

KIC 011245425

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})
011245425-01	OBS	No	395.617238	150.257014	5103.1	4.562	11.9	16.8	0.60	4796	7.83	0.22
011245425-02	OBS	No	466.249264	139.423491	467.7	19.048	17.8	4.1	0.60	4796	1.26	0.17
011245425-03	OBS	No	471.674677	155.363770	2888.2	3.500	17.2	-1.0	0.60	4796	3.13	0.17

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
011245425-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_TER_DV—MOD_POS_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—INCONSISTENT_TRANS—CENT_FEW_DIFFS
011245425-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_MARSHALL_SKYE—LPP_DV—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—INCONSISTENT_TRANS—CENT_FEW_DIFFS
011245425-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_MARSHALL—LPP_DV—ALL_TRANS_CHASES—MOD_NONUNIQ_ALT—INCONSISTENT_TRANS—CENT_NOFITS

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

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

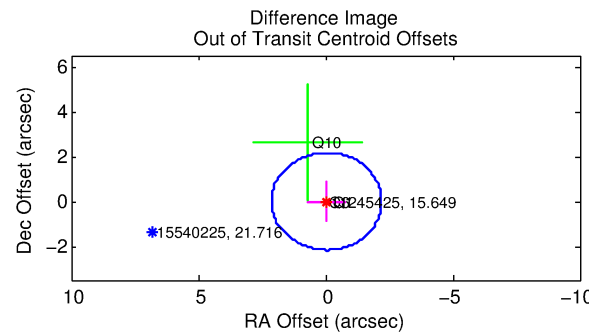
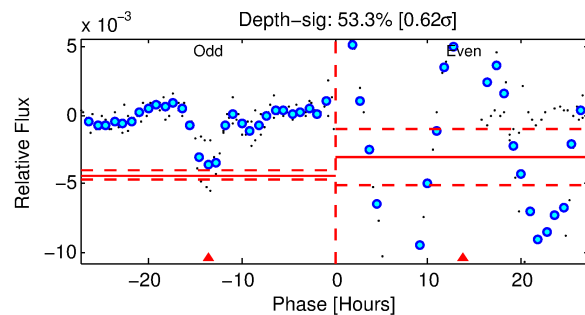
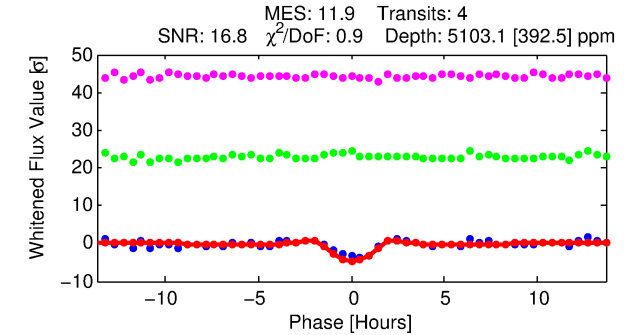
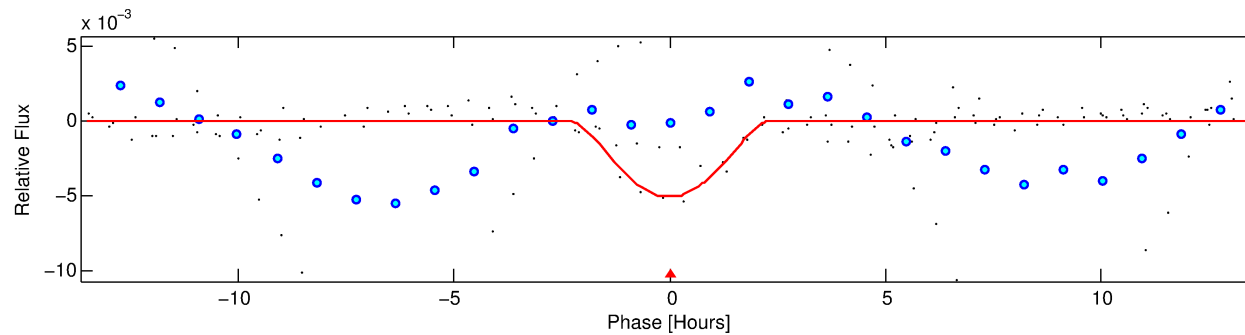
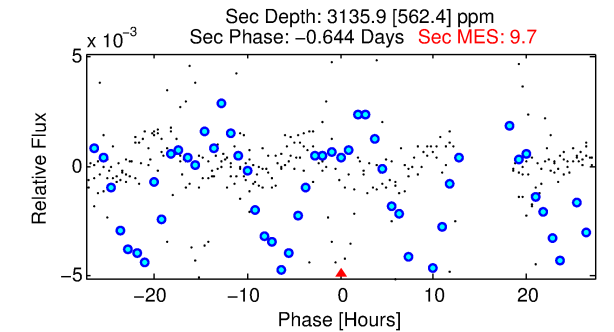
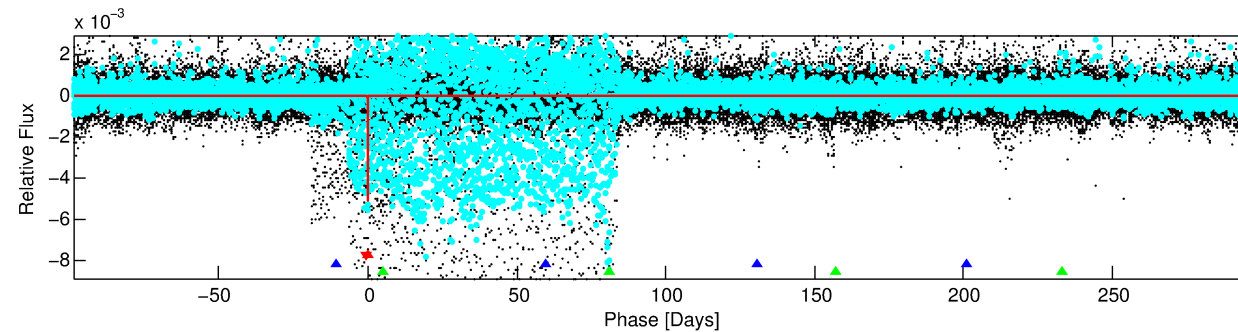
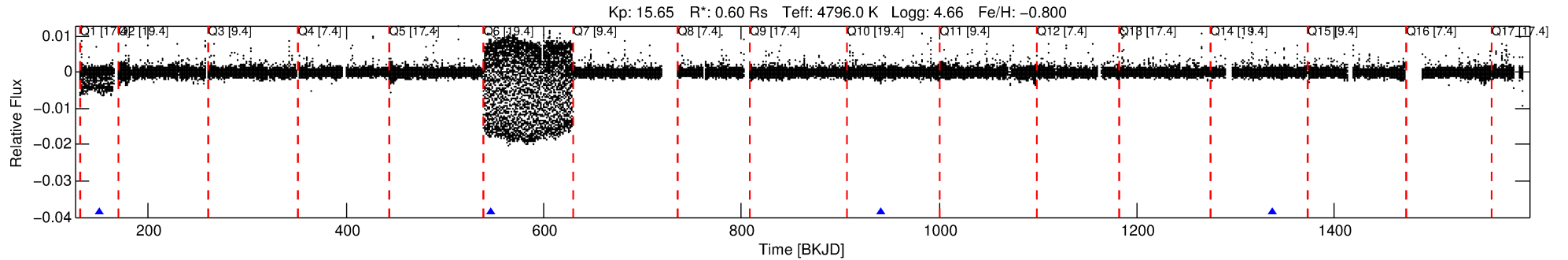
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 011245425-01

No Significant Match Found

DV One-Page Summary

KIC: 11245425 Candidate: 1 of 3 Period: 395.617 d



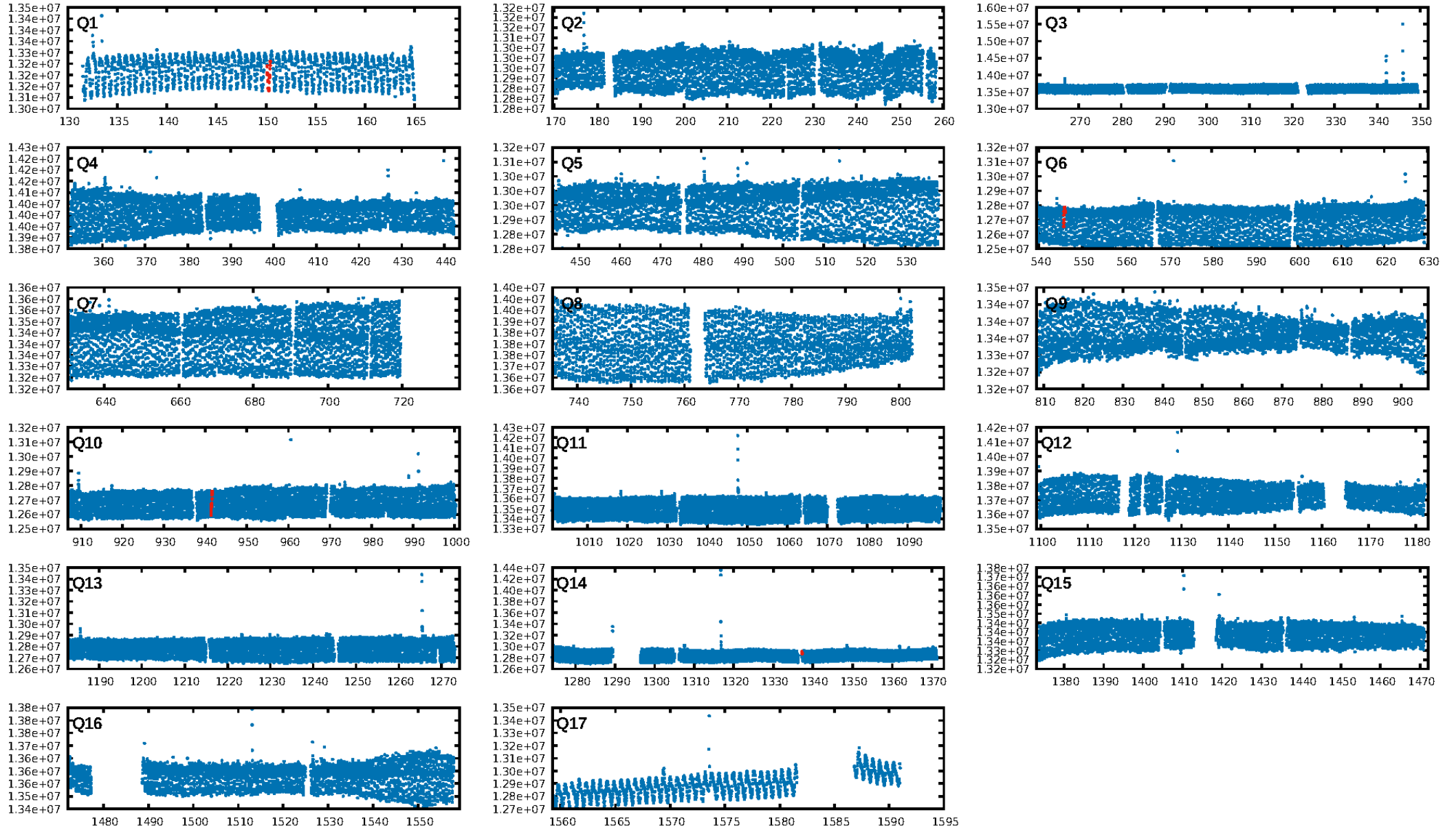
DV Fit Results:

Period = 395.61724 [0.00270] d
Epoch = 150.2570 [0.0031] BKJD
Rp/R* = 0.1200 [0.1944]
a/R* = 343.83 [104.09]
b = 0.99 [0.28]
Seff = 0.22 [0.03]
Teq = 174 [7] K
Rp = 7.83 [12.70] Re
a = 0.8851 [0.0613] AU
Ag = 22032.12 [71525.83] [0.31σ]
Teffp = 3276 [2659] K [1.17σ]

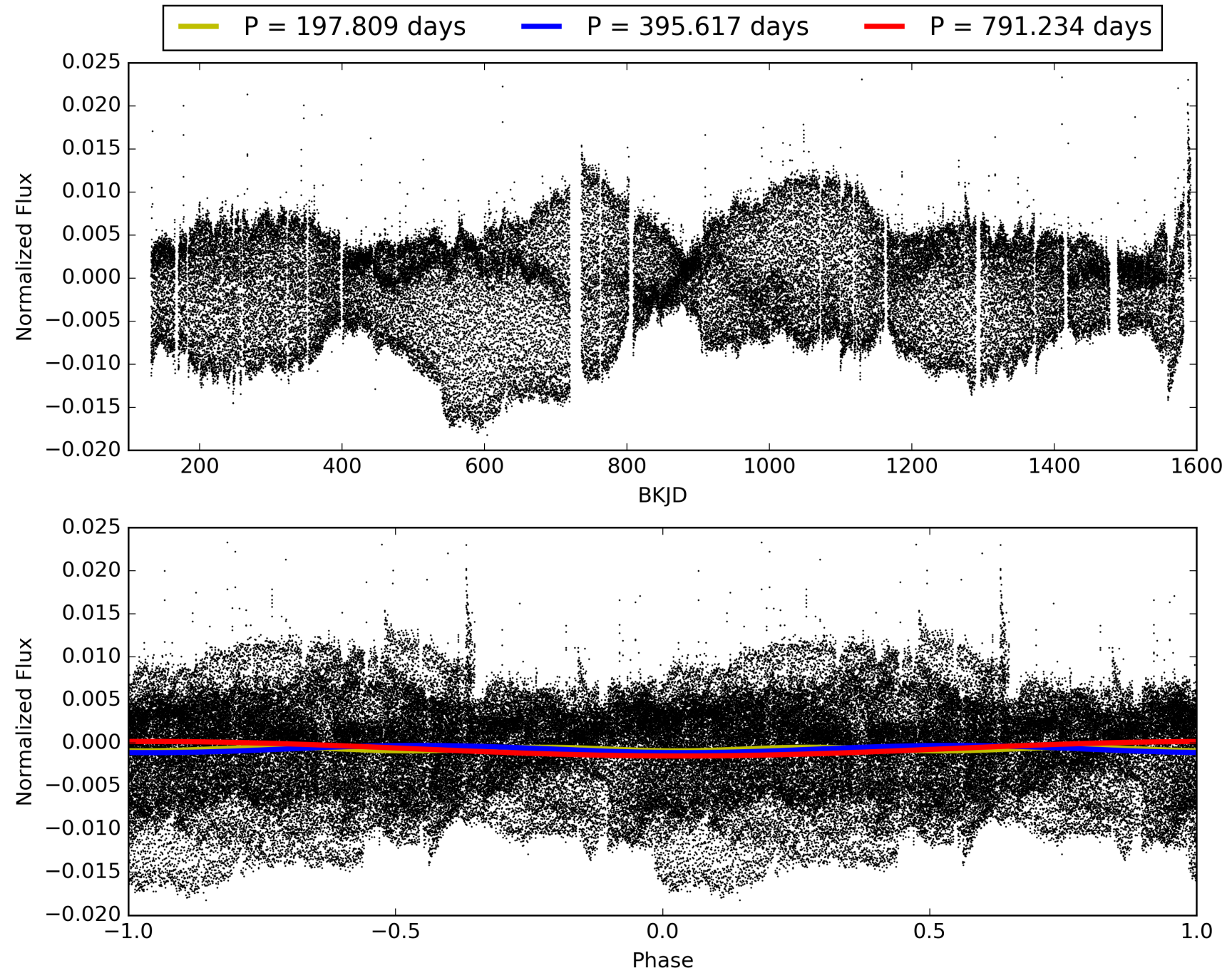
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: 100.0% [86.55σ]
ModelChiSquare2-sig: 12.6%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [3/3]
GhostDiagnostic-chr: 5.867
Centroid-sig: 28.7%
Centroid-so: 0.241 arcsec [0.60σ]
OotOffset-rm: 0.040 arcsec [0.05σ]
KicOffset-rm: 0.122 arcsec [0.14σ]
OotOffset-st: 2/0/0/1 [3]
KicOffset-st: 2/0/0/1 [3]
DiffImageQuality-fgm: 0.33 [1/3]
DiffImageOverlap-fno: 1.00 [3/3]

TCE 011245425-01, PDC Light Curves

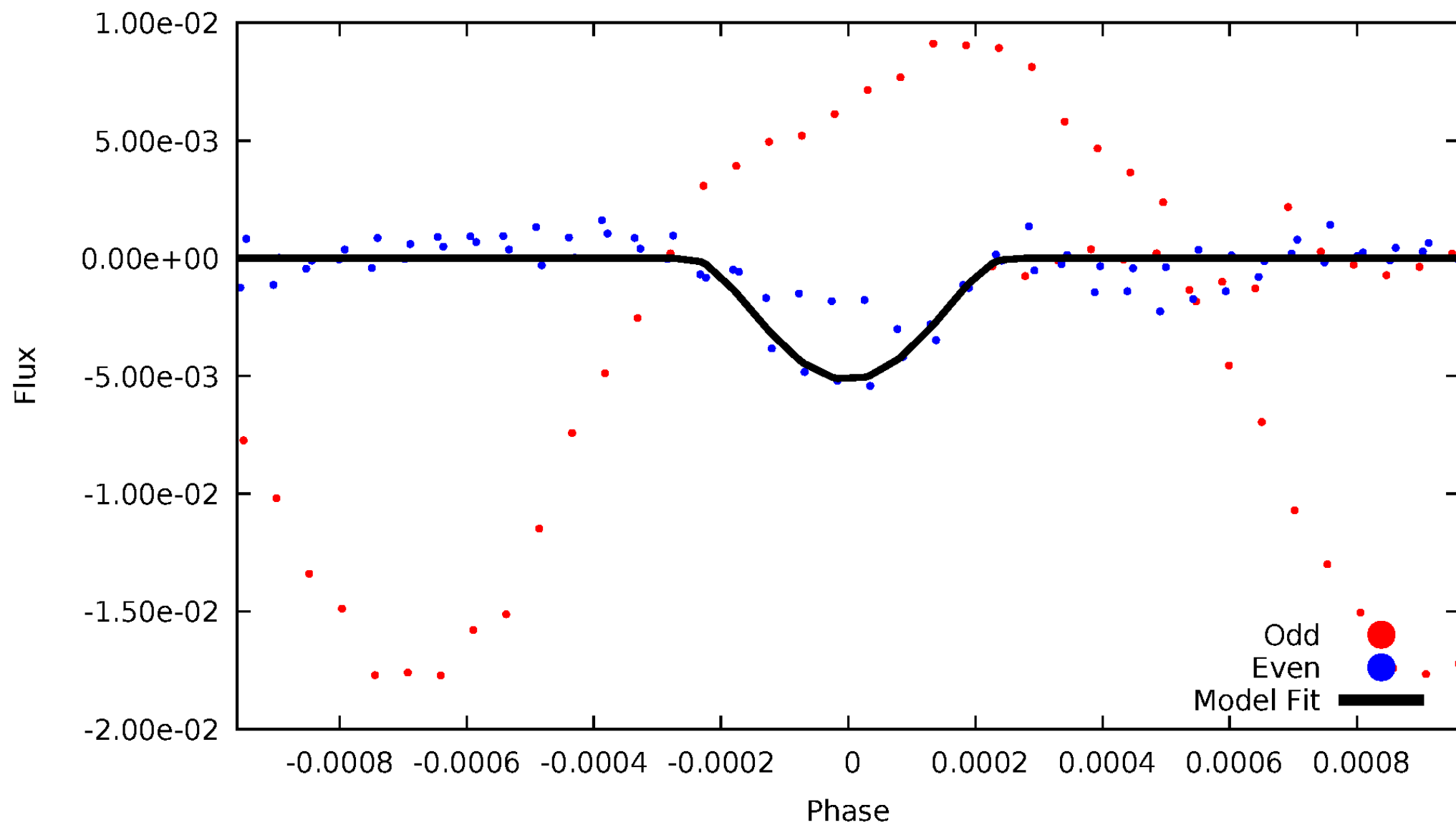


TCE 011245425-01



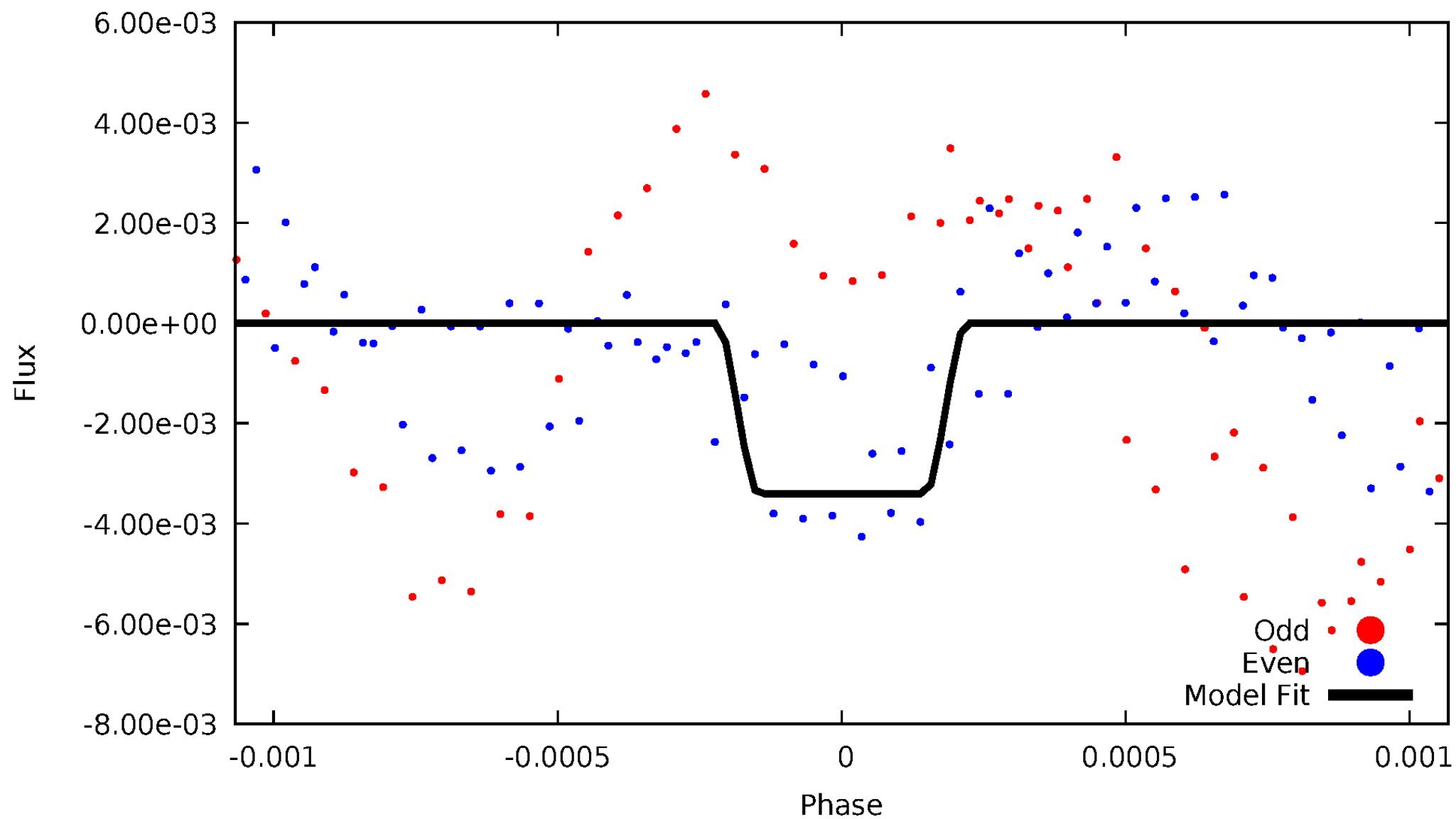
DV Odd/Even

TCE 011245425-01



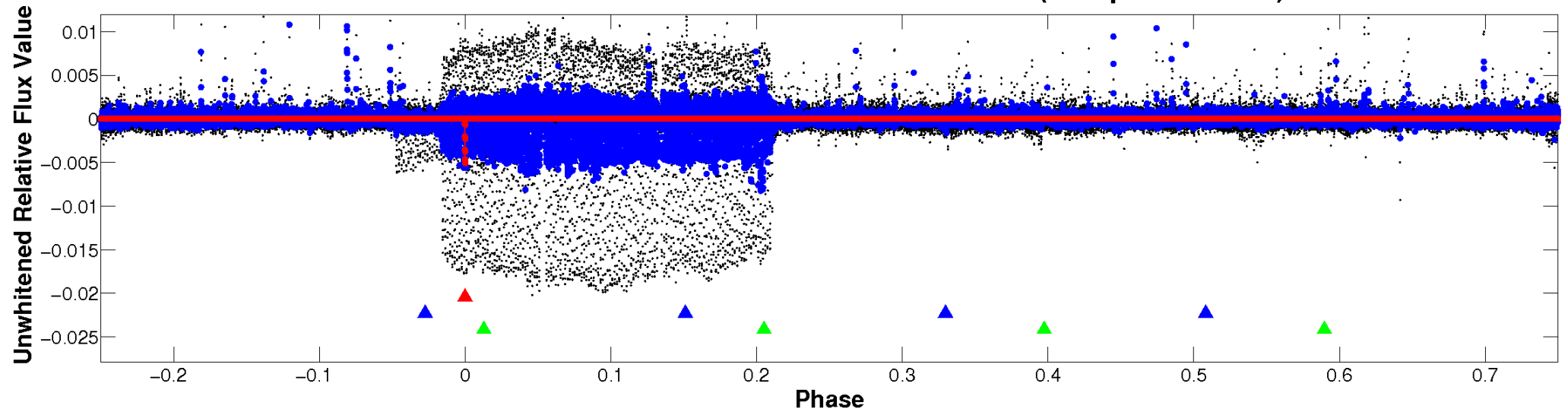
ALT Odd/Even

TCE 011245425-01

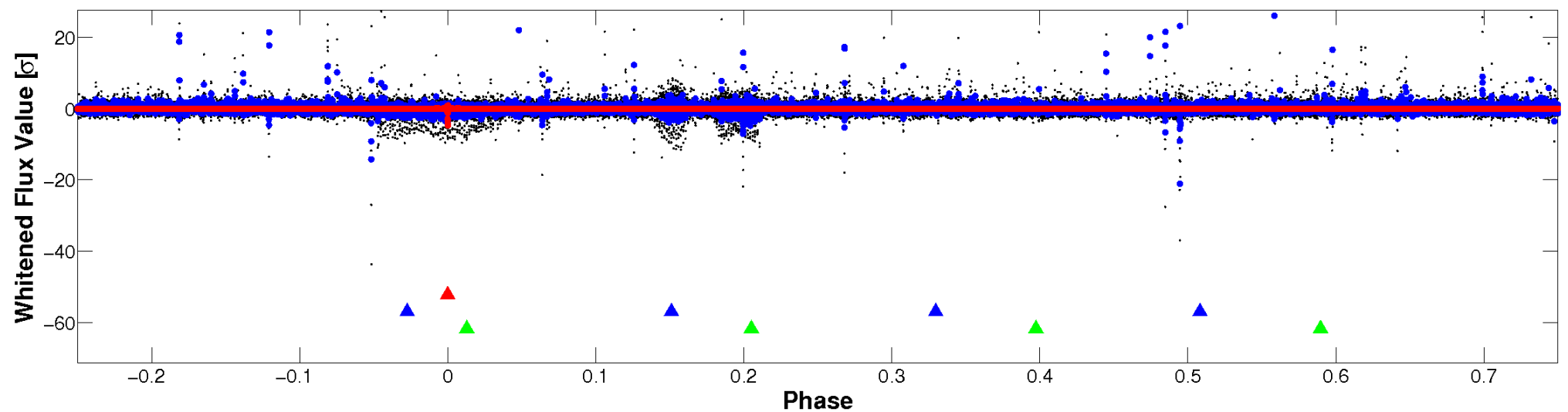


Non-Whitened Vs. Whitened Light Curve

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

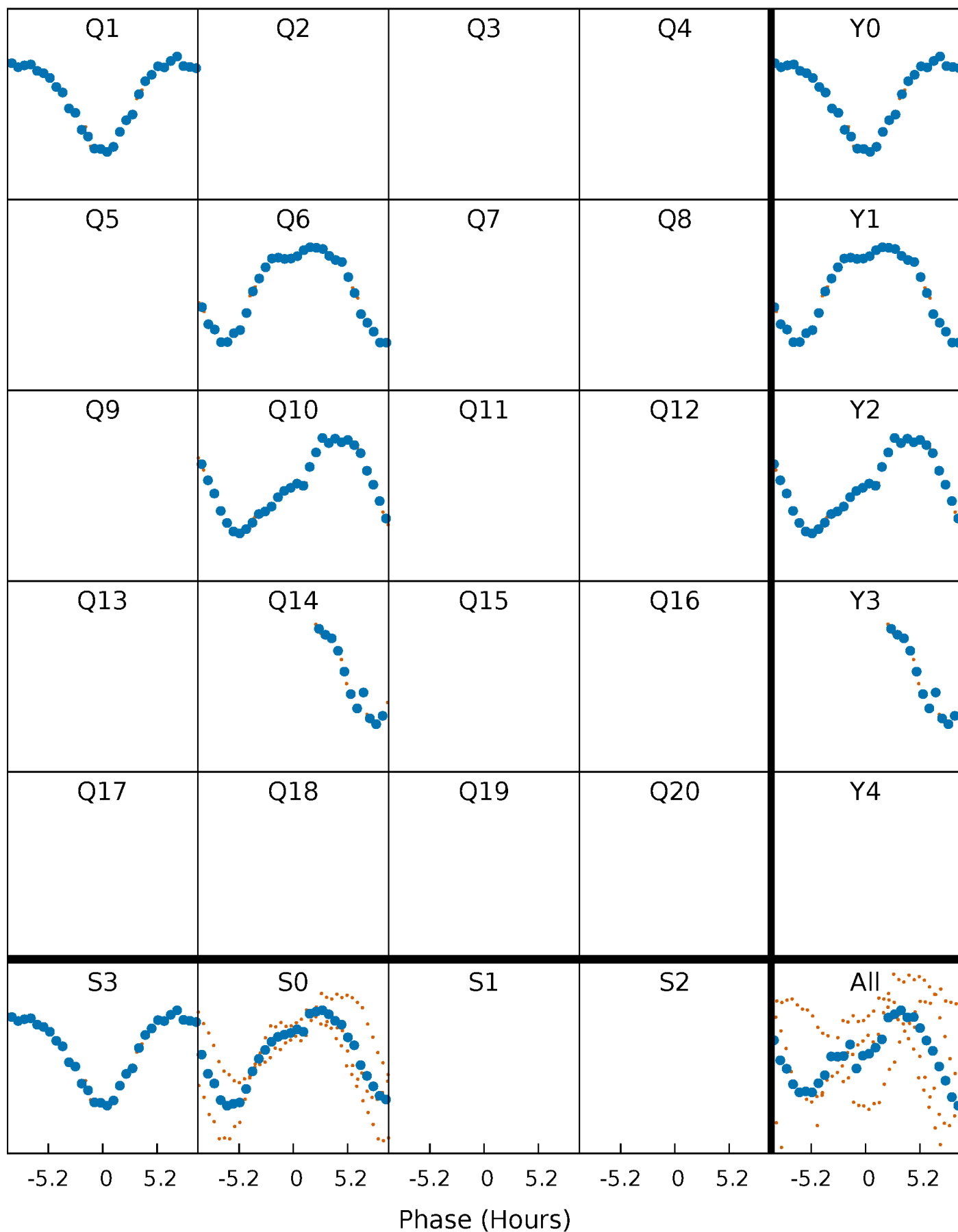


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



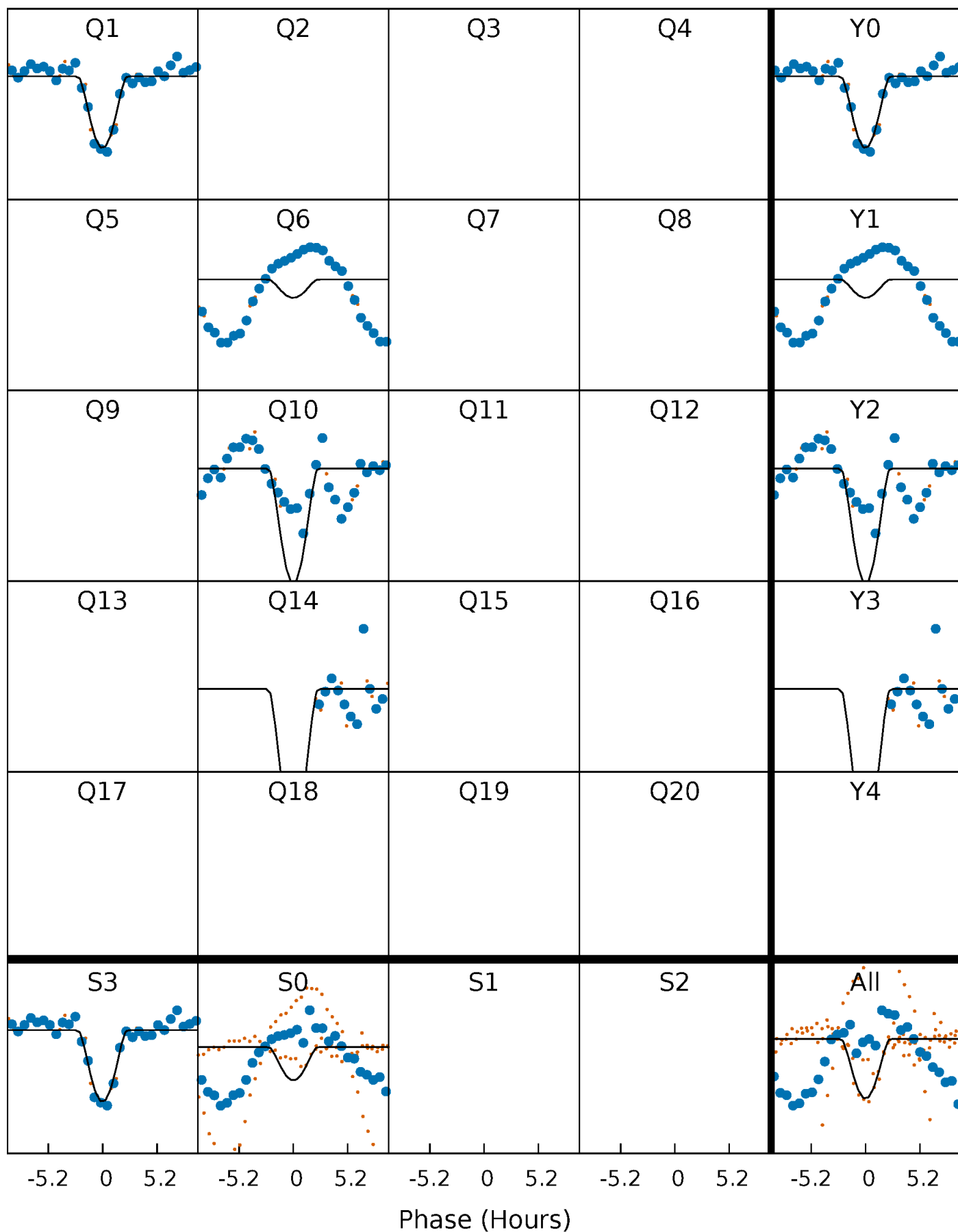
PDC Quarter-Phased Transit Curves

TCE 011245425-01 P=395.617238 Days $T_0=150.257014$ (BKJD)



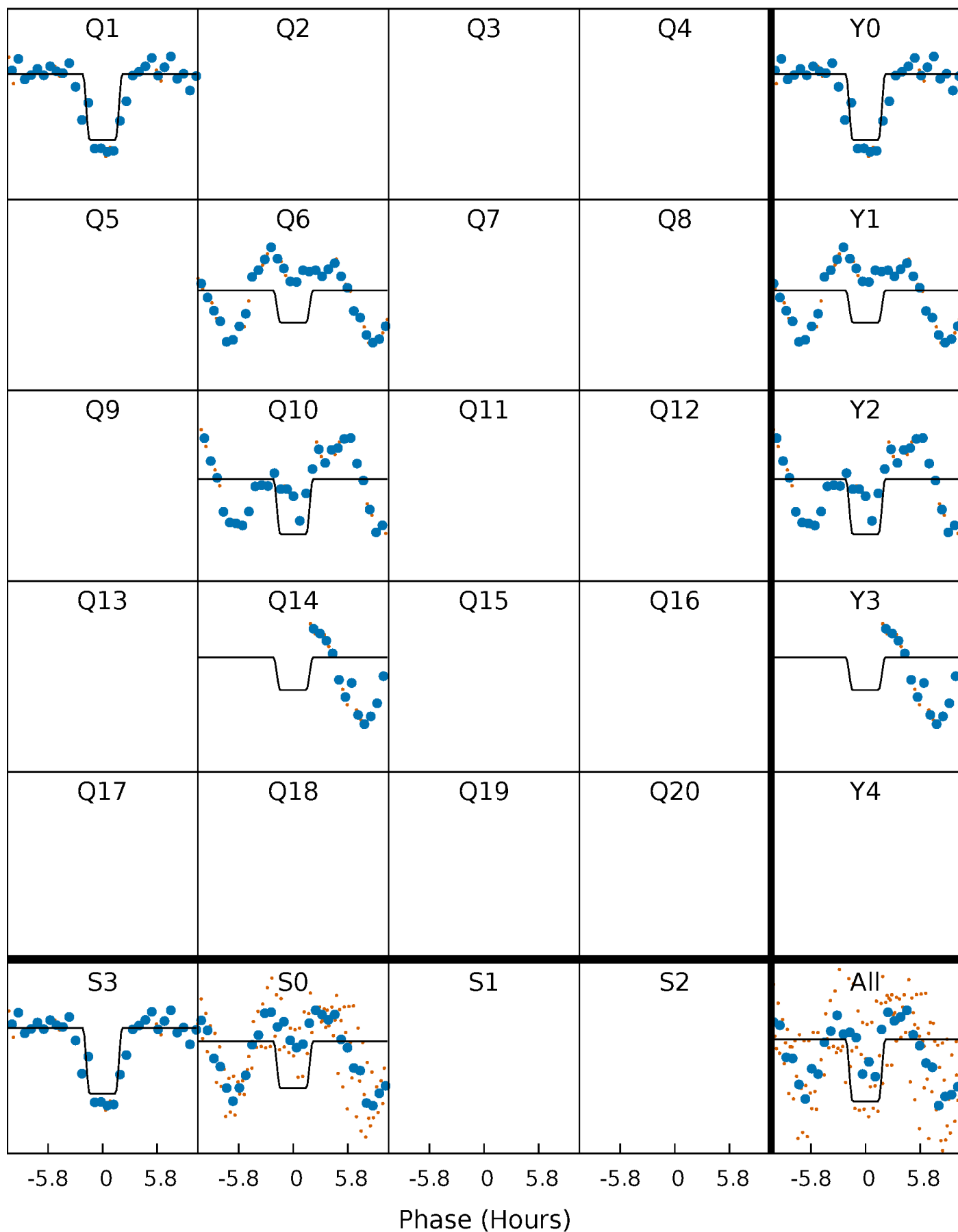
DV Quarter-Phased Transit Curves

TCE 011245425-01 P=395.617238 Days $T_0=150.257014$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

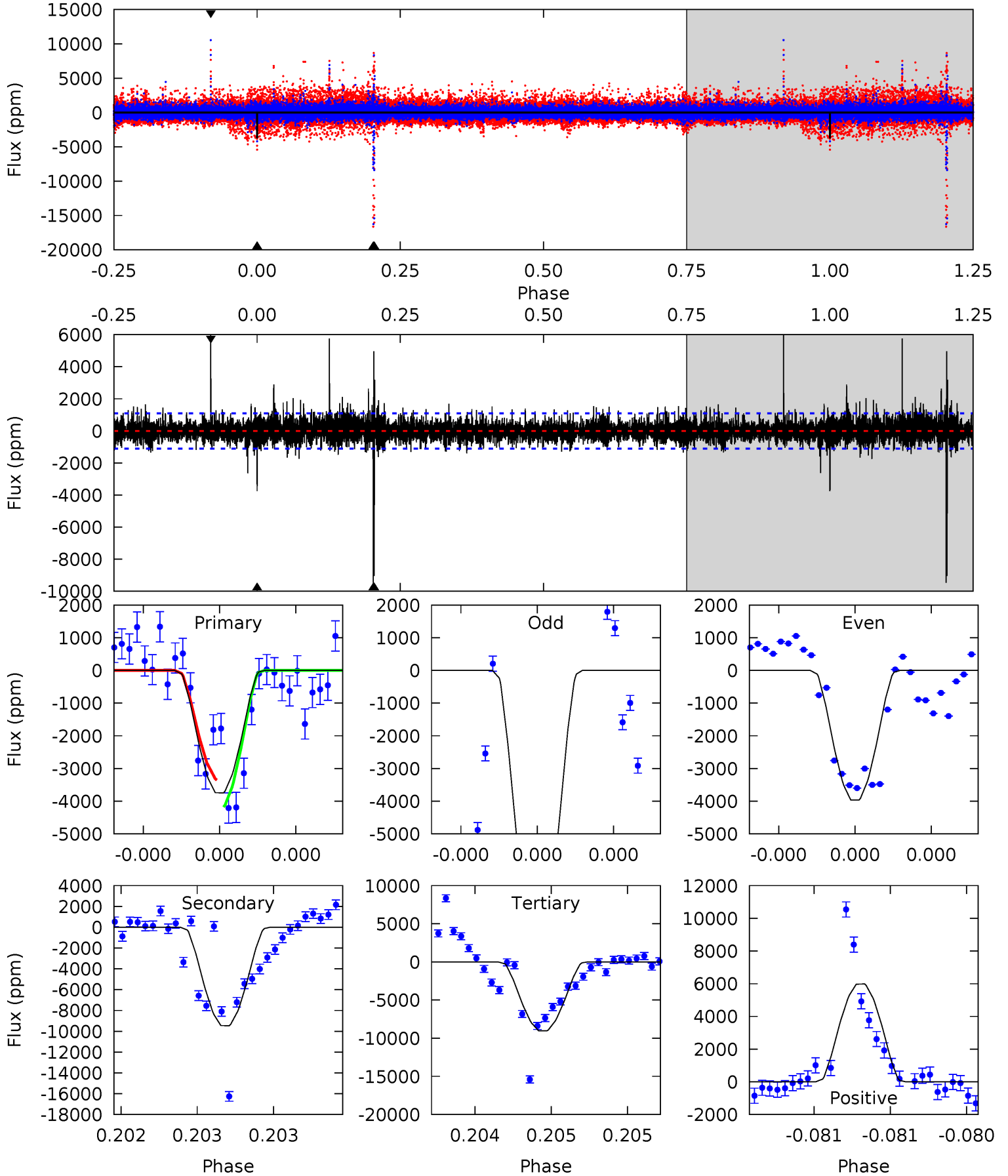
TCE 011245425-01 P=395.621944 Days $T_0=150.256799$ (BKJD)



DV Model-Shift Uniqueness Test

011245425-01, P = 395.617238 Days, E = 150.257014 Days

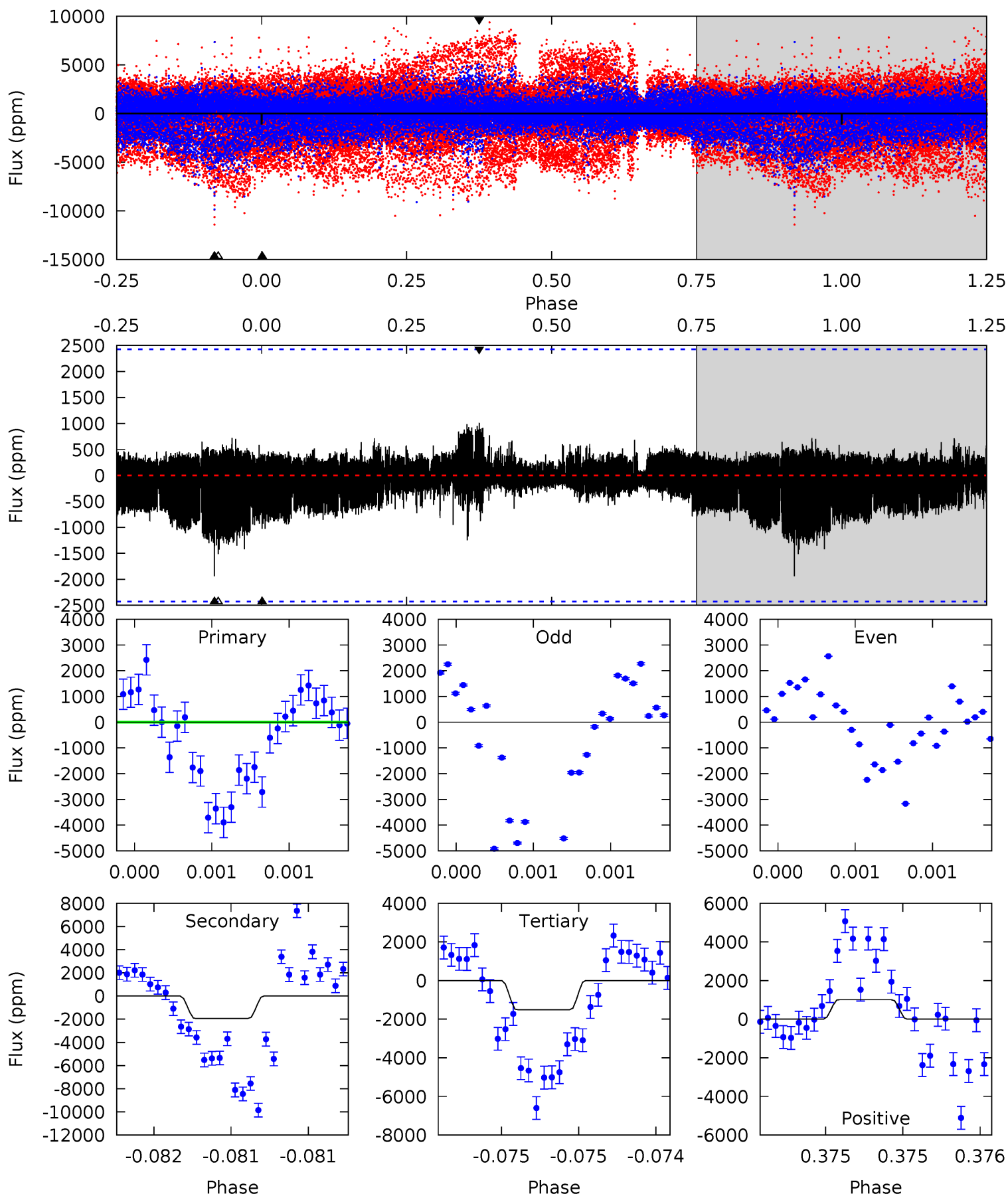
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
19.0	48.0	45.8	30.3	5.58	3.50	2.48	-26.8	-11.3	2.18	17.7	4.33	-0.07	0.39	2.11



Alt Model-Shift Uniqueness Test

011245425-01, P = 395.621944 Days, E = 150.256799 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
2.38	4.49	3.49	2.33	5.61	3.53	0.74	-1.12	0.05	0.99	2.16	0.52	0.85	0.34	0.58



Stellar Parameters For KIC 011245425

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	4796^{+143}_{-143}	$4.656^{+0.059}_{-0.032}$	$-0.800^{+0.300}_{-0.300}$	$0.598^{+0.047}_{-0.047}$	$0.590^{+0.055}_{-0.029}$	$3.895^{+0.957}_{-0.530}$
	+3%/-3%	+1%/-1%	+37%/-37%	+8%/-8%	+9%/-5%	+25%/-14%
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 011245425-01 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-9467 ± 197	$12.56^{+10.62}_{-8.58}$	242^{+8}_{-9}	3724^{+2188}_{-639}	$27127^{+234386}_{-19497}$
Alt.	-1943 ± 433	$10.07^{+9.87}_{-7.27}$	242^{+8}_{-9}	3109^{+1745}_{-538}	8214^{+95572}_{-6281}

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 $A_{obs} \gg 1.0$

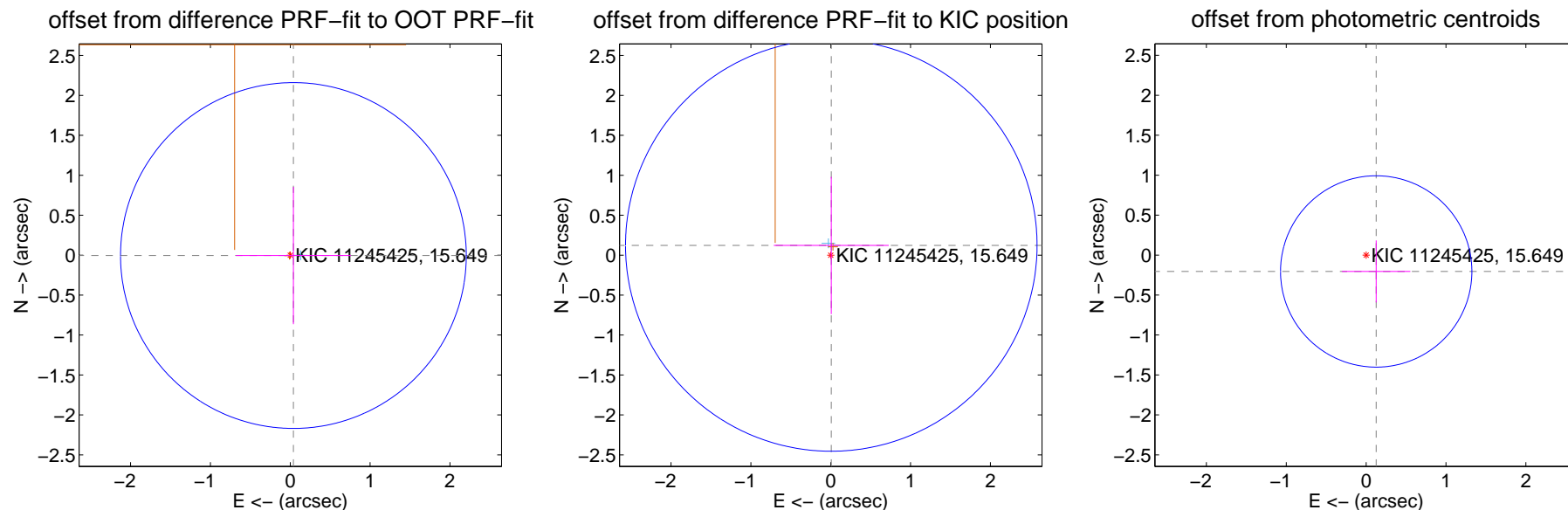
DV Centroid Data

Supplemental centroid analysis for 011245425-01. Kepler magnitude: 15.65. Transit SNR 16.82

There are 1 quarters with good PRF difference image offsets

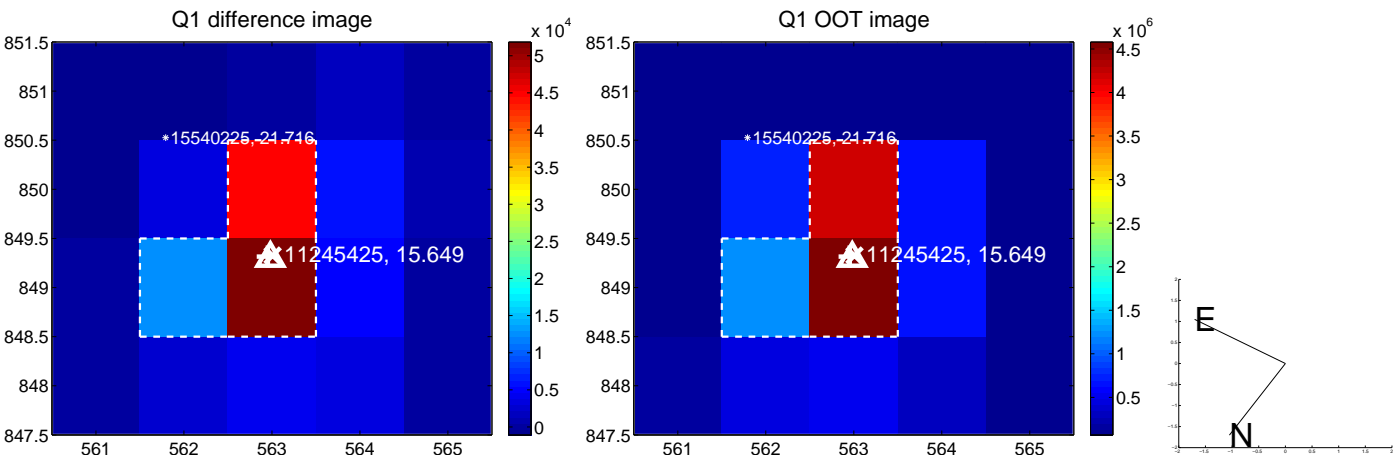
The direct PRF centroid is offset from the target star catalog position by about 0.09 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.040 ± 0.721	0.05	-0.039 ± 0.719	-0.005 ± 0.859
PRF-fit source offset from KIC position	0.122 ± 0.859	0.14	-0.007 ± 0.719	0.122 ± 0.859
photometric centroid source offset	0.24 ± 0.40	0.60	-0.13 ± 0.43	-0.20 ± 0.39

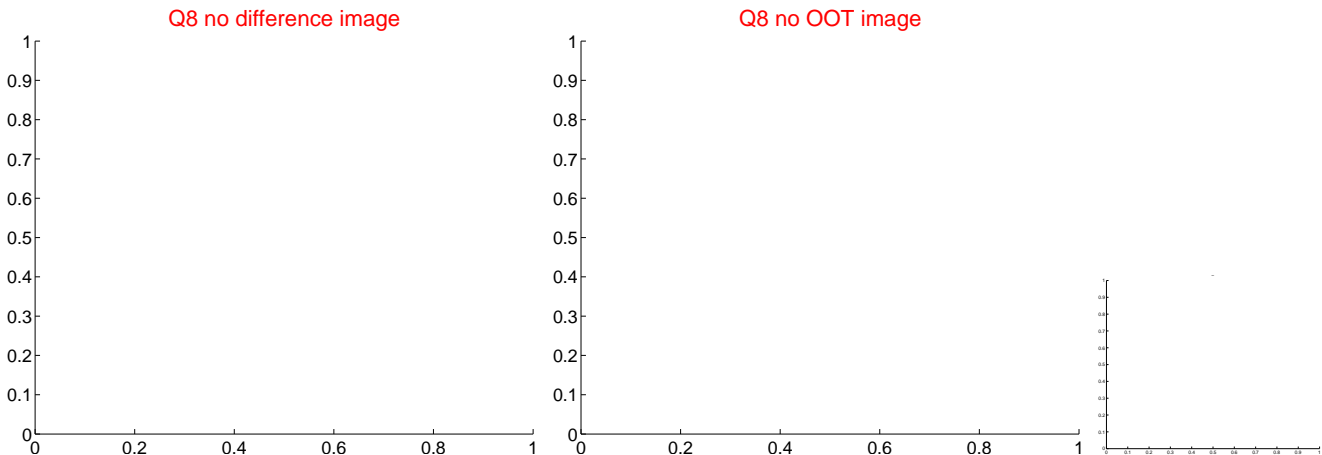
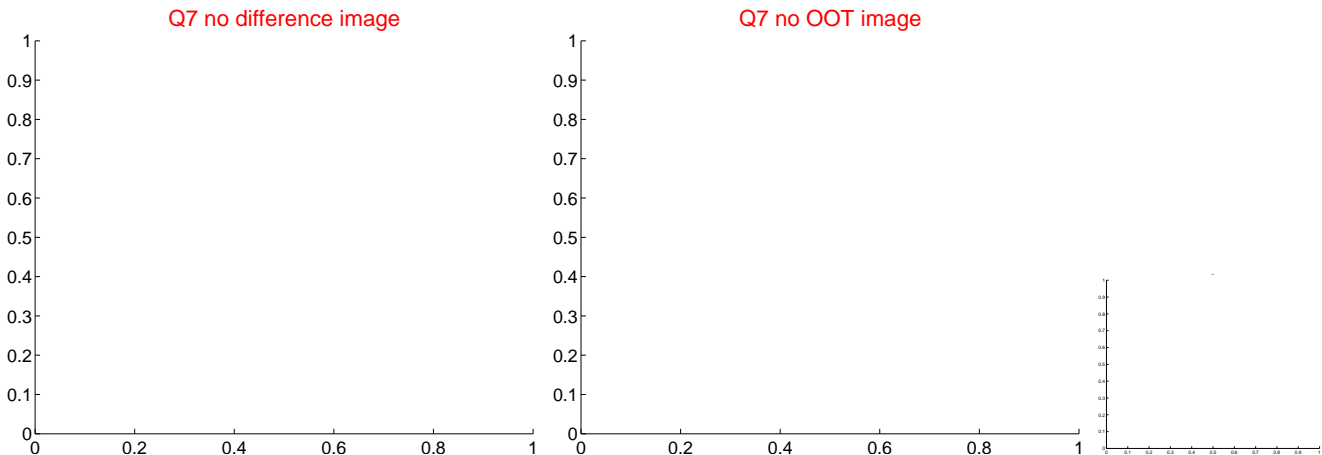
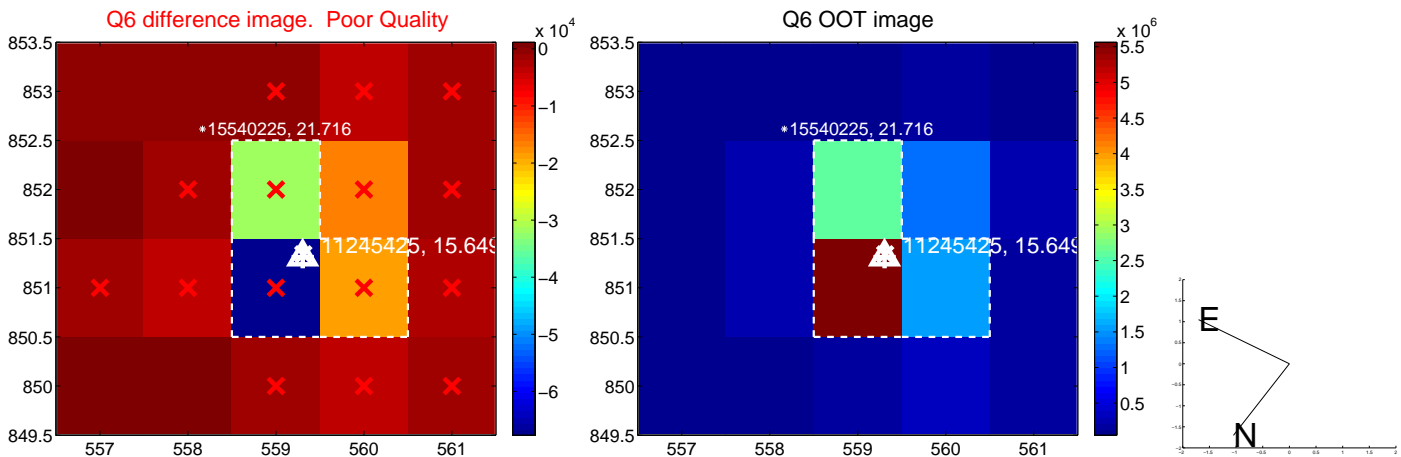
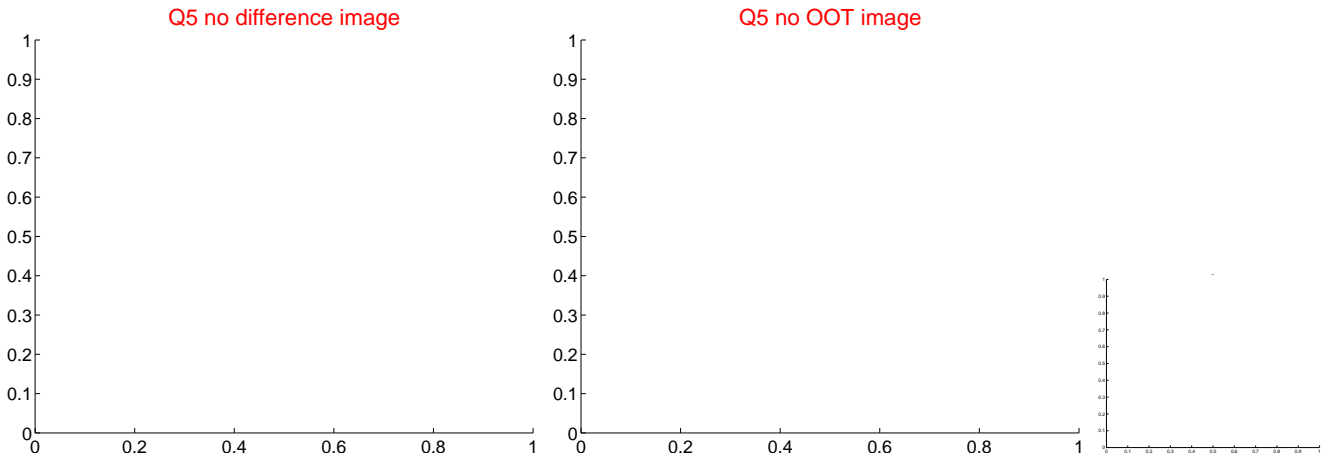


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

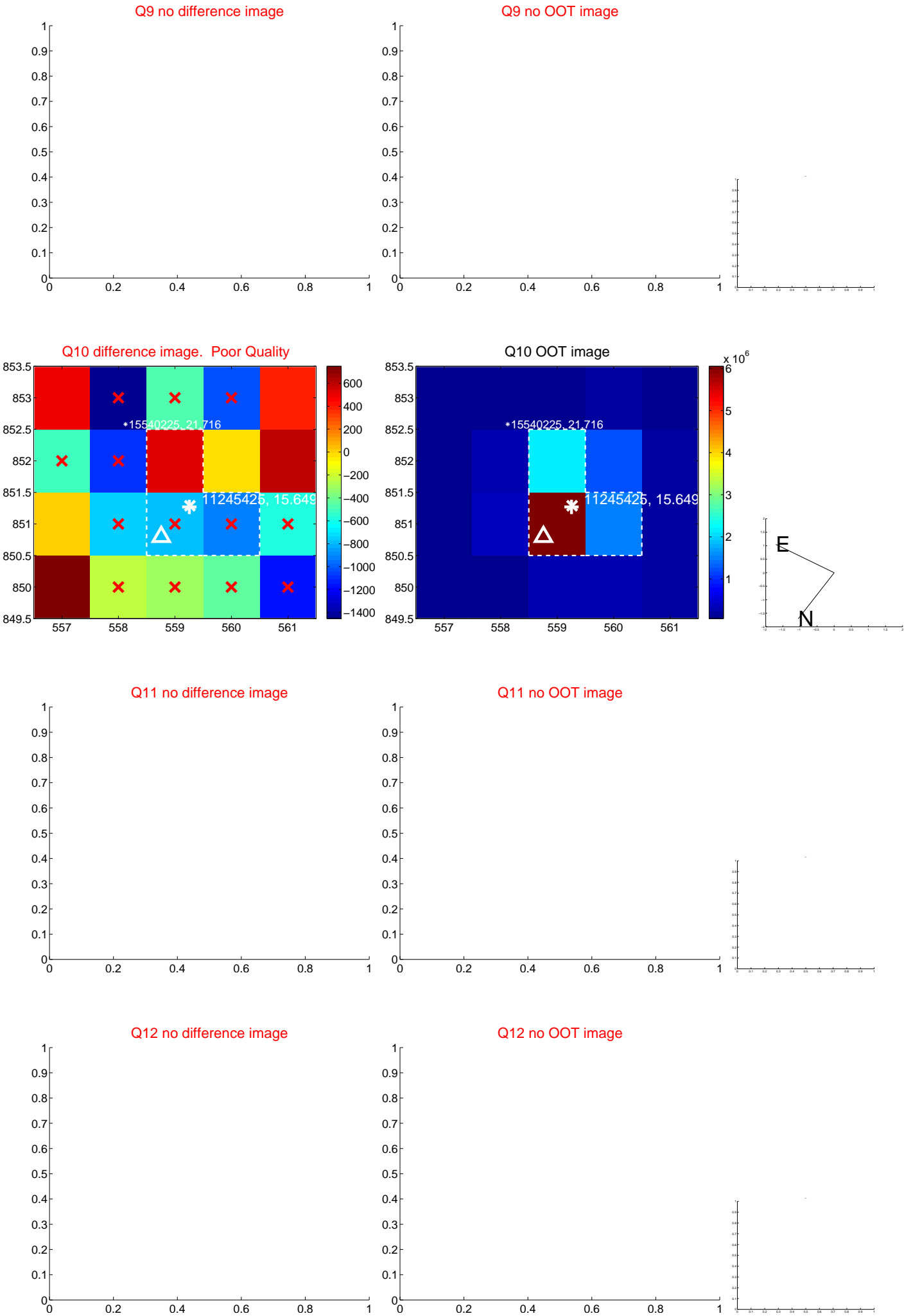
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



white ×: KIC target position; +: OOT centroid; △: difference centroid. red ×: large negative pixel value.



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



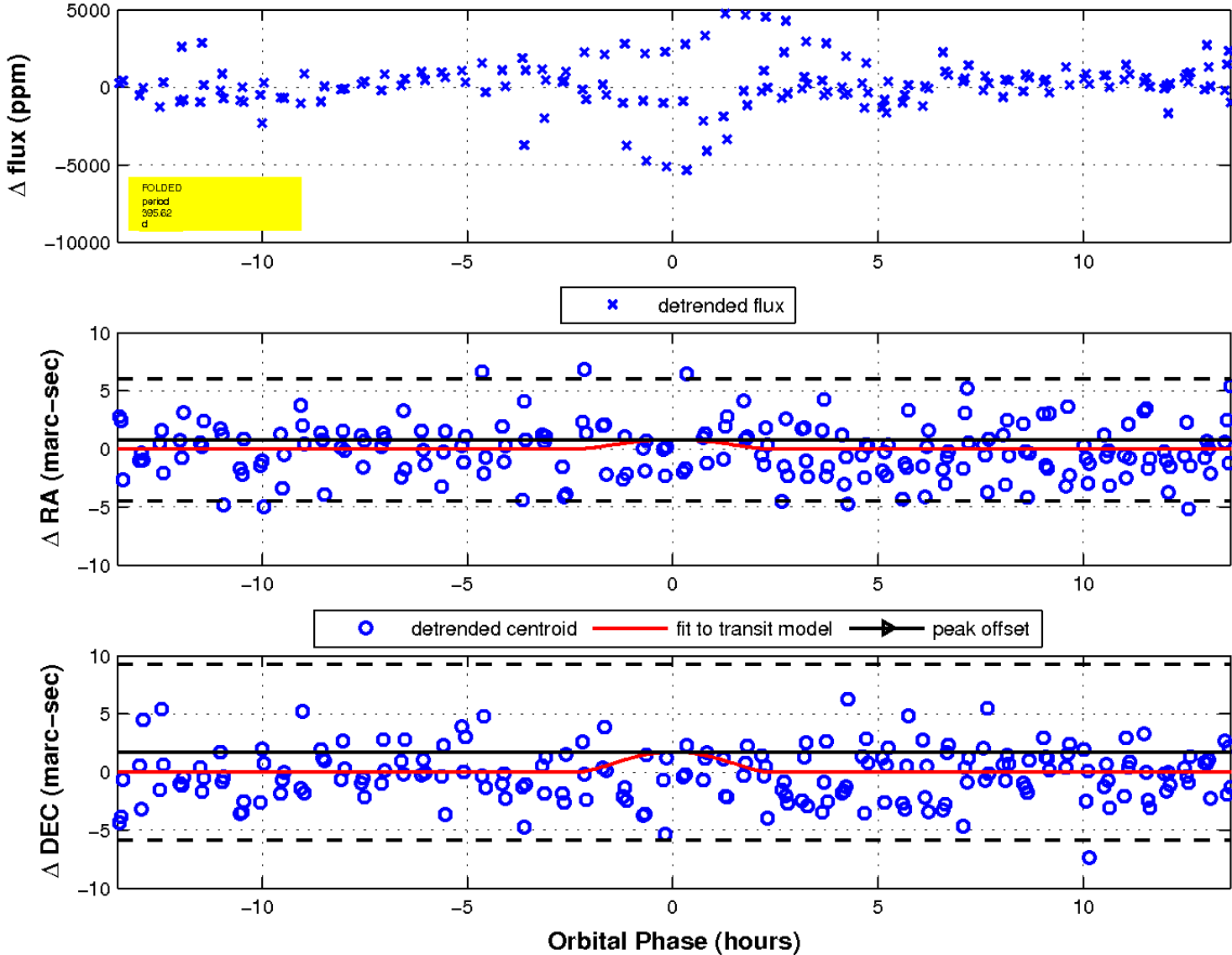
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.

Q17 no difference image

Q17 no OOT image

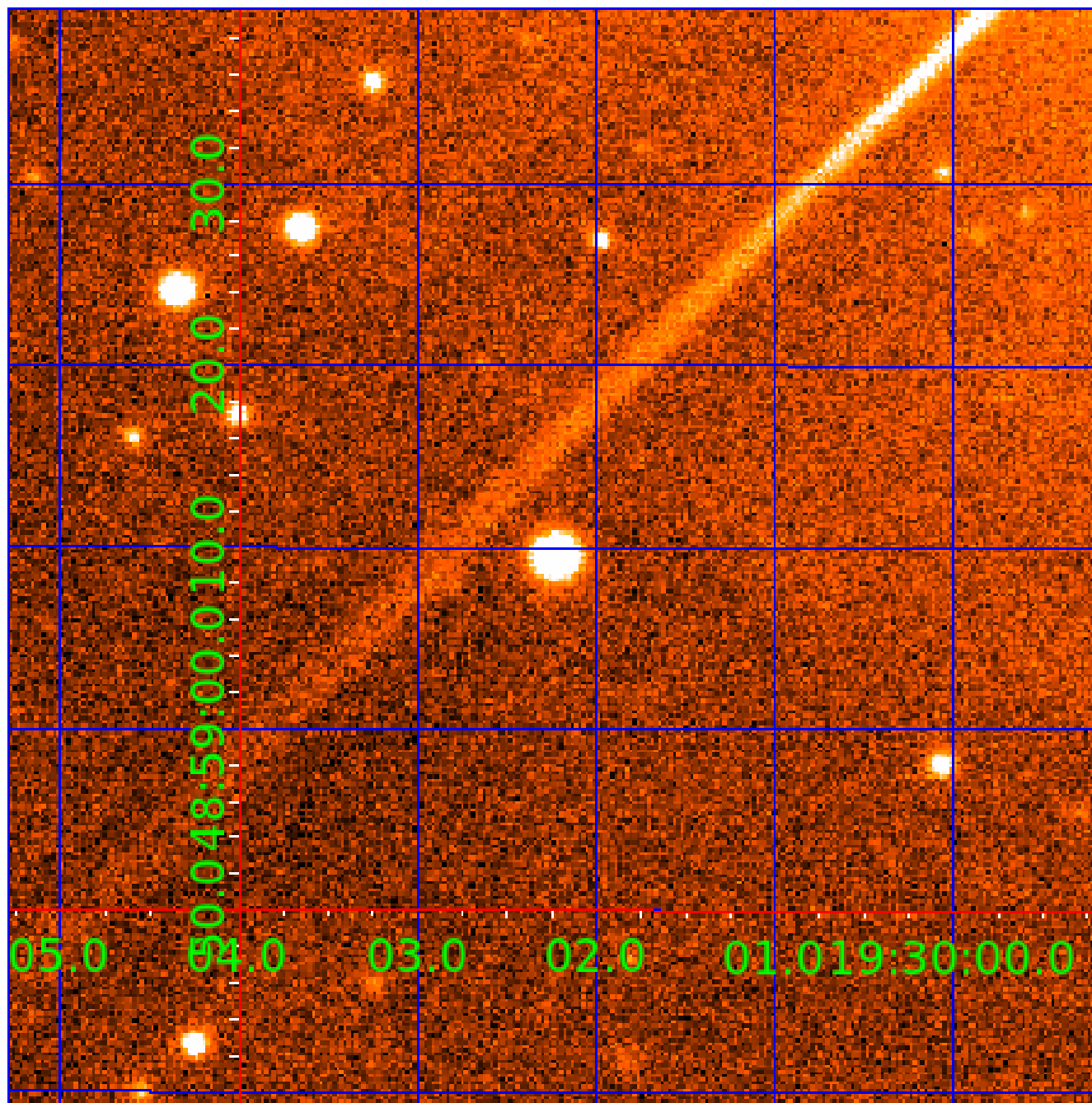


fluxWeightedCentroids, Planet 1 of 3



UKIRT Image

Declination



KIC 011245425

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})
011245425-01	OBS	No	395.617238	150.257014	5103.1	4.562	11.9	16.8	0.60	4796	7.83	0.22
011245425-02	OBS	No	466.249264	139.423491	467.7	19.048	17.8	4.1	0.60	4796	1.26	0.17
011245425-03	OBS	No	471.674677	155.363770	2888.2	3.500	17.2	-1.0	0.60	4796	3.13	0.17

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
011245425-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_TER_DV—MOD_POS_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—INCONSISTENT_TRANS—CENT_FEW_DIFFS
011245425-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_MARSHALL_SKYE—LPP_DV—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—INCONSISTENT_TRANS—CENT_FEW_DIFFS
011245425-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_MARSHALL—LPP_DV—ALL_TRANS_CHASES—MOD_NONUNIQ_ALT—INCONSISTENT_TRANS—CENT_NOFITS

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

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

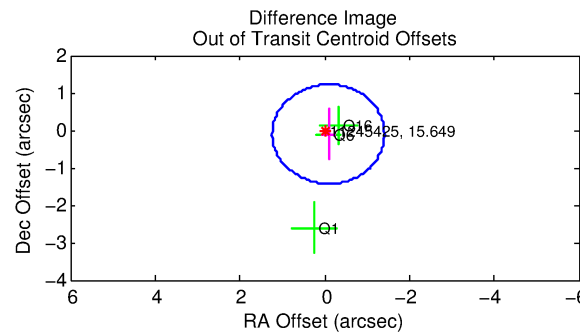
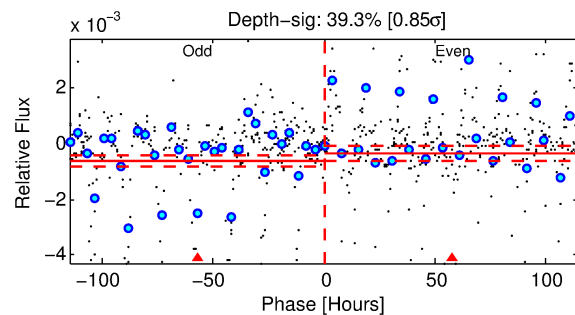
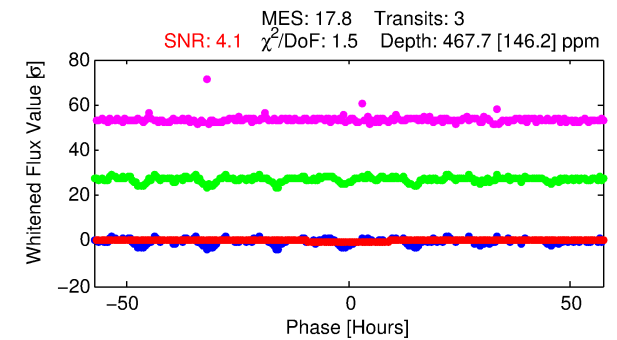
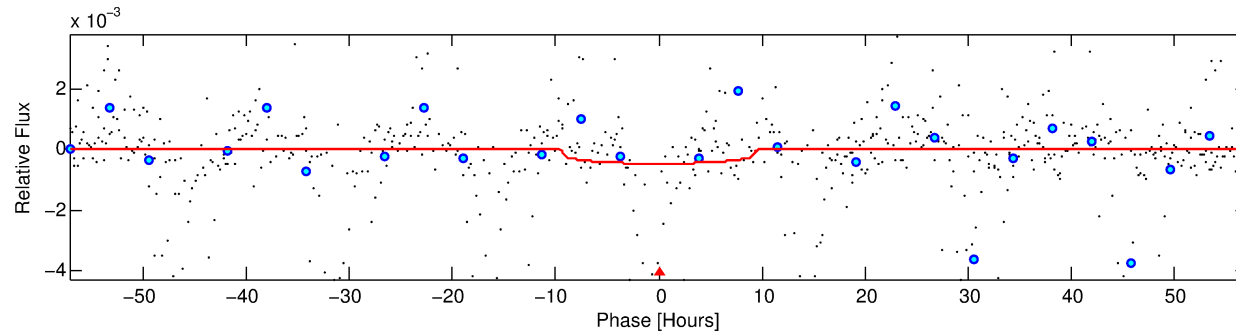
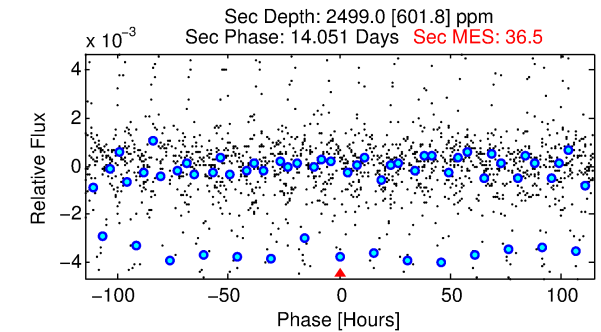
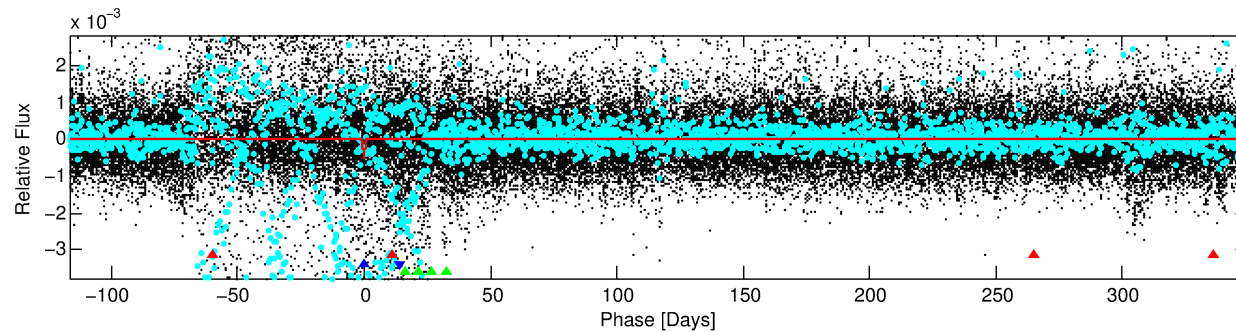
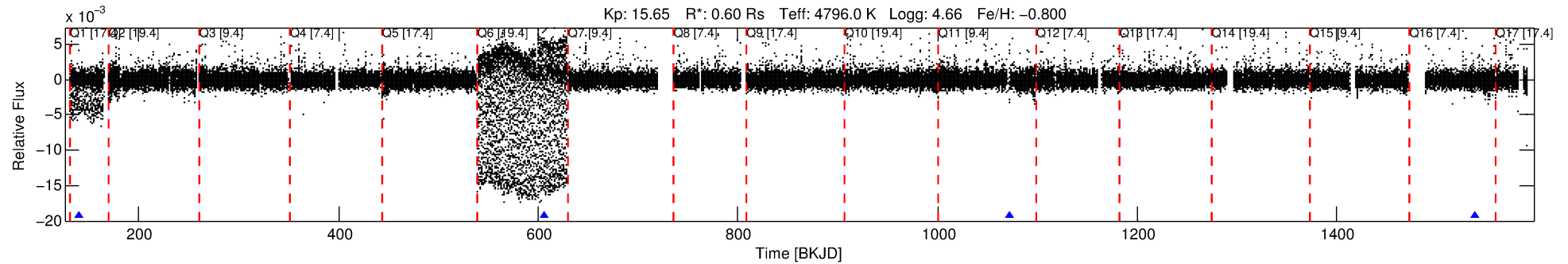
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 011245425-02

No Significant Match Found

DV One-Page Summary

KIC: 11245425 Candidate: 2 of 3 Period: 466.249 d



DV Fit Results:

Period = 466.24926 [0.02976] d
Epoch = 139.4235 [0.0475] BKJD
Rp/R* = 0.0193 [0.0718]
a/R* = 188.70 [2564.15]
b = 0.14 [93.08]
Seff = 0.17 [0.03]
Teq = 165 [7] K
Rp = 1.26 [4.69] Re
a = 0.9876 [0.0684] AU
Ag = 845259.13 [6292336.67] [0.13 σ]
Teffp = 7718 [14365] K [0.53 σ]

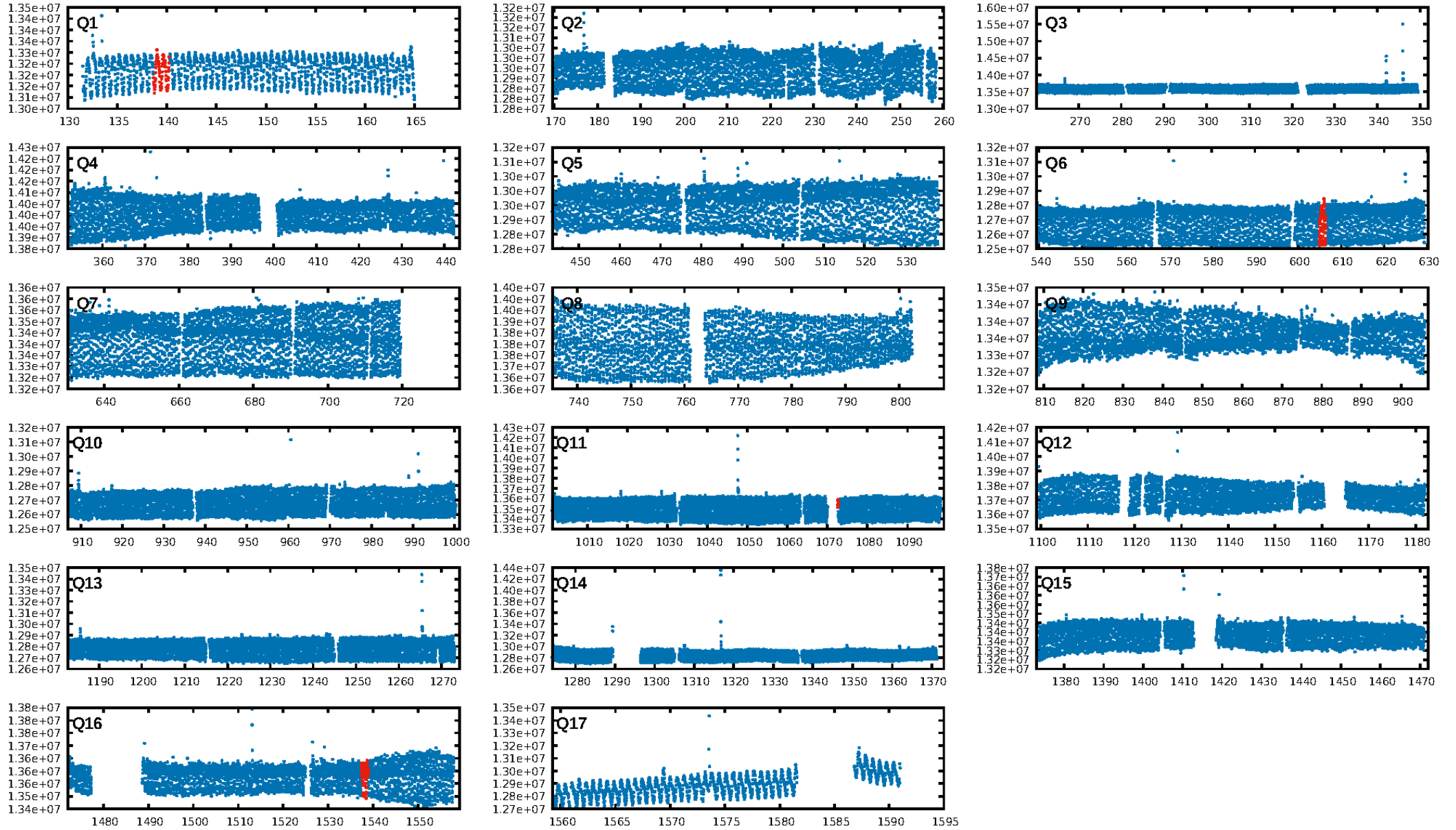
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [86.55 σ]
LongPeriod-sig: 100.0% [6.72 σ]
ModelChiSquare2-sig: 91.1%
ModelChiSquareGof-sig: 76.8%
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [2/2]
GhostDiagnostic-chr: -0.5201
Centroid-sig: 2.2%
Centroid-so: 2.843 arcsec [1.74 σ]
OotOffset-rm: 0.136 arcsec [0.31 σ]
OotOffset-st: 1/0/1/1 [3]
KicOffset-rm: 0.068 arcsec [0.26 σ]
KicOffset-st: 1/0/1/1 [3]
DiffImageQuality-fgm: 0.33 [1/3]
DiffImageOverlap-fno: 1.00 [3/3]

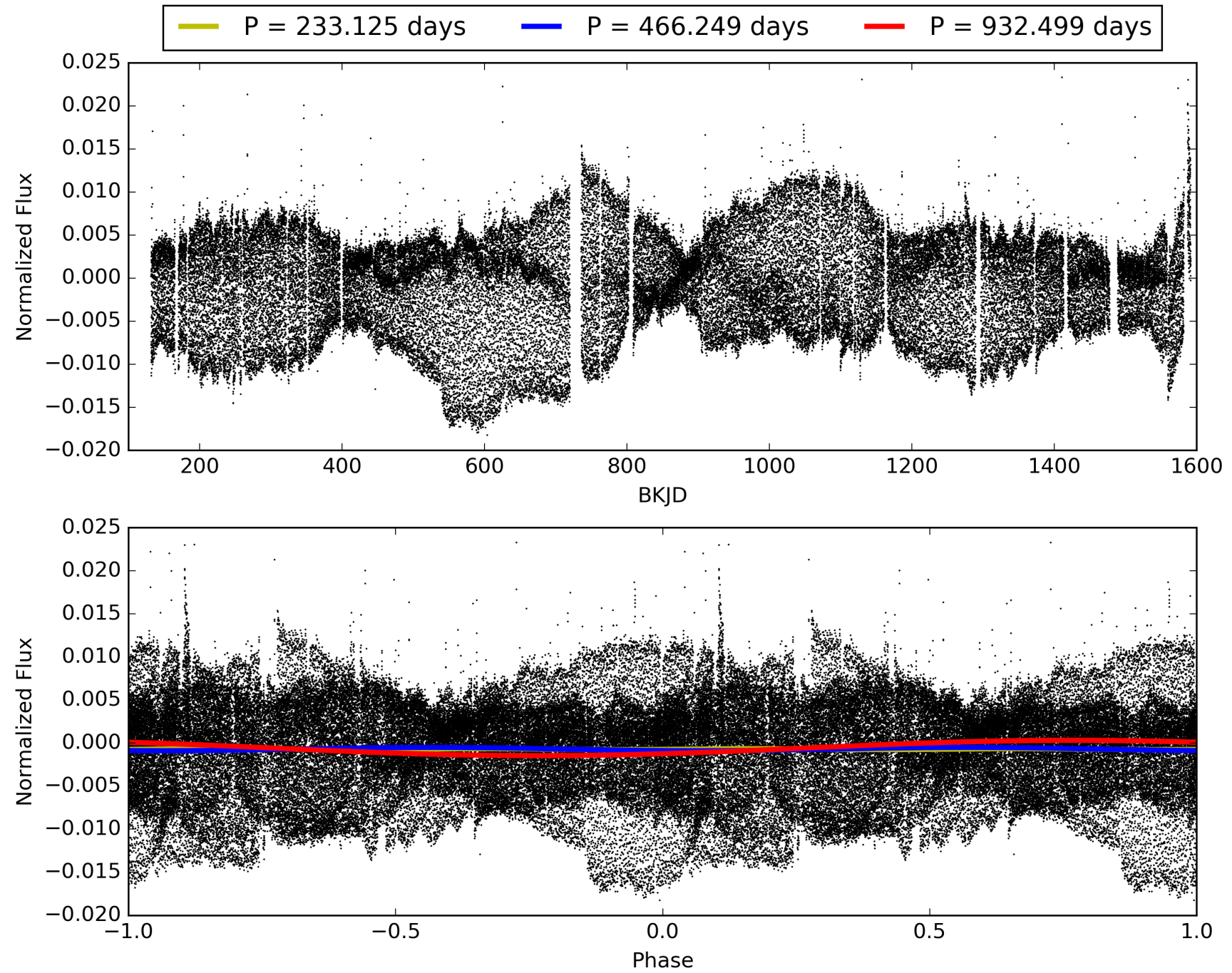
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 05:41:37 Z

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

TCE 011245425-02, PDC Light Curves

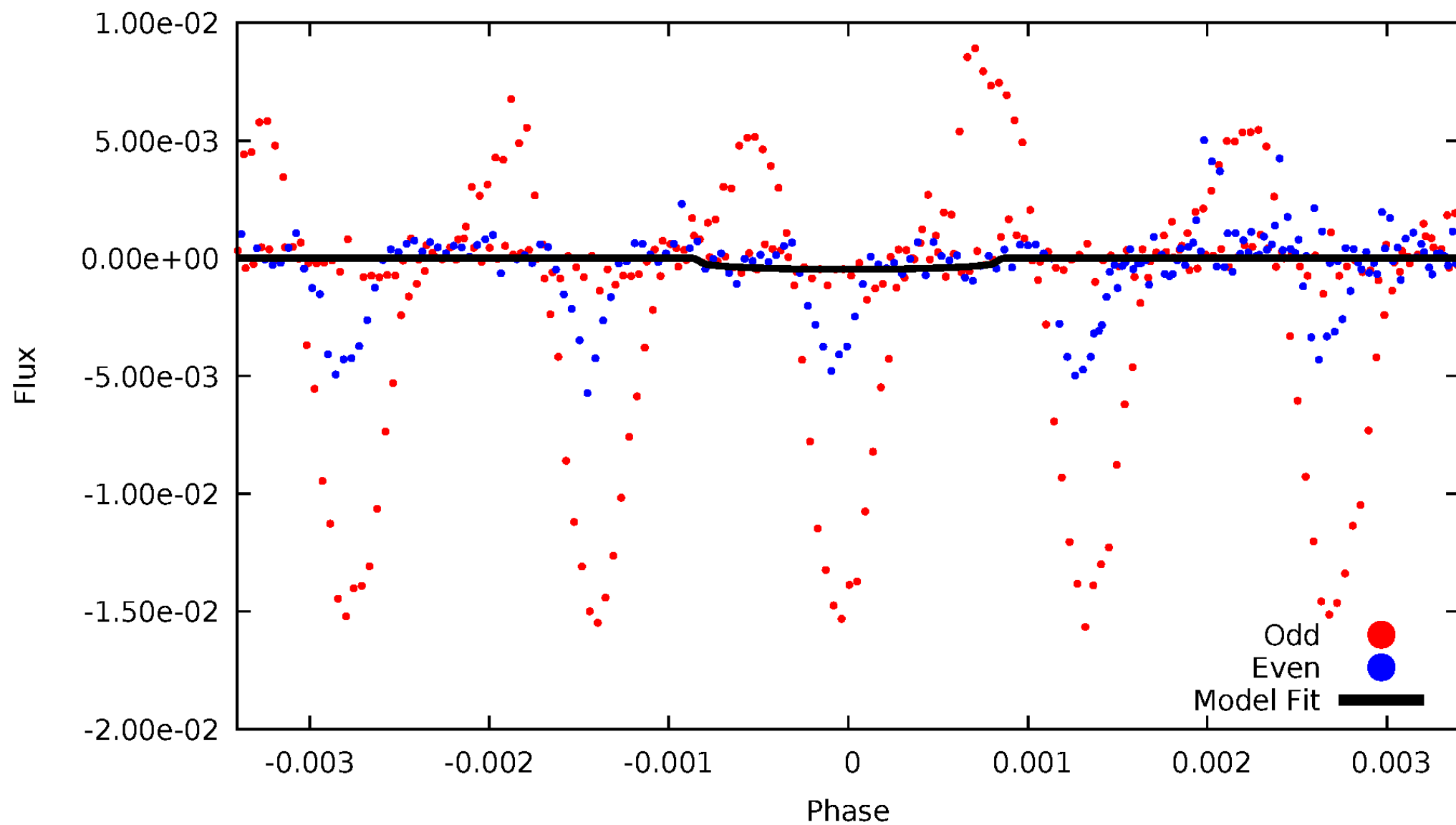


TCE 011245425-02



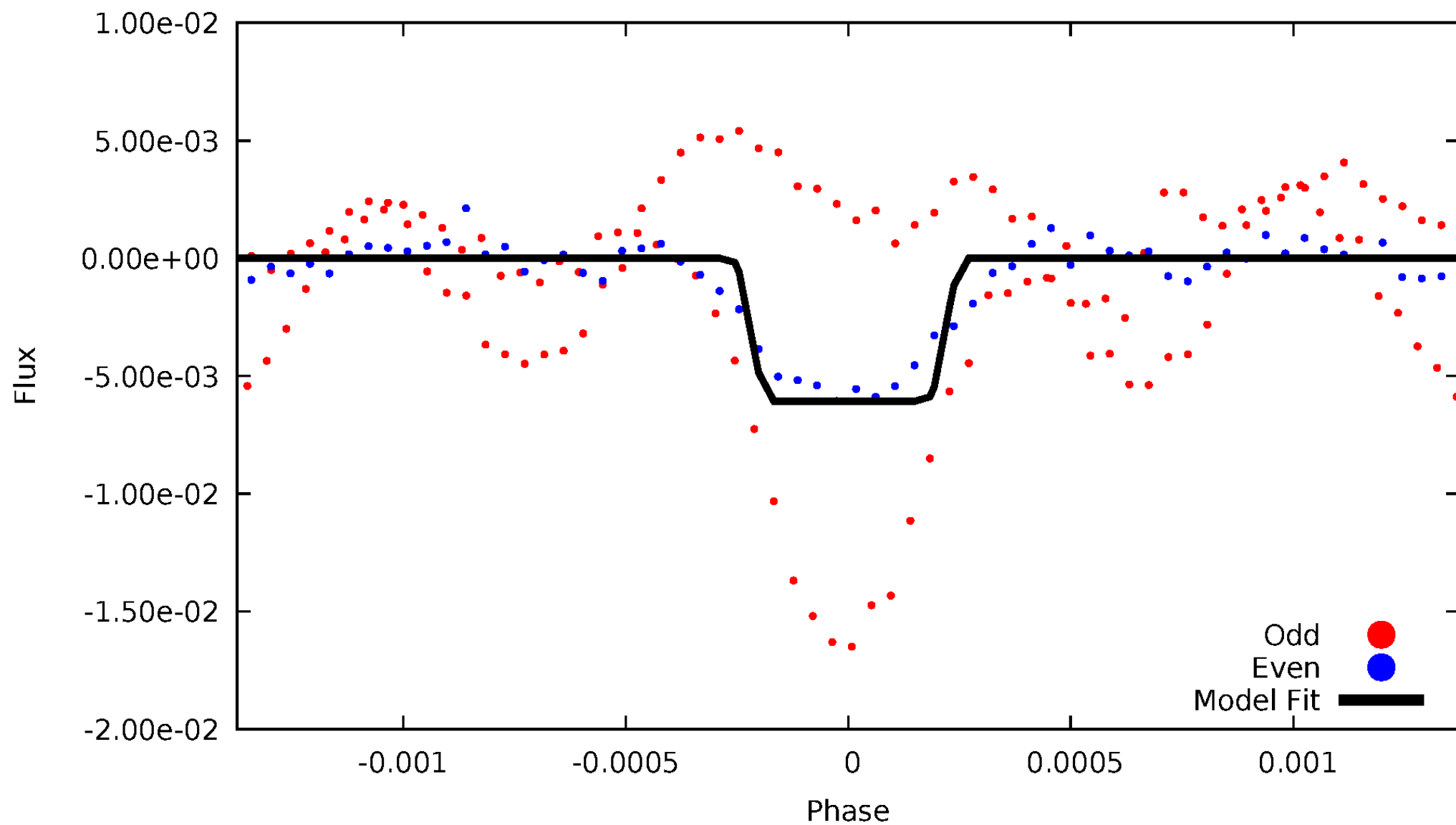
DV Odd/Even

TCE 011245425-02



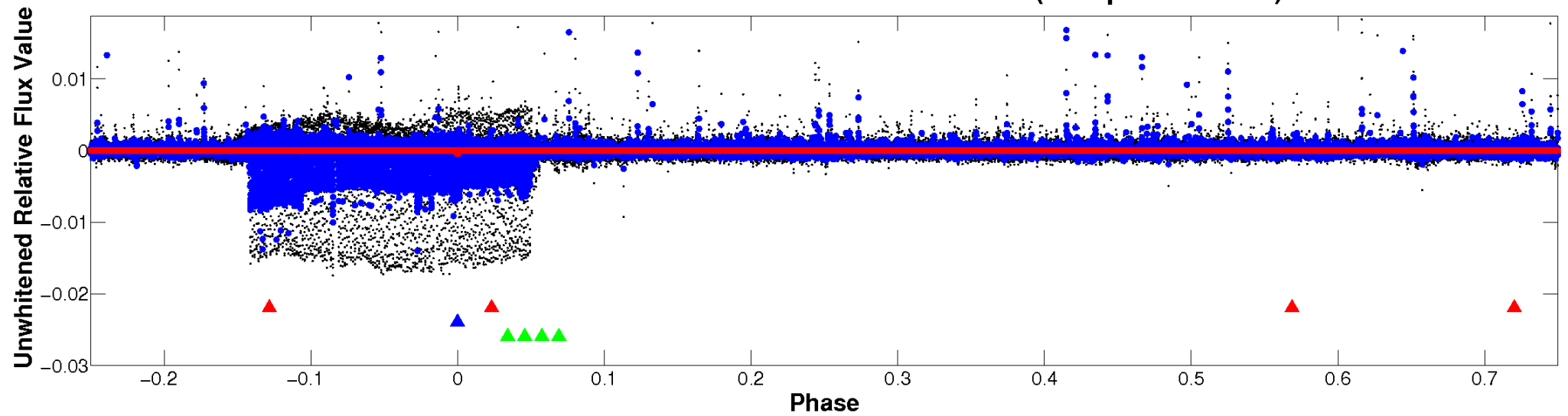
ALT Odd/Even

TCE 011245425-02

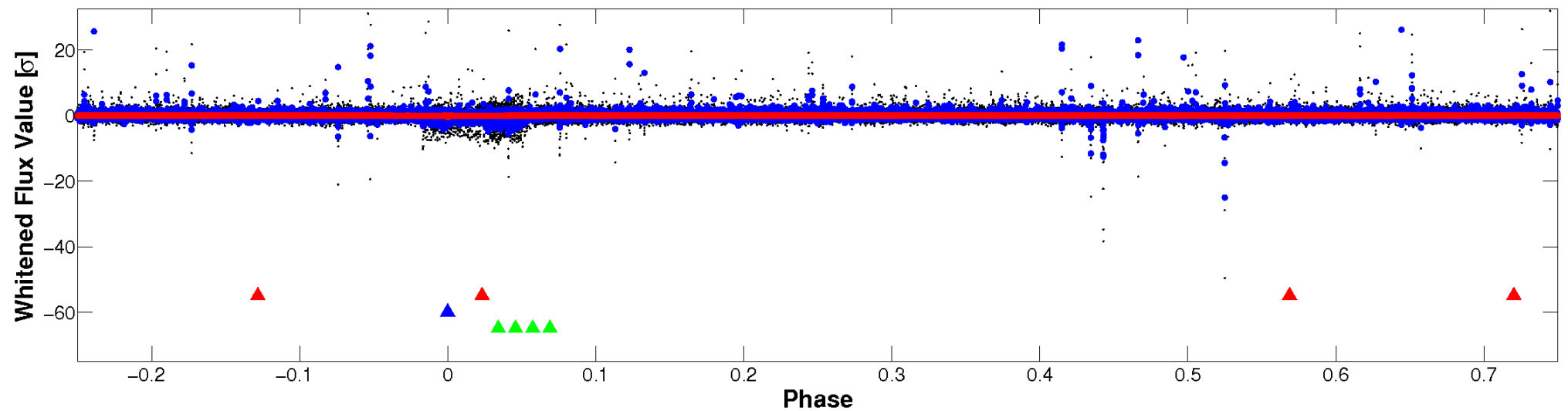


Non-Whitened Vs. Whitened Light Curve

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



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



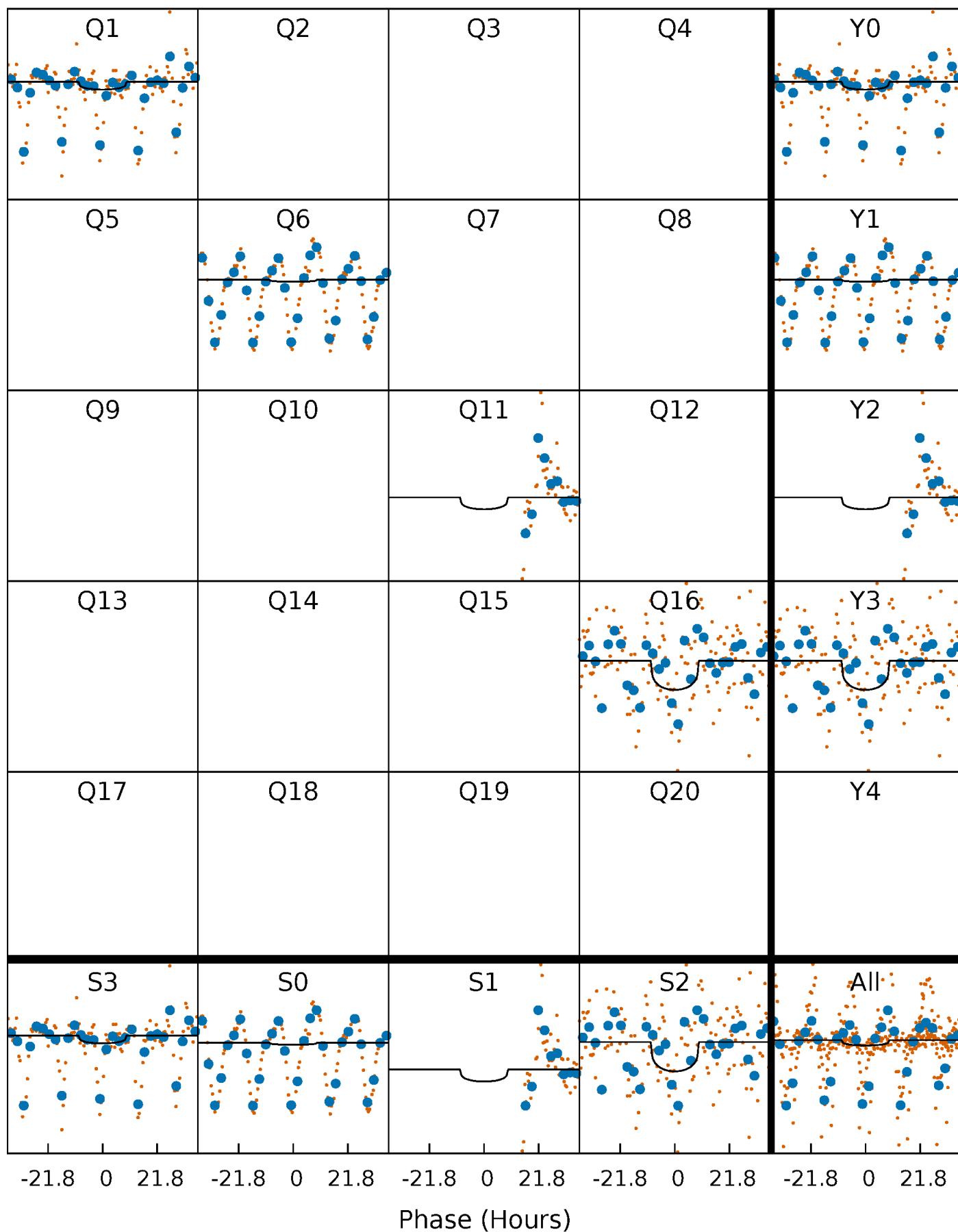
PDC Quarter-Phased Transit Curves

TCE 011245425-02 P=466.249264 Days $T_0=139.423491$ (BKJD)



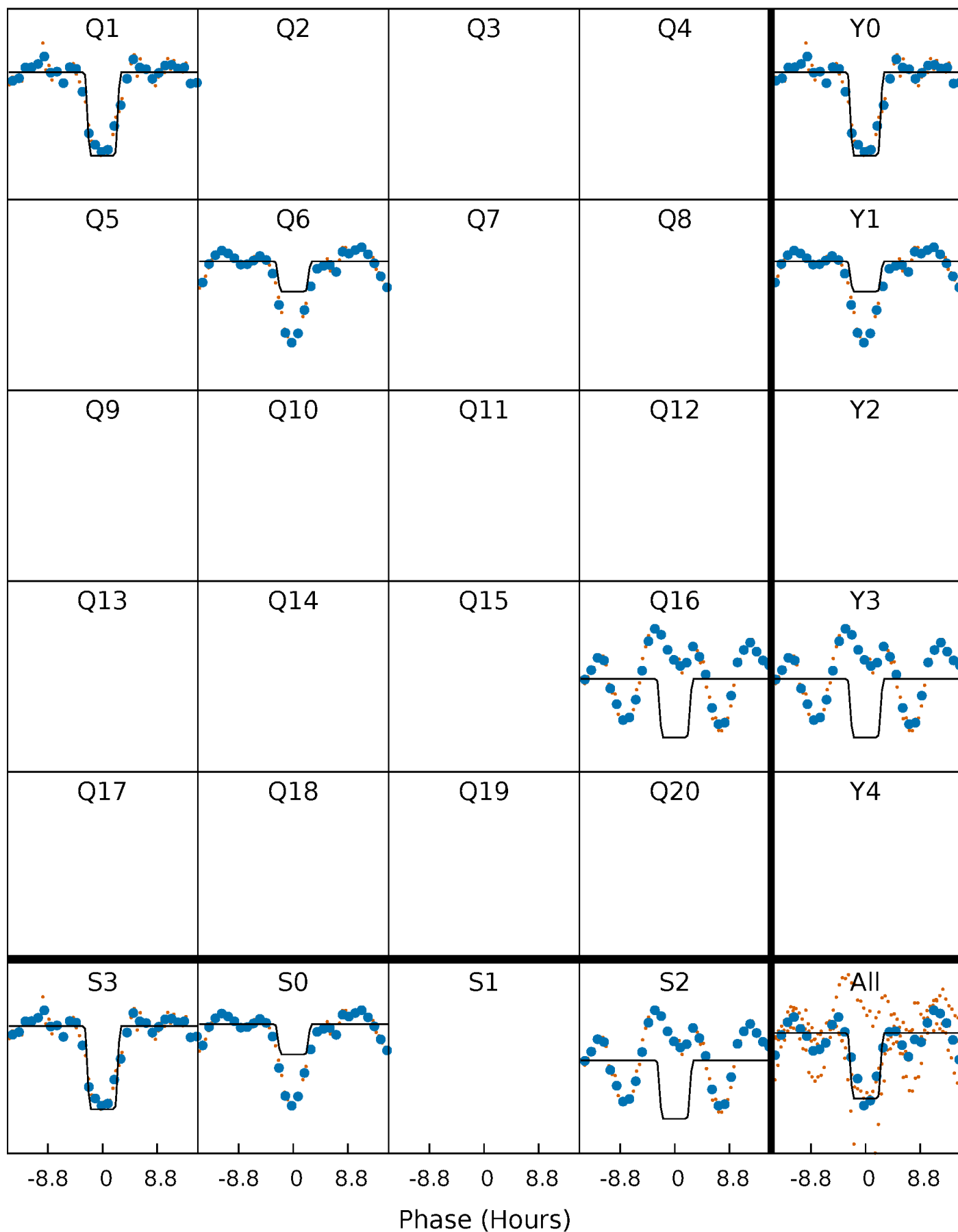
DV Quarter-Phased Transit Curves

TCE 011245425-02 P=466.249264 Days $T_0=139.423491$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

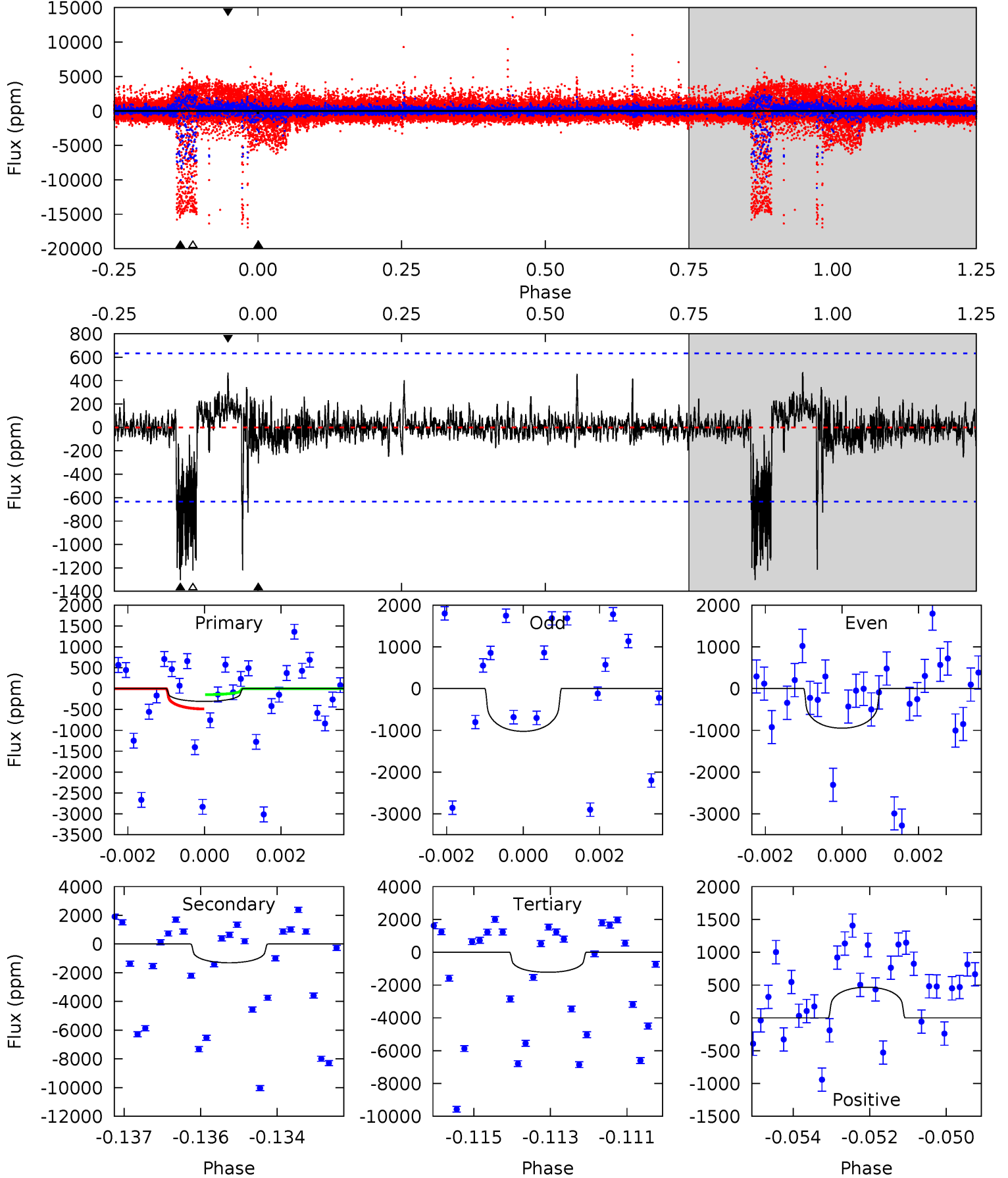
TCE 011245425-02 P=466.259783 Days $T_0=139.391507$ (BKJD)



DV Model-Shift Uniqueness Test

011245425-02, P = 466.249264 Days, E = 139.423491 Days

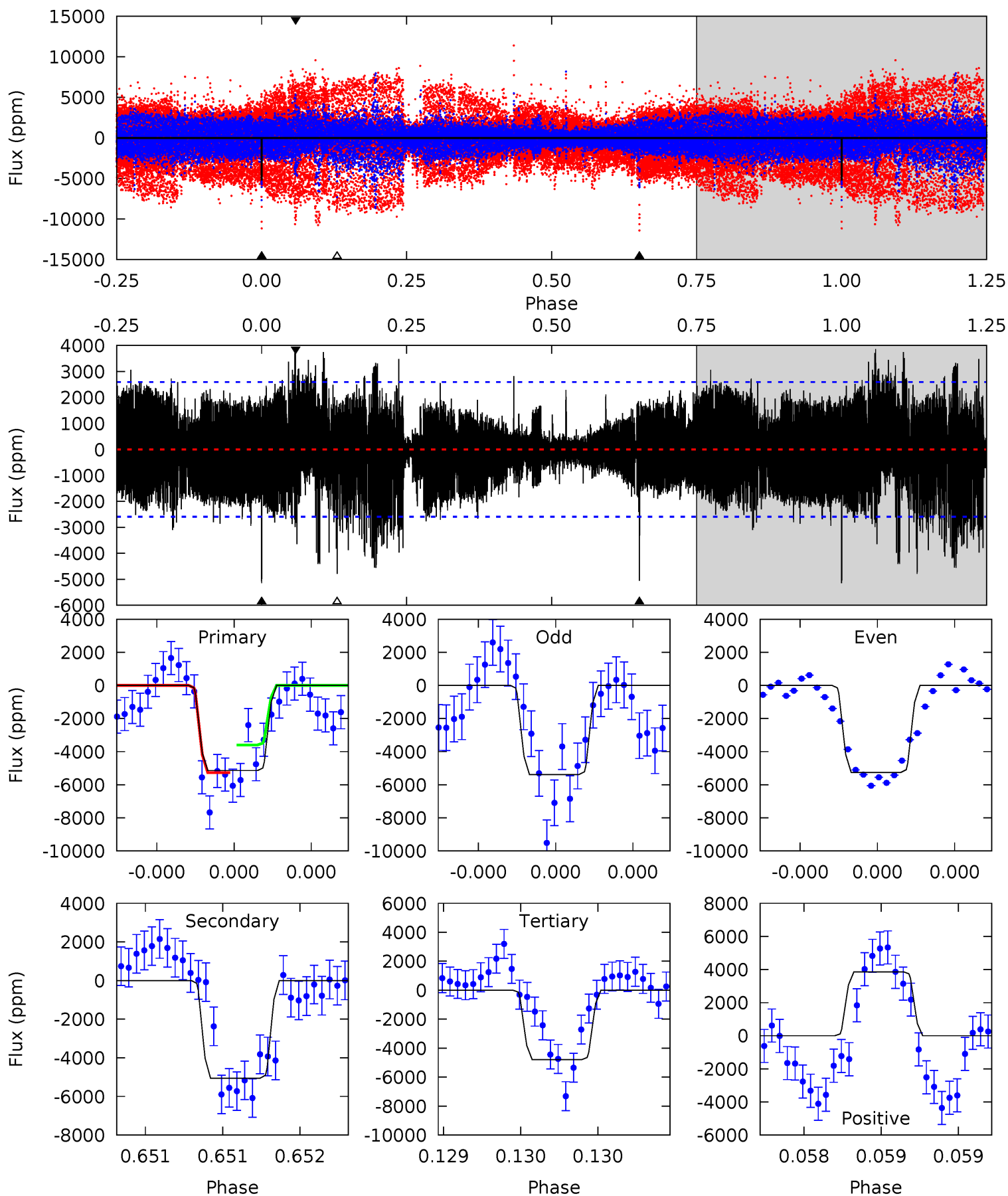
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
2.59	11.0	10.3	3.95	5.35	3.13	1.20	-7.74	-1.35	0.69	7.08	0.22	1.15	0.26	1.44



Alt Model-Shift Uniqueness Test

011245425-02, P = 466.259783 Days, E = 139.391507 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
11.1	10.9	10.3	8.30	5.58	3.49	2.26	0.76	2.76	0.56	2.57	0.17	1.02	0.43	1.86



Stellar Parameters For KIC 011245425

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	4796^{+143}_{-143}	$4.656^{+0.059}_{-0.032}$	$-0.800^{+0.300}_{-0.300}$	$0.598^{+0.047}_{-0.047}$	$0.590^{+0.055}_{-0.029}$	$3.895^{+0.957}_{-0.530}$
	+3%/-3%	+1%/-1%	+37%/-37%	+8%/-8%	+9%/-5%	+25%/-14%
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 011245425-02 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-1305 ± 118	$3.58^{+3.47}_{-2.36}$	229^{+8}_{-8}	4076^{+2375}_{-822}	$55452^{+419310}_{-41268}$
Alt.	-5054 ± 465	$6.00^{+4.31}_{-3.88}$	229^{+8}_{-8}	4373^{+2493}_{-783}	$77154^{+516345}_{-51434}$

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 $A_{obs} \gg 1.0$

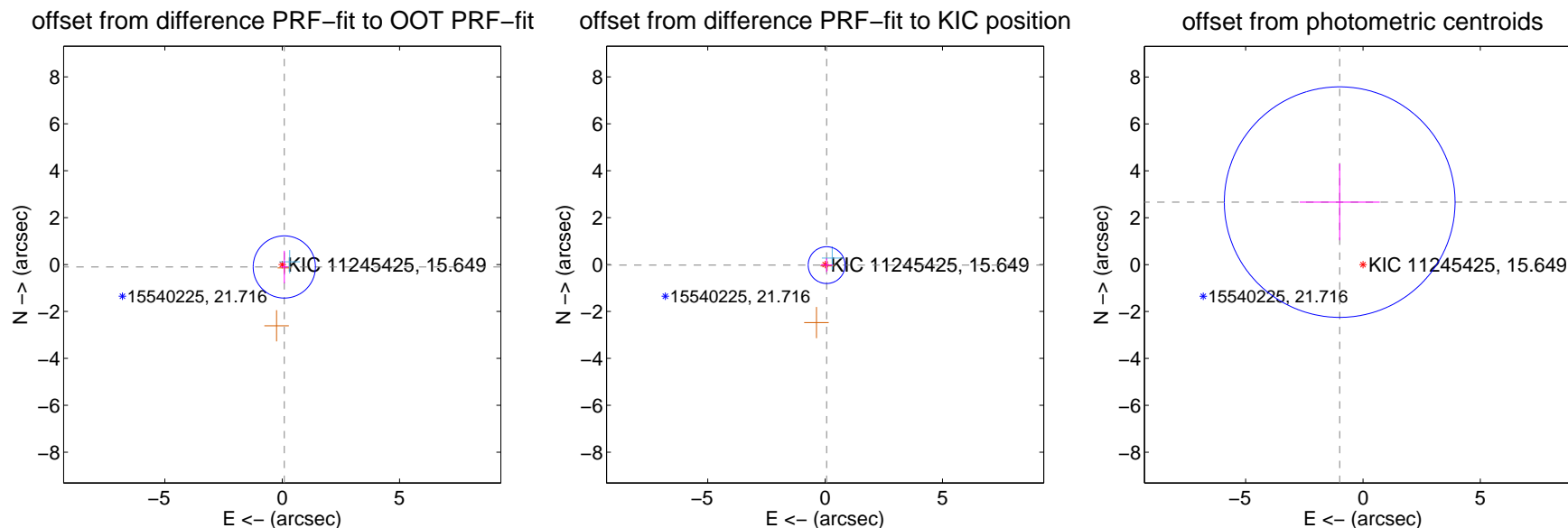
DV Centroid Data

Supplemental centroid analysis for 011245425-02. Kepler magnitude: 15.65. Transit SNR 4.12

There are 1 quarters with good PRF difference image offsets

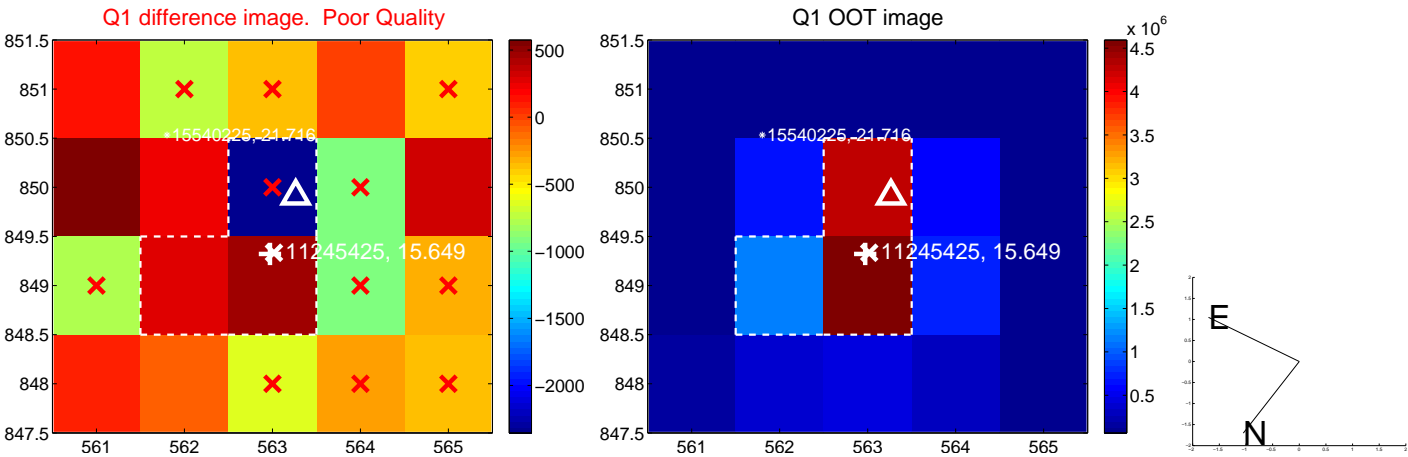
The direct PRF centroid is offset from the target star catalog position by about 0.16 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.136 ± 0.442	0.31	-0.089 ± 0.150	-0.103 ± 0.693
PRF-fit source offset from KIC position	0.068 ± 0.261	0.26	-0.064 ± 0.256	-0.025 ± 0.293
photometric centroid source offset	2.84 ± 1.64	1.74	0.99 ± 1.70	2.66 ± 1.63

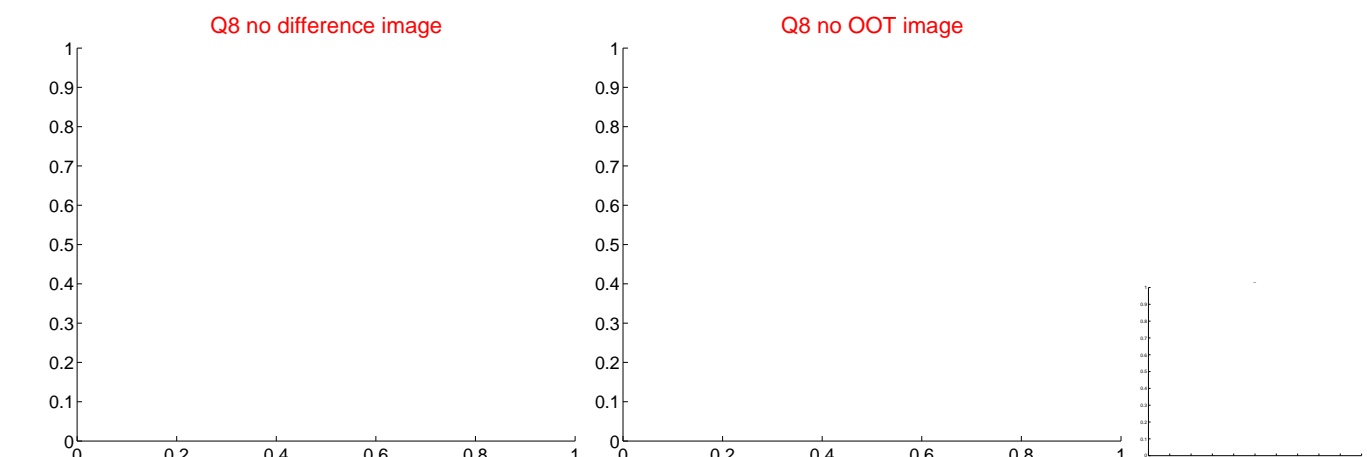
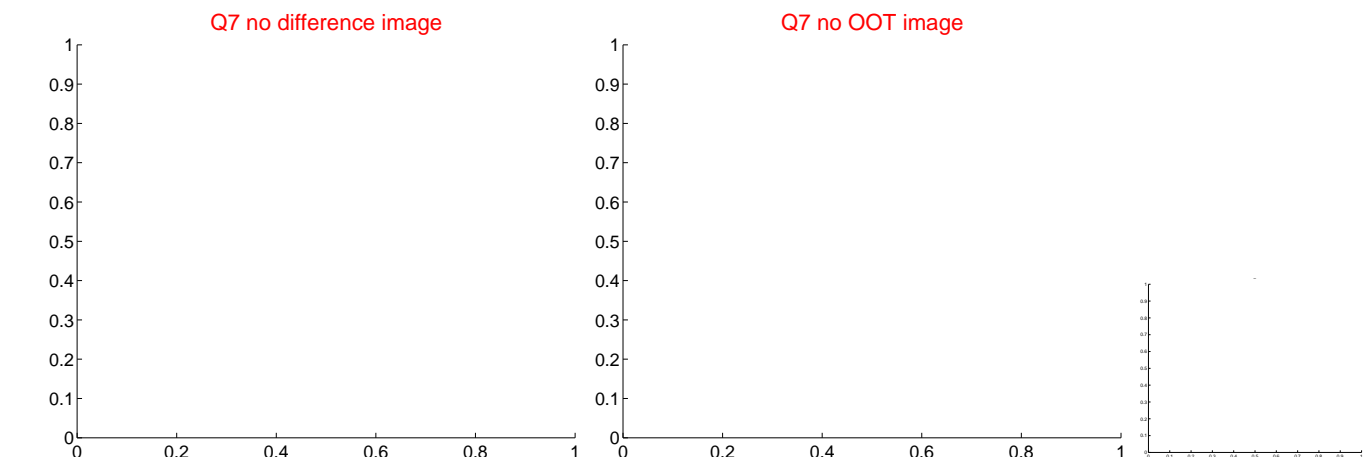
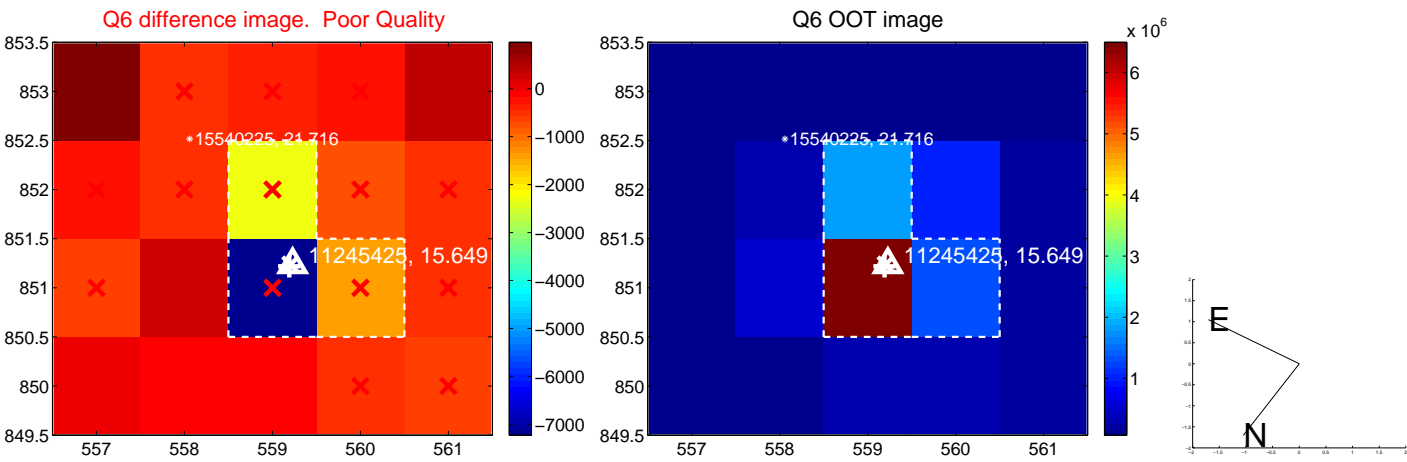
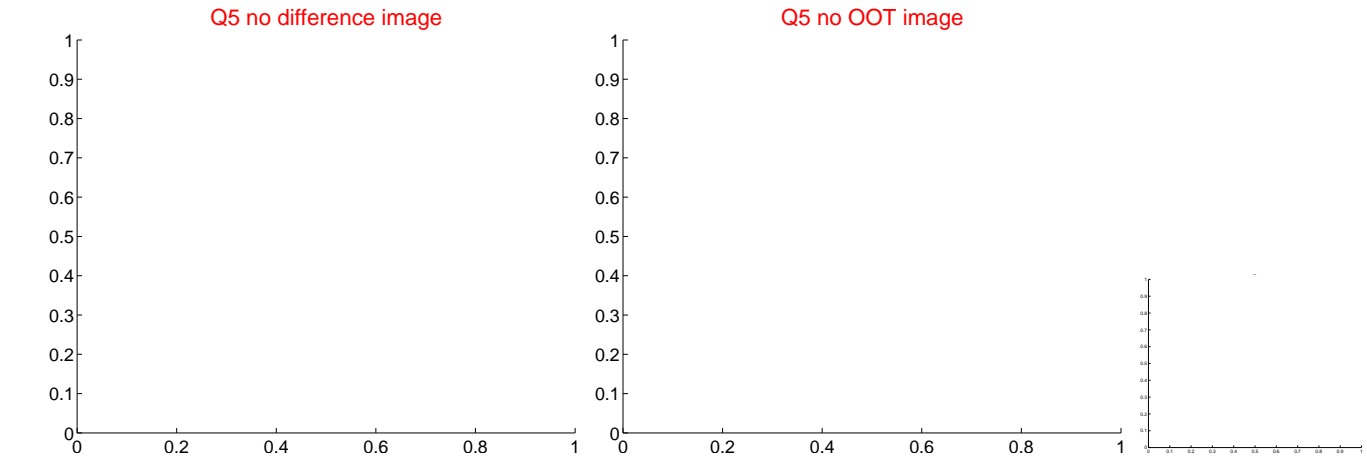


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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



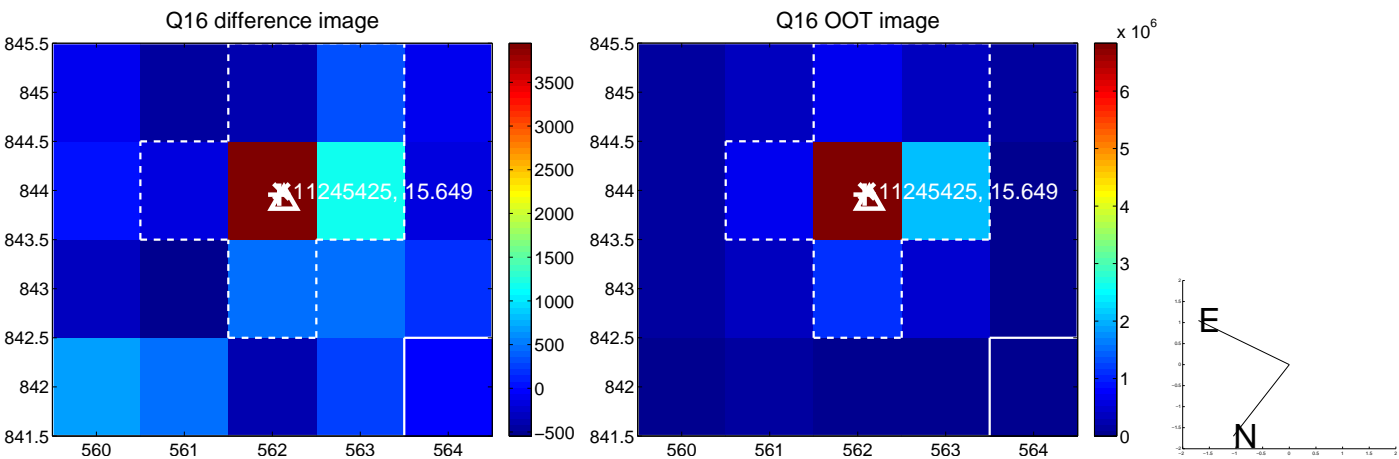
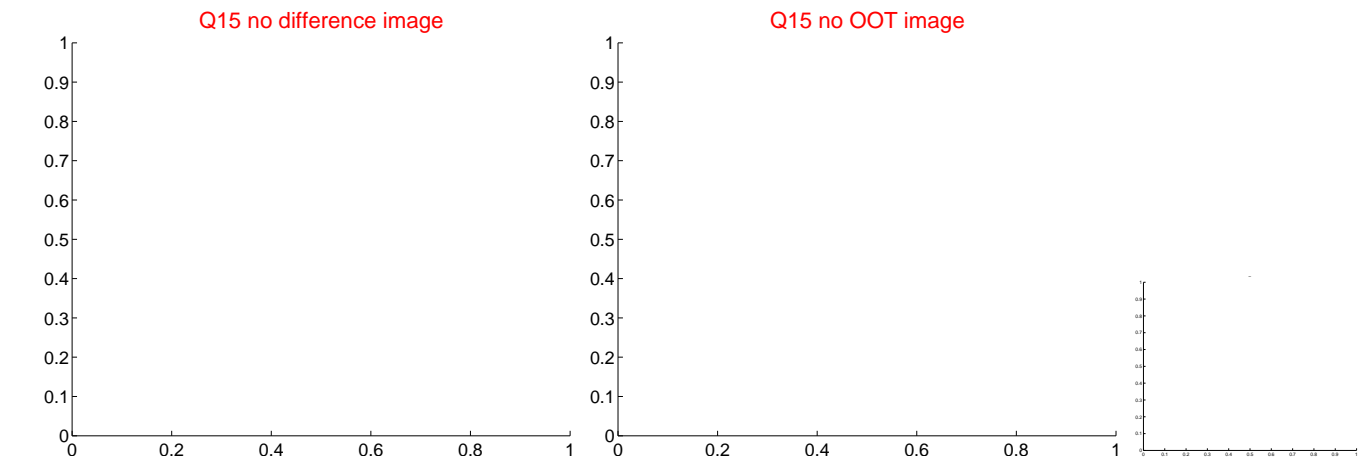
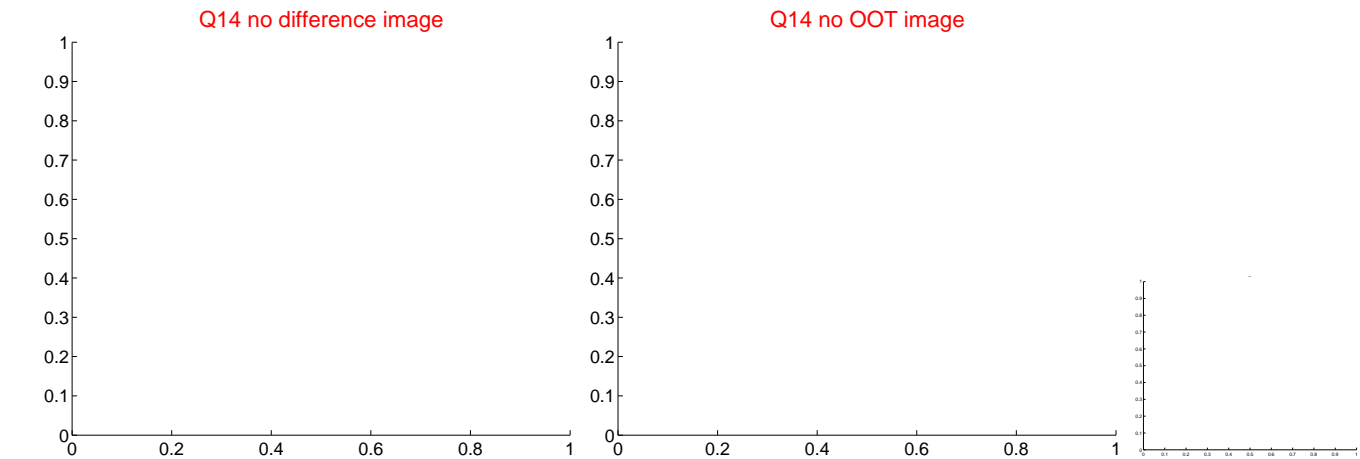
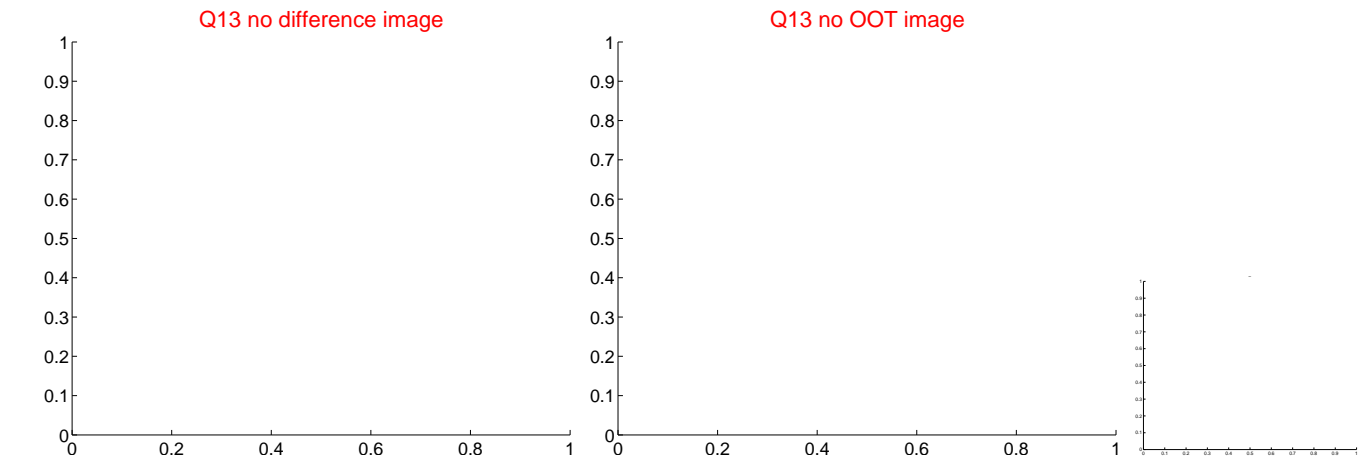
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



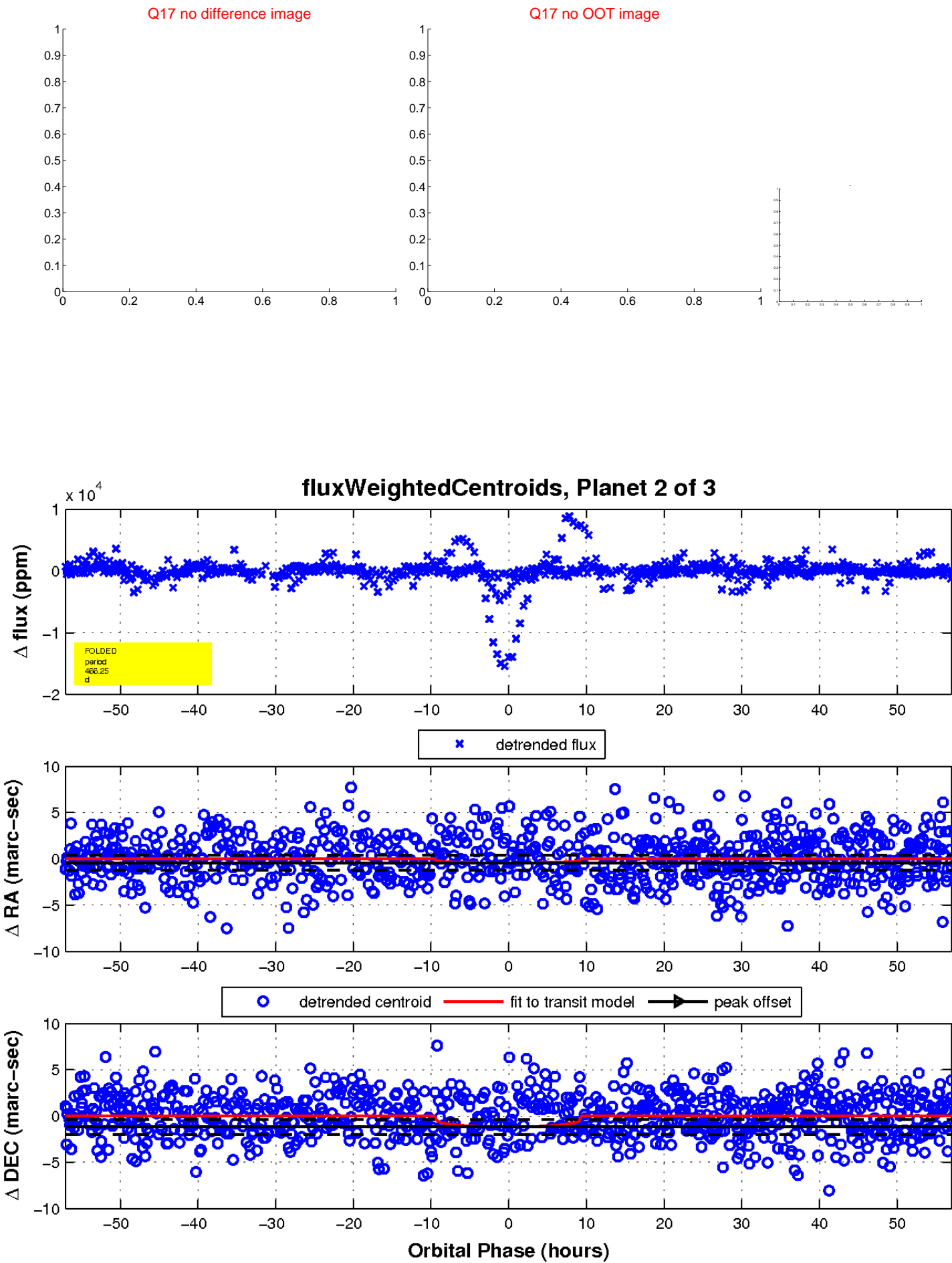
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

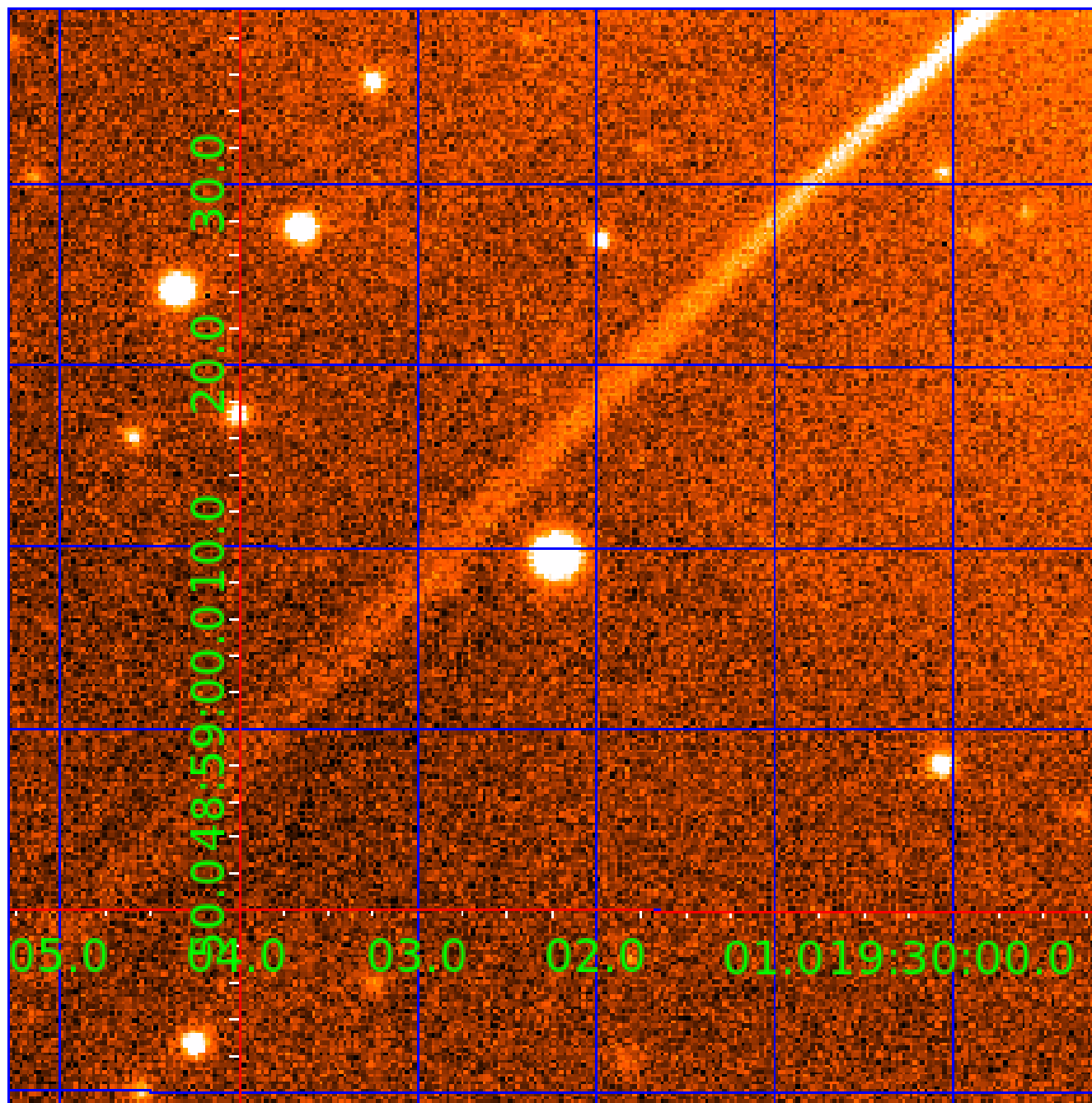


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 011245425

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})
011245425-01	OBS	No	395.617238	150.257014	5103.1	4.562	11.9	16.8	0.60	4796	7.83	0.22
011245425-02	OBS	No	466.249264	139.423491	467.7	19.048	17.8	4.1	0.60	4796	1.26	0.17
011245425-03	OBS	No	471.674677	155.363770	2888.2	3.500	17.2	-1.0	0.60	4796	3.13	0.17

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
011245425-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_TER_DV—MOD_POS_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—INCONSISTENT_TRANS—CENT_FEW_DIFFS
011245425-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_MARSHALL_SKYE—LPP_DV—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—INCONSISTENT_TRANS—CENT_FEW_DIFFS
011245425-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_MARSHALL—LPP_DV—ALL_TRANS_CHASES—MOD_NONUNIQ_ALT—INCONSISTENT_TRANS—CENT_NOFITS

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

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

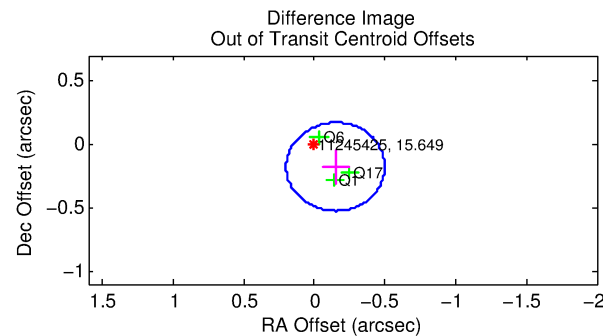
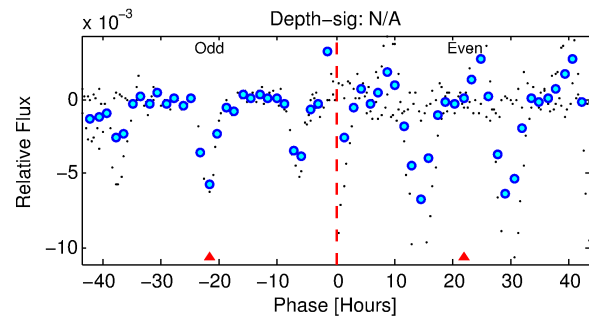
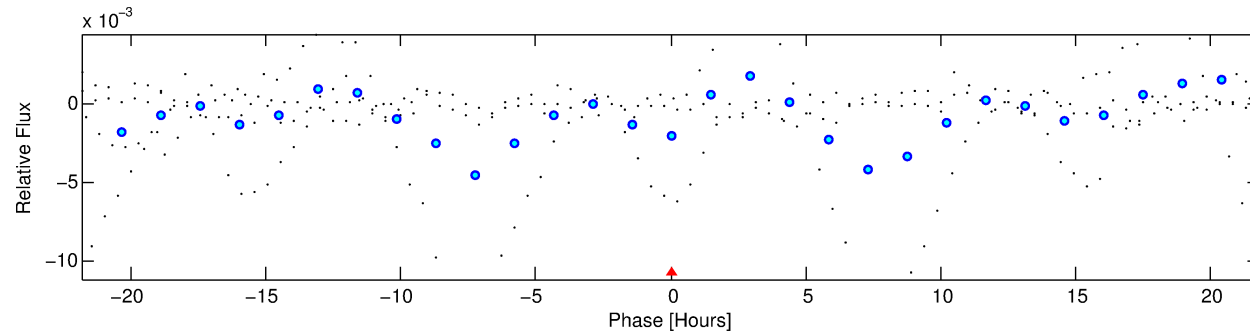
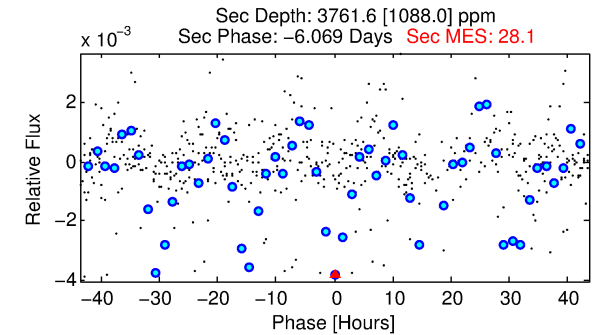
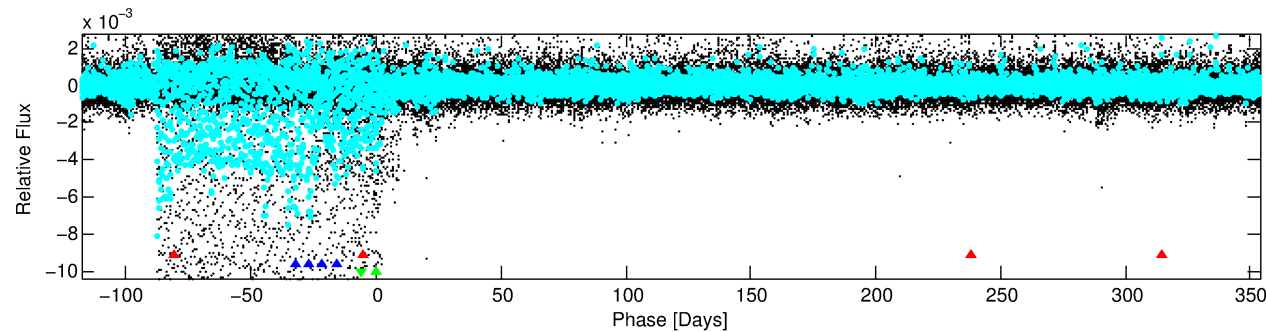
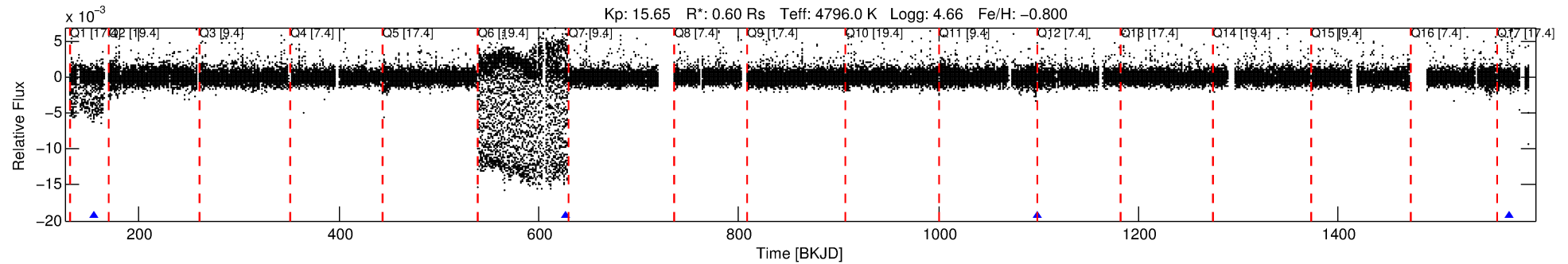
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 011245425-03

No Significant Match Found

DV One-Page Summary

KIC: 11245425 Candidate: 3 of 3 Period: 471.675 d



TPS TCE Results:

Period = 471.67468 d
Epoch = 155.3638 BKJD

DV fit results are unavailable

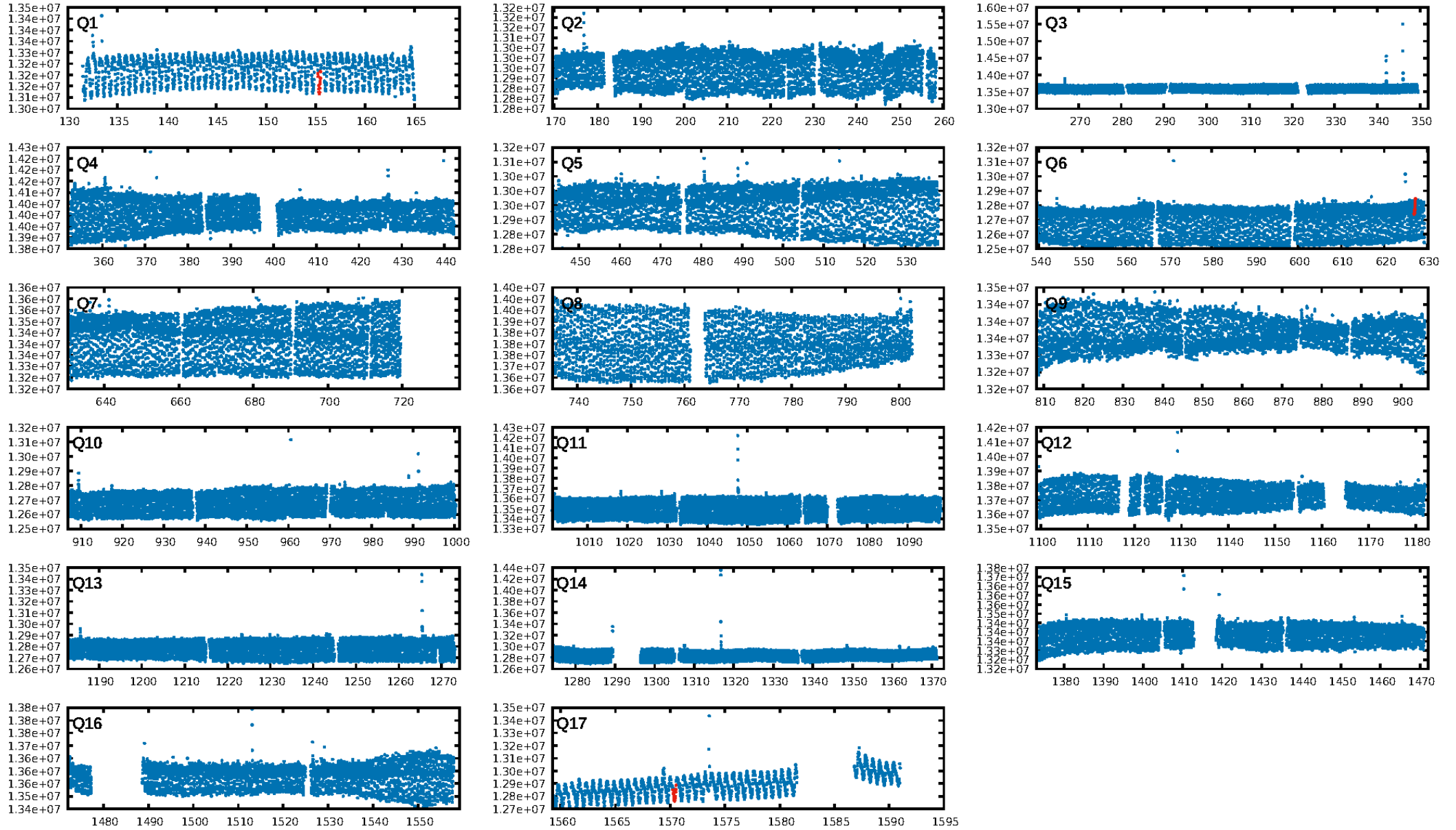
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [6.72 σ]
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [1/1]
GhostDiagnostic-chr: -2.367
Centroid-sig: 95.5%
Centroid-so: 0.144 arcsec [0.68 σ]
OotOffset-rm: 0.231 arcsec [1.99 σ]
KicOffset-rm: 0.055 arcsec [0.55 σ]
OotOffset-st: 1/0/0/2 [3]
KicOffset-st: 1/0/0/2 [3]
DiffImageQuality-fgm: 0.67 [2/3]
DiffImageOverlap-fno: 1.00 [3/3]

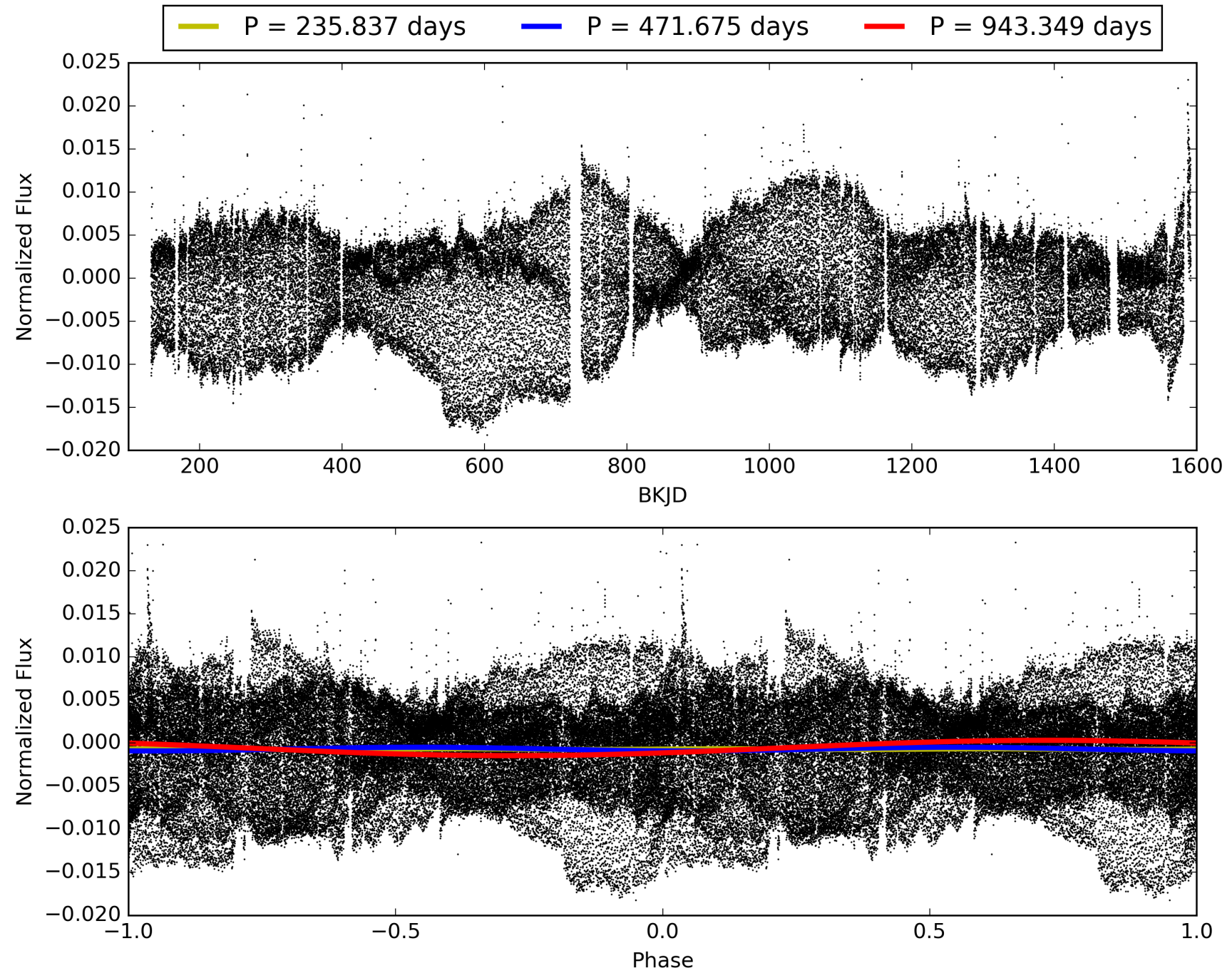
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 05:41:49 Z

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

TCE 011245425-03, PDC Light Curves

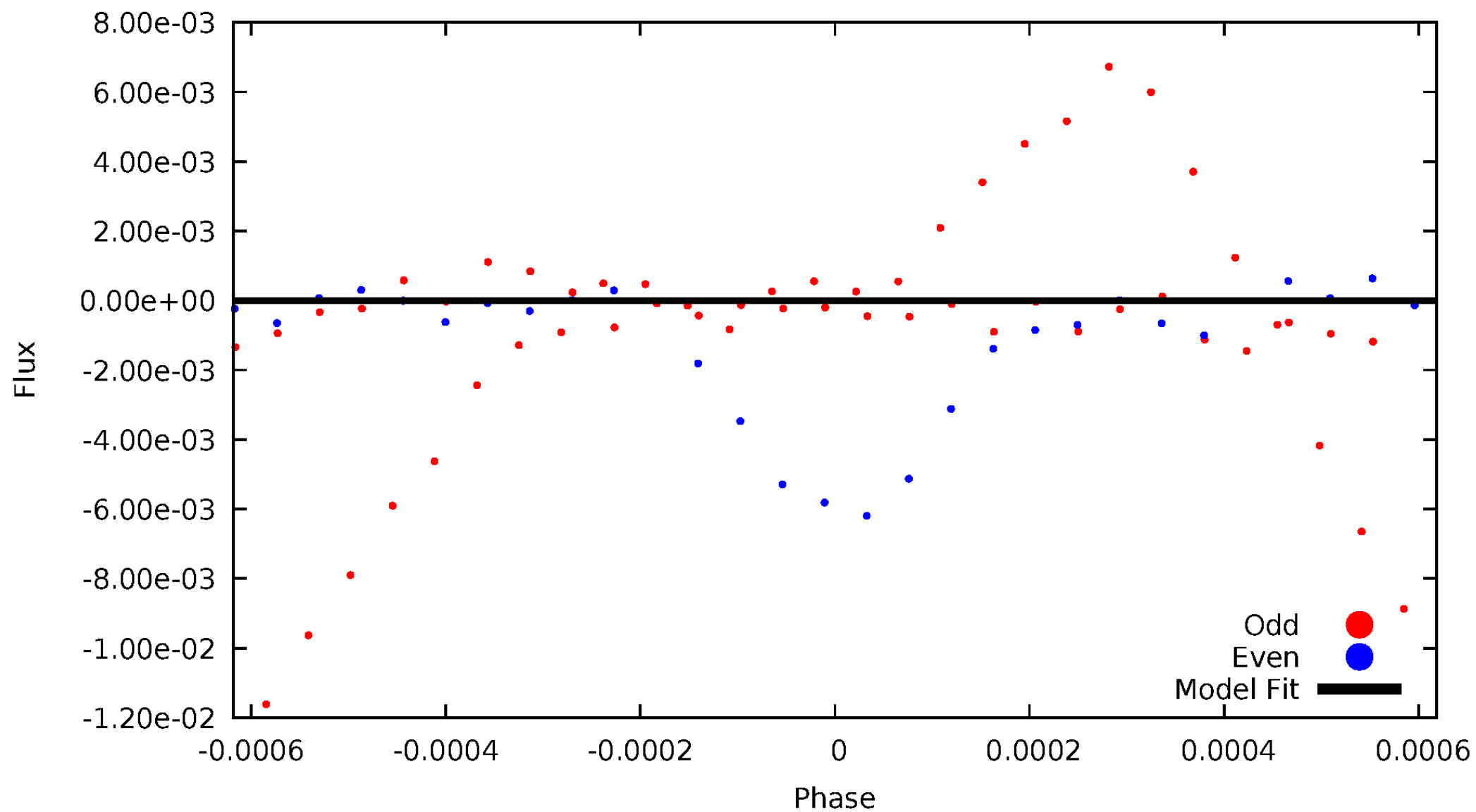


TCE 011245425-03



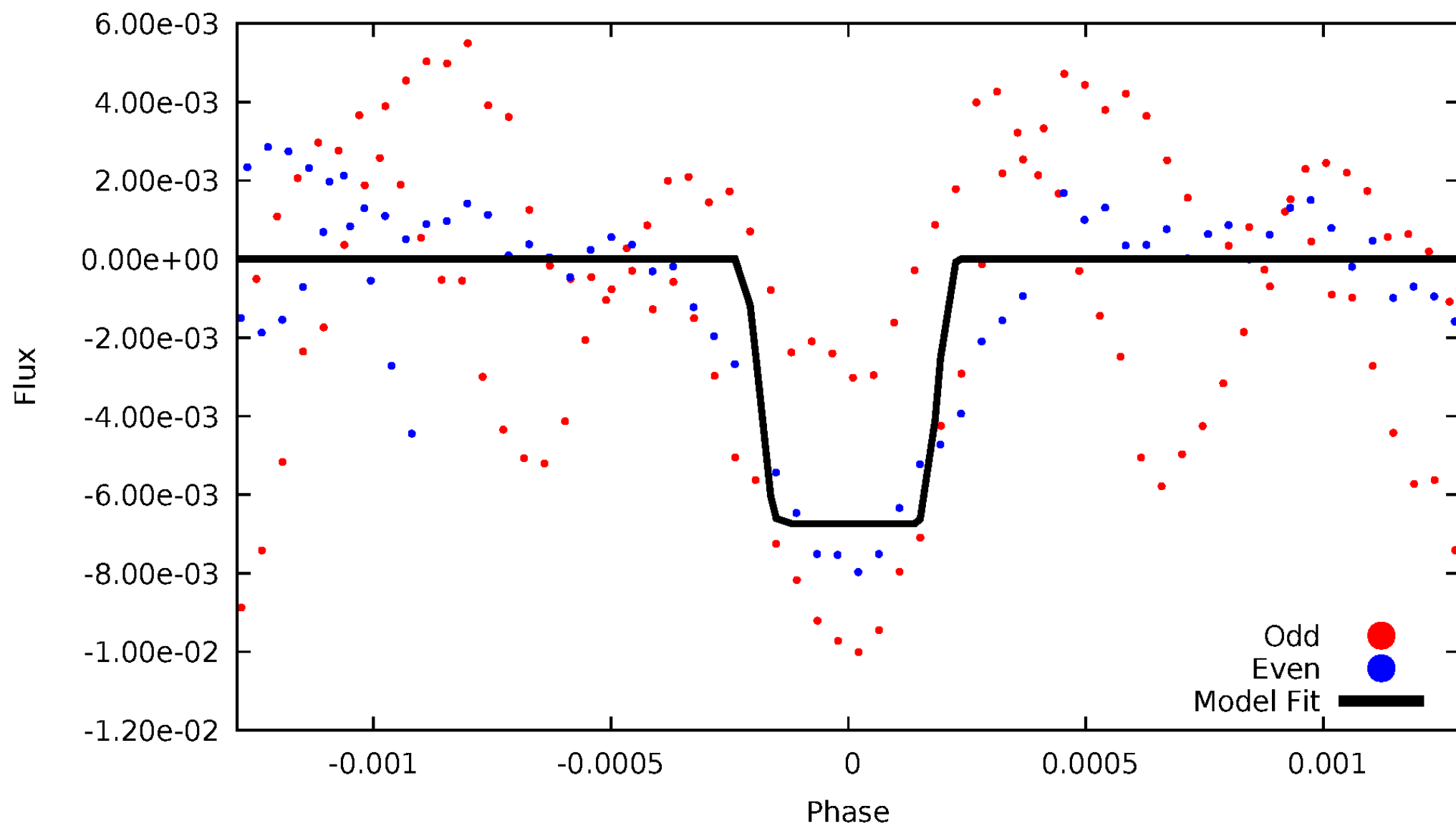
DV Odd/Even

TCE 011245425-03



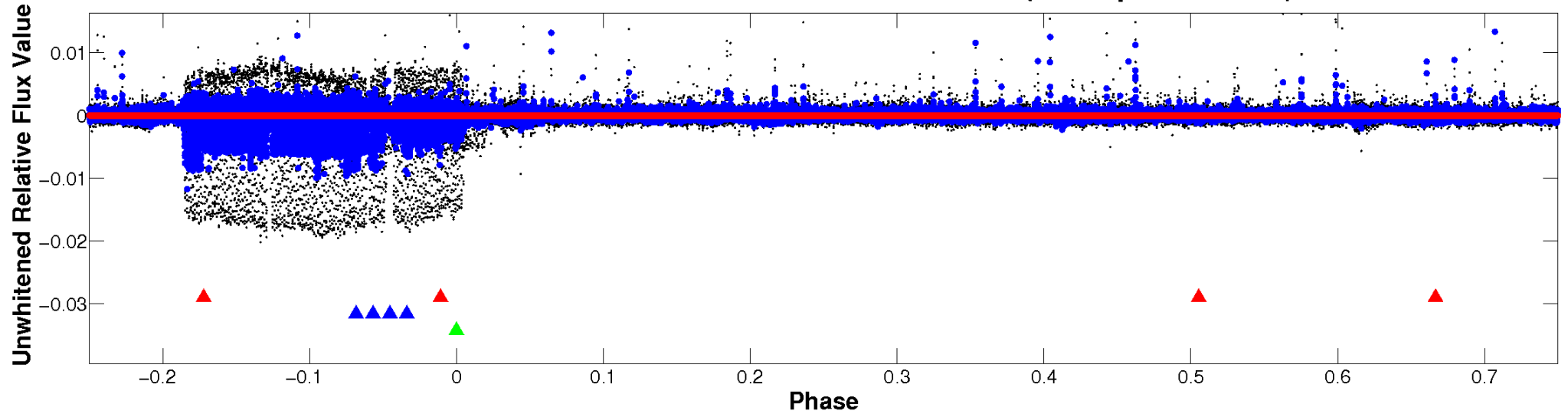
ALT Odd/Even

TCE 011245425-03



Non-Whitened Vs. Whitened Light Curve

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

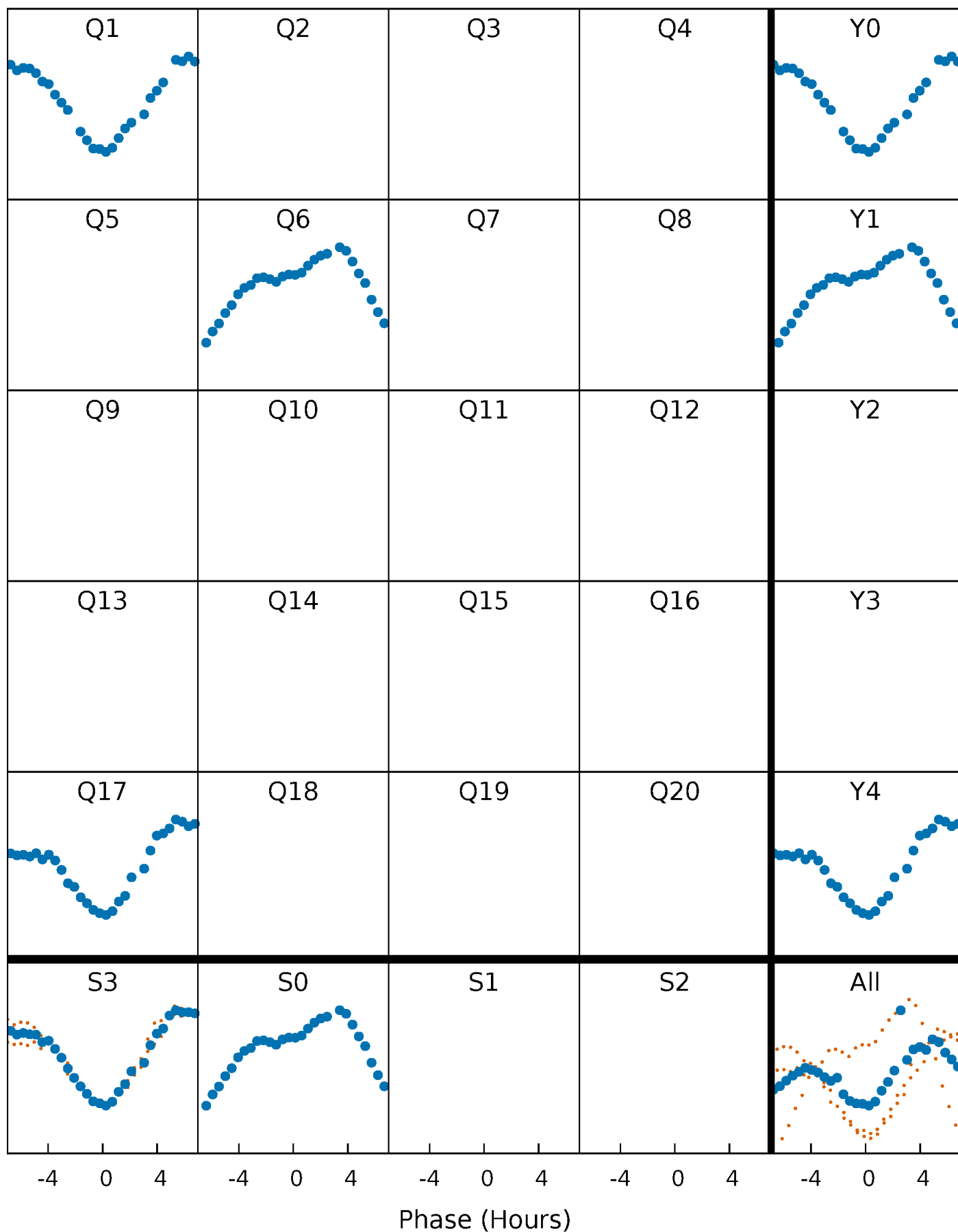


Planet 3 : Phased Whitened Flux Time Series (TPS Epoch/Period)



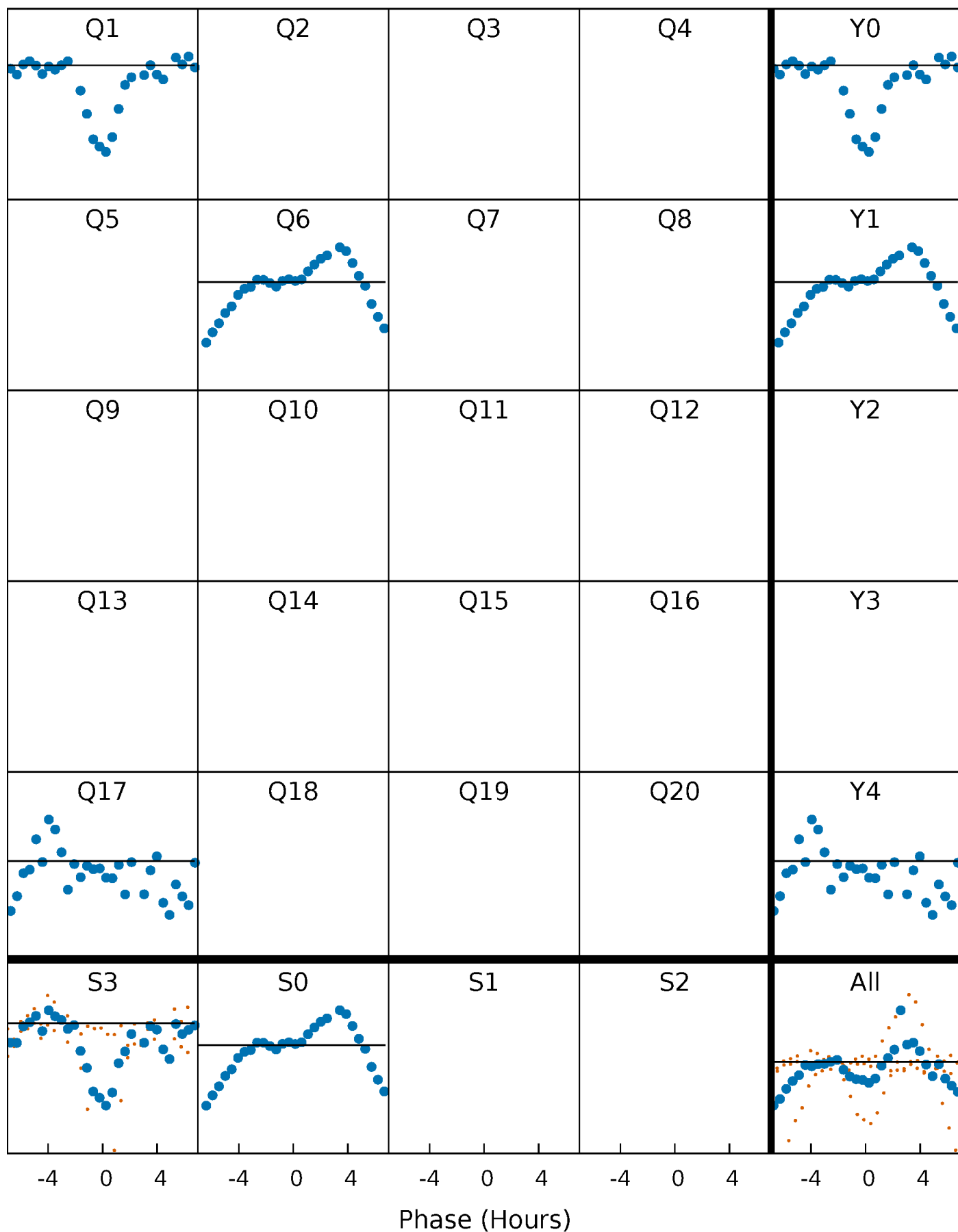
PDC Quarter-Phased Transit Curves

TCE 011245425-03 P=471.674677 Days $T_0=155.363769$ (BKJD)



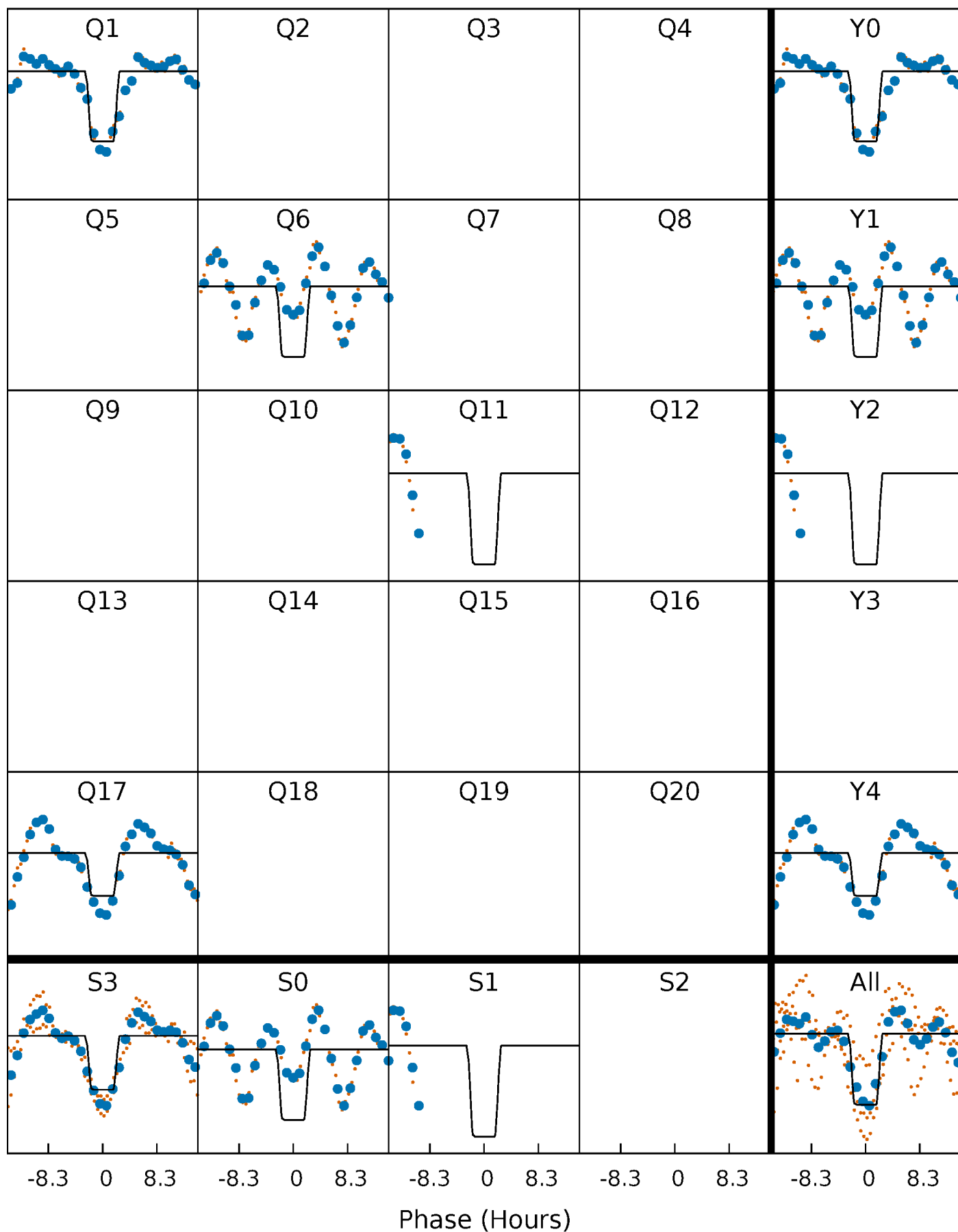
DV Quarter-Phased Transit Curves

TCE 011245425-03 $P=471.674677$ Days $T_0=155.363769$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

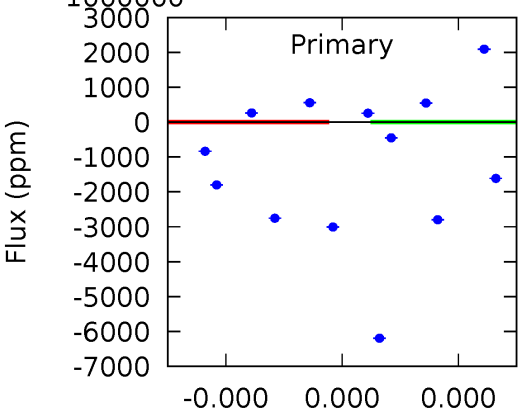
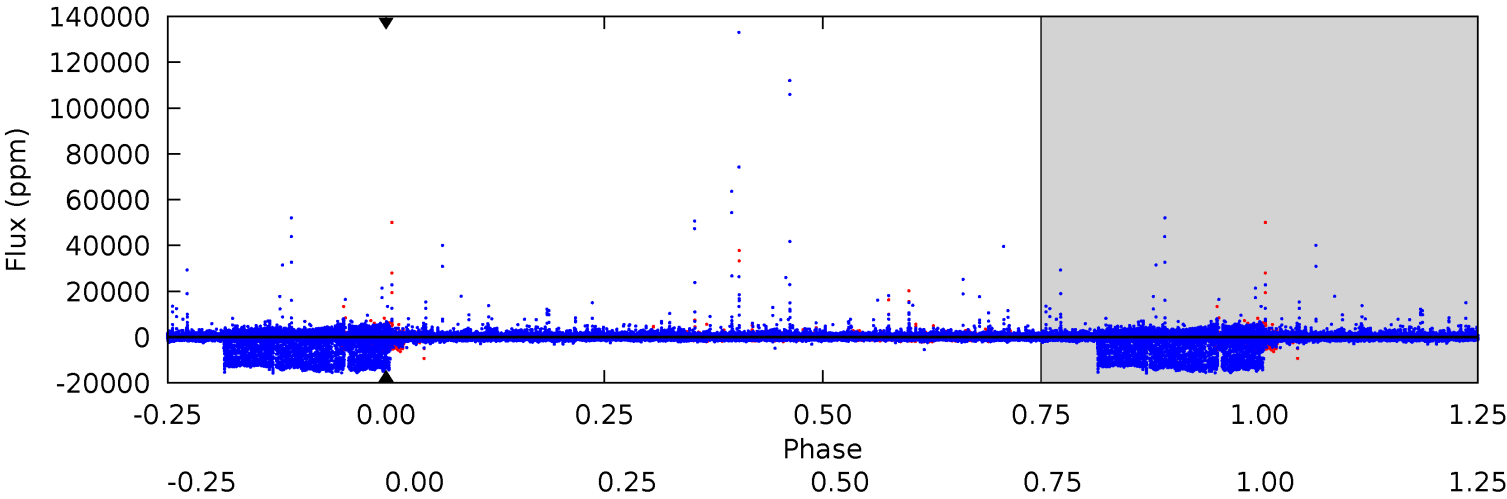
TCE 011245425-03 P=471.674677 Days $T_0=155.369399$ (BKJD)



DV Model-Shift Uniqueness Test

011245425-03, P = 471.674677 Days, E = 155.363769 Days

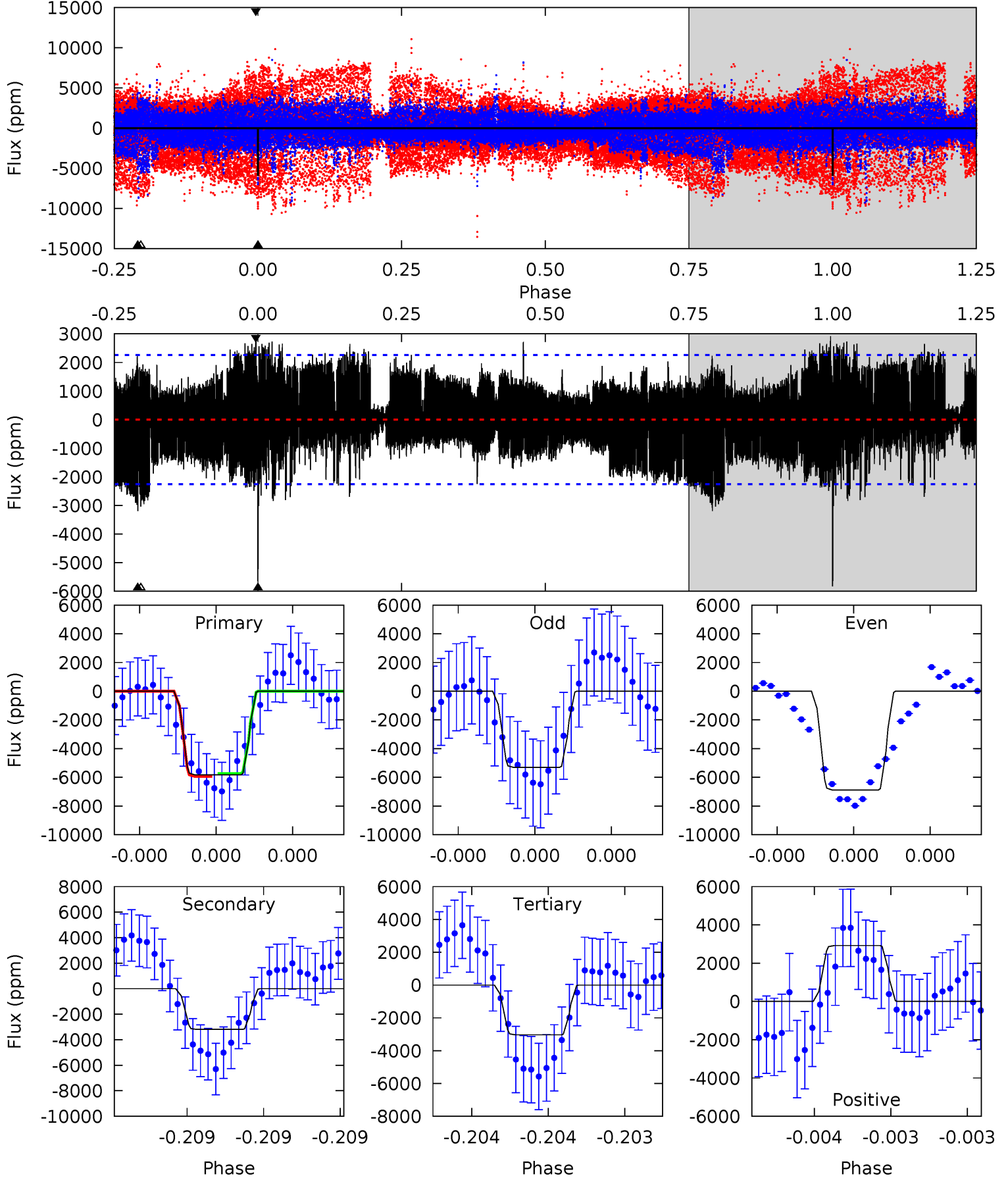
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
0	0	0	0	1.00	1.00	1.00	0	0	0	0	0	0	0	0



Alt Model-Shift Uniqueness Test

011245425-03, P = 471.674677 Days, E = 155.369399 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
14.5	7.92	7.54	7.25	5.60	3.52	2.31	6.93	7.22	0.38	0.67	1.93	0.85	0.33	0.26



Stellar Parameters For KIC 011245425

	$T_{\text{eff}} (K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M (M_{\odot})$	$p_{\star} (g \cdot \text{cm}^{-3})$
	4796^{+143}_{-143}	$4.656^{+0.059}_{-0.032}$	$-0.800^{+0.300}_{-0.300}$	$0.598^{+0.047}_{-0.047}$	$0.590^{+0.055}_{-0.029}$	$3.895^{+0.957}_{-0.530}$
	+3%/-3%	+1%/-1%	+37%/-37%	+8%/-8%	+9%/-5%	+25%/-14%
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 011245425-03 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	0 ± 1000000	$5.76^{+5.85}_{-3.77}$	228^{+8}_{-8}	3153^{+9257}_{-13911}	$10266^{+3403519}_{-2496433}$
Alt.	-3191 ± 403	$7.34^{+5.73}_{-4.71}$	228^{+8}_{-8}	3727^{+1907}_{-625}	$33453^{+230878}_{-23247}$

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 $A_{obs} \gg 1.0$

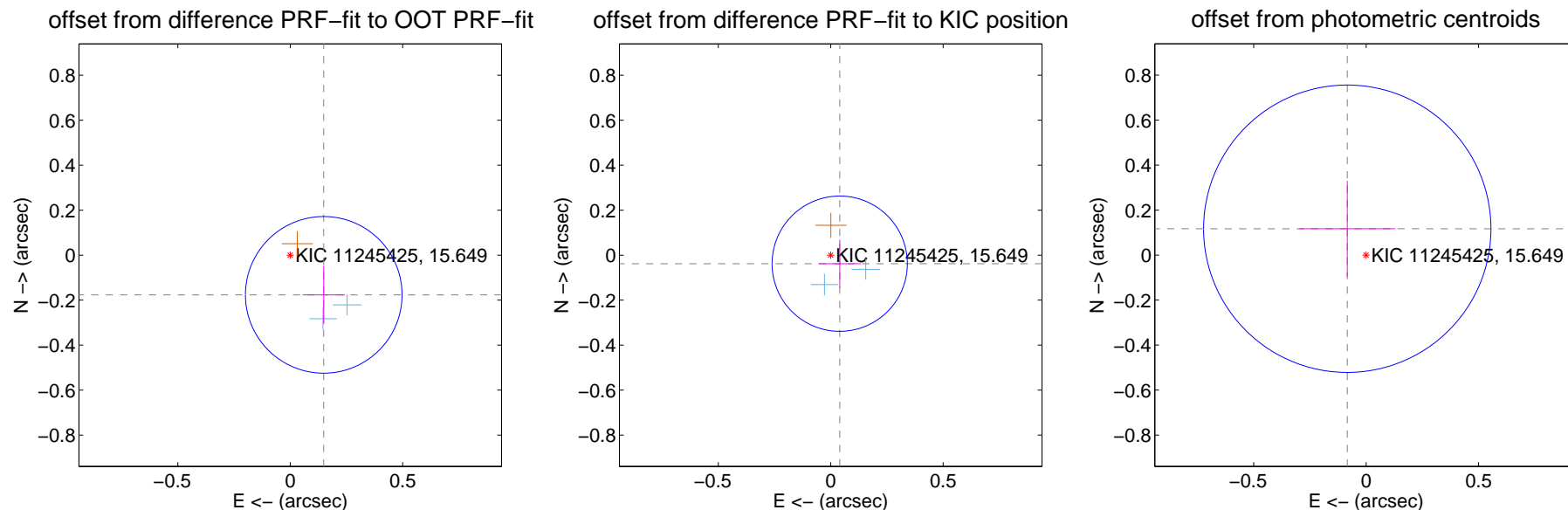
DV Centroid Data

Supplemental centroid analysis for 011245425-03. Kepler magnitude: 15.65. Transit SNR -1.00

There are 2 quarters with good PRF difference image offsets

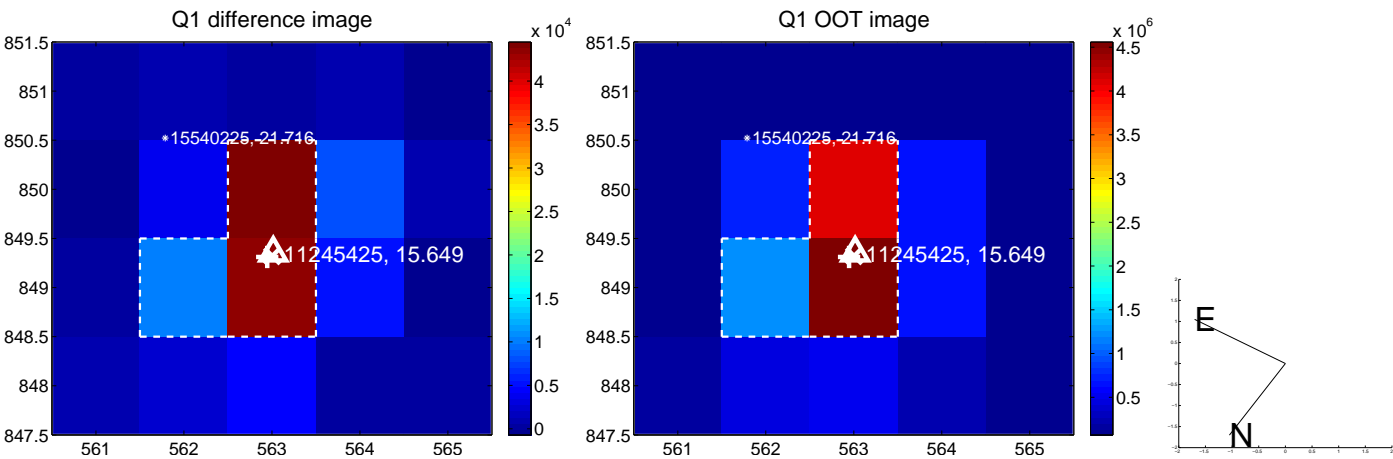
The direct PRF centroid is offset from the target star catalog position by about 0.19 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.231 ± 0.116	1.99	-0.149 ± 0.094	-0.177 ± 0.129
PRF-fit source offset from KIC position	0.055 ± 0.100	0.55	-0.040 ± 0.094	-0.038 ± 0.107
photometric centroid source offset	0.14 ± 0.21	0.68	0.08 ± 0.21	0.12 ± 0.21

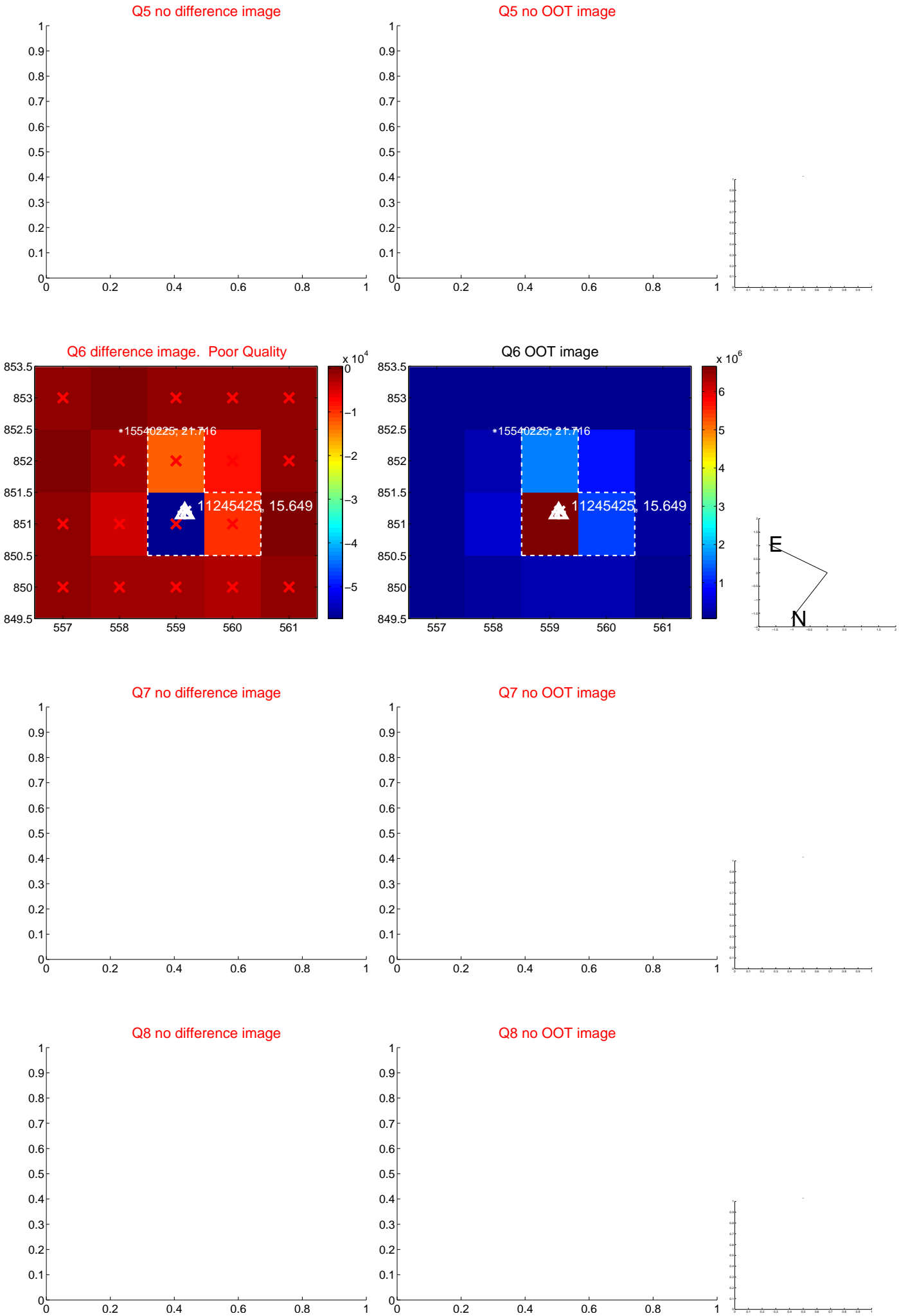


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ . 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 ×: KIC target position; +: OOT centroid; △: difference centroid. red ×: large negative pixel value.



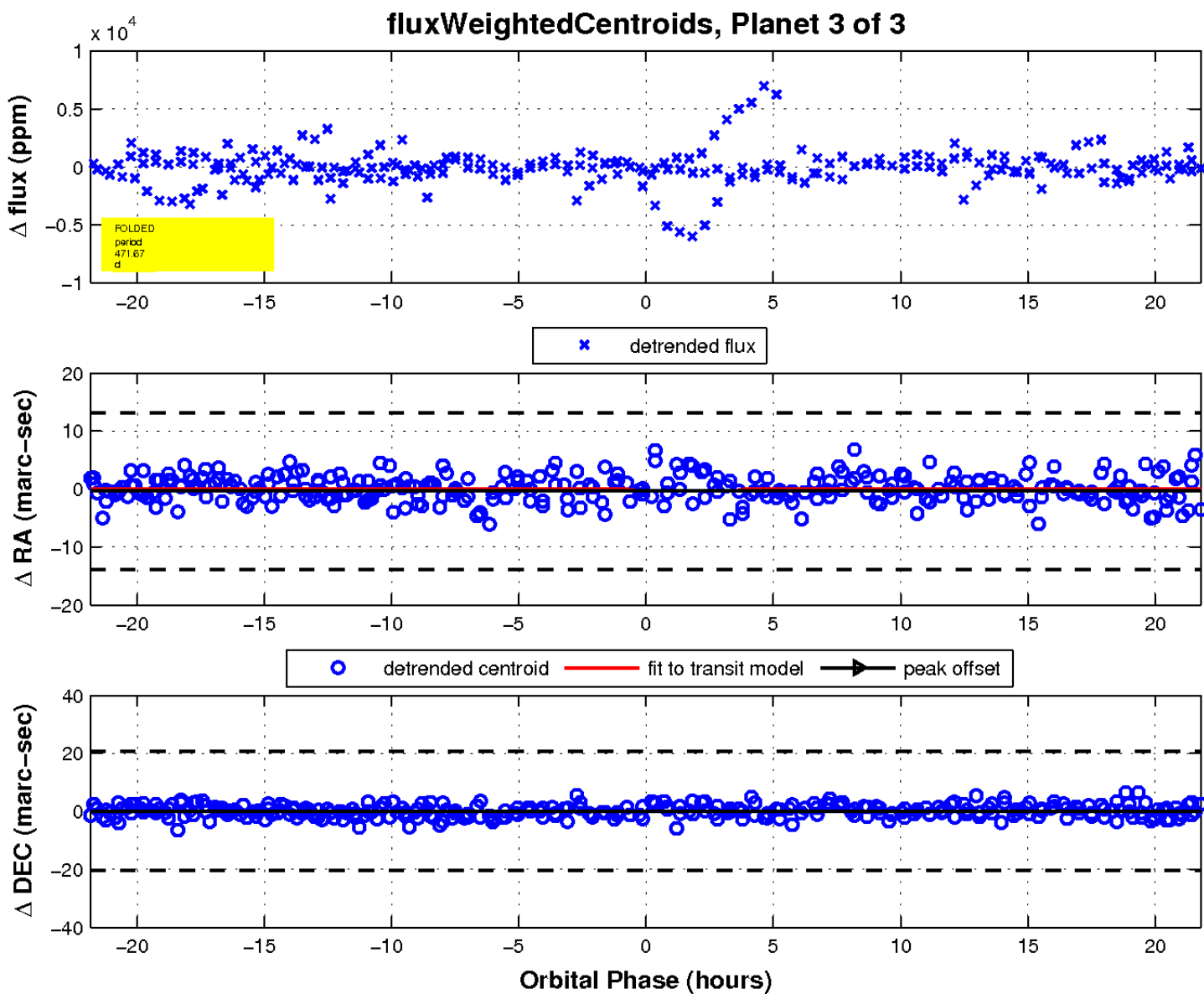
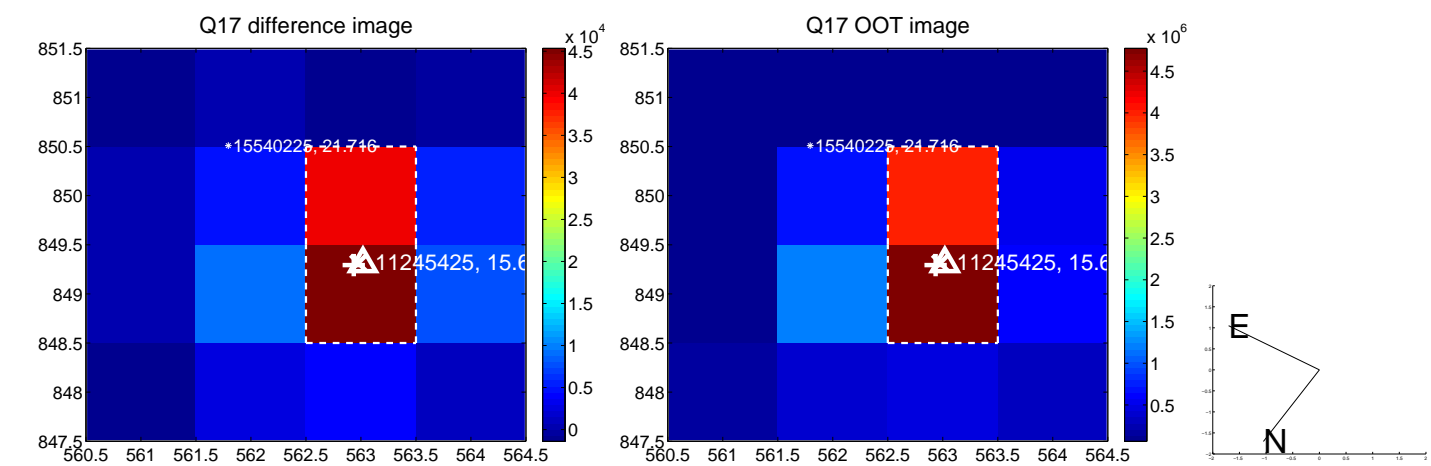
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

