

KIC 011017466

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})
011017466-01	OBS	No	225.953969	201.173677	2956.4	2.216	11.0	7.0	0.66	4907	3.71	0.58
011017466-02	OBS	No	164.194991	135.986718	2383.8	2.790	12.5	7.0	0.66	4907	3.16	0.89

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
011017466-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_MARSHALL_ZUMA—LPP_DV—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—INCONSISTENT_TRANS
011017466-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_MARSHALL—LPP_DV

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

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

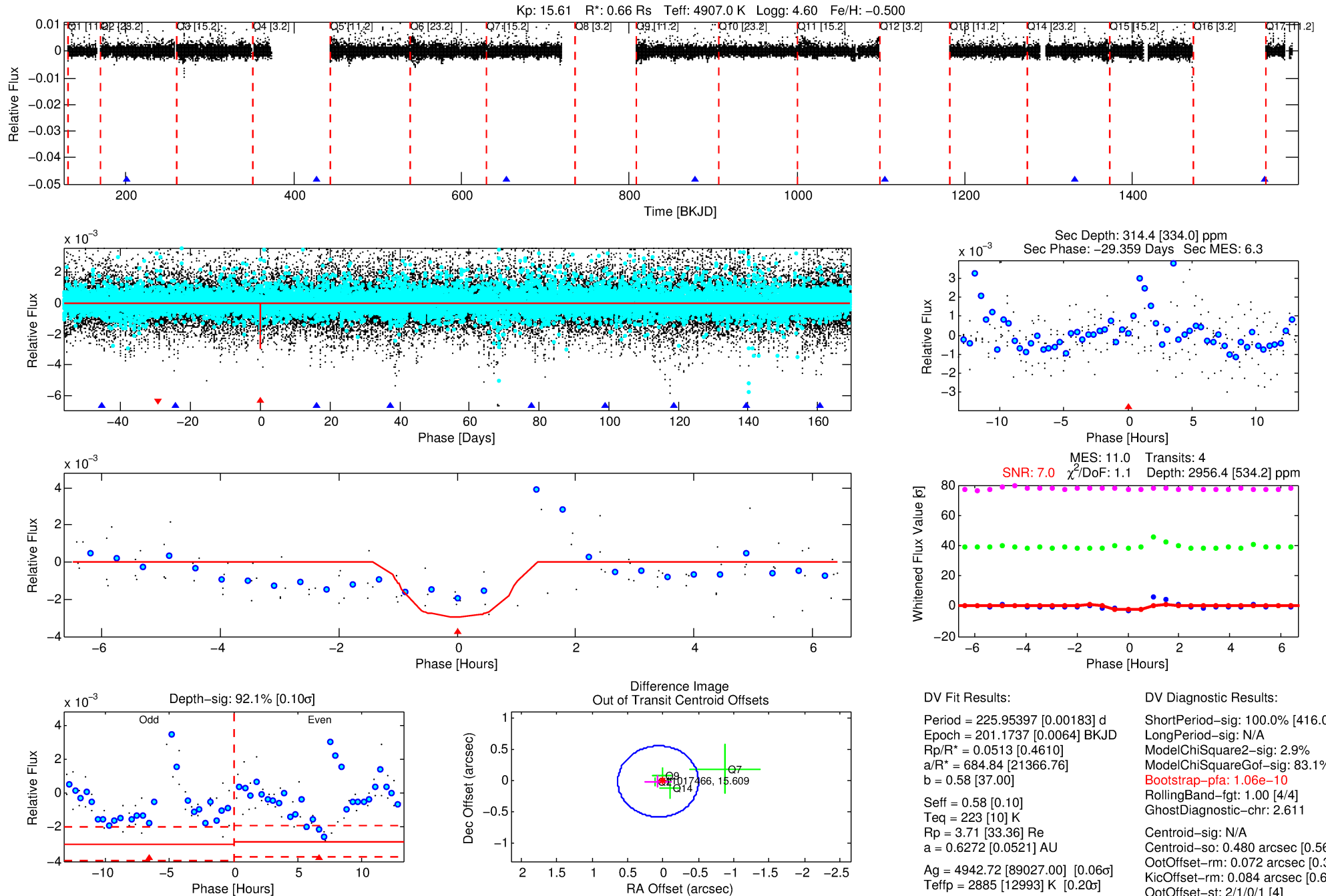
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 011017466-01

No Significant Match Found

DV One-Page Summary

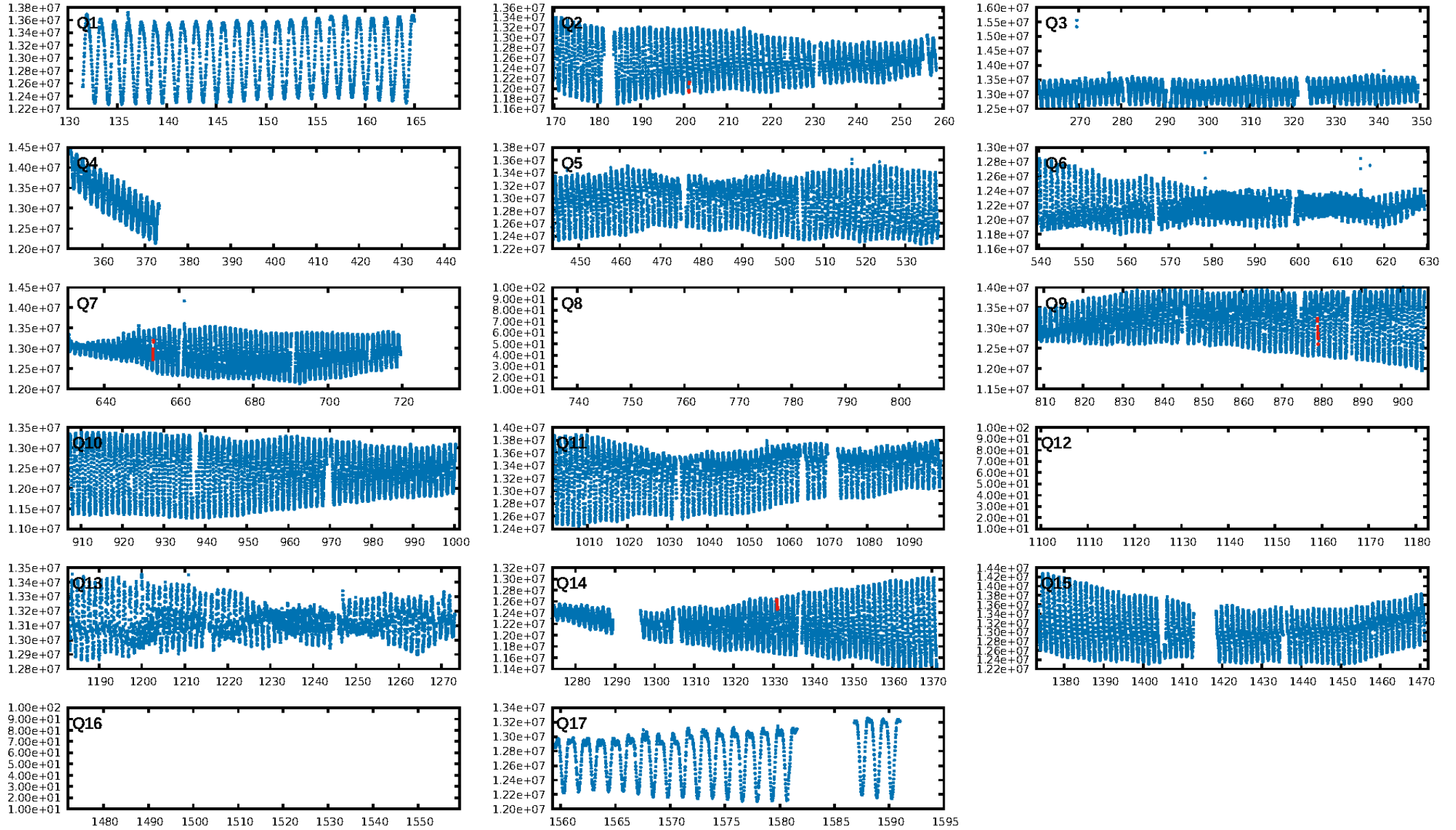
KIC: 11017466 Candidate: 1 of 2 Period: 225.954 d



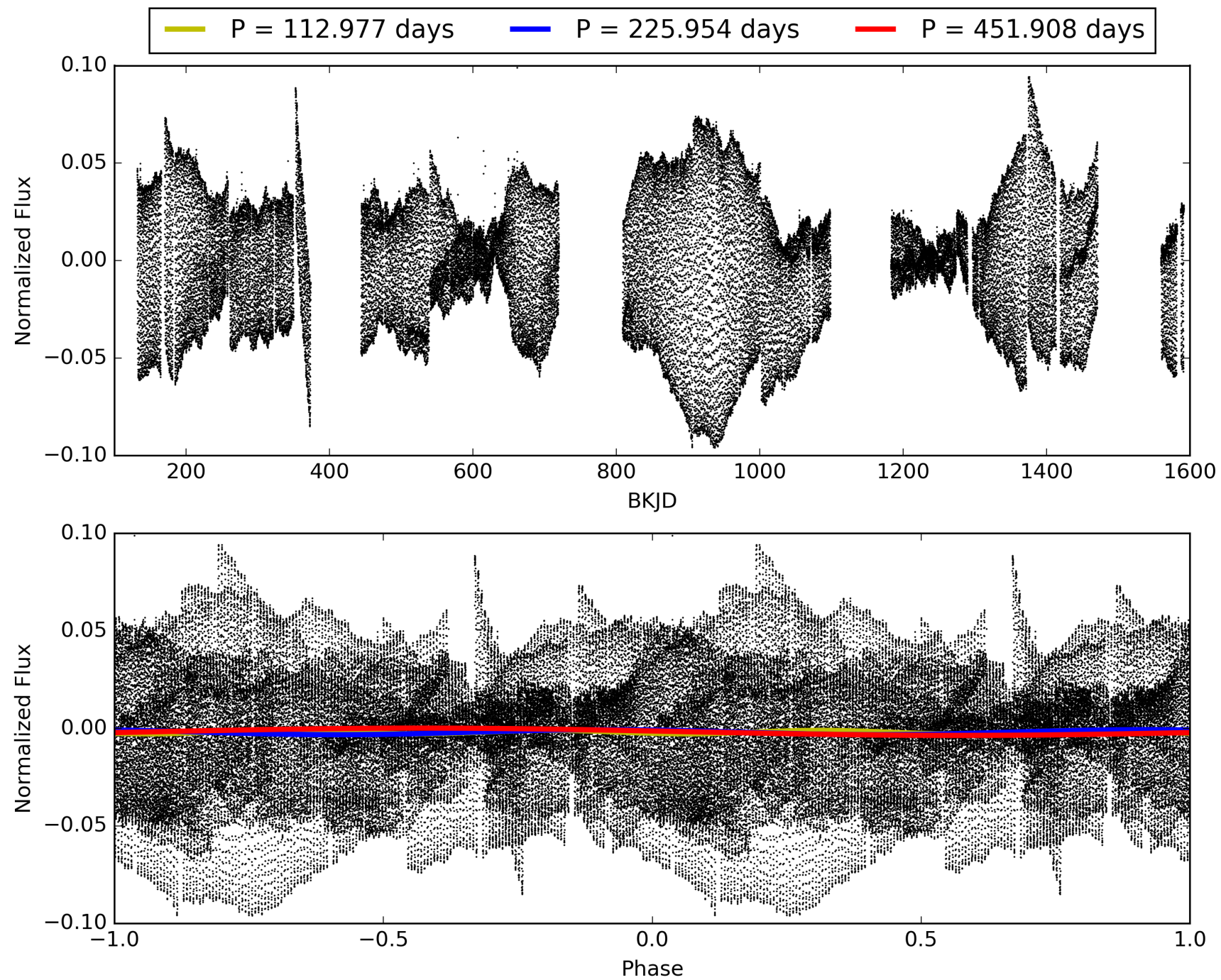
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 29-Jan-2016 06:00:19 Z

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

TCE 011017466-01, PDC Light Curves

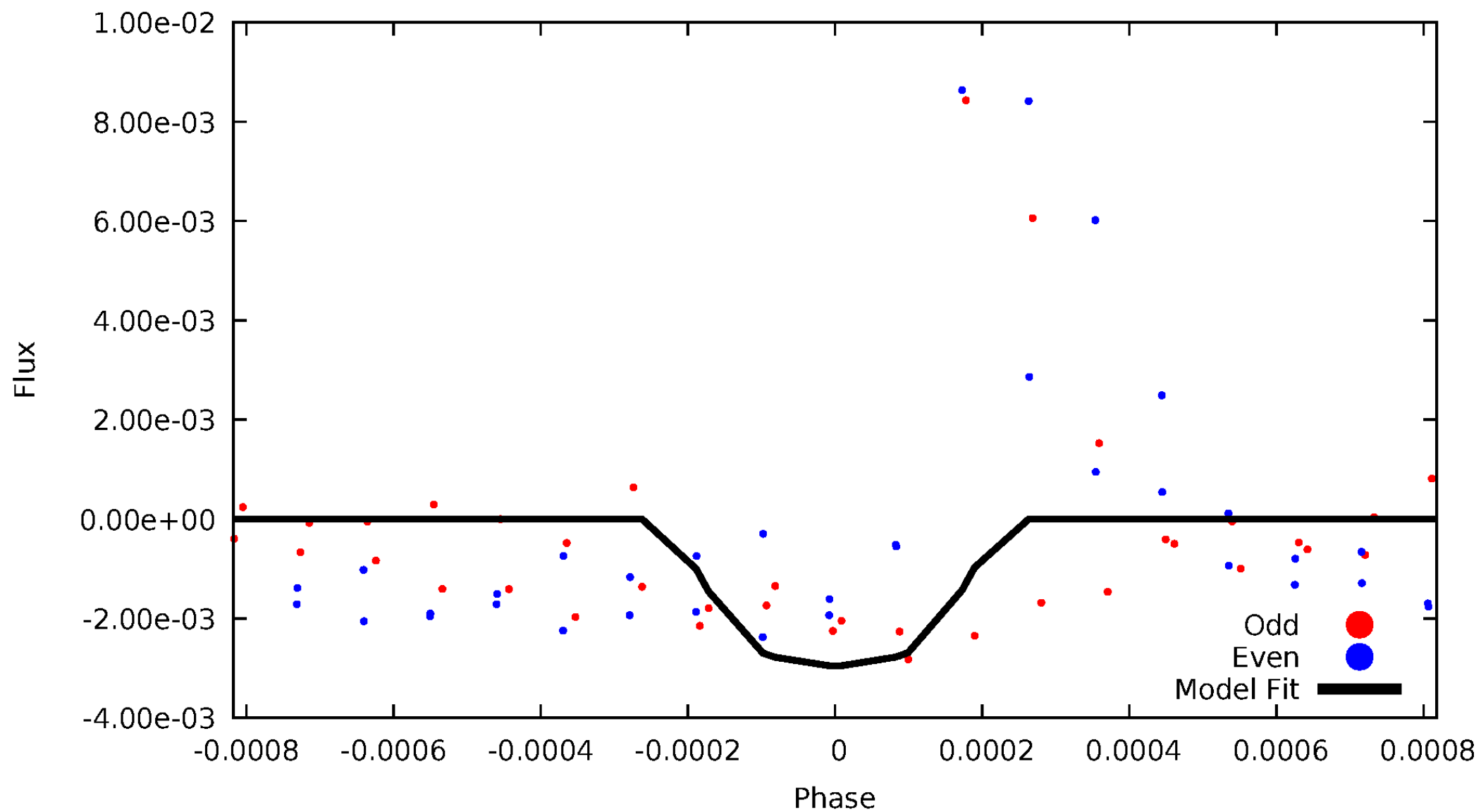


TCE 011017466-01



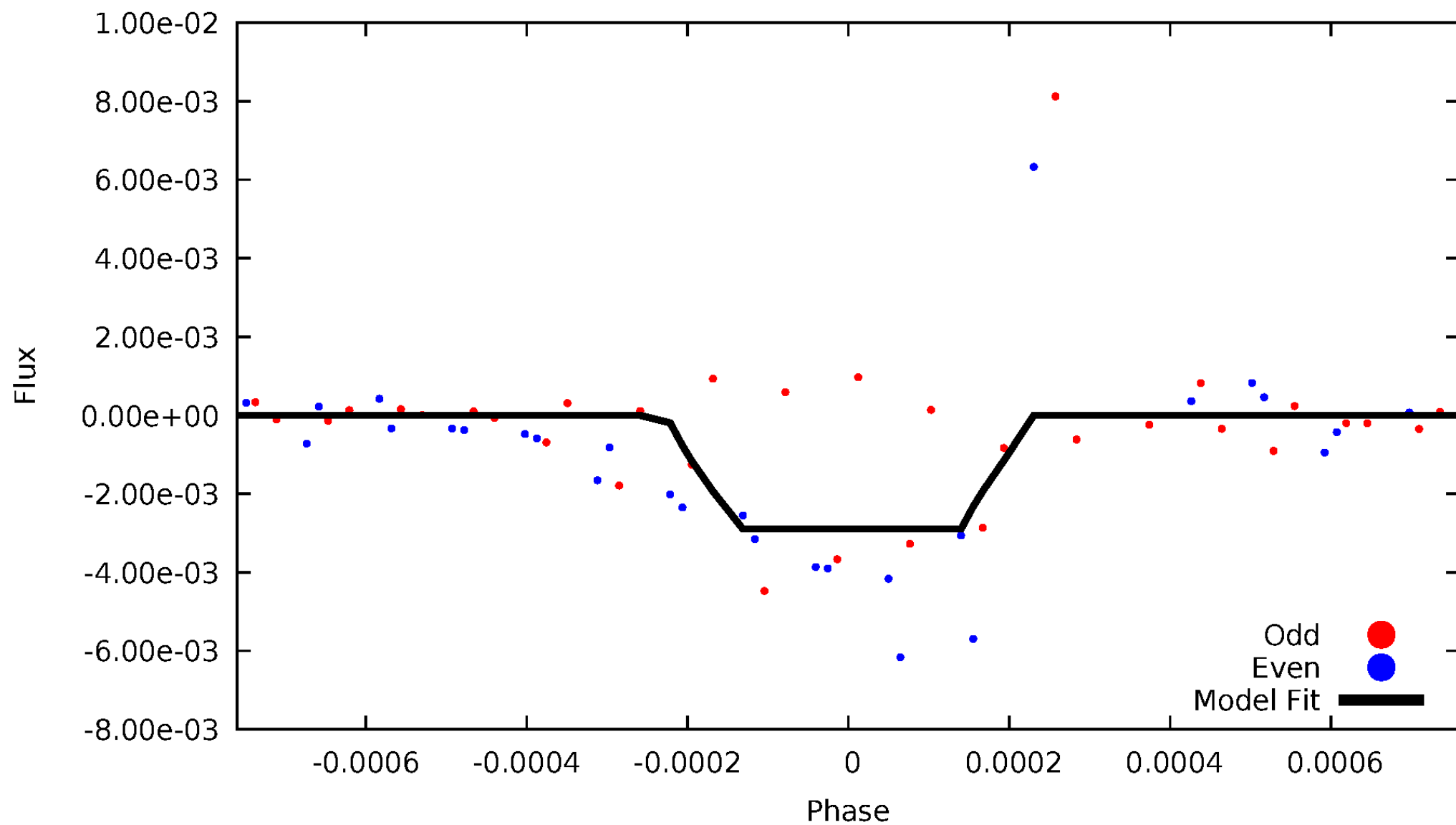
DV Odd/Even

TCE 011017466-01



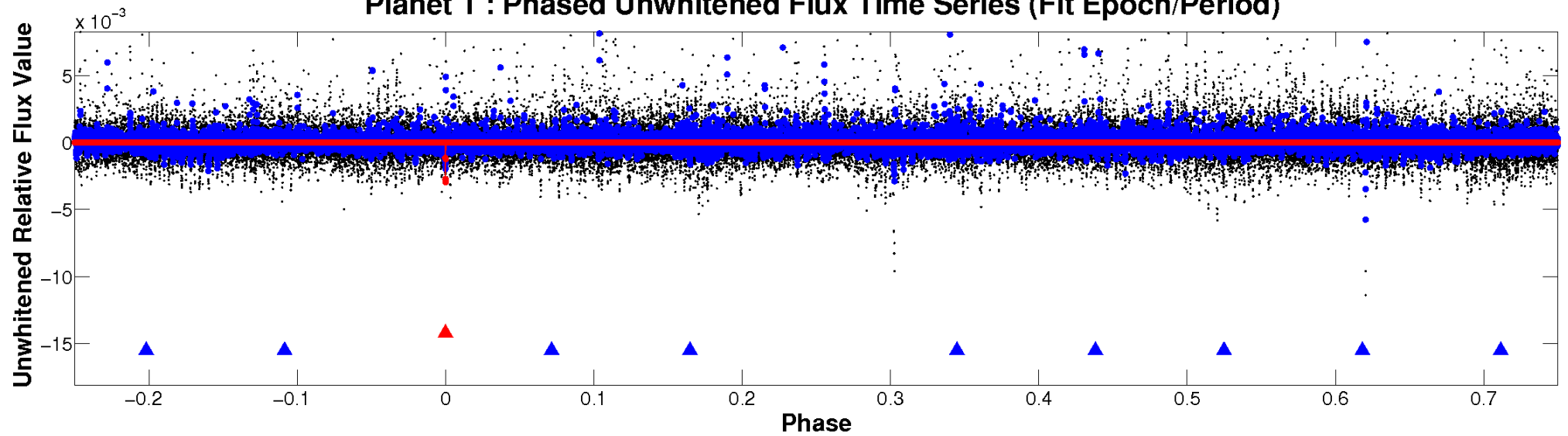
ALT Odd/Even

TCE 011017466-01

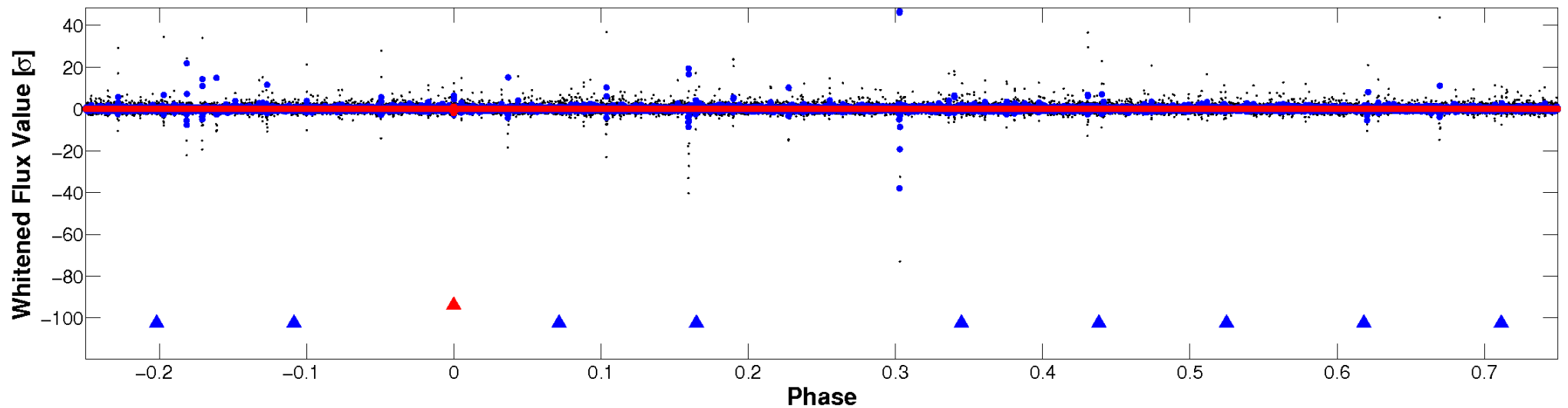


Non-Whitened Vs. Whitened Light Curve

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

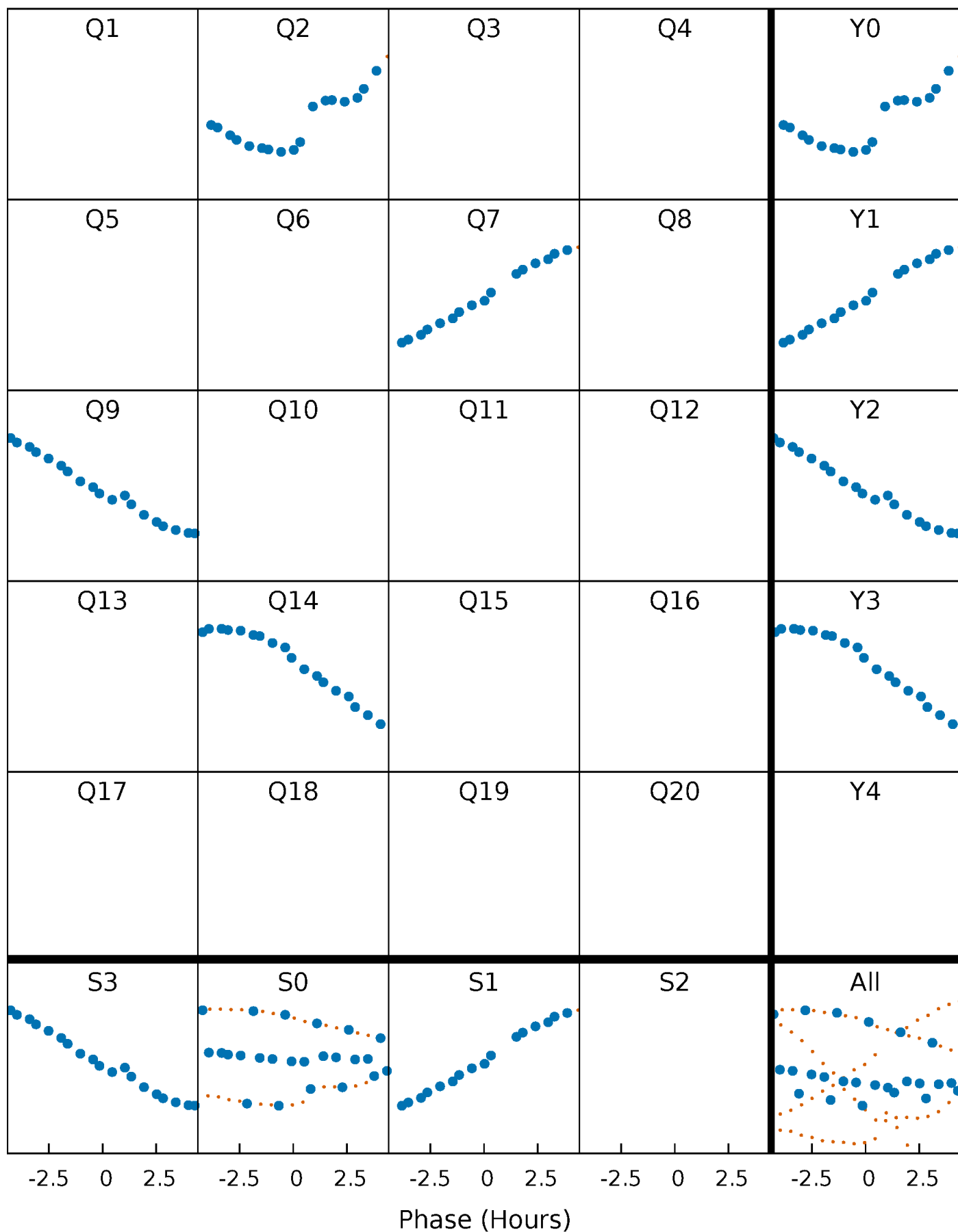


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



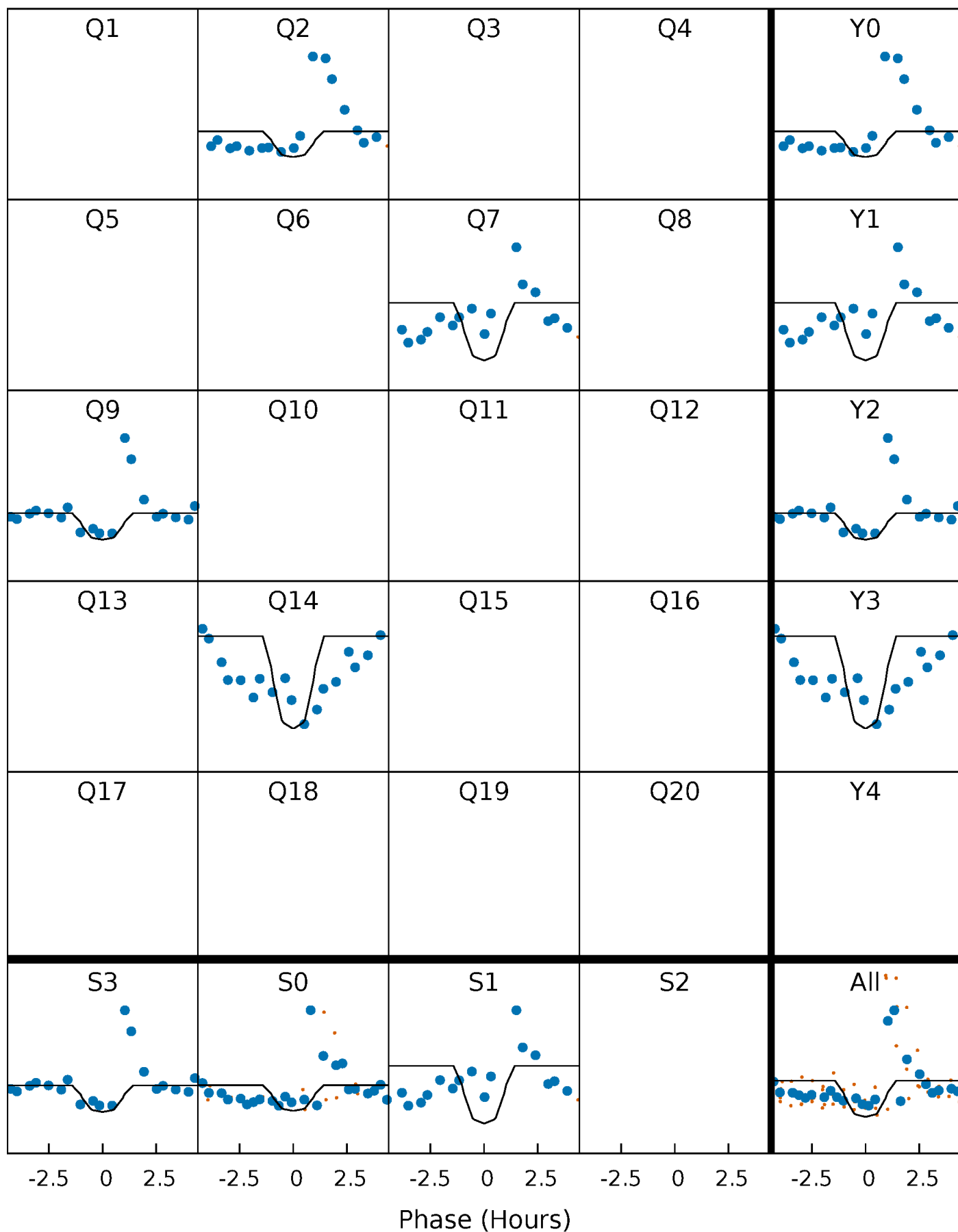
PDC Quarter-Phased Transit Curves

TCE 011017466-01 P=225.953969 Days $T_0=201.173677$ (BKJD)



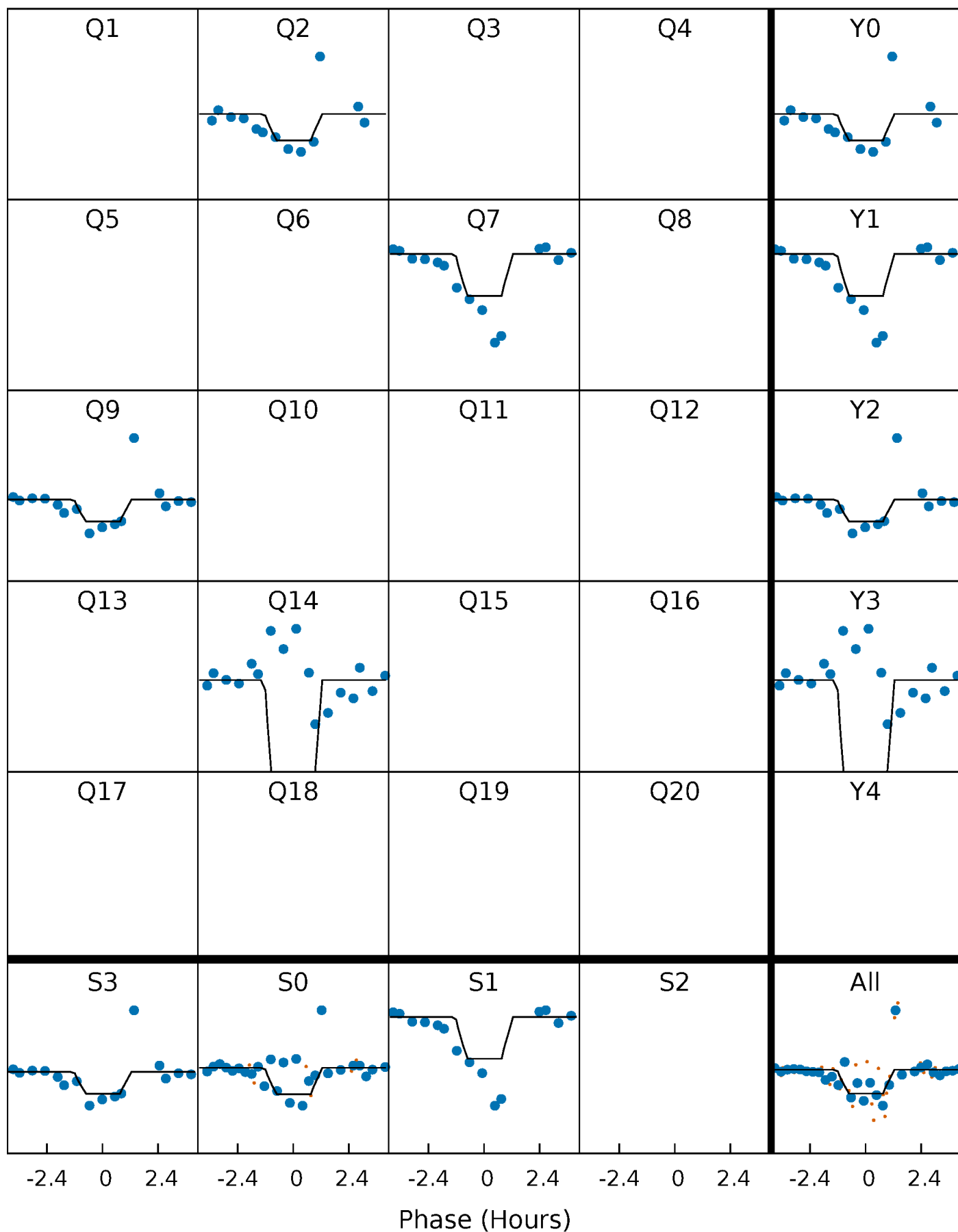
DV Quarter-Phased Transit Curves

TCE 011017466-01 P=225.953969 Days $T_0=201.173677$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

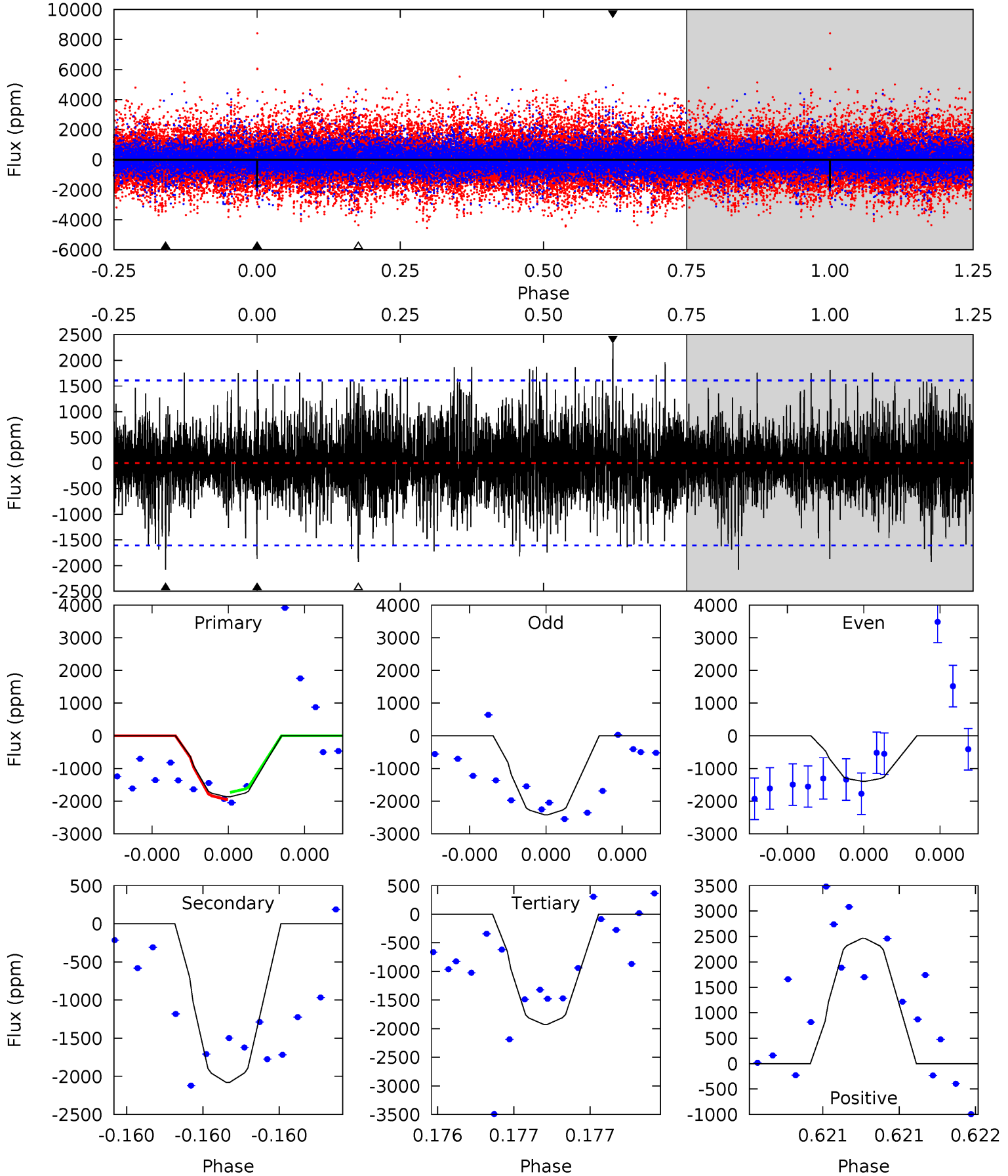
TCE 011017466-01 P=225.952340 Days $T_0=201.160638$ (BKJD)



DV Model-Shift Uniqueness Test

011017466-01, P = 225.953969 Days, E = 201.173677 Days

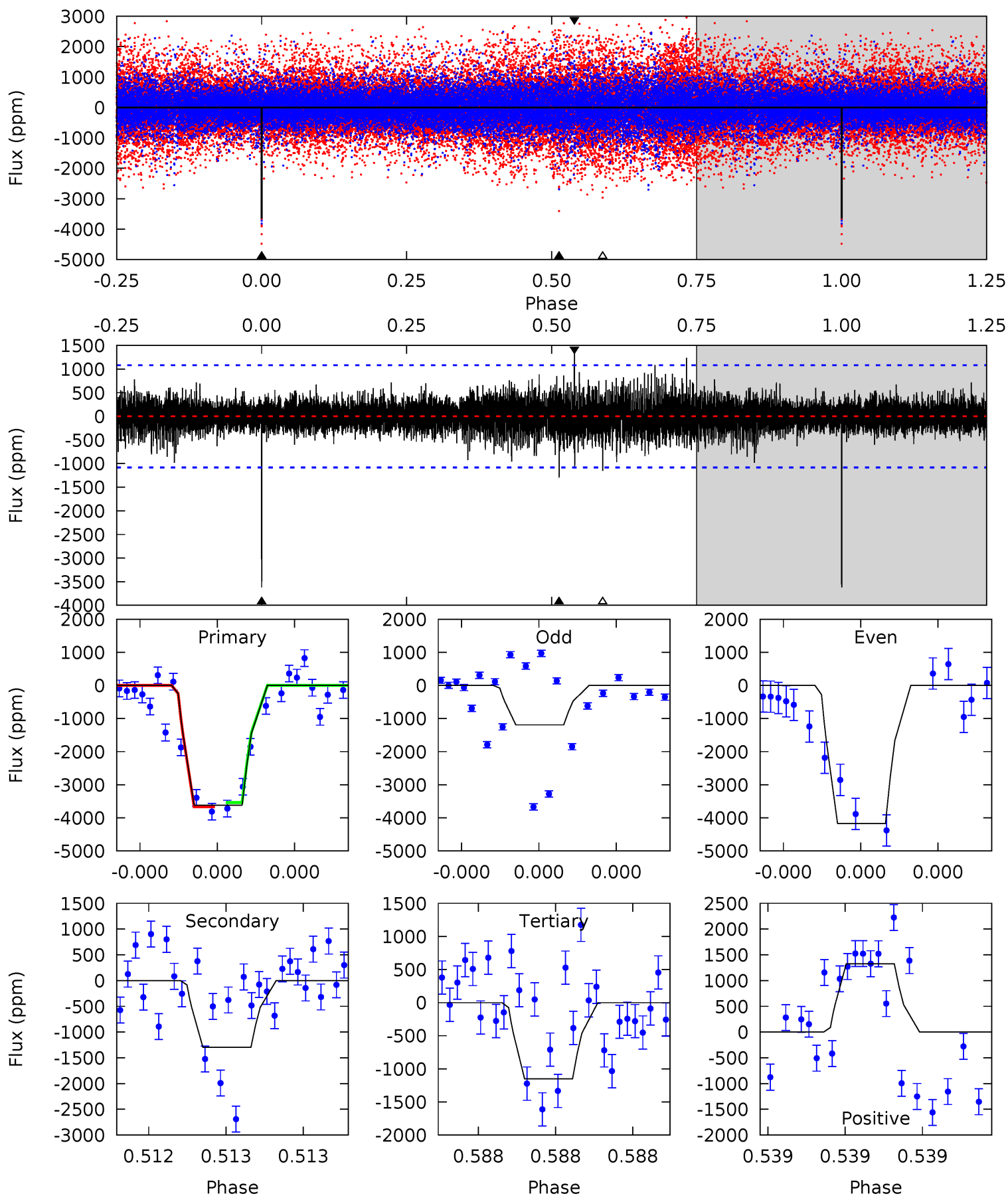
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
6.53	7.27	6.73	8.60	5.62	3.55	1.72	-0.21	-2.08	0.53	-1.34	1.66	1.21	0.54	0.37



Alt Model-Shift Uniqueness Test

011017466-01, P = 225.952340 Days, E = 201.160638 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
18.7	6.71	5.94	6.86	5.60	3.52	1.22	12.8	11.9	0.76	-0.15	8.92	0.80	0.27	0.34



Stellar Parameters For KIC 011017466

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	4907^{+147}_{-132}	$4.604^{+0.070}_{-0.035}$	$-0.500^{+0.300}_{-0.300}$	$0.663^{+0.057}_{-0.063}$	$0.645^{+0.082}_{-0.041}$	$3.109^{+0.886}_{-0.479}$
	+3%/-3%	+2%/-1%	+60%/-60%	+9%/-10%	+13%/-6%	+29%/-15%
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 011017466-01 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-2081 ± 286	$23.65^{+26.43}_{-16.56}$	309^{+11}_{-11}	2609^{+1082}_{-419}	815^{+8877}_{-633}
Alt.	-1298 ± 194	$23.80^{+25.32}_{-15.98}$	309^{+11}_{-11}	2443^{+887}_{-365}	490^{+4267}_{-376}

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 $A_{obs} \gg 1.0$

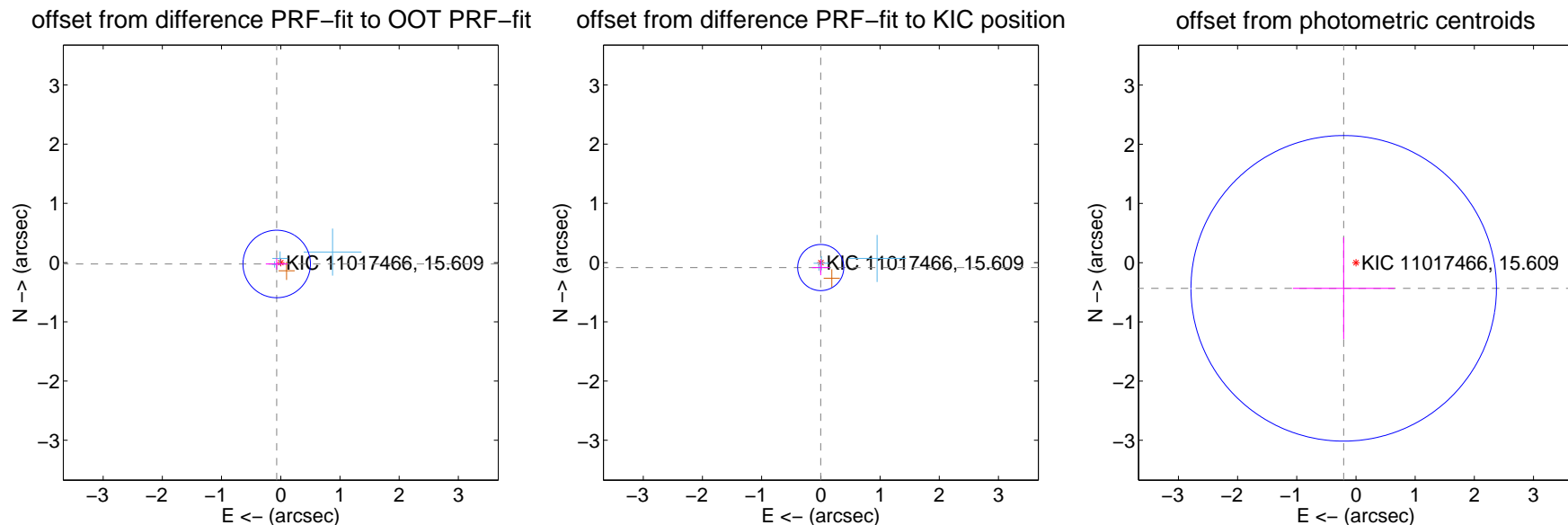
DV Centroid Data

Supplemental centroid analysis for 011017466-01. Kepler magnitude: 15.61. Transit SNR 6.97

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	0.072 ± 0.190	0.38	0.068 ± 0.184	-0.023 ± 0.095
PRF-fit source offset from KIC position	0.084 ± 0.130	0.64	0.002 ± 0.147	-0.084 ± 0.130
photometric centroid source offset	0.48 ± 0.86	0.56	0.21 ± 0.86	-0.43 ± 0.86



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.

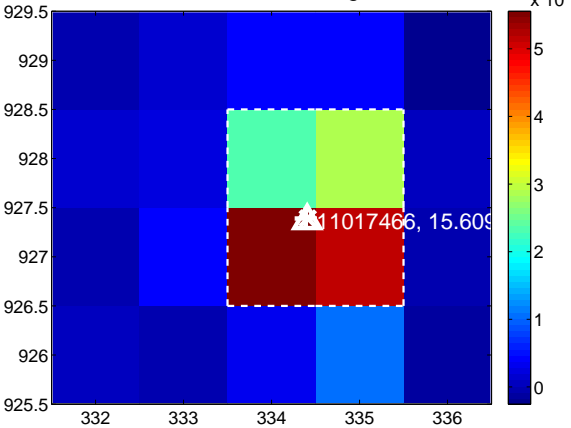
Q1 no difference image



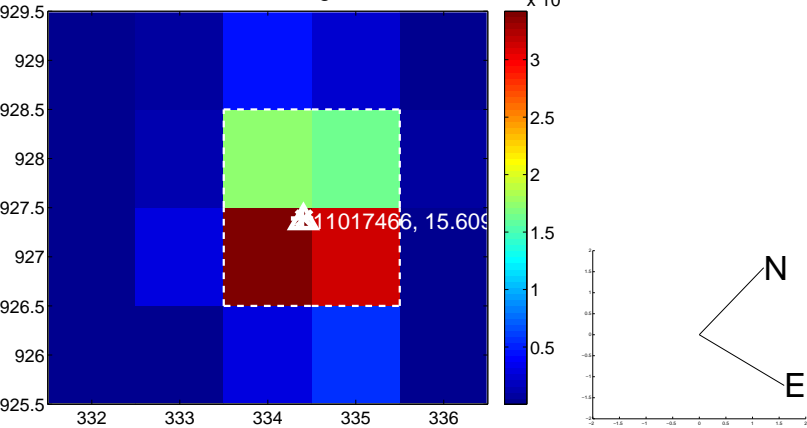
Q1 no OOT image



Q2 difference image



Q2 OOT image



Q3 no difference image



Q3 no OOT image



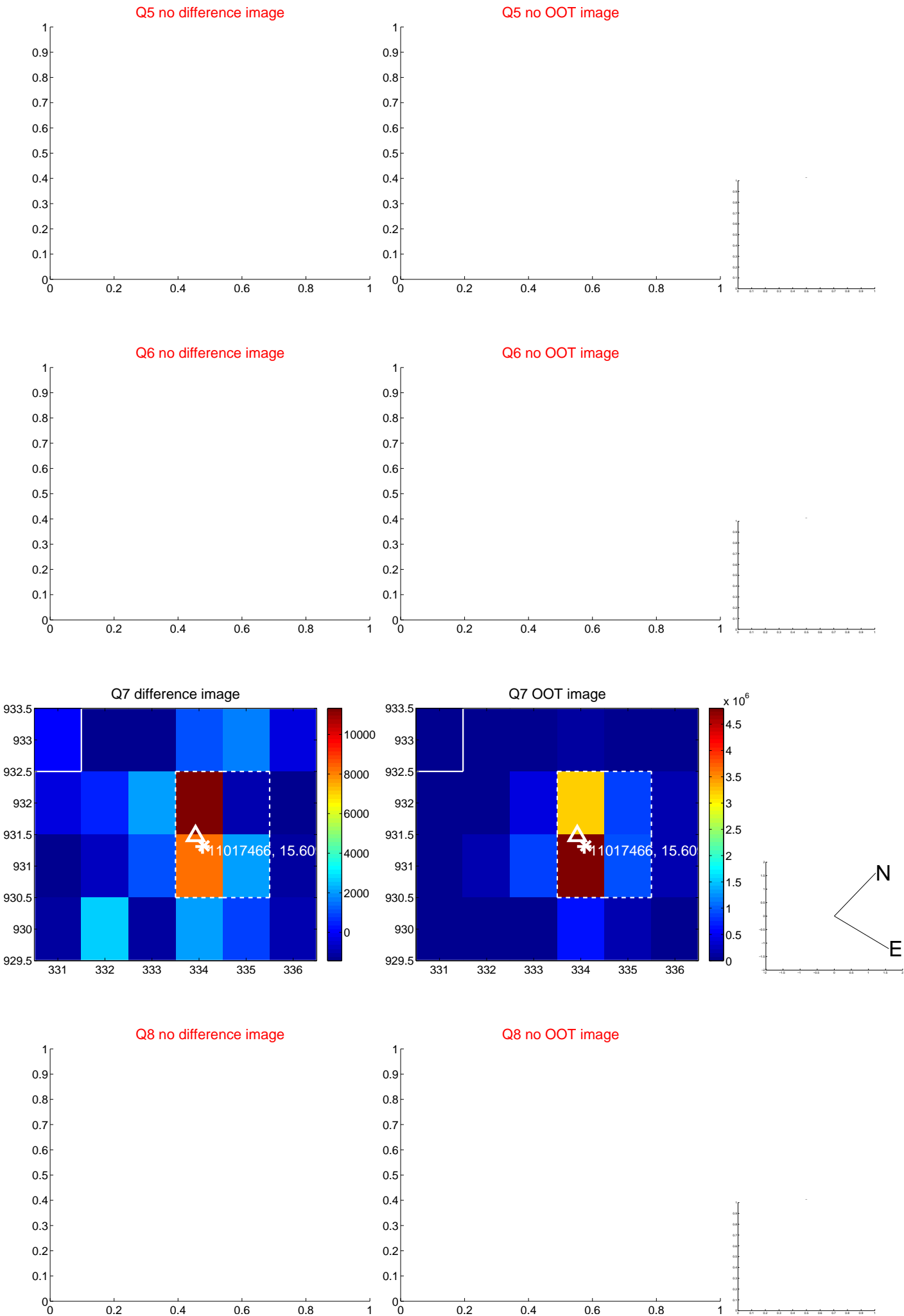
Q4 no difference image



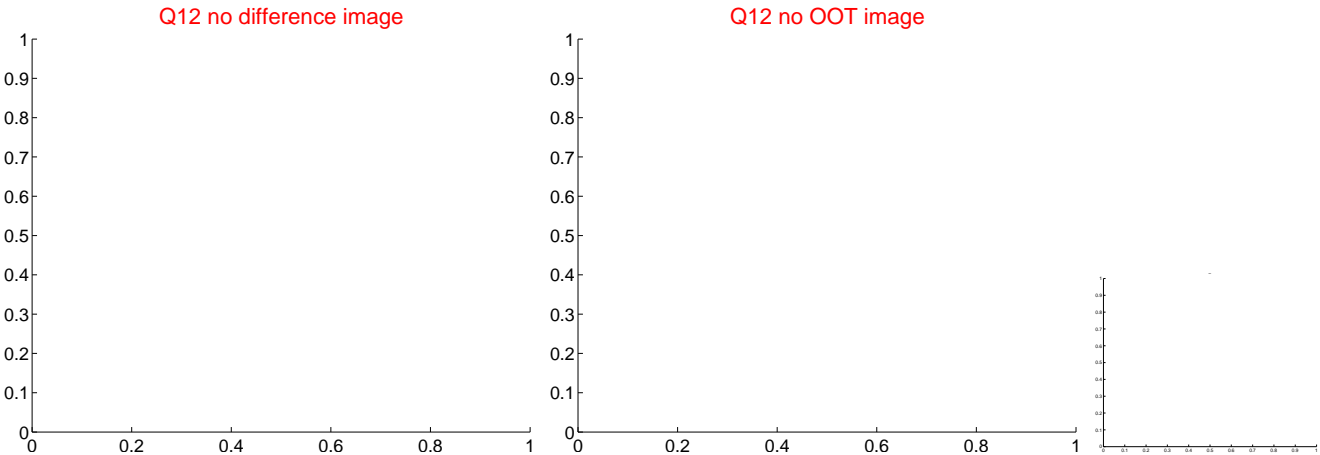
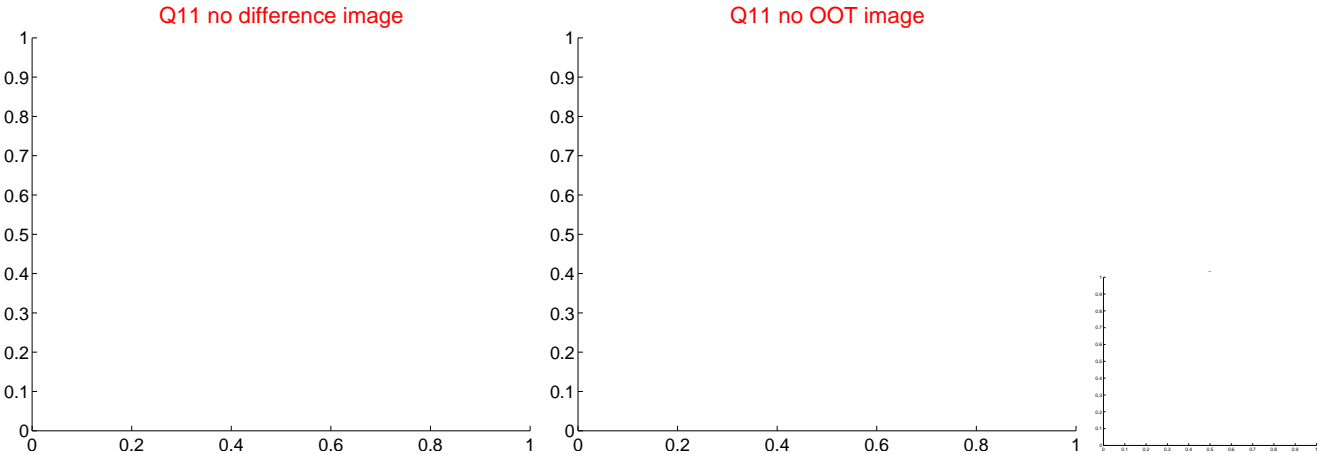
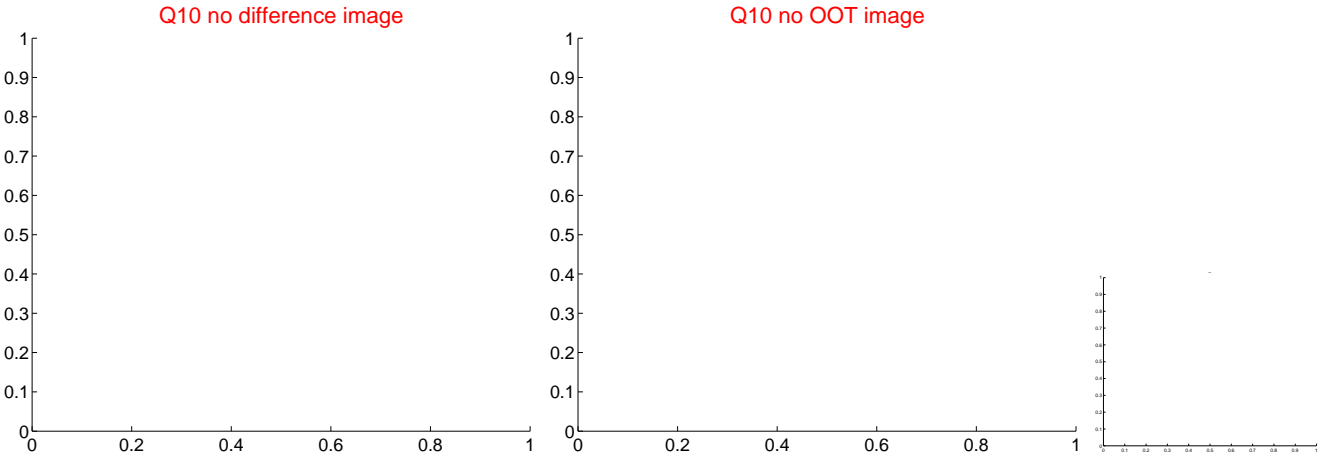
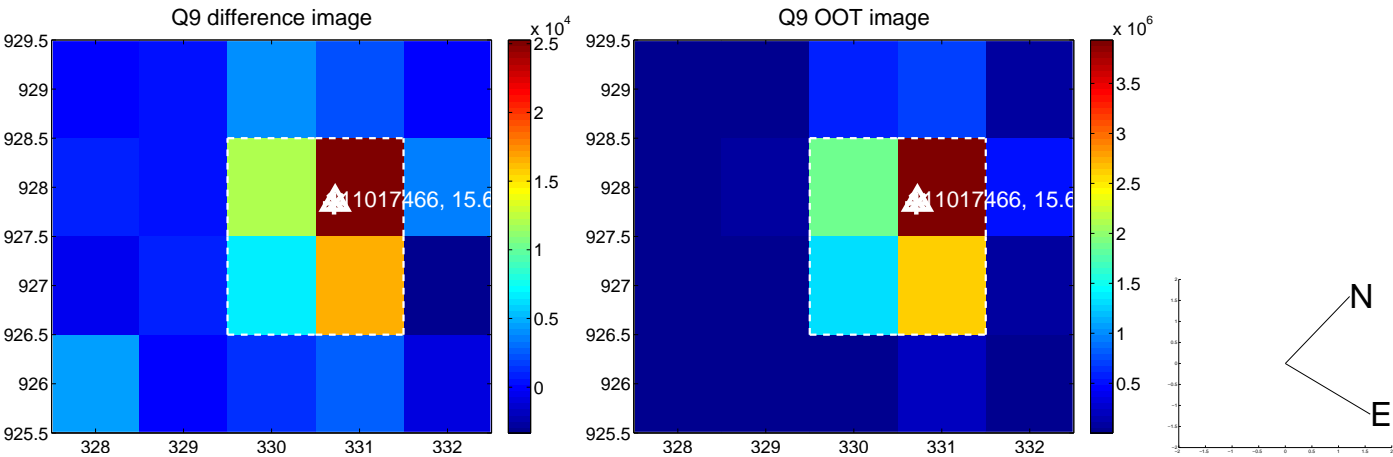
Q4 no OOT image



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.



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

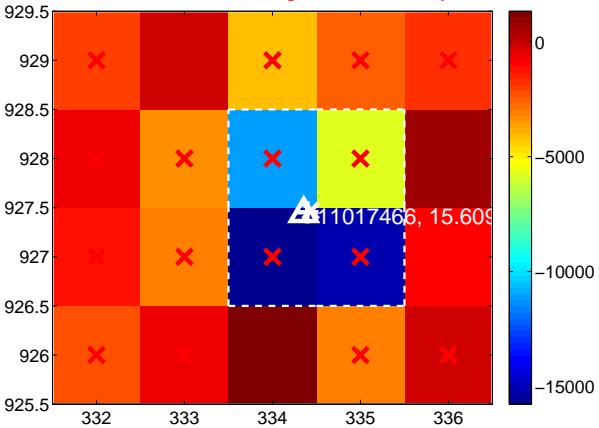
Q13 no difference image



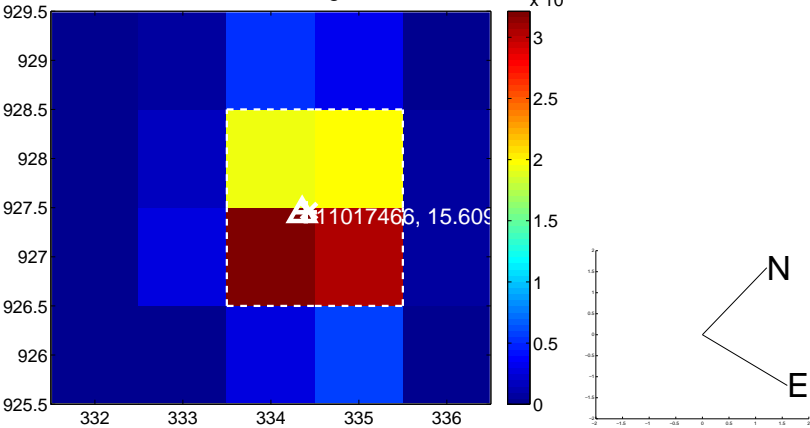
Q13 no OOT image



Q14 difference image. Poor Quality



Q14 OOT image



Q15 no difference image



Q15 no OOT image



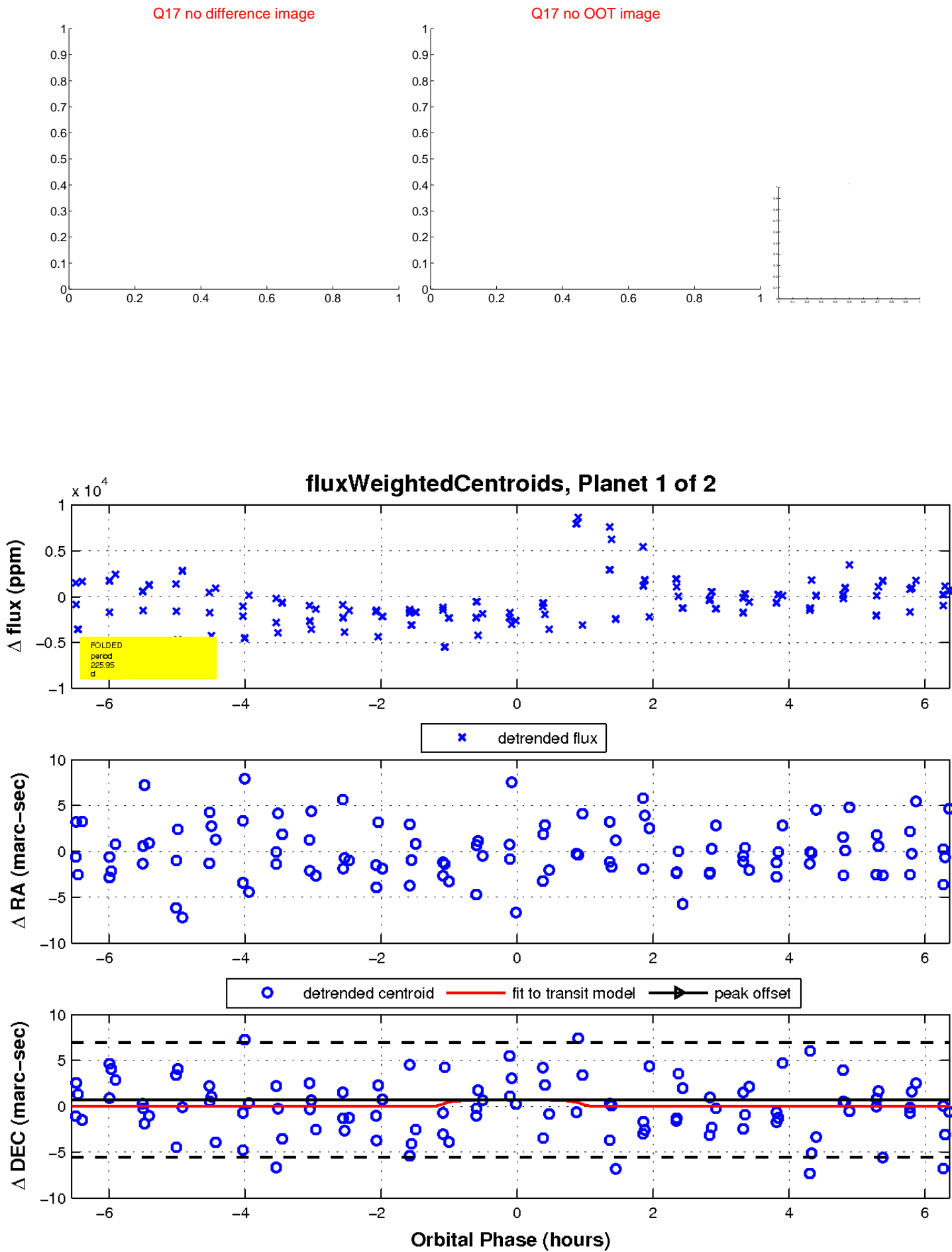
Q16 no difference image



Q16 no OOT image

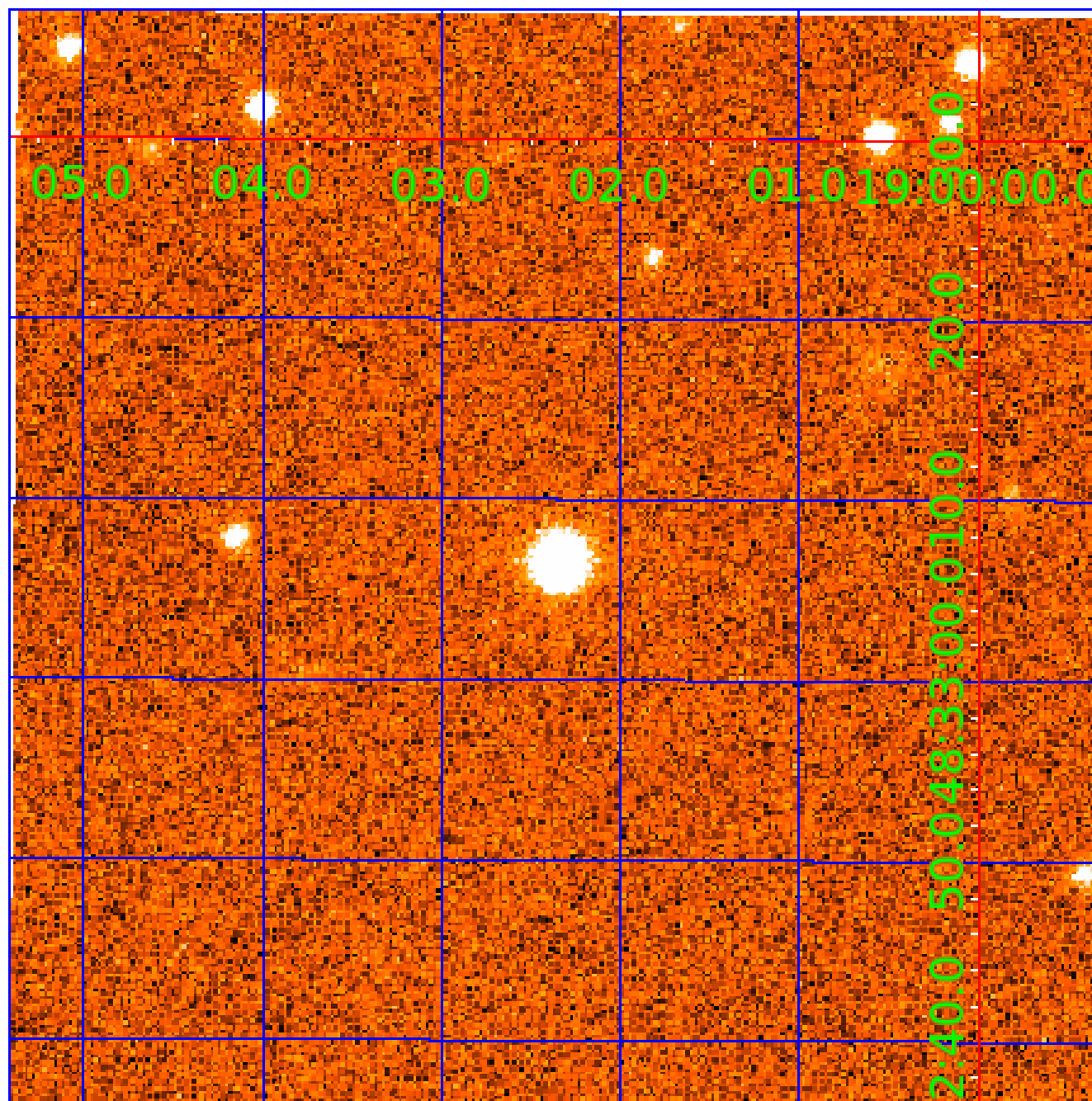


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 011017466

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})
011017466-01	OBS	No	225.953969	201.173677	2956.4	2.216	11.0	7.0	0.66	4907	3.71	0.58
011017466-02	OBS	No	164.194991	135.986718	2383.8	2.790	12.5	7.0	0.66	4907	3.16	0.89

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
011017466-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_MARSHALL_ZUMA—LPP_DV—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—INCONSISTENT_TRANS
011017466-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_MARSHALL—LPP_DV

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

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

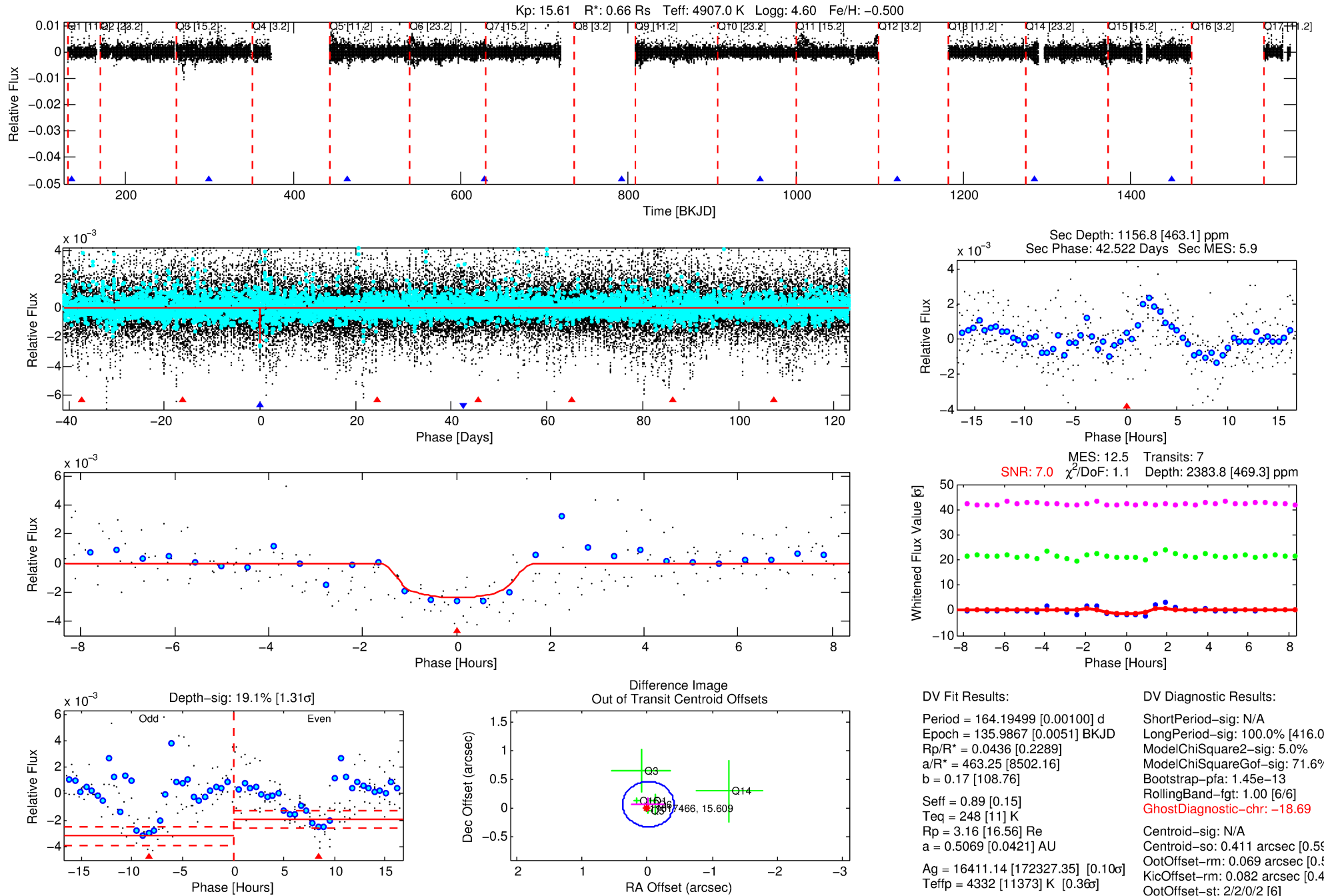
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 011017466-02

No Significant Match Found

DV One-Page Summary

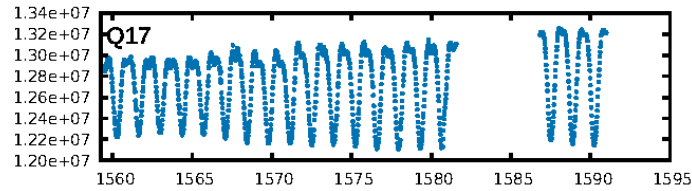
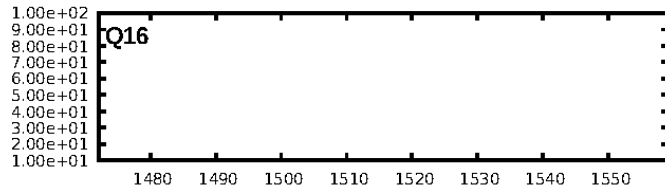
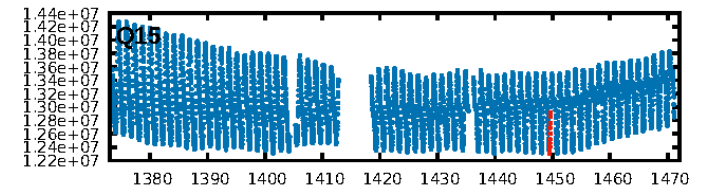
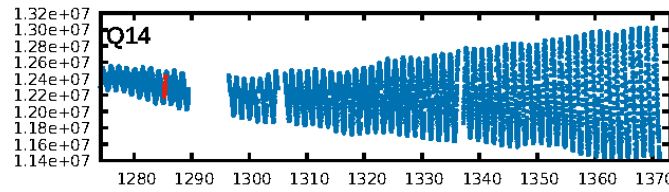
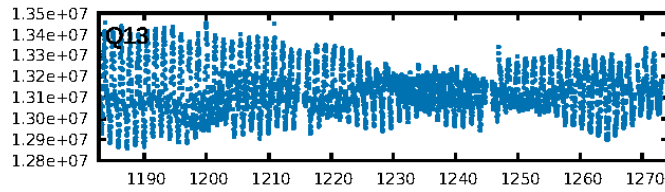
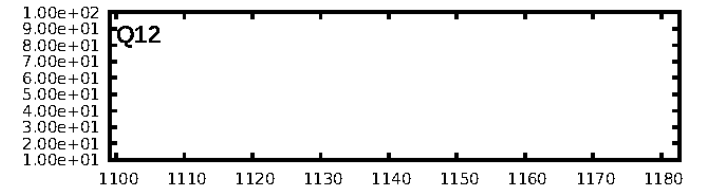
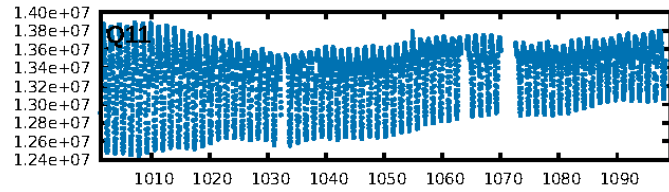
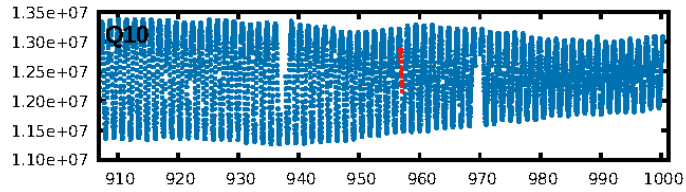
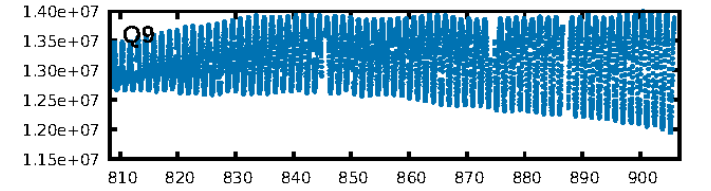
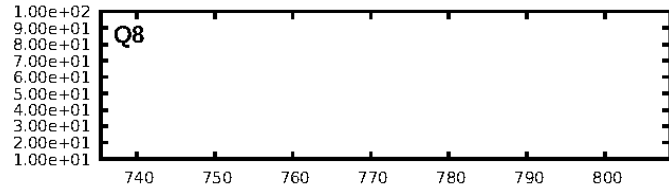
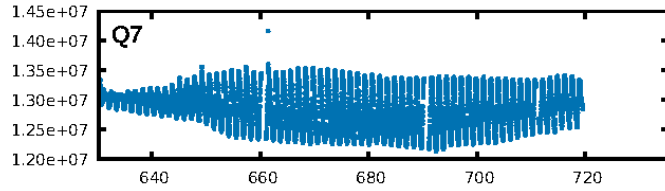
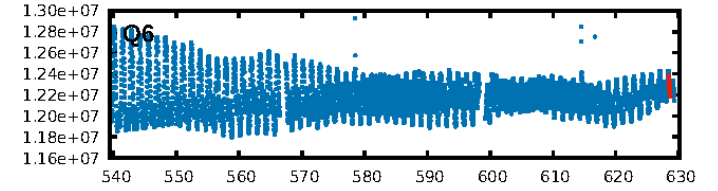
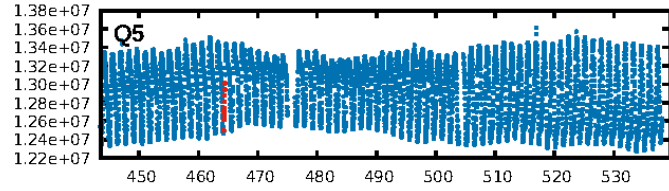
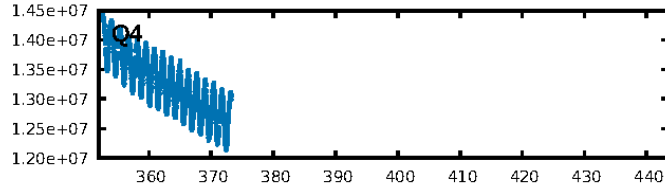
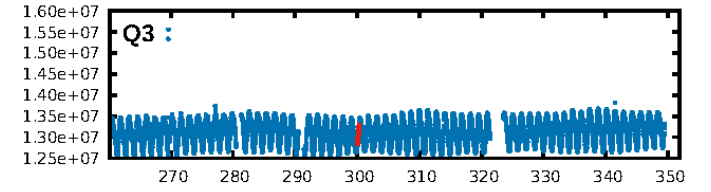
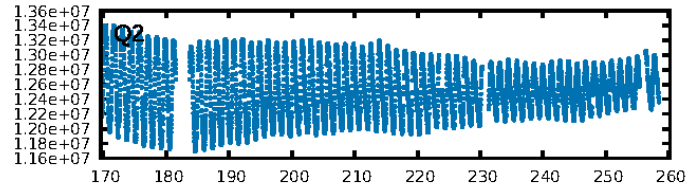
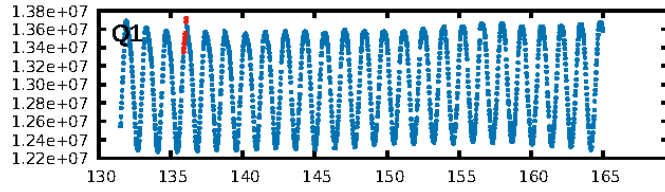
KIC: 11017466 Candidate: 2 of 2 Period: 164.195 d



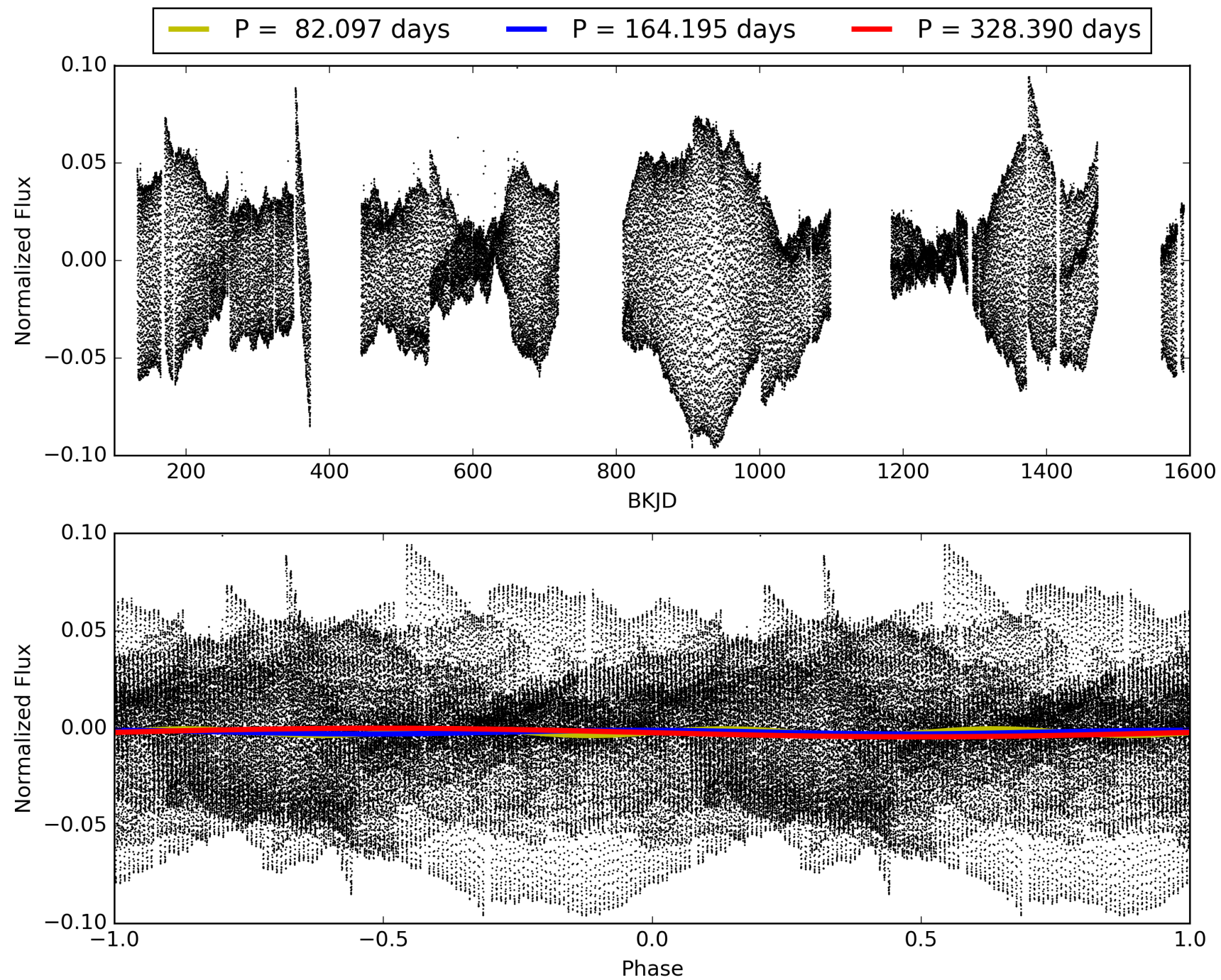
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 29-Jan-2016 06:00:29 Z

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

TCE 011017466-02, PDC Light Curves

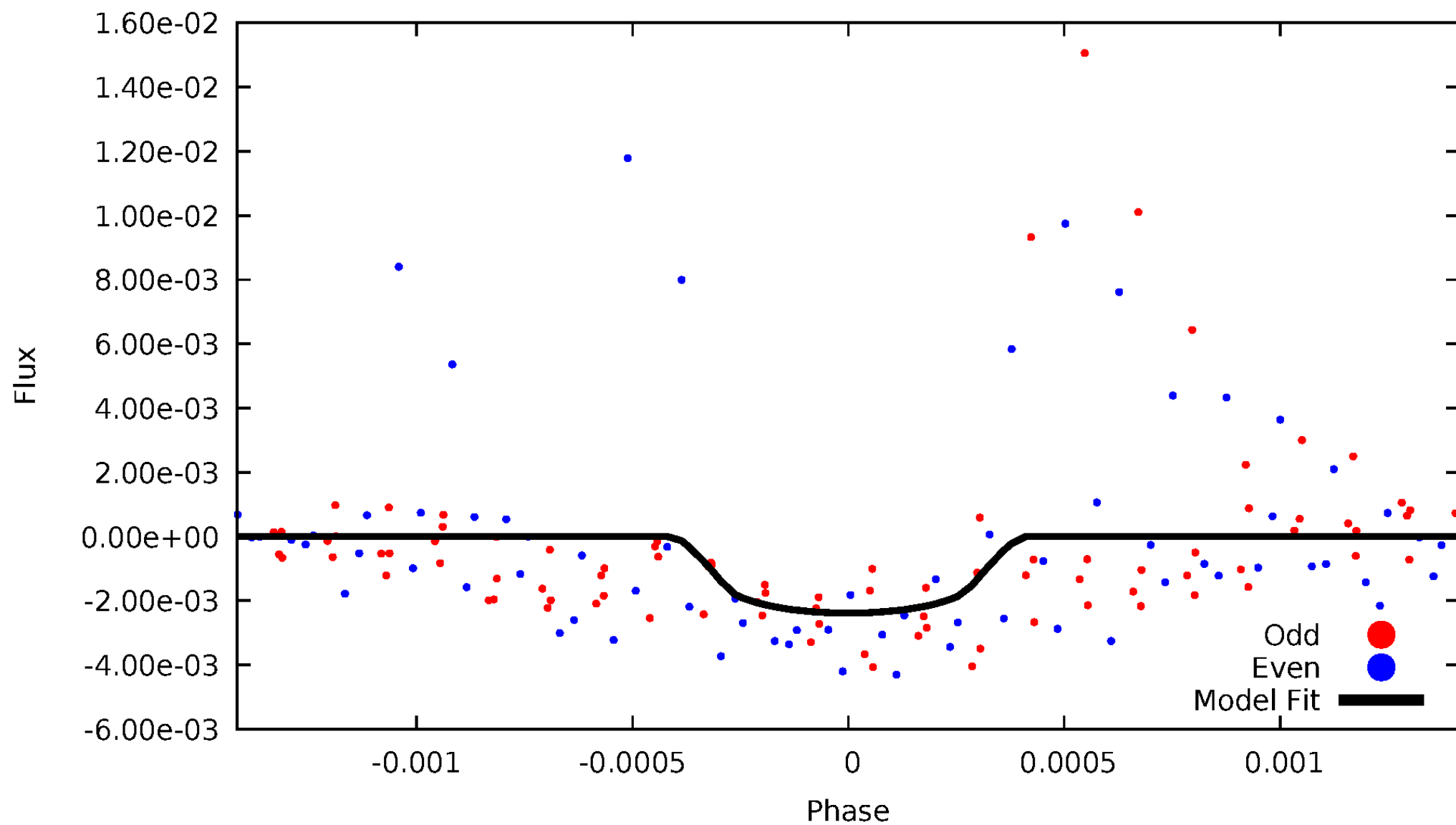


TCE 011017466-02



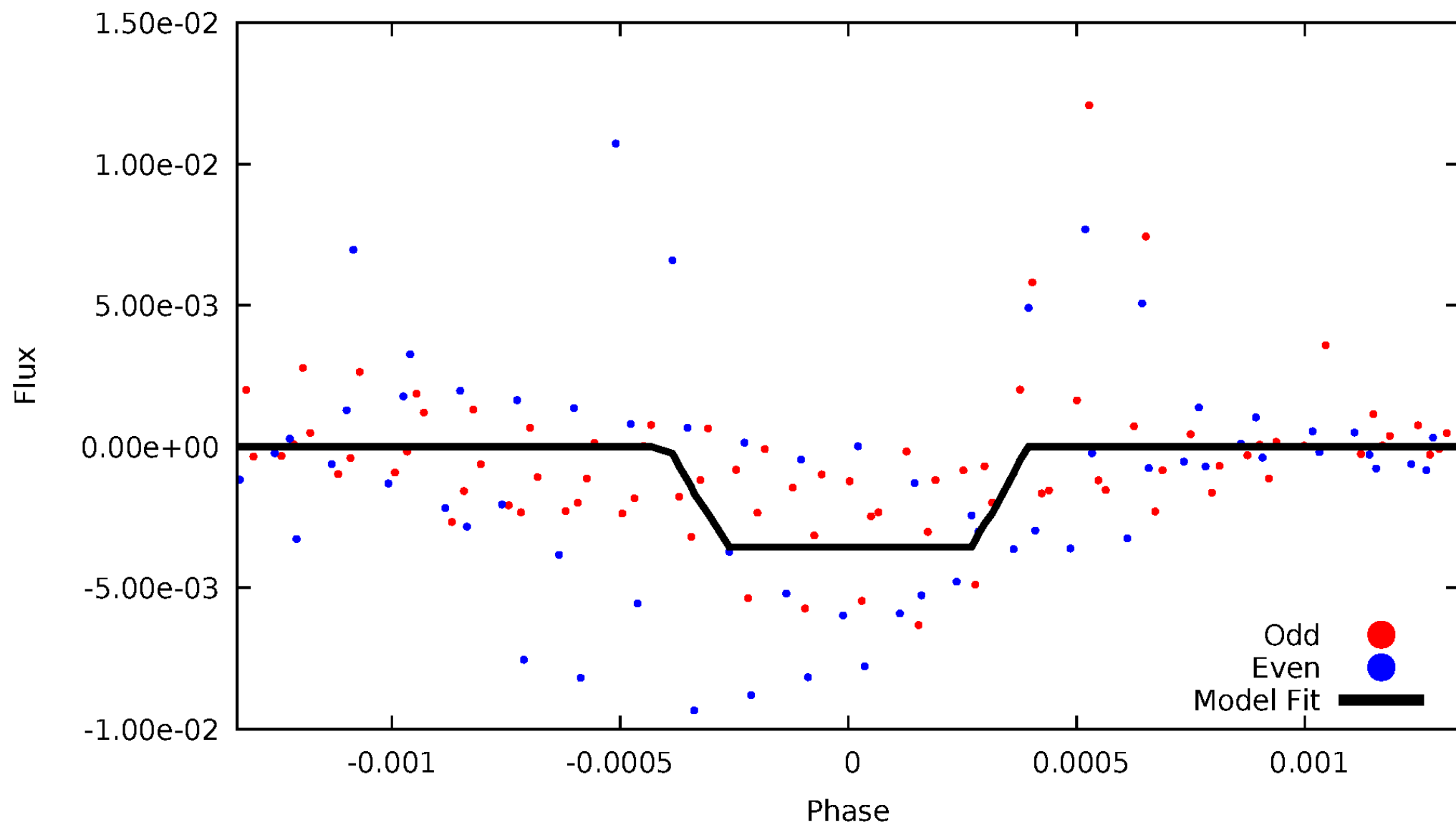
DV Odd/Even

TCE 011017466-02



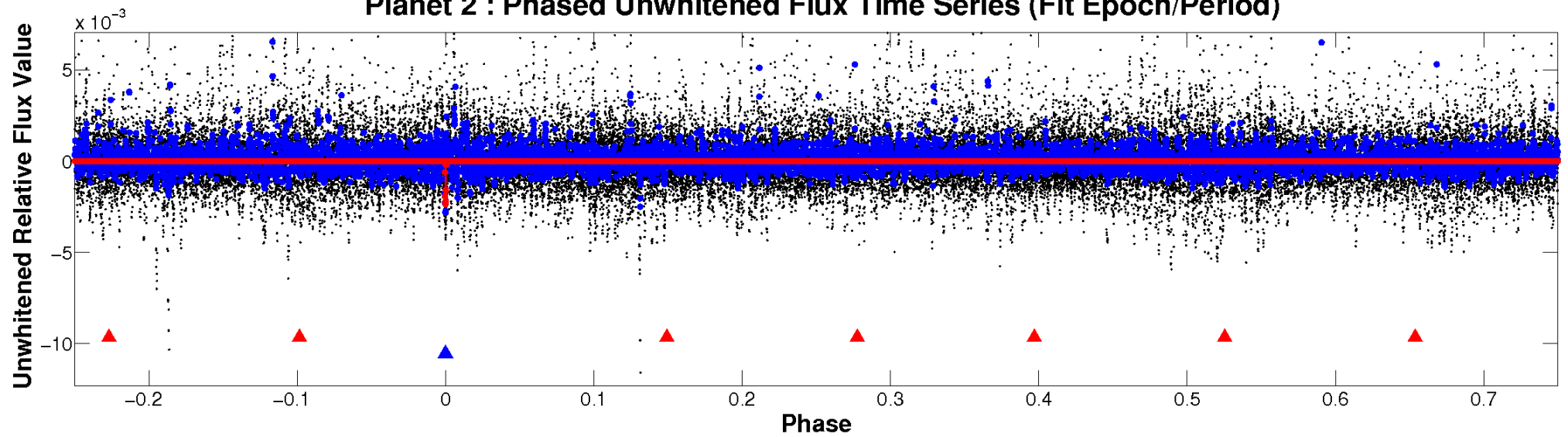
ALT Odd/Even

TCE 011017466-02

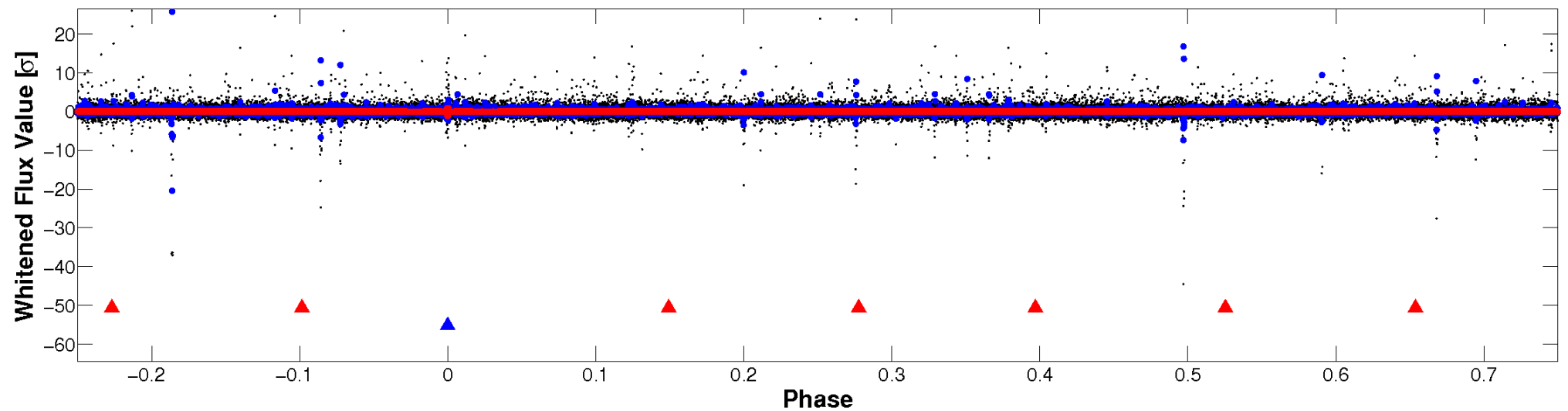


Non-Whitened Vs. Whitened Light Curve

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

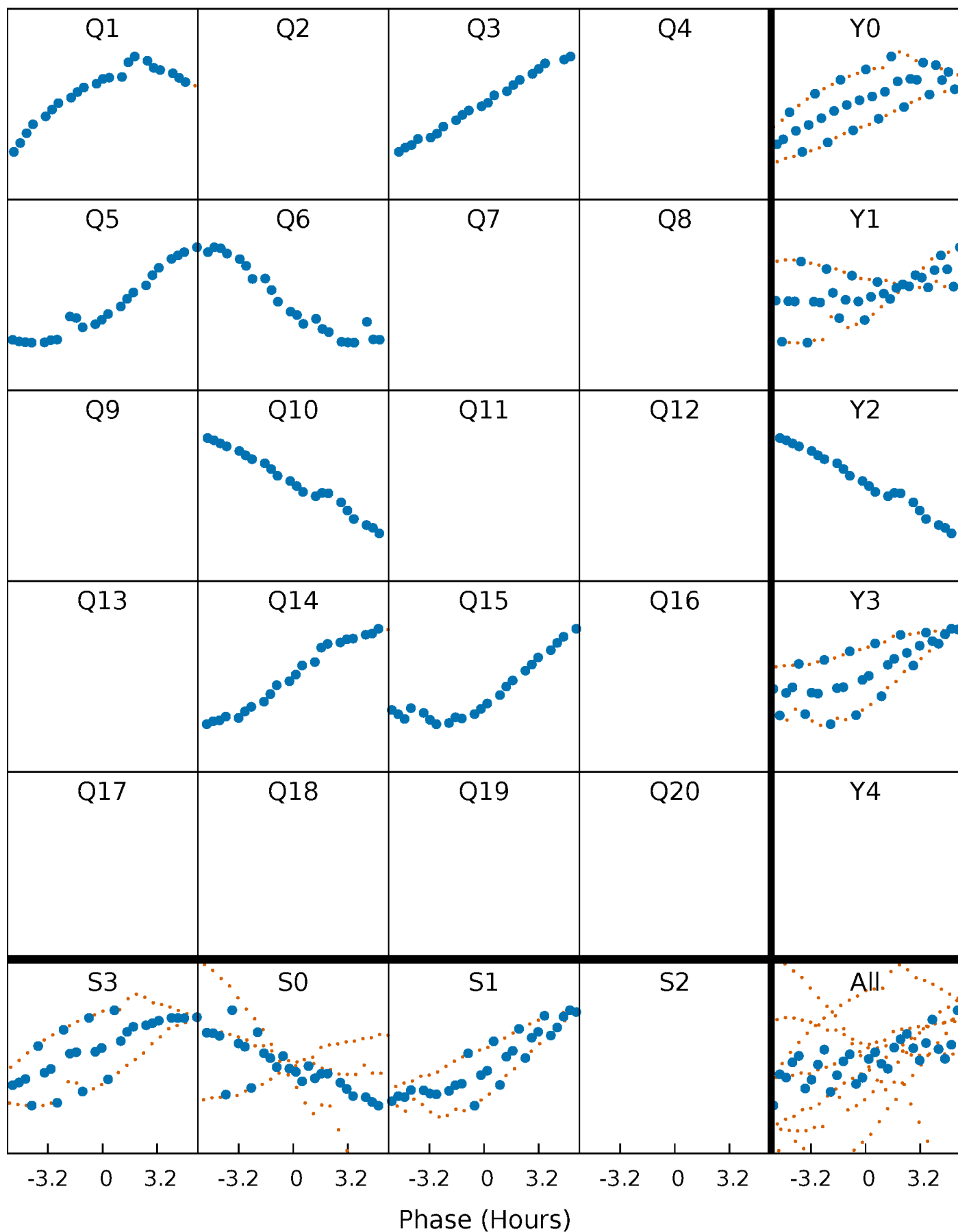


Planet 2 : Phased Whitened Flux Time Series (Fit Epoch/Period)



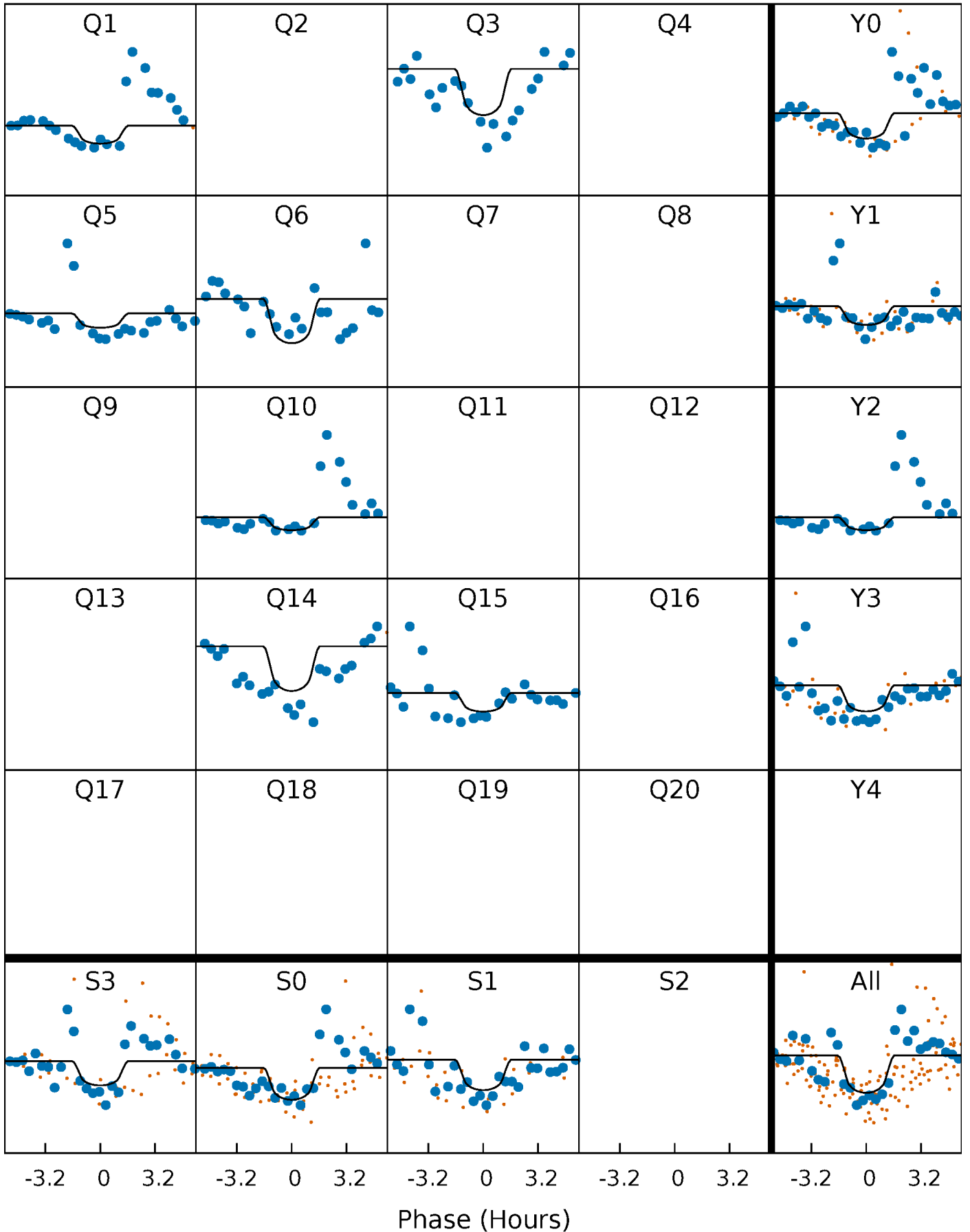
PDC Quarter-Phased Transit Curves

TCE 011017466-02 $P=164.194991$ Days $T_0=135.986718$ (BKJD)



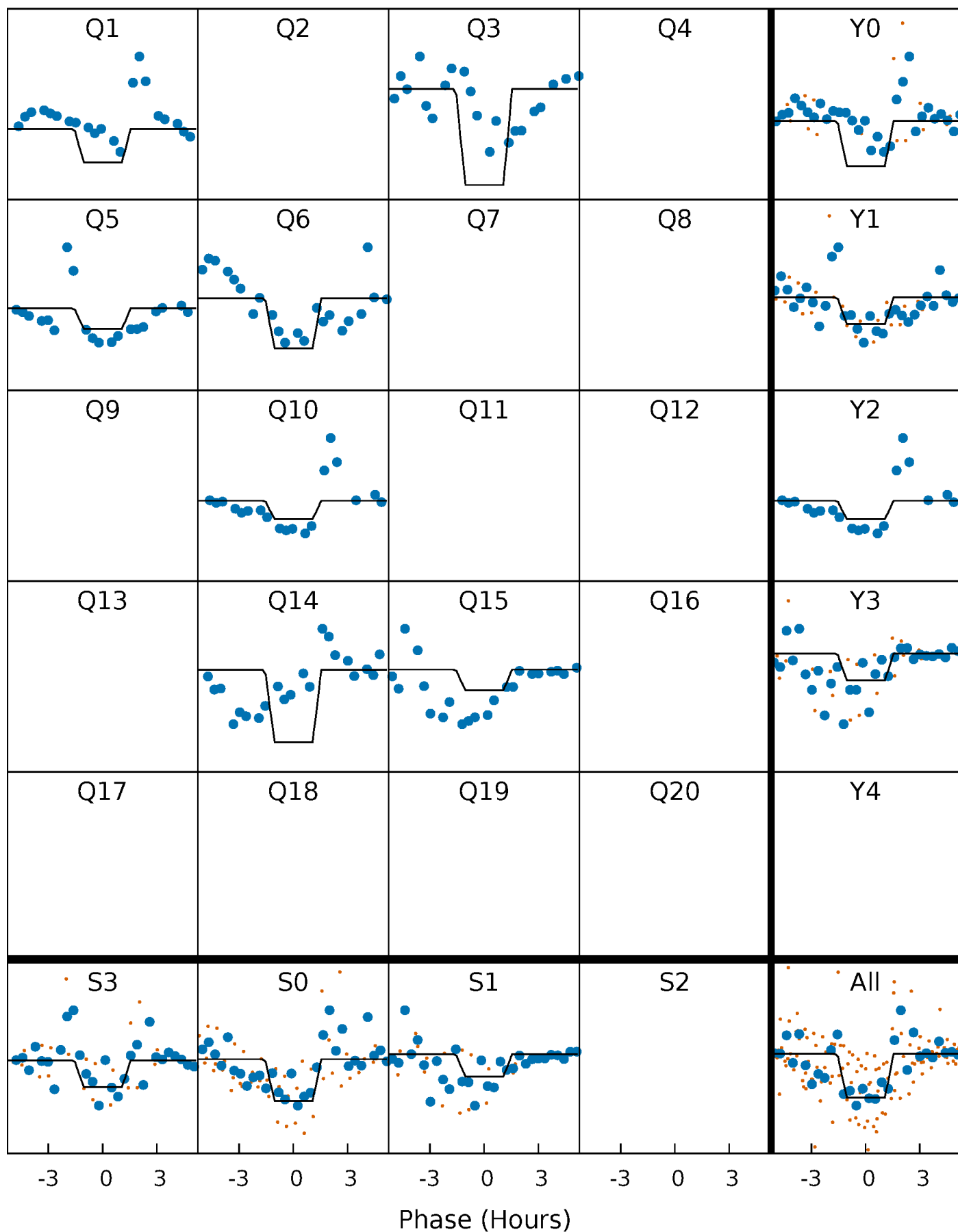
DV Quarter-Phased Transit Curves

TCE 011017466-02 P=164.194991 Days $T_0=135.986718$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

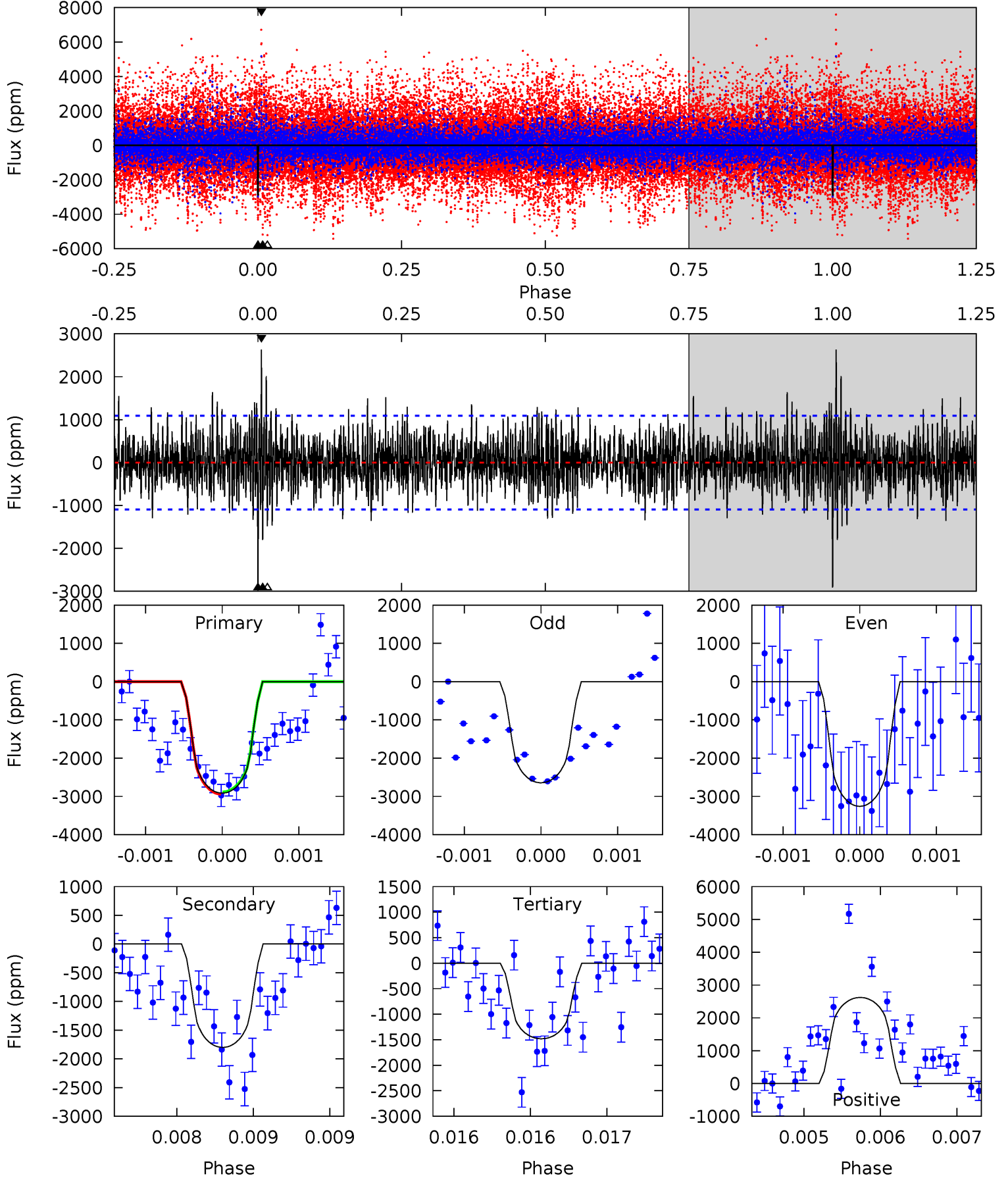
TCE 011017466-02 P=164.196191 Days $T_0=135.984070$ (BKJD)



DV Model-Shift Uniqueness Test

011017466-02, P = 164.194991 Days, E = 135.986718 Days

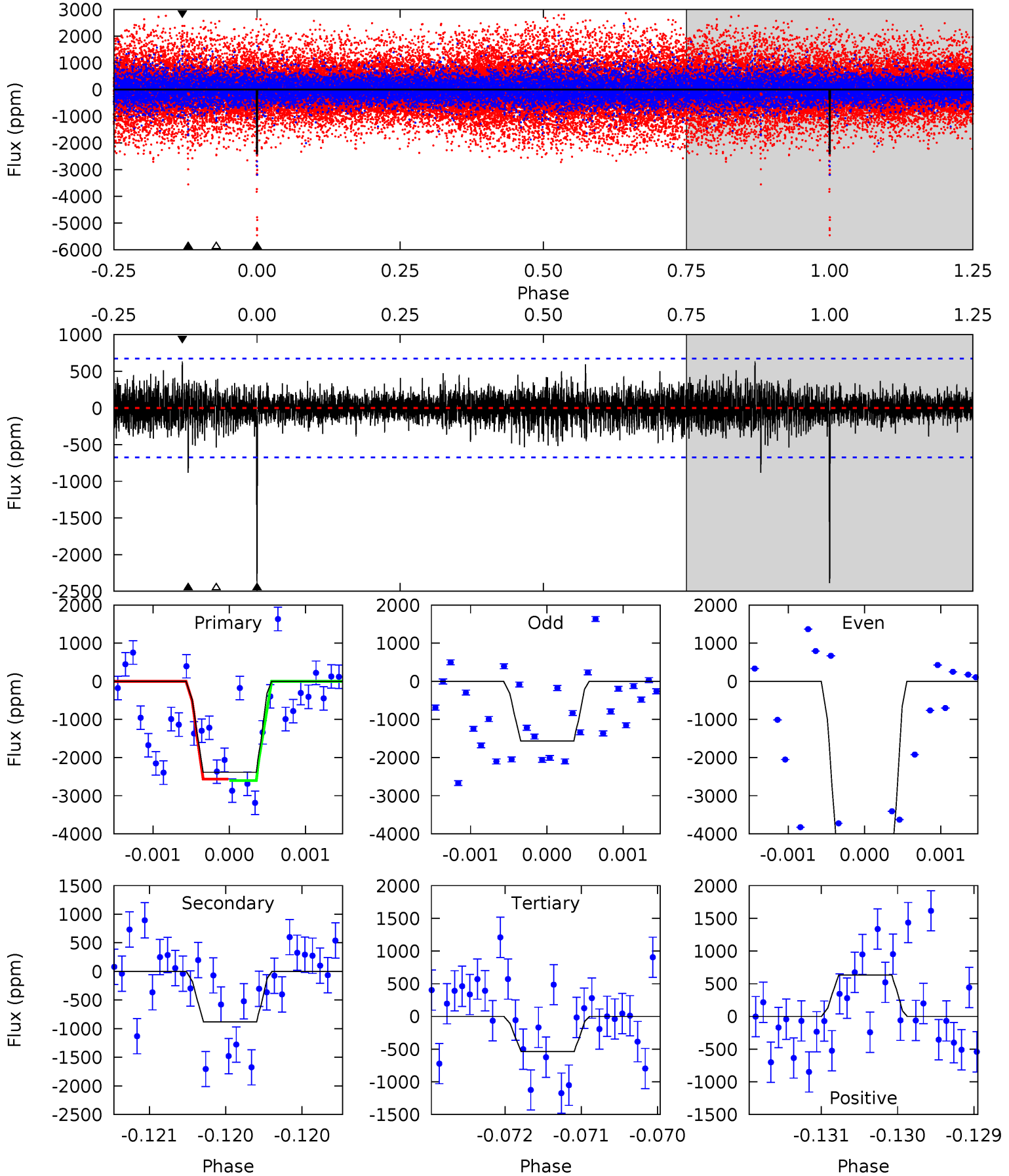
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
14.7	9.06	7.46	13.2	5.50	3.36	2.35	7.21	1.47	1.61	-4.13	1.50	0.96	0.47	0.15



Alt Model-Shift Uniqueness Test

011017466-02, P = 164.196191 Days, E = 135.984070 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
19.5	7.20	4.38	5.17	5.50	3.37	1.16	15.1	14.3	2.81	2.02	13.8	1.35	0.21	0.16



Stellar Parameters For KIC 011017466

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	M (M_{\odot})	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	4907^{+147}_{-132}	$4.604^{+0.070}_{-0.035}$	$-0.500^{+0.300}_{-0.300}$	$0.663^{+0.057}_{-0.063}$	$0.645^{+0.082}_{-0.041}$	$3.109^{+0.886}_{-0.479}$
	+3%/-3%	+2%/-1%	+60%/-60%	+9%/-10%	+13%/-6%	+29%/-15%
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 011017466-02 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-1800 ± 199	$12.90^{+12.37}_{-8.47}$	344^{+13}_{-13}	3020^{+1155}_{-496}	1593^{+11056}_{-1184}
Alt.	-881 ± 122	$12.65^{+13.67}_{-8.51}$	344^{+11}_{-13}	2739^{+1156}_{-429}	778^{+7341}_{-589}

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 $A_{obs} \gg 1.0$

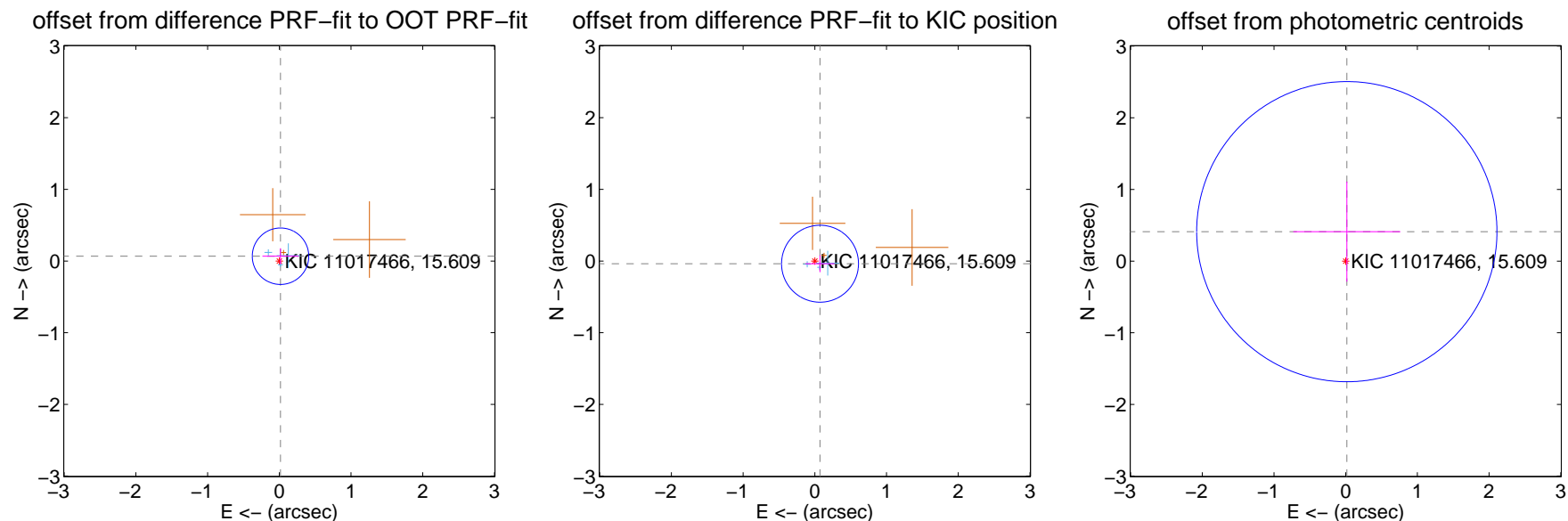
DV Centroid Data

Supplemental centroid analysis for 011017466-02. Kepler magnitude: 15.61. Transit SNR 7.04

There are 3 quarters with good PRF difference image offsets

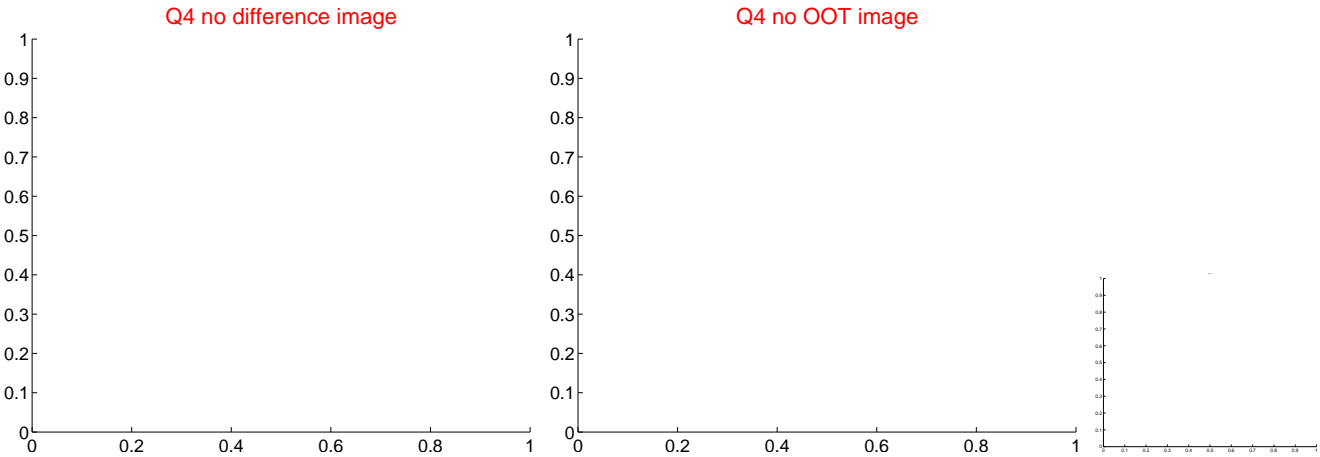
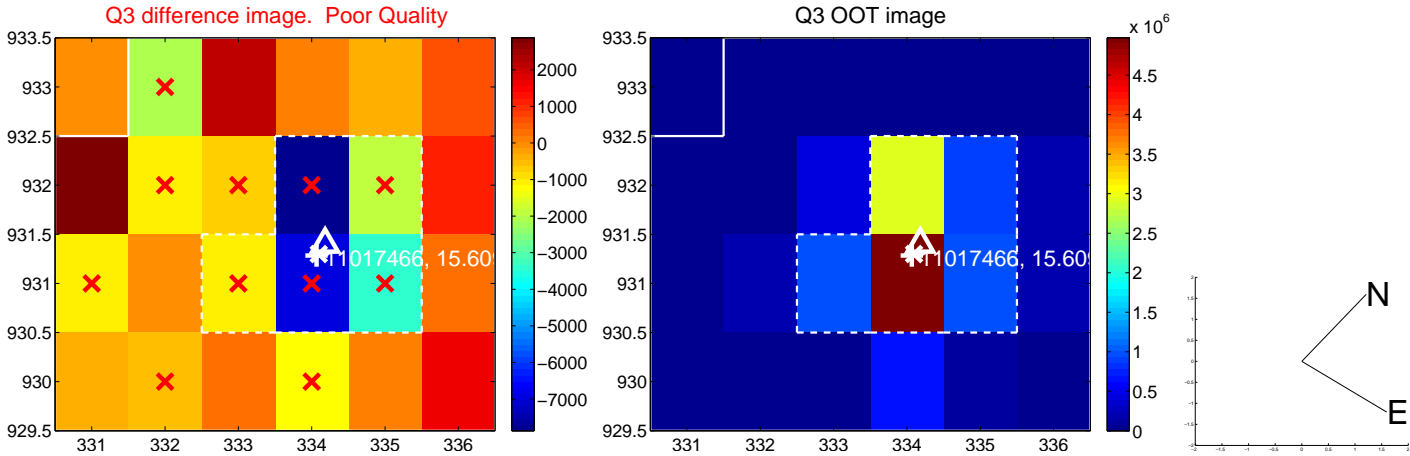
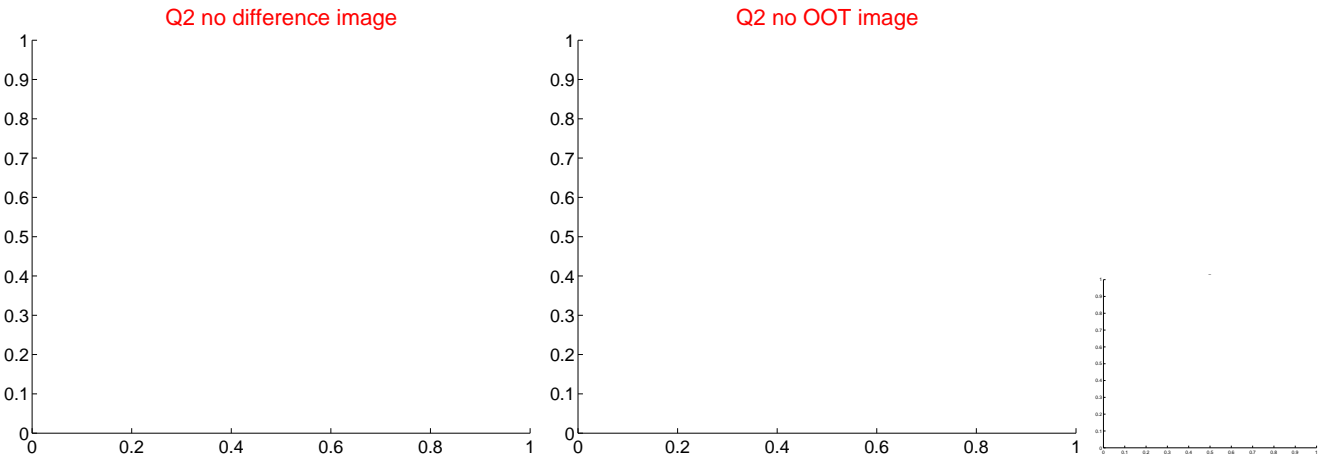
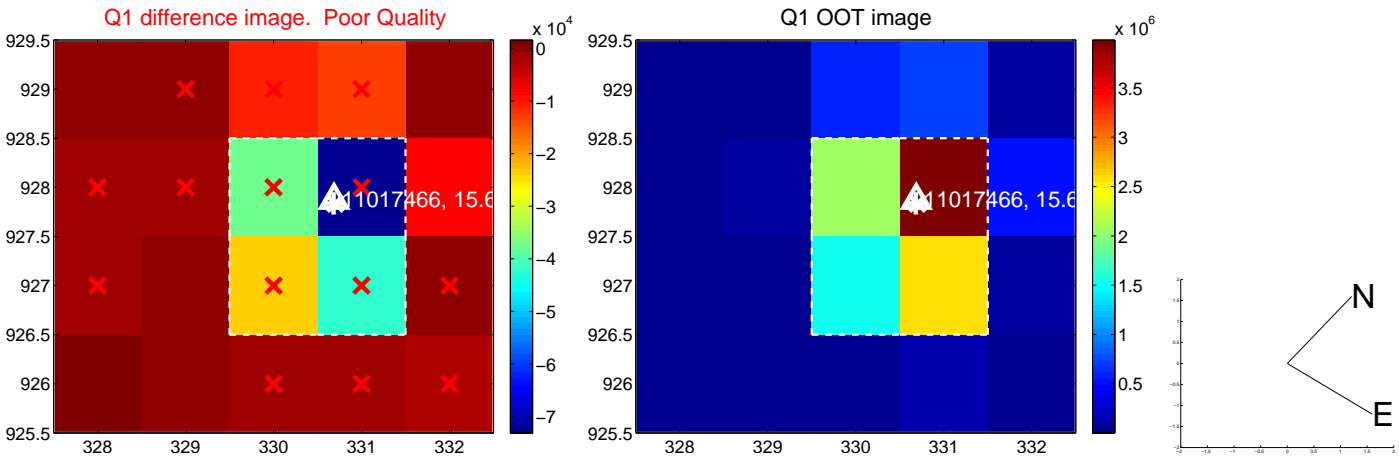
The direct PRF centroid is offset from the target star catalog position by about 0.17 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.069 ± 0.131	0.53	-0.017 ± 0.252	0.067 ± 0.111
PRF-fit source offset from KIC position	0.082 ± 0.179	0.46	-0.073 ± 0.201	-0.038 ± 0.118
photometric centroid source offset	0.41 ± 0.70	0.59	-0.02 ± 0.75	0.41 ± 0.70

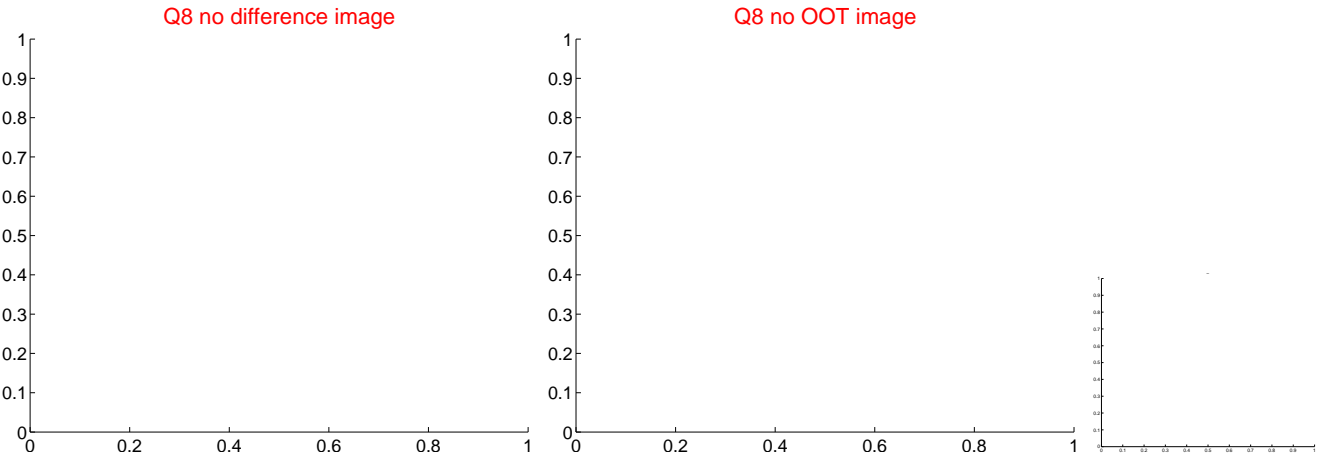
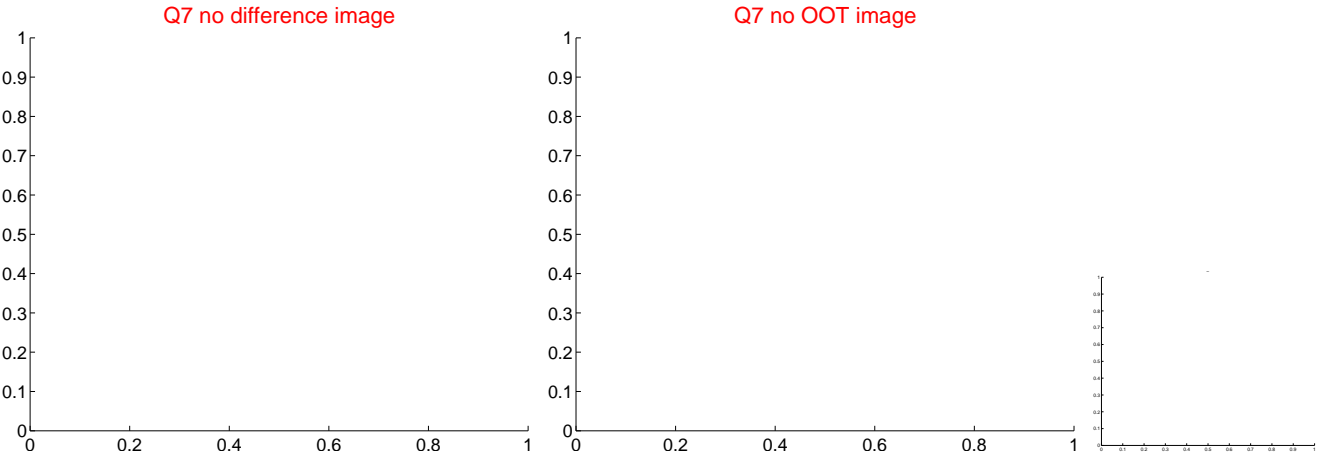
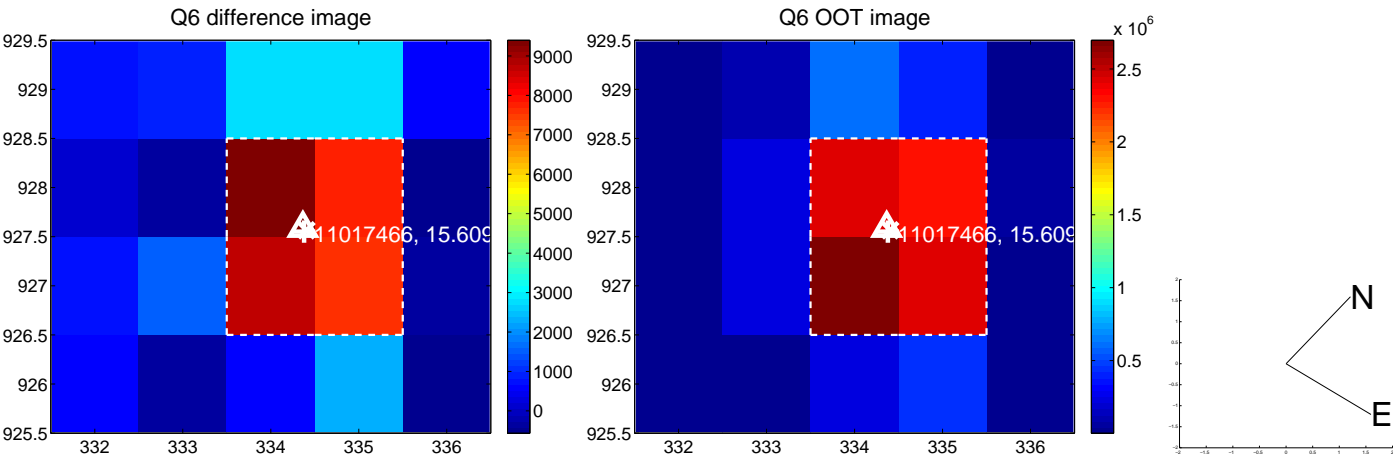
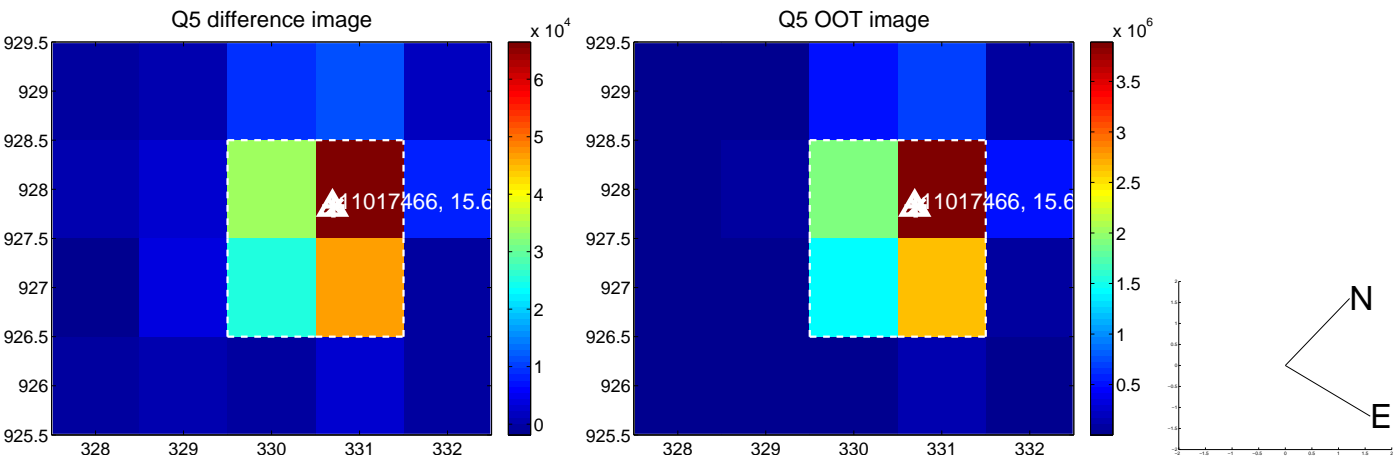


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

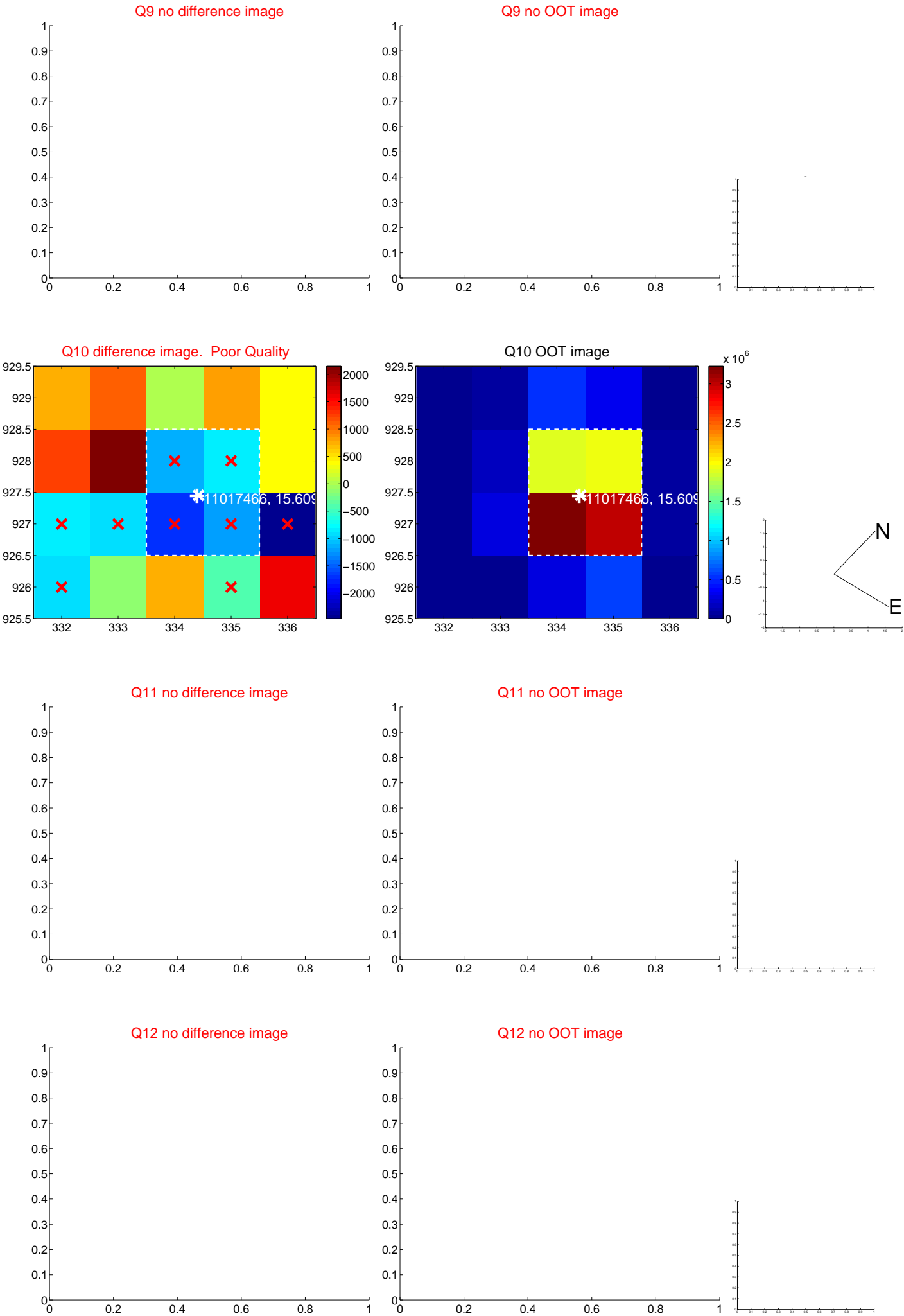
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

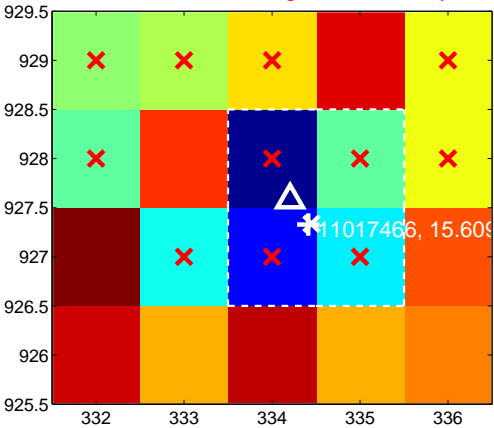
Q13 no difference image



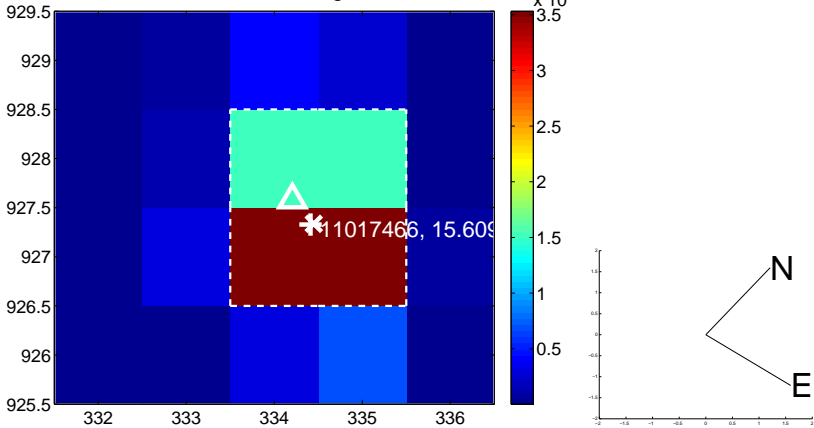
Q13 no OOT image



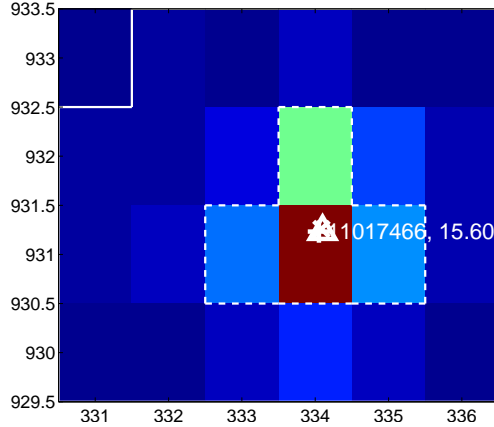
Q14 difference image. Poor Quality



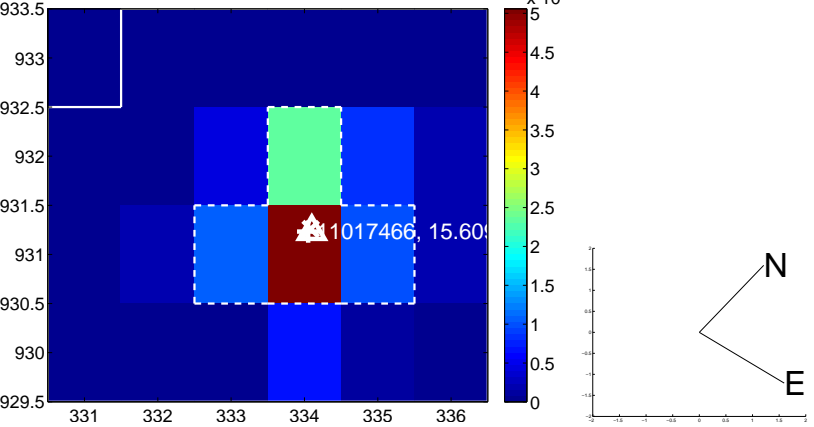
Q14 OOT image



Q15 difference image



Q15 OOT image



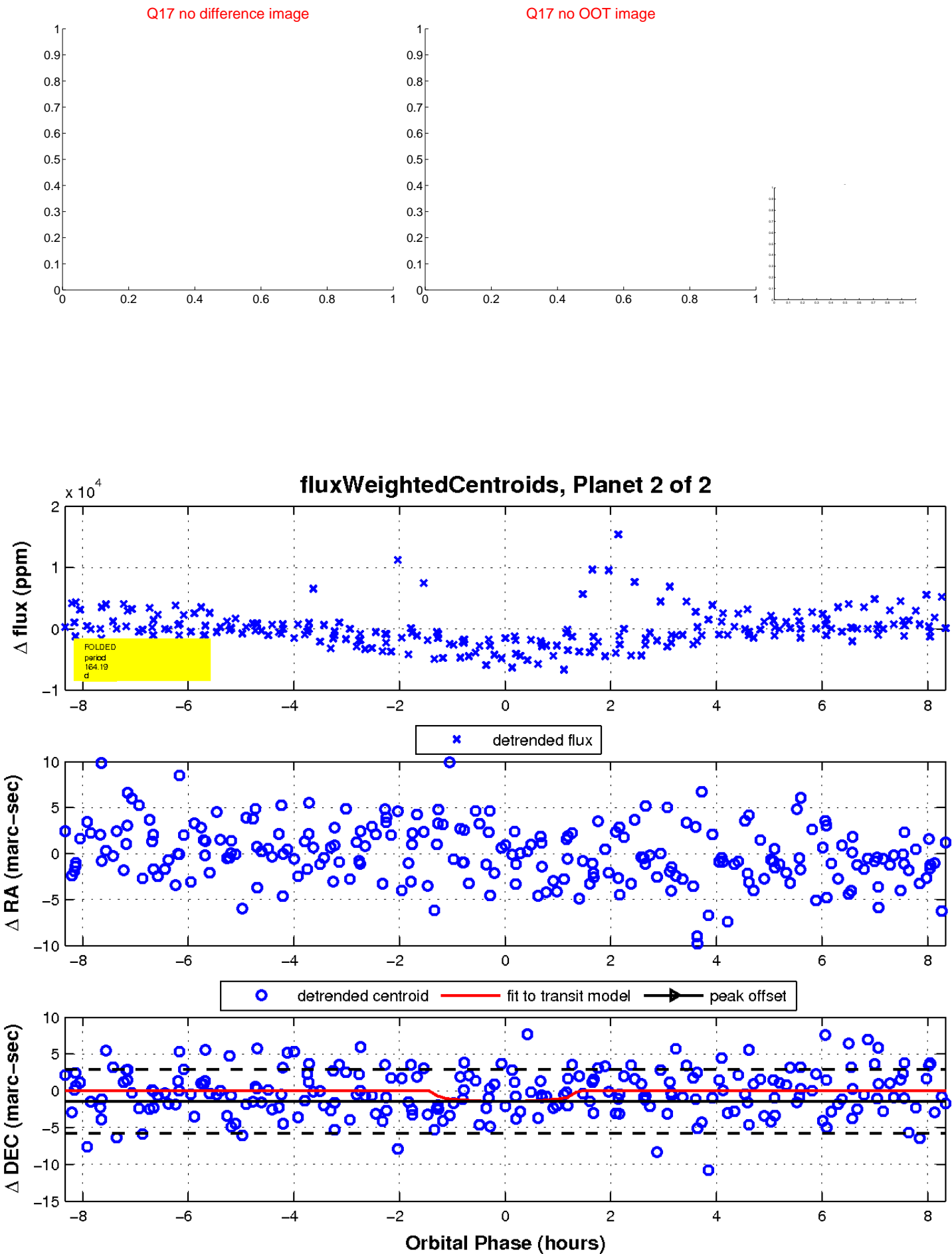
Q16 no difference image



Q16 no OOT image



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



UKIRT Image

Declination

