

KIC 005801452

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})
005801452-01	OBS	No	3.123099	131.713640	72.1	7.059	10.0	11.5	1.17	6440	1.30	1068.73
005801452-02	OBS	No	3.123207	133.118712	64.6	6.791	11.7	12.1	1.17	6440	1.10	1068.68
005801452-03	OBS	No	3.124078	133.828205	45.1	9.516	11.1	10.8	1.17	6440	0.93	1068.28

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
005801452-01	OBS	FP	0.00	1	0	0	0	SWEET_NTL—LPP_DV—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—CENT_FEW_DIFFS
005801452-02	OBS	FP	0.00	1	0	0	0	SWEET_NTL—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_POS_ALT—SAME_NTL_PERIOD—CENT_FEW_DIFFS
005801452-03	OBS	FP	0.00	1	0	0	0	SWEET_NTL—LPP_DV—LPP_ALT—MOD_NONUNIQ_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.

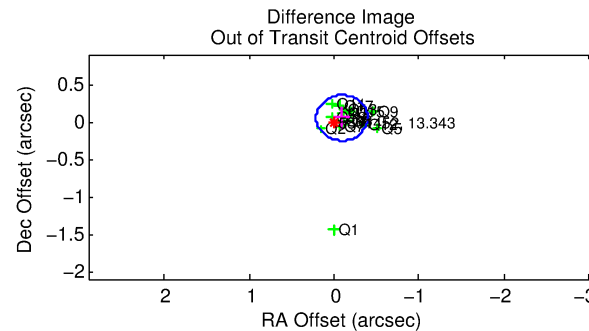
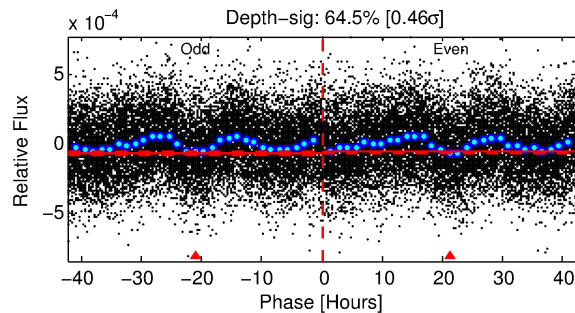
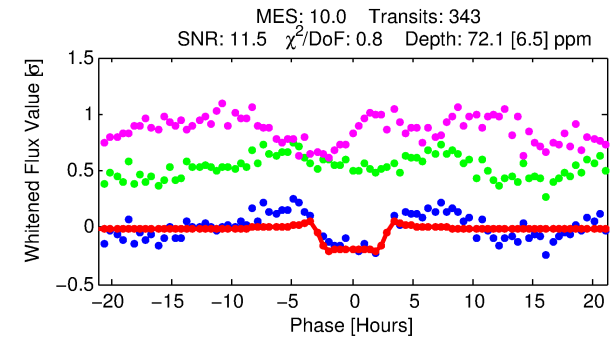
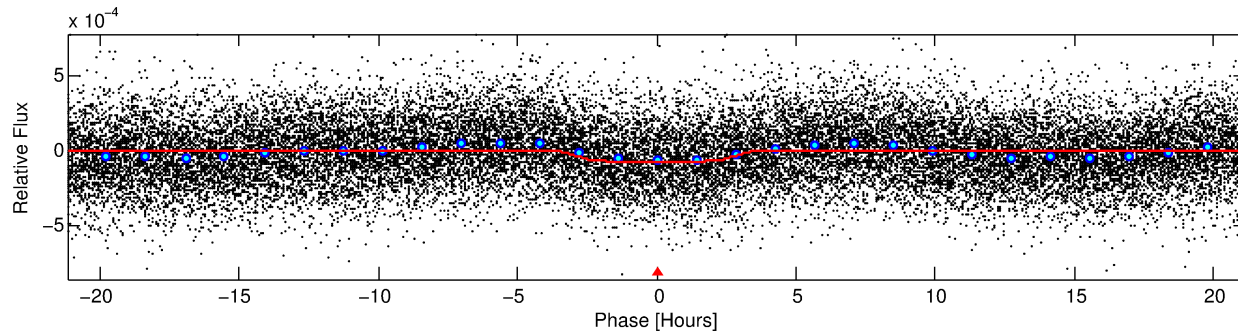
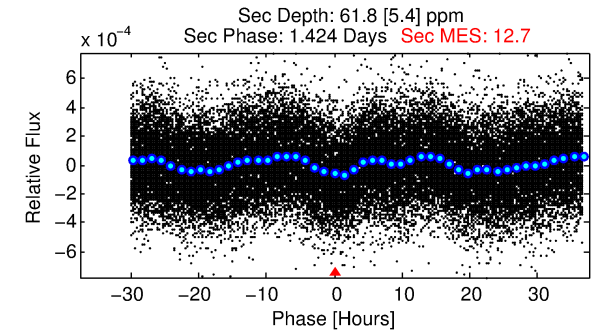
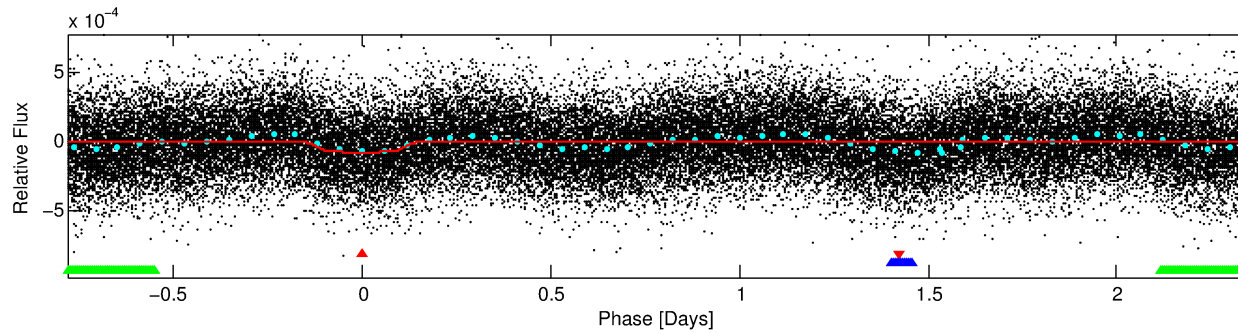
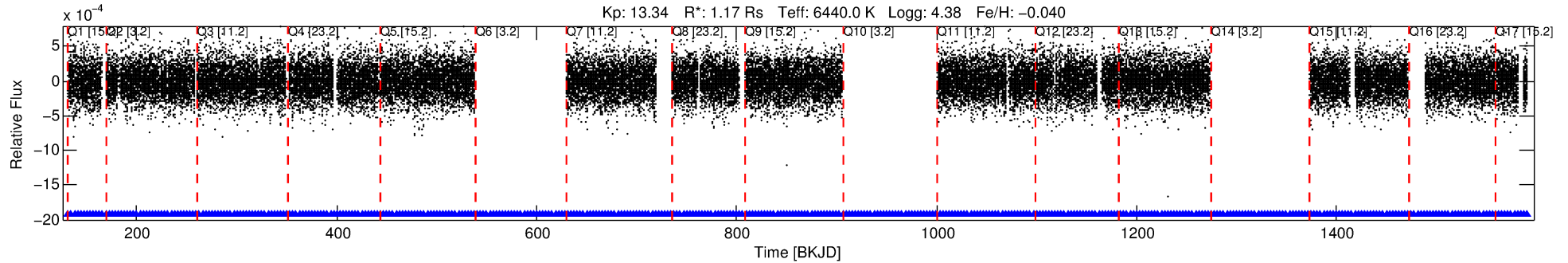
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 005801452-01

No Significant Match Found

DV One-Page Summary

KIC: 5801452 Candidate: 1 of 3 Period: 3.123 d



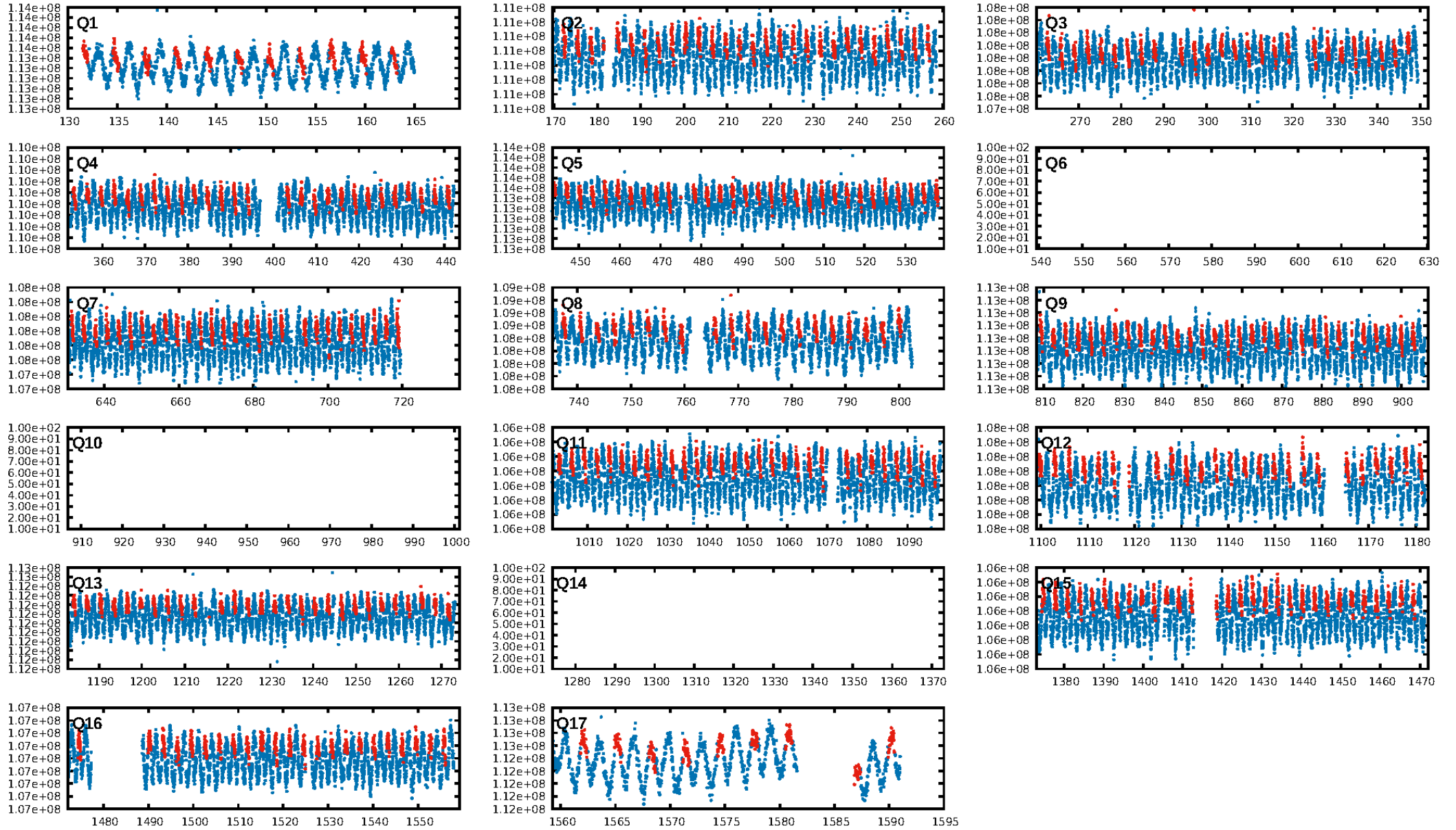
DV Fit Results:

Period = 3.12310 [0.00003] d
Epoch = 131.7136 [0.0065] BKJD
Rp/R* = 0.0102 [0.0006]
a/R* = 1.32 [0.10]
b = 0.98 [0.01]
Seff = 1068.73 [415.04]
Teq = 1458 [142] K
Rp = 1.30 [0.42] Re
a = 0.0444 [0.0115] AU
Ag = 39.40 [15.45] [2.49σ]
Teffp = 5647 [269] K [13.79σ]

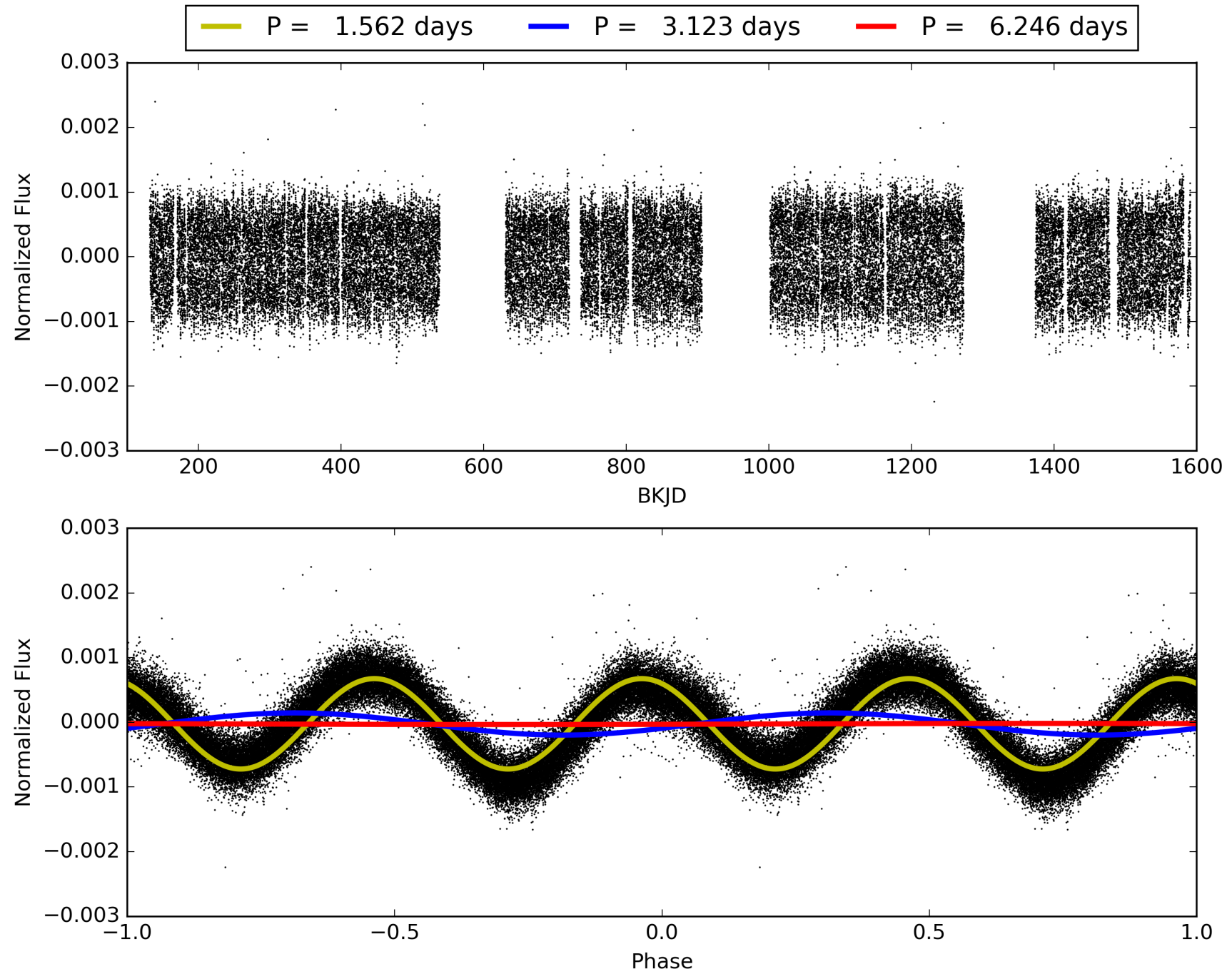
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: 0.0% [0.00σ]
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 5.74e-09
RollingBand-fgt: 1.00 [323/323]
GhostDiagnostic-chr: 1.39
Centroid-sig: 15.2%
Centroid-so: 0.740 arcsec [1.47σ]
OotOffset-rm: 0.102 arcsec [1.01σ]
KicOffset-rm: 0.112 arcsec [1.28σ]
OotOffset-st: 1/4/4/5 [14]
KicOffset-st: 1/4/4/5 [14]
DiffImageQuality-fgm: 0.00 [0/14]
DiffImageOverlap-fno: 0.57 [8/14]

TCE 005801452-01, PDC Light Curves

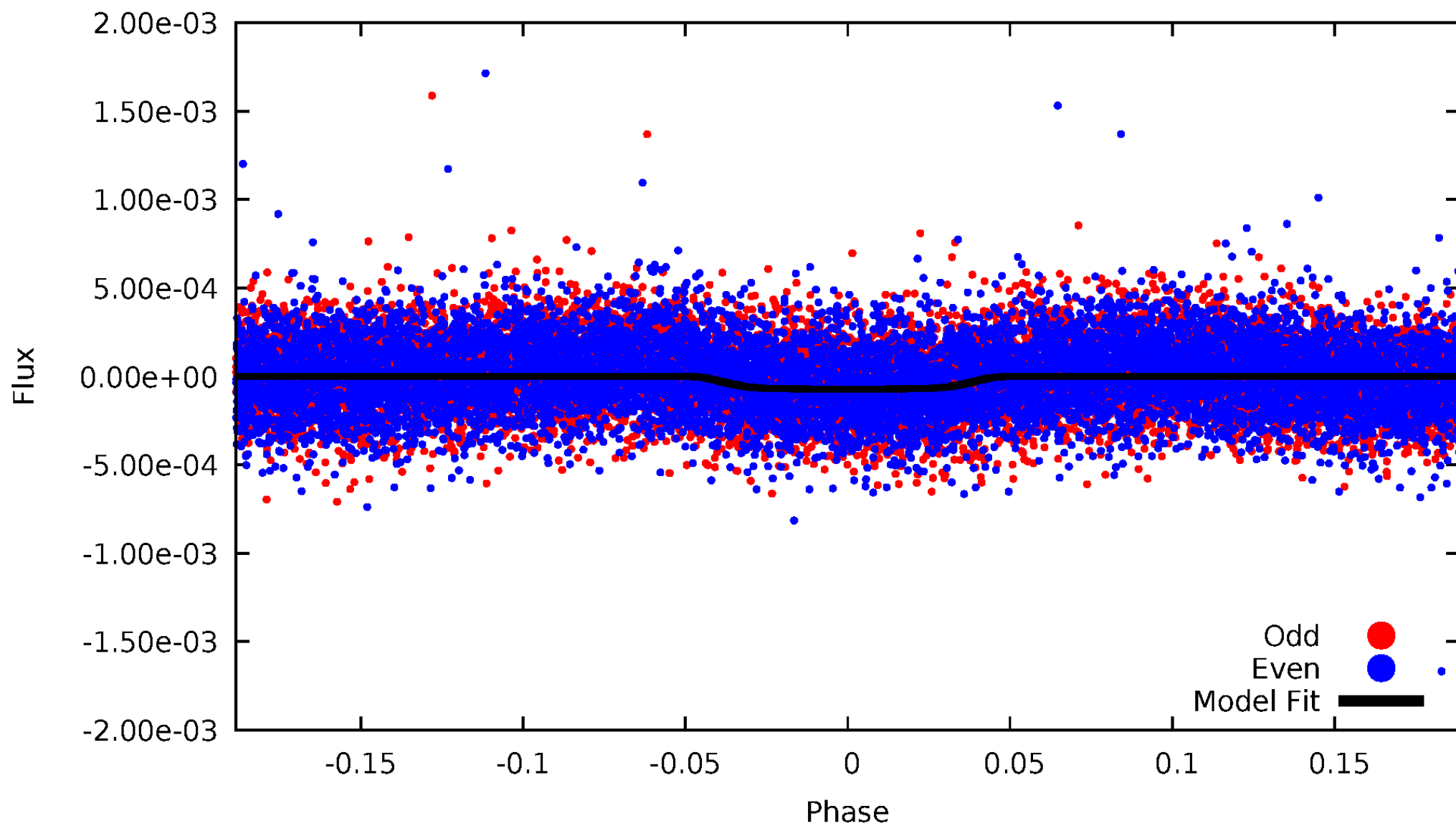


TCE 005801452-01



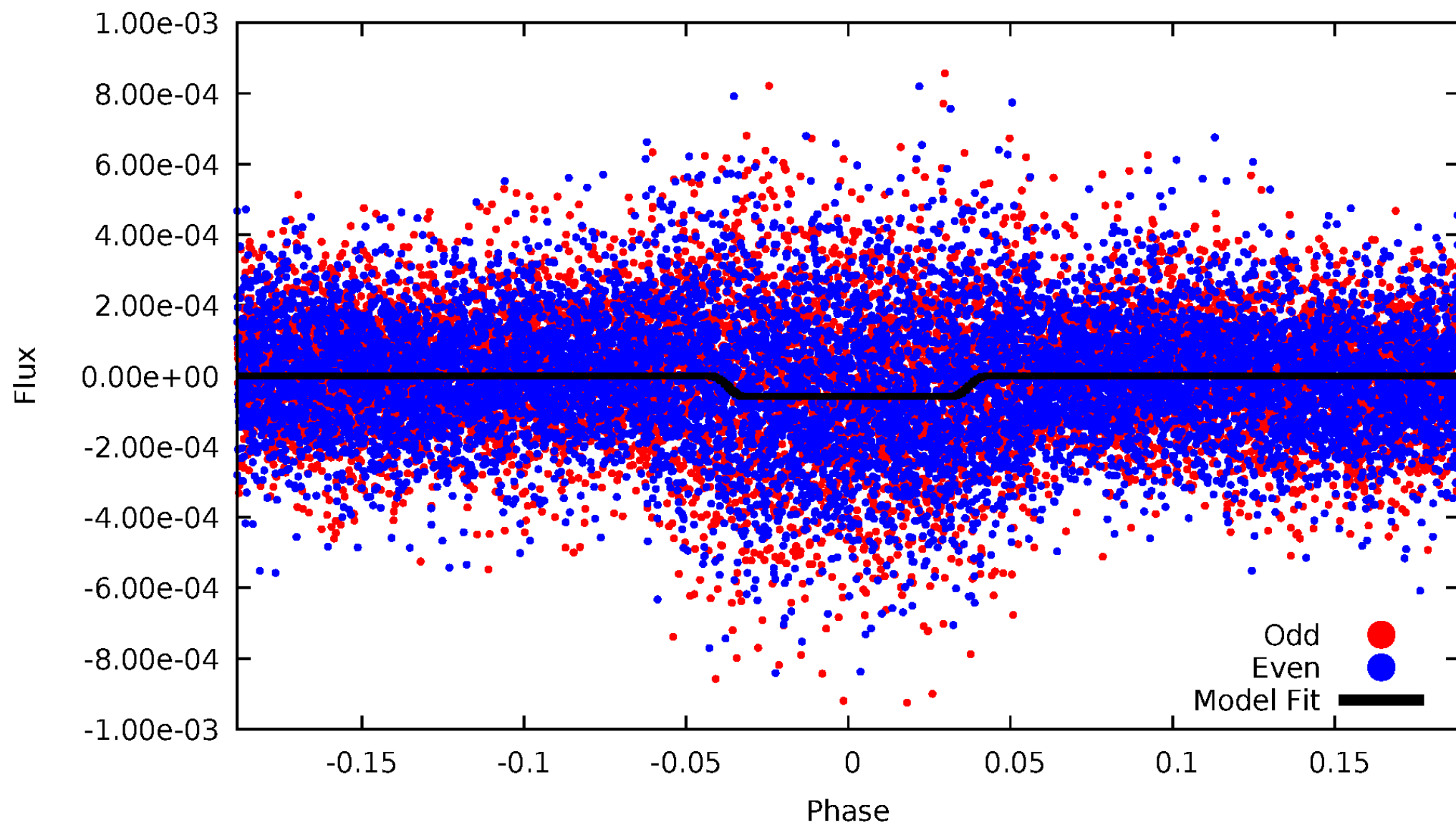
DV Odd/Even

TCE 005801452-01

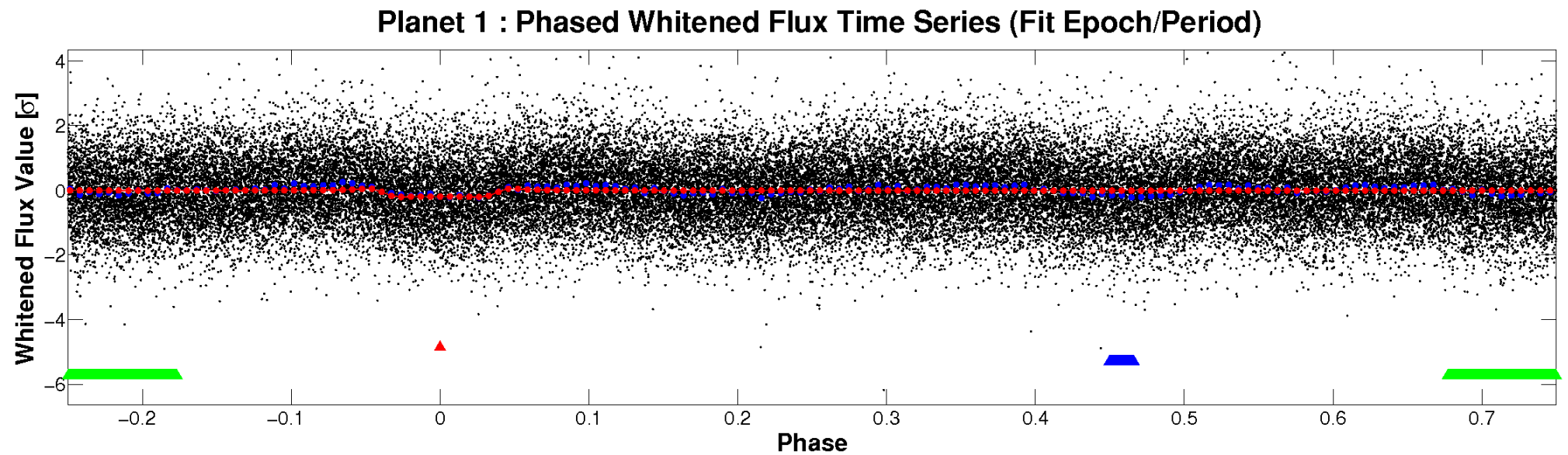
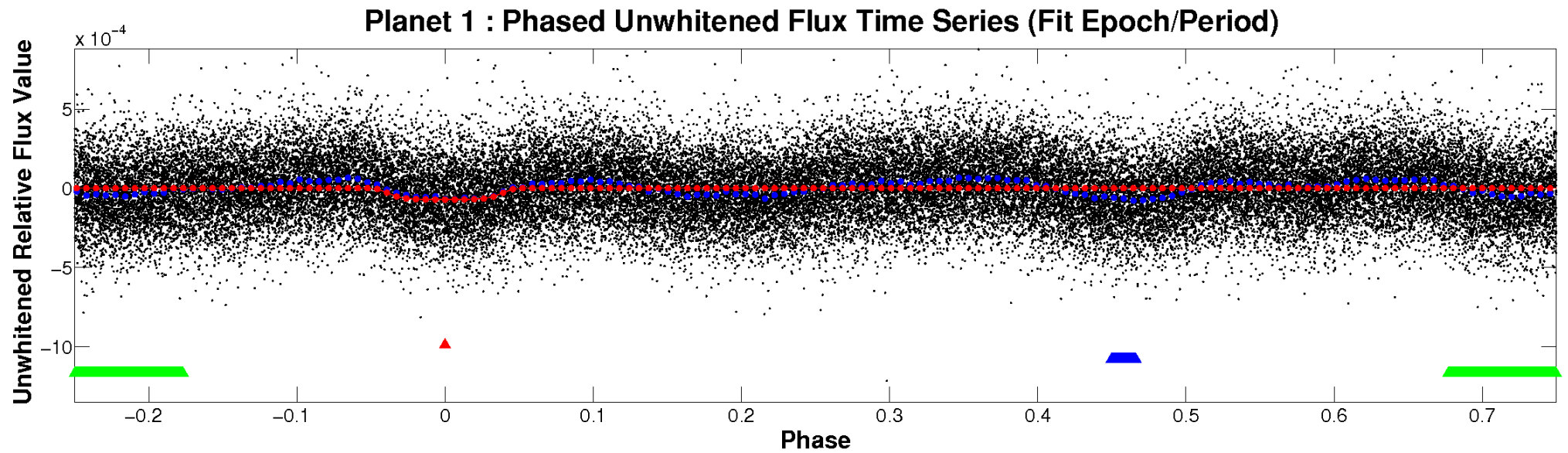


ALT Odd/Even

TCE 005801452-01

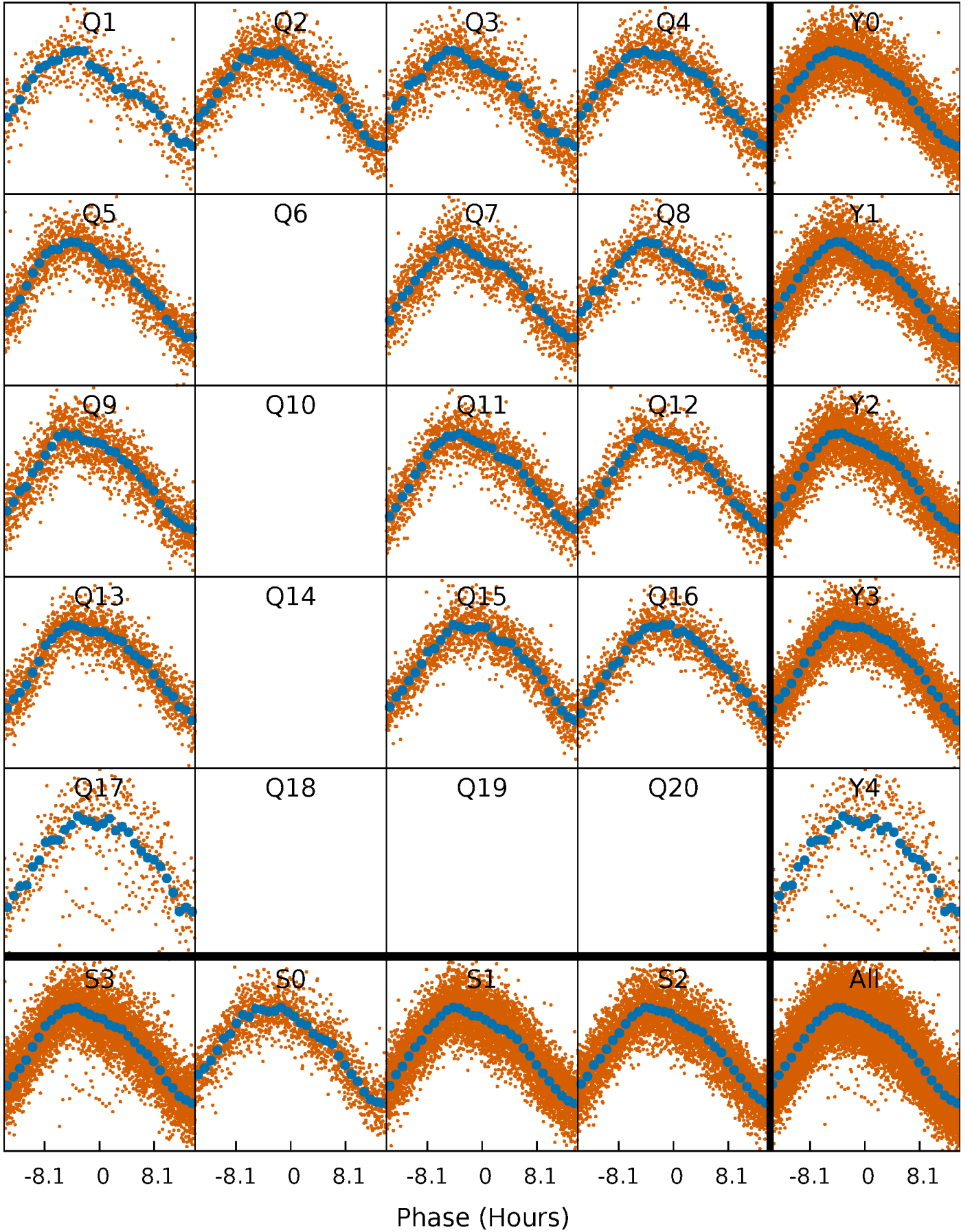


Non-Whitened Vs. Whitened Light Curve



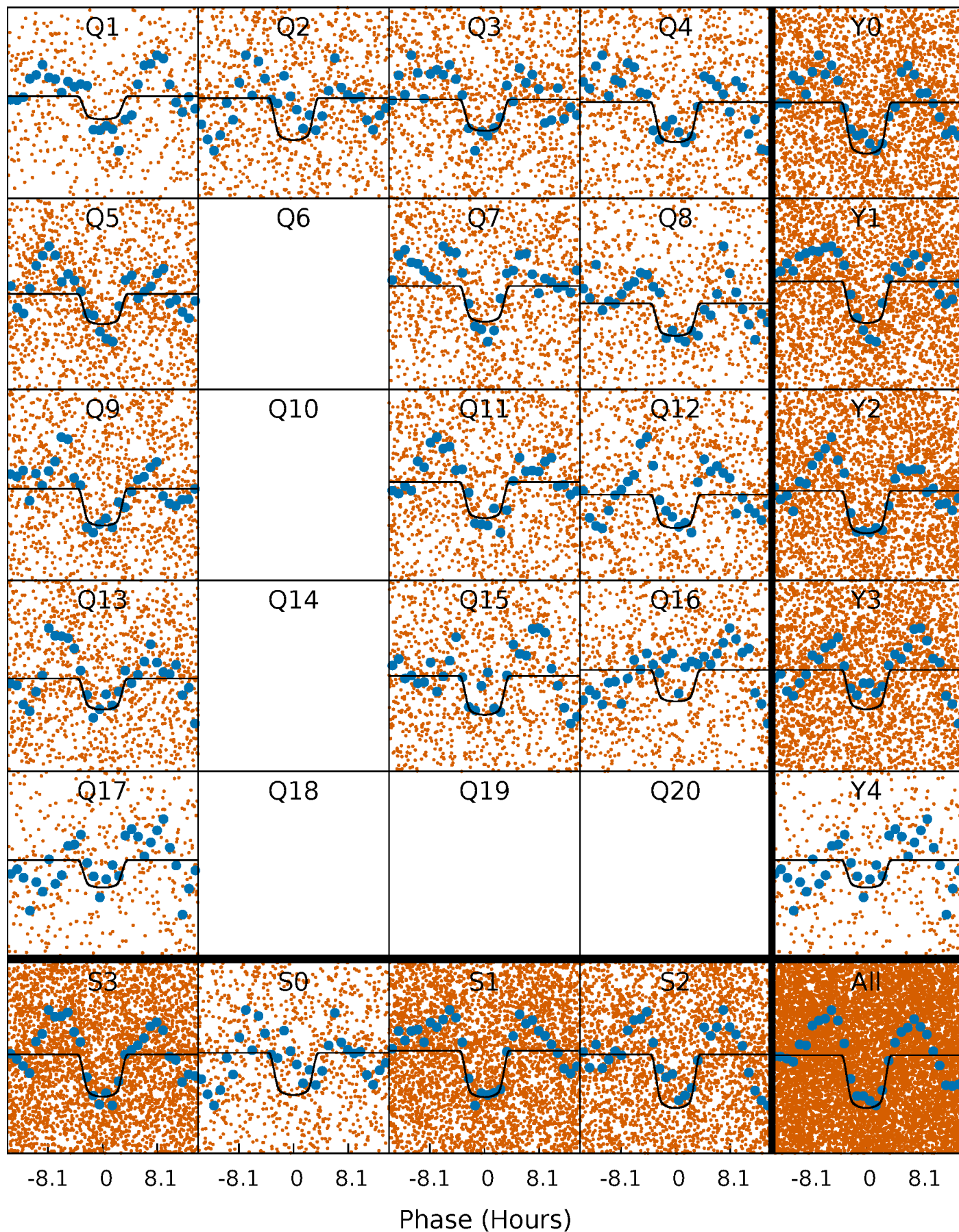
PDC Quarter-Phased Transit Curves

TCE 005801452-01 P= 3.123099 Days $T_0=131.713640$ (BKJD)



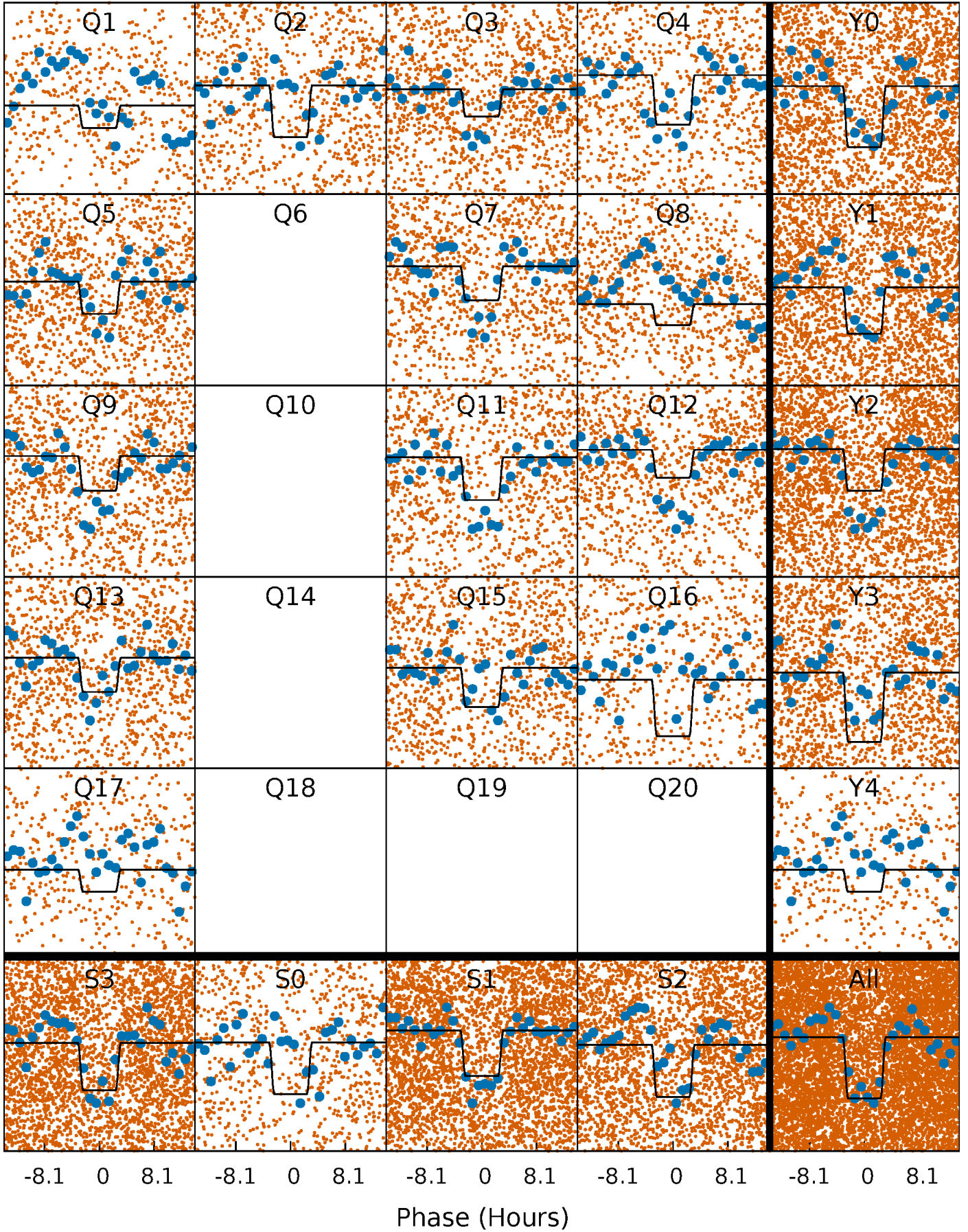
DV Quarter-Phased Transit Curves

TCE 005801452-01 P= 3.123099 Days $T_0=131.713640$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

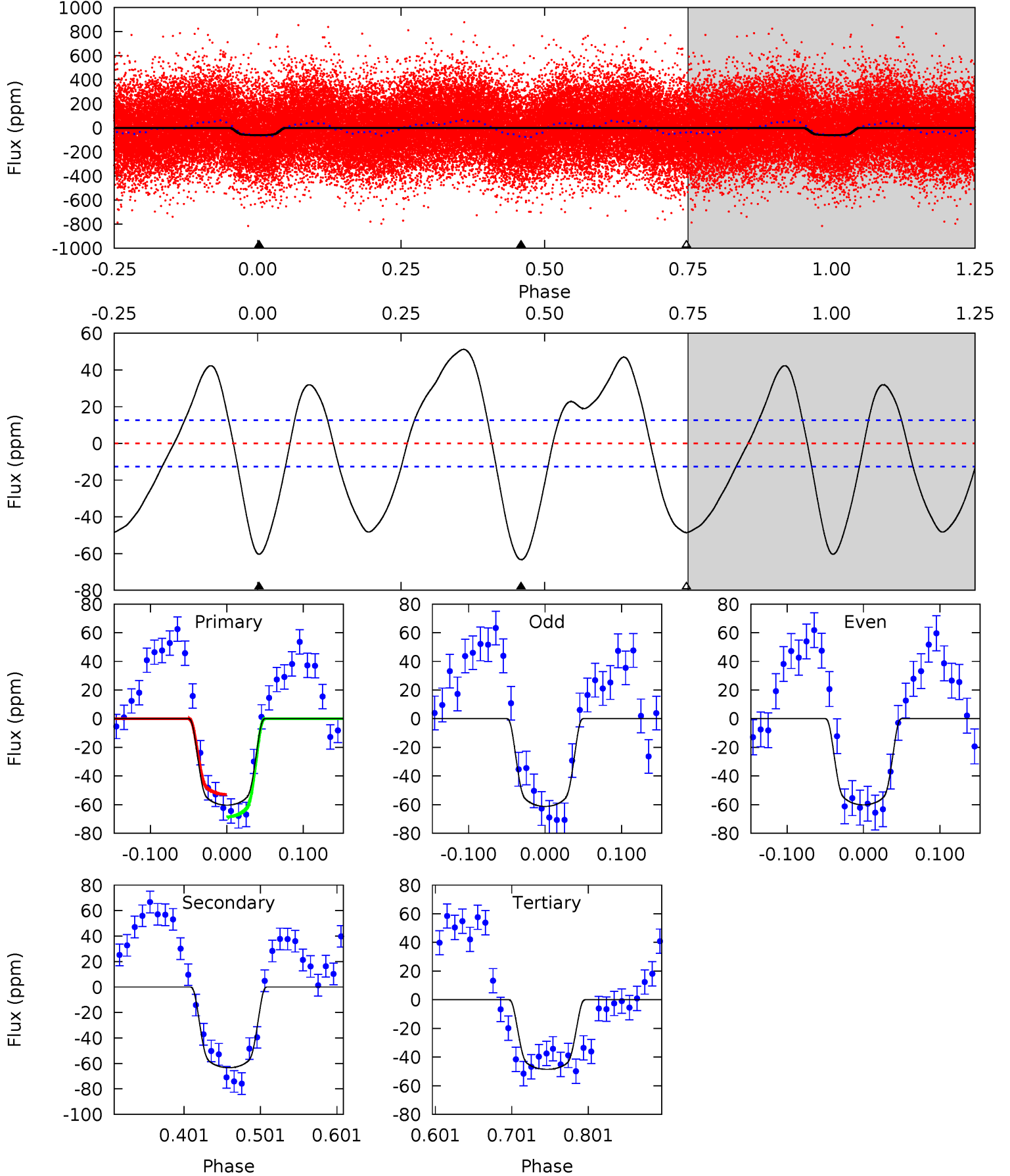
TCE 005801452-01 P= 3.123072 Days $T_0=131.724541$ (BKJD)



DV Model-Shift Uniqueness Test

005801452-01, P = 3.123099 Days, E = 128.590541 Days

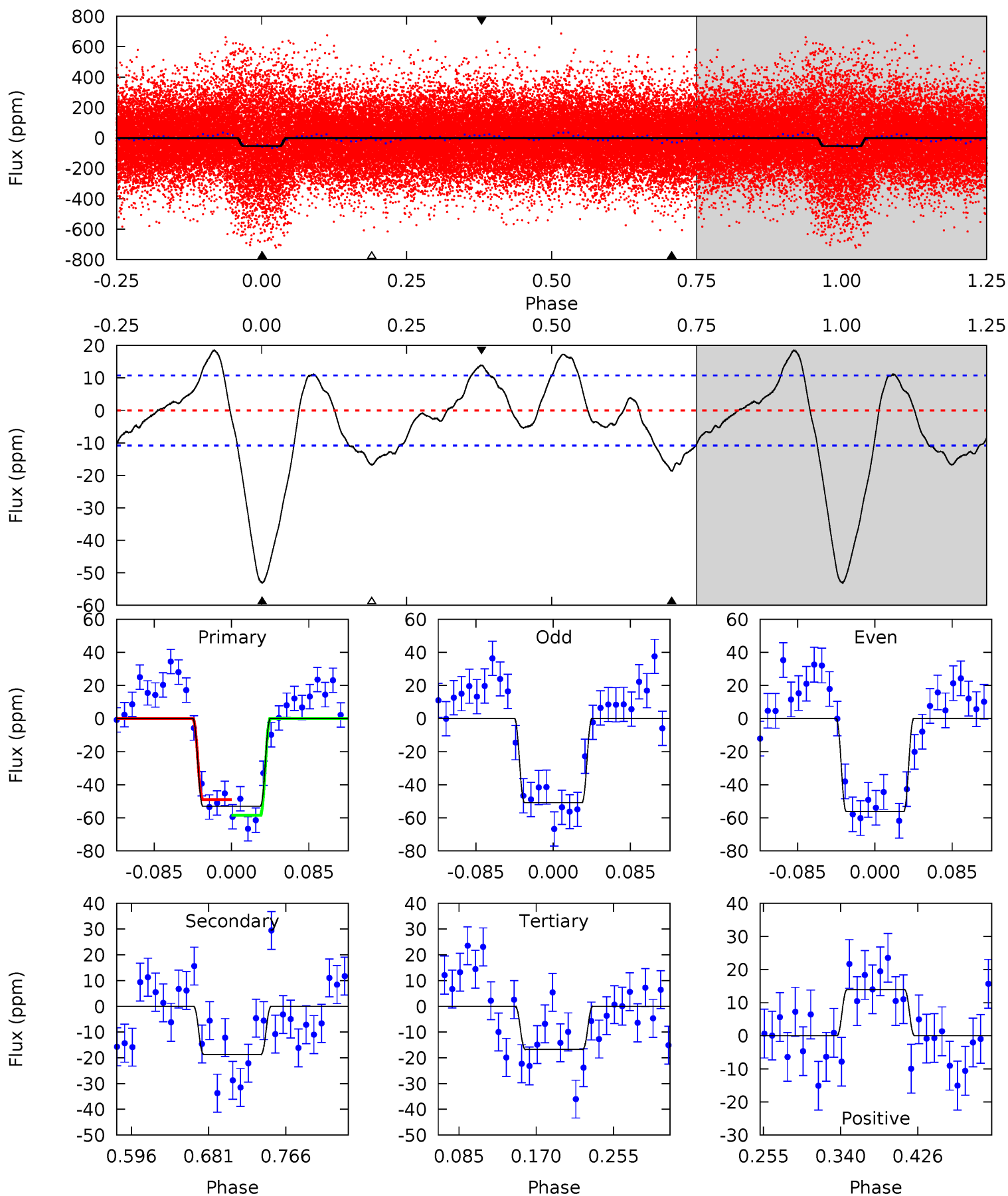
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
21.9	23.0	17.6	0	4.56	1.64	11.7	4.28	21.9	5.36	23.0	0.20	1.02	0.45	2.84



Alt Model-Shift Uniqueness Test

005801452-01, P = 3.123072 Days, E = 128.601469 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
22.6	7.96	7.13	5.93	4.60	1.72	3.70	15.5	16.7	0.82	2.02	1.14	1.06	0.26	1.99



Stellar Parameters For KIC 005801452

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6440^{+144}_{-208}	$4.380^{+0.065}_{-0.195}$	$-0.040^{+0.250}_{-0.300}$	$1.169^{+0.370}_{-0.148}$	$1.196^{+0.169}_{-0.152}$	$1.053^{+0.359}_{-0.520}$
	+2%/-3%	+1%/-4%	+625%/-750%	+32%/-13%	+14%/-13%	+34%/-49%
Source	PHO1	KIC0	KIC0	DSEP		

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

Secondary Eclipse Parameters for KIC 005801452-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-63 ± 3	$1.34^{+0.23}_{-0.13}$	2076^{+131}_{-103}	5676^{+212}_{-218}	37^{+9}_{-8}
Alt.	-19 ± 2	$1.00^{+0.18}_{-0.11}$	2068^{+138}_{-102}	4902^{+249}_{-223}	20^{+6}_{-5}

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

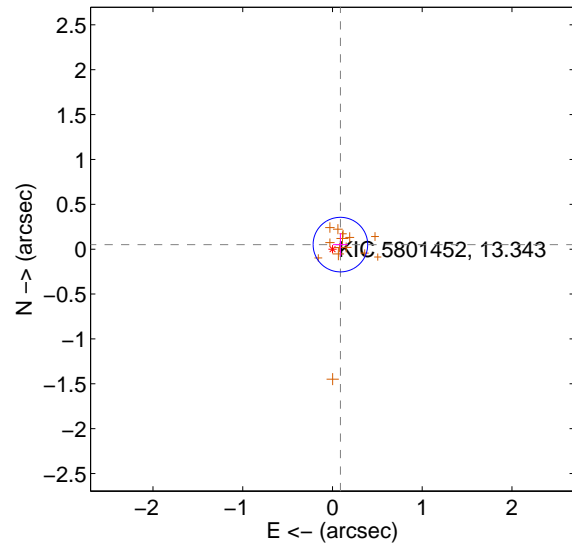
Supplemental centroid analysis for 005801452-01. Kepler magnitude: 13.34. Transit SNR 11.54

There are 0 quarters with good PRF difference image offsets

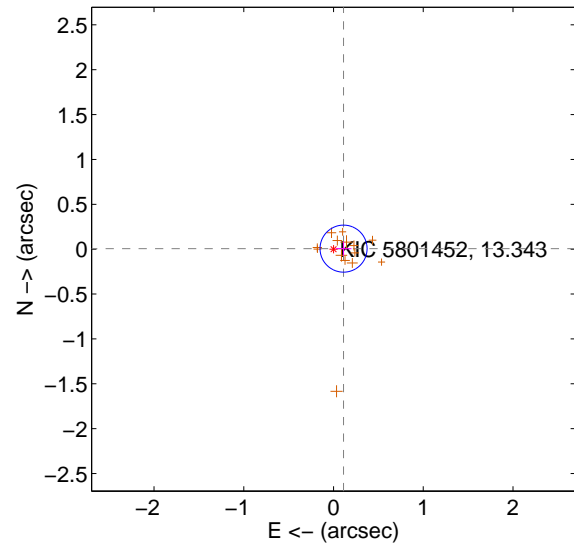
The direct PRF centroid is offset from the target star catalog position by about 0.13 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.102 ± 0.101	1.01	-0.088 ± 0.084	0.051 ± 0.128
PRF-fit source offset from KIC position	0.112 ± 0.087	1.28	-0.112 ± 0.087	0.006 ± 0.079
photometric centroid source offset	0.74 ± 0.50	1.47	0.73 ± 0.50	0.14 ± 0.47

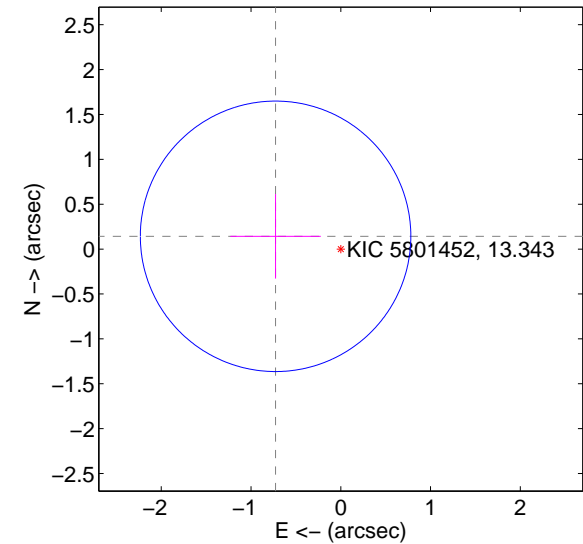
offset from difference PRF-fit to OOT PRF-fit



offset from difference PRF-fit to KIC position

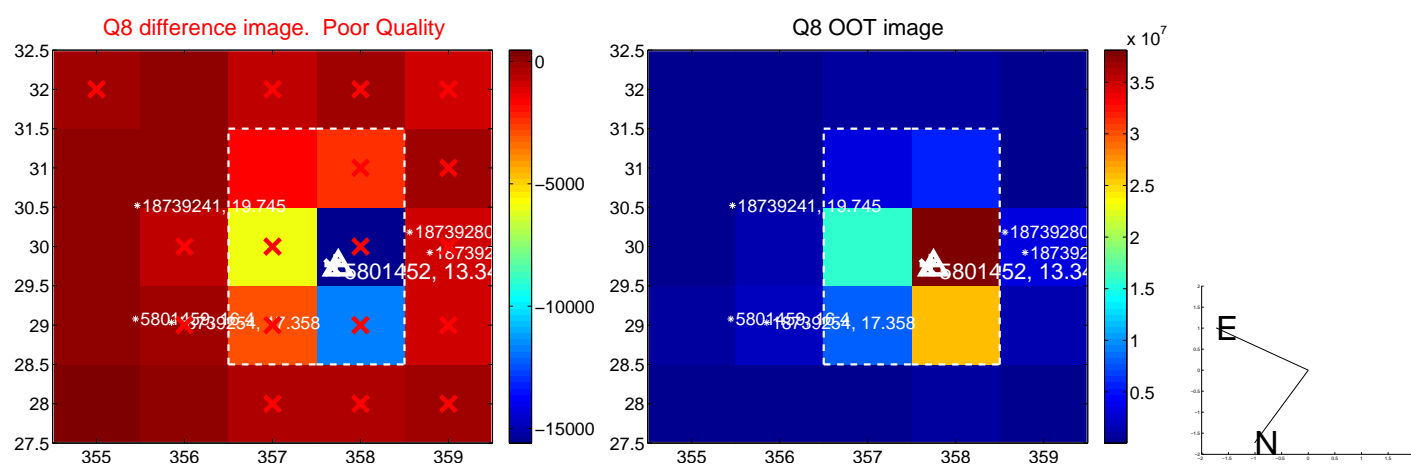
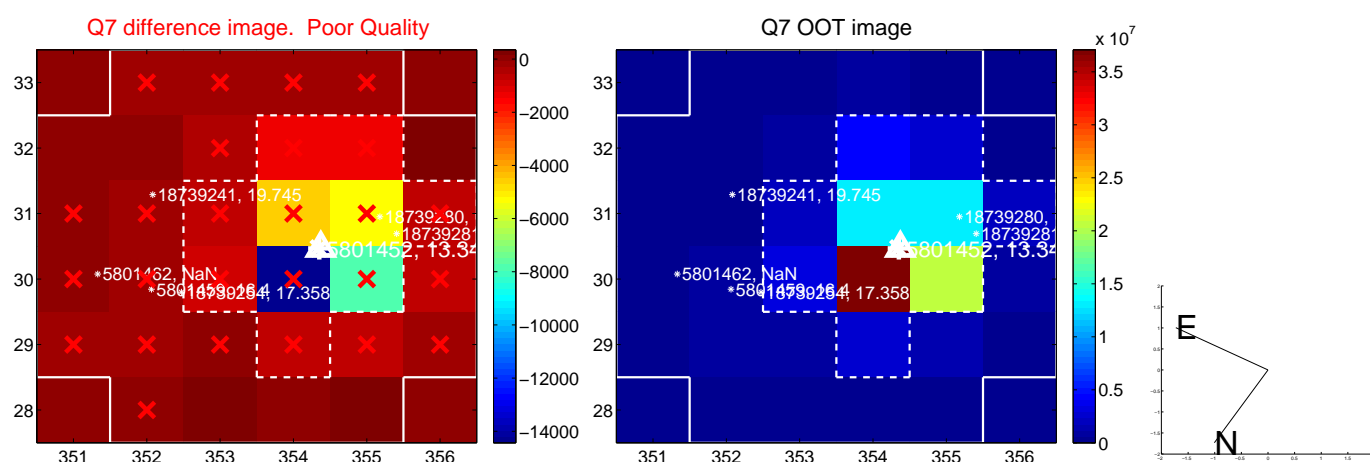
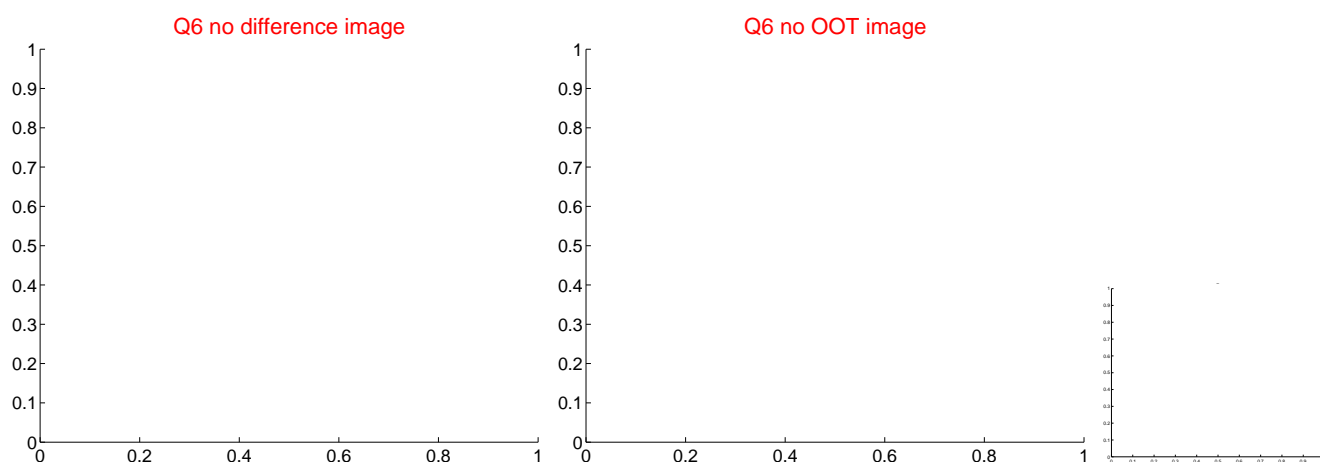
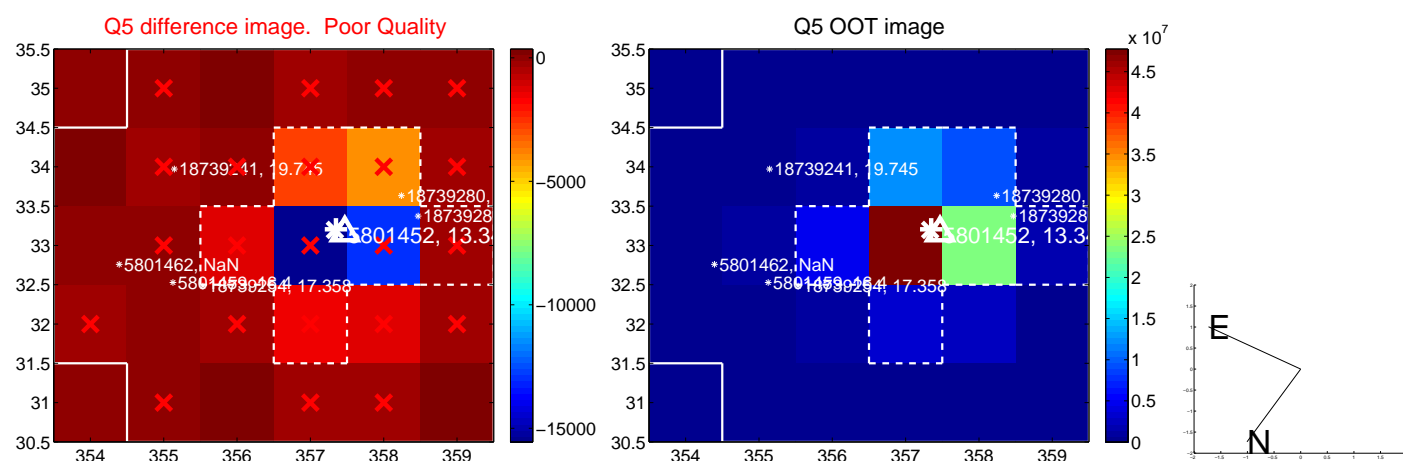


offset from photometric centroids

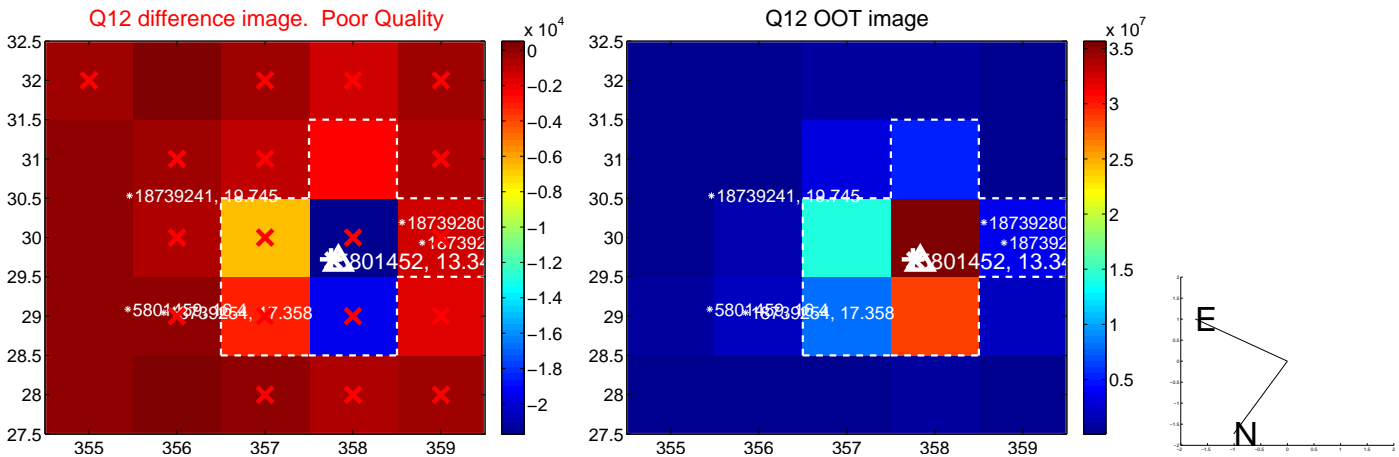
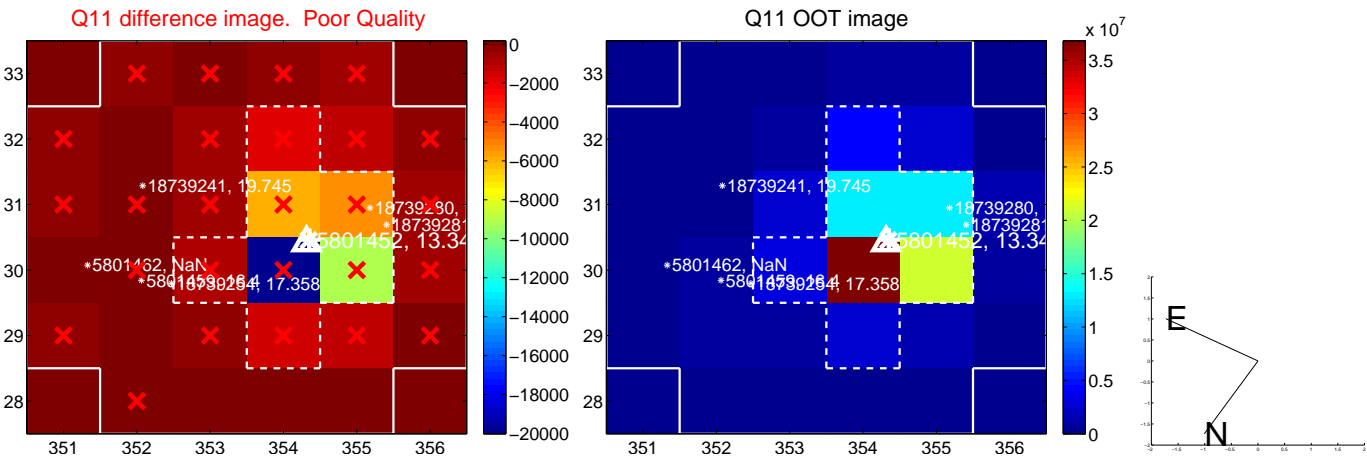
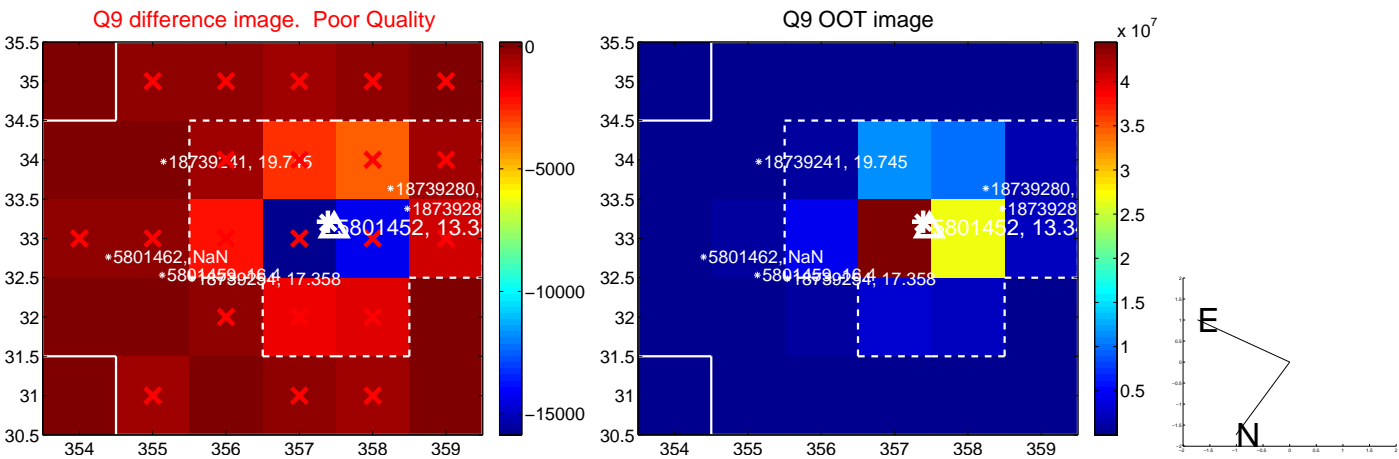


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

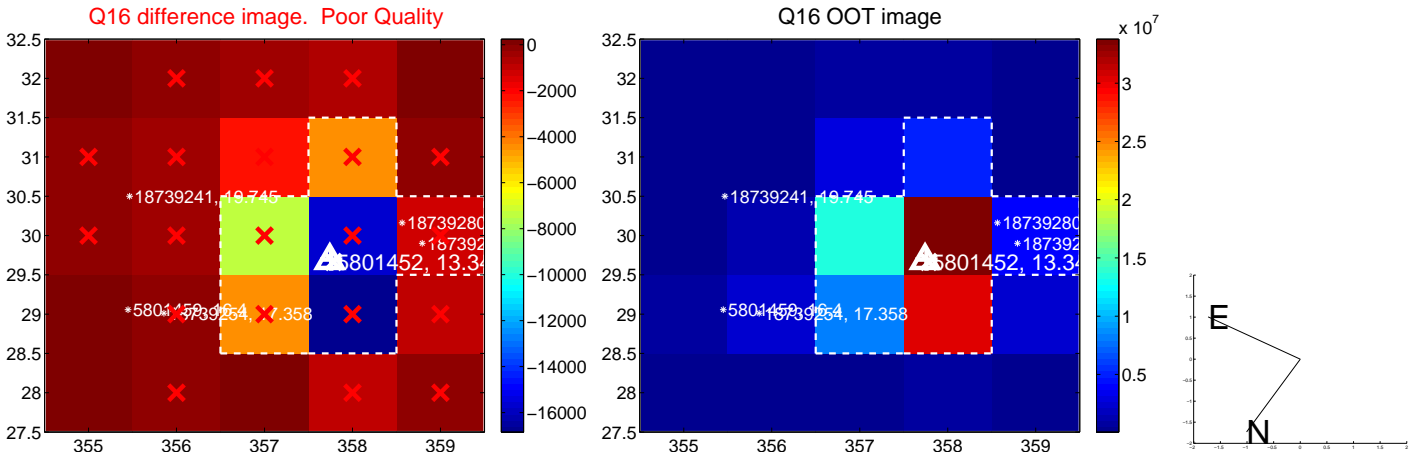
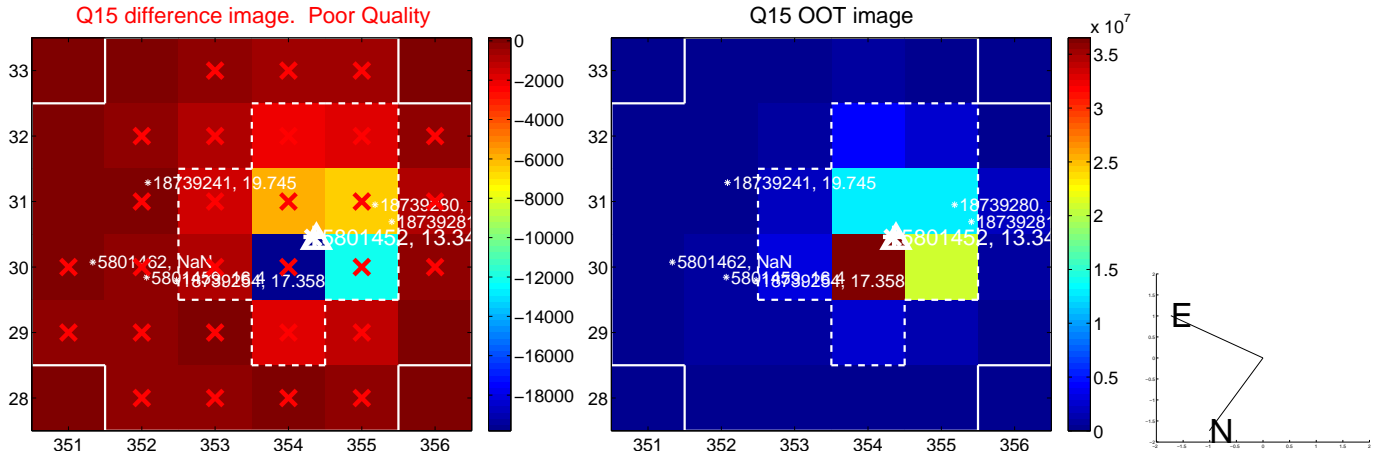
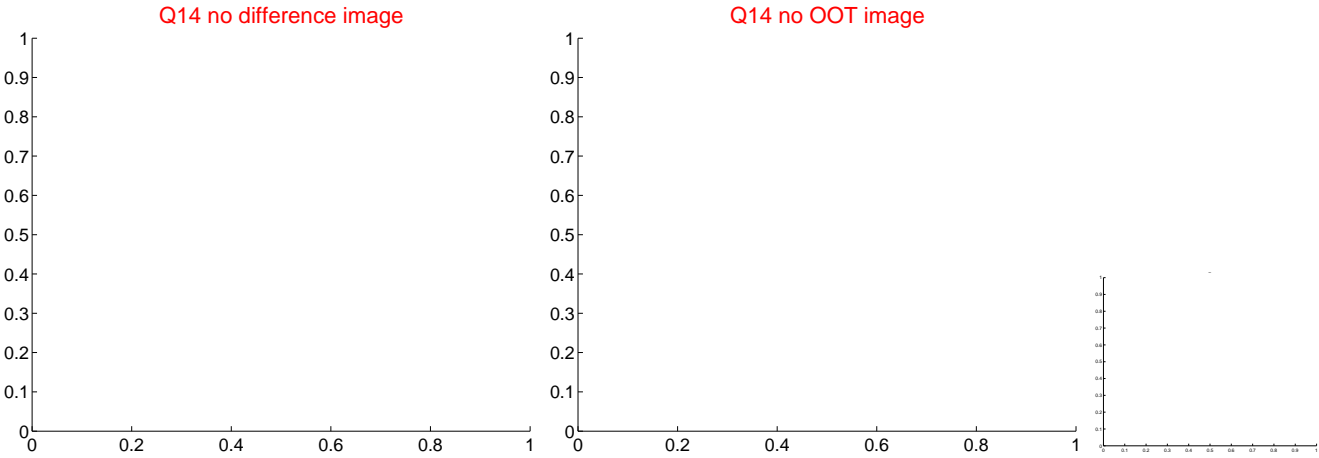
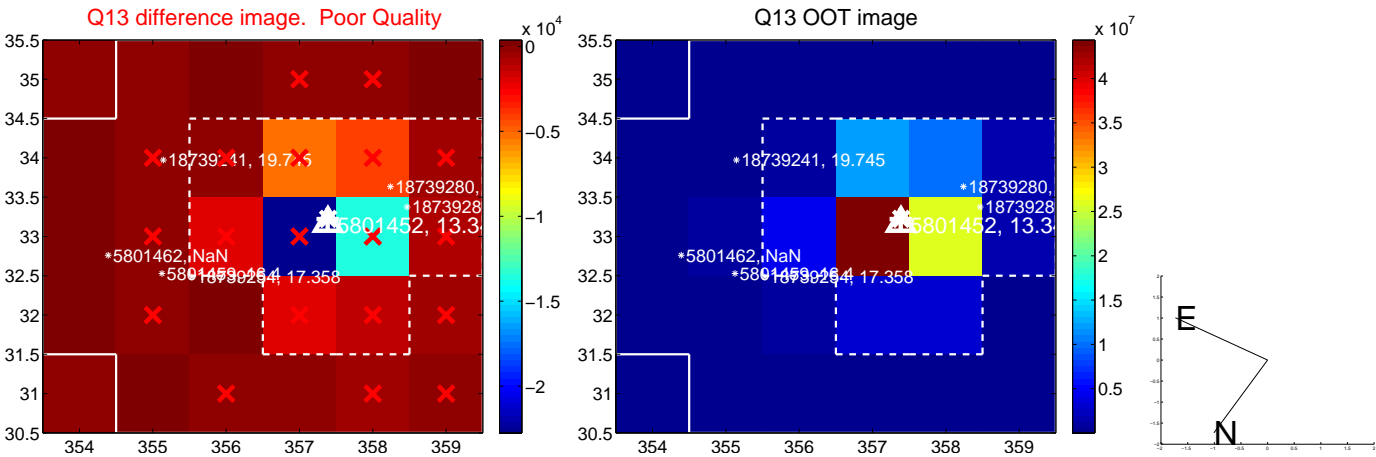
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



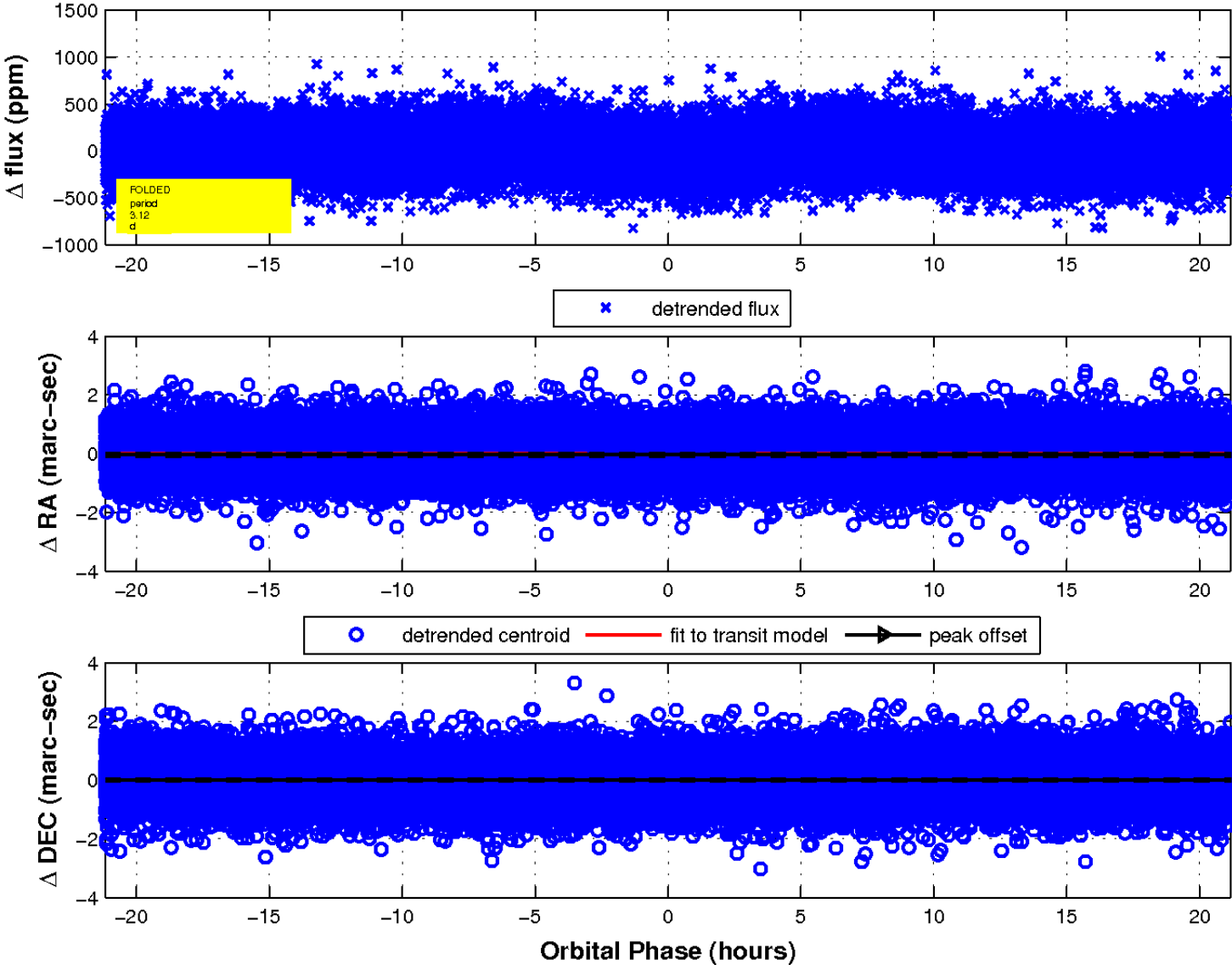
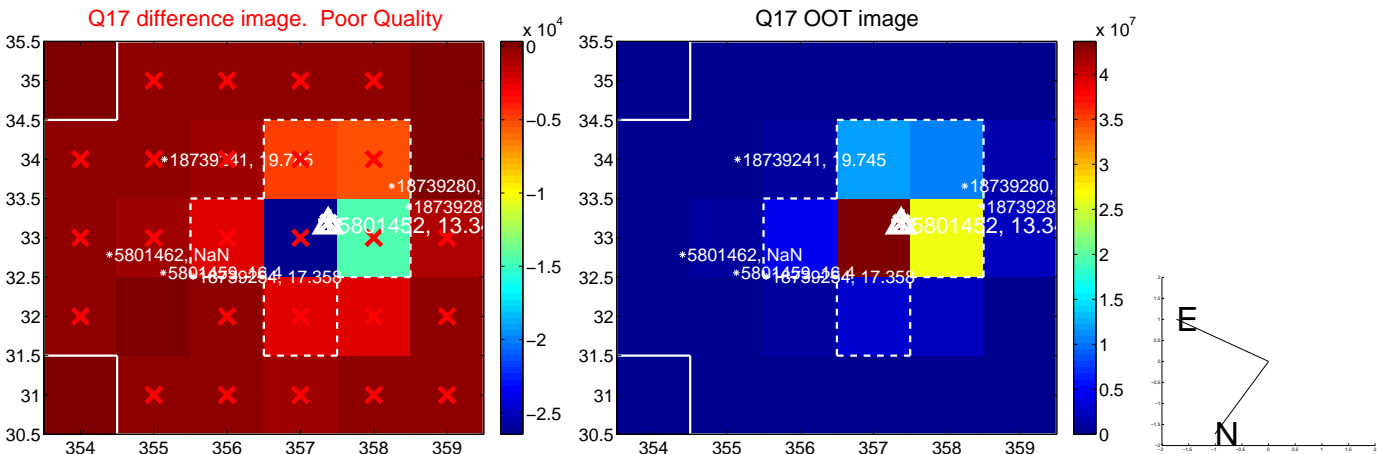
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

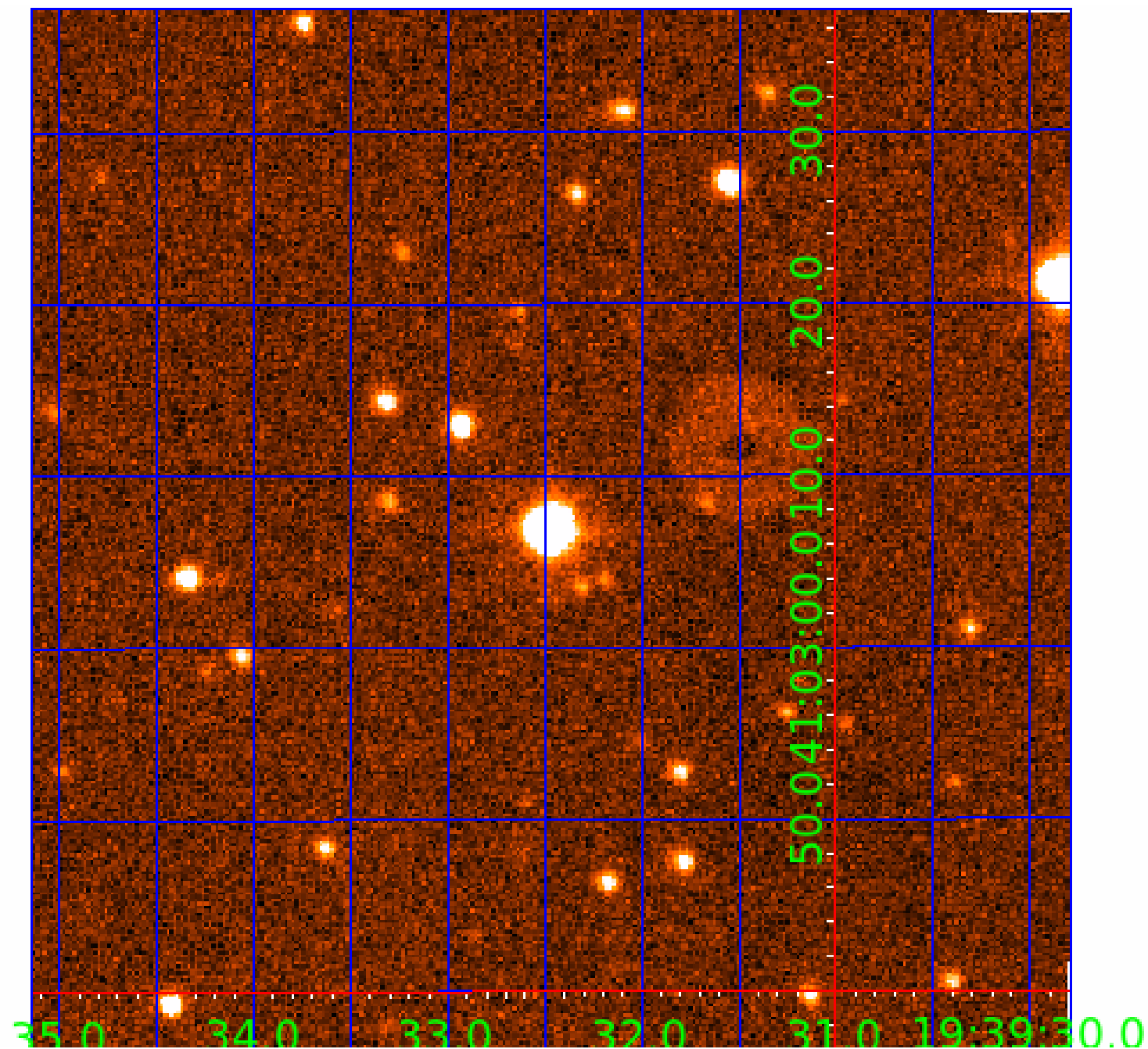


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 005801452

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})
005801452-01	OBS	No	3.123099	131.713640	72.1	7.059	10.0	11.5	1.17	6440	1.30	1068.73
005801452-02	OBS	No	3.123207	133.118712	64.6	6.791	11.7	12.1	1.17	6440	1.10	1068.68
005801452-03	OBS	No	3.124078	133.828205	45.1	9.516	11.1	10.8	1.17	6440	0.93	1068.28

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
005801452-01	OBS	FP	0.00	1	0	0	0	SWEET_NTL—LPP_DV—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—CENT_FEW_DIFFS
005801452-02	OBS	FP	0.00	1	0	0	0	SWEET_NTL—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_POS_ALT—SAME_NTL_PERIOD—CENT_FEW_DIFFS
005801452-03	OBS	FP	0.00	1	0	0	0	SWEET_NTL—LPP_DV—LPP_ALT—MOD_NONUNIQ_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.

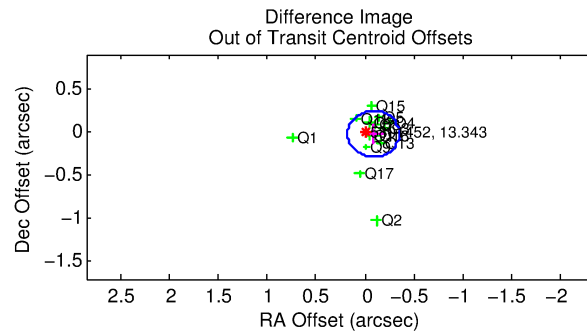
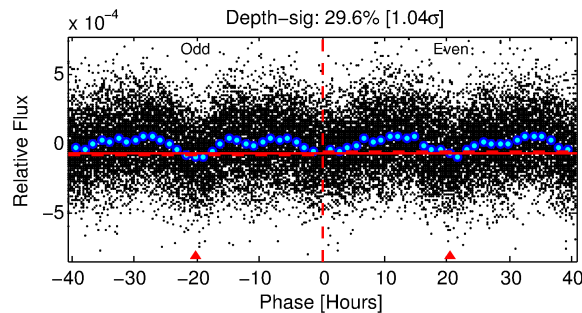
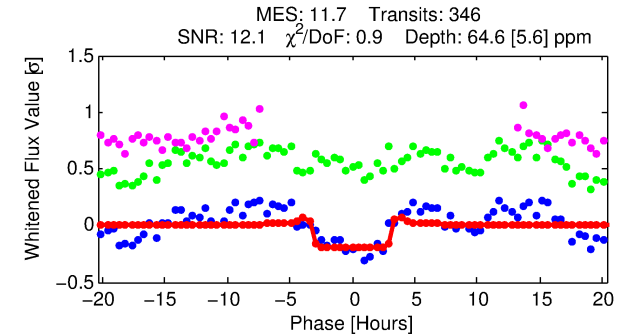
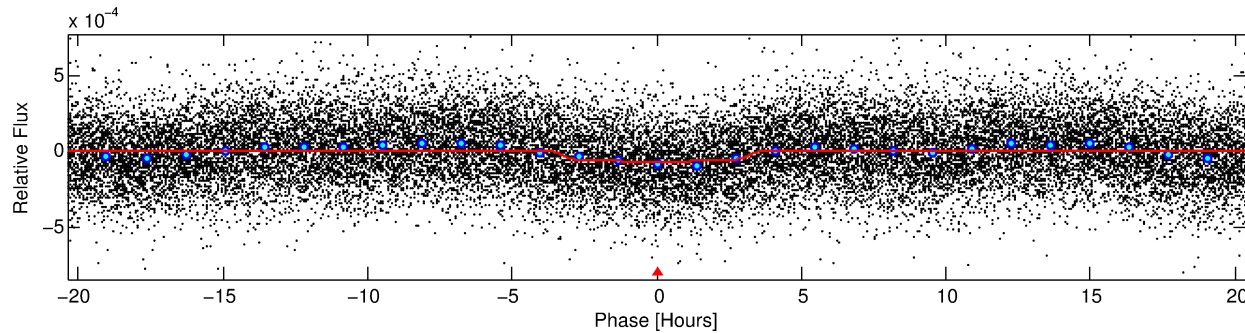
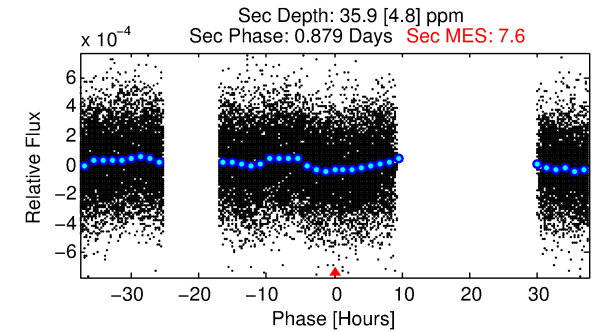
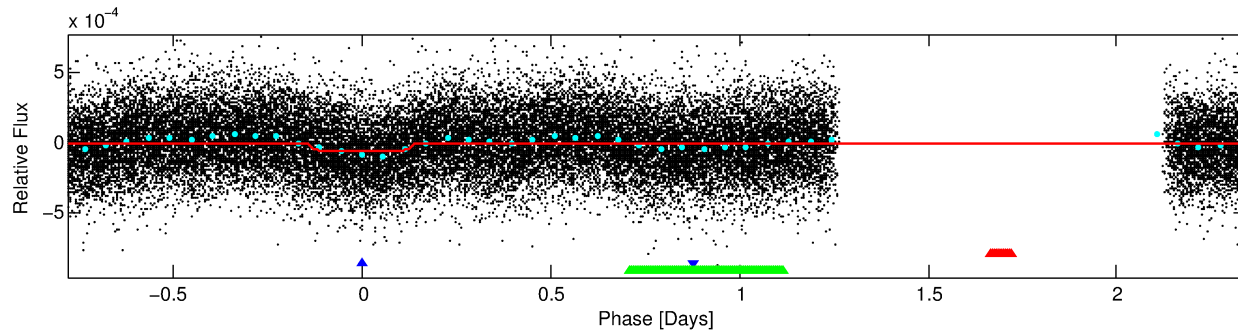
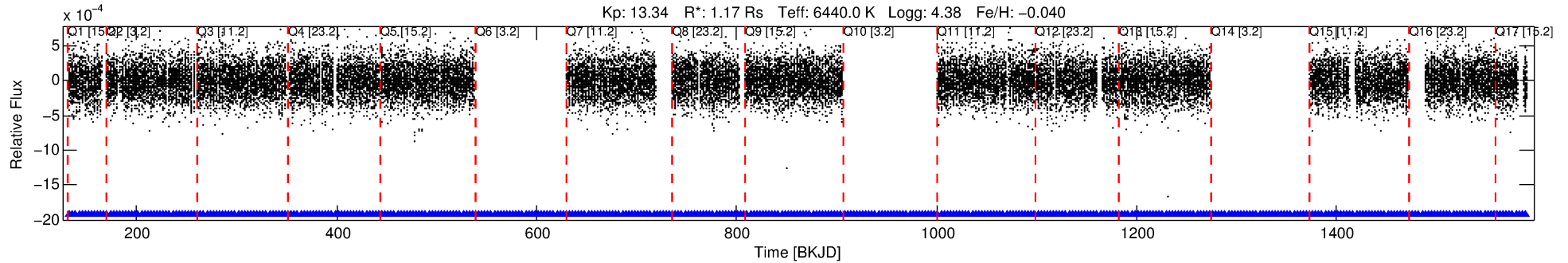
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 005801452-02

No Significant Match Found

DV One-Page Summary

KIC: 5801452 Candidate: 2 of 3 Period: 3.123 d



DV Fit Results:

Period = 3.12321 [0.00002] d
Epoch = 133.1187 [0.0038] BKJD
Rp/R* = 0.0086 [0.0013]
a/R* = 1.84 [1.05]
b = 0.90 [0.17]
Seff = 1068.68 [415.02]
Teq = 1458 [142] K
Rp = 1.10 [0.39] Re
a = 0.0444 [0.0115] AU
Ag = 32.12 [15.79] [1.97σ]
Teffp = 5366 [473] K [7.92σ]

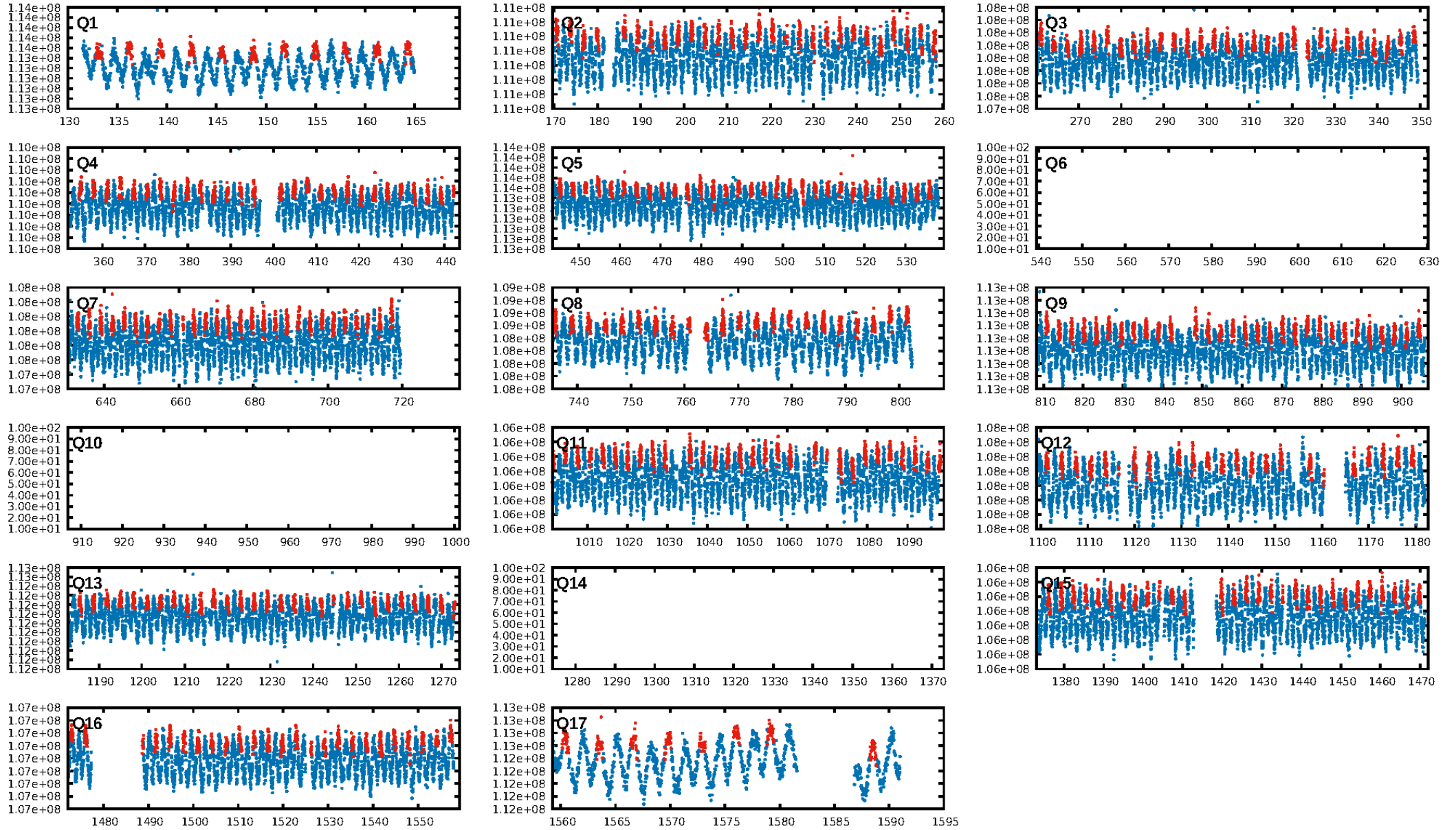
DV Diagnostic Results:

ShortPeriod-sig: 0.0% [0.00σ]
LongPeriod-sig: 0.1% [0.00σ]
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 5.67e-12
RollingBand-fgt: 1.00 [327/327]
GhostDiagnostic-chr: 3.437
Centroid-sig: 16.6%
Centroid-so: 0.701 arcsec [1.38σ]
OotOffset-rm: 0.086 arcsec [0.97σ]
OotOffset-st: 1/4/4/5 [14]
KicOffset-rm: 0.098 arcsec [1.02σ]
KicOffset-st: 1/4/4/5 [14]
DiffImageQuality-fgm: 0.00 [0/14]
DiffImageOverlap-fno: 0.86 [12/14]

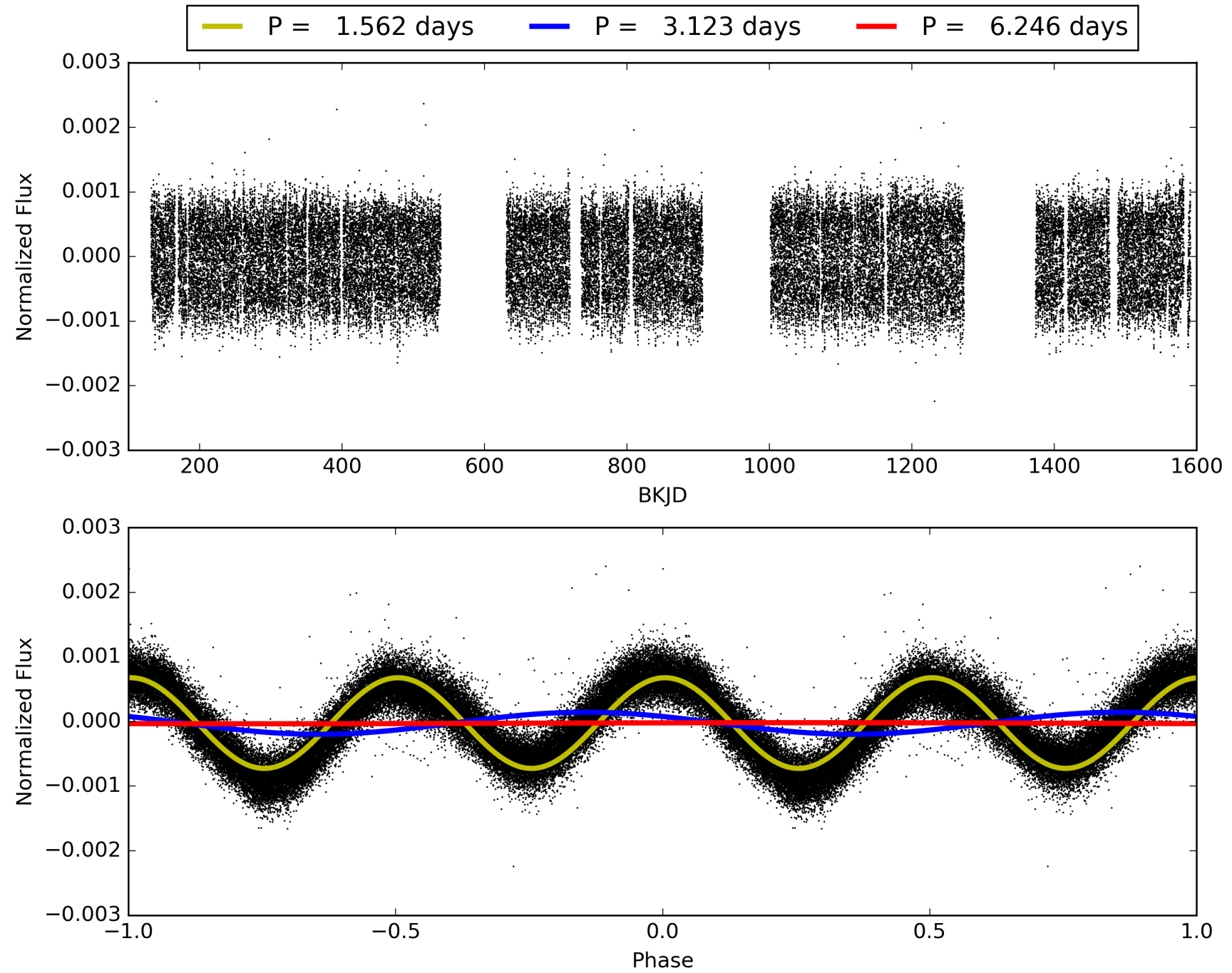
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 09:26:38 Z

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

TCE 005801452-02, PDC Light Curves

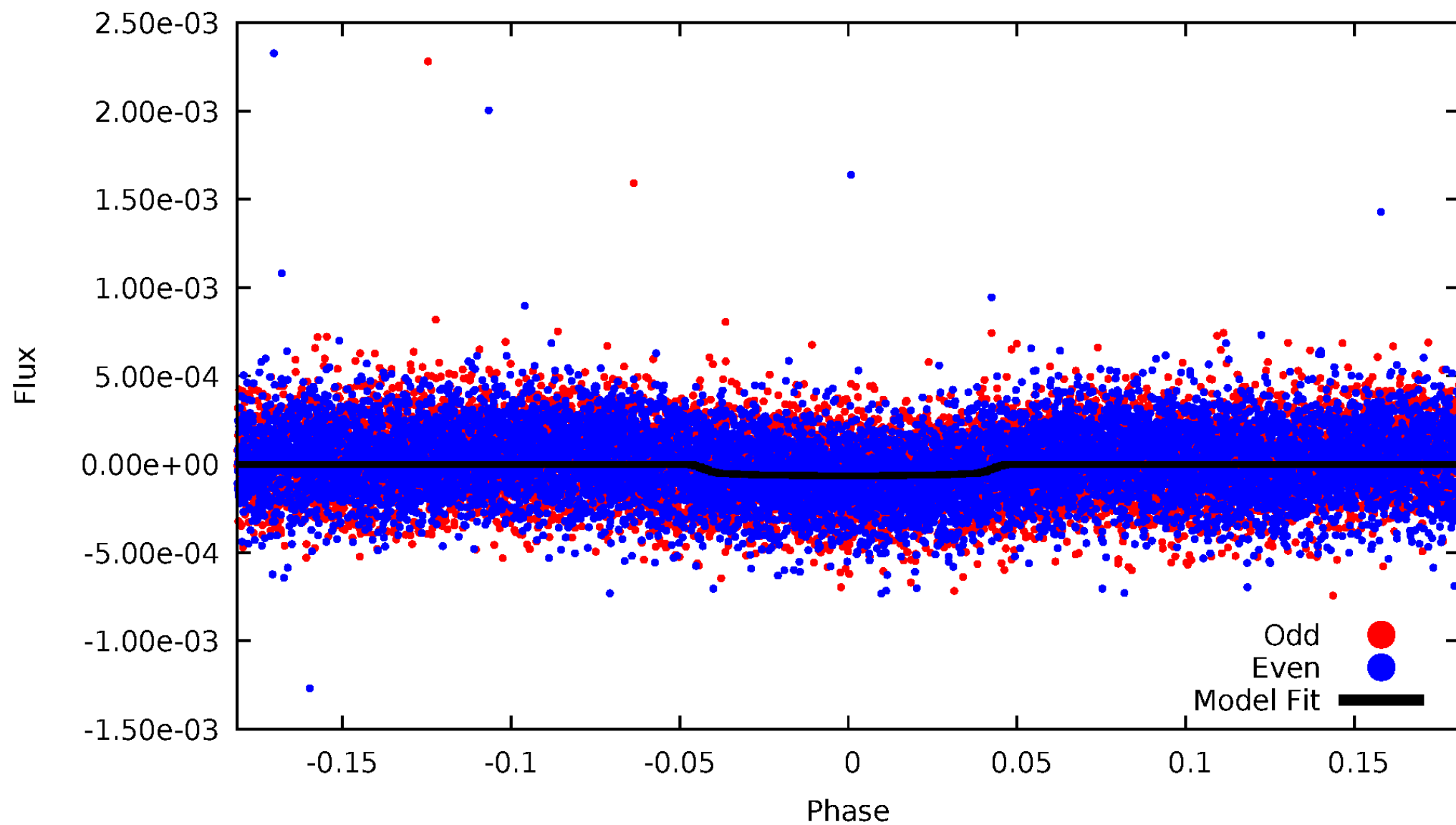


TCE 005801452-02



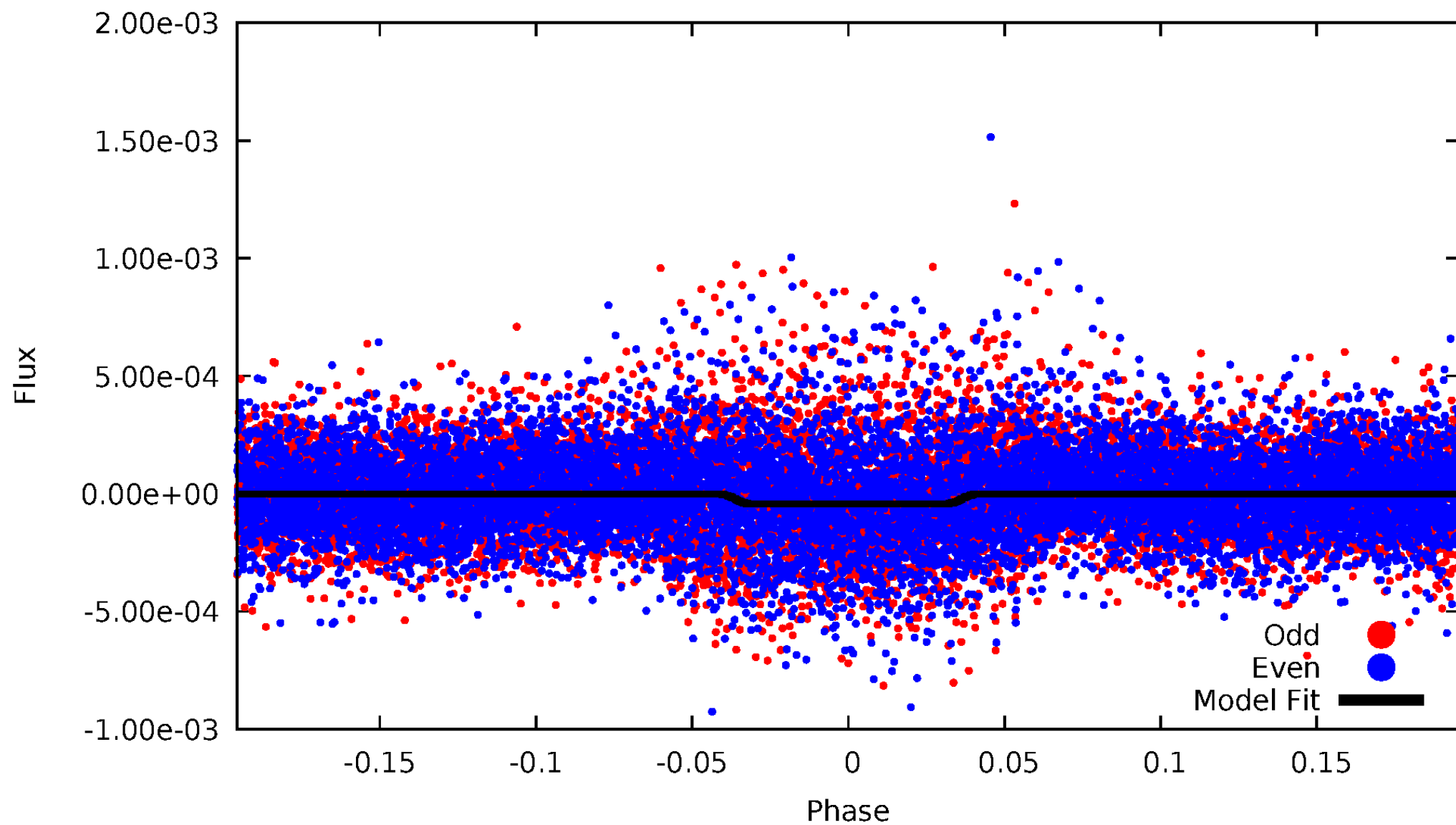
DV Odd/Even

TCE 005801452-02



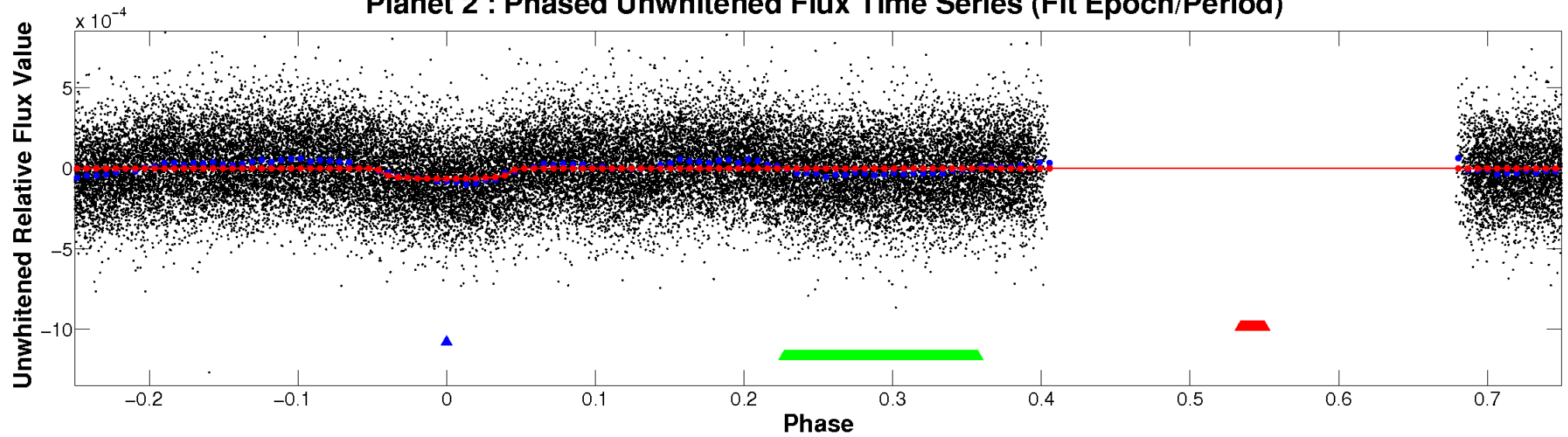
ALT Odd/Even

TCE 005801452-02

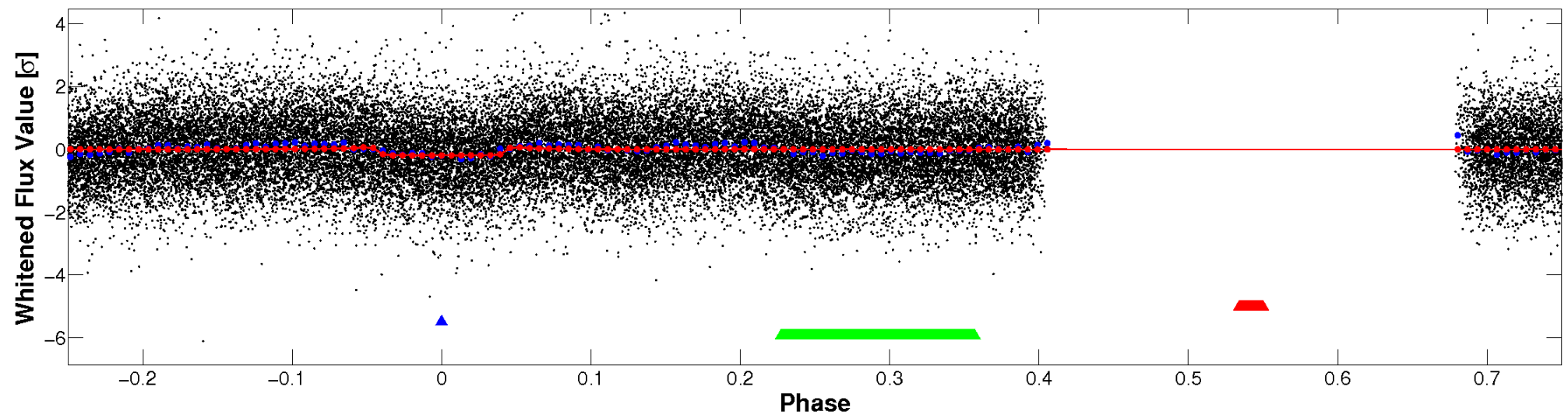


Non-Whitened Vs. Whitened Light Curve

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

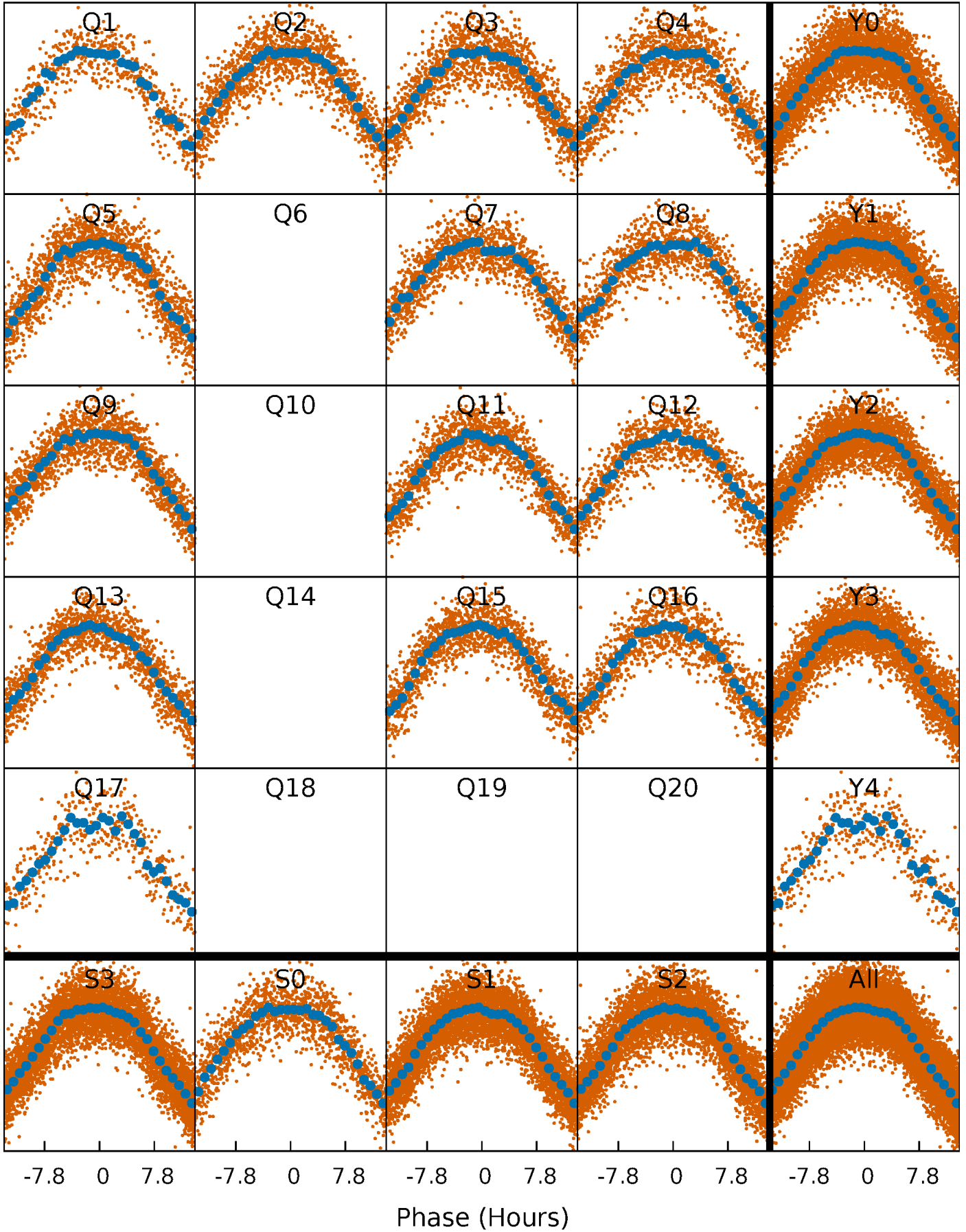


Planet 2 : Phased Whitened Flux Time Series (Fit Epoch/Period)



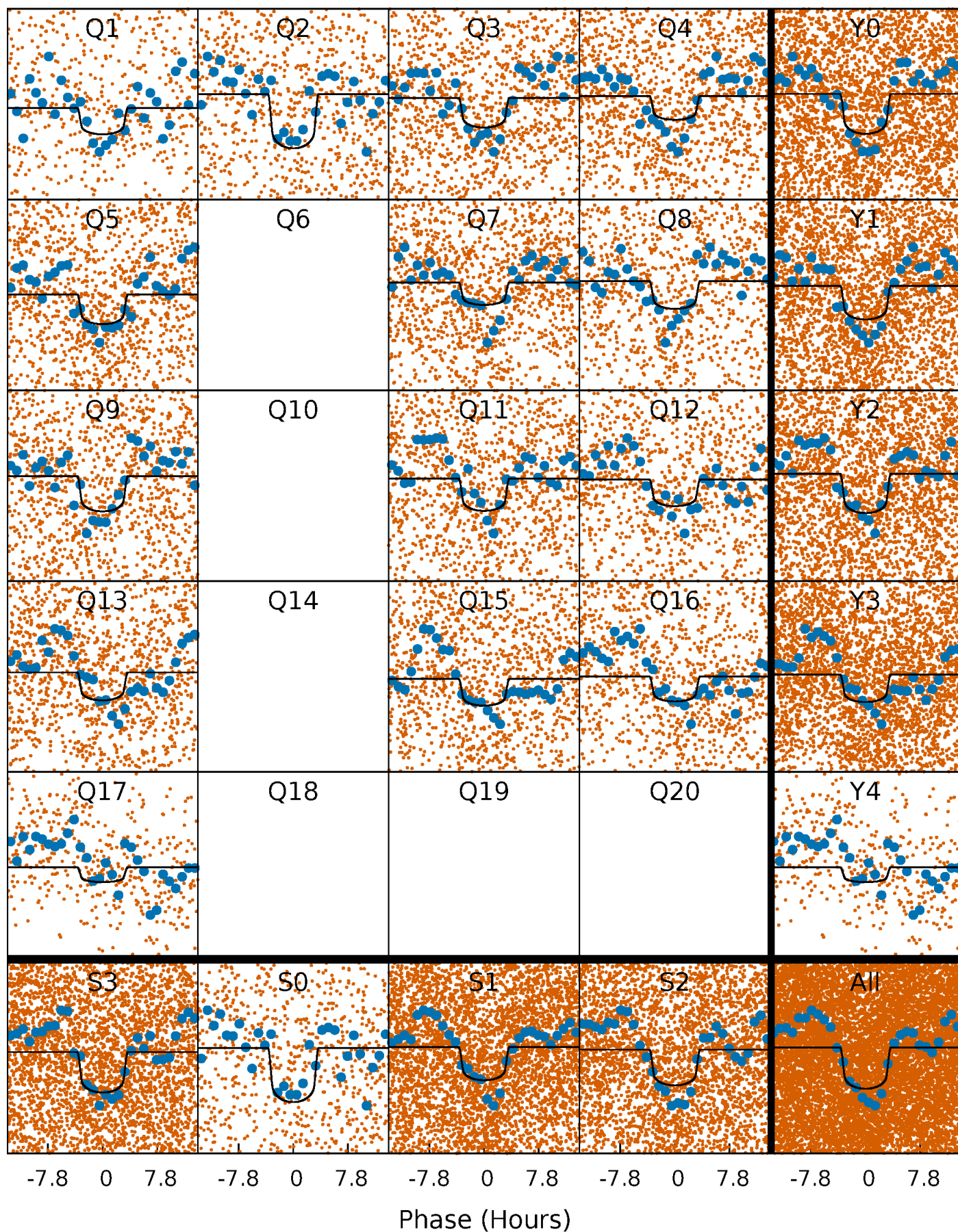
PDC Quarter-Phased Transit Curves

TCE 005801452-02 P= 3.123207 Days $T_0=133.118712$ (BKJD)



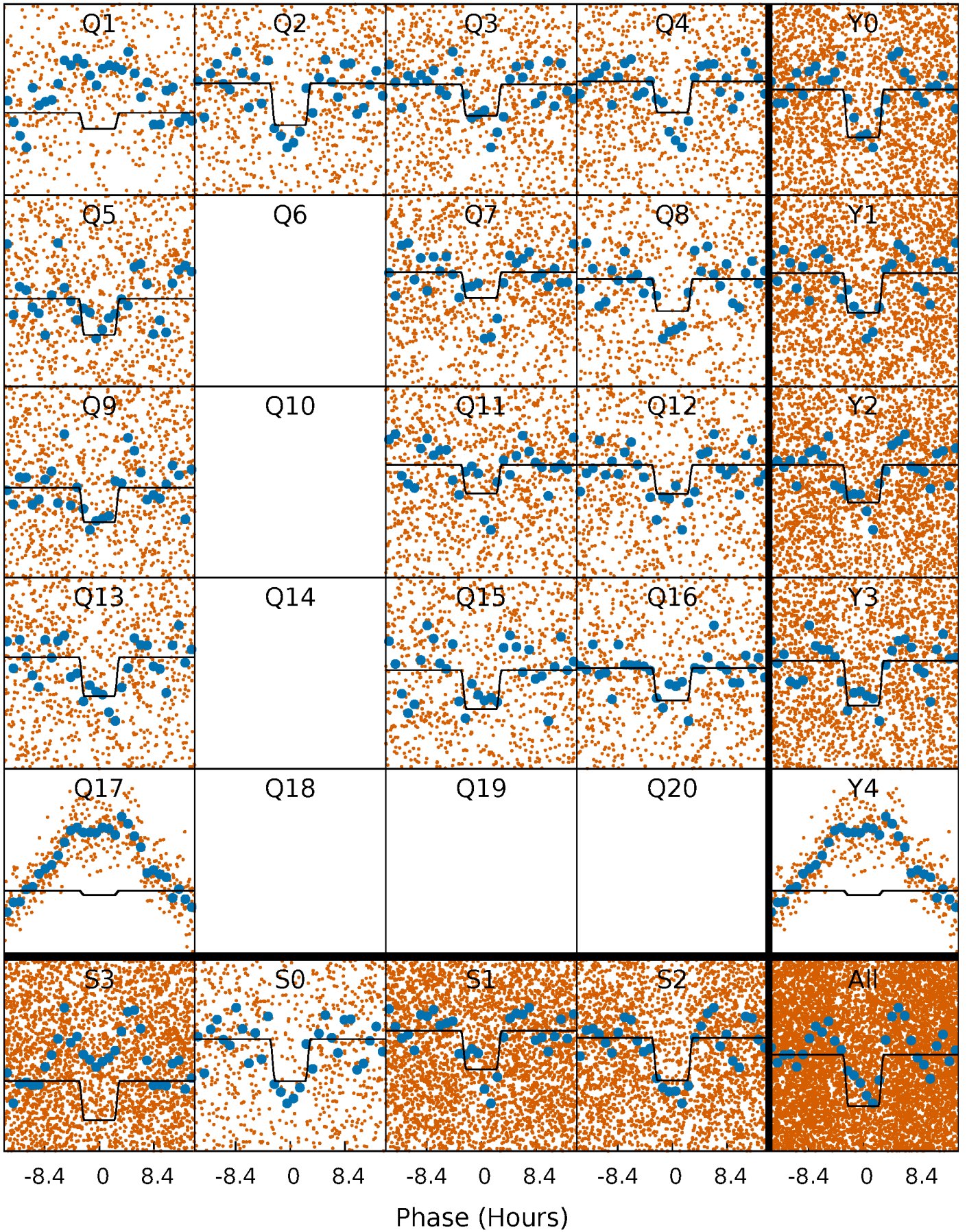
DV Quarter-Phased Transit Curves

TCE 005801452-02 P= 3.123207 Days $T_0=133.118712$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

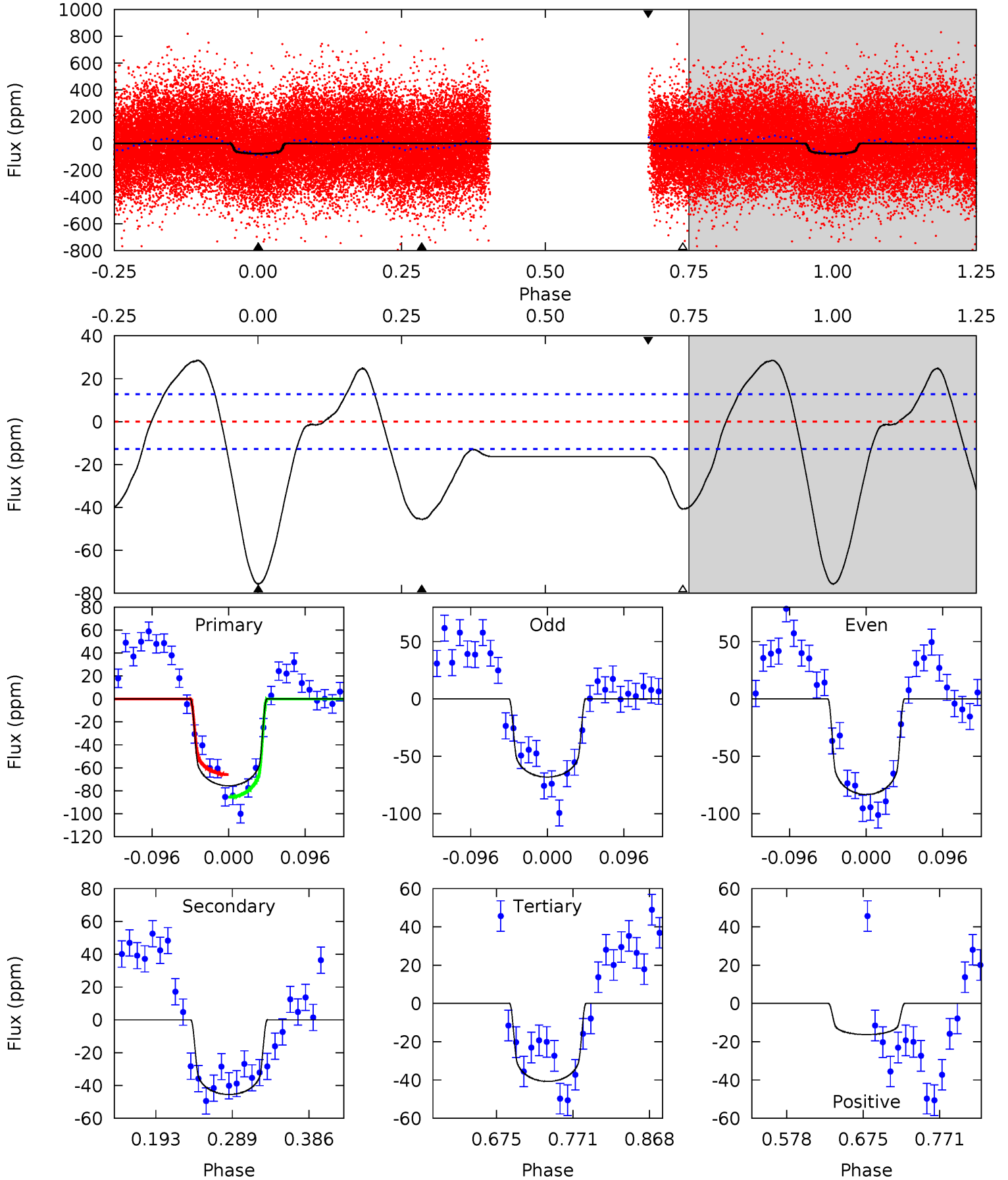
TCE 005801452-02 P= 3.123179 Days $T_0=133.121799$ (BKJD)



DV Model-Shift Uniqueness Test

005801452-02, P = 3.123207 Days, E = 129.995505 Days

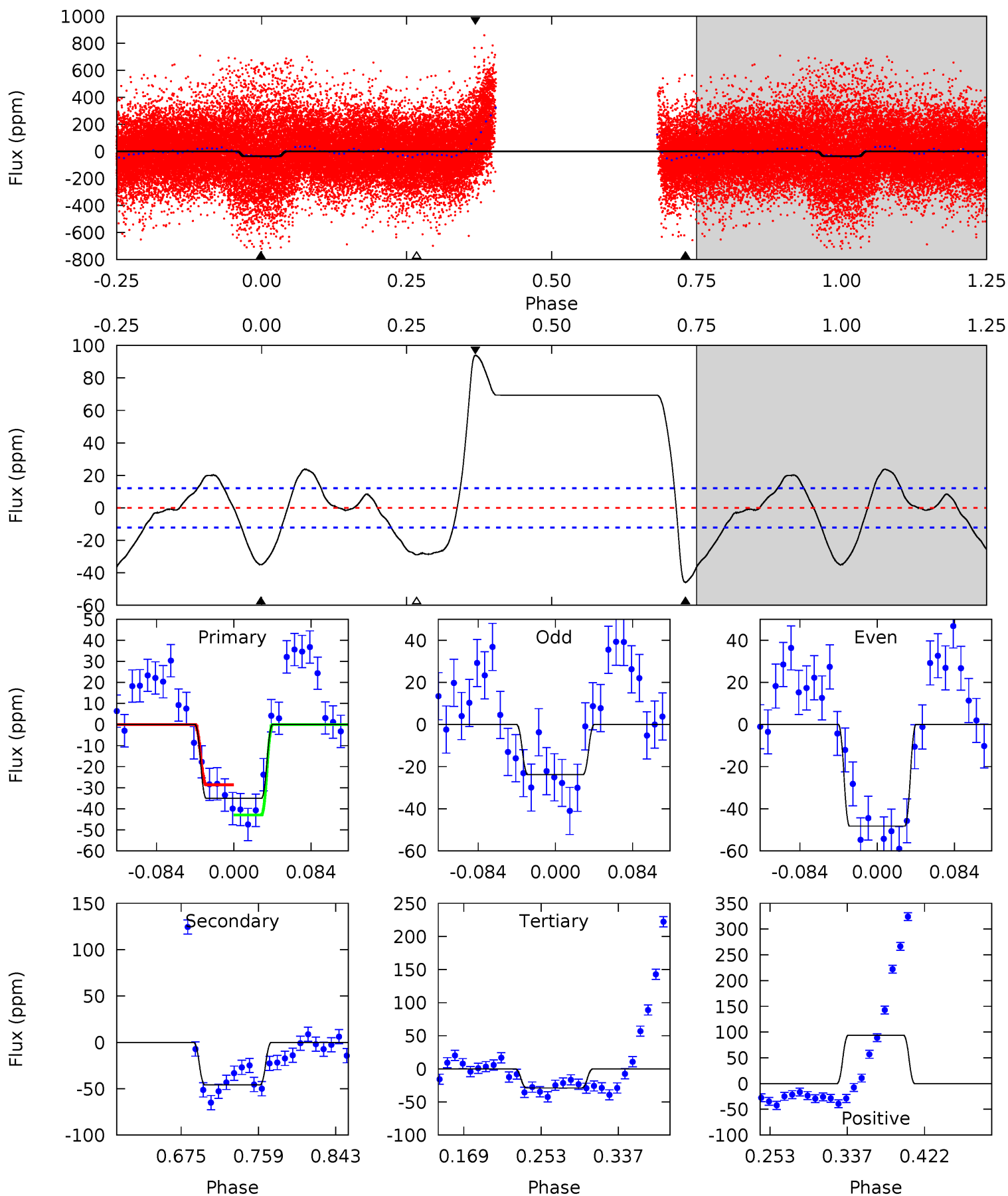
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
27.1	16.3	14.6	-5.84	4.57	1.66	8.10	12.5	33.0	1.70	22.1	2.74	1.06	0.27	3.52



Alt Model-Shift Uniqueness Test

005801452-02, P = 3.123179 Days, E = 129.998620 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
13.3	17.4	11.0	35.7	4.60	1.73	11.7	2.32	-22.4	6.44	-18.3	4.65	0.70	0.67	2.91



Stellar Parameters For KIC 005801452

	$T_{\text{eff}} (K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M (M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6440^{+144}_{-208}	$4.380^{+0.065}_{-0.195}$	$-0.040^{+0.250}_{-0.300}$	$1.169^{+0.370}_{-0.148}$	$1.196^{+0.169}_{-0.152}$	$1.053^{+0.359}_{-0.520}$
	+2%/-3%	+1%/-4%	+625%/-750%	+32%/-13%	+14%/-13%	+34%/-49%
Source	PHO1	KIC0	KIC0	DSEP		

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

Secondary Eclipse Parameters for KIC 005801452-02 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-45 ± 3	$1.14^{+0.22}_{-0.20}$	2068^{+155}_{-101}	5697^{+459}_{-405}	38^{+15}_{-12}
Alt.	-46 ± 3	$0.89^{+0.23}_{-0.18}$	2069^{+163}_{-96}	6432^{+899}_{-555}	62^{+35}_{-22}

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 $A_{obs} \gg 1.0$

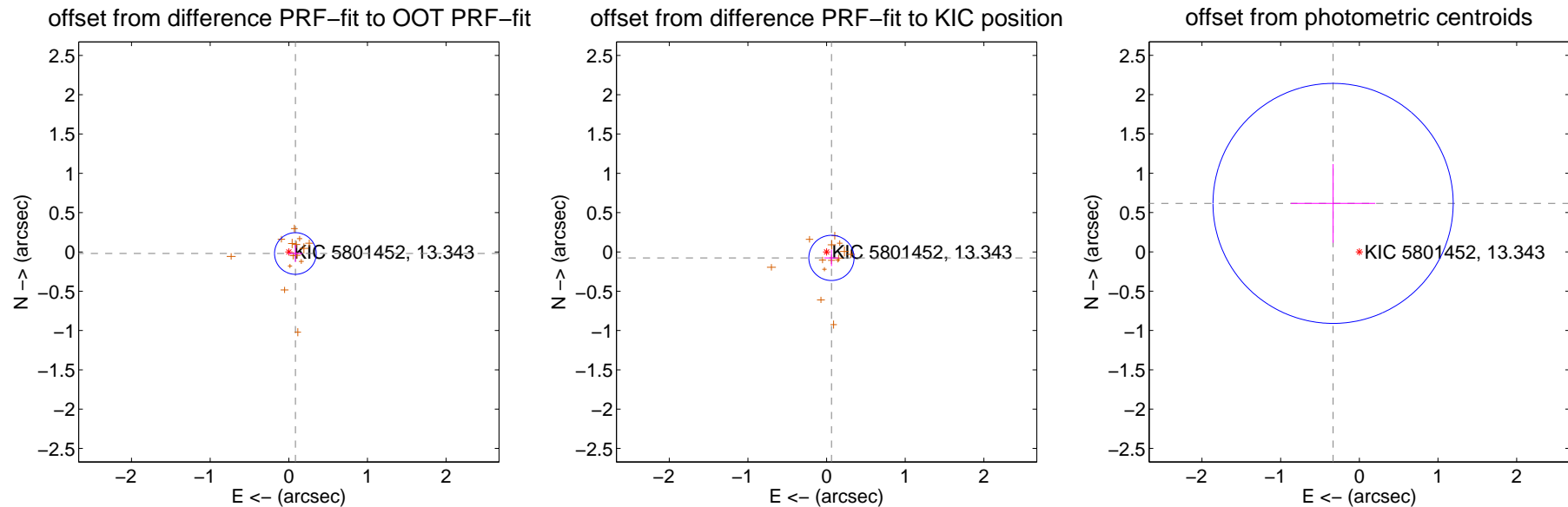
DV Centroid Data

Supplemental centroid analysis for 005801452-02. Kepler magnitude: 13.34. Transit SNR 12.15

There are 0 quarters with good PRF difference image offsets

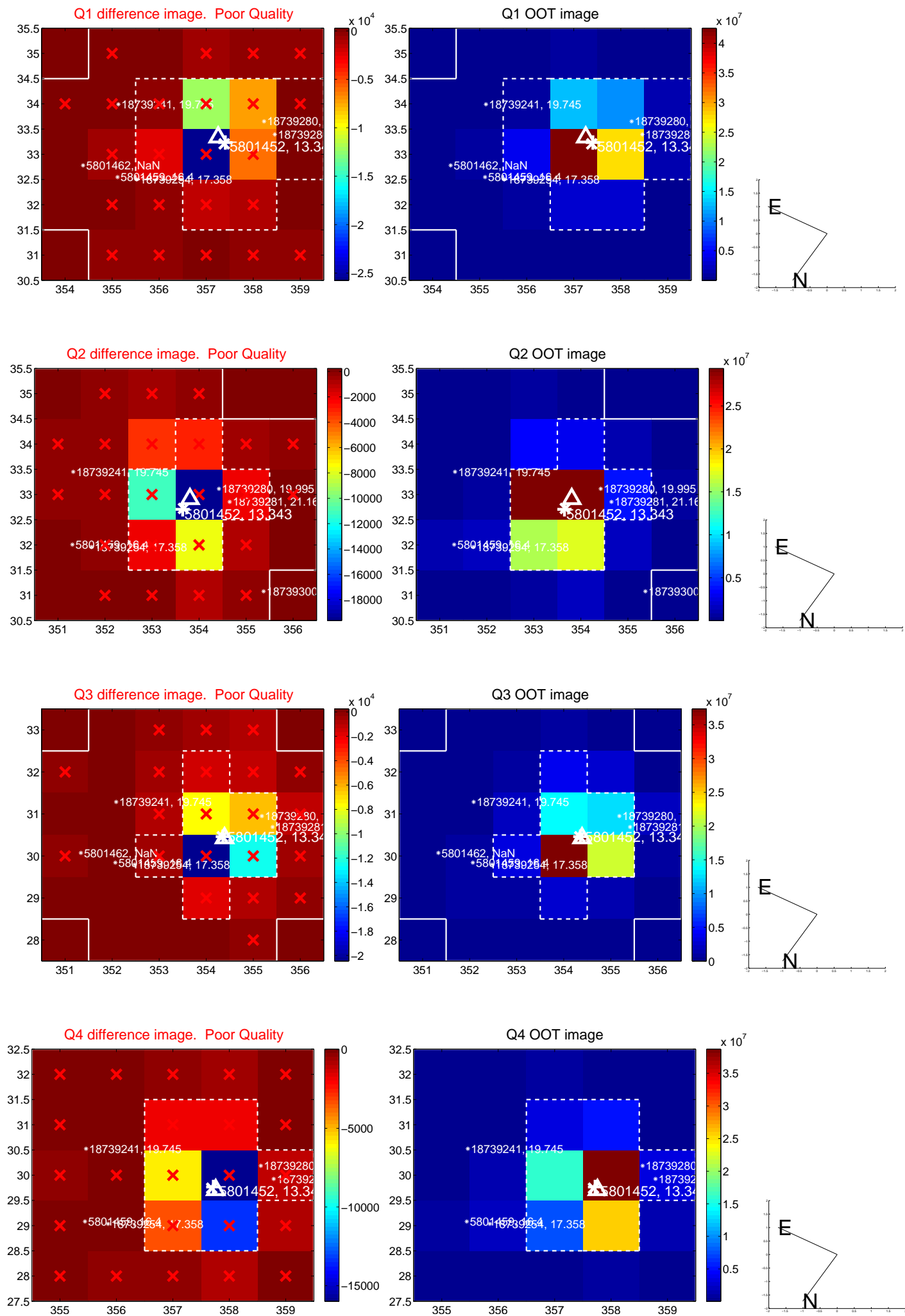
The direct PRF centroid is offset from the target star catalog position by about 0.13 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.086 ± 0.088	0.97	-0.084 ± 0.088	-0.020 ± 0.109
PRF-fit source offset from KIC position	0.098 ± 0.096	1.02	-0.062 ± 0.093	-0.076 ± 0.104
photometric centroid source offset	0.70 ± 0.51	1.38	0.33 ± 0.54	0.62 ± 0.50

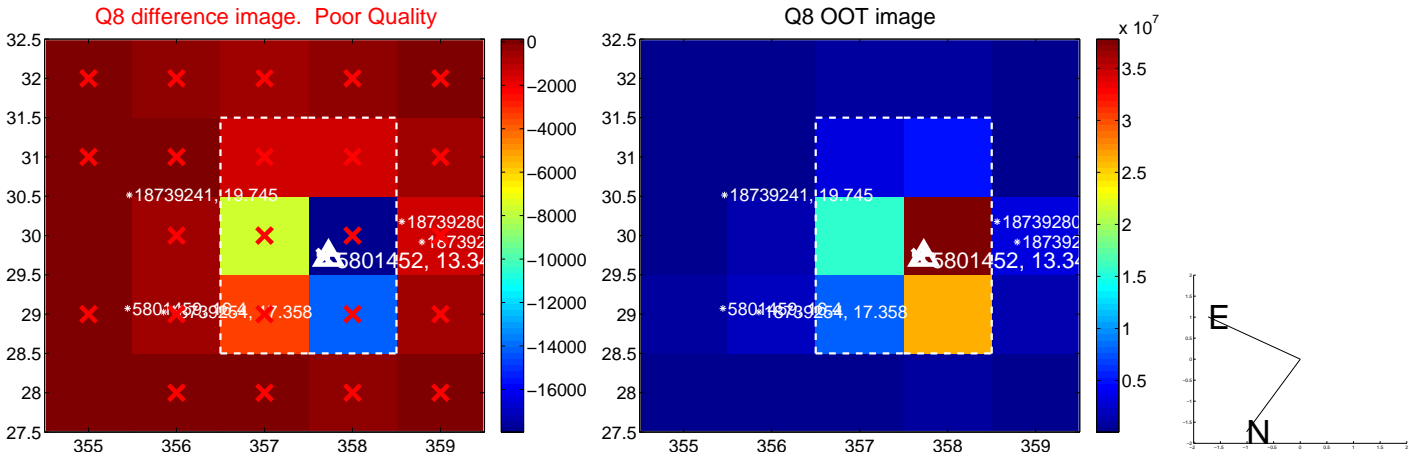
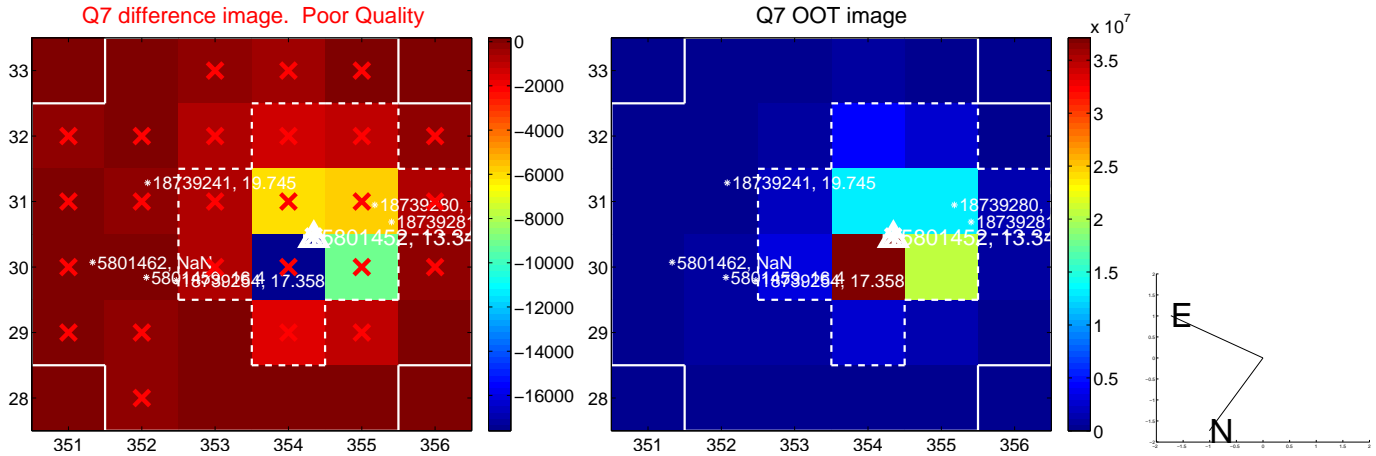
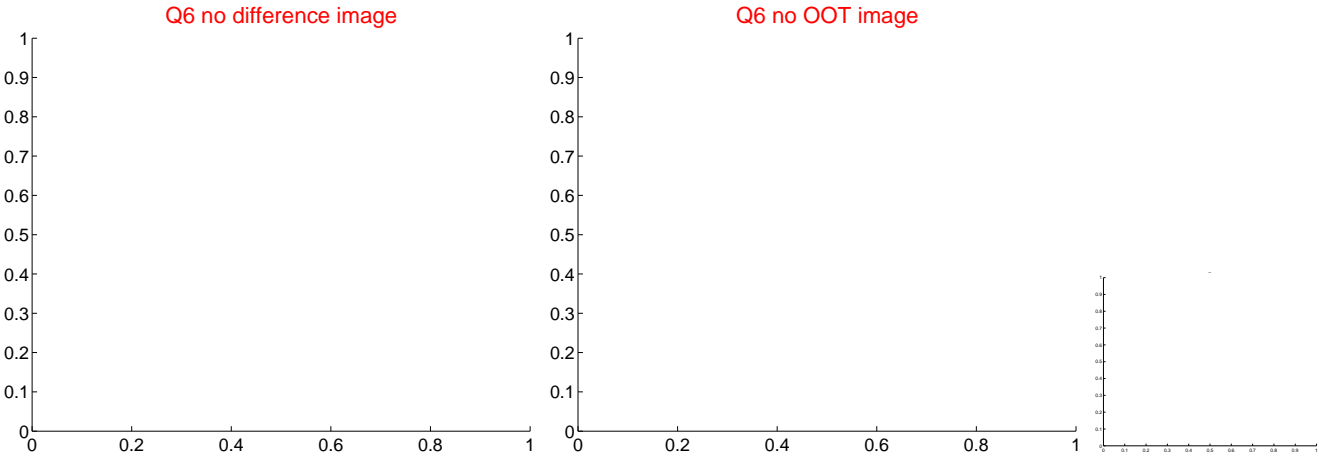
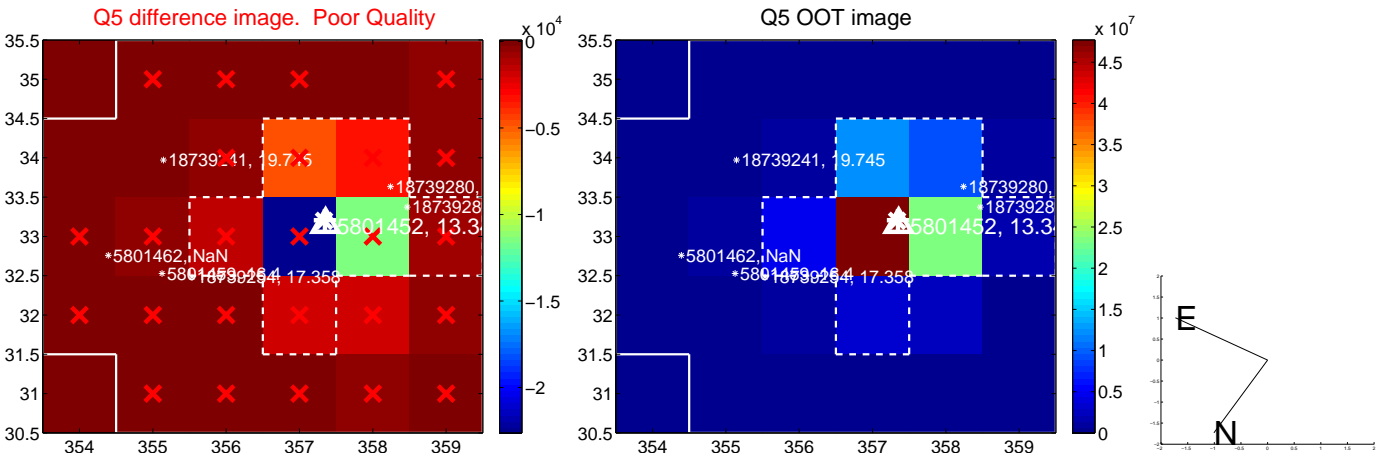


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

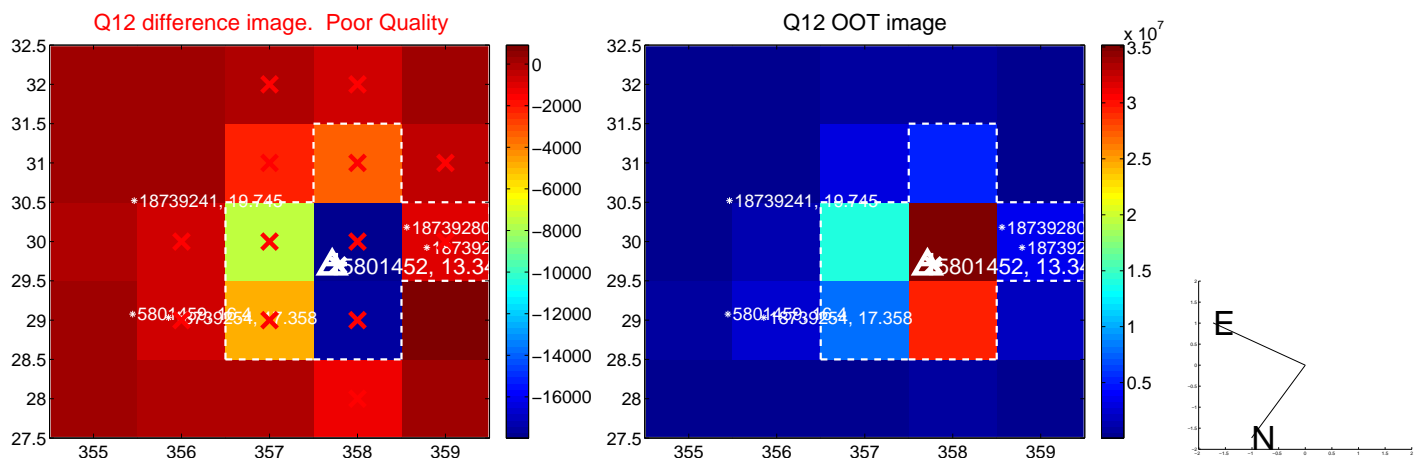
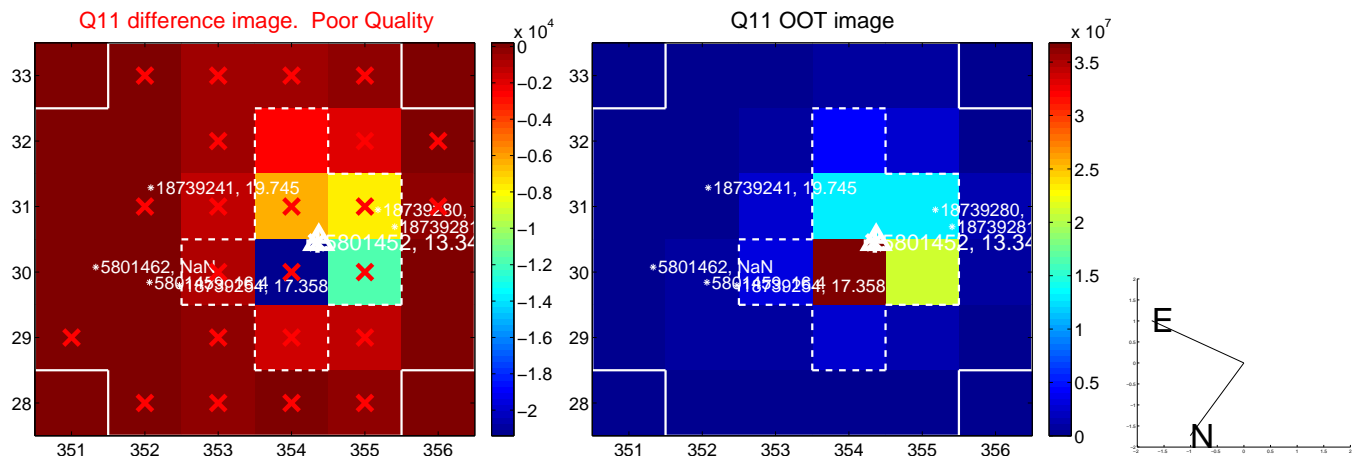
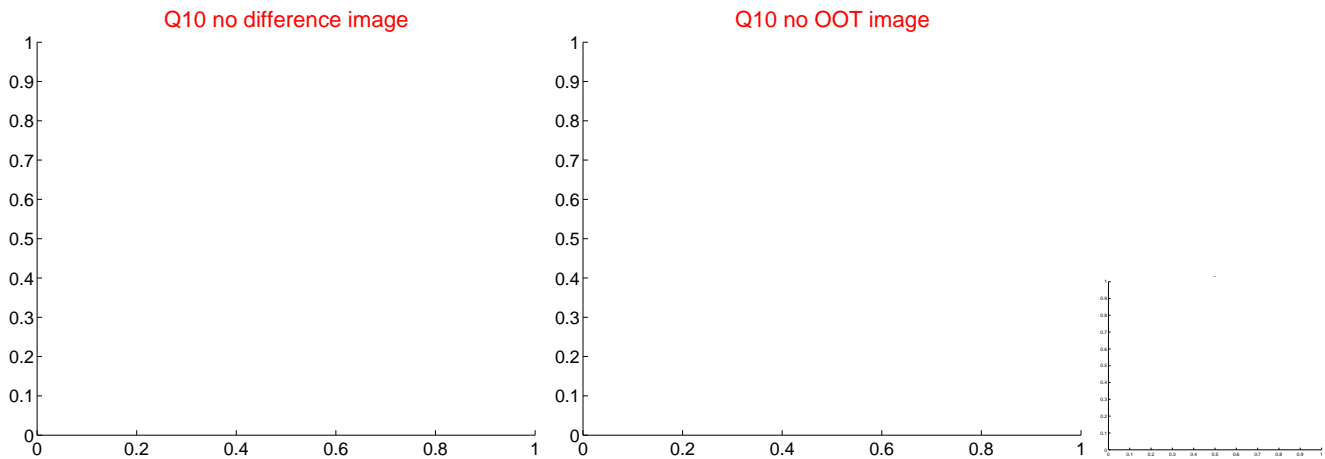
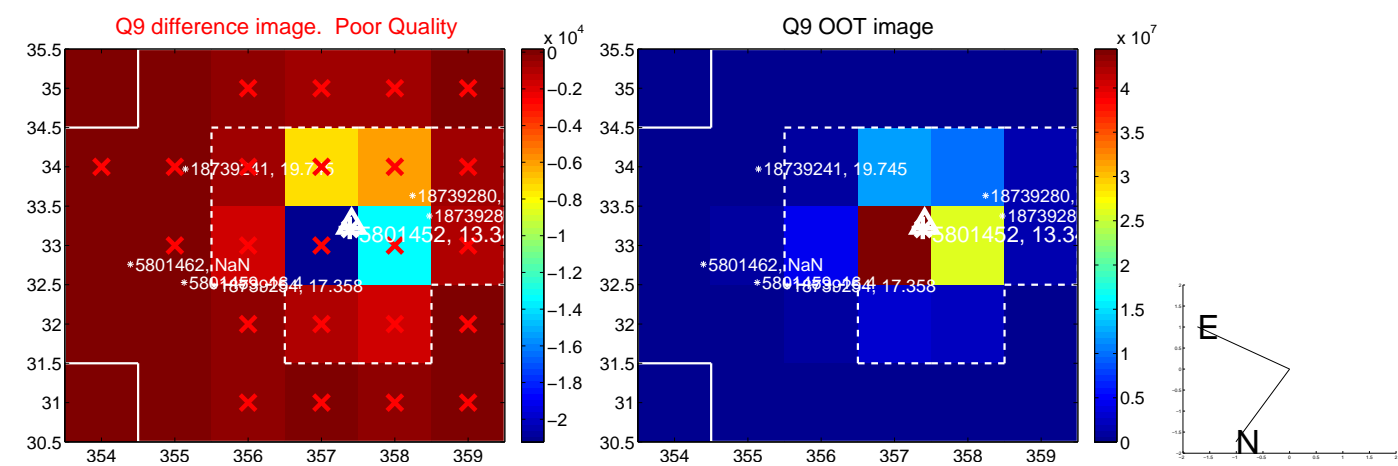
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



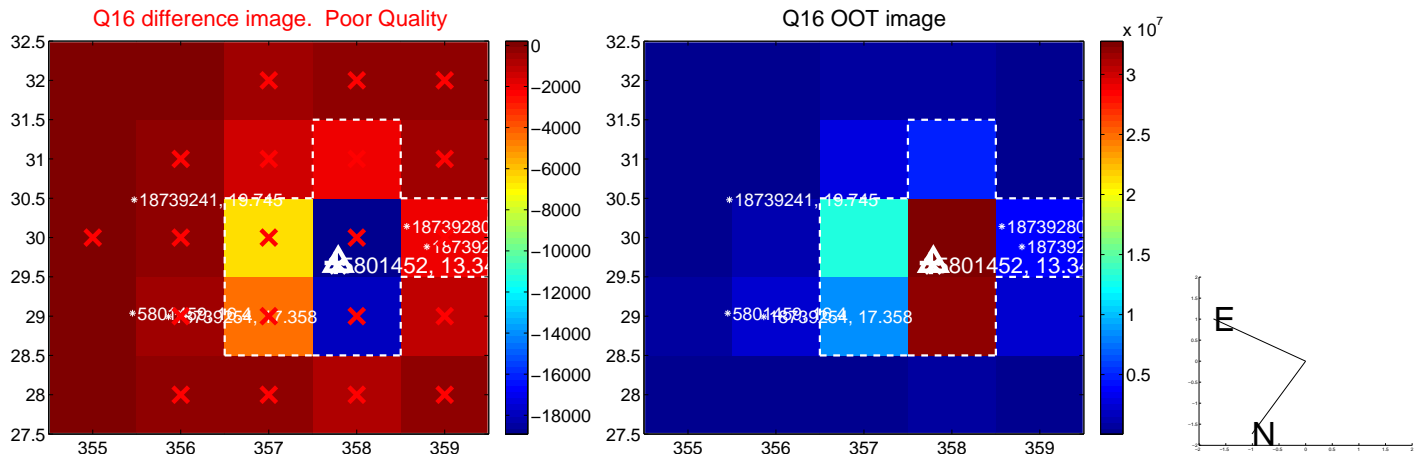
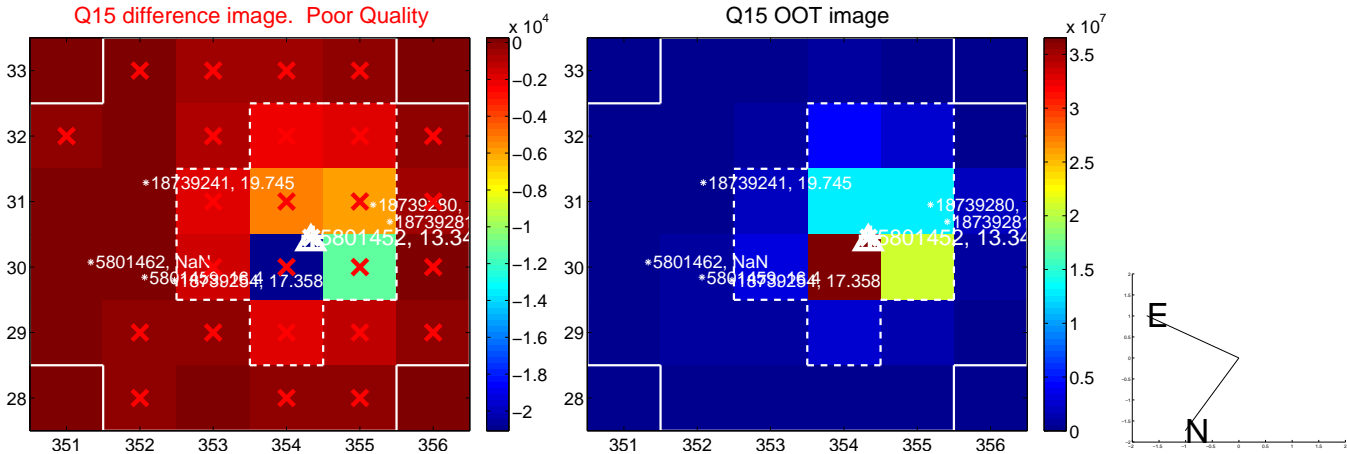
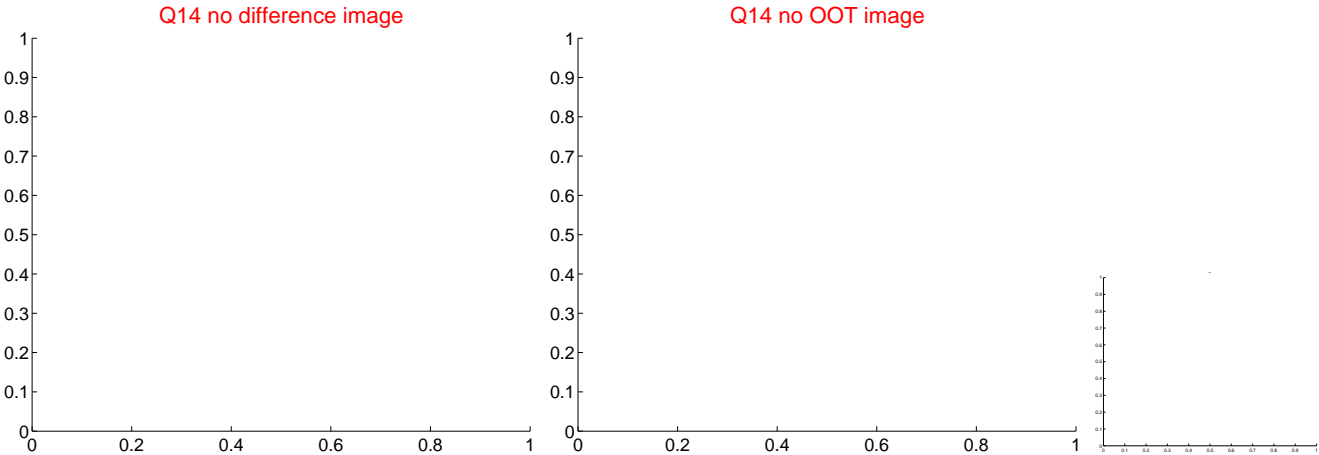
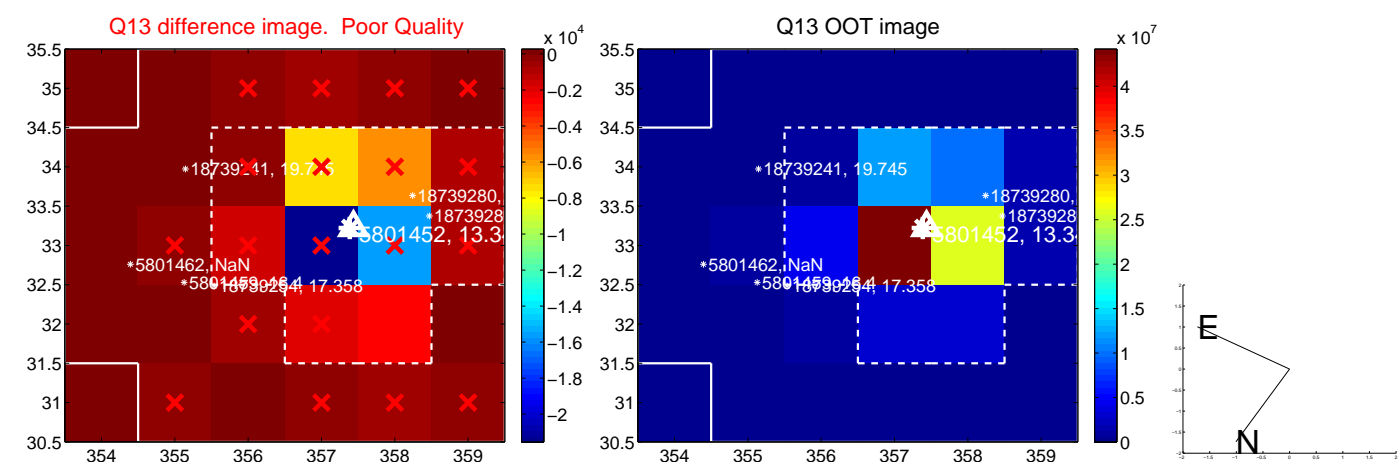
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



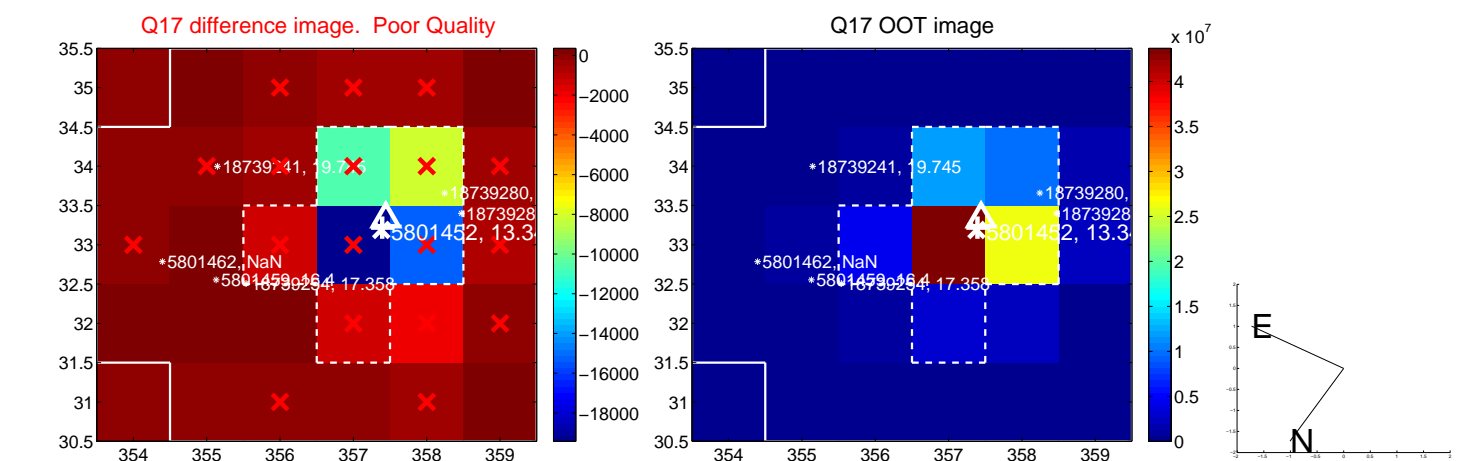
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



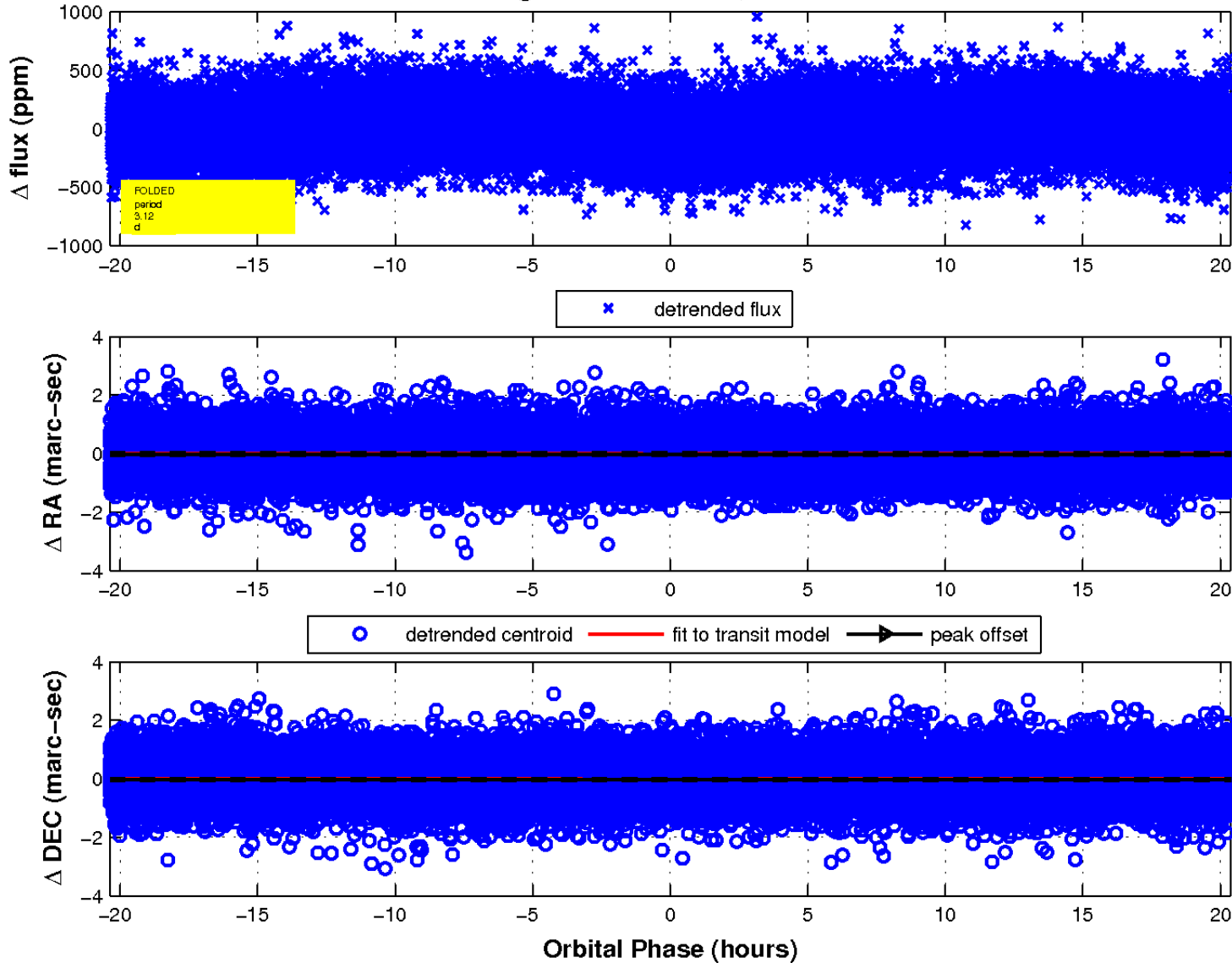
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

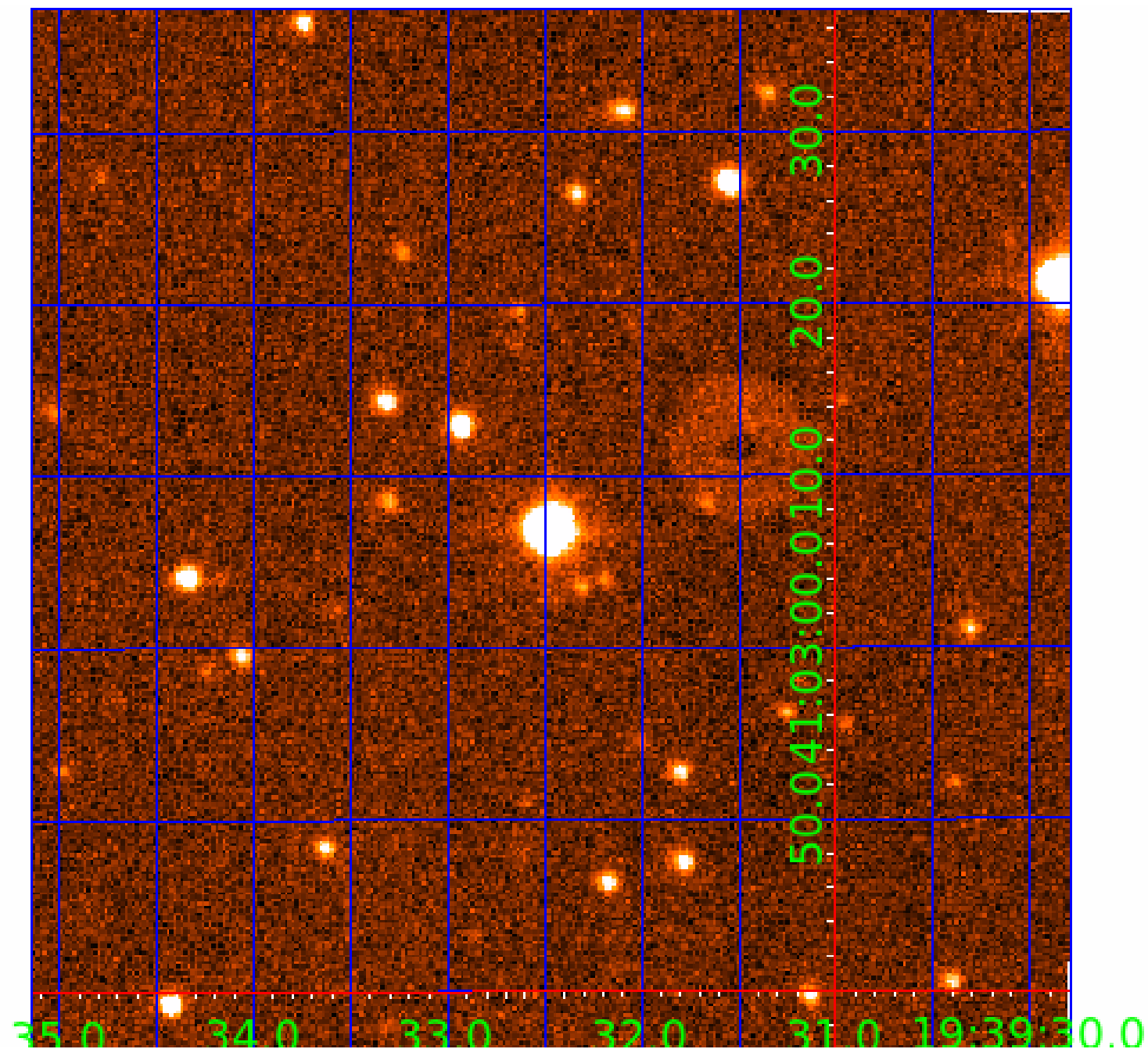


fluxWeightedCentroids, Planet 2 of 3



UKIRT Image

Declination



KIC 005801452

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})
005801452-01	OBS	No	3.123099	131.713640	72.1	7.059	10.0	11.5	1.17	6440	1.30	1068.73
005801452-02	OBS	No	3.123207	133.118712	64.6	6.791	11.7	12.1	1.17	6440	1.10	1068.68
005801452-03	OBS	No	3.124078	133.828205	45.1	9.516	11.1	10.8	1.17	6440	0.93	1068.28

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
005801452-01	OBS	FP	0.00	1	0	0	0	SWEET_NTL—LPP_DV—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—CENT_FEW_DIFFS
005801452-02	OBS	FP	0.00	1	0	0	0	SWEET_NTL—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_POS_ALT—SAME_NTL_PERIOD—CENT_FEW_DIFFS
005801452-03	OBS	FP	0.00	1	0	0	0	SWEET_NTL—LPP_DV—LPP_ALT—MOD_NONUNIQ_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.

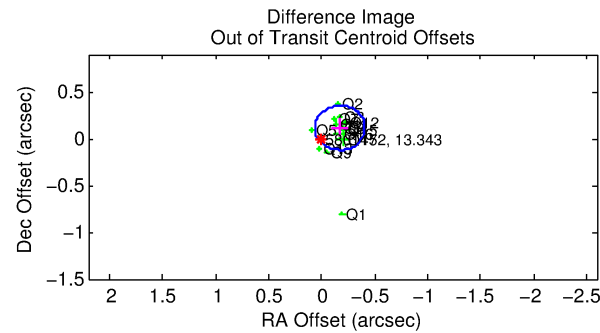
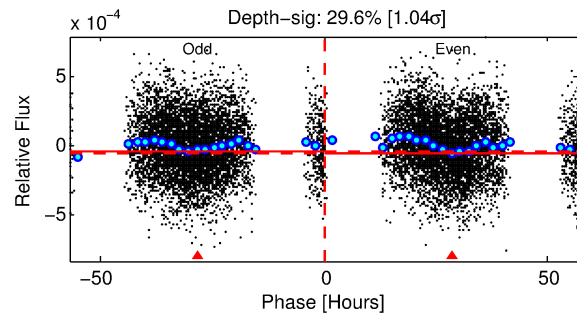
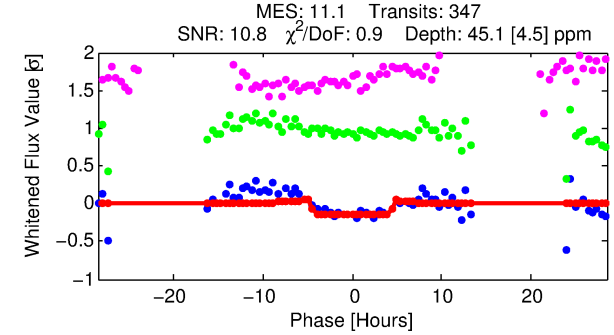
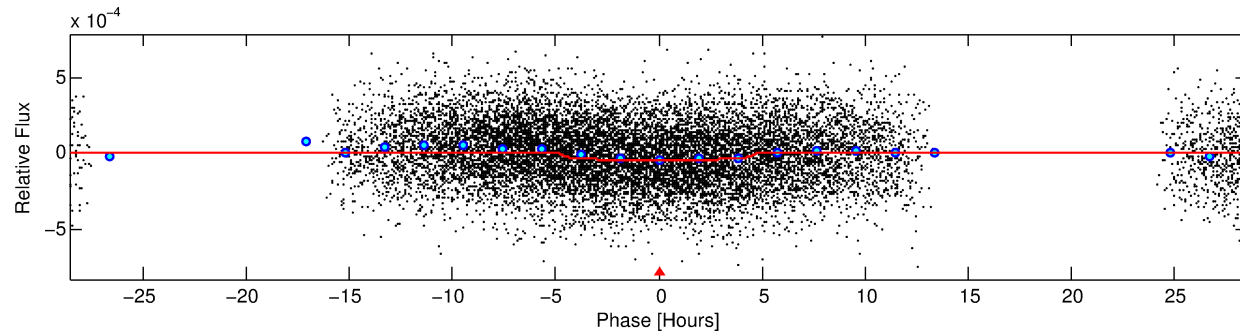
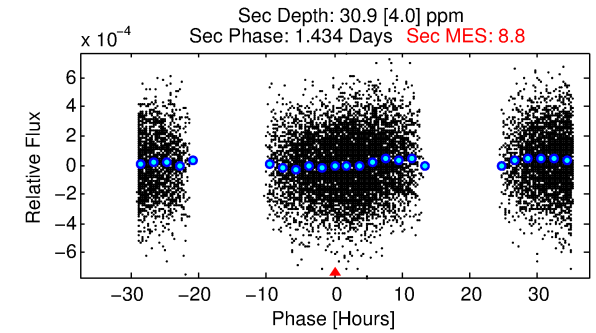
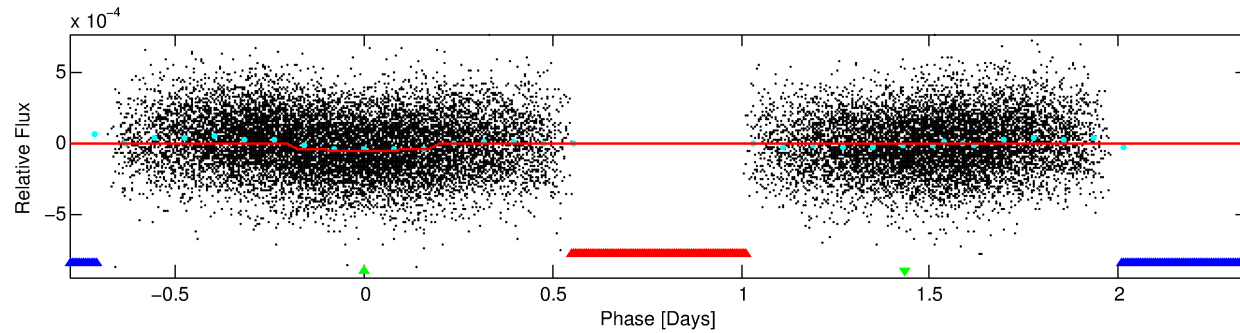
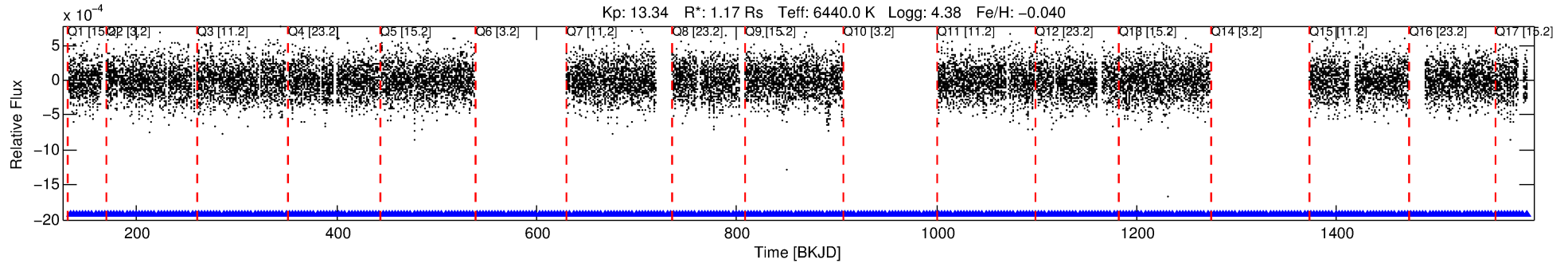
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 005801452-03

No Significant Match Found

DV One-Page Summary

KIC: 5801452 Candidate: 3 of 3 Period: 3.124 d



DV Fit Results:

Period = 3.12408 [0.00004] d
Epoch = 133.8282 [0.0068] BKJD
Rp/R* = 0.0072 [0.0012]
a/R* = 1.44 [0.66]
b = 0.91 [0.17]
Seff = 1068.28 [414.87]
Teq = 1458 [142] K
Rp = 0.92 [0.33] Re
a = 0.0444 [0.0115] AU
Ag = 39.15 [19.82] [1.93σ]
Teffp = 5638 [525] K [7.69σ]

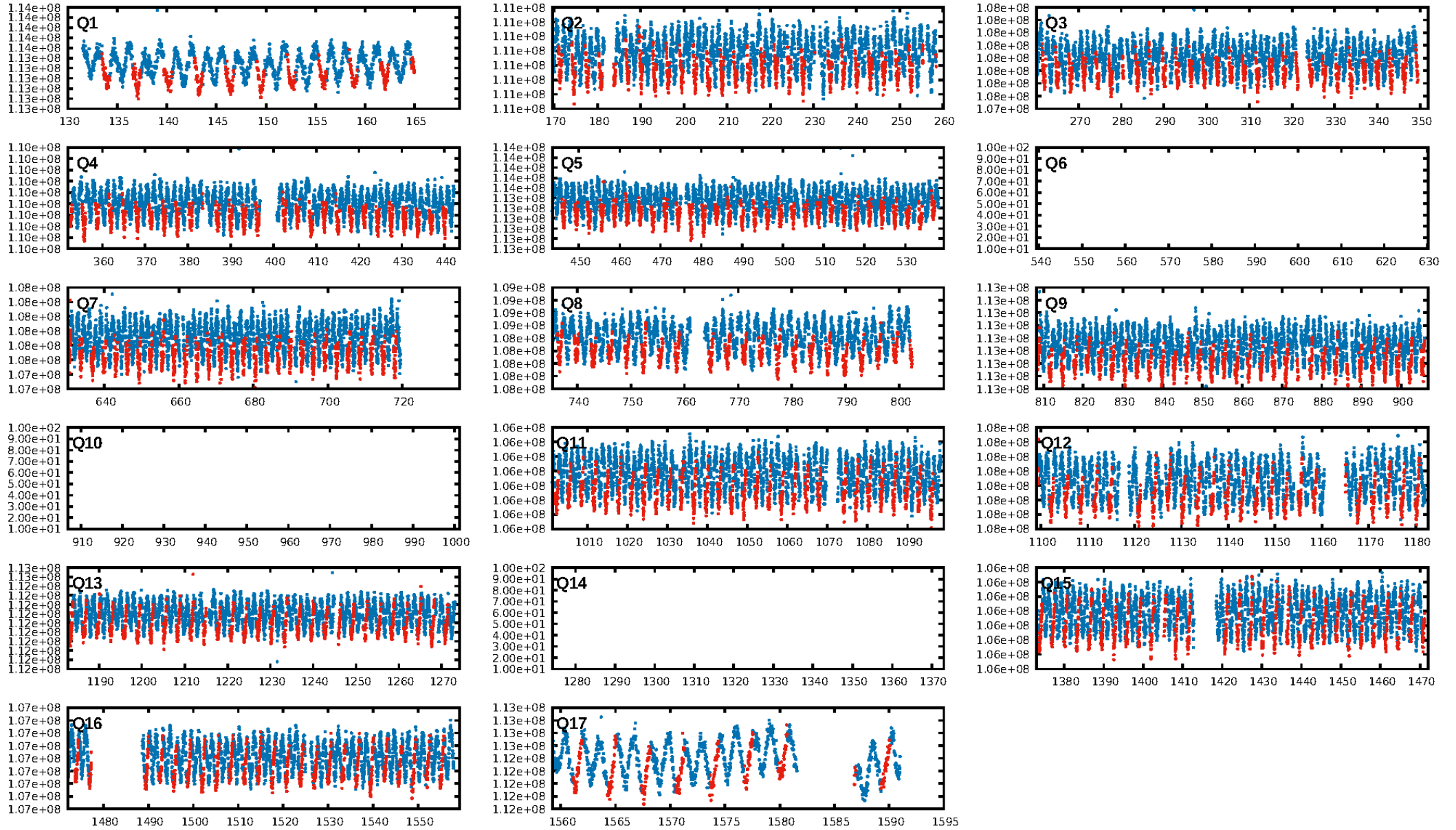
DV Diagnostic Results:

ShortPeriod-sig: 0.1% [0.00σ]
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 2.80e-11
RollingBand-fgt: 1.00 [328/328]
GhostDiagnostic-chr: 1.084
Centroid-sig: 0.0%
Centroid-so: 2.857 arcsec [4.33σ]
OotOffset-rm: 0.209 arcsec [2.65σ]
KicOffset-rm: 0.107 arcsec [1.43σ]
OotOffset-st: 1/4/4/5 [14]
KicOffset-st: 1/4/4/5 [14]
DiffImageQuality-fgm: 1.00 [14/14]
DiffImageOverlap-fno: 0.00 [0/14]

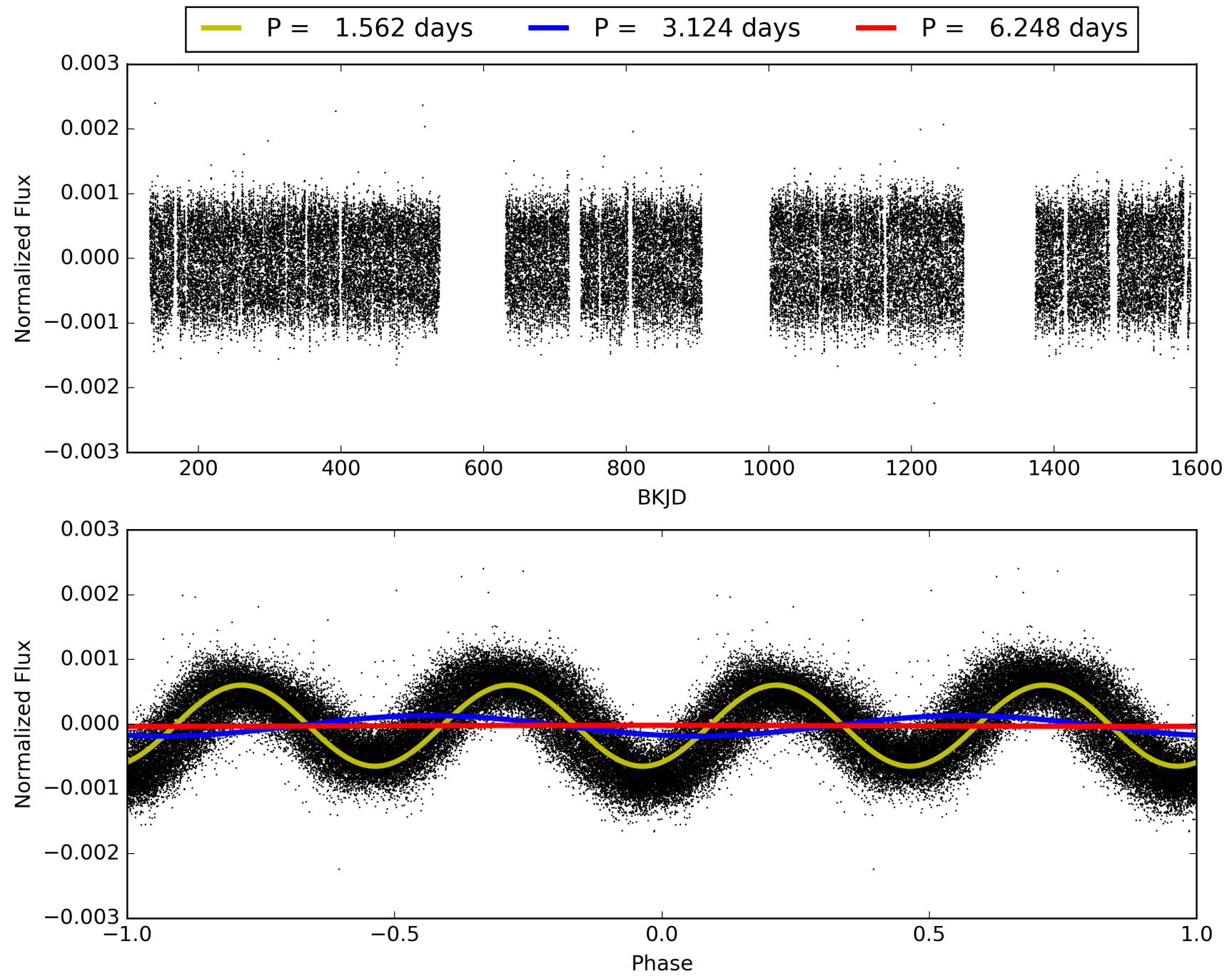
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 09:26:46 Z

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

TCE 005801452-03, PDC Light Curves

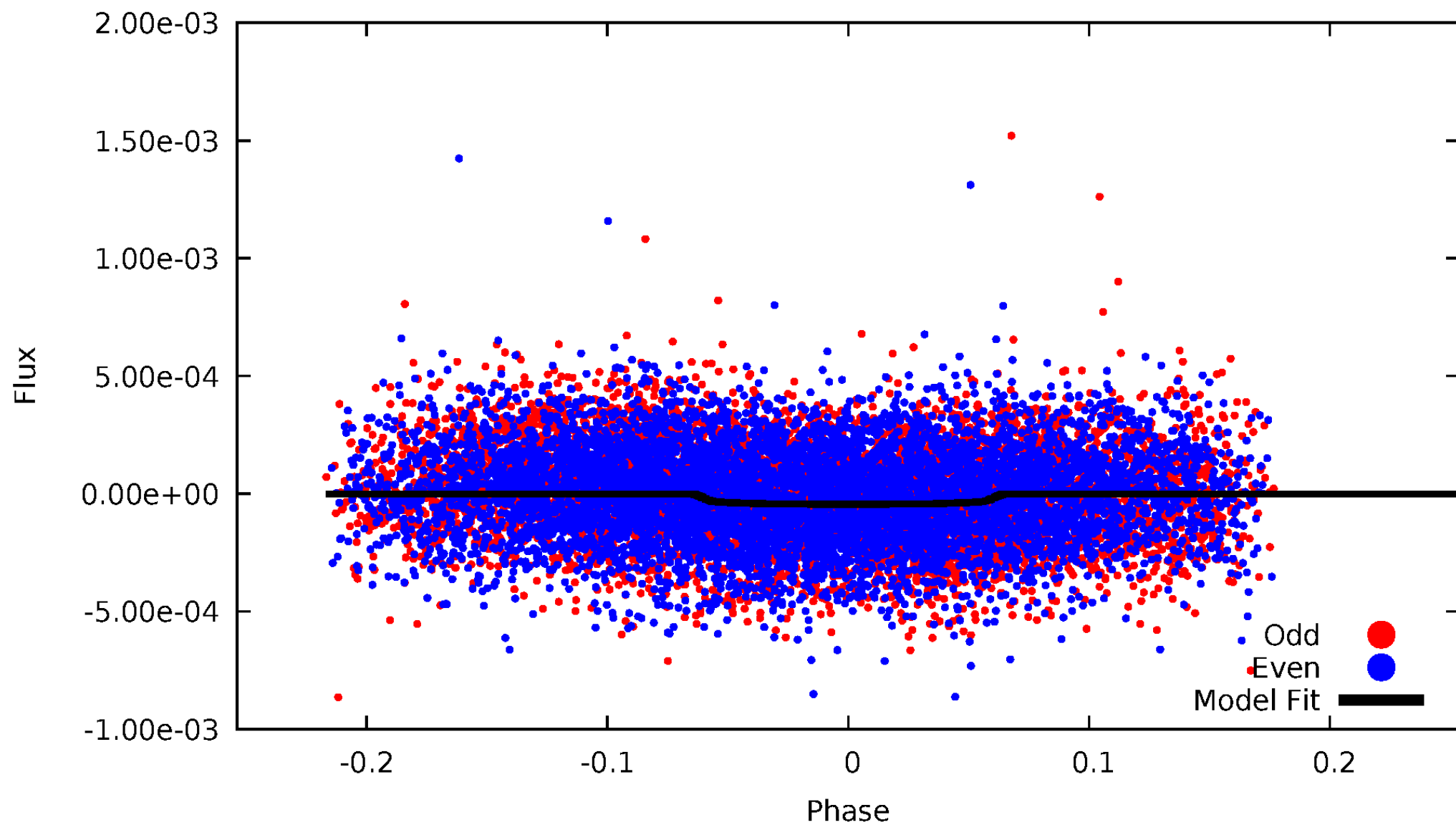


TCE 005801452-03



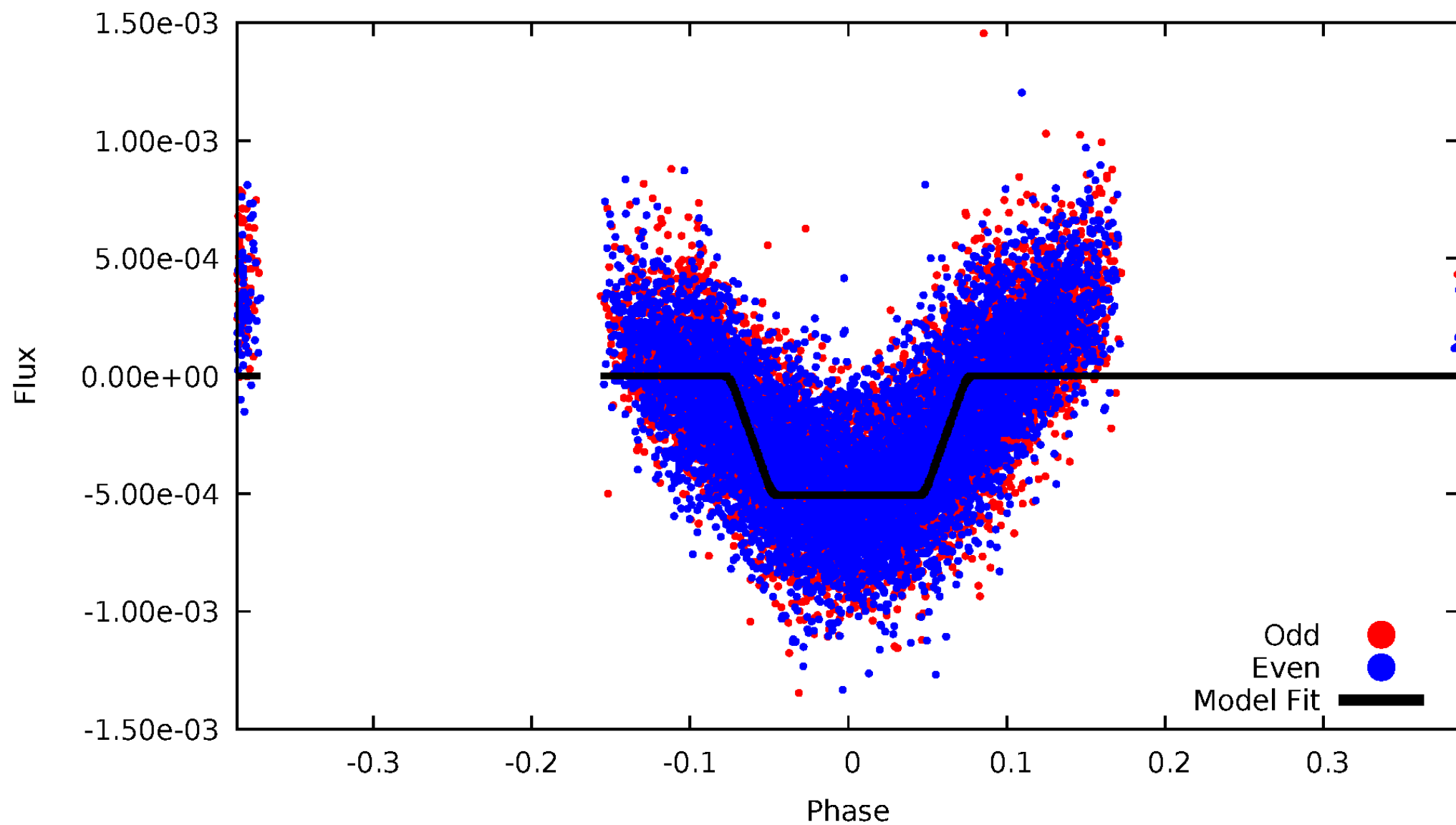
DV Odd/Even

TCE 005801452-03

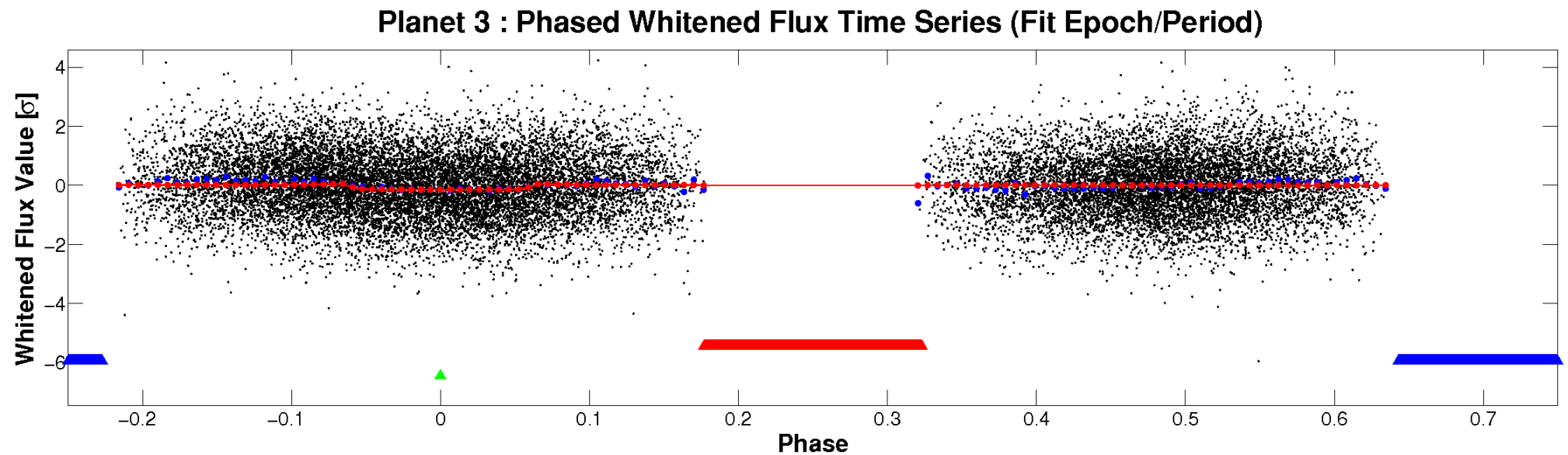
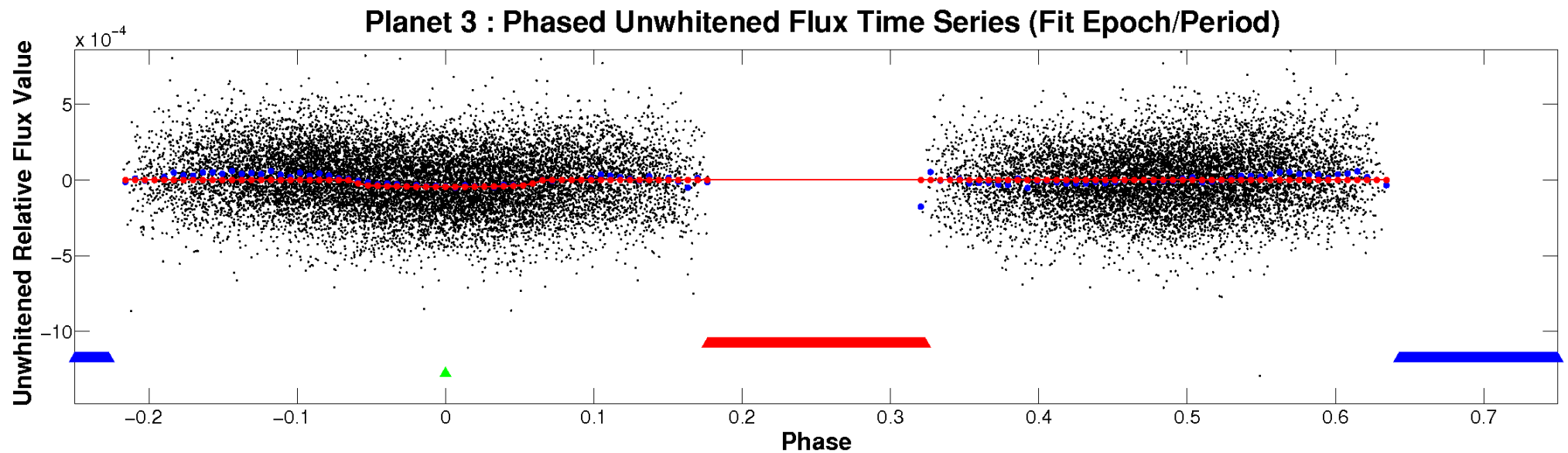


ALT Odd/Even

TCE 005801452-03

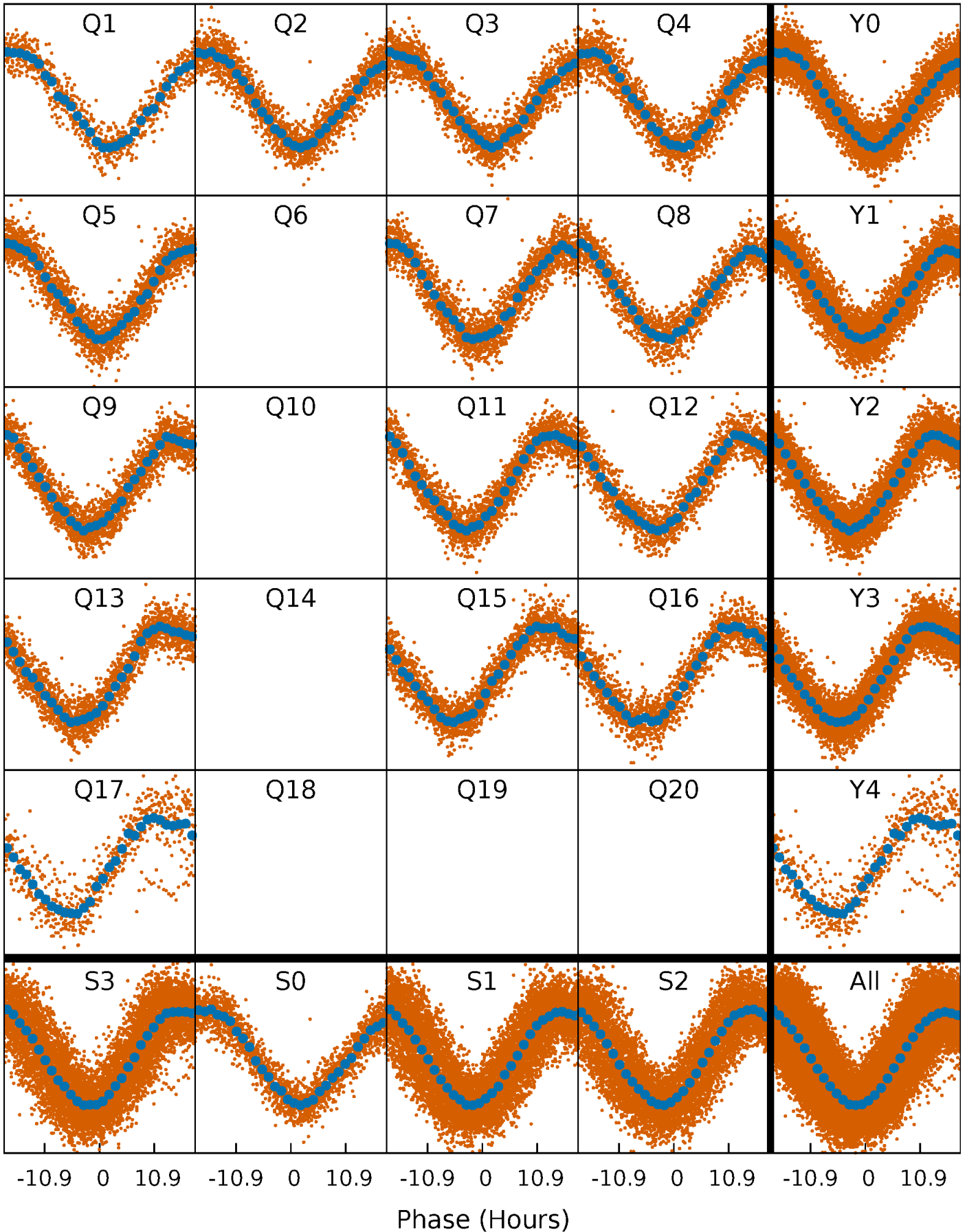


Non-Whitened Vs. Whitened Light Curve



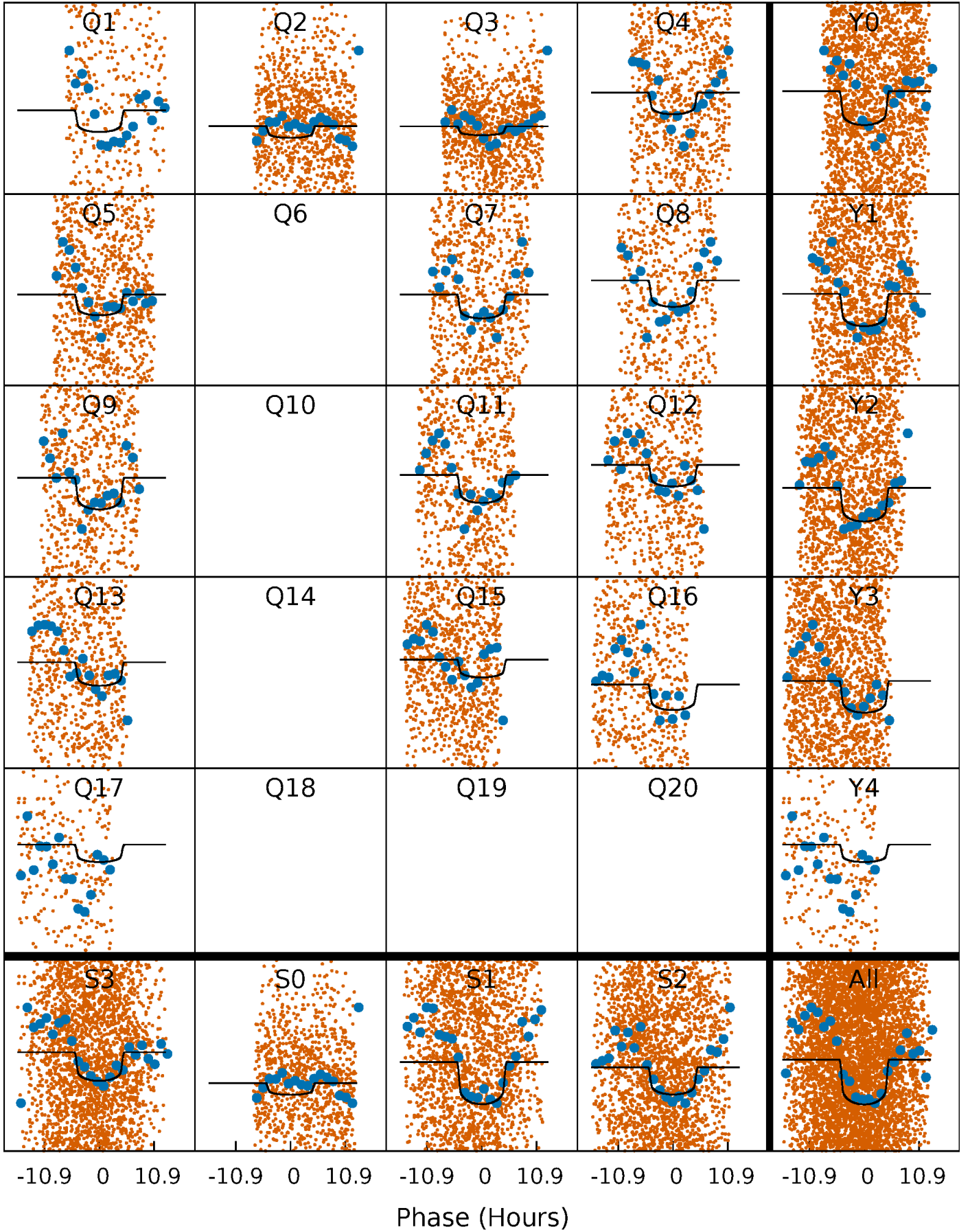
PDC Quarter-Phased Transit Curves

TCE 005801452-03 $P = 3.124078$ Days $T_0 = 133.828205$ (BKJD)



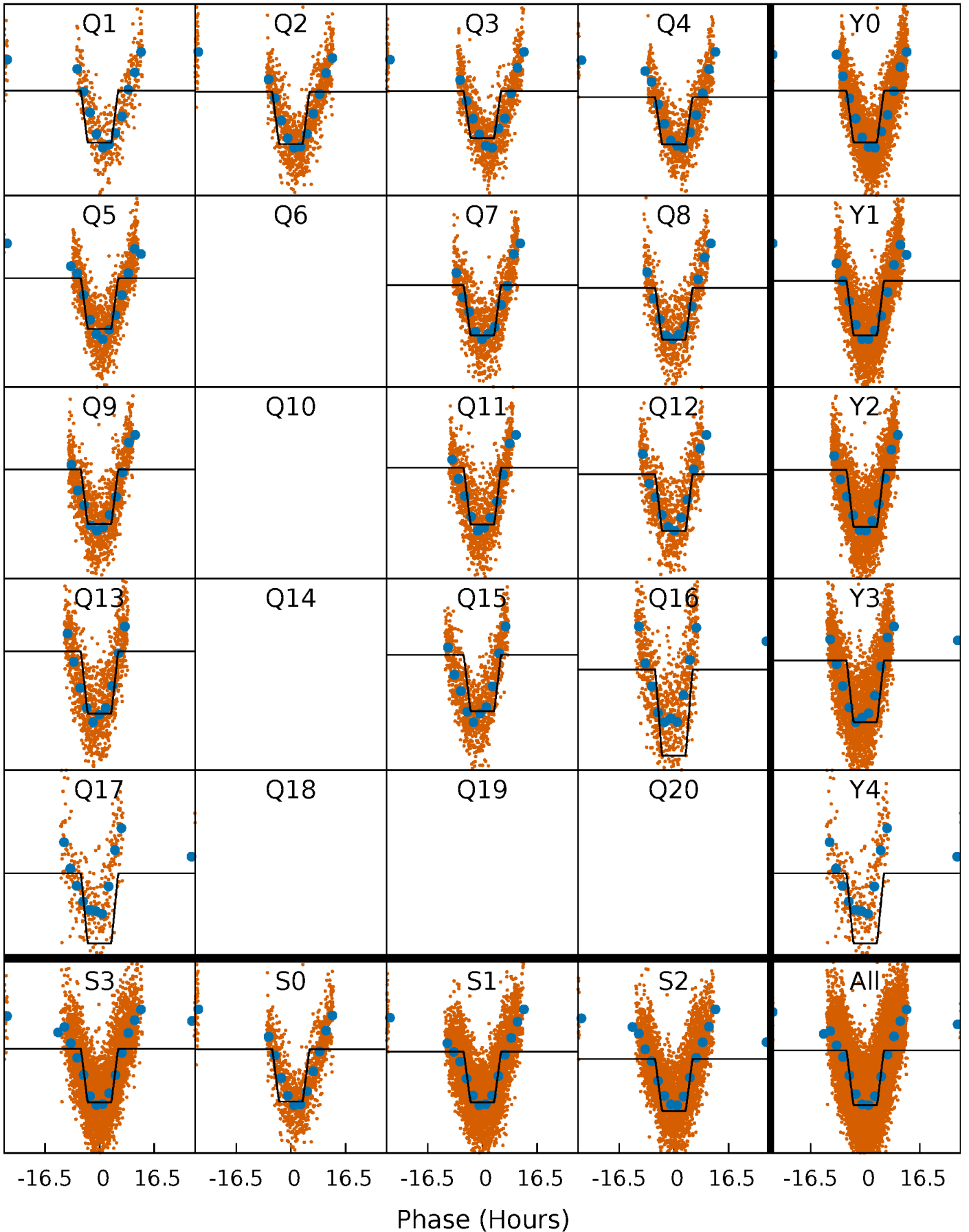
DV Quarter-Phased Transit Curves

TCE 005801452-03 P= 3.124078 Days $T_0=133.828205$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

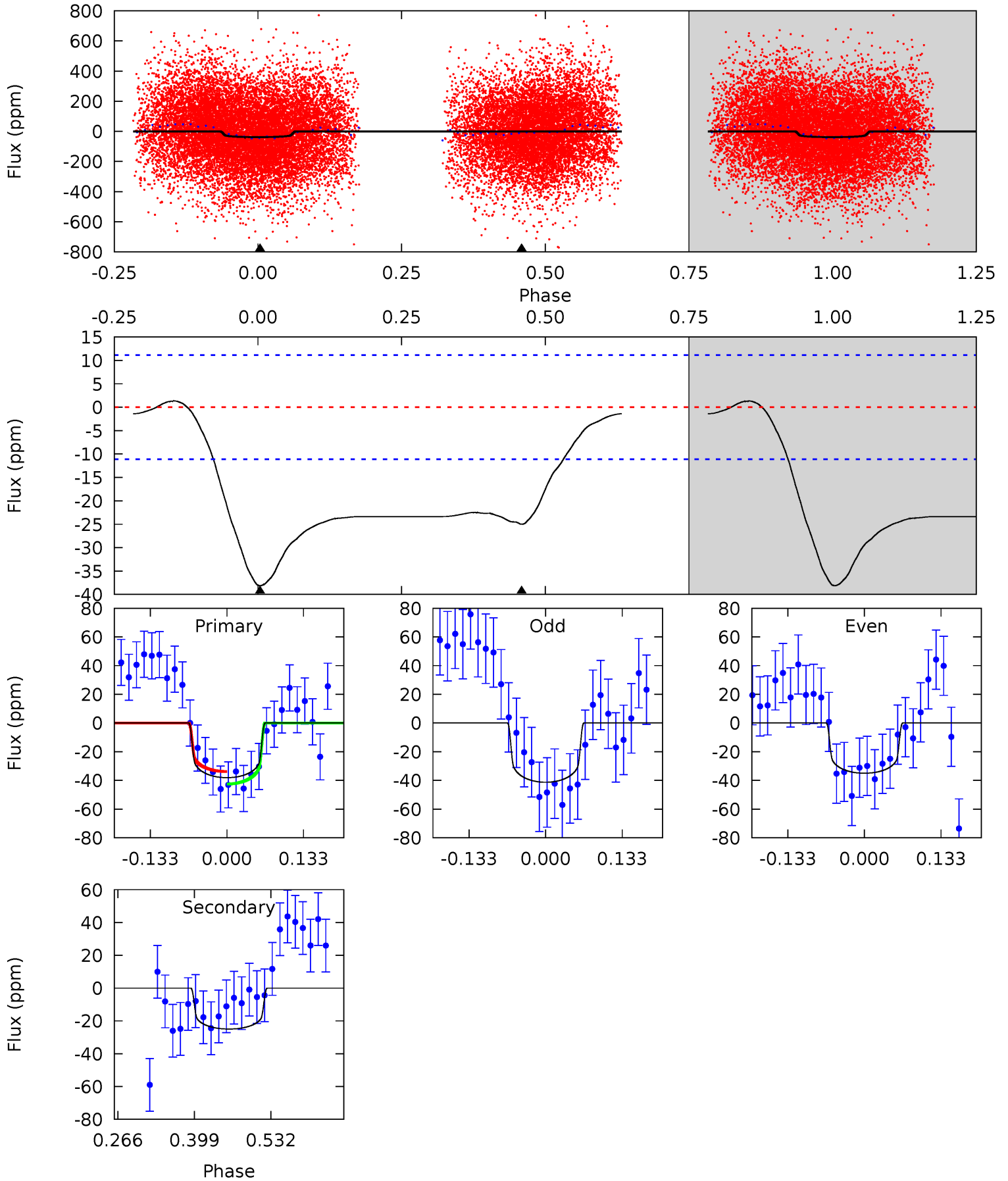
TCE 005801452-03 $P = 3.123638$ Days $T_0 = 133.842675$ (BKJD)



DV Model-Shift Uniqueness Test

005801452-03, P = 3.124078 Days, E = 130.704127 Days

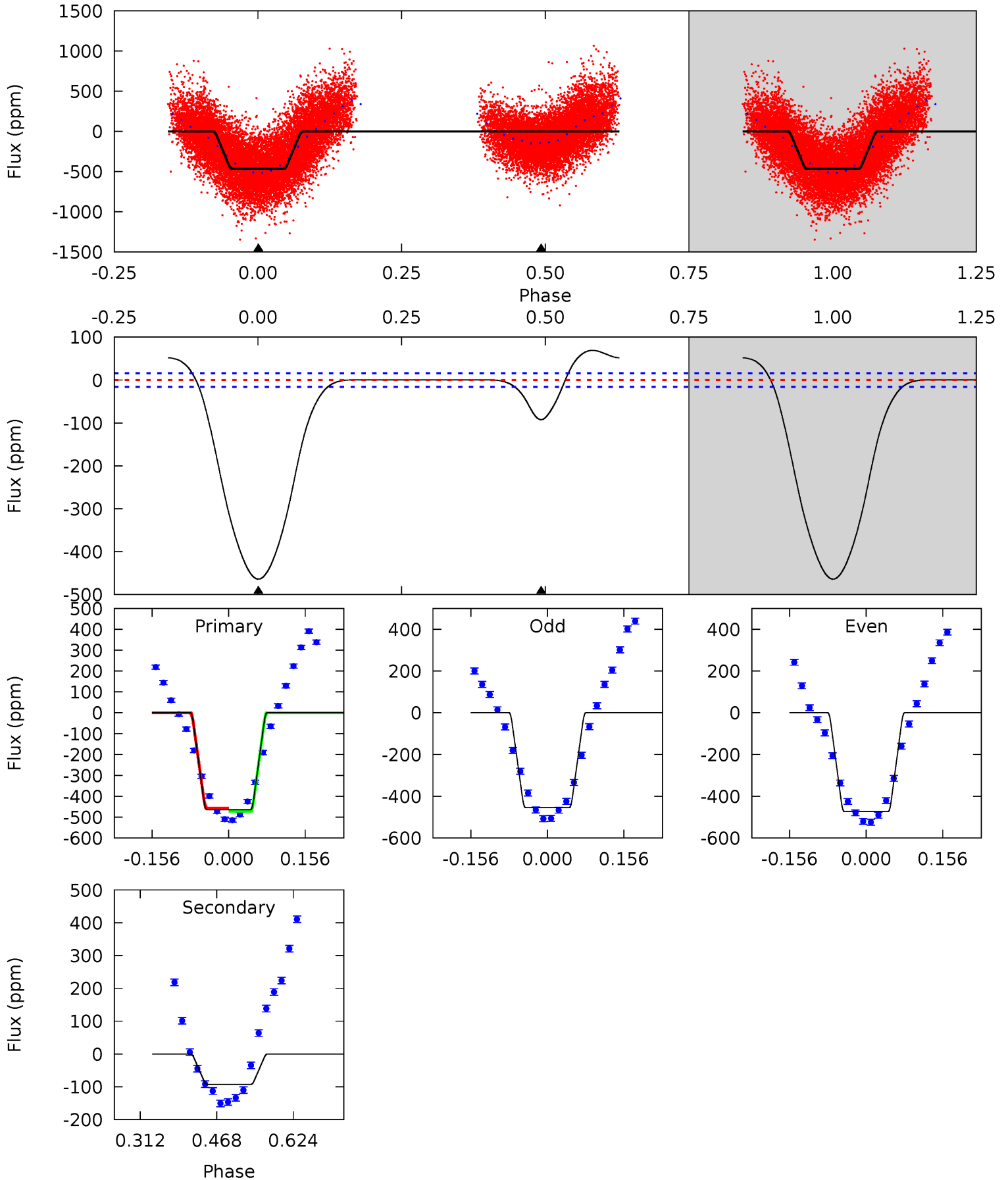
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
15.4	10.1	0	0	4.50	1.50	3.61	15.4	15.4	10.1	10.1	1.30	1.14	0.03	1.75



Alt Model-Shift Uniqueness Test

005801452-03, P = 3.123638 Days, E = 130.719037 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
132.0	26.3	0	0	4.47	1.42	7.59	132.0	132.0	26.3	26.3	2.65	0.98	0.13	2.18



Stellar Parameters For KIC 005801452

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6440^{+144}_{-208}	$4.380^{+0.065}_{-0.195}$	$-0.040^{+0.250}_{-0.300}$	$1.169^{+0.370}_{-0.148}$	$1.196^{+0.169}_{-0.152}$	$1.053^{+0.359}_{-0.520}$
	+2%/-3%	+1%/-4%	+625%/-750%	+32%/-13%	+14%/-13%	+34%/-49%
Source	PHO1	KIC0	KIC0	DSEP		

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

Secondary Eclipse Parameters for KIC 005801452-03 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-25 ± 2	$0.96^{+0.19}_{-0.18}$	2064^{+139}_{-91}	5358^{+481}_{-387}	29^{+15}_{-9}
Alt.	-92 ± 4	$2.95^{+0.45}_{-0.29}$	2070^{+126}_{-98}	4379^{+126}_{-134}	11^{+2}_{-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 $T_{obs} \gg T_{max}$ AND $A_{obs} \gg 1.0$

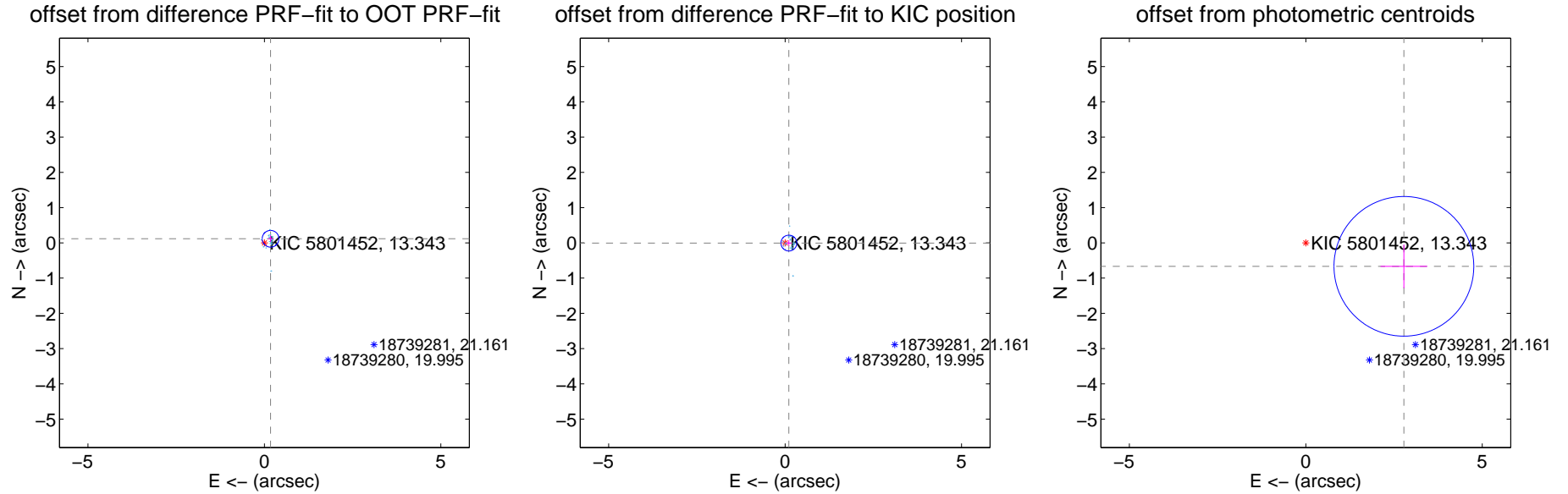
DV Centroid Data

Supplemental centroid analysis for 005801452-03. Kepler magnitude: 13.34. Transit SNR 10.75

There are 14 quarters with good PRF difference image offsets

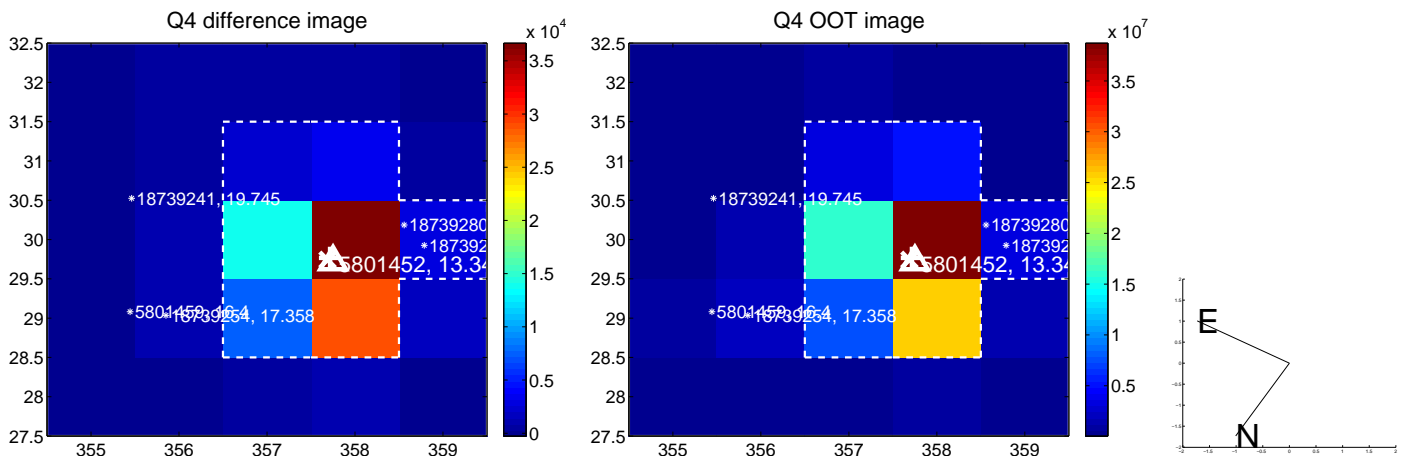
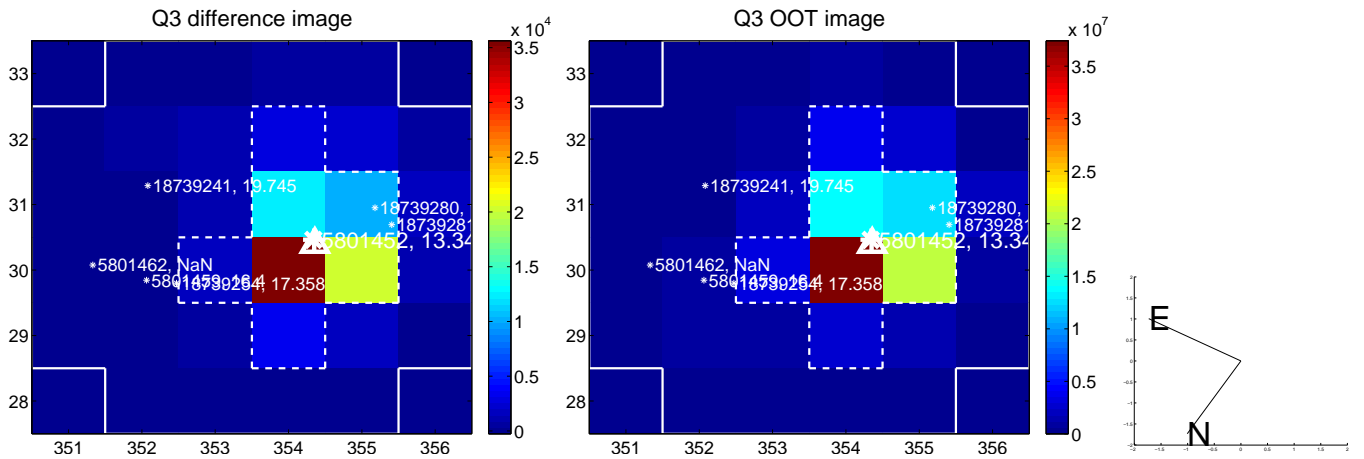
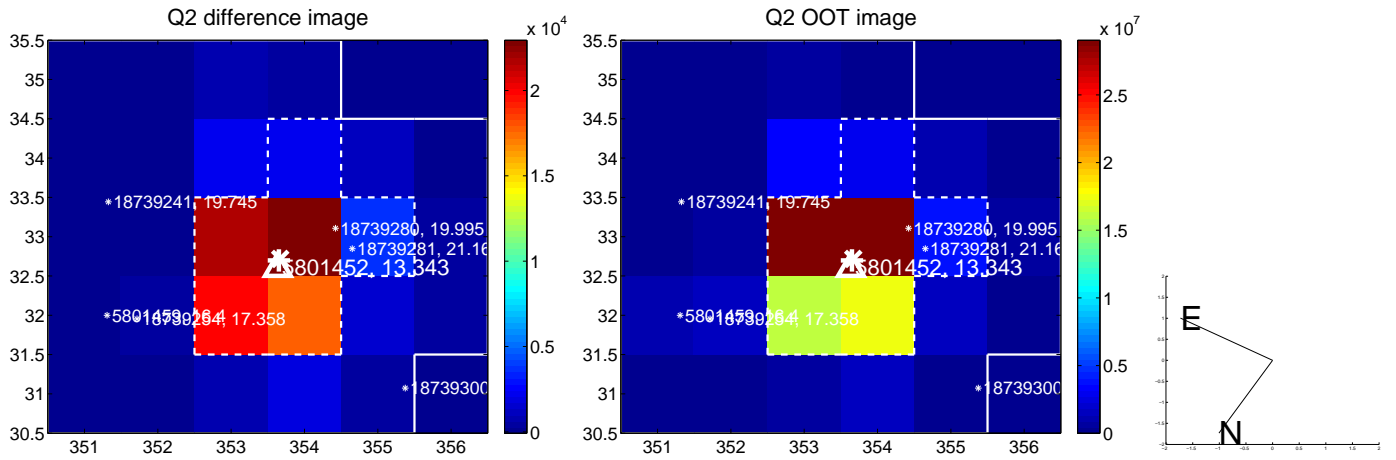
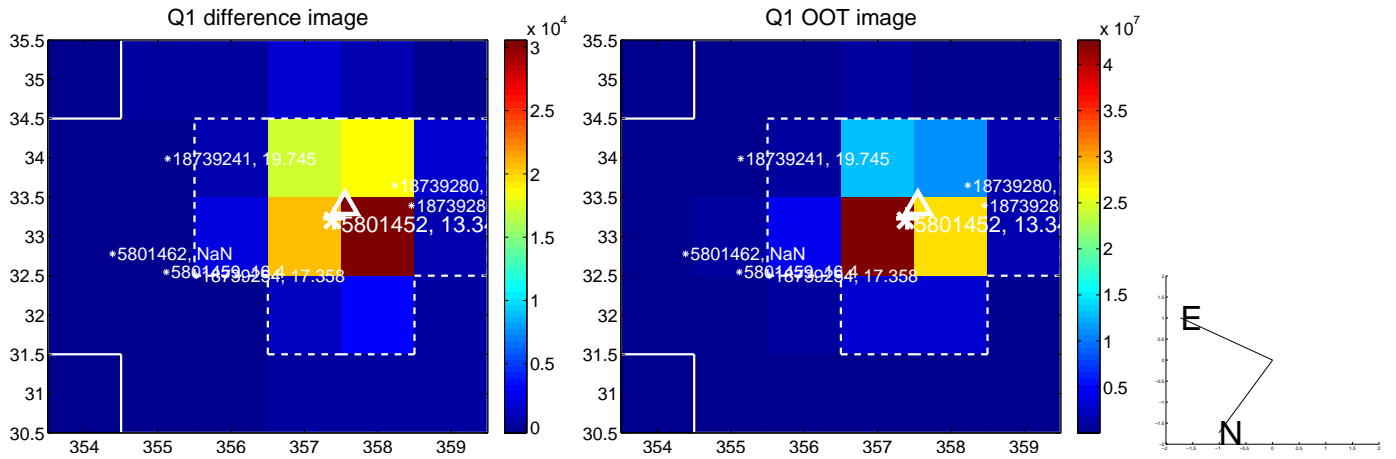
The direct PRF centroid is offset from the target star catalog position by about 0.13 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.209 ± 0.079	2.65	-0.174 ± 0.071	0.116 ± 0.093
PRF-fit source offset from KIC position	0.107 ± 0.075	1.43	-0.107 ± 0.075	-0.007 ± 0.079
photometric centroid source offset	2.86 ± 0.66	4.33	-2.78 ± 0.66	-0.67 ± 0.62

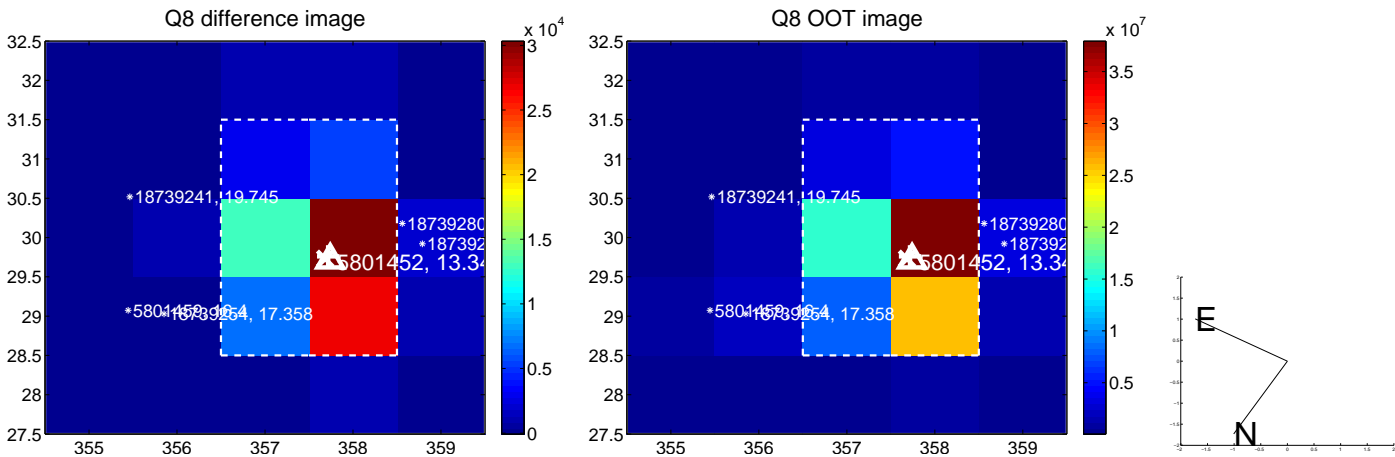
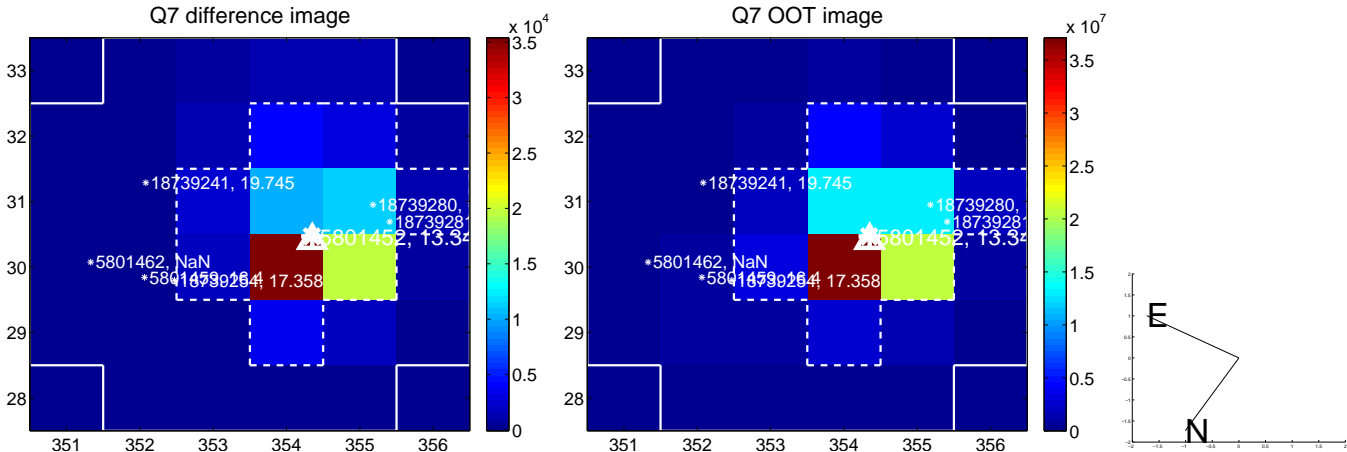
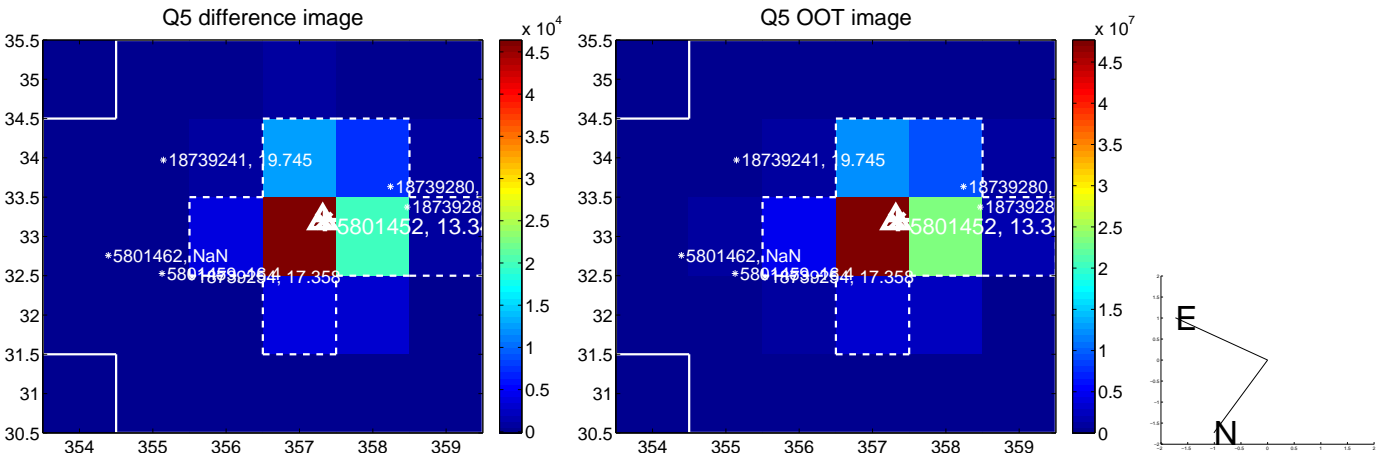


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets**; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

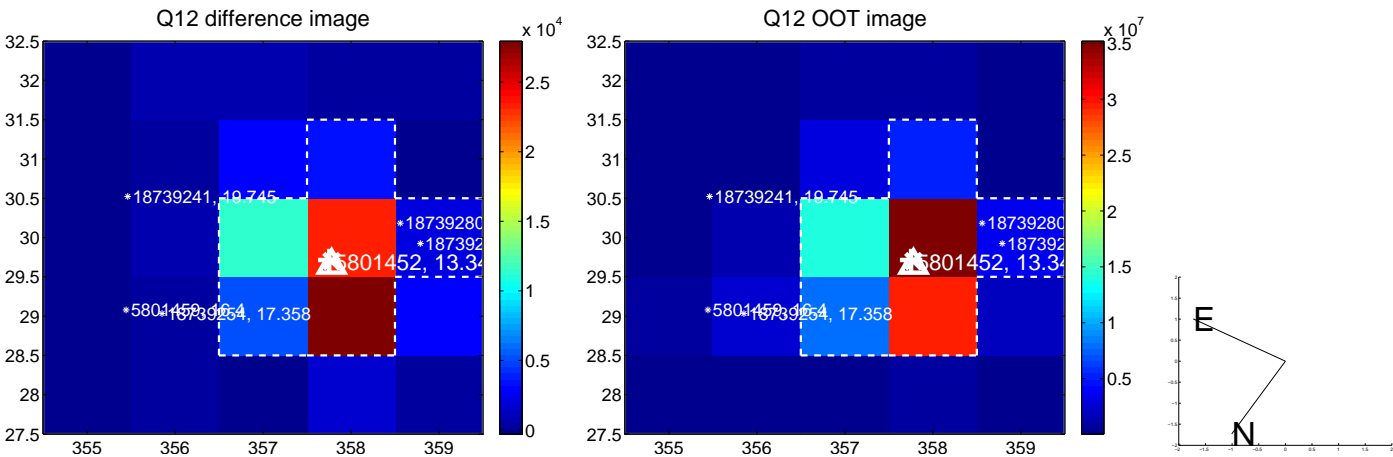
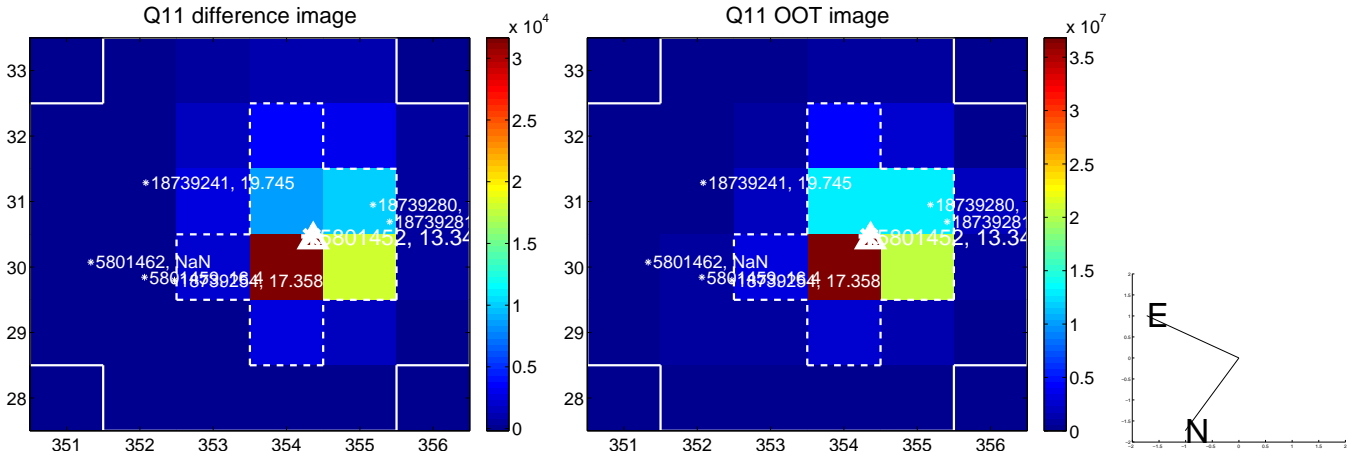
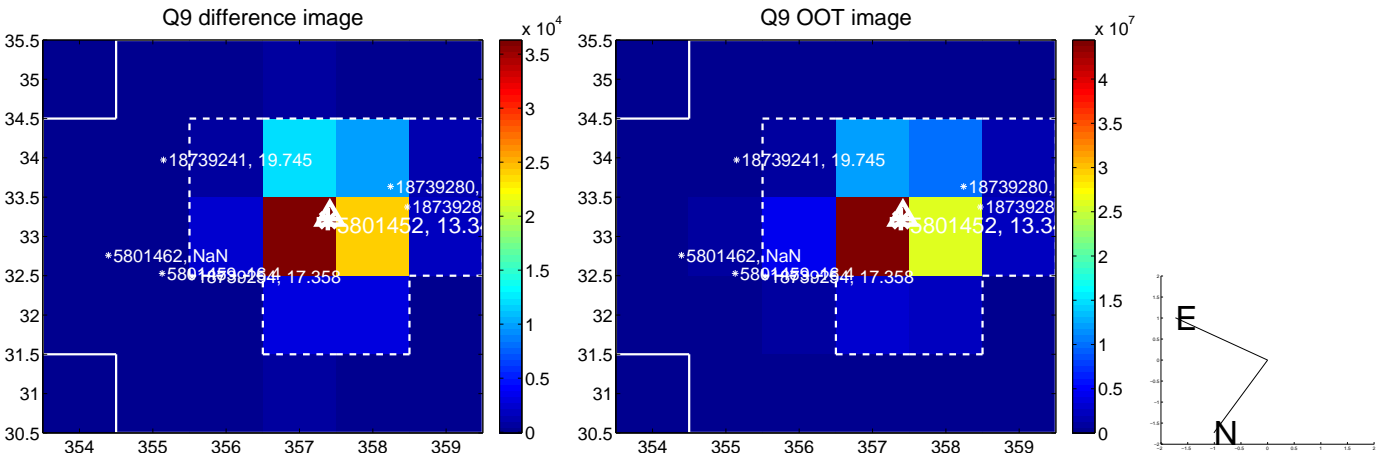
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



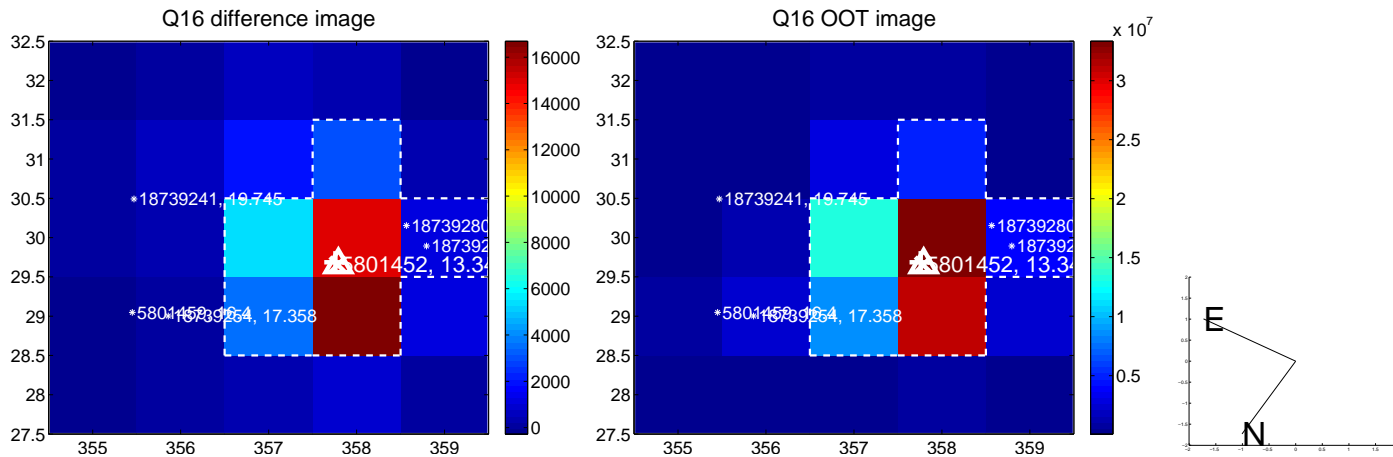
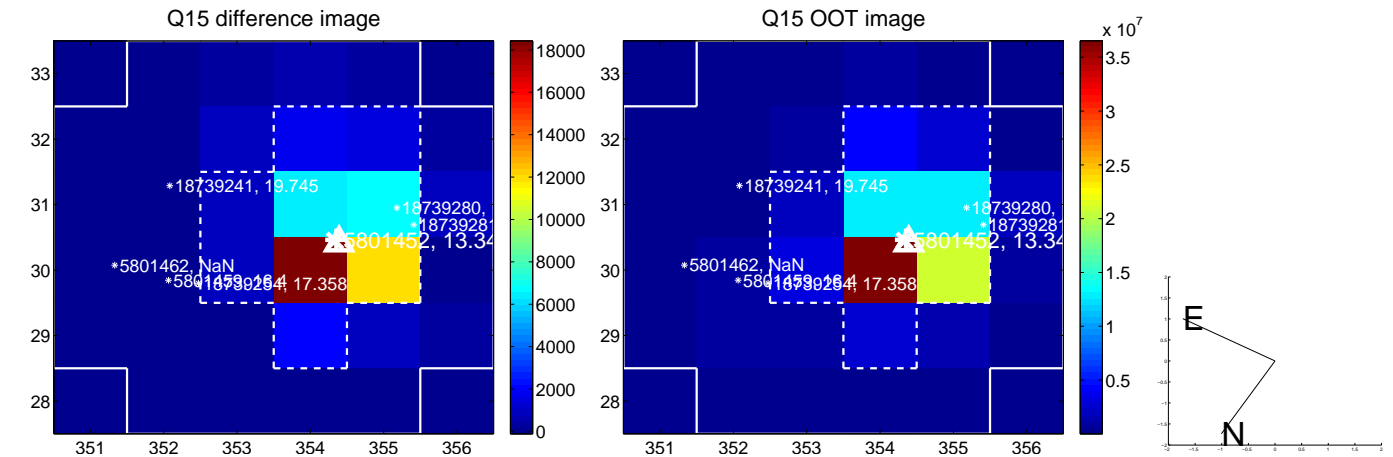
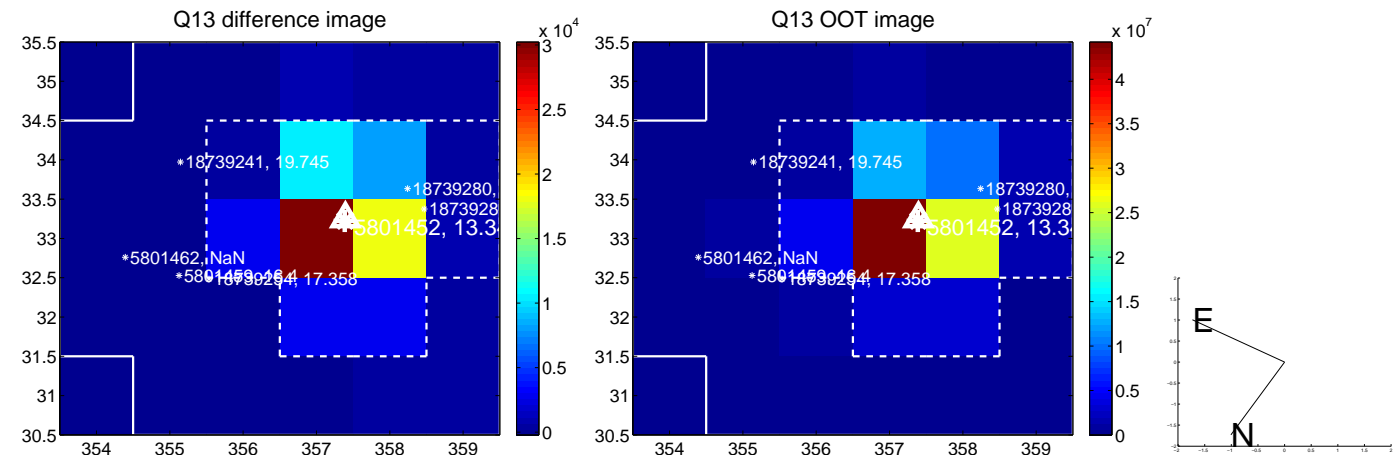
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



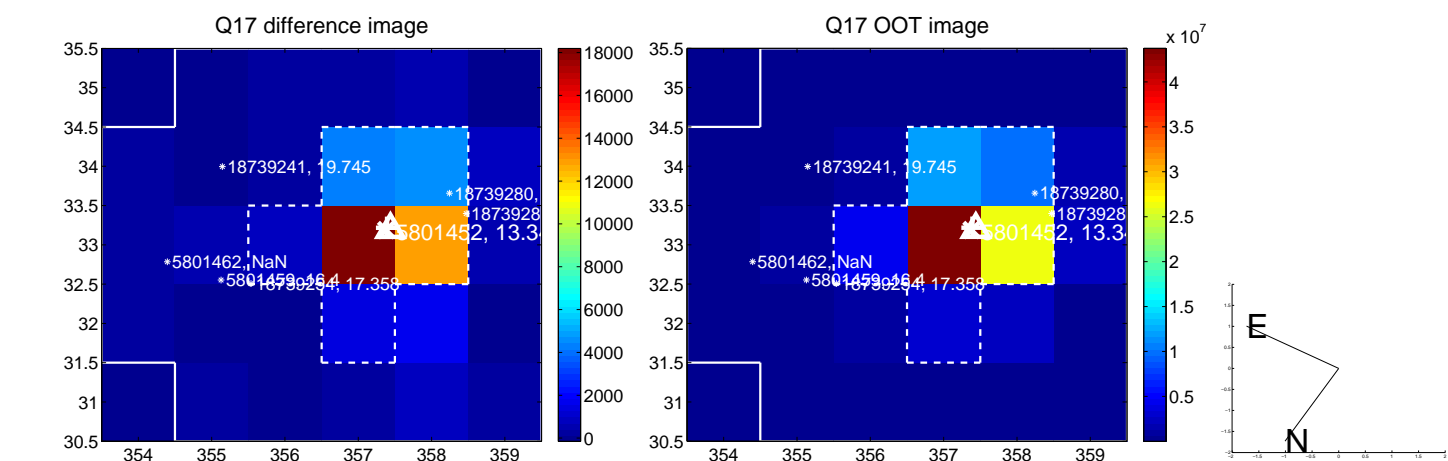
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



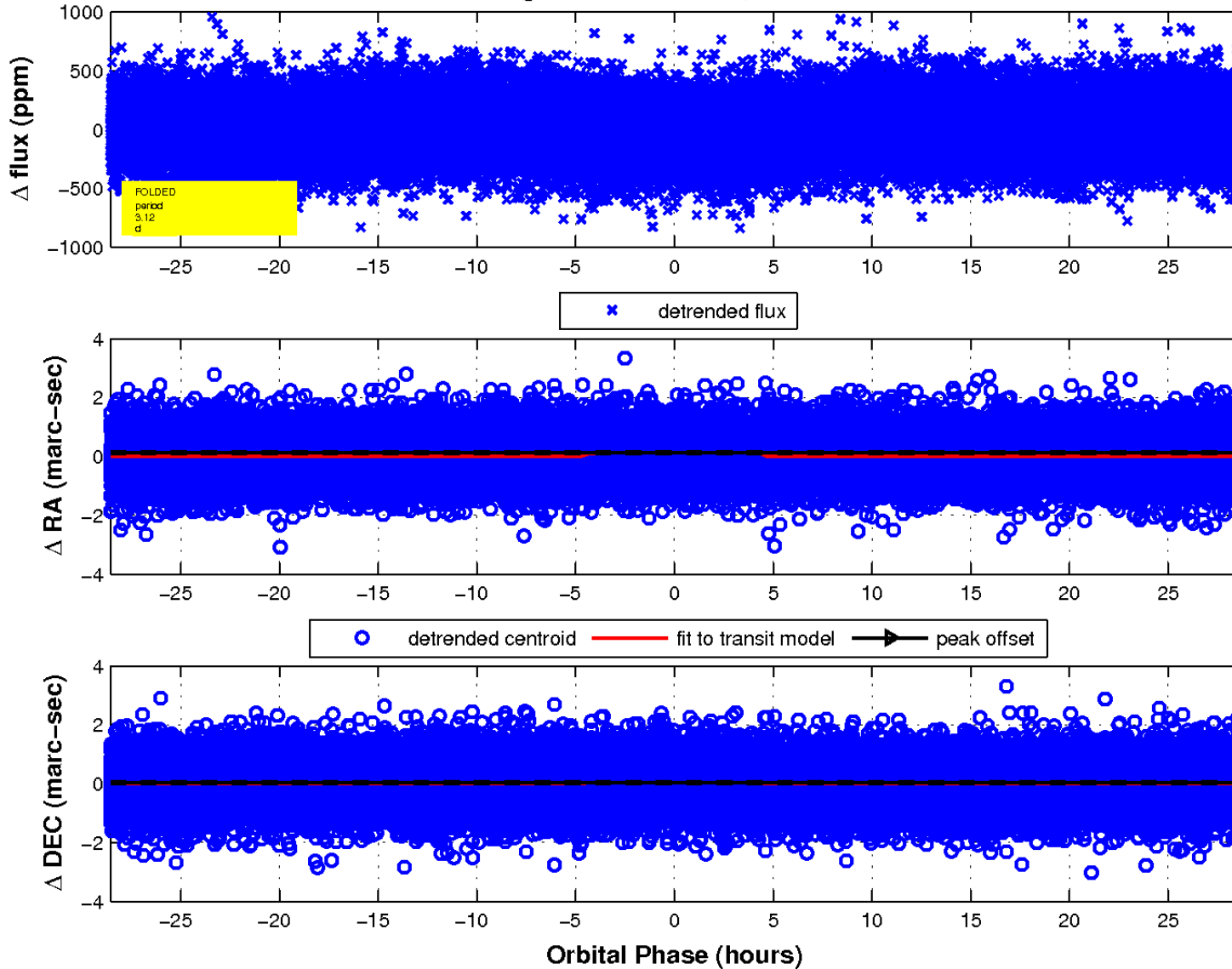
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



fluxWeightedCentroids, Planet 3 of 3



UKIRT Image

