

KIC 007350067

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})
007350067-01	OBS	6863.01	4.485590	135.431953	2240.4	0.834	22.4	39.7	0.19	3236	0.94	4.21
007350067-02	OBS	No	287.029062	332.555145	3119.6	4.263	13.8	8.1	0.19	3236	1.07	0.02
007350067-03	OBS	No	279.498556	347.344021	3972.2	5.834	13.0	10.1	0.19	3236	1.21	0.02
007350067-04	OBS	No	258.389148	137.445671	1921.0	3.957	11.1	6.5	0.19	3236	0.83	0.02
007350067-05	OBS	No	367.993067	207.889083	2614.2	11.600	10.7	7.3	0.19	3236	1.17	0.01
007350067-06	OBS	No	211.665139	221.872541	1892.9	4.650	11.0	6.6	0.19	3236	0.83	0.03
007350067-07	OBS	No	305.778173	241.657053	2703.7	3.000	11.9	-1.0	0.19	3236	0.99	0.01

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
007350067-01	OBS	PC	1.00	0	0	0	0	CENT_KIC_POS
007350067-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_MARSHALL—LPP_DV—MOD_POS_DV—INCONSISTENT_TRANS—CENT_FEW_DIFFS
007350067-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_MARSHALL—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_POS_DV—CENT_FEW_DIFFS
007350067-04	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_MARSHALL_SKYE—LPP_DV—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—CENT_KIC_POS
007350067-05	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_MARSHALL—LPP_DV—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—INCONSISTENT_TRANS—CENT_FEW_DIFFS
007350067-06	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_MARSHALL_SKYE—LPP_DV—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV
007350067-07	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_MARSHALL—LPP_DV—ALL_TRANS_CHASES—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.

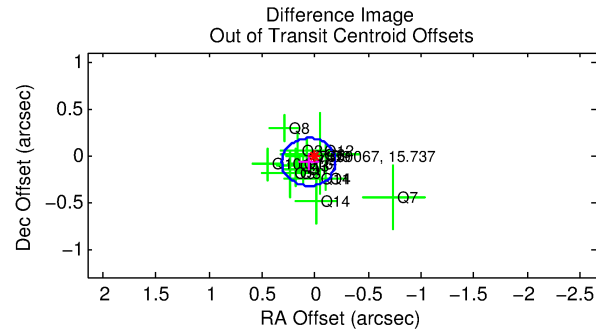
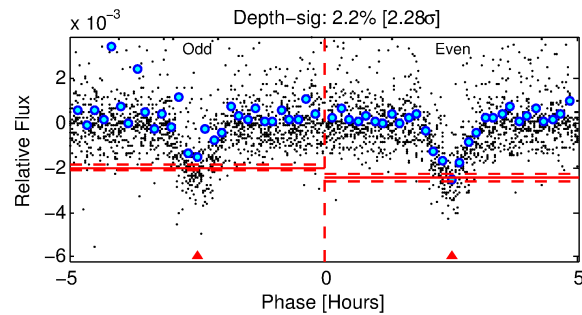
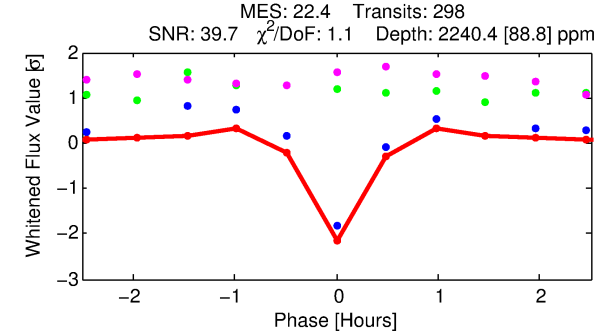
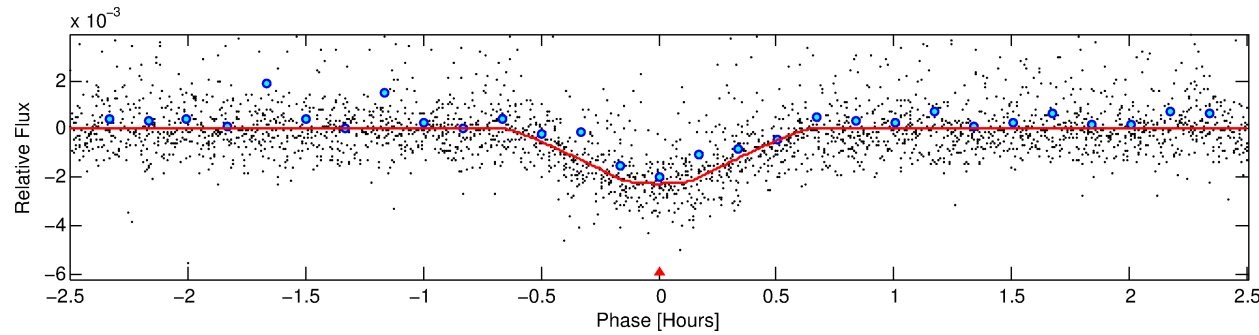
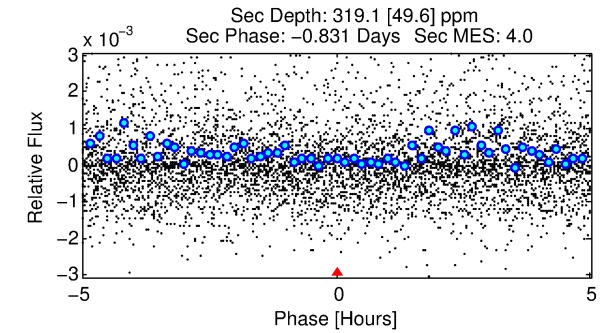
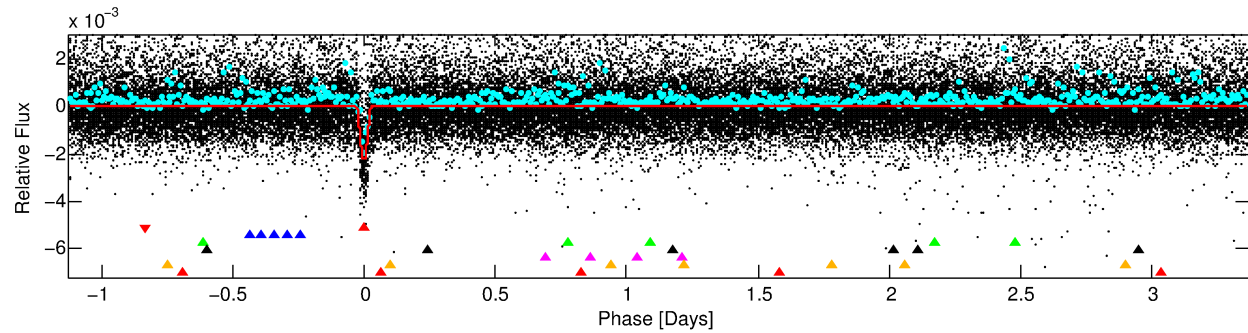
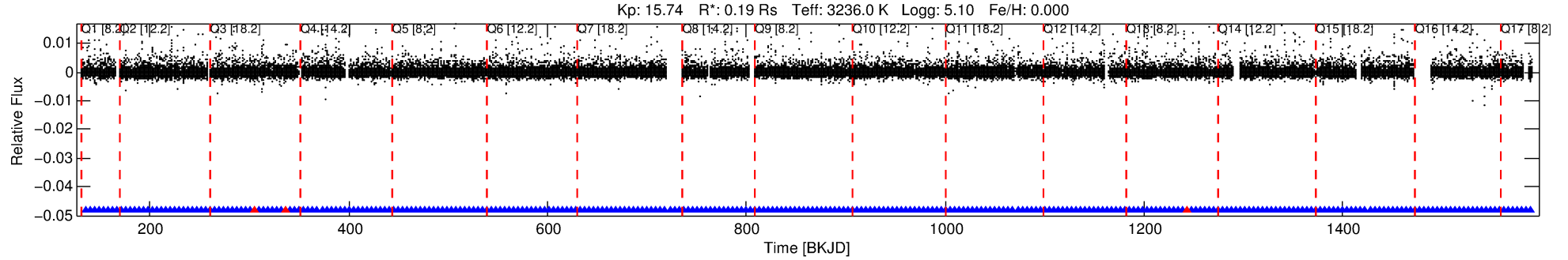
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 007350067-01

No Significant Match Found

DV One-Page Summary

KIC: 7350067 Candidate: 1 of 7 Period: 4.486 d
KOI: K06863.01 Corr: 0.974



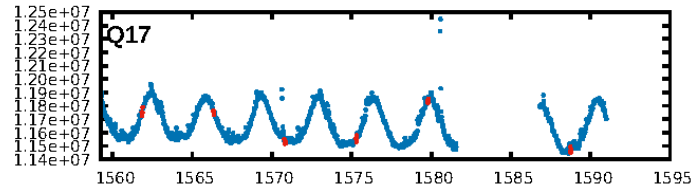
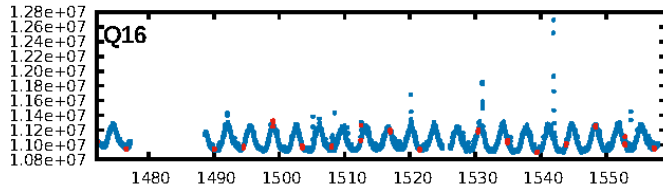
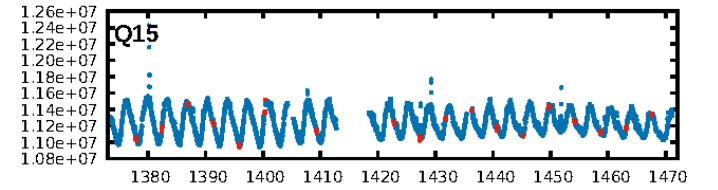
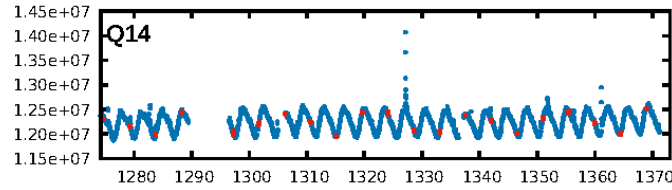
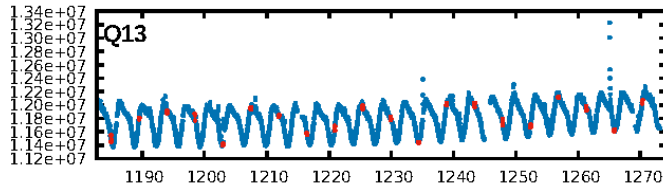
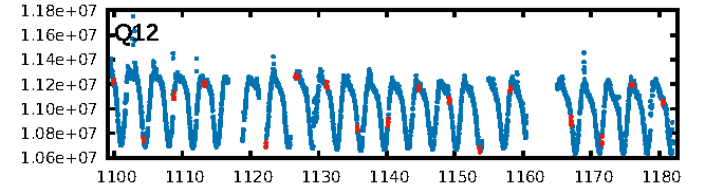
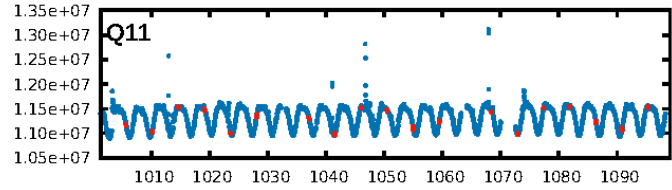
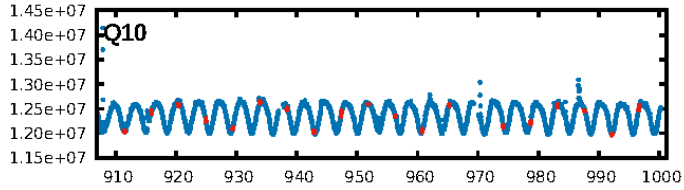
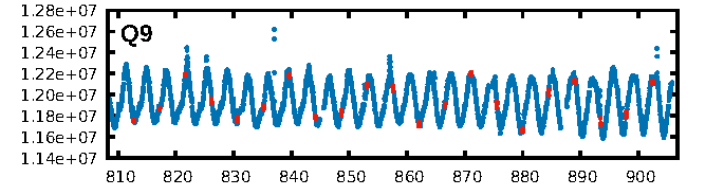
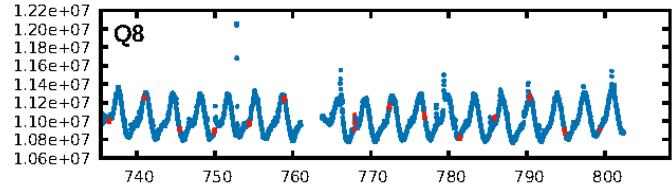
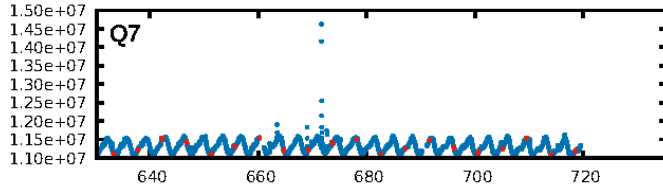
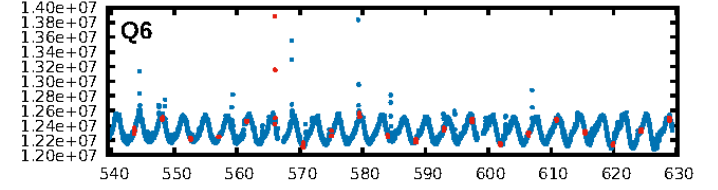
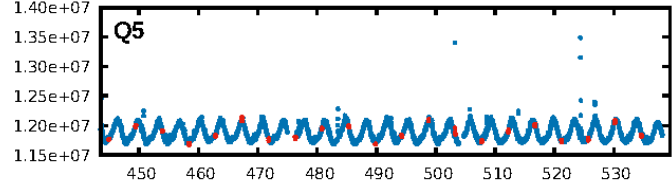
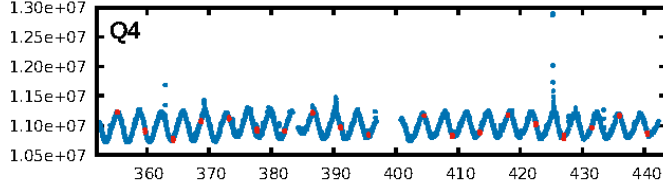
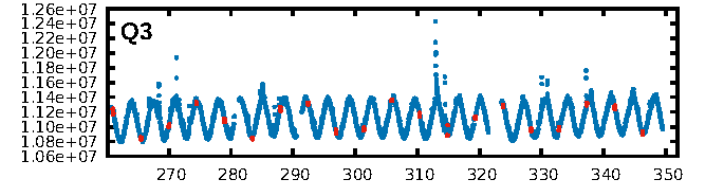
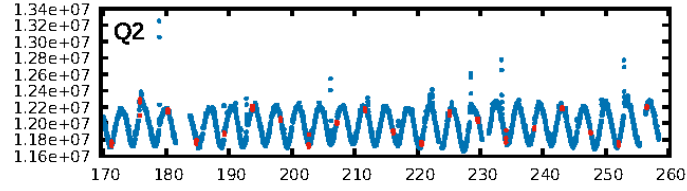
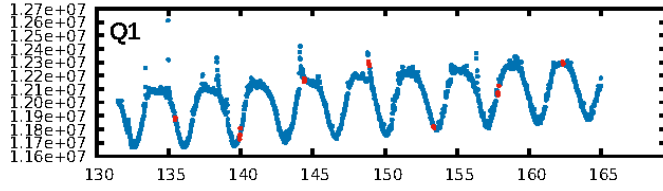
DV Fit Results:

Period = 4.48559 [0.00000] d
Epoch = 135.4320 [0.0005] BKJD
Rp/R* = 0.0448 [0.0091]
a/R* = 38.22 [33.39]
b = 0.48 [1.43]
Seff = 4.21 [0.65]
Teq = 365 [14] K
Rp = 0.94 [0.25] Re
a = 0.0295 [0.0037] AU
Ag = 171.75 [78.50] [2.18σ]
Teffp = 2044 [223] K [7.51σ]

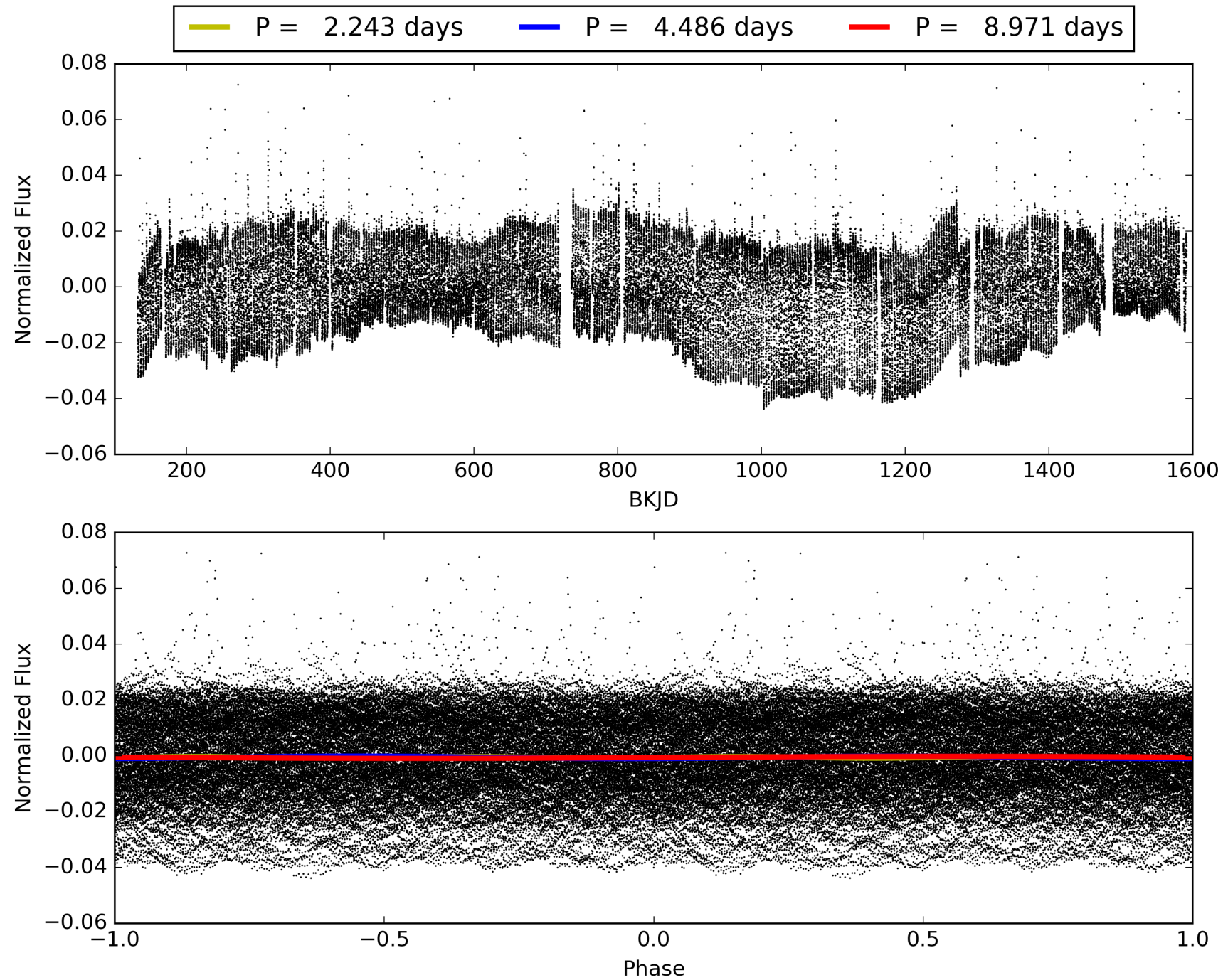
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: 100.0% [1052.45σ]
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: N/A
RollingBand-fgt: 0.99 [282/285]
GhostDiagnostic-chr: 1.732
Centroid-sig: N/A
Centroid-so: 0.733 arcsec [3.33σ]
OotOffset-rm: 0.095 arcsec [1.12σ]
KicOffset-rm: 0.392 arcsec [4.41σ]
OotOffset-st: 4/4/4/4 [16]
KicOffset-st: 4/4/4/4 [16]
DiffImageQuality-fgm: 0.94 [15/16]
DiffImageOverlap-fno: 1.00 [17/17]

TCE 007350067-01, PDC Light Curves

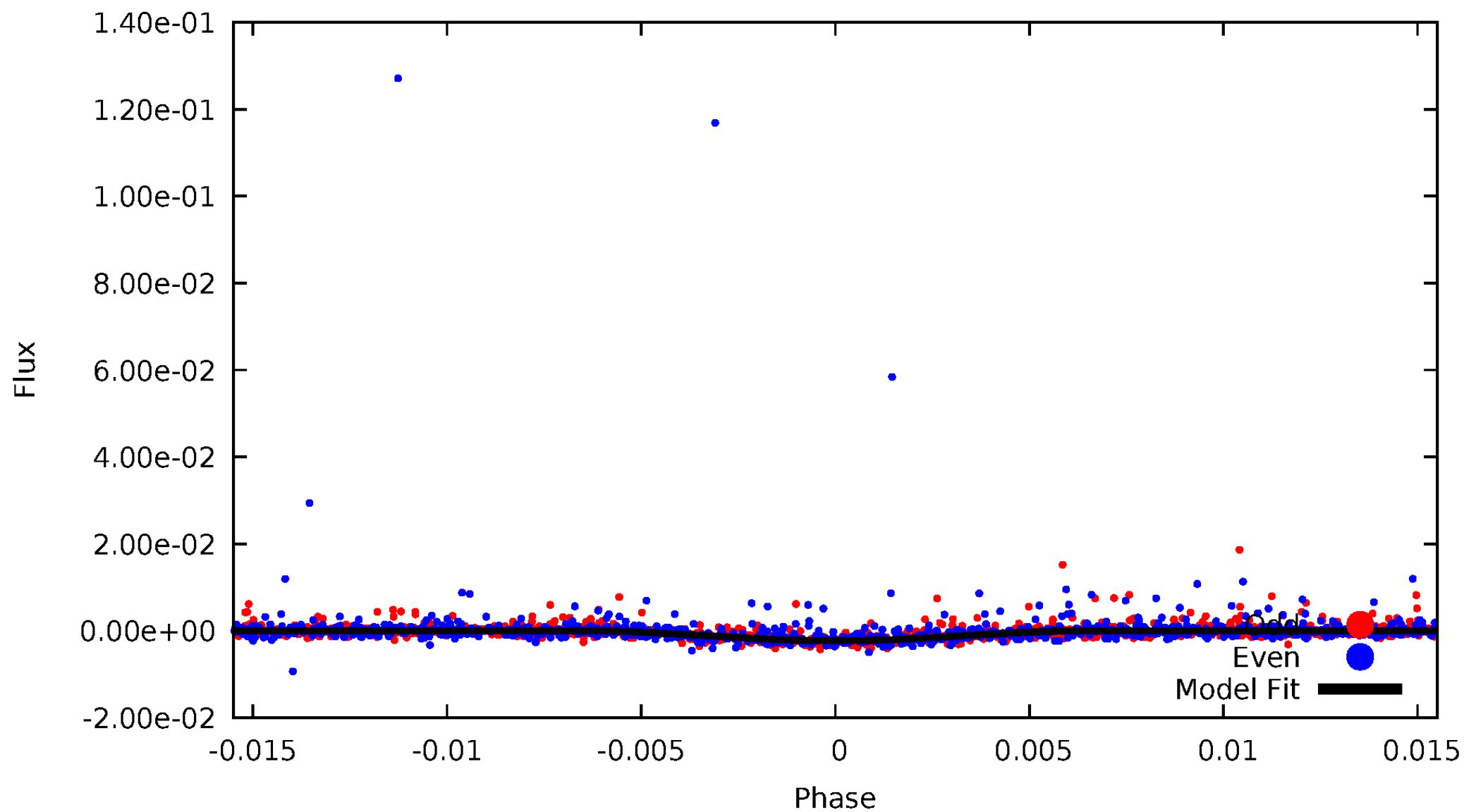


TCE 007350067-01



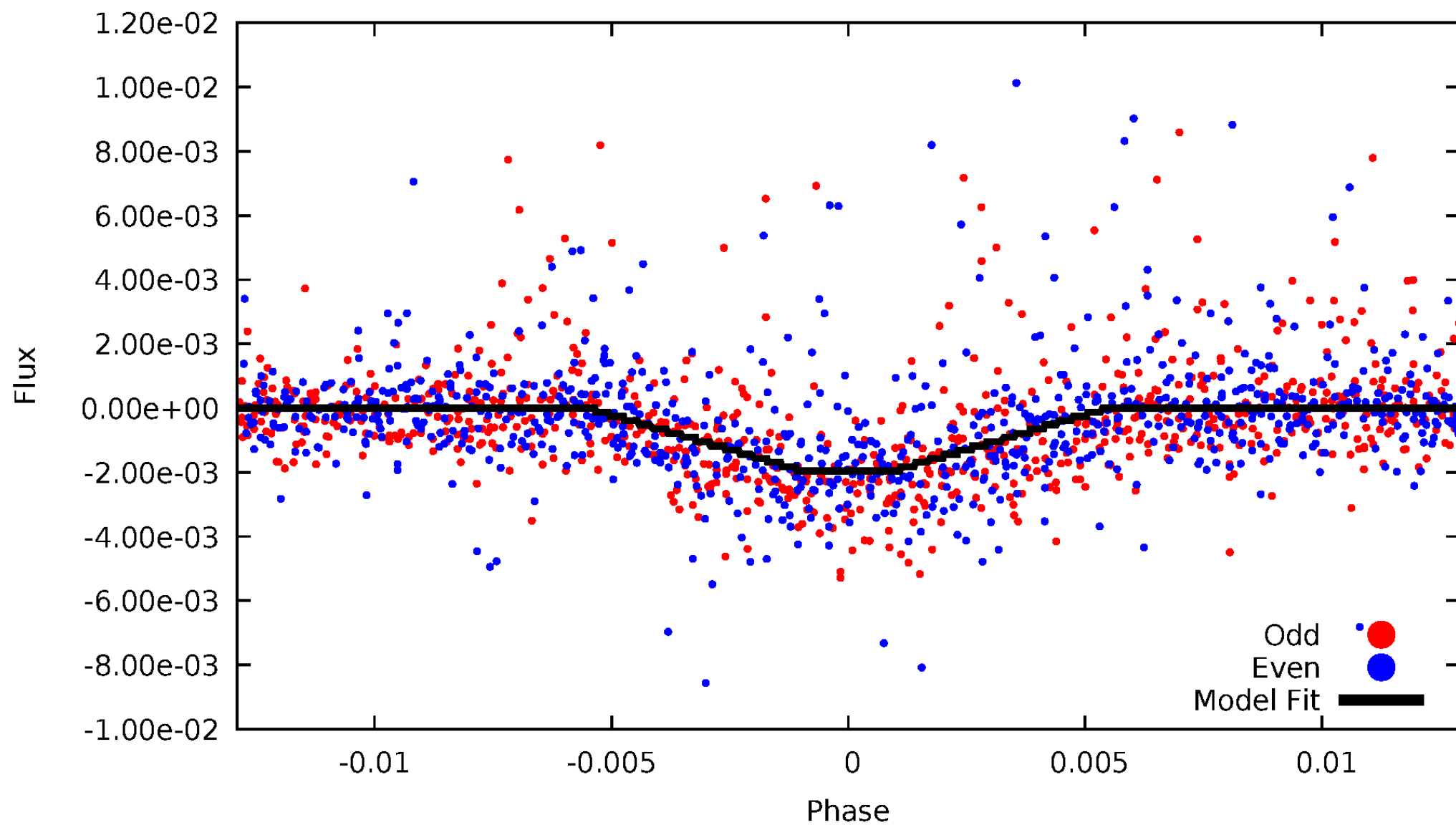
DV Odd/Even

TCE 007350067-01



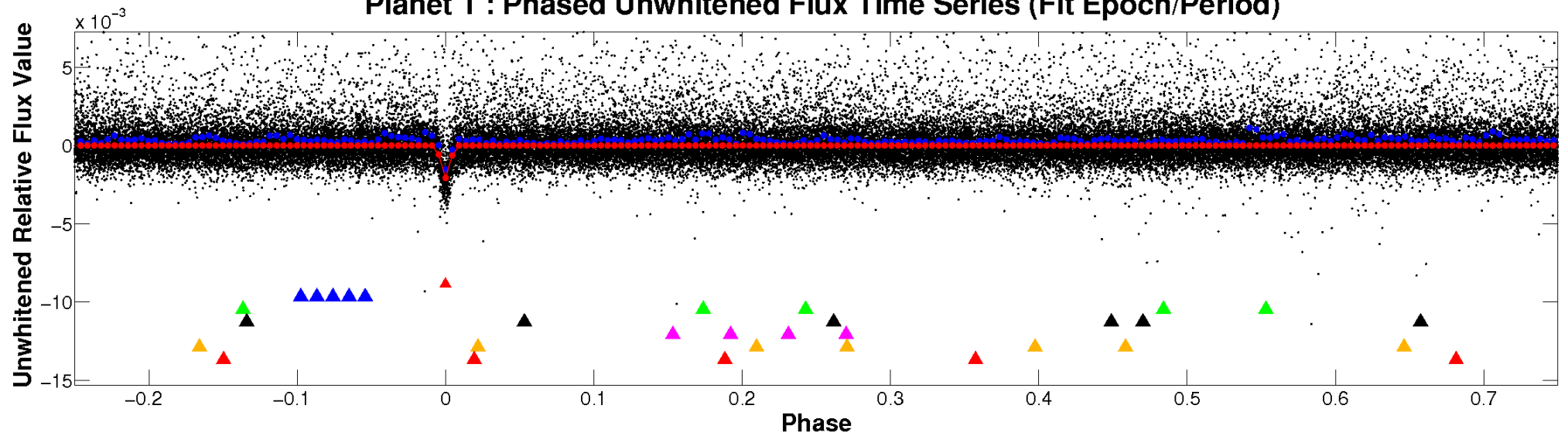
ALT Odd/Even

TCE 007350067-01

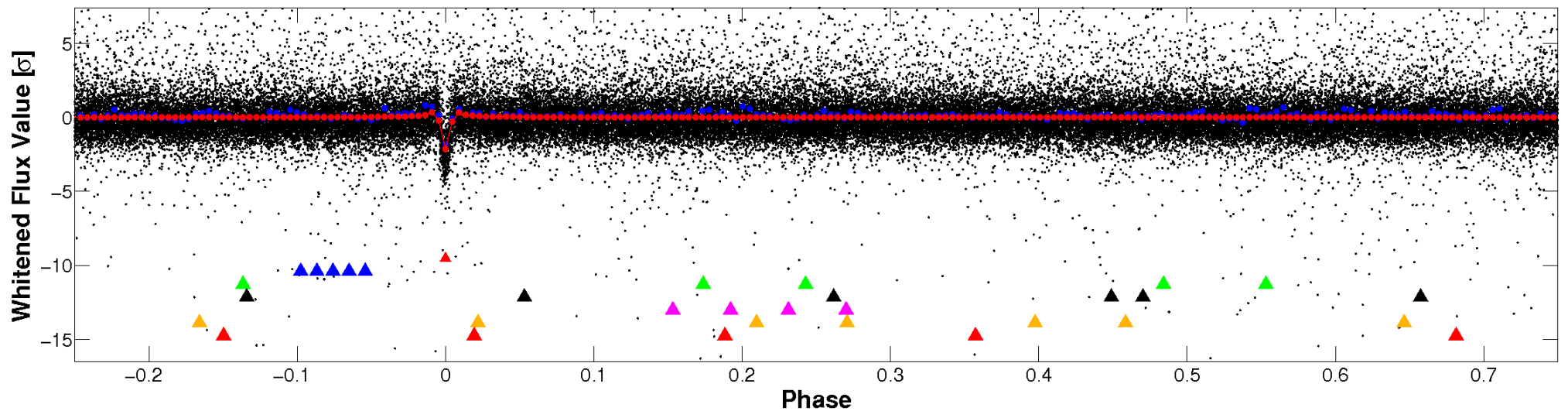


Non-Whitened Vs. Whitened Light Curve

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

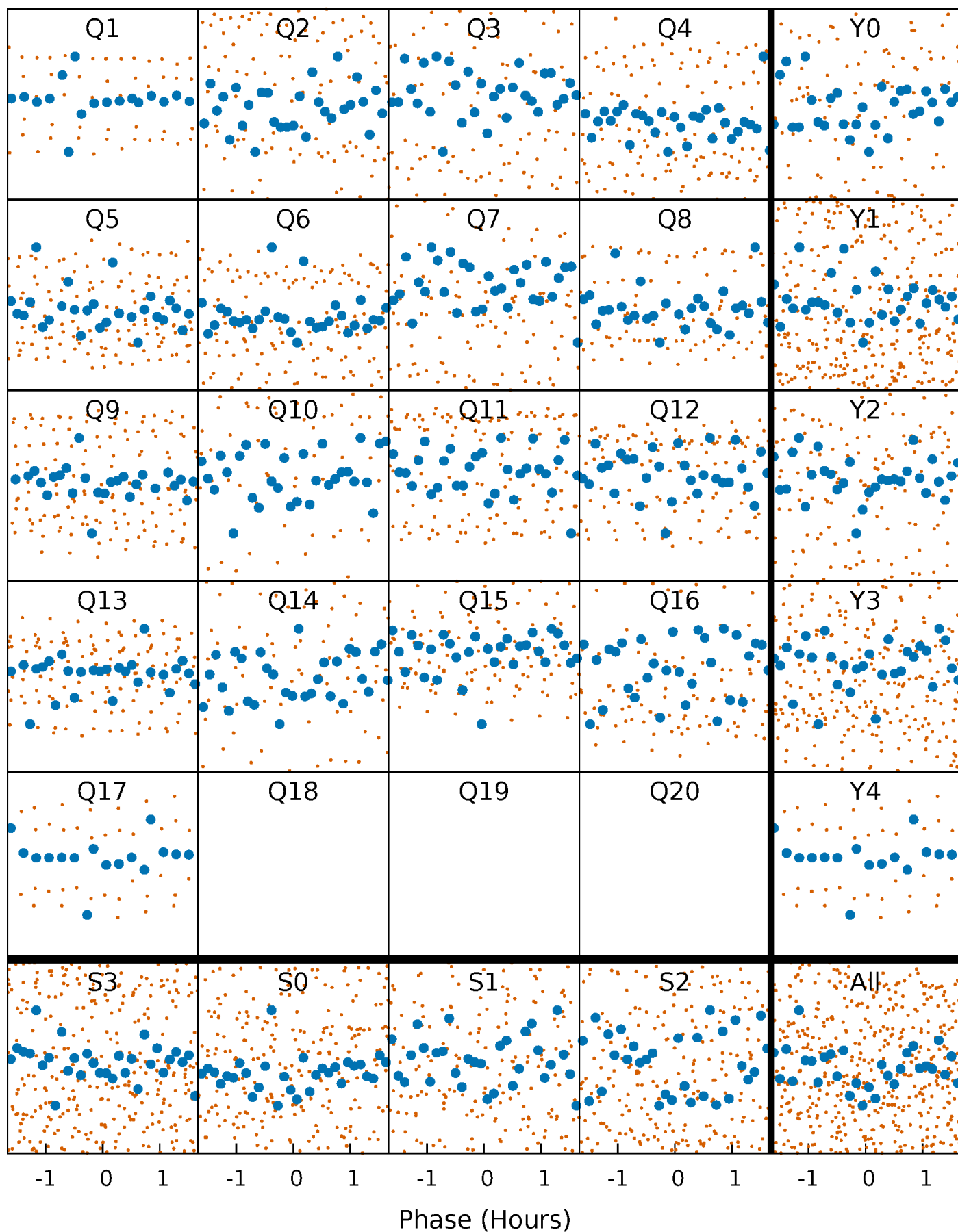


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



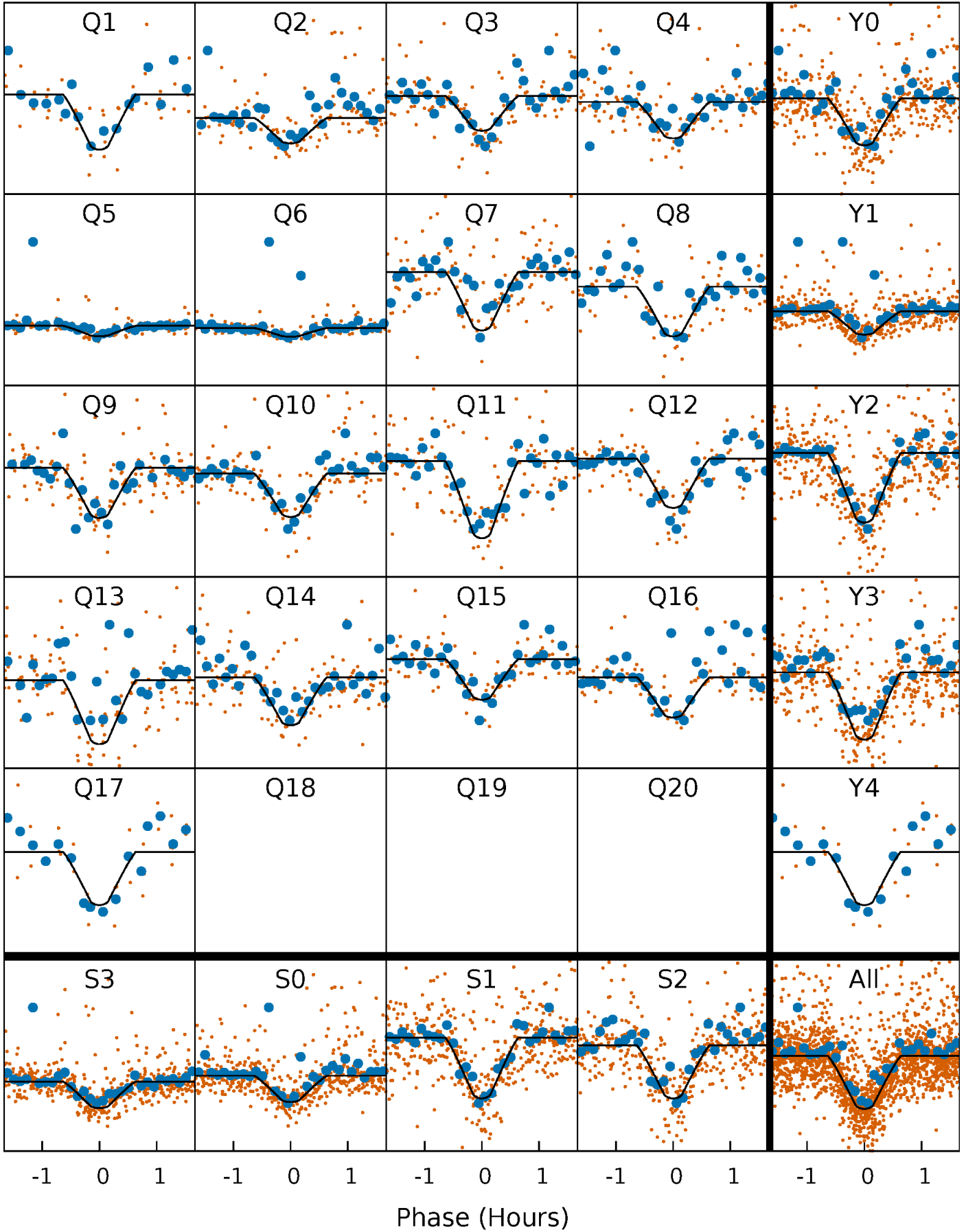
PDC Quarter-Phased Transit Curves

TCE 007350067-01 P= 4.485590 Days $T_0=135.431953$ (BKJD)



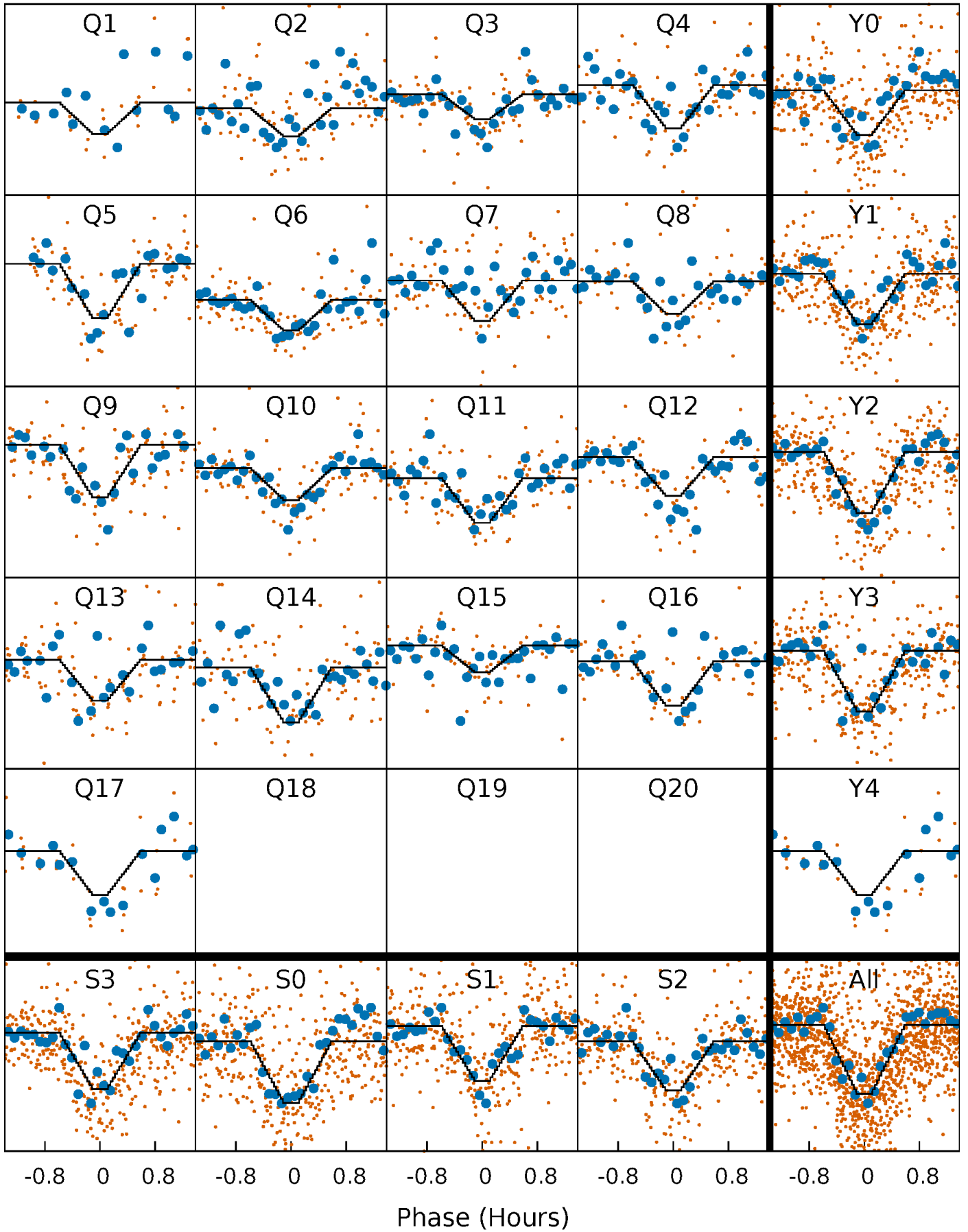
DV Quarter-Phased Transit Curves

TCE 007350067-01 P= 4.485590 Days $T_0=135.431953$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

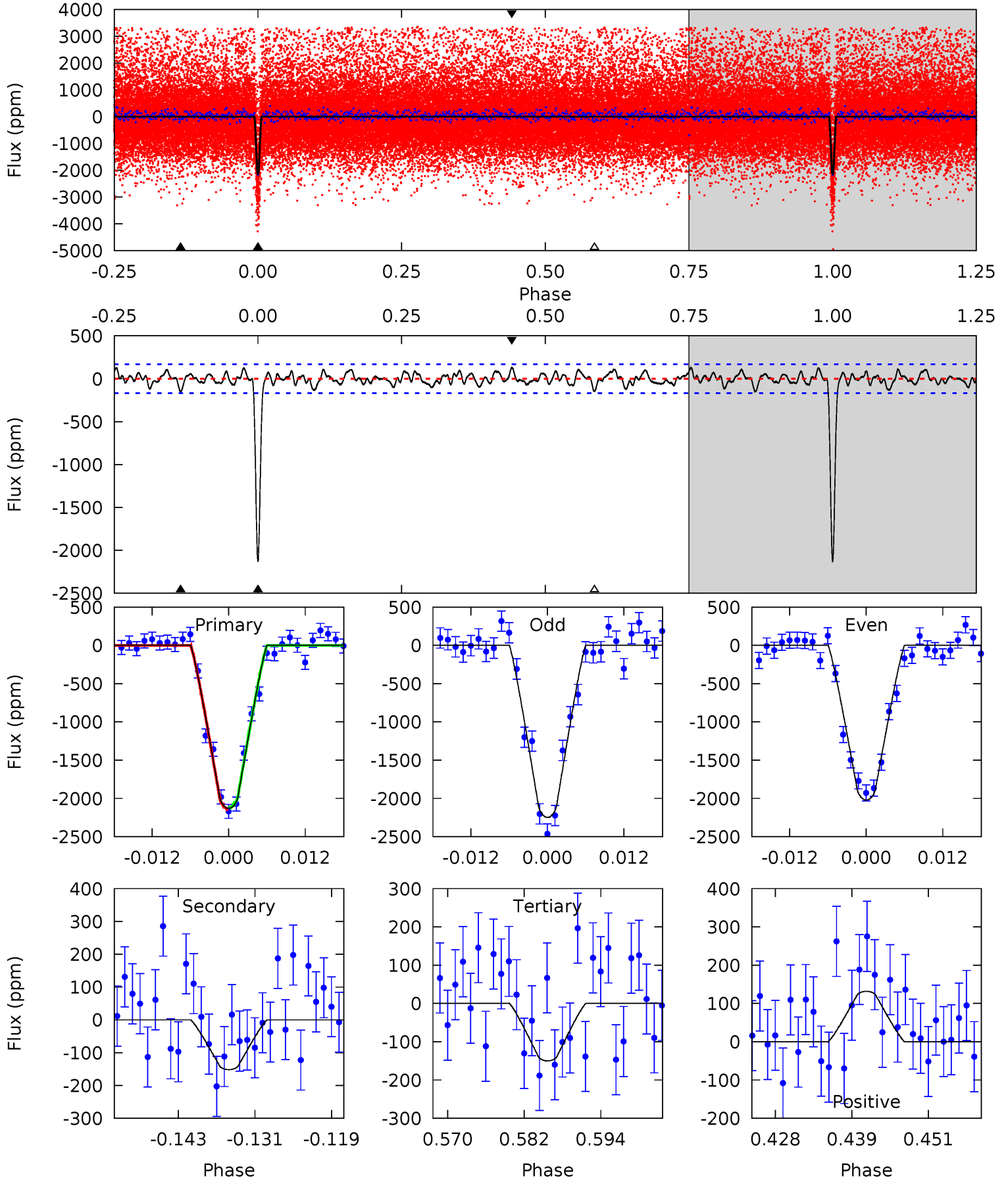
TCE 007350067-01 P= 4.485580 Days $T_0=135.432904$ (BKJD)



DV Model-Shift Uniqueness Test

007350067-01, P = 4.485590 Days, E = 130.946363 Days

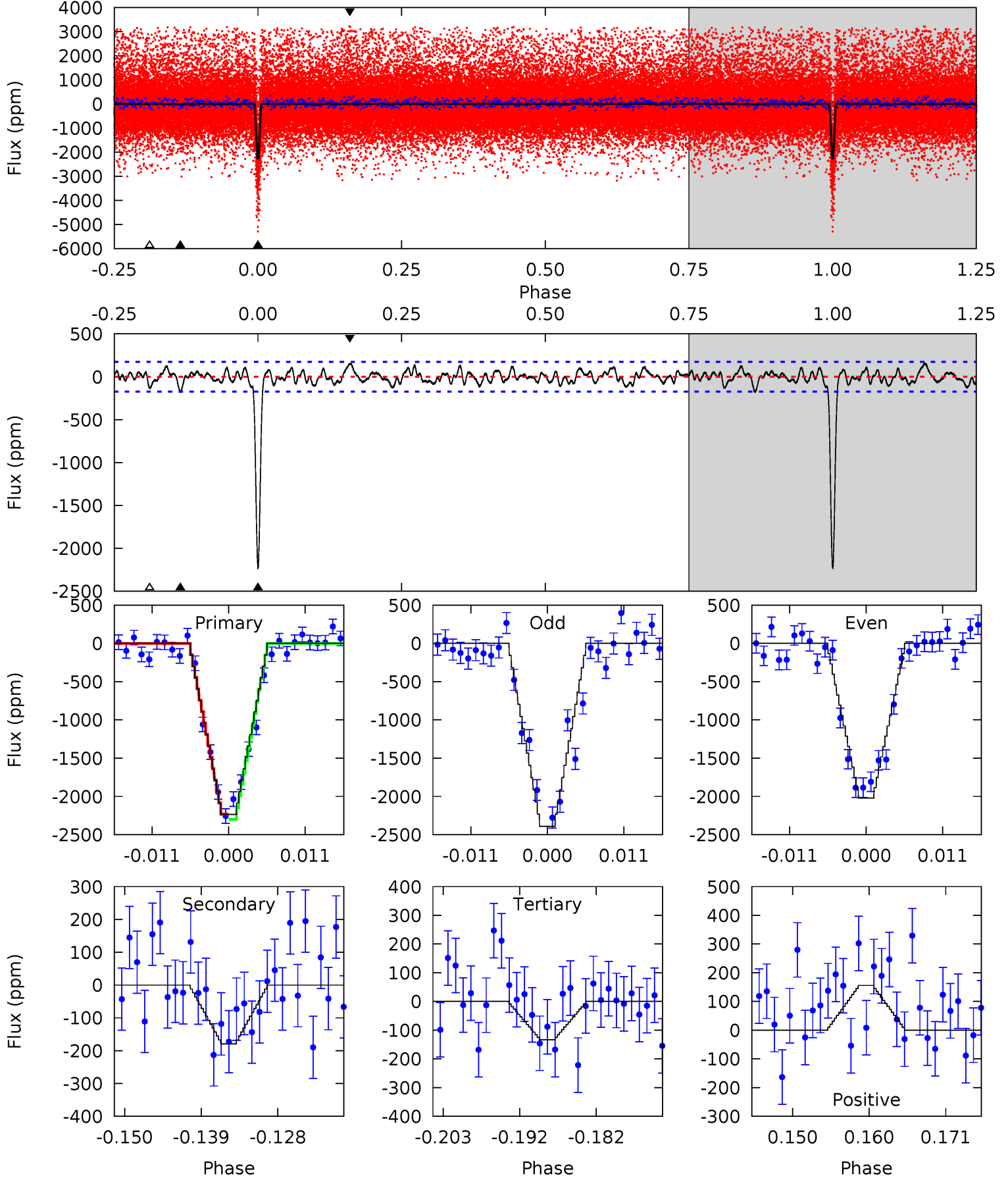
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
63.1	4.50	4.45	3.90	4.99	2.52	1.56	58.6	59.2	0.05	0.60	3.41	0.70	0.06	0.32



Alt Model-Shift Uniqueness Test

007350067-01, P = 4.485580 Days, E = 130.947324 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
64.9	5.20	3.88	4.52	5.01	2.55	1.61	61.0	60.4	1.32	0.68	5.39	0.89	0.07	0.99



Stellar Parameters For KIC 007350067

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	3236^{+41}_{-25}	$5.097^{+0.055}_{-0.050}$	$0.000^{+0.100}_{-0.100}$	$0.193^{+0.034}_{-0.025}$	$0.169^{+0.038}_{-0.025}$	$33.360^{+10.540}_{-7.993}$
	+1%/-1%	+1%/-1%	+inf%/-inf%	+18%/-13%	+22%/-15%	+32%/-24%
Source	PHO2	PHO2	PHO2	DSEP		

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

Secondary Eclipse Parameters for KIC 007350067-01 / KOI 6863.01

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-152 ± 34	$0.95^{+0.21}_{-0.21}$	510^{+13}_{-13}	2317^{+125}_{-109}	84^{+49}_{-30}
Alt.	-179 ± 34	$0.93^{+0.21}_{-0.20}$	512^{+14}_{-13}	2368^{+140}_{-115}	98^{+64}_{-34}

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 $A_{obs} \gg 1.0$

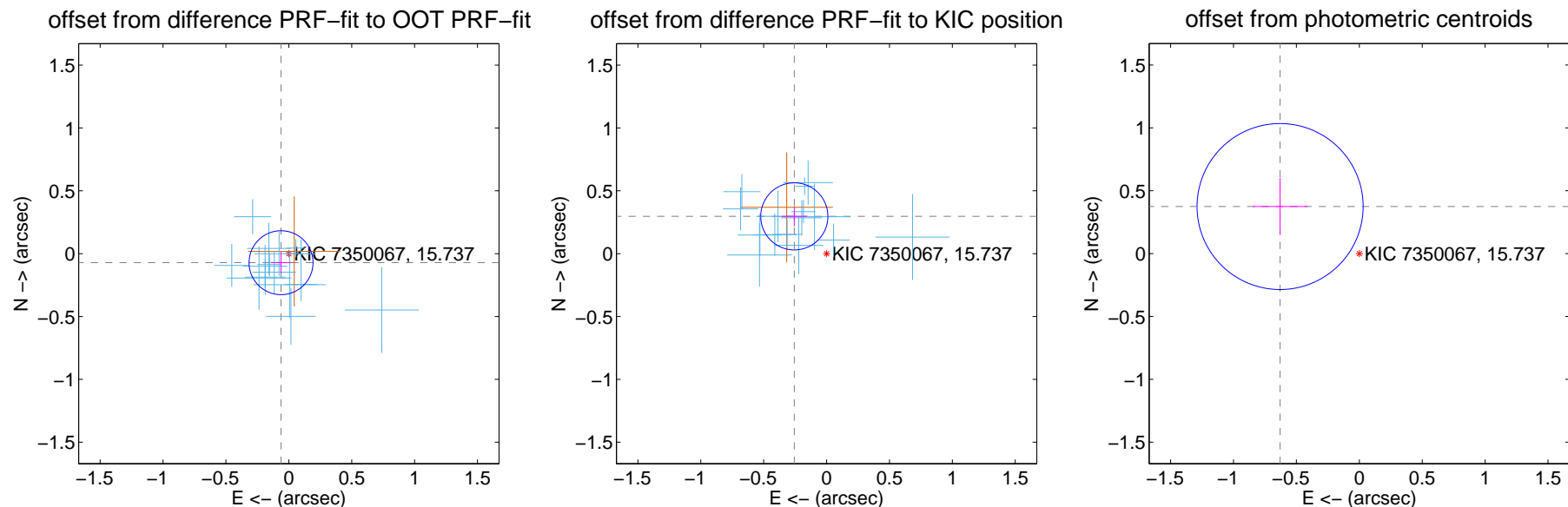
DV Centroid Data

Supplemental centroid analysis for 007350067-01. Kepler magnitude: 15.74. Transit SNR 39.75

There are 15 quarters with good PRF difference image offsets

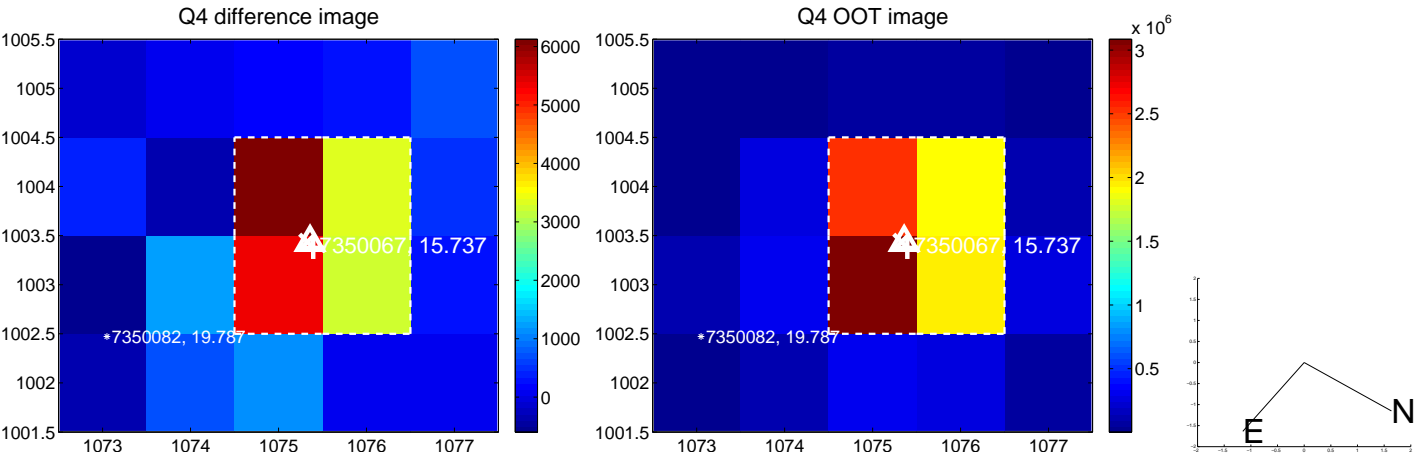
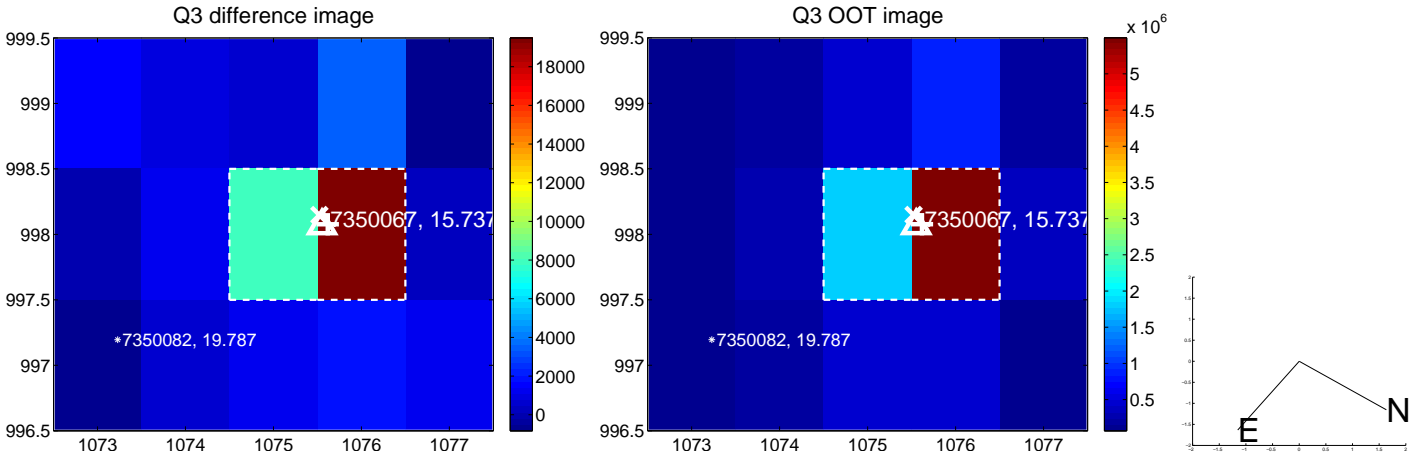
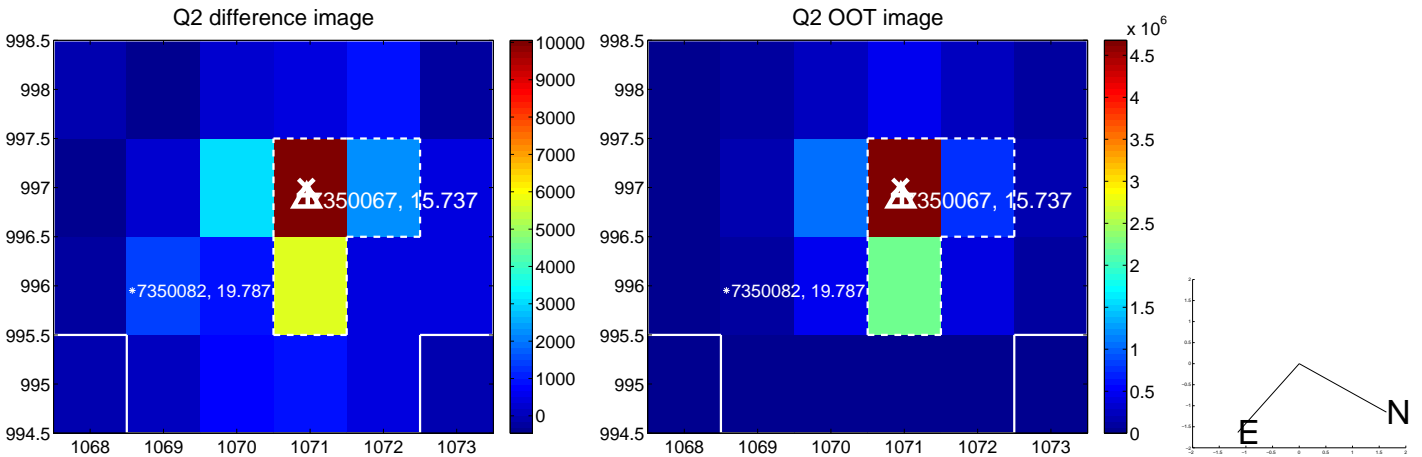
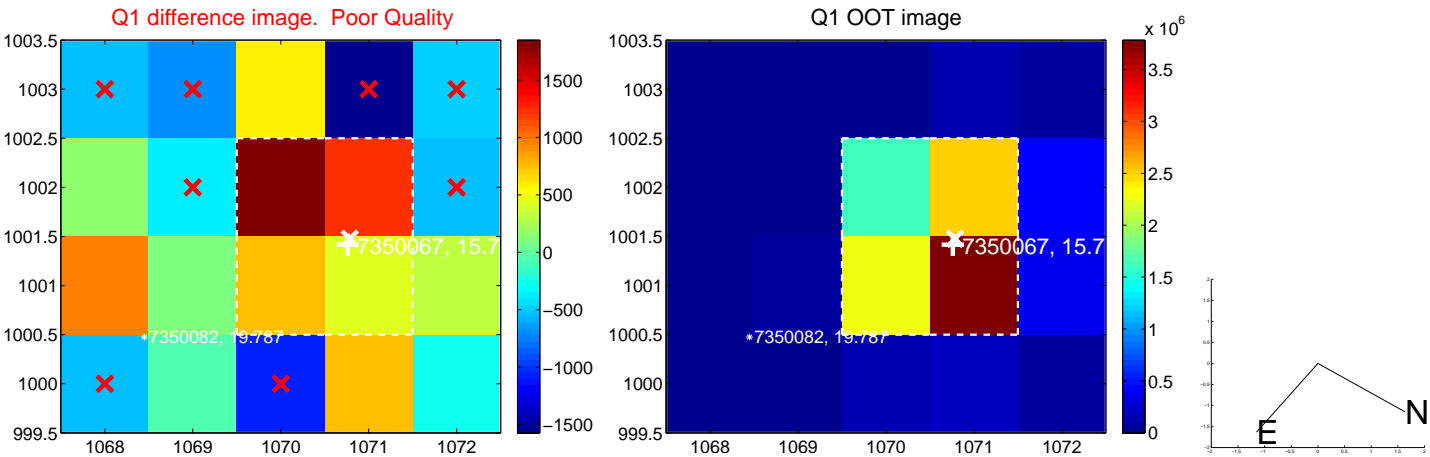
The direct PRF centroid is offset from the target star catalog position by about 0.42 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.095 ± 0.085	1.12	0.062 ± 0.084	-0.072 ± 0.086
PRF-fit source offset from KIC position	0.392 ± 0.089	4.41	0.257 ± 0.100	0.297 ± 0.078
photometric centroid source offset	0.73 ± 0.22	3.33	0.63 ± 0.22	0.37 ± 0.23

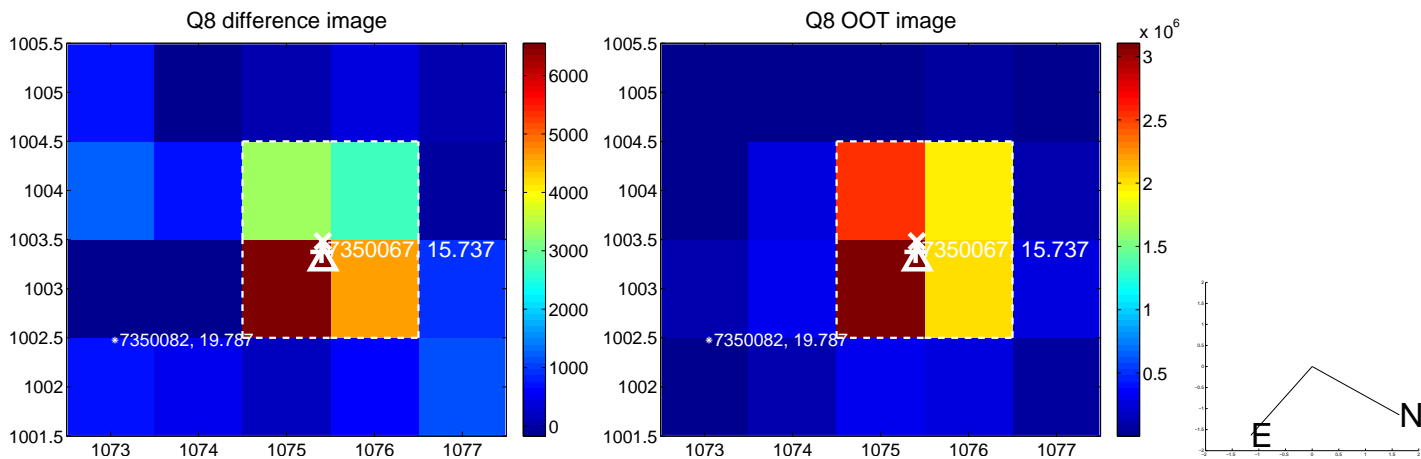
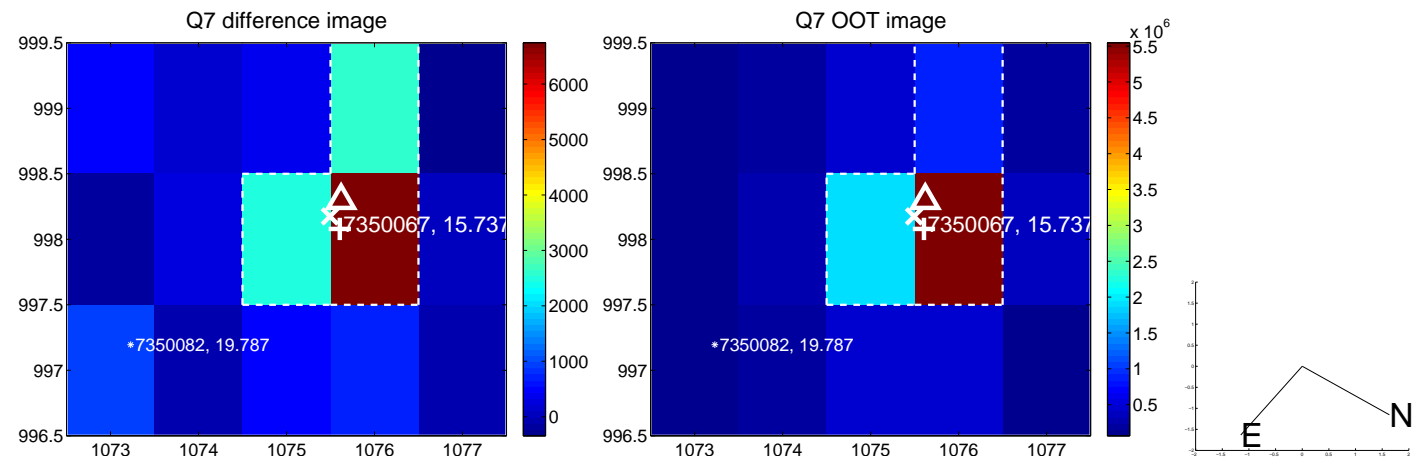
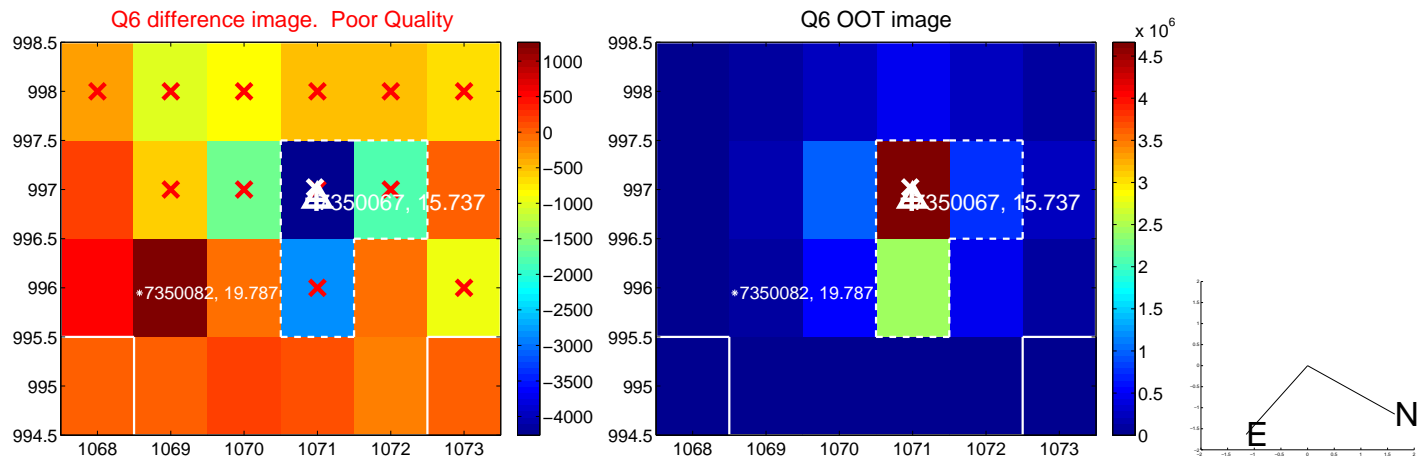
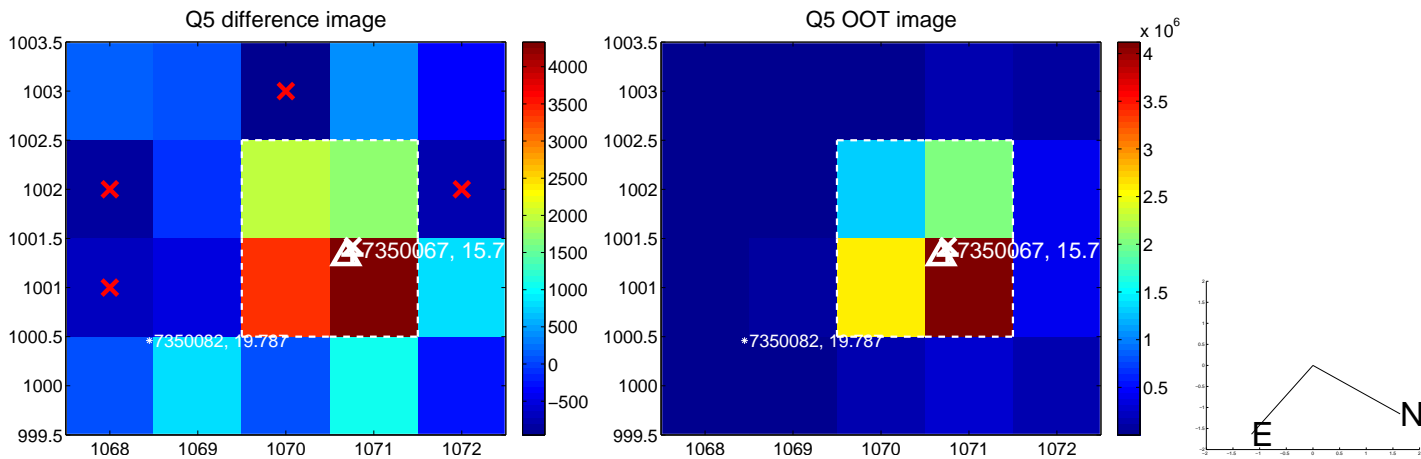


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets**; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

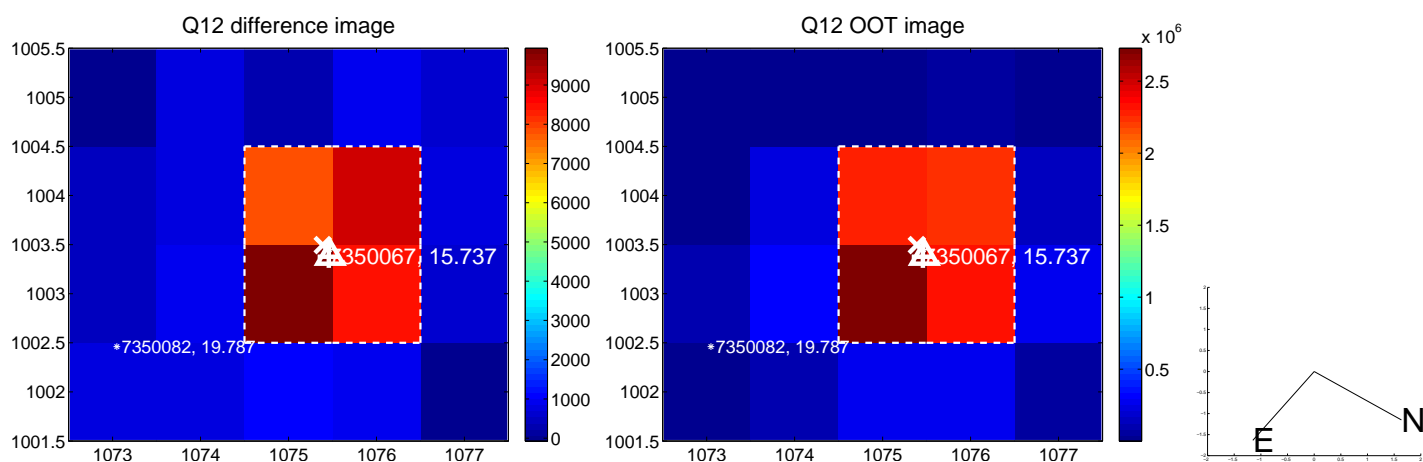
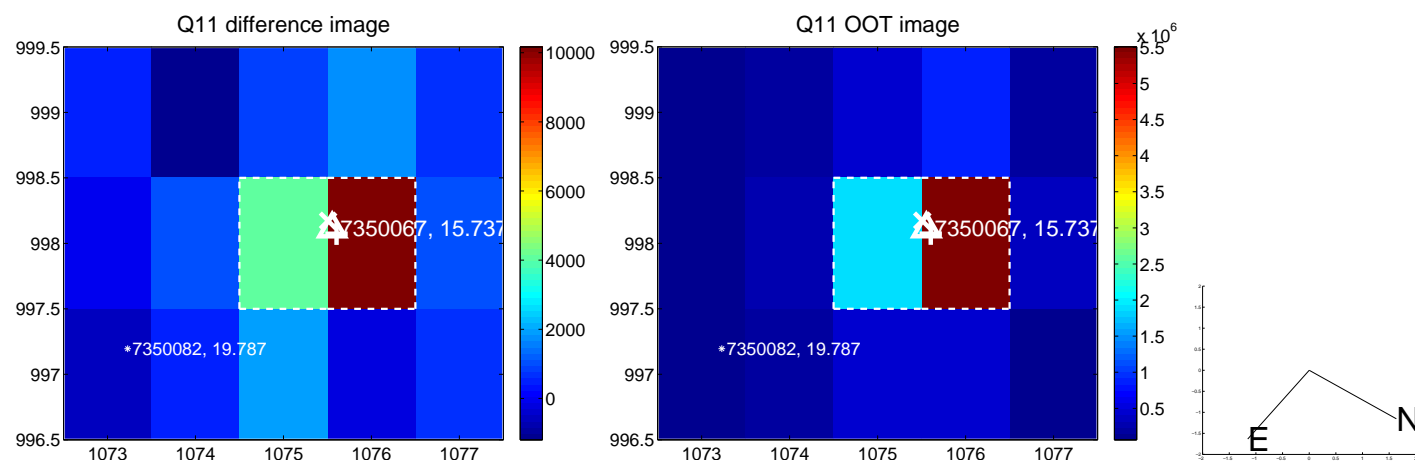
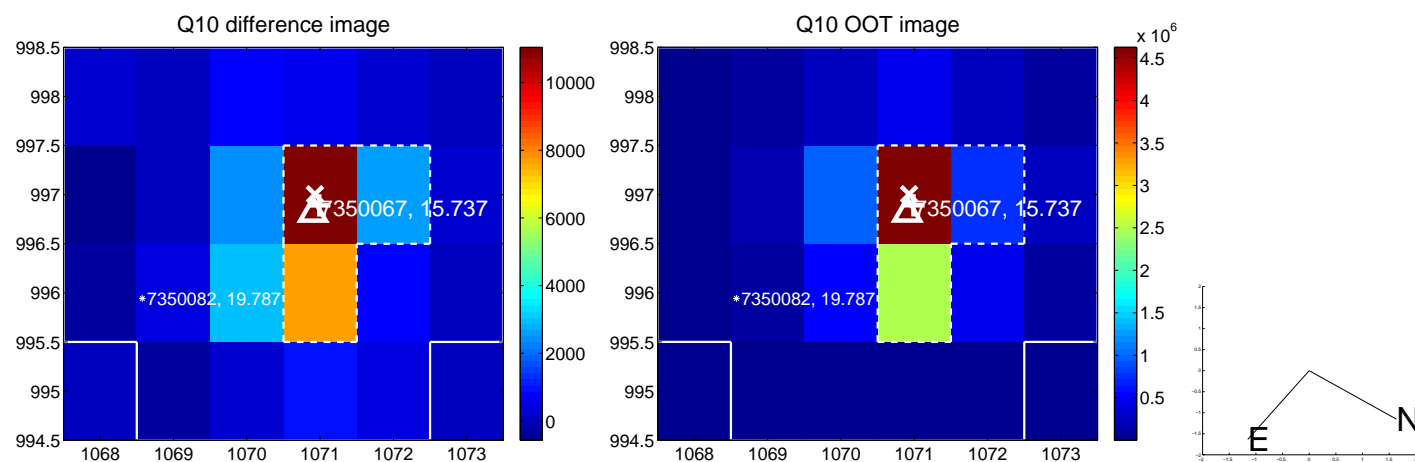
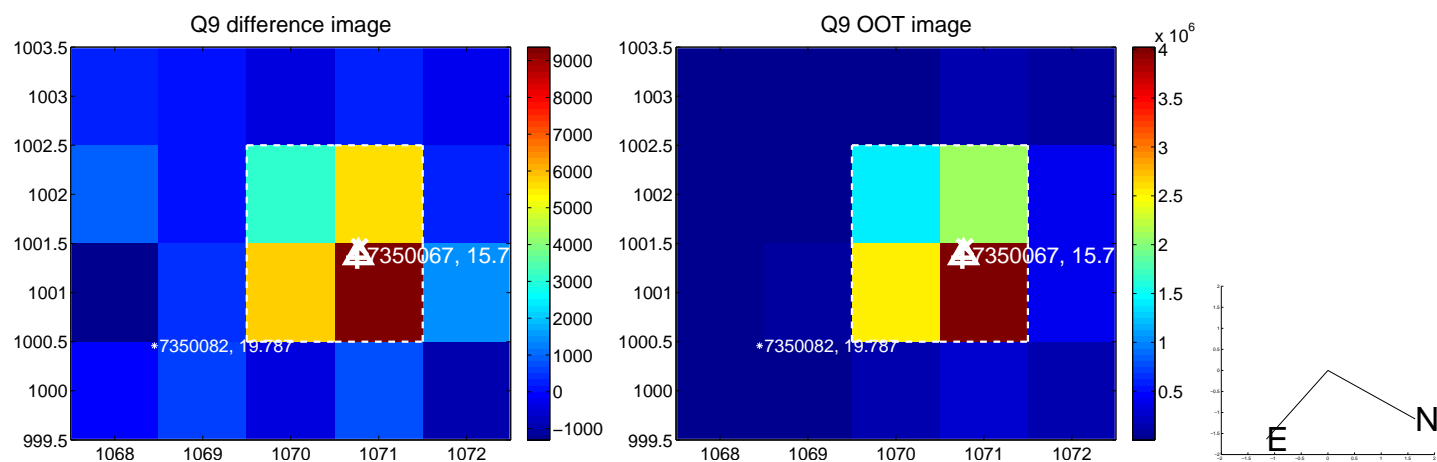
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



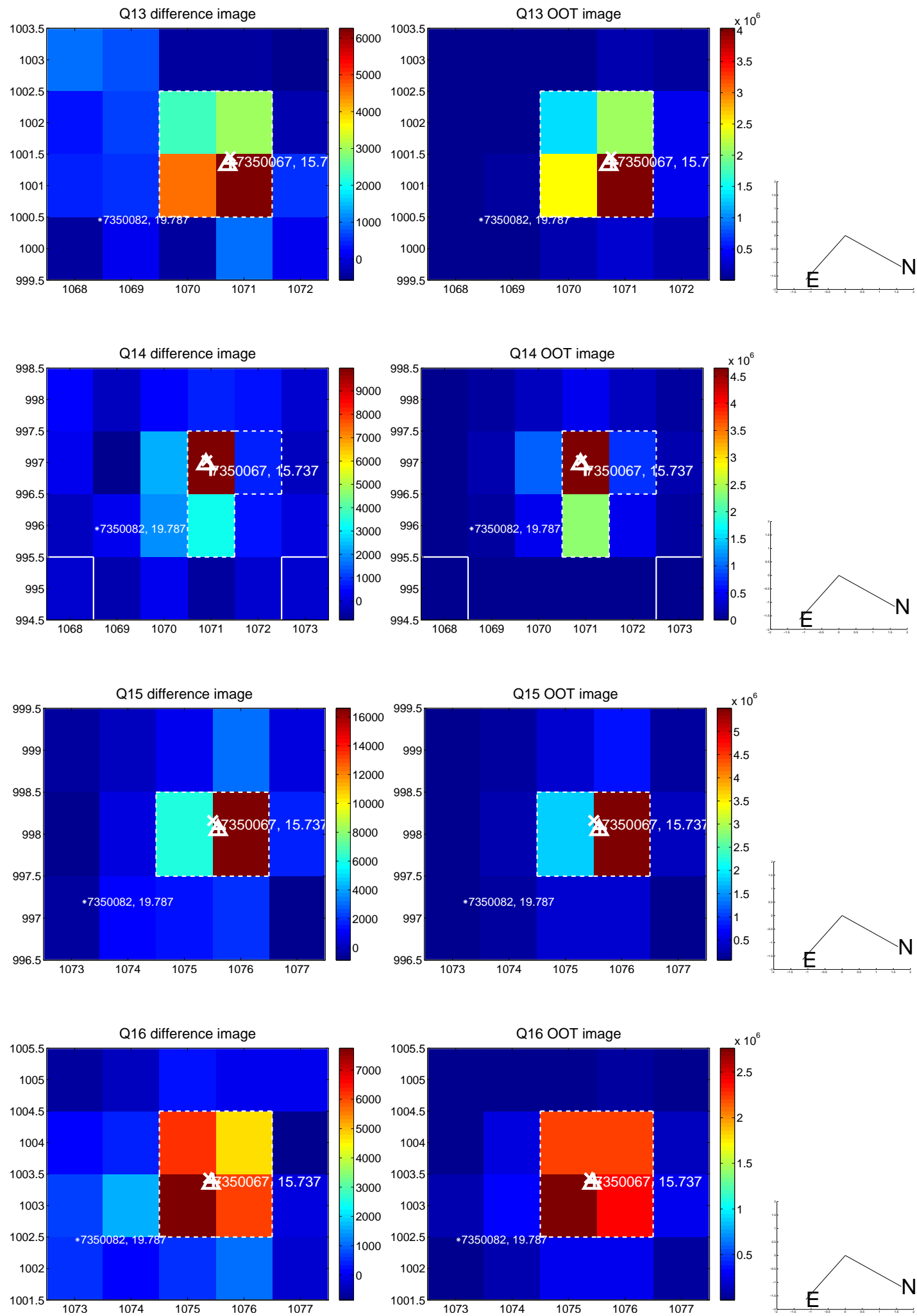
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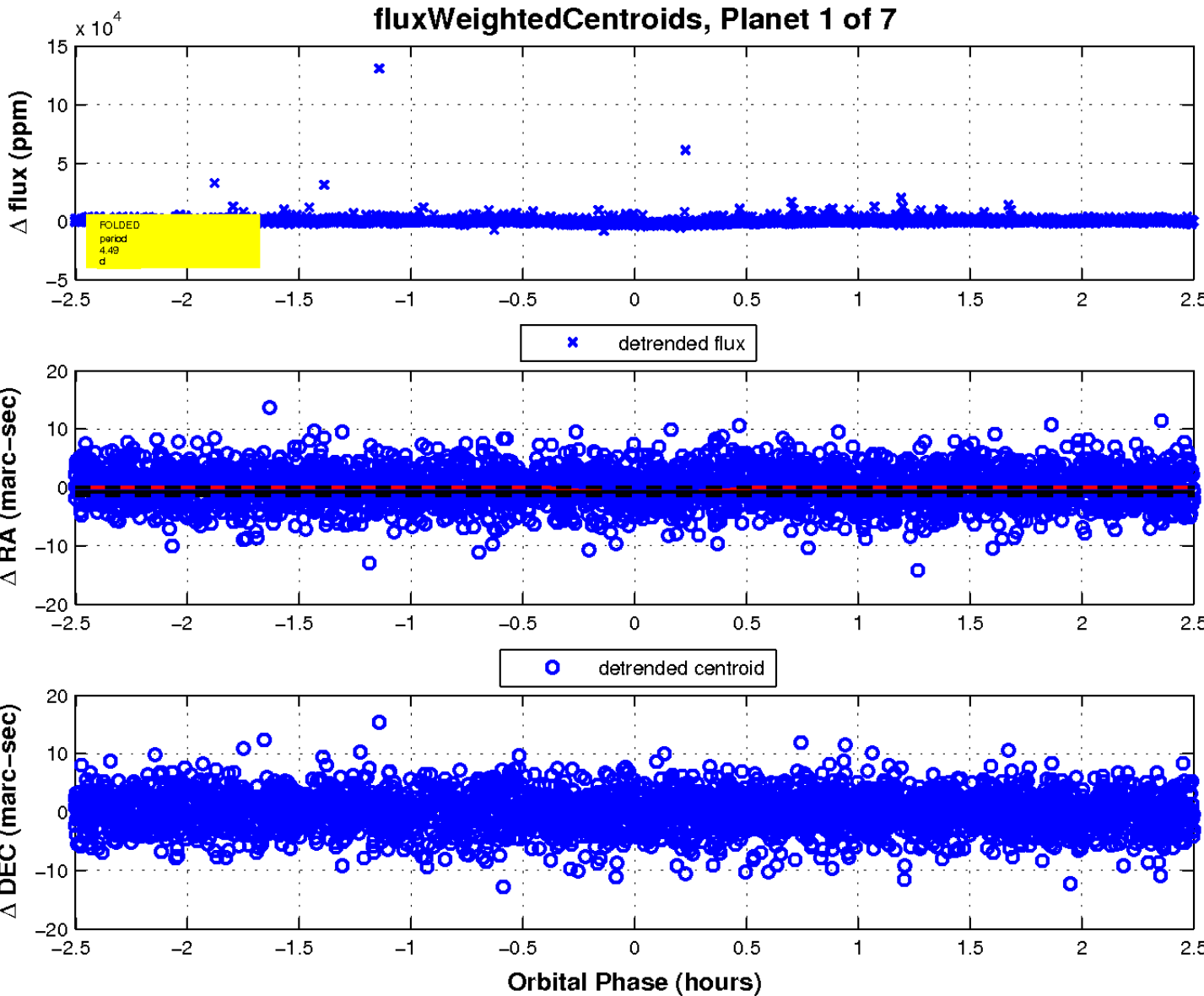
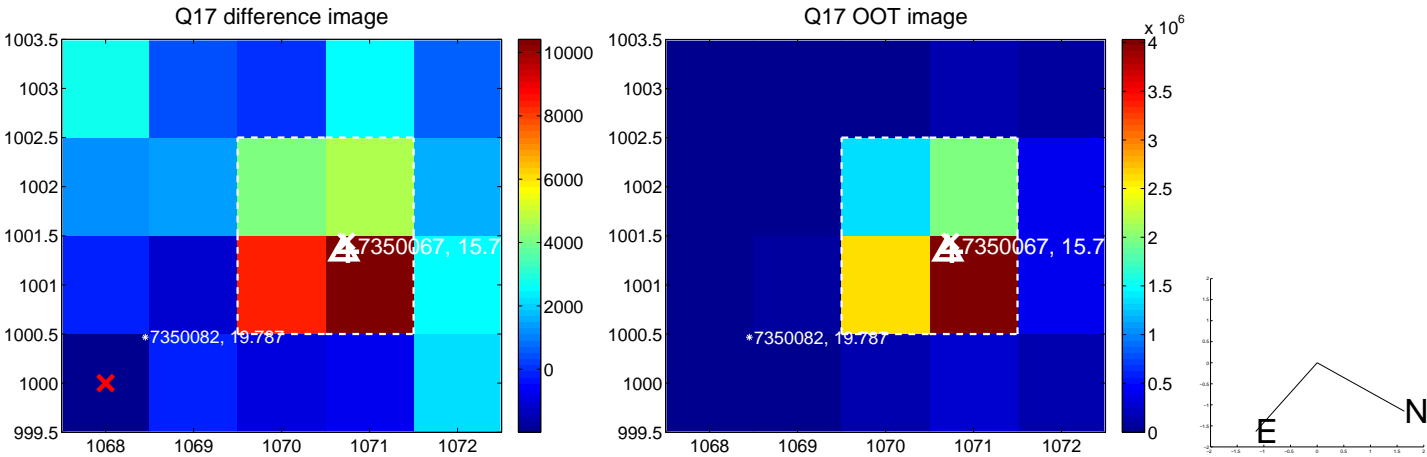
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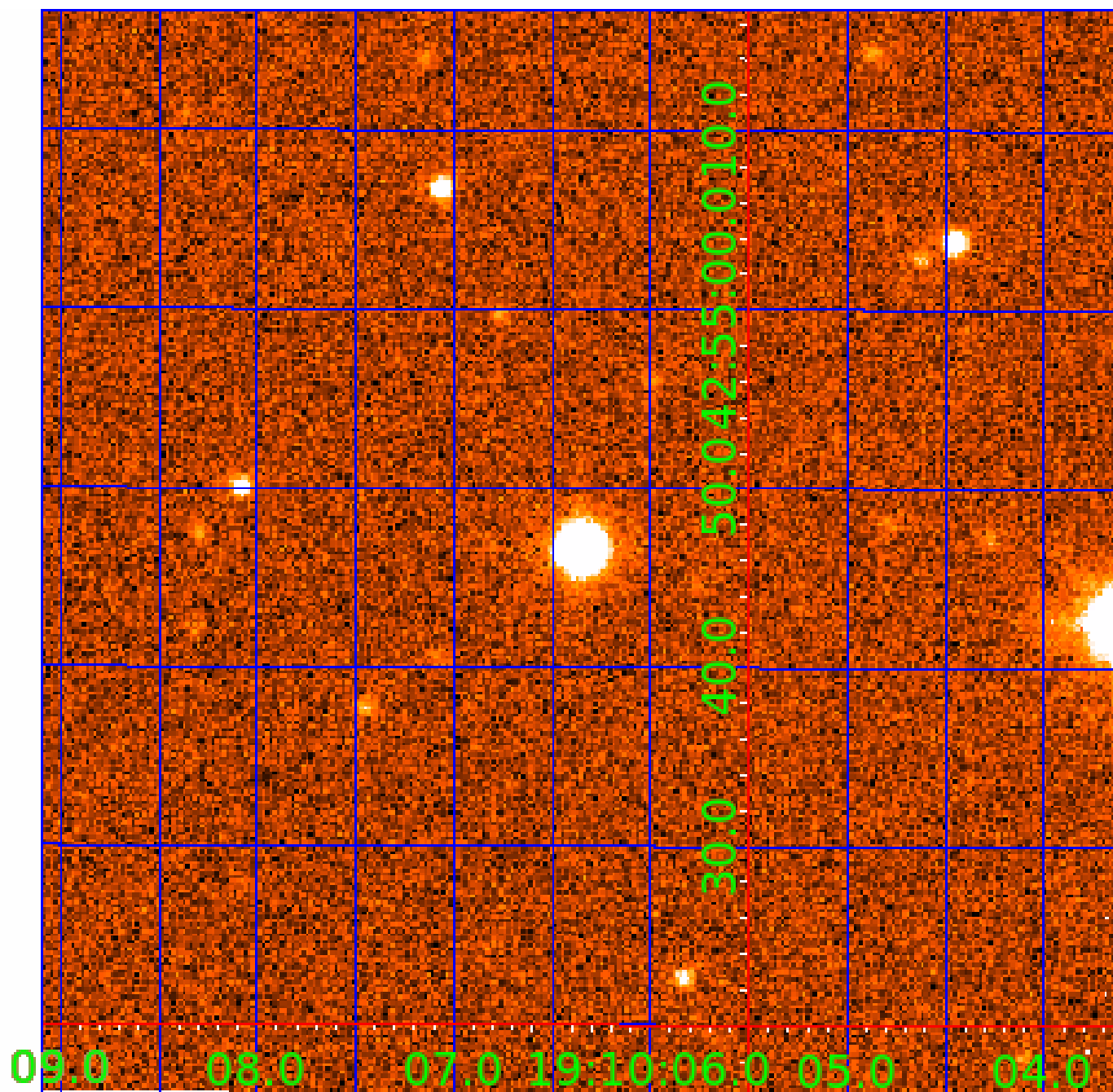


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UKIRT Image

Declination



KIC 007350067

Q1-17 DR25 TCE Parameters

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007350067-05	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_MARSHALL—LPP_DV—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—INCONSISTENT_TRANS—CENT_FEW_DIFFS
007350067-06	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_MARSHALL_SKYE—LPP_DV—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV
007350067-07	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_MARSHALL—LPP_DV—ALL_TRANS_CHASES—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.

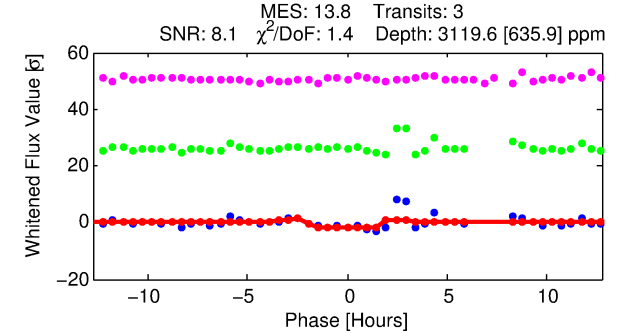
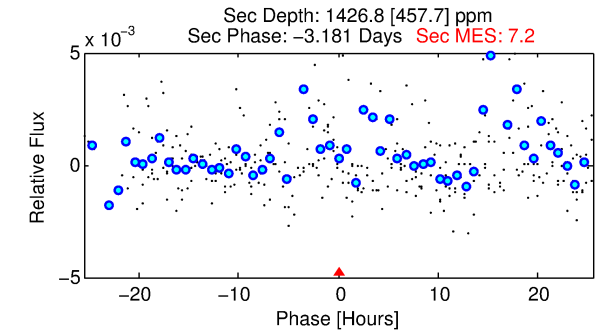
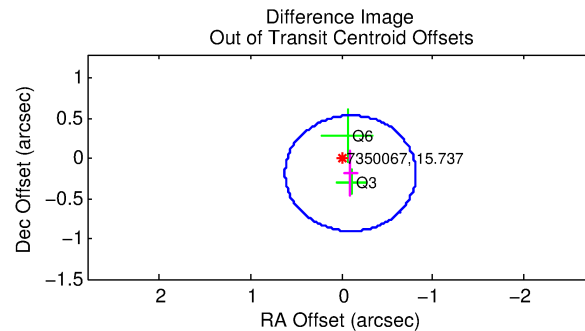
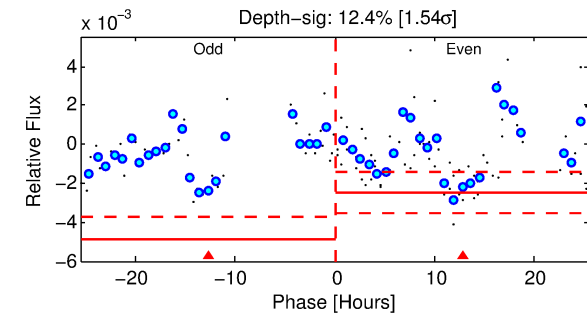
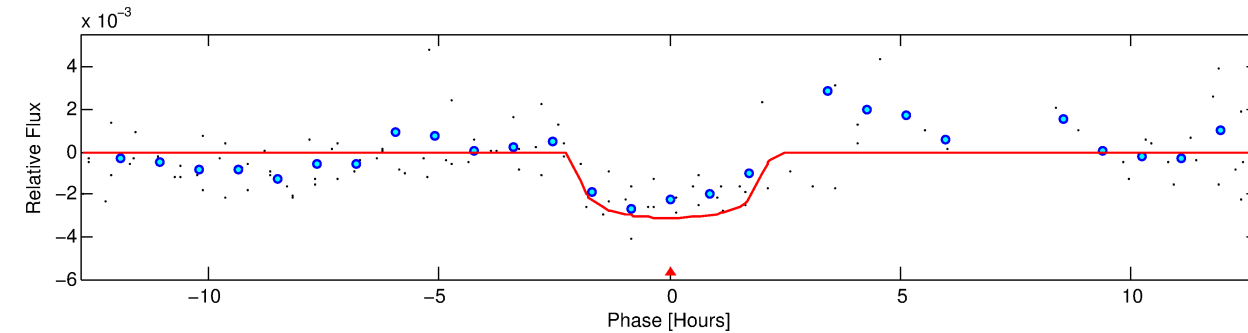
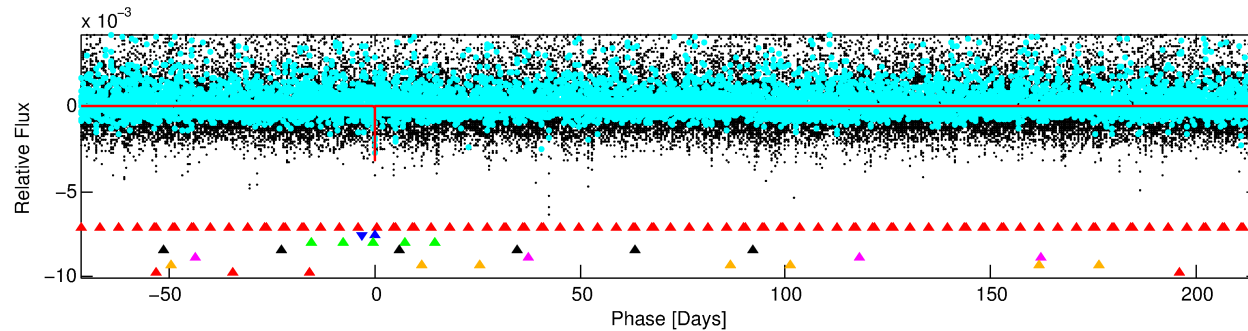
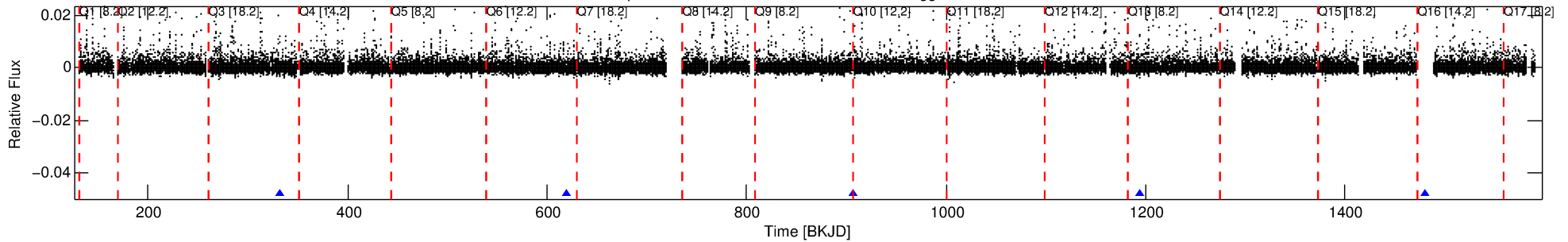
Ephemeris Match Information For 007350067-02

No Significant Match Found

DV One-Page Summary

KIC: 7350067 Candidate: 2 of 7 Period: 287.029 d
KOI: K06863 Corr: No Ephemeris Match

Kp: 15.74 R*: 0.19 Rs Teff: 3236.0 K Logg: 5.10 Fe/H: 0.000



DV Fit Results:

Period = 287.02906 [0.00459] d
Epoch = 332.5551 [0.0080] BKJD
Rp/R* = 0.0508 [0.0597]
a/R* = 528.57 [2657.93]
b = 0.22 [21.86]
Seff = 0.02 [0.00]
Teq = 91 [3] K
Rp = 1.07 [1.27] Re
a = 0.4717 [0.0589] AU
Ag = 152694.66 [363274.60] [0.42σ]
Teffp = 2791 [1657] K [1.63σ]

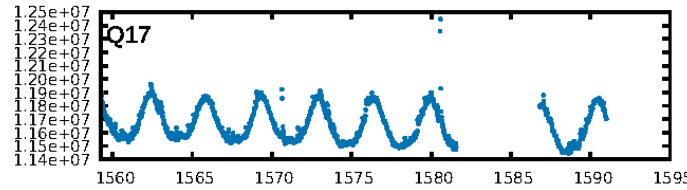
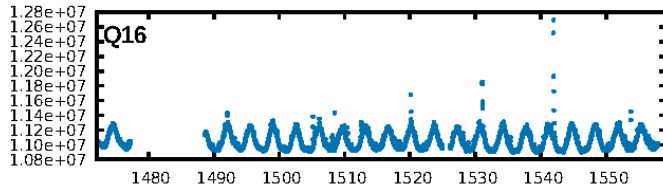
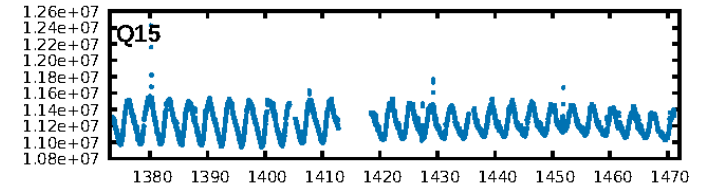
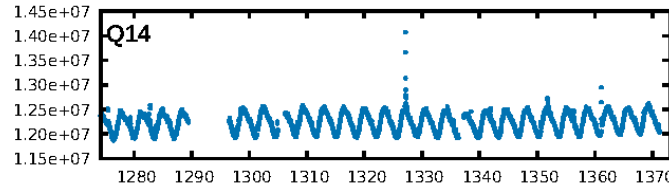
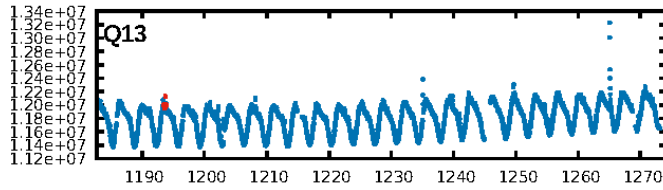
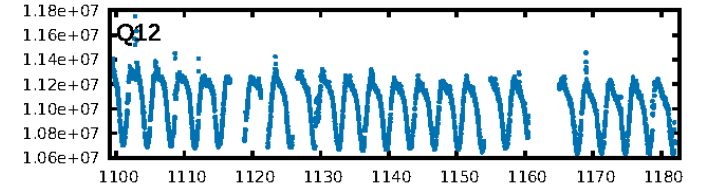
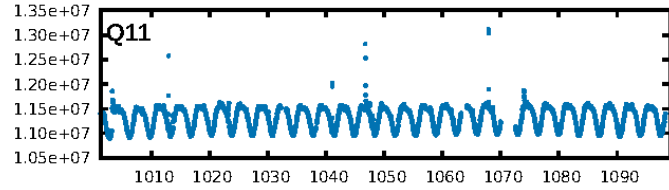
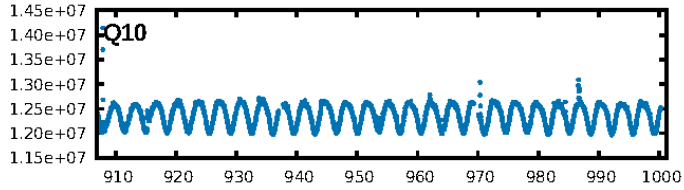
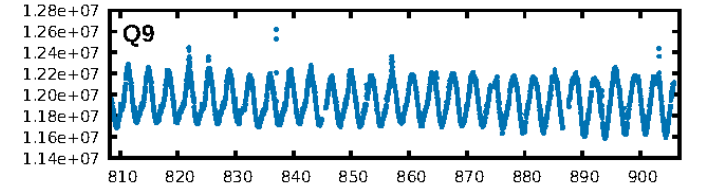
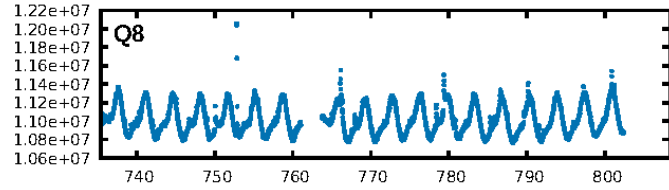
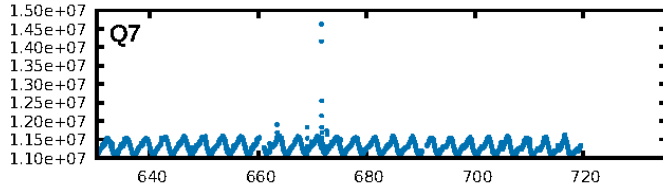
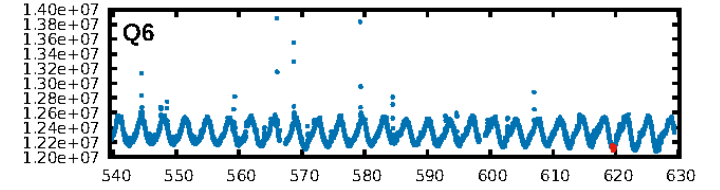
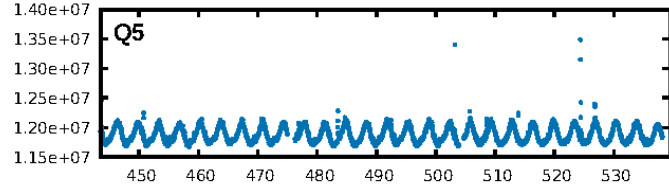
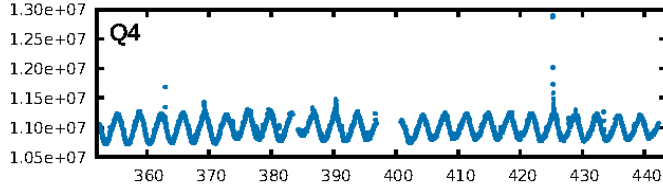
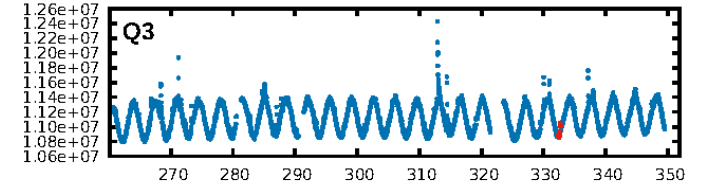
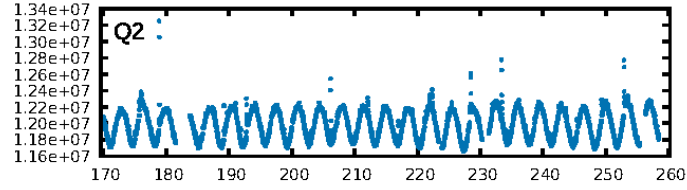
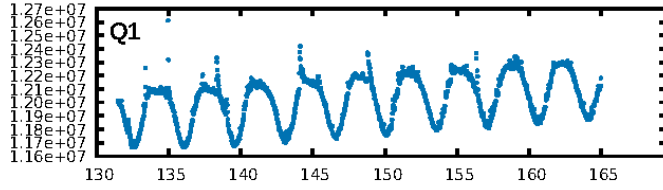
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [25.01σ]
LongPeriod-sig: 100.0% [86.32σ]
ModelChiSquare2-sig: 0.7%
ModelChiSquareGof-sig: 59.2%
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [3/3]
GhostDiagnostic-chr: -5.969
Centroid-sig: N/A
Centroid-so: 0.821 arcsec [1.18σ]
OotOffset-rm: 0.208 arcsec [0.87σ]
KicOffset-rm: 0.295 arcsec [1.53σ]
OotOffset-st: 1/1/0/0 [2]
KicOffset-st: 1/1/0/0 [2]
DiffImageQuality-fgm: 1.00 [2/2]
DiffImageOverlap-fno: 0.00 [0/2]

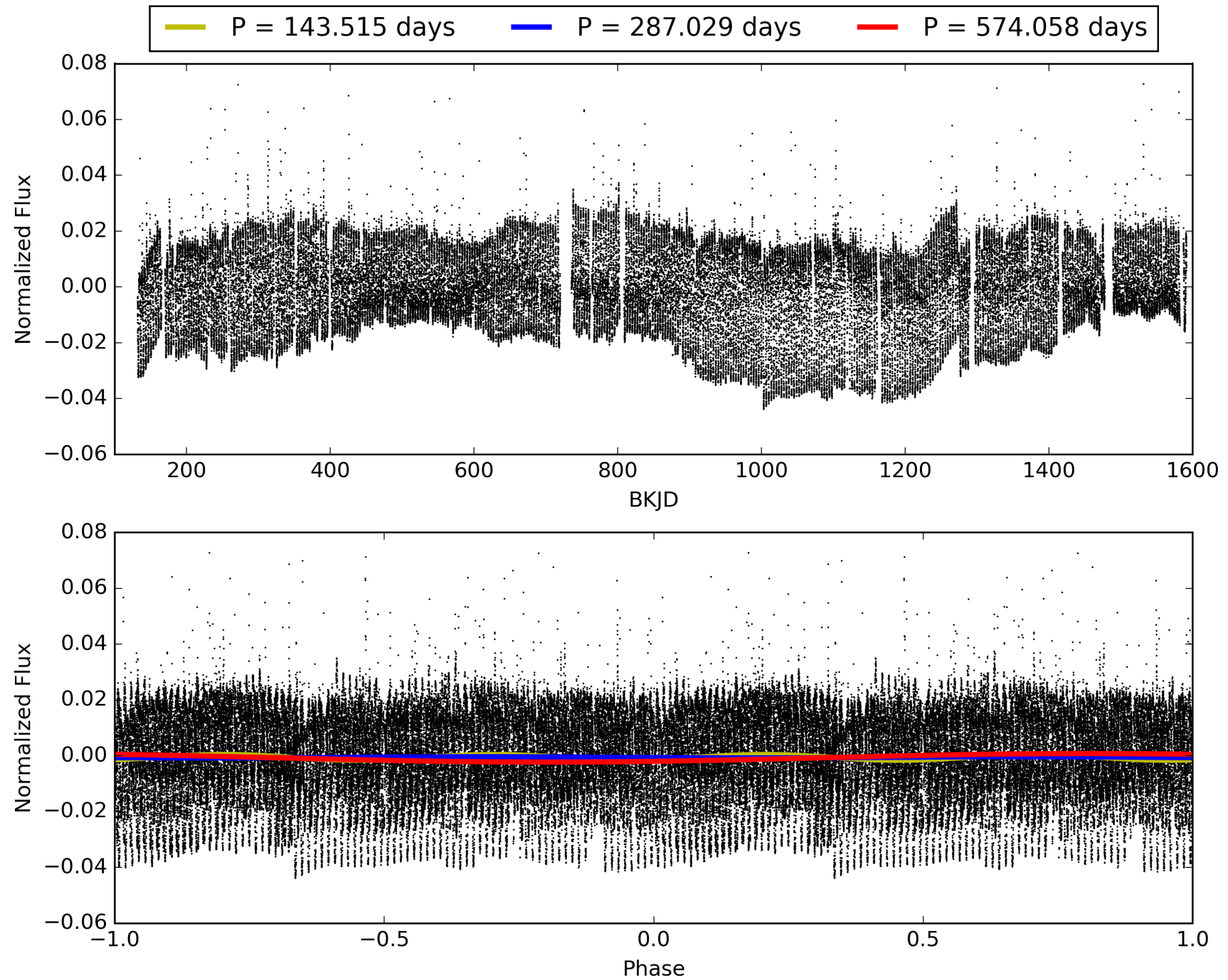
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 02-Feb-2016 00:35:35 Z

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

TCE 007350067-02, PDC Light Curves

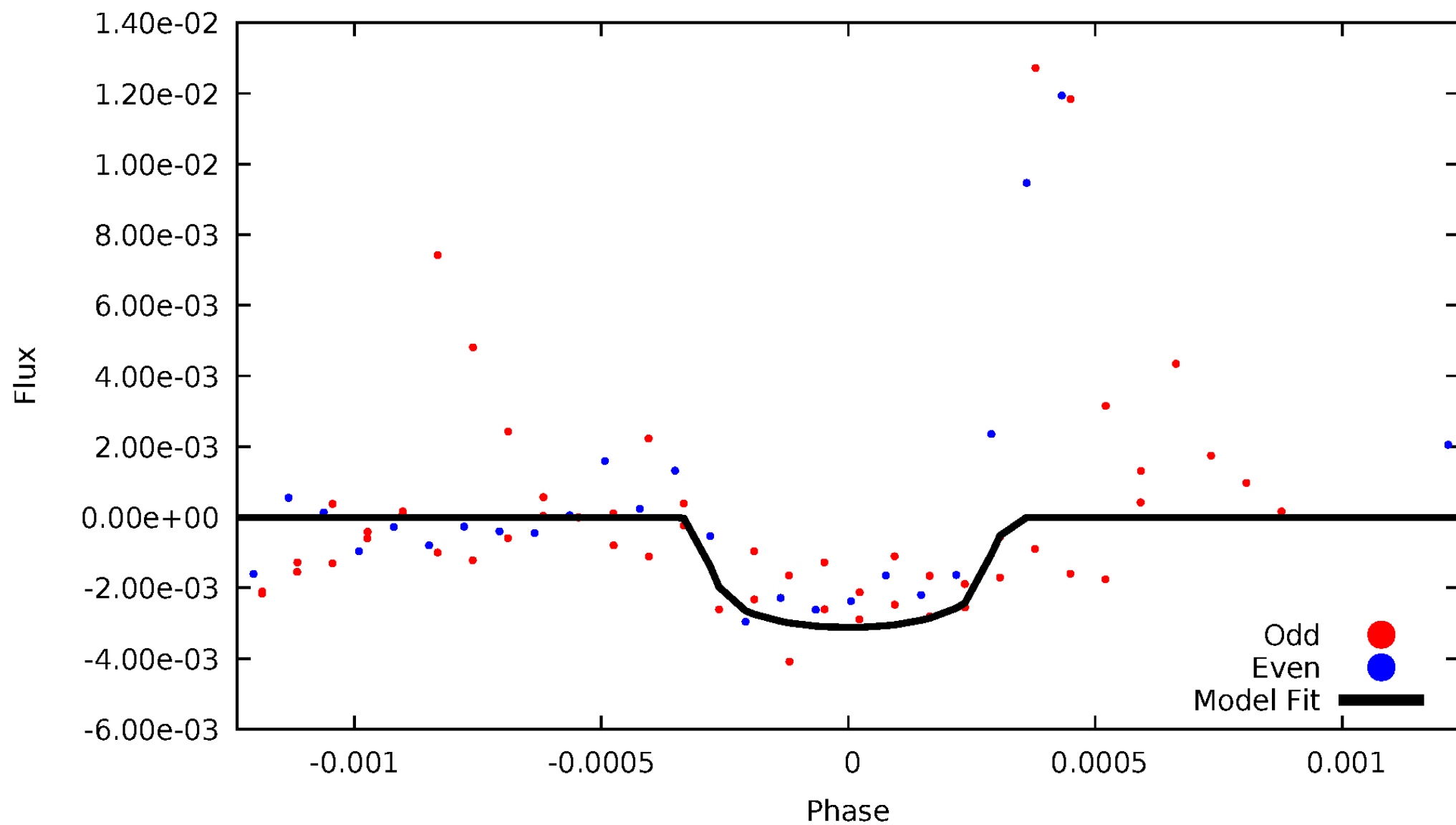


TCE 007350067-02



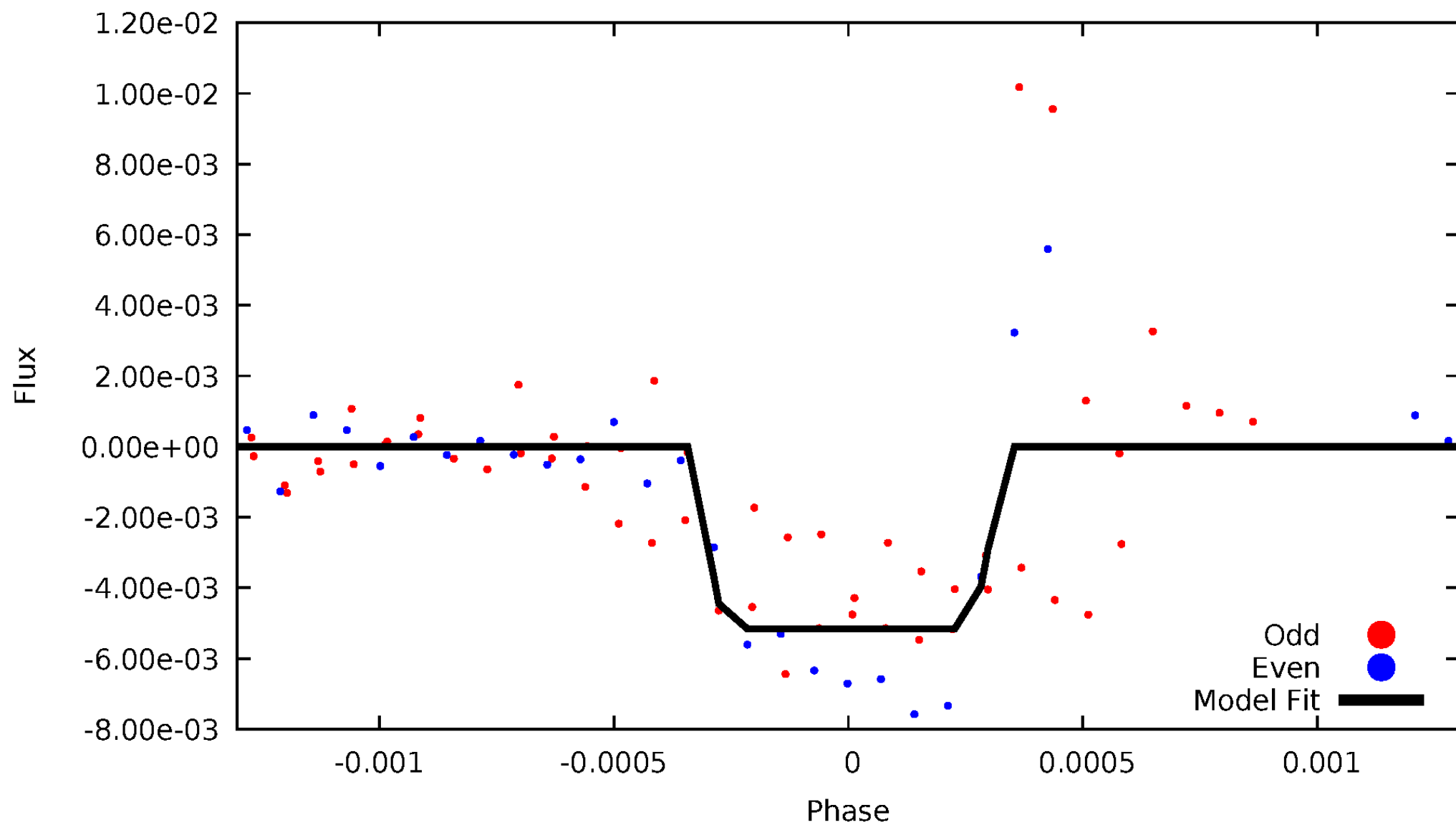
DV Odd/Even

TCE 007350067-02



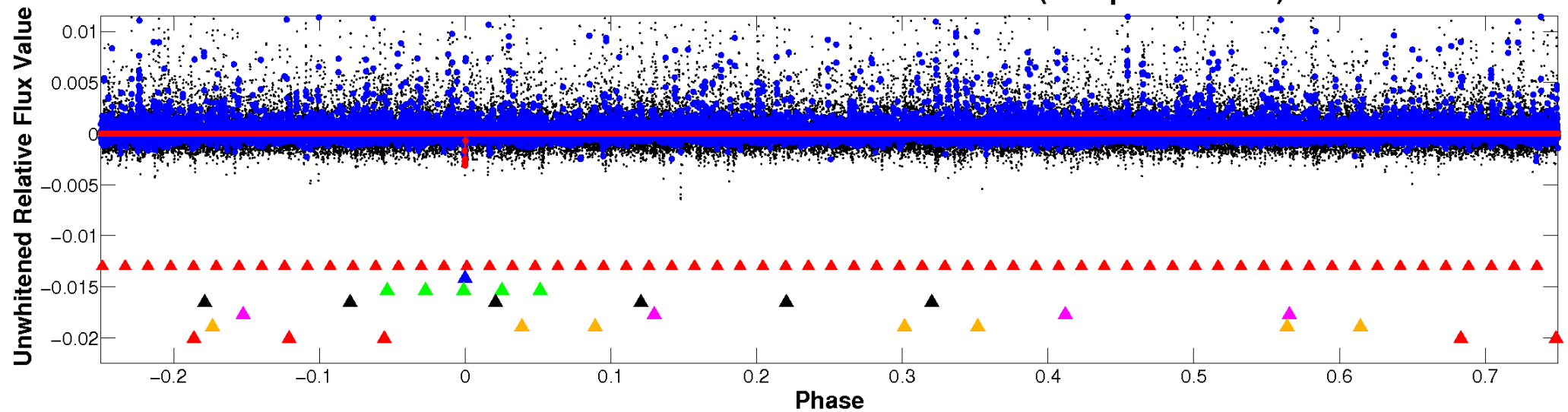
ALT Odd/Even

TCE 007350067-02

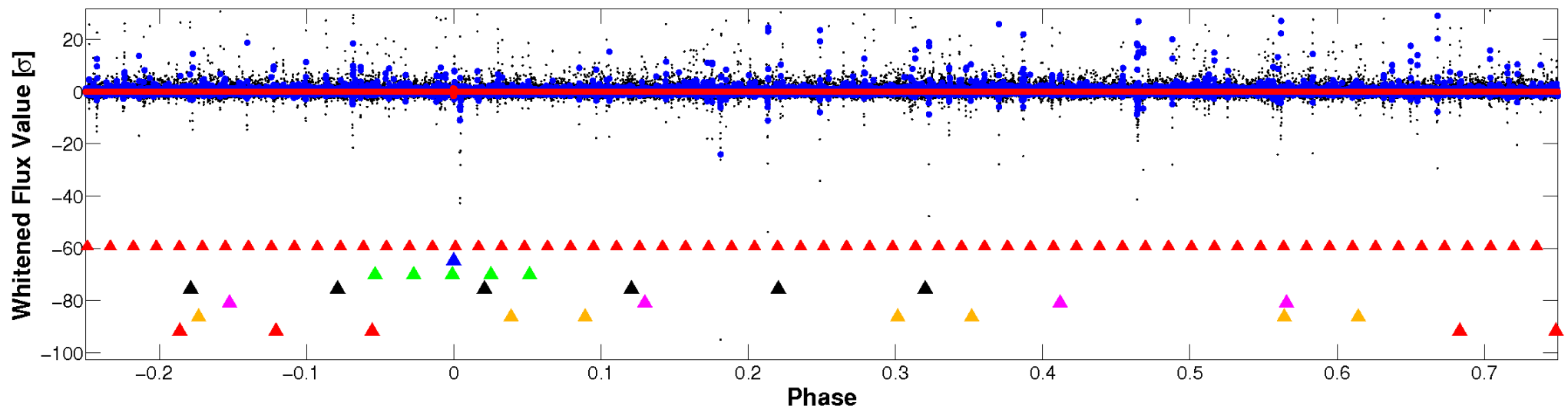


Non-Whitened Vs. Whitened Light Curve

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

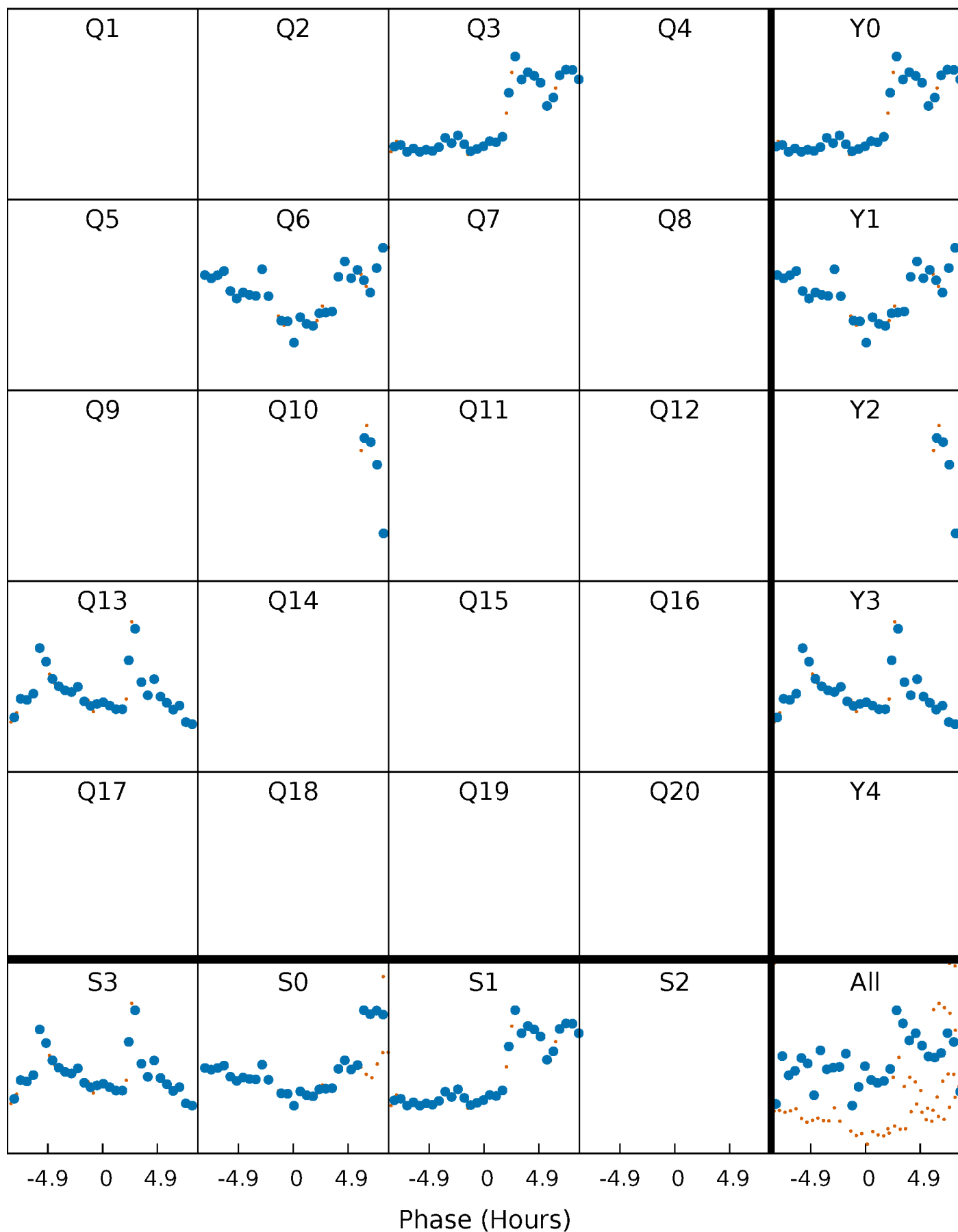


Planet 2 : Phased Whitened Flux Time Series (Fit Epoch/Period)



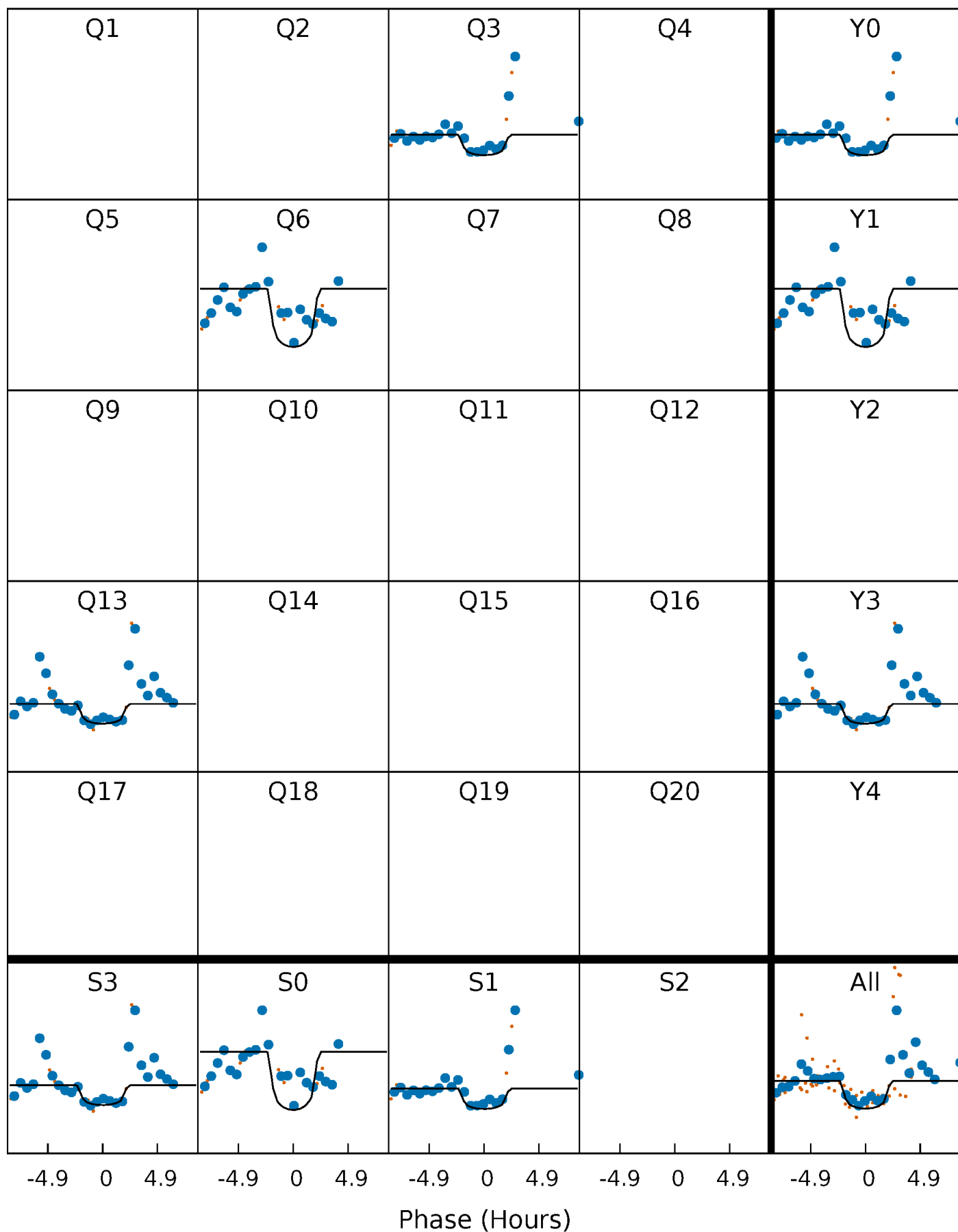
PDC Quarter-Phased Transit Curves

TCE 007350067-02 $P=287.029062$ Days $T_0=332.555145$ (BKJD)



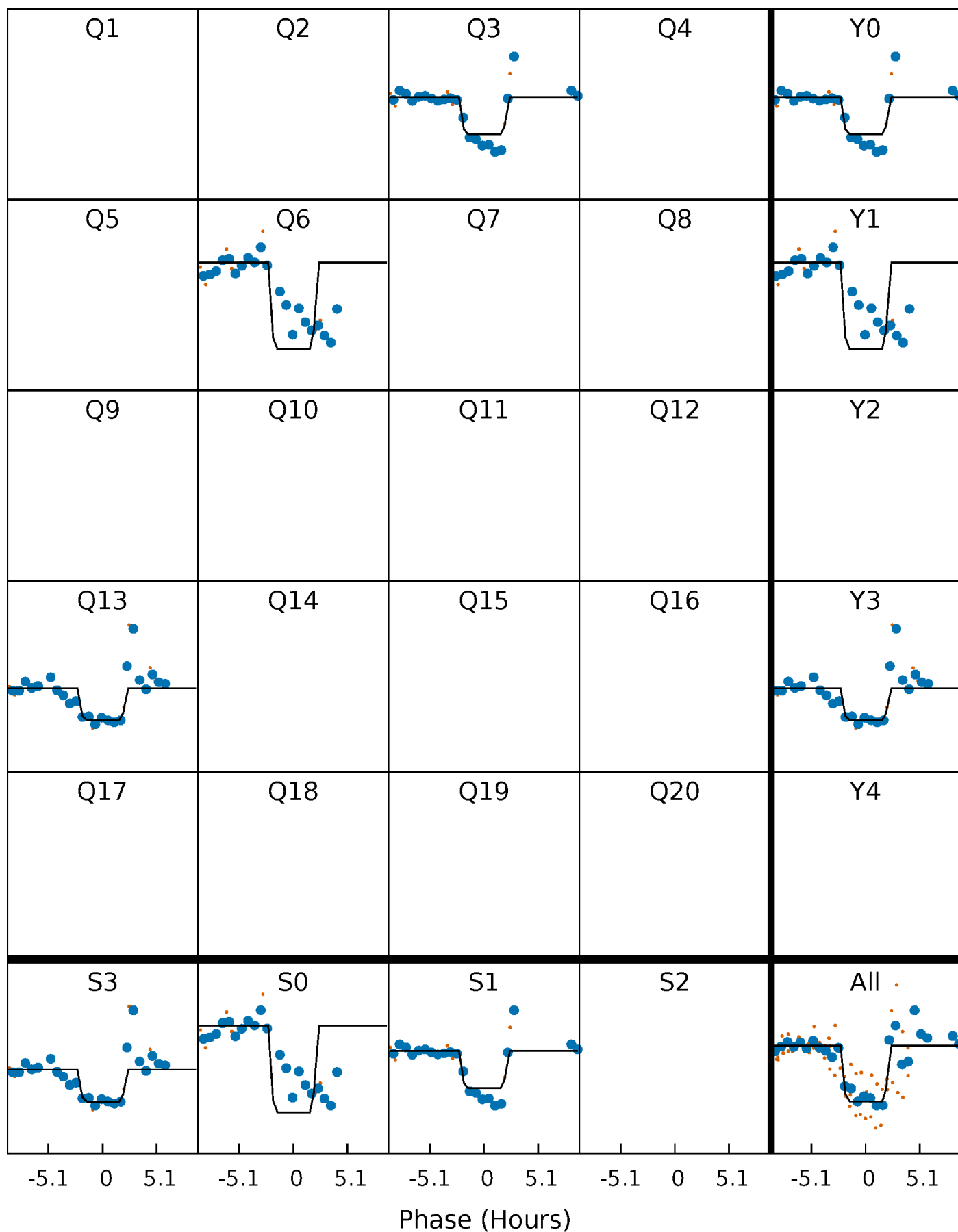
DV Quarter-Phased Transit Curves

TCE 007350067-02 P=287.029062 Days $T_0=332.555145$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

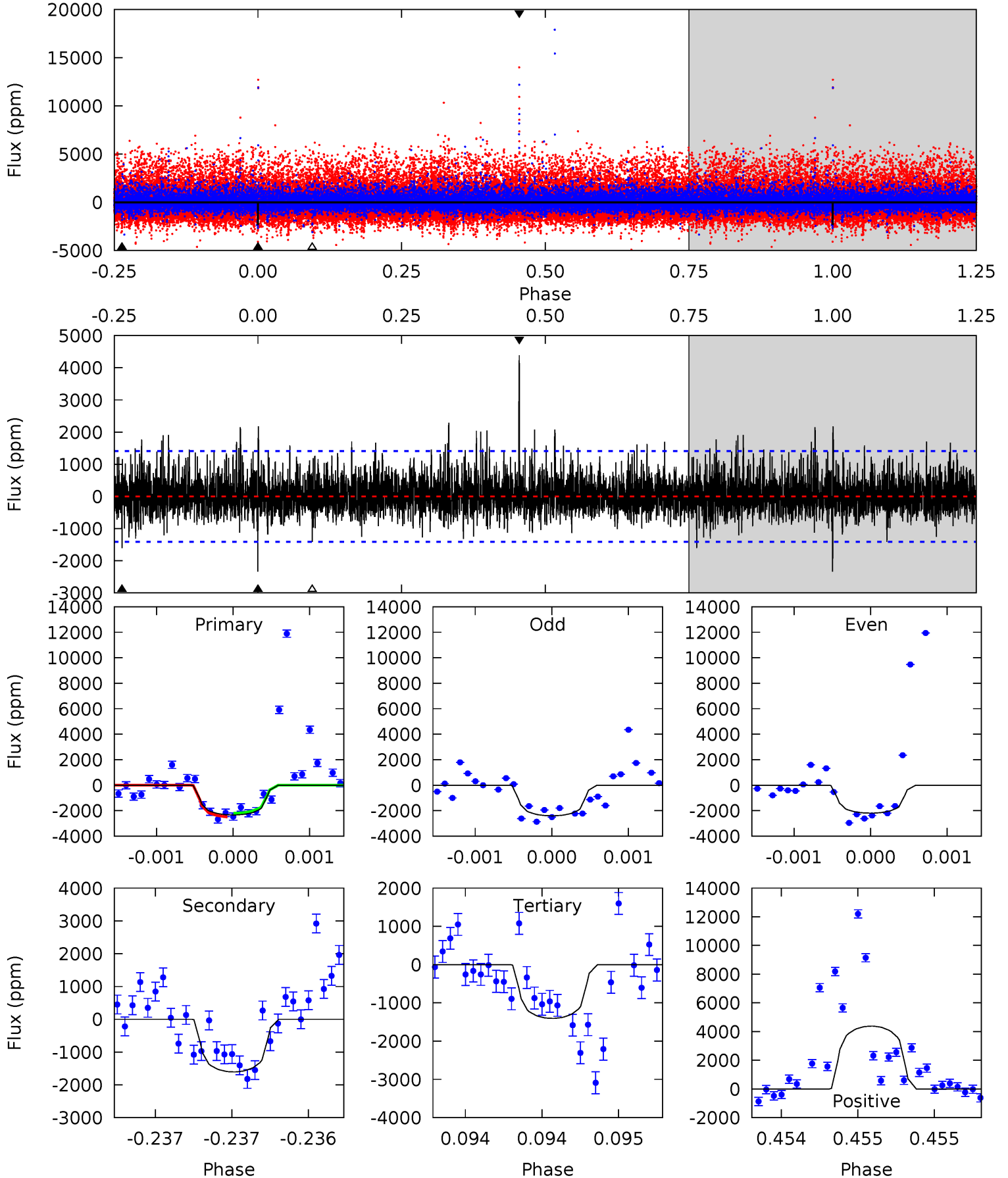
TCE 007350067-02 P=287.029804 Days $T_0=332.557082$ (BKJD)



DV Model-Shift Uniqueness Test

007350067-02, P = 287.029062 Days, E = 45.526083 Days

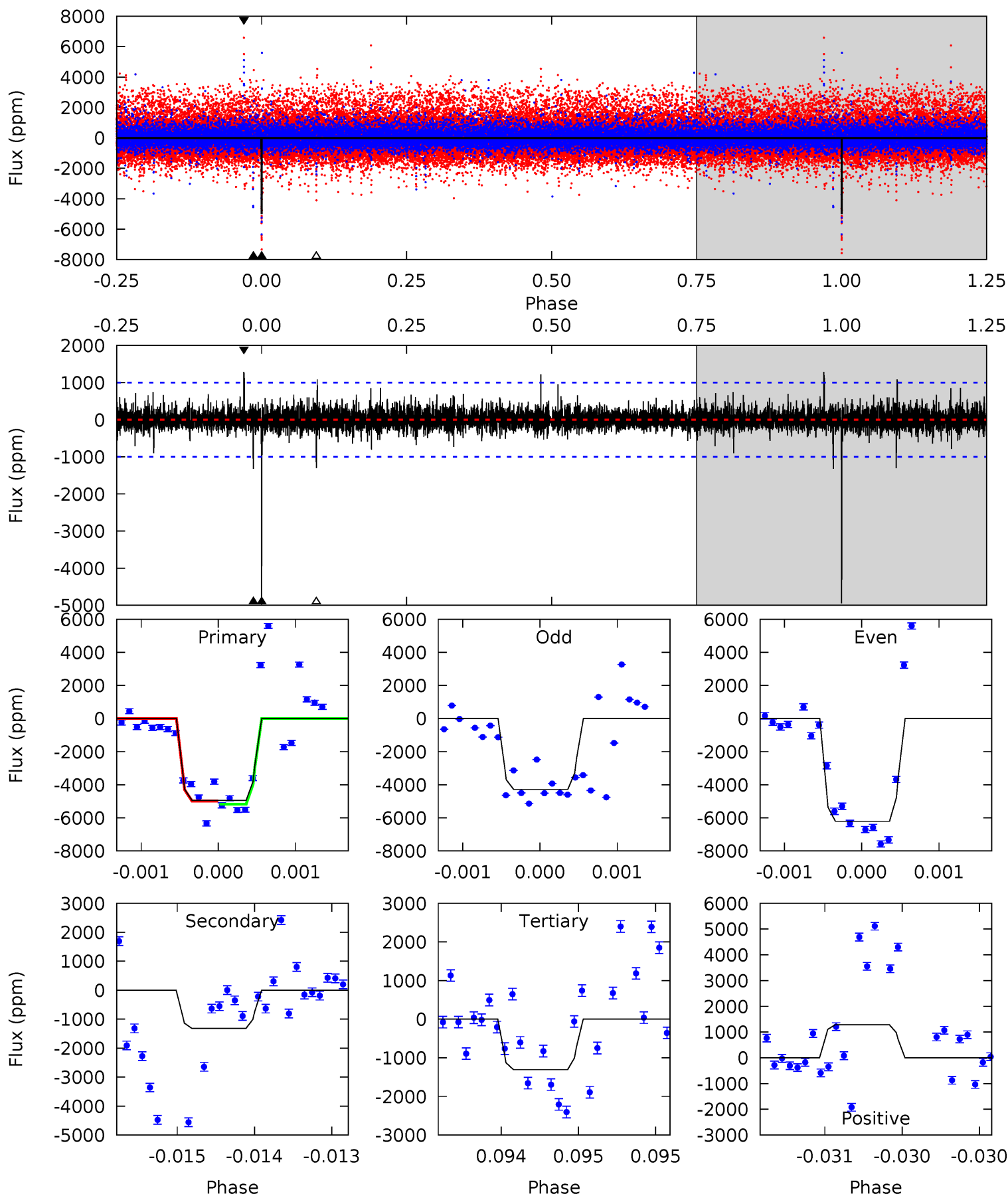
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
9.16	6.30	5.52	17.2	5.53	3.41	1.78	3.64	-8.03	0.78	-10.9	0.26	1.06	0.65	0.57



Alt Model-Shift Uniqueness Test

007350067-02, $P = 287.029804$ Days, $E = 45.527278$ Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
27.4	7.29	7.23	7.10	5.53	3.42	1.01	20.2	20.3	0.05	0.19	4.88	0.93	0.21	0.50



Stellar Parameters For KIC 007350067

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	3236^{+41}_{-25}	$5.097^{+0.055}_{-0.050}$	$0.000^{+0.100}_{-0.100}$	$0.193^{+0.034}_{-0.025}$	$0.169^{+0.038}_{-0.025}$	$33.360^{+10.540}_{-7.993}$
	+1%/-1%	+1%/-1%	+inf%/-inf%	+18%/-13%	+22%/-15%	+32%/-24%
Source	PHO2	PHO2	PHO2	DSEP		

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

Secondary Eclipse Parameters for KIC 007350067-02 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-1606 ± 255	$1.42^{+1.20}_{-0.89}$	128^{+4}_{-3}	2808^{+948}_{-406}	$99601^{+576682}_{-71291}$
Alt.	-1316 ± 181	$1.75^{+1.23}_{-1.07}$	128^{+3}_{-3}	2582^{+781}_{-302}	$52434^{+286271}_{-34007}$

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

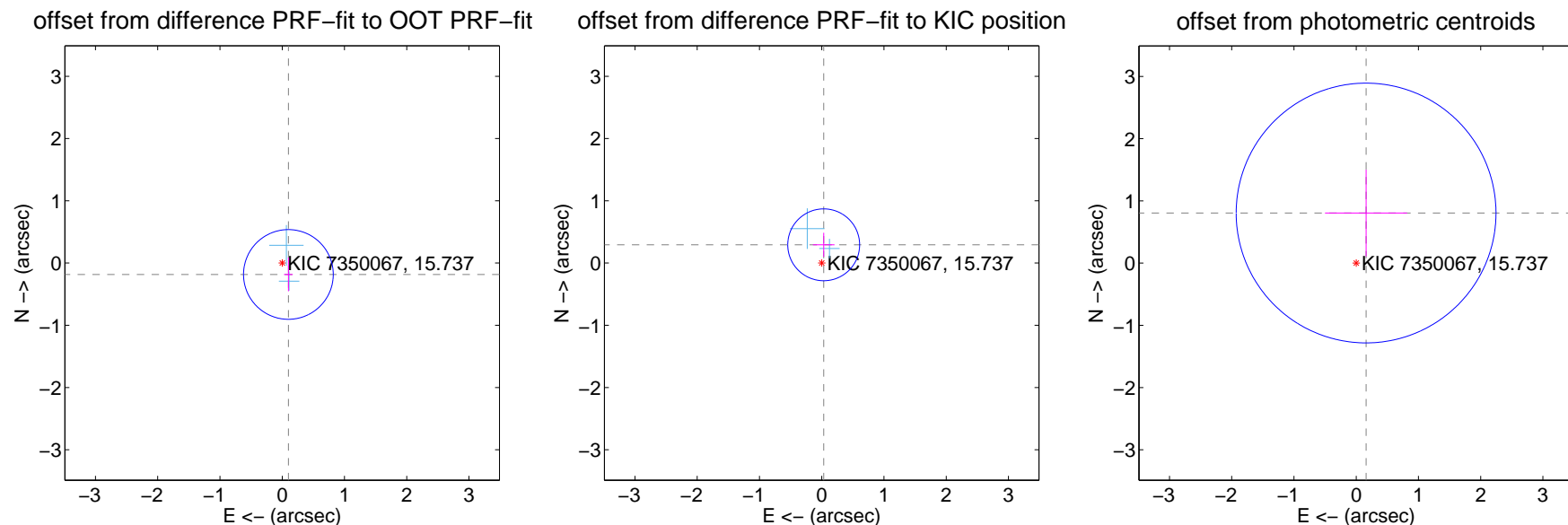
DV Centroid Data

Supplemental centroid analysis for 007350067-02. Kepler magnitude: 15.74. Transit SNR 8.06

There are 2 quarters with good PRF difference image offsets

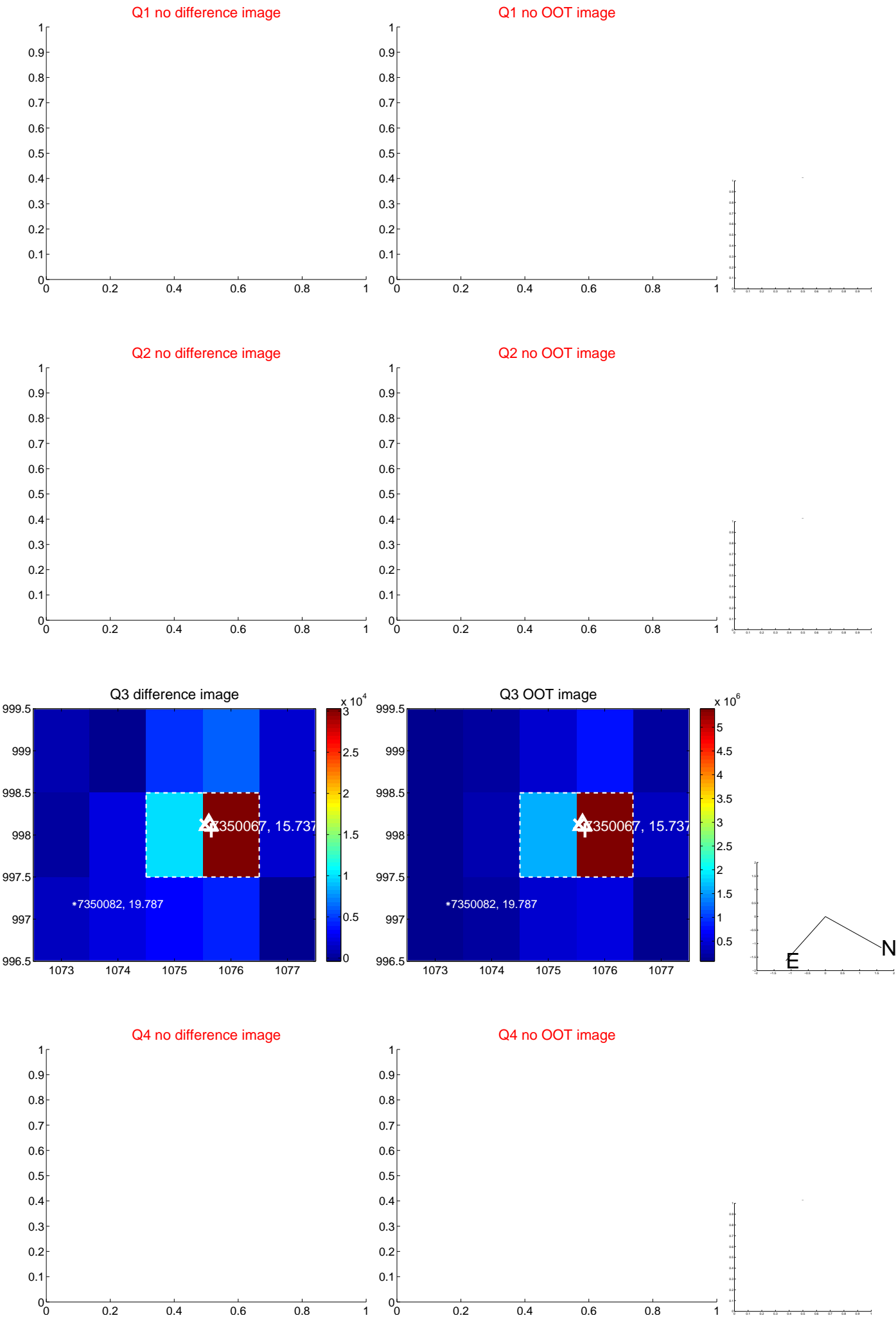
The direct PRF centroid is offset from the target star catalog position by about 0.40 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.208 ± 0.240	0.87	-0.099 ± 0.070	-0.183 ± 0.270
PRF-fit source offset from KIC position	0.295 ± 0.192	1.53	-0.032 ± 0.174	0.293 ± 0.193
photometric centroid source offset	0.82 ± 0.70	1.18	-0.16 ± 0.66	0.81 ± 0.70

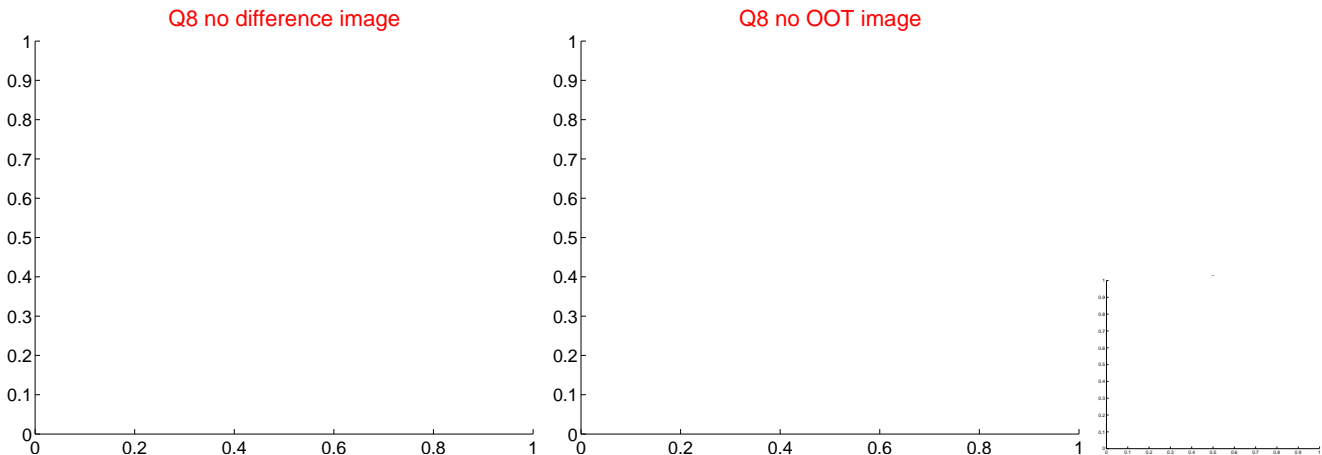
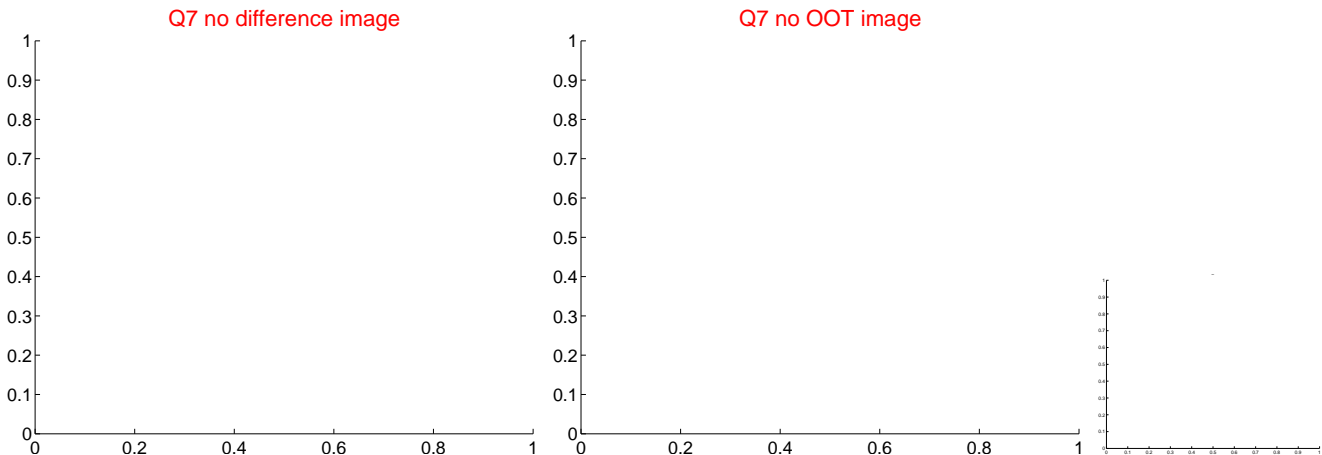
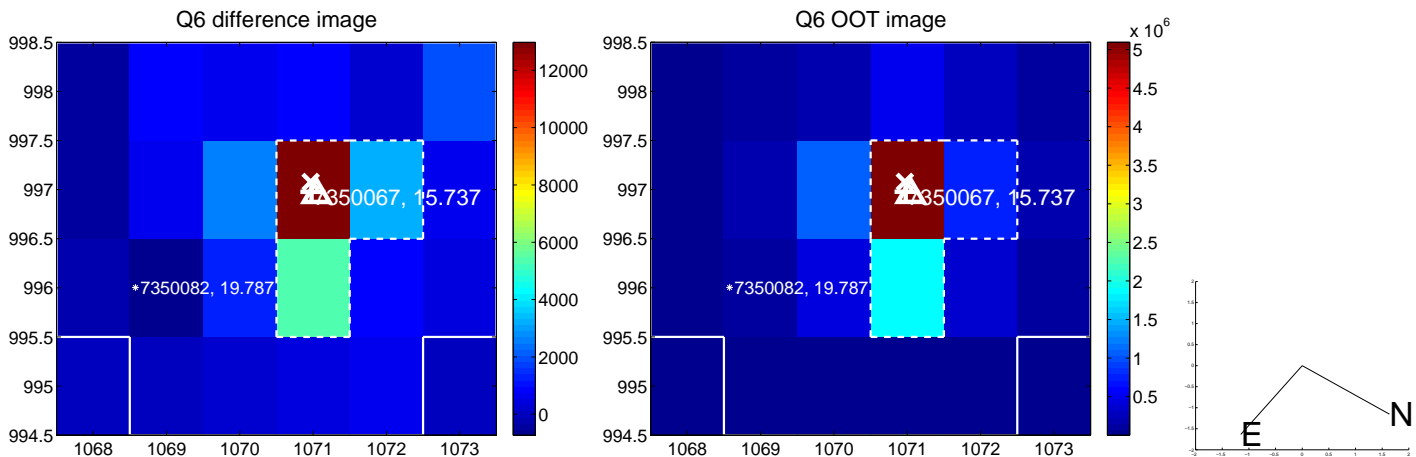
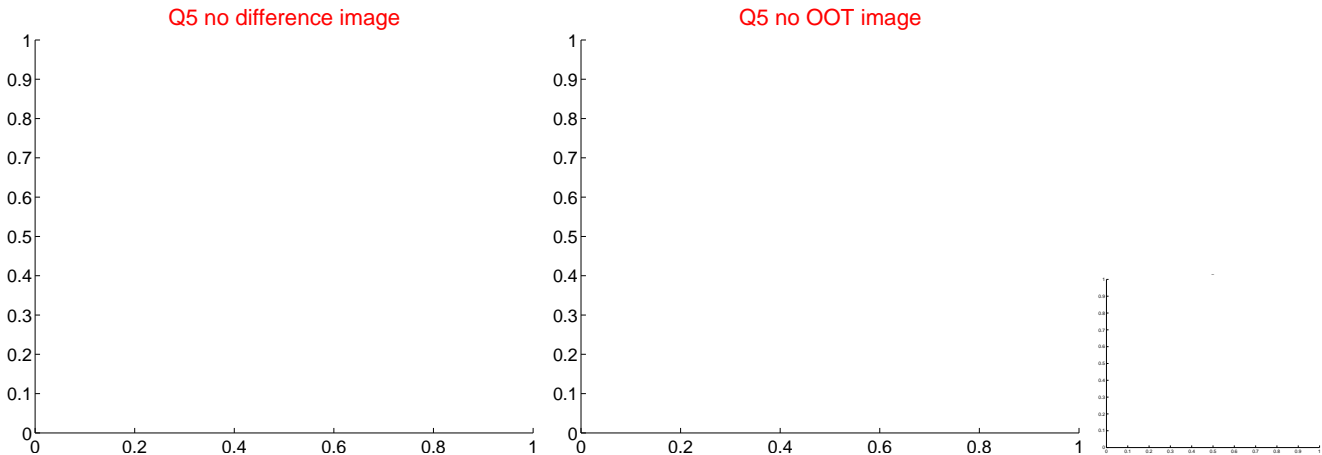


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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



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



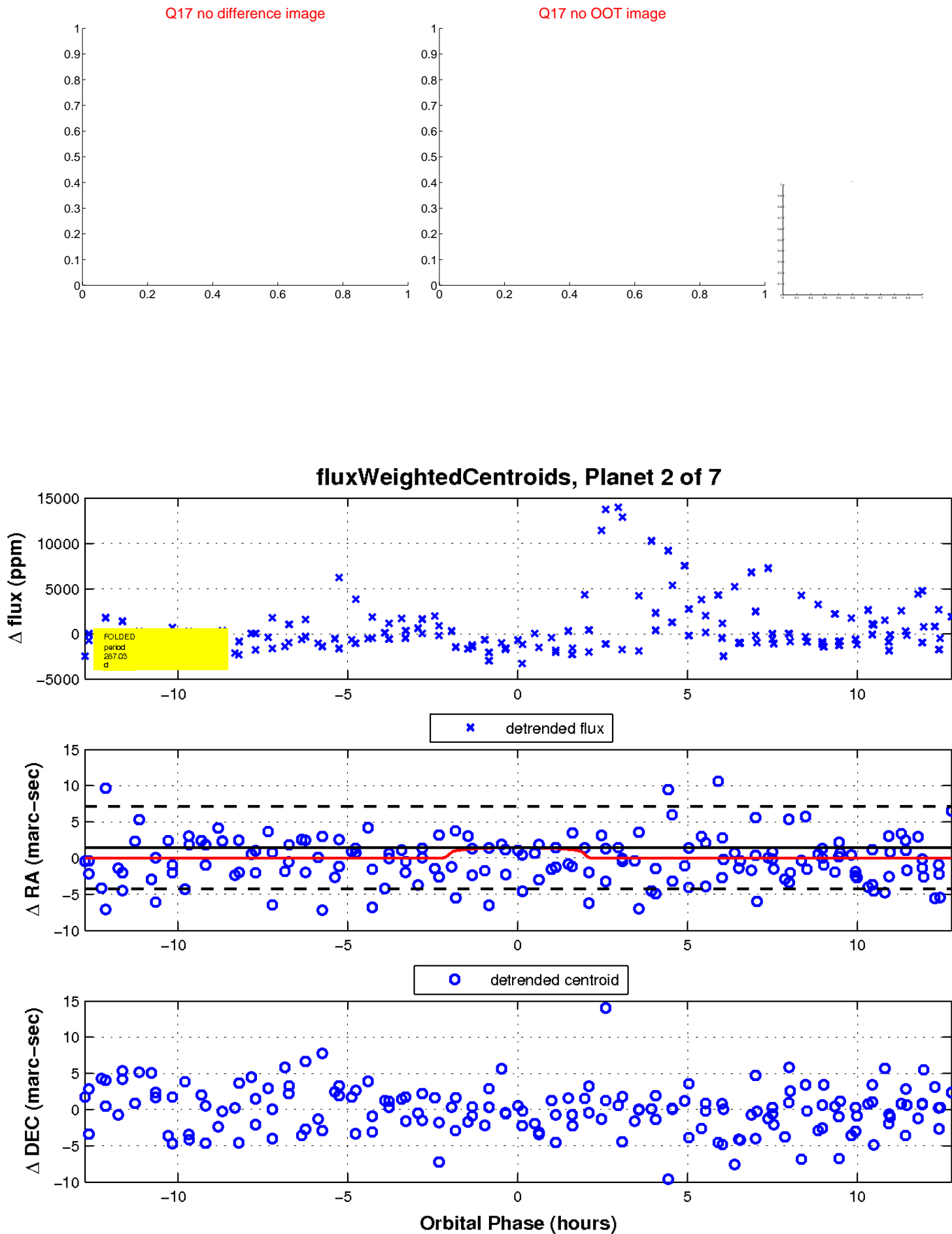
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

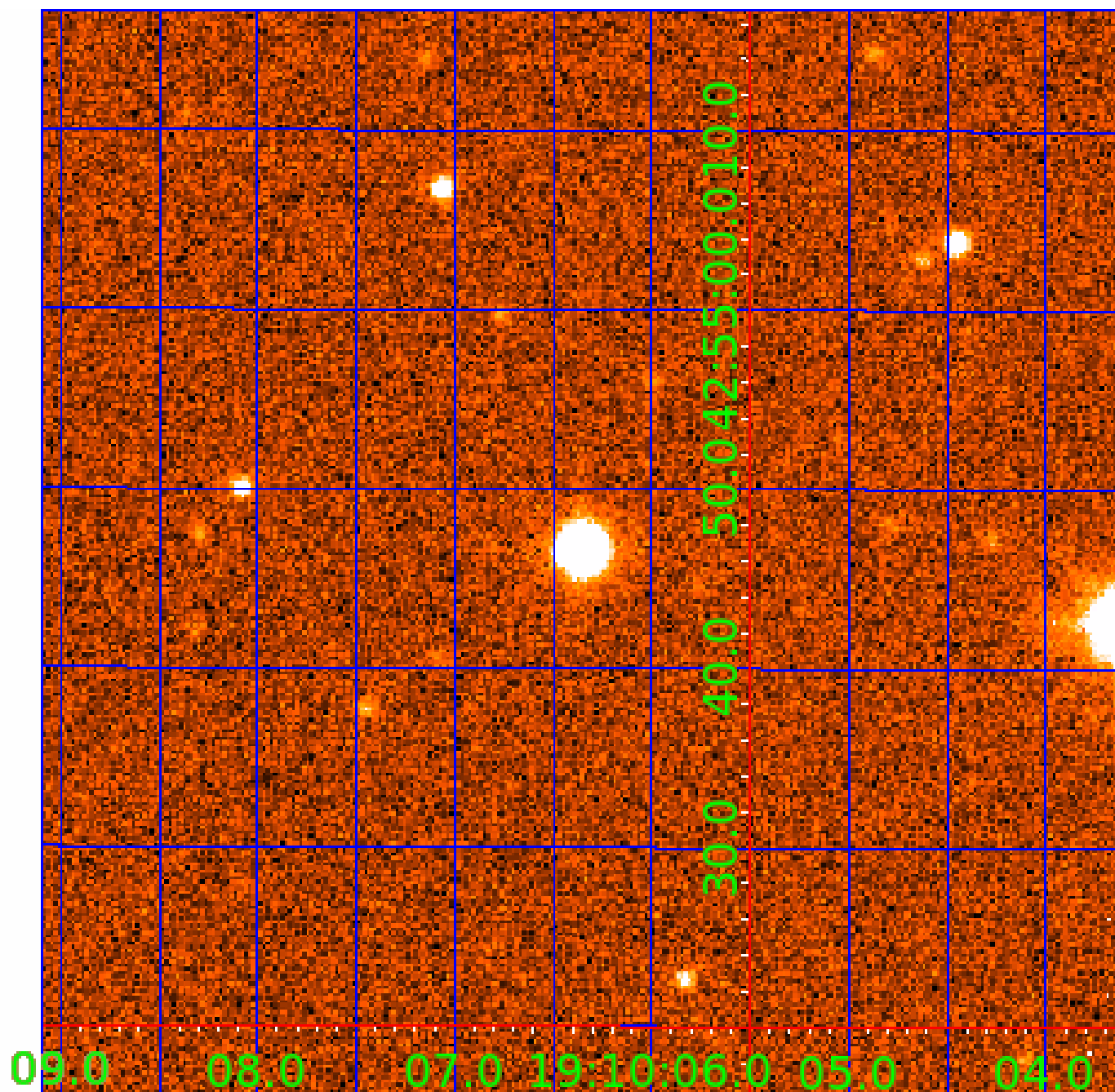


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 007350067

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})
007350067-01	OBS	6863.01	4.485590	135.431953	2240.4	0.834	22.4	39.7	0.19	3236	0.94	4.21
007350067-02	OBS	No	287.029062	332.555145	3119.6	4.263	13.8	8.1	0.19	3236	1.07	0.02
007350067-03	OBS	No	279.498556	347.344021	3972.2	5.834	13.0	10.1	0.19	3236	1.21	0.02
007350067-04	OBS	No	258.389148	137.445671	1921.0	3.957	11.1	6.5	0.19	3236	0.83	0.02
007350067-05	OBS	No	367.993067	207.889083	2614.2	11.600	10.7	7.3	0.19	3236	1.17	0.01
007350067-06	OBS	No	211.665139	221.872541	1892.9	4.650	11.0	6.6	0.19	3236	0.83	0.03
007350067-07	OBS	No	305.778173	241.657053	2703.7	3.000	11.9	-1.0	0.19	3236	0.99	0.01

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
007350067-01	OBS	PC	1.00	0	0	0	0	CENT_KIC_POS
007350067-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_MARSHALL—LPP_DV—MOD_POS_DV—INCONSISTENT_TRANS—CENT_FEW_DIFFS
007350067-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_MARSHALL—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_POS_DV—CENT_FEW_DIFFS
007350067-04	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_MARSHALL_SKYE—LPP_DV—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—CENT_KIC_POS
007350067-05	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_MARSHALL—LPP_DV—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—INCONSISTENT_TRANS—CENT_FEW_DIFFS
007350067-06	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_MARSHALL_SKYE—LPP_DV—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV
007350067-07	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_MARSHALL—LPP_DV—ALL_TRANS_CHASES—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.

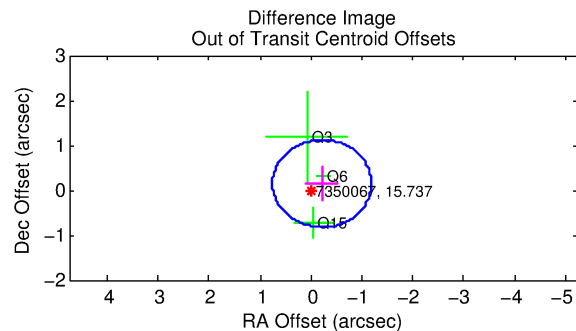
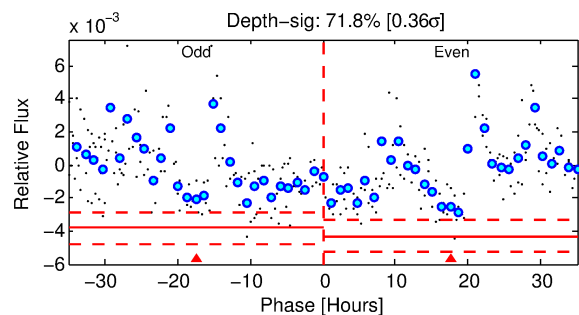
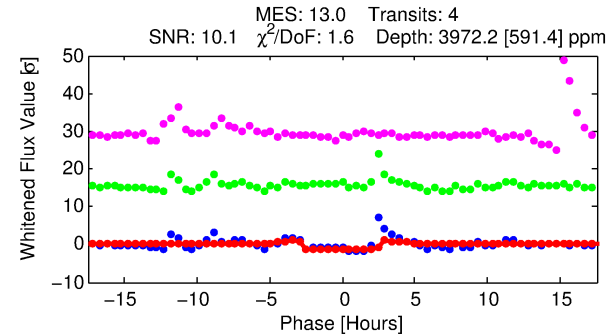
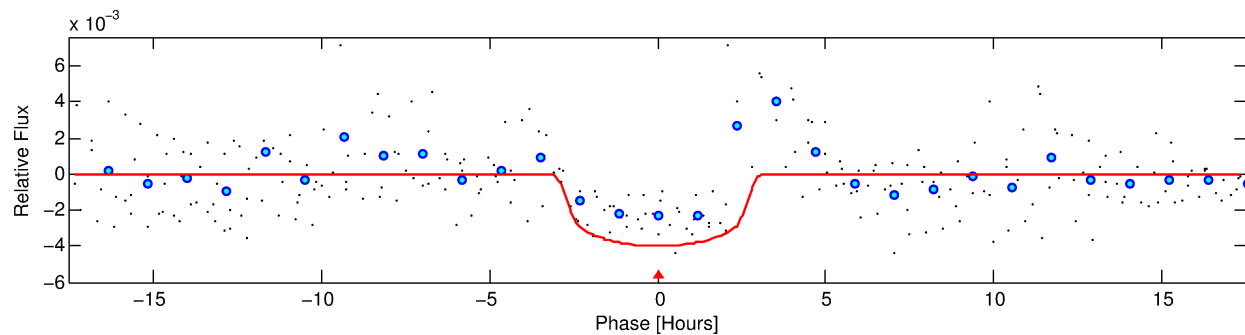
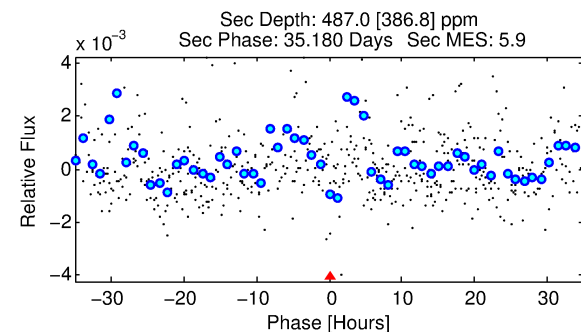
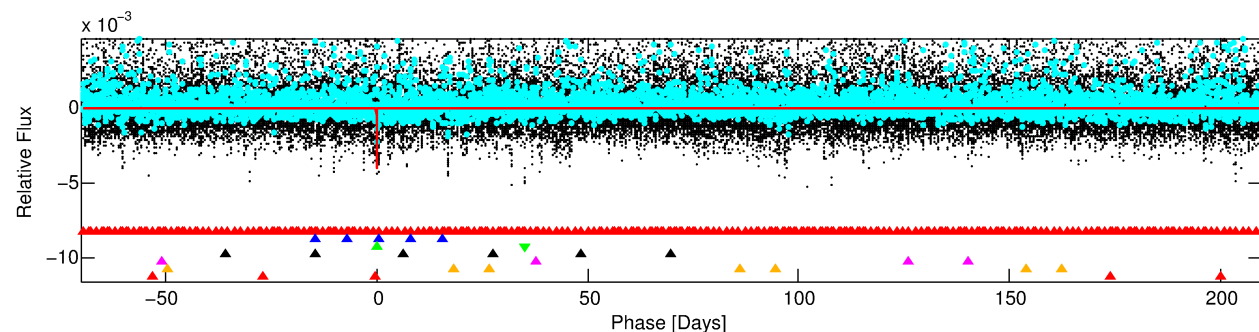
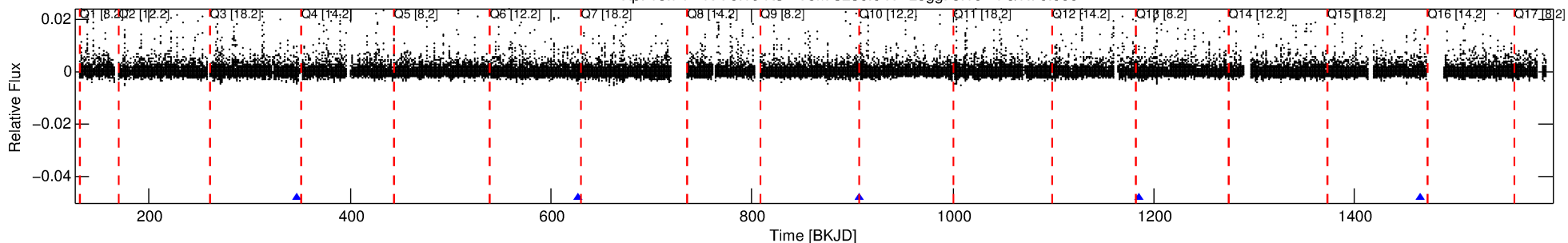
Ephemeris Match Information For 007350067-03

No Significant Match Found

DV One-Page Summary

KIC: 7350067 Candidate: 3 of 7 Period: 279.499 d
KOI: K06863 Corr: No Ephemeris Match

Kp: 15.74 R*: 0.19 Rs Teff: 3236.0 K Logg: 5.10 Fe/H: 0.000



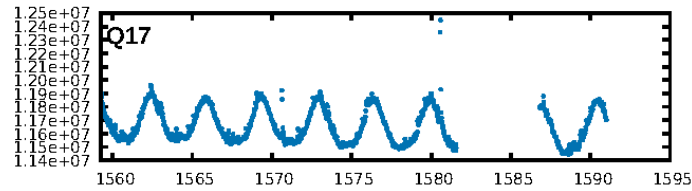
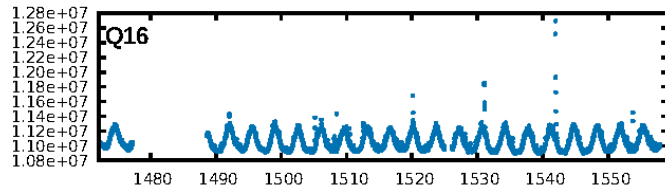
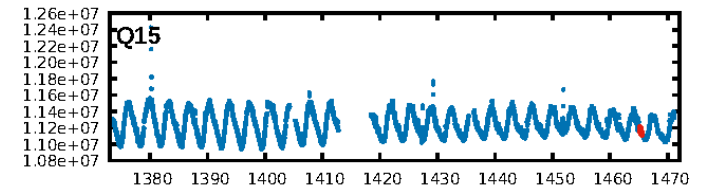
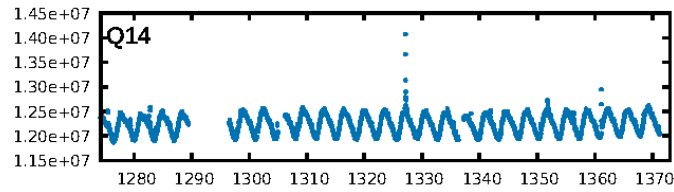
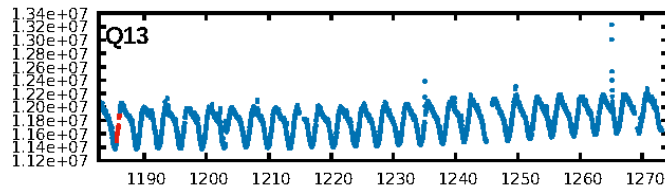
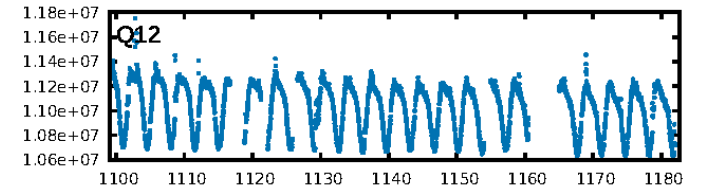
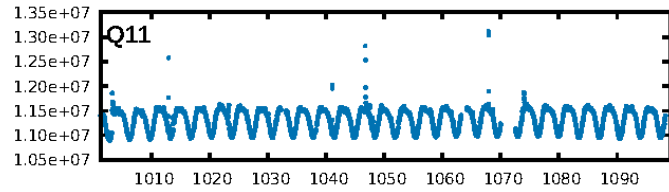
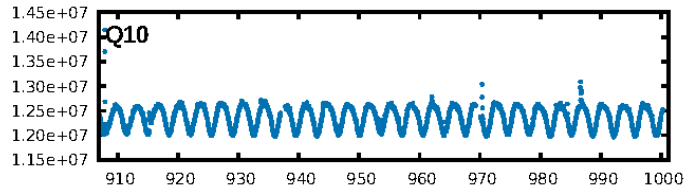
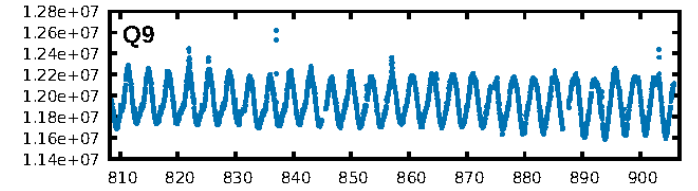
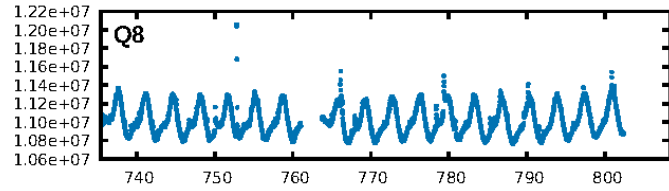
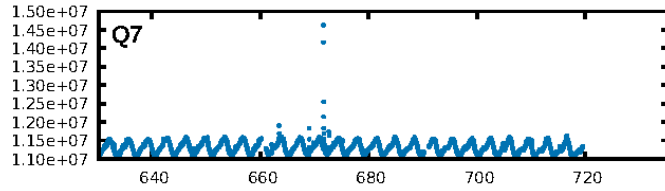
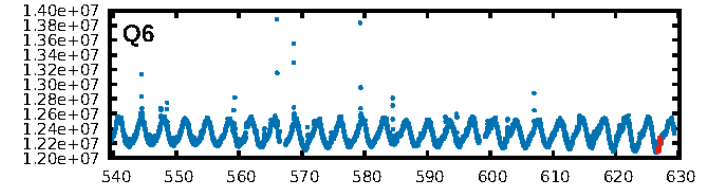
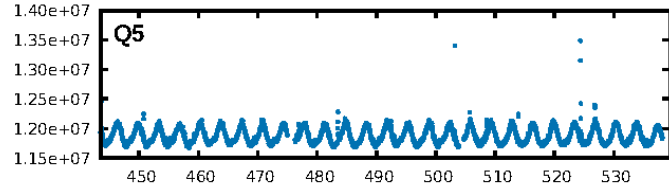
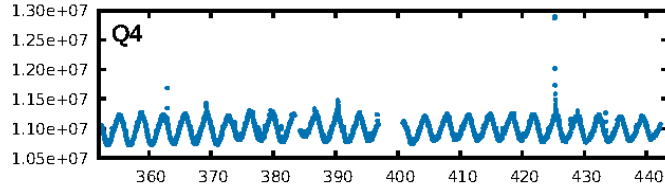
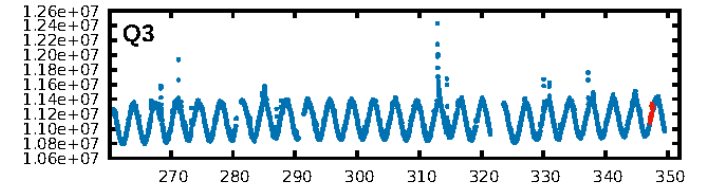
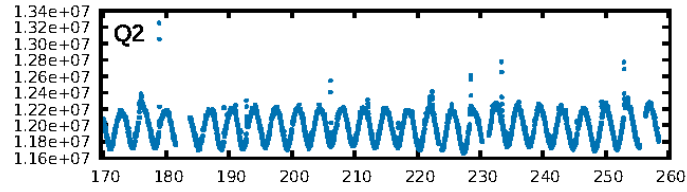
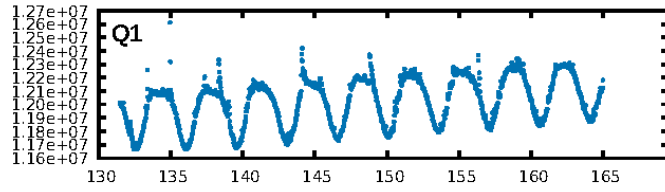
DV Fit Results:

Period = 279.49856 [0.00293] d
Epoch = 347.3440 [0.0076] BKJD
Rp/R* = 0.0575 [0.0208]
a/R* = 372.52 [539.81]
b = 0.29 [4.64]
Seff = 0.02 [0.00]
Teq = 92 [4] K
Rp = 1.21 [0.49] Re
a = 0.4634 [0.0578] AU
Ag = 39195.90 [42454.94] [0.92σ]
Teffp = 2004 [538] K [3.55σ]

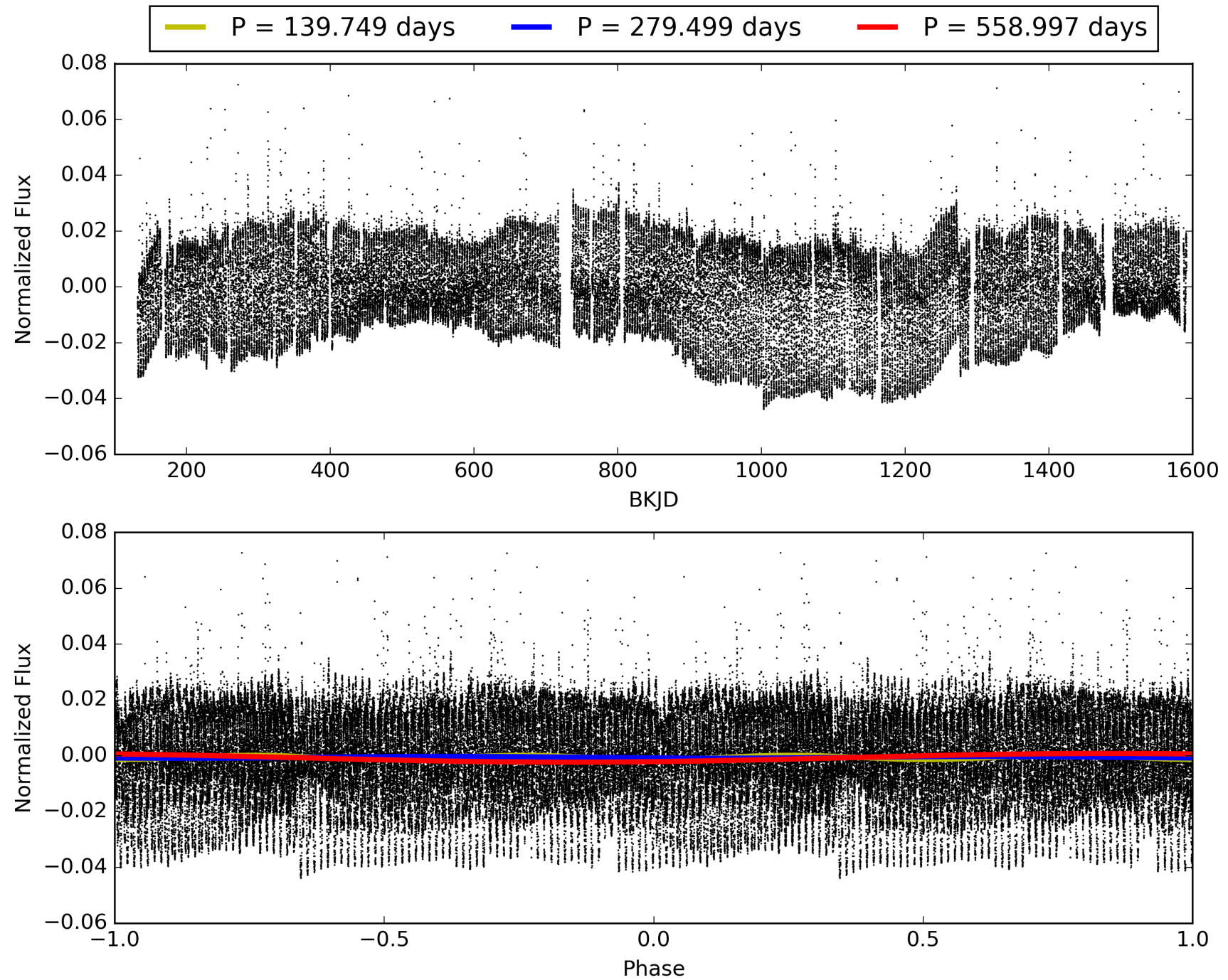
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [71.87σ]
LongPeriod-sig: 100.0% [25.01σ]
ModelChiSquare2-sig: 1.8%
ModelChiSquareGof-sig: 99.3%
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [4/4]
GhostDiagnostic-chr: 0.9261
Centroid-sig: N/A
Centroid-so: 0.637 arcsec [1.53σ]
OotOffset-rm: 0.260 arcsec [0.80σ]
KicOffset-rm: 0.473 arcsec [1.05σ]
OotOffset-st: 1/2/0/0 [3]
KicOffset-st: 1/2/0/0 [3]
DiffImageQuality-fgm: 0.67 [2/3]
DiffImageOverlap-fno: 0.67 [2/3]

TCE 007350067-03, PDC Light Curves

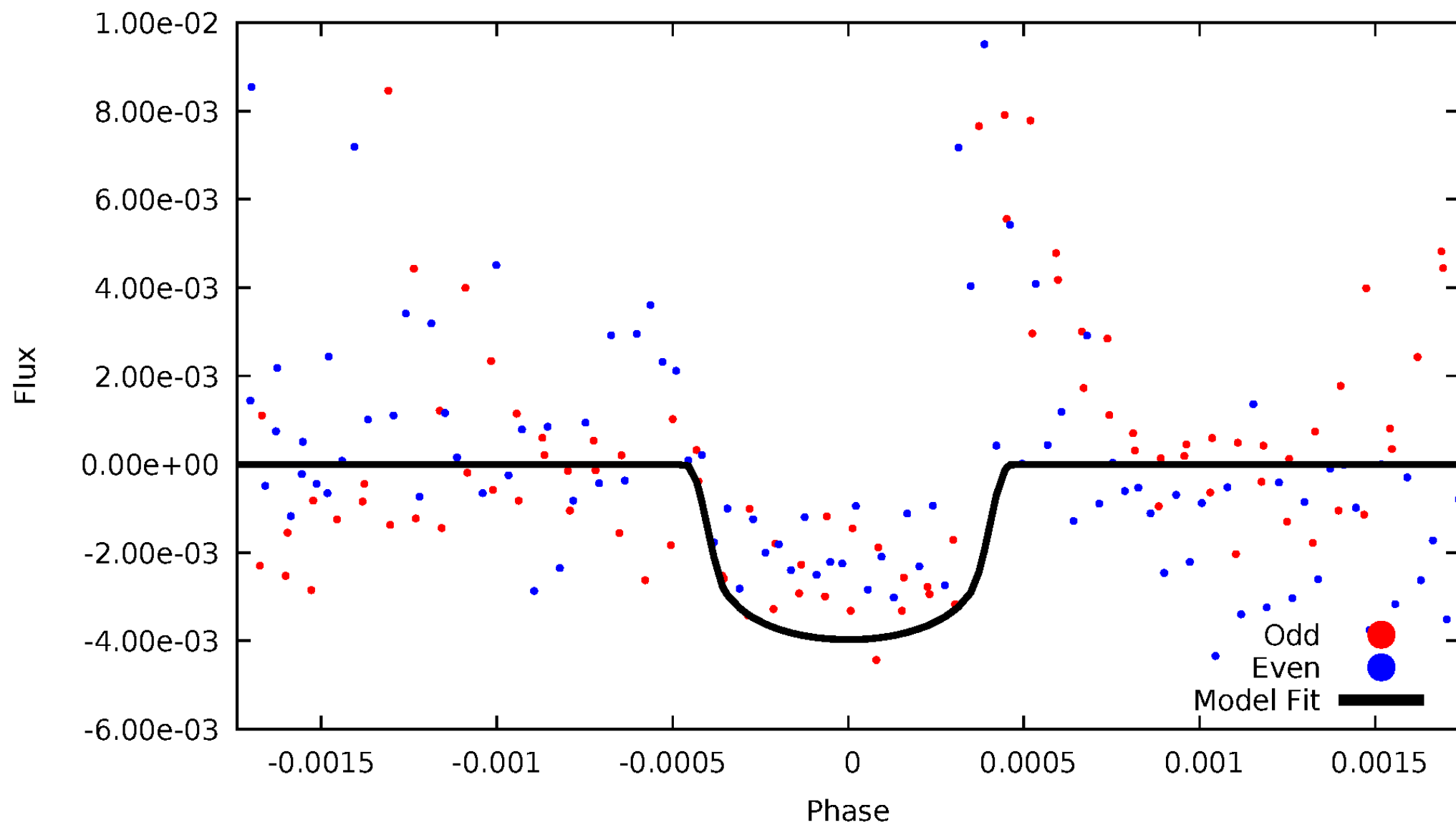


TCE 007350067-03



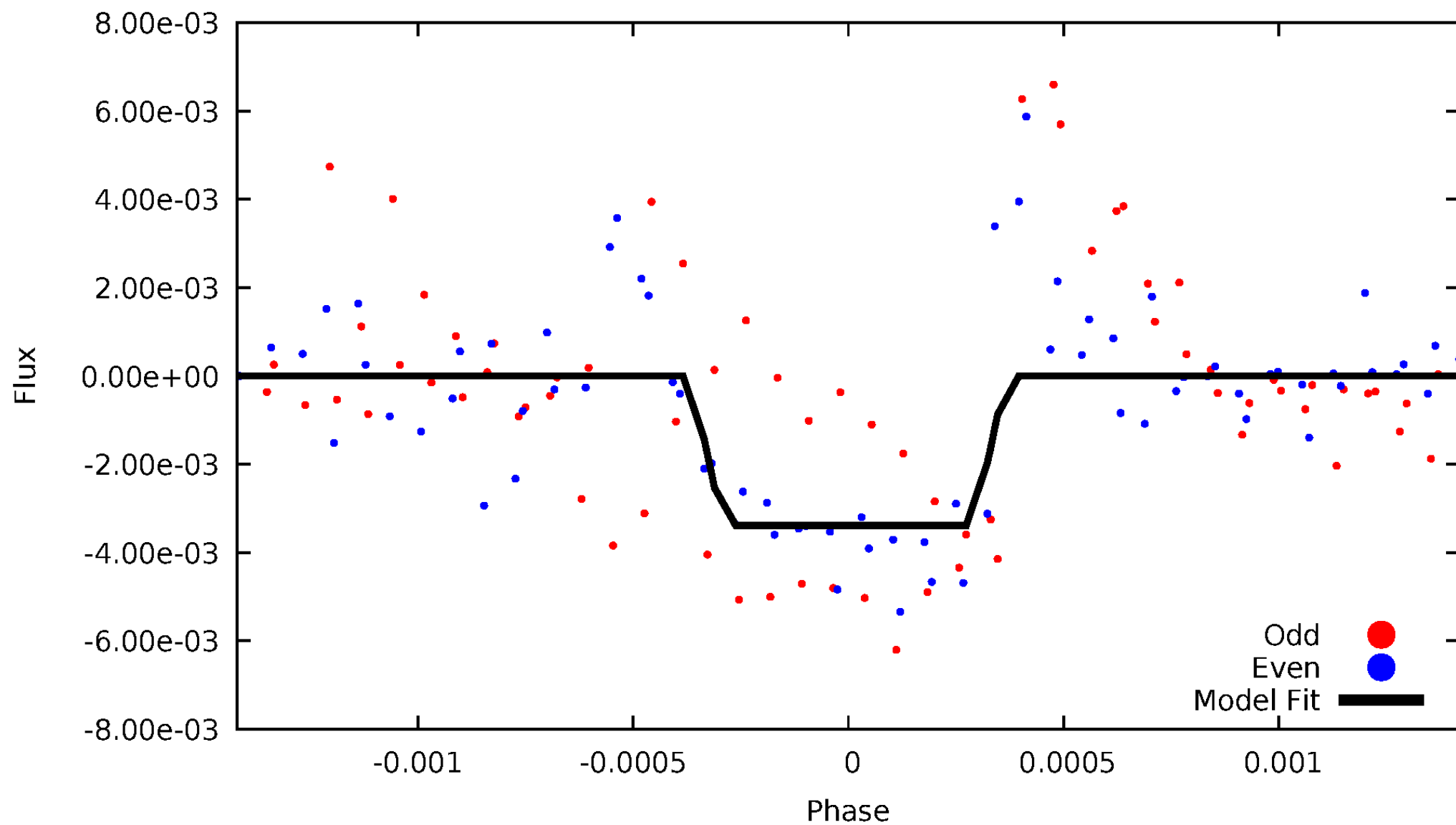
DV Odd/Even

TCE 007350067-03



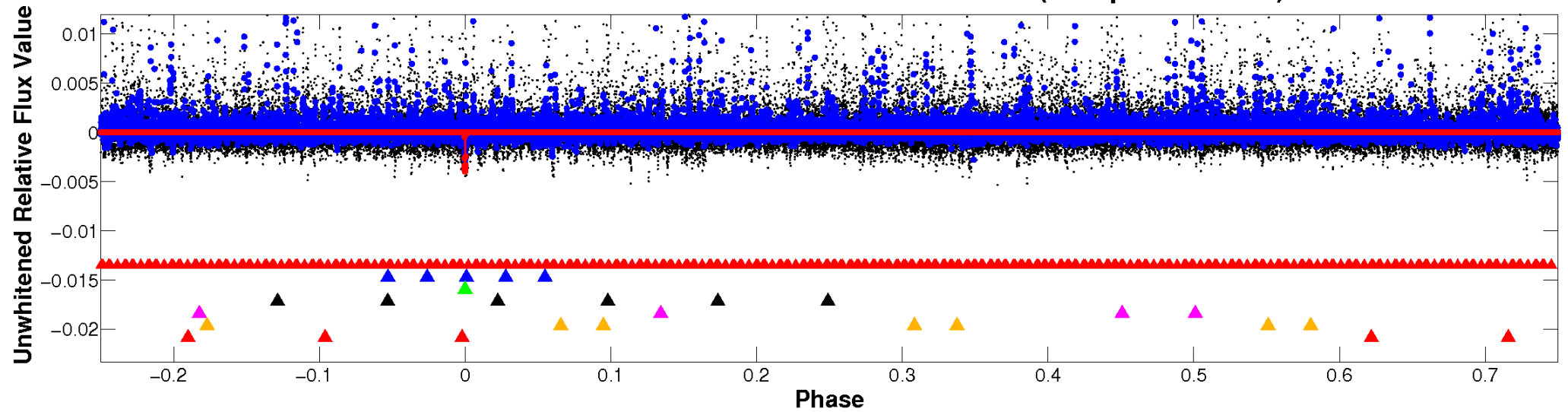
ALT Odd/Even

TCE 007350067-03

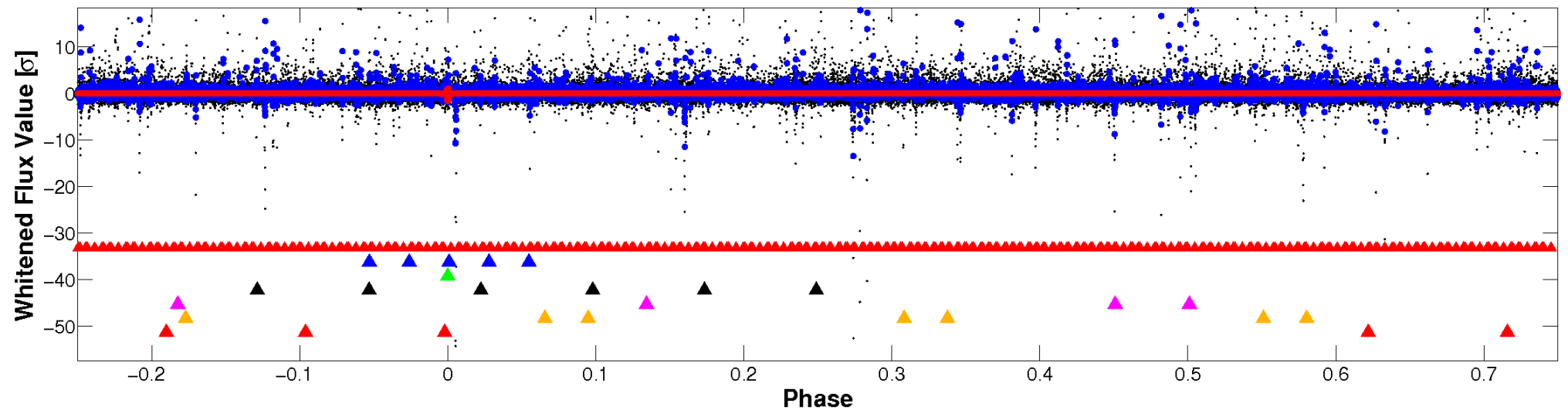


Non-Whitened Vs. Whitened Light Curve

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

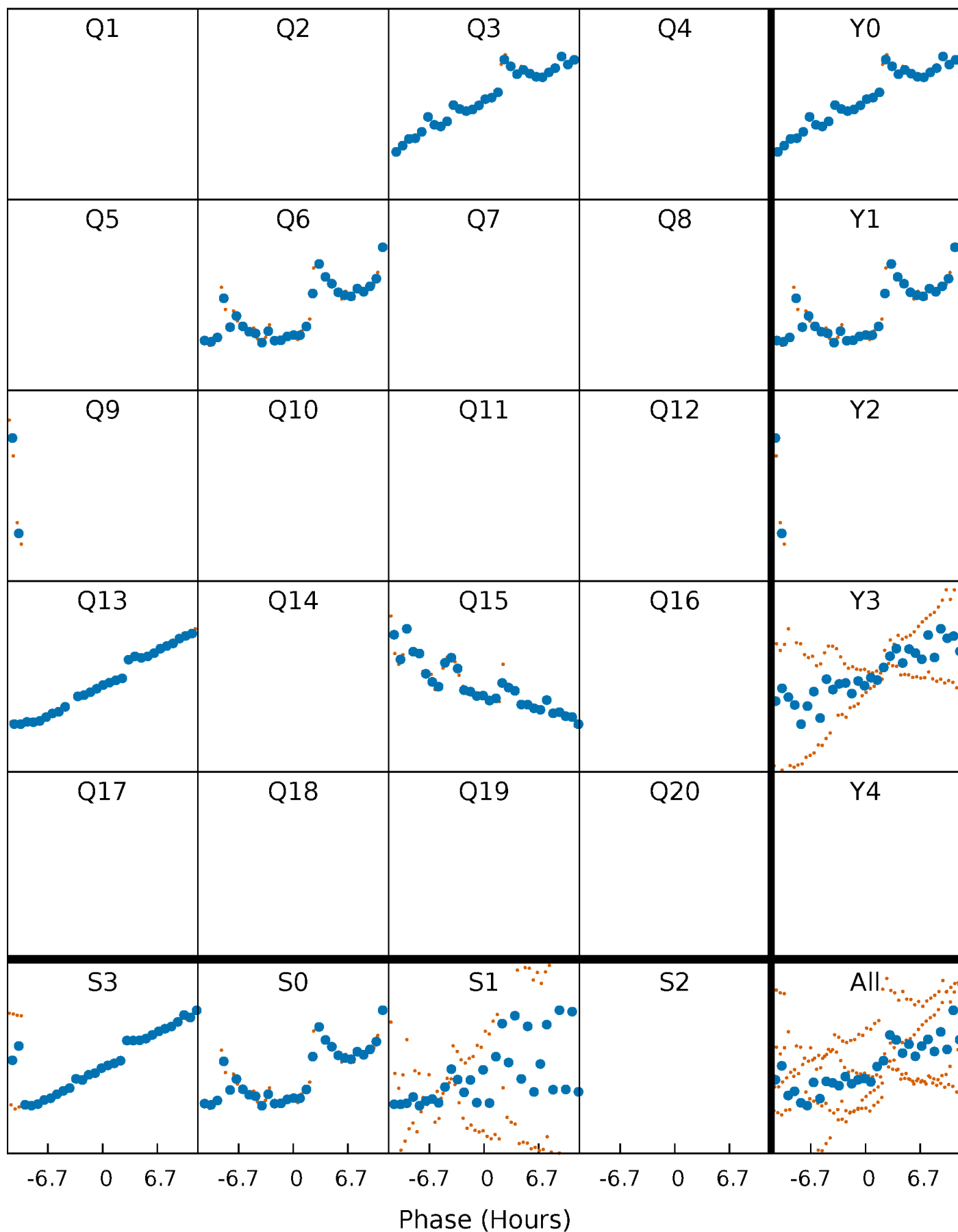


Planet 3 : Phased Whitened Flux Time Series (Fit Epoch/Period)



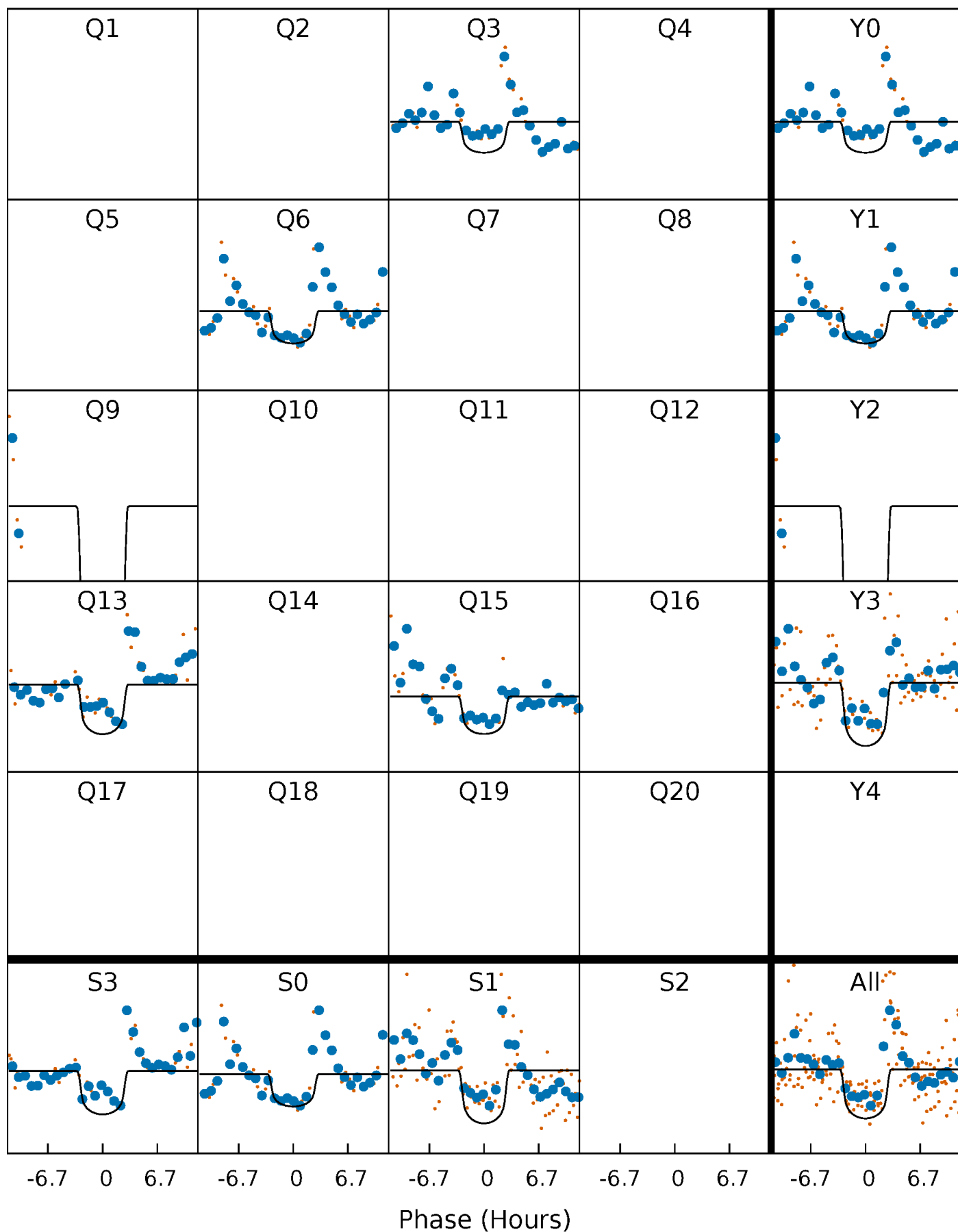
PDC Quarter-Phased Transit Curves

TCE 007350067-03 $P=279.498556$ Days $T_0=347.344021$ (BKJD)



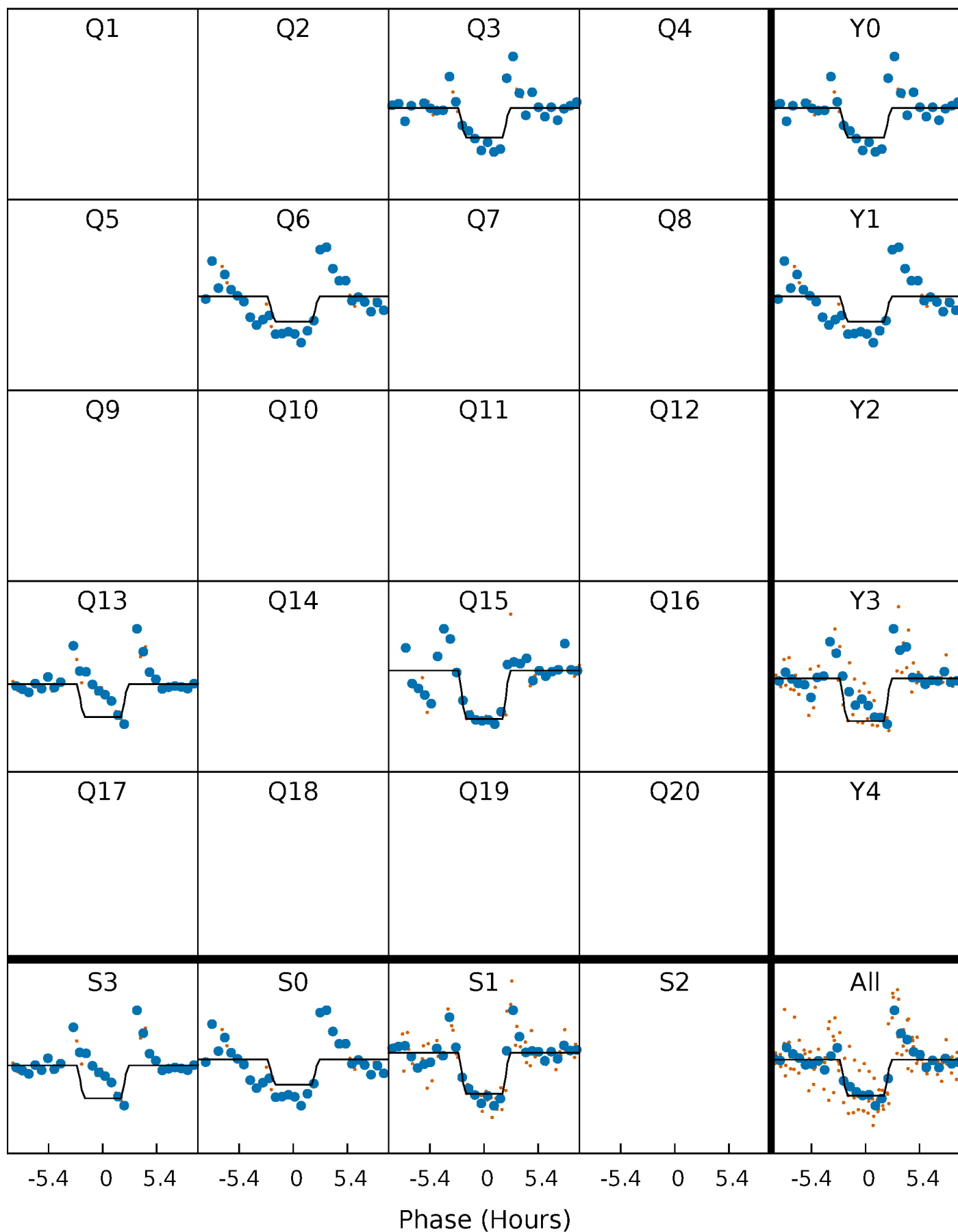
DV Quarter-Phased Transit Curves

TCE 007350067-03 $P=279.498556$ Days $T_0=347.344021$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

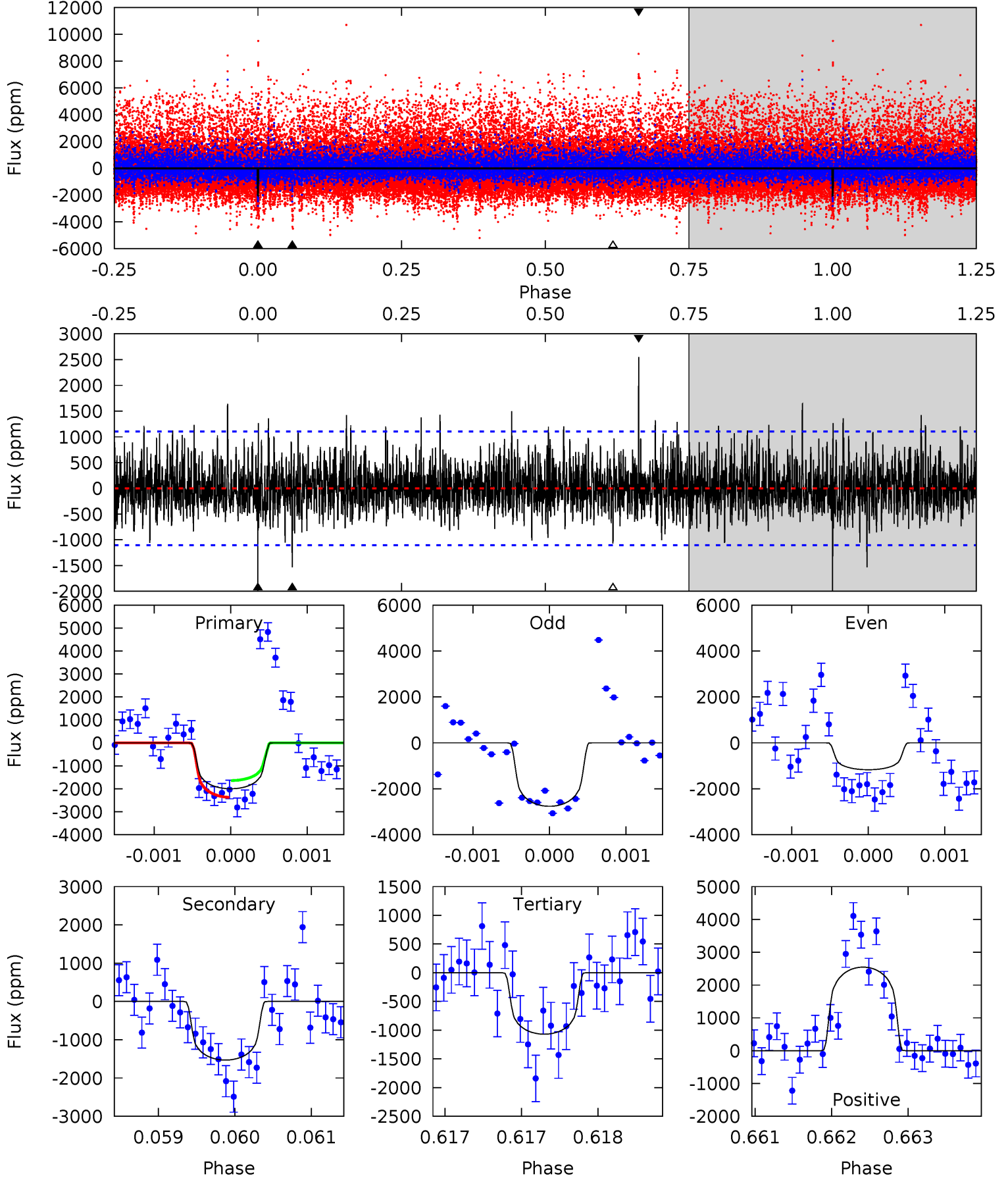
TCE 007350067-03 P=279.497045 Days $T_0=347.336671$ (BKJD)



DV Model-Shift Uniqueness Test

007350067-03, $P = 279.498556$ Days, $E = 67.845465$ Days

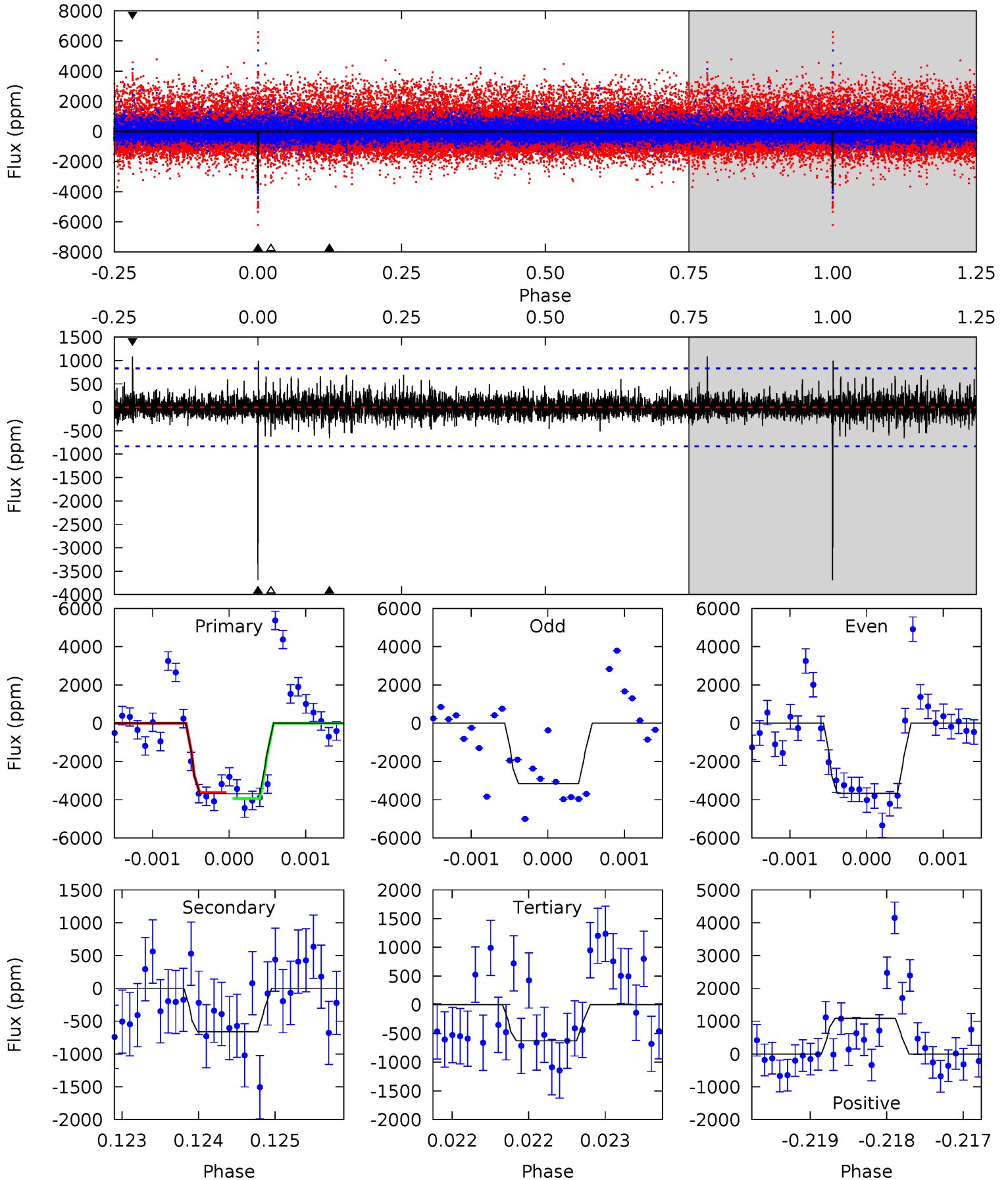
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
9.92	7.59	5.31	12.6	5.47	3.32	1.78	4.61	-2.71	2.29	-5.04	3.24	0.82	0.56	1.81



Alt Model-Shift Uniqueness Test

007350067-03, P = 279.497045 Days, E = 67.839626 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
24.5	4.39	4.17	7.22	5.52	3.40	0.99	20.3	17.3	0.23	-2.83	1.67	0.93	0.23	0



Stellar Parameters For KIC 007350067

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	3236^{+41}_{-25}	$5.097^{+0.055}_{-0.050}$	$0.000^{+0.100}_{-0.100}$	$0.193^{+0.034}_{-0.025}$	$0.169^{+0.038}_{-0.025}$	$33.360^{+10.540}_{-7.993}$
	+1%/-1%	+1%/-1%	+inf%/-inf%	+18%/-13%	+22%/-15%	+32%/-24%
Source	PHO2	PHO2	PHO2	DSEP		

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

Secondary Eclipse Parameters for KIC 007350067-03 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-1531 ± 202	$1.19^{+0.45}_{-0.43}$	129^{+4}_{-3}	2905^{+440}_{-235}	$125479^{+184926}_{-59090}$
Alt.	-661 ± 151	$1.23^{+0.45}_{-0.48}$	129^{+3}_{-3}	2602^{+370}_{-210}	52797^{+91423}_{-26548}

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

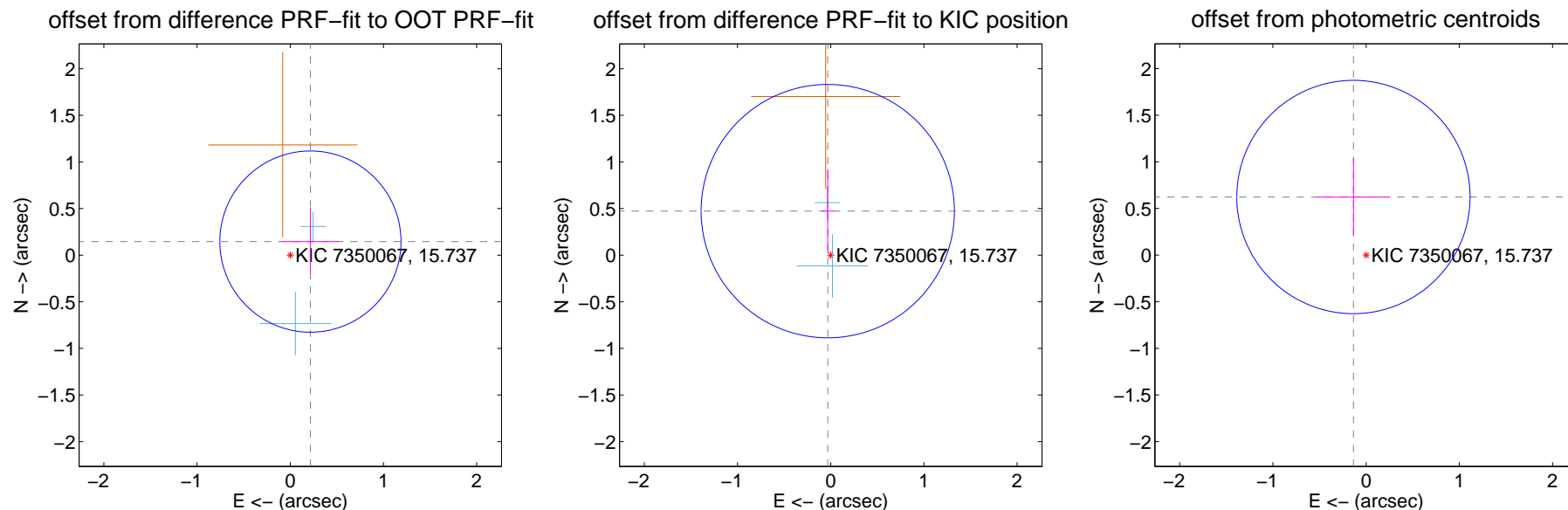
DV Centroid Data

Supplemental centroid analysis for 007350067-03. Kepler magnitude: 15.74. Transit SNR 10.07

There are 2 quarters with good PRF difference image offsets

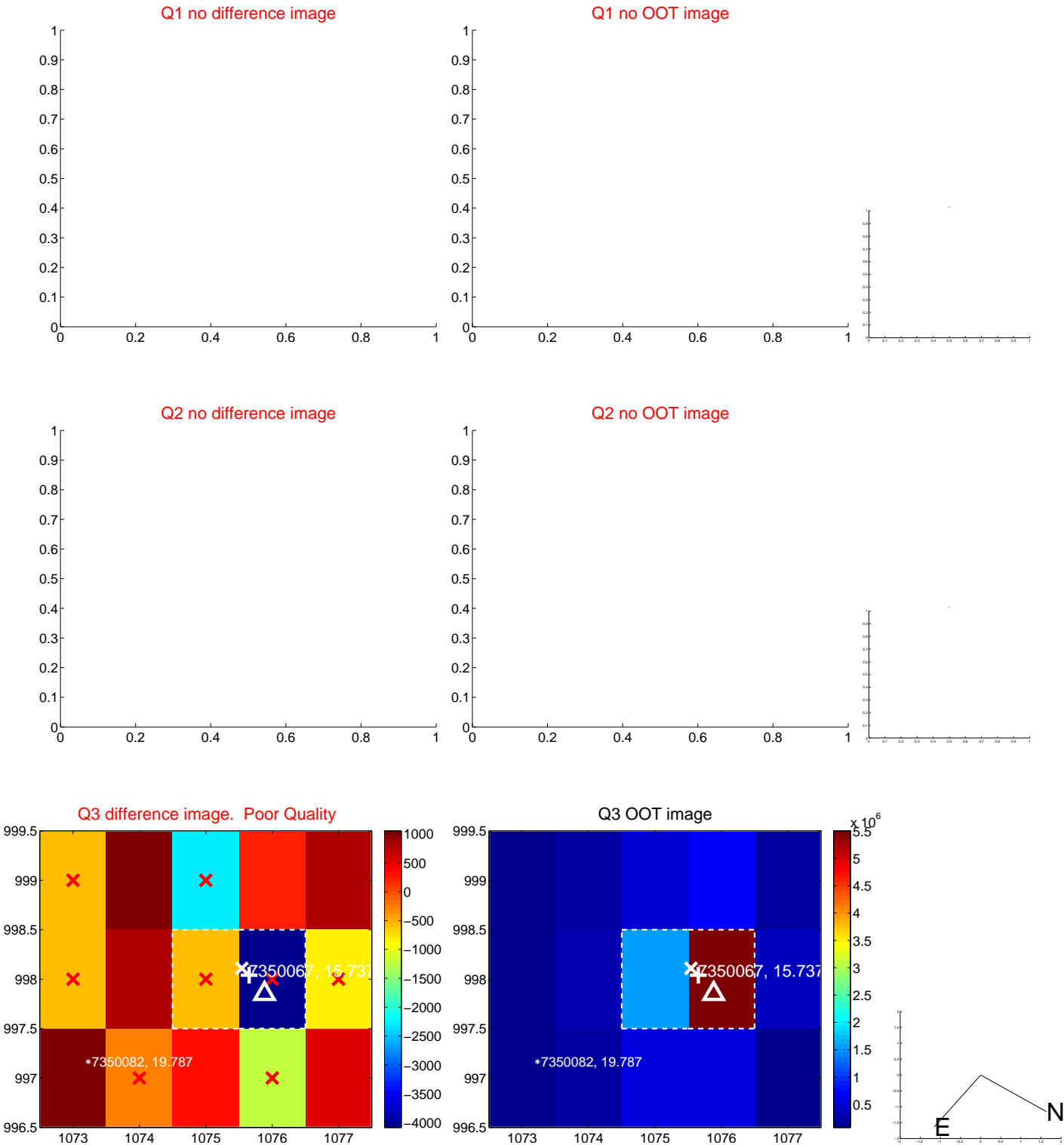
The direct PRF centroid is offset from the target star catalog position by about 0.62 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.260 ± 0.324	0.80	-0.216 ± 0.306	0.145 ± 0.360
PRF-fit source offset from KIC position	0.473 ± 0.453	1.05	0.032 ± 0.071	0.472 ± 0.452
photometric centroid source offset	0.64 ± 0.42	1.53	0.14 ± 0.39	0.62 ± 0.42



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.

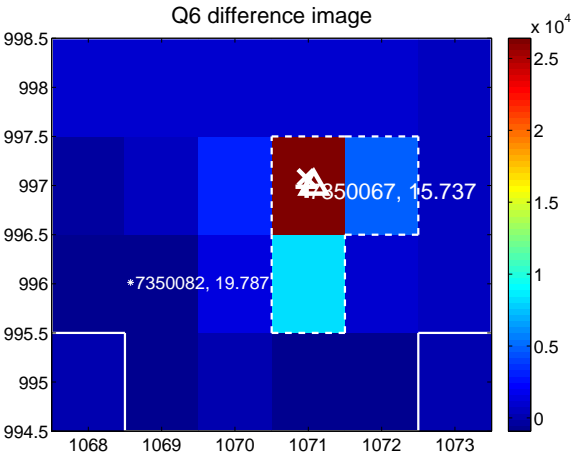
Q5 no difference image



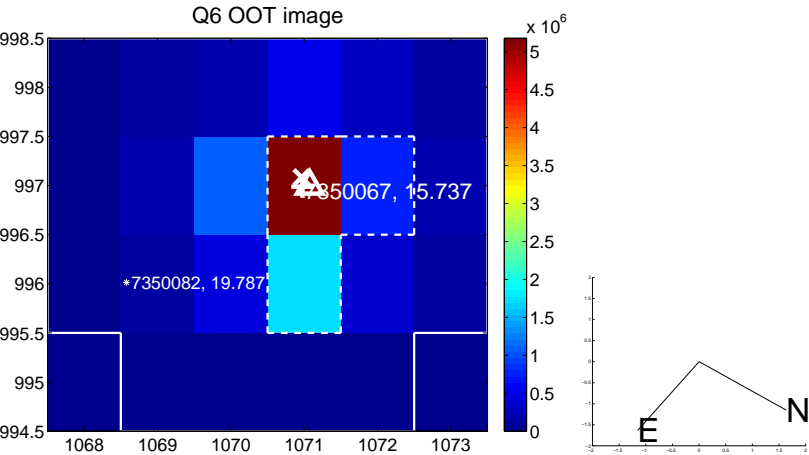
Q5 no OOT image



Q6 difference image



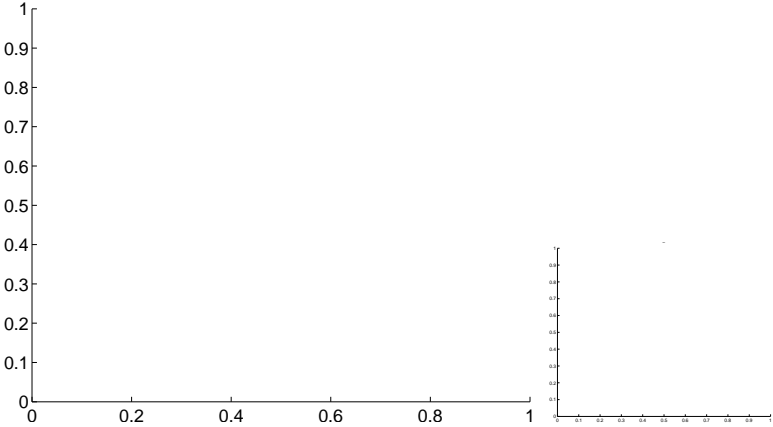
Q6 OOT image



Q7 no difference image



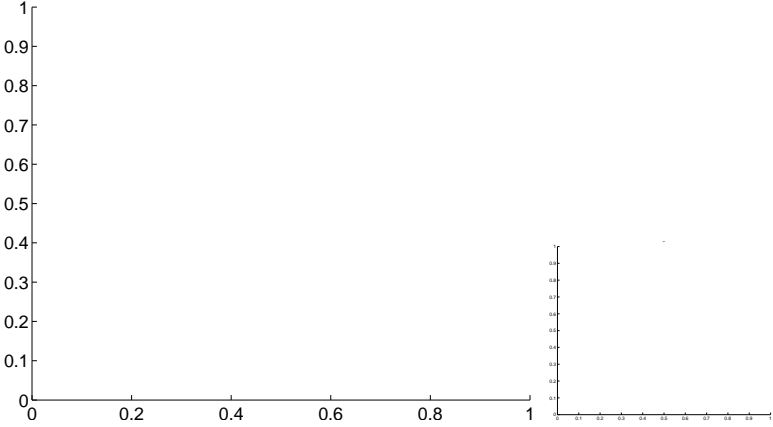
Q7 no OOT image



Q8 no difference image



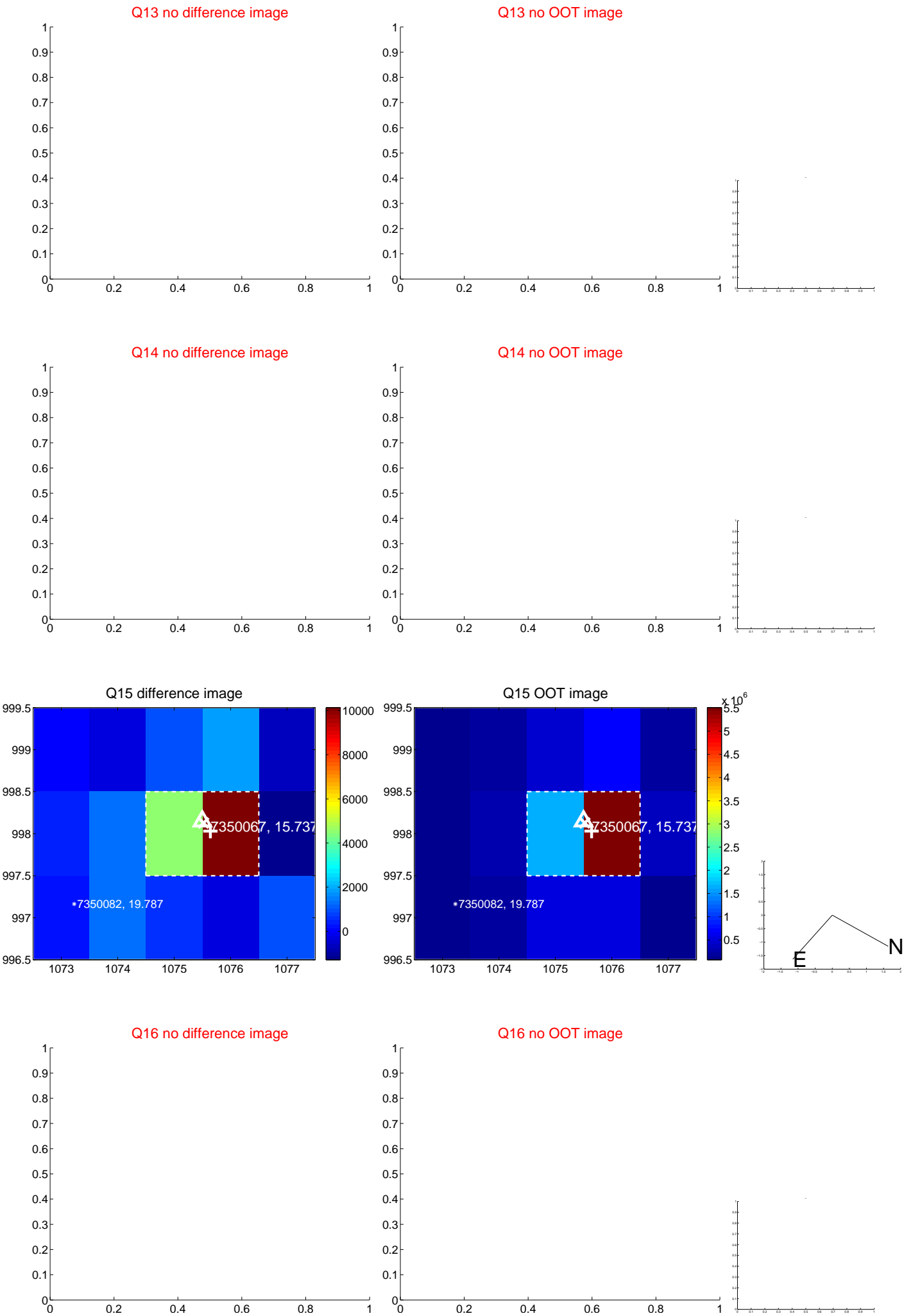
Q8 no OOT image



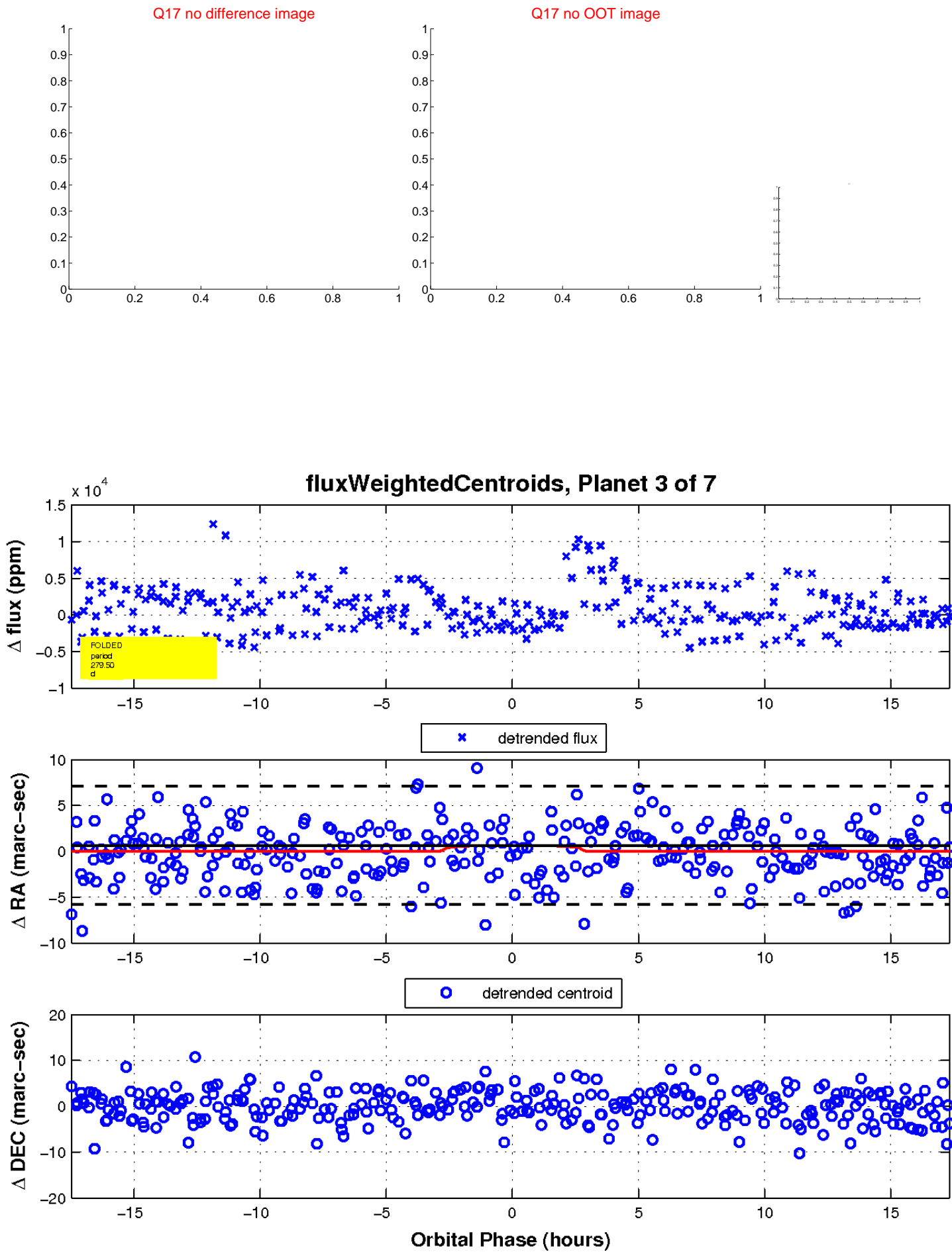
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

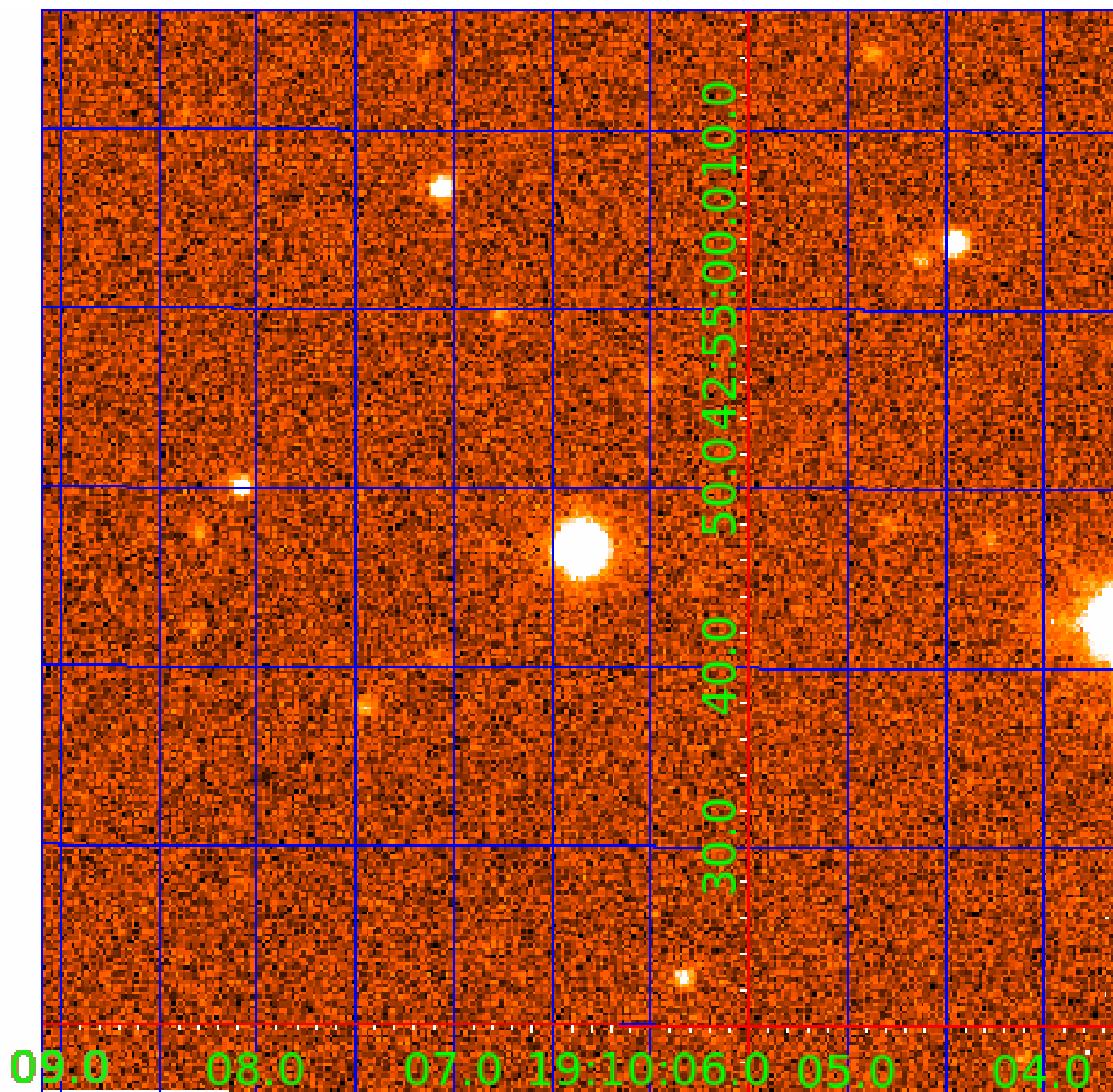


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 007350067

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})
007350067-01	OBS	6863.01	4.485590	135.431953	2240.4	0.834	22.4	39.7	0.19	3236	0.94	4.21
007350067-02	OBS	No	287.029062	332.555145	3119.6	4.263	13.8	8.1	0.19	3236	1.07	0.02
007350067-03	OBS	No	279.498556	347.344021	3972.2	5.834	13.0	10.1	0.19	3236	1.21	0.02
007350067-04	OBS	No	258.389148	137.445671	1921.0	3.957	11.1	6.5	0.19	3236	0.83	0.02
007350067-05	OBS	No	367.993067	207.889083	2614.2	11.600	10.7	7.3	0.19	3236	1.17	0.01
007350067-06	OBS	No	211.665139	221.872541	1892.9	4.650	11.0	6.6	0.19	3236	0.83	0.03
007350067-07	OBS	No	305.778173	241.657053	2703.7	3.000	11.9	-1.0	0.19	3236	0.99	0.01

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
007350067-01	OBS	PC	1.00	0	0	0	0	CENT_KIC_POS
007350067-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_MARSHALL—LPP_DV—MOD_POS_DV—INCONSISTENT_TRANS—CENT_FEW_DIFFS
007350067-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_MARSHALL—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_POS_DV—CENT_FEW_DIFFS
007350067-04	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_MARSHALL_SKYE—LPP_DV—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—CENT_KIC_POS
007350067-05	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_MARSHALL—LPP_DV—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—INCONSISTENT_TRANS—CENT_FEW_DIFFS
007350067-06	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_MARSHALL_SKYE—LPP_DV—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV
007350067-07	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_MARSHALL—LPP_DV—ALL_TRANS_CHASES—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.

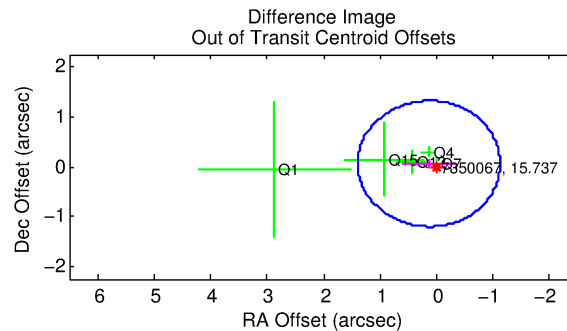
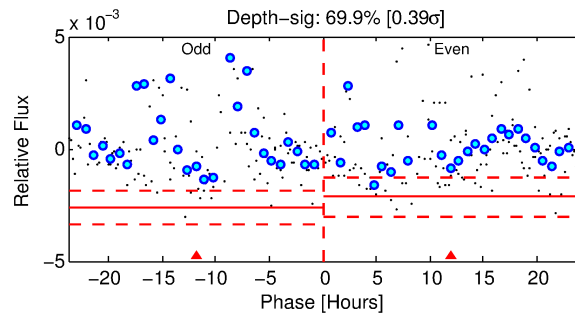
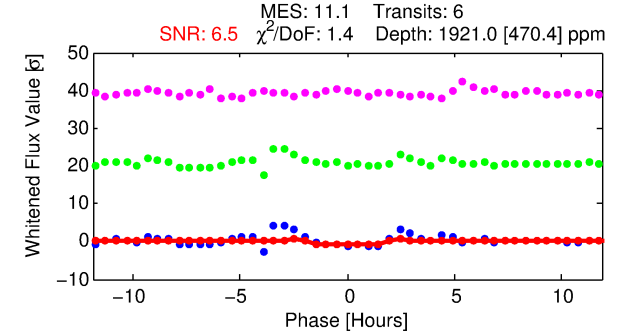
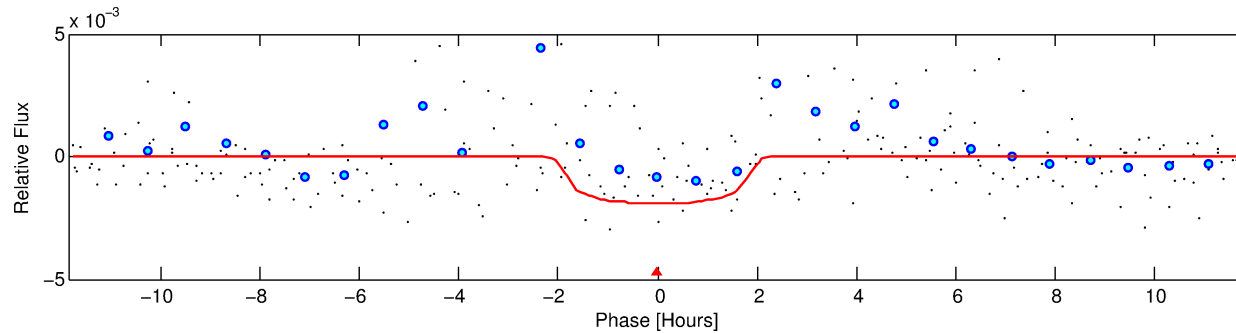
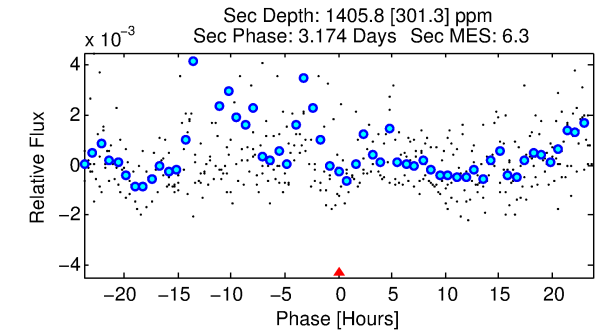
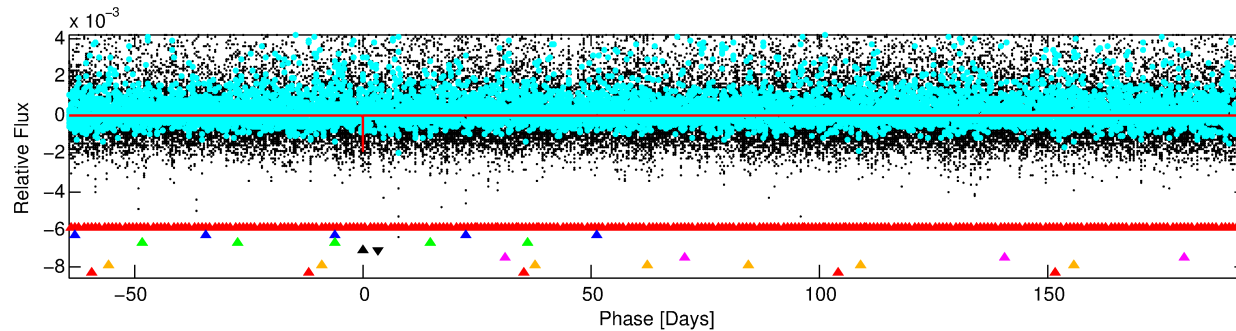
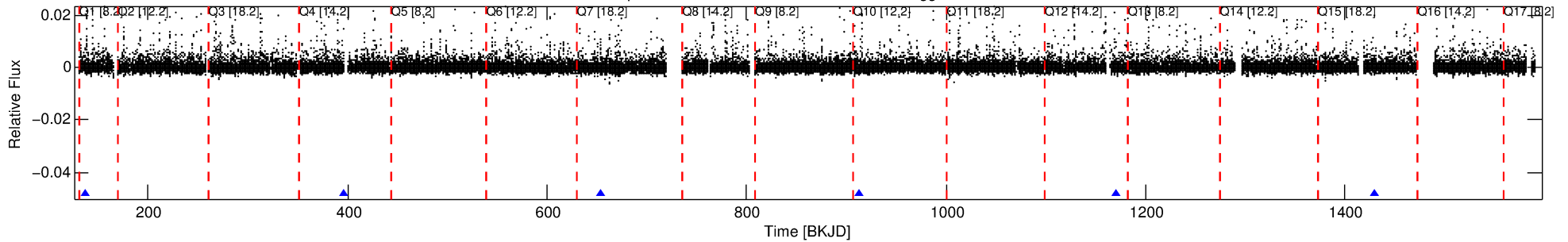
Ephemeris Match Information For 007350067-04

No Significant Match Found

DV One-Page Summary

KIC: 7350067 Candidate: 4 of 7 Period: 258.389 d
KOI: K06863 Corr: No Ephemeris Match

Kp: 15.74 R*: 0.19 Rs Teff: 3236.0 K Logg: 5.10 Fe/H: 0.000



DV Fit Results:

Period = 258.38915 [0.00432] d
Epoch = 137.4457 [0.0141] BKJD
Rp/R* = 0.0396 [0.1045]
a/R* = 518.58 [5925.02]
b = 0.02 [686.59]
Seff = 0.02 [0.00]
Teq = 95 [4] K
Rp = 0.83 [2.21] Re
a = 0.4398 [0.0549] AU
Ag = 214725.49 [1134267.15] [0.19σ]
Teffp = 3148 [4155] K [0.73σ]

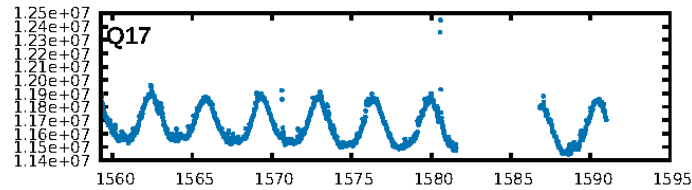
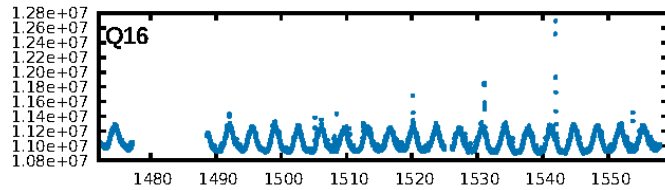
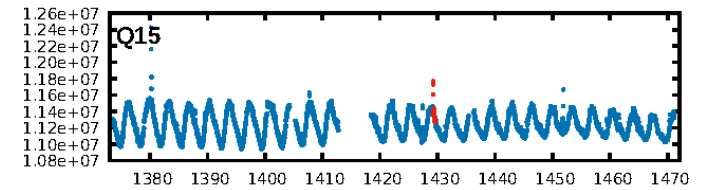
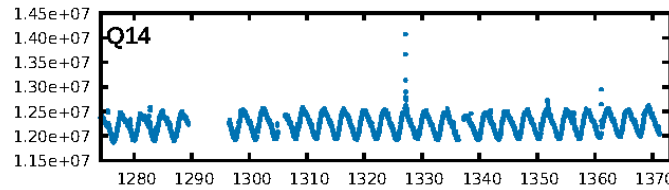
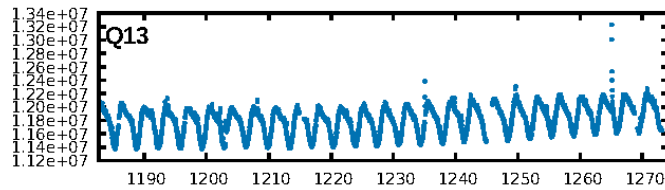
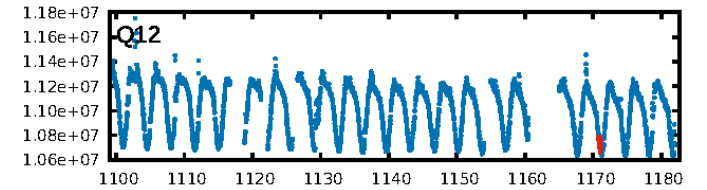
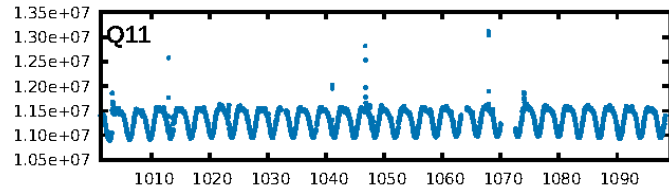
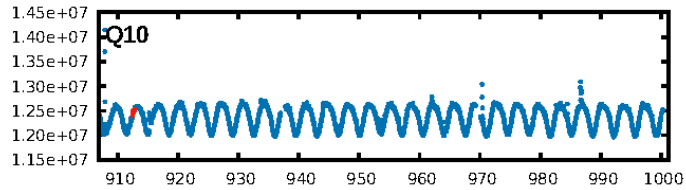
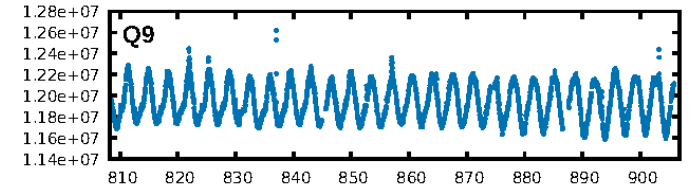
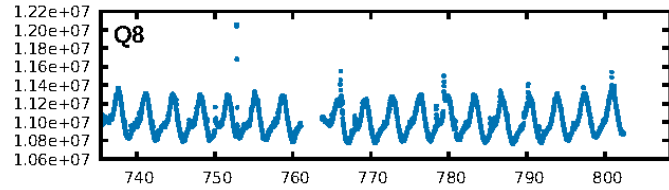
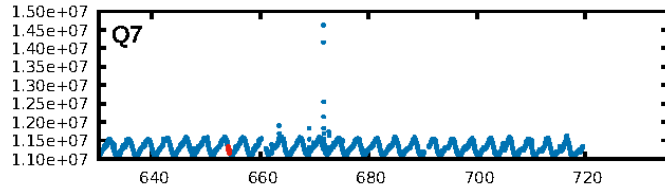
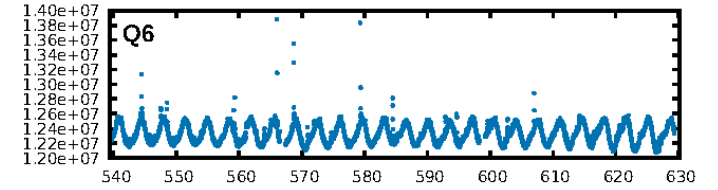
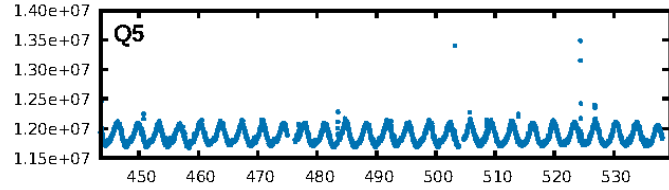
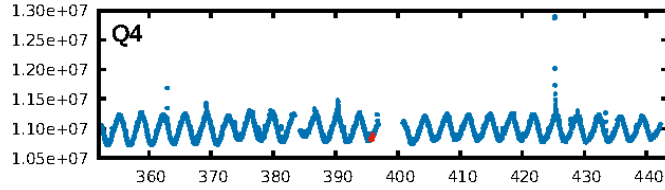
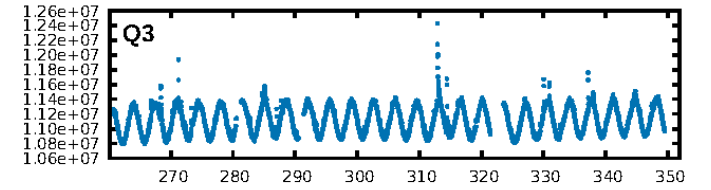
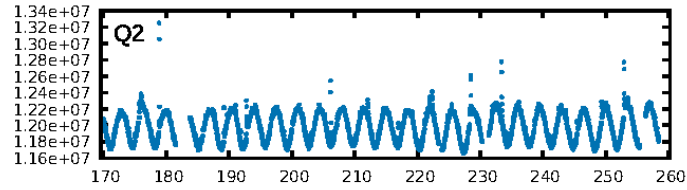
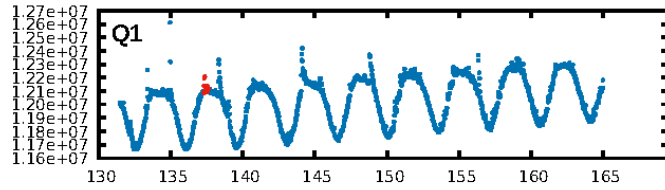
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [183.66σ]
LongPeriod-sig: 100.0% [71.87σ]
ModelChiSquare2-sig: 10.6%
ModelChiSquareGof-sig: 92.1%
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [5/5]
GhostDiagnostic-chr: -0.5746
Centroid-sig: N/A
Centroid-so: 1.307 arcsec [1.56σ]
OotOffset-rm: 0.150 arcsec [0.36σ]
KicOffset-rm: 0.642 arcsec [2.03σ]
OotOffset-st: 0/2/2/1 [5]
KicOffset-st: 0/2/2/1 [5]
DiffImageQuality-fgm: 0.60 [3/5]
DiffImageOverlap-fno: 0.83 [5/6]

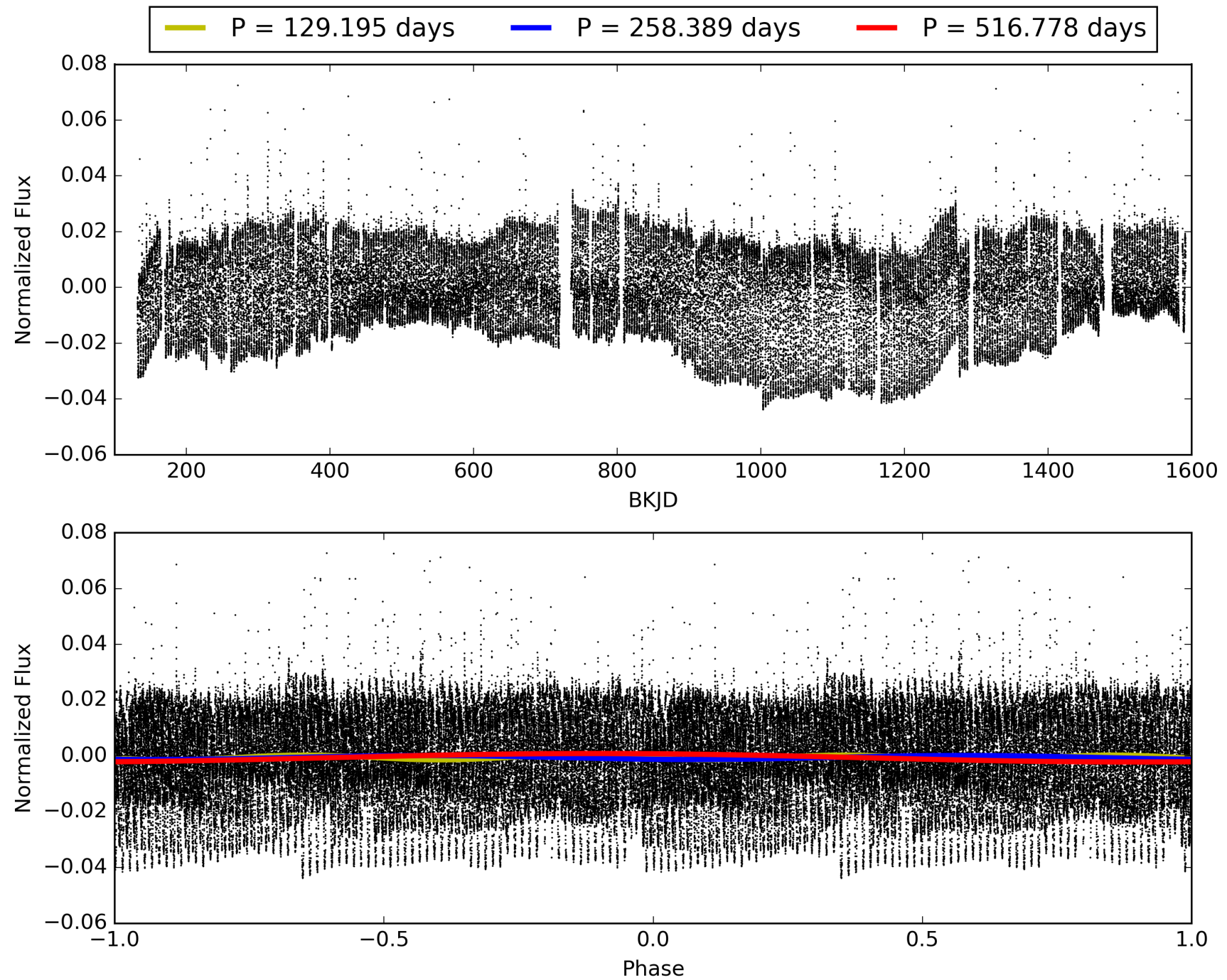
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 02-Feb-2016 00:35:56 Z

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

TCE 007350067-04, PDC Light Curves

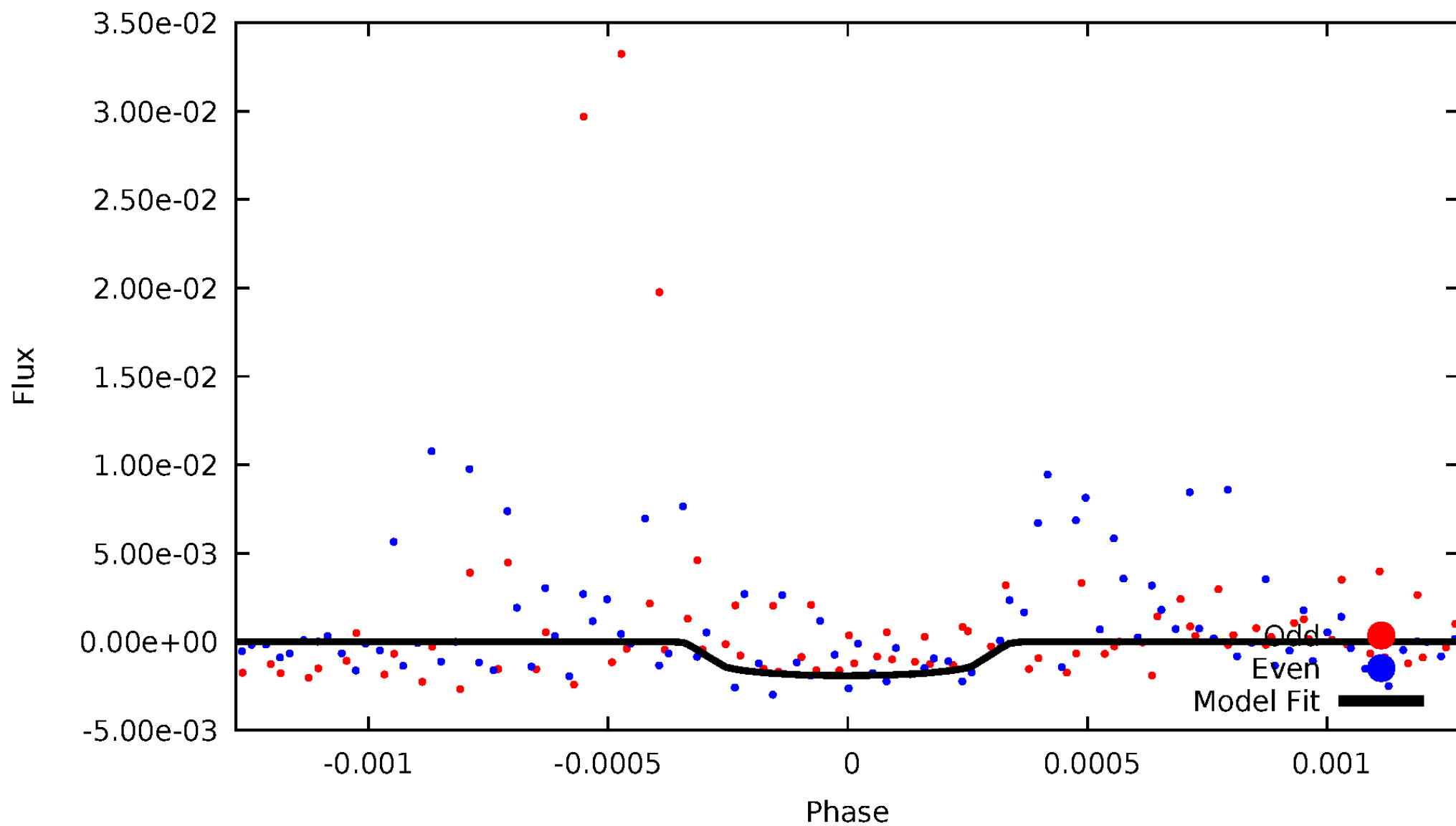


TCE 007350067-04



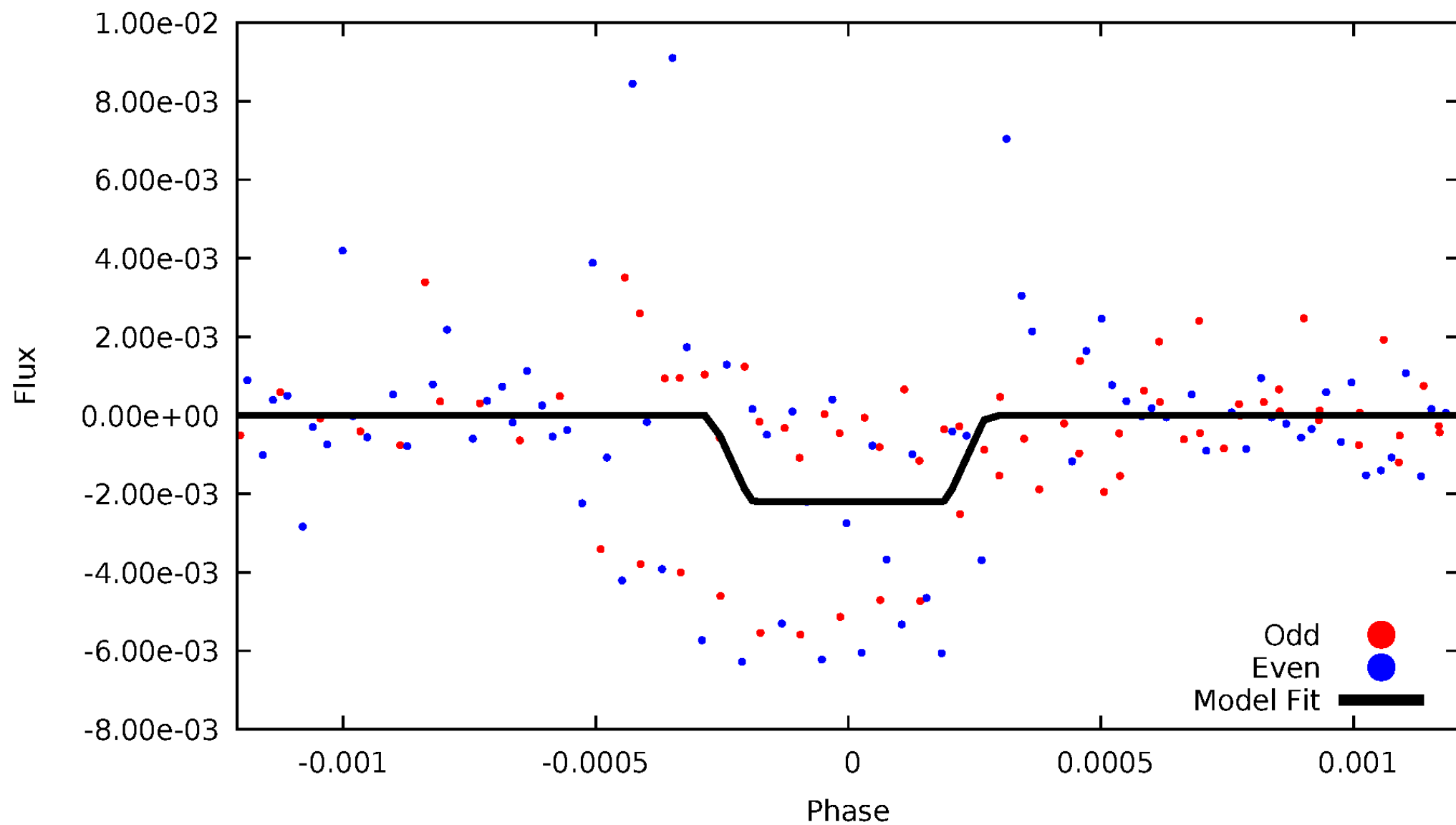
DV Odd/Even

TCE 007350067-04



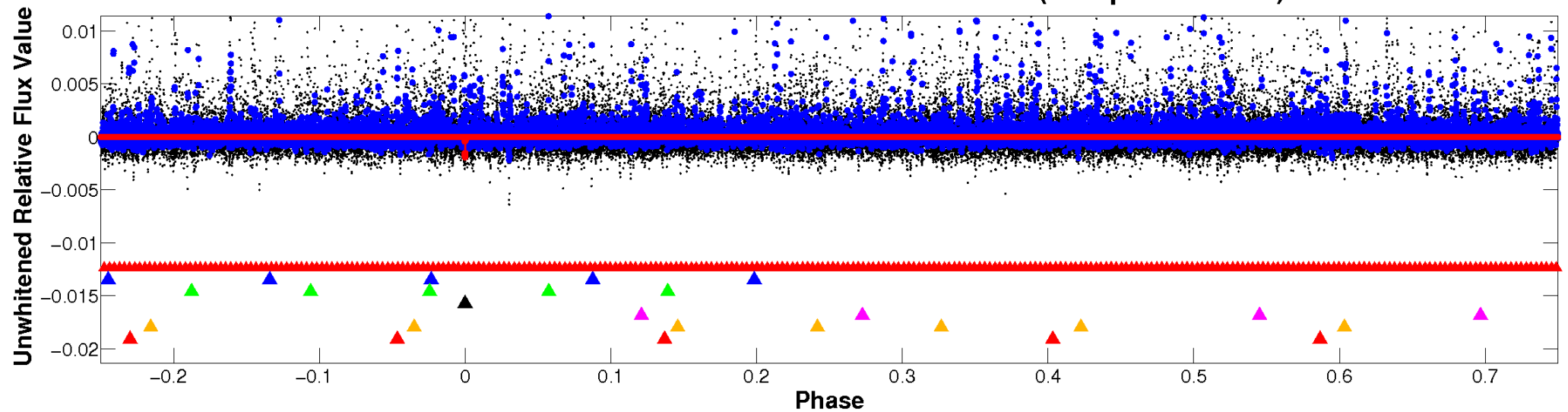
ALT Odd/Even

TCE 007350067-04

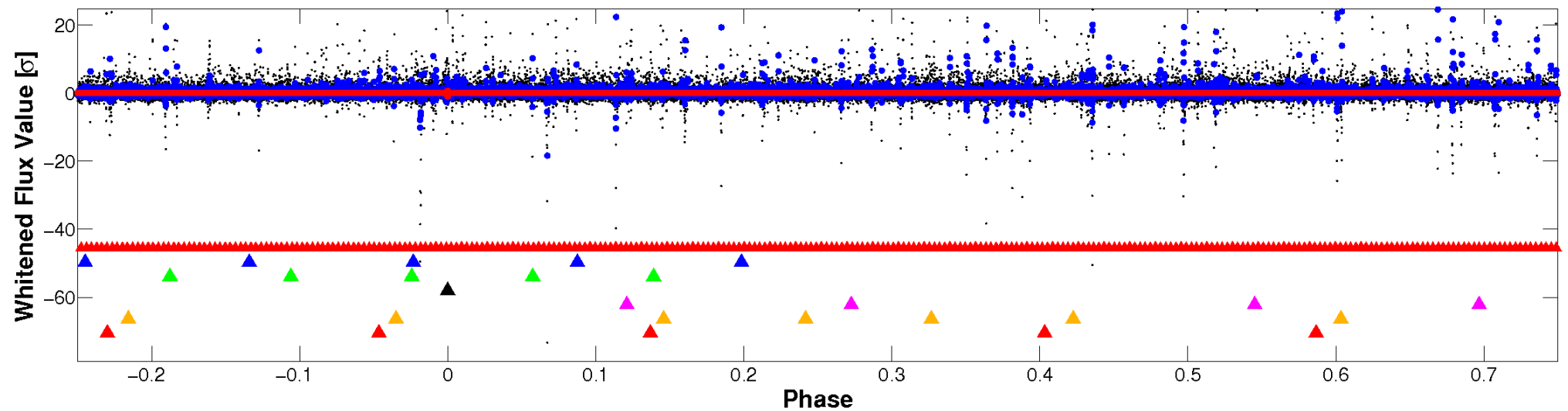


Non-Whitened Vs. Whitened Light Curve

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

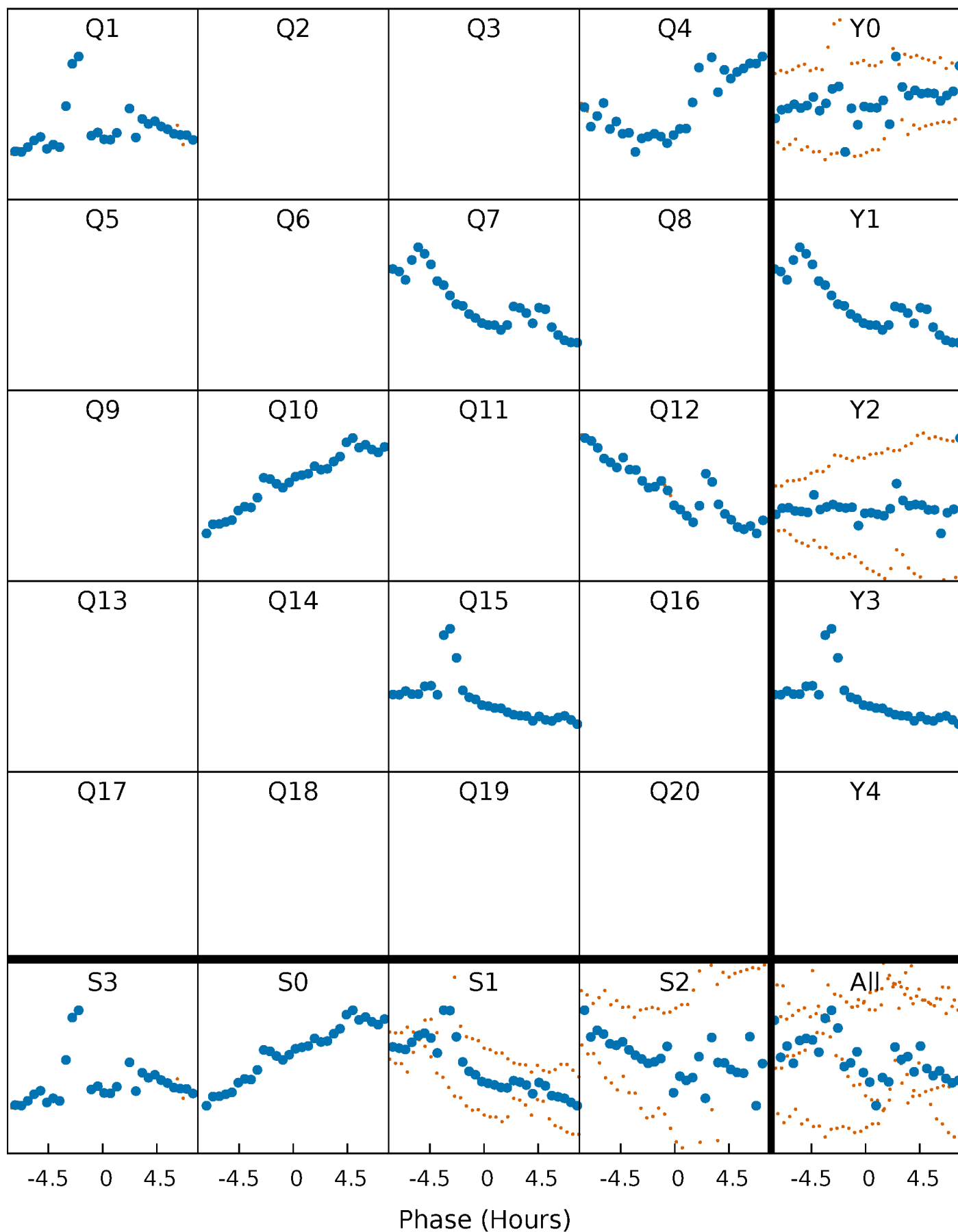


Planet 4 : Phased Whitened Flux Time Series (Fit Epoch/Period)



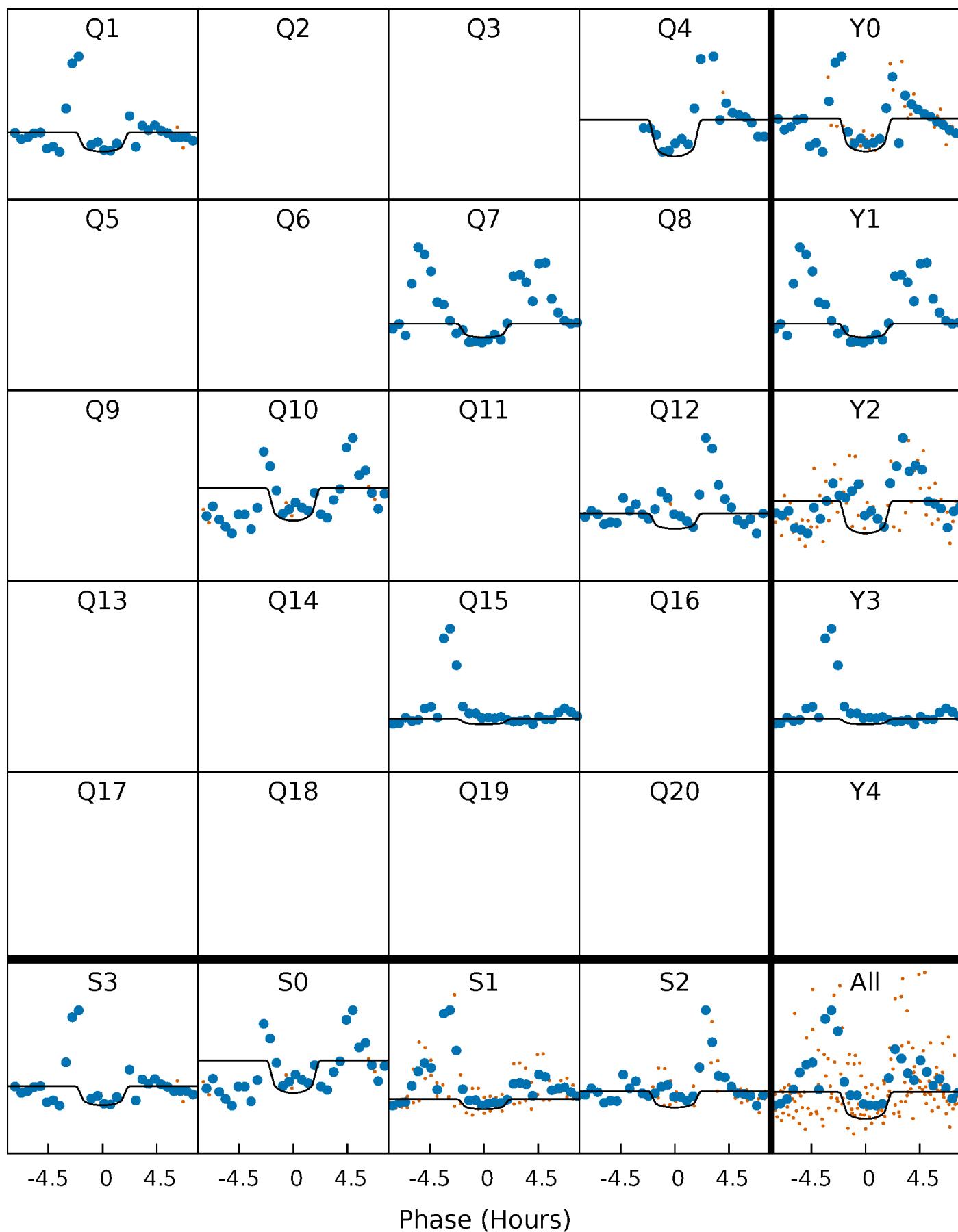
PDC Quarter-Phased Transit Curves

TCE 007350067-04 P=258.389148 Days $T_0=137.445671$ (BKJD)



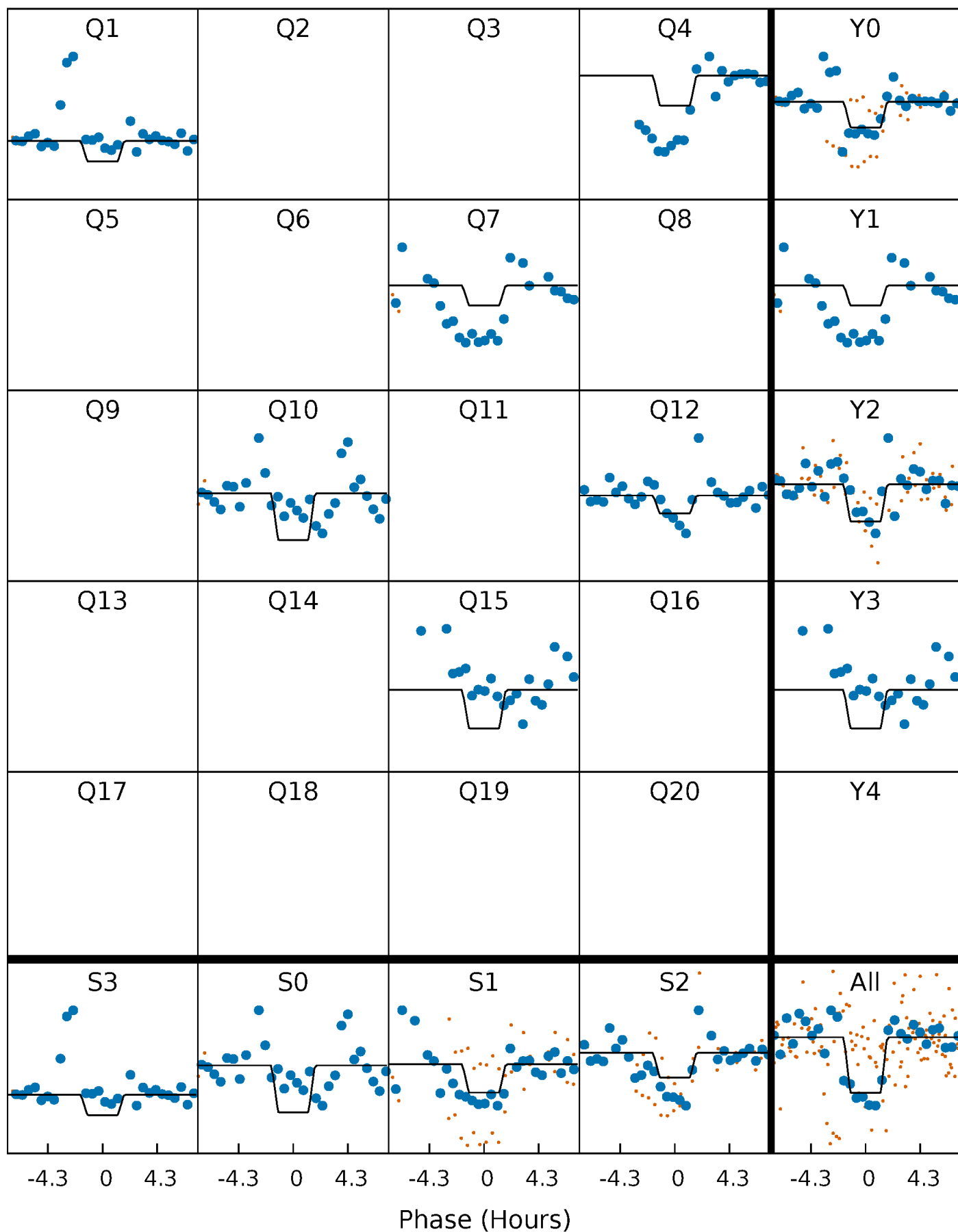
DV Quarter-Phased Transit Curves

TCE 007350067-04 $P=258.389148$ Days $T_0=137.445671$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

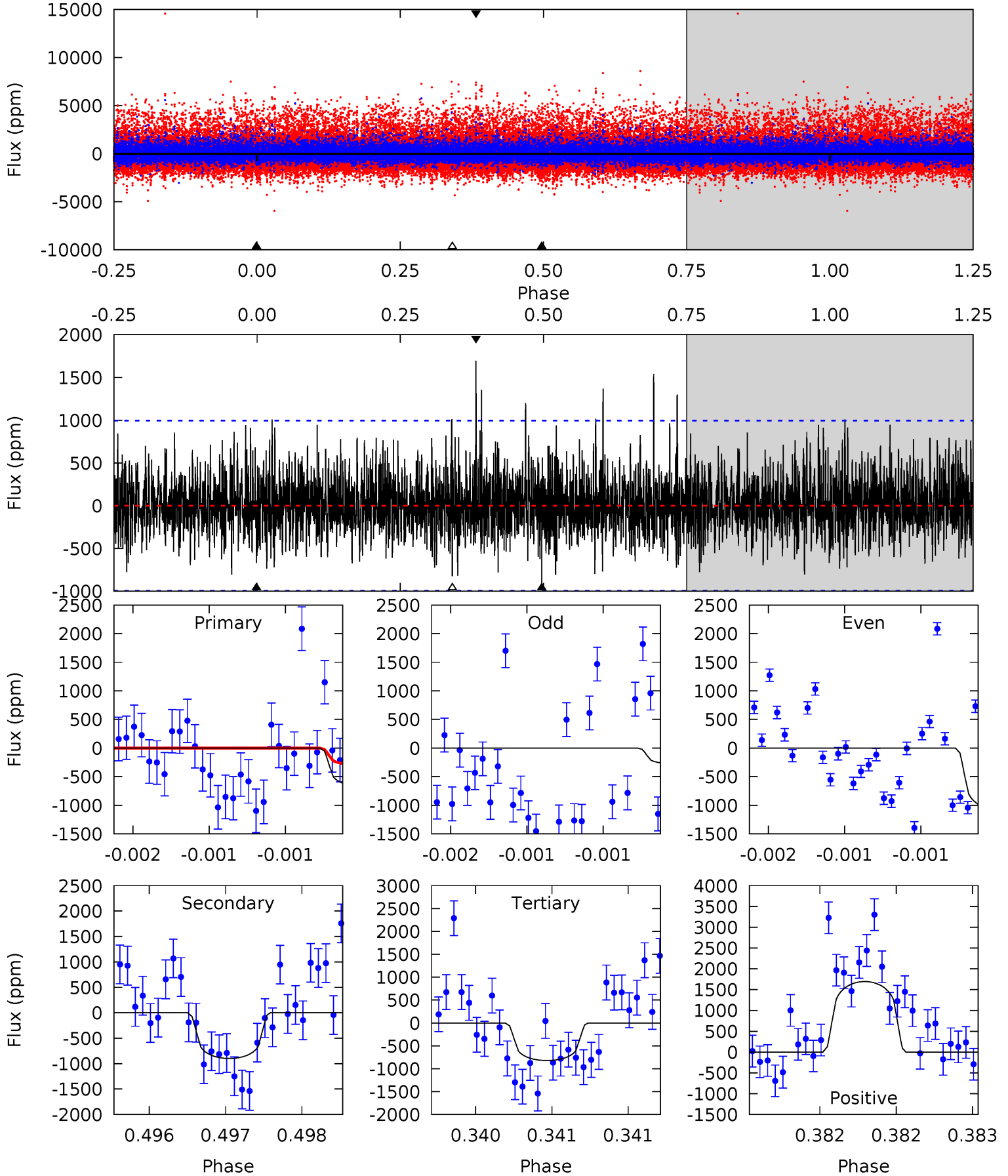
TCE 007350067-04 P=258.395582 Days $T_0=137.446798$ (BKJD)



DV Model-Shift Uniqueness Test

007350067-04, P = 258.389148 Days, E = 137.445671 Days

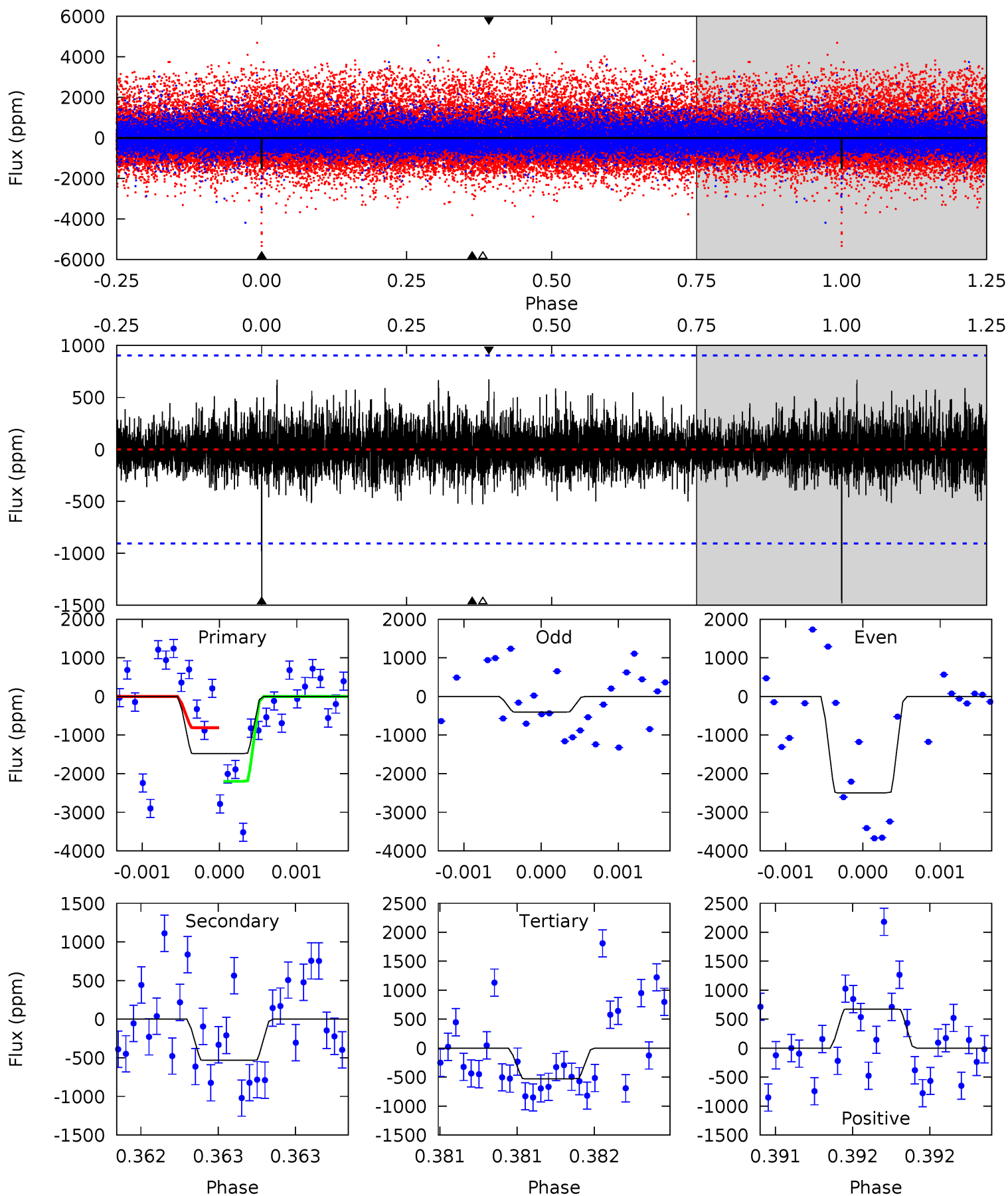
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
3.71	4.98	4.55	9.39	5.52	3.40	1.60	-0.85	-5.69	0.43	-4.41	1.87	0.61	0.65	1.96



Alt Model-Shift Uniqueness Test

007350067-04, P = 258.395582 Days, E = 137.446798 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
9.11	3.27	3.25	4.15	5.57	3.47	0.94	5.86	4.96	0.02	-0.87	6.20	1.51	0.31	4.32



Stellar Parameters For KIC 007350067

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	3236^{+41}_{-25}	$5.097^{+0.055}_{-0.050}$	$0.000^{+0.100}_{-0.100}$	$0.193^{+0.034}_{-0.025}$	$0.169^{+0.038}_{-0.025}$	$33.360^{+10.540}_{-7.993}$
	+1%/-1%	+1%/-1%	+inf%/-inf%	+18%/-13%	+22%/-15%	+32%/-24%
Source	PHO2	PHO2	PHO2	DSEP		

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

Secondary Eclipse Parameters for KIC 007350067-04 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-899±180	$1.90^{+1.72}_{-1.28}$	132^{+4}_{-4}	2415^{+832}_{-337}	$25336^{+221871}_{-18642}$
Alt.	-532±162	$1.83^{+1.72}_{-1.26}$	132^{+4}_{-3}	2282^{+797}_{-312}	$16206^{+153210}_{-12221}$

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

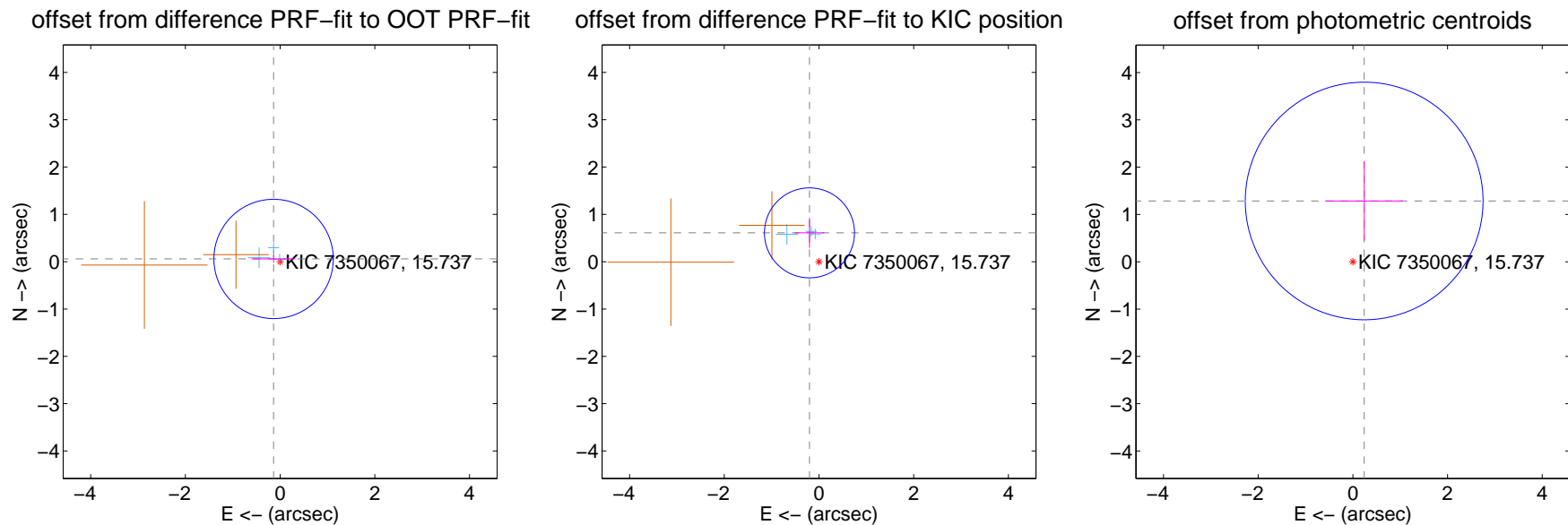
DV Centroid Data

Supplemental centroid analysis for 007350067-04. Kepler magnitude: 15.74. Transit SNR 6.47

There are 3 quarters with good PRF difference image offsets

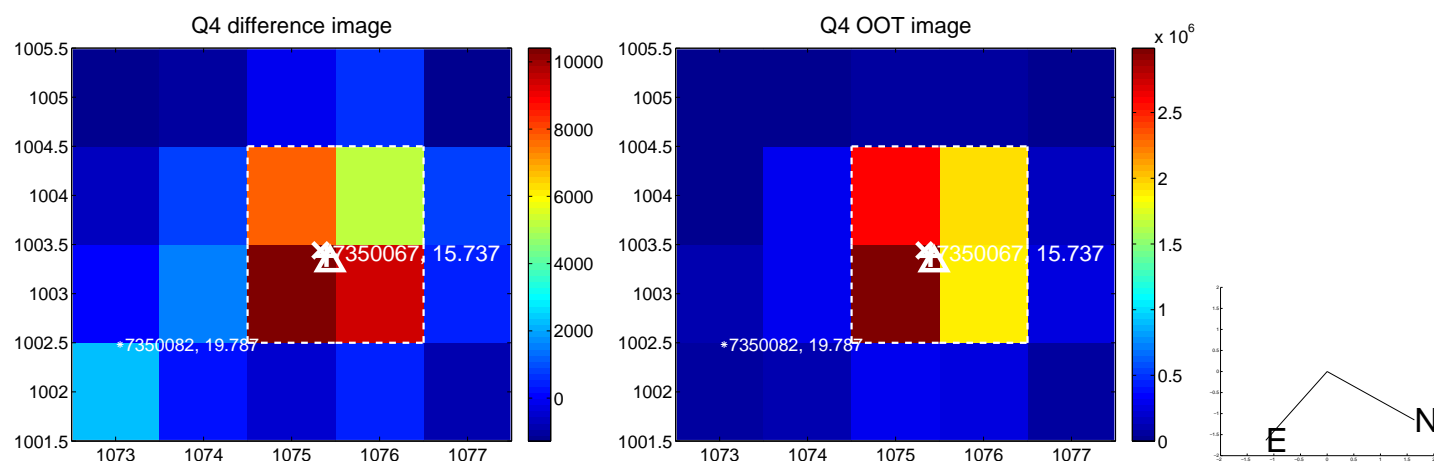
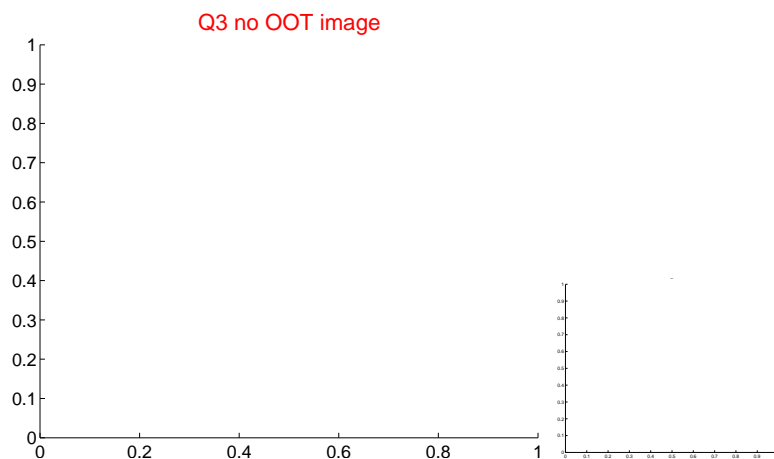
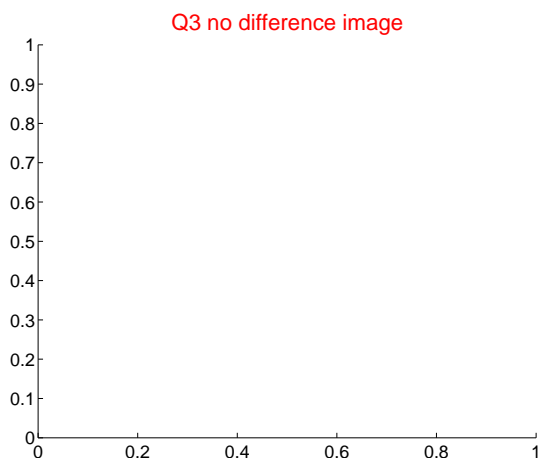
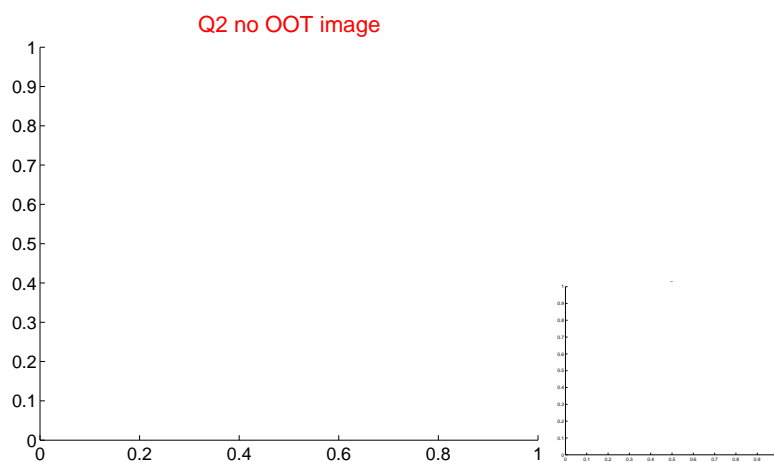
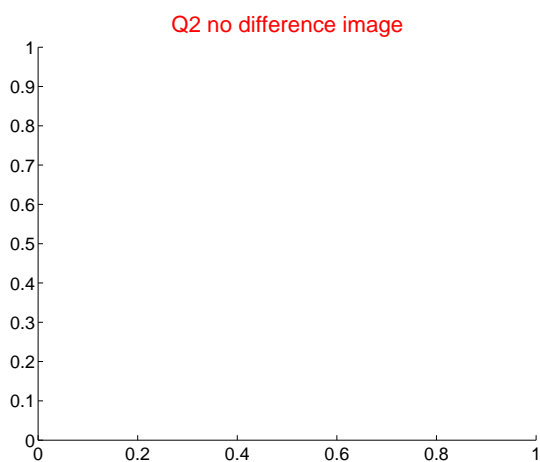
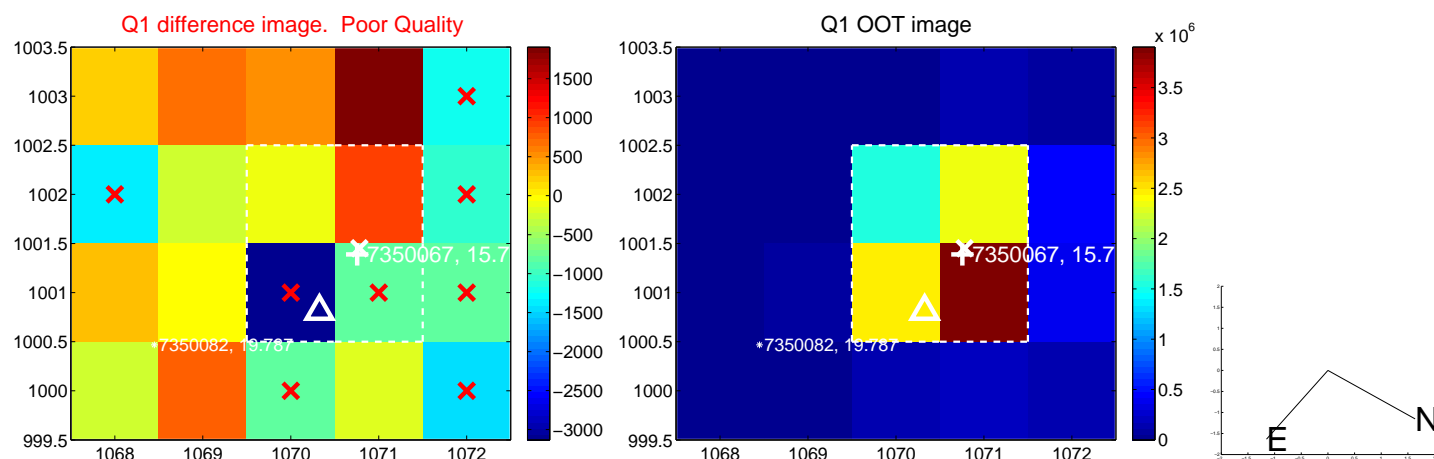
The direct PRF centroid is offset from the target star catalog position by about 0.62 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.150 ± 0.420	0.36	0.138 ± 0.465	0.059 ± 0.079
PRF-fit source offset from KIC position	0.642 ± 0.317	2.03	0.201 ± 0.313	0.610 ± 0.317
photometric centroid source offset	1.31 ± 0.84	1.56	-0.24 ± 0.82	1.29 ± 0.84

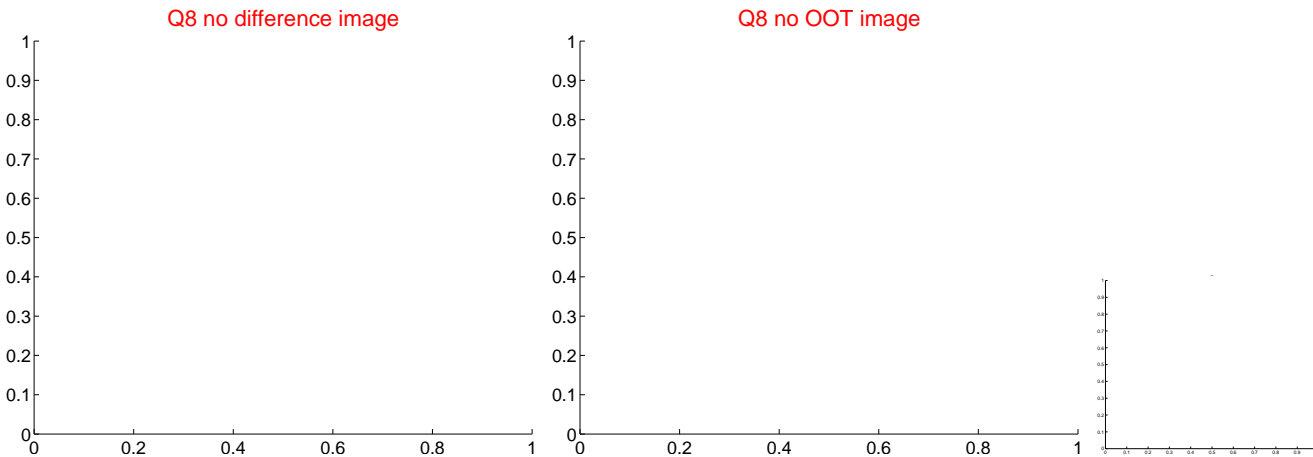
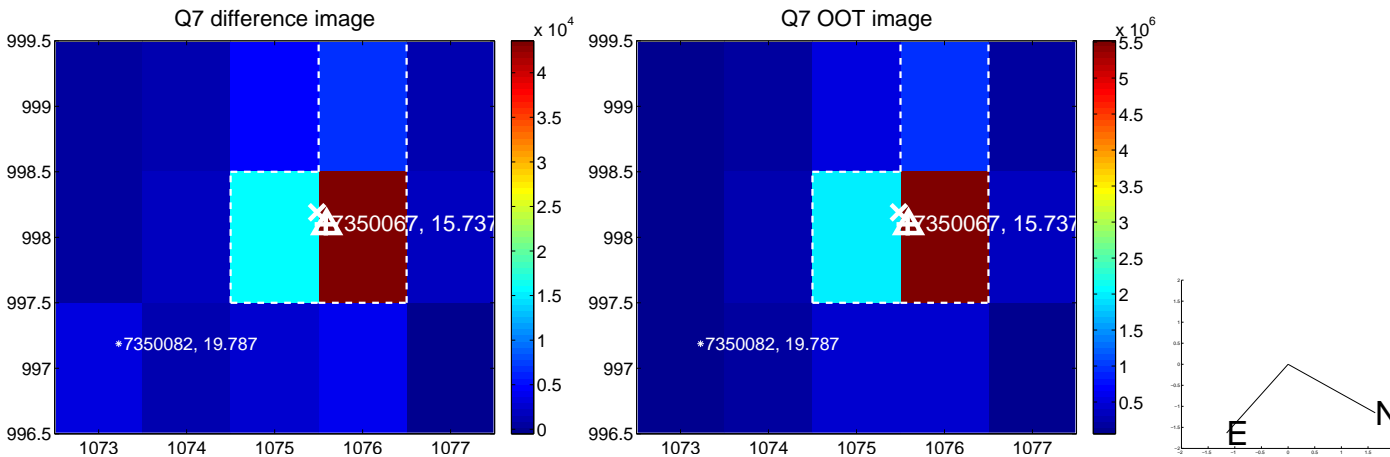
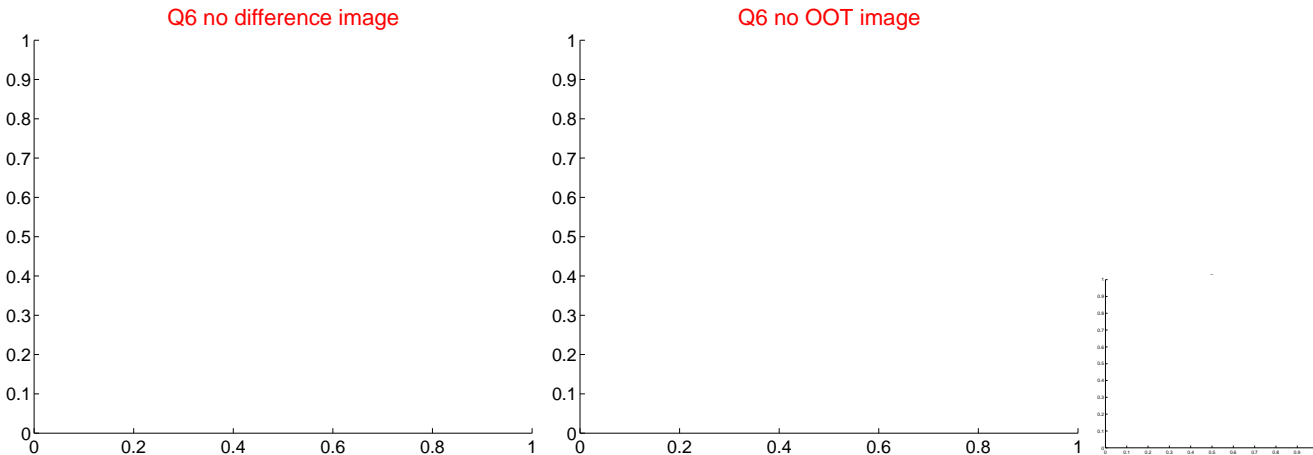
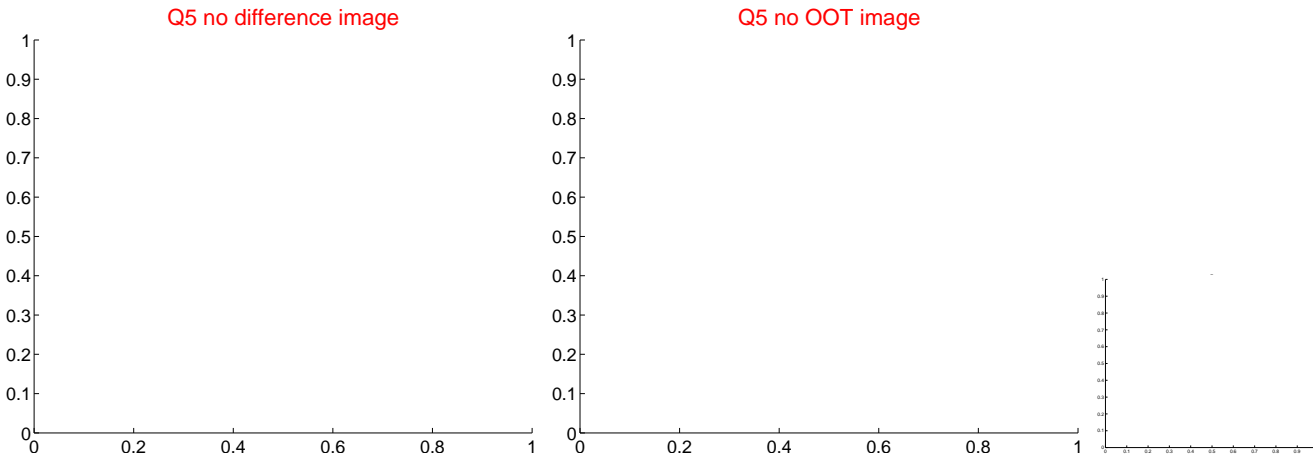


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

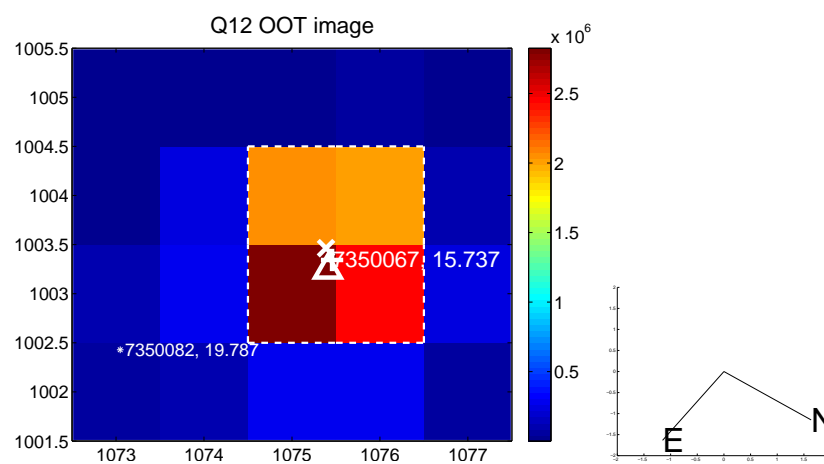
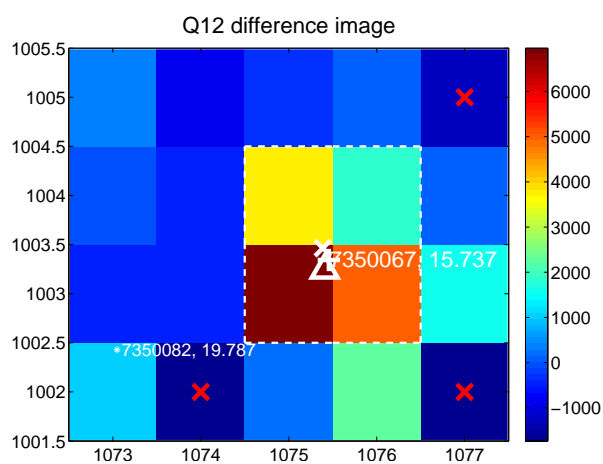
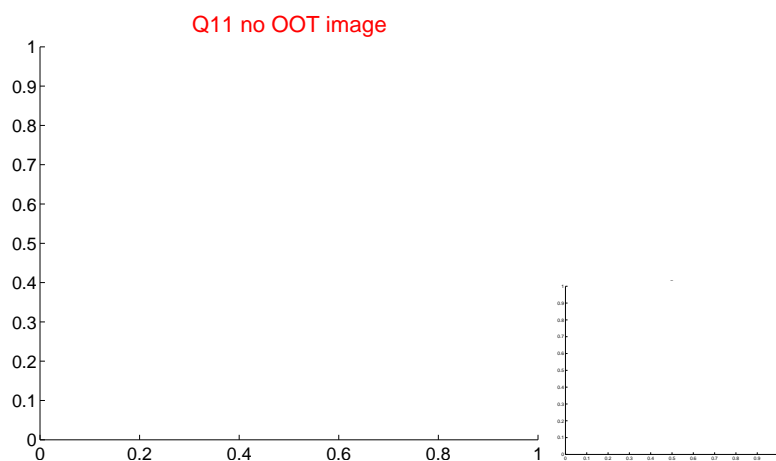
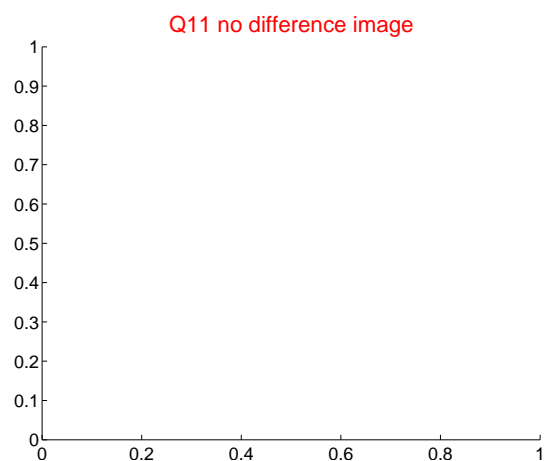
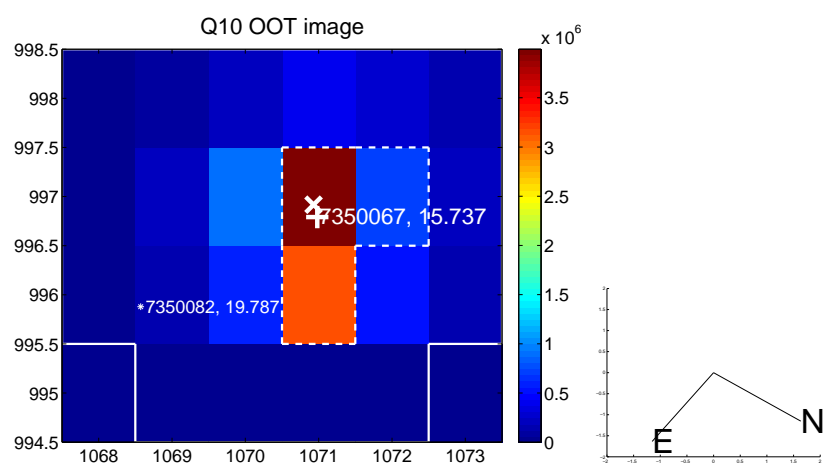
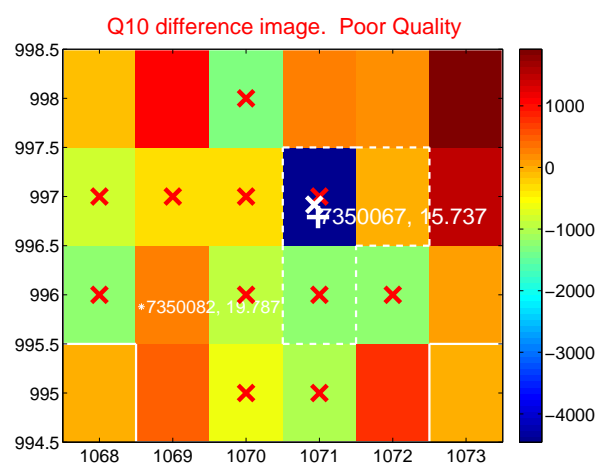
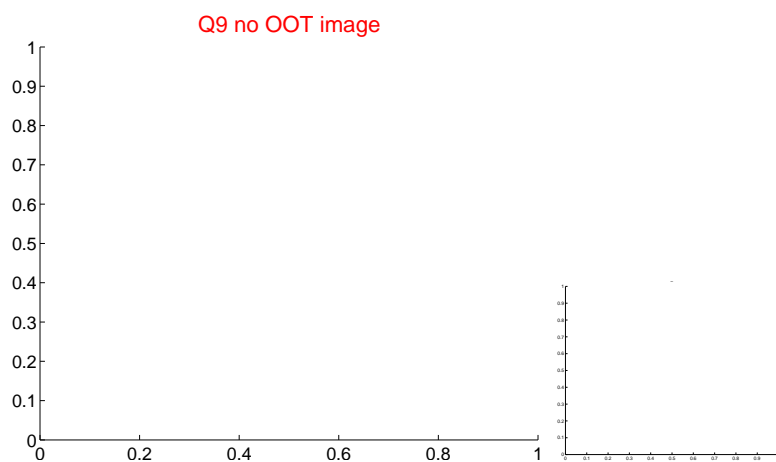
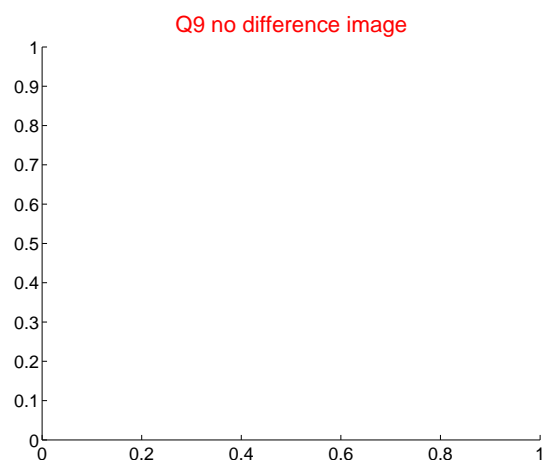
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



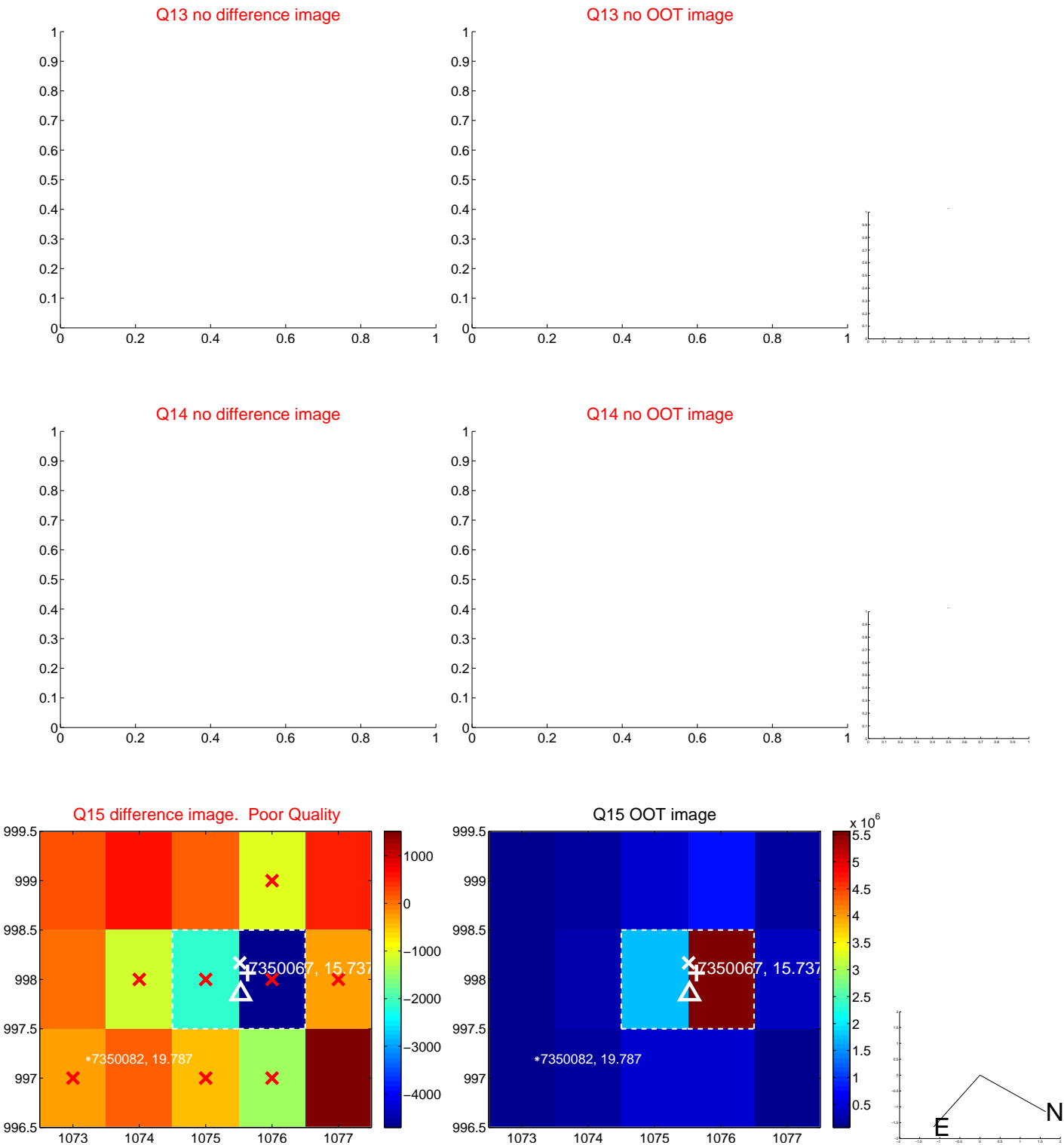
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value



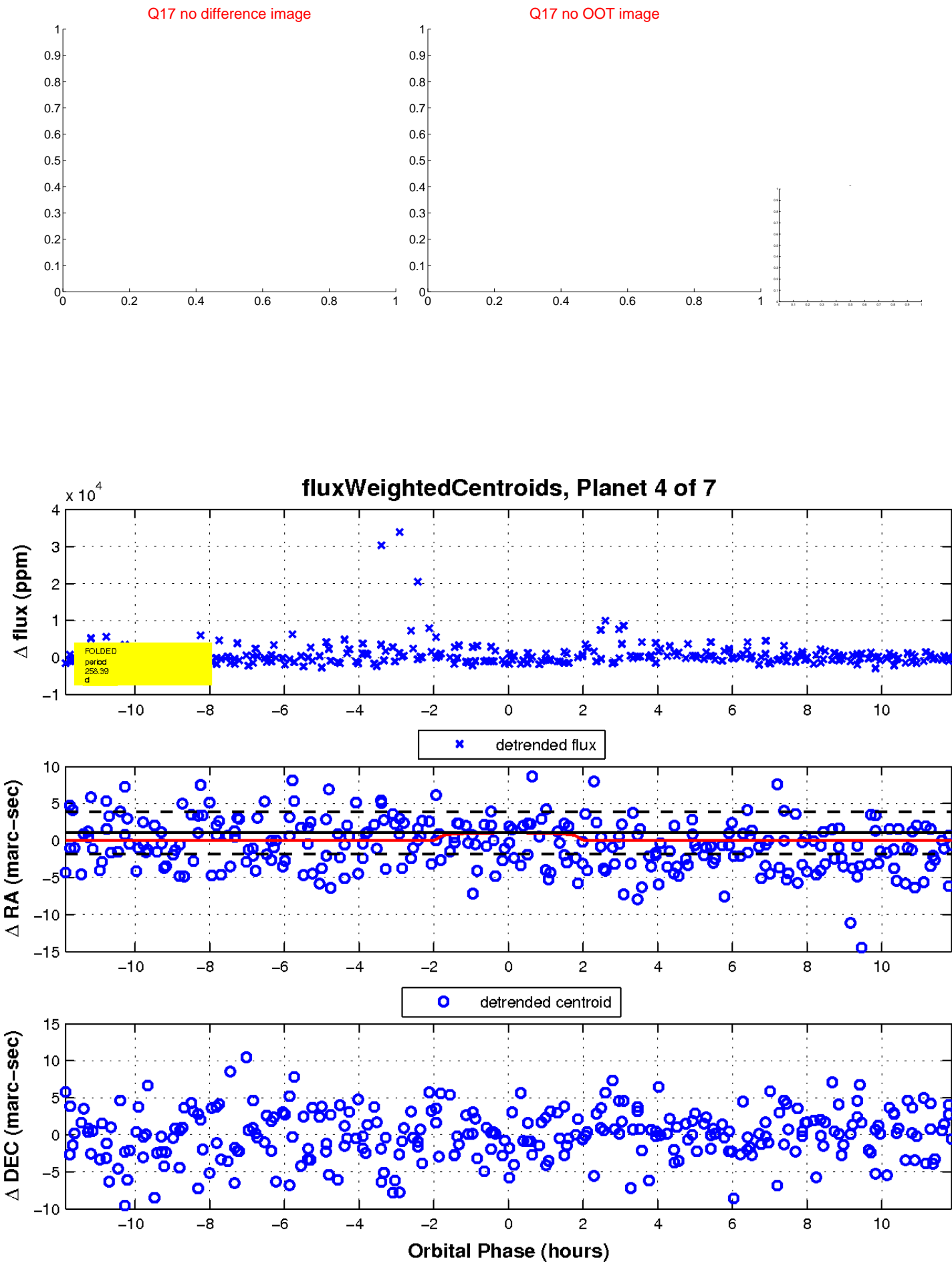
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

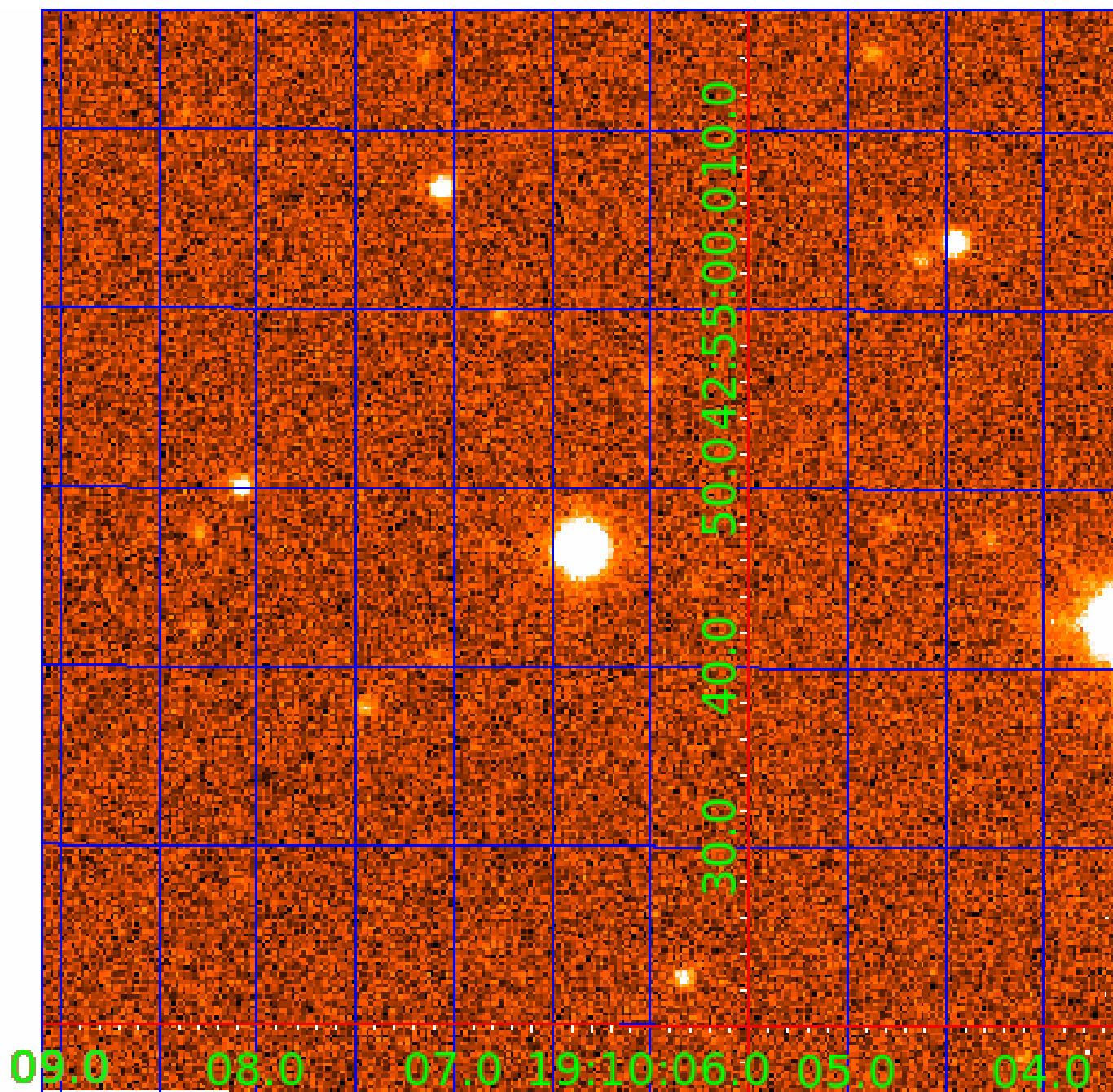


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 007350067

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})
007350067-01	OBS	6863.01	4.485590	135.431953	2240.4	0.834	22.4	39.7	0.19	3236	0.94	4.21
007350067-02	OBS	No	287.029062	332.555145	3119.6	4.263	13.8	8.1	0.19	3236	1.07	0.02
007350067-03	OBS	No	279.498556	347.344021	3972.2	5.834	13.0	10.1	0.19	3236	1.21	0.02
007350067-04	OBS	No	258.389148	137.445671	1921.0	3.957	11.1	6.5	0.19	3236	0.83	0.02
007350067-05	OBS	No	367.993067	207.889083	2614.2	11.600	10.7	7.3	0.19	3236	1.17	0.01
007350067-06	OBS	No	211.665139	221.872541	1892.9	4.650	11.0	6.6	0.19	3236	0.83	0.03
007350067-07	OBS	No	305.778173	241.657053	2703.7	3.000	11.9	-1.0	0.19	3236	0.99	0.01

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
007350067-01	OBS	PC	1.00	0	0	0	0	CENT_KIC_POS
007350067-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_MARSHALL—LPP_DV—MOD_POS_DV—INCONSISTENT_TRANS—CENT_FEW_DIFFS
007350067-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_MARSHALL—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_POS_DV—CENT_FEW_DIFFS
007350067-04	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_MARSHALL_SKYE—LPP_DV—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—CENT_KIC_POS
007350067-05	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_MARSHALL—LPP_DV—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—INCONSISTENT_TRANS—CENT_FEW_DIFFS
007350067-06	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_MARSHALL_SKYE—LPP_DV—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV
007350067-07	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_MARSHALL—LPP_DV—ALL_TRANS_CHASES—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.

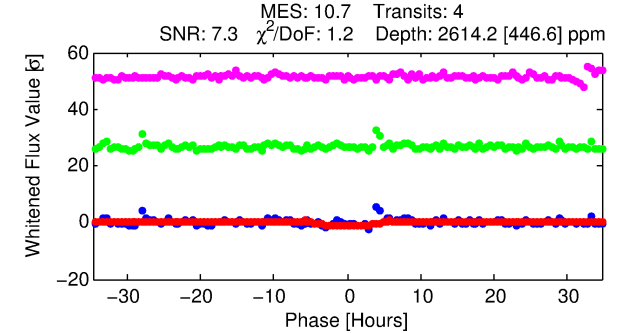
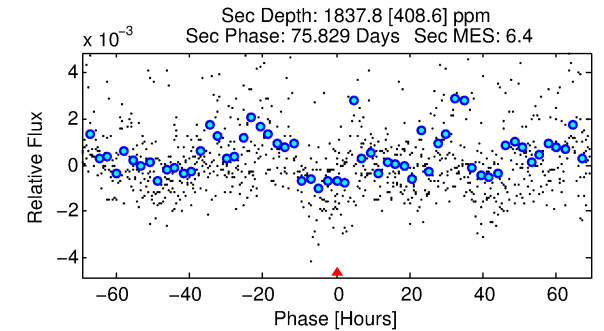
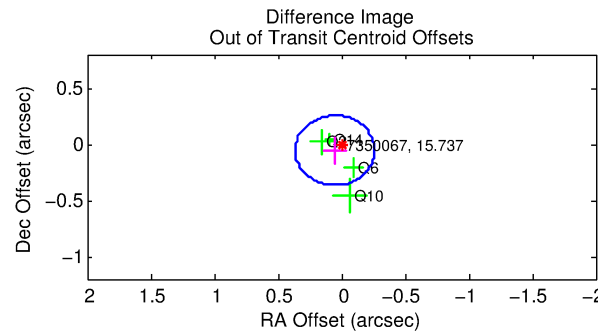
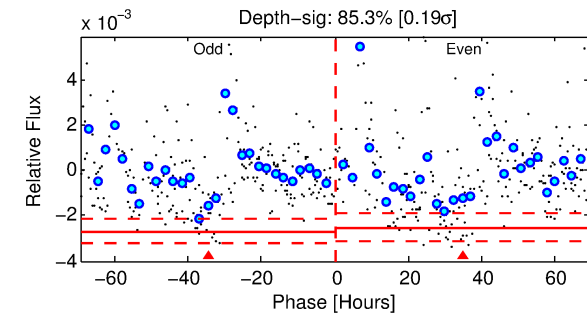
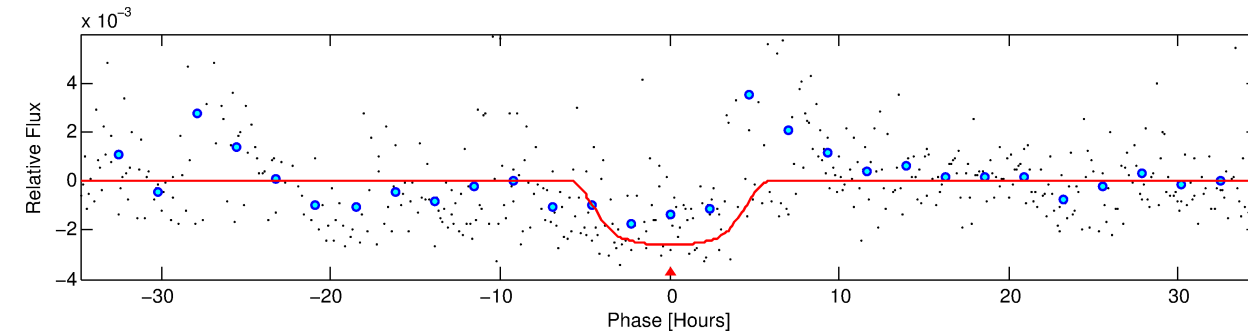
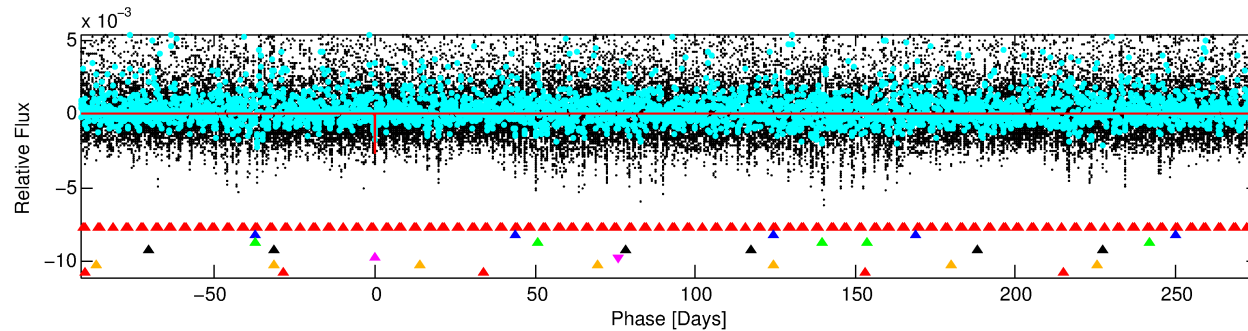
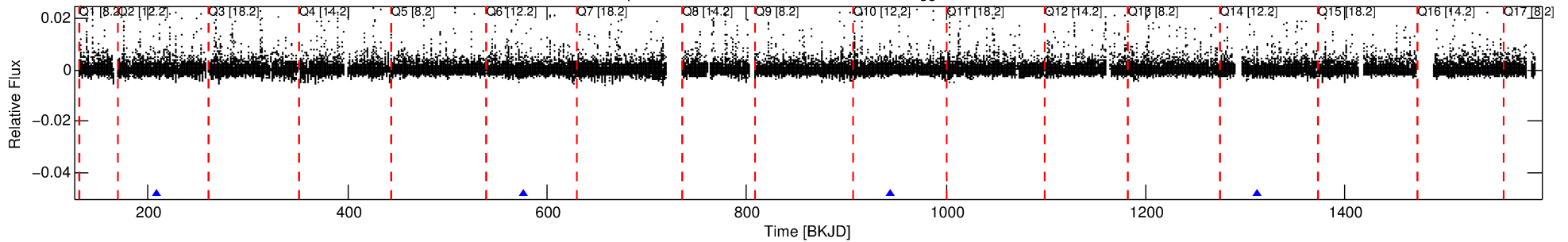
Ephemeris Match Information For 007350067-05

No Significant Match Found

DV One-Page Summary

KIC: 7350067 Candidate: 5 of 7 Period: 367.993 d
KOI: K06863 Corr: No Ephemeris Match

Kp: 15.74 R*: 0.19 Rs Teff: 3236.0 K Logg: 5.10 Fe/H: 0.000



DV Fit Results:

Period = 367.99307 [0.01179] d
Epoch = 207.8891 [0.0226] BKJD
Rp/R* = 0.0557 [0.0061]
a/R* = 135.56 [29.23]
b = 0.90 [0.05]
Seff = 0.01 [0.00]
Teq = 84 [3] K
Rp = 1.17 [0.24] Re
a = 0.5567 [0.0695] AU
Ag = 227433.43 [78376.69] [2.90σ]
Teffp = 2838 [225] K [12.25σ]

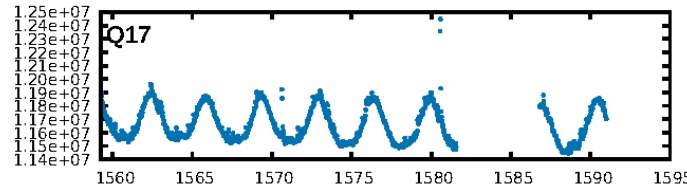
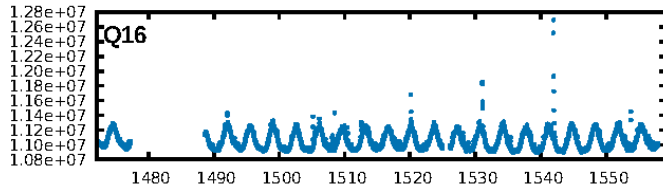
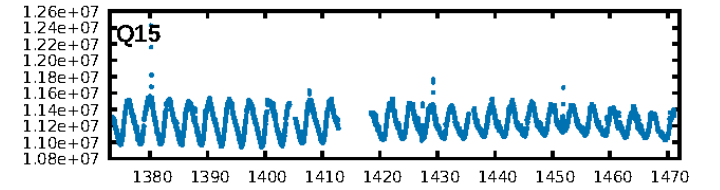
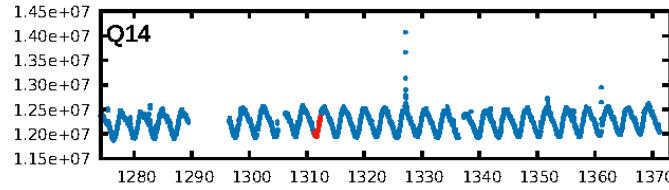
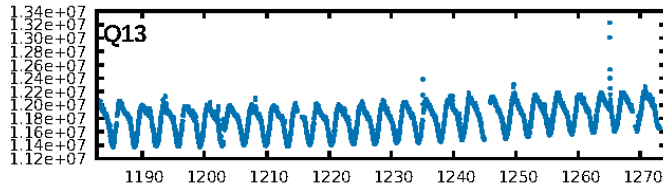
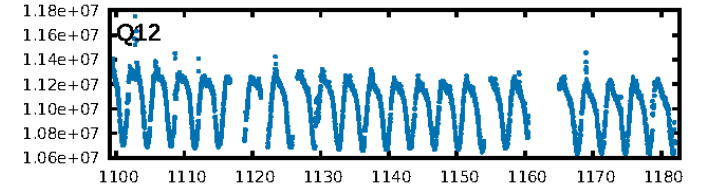
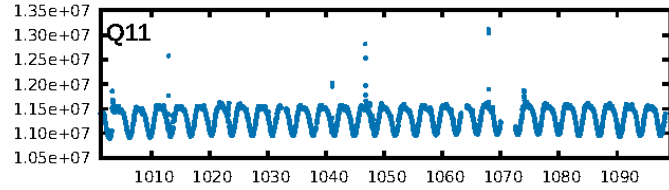
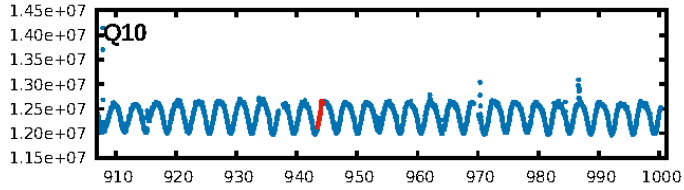
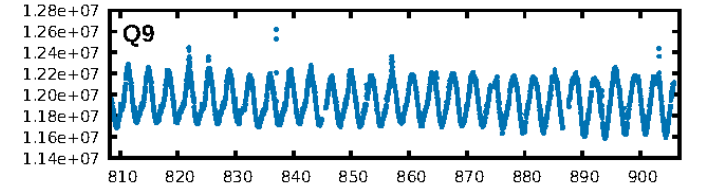
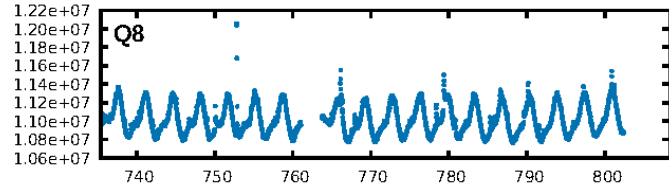
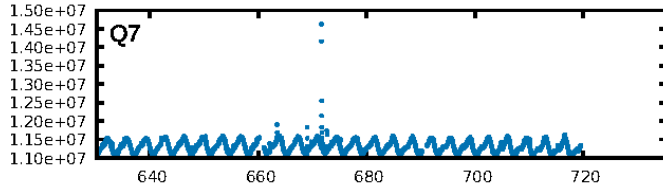
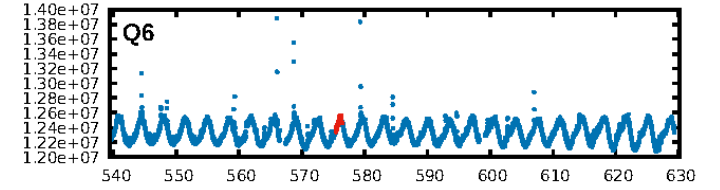
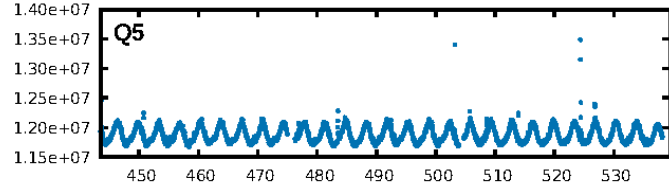
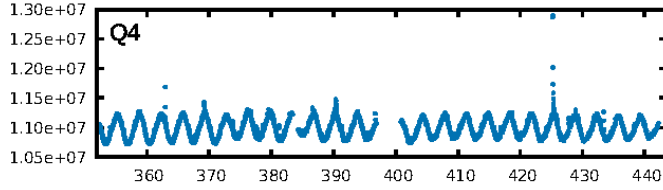
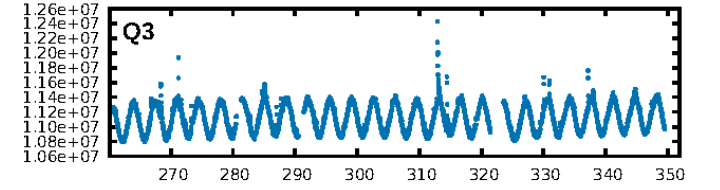
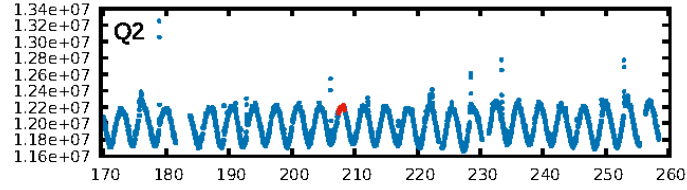
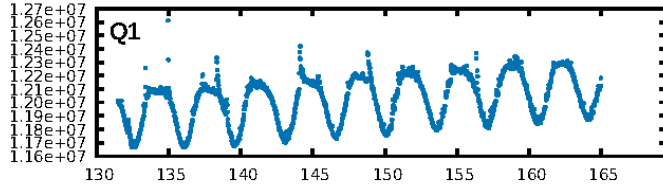
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [124.62σ]
LongPeriod-sig: N/A
ModelChiSquare2-sig: 30.9%
ModelChiSquareGof-sig: 92.6%
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [4/4]
GhostDiagnostic-chr: -1.857
Centroid-sig: N/A
Centroid-so: 0.739 arcsec [1.57σ]
OotOffset-rm: 0.076 arcsec [0.74σ]
KicOffset-rm: 0.545 arcsec [3.93σ]
OotOffset-st: 4/0/0/0 [4]
KicOffset-st: 4/0/0/0 [4]
DiffImageQuality-fgm: 0.25 [1/4]
DiffImageOverlap-fno: 0.50 [2/4]

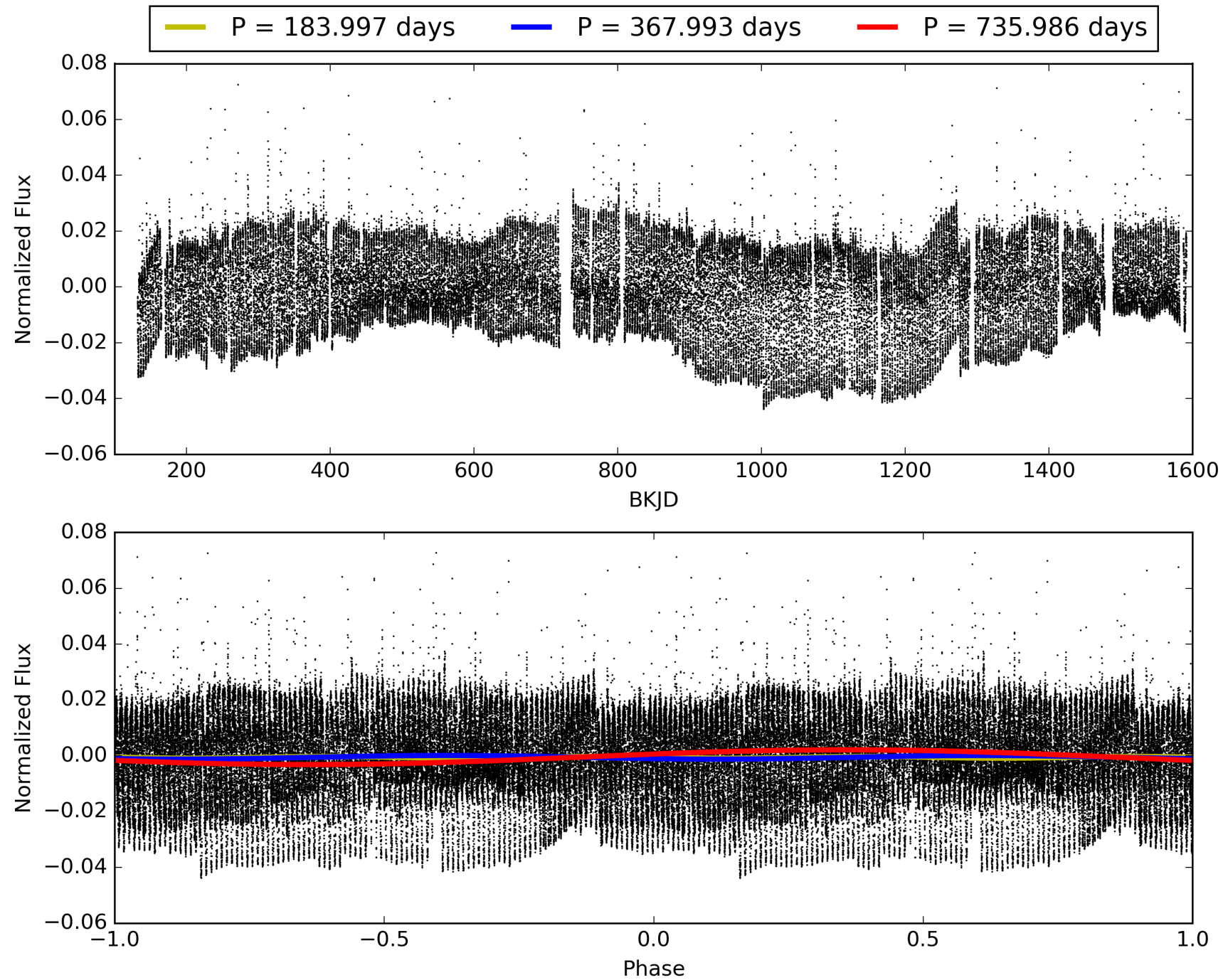
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 02-Feb-2016 00:36:05 Z

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

TCE 007350067-05, PDC Light Curves

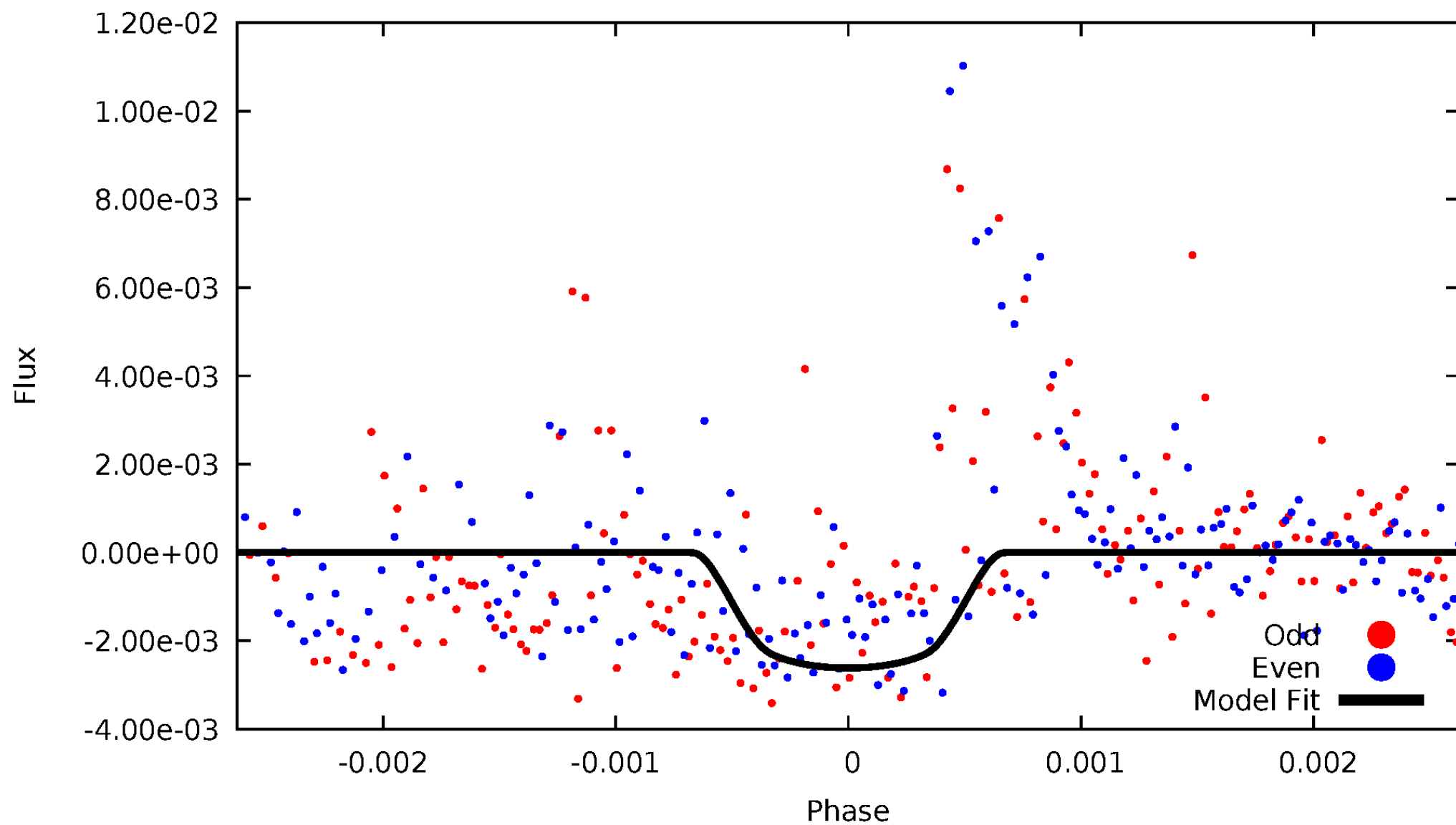


TCE 007350067-05



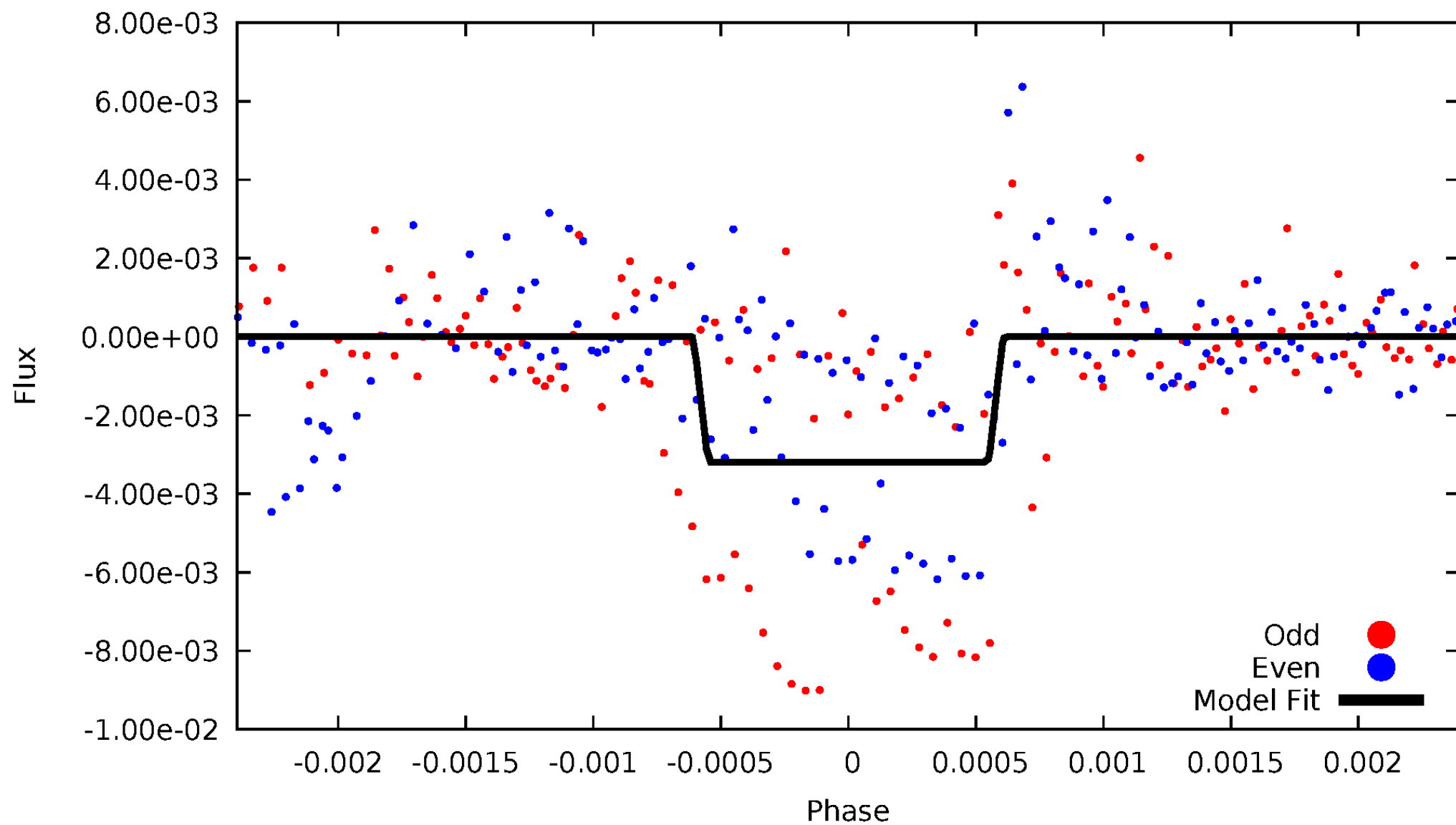
DV Odd/Even

TCE 007350067-05



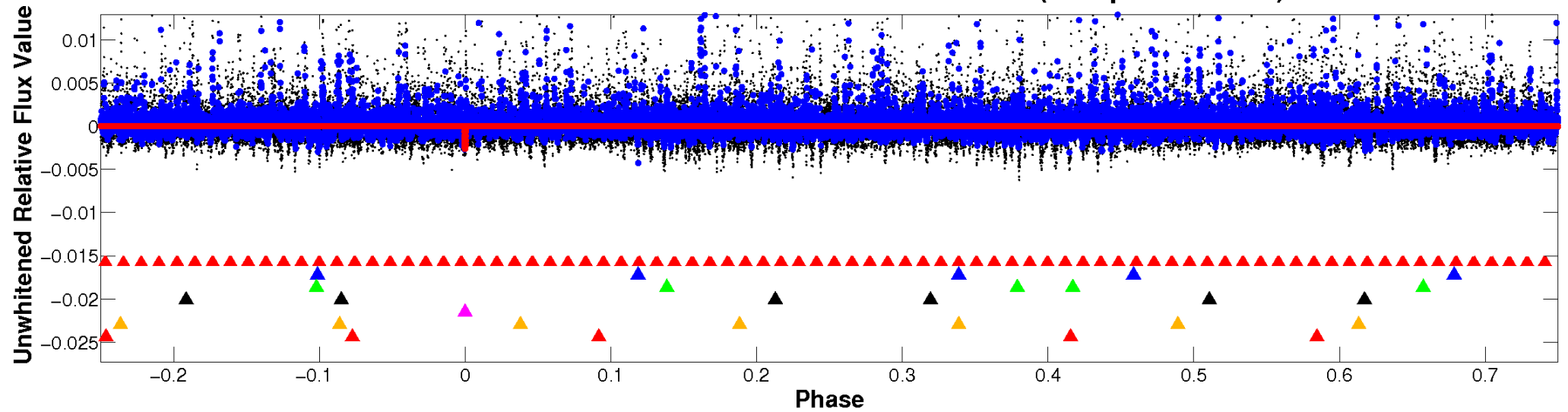
ALT Odd/Even

TCE 007350067-05

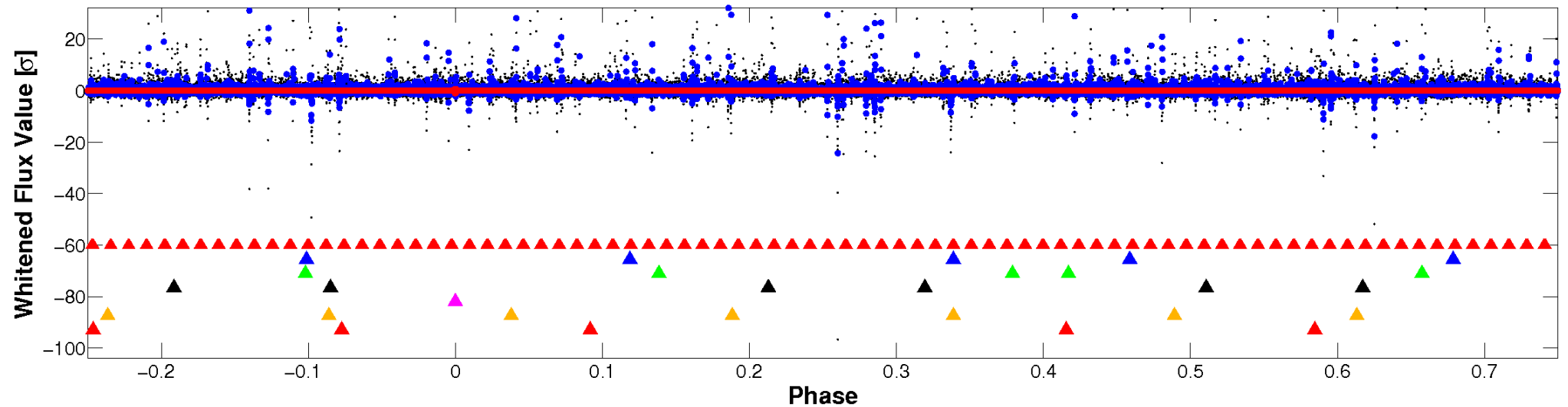


Non-Whitened Vs. Whitened Light Curve

Planet 5 : Phased Unwhitened Flux Time Series (Fit Epoch/Period)

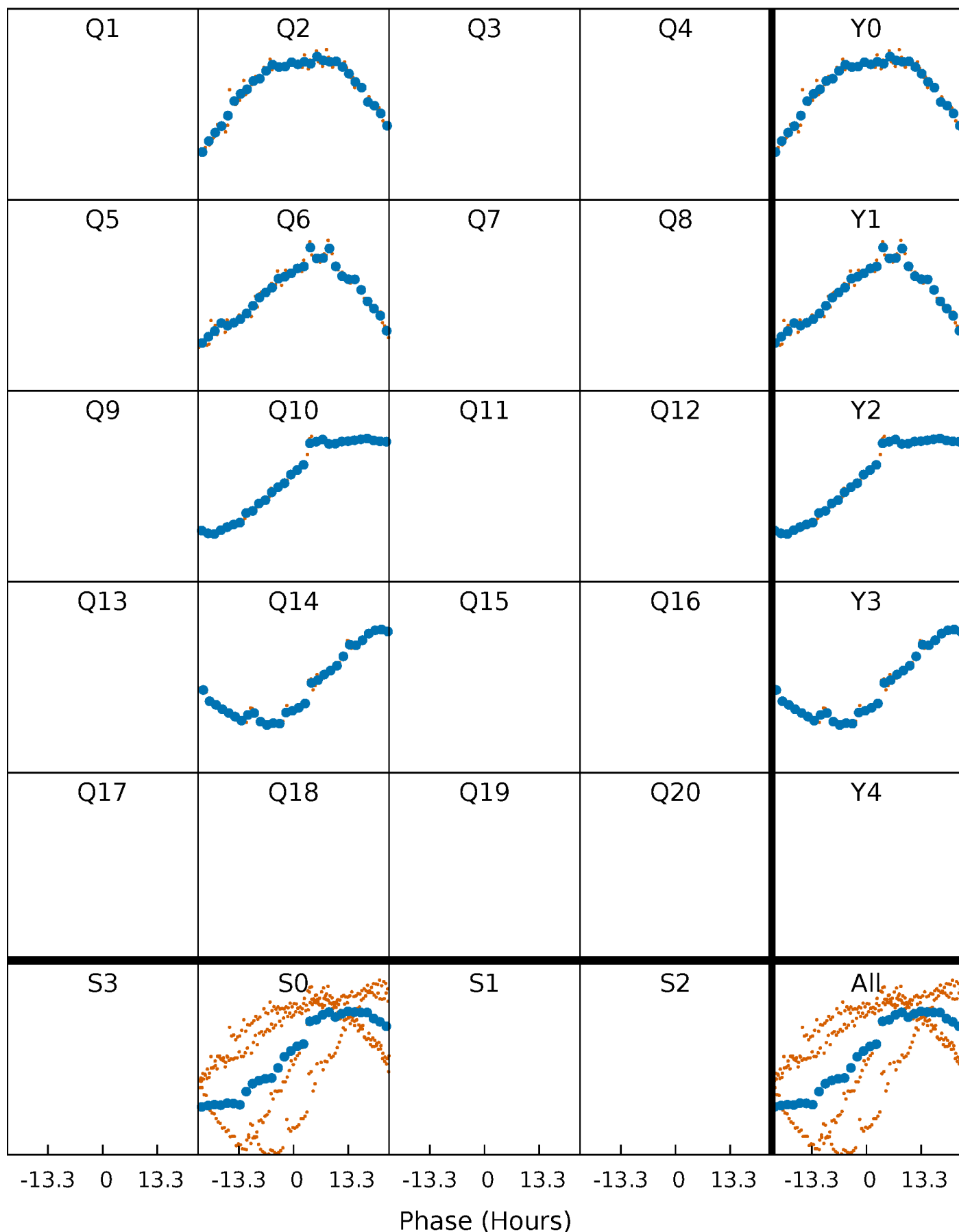


Planet 5 : Phased Whitened Flux Time Series (Fit Epoch/Period)



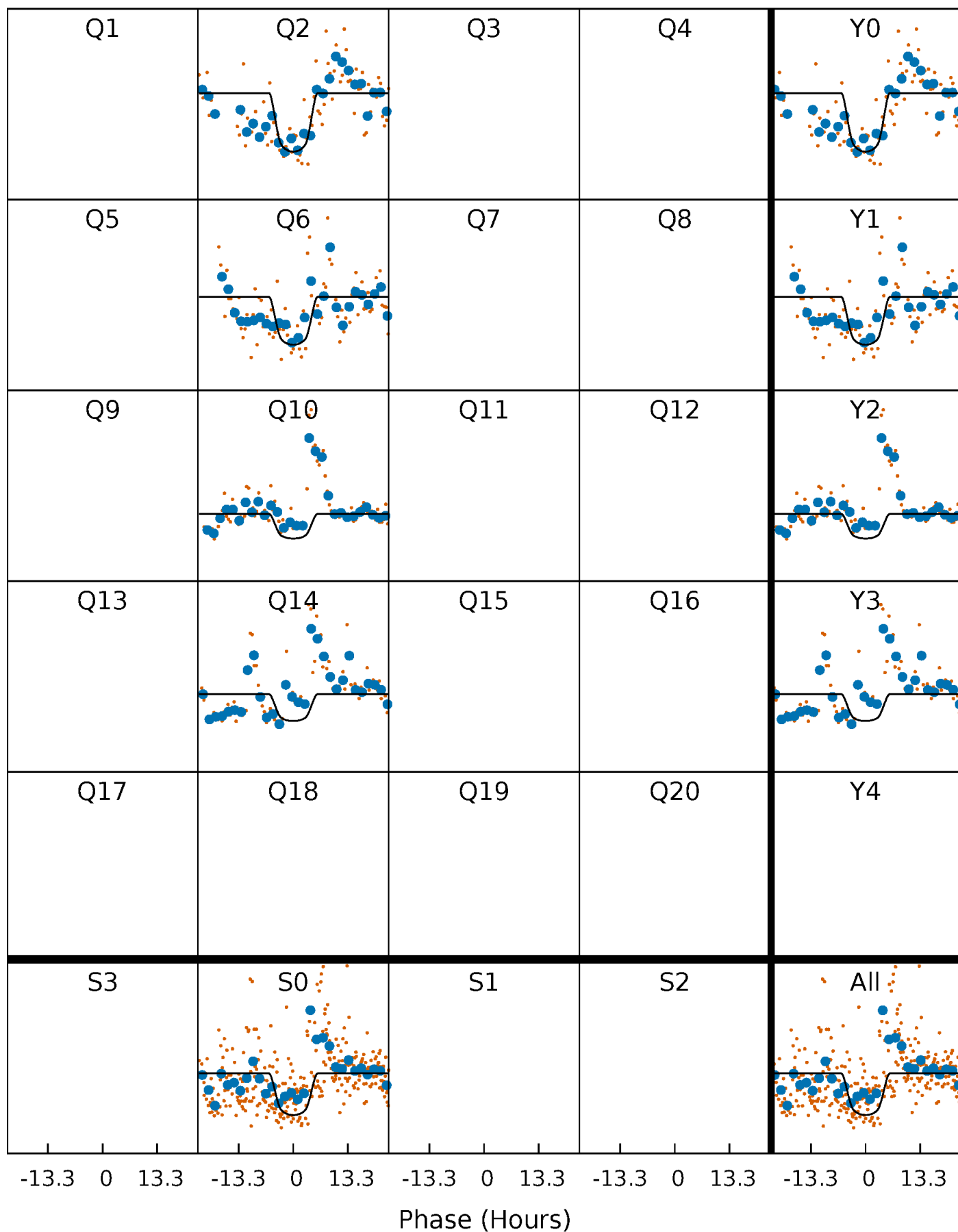
PDC Quarter-Phased Transit Curves

TCE 007350067-05 P=367.993067 Days $T_0=207.889083$ (BKJD)



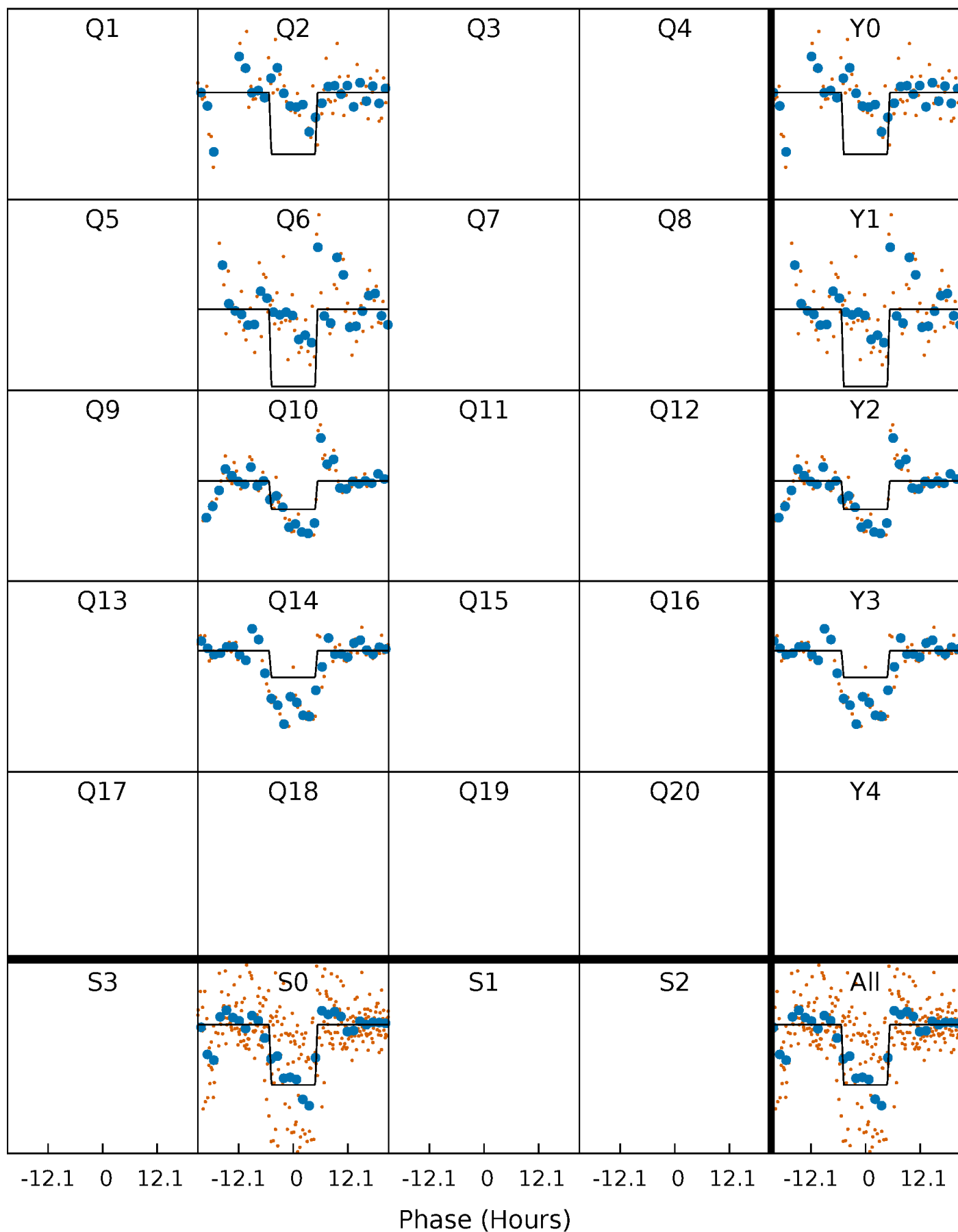
DV Quarter-Phased Transit Curves

TCE 007350067-05 $P=367.993067$ Days $T_0=207.889083$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

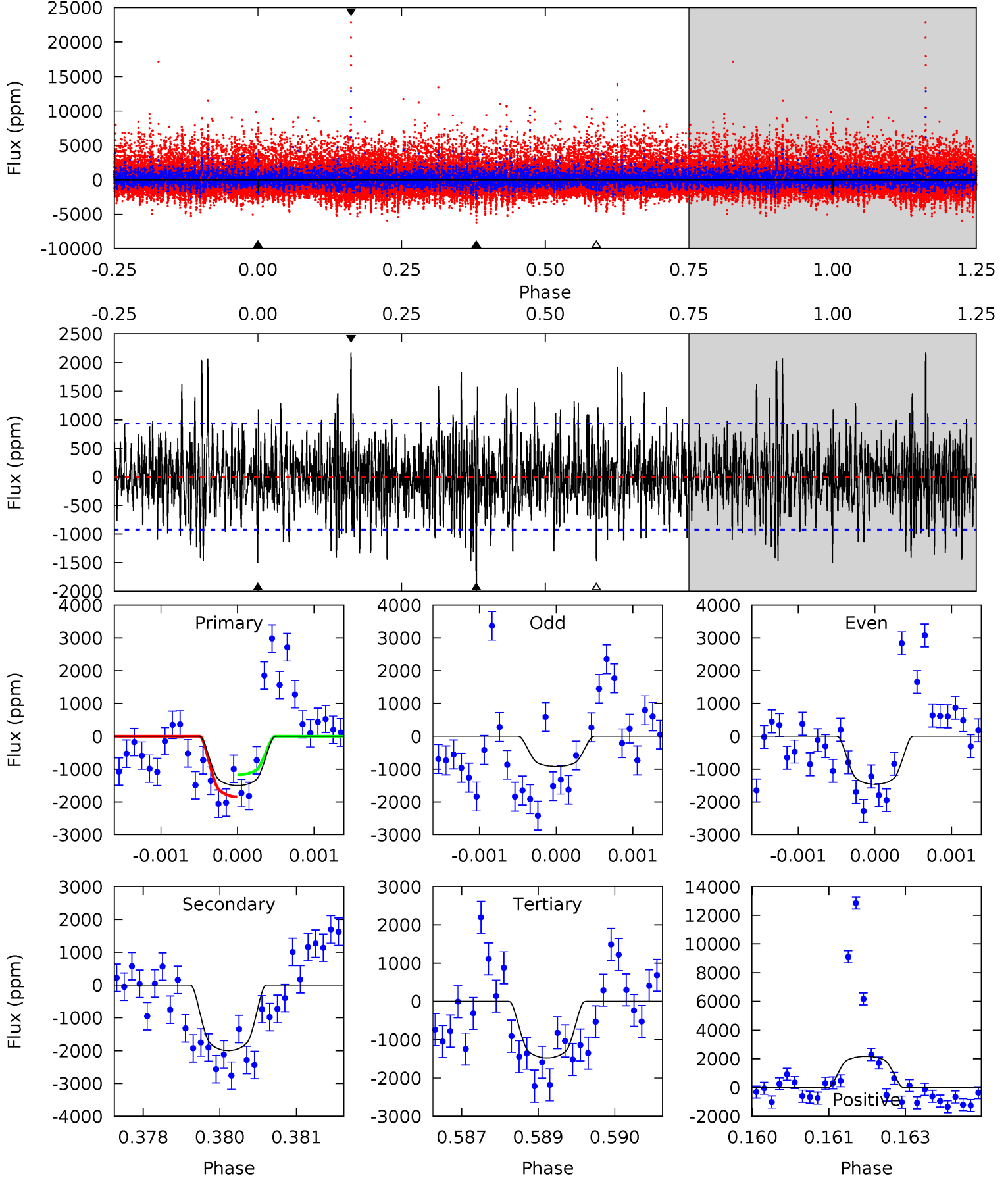
TCE 007350067-05 $P=367.994793$ Days $T_0=207.815736$ (BKJD)



DV Model-Shift Uniqueness Test

007350067-05, P = 367.993067 Days, E = 207.889083 Days

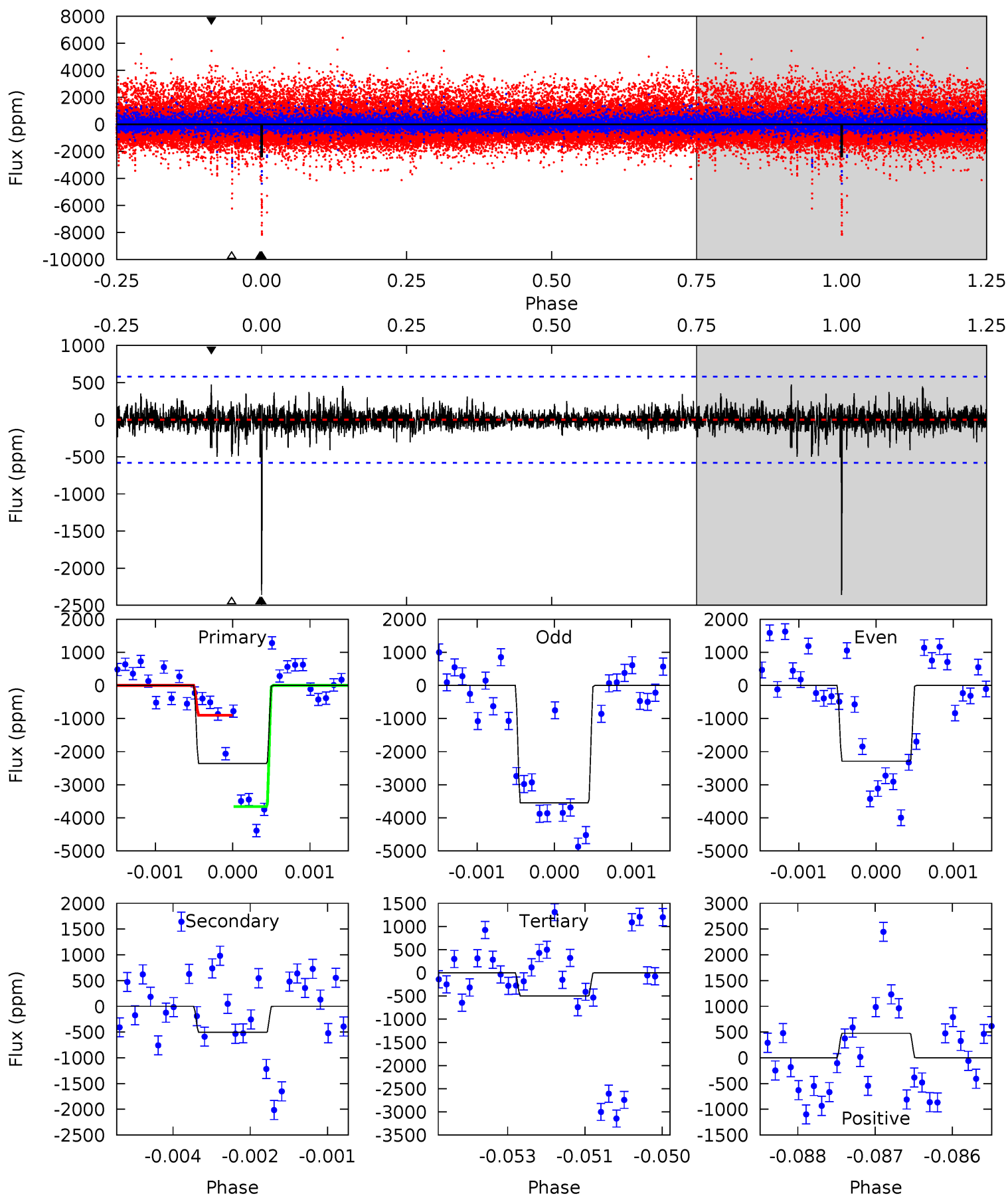
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
8.71	11.6	8.56	12.6	5.40	3.20	2.89	0.15	-3.89	3.03	-1.01	1.08	1.18	0.52	1.97



Alt Model-Shift Uniqueness Test

007350067-05, P = 367.994793 Days, E = 207.815736 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
22.0	4.73	4.67	4.44	5.42	3.23	0.80	17.4	17.6	0.06	0.29	5.91	1.26	0.17	13.1



Stellar Parameters For KIC 007350067

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	3236^{+41}_{-25}	$5.097^{+0.055}_{-0.050}$	$0.000^{+0.100}_{-0.100}$	$0.193^{+0.034}_{-0.025}$	$0.169^{+0.038}_{-0.025}$	$33.360^{+10.540}_{-7.993}$
	+1%/-1%	+1%/-1%	+inf%/-inf%	+18%/-13%	+22%/-15%	+32%/-24%
Source	PHO2	PHO2	PHO2	DSEP		

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

Secondary Eclipse Parameters for KIC 007350067-05 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-1999 ± 172	$1.17^{+0.17}_{-0.16}$	118^{+3}_{-3}	3035^{+123}_{-95}	246713^{+82940}_{-53191}
Alt.	-506 ± 107	$1.19^{+0.17}_{-0.16}$	117^{+3}_{-3}	2522^{+98}_{-94}	61063^{+21850}_{-16935}

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

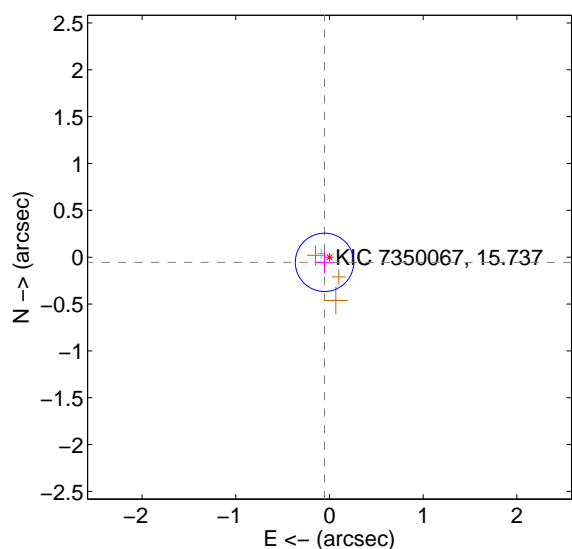
Supplemental centroid analysis for 007350067-05. Kepler magnitude: 15.74. Transit SNR 7.31

There are 1 quarters with good PRF difference image offsets

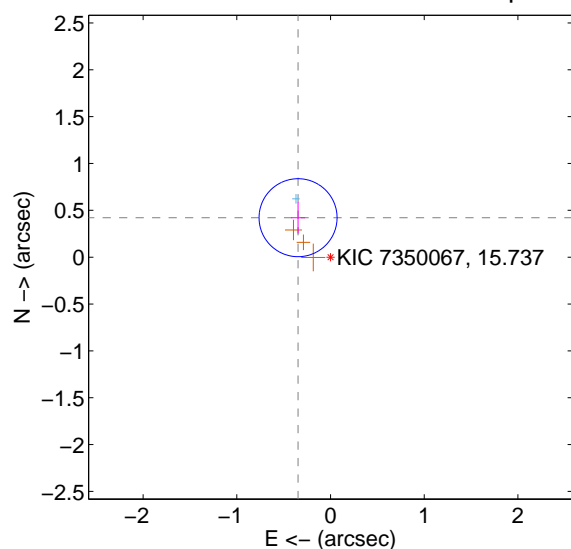
The direct PRF centroid is offset from the target star catalog position by about 0.65 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.076 ± 0.104	0.74	0.053 ± 0.088	-0.055 ± 0.117
PRF-fit source offset from KIC position	0.545 ± 0.139	3.93	0.346 ± 0.075	0.421 ± 0.169
photometric centroid source offset	0.74 ± 0.47	1.57	0.72 ± 0.47	0.15 ± 0.56

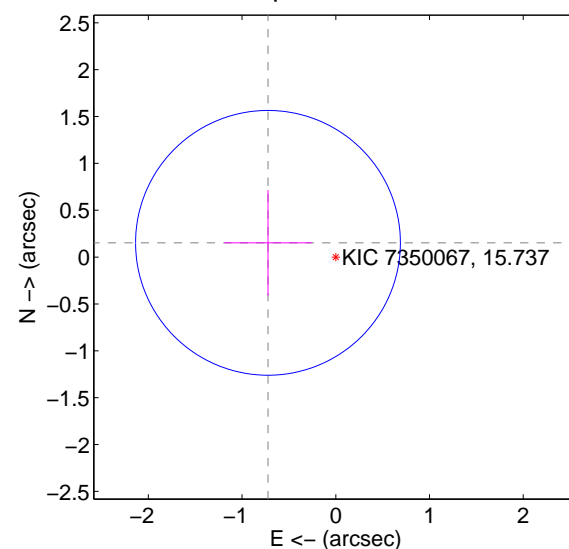
offset from difference PRF-fit to OOT PRF-fit



offset from difference PRF-fit to KIC position

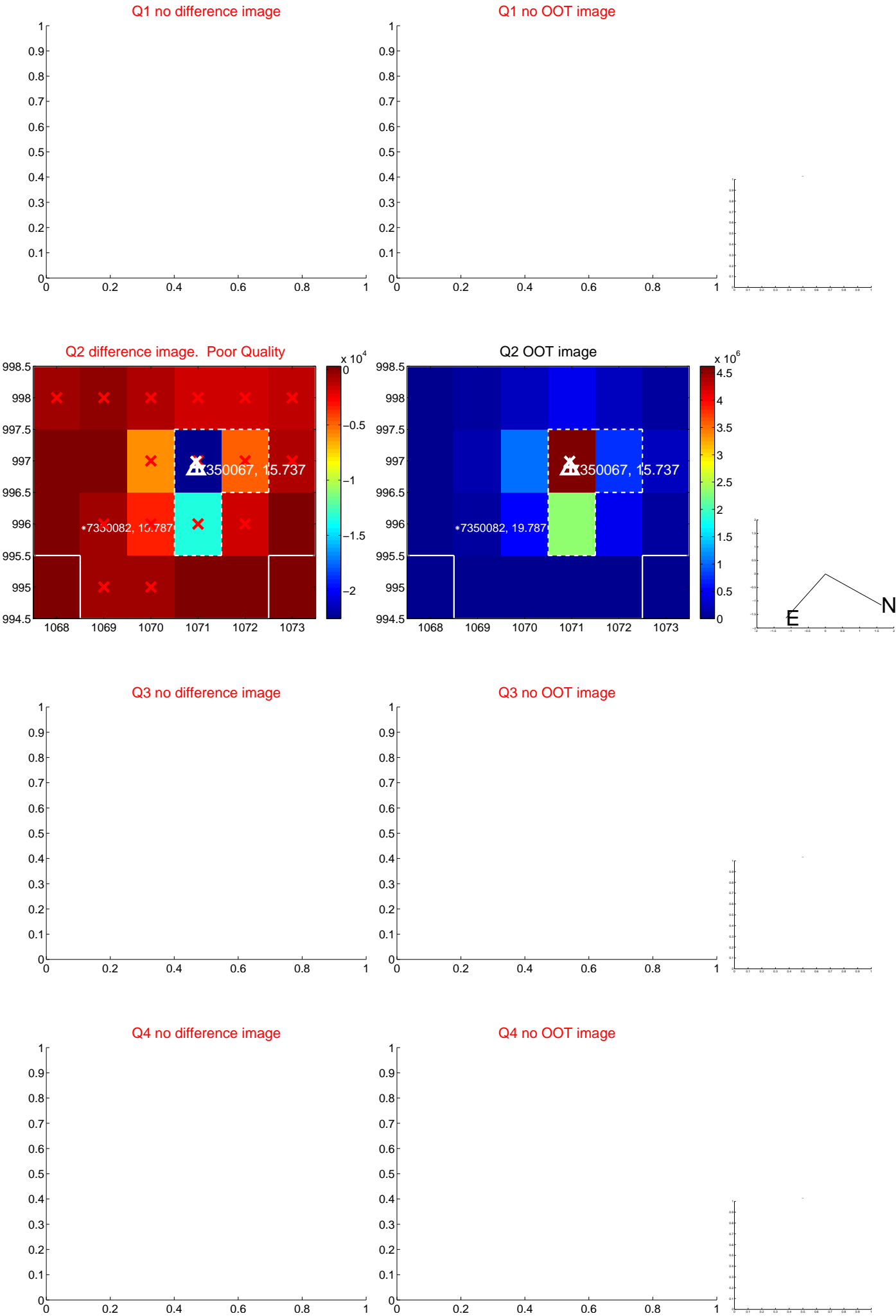


offset from photometric centroids

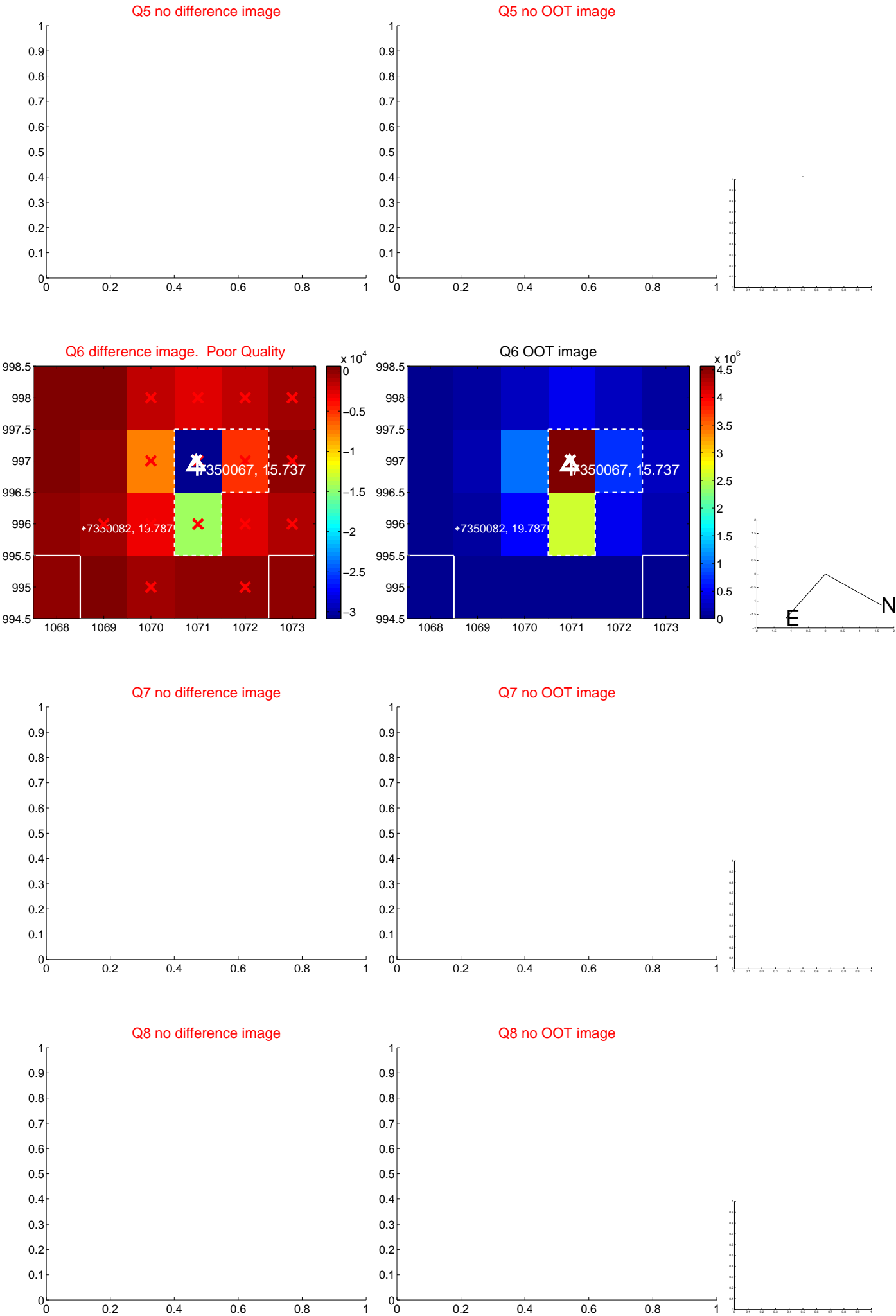


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

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



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



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

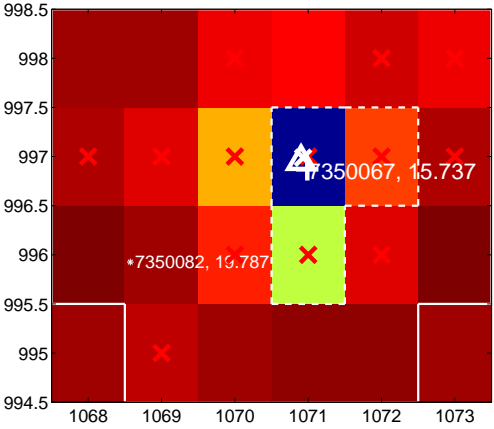
Q9 no difference image



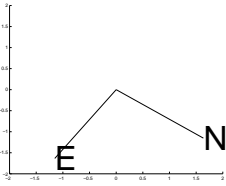
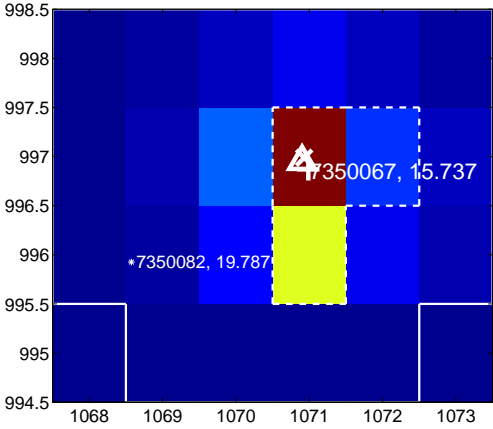
Q9 no OOT image



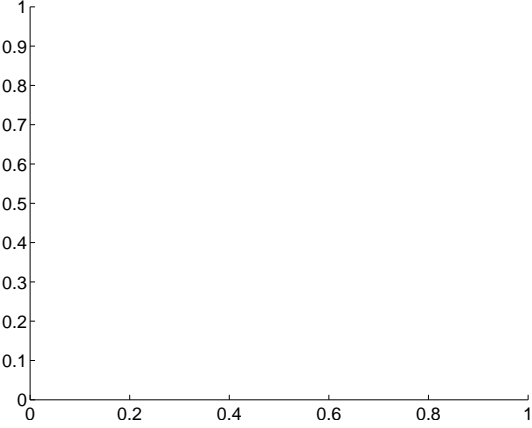
Q10 difference image. Poor Quality



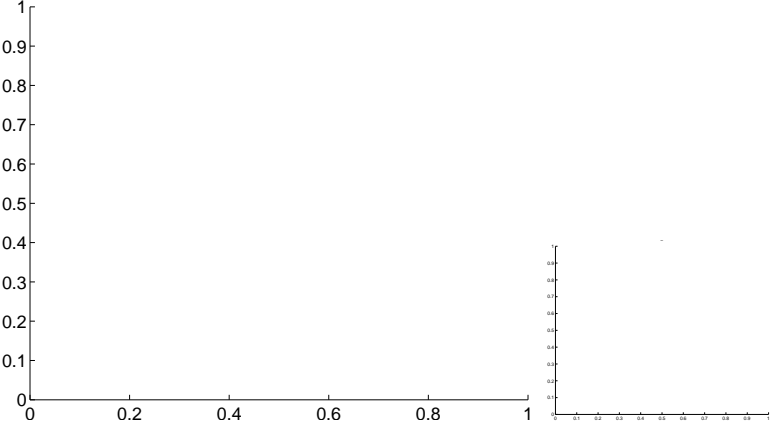
Q10 OOT image



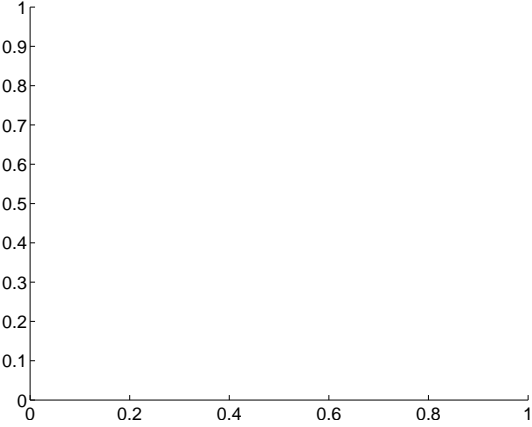
Q11 no difference image



Q11 no OOT image



Q12 no difference image

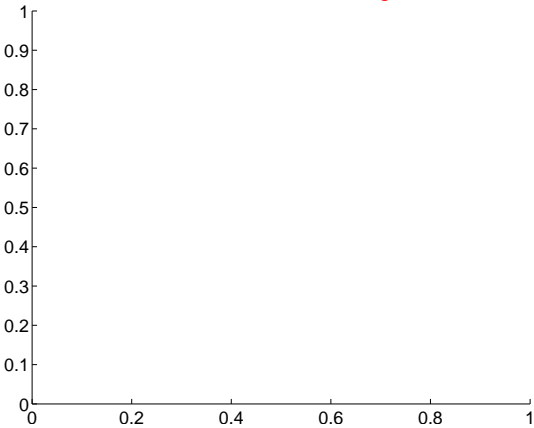


Q12 no OOT image

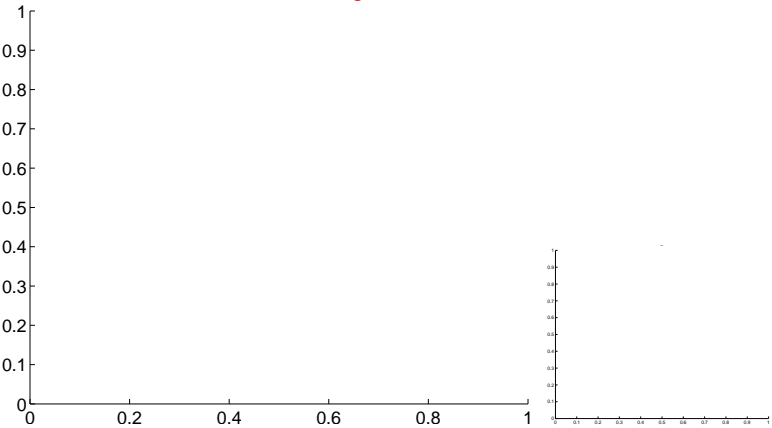


white ×: KIC target position; +: OOT centroid; △: difference centroid. red ✕: large negative pixel value.

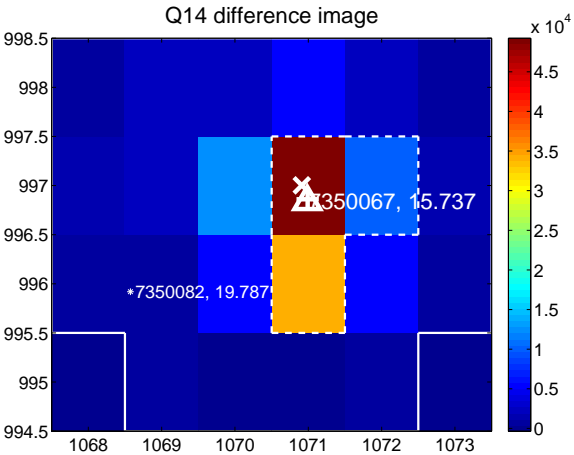
Q13 no difference image



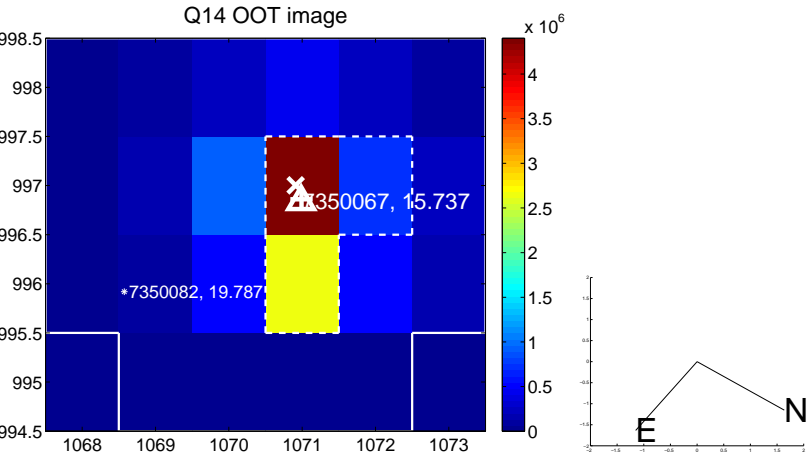
Q13 no OOT image



Q14 difference image



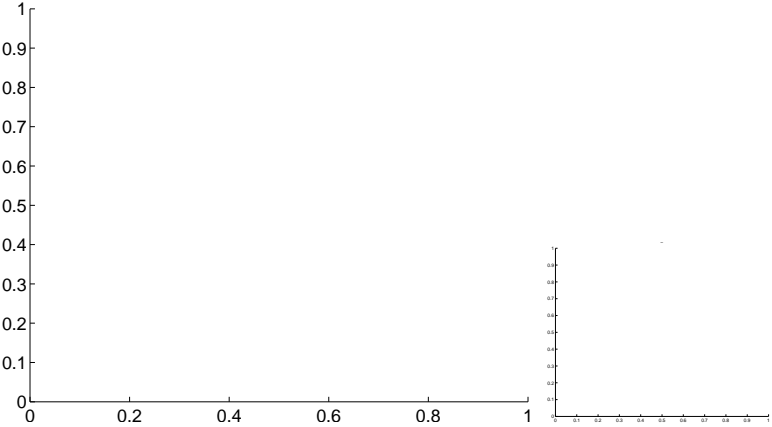
Q14 OOT image



Q15 no difference image



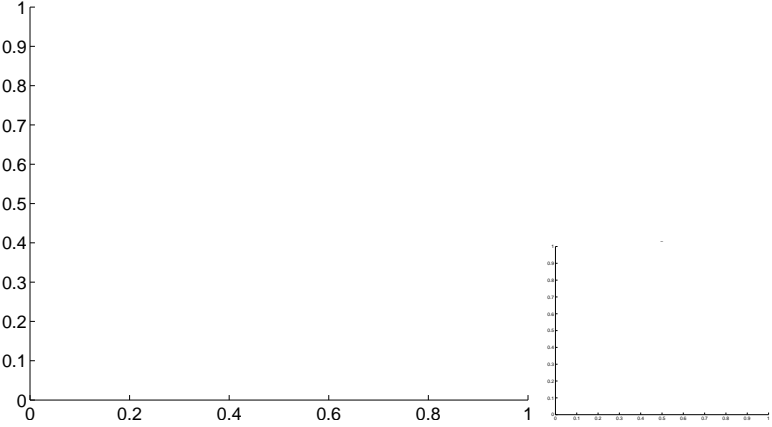
Q15 no OOT image



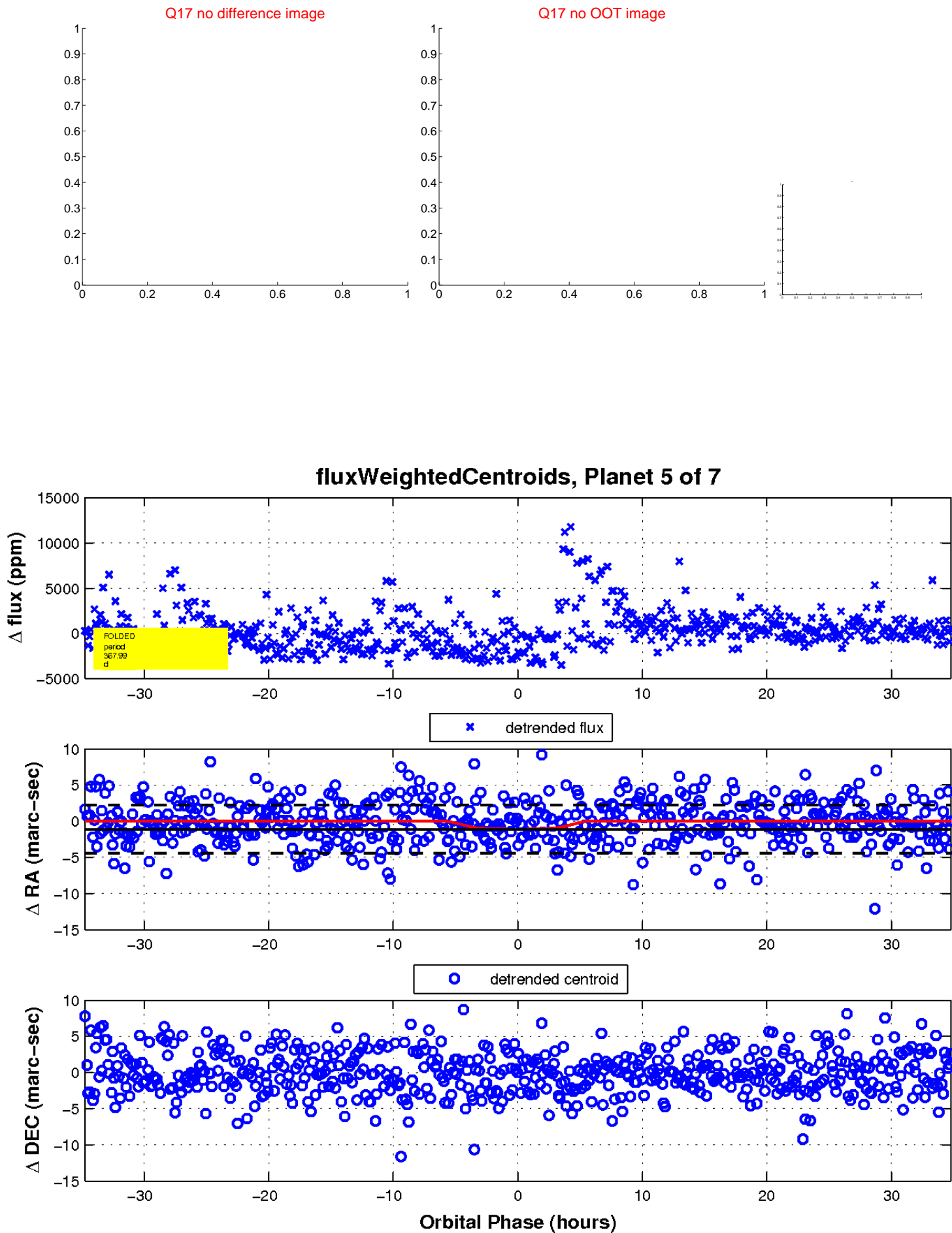
Q16 no difference image



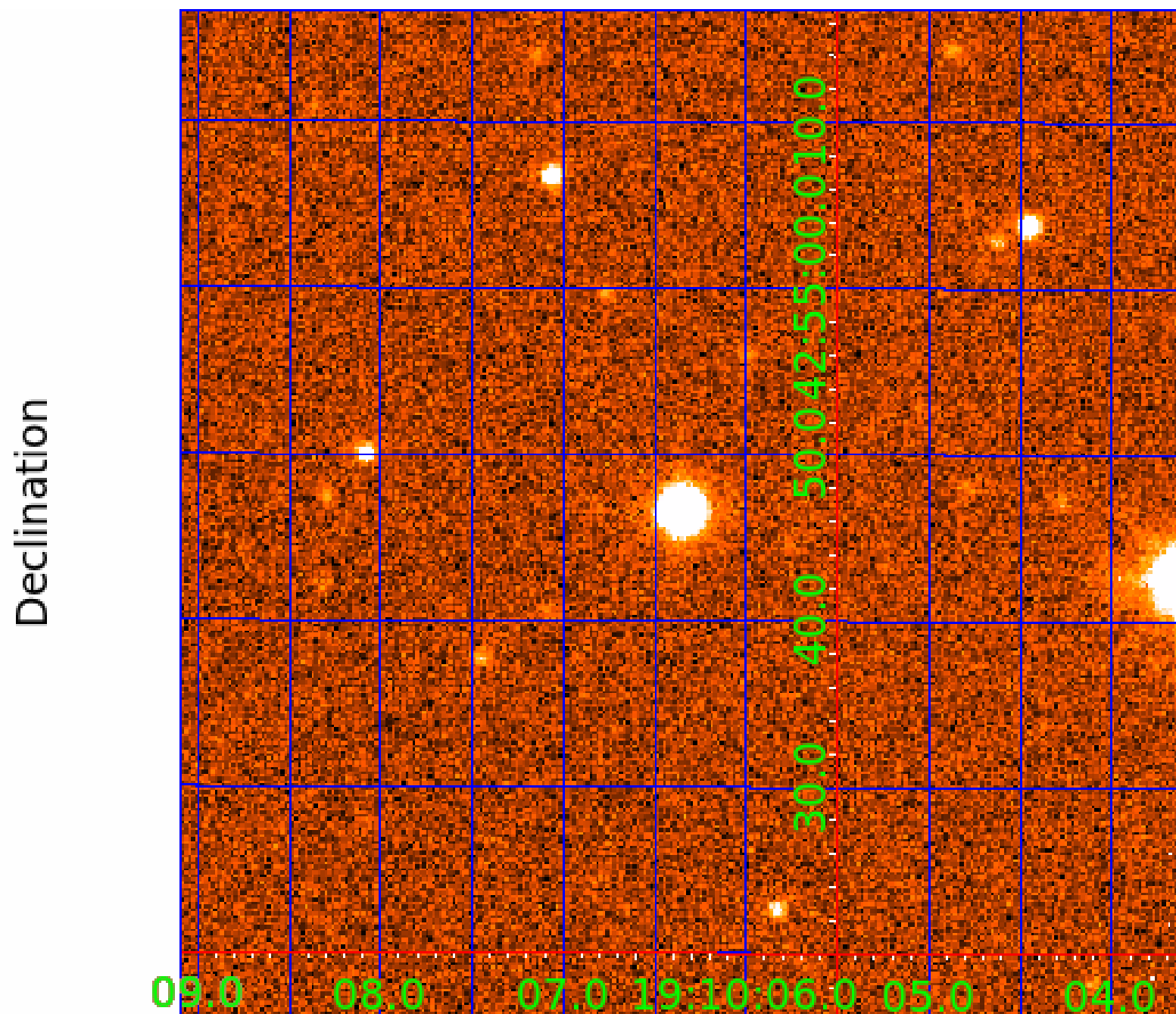
Q16 no OOT image



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



UKIRT Image



KIC 007350067

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})
007350067-01	OBS	6863.01	4.485590	135.431953	2240.4	0.834	22.4	39.7	0.19	3236	0.94	4.21
007350067-02	OBS	No	287.029062	332.555145	3119.6	4.263	13.8	8.1	0.19	3236	1.07	0.02
007350067-03	OBS	No	279.498556	347.344021	3972.2	5.834	13.0	10.1	0.19	3236	1.21	0.02
007350067-04	OBS	No	258.389148	137.445671	1921.0	3.957	11.1	6.5	0.19	3236	0.83	0.02
007350067-05	OBS	No	367.993067	207.889083	2614.2	11.600	10.7	7.3	0.19	3236	1.17	0.01
007350067-06	OBS	No	211.665139	221.872541	1892.9	4.650	11.0	6.6	0.19	3236	0.83	0.03
007350067-07	OBS	No	305.778173	241.657053	2703.7	3.000	11.9	-1.0	0.19	3236	0.99	0.01

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
007350067-01	OBS	PC	1.00	0	0	0	0	CENT_KIC_POS
007350067-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_MARSHALL—LPP_DV—MOD_POS_DV—INCONSISTENT_TRANS—CENT_FEW_DIFFS
007350067-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_MARSHALL—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_POS_DV—CENT_FEW_DIFFS
007350067-04	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_MARSHALL_SKYE—LPP_DV—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—CENT_KIC_POS
007350067-05	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_MARSHALL—LPP_DV—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—INCONSISTENT_TRANS—CENT_FEW_DIFFS
007350067-06	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_MARSHALL_SKYE—LPP_DV—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV
007350067-07	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_MARSHALL—LPP_DV—ALL_TRANS_CHASES—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.

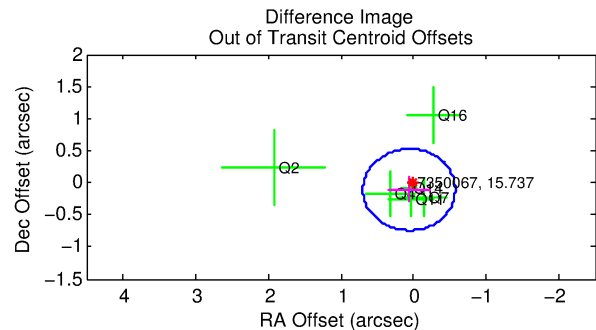
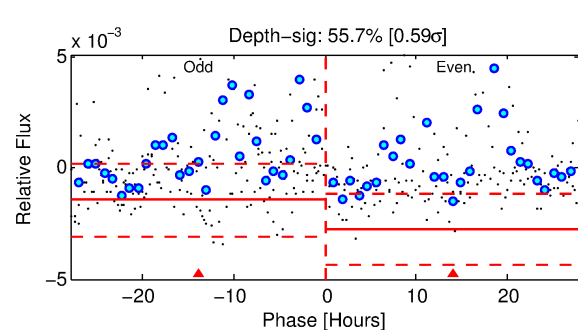
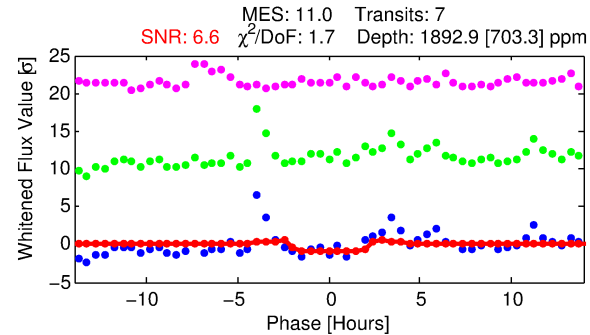
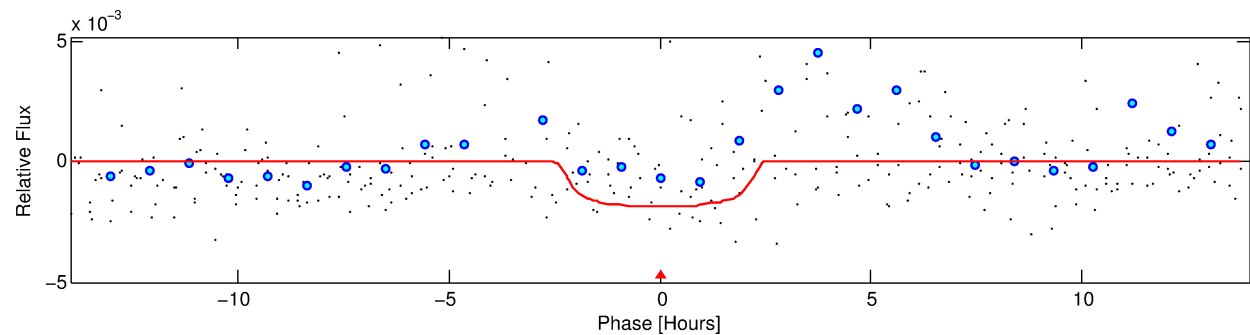
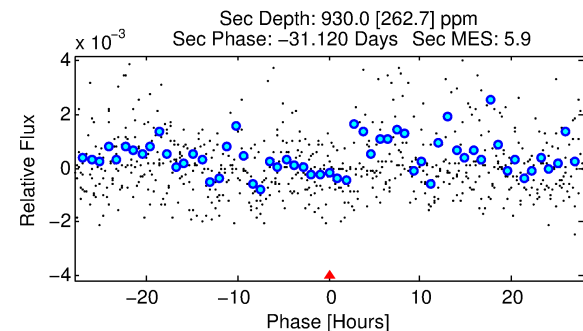
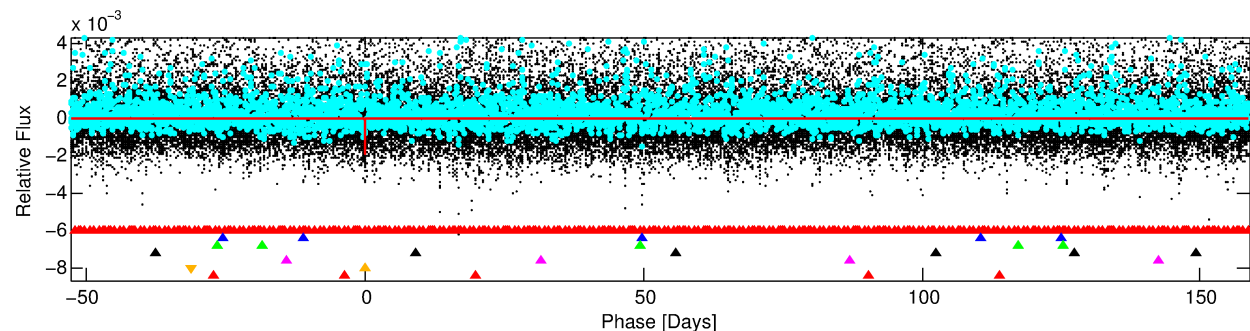
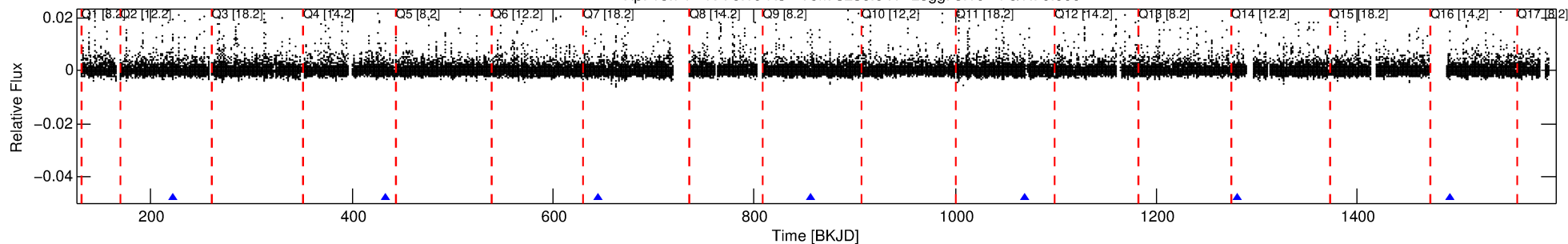
Ephemeris Match Information For 007350067-06

No Significant Match Found

DV One-Page Summary

KIC: 7350067 Candidate: 6 of 7 Period: 211.665 d
KOI: K06863 Corr: No Ephemeris Match

Kp: 15.74 R*: 0.19 Rs Teff: 3236.0 K Logg: 5.10 Fe/H: 0.000



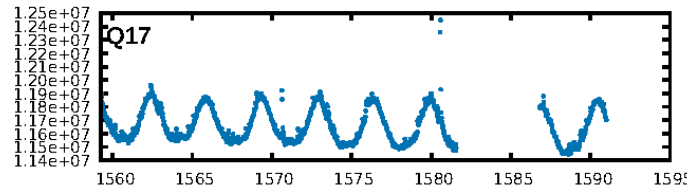
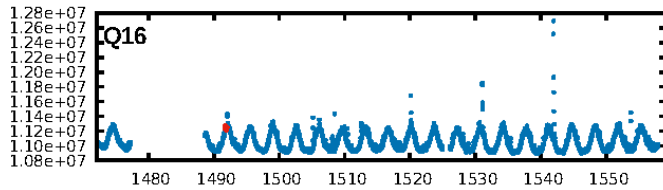
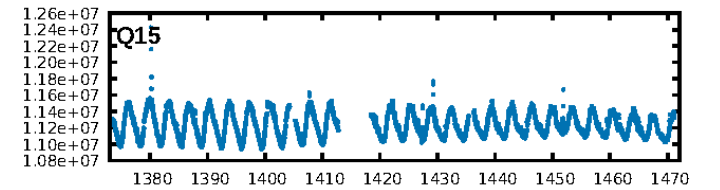
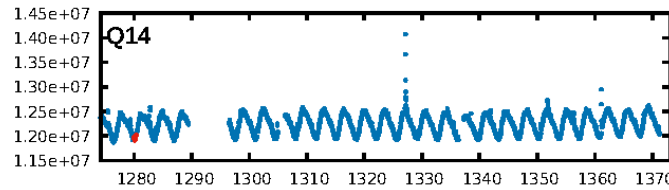
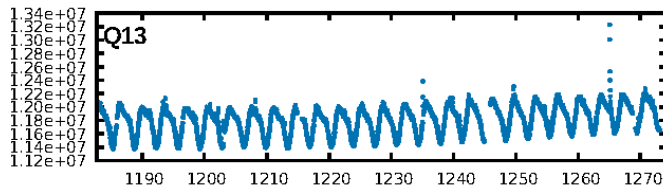
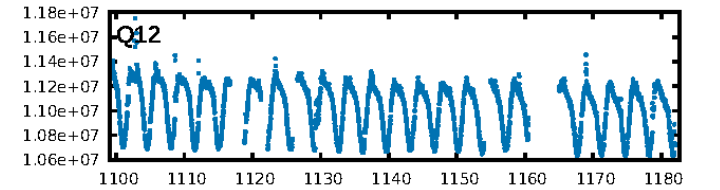
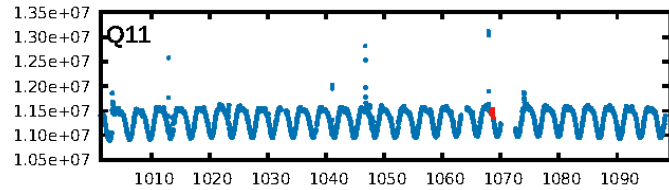
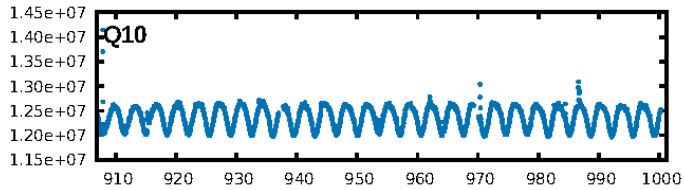
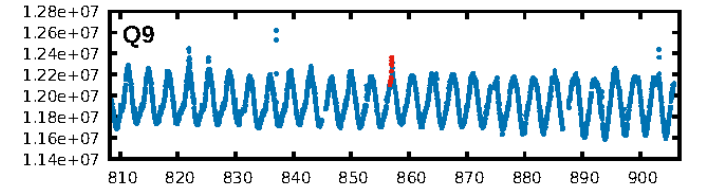
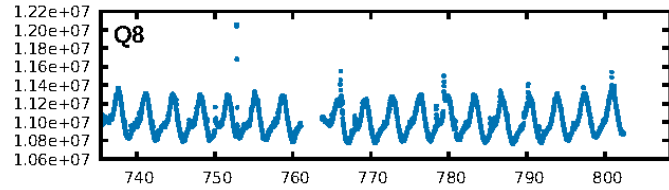
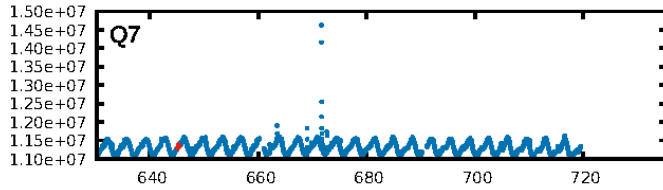
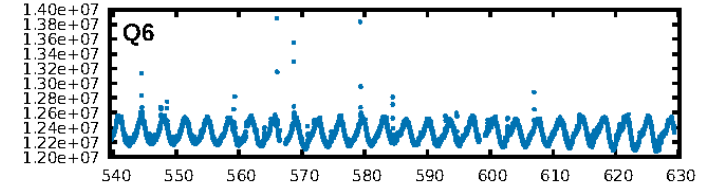
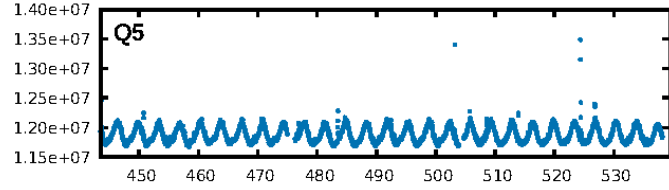
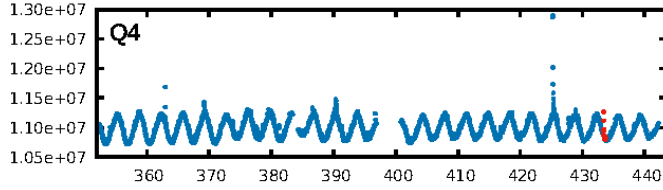
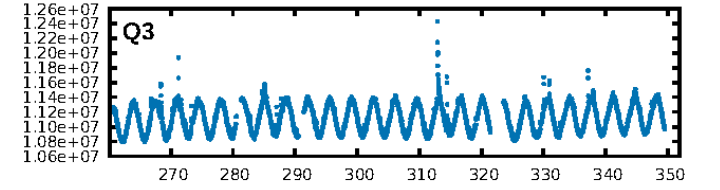
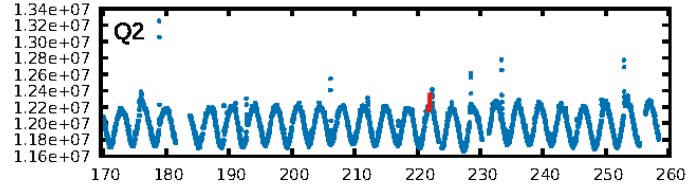
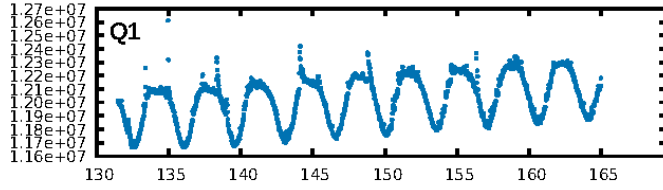
DV Fit Results:

Period = 211.66514 [0.00516] d
Epoch = 221.8725 [0.0207] BKJD
Rp/R* = 0.0396 [0.0853]
a/R* = 352.70 [3246.95]
b = 0.23 [38.38]
Seff = 0.02 [0.00]
Teq = 101 [4] K
Rp = 0.83 [1.80] Re
a = 0.3850 [0.0481] AU
Ag = 109211.96 [472254.27] [0.23σ]
Teffp = 2841 [3070] K [0.89σ]

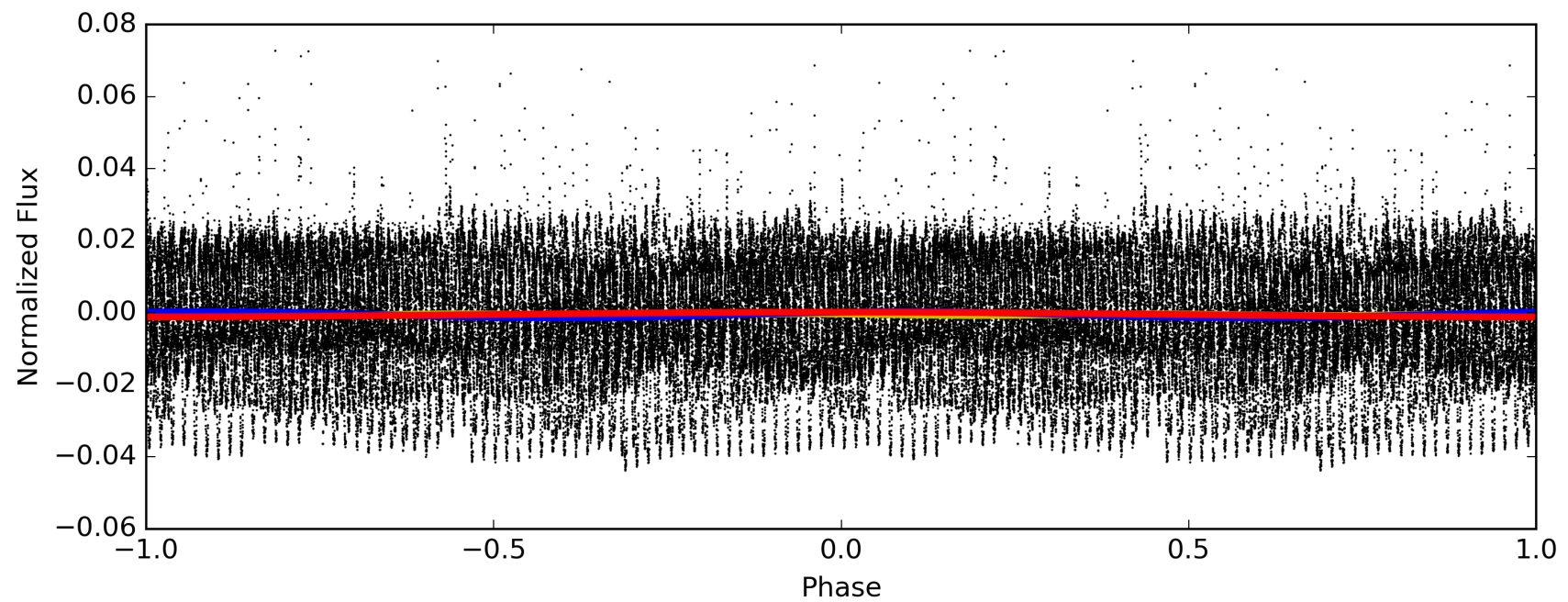
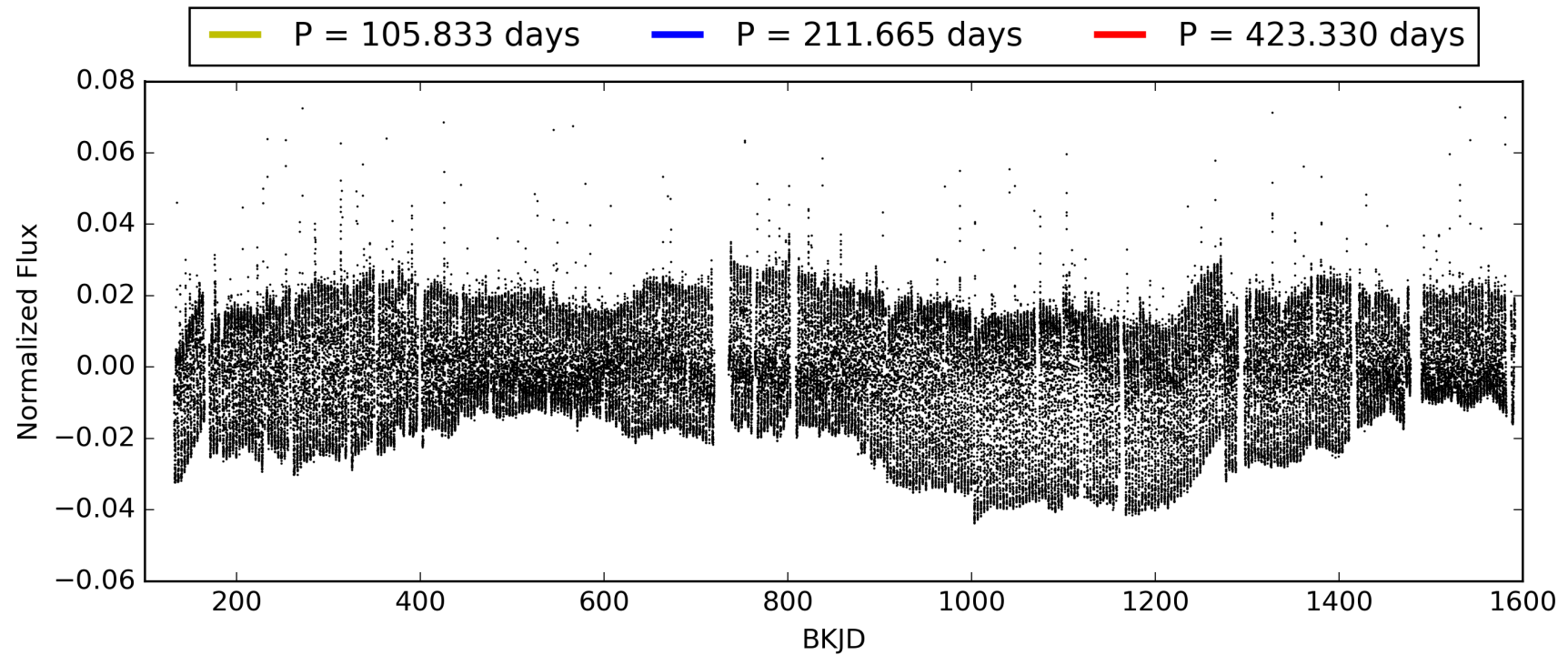
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [1052.45σ]
LongPeriod-sig: 100.0% [183.66σ]
ModelChiSquare2-sig: 3.3%
ModelChiSquareGot-sig: 62.0%
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [7/7]
GhostDiagnostic-chr: -2.292
Centroid-sig: N/A
Centroid-so: 0.657 arcsec [0.94σ]
OotOffset-rm: 0.126 arcsec [0.59σ]
OotOffset-st: 2/2/0 [6]
KicOffset-rm: 0.639 arcsec [3.61σ]
KicOffset-st: 2/2/0 [6]
DiffImageQuality-fgm: 0.50 [3/6]
DiffImageOverlap-fno: 0.86 [6/7]

TCE 007350067-06, PDC Light Curves

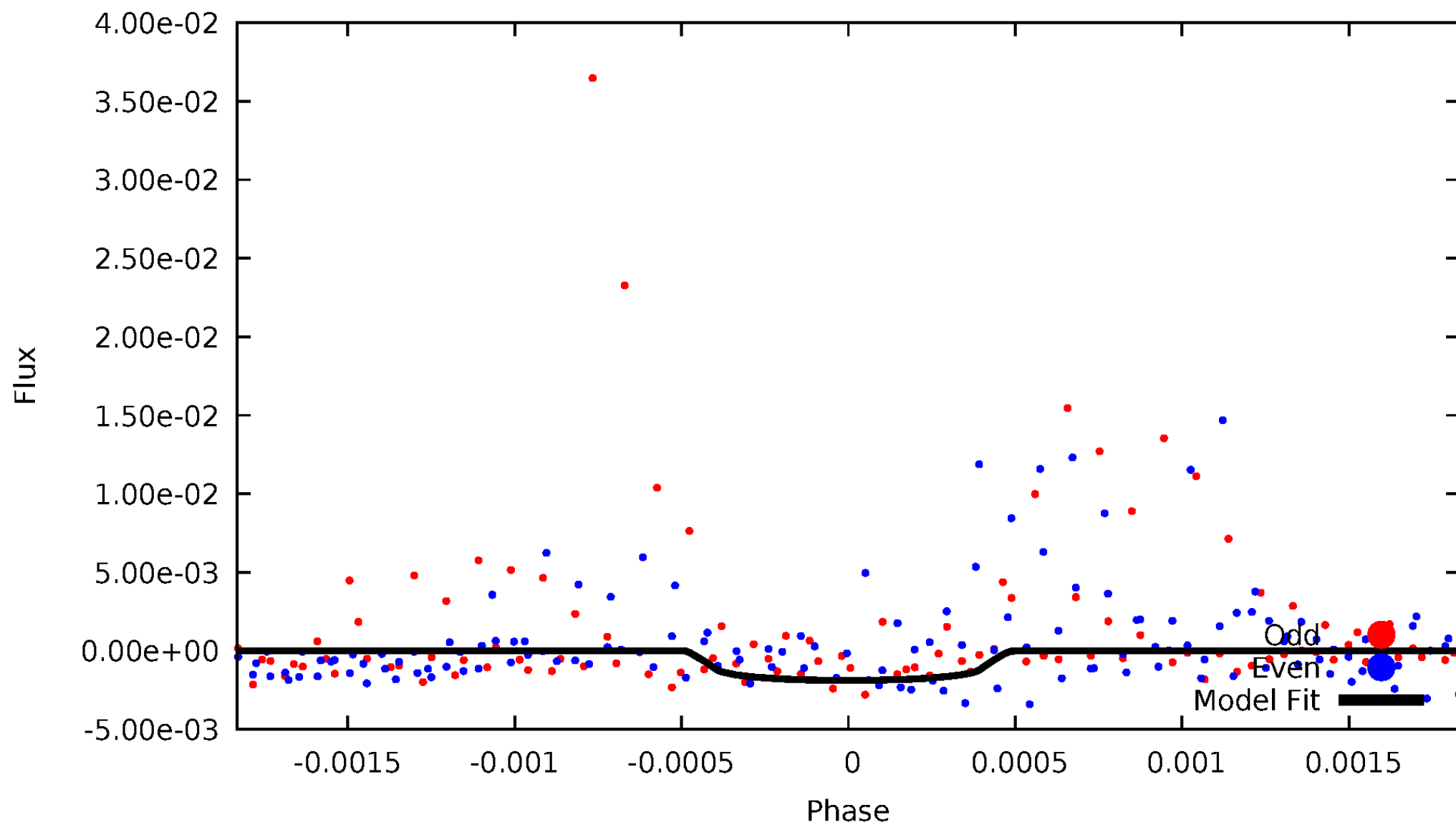


TCE 007350067-06



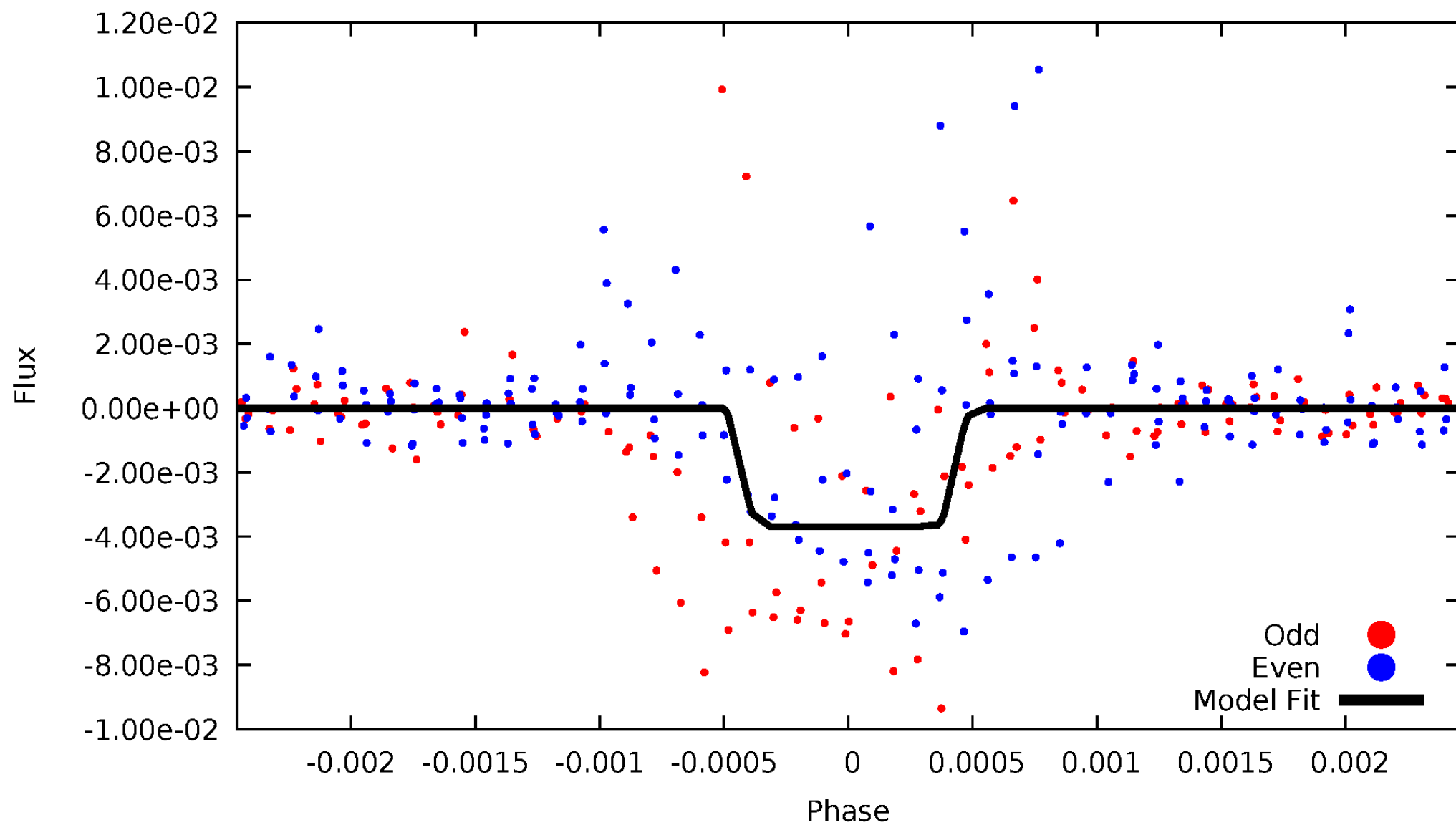
DV Odd/Even

TCE 007350067-06



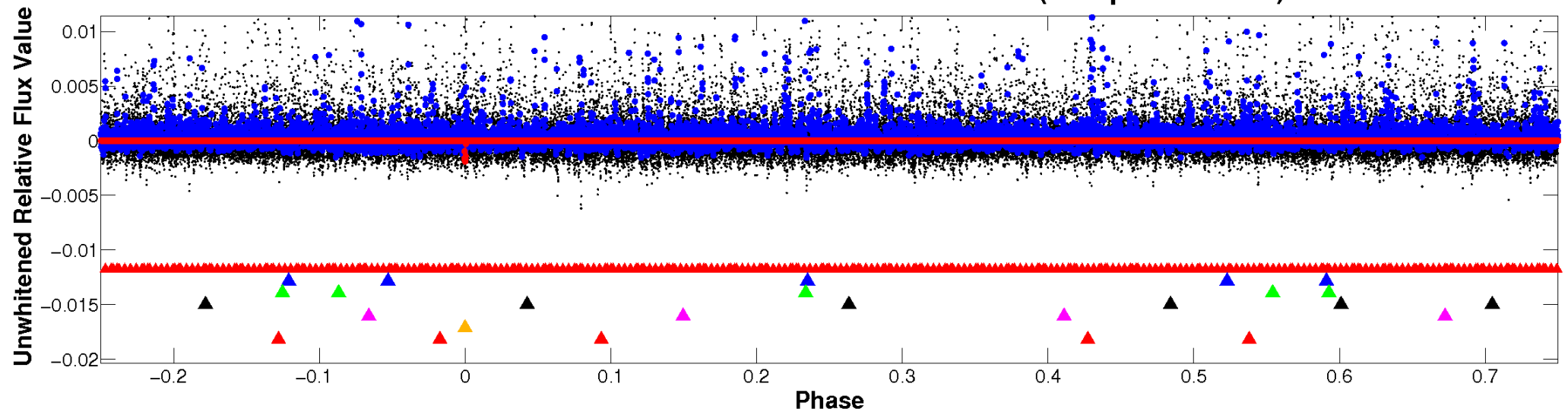
ALT Odd/Even

TCE 007350067-06

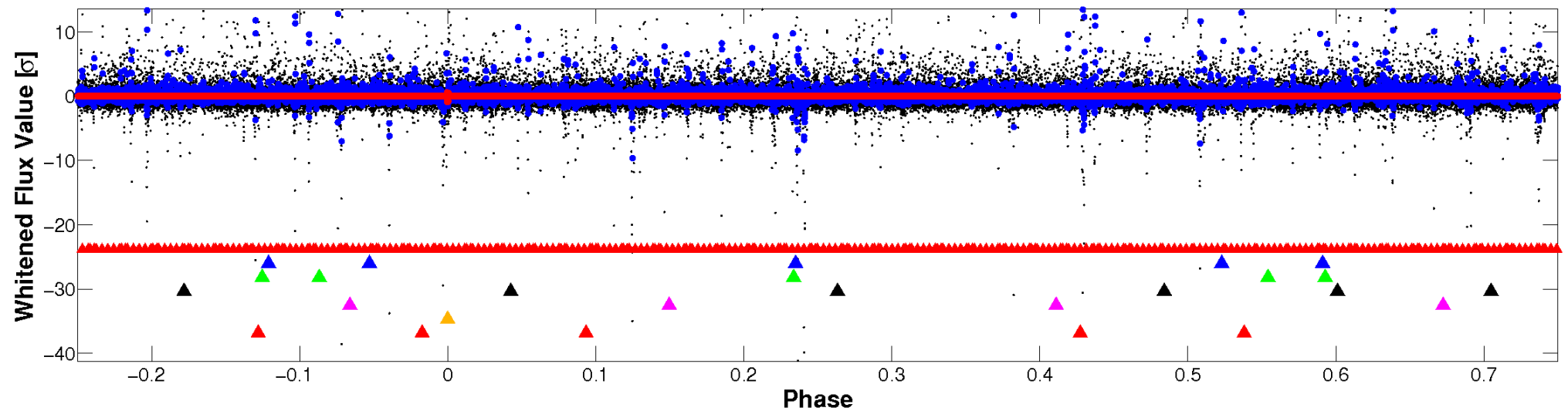


Non-Whitened Vs. Whitened Light Curve

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

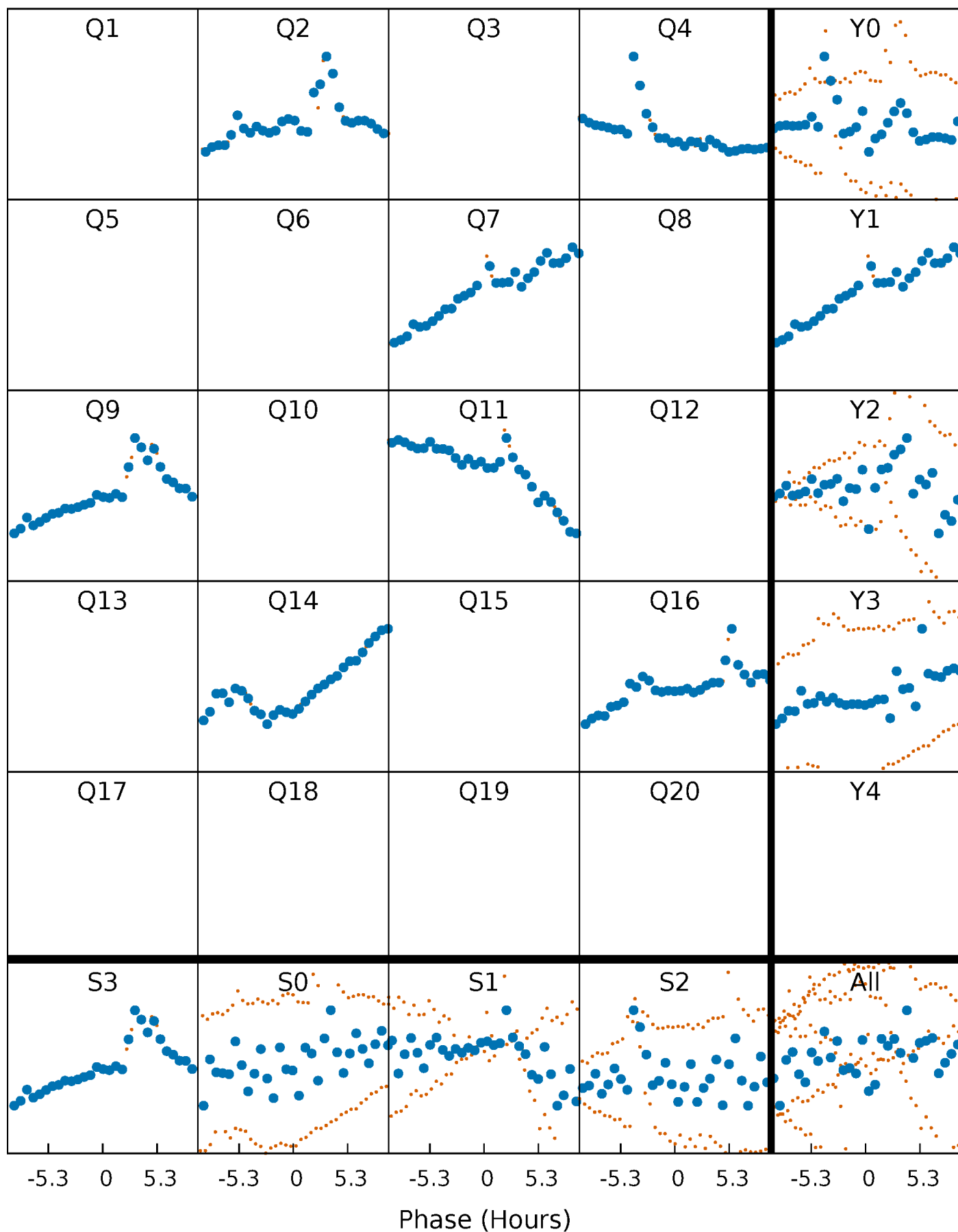


Planet 6 : Phased Whitened Flux Time Series (Fit Epoch/Period)



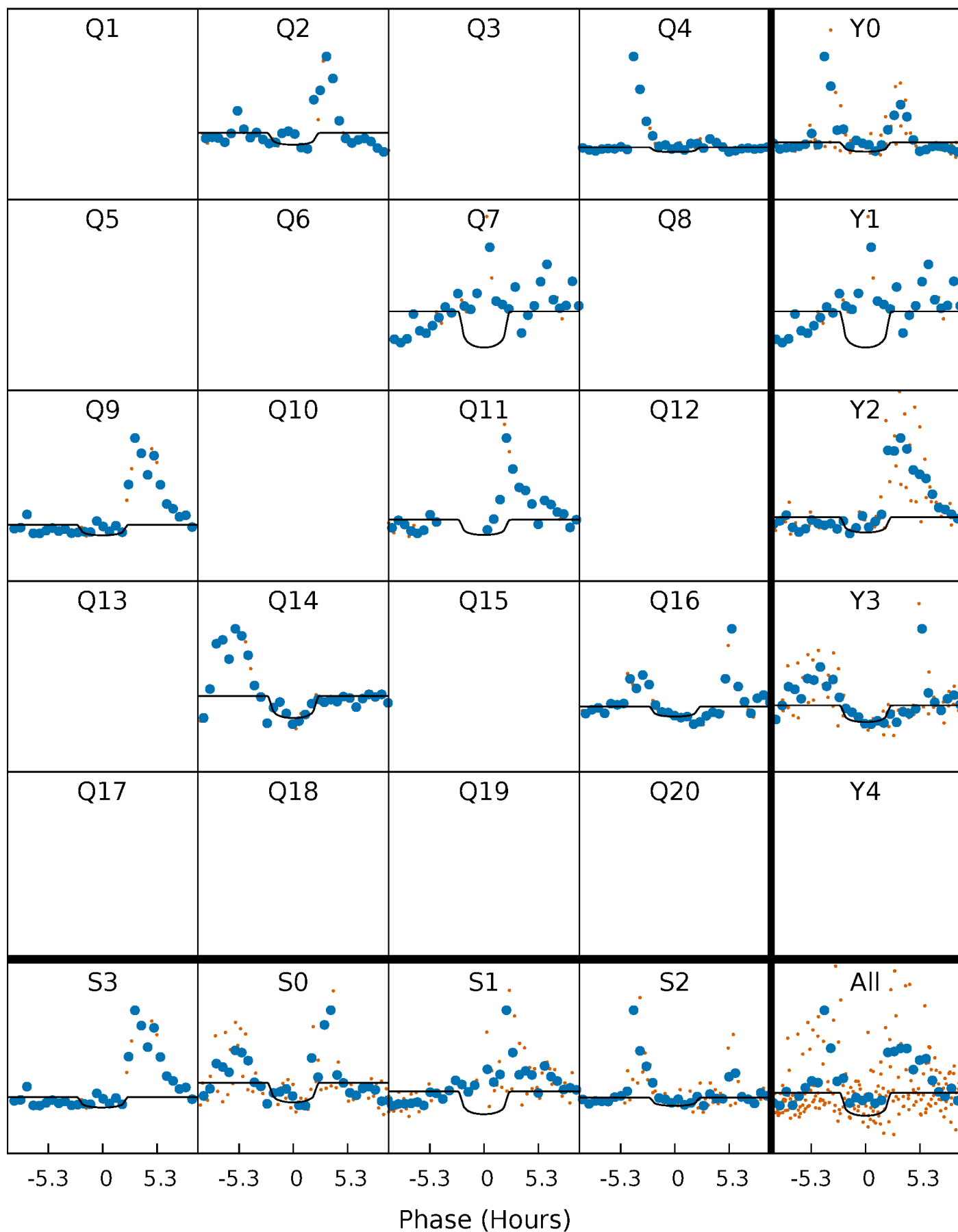
PDC Quarter-Phased Transit Curves

TCE 007350067-06 P=211.665139 Days $T_0=221.872541$ (BKJD)



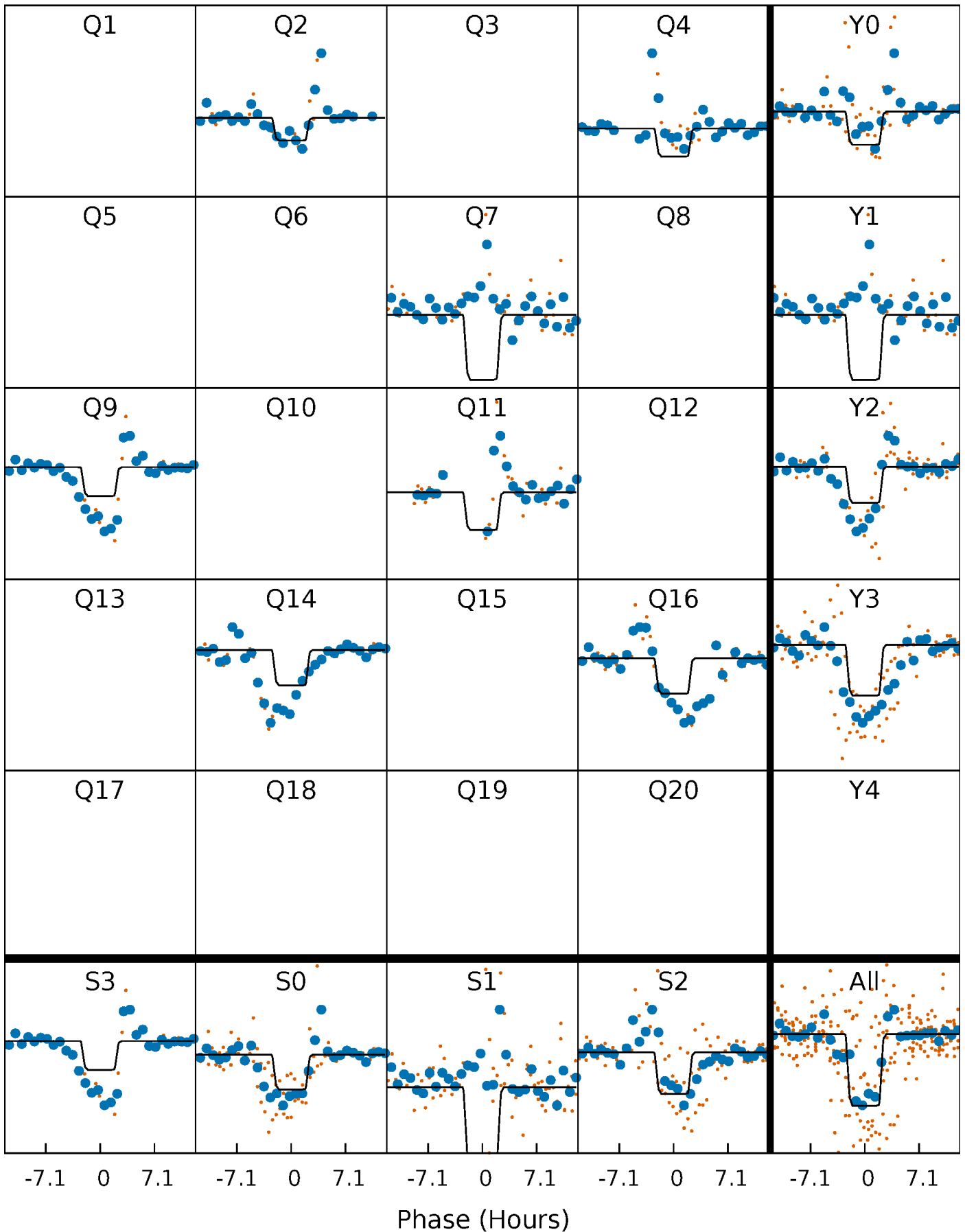
DV Quarter-Phased Transit Curves

TCE 007350067-06 P=211.665139 Days $T_0=221.872541$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

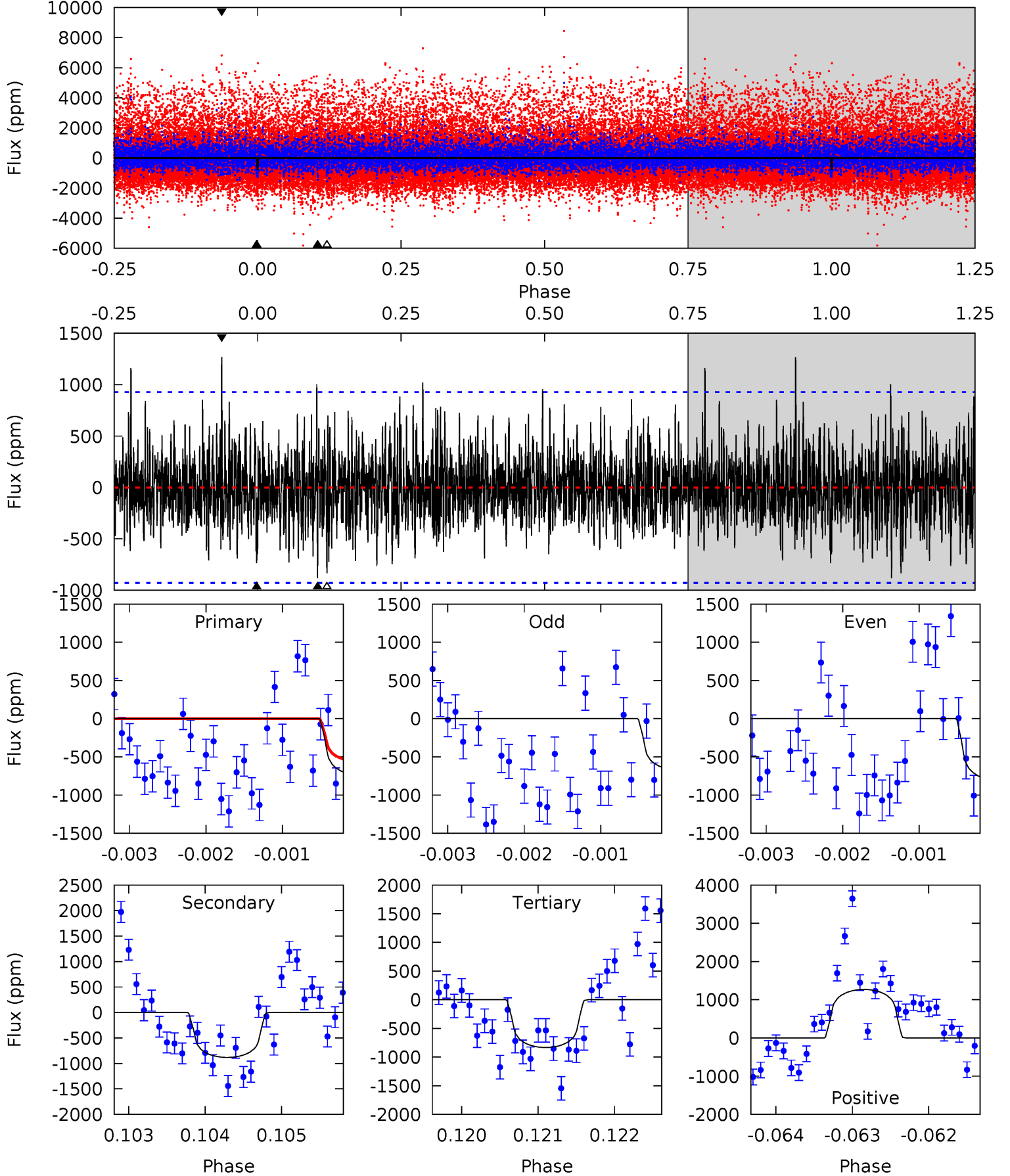
TCE 007350067-06 P=211.671248 Days $T_0=221.852531$ (BKJD)



DV Model-Shift Uniqueness Test

007350067-06, P = 211.665139 Days, E = 10.207402 Days

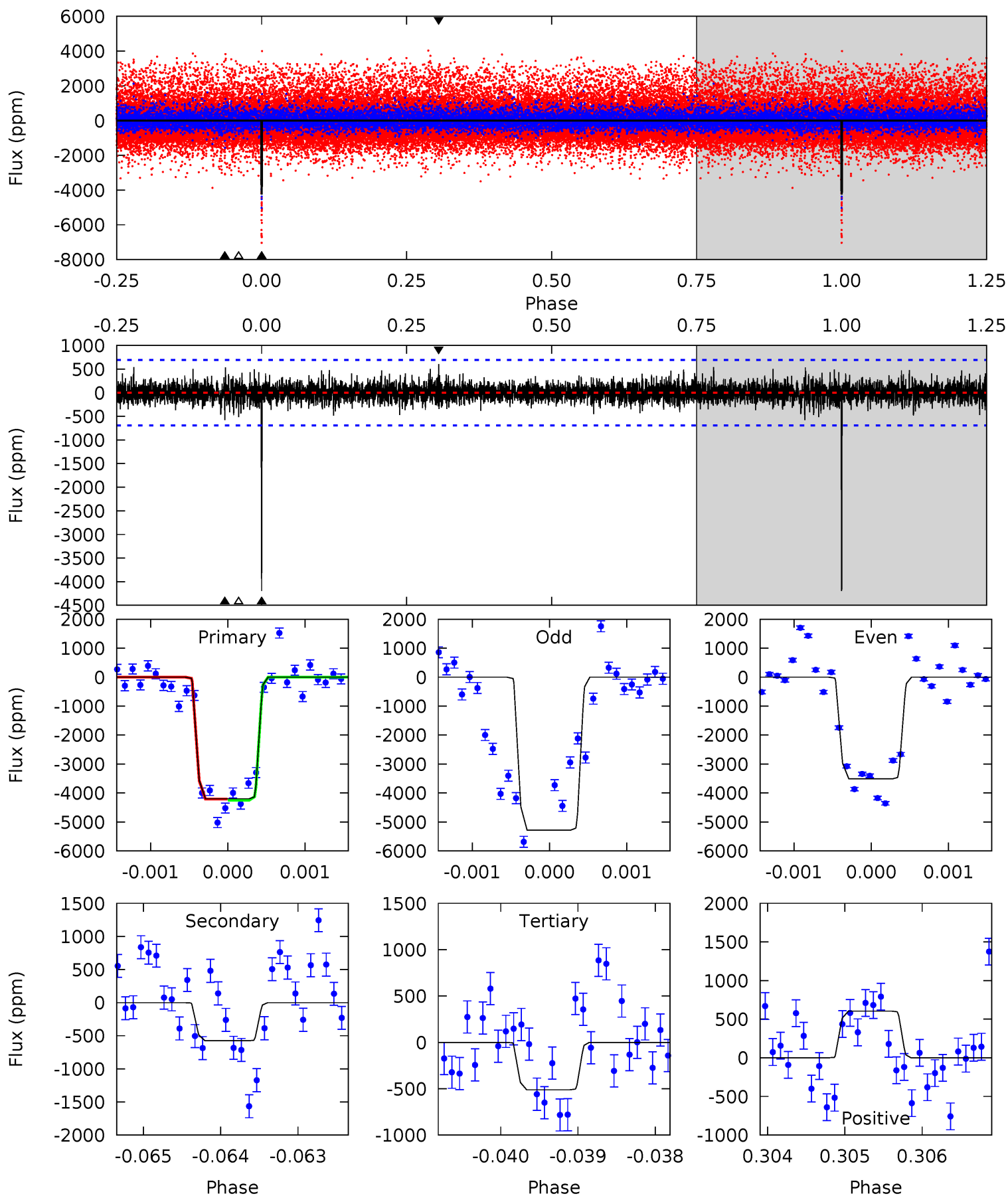
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
4.31	5.18	4.90	7.46	5.46	3.30	1.59	-0.58	-3.15	0.29	-2.28	0.35	0.04	0.59	1.06



Alt Model-Shift Uniqueness Test

007350067-06, P = 211.671248 Days, E = 10.181283 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
33.0	4.53	4.02	4.76	5.44	3.27	1.02	29.0	28.3	0.51	-0.23	6.88	0.77	0.13	0.16



Stellar Parameters For KIC 007350067

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	3236^{+41}_{-25}	$5.097^{+0.055}_{-0.050}$	$0.000^{+0.100}_{-0.100}$	$0.193^{+0.034}_{-0.025}$	$0.169^{+0.038}_{-0.025}$	$33.360^{+10.540}_{-7.993}$
	+1%/-1%	+1%/-1%	+inf%/-inf%	+18%/-13%	+22%/-15%	+32%/-24%
Source	PHO2	PHO2	PHO2	DSEP		

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

Secondary Eclipse Parameters for KIC 007350067-06 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-882 ± 170	$1.55^{+1.55}_{-1.03}$	141^{+4}_{-3}	2546^{+880}_{-381}	$30246^{+244197}_{-22674}$
Alt.	-576 ± 127	$1.86^{+1.51}_{-1.20}$	142^{+4}_{-4}	2300^{+689}_{-273}	13357^{+95746}_{-9332}

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

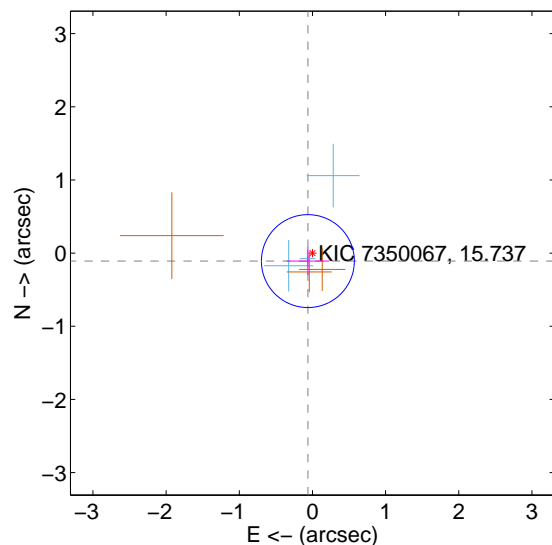
Supplemental centroid analysis for 007350067-06. Kepler magnitude: 15.74. Transit SNR 6.63

There are 3 quarters with good PRF difference image offsets

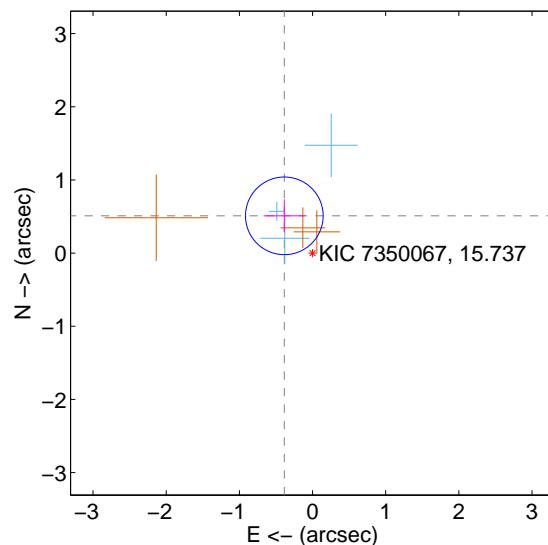
The direct PRF centroid is offset from the target star catalog position by about 0.41 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.126 ± 0.212	0.59	0.062 ± 0.290	-0.109 ± 0.190
PRF-fit source offset from KIC position	0.639 ± 0.177	3.61	0.385 ± 0.281	0.509 ± 0.226
photometric centroid source offset	0.66 ± 0.70	0.94	0.60 ± 0.69	0.26 ± 0.74

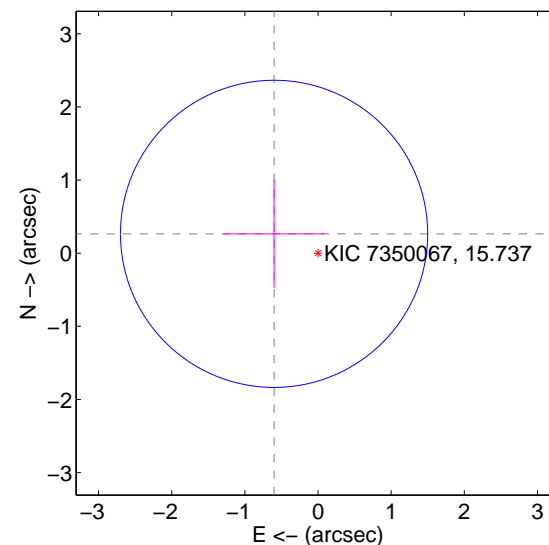
offset from difference PRF-fit to OOT PRF-fit



offset from difference PRF-fit to KIC position

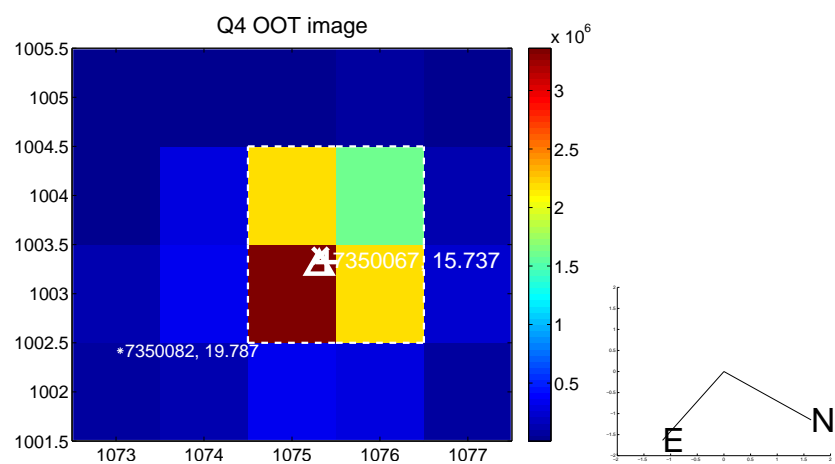
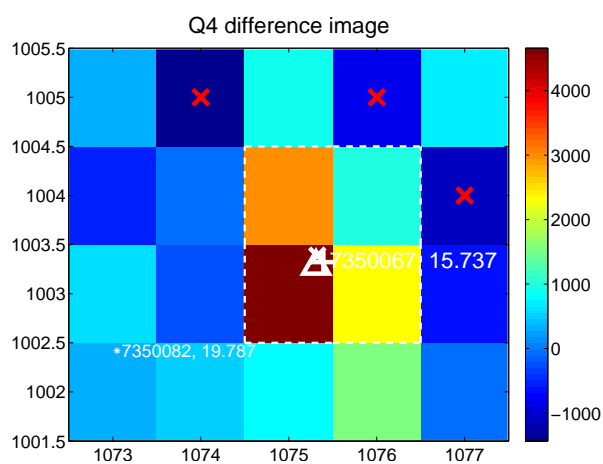
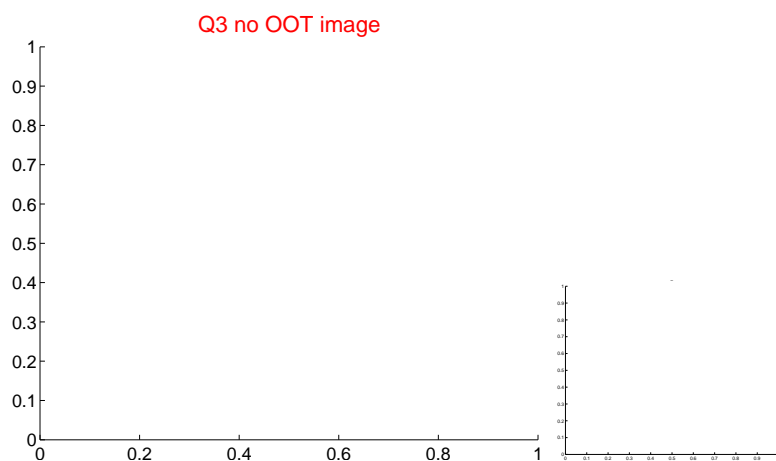
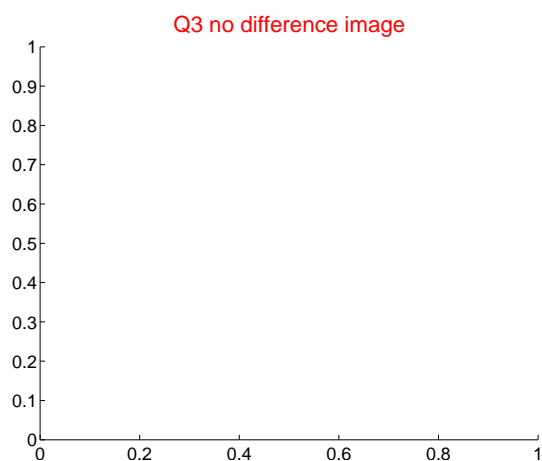
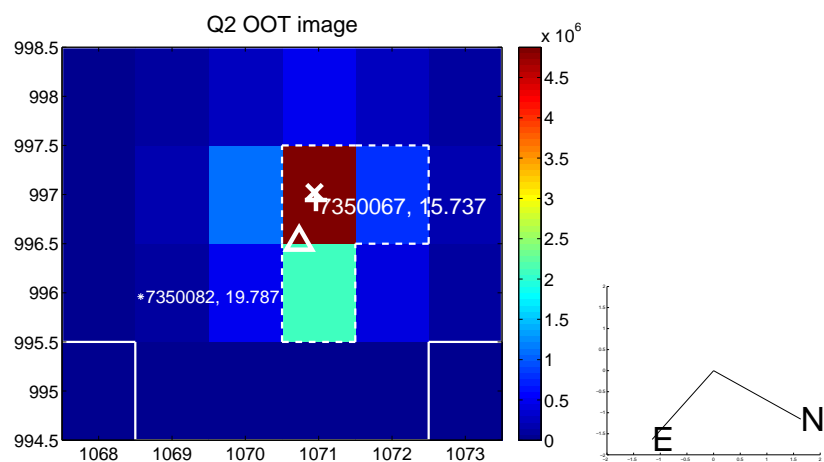
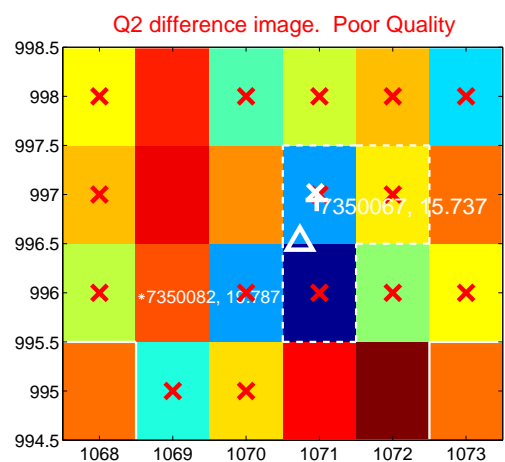
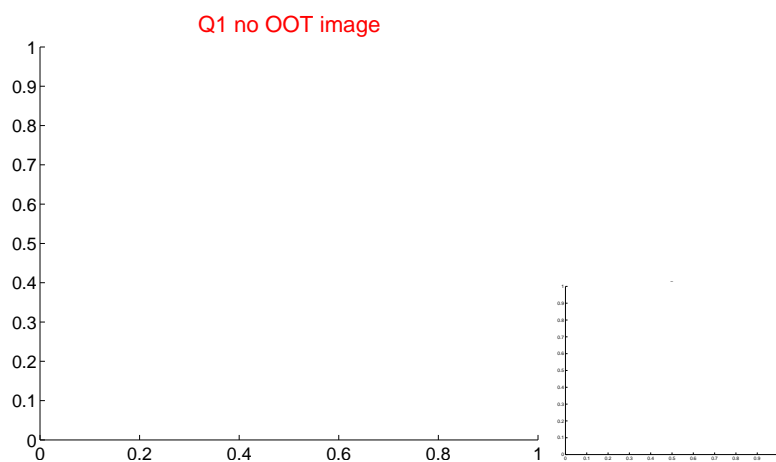
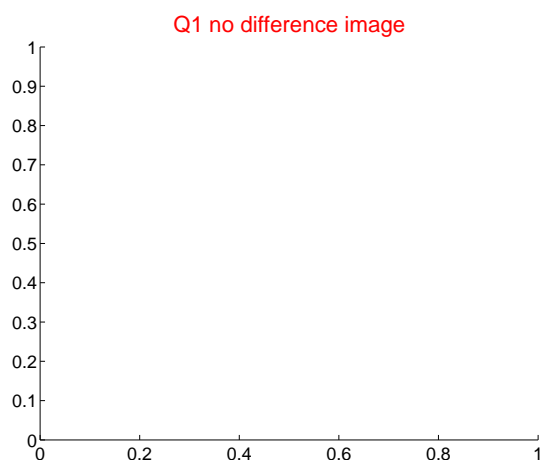


offset from photometric centroids



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

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



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

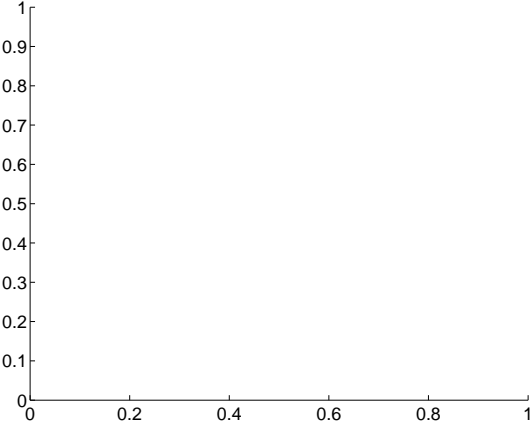
Q5 no difference image



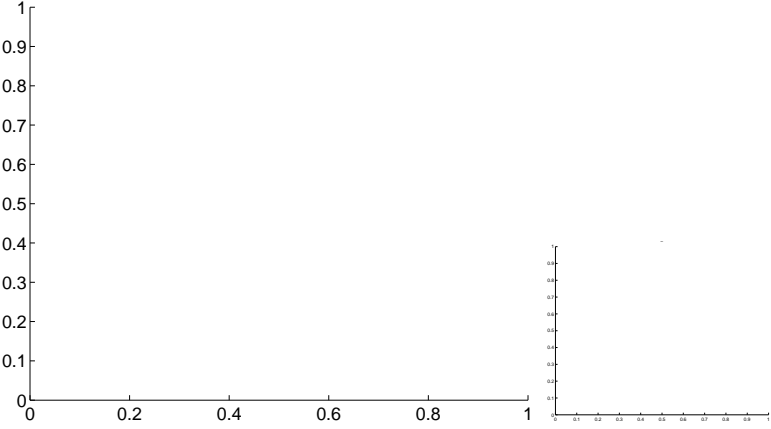
Q5 no OOT image



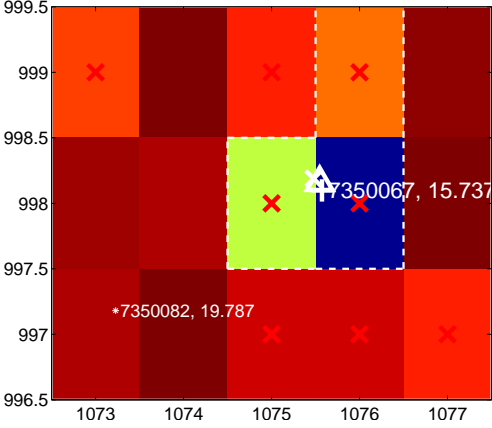
Q6 no difference image



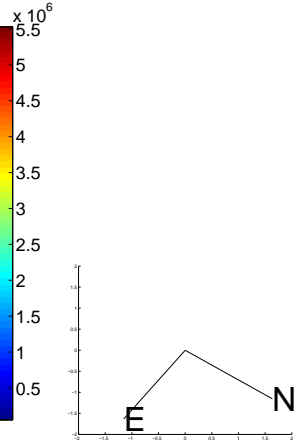
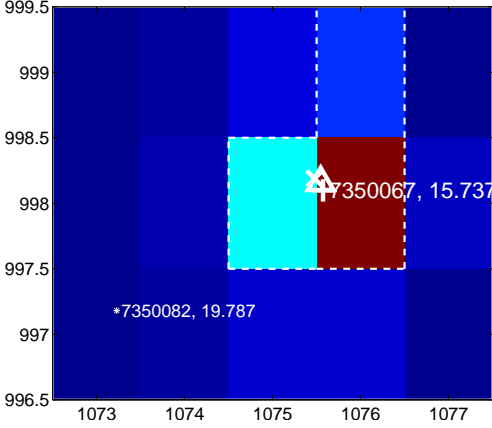
Q6 no OOT image



Q7 difference image. Poor Quality



Q7 OOT image



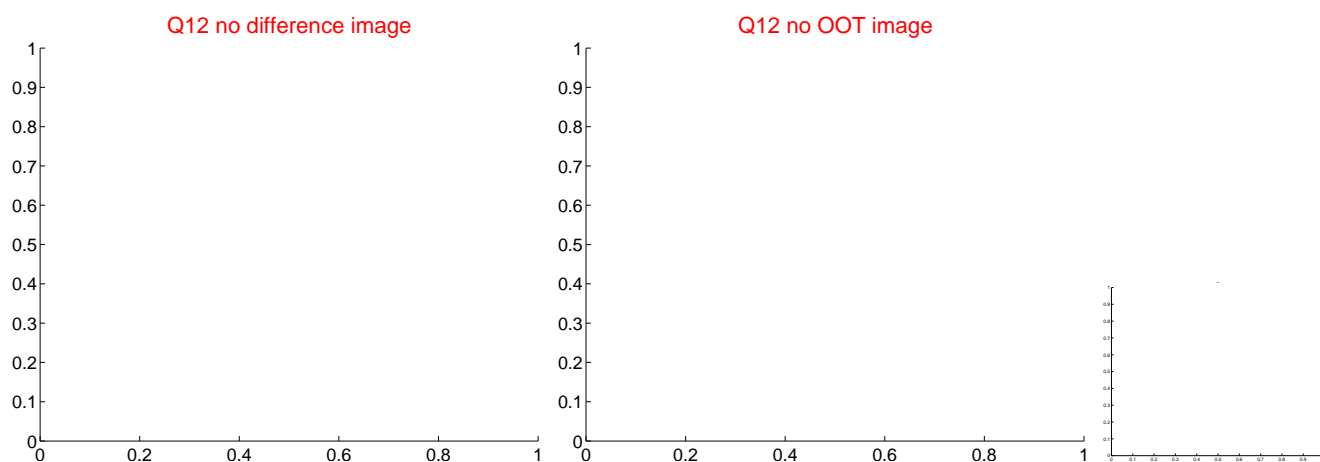
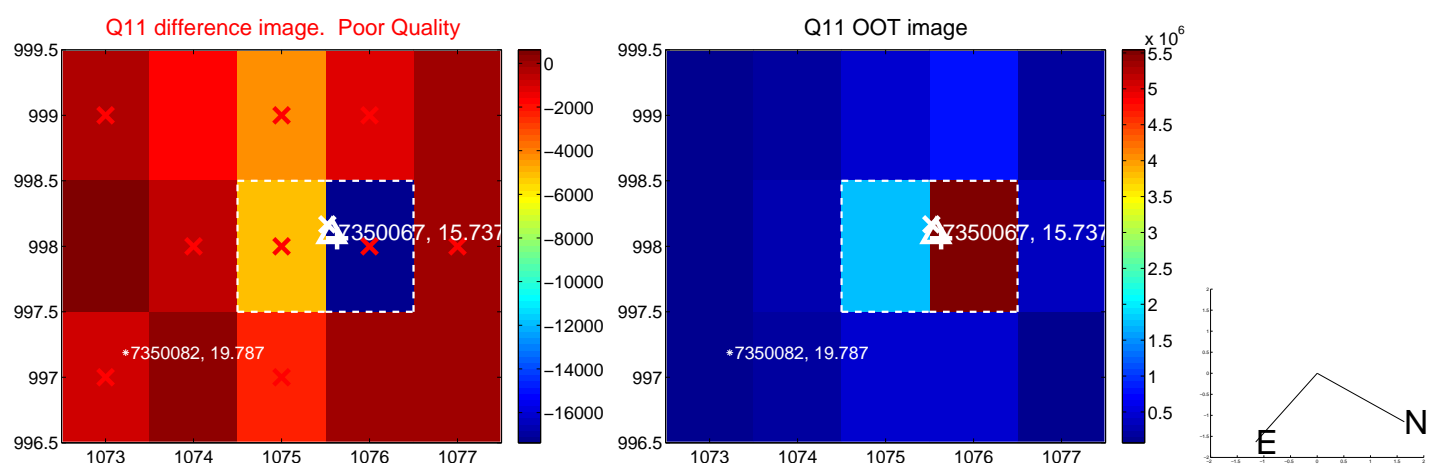
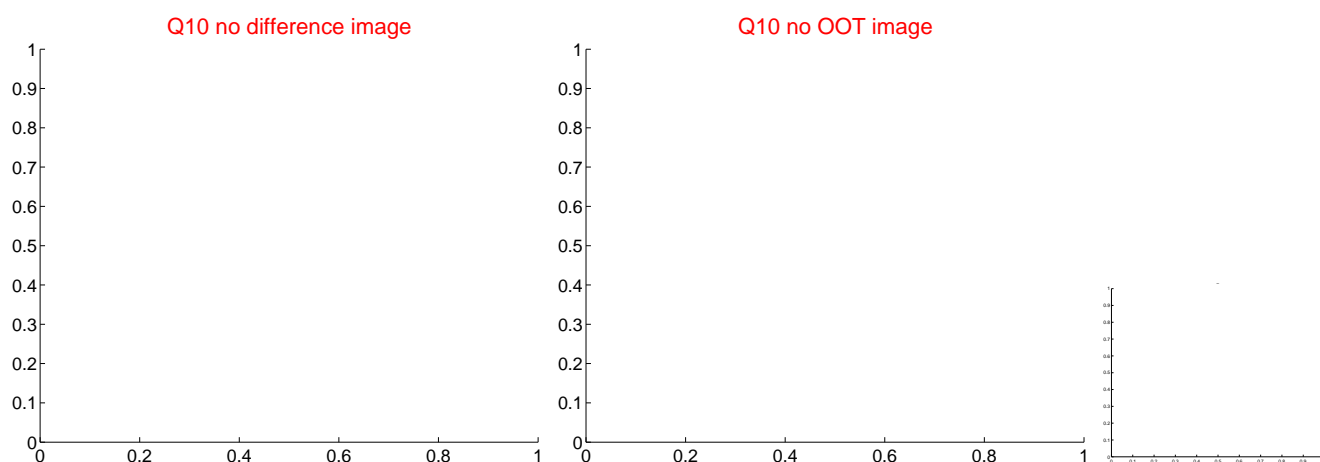
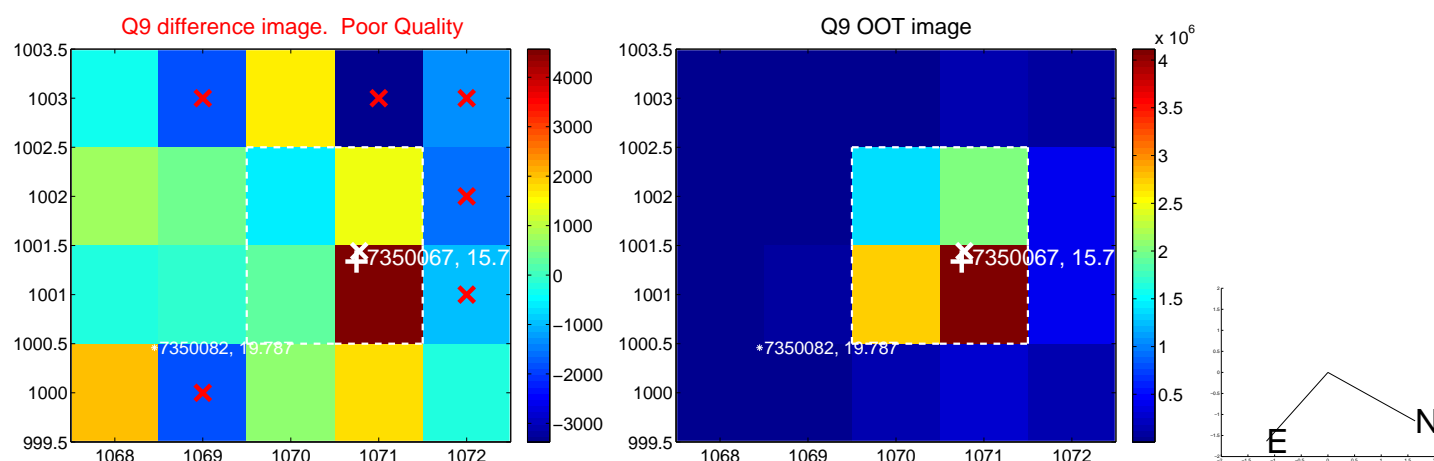
Q8 no difference image



Q8 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.

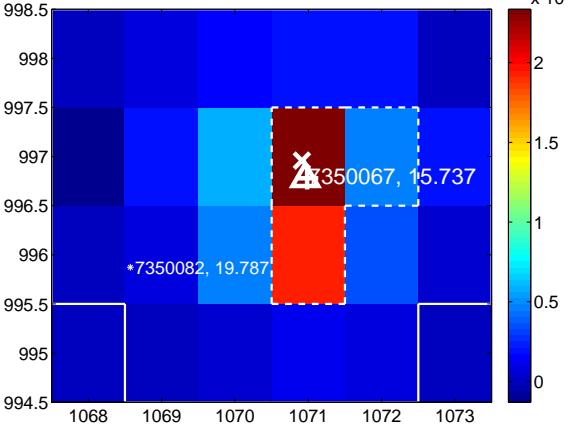
Q13 no difference image



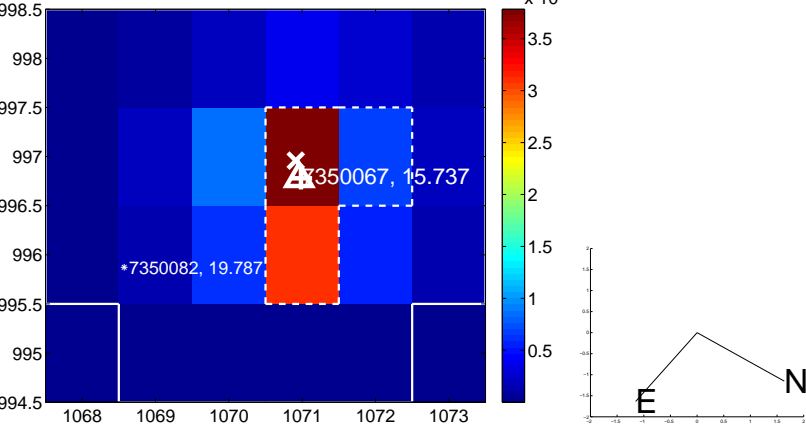
Q13 no OOT image



Q14 difference image



Q14 OOT image



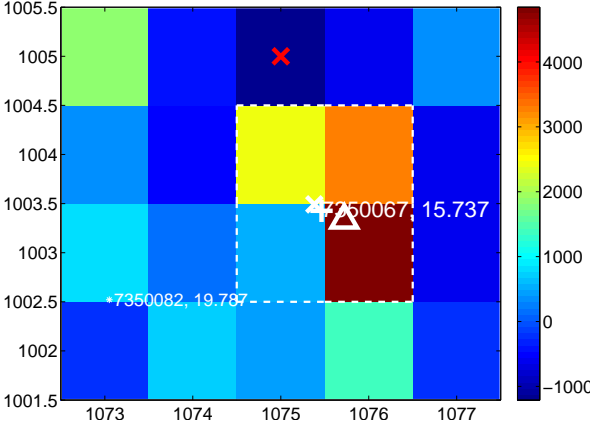
Q15 no difference image



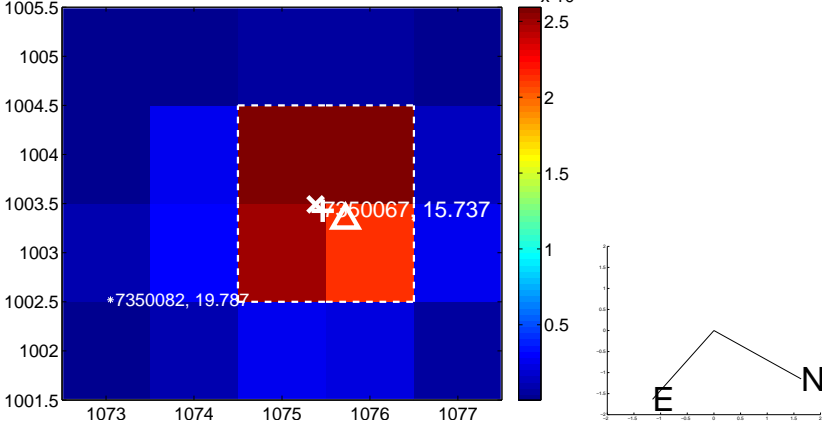
Q15 no OOT image



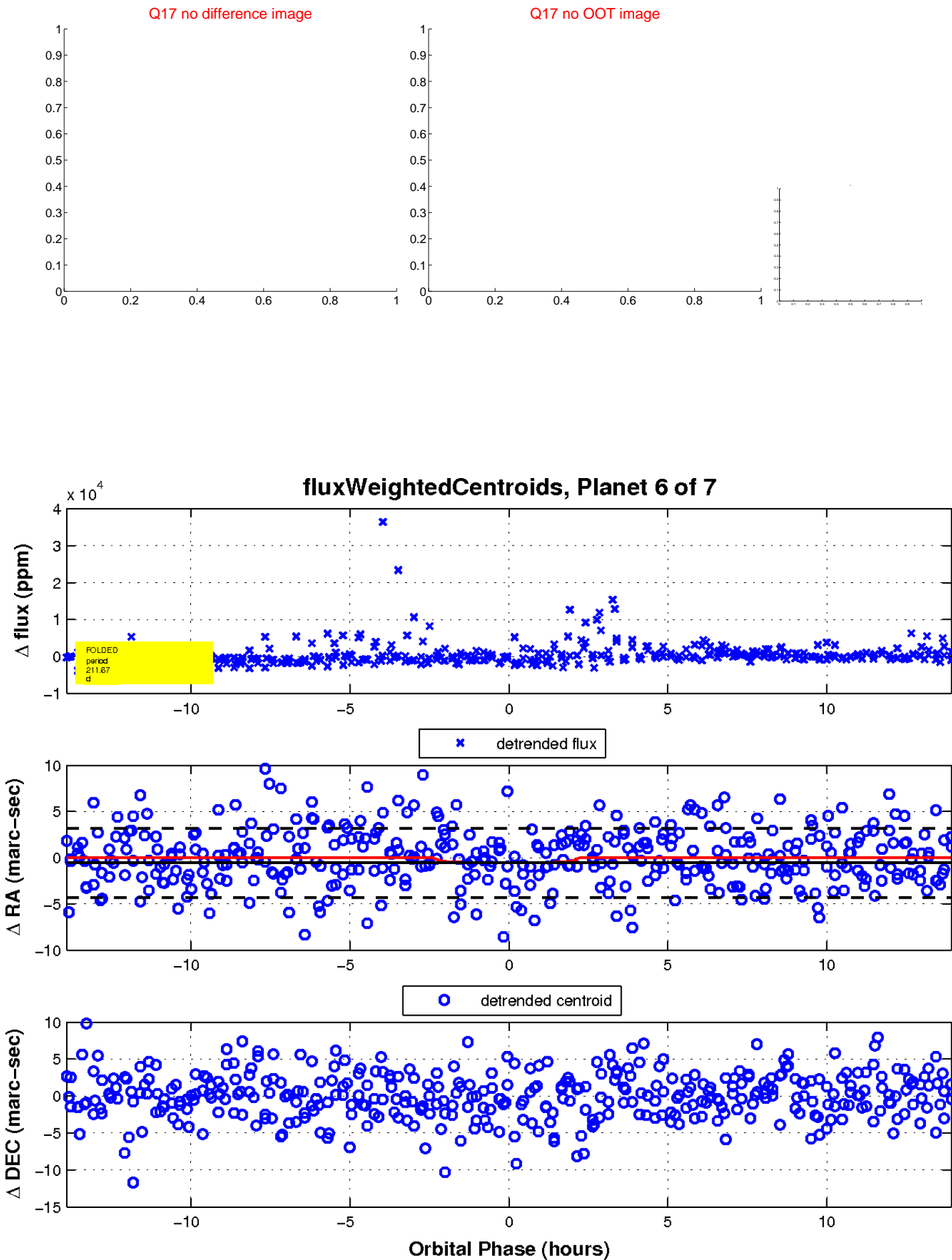
Q16 difference image



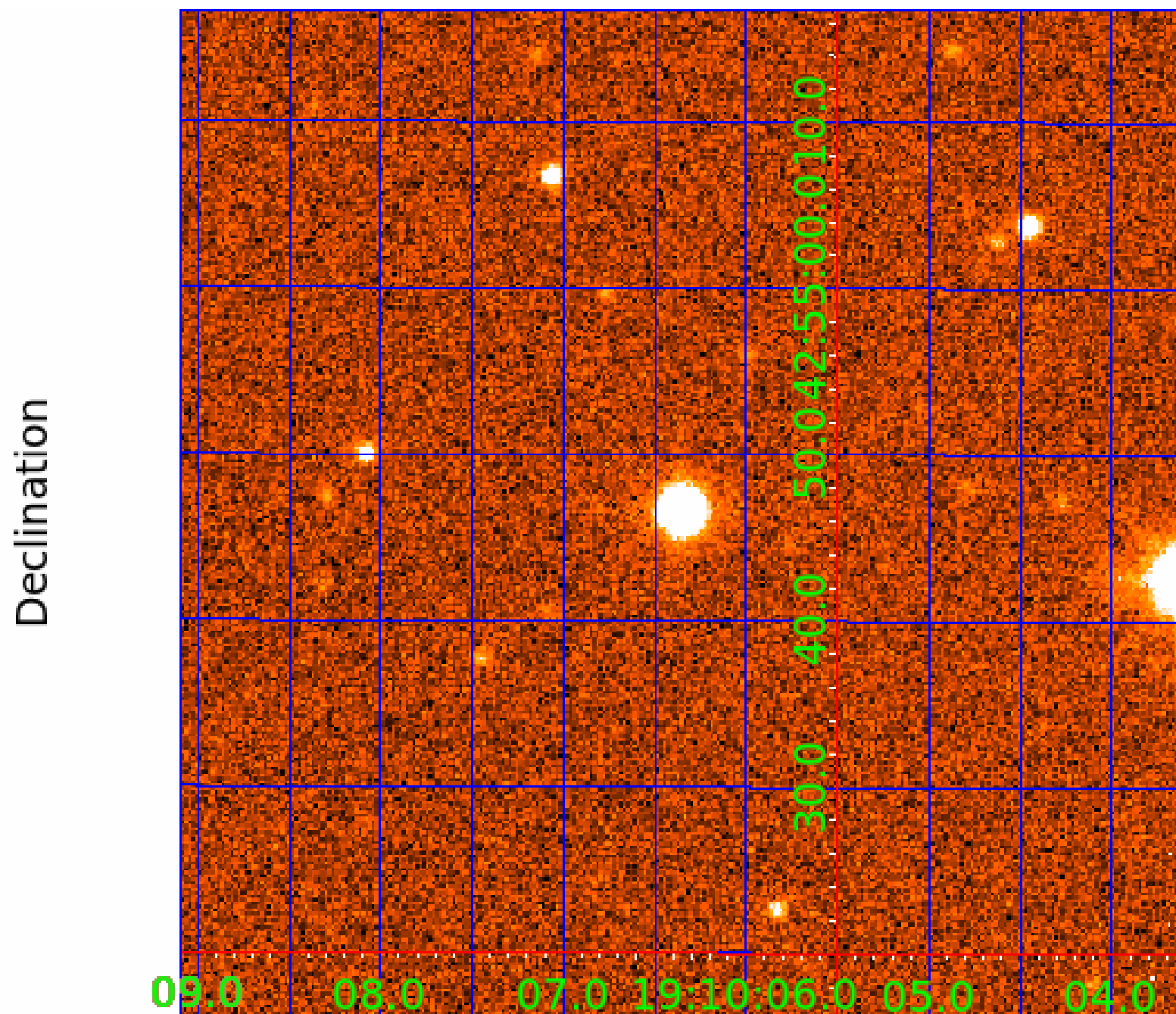
Q16 OOT image



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



UKIRT Image



KIC 007350067

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})
007350067-01	OBS	6863.01	4.485590	135.431953	2240.4	0.834	22.4	39.7	0.19	3236	0.94	4.21
007350067-02	OBS	No	287.029062	332.555145	3119.6	4.263	13.8	8.1	0.19	3236	1.07	0.02
007350067-03	OBS	No	279.498556	347.344021	3972.2	5.834	13.0	10.1	0.19	3236	1.21	0.02
007350067-04	OBS	No	258.389148	137.445671	1921.0	3.957	11.1	6.5	0.19	3236	0.83	0.02
007350067-05	OBS	No	367.993067	207.889083	2614.2	11.600	10.7	7.3	0.19	3236	1.17	0.01
007350067-06	OBS	No	211.665139	221.872541	1892.9	4.650	11.0	6.6	0.19	3236	0.83	0.03
007350067-07	OBS	No	305.778173	241.657053	2703.7	3.000	11.9	-1.0	0.19	3236	0.99	0.01

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
007350067-01	OBS	PC	1.00	0	0	0	0	CENT_KIC_POS
007350067-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_MARSHALL—LPP_DV—MOD_POS_DV—INCONSISTENT_TRANS—CENT_FEW_DIFFS
007350067-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_MARSHALL—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_POS_DV—CENT_FEW_DIFFS
007350067-04	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_MARSHALL_SKYE—LPP_DV—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—CENT_KIC_POS
007350067-05	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_MARSHALL—LPP_DV—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—INCONSISTENT_TRANS—CENT_FEW_DIFFS
007350067-06	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_MARSHALL_SKYE—LPP_DV—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV
007350067-07	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_MARSHALL—LPP_DV—ALL_TRANS_CHASES—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.

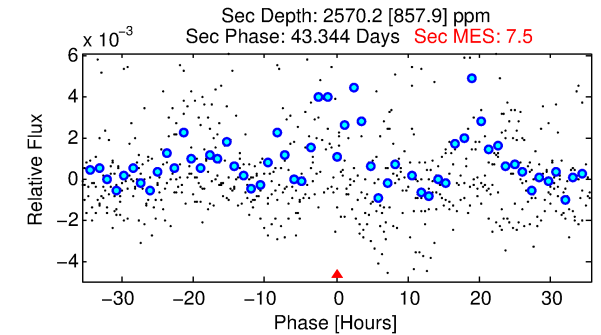
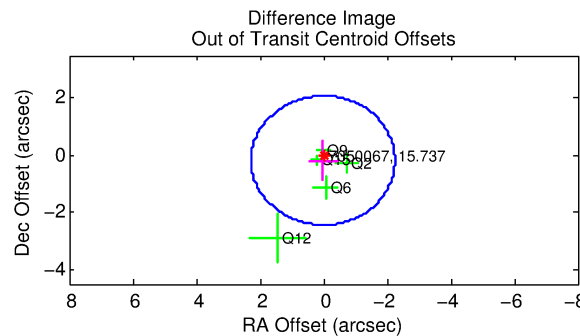
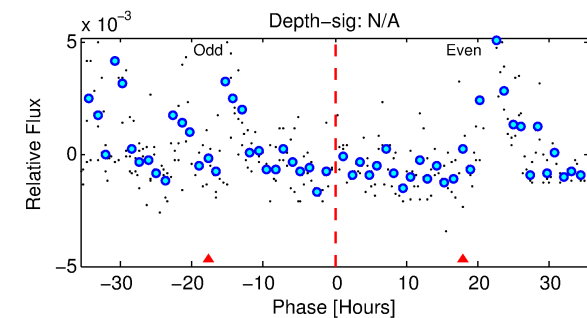
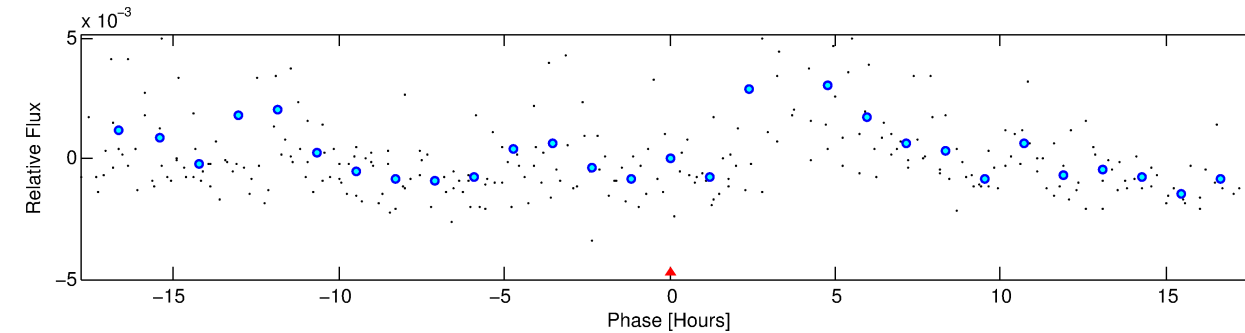
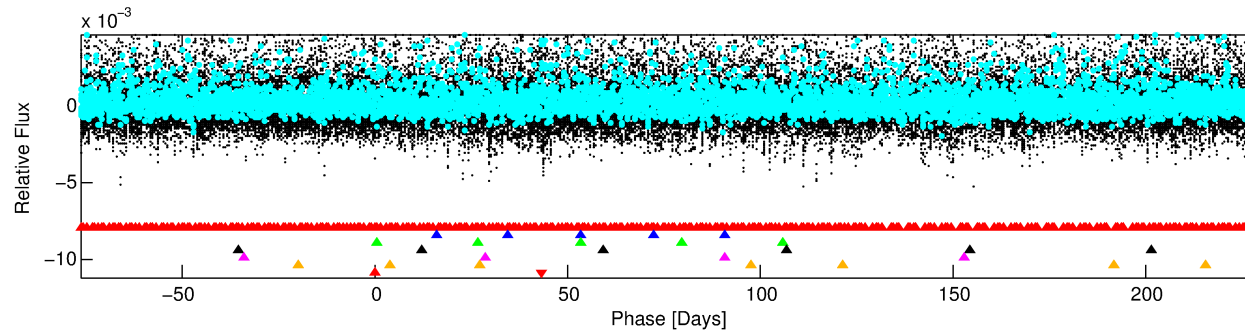
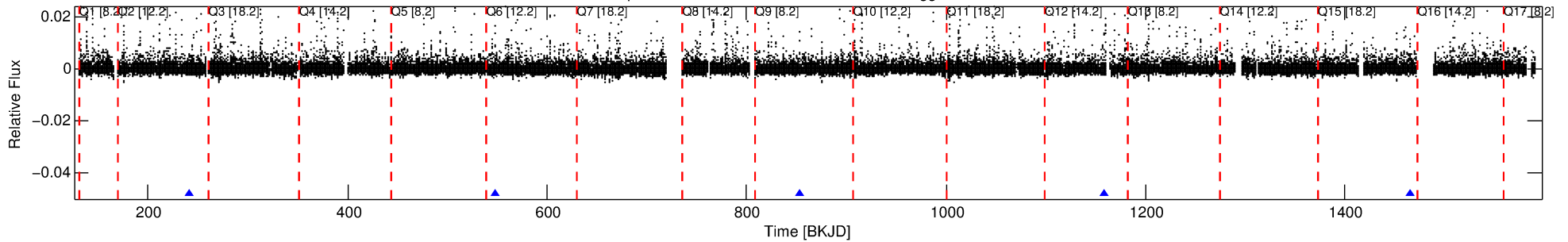
Ephemeris Match Information For 007350067-07

No Significant Match Found

DV One-Page Summary

KIC: 7350067 Candidate: 7 of 7 Period: 305.778 d
KOI: K06863 Corr: No Ephemeris Match

Kp: 15.74 R*: 0.19 Rs Teff: 3236.0 K Logg: 5.10 Fe/H: 0.000



TPS TCE Results:

Period = 305.77817 d
Epoch = 241.6571 BKJD

DV fit results are unavailable

DV Diagnostic Results:

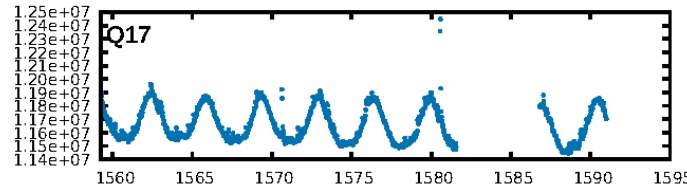
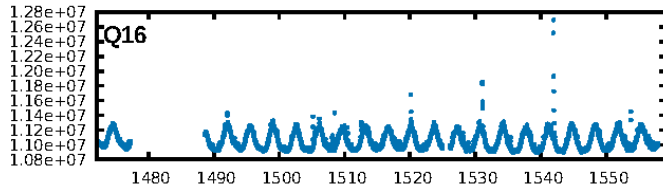
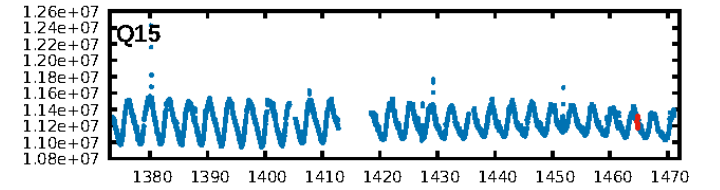
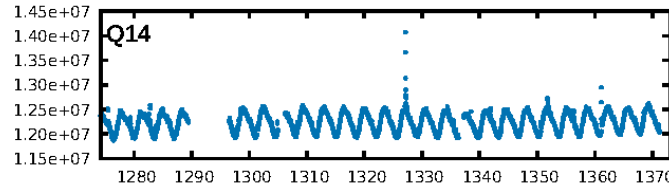
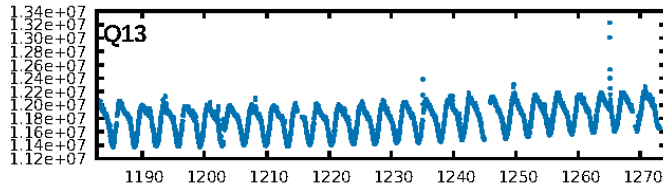
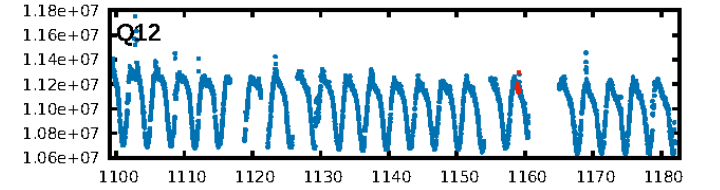
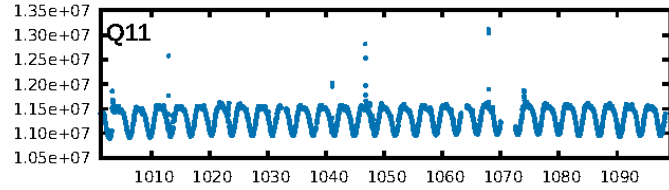
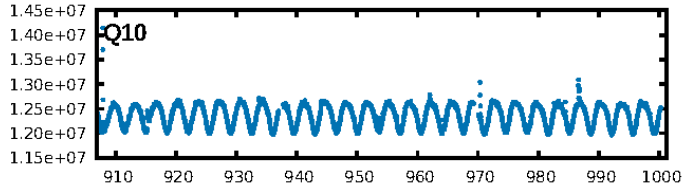
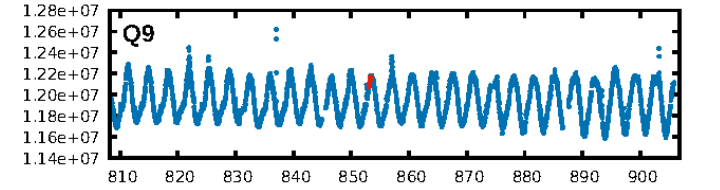
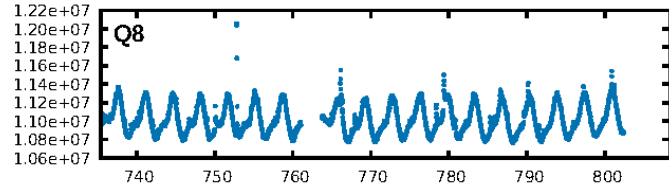
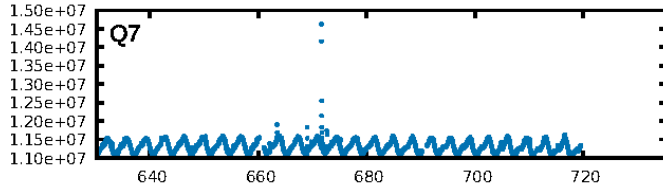
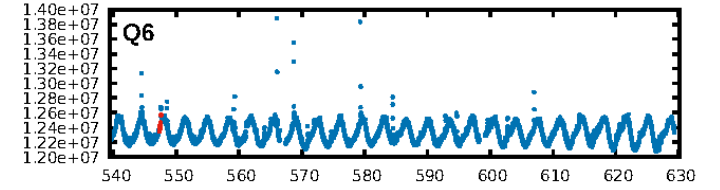
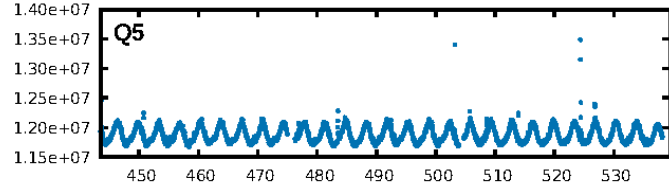
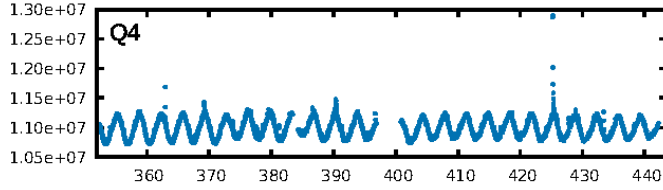
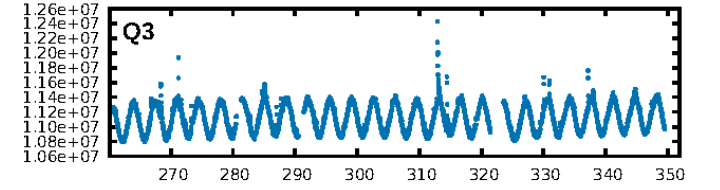
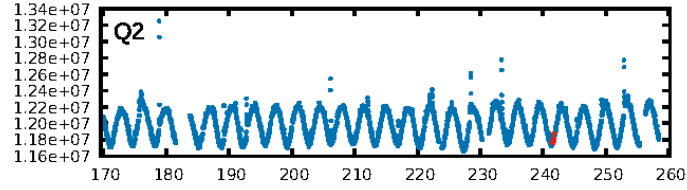
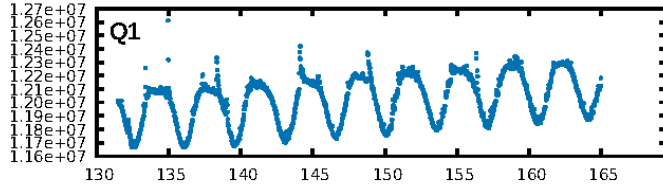
ShortPeriod-sig: 100.0% [86.32σ]
LongPeriod-sig: 100.0% [124.62σ]
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [5/5]
GhostDiagnostic-chr: 0.8507

Centroid-sig: N/A
Centroid-so: 0.949 arcsec [2.17σ]
OotOffset-rm: 0.174 arcsec [0.23σ]
KicOffset-rm: 0.345 arcsec [1.47σ]
OotOffset-st: 2/1/1/1 [5]
KicOffset-st: 2/1/1/1 [5]
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DiffImageOverlap-fno: 0.60 [3/5]

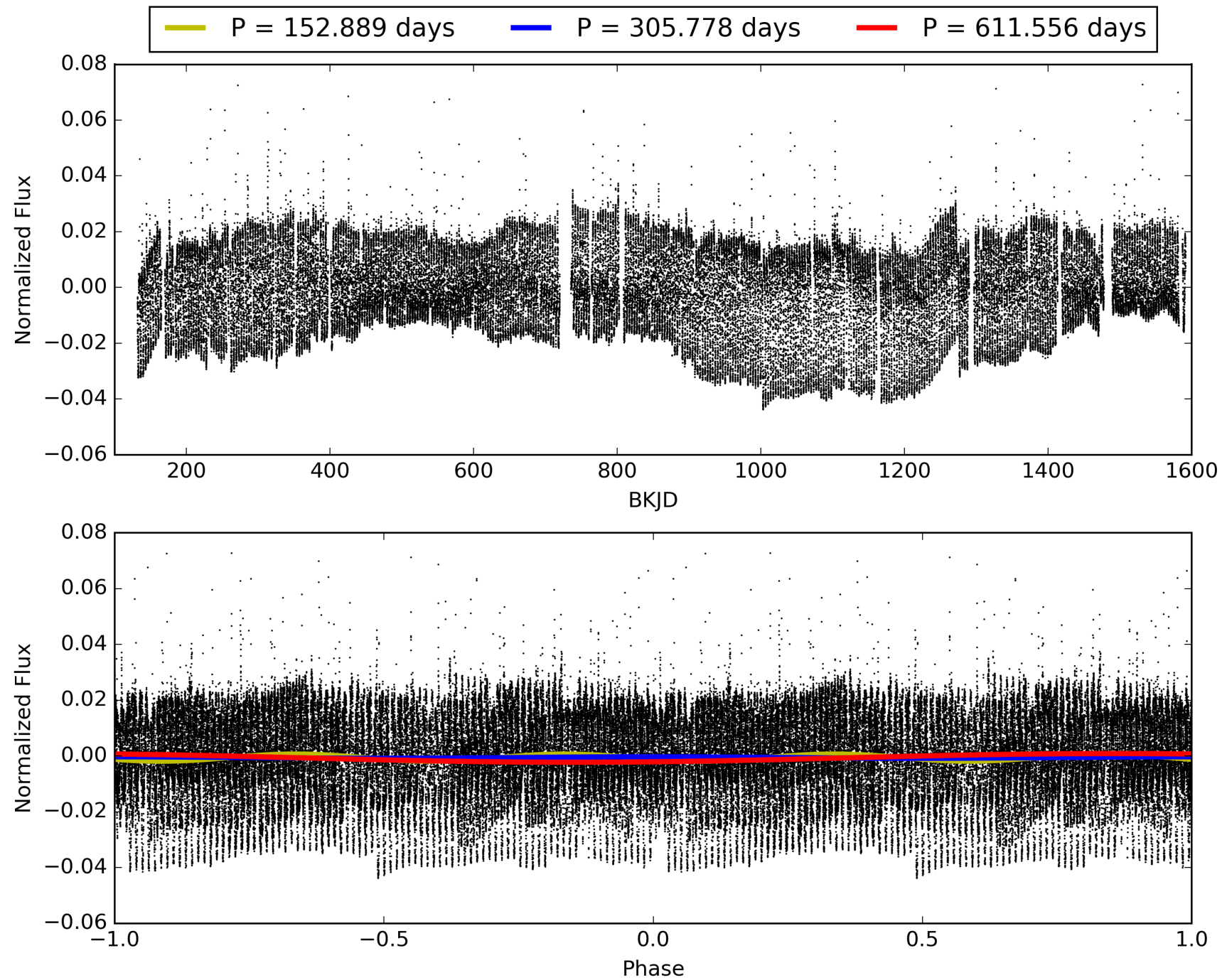
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 02-Feb-2016 00:36:24 Z

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

TCE 007350067-07, PDC Light Curves

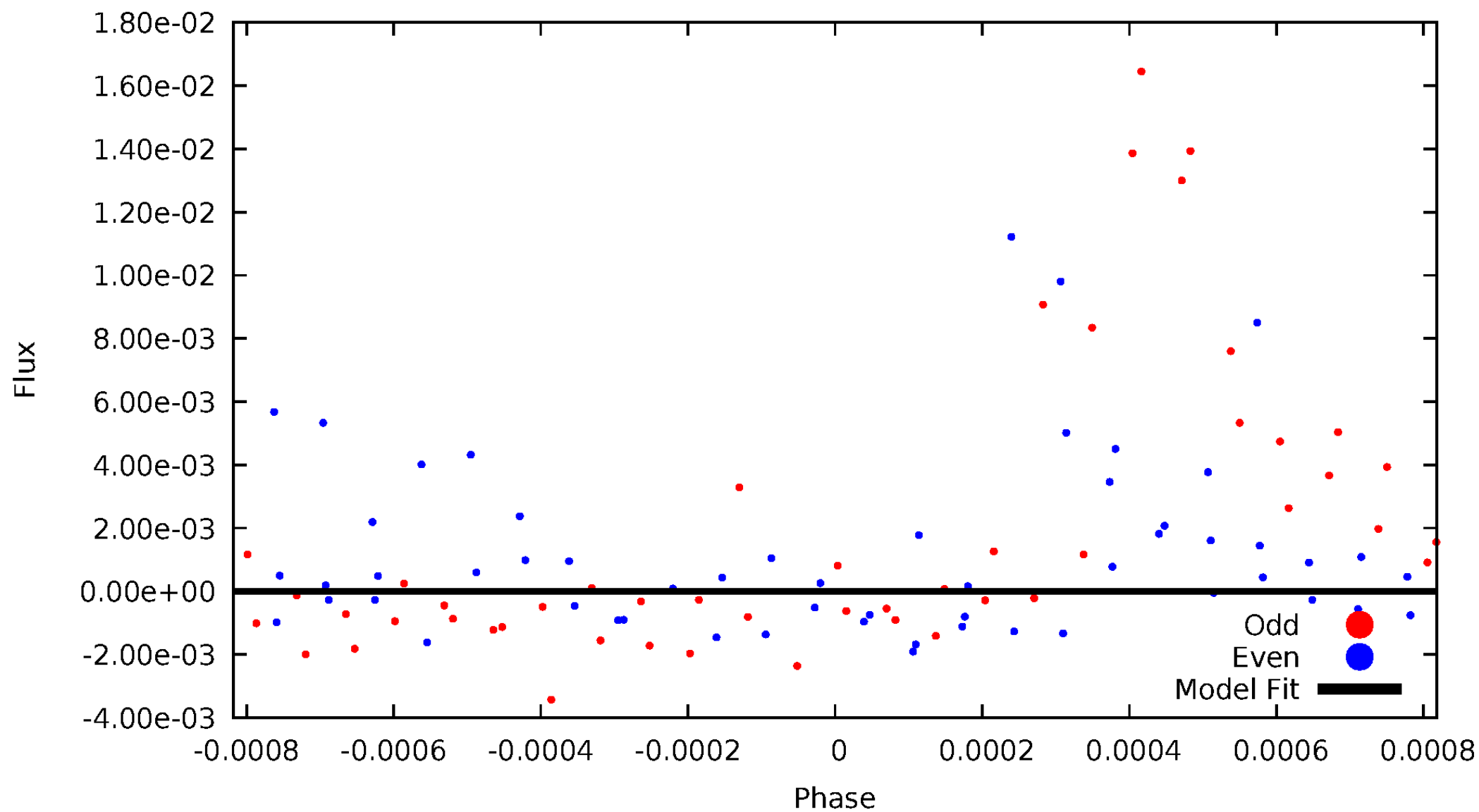


TCE 007350067-07



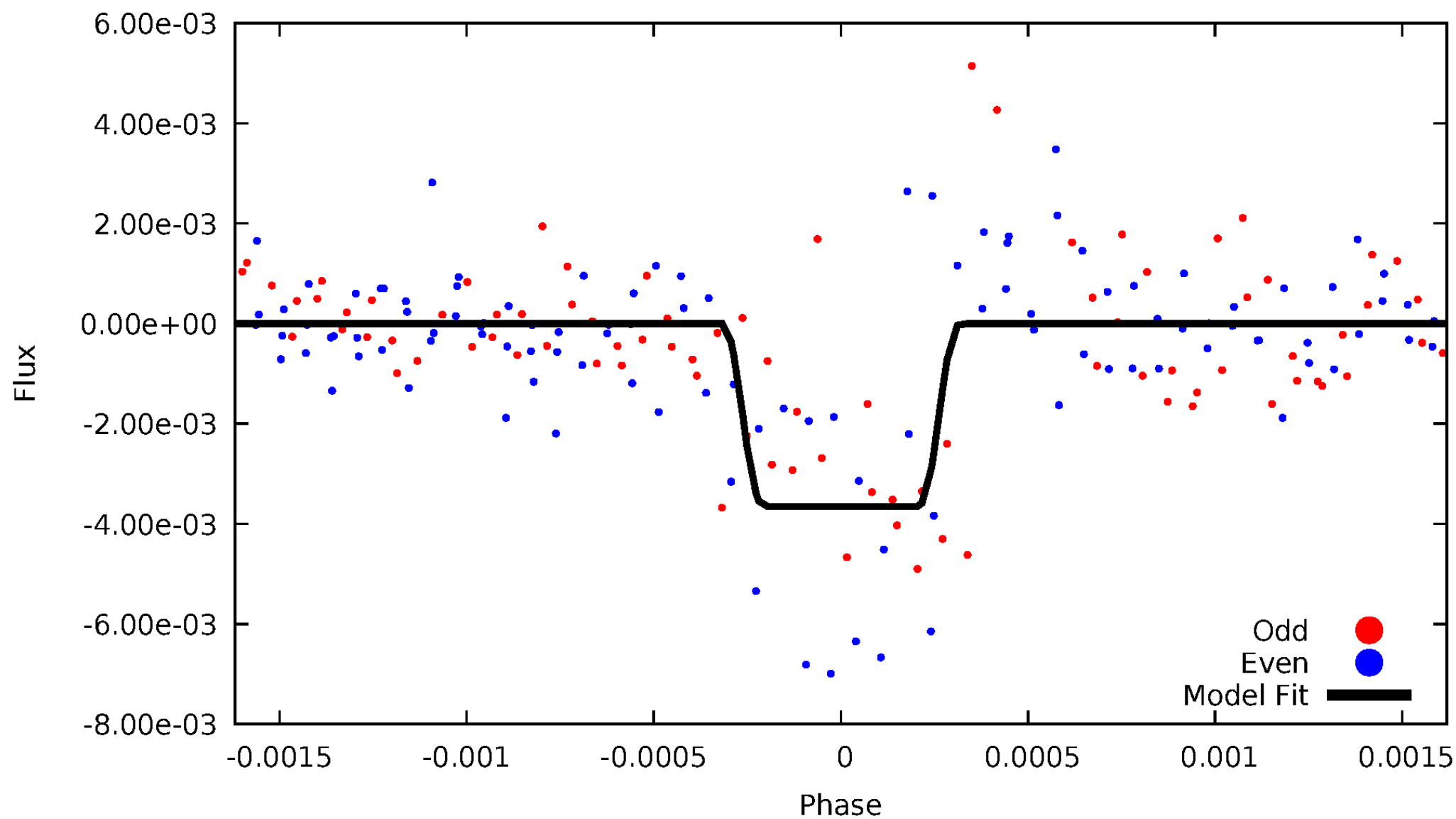
DV Odd/Even

TCE 007350067-07



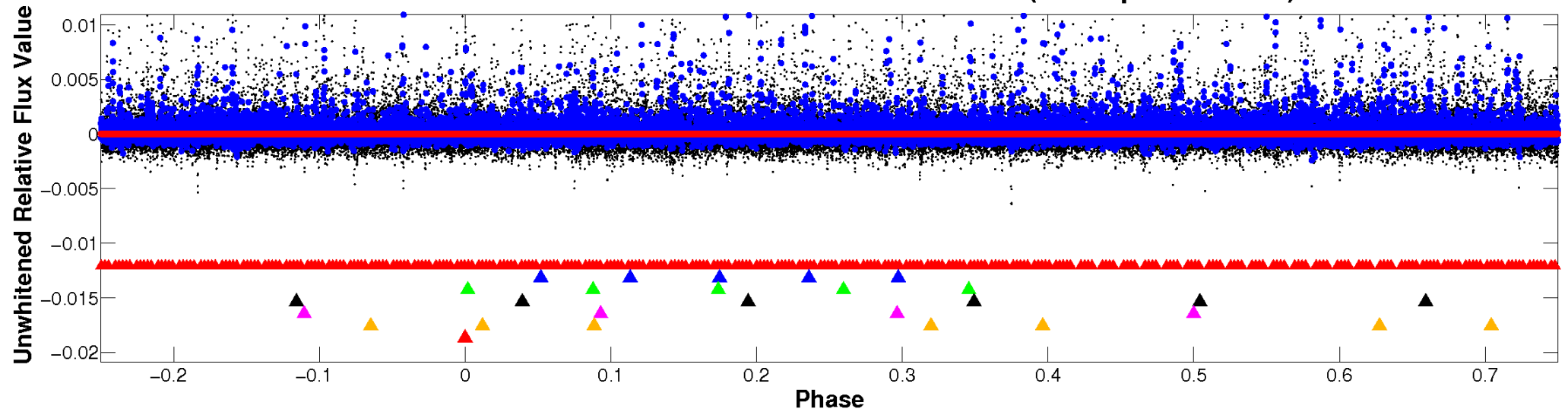
ALT Odd/Even

TCE 007350067-07

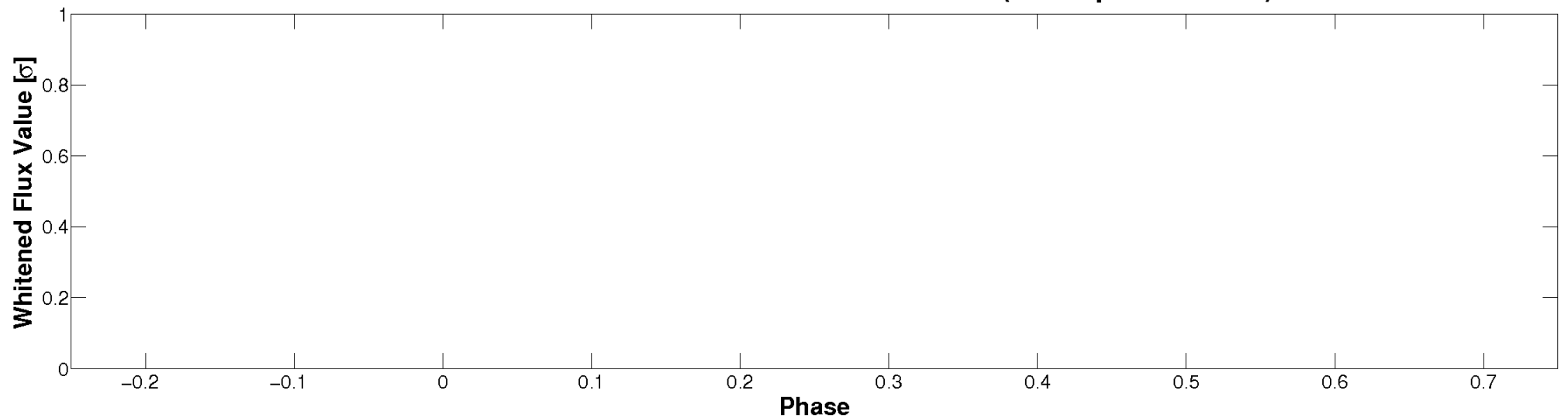


Non-Whitened Vs. Whitened Light Curve

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

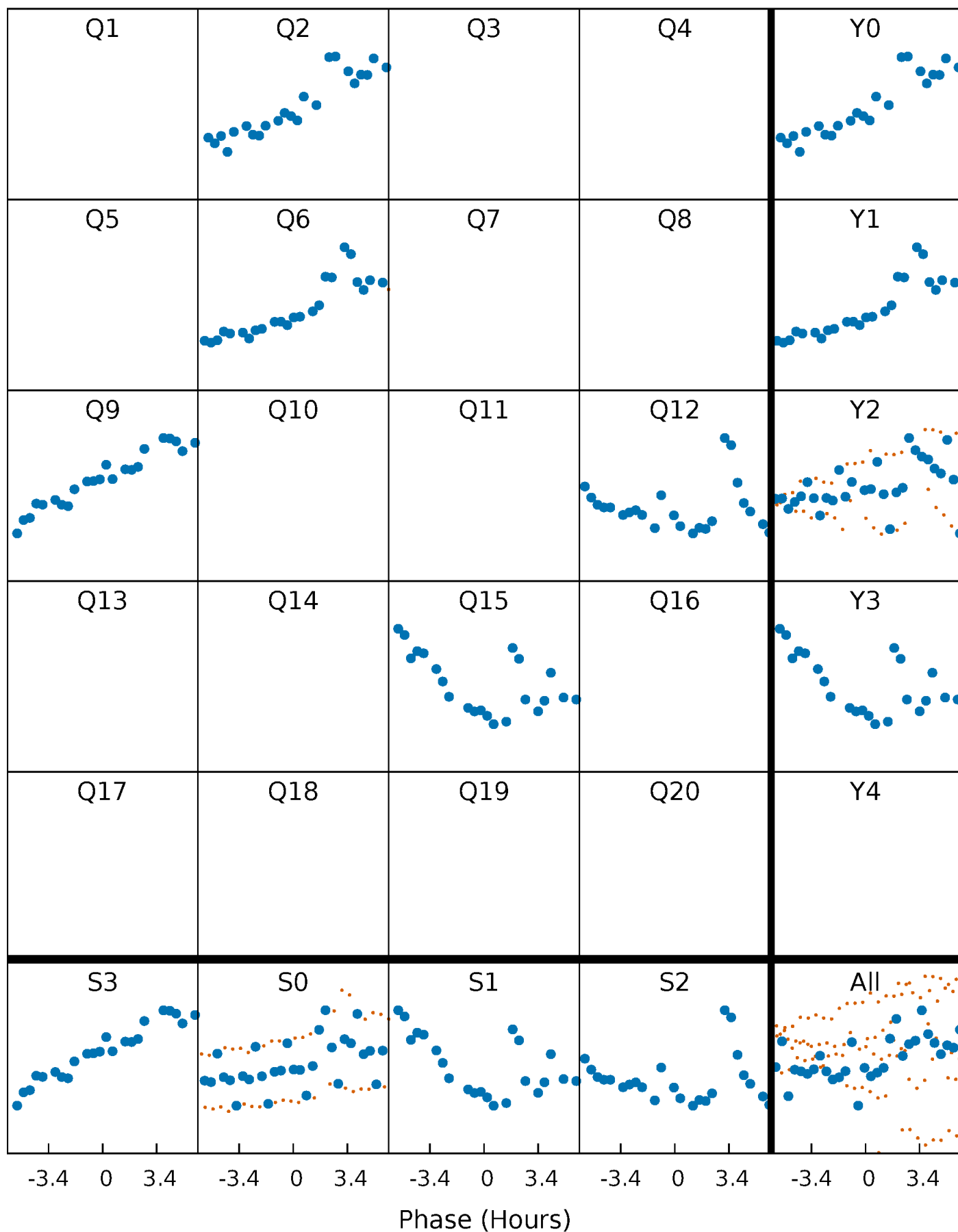


Planet 7 : Phased Whitened Flux Time Series (TPS Epoch/Period)



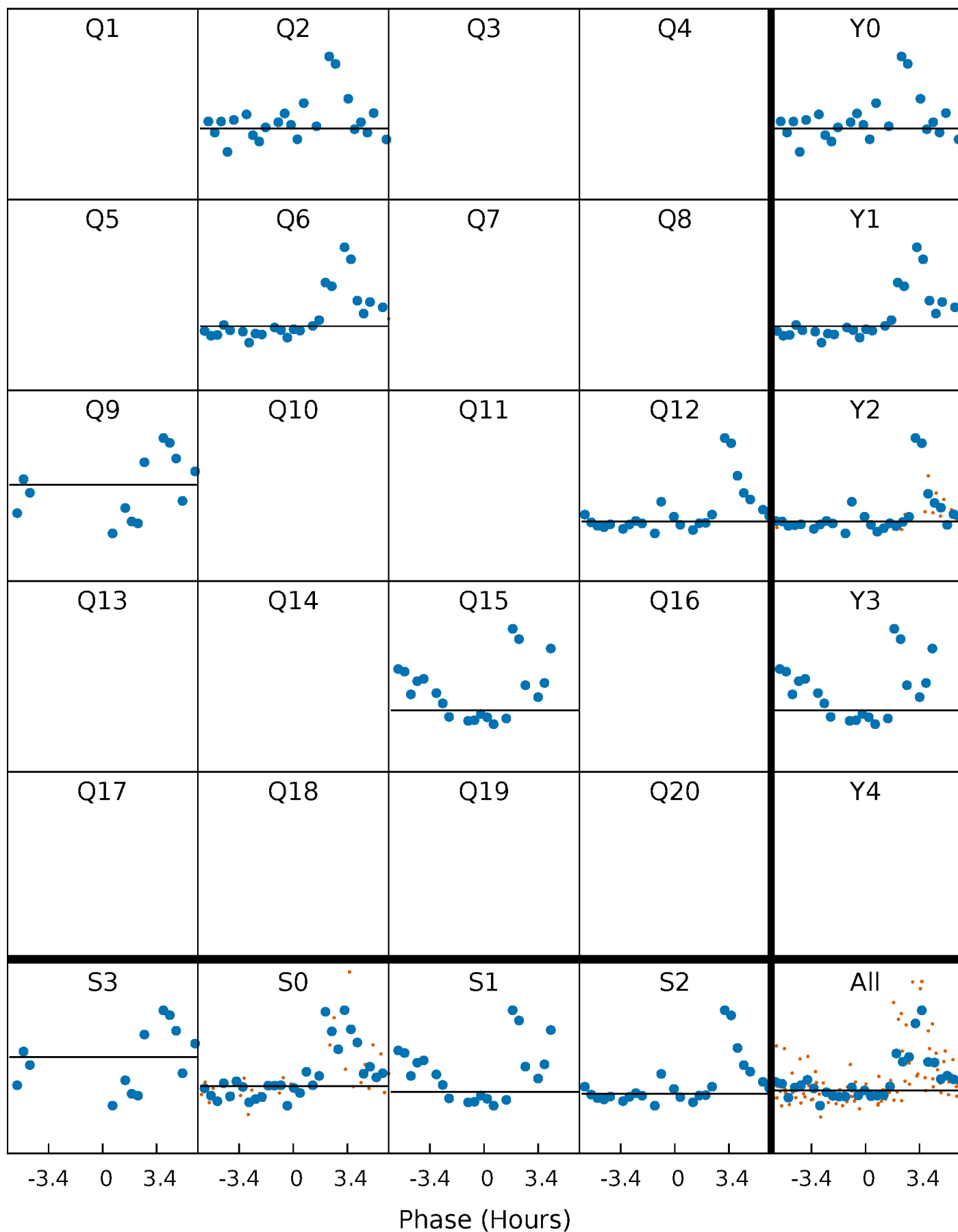
PDC Quarter-Phased Transit Curves

TCE 007350067-07 P=305.778173 Days $T_0=241.657053$ (BKJD)



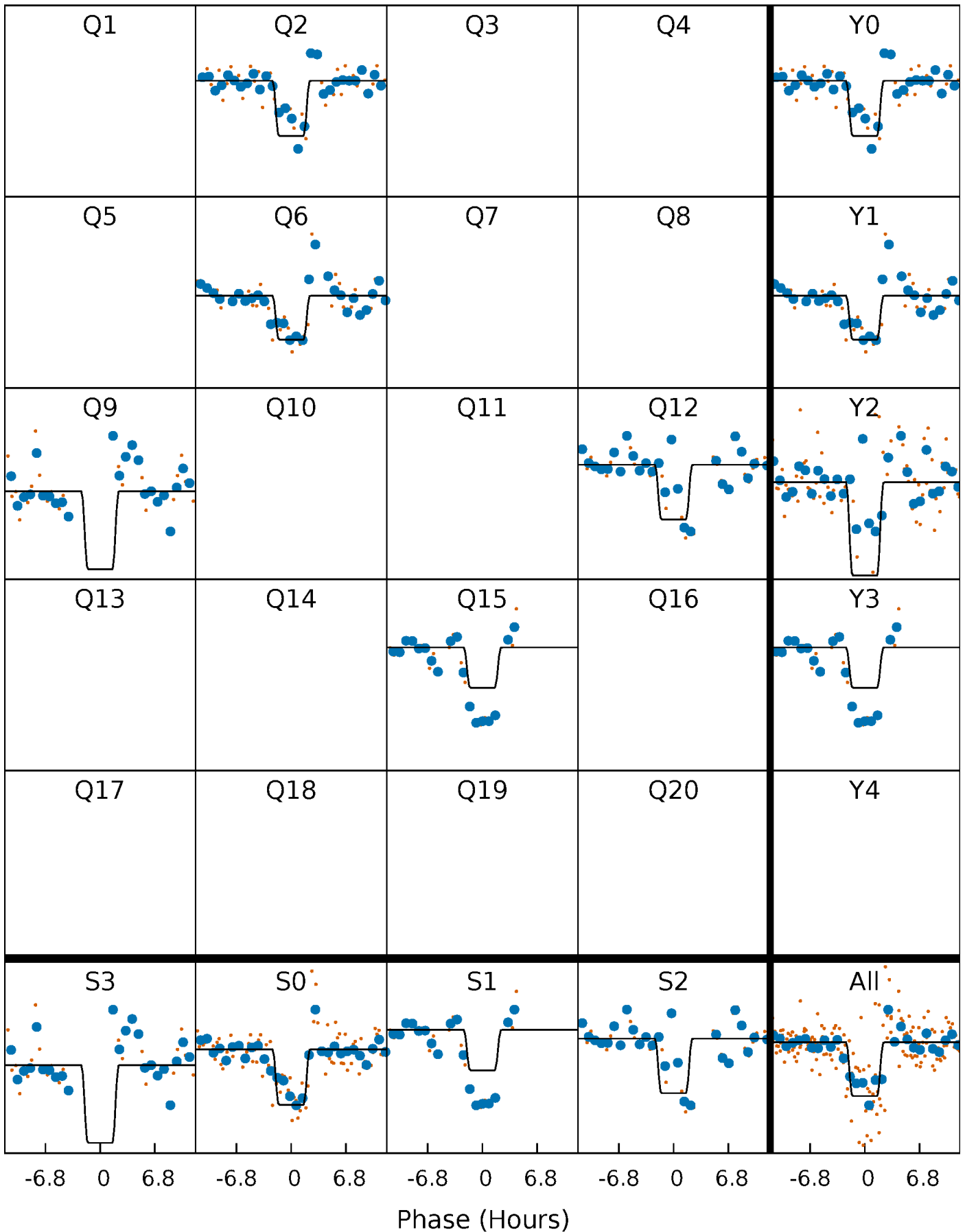
DV Quarter-Phased Transit Curves

TCE 007350067-07 $P=305.778173$ Days $T_0=241.657053$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

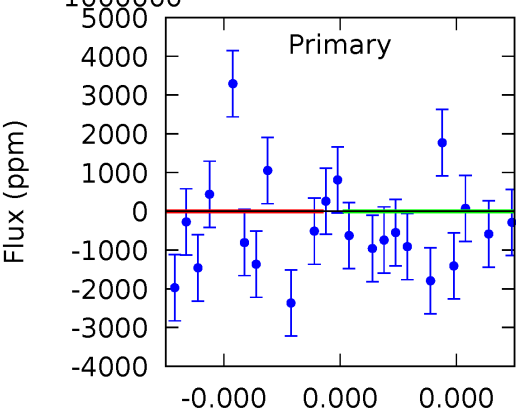
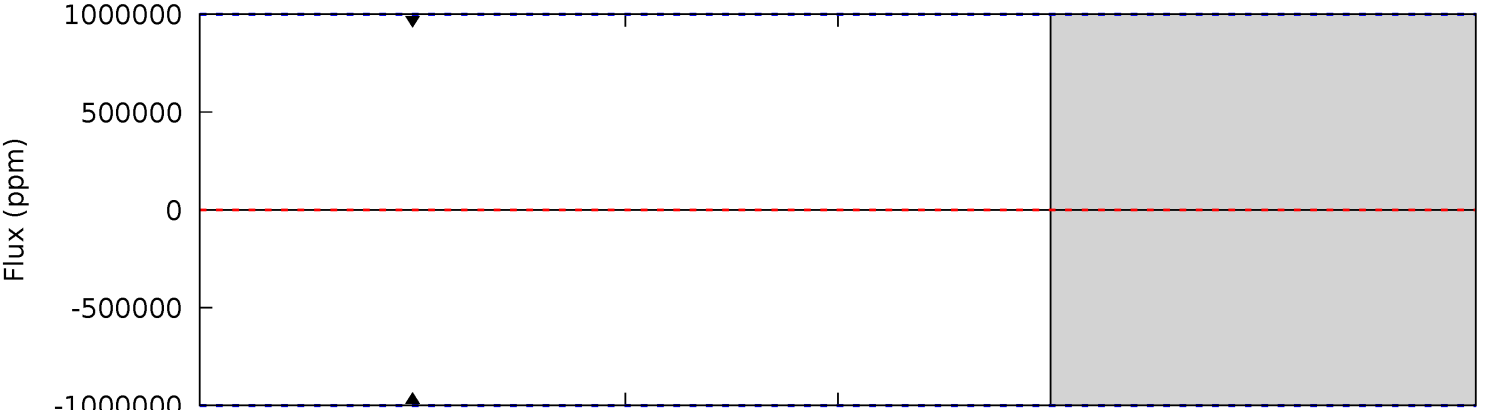
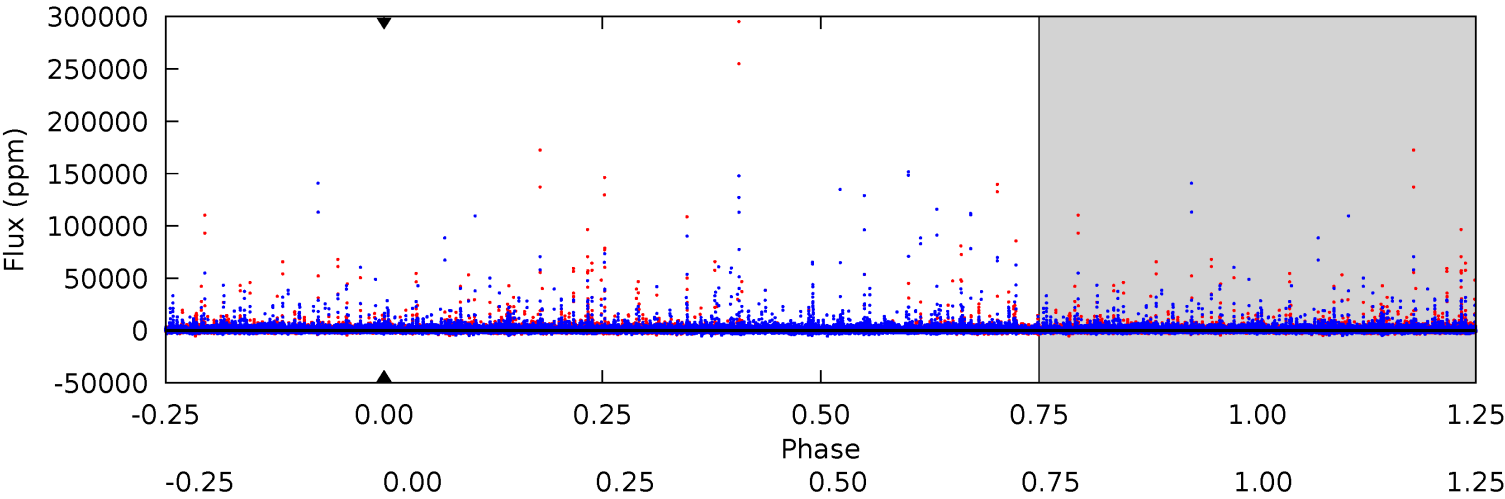
TCE 007350067-07 $P=305.778173$ Days $T_0=241.636299$ (BKJD)



DV Model-Shift Uniqueness Test

007350067-07, P = 305.778173 Days, E = 241.657053 Days

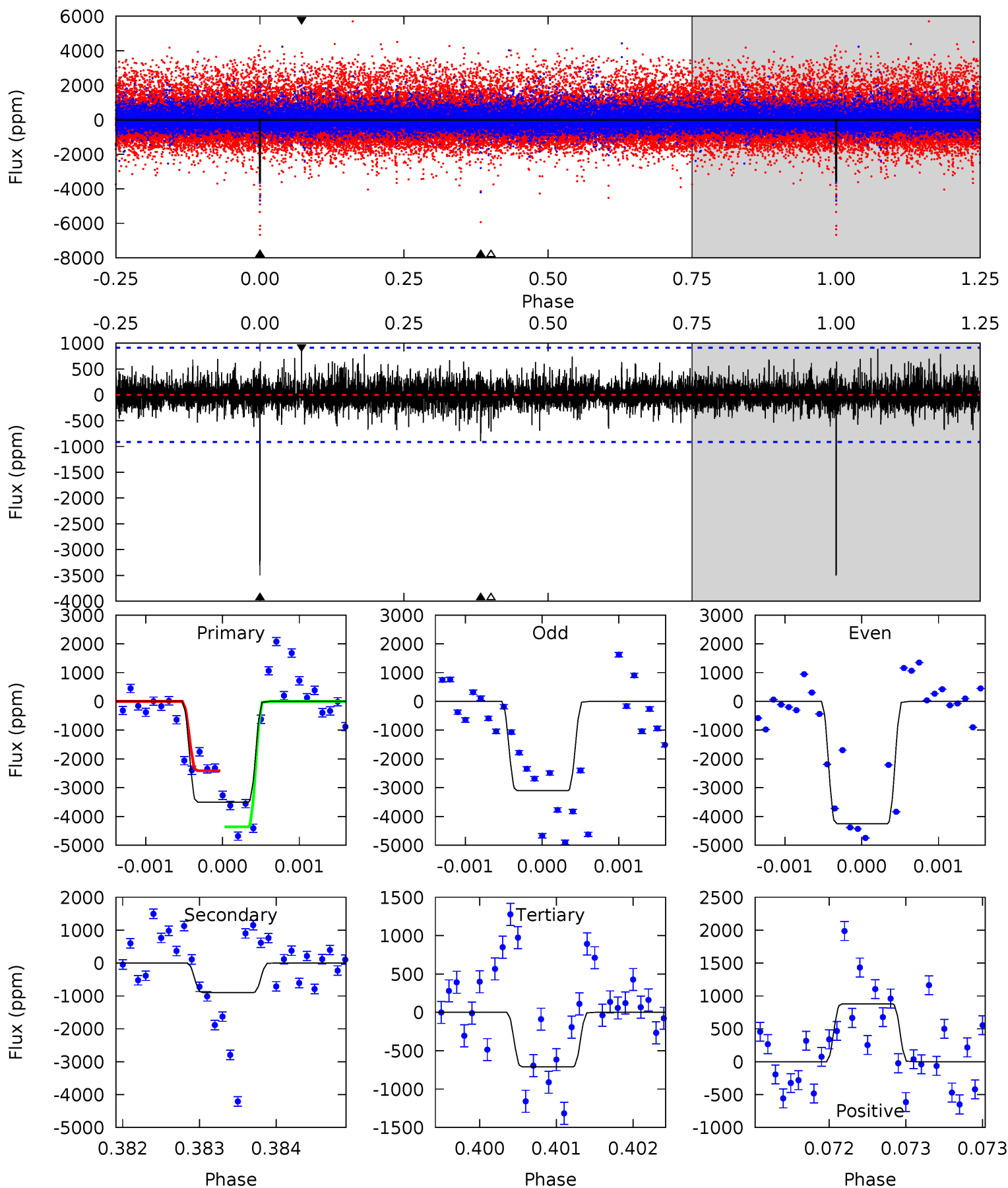
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
0	0	0	0	1.00	1.00	1.00	0	0	0	0	0	0	0	0



Alt Model-Shift Uniqueness Test

007350067-07, $P = 305.778173$ Days, $E = 241.636299$ Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
21.2	5.43	4.30	5.33	5.54	3.43	1.07	16.9	15.9	1.13	0.10	3.41	0.88	0.20	5.94



Stellar Parameters For KIC 007350067

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	3236^{+41}_{-25}	$5.097^{+0.055}_{-0.050}$	$0.000^{+0.100}_{-0.100}$	$0.193^{+0.034}_{-0.025}$	$0.169^{+0.038}_{-0.025}$	$33.360^{+10.540}_{-7.993}$
	+1%/-1%	+1%/-1%	+inf%/-inf%	+18%/-13%	+22%/-15%	+32%/-24%
Source	PHO2	PHO2	PHO2	DSEP		

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

Secondary Eclipse Parameters for KIC 007350067-07 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	0 ± 1000000	$1.88^{+1.72}_{-1.30}$	125^{+3}_{-3}	2600^{+3385}_{-8226}	$65011^{+7474627}_{-5864907}$
Alt.	-896 ± 165	$2.04^{+1.91}_{-1.35}$	125^{+3}_{-3}	2377^{+800}_{-322}	$29131^{+219302}_{-21930}$

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 $A_{obs} \gg 1.0$

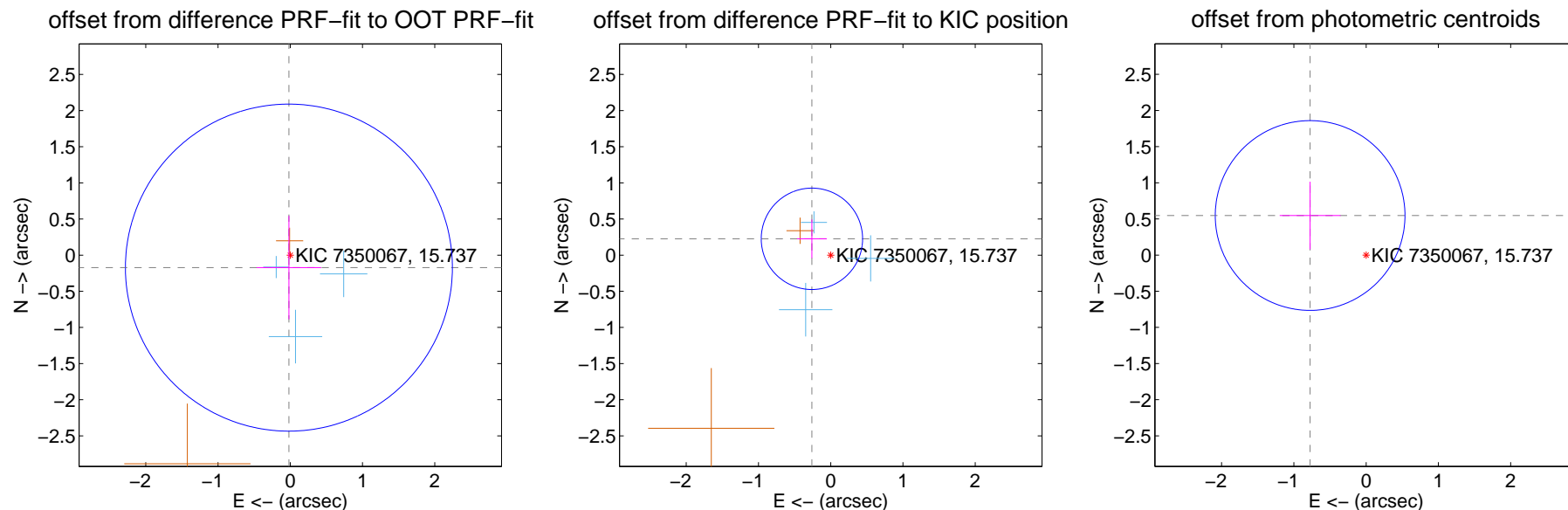
DV Centroid Data

Supplemental centroid analysis for 007350067-07. Kepler magnitude: 15.74. Transit SNR -1.00

There are 3 quarters with good PRF difference image offsets

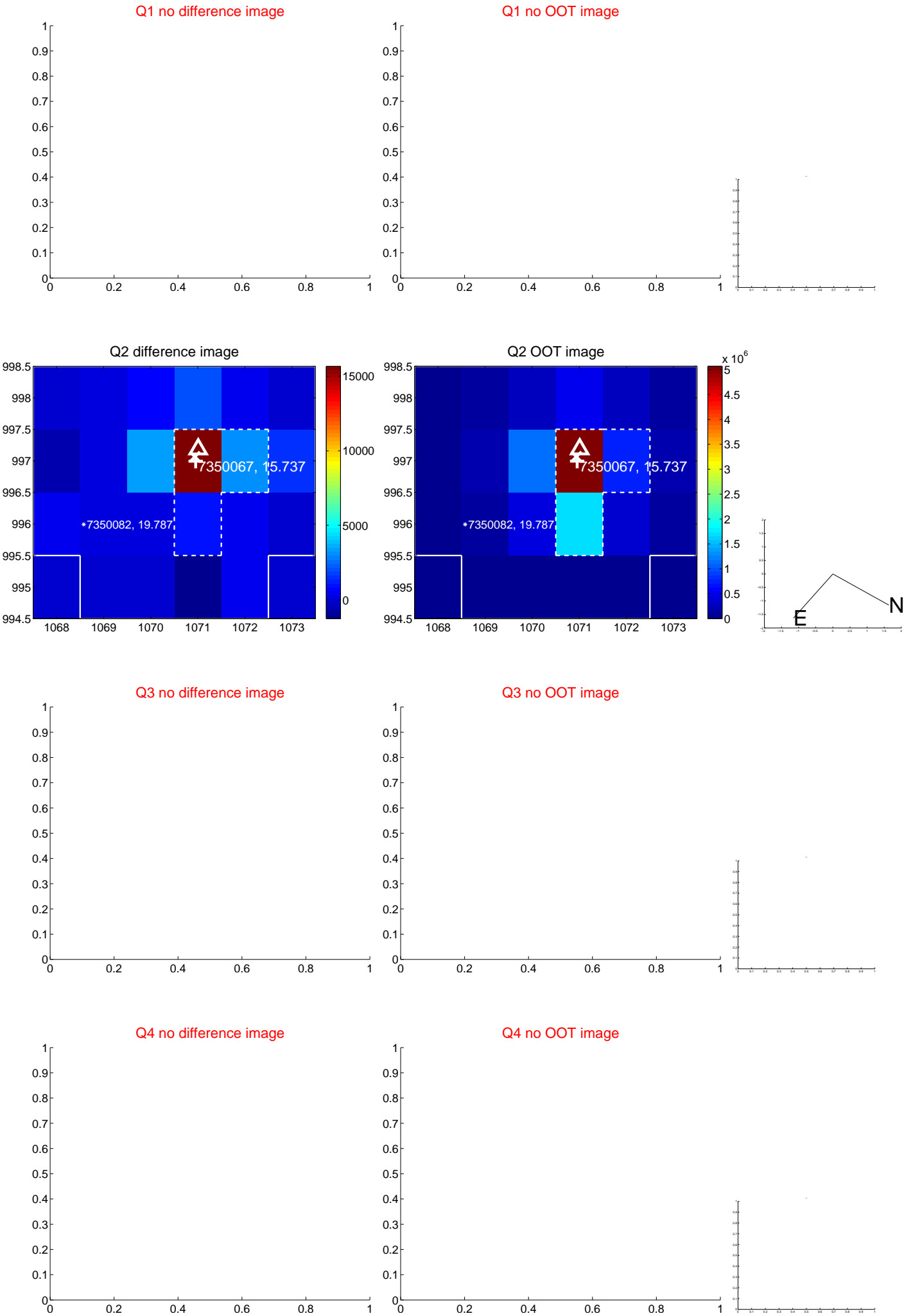
The direct PRF centroid is offset from the target star catalog position by about 0.62 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.174 ± 0.754	0.23	0.019 ± 0.447	-0.173 ± 0.715
PRF-fit source offset from KIC position	0.345 ± 0.234	1.47	0.260 ± 0.205	0.226 ± 0.267
photometric centroid source offset	0.95 ± 0.44	2.17	0.77 ± 0.42	0.55 ± 0.47



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.

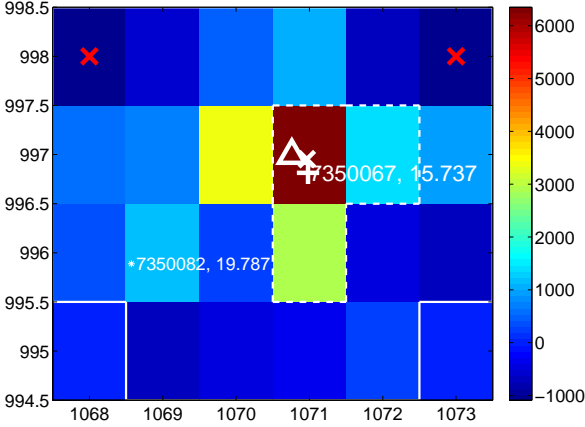
Q5 no difference image



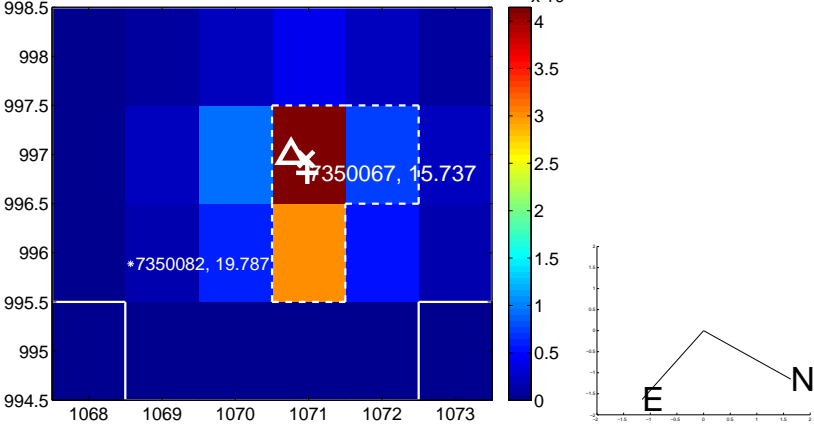
Q5 no OOT image



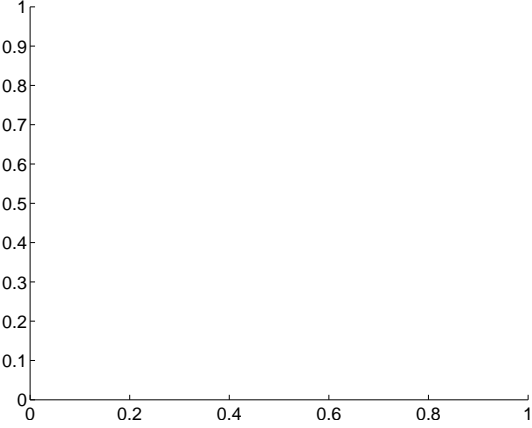
Q6 difference image



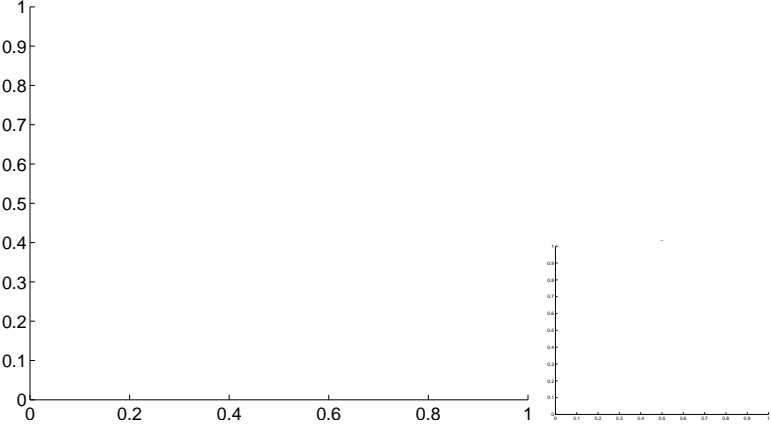
Q6 OOT image



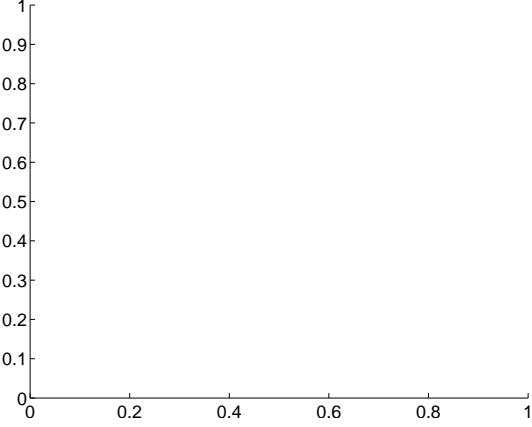
Q7 no difference image



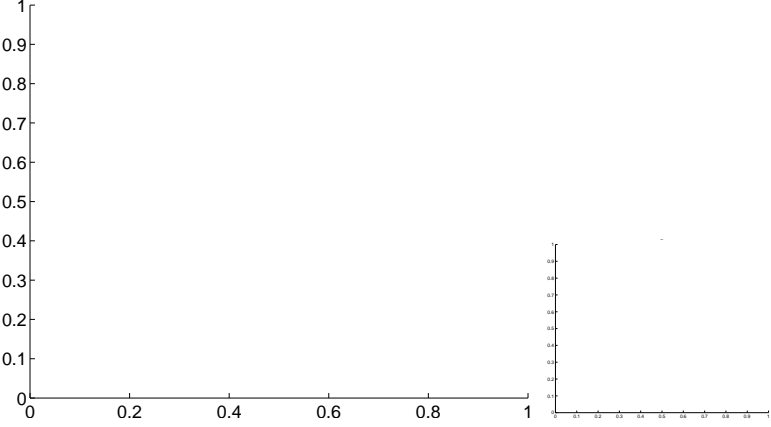
Q7 no OOT image



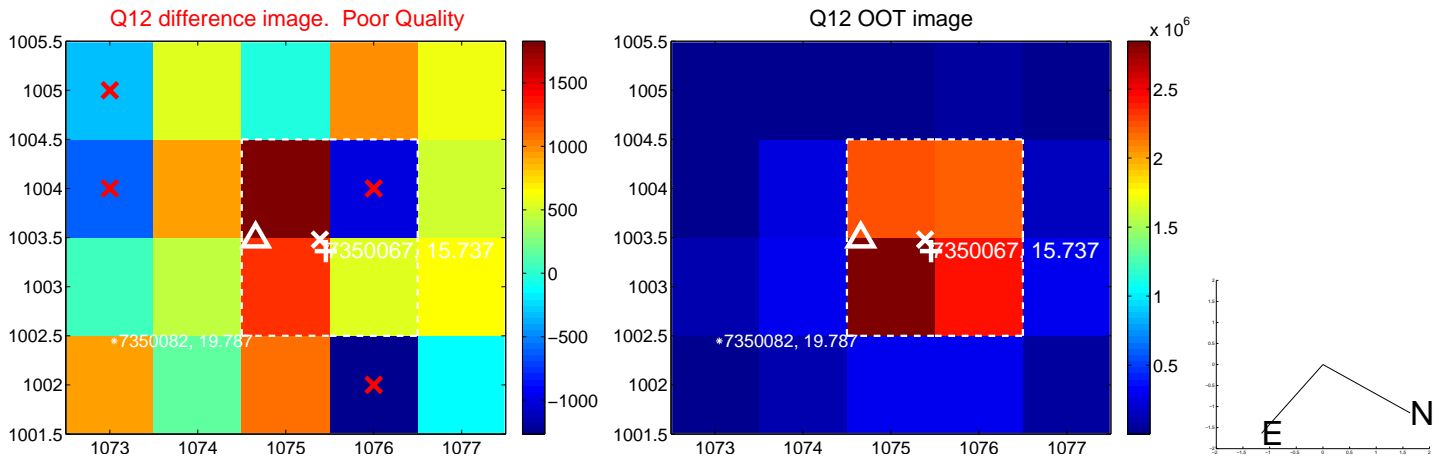
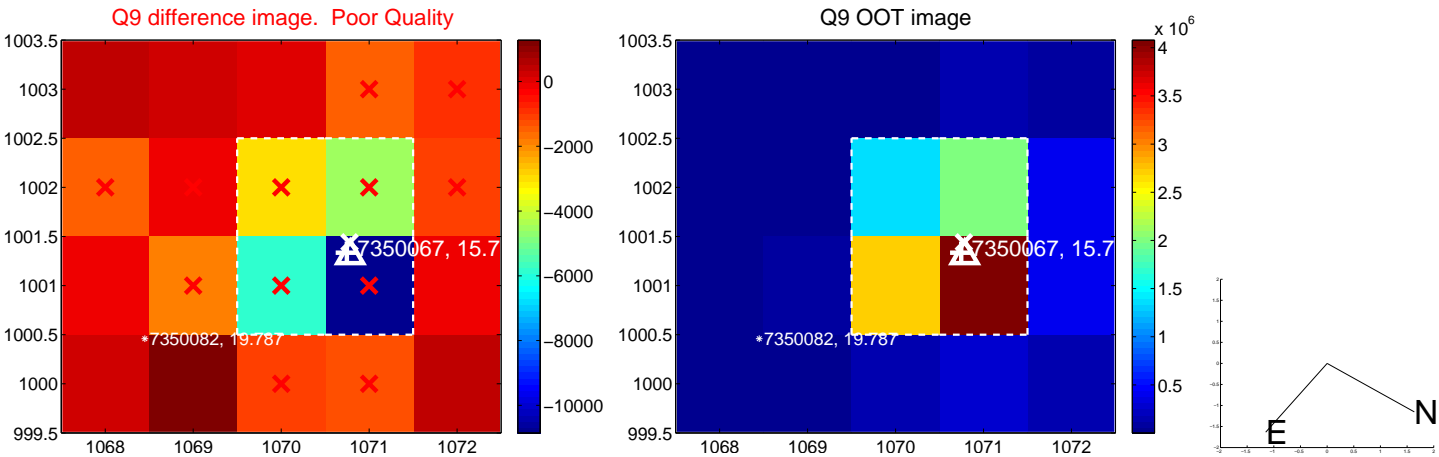
Q8 no difference image



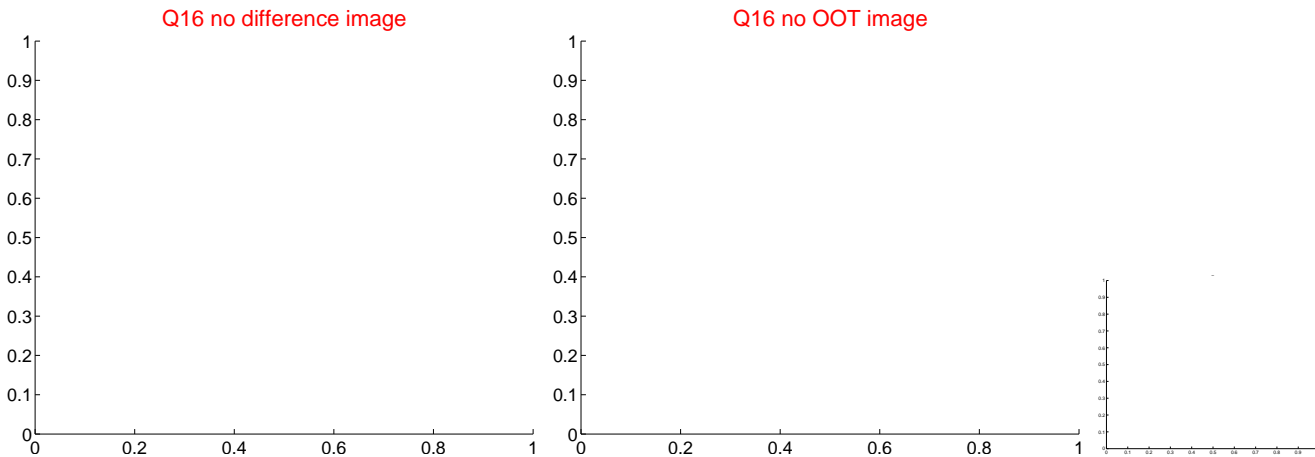
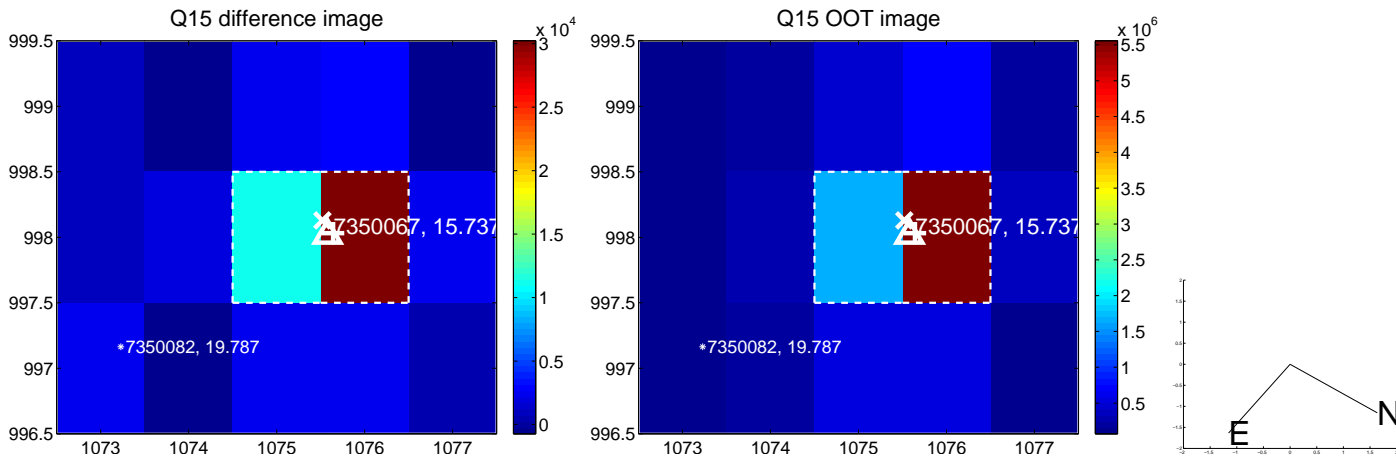
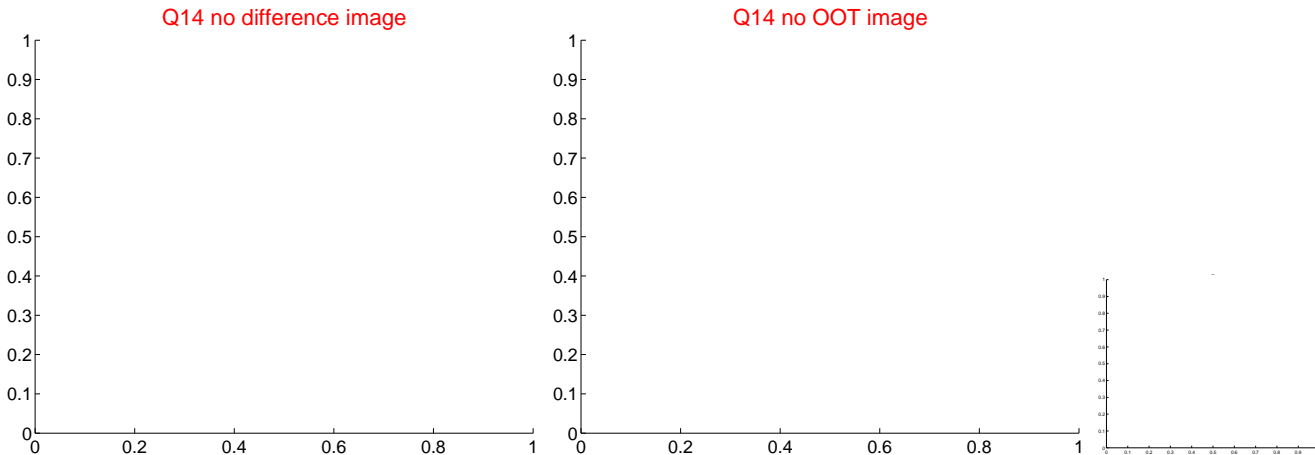
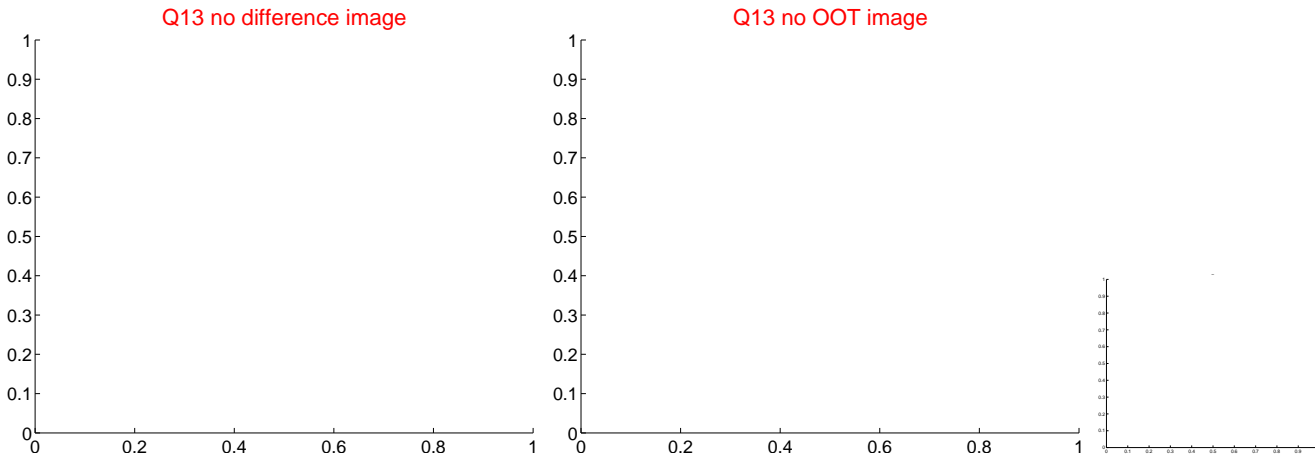
Q8 no OOT image



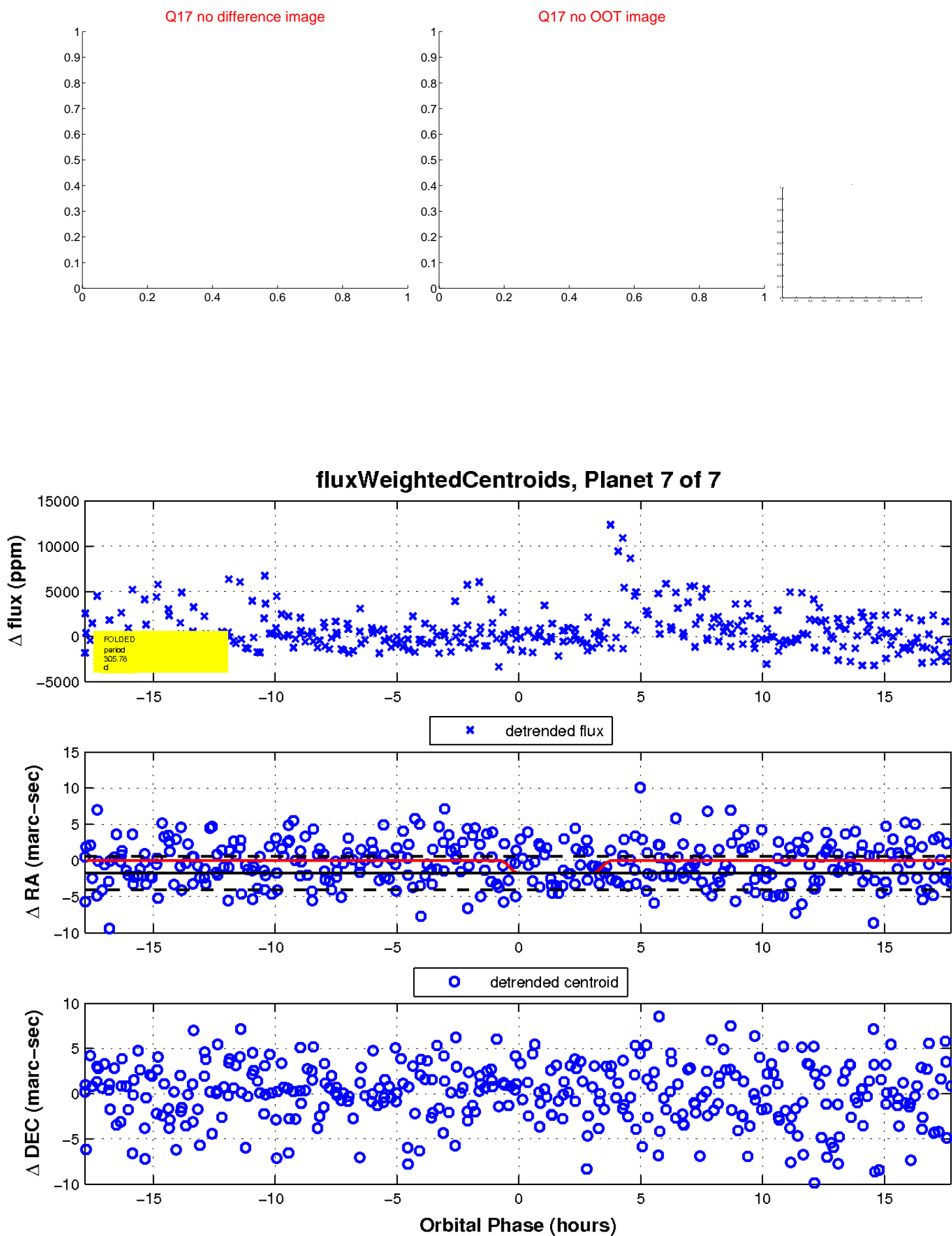
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UKIRT Image

Declination

