

KIC 007465605

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})
007465605-01	OBS	No	348.355246	244.599308	768.5	3.456	17.3	5.7	0.58	4025	1.77	0.12
007465605-03	OBS	No	355.207838	341.690339	788.6	3.727	11.9	7.7	0.58	4025	1.70	0.12
007465605-04	OBS	No	369.334080	224.099689	757.2	7.509	11.8	5.9	0.58	4025	1.66	0.11
007465605-05	OBS	No	354.497016	340.964354	637.2	2.392	11.3	5.4	0.58	4025	1.72	0.12
007465605-06	OBS	No	436.569821	238.072009	425.0	10.500	10.9	-1.0	0.58	4025	1.16	0.09

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
007465605-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_MARSHALL_SKYE_ZUMA_TRACKER—LPP_DV—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—INCONSISTENT_TRANS—CENT_FEW_DIFFS
007465605-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_MARSHALL—LPP_DV—MOD_NONUNIQ_DV—MOD_POS_DV—CENT_FEW_DIFFS
007465605-04	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—MOD_POS_ALT—INCONSISTENT_TRANS—CENT_FEW_DIFFS
007465605-05	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_MARSHALL—LPP_DV—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—INCONSISTENT_TRANS—CENT_KIC_POS
007465605-06	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_MARSHALL_SKYE—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.

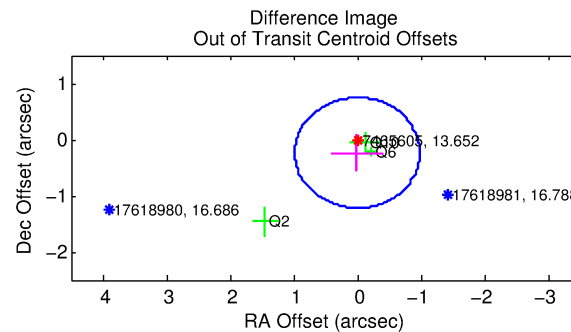
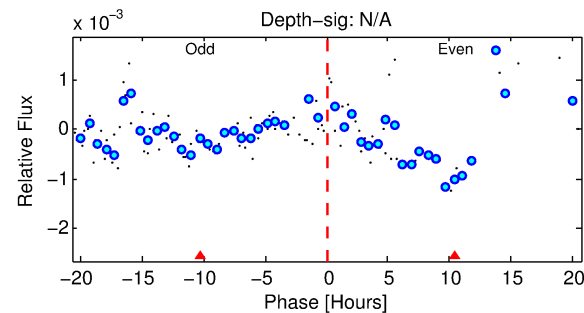
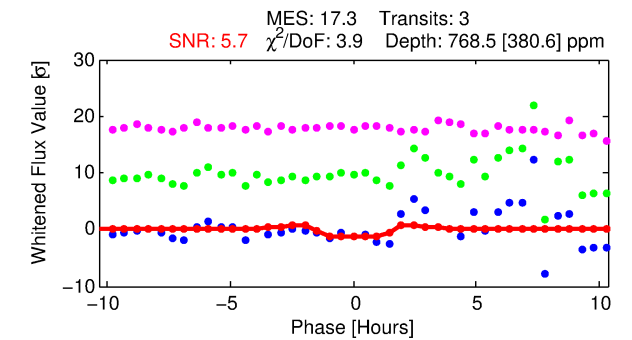
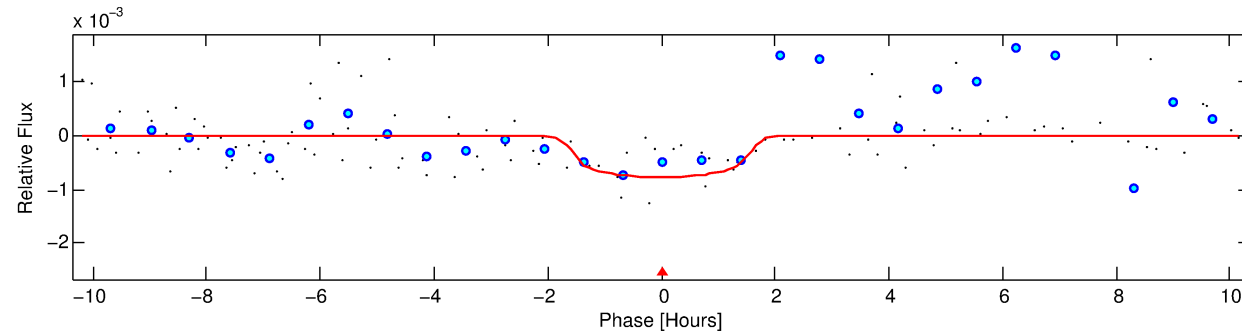
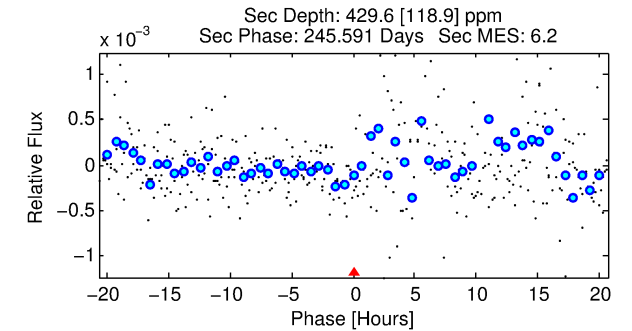
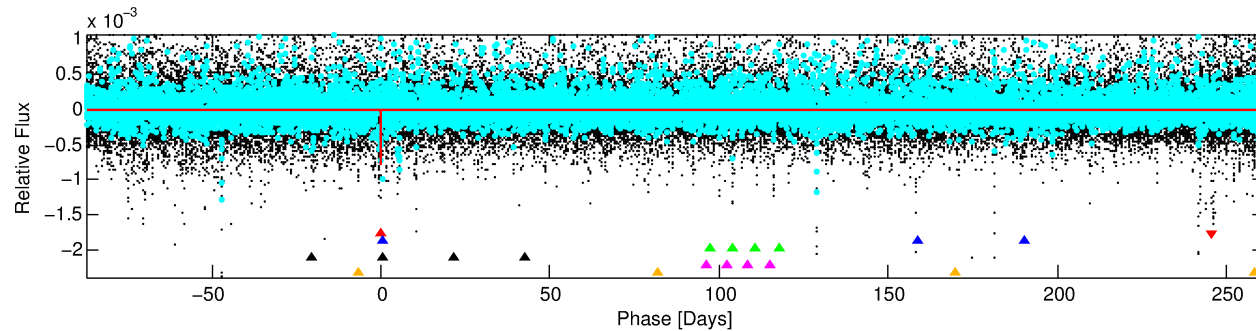
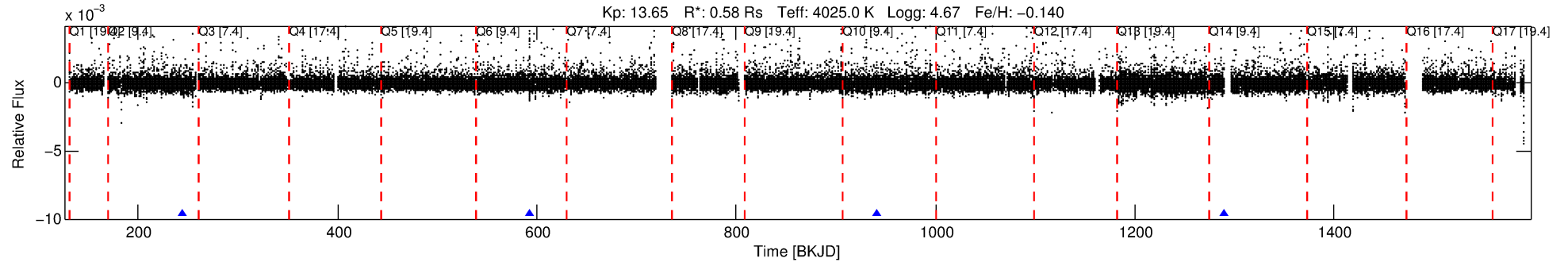
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 007465605-01

No Significant Match Found

DV One-Page Summary

KIC: 7465605 Candidate: 1 of 6 Period: 348.355 d



DV Fit Results:

Period = 348.35525 [0.01514] d
Epoch = 244.5993 [0.0196] BKJD
Rp/R* = 0.0280 [0.0606]
a/R* = 515.09 [4465.70]
b = 0.78 [4.41]
Seff = 0.12 [0.02]
Teq = 150 [8] K
Rp = 1.77 [3.82] Re
a = 0.8038 [0.0796] AU
Ag = 48963.08 [211950.22] [0.23σ]
Teffp = 3460 [3745] K [0.88σ]

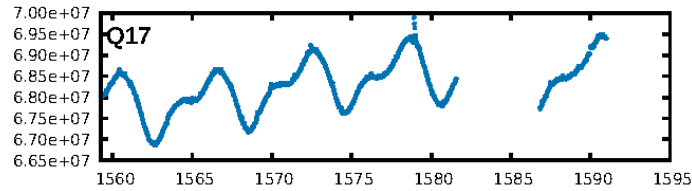
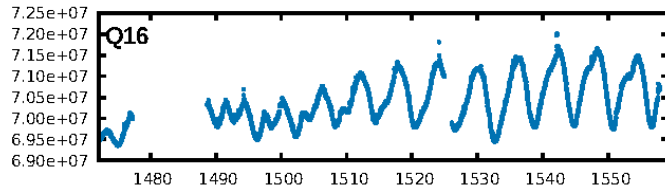
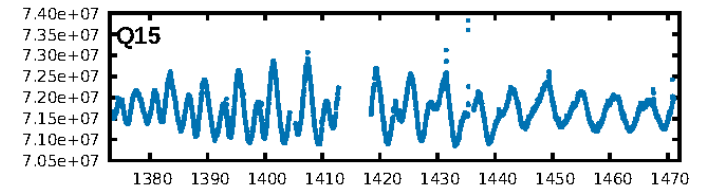
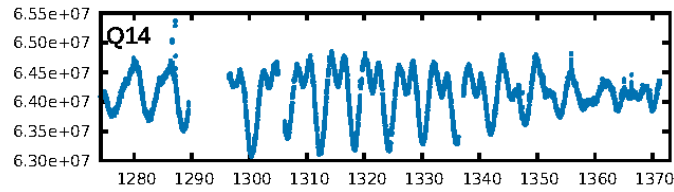
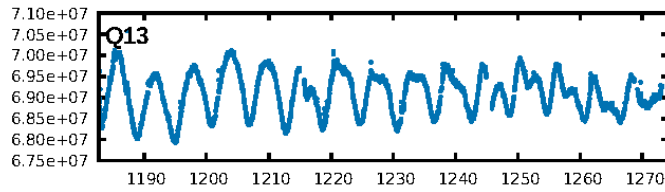
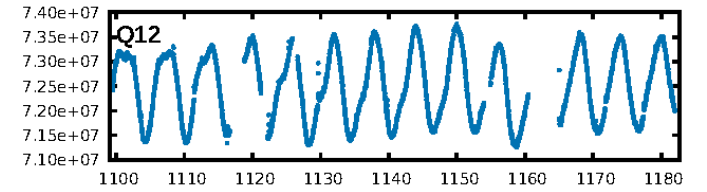
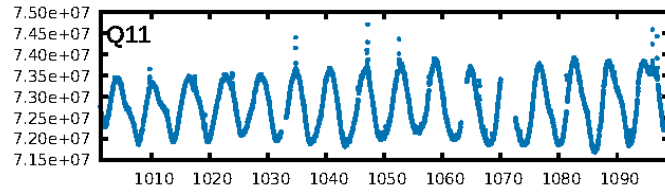
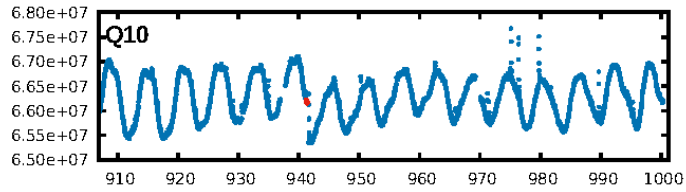
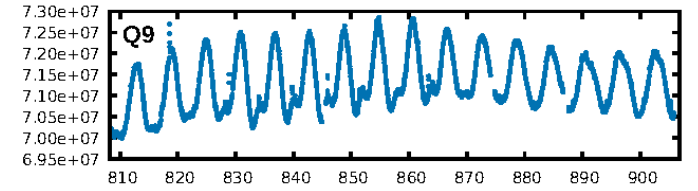
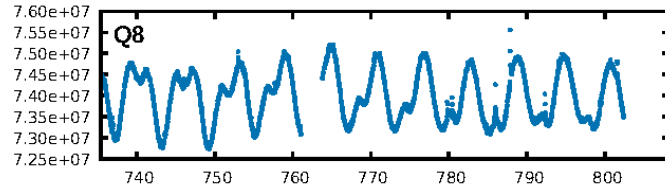
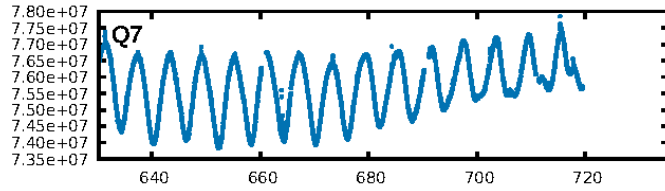
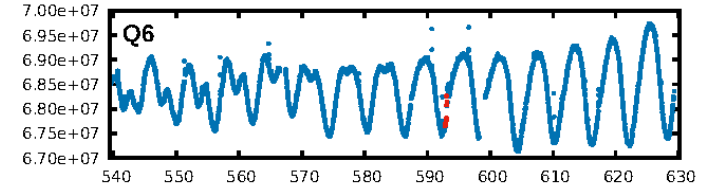
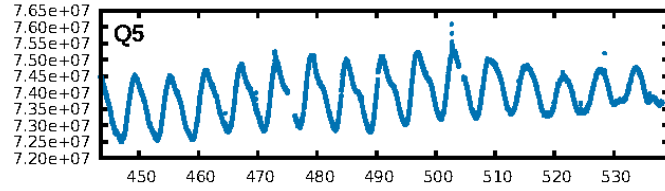
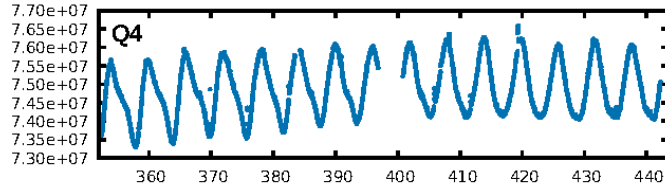
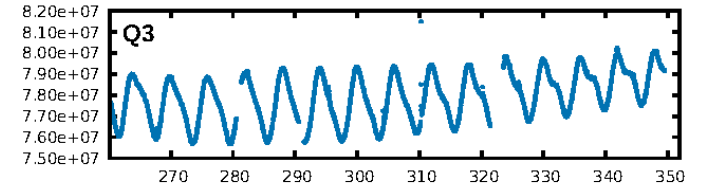
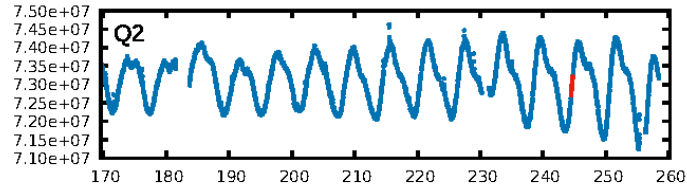
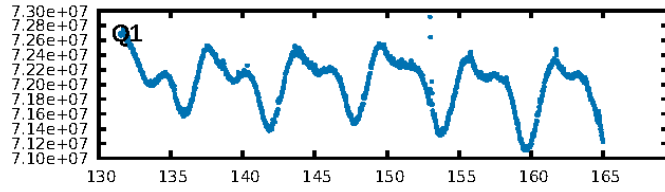
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: 100.0% [35.07σ]
ModelChiSquare2-sig: 0.0%
ModelChiSquareGof-sig: 0.1%
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [3/3]
GhostDiagnostic-chr: -3.59
Centroid-sig: 1.5%
Centroid-so: 2.321 arcsec [2.62σ]
OotOffset-rm: 0.235 arcsec [0.72σ]
OotOffset-st: 3/0/0/0 [3]
KicOffset-rm: 0.928 arcsec [2.50σ]
KicOffset-st: 3/0/0/0 [3]
DiffImageQuality-fgm: 1.00 [3/3]
DiffImageOverlap-fno: 0.33 [1/3]

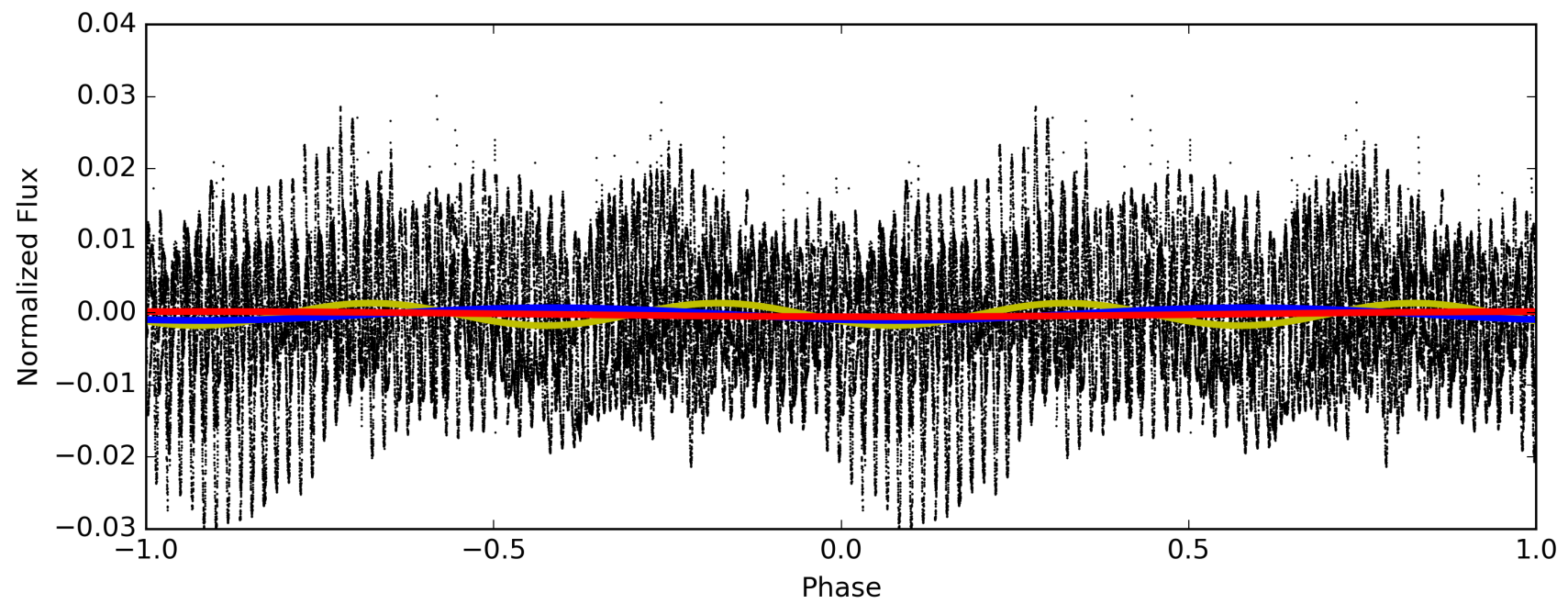
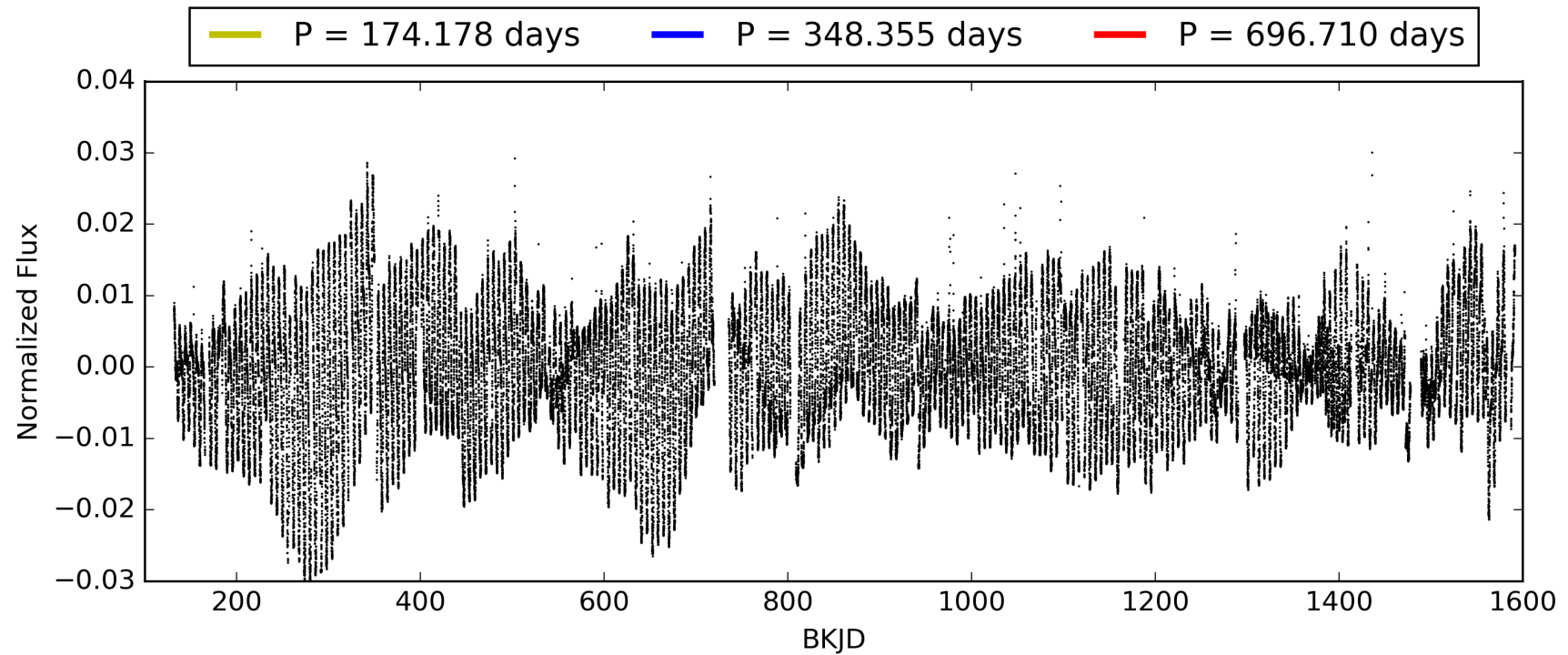
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 01-Feb-2016 05:53:32 Z

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

TCE 007465605-01, PDC Light Curves

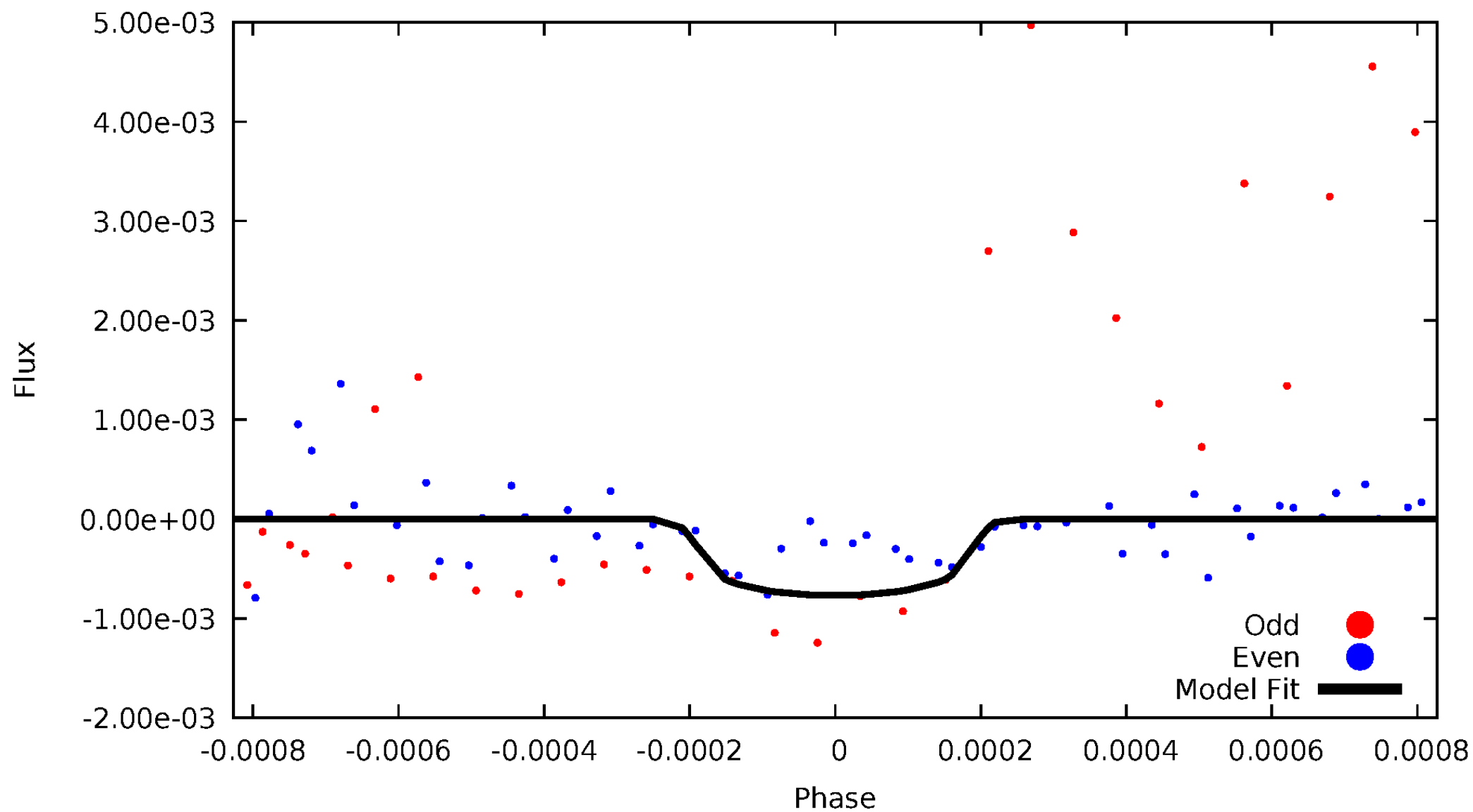


TCE 007465605-01



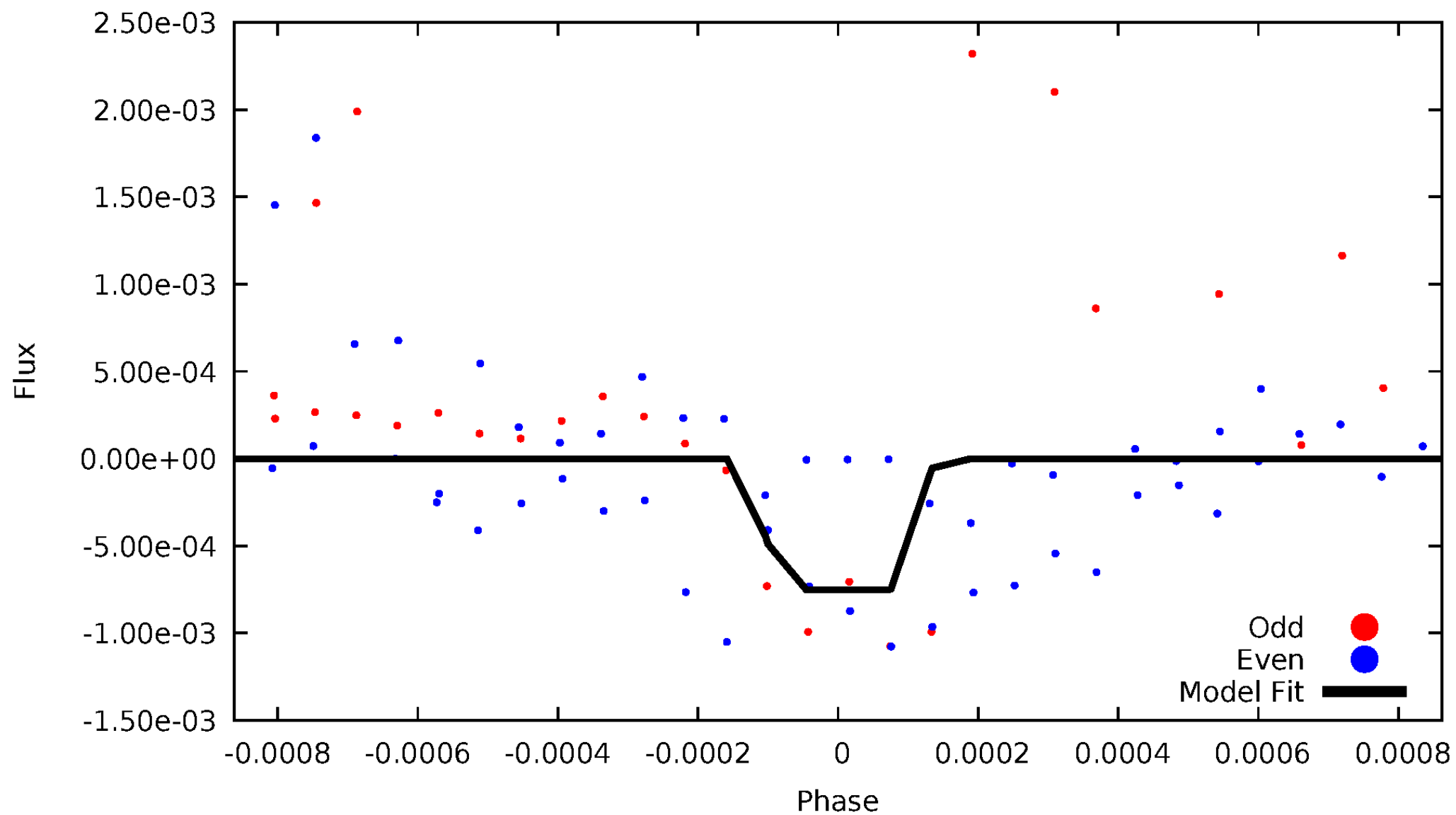
DV Odd/Even

TCE 007465605-01



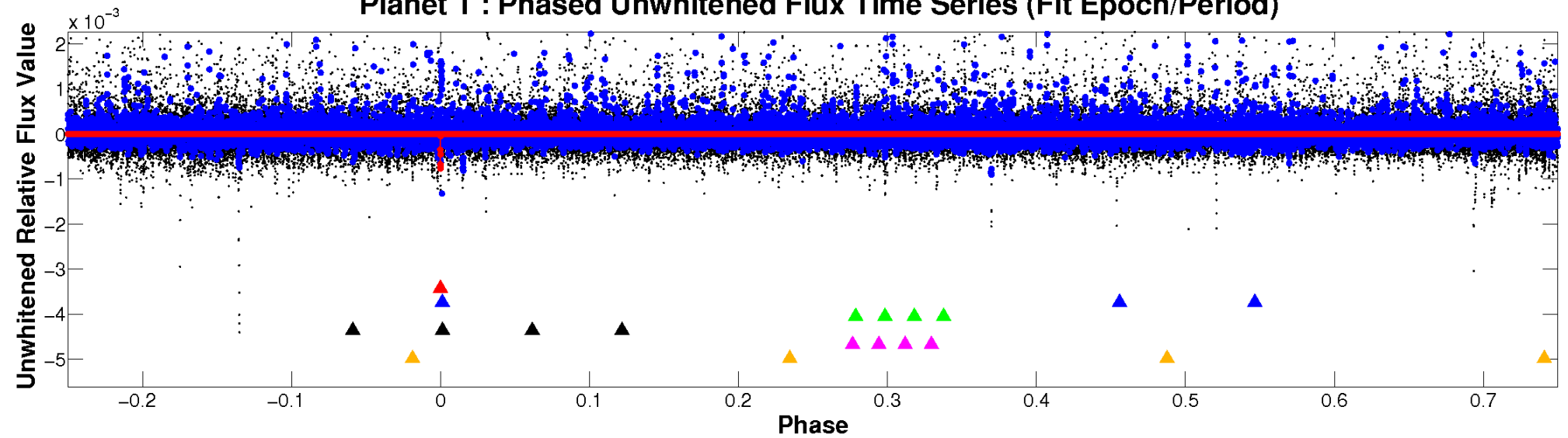
ALT Odd/Even

TCE 007465605-01

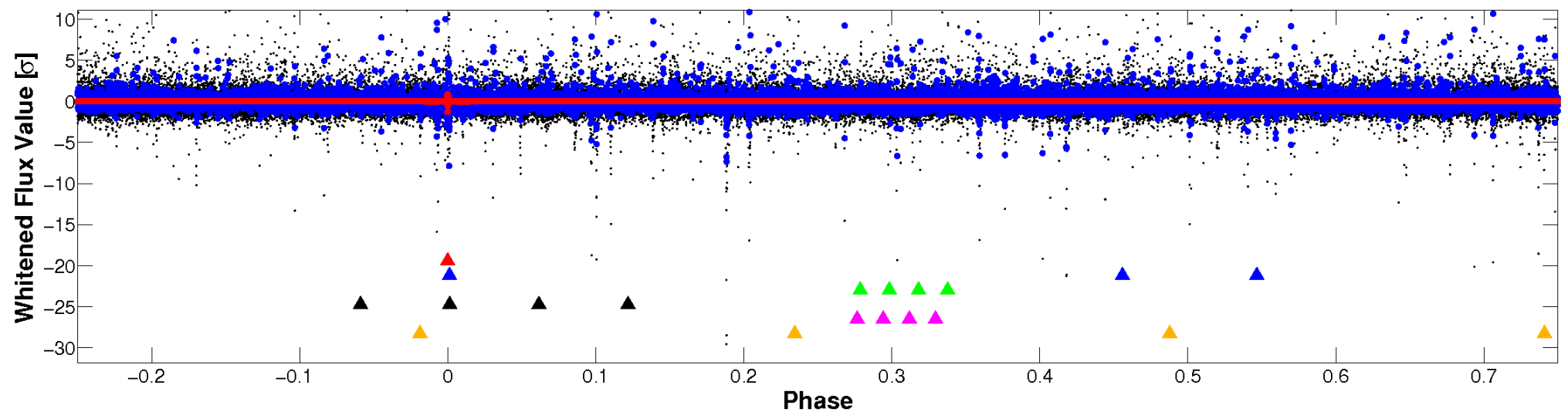


Non-Whitened Vs. Whitened Light Curve

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

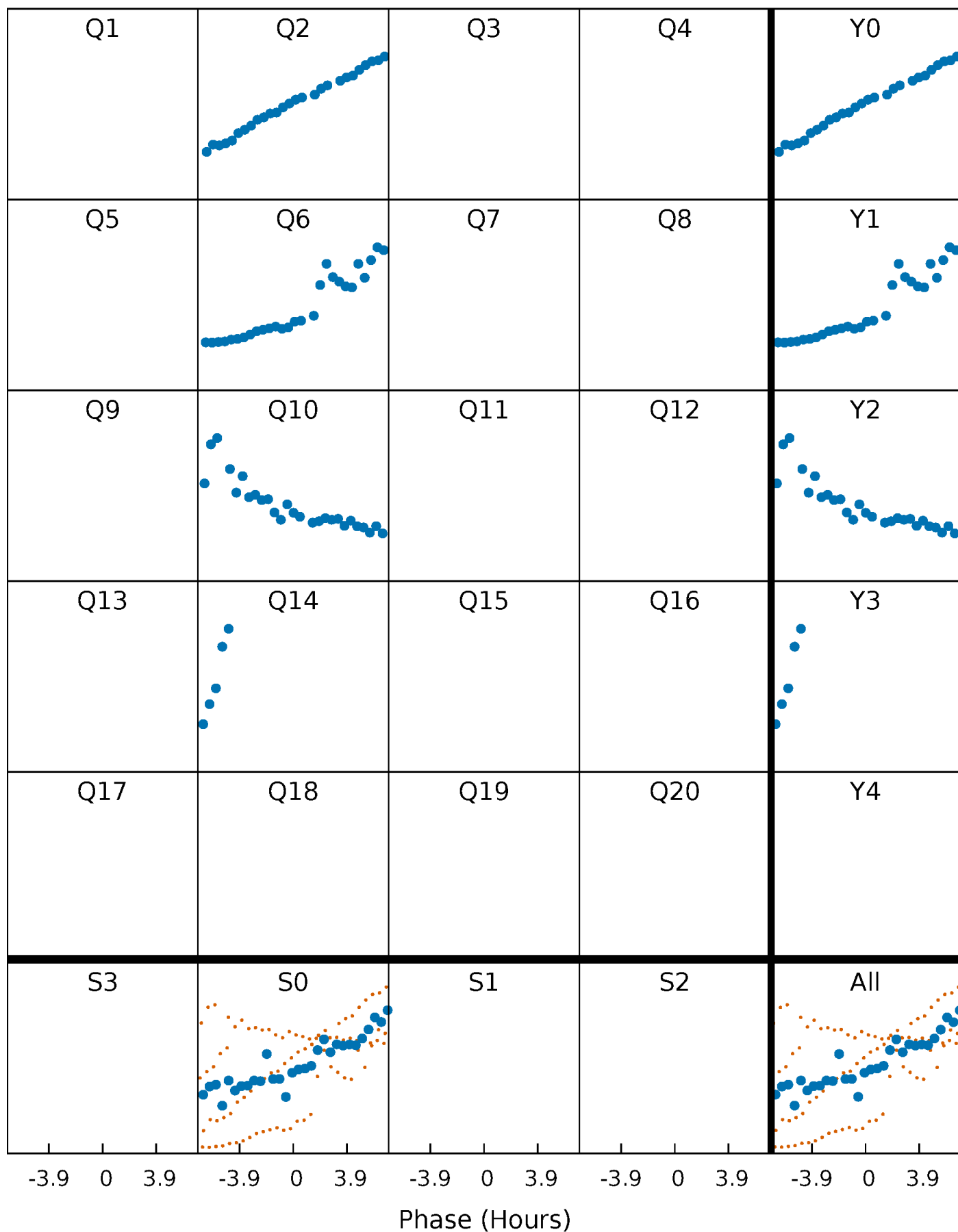


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



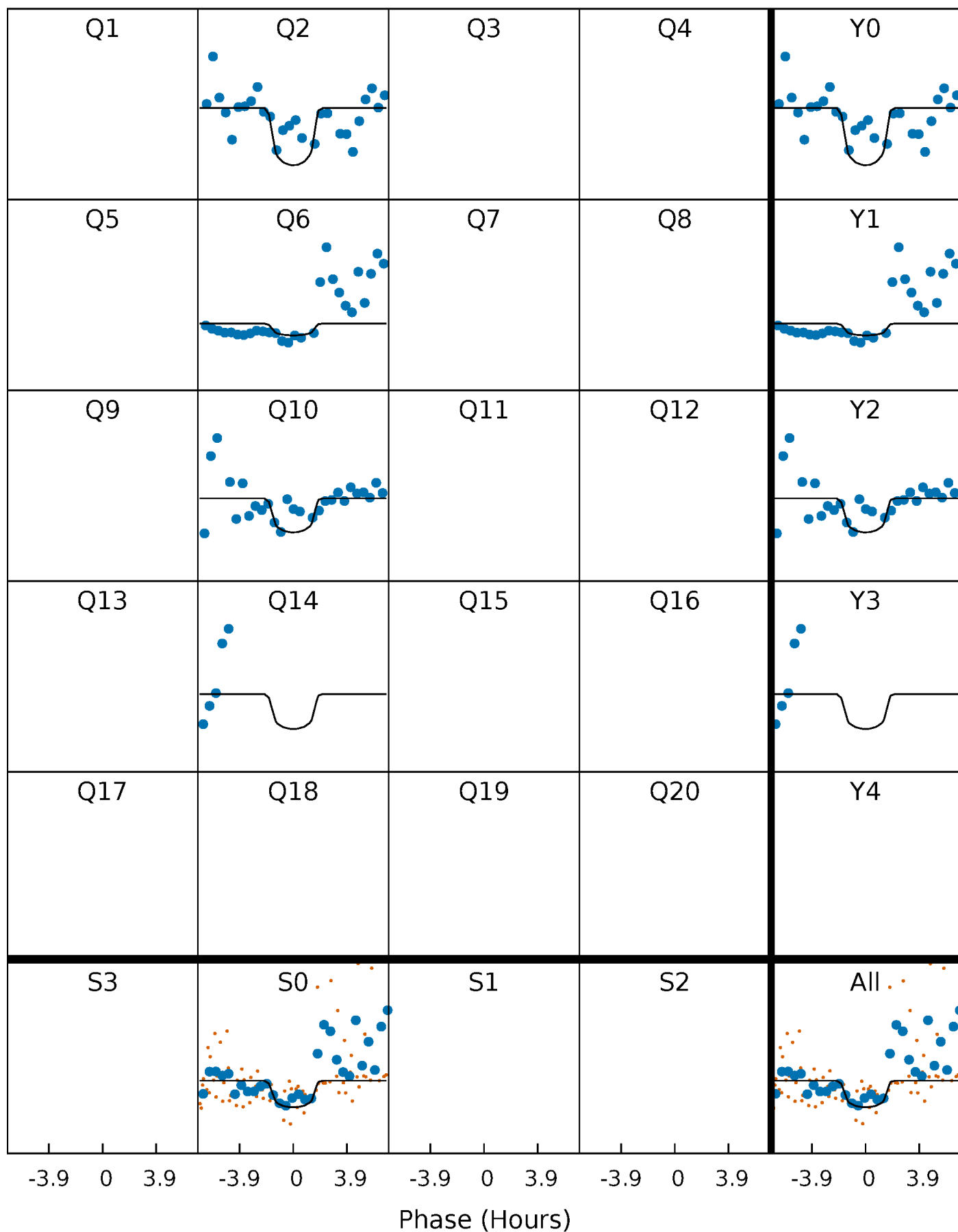
PDC Quarter-Phased Transit Curves

TCE 007465605-01 P=348.355246 Days $T_0=244.599308$ (BKJD)



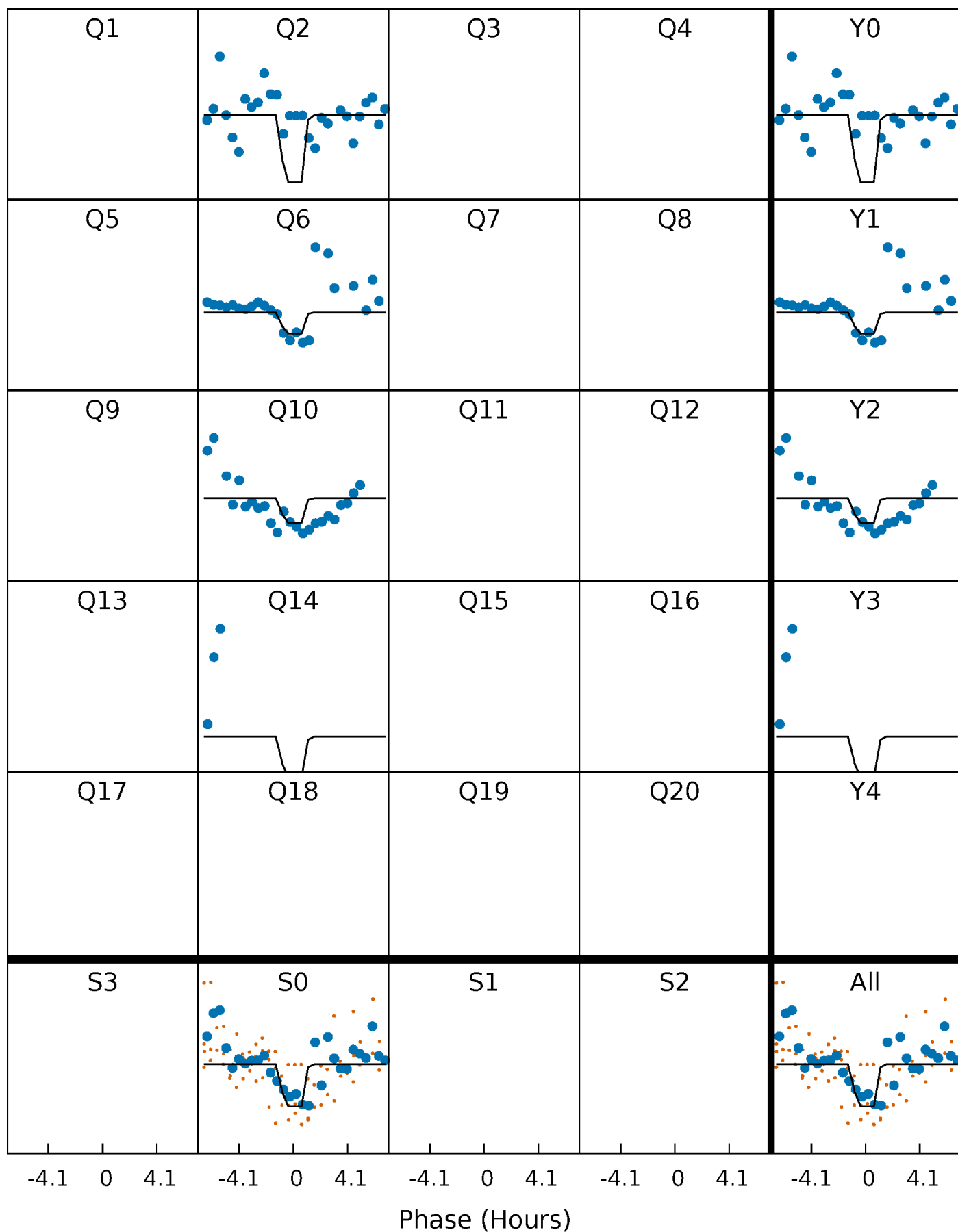
DV Quarter-Phased Transit Curves

TCE 007465605-01 P=348.355246 Days $T_0=244.599308$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

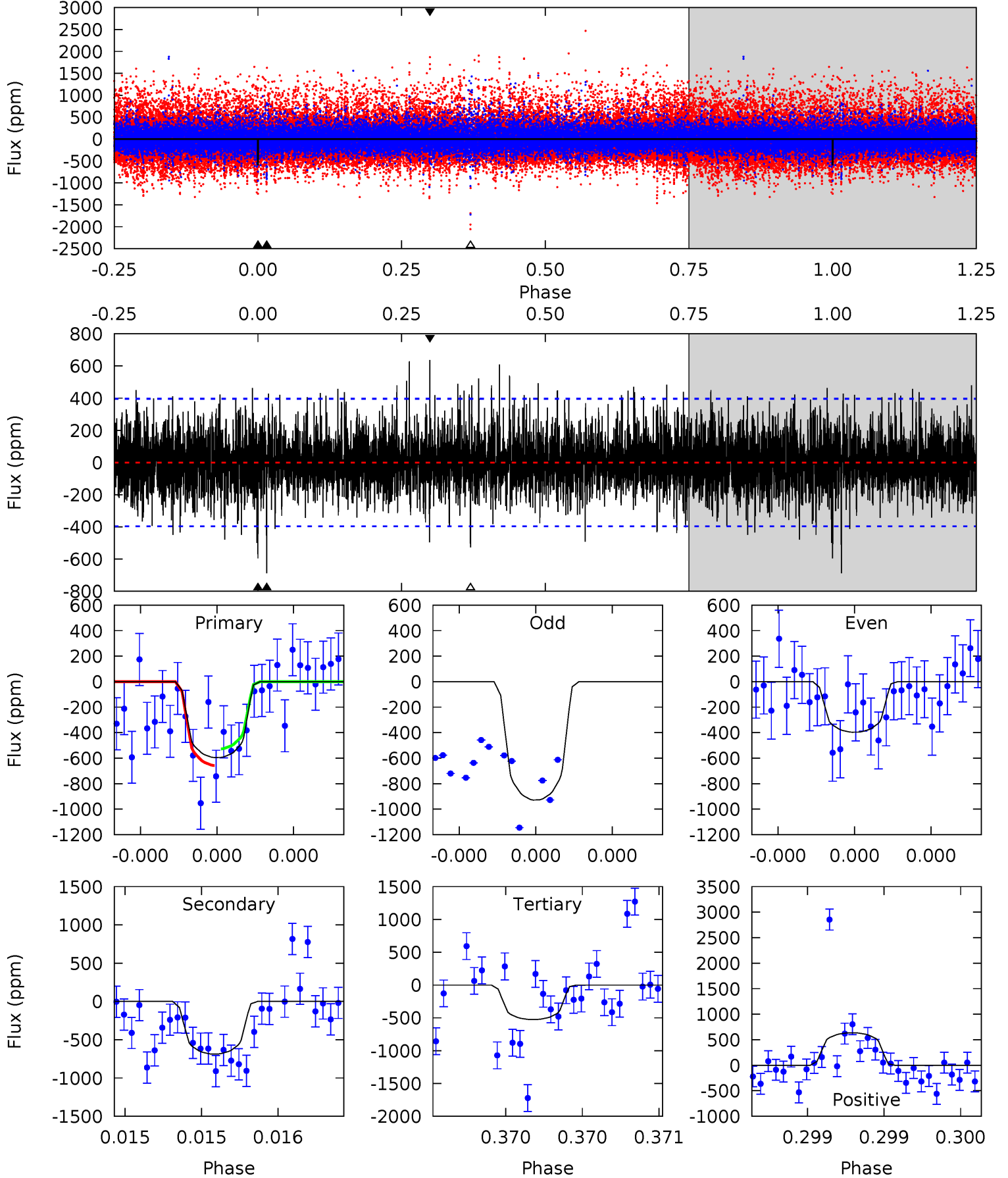
TCE 007465605-01 P=348.371764 Days $T_0=244.589134$ (BKJD)



DV Model-Shift Uniqueness Test

007465605-01, P = 348.355246 Days, E = 244.599308 Days

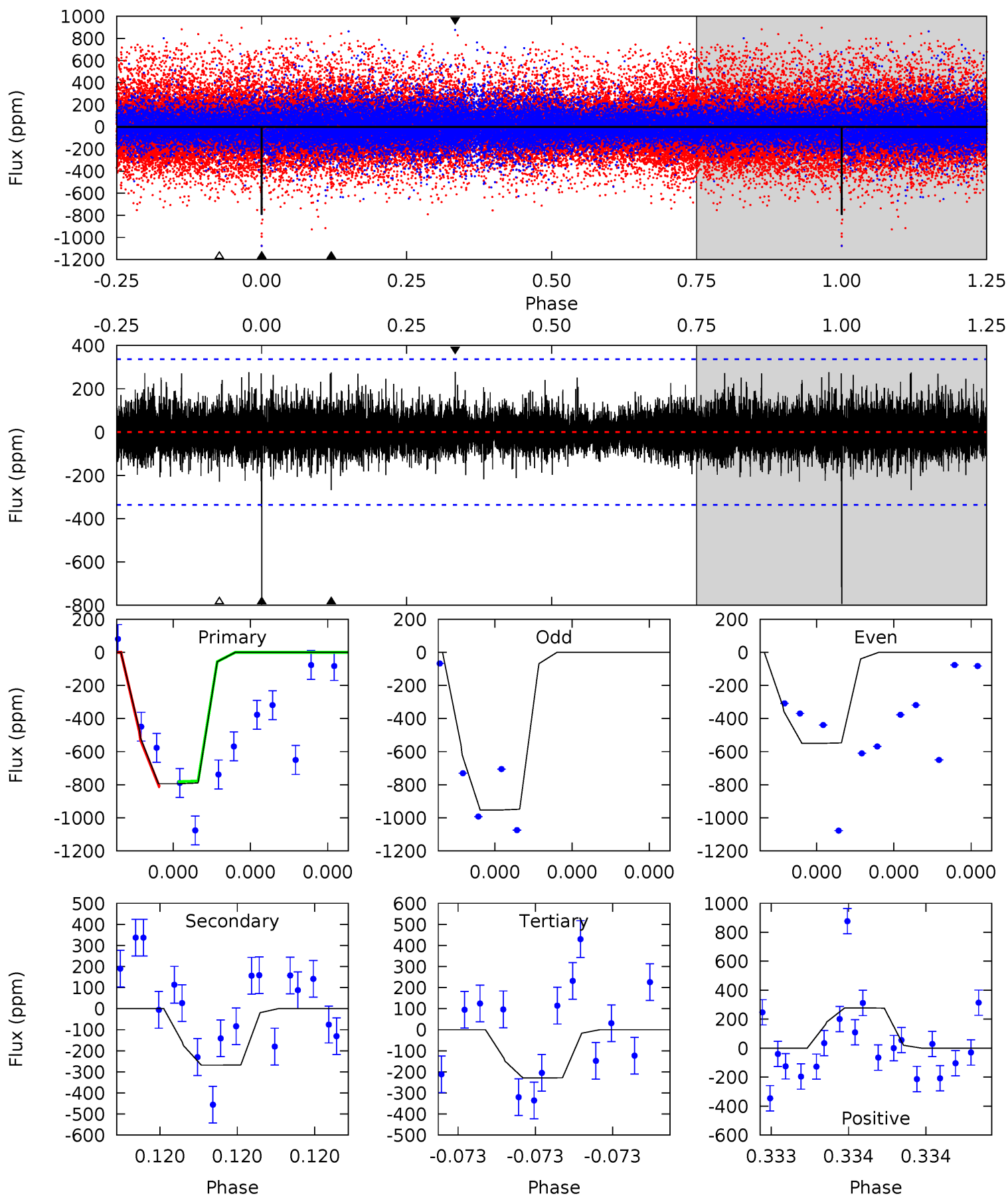
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
8.40	9.69	7.42	8.98	5.59	3.50	1.84	0.98	-0.58	2.27	0.72	3.04	1.38	0.48	0.93



Alt Model-Shift Uniqueness Test

007465605-01, P = 348.371764 Days, E = 244.589134 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
13.5	4.55	3.88	4.71	5.70	3.68	0.95	9.58	8.76	0.66	-0.16	3.11	0.72	0.26	0.25



Stellar Parameters For KIC 007465605

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	M (M_{\odot})	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	4025^{+125}_{-153}	$4.672^{+0.065}_{-0.025}$	$-0.140^{+0.300}_{-0.300}$	$0.577^{+0.045}_{-0.074}$	$0.570^{+0.059}_{-0.065}$	$4.191^{+1.370}_{-0.512}$
	+3%/-4%	+1%/-1%	+214%/-214%	+8%/-13%	+10%/-11%	+33%/-12%
Source	KIC0	KIC0	KIC0	DSEP		

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

Secondary Eclipse Parameters for KIC 007465605-01 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-687 ± 71	$3.45^{+3.11}_{-2.36}$	208^{+8}_{-9}	3161^{+1498}_{-538}	$20426^{+197257}_{-14876}$
Alt.	-268 ± 59	$3.31^{+2.93}_{-2.23}$	208^{+7}_{-9}	2799^{+1092}_{-419}	8912^{+71145}_{-6580}

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 $A_{obs} \gg 1.0$

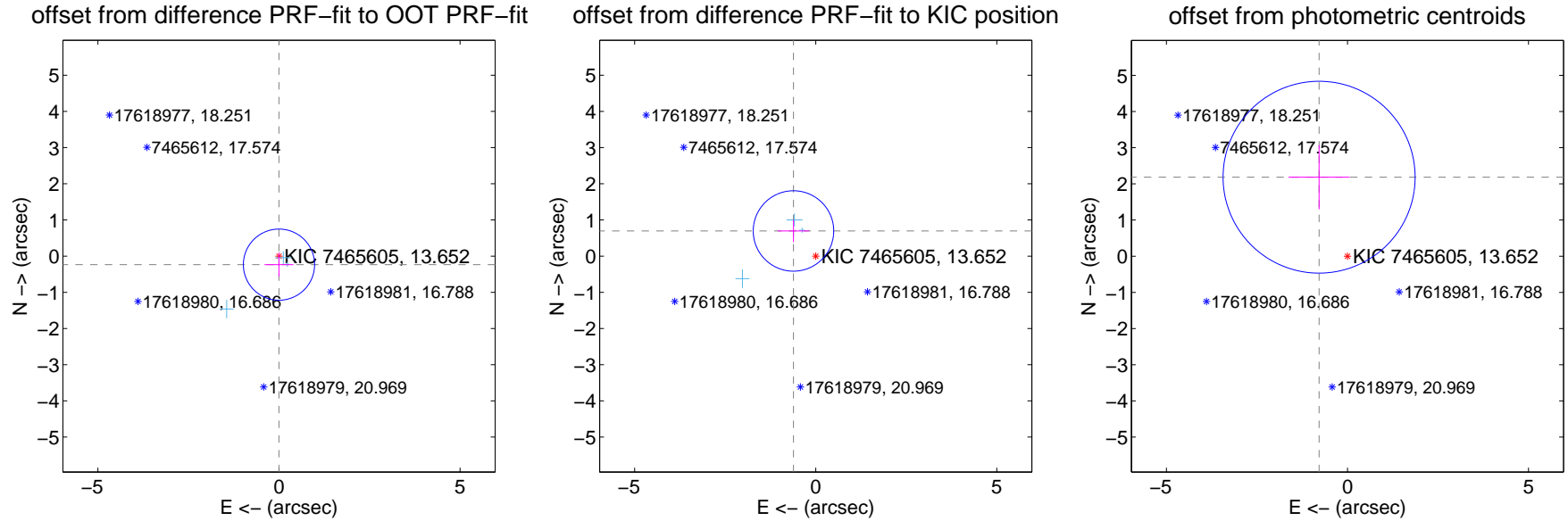
DV Centroid Data

Supplemental centroid analysis for 007465605-01. Kepler magnitude: 13.65. Transit SNR 5.69

There are 3 quarters with good PRF difference image offsets

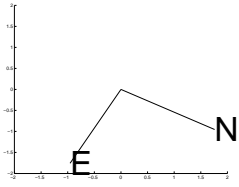
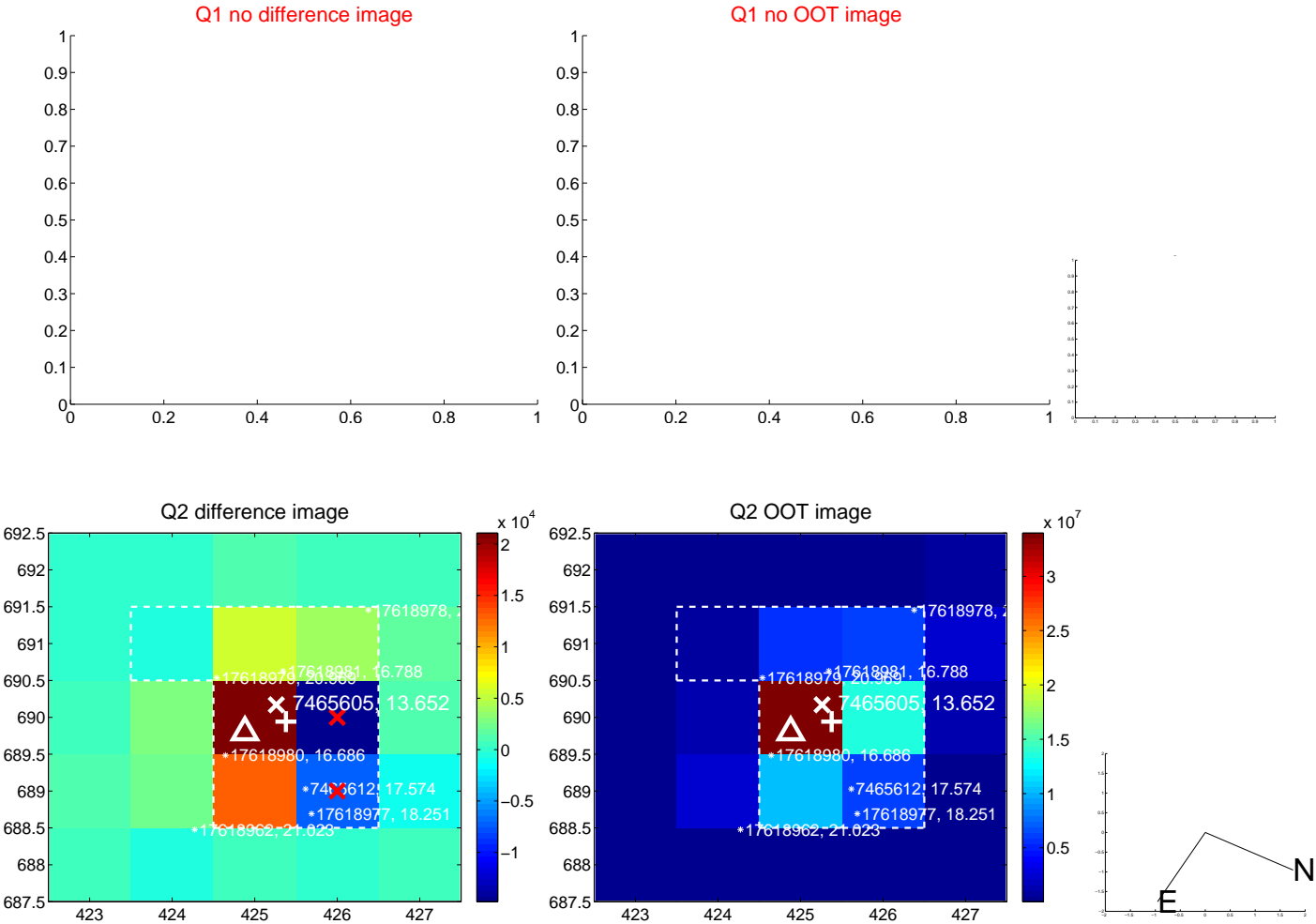
The direct PRF centroid is offset from the target star catalog position by about 1.26 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.235 ± 0.328	0.72	0.000 ± 0.399	-0.235 ± 0.328
PRF-fit source offset from KIC position	0.928 ± 0.371	2.50	0.614 ± 0.436	0.695 ± 0.310
photometric centroid source offset	2.32 ± 0.88	2.62	0.78 ± 0.85	2.18 ± 0.89

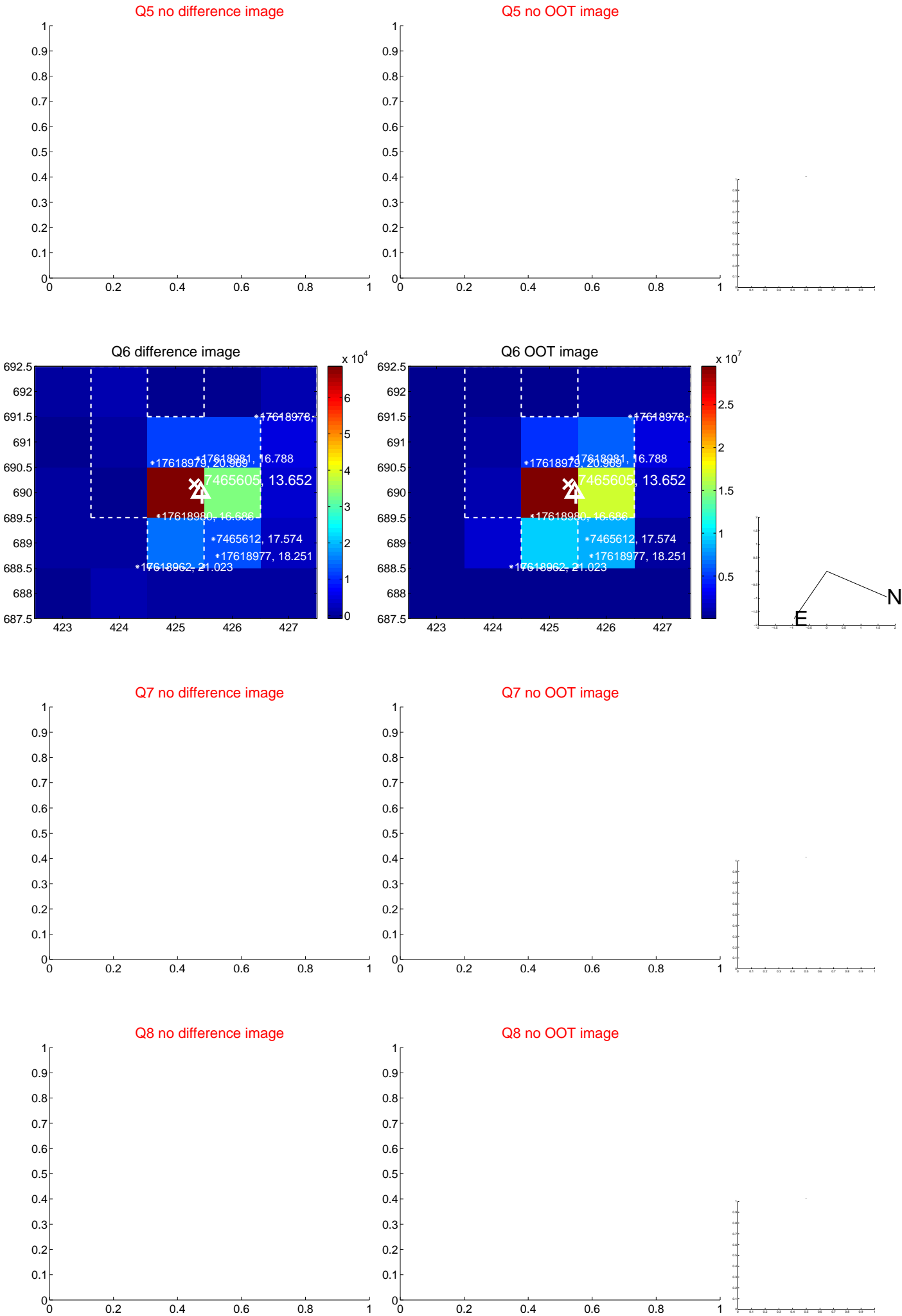


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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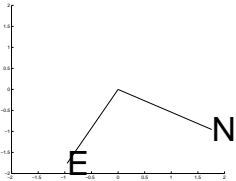
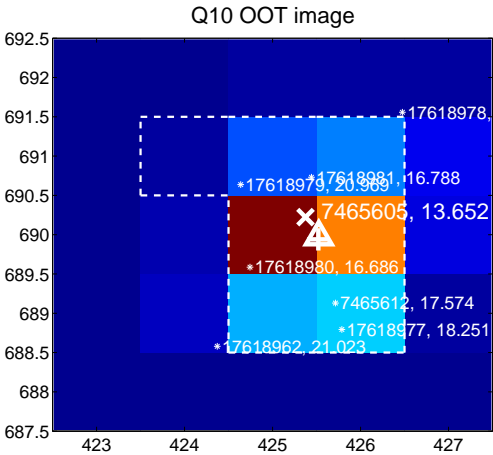
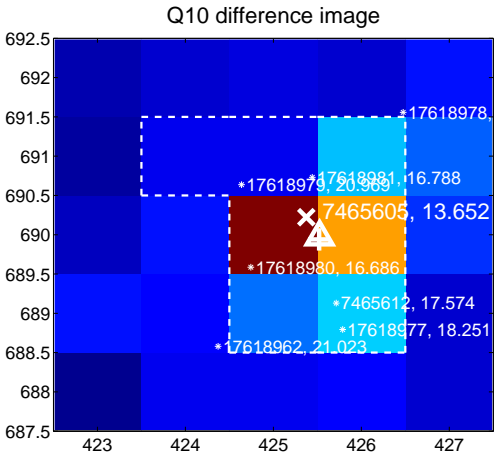


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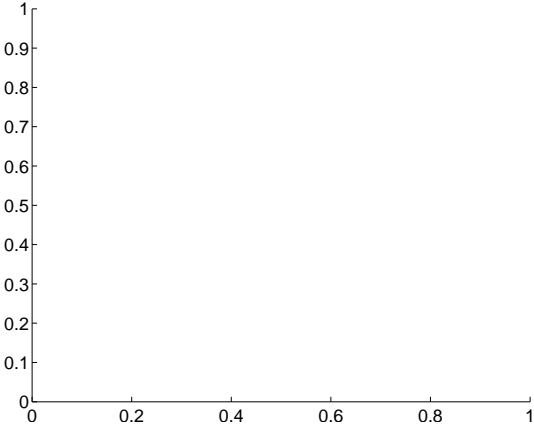
Q9 no difference image



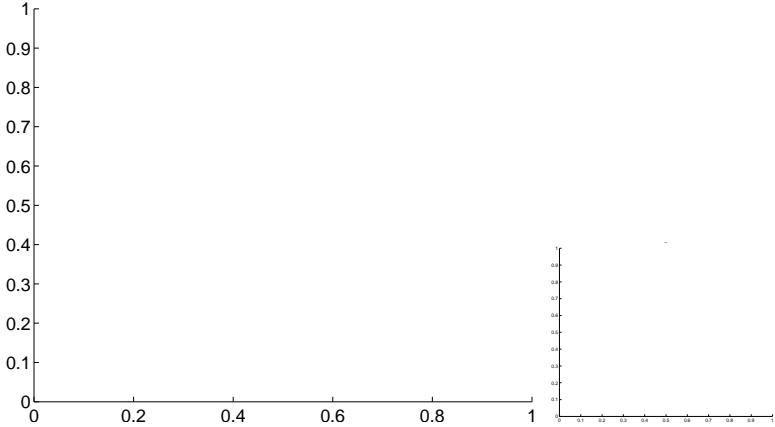
Q9 no OOT image



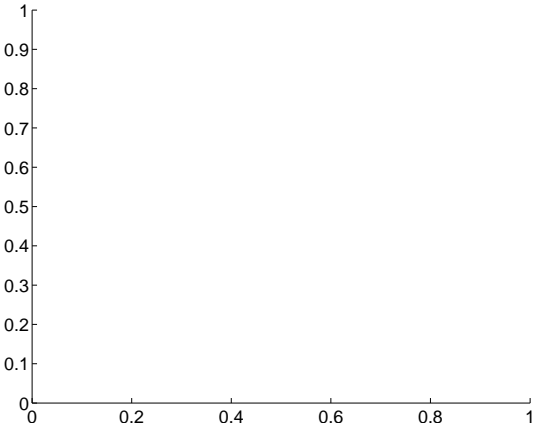
Q11 no difference image



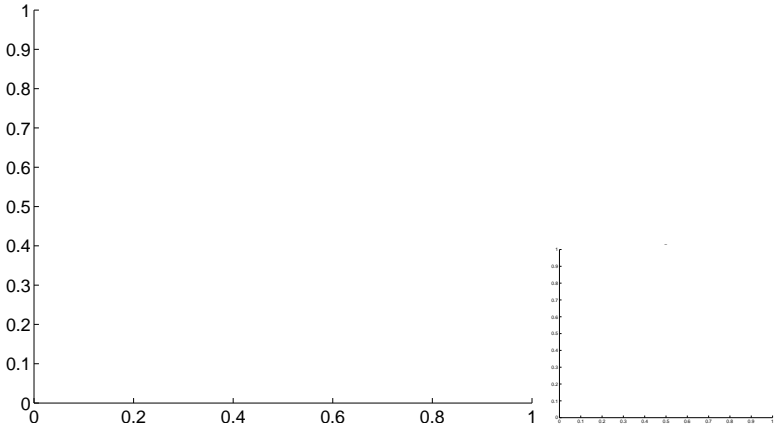
Q11 no OOT image



Q12 no difference image



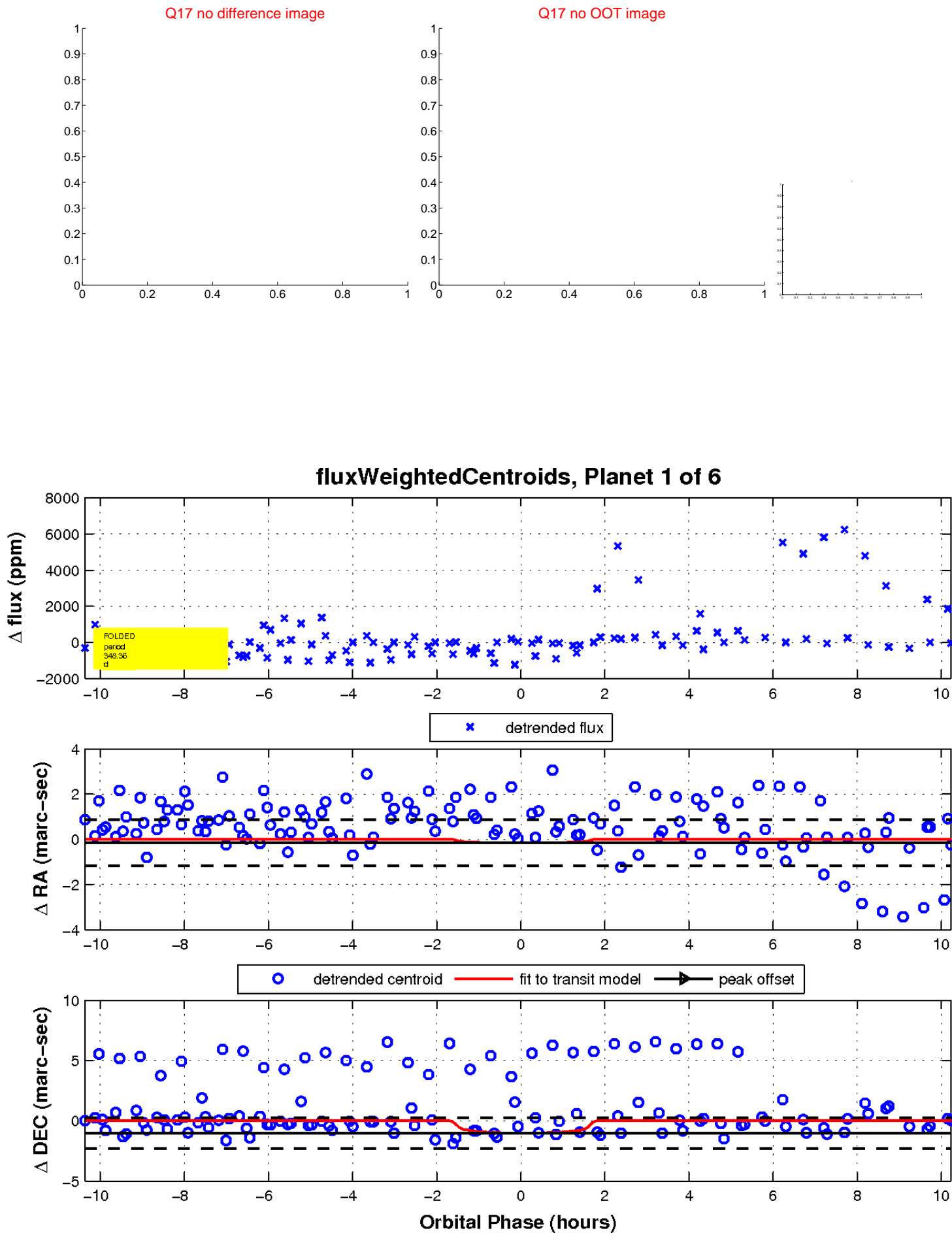
Q12 no OOT image



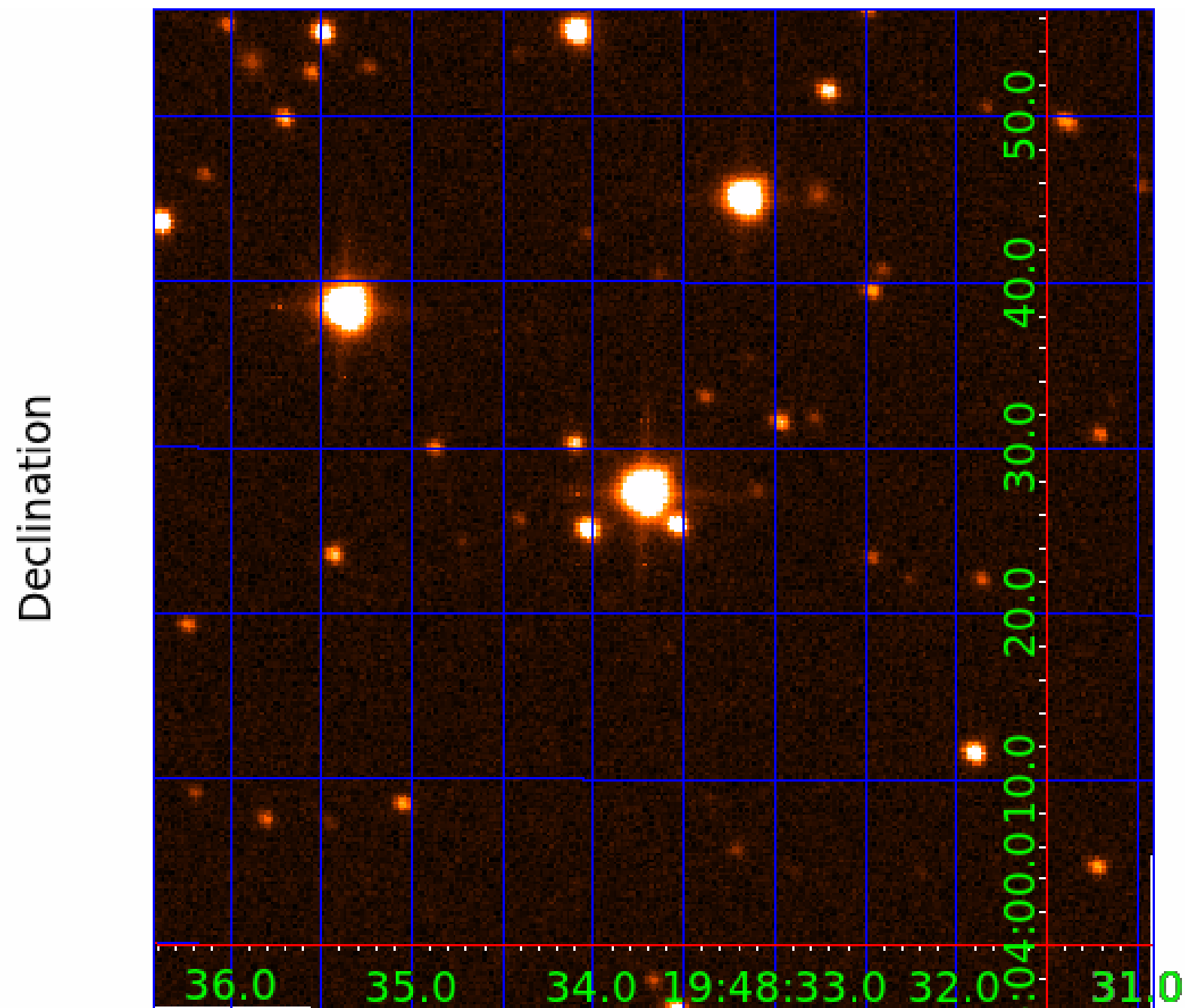
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UKIRT Image



KIC 007465605

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

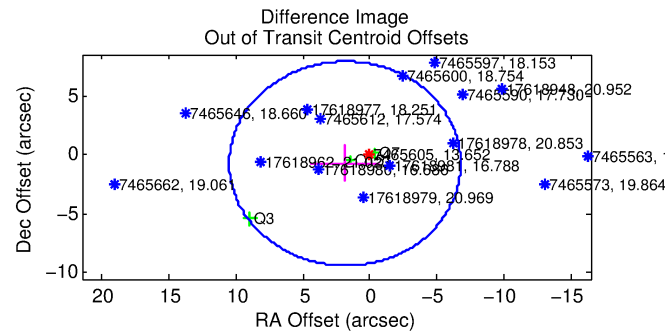
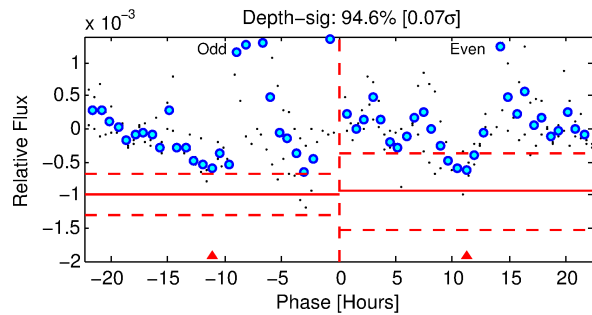
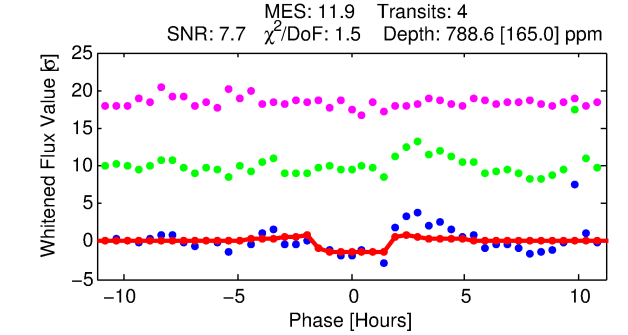
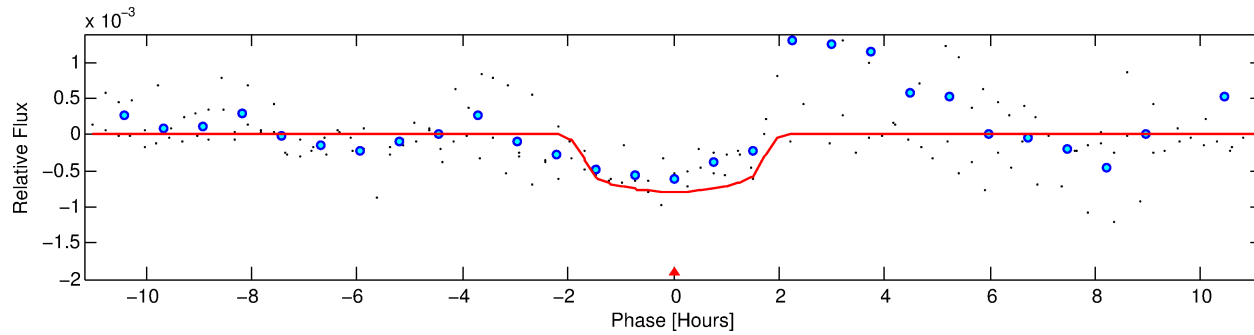
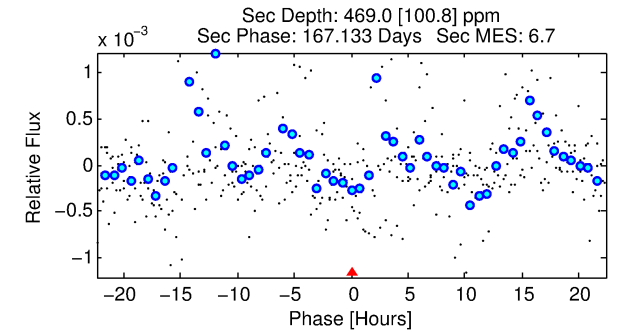
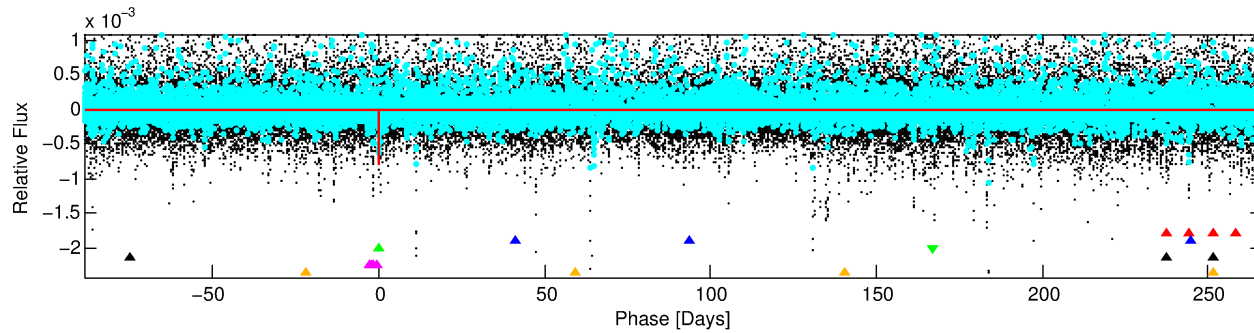
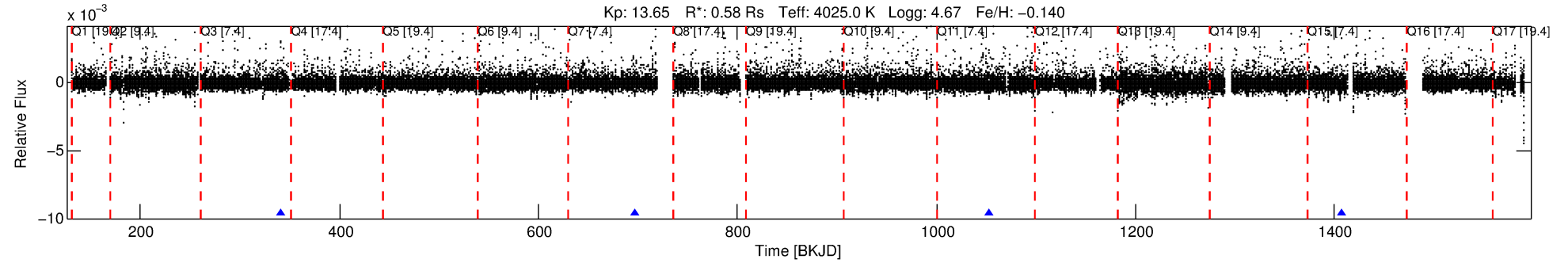
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 007465605-03

No Significant Match Found

DV One-Page Summary

KIC: 7465605 Candidate: 3 of 6 Period: 355.208 d



DV Fit Results:

Period = 355.20784 [0.00486] d
Epoch = 341.6903 [0.0090] BKJD
Rp/R* = 0.0270 [0.0436]
a/R* = 586.28 [3747.75]
b = 0.64 [6.03]
Seff = 0.12 [0.02]
Teq = 149 [8] K
Rp = 1.70 [2.75] Re
a = 0.8143 [0.0806] AU
Ag = 59403.37 [192766.21] [0.31σ]
Teffp = 3608 [2928] K [1.18σ]

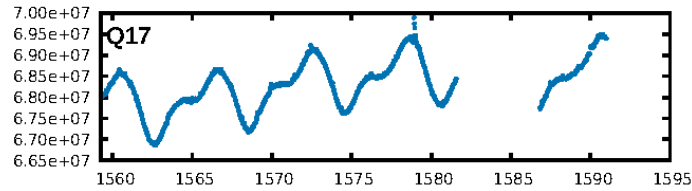
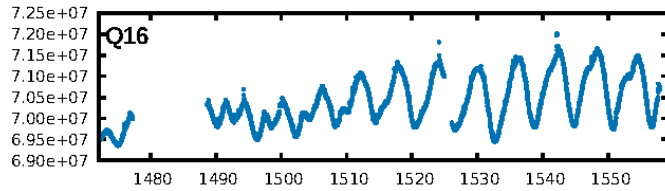
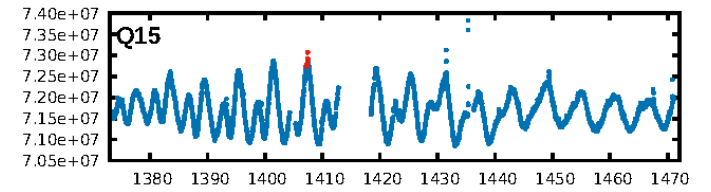
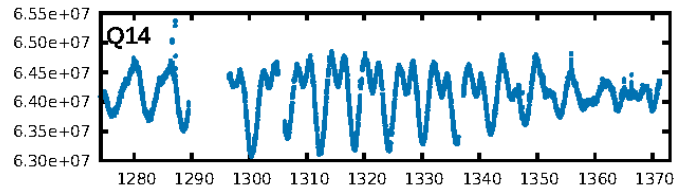
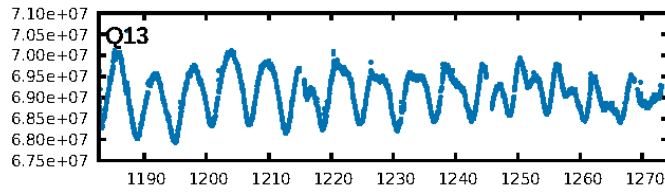
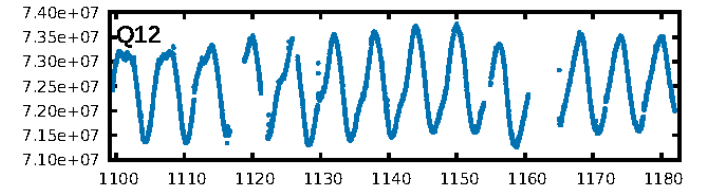
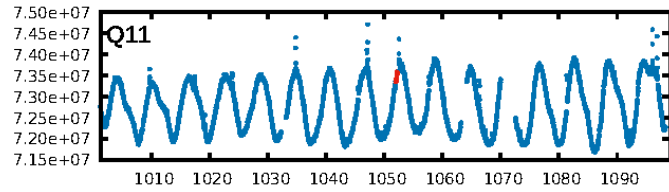
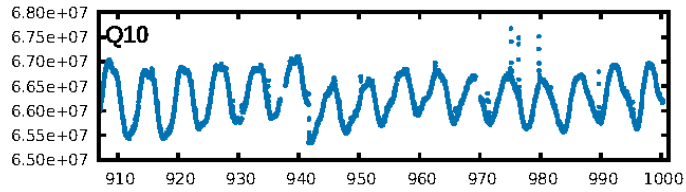
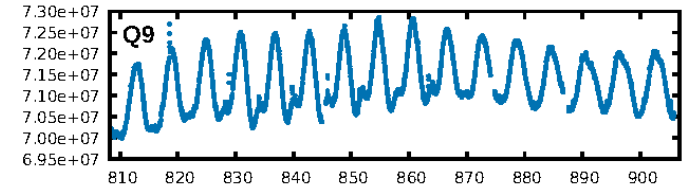
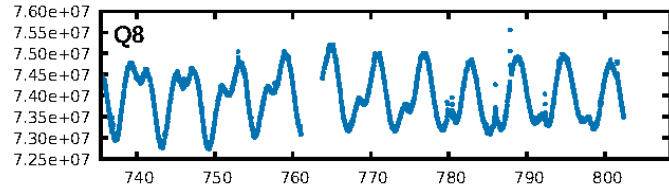
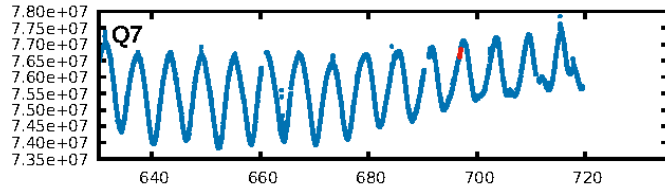
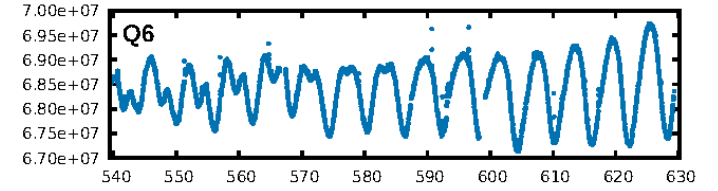
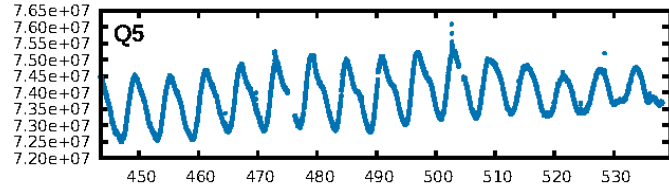
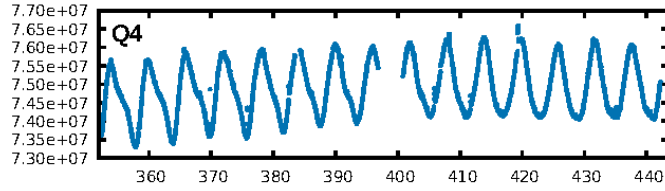
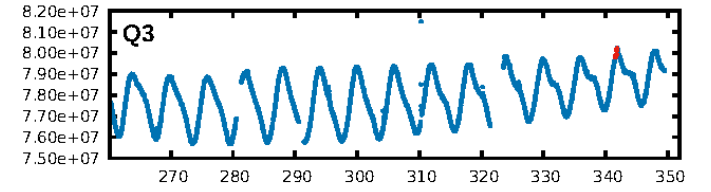
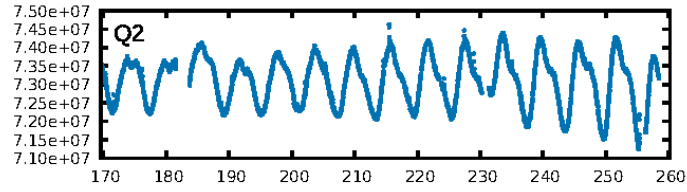
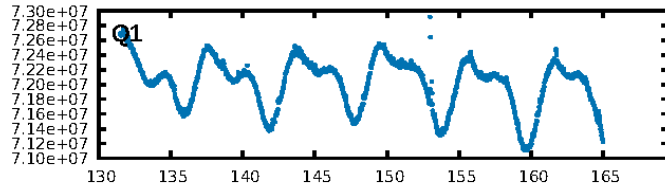
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [3.85σ]
LongPeriod-sig: 100.0% [40.44σ]
ModelChiSquare2-sig: 12.4%
ModelChiSquareGof-sig: 63.5%
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [4/4]
GhostDiagnostic-chr: 3.13
Centroid-sig: 91.4%
Centroid-so: 1.149 arcsec [1.75σ]
OotOffset-rm: 1.994 arcsec [0.69σ]
KicOffset-rm: 2.861 arcsec [1.25σ]
OotOffset-st: 0/3/0/0 [3]
KicOffset-st: 0/3/0/0 [3]
DiffImageQuality-fgm: 0.33 [1/3]
DiffImageOverlap-fno: 1.00 [4/4]

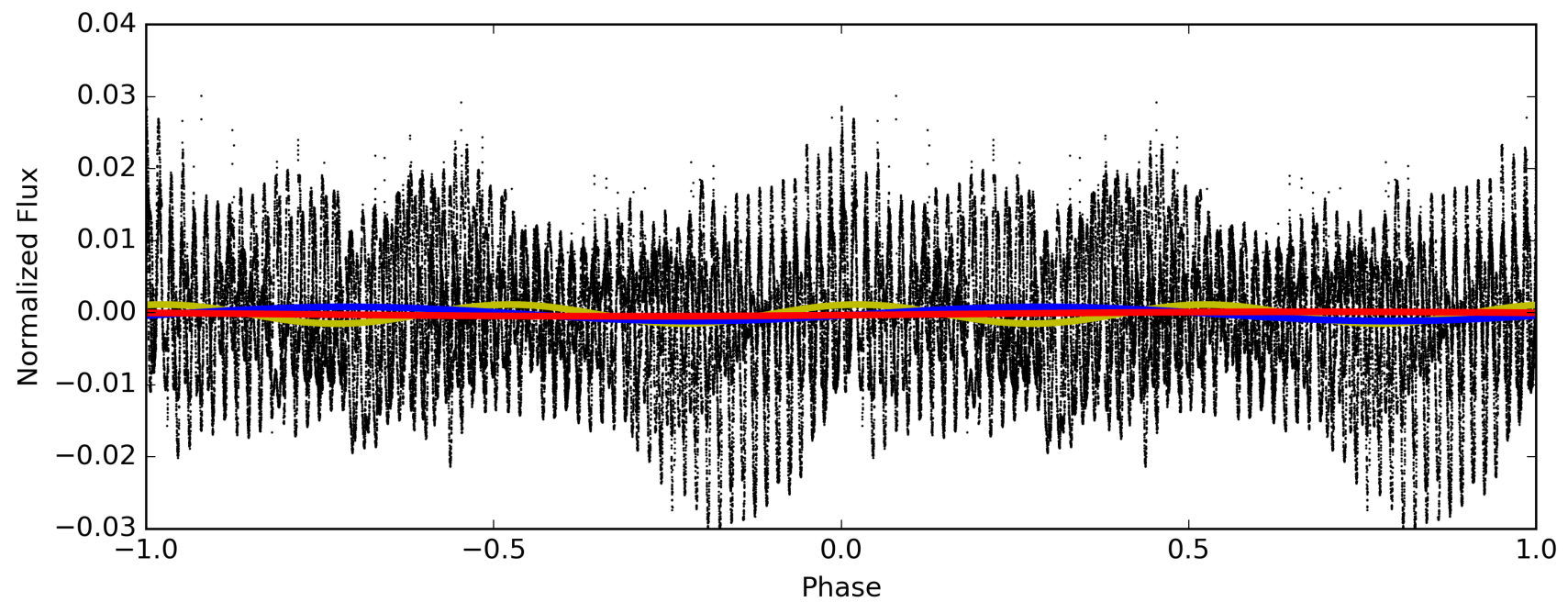
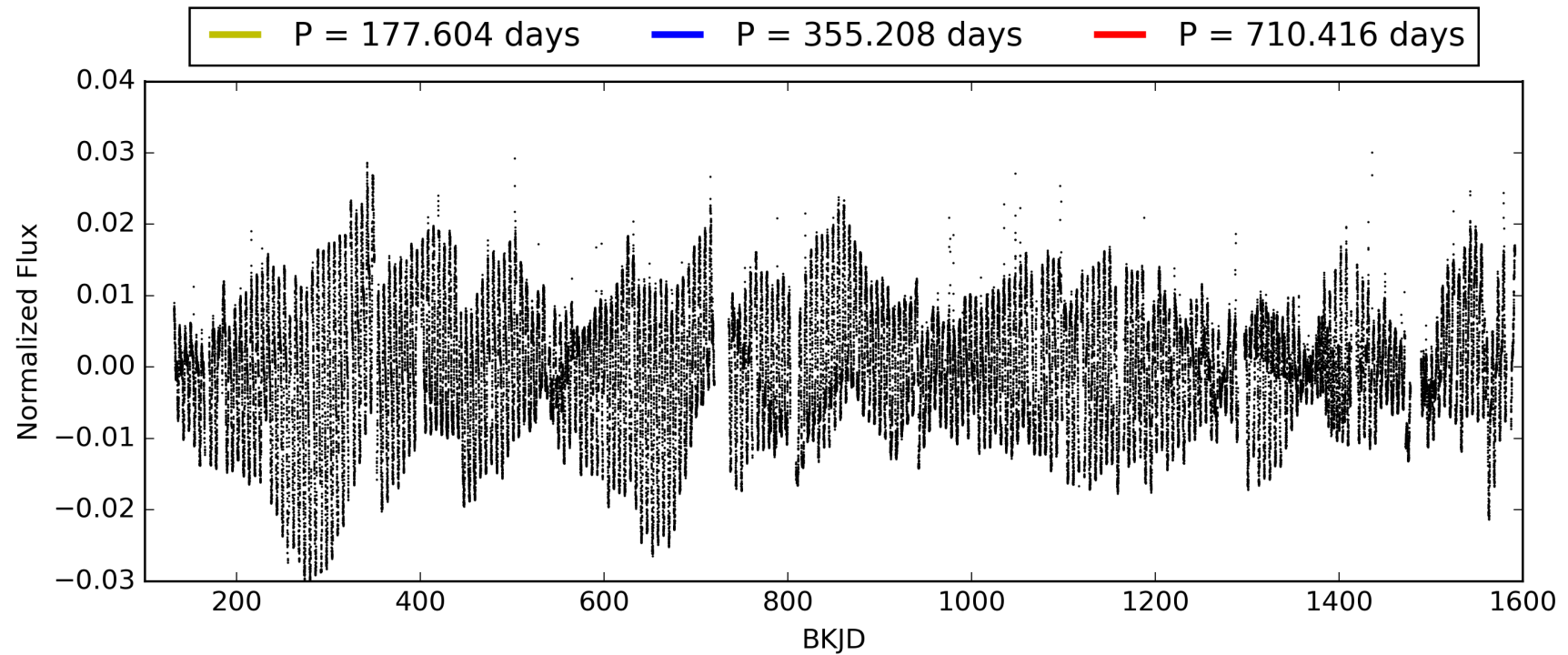
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 01-Feb-2016 05:54:03 Z

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

TCE 007465605-03, PDC Light Curves

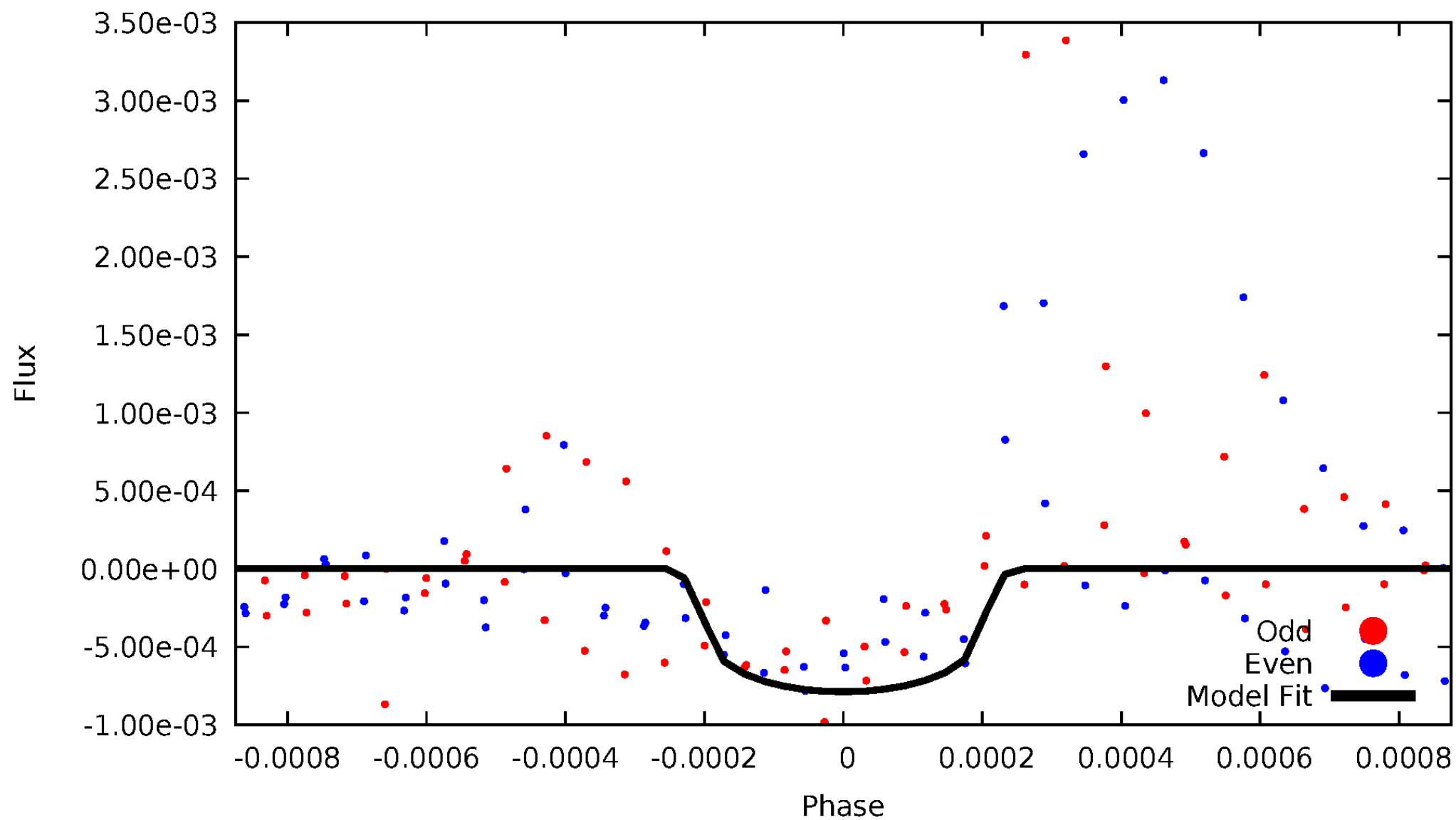


TCE 007465605-03



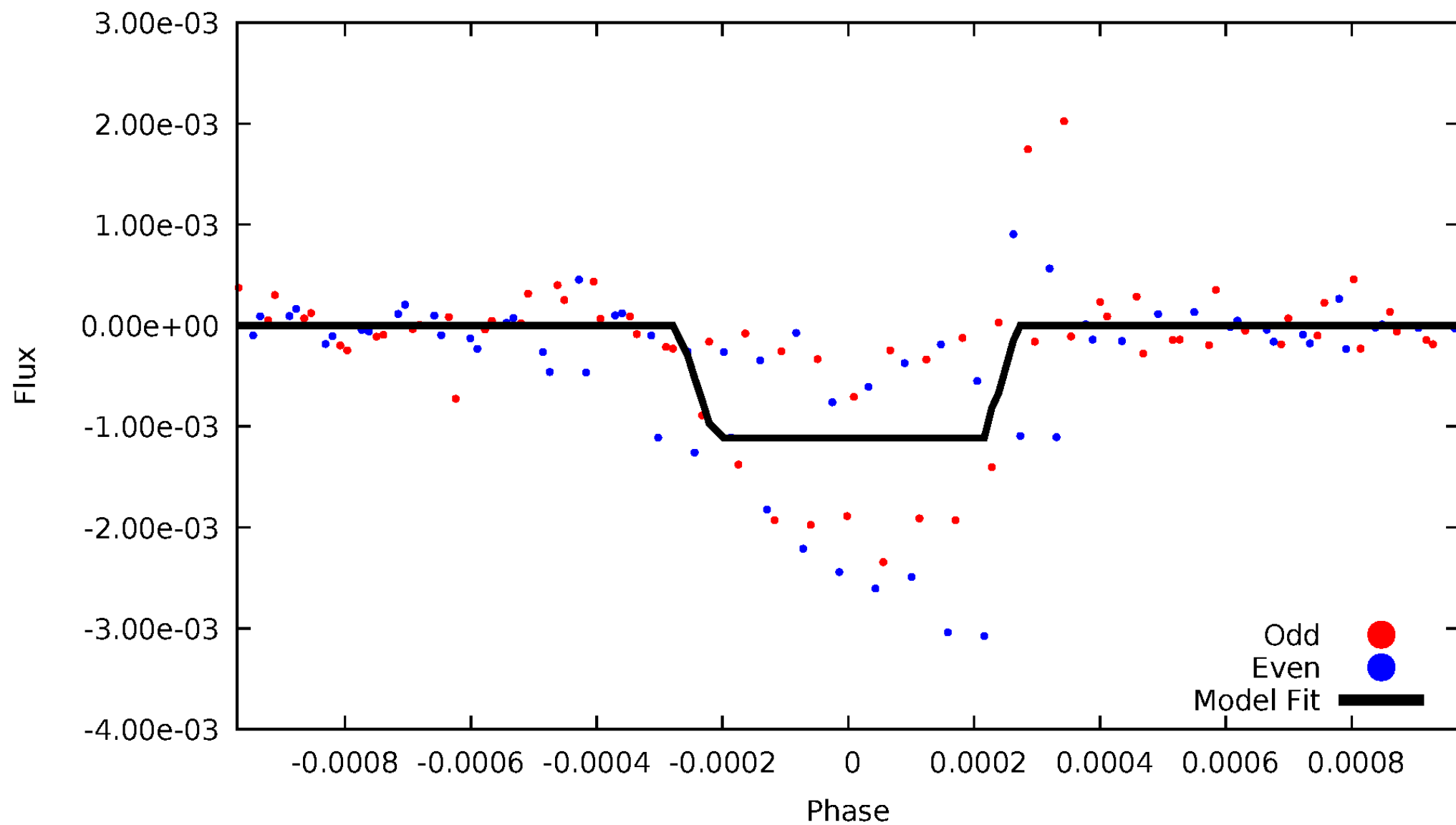
DV Odd/Even

TCE 007465605-03



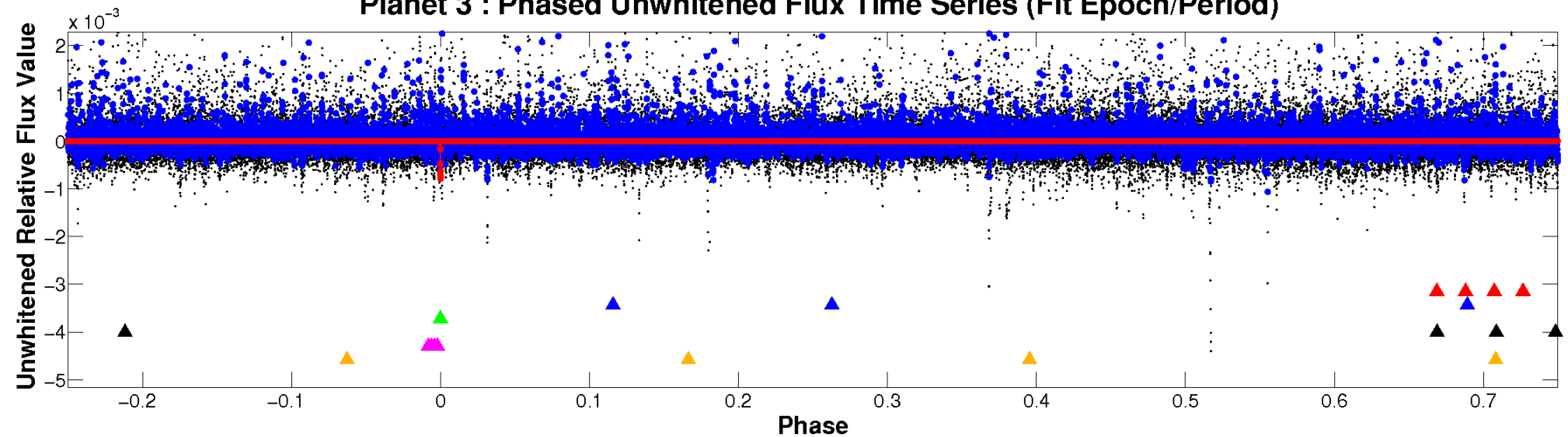
ALT Odd/Even

TCE 007465605-03

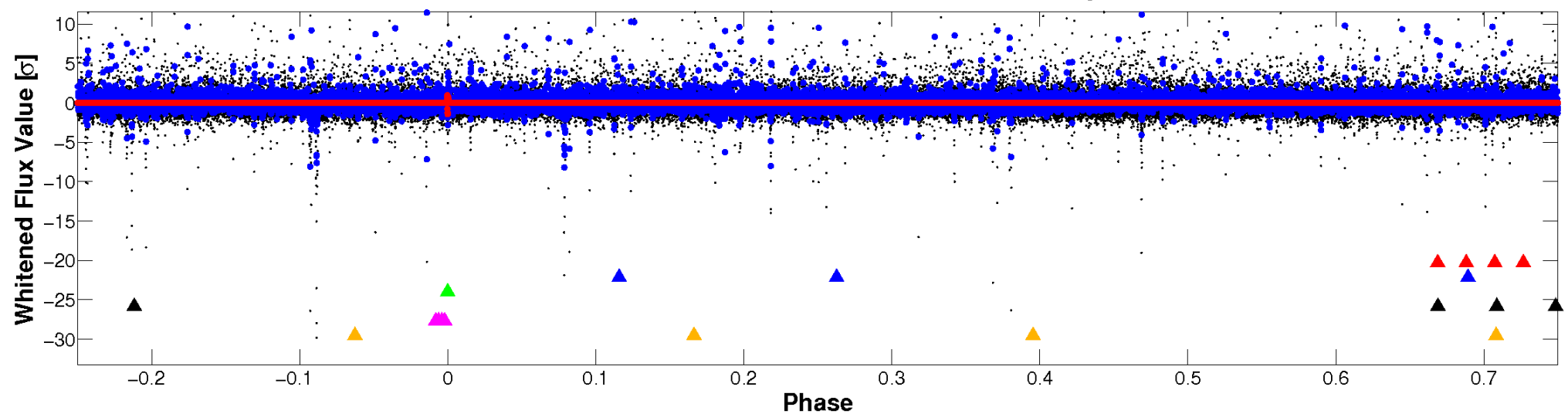


Non-Whitened Vs. Whitened Light Curve

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

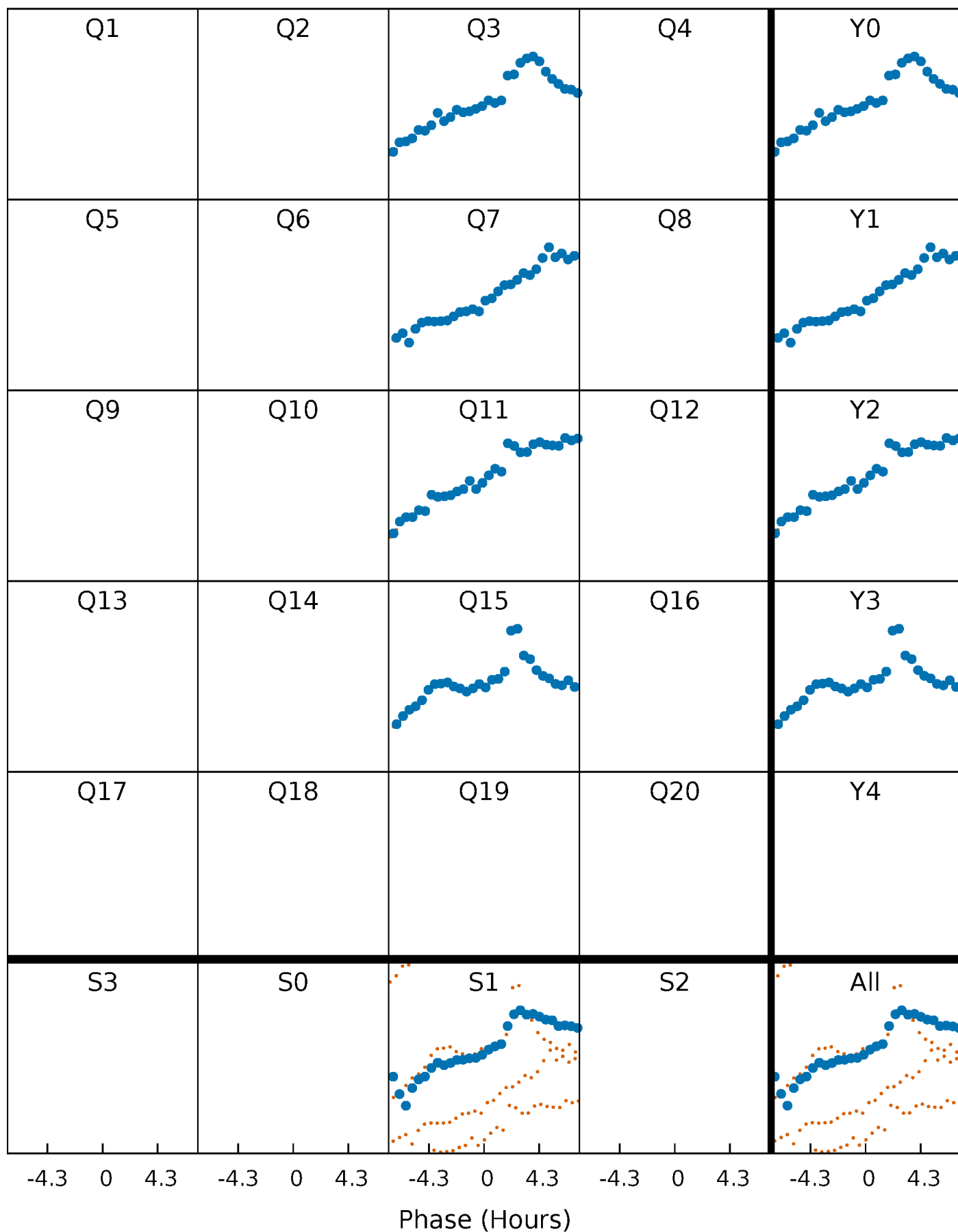


Planet 3 : Phased Whitened Flux Time Series (Fit Epoch/Period)



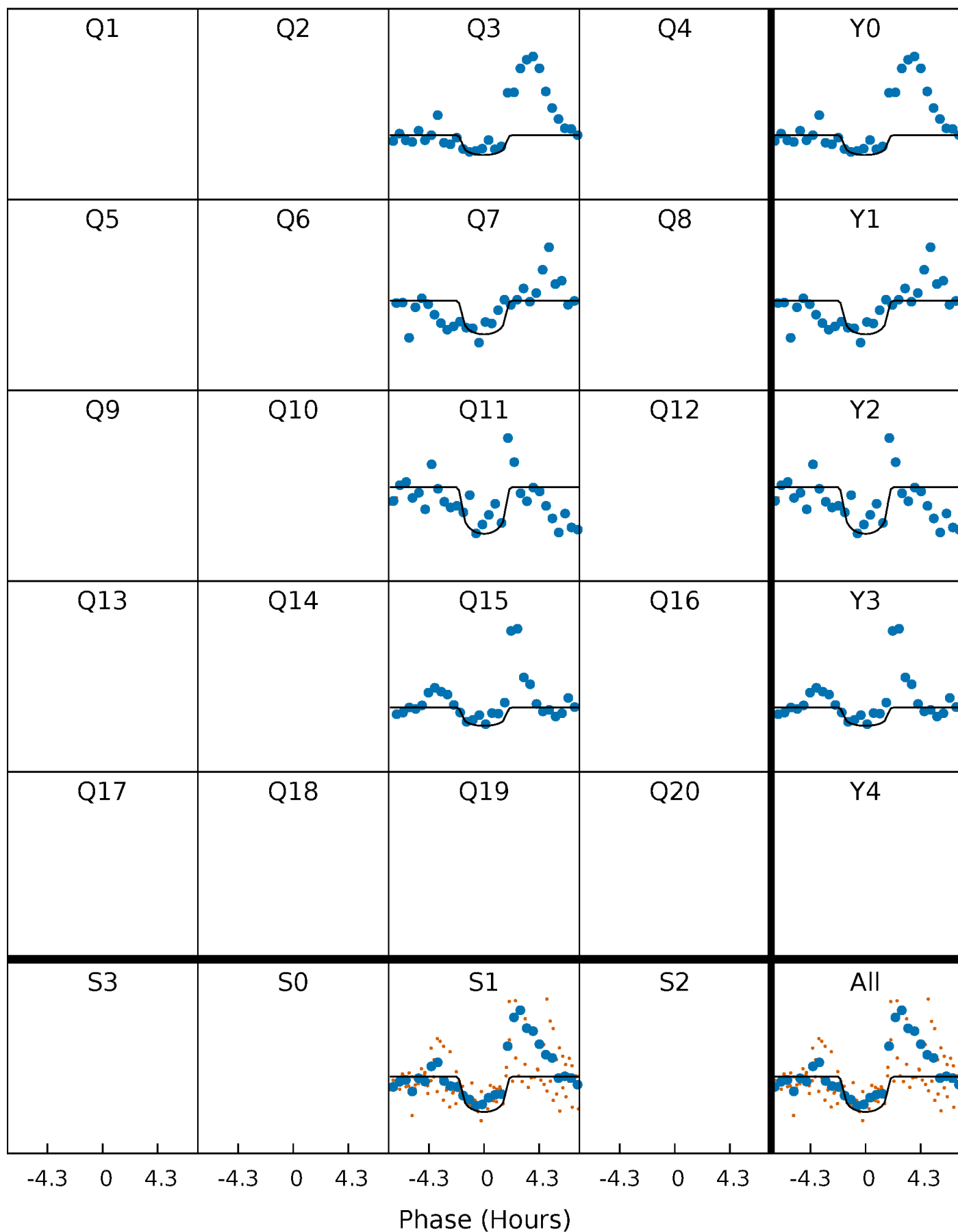
PDC Quarter-Phased Transit Curves

TCE 007465605-03 P=355.207838 Days $T_0=341.690339$ (BKJD)



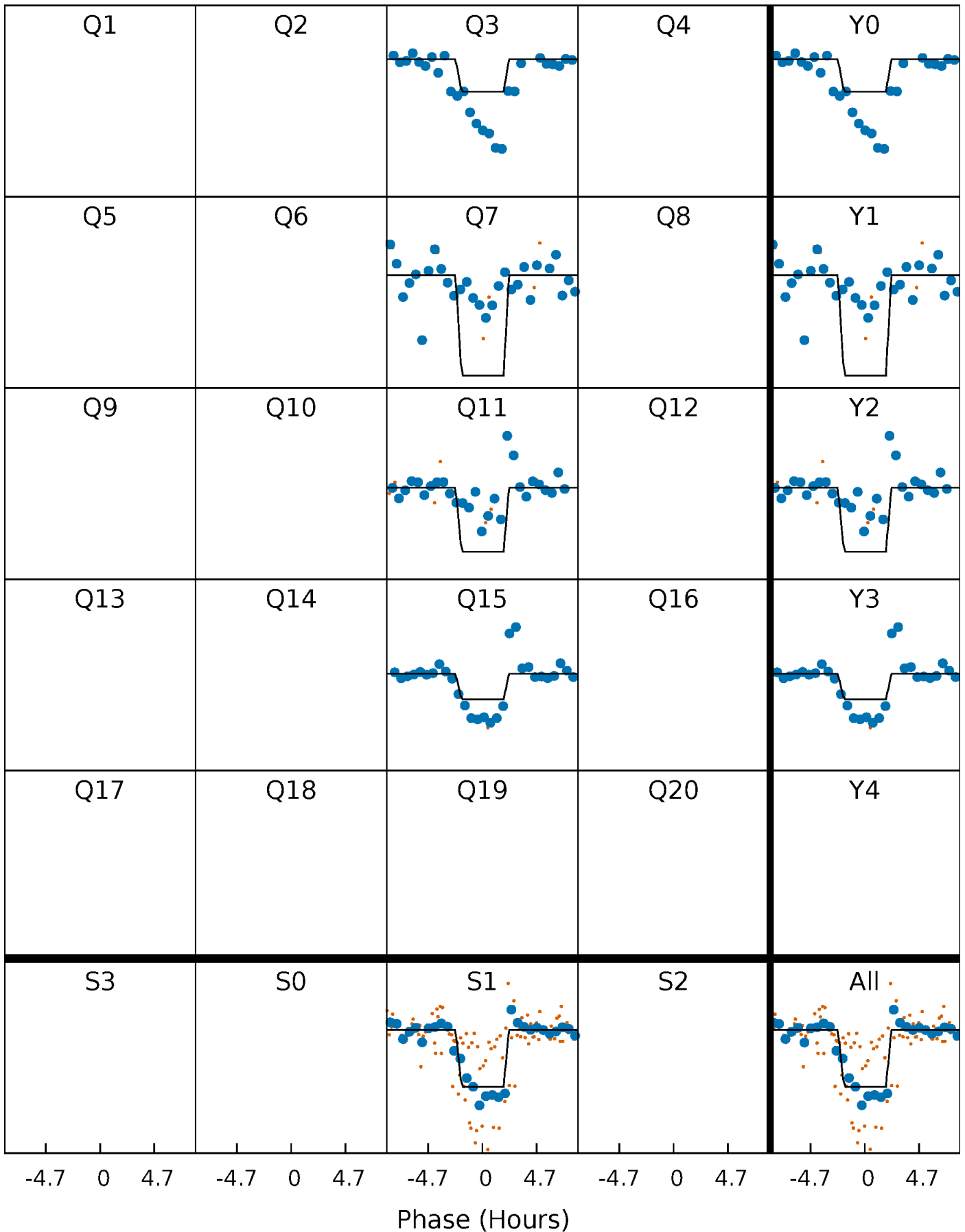
DV Quarter-Phased Transit Curves

TCE 007465605-03 $P=355.207838$ Days $T_0=341.690339$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

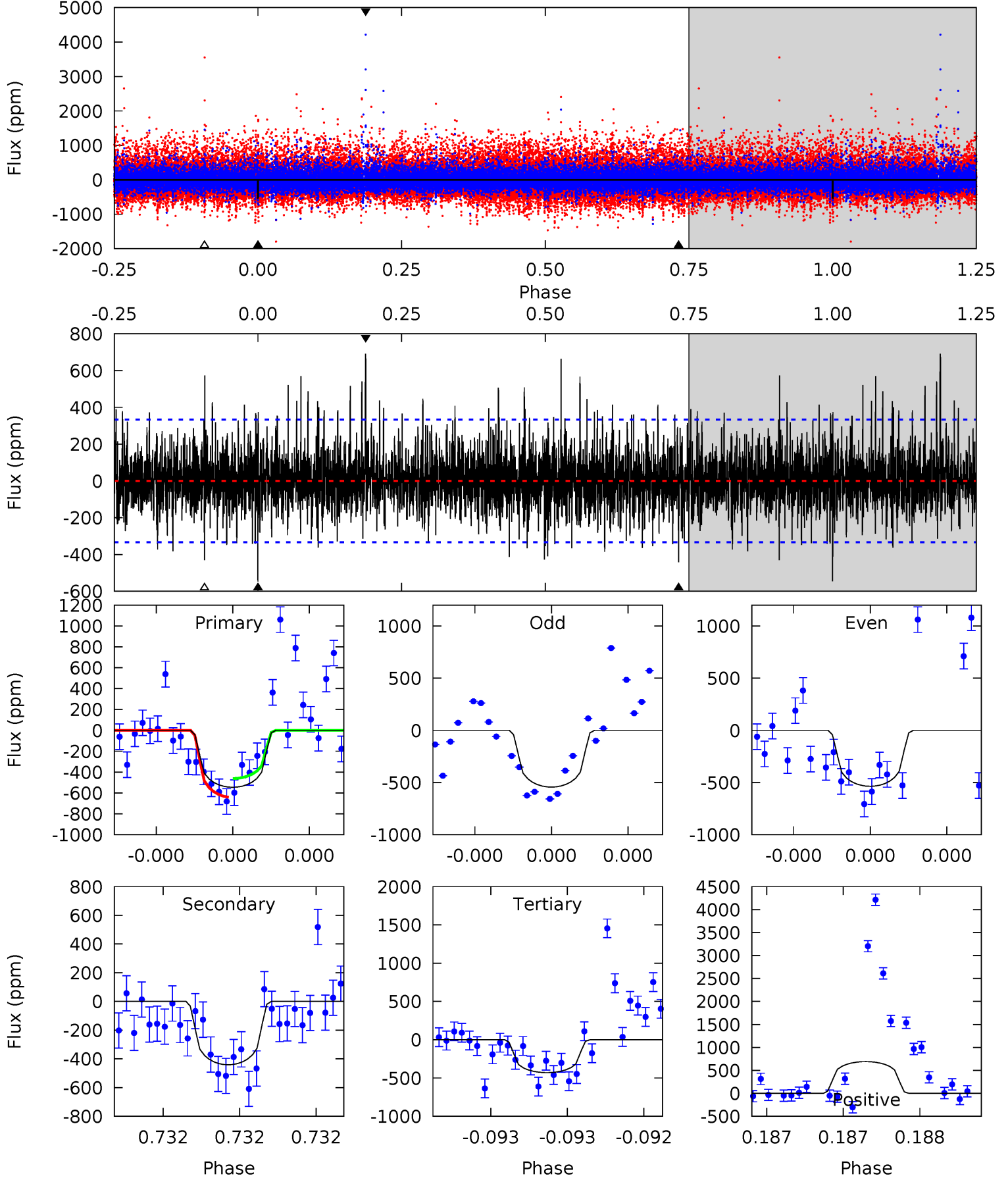
TCE 007465605-03 $P=355.210196$ Days $T_0=341.675205$ (BKJD)



DV Model-Shift Uniqueness Test

007465605-03, P = 355.207838 Days, E = 341.690339 Days

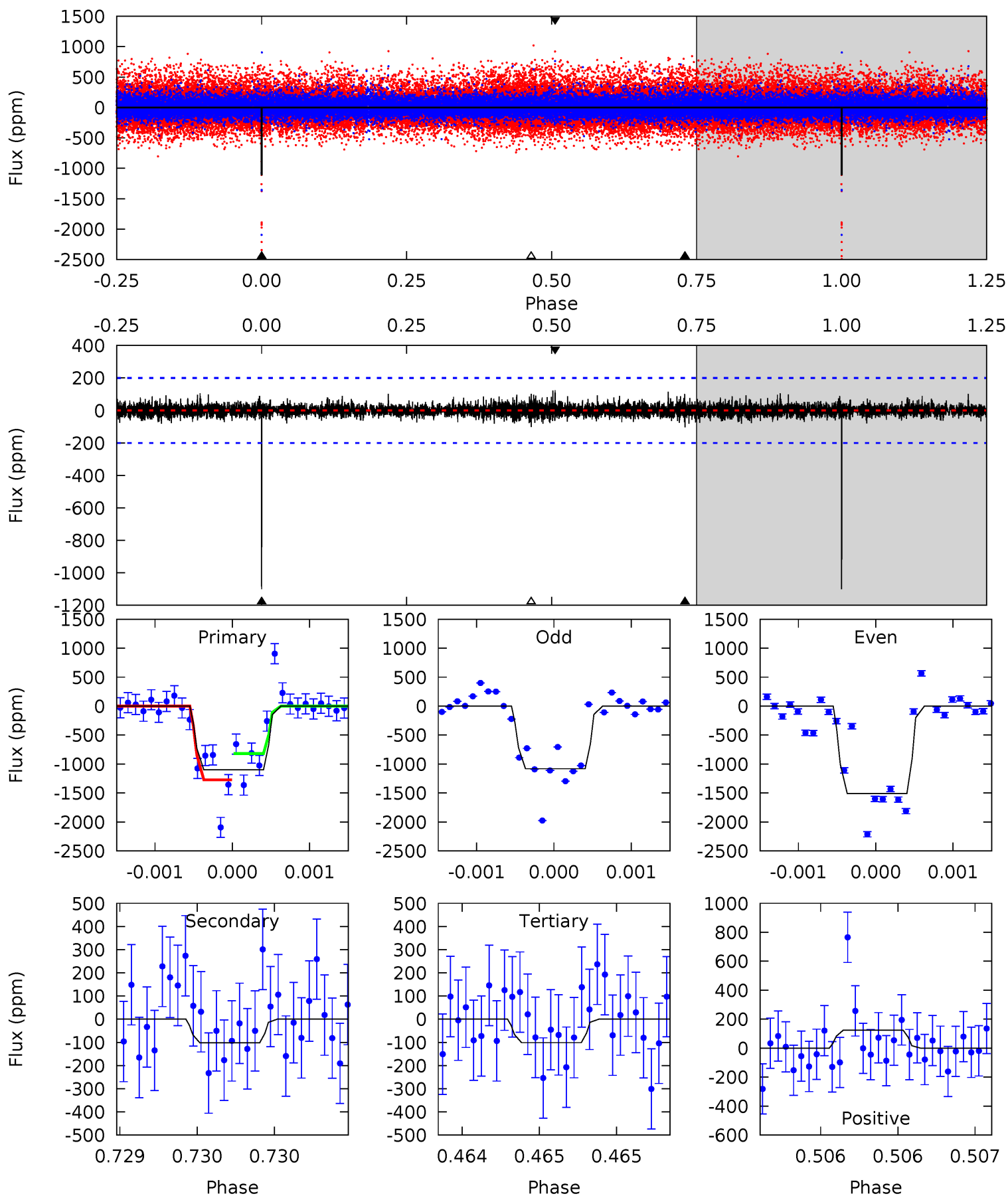
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
9.15	7.39	7.21	11.6	5.59	3.50	2.02	1.94	-2.44	0.19	-4.19	0.06	1.01	0.56	1.51



Alt Model-Shift Uniqueness Test

007465605-03, P = 355.210196 Days, E = 341.675205 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
30.6	2.85	2.81	3.47	5.57	3.48	0.61	27.8	27.1	0.04	-0.62	6.22	1.08	0.10	6.09



Stellar Parameters For KIC 007465605

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	M (M_{\odot})	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	4025^{+125}_{-153}	$4.672^{+0.065}_{-0.025}$	$-0.140^{+0.300}_{-0.300}$	$0.577^{+0.045}_{-0.074}$	$0.570^{+0.059}_{-0.065}$	$4.191^{+1.370}_{-0.512}$
	+3%/-4%	+1%/-1%	+214%/-214%	+8%/-13%	+10%/-11%	+33%/-12%
Source	KIC0	KIC0	KIC0	DSEP		

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

Secondary Eclipse Parameters for KIC 007465605-03 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-441 ± 60	$2.64^{+2.11}_{-1.86}$	206^{+8}_{-9}	3168^{+1685}_{-460}	$22729^{+222110}_{-15488}$
Alt.	-102 ± 36	$2.80^{+2.34}_{-1.84}$	207^{+8}_{-8}	2564^{+907}_{-360}	4326^{+34637}_{-3120}

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 $A_{obs} \gg 1.0$

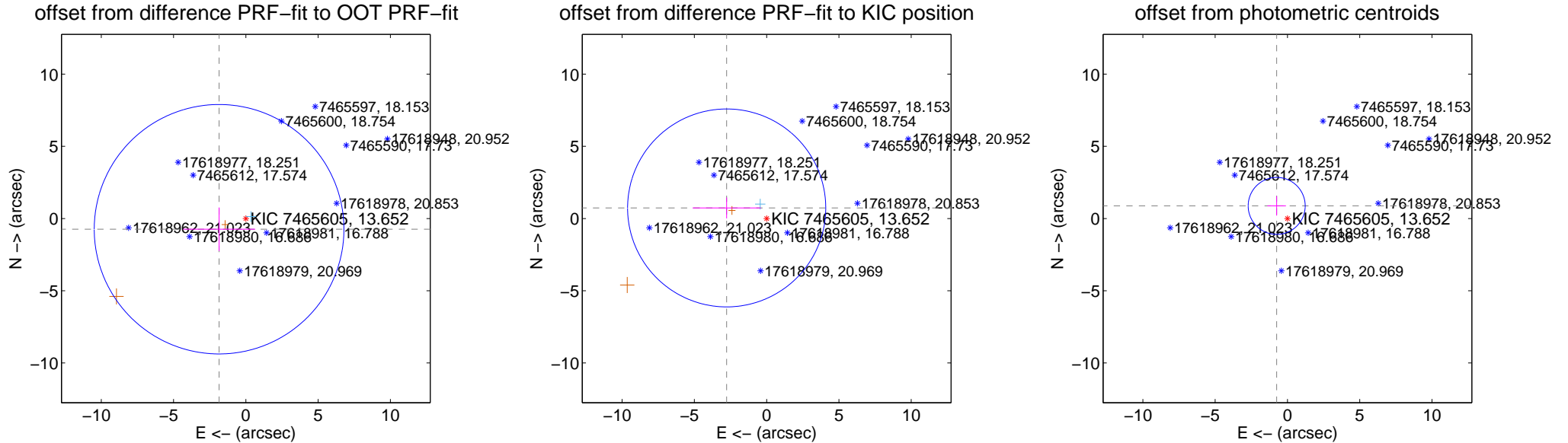
DV Centroid Data

Supplemental centroid analysis for 007465605-03. Kepler magnitude: 13.65. Transit SNR 7.67

There are 1 quarters with good PRF difference image offsets

The direct PRF centroid is offset from the target star catalog position by about 1.37 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	1.994 ± 2.879	0.69	1.851 ± 2.502	-0.741 ± 1.504
PRF-fit source offset from KIC position	2.861 ± 2.285	1.25	2.765 ± 2.356	0.734 ± 0.726
photometric centroid source offset	1.15 ± 0.66	1.75	0.74 ± 0.64	0.88 ± 0.67



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

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

Q1 no difference image



Q1 no OOT image



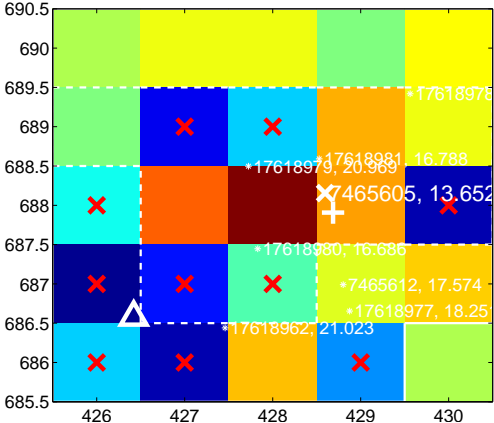
Q2 no difference image



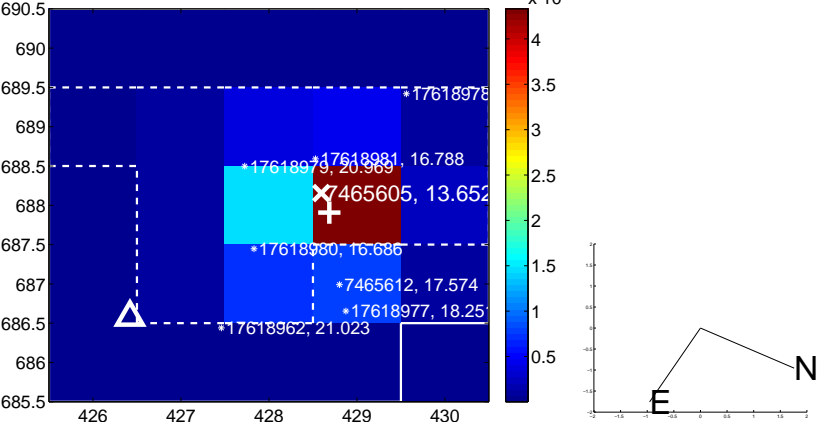
Q2 no OOT image



Q3 difference image. Poor Quality



Q3 OOT image



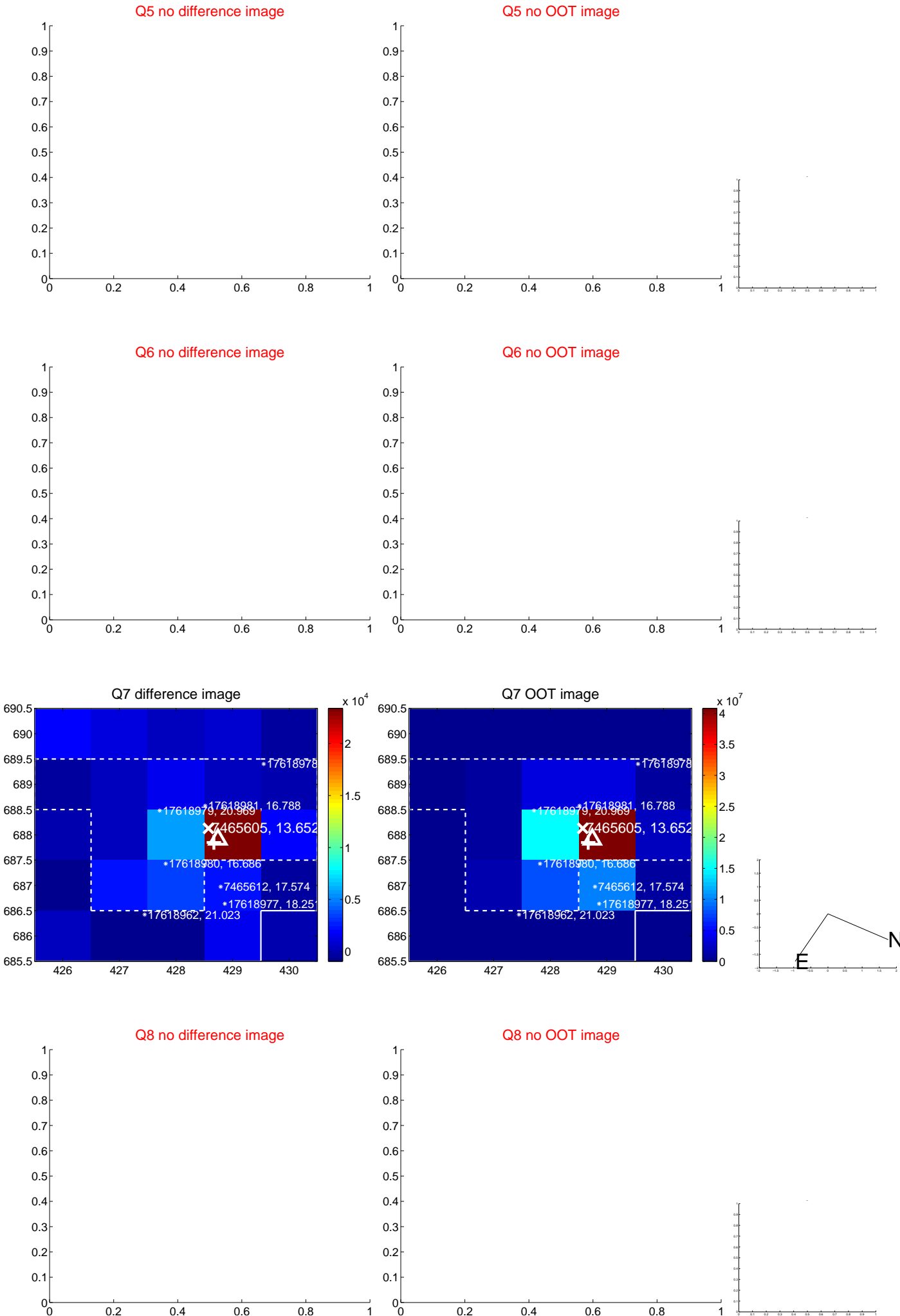
Q4 no difference image



Q4 no OOT image



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



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

Q9 no difference image



Q9 no OOT image



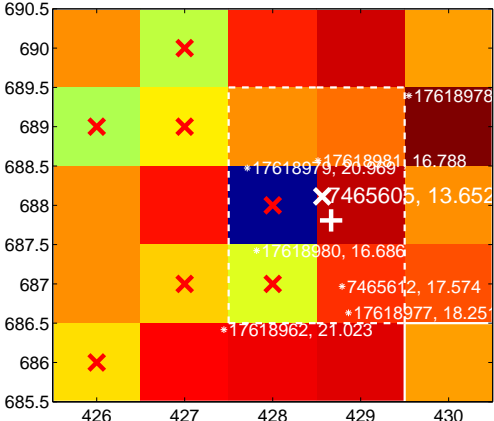
Q10 no difference image



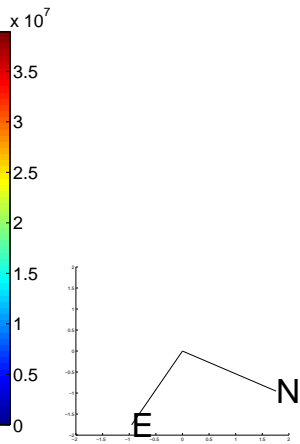
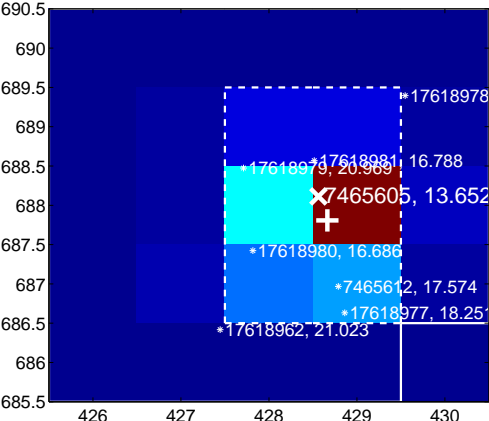
Q10 no OOT image



Q11 difference image. Poor Quality



Q11 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



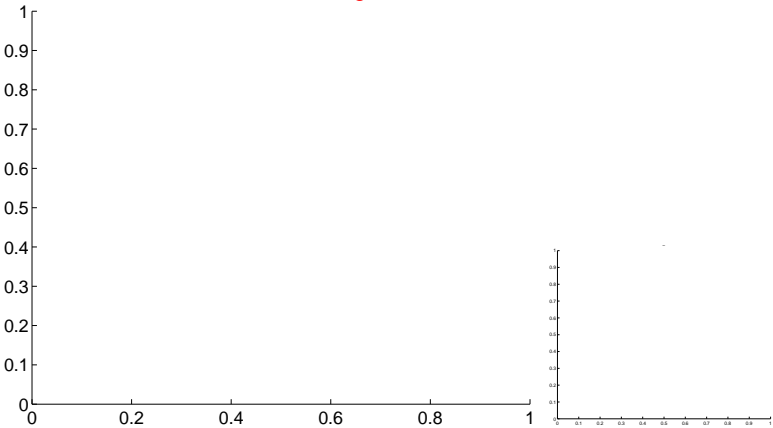
Q13 no OOT image



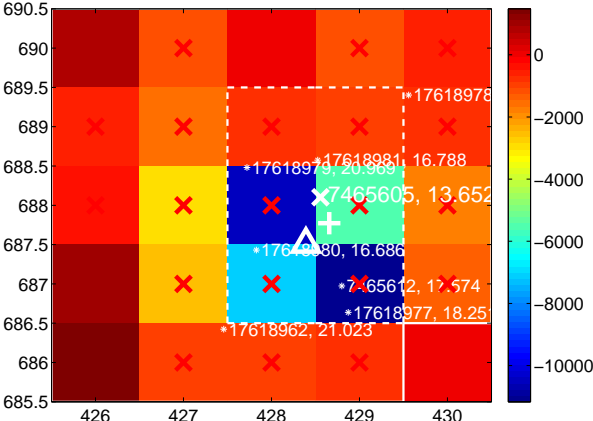
Q14 no difference image



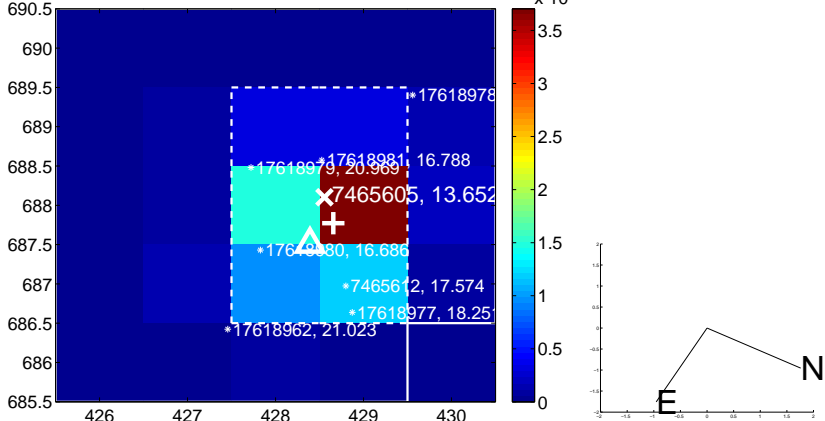
Q14 no OOT image



Q15 difference image. Poor Quality



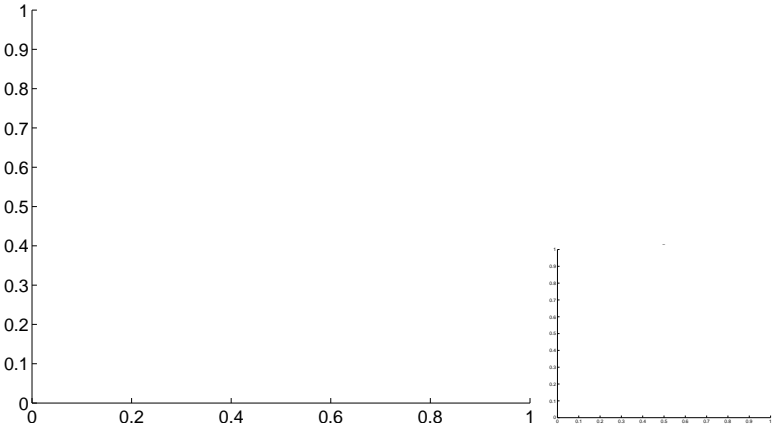
Q15 OOT image



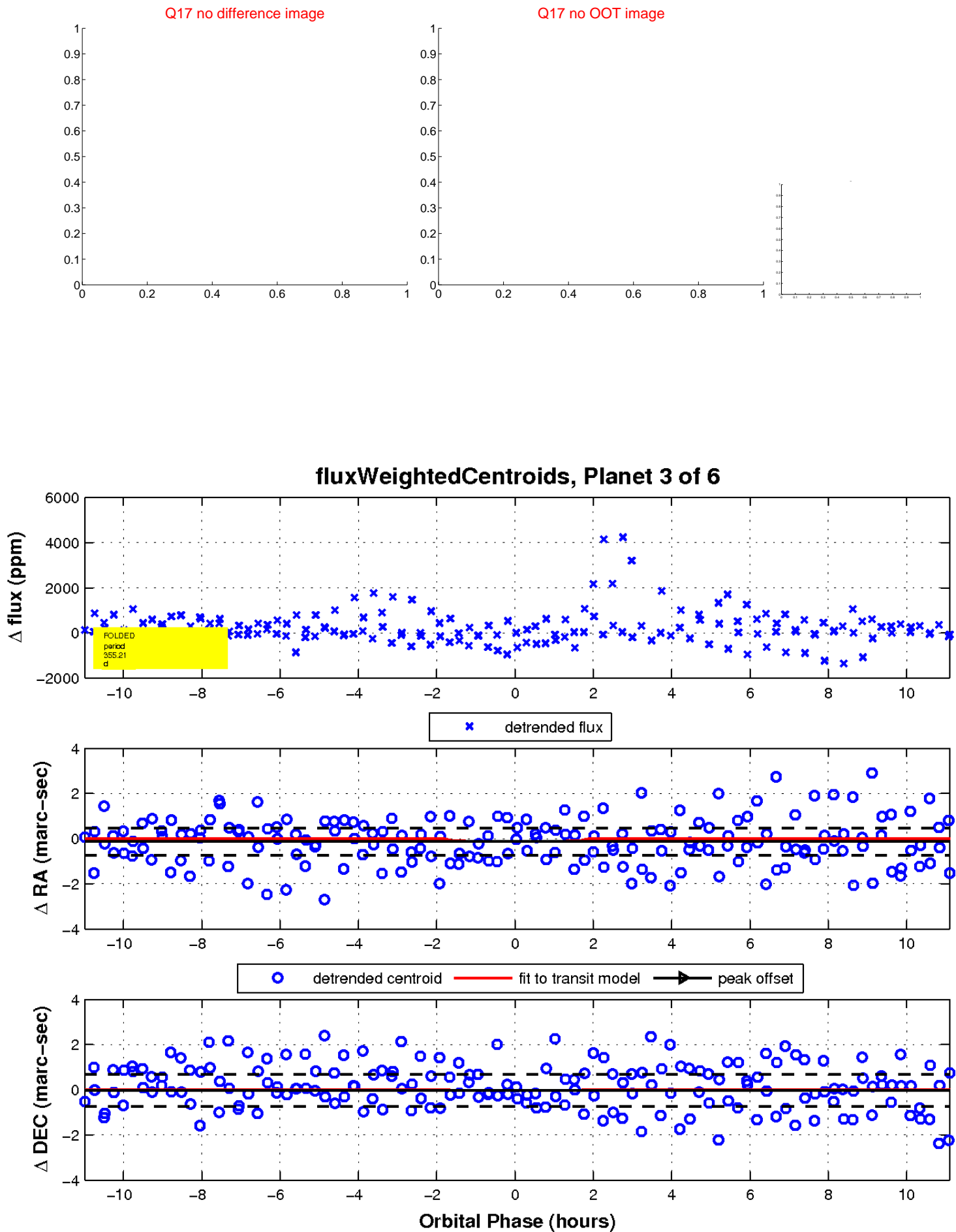
Q16 no difference image



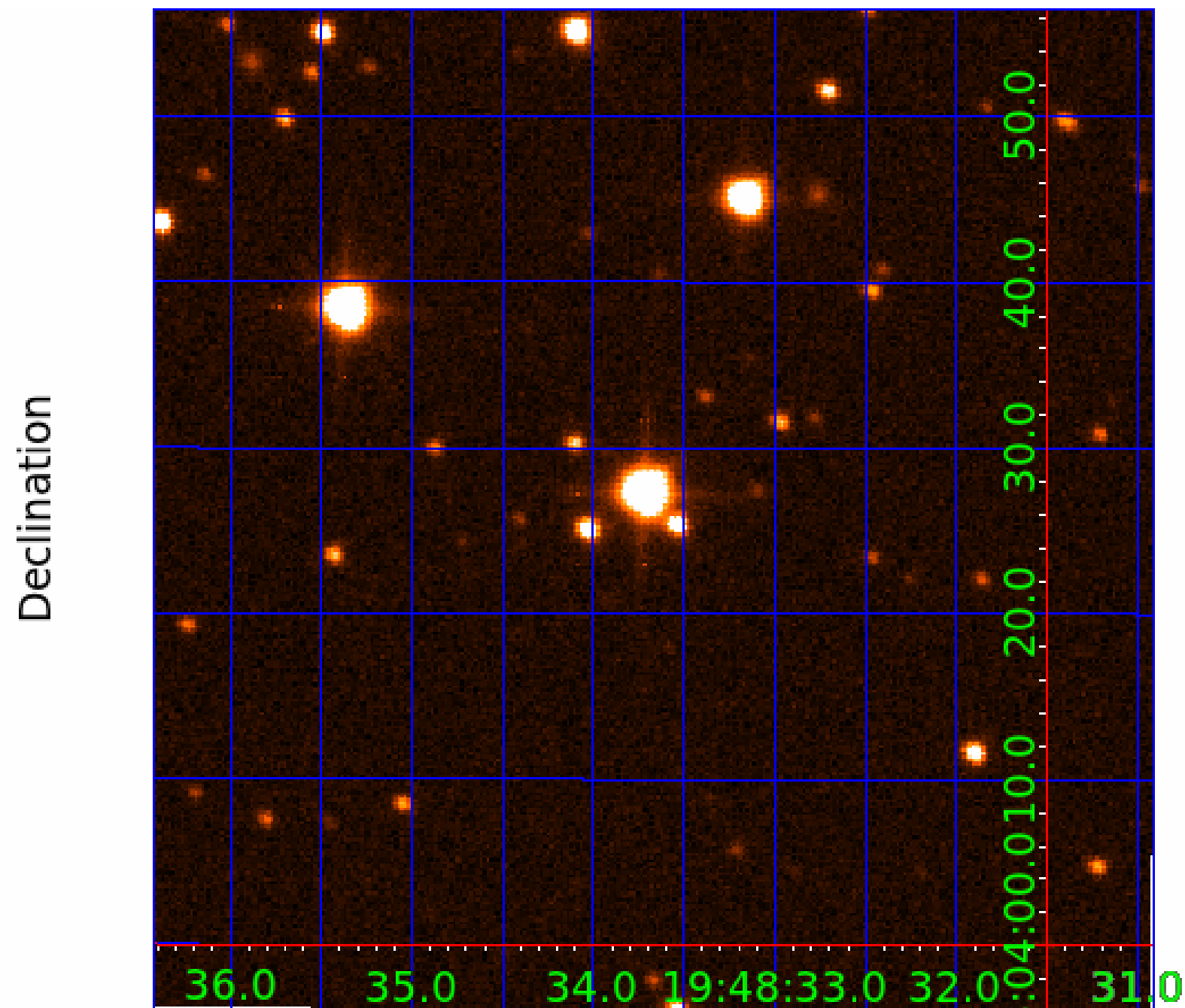
Q16 no OOT image



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



UKIRT Image



KIC 007465605

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})
007465605-01	OBS	No	348.355246	244.599308	768.5	3.456	17.3	5.7	0.58	4025	1.77	0.12
007465605-03	OBS	No	355.207838	341.690339	788.6	3.727	11.9	7.7	0.58	4025	1.70	0.12
007465605-04	OBS	No	369.334080	224.099689	757.2	7.509	11.8	5.9	0.58	4025	1.66	0.11
007465605-05	OBS	No	354.497016	340.964354	637.2	2.392	11.3	5.4	0.58	4025	1.72	0.12
007465605-06	OBS	No	436.569821	238.072009	425.0	10.500	10.9	-1.0	0.58	4025	1.16	0.09

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
007465605-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_MARSHALL_SKYE_ZUMA_TRACKER—LPP_DV—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—INCONSISTENT_TRANS—CENT_FEW_DIFFS
007465605-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_MARSHALL—LPP_DV—MOD_NONUNIQ_DV—MOD_POS_DV—CENT_FEW_DIFFS
007465605-04	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—MOD_POS_ALT—INCONSISTENT_TRANS—CENT_FEW_DIFFS
007465605-05	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_MARSHALL—LPP_DV—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—INCONSISTENT_TRANS—CENT_KIC_POS
007465605-06	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_MARSHALL_SKYE—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.

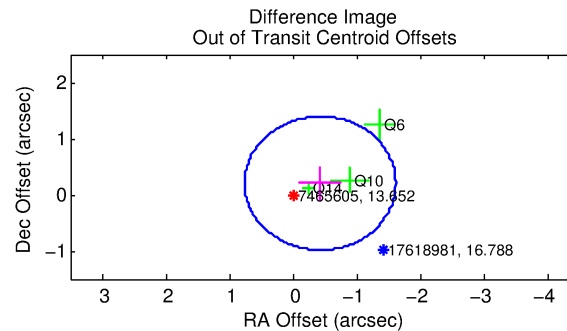
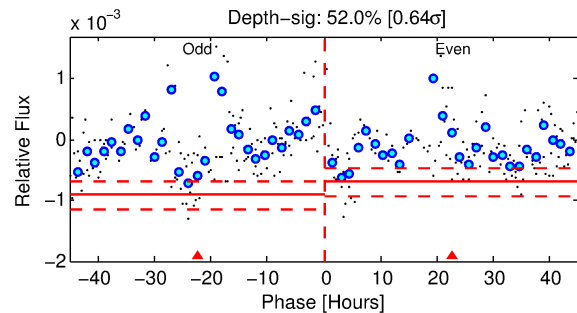
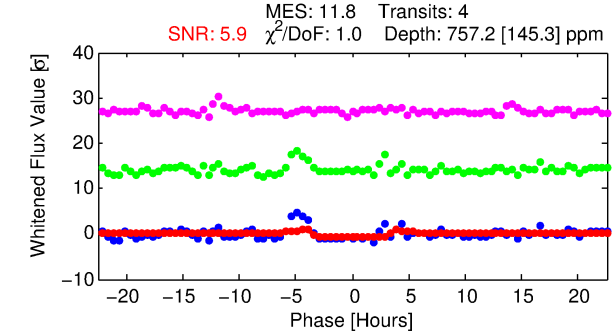
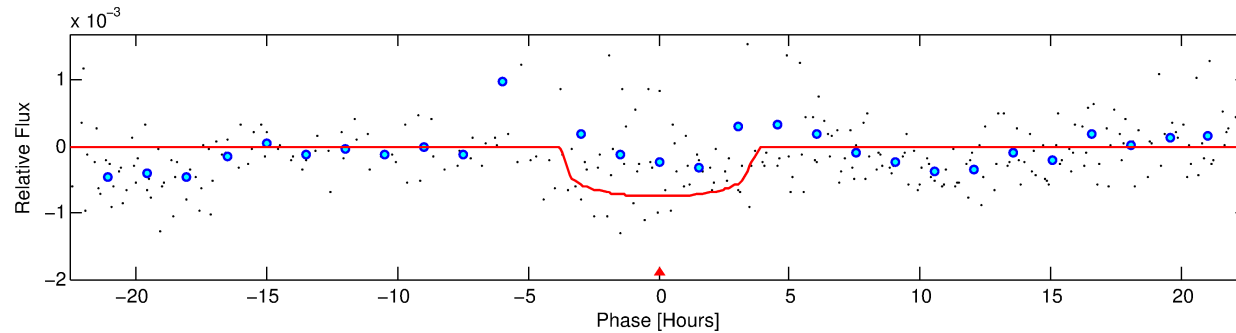
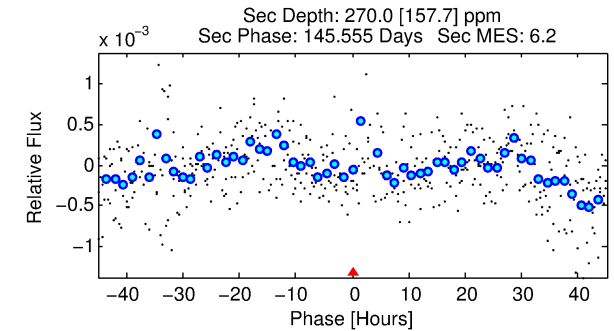
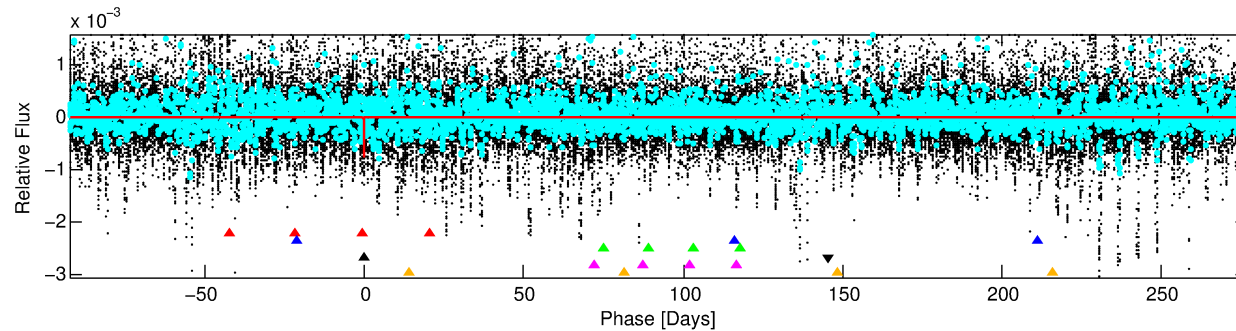
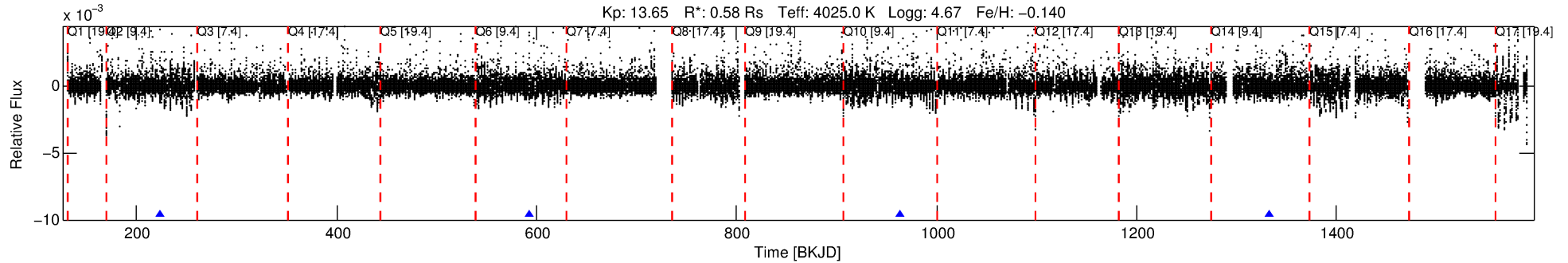
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 007465605-04

No Significant Match Found

DV One-Page Summary

KIC: 7465605 Candidate: 4 of 6 Period: 369.334 d



DV Fit Results:

Period = 369.33408 [0.00494] d
Epoch = 224.0997 [0.0097] BKJD
Rp/R* = 0.0263 [0.0154]
a/R* = 305.83 [686.10]
b = 0.63 [2.20]
Seff = 0.11 [0.02]
Teq = 148 [7] K
Rp = 1.66 [0.99] Re
a = 0.8358 [0.0827] AU
Ag = 37817.67 [49804.22] [0.76 σ]
Teffp = 3181 [1049] K [2.89 σ]

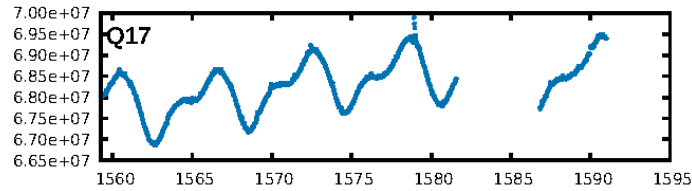
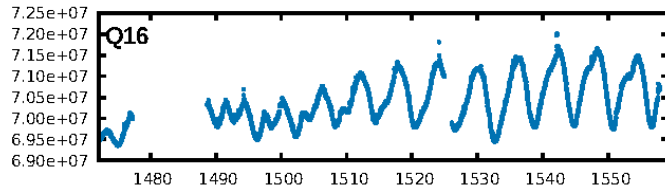
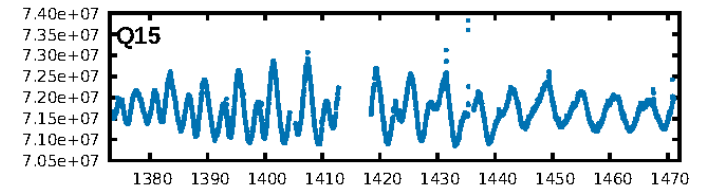
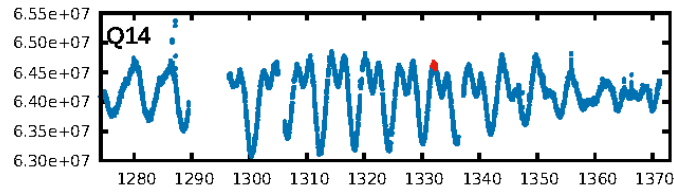
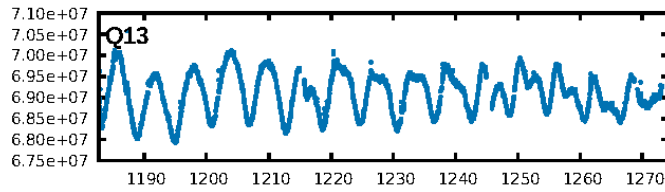
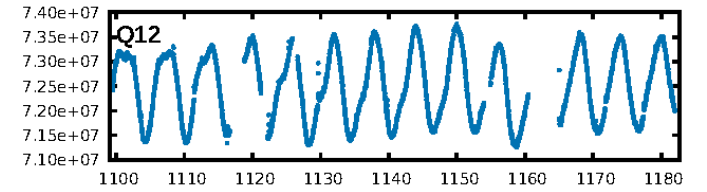
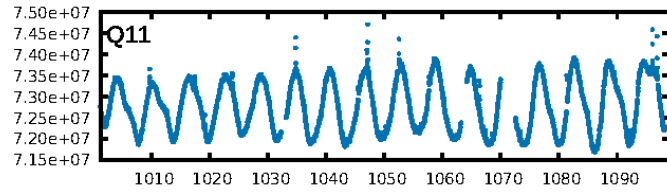
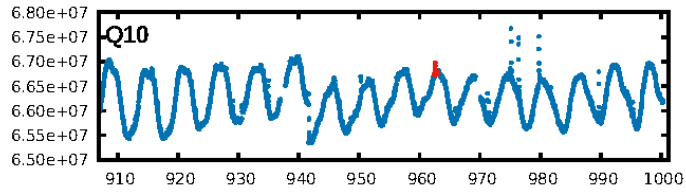
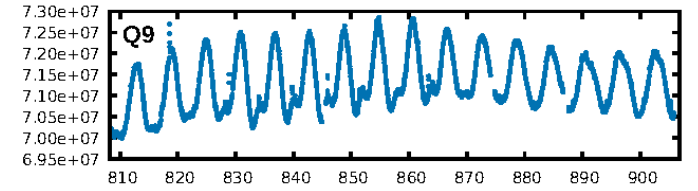
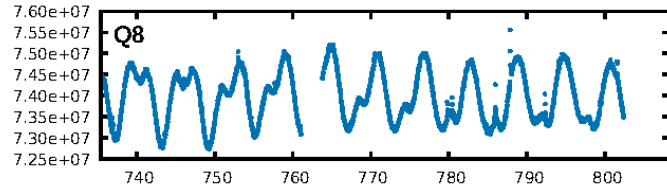
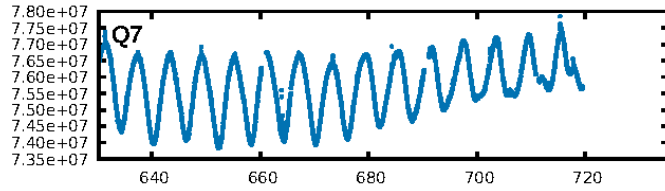
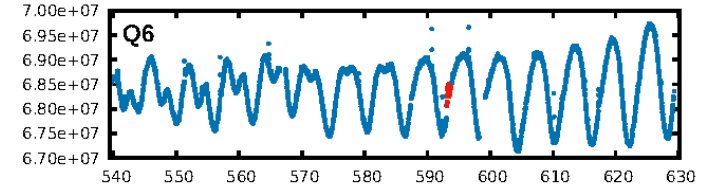
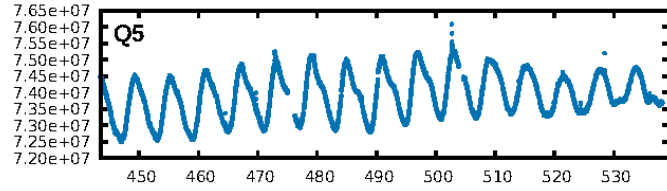
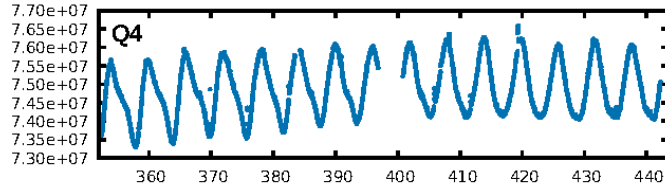
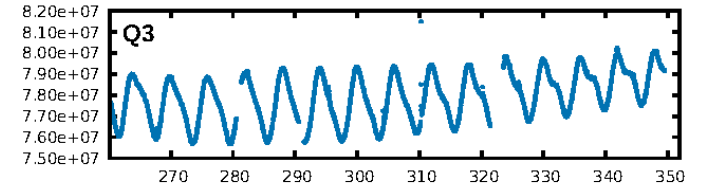
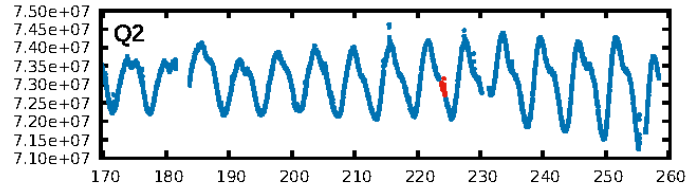
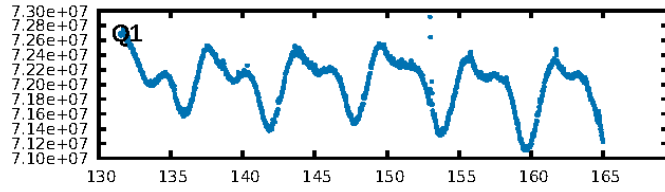
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [40.44 σ]
LongPeriod-sig: 100.0% [125.01 σ]
ModelChiSquare2-sig: 4.3%
ModelChiSquareGof-sig: 99.6%
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [4/4]
GhostDiagnostic-chr: 1.931
Centroid-sig: 31.2%
Centroid-so: 1.510 arcsec [2.60 σ]
OotOffset-rm: 0.476 arcsec [1.20 σ]
OotOffset-st: 3/0/0/0 [3]
KicOffset-rm: 1.293 arcsec [5.97 σ]
KicOffset-st: 3/0/0/0 [3]
DiffImageQuality-fgm: 0.00 [0/3]
DiffImageOverlap-fno: 0.67 [2/3]

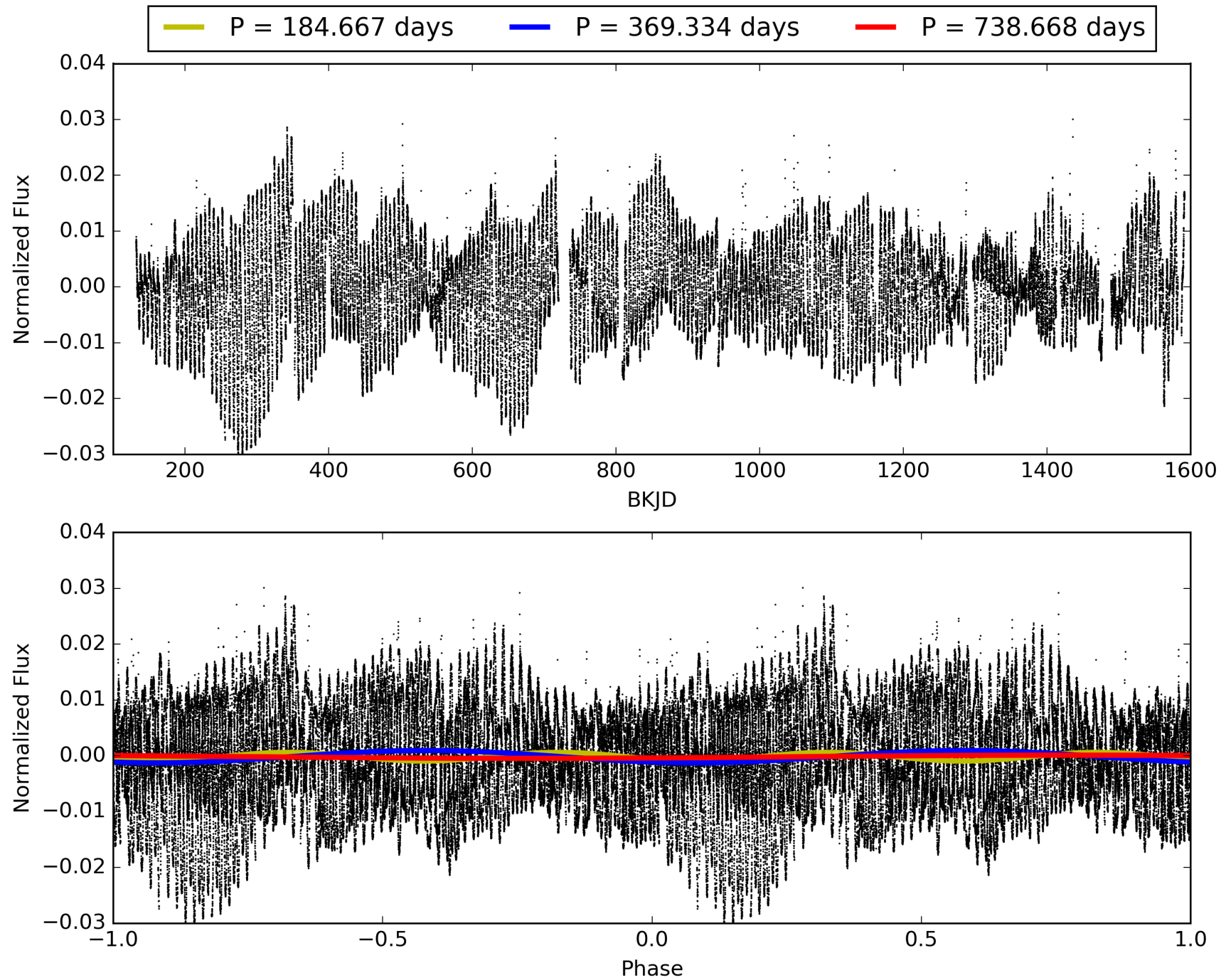
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 01-Feb-2016 05:54:14 Z

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

TCE 007465605-04, PDC Light Curves

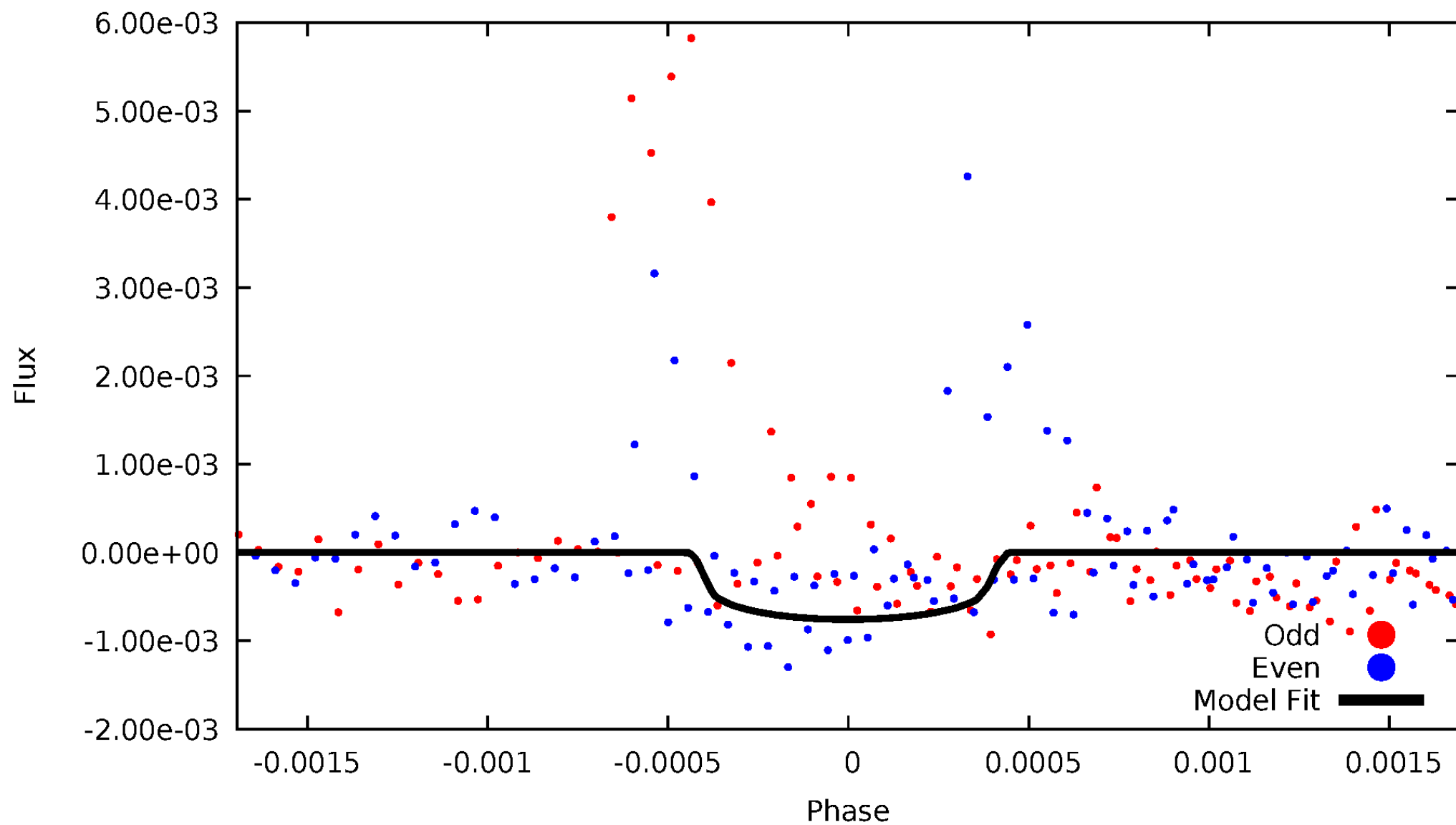


TCE 007465605-04



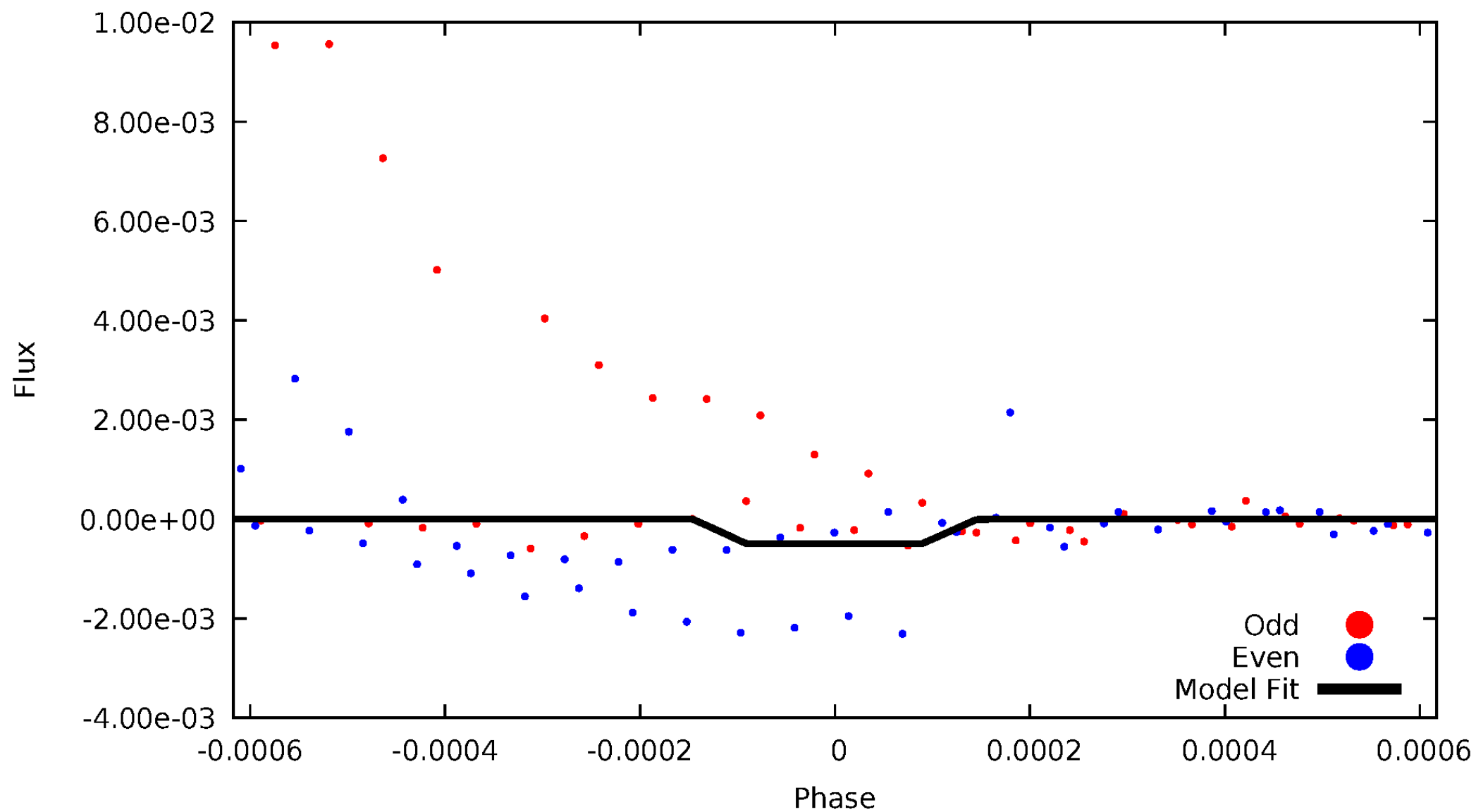
DV Odd/Even

TCE 007465605-04



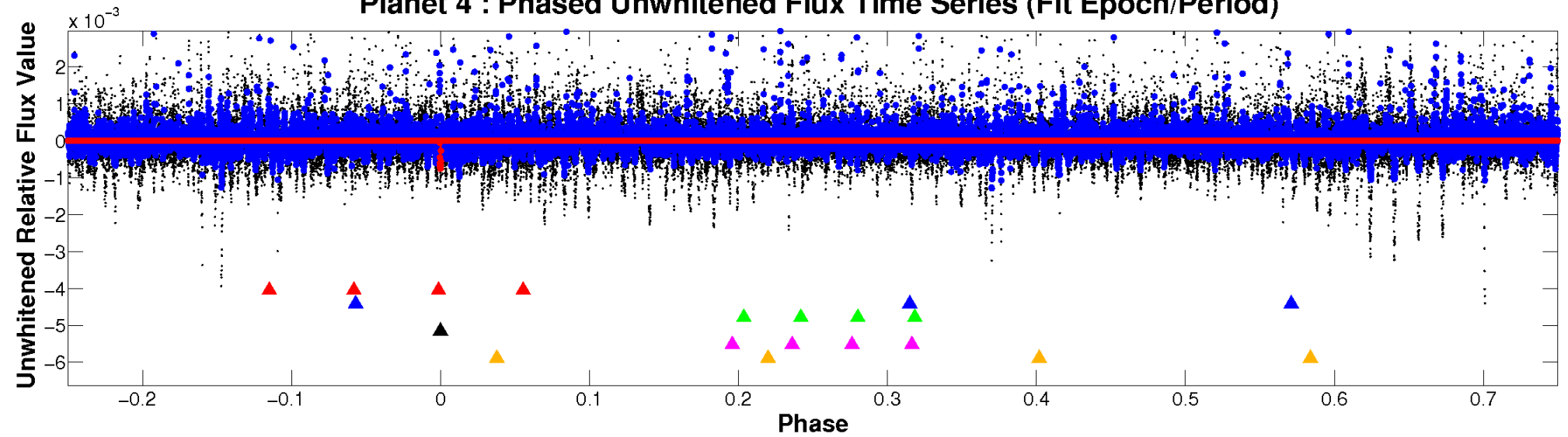
ALT Odd/Even

TCE 007465605-04

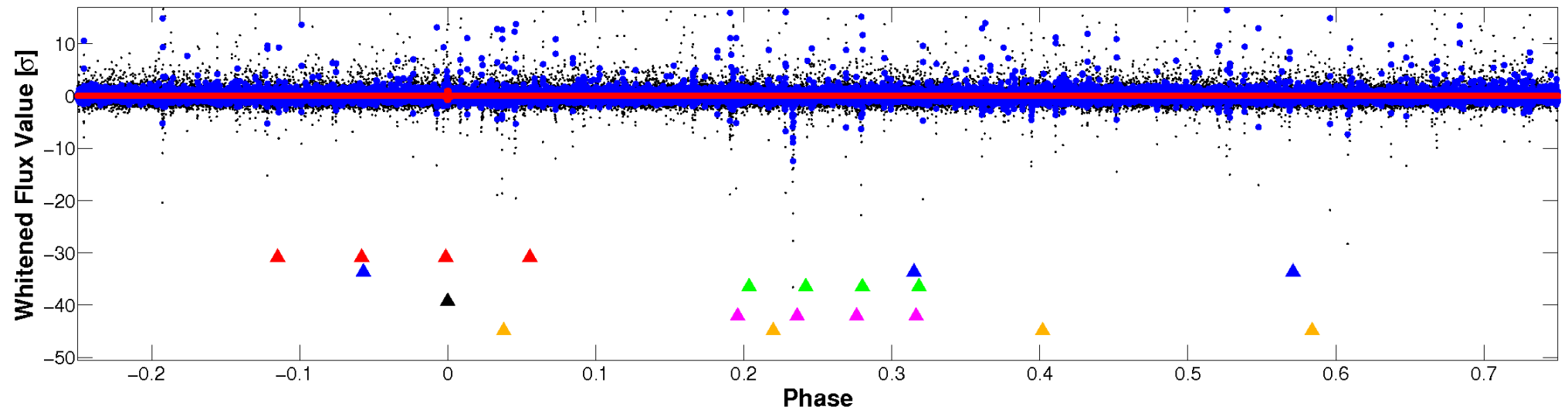


Non-Whitened Vs. Whitened Light Curve

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

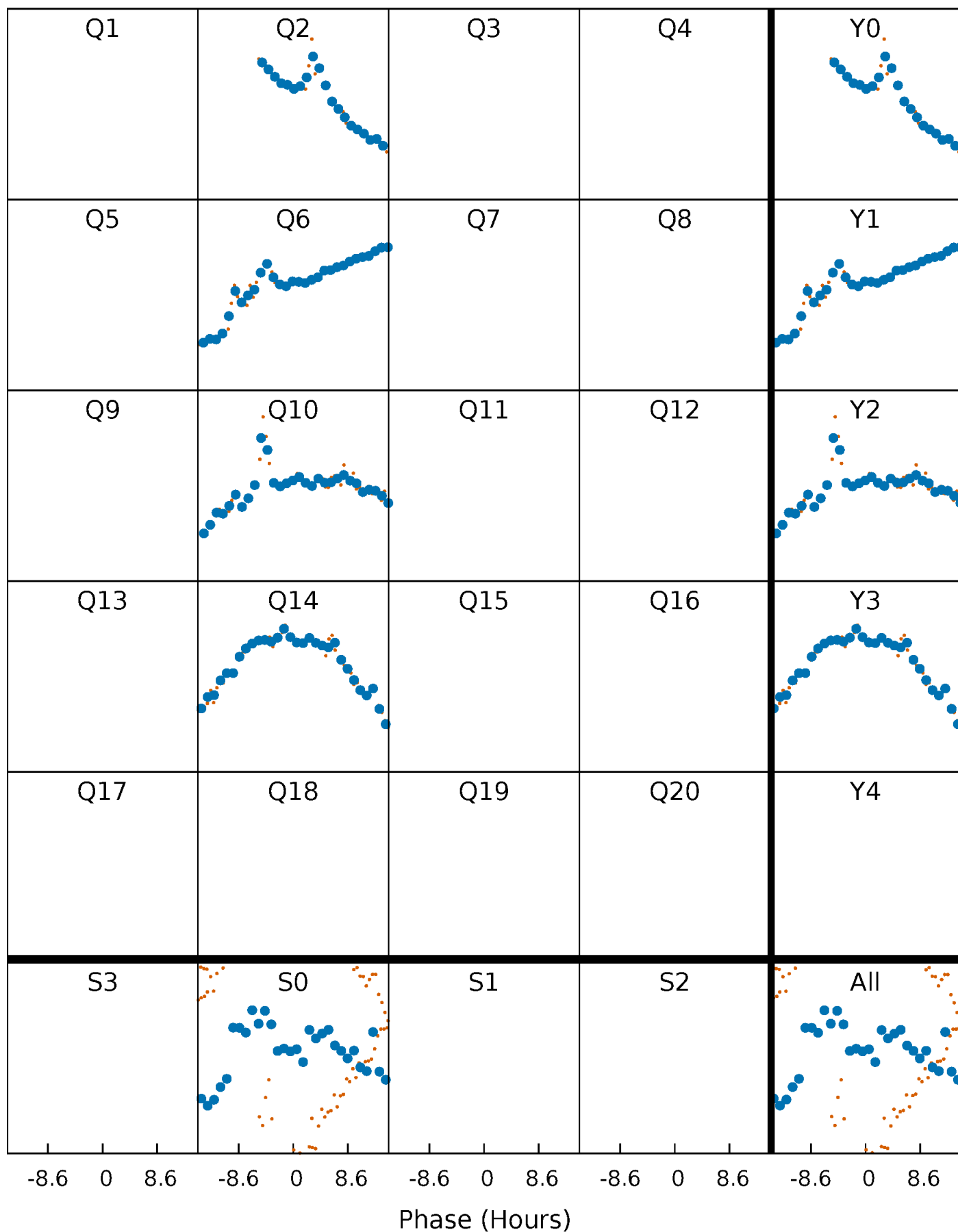


Planet 4 : Phased Whitened Flux Time Series (Fit Epoch/Period)



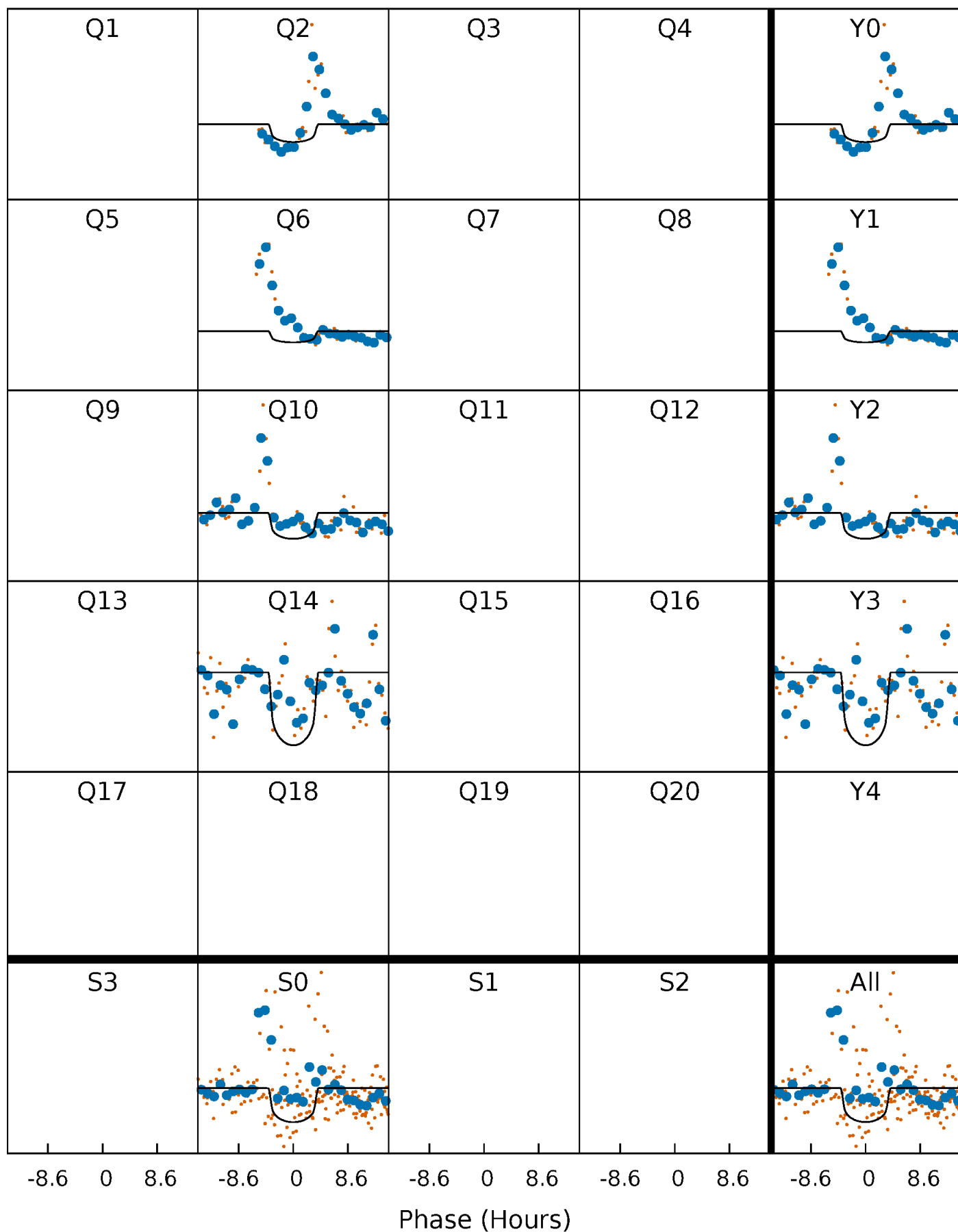
PDC Quarter-Phased Transit Curves

TCE 007465605-04 P=369.334080 Days $T_0=224.099689$ (BKJD)



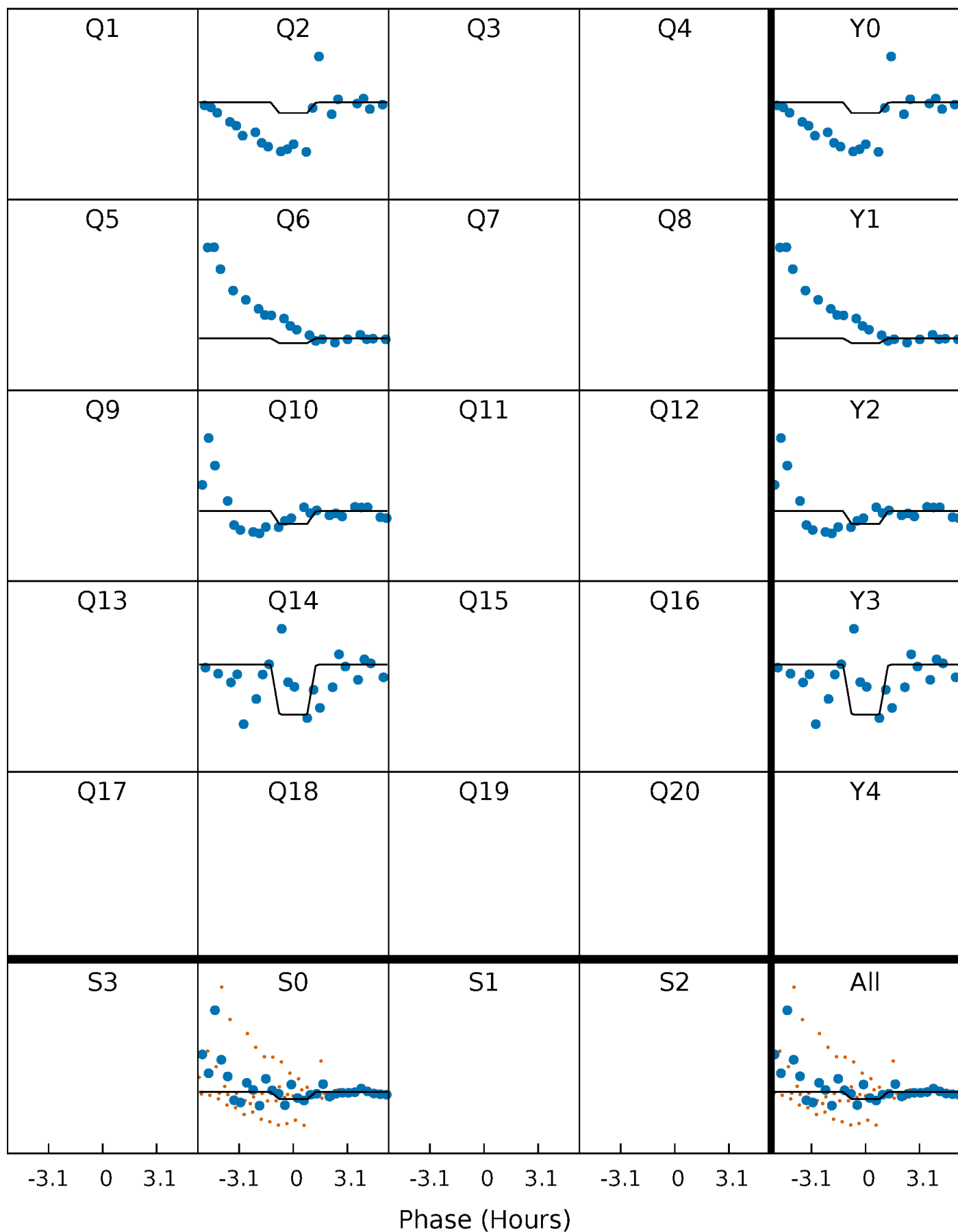
DV Quarter-Phased Transit Curves

TCE 007465605-04 P=369.334080 Days $T_0=224.099689$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

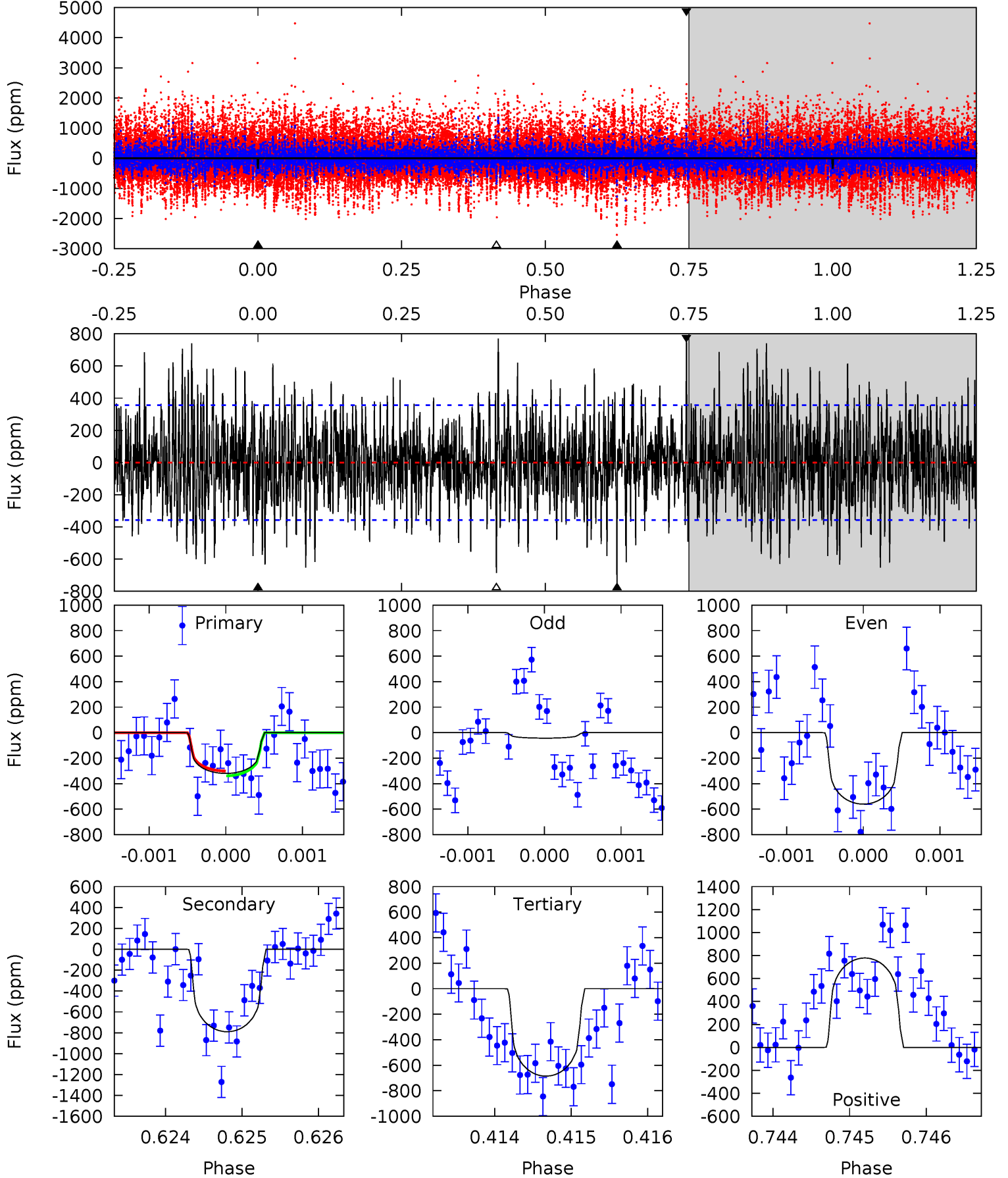
TCE 007465605-04 P=369.309352 Days $T_0=224.155296$ (BKJD)



DV Model-Shift Uniqueness Test

007465605-04, P = 369.334080 Days, E = 224.099689 Days

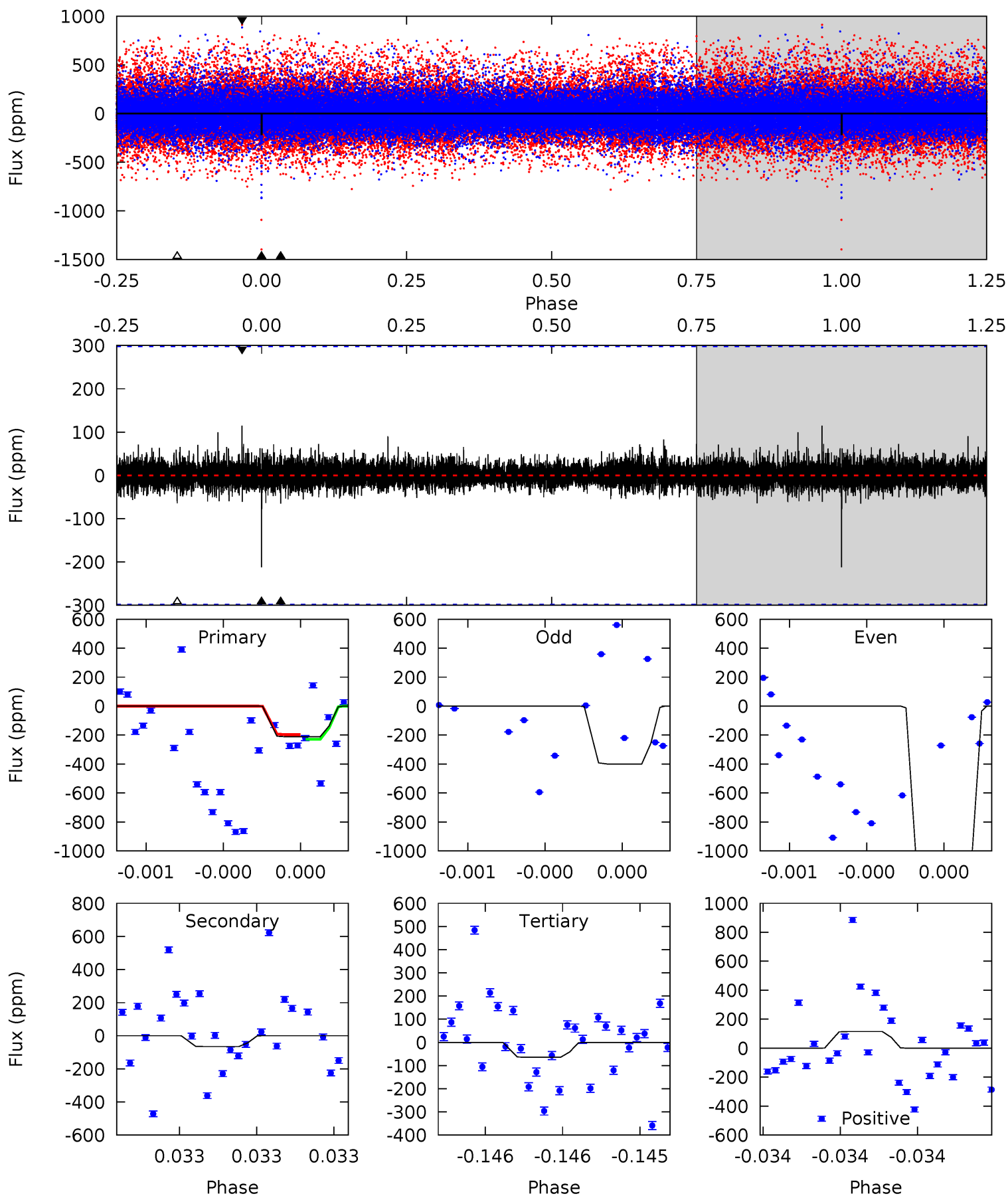
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
4.90	12.1	10.5	11.9	5.47	3.32	3.15	-5.60	-7.03	1.60	0.17	3.61	0.26	0.50	0.29



Alt Model-Shift Uniqueness Test

007465605-04, P = 369.309352 Days, E = 224.155296 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
4.02	1.24	1.22	2.18	5.66	3.62	0.30	2.80	1.84	0.02	-0.94	11.7	1.60	0.35	0.30



Stellar Parameters For KIC 007465605

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	M (M_{\odot})	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	4025^{+125}_{-153}	$4.672^{+0.065}_{-0.025}$	$-0.140^{+0.300}_{-0.300}$	$0.577^{+0.045}_{-0.074}$	$0.570^{+0.059}_{-0.065}$	$4.191^{+1.370}_{-0.512}$
	+3%/-4%	+1%/-1%	+214%/-214%	+8%/-13%	+10%/-11%	+33%/-12%
Source	KIC0	KIC0	KIC0	DSEP		

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

Secondary Eclipse Parameters for KIC 007465605-04 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-790 ± 65	$1.70^{+0.93}_{-0.89}$	204^{+8}_{-9}	4060^{+1520}_{-572}	$106527^{+364961}_{-62351}$
Alt.	-65 ± 53	$1.50^{+0.92}_{-0.86}$	204^{+8}_{-8}	2833^{+873}_{-546}	10223^{+51350}_{-8383}

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

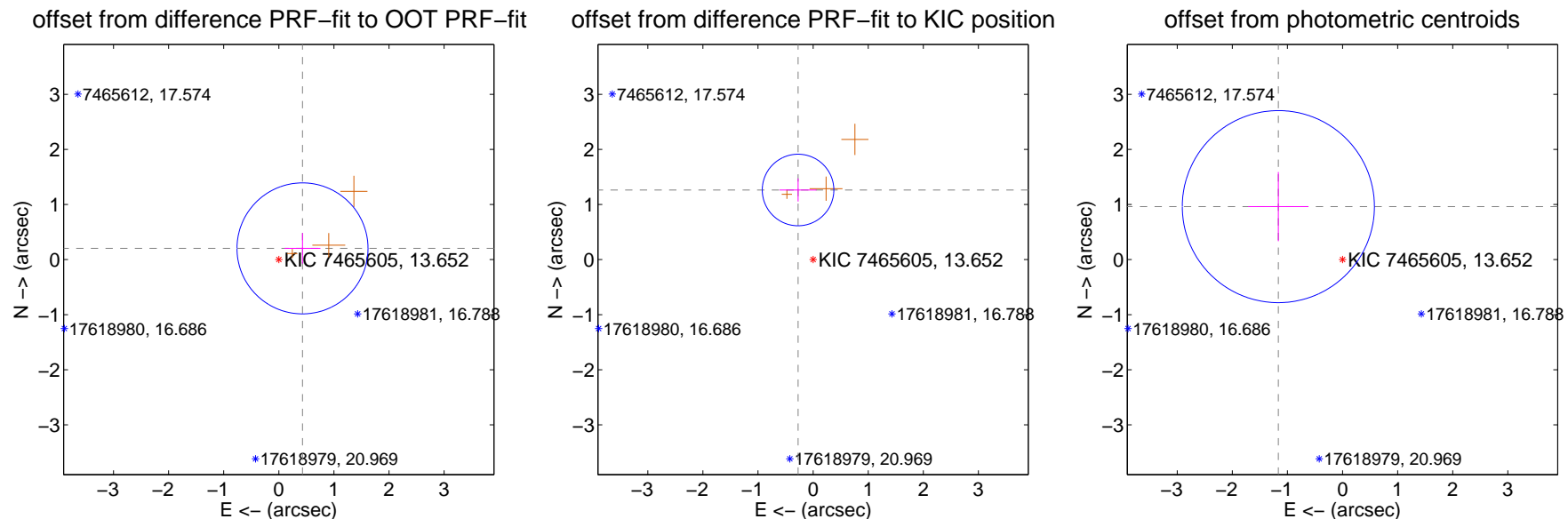
DV Centroid Data

Supplemental centroid analysis for 007465605-04. Kepler magnitude: 13.65. Transit SNR 5.88

There are 0 quarters with good PRF difference image offsets

The direct PRF centroid is offset from the target star catalog position by about 1.29 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.476 ± 0.396	1.20	-0.430 ± 0.325	0.203 ± 0.278
PRF-fit source offset from KIC position	1.293 ± 0.217	5.97	0.273 ± 0.335	1.264 ± 0.209
photometric centroid source offset	1.51 ± 0.58	2.60	1.16 ± 0.55	0.96 ± 0.63

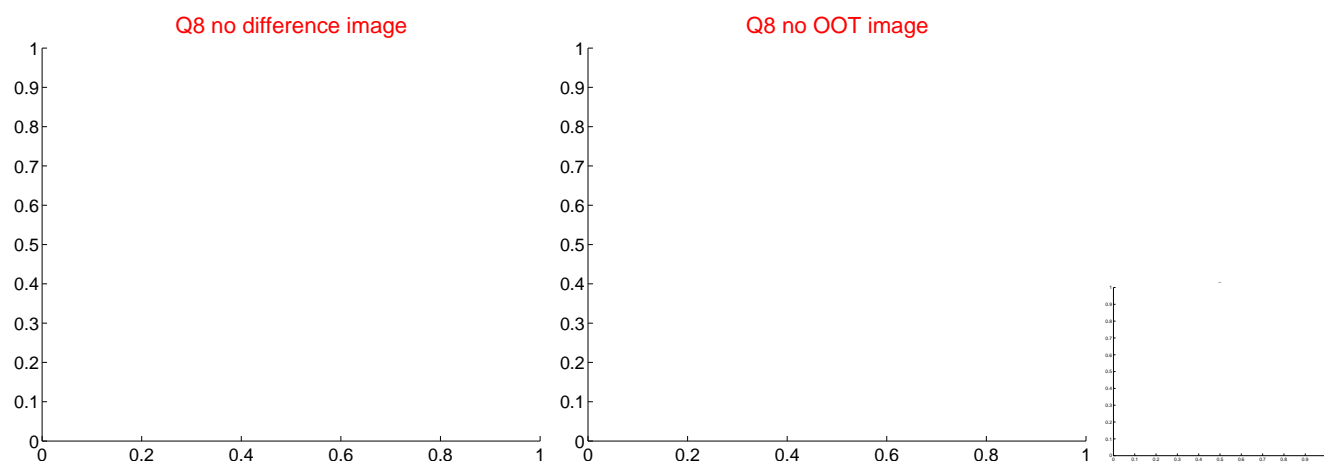
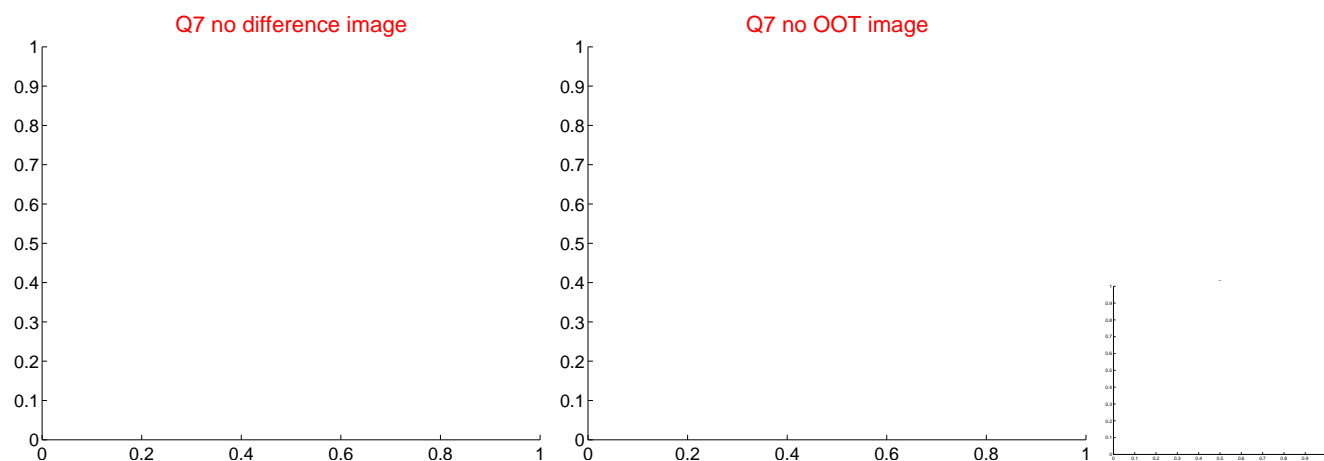
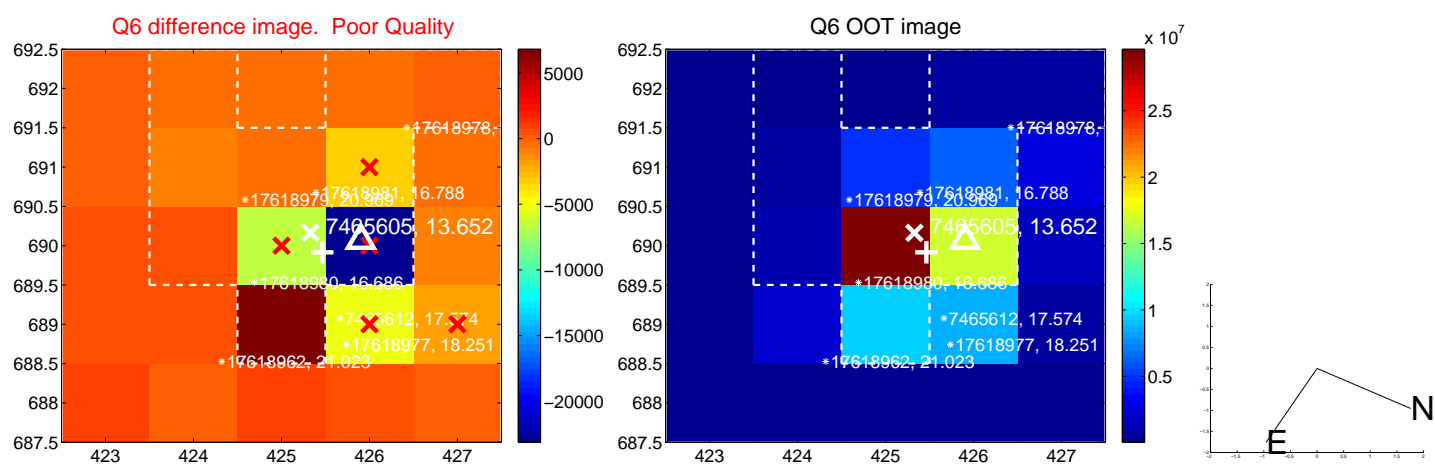
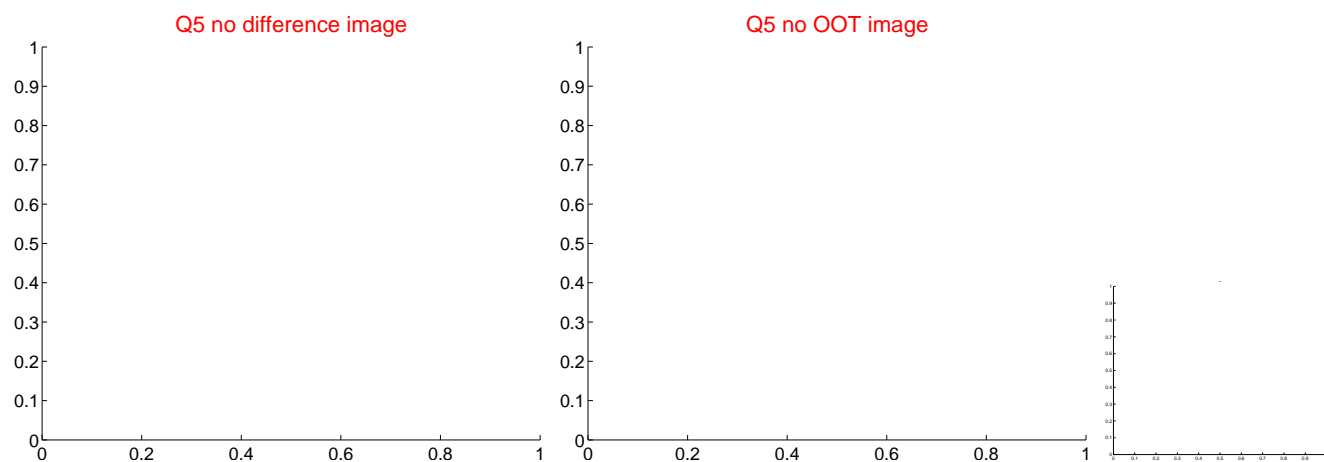


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets**; **Vermillion crosses: bad quarterly centroid offsets**; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

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



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



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

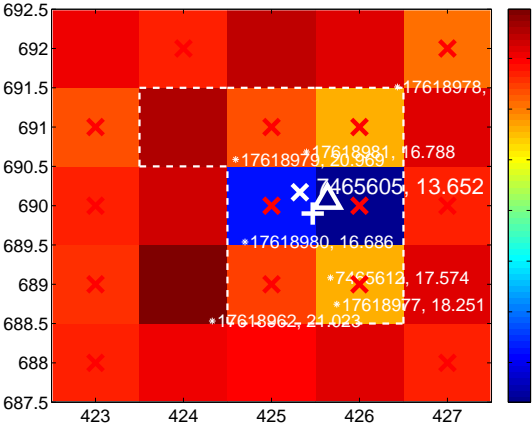
Q9 no difference image



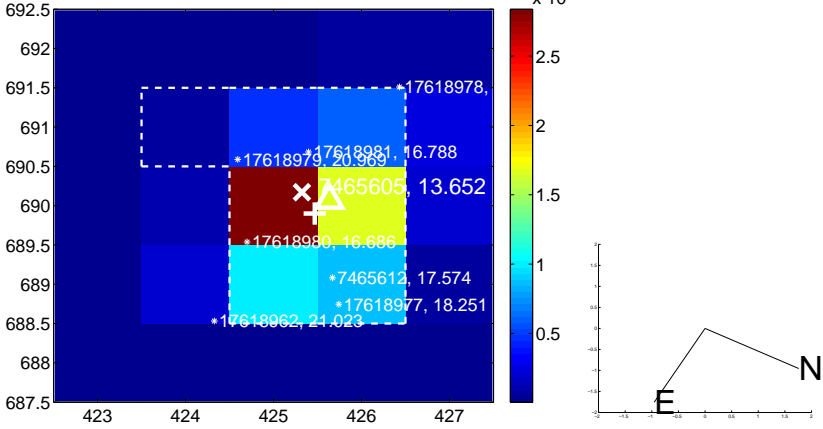
Q9 no OOT image



Q10 difference image. Poor Quality



Q10 OOT image



Q11 no difference image



Q11 no OOT image



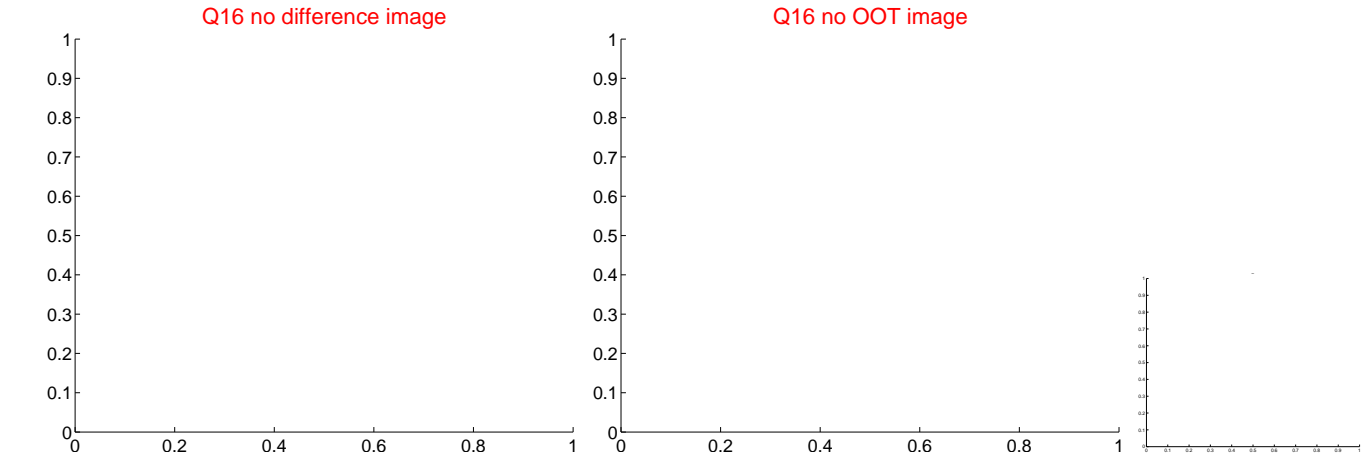
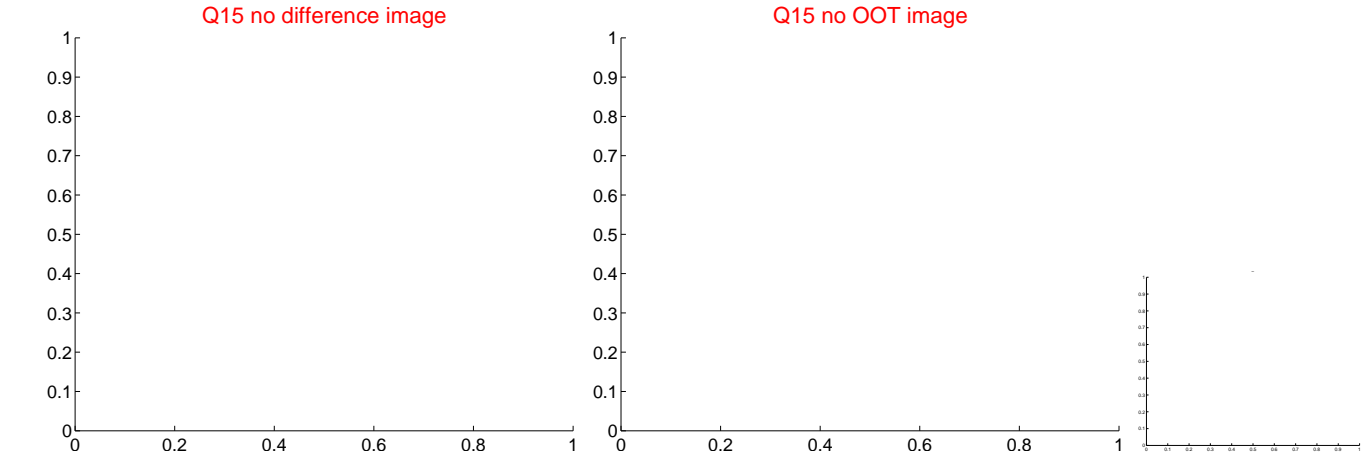
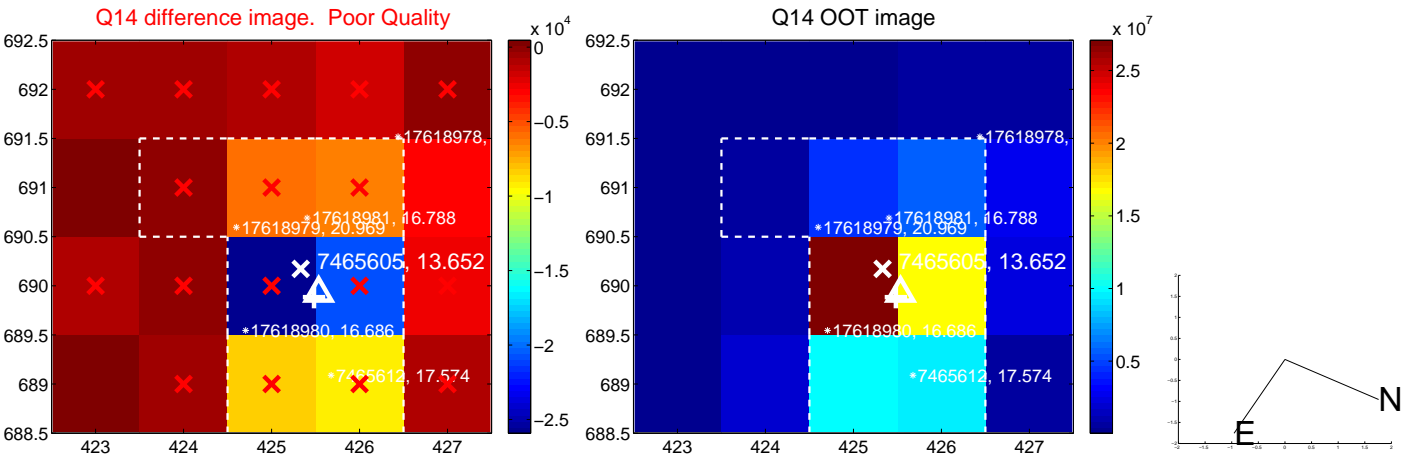
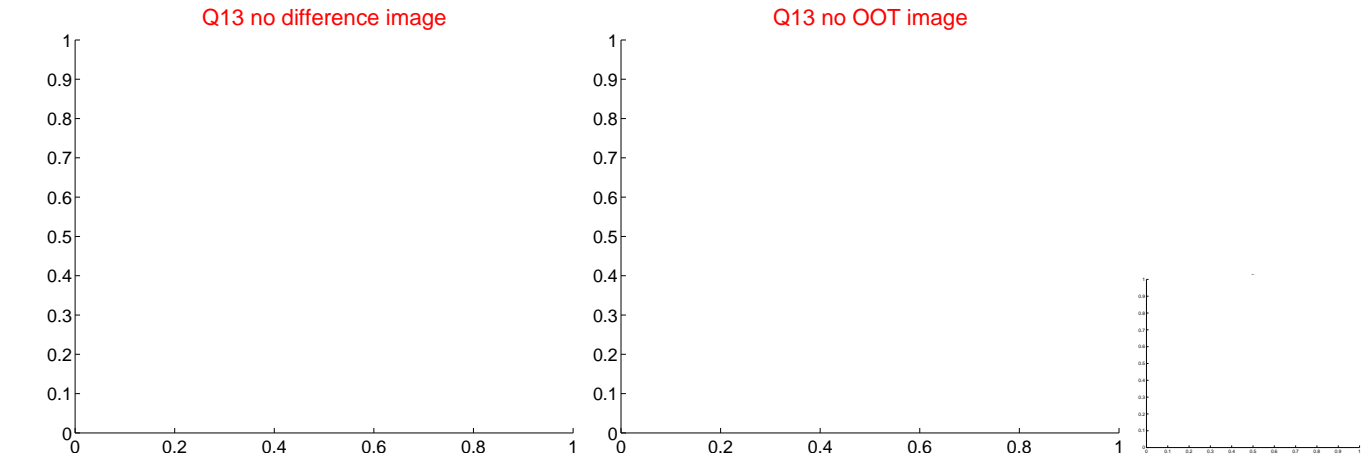
Q12 no difference image



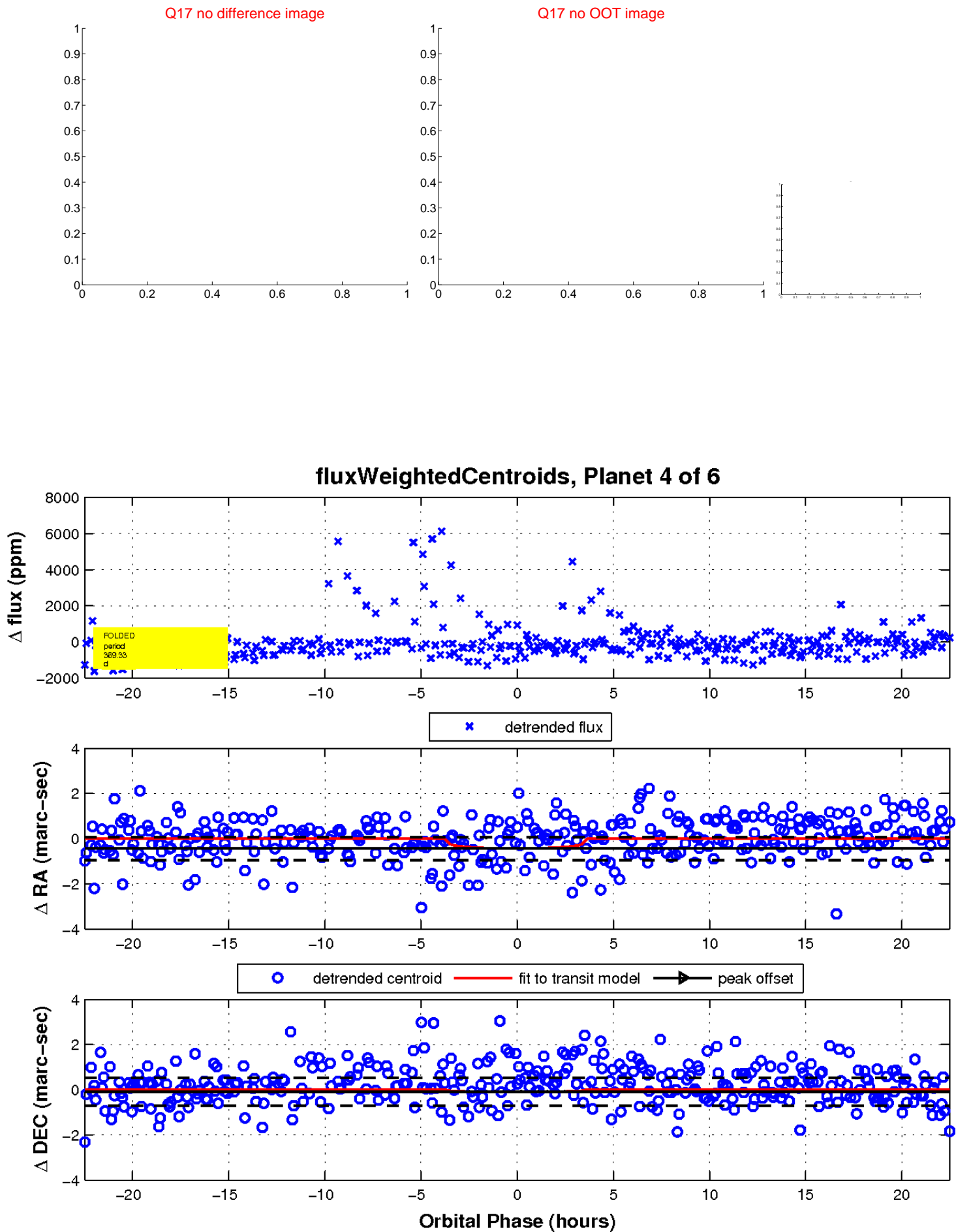
Q12 no OOT image



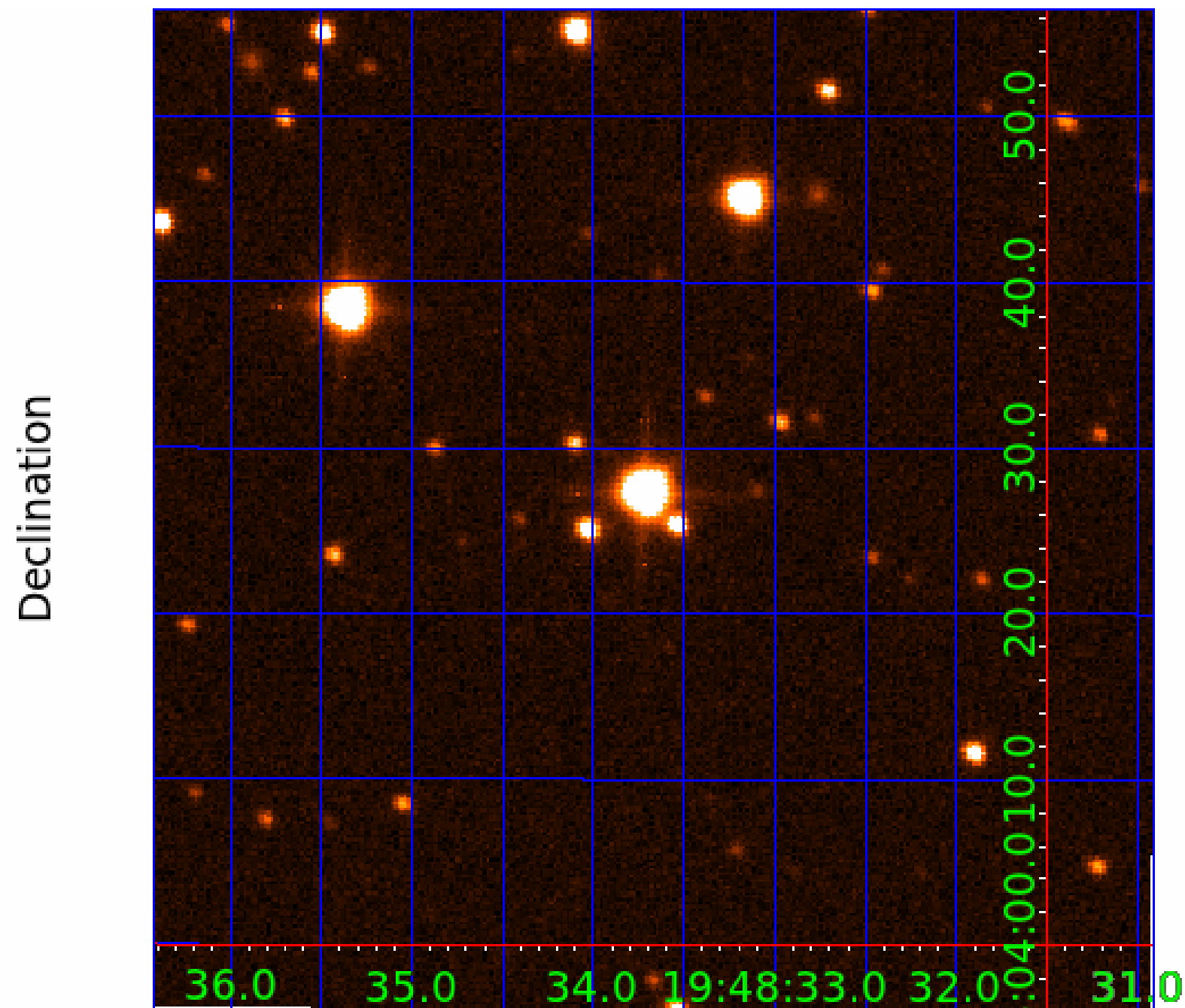
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



UKIRT Image



KIC 007465605

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})
007465605-01	OBS	No	348.355246	244.599308	768.5	3.456	17.3	5.7	0.58	4025	1.77	0.12
007465605-03	OBS	No	355.207838	341.690339	788.6	3.727	11.9	7.7	0.58	4025	1.70	0.12
007465605-04	OBS	No	369.334080	224.099689	757.2	7.509	11.8	5.9	0.58	4025	1.66	0.11
007465605-05	OBS	No	354.497016	340.964354	637.2	2.392	11.3	5.4	0.58	4025	1.72	0.12
007465605-06	OBS	No	436.569821	238.072009	425.0	10.500	10.9	-1.0	0.58	4025	1.16	0.09

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
007465605-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_MARSHALL_SKYE_ZUMA_TRACKER—LPP_DV—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—INCONSISTENT_TRANS—CENT_FEW_DIFFS
007465605-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_MARSHALL—LPP_DV—MOD_NONUNIQ_DV—MOD_POS_DV—CENT_FEW_DIFFS
007465605-04	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—MOD_POS_ALT—INCONSISTENT_TRANS—CENT_FEW_DIFFS
007465605-05	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_MARSHALL—LPP_DV—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—INCONSISTENT_TRANS—CENT_KIC_POS
007465605-06	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_MARSHALL_SKYE—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.

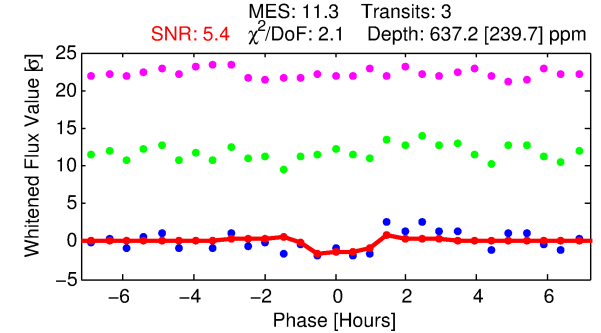
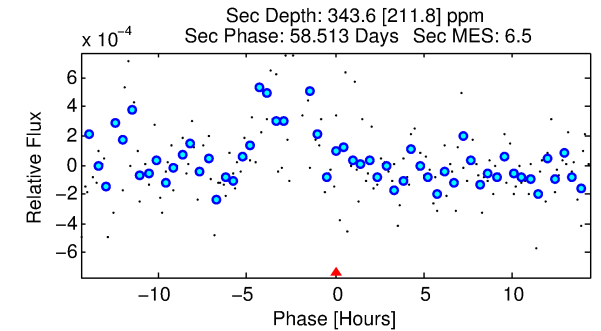
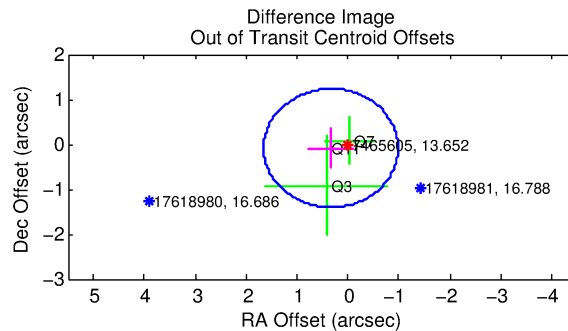
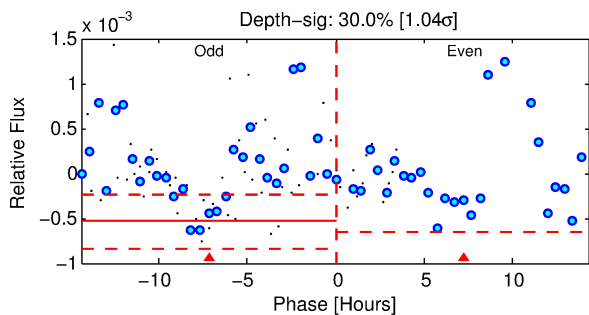
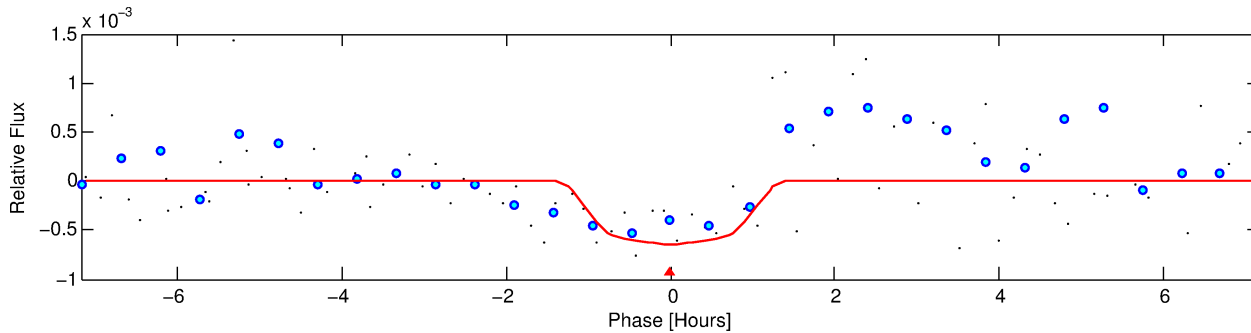
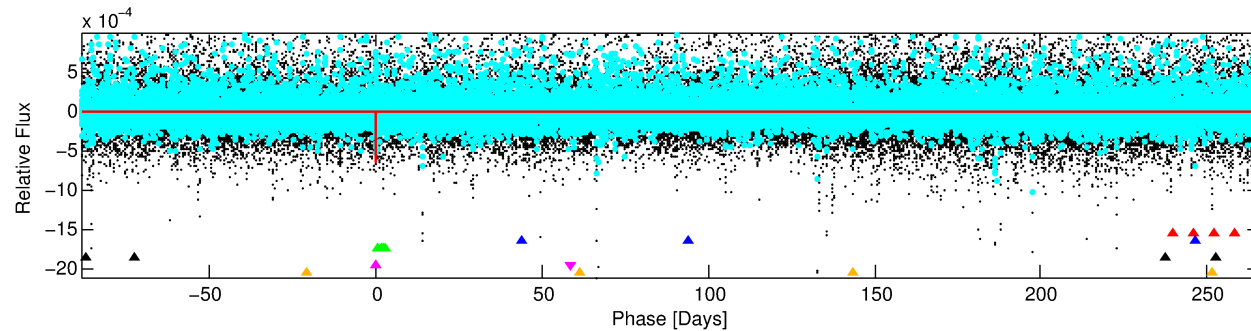
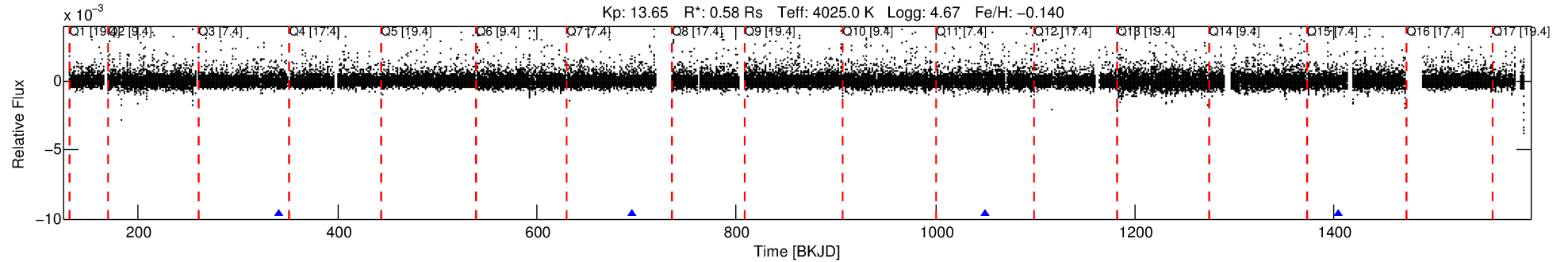
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 007465605-05

No Significant Match Found

DV One-Page Summary

KIC: 7465605 Candidate: 5 of 6 Period: 354.497 d



DV Fit Results:

Period = 354.49702 [0.00718] d
Epoch = 340.9644 [0.0102] BKJD
Rp/R* = 0.0273 [0.0287]
a/R* = 601.83 [2480.73]
b = 0.88 [1.09]
Seff = 0.12 [0.02]
Teq = 150 [8] K
Rp = 1.72 [1.82] Re
a = 0.8132 [0.0805] AU
Ag = 42457.25 [93465.83] [0.45 σ]
Teffp = 3319 [1828] K [1.73 σ]

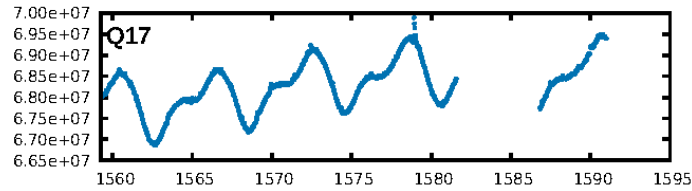
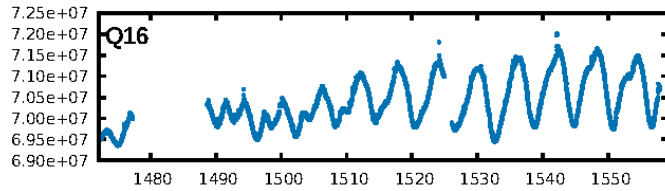
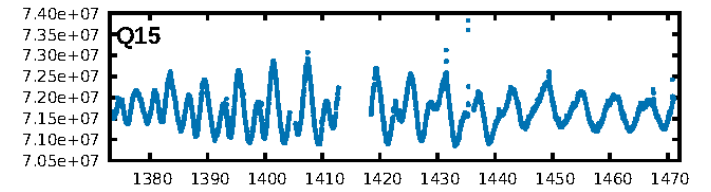
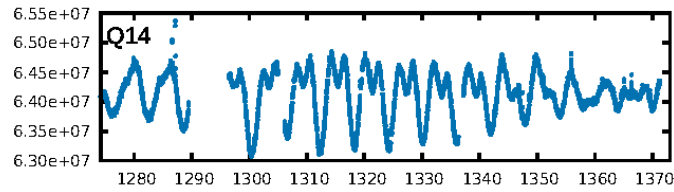
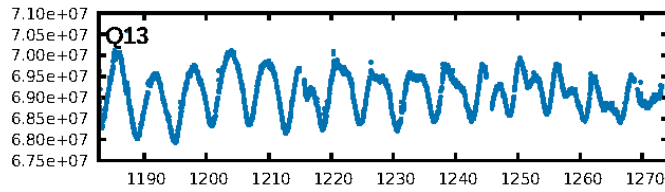
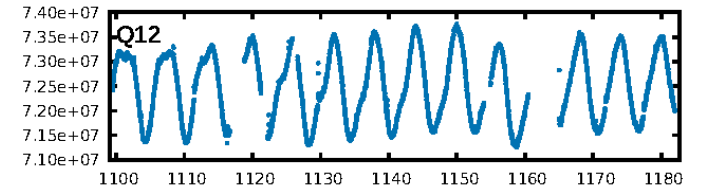
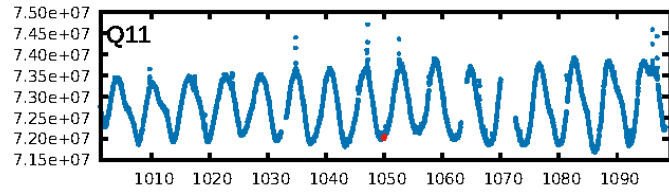
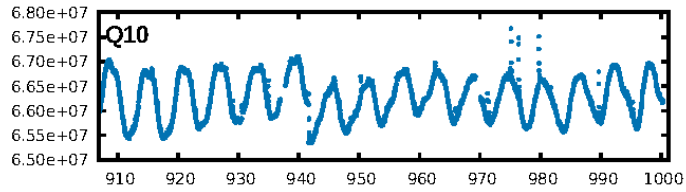
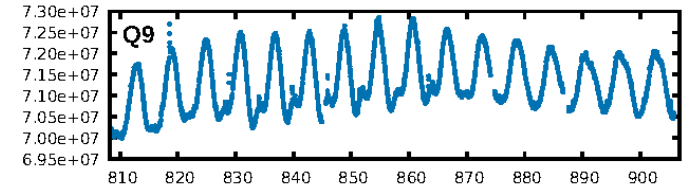
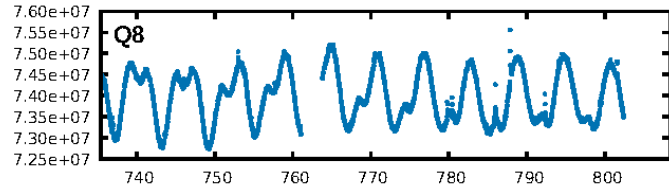
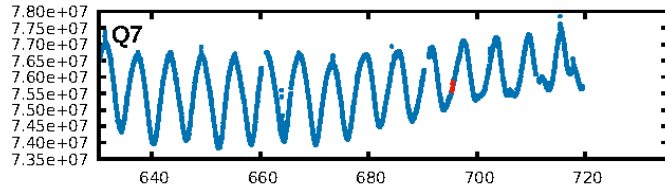
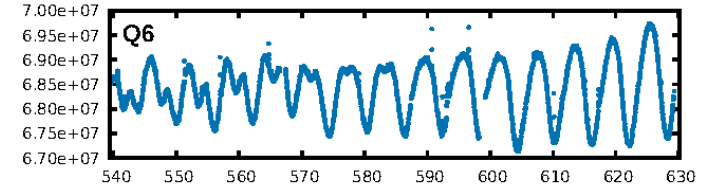
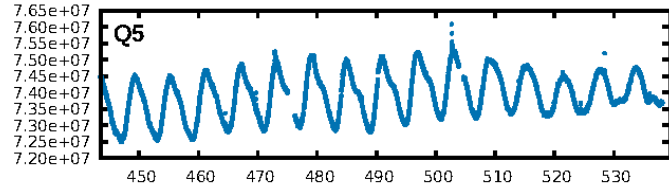
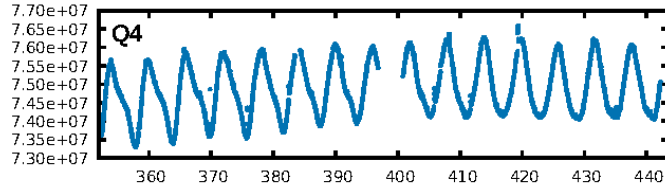
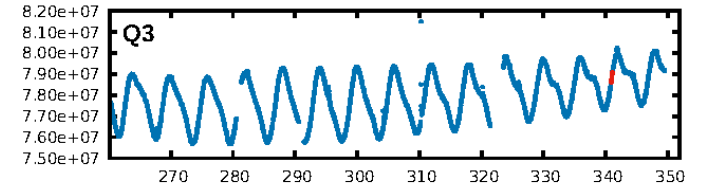
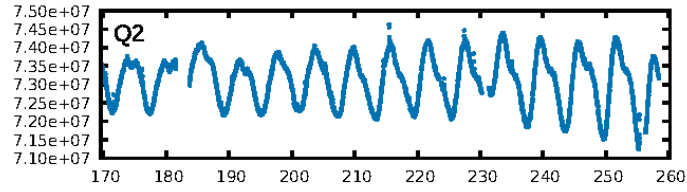
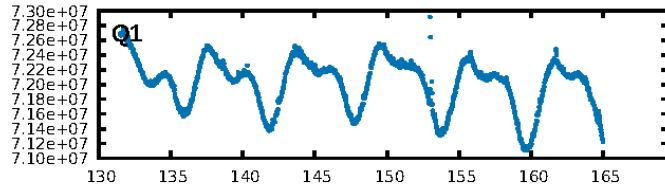
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [35.07 σ]
LongPeriod-sig: 100.0% [3.85 σ]
ModelChiSquare2-sig: 82.2%
ModelChiSquareGof-sig: 92.0%
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [3/3]
GhostDiagnostic-chr: 0.2981
Centroid-sig: 29.5%
Centroid-so: 1.210 arcsec [1.08 σ]
OotOffset-rm: 0.347 arcsec [0.79 σ]
OotOffset-st: 0/3/0/0 [3]
KicOffset-rm: 1.475 arcsec [3.40 σ]
KicOffset-st: 0/3/0/0 [3]
DiffImageQuality-fgm: 1.00 [3/3]
DiffImageOverlap-fno: 1.00 [3/3]

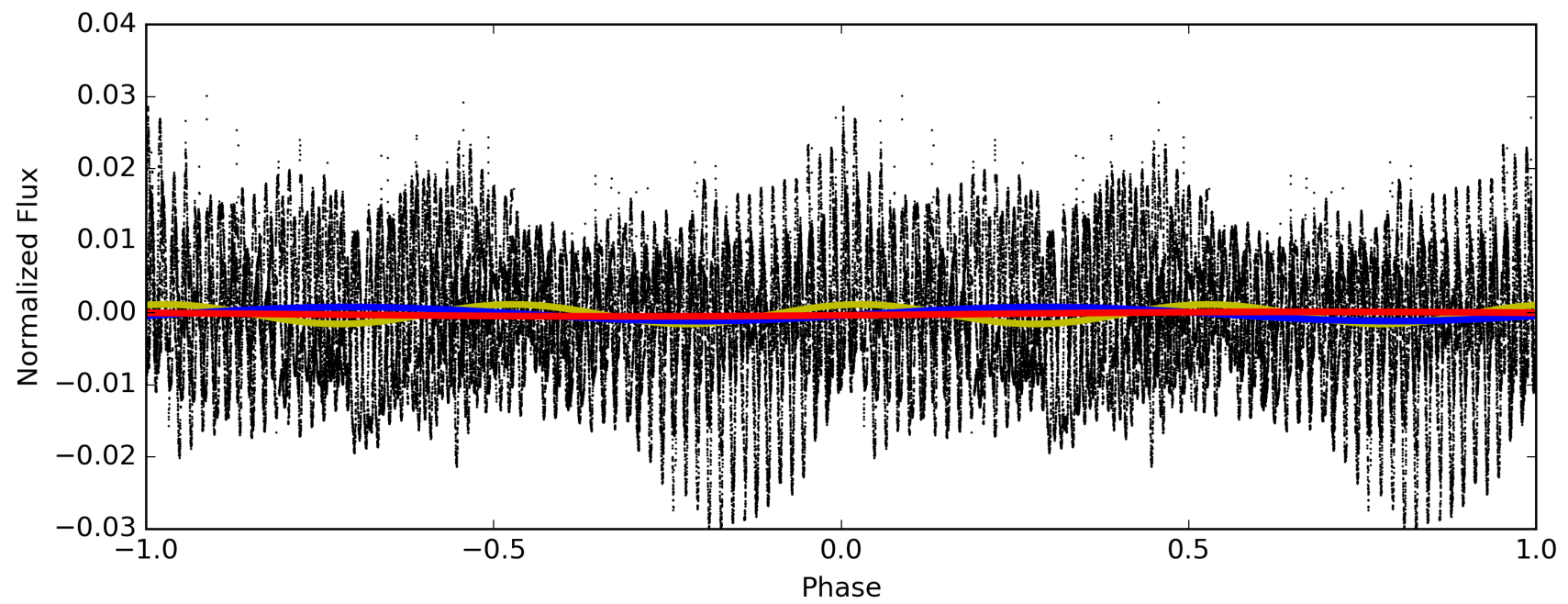
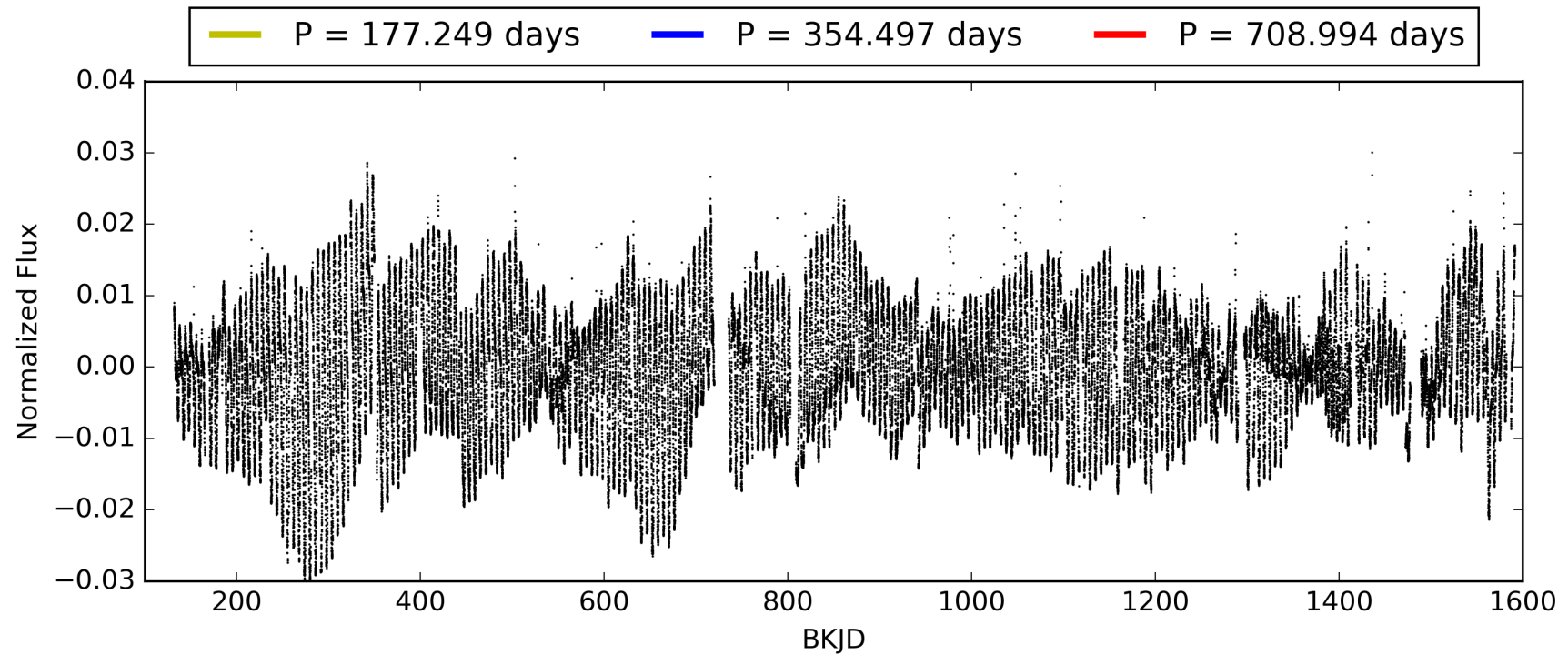
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 01-Feb-2016 05:54:35 Z

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

TCE 007465605-05, PDC Light Curves

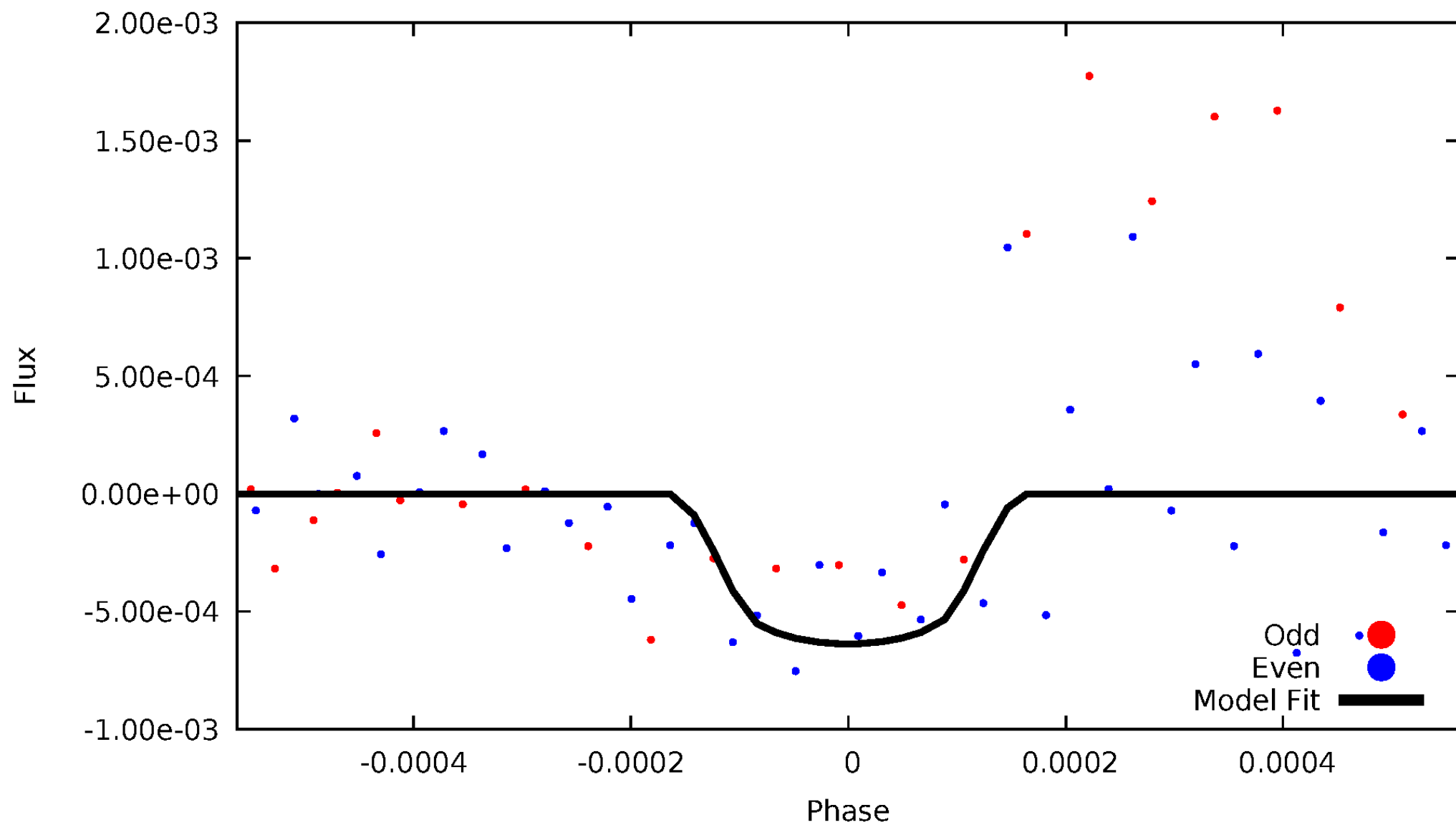


TCE 007465605-05



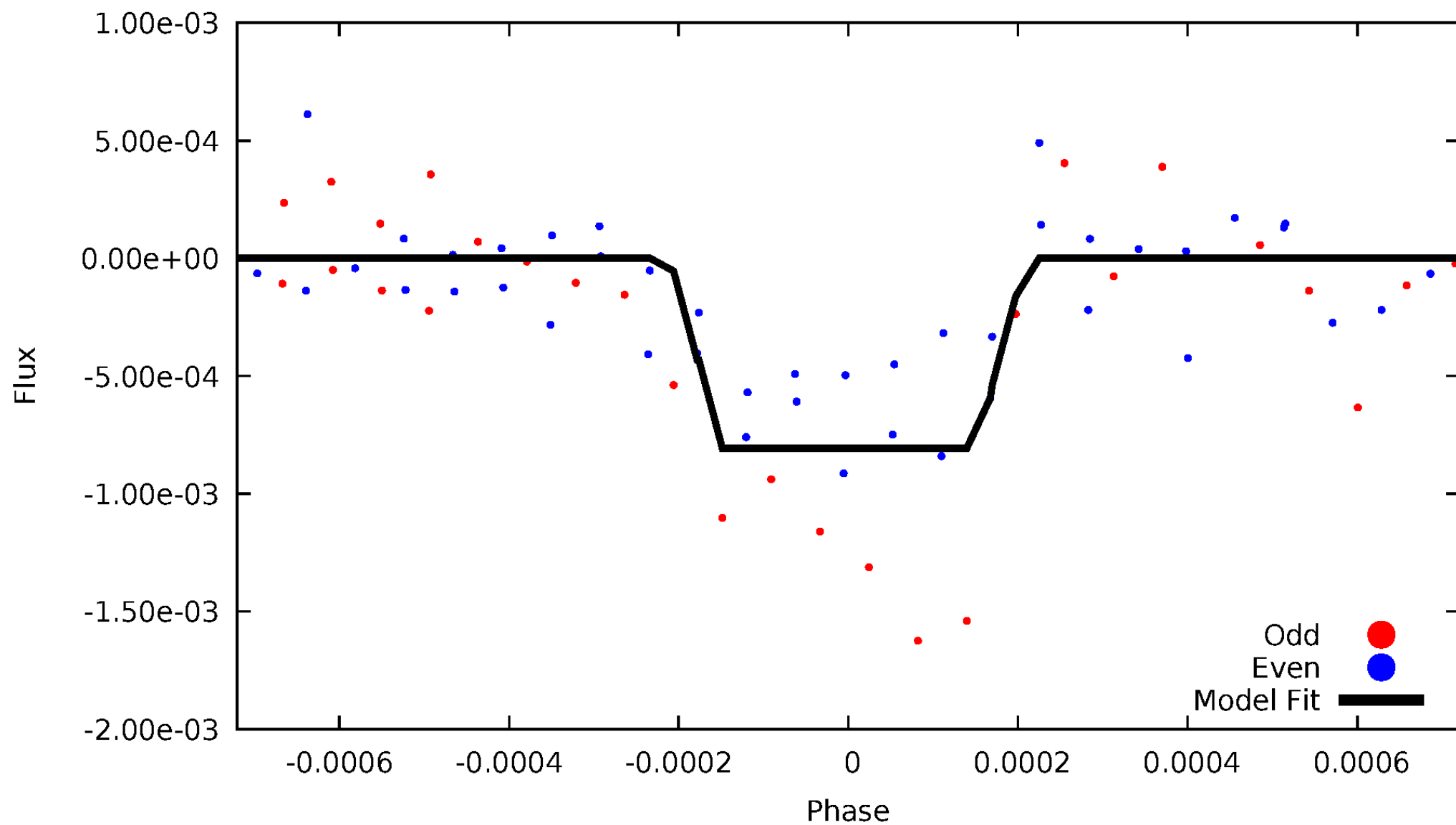
DV Odd/Even

TCE 007465605-05



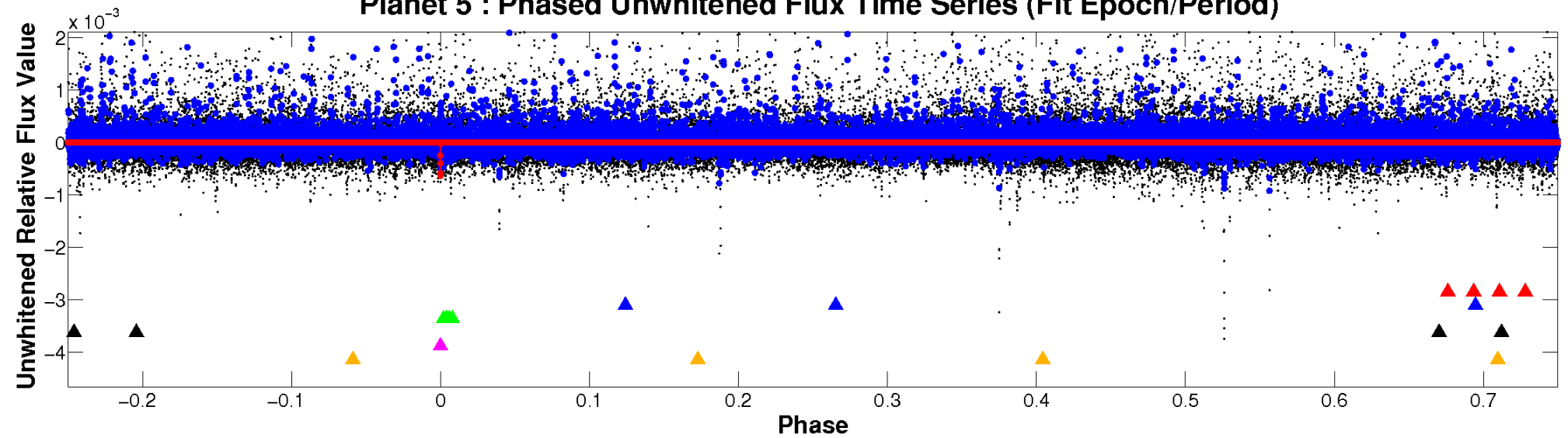
ALT Odd/Even

TCE 007465605-05

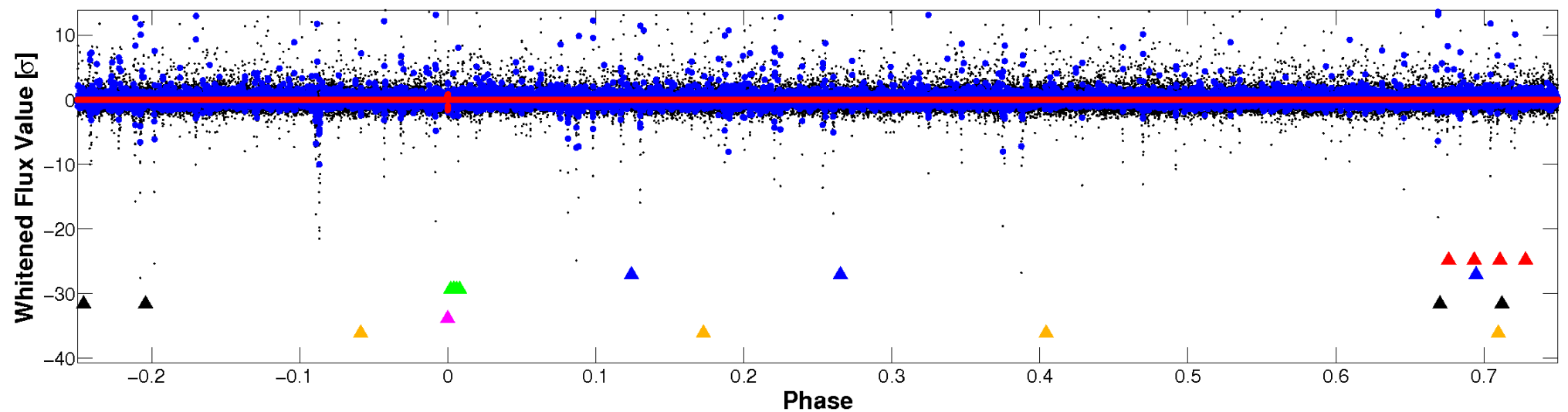


Non-Whitened Vs. Whitened Light Curve

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

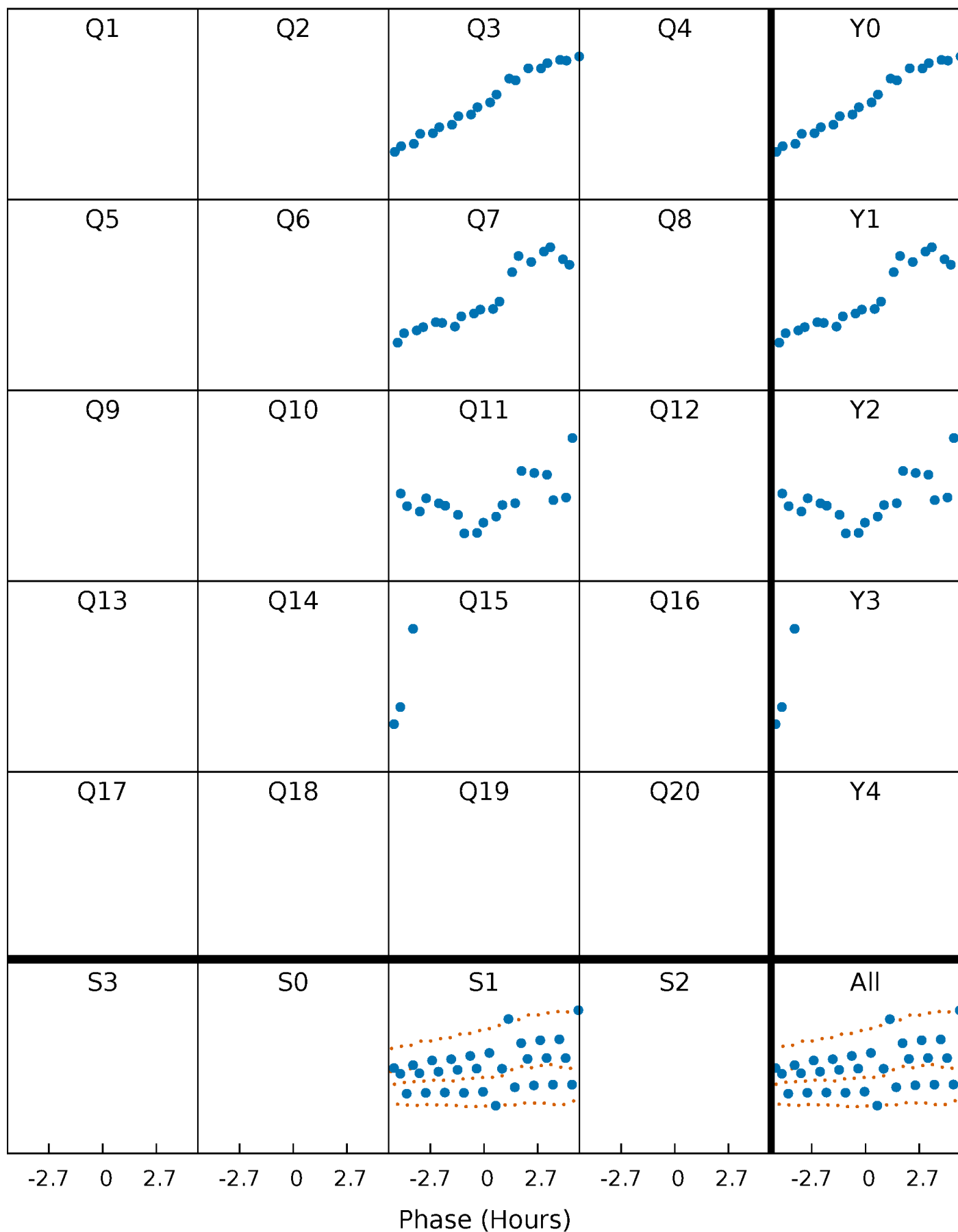


Planet 5 : Phased Whitened Flux Time Series (Fit Epoch/Period)



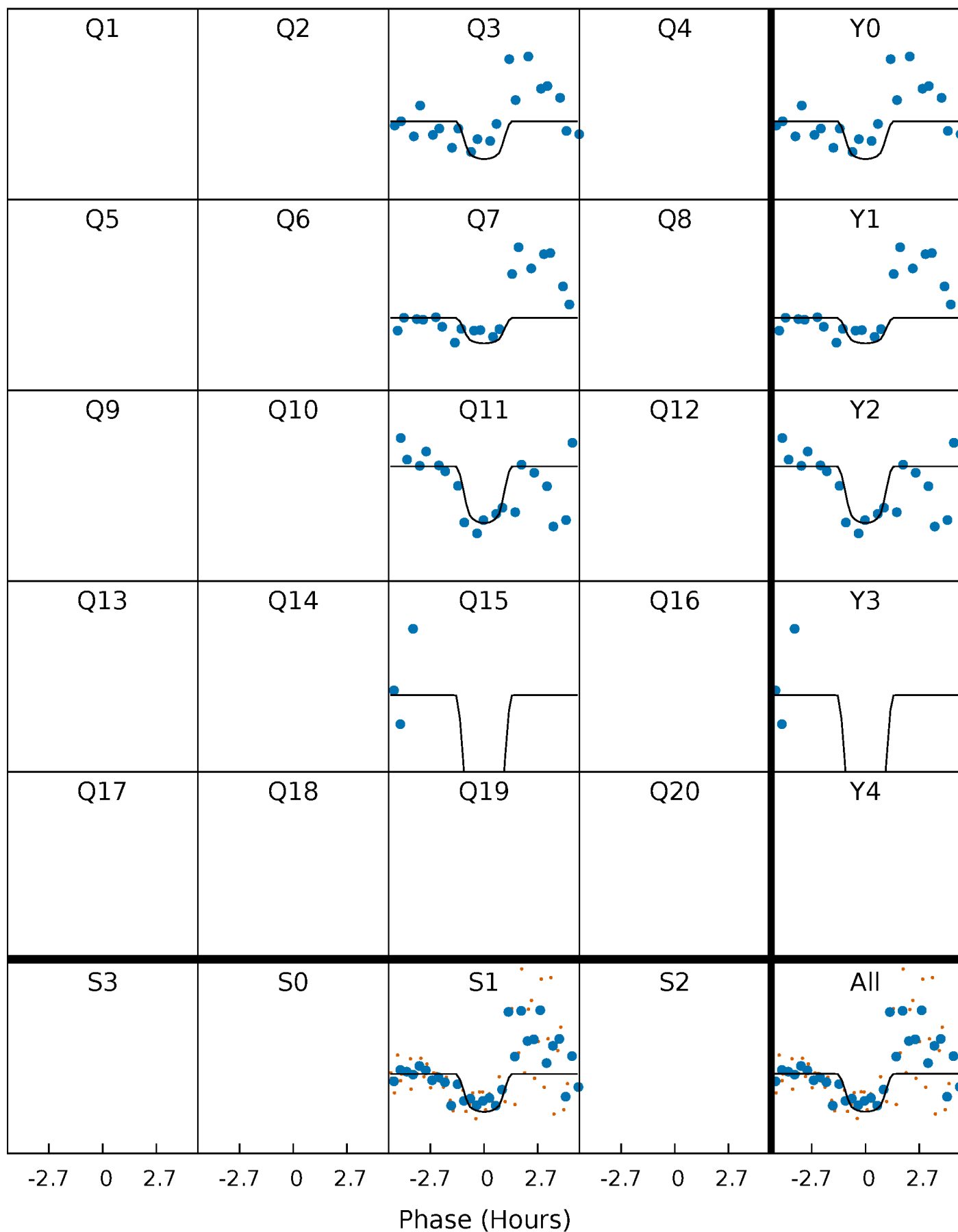
PDC Quarter-Phased Transit Curves

TCE 007465605-05 $P=354.497016$ Days $T_0=340.964354$ (BKJD)



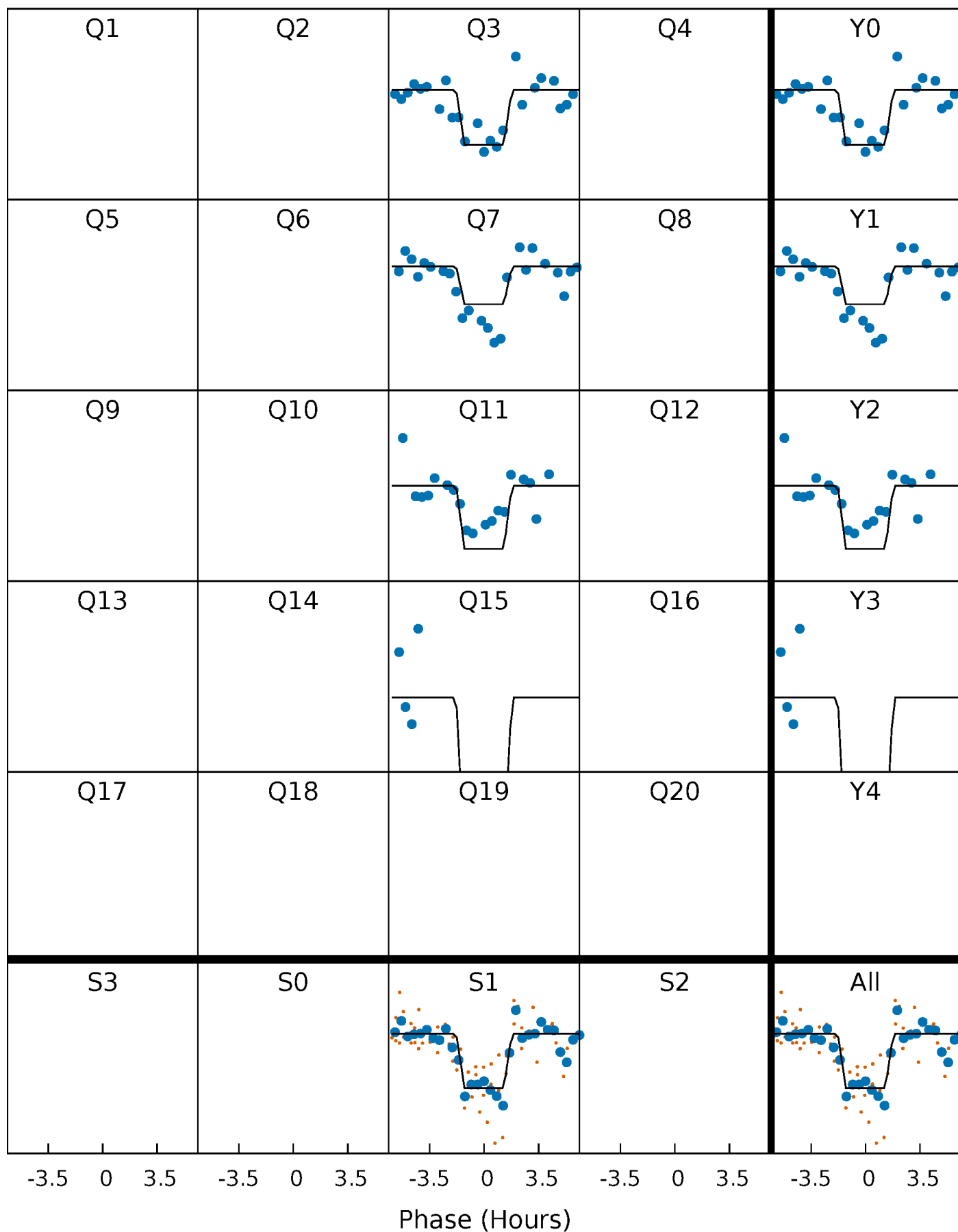
DV Quarter-Phased Transit Curves

TCE 007465605-05 $P=354.497016$ Days $T_0=340.964354$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

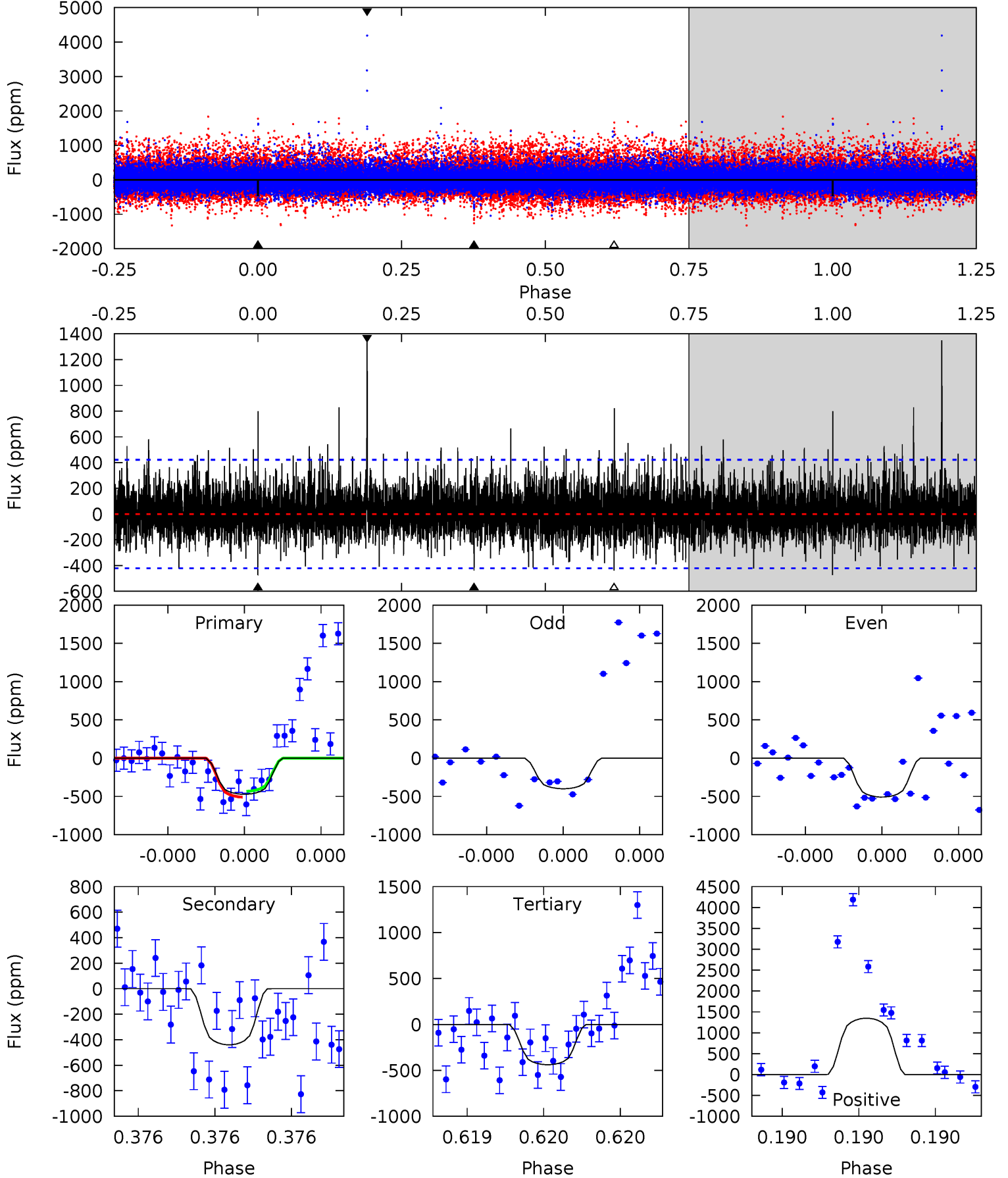
TCE 007465605-05 $P=354.513184$ Days $T_0=340.936424$ (BKJD)



DV Model-Shift Uniqueness Test

007465605-05, P = 354.497016 Days, E = 340.964354 Days

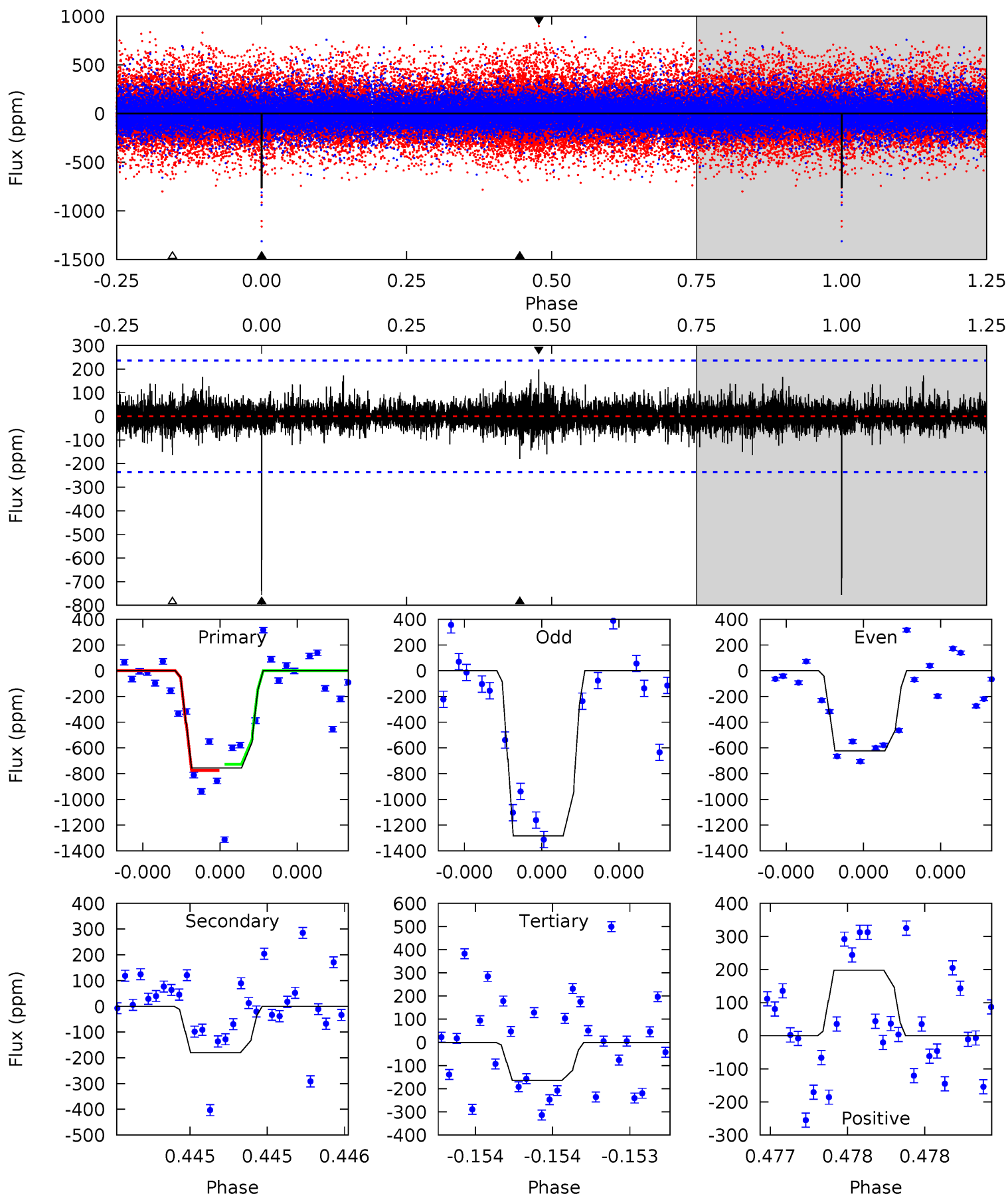
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
6.32	5.89	5.87	18.1	5.65	3.59	1.68	0.45	-11.7	0.02	-12.2	0.53	1.19	0.74	0.52



Alt Model-Shift Uniqueness Test

007465605-05, P = 354.513184 Days, E = 340.936424 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
18.0	4.28	3.89	4.70	5.61	3.54	0.79	14.1	13.3	0.39	-0.42	7.79	1.11	0.21	0.57



Stellar Parameters For KIC 007465605

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	M (M_{\odot})	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	4025^{+125}_{-153}	$4.672^{+0.065}_{-0.025}$	$-0.140^{+0.300}_{-0.300}$	$0.577^{+0.045}_{-0.074}$	$0.570^{+0.059}_{-0.065}$	$4.191^{+1.370}_{-0.512}$
	+3%/-4%	+1%/-1%	+214%/-214%	+8%/-13%	+10%/-11%	+33%/-12%
Source	KIC0	KIC0	KIC0	DSEP		

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

Secondary Eclipse Parameters for KIC 007465605-05 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-440 ± 75	$2.07^{+1.59}_{-1.30}$	207^{+8}_{-9}	3437^{+1504}_{-532}	$37042^{+222778}_{-24708}$
Alt.	-180 ± 42	$2.18^{+1.62}_{-1.36}$	207^{+8}_{-9}	2981^{+992}_{-422}	13572^{+78966}_{-9100}

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 $A_{obs} \gg 1.0$

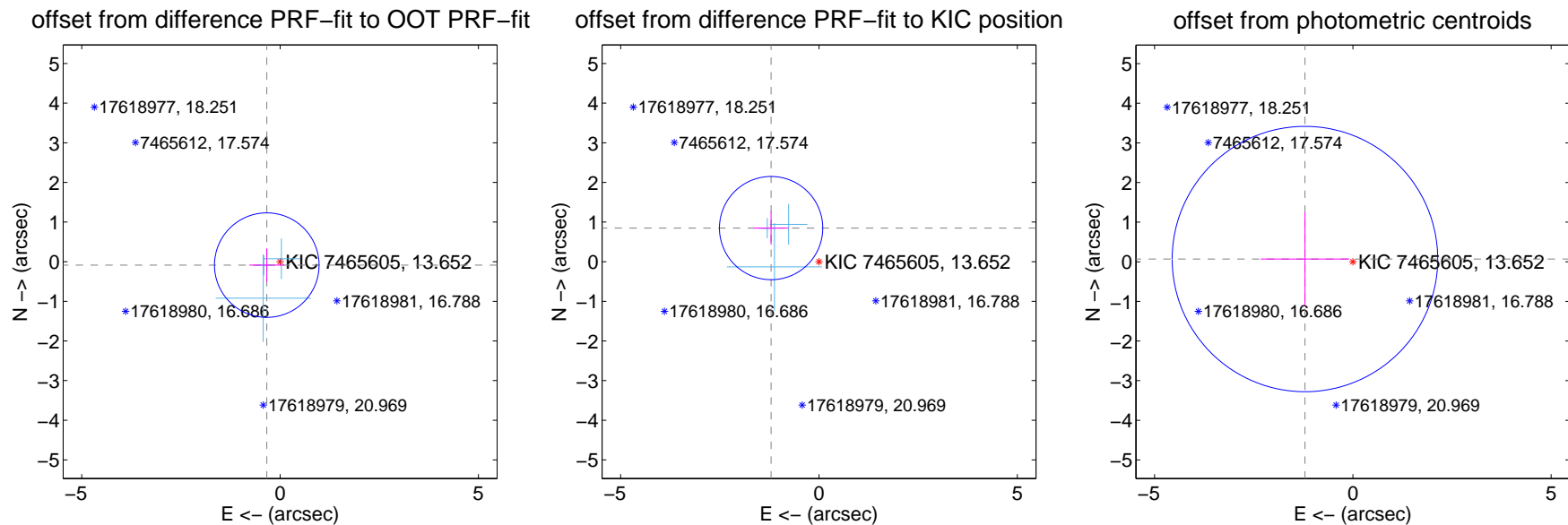
DV Centroid Data

Supplemental centroid analysis for 007465605-05. Kepler magnitude: 13.65. Transit SNR 5.44

There are 3 quarters with good PRF difference image offsets

The direct PRF centroid is offset from the target star catalog position by about 1.29 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.347 ± 0.439	0.79	0.336 ± 0.441	-0.086 ± 0.420
PRF-fit source offset from KIC position	1.475 ± 0.434	3.40	1.207 ± 0.441	0.848 ± 0.420
photometric centroid source offset	1.21 ± 1.12	1.08	1.21 ± 1.12	0.07 ± 1.18



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

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

Q1 no difference image



Q1 no OOT image



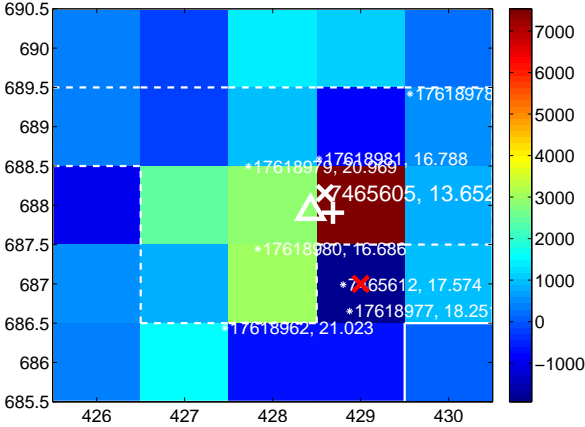
Q2 no difference image



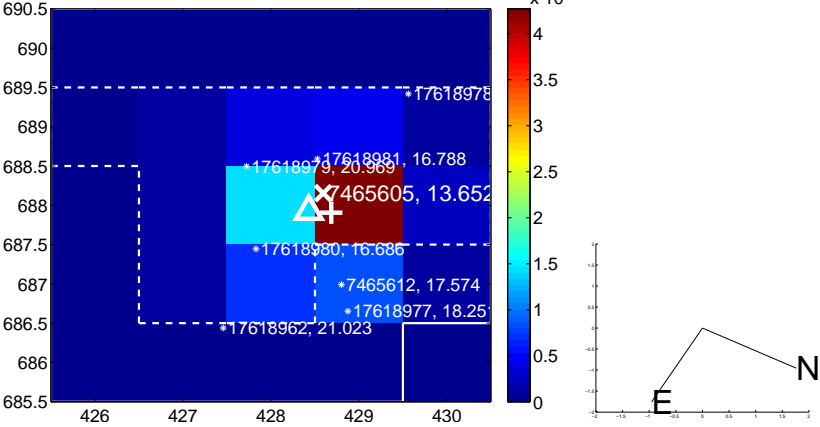
Q2 no OOT image



Q3 difference image



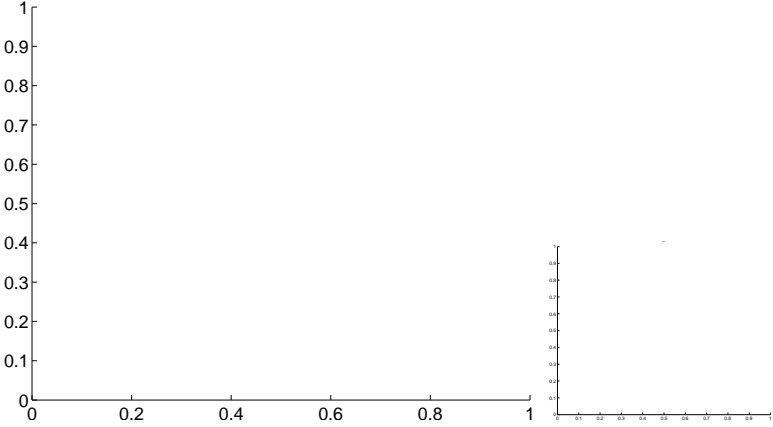
Q3 OOT image



Q4 no difference image



Q4 no OOT image



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

Q5 no difference image



Q5 no OOT image



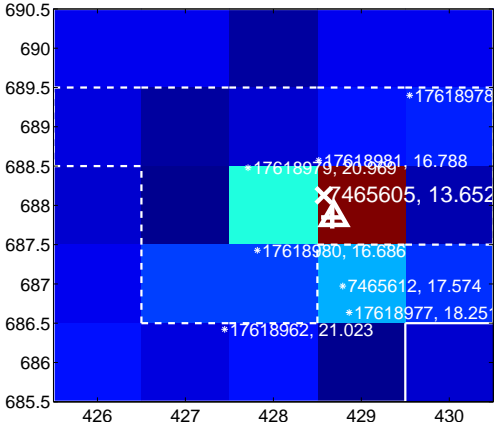
Q6 no difference image



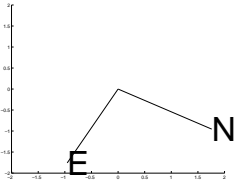
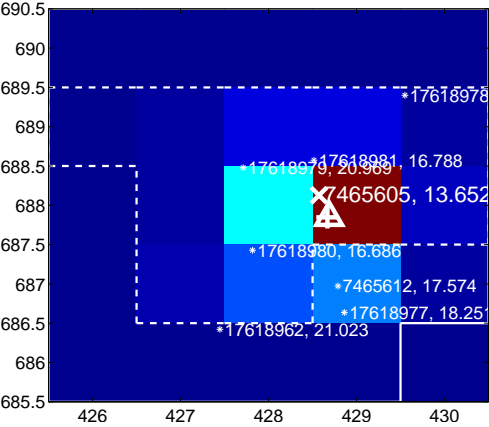
Q6 no OOT image



Q7 difference image



Q7 OOT image



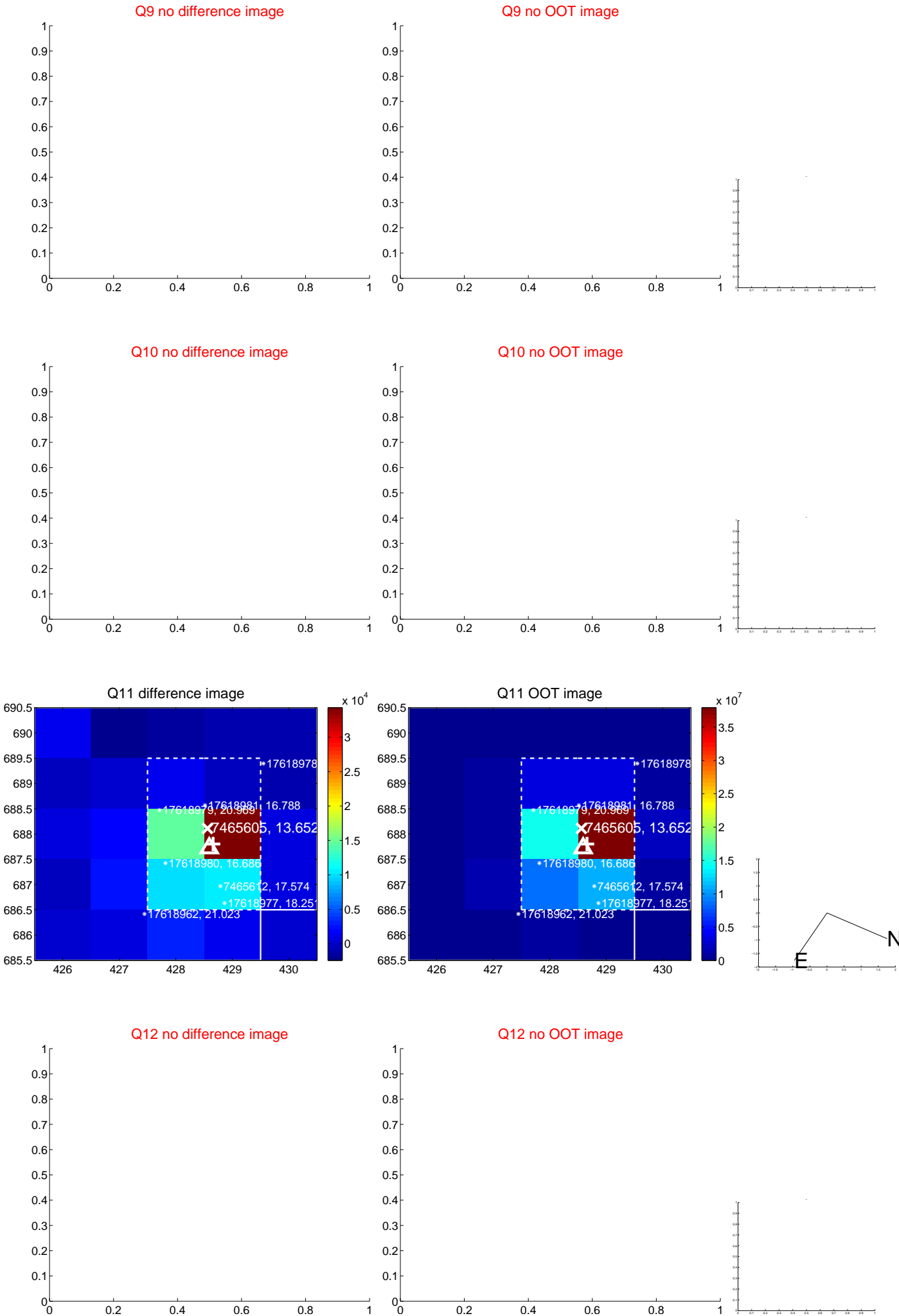
Q8 no difference image



Q8 no OOT image



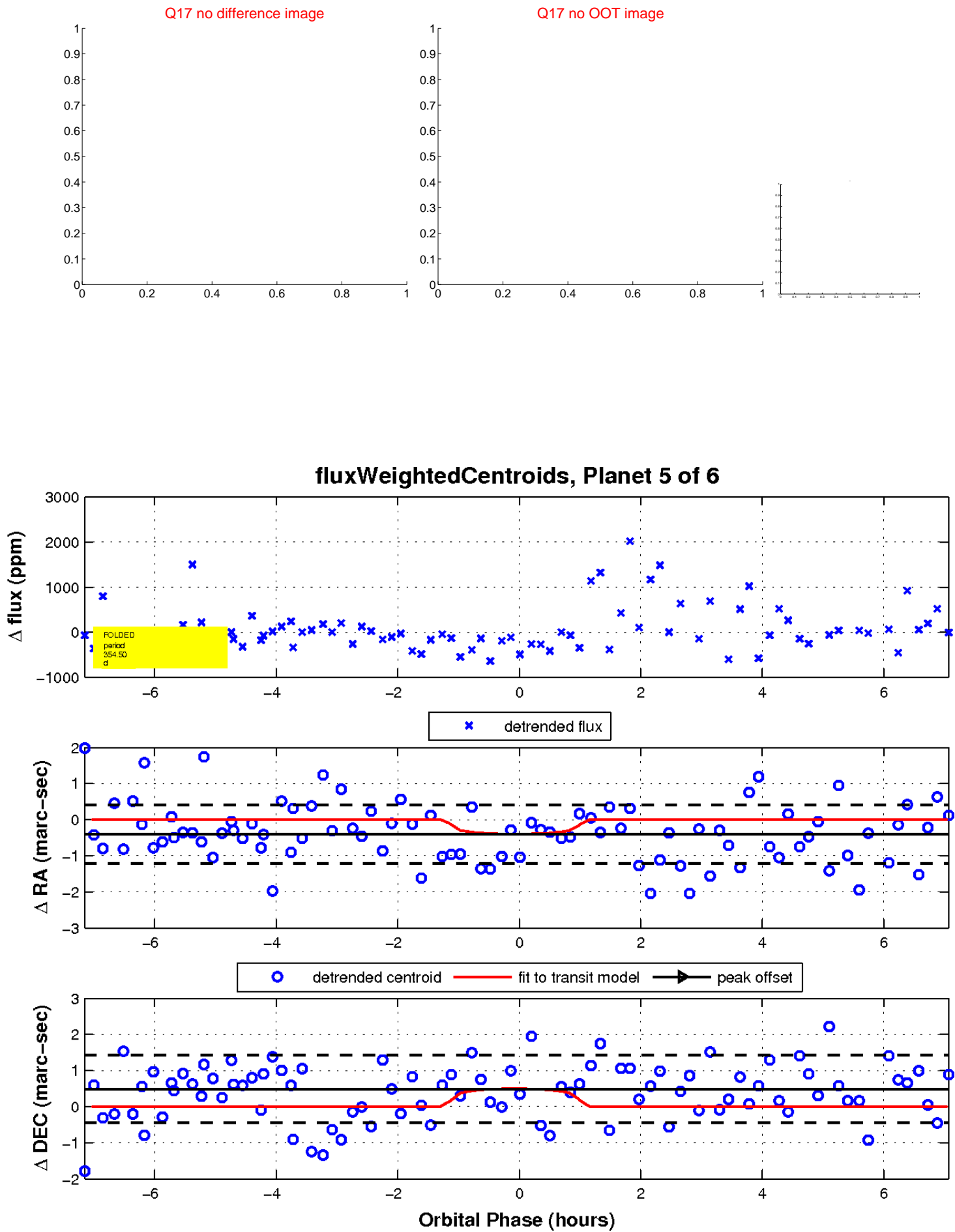
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



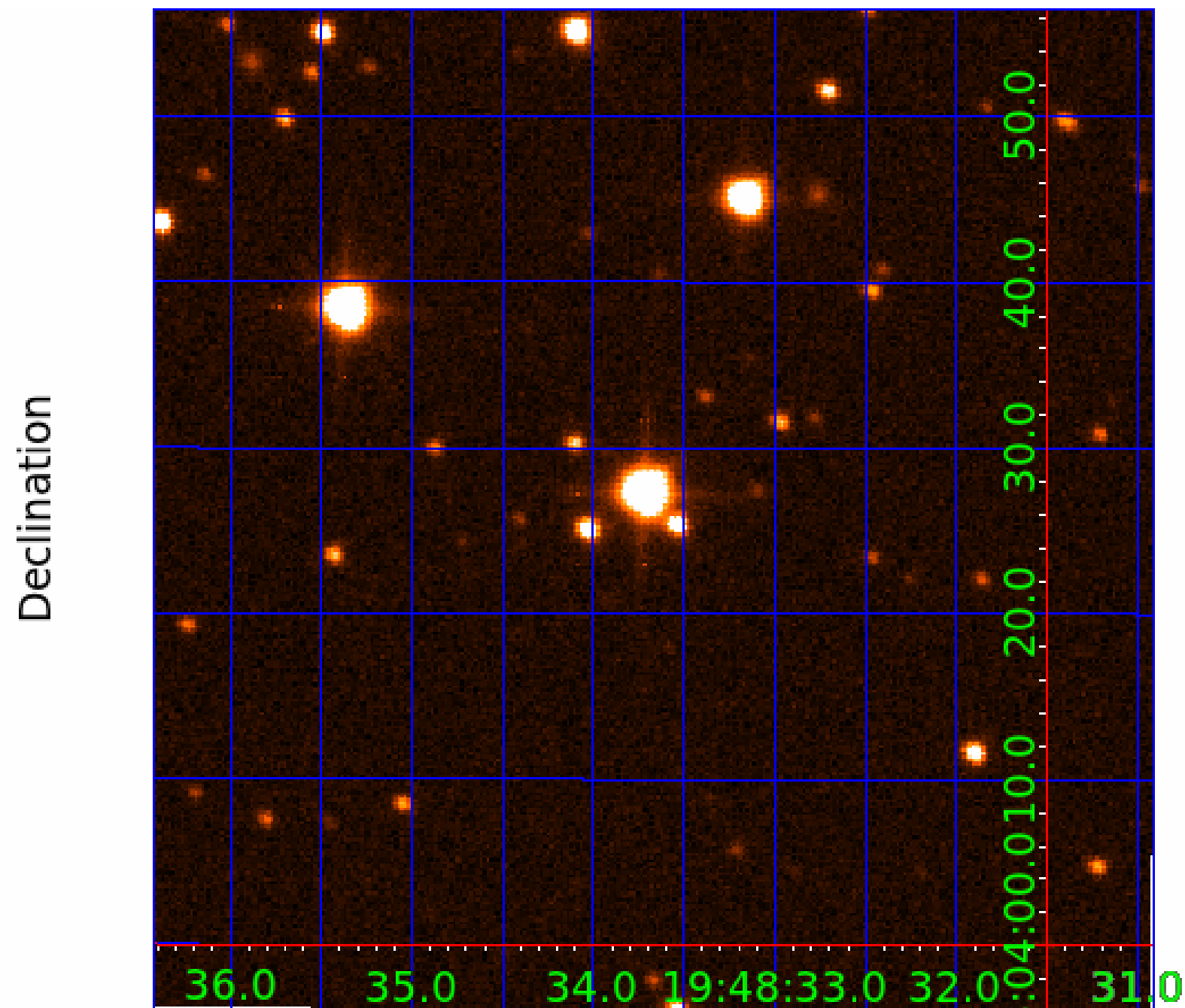
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



UKIRT Image



KIC 007465605

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})
007465605-01	OBS	No	348.355246	244.599308	768.5	3.456	17.3	5.7	0.58	4025	1.77	0.12
007465605-03	OBS	No	355.207838	341.690339	788.6	3.727	11.9	7.7	0.58	4025	1.70	0.12
007465605-04	OBS	No	369.334080	224.099689	757.2	7.509	11.8	5.9	0.58	4025	1.66	0.11
007465605-05	OBS	No	354.497016	340.964354	637.2	2.392	11.3	5.4	0.58	4025	1.72	0.12
007465605-06	OBS	No	436.569821	238.072009	425.0	10.500	10.9	-1.0	0.58	4025	1.16	0.09

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
007465605-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_MARSHALL_SKYE_ZUMA_TRACKER—LPP_DV—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—INCONSISTENT_TRANS—CENT_FEW_DIFFS
007465605-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_MARSHALL—LPP_DV—MOD_NONUNIQ_DV—MOD_POS_DV—CENT_FEW_DIFFS
007465605-04	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—MOD_POS_ALT—INCONSISTENT_TRANS—CENT_FEW_DIFFS
007465605-05	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_MARSHALL—LPP_DV—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—INCONSISTENT_TRANS—CENT_KIC_POS
007465605-06	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_MARSHALL_SKYE—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.

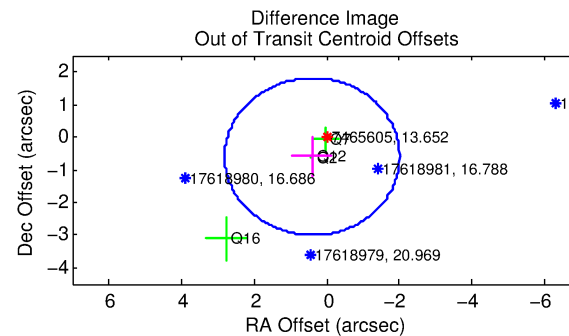
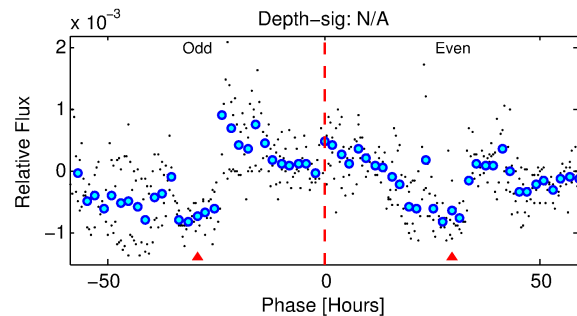
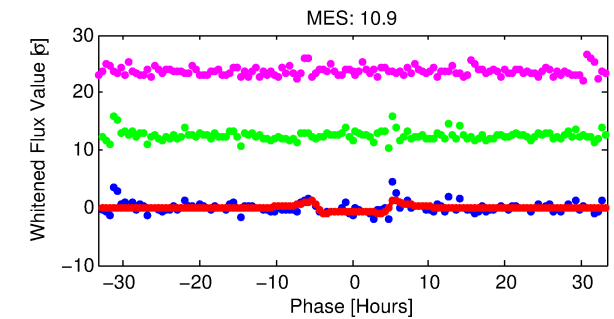
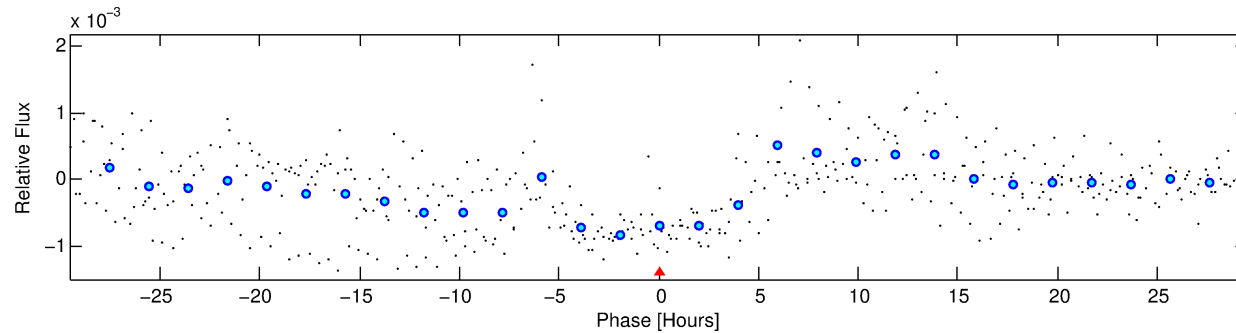
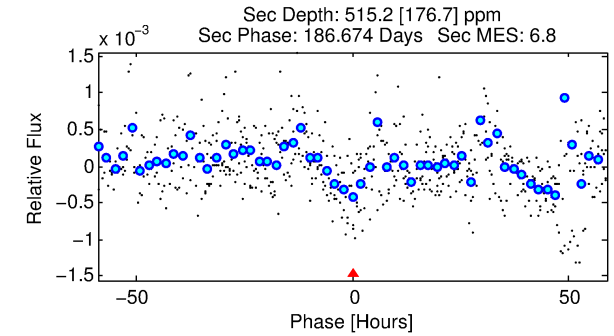
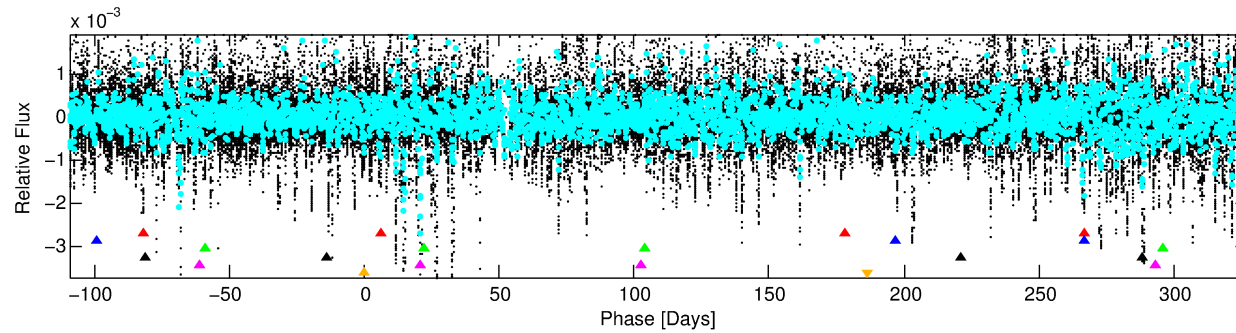
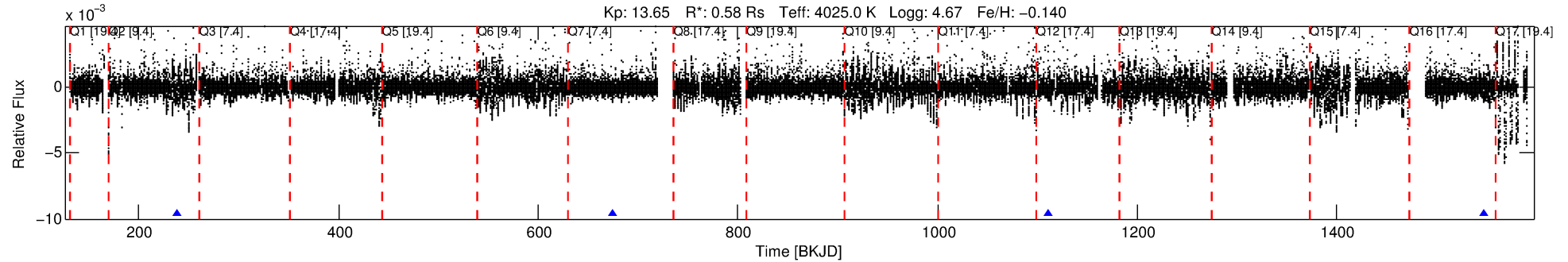
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 007465605-06

No Significant Match Found

DV One-Page Summary

KIC: 7465605 Candidate: 6 of 6 Period: 436.570 d



TPS TCE Results:

Period = 436.56982 d
Epoch = 238.0720 BKJD

DV fit results are unavailable

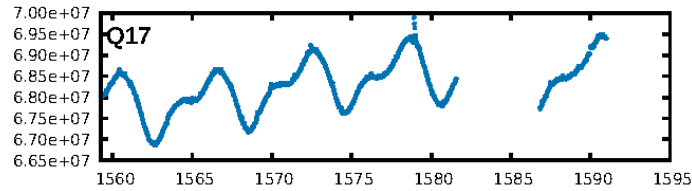
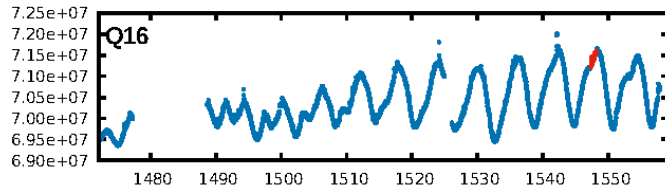
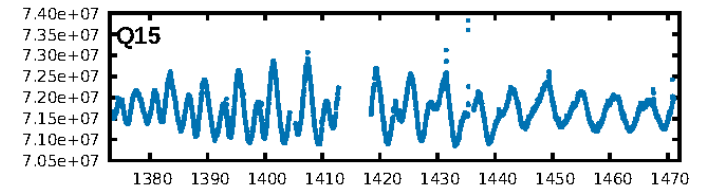
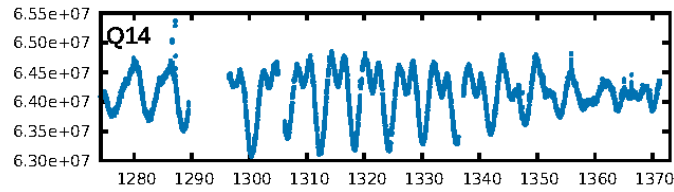
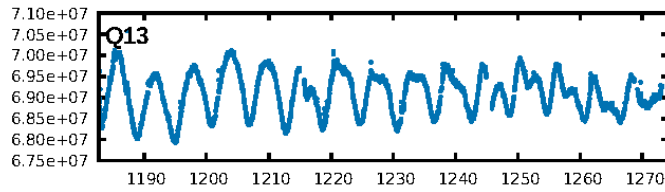
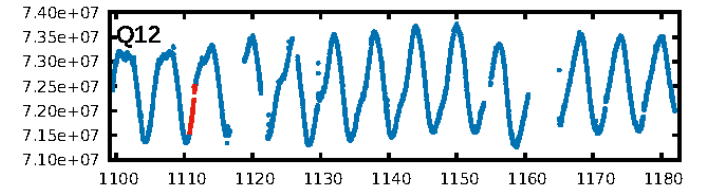
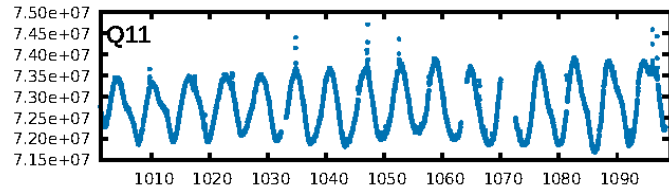
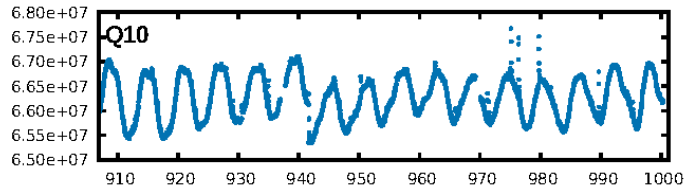
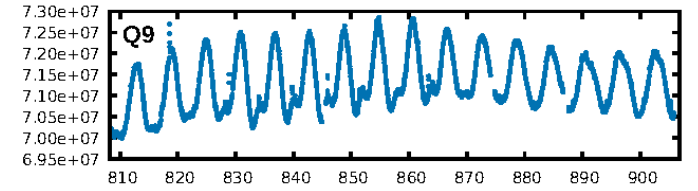
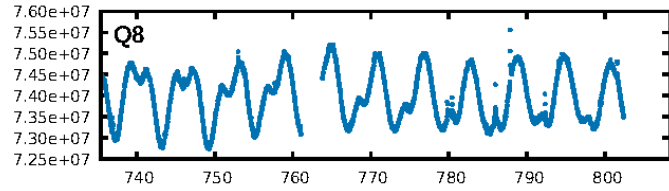
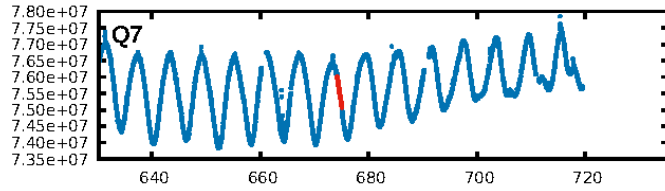
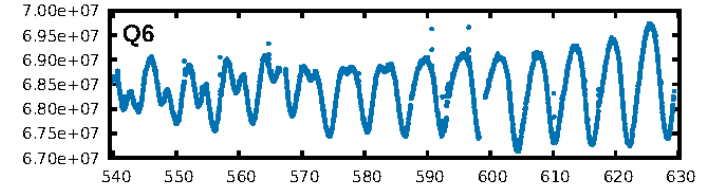
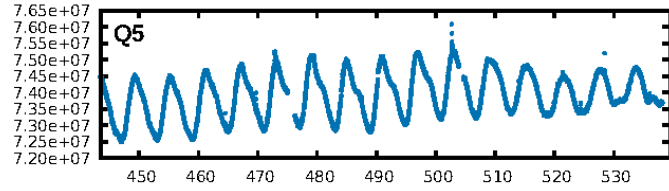
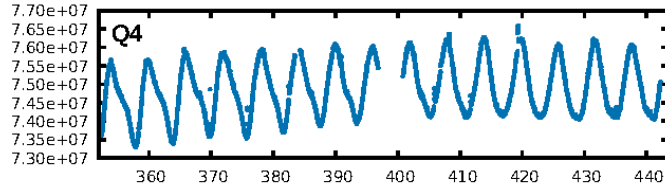
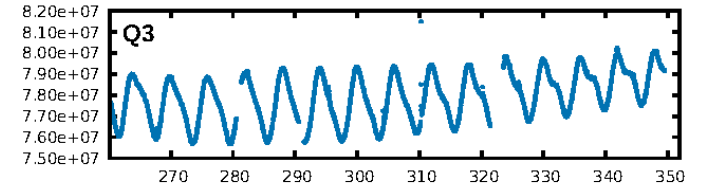
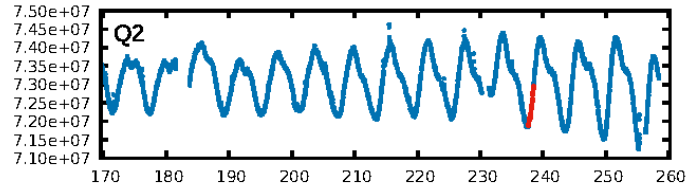
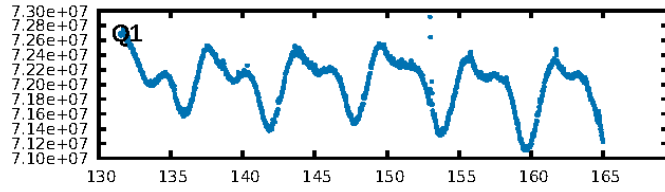
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [125.01σ]
LongPeriod-sig: 100.0% [144.27σ]
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [4/4]
GhostDiagnostic-chr: 1.411
Centroid-sig: 2.7%
Centroid-so: 1.659 arcsec [3.41σ]
OotOffset-rm: 0.717 arcsec [0.89σ]
KicOffset-rm: 1.020 arcsec [3.20σ]
OotOffset-st: 1/1/2/0 [4]
KicOffset-st: 1/1/2/0 [4]
DiffImageQuality-fgm: 0.50 [2/4]
DiffImageOverlap-fno: 1.00 [4/4]

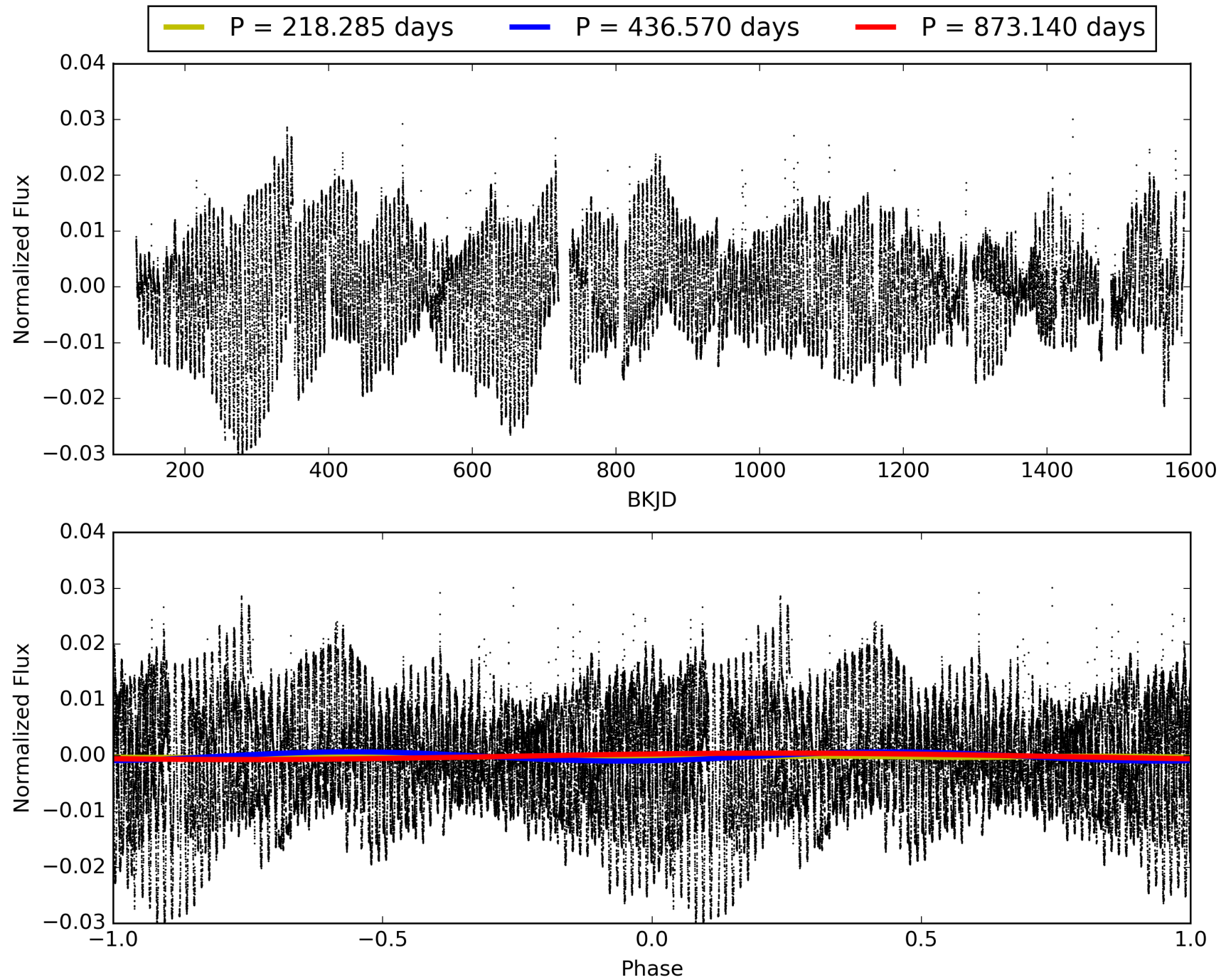
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 01-Feb-2016 05:54:45 Z

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

TCE 007465605-06, PDC Light Curves

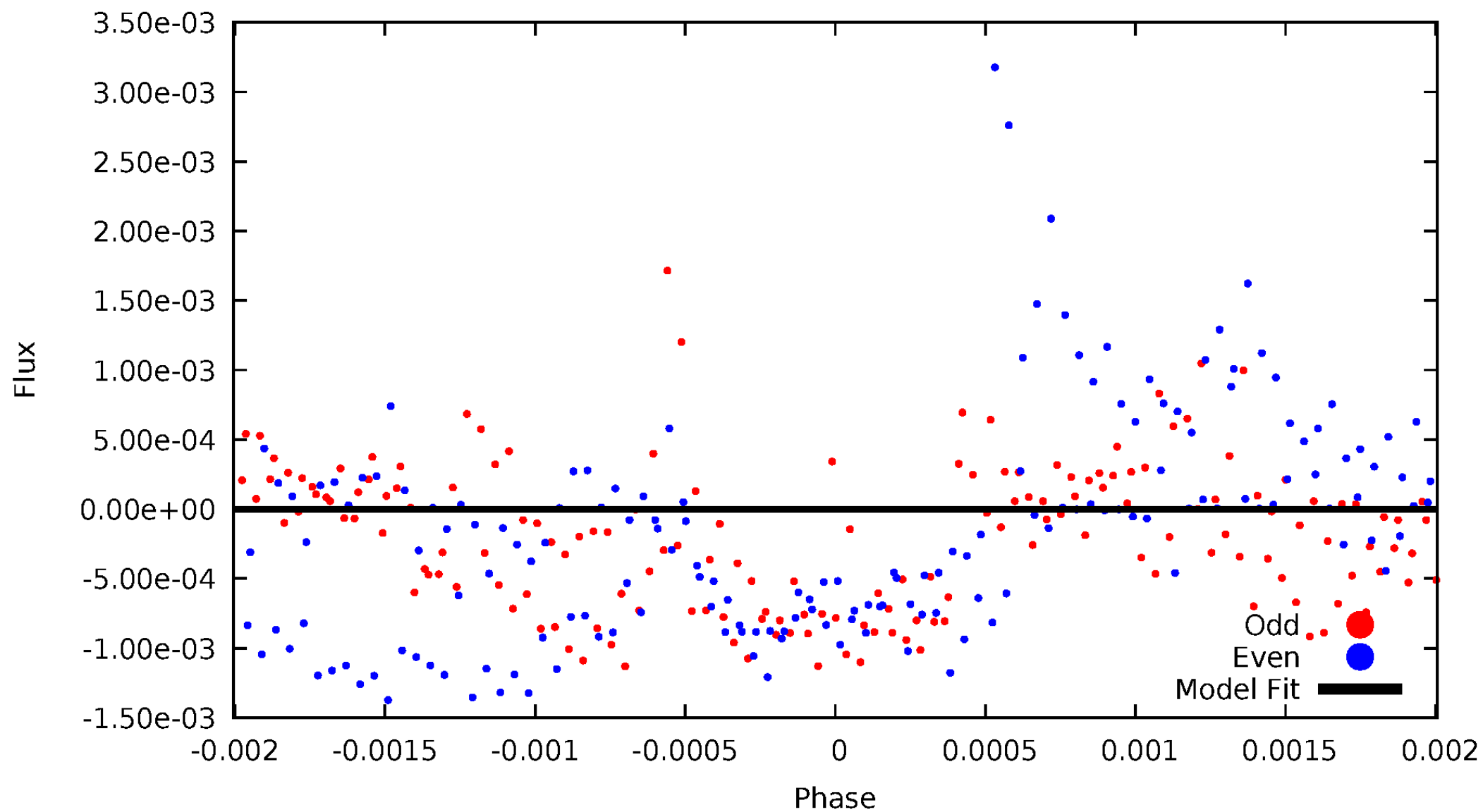


TCE 007465605-06



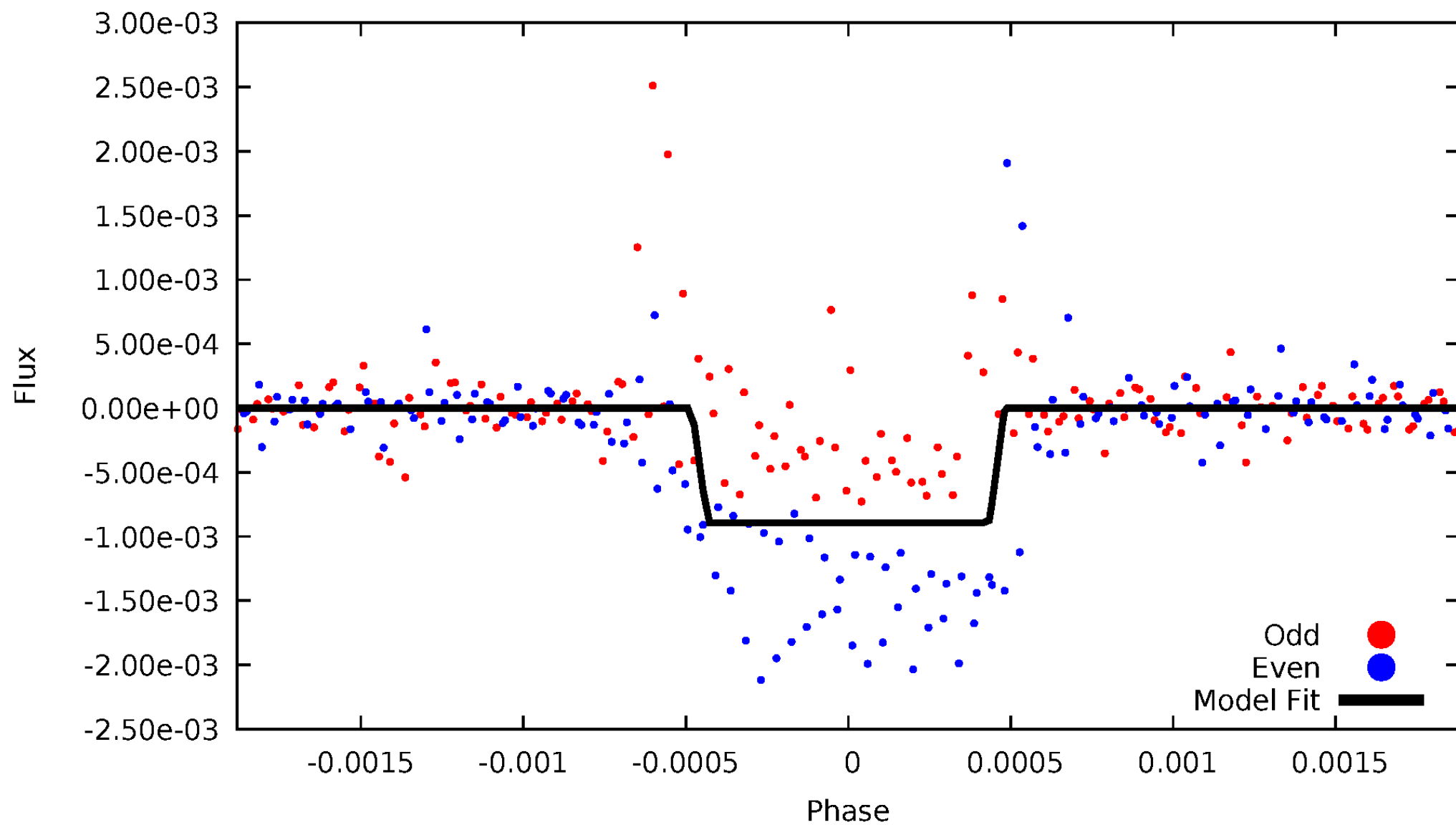
DV Odd/Even

TCE 007465605-06



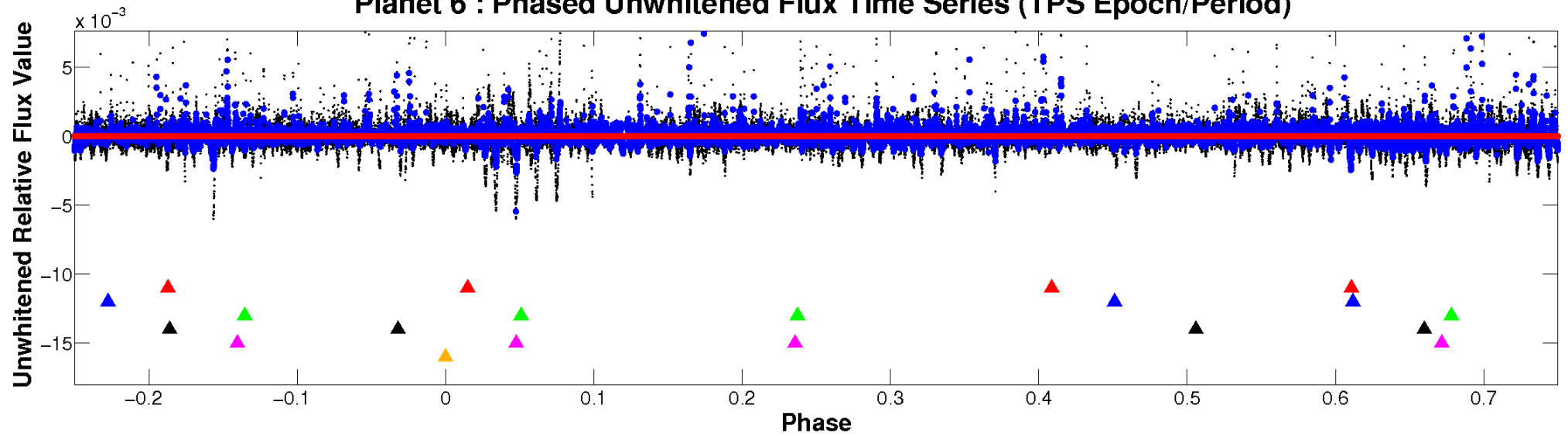
ALT Odd/Even

TCE 007465605-06

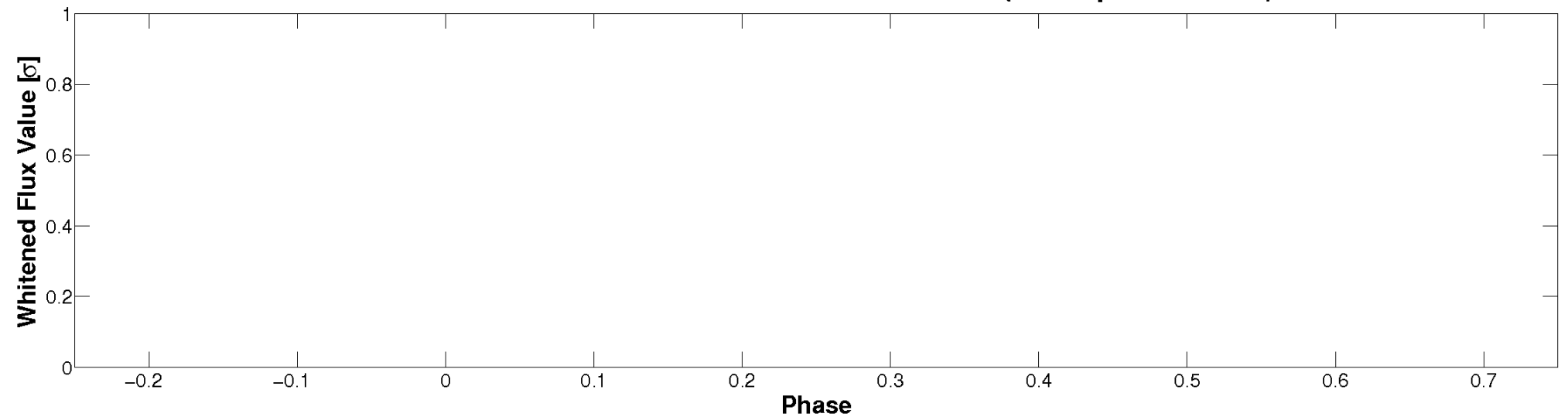


Non-Whitened Vs. Whitened Light Curve

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

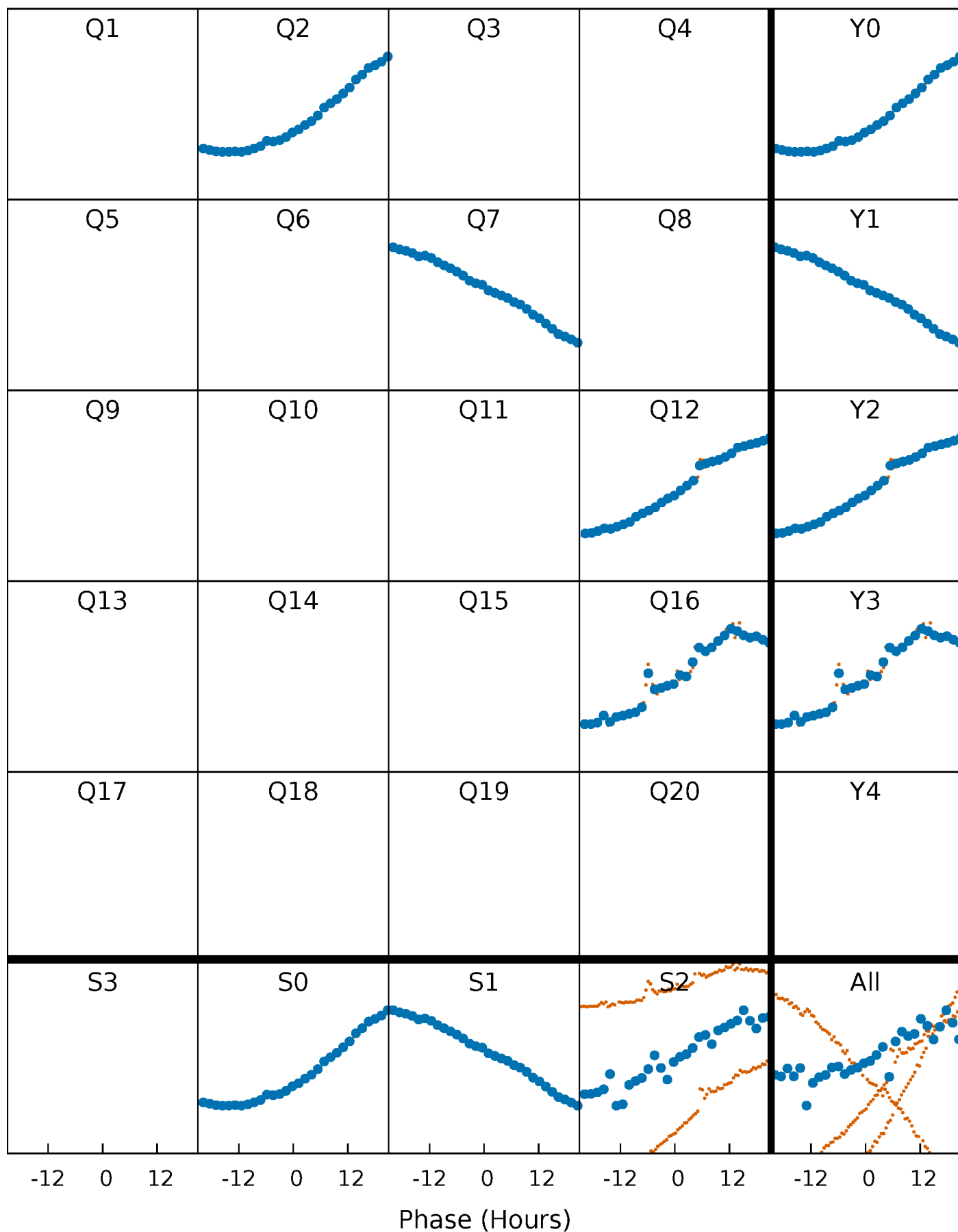


Planet 6 : Phased Whitened Flux Time Series (TPS Epoch/Period)



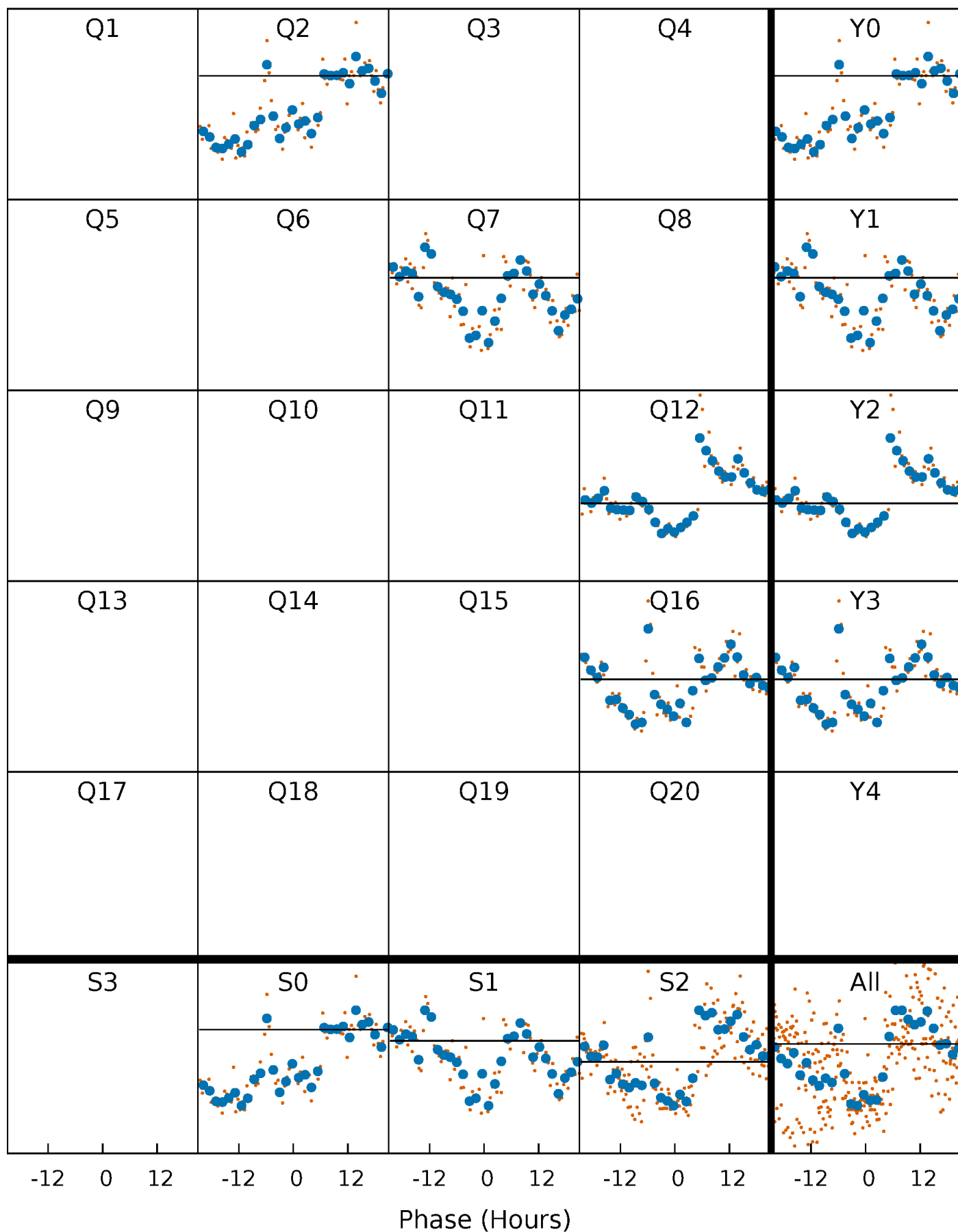
PDC Quarter-Phased Transit Curves

TCE 007465605-06 P=436.569821 Days $T_0=238.072009$ (BKJD)



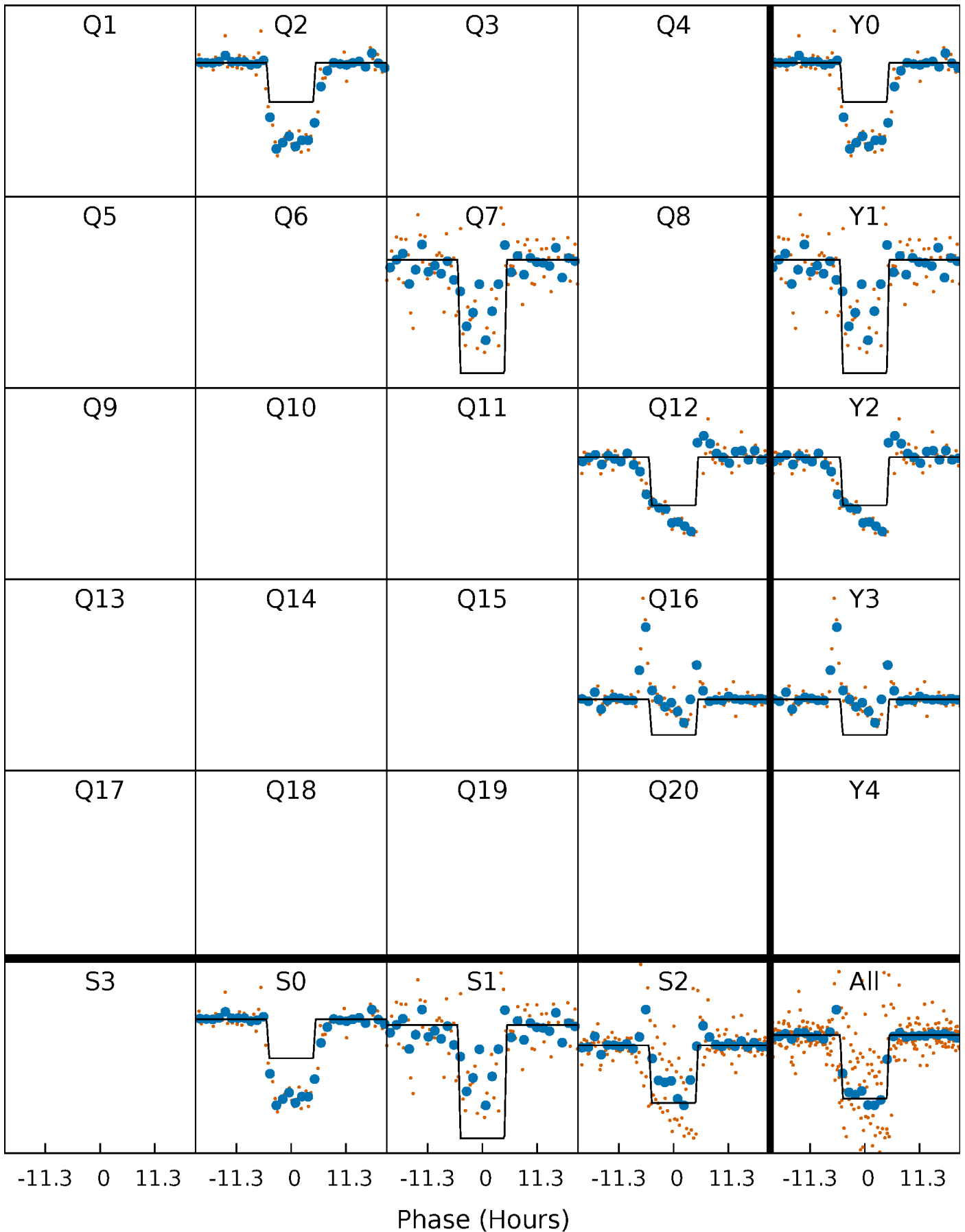
DV Quarter-Phased Transit Curves

TCE 007465605-06 P=436.569821 Days $T_0=238.072009$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

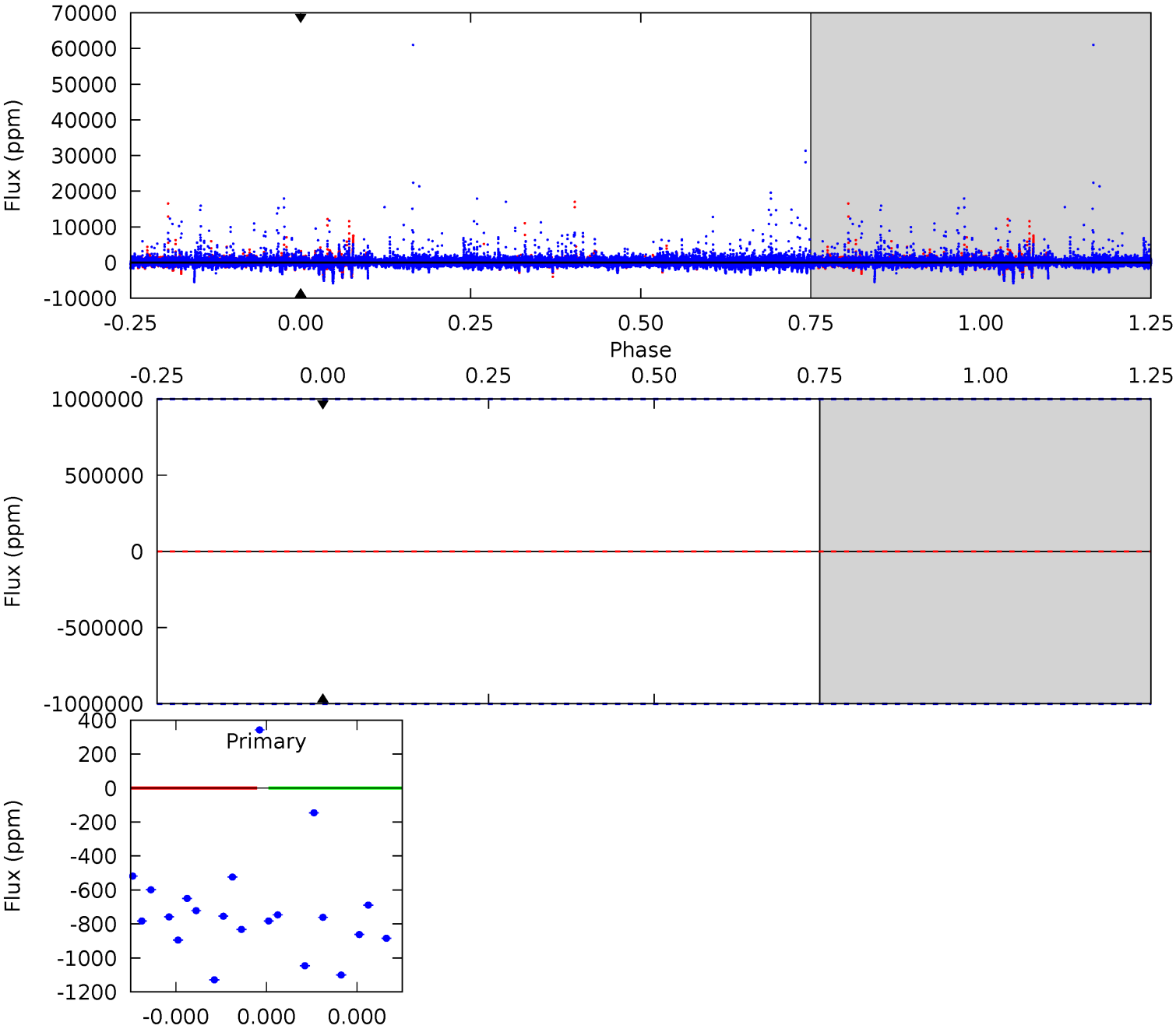
TCE 007465605-06 P=436.569821 Days $T_0=238.090628$ (BKJD)



DV Model-Shift Uniqueness Test

007465605-06, P = 436.569821 Days, E = 238.072009 Days

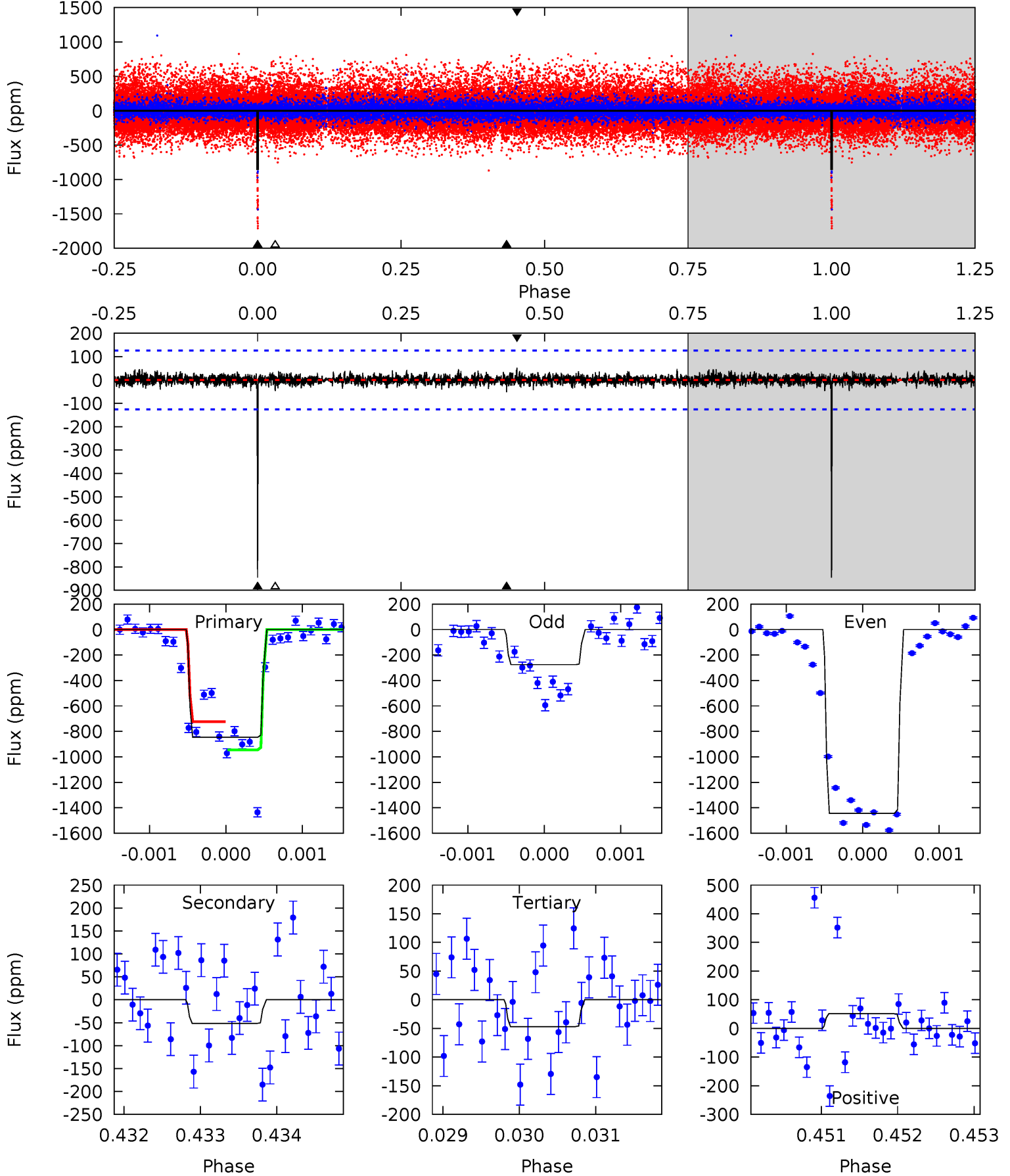
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
0	0	0	0	1.00	1.00	1.00	0	0	0	0	0	0	0	0



Alt Model-Shift Uniqueness Test

007465605-06, P = 436.569821 Days, E = 238.090628 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
36.7	2.23	2.03	2.23	5.46	3.30	0.49	34.7	34.5	0.20	-0.00	28.0	1.14	0.06	4.80



Stellar Parameters For KIC 007465605

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	4025^{+125}_{-153}	$4.672^{+0.065}_{-0.025}$	$-0.140^{+0.300}_{-0.300}$	$0.577^{+0.045}_{-0.074}$	$0.570^{+0.059}_{-0.065}$	$4.191^{+1.370}_{-0.512}$
	+3%/-4%	+1%/-1%	+214%/-214%	+8%/-13%	+10%/-11%	+33%/-12%
Source	KIC0	KIC0	KIC0	DSEP		

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

Secondary Eclipse Parameters for KIC 007465605-06 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	0 ± 1000000	$4.16^{+5.14}_{-2.81}$	192^{+8}_{-8}	-3604^{+12983}_{-6678}	$-68023.404^{+4617366.152}_{-4987448.585}$
Alt.	-51 ± 23	$5.03^{+5.05}_{-3.42}$	193^{+8}_{-8}	2063^{+622}_{-290}	892^{+8080}_{-687}

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 $A_{obs} \gg 1.0$

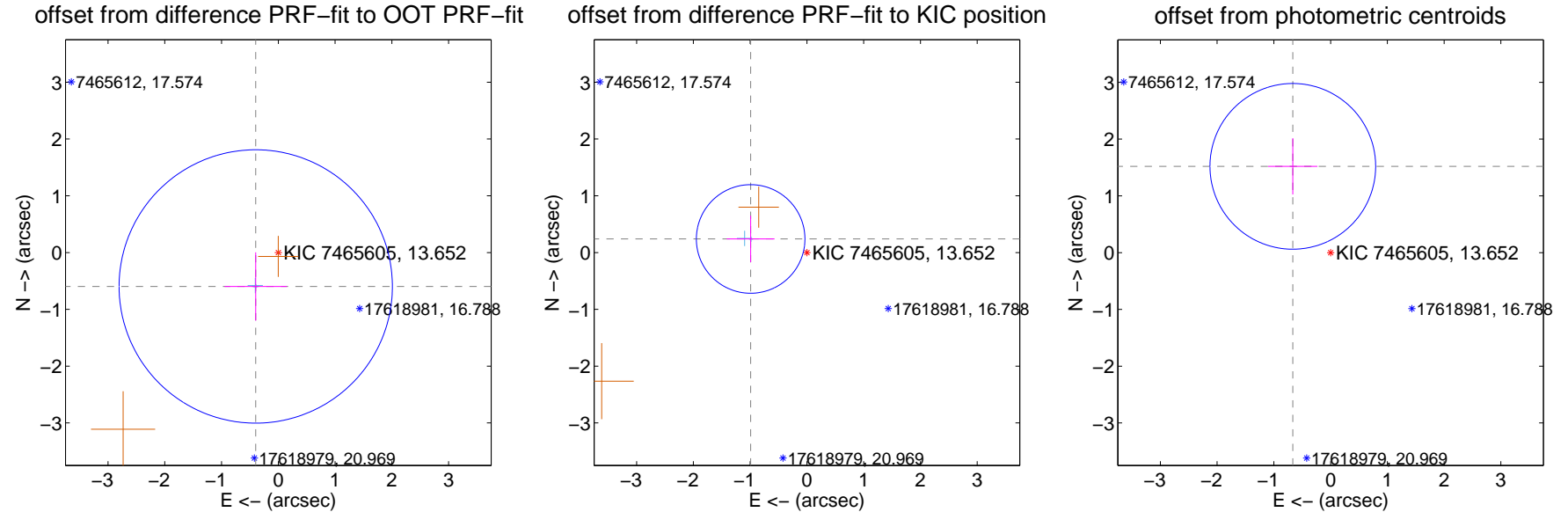
DV Centroid Data

Supplemental centroid analysis for 007465605-06. Kepler magnitude: 13.65. Transit SNR -1.00

There are 2 quarters with good PRF difference image offsets

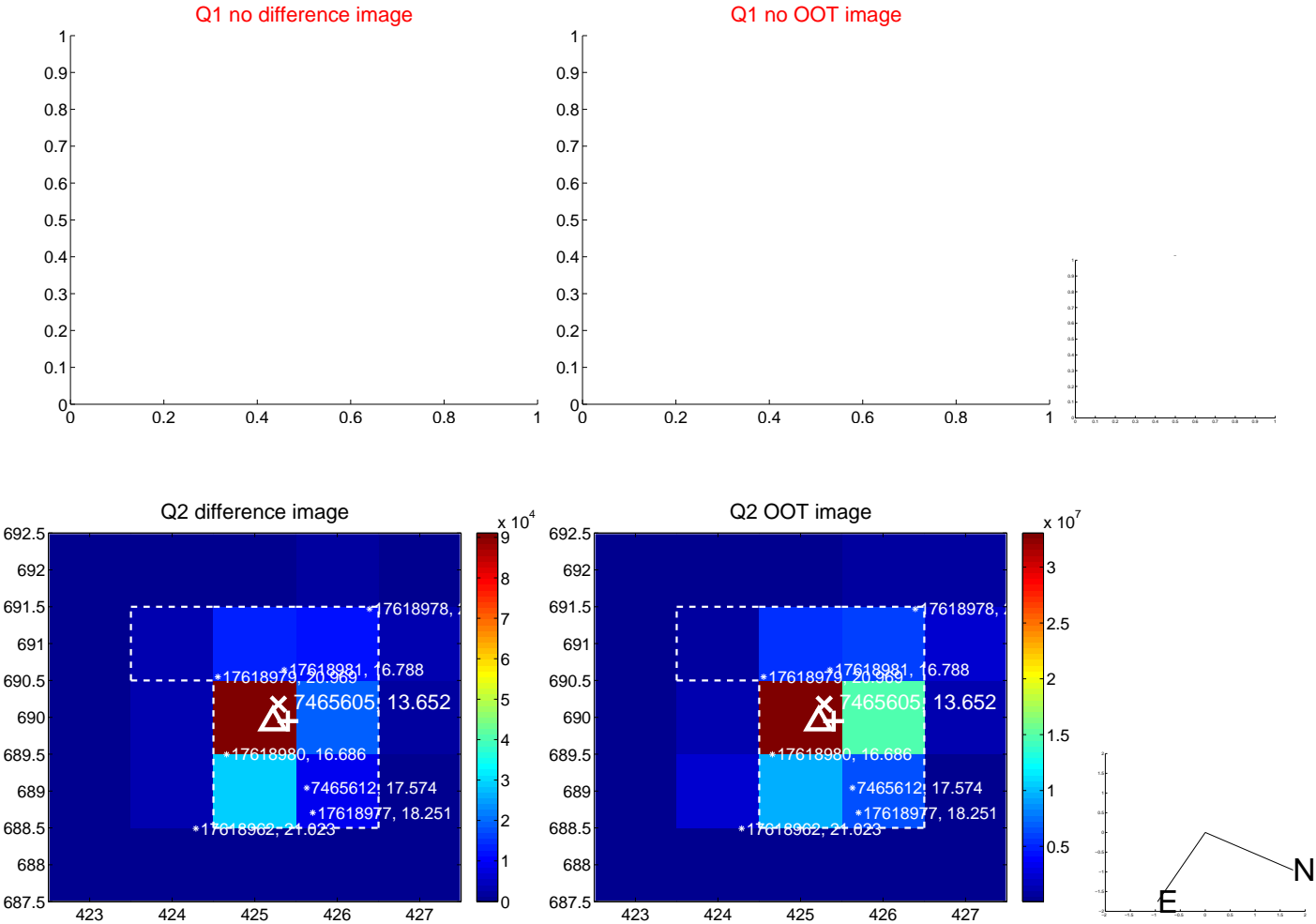
The direct PRF centroid is offset from the target star catalog position by about 1.22 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.717 ± 0.802	0.89	0.398 ± 0.549	-0.597 ± 0.601
PRF-fit source offset from KIC position	1.020 ± 0.319	3.20	0.991 ± 0.421	0.240 ± 0.409
photometric centroid source offset	1.66 ± 0.49	3.41	0.67 ± 0.43	1.52 ± 0.50



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



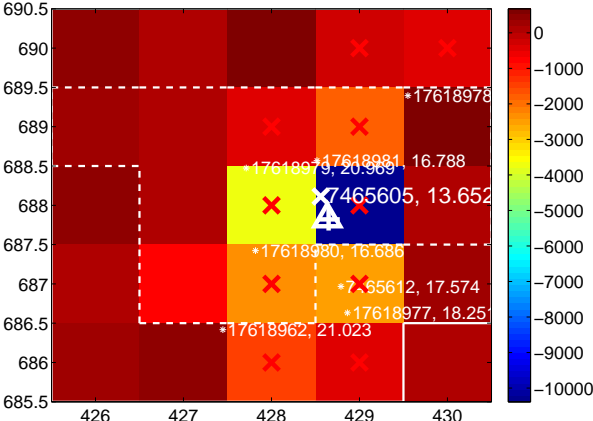
Q6 no difference image



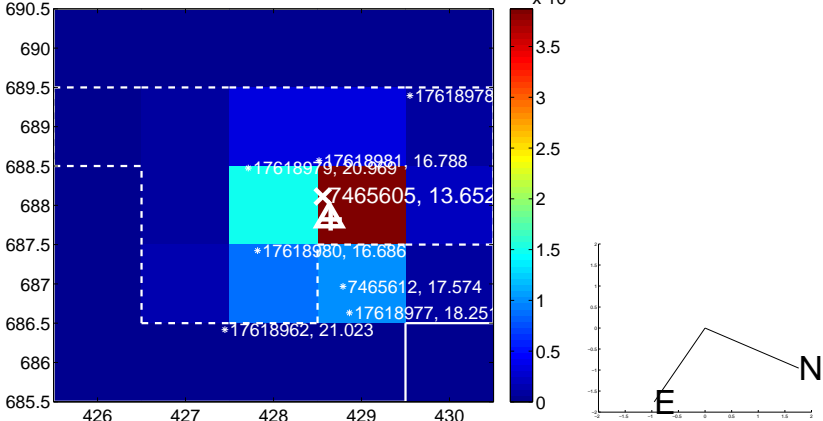
Q6 no OOT image



Q7 difference image. Poor Quality



Q7 OOT image



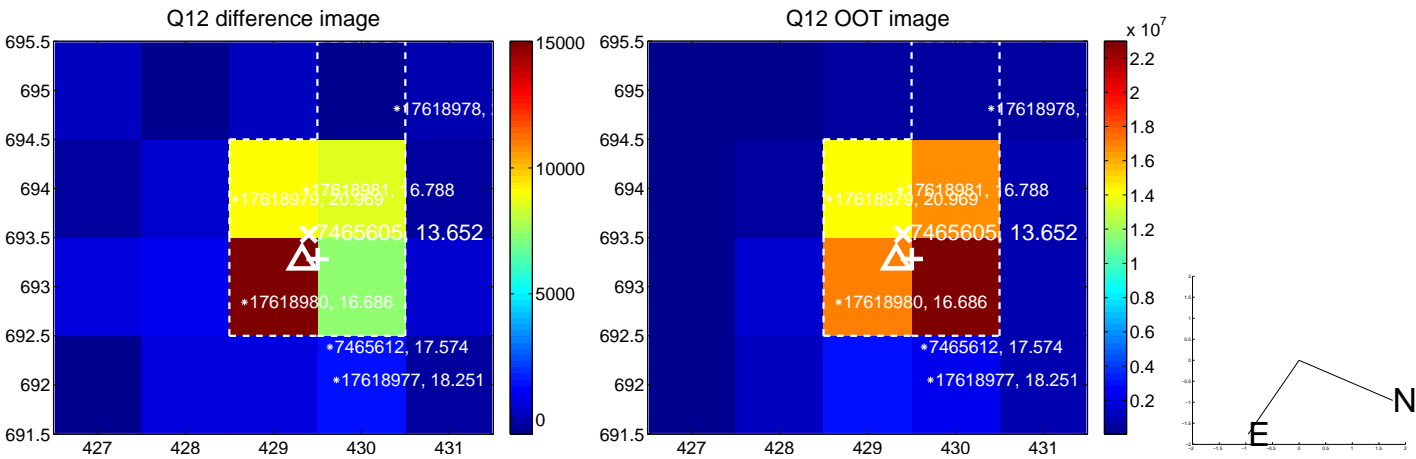
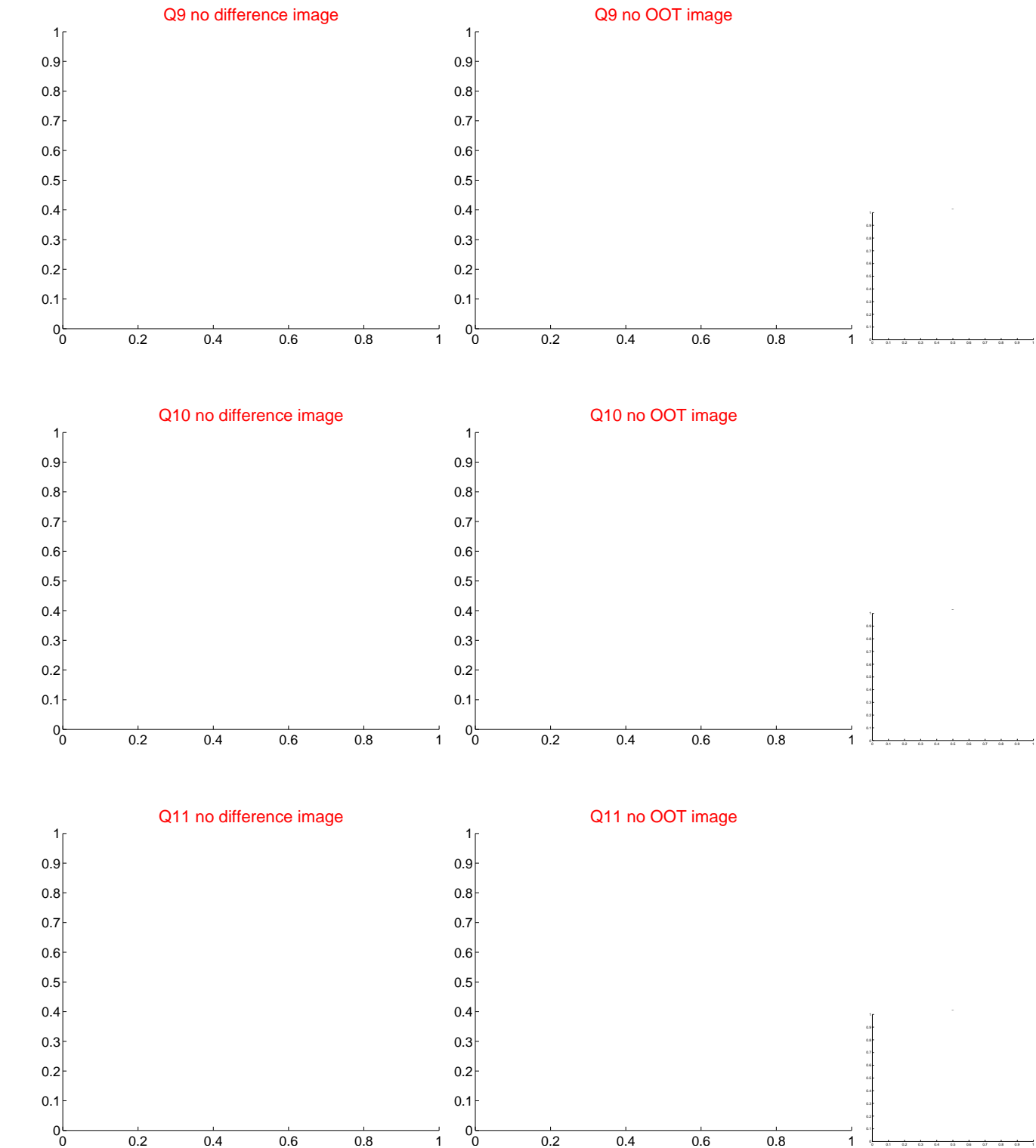
Q8 no difference image



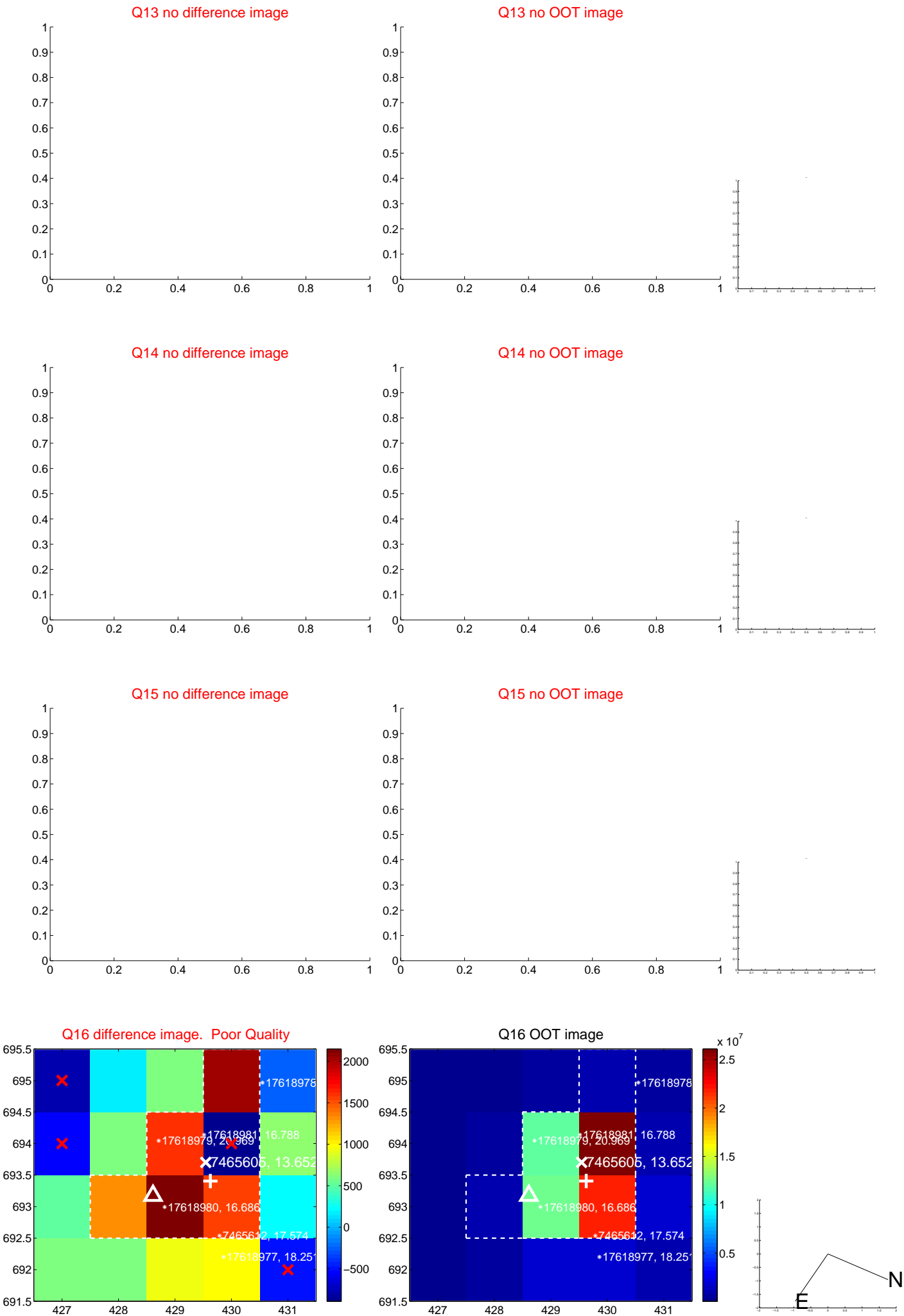
Q8 no OOT image



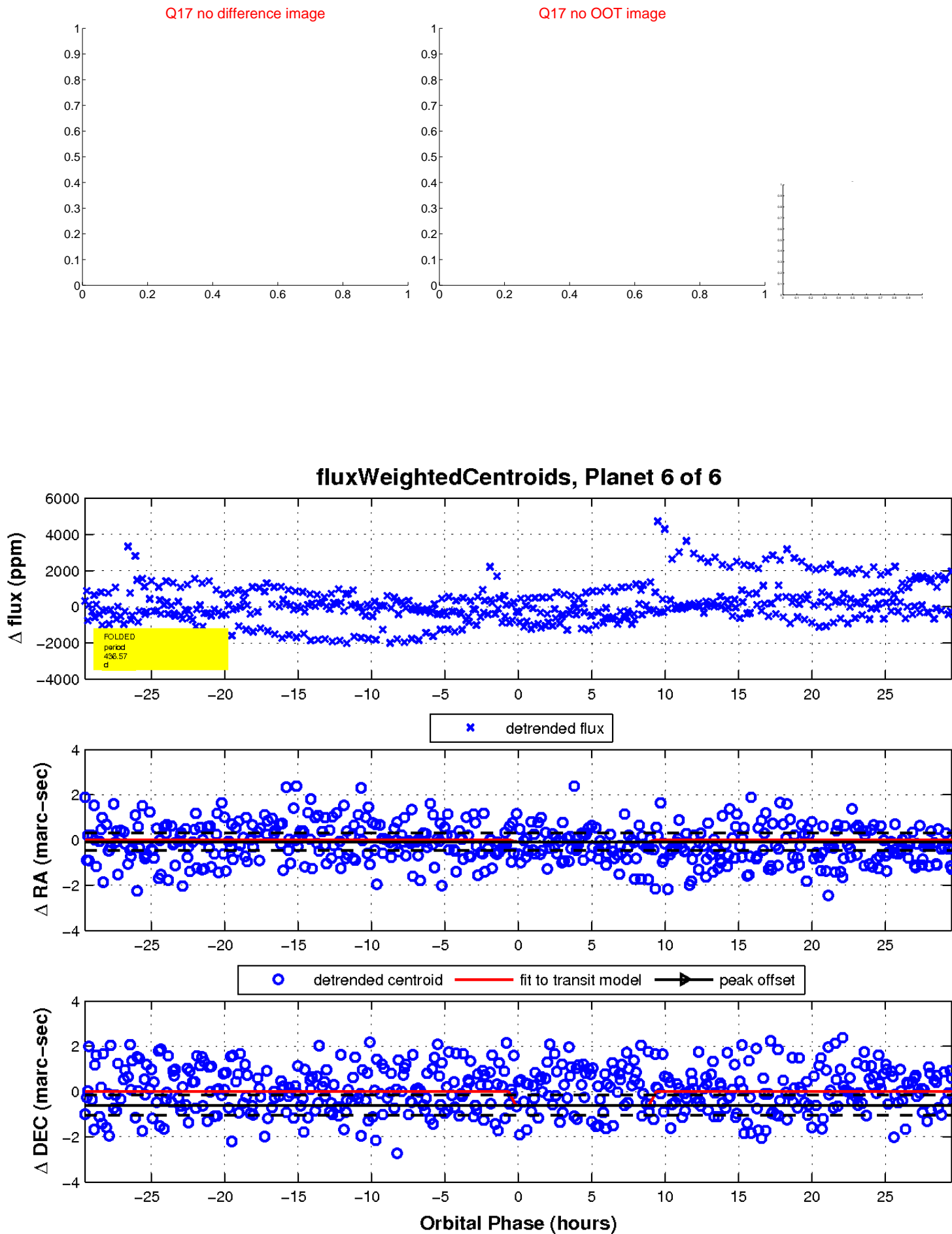
white ×: KIC target position; +: OOT centroid; △: difference centroid. red ✕: large negative pixel value.



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



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



UKIRT Image

