

KIC 010801647

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})
010801647-01	OBS	No	330.368090	409.311041	545.5	2.752	12.3	3.9	1.34	5883	3.22	2.13
010801647-02	OBS	No	0.753128	132.146344	26.9	4.372	7.9	5.1	1.34	5883	0.70	7093.62
010801647-03	OBS	No	299.804795	380.050453	2225.8	4.522	11.3	9.5	1.34	5883	6.50	2.42
010801647-04	OBS	No	197.368302	162.652256	138.6	0.727	12.3	0.7	1.34	5883	1.67	4.23
010801647-05	OBS	No	197.363503	162.428687	731.8	4.635	11.5	5.3	1.34	5883	3.64	4.23
010801647-06	OBS	No	146.937679	192.093369	2298.7	18.590	10.3	7.3	1.34	5883	12.14	6.27
010801647-07	OBS	No	93.083145	189.730328	102.6	3.437	8.4	0.9	1.34	5883	1.62	11.52
010801647-08	OBS	No	268.163039	281.469485	363.3	6.000	9.8	-1.0	1.34	5883	2.54	2.81

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
010801647-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_MARSHALL_SKYE—LPP_DV—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—INCONSISTENT_TRANS
010801647-02	OBS	FP	0.00	1	0	0	0	LPP_DV
010801647-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_CHASES_MARSHALL—LPP_ALT—ALL_TRANS_CHASES—INCONSISTENT_TRANS—CENT_FEW_DIFFS
010801647-04	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_MARSHALL_SKYE_TRACKER—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—INCONSISTENT_TRANS
010801647-05	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_MARSHALL_SKYE—TRANS_GAPPED—LPP_DV—ALL_TRANS_CHASES—MOD_POS_DV—INCONSISTENT_TRANS—SAME_NTL_PERIOD
010801647-06	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—INCONSISTENT_TRANS
010801647-07	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_TRACKER—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT
010801647-08	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_MARSHALL—ALL_TRANS_CHASES—NO_FITS—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.

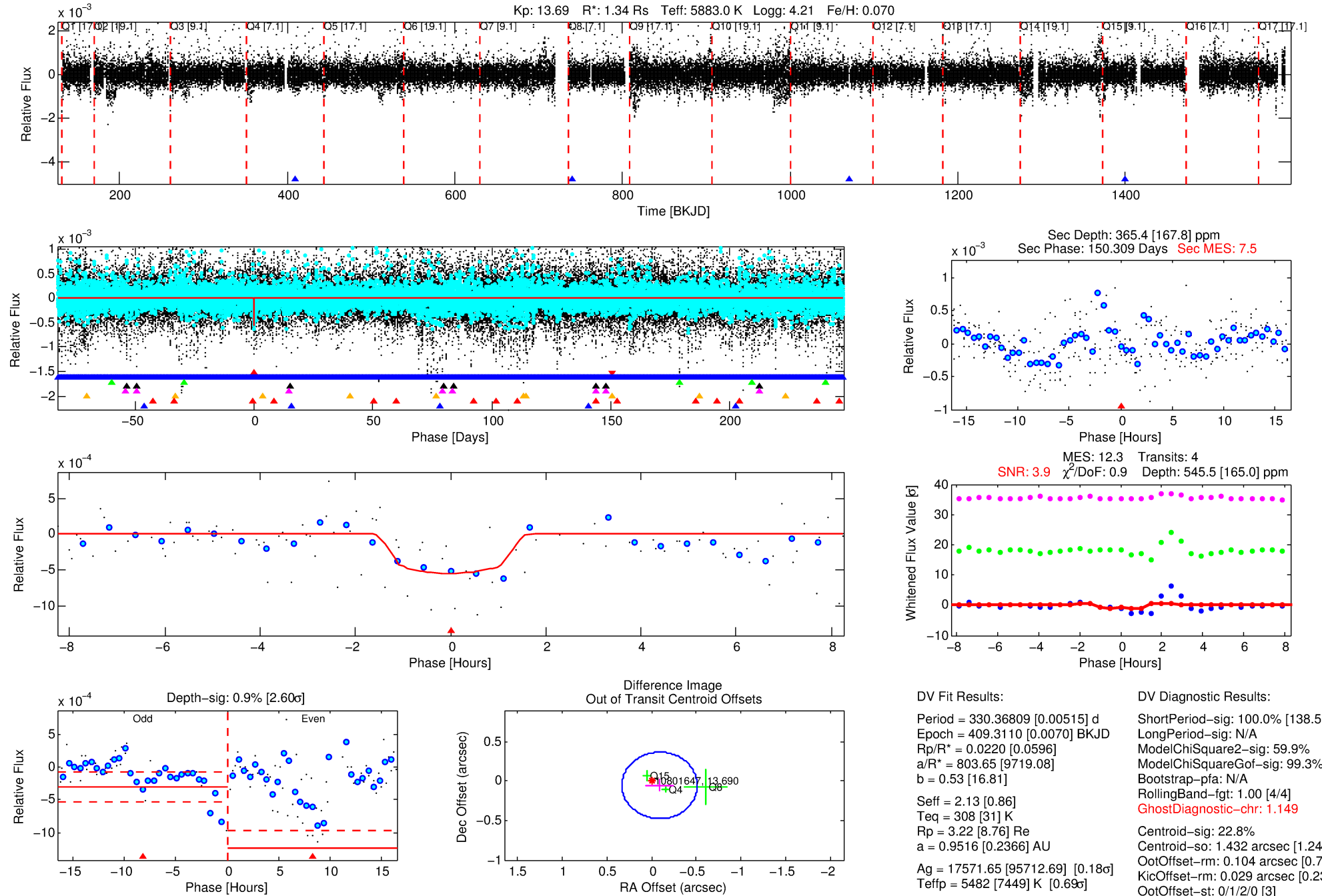
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 010801647-01

No Significant Match Found

DV One-Page Summary

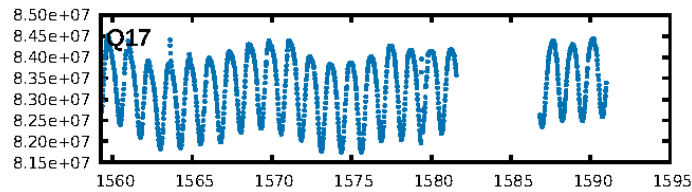
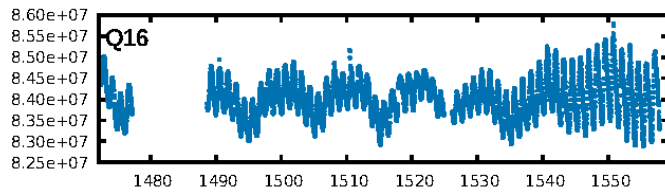
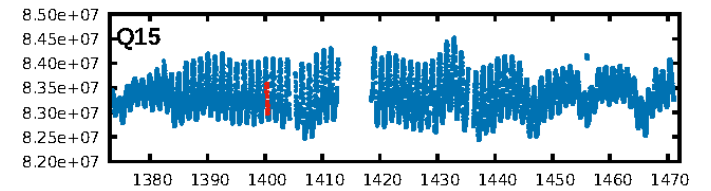
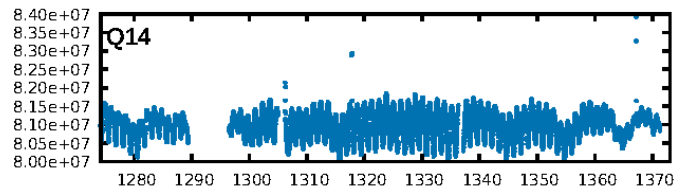
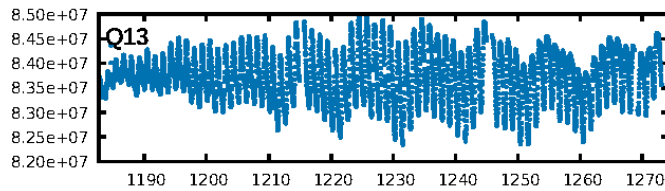
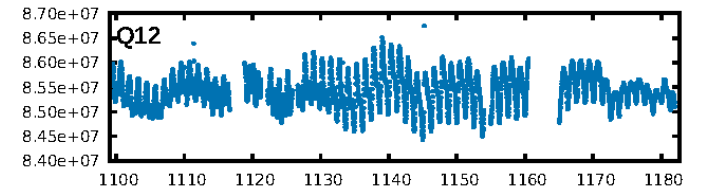
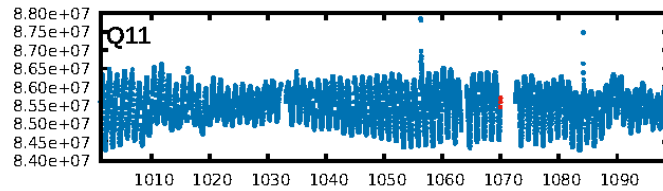
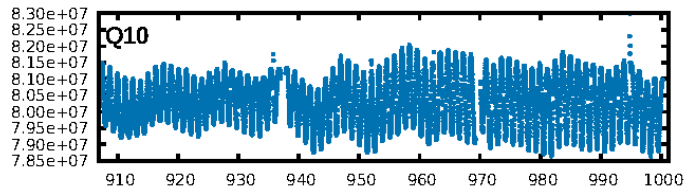
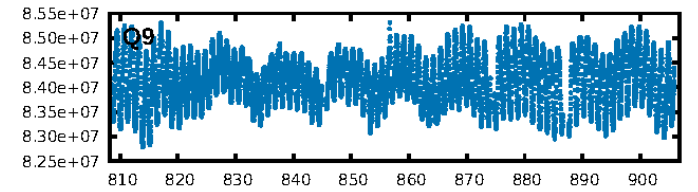
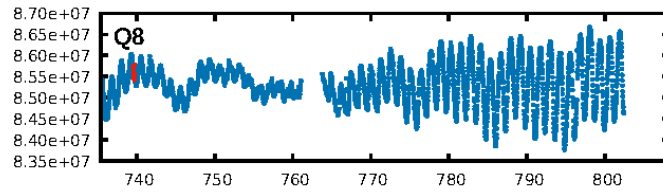
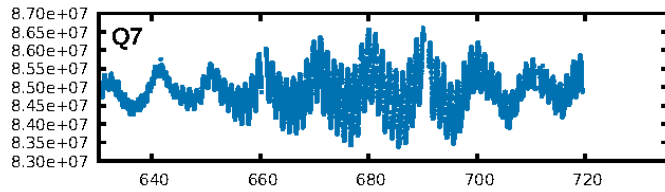
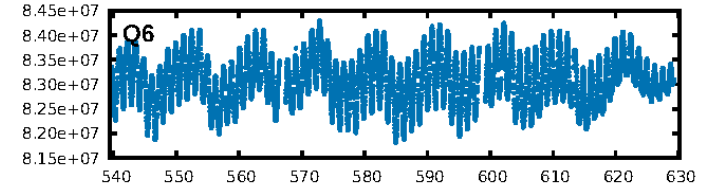
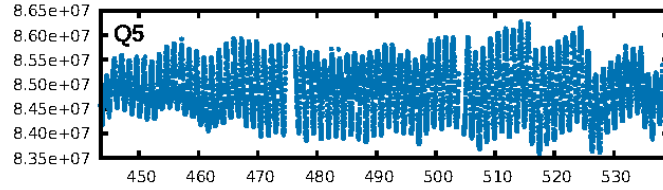
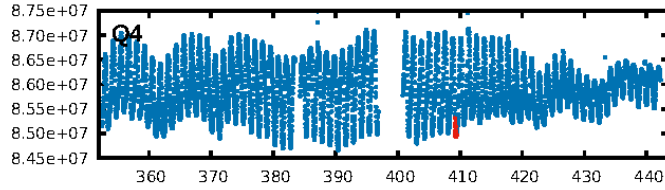
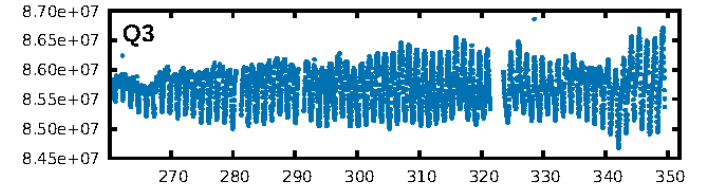
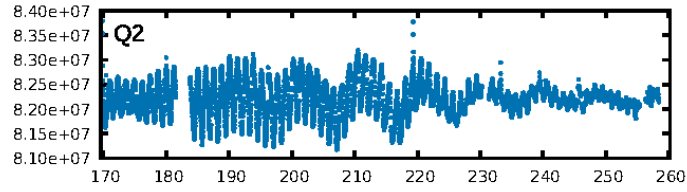
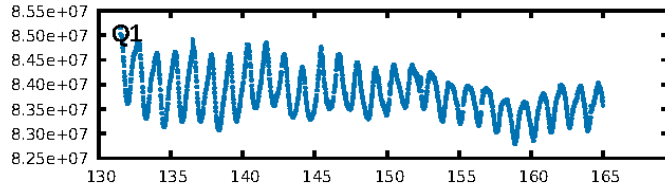
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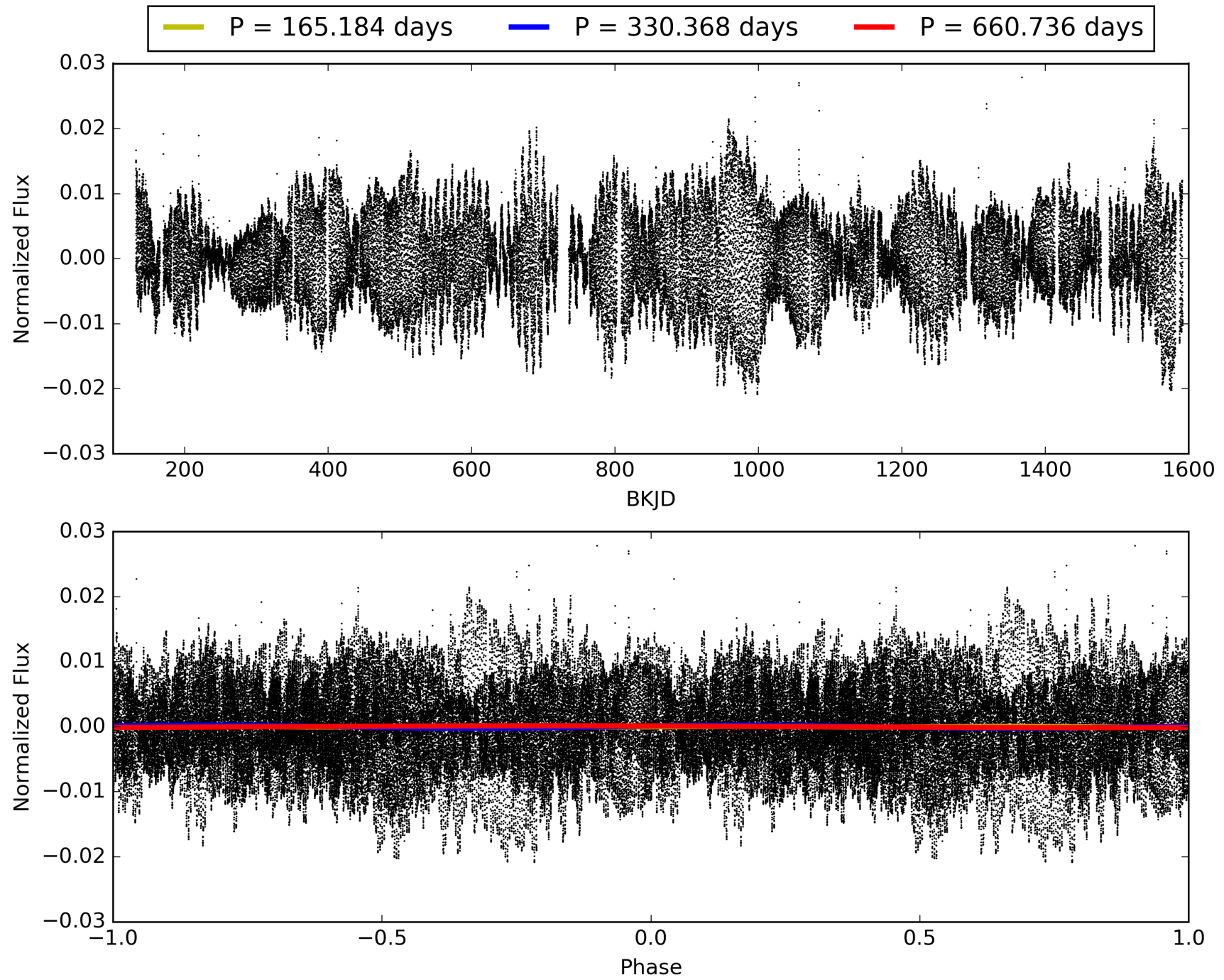
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This Data Validation Report Summary was produced in the Kepler Science Operations Center Pipeline at NASA Ames Research Center

TCE 010801647-01, PDC Light Curves

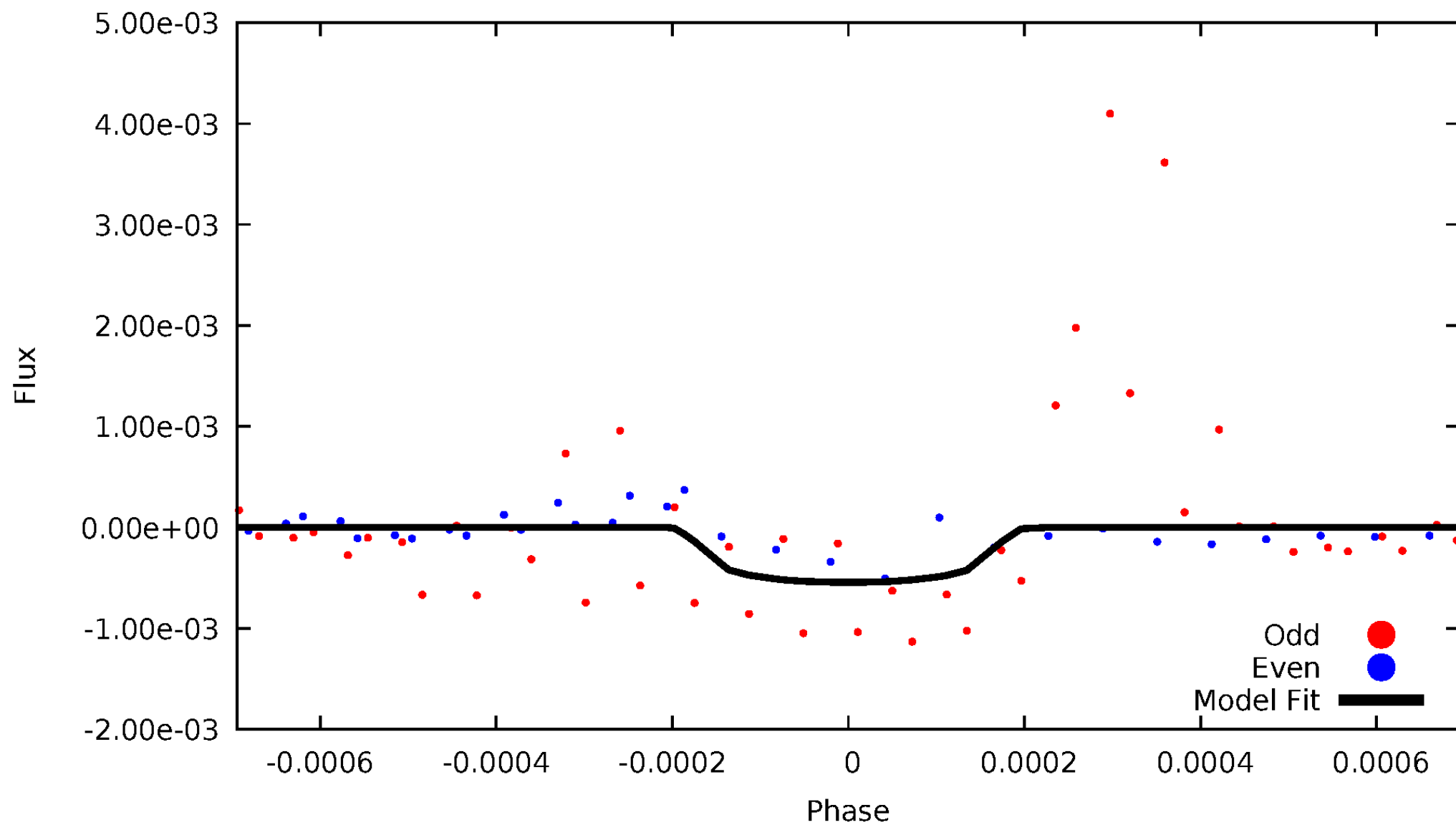


TCE 010801647-01



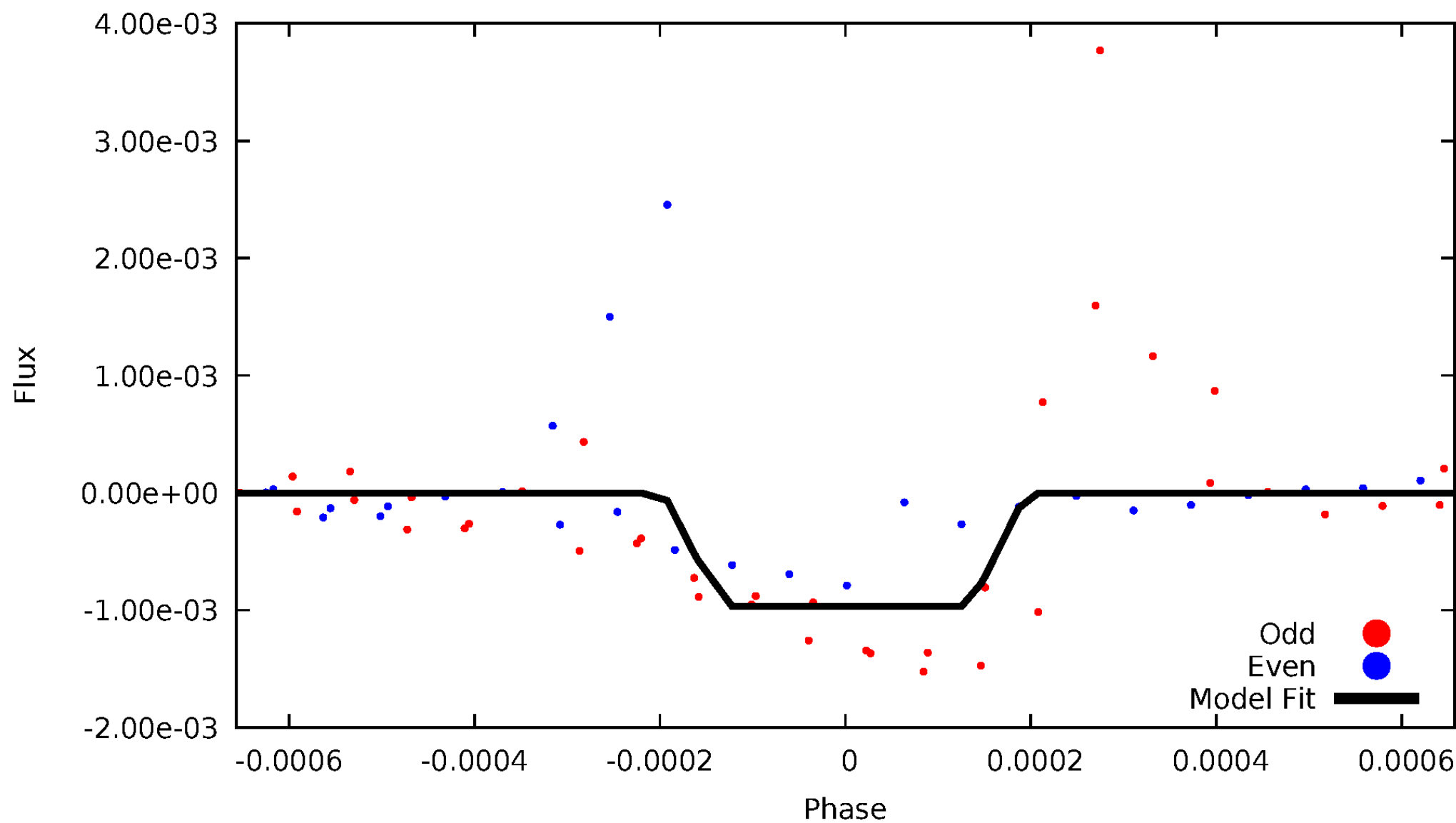
DV Odd/Even

TCE 010801647-01



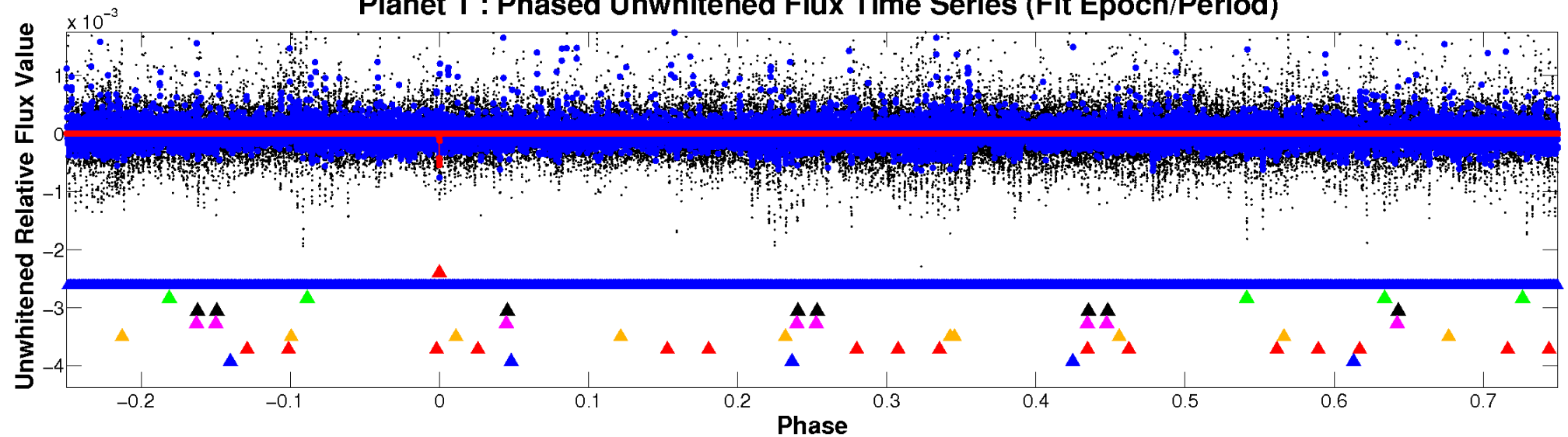
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TCE 010801647-01

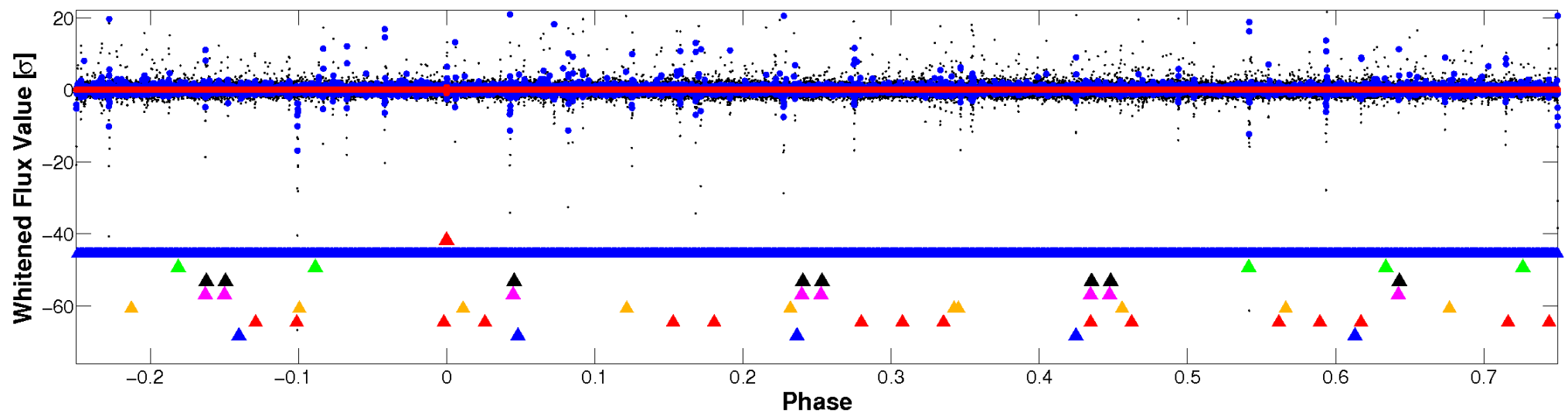


Non-Whitened Vs. Whitened Light Curve

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

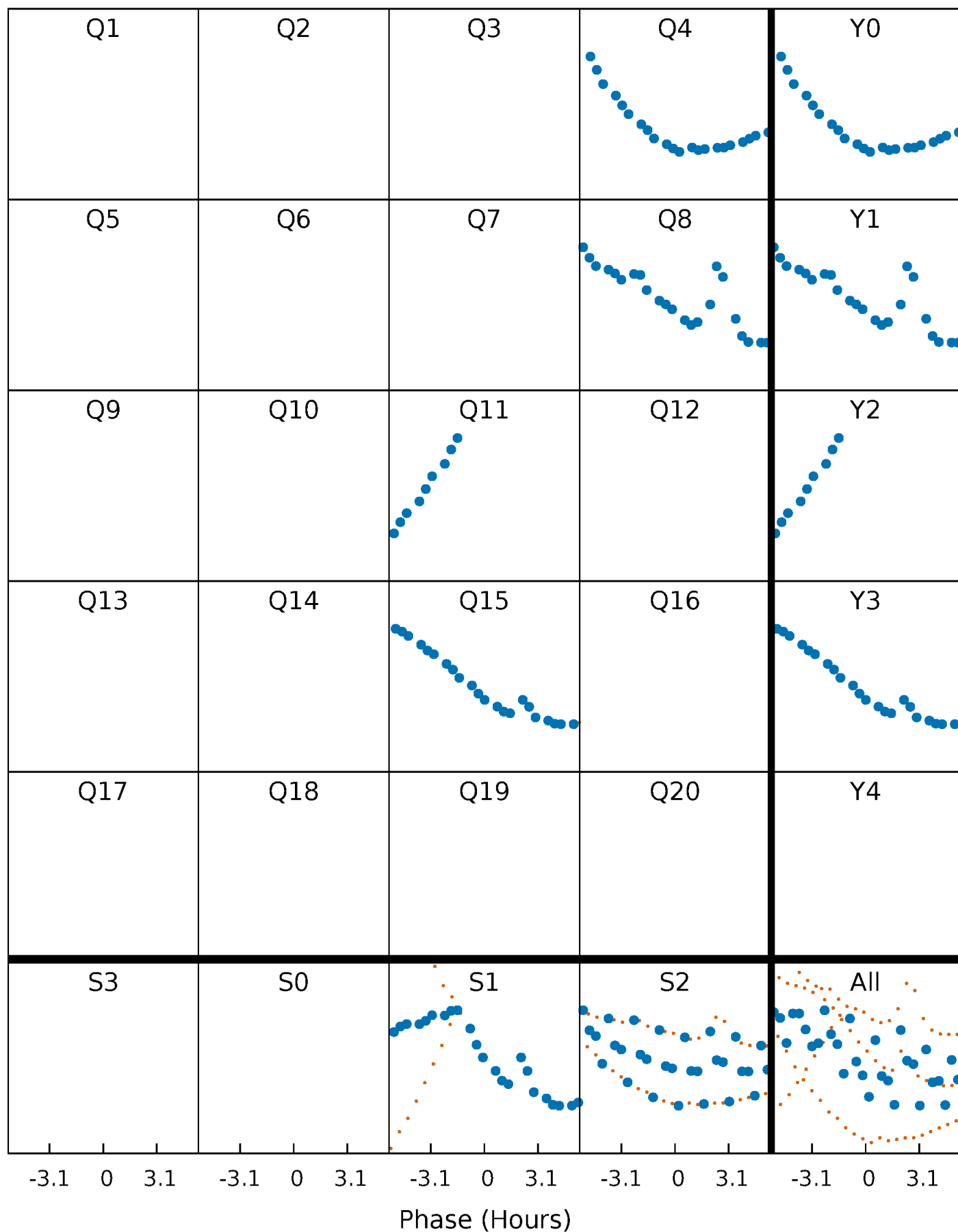


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



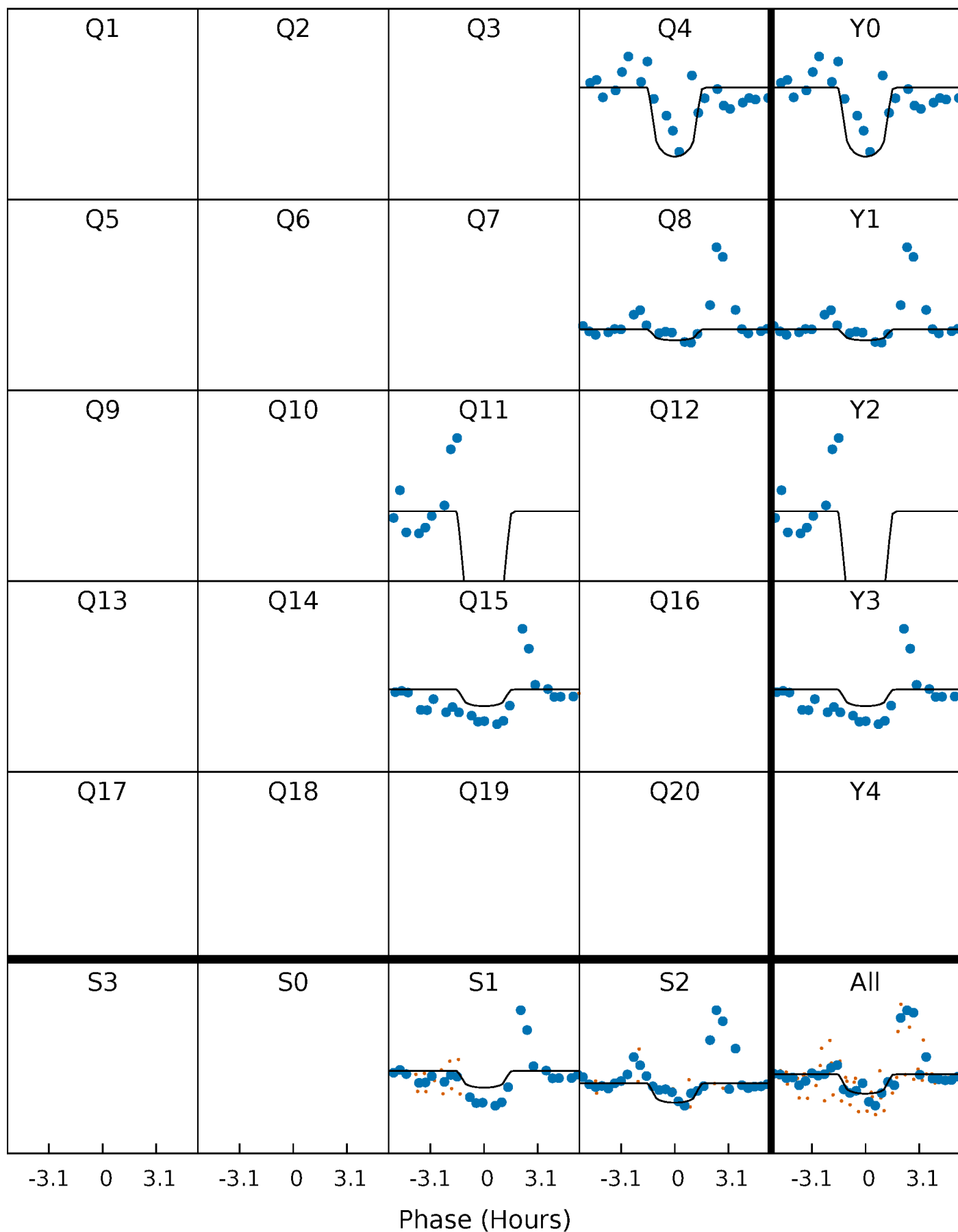
PDC Quarter-Phased Transit Curves

TCE 010801647-01 P=330.368090 Days $T_0=409.311041$ (BKJD)



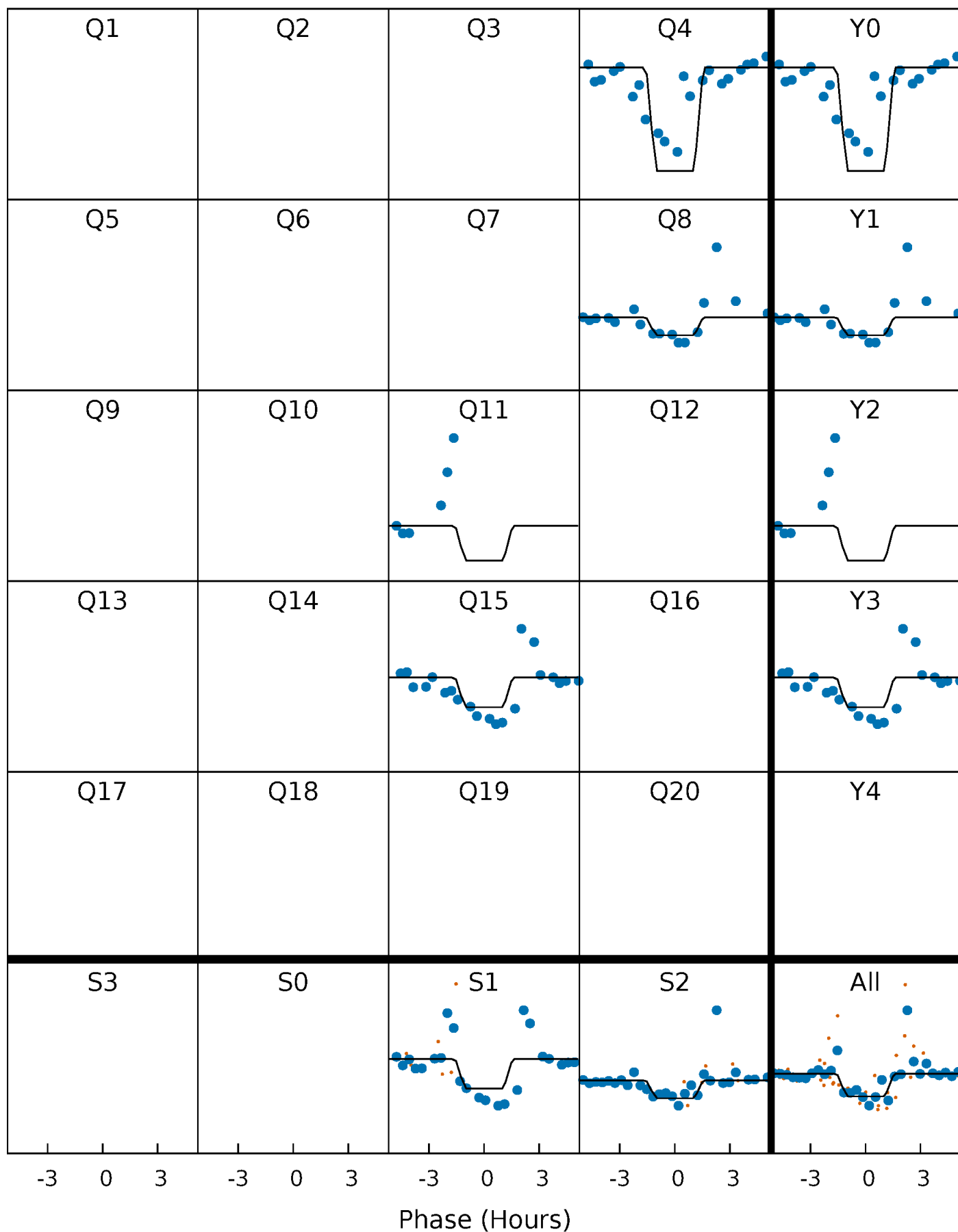
DV Quarter-Phased Transit Curves

TCE 010801647-01 P=330.368090 Days $T_0=409.311041$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

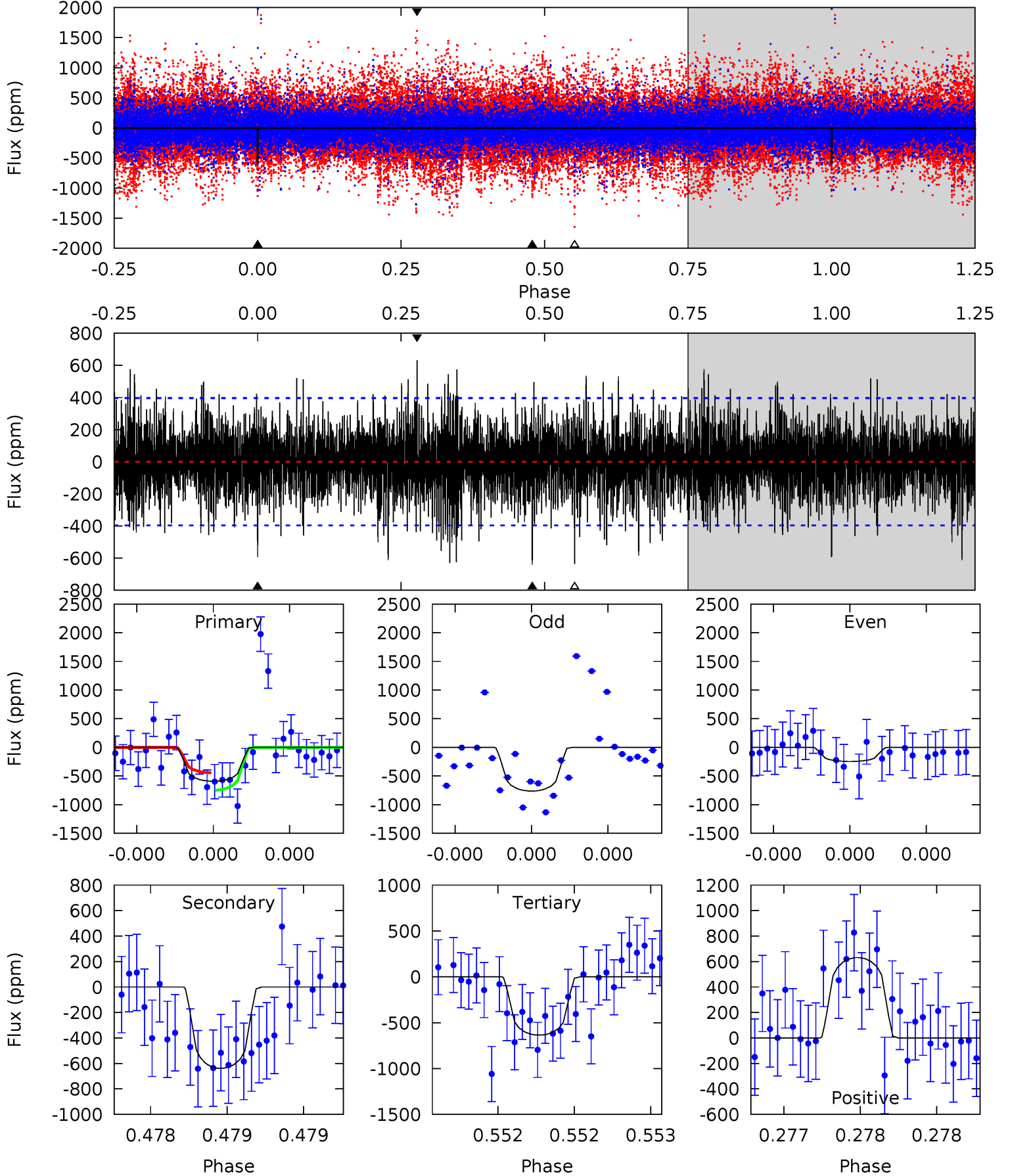
TCE 010801647-01 P=330.362405 Days $T_0=409.324278$ (BKJD)



DV Model-Shift Uniqueness Test

010801647-01, P = 330.368090 Days, E = 78.942951 Days

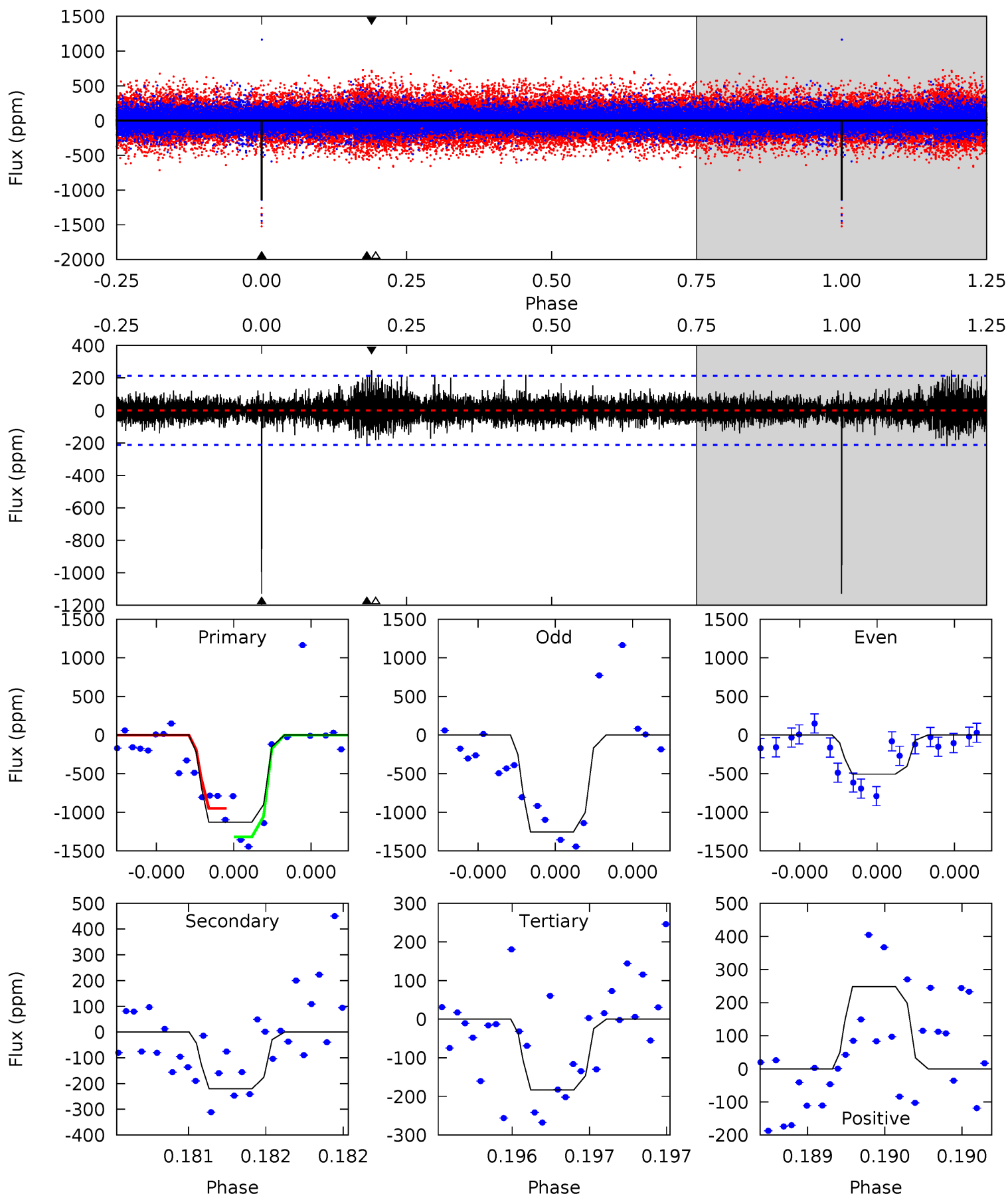
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
8.38	9.03	8.98	8.92	5.60	3.52	2.15	-0.61	-0.54	0.04	0.11	3.41	1.53	0.50	2.17



Alt Model-Shift Uniqueness Test

010801647-01, P = 330.362405 Days, E = 78.961873 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
29.8	5.80	4.84	6.56	5.62	3.55	1.13	24.9	23.2	0.97	-0.75	9.74	0.87	0.18	4.86



Stellar Parameters For KIC 010801647

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	5883^{+158}_{-176}	$4.206^{+0.220}_{-0.180}$	$0.070^{+0.250}_{-0.300}$	$1.340^{+0.367}_{-0.367}$	$1.050^{+0.138}_{-0.138}$	$0.615^{+0.759}_{-0.298}$
	+3%/-3%	+5%/-4%	+357%/-429%	+27%/-27%	+13%/-13%	+123%/-48%
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 010801647-01 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-639 ± 71	$7.04^{+6.94}_{-4.89}$	430^{+33}_{-32}	4453^{+3470}_{-957}	6480^{+61085}_{-4902}
Alt.	-220 ± 38	$7.95^{+7.31}_{-5.52}$	429^{+31}_{-33}	3532^{+1961}_{-620}	1749^{+16924}_{-1293}

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 $A_{obs} \gg 1.0$

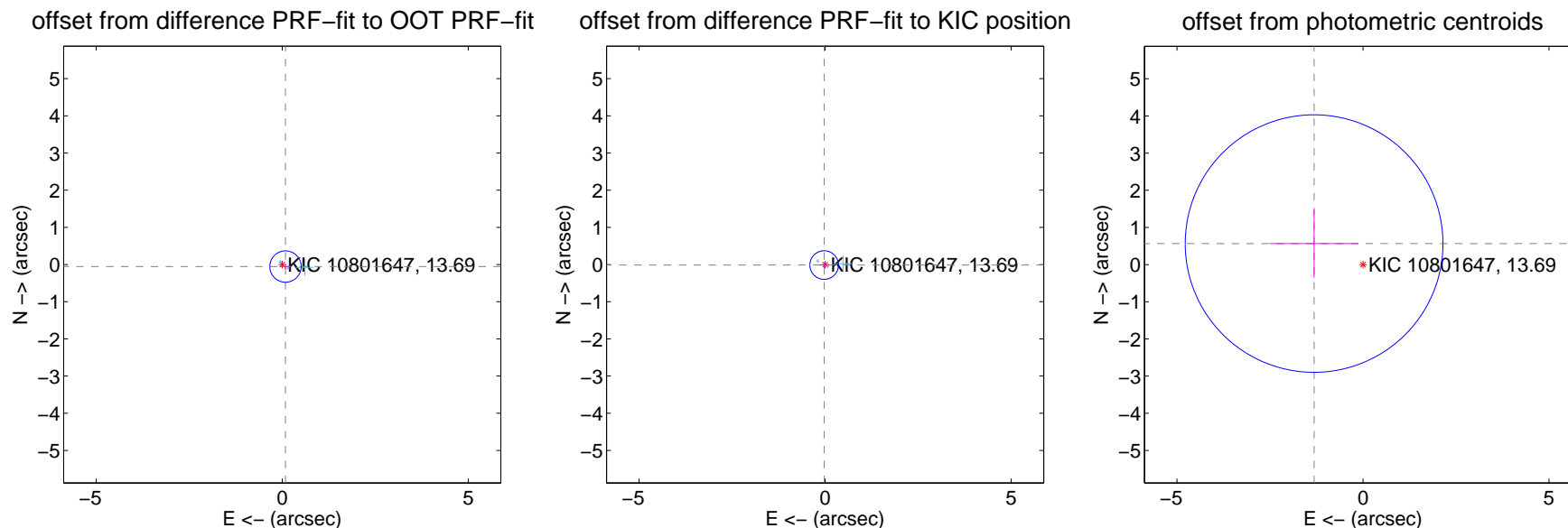
DV Centroid Data

Supplemental centroid analysis for 010801647-01. Kepler magnitude: 13.69. Transit SNR 3.93

There are 3 quarters with good PRF difference image offsets

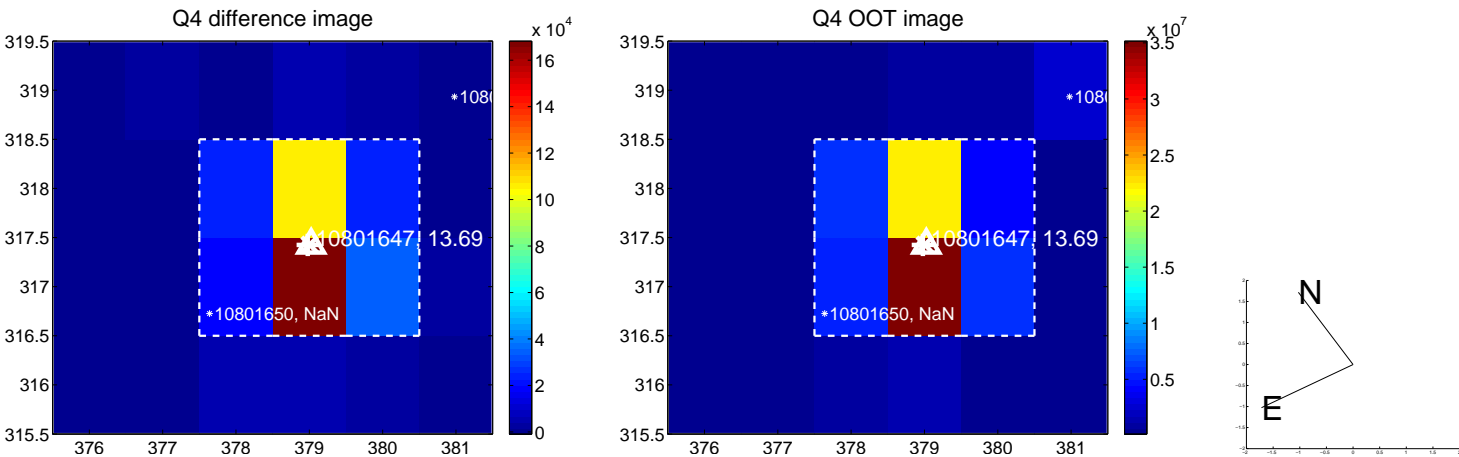
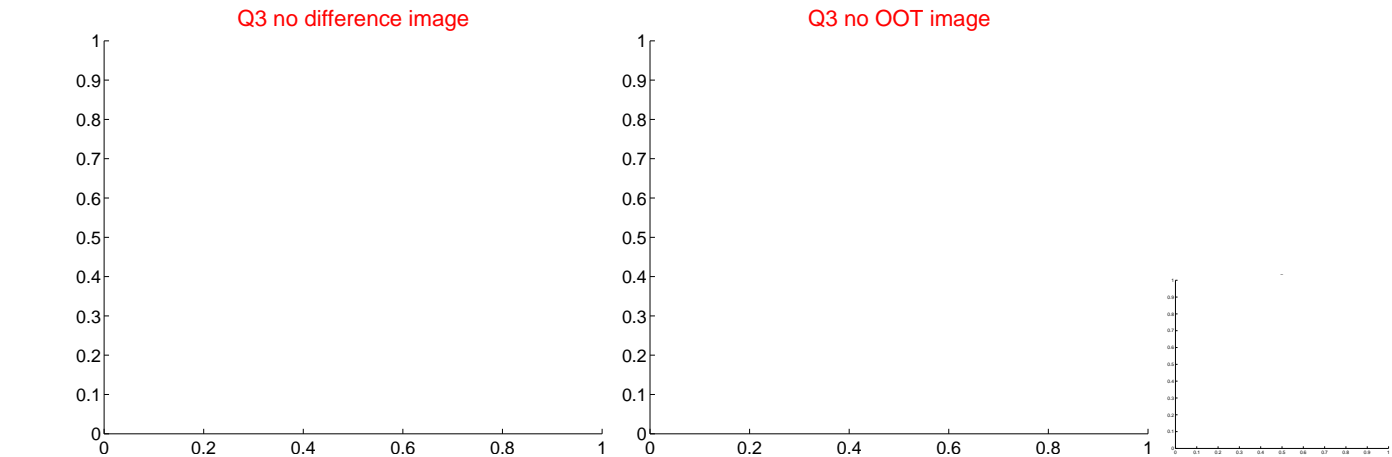
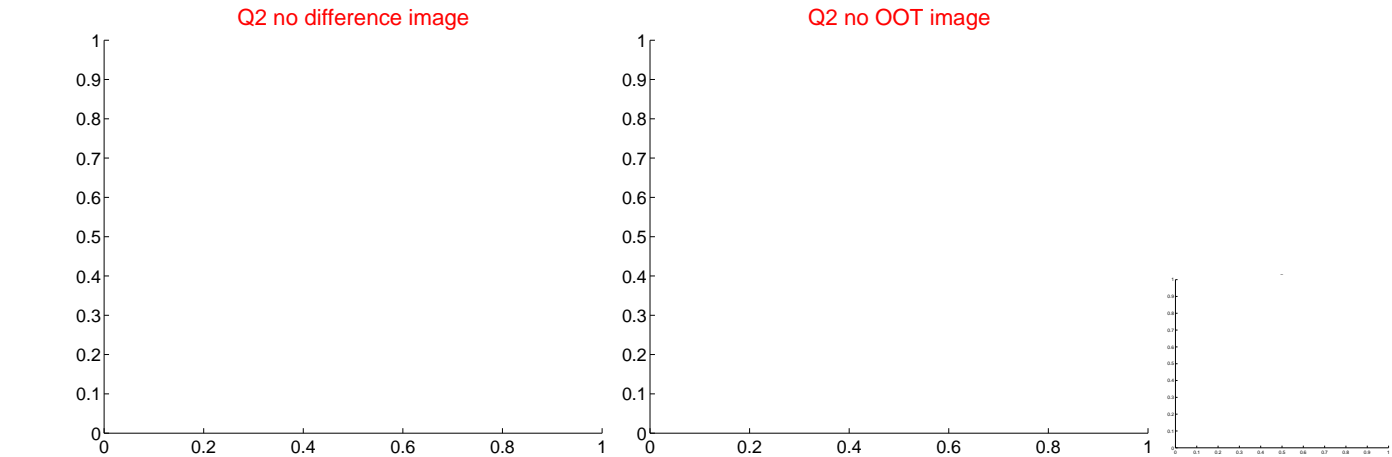
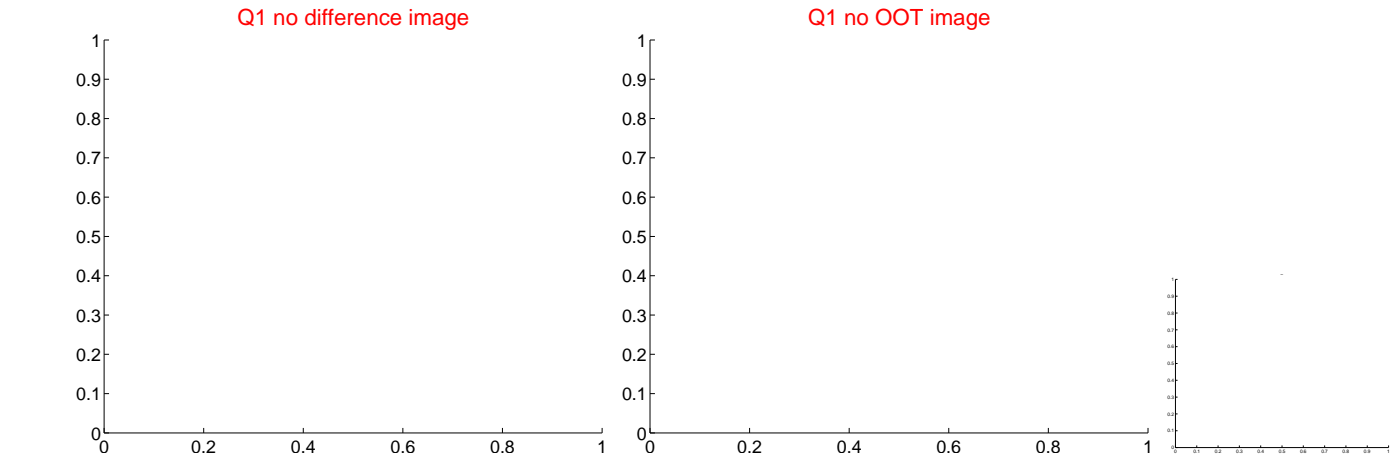
The direct PRF centroid is offset from the target star catalog position by about 0.15 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.104 ± 0.141	0.74	-0.088 ± 0.148	-0.054 ± 0.071
PRF-fit source offset from KIC position	0.029 ± 0.128	0.23	0.026 ± 0.140	-0.014 ± 0.070
photometric centroid source offset	1.43 ± 1.15	1.24	1.31 ± 1.19	0.57 ± 0.92



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

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



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Q5 no difference image



Q5 no OOT image



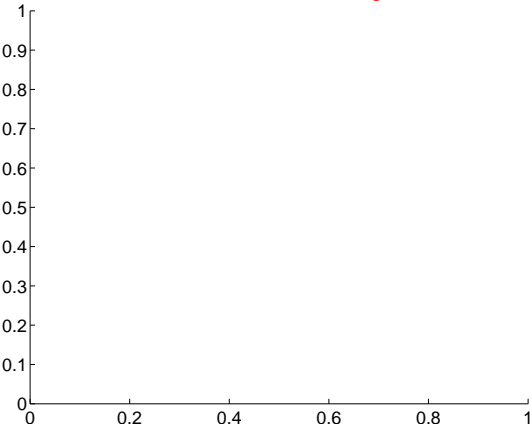
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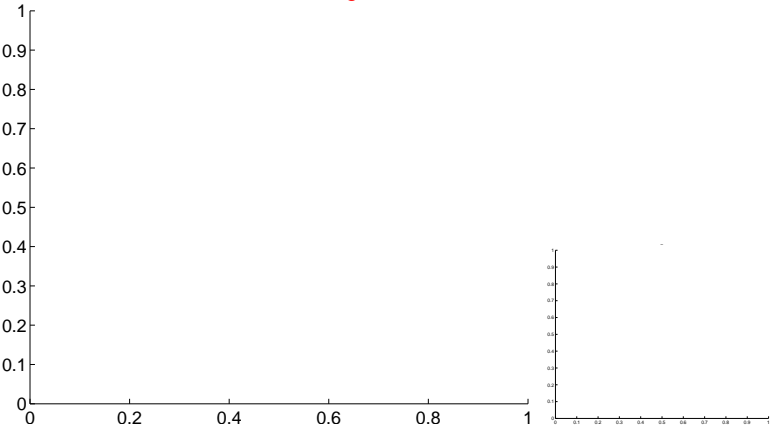
Q6 no OOT image



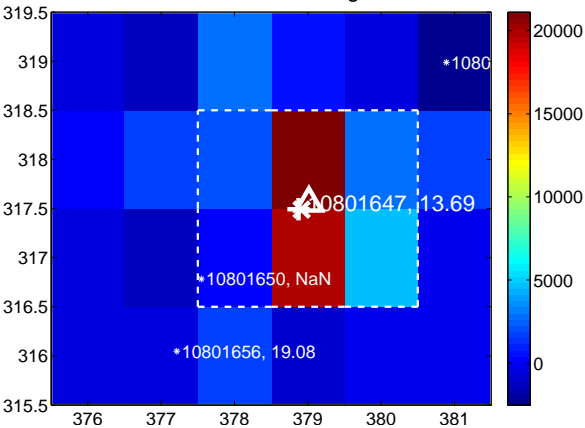
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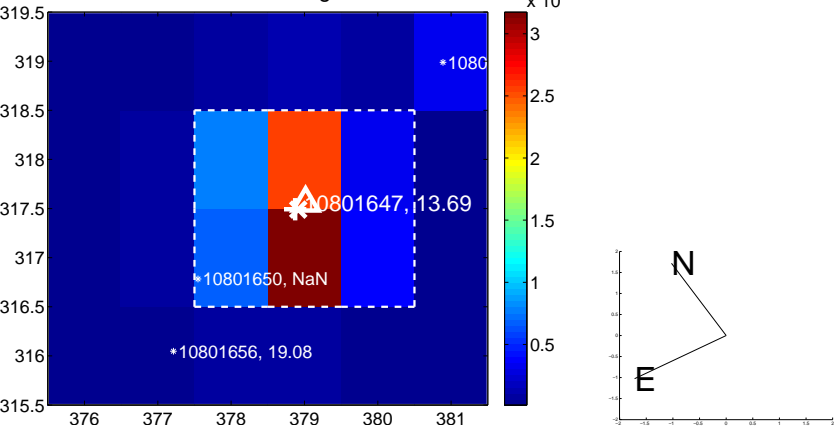
Q7 no OOT image



Q8 difference image



Q8 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.

Q13 no difference image



Q13 no OOT image



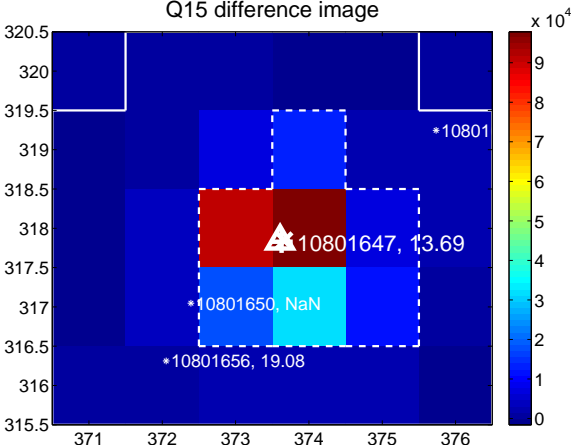
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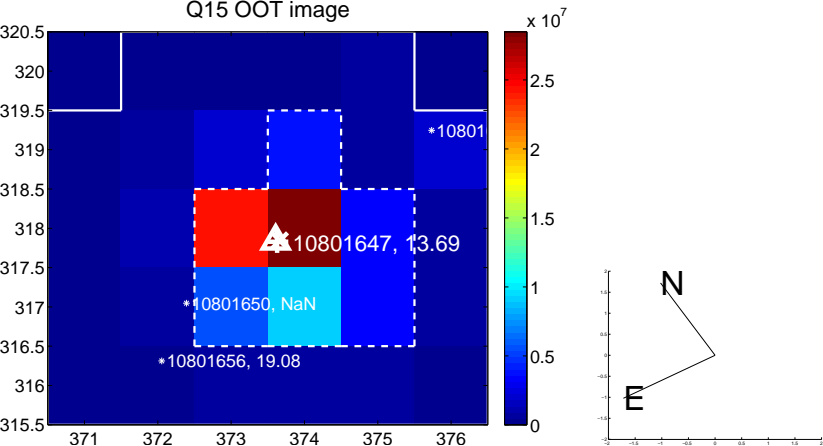
Q14 no OOT image



Q15 difference image



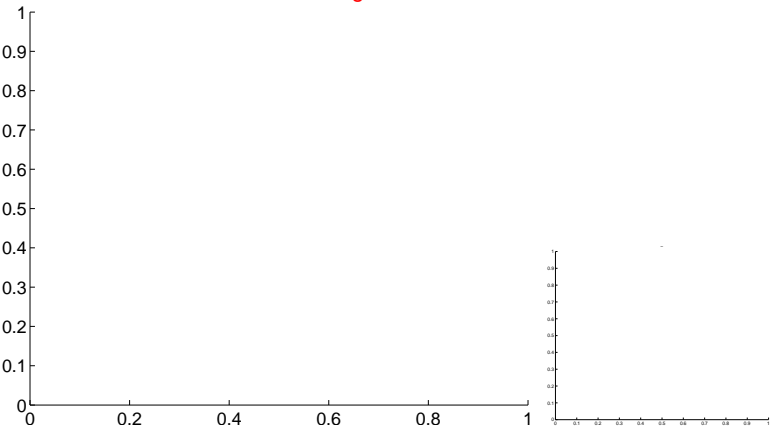
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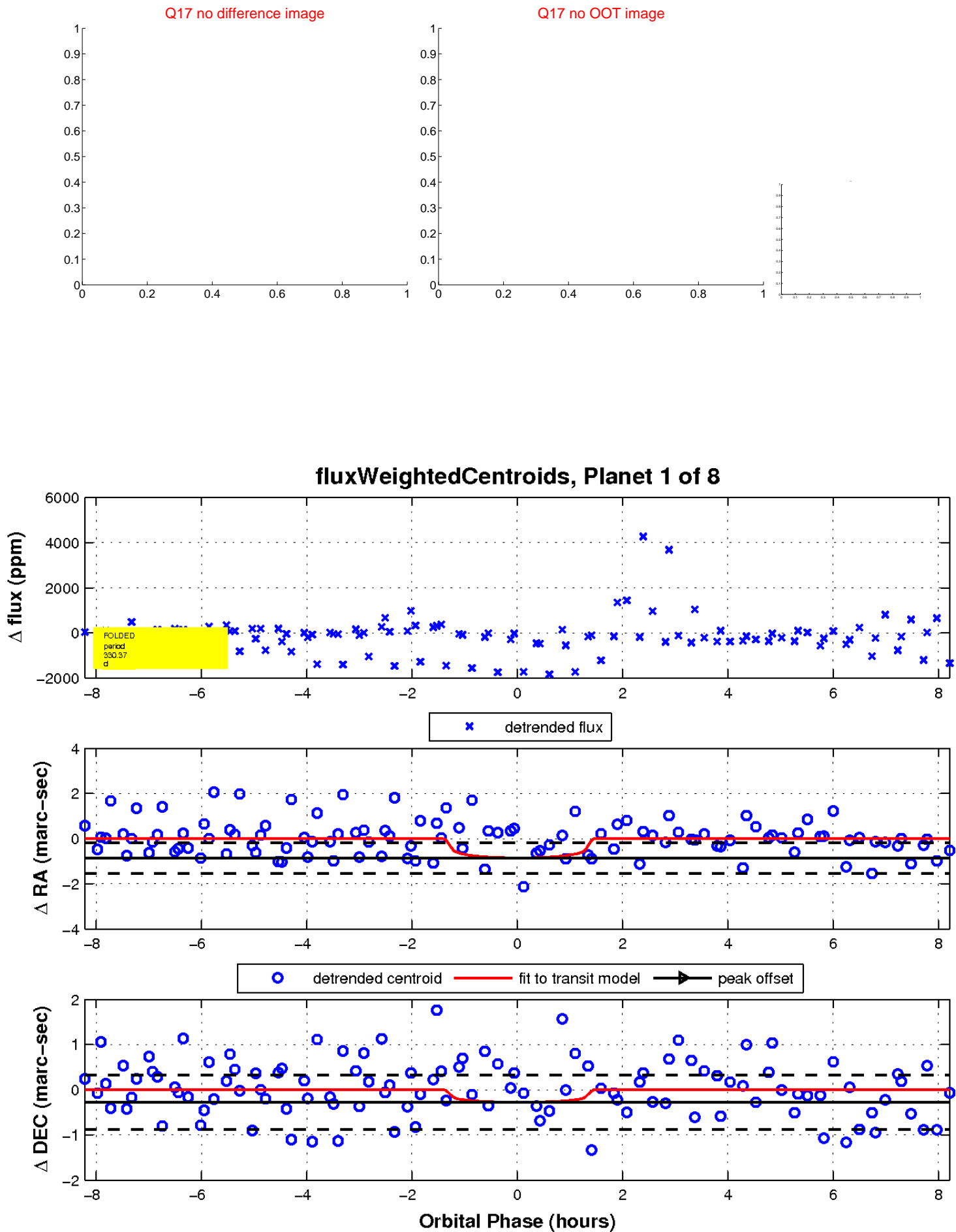
Q16 no difference image



Q16 no OOT image

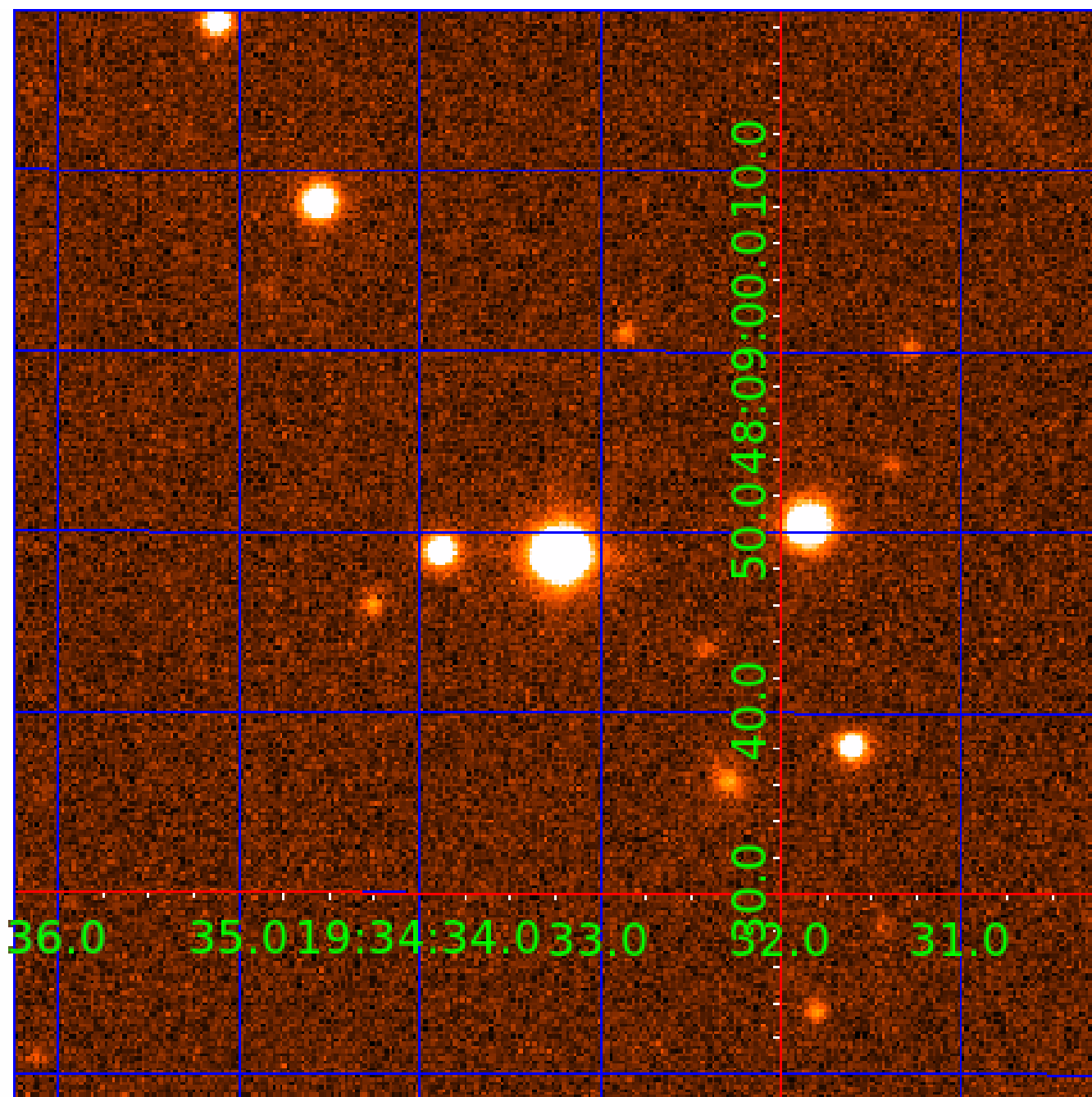


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UKIRT Image

Declination



KIC 010801647

Q1-17 DR25 TCE Parameters

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010801647-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_CHASES_MARSHALL—LPP_ALT—ALL_TRANS_CHASES—INCONSISTENT_TRANS—CENT_FEW_DIFFS
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010801647-07	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_TRACKER—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT
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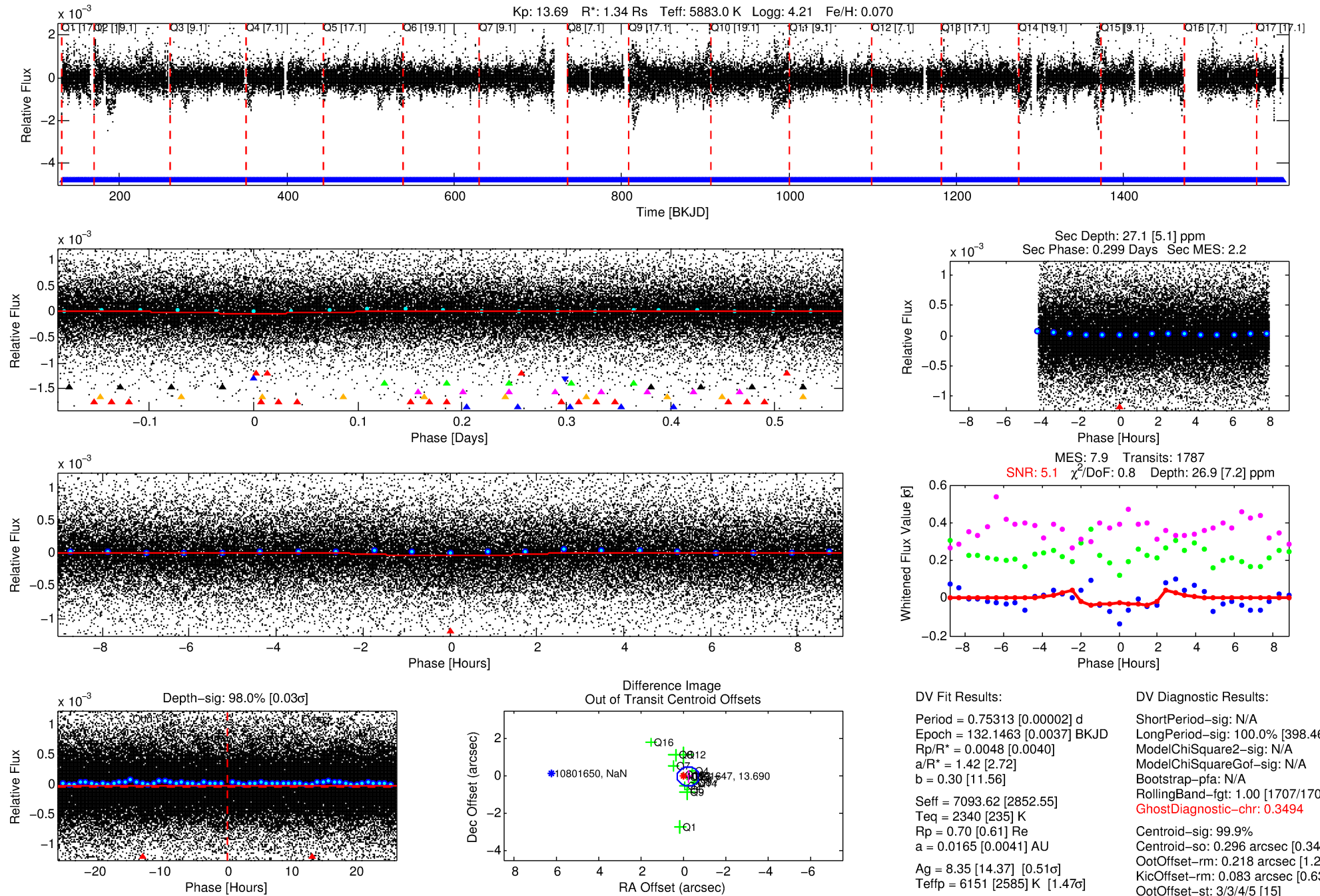
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 010801647-02

No Significant Match Found

DV One-Page Summary

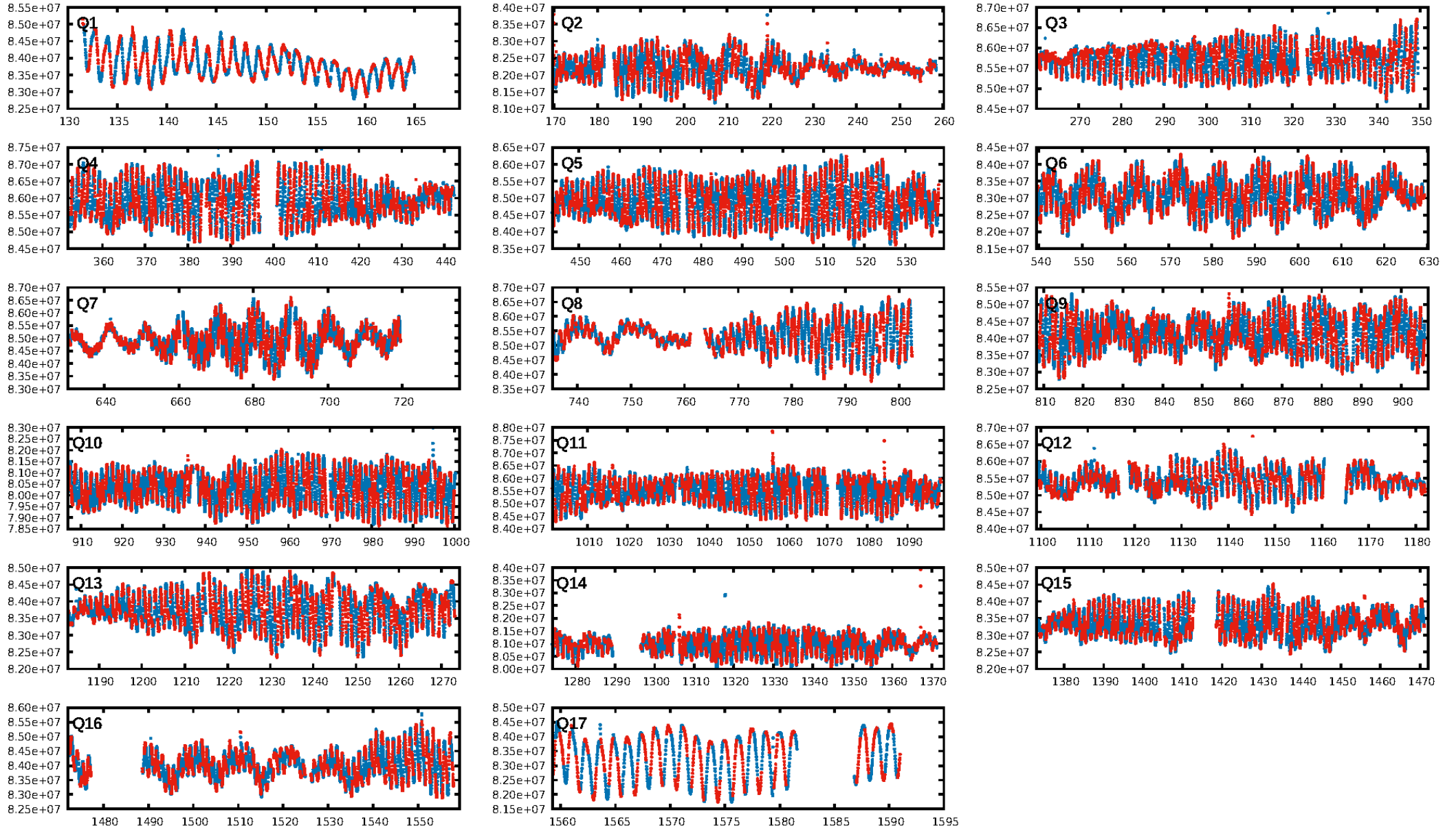
KIC: 10801647 Candidate: 2 of 8 Period: 0.753 d



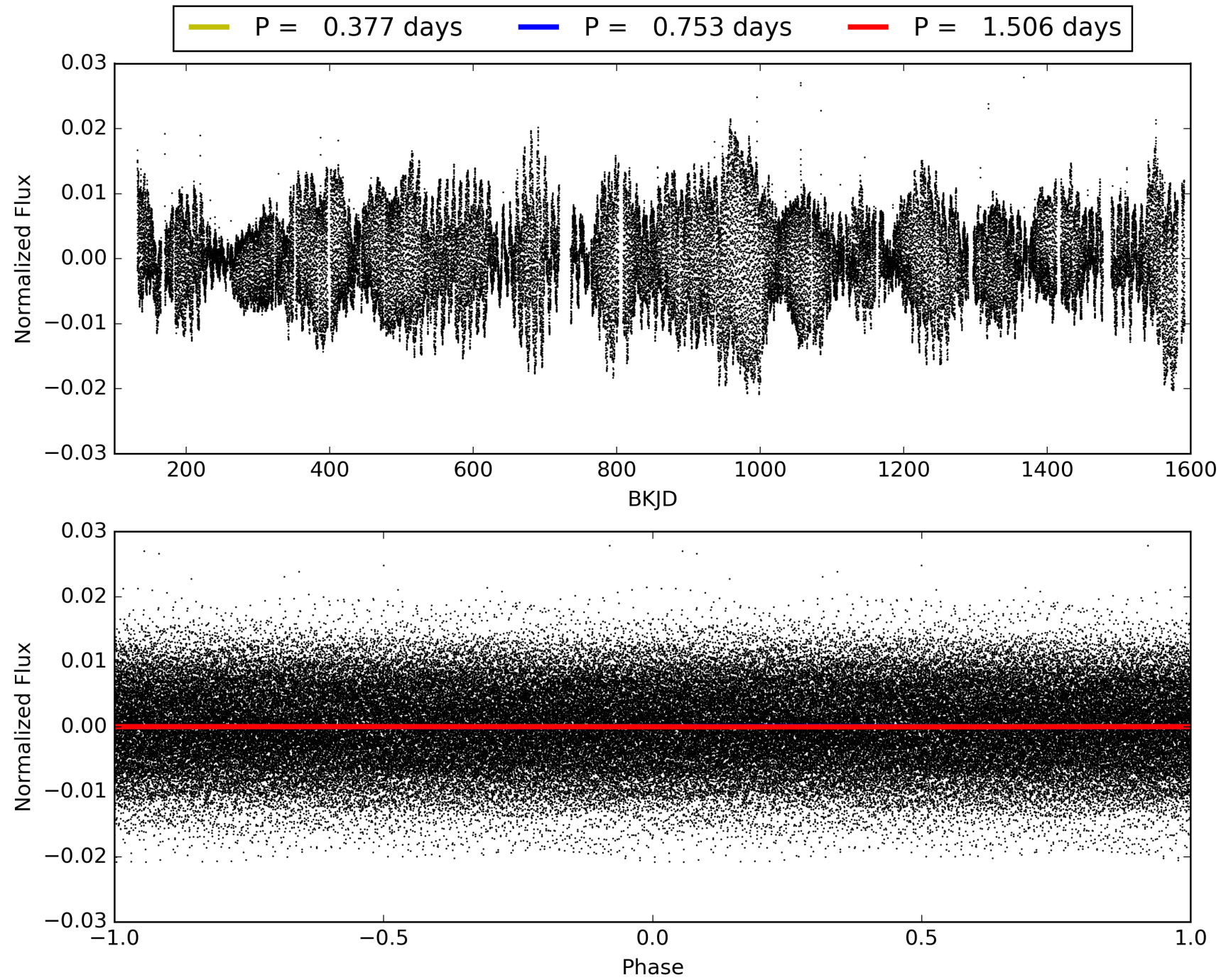
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This Data Validation Report Summary was produced in the Kepler Science Operations Center Pipeline at NASA Ames Research Center

TCE 010801647-02, PDC Light Curves

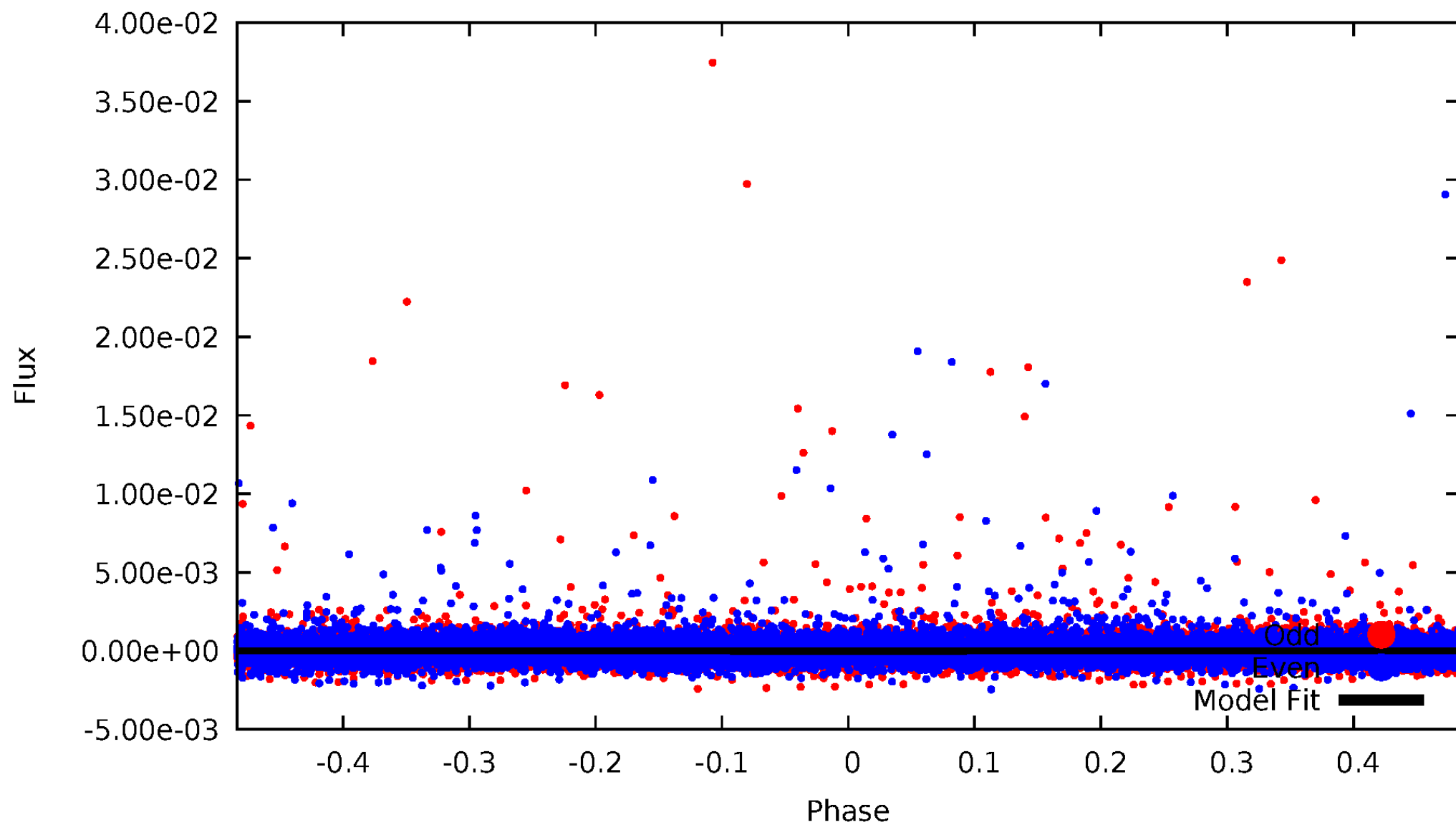


TCE 010801647-02



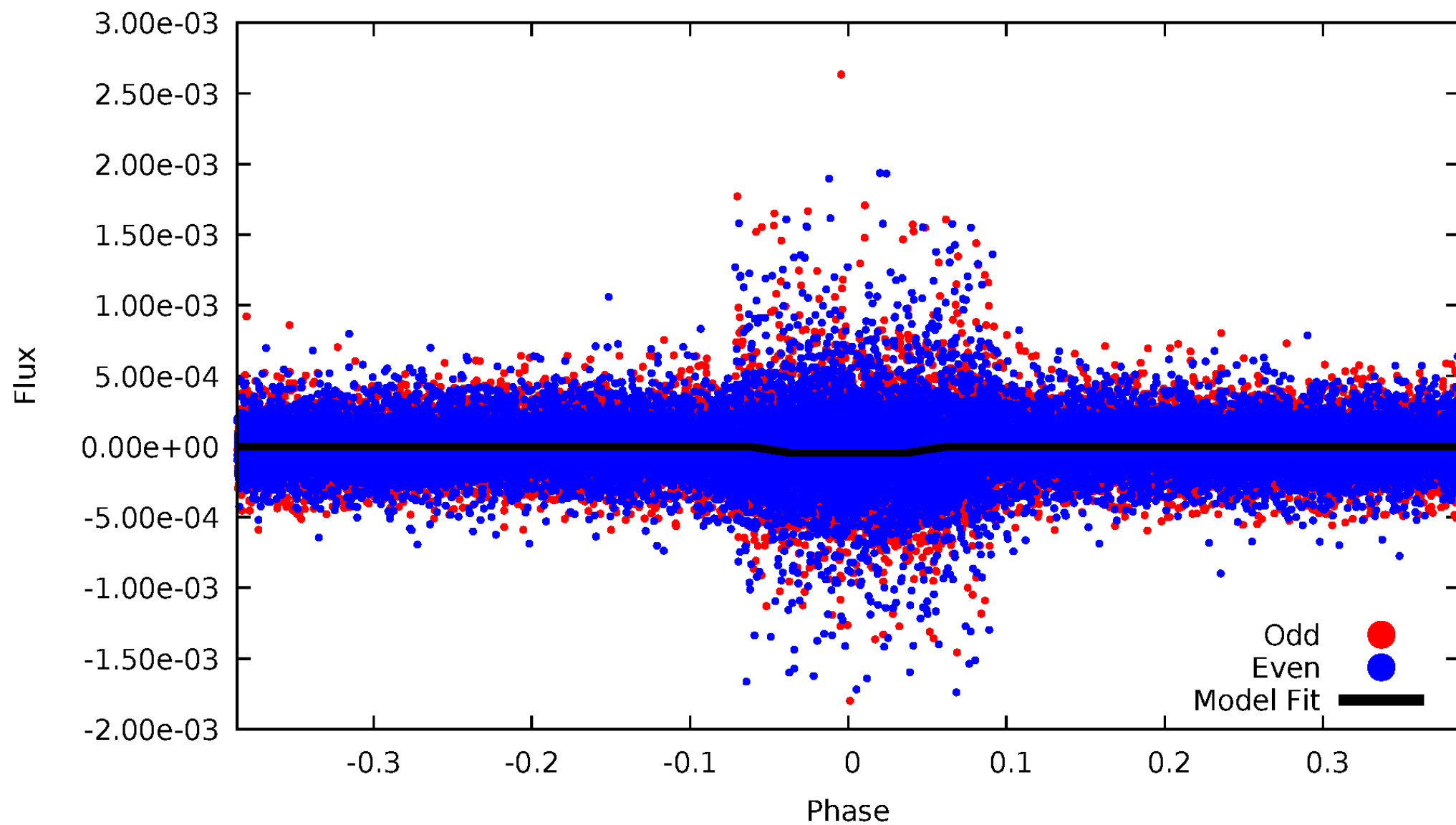
DV Odd/Even

TCE 010801647-02



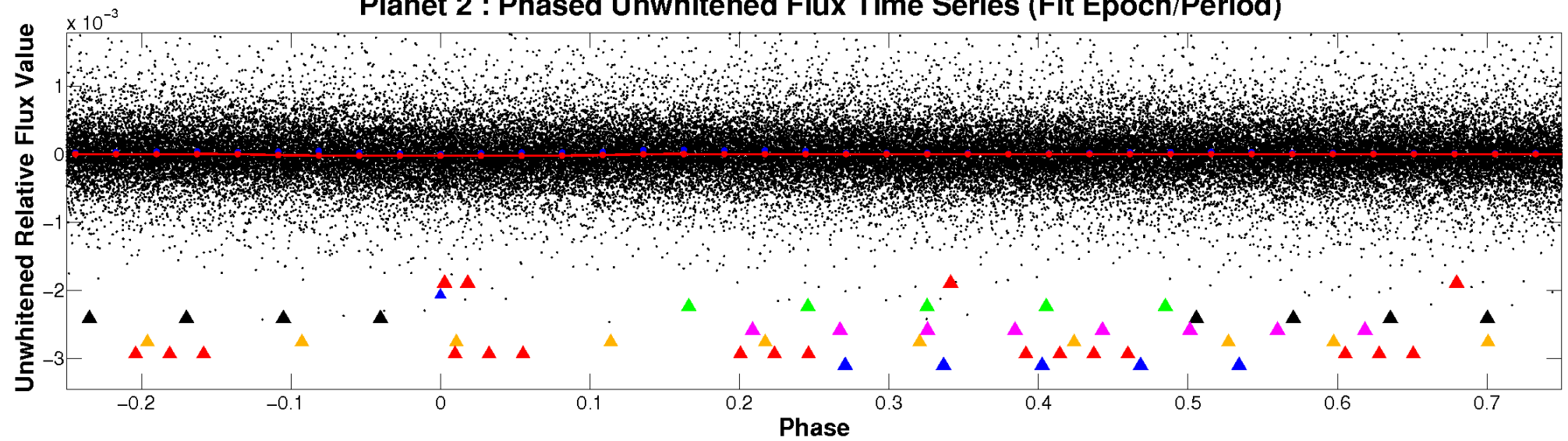
ALT Odd/Even

TCE 010801647-02

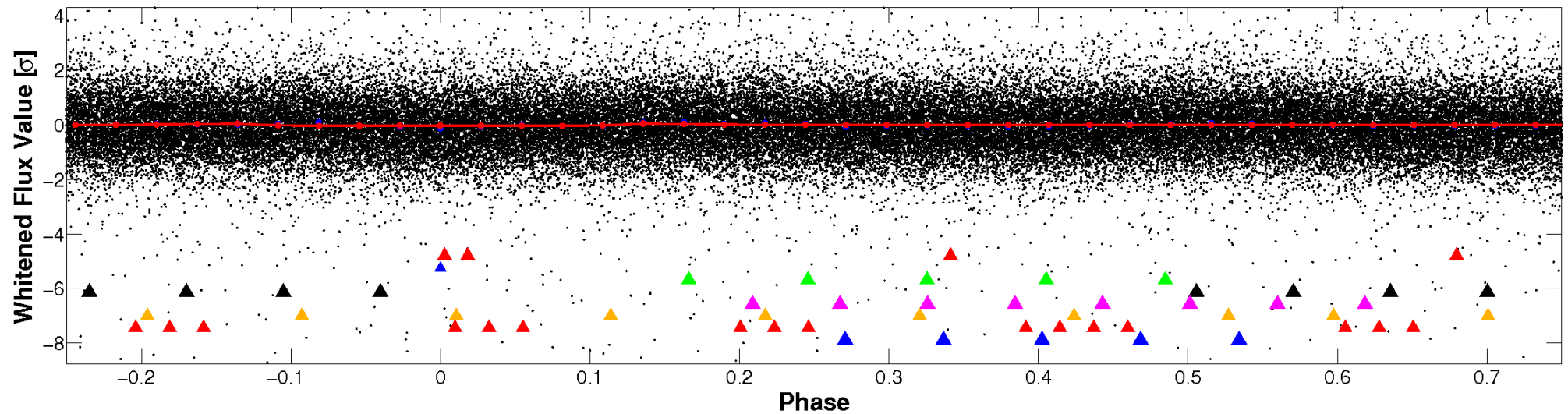


Non-Whitened Vs. Whitened Light Curve

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

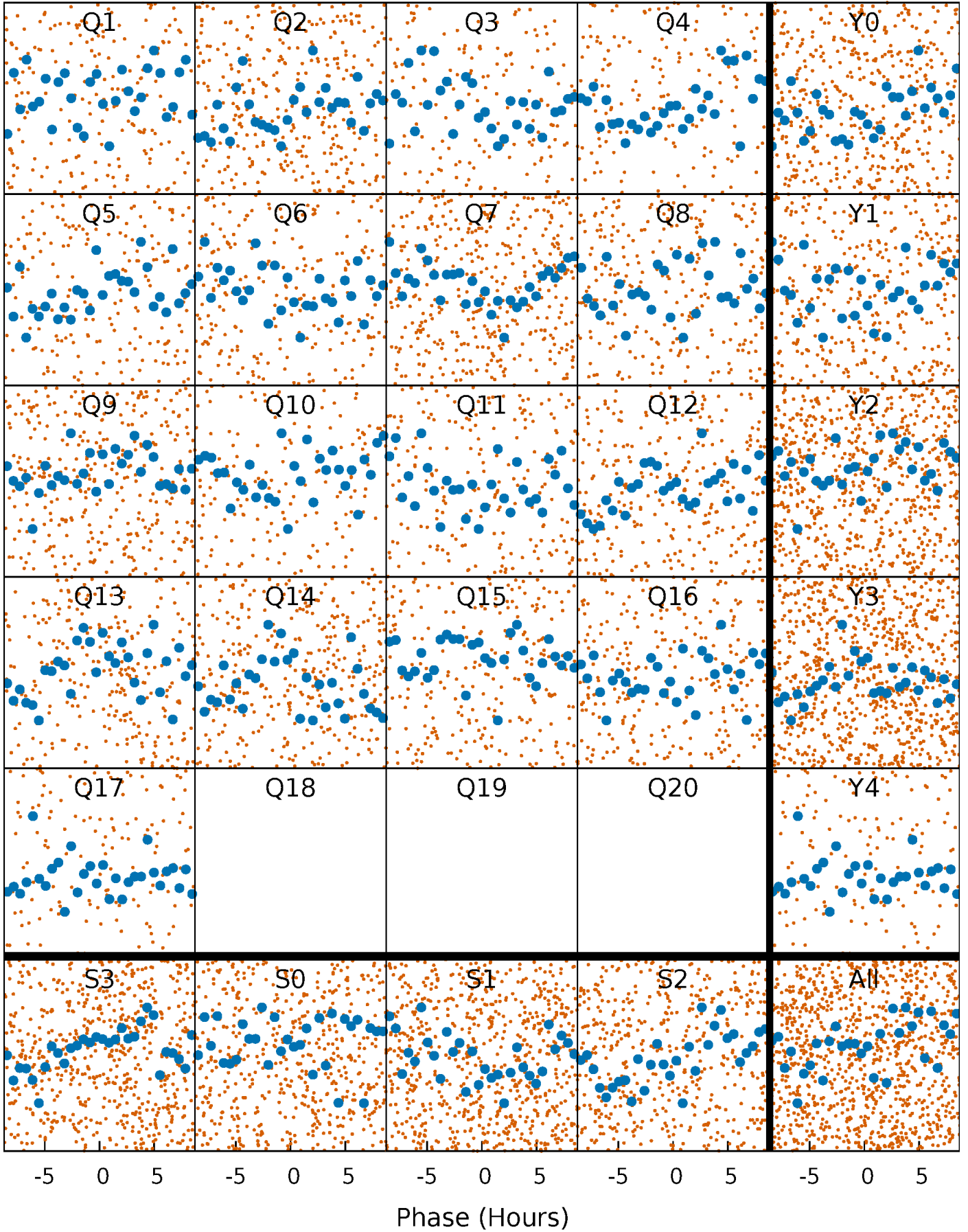


Planet 2 : Phased Whitened Flux Time Series (Fit Epoch/Period)



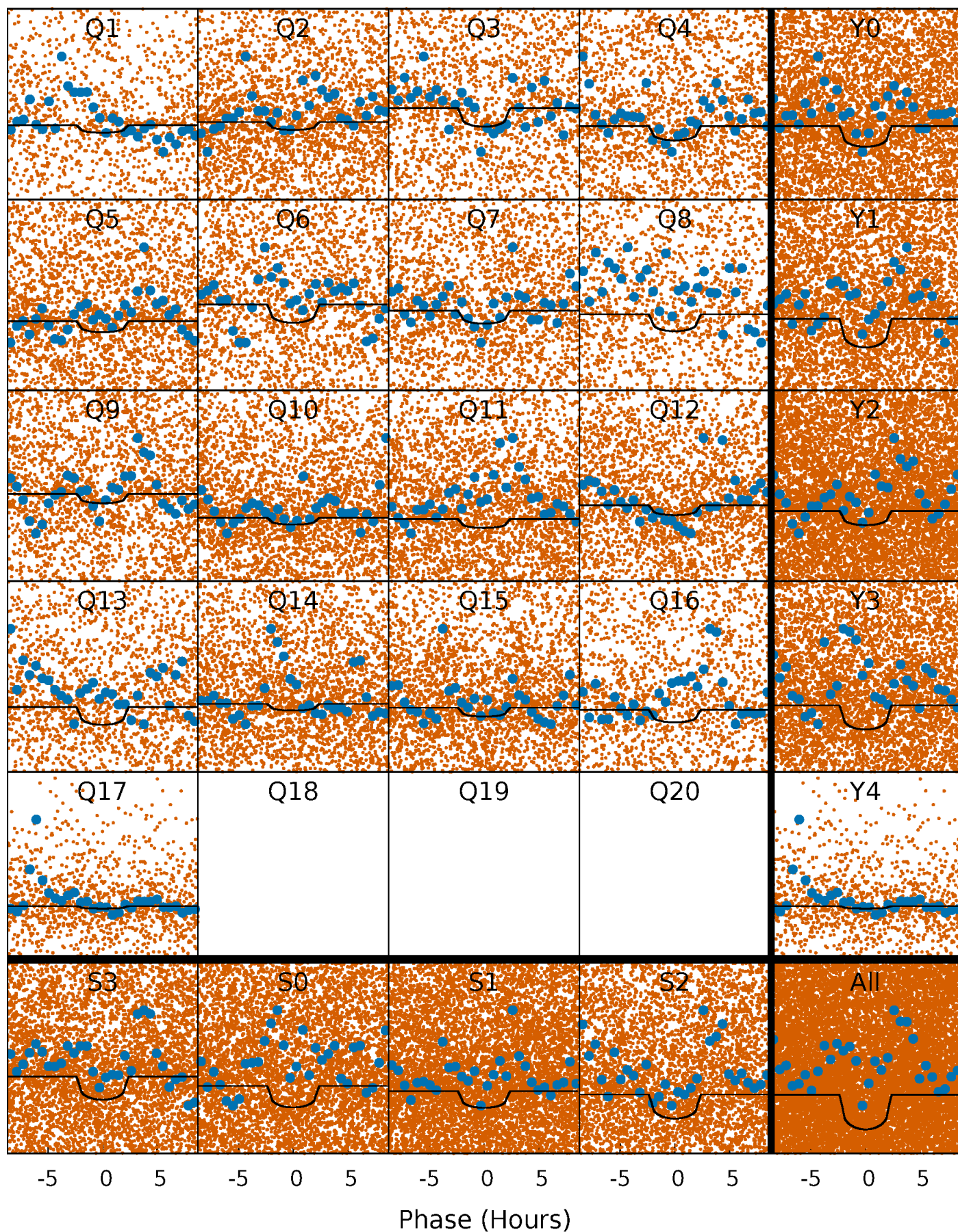
PDC Quarter-Phased Transit Curves

TCE 010801647-02 P= 0.753128 Days $T_0=132.146344$ (BKJD)



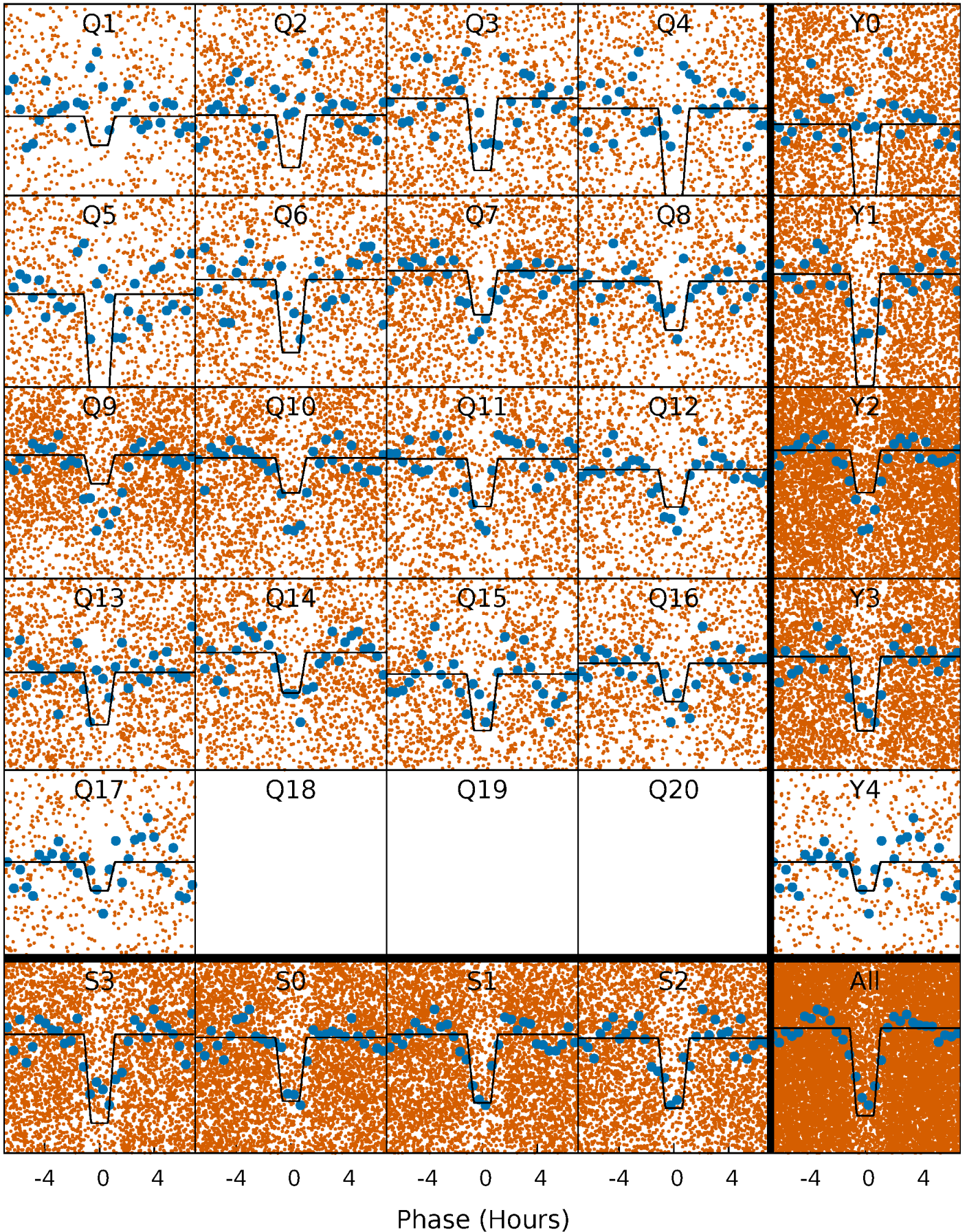
DV Quarter-Phased Transit Curves

TCE 010801647-02 $P = 0.753128$ Days $T_0 = 132.146344$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

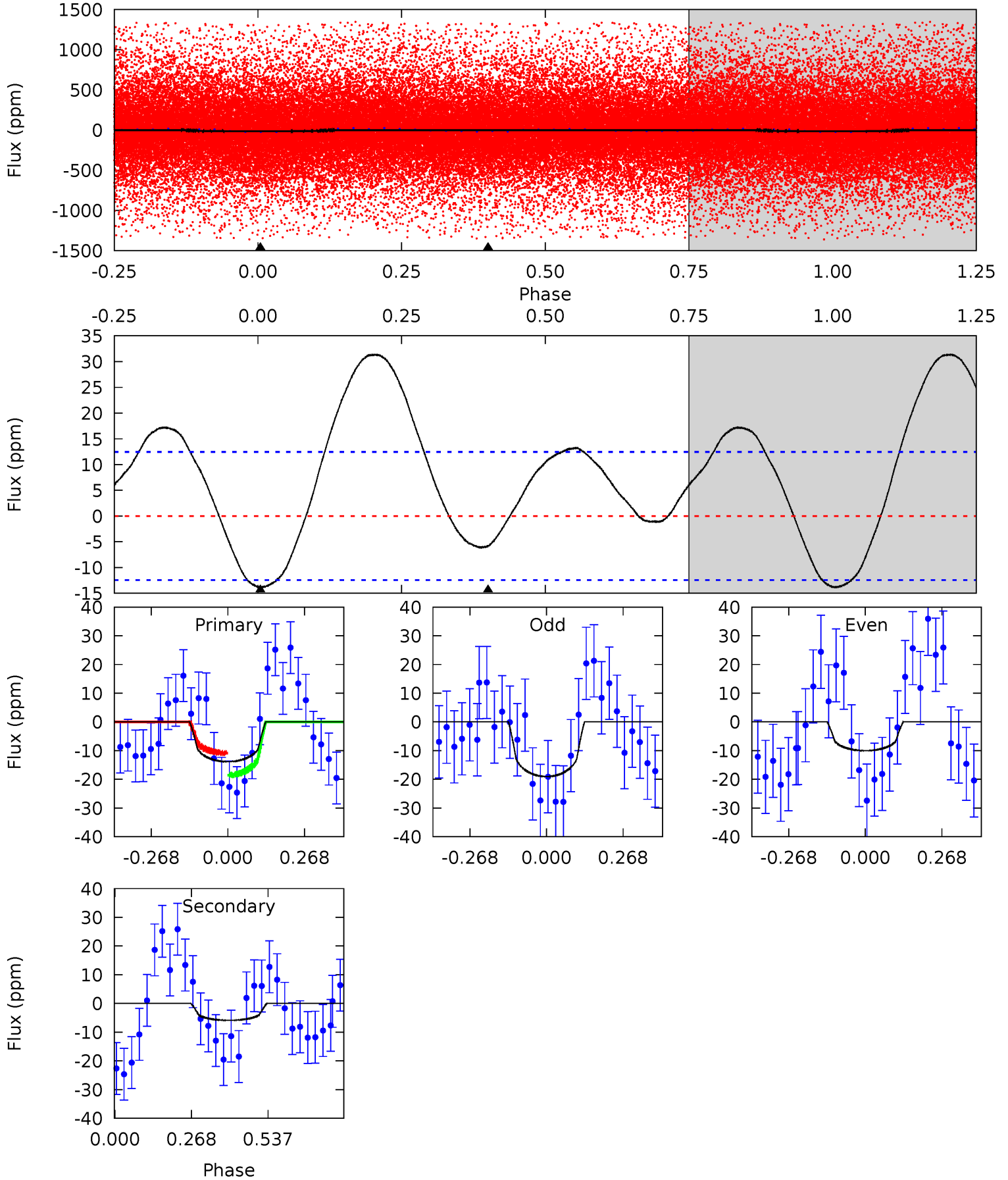
TCE 010801647-02 P= 0.753166 Days $T_0=132.116389$ (BKJD)



DV Model-Shift Uniqueness Test

010801647-02, P = 0.753128 Days, E = 131.393216 Days

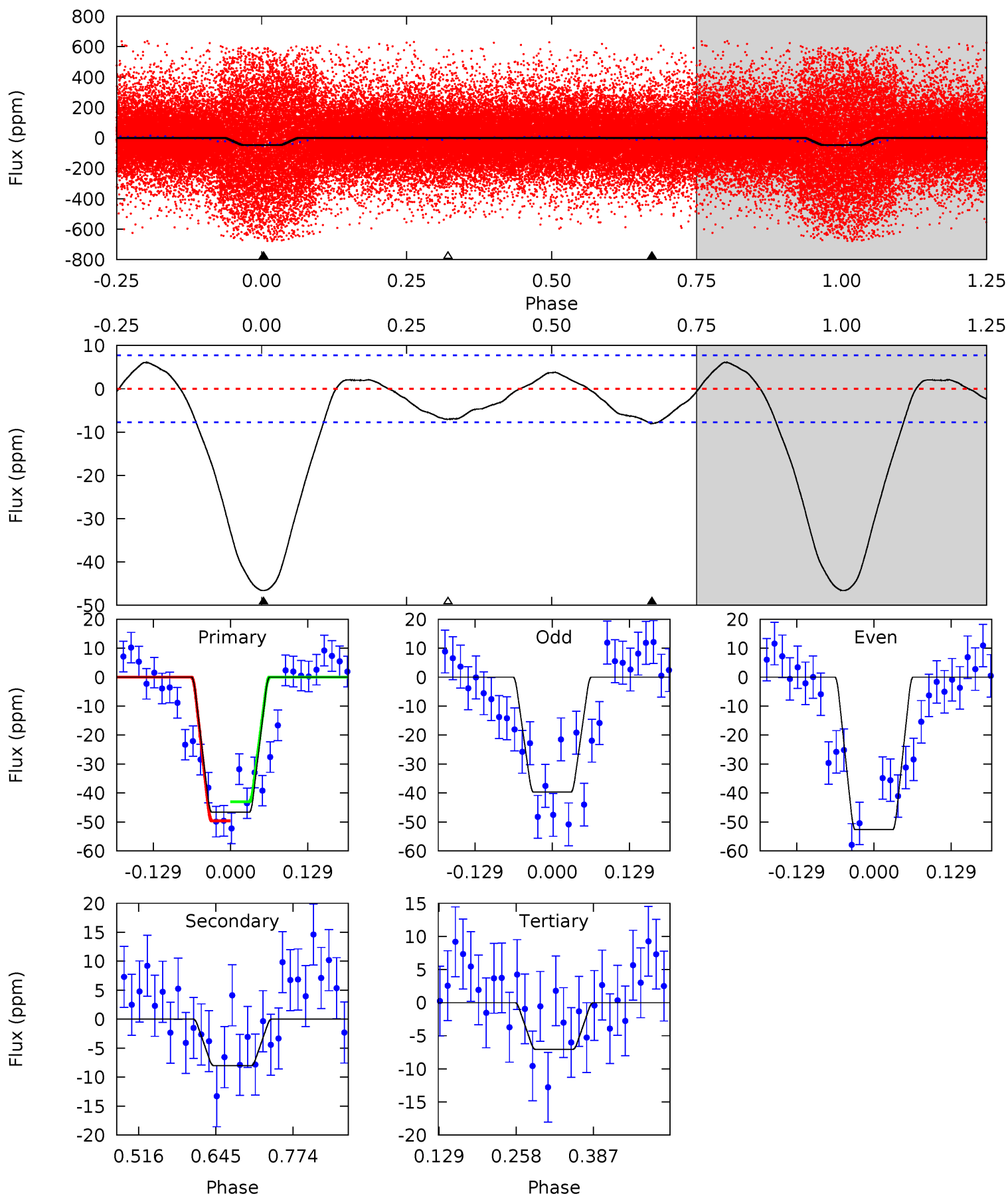
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
4.85	2.06	0	0	4.35	1.11	0.80	4.85	4.85	2.06	2.06	1.59	-2.18	0.69	1.34



Alt Model-Shift Uniqueness Test

010801647-02, P = 0.753166 Days, E = 131.363223 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
27.2	4.67	4.11	0	4.51	1.52	2.14	23.1	27.2	0.56	4.67	3.81	0.84	0.12	1.93



Stellar Parameters For KIC 010801647

	$T_{\text{eff}} (K)$	$\log(g)$	$[\text{Fe}/\text{H}]$	$R (R_{\odot})$	$M (M_{\odot})$	$\rho_{\star} (\text{g}\cdot\text{cm}^{-3})$
	5883^{+158}_{-176}	$4.206^{+0.220}_{-0.180}$	$0.070^{+0.250}_{-0.300}$	$1.340^{+0.367}_{-0.367}$	$1.050^{+0.138}_{-0.138}$	$0.615^{+0.759}_{-0.298}$
	+3%/-3%	+5%/-4%	+357%/-429%	+27%/-27%	+13%/-13%	+123%/-48%
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 010801647-02 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-6 ± 3	$0.73^{+0.55}_{-0.45}$	3253^{+273}_{-253}	4089^{+2246}_{-1229}	$1.585^{+8.366}_{-1.164}$
Alt.	-8 ± 2	$0.99^{+0.63}_{-0.53}$	3258^{+248}_{-252}	3836^{+1466}_{-928}	$1.174^{+4.023}_{-0.745}$

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

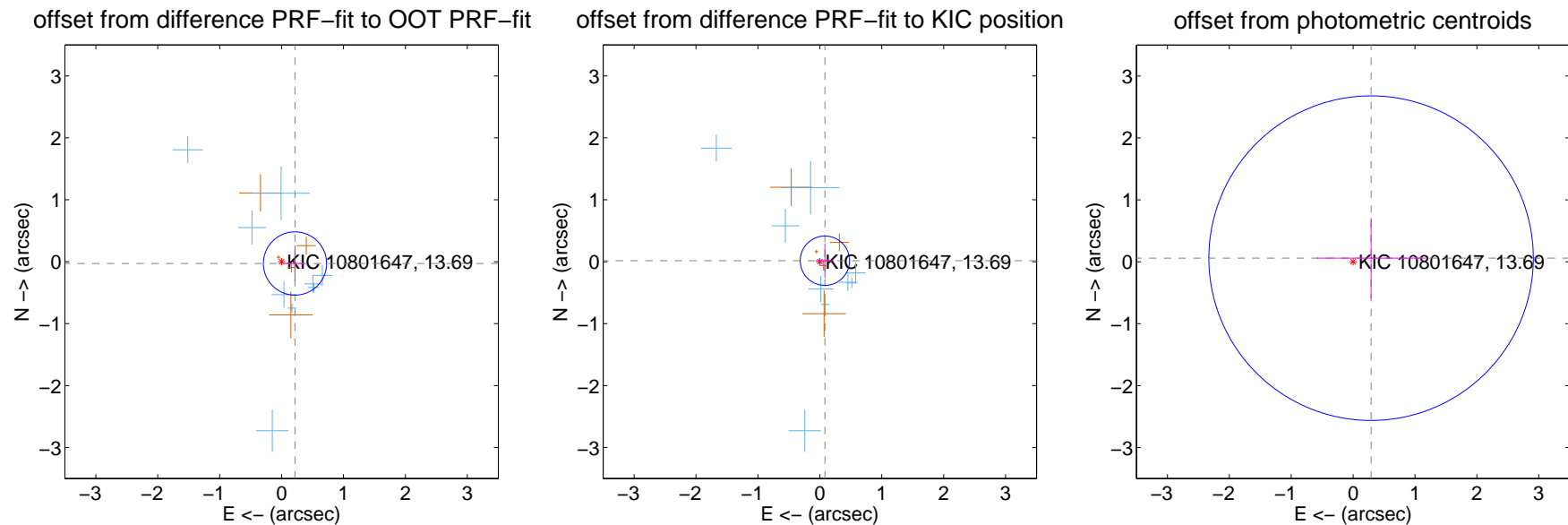
DV Centroid Data

Supplemental centroid analysis for 010801647-02. Kepler magnitude: 13.69. Transit SNR 5.09

There are 9 quarters with good PRF difference image offsets

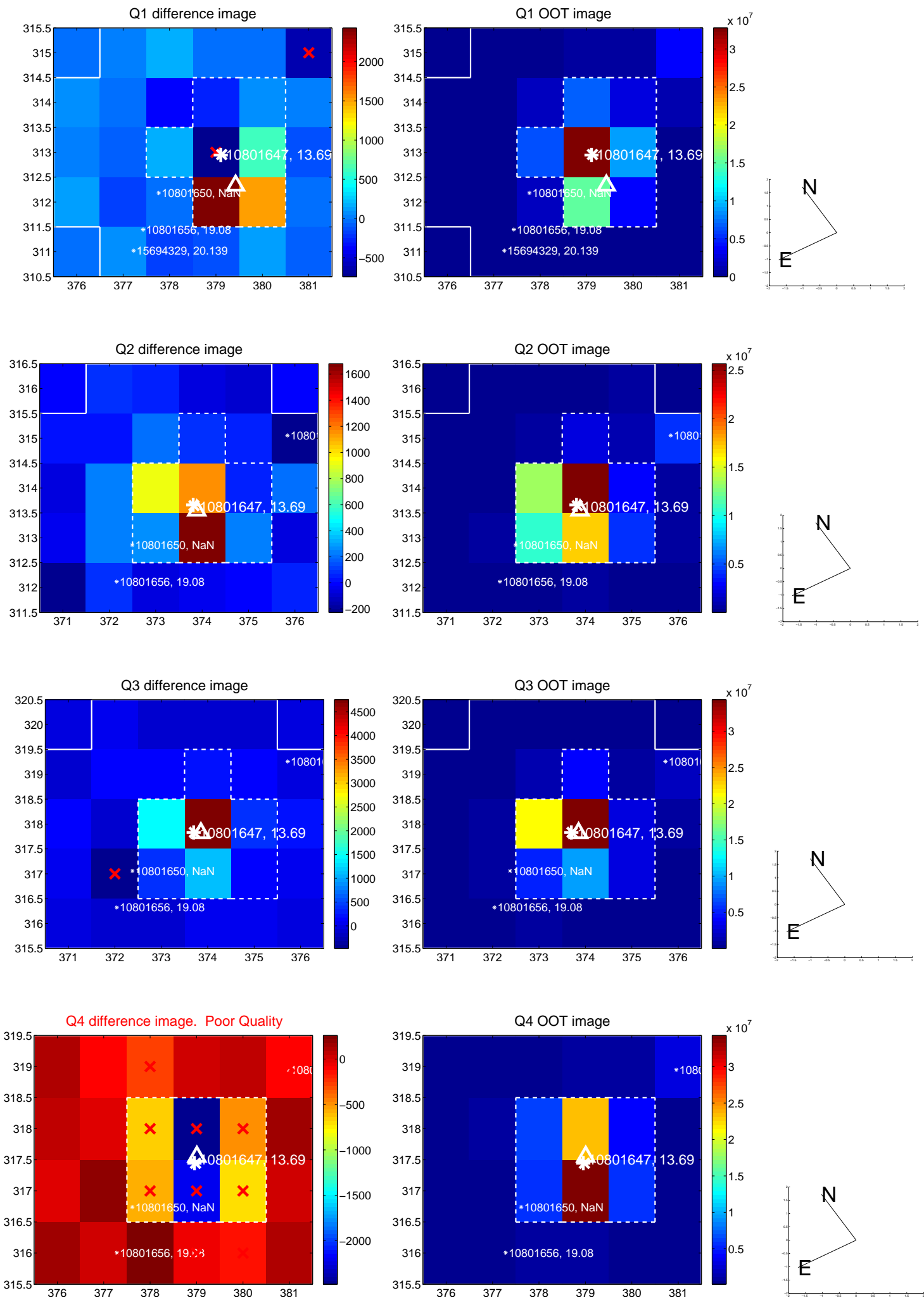
The direct PRF centroid is offset from the target star catalog position by about 0.09 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.218 ± 0.170	1.28	-0.217 ± 0.154	-0.029 ± 0.291
PRF-fit source offset from KIC position	0.083 ± 0.133	0.63	-0.082 ± 0.147	0.016 ± 0.280
photometric centroid source offset	0.30 ± 0.87	0.34	-0.29 ± 0.88	0.06 ± 0.65

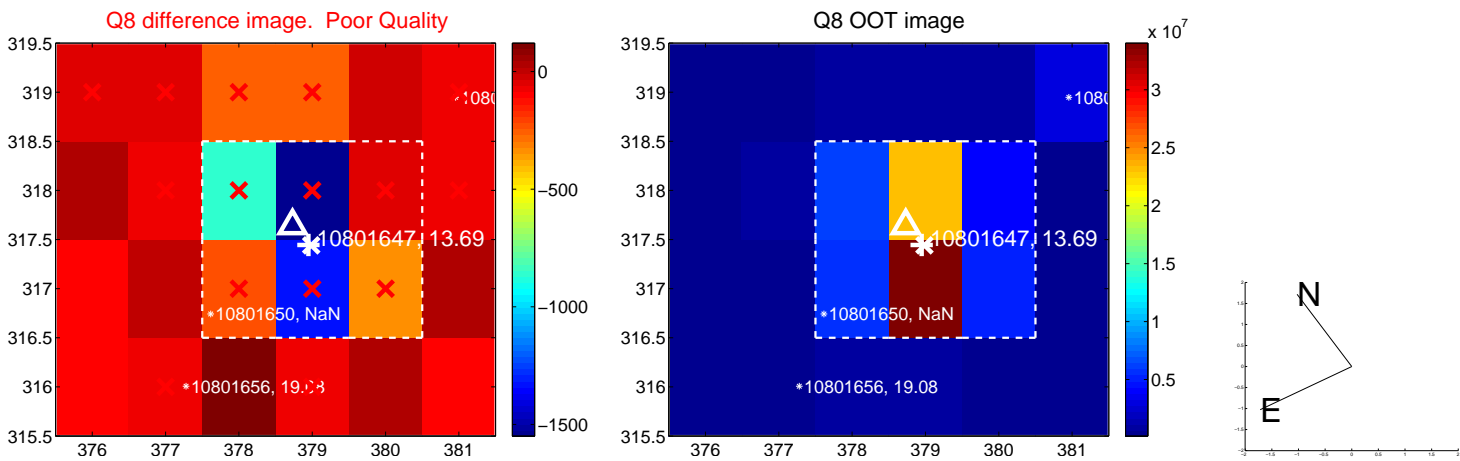
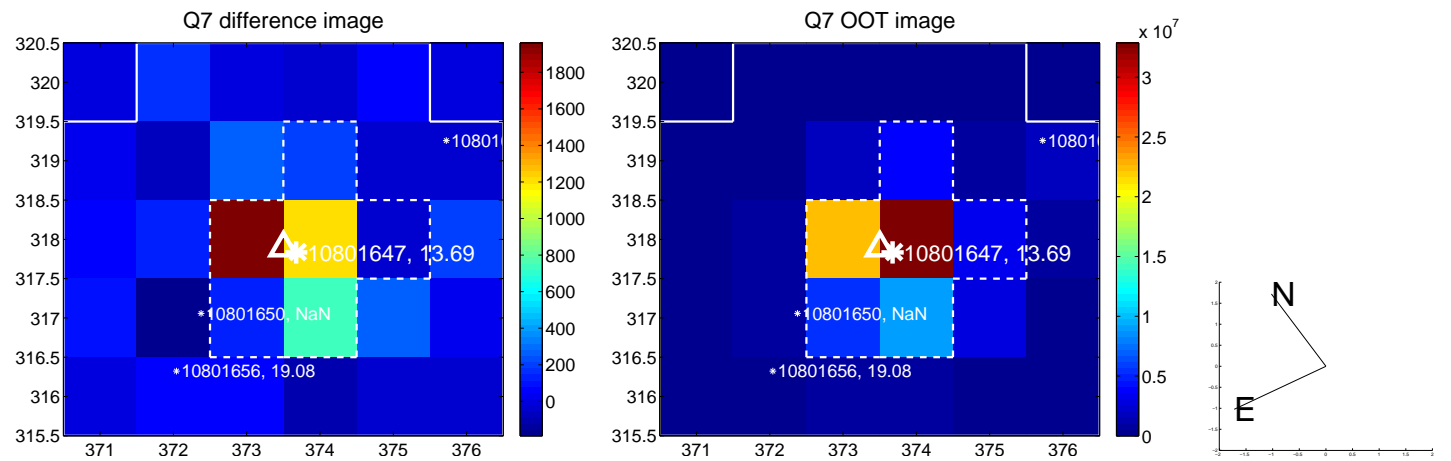
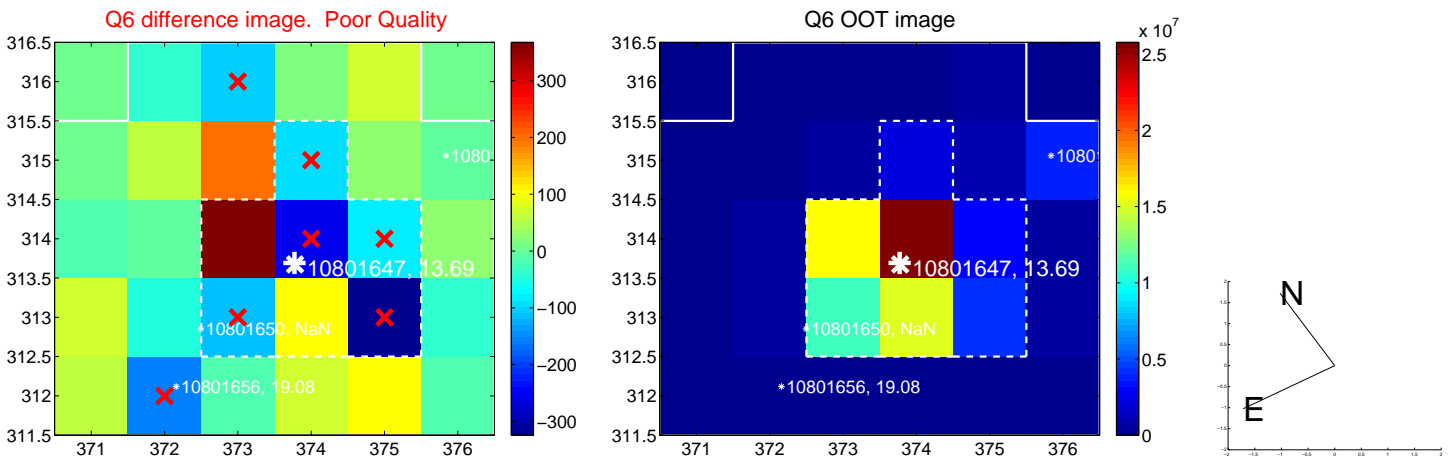
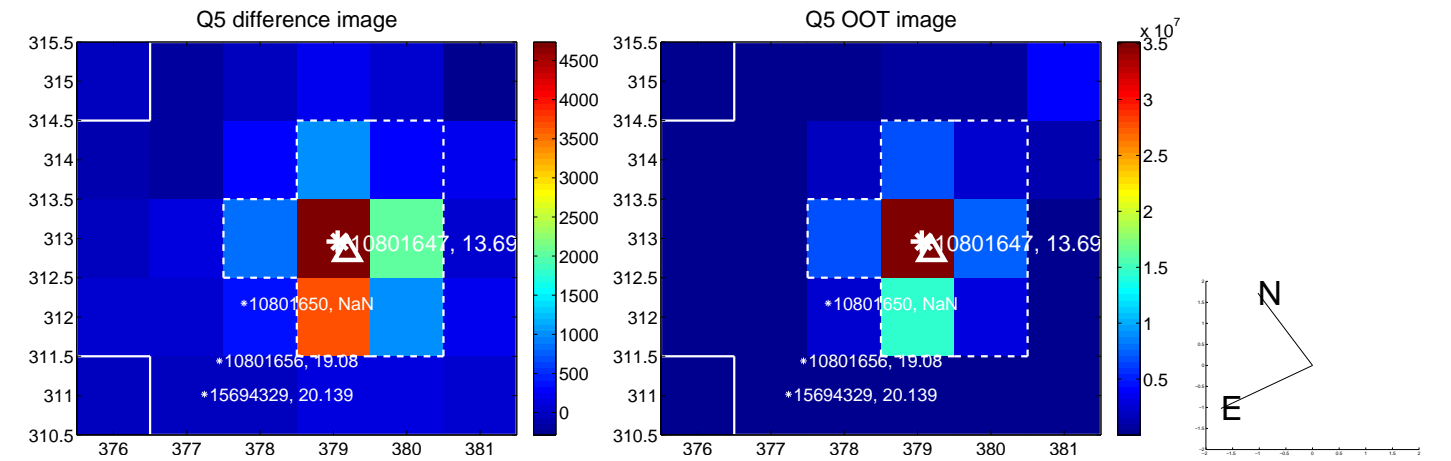


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets**; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

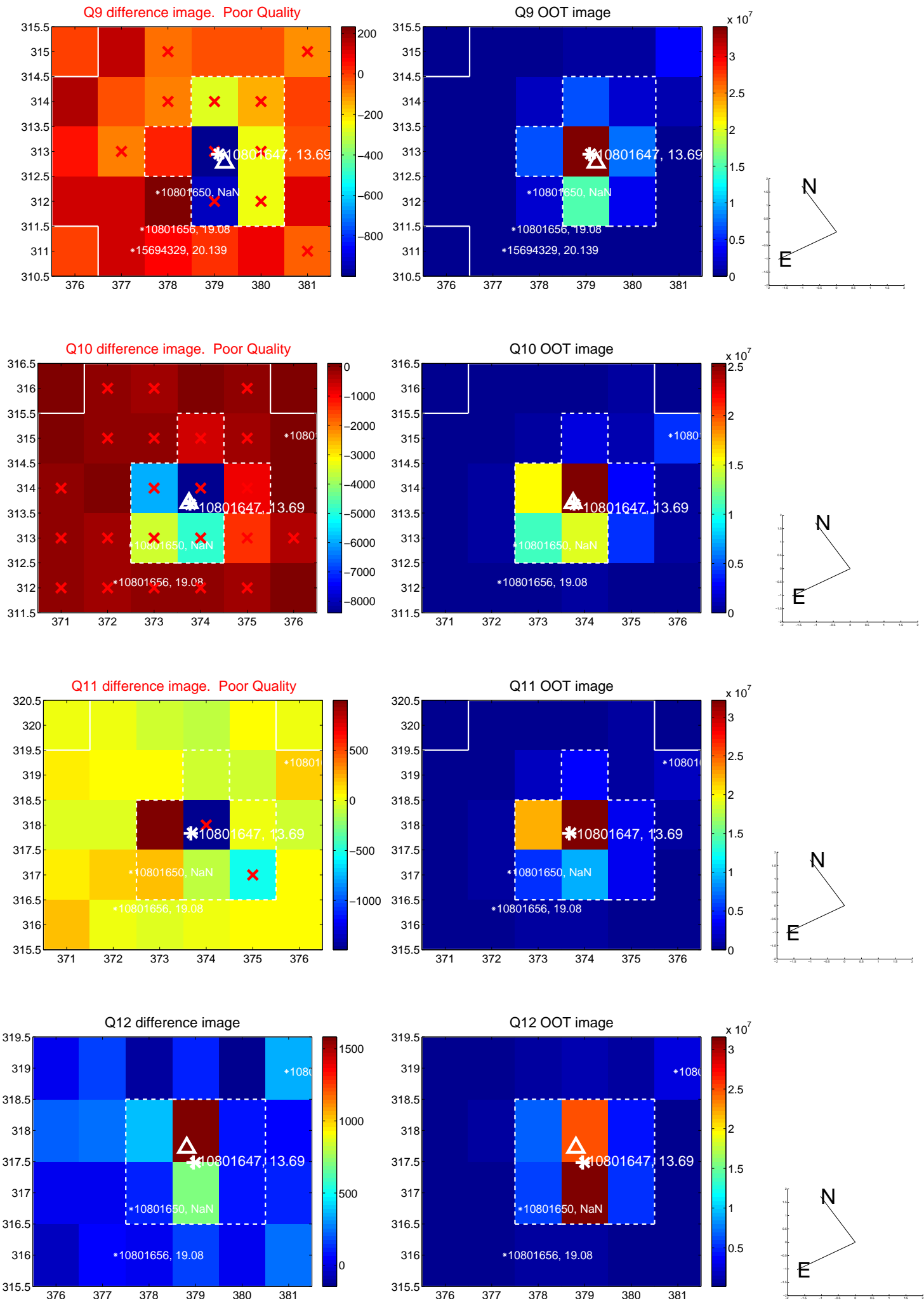
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



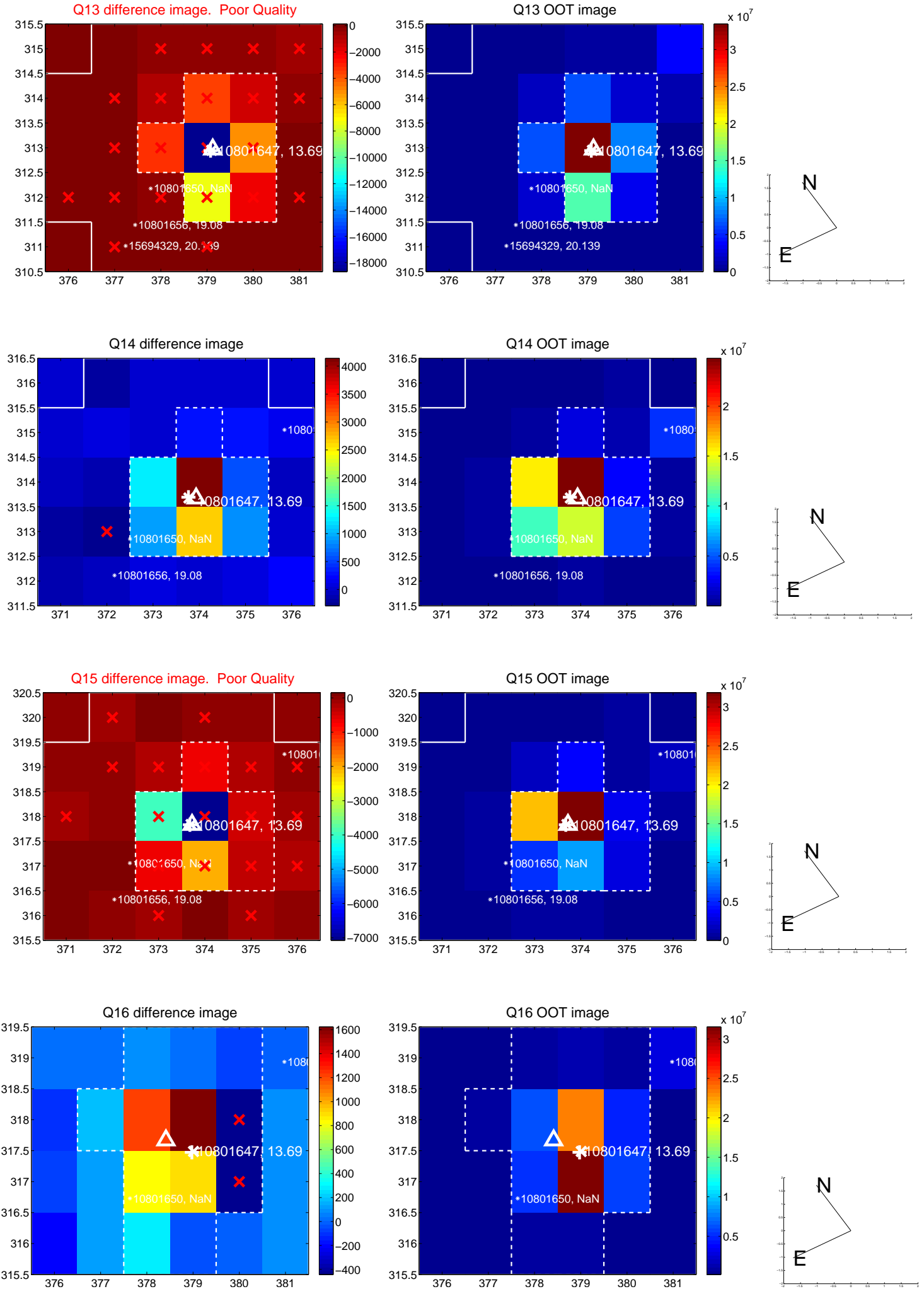
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



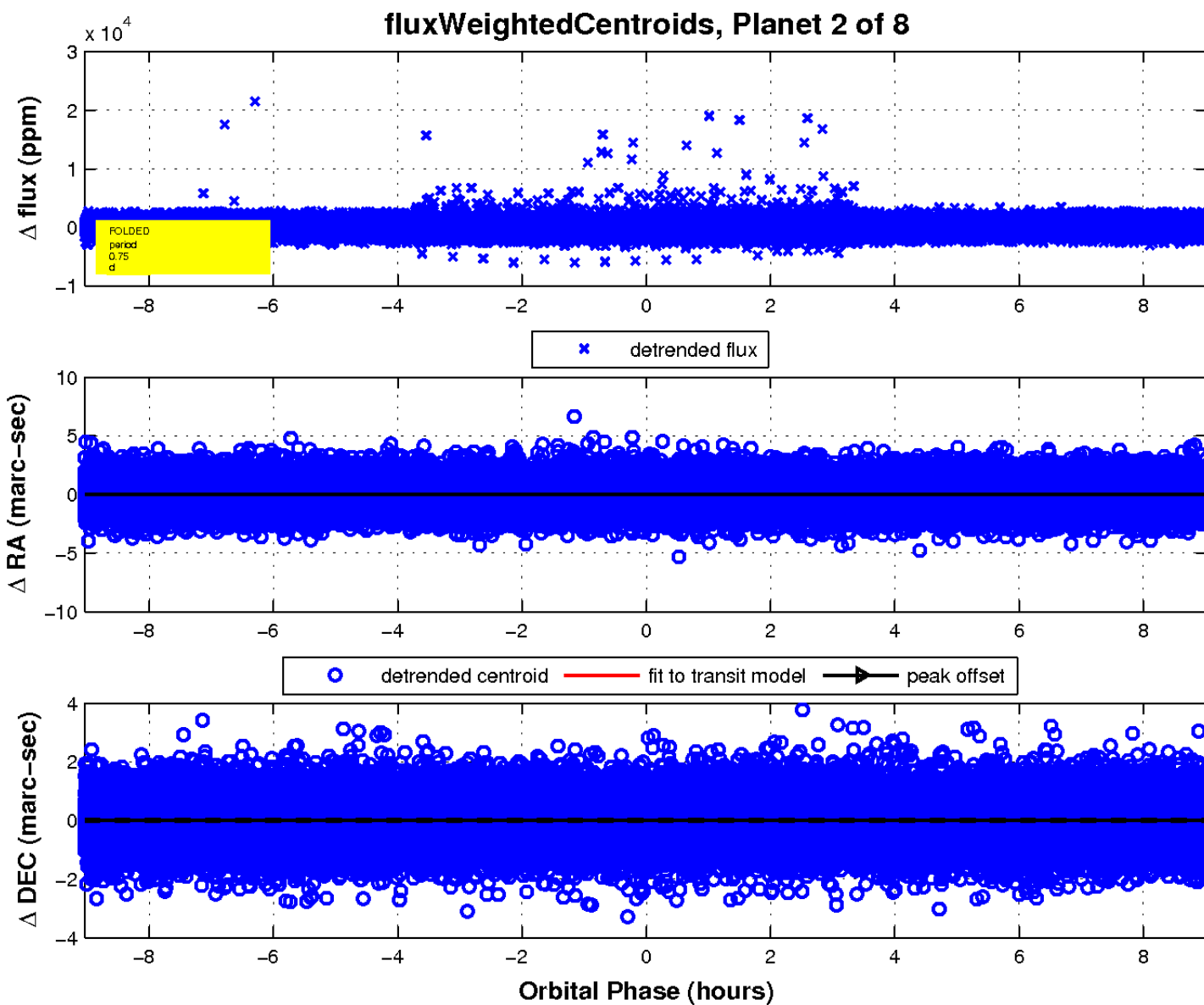
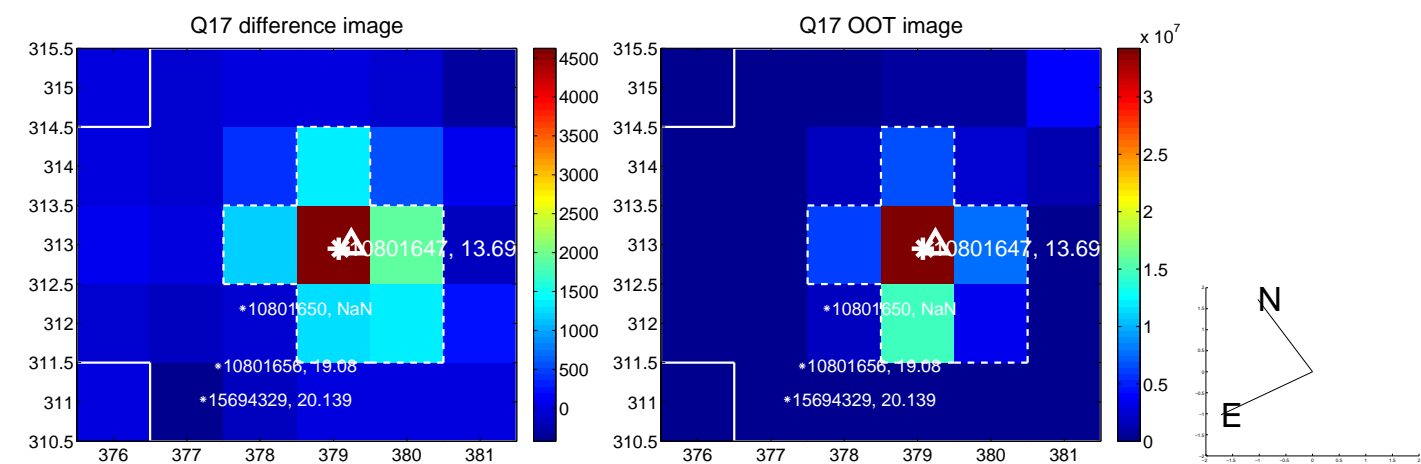
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

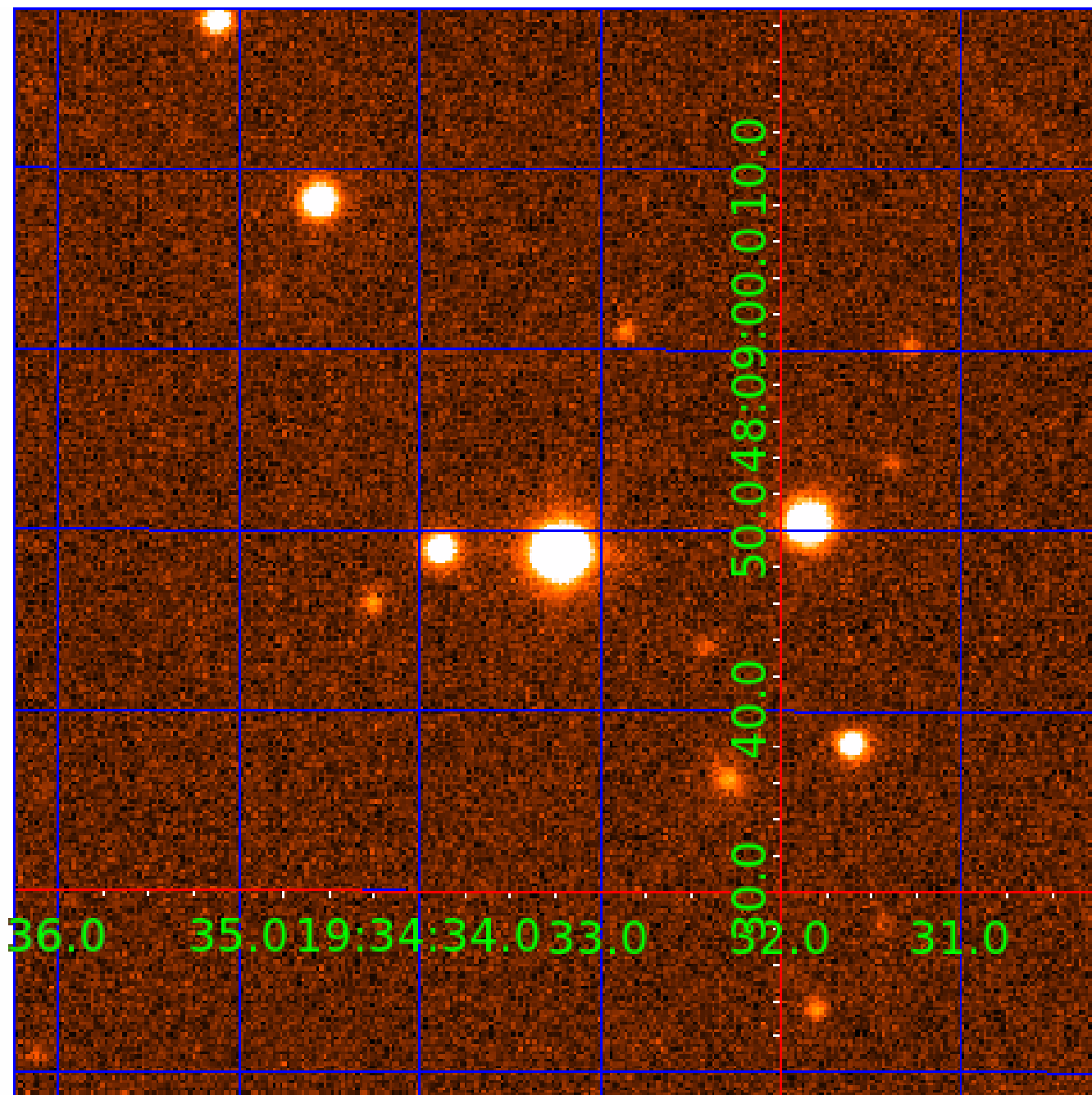


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 010801647

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})
010801647-01	OBS	No	330.368090	409.311041	545.5	2.752	12.3	3.9	1.34	5883	3.22	2.13
010801647-02	OBS	No	0.753128	132.146344	26.9	4.372	7.9	5.1	1.34	5883	0.70	7093.62
010801647-03	OBS	No	299.804795	380.050453	2225.8	4.522	11.3	9.5	1.34	5883	6.50	2.42
010801647-04	OBS	No	197.368302	162.652256	138.6	0.727	12.3	0.7	1.34	5883	1.67	4.23
010801647-05	OBS	No	197.363503	162.428687	731.8	4.635	11.5	5.3	1.34	5883	3.64	4.23
010801647-06	OBS	No	146.937679	192.093369	2298.7	18.590	10.3	7.3	1.34	5883	12.14	6.27
010801647-07	OBS	No	93.083145	189.730328	102.6	3.437	8.4	0.9	1.34	5883	1.62	11.52
010801647-08	OBS	No	268.163039	281.469485	363.3	6.000	9.8	-1.0	1.34	5883	2.54	2.81

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
010801647-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_MARSHALL_SKYE—LPP_DV—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—INCONSISTENT_TRANS
010801647-02	OBS	FP	0.00	1	0	0	0	LPP_DV
010801647-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_CHASES_MARSHALL—LPP_ALT—ALL_TRANS_CHASES—INCONSISTENT_TRANS—CENT_FEW_DIFFS
010801647-04	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_MARSHALL_SKYE_TRACKER—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—INCONSISTENT_TRANS
010801647-05	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_MARSHALL_SKYE—TRANS_GAPPED—LPP_DV—ALL_TRANS_CHASES—MOD_POS_DV—INCONSISTENT_TRANS—SAME_NTL_PERIOD
010801647-06	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—INCONSISTENT_TRANS
010801647-07	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_TRACKER—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT
010801647-08	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_MARSHALL—ALL_TRANS_CHASES—NO_FITS—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.

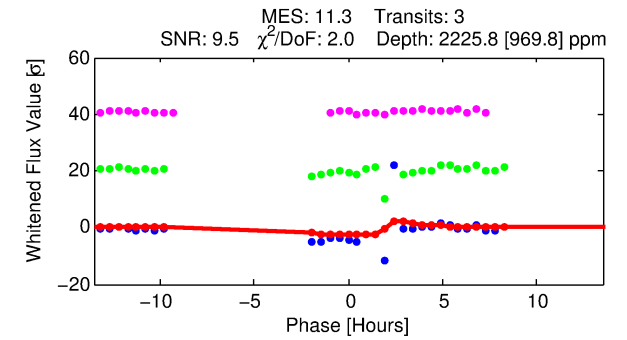
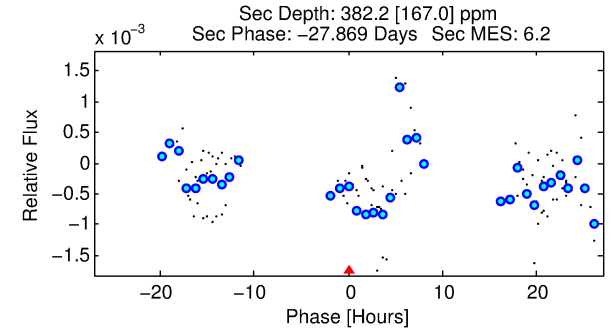
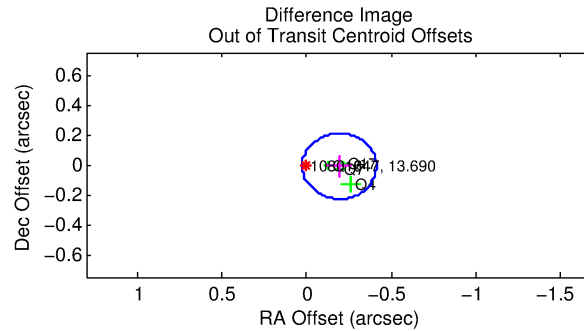
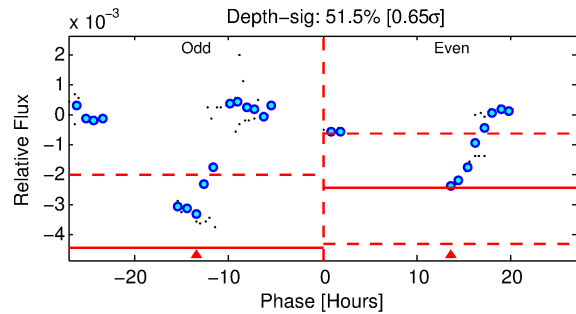
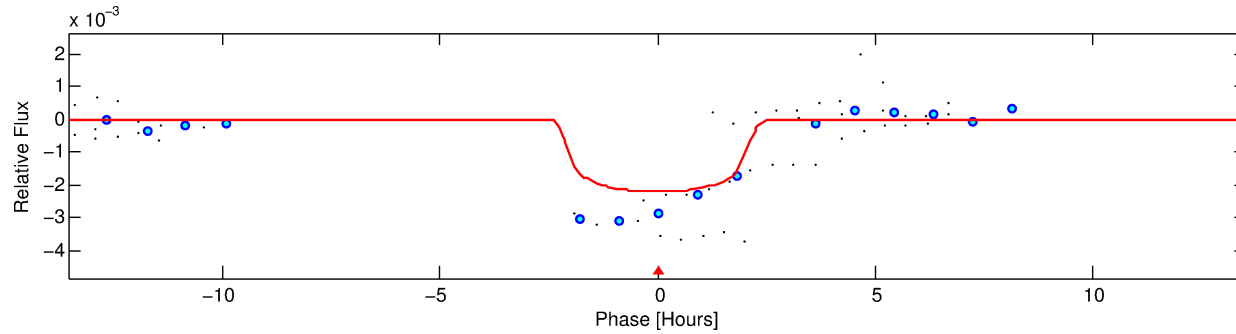
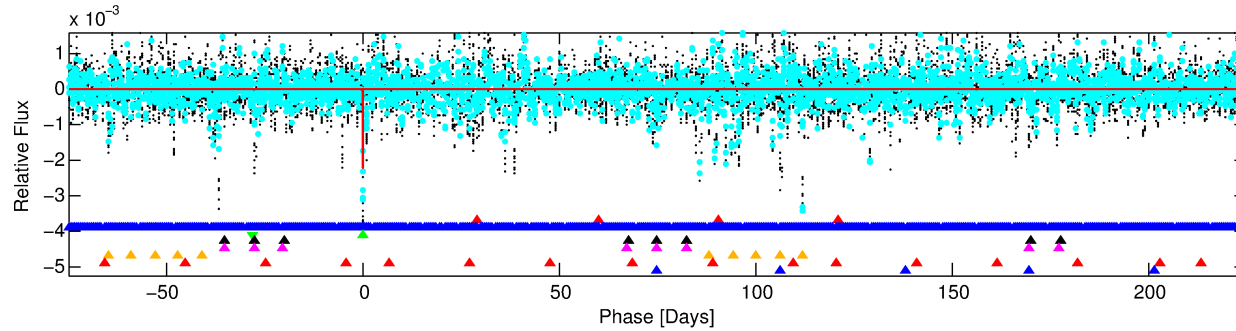
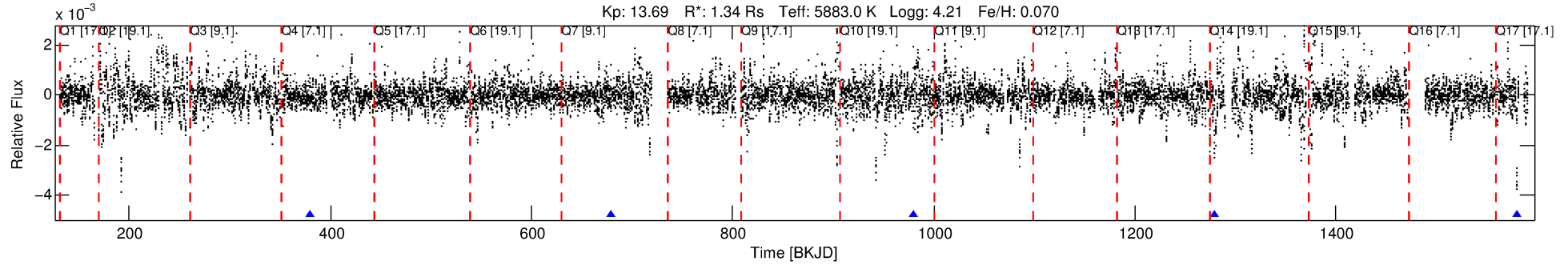
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 010801647-03

No Significant Match Found

DV One-Page Summary

KIC: 10801647 Candidate: 3 of 8 Period: 299.805 d



DV Fit Results:

Period = 299.80480 [0.00976] d
Epoch = 380.0505 [0.0498] BKJD
Rp/R* = 0.0445 [0.4227]
a/R* = 456.27 [19471.23]
b = 0.53 [58.12]
Seff = 2.42 [0.97]
Teq = 318 [32] K
Rp = 6.50 [61.83] Re
a = 0.8919 [0.2218] AU
Ag = 3958.33 [75306.46] [0.05 σ]
Teffp = 3901 [18552] K [0.19 σ]

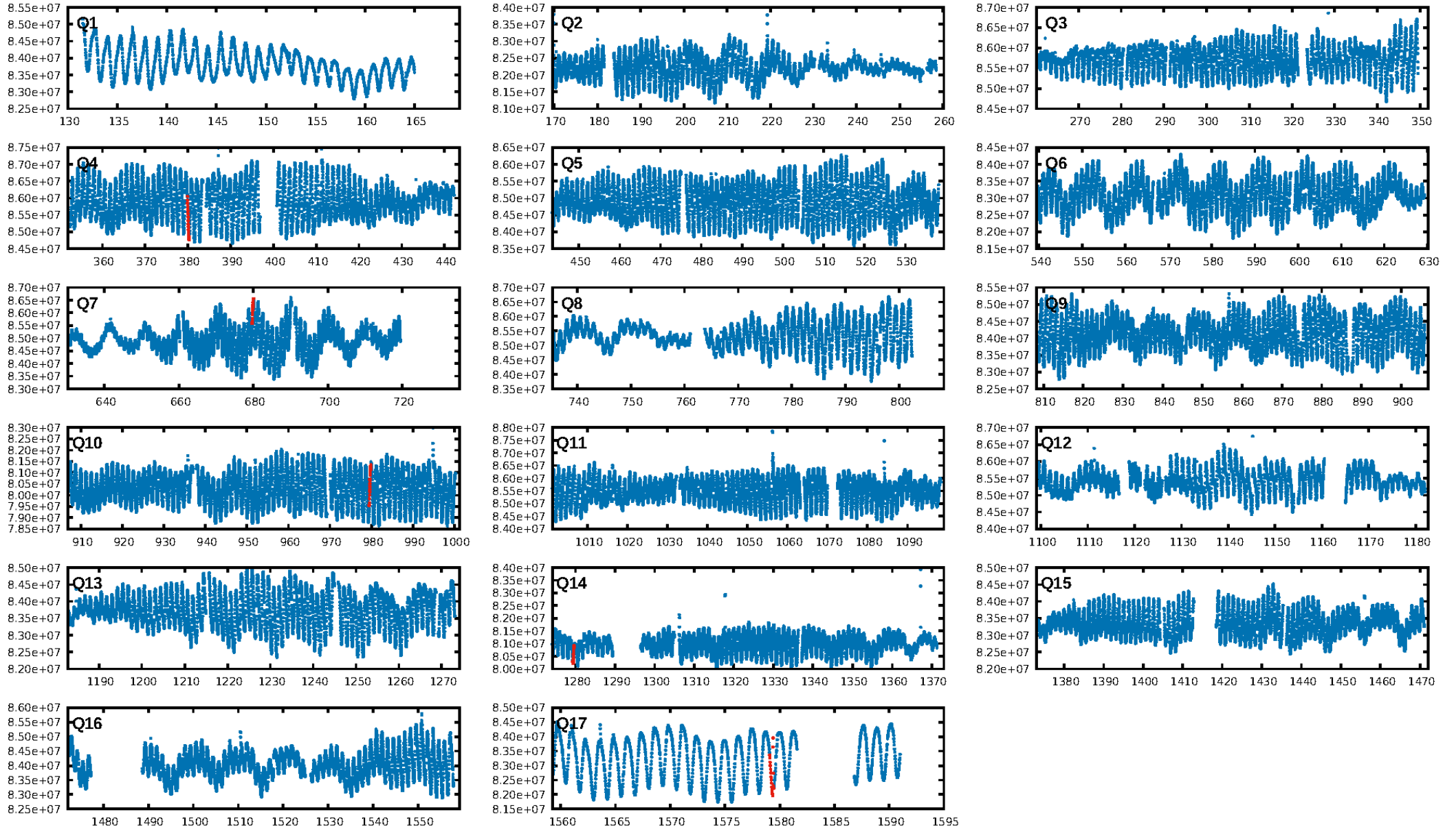
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [101.07 σ]
LongPeriod-sig: 100.0% [138.57 σ]
ModelChiSquare2-sig: 0.0%
ModelChiSquareGof-sig: 55.1%
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [2/2]
GhostDiagnostic-chr: -245.8
Centroid-sig: 37.5%
Centroid-so: 0.165 arcsec [0.74 σ]
OotOffset-rm: 0.193 arcsec [2.65 σ]
OotOffset-st: 1/1/1/1 [4]
KicOffset-rm: 0.141 arcsec [2.05 σ]
KicOffset-st: 1/1/1/1 [4]
DiffImageQuality-fgm: 0.50 [2/4]
DiffImageOverlap-fno: 0.00 [0/4]

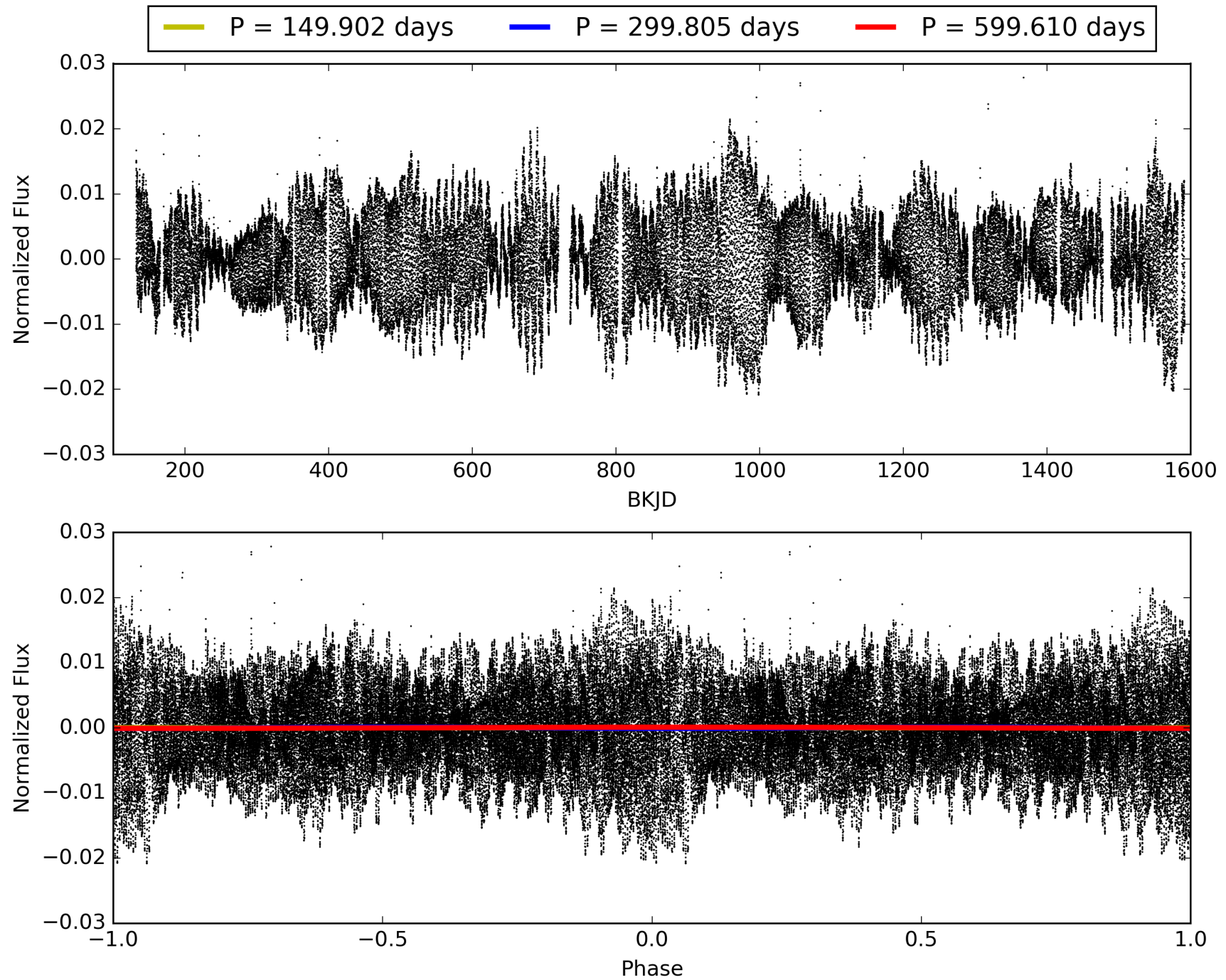
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 06:21:30 Z

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TCE 010801647-03, PDC Light Curves

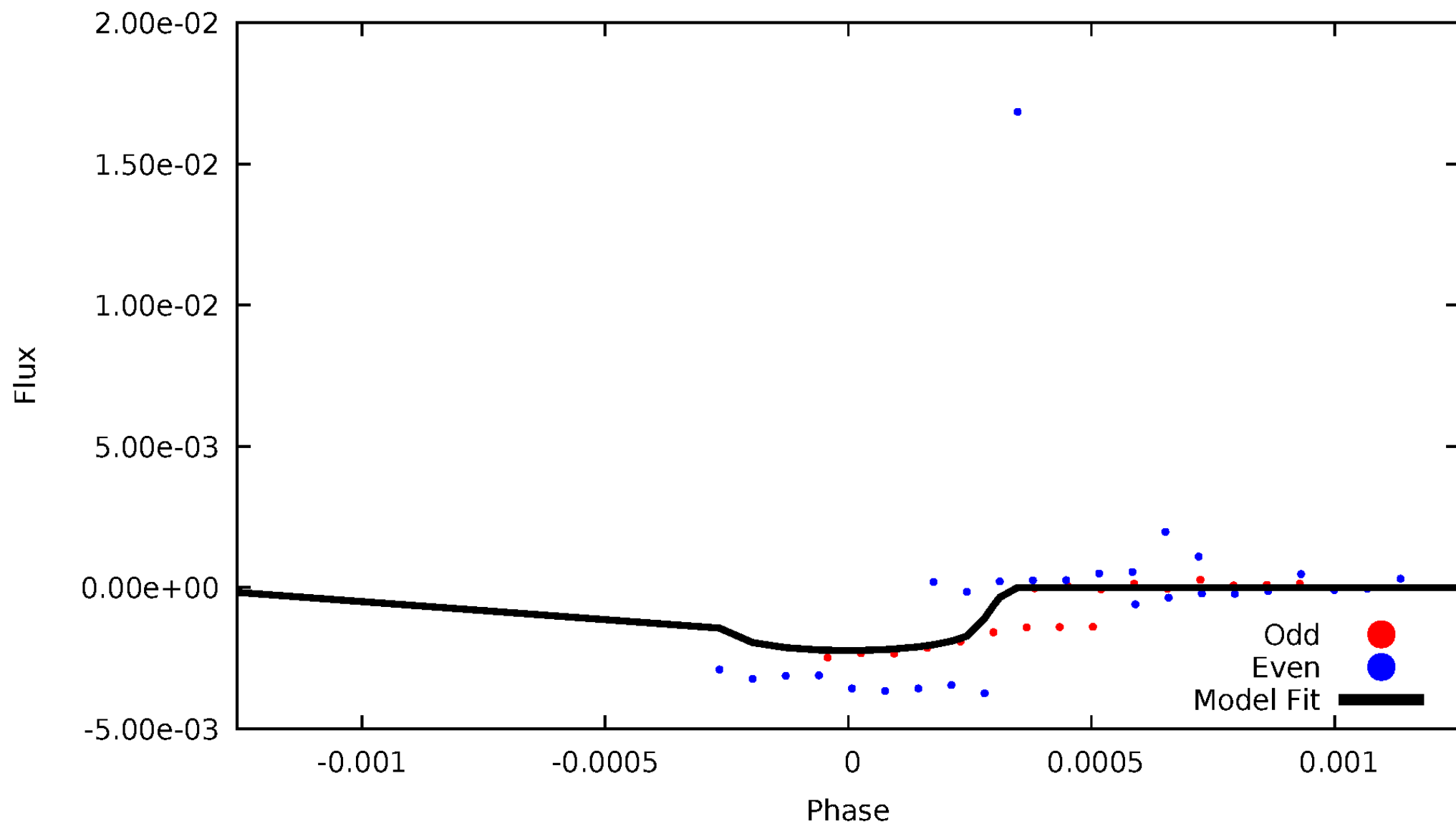


TCE 010801647-03



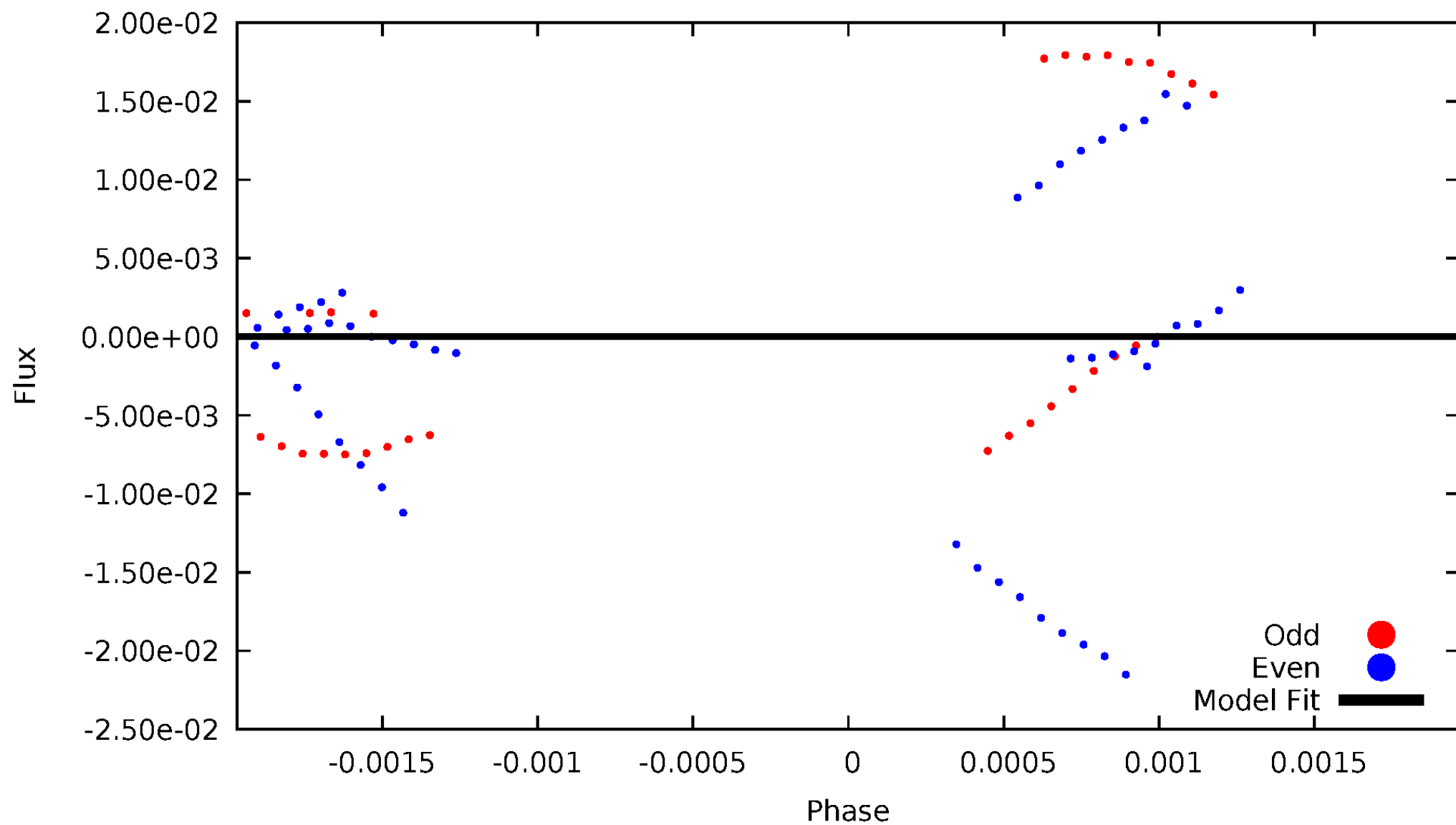
DV Odd/Even

TCE 010801647-03

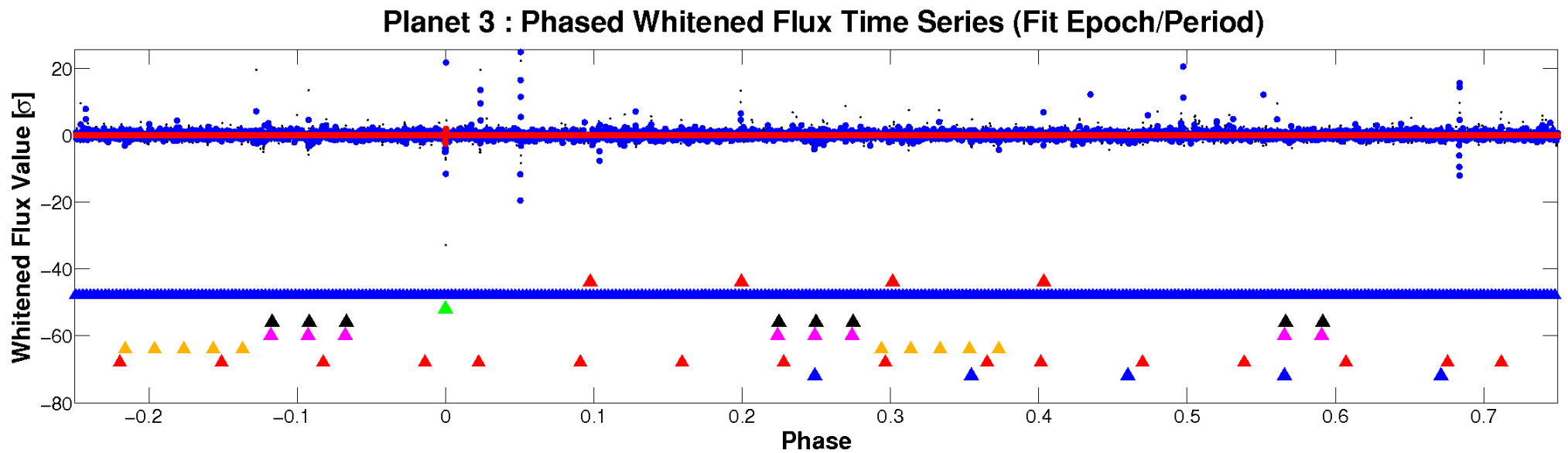
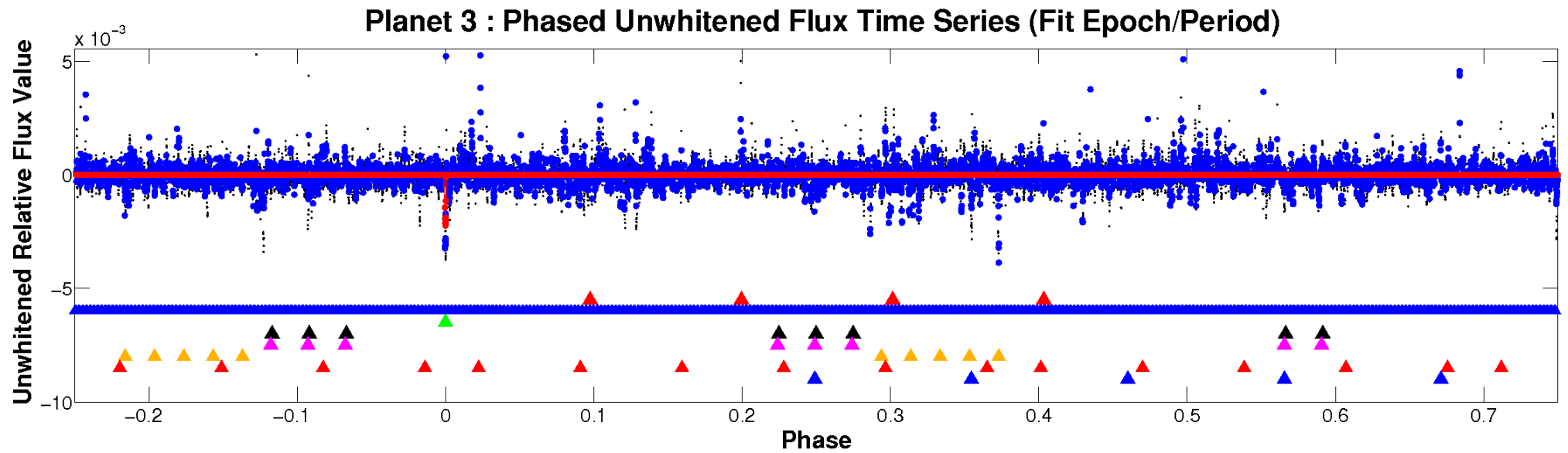


ALT Odd/Even

TCE 010801647-03

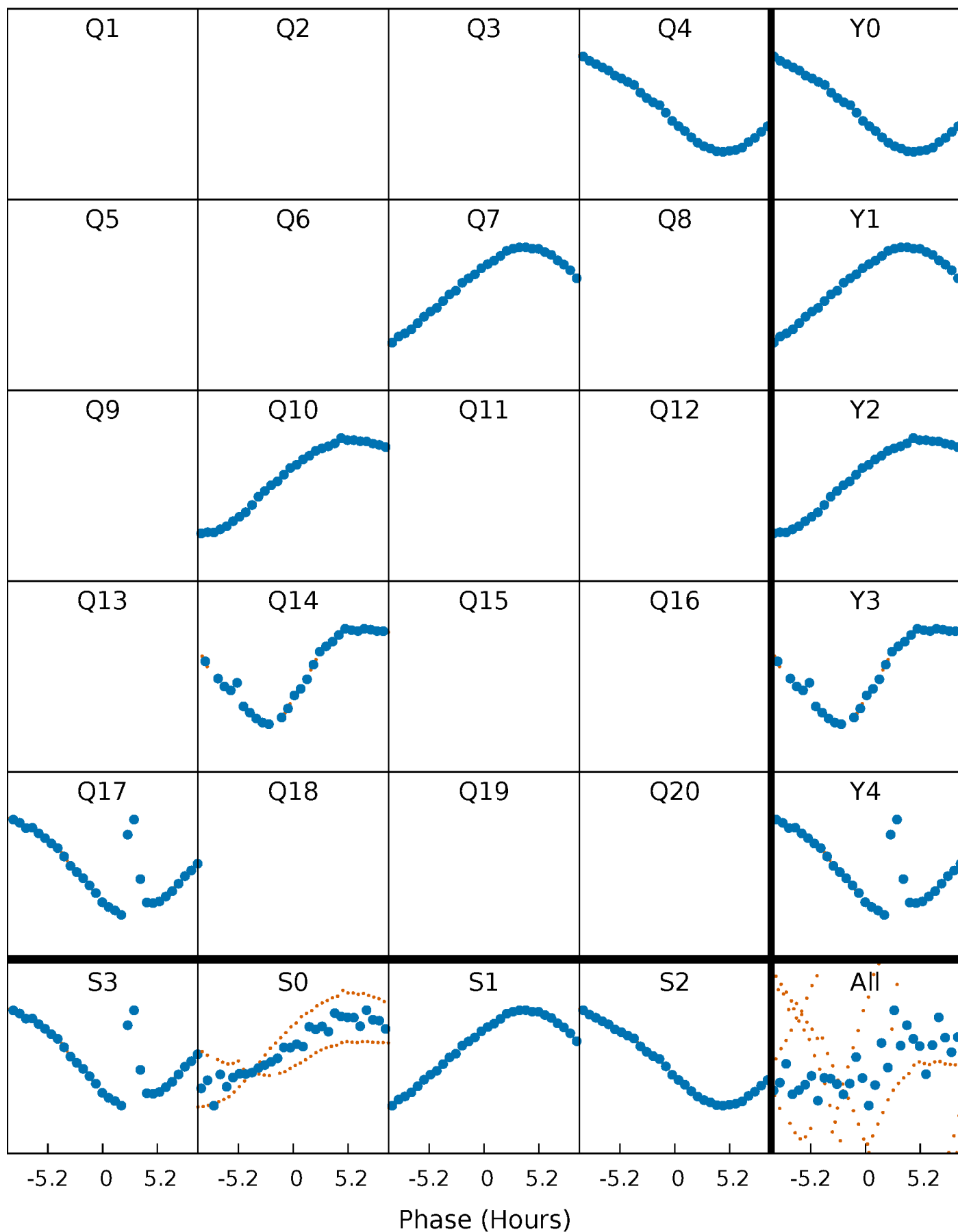


Non-Whitened Vs. Whitened Light Curve



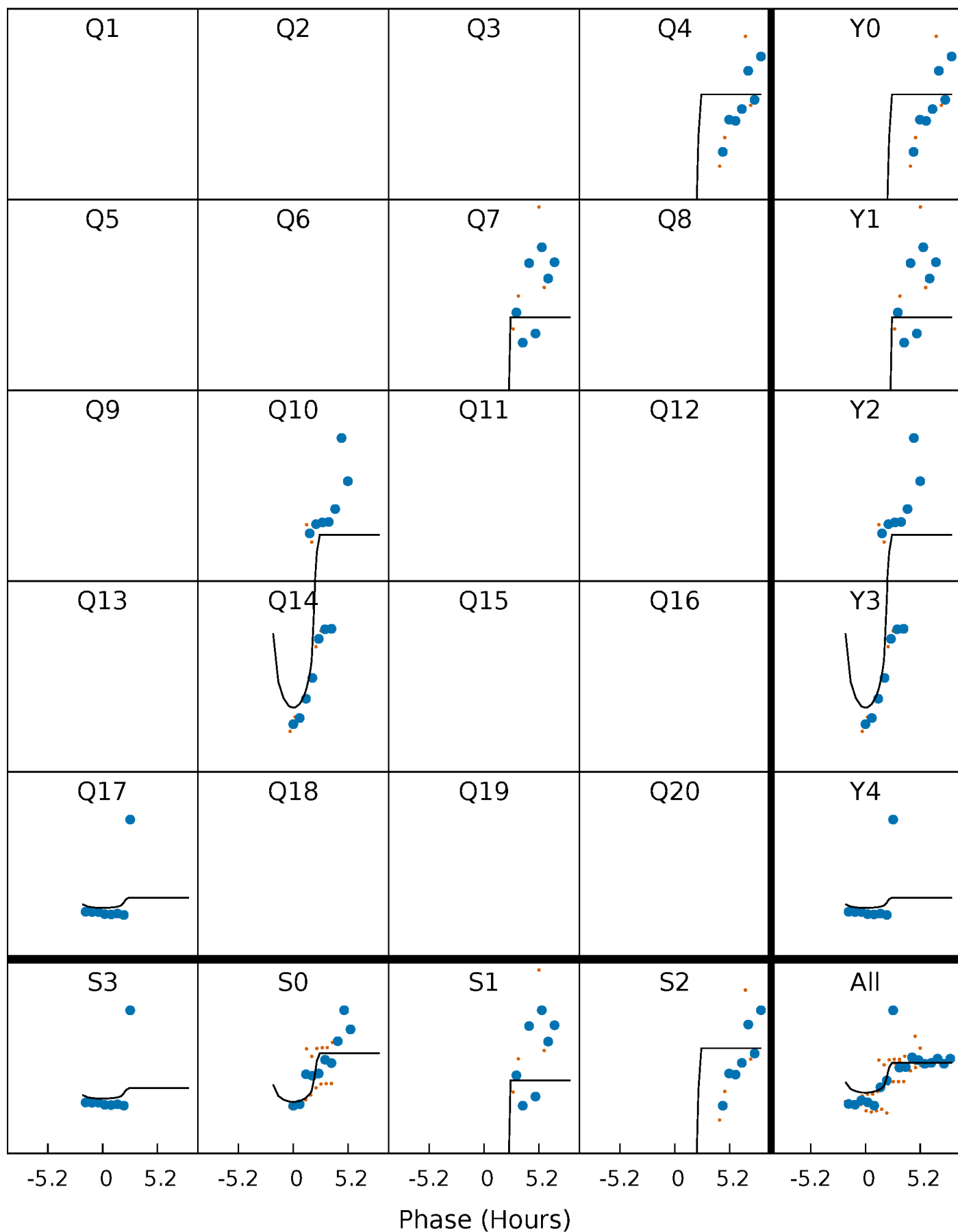
PDC Quarter-Phased Transit Curves

TCE 010801647-03 $P=299.804795$ Days $T_0=380.050453$ (BKJD)



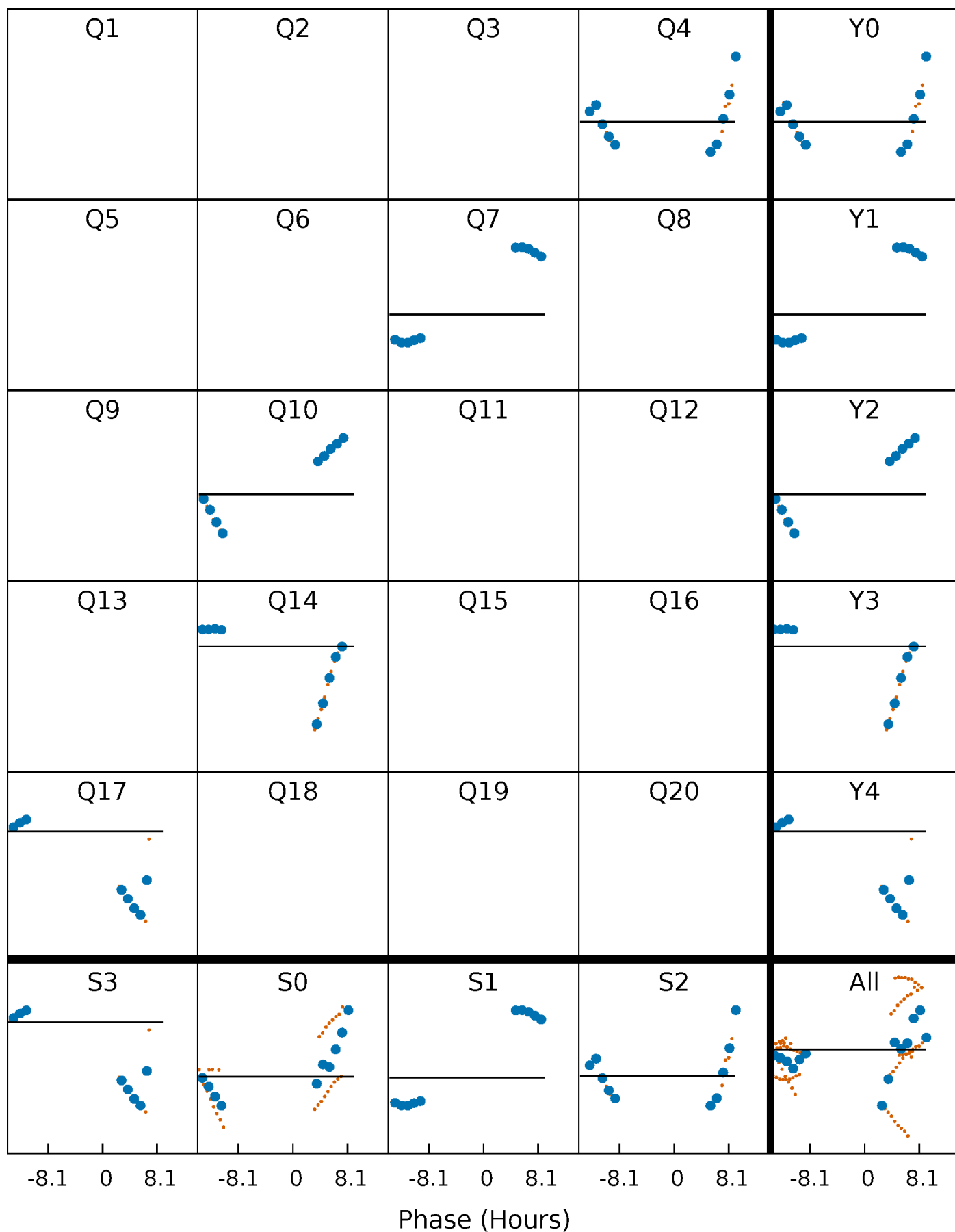
DV Quarter-Phased Transit Curves

TCE 010801647-03 $P=299.804795$ Days $T_0=380.050453$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

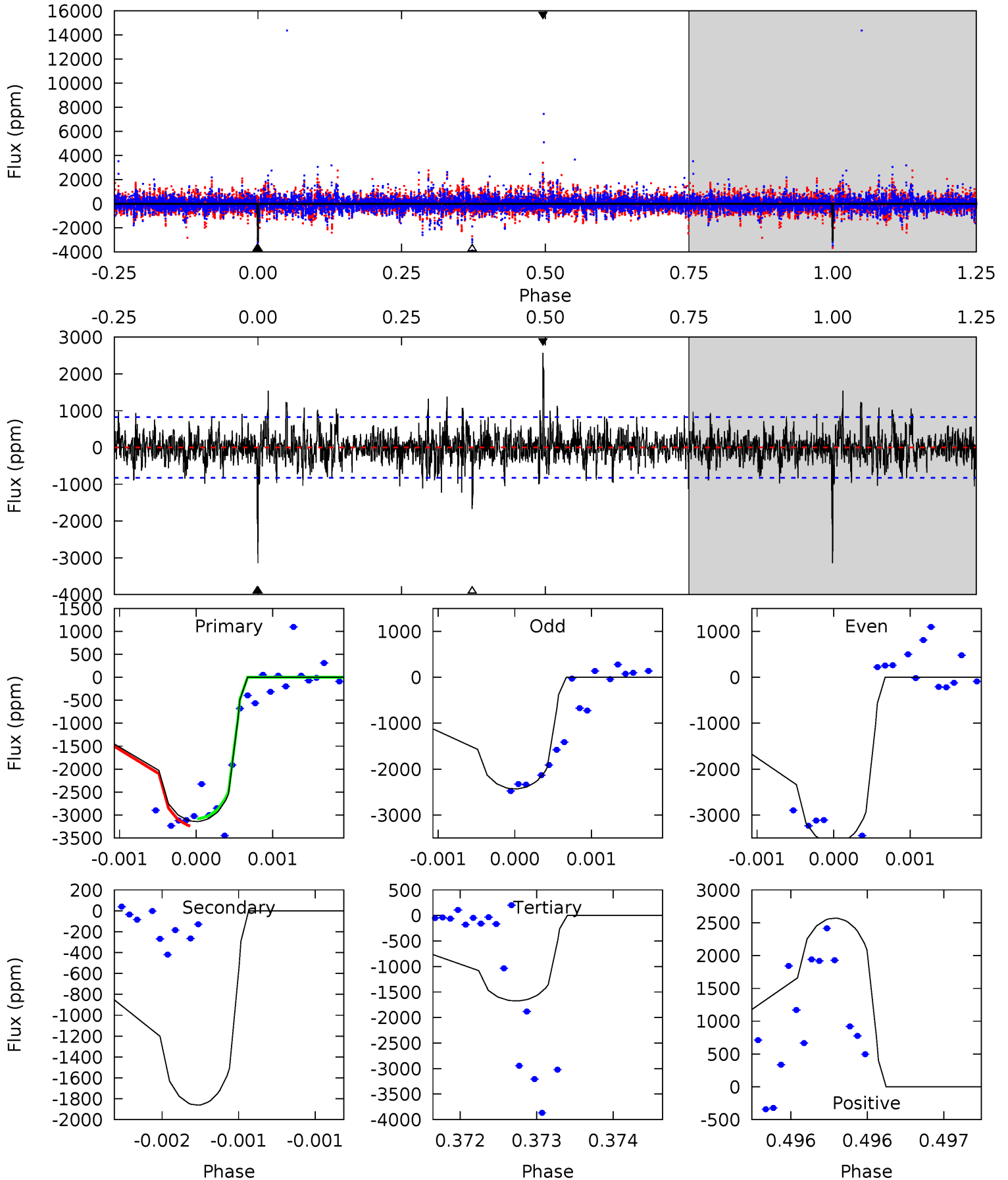
TCE 010801647-03 P=299.768171 Days $T_0=380.013172$ (BKJD)



DV Model-Shift Uniqueness Test

010801647-03, P = 299.804795 Days, E = 80.245658 Days

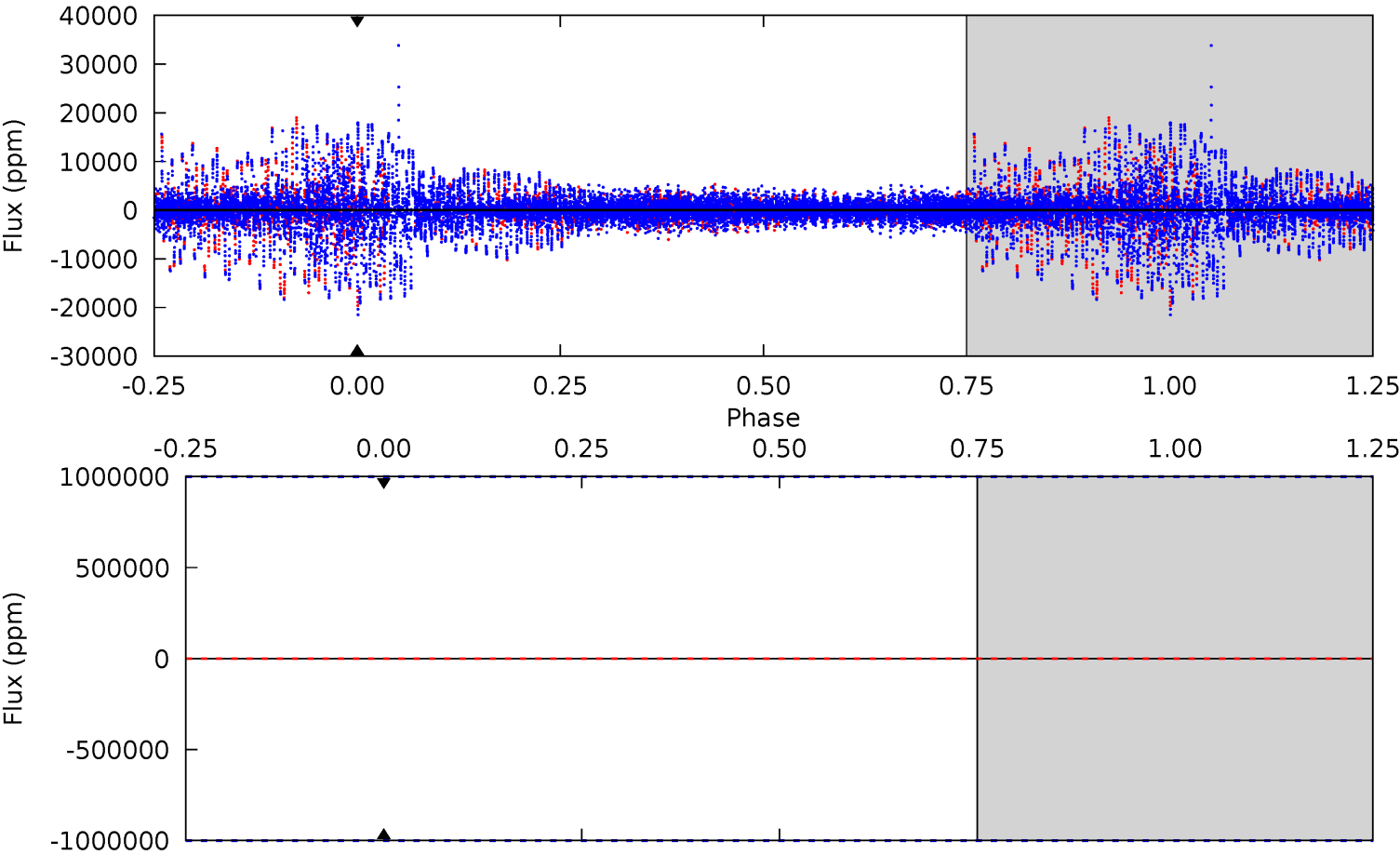
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
21.1	12.5	11.3	17.3	5.56	3.46	2.07	9.87	3.84	1.26	-4.77	3.61	0.84	0.45	0.47



Alt Model-Shift Uniqueness Test

010801647-03, P = 299.768171 Days, E = 80.245001 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



Stellar Parameters For KIC 010801647

	$T_{\text{eff}} (K)$	$\log(g)$	$[\text{Fe}/\text{H}]$	$R (R_{\odot})$	$M (M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	5883^{+158}_{-176}	$4.206^{+0.220}_{-0.180}$	$0.070^{+0.250}_{-0.300}$	$1.340^{+0.367}_{-0.367}$	$1.050^{+0.138}_{-0.138}$	$0.615^{+0.759}_{-0.298}$
	+3%/-3%	+5%/-4%	+357%/-429%	+27%/-27%	+13%/-13%	+123%/-48%
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 010801647-03 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-1862 ± 149	$46.51^{+45.44}_{-32.65}$	444^{+36}_{-32}	2889^{+1336}_{-472}	374^{+3613}_{-276}
Alt.	0 ± 1000000	$54.13^{+52.85}_{-35.71}$	443^{+36}_{-33}	-2842^{+9228}_{-3339}	$-304.616^{+28904.438}_{-24804.909}$

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

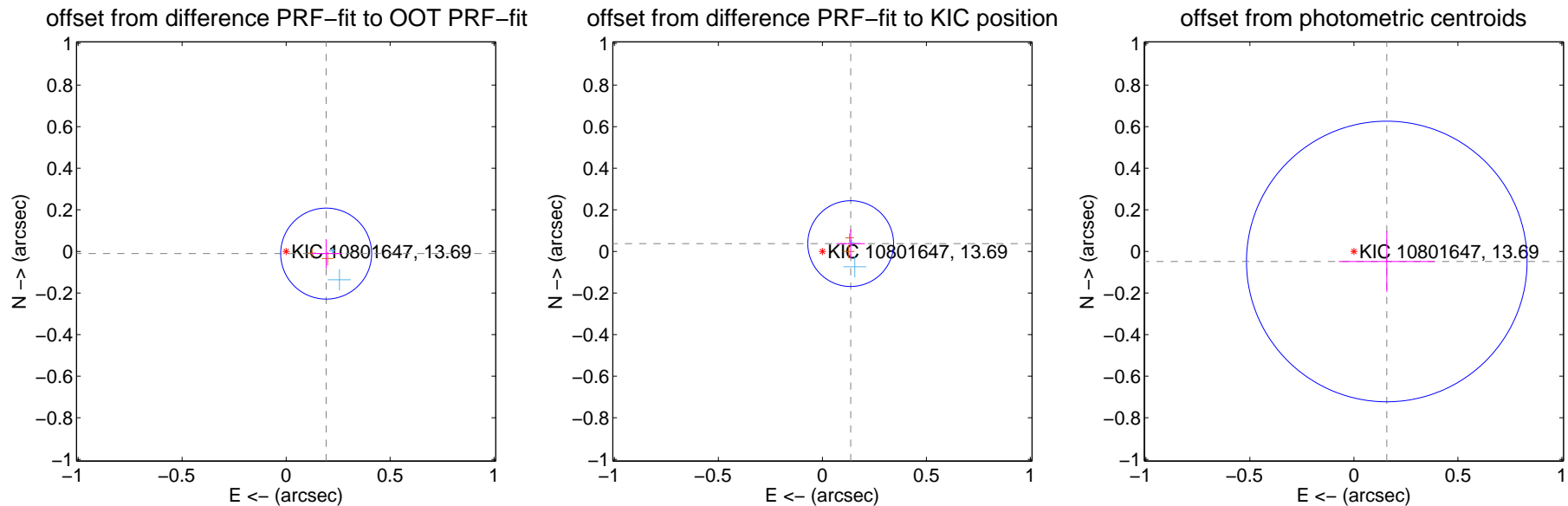
DV Centroid Data

Supplemental centroid analysis for 010801647-03. Kepler magnitude: 13.69. Transit SNR 9.54

There are 2 quarters with good PRF difference image offsets

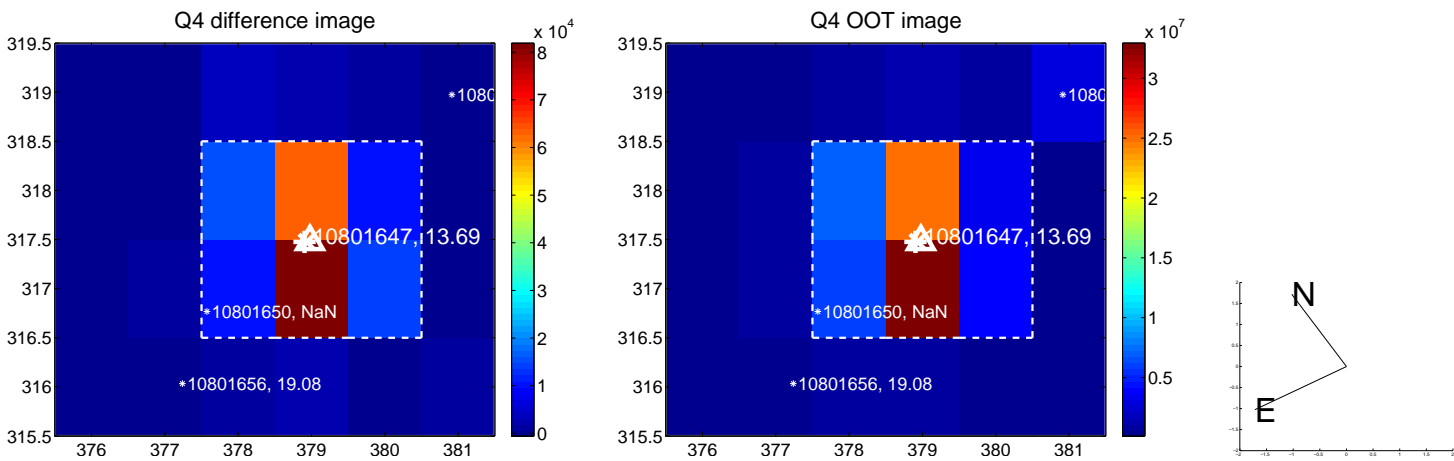
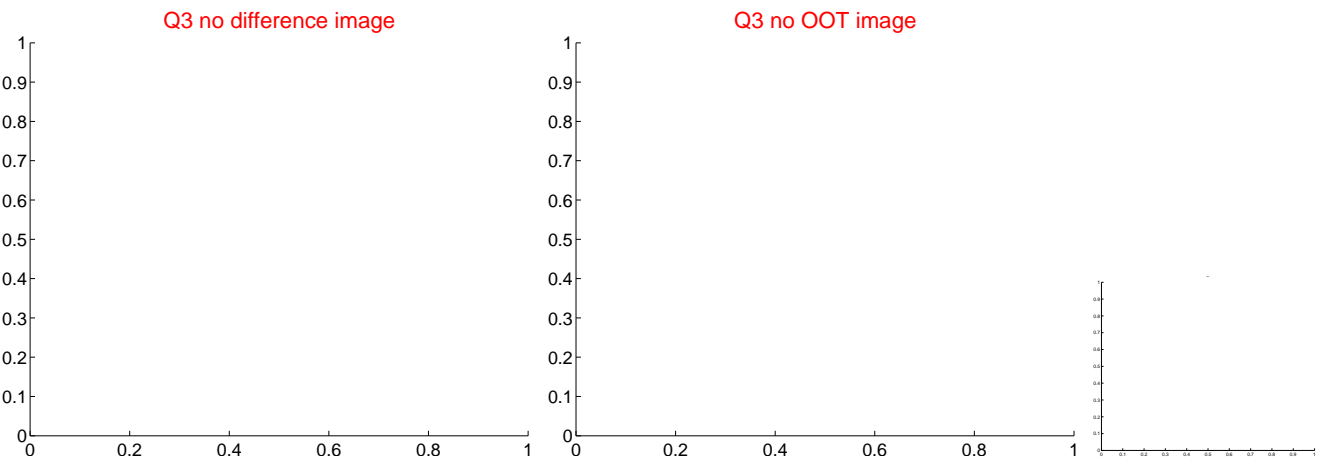
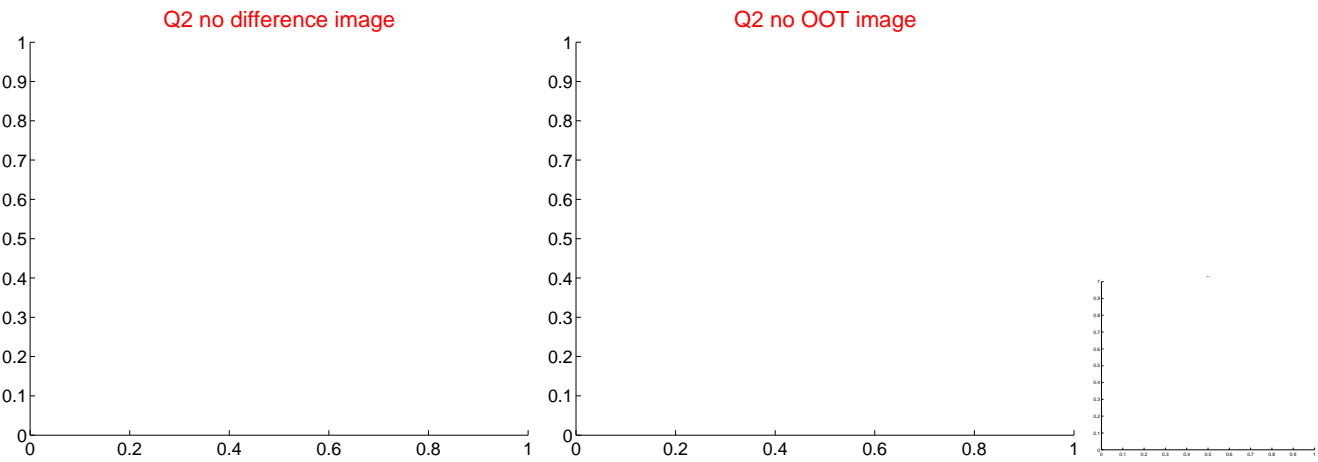
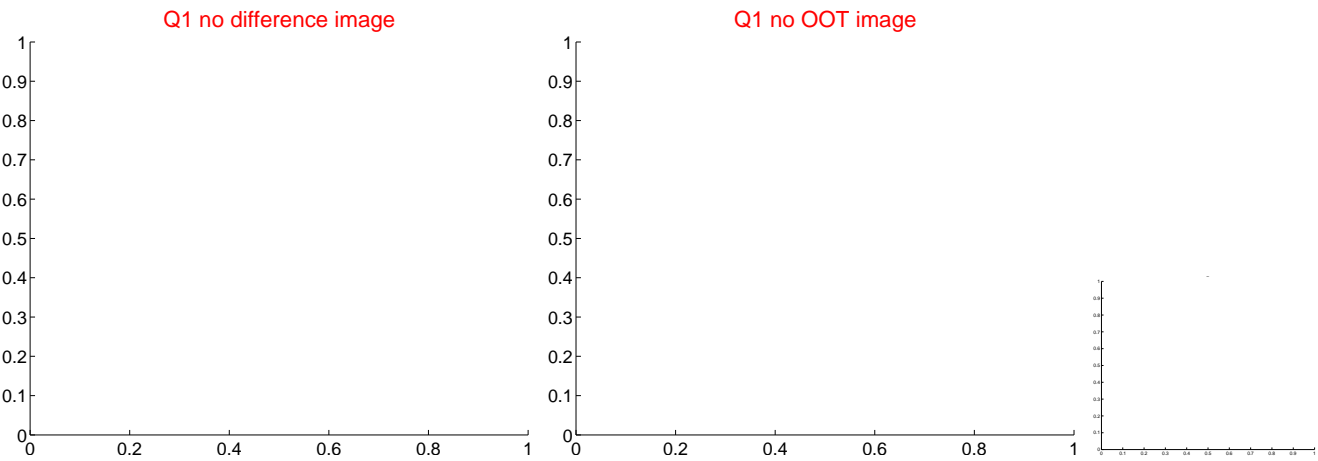
The direct PRF centroid is offset from the target star catalog position by about 0.09 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.193 ± 0.073	2.65	-0.193 ± 0.073	-0.010 ± 0.070
PRF-fit source offset from KIC position	0.141 ± 0.069	2.05	-0.136 ± 0.069	0.038 ± 0.069
photometric centroid source offset	0.17 ± 0.22	0.74	-0.16 ± 0.23	-0.05 ± 0.15

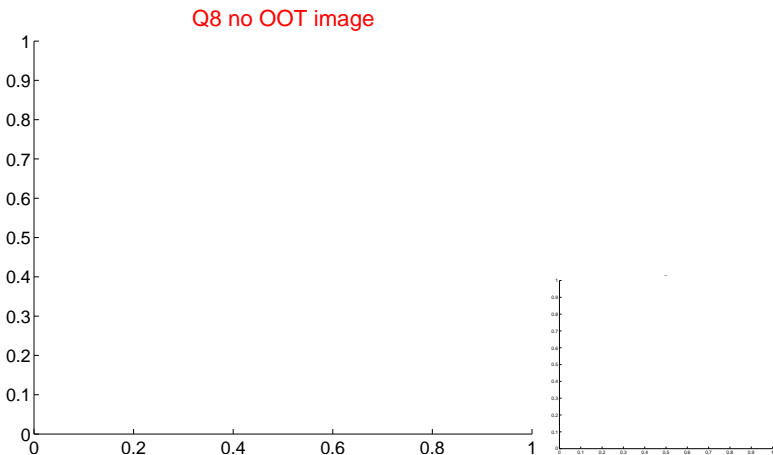
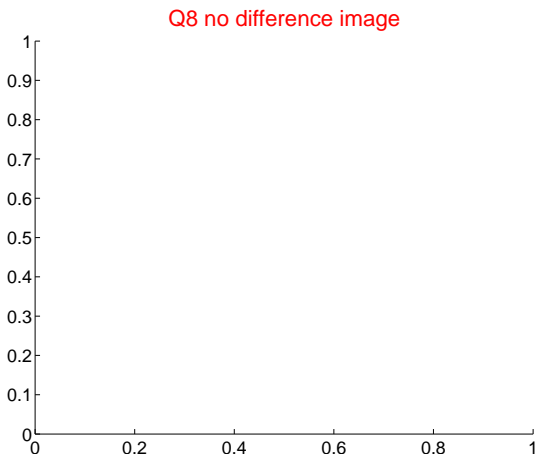
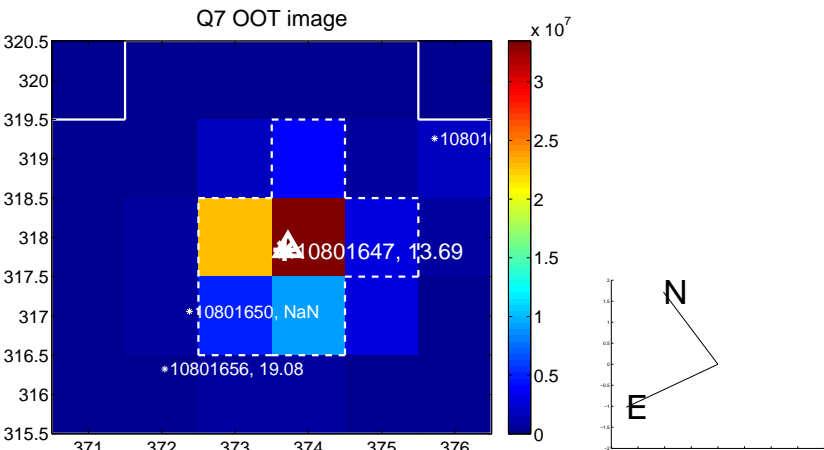
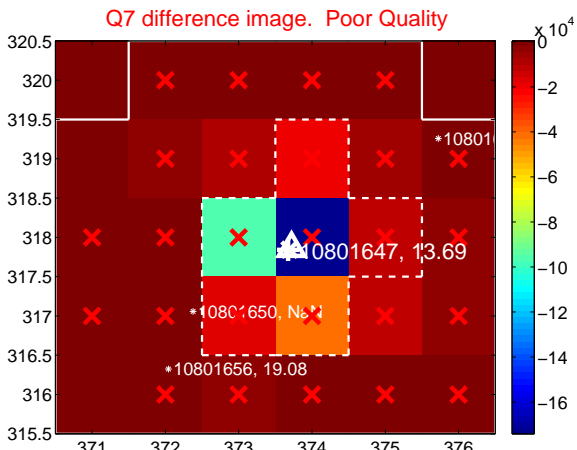
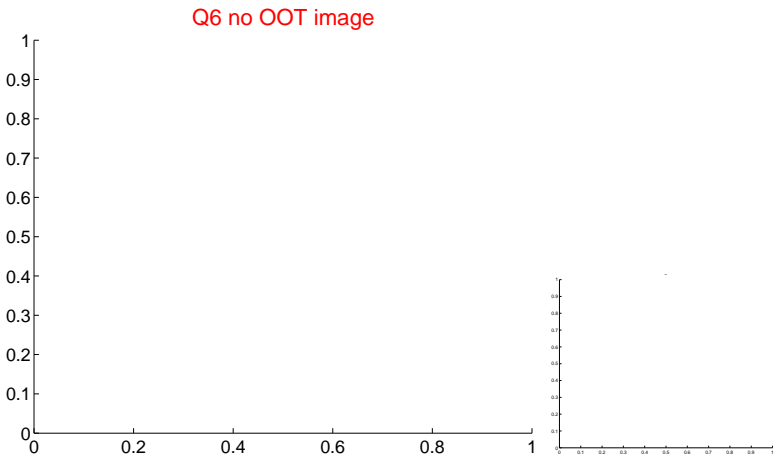
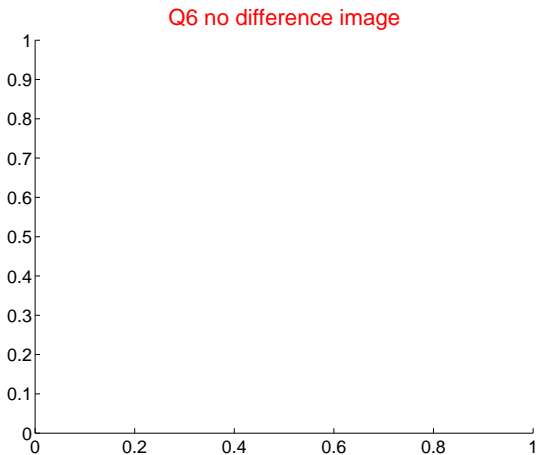
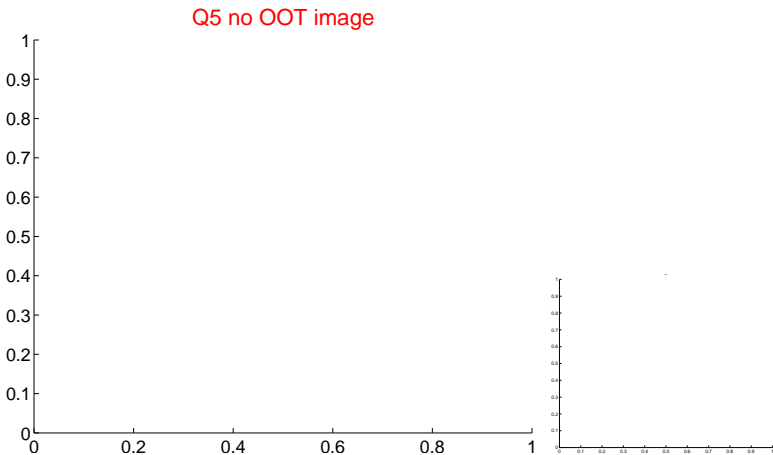
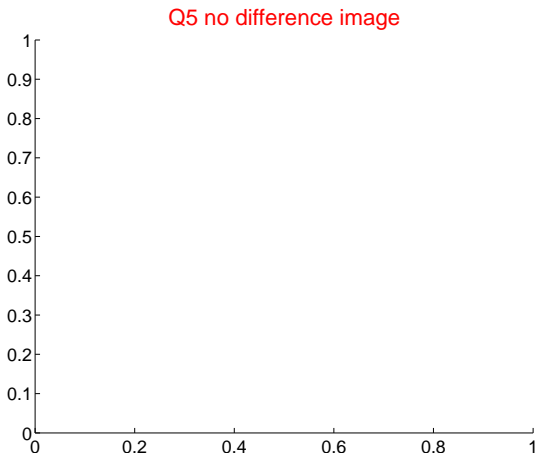


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

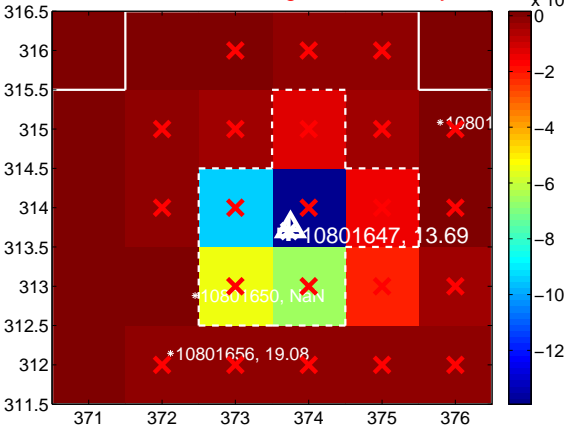
Q9 no difference image



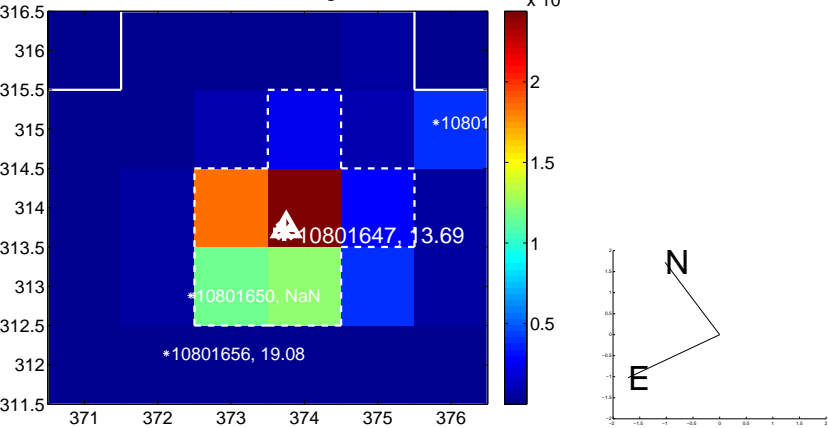
Q9 no OOT image



Q10 difference image. Poor Quality



Q10 OOT image



Q11 no difference image



Q11 no OOT image



Q12 no difference image



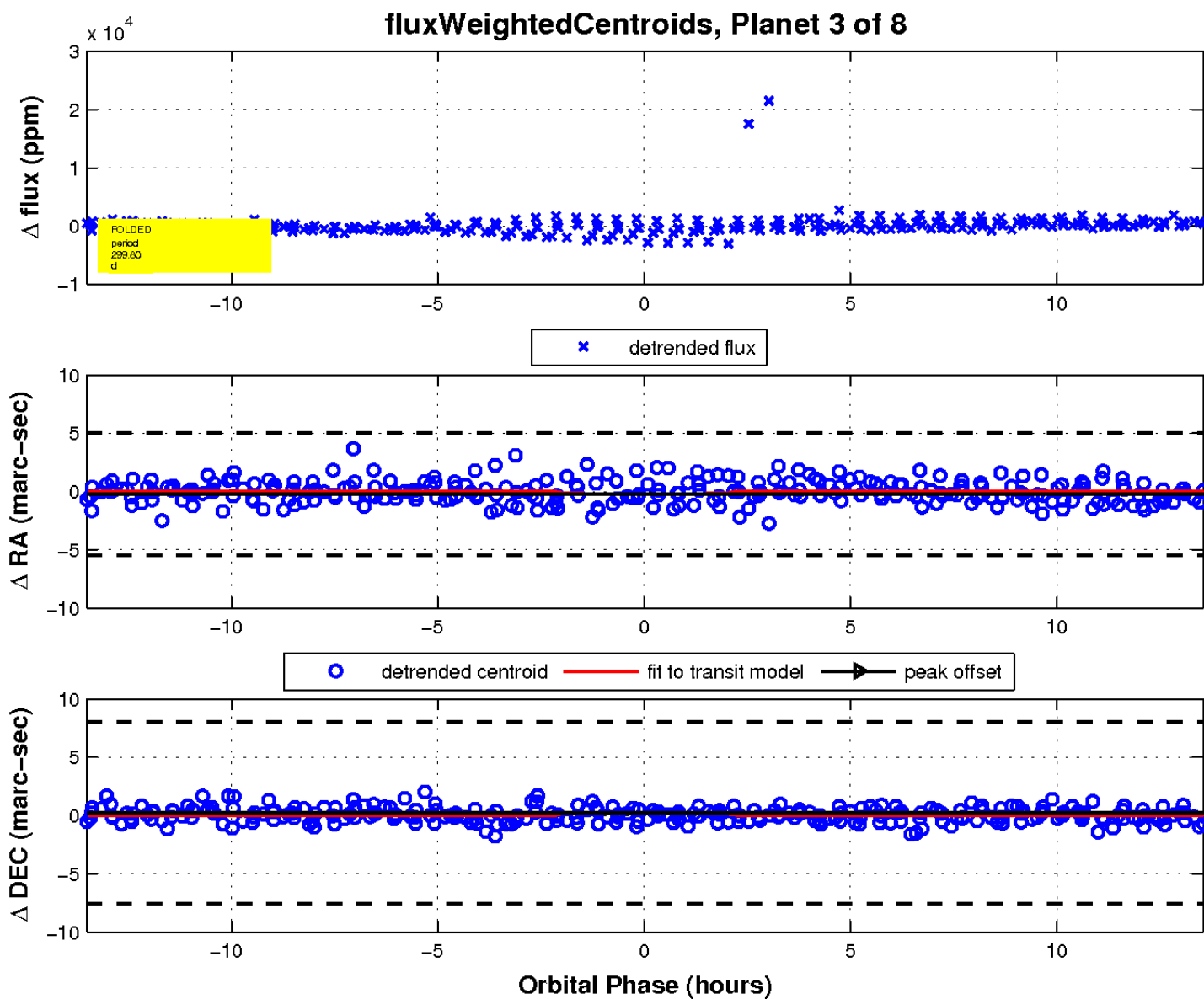
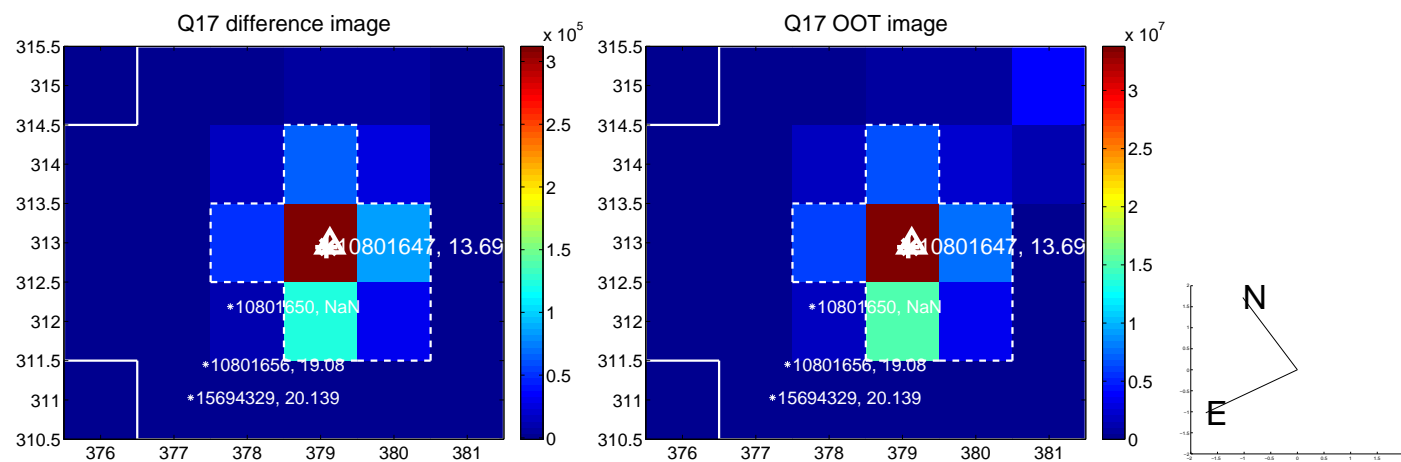
Q12 no OOT image



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

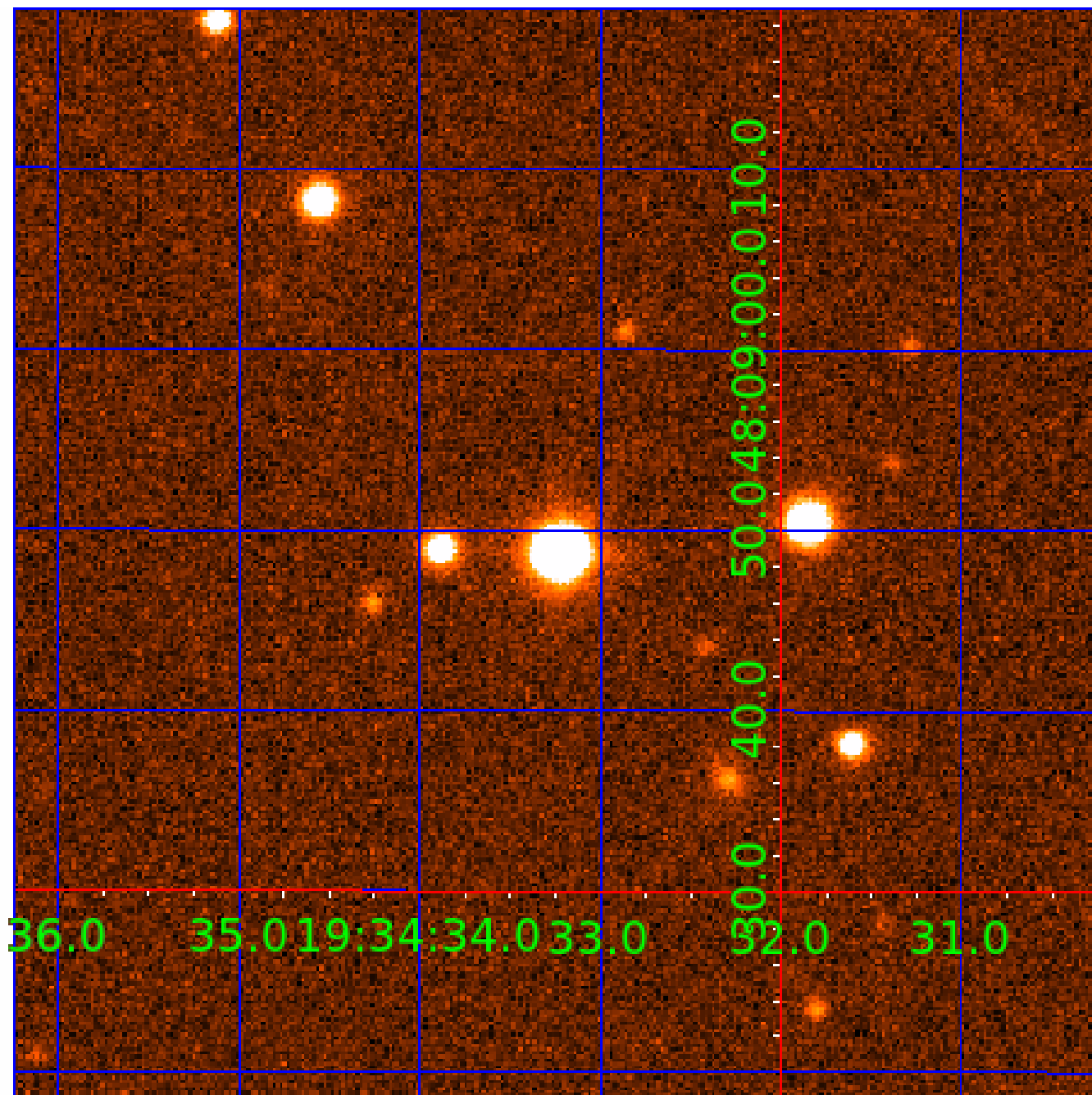


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 010801647

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})
010801647-01	OBS	No	330.368090	409.311041	545.5	2.752	12.3	3.9	1.34	5883	3.22	2.13
010801647-02	OBS	No	0.753128	132.146344	26.9	4.372	7.9	5.1	1.34	5883	0.70	7093.62
010801647-03	OBS	No	299.804795	380.050453	2225.8	4.522	11.3	9.5	1.34	5883	6.50	2.42
010801647-04	OBS	No	197.368302	162.652256	138.6	0.727	12.3	0.7	1.34	5883	1.67	4.23
010801647-05	OBS	No	197.363503	162.428687	731.8	4.635	11.5	5.3	1.34	5883	3.64	4.23
010801647-06	OBS	No	146.937679	192.093369	2298.7	18.590	10.3	7.3	1.34	5883	12.14	6.27
010801647-07	OBS	No	93.083145	189.730328	102.6	3.437	8.4	0.9	1.34	5883	1.62	11.52
010801647-08	OBS	No	268.163039	281.469485	363.3	6.000	9.8	-1.0	1.34	5883	2.54	2.81

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
010801647-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_MARSHALL_SKYE—LPP_DV—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—INCONSISTENT_TRANS
010801647-02	OBS	FP	0.00	1	0	0	0	LPP_DV
010801647-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_CHASES_MARSHALL—LPP_ALT—ALL_TRANS_CHASES—INCONSISTENT_TRANS—CENT_FEW_DIFFS
010801647-04	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_MARSHALL_SKYE_TRACKER—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—INCONSISTENT_TRANS
010801647-05	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_MARSHALL_SKYE—TRANS_GAPPED—LPP_DV—ALL_TRANS_CHASES—MOD_POS_DV—INCONSISTENT_TRANS—SAME_NTL_PERIOD
010801647-06	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—INCONSISTENT_TRANS
010801647-07	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_TRACKER—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT
010801647-08	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_MARSHALL—ALL_TRANS_CHASES—NO_FITS—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.

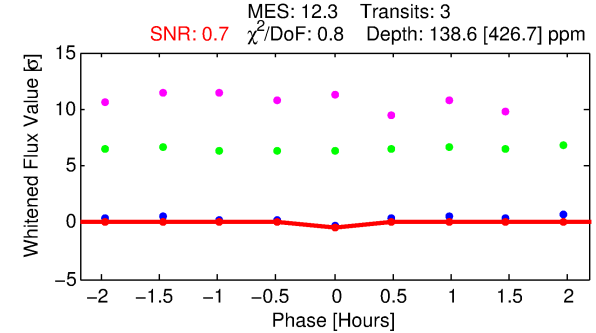
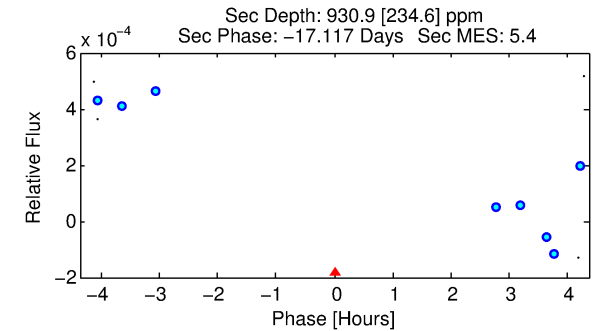
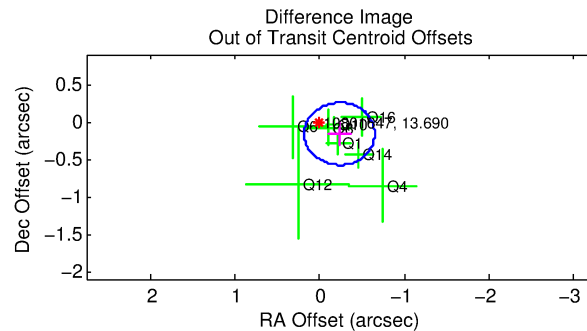
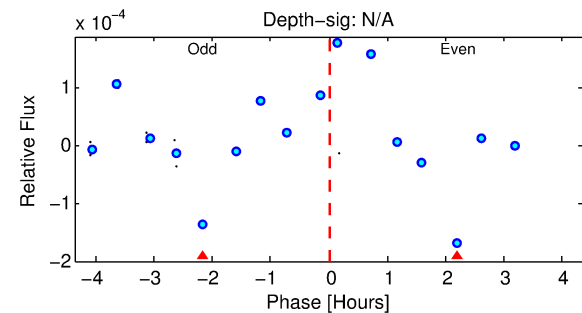
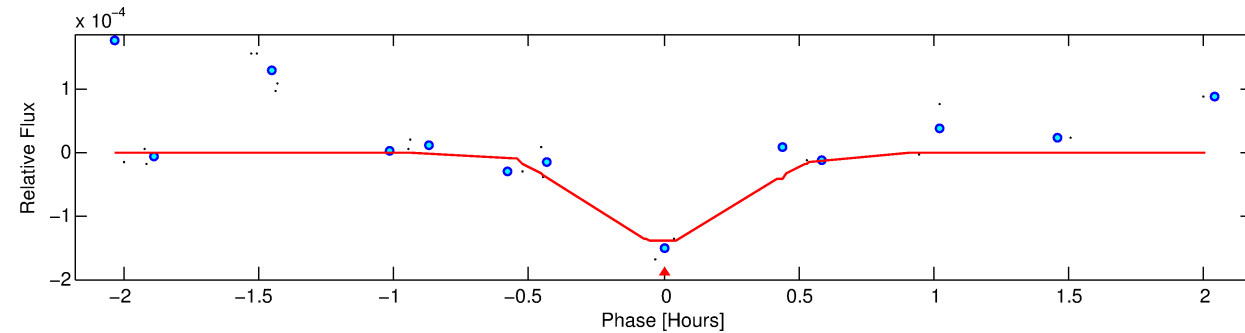
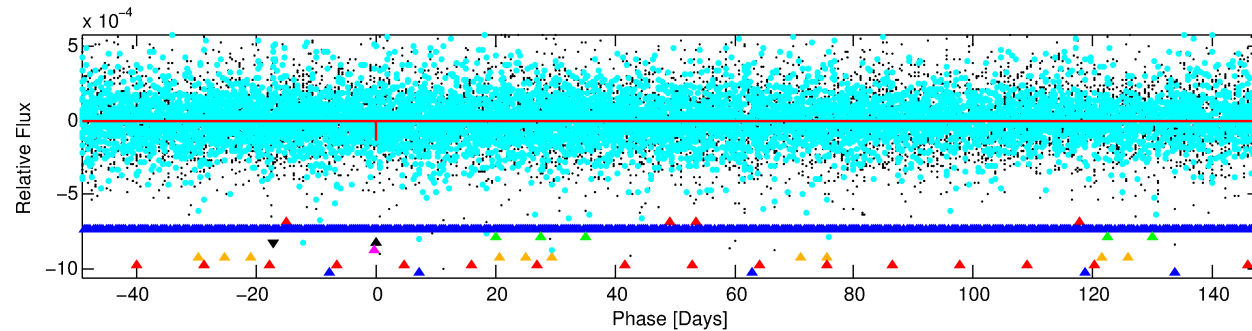
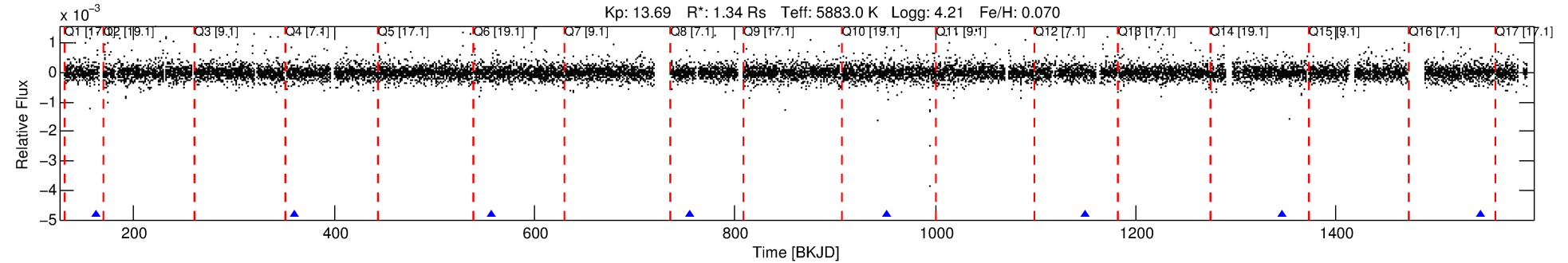
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 010801647-04

No Significant Match Found

DV One-Page Summary

KIC: 10801647 Candidate: 4 of 8 Period: 197.368 d



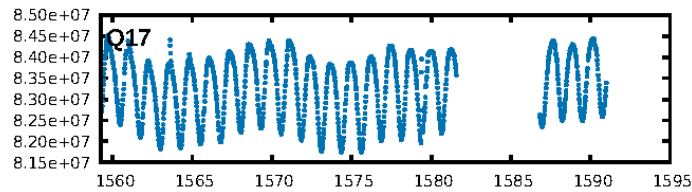
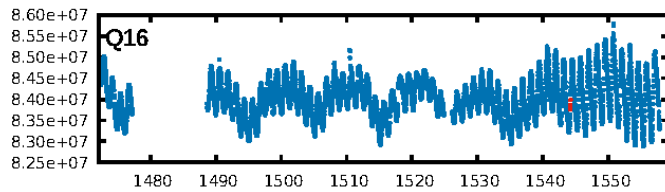
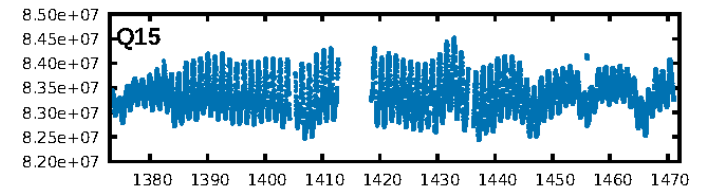
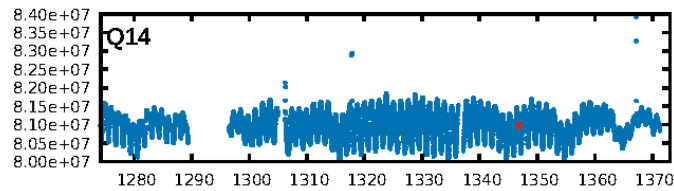
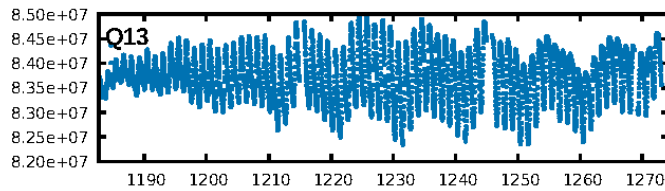
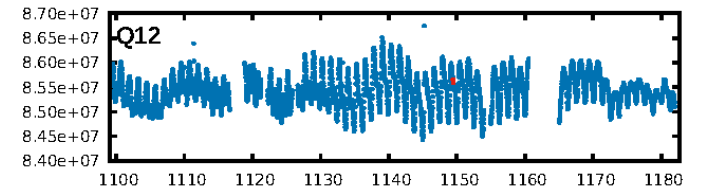
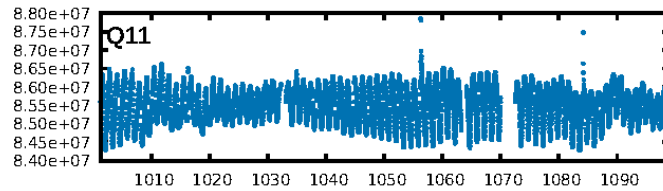
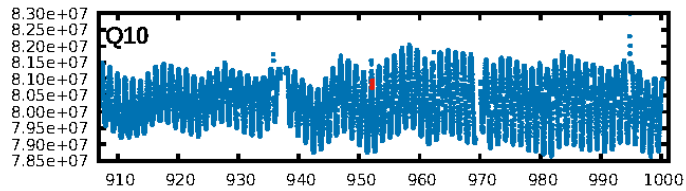
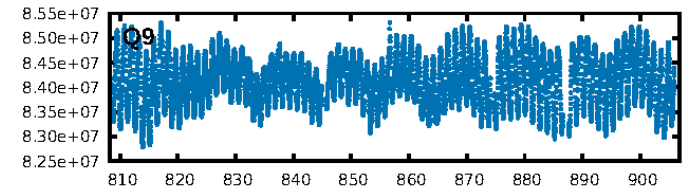
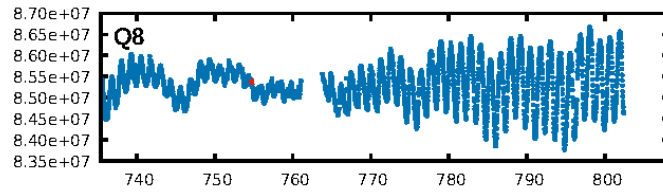
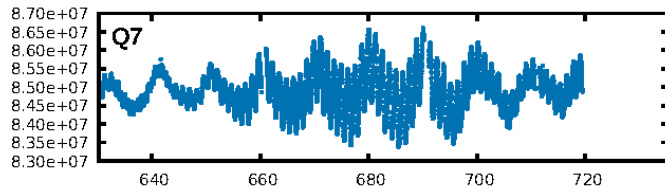
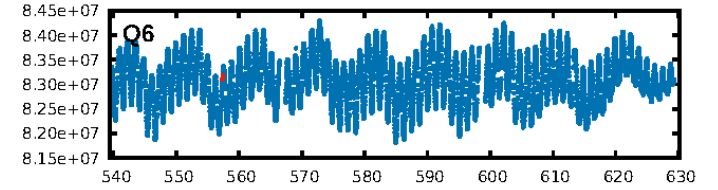
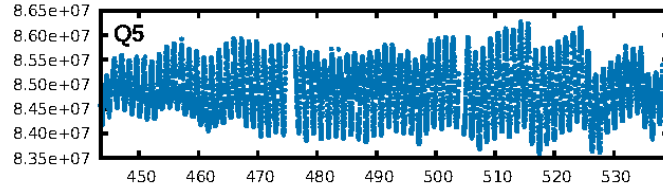
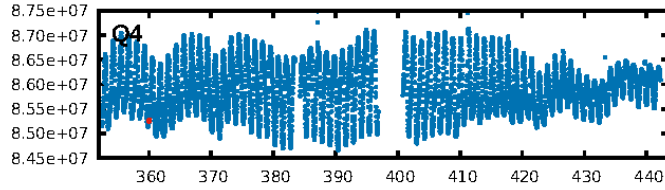
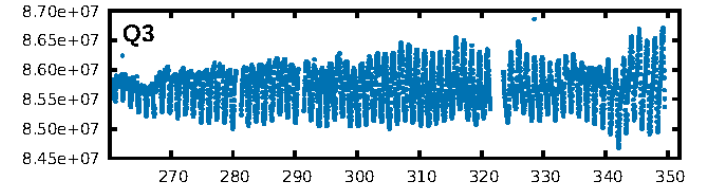
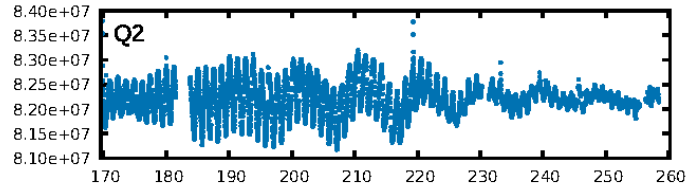
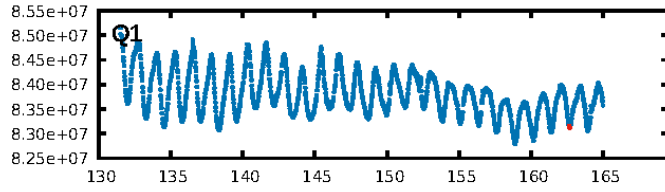
DV Fit Results:

Period = 197.36830 [0.04352] d
Epoch = 162.6523 [0.0380] BKJD
Rp/R* = 0.0115 [1.0201]
a/R* = 1705.26 [678774.02]
b = 0.59 [447.12]
Seff = 4.23 [1.70]
Teq = 366 [37] K
Rp = 1.67 [149.16] Re
a = 0.6750 [0.1679] AU
Ag = 83226.14 [14828559.01] [0.01] σ
Teffp = 9603 [427751] K [0.02] σ

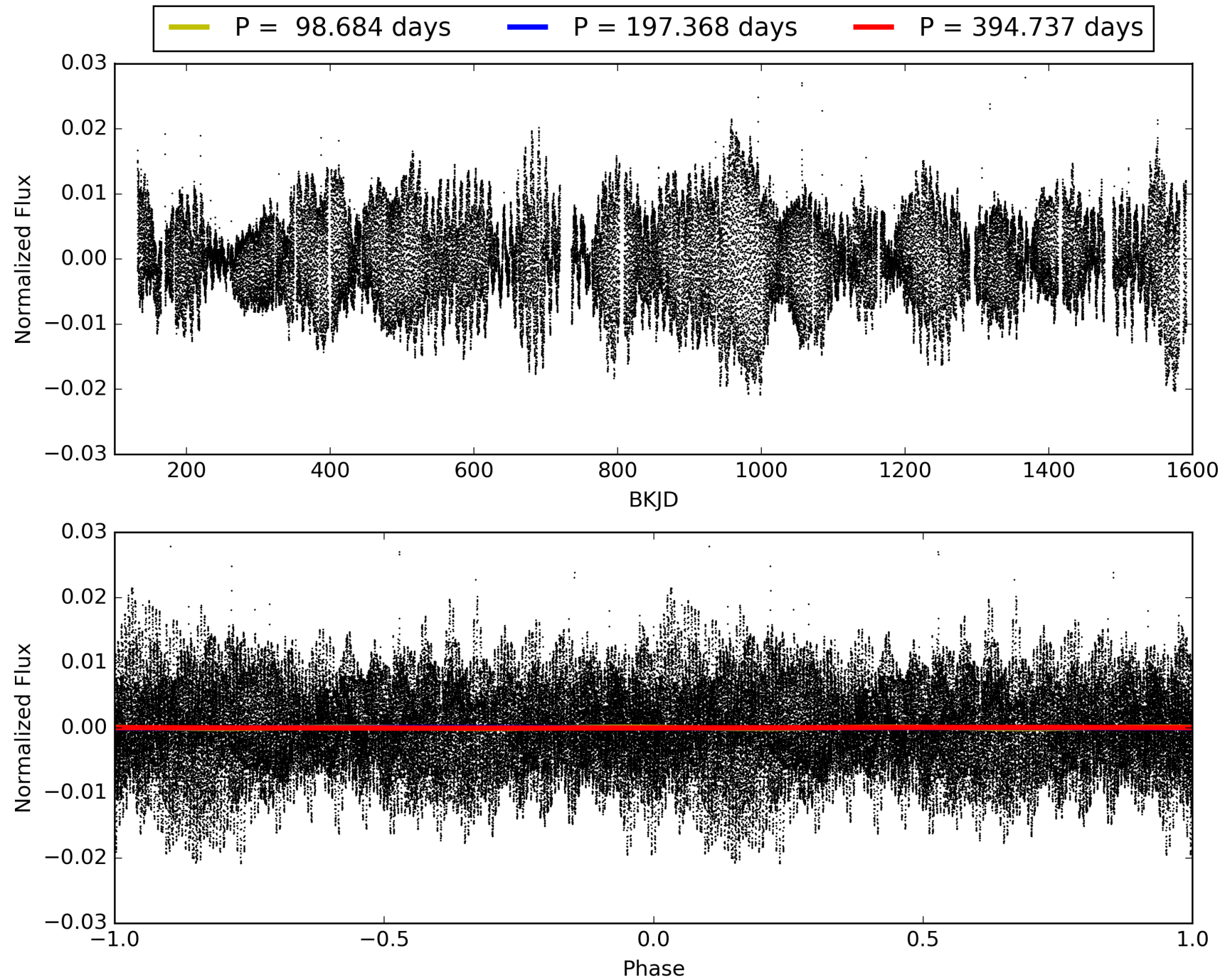
DV Diagnostic Results:

ShortPeriod-sig: 2.0% [0.02 σ]
LongPeriod-sig: 100.0% [281.12 σ]
ModelChiSquare2-sig: 94.8%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [2/2]
GhostDiagnostic-chr: -0.3523
Centroid-sig: 10.9%
Centroid-so: 7.256 arcsec [1.46 σ]
OotOffset-rm: 0.285 arcsec [2.05 σ]
KicOffset-rm: 0.215 arcsec [1.30 σ]
OotOffset-st: 3/0/4/1 [8]
KicOffset-st: 3/0/4/1 [8]
DiffImageQuality-fgm: 0.50 [4/8]
DiffImageOverlap-fno: 0.00 [0/8]

TCE 010801647-04, PDC Light Curves

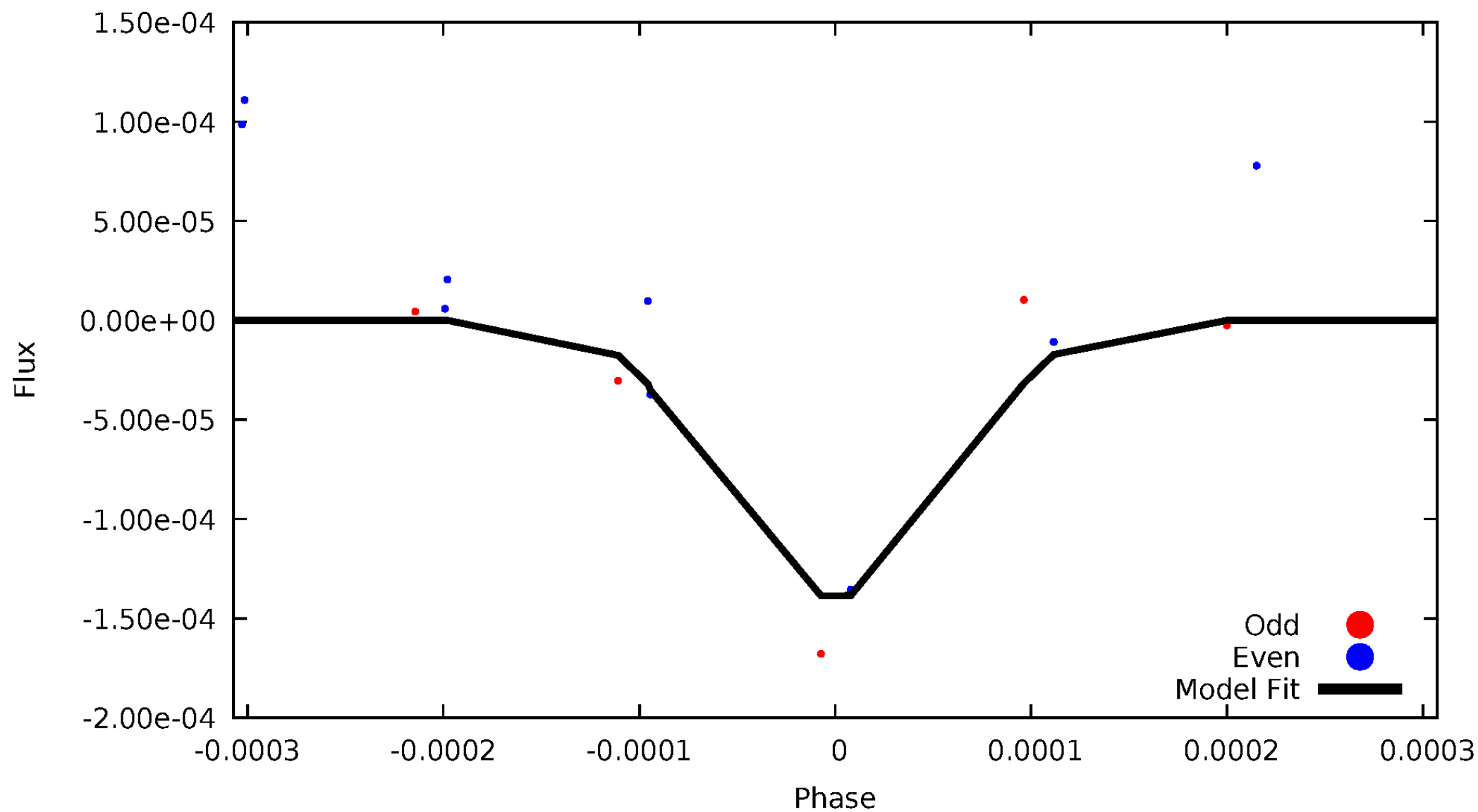


TCE 010801647-04



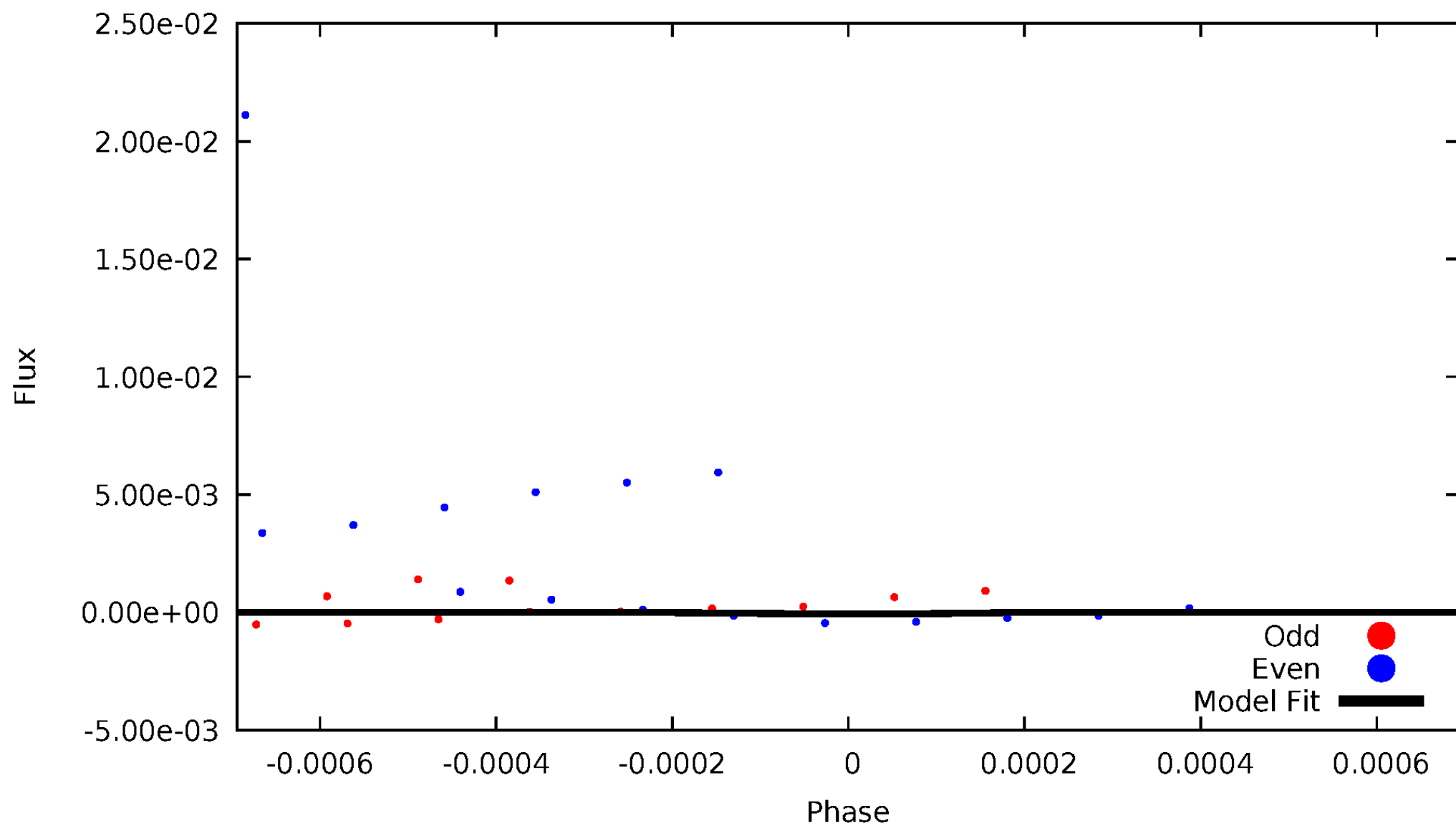
DV Odd/Even

TCE 010801647-04



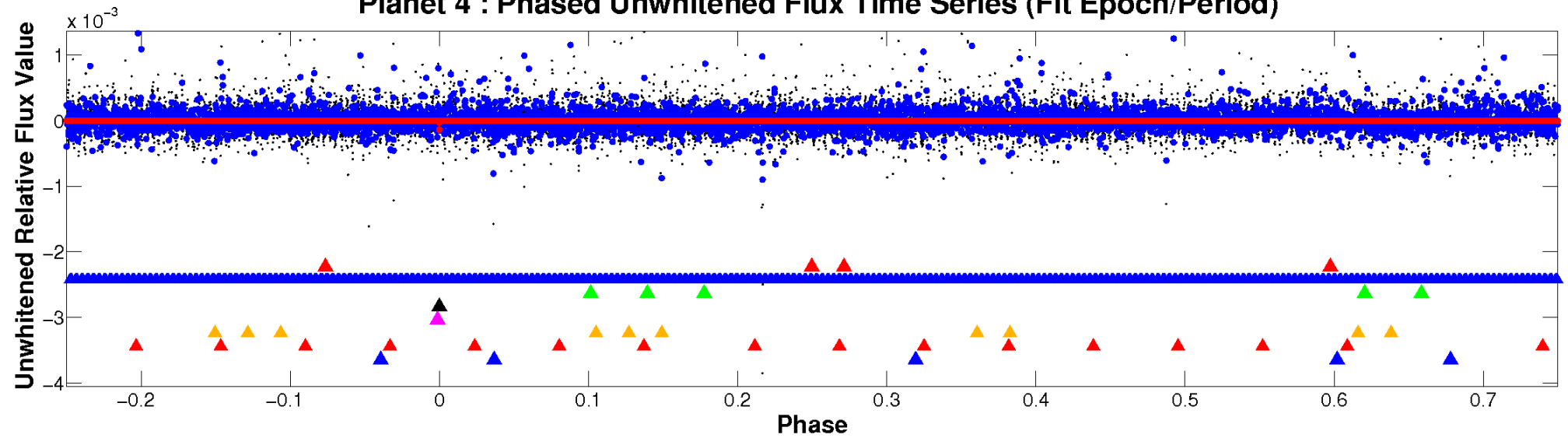
ALT Odd/Even

TCE 010801647-04

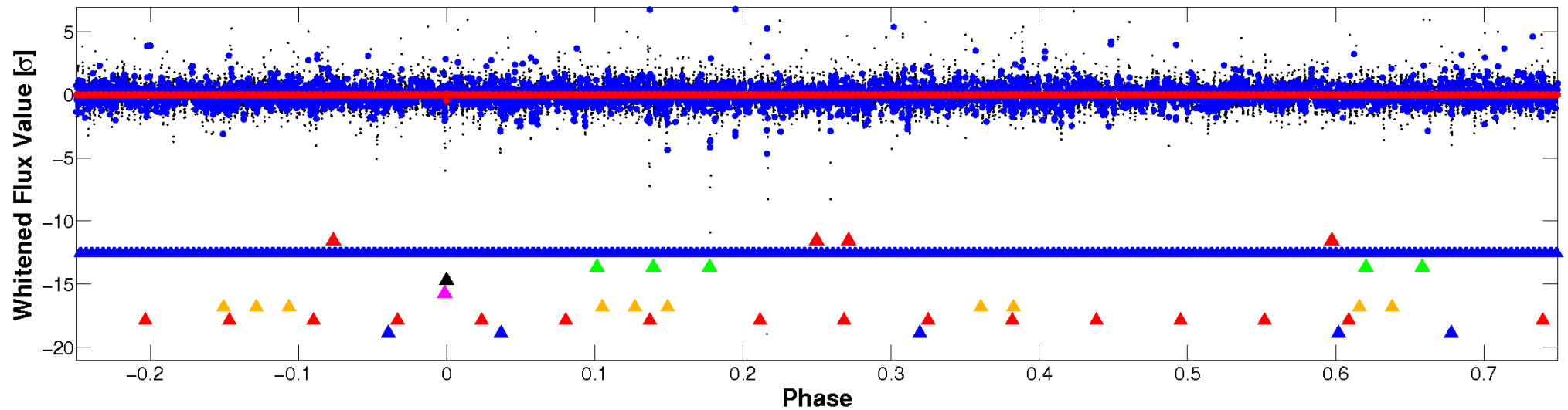


Non-Whitened Vs. Whitened Light Curve

Planet 4 : Phased Unwhitened Flux Time Series (Fit Epoch/Period)

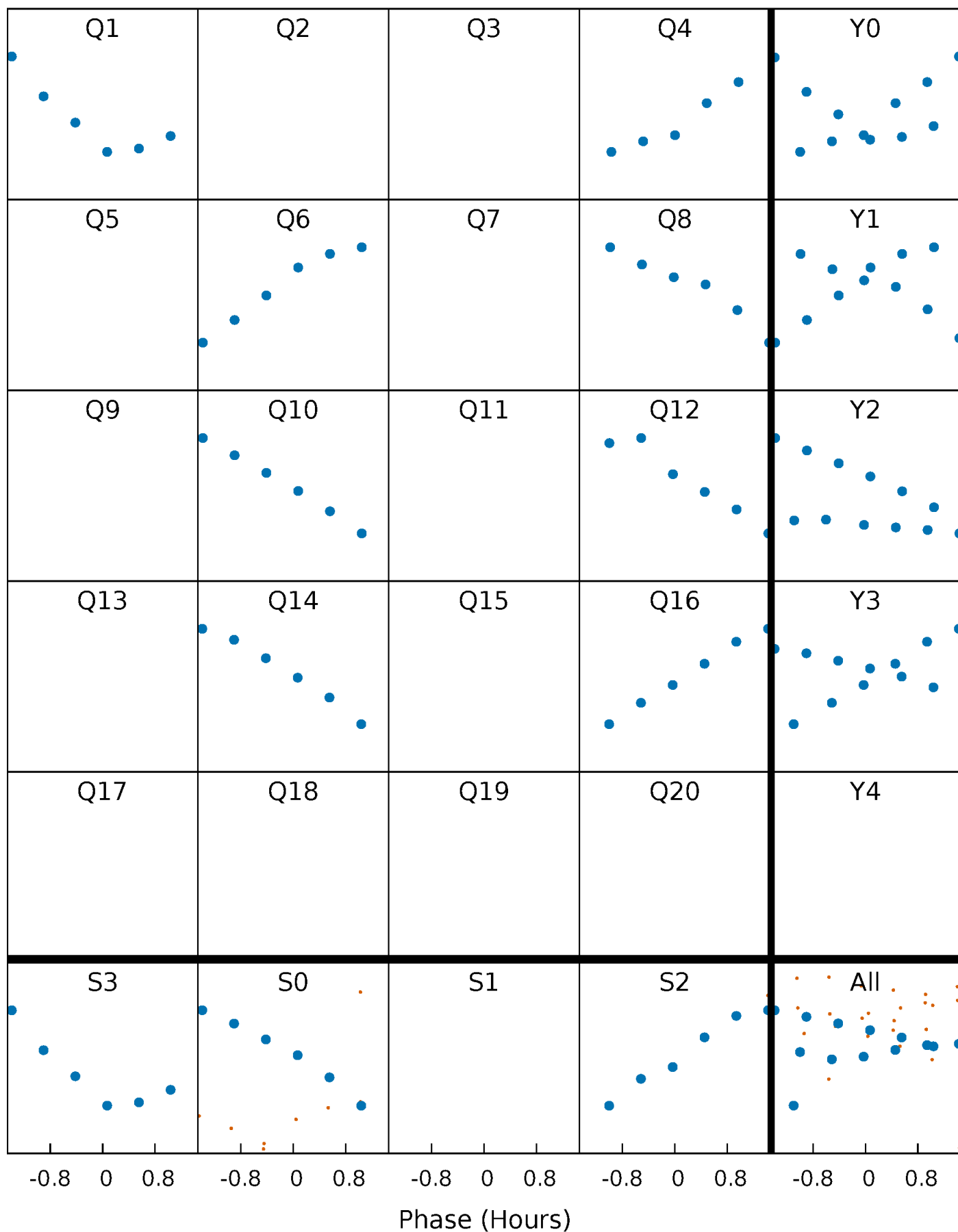


Planet 4 : Phased Whitened Flux Time Series (Fit Epoch/Period)



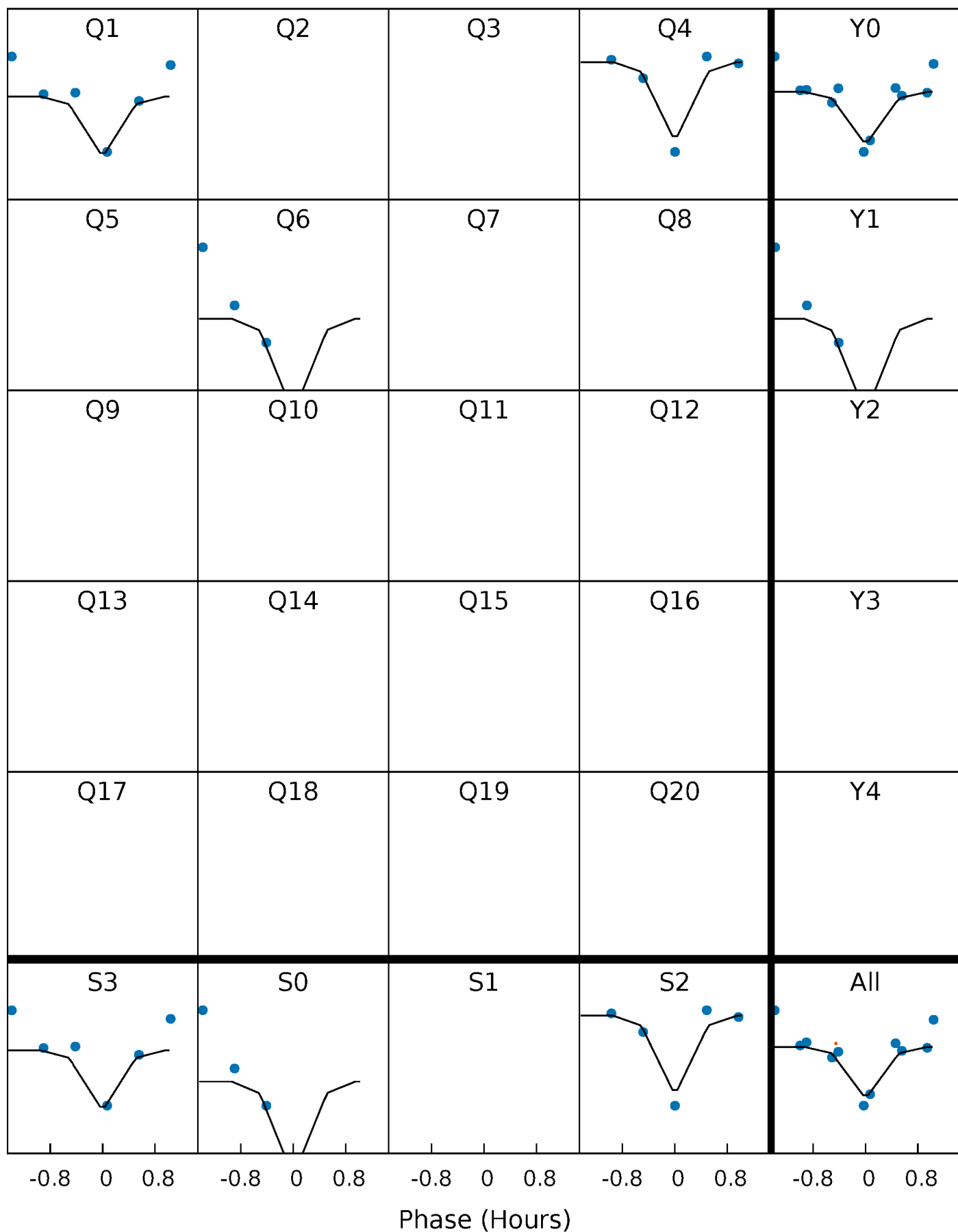
PDC Quarter-Phased Transit Curves

TCE 010801647-04 $P=197.368302$ Days $T_0=162.652256$ (BKJD)



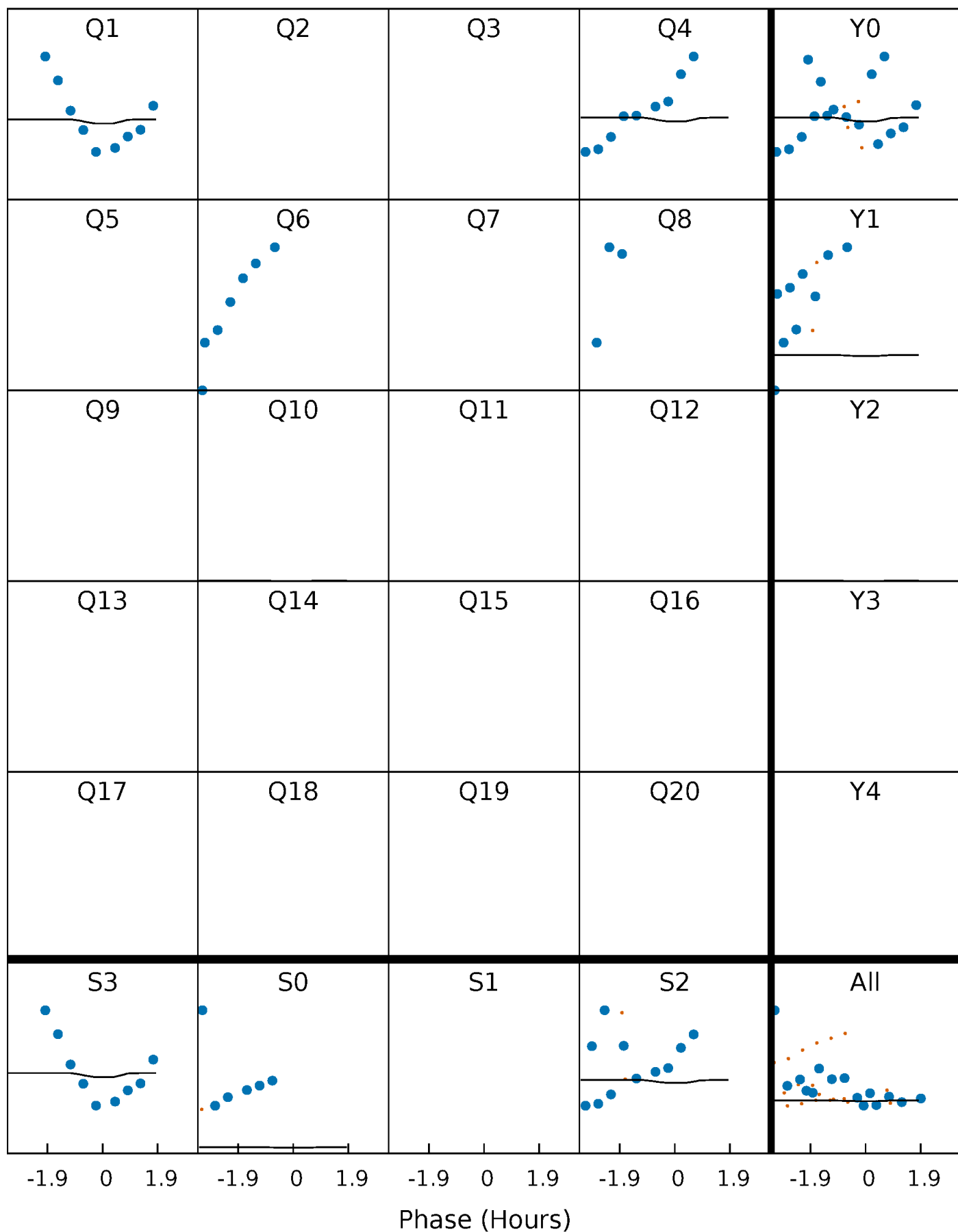
DV Quarter-Phased Transit Curves

TCE 010801647-04 $P=197.368302$ Days $T_0=162.652256$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

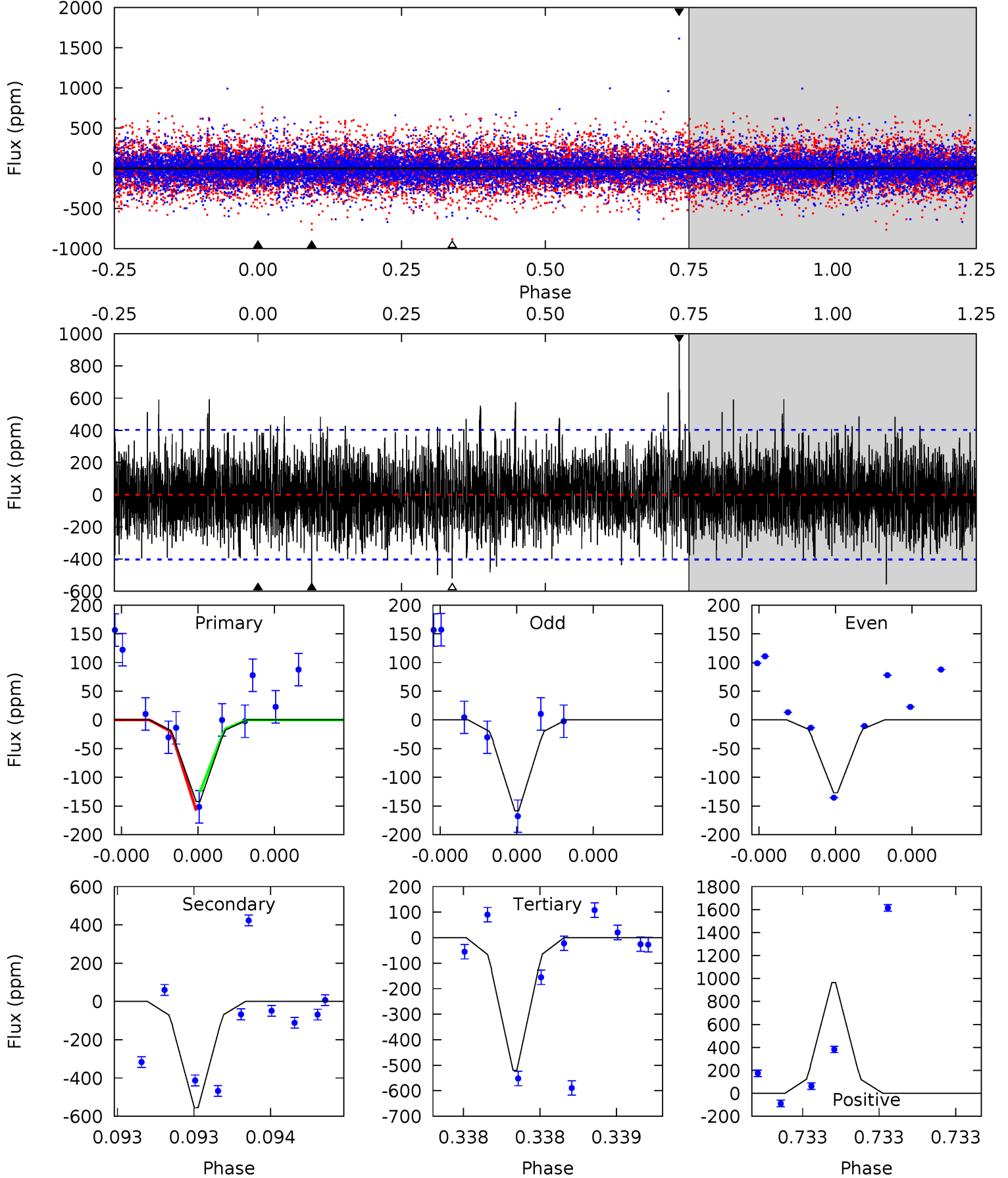
TCE 010801647-04 P=197.370185 Days $T_0=162.659050$ (BKJD)



DV Model-Shift Uniqueness Test

010801647-04, P = 197.368302 Days, E = 162.652256 Days

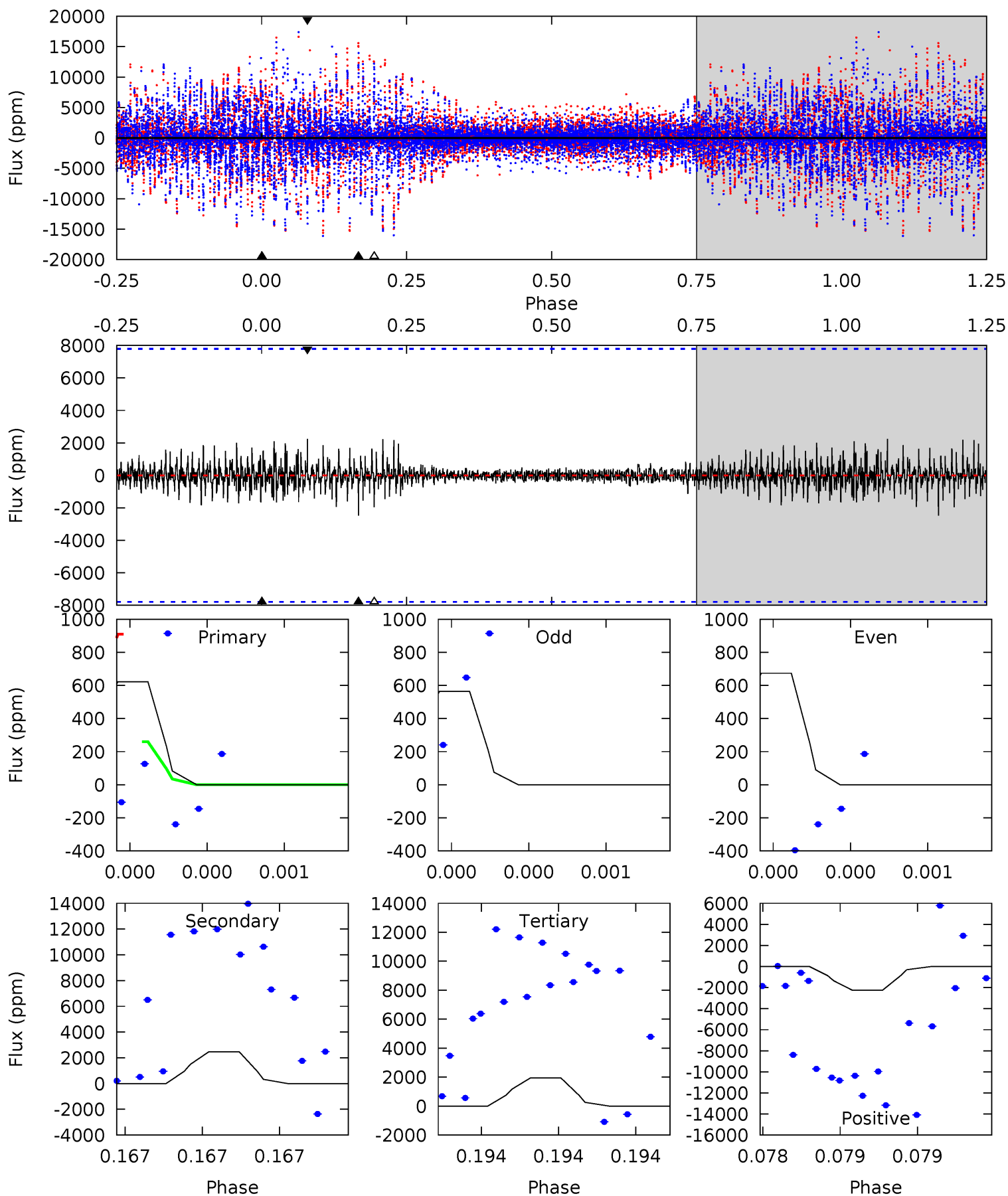
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
2.00	7.80	7.31	13.5	5.66	3.61	1.71	-5.31	-11.5	0.49	-5.74	0.18	1.00	0.63	0.23



Alt Model-Shift Uniqueness Test

010801647-04, P = 197.370185 Days, E = 162.659050 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
0.45	1.79	1.41	1.63	5.65	3.59	0.33	-0.96	-1.18	0.38	0.16	0.03	1.00	0.48	0.24



Stellar Parameters For KIC 010801647

	$T_{\text{eff}} (K)$	$\log(g)$	$[\text{Fe}/\text{H}]$	$R (R_{\odot})$	$M (M_{\odot})$	$\rho_{\star} (\text{g}\cdot\text{cm}^{-3})$
	5883^{+158}_{-176}	$4.206^{+0.220}_{-0.180}$	$0.070^{+0.250}_{-0.300}$	$1.340^{+0.367}_{-0.367}$	$1.050^{+0.138}_{-0.138}$	$0.615^{+0.759}_{-0.298}$
	+3%/-3%	+5%/-4%	+357%/-429%	+27%/-27%	+13%/-13%	+123%/-48%
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 010801647-04 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-555 ± 71	$97.89^{+113.54}_{-70.02}$	507^{+41}_{-40}	2063^{+701}_{-295}	15^{+155}_{-12}
Alt.	-2476 ± 1381	$107.00^{+111.54}_{-77.46}$	509^{+40}_{-37}	2387^{+1015}_{-400}	49^{+698}_{-40}

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

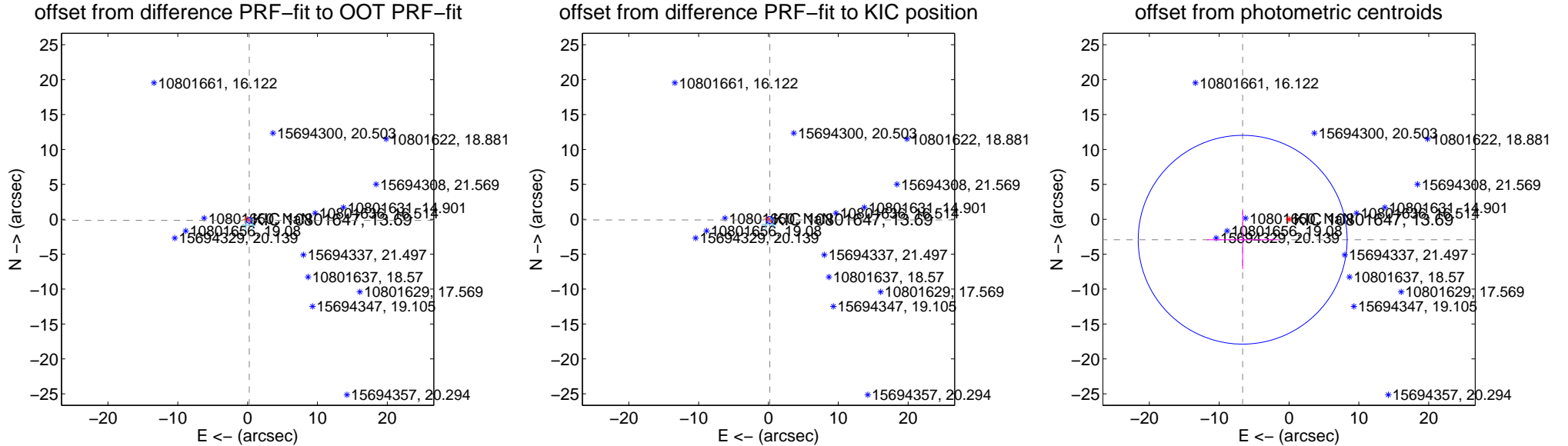
DV Centroid Data

Supplemental centroid analysis for 010801647-04. Kepler magnitude: 13.69. Transit SNR 0.73

There are 4 quarters with good PRF difference image offsets

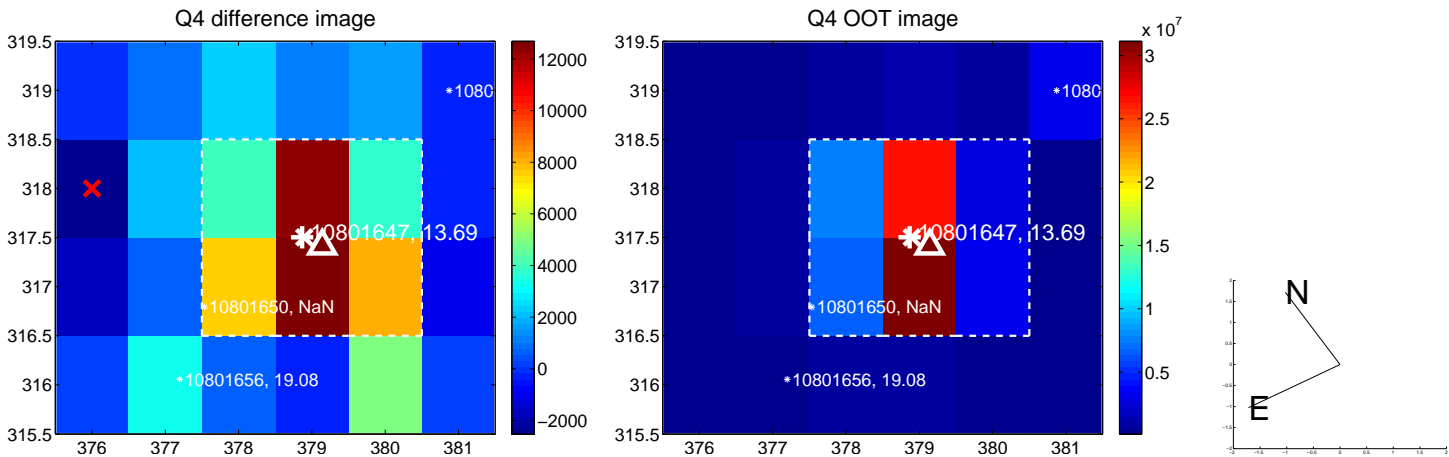
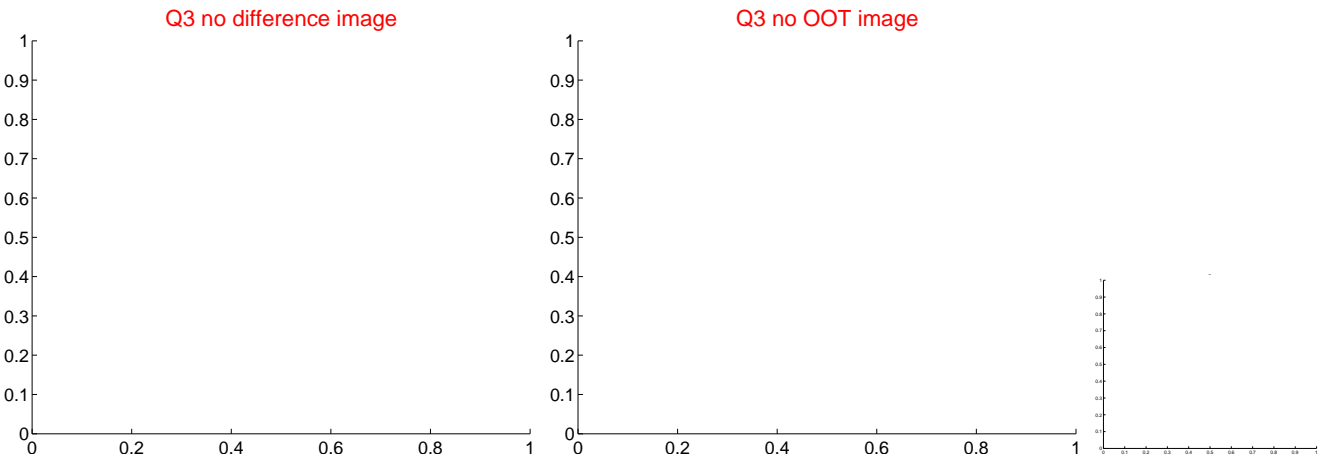
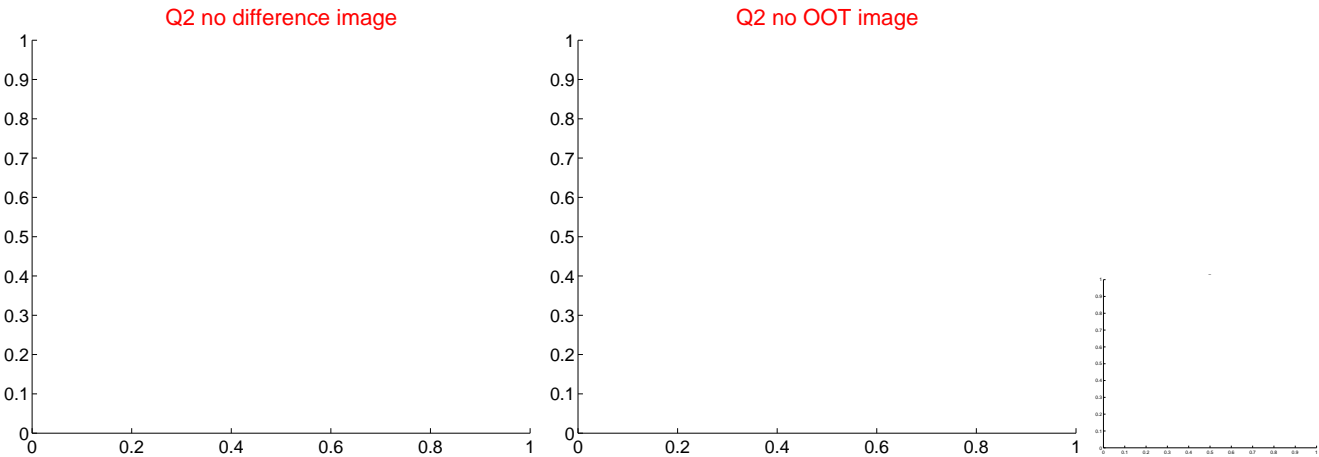
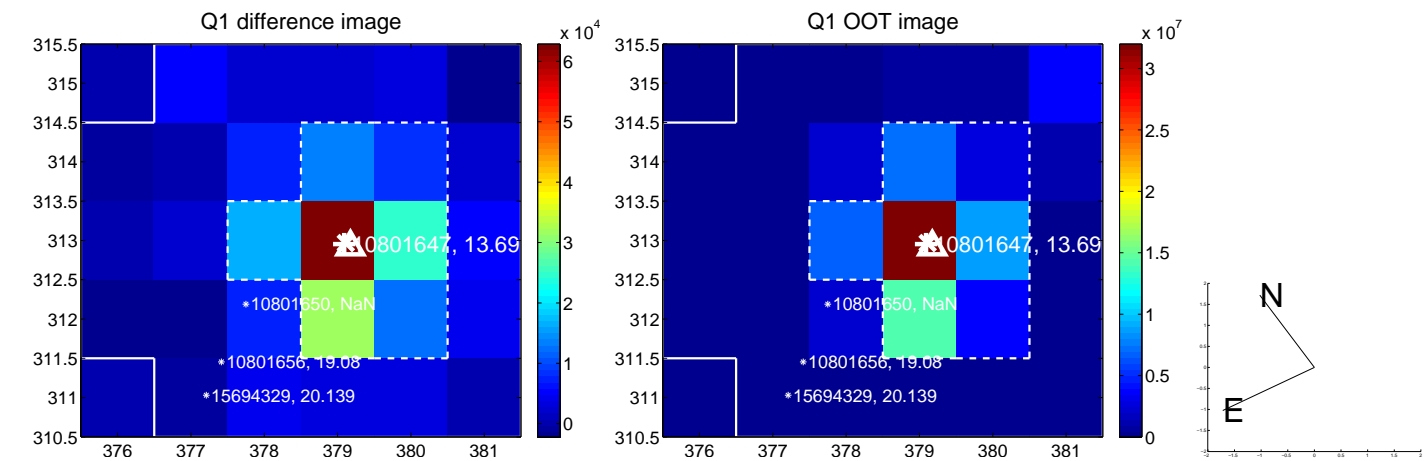
The direct PRF centroid is offset from the target star catalog position by about 0.16 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.285 ± 0.139	2.05	-0.235 ± 0.134	-0.161 ± 0.149
PRF-fit source offset from KIC position	0.215 ± 0.165	1.30	-0.191 ± 0.150	-0.099 ± 0.157
photometric centroid source offset	7.26 ± 4.98	1.46	6.64 ± 5.12	-2.93 ± 4.20



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.

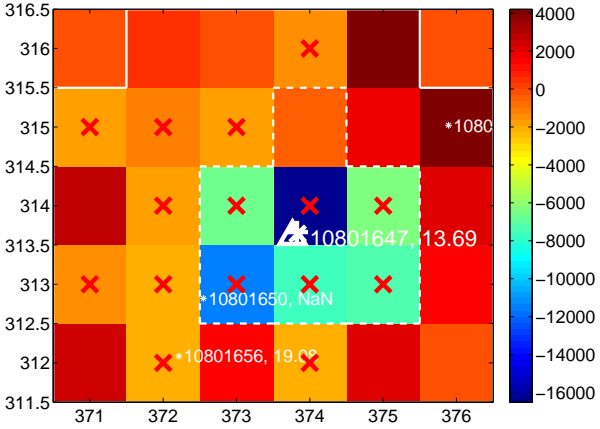
Q5 no difference image



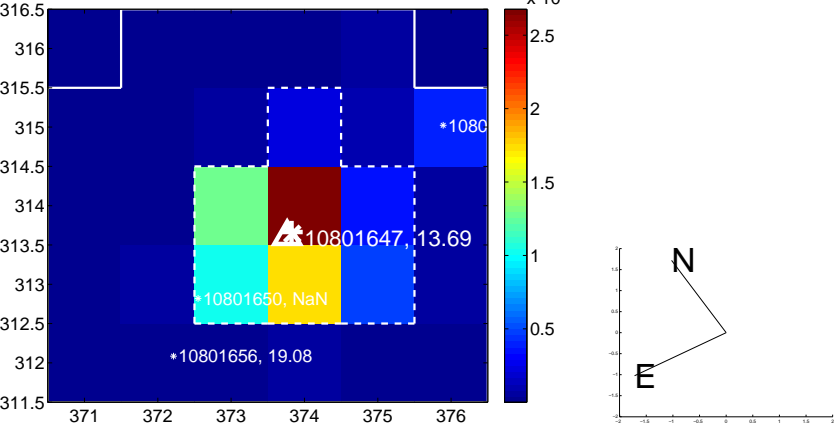
Q5 no OOT image



Q6 difference image. Poor Quality



Q6 OOT image



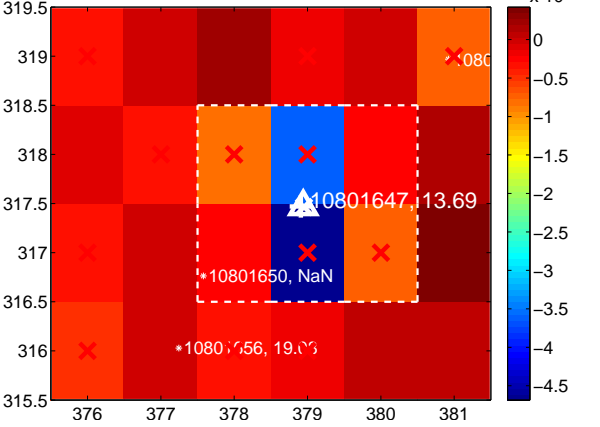
Q7 no difference image



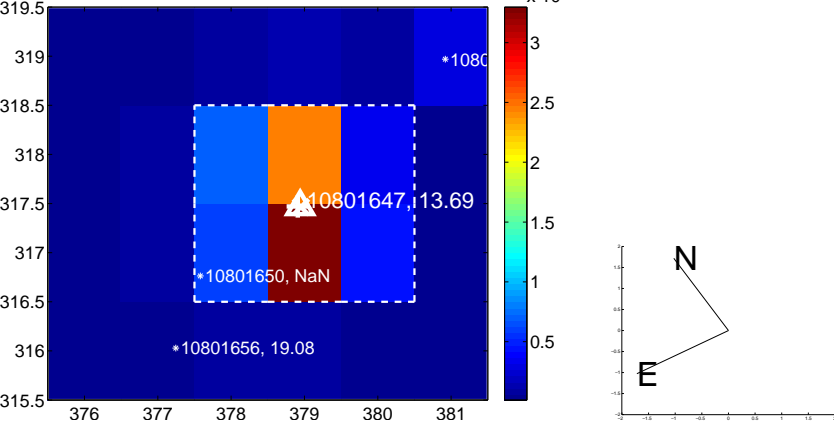
Q7 no OOT image



Q8 difference image. Poor Quality



Q8 OOT image

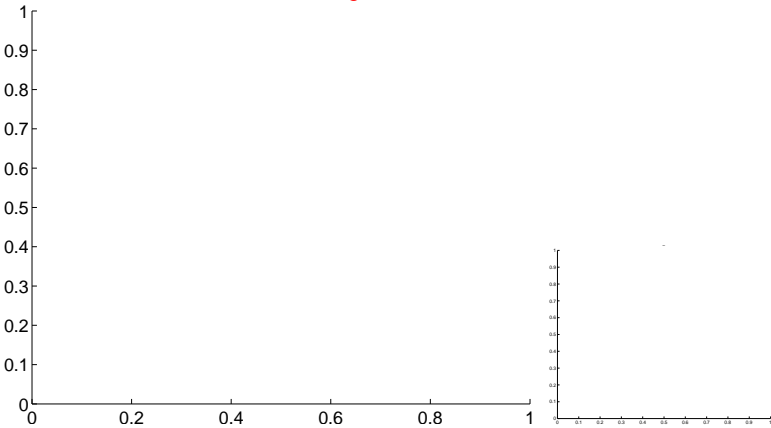


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.

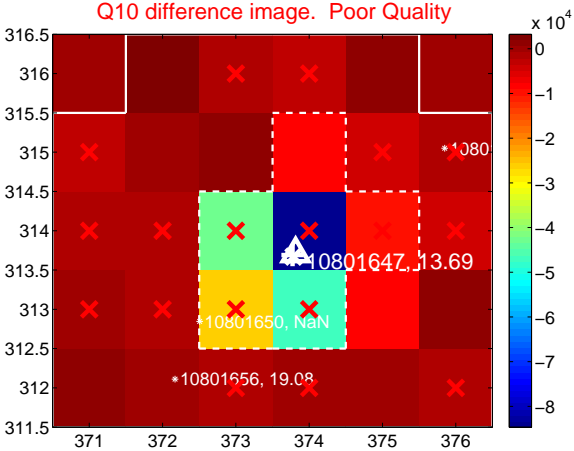
Q9 no difference image



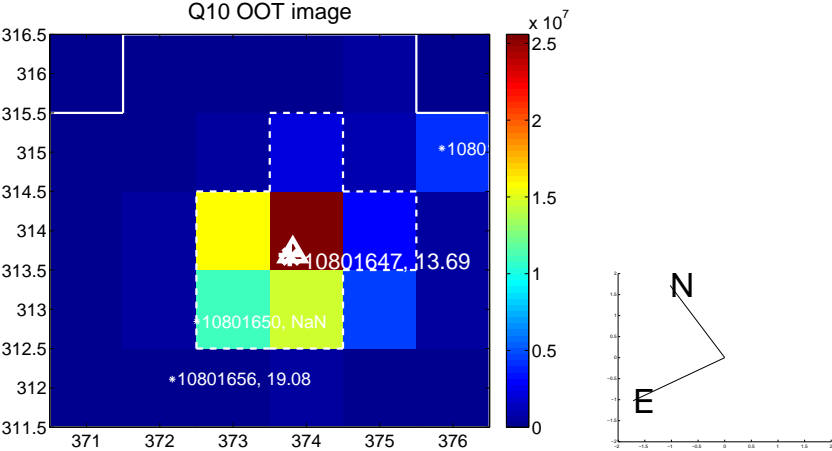
Q9 no OOT image



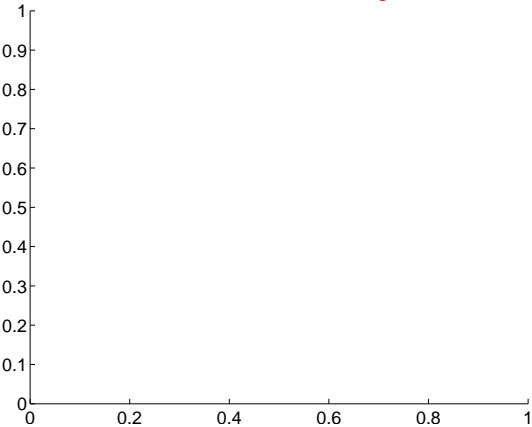
Q10 difference image. Poor Quality



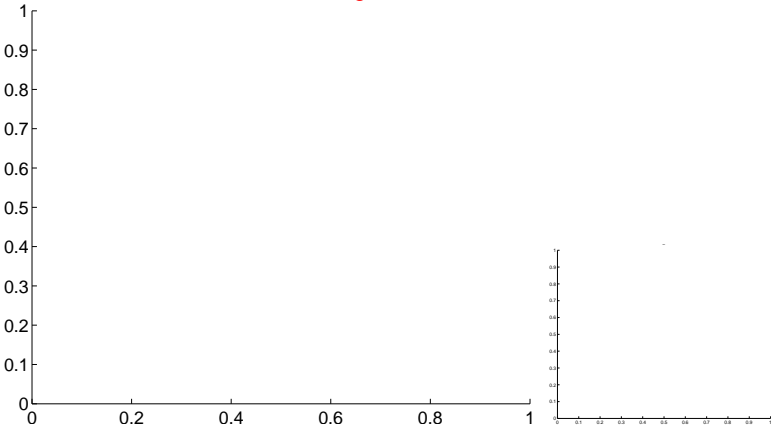
Q10 OOT image



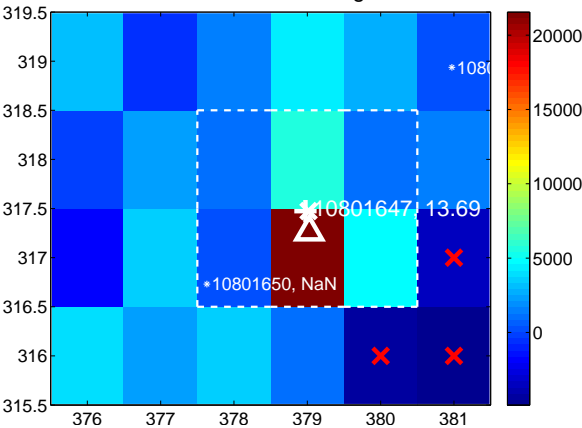
Q11 no difference image



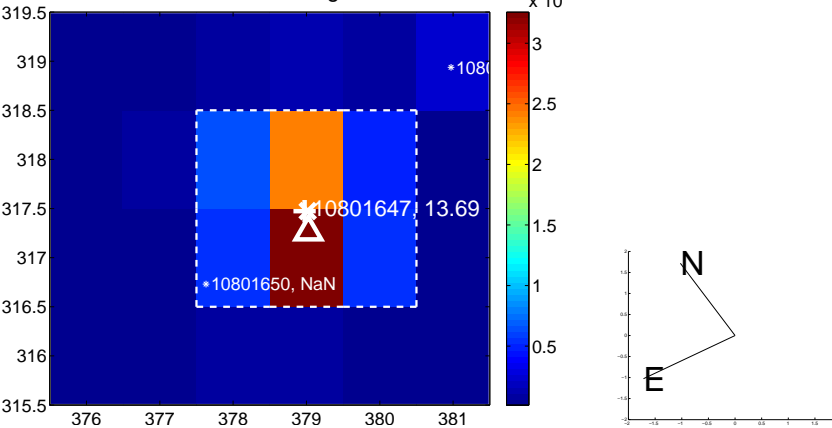
Q11 no OOT image



Q12 difference image



Q12 OOT image

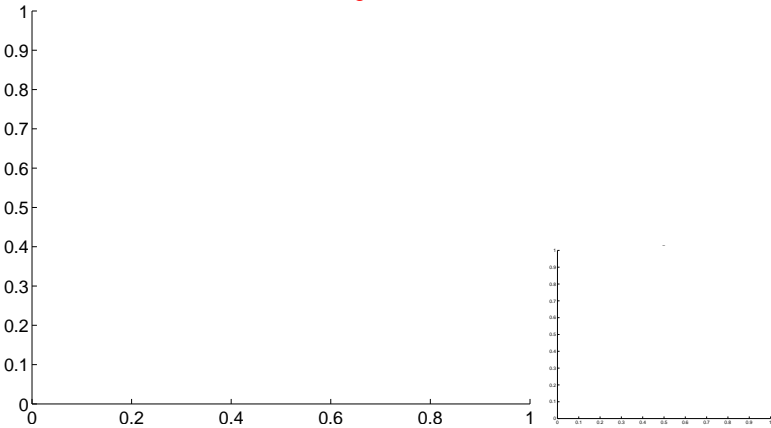


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.

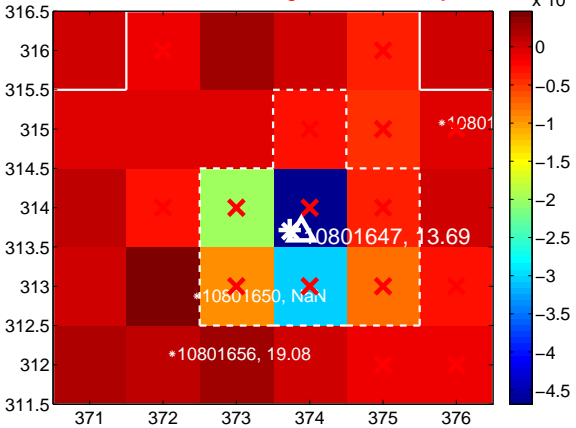
Q13 no difference image



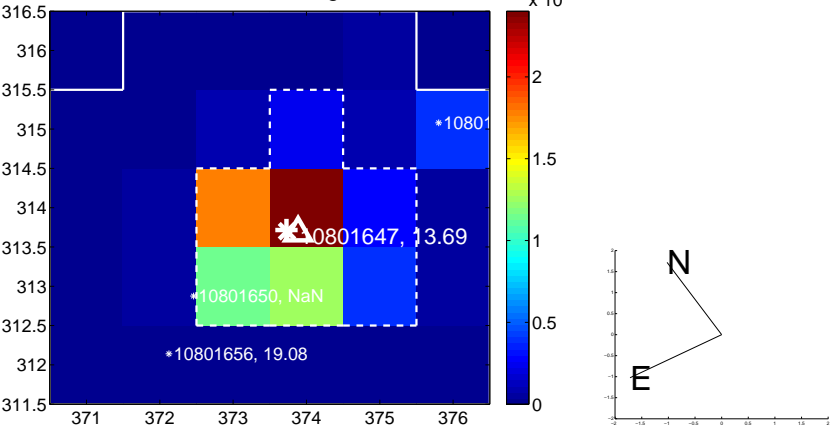
Q13 no OOT image



Q14 difference image. Poor Quality



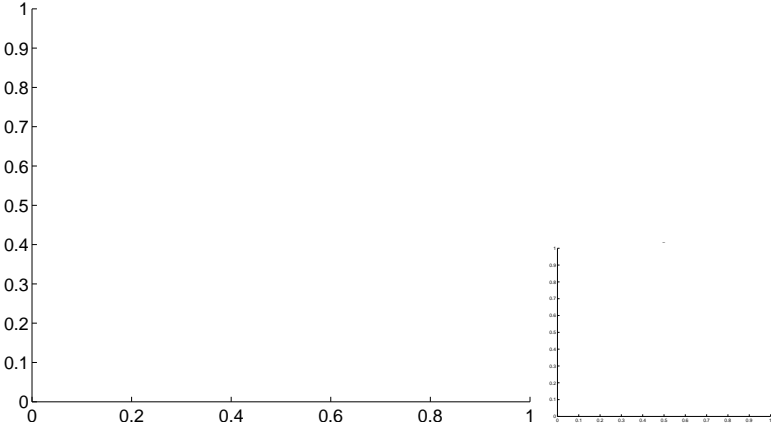
Q14 OOT image



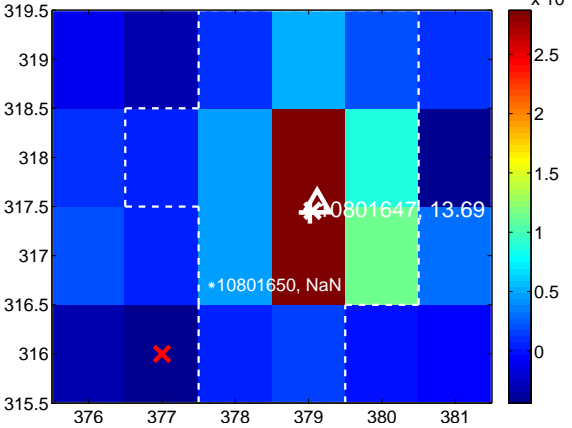
Q15 no difference image



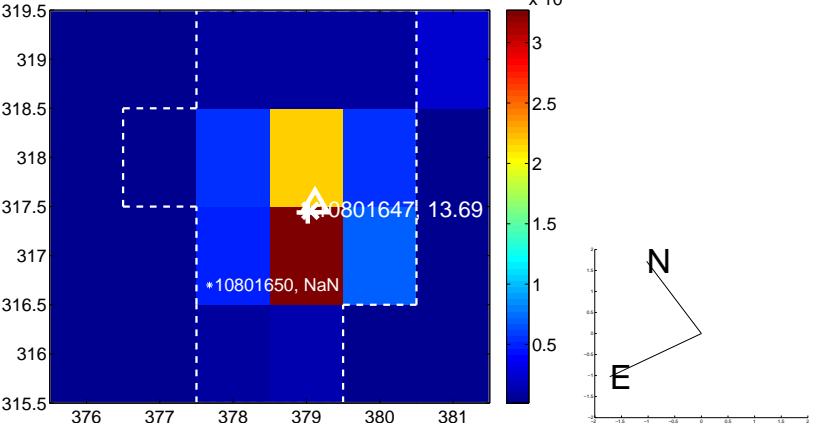
Q15 no OOT image



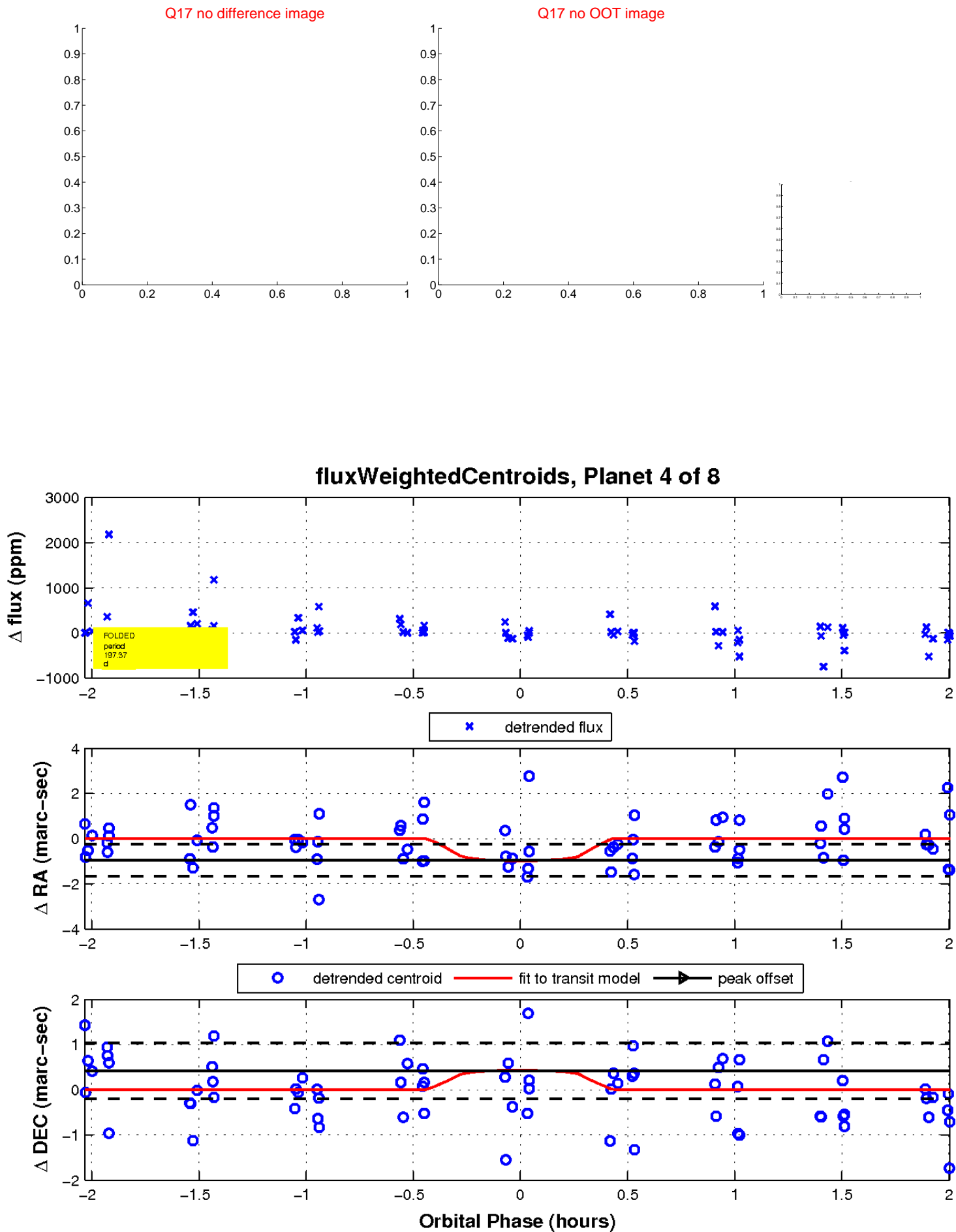
Q16 difference image



Q16 OOT image

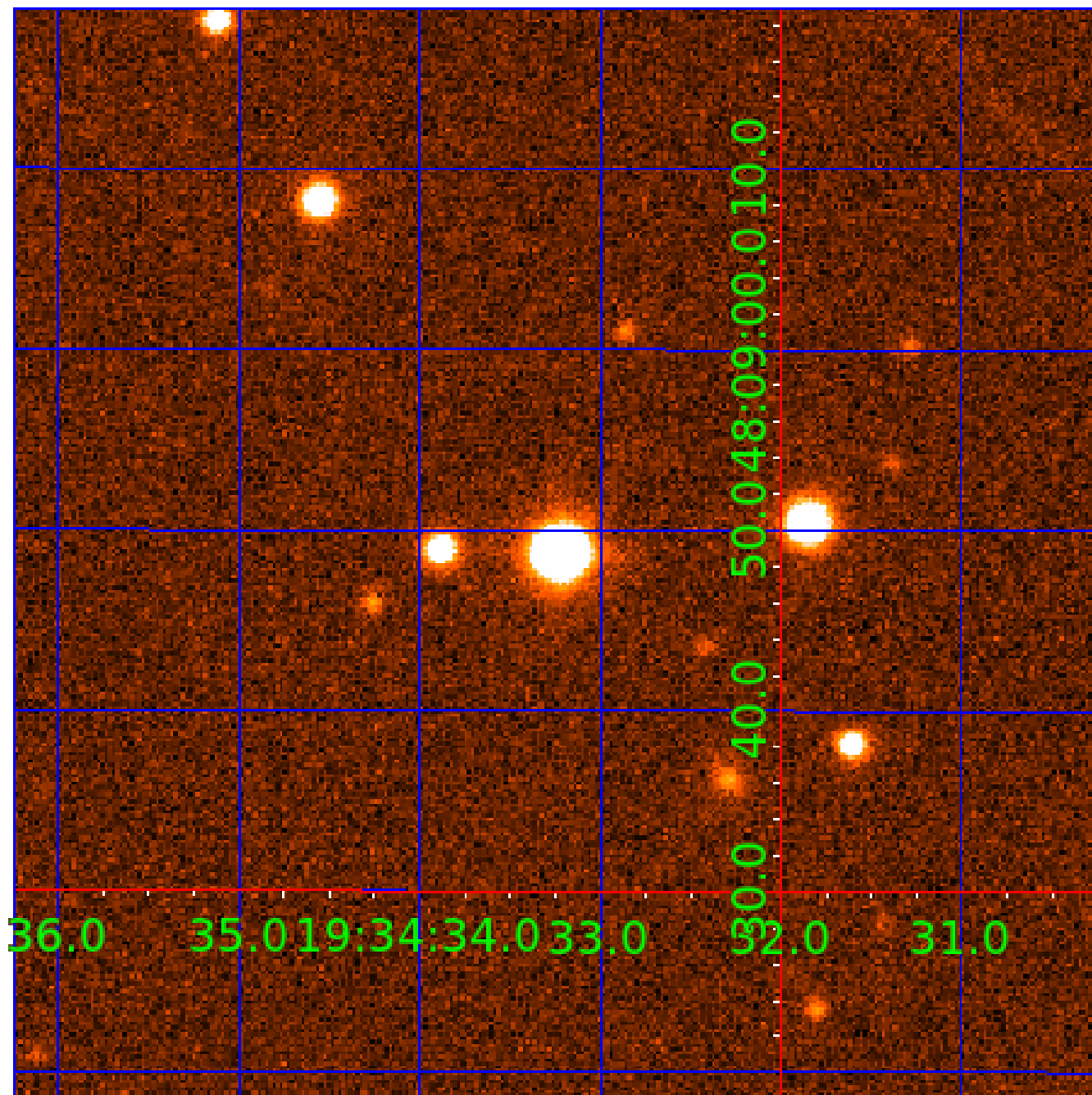


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 010801647

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})
010801647-01	OBS	No	330.368090	409.311041	545.5	2.752	12.3	3.9	1.34	5883	3.22	2.13
010801647-02	OBS	No	0.753128	132.146344	26.9	4.372	7.9	5.1	1.34	5883	0.70	7093.62
010801647-03	OBS	No	299.804795	380.050453	2225.8	4.522	11.3	9.5	1.34	5883	6.50	2.42
010801647-04	OBS	No	197.368302	162.652256	138.6	0.727	12.3	0.7	1.34	5883	1.67	4.23
010801647-05	OBS	No	197.363503	162.428687	731.8	4.635	11.5	5.3	1.34	5883	3.64	4.23
010801647-06	OBS	No	146.937679	192.093369	2298.7	18.590	10.3	7.3	1.34	5883	12.14	6.27
010801647-07	OBS	No	93.083145	189.730328	102.6	3.437	8.4	0.9	1.34	5883	1.62	11.52
010801647-08	OBS	No	268.163039	281.469485	363.3	6.000	9.8	-1.0	1.34	5883	2.54	2.81

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
010801647-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_MARSHALL_SKYE—LPP_DV—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—INCONSISTENT_TRANS
010801647-02	OBS	FP	0.00	1	0	0	0	LPP_DV
010801647-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_CHASES_MARSHALL—LPP_ALT—ALL_TRANS_CHASES—INCONSISTENT_TRANS—CENT_FEW_DIFFS
010801647-04	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_MARSHALL_SKYE_TRACKER—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—INCONSISTENT_TRANS
010801647-05	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_MARSHALL_SKYE—TRANS_GAPPED—LPP_DV—ALL_TRANS_CHASES—MOD_POS_DV—INCONSISTENT_TRANS—SAME_NTL_PERIOD
010801647-06	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—INCONSISTENT_TRANS
010801647-07	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_TRACKER—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT
010801647-08	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_MARSHALL—ALL_TRANS_CHASES—NO_FITS—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.

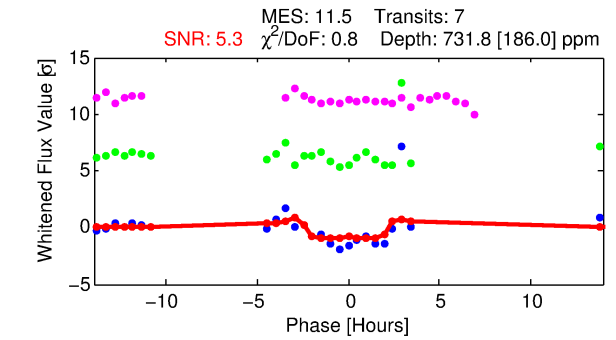
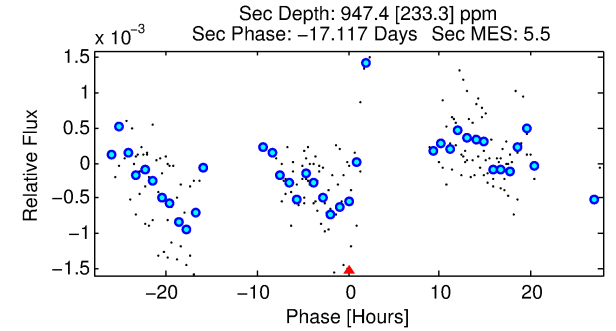
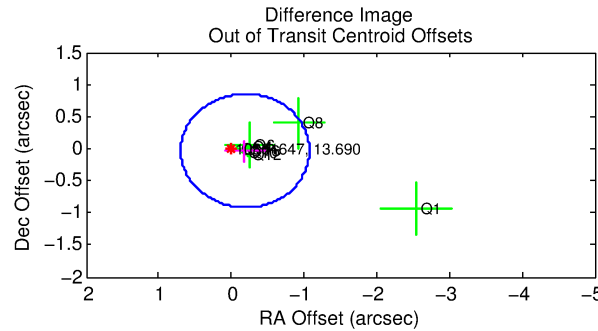
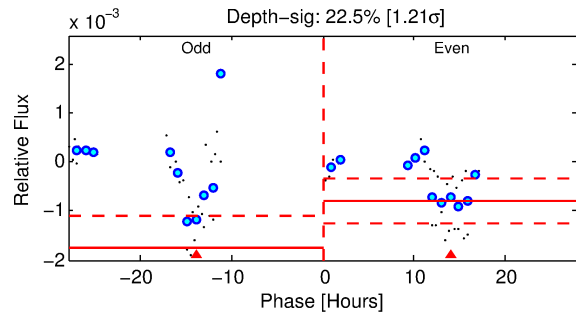
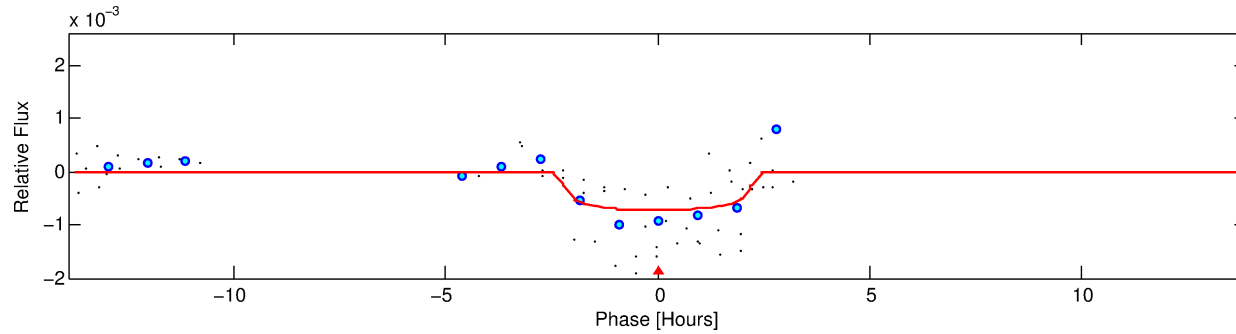
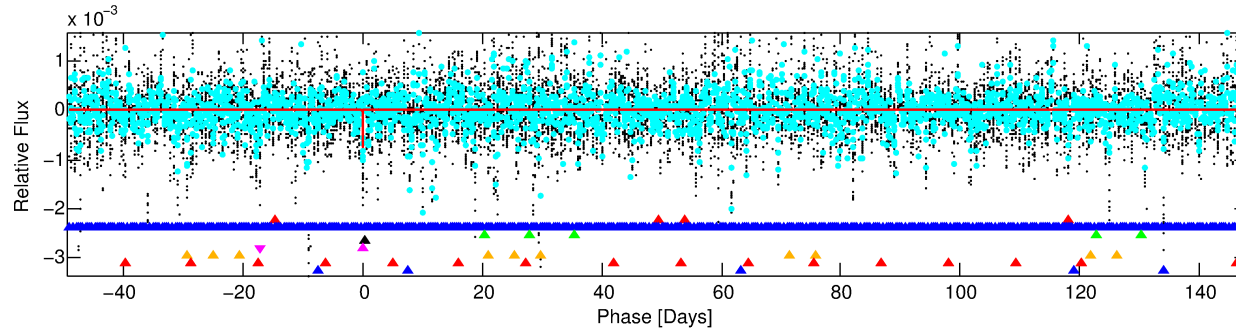
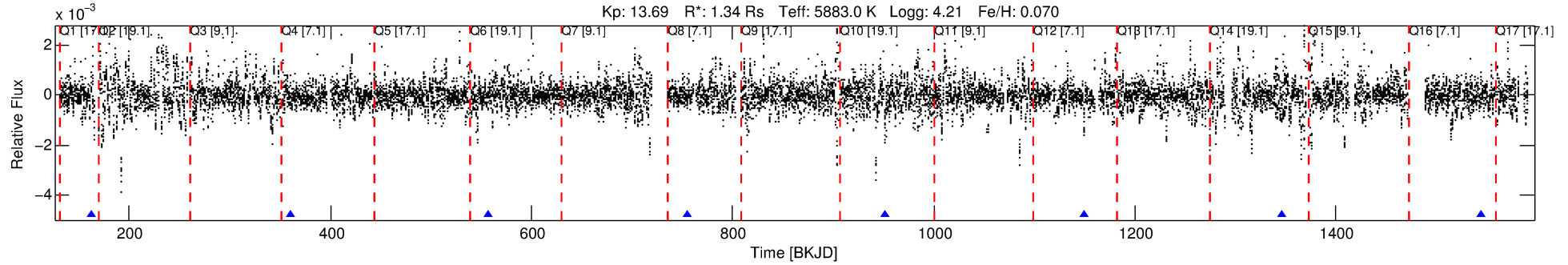
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 010801647-05

No Significant Match Found

DV One-Page Summary

KIC: 10801647 Candidate: 5 of 8 Period: 197.364 d



DV Fit Results:

Period = 197.36350 [0.00572] d
Epoch = 162.4287 [0.0269] BKJD
Rp/R* = 0.0249 [0.0785]
a/R* = 314.39 [4418.58]
b = 0.34 [36.59]
Seff = 4.23 [1.70]
Teq = 366 [37] K
Rp = 3.64 [11.52] Re
a = 0.6750 [0.1679] AU
Ag = 17890.40 [112998.37] [0.16 σ]
Teffp = 6539 [10308] K [0.60 σ]

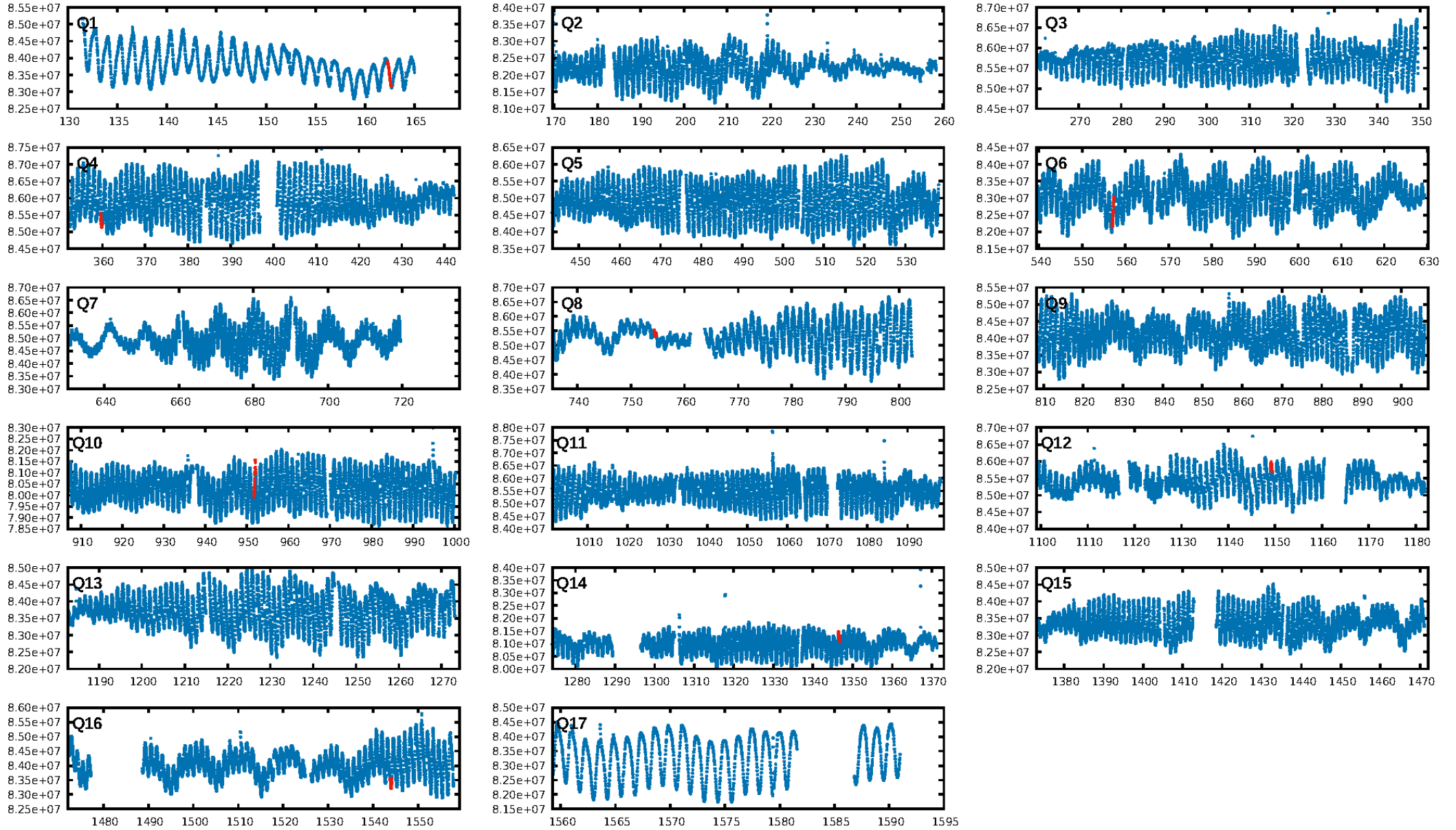
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [63.17 σ]
LongPeriod-sig: 2.0% [0.02 σ]
ModelChiSquare2-sig: 0.3%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [7/7]
GhostDiagnostic-chr: -0.3268
Centroid-sig: 33.8%
Centroid-so: 0.290 arcsec [0.59 σ]
OotOffset-rm: 0.190 arcsec [0.64 σ]
OotOffset-st: 3/0/4/1 [8]
KicOffset-rm: 0.111 arcsec [0.39 σ]
KicOffset-st: 3/0/4/1 [8]
DiffImageQuality-fgm: 0.50 [4/8]
DiffImageOverlap-fno: 0.00 [0/8]

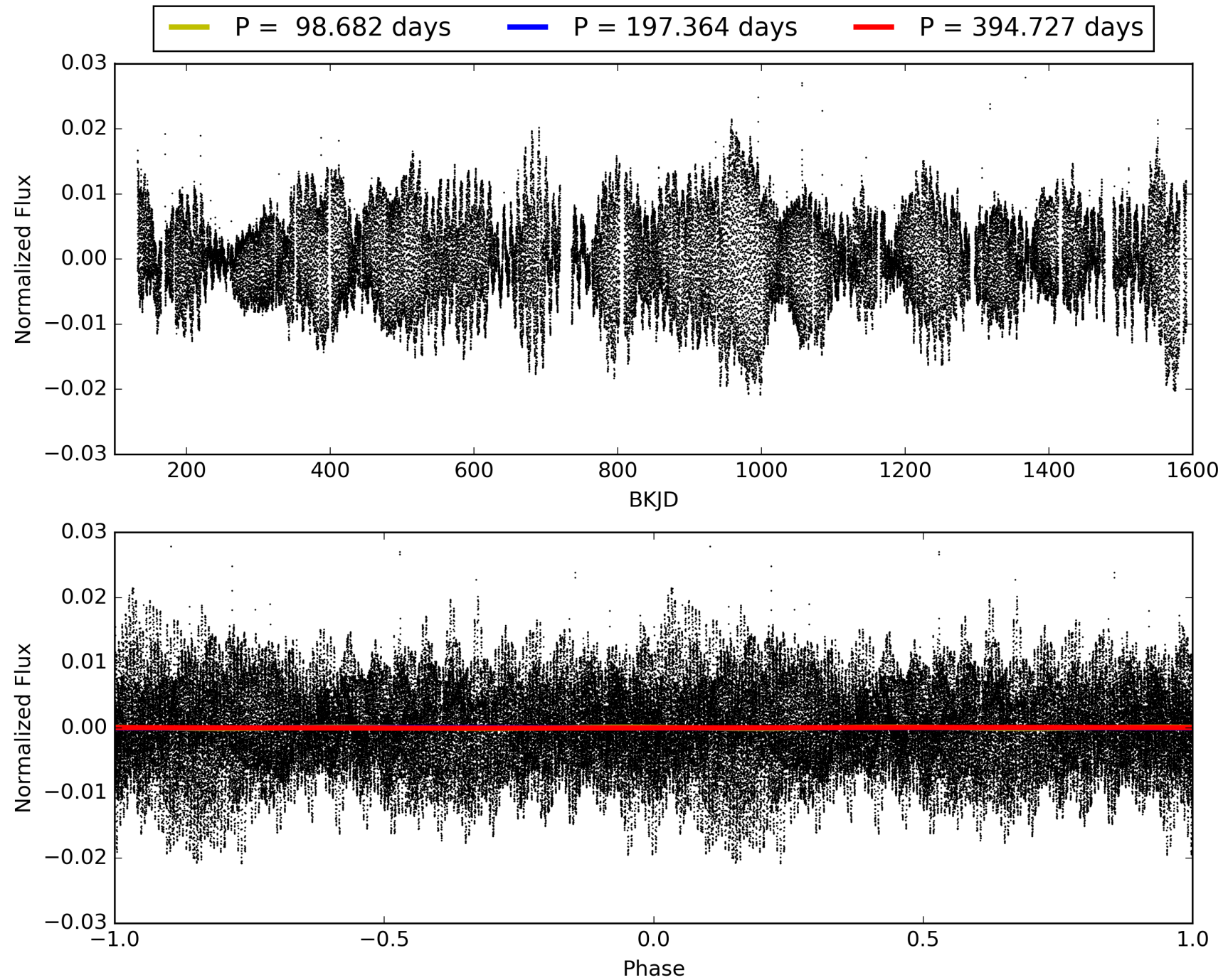
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 06:21:46 Z

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

TCE 010801647-05, PDC Light Curves

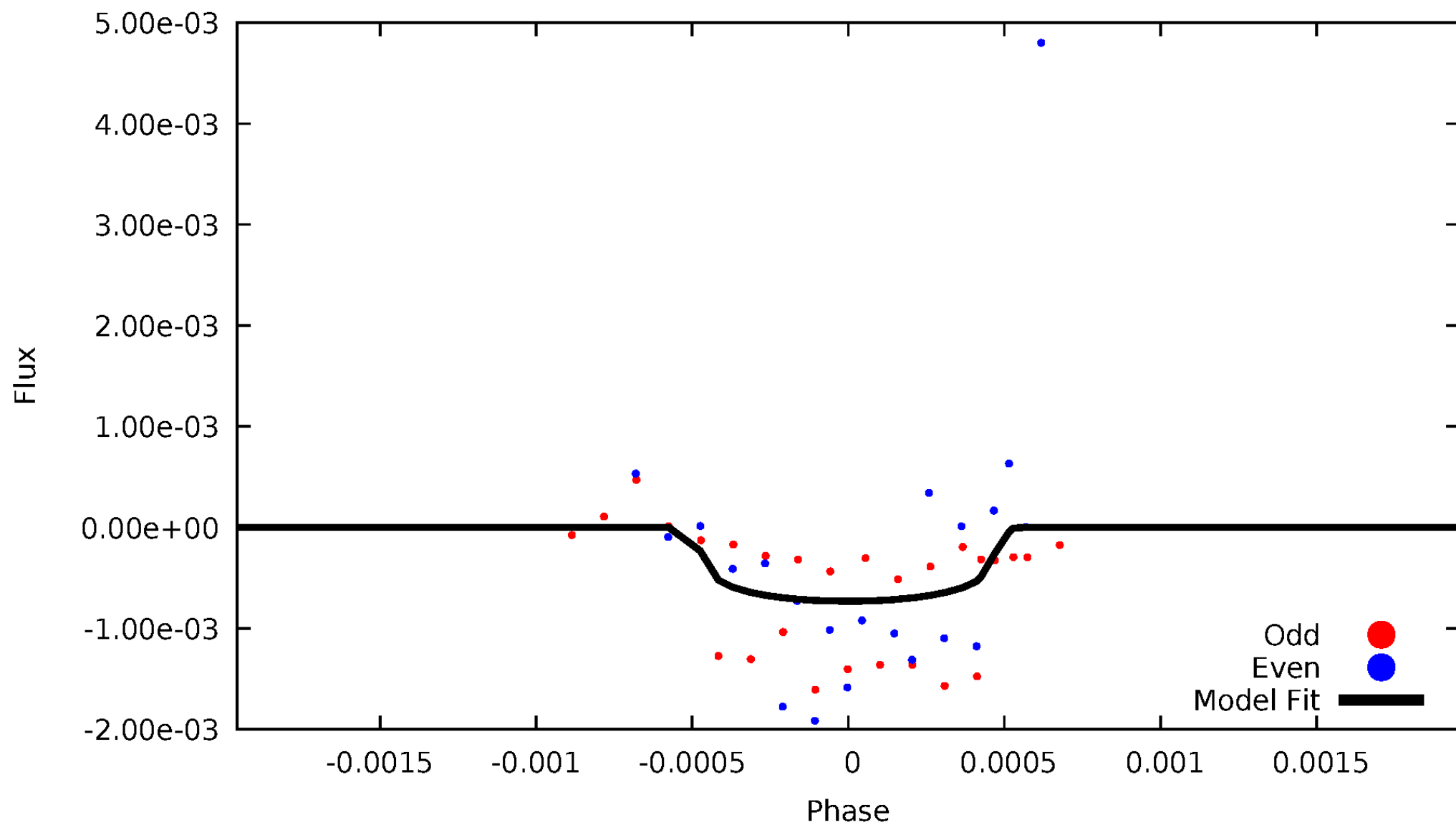


TCE 010801647-05



DV Odd/Even

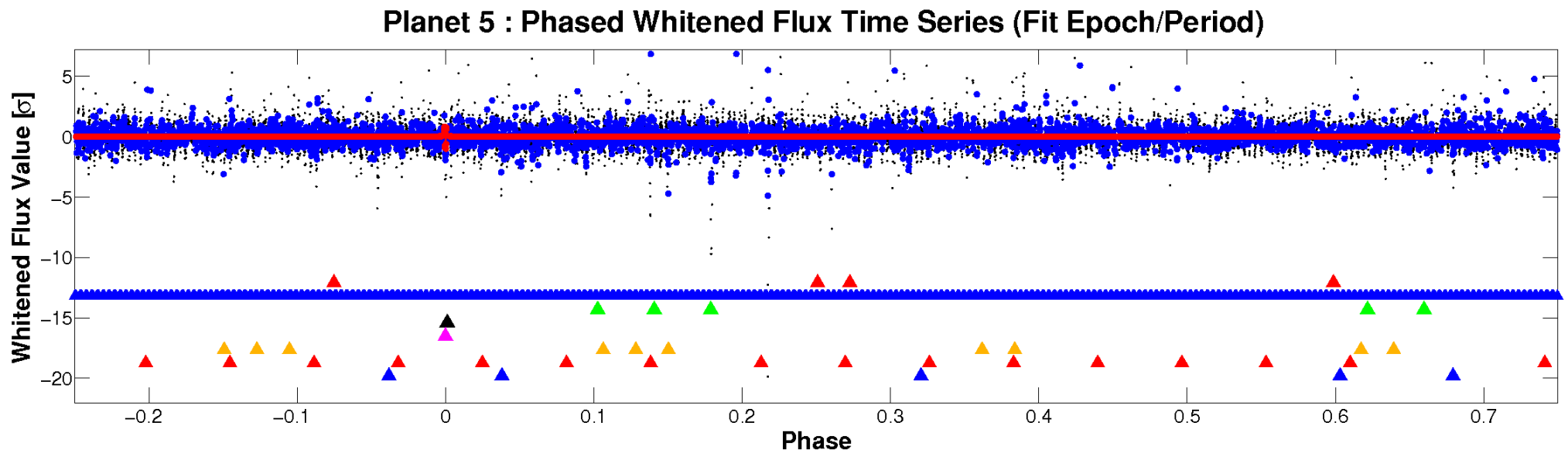
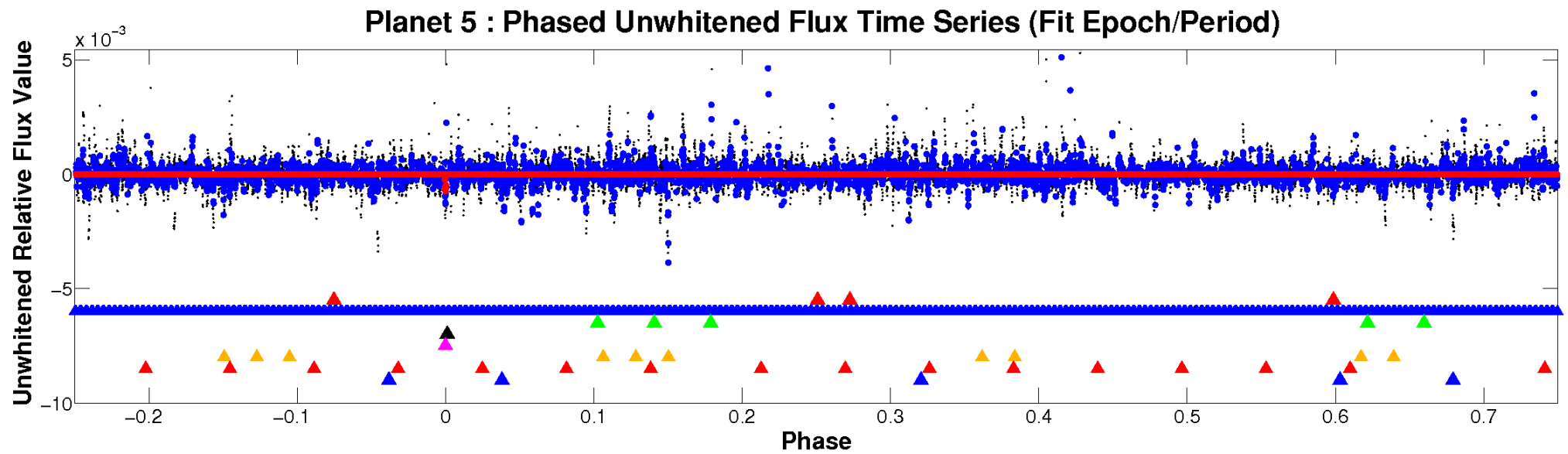
TCE 010801647-05



ALT Odd/Even

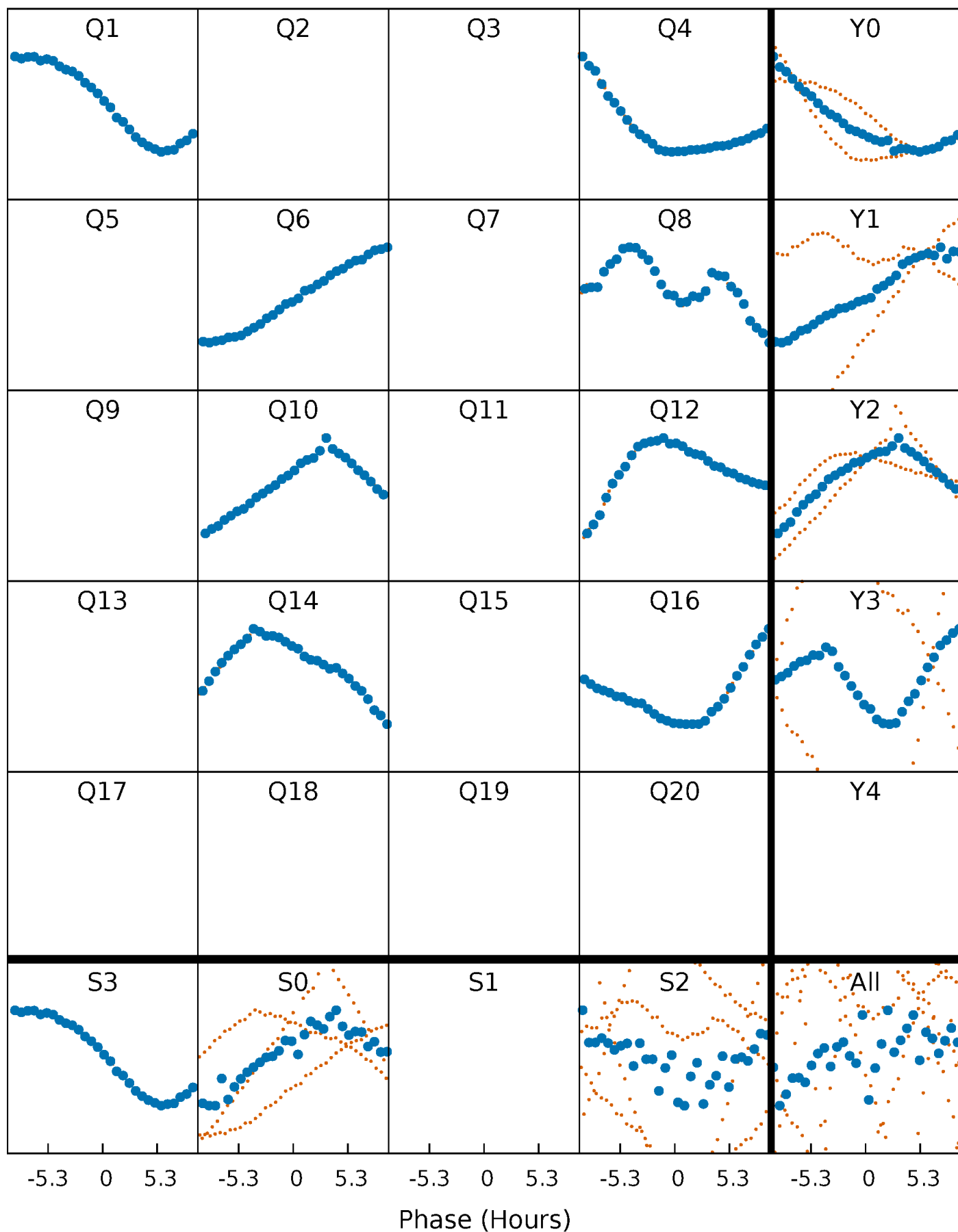
This plot does not exist for this TCE.

Non-Whitened Vs. Whitened Light Curve



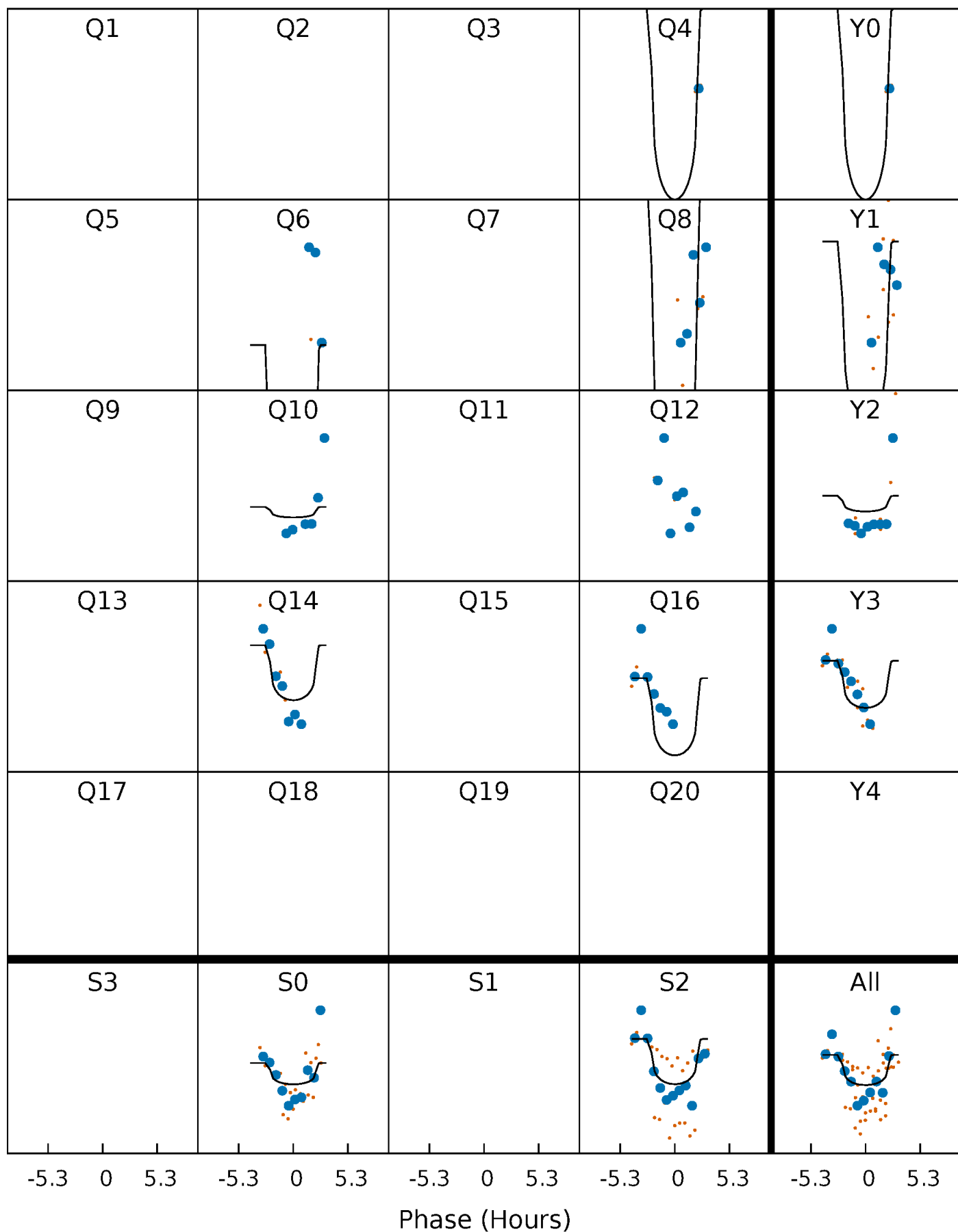
PDC Quarter-Phased Transit Curves

TCE 010801647-05 $P=197.363503$ Days $T_0=162.428687$ (BKJD)



DV Quarter-Phased Transit Curves

TCE 010801647-05 $P=197.363503$ Days $T_0=162.428687$ (BKJD)

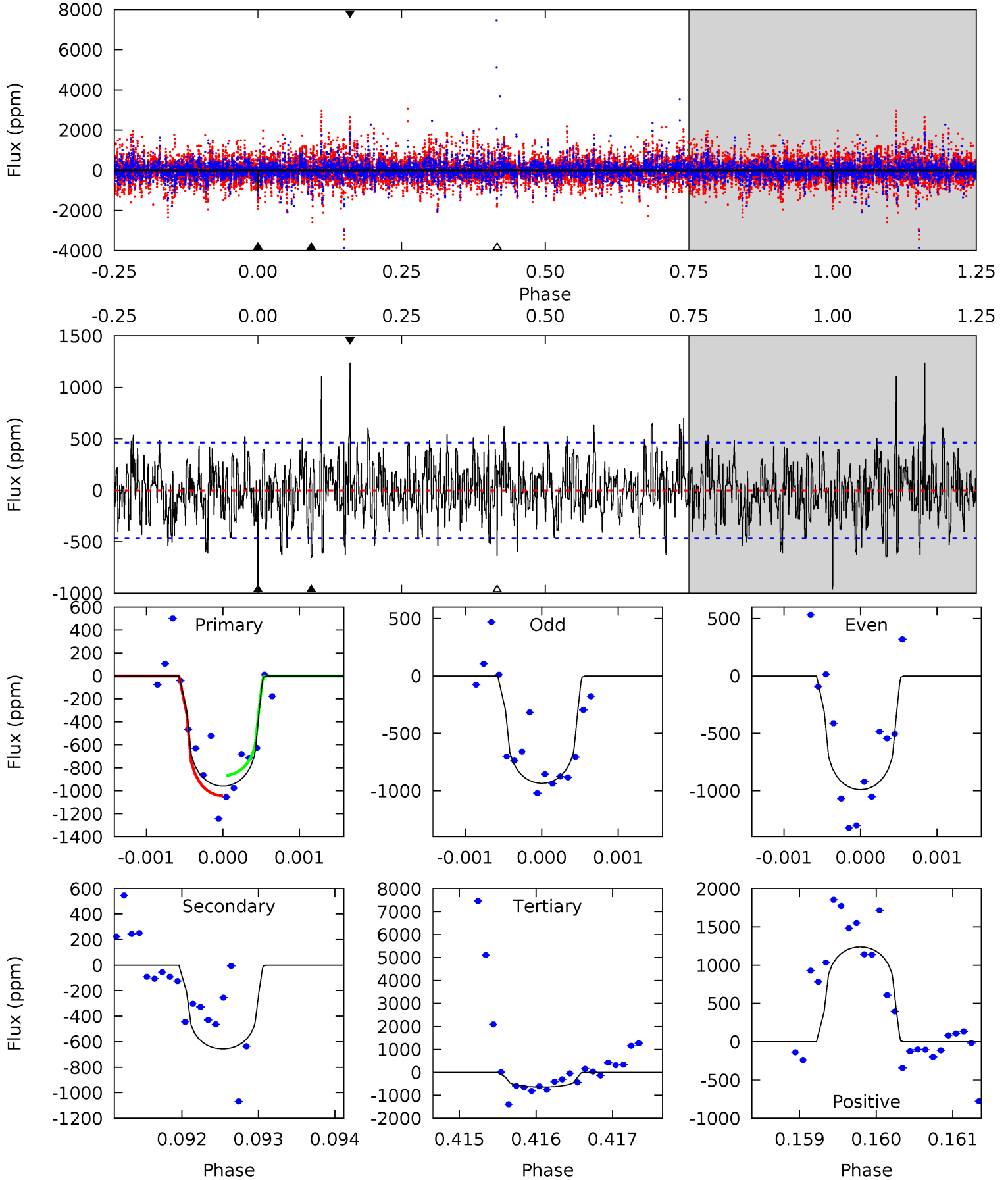


This plot does not exist for this TCE.

DV Model-Shift Uniqueness Test

010801647-05, P = 197.363503 Days, E = 162.428687 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
11.3	7.71	7.48	14.5	5.45	3.29	2.59	3.79	-3.27	0.22	-6.84	0.30	1.45	0.56	1.06



Alt Model-Shift Uniqueness Test

This plot does not exist for this TCE.

Stellar Parameters For KIC 010801647

	$T_{\text{eff}} (K)$	$\log(g)$	$[\text{Fe}/\text{H}]$	$R (R_{\odot})$	$M (M_{\odot})$	$\rho_{\star} (\text{g}\cdot\text{cm}^{-3})$
	5883^{+158}_{-176}	$4.206^{+0.220}_{-0.180}$	$0.070^{+0.250}_{-0.300}$	$1.340^{+0.367}_{-0.367}$	$1.050^{+0.138}_{-0.138}$	$0.615^{+0.759}_{-0.298}$
	+3%/-3%	+5%/-4%	+357%/-429%	+27%/-27%	+13%/-13%	+123%/-48%
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 010801647-05 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-657 ± 85	$9.10^{+9.66}_{-5.97}$	512^{+38}_{-40}	4038^{+2327}_{-819}	1946^{+15265}_{-1487}
Alt.	N/A	N/A	N/A	N/A	N/A

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

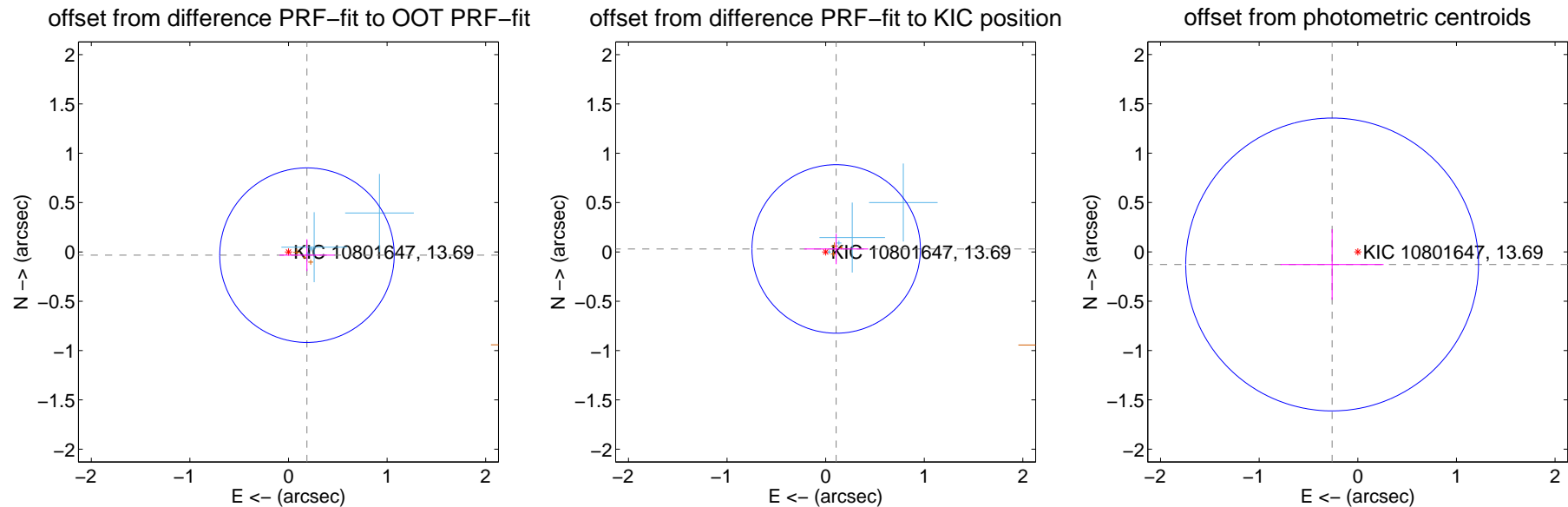
DV Centroid Data

Supplemental centroid analysis for 010801647-05. Kepler magnitude: 13.69. Transit SNR 5.34

There are 4 quarters with good PRF difference image offsets

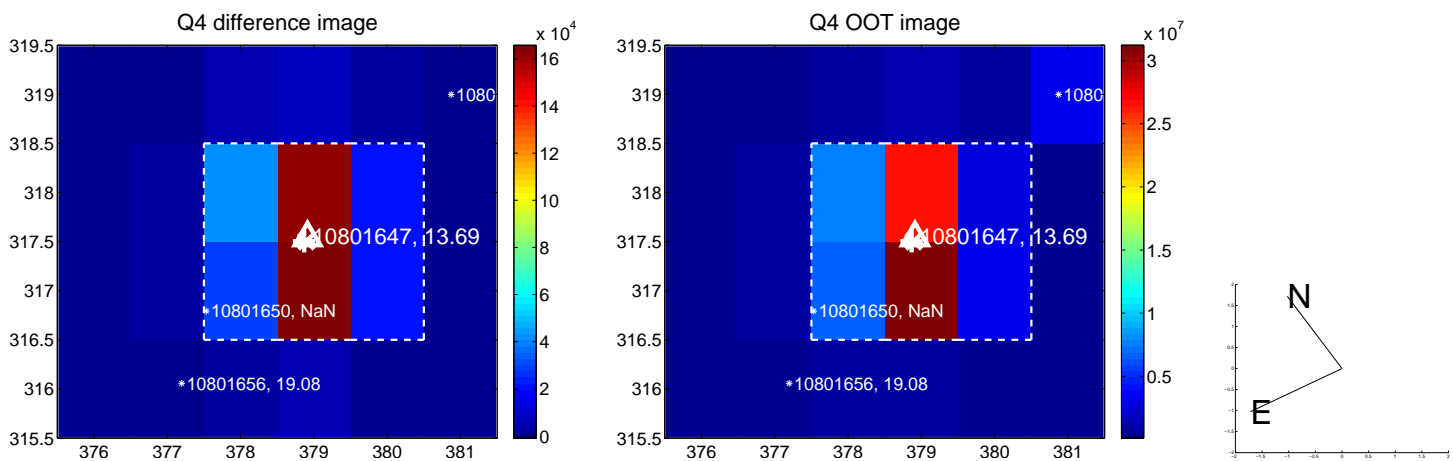
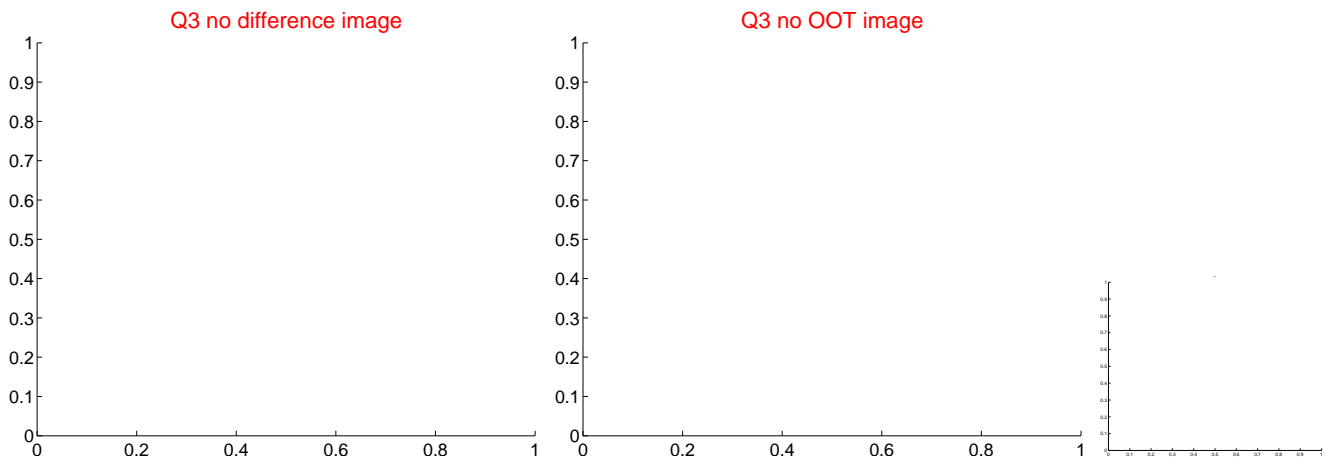
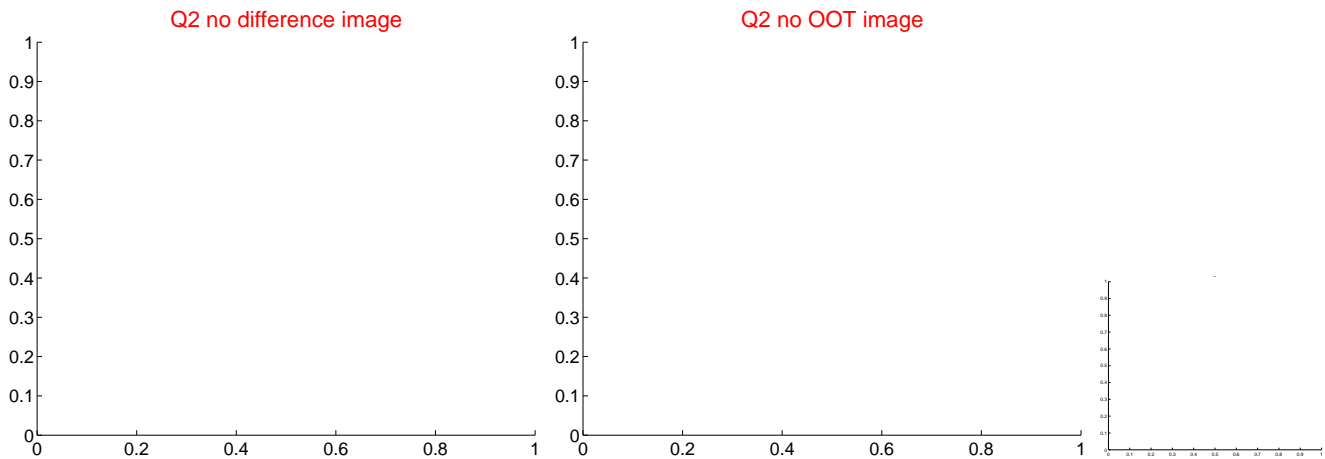
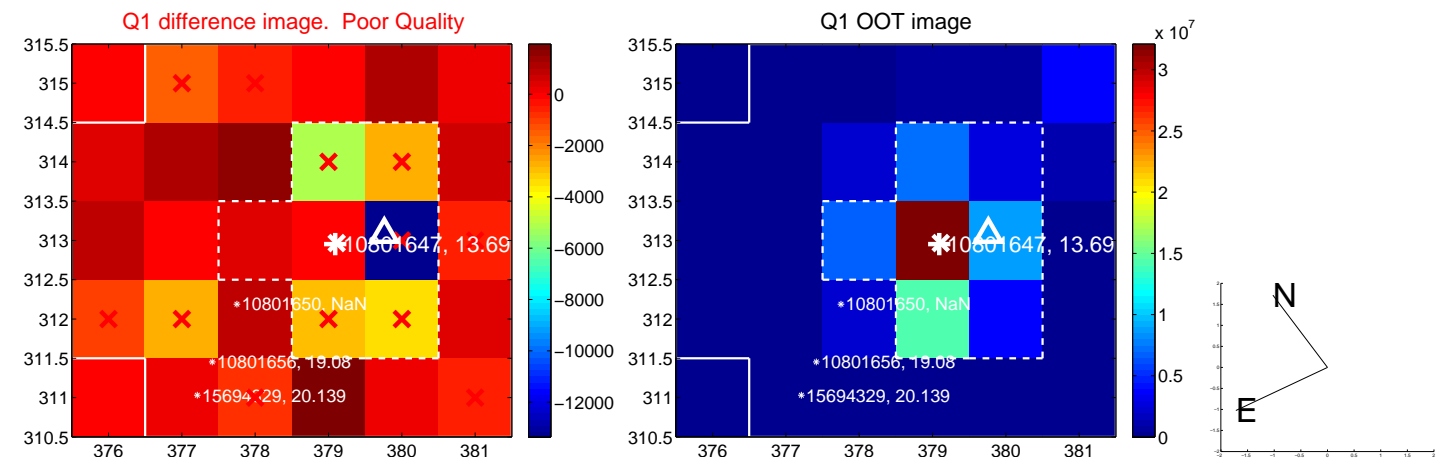
The direct PRF centroid is offset from the target star catalog position by about 0.16 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.190 ± 0.295	0.64	-0.187 ± 0.280	-0.033 ± 0.161
PRF-fit source offset from KIC position	0.111 ± 0.285	0.39	-0.107 ± 0.325	0.030 ± 0.154
photometric centroid source offset	0.29 ± 0.49	0.59	0.26 ± 0.52	-0.13 ± 0.36



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.

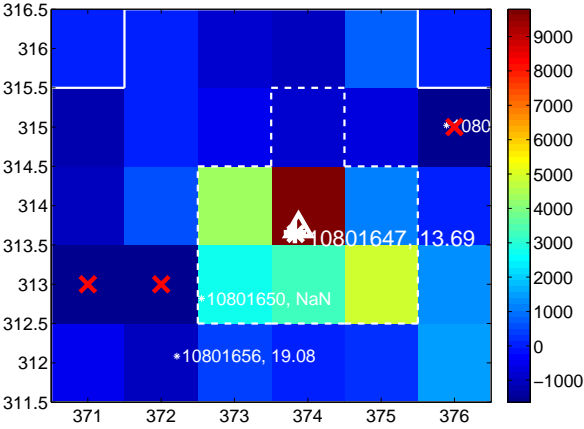
Q5 no difference image



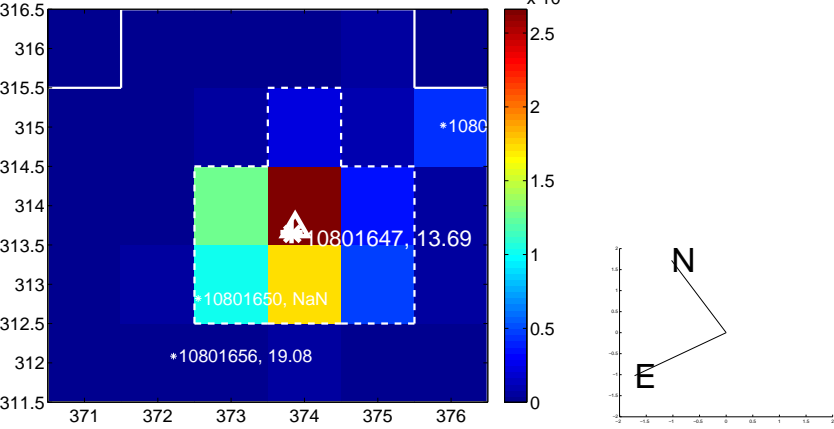
Q5 no OOT image



Q6 difference image



Q6 OOT image



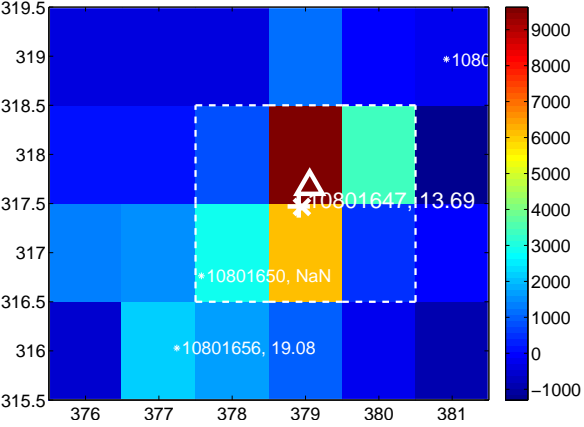
Q7 no difference image



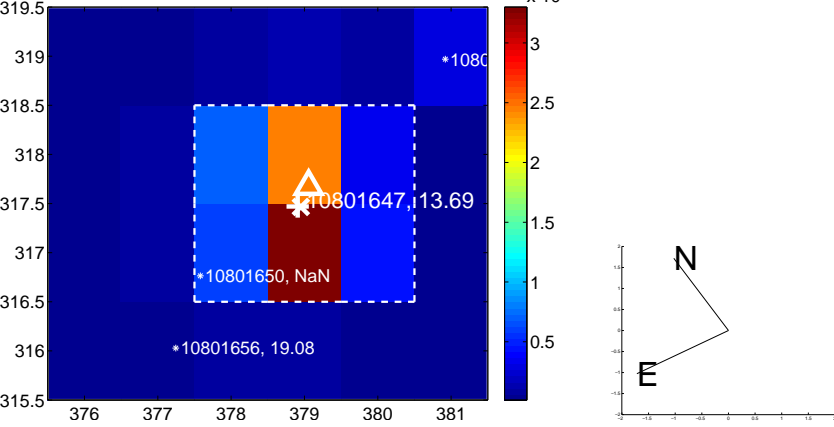
Q7 no OOT image



Q8 difference image



Q8 OOT image

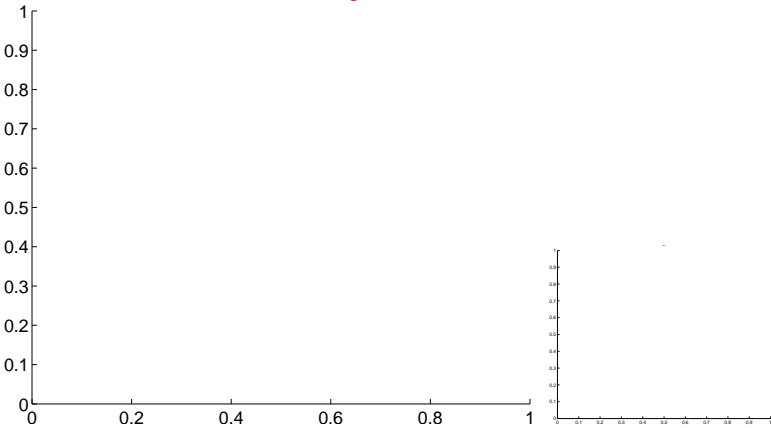


white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.

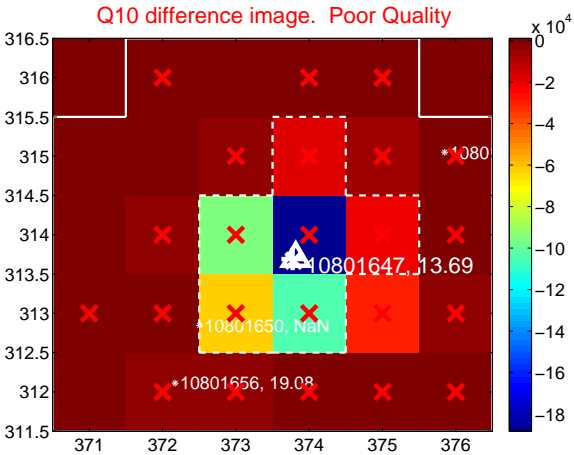
Q9 no difference image



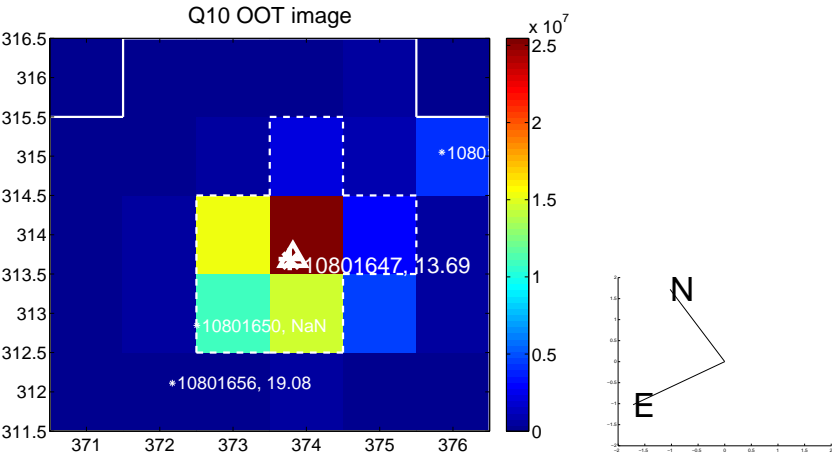
Q9 no OOT image



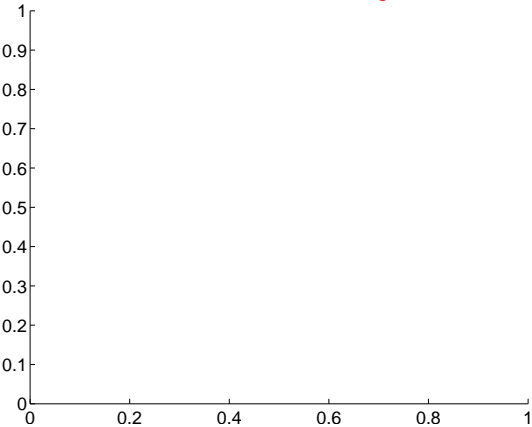
Q10 difference image. Poor Quality



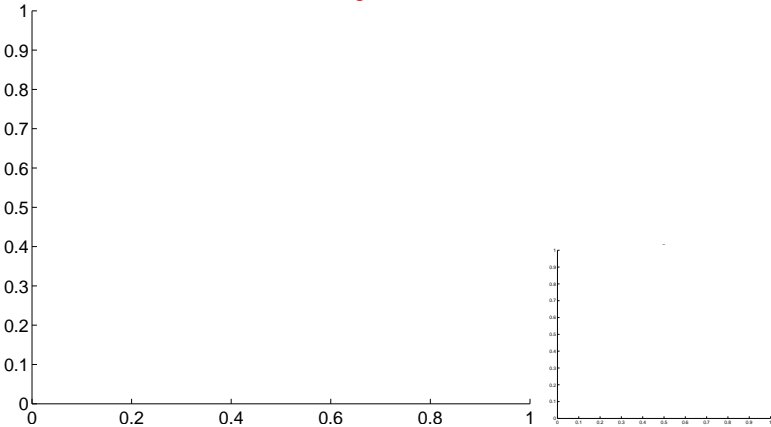
Q10 OOT image



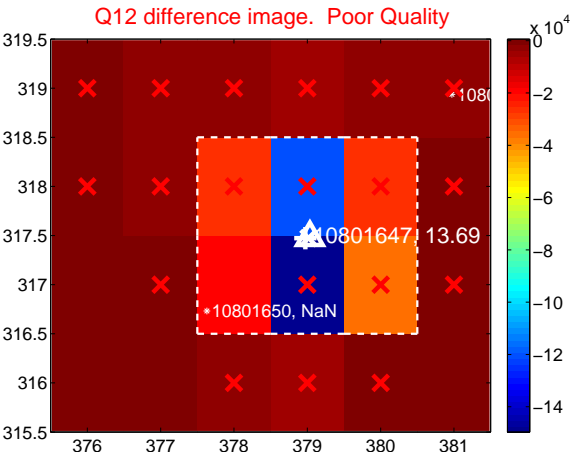
Q11 no difference image



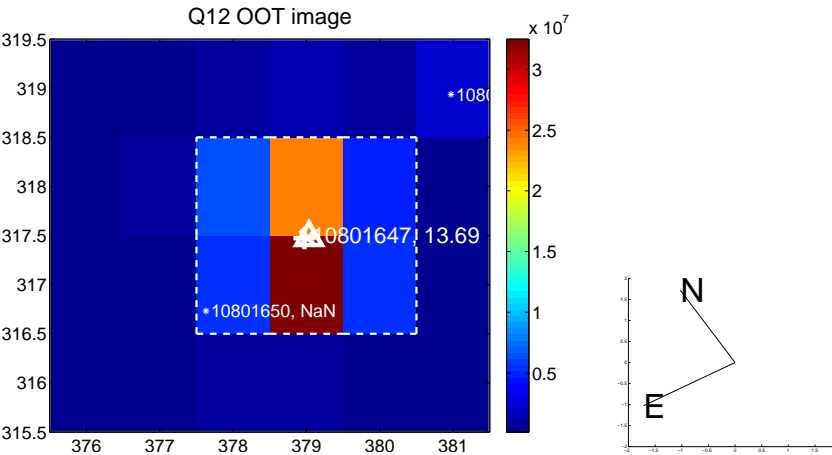
Q11 no OOT image



Q12 difference image. Poor Quality

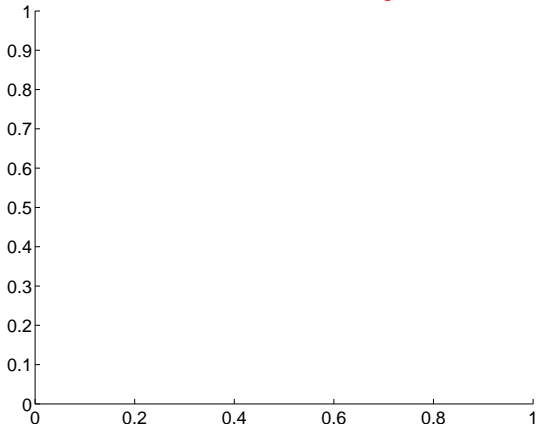


Q12 OOT image

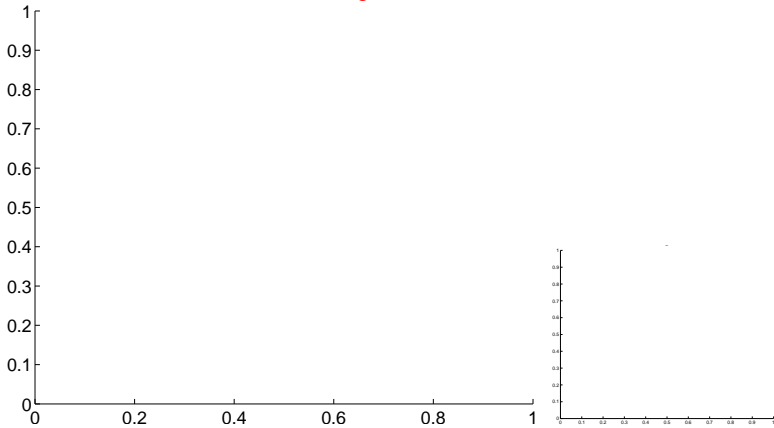


white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.

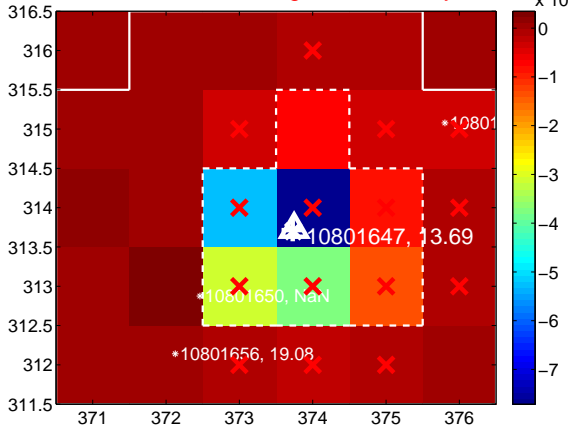
Q13 no difference image



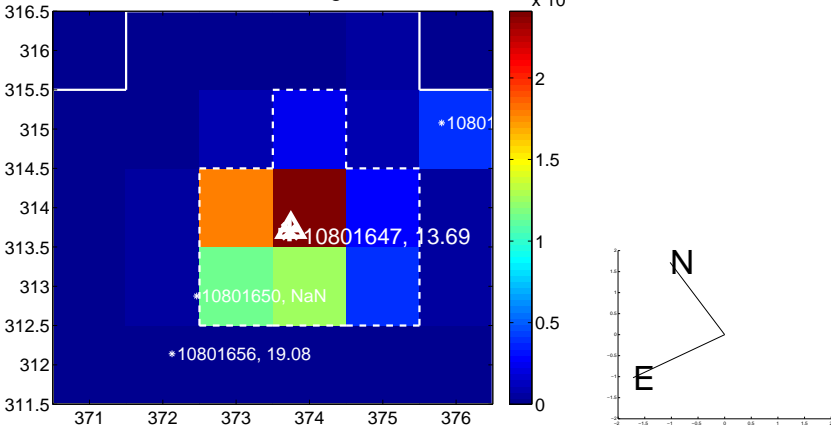
Q13 no OOT image



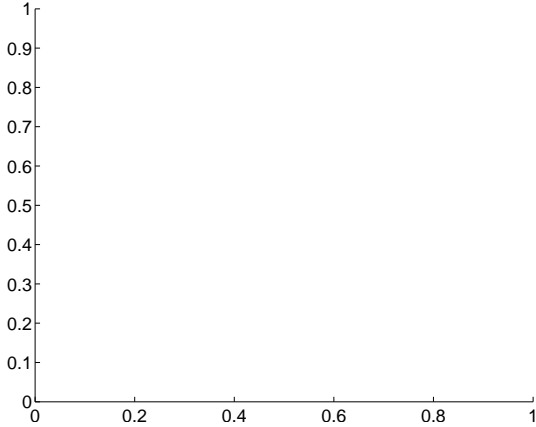
Q14 difference image. Poor Quality



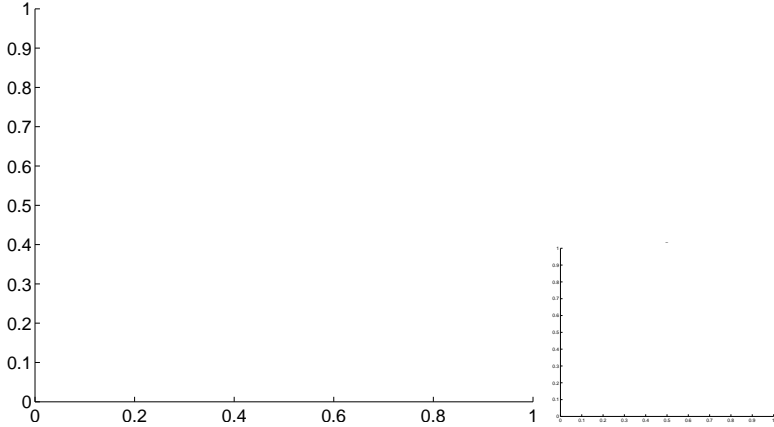
Q14 OOT image



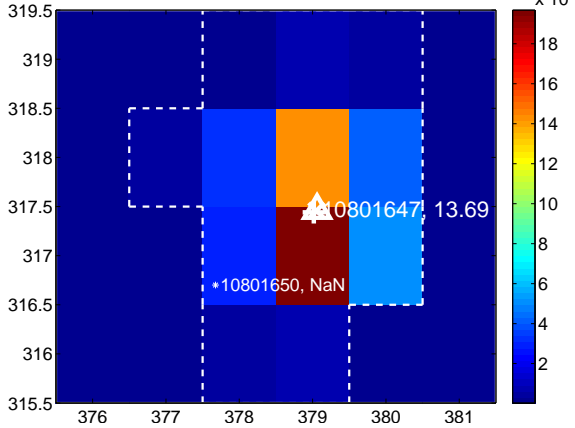
Q15 no difference image



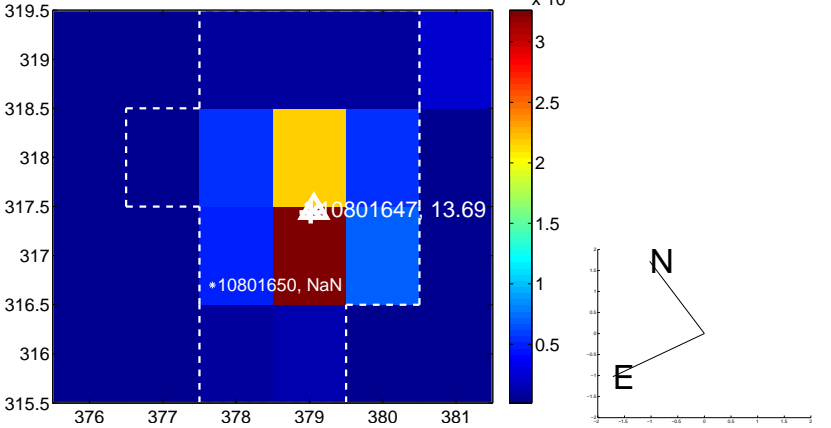
Q15 no OOT image



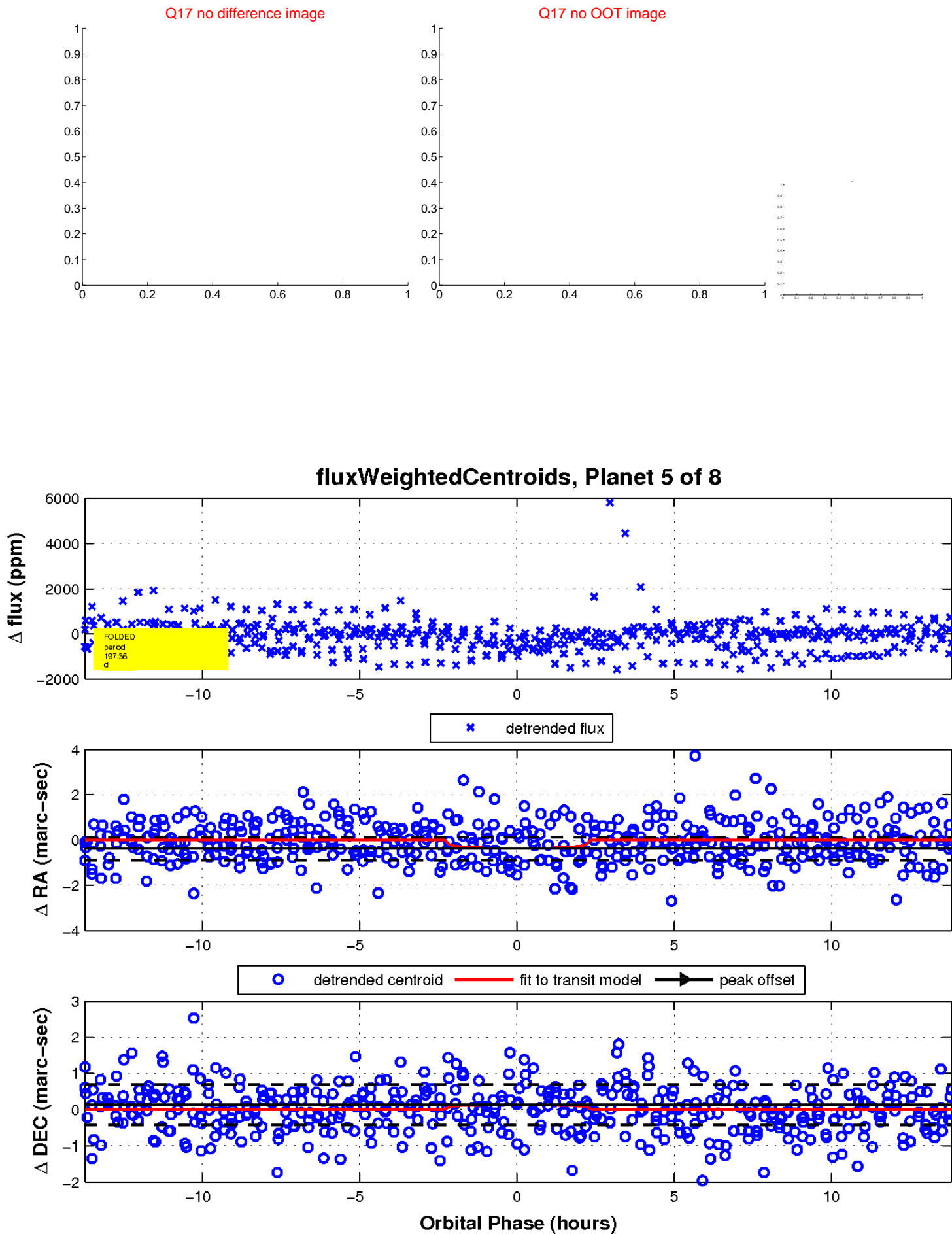
Q16 difference image



Q16 OOT image

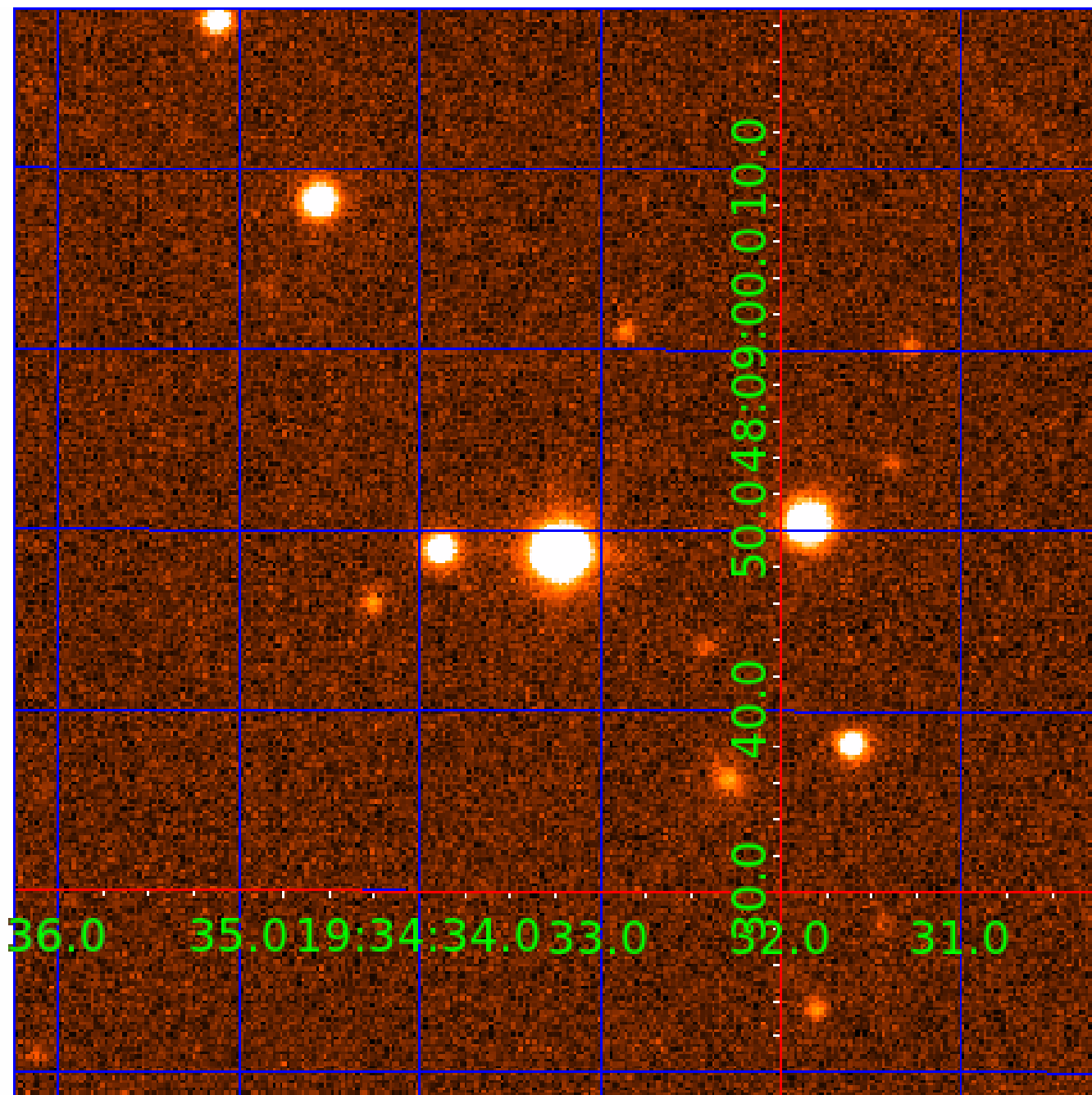


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 010801647

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})
010801647-01	OBS	No	330.368090	409.311041	545.5	2.752	12.3	3.9	1.34	5883	3.22	2.13
010801647-02	OBS	No	0.753128	132.146344	26.9	4.372	7.9	5.1	1.34	5883	0.70	7093.62
010801647-03	OBS	No	299.804795	380.050453	2225.8	4.522	11.3	9.5	1.34	5883	6.50	2.42
010801647-04	OBS	No	197.368302	162.652256	138.6	0.727	12.3	0.7	1.34	5883	1.67	4.23
010801647-05	OBS	No	197.363503	162.428687	731.8	4.635	11.5	5.3	1.34	5883	3.64	4.23
010801647-06	OBS	No	146.937679	192.093369	2298.7	18.590	10.3	7.3	1.34	5883	12.14	6.27
010801647-07	OBS	No	93.083145	189.730328	102.6	3.437	8.4	0.9	1.34	5883	1.62	11.52
010801647-08	OBS	No	268.163039	281.469485	363.3	6.000	9.8	-1.0	1.34	5883	2.54	2.81

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
010801647-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_MARSHALL_SKYE—LPP_DV—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—INCONSISTENT_TRANS
010801647-02	OBS	FP	0.00	1	0	0	0	LPP_DV
010801647-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_CHASES_MARSHALL—LPP_ALT—ALL_TRANS_CHASES—INCONSISTENT_TRANS—CENT_FEW_DIFFS
010801647-04	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_MARSHALL_SKYE_TRACKER—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—INCONSISTENT_TRANS
010801647-05	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_MARSHALL_SKYE—TRANS_GAPPED—LPP_DV—ALL_TRANS_CHASES—MOD_POS_DV—INCONSISTENT_TRANS—SAME_NTL_PERIOD
010801647-06	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—INCONSISTENT_TRANS
010801647-07	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_TRACKER—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT
010801647-08	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_MARSHALL—ALL_TRANS_CHASES—NO_FITS—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.

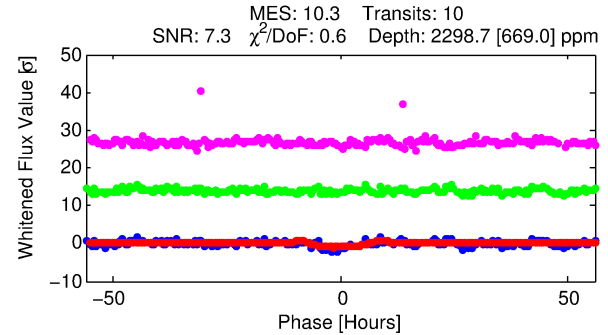
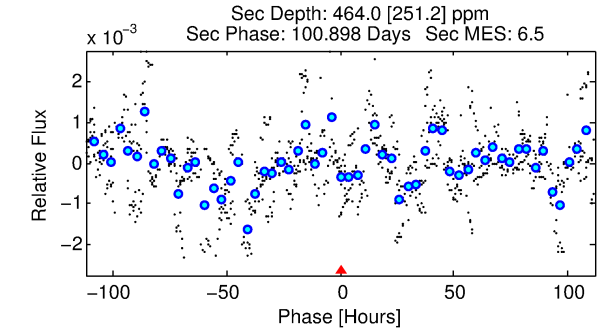
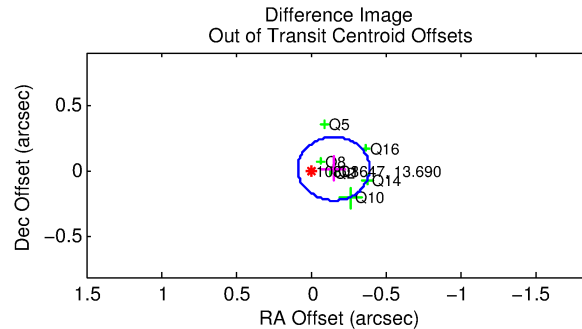
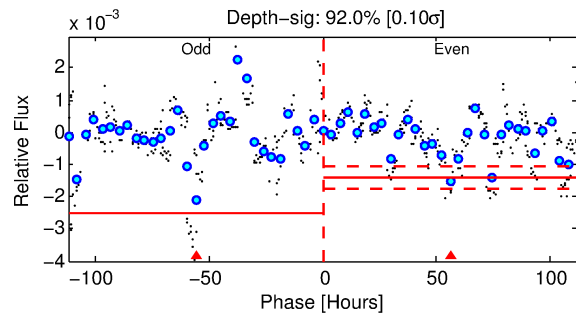
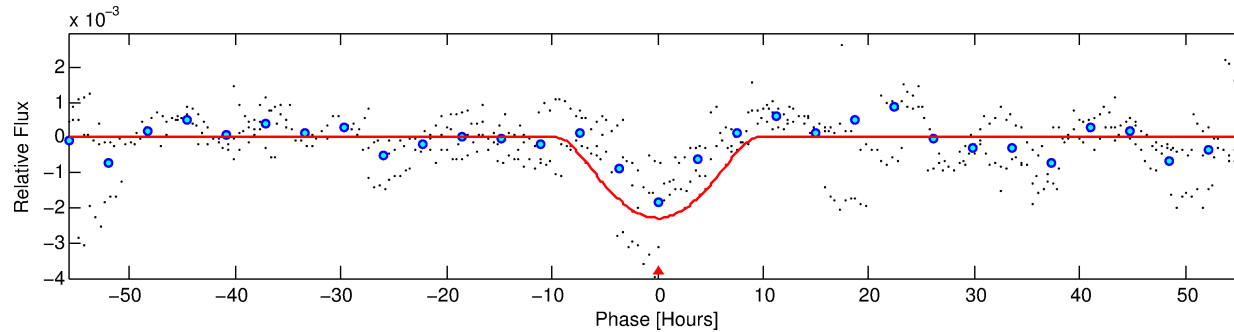
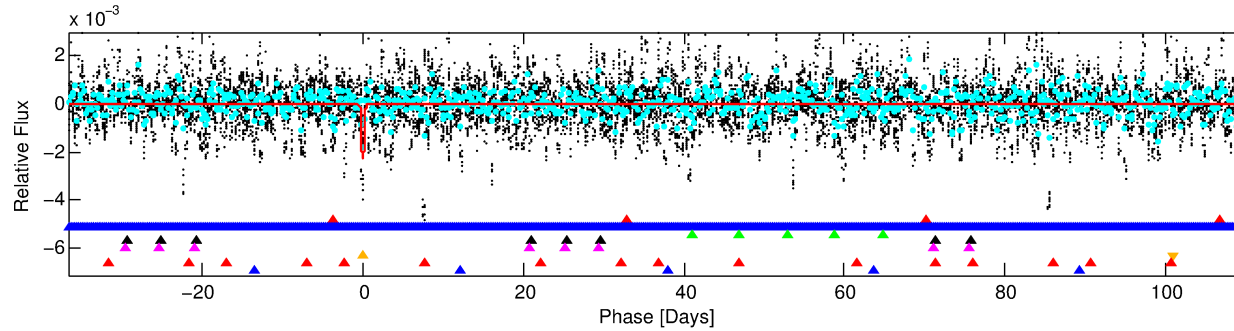
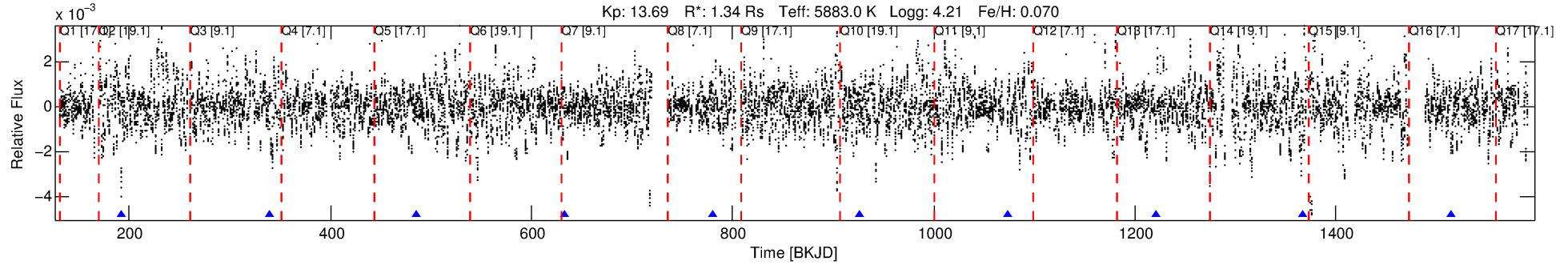
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 010801647-06

No Significant Match Found

DV One-Page Summary

KIC: 10801647 Candidate: 6 of 8 Period: 146.938 d



DV Fit Results:

Period = 146.93768 [0.00986] d
Epoch = 192.0934 [0.0410] BKJD
Rp/R* = 0.0830 [0.1279]
a/R* = 25.14 [7.54]
b = 1.00 [0.17]
Seff = 6.27 [2.52]
Teq = 403 [41] K
Rp = 12.14 [19.00] Re
a = 0.5544 [0.1379] AU
Ag = 532.25 [1677.65] [0.32 σ]
Teffp = 2996 [2345] K [1.11 σ]

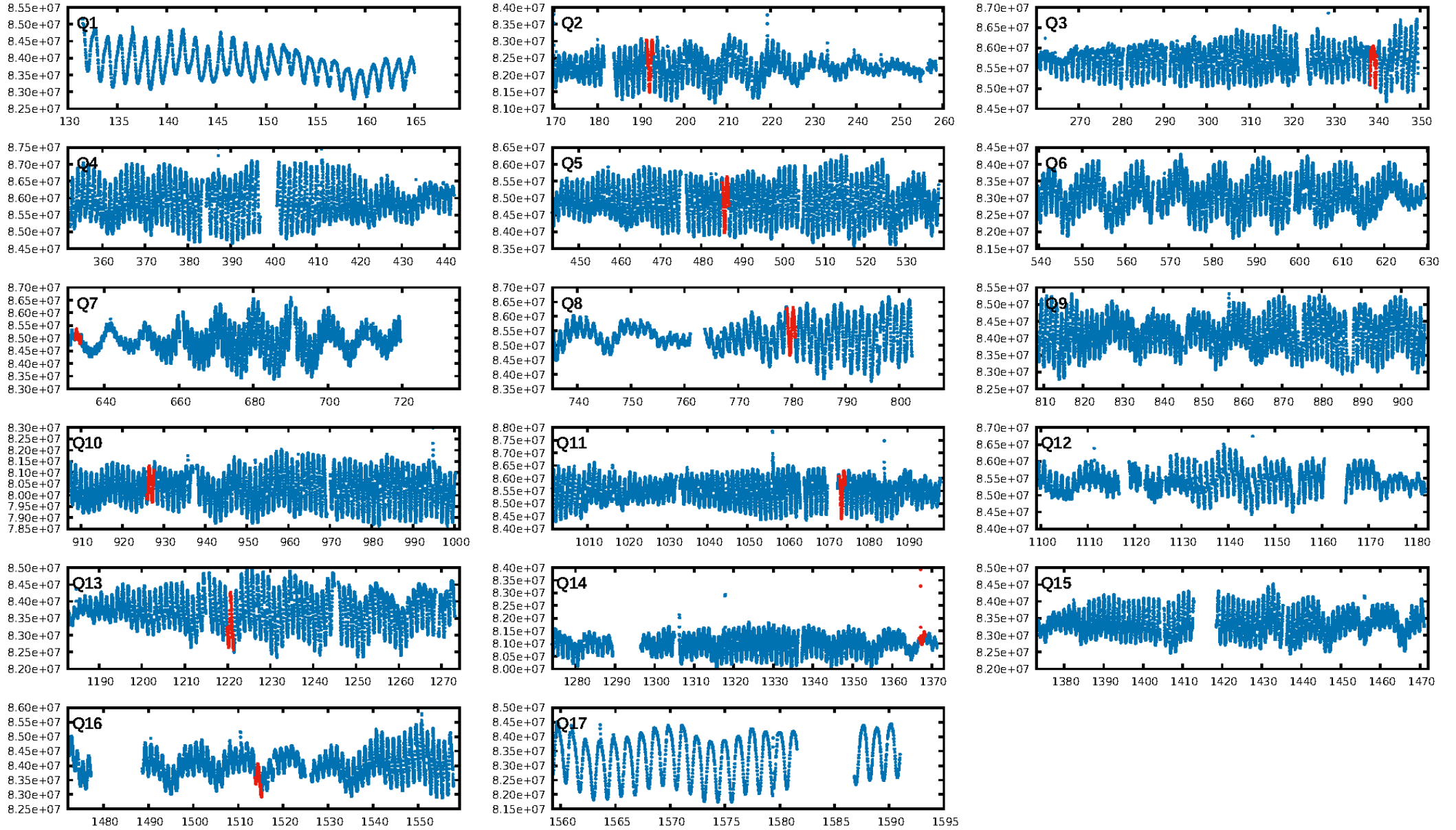
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [68.37 σ]
LongPeriod-sig: 100.0% [63.17 σ]
ModelChiSquare2-sig: 4.2%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [10/10]
GhostDiagnostic-chr: -9.615
Centroid-sig: 26.7%
Centroid-so: 0.112 arcsec [0.76 σ]
OotOffset-rm: 0.155 arcsec [1.93 σ]
OotOffset-st: 3/1/2/1 [7]
KicOffset-rm: 0.166 arcsec [2.21 σ]
KicOffset-st: 3/1/2/1 [7]
DiffImageQuality-fgm: 0.57 [4/7]
DiffImageOverlap-fno: 0.00 [0/7]

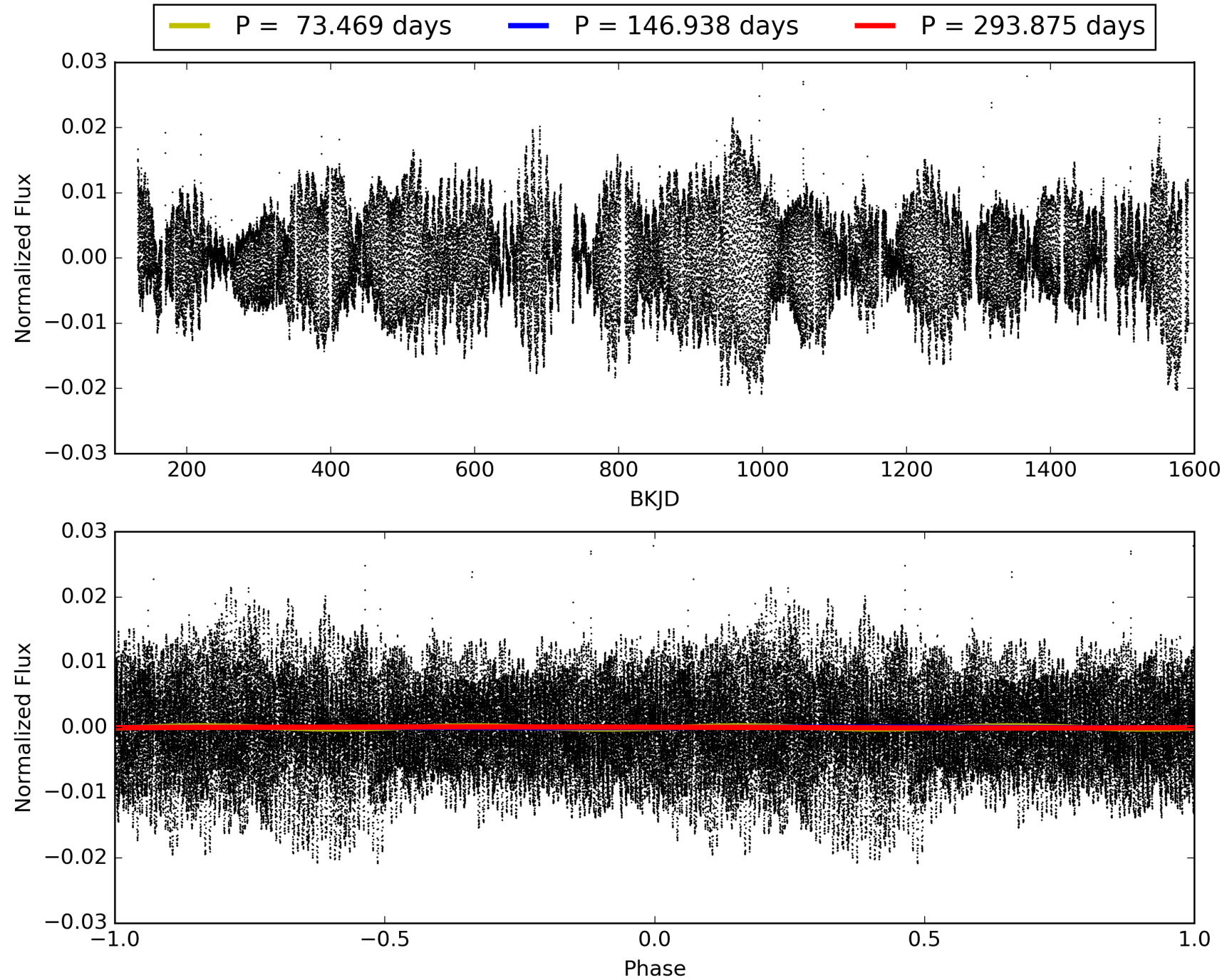
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 06:21:50 Z

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

TCE 010801647-06, PDC Light Curves

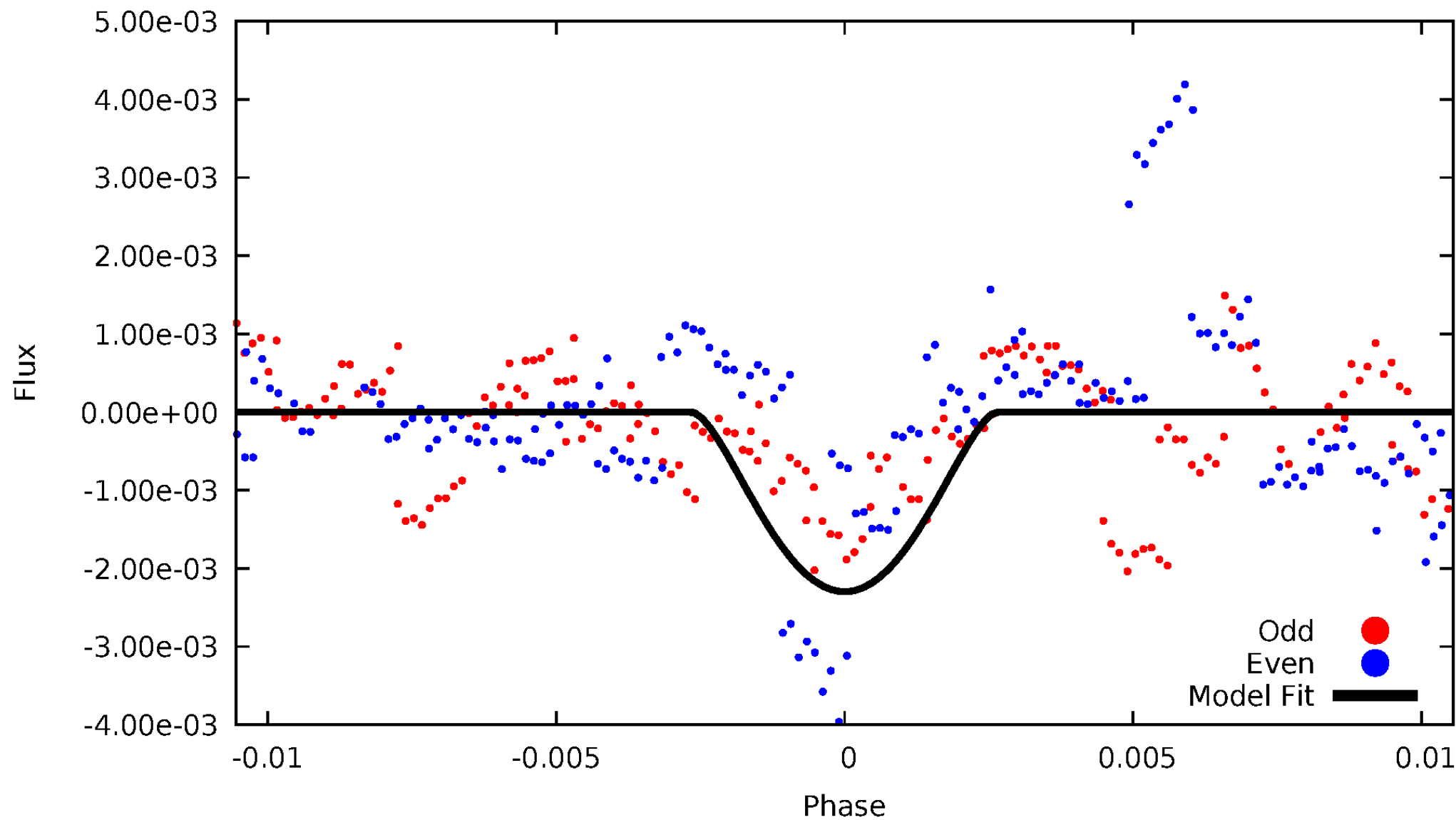


TCE 010801647-06



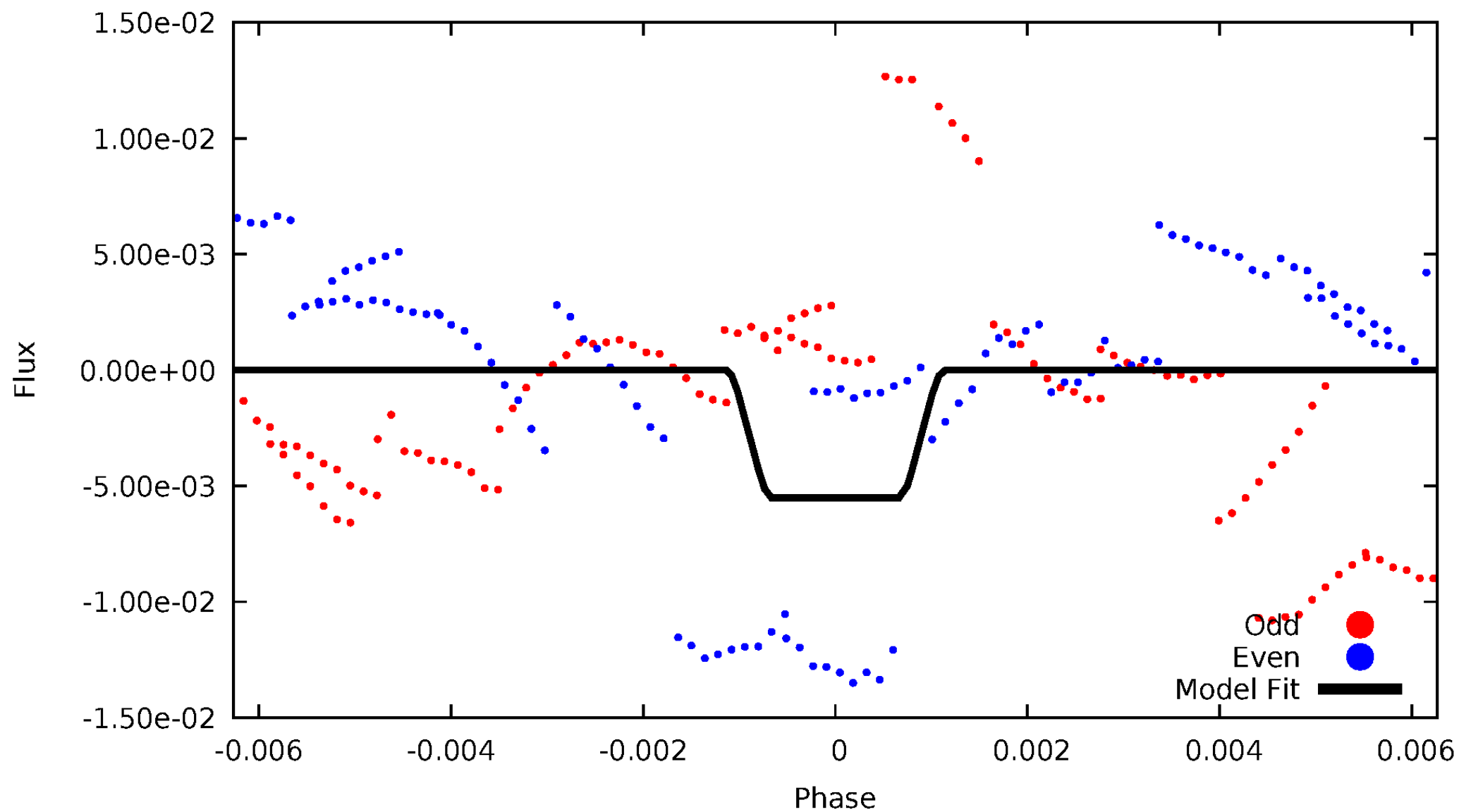
DV Odd/Even

TCE 010801647-06



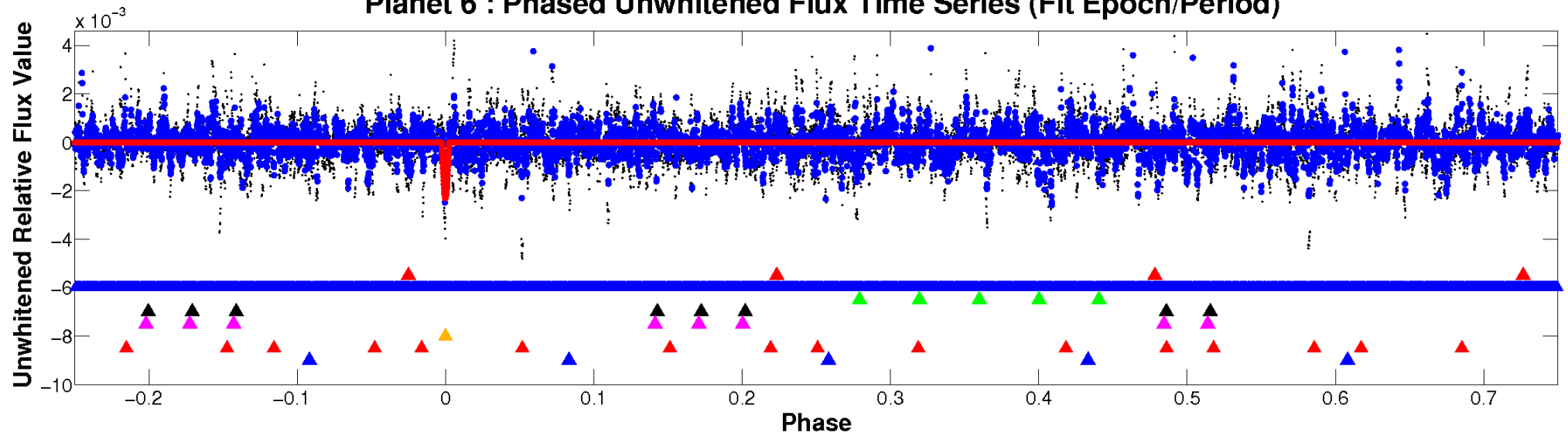
ALT Odd/Even

TCE 010801647-06

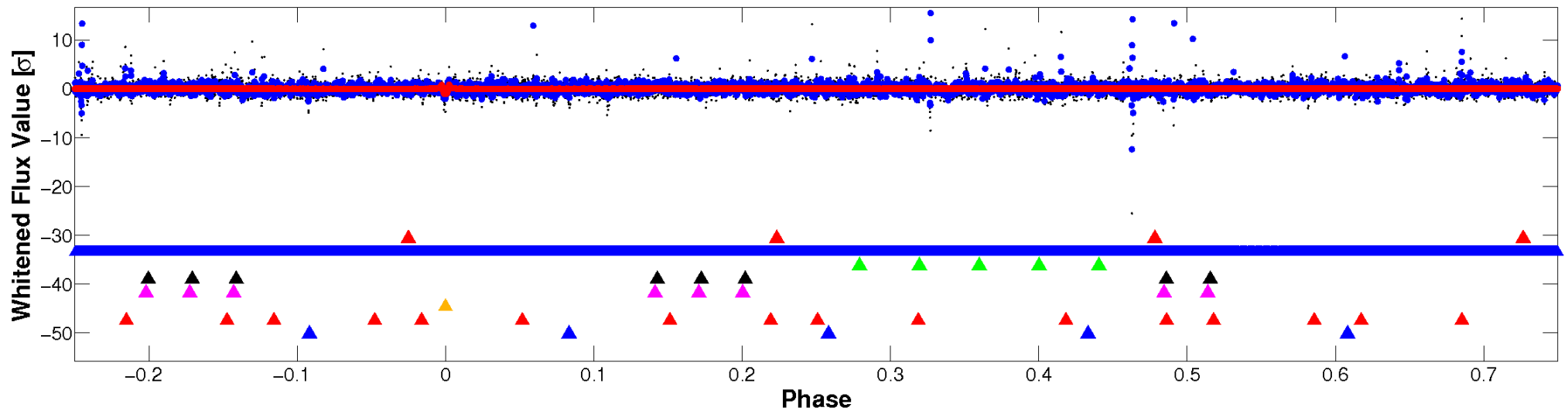


Non-Whitened Vs. Whitened Light Curve

Planet 6 : Phased Unwhitened Flux Time Series (Fit Epoch/Period)

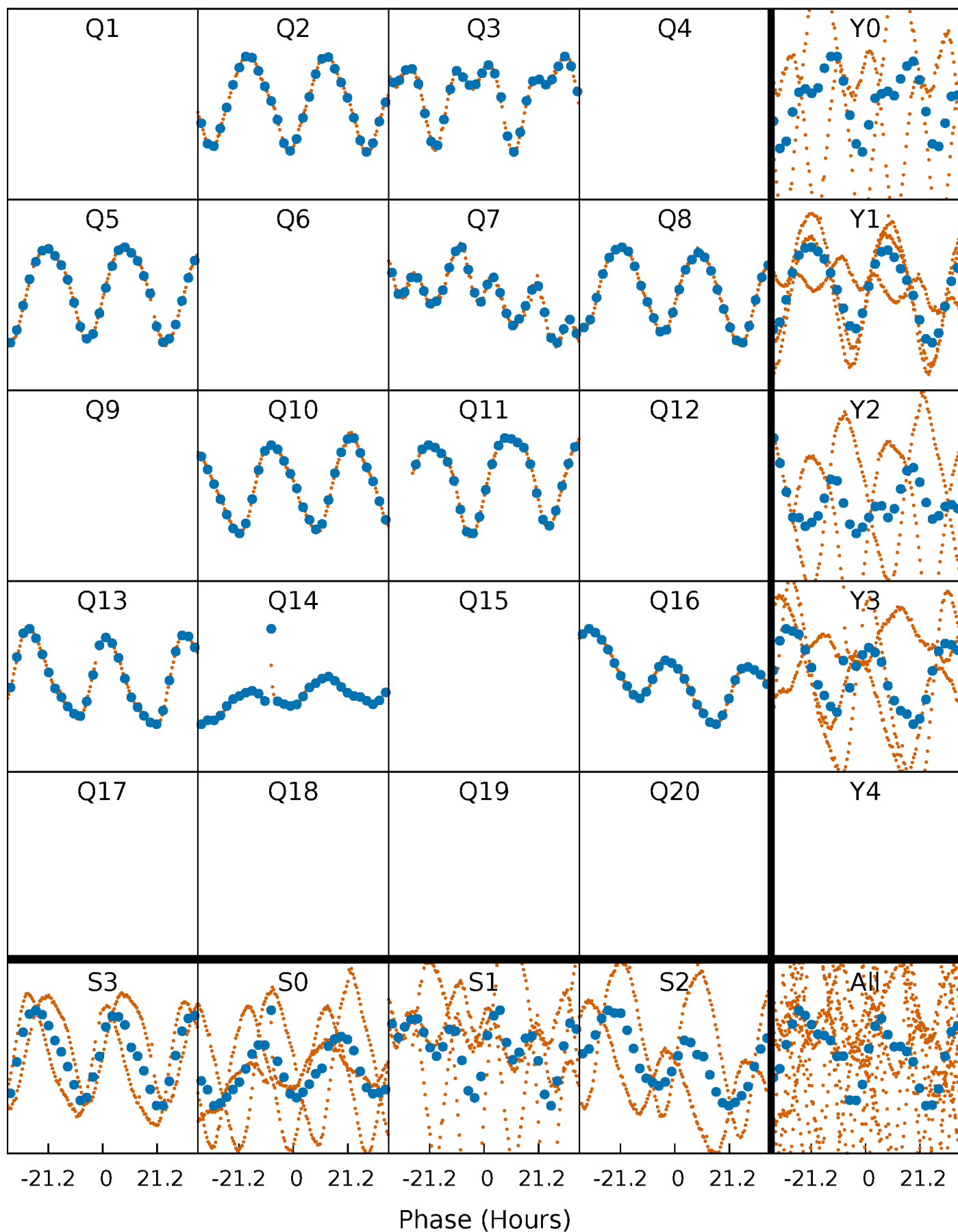


Planet 6 : Phased Whitened Flux Time Series (Fit Epoch/Period)



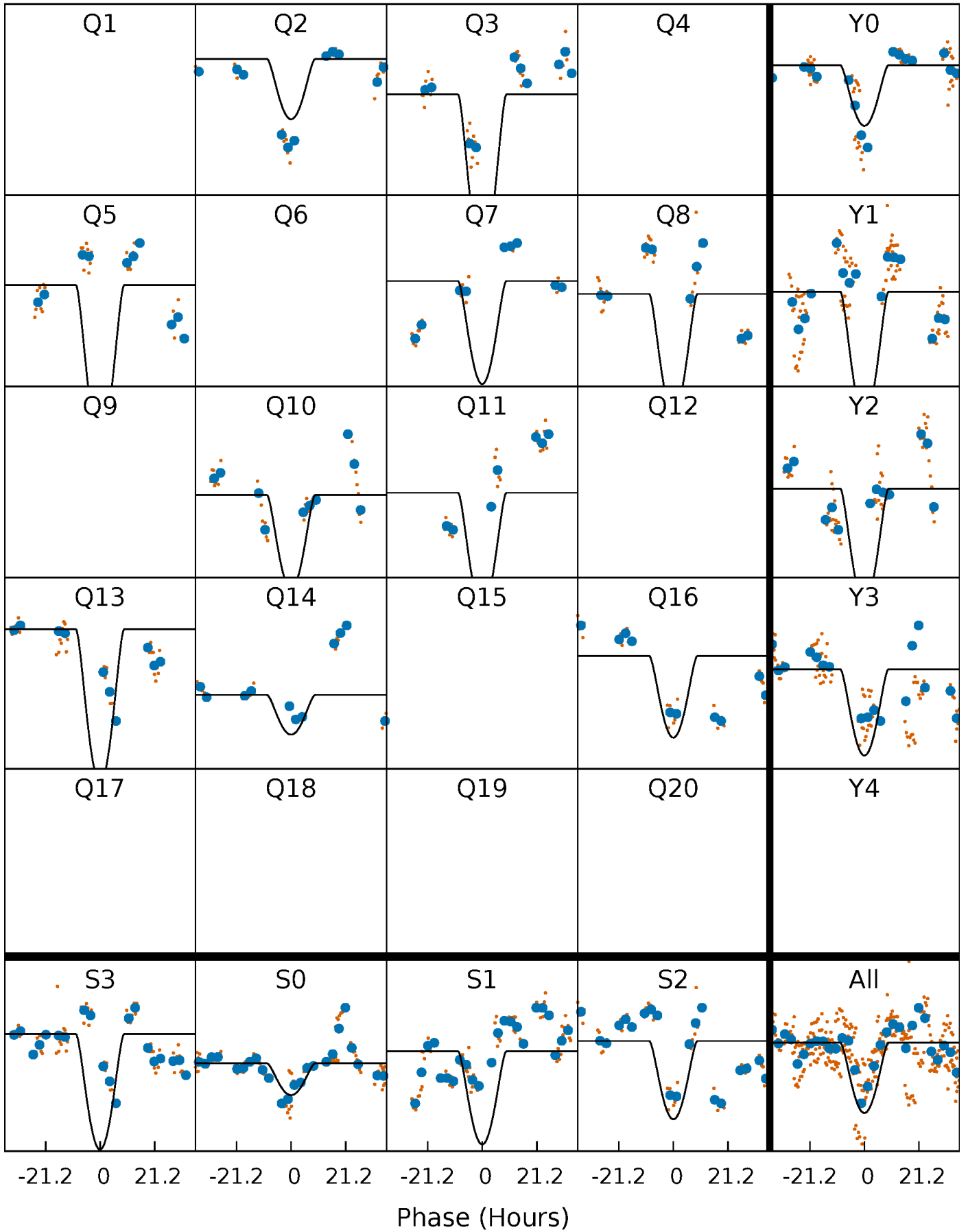
PDC Quarter-Phased Transit Curves

TCE 010801647-06 P=146.937679 Days $T_0=192.093369$ (BKJD)



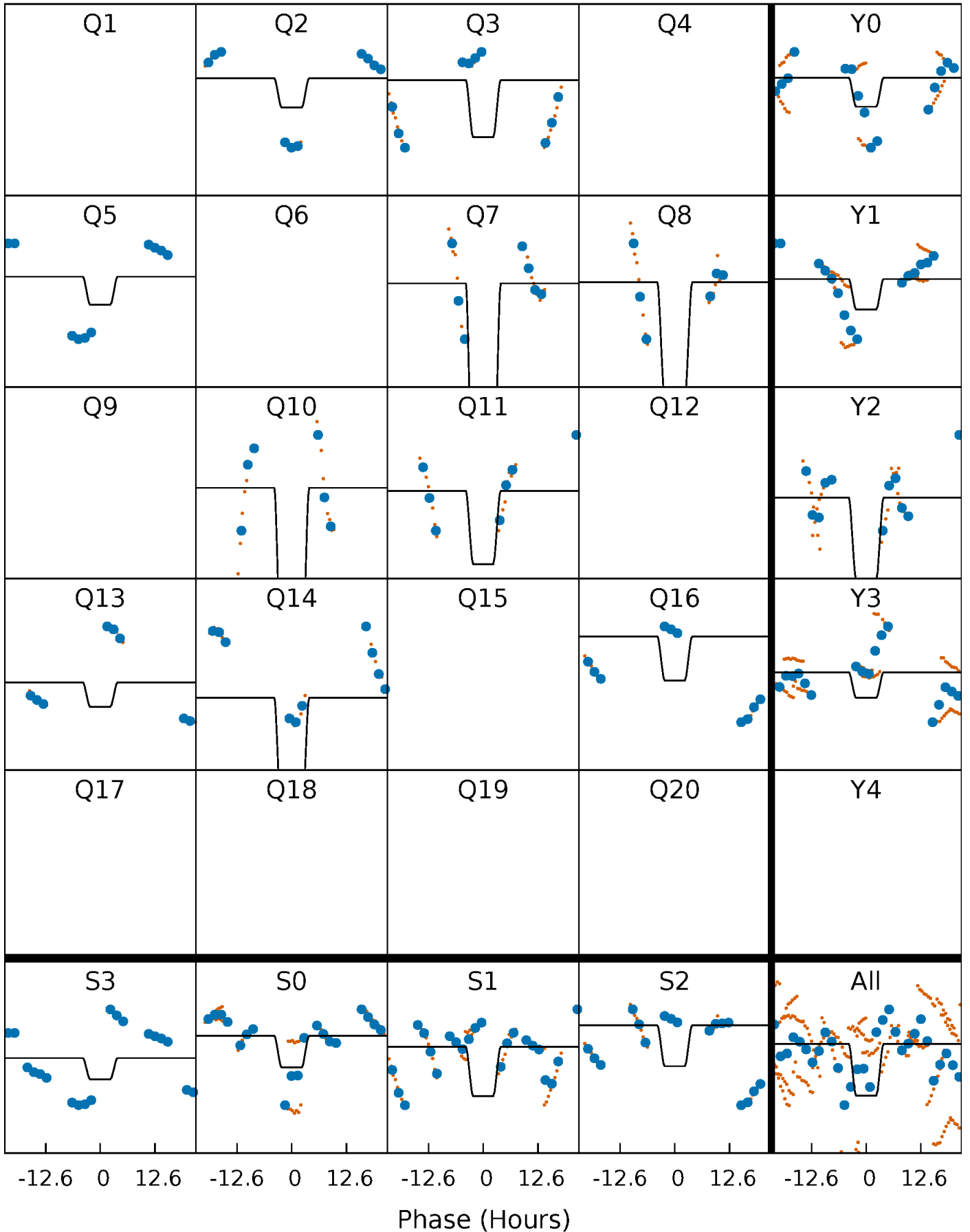
DV Quarter-Phased Transit Curves

TCE 010801647-06 P=146.937679 Days $T_0=192.093369$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

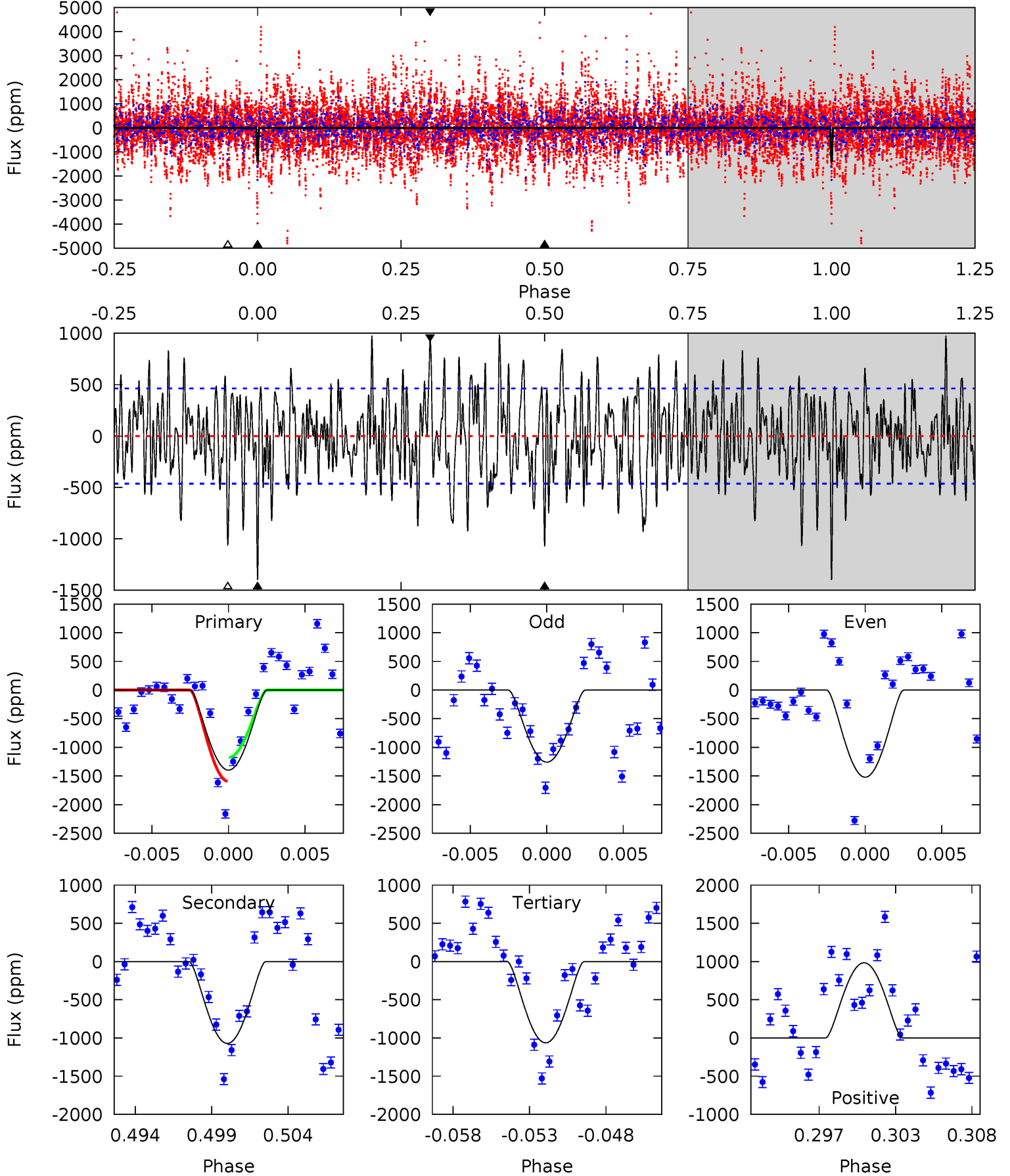
TCE 010801647-06 P=146.948086 Days $T_0=192.010746$ (BKJD)



DV Model-Shift Uniqueness Test

010801647-06, P = 146.937679 Days, E = 45.155690 Days

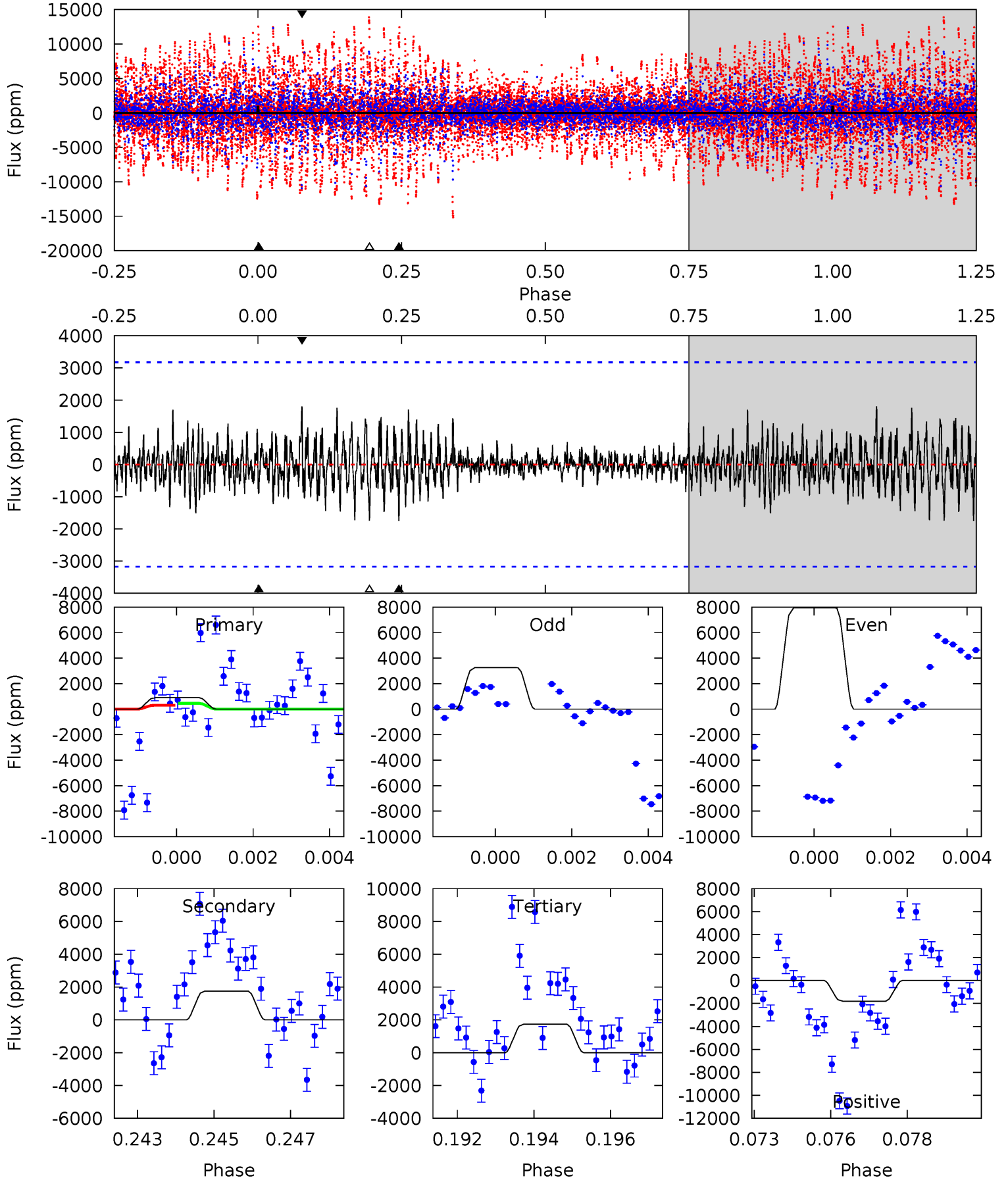
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
15.5	11.9	11.8	10.9	5.15	2.79	3.87	3.70	4.59	0.08	0.97	1.39	0.82	0.41	2.31



Alt Model-Shift Uniqueness Test

010801647-06, P = 146.948086 Days, E = 45.062660 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
1.50	2.93	2.90	3.01	5.31	3.06	0.78	-1.40	-1.51	0.03	-0.07	4.40	291.4	0.51	0.13



Stellar Parameters For KIC 010801647

	$T_{\text{eff}} (K)$	$\log(g)$	$[\text{Fe}/\text{H}]$	$R (R_{\odot})$	$M (M_{\odot})$	$\rho_{\star} (\text{g}\cdot\text{cm}^{-3})$
	5883^{+158}_{-176}	$4.206^{+0.220}_{-0.180}$	$0.070^{+0.250}_{-0.300}$	$1.340^{+0.367}_{-0.367}$	$1.050^{+0.138}_{-0.138}$	$0.615^{+0.759}_{-0.298}$
	+3%/-3%	+5%/-4%	+357%/-429%	+27%/-27%	+13%/-13%	+123%/-48%
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 010801647-06 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-1071 ± 90	$17.56^{+16.03}_{-11.56}$	563^{+41}_{-42}	3496^{+1727}_{-555}	592^{+4578}_{-430}
Alt.	-1755 ± 598	$17.52^{+17.04}_{-11.10}$	563^{+41}_{-40}	3838^{+1913}_{-774}	936^{+6645}_{-706}

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

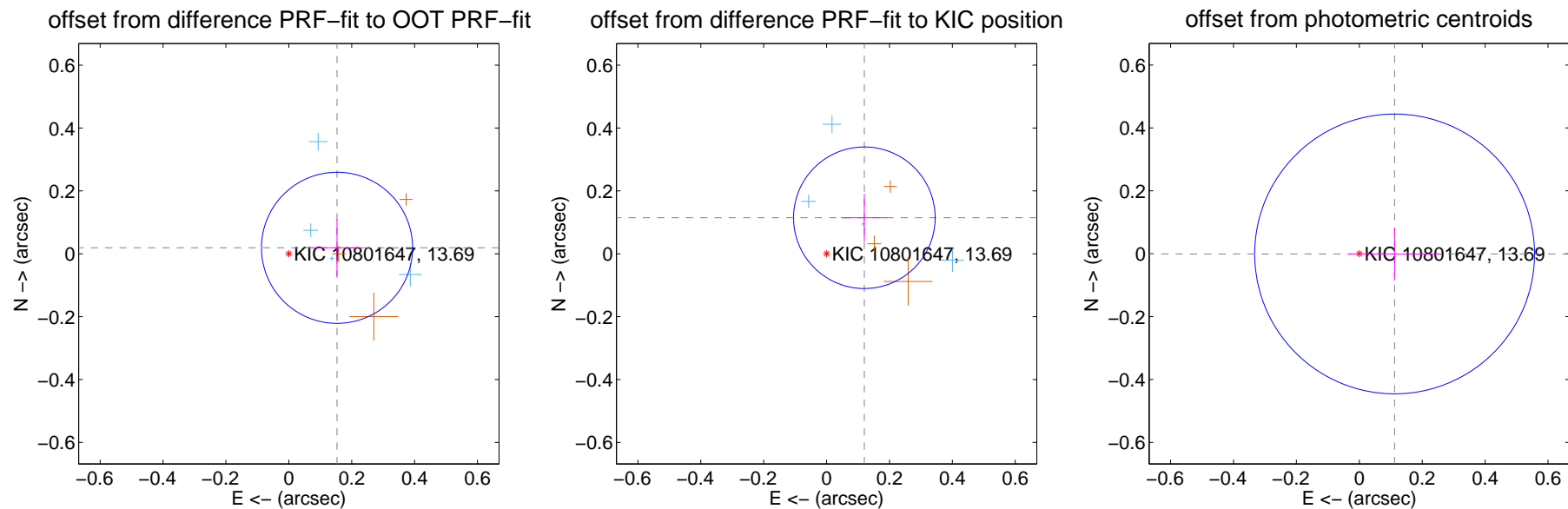
DV Centroid Data

Supplemental centroid analysis for 010801647-06. Kepler magnitude: 13.69. Transit SNR 7.28

There are 4 quarters with good PRF difference image offsets

The direct PRF centroid is offset from the target star catalog position by about 0.18 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.155 ± 0.080	1.93	-0.153 ± 0.082	0.019 ± 0.090
PRF-fit source offset from KIC position	0.166 ± 0.075	2.21	-0.120 ± 0.074	0.115 ± 0.076
photometric centroid source offset	0.11 ± 0.15	0.76	-0.11 ± 0.15	-0.00 ± 0.08



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.

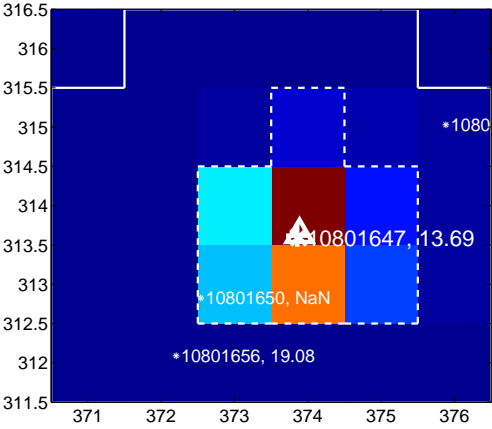
Q1 no difference image



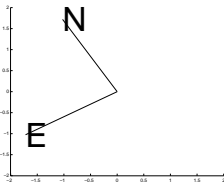
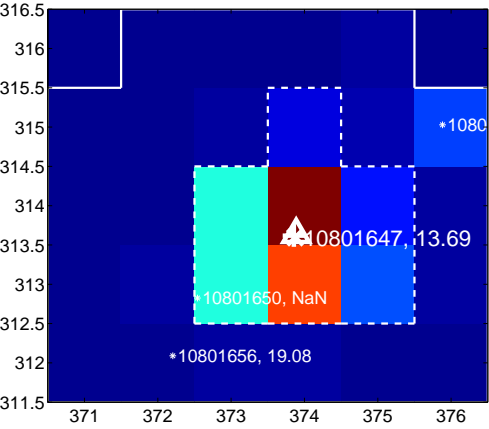
Q1 no OOT image



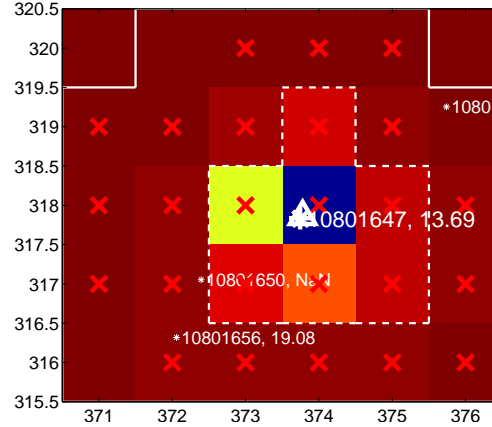
Q2 difference image



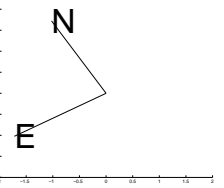
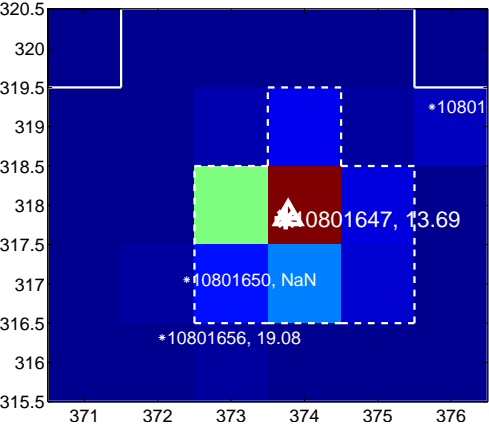
Q2 OOT image



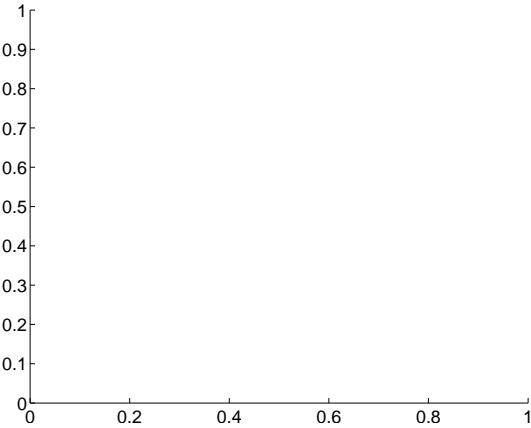
Q3 difference image. Poor Quality



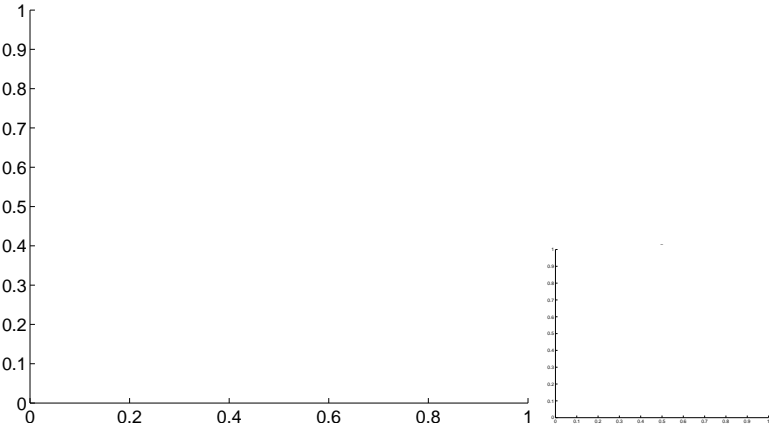
Q3 OOT image



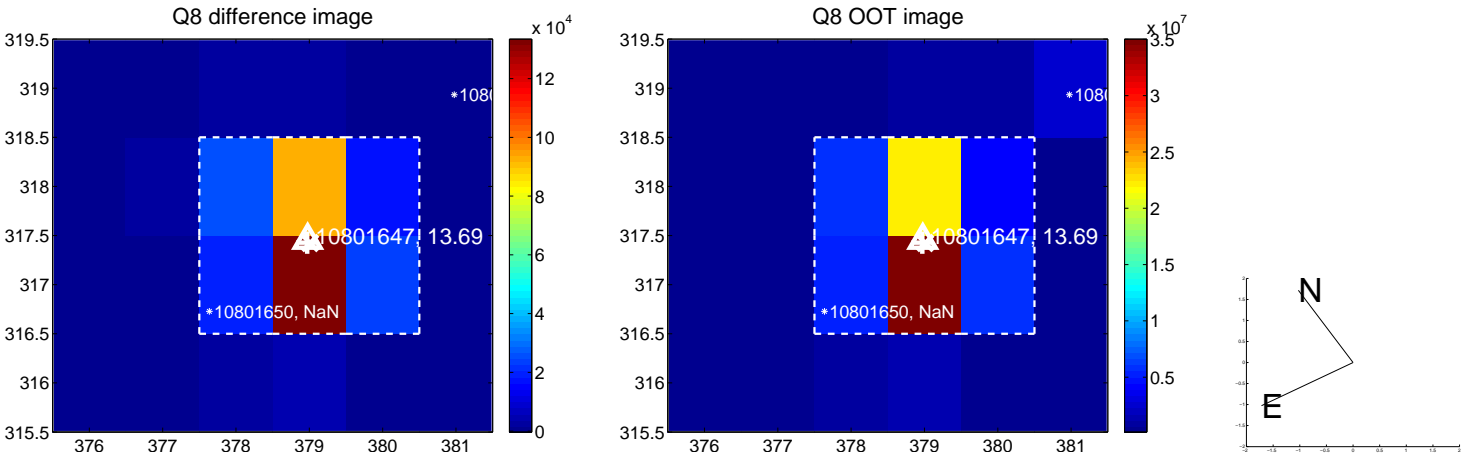
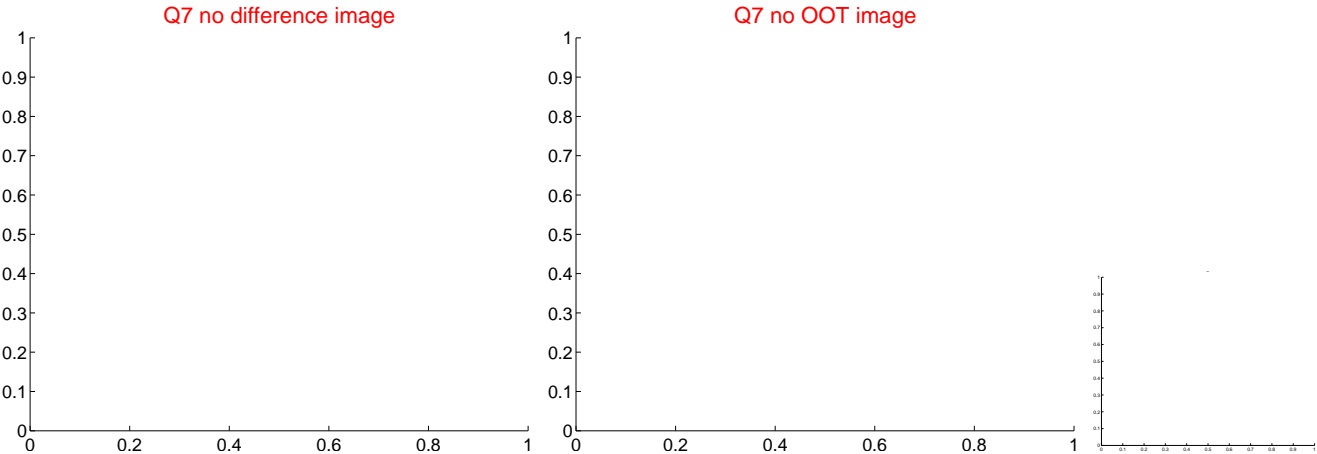
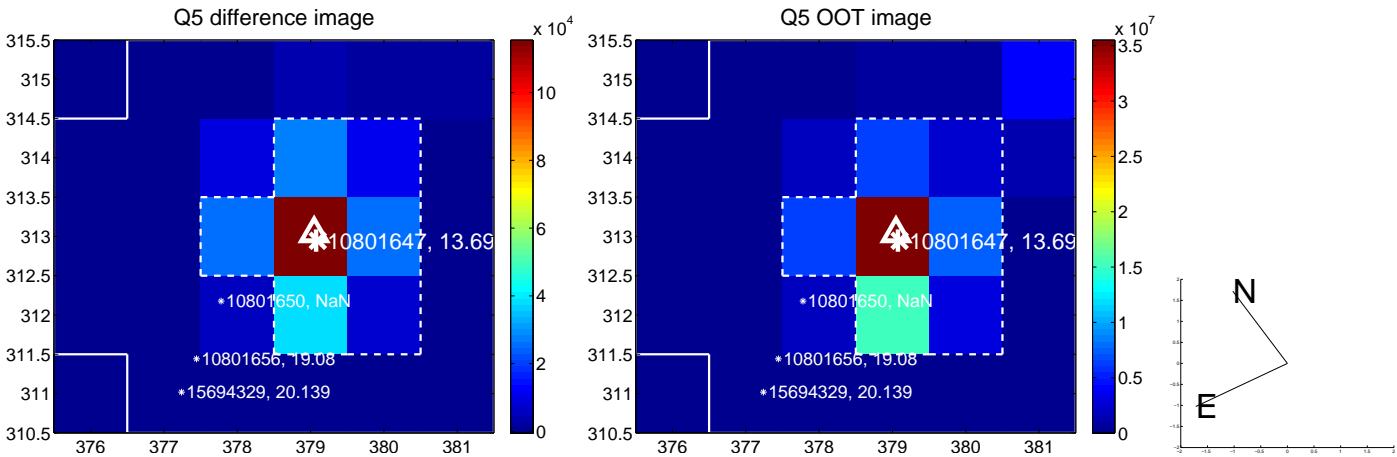
Q4 no difference image



Q4 no OOT image



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

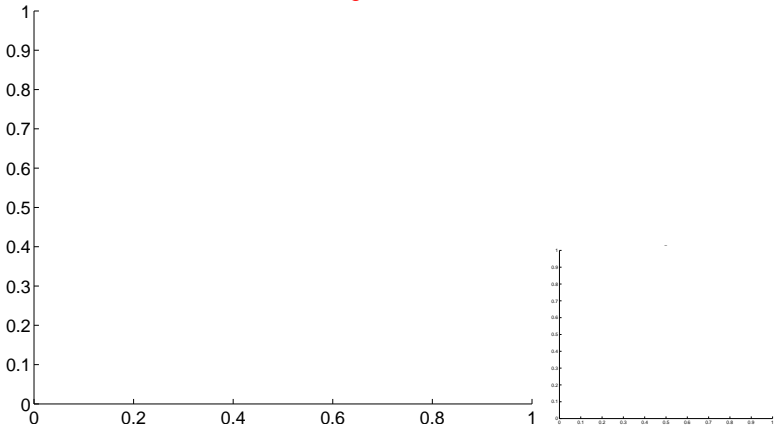


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.

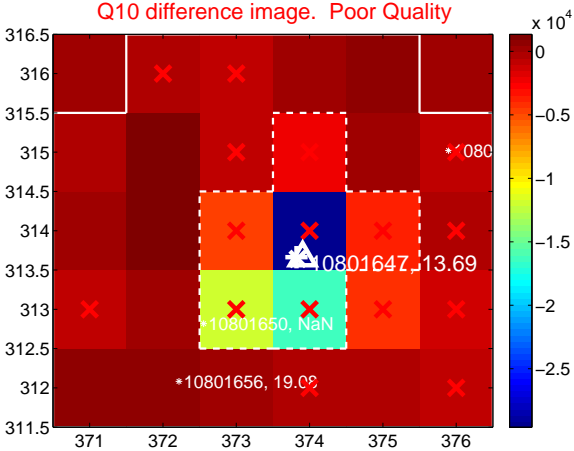
Q9 no difference image



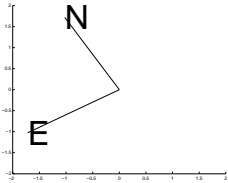
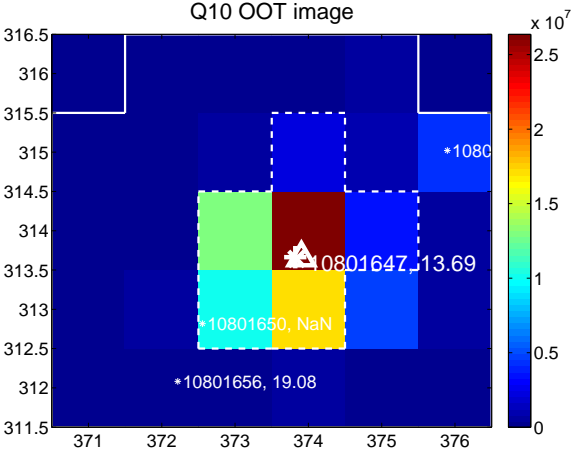
Q9 no OOT image



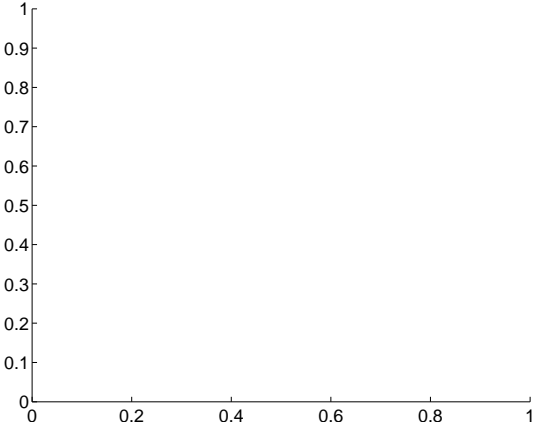
Q10 difference image. Poor Quality



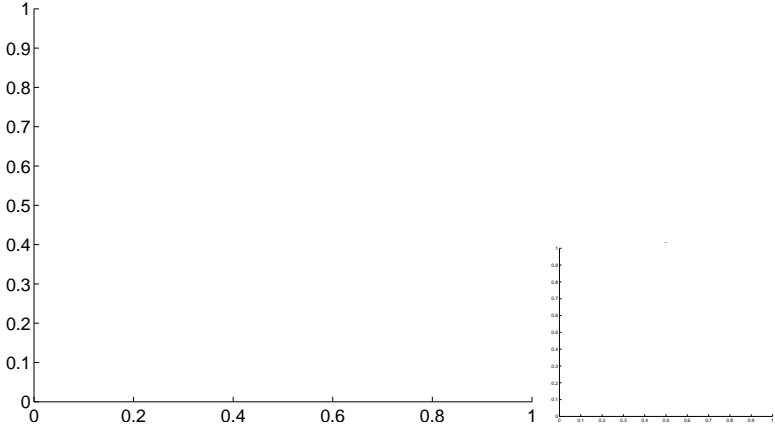
Q10 OOT image



Q11 no difference image



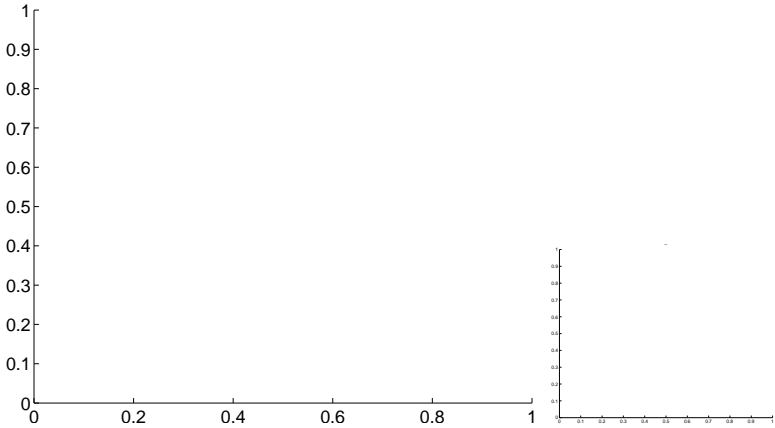
Q11 no OOT image



Q12 no difference image

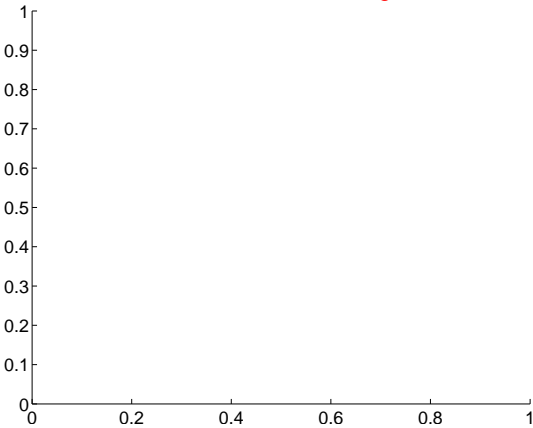


Q12 no OOT image



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

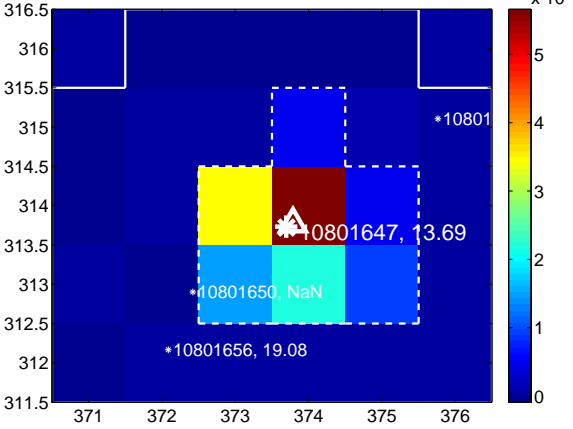
Q13 no difference image



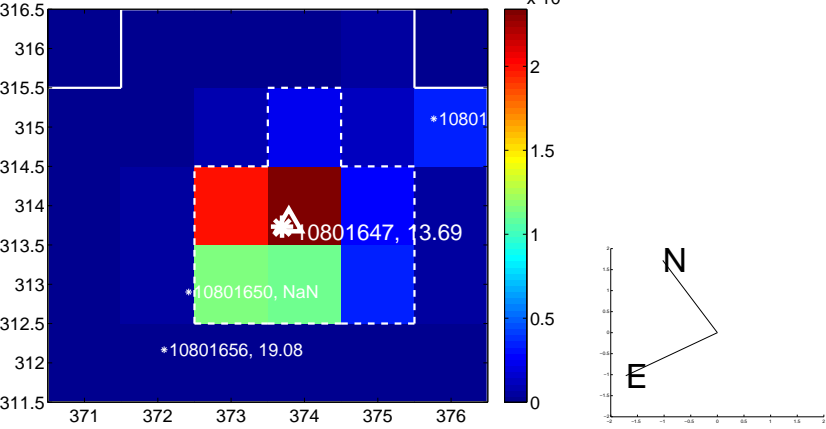
Q13 no OOT image



Q14 difference image



Q14 OOT image



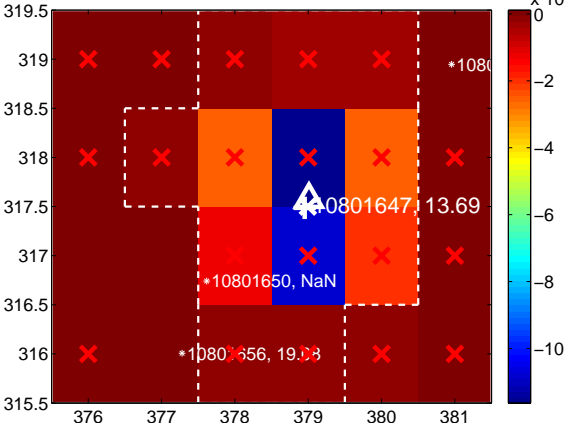
Q15 no difference image



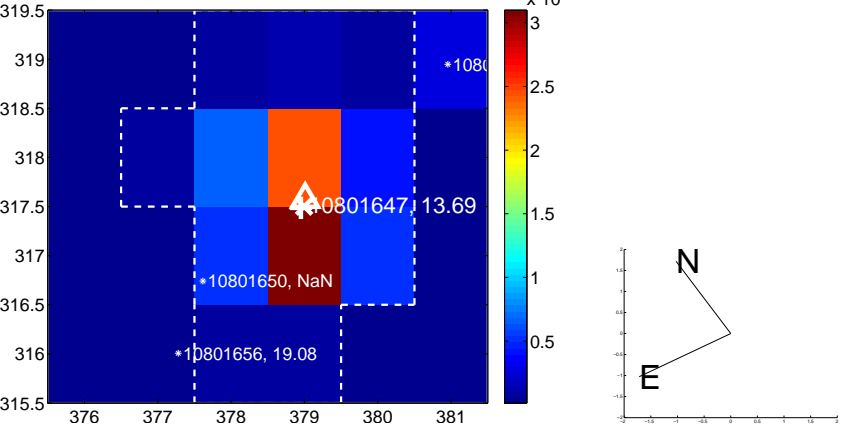
Q15 no OOT image



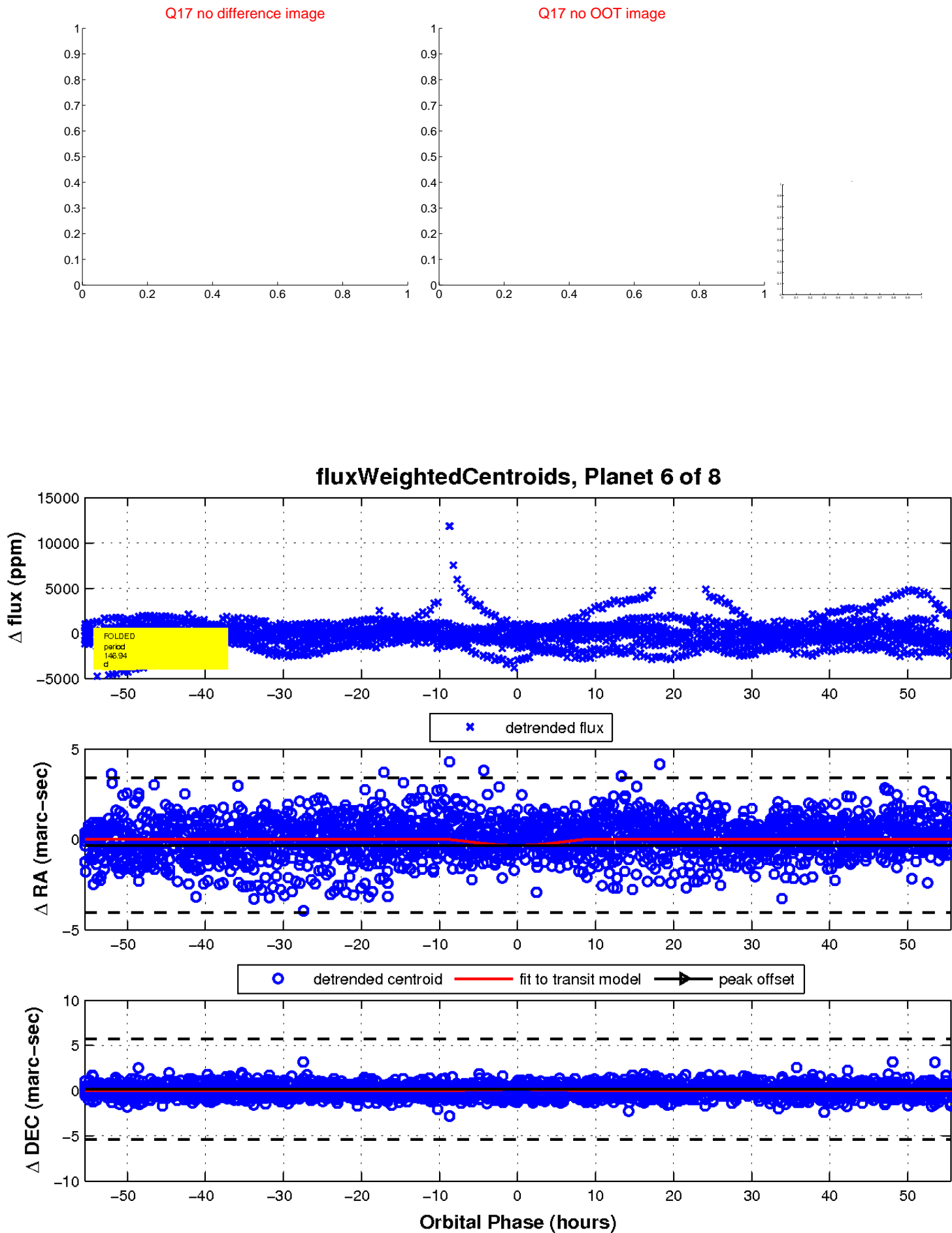
Q16 difference image. Poor Quality



Q16 OOT image

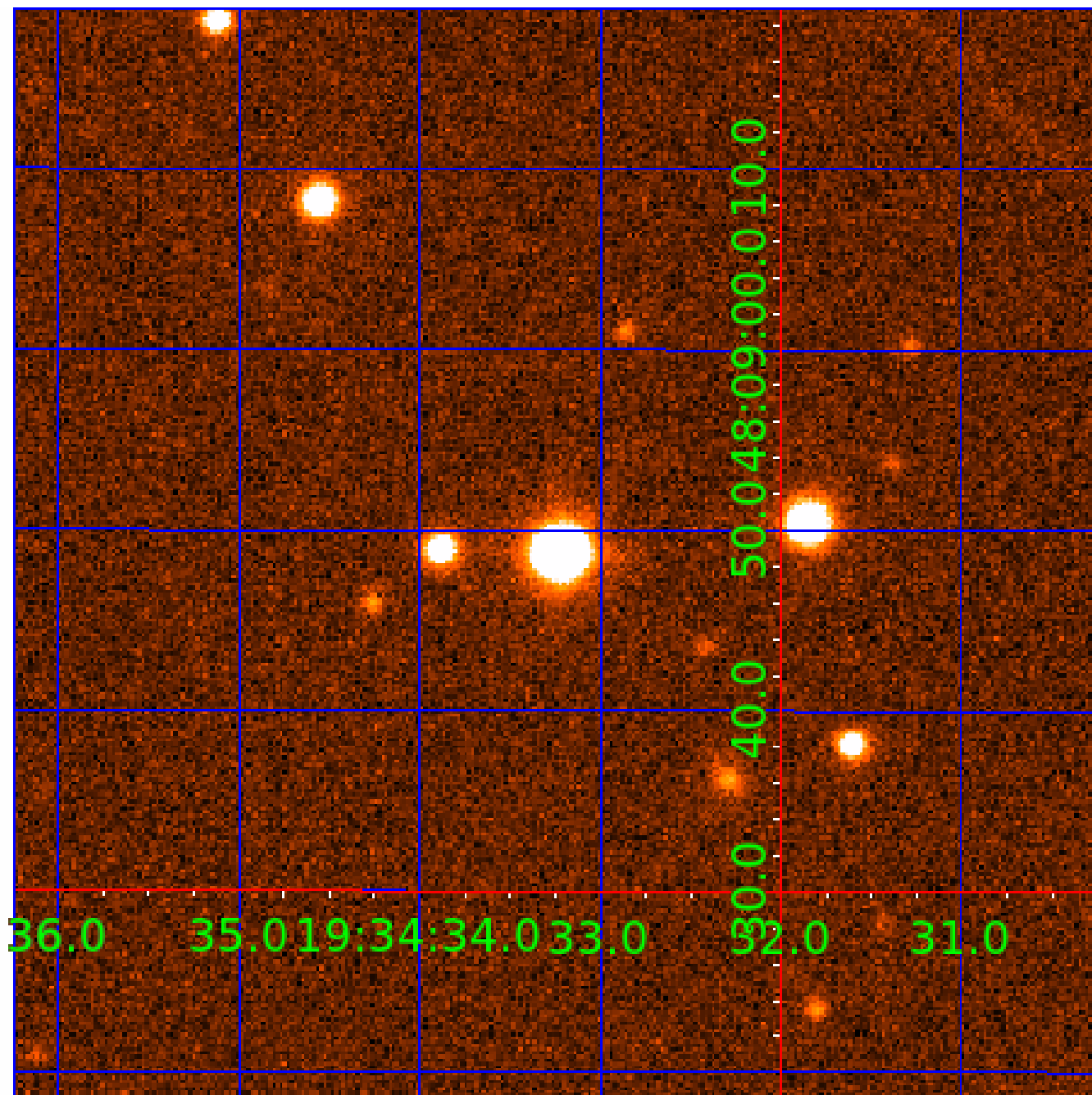


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 010801647

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})
010801647-01	OBS	No	330.368090	409.311041	545.5	2.752	12.3	3.9	1.34	5883	3.22	2.13
010801647-02	OBS	No	0.753128	132.146344	26.9	4.372	7.9	5.1	1.34	5883	0.70	7093.62
010801647-03	OBS	No	299.804795	380.050453	2225.8	4.522	11.3	9.5	1.34	5883	6.50	2.42
010801647-04	OBS	No	197.368302	162.652256	138.6	0.727	12.3	0.7	1.34	5883	1.67	4.23
010801647-05	OBS	No	197.363503	162.428687	731.8	4.635	11.5	5.3	1.34	5883	3.64	4.23
010801647-06	OBS	No	146.937679	192.093369	2298.7	18.590	10.3	7.3	1.34	5883	12.14	6.27
010801647-07	OBS	No	93.083145	189.730328	102.6	3.437	8.4	0.9	1.34	5883	1.62	11.52
010801647-08	OBS	No	268.163039	281.469485	363.3	6.000	9.8	-1.0	1.34	5883	2.54	2.81

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
010801647-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_MARSHALL_SKYE—LPP_DV—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—INCONSISTENT_TRANS
010801647-02	OBS	FP	0.00	1	0	0	0	LPP_DV
010801647-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_CHASES_MARSHALL—LPP_ALT—ALL_TRANS_CHASES—INCONSISTENT_TRANS—CENT_FEW_DIFFS
010801647-04	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_MARSHALL_SKYE_TRACKER—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—INCONSISTENT_TRANS
010801647-05	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_MARSHALL_SKYE—TRANS_GAPPED—LPP_DV—ALL_TRANS_CHASES—MOD_POS_DV—INCONSISTENT_TRANS—SAME_NTL_PERIOD
010801647-06	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—INCONSISTENT_TRANS
010801647-07	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_TRACKER—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT
010801647-08	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_MARSHALL—ALL_TRANS_CHASES—NO_FITS—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.

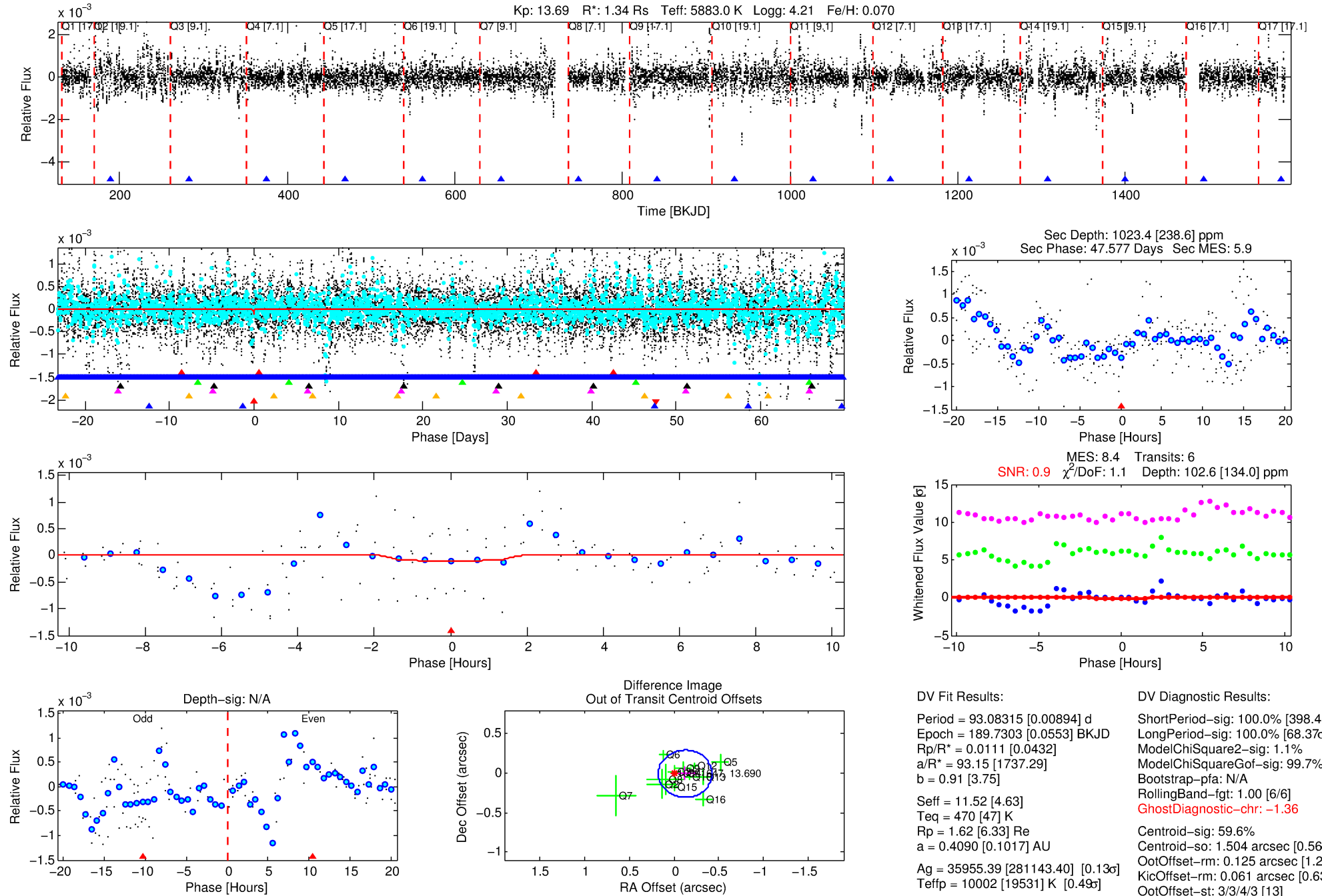
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 010801647-07

No Significant Match Found

DV One-Page Summary

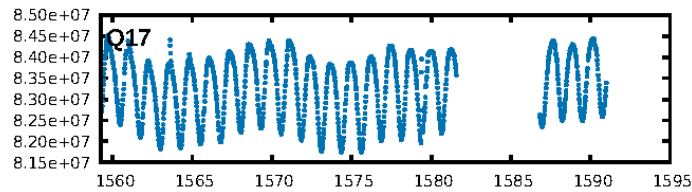
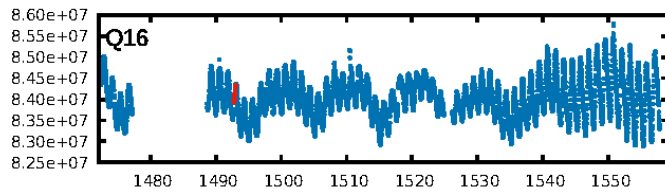
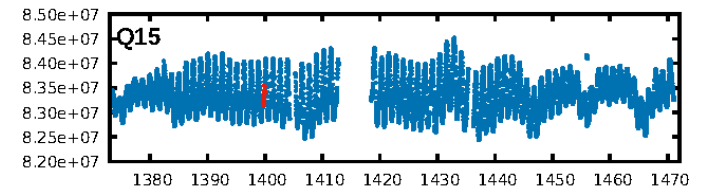
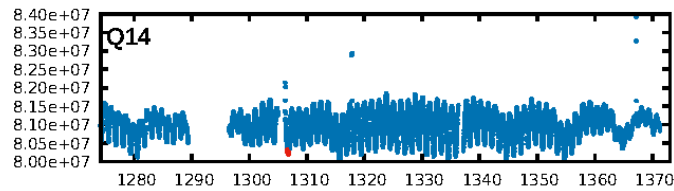
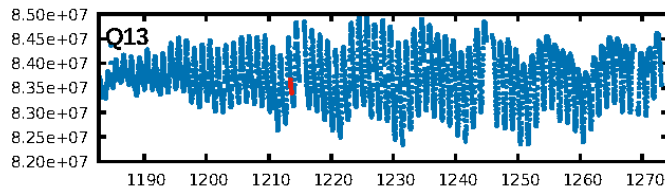
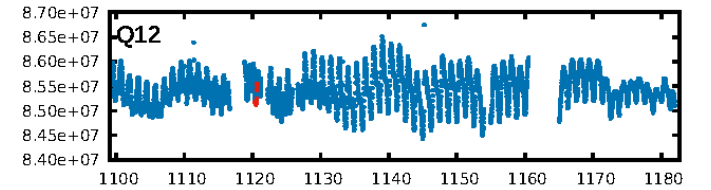
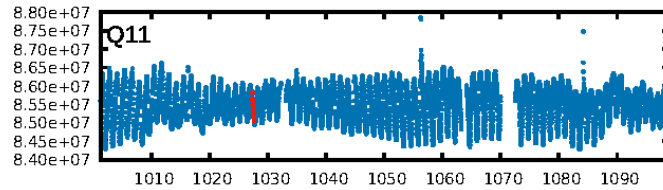
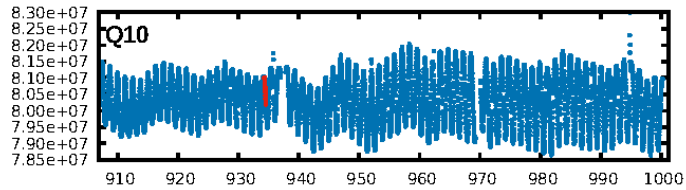
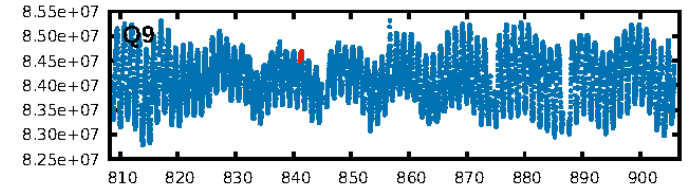
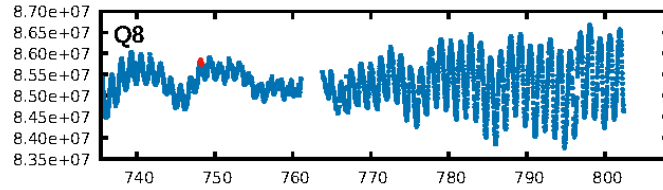
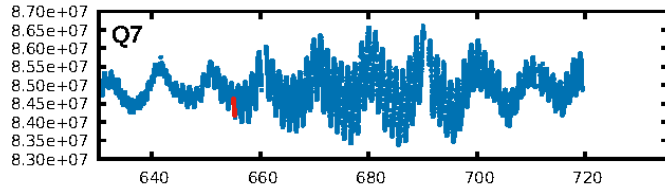
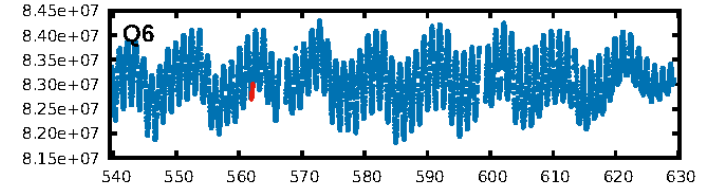
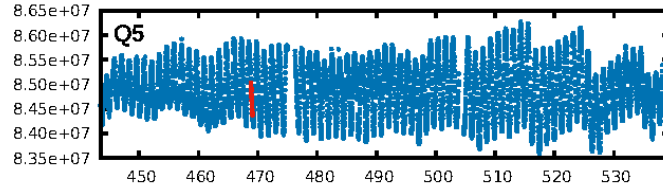
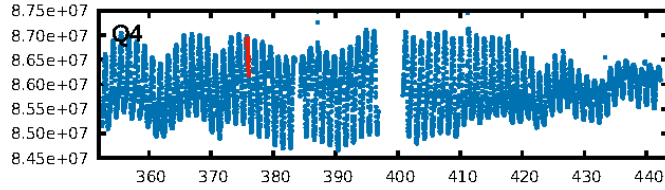
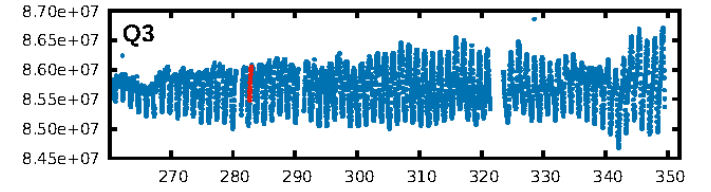
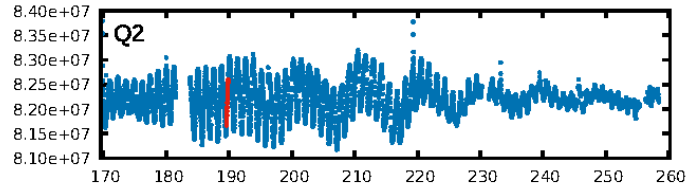
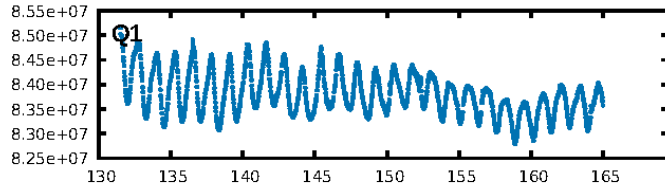
KIC: 10801647 Candidate: 7 of 8 Period: 93.083 d



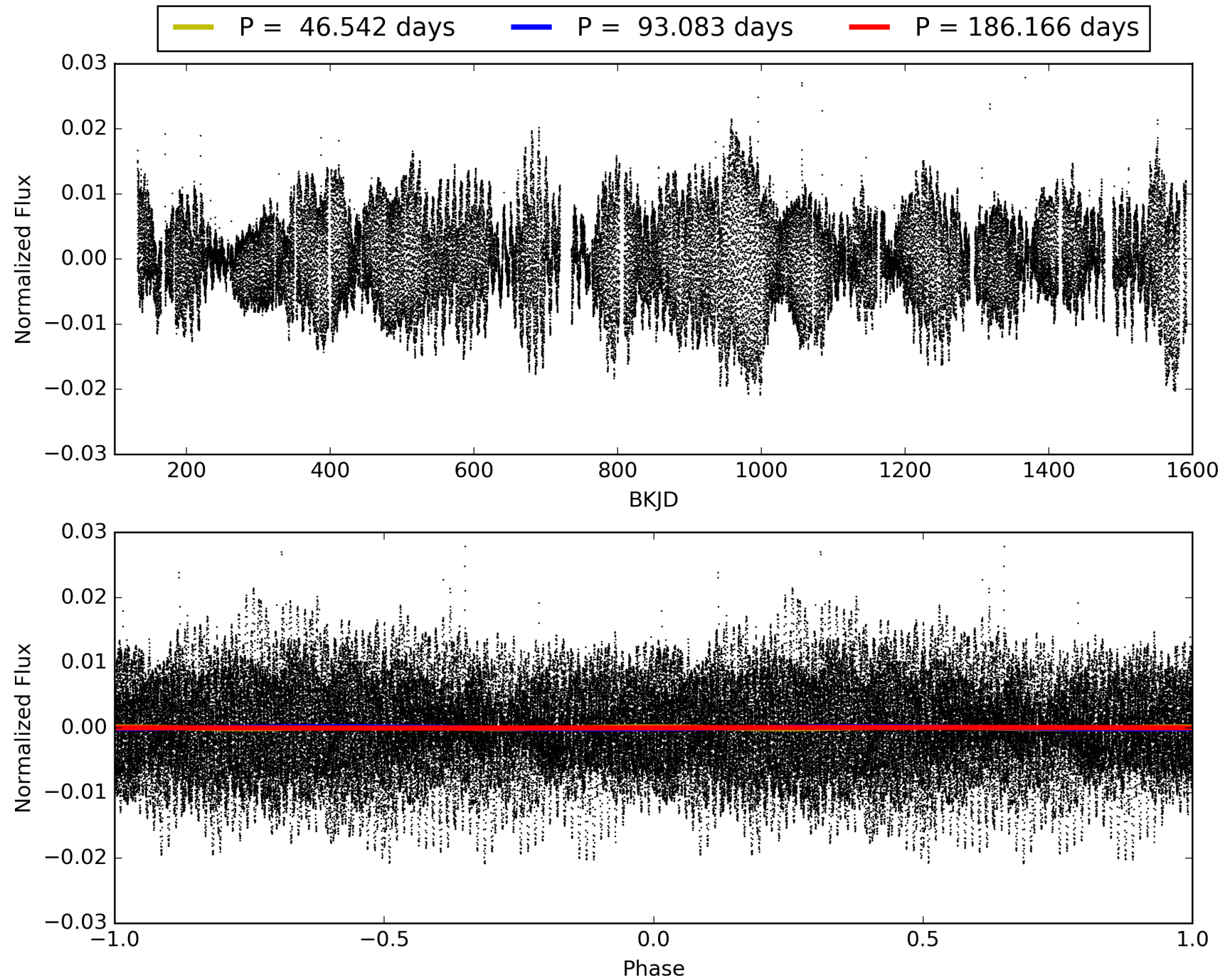
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 06:21:55 Z

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

TCE 010801647-07, PDC Light Curves

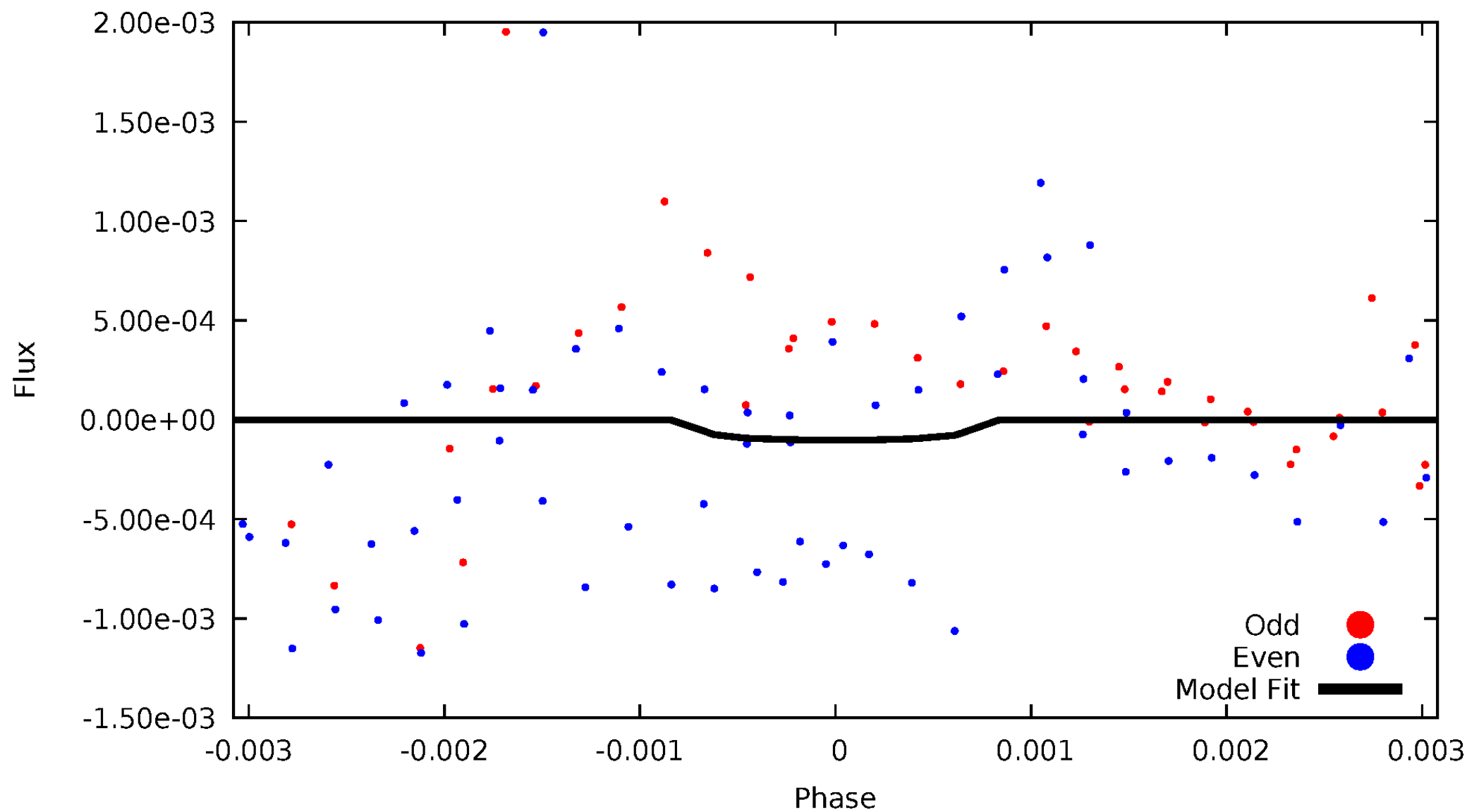


TCE 010801647-07



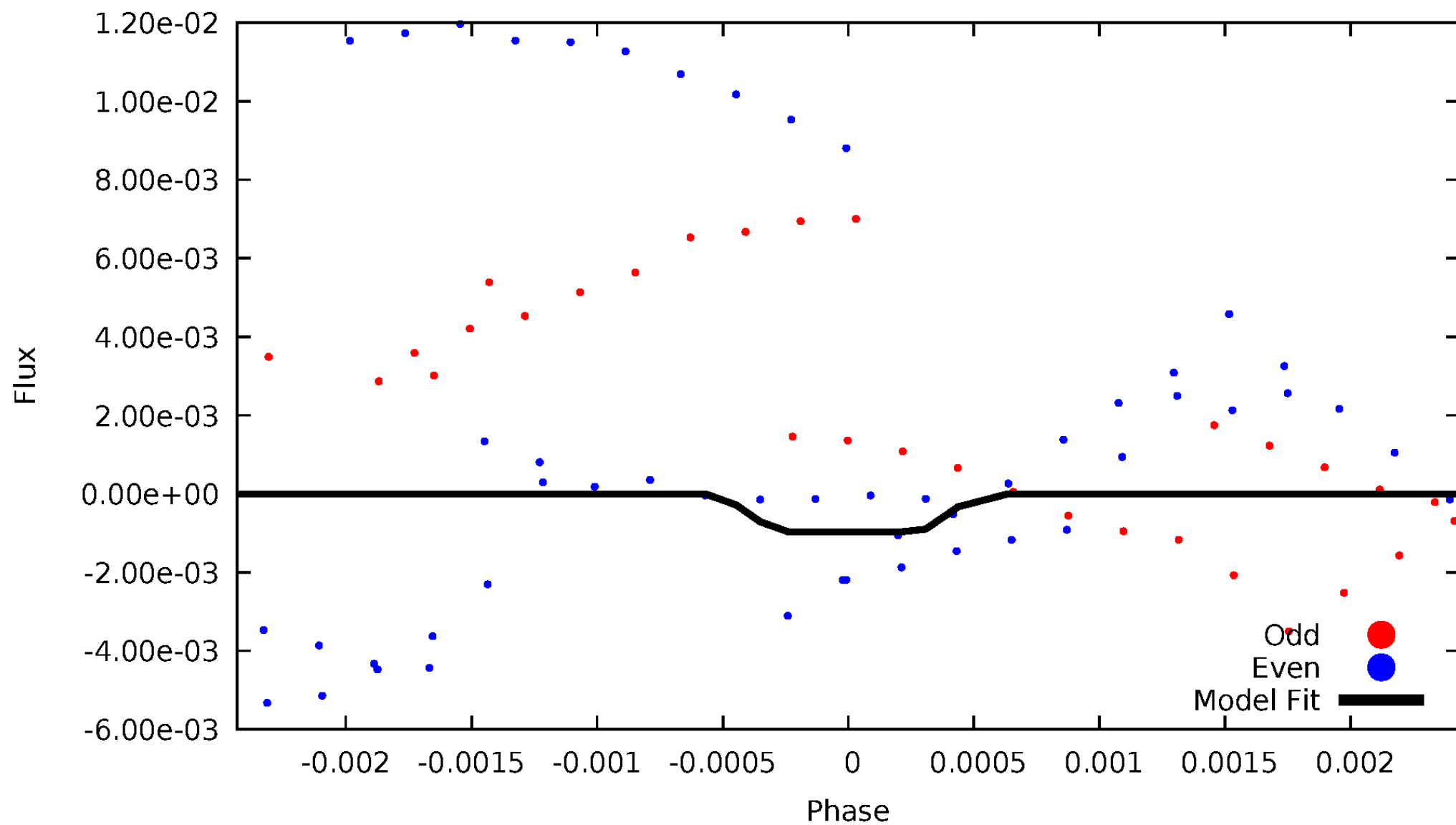
DV Odd/Even

TCE 010801647-07



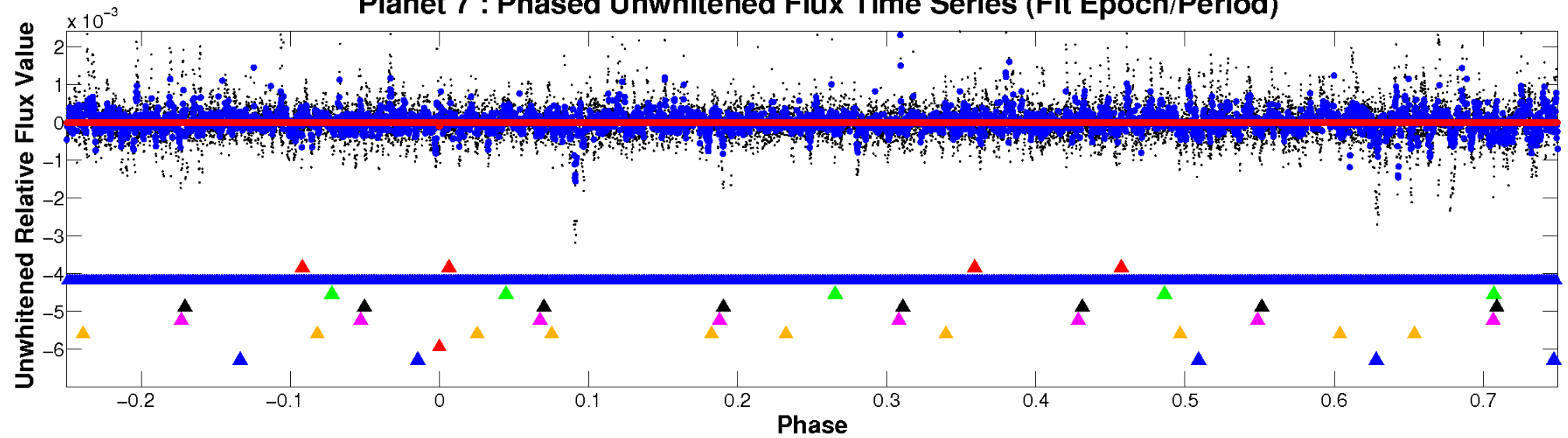
ALT Odd/Even

TCE 010801647-07

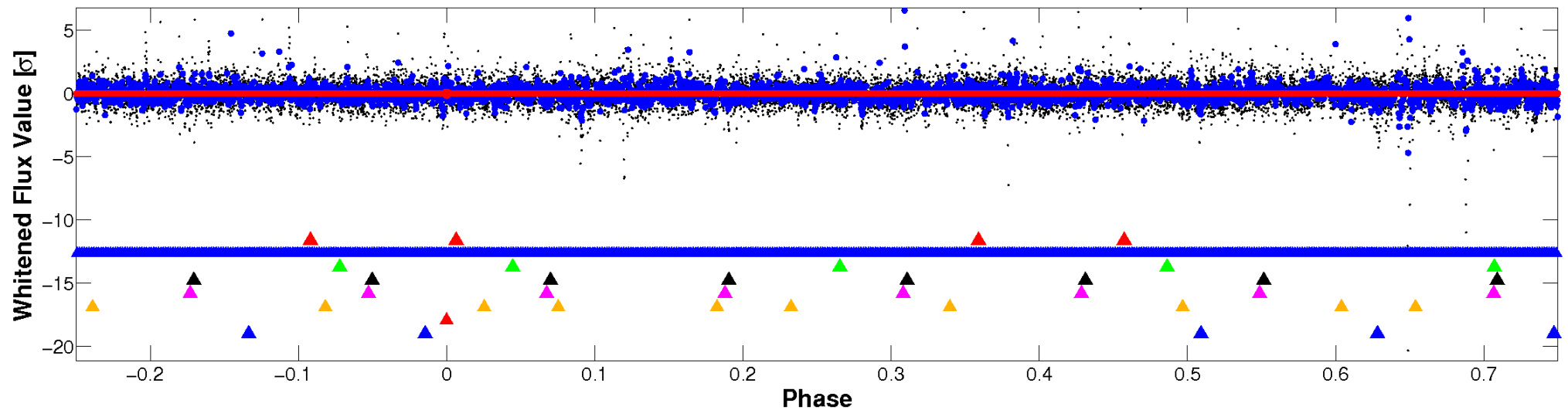


Non-Whitened Vs. Whitened Light Curve

Planet 7 : Phased Unwhitened Flux Time Series (Fit Epoch/Period)

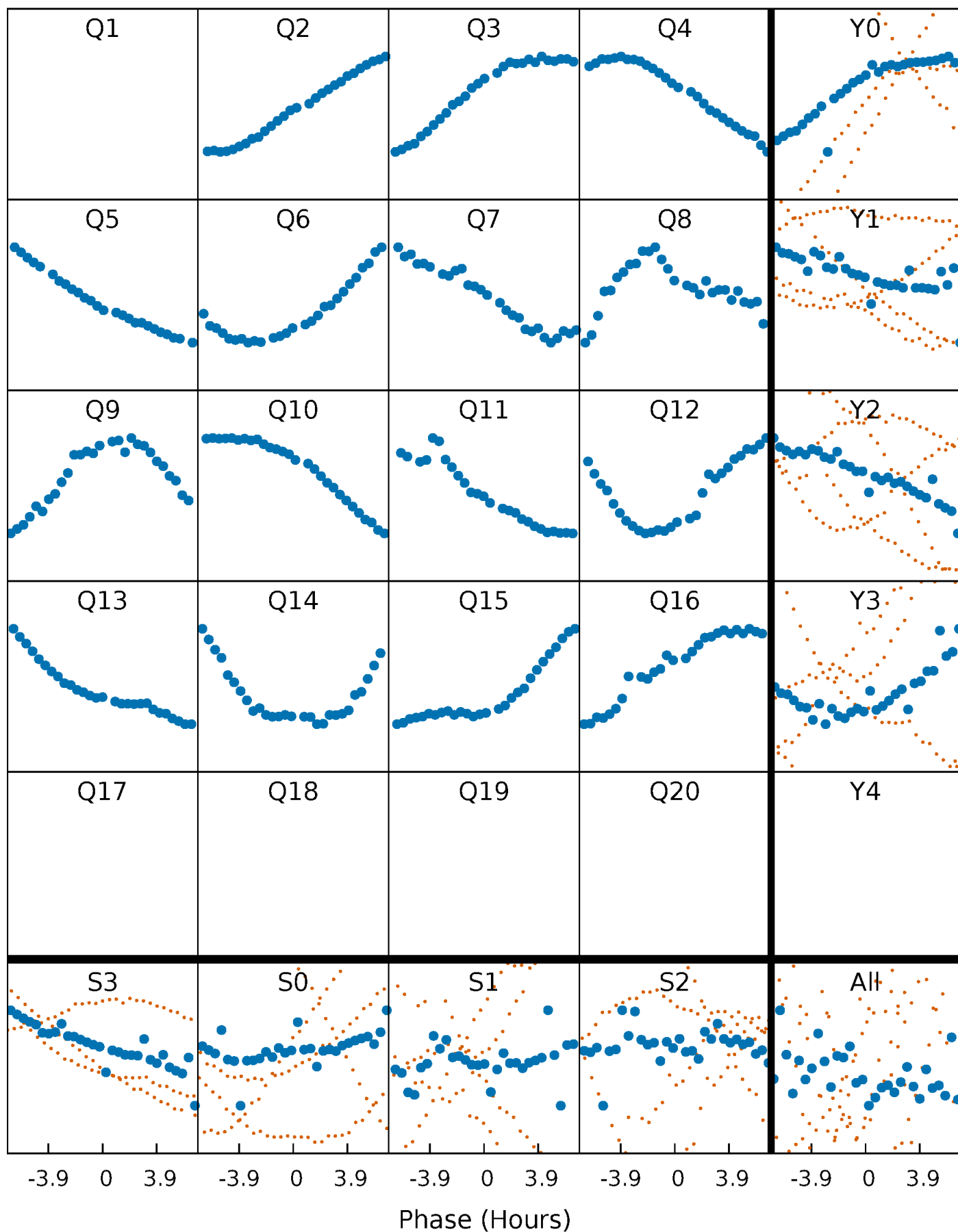


Planet 7 : Phased Whitened Flux Time Series (Fit Epoch/Period)



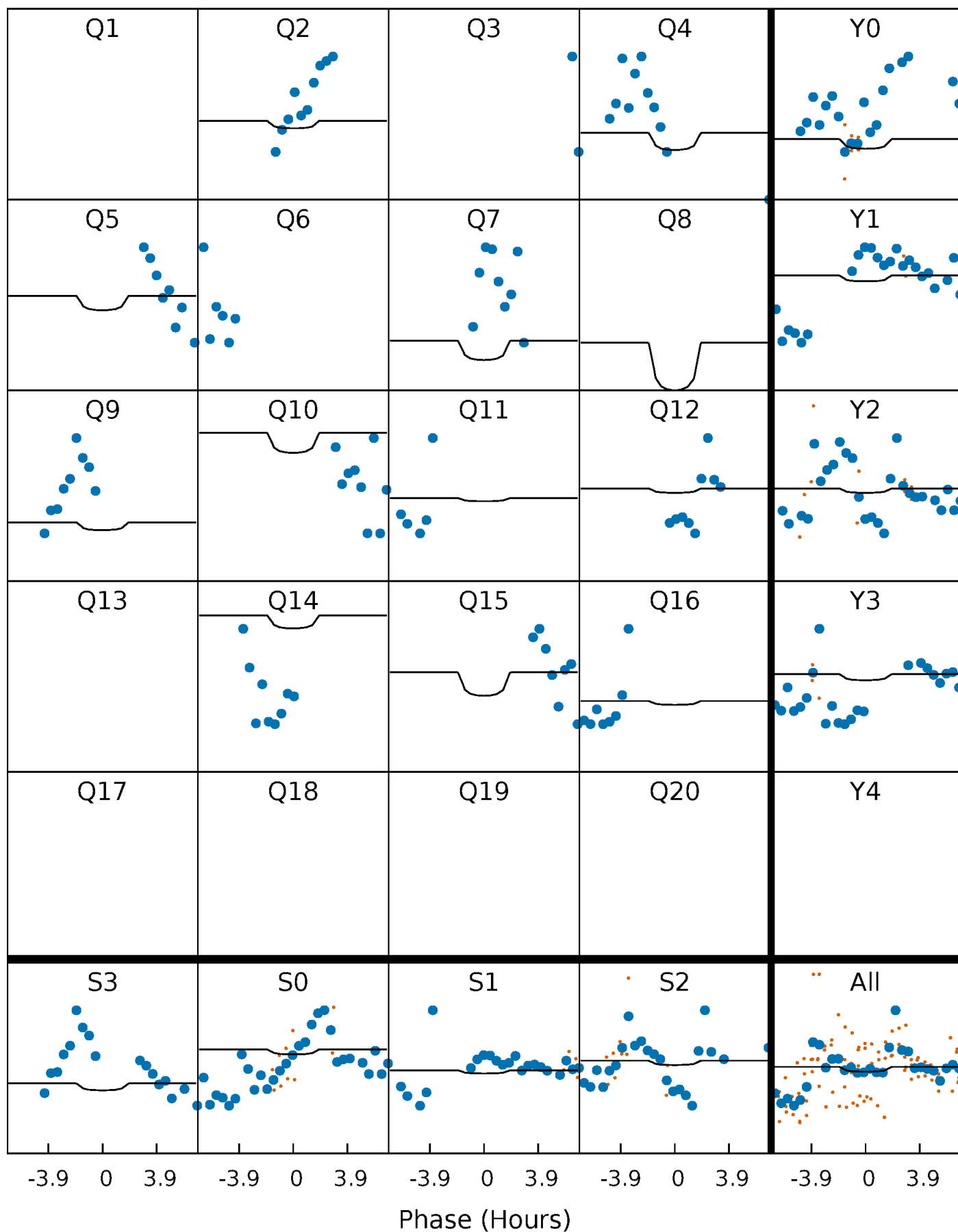
PDC Quarter-Phased Transit Curves

TCE 010801647-07 P= 93.083145 Days $T_0=189.730328$ (BKJD)



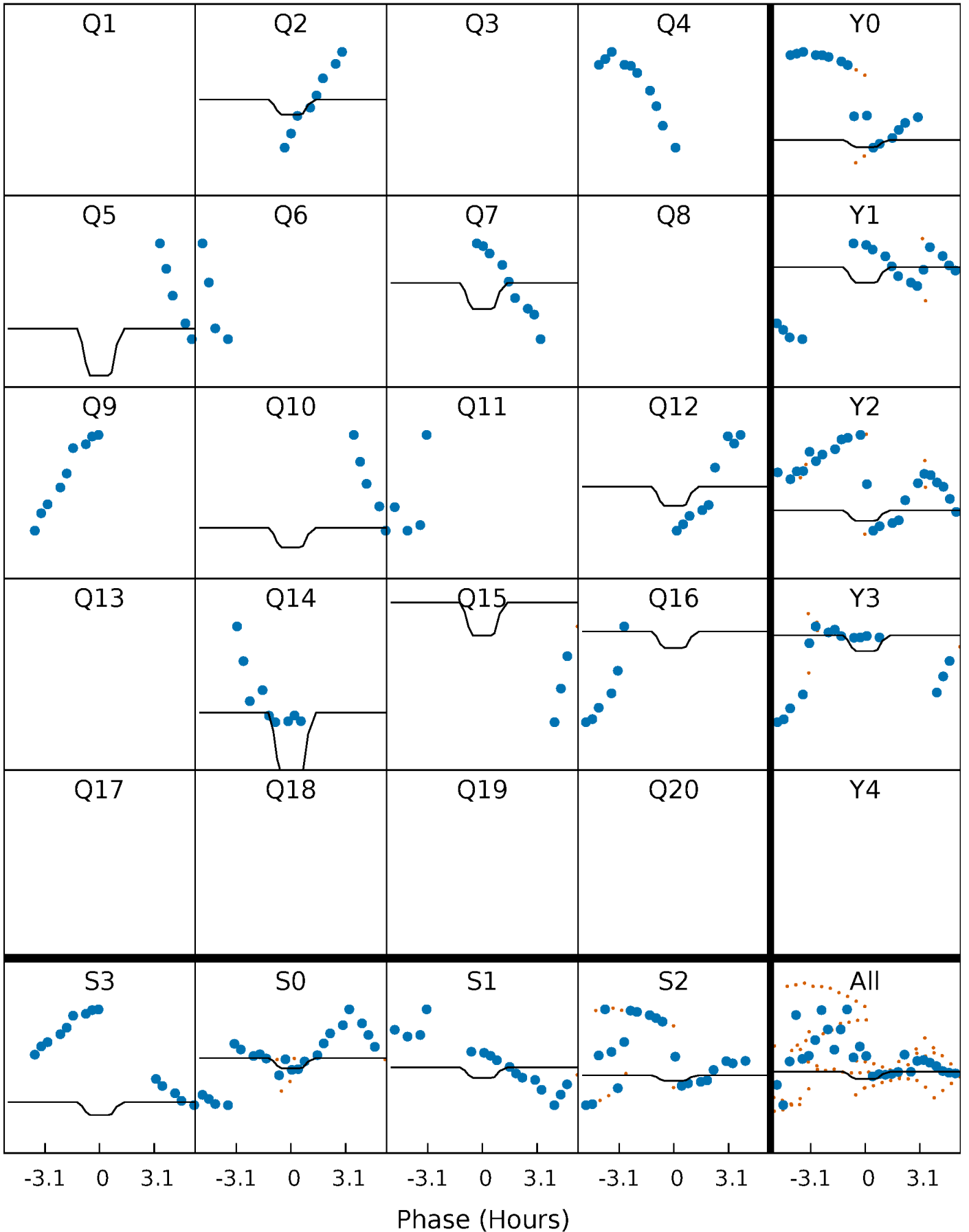
DV Quarter-Phased Transit Curves

TCE 010801647-07 $P = 93.083145$ Days $T_0 = 189.730328$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

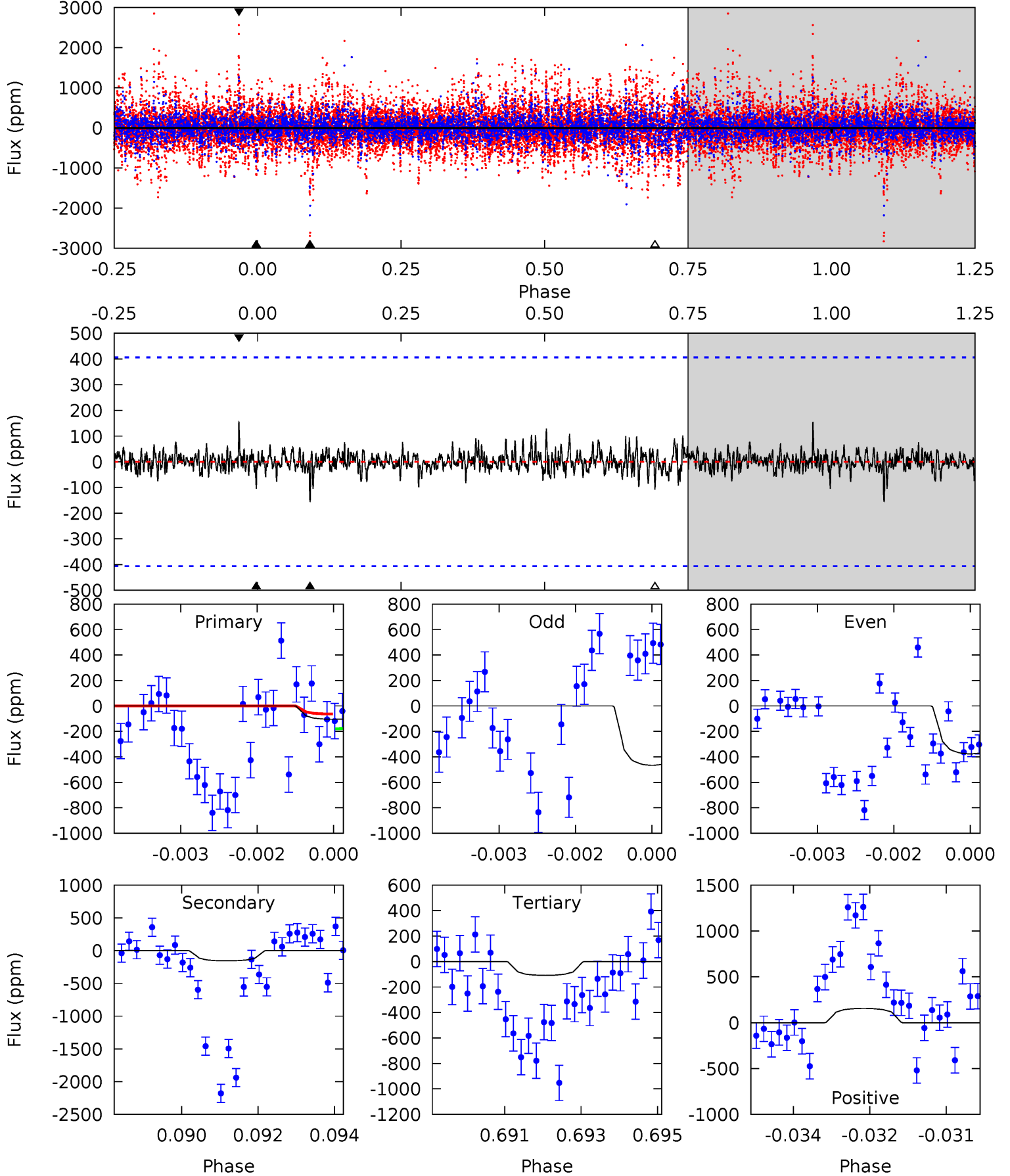
TCE 010801647-07 $P = 93.082703$ Days $T_0 = 189.710577$ (BKJD)



DV Model-Shift Uniqueness Test

010801647-07, P = 93.083145 Days, E = 96.647183 Days

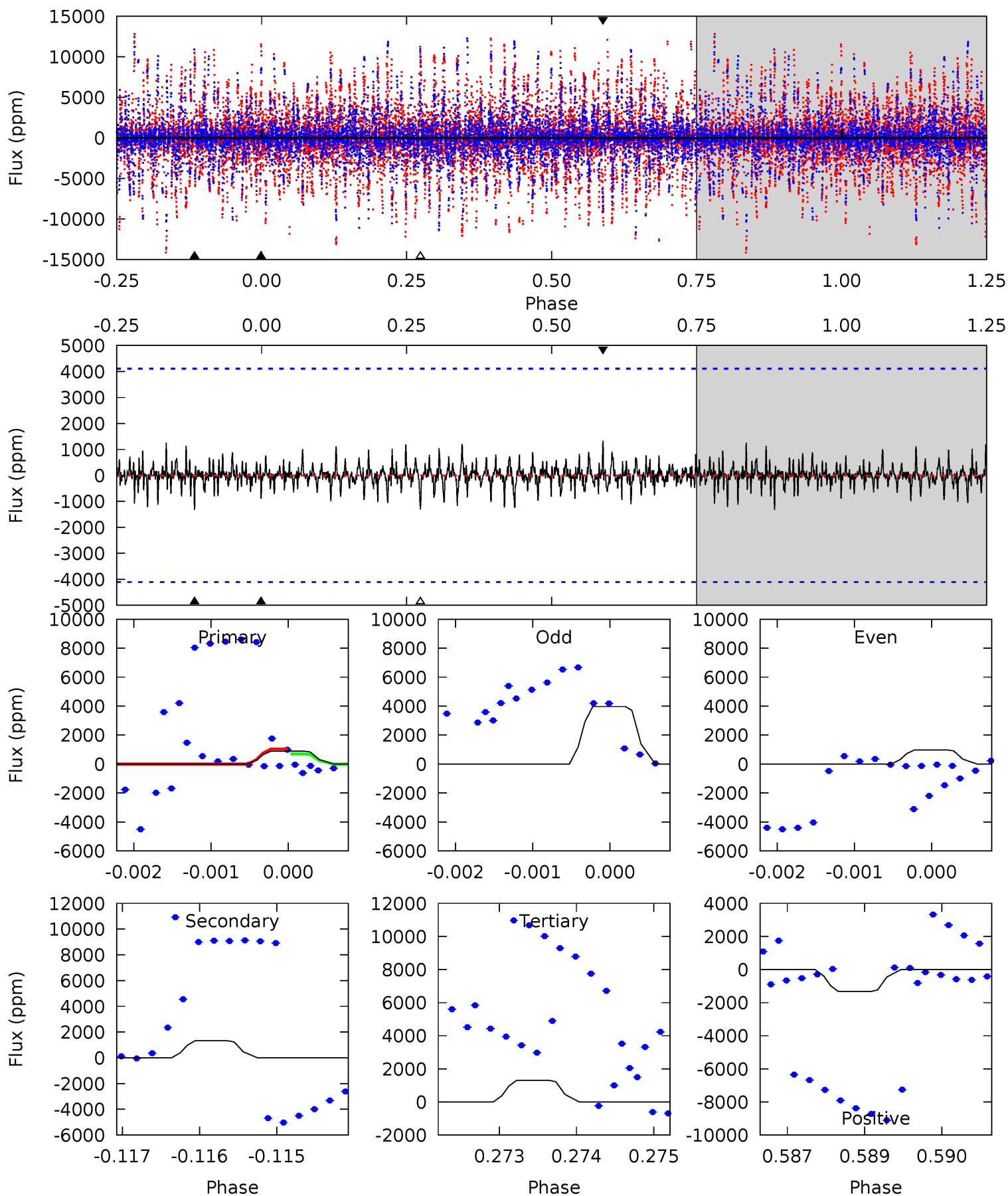
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
1.38	2.06	1.43	2.05	5.36	3.14	0.41	-0.05	-0.67	0.63	0.01	0.55	-1.18	0.50	0.77



Alt Model-Shift Uniqueness Test

010801647-07, P = 93.082703 Days, E = 96.627874 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
1.18	1.75	1.73	1.76	5.44	3.27	0.42	-0.55	-0.58	0.02	-0.01	1.87	4.13	0.50	0.22



Stellar Parameters For KIC 010801647

	$T_{\text{eff}} (K)$	$\log(g)$	$[\text{Fe}/\text{H}]$	$R (R_{\odot})$	$M (M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	5883^{+158}_{-176}	$4.206^{+0.220}_{-0.180}$	$0.070^{+0.250}_{-0.300}$	$1.340^{+0.367}_{-0.367}$	$1.050^{+0.138}_{-0.138}$	$0.615^{+0.759}_{-0.298}$
	+3%/-3%	+5%/-4%	+357%/-429%	+27%/-27%	+13%/-13%	+123%/-48%
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 010801647-07 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-156 ± 76	$4.76^{+4.92}_{-3.39}$	657^{+51}_{-52}	3909^{+2490}_{-879}	586^{+5861}_{-470}
Alt.	-1321 ± 755	$6.60^{+5.13}_{-4.36}$	656^{+50}_{-49}	5196^{+4054}_{-1236}	2617^{+21240}_{-1974}

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

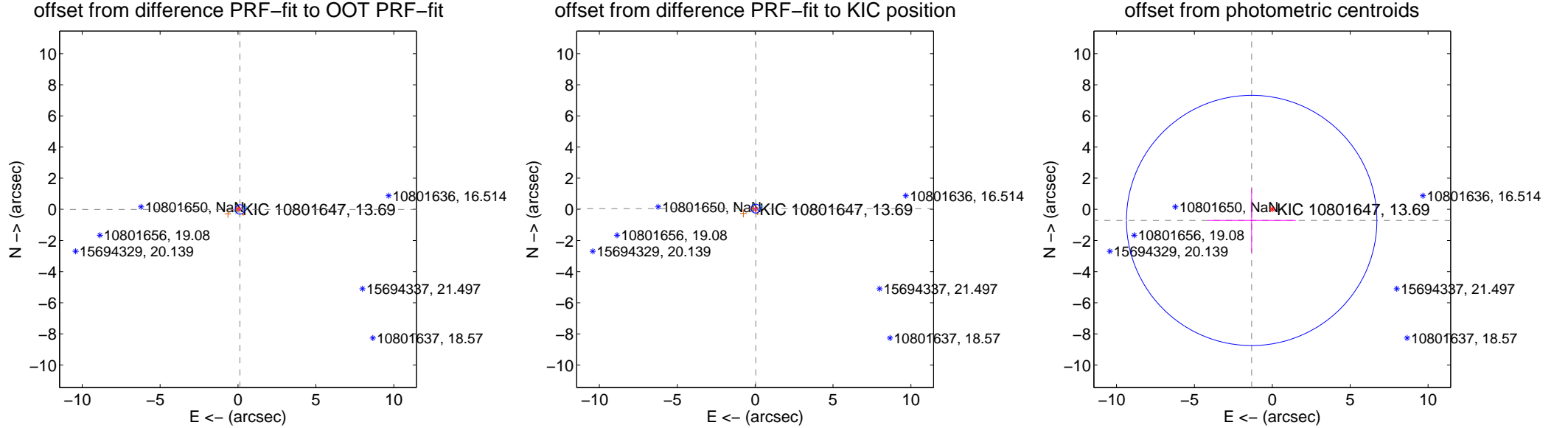
DV Centroid Data

Supplemental centroid analysis for 010801647-07. Kepler magnitude: 13.69. Transit SNR 0.91

There are 6 quarters with good PRF difference image offsets

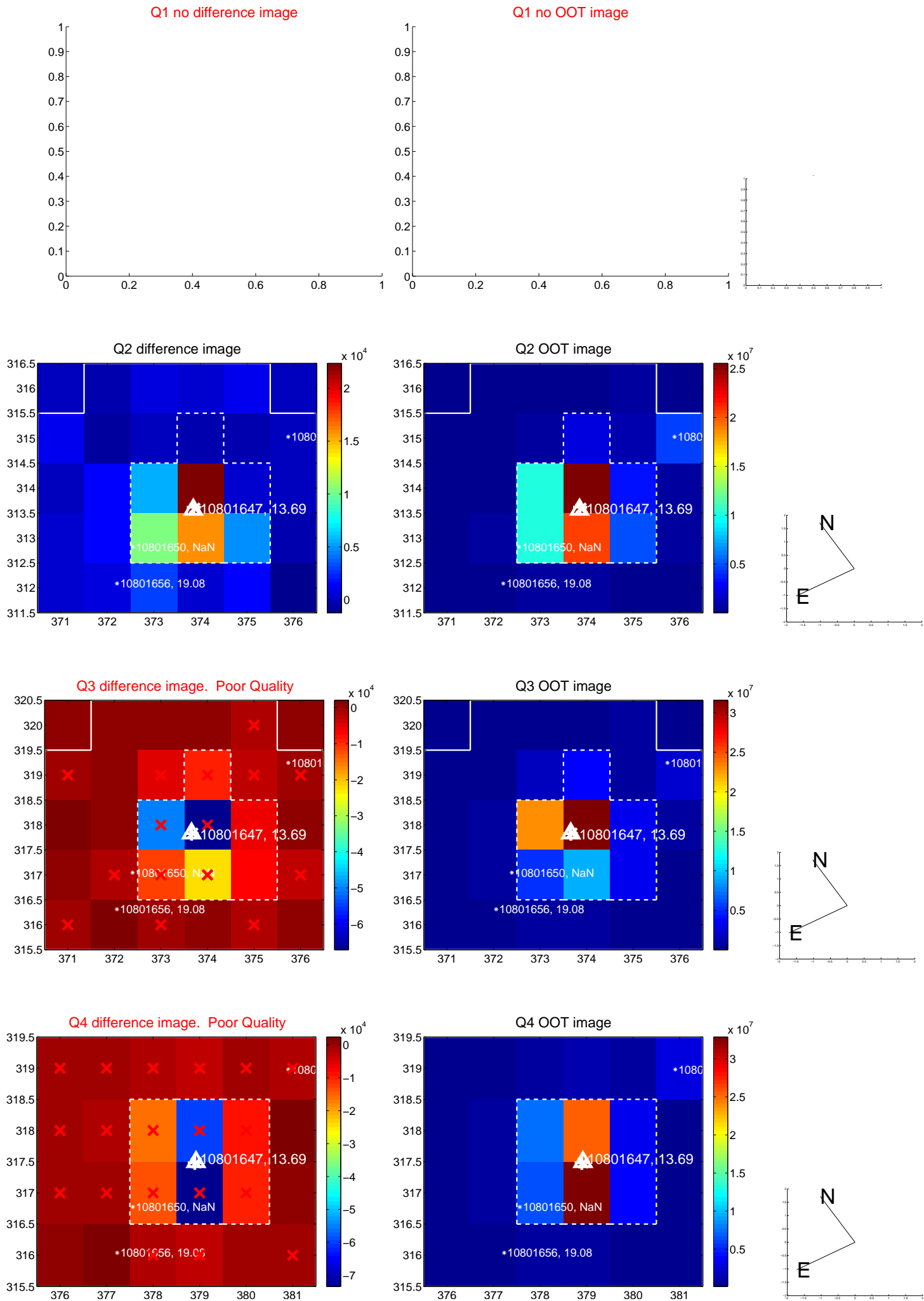
The direct PRF centroid is offset from the target star catalog position by about 0.17 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.125 ± 0.100	1.24	-0.124 ± 0.101	-0.006 ± 0.078
PRF-fit source offset from KIC position	0.061 ± 0.096	0.63	-0.038 ± 0.102	0.047 ± 0.081
photometric centroid source offset	1.50 ± 2.68	0.56	1.32 ± 2.84	-0.71 ± 2.06

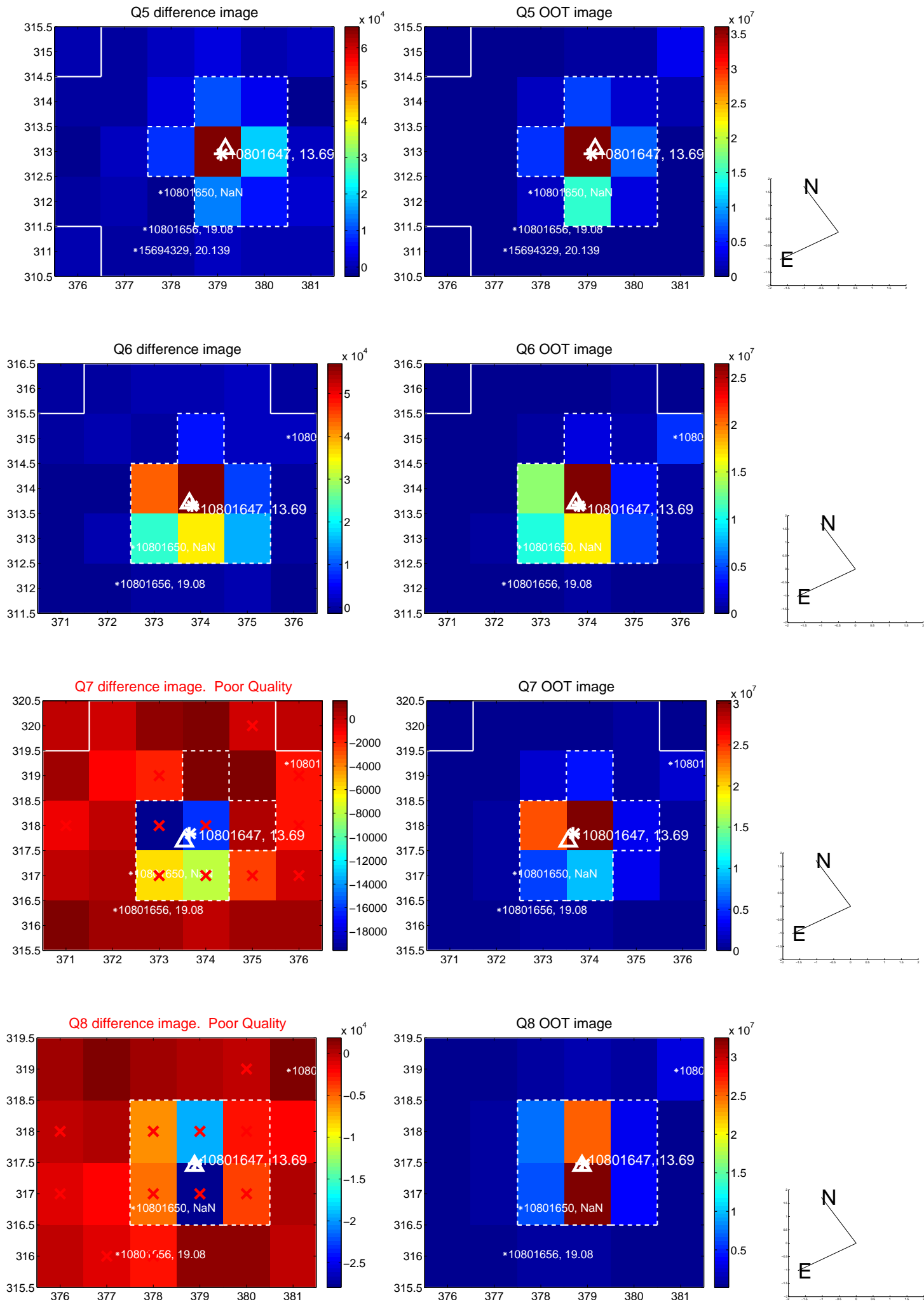


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets**; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

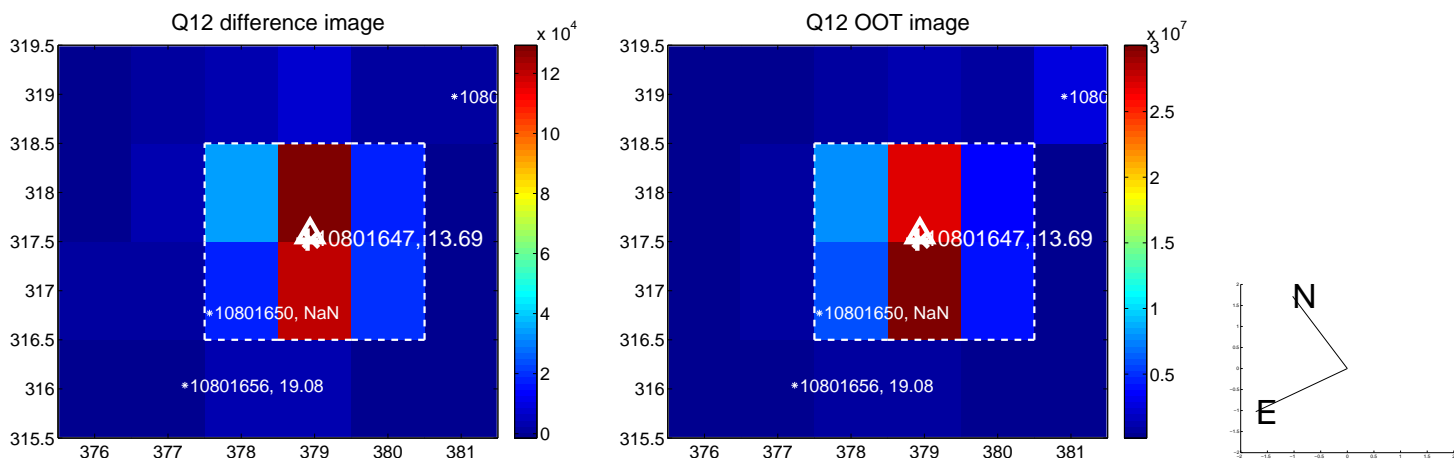
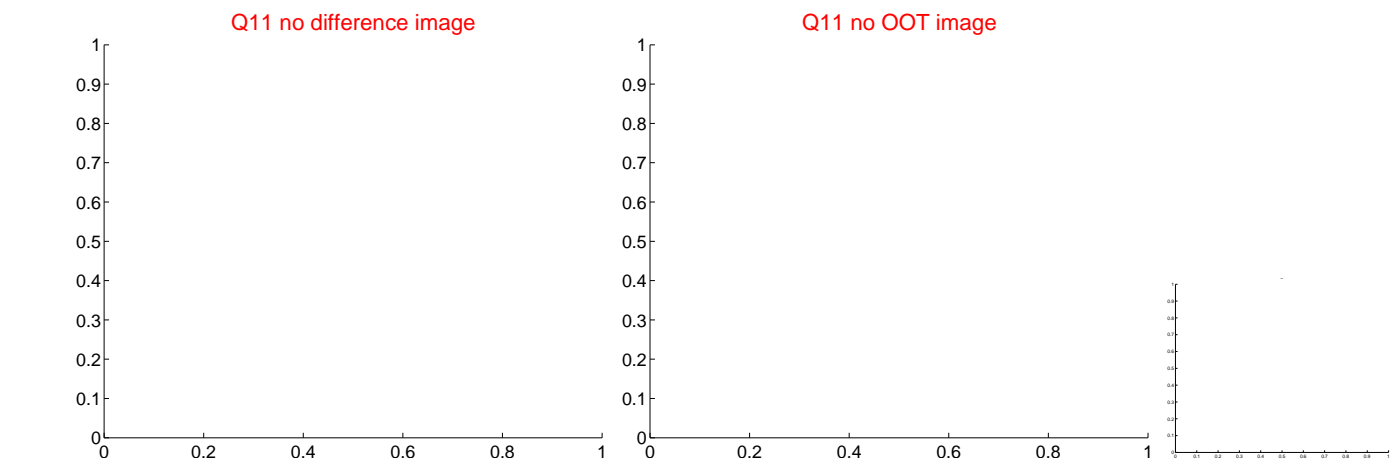
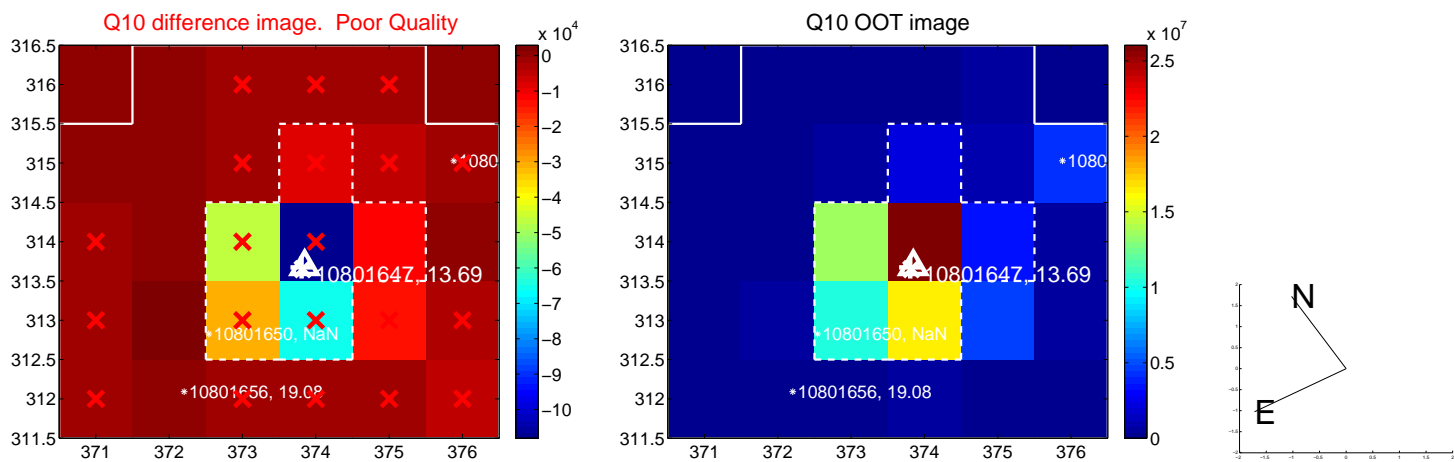
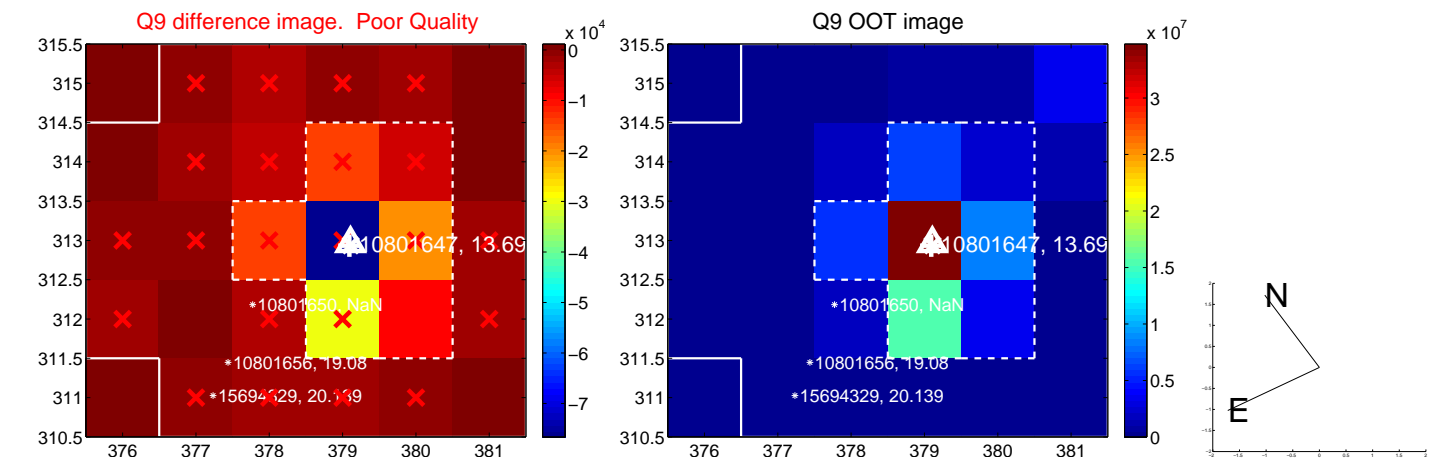
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



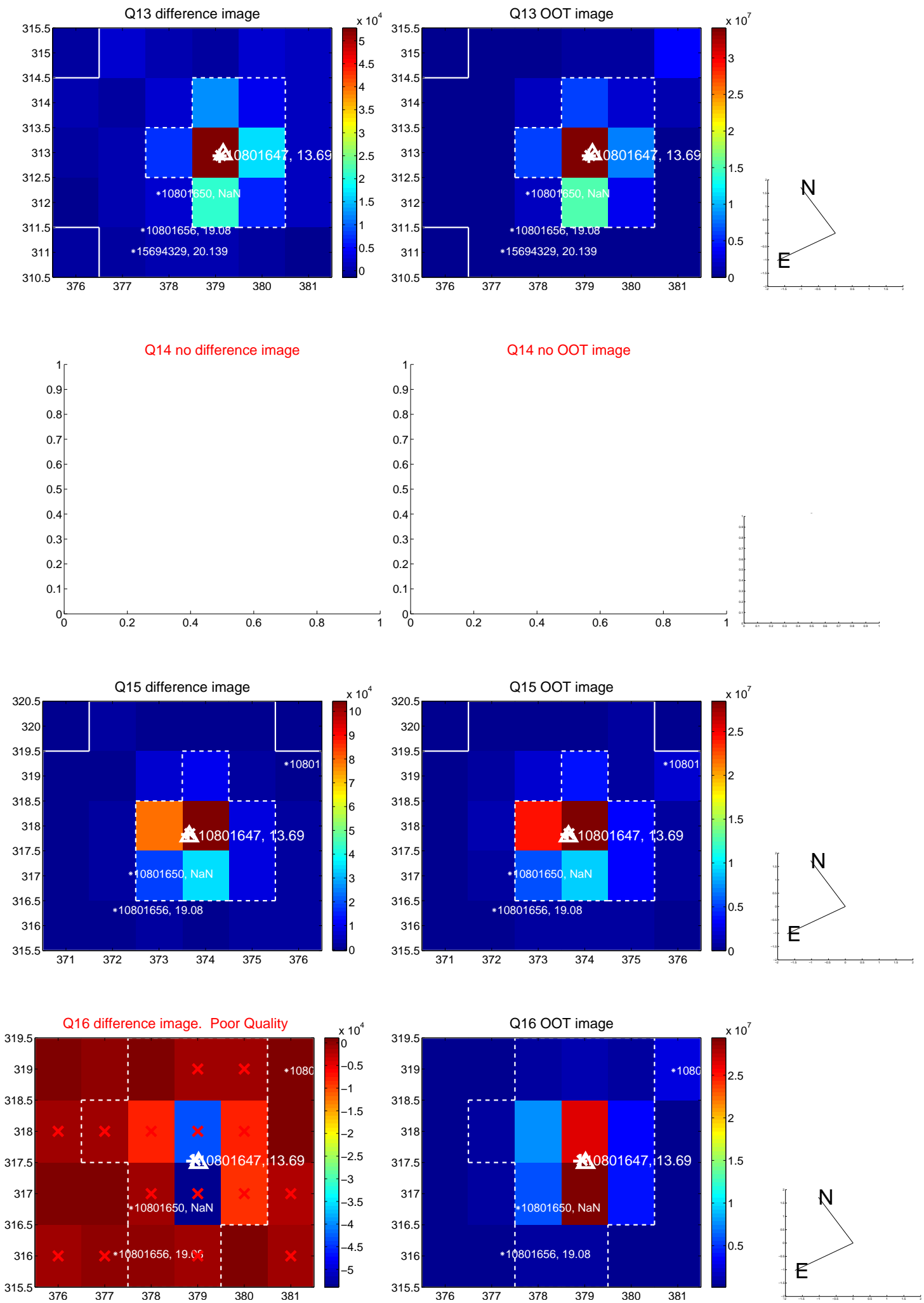
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



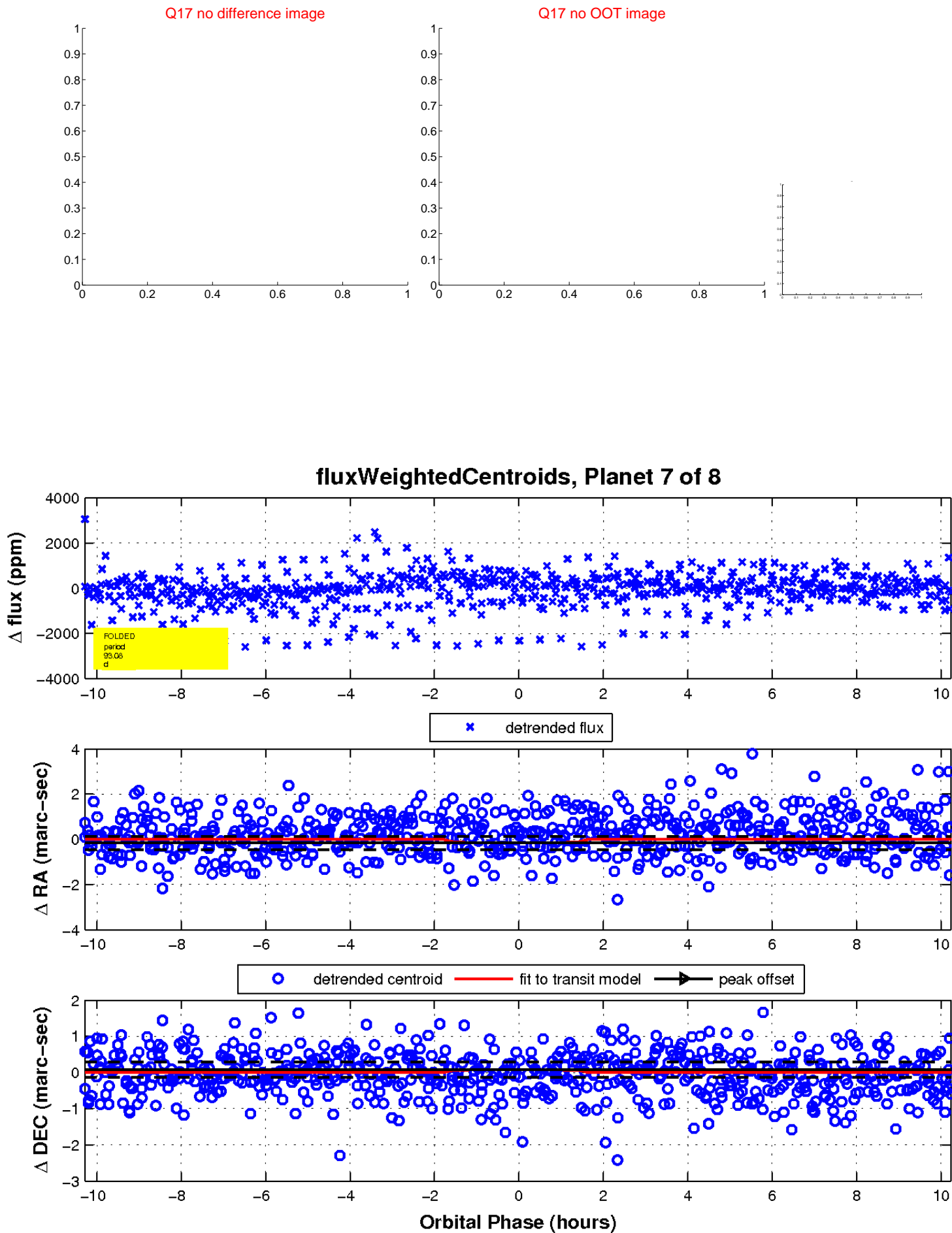
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

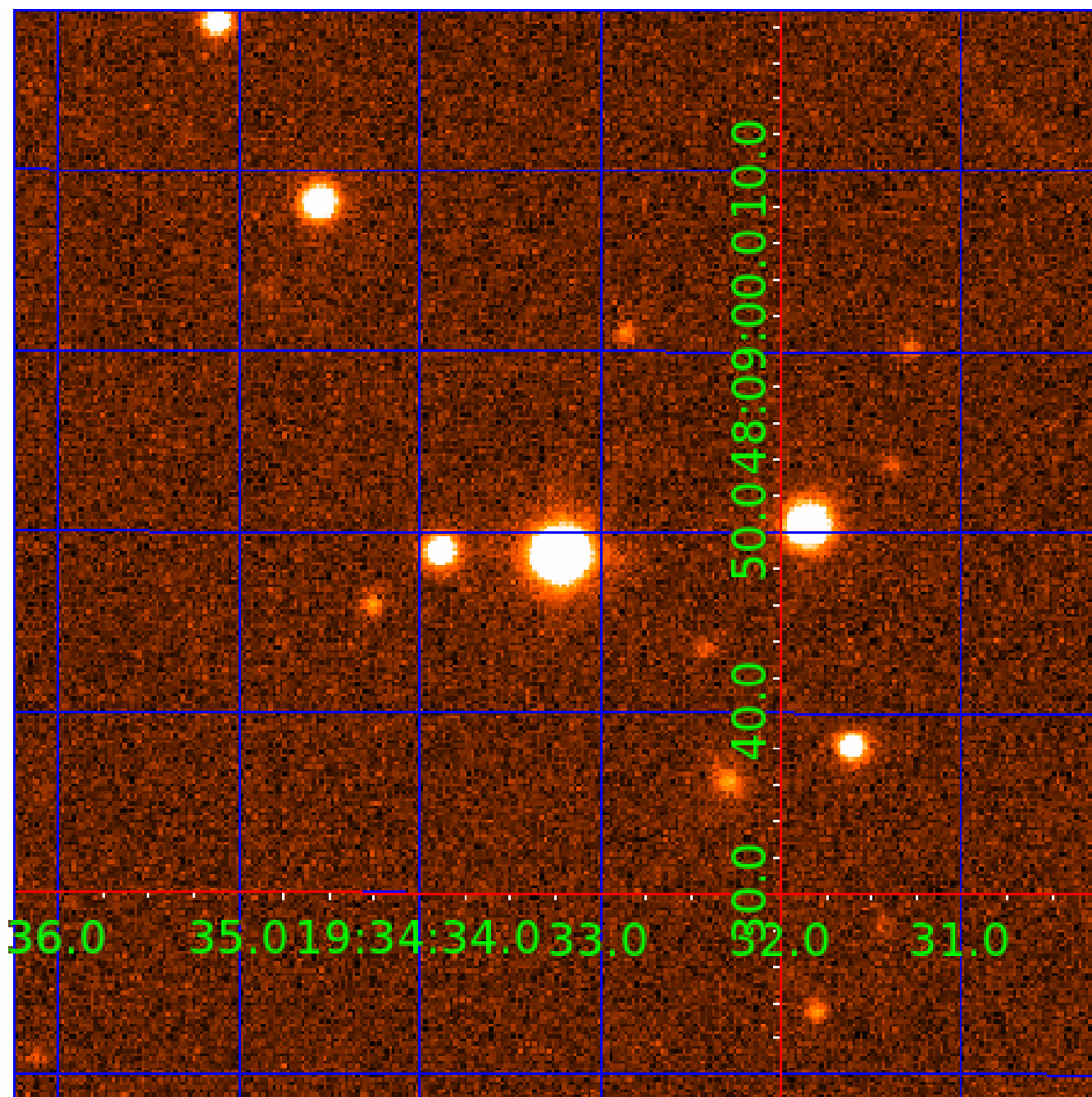


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 010801647

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})
010801647-01	OBS	No	330.368090	409.311041	545.5	2.752	12.3	3.9	1.34	5883	3.22	2.13
010801647-02	OBS	No	0.753128	132.146344	26.9	4.372	7.9	5.1	1.34	5883	0.70	7093.62
010801647-03	OBS	No	299.804795	380.050453	2225.8	4.522	11.3	9.5	1.34	5883	6.50	2.42
010801647-04	OBS	No	197.368302	162.652256	138.6	0.727	12.3	0.7	1.34	5883	1.67	4.23
010801647-05	OBS	No	197.363503	162.428687	731.8	4.635	11.5	5.3	1.34	5883	3.64	4.23
010801647-06	OBS	No	146.937679	192.093369	2298.7	18.590	10.3	7.3	1.34	5883	12.14	6.27
010801647-07	OBS	No	93.083145	189.730328	102.6	3.437	8.4	0.9	1.34	5883	1.62	11.52
010801647-08	OBS	No	268.163039	281.469485	363.3	6.000	9.8	-1.0	1.34	5883	2.54	2.81

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
010801647-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_MARSHALL_SKYE—LPP_DV—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—INCONSISTENT_TRANS
010801647-02	OBS	FP	0.00	1	0	0	0	LPP_DV
010801647-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_CHASES_MARSHALL—LPP_ALT—ALL_TRANS_CHASES—INCONSISTENT_TRANS—CENT_FEW_DIFFS
010801647-04	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_MARSHALL_SKYE_TRACKER—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—INCONSISTENT_TRANS
010801647-05	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_MARSHALL_SKYE—TRANS_GAPPED—LPP_DV—ALL_TRANS_CHASES—MOD_POS_DV—INCONSISTENT_TRANS—SAME_NTL_PERIOD
010801647-06	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—INCONSISTENT_TRANS
010801647-07	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_TRACKER—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT
010801647-08	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_MARSHALL—ALL_TRANS_CHASES—NO_FITS—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.

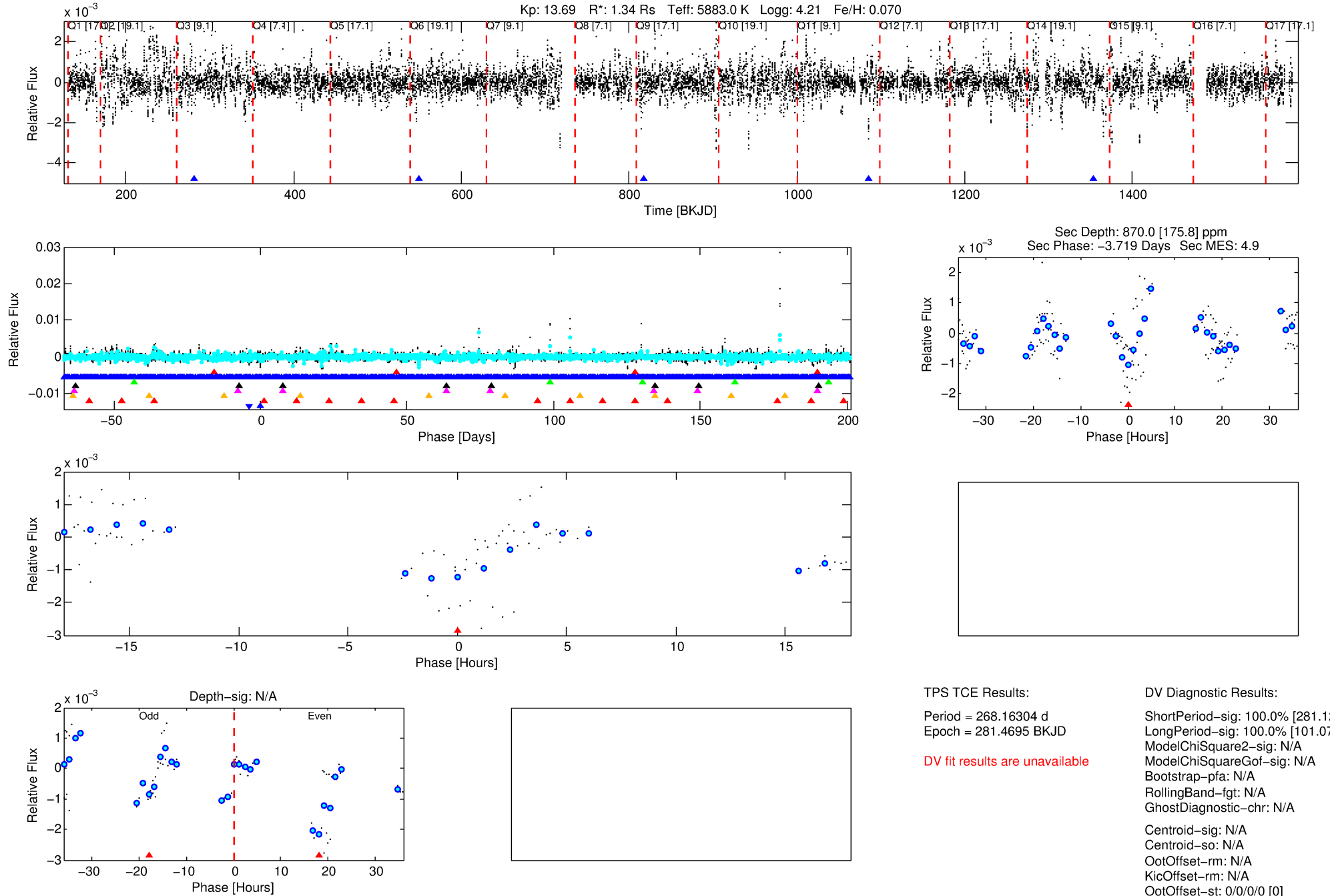
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 010801647-08

No Significant Match Found

DV One-Page Summary

KIC: 10801647 Candidate: 8 of 8 Period: 268.163 d



TPS TCE Results:

Period = 268.16304 d
Epoch = 281.4695 BKJD

DV fit results are unavailable

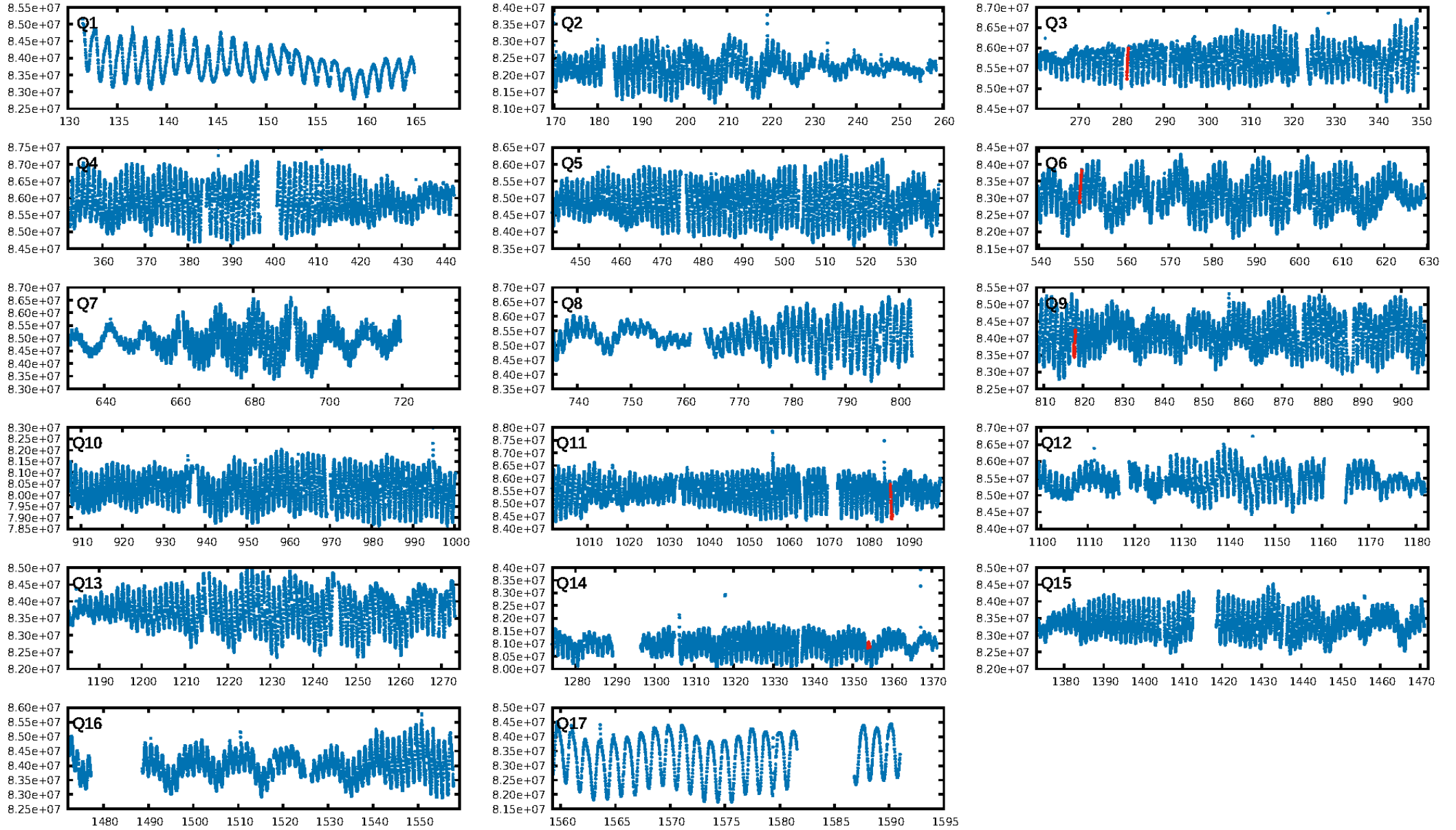
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [281.12σ]
LongPeriod-sig: 100.0% [101.07σ]
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: N/A
RollingBand-fgt: N/A
GhostDiagnostic-chr: N/A
Centroid-sig: N/A
Centroid-so: N/A
OotOffset-rm: N/A
KicOffset-rm: N/A
OotOffset-st: 0/0/0/0 [0]
KicOffset-st: 0/0/0/0 [0]
DiffImageQuality-fgm: N/A
DiffImageOverlap-fno: N/A

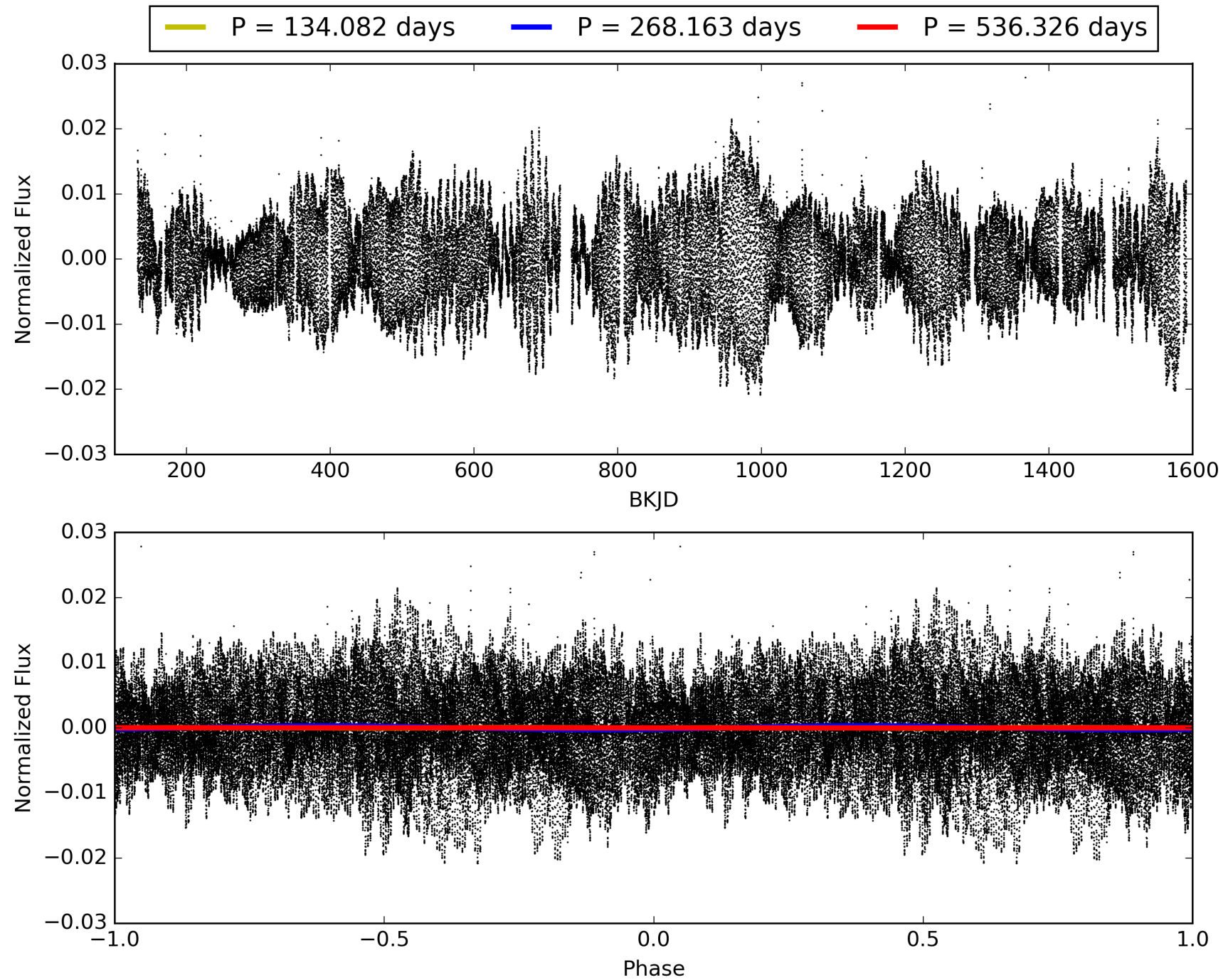
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 06:21:59 Z

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

TCE 010801647-08, PDC Light Curves

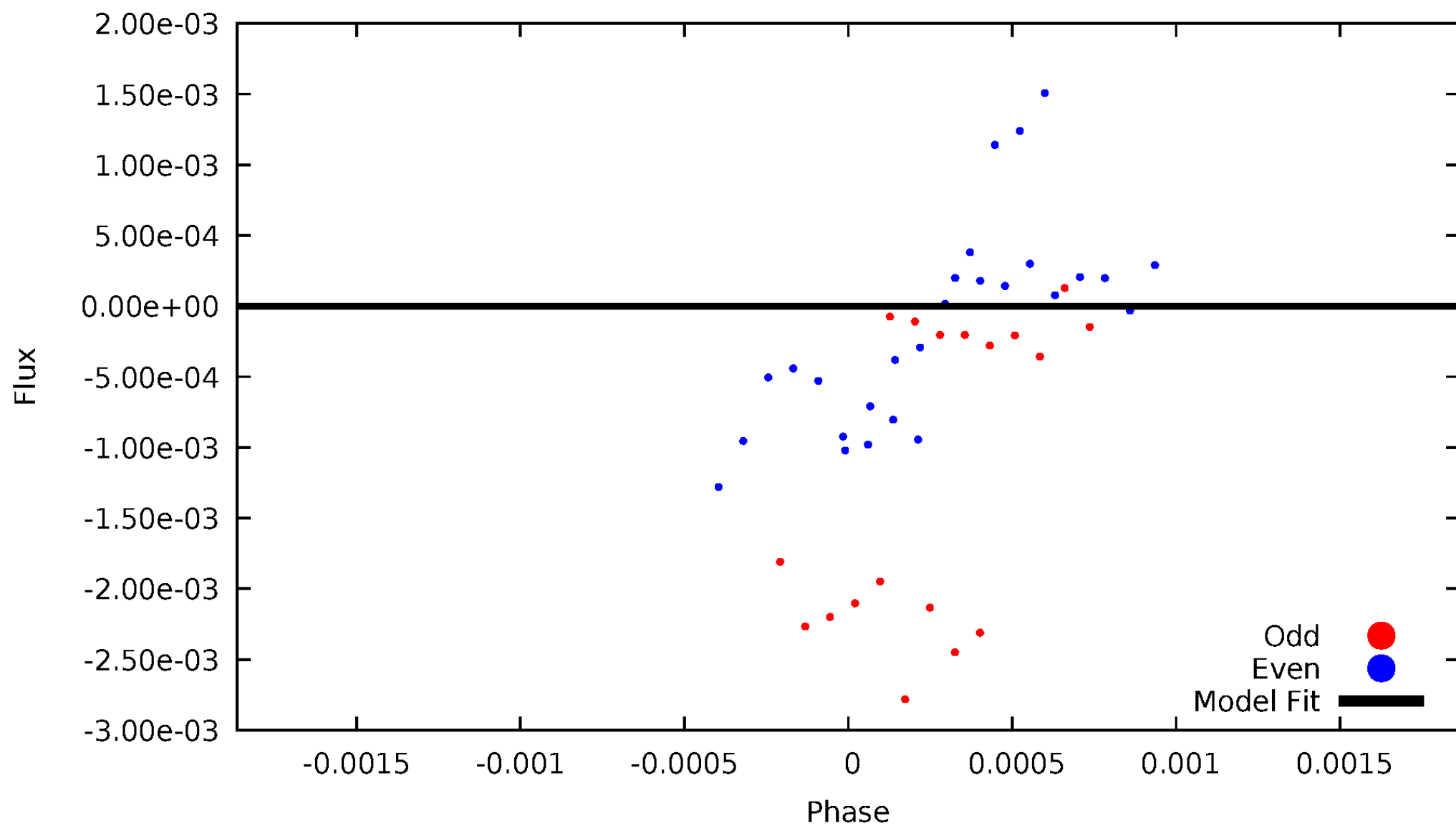


TCE 010801647-08



DV Odd/Even

TCE 010801647-08

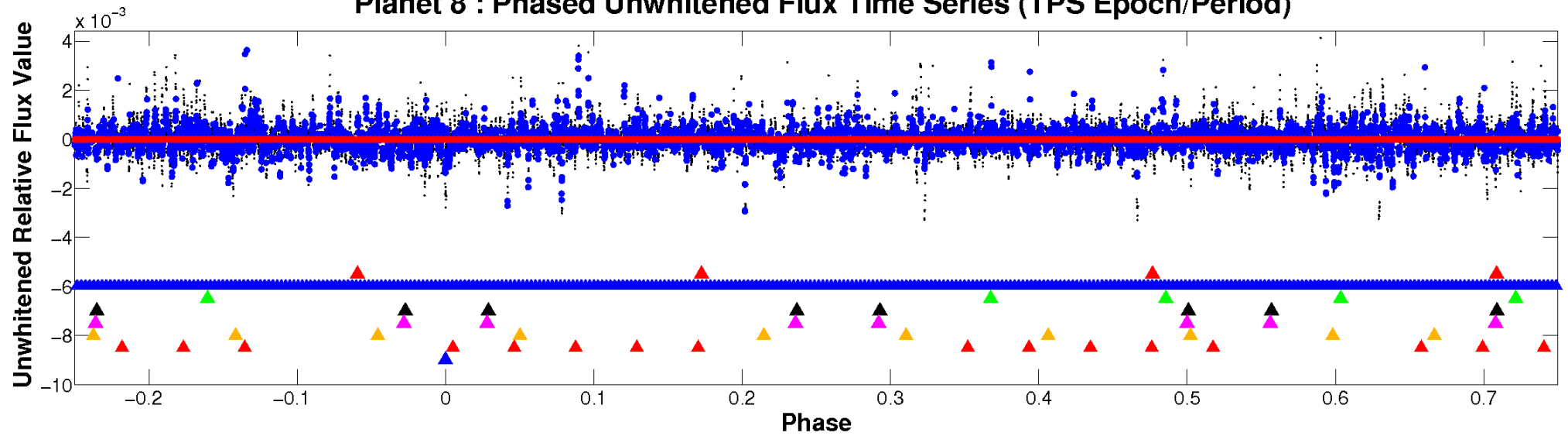


ALT Odd/Even

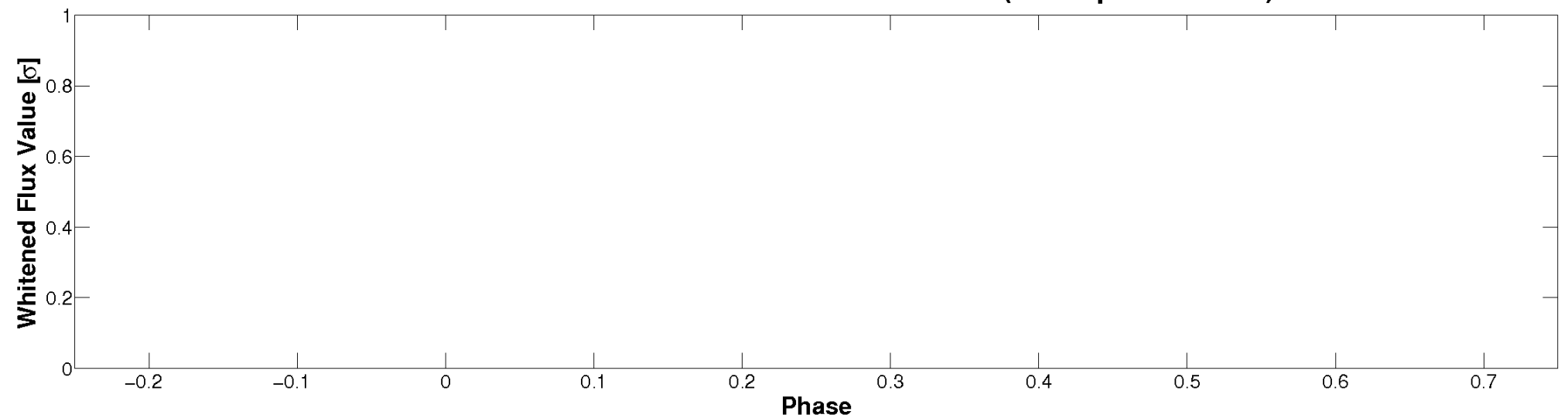
This plot does not exist for this TCE.

Non-Whitened Vs. Whitened Light Curve

Planet 8 : Phased Unwhitened Flux Time Series (TPS Epoch/Period)

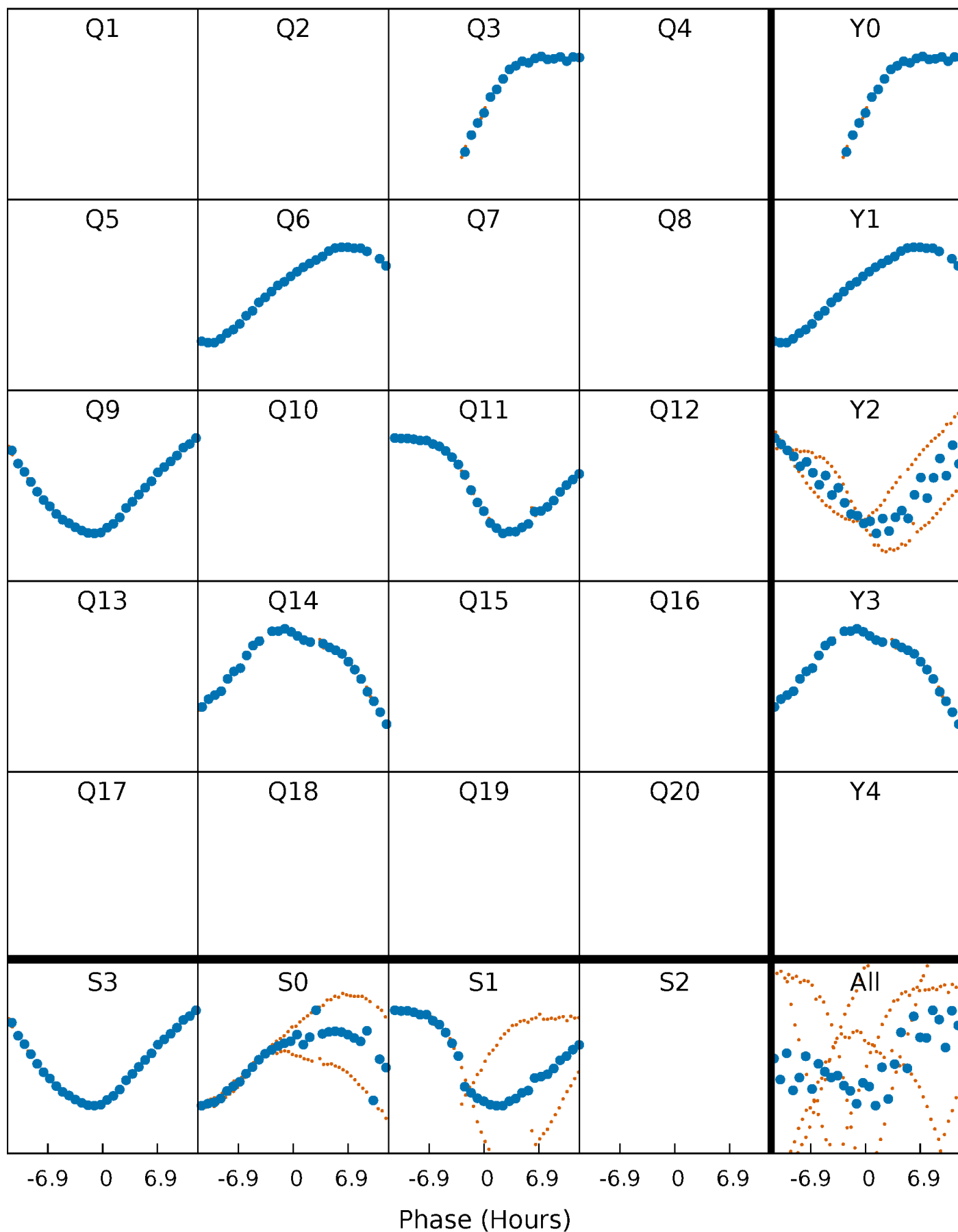


Planet 8 : Phased Whitened Flux Time Series (TPS Epoch/Period)



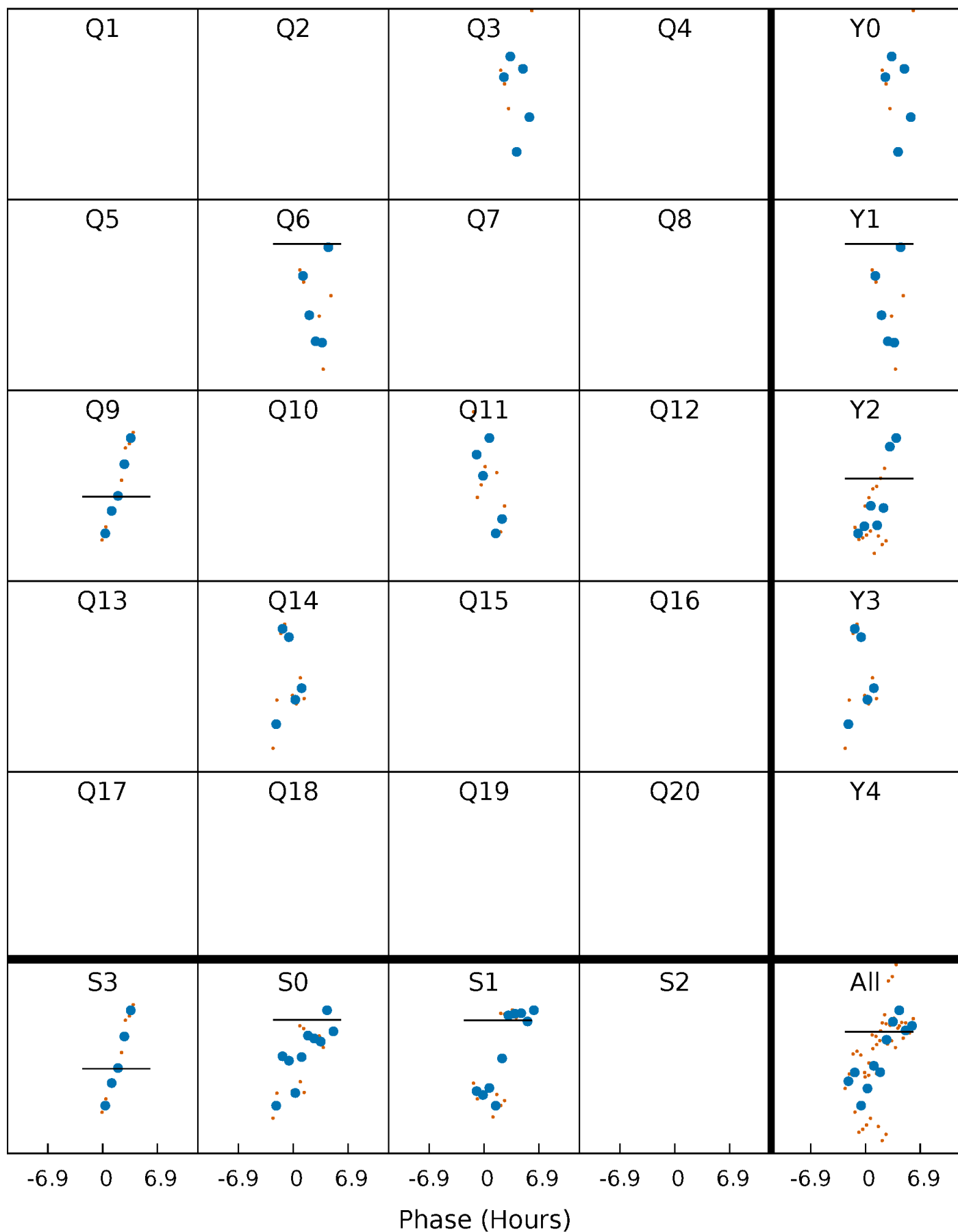
PDC Quarter-Phased Transit Curves

TCE 010801647-08 P=268.163039 Days $T_0=281.469485$ (BKJD)



DV Quarter-Phased Transit Curves

TCE 010801647-08 $P=268.163039$ Days $T_0=281.469485$ (BKJD)

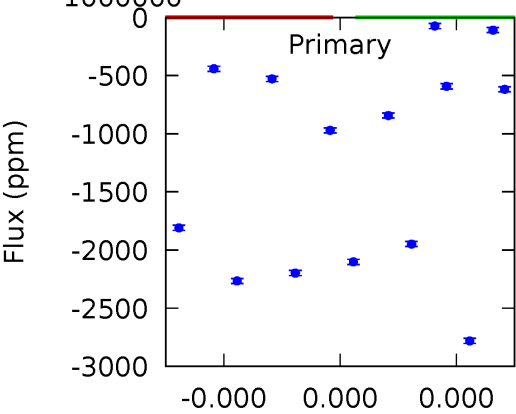
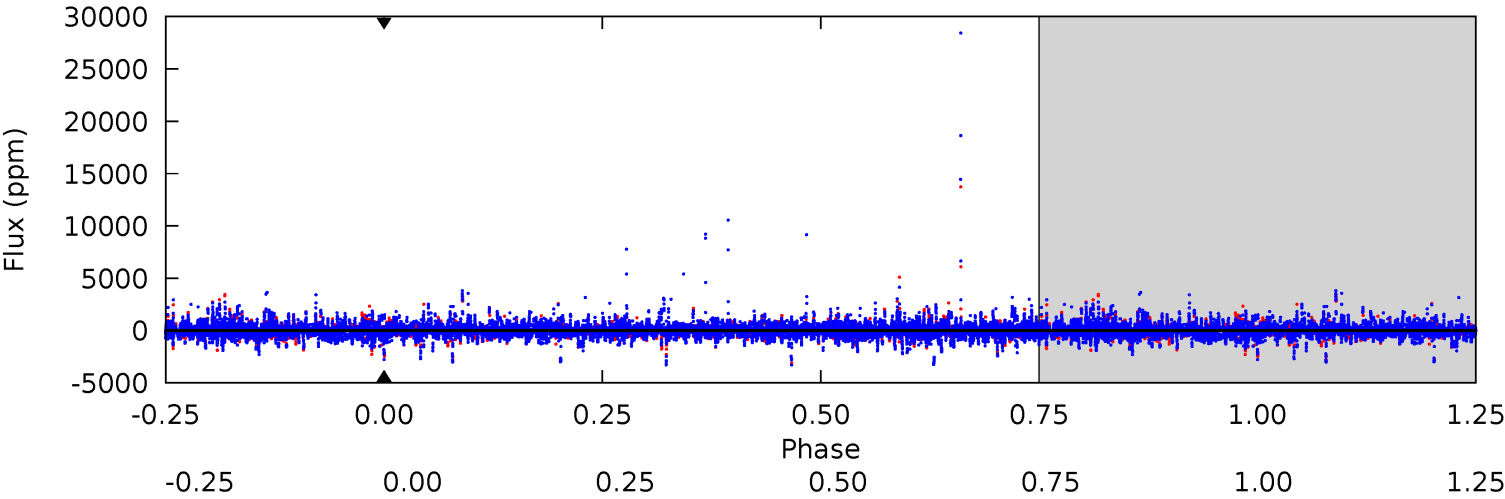


This plot does not exist for this TCE.

DV Model-Shift Uniqueness Test

010801647-08, P = 268.163039 Days, E = 13.306446 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

This plot does not exist for this TCE.

Stellar Parameters For KIC 010801647

	$T_{\text{eff}}(K)$	$\log(g)$	$[\text{Fe}/\text{H}]$	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	5883^{+158}_{-176}	$4.206^{+0.220}_{-0.180}$	$0.070^{+0.250}_{-0.300}$	$1.340^{+0.367}_{-0.367}$	$1.050^{+0.138}_{-0.138}$	$0.615^{+0.759}_{-0.298}$
	+3%/-3%	+5%/-4%	+357%/-429%	+27%/-27%	+13%/-13%	+123%/-48%
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 010801647-08 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	0 ± 1000000	$9.66^{+11.11}_{-6.53}$	461^{+36}_{-40}	4073^{+18475}_{-28569}	$3419^{+632502}_{-748495}$
Alt.	N/A	N/A	N/A	N/A	N/A

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 $A_{obs} \gg 1.0$

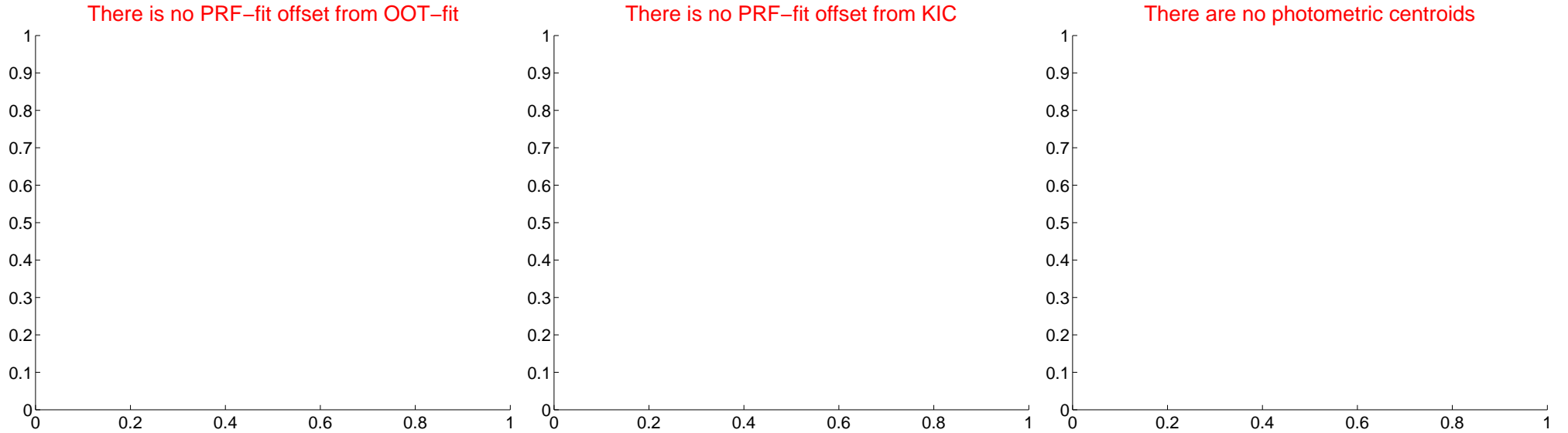
DV Centroid Data

Supplemental centroid analysis for 010801647-08. Kepler magnitude: 13.69. Transit SNR -1.00

There are 0 quarters with good PRF difference image offsets

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

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	—	—	—	—
PRF-fit source offset from KIC position	—	—	—	—
photometric centroid source offset	—	—	—	—



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

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



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.



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folded centroid time series figure for this object.

UKIRT Image

Declination

