

KIC 005007640

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})
005007640-01	OBS	No	2.112851	133.502358	2.9	9.257	10.2	0.4	1.11	6341	0.20	1563.78
005007640-02	OBS	No	2.104697	132.806518	88.0	7.028	12.0	11.4	1.11	6341	1.22	1571.87
005007640-03	OBS	No	188.560892	144.956276	213.5	10.500	8.2	-1.0	1.11	6341	1.63	3.92

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
005007640-01	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_ALT
005007640-02	OBS	FP	0.00	1	0	0	0	TRANS_GAPPED—SWEET_NTL—LPP_DV—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT
005007640-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_MARSHALL—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_NOFITS

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

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

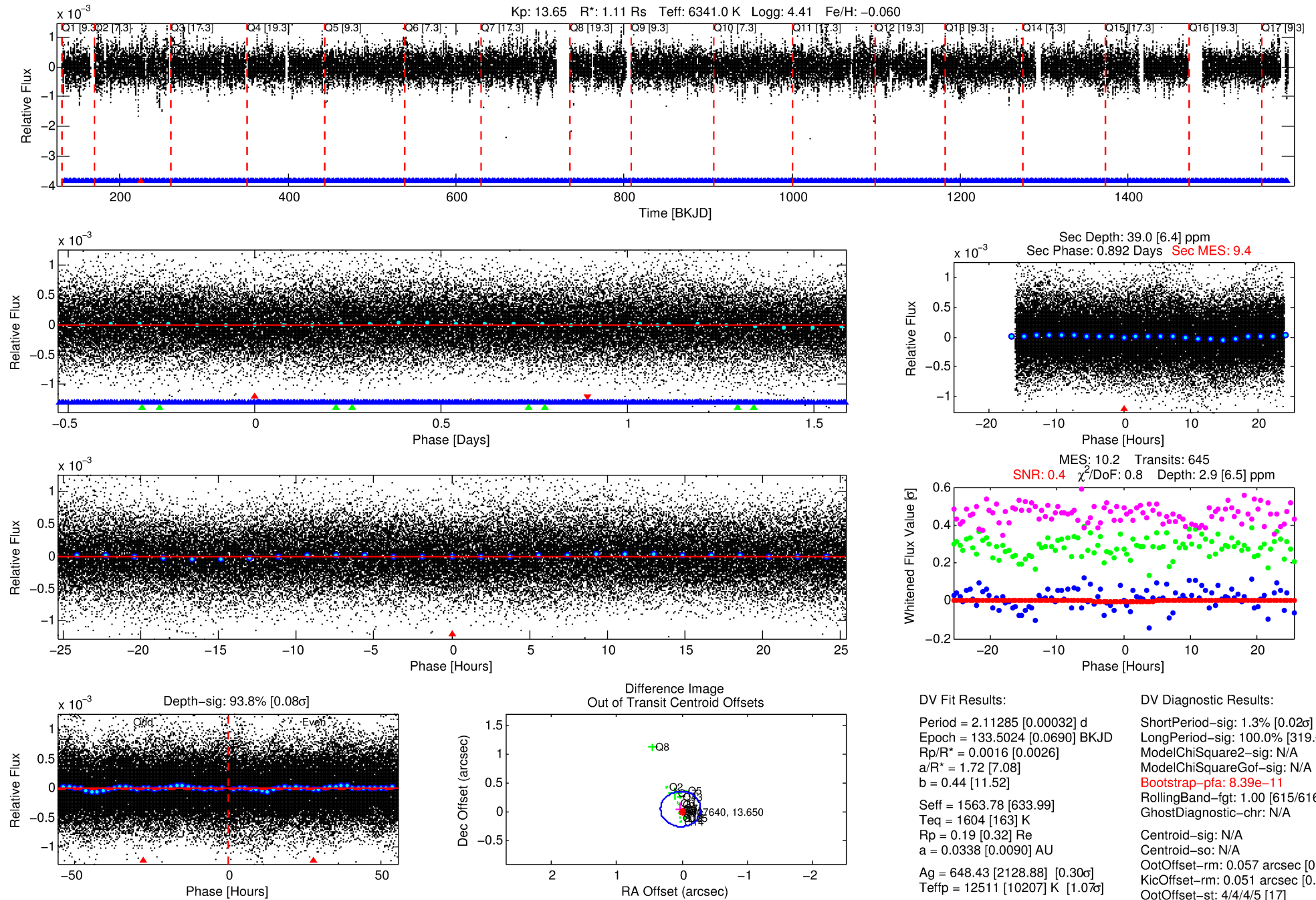
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 005007640-01

No Significant Match Found

DV One-Page Summary

KIC: 5007640 Candidate: 1 of 3 Period: 2.113 d



DV Fit Results:

Period = 2.11285 [0.00032] d
Epoch = 133.5024 [0.0690] BKJD
Rp/R* = 0.0016 [0.0026]
a/R* = 1.72 [7.08]
b = 0.44 [11.52]
Seff = 1563.78 [633.99]
Teq = 1604 [163] K
Rp = 0.19 [0.32] Re
a = 0.0338 [0.0090] AU
Ag = 648.43 [2128.88] [0.30 σ]
Teffp = 12511 [10207] K [1.07 σ]

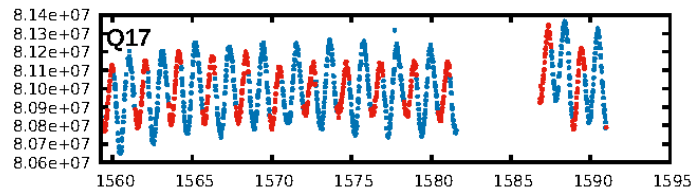
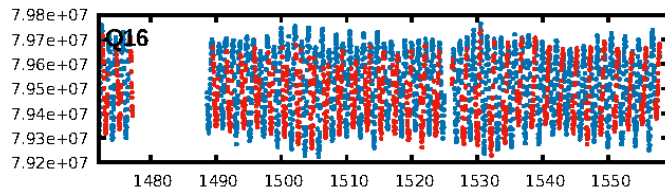
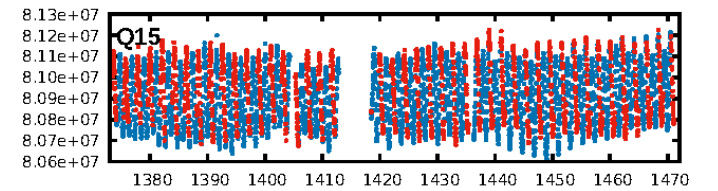
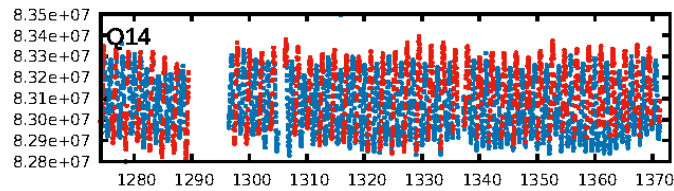
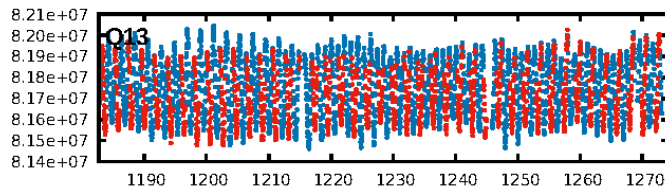
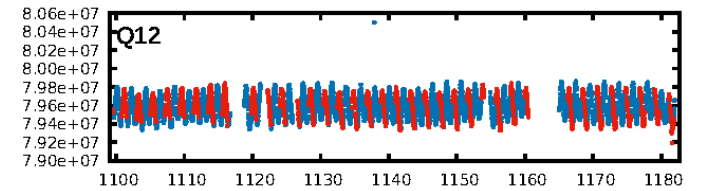
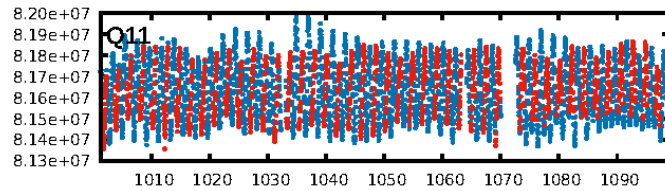
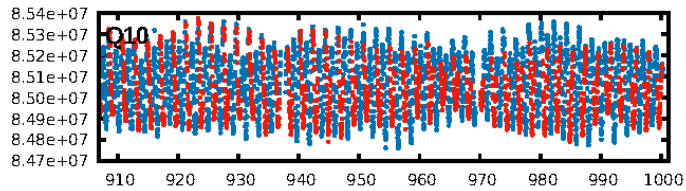
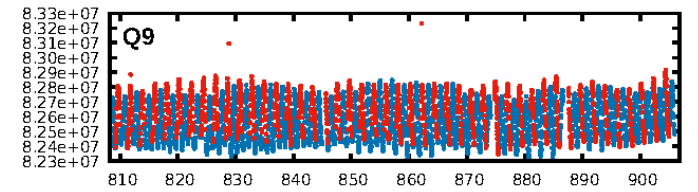
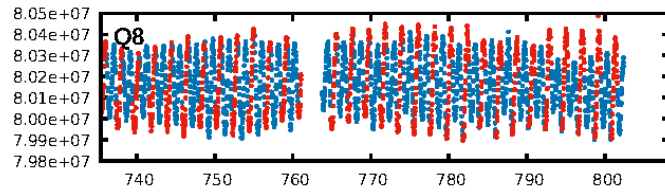
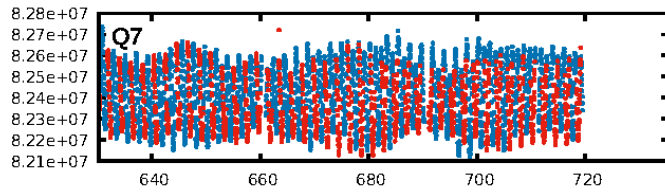
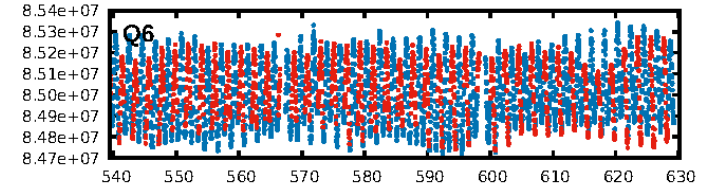
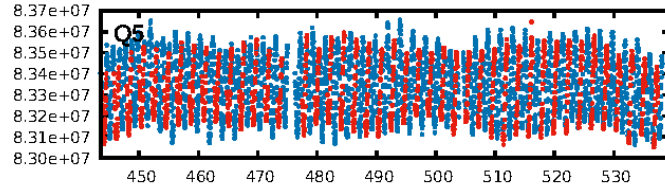
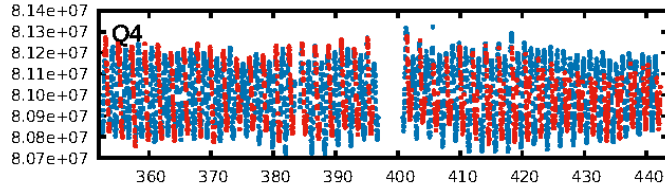
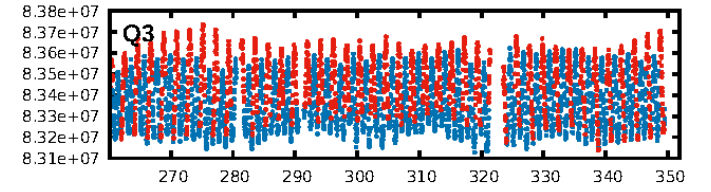
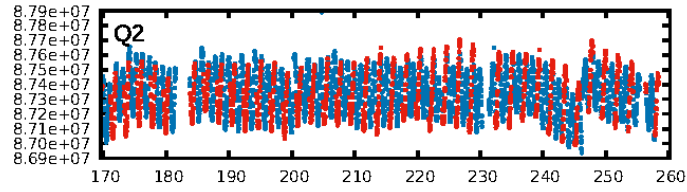
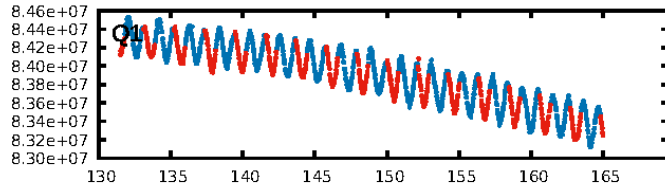
DV Diagnostic Results:

ShortPeriod-sig: 1.3% [0.02 σ]
LongPeriod-sig: 100.0% [319.67 σ]
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 8.39e-11
RollingBand-fgt: 1.00 [615/616]
GhostDiagnostic-chr: N/A
Centroid-sig: N/A
Centroid-so: N/A
OotOffset-rm: 0.057 arcsec [0.55 σ]
KicOffset-rm: 0.051 arcsec [0.70 σ]
OotOffset-st: 4/4/4/5 [17]
KicOffset-st: 4/4/4/5 [17]
DiffImageQuality-fgm: 0.47 [8/17]
DiffImageOverlap-fno: 0.35 [6/17]

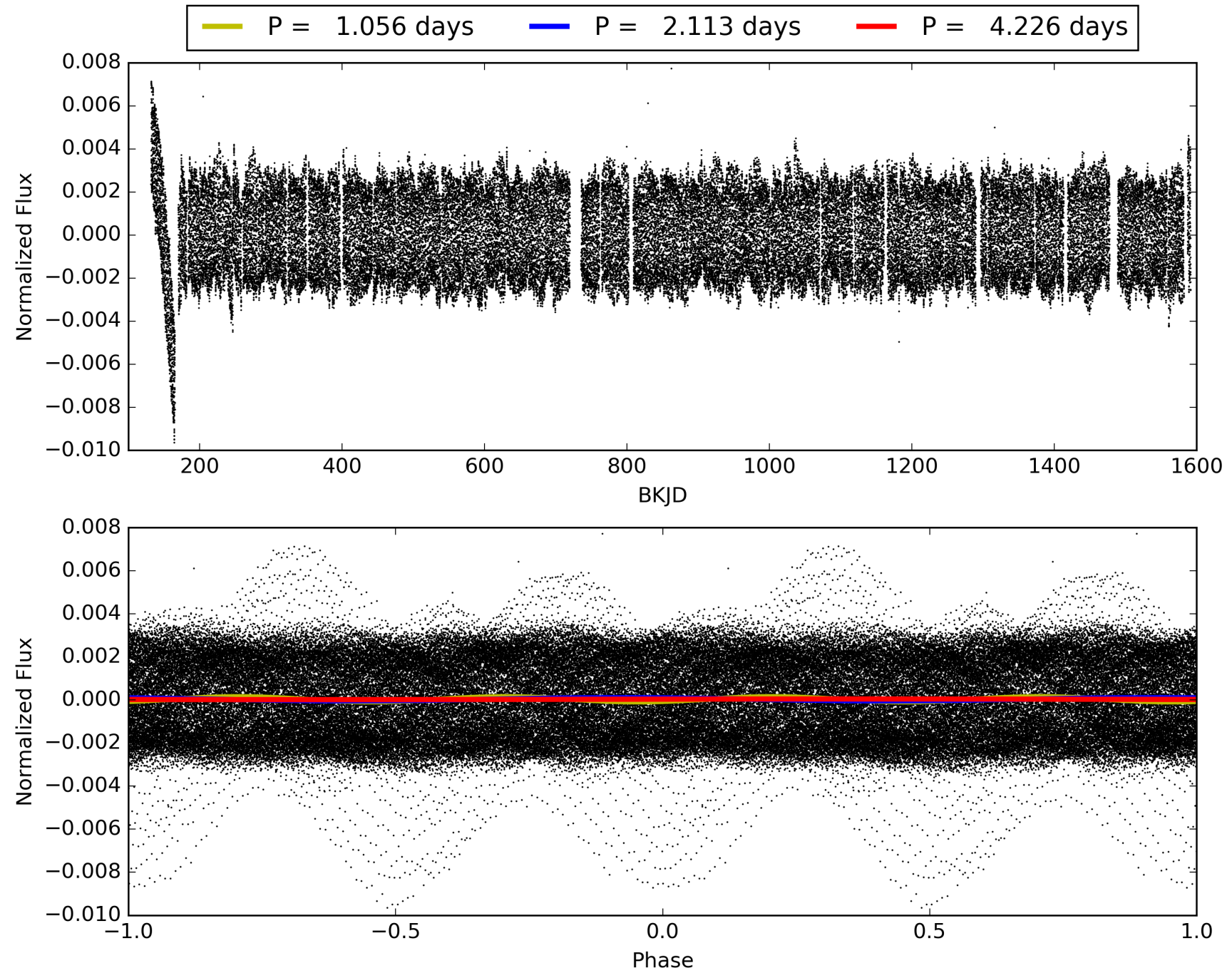
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 31-Jan-2016 18:28:24 Z

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

TCE 005007640-01, PDC Light Curves

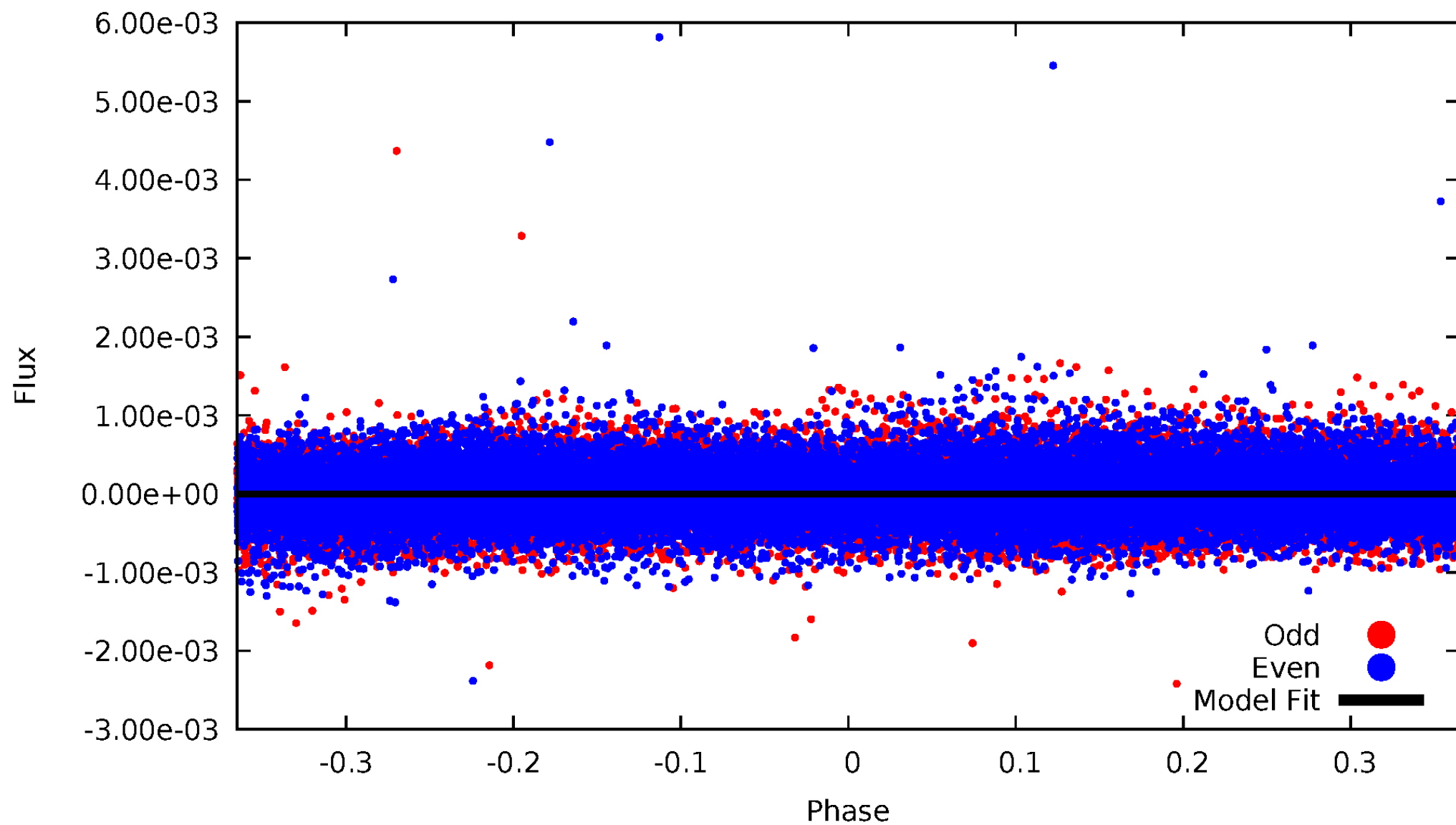


TCE 005007640-01



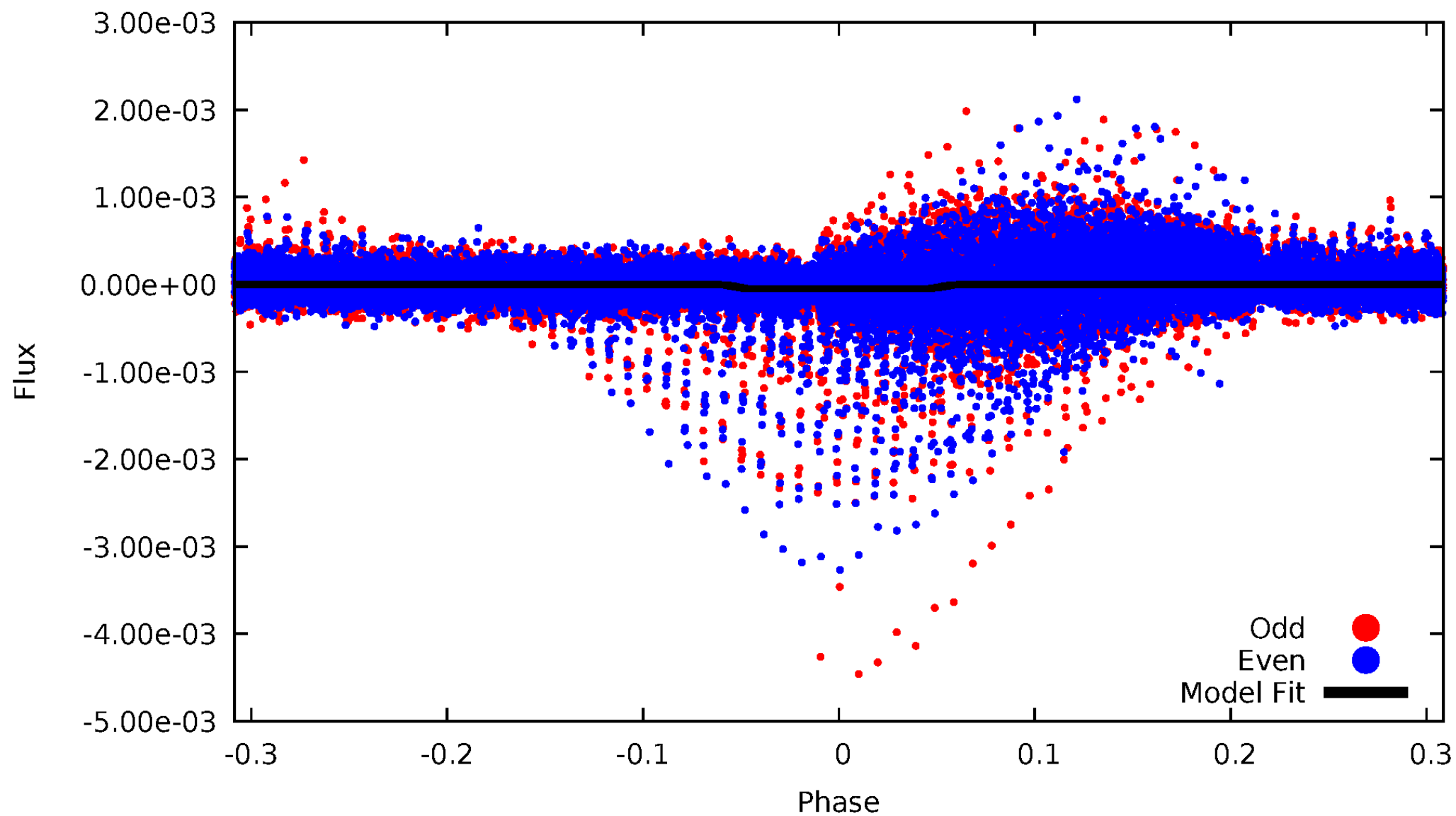
DV Odd/Even

TCE 005007640-01

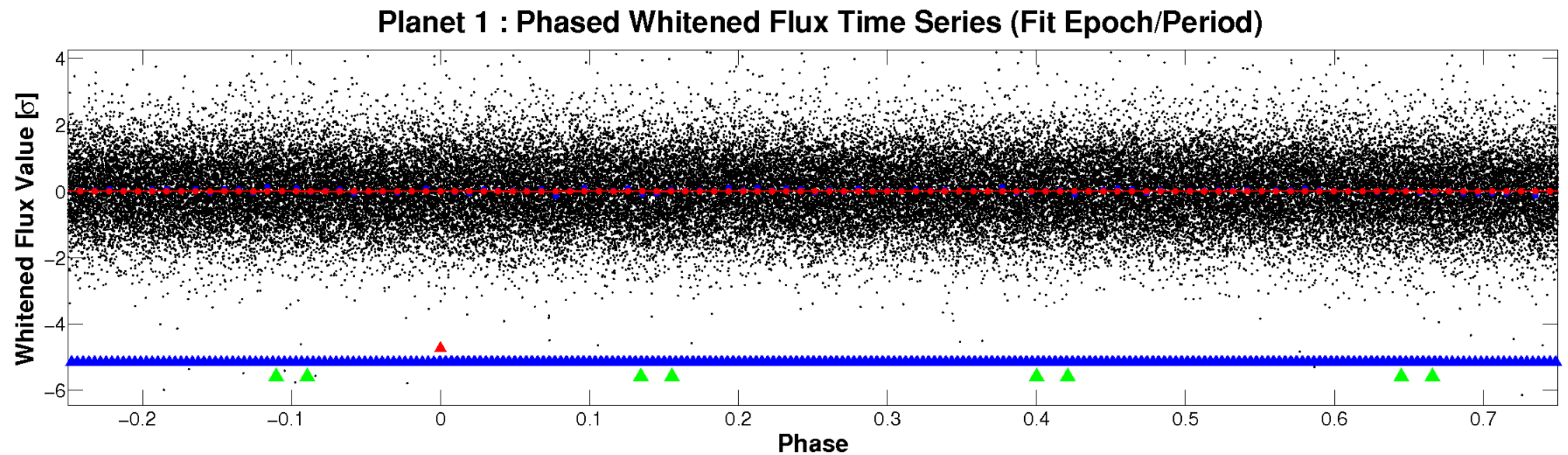
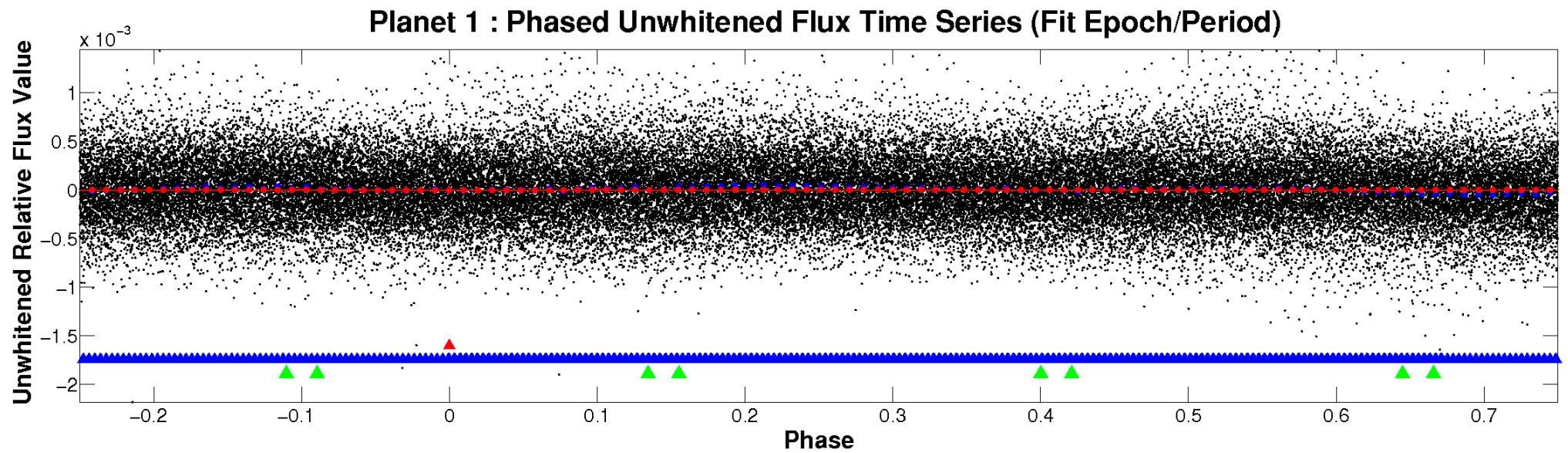


ALT Odd/Even

TCE 005007640-01

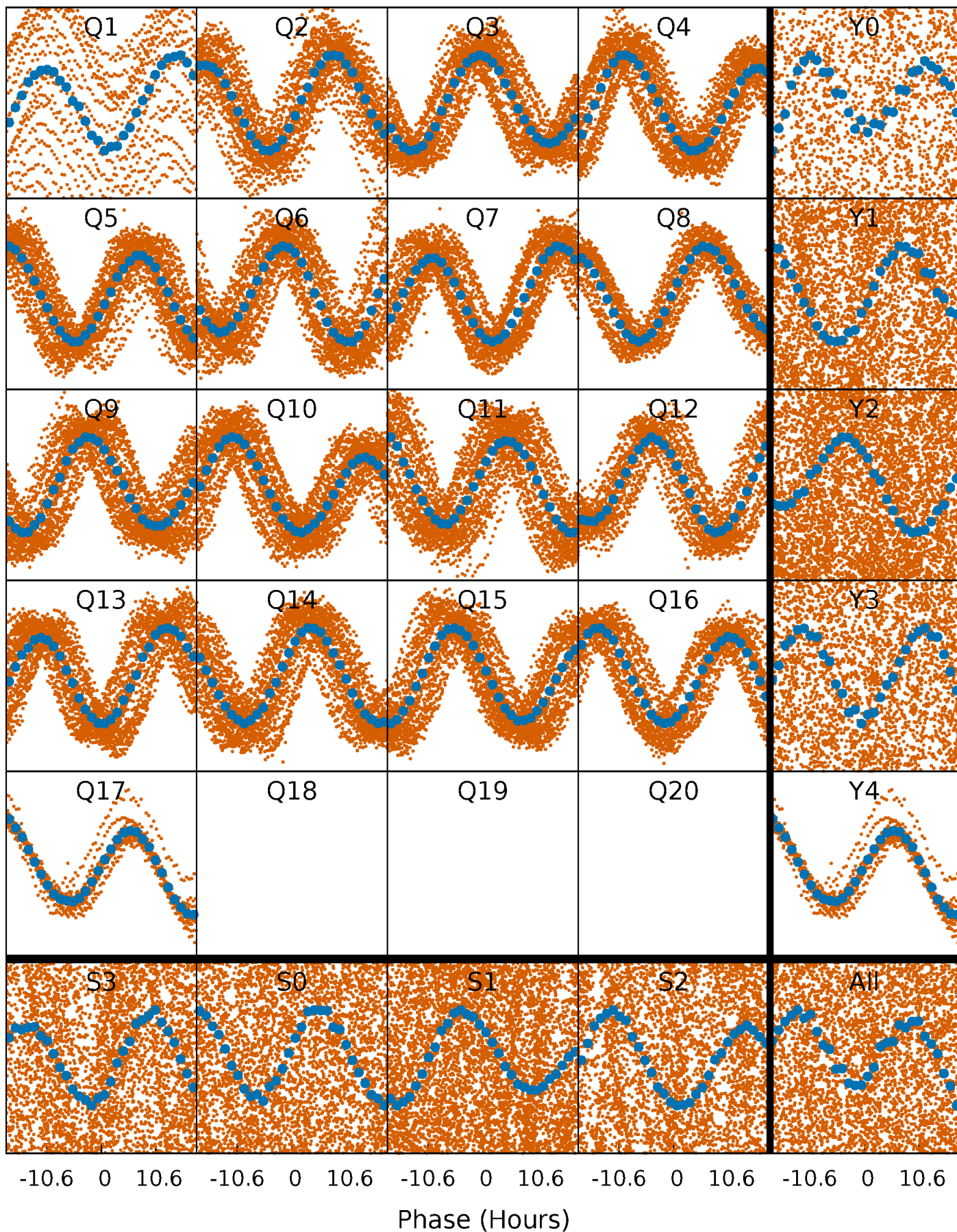


Non-Whitened Vs. Whitened Light Curve



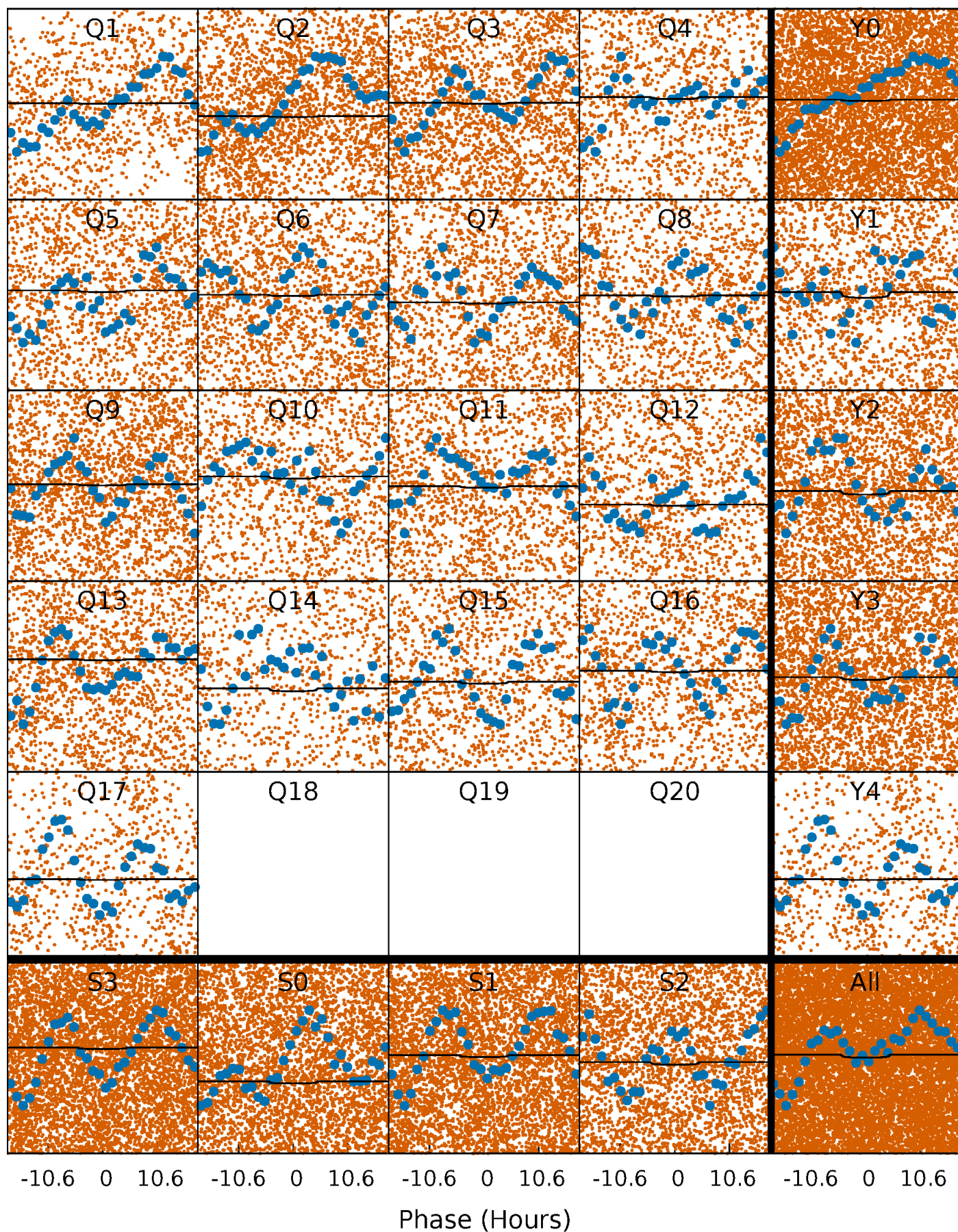
PDC Quarter-Phased Transit Curves

TCE 005007640-01 P= 2.112851 Days $T_0=133.502358$ (BKJD)



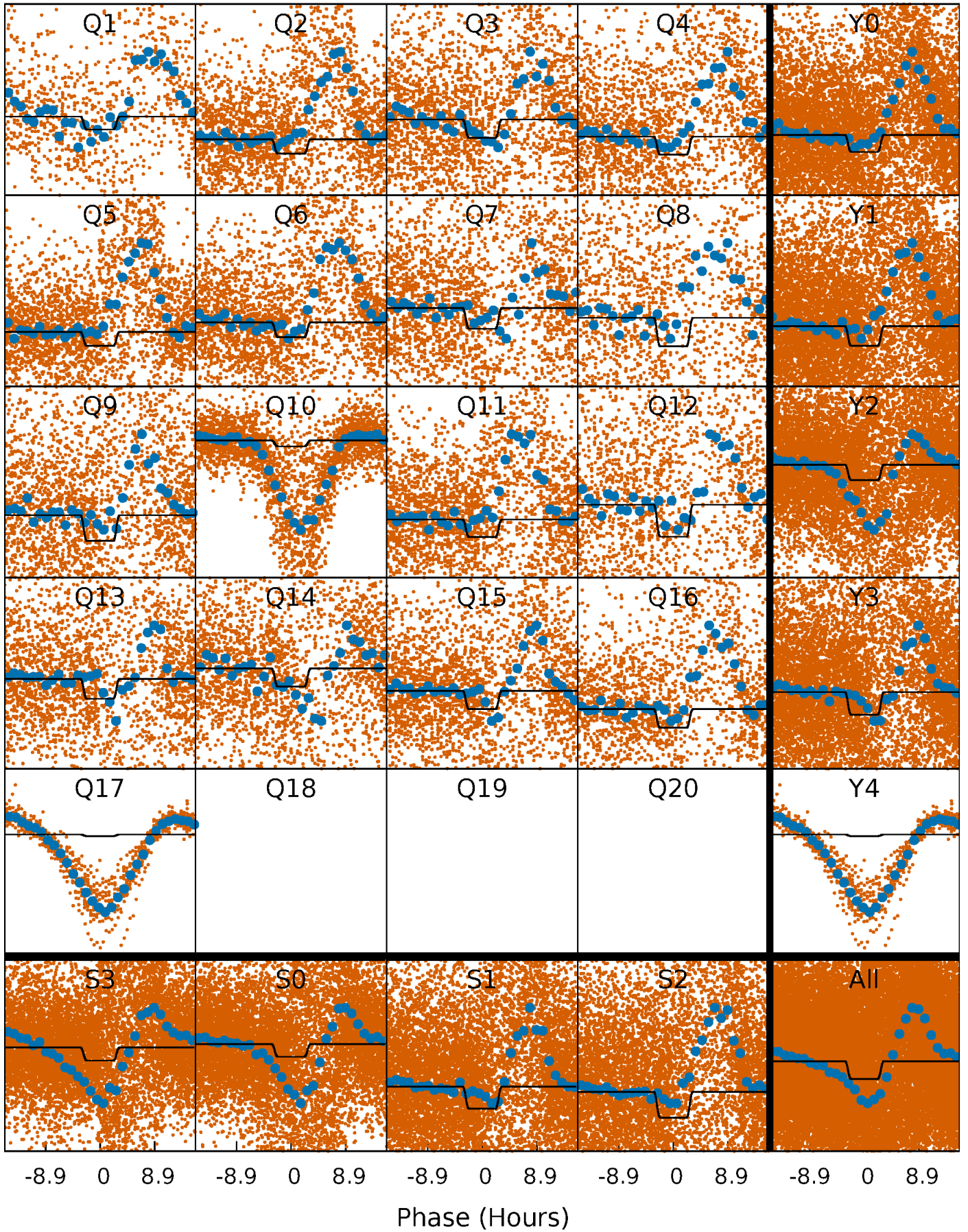
DV Quarter-Phased Transit Curves

TCE 005007640-01 P= 2.112851 Days $T_0=133.502358$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

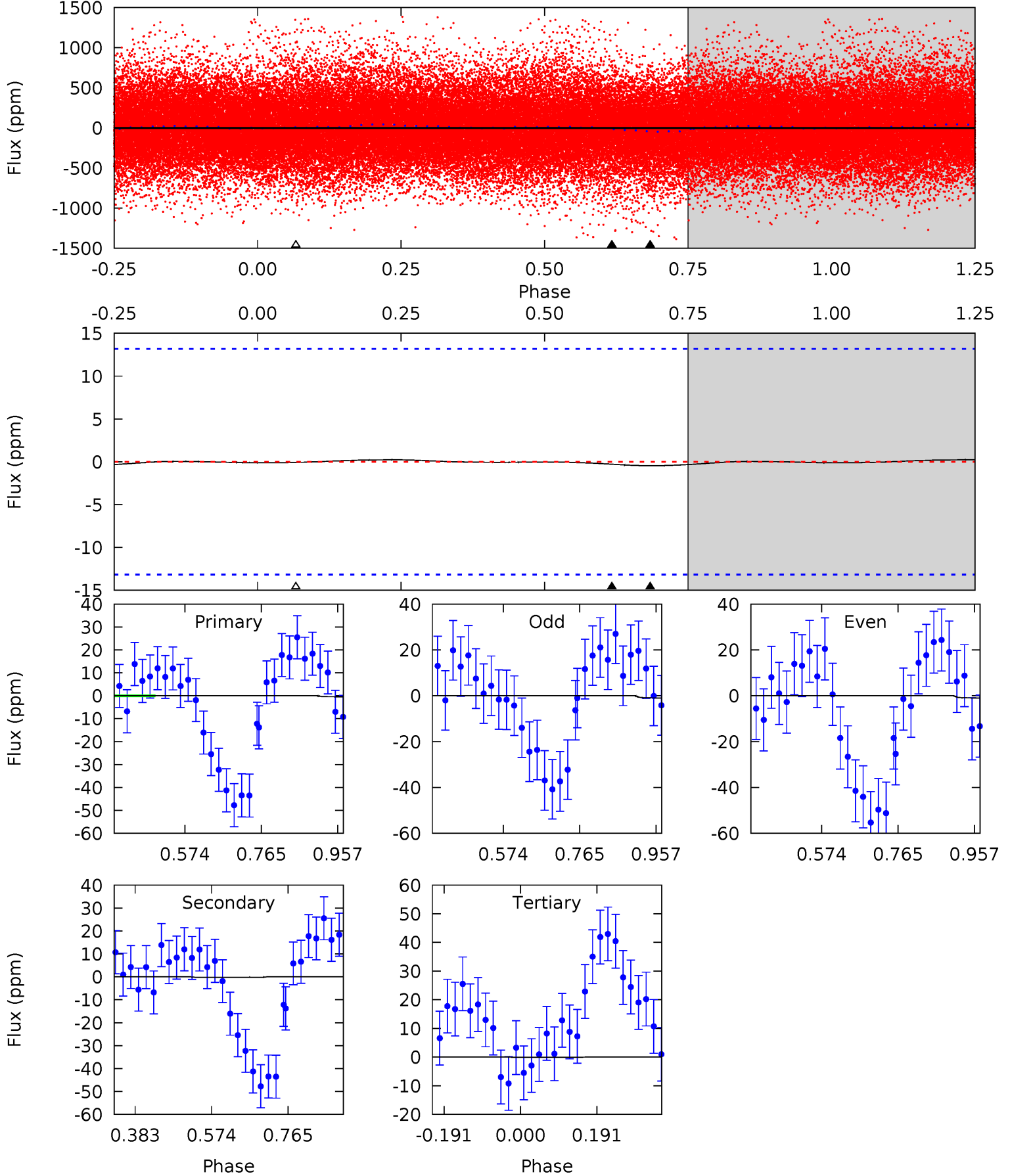
TCE 005007640-01 P= 2.104462 Days $T_0=132.689419$ (BKJD)



DV Model-Shift Uniqueness Test

005007640-01, P = 2.112851 Days, E = 131.389507 Days

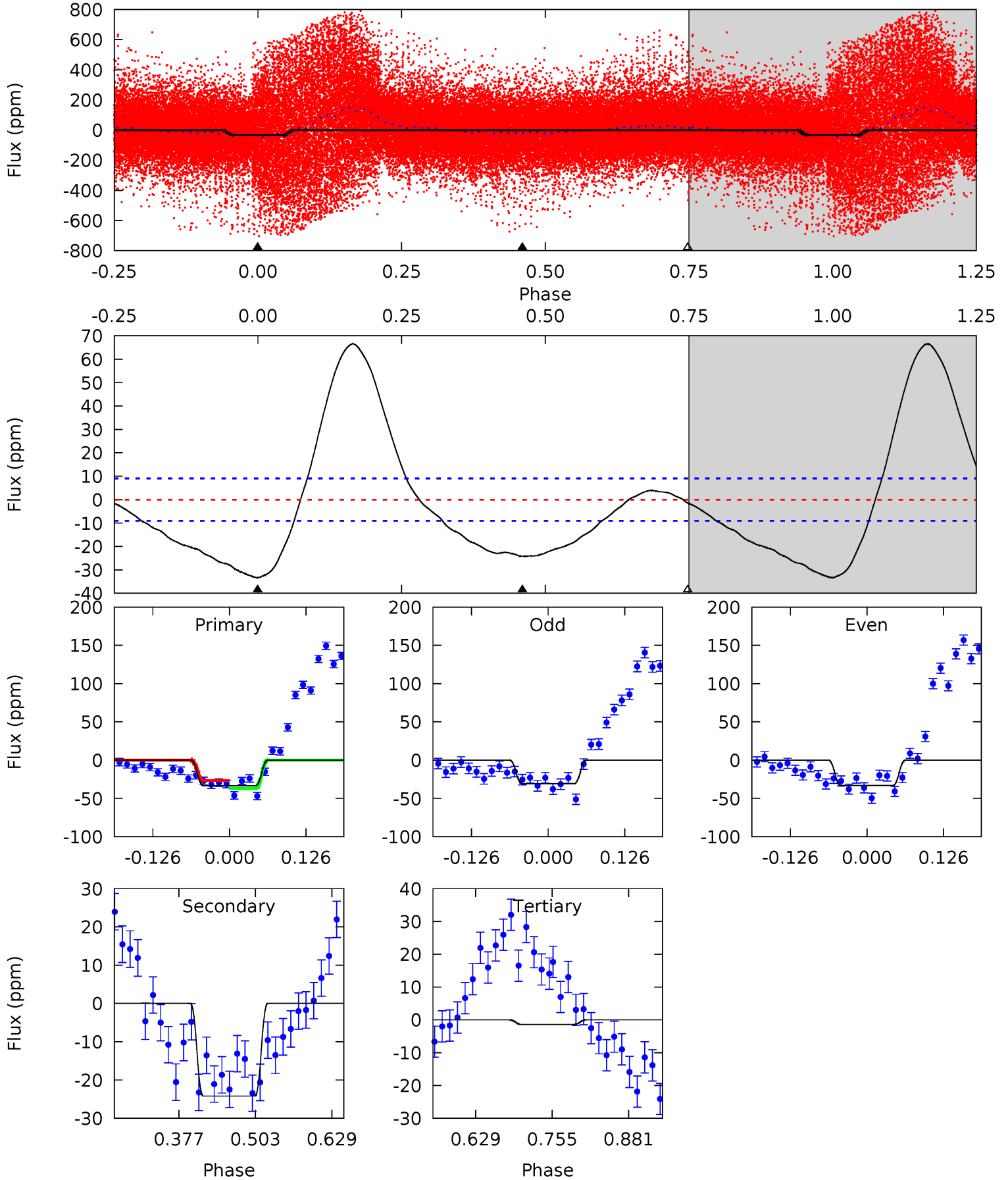
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
0.16	0.10	0.02	0	4.43	1.31	0.04	0.13	0.16	0.07	0.10	0.00	0.10	0.34	0.07



Alt Model-Shift Uniqueness Test

005007640-01, P = 2.104462 Days, E = 130.584957 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
16.6	12.1	0.71	0	4.52	1.53	12.6	15.9	16.6	11.4	12.1	0.59	3.37	0.67	2.54



Stellar Parameters For KIC 005007640

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6341^{+153}_{-210}	$4.409^{+0.065}_{-0.208}$	$-0.060^{+0.250}_{-0.300}$	$1.111^{+0.353}_{-0.141}$	$1.154^{+0.154}_{-0.154}$	$1.187^{+0.325}_{-0.613}$
	+2%/-3%	+1%/-5%	+417%/-500%	+32%/-13%	+13%/-13%	+27%/-52%
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 005007640-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-0 ± 3	$0.31^{+0.30}_{-0.21}$	2281^{+179}_{-115}	3235^{+3062}_{-8657}	$1.322^{+34.312}_{-20.667}$
Alt.	-24 ± 2	$0.88^{+0.38}_{-0.33}$	2279^{+164}_{-120}	5332^{+1410}_{-719}	19^{+31}_{-9}

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

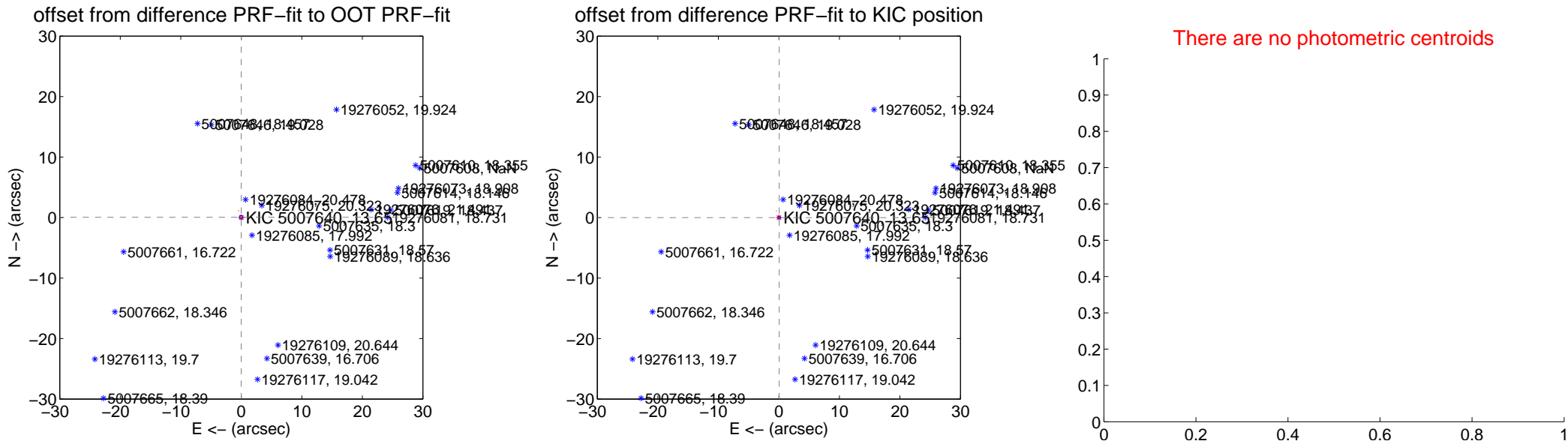
DV Centroid Data

Supplemental centroid analysis for 005007640-01. Kepler magnitude: 13.65. Transit SNR 0.45

There are 8 quarters with good PRF difference image offsets

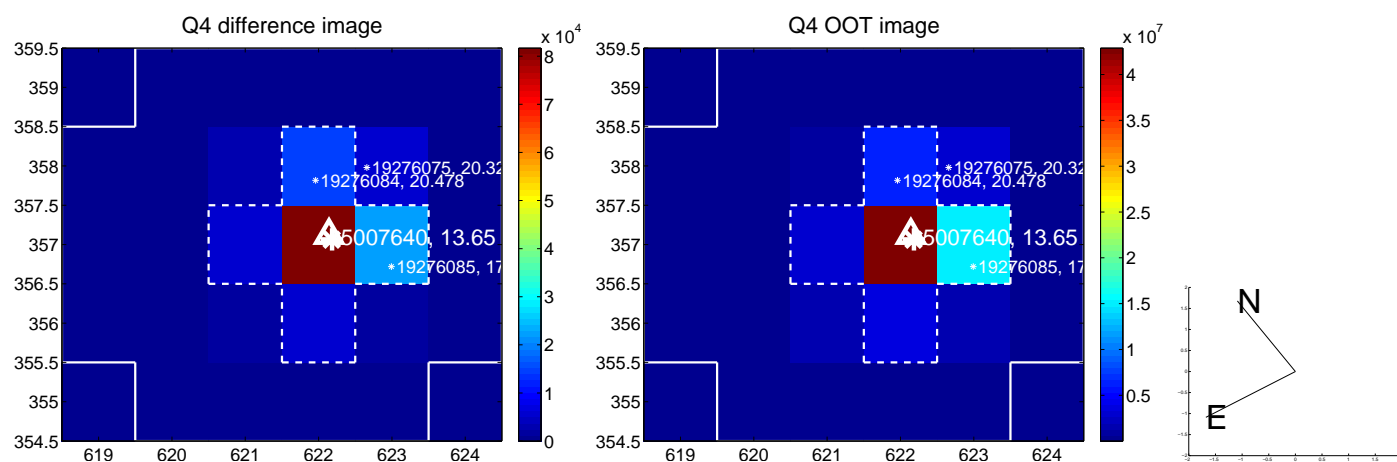
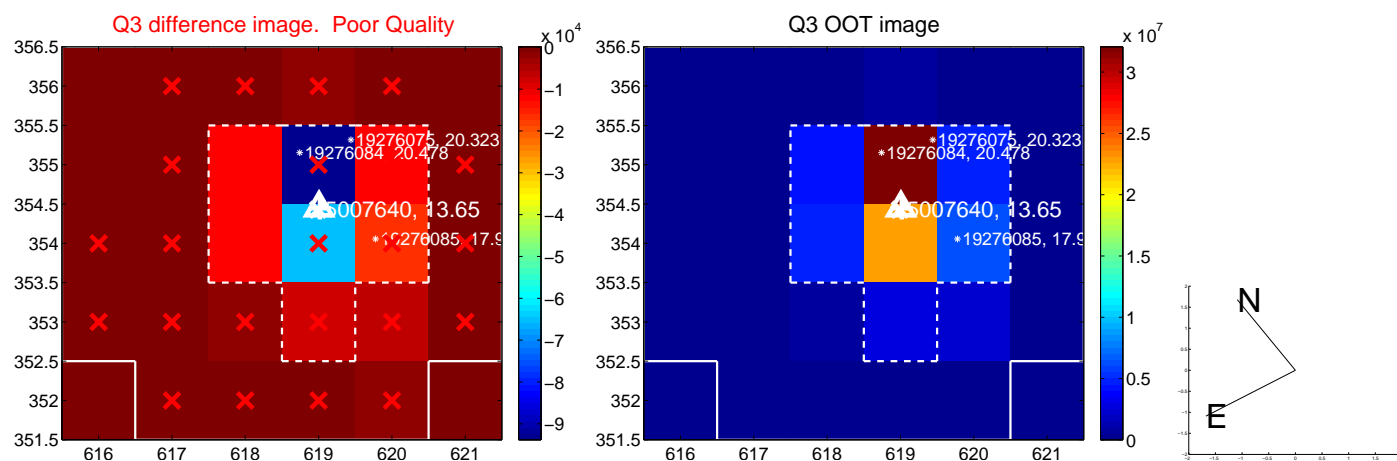
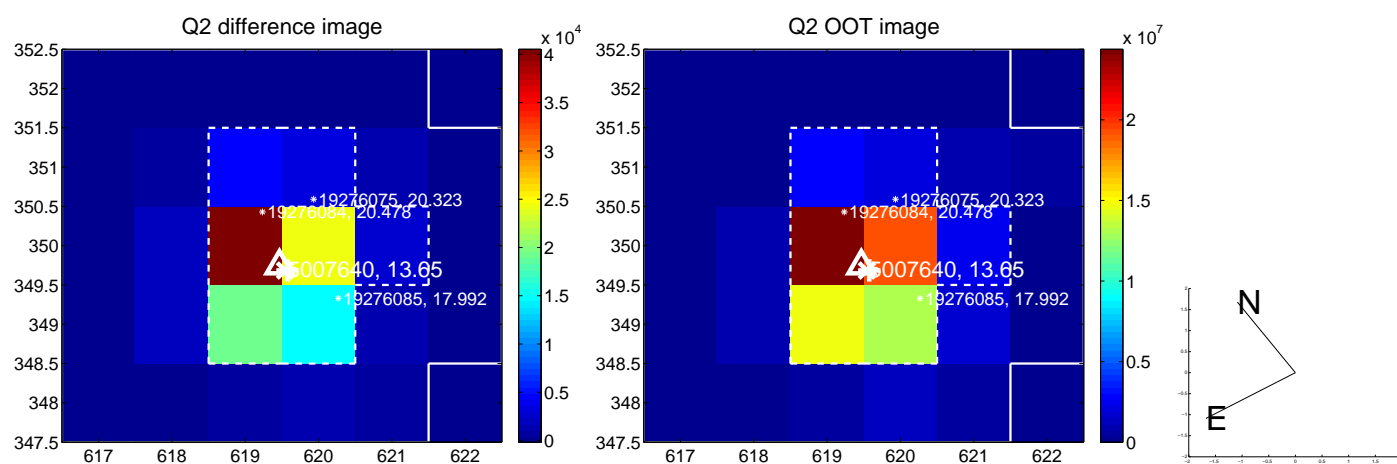
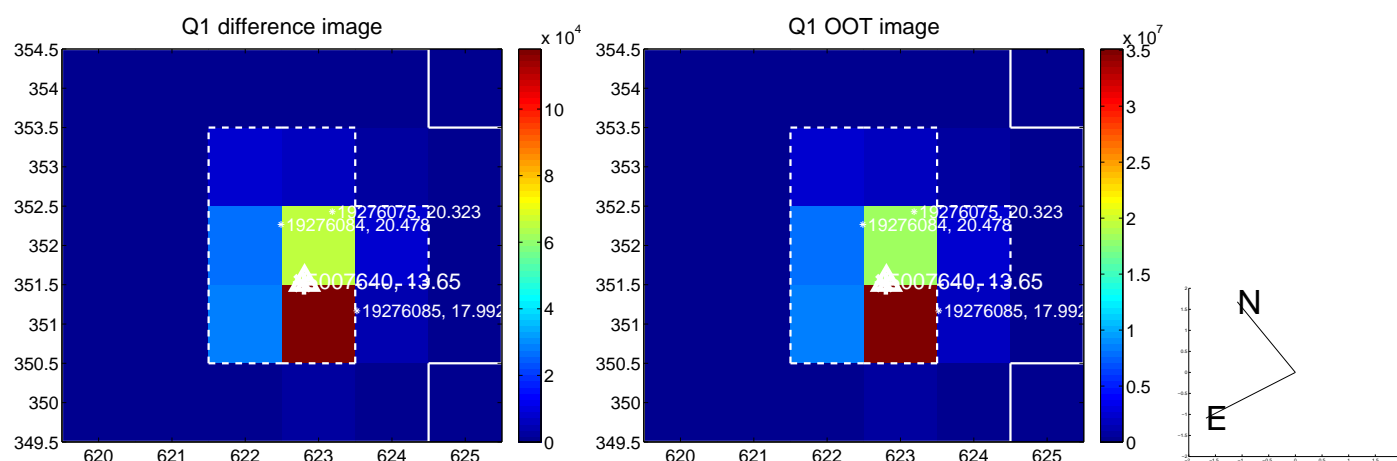
The direct PRF centroid is offset from the target star catalog position by about 0.10 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.057 ± 0.102	0.55	0.025 ± 0.073	0.051 ± 0.099
PRF-fit source offset from KIC position	0.051 ± 0.073	0.70	-0.051 ± 0.072	-0.003 ± 0.097
photometric centroid source offset	—	—	—	—

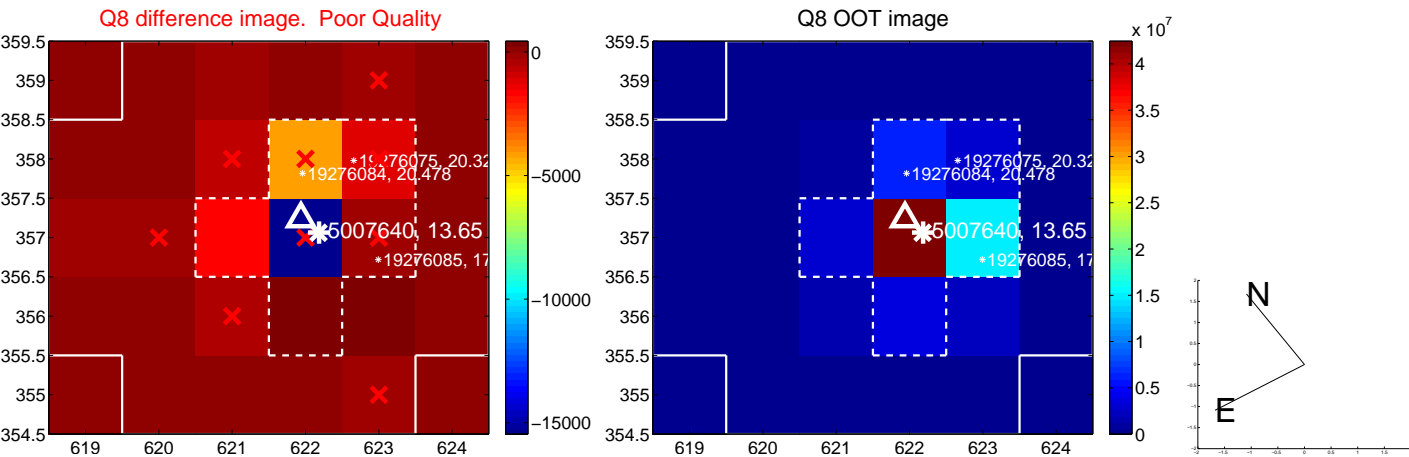
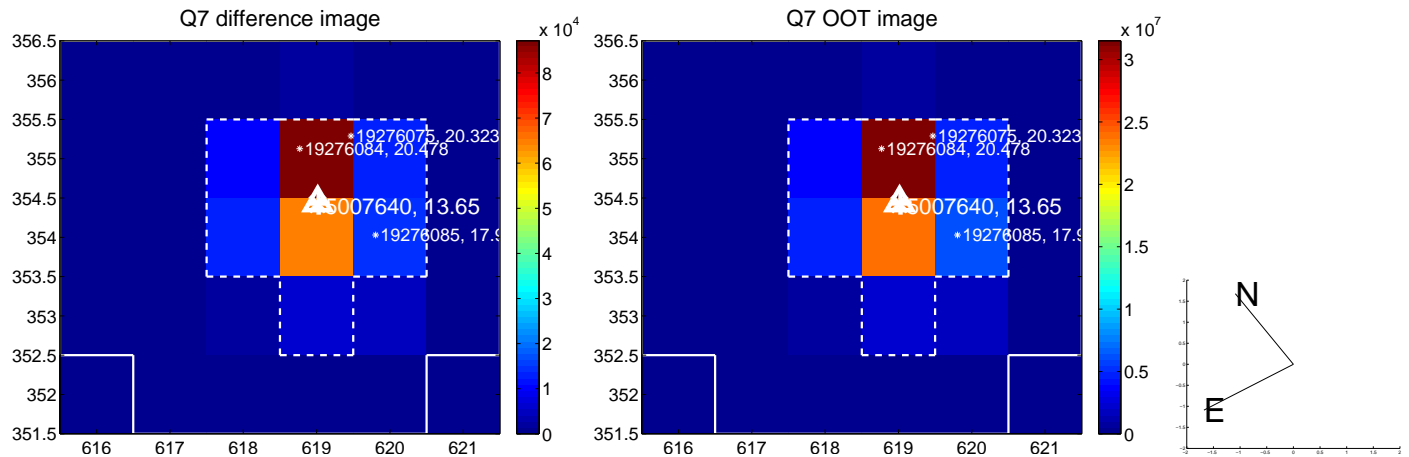
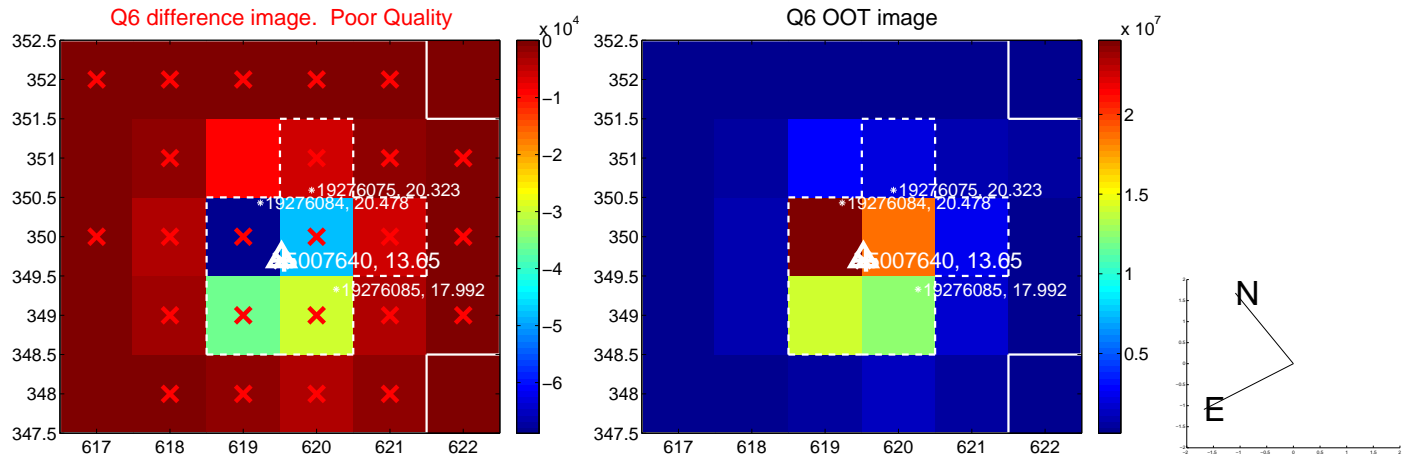
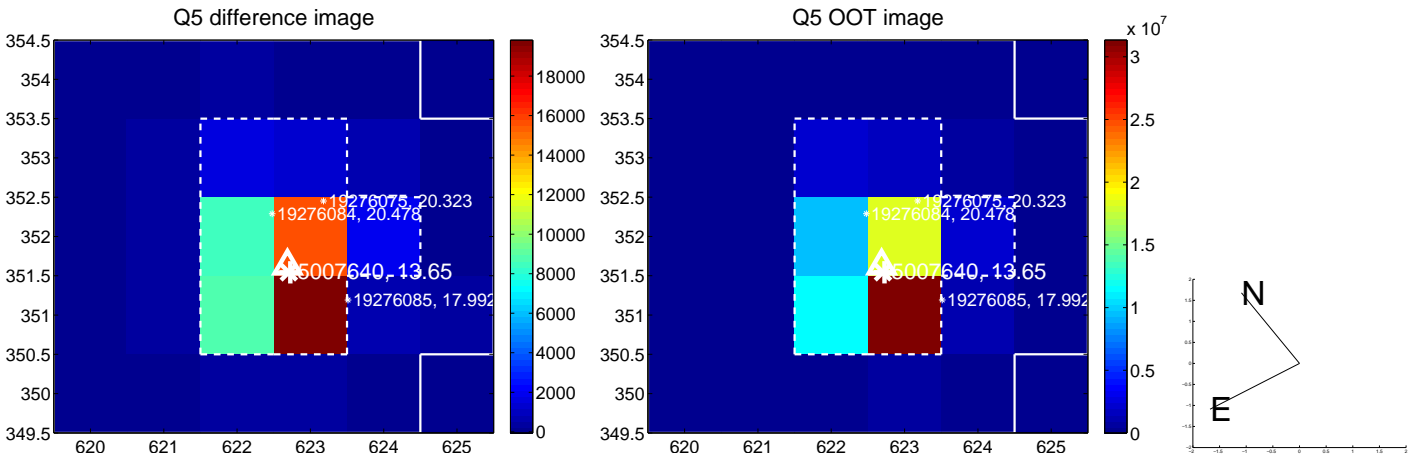


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses:** good quarterly centroid offsets; **Vermillion crosses:** bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

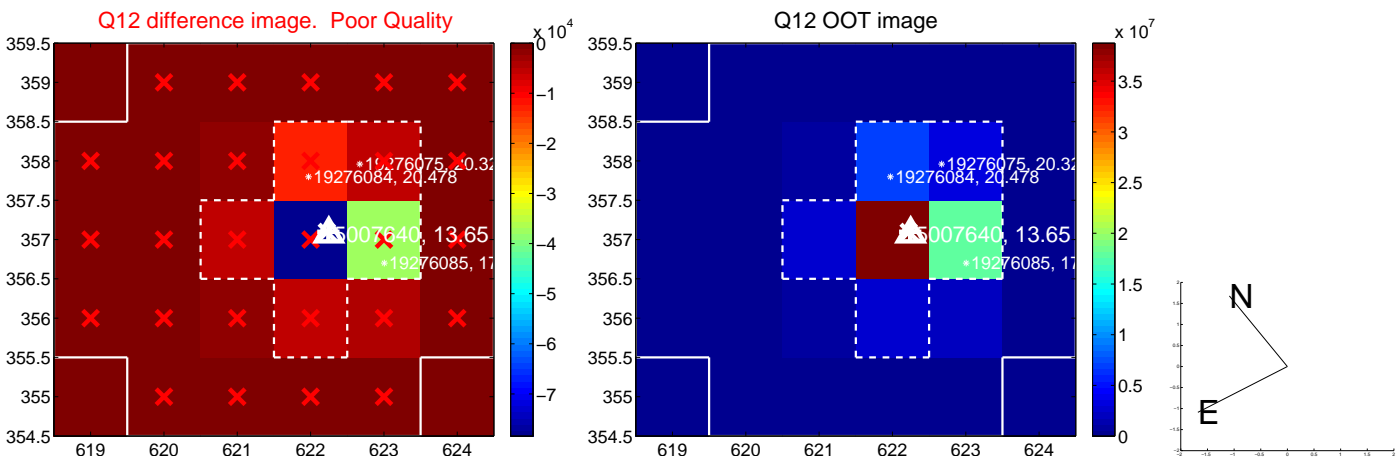
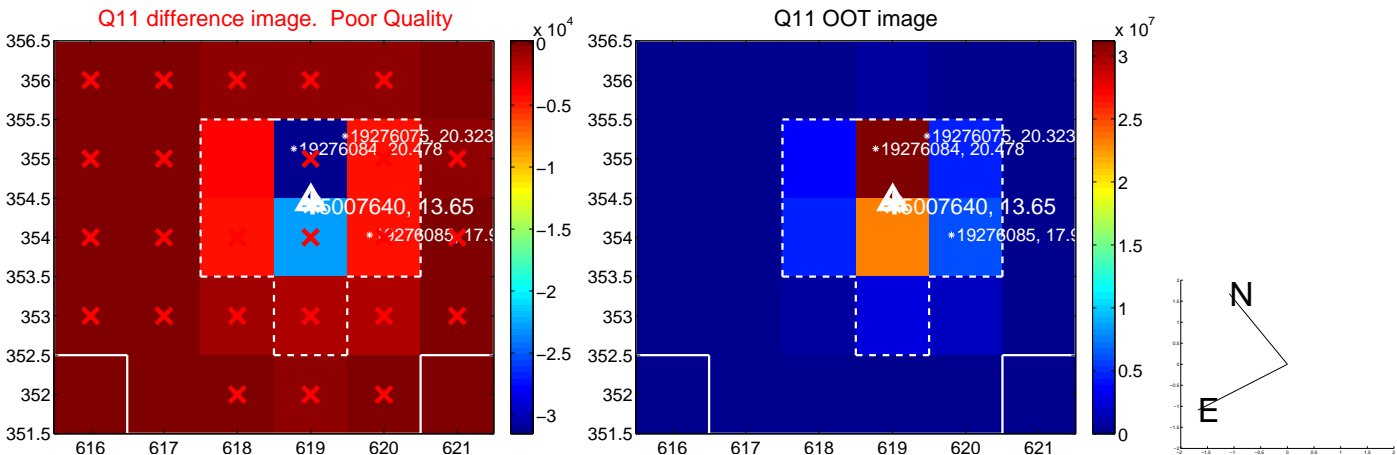
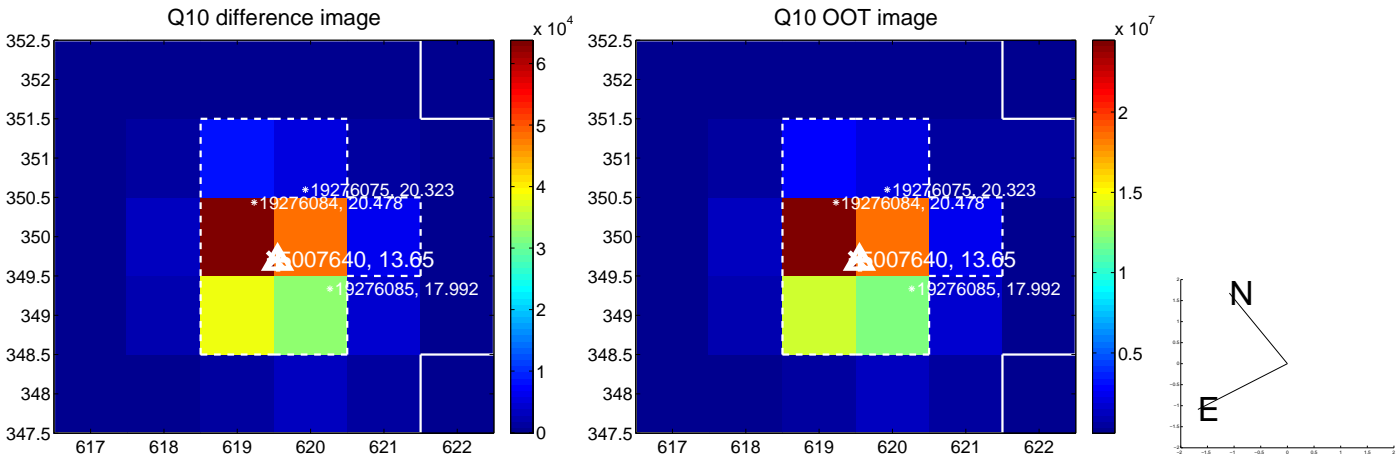
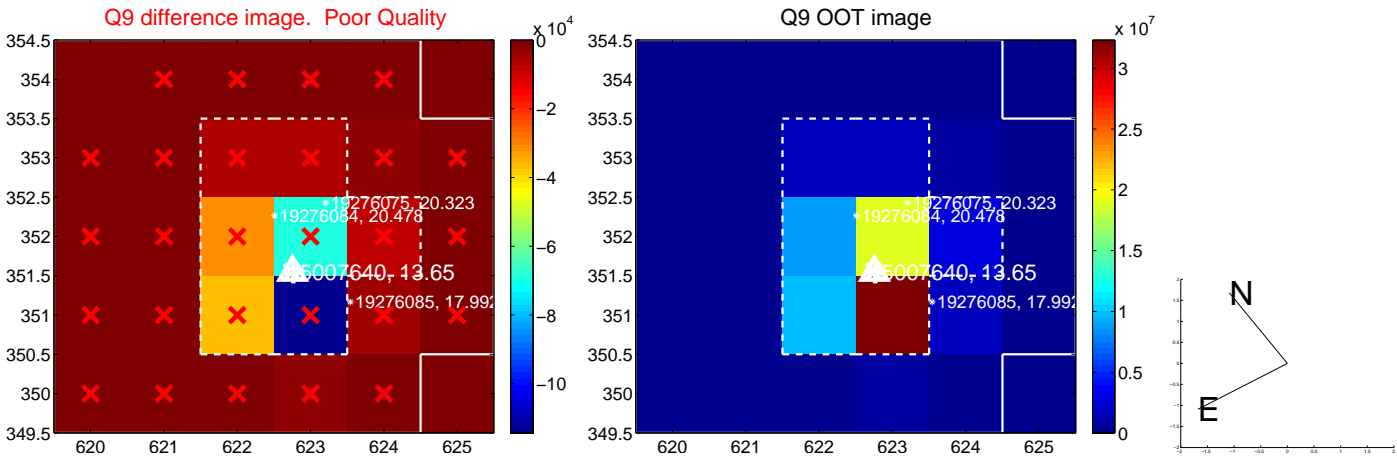
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



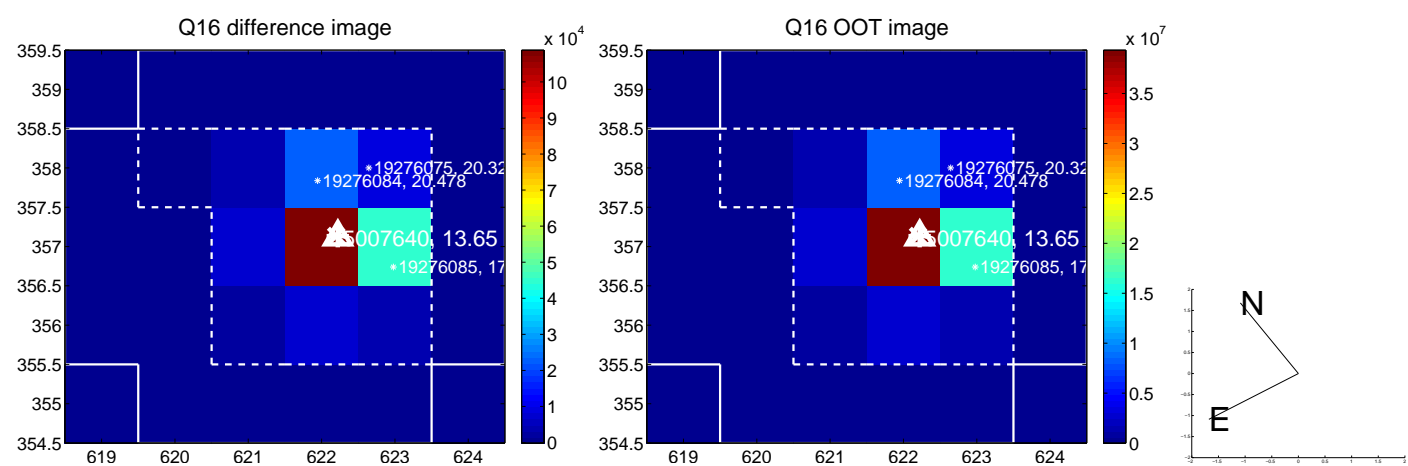
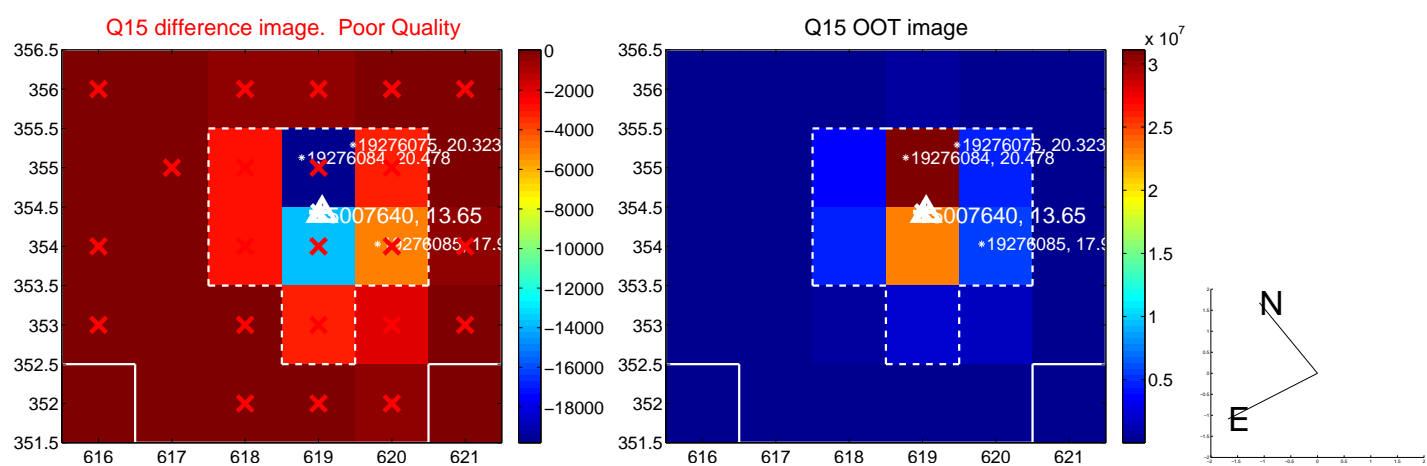
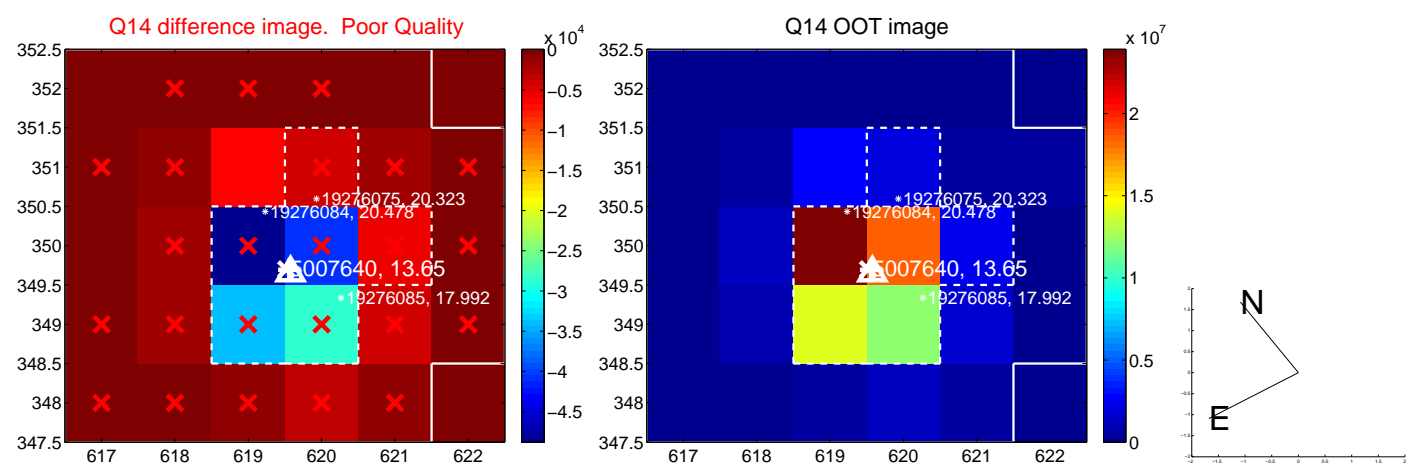
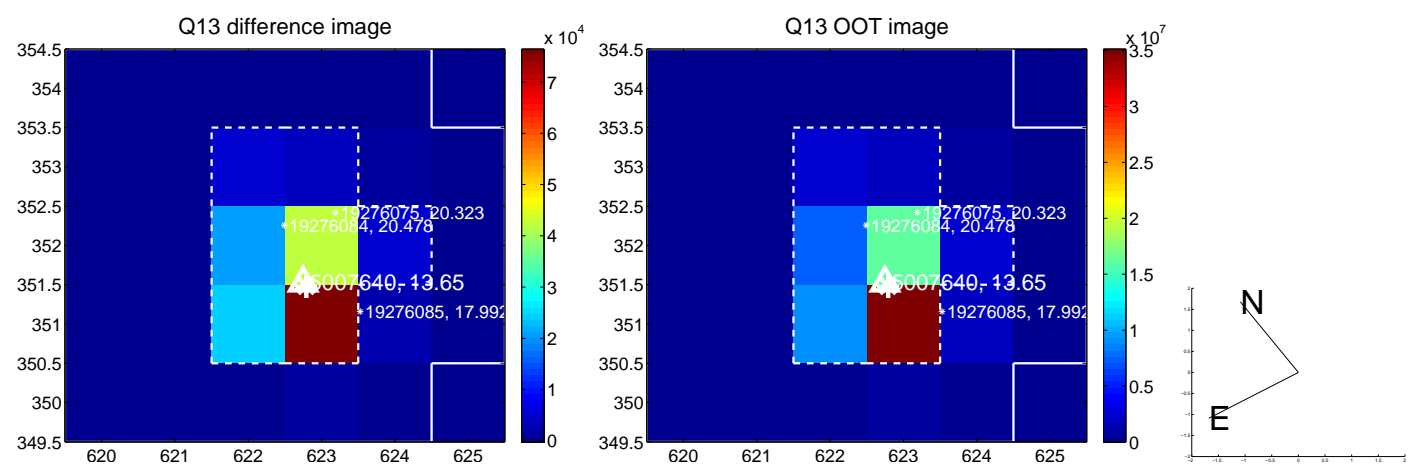
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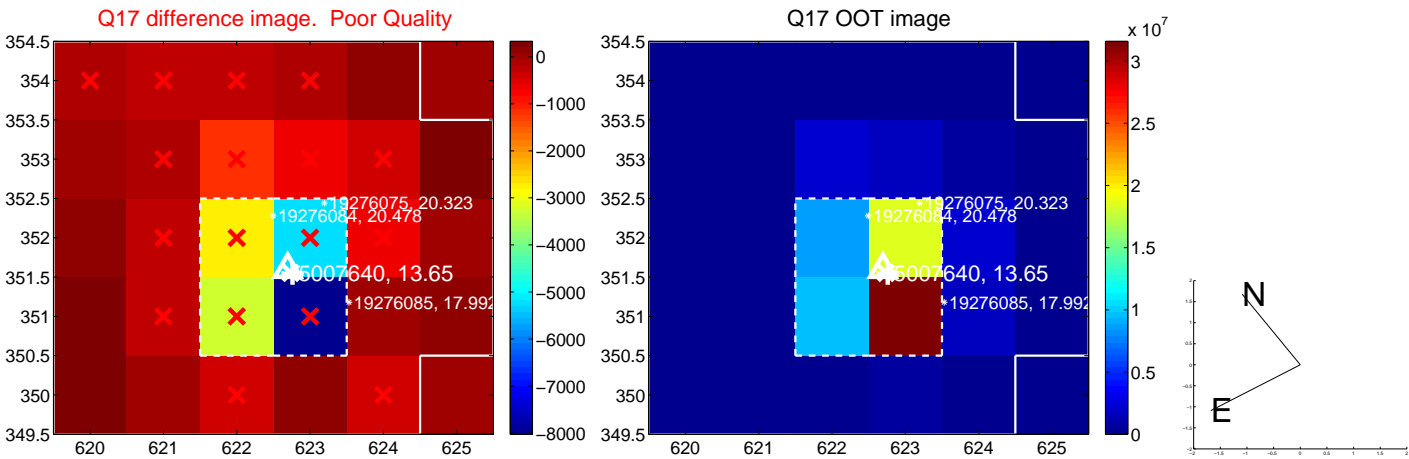
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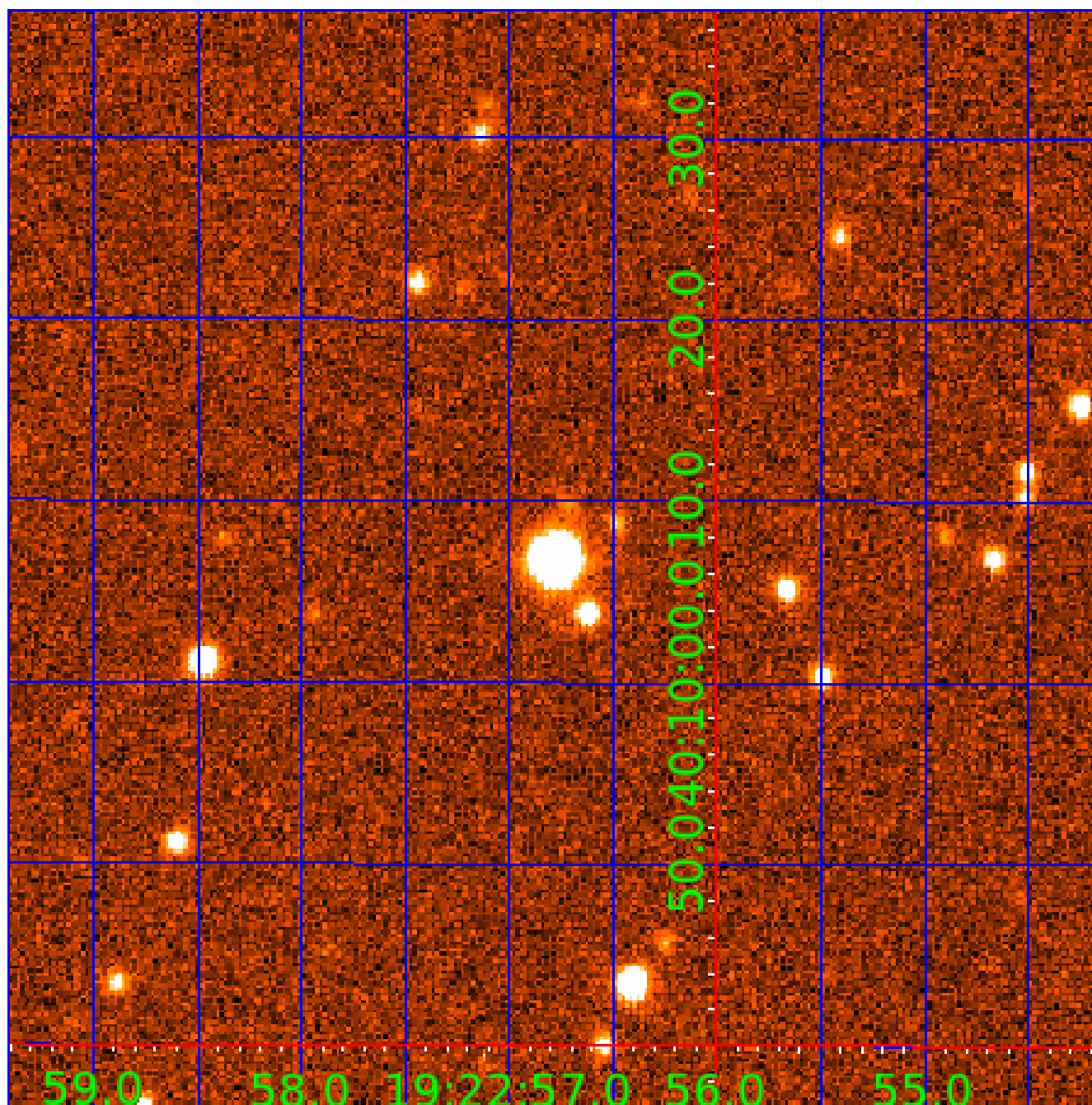
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



folded centroid time series figure for this object.

UKIRT Image

Declination



KIC 005007640

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Robovetter Results

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005007640-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_MARSHALL—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_NOFITS

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

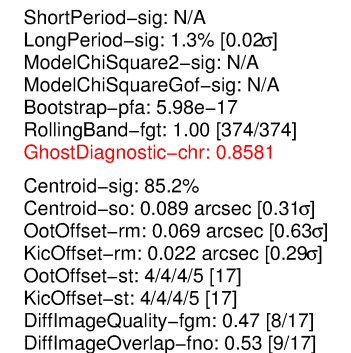
N = Not Transit-Like. S = Stellar Eclipse. C = Centroid Offset. E = Ephemeris Match.

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

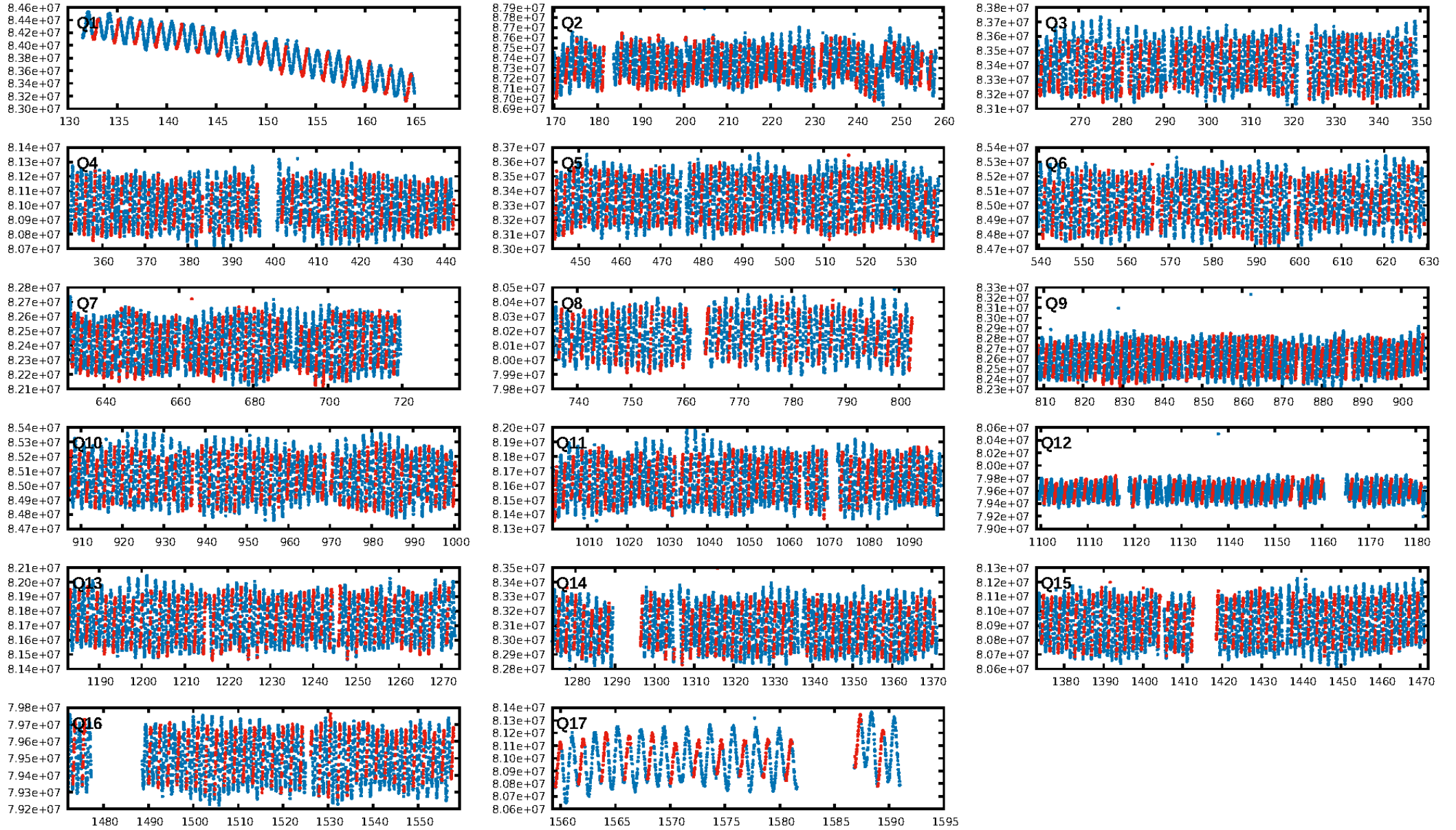
Ephemeris Match Information For 005007640-02

No Significant Match Found

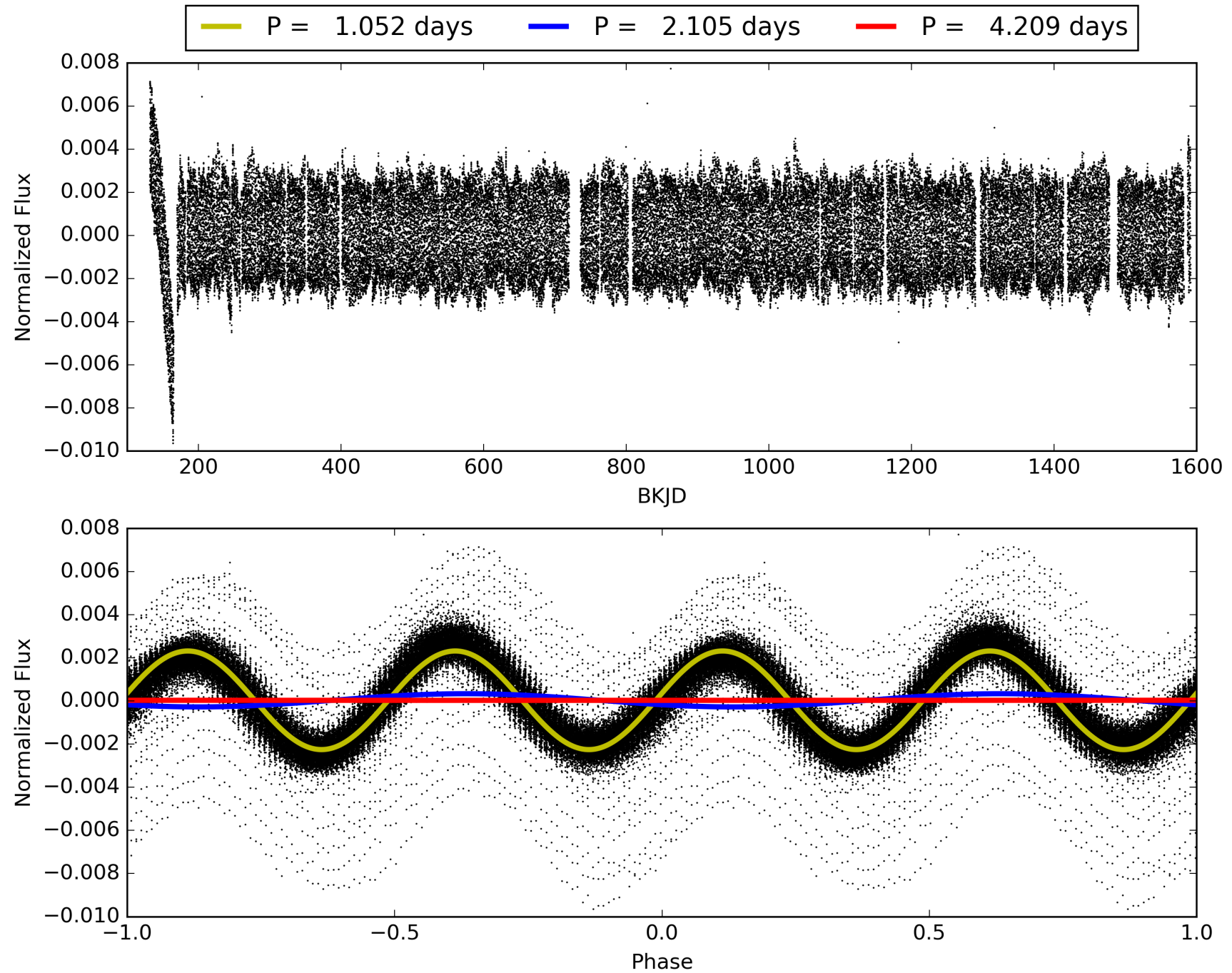
KIC: 5007640 Candidate: 2 of 3 Period: 2.105 d



TCE 005007640-02, PDC Light Curves

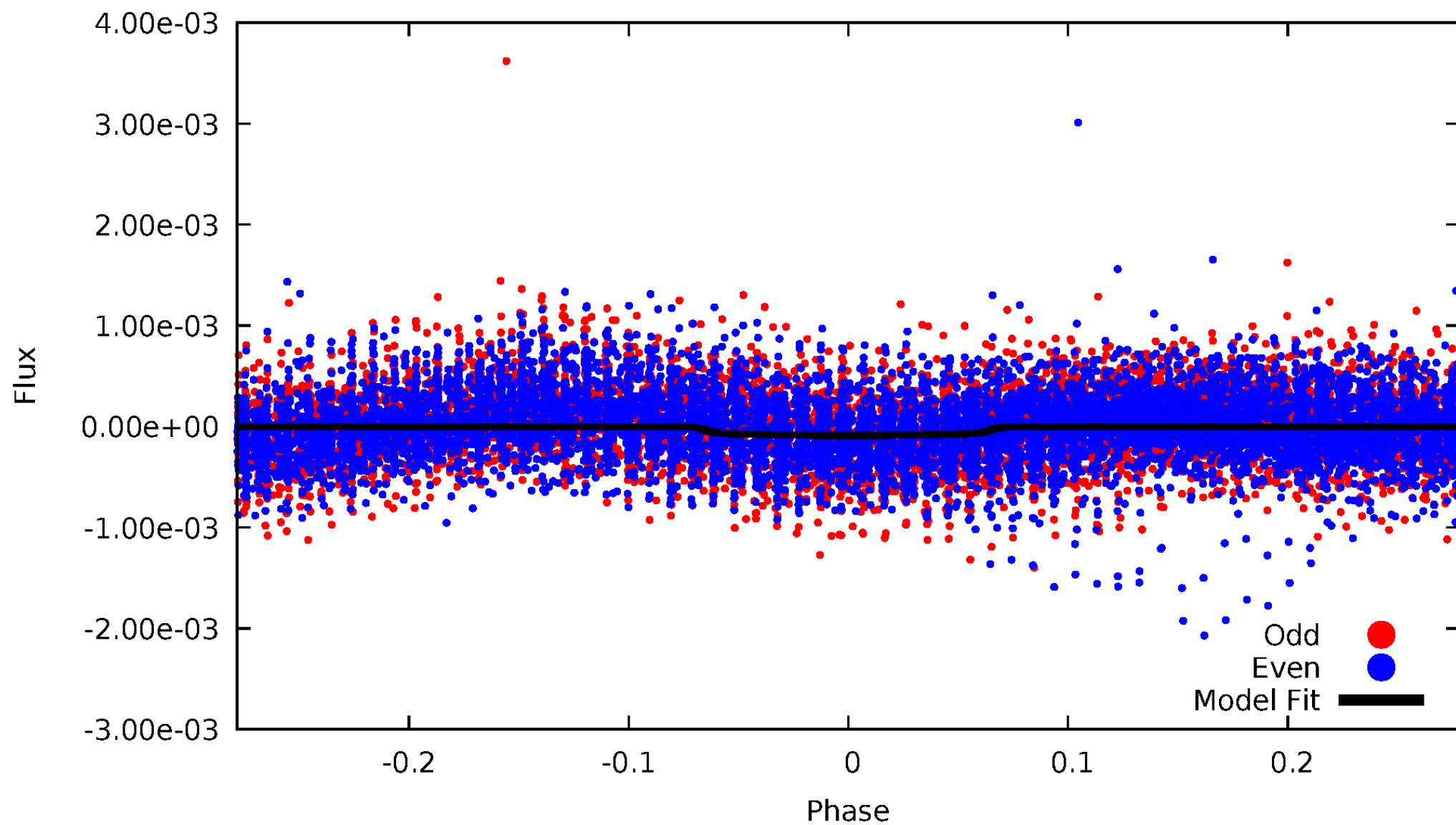


TCE 005007640-02



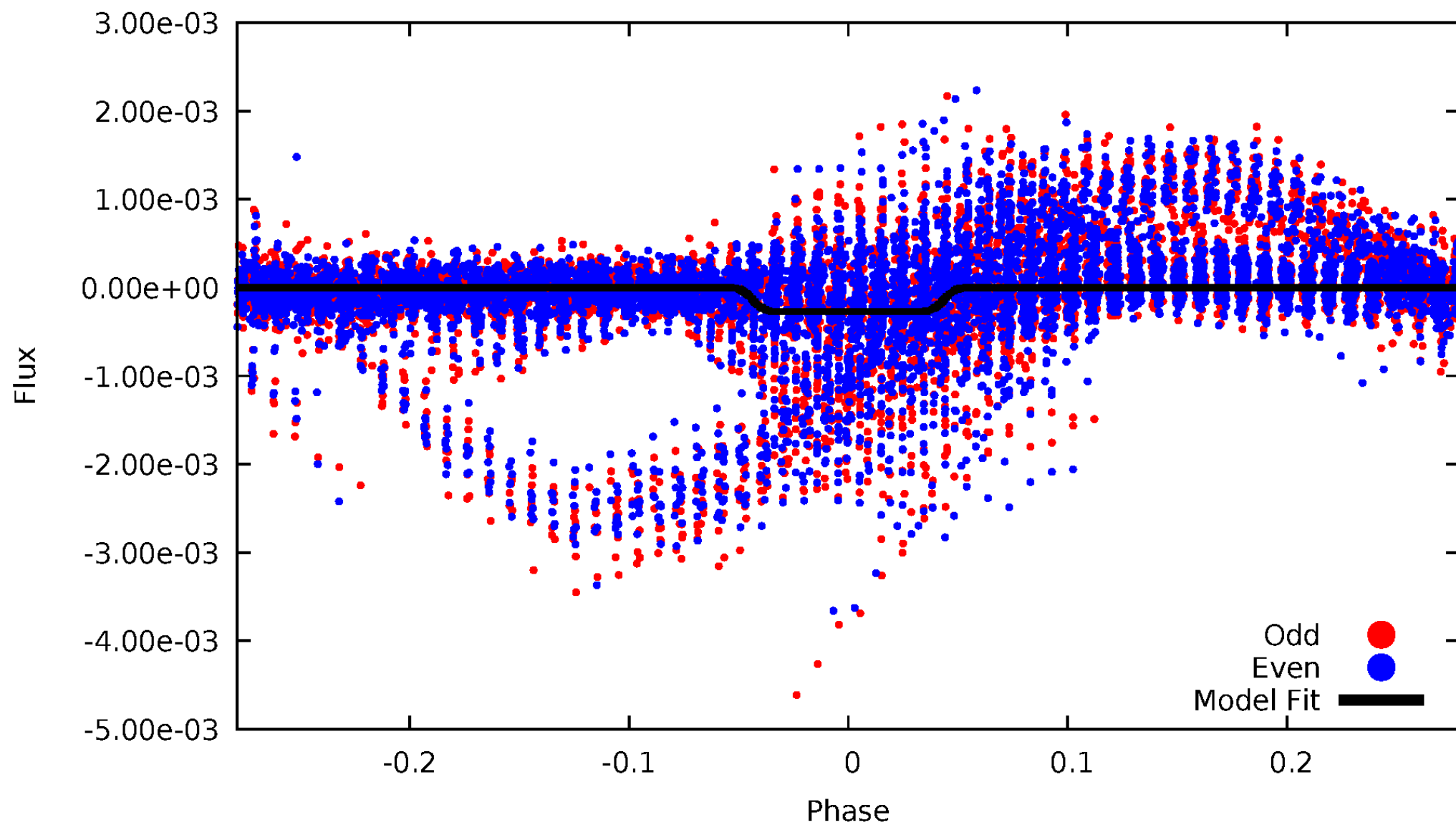
DV Odd/Even

TCE 005007640-02



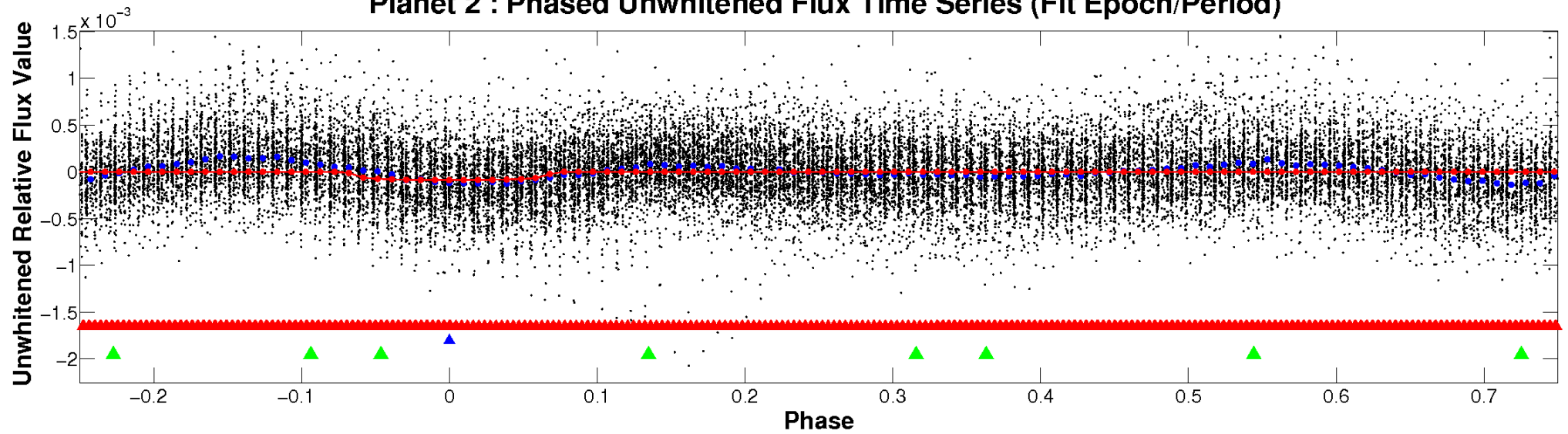
ALT Odd/Even

TCE 005007640-02

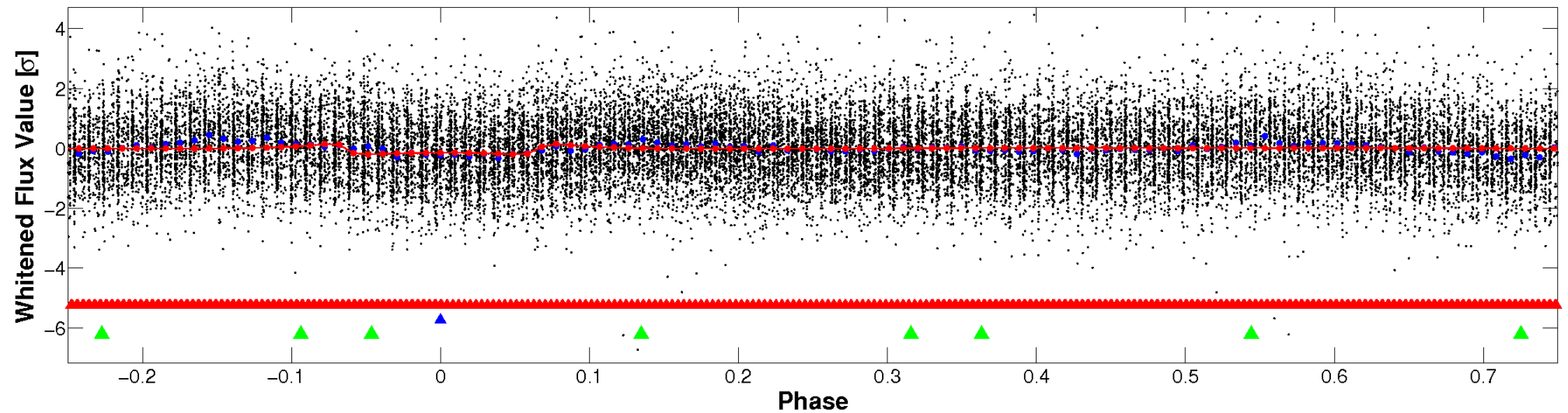


Non-Whitened Vs. Whitened Light Curve

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

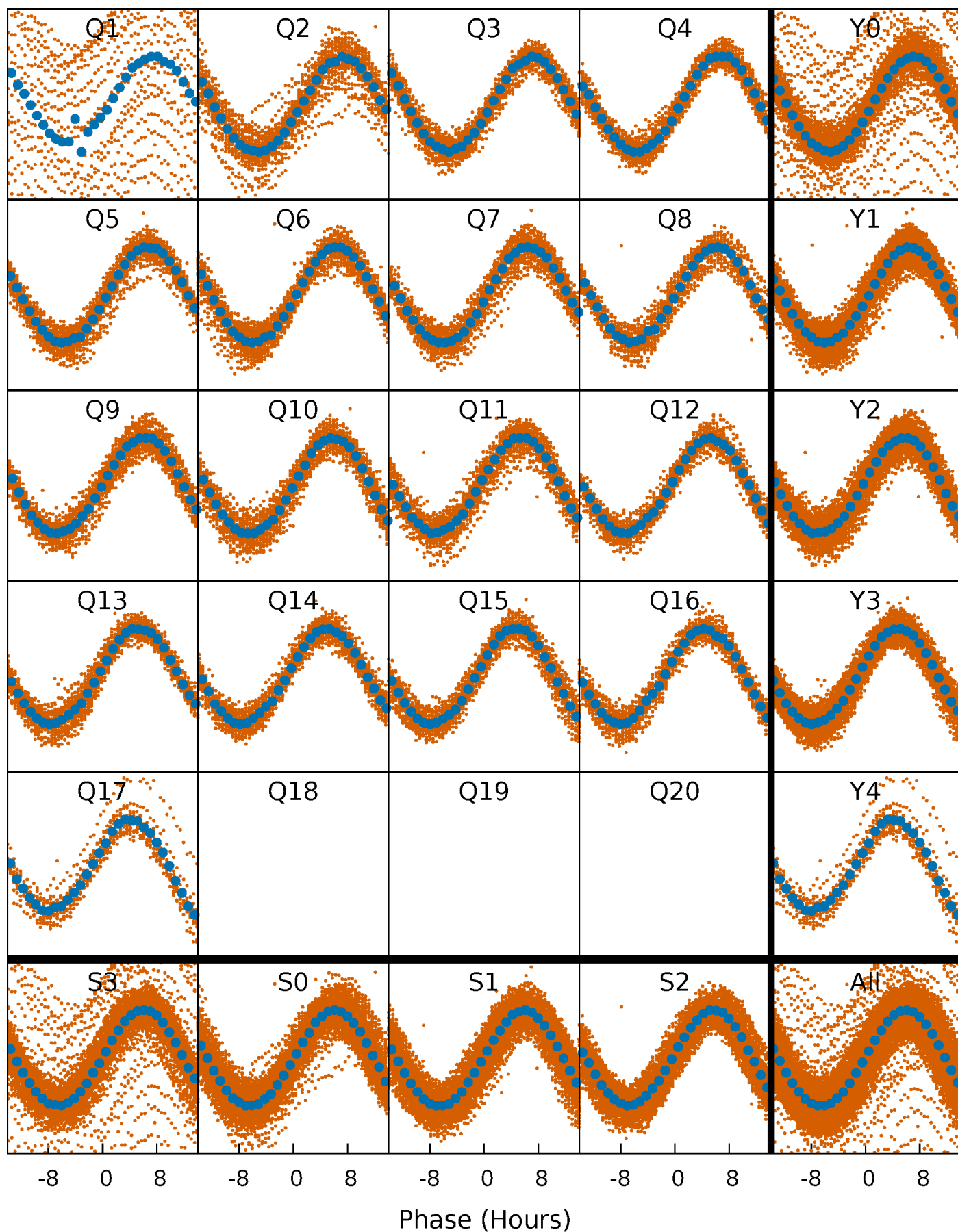


Planet 2 : Phased Whitened Flux Time Series (Fit Epoch/Period)



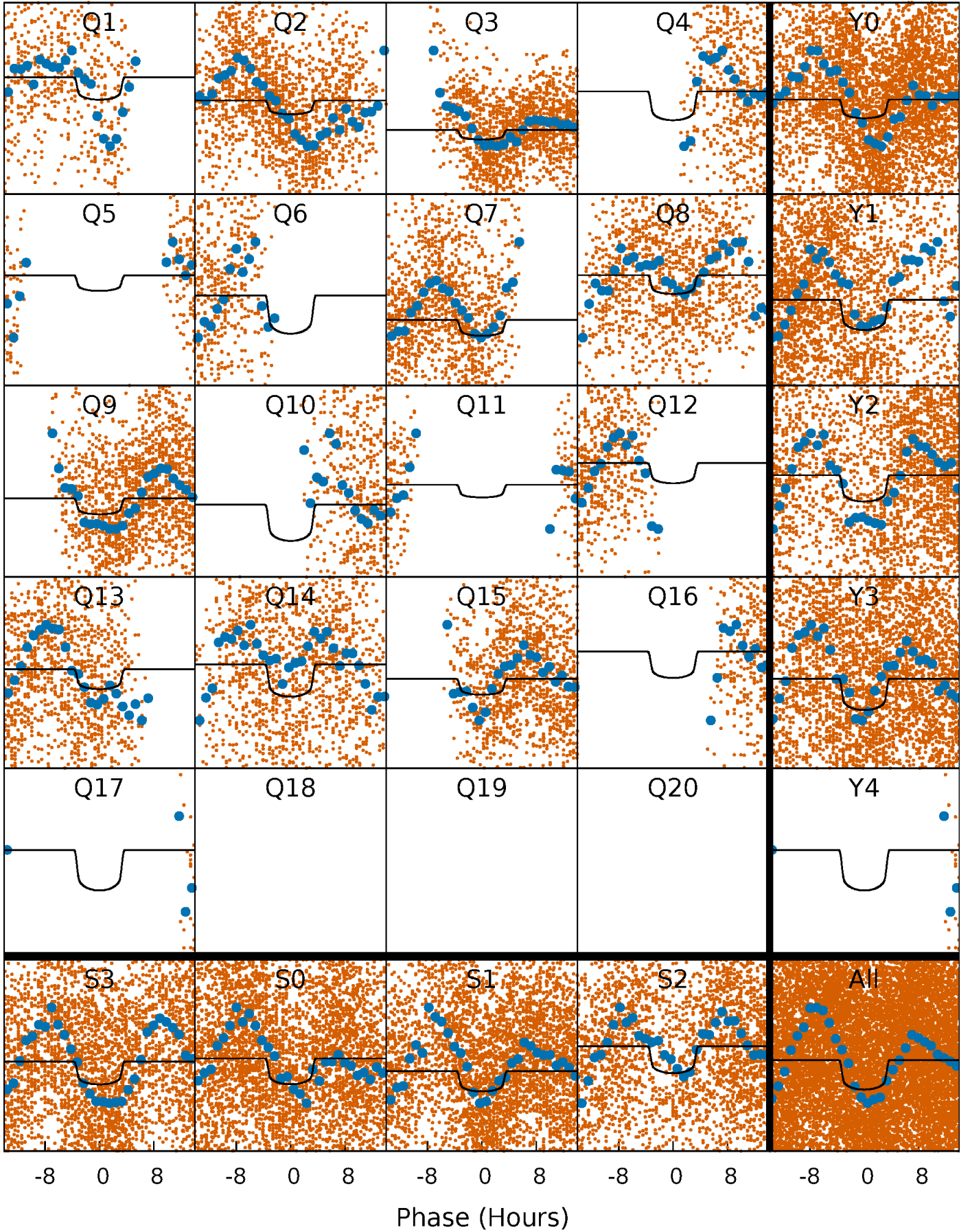
PDC Quarter-Phased Transit Curves

TCE 005007640-02 P= 2.104697 Days $T_0=132.806518$ (BKJD)



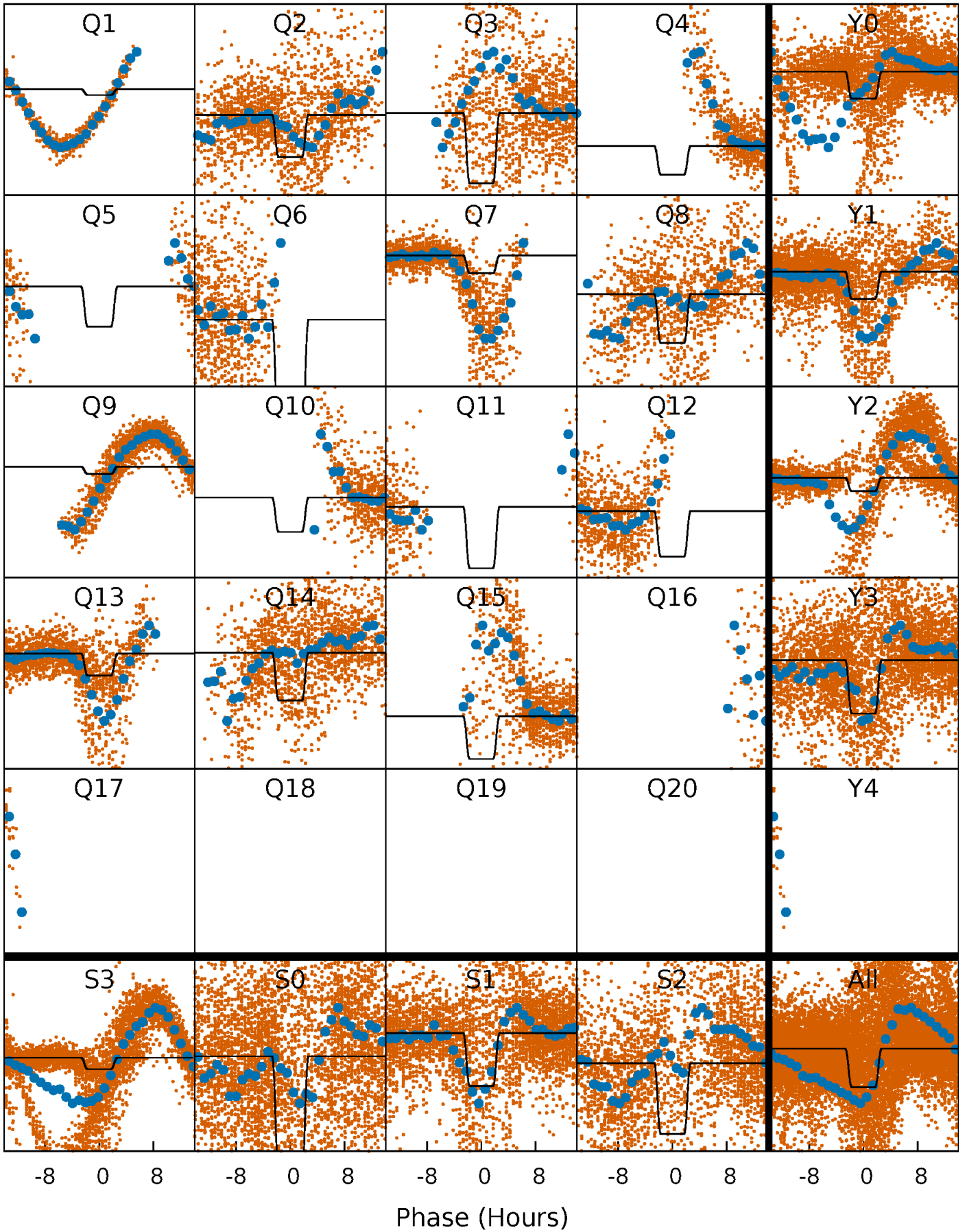
DV Quarter-Phased Transit Curves

TCE 005007640-02 P= 2.104697 Days $T_0=132.806518$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

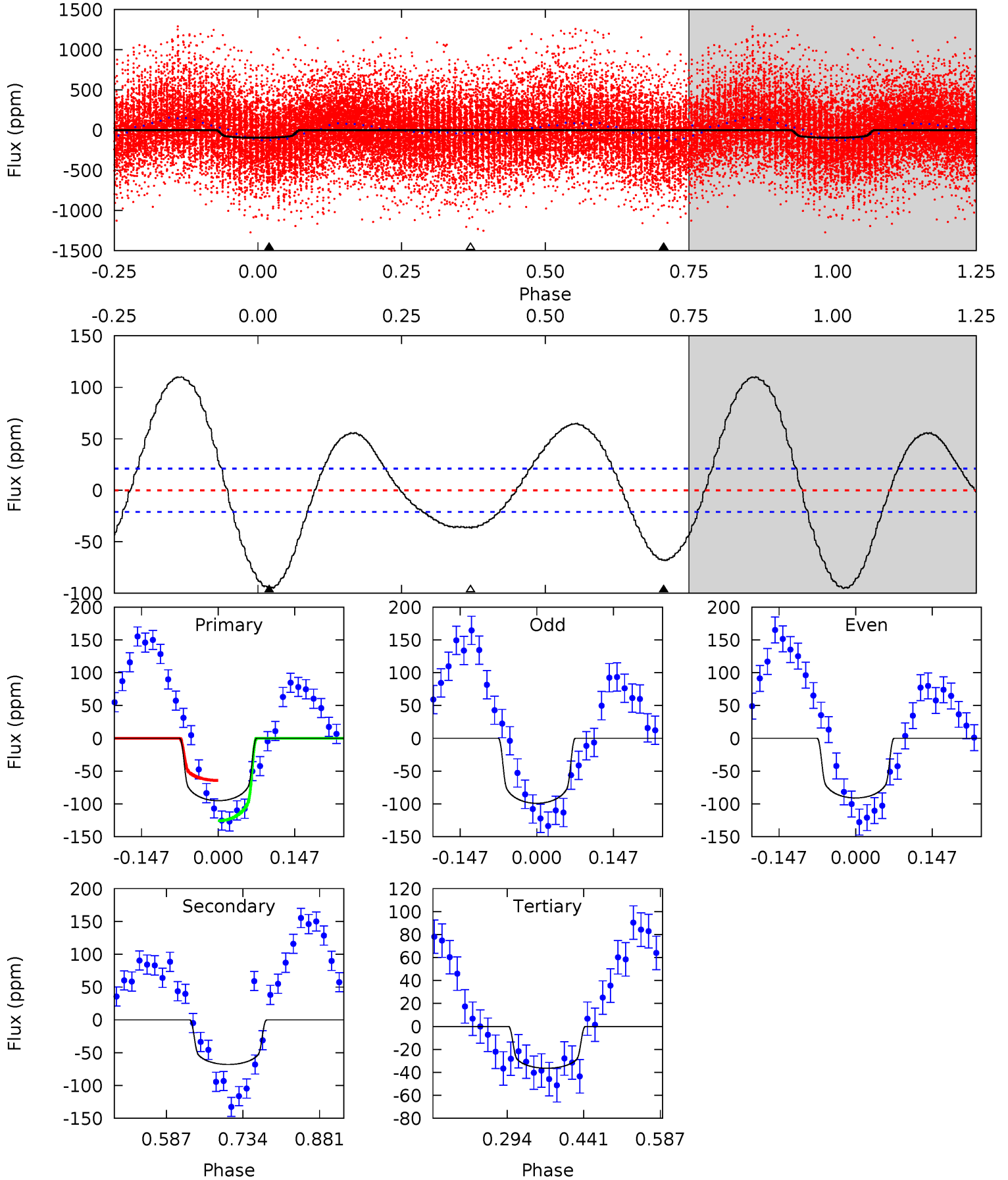
TCE 005007640-02 P= 2.104540 Days $T_0=132.798593$ (BKJD)



DV Model-Shift Uniqueness Test

005007640-02, P = 2.104697 Days, E = 130.701821 Days

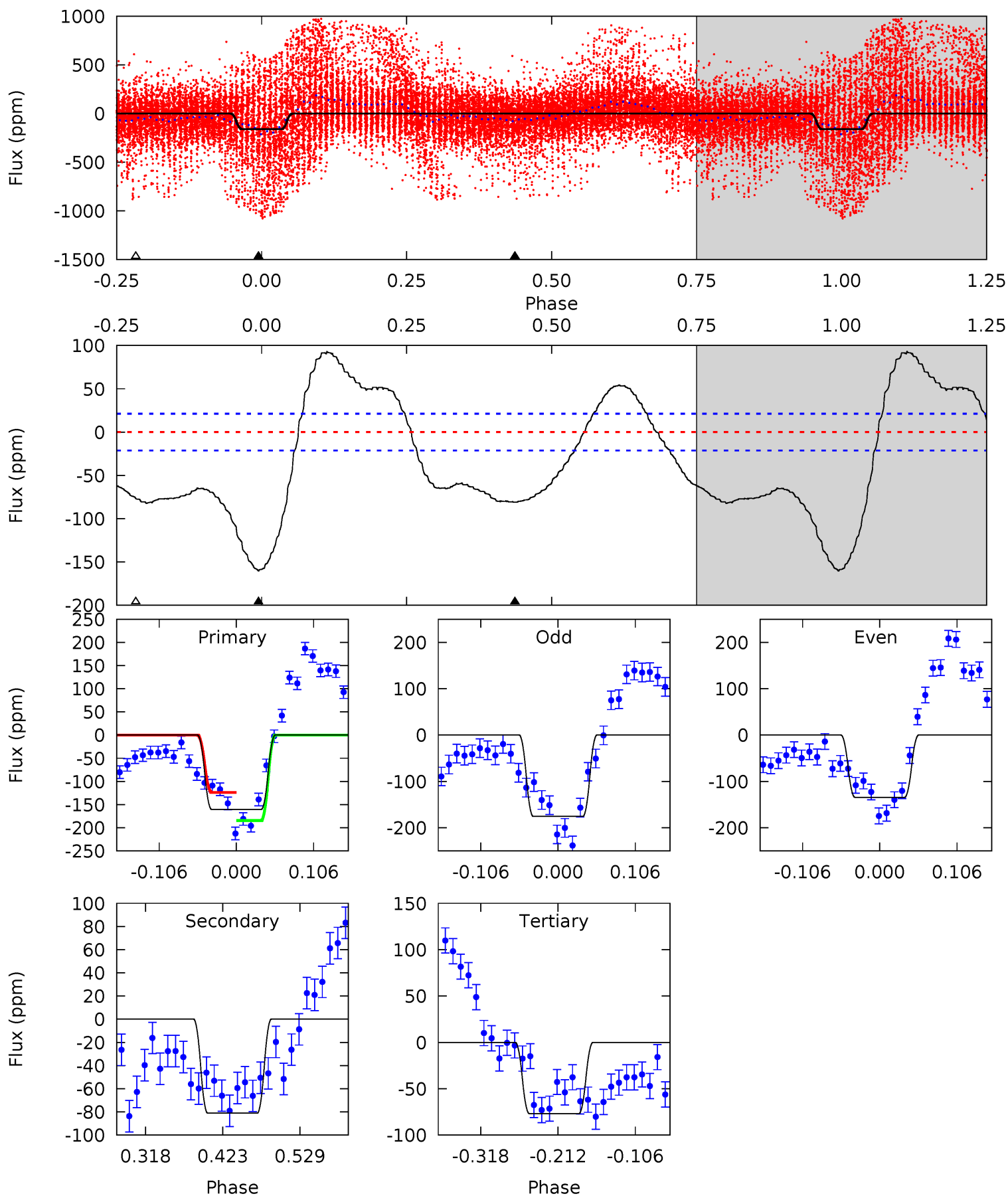
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
20.3	14.5	7.77	0	4.48	1.45	8.58	12.5	20.3	6.74	14.5	0.87	1.02	0.54	6.53



Alt Model-Shift Uniqueness Test

005007640-02, P = 2.104540 Days, E = 130.694053 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
34.3	17.4	16.5	0	4.55	1.62	12.1	17.9	34.3	0.90	17.4	4.49	1.77	0.37	6.73



Stellar Parameters For KIC 005007640

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6341^{+153}_{-210}	$4.409^{+0.065}_{-0.208}$	$-0.060^{+0.250}_{-0.300}$	$1.111^{+0.353}_{-0.141}$	$1.154^{+0.154}_{-0.154}$	$1.187^{+0.325}_{-0.613}$
	+2%/-3%	+1%/-5%	+417%/-500%	+32%/-13%	+13%/-13%	+27%/-52%
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 005007640-02 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-68 ± 5	$1.27^{+0.23}_{-0.20}$	2279^{+170}_{-108}	5727^{+415}_{-359}	26^{+9}_{-8}
Alt.	-81 ± 5	$2.06^{+0.37}_{-0.24}$	2288^{+155}_{-109}	4776^{+218}_{-186}	12^{+3}_{-3}

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

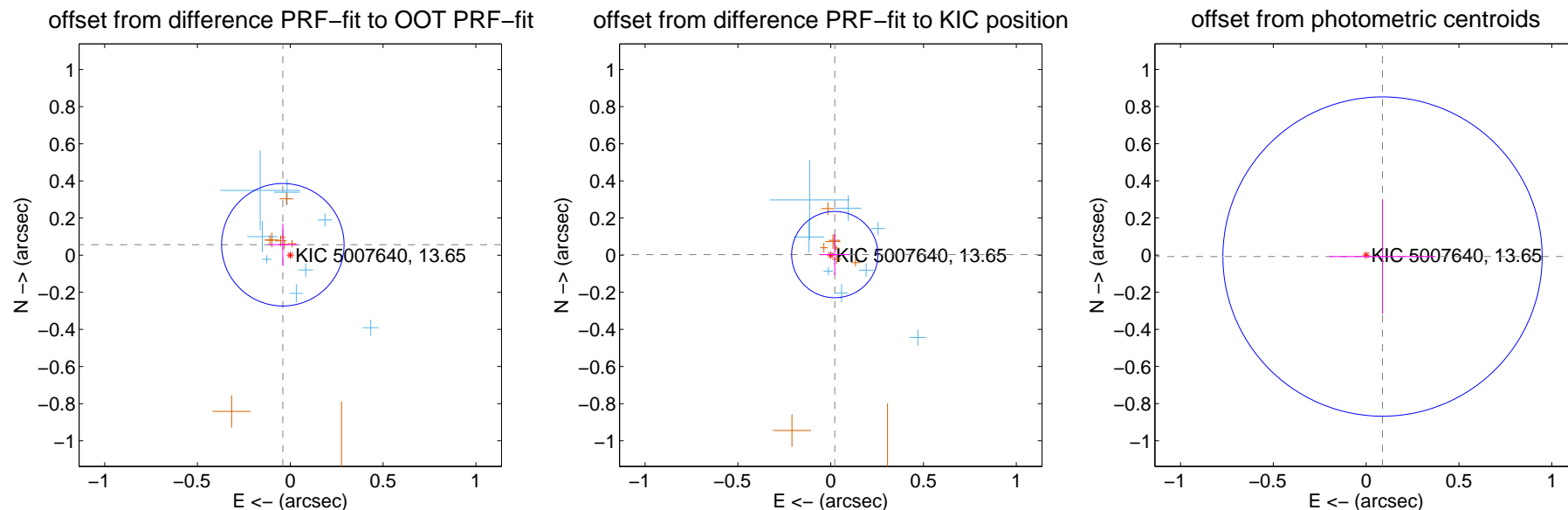
DV Centroid Data

Supplemental centroid analysis for 005007640-02. Kepler magnitude: 13.65. Transit SNR 11.42

There are 8 quarters with good PRF difference image offsets

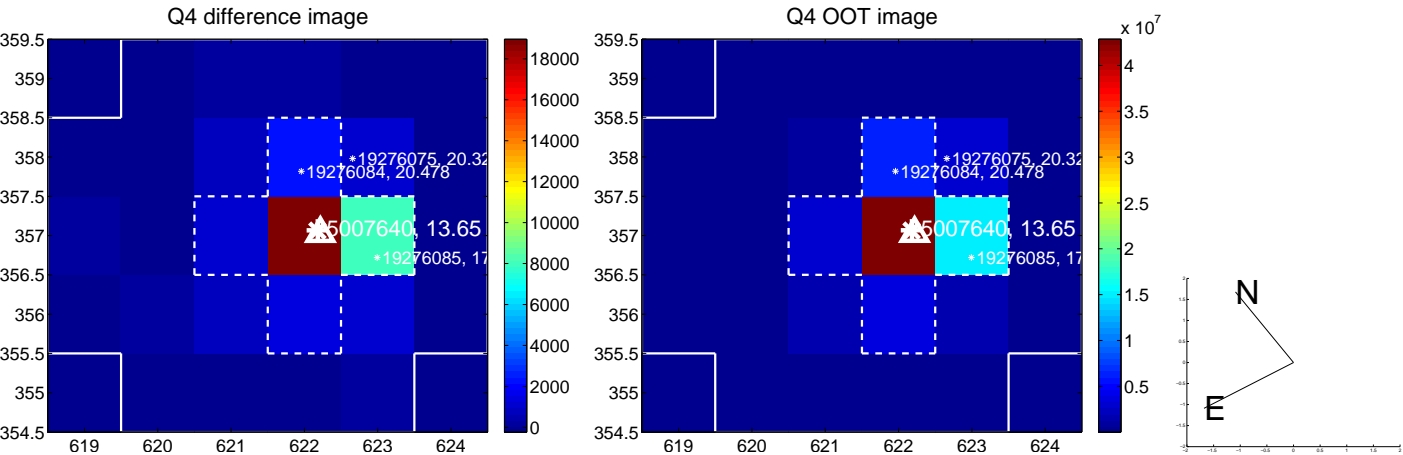
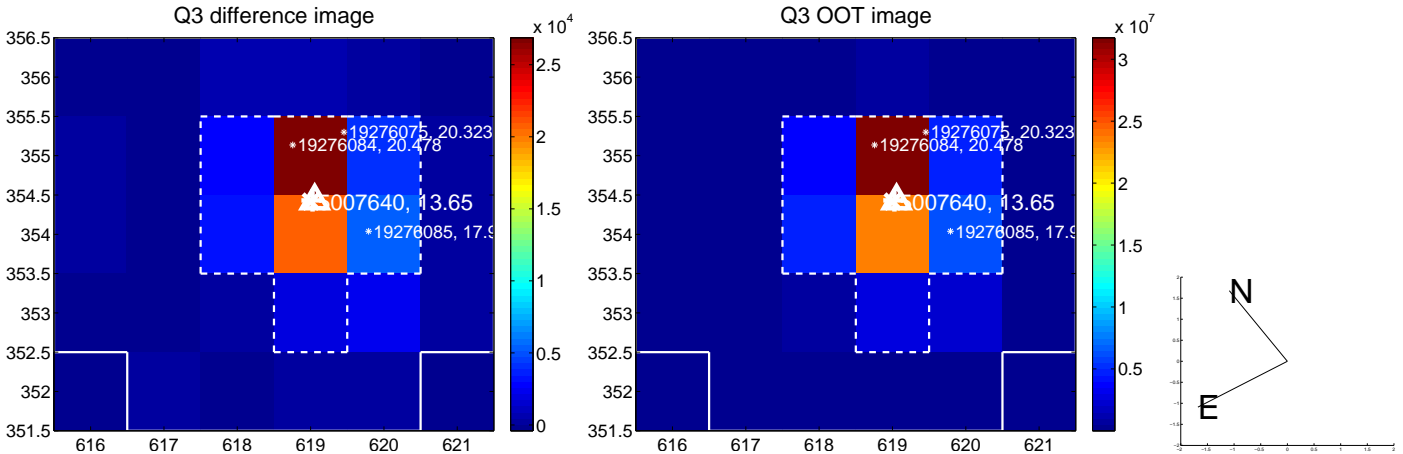
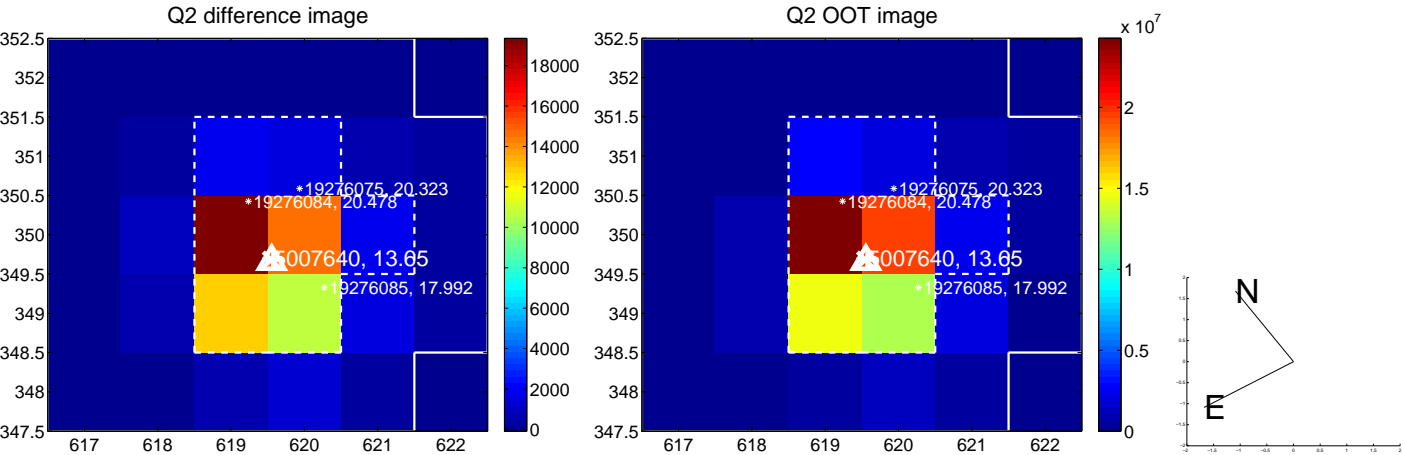
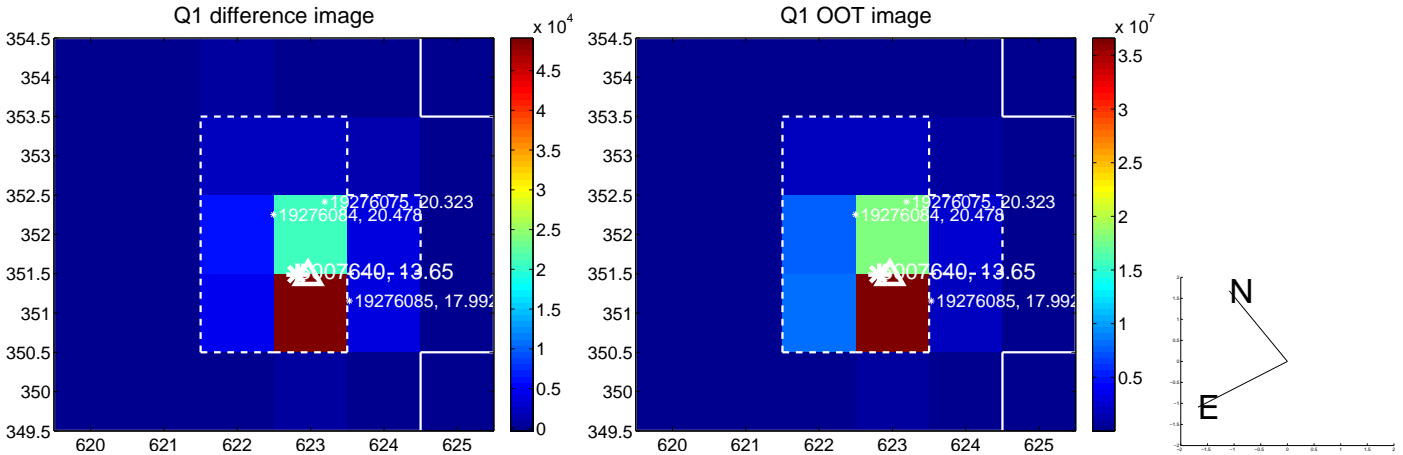
The direct PRF centroid is offset from the target star catalog position by about 0.10 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.069 ± 0.110	0.63	0.040 ± 0.079	0.056 ± 0.115
PRF-fit source offset from KIC position	0.022 ± 0.077	0.29	-0.022 ± 0.079	0.003 ± 0.111
photometric centroid source offset	0.09 ± 0.29	0.31	-0.09 ± 0.29	-0.01 ± 0.31

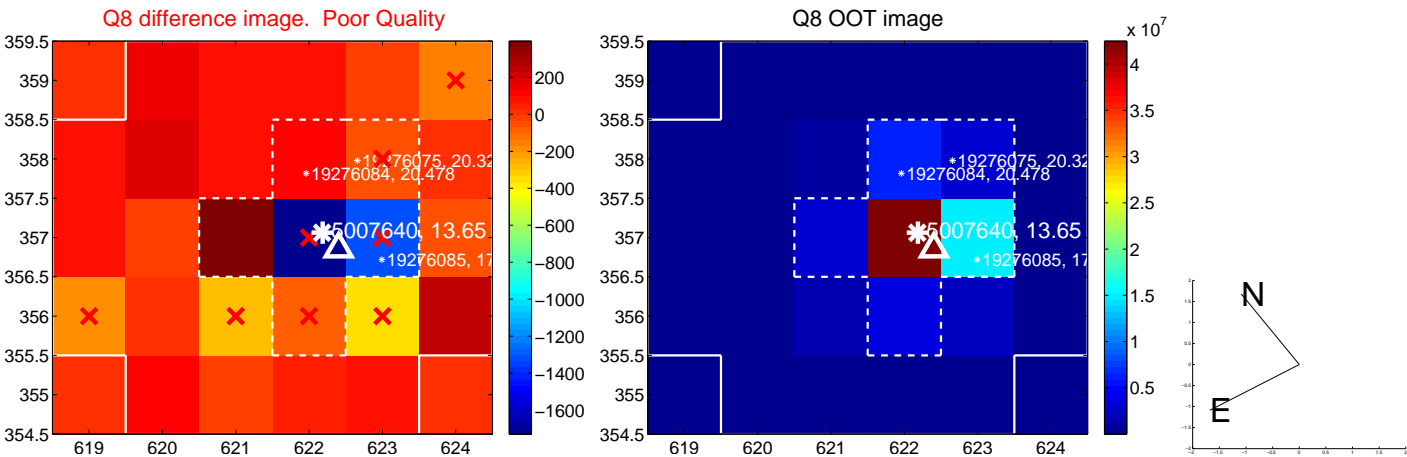
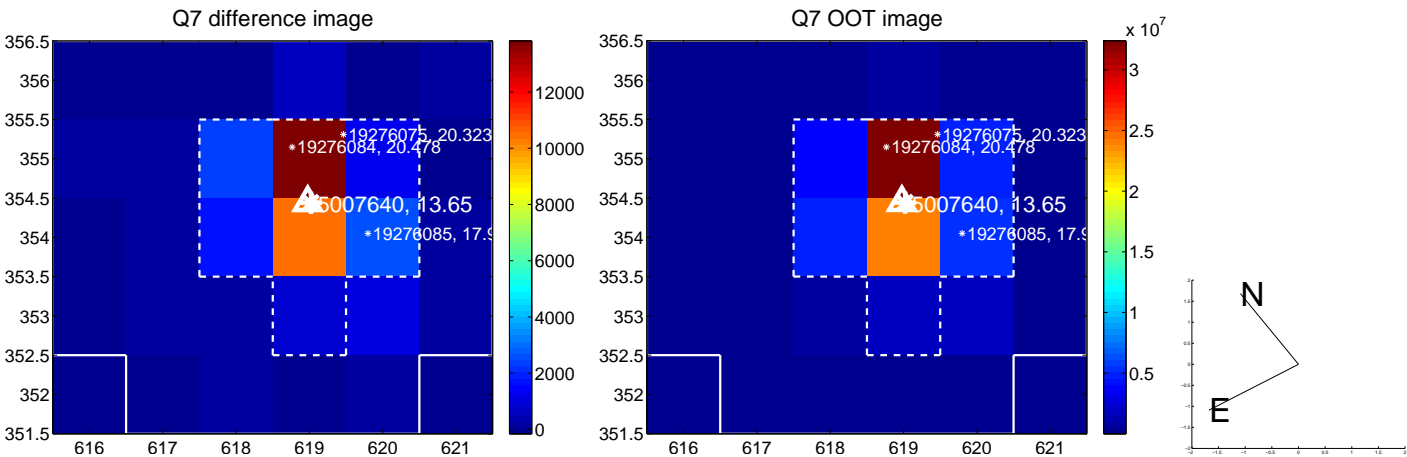
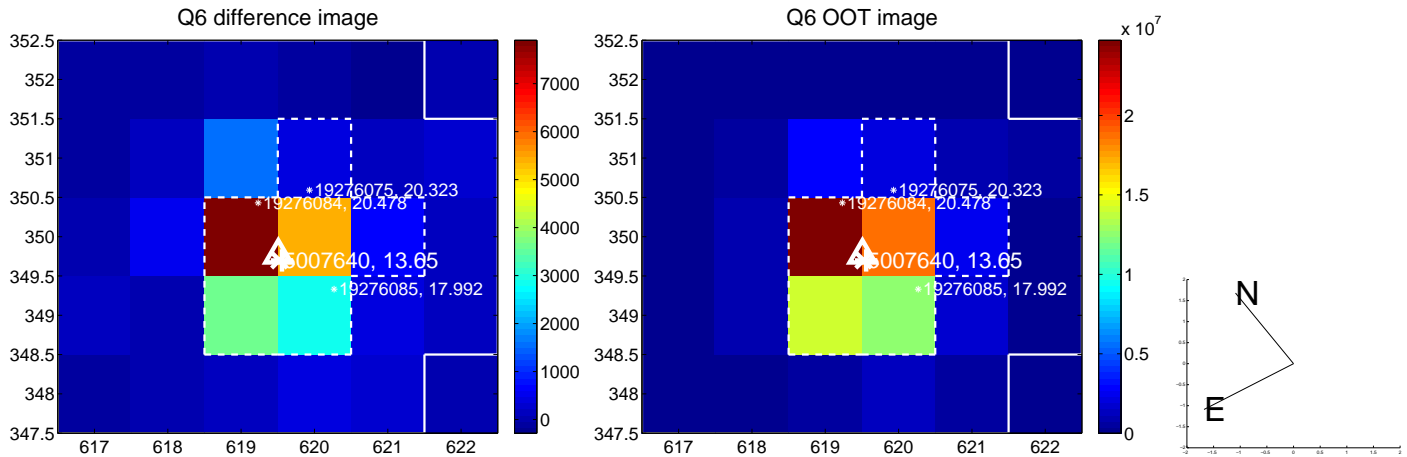
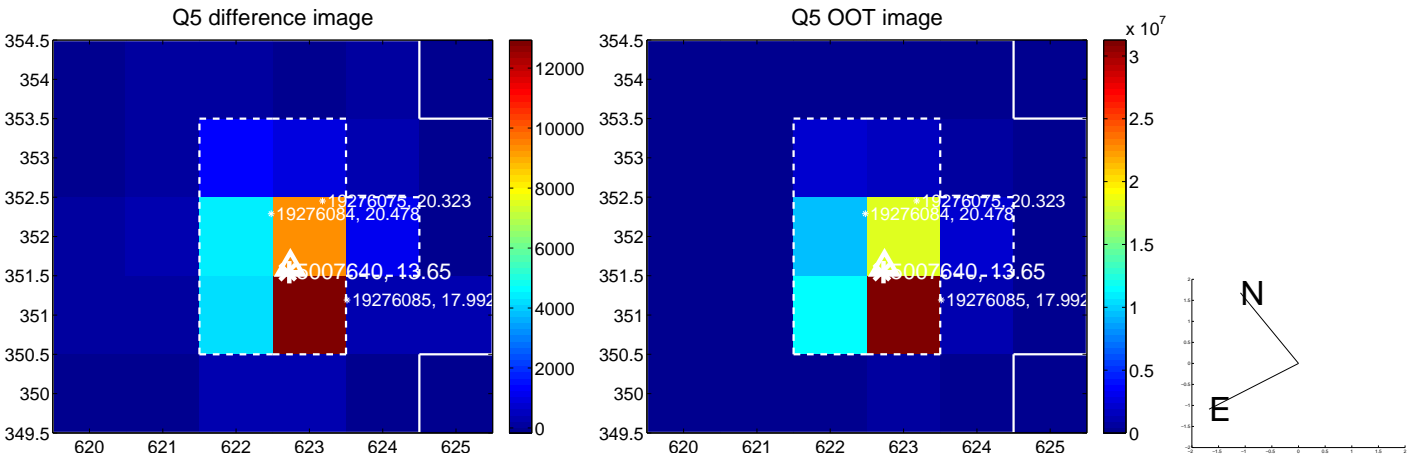


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses:** good quarterly centroid offsets; **Vermillion crosses:** bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

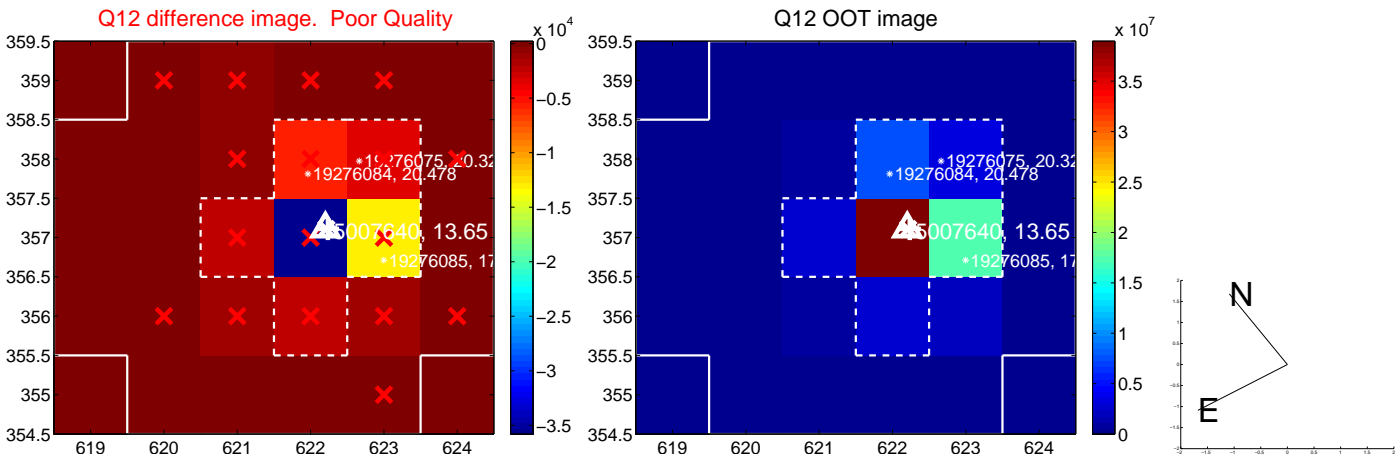
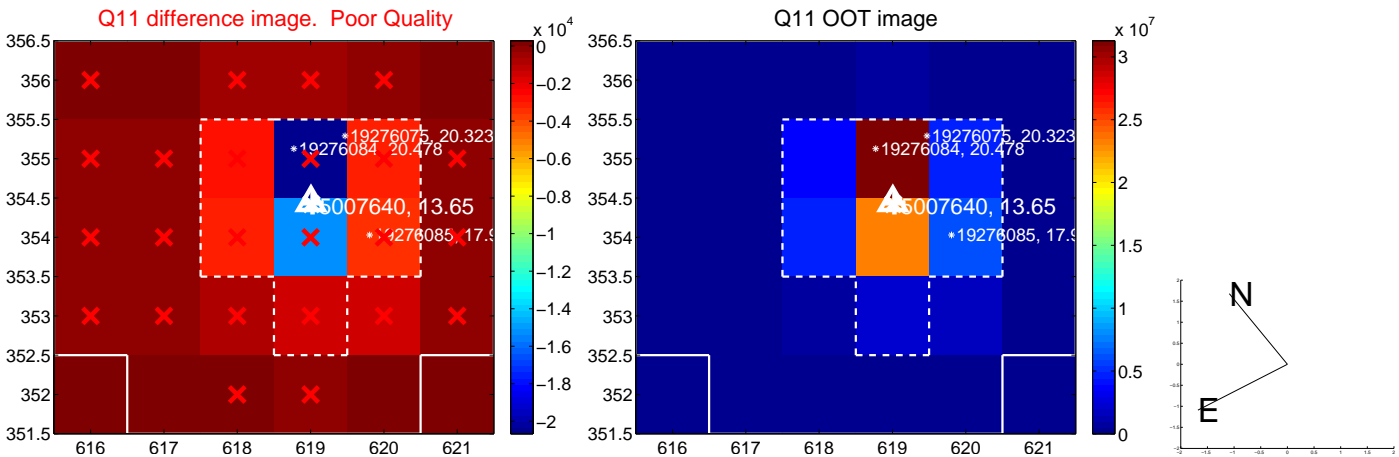
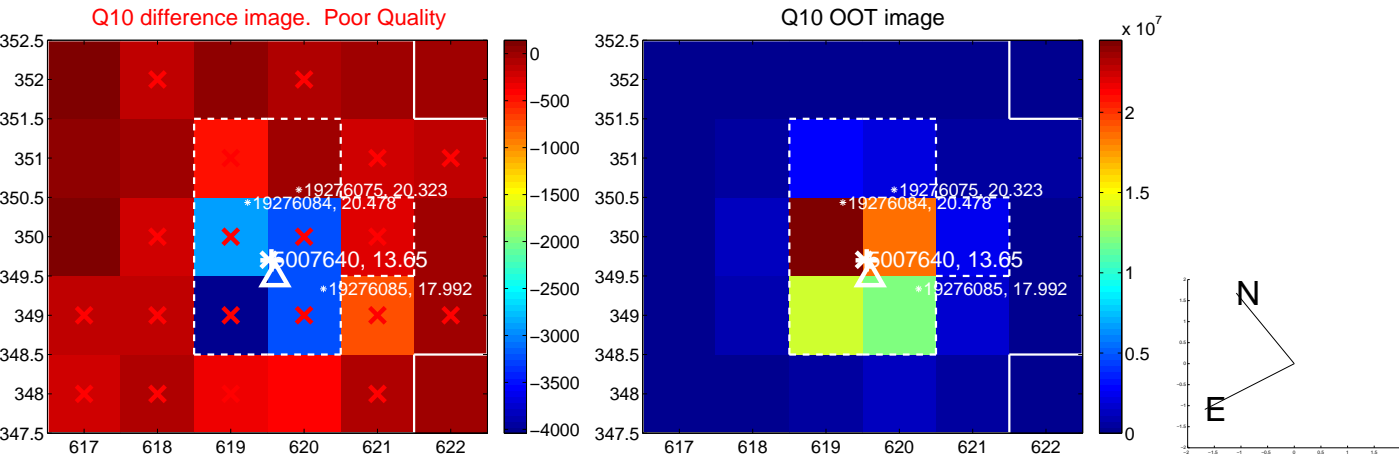
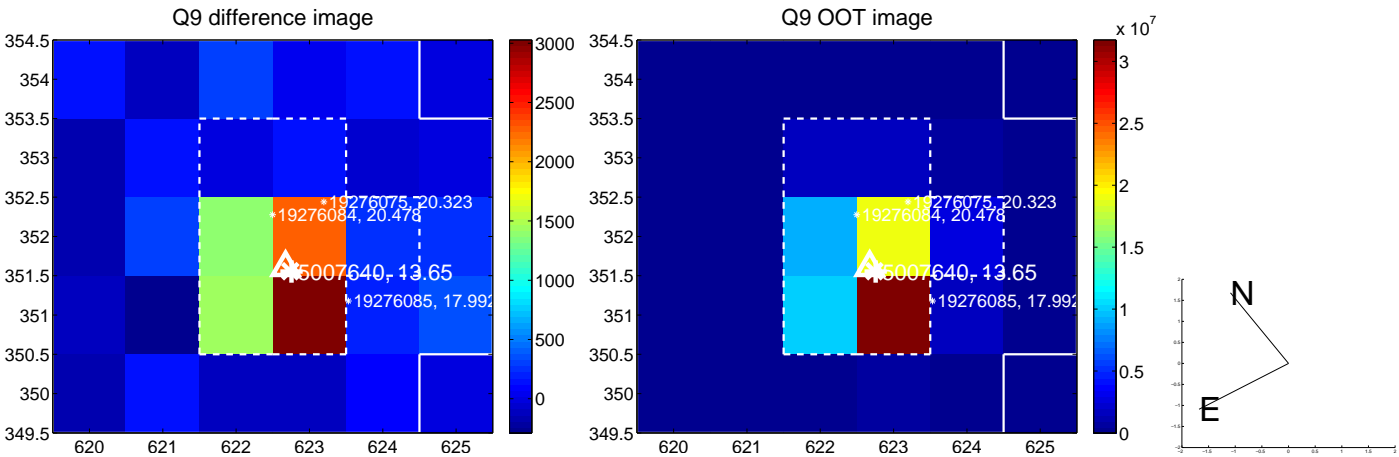
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



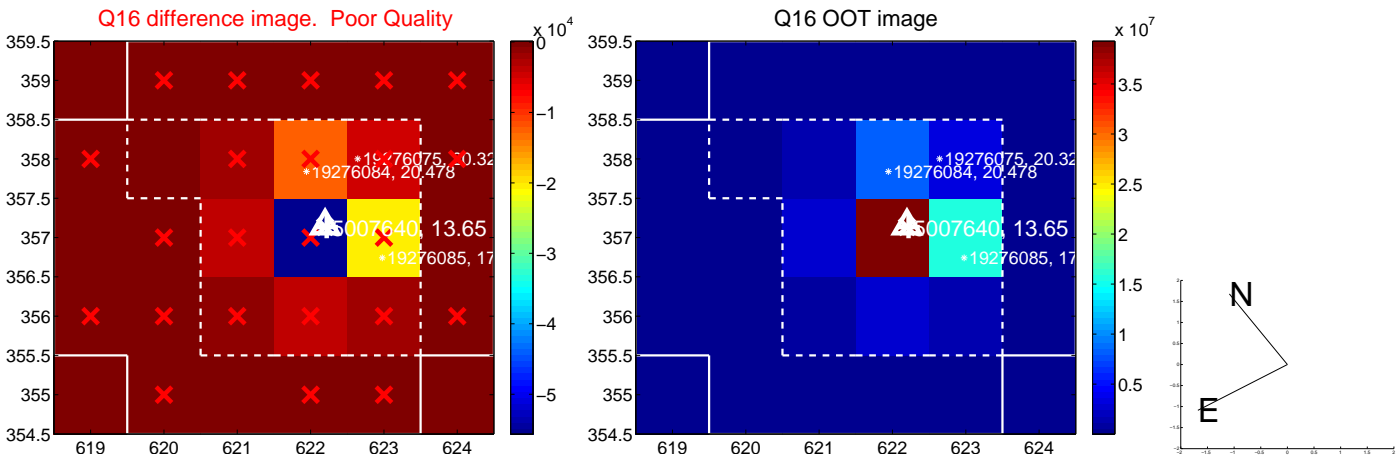
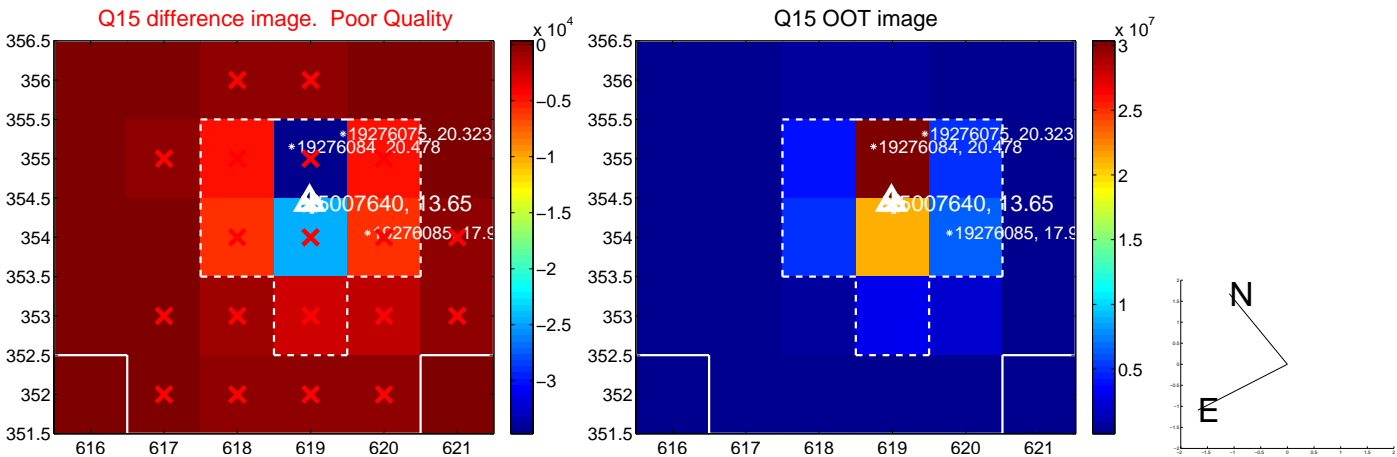
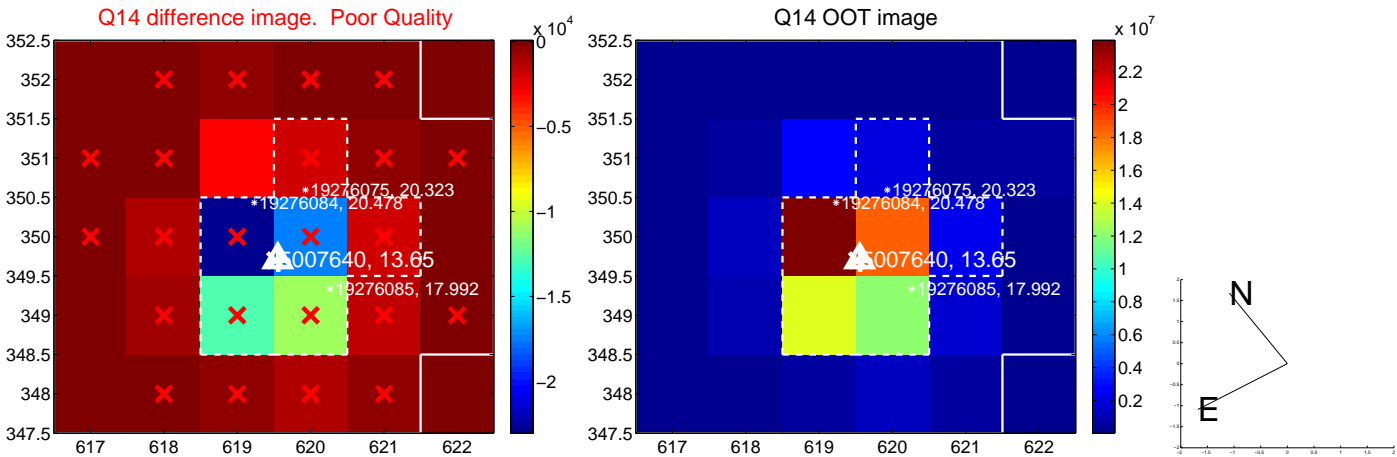
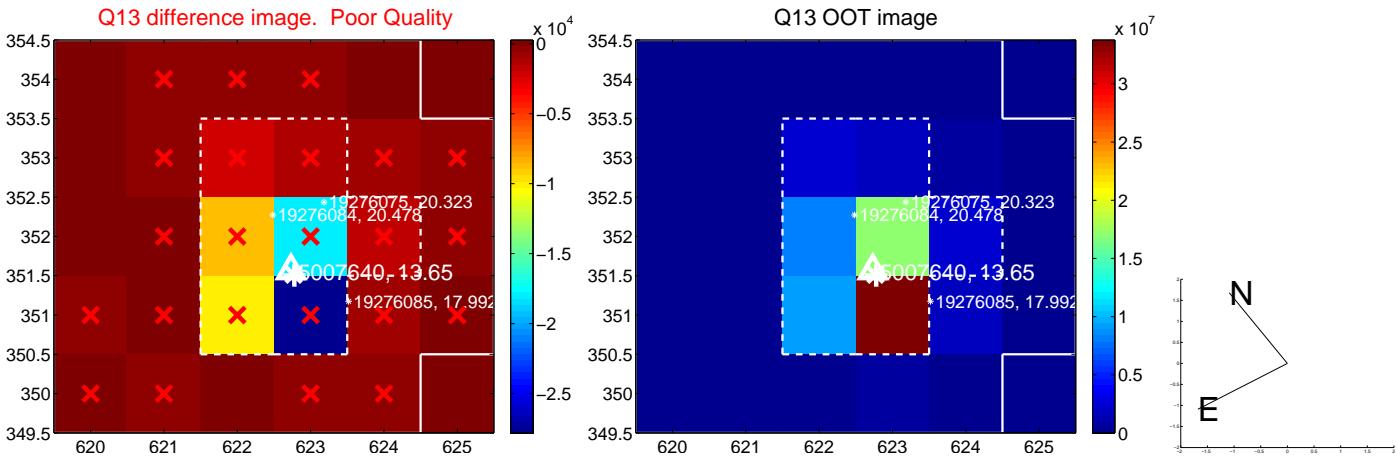
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



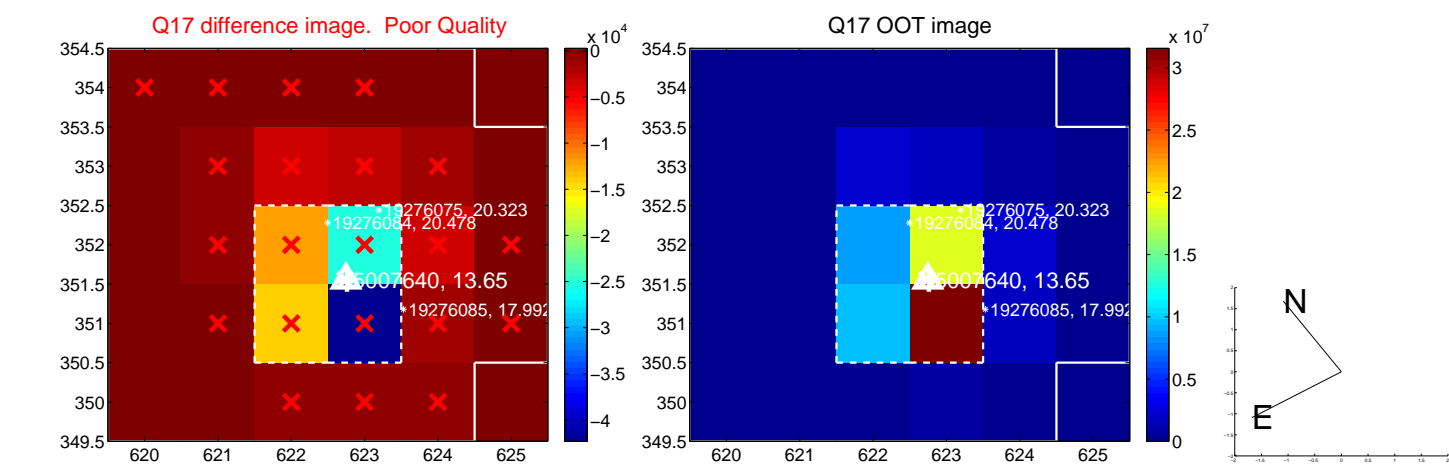
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



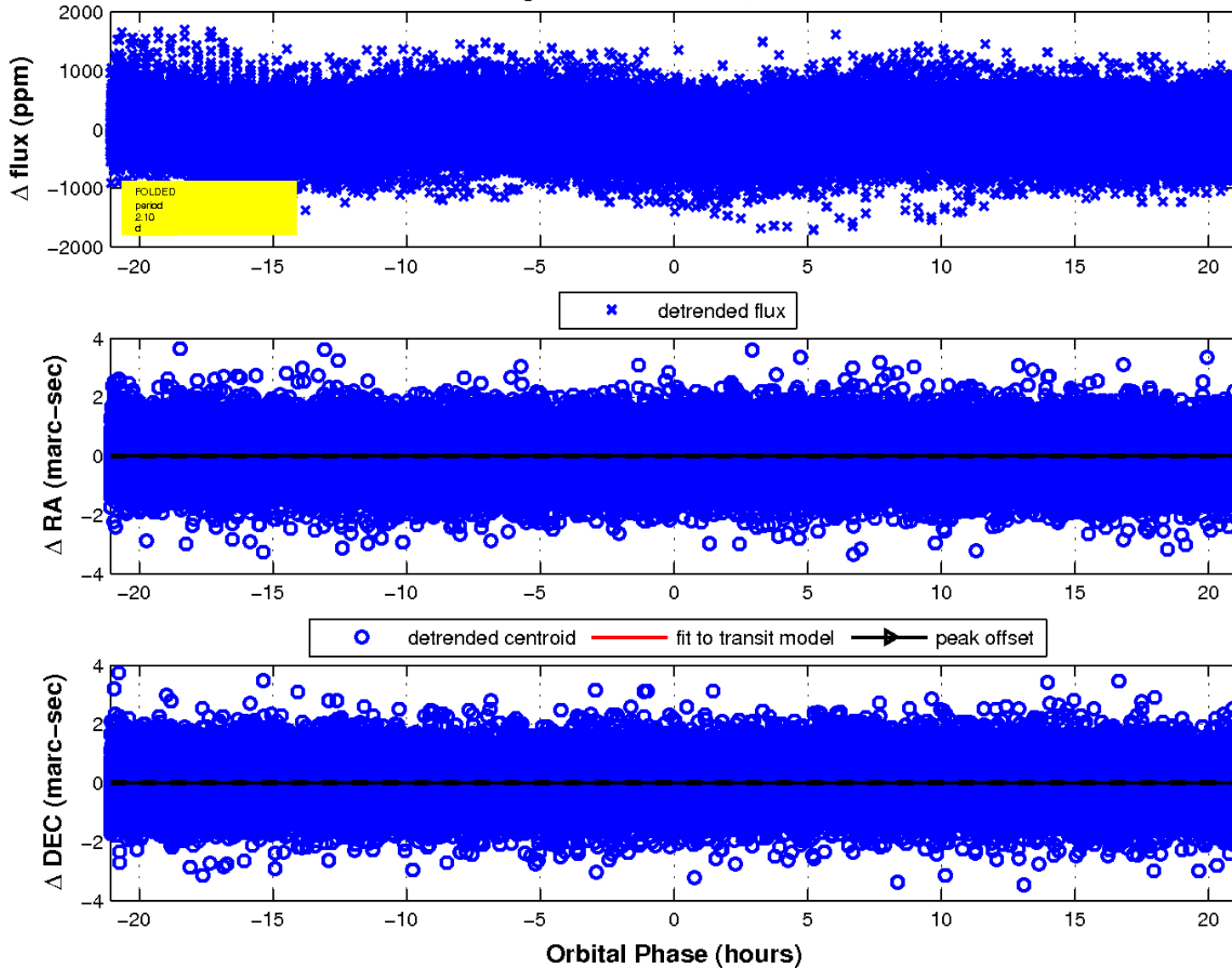
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

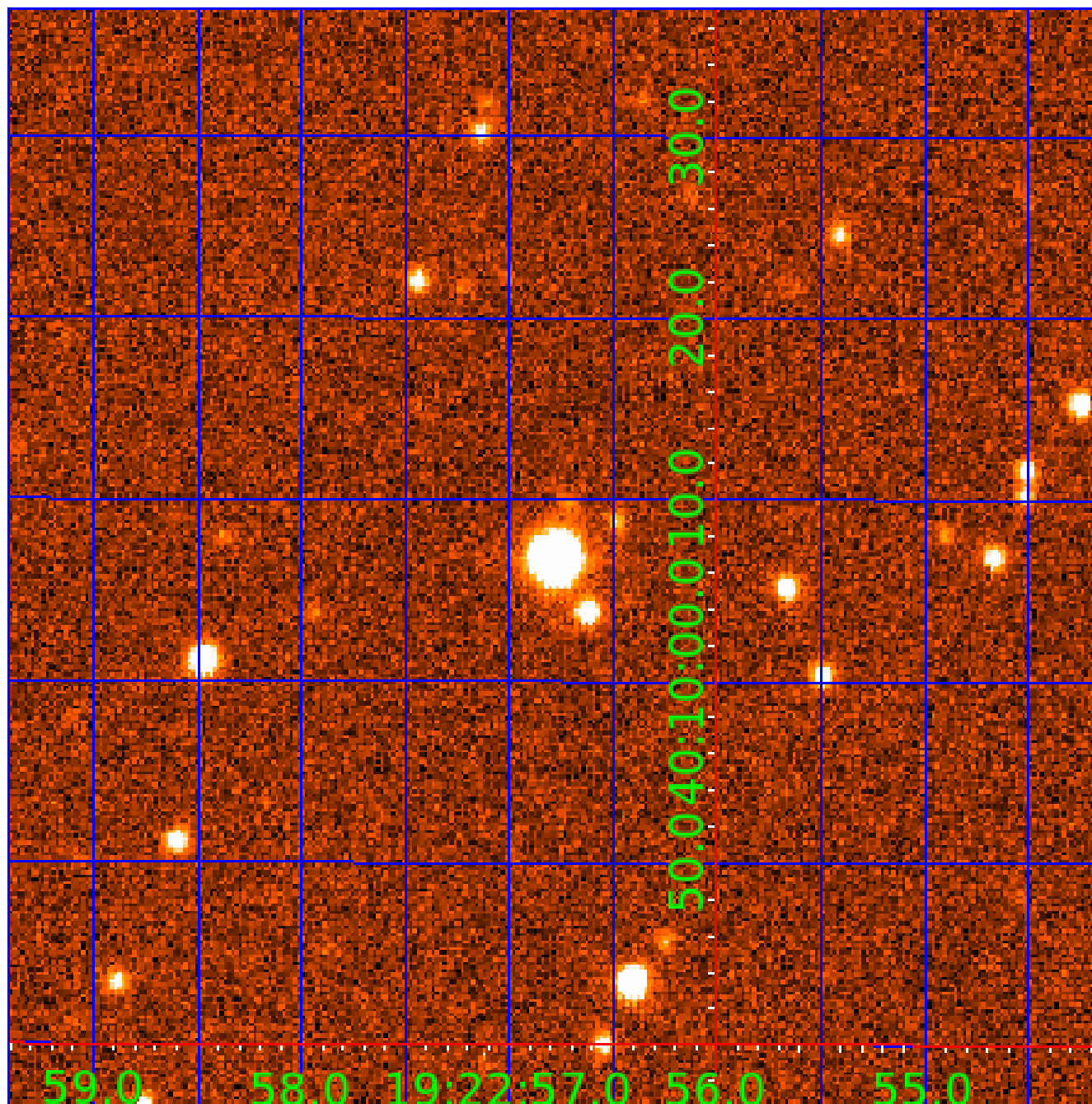


fluxWeightedCentroids, Planet 2 of 3



UKIRT Image

Declination



KIC 005007640

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})
005007640-01	OBS	No	2.112851	133.502358	2.9	9.257	10.2	0.4	1.11	6341	0.20	1563.78
005007640-02	OBS	No	2.104697	132.806518	88.0	7.028	12.0	11.4	1.11	6341	1.22	1571.87
005007640-03	OBS	No	188.560892	144.956276	213.5	10.500	8.2	-1.0	1.11	6341	1.63	3.92

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
005007640-01	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_ALT
005007640-02	OBS	FP	0.00	1	0	0	0	TRANS_GAPPED—SWEET_NTL—LPP_DV—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT
005007640-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_MARSHALL—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_NOFITS

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

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

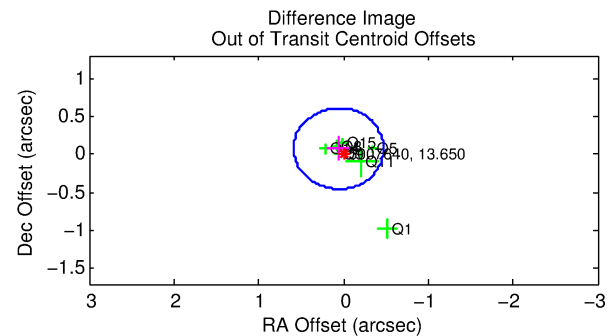
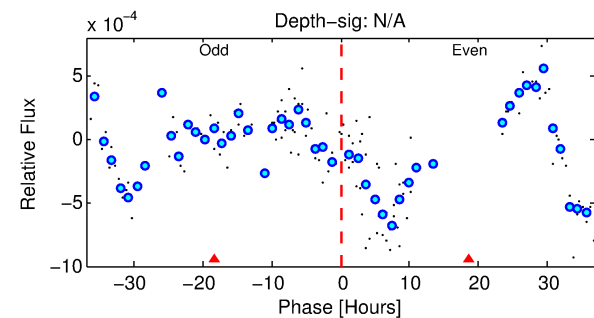
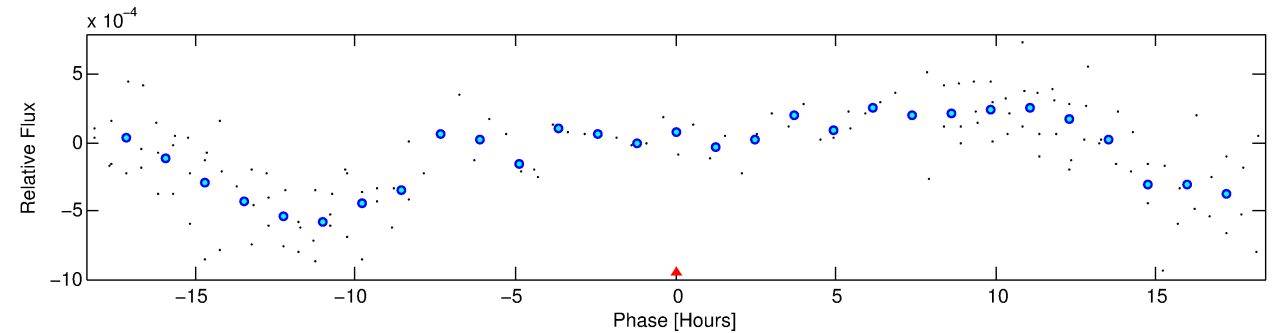
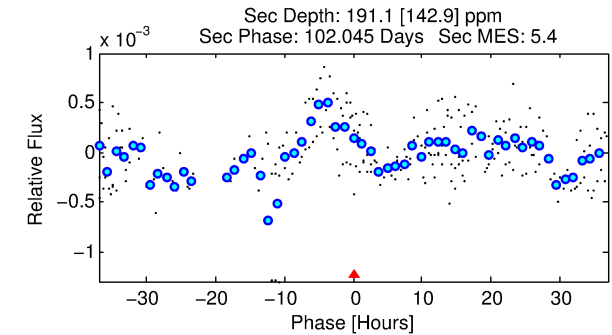
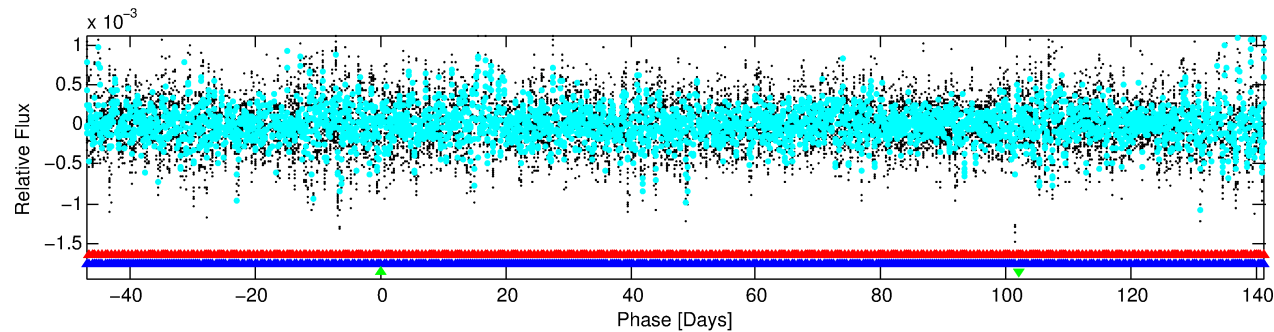
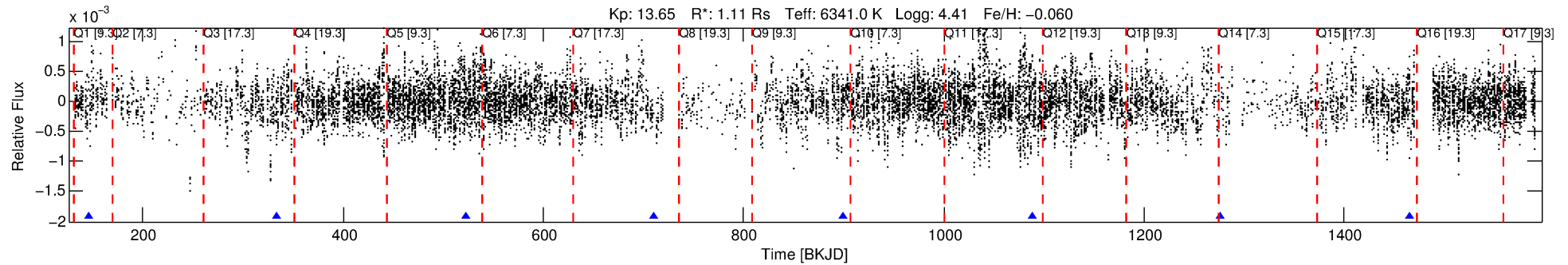
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 005007640-03

No Significant Match Found

DV One-Page Summary

KIC: 5007640 Candidate: 3 of 3 Period: 188.561 d



TPS TCE Results:

Period = 188.56089 d
Epoch = 144.9563 BKJD

DV fit results are unavailable

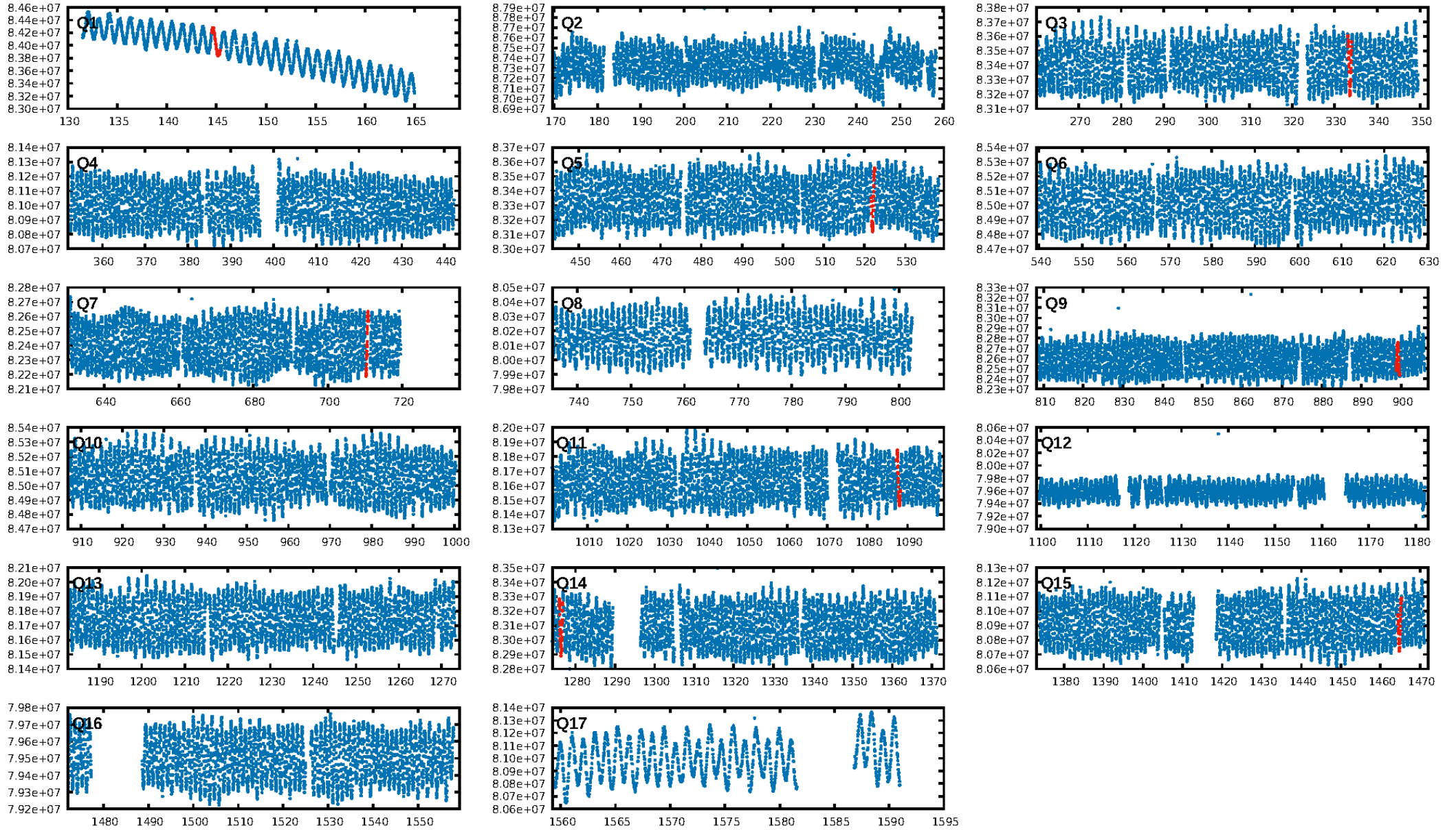
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [319.67σ]
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 5.46e-09
RollingBand-fgt: 1.00 [1/1]
GhostDiagnostic-chr: 0.6699
Centroid-sig: 0.1%
Centroid-so: 1.101 arcsec [2.32σ]
OotOffset-rm: 0.097 arcsec [0.55σ]
KicOffset-rm: 0.068 arcsec [0.60σ]
OotOffset-st: 1/3/0/3 [7]
KicOffset-st: 1/3/0/3 [7]
DiffImageQuality-fgm: 0.43 [3/7]
DiffImageOverlap-fno: 0.14 [1/7]

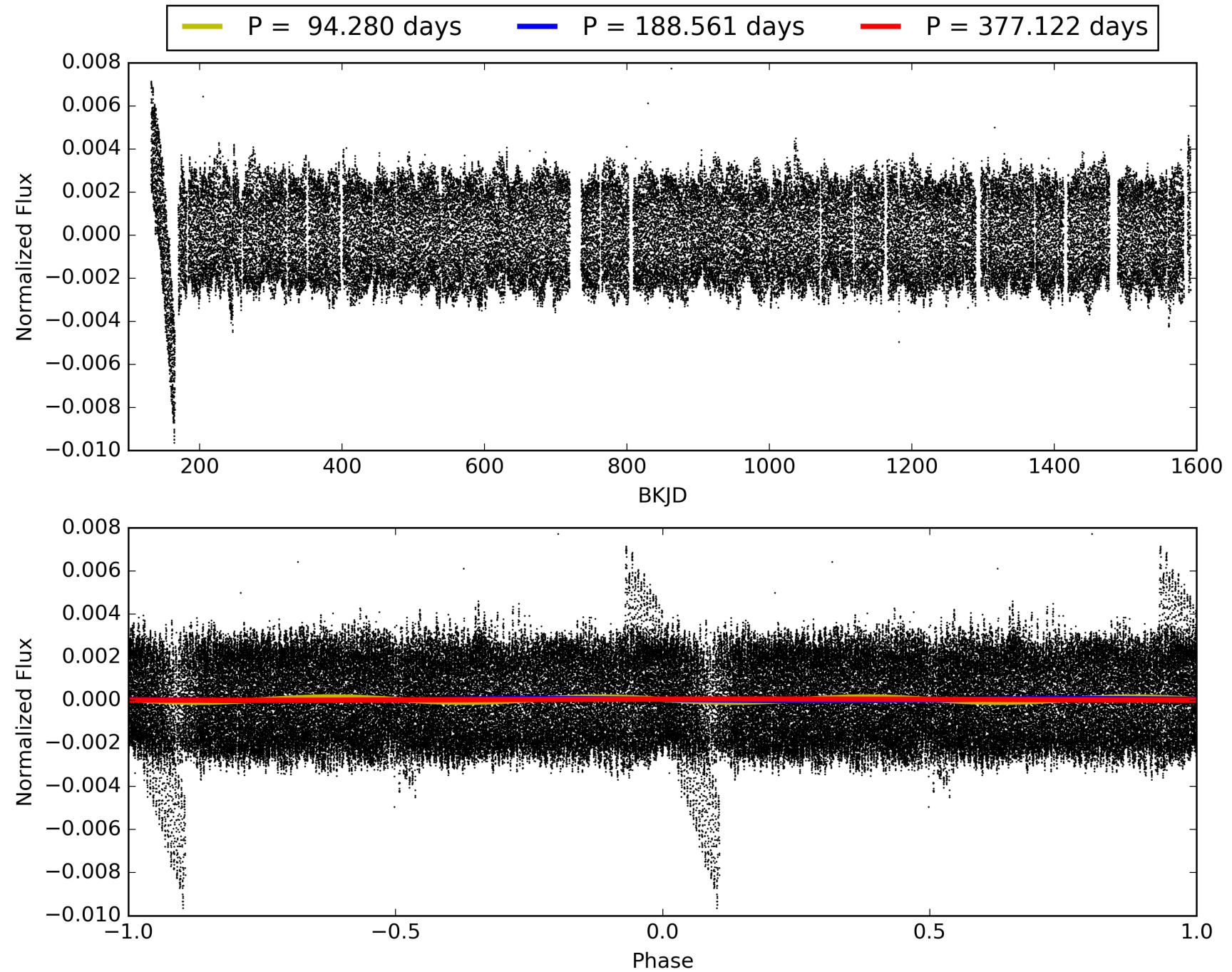
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 31-Jan-2016 18:28:44 Z

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

TCE 005007640-03, PDC Light Curves

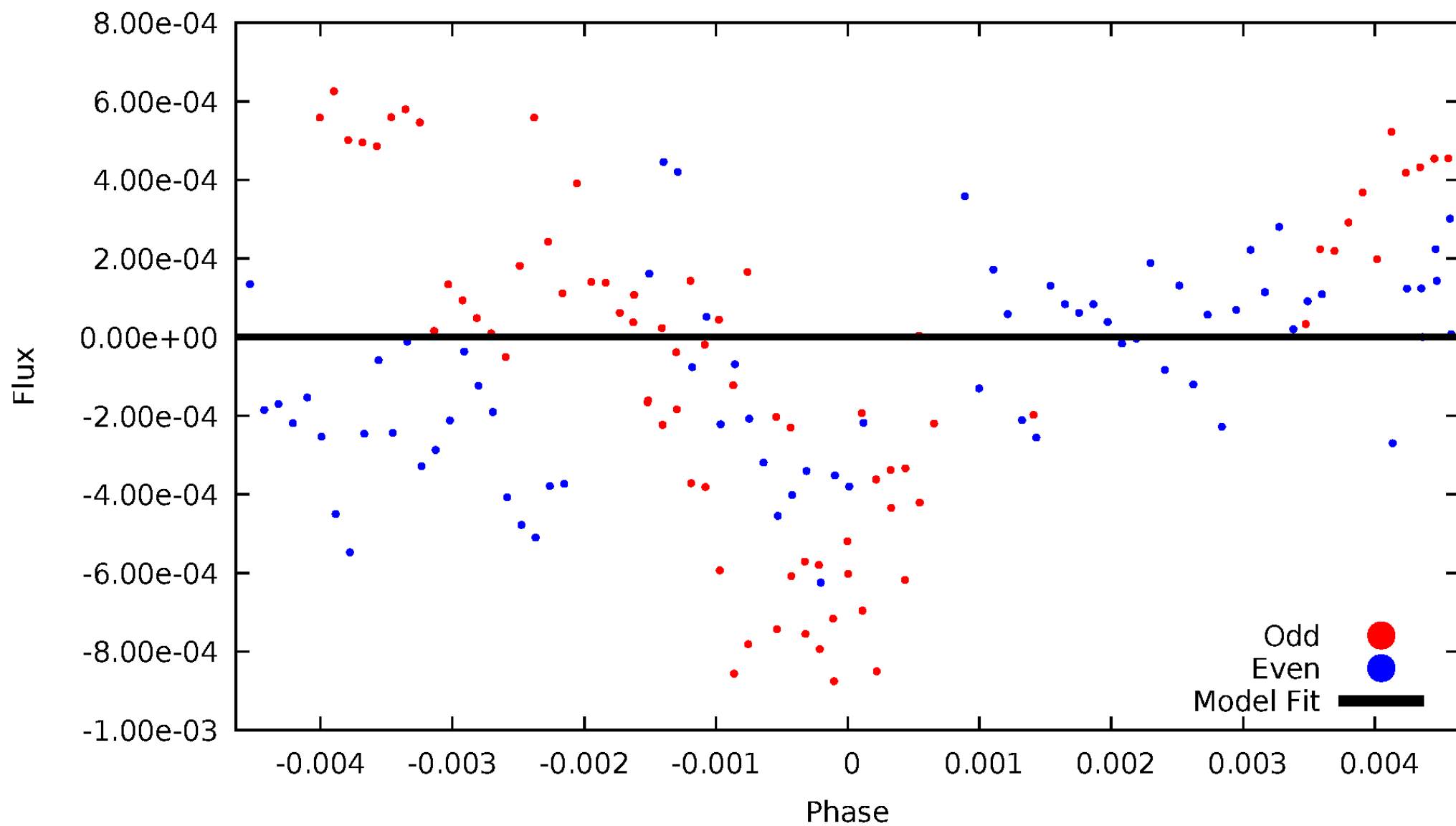


TCE 005007640-03



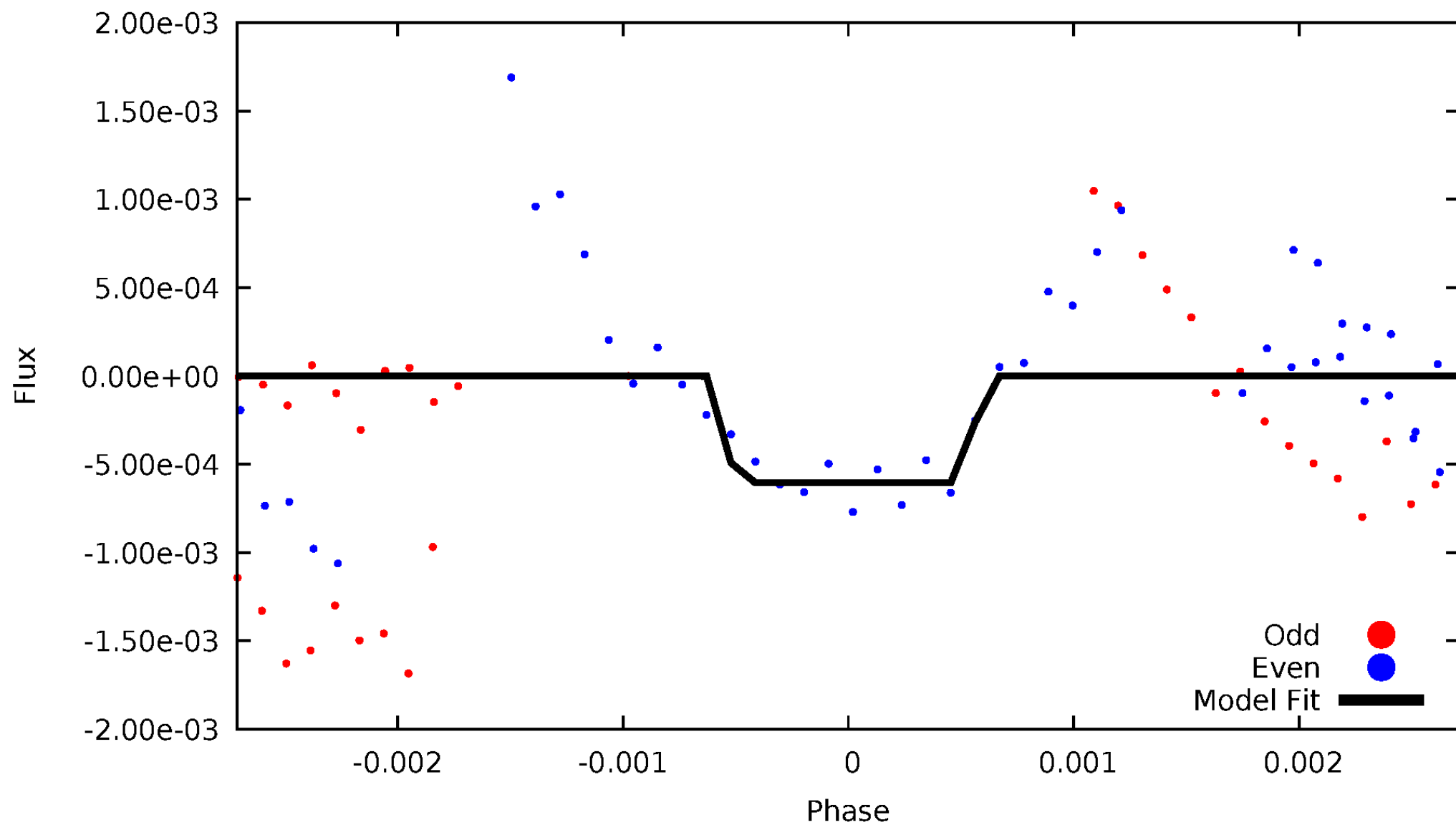
DV Odd/Even

TCE 005007640-03



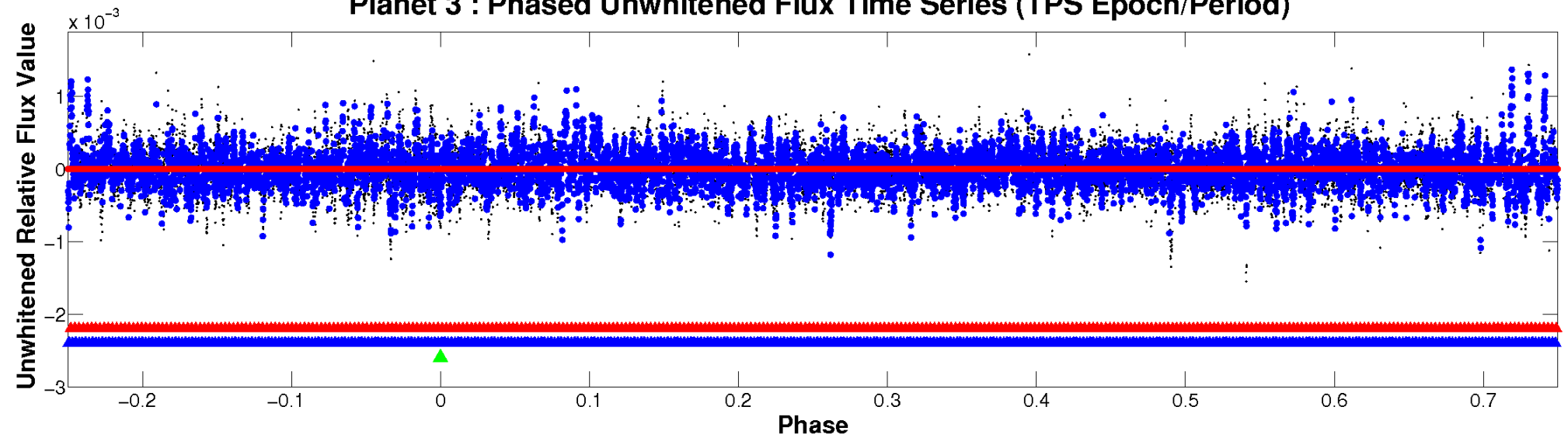
ALT Odd/Even

TCE 005007640-03

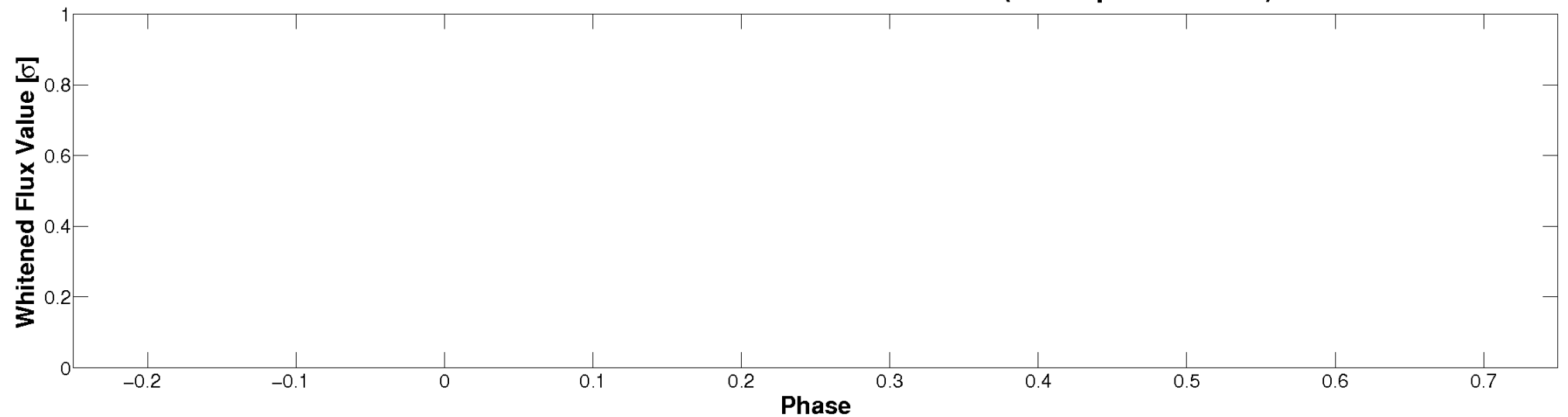


Non-Whitened Vs. Whitened Light Curve

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

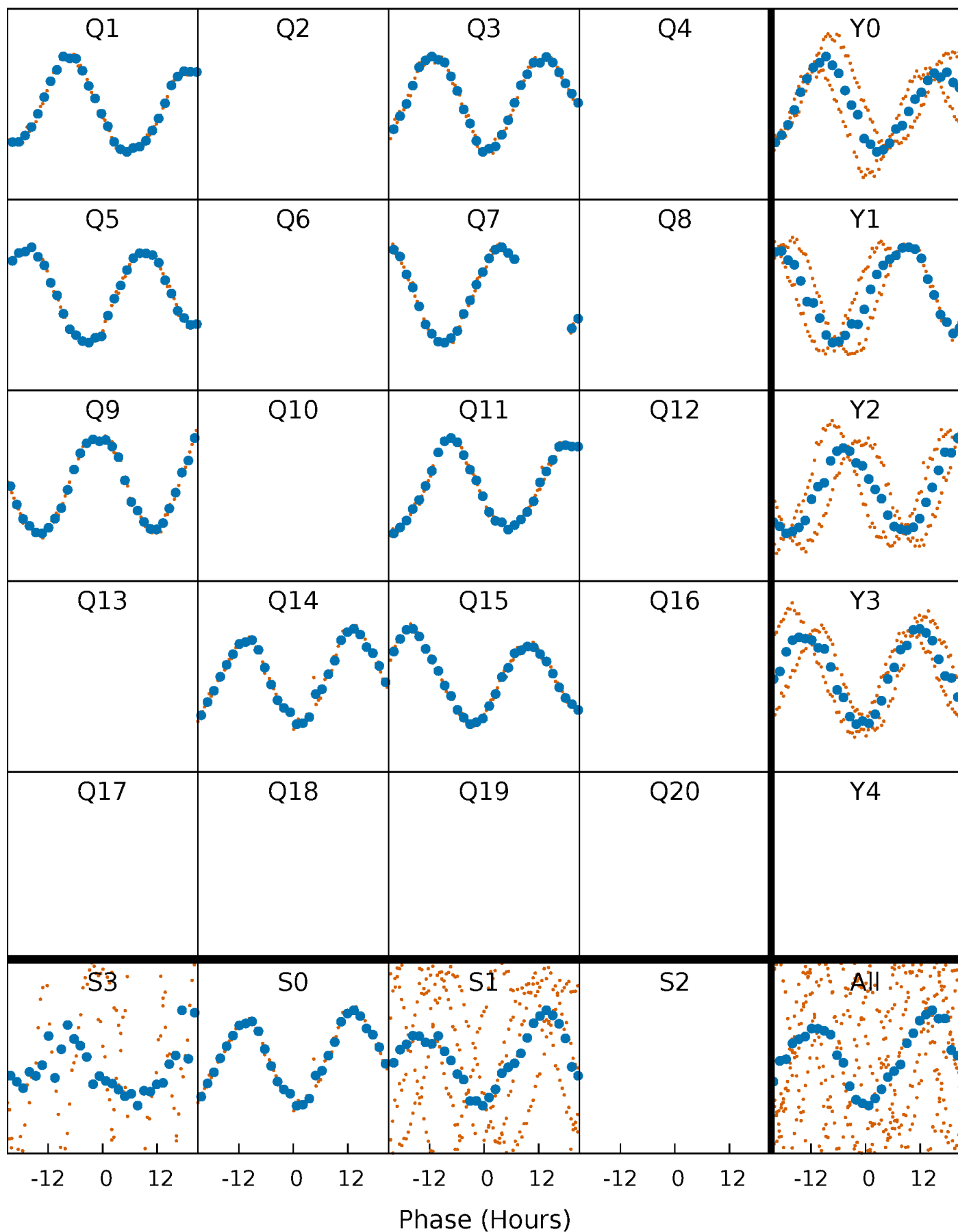


Planet 3 : Phased Whitened Flux Time Series (TPS Epoch/Period)



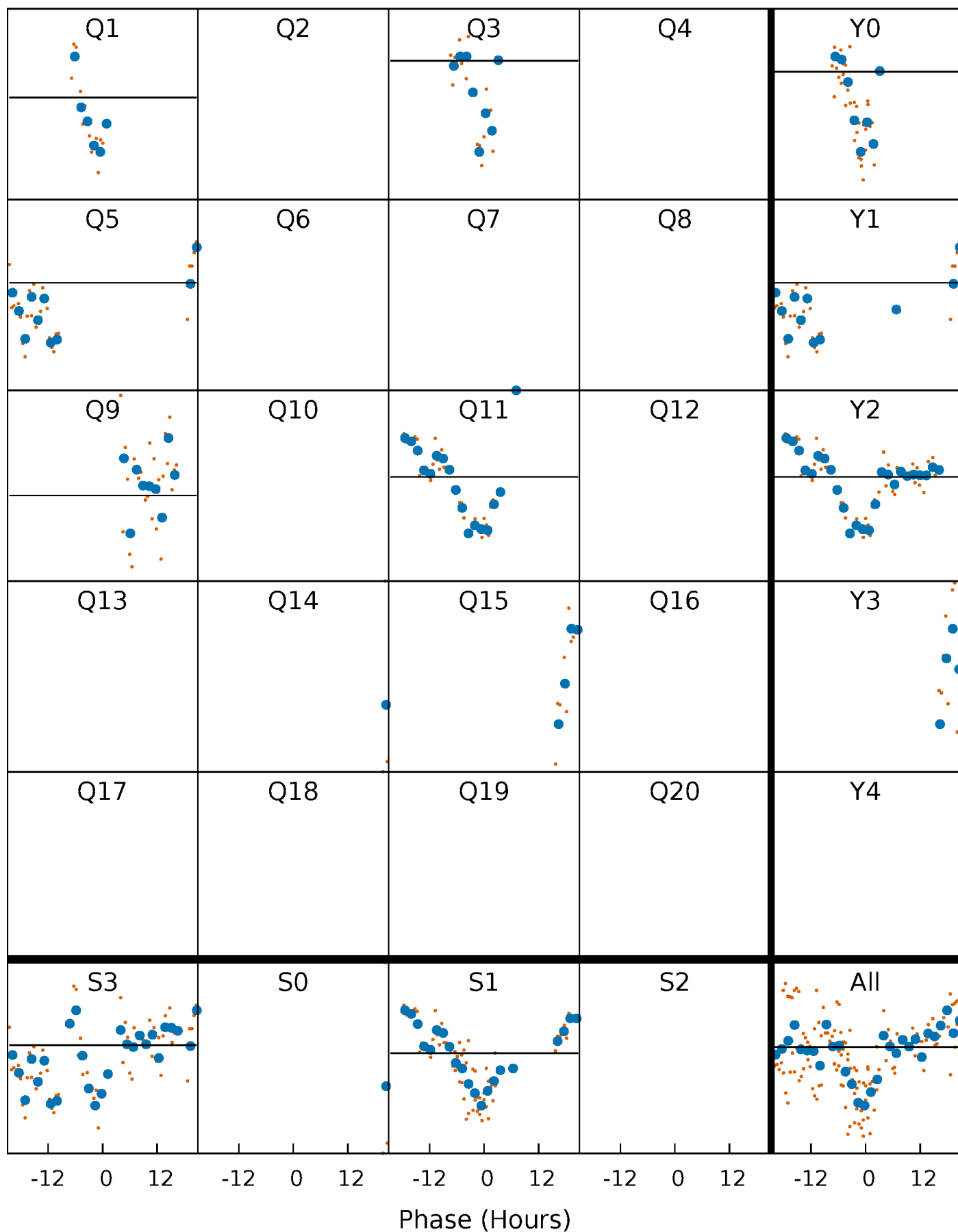
PDC Quarter-Phased Transit Curves

TCE 005007640-03 P=188.560892 Days $T_0=144.956276$ (BKJD)



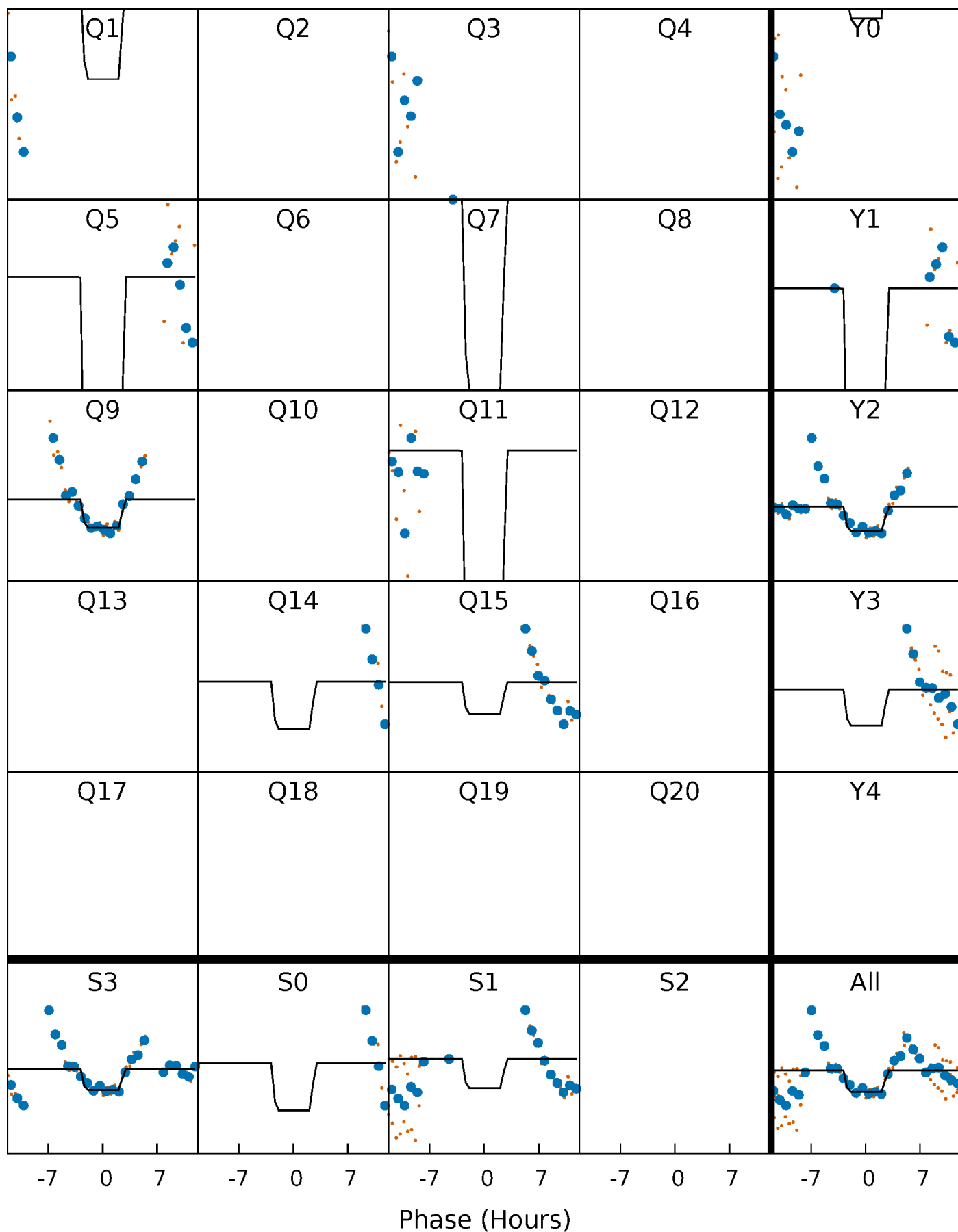
DV Quarter-Phased Transit Curves

TCE 005007640-03 $P=188.560892$ Days $T_0=144.956276$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

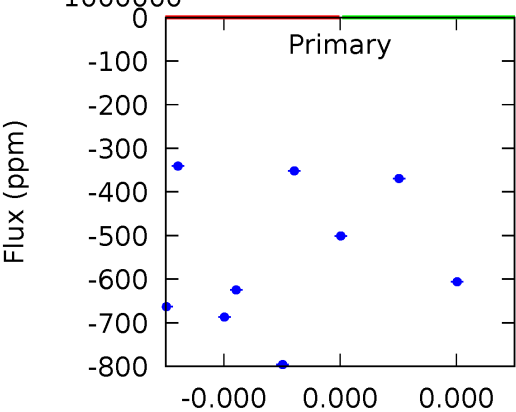
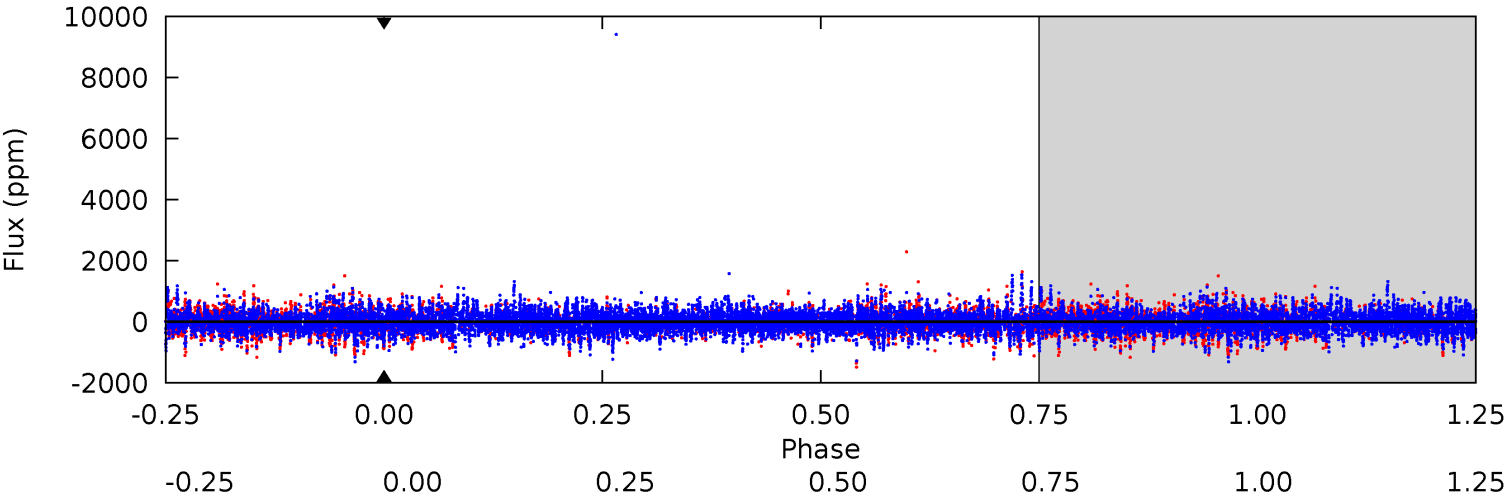
TCE 005007640-03 P=188.560892 Days $T_0=145.406026$ (BKJD)



DV Model-Shift Uniqueness Test

005007640-03, P = 188.560892 Days, E = 144.956276 Days

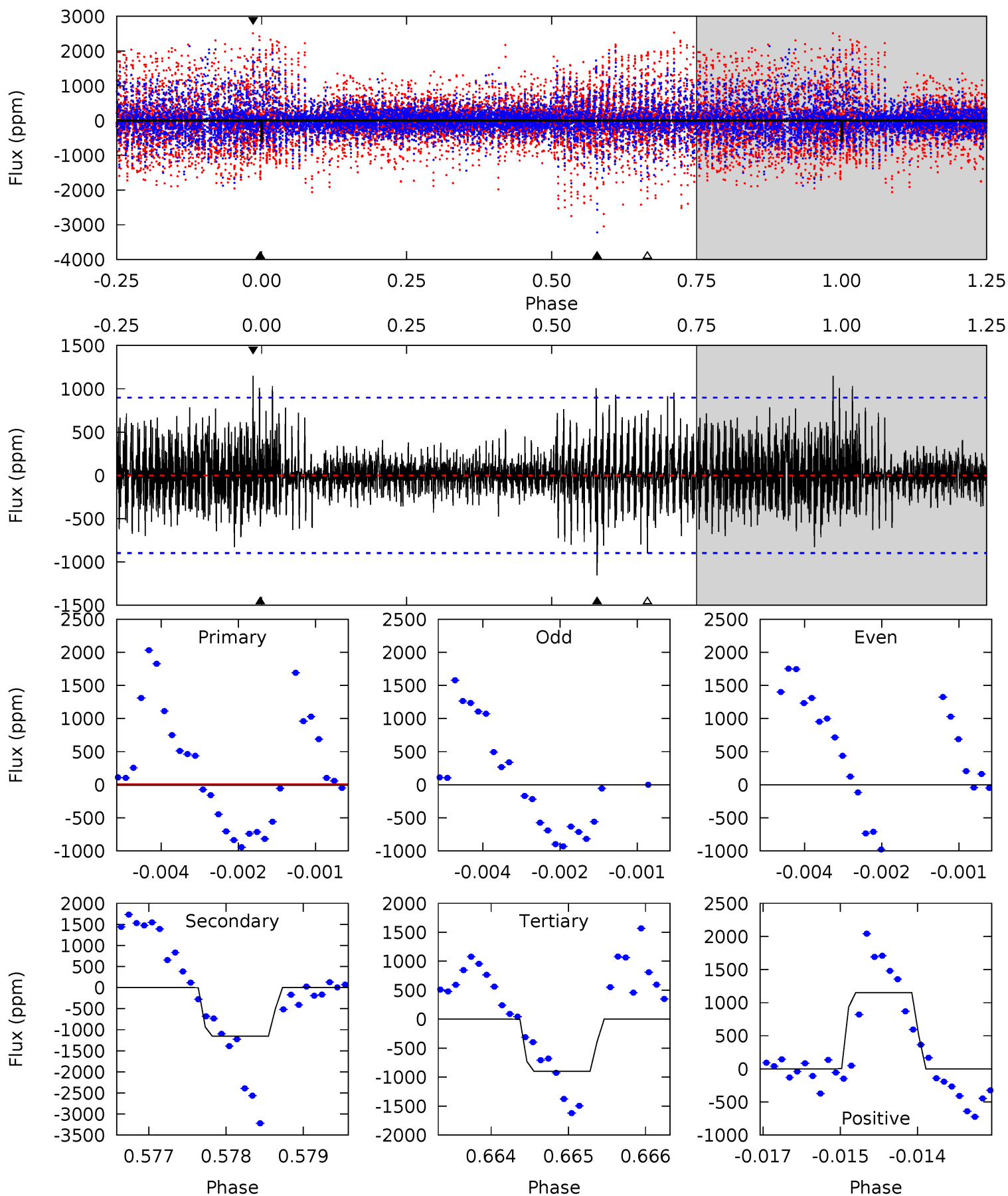
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
0	0	0	0	1.00	1.00	1.00	0	0	0	0	0	0	0	0



Alt Model-Shift Uniqueness Test

005007640-03, P = 188.560892 Days, E = 145.406026 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
3.56	6.96	5.43	6.94	5.42	3.24	1.38	-1.87	-3.39	1.53	0.02	0.17	1.00	0.50	0.27



Stellar Parameters For KIC 005007640

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6341^{+153}_{-210}	$4.409^{+0.065}_{-0.208}$	$-0.060^{+0.250}_{-0.300}$	$1.111^{+0.353}_{-0.141}$	$1.154^{+0.154}_{-0.154}$	$1.187^{+0.325}_{-0.613}$
	+2%/-3%	+1%/-5%	+417%/-500%	+32%/-13%	+13%/-13%	+27%/-52%
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 005007640-03 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	0 ± 1000000	$9.45^{+9.94}_{-6.99}$	510^{+34}_{-25}	2925^{+29158}_{-29920}	$254^{+630736}_{-524338}$
Alt.	-1152 ± 166	$10.33^{+10.14}_{-6.70}$	510^{+42}_{-26}	4331^{+2614}_{-925}	2665^{+18547}_{-2005}

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 $A_{obs} \gg 1.0$

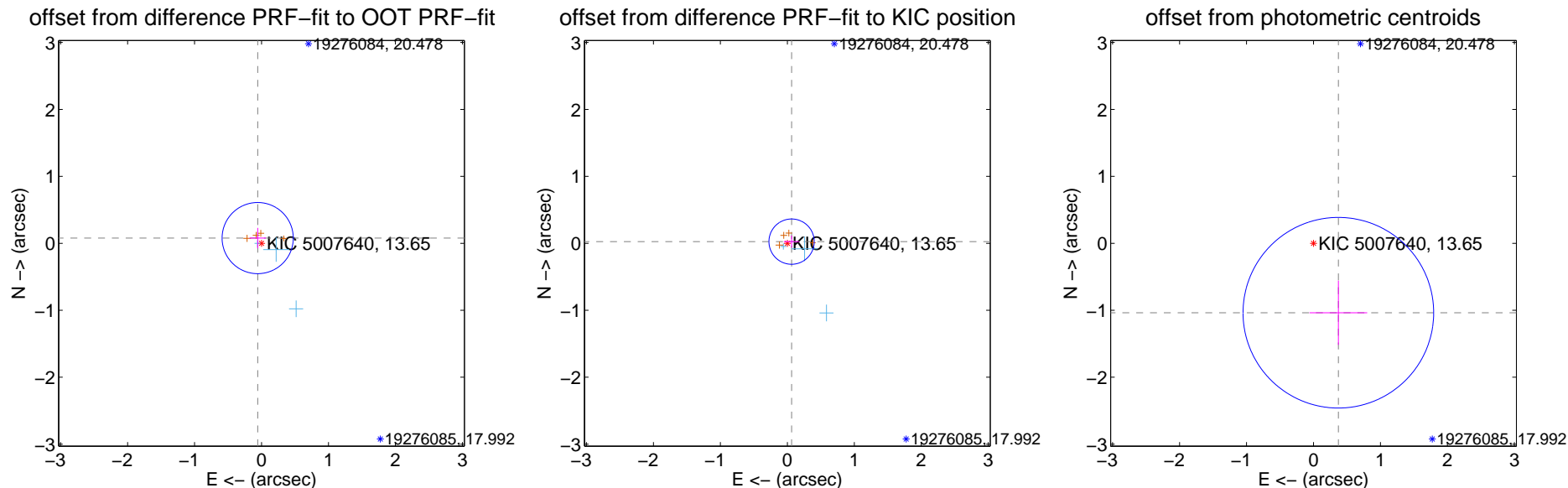
DV Centroid Data

Supplemental centroid analysis for 005007640-03. Kepler magnitude: 13.65. Transit SNR -1.00

There are 3 quarters with good PRF difference image offsets

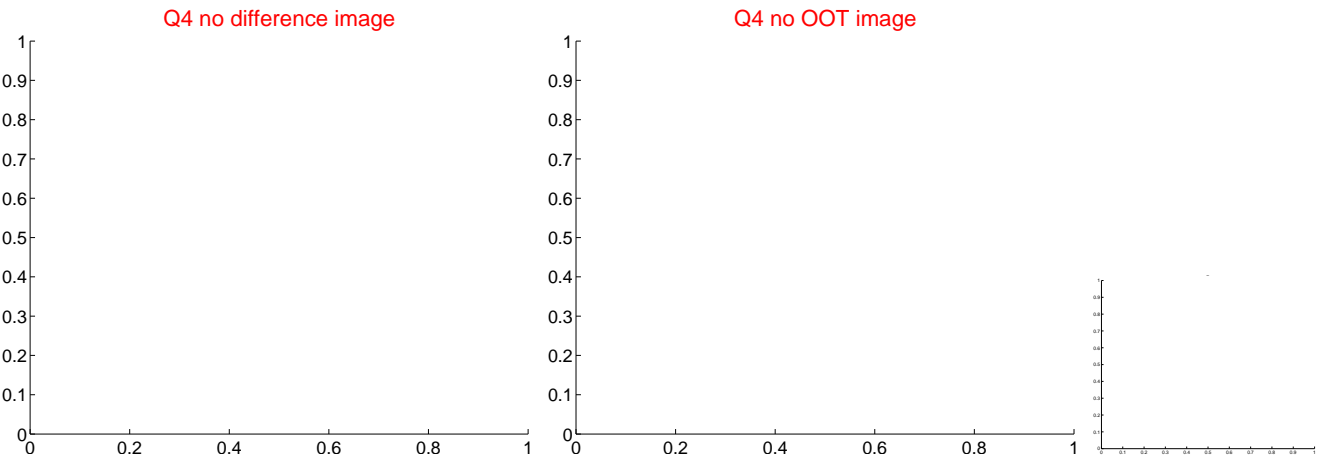
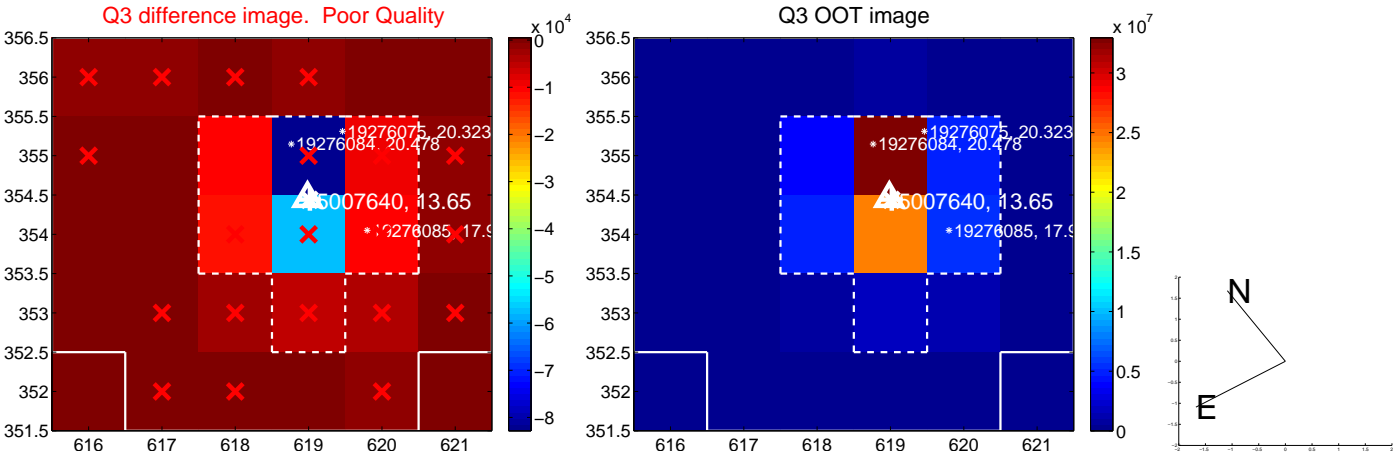
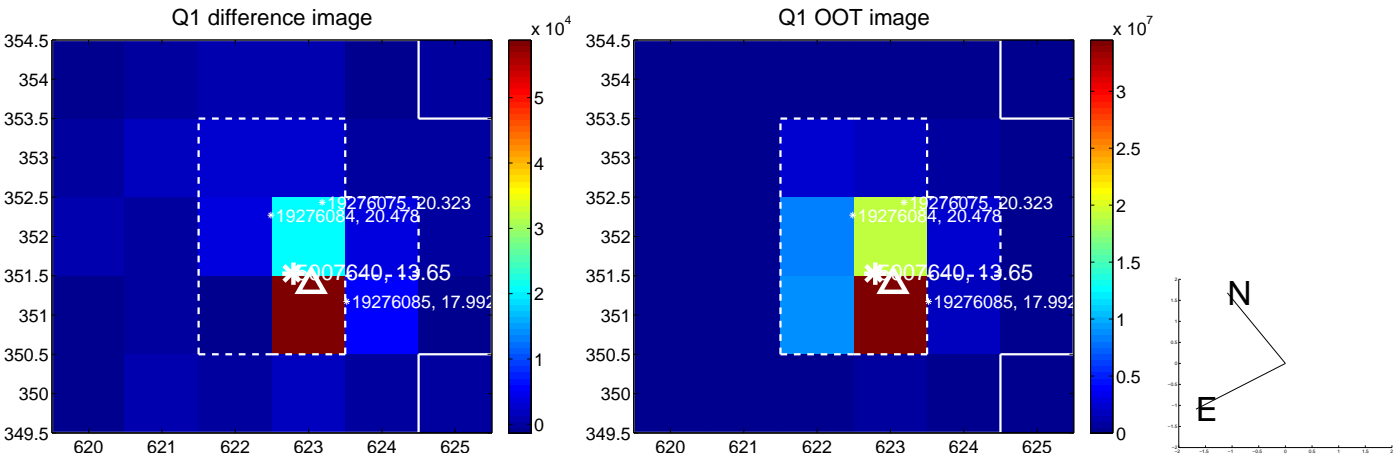
The direct PRF centroid is offset from the target star catalog position by about 0.03 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.097 ± 0.177	0.55	0.057 ± 0.123	0.078 ± 0.152
PRF-fit source offset from KIC position	0.068 ± 0.113	0.60	-0.063 ± 0.116	0.025 ± 0.090
photometric centroid source offset	1.10 ± 0.47	2.32	-0.37 ± 0.43	-1.04 ± 0.48

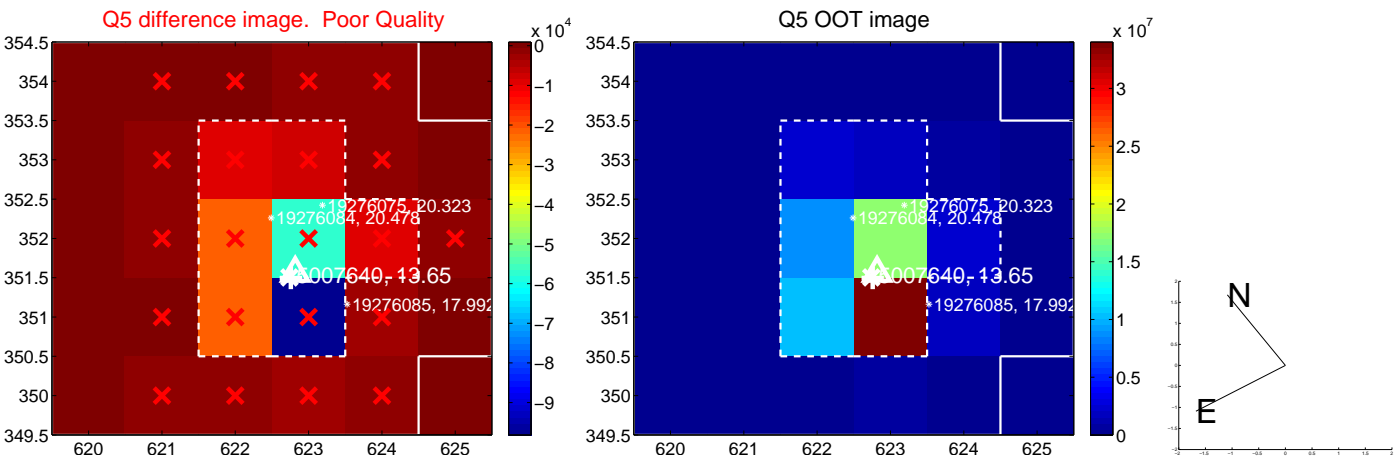


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

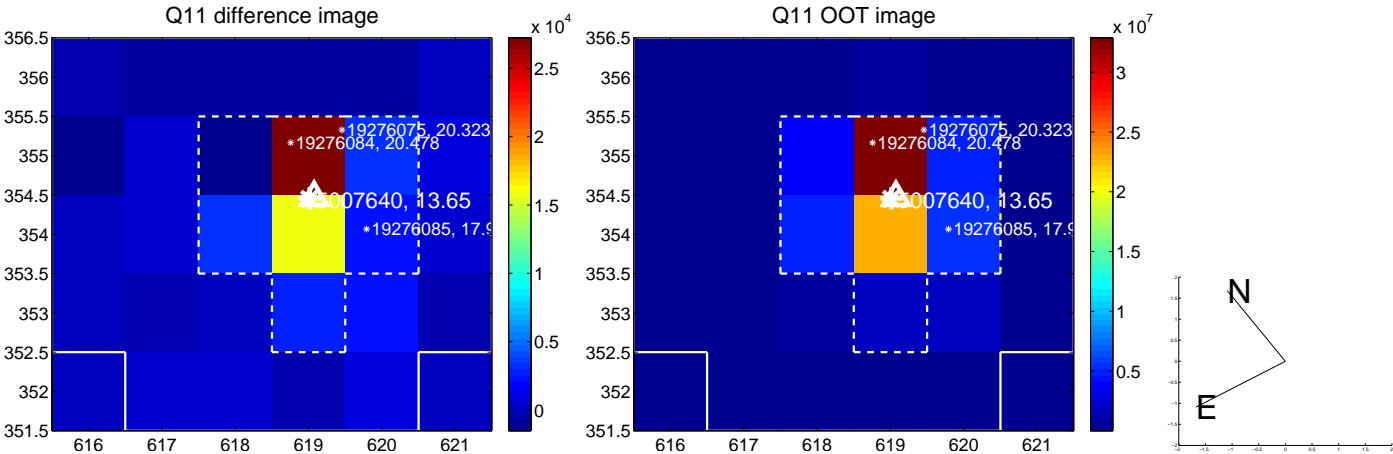
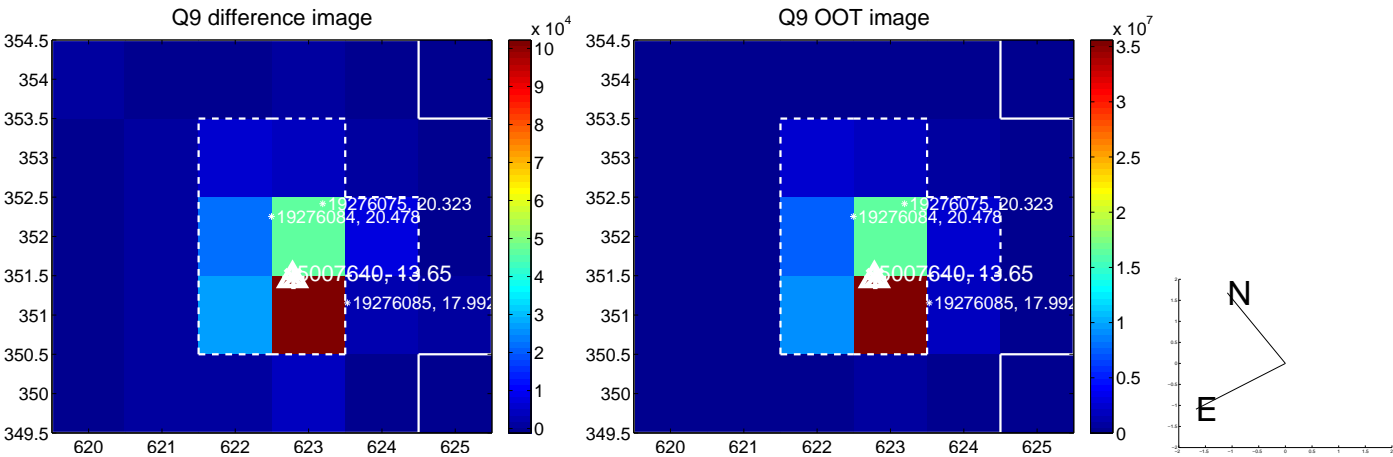
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



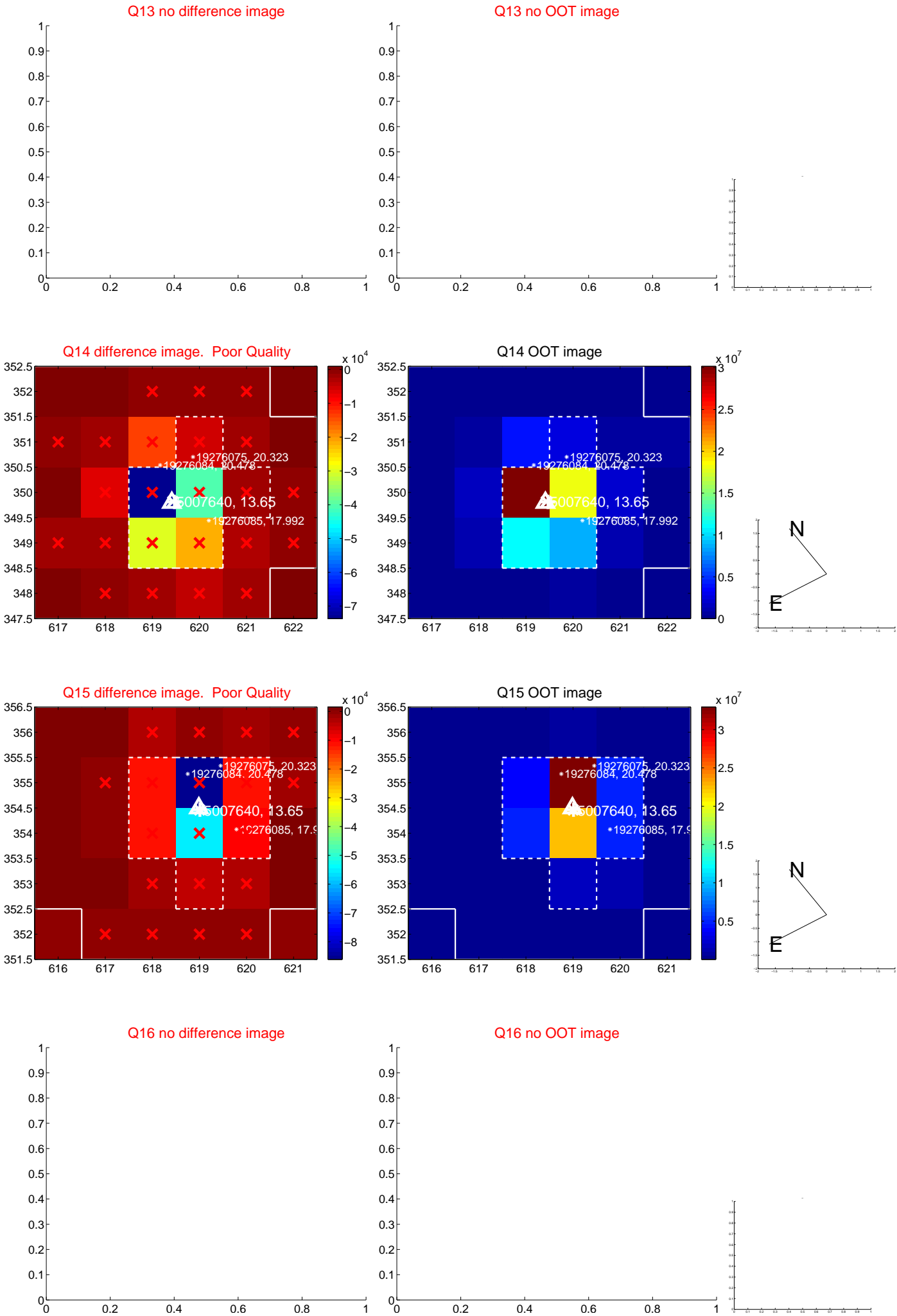
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



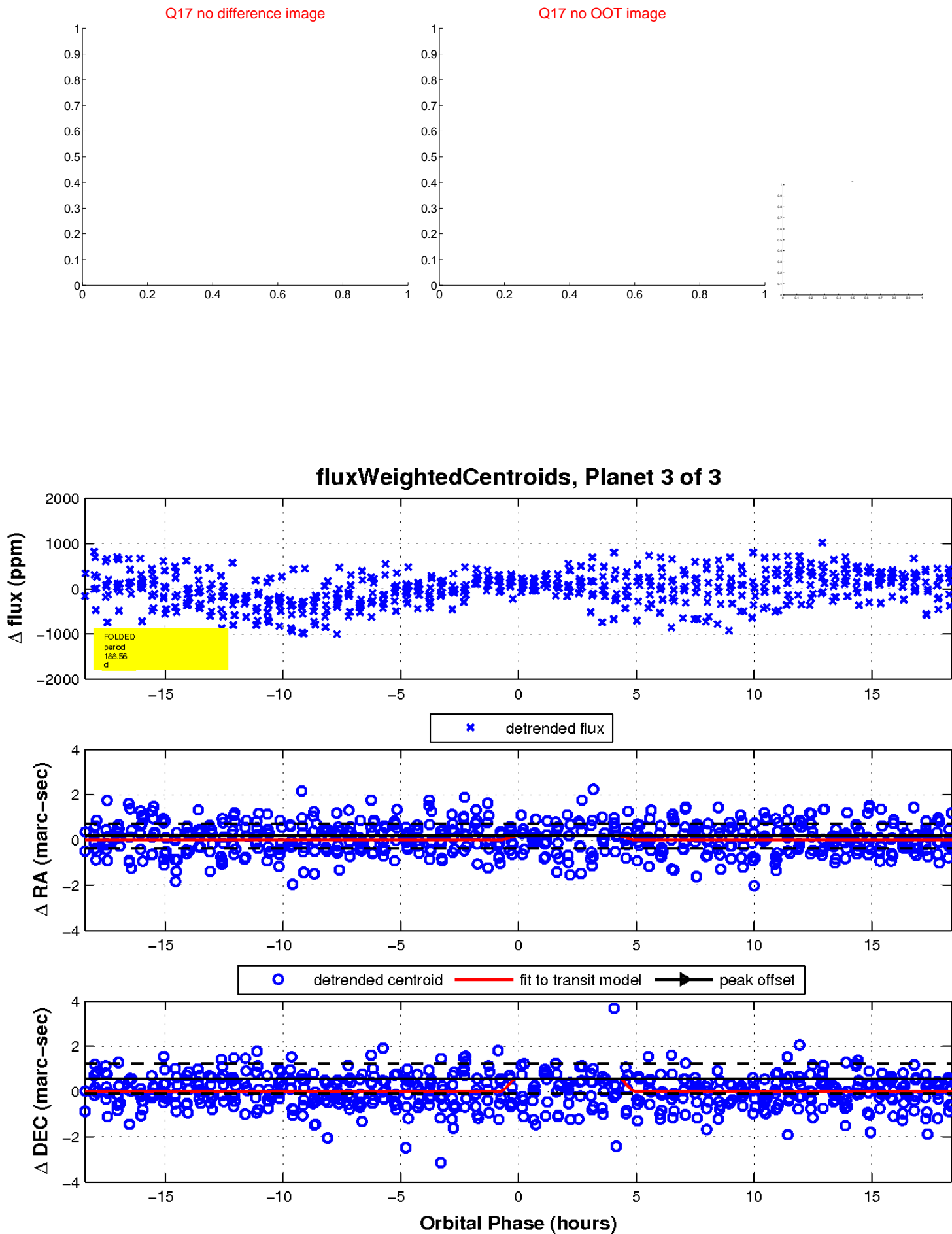
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

