

KIC 008526387

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})
008526387-01	OBS	No	257.125508	325.121000	3658.5	14.036	19.7	9.9	0.67	4535	5.00	0.36
008526387-02	OBS	7051.01	0.772808	131.704068	337.8	1.075	9.7	11.1	0.67	4535	1.48	822.17
008526387-03	OBS	No	161.849373	289.899982	3284.7	23.735	13.3	7.5	0.67	4535	7.47	0.66

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
008526387-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_MARSHALL—LPP_DV—ALL_TRANS_CHASES—INCONSISTENT_TRANS—CENT_FEW_DIFFS
008526387-02	OBS	FP	0.09	0	0	1	0	CENT_RESOLVED_OFFSET
008526387-03	OBS	FP	0.00	1	0	1	0	LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—INCONSISTENT_TRANS—CENT_FEW_DIFFS—HALO_GHOST

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.

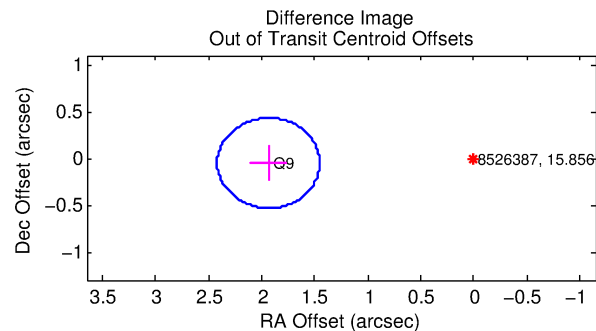
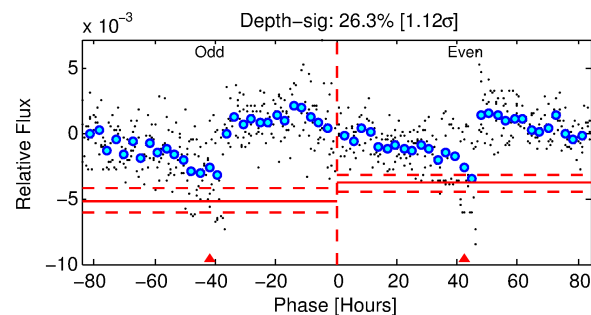
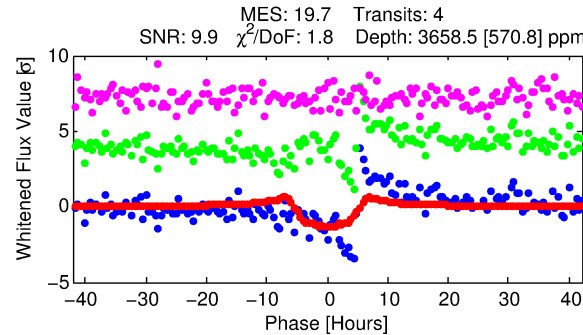
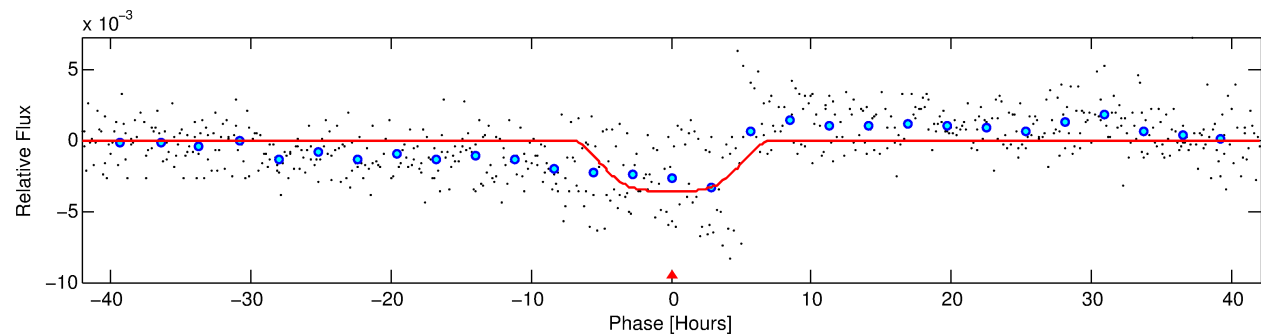
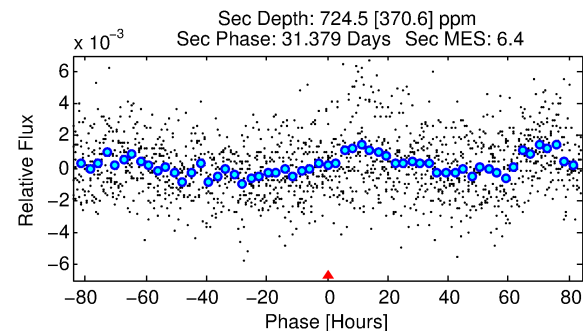
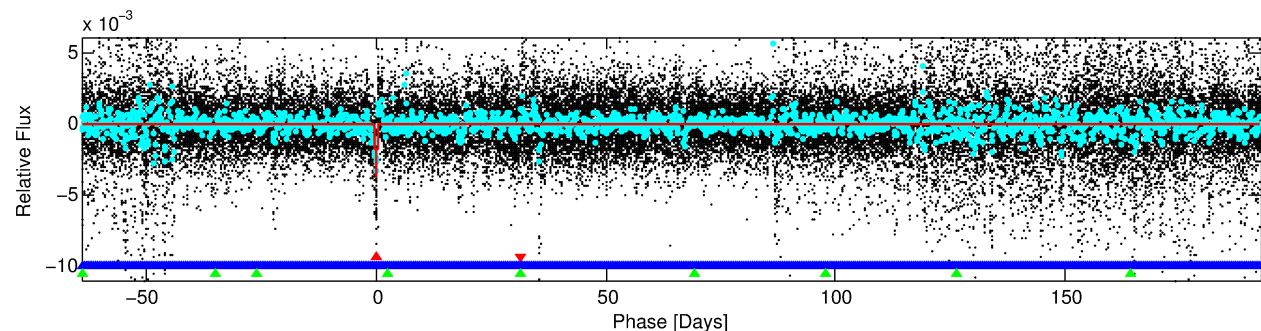
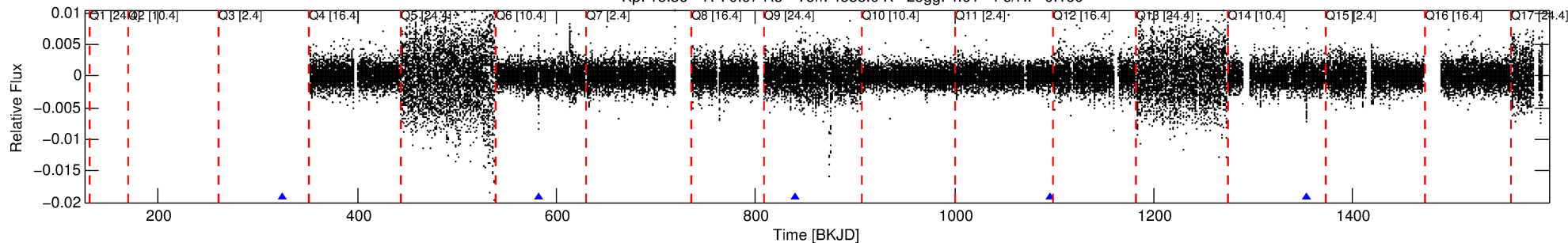
Ephemeris Match Information For 008526387-01

No Significant Match Found

DV One-Page Summary

KIC: 8526387 Candidate: 1 of 3 Period: 257.126 d
KOI: K07051 Corr: No Ephemeris Match

Kp: 15.86 R*: 0.67 Rs Teff: 4535.0 K Logg: 4.61 Fe/H: -0.160



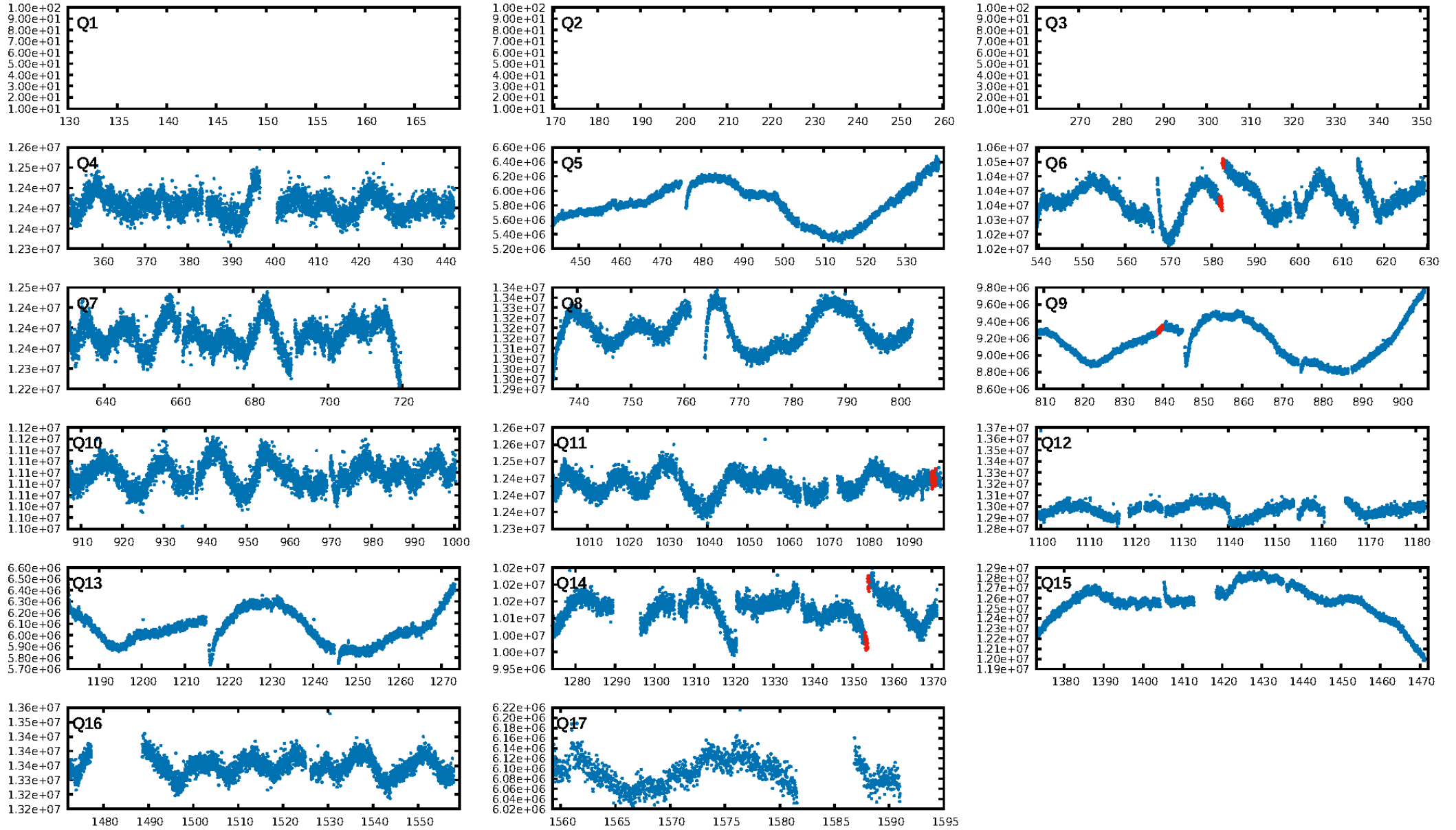
DV Fit Results:

Period = 257.12551 [0.01409] d
Epoch = 325.1210 [0.0365] BKJD
Rp/R* = 0.0685 [0.0078]
a/R* = 80.88 [16.20]
b = 0.90 [0.05]
Seff = 0.36 [0.06]
Teq = 197 [8] K
Rp = 4.99 [0.72] Re
a = 0.6886 [0.0496] AU
Ag = 7576.16 [4308.53] [1.76σ]
Teffp = 2842 [410] K [6.45σ]

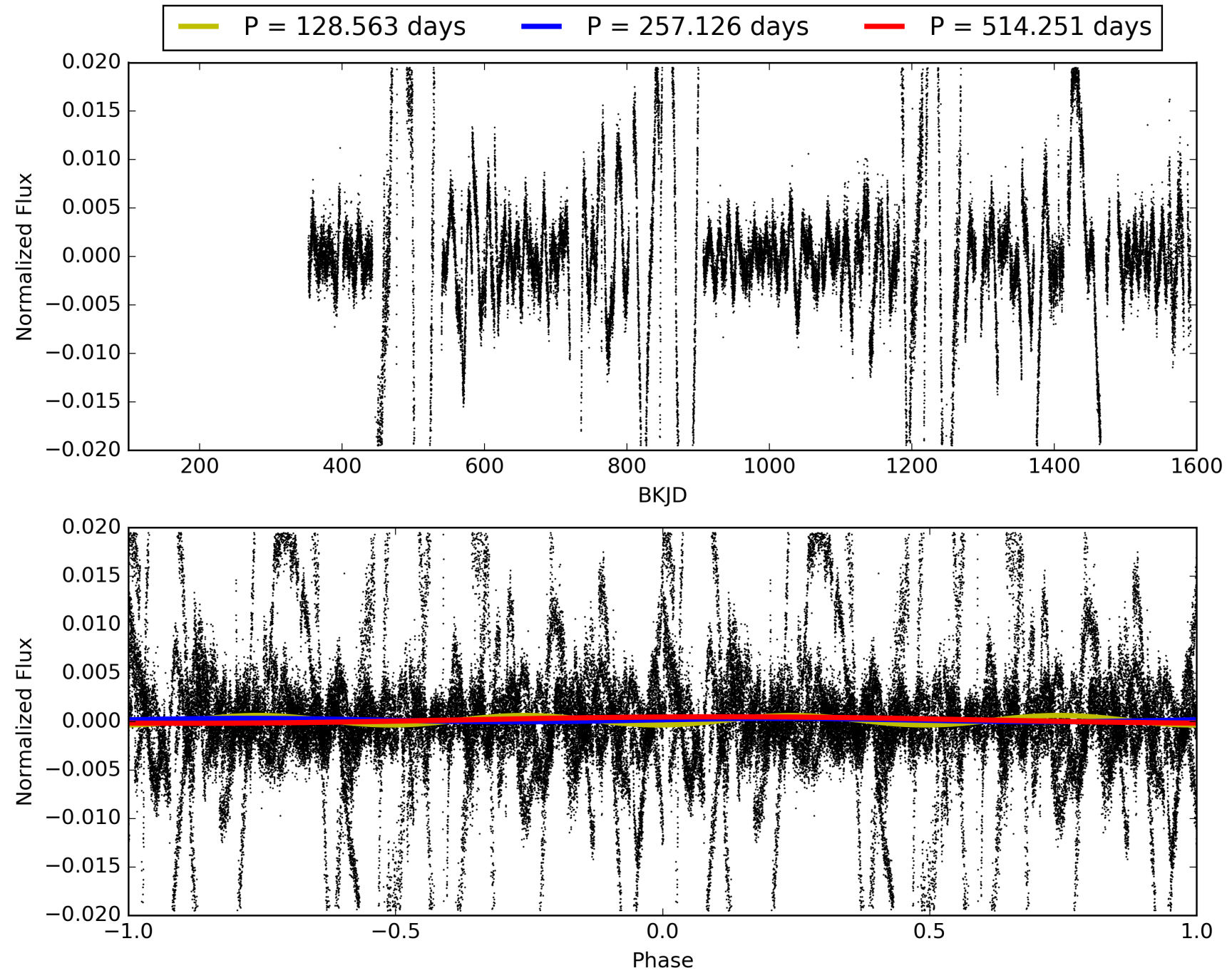
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [82.92σ]
LongPeriod-sig: N/A
ModelChiSquare2-sig: 0.0%
ModelChiSquareGoF-sig: 0.3%
Bootstrap-pfa: 3.68e-29
RollingBand-fgt: 1.00 [4/4]
GhostDiagnostic-chr: -0.6339
Centroid-sig: 0.7%
Centroid-so: 4.626 arcsec [55.35σ]
OotOffset-rm: 1.938 arcsec [12.06σ]
KicOffset-rm: 10.397 arcsec [57.95σ]
OotOffset-st: 0/0/0/1 [1]
KicOffset-st: 0/0/0/1 [1]
DiffImageQuality-fgm: 1.00 [1/1]
DiffImageOverlap-fno: 0.00 [0/3]

TCE 008526387-01, PDC Light Curves

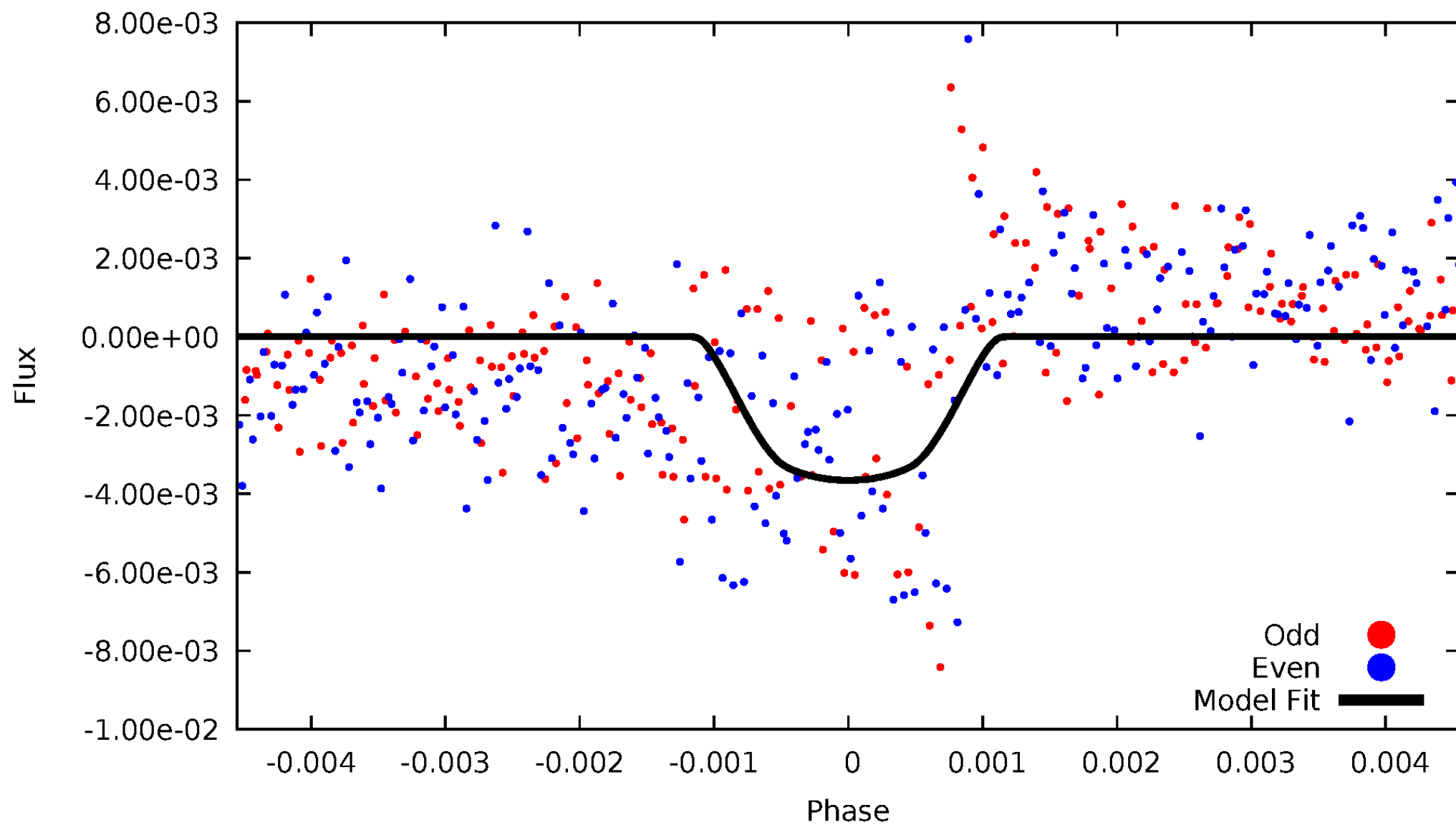


TCE 008526387-01



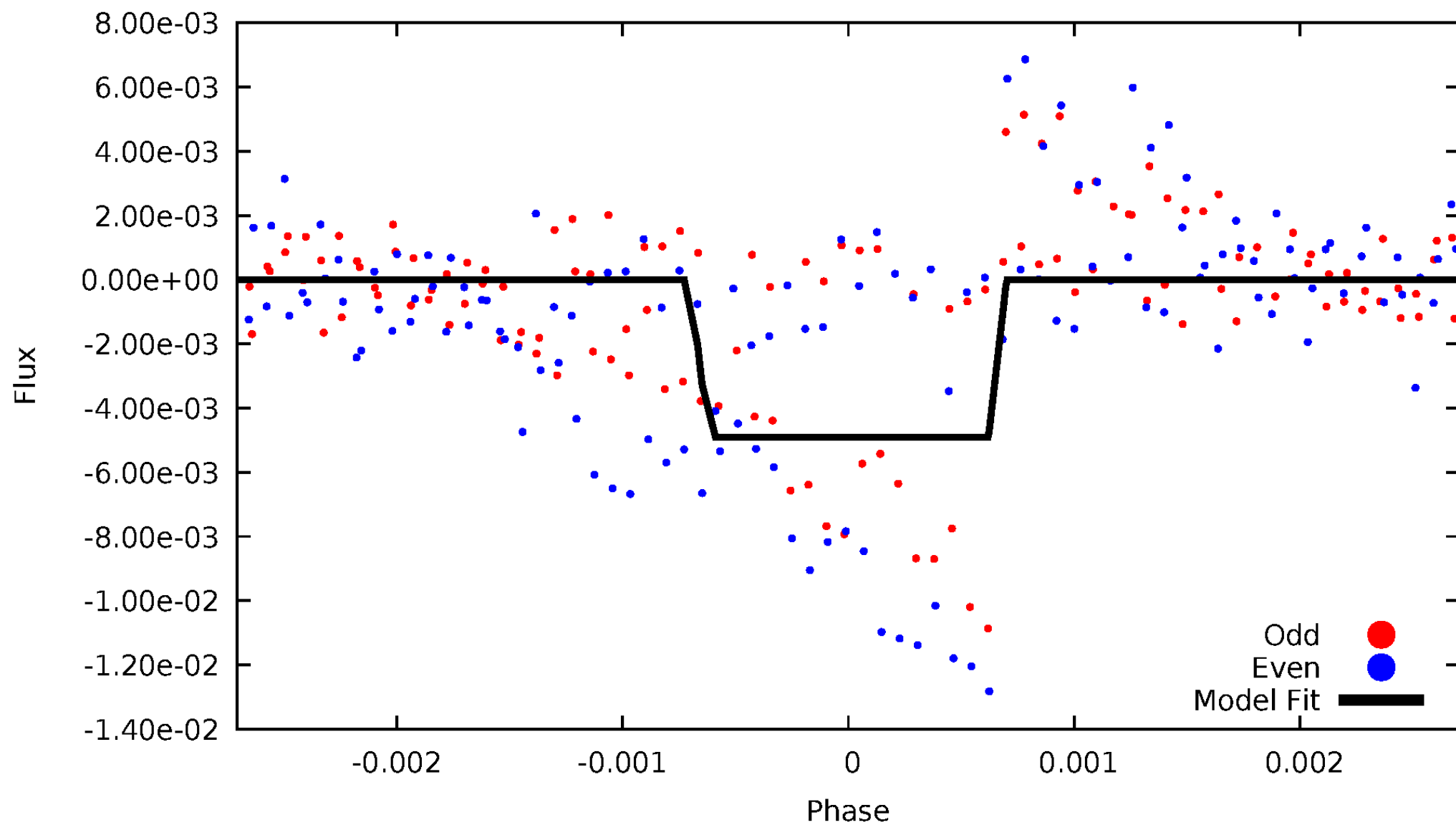
DV Odd/Even

TCE 008526387-01

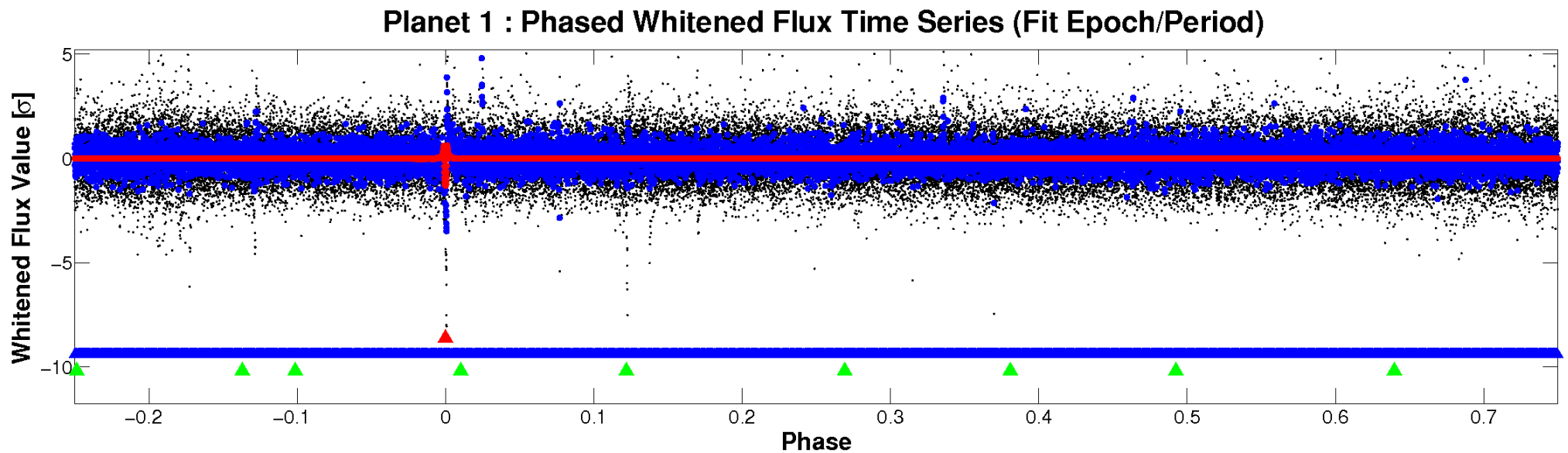
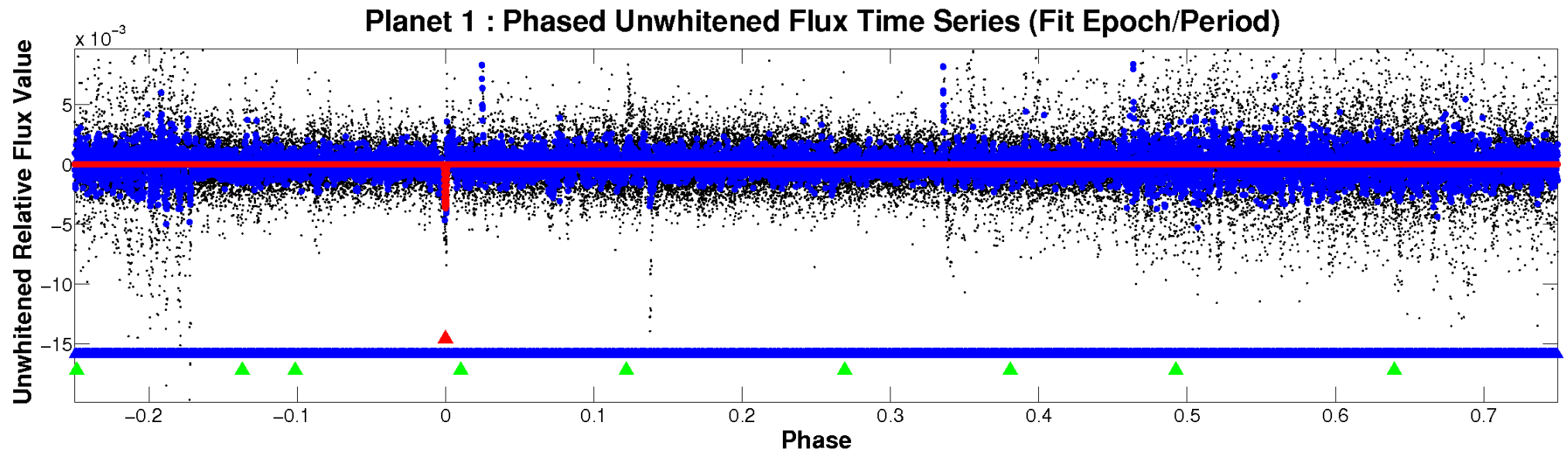


ALT Odd/Even

TCE 008526387-01

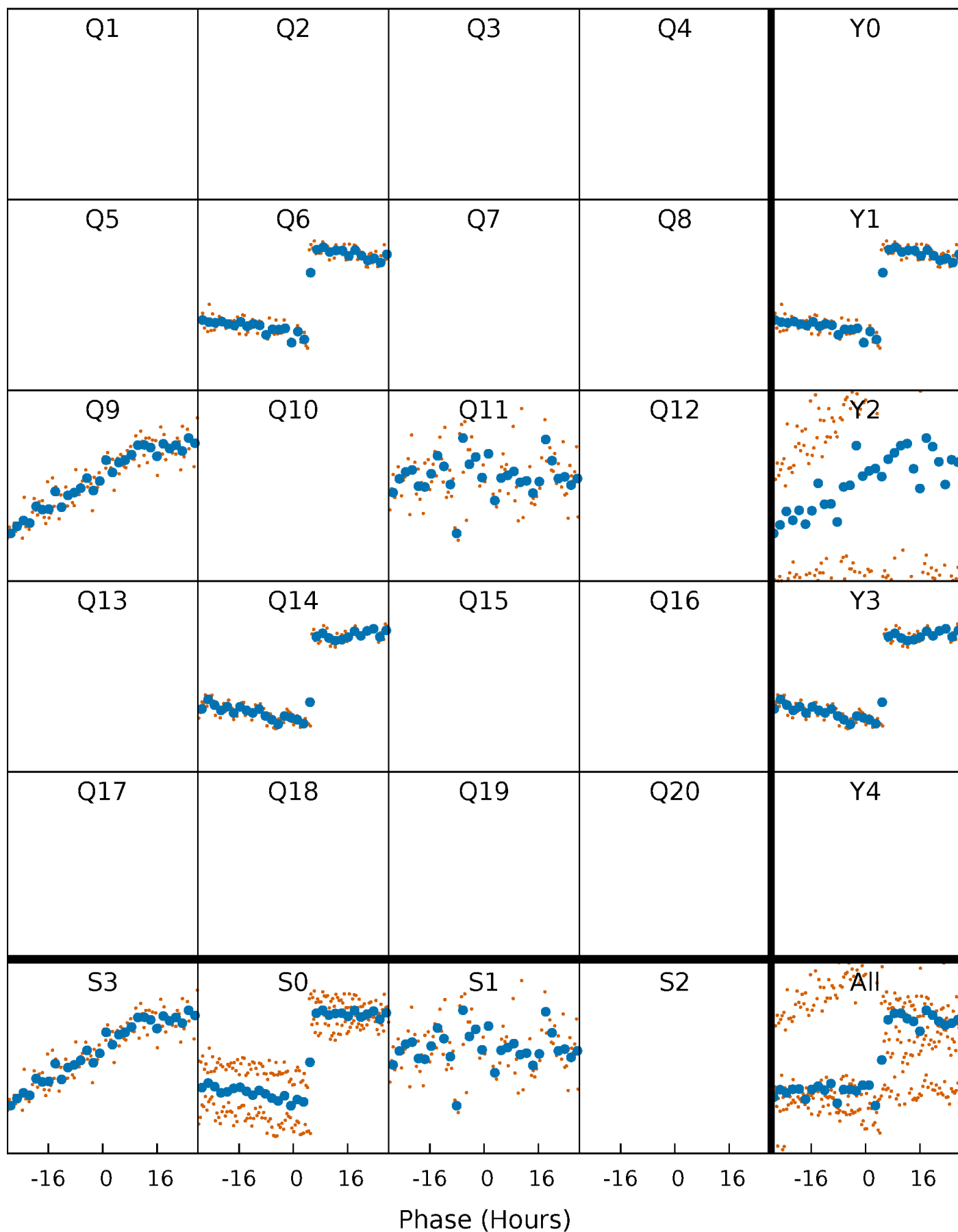


Non-Whitened Vs. Whitened Light Curve



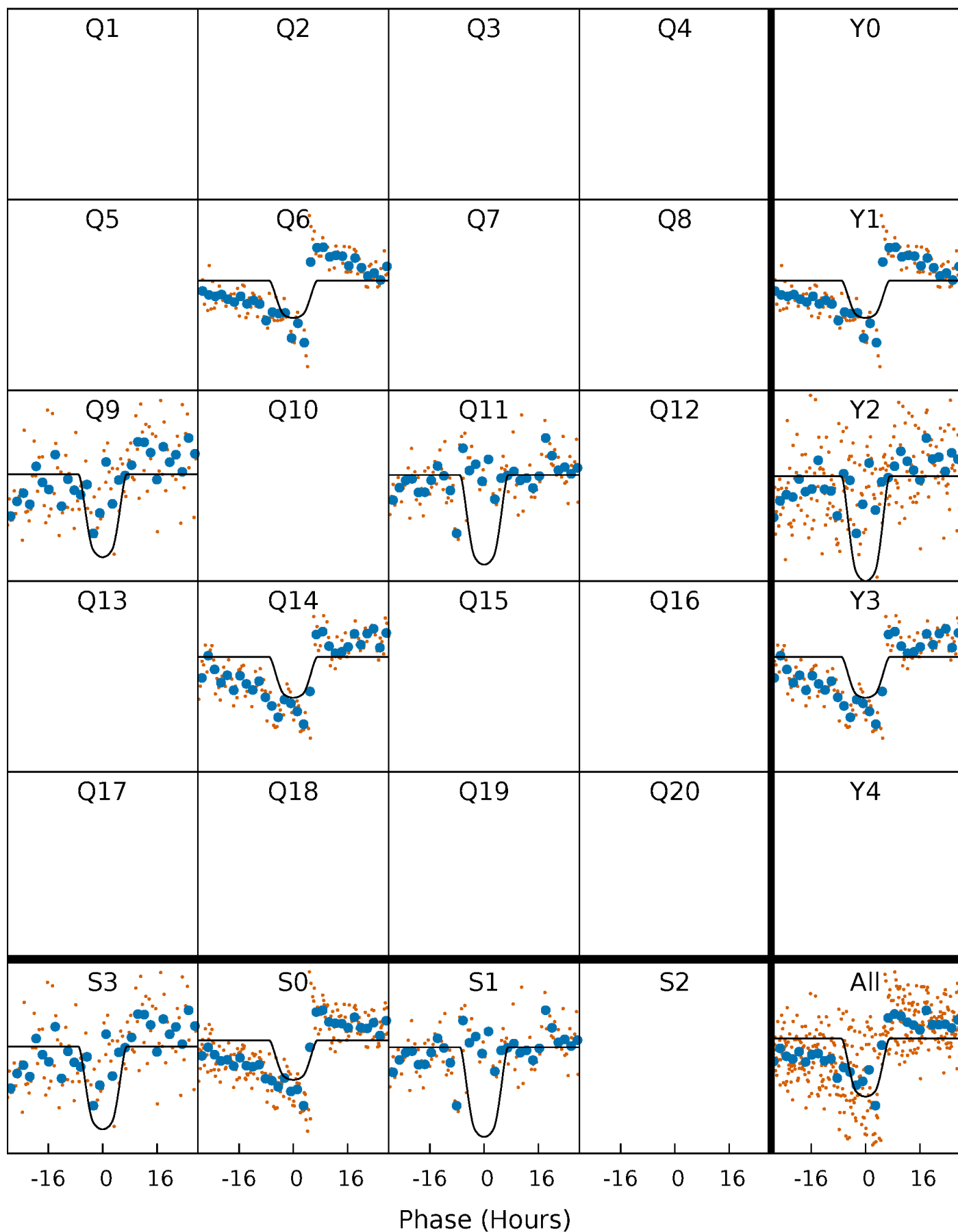
PDC Quarter-Phased Transit Curves

TCE 008526387-01 P=257.125508 Days $T_0=325.121000$ (BKJD)



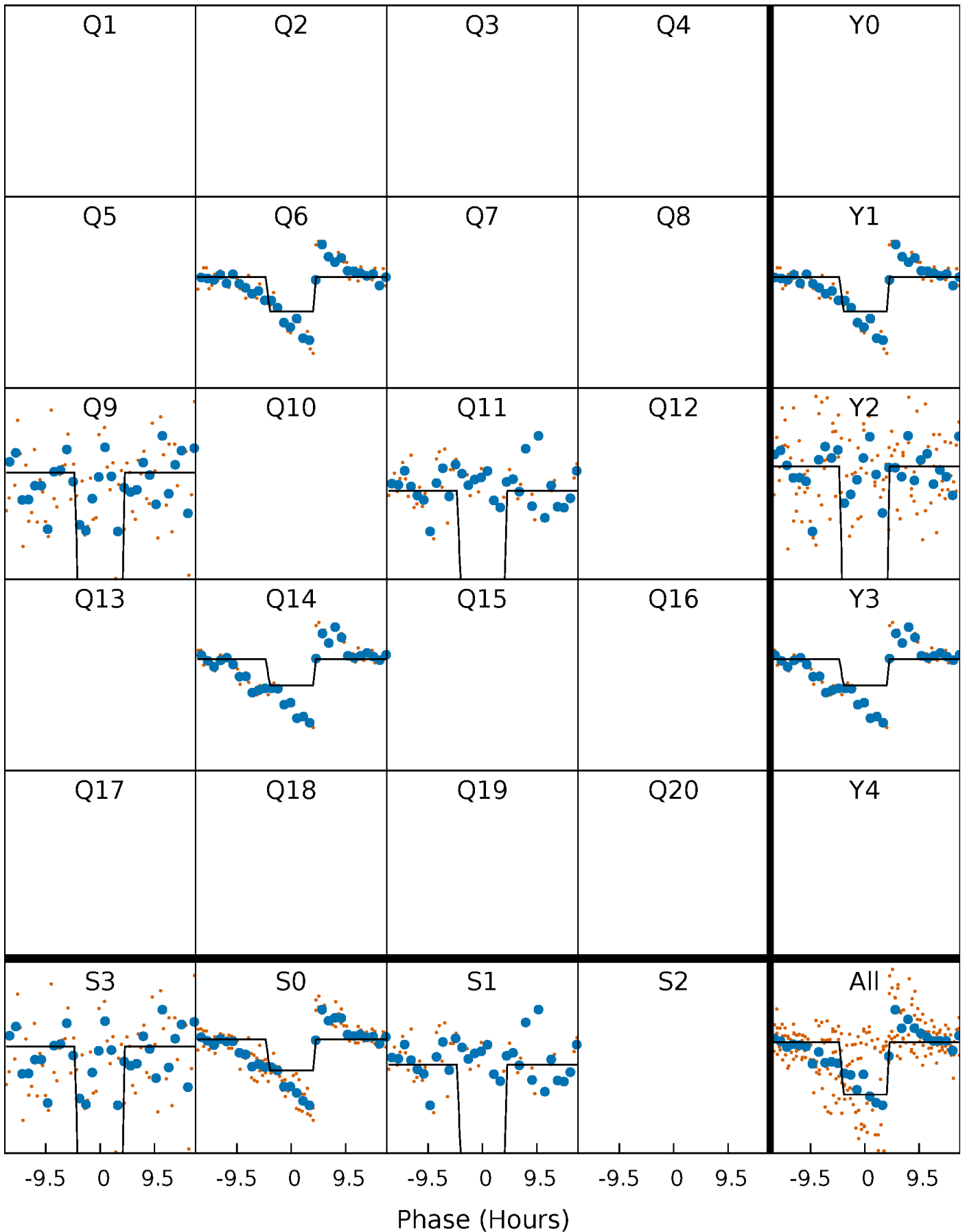
DV Quarter-Phased Transit Curves

TCE 008526387-01 $P=257.125508$ Days $T_0=325.121000$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

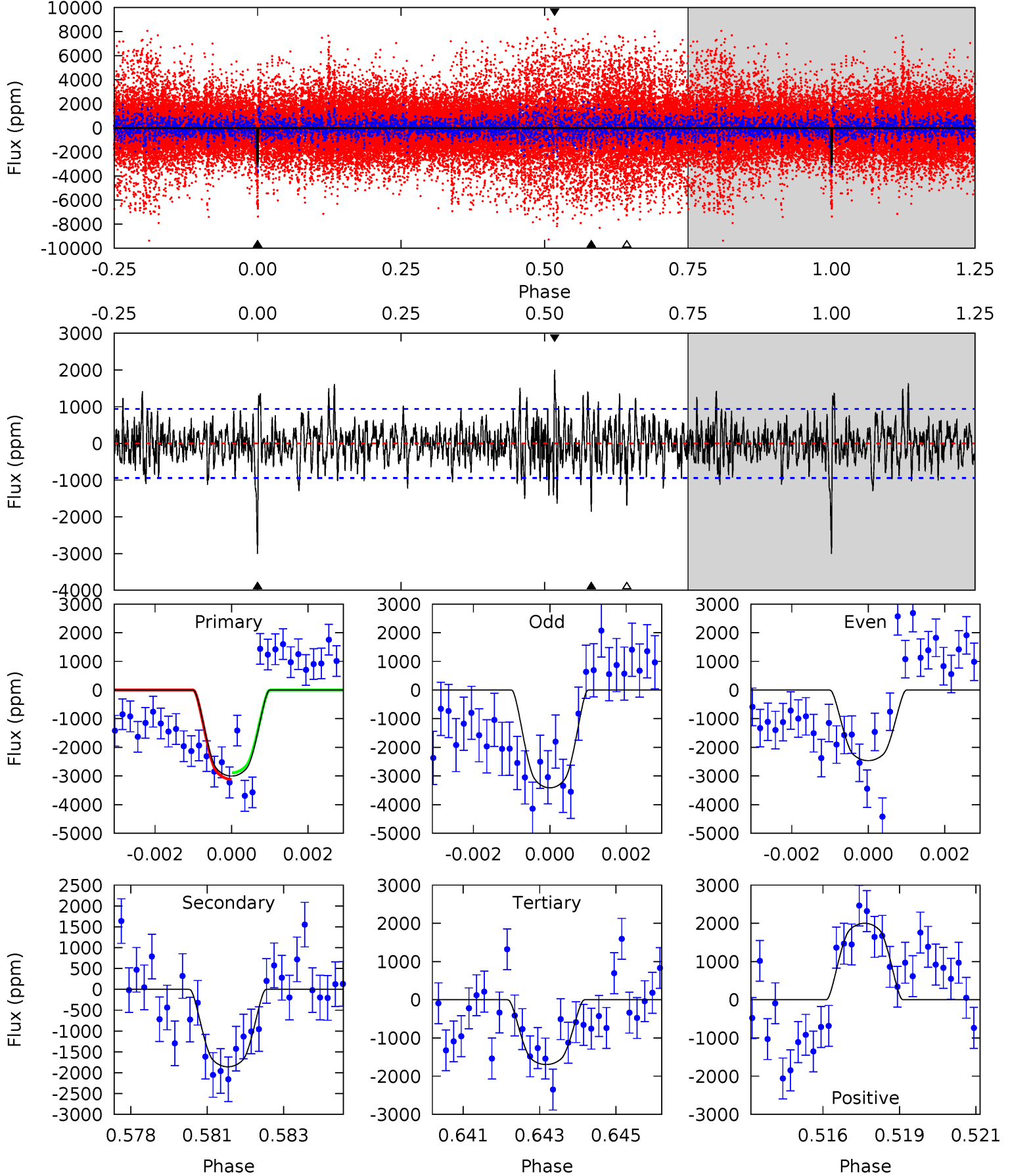
TCE 008526387-01 P=257.135919 Days $T_0=325.127729$ (BKJD)



DV Model-Shift Uniqueness Test

008526387-01, P = 257.125508 Days, E = 325.121000 Days

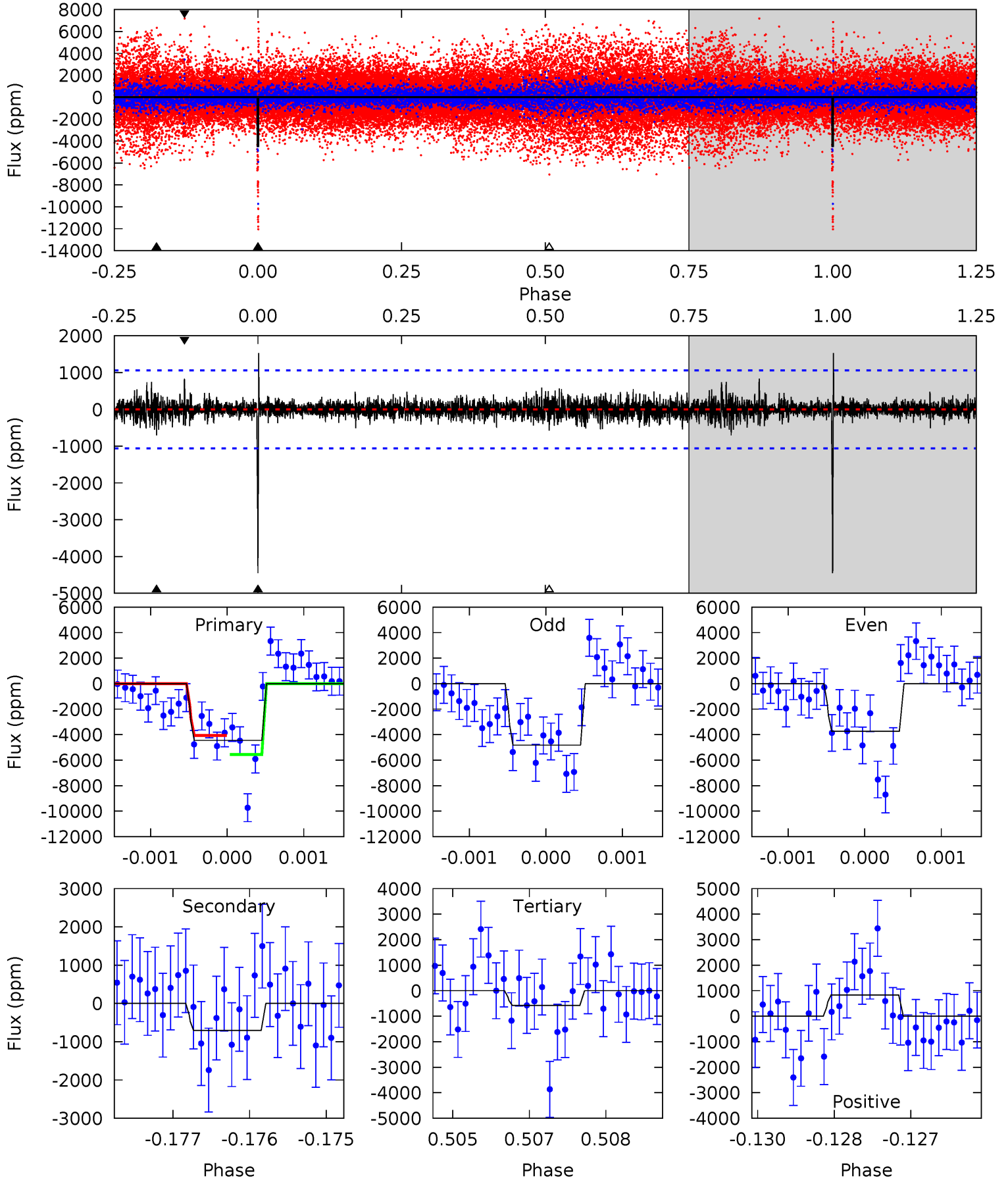
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
16.9	10.5	9.56	11.3	5.30	3.05	2.54	7.38	5.65	0.92	-0.81	2.60	0.96	0.40	0.64



Alt Model-Shift Uniqueness Test

008526387-01, P = 257.135919 Days, E = 325.127729 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
22.7	3.58	2.93	4.25	5.40	3.20	0.77	19.7	18.4	0.65	-0.67	2.76	1.09	0.26	3.65



Stellar Parameters For KIC 008526387

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (g \cdot \text{cm}^{-3})$
	4535^{+159}_{-159}	$4.607^{+0.052}_{-0.028}$	$-0.160^{+0.300}_{-0.300}$	$0.668^{+0.048}_{-0.060}$	$0.659^{+0.075}_{-0.054}$	$3.111^{+0.776}_{-0.351}$
	+4%/-4%	+1%/-1%	+188%/-188%	+7%/-9%	+11%/-8%	+25%/-11%
Source	KIC0	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 008526387-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-1858 ± 177	$4.93^{+0.65}_{-0.60}$	273^{+10}_{-10}	3836^{+217}_{-205}	20278^{+6199}_{-4492}
Alt.	-703 ± 196	$5.11^{+0.64}_{-0.63}$	275^{+10}_{-11}	3244^{+200}_{-200}	6921^{+2943}_{-2191}

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

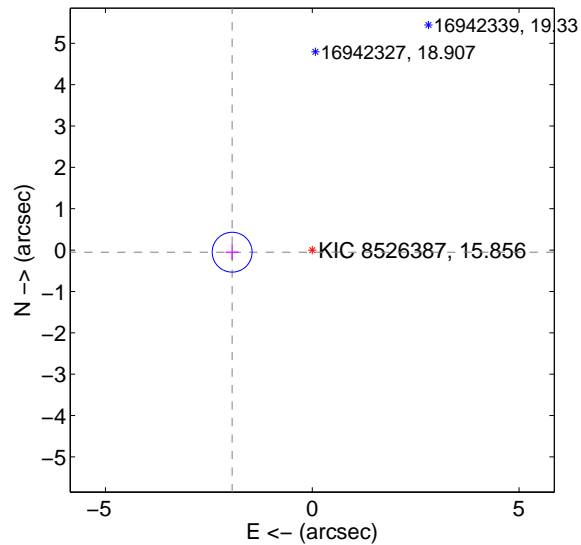
Supplemental centroid analysis for 008526387-01. Kepler magnitude: 15.86. Transit SNR 9.88

There are 1 quarters with good PRF difference image offsets

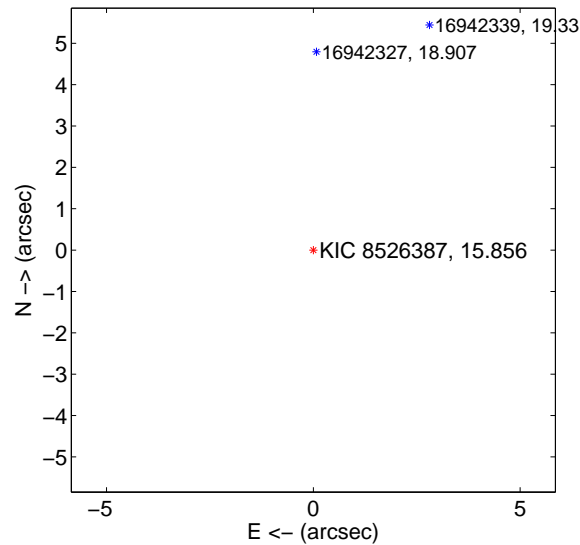
The OOT PRF centroid is offset from the target star catalog position by about 9.38 arcsec so the offset from difference PRF-fit to OOT-fit may be invalid.

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	1.938 ± 0.161	12.06	1.937 ± 0.161	-0.051 ± 0.188
PRF-fit source offset from KIC position	10.397 ± 0.179	57.95	5.957 ± 0.161	-8.521 ± 0.188
photometric centroid source offset	4.63 ± 0.08	55.35	2.50 ± 0.08	-3.89 ± 0.08

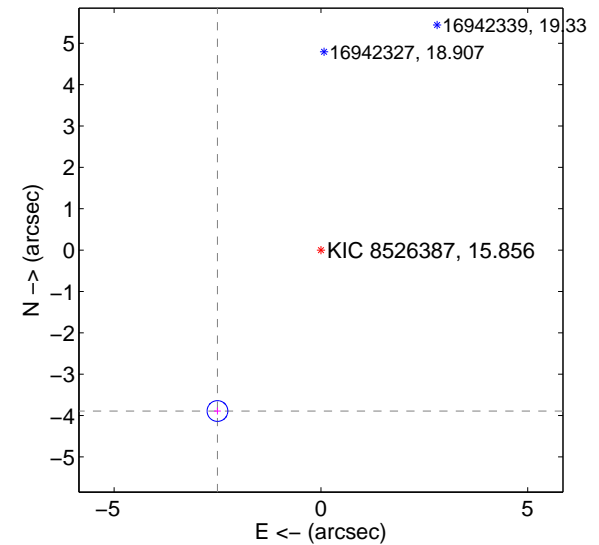
offset from difference PRF-fit to OOT PRF-fit



offset from difference PRF-fit to KIC position



offset from photometric centroids

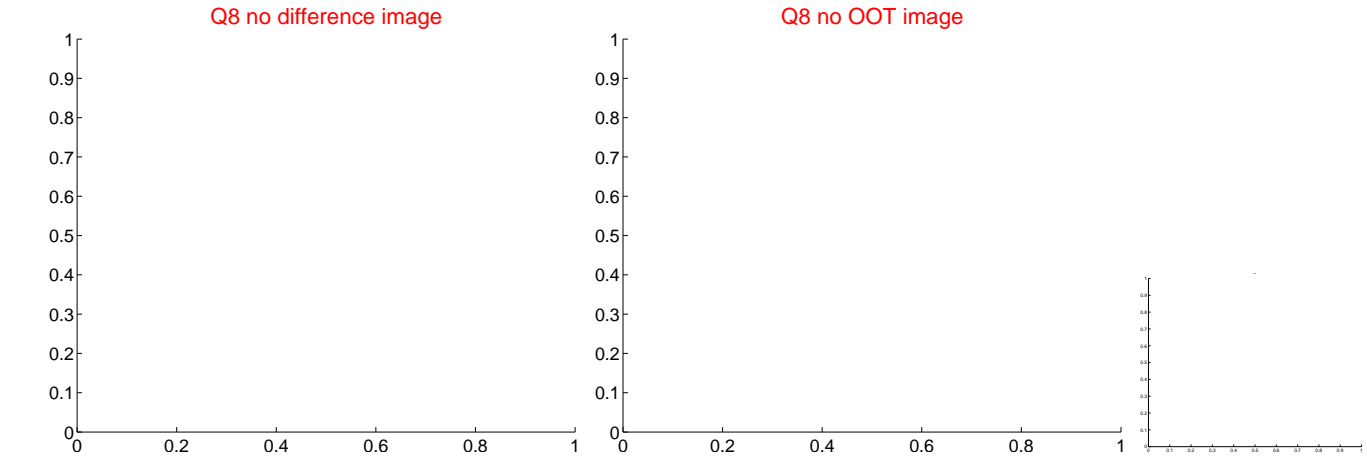
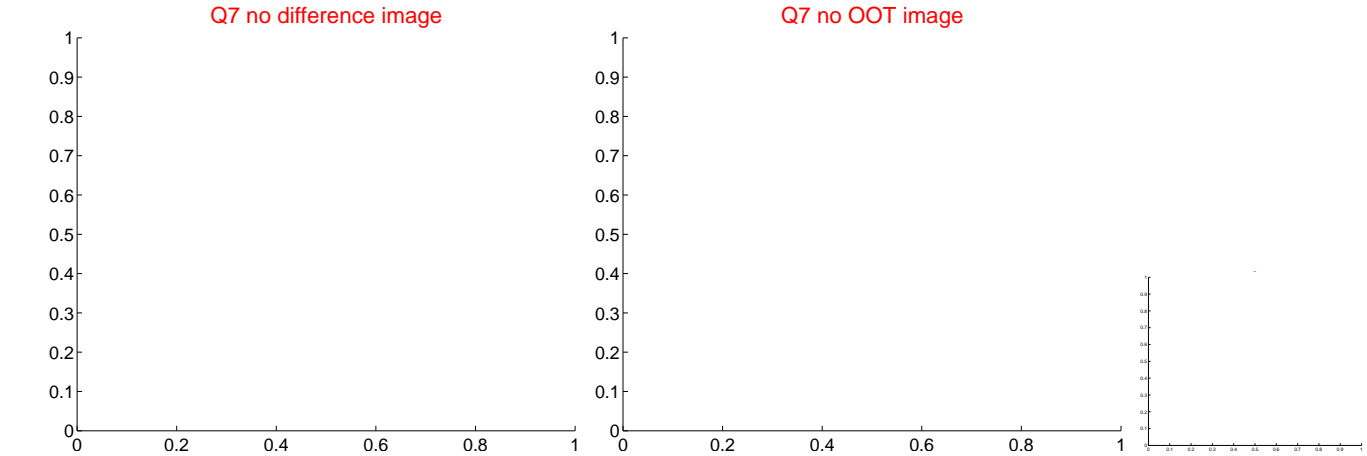
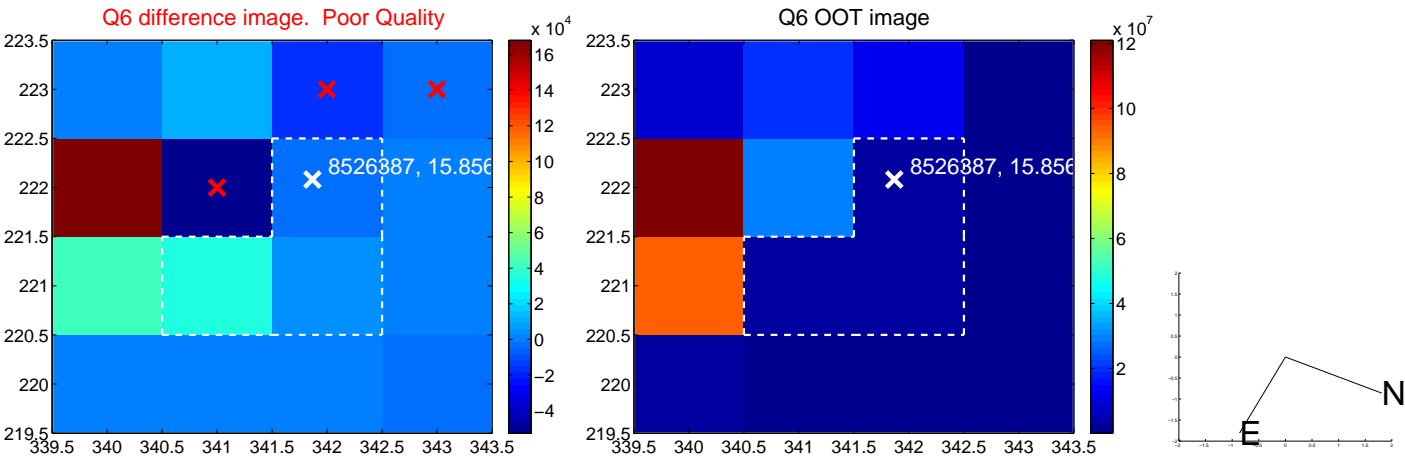
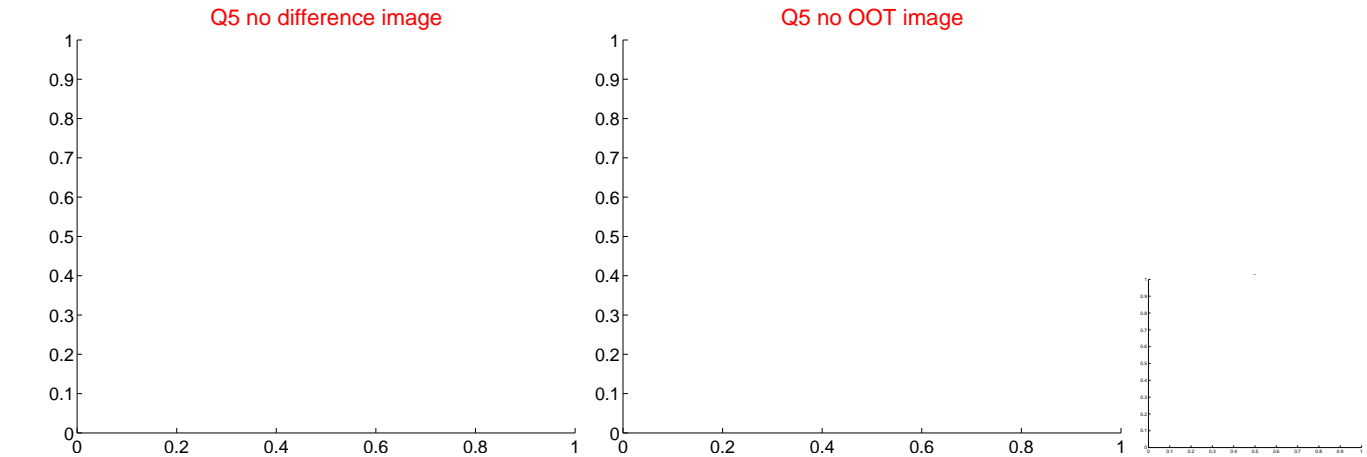


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

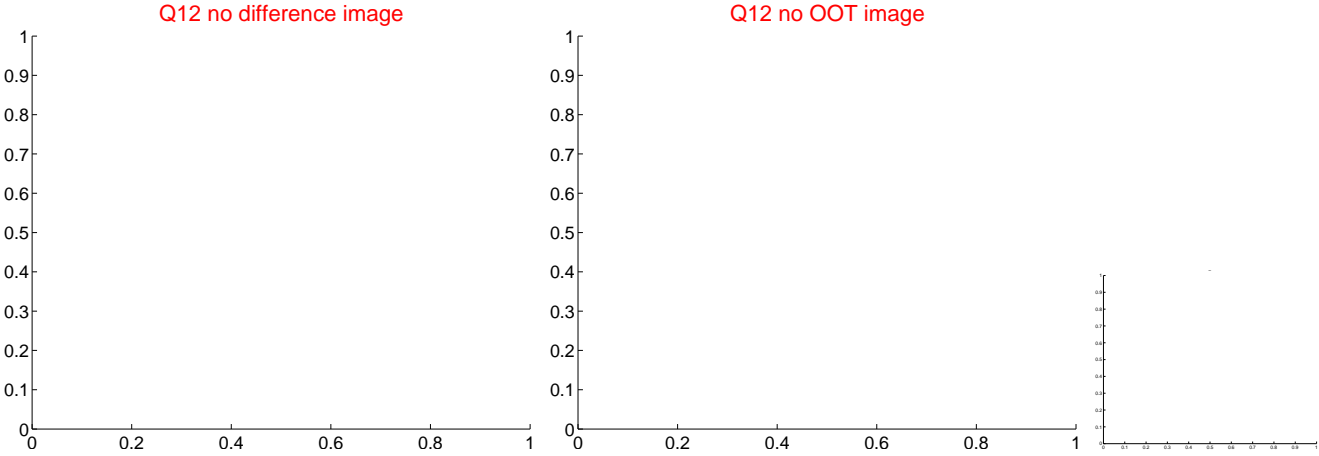
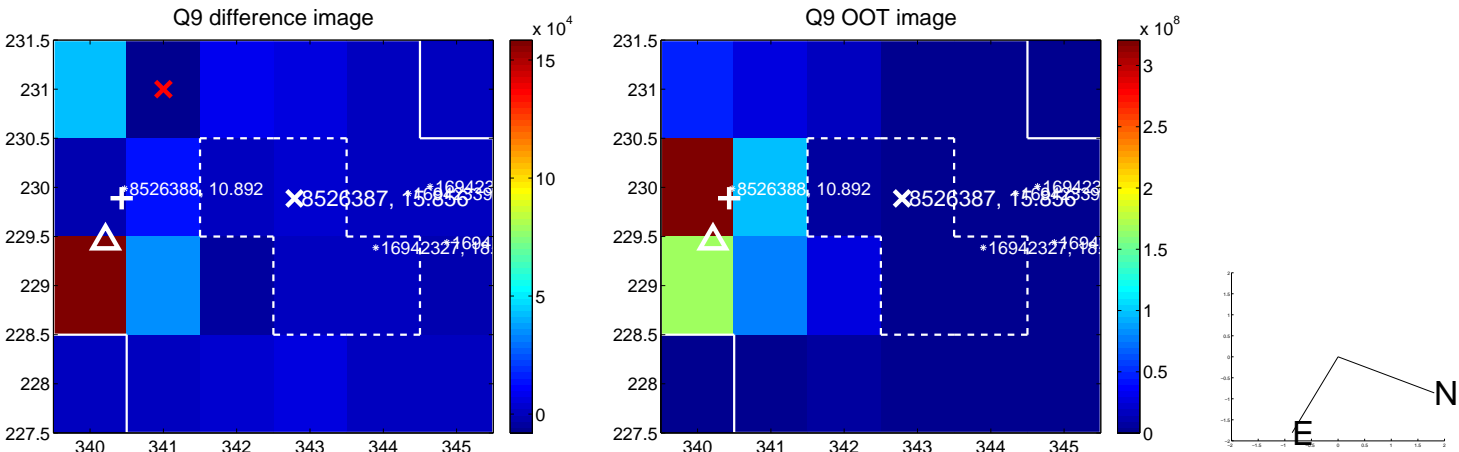
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



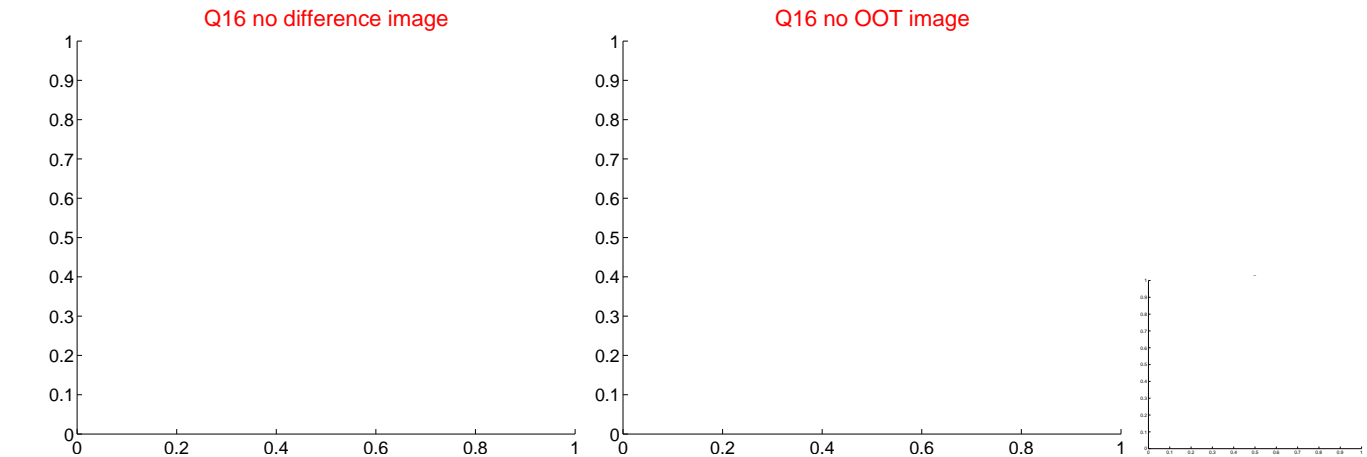
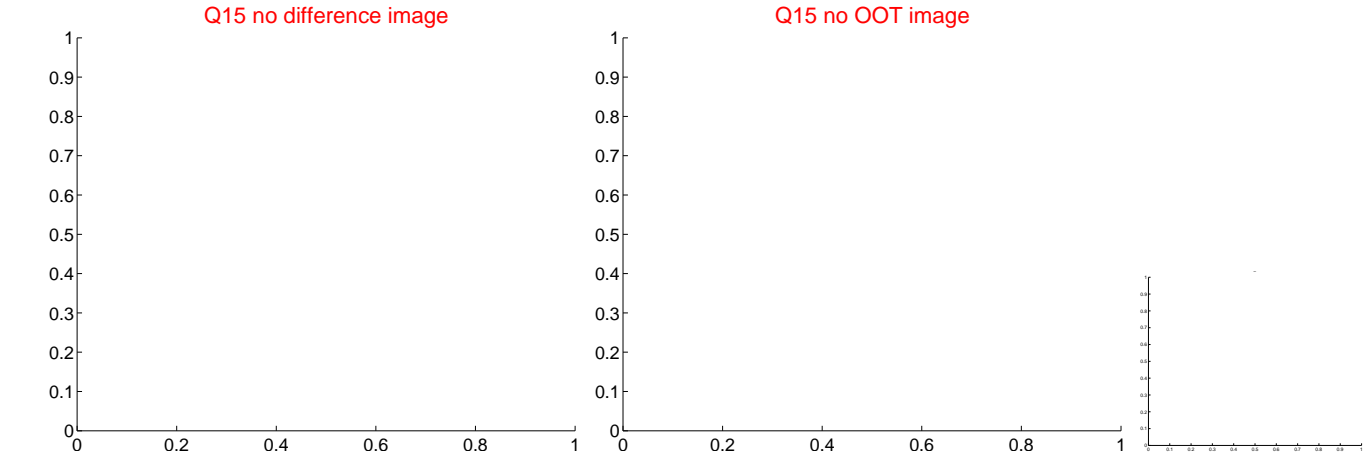
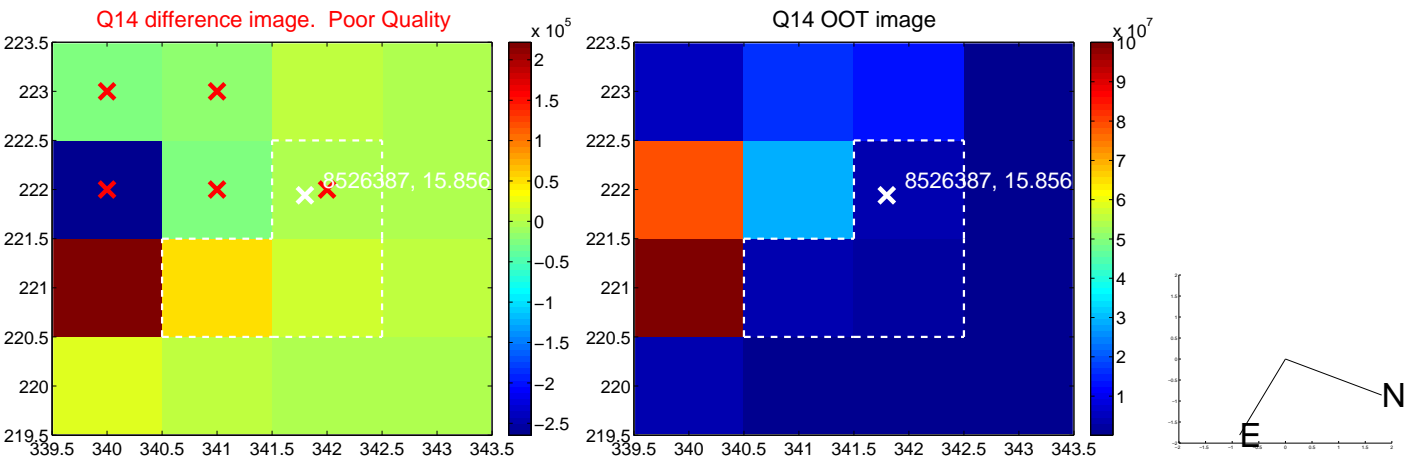
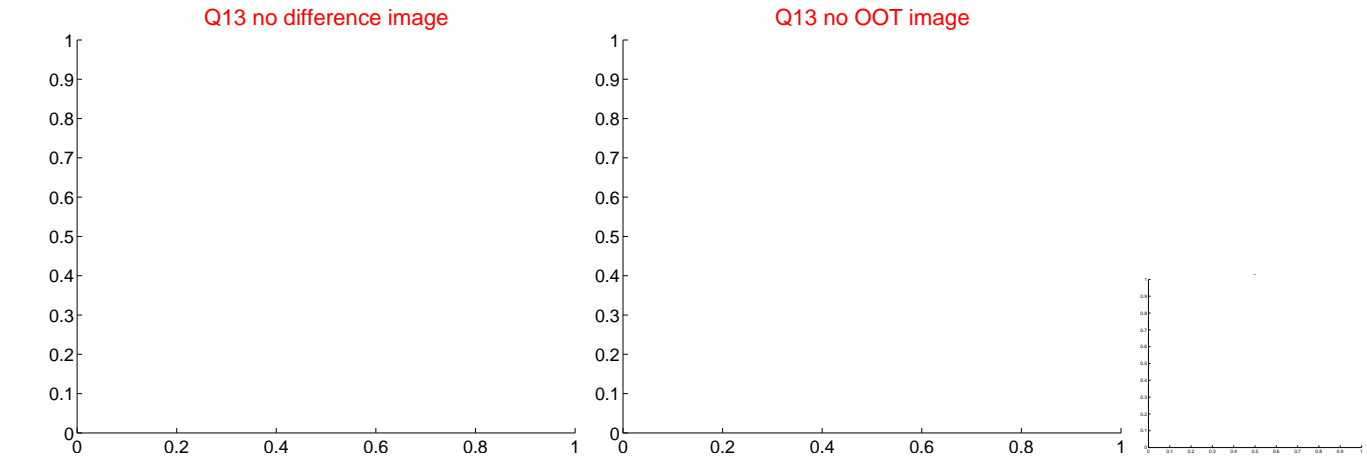
white ×: KIC target position; +: OOT centroid; △: difference centroid. red ✕: large negative pixel value.



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



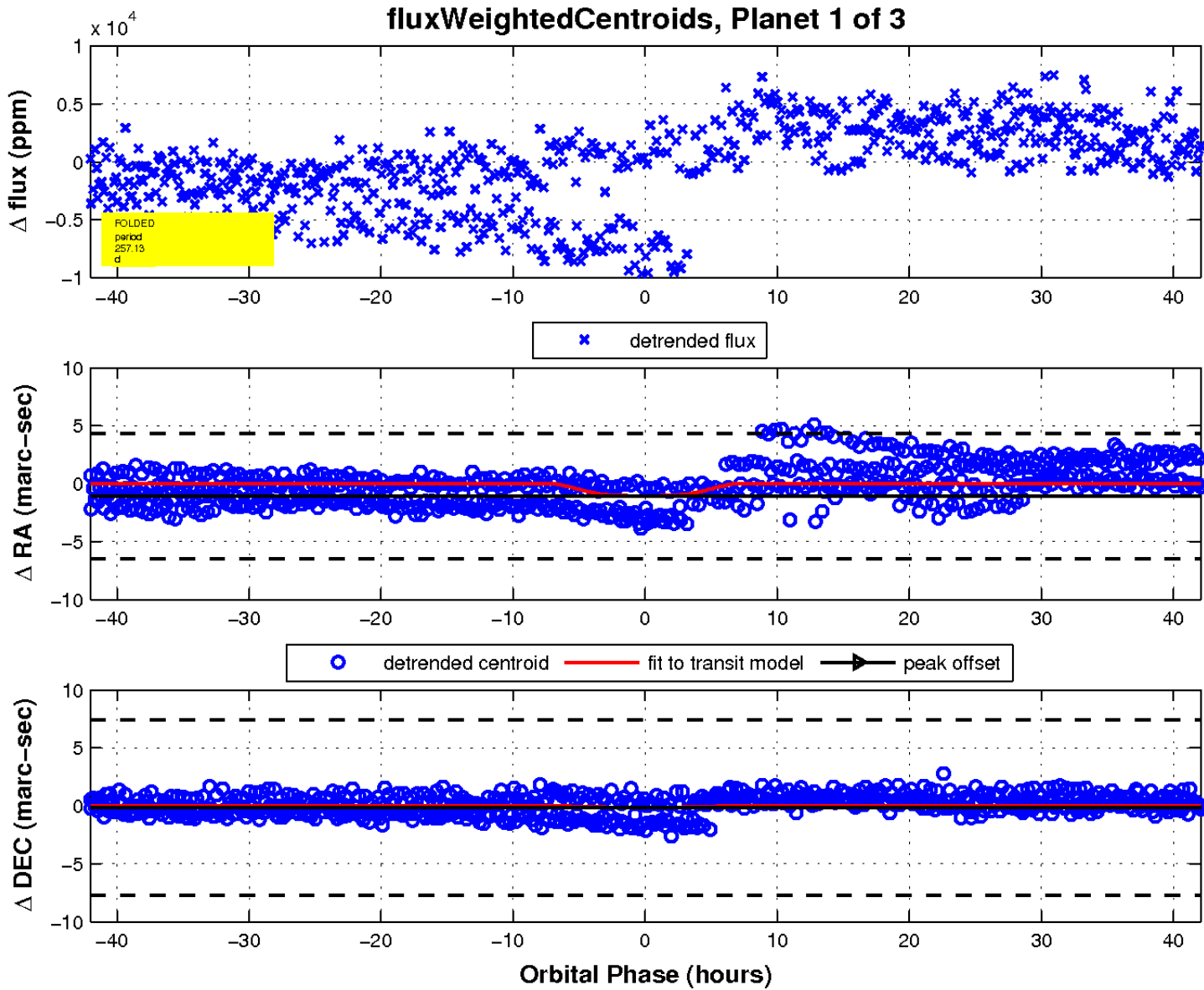
white ×: KIC target position; +: OOT centroid; △: difference centroid. red ×: large negative pixel value.



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

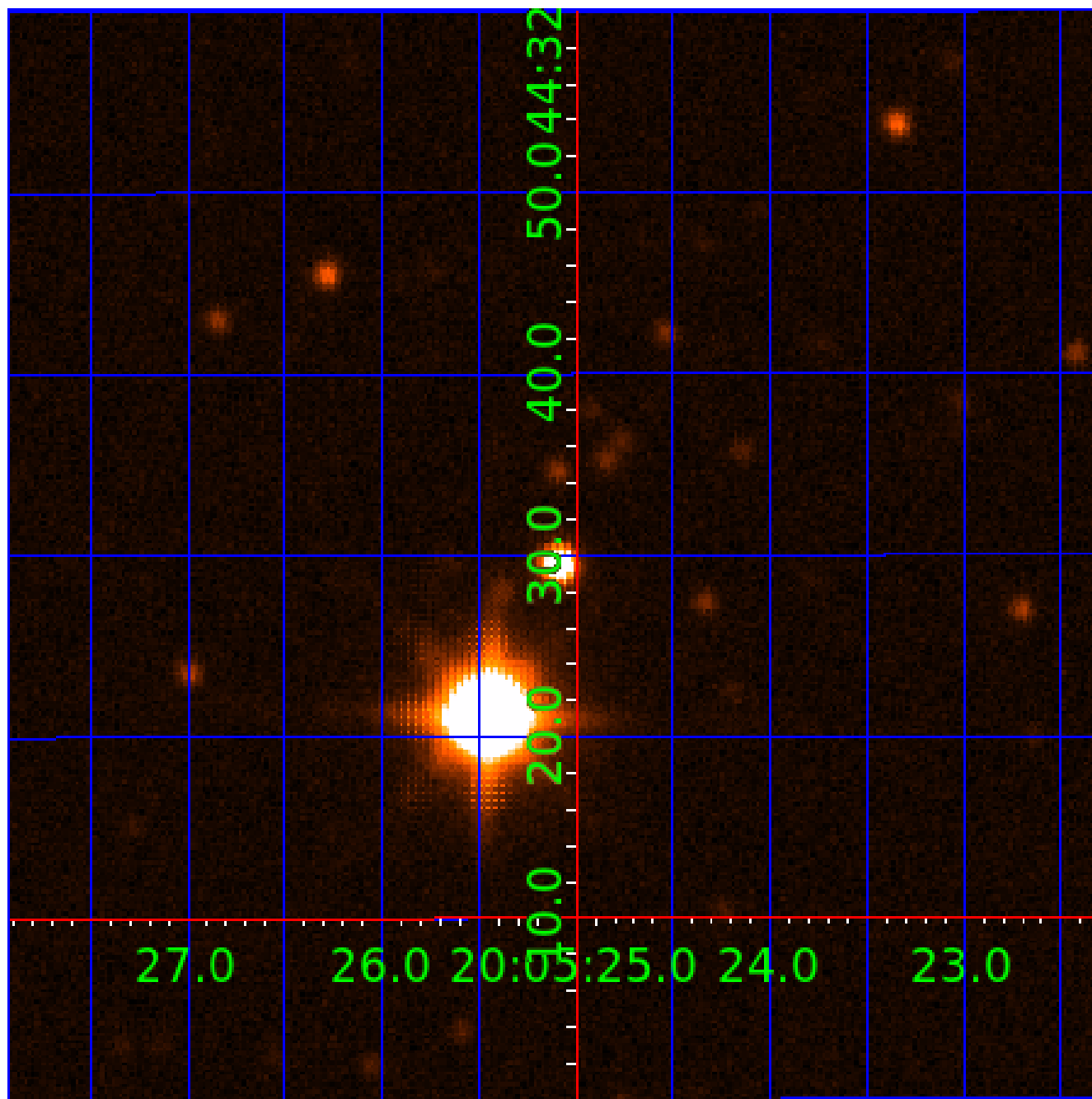
Q17 no difference image

Q17 no OOT image



UKIRT Image

Declination



KIC 008526387

Q1-17 DR25 TCE Parameters

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

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008526387-02	OBS	FP	0.09	0	0	1	0	CENT_RESOLVED_OFFSET
008526387-03	OBS	FP	0.00	1	0	1	0	LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—INCONSISTENT_TRANS—CENT_FEW_DIFFS—HALO_GHOST

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

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

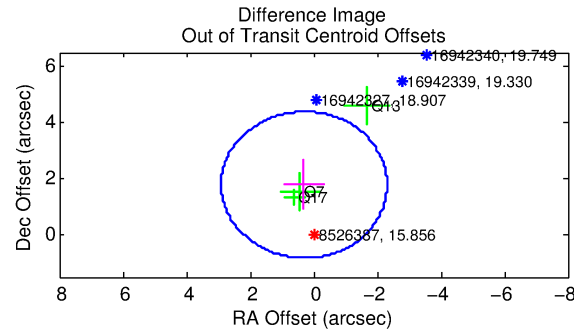
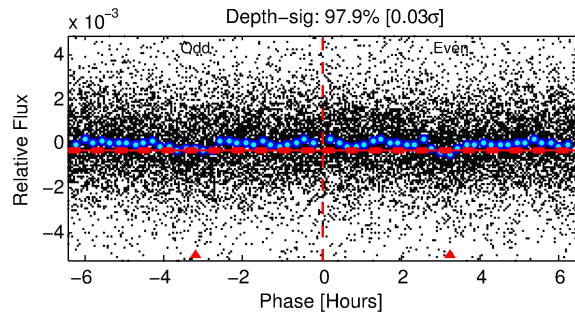
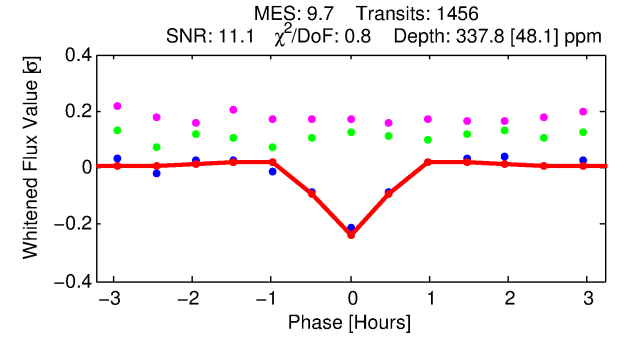
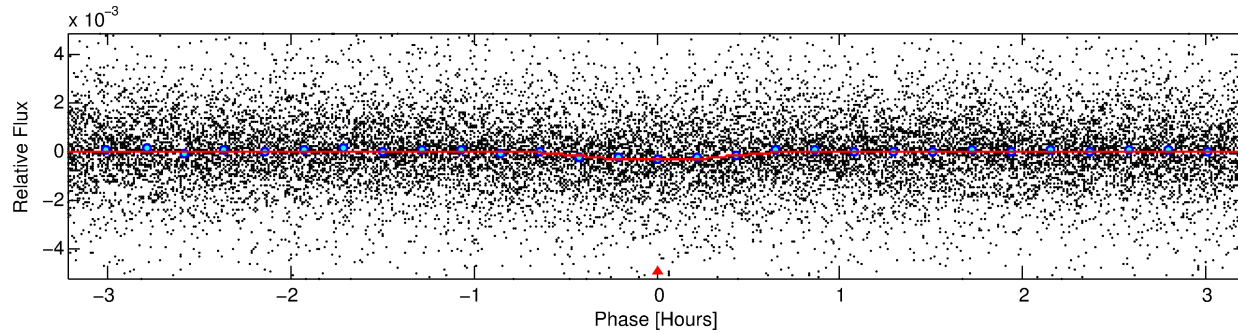
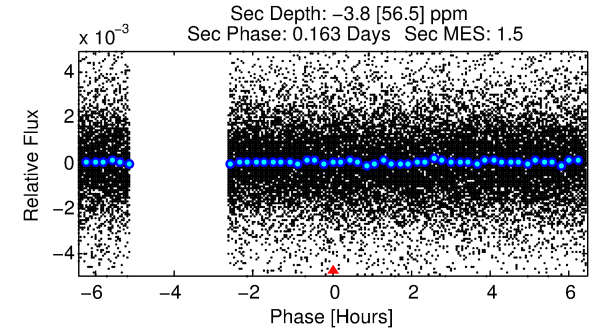
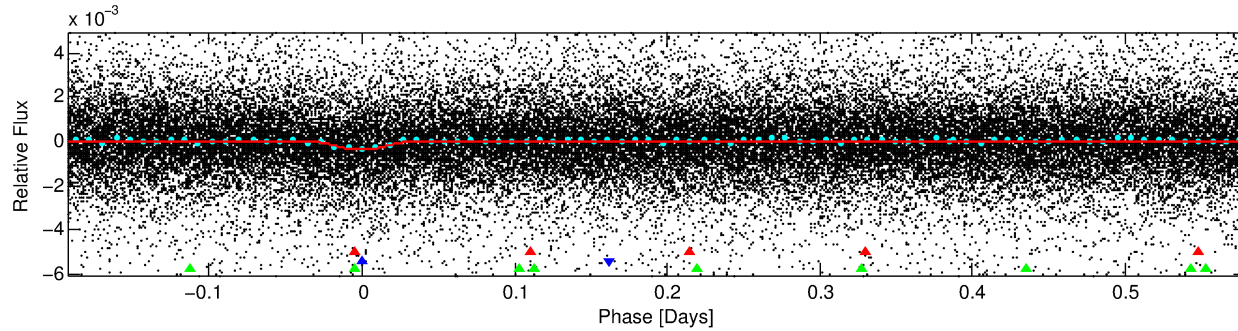
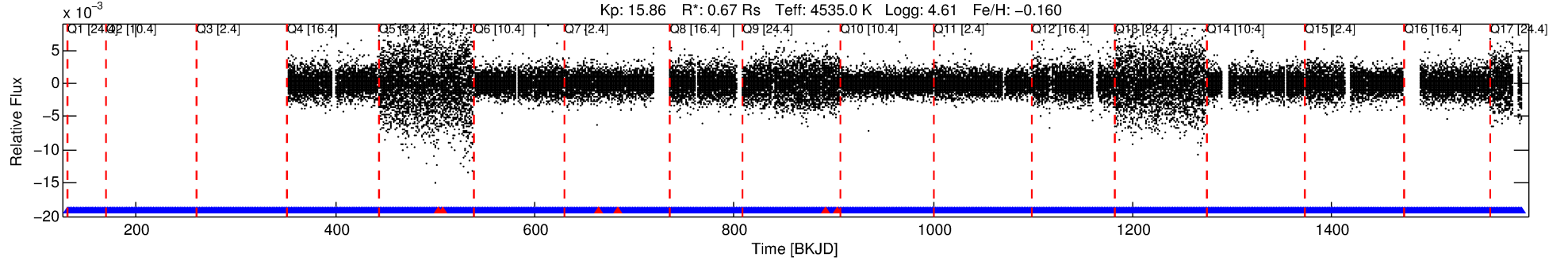
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 008526387-02

No Significant Match Found

DV One-Page Summary

KIC: 8526387 Candidate: 2 of 3 Period: 0.773 d
KOI: K07051.01 Corr: 0.886



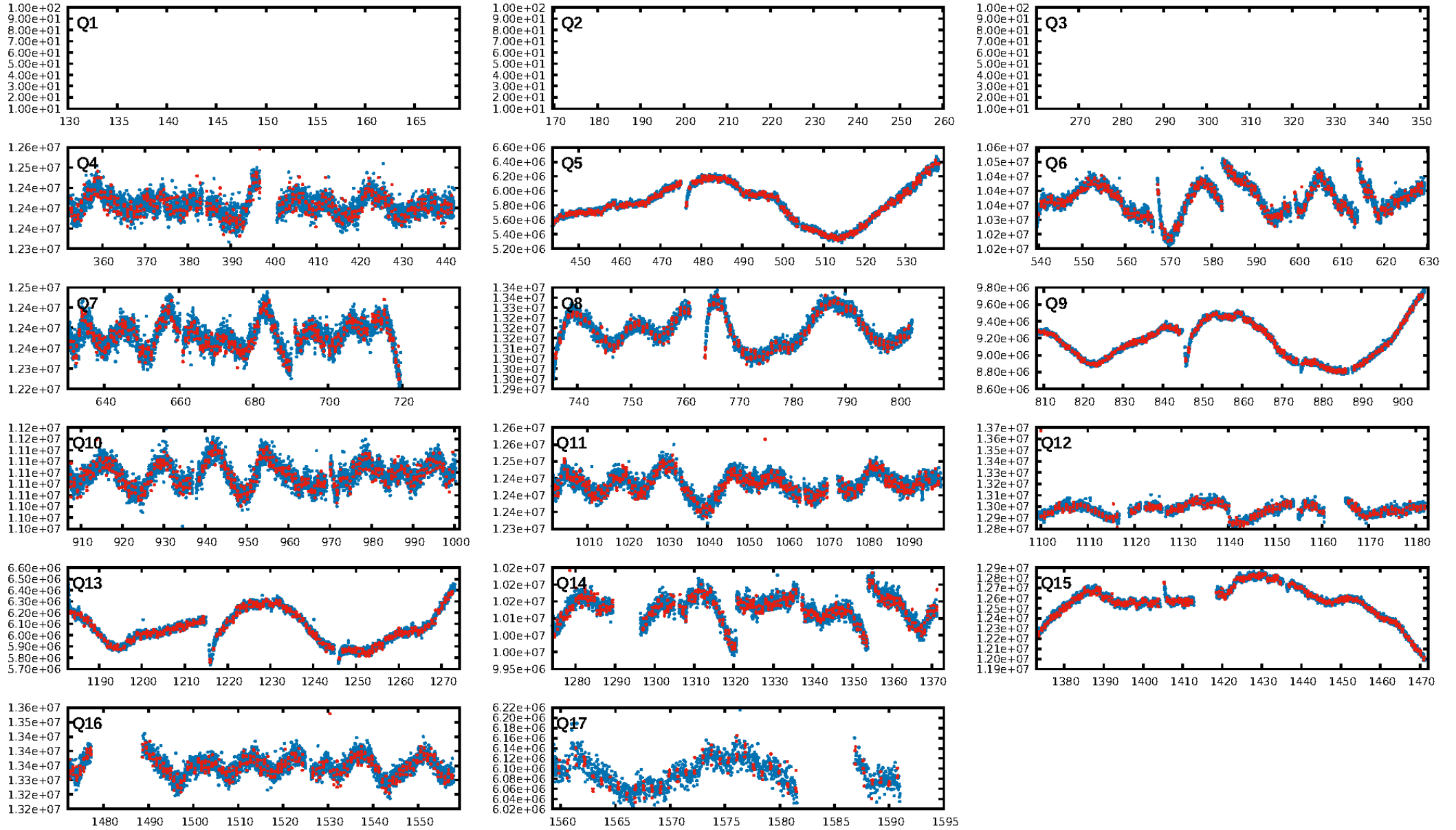
DV Fit Results:

Period = 0.77281 [0.00001] d
Epoch = 131.7041 [0.0015] BKJD
Rp/R* = 0.0203 [0.0209]
a/R* = 3.06 [9.79]
b = 0.87 [1.04]
Seff = 822.17 [141.51]
Teq = 1365 [59] K
Rp = 1.48 [1.53] Re
a = 0.0143 [0.0010] AU
Ag = N/A
Teffp = N/A

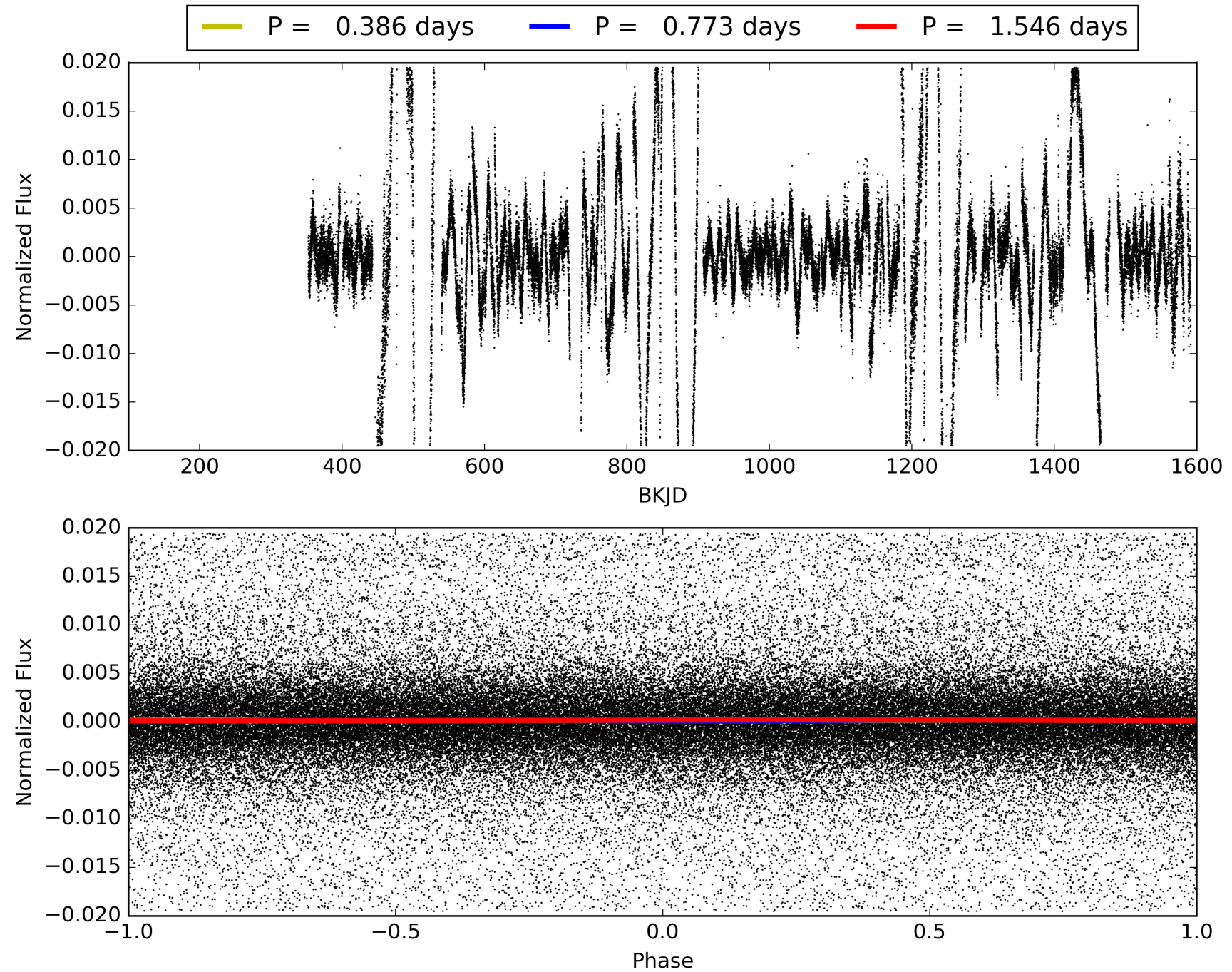
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: 100.0% [162.71σ]
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 2.90e-22
RollingBand-fgt: 1.00 [1415/1421]
GhostDiagnostic-chr: 0.7953
Centroid-sig: 0.0%
Centroid-so: 4.330 arcsec [49.53σ]
OotOffset-rm: 1.804 arcsec [2.07σ]
KicOffset-rm: 6.601 arcsec [7.56σ]
OotOffset-st: 0.1/0.2 [3]
KicOffset-st: 1/1/1/2 [5]
DiffImageQuality-fgm: 0.40 [2/5]
DiffImageOverlap-fno: 1.00 [14/14]

TCE 008526387-02, PDC Light Curves

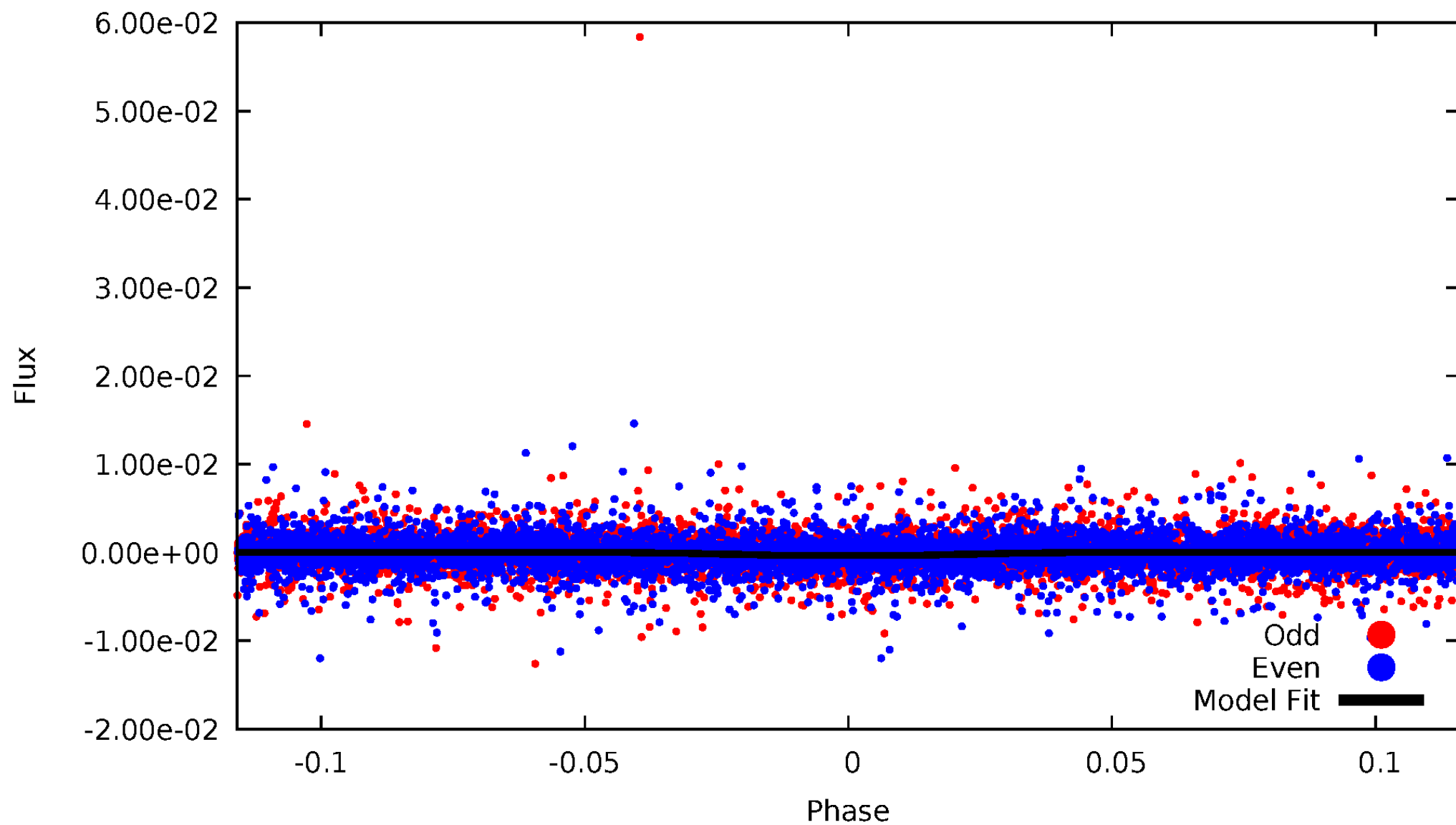


TCE 008526387-02



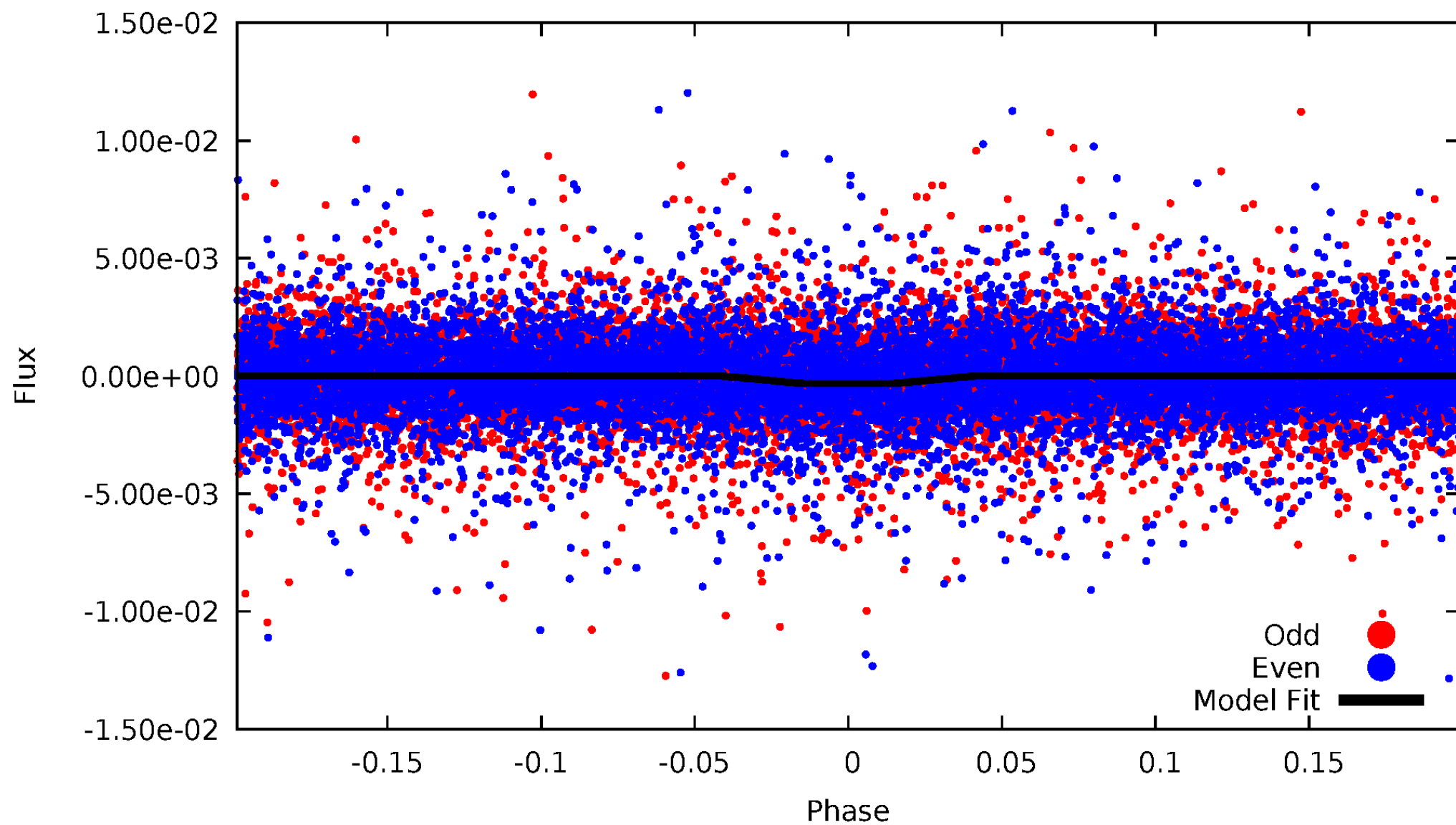
DV Odd/Even

TCE 008526387-02



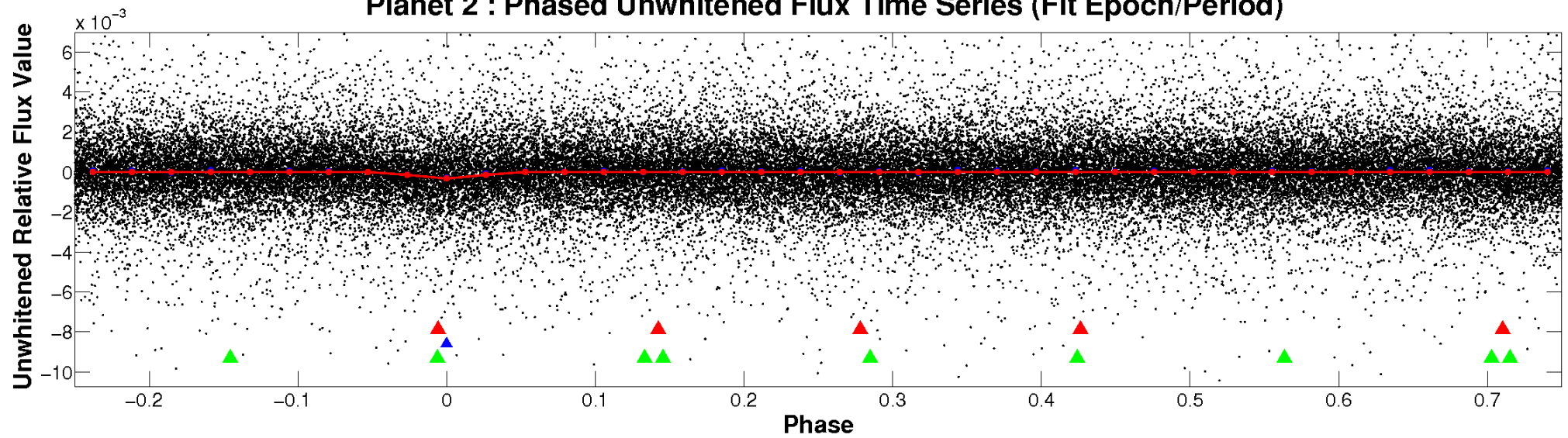
ALT Odd/Even

TCE 008526387-02

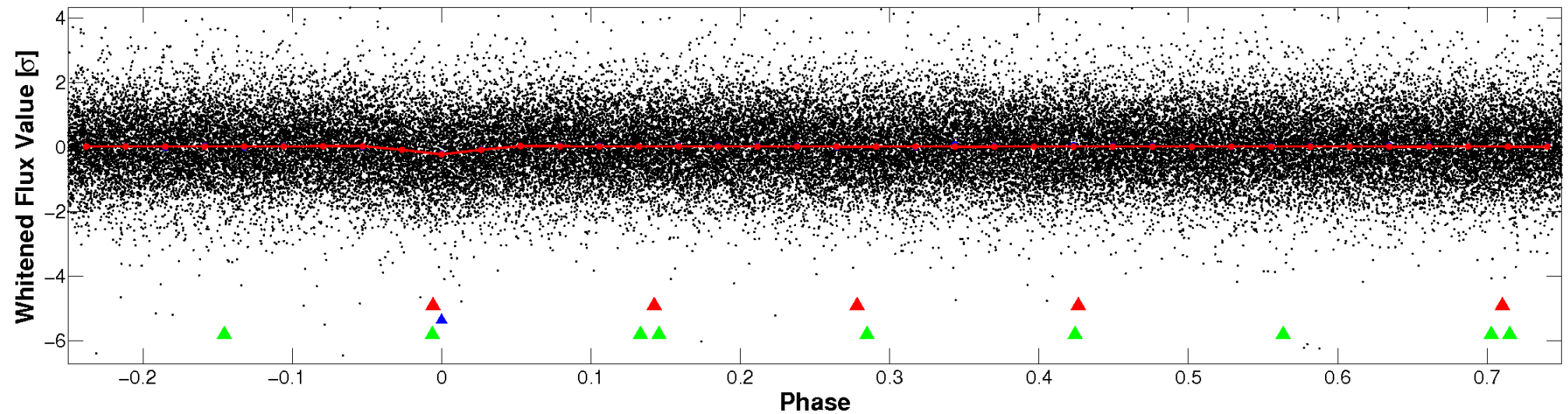


Non-Whitened Vs. Whitened Light Curve

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

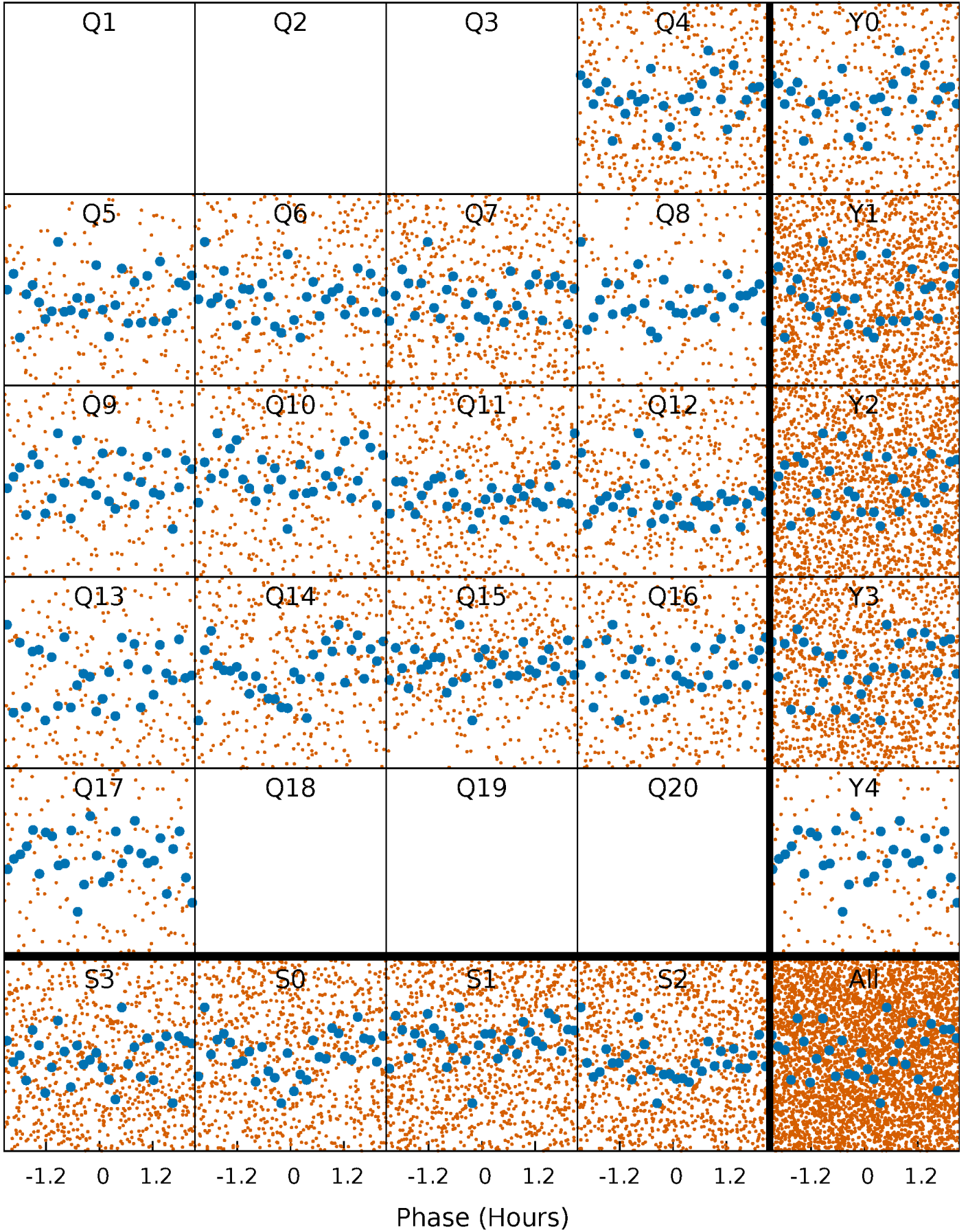


Planet 2 : Phased Whitened Flux Time Series (Fit Epoch/Period)



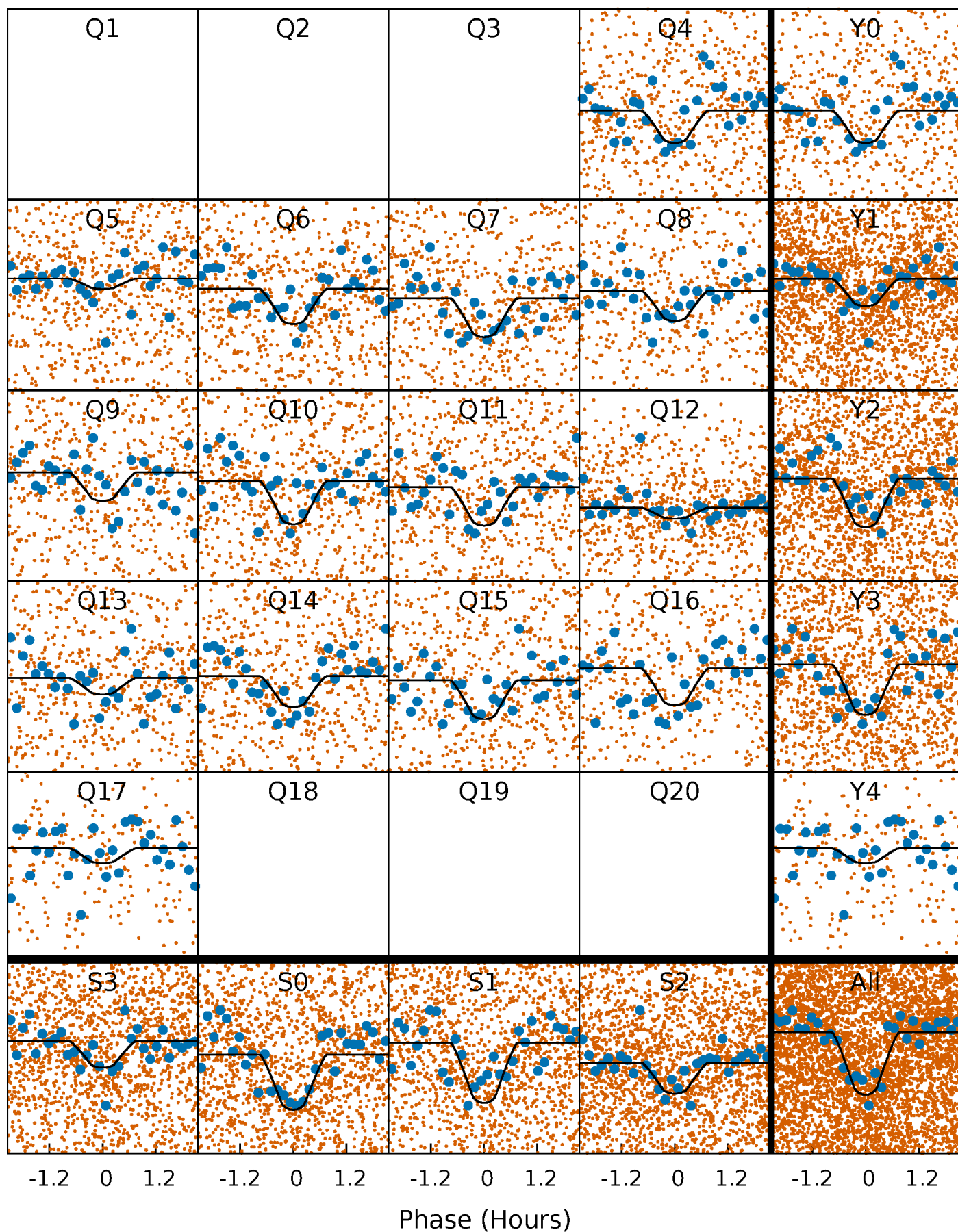
PDC Quarter-Phased Transit Curves

TCE 008526387-02 P= 0.772808 Days $T_0=131.704068$ (BKJD)



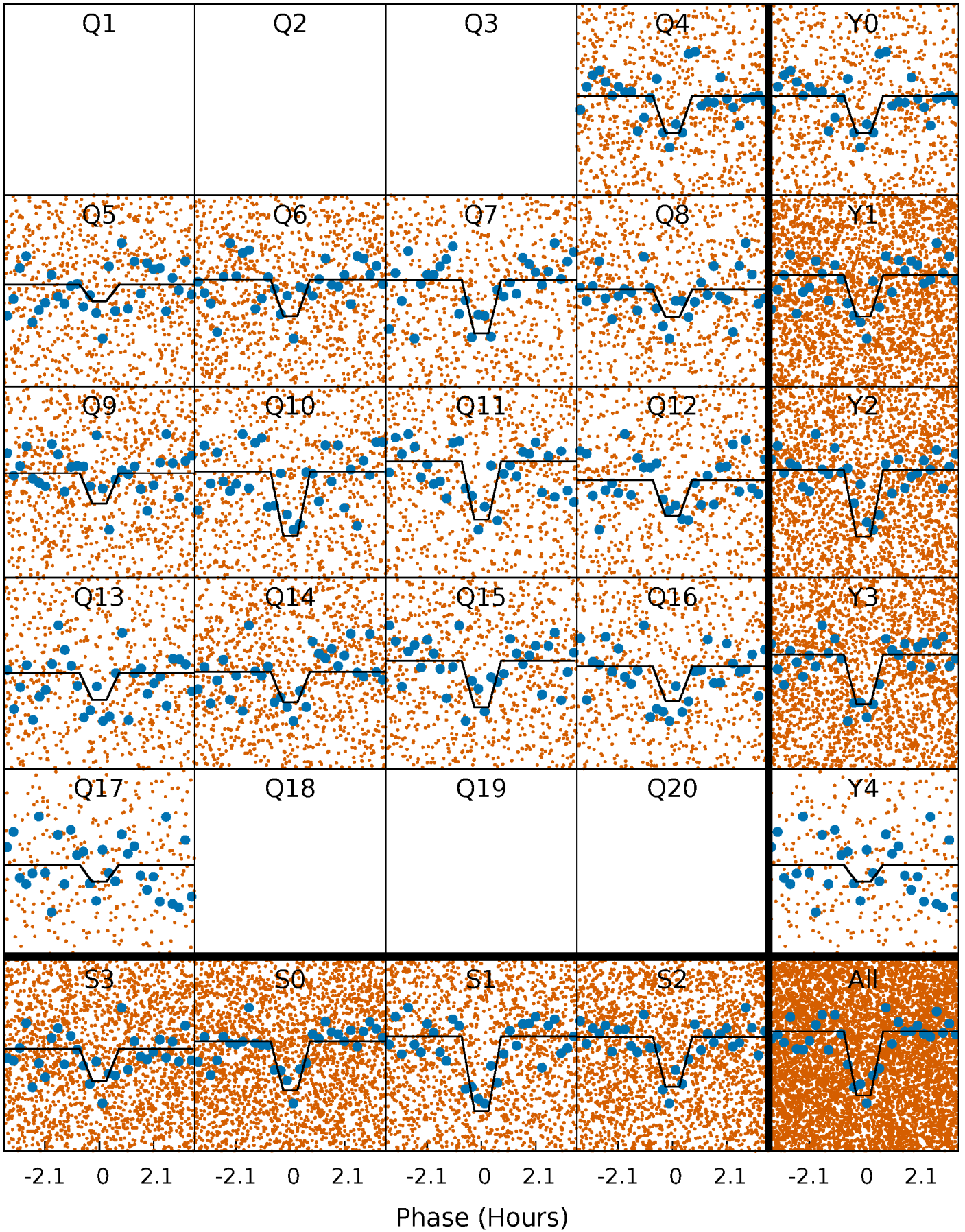
DV Quarter-Phased Transit Curves

TCE 008526387-02 P= 0.772808 Days $T_0=131.704068$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

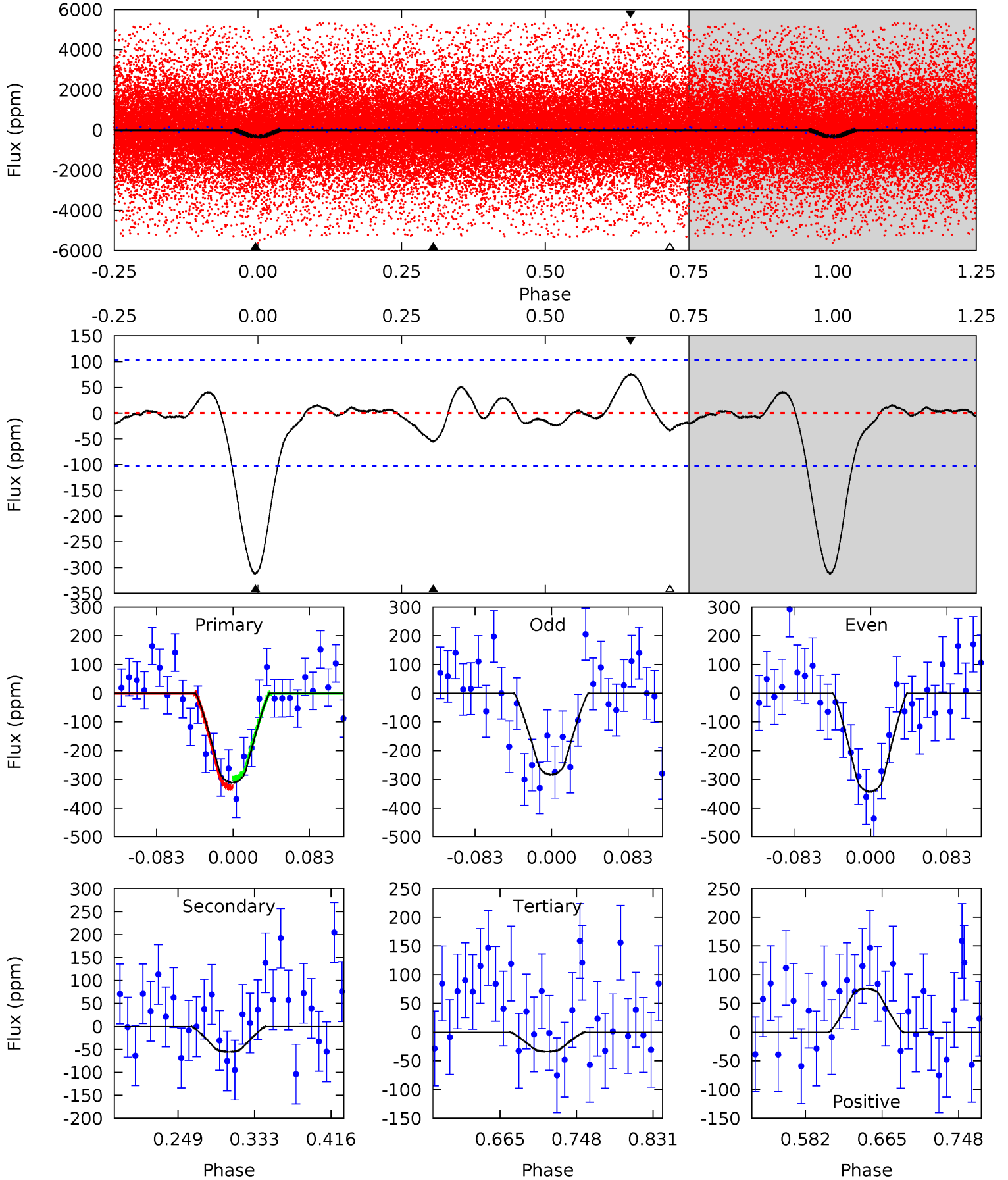
TCE 008526387-02 $P = 0.772799$ Days $T_0 = 131.708402$ (BKJD)



DV Model-Shift Uniqueness Test

008526387-02, P = 0.772808 Days, E = 131.704068 Days

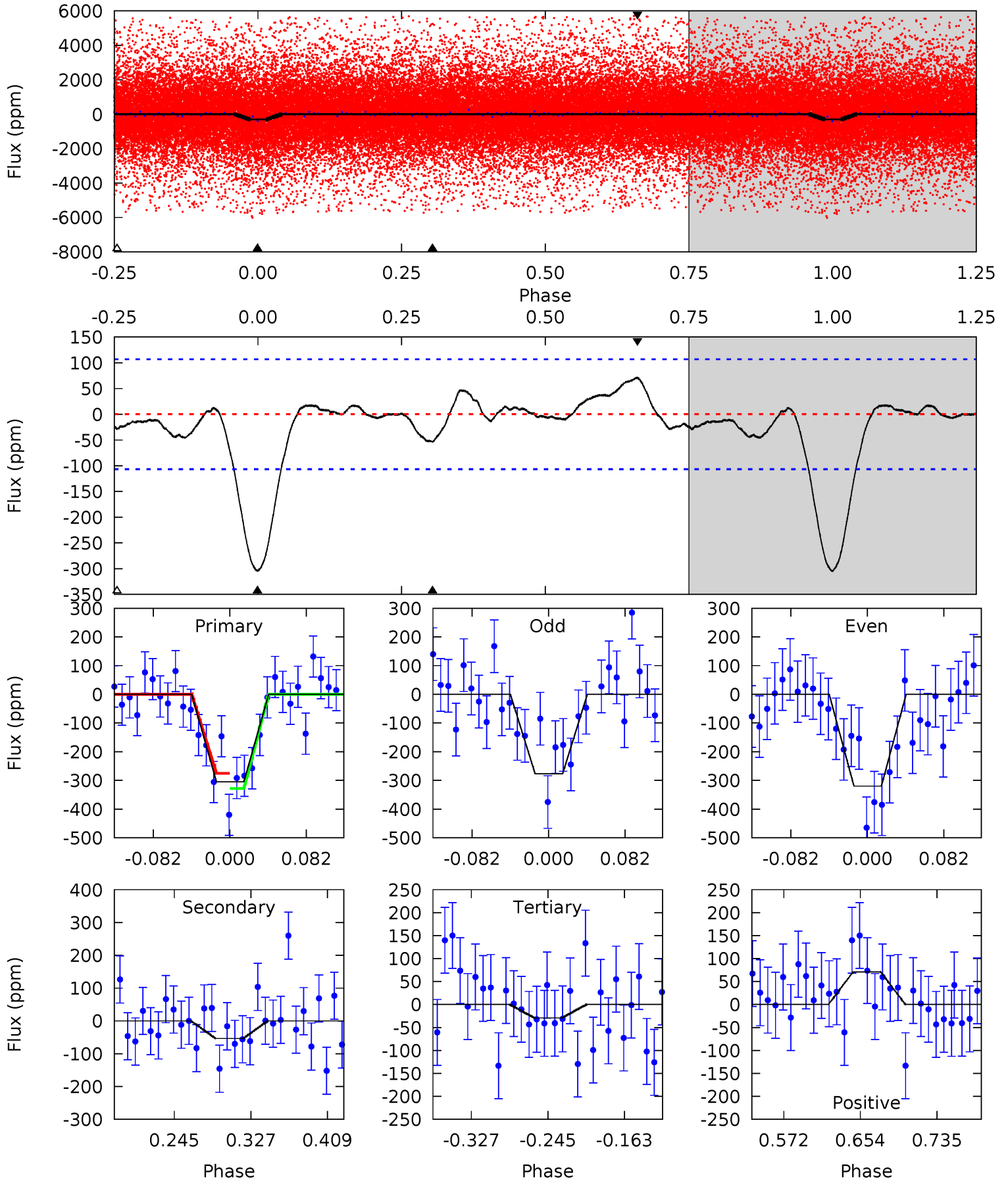
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
13.9	2.47	1.51	3.38	4.60	1.73	0.99	12.4	10.5	0.96	-0.91	1.34	0.99	0.20	0.68



Alt Model-Shift Uniqueness Test

008526387-02, P = 0.772799 Days, E = 131.708402 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
13.1	2.31	1.26	3.07	4.61	1.74	1.10	11.9	10.1	1.05	-0.76	0.93	1.06	0.19	0



Stellar Parameters For KIC 008526387

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (g \cdot \text{cm}^{-3})$
	4535^{+159}_{-159}	$4.607^{+0.052}_{-0.028}$	$-0.160^{+0.300}_{-0.300}$	$0.668^{+0.048}_{-0.060}$	$0.659^{+0.075}_{-0.054}$	$3.111^{+0.776}_{-0.351}$
	+4%/-4%	+1%/-1%	+188%/-188%	+7%/-9%	+11%/-8%	+25%/-11%
Source	KIC0	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 008526387-02 / KOI 7051.01

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-55 ± 22	$1.83^{+1.29}_{-1.18}$	1900^{+74}_{-77}	2926^{+1317}_{-558}	$1.786^{+13.167}_{-1.208}$
Alt.	-53 ± 23	$1.62^{+1.38}_{-1.01}$	1903^{+73}_{-73}	3025^{+1282}_{-661}	$2.188^{+14.092}_{-1.616}$

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

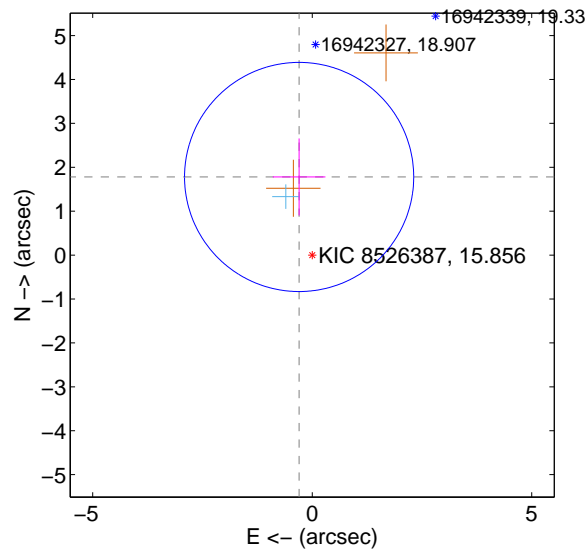
Supplemental centroid analysis for 008526387-02. Kepler magnitude: 15.86. Transit SNR 11.12

There are 2 quarters with good PRF difference image offsets

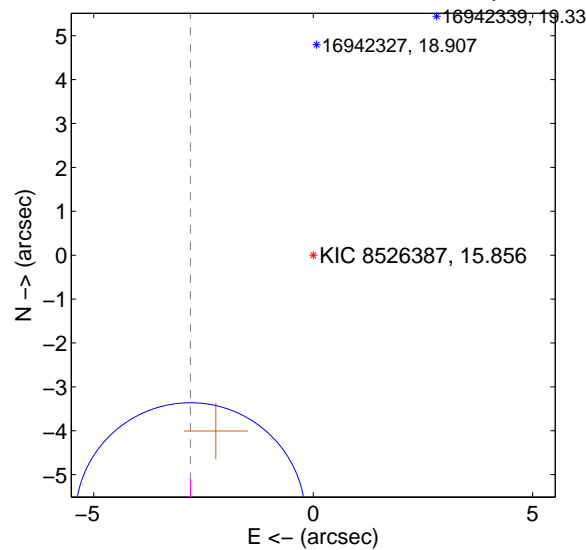
The OOT PRF centroid is offset from the target star catalog position by about 9.42 arcsec so the offset from difference PRF-fit to OOT-fit may be invalid.

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	1.804 ± 0.870	2.07	0.298 ± 0.599	1.779 ± 0.876
PRF-fit source offset from KIC position	6.601 ± 0.873	7.56	2.797 ± 0.813	-5.979 ± 0.885
photometric centroid source offset	4.33 ± 0.09	49.53	2.20 ± 0.07	-3.73 ± 0.09

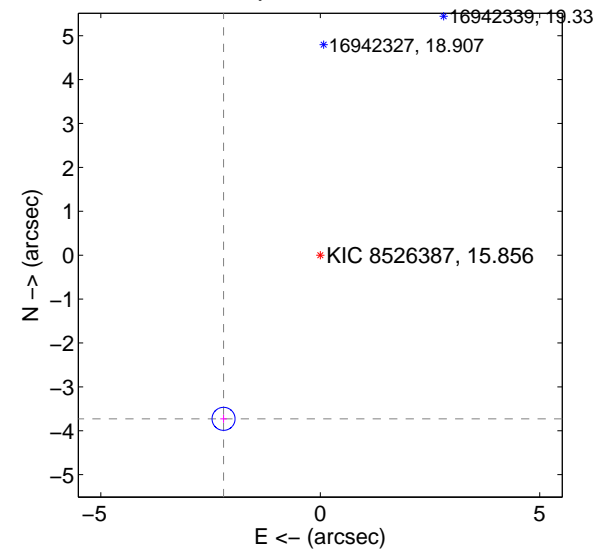
offset from difference PRF-fit to OOT PRF-fit



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.

Q1 no difference image



Q1 no OOT image



Q2 no difference image



Q2 no OOT image



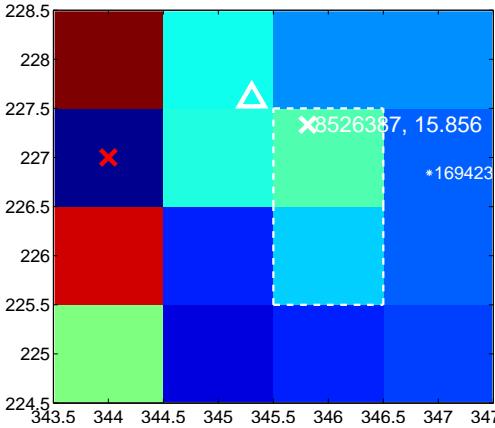
Q3 no difference image



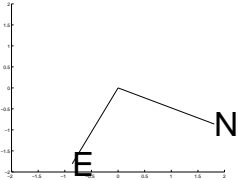
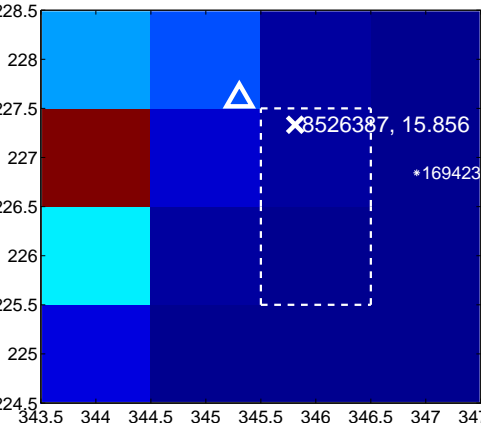
Q3 no OOT image



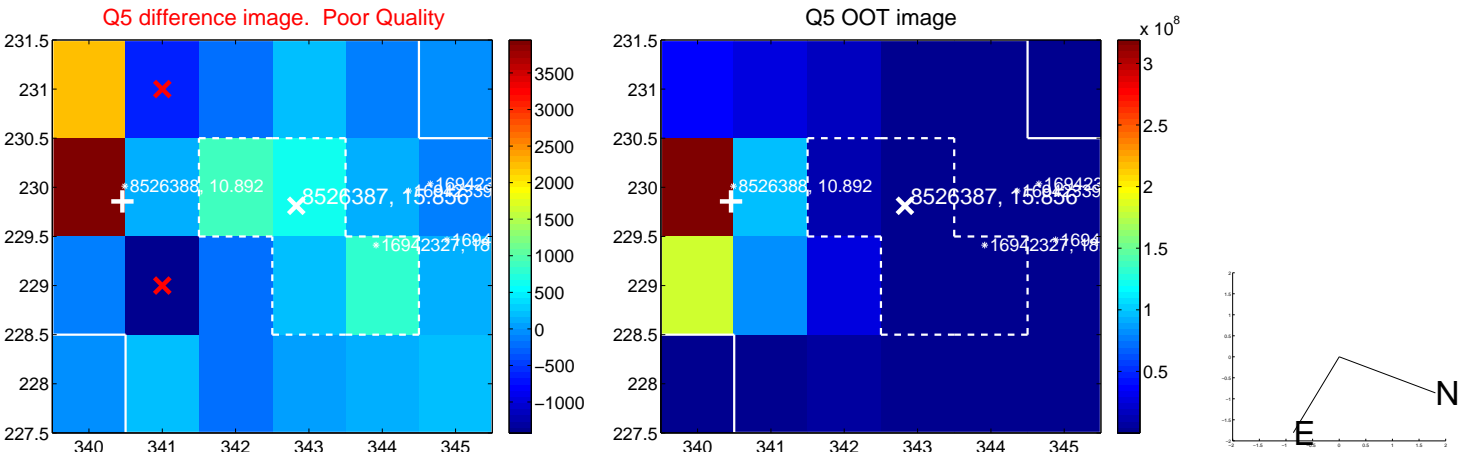
Q4 difference image. Poor Quality



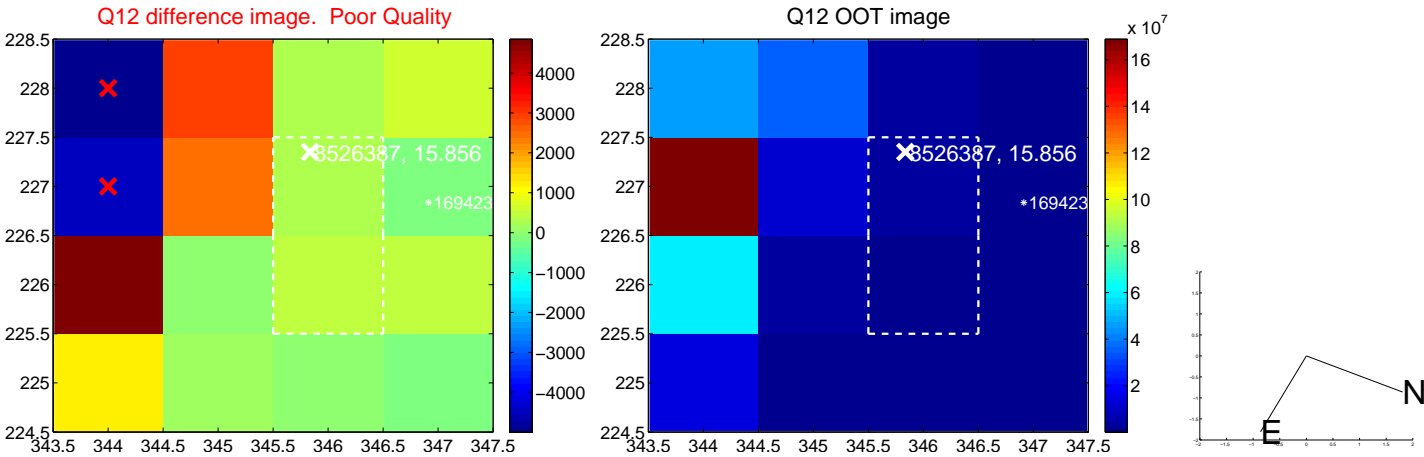
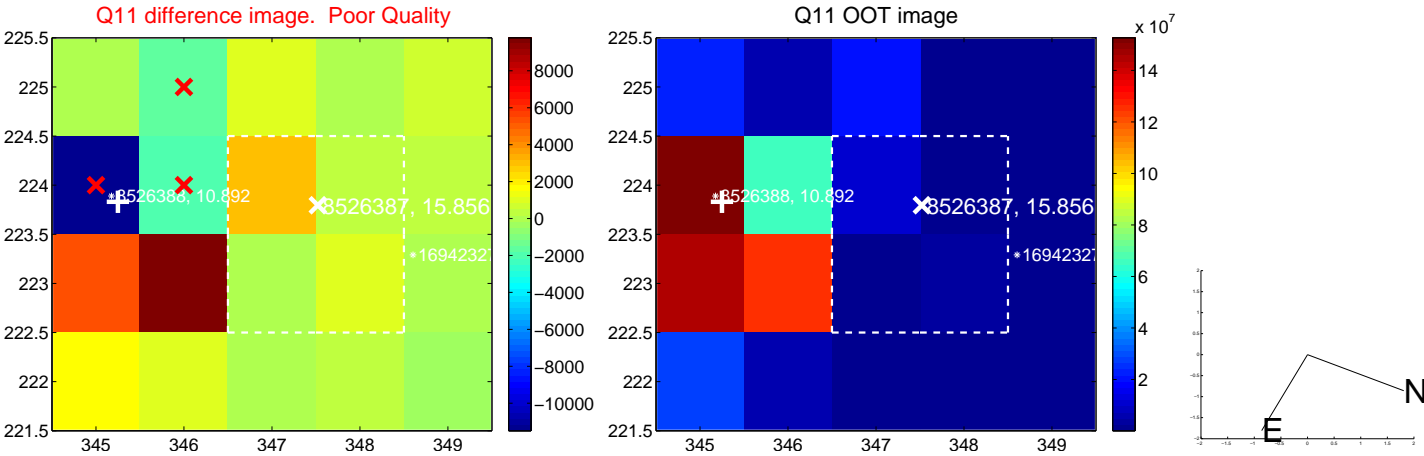
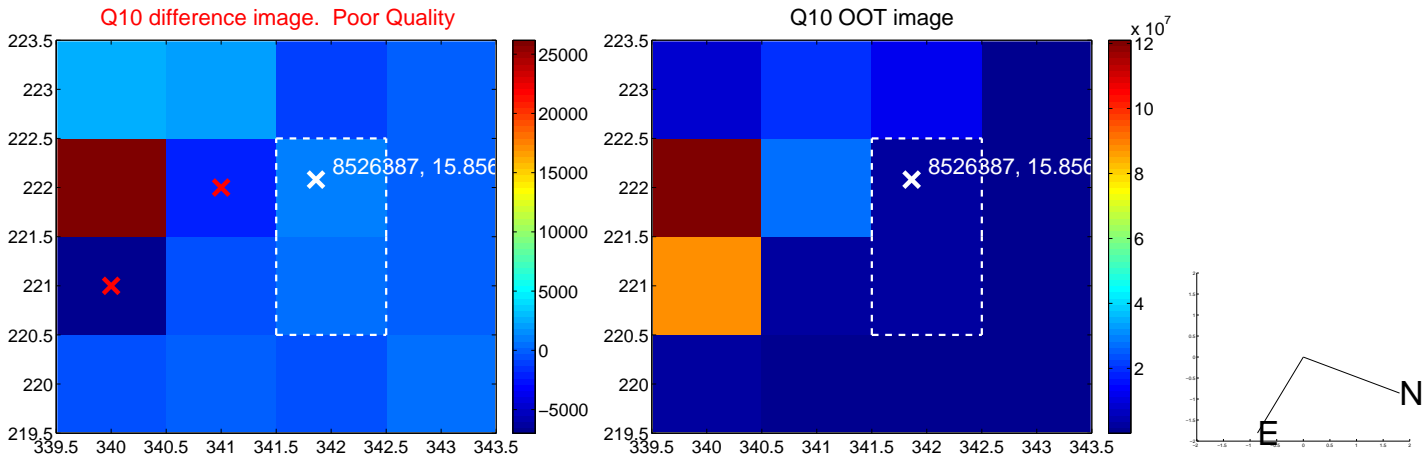
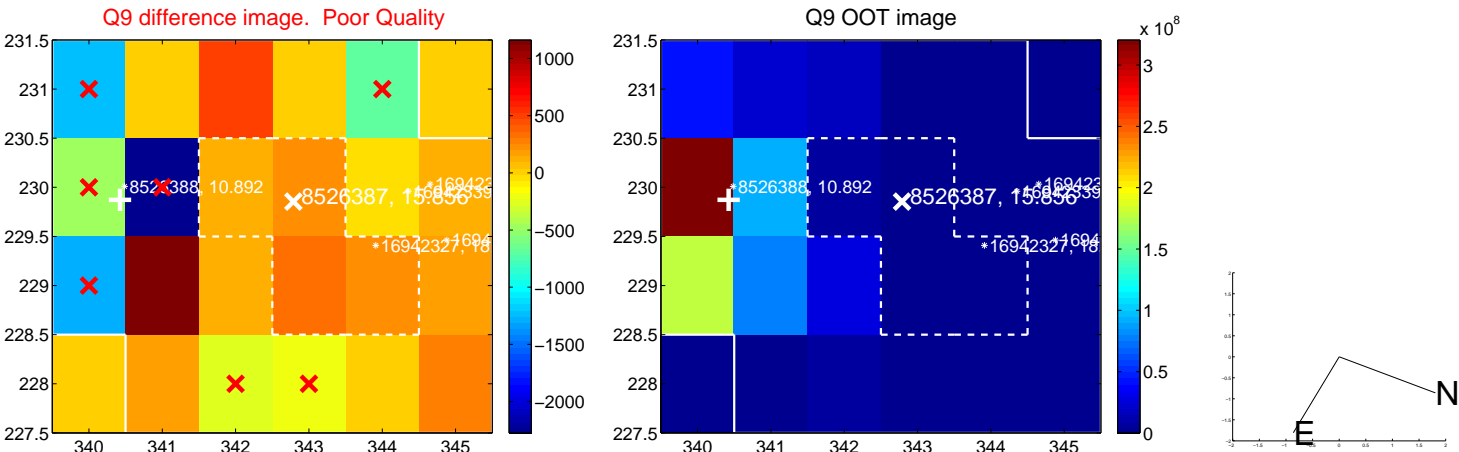
Q4 OOT image



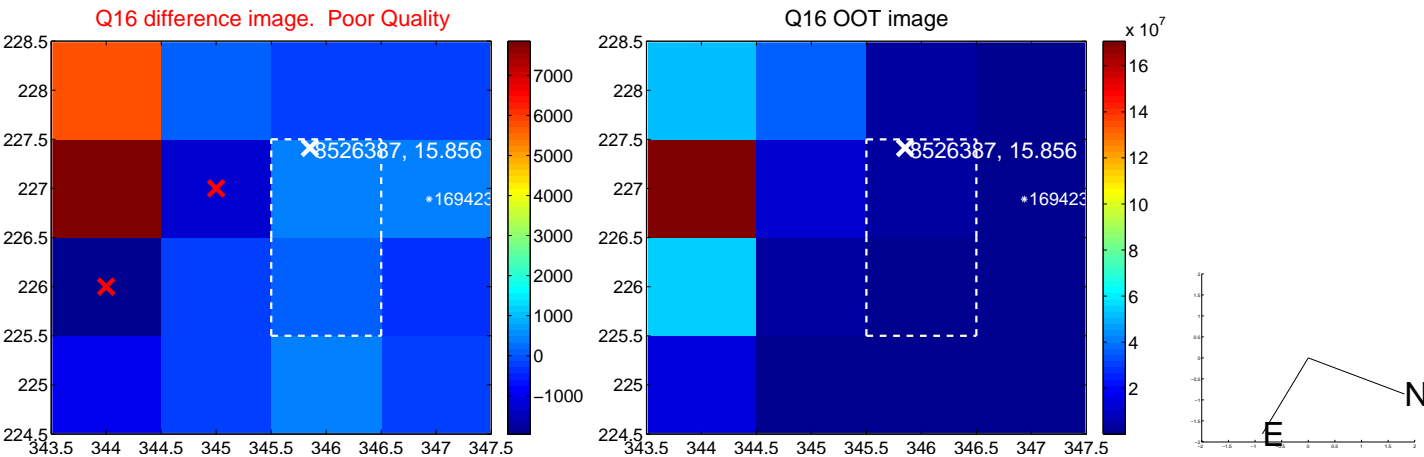
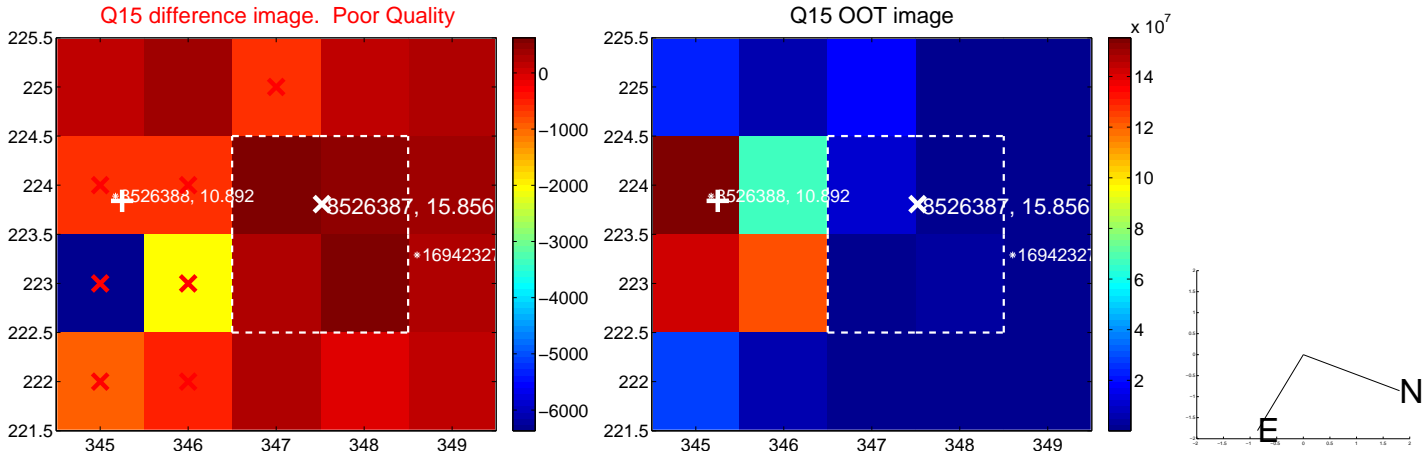
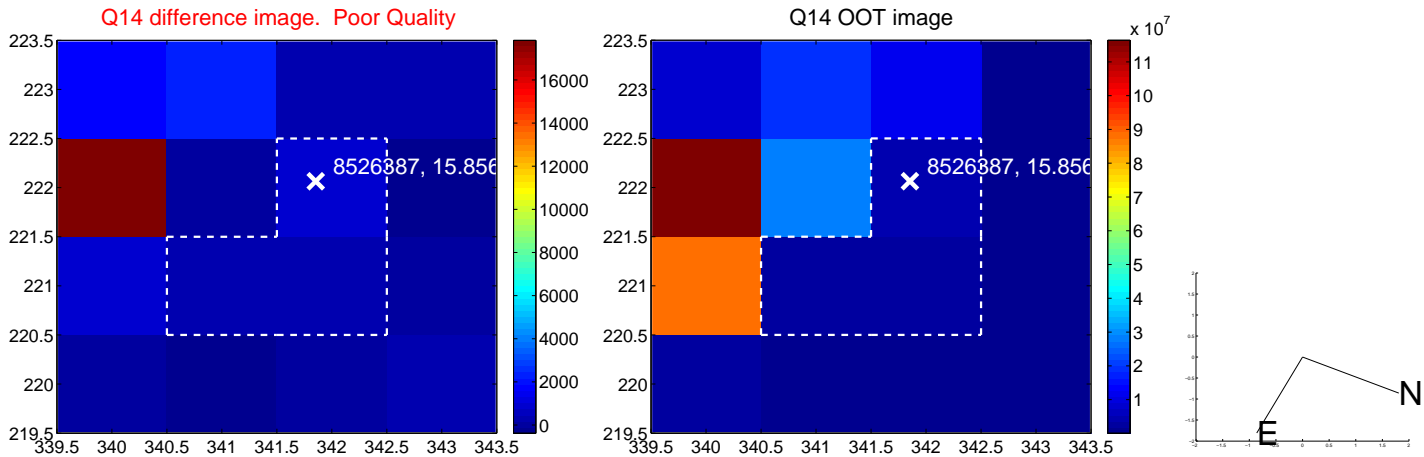
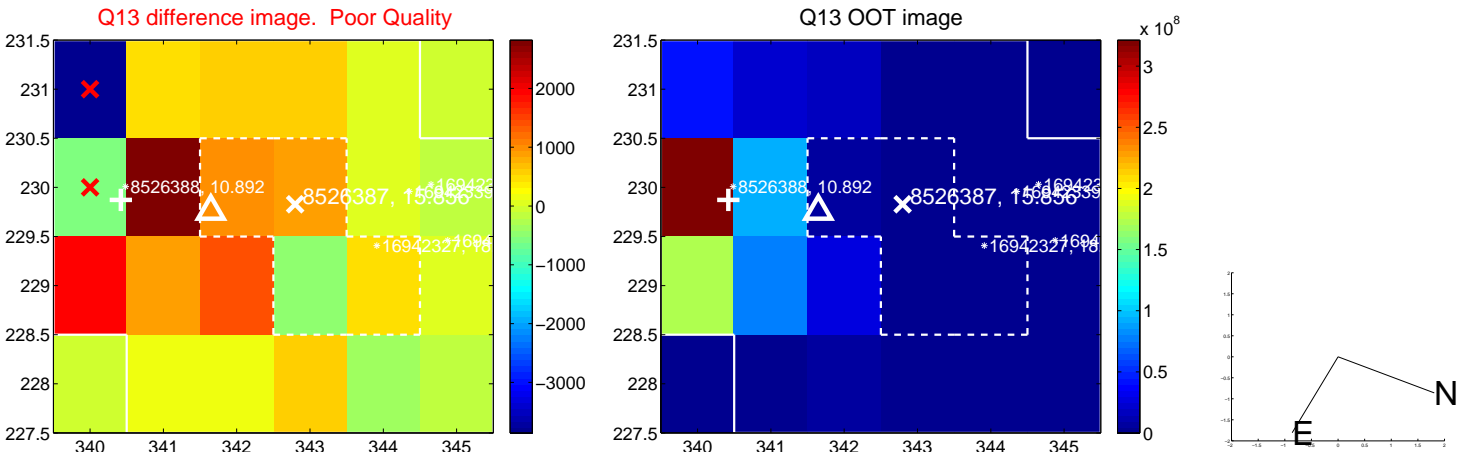
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



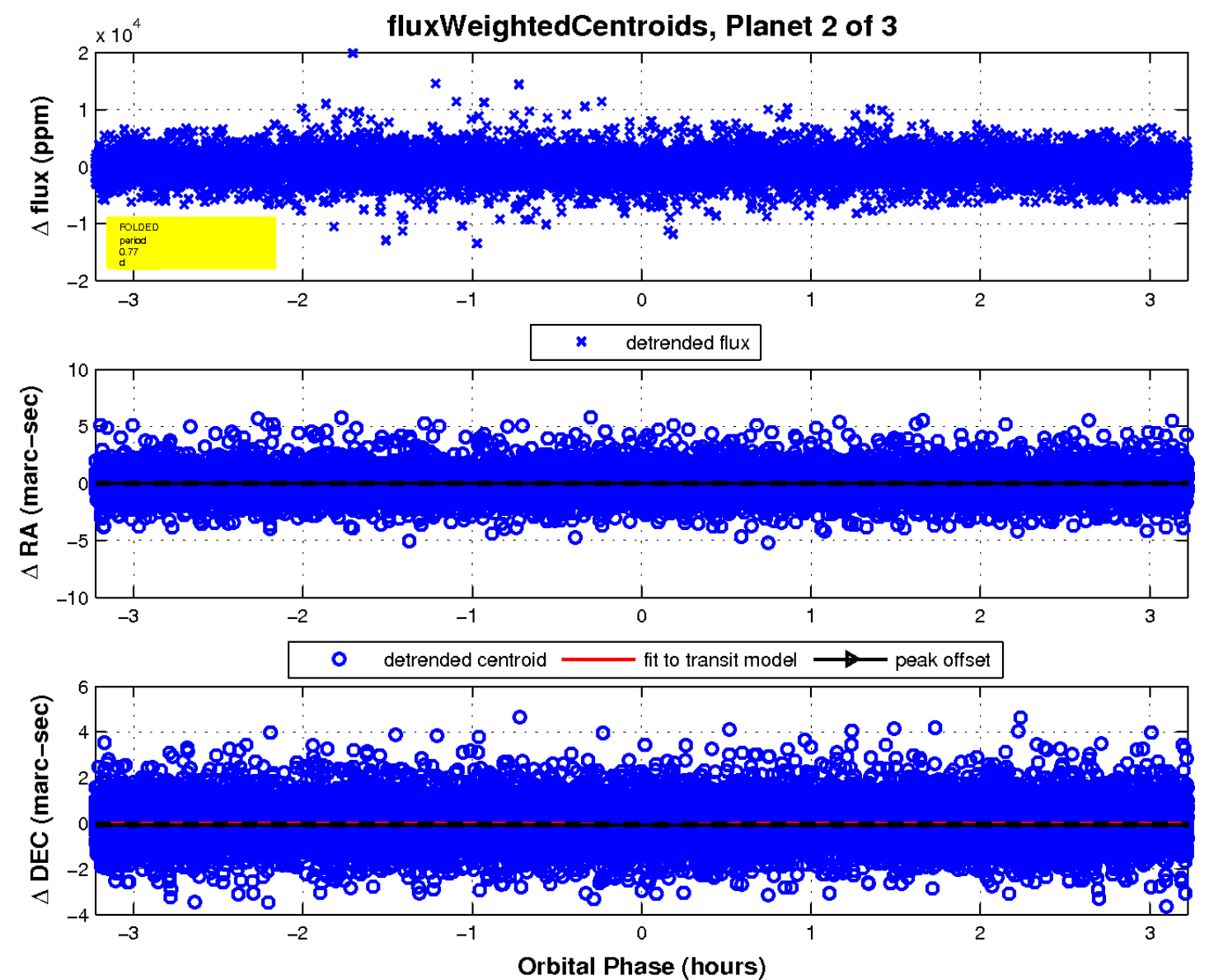
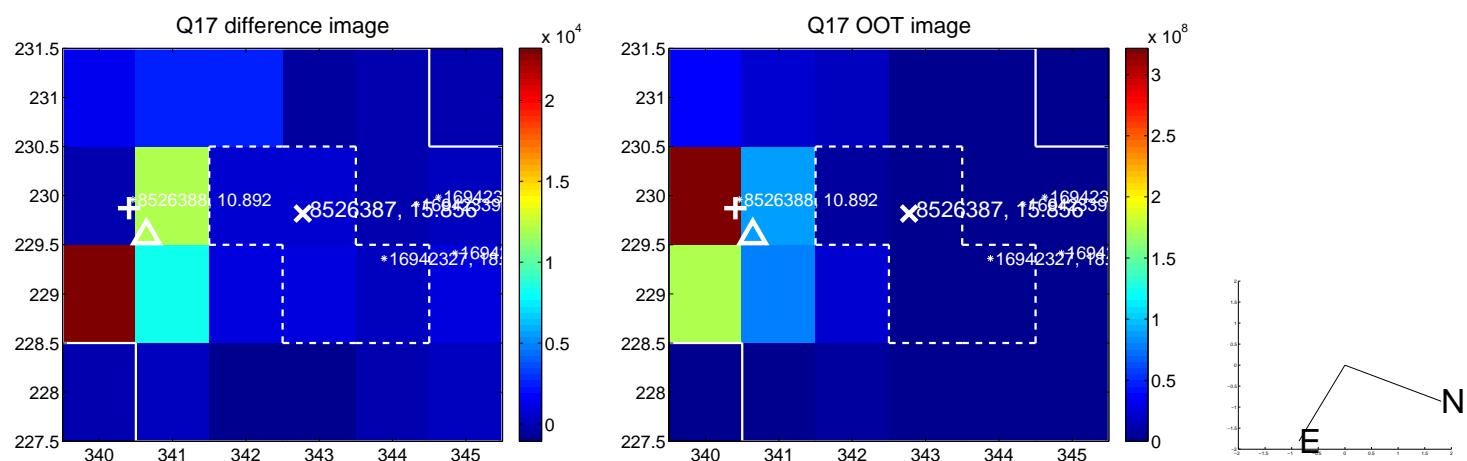
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

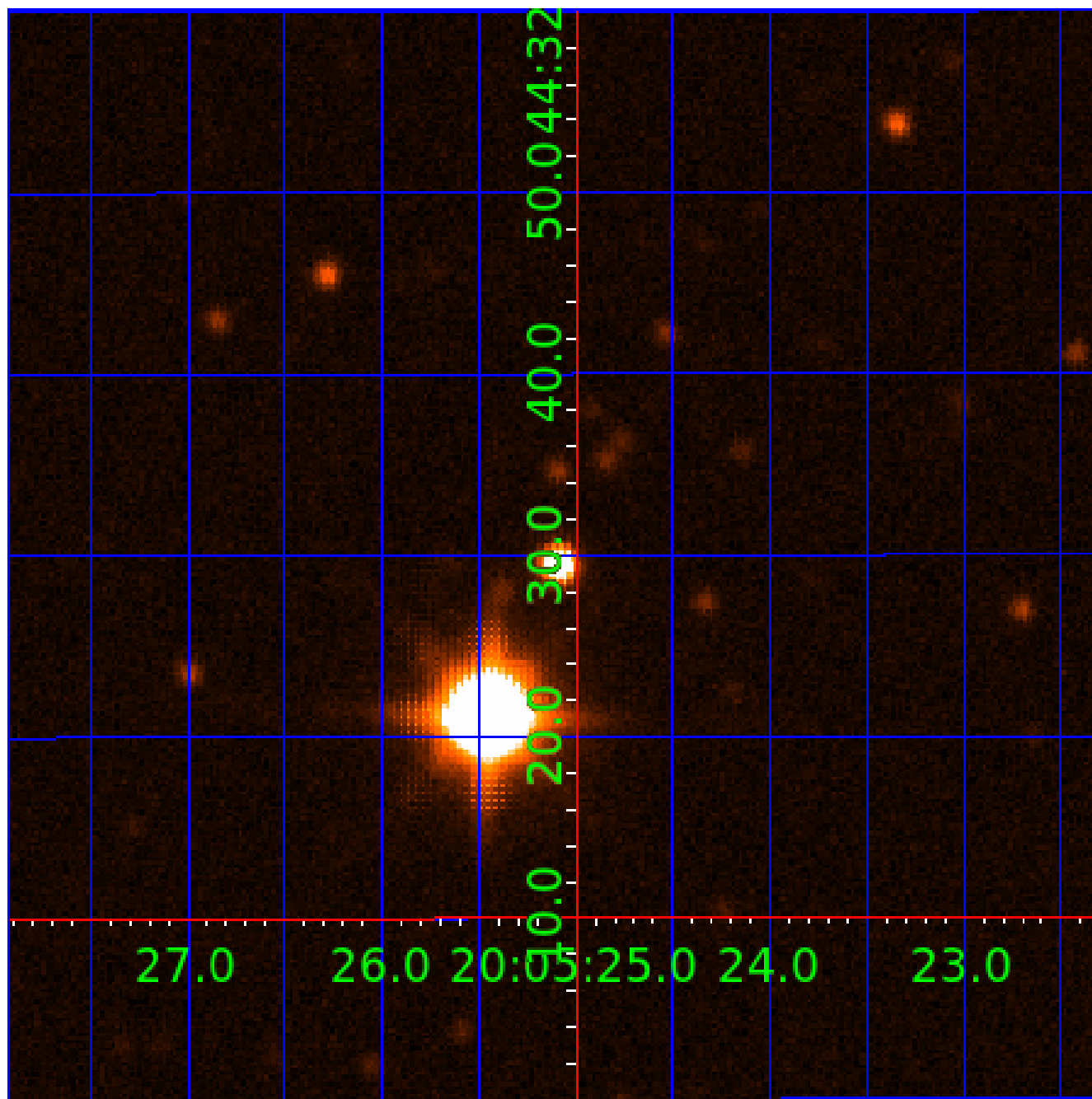


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 008526387

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})
008526387-01	OBS	No	257.125508	325.121000	3658.5	14.036	19.7	9.9	0.67	4535	5.00	0.36
008526387-02	OBS	7051.01	0.772808	131.704068	337.8	1.075	9.7	11.1	0.67	4535	1.48	822.17
008526387-03	OBS	No	161.849373	289.899982	3284.7	23.735	13.3	7.5	0.67	4535	7.47	0.66

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
008526387-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_MARSHALL—LPP_DV—ALL_TRANS_CHASES—INCONSISTENT_TRANS—CENT_FEW_DIFFS
008526387-02	OBS	FP	0.09	0	0	1	0	CENT_RESOLVED_OFFSET
008526387-03	OBS	FP	0.00	1	0	1	0	LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—INCONSISTENT_TRANS—CENT_FEW_DIFFS—HALO_GHOST

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.

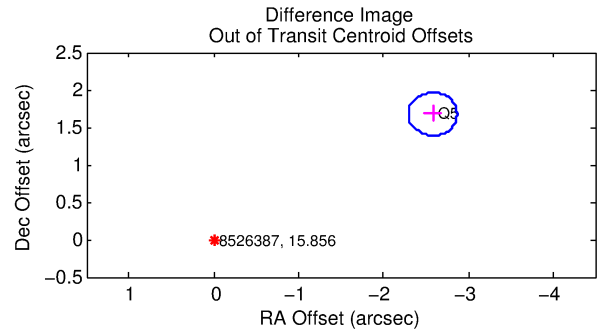
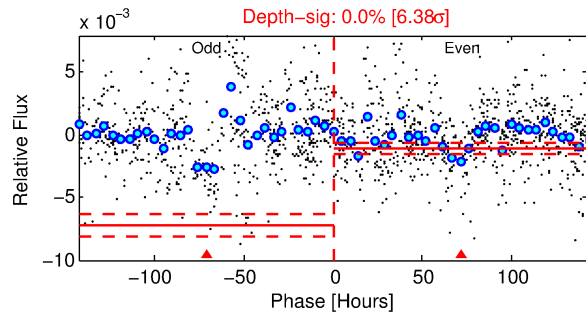
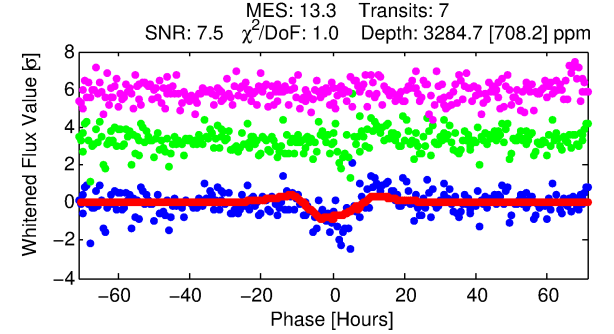
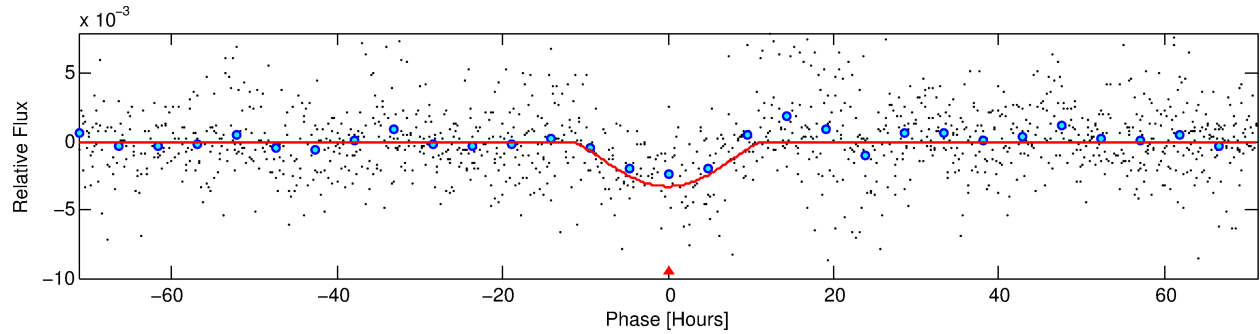
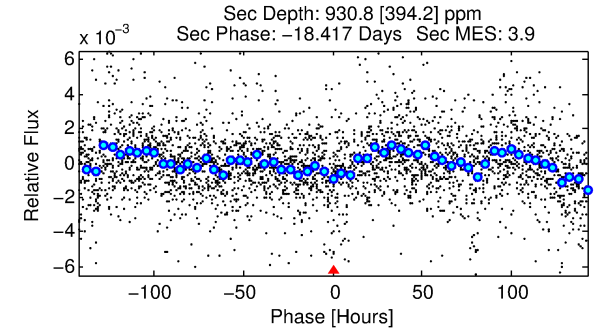
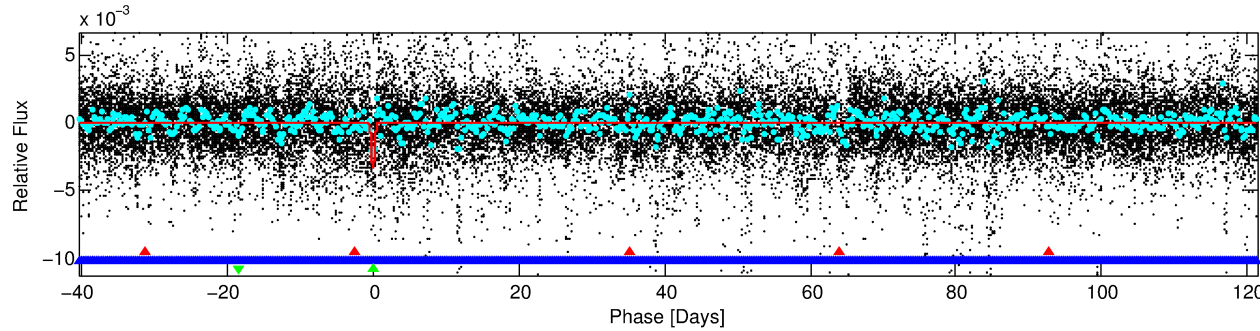
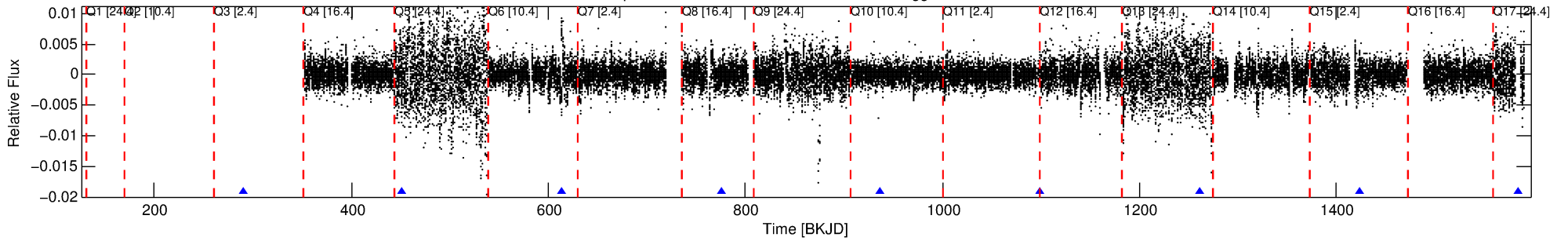
Ephemeris Match Information For 008526387-03

No Significant Match Found

DV One-Page Summary

KIC: 8526387 Candidate: 3 of 3 Period: 161.849 d
KOI: K07051 Corr: No Ephemeris Match

Kp: 15.86 R*: 0.67 Rs Teff: 4535.0 K Logg: 4.61 Fe/H: -0.160



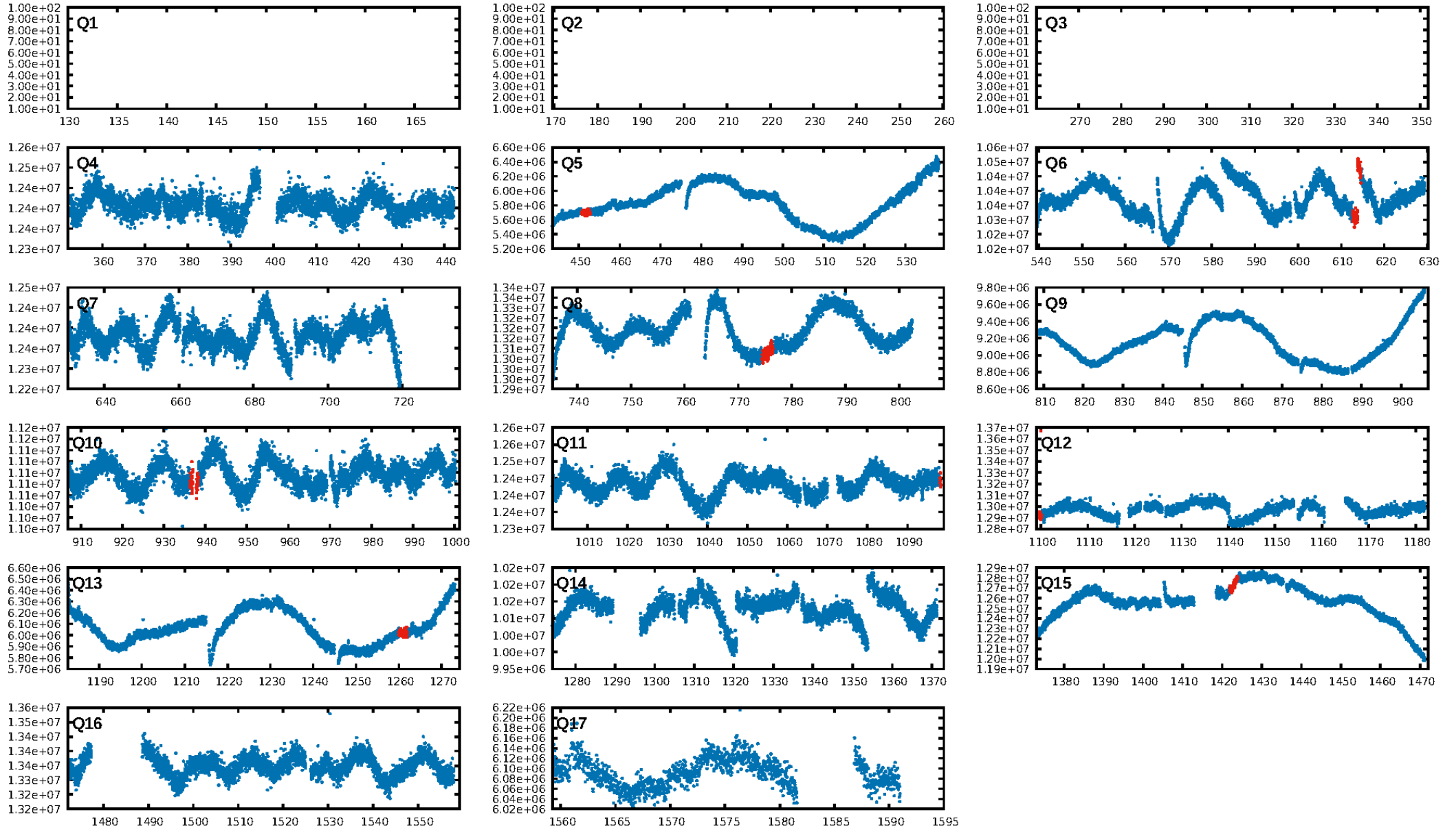
DV Fit Results:

Period = 161.84937 [0.01370] d
Epoch = 289.9000 [0.0614] BKJD
Rp/R* = 0.1024 [0.3271]
a/R* = 24.38 [14.27]
b = 1.00 [0.47]
Seff = 0.66 [0.11]
Teq = 230 [10] K
Rp = 7.47 [23.85] Re
a = 0.5058 [0.0364] AU
Ag = 2349.61 [15039.04] [0.16σ]
Teffp = 2475 [3961] K [0.57σ]

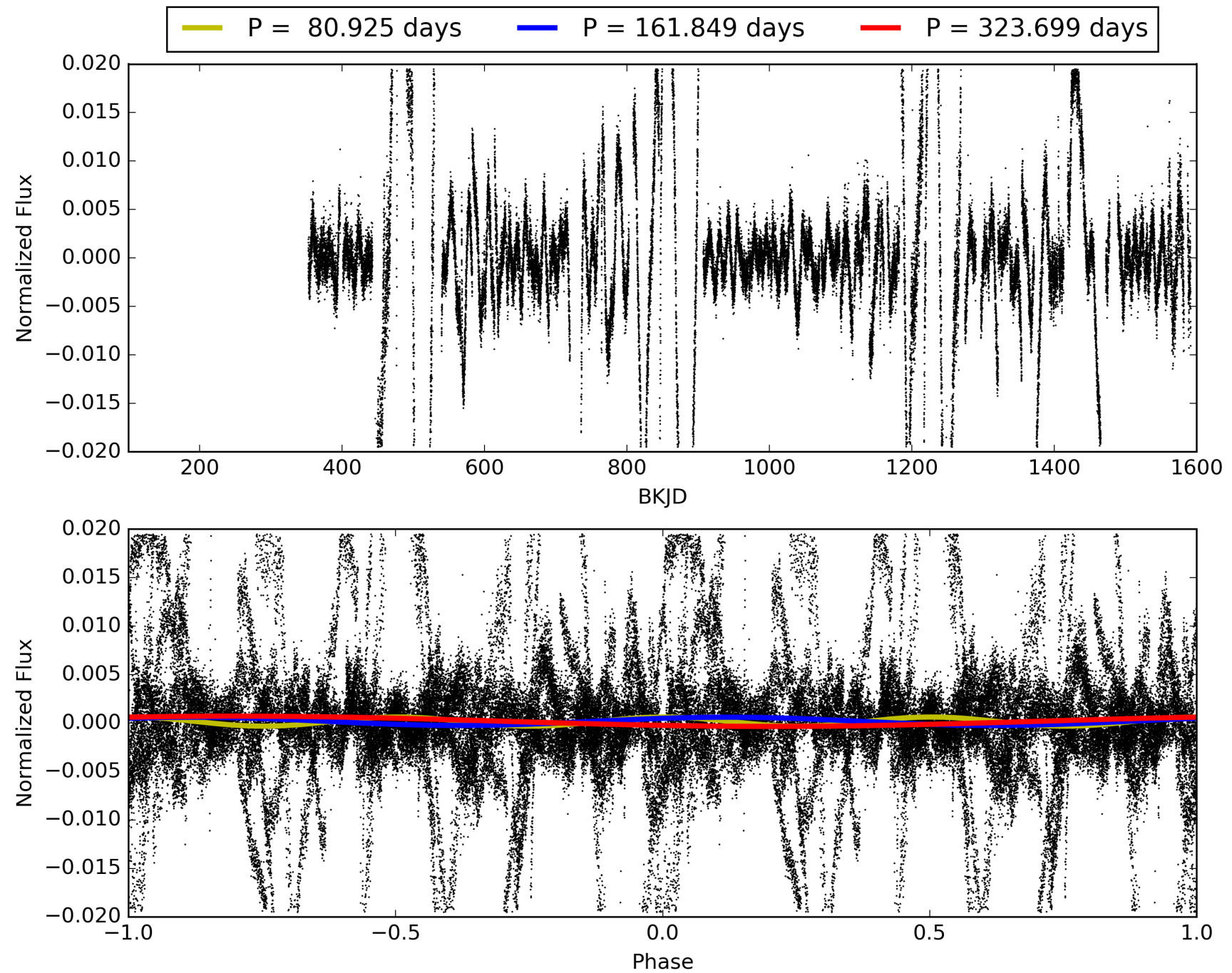
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [162.71σ]
LongPeriod-sig: 100.0% [82.92σ]
ModelChiSquare2-sig: 0.0%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: 1.08e-21
RollingBand-fgt: 1.00 [7/7]
GhostDiagnostic-chr: 0.06509
Centroid-sig: 16.5%
Centroid-so: 4.544 arcsec [48.32σ]
OotOffset-rm: 3.078 arcsec [32.24σ]
KicOffset-rm: 6.992 arcsec [69.92σ]
OotOffset-st: 0/0/0/1 [1]
KicOffset-st: 0/0/0/1 [1]
DiffImageQuality-fgm: 1.00 [1/1]
DiffImageOverlap-fno: 0.00 [0/5]

TCE 008526387-03, PDC Light Curves

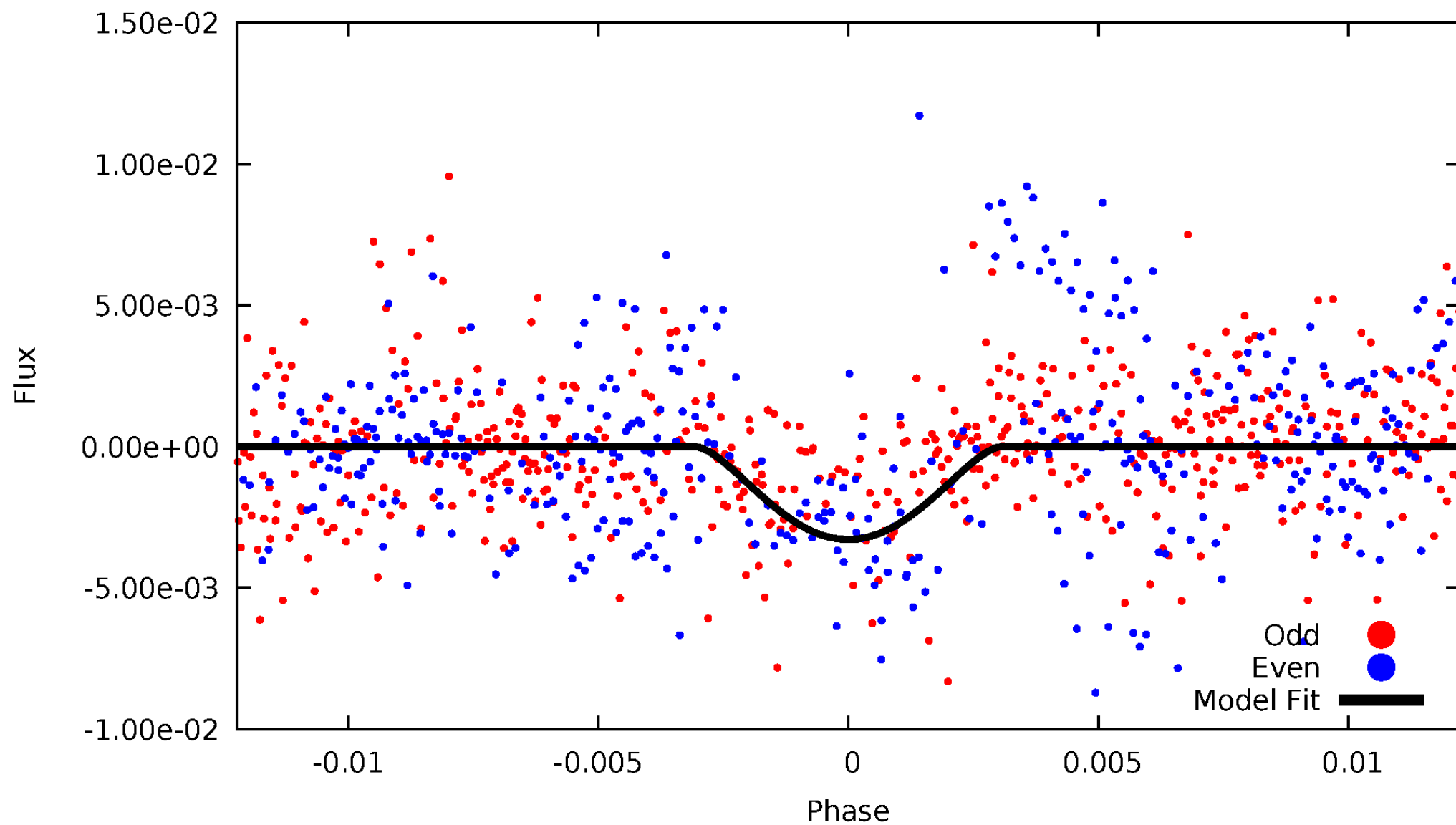


TCE 008526387-03



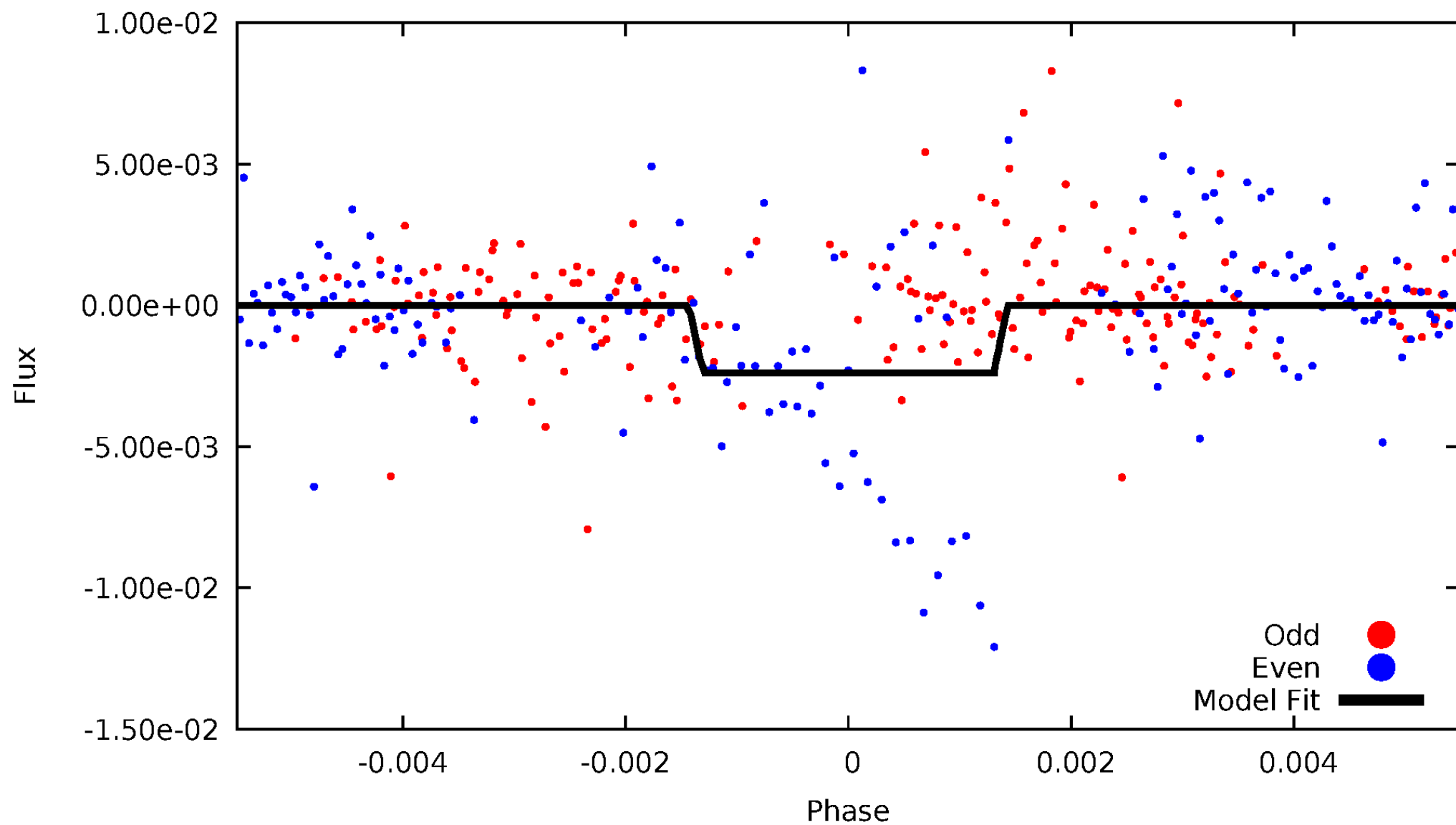
DV Odd/Even

TCE 008526387-03



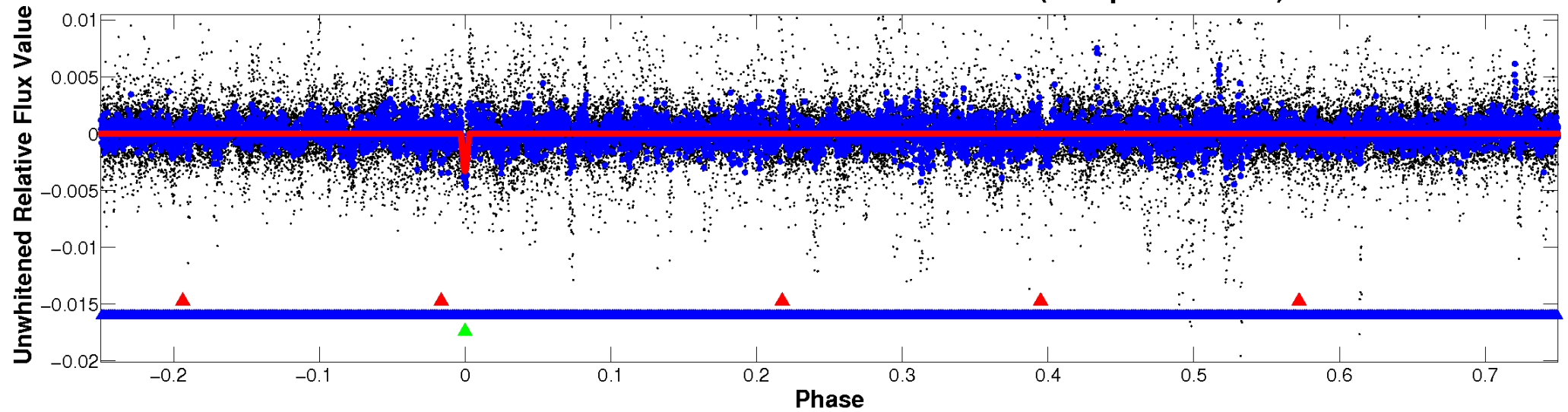
ALT Odd/Even

TCE 008526387-03

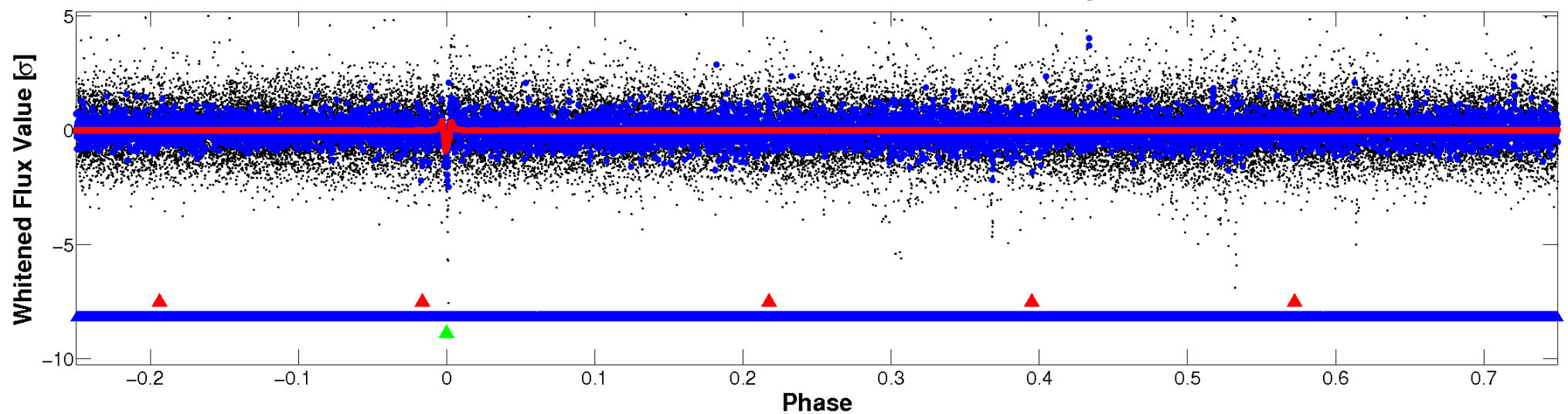


Non-Whitened Vs. Whitened Light Curve

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

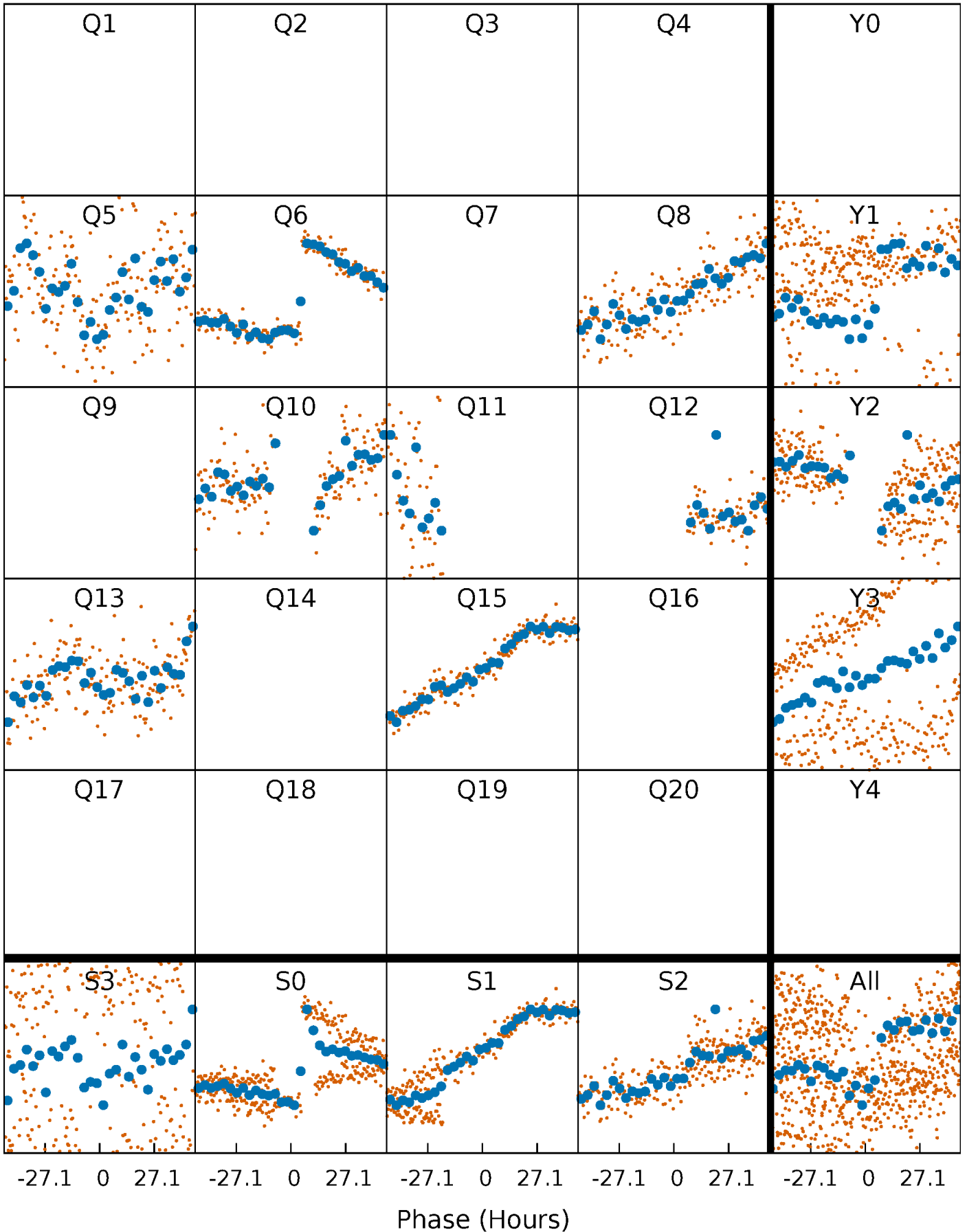


Planet 3 : Phased Whitened Flux Time Series (Fit Epoch/Period)



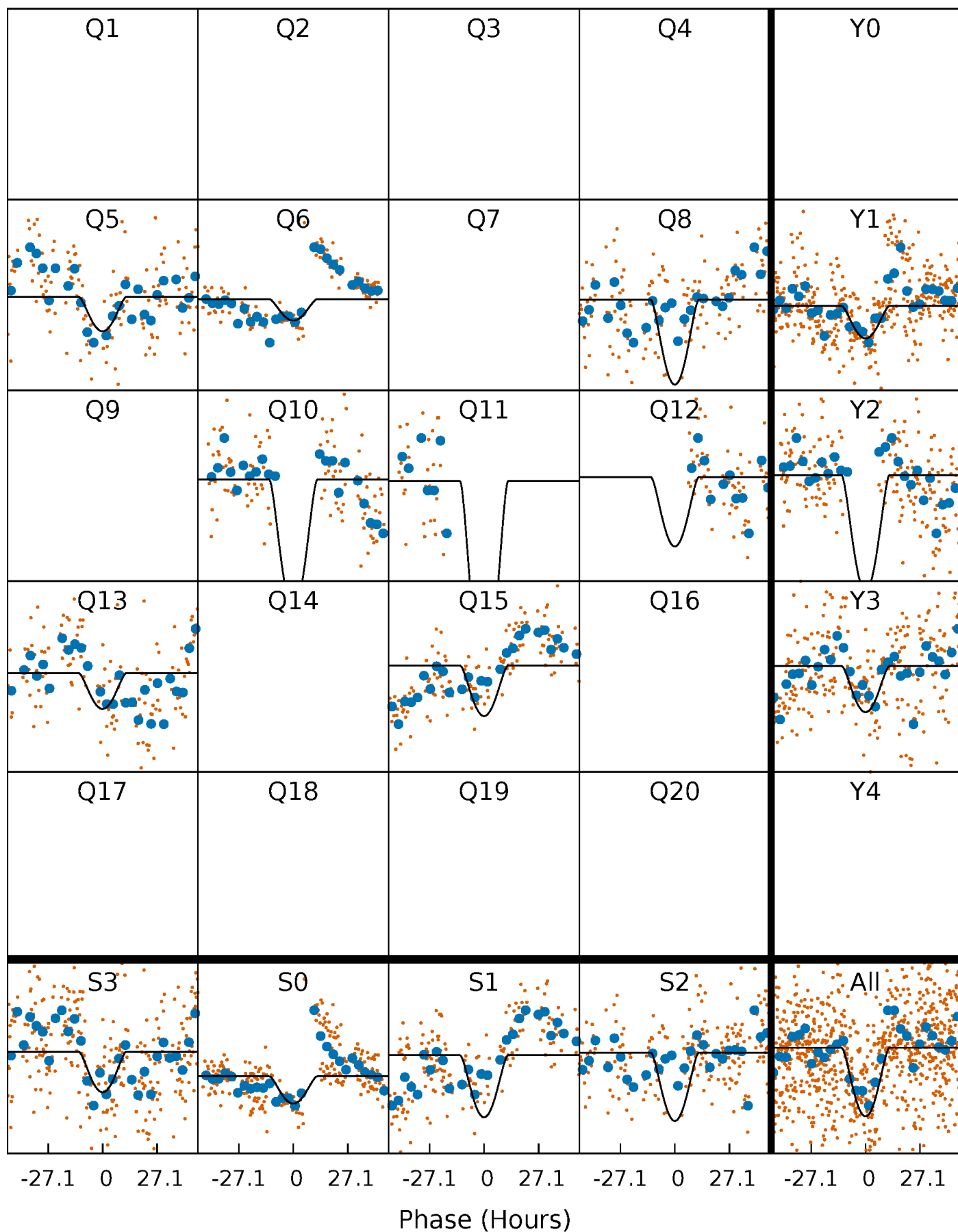
PDC Quarter-Phased Transit Curves

TCE 008526387-03 $P=161.849373$ Days $T_0=289.899983$ (BKJD)



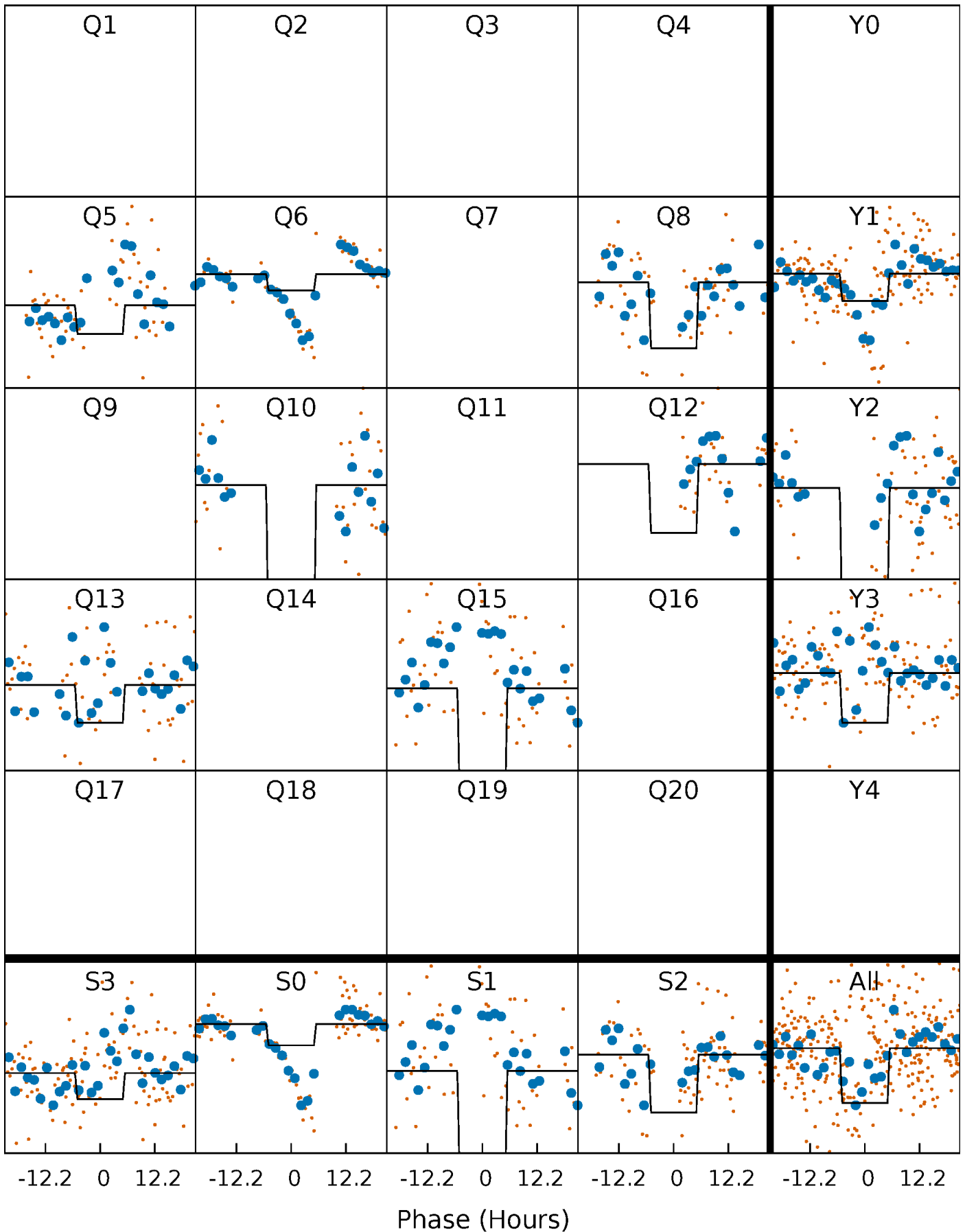
DV Quarter-Phased Transit Curves

TCE 008526387-03 $P=161.849373$ Days $T_0=289.899983$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

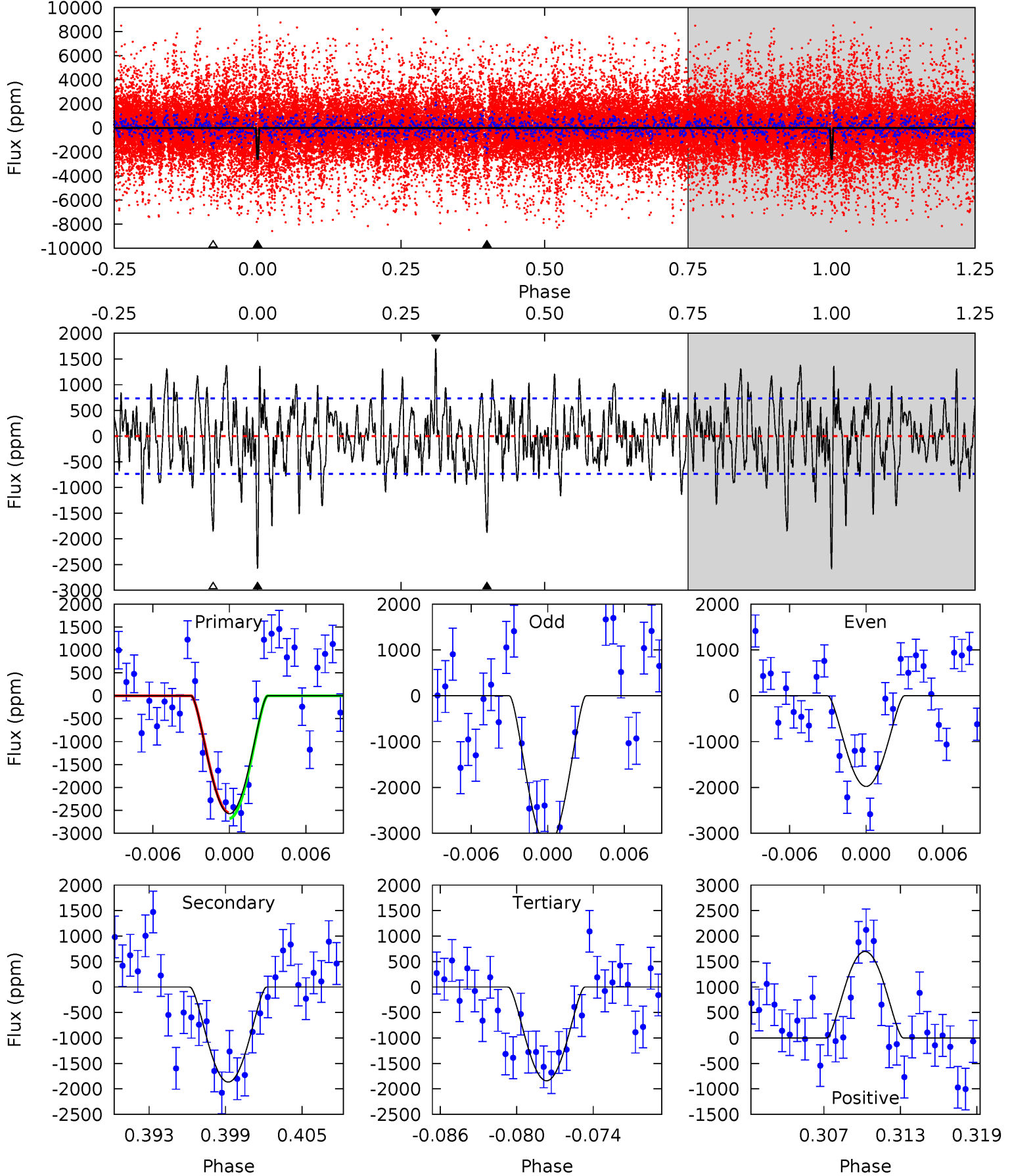
TCE 008526387-03 P=161.922341 Days $T_0=289.751945$ (BKJD)



DV Model-Shift Uniqueness Test

008526387-03, P = 161.849373 Days, E = 289.899983 Days

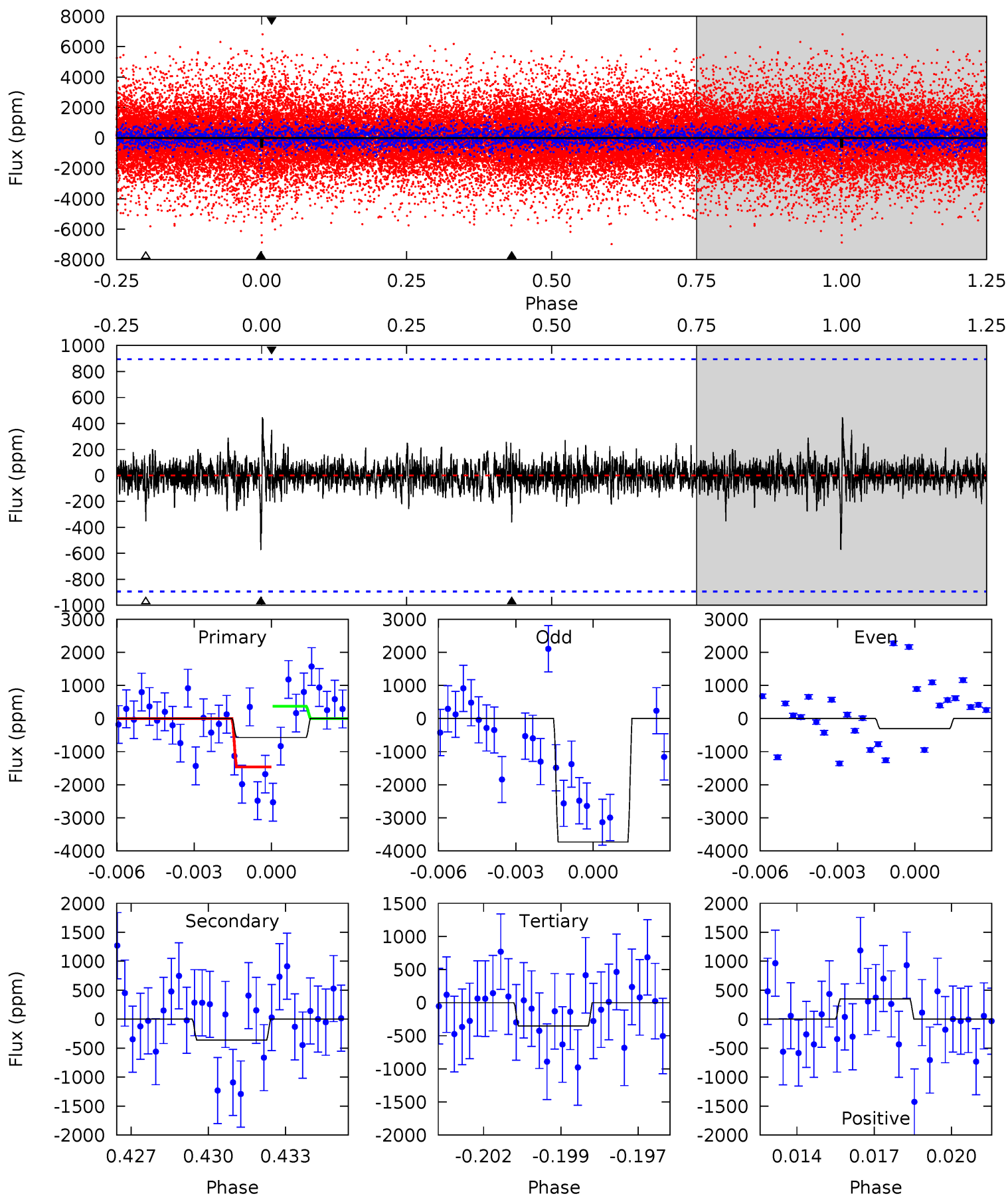
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
18.0	13.0	12.8	11.8	5.12	2.74	3.59	5.11	6.11	0.18	1.17	4.21	1.03	0.40	0.44



Alt Model-Shift Uniqueness Test

008526387-03, P = 161.922341 Days, E = 289.751945 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
3.38	2.12	2.07	2.06	5.26	2.98	0.45	1.30	1.32	0.05	0.06	10.7	4.06	0.44	3.17



Stellar Parameters For KIC 008526387

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (g \cdot \text{cm}^{-3})$
	4535^{+159}_{-159}	$4.607^{+0.052}_{-0.028}$	$-0.160^{+0.300}_{-0.300}$	$0.668^{+0.048}_{-0.060}$	$0.659^{+0.075}_{-0.054}$	$3.111^{+0.776}_{-0.351}$
	+4%/-4%	+1%/-1%	+188%/-188%	+7%/-9%	+11%/-8%	+25%/-11%
Source	KIC0	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 008526387-03 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-1866 ± 143	$19.00^{+18.07}_{-13.03}$	320^{+12}_{-13}	2589^{+995}_{-379}	721^{+6815}_{-527}
Alt.	-361 ± 170	$15.92^{+18.31}_{-11.32}$	319^{+12}_{-12}	2196^{+768}_{-353}	183^{+1826}_{-150}

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

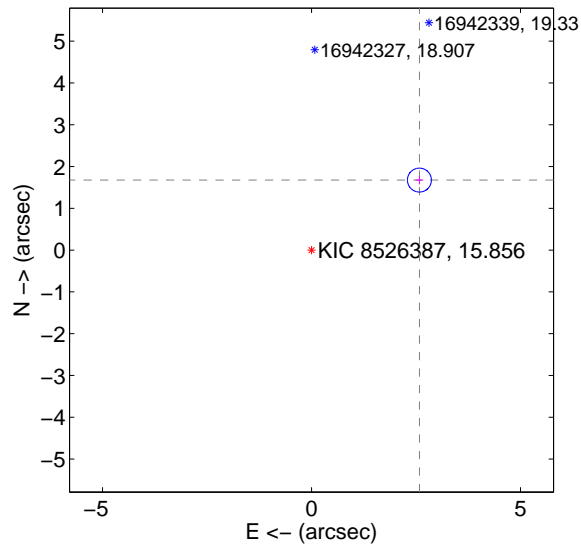
Supplemental centroid analysis for 008526387-03. Kepler magnitude: 15.86. Transit SNR 7.50

There are 1 quarters with good PRF difference image offsets

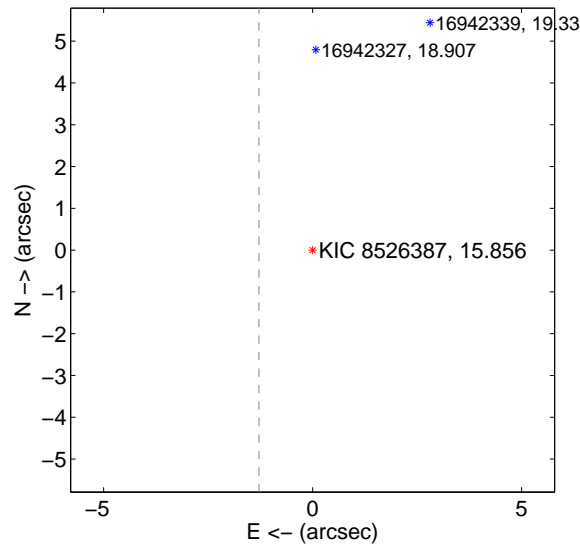
The OOT PRF centroid is offset from the target star catalog position by about 9.38 arcsec so the offset from difference PRF-fit to OOT-fit may be invalid.

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	3.078 ± 0.095	32.24	-2.582 ± 0.093	1.676 ± 0.100
PRF-fit source offset from KIC position	6.992 ± 0.100	69.92	1.284 ± 0.093	-6.873 ± 0.100
photometric centroid source offset	4.54 ± 0.09	48.32	2.34 ± 0.09	-3.90 ± 0.10

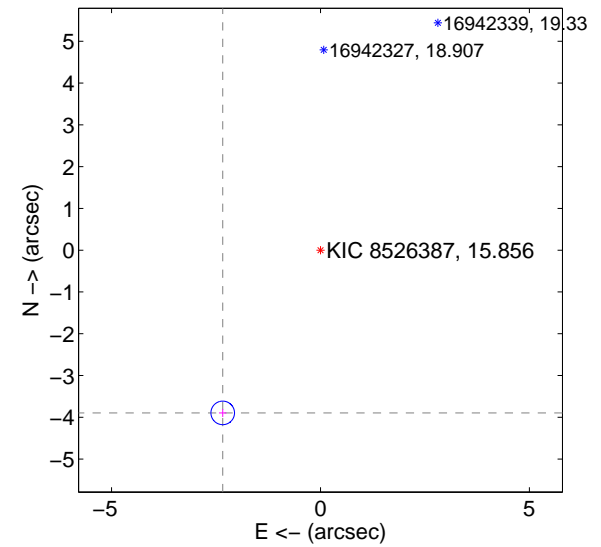
offset from difference PRF-fit to OOT PRF-fit



offset from difference PRF-fit to KIC position



offset from photometric centroids

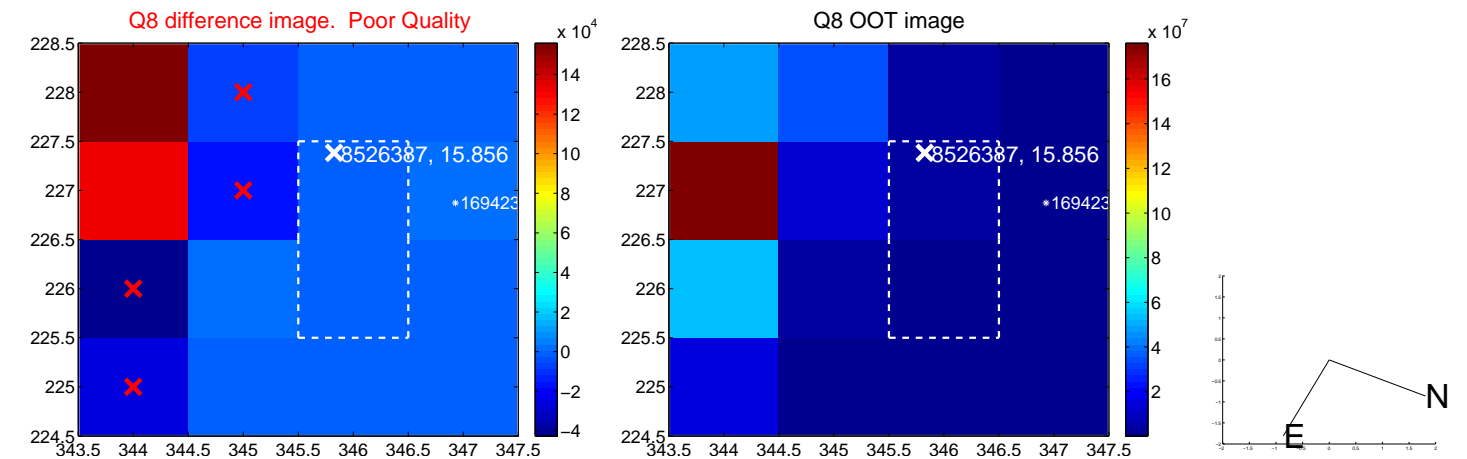
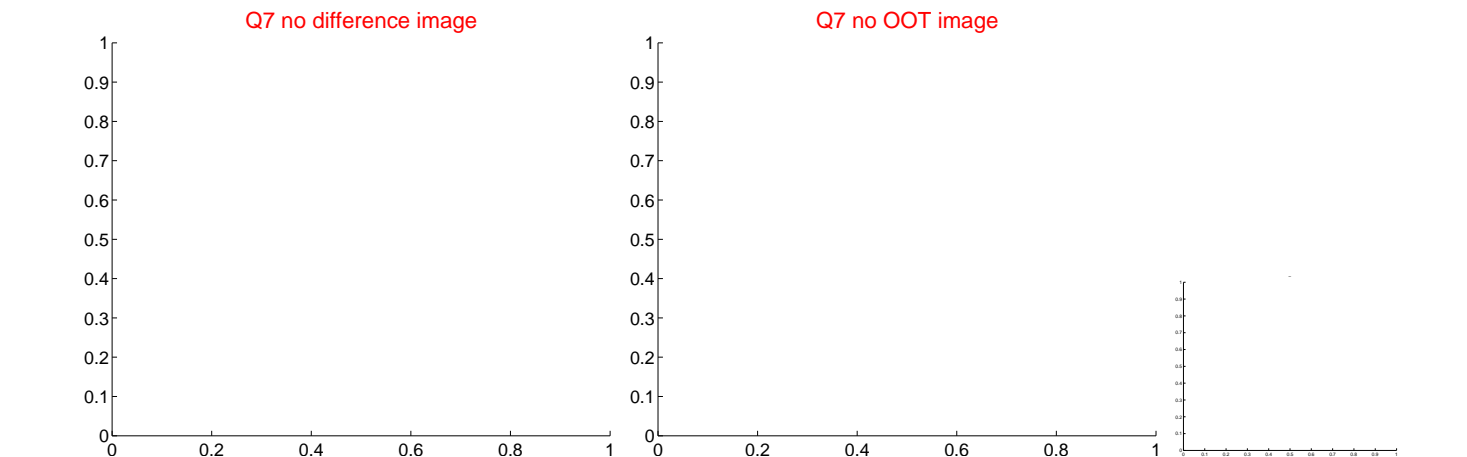
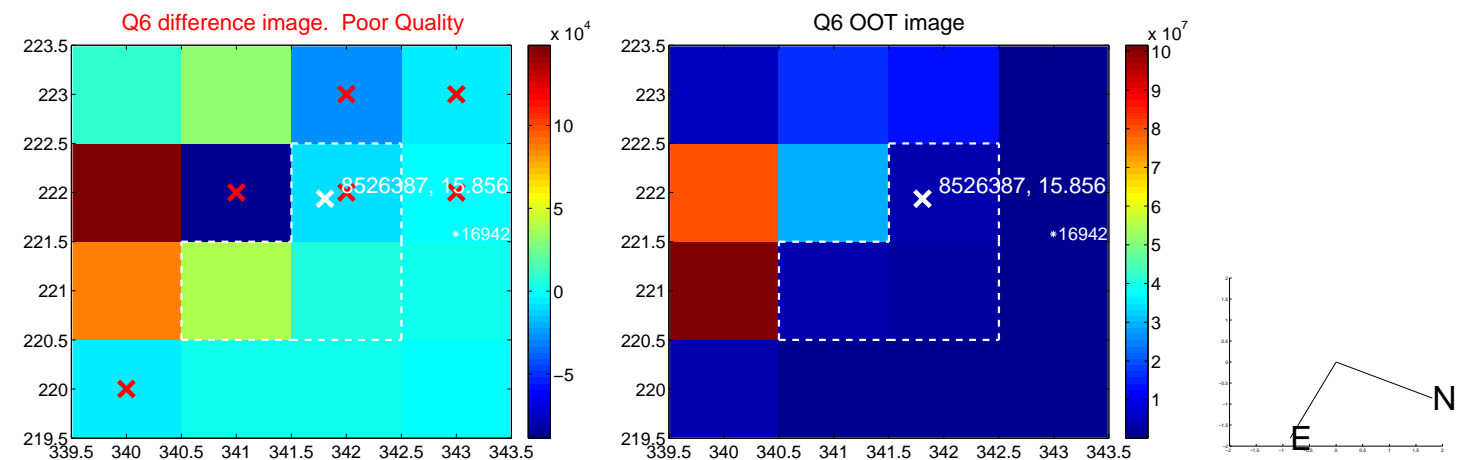
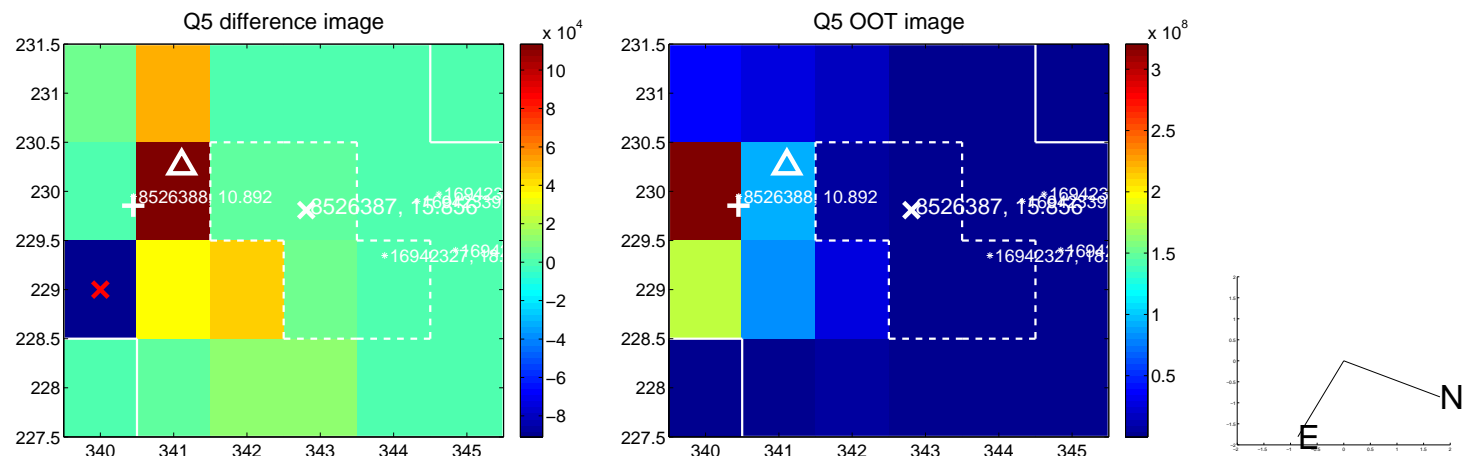


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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



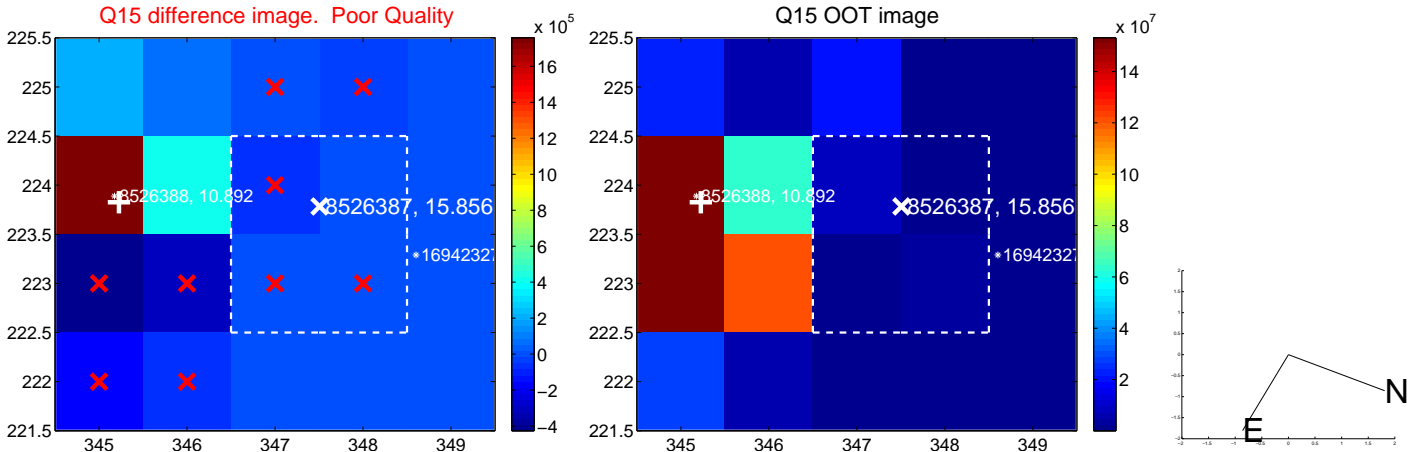
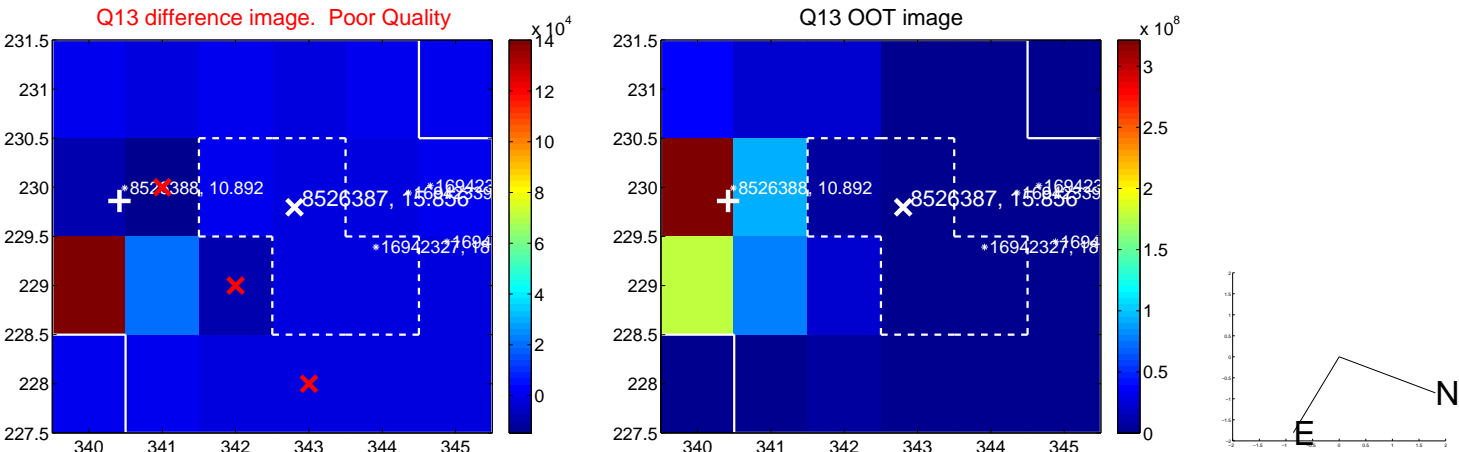
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



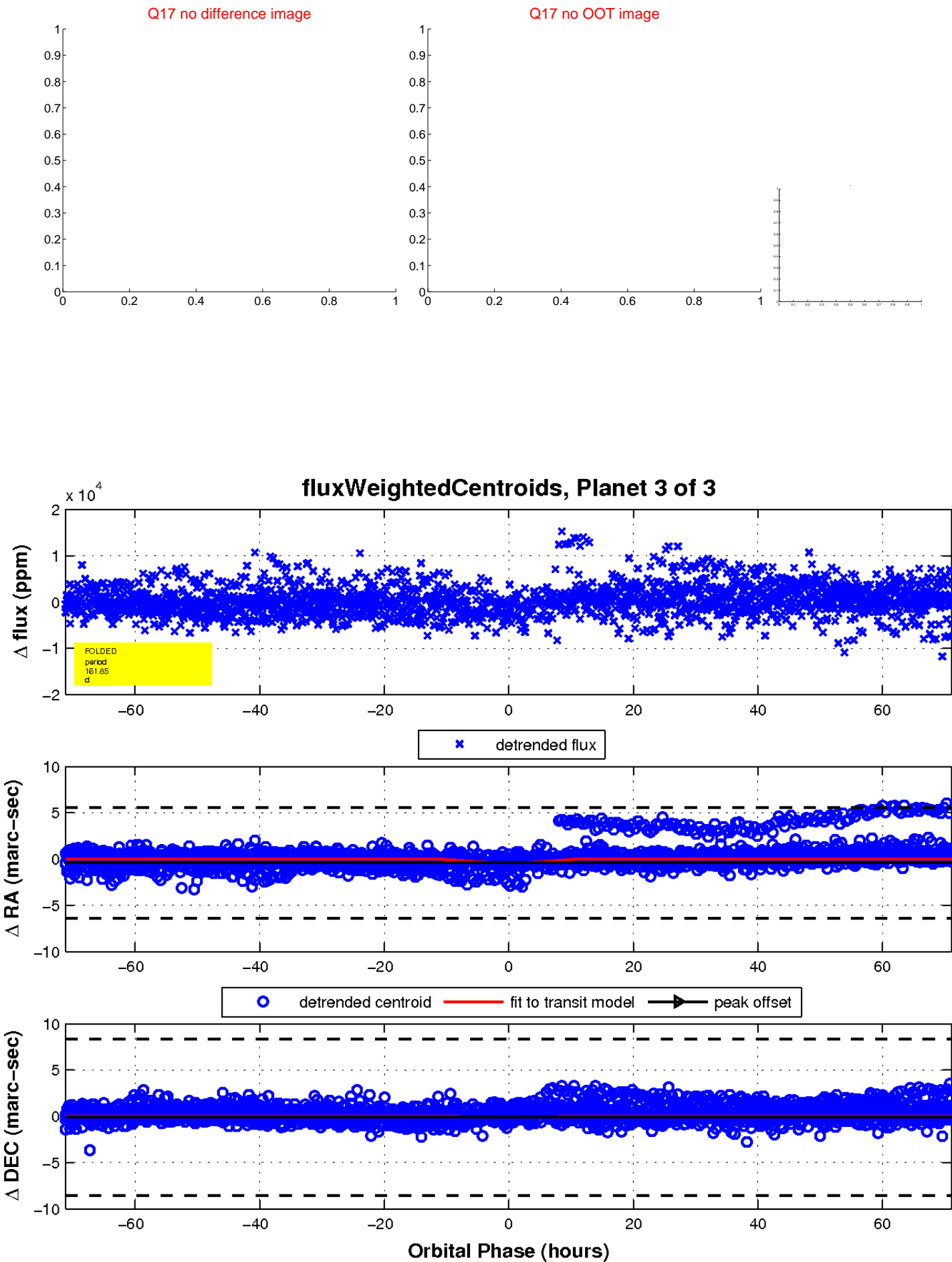
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



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



UKIRT Image

Declination

