KIC 009267997

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 ($S_\oplus$)
009267997-02	OBS	No	616.494128	265.425735	1126.0	3.500	18.4	-1.0	2.12	6616	7.17	2.89
009267997-03	OBS	No	663.375525	217.195722	604.3	10.500	17.0	-1.0	2.12	6616	5.25	2.62
009267997-04	OBS	No	367.150206	435.708807	613.8	5.000	13.0	-1.0	2.12	6616	5.29	5.76

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
009267997-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_MARSHALL_ZUMA—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—INCONSISTENT_TRANS—CENT_NOFITS
009267997-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_MARSHALL—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_TER_ALT—MOD_POS_ALT—INCONSISTENT_TRANS—CENT_NOFITS
009267997-04	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.

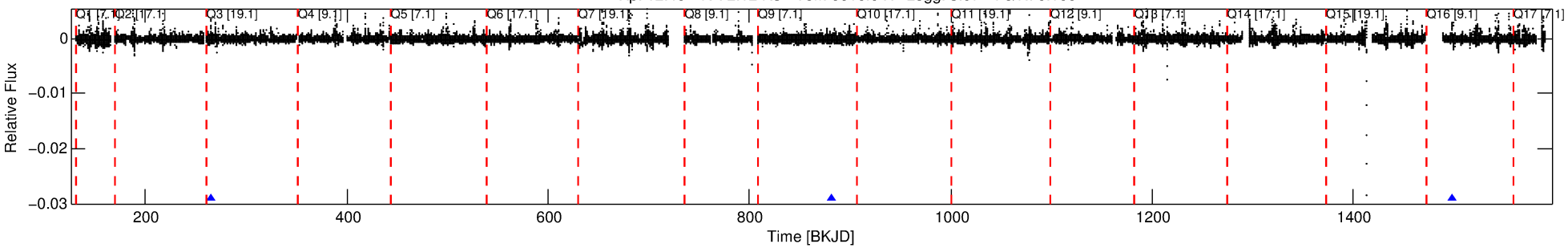
Ephemeris Match Information For 009267997-02

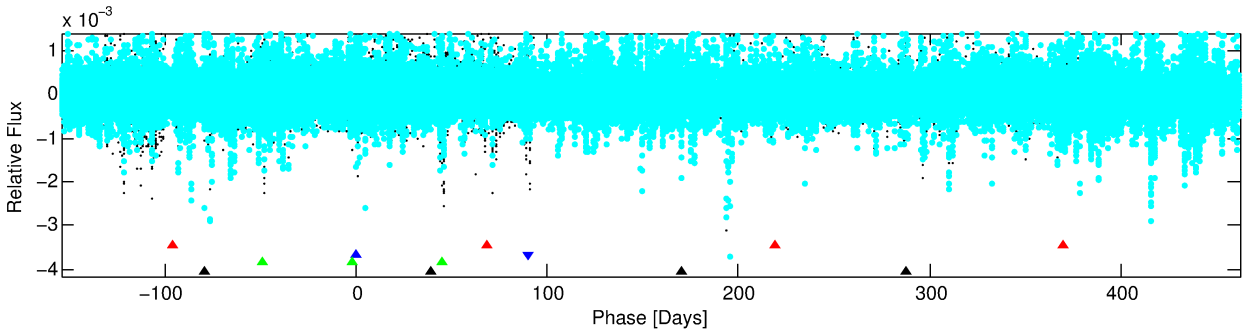
No Significant Match Found

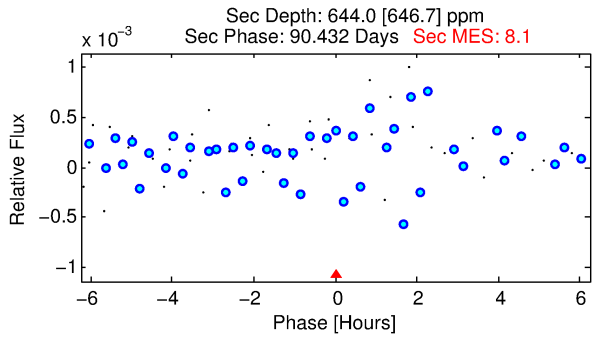
DV One-Page Summary

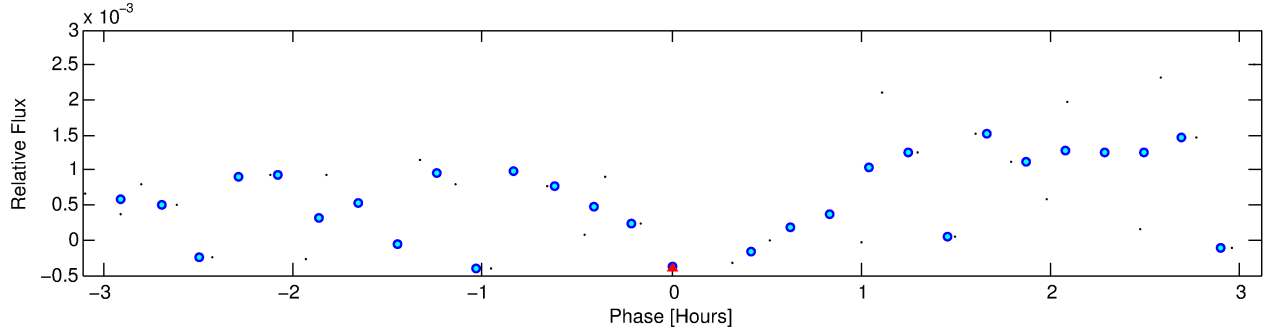
KIC: 9267997 Candidate: 2 of 4 Period: 616.494 d

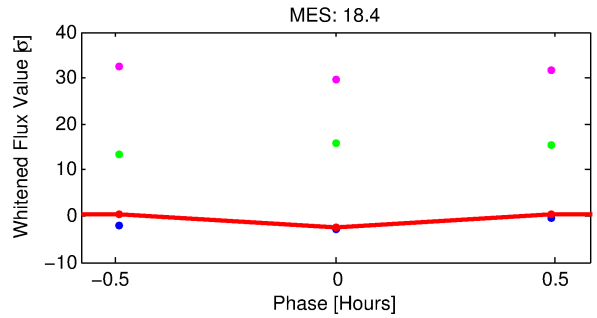
Kp: 12.40 R*: 2.12 Rs Teff: 6616.0 K Logg: 3.97 Fe/H: 0.100

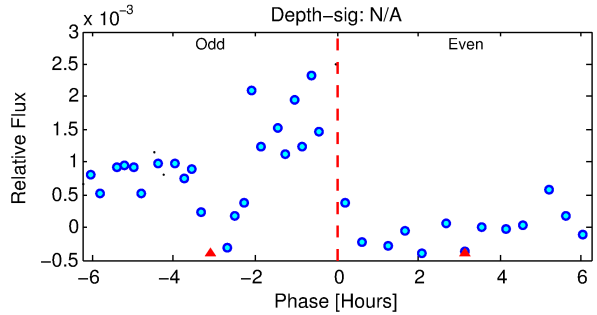


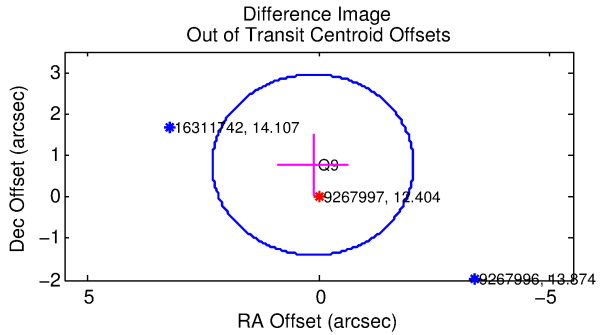












TPS TCE Results:

Period = 616.49413 d
Epoch = 265.4257 BKJD

DV fit results are unavailable

DV Diagnostic Results:

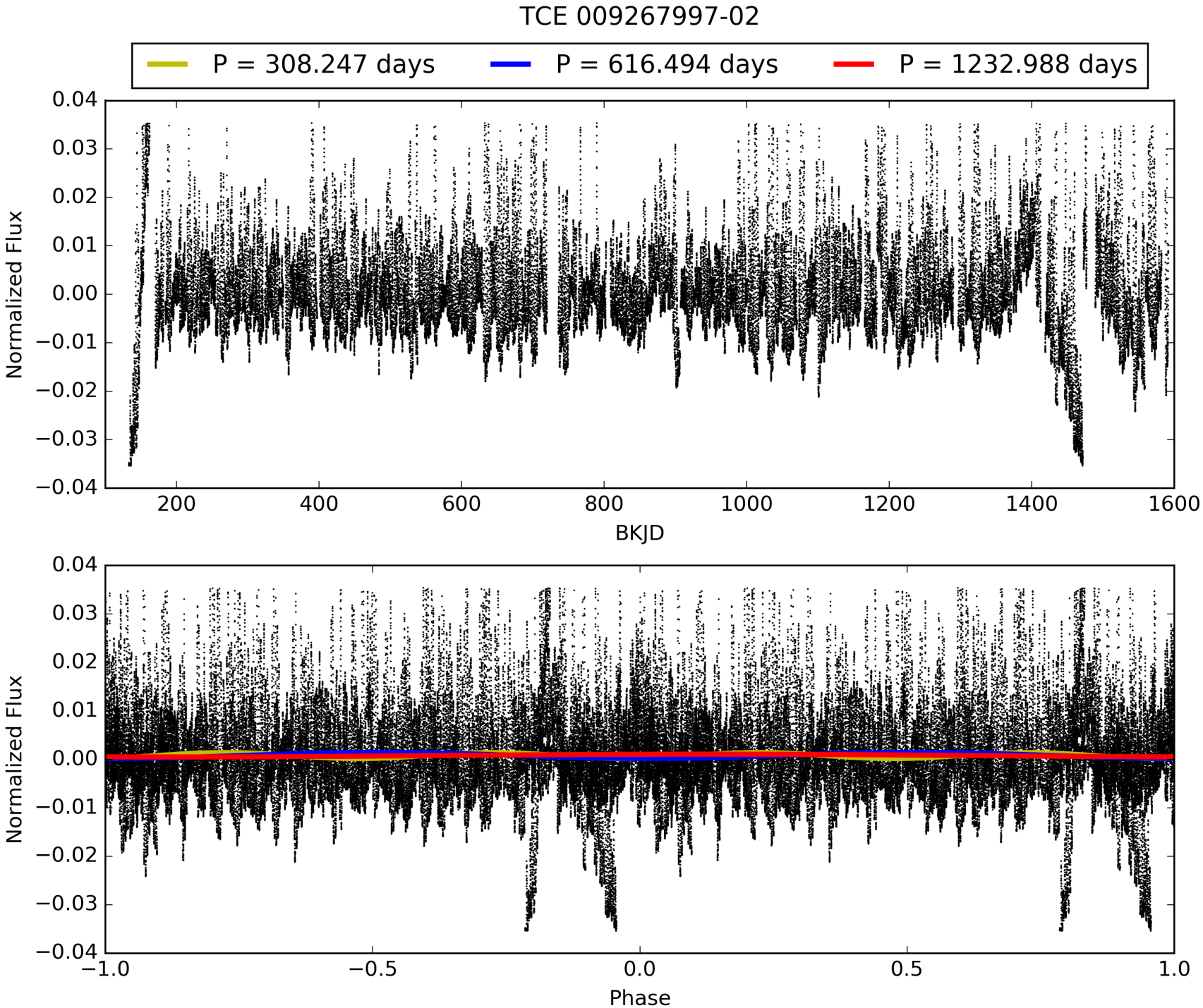
ShortPeriod−sig: 100.0% [249.02σ]
LongPeriod−sig: 100.0% [101.66σ]
ModelChiSquare2−sig: N/A
ModelChiSquareGof−sig: N/A
Bootstrap−pfa: N/A
RollingBand−fgt: 1.00 [3/3]
GhostDiagnostic−chr: −0.3581

Centroid−sig: N/A
Centroid−so: 1.635 arcsec [1.56σ]
OotOffset−rm: 0.784 arcsec [1.08σ]
KicOffset−rm: 3.532 arcsec [4.81σ]
OotOffset−st: 0/0/0/1 [1]
KicOffset−st: 0/0/0/1 [1]
DiffImageQuality−fgm: 0.00 [0/1]
DiffImageOverlap−fno: 1.00 [1/1]

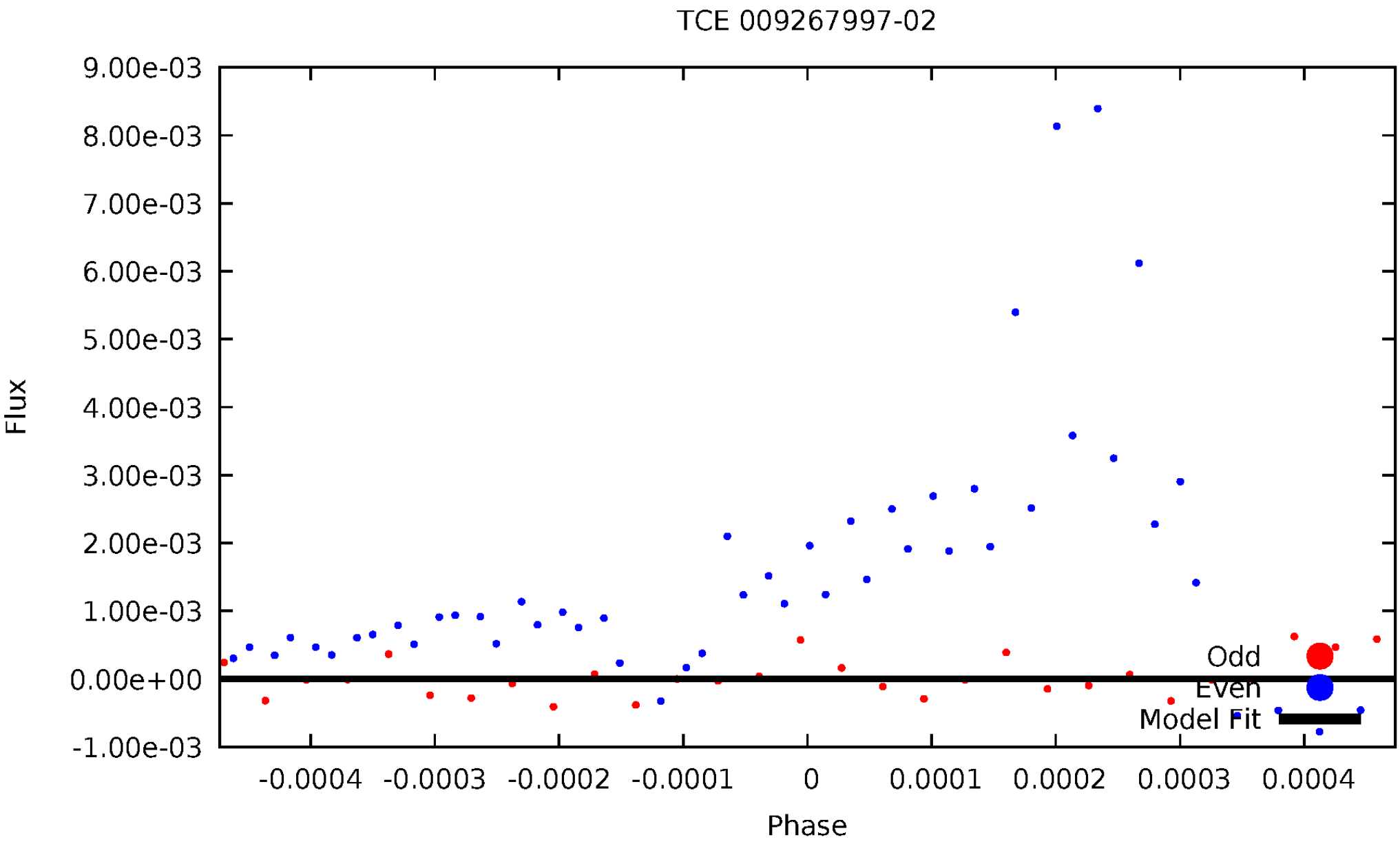
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30−Jan−2016 06:06:54 Z

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

TCE 009267997-02, PDC Light Curves


TCE 009267997-02
P = 308.247 days
P = 616.494 days
P = 1232.988 days
Normalized Flux
BKJD
Normalized Flux
Phase

DV Odd/Even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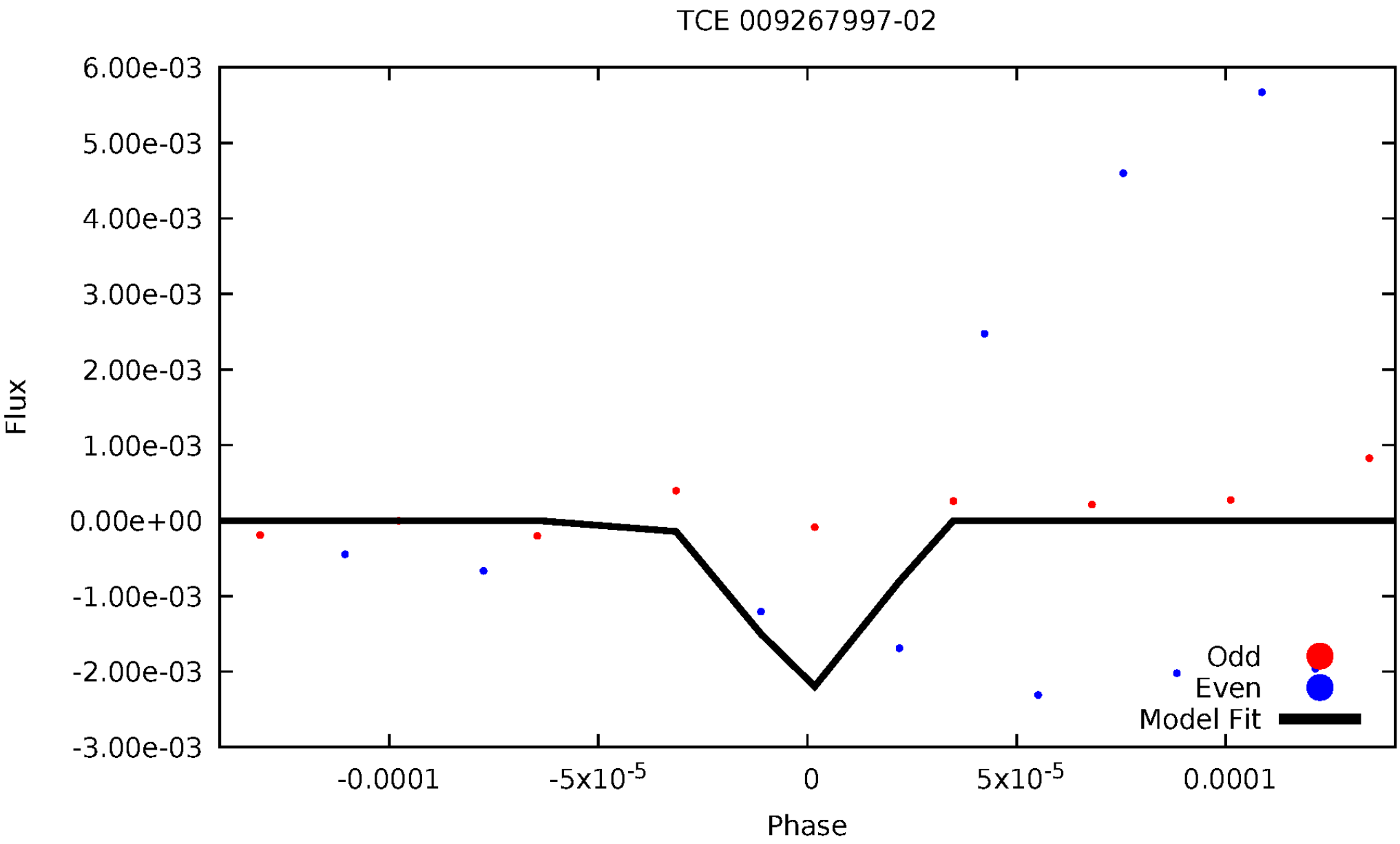
9.00e-03
8.00e-03
7.00e-03
6.00e-03
5.00e-03
4.00e-03
3.00e-03
2.00e-03
1.00e-03
0.00e+00
-1.00e-03
Flux
-0.0004
-0.0003
-0.0002
-0.0001
0
0.0001
0.0002
0.0003
0.0004
Phase
Odd
Even
Model Fit

ALT Odd/Even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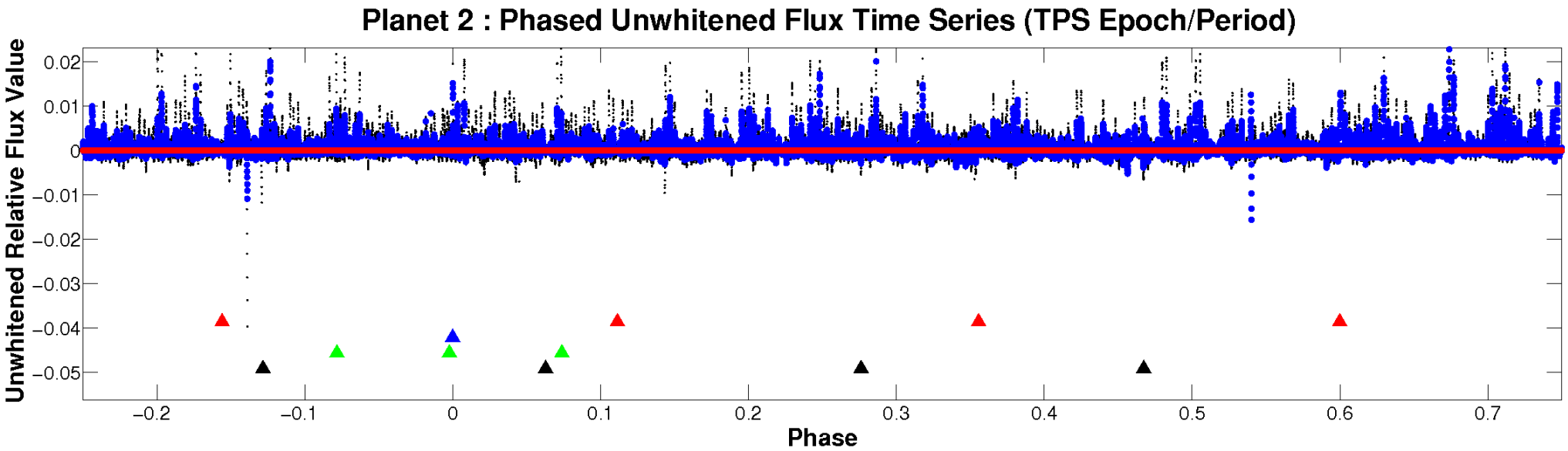
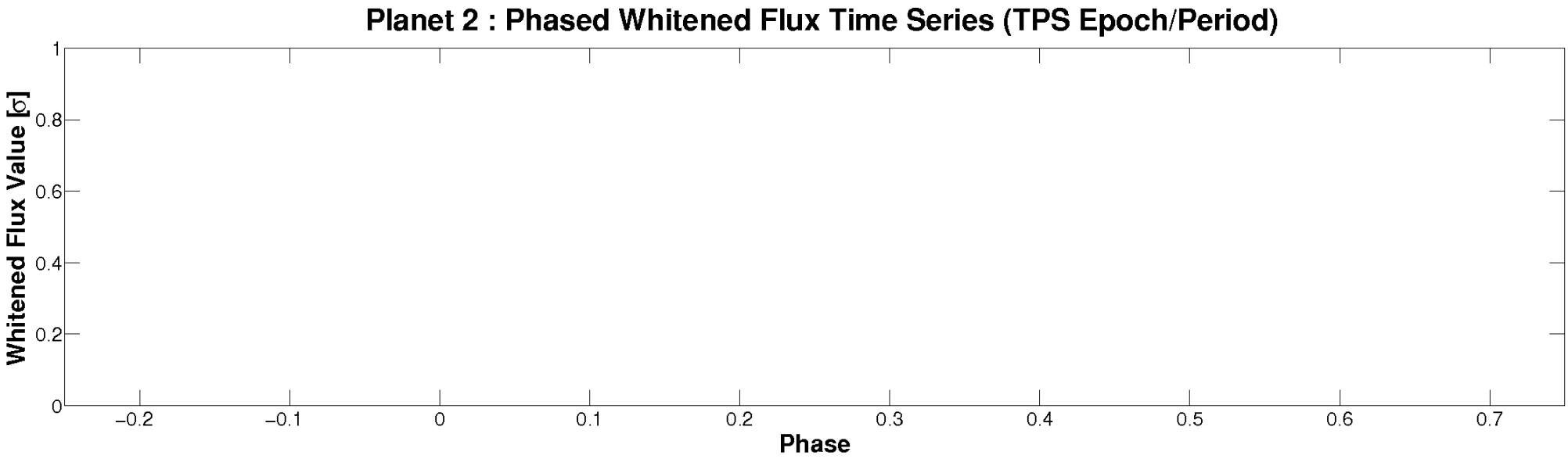
5.00e-03
4.00e-03
3.00e-03
2.00e-03
1.00e-03
0.00e+00
-1.00e-03
-2.00e-03
-3.00e-03
Flux
-0.0001
-5x10^-5
0
5x10^-5
0.0001
Phase
Odd
Even
Model Fit

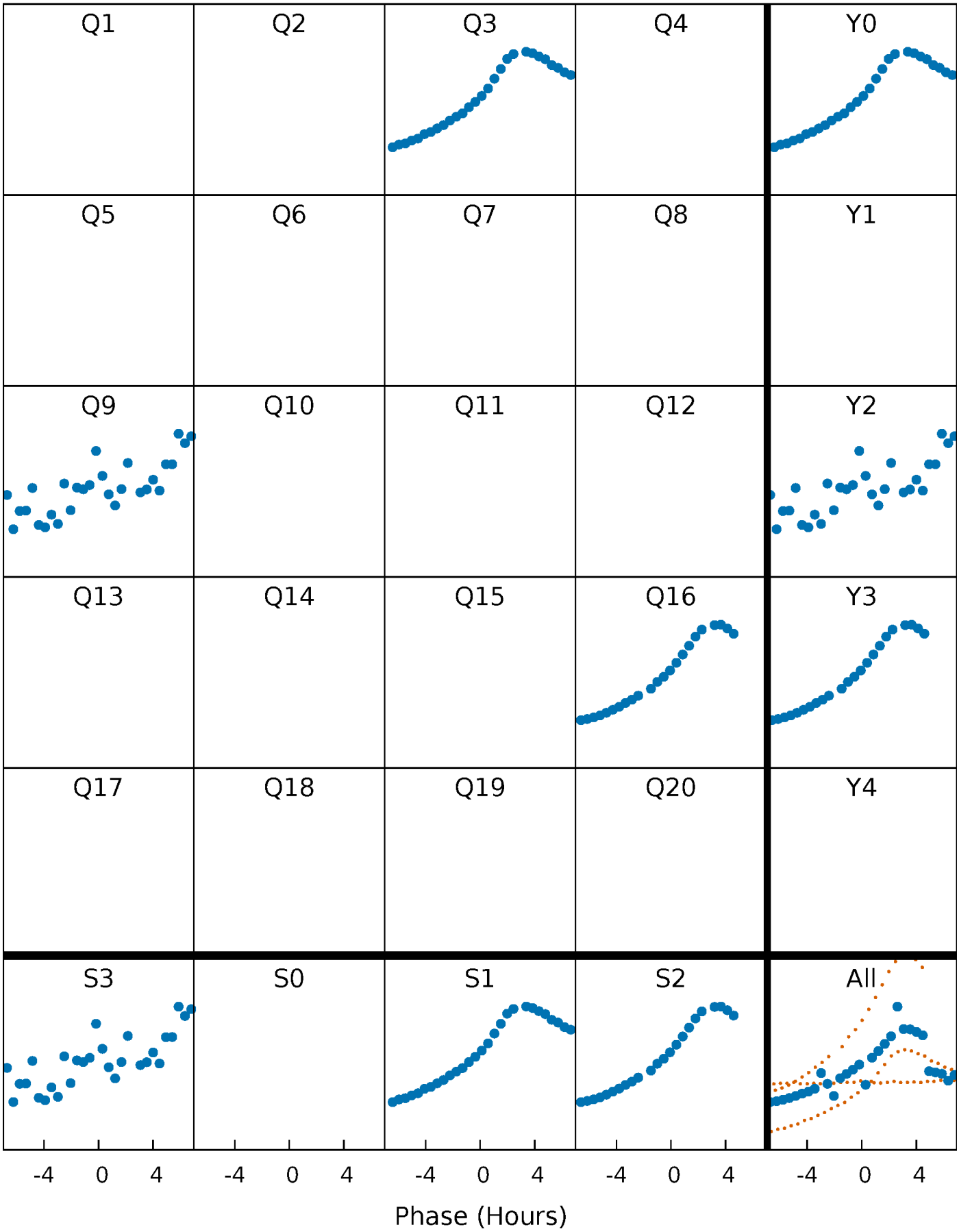
Non-Whitened Vs. Whitened Light Curve





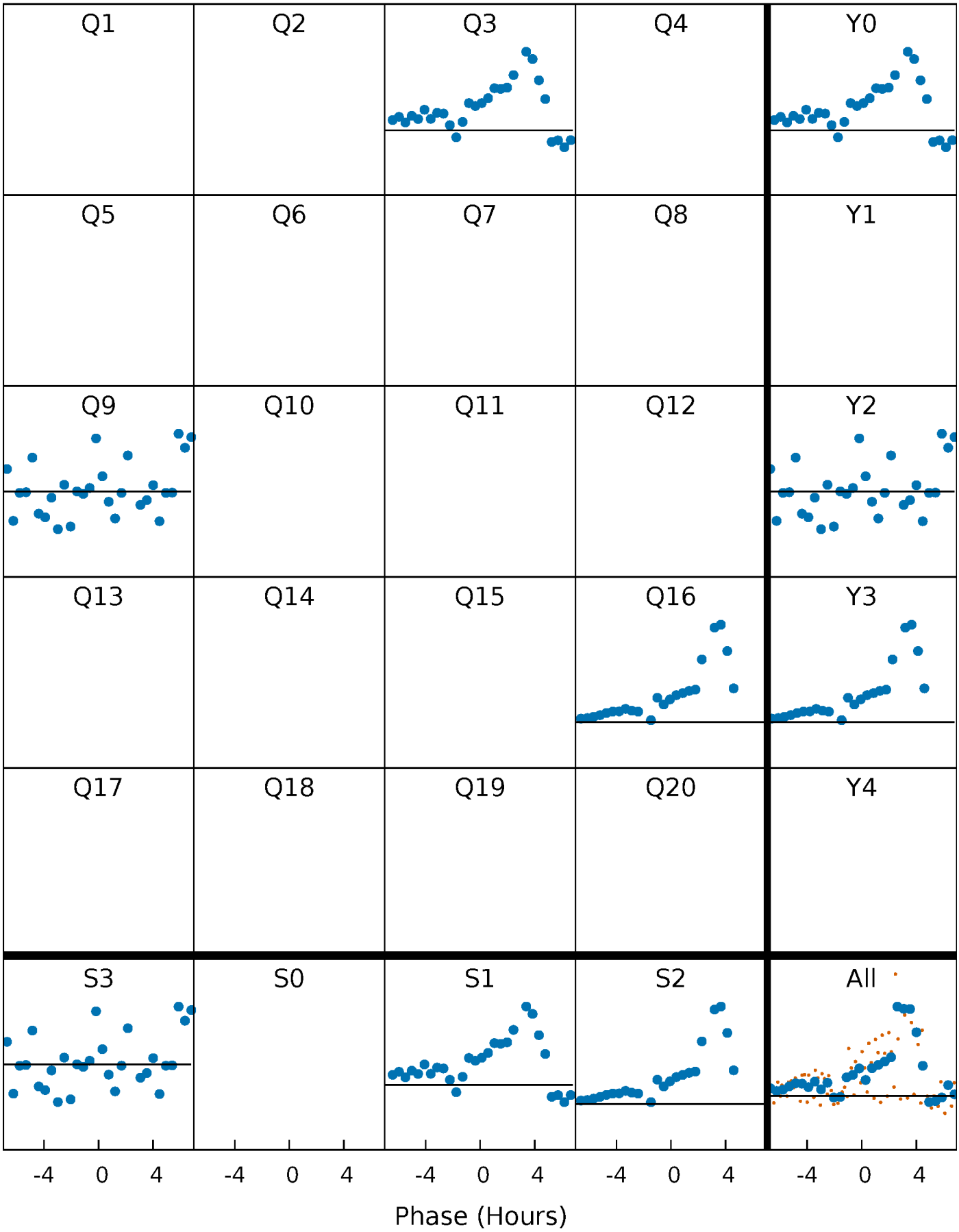
PDC Quarter-Phased Transit Curves

TCE 009267997-02 P=616.494127 Days T_0=265.425735 (BKJD)



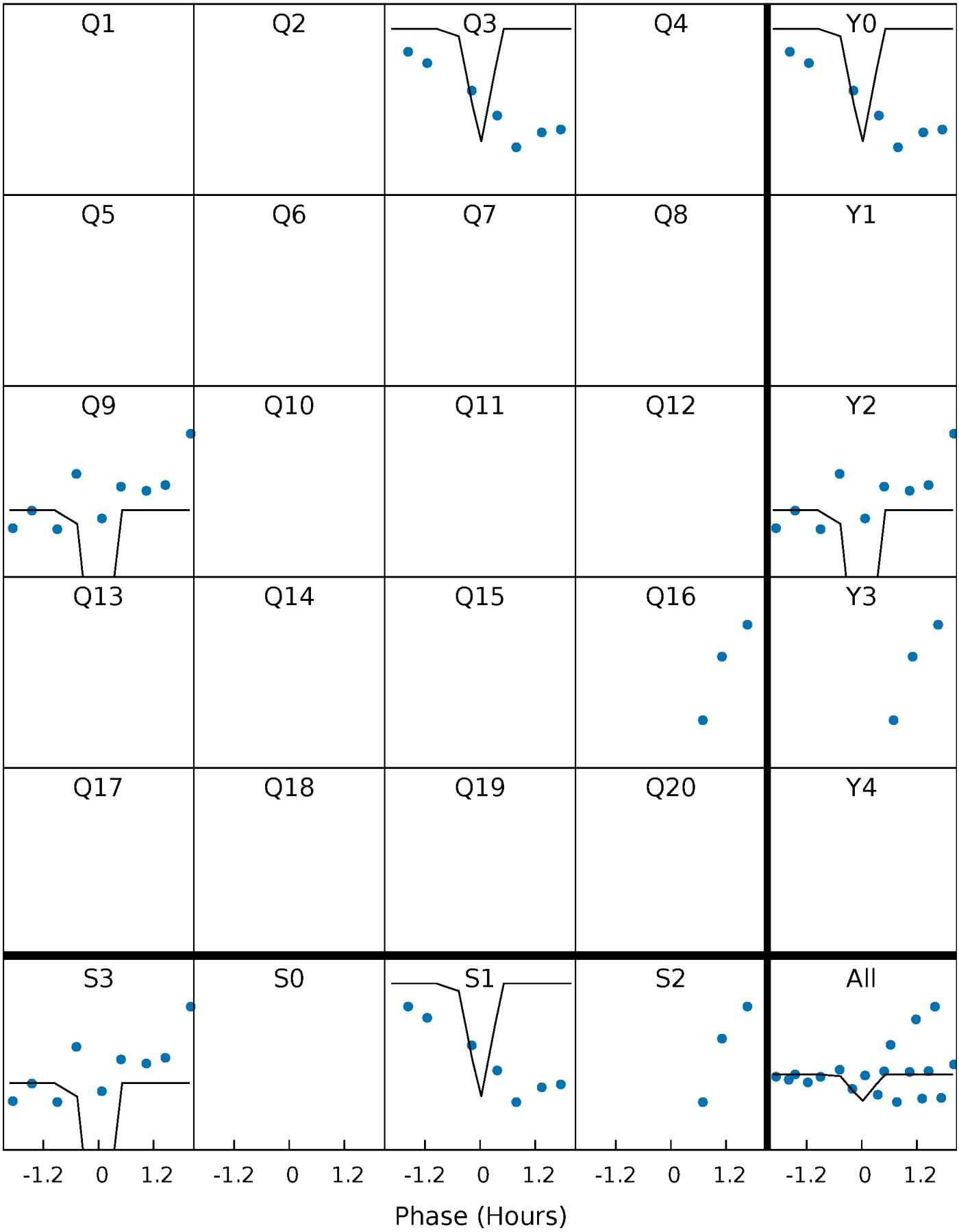
DV Quarter-Phased Transit Curves

TCE 009267997-02 P=616.494127 Days T_0=265.425735 (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

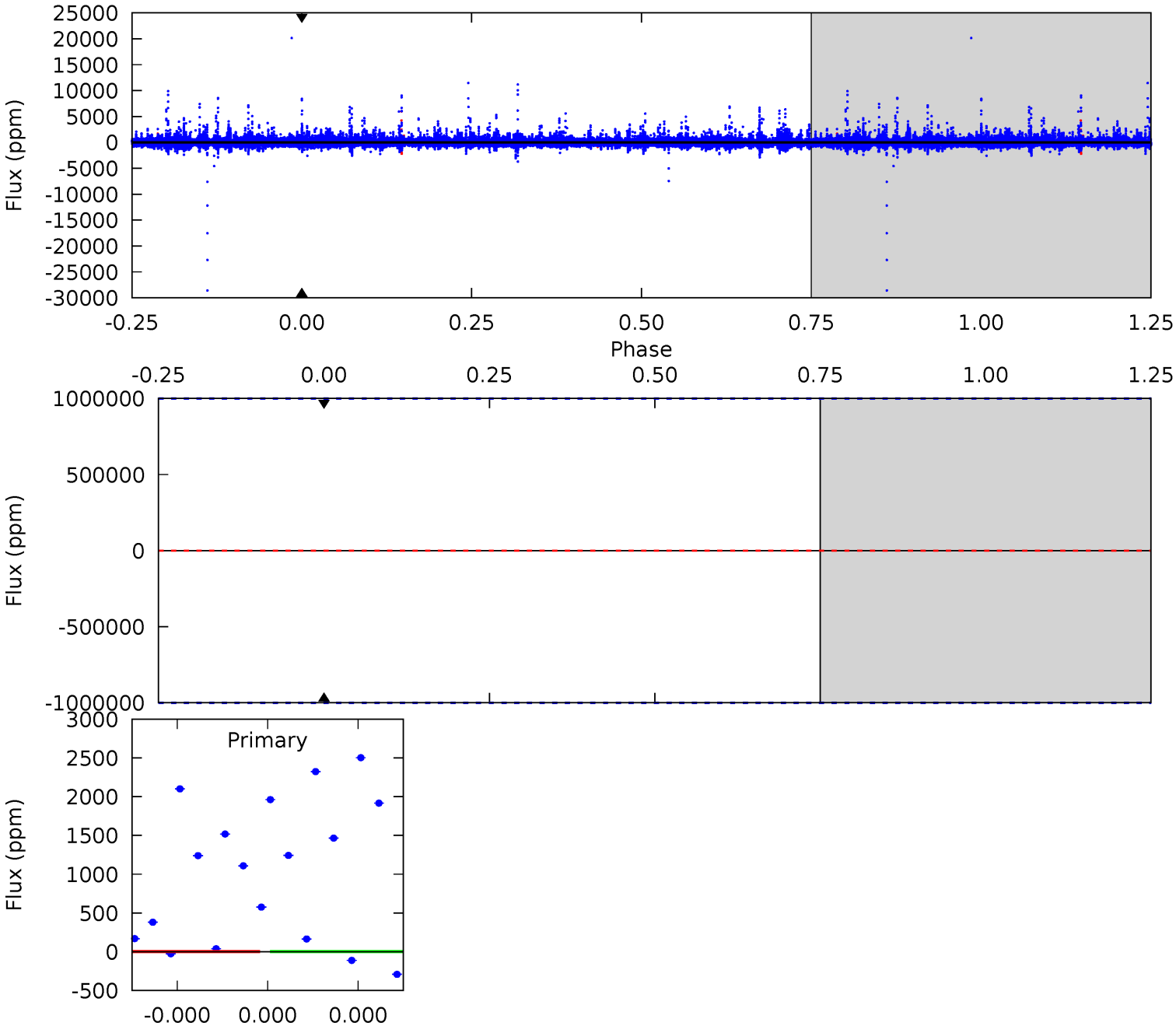
TCE 009267997-02 P=616.494127 Days T_0=265.339451 (BKJD)



DV Model-Shift Uniqueness Test

009267997-02, P = 616.494127 Days, E = 265.425735 Days

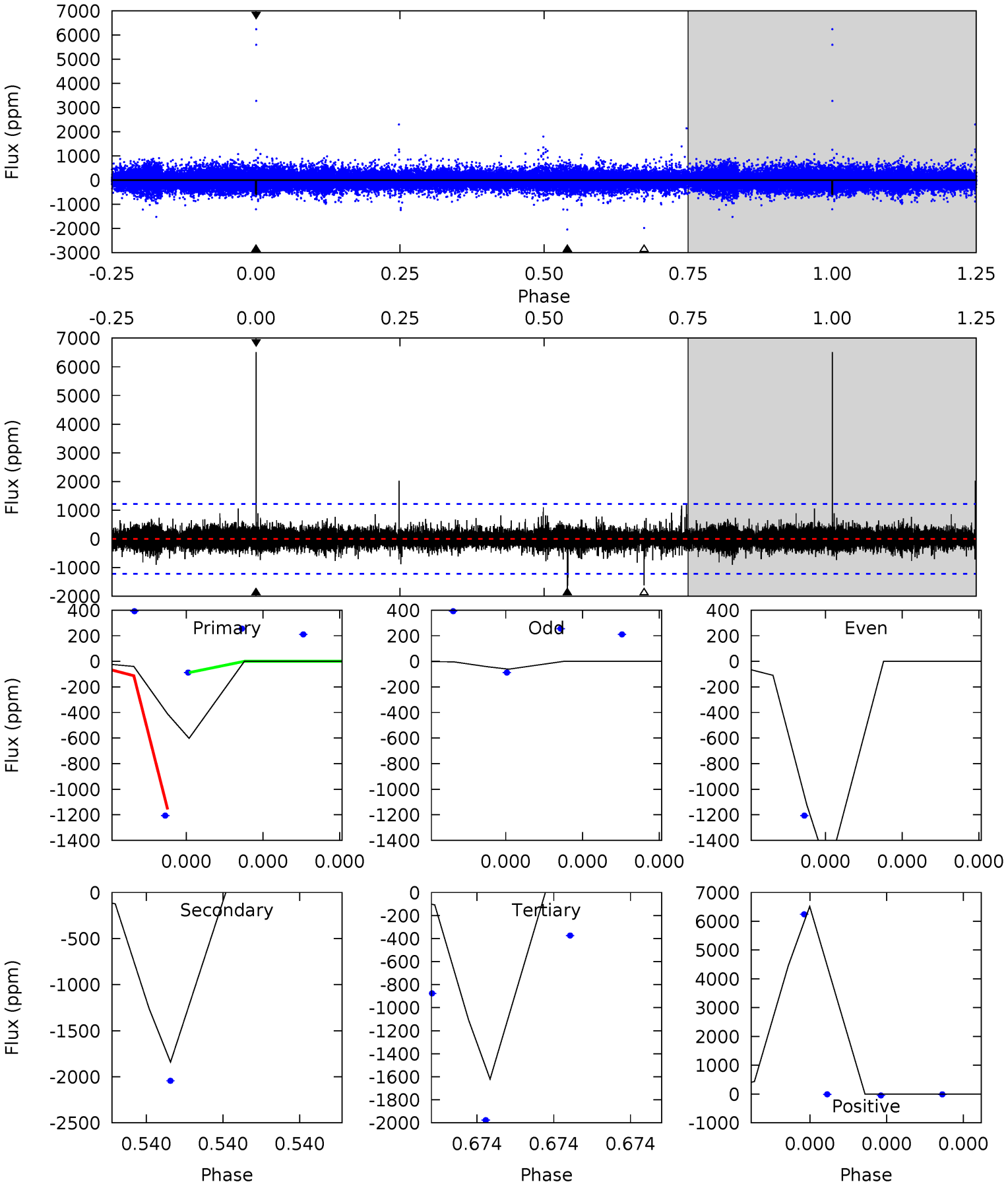
Pri	Sec	Ter	Pos	FA_1	FA_2	F_{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
0	0	0	0	1.00	1.00	1.00	0	0	0	0	0	0	0	0



Alt Model-Shift Uniqueness Test

009267997-02, P = 616.494127 Days, E = 265.339451 Days

Pri	Sec	Ter	Pos	FA_1	FA_2	F_{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
2.96	9.04	7.96	32.0	5.97	4.07	0.79	-5.00	-29.0	1.08	-23.0	4.94	1.00	0.78	0.00



Stellar Parameters For KIC 009267997

	$T_{\rm eff}(K)$	$\log(g)$	[Fe/H]	R ($R_\odot$)	$M(M_\odot)$	$p_\star$ (g·cm^{-3})
	6616^{+184}_{-253}	$3.971^{+0.299}_{-0.161}$	$0.100^{+0.200}_{-0.350}$	$2.123^{+0.620}_{-0.758}$	$1.538^{+0.185}_{-0.344}$	$0.227^{+0.436}_{-0.107}$
	+3%/-4%	+8%/-4%	+200%/-350%	+29%/-36%	+12%/-22%	+193%/-47%
Source	PHO54	PHO54	PHO54	DSEP		

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

Secondary Eclipse Parameters for KIC 009267997-02 / KOI

Detrend	Depth (ppm)	R_p ($R_\oplus$)	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	0±1000000	$17.87^{+17.21}_{-12.75}$	454^{+40}_{-43}	6076^{+26635}_{-24640}	$23118^{+1207371}_{-513040}$
Alt.	-1841±204	$18.58^{+18.71}_{-12.19}$	458^{+38}_{-45}	4776^{+3509}_{-1013}	7740^{+59310}_{-5786}

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 $A_{obs} \gg 1.0$

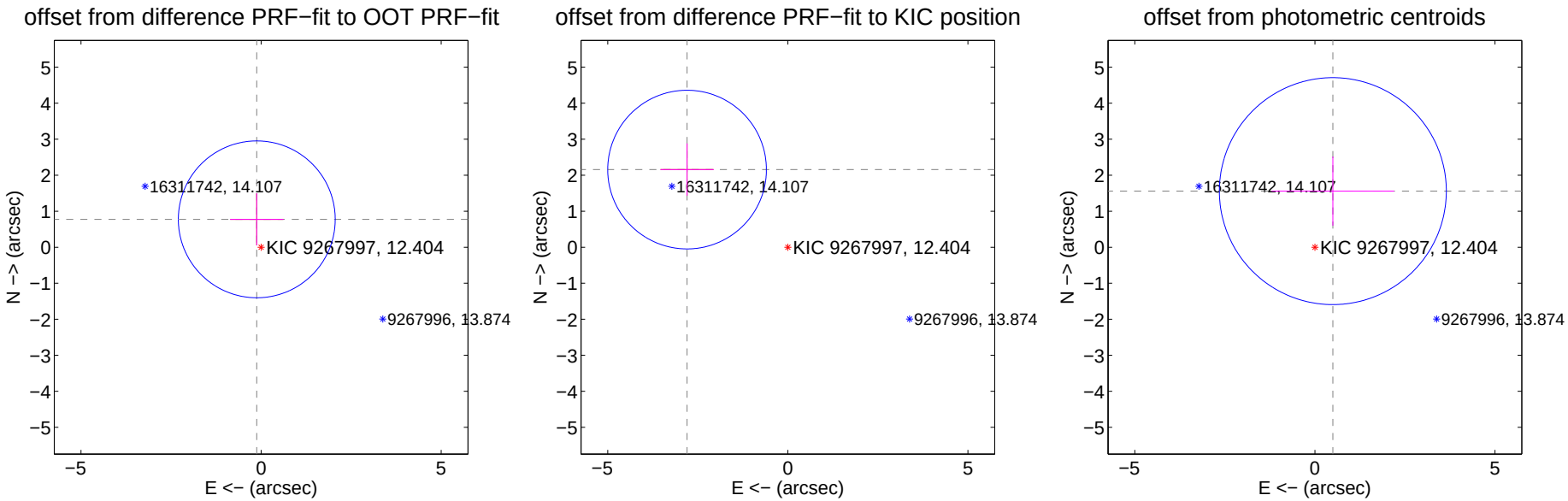
DV Centroid Data

Supplemental centroid analysis for 009267997-02. Kepler magnitude: 12.40. Transit SNR -1.00

There are 0 quarters with good PRF difference image offsets

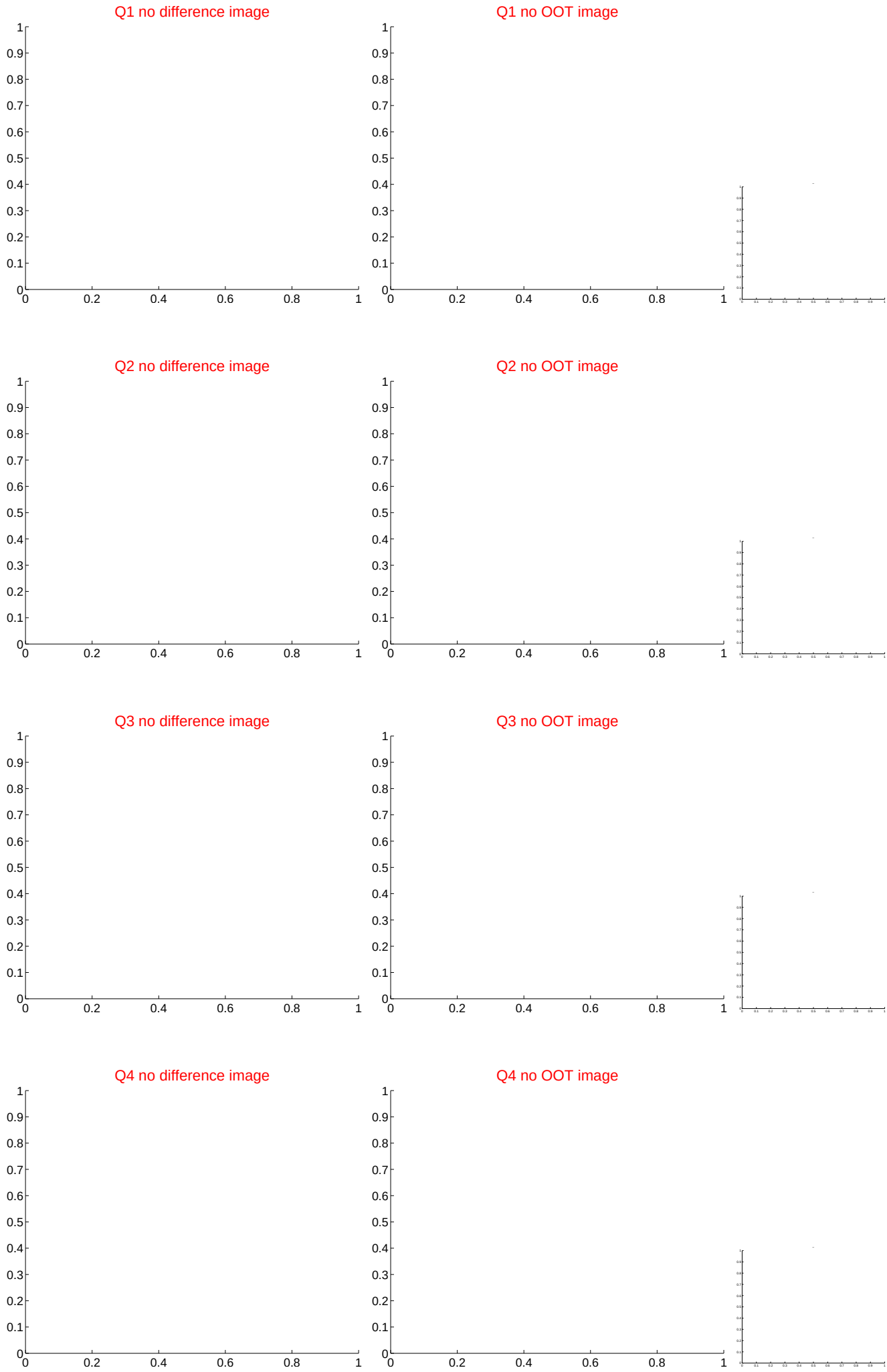
The OOT PRF centroid is offset from the target star catalog position by about 3.01 arcsec so the offset from difference PRF-fit to OOT-fit may be invalid.

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.784 ± 0.726	1.08	0.120 ± 0.739	0.774 ± 0.725
PRF-fit source offset from KIC position	3.532 ± 0.734	4.81	2.798 ± 0.739	2.156 ± 0.725
photometric centroid source offset	1.64 ± 1.05	1.56	-0.50 ± 1.70	1.56 ± 0.96

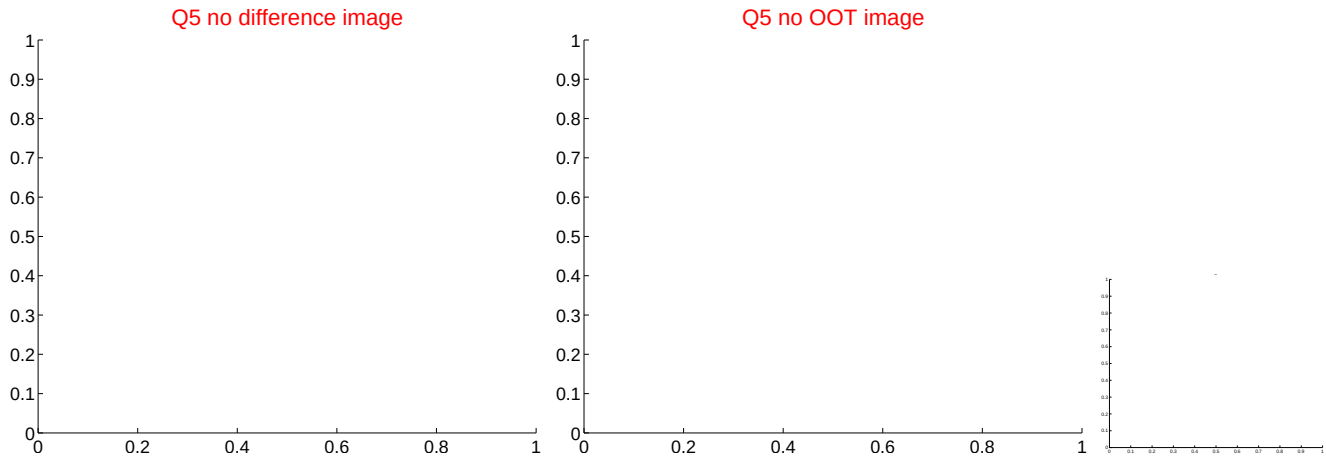


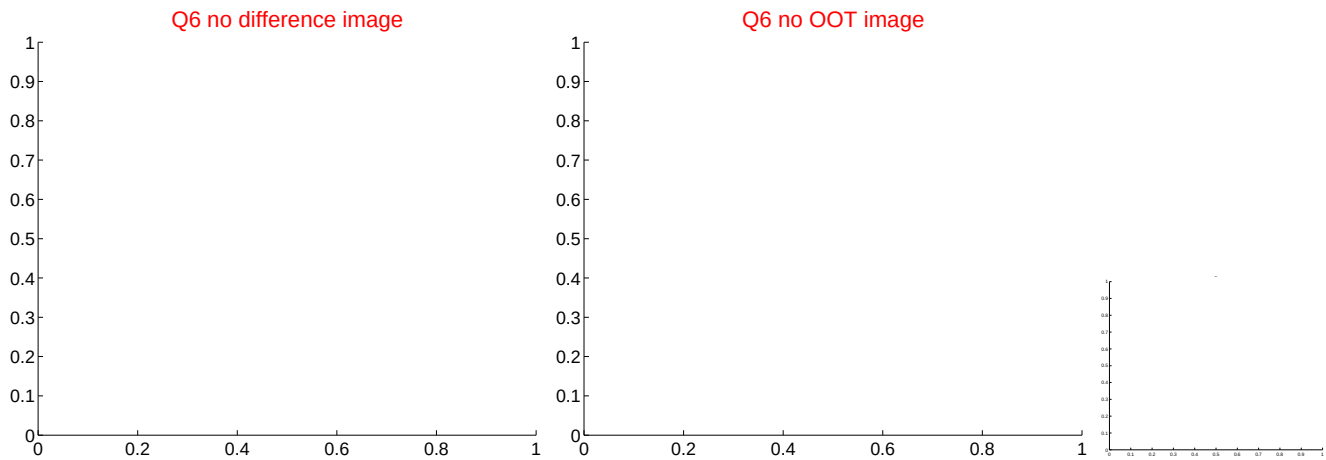
Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one-σ uncertainty. Blue circle: three-σ. Red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

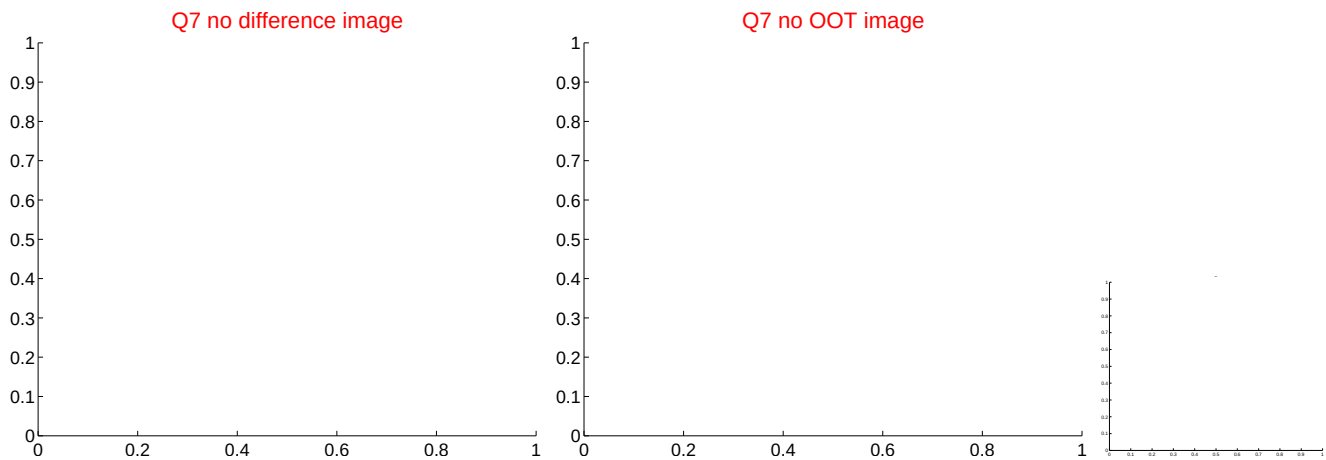
white ×: KIC target position; +: OOT centroid; △: difference centroid. red ×: large negative pixel value.

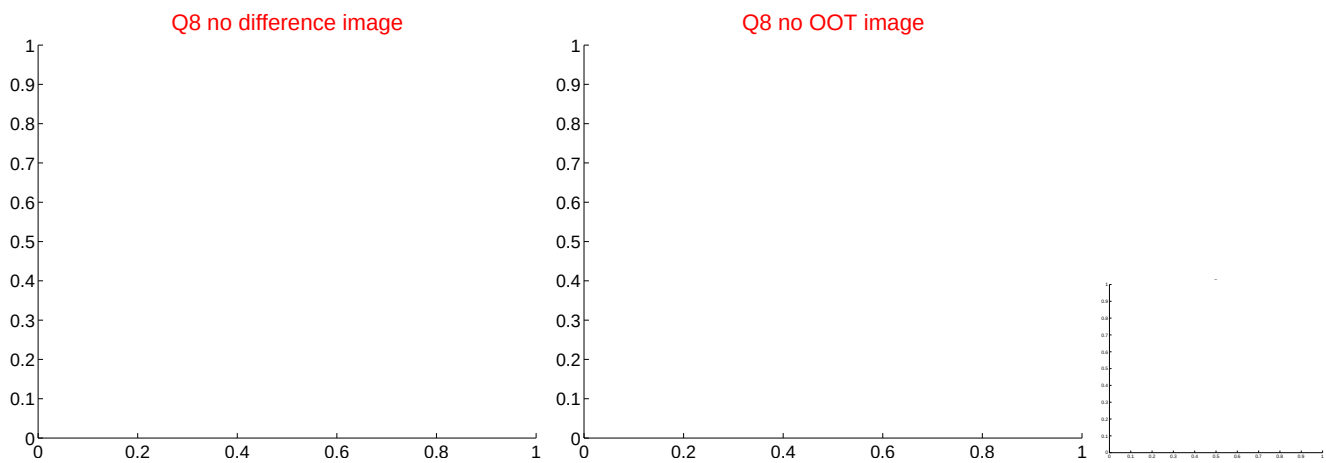


white ×: KIC target position; +: OOT centroid; △: difference centroid. red ×: large negative pixel value.

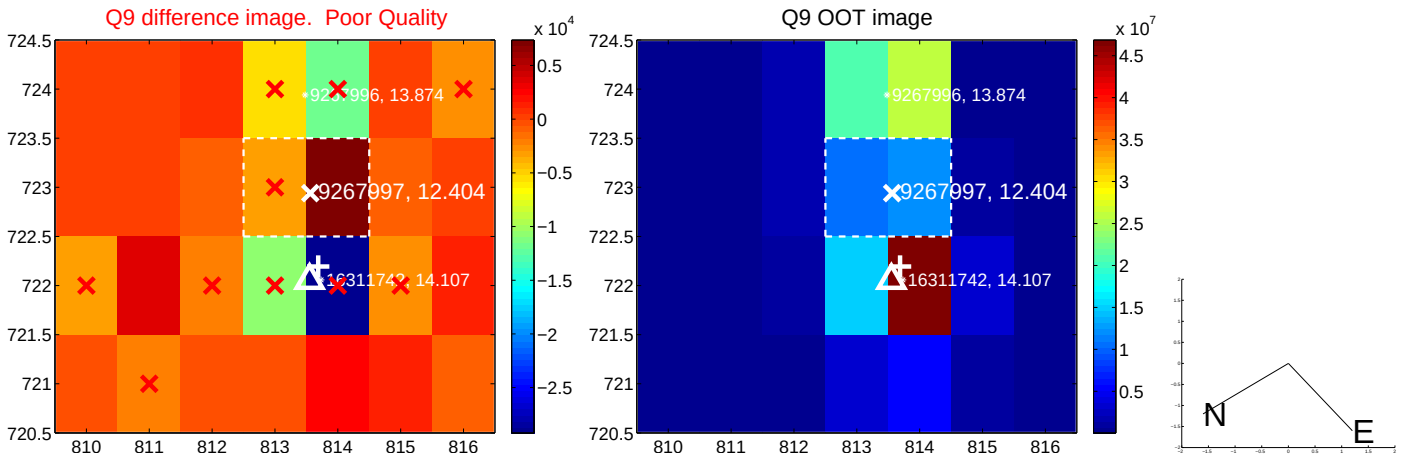


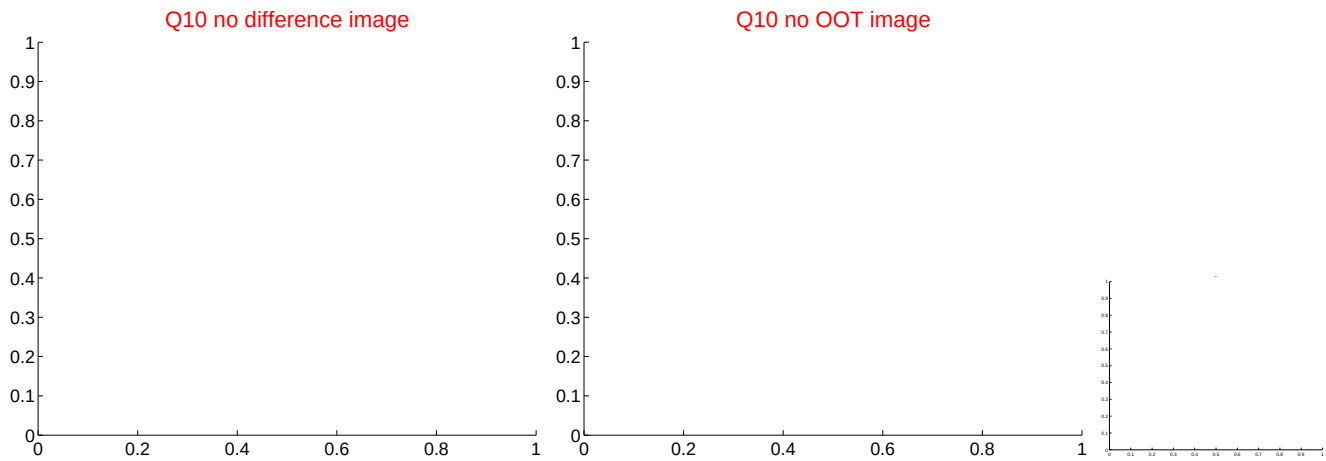


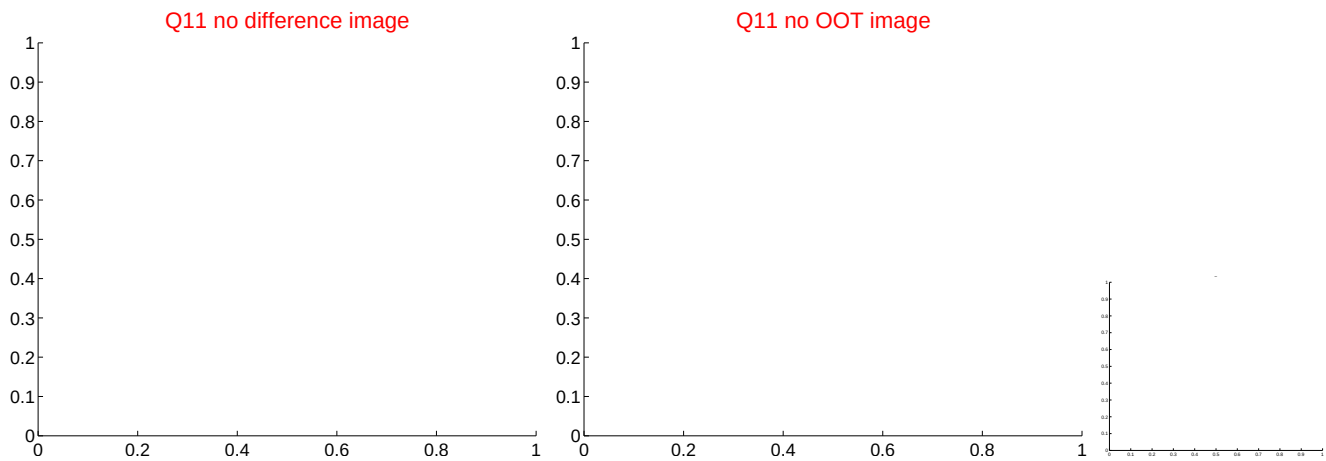


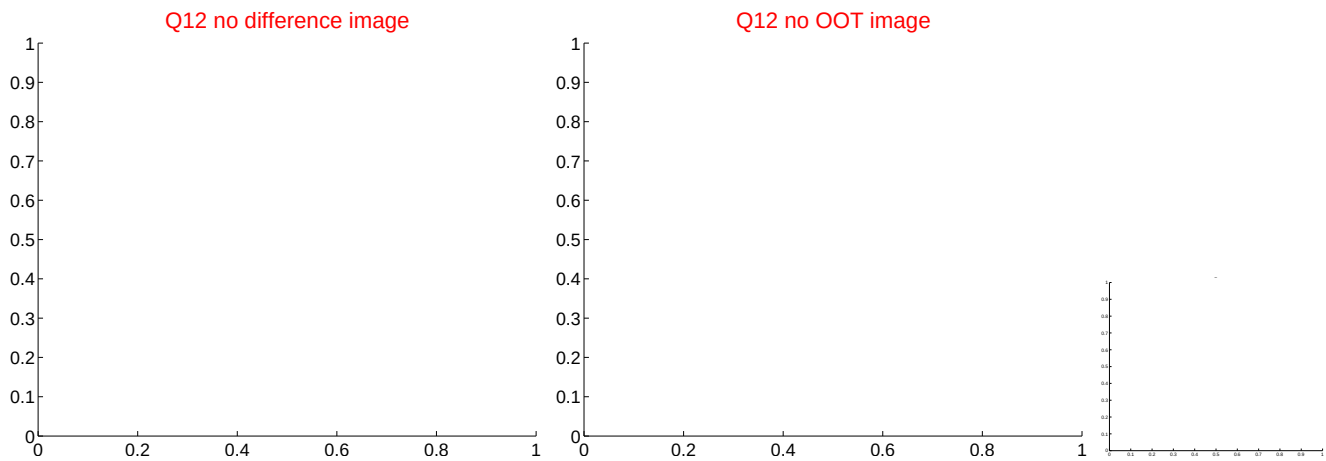


white ×: KIC target position; +: OOT centroid; △: difference centroid. red ×: large negative pixel value.

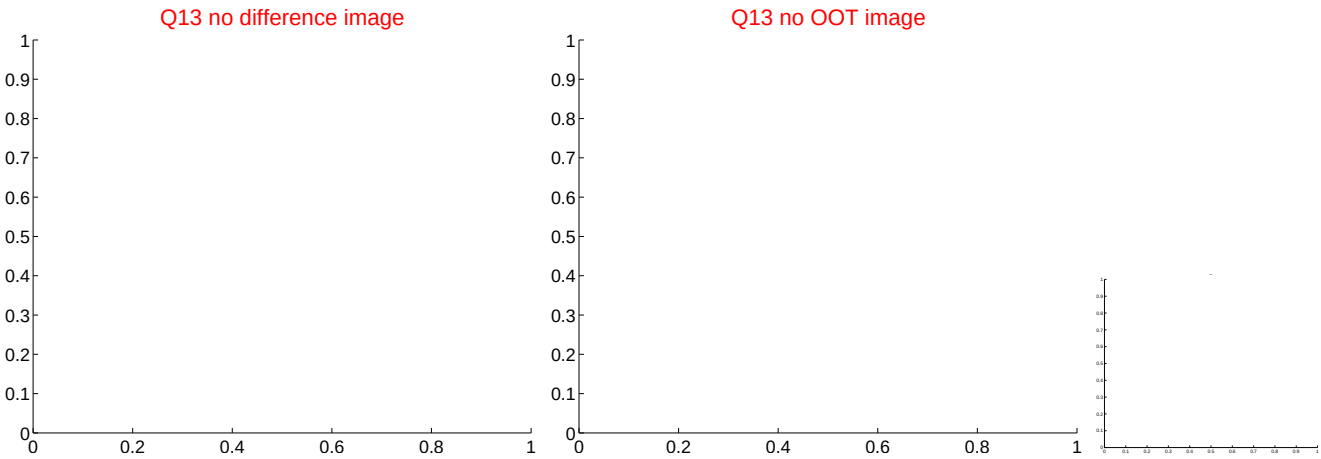


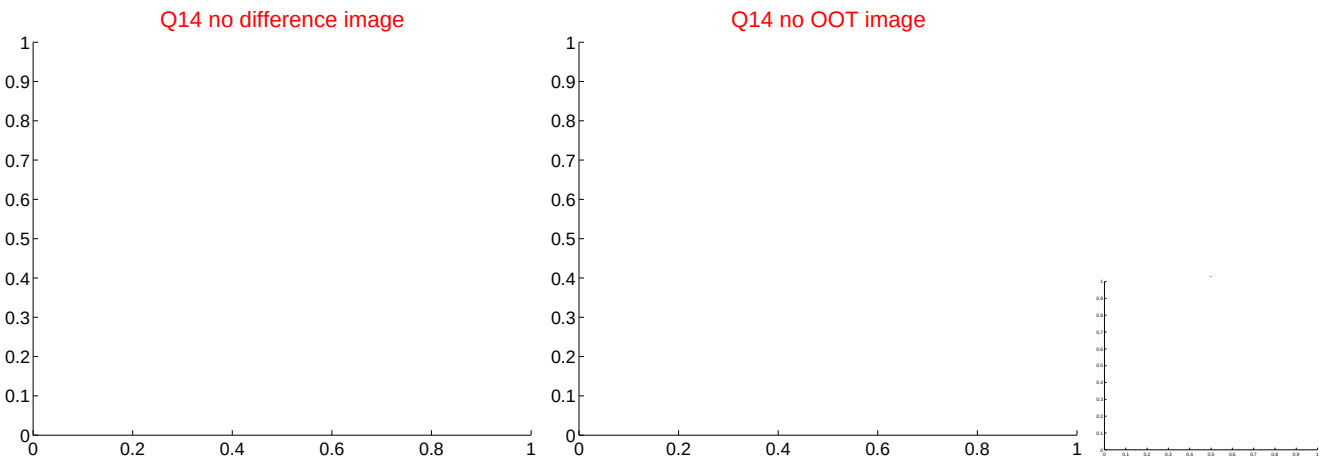


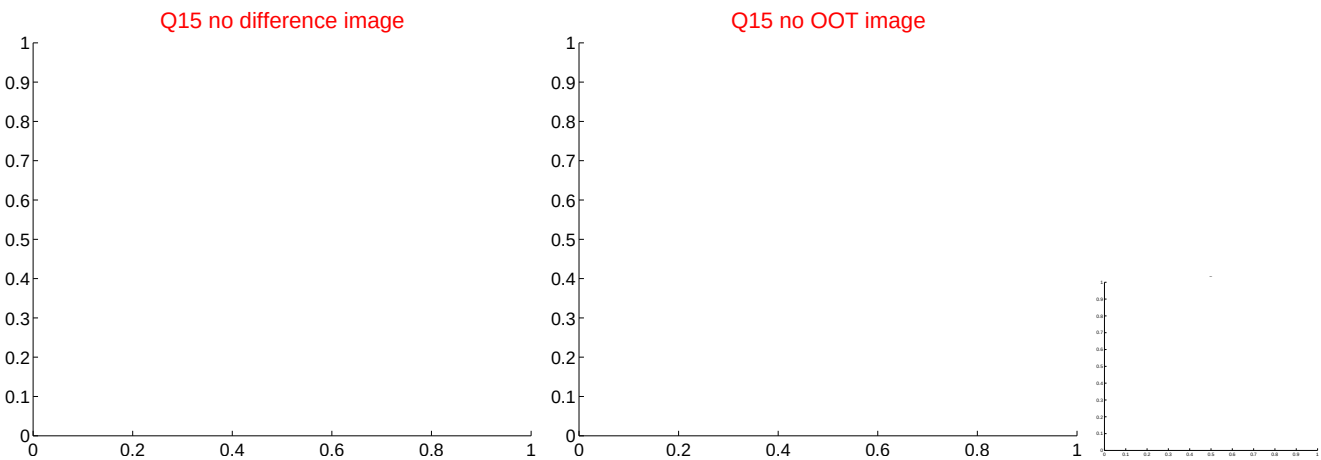


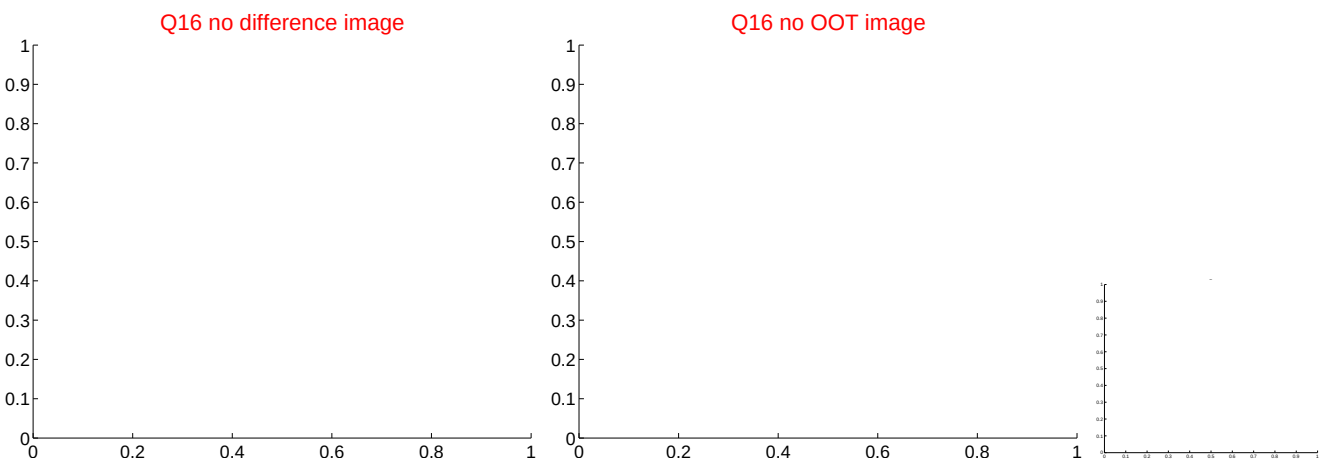


white ×: KIC target position; +: OOT centroid; △: difference centroid. red ×: large negative pixel value.

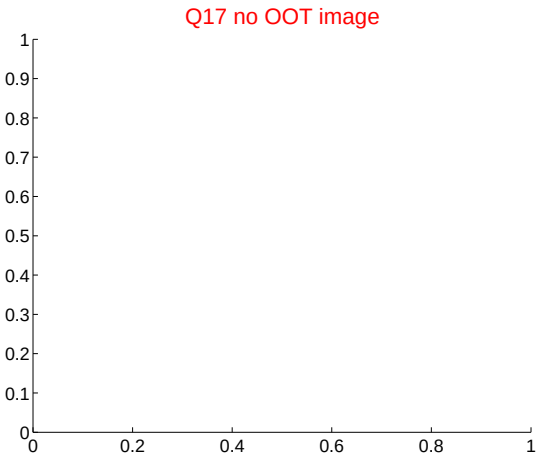


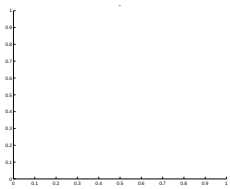


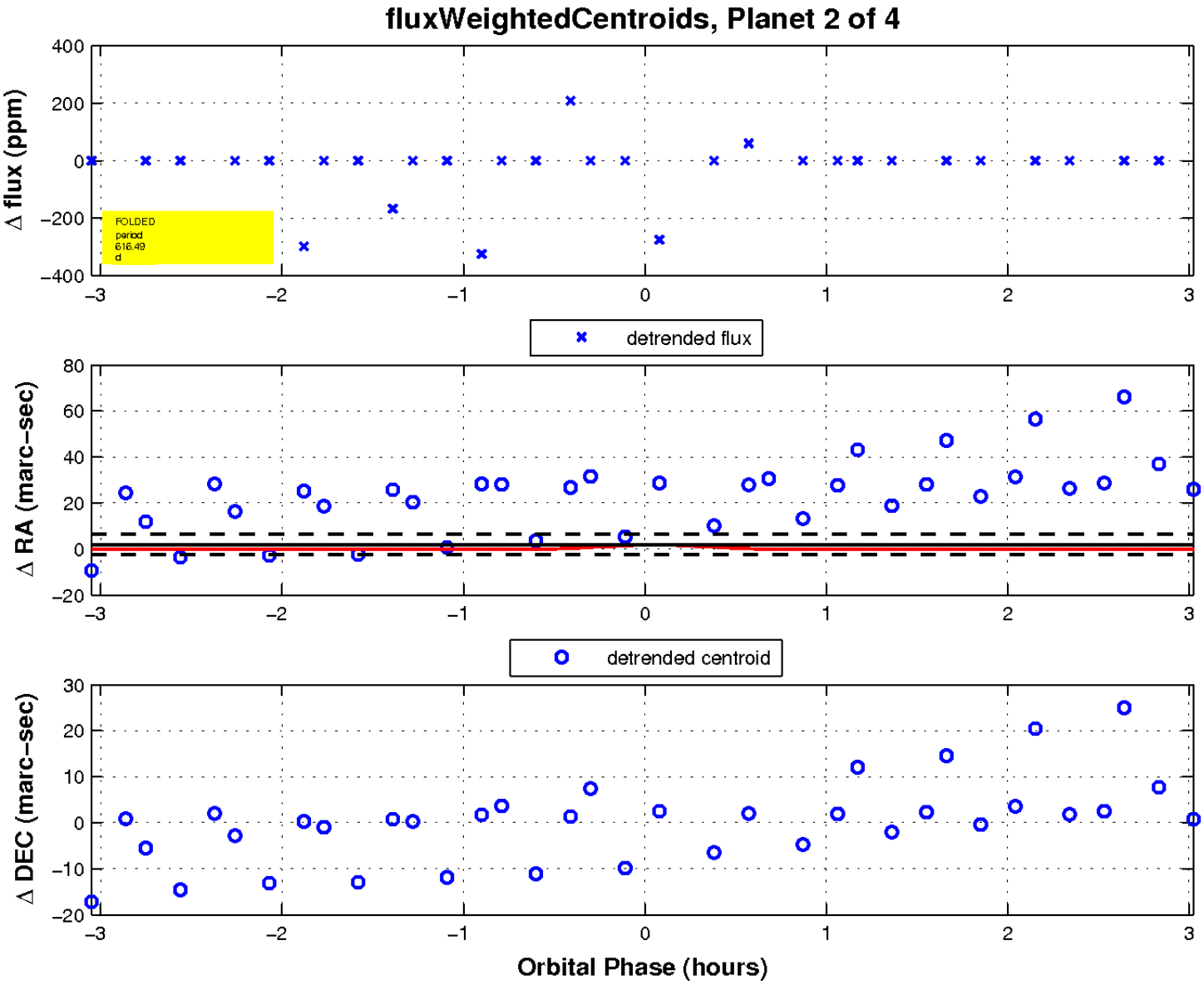




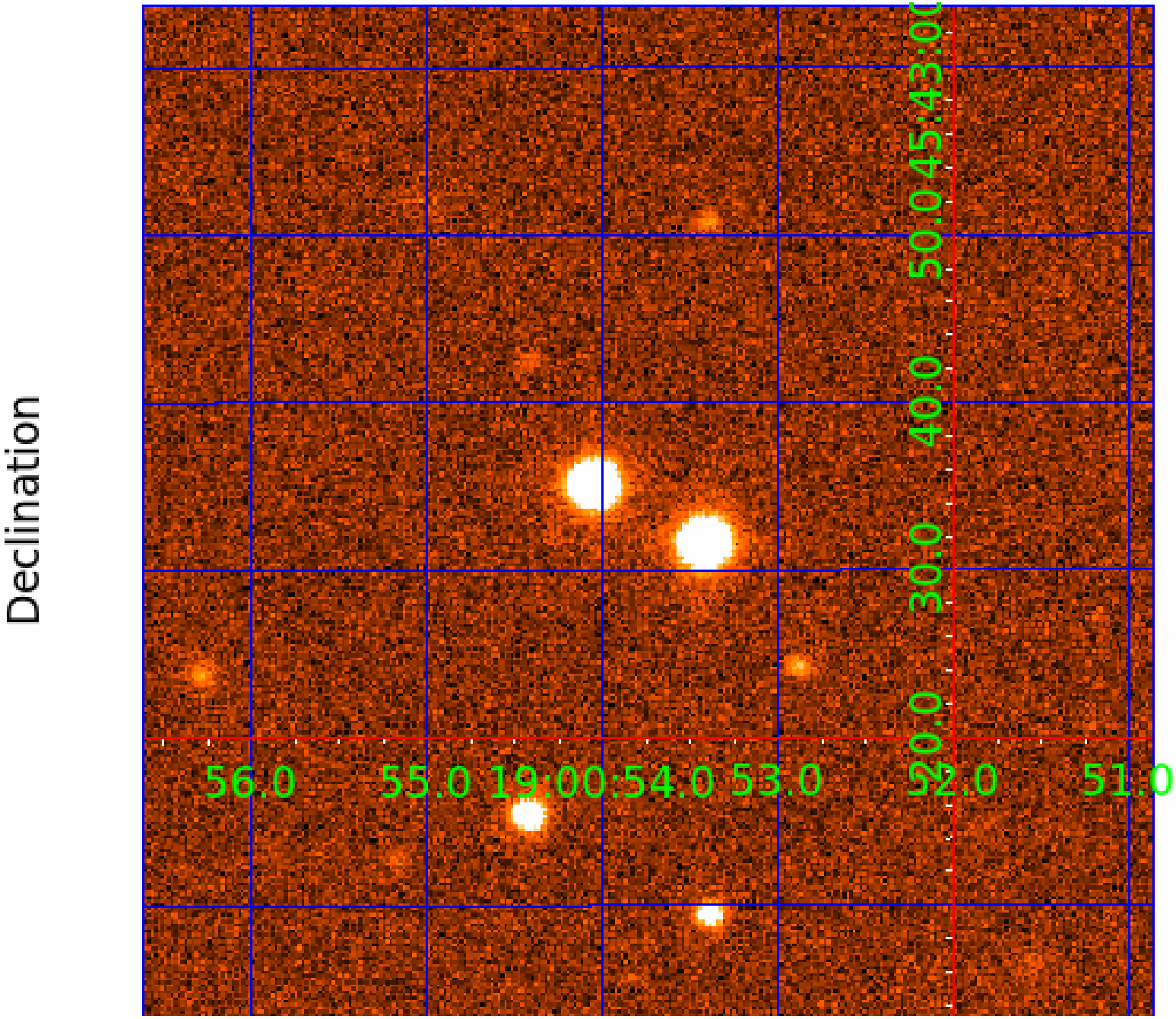
white ×: KIC target position; +: OOT centroid; △: difference centroid. red ×: large negative pixel value.







UKIRT Image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50.0
45:43:0

KIC 009267997

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 ($S_\oplus$)
009267997-02	OBS	No	616.494128	265.425735	1126.0	3.500	18.4	-1.0	2.12	6616	7.17	2.89
009267997-03	OBS	No	663.375525	217.195722	604.3	10.500	17.0	-1.0	2.12	6616	5.25	2.62
009267997-04	OBS	No	367.150206	435.708807	613.8	5.000	13.0	-1.0	2.12	6616	5.29	5.76

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
009267997-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_MARSHALL_ZUMA—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—INCONSISTENT_TRANS—CENT_NOFITS
009267997-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_MARSHALL—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_TER_ALT—MOD_POS_ALT—INCONSISTENT_TRANS—CENT_NOFITS
009267997-04	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.

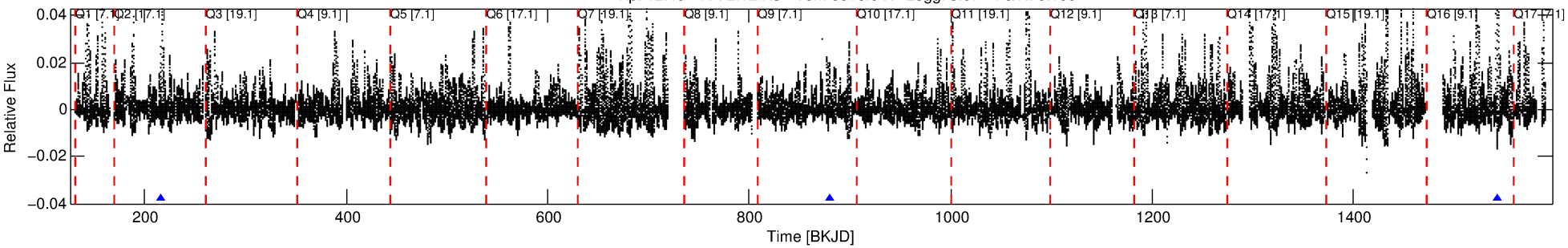
Ephemeris Match Information For 009267997-03

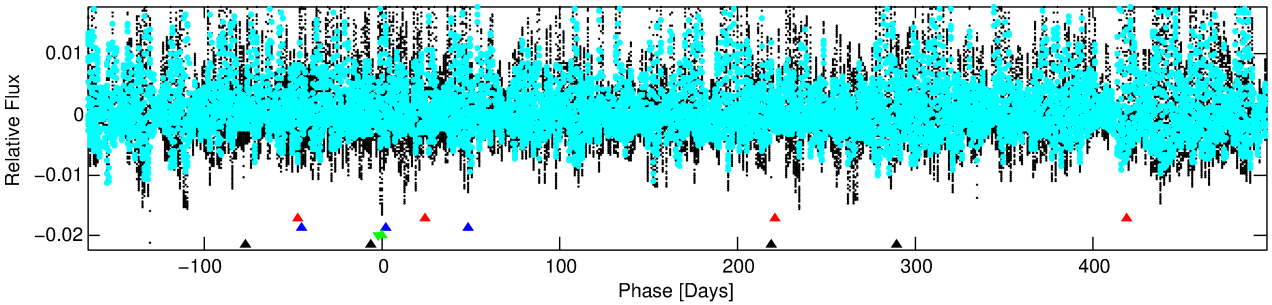
No Significant Match Found

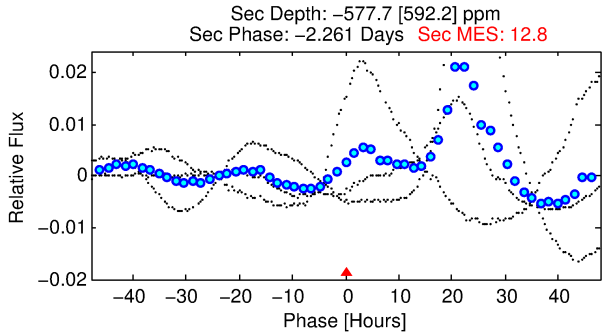
DV One-Page Summary

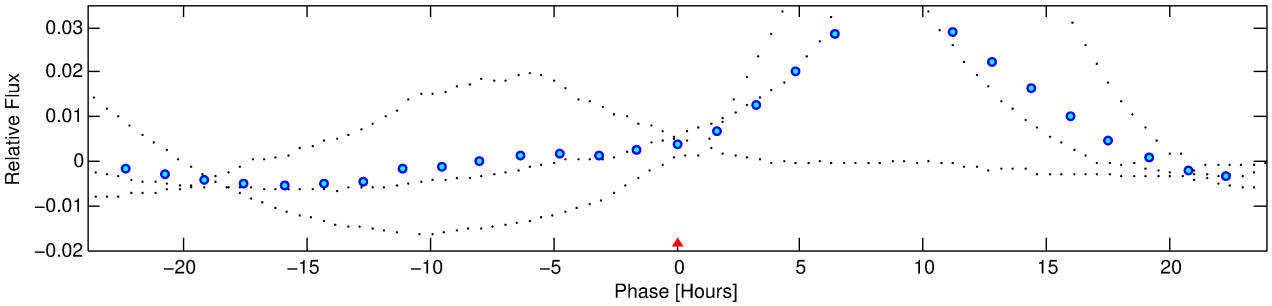
KIC: 9267997 Candidate: 3 of 4 Period: 663.376 d

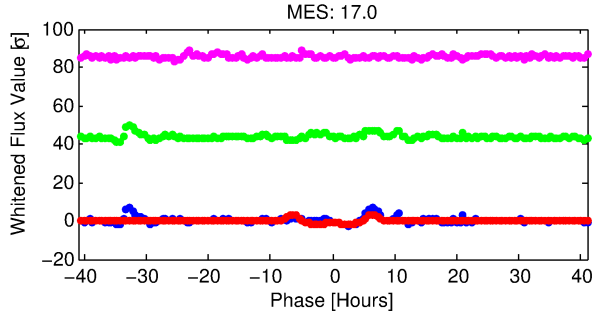
Kp: 12.40 R*: 2.12 Rs Teff: 6616.0 K Logg: 3.97 Fe/H: 0.100

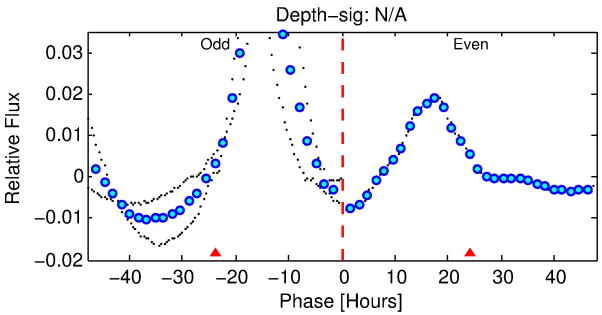


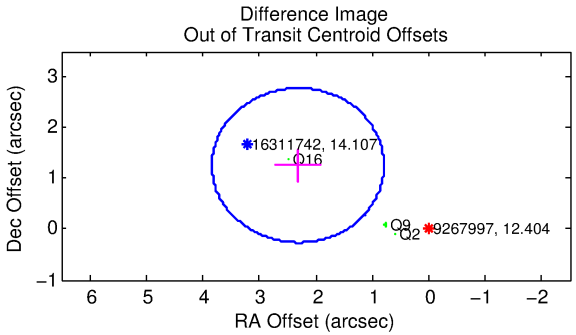












TPS TCE Results:

Period = 663.37553 d
Epoch = 217.1957 BKJD

DV fit results are unavailable

DV Diagnostic Results:

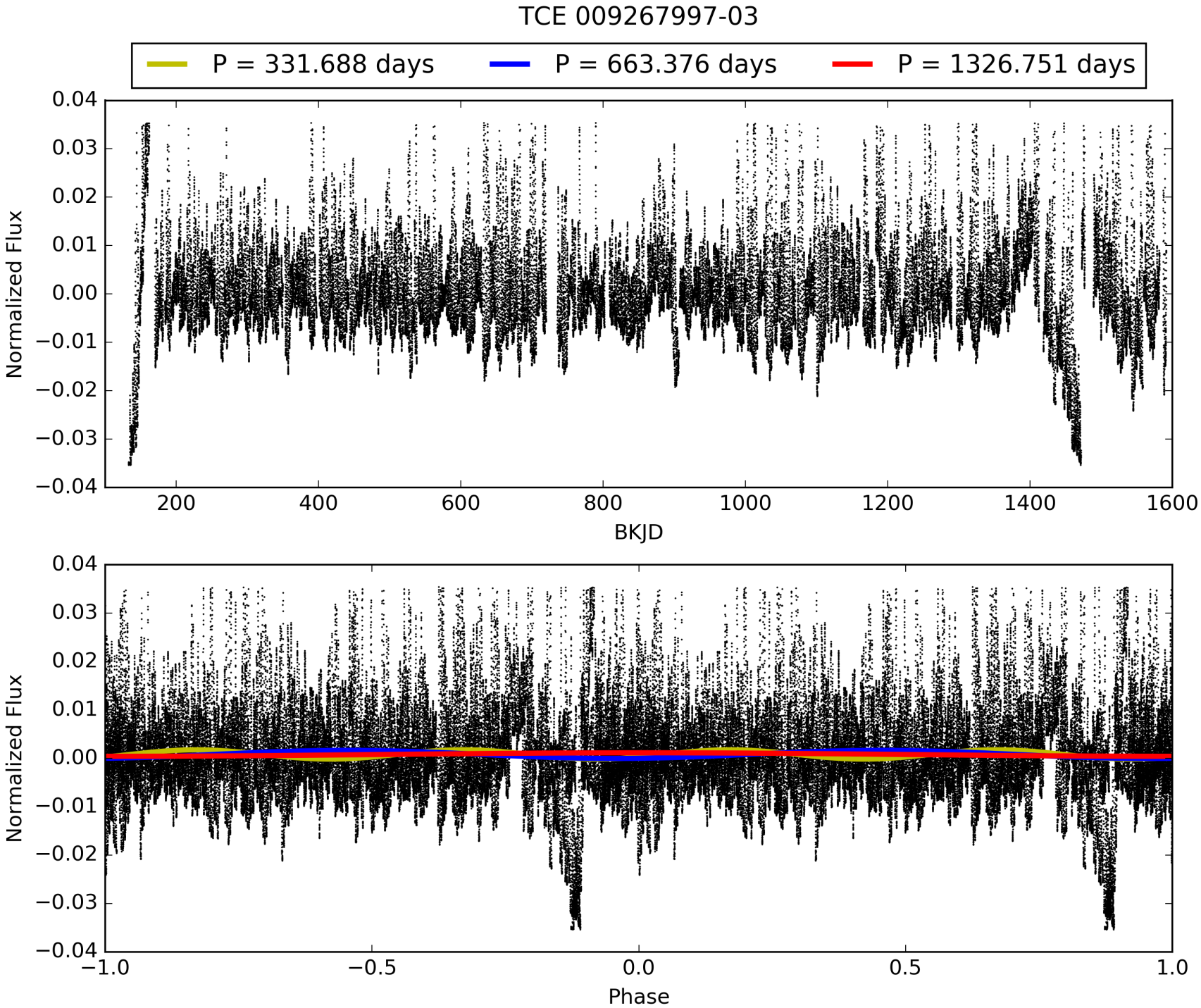
ShortPeriod−sig: 100.0% [101.66σ]
LongPeriod−sig: N/A
ModelChiSquare2−sig: N/A
ModelChiSquareGof−sig: N/A
Bootstrap−pfa: N/A
RollingBand−fgt: 1.00 [3/3]
GhostDiagnostic−chr: −0.2655

Centroid−sig: N/A
Centroid−so: 30.112 arcsec [1.60σ]
OotOffset−rm: 2.634 arcsec [5.19σ]
KicOffset−rm: 3.628 arcsec [44.14σ]
OotOffset−st: 1/0/1/1 [3]
KicOffset−st: 1/0/1/1 [3]
DiffImageQuality−fgm: 0.67 [2/3]
DiffImageOverlap−fno: 1.00 [3/3]

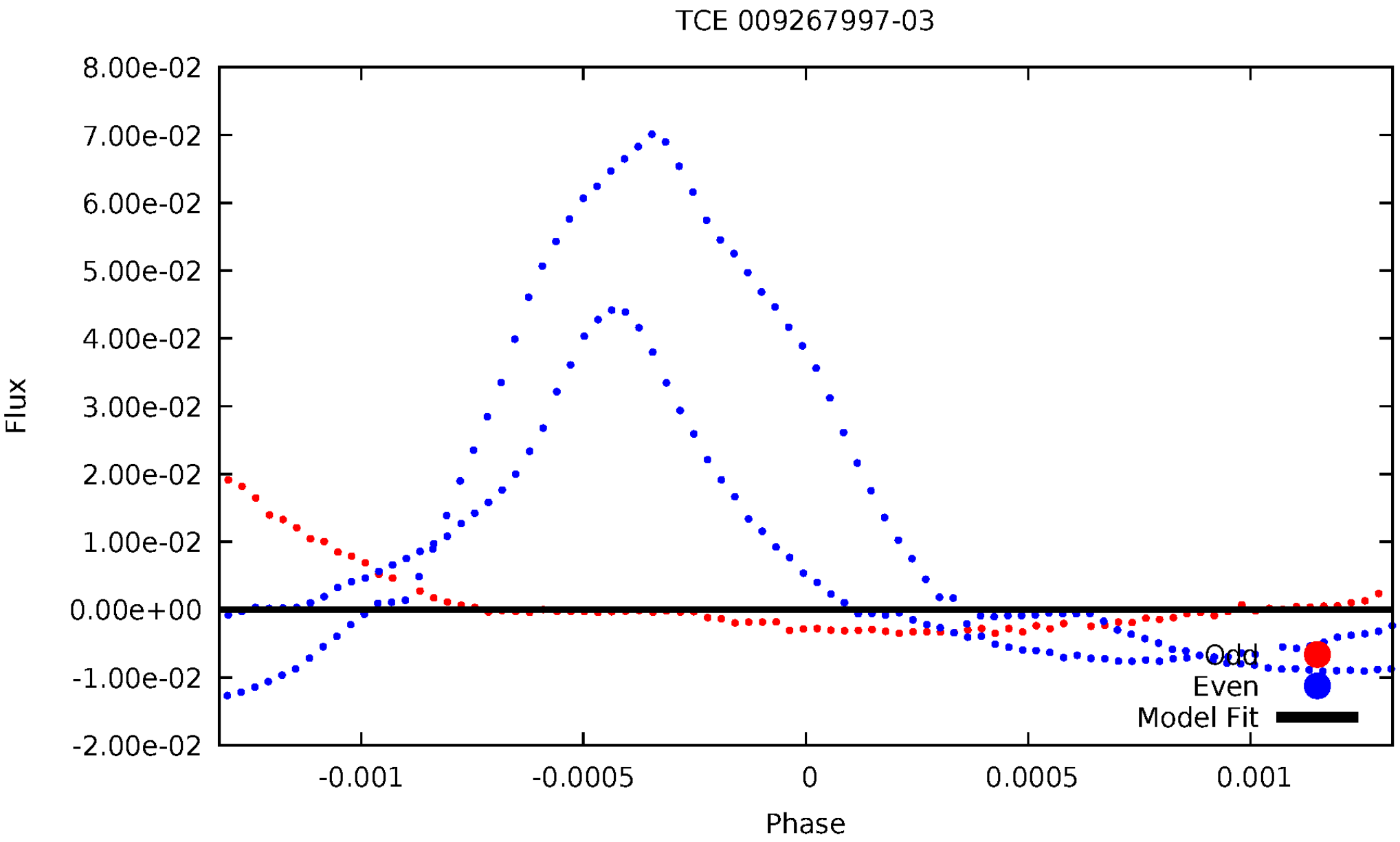
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30−Jan−2016 06:07:09 Z

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

TCE 009267997-03, PDC Light Curves


TCE 009267997-03
P = 331.688 days
P = 663.376 days
P = 1326.751 days
Normalized Flux
BKJD
Normalized Flux
Phase

DV Odd/Even


TCE 009267997-03
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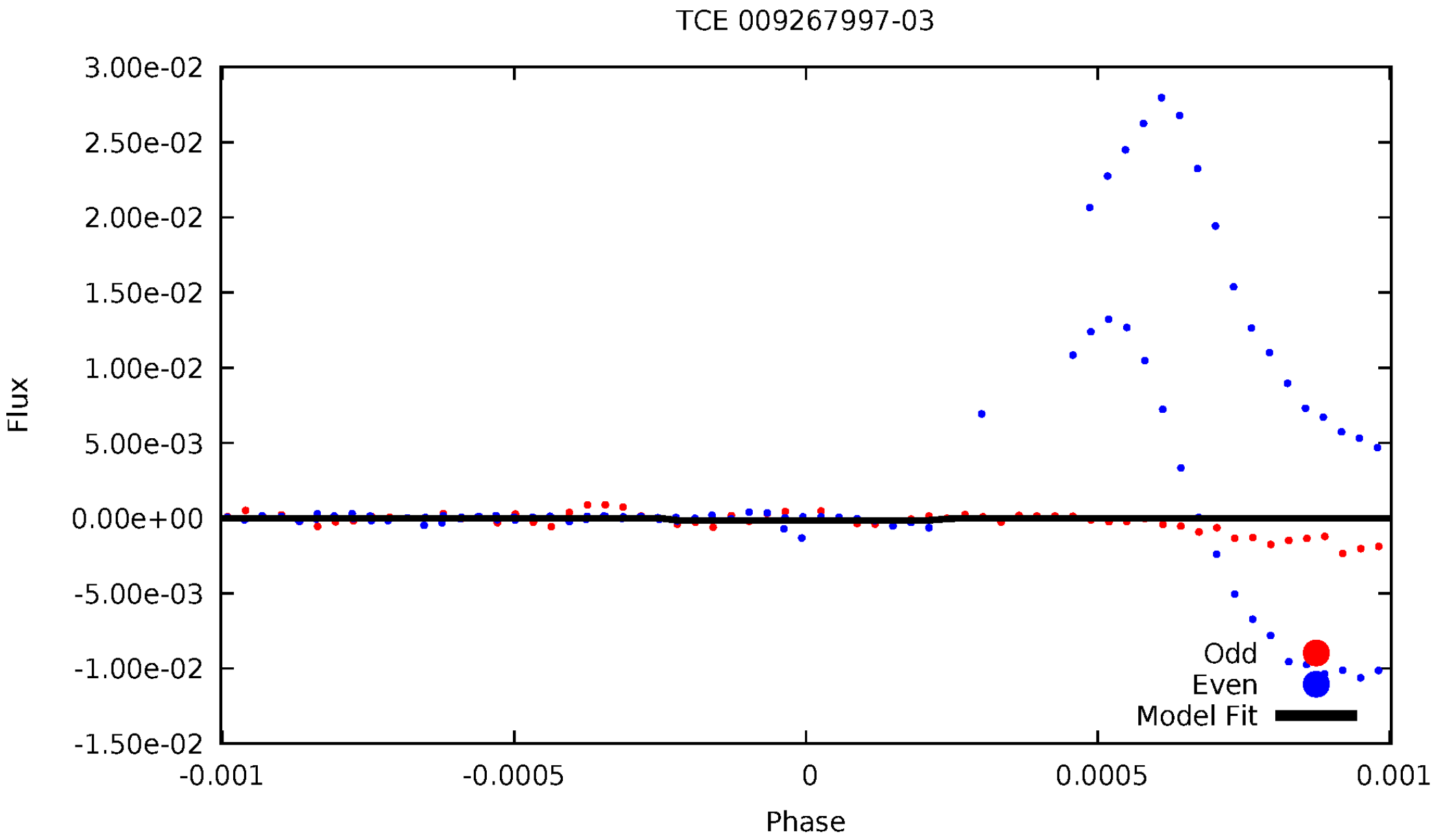
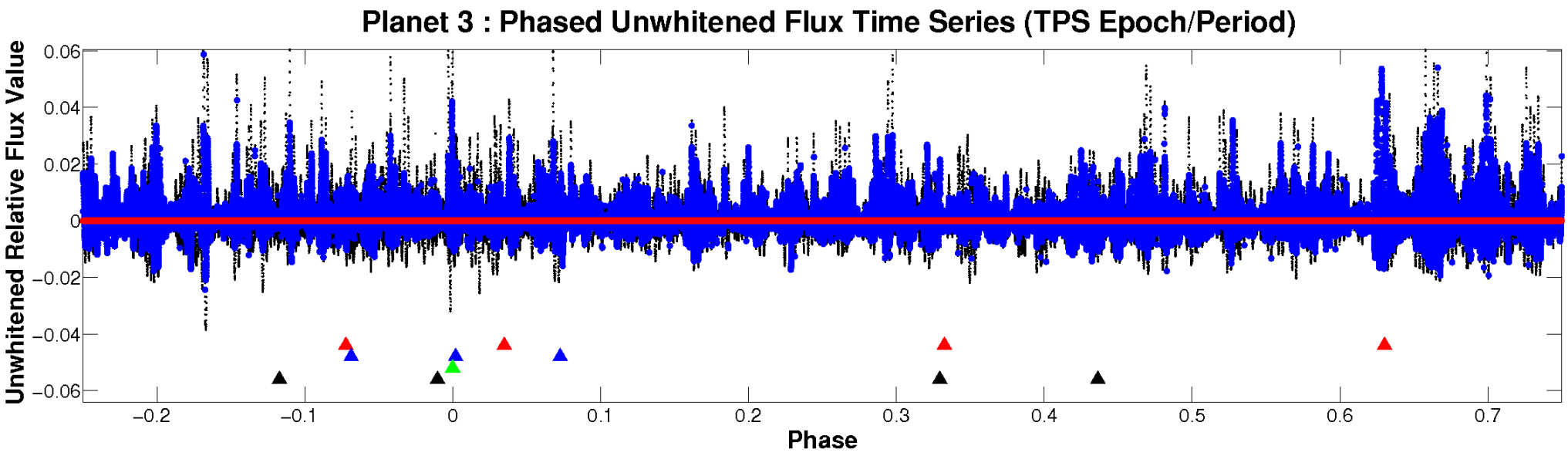
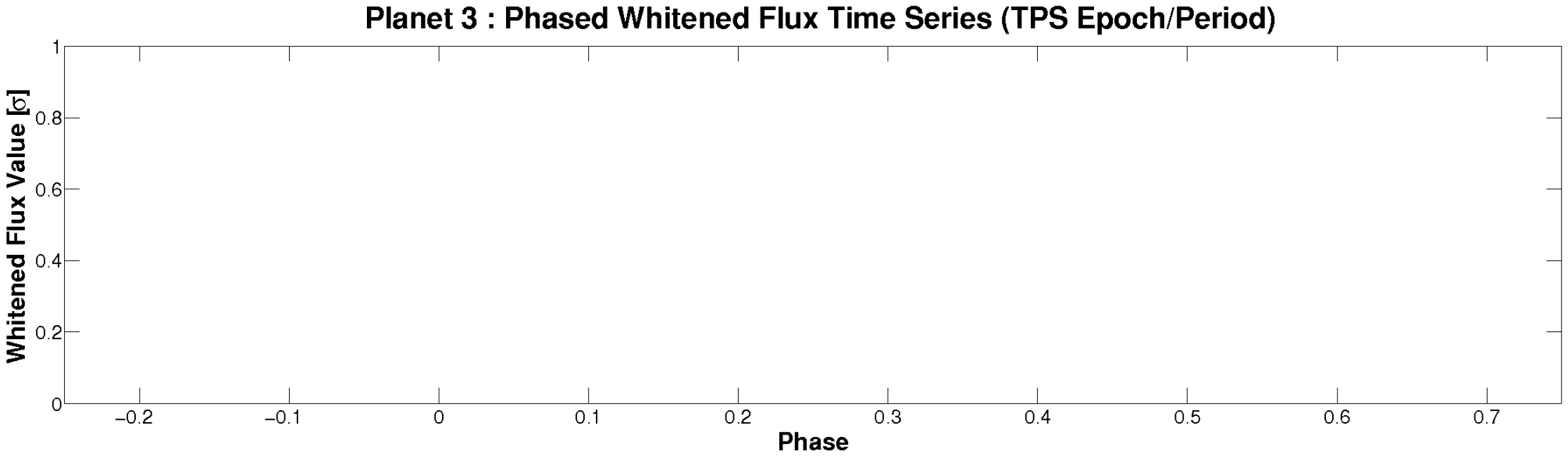
7.00e-02
6.00e-02
5.00e-02
4.00e-02
3.00e-02
2.00e-02
1.00e-02
0.00e+00
-1.00e-02
-2.00e-02
Flux
-0.001
-0.0005
0
0.0005
0.001
Phase
Odd
Even
Model Fit

ALT Odd/Even


TCE 009267997-03
3.00e-02
2.50e-02
2.00e-02
1.50e-02
1.00e-02
5.00e-03
0.00e+00
-5.00e-03
-1.00e-02
-1.50e-02
Flux
-0.001
-0.0005
0
0.0005
0.001
Phase
Odd
Even
Model Fit

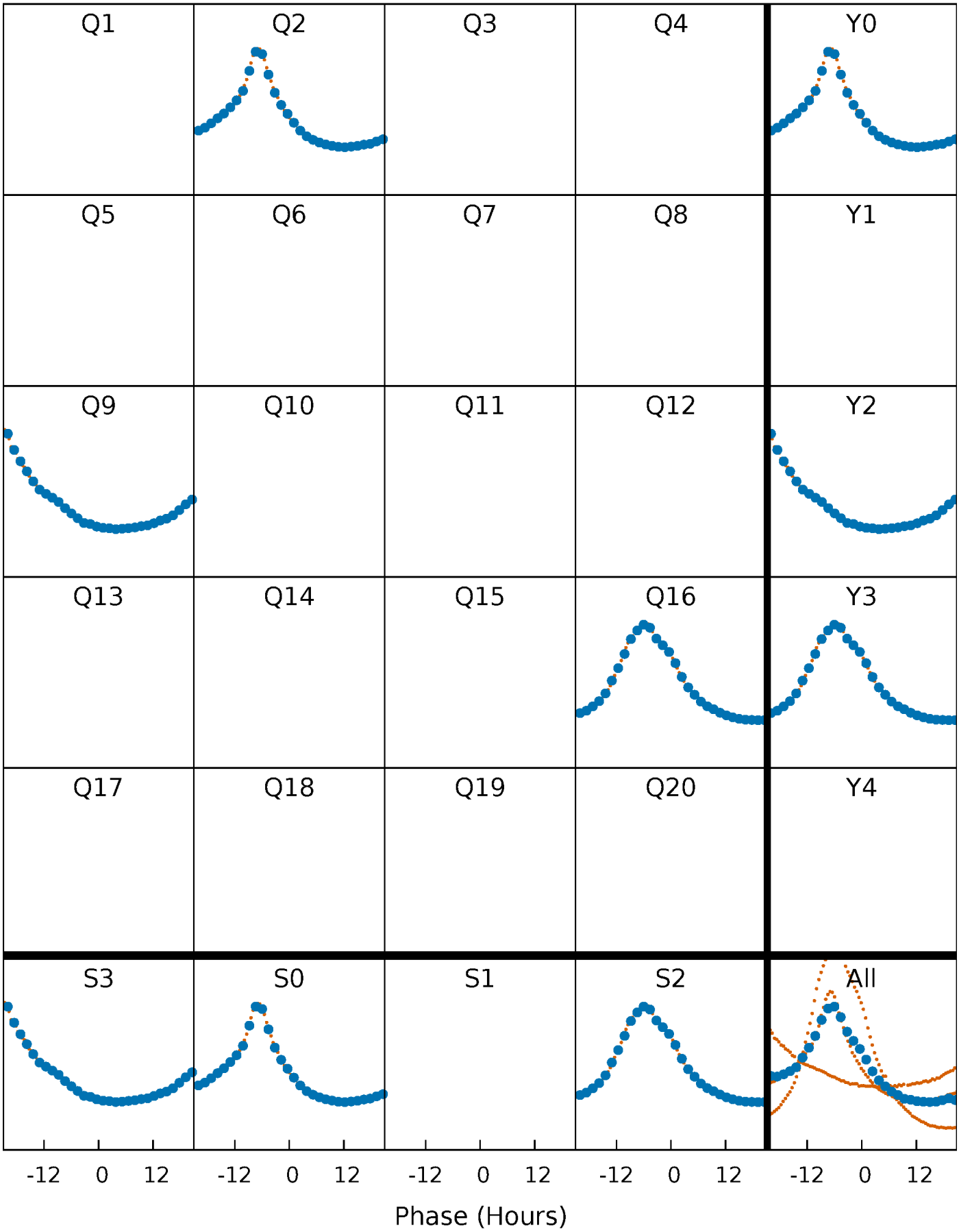
Non-Whitened Vs. Whitened Light Curve





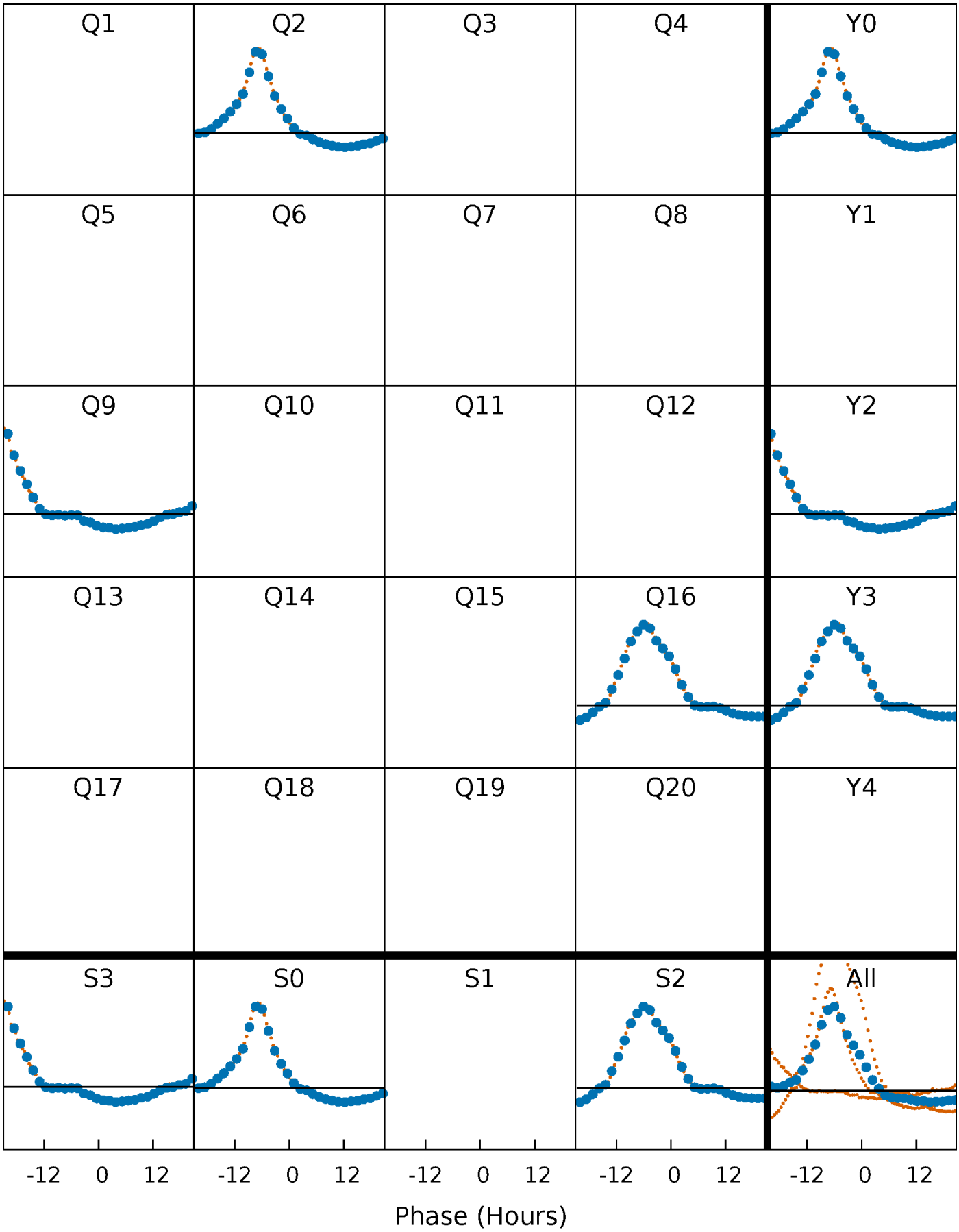
PDC Quarter-Phased Transit Curves

TCE 009267997-03 P=663.375525 Days T_0=217.195722 (BKJD)



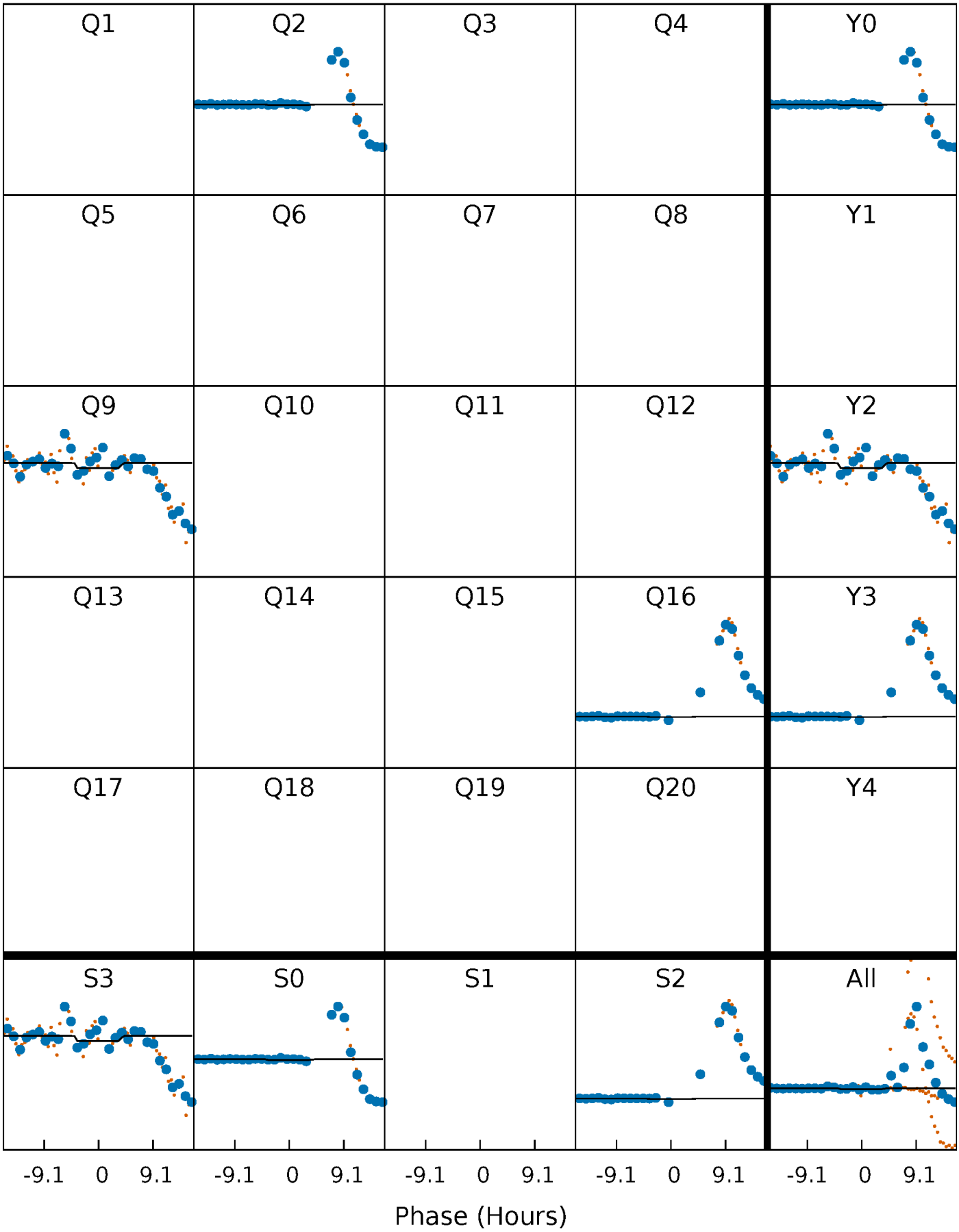
DV Quarter-Phased Transit Curves

TCE 009267997-03 P=663.375525 Days T_0=217.195722 (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

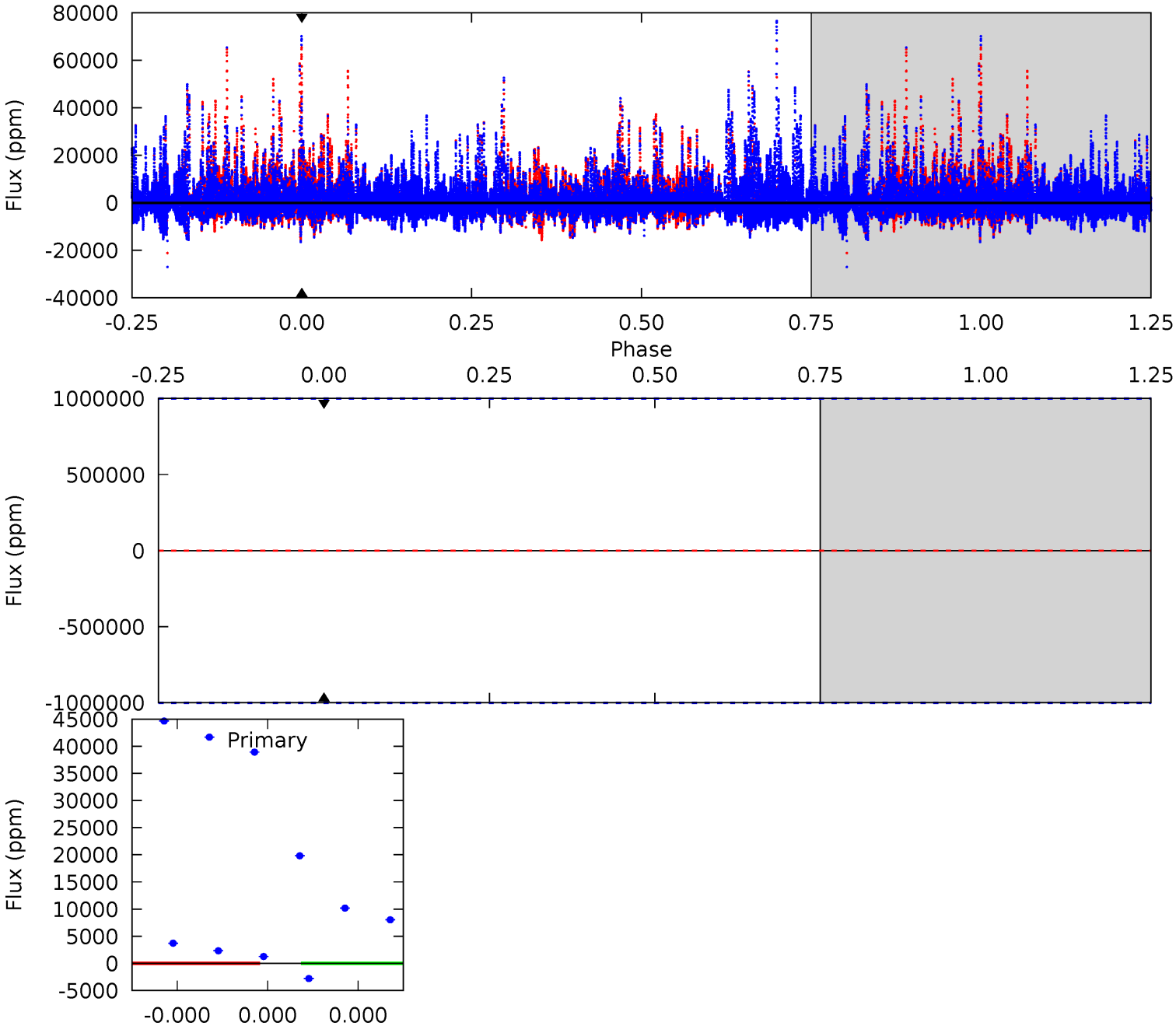
TCE 009267997-03 P=663.375525 Days T_0=216.561946 (BKJD)



DV Model-Shift Uniqueness Test

009267997-03, P = 663.375525 Days, E = 217.195722 Days

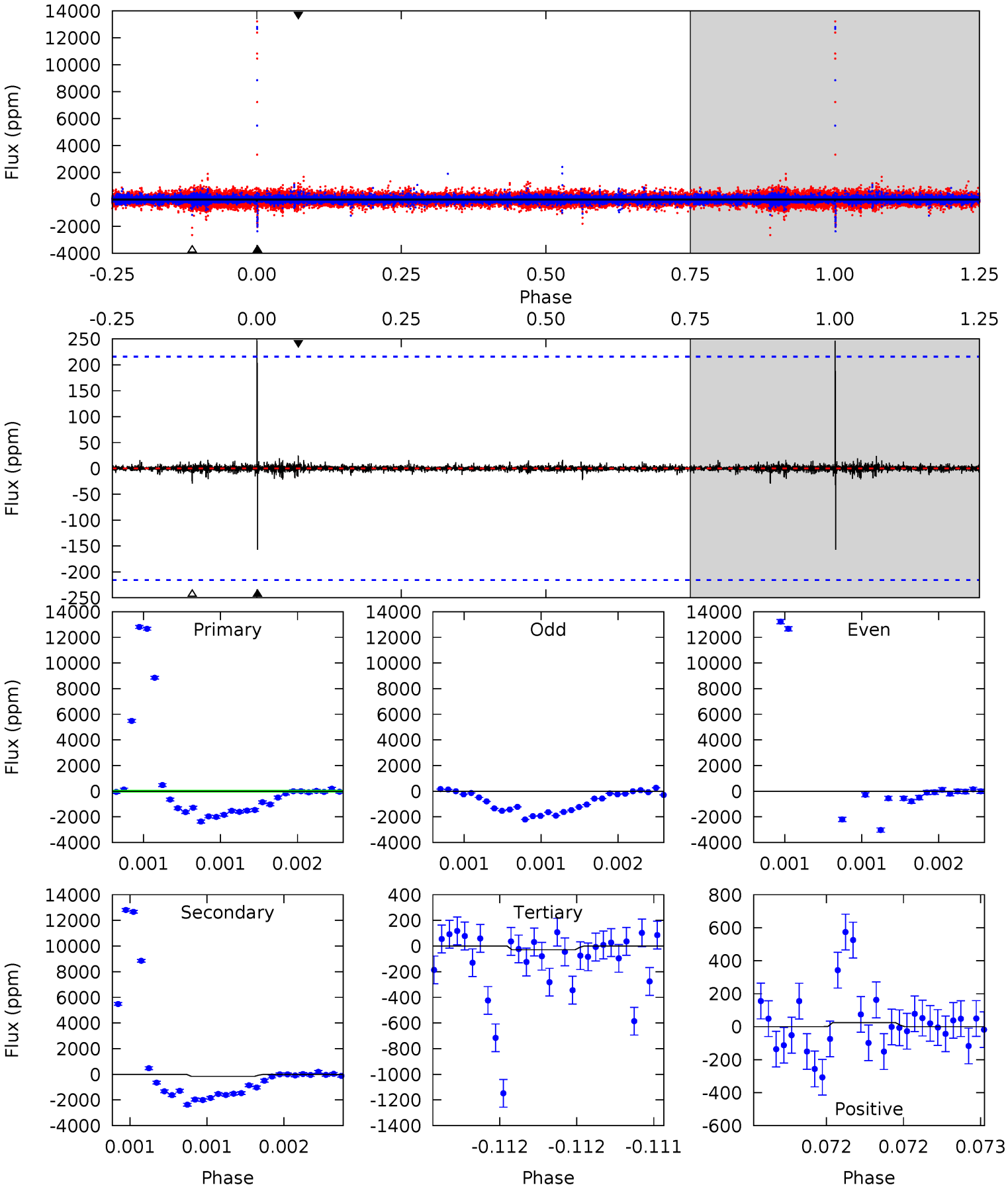
Pri	Sec	Ter	Pos	FA_1	FA_2	F_{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
0	0	0	0	1.00	1.00	1.00	0	0	0	0	0	0	0	0



Alt Model-Shift Uniqueness Test

009267997-03, P = 663.375525 Days, E = 216.561946 Days

Pri	Sec	Ter	Pos	FA_1	FA_2	F_{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
1.83	4.05	0.75	0.62	5.56	3.47	0.12	1.08	1.21	3.30	3.43	0.11	2.18	0.61	2.04



Stellar Parameters For KIC 009267997

	$T_{\rm eff}(K)$	$\log(g)$	[Fe/H]	R ($R_\odot$)	$M(M_\odot)$	$p_\star$ (g·cm^{-3})
	6616^{+184}_{-253}	$3.971^{+0.299}_{-0.161}$	$0.100^{+0.200}_{-0.350}$	$2.123^{+0.620}_{-0.758}$	$1.538^{+0.185}_{-0.344}$	$0.227^{+0.436}_{-0.107}$
	+3%/-4%	+8%/-4%	+200%/-350%	+29%/-36%	+12%/-22%	+193%/-47%
Source	PHO54	PHO54	PHO54	DSEP		

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

Secondary Eclipse Parameters for KIC 009267997-03 / KOI

Detrend	Depth (ppm)	R_p ($R_\oplus$)	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	0±1000000	$16.21^{+18.01}_{-11.19}$	446^{+33}_{-40}	5301^{+24484}_{-29025}	$12152^{+1148575}_{-752739}$
Alt.	-157±39	$15.74^{+16.78}_{-11.14}$	448^{+36}_{-44}	3309^{+1859}_{-624}	971^{+11599}_{-750}

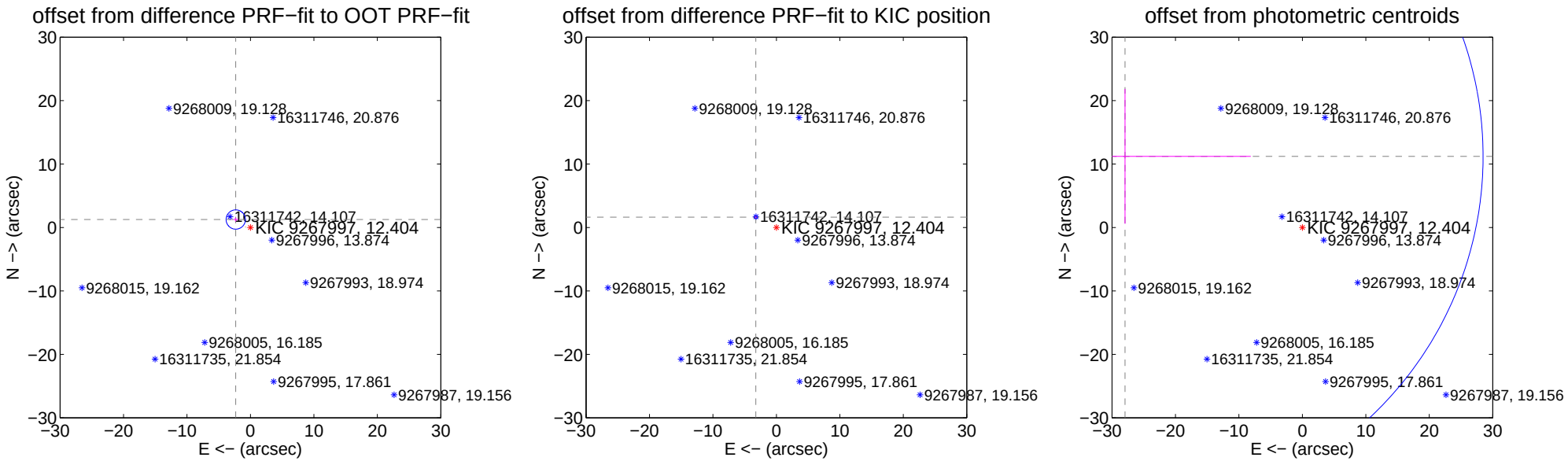
T_{max} = Theoretical Maximum Planetary Temperature
T_{obs} = Observed Planetary Temperature (Assuming A=0.3)
A_{obs} = Observed Albedo (Assuming T=0)

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

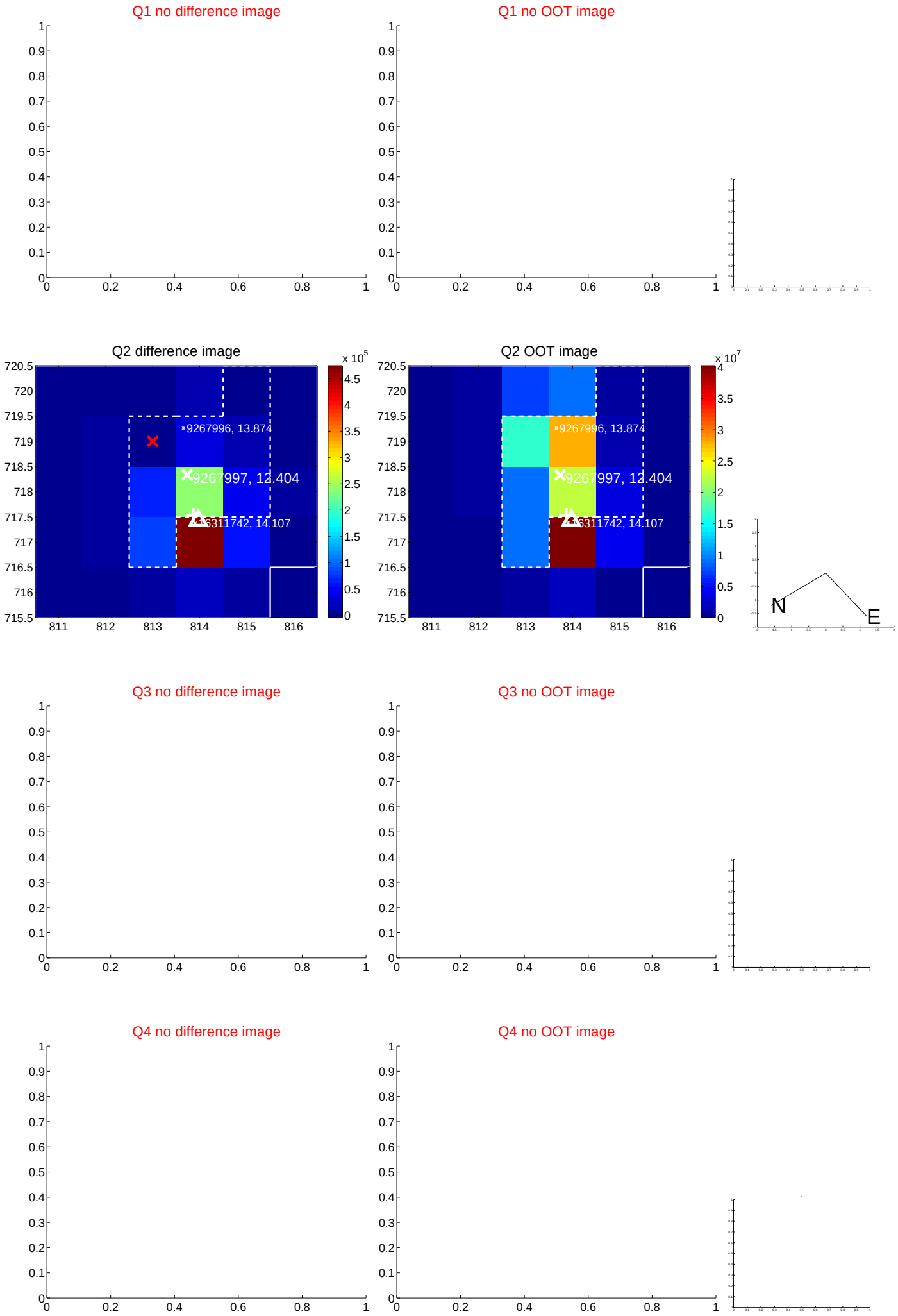
Supplemental centroid analysis for 009267997-03. Kepler magnitude: 12.40. Transit SNR -1.00
There are 2 quarters with good PRF difference image offsets
The direct PRF centroid is offset from the target star catalog position by about 0.79 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	2.634 ± 0.507	5.19	2.314 ± 0.409	1.257 ± 0.317
PRF-fit source offset from KIC position	3.628 ± 0.082	44.14	3.243 ± 0.081	1.626 ± 0.086
photometric centroid source offset	30.11 ± 18.81	1.60	27.95 ± 19.81	11.21 ± 10.62

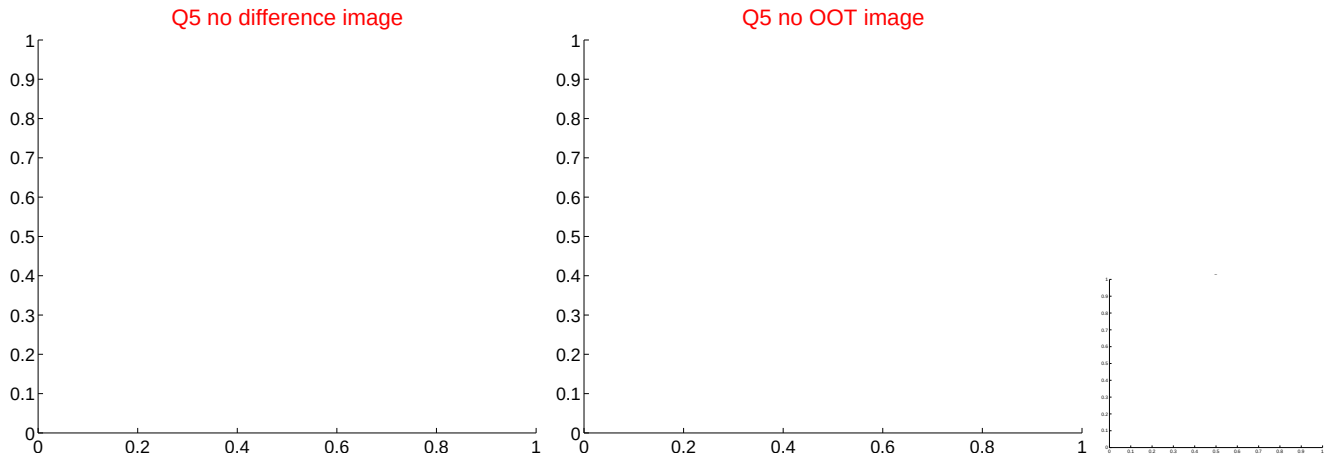


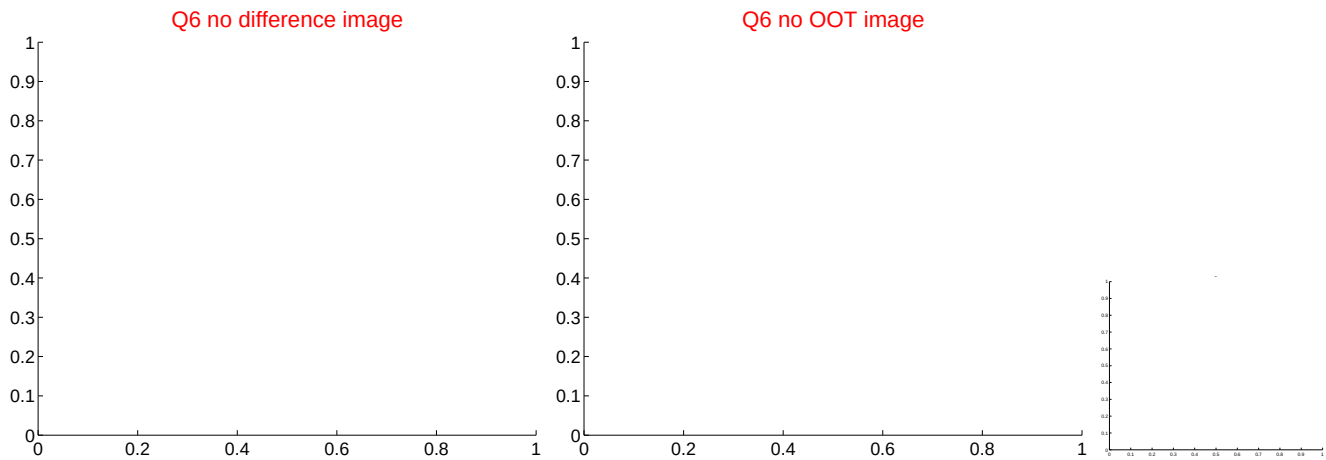
Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one-σ uncertainty. Blue circle: three-σ. Red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

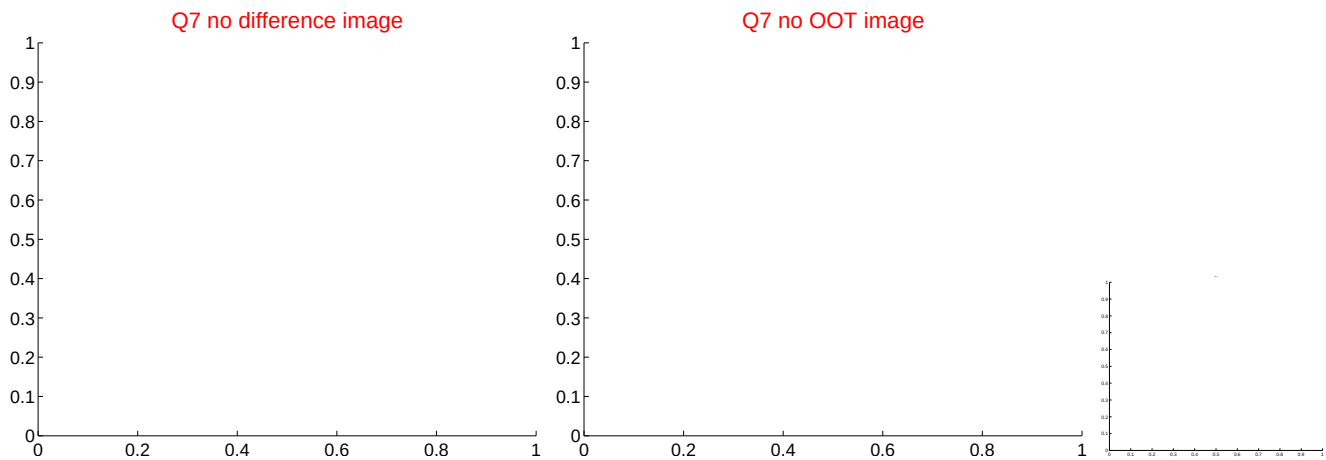
white ×: KIC target position; +: OOT centroid; △: difference centroid. red ×: large negative pixel value.

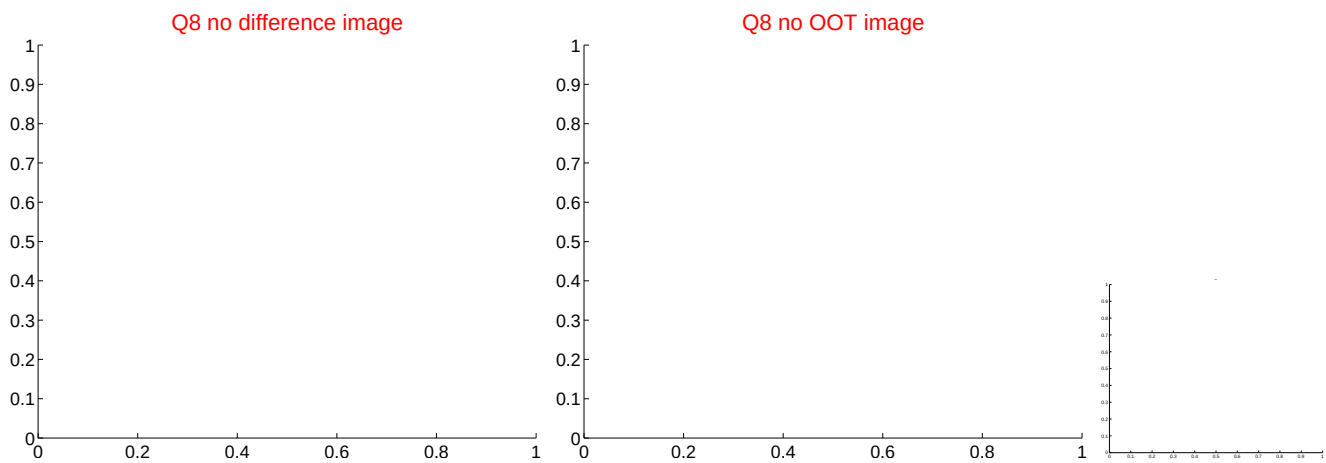


white ×: KIC target position; +: OOT centroid; △: difference centroid. red ×: large negative pixel value.

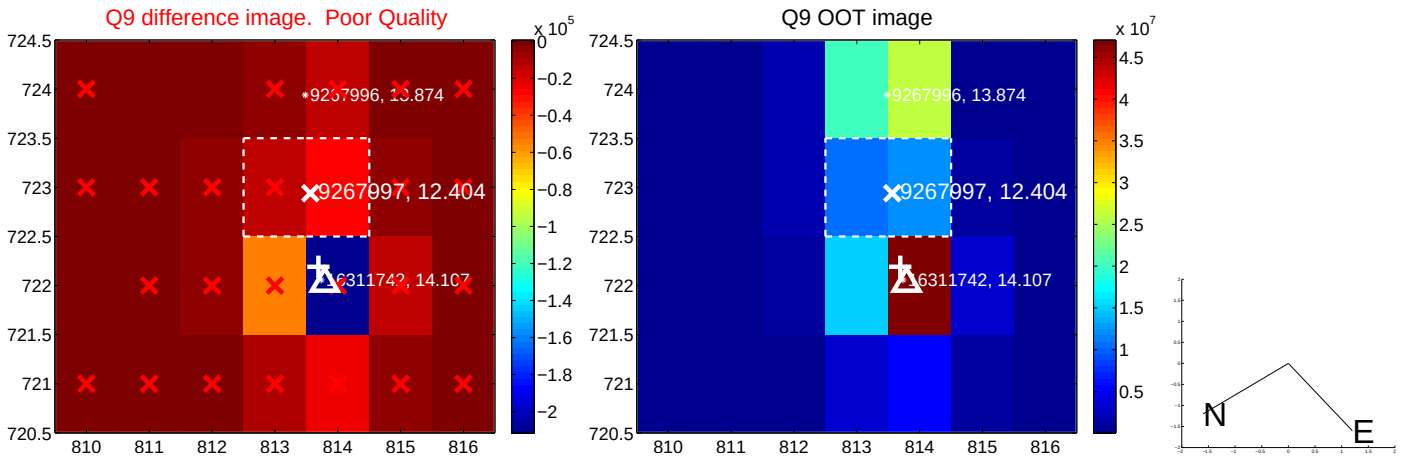


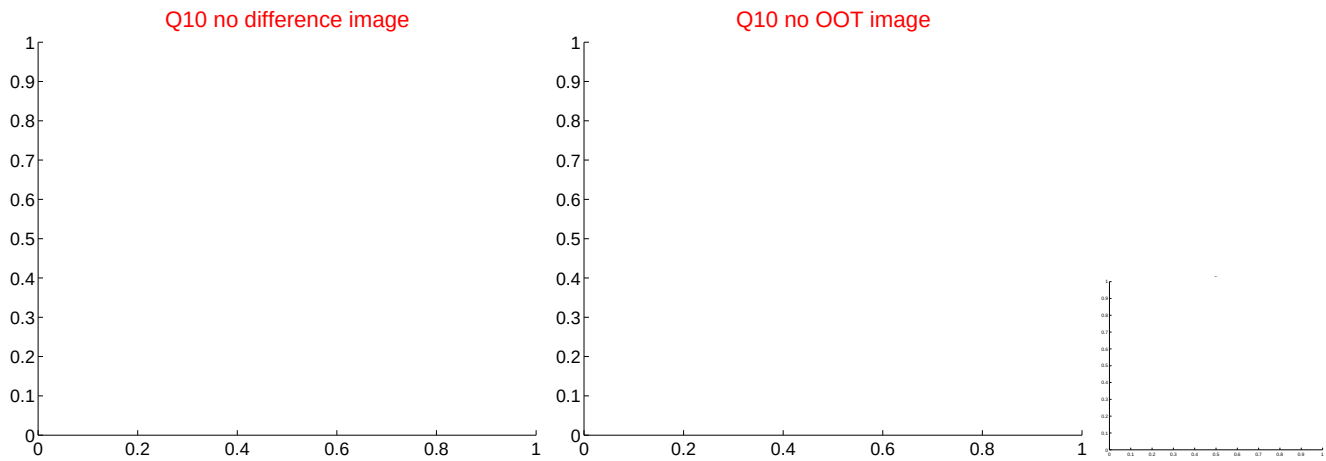


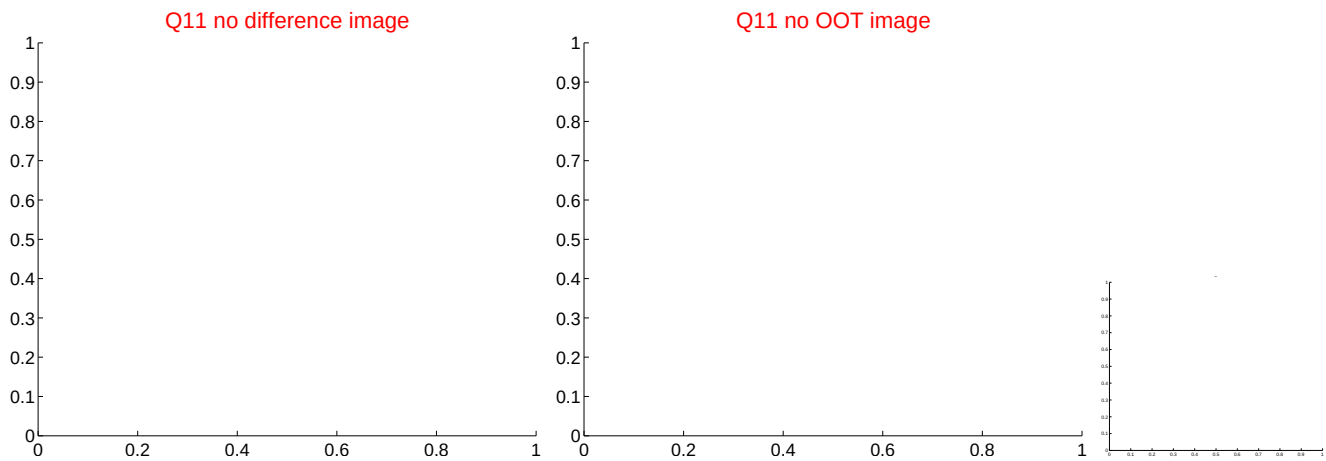


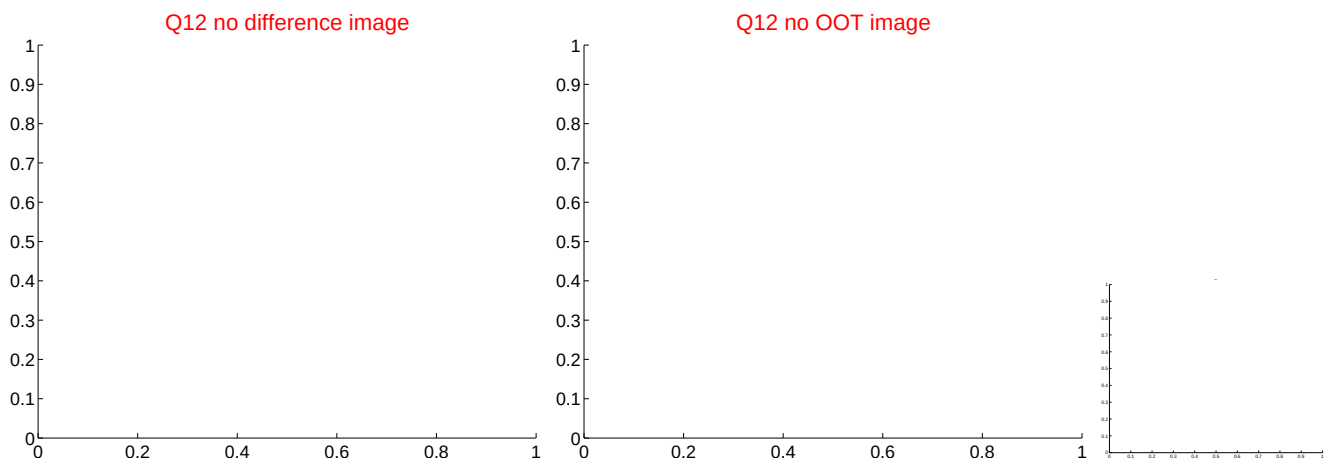


white ×: KIC target position; +: OOT centroid; △: difference centroid. red ×: large negative pixel value.

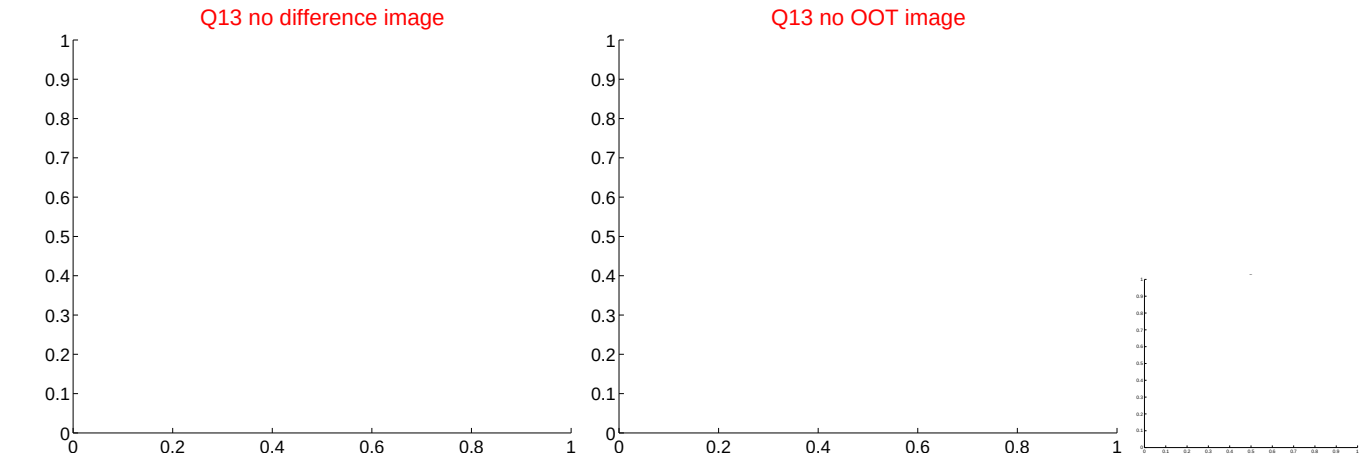


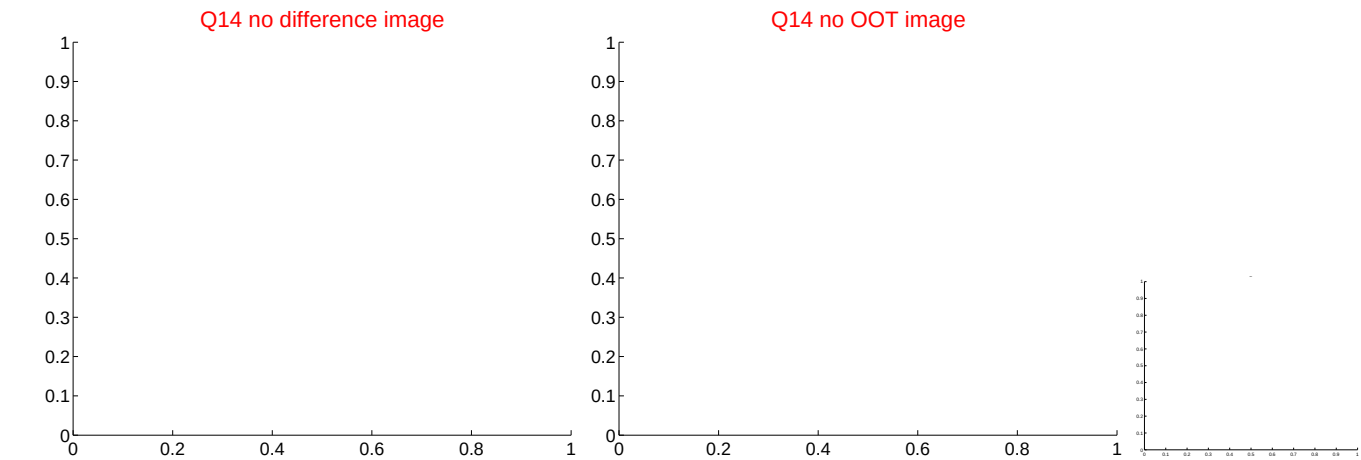


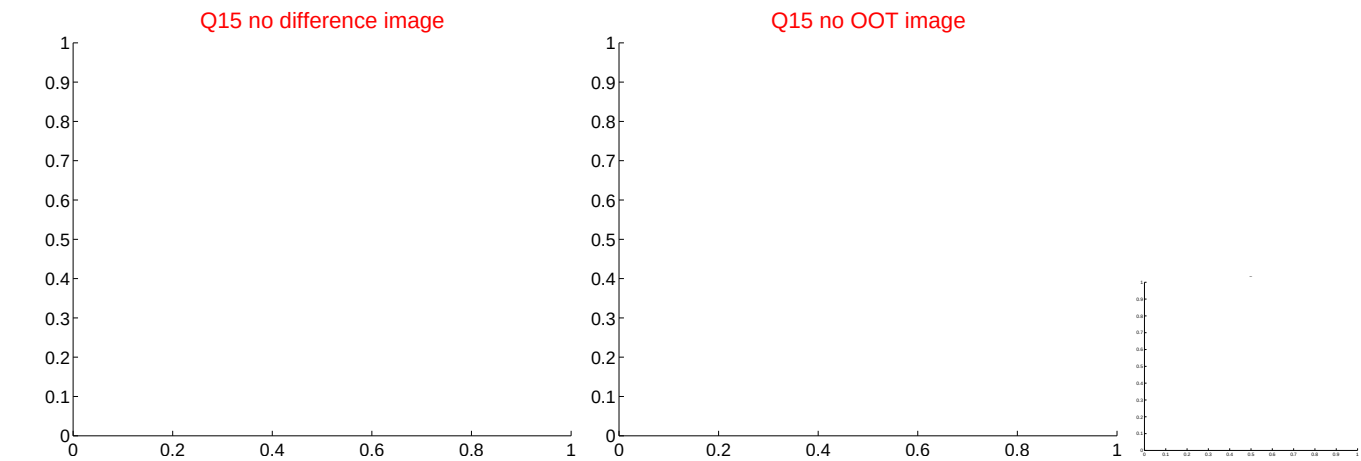


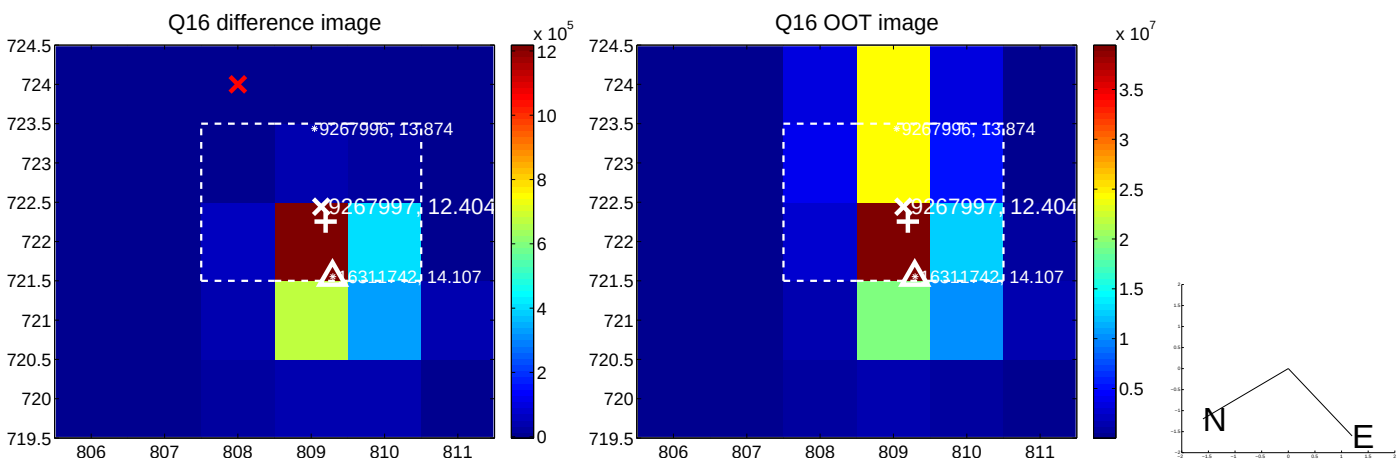


white ×: KIC target position; +: OOT centroid; △: difference centroid. red ×: large negative pixel value.

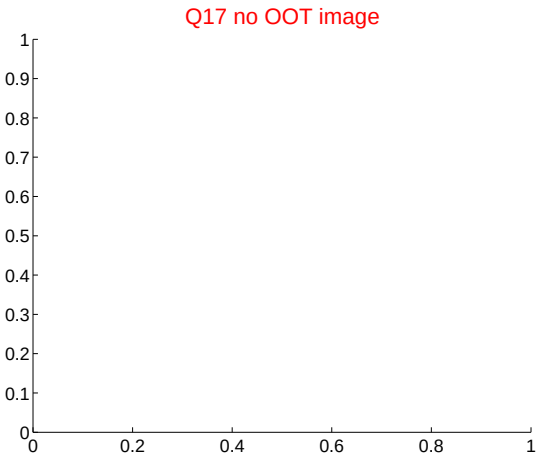


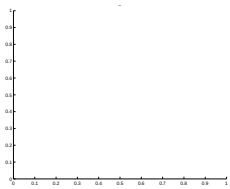


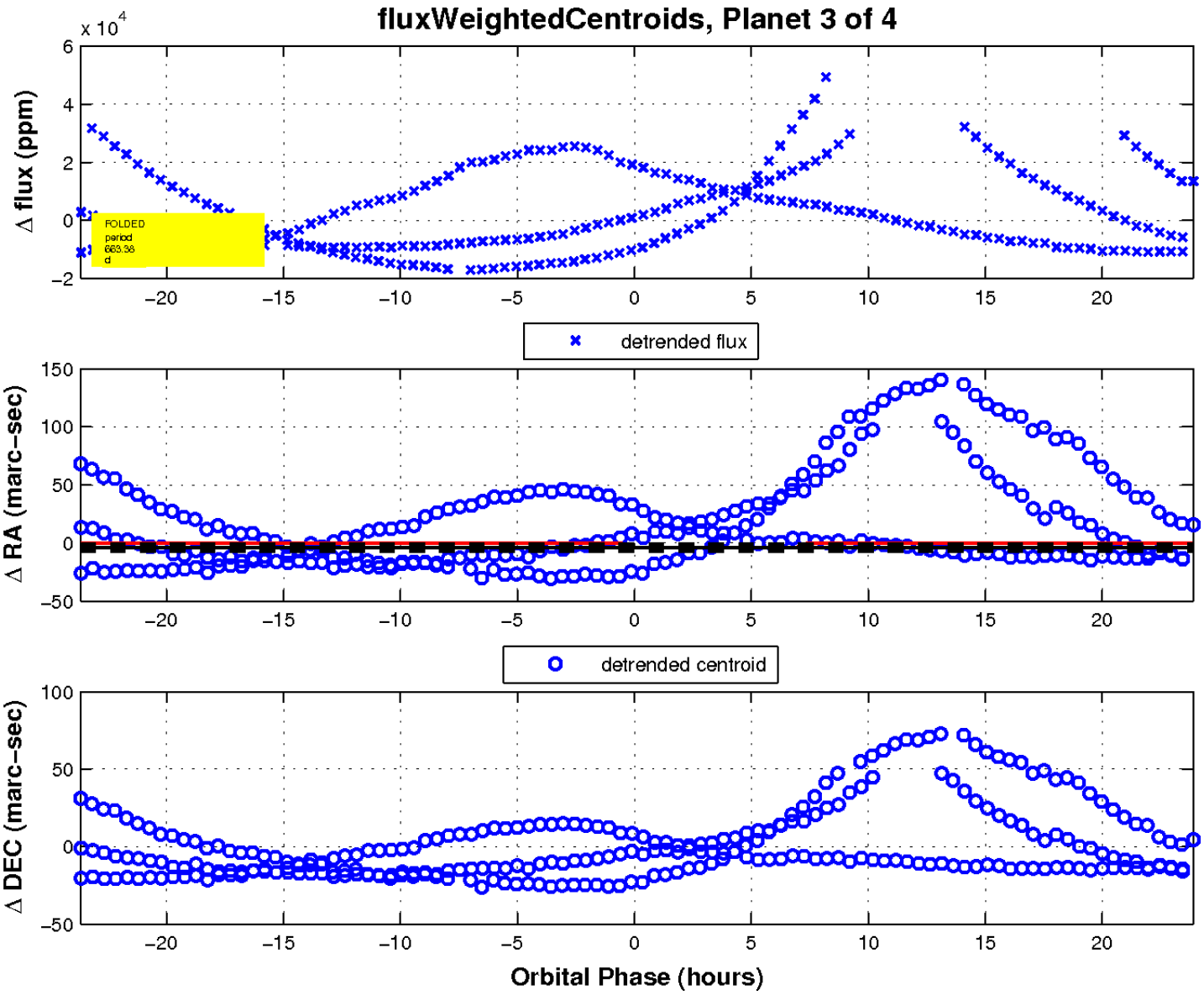




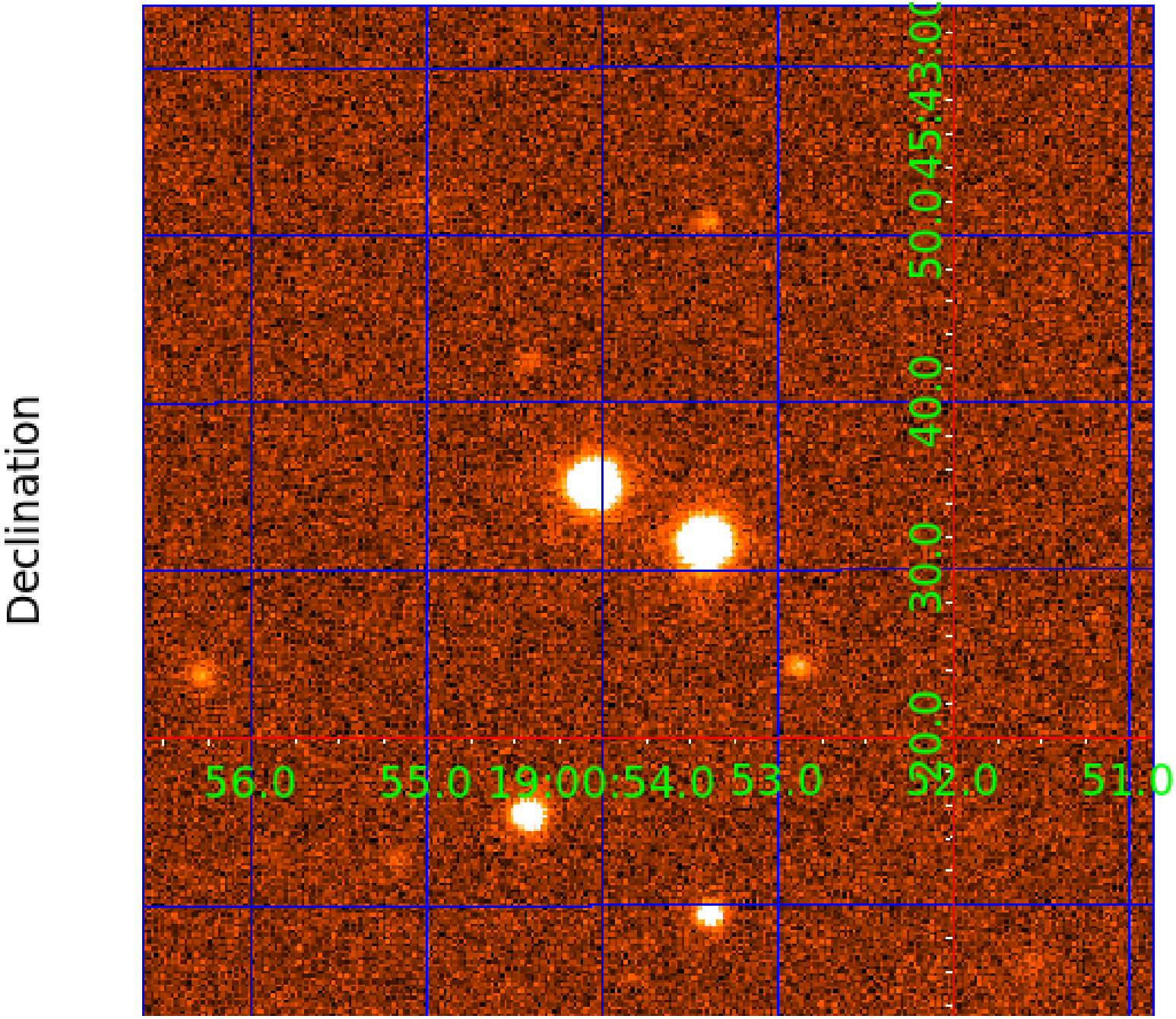
white ×: KIC target position; +: OOT centroid; △: difference centroid. red ×: large negative pixel value.







UKIRT Image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30.0
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50.0
45:43:0

KIC 009267997

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 ($S_\oplus$)
009267997-02	OBS	No	616.494128	265.425735	1126.0	3.500	18.4	-1.0	2.12	6616	7.17	2.89
009267997-03	OBS	No	663.375525	217.195722	604.3	10.500	17.0	-1.0	2.12	6616	5.25	2.62
009267997-04	OBS	No	367.150206	435.708807	613.8	5.000	13.0	-1.0	2.12	6616	5.29	5.76

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
009267997-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_MARSHALL_ZUMA—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—INCONSISTENT_TRANS—CENT_NOFITS
009267997-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_MARSHALL—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_TER_ALT—MOD_POS_ALT—INCONSISTENT_TRANS—CENT_NOFITS
009267997-04	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.

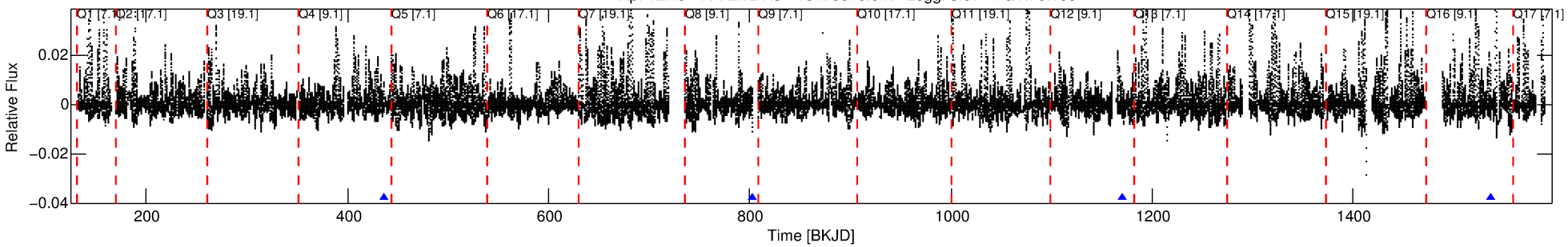
Ephemeris Match Information For 009267997-04

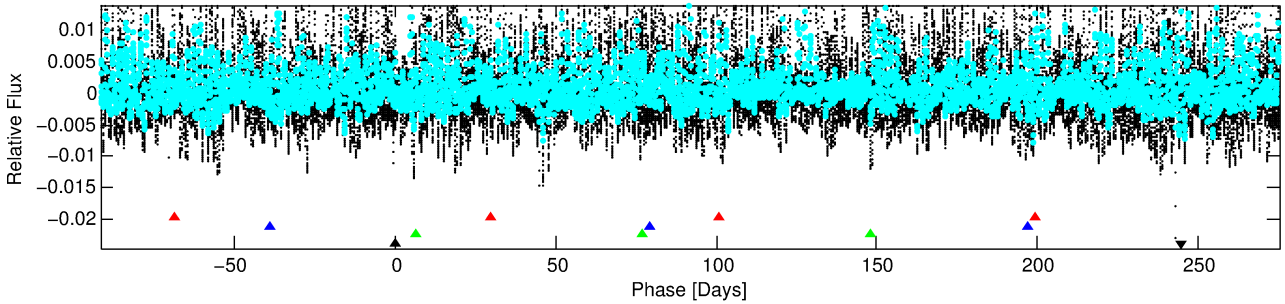
No Significant Match Found

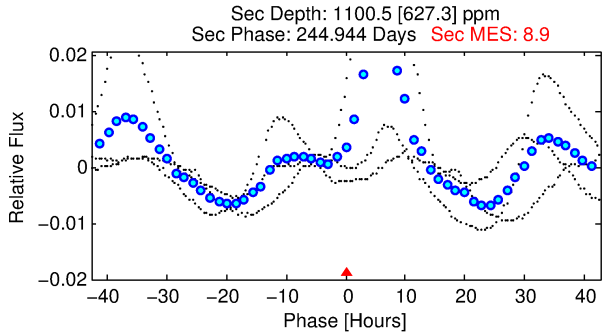
DV One-Page Summary

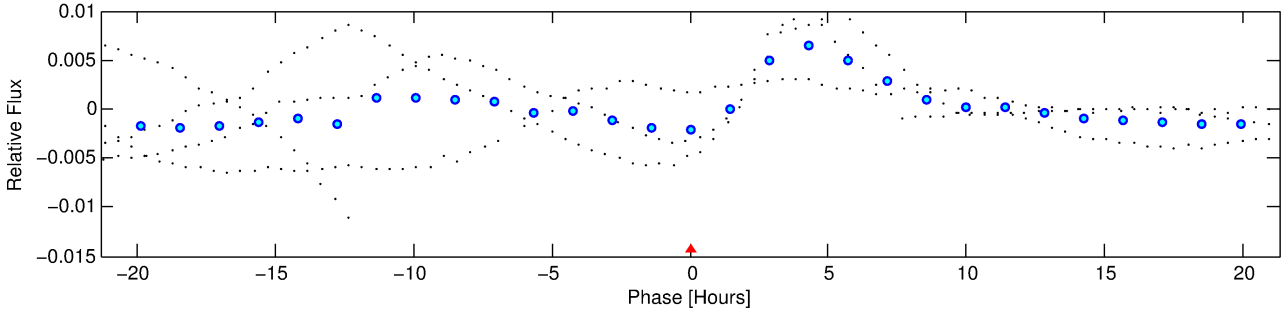
KIC: 9267997 Candidate: 4 of 4 Period: 367.150 d

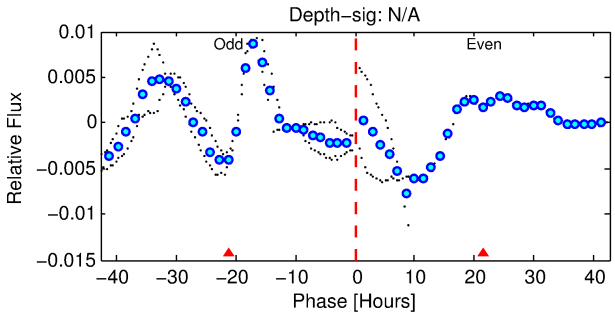
Kp: 12.40 R*: 2.12 Rs Teff: 6616.0 K Logg: 3.97 Fe/H: 0.100

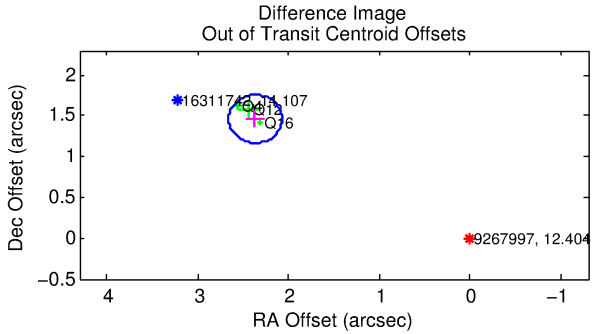












TPS TCE Results:

Period = 367.15021 d
Epoch = 435.7088 BKJD

DV fit results are unavailable

DV Diagnostic Results:

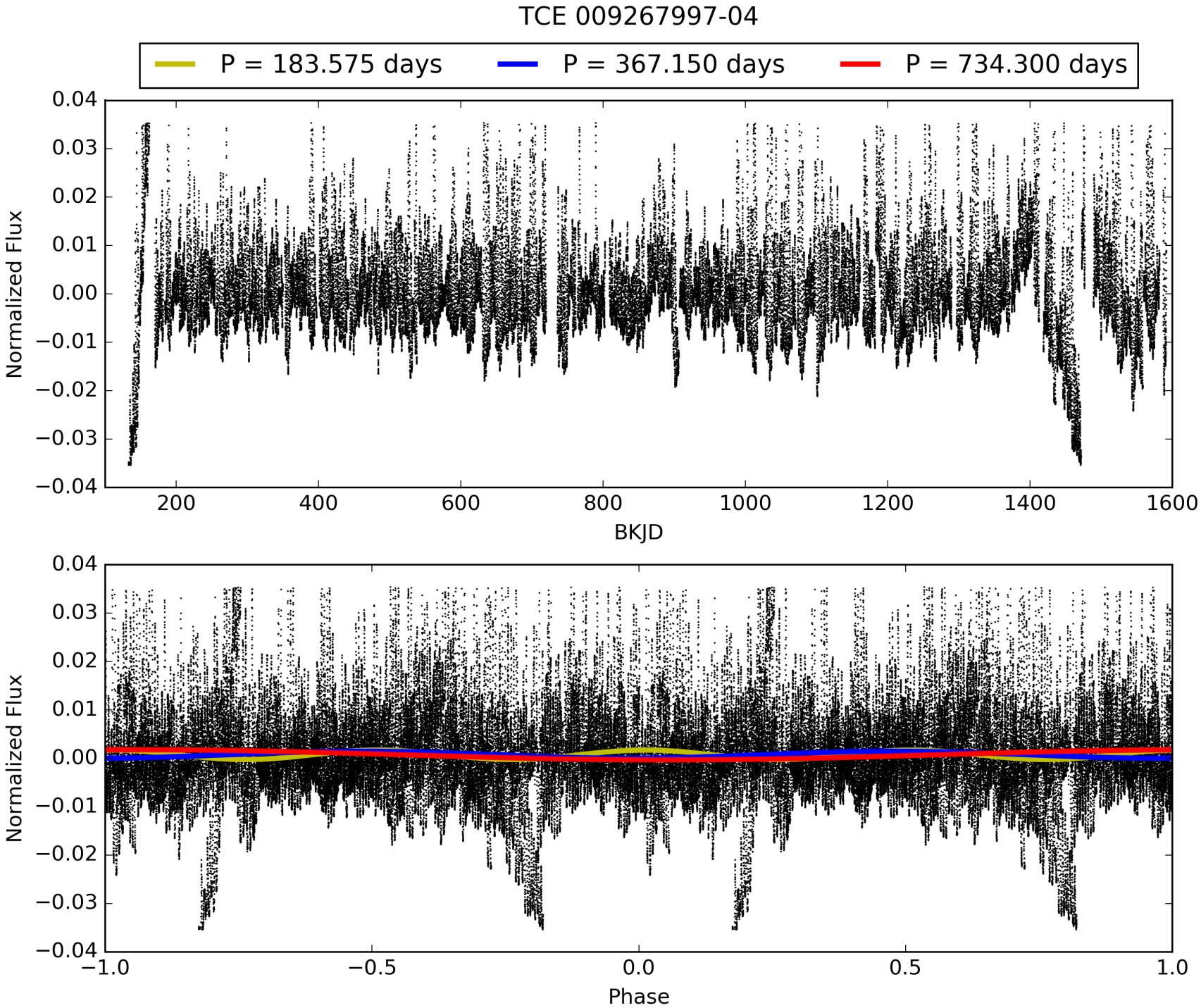
ShortPeriod−sig: N/A
LongPeriod−sig: 100.0% [158.65σ]
ModelChiSquare2−sig: N/A
ModelChiSquareGof−sig: N/A
Bootstrap−pfa: N/A
RollingBand−fgt: 1.00 [3/3]
GhostDiagnostic−chr: 0.721

Centroid−sig: N/A
Centroid−so: 0.994 arcsec [2.77σ]
OotOffset−rm: 2.781 arcsec [28.44σ]
KicOffset−rm: 3.533 arcsec [44.82σ]
OotOffset−st: 0/0/3/0 [3]
KicOffset−st: 0/0/3/0 [3]
DiffImageQuality−fgm: 0.33 [1/3]
DiffImageOverlap−fno: 1.00 [3/3]

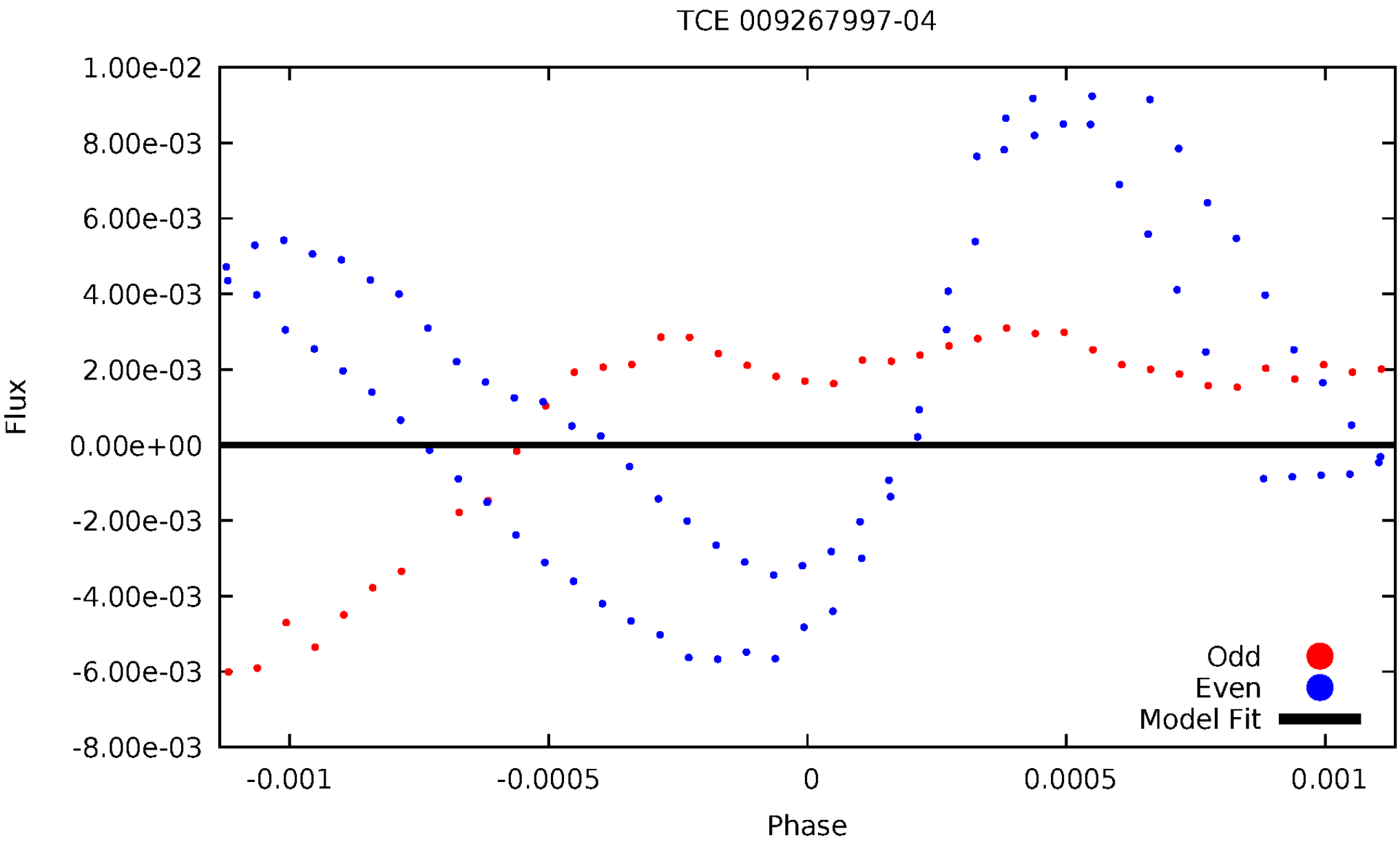
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 −− Date Generated: 30−Jan−2016 06:07:19 Z

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

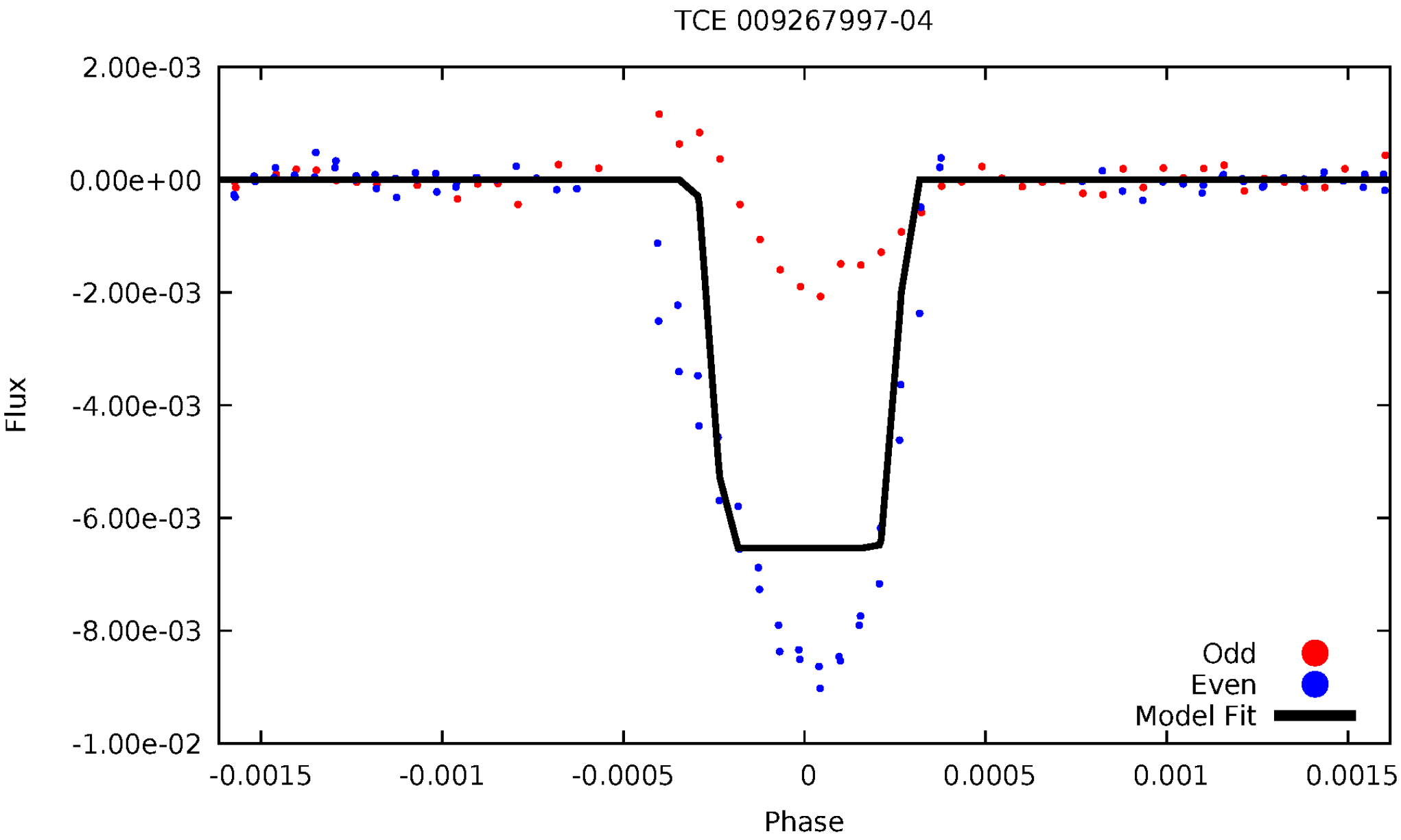
TCE 009267997-04, PDC Light Curves


TCE 009267997-04
P = 183.575 days
P = 367.150 days
P = 734.300 days
Normalized Flux
BKJD
Normalized Flux
Phase

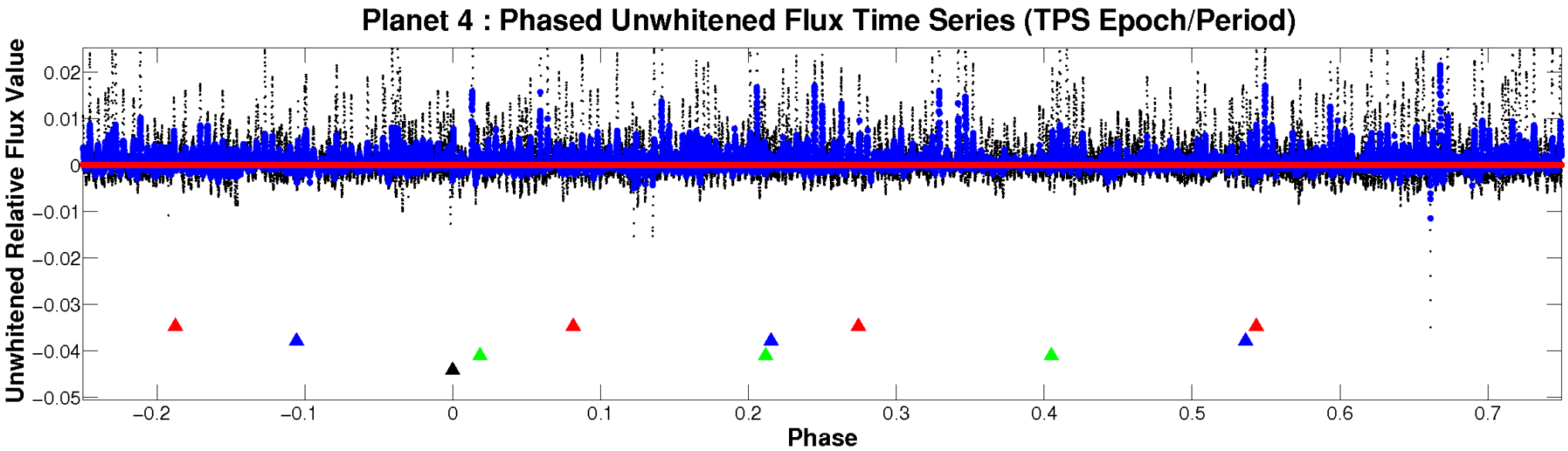
DV Odd/Even

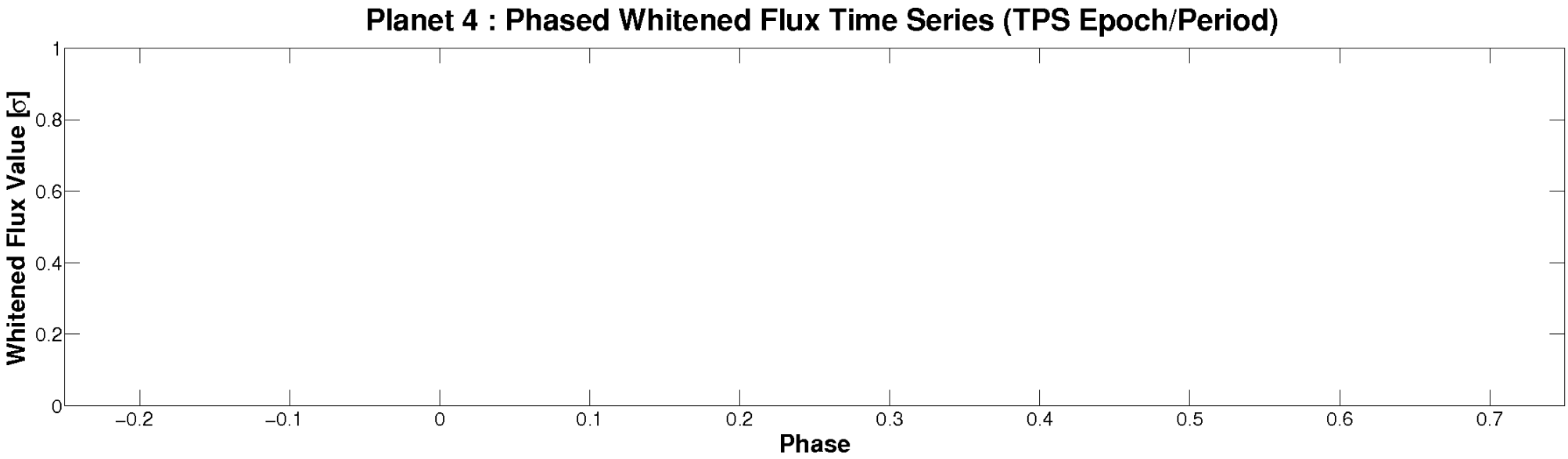

TCE 009267997-04
1.00e-02
8.00e-03
6.00e-03
4.00e-03
2.00e-03
0.00e+00
-2.00e-03
-4.00e-03
-6.00e-03
-8.00e-03
Flux
-0.001
-0.0005
0
0.0005
0.001
Phase
Odd
Even
Model Fit

ALT Odd/Even


TCE 009267997-04
2.00e-03
0.00e+00
-2.00e-03
-4.00e-03
-6.00e-03
-8.00e-03
-1.00e-02
Flux
-0.0015
-0.001
-0.0005
0
0.0005
0.001
0.0015
Phase
Odd
Even
Model Fit

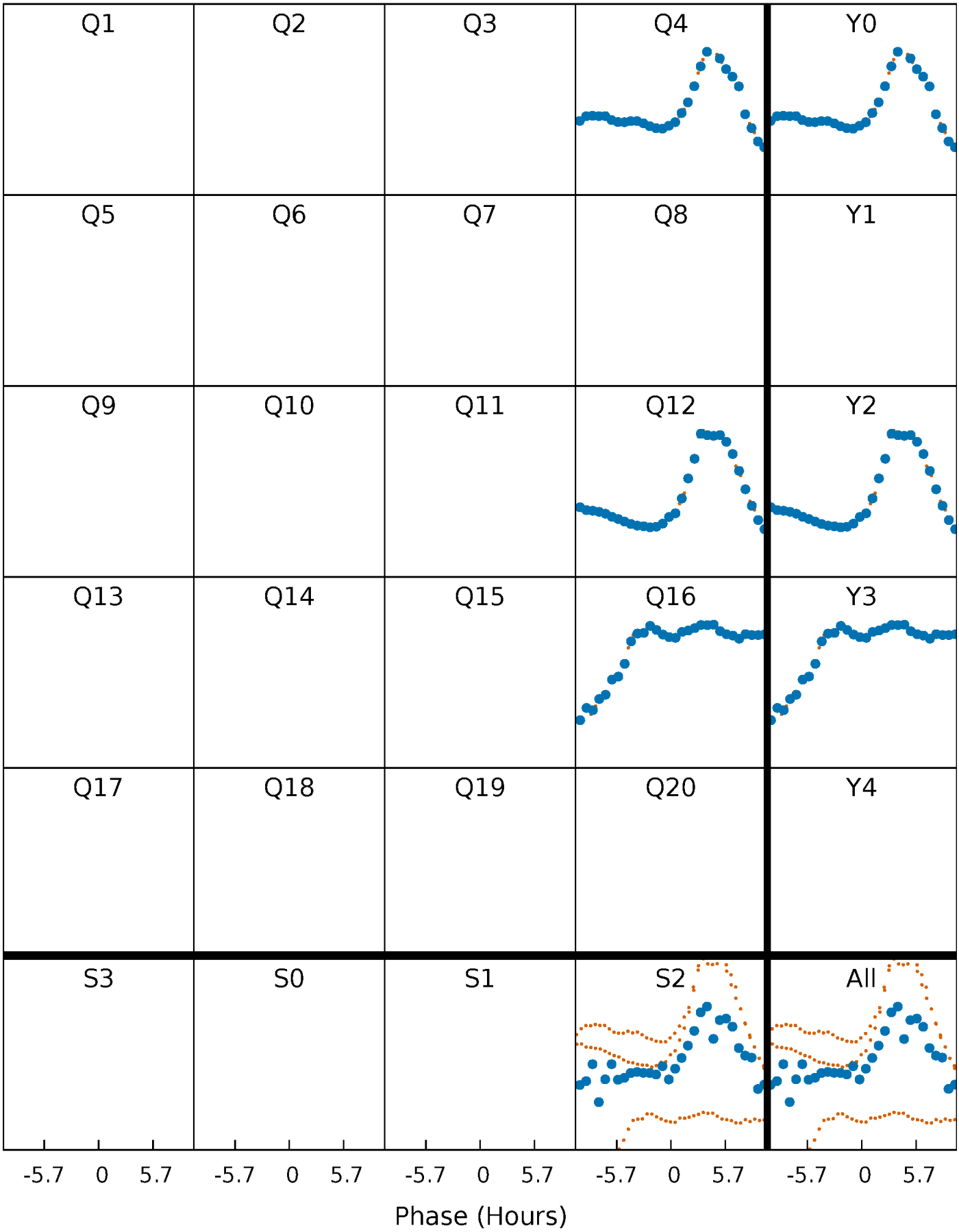
Non-Whitened Vs. Whitened Light Curve





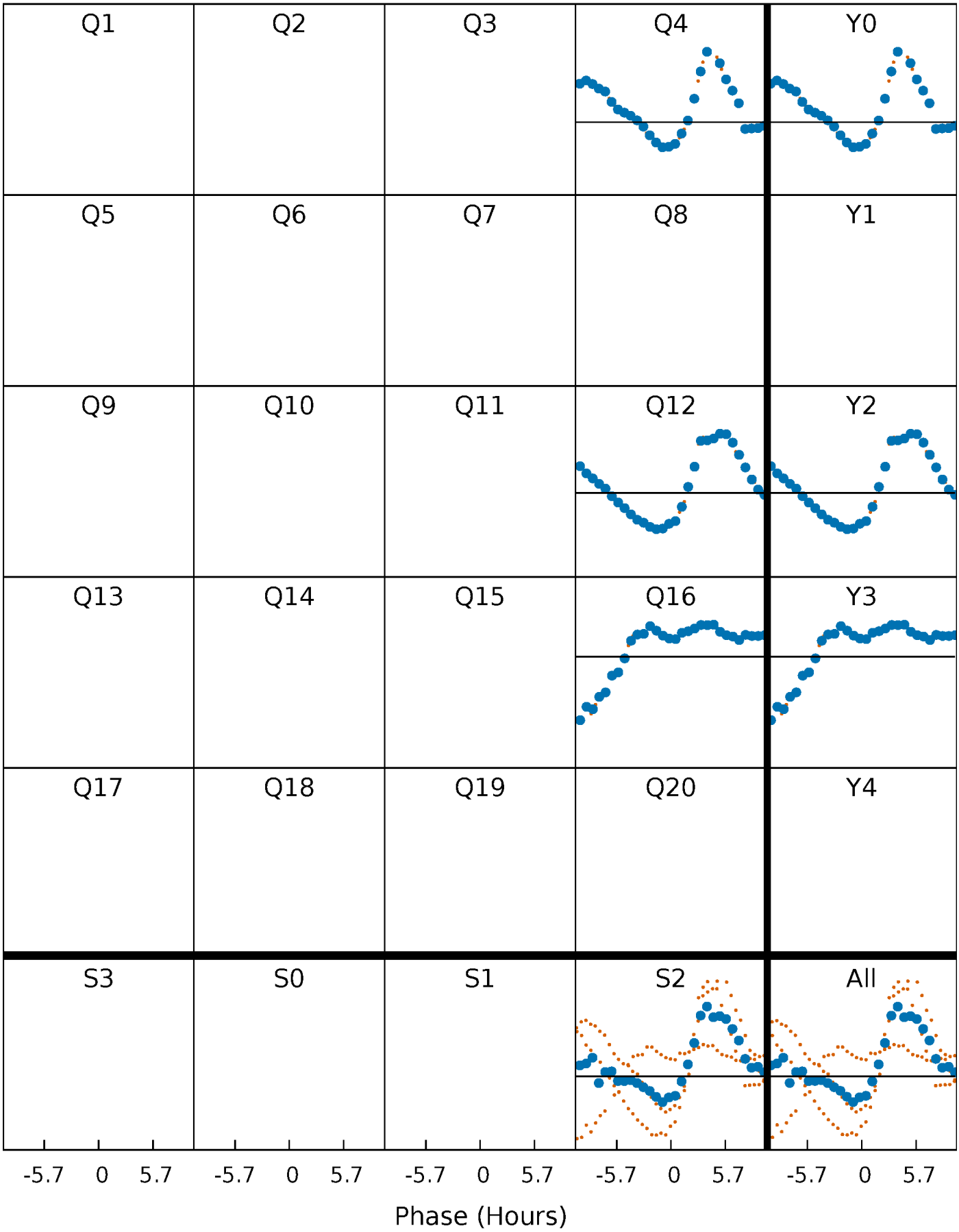
PDC Quarter-Phased Transit Curves

TCE 009267997-04 P=367.150206 Days T_0=435.708807 (BKJD)



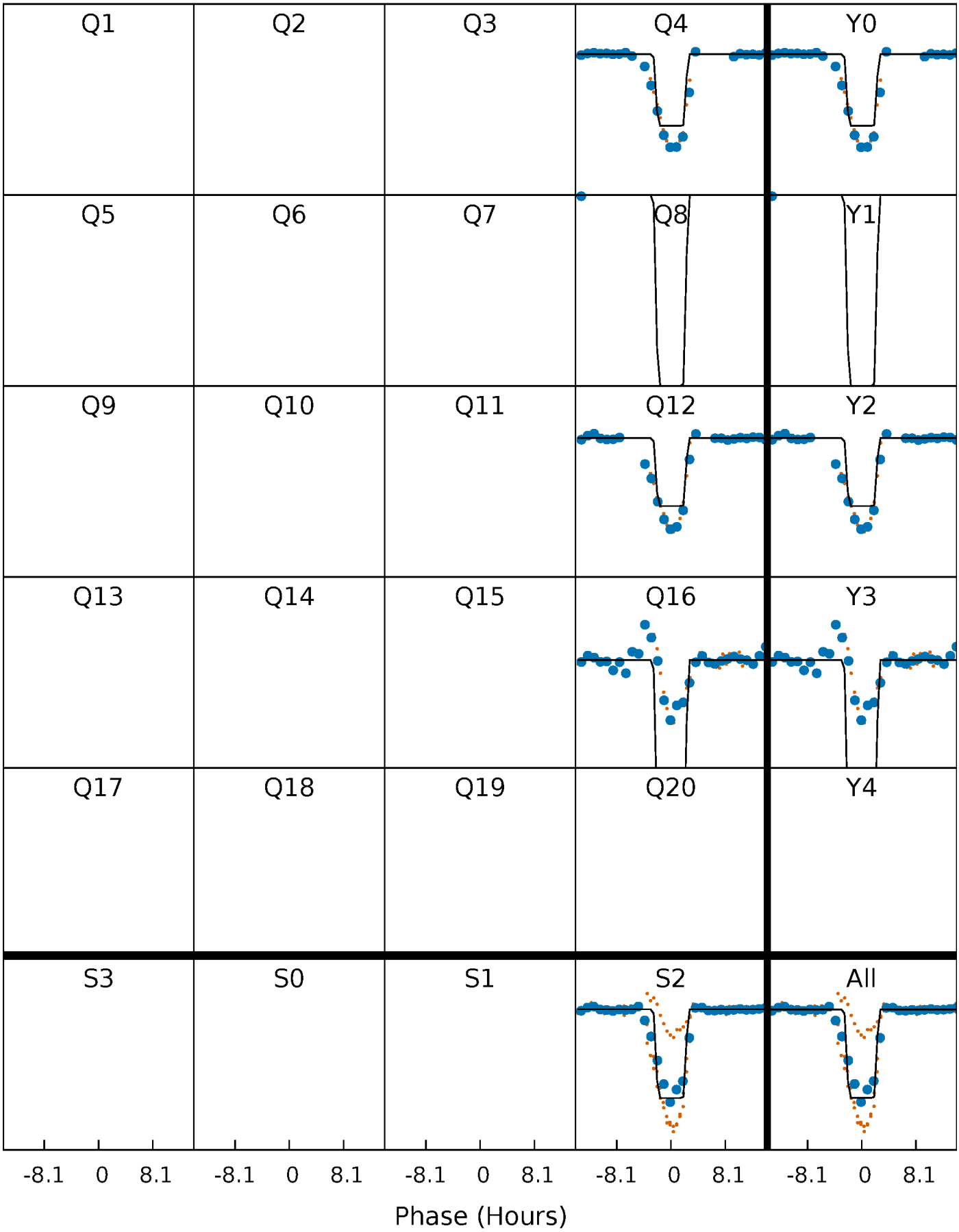
DV Quarter-Phased Transit Curves

TCE 009267997-04 P=367.150206 Days T_0=435.708807 (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

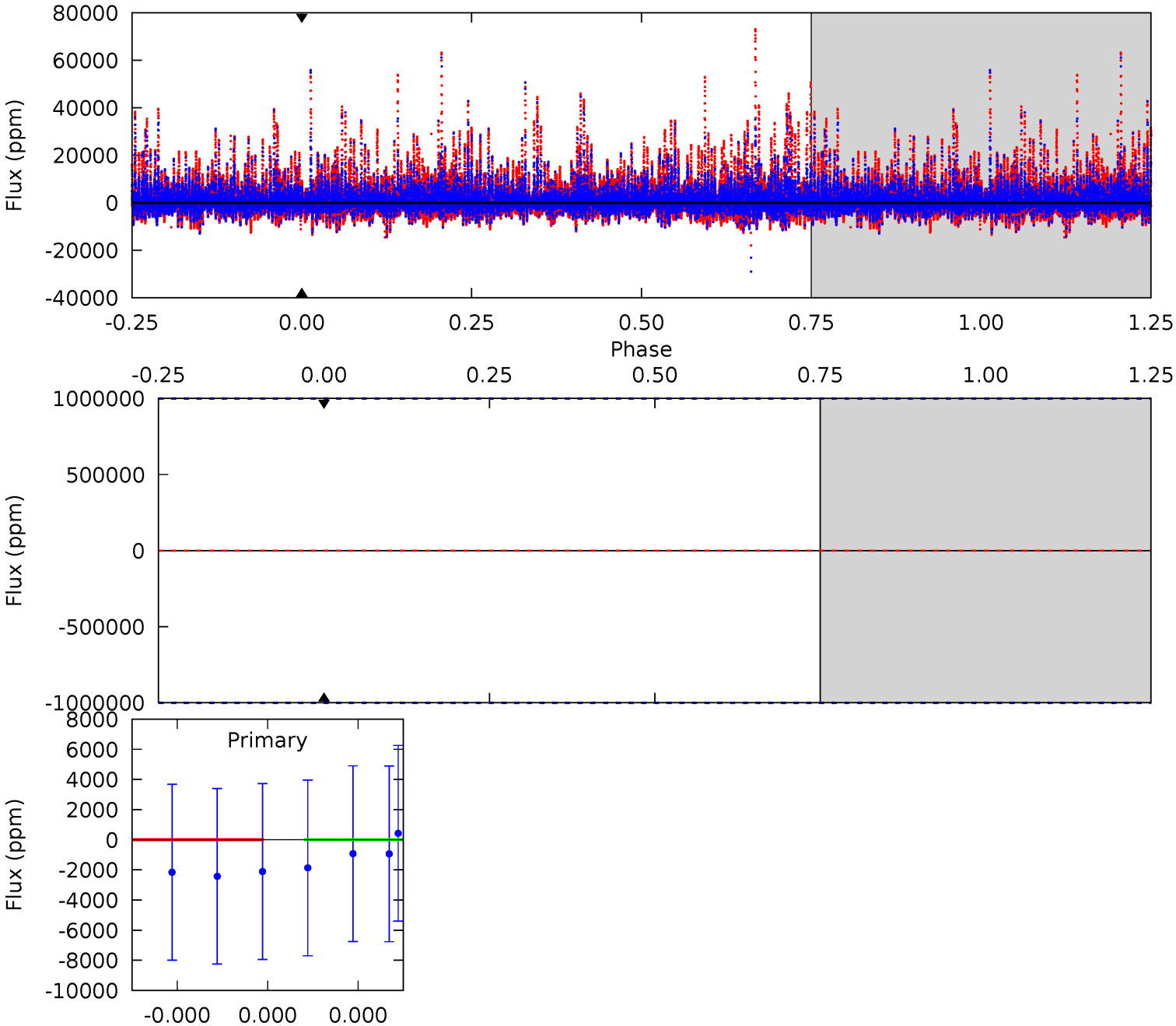
TCE 009267997-04 P=367.150206 Days T_0=435.711056 (BKJD)



DV Model-Shift Uniqueness Test

009267997-04, P = 367.150206 Days, E = 68.558601 Days

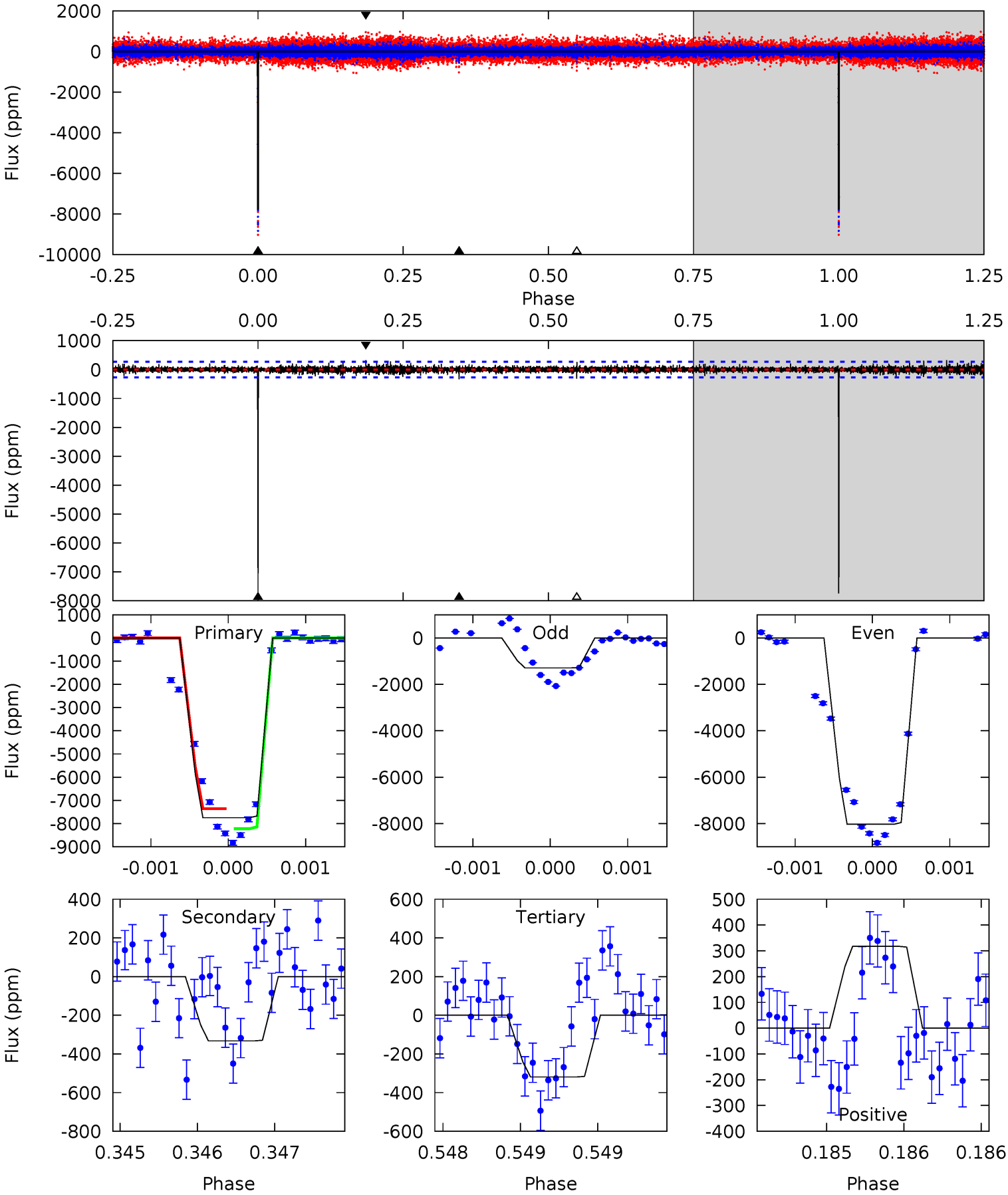
Pri	Sec	Ter	Pos	FA_1	FA_2	F_{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
0	0	0	0	1.00	1.00	1.00	0	0	0	0	0	0	0	0



Alt Model-Shift Uniqueness Test

009267997-04, P = 367.150206 Days, E = 68.560850 Days

Pri	Sec	Ter	Pos	FA_1	FA_2	F_{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
158.6	6.80	6.52	6.50	5.55	3.45	1.00	152.1	152.1	0.28	0.30	80.2	0.73	0.04	0



Stellar Parameters For KIC 009267997

	$T_{\rm eff}(K)$	$\log(g)$	[Fe/H]	R ($R_\odot$)	$M(M_\odot)$	$p_\star$ (g·cm^{-3})
	6616^{+184}_{-253}	$3.971^{+0.299}_{-0.161}$	$0.100^{+0.200}_{-0.350}$	$2.123^{+0.620}_{-0.758}$	$1.538^{+0.185}_{-0.344}$	$0.227^{+0.436}_{-0.107}$
	+3%/-4%	+8%/-4%	+200%/-350%	+29%/-36%	+12%/-22%	+193%/-47%
Source	PHO54	PHO54	PHO54	DSEP		

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

Secondary Eclipse Parameters for KIC 009267997-04 / KOI

Detrend	Depth (ppm)	R_p ($R_\oplus$)	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	0±1000000	$16.91^{+17.07}_{-11.95}$	542^{+43}_{-49}	5607^{+23950}_{-29787}	$7995^{+499154}_{-385285}$
Alt.	-332±49	$23.35^{+22.17}_{-15.59}$	542^{+46}_{-54}	3277^{+1508}_{-543}	441^{+3452}_{-329}

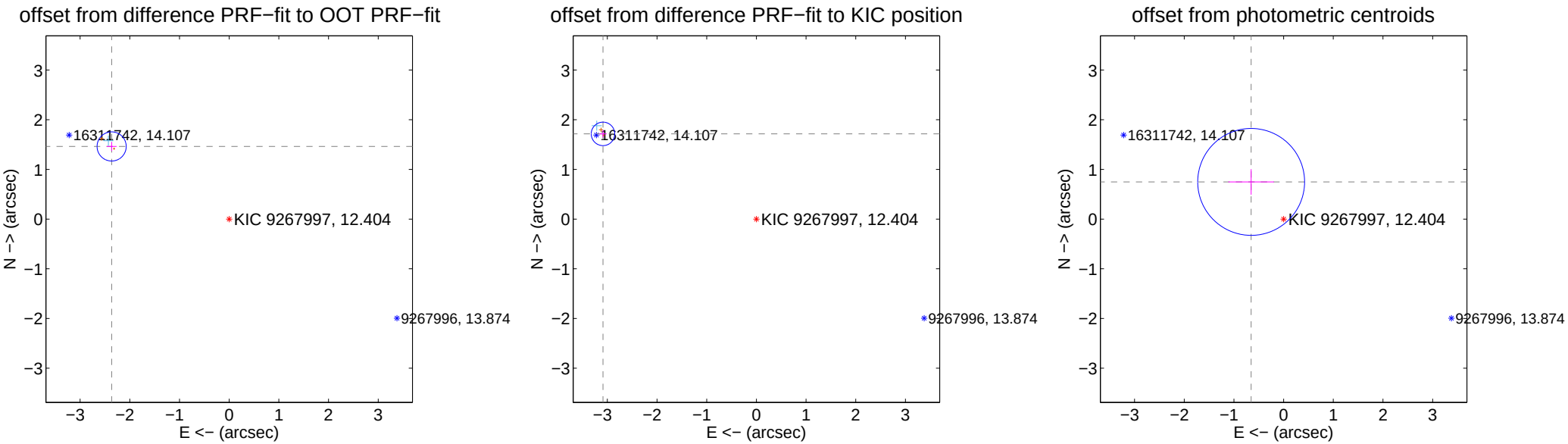
T_{max} = Theoretical Maximum Planetary Temperature
T_{obs} = Observed Planetary Temperature (Assuming A=0.3)
A_{obs} = Observed Albedo (Assuming T=0)

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

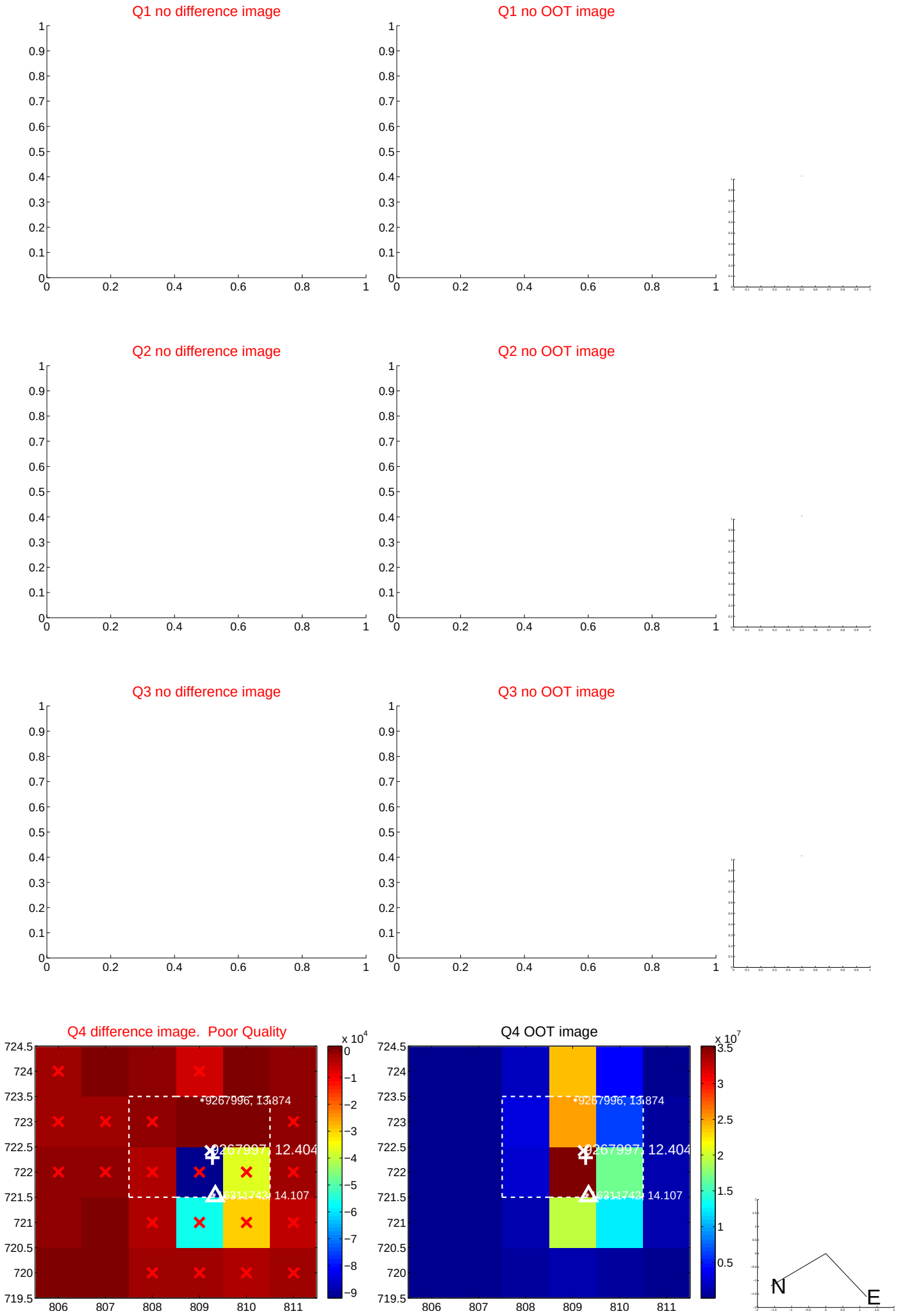
Supplemental centroid analysis for 009267997-04. Kepler magnitude: 12.40. Transit SNR -1.00
There are 1 quarters with good PRF difference image offsets
The direct PRF centroid is offset from the target star catalog position by about 0.80 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	2.781 ± 0.098	28.44	2.366 ± 0.100	1.462 ± 0.093
PRF-fit source offset from KIC position	3.533 ± 0.079	44.82	3.088 ± 0.072	1.715 ± 0.077
photometric centroid source offset	0.99 ± 0.36	2.77	0.65 ± 0.46	0.75 ± 0.26

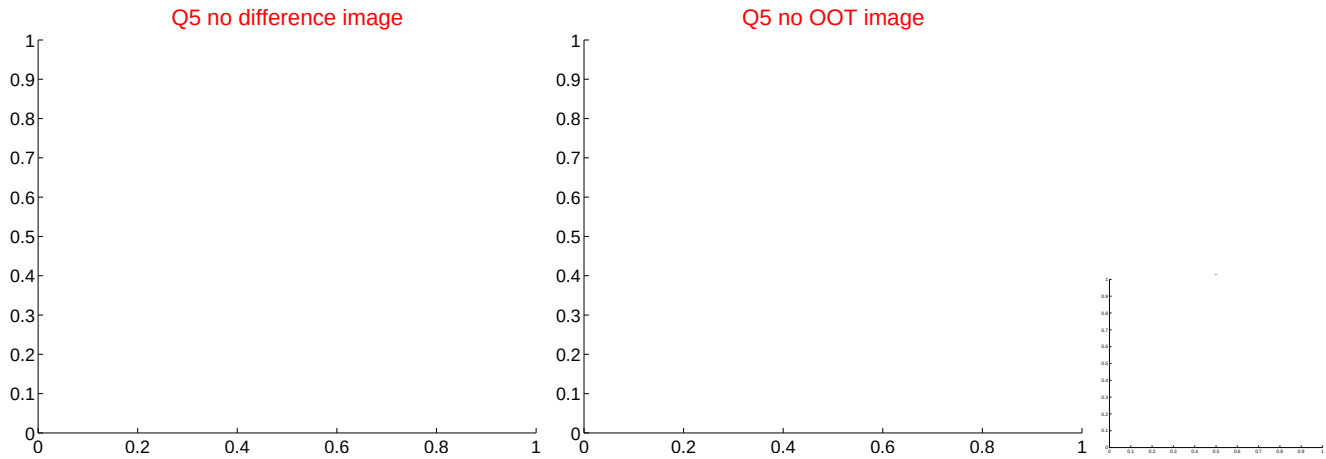


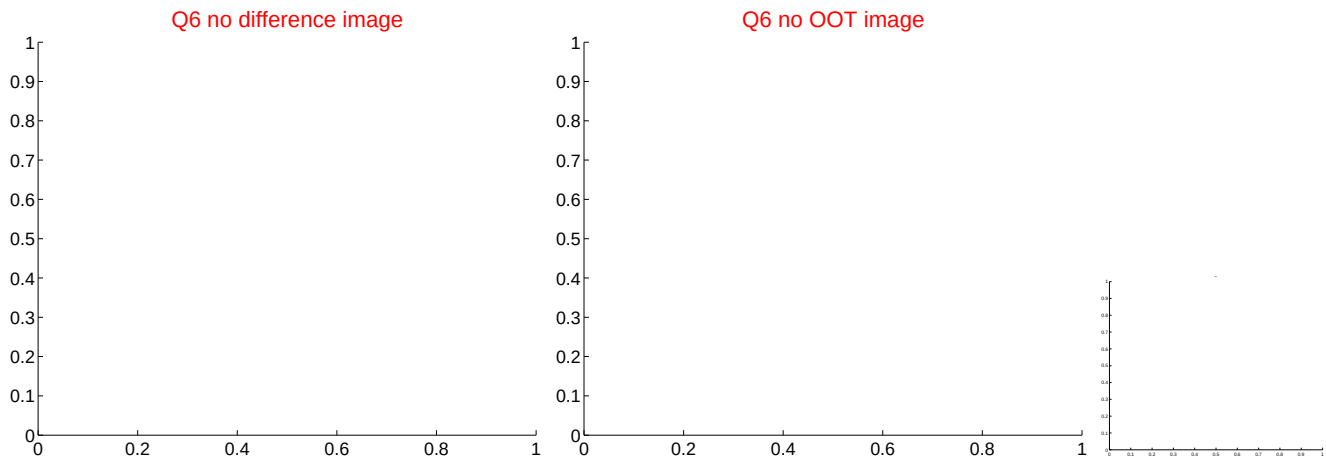
Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one-σ uncertainty. Blue circle: three-σ. Red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

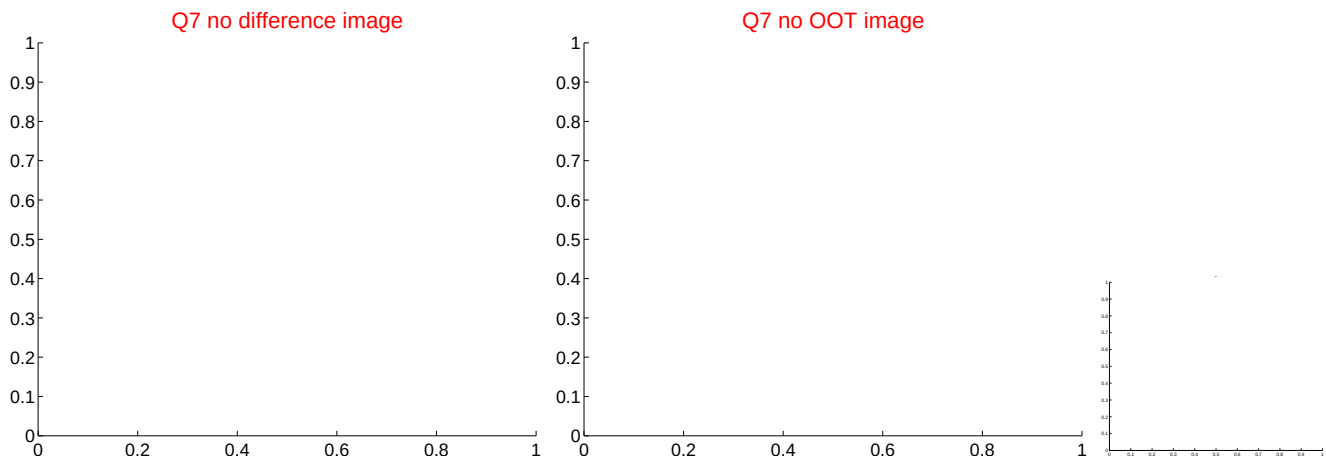
white ×: KIC target position; +: OOT centroid; △: difference centroid. red ×: large negative pixel value.

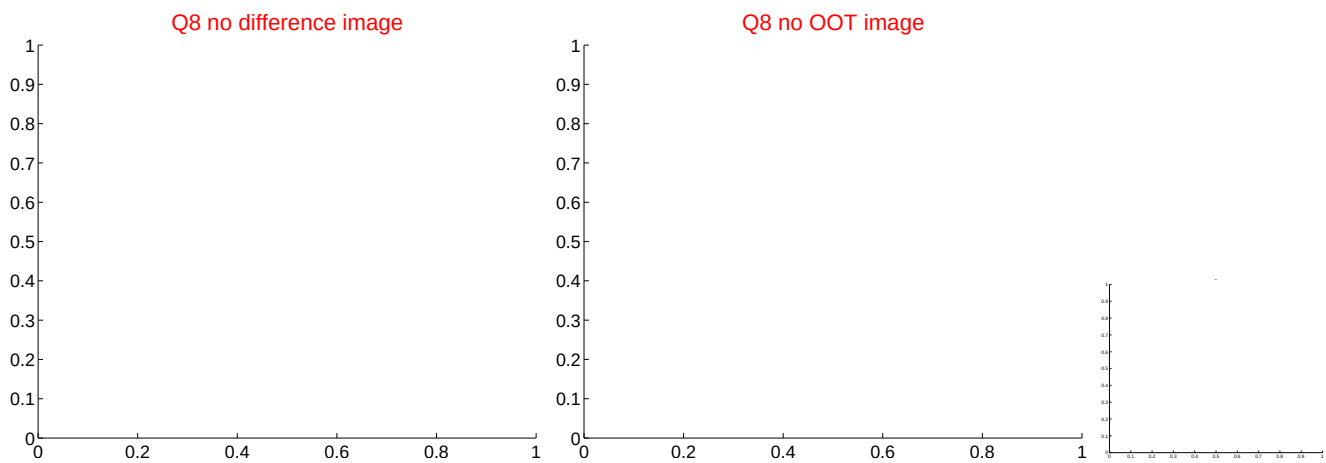


white ×: KIC target position; +: OOT centroid; △: difference centroid. red ×: large negative pixel value.

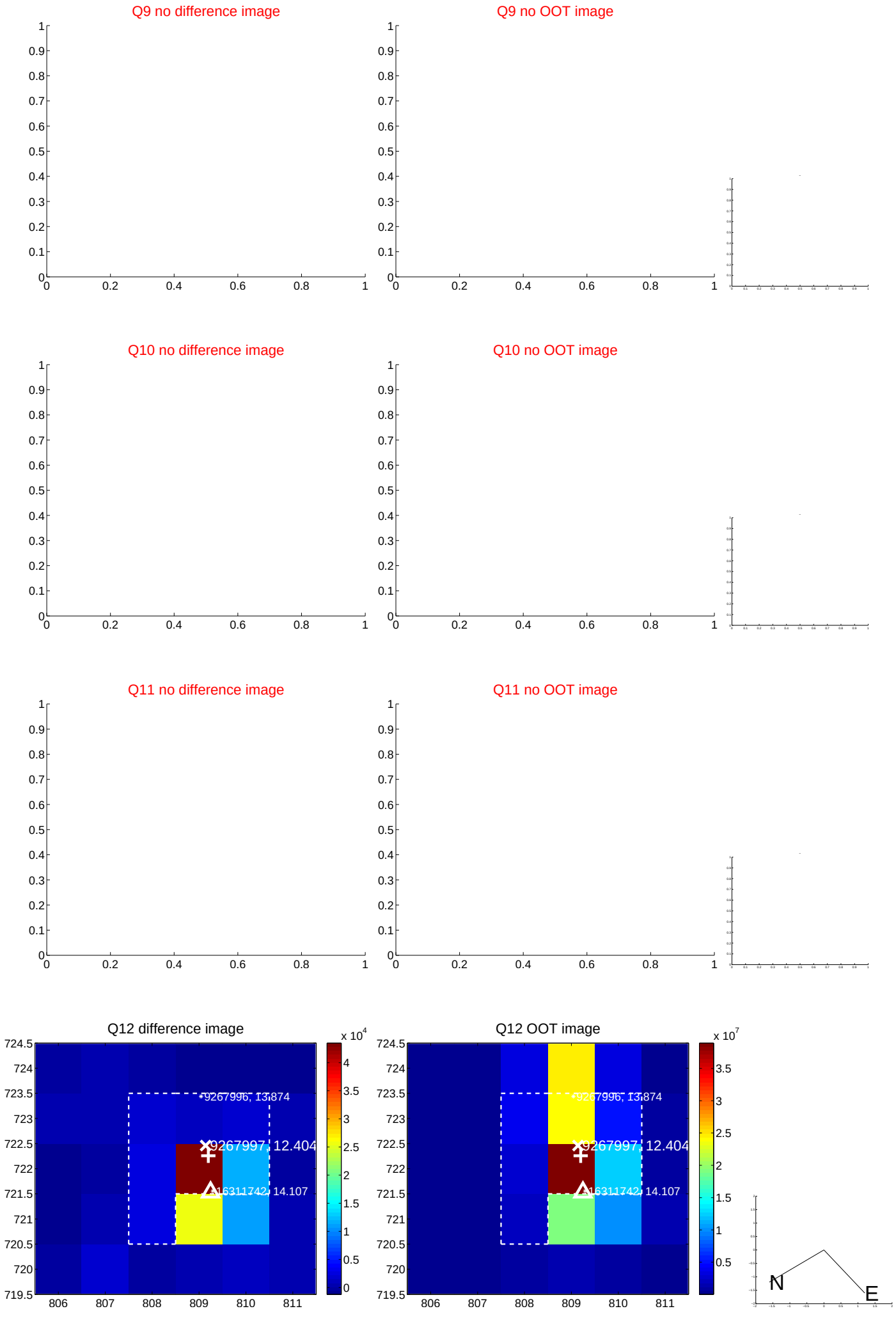




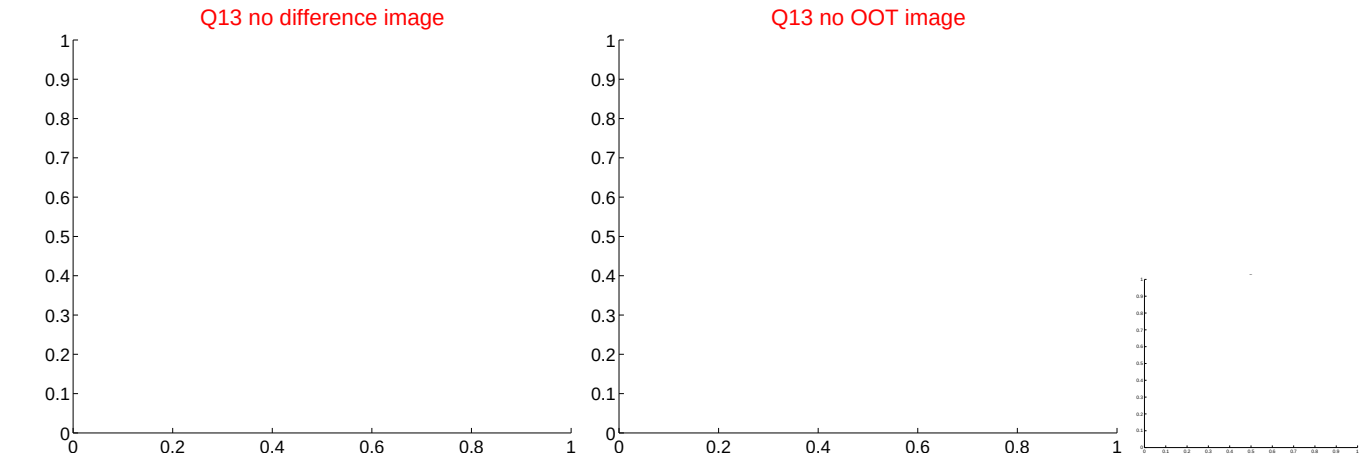


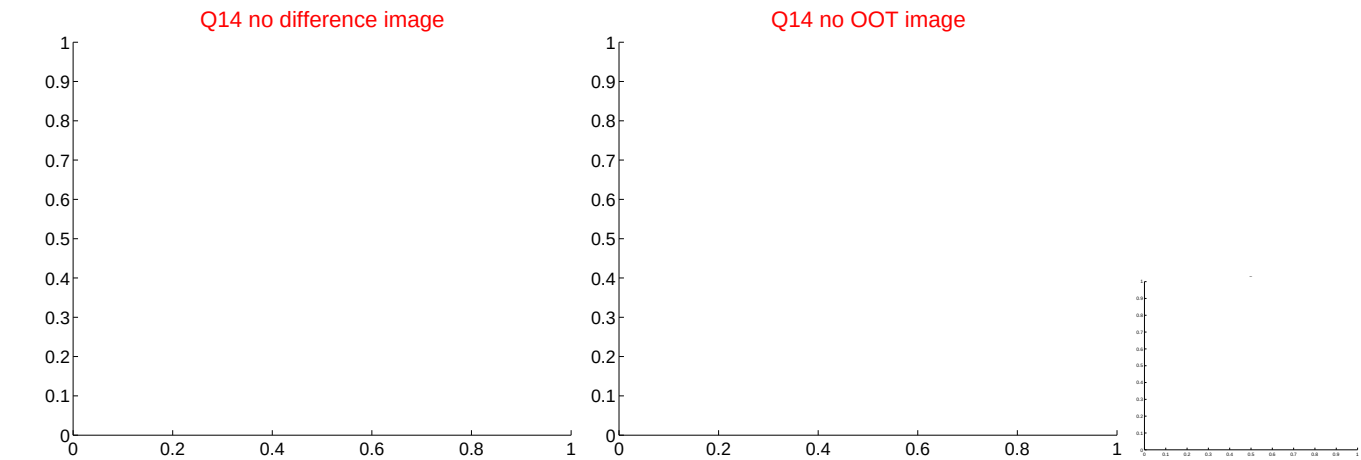


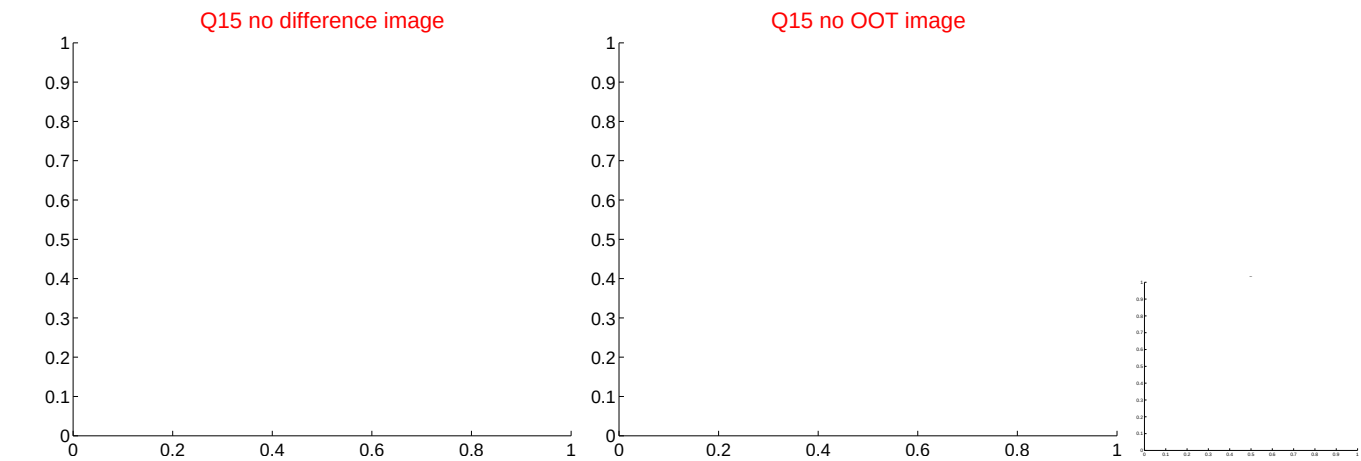
white ×: KIC target position; +: OOT centroid; △: difference centroid. red ×: large negative pixel value.

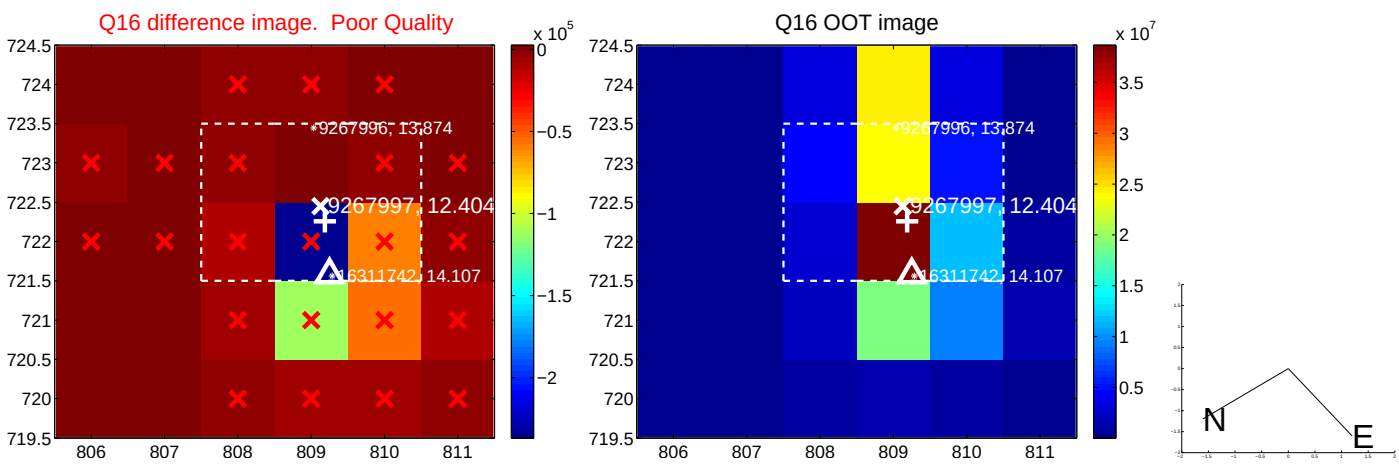


white ×: KIC target position; +: OOT centroid; △: difference centroid. red ×: large negative pixel value.

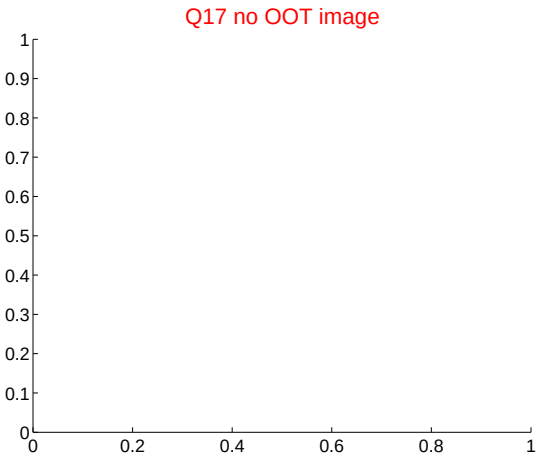


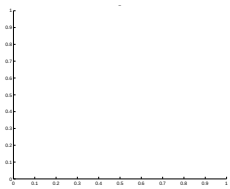


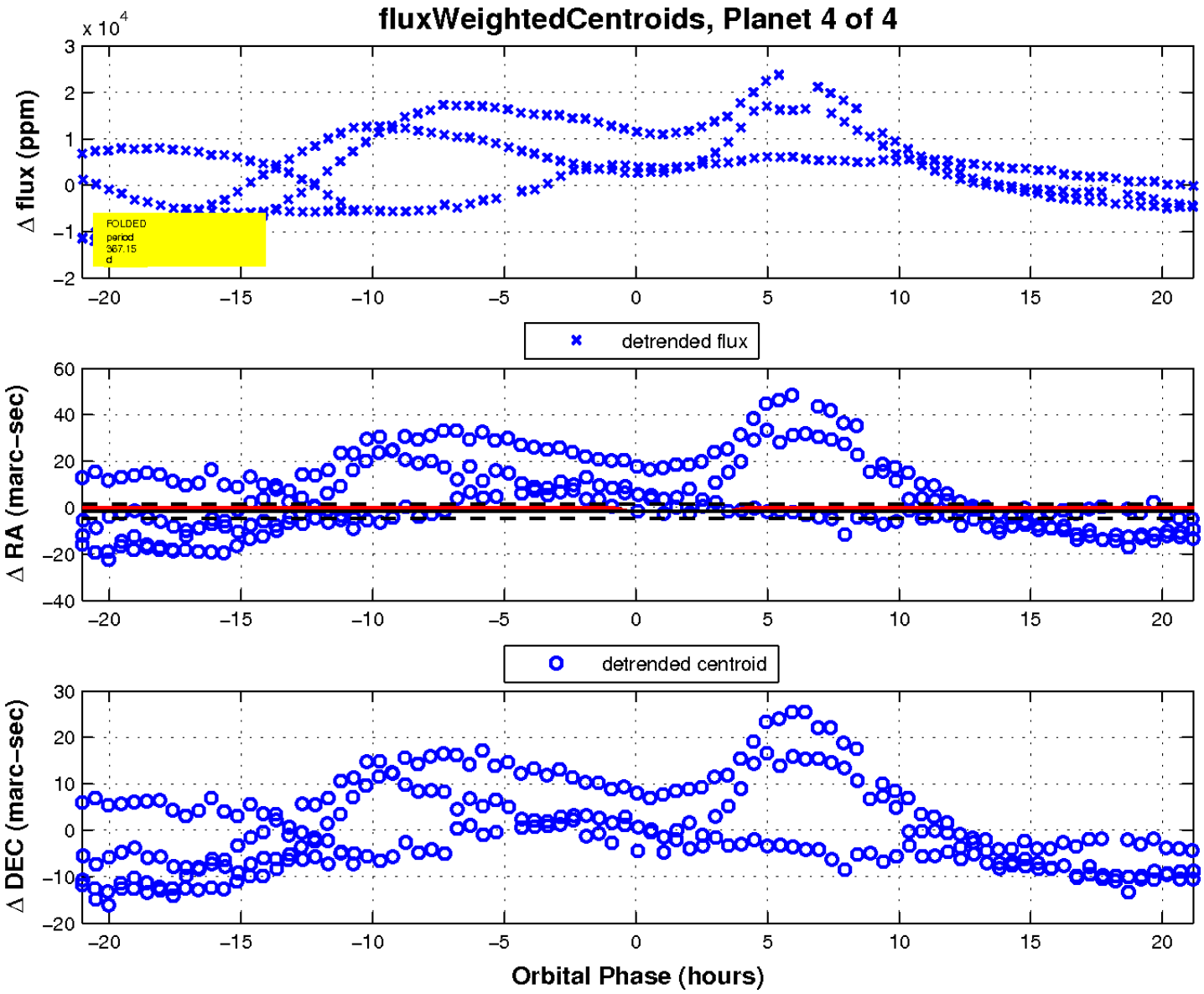




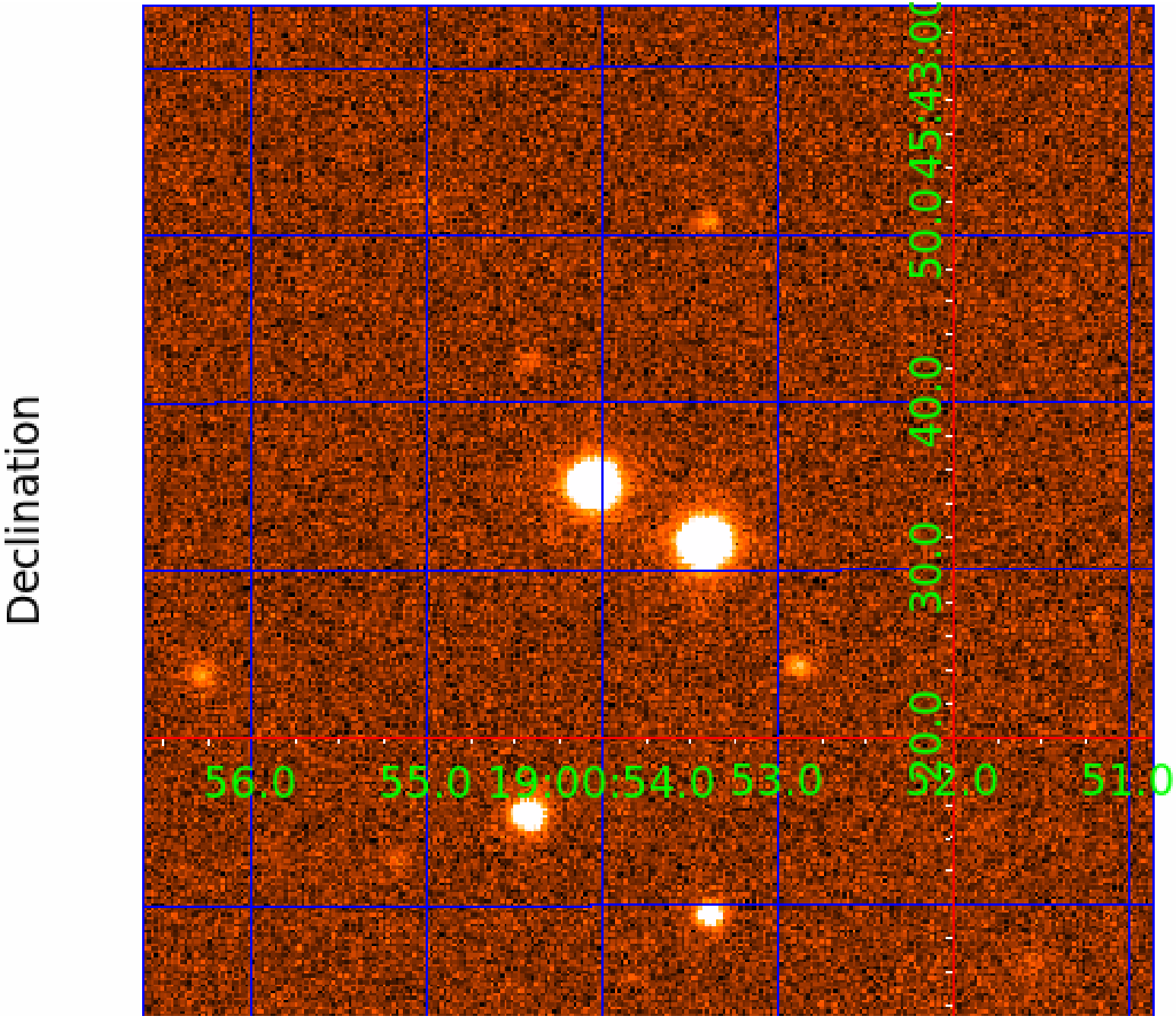
white ×: KIC target position; +: OOT centroid; △: difference centroid. red ×: large negative pixel value.







UKIRT Image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