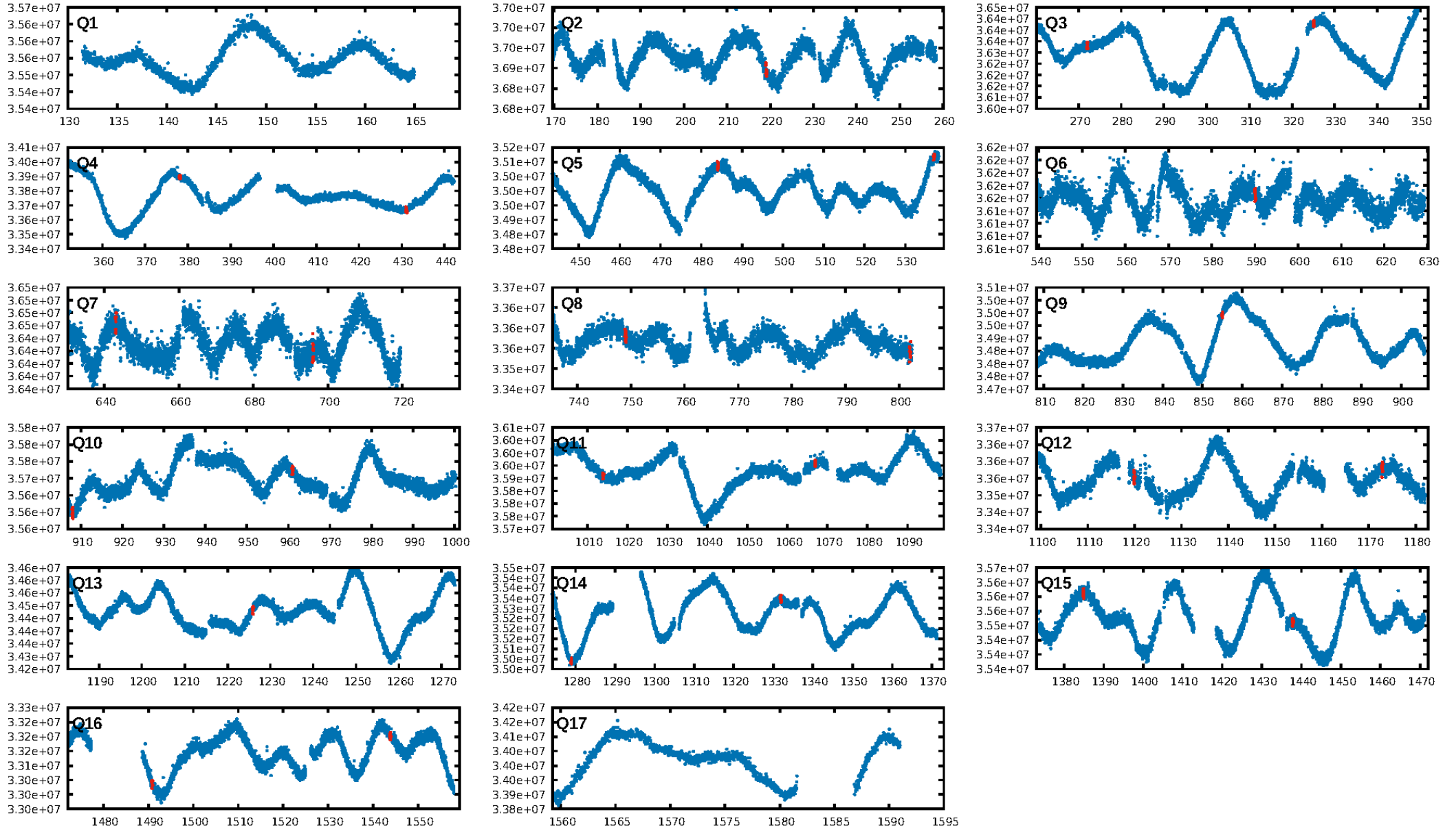
DV Fit Results:

Period = 52.98956 [0.00078] d
Epoch = 166.1181 [0.0116] BKJD
Rp/R* = 0.0177 [0.0274]
a/R* = 78.59 [483.03]
b = 0.85 [2.00]
Seff = 8.79 [4.10]
Teff = 439 [51] K
Rp = 1.82 [2.87] Re
a = 0.2613 [0.0731] AU
Ag = 2113.23 [6673.80] [0.32 σ]
Teffp = 4602 [3599] K [1.16 σ]

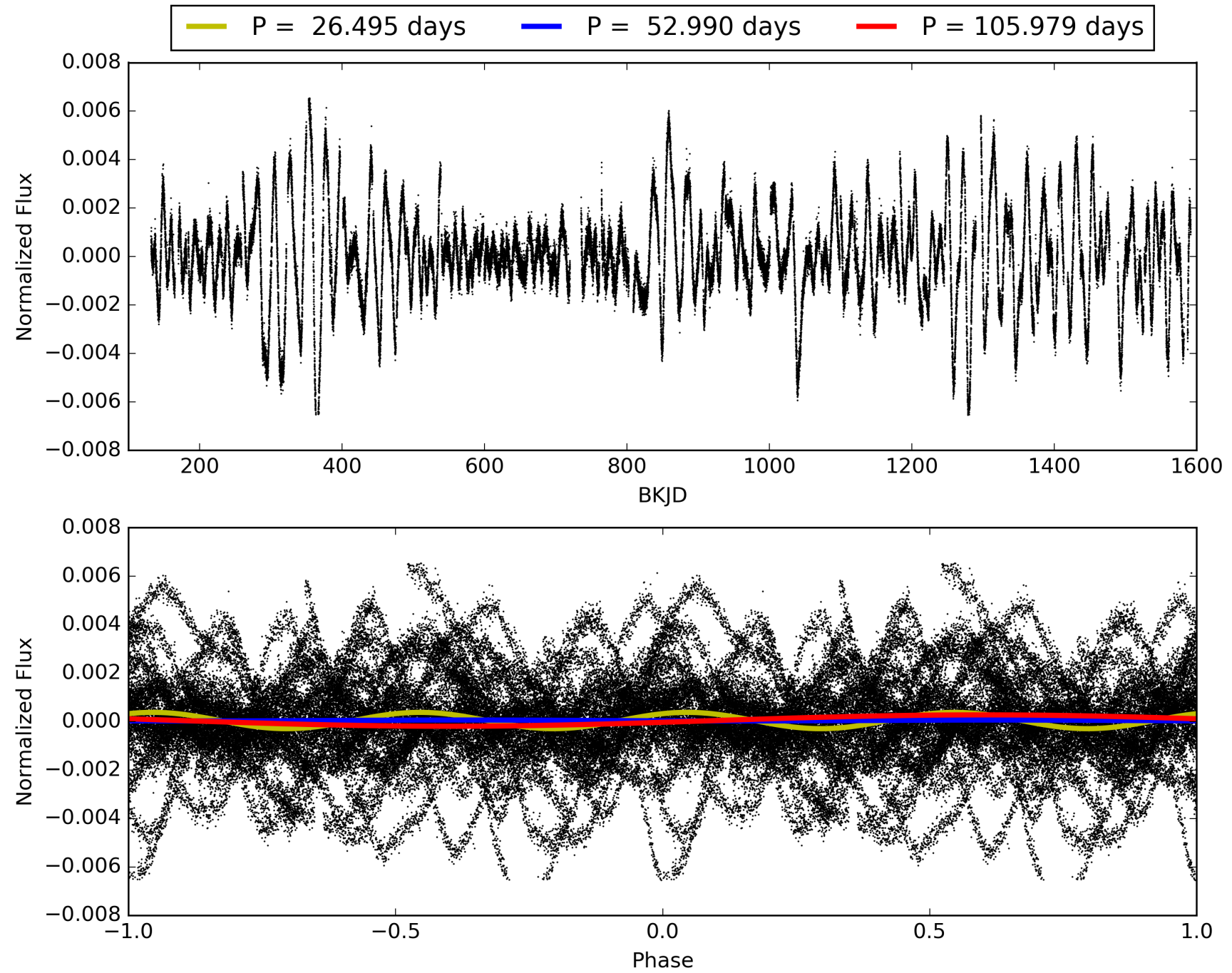
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [95.91 σ]
LongPeriod-sig: 100.0% [55.78 σ]
ModelChiSquare2-sig: 0.3%
ModelChiSquareGof-sig: 92.2%
Bootstrap-pfa: 2.99e-09
RollingBand-fgt: 1.00 [12/12]
GhostDiagnostic-chr: -1.815
Centroid-sig: 71.1%
Centroid-so: 0.857 arcsec [0.63 σ]
OotOffset-rm: 1.326 arcsec [1.00 σ]
KicOffset-rm: 1.366 arcsec [1.03 σ]
OotOffset-st: 2/1/2/0 [5]
KicOffset-st: 2/1/2/0 [5]
DiffImageQuality-fgm: 0.00 [0/5]
DiffImageOverlap-fno: 0.67 [10/15]

TCE 007363962-03, PDC Light Curves

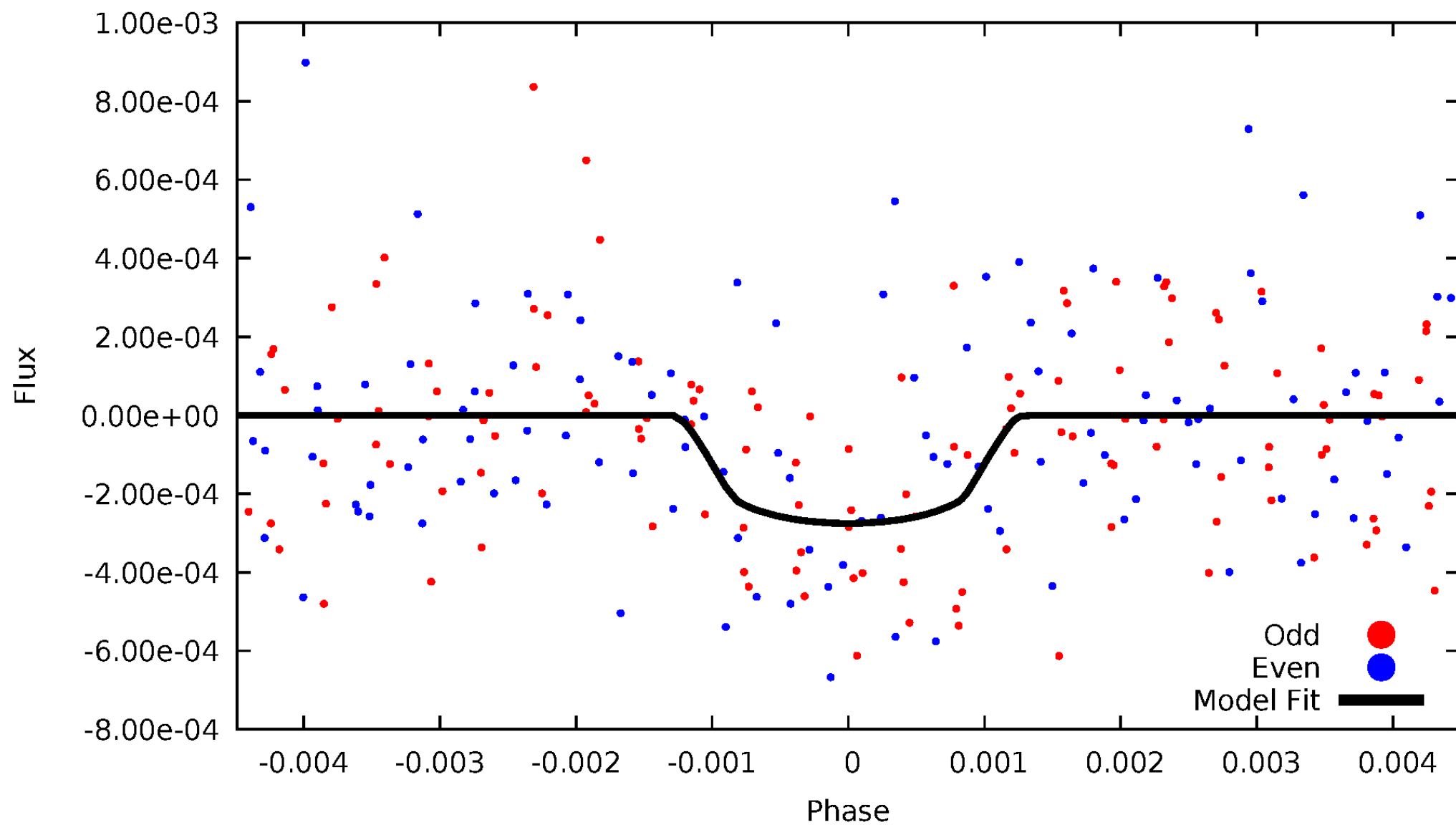


TCE 007363962-03



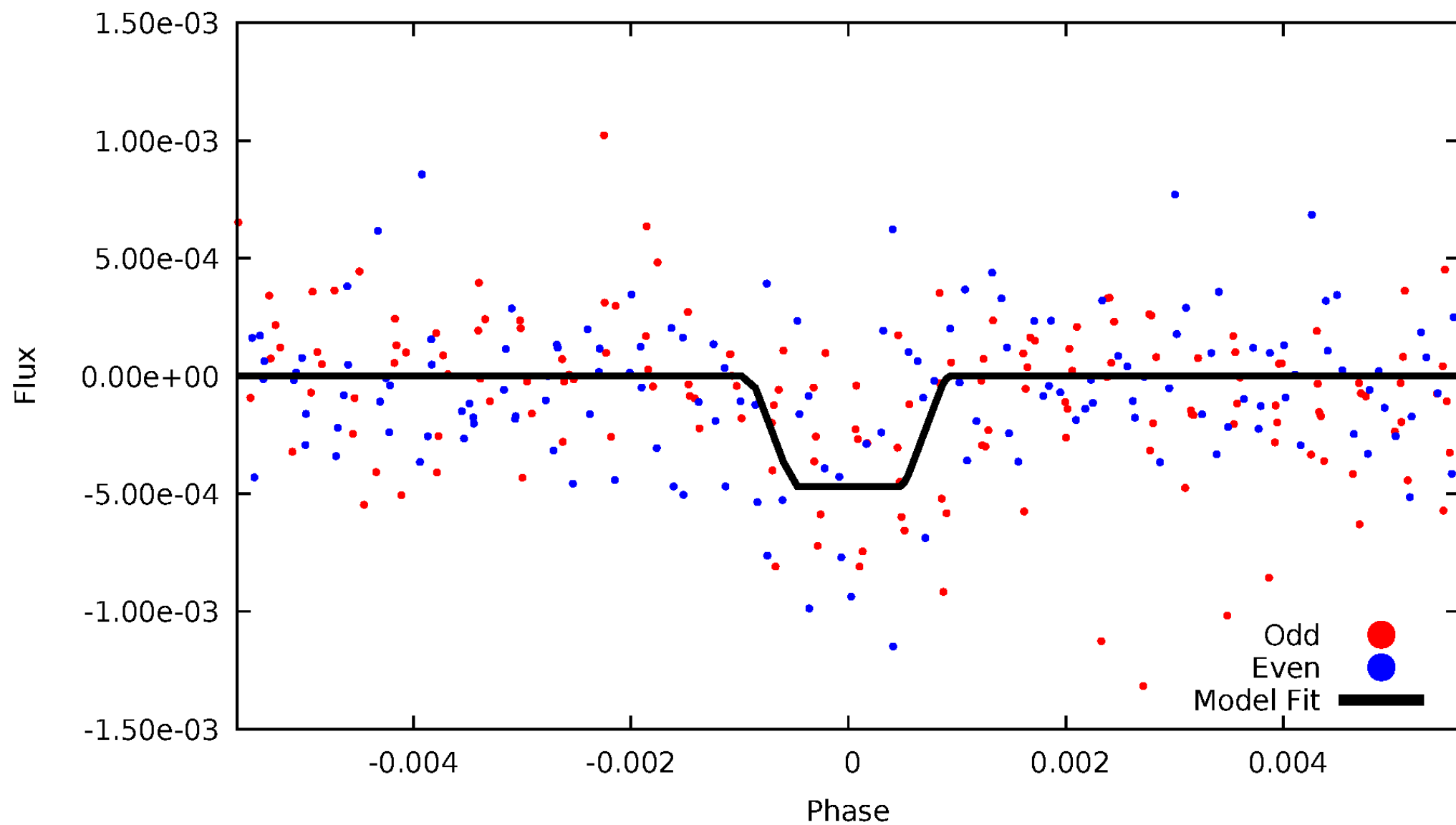
DV Odd/Even

TCE 007363962-03



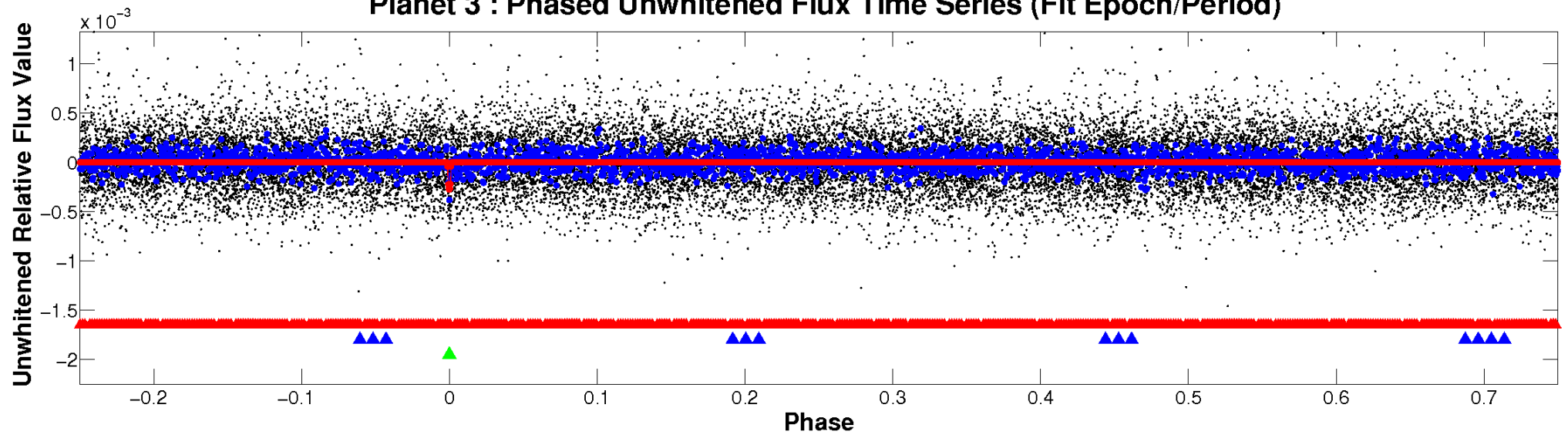
ALT Odd/Even

TCE 007363962-03

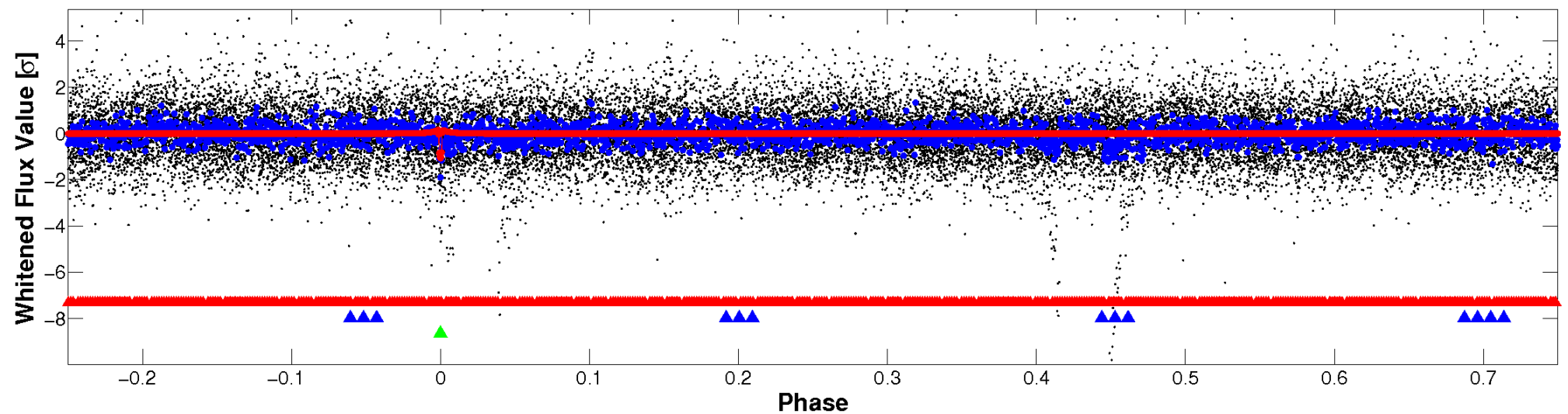


Non-Whitened Vs. Whitened Light Curve

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

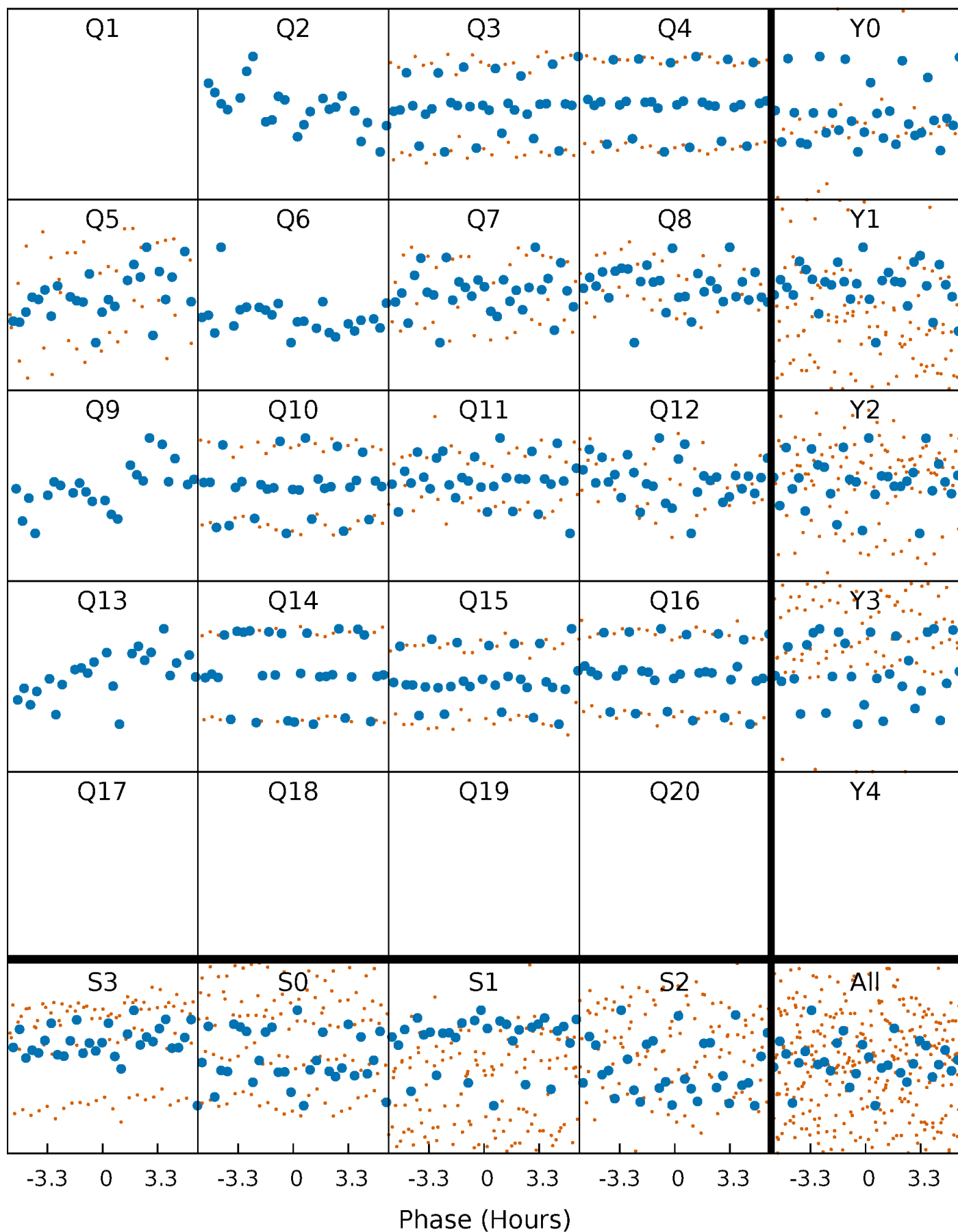


Planet 3 : Phased Whitened Flux Time Series (Fit Epoch/Period)



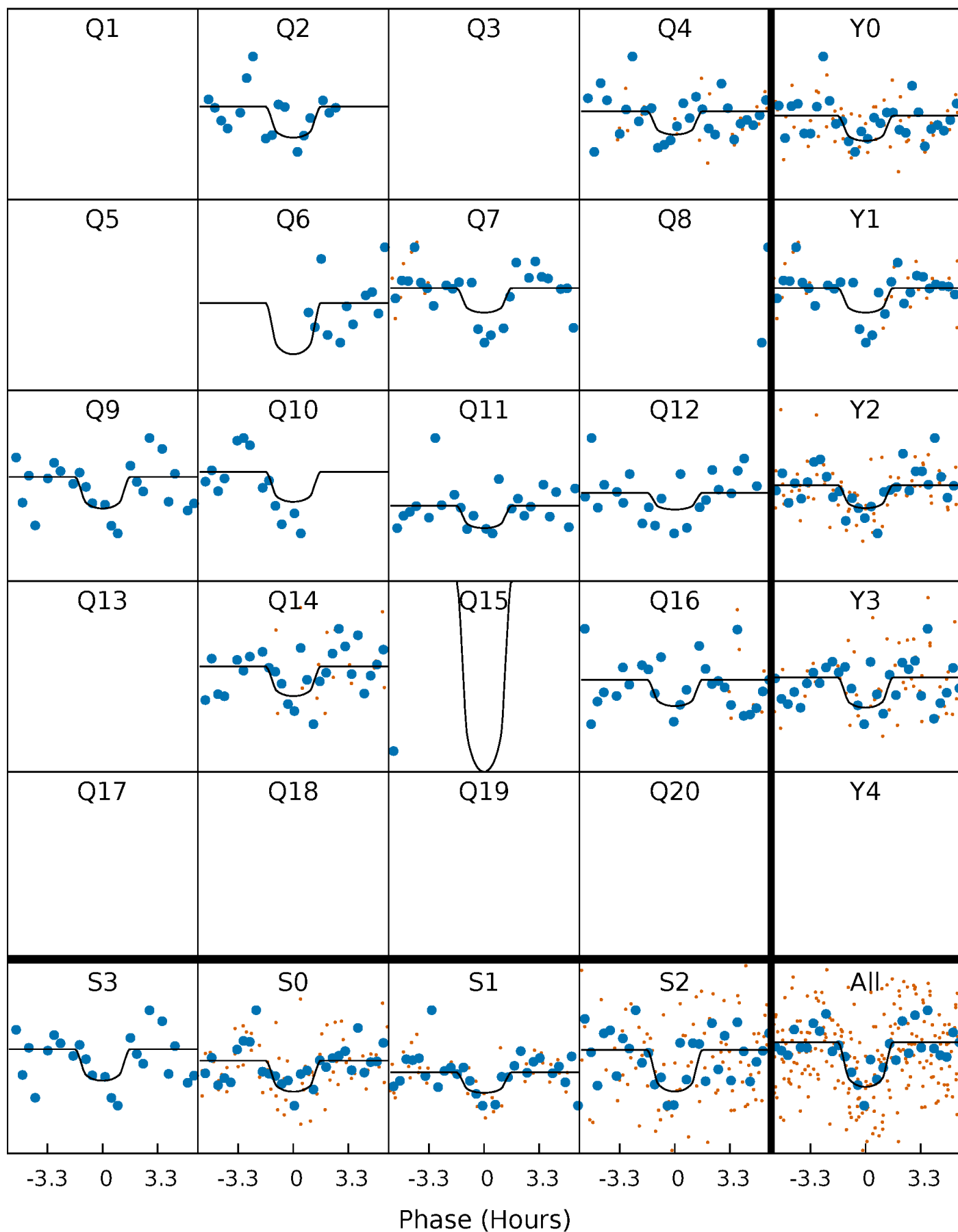
PDC Quarter-Phased Transit Curves

TCE 007363962-03 P= 52.989563 Days $T_0=166.118094$ (BKJD)



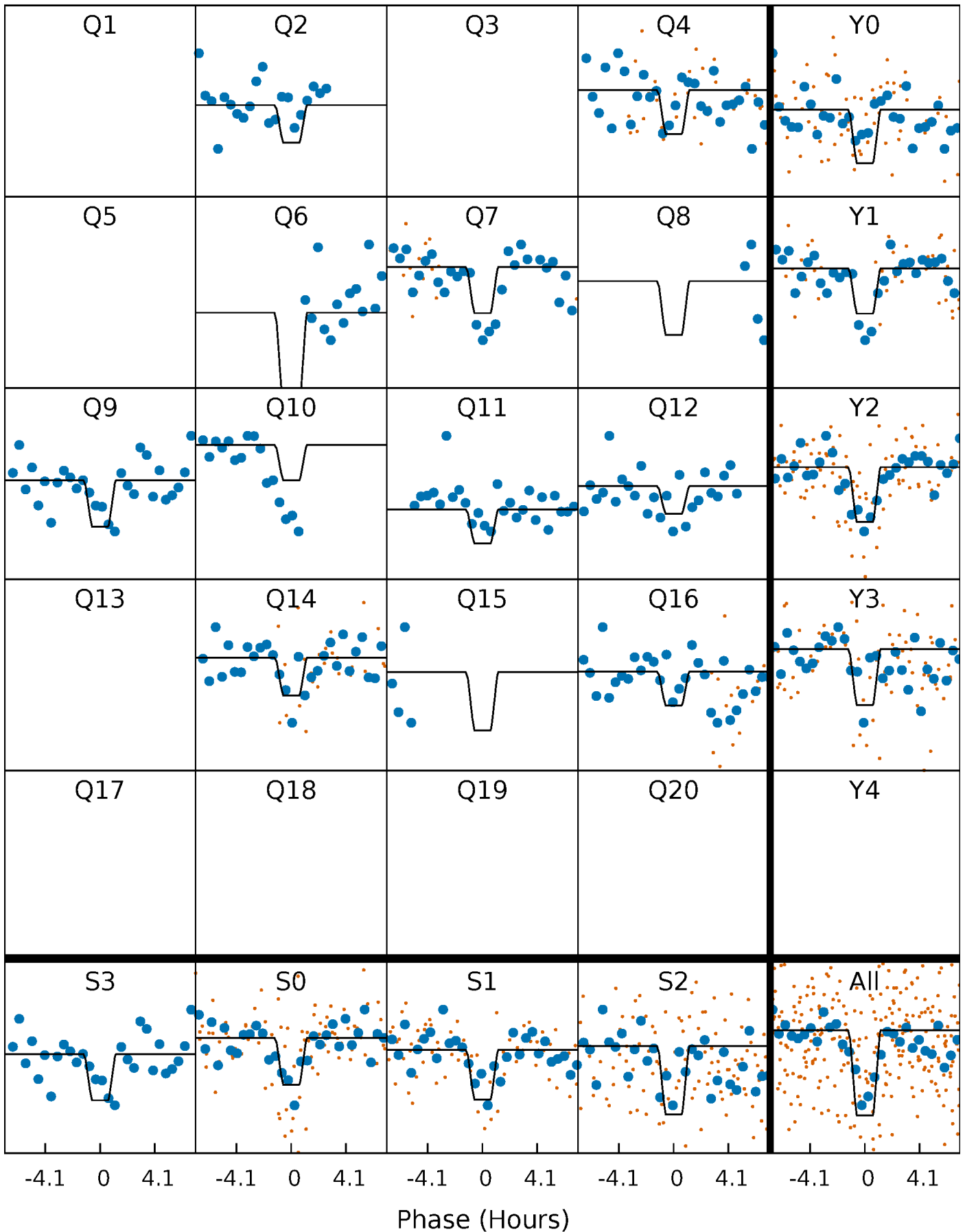
DV Quarter-Phased Transit Curves

TCE 007363962-03 P= 52.989563 Days $T_0=166.118094$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

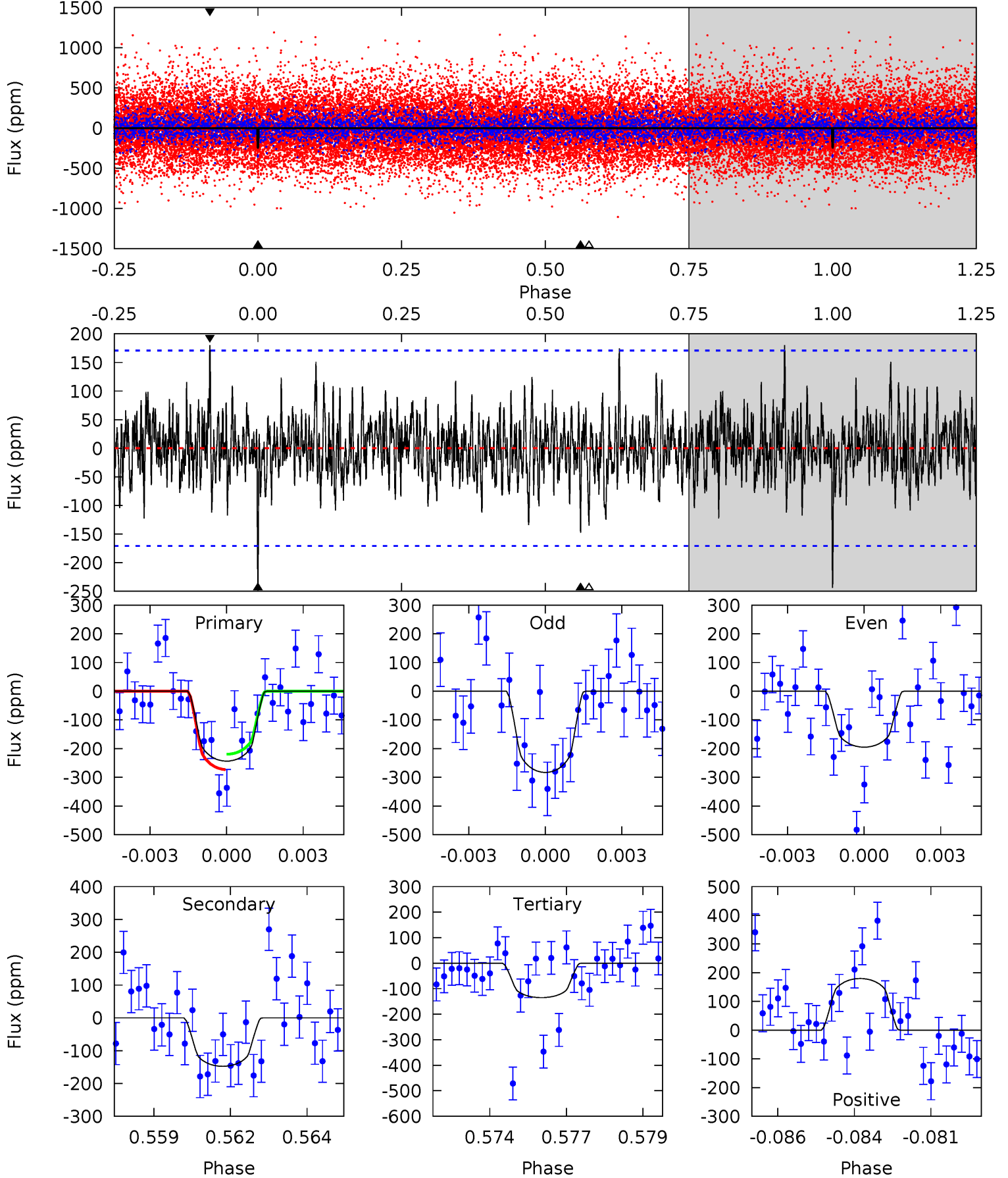
TCE 007363962-03 P= 52.989576 Days $T_0=166.114416$ (BKJD)



DV Model-Shift Uniqueness Test

007363962-03, P = 52.989563 Days, E = 113.128531 Days

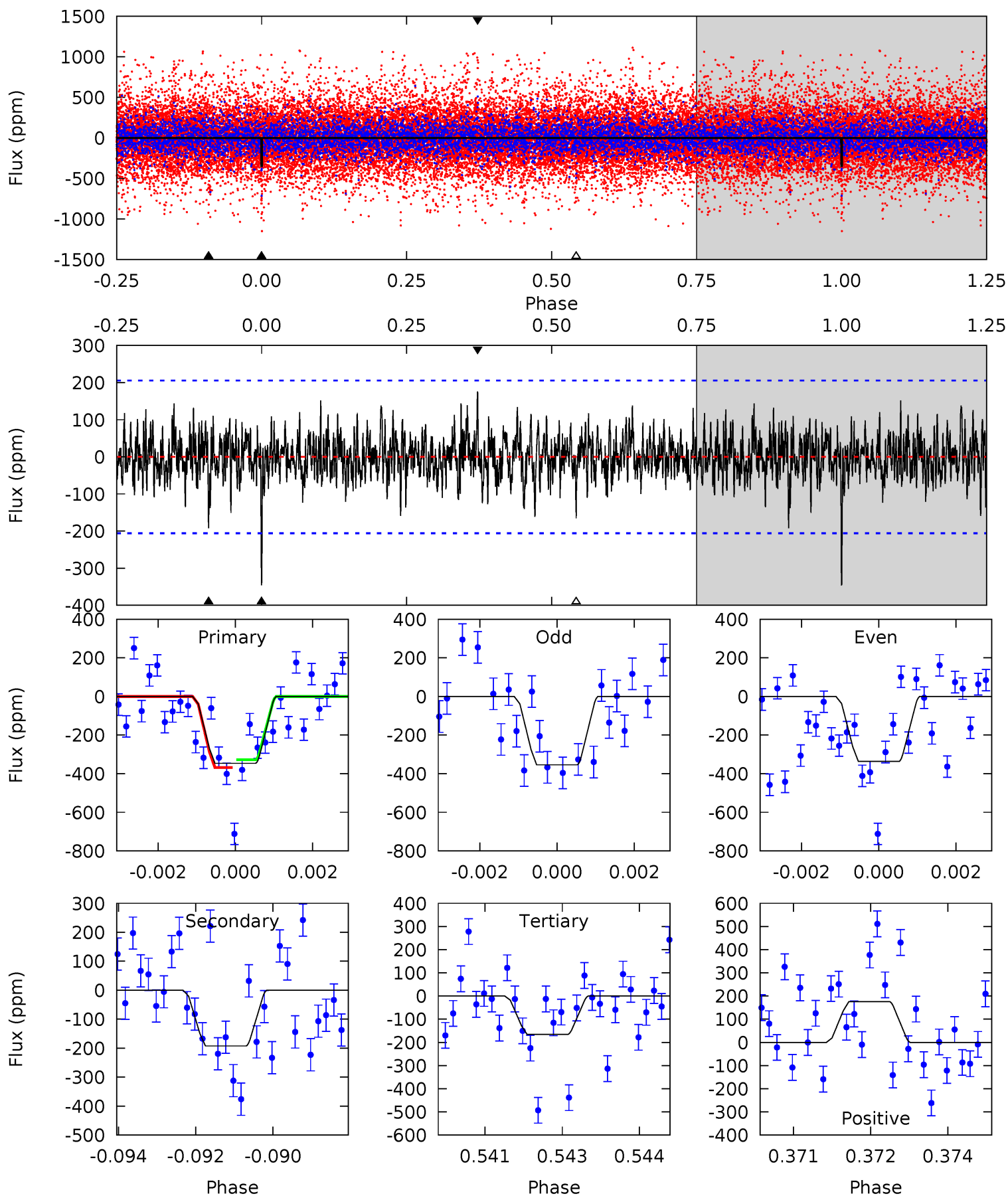
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
7.55	4.57	4.18	5.57	5.28	3.02	1.34	3.37	1.98	0.39	-1.00	1.37	1.23	0.42	0.83



Alt Model-Shift Uniqueness Test

007363962-03, P = 52.989576 Days, E = 113.124840 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
9.00	5.01	4.31	4.57	5.35	3.13	1.24	4.69	4.44	0.70	0.44	0.23	1.14	0.34	0.51



Stellar Parameters For KIC 007363962

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	M (M_{\odot})	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	5236^{+157}_{-157}	$4.416^{+0.133}_{-0.266}$	$0.180^{+0.250}_{-0.250}$	$0.944^{+0.271}_{-0.125}$	$0.846^{+0.095}_{-0.061}$	$1.416^{+0.929}_{-0.818}$
	+3%/-3%	+3%/-6%	+139%/-139%	+29%/-13%	+11%/-7%	+66%/-58%
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 007363962-03 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-148 ± 32	$2.77^{+2.76}_{-1.75}$	620^{+56}_{-34}	3868^{+1858}_{-703}	691^{+4540}_{-513}
Alt.	-193 ± 38	$3.11^{+2.78}_{-1.98}$	619^{+52}_{-35}	3848^{+1961}_{-649}	736^{+4546}_{-536}

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 $A_{obs} \gg 1.0$

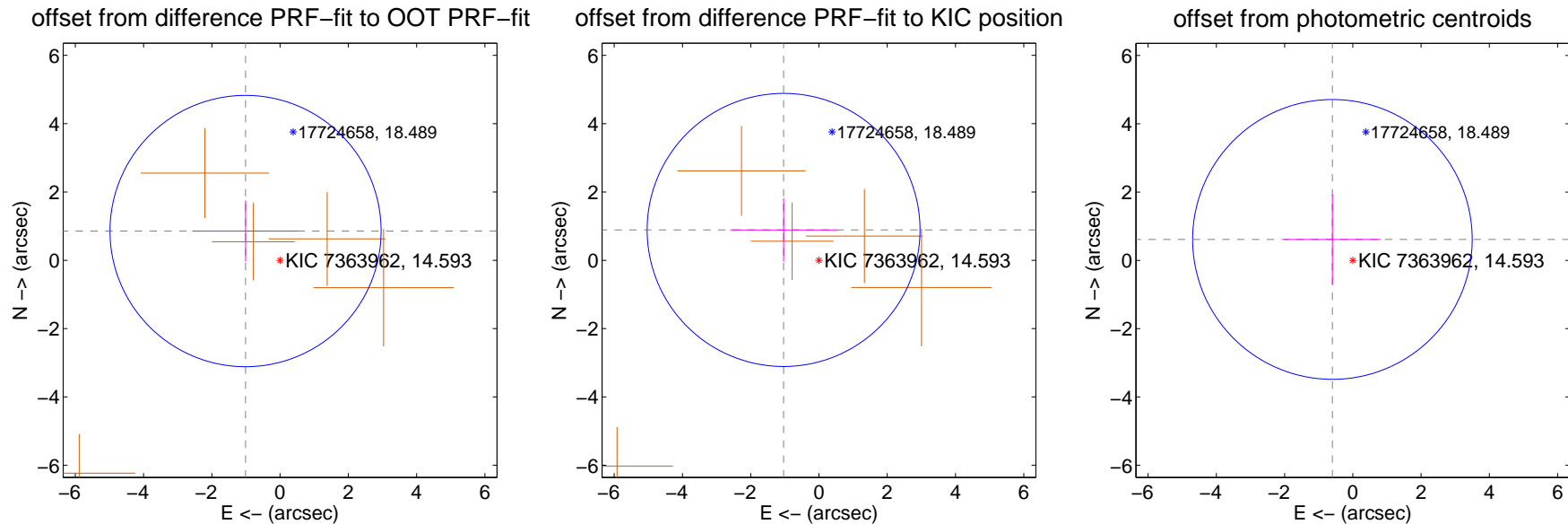
DV Centroid Data

Supplemental centroid analysis for 007363962-03. Kepler magnitude: 14.59. Transit SNR 7.06

There are 0 quarters with good PRF difference image offsets

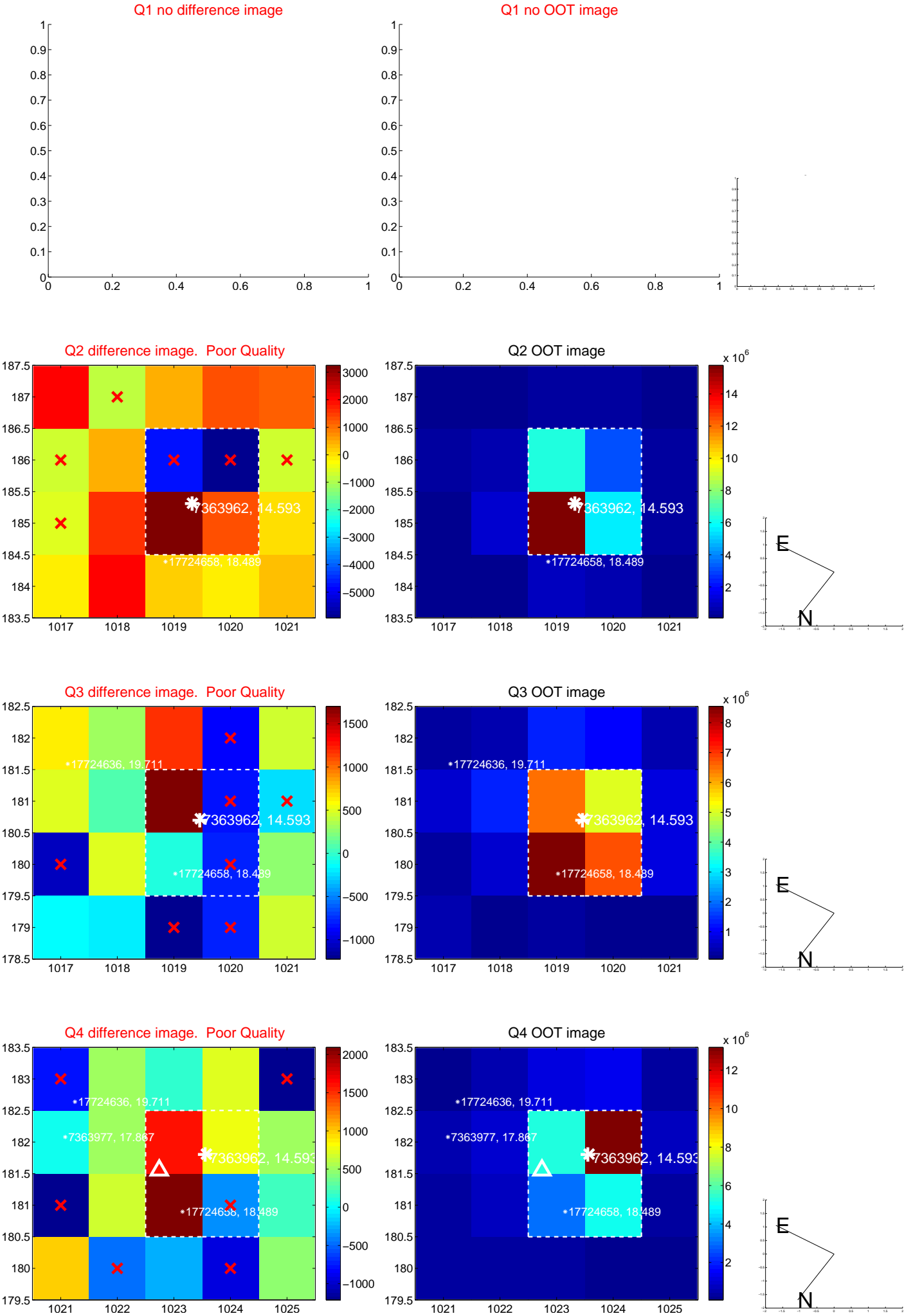
The direct PRF centroid is offset from the target star catalog position by about 0.01 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	1.326 ± 1.324	1.00	1.013 ± 1.559	0.856 ± 0.898
PRF-fit source offset from KIC position	1.366 ± 1.333	1.03	1.037 ± 1.563	0.889 ± 0.931
photometric centroid source offset	0.86 ± 1.37	0.63	0.60 ± 1.42	0.61 ± 1.32

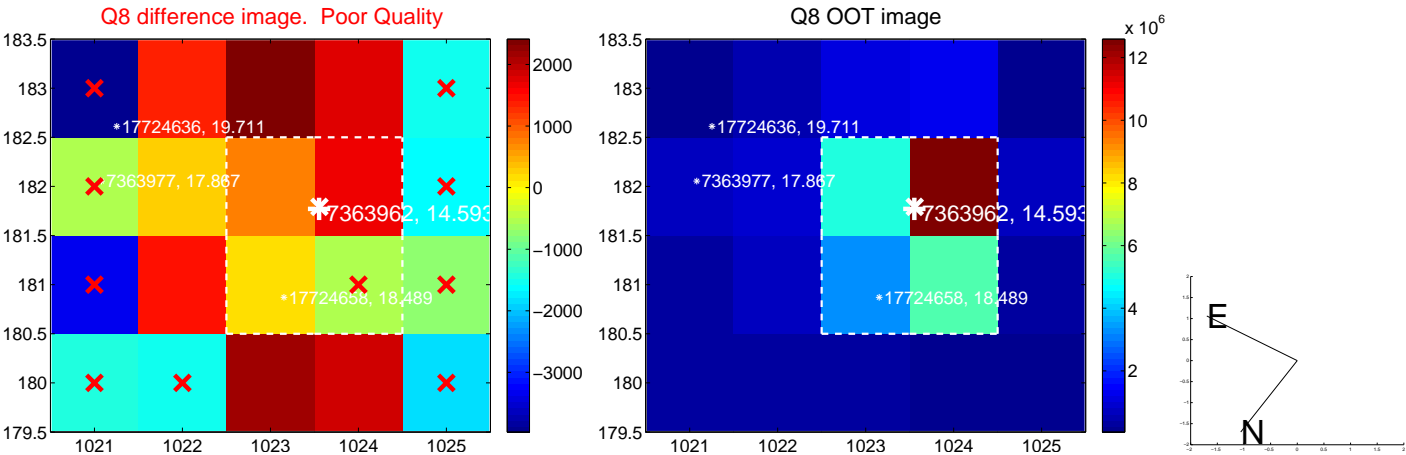
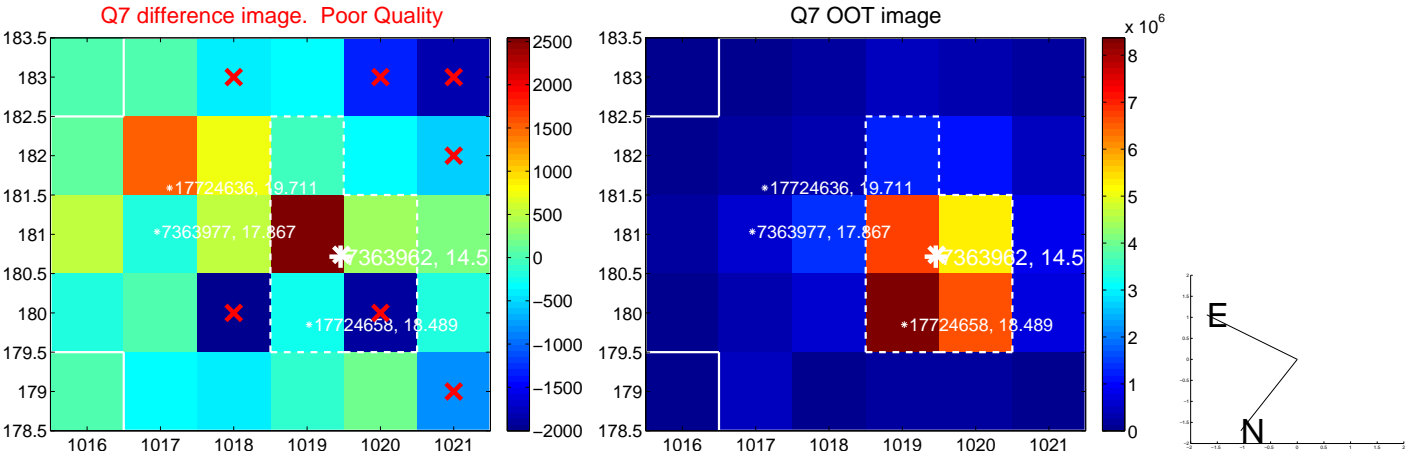
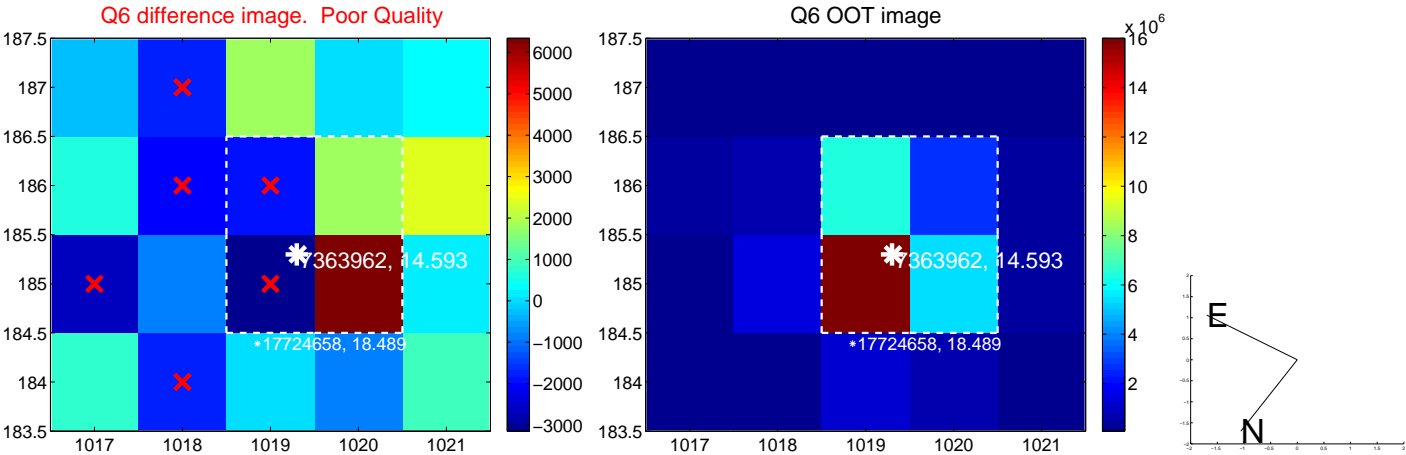
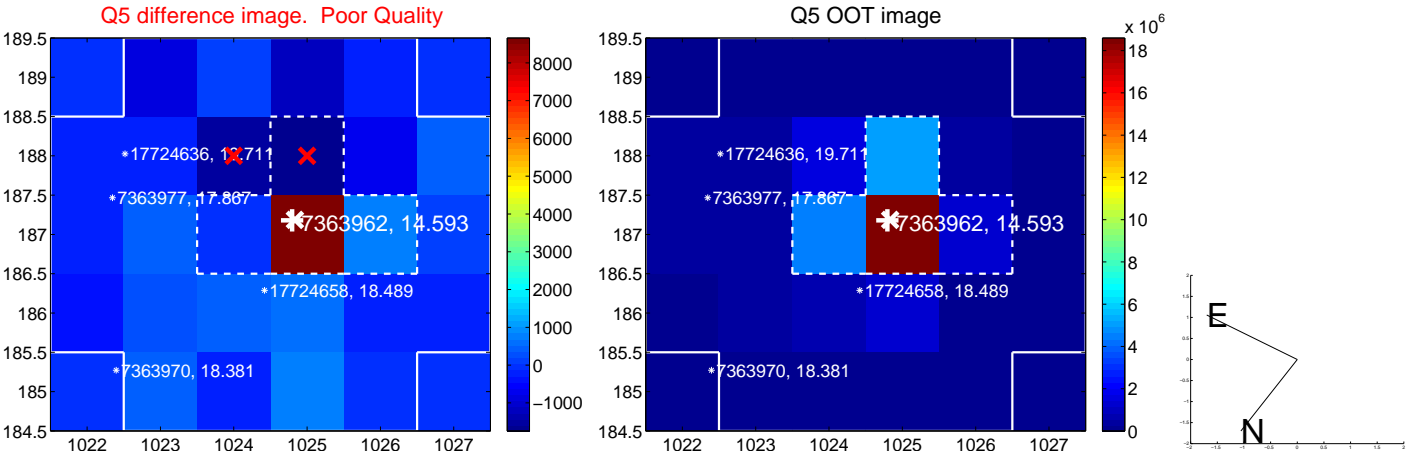


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

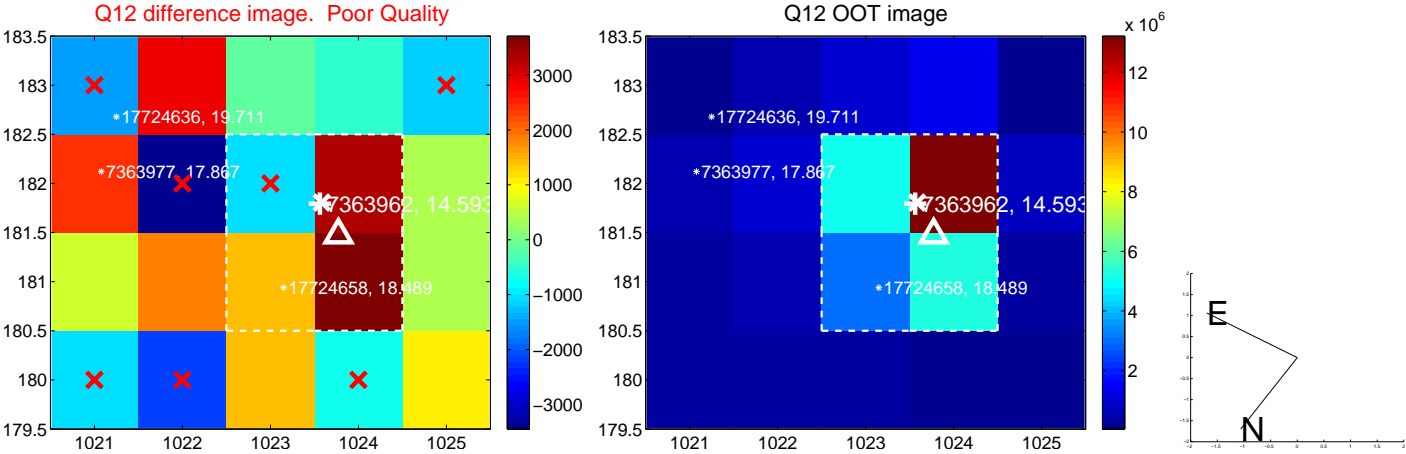
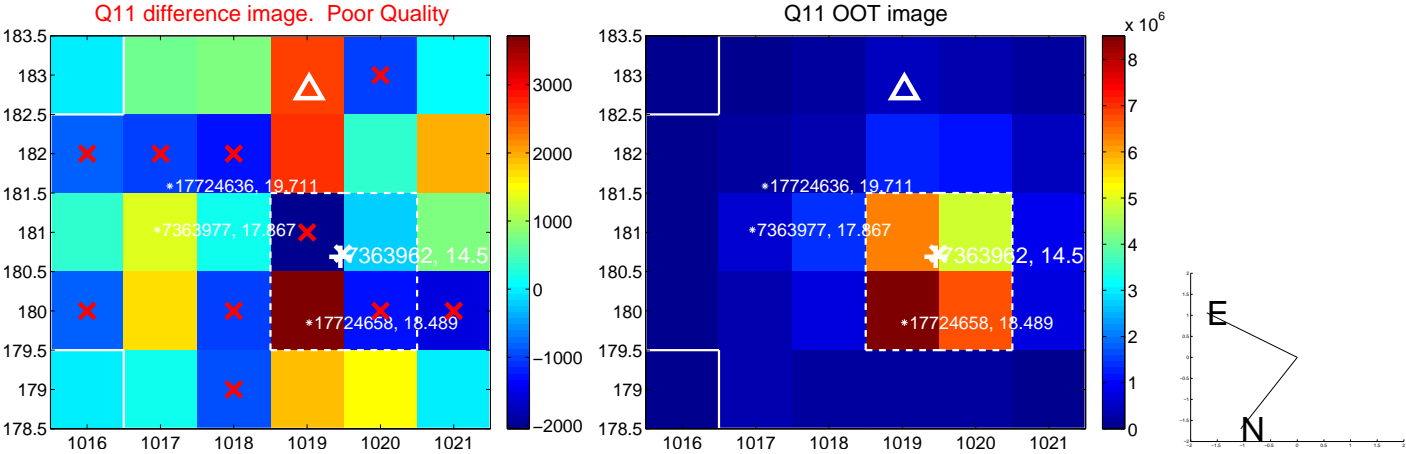
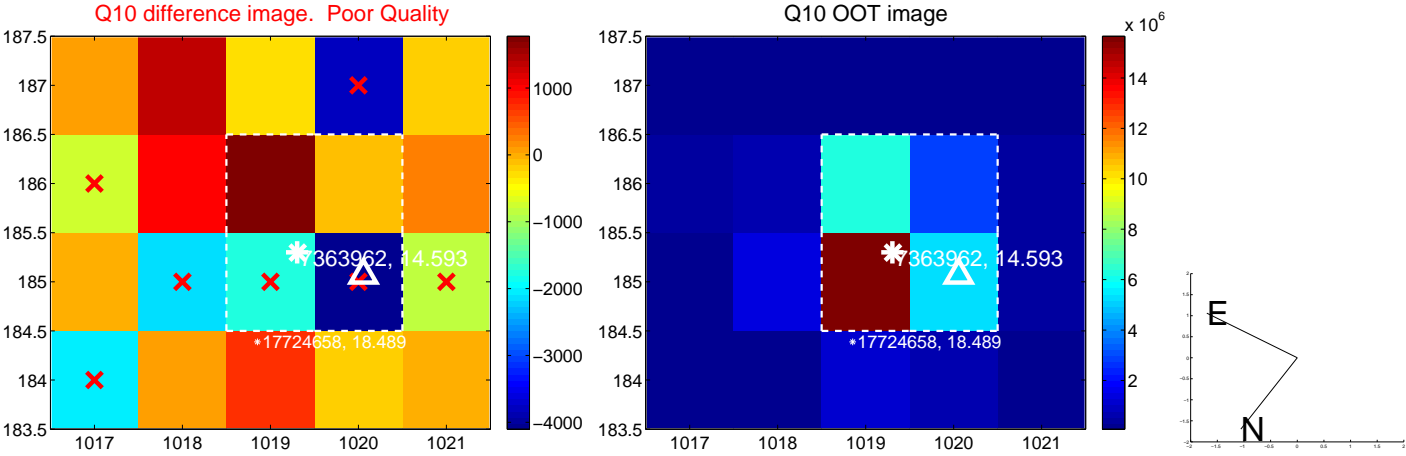
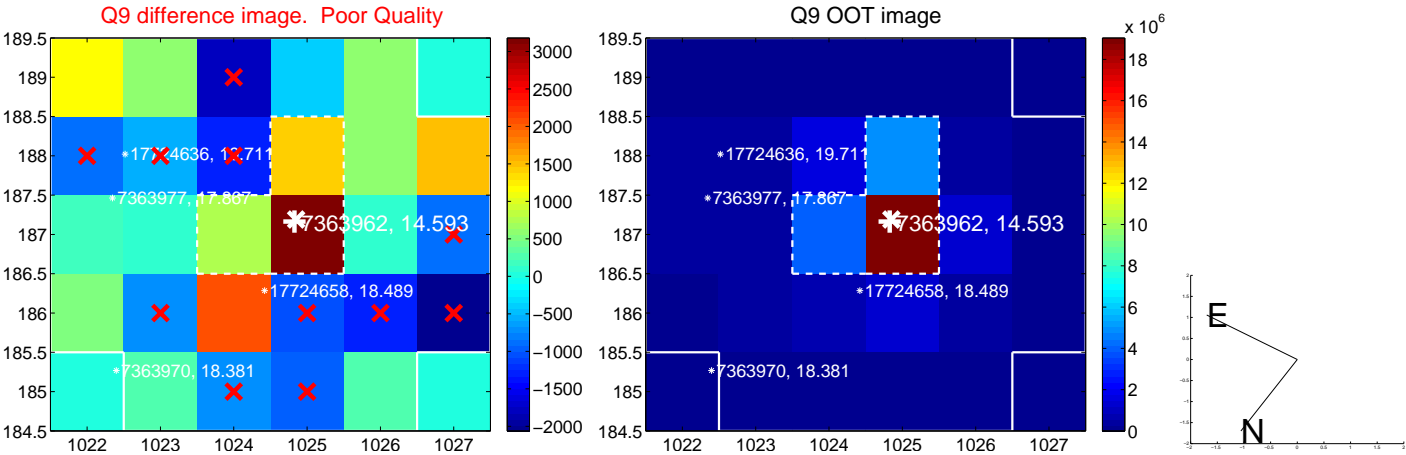
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



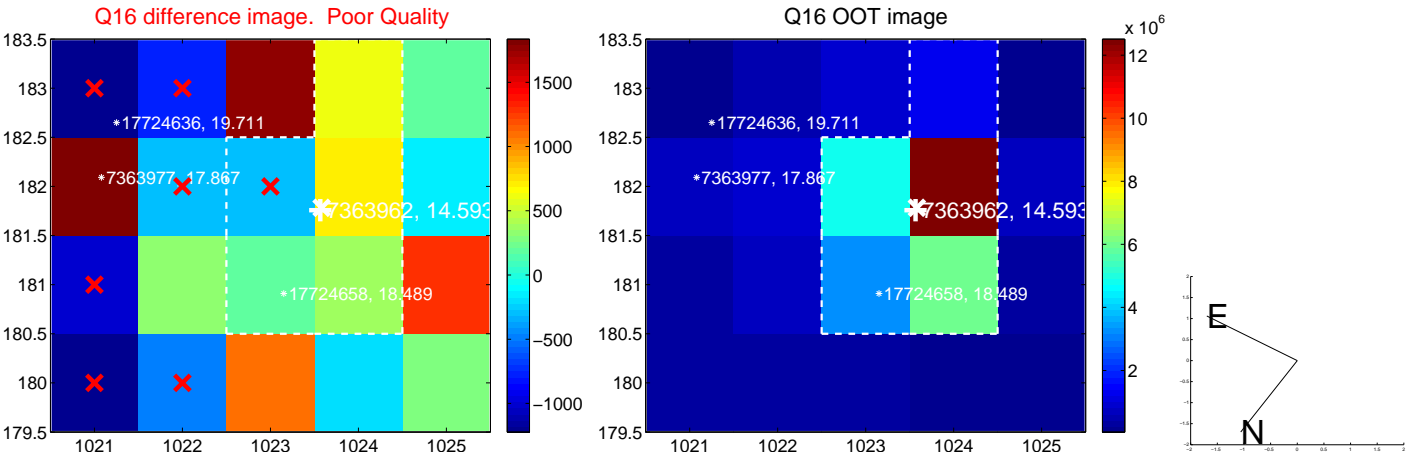
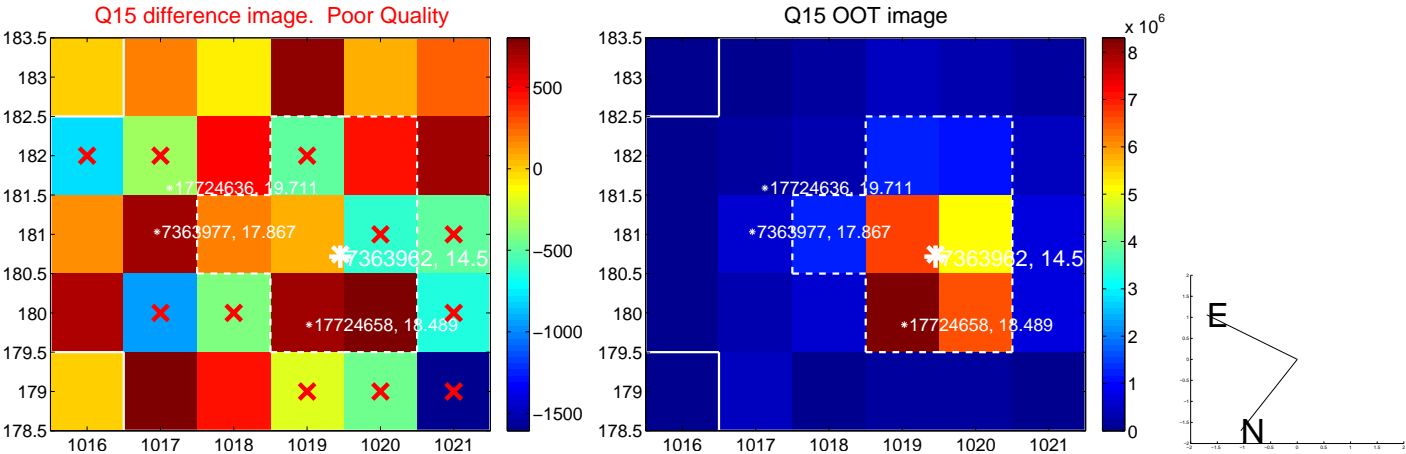
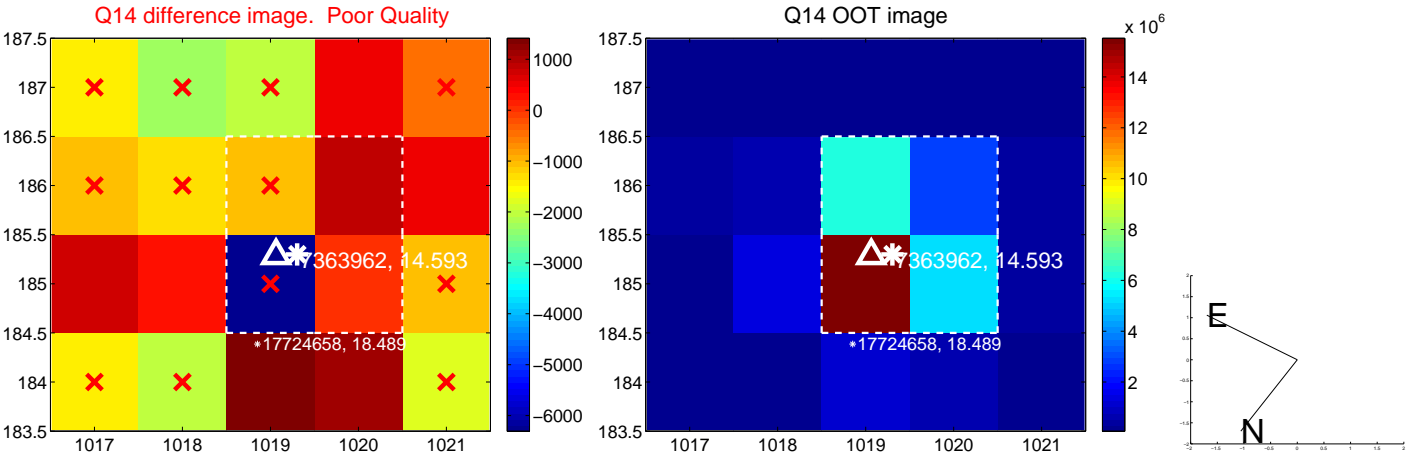
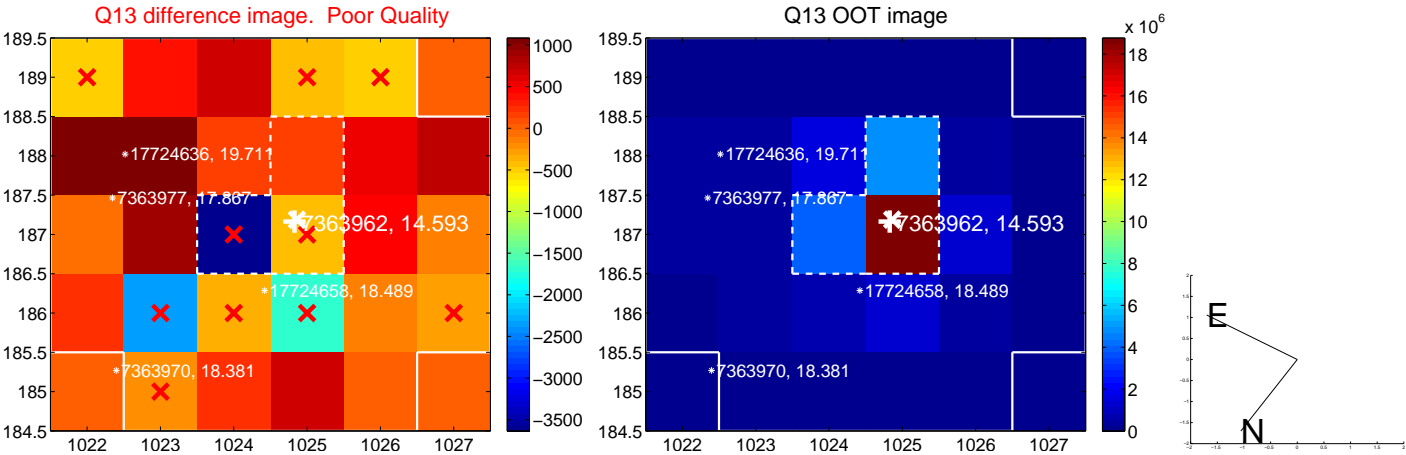
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



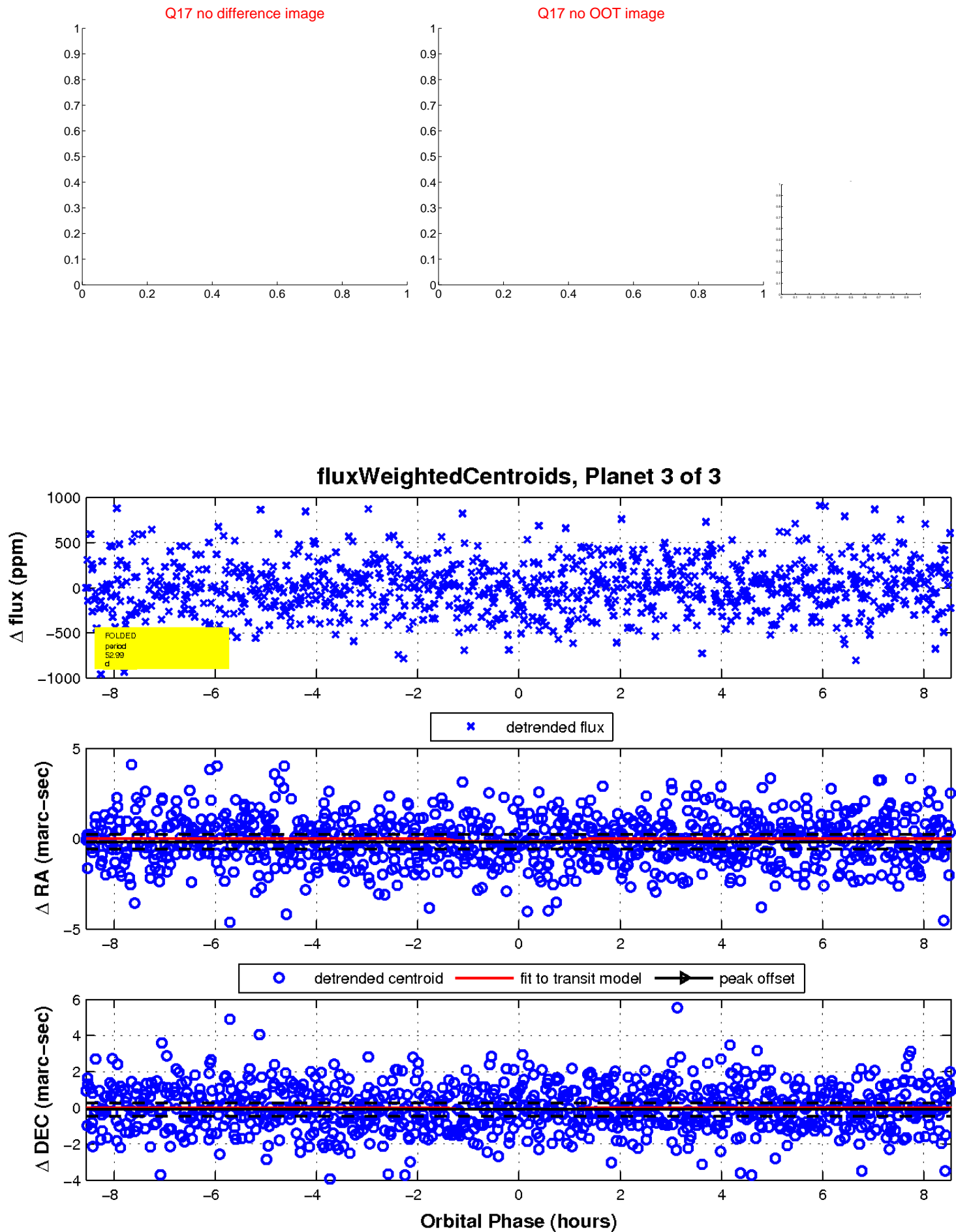
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

