

KIC 003629496

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})
003629496-01	OBS	No	1.159741	132.223875	18.6	6.497	20.4	7.1	2.59	9967	1.20	65243.17
003629496-02	OBS	No	92.349203	135.096359	907.3	6.212	14.8	15.4	2.59	9967	9.51	190.45
003629496-03	OBS	No	58.674936	166.077766	38.8	4.500	13.4	-1.0	2.59	9967	1.65	348.67
003629496-04	OBS	No	360.976046	160.588947	754.1	10.841	9.6	8.6	2.59	9967	10.47	30.93
003629496-05	OBS	No	282.028572	154.982651	657.4	3.606	10.0	8.5	2.59	9967	6.81	42.98
003629496-06	OBS	No	230.094834	133.885270	574.4	3.251	8.7	8.6	2.59	9967	6.63	56.38
003629496-07	OBS	No	282.008740	151.569591	1025.7	7.620	12.6	15.3	2.59	9967	9.87	42.99

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
003629496-01	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—CENT_SATURATED
003629496-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_ALT—INCONSISTENT_TRANS—CENT_SATURATED
003629496-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_SATURATED
003629496-04	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_TRACKER—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—INCONSISTENT_TRANS—CENT_SATURATED
003629496-05	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_CHASES—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_TER_DV—MOD_POS_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_SATURATED
003629496-06	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_CHASES—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_TER_DV—MOD_POS_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—INCONSISTENT_TRANS—CENT_SATURATED
003629496-07	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_CHASES—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—SAME_NTL_PERIOD—CENT_SATURATED

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

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

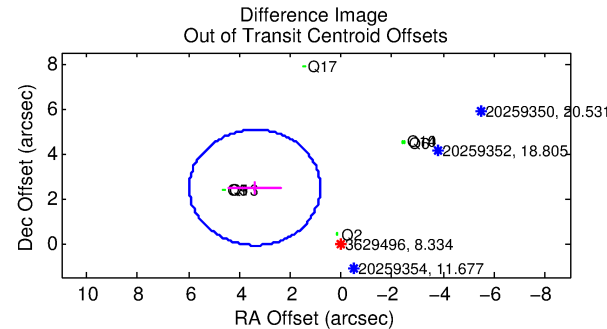
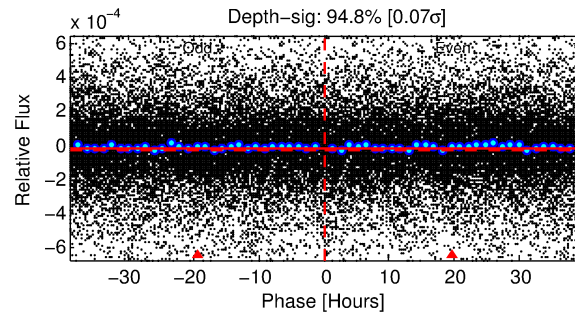
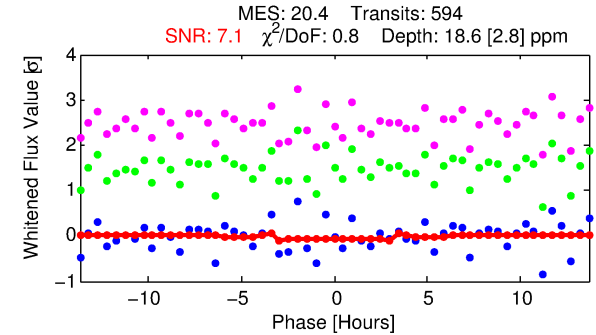
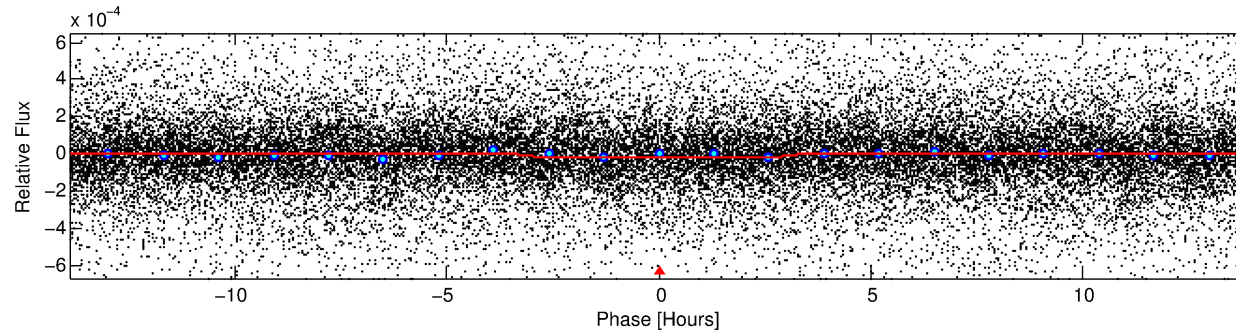
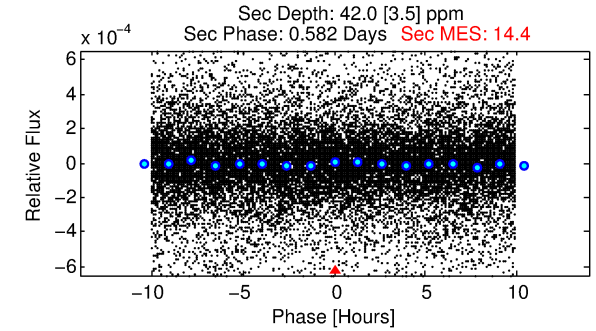
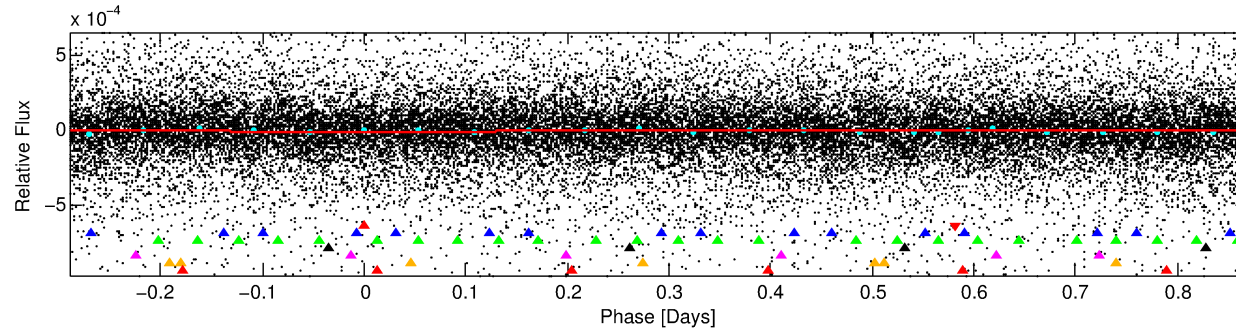
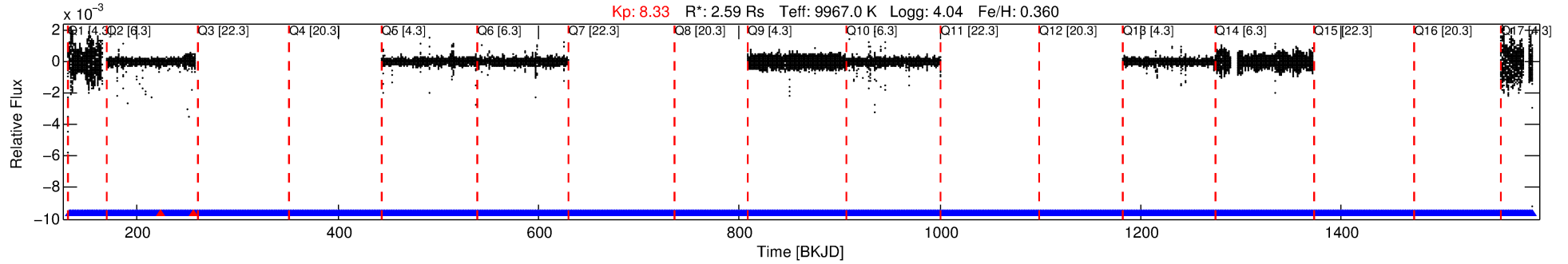
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 003629496-01

No Significant Match Found

DV One-Page Summary

KIC: 3629496 Candidate: 1 of 7 Period: 1.160 d



DV Fit Results:

Period = 1.15974 [0.00002] d
Epoch = 132.2239 [0.0022] BKJD
Rp/R* = 0.0043 [0.0006]
a/R* = 1.28 [0.44]
b = 0.71 [0.62]
Seff = 65243.17 [23055.69]
Teq = 4075 [360] K
Rp = 1.20 [0.35] Re
a = 0.0301 [0.0065] AU
Ag = 14.49 [6.25] [2.16σ]
Teffp = 12293 [1014] K [7.64σ]

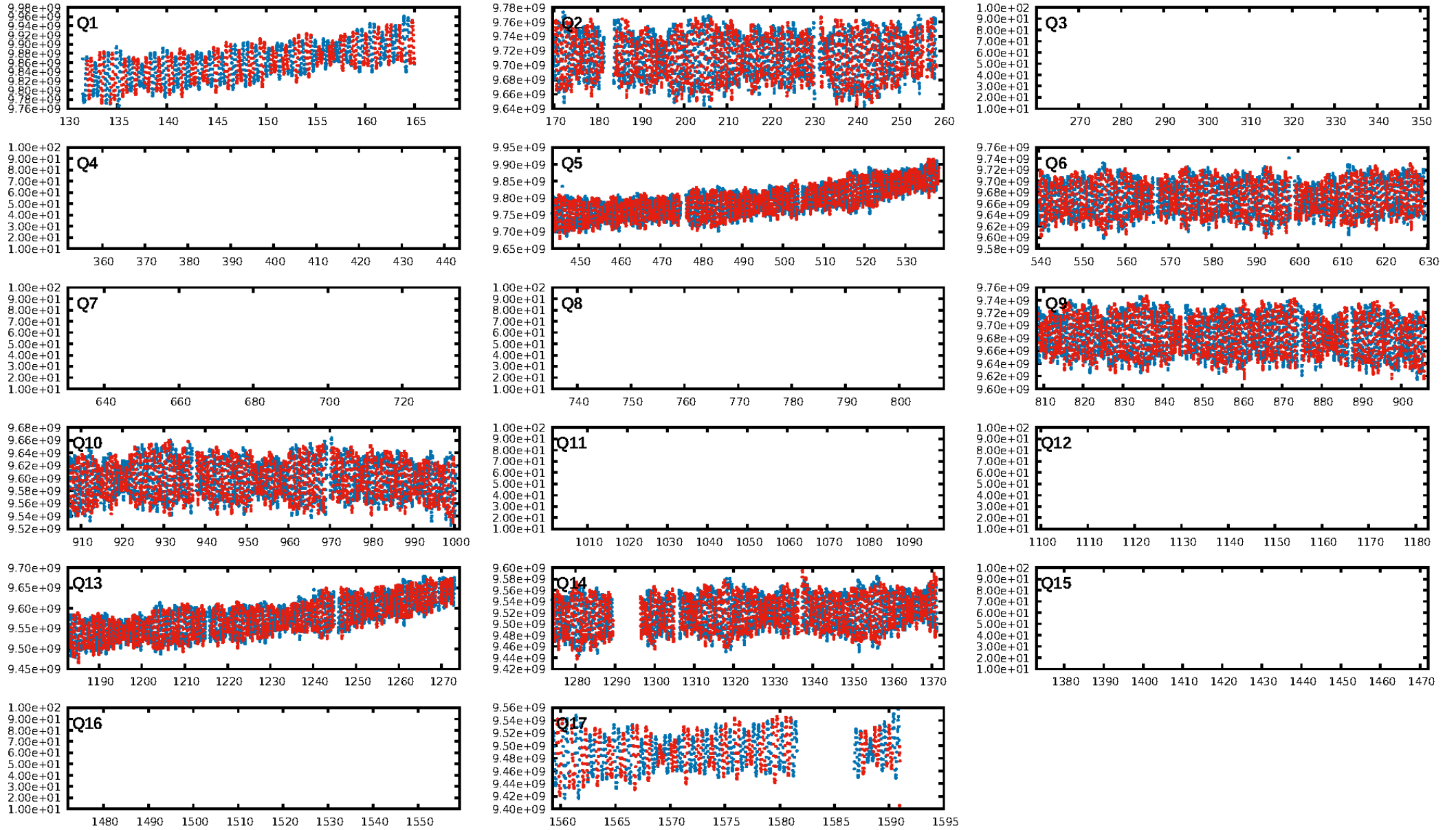
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: 100.0% [174.67σ]
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [541/543]
GhostDiagnostic-chr: N/A
Centroid-sig: N/A
Centroid-so: 1.758 arcsec [0.66σ]
OotOffset-rm: 4.199 arcsec [4.90σ]
KicOffset-rm: 8.048 arcsec [3.91σ]
OotOffset-st: 4/0/0/5 [9]
KicOffset-st: 4/0/0/5 [9]
DiffImageQuality-fgm: 0.00 [0/9]
DiffImageOverlap-fno: 1.00 [9/9]

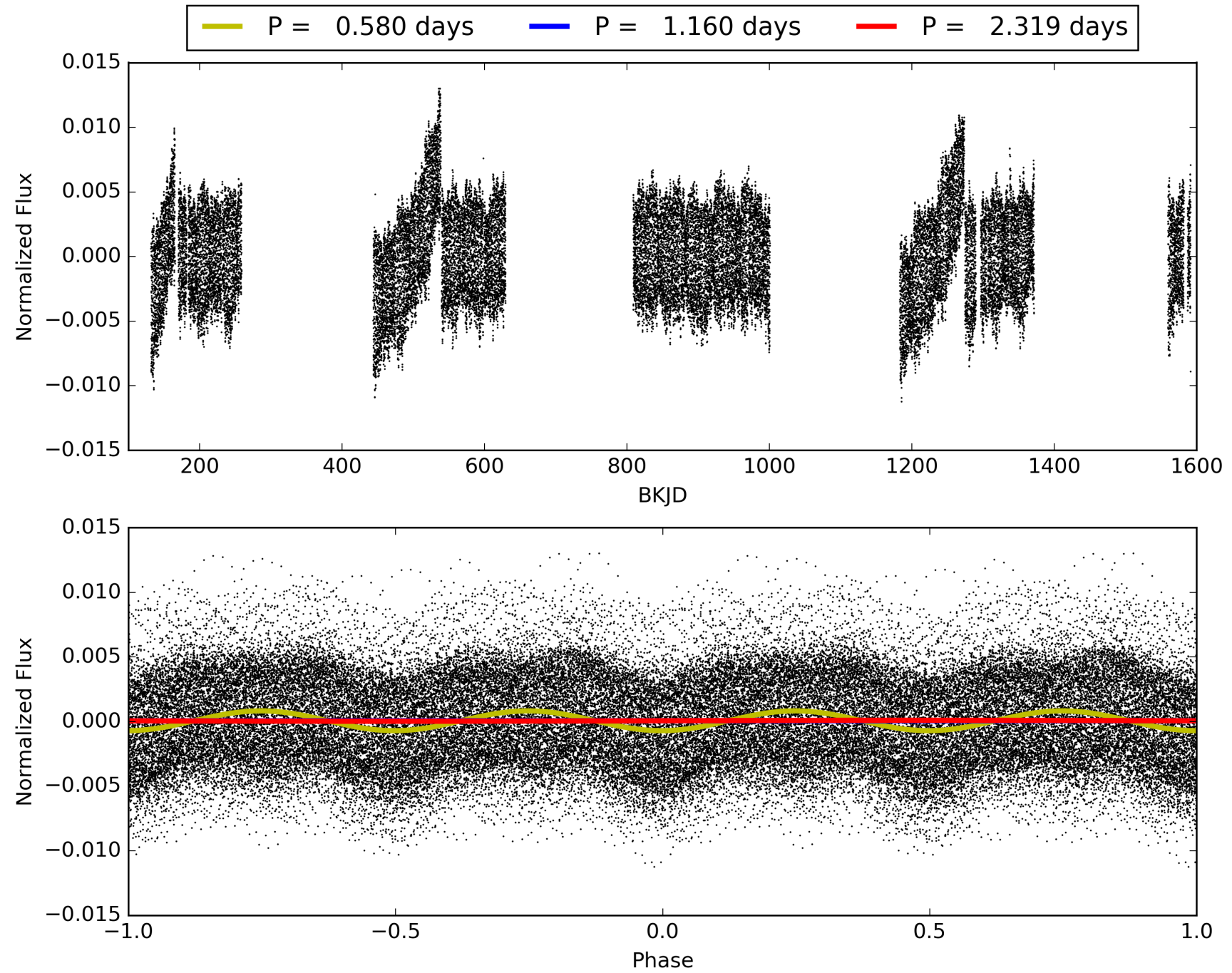
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 02-Feb-2016 01:32:15 Z

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

TCE 003629496-01, PDC Light Curves

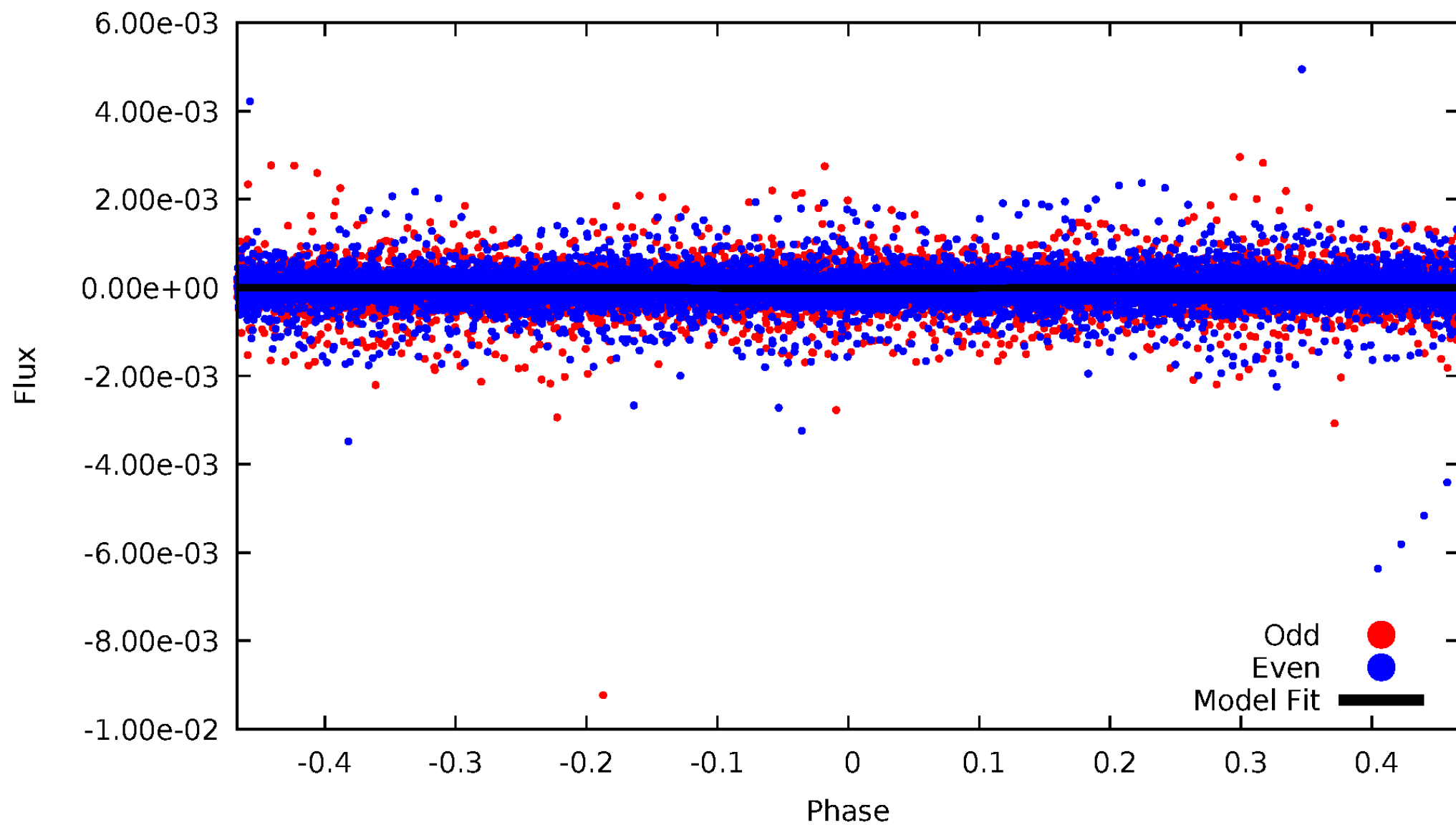


TCE 003629496-01



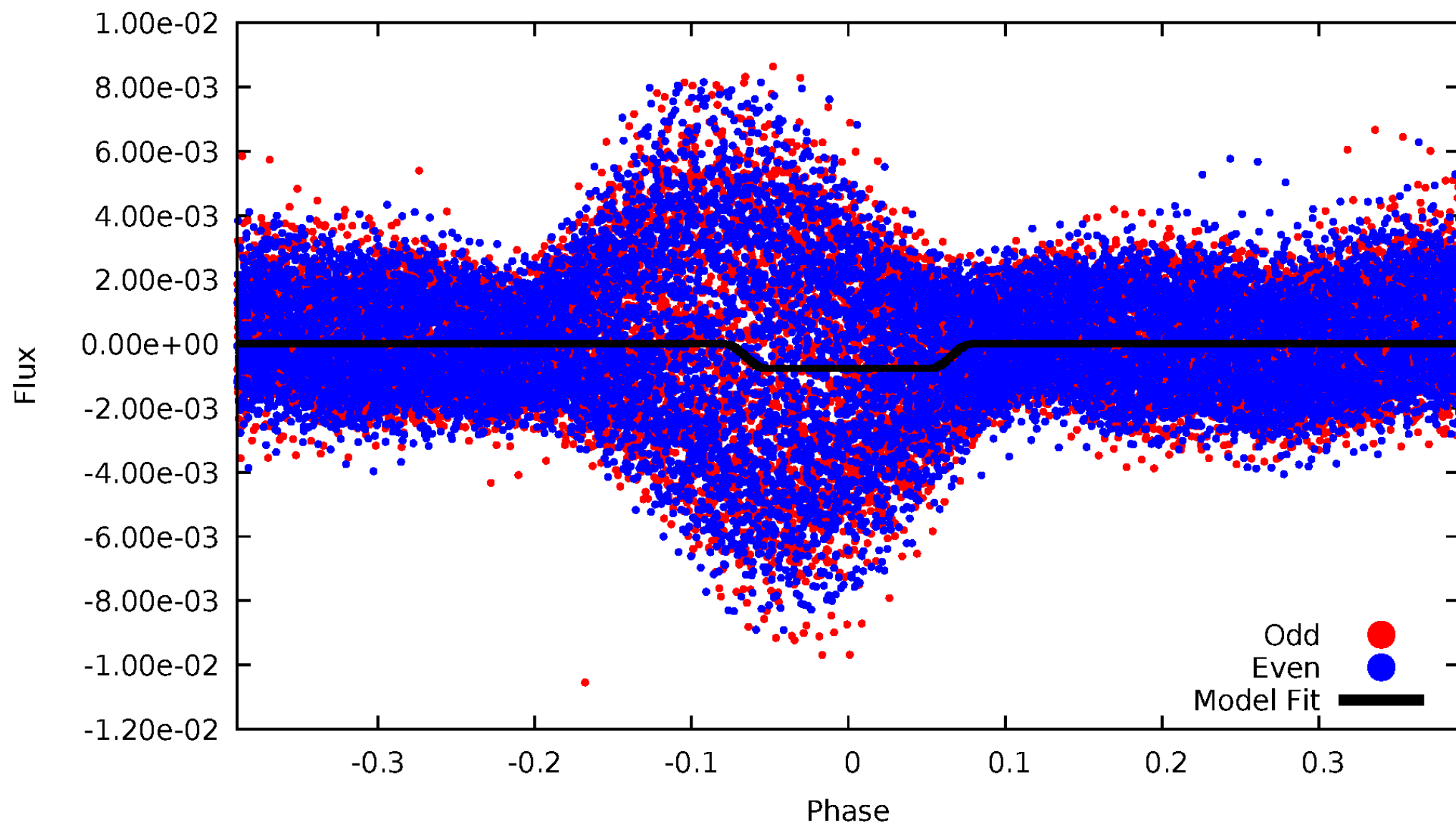
DV Odd/Even

TCE 003629496-01



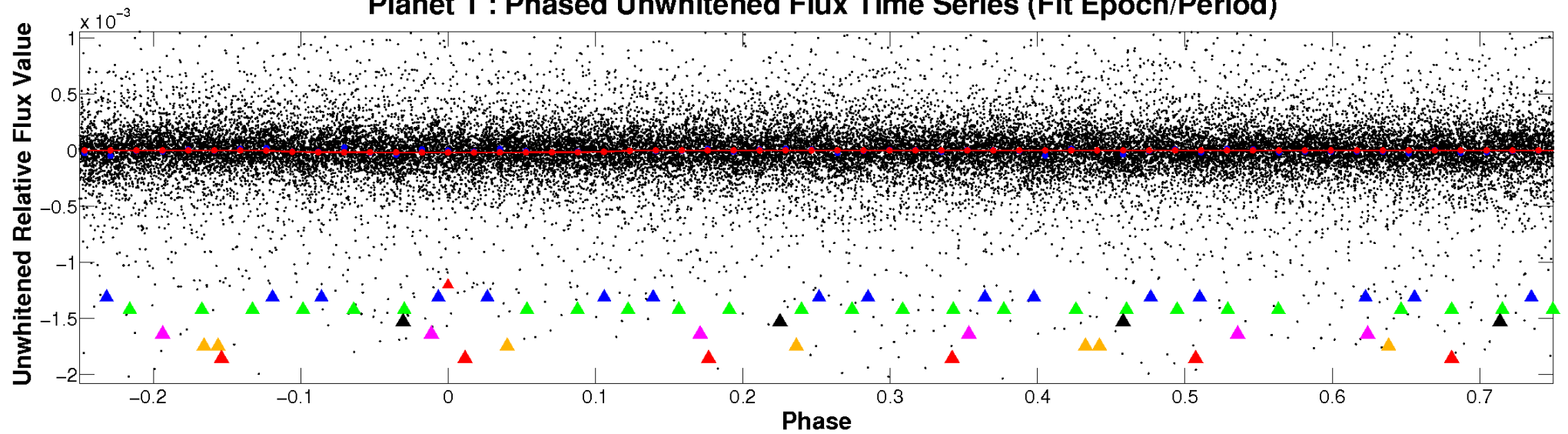
ALT Odd/Even

TCE 003629496-01

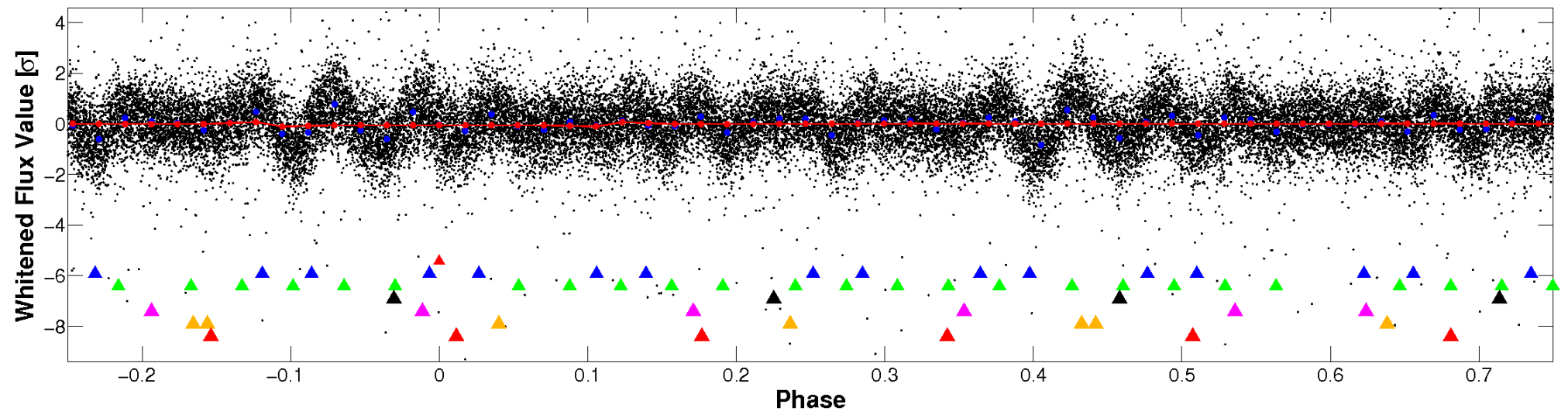


Non-Whitened Vs. Whitened Light Curve

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

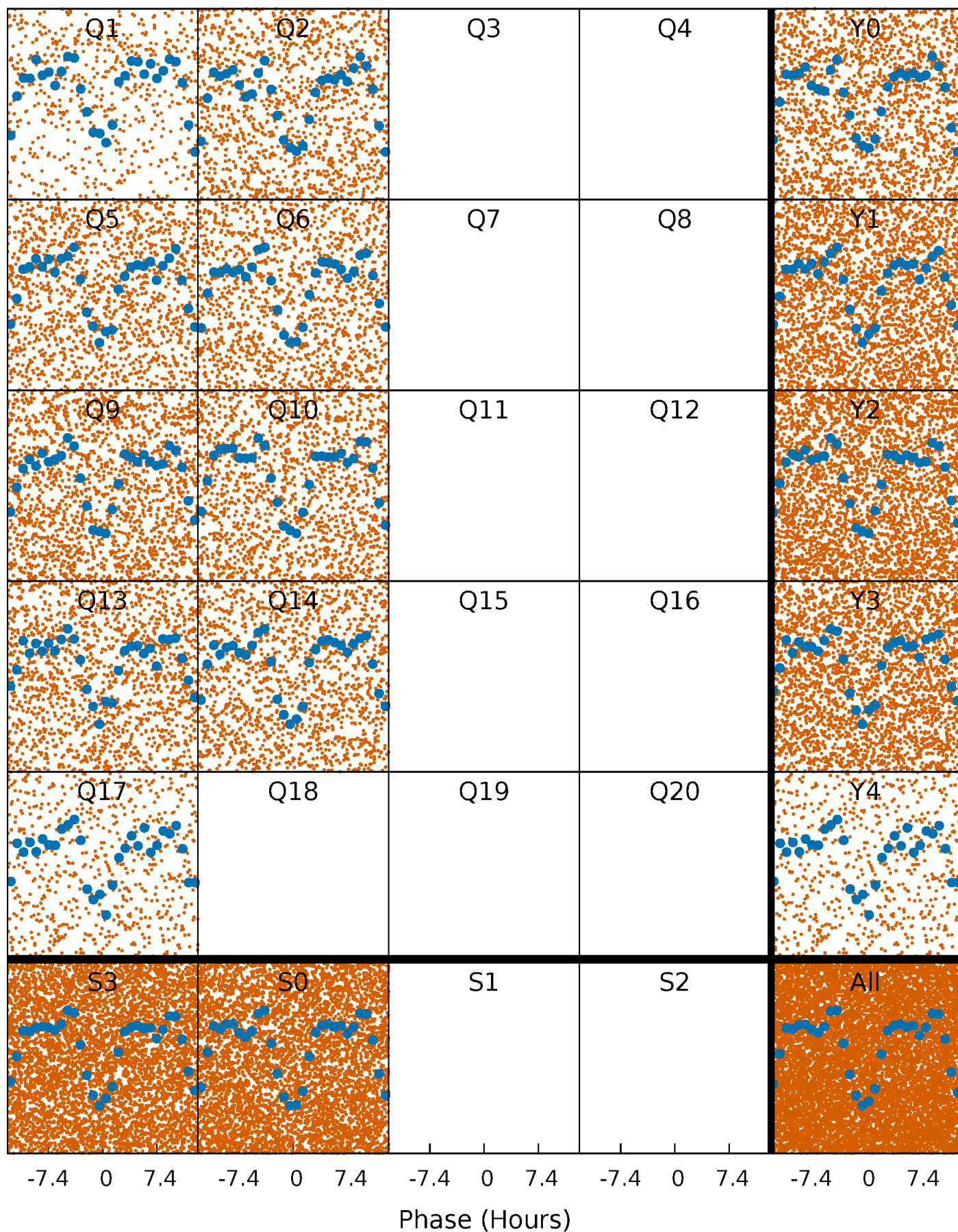


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



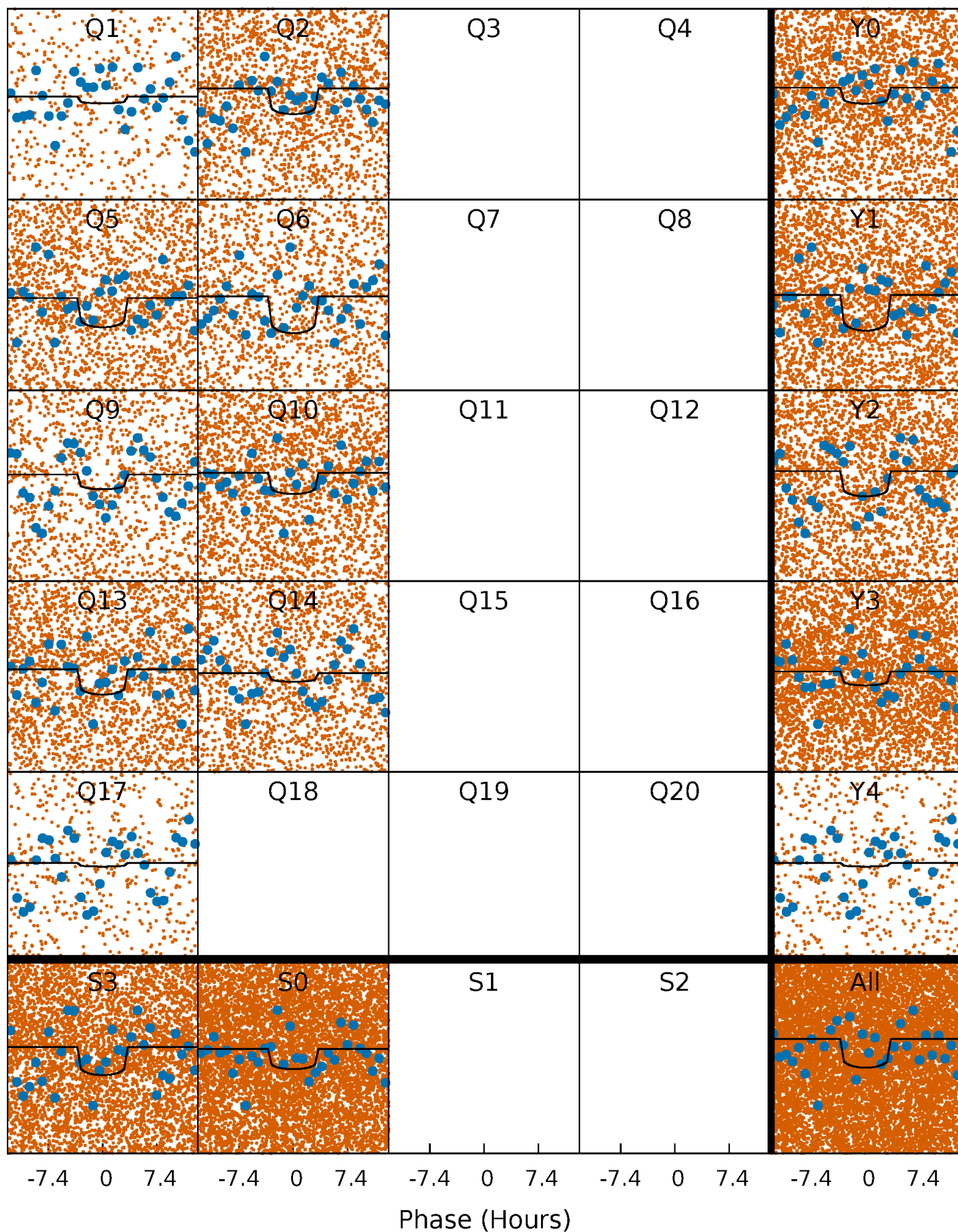
PDC Quarter-Phased Transit Curves

TCE 003629496-01 P= 1.159741 Days $T_0=132.223875$ (BKJD)



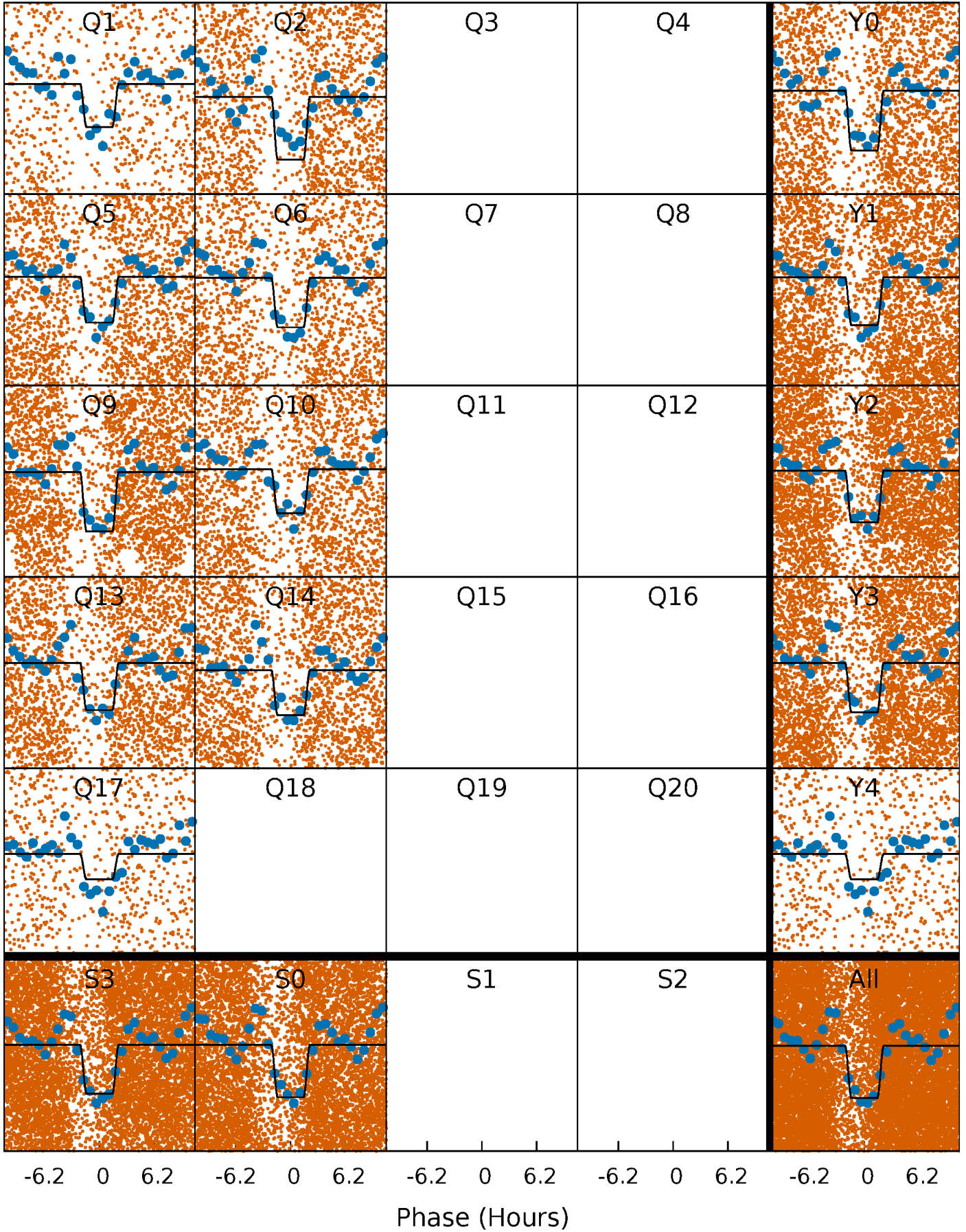
DV Quarter-Phased Transit Curves

TCE 003629496-01 P= 1.159741 Days $T_0=132.223875$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

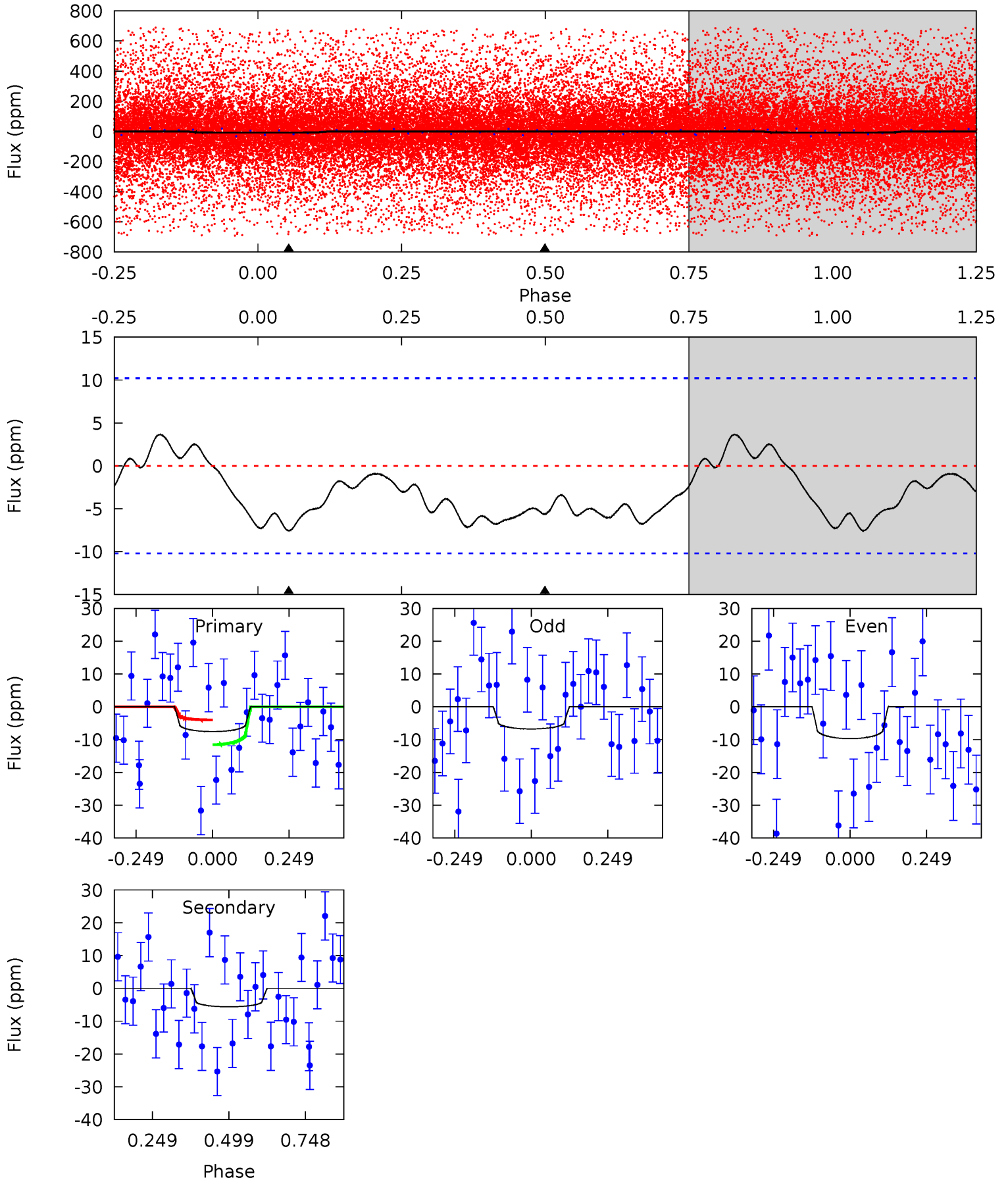
TCE 003629496-01 P= 1.159732 Days $T_0=132.212300$ (BKJD)



DV Model-Shift Uniqueness Test

003629496-01, P = 1.159741 Days, E = 131.064134 Days

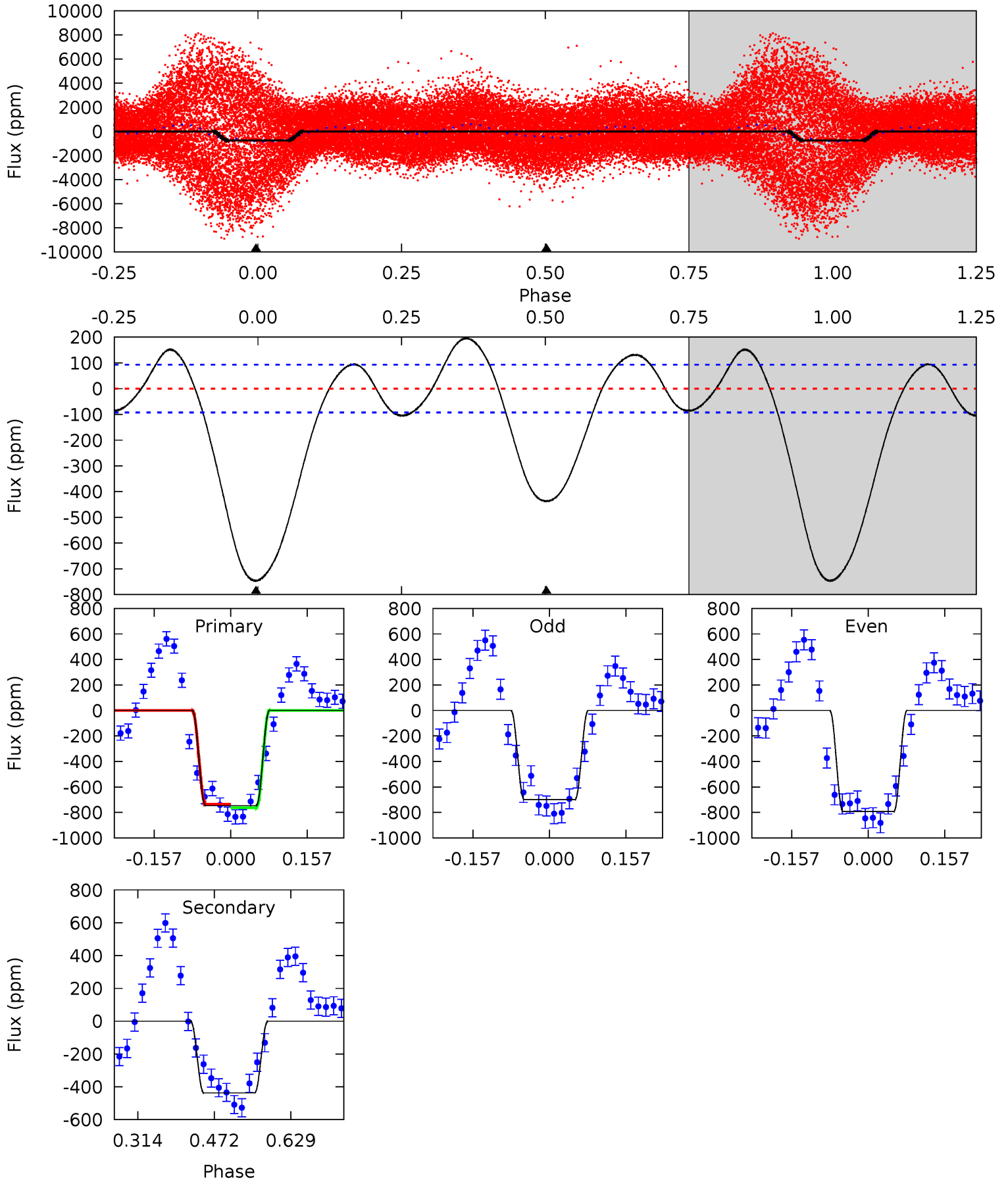
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
3.24	2.41	0	0	4.37	1.15	0.85	3.24	3.24	2.41	2.41	0.66	0.54	0.32	1.70



Alt Model-Shift Uniqueness Test

003629496-01, P = 1.159732 Days, E = 131.052568 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
35.9	21.0	0	0	4.47	1.41	3.83	35.9	35.9	21.0	21.0	2.24	1.53	0.21	0.68



Stellar Parameters For KIC 003629496

	$T_{\text{eff}} (K)$	$\log(g)$	$[\text{Fe}/\text{H}]$	$R (R_{\odot})$	$M (M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	9967^{+280}_{-385}	$4.045^{+0.094}_{-0.175}$	$0.360^{+0.050}_{-0.250}$	$2.587^{+0.659}_{-0.384}$	$2.707^{+0.273}_{-0.273}$	$0.220^{+0.110}_{-0.100}$
	+3%/-4%	+2%/-4%	+14%/-69%	+25%/-15%	+10%/-10%	+50%/-45%
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 003629496-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-6 ± 2	$1.22^{+0.23}_{-0.22}$	5741^{+394}_{-325}	6548^{+1115}_{-1183}	$1.803^{+1.302}_{-0.880}$
Alt.	-437 ± 21	$7.95^{+1.04}_{-0.63}$	5751^{+353}_{-324}	8000^{+259}_{-287}	$3.448^{+0.653}_{-0.709}$

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

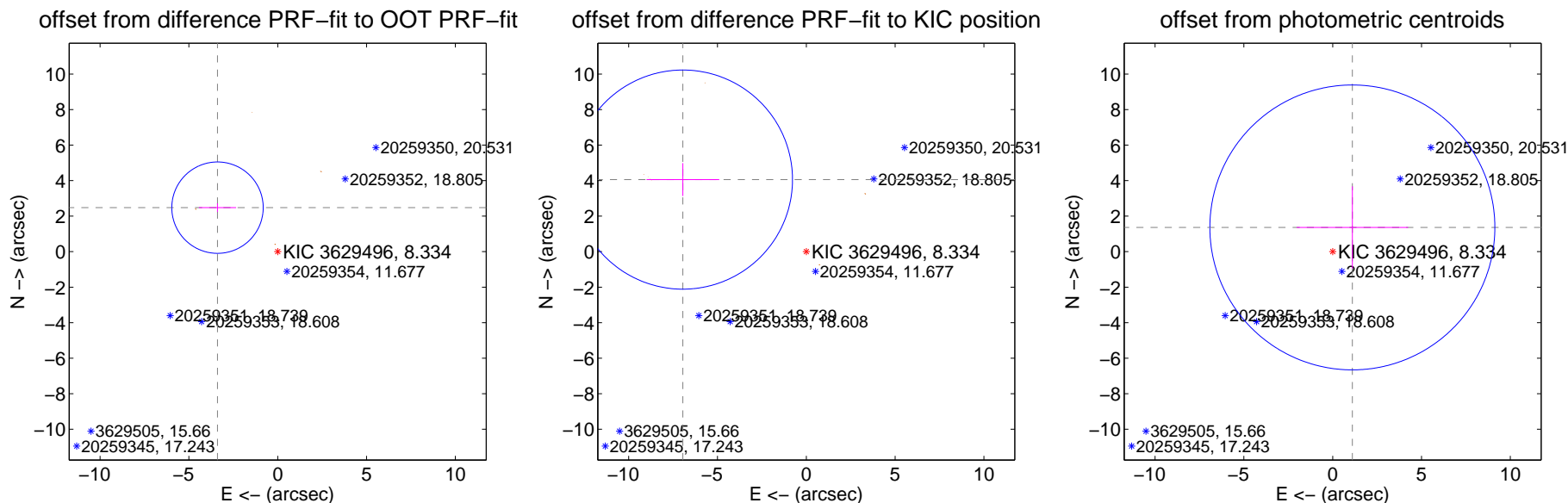
DV Centroid Data

Supplemental centroid analysis for 003629496-01. **Kepler magnitude: 8.33.** Transit SNR 7.09

There are 0 quarters with good PRF difference image offsets

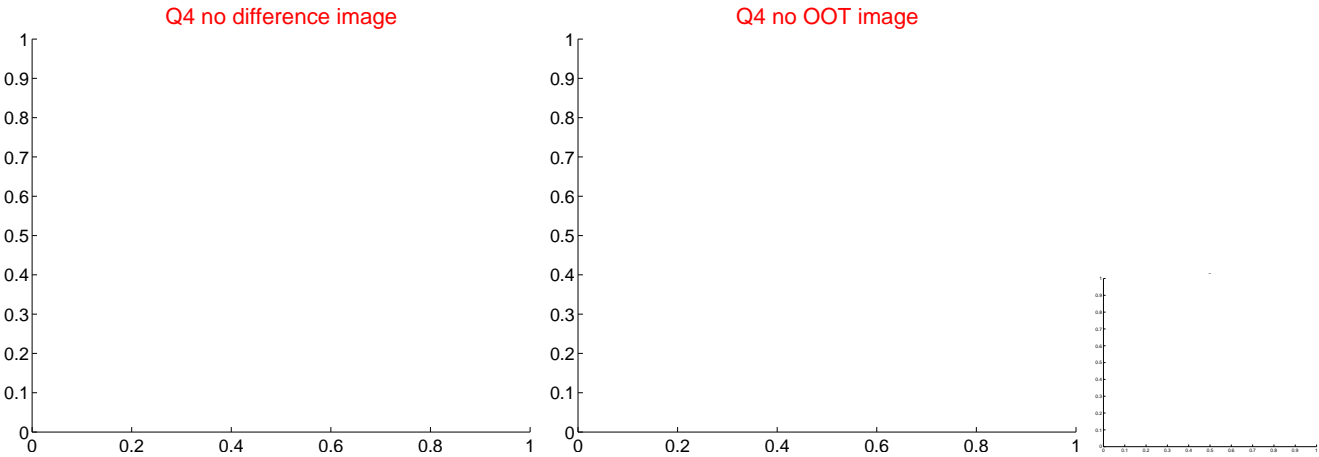
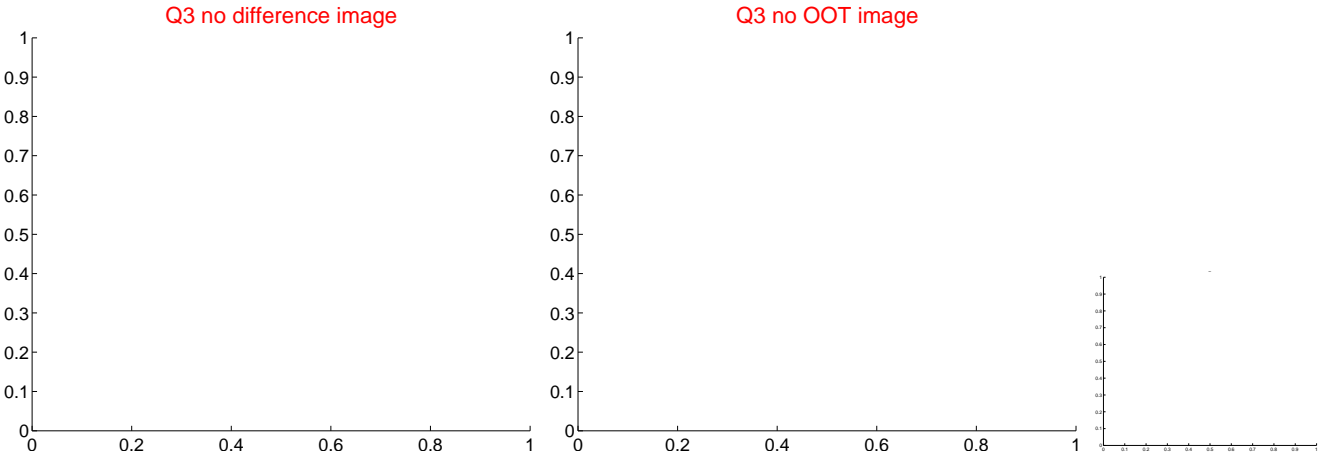
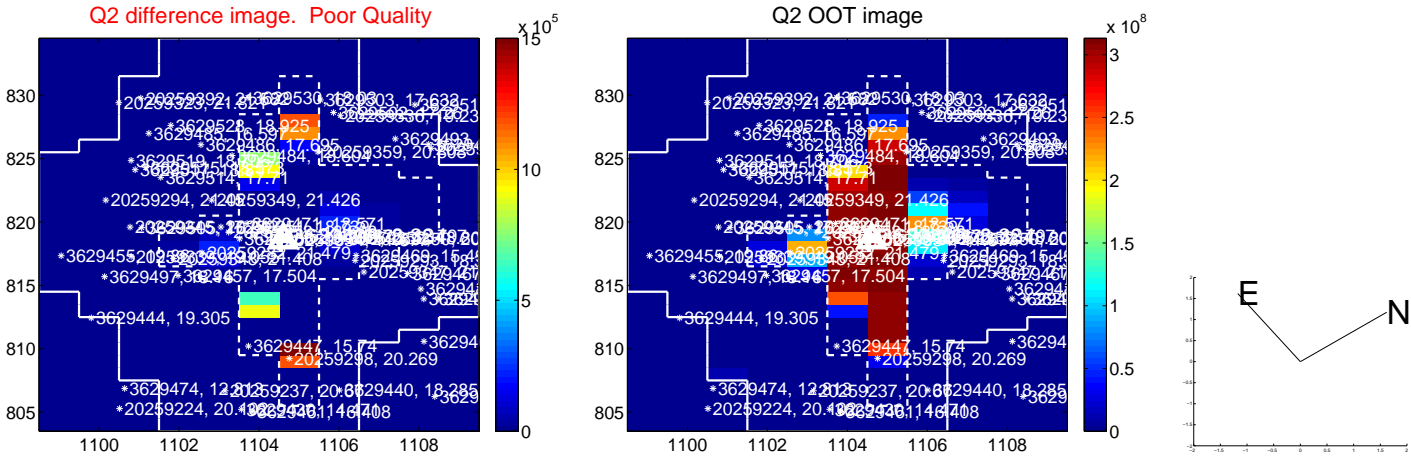
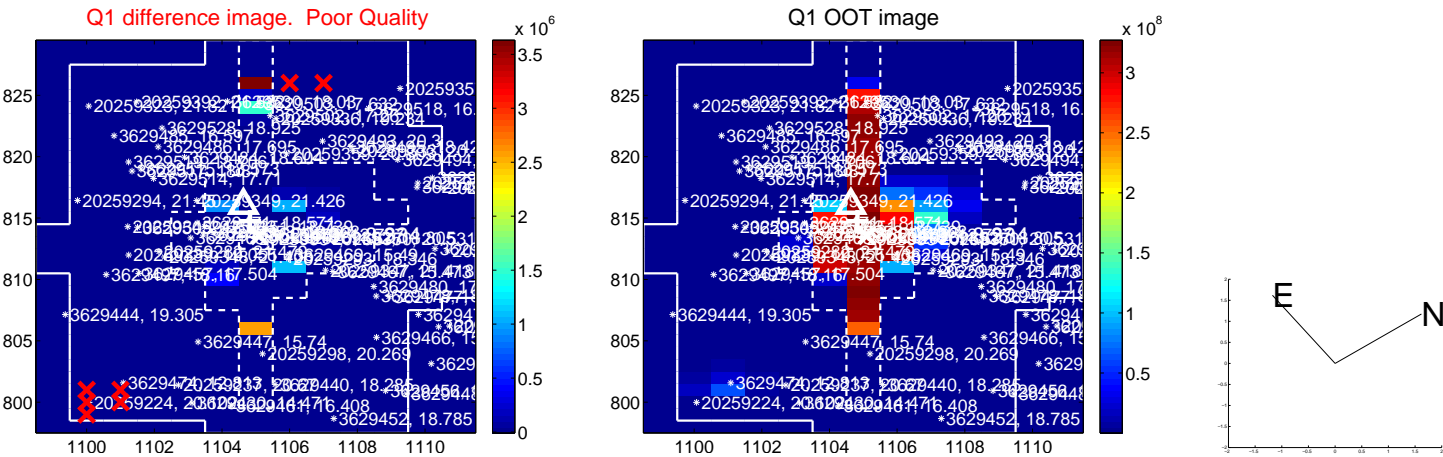
The OOT PRF centroid is offset from the target star catalog position by about 4.57 arcsec so the offset from difference PRF-fit to OOT-fit may be invalid.

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	4.199 ± 0.858	4.90	3.390 ± 1.047	2.478 ± 0.244
PRF-fit source offset from KIC position	8.048 ± 2.057	3.91	6.949 ± 2.049	4.058 ± 0.925
photometric centroid source offset	1.76 ± 2.67	0.66	-1.11 ± 3.14	1.36 ± 2.32

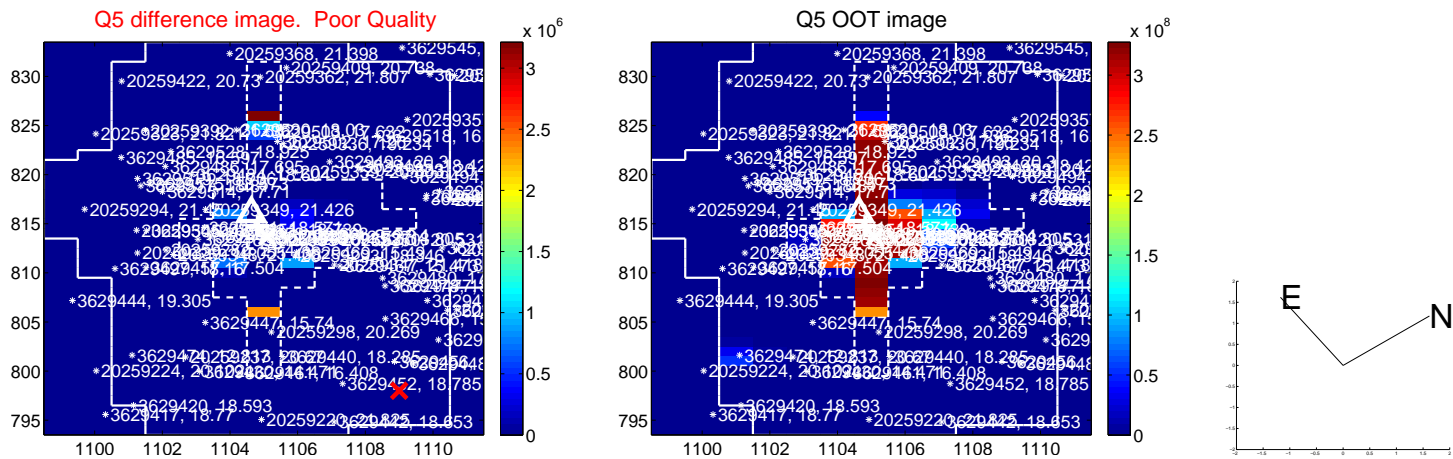


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets;** magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

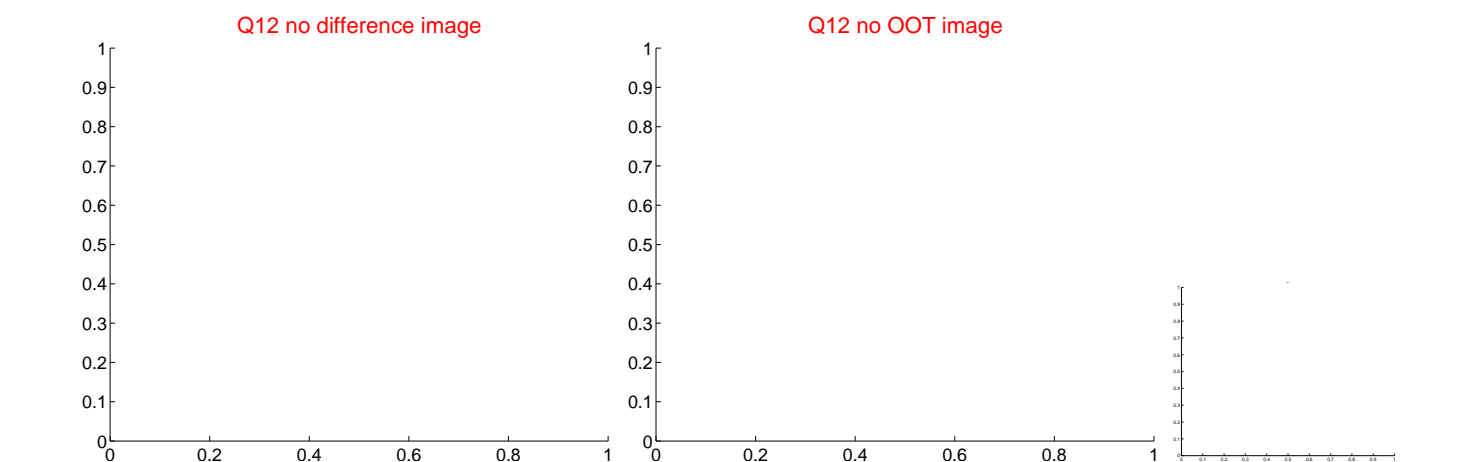
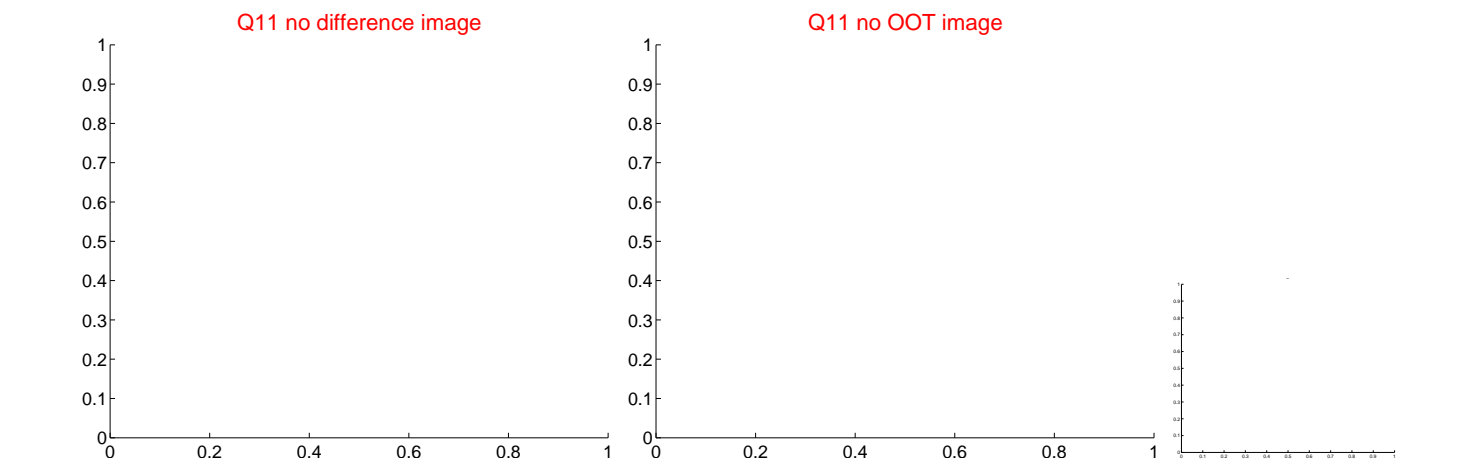
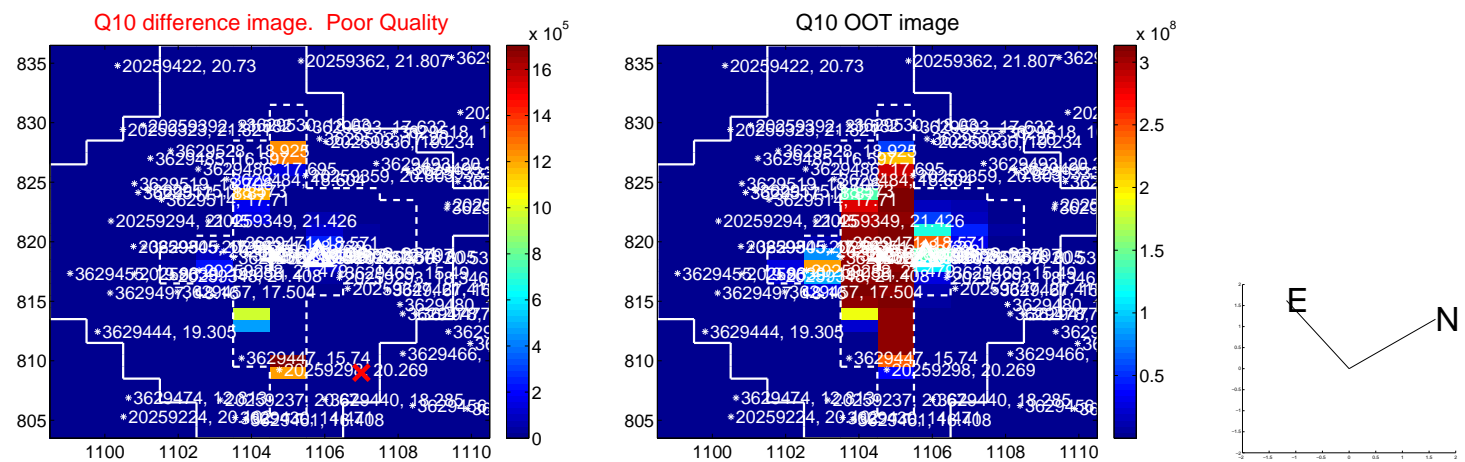
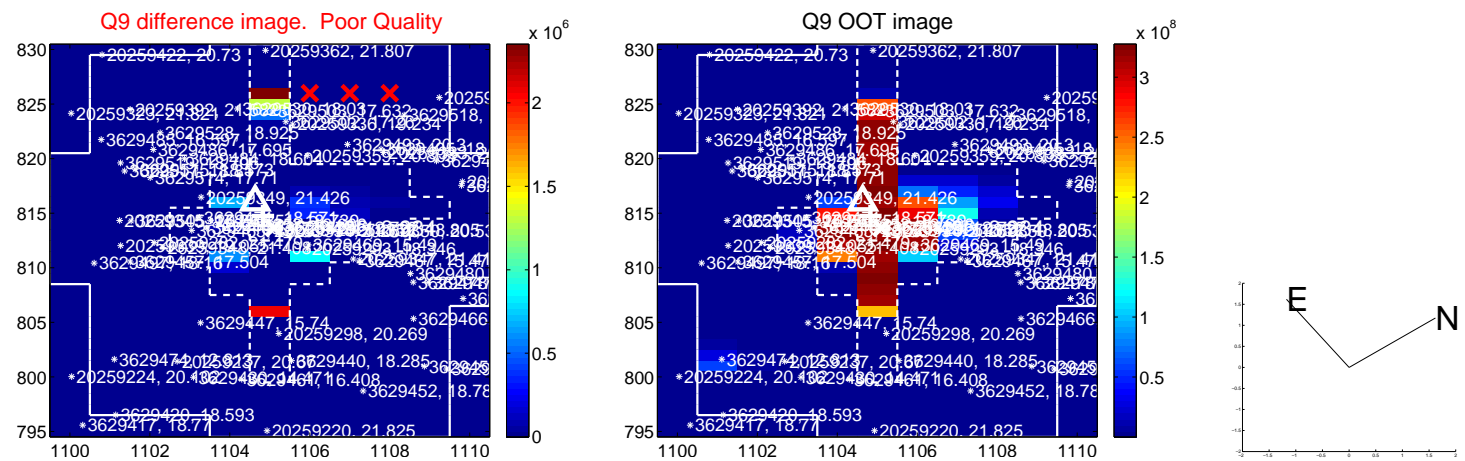
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



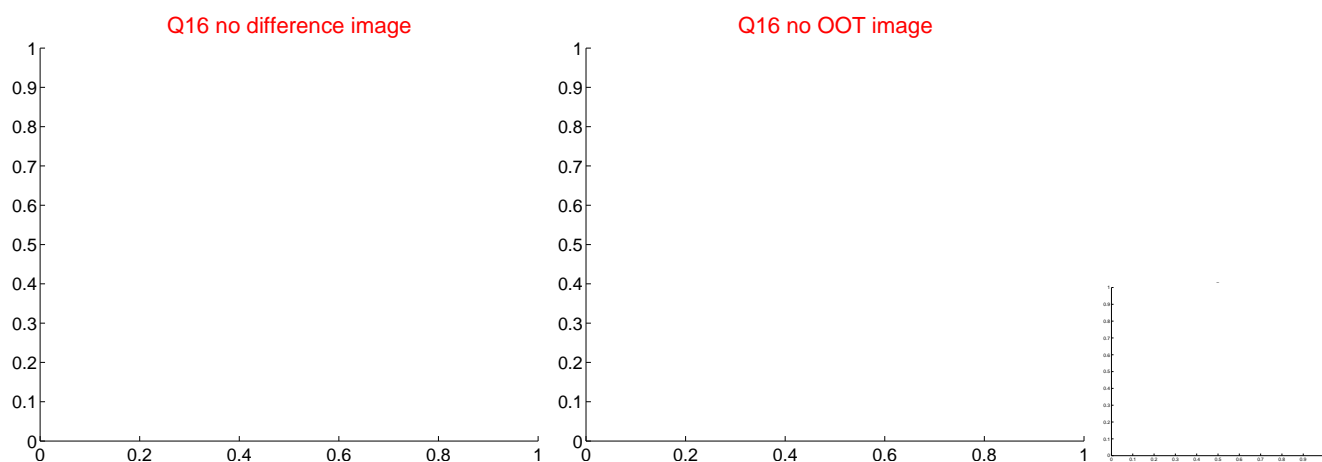
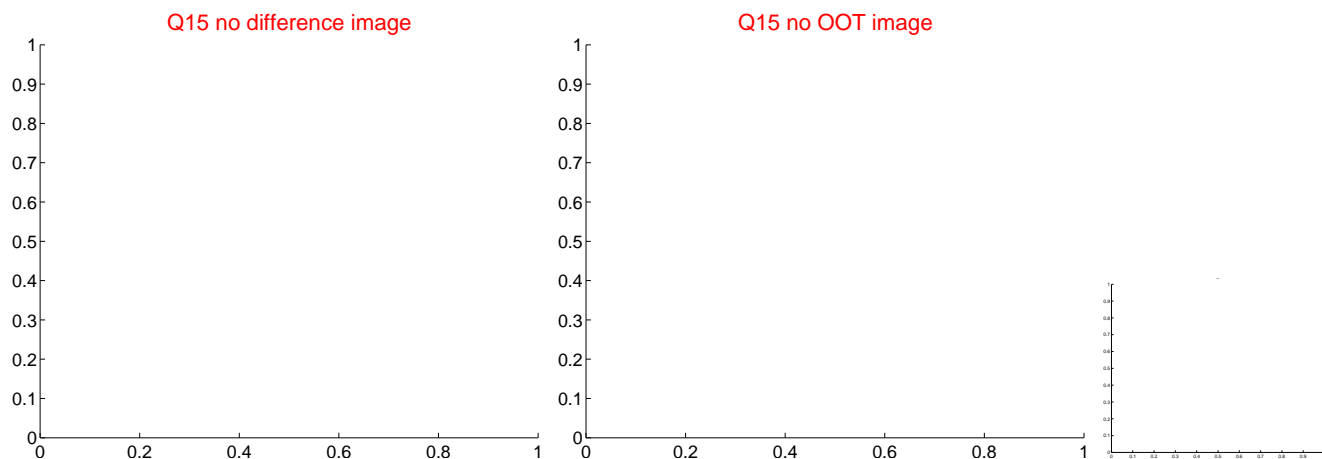
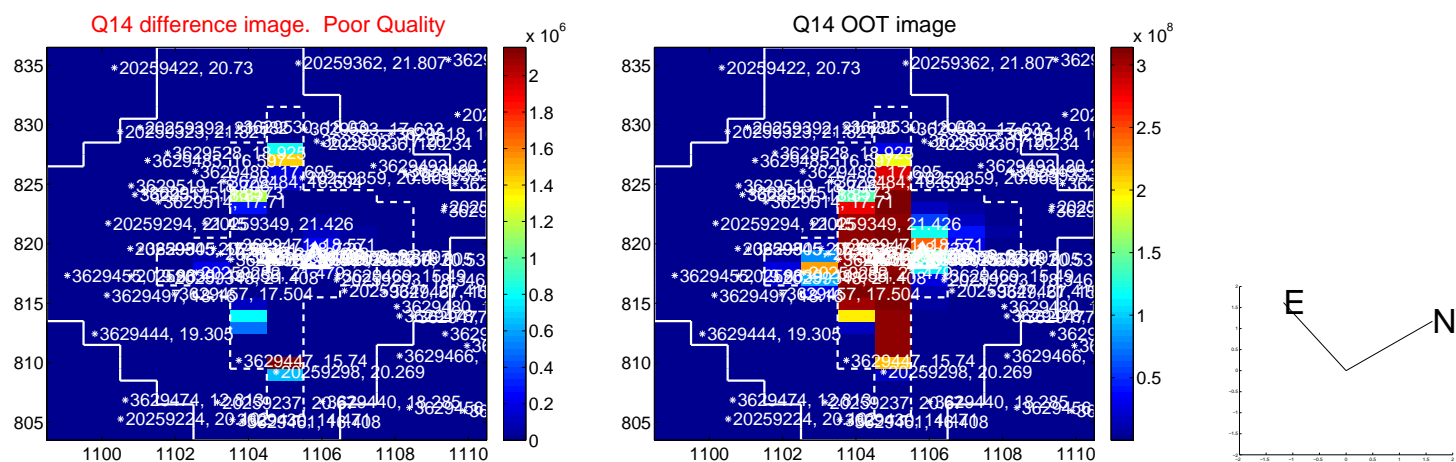
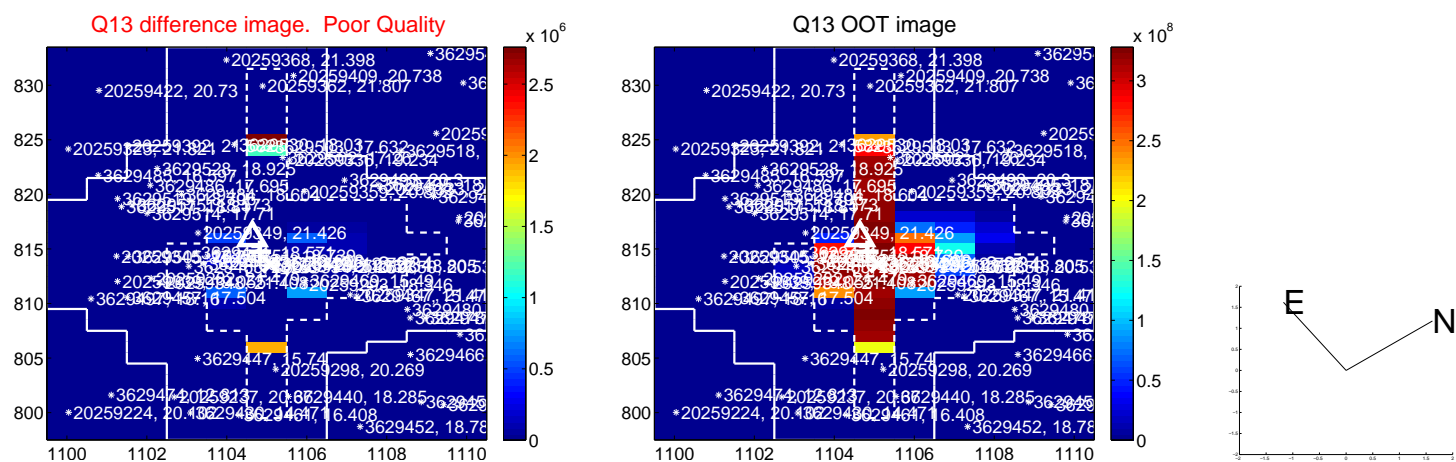
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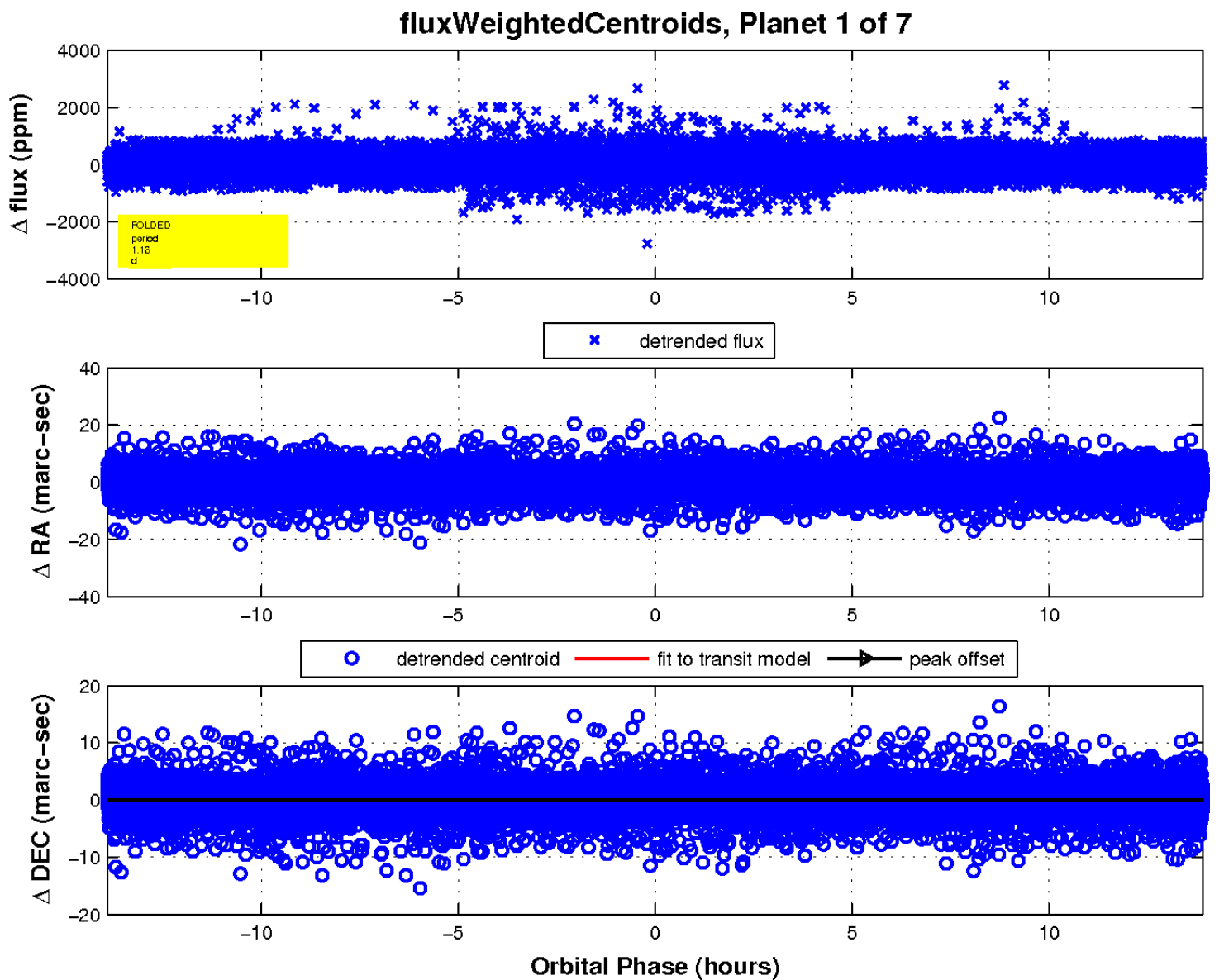
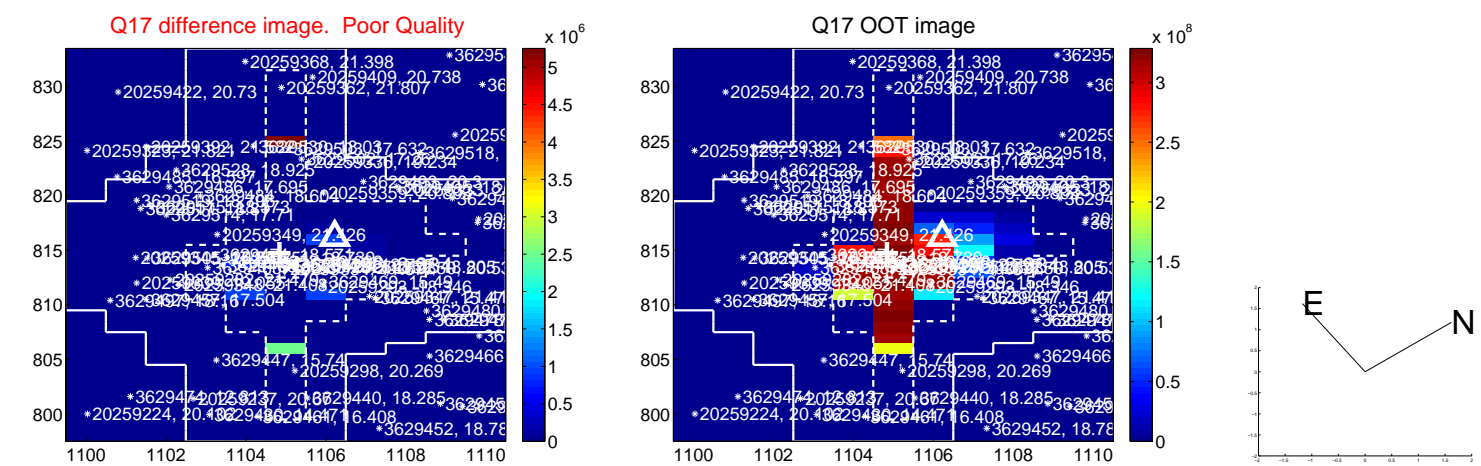
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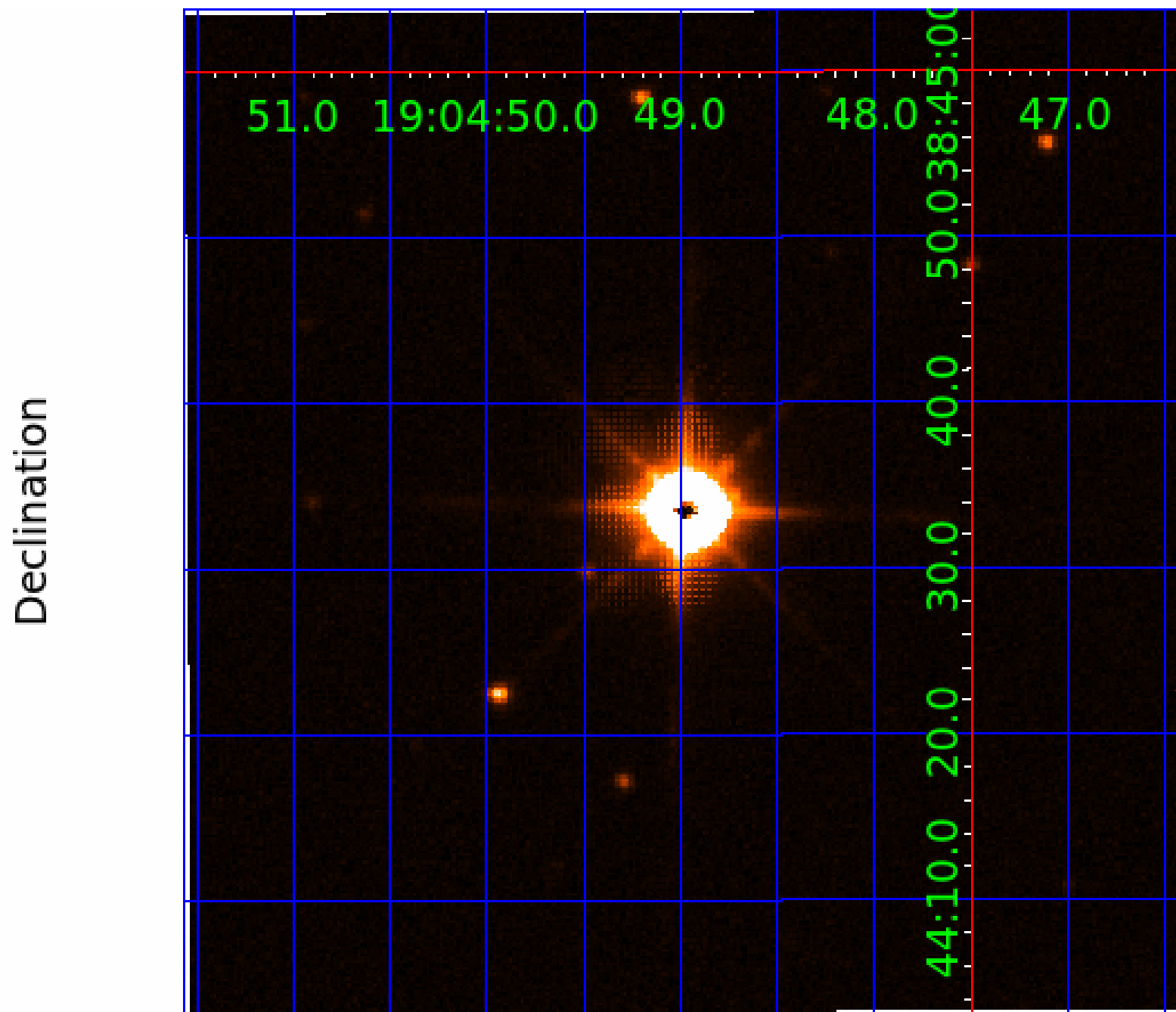
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UKIRT Image



KIC 003629496

Q1-17 DR25 TCE Parameters

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003629496-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_SATURATED
003629496-04	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_TRACKER—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—INCONSISTENT_TRANS—CENT_SATURATED
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003629496-06	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_CHASES—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_TER_DV—MOD_POS_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—INCONSISTENT_TRANS—CENT_SATURATED
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Notes: OBS = Observed. INJ = Injected. INV = Inverted. SCR = Scrambled.

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

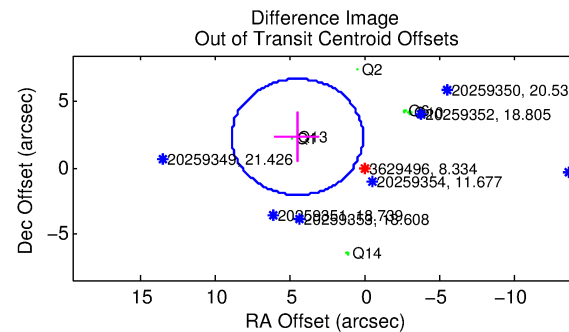
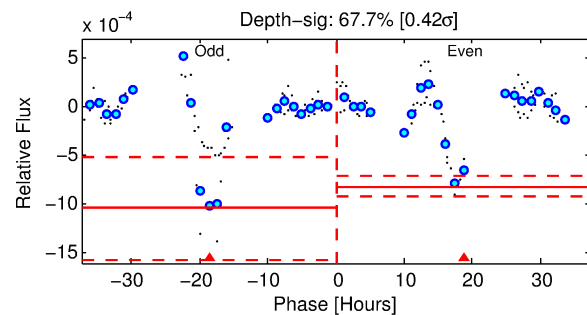
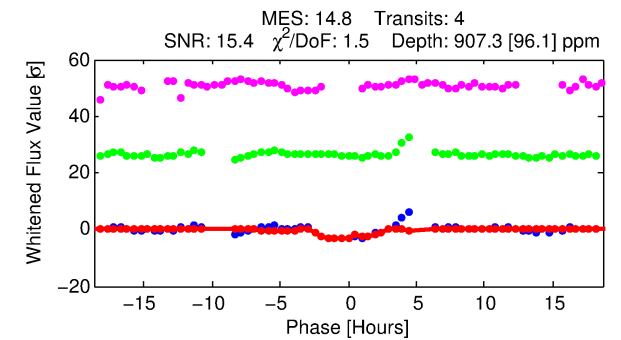
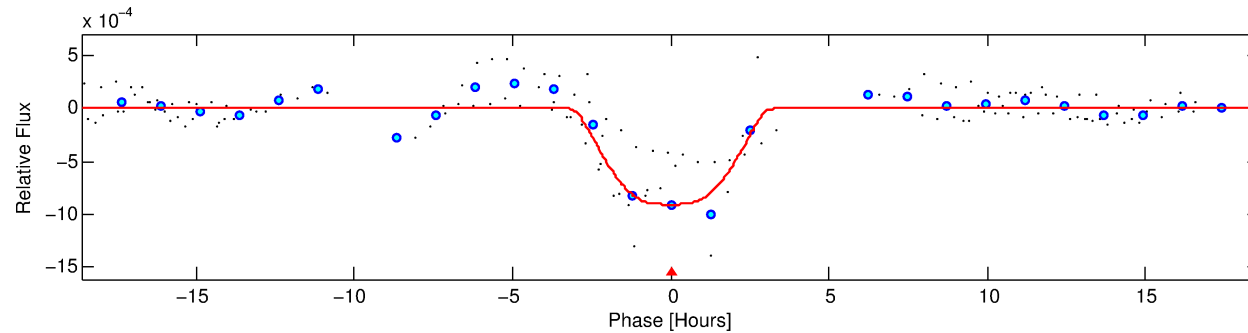
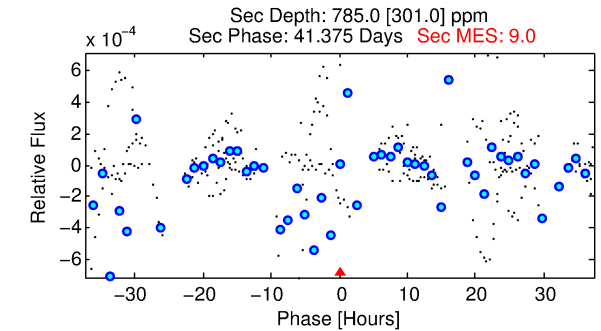
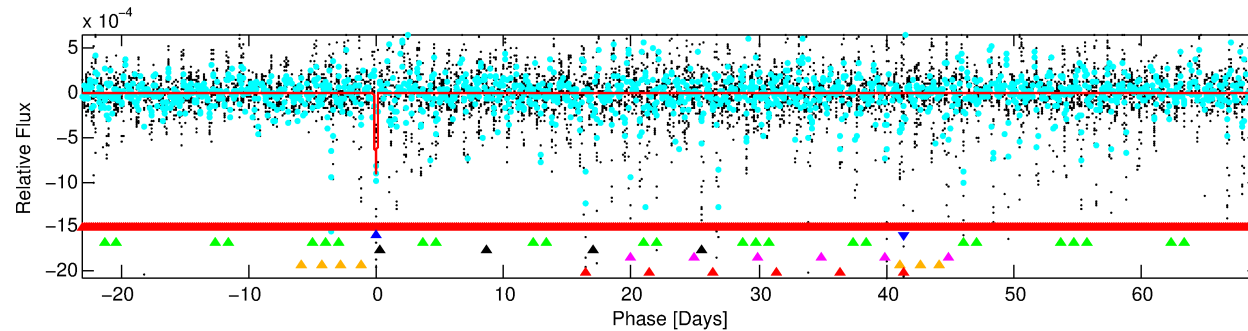
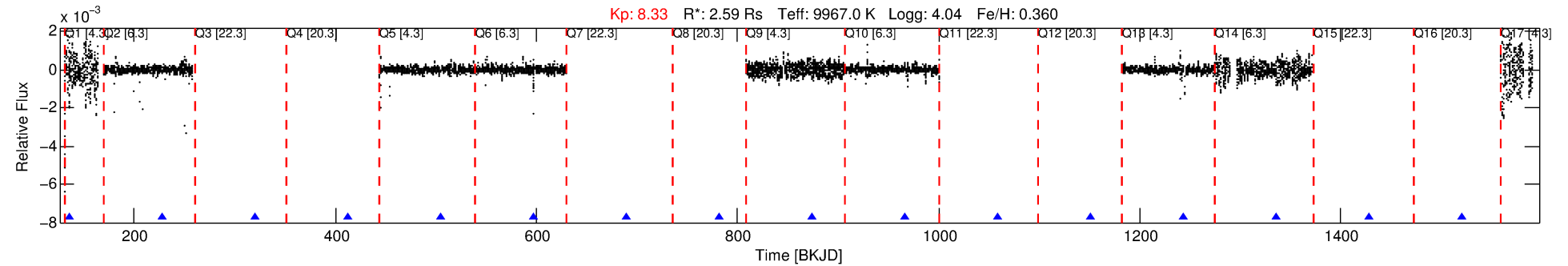
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 003629496-02

No Significant Match Found

DV One-Page Summary

KIC: 3629496 Candidate: 2 of 7 Period: 92.349 d



DV Fit Results:

Period = 92.34920 [0.00126] d
Epoch = 135.0964 [0.0086] BKJD
Rp/R* = 0.0337 [0.0020]
a/R* = 42.67 [3.18]
b = 0.96 [0.01]
Seff = 190.45 [67.30]
Teq = 947 [84] K
Rp = 9.51 [2.49] Re
a = 0.5574 [0.1207] AU
Ag = 1482.82 [759.11] [1.95 sigma]
Teffp = 9088 [977] K [8.30 sigma]

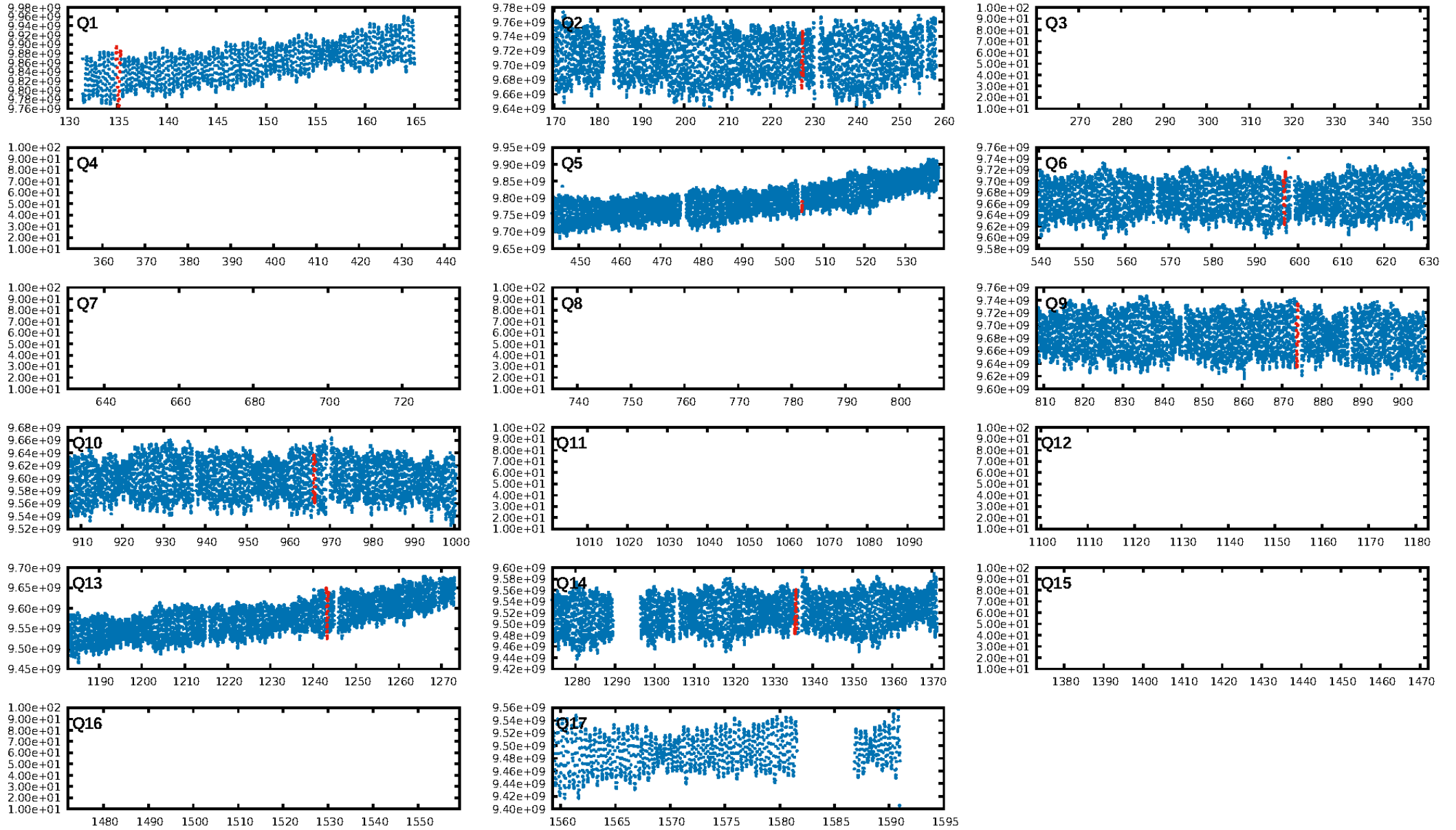
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [105.36 sigma]
LongPeriod-sig: 100.0% [471.50 sigma]
ModelChiSquare2-sig: 0.0%
ModelChiSquareGof-sig: 67.9%
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [3/3]
GhostDiagnostic-chr: N/A
Centroid-sig: N/A
Centroid-so: 2.603 arcsec [3.44 sigma]
OotOffset-rm: 5.028 arcsec [3.44 sigma]
KicOffset-rm: 9.458 arcsec [3.93 sigma]
OotOffset-st: 4/0/0/2 [6]
KicOffset-st: 4/0/0/2 [6]
DiffImageQuality-fgm: 0.00 [0/6]
DiffImageOverlap-fno: 0.00 [0/6]

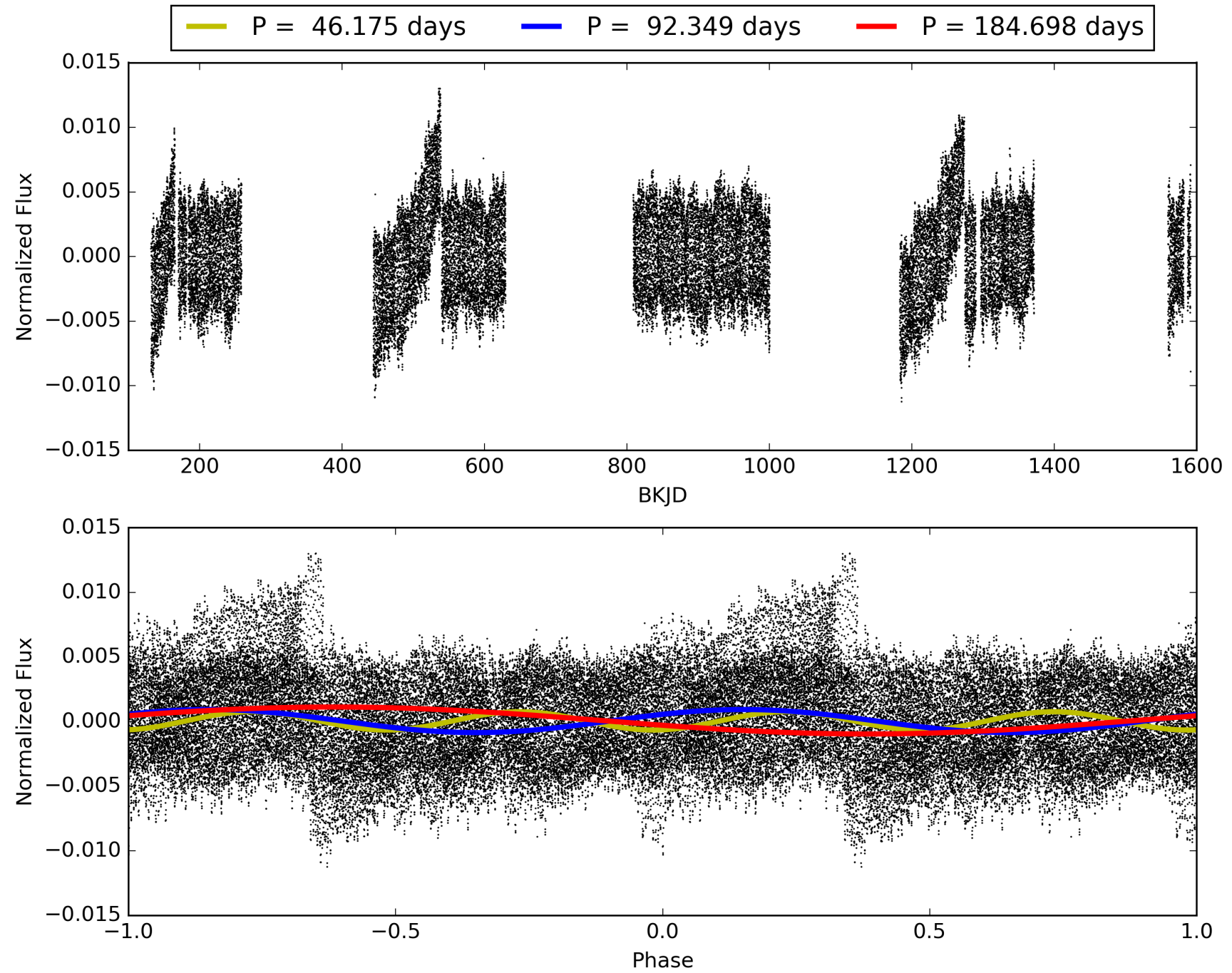
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 02-Feb-2016 01:32:23 Z

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

TCE 003629496-02, PDC Light Curves

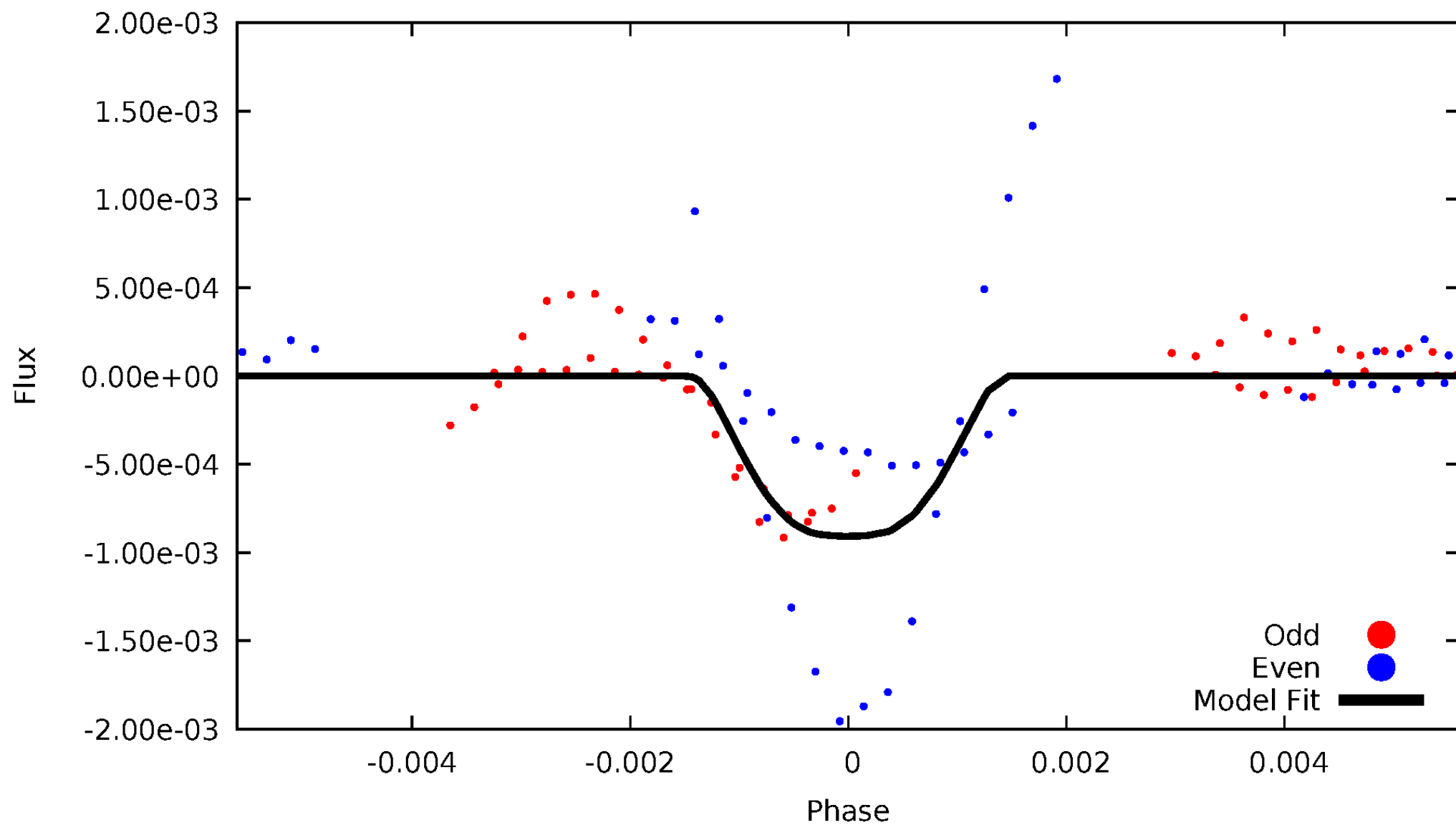


TCE 003629496-02



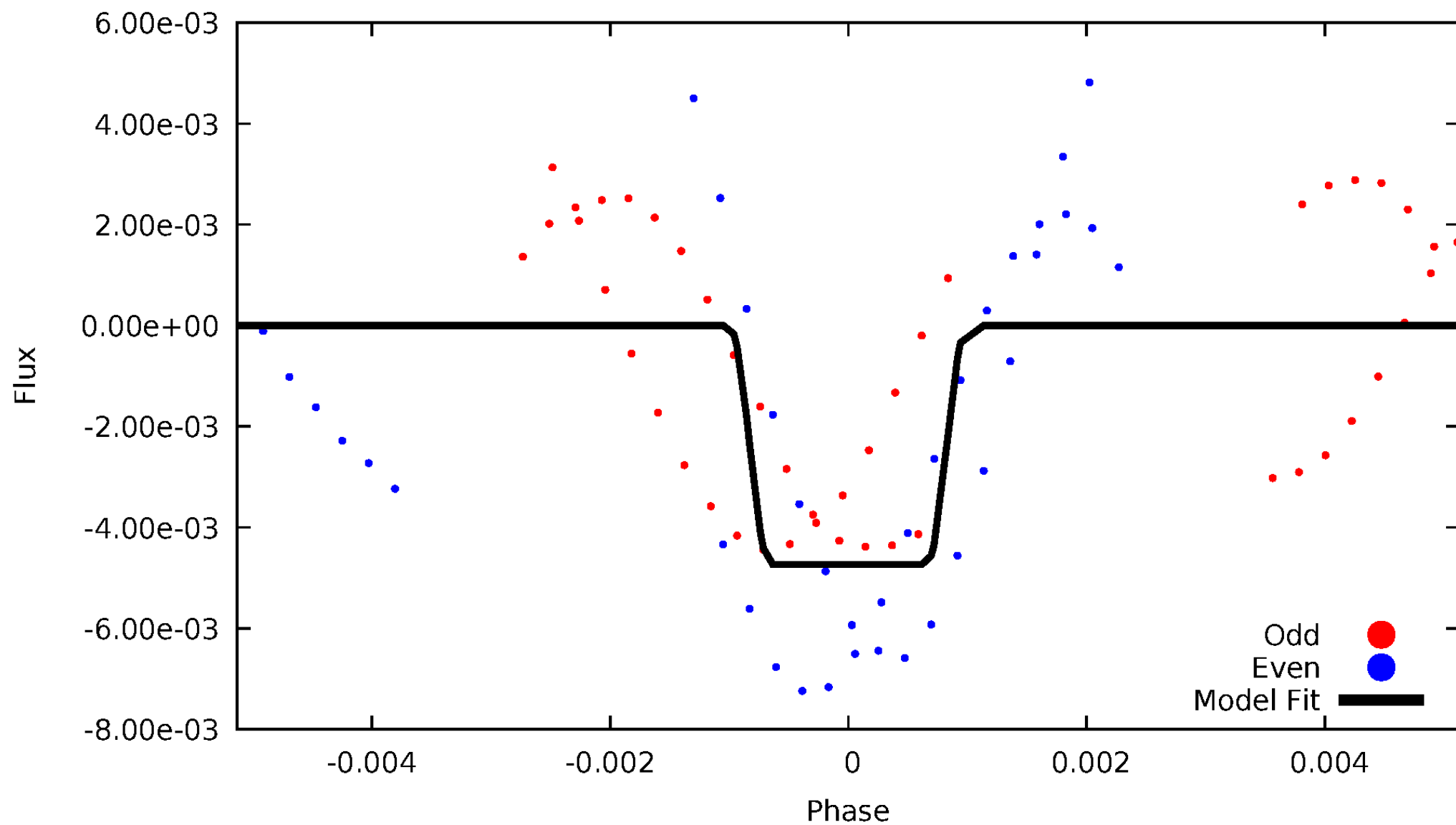
DV Odd/Even

TCE 003629496-02



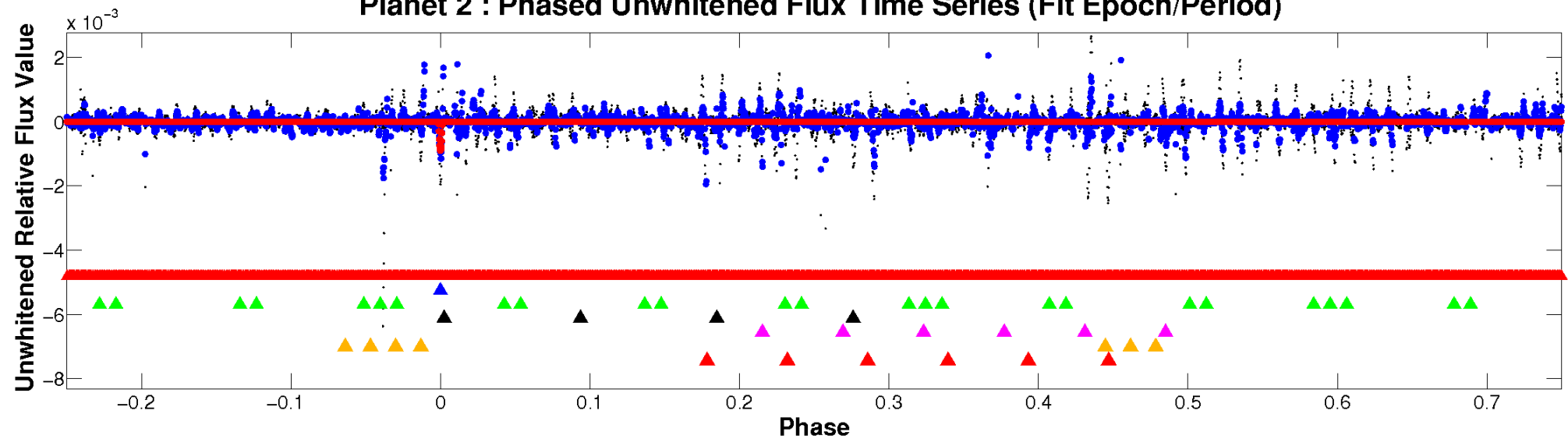
ALT Odd/Even

TCE 003629496-02

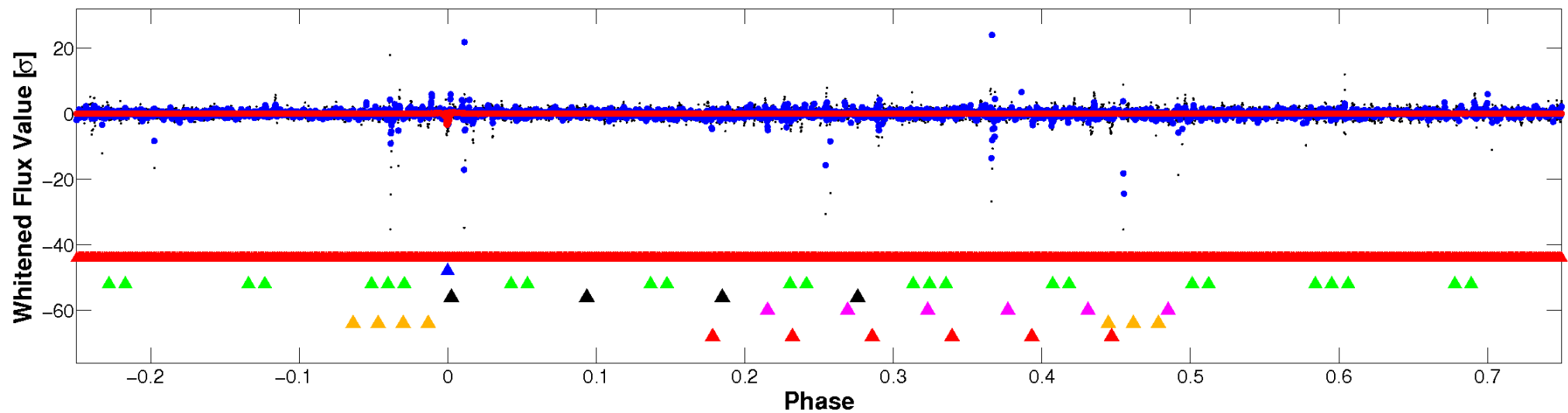


Non-Whitened Vs. Whitened Light Curve

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

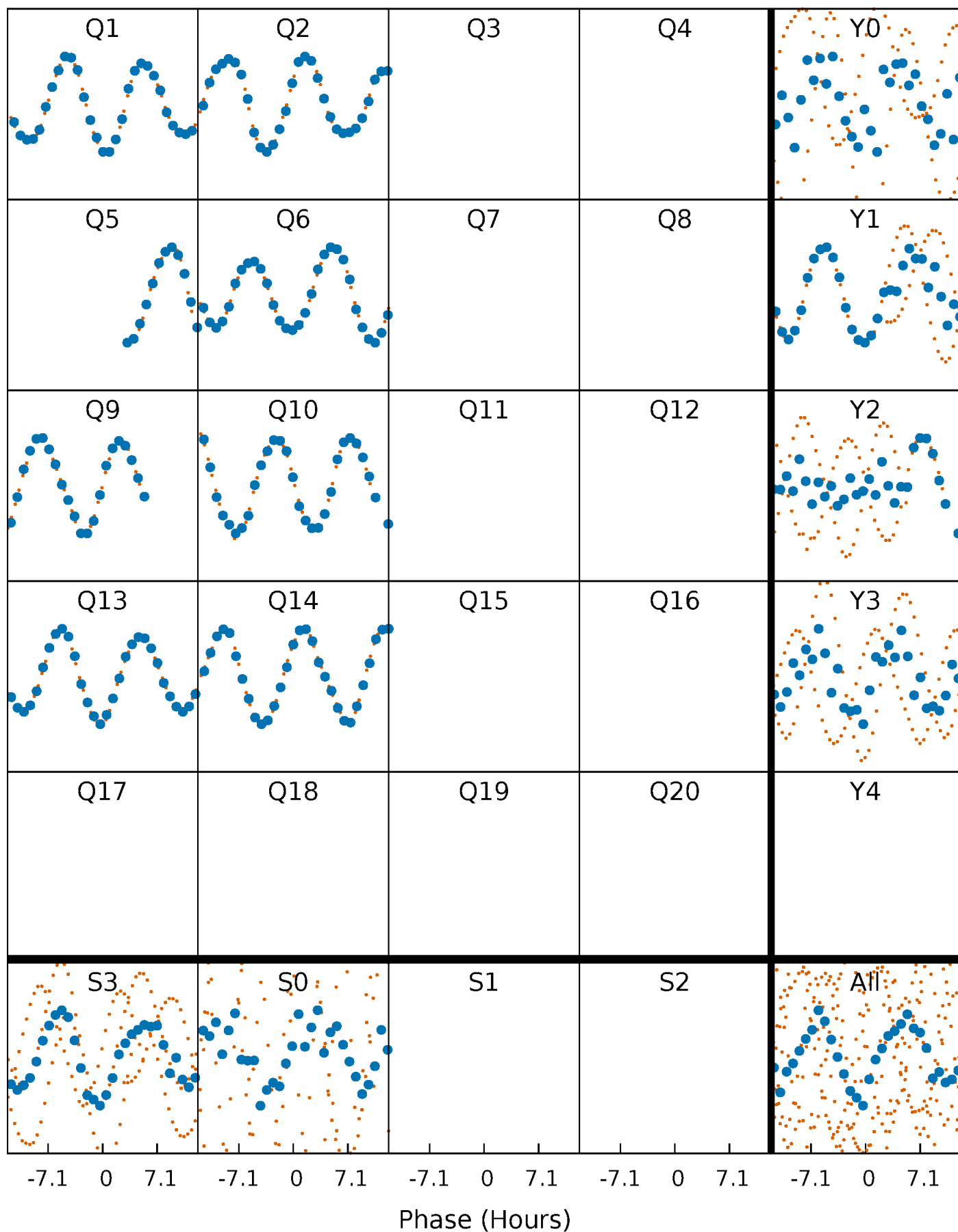


Planet 2 : Phased Whitened Flux Time Series (Fit Epoch/Period)



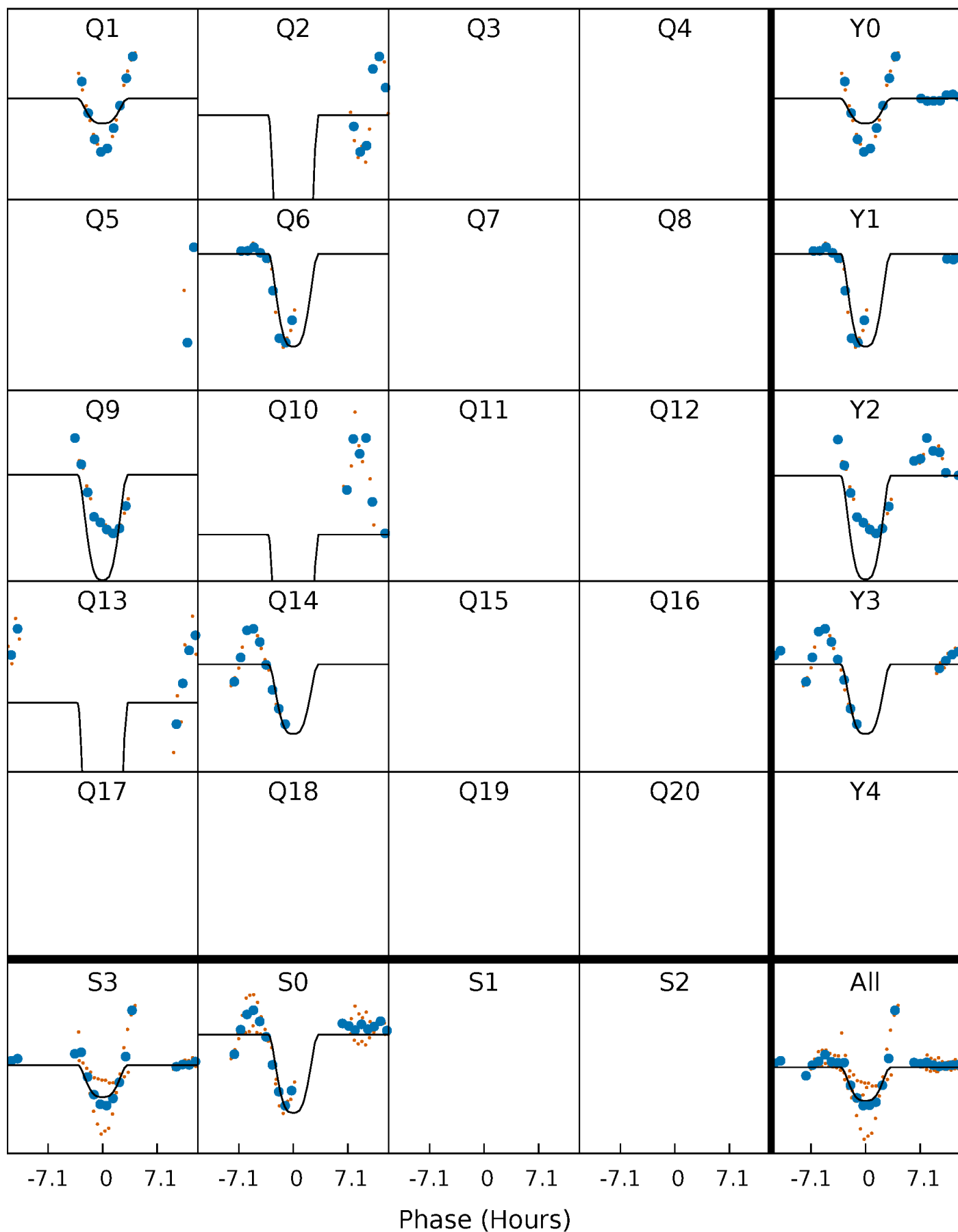
PDC Quarter-Phased Transit Curves

TCE 003629496-02 P= 92.349203 Days $T_0=135.096359$ (BKJD)



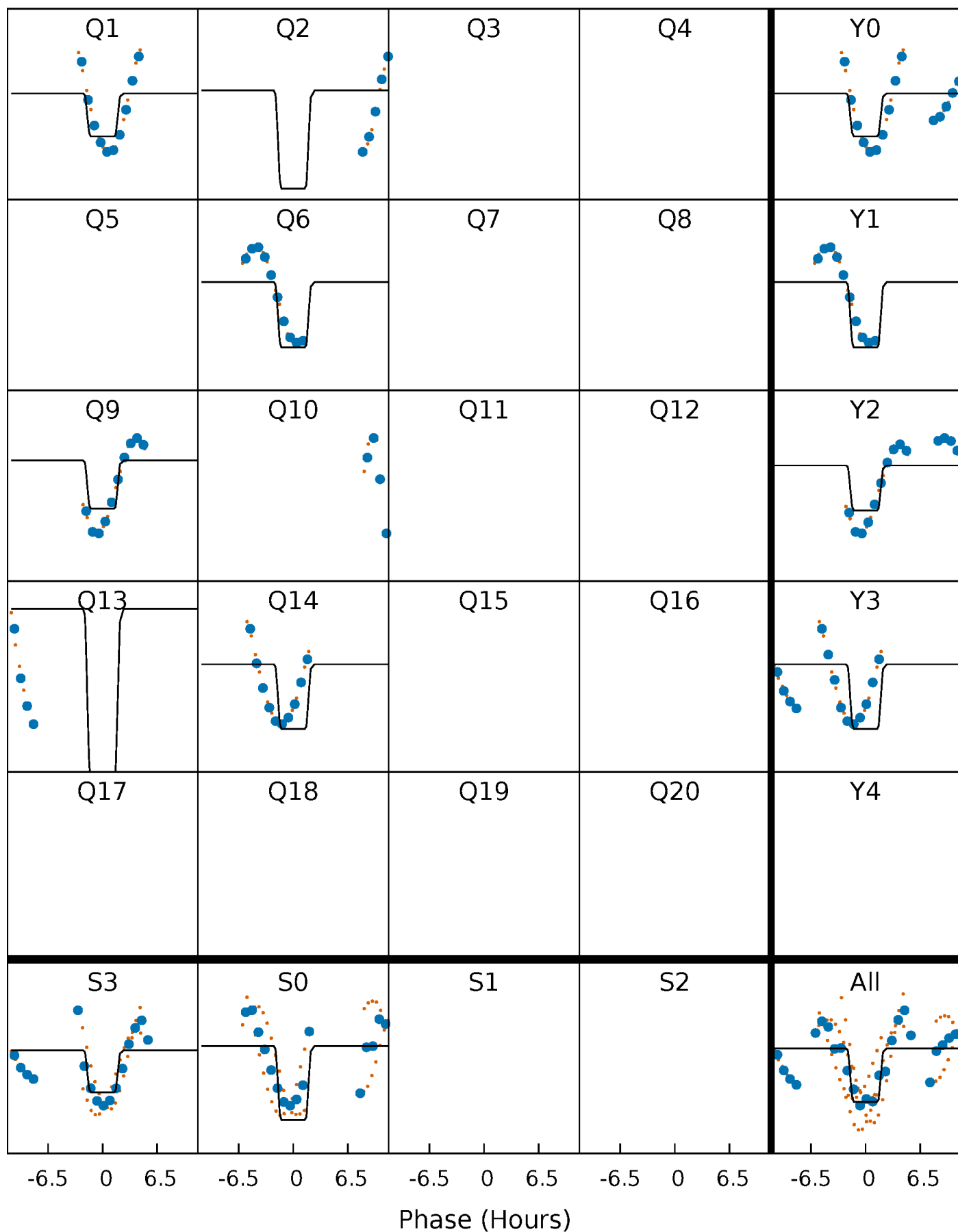
DV Quarter-Phased Transit Curves

TCE 003629496-02 P= 92.349203 Days $T_0=135.096359$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

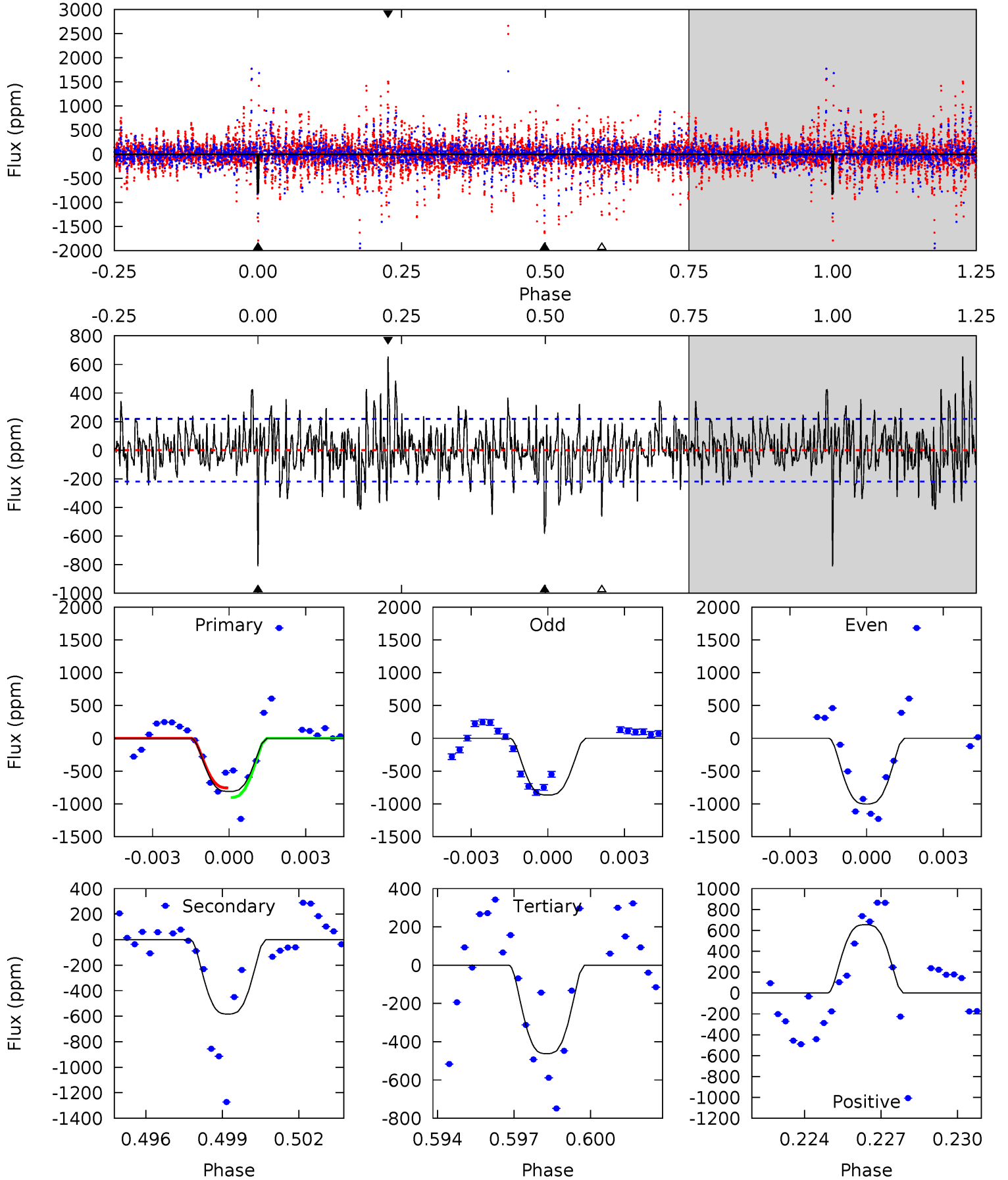
TCE 003629496-02 P= 92.341681 Days $T_0=135.086134$ (BKJD)



DV Model-Shift Uniqueness Test

003629496-02, P = 92.349203 Days, E = 42.747156 Days

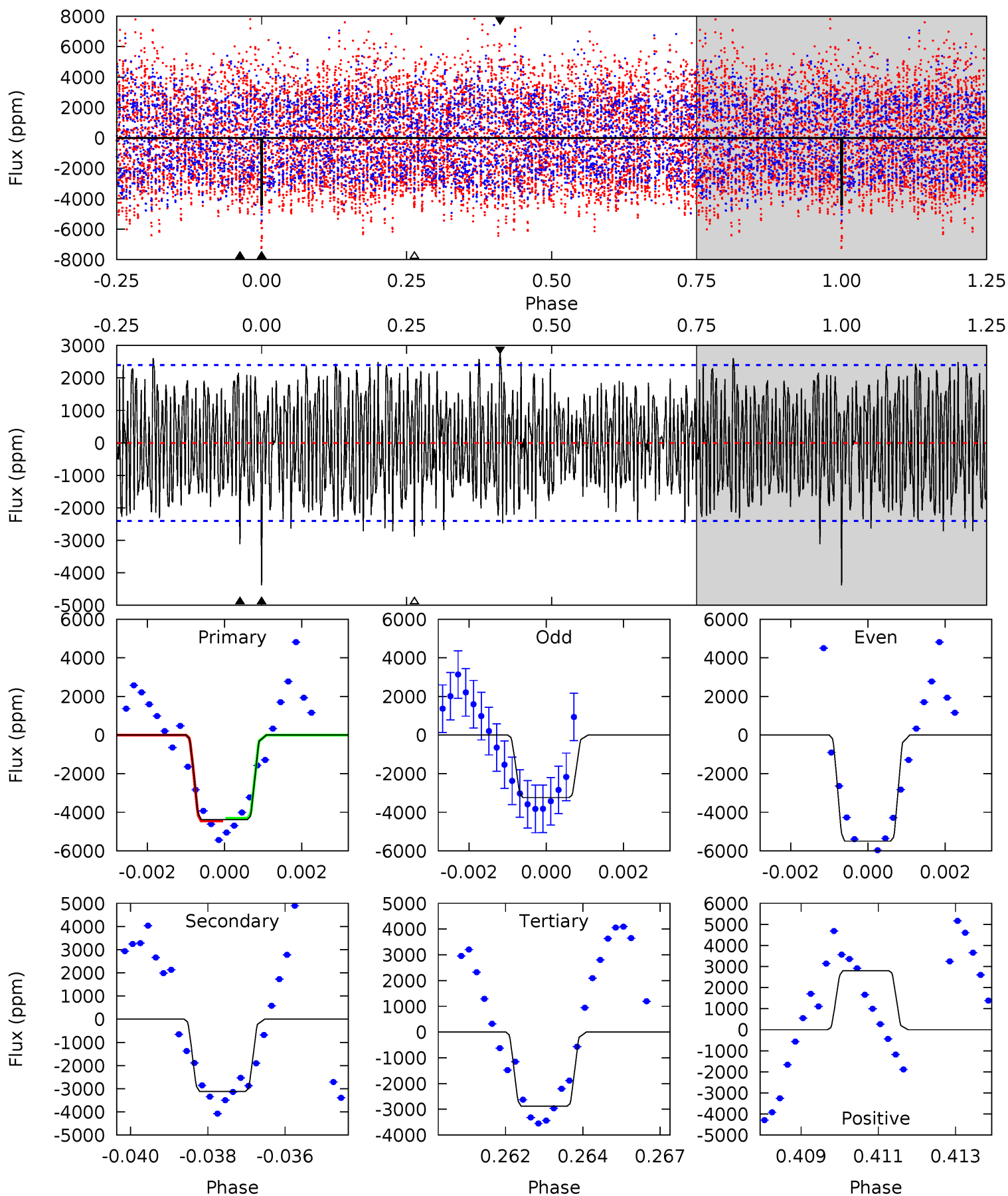
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
19.5	14.0	11.1	15.7	5.25	2.97	3.02	8.36	3.75	2.90	-1.71	1.44	1.08	0.45	1.66



Alt Model-Shift Uniqueness Test

003629496-02, P = 92.341681 Days, E = 42.744453 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
9.71	6.90	6.39	6.20	5.32	3.08	2.52	3.32	3.51	0.51	0.70	2.50	1.00	0.39	0.16



Stellar Parameters For KIC 003629496

	$T_{\text{eff}} (K)$	$\log(g)$	$[\text{Fe}/\text{H}]$	$R (R_{\odot})$	$M (M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	9967^{+280}_{-385}	$4.045^{+0.094}_{-0.175}$	$0.360^{+0.050}_{-0.250}$	$2.587^{+0.659}_{-0.384}$	$2.707^{+0.273}_{-0.273}$	$0.220^{+0.110}_{-0.100}$
	+3%/-4%	+2%/-4%	+14%/-69%	+25%/-15%	+10%/-10%	+50%/-45%
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 003629496-02 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-583 ± 42	$9.73^{+1.45}_{-1.00}$	1338^{+91}_{-80}	7944^{+427}_{-398}	1044^{+248}_{-243}
Alt.	-3114 ± 451	$19.76^{+3.01}_{-1.82}$	1336^{+97}_{-78}	8601^{+511}_{-549}	1340^{+361}_{-342}

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

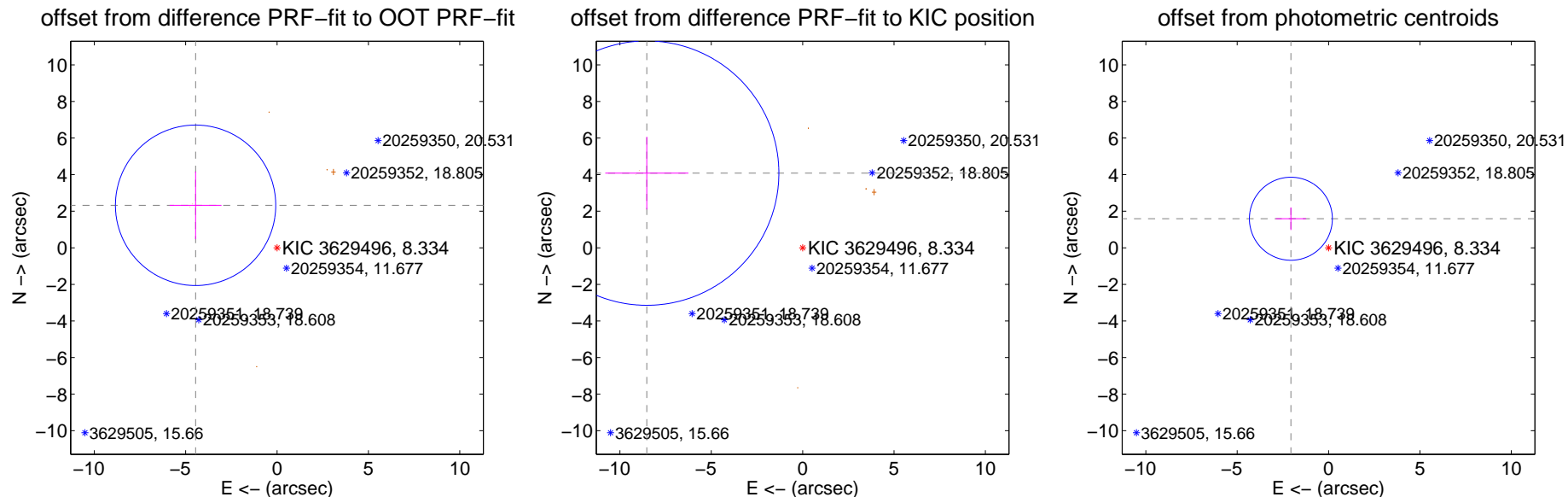
DV Centroid Data

Supplemental centroid analysis for 003629496-02. **Kepler magnitude: 8.33.** Transit SNR 15.42

There are 0 quarters with good PRF difference image offsets

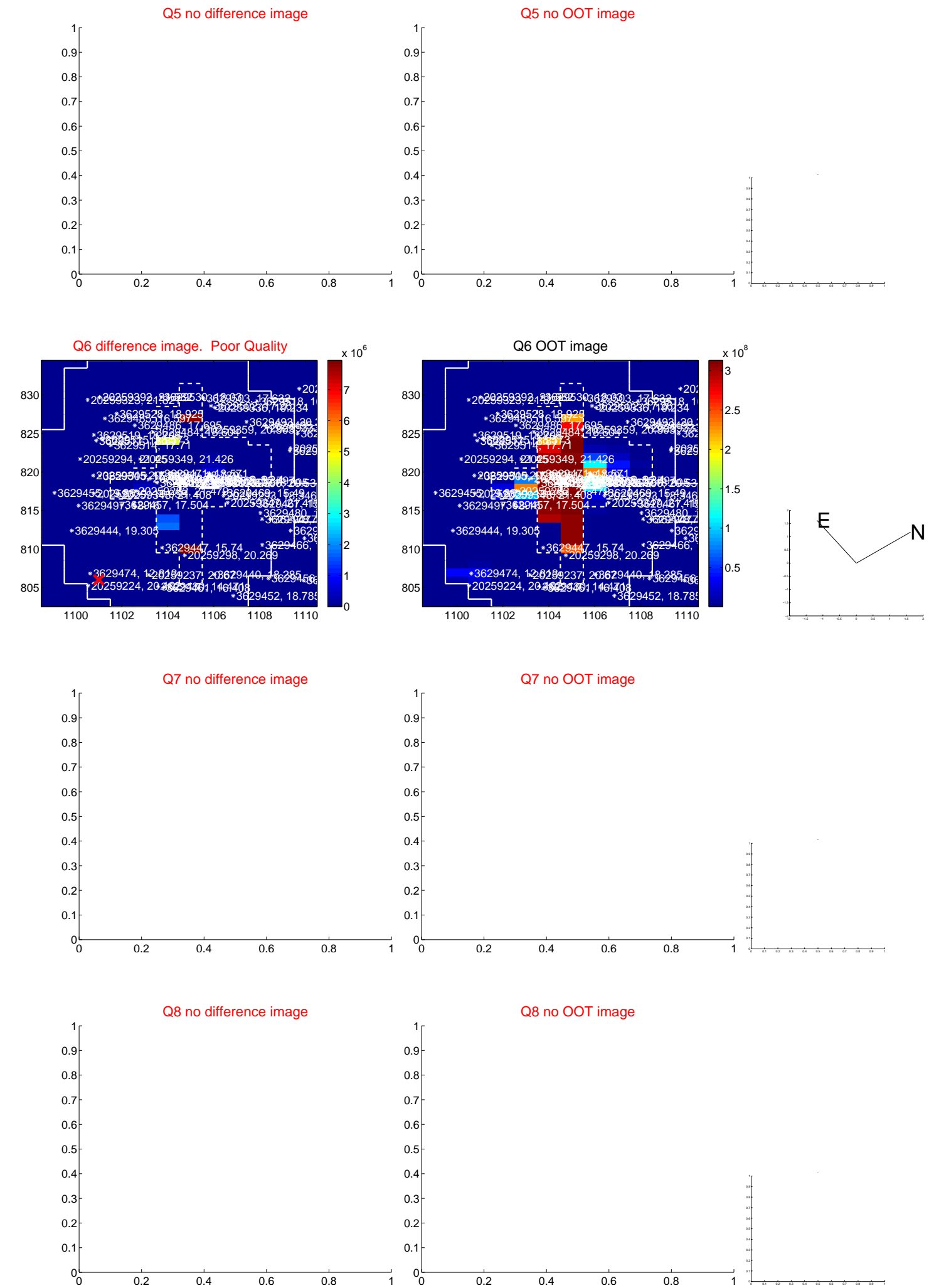
The direct PRF centroid is offset from the target star catalog position by about 1.43 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	5.028 ± 1.462	3.44	4.459 ± 1.419	2.324 ± 1.850
PRF-fit source offset from KIC position	9.458 ± 2.409	3.93	8.530 ± 2.275	4.084 ± 1.987
photometric centroid source offset	2.60 ± 0.76	3.44	2.06 ± 0.83	1.59 ± 0.62

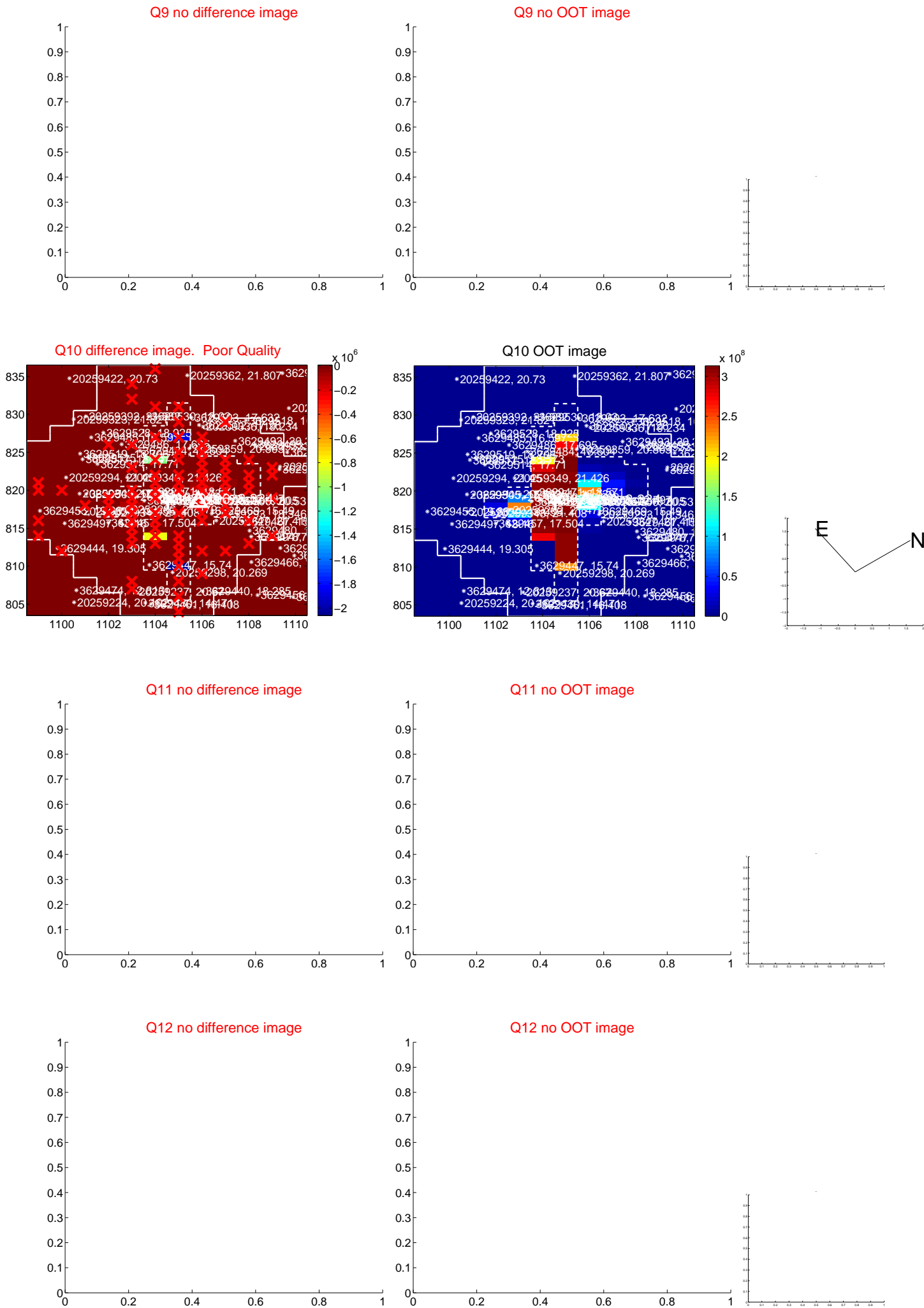


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets;** magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

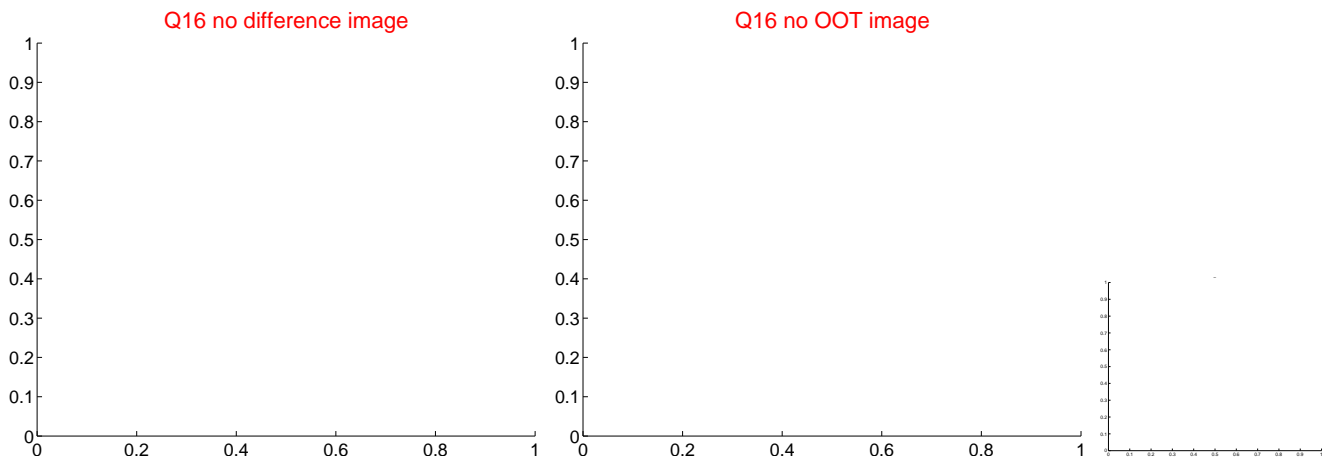
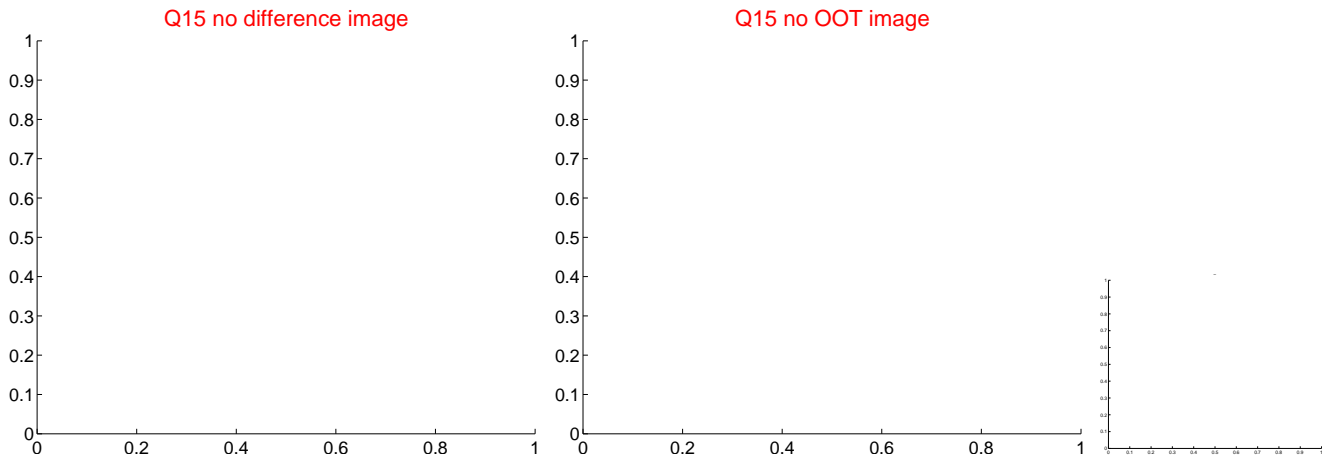
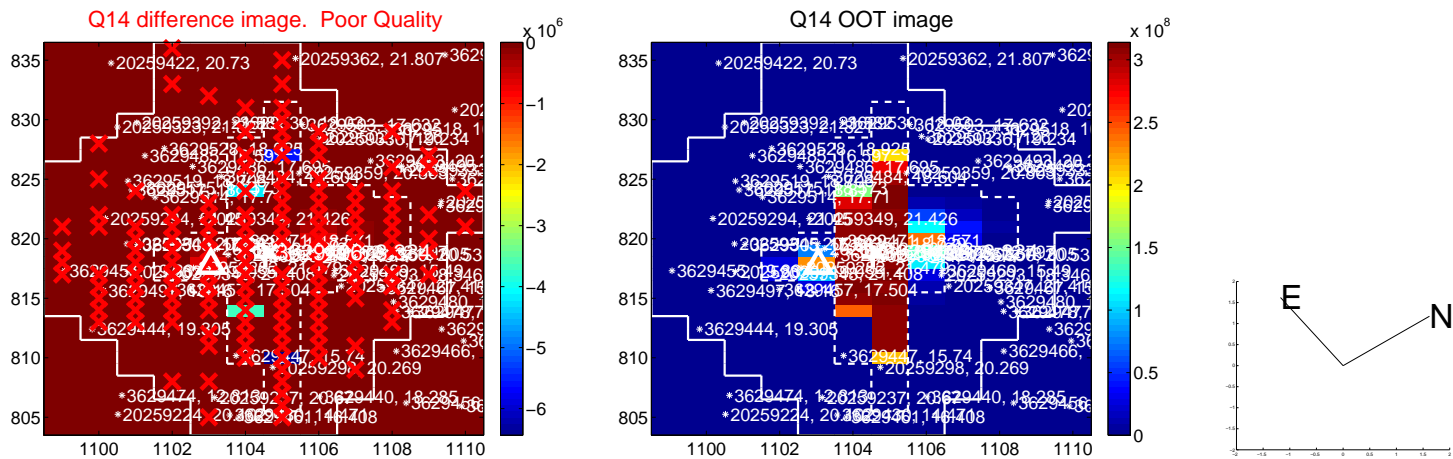
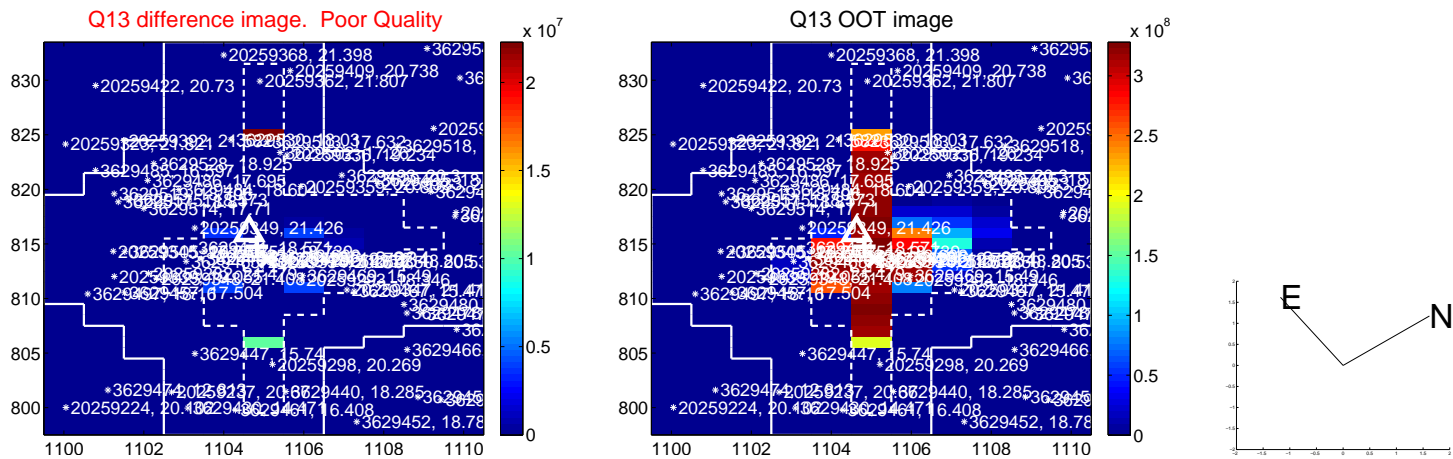
white ×: KIC target position; +: OOT centroid; △: difference centroid. red ✕: large negative pixel value.



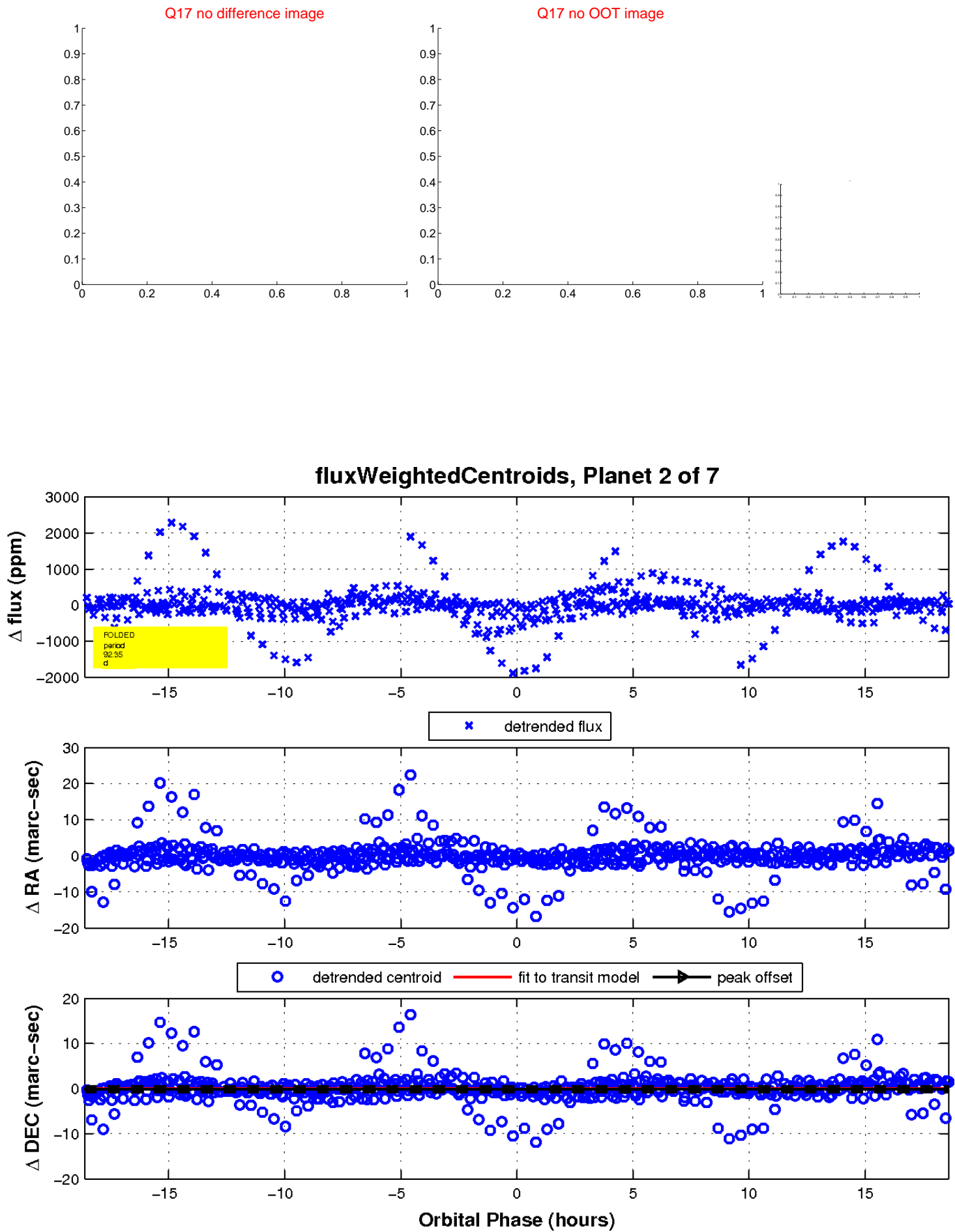
white ×: KIC target position; +: OOT centroid; △: difference centroid. red ✕: large negative pixel value.



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

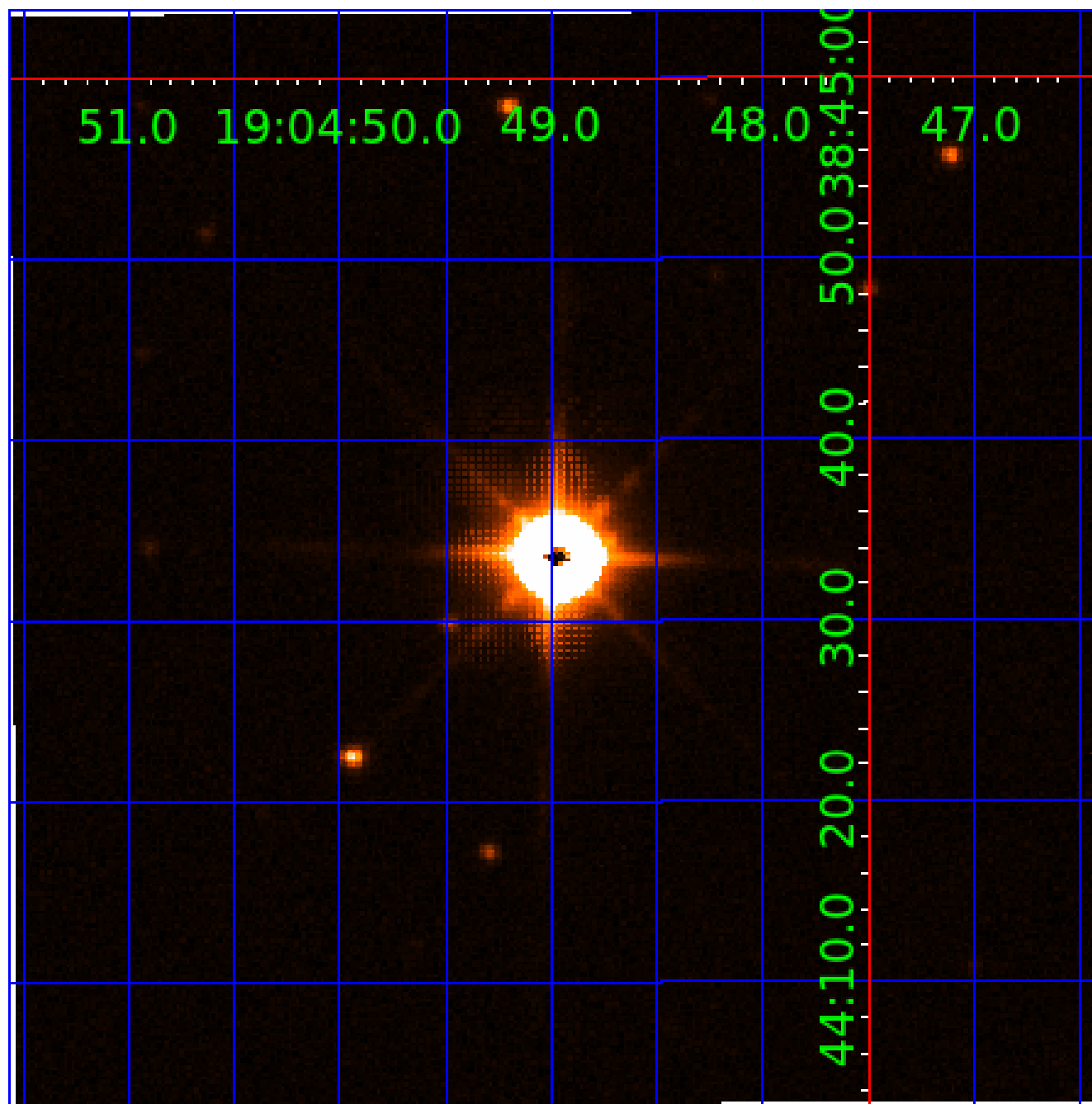


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 003629496

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})
003629496-01	OBS	No	1.159741	132.223875	18.6	6.497	20.4	7.1	2.59	9967	1.20	65243.17
003629496-02	OBS	No	92.349203	135.096359	907.3	6.212	14.8	15.4	2.59	9967	9.51	190.45
003629496-03	OBS	No	58.674936	166.077766	38.8	4.500	13.4	-1.0	2.59	9967	1.65	348.67
003629496-04	OBS	No	360.976046	160.588947	754.1	10.841	9.6	8.6	2.59	9967	10.47	30.93
003629496-05	OBS	No	282.028572	154.982651	657.4	3.606	10.0	8.5	2.59	9967	6.81	42.98
003629496-06	OBS	No	230.094834	133.885270	574.4	3.251	8.7	8.6	2.59	9967	6.63	56.38
003629496-07	OBS	No	282.008740	151.569591	1025.7	7.620	12.6	15.3	2.59	9967	9.87	42.99

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
003629496-01	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—CENT_SATURATED
003629496-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_ALT—INCONSISTENT_TRANS—CENT_SATURATED
003629496-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_SATURATED
003629496-04	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_TRACKER—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—INCONSISTENT_TRANS—CENT_SATURATED
003629496-05	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_CHASES—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_TER_DV—MOD_POS_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_SATURATED
003629496-06	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_CHASES—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_TER_DV—MOD_POS_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—INCONSISTENT_TRANS—CENT_SATURATED
003629496-07	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_CHASES—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—SAME_NTL_PERIOD—CENT_SATURATED

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

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

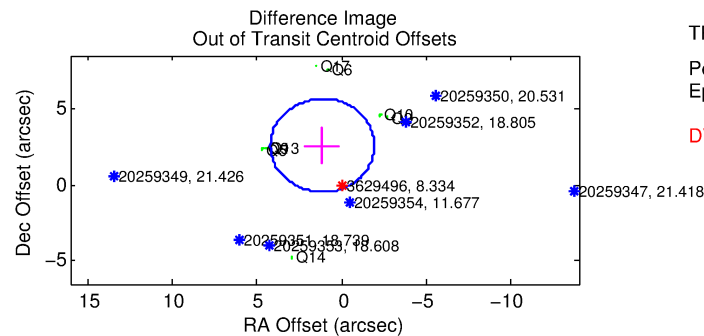
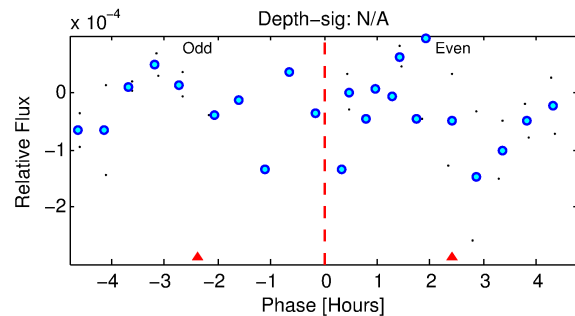
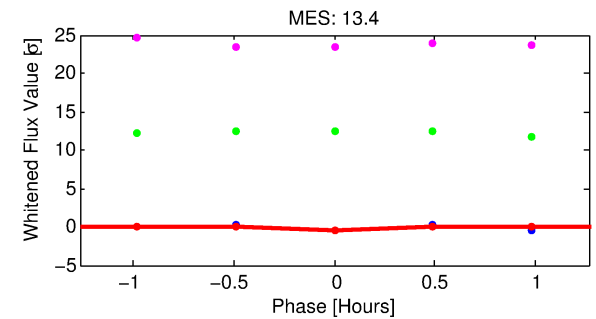
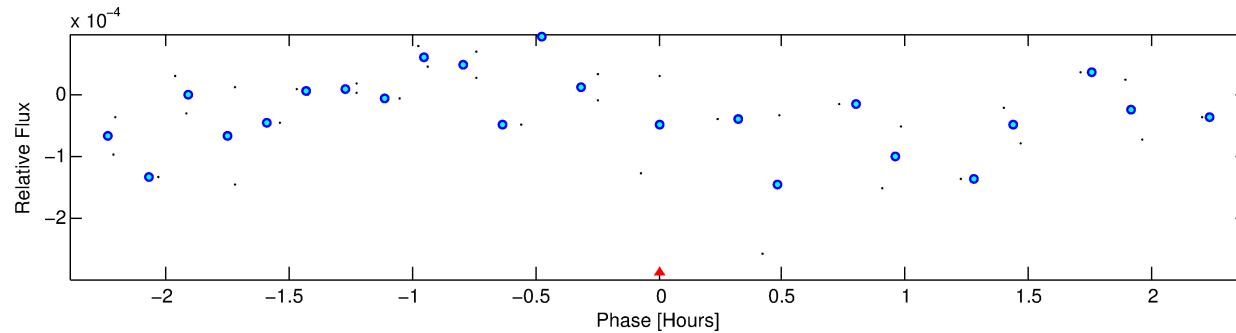
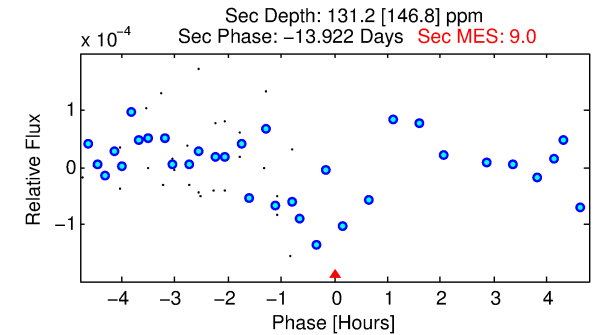
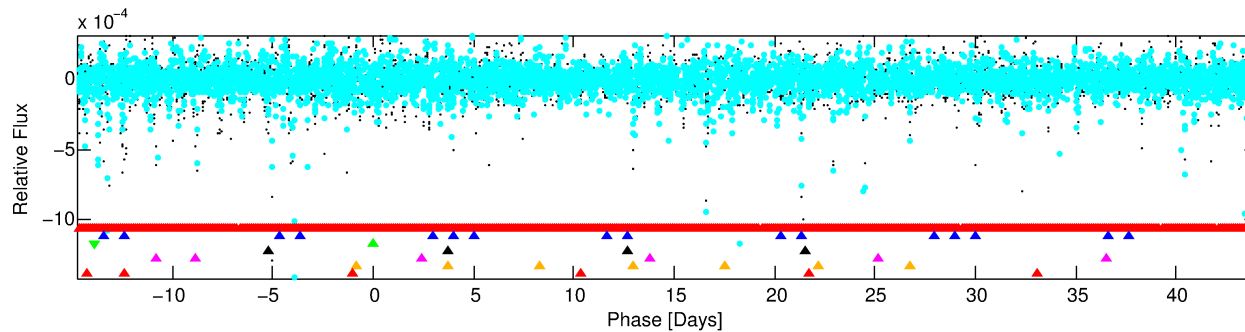
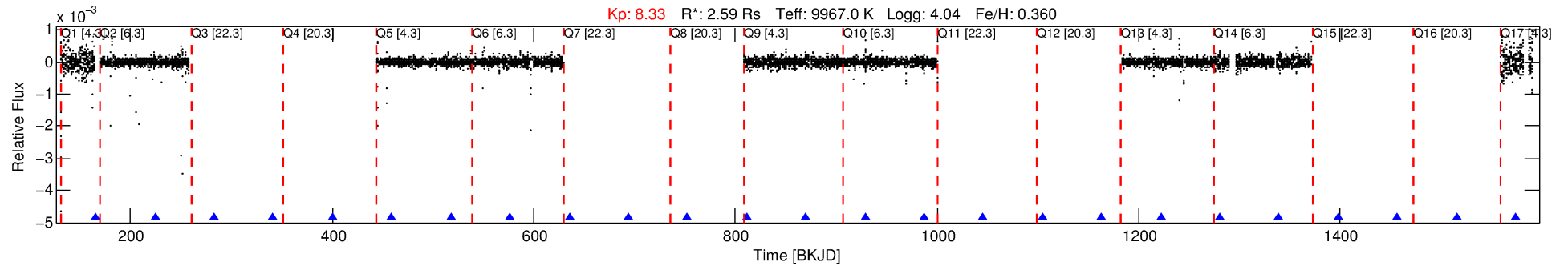
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 003629496-03

No Significant Match Found

DV One-Page Summary

KIC: 3629496 Candidate: 3 of 7 Period: 58.675 d



TPS TCE Results:

Period = 58.67494 d
Epoch = 166.0778 BKJD

DV fit results are unavailable

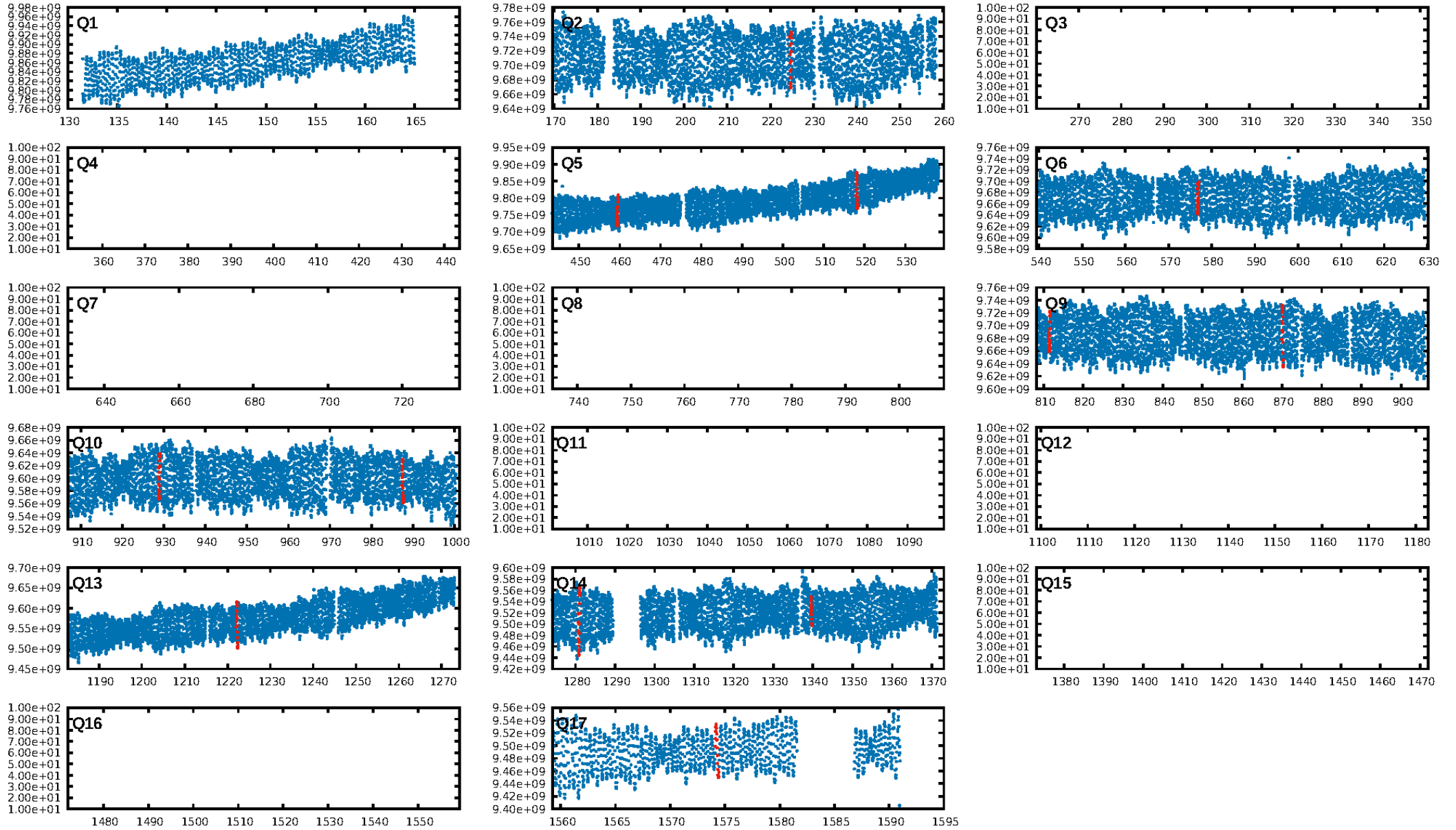
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [174.67σ]
LongPeriod-sig: 100.0% [105.36σ]
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [5/5]
GhostDiagnostic-chr: N/A
Centroid-sig: N/A
Centroid-so: 1.870 arcsec [3.62σ]
OotOffset-rm: 2.834 arcsec [2.77σ]
KicOffset-rm: 5.054 arcsec [2.89σ]
OotOffset-st: 4/0/0/4 [8]
KicOffset-st: 4/0/0/4 [8]
DiffImageQuality-fgm: 0.00 [0/8]
DiffImageOverlap-fno: 0.62 [5/8]

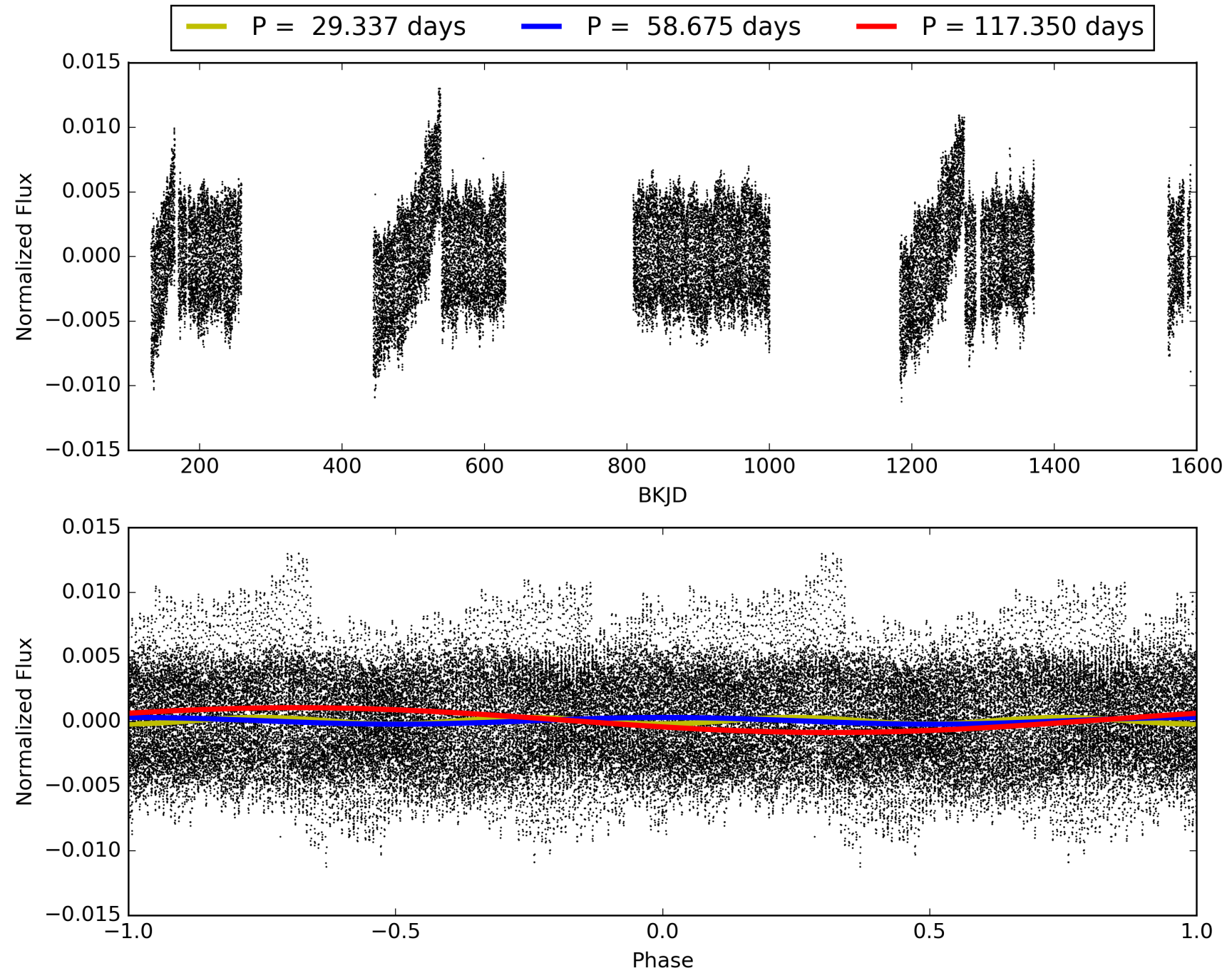
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 02-Feb-2016 01:32:27 Z

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

TCE 003629496-03, PDC Light Curves

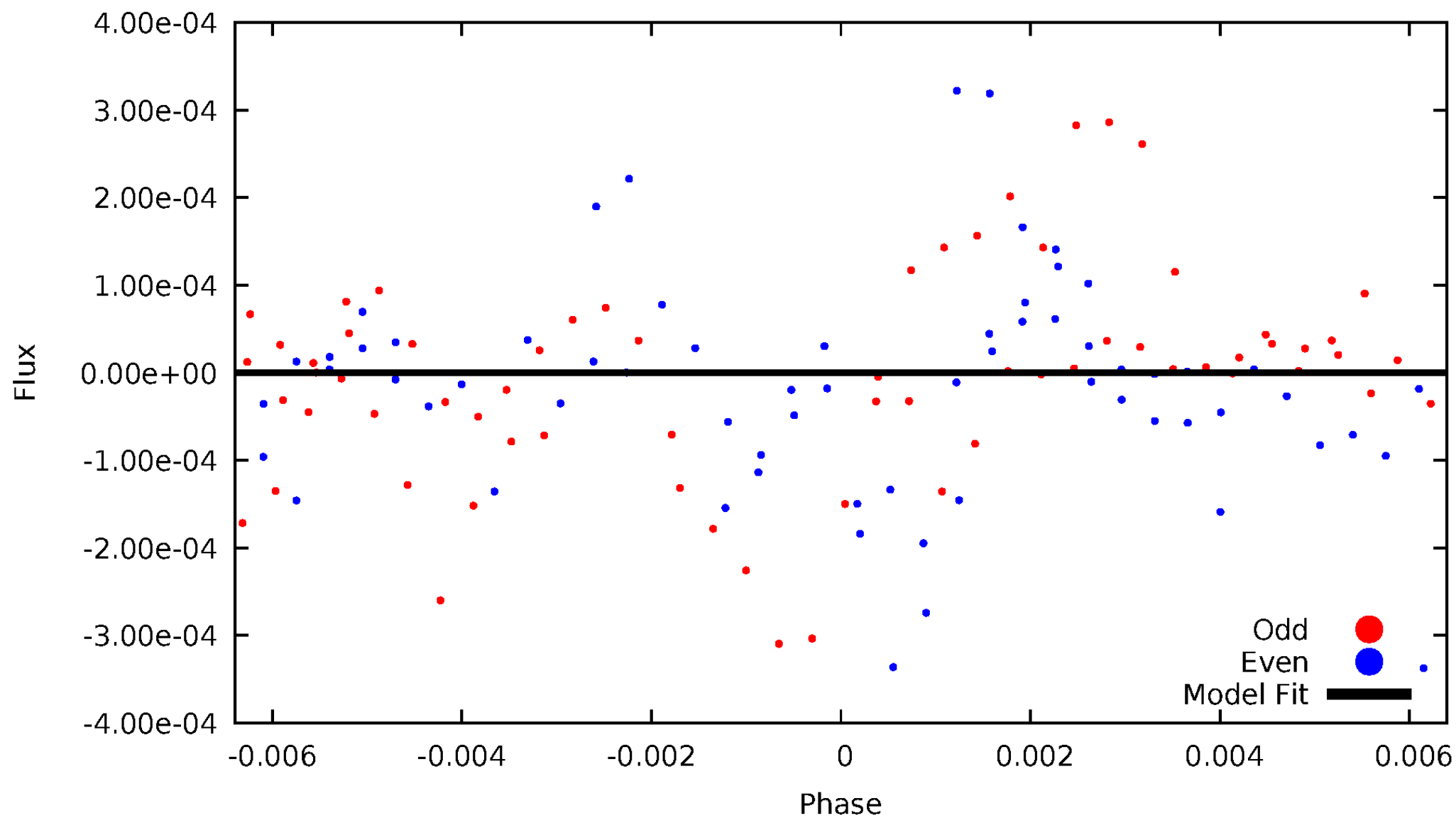


TCE 003629496-03



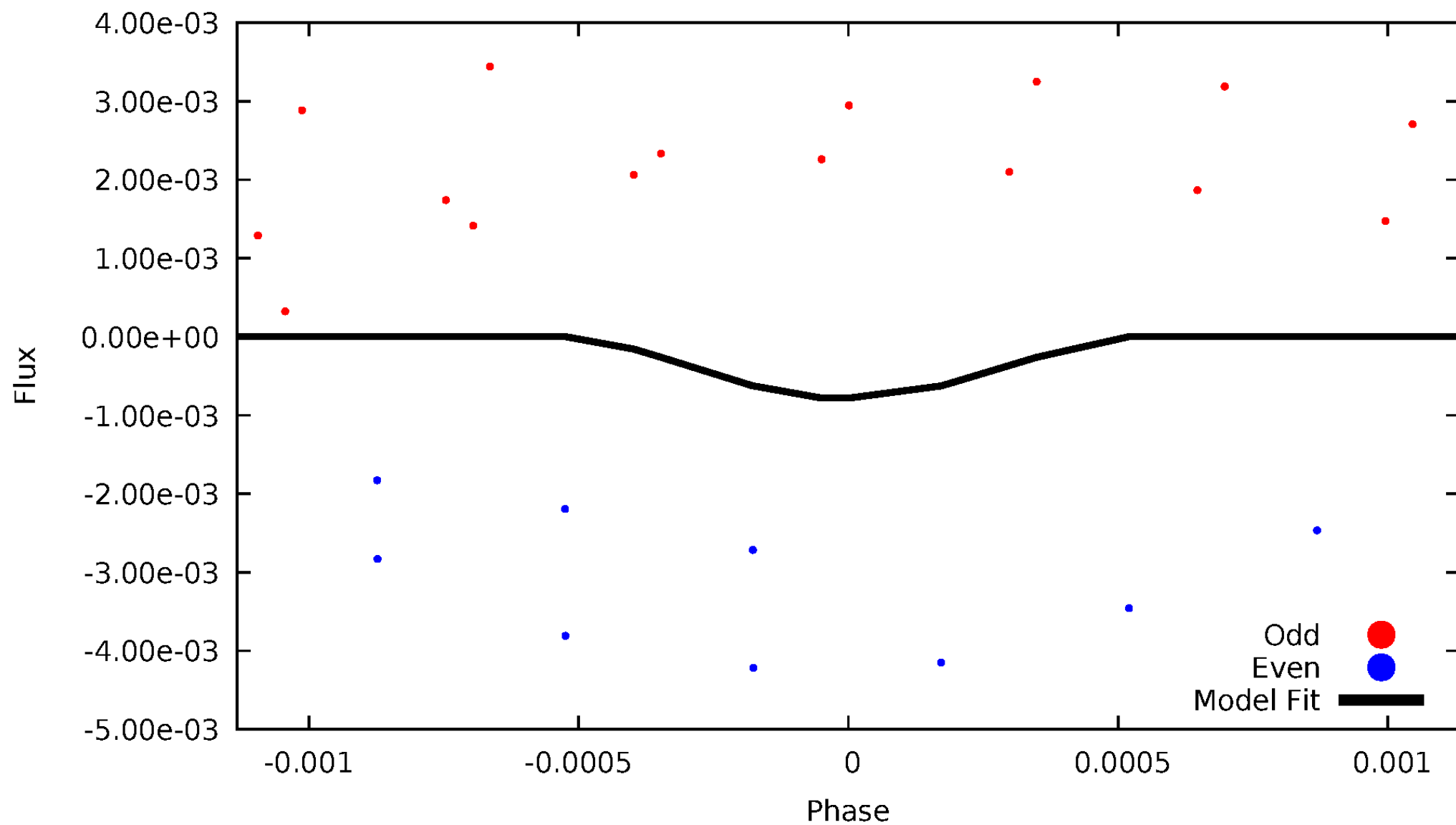
DV Odd/Even

TCE 003629496-03

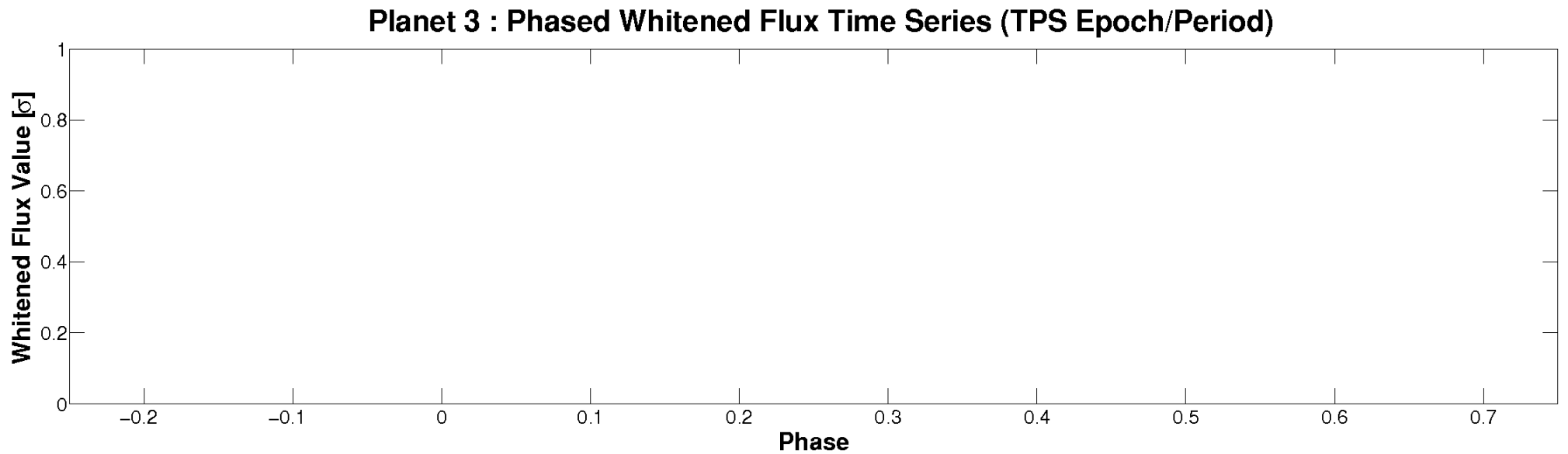
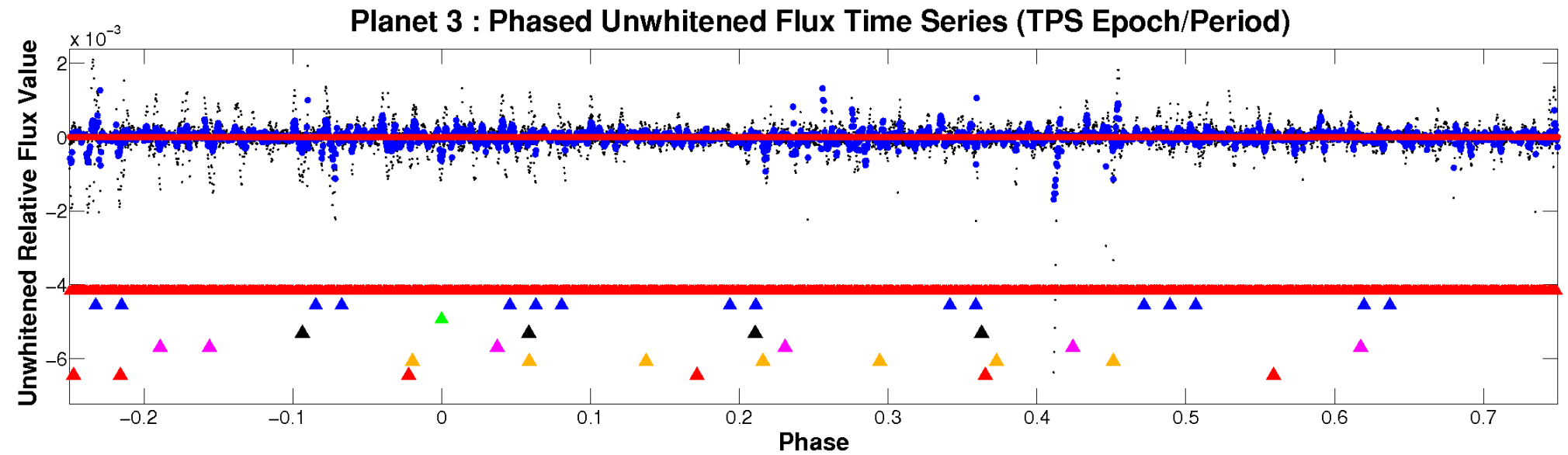


ALT Odd/Even

TCE 003629496-03

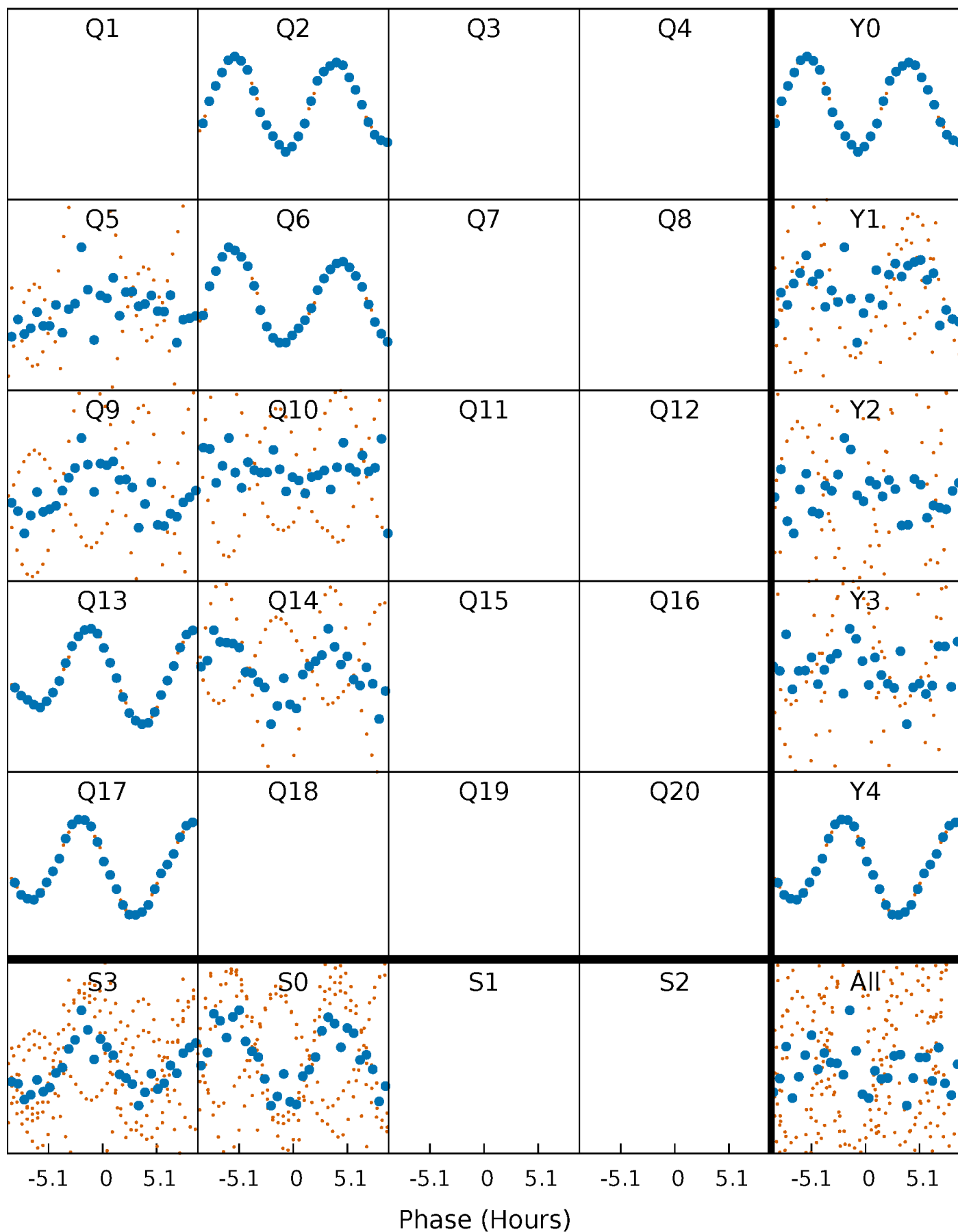


Non-Whitened Vs. Whitened Light Curve



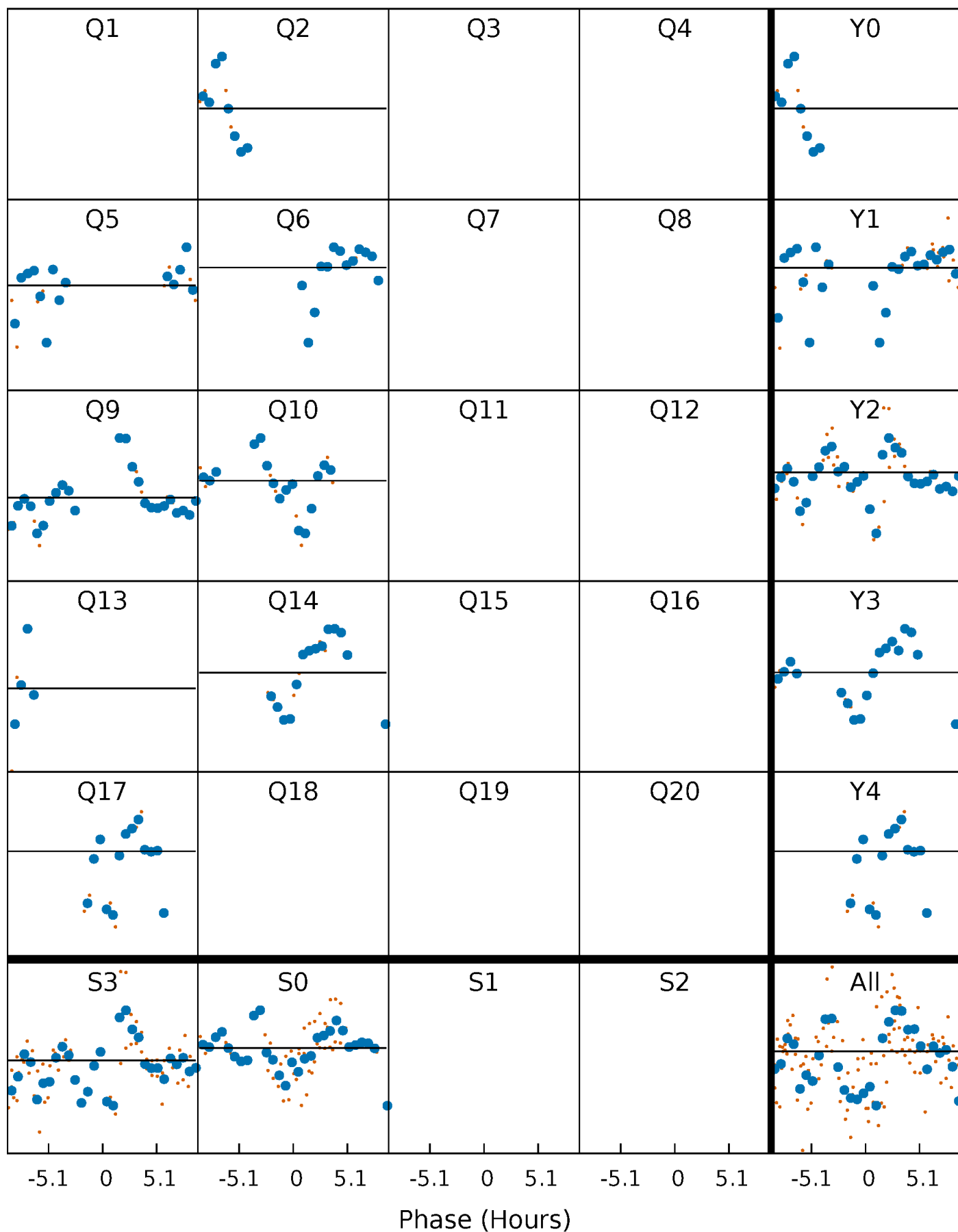
PDC Quarter-Phased Transit Curves

TCE 003629496-03 P= 58.674936 Days $T_0=166.077766$ (BKJD)



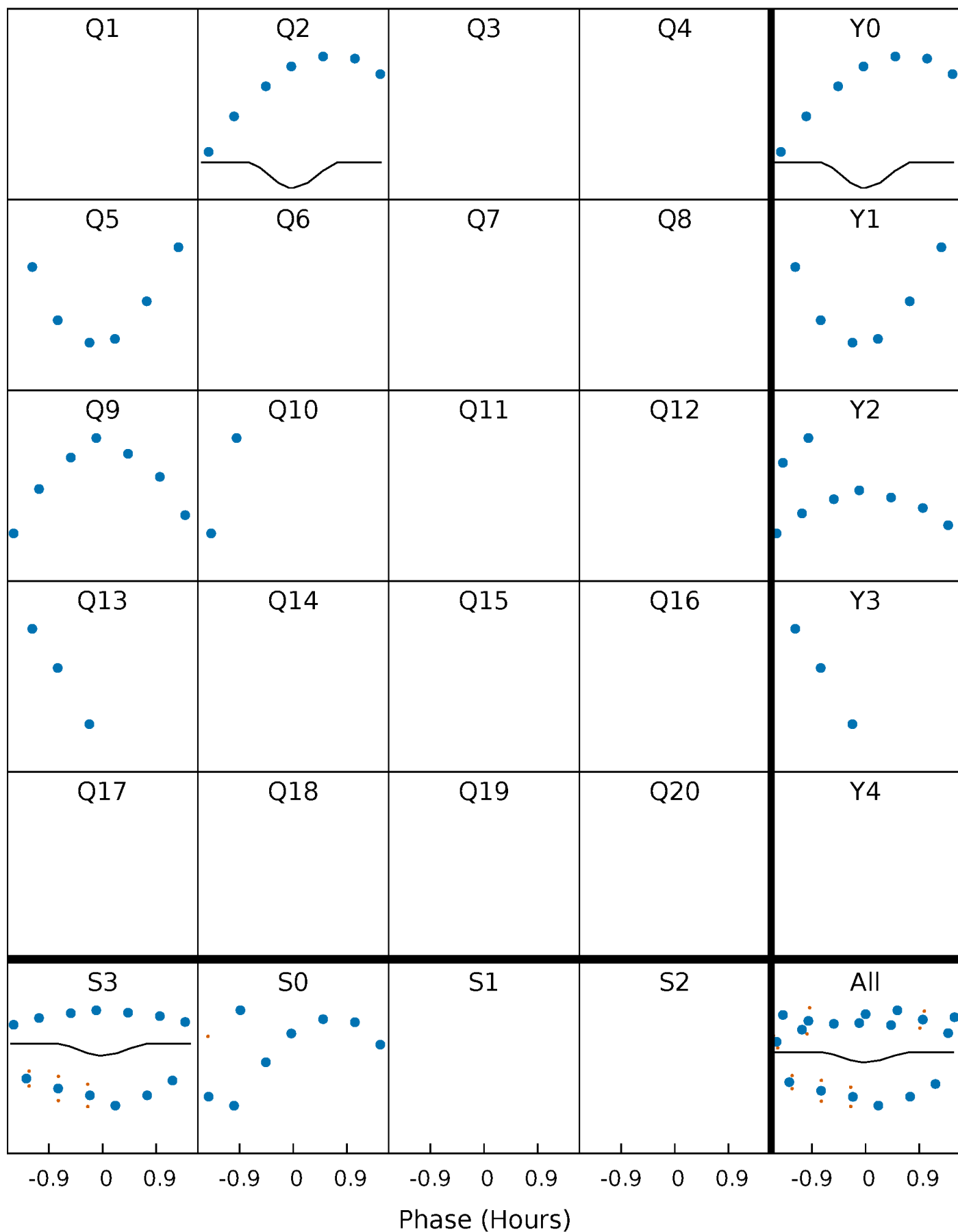
DV Quarter-Phased Transit Curves

TCE 003629496-03 $P = 58.674936$ Days $T_0 = 166.077766$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

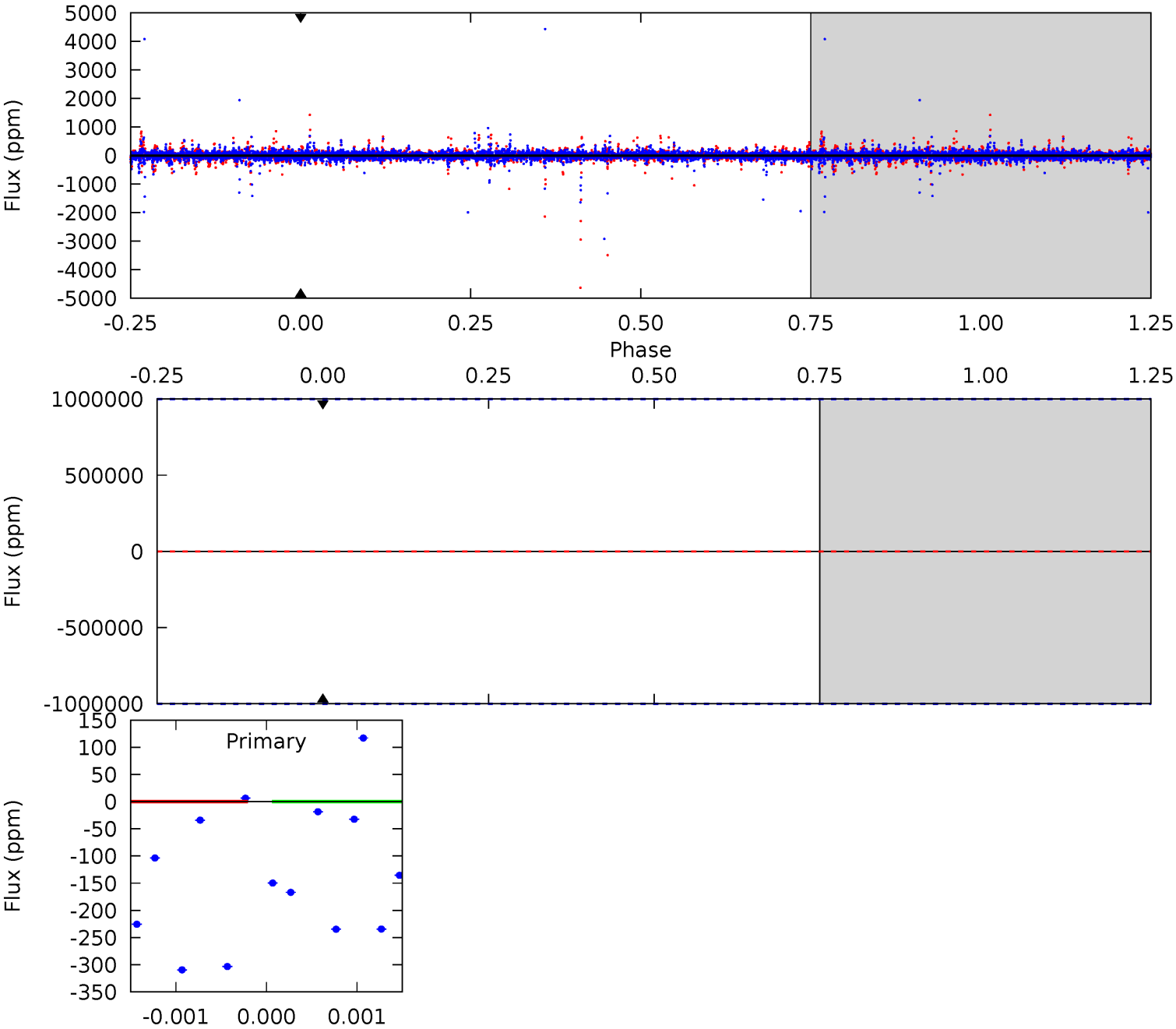
TCE 003629496-03 $P = 58.674936$ Days $T_0 = 165.812363$ (BKJD)



DV Model-Shift Uniqueness Test

003629496-03, P = 58.674936 Days, E = 107.402830 Days

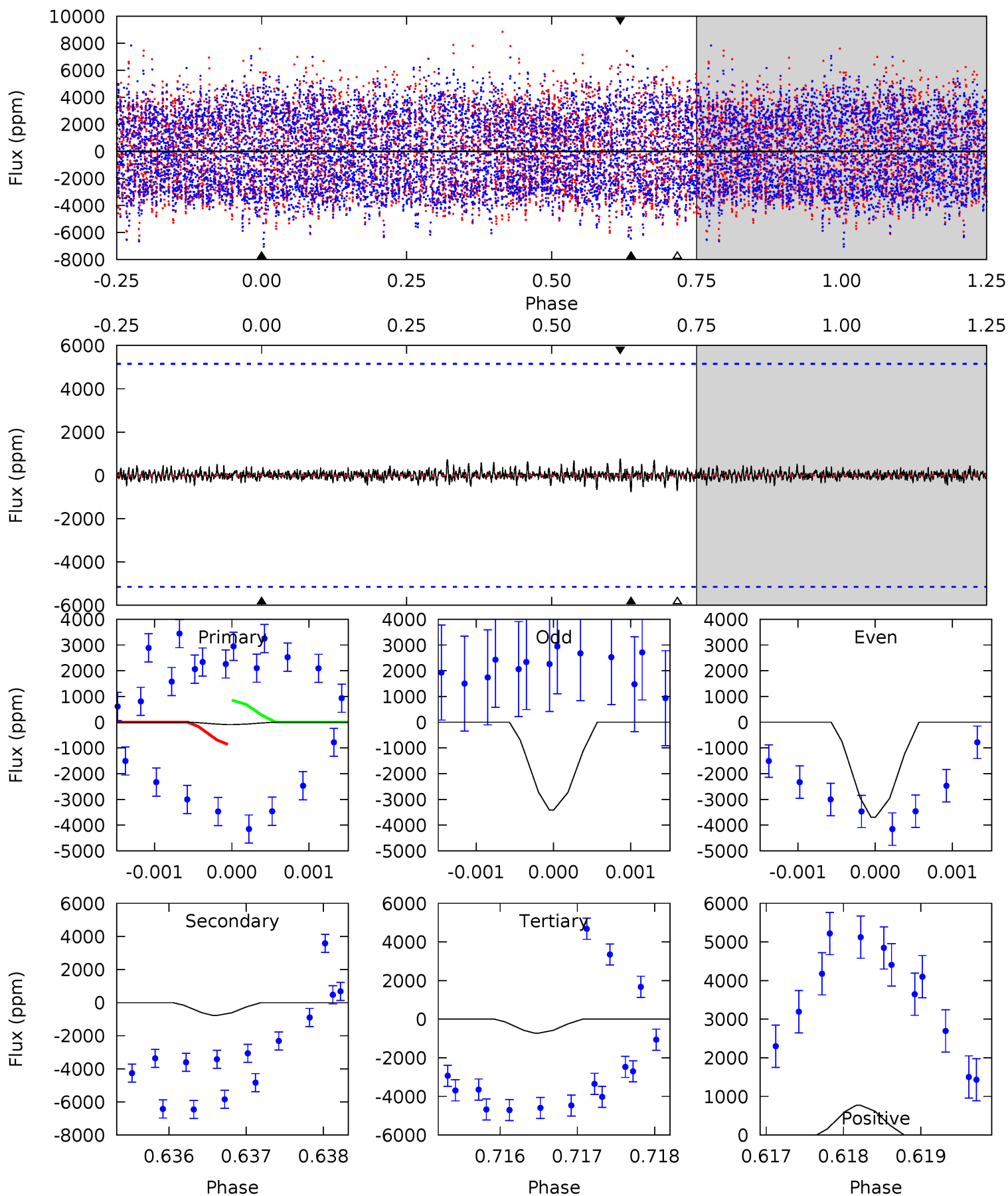
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
0	0	0	0	1.00	1.00	1.00	0	0	0	0	0	0	0	0



Alt Model-Shift Uniqueness Test

003629496-03, P = 58.674936 Days, E = 107.137427 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
0.10	0.82	0.77	0.82	5.47	3.31	0.16	-0.67	-0.72	0.05	0.00	0.15	0.18	0.50	0.00



Stellar Parameters For KIC 003629496

	$T_{\text{eff}} (K)$	$\log(g)$	$[\text{Fe}/\text{H}]$	$R (R_{\odot})$	$M (M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	9967^{+280}_{-385}	$4.045^{+0.094}_{-0.175}$	$0.360^{+0.050}_{-0.250}$	$2.587^{+0.659}_{-0.384}$	$2.707^{+0.273}_{-0.273}$	$0.220^{+0.110}_{-0.100}$
	+3%/-4%	+2%/-4%	+14%/-69%	+25%/-15%	+10%/-10%	+50%/-45%
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 003629496-03 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	0 ± 1000000	$20.76^{+22.15}_{-14.54}$	1551^{+103}_{-88}	-5877^{+88616}_{-88189}	$-187.706^{+41918.426}_{-44772.408}$
Alt.	-773 ± 943	$22.97^{+21.57}_{-15.34}$	1557^{+102}_{-84}	5023^{+4642}_{-8841}	90^{+927}_{-113}

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

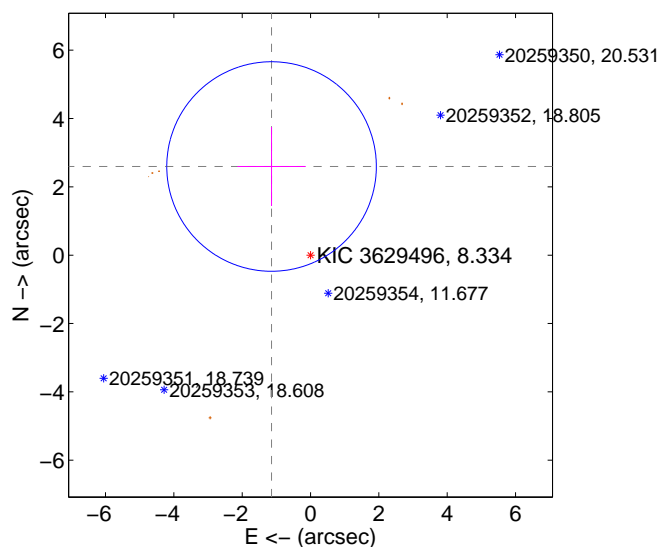
Supplemental centroid analysis for 003629496-03. **Kepler magnitude: 8.33.** Transit SNR -1.00

There are 0 quarters with good PRF difference image offsets

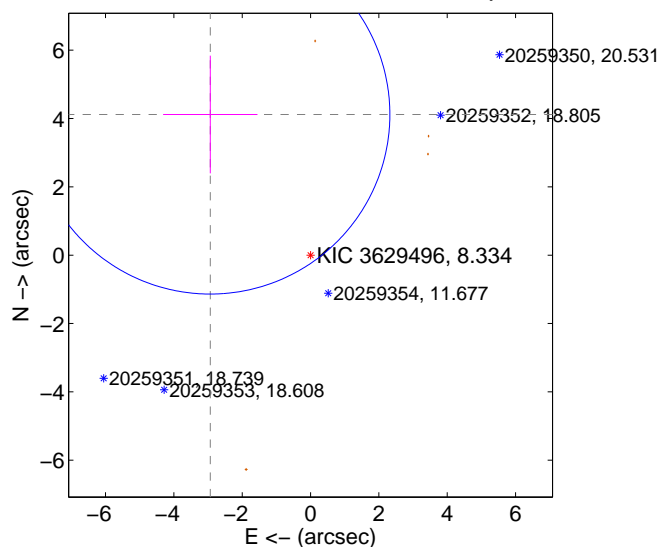
The OOT PRF centroid is offset from the target star catalog position by about 4.57 arcsec so the offset from difference PRF-fit to OOT-fit may be invalid.

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	2.834 ± 1.022	2.77	1.140 ± 0.998	2.594 ± 1.155
PRF-fit source offset from KIC position	5.054 ± 1.751	2.89	2.933 ± 1.380	4.116 ± 1.723
photometric centroid source offset	1.87 ± 0.52	3.62	1.48 ± 0.56	1.14 ± 0.44

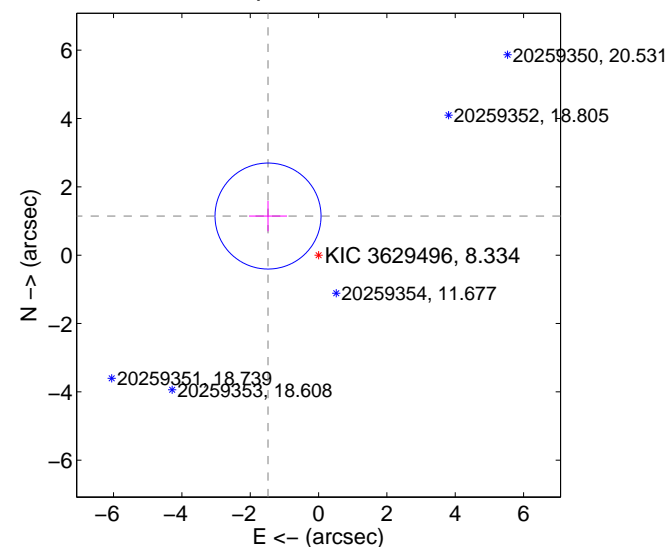
offset from difference PRF-fit to OOT PRF-fit



offset from difference PRF-fit to KIC position

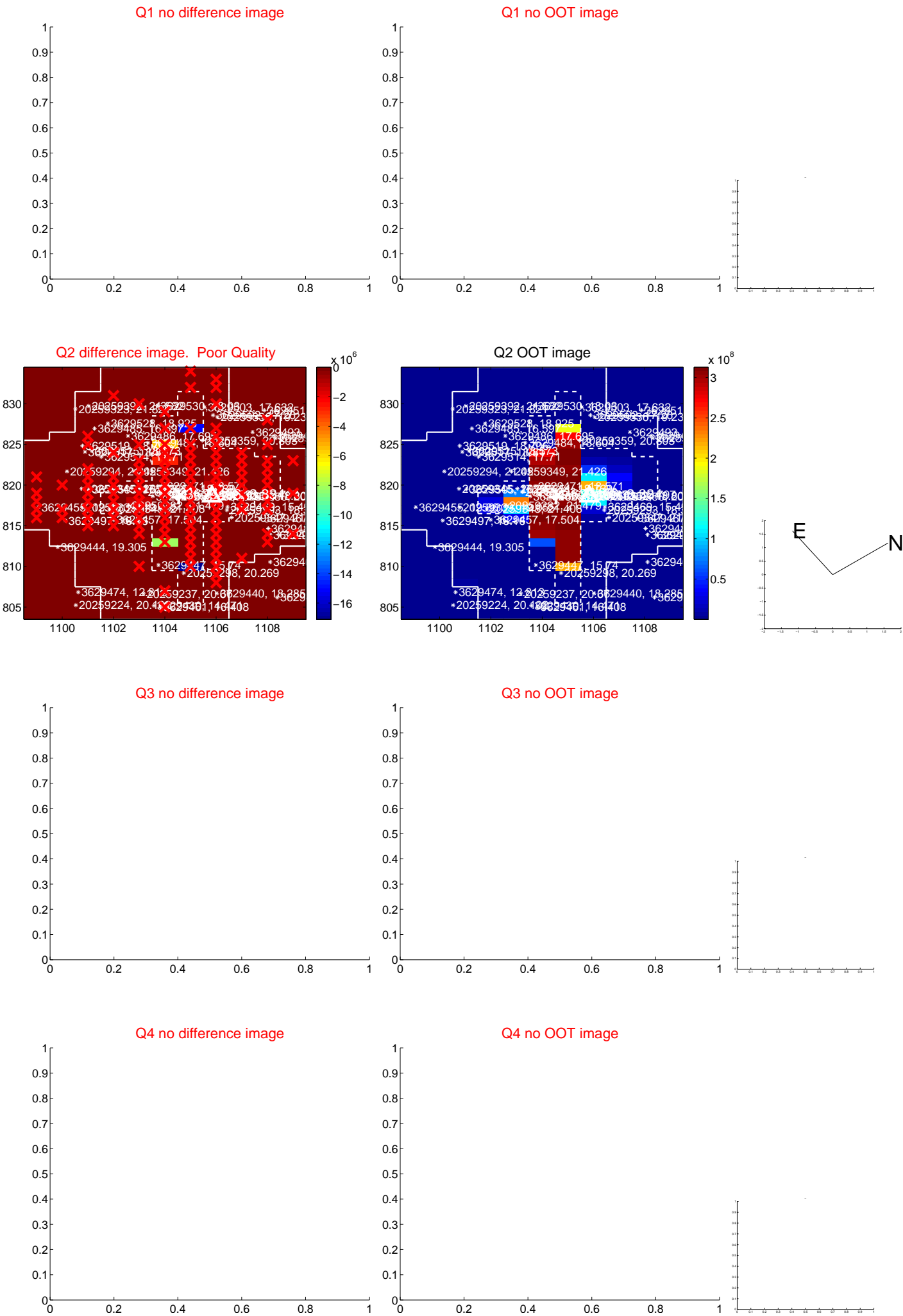


offset from photometric centroids

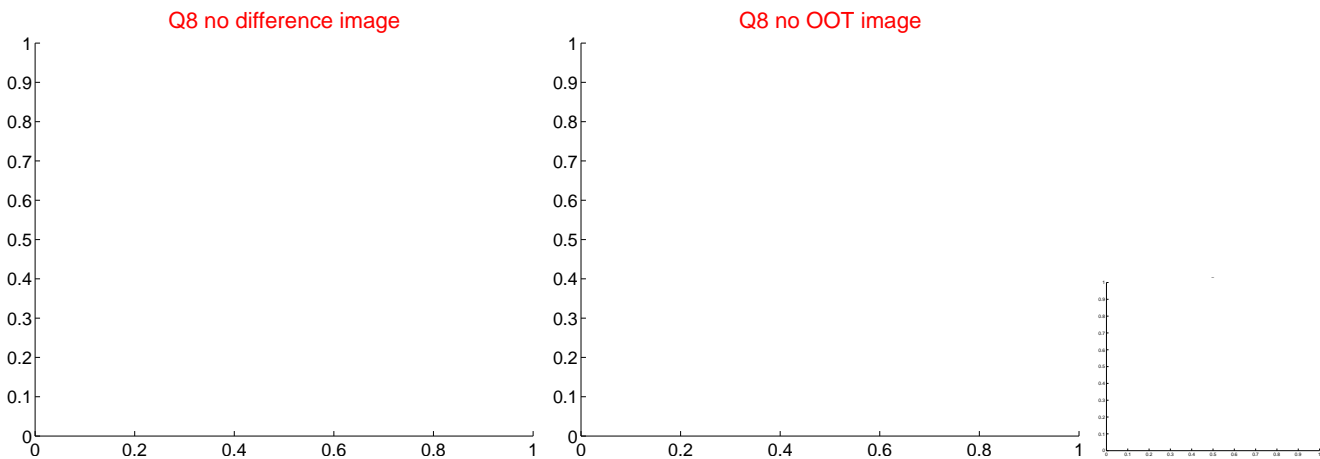
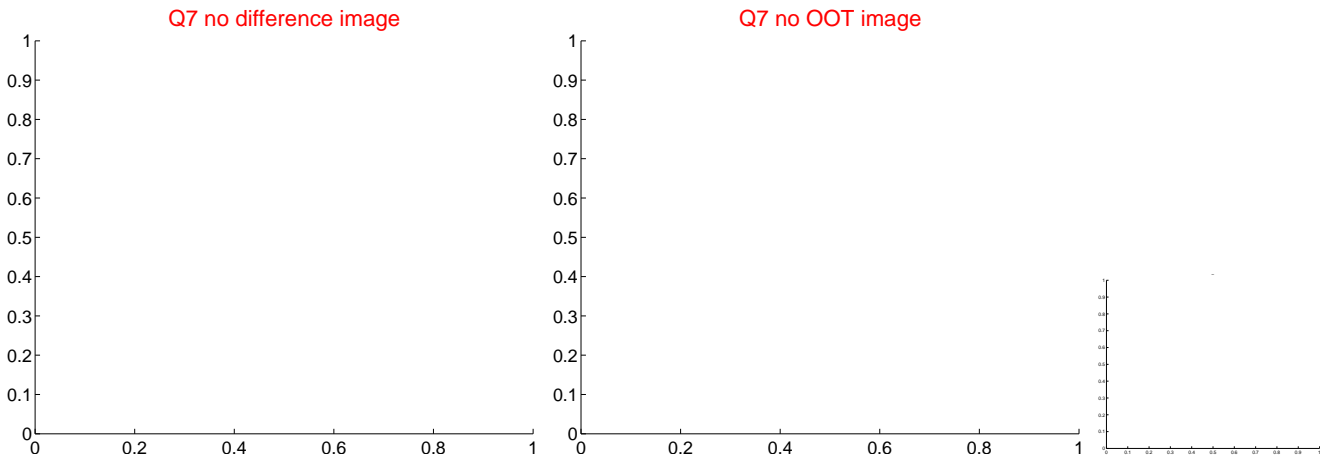
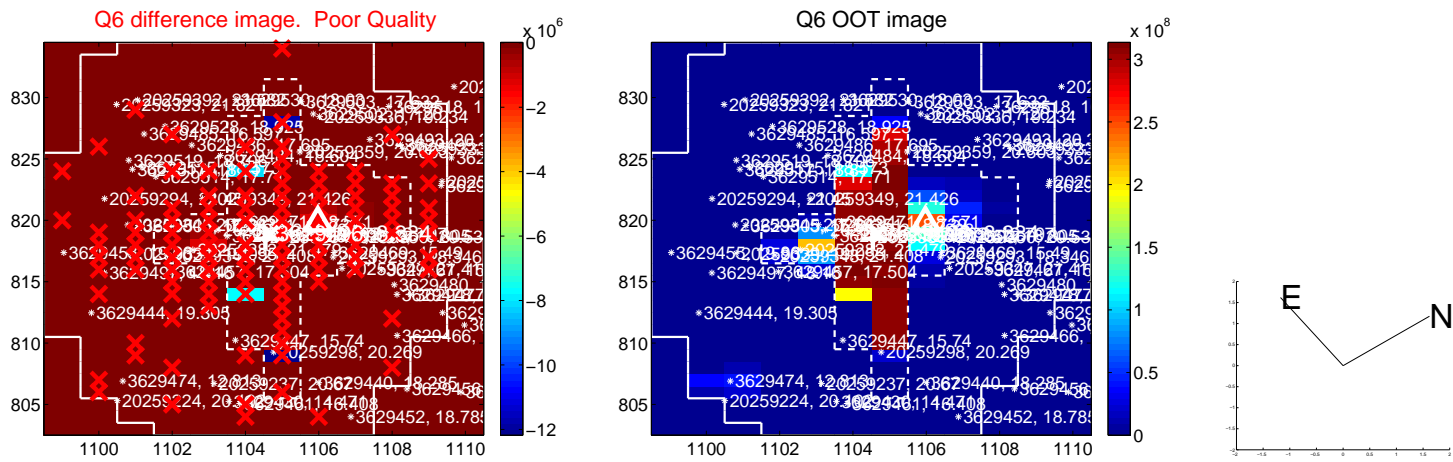
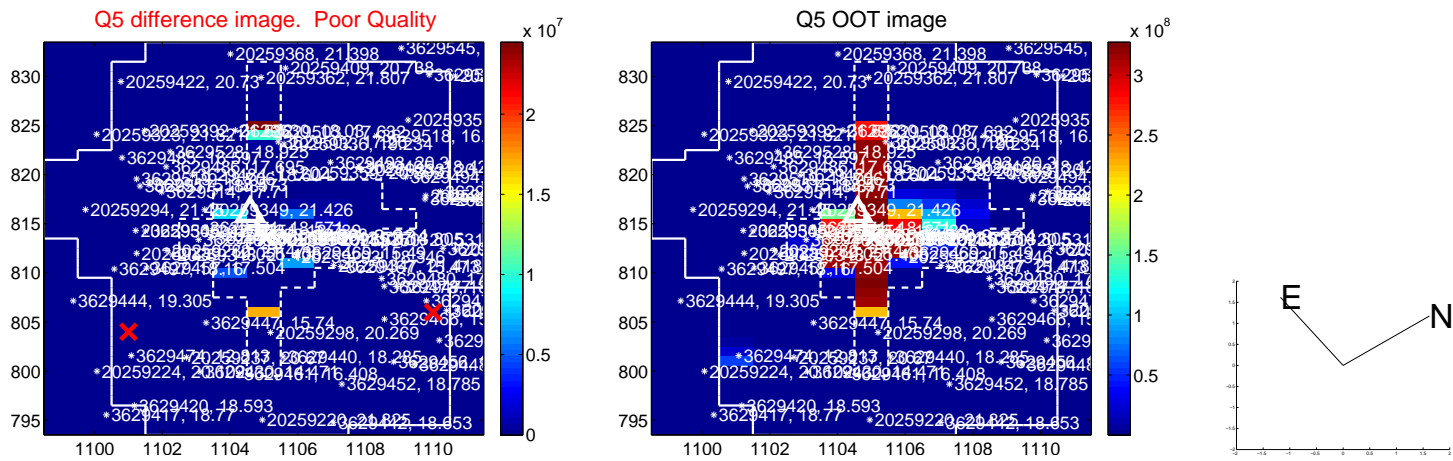


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets;** magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

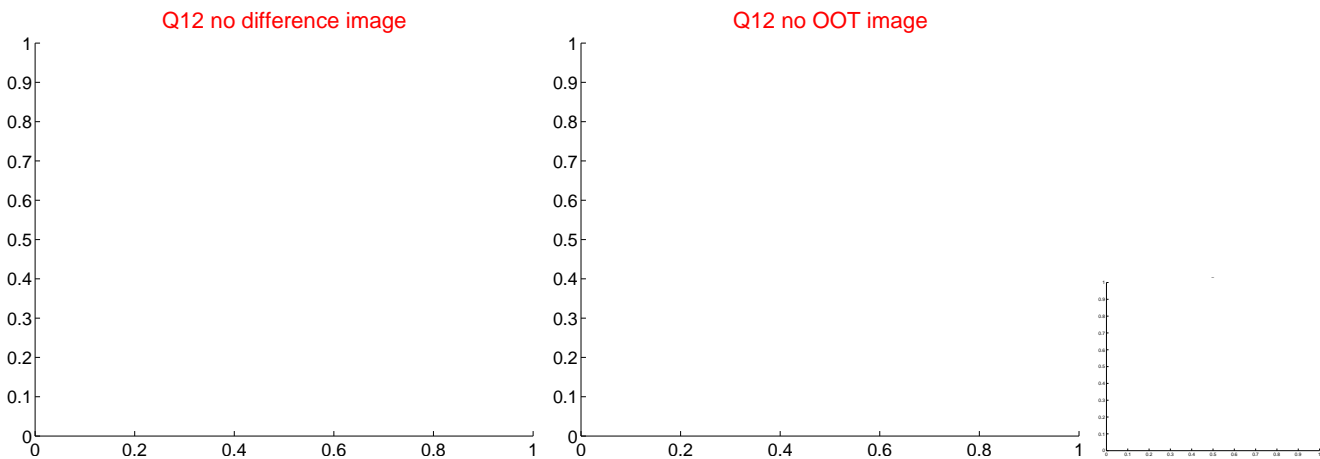
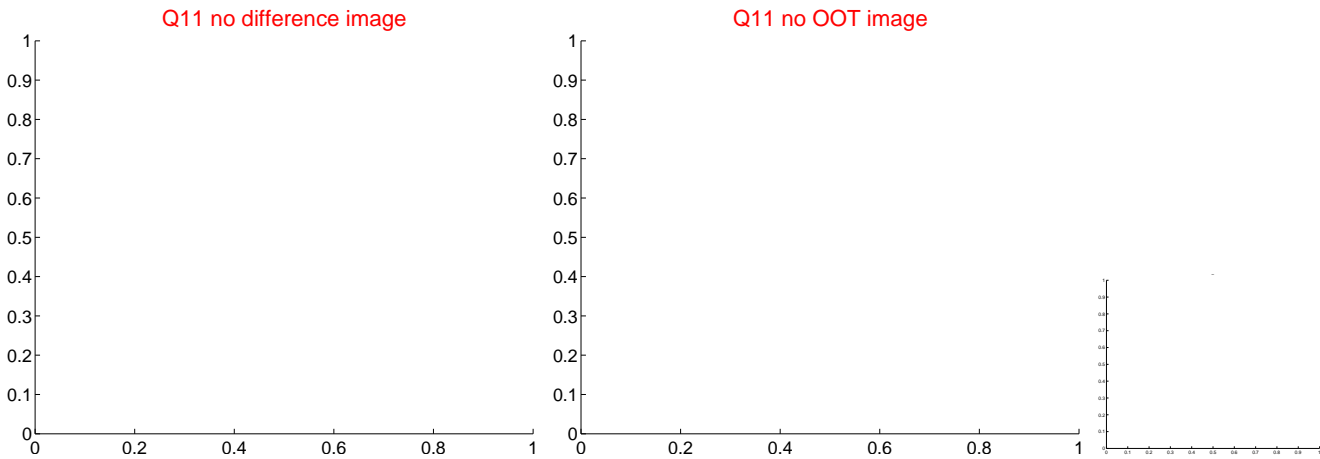
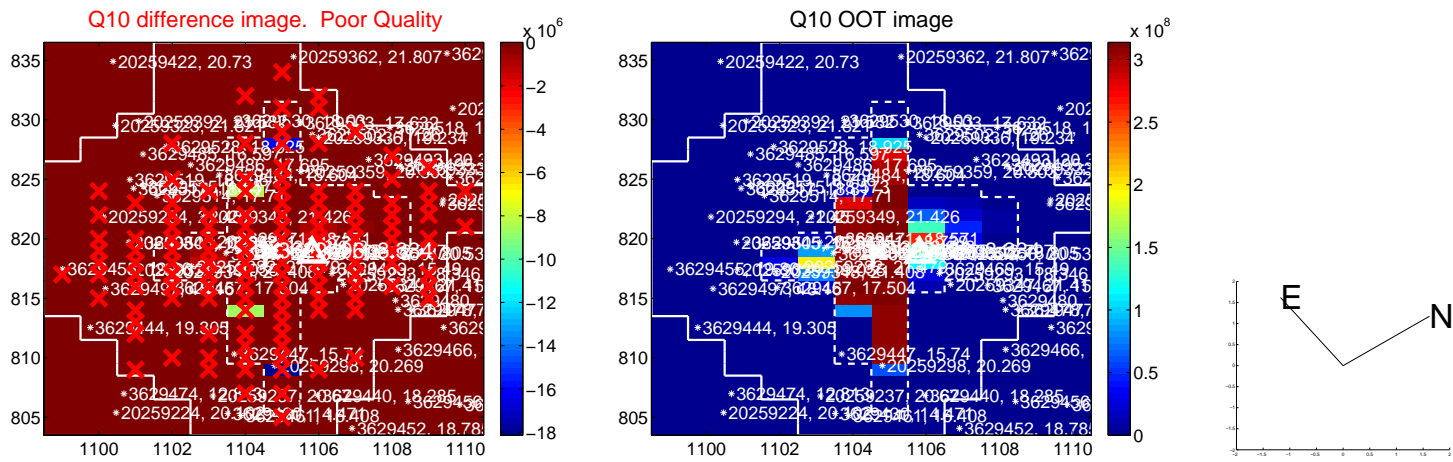
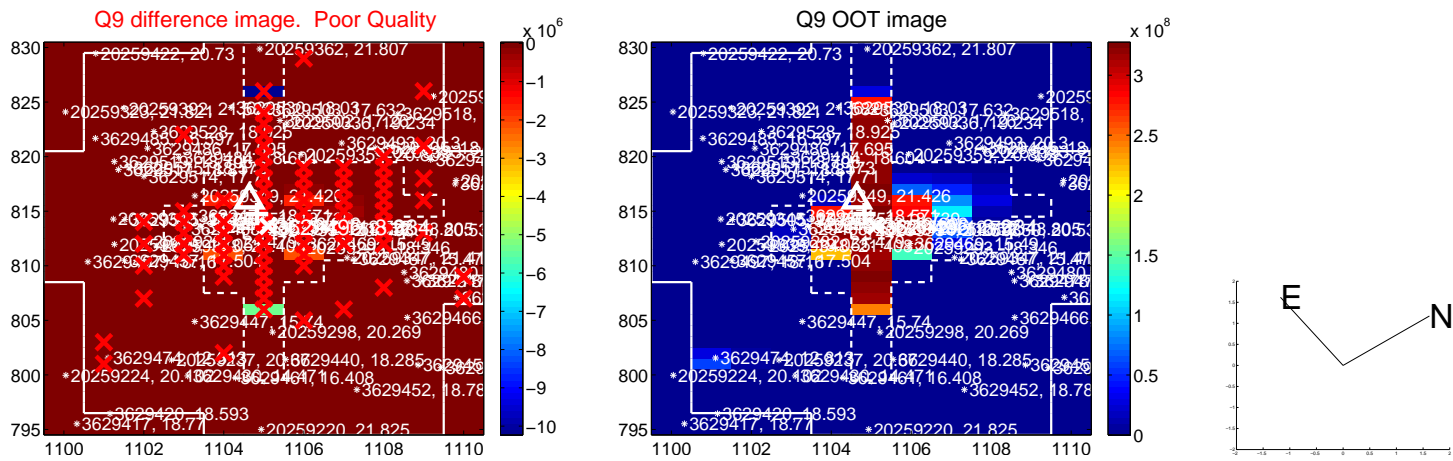
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



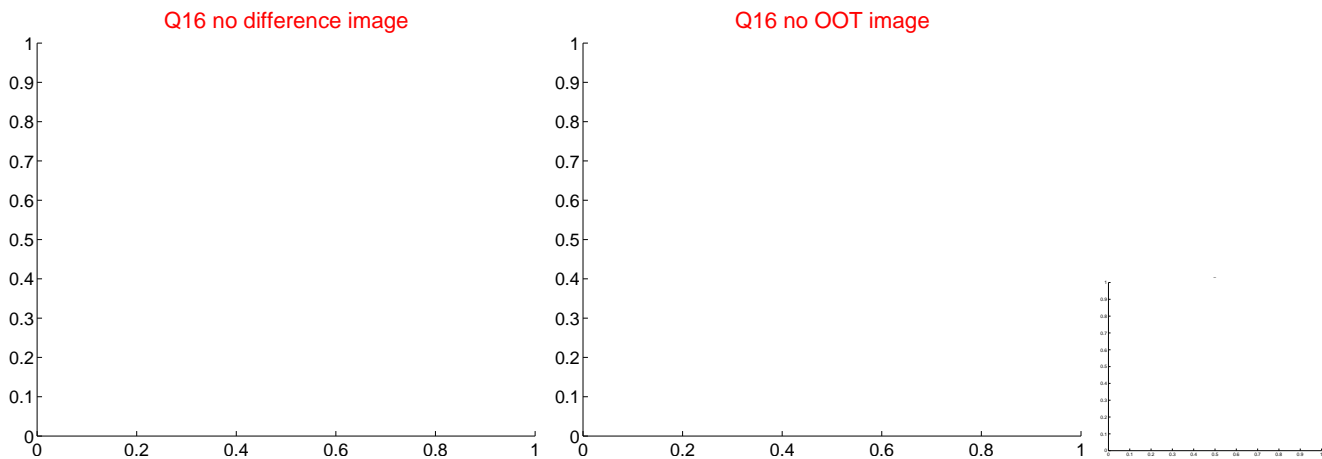
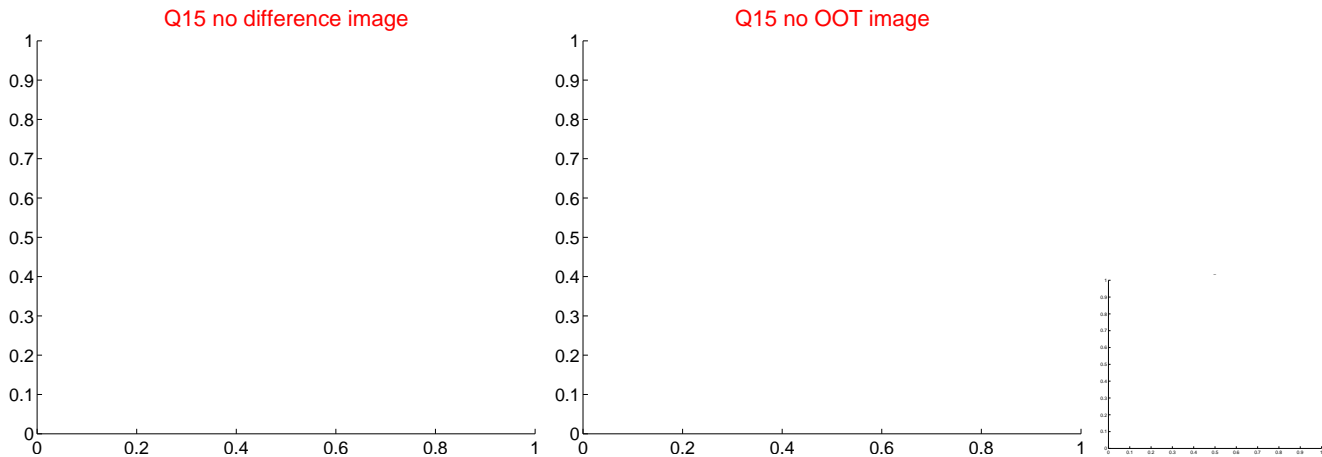
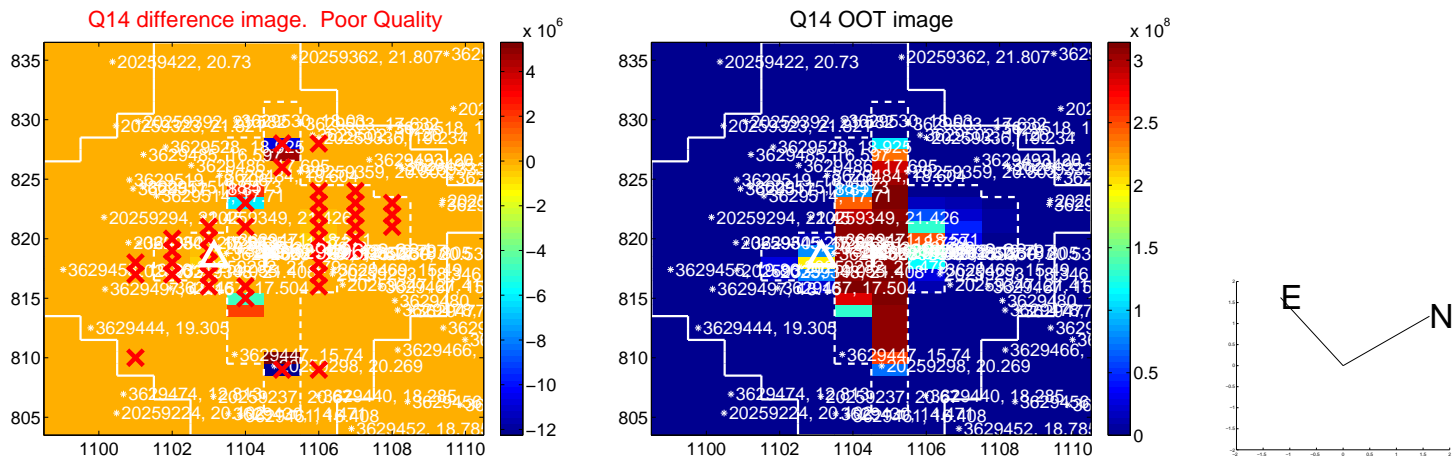
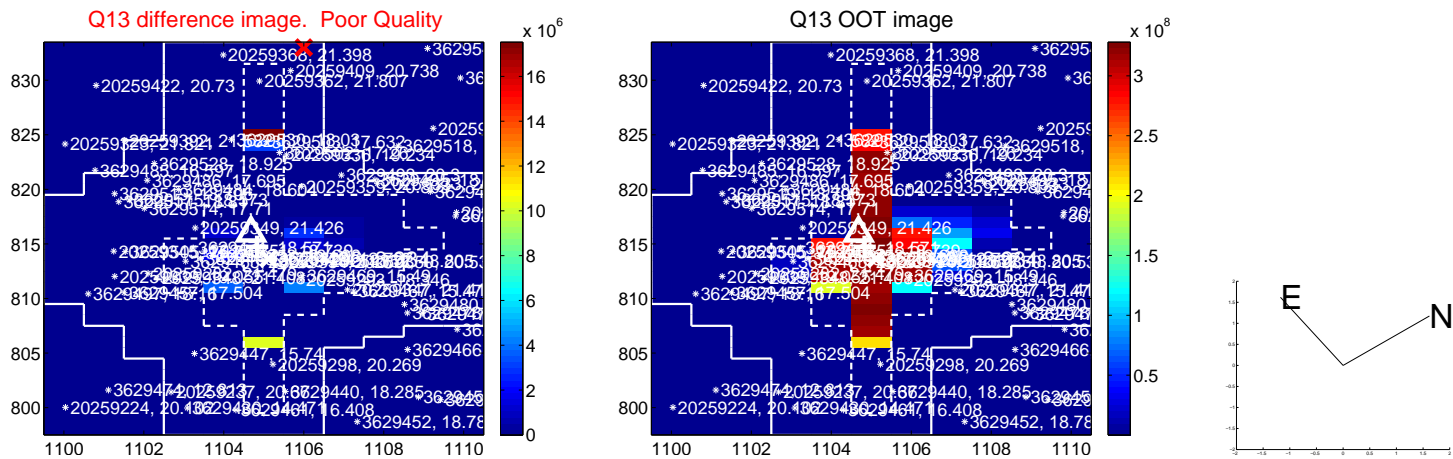
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



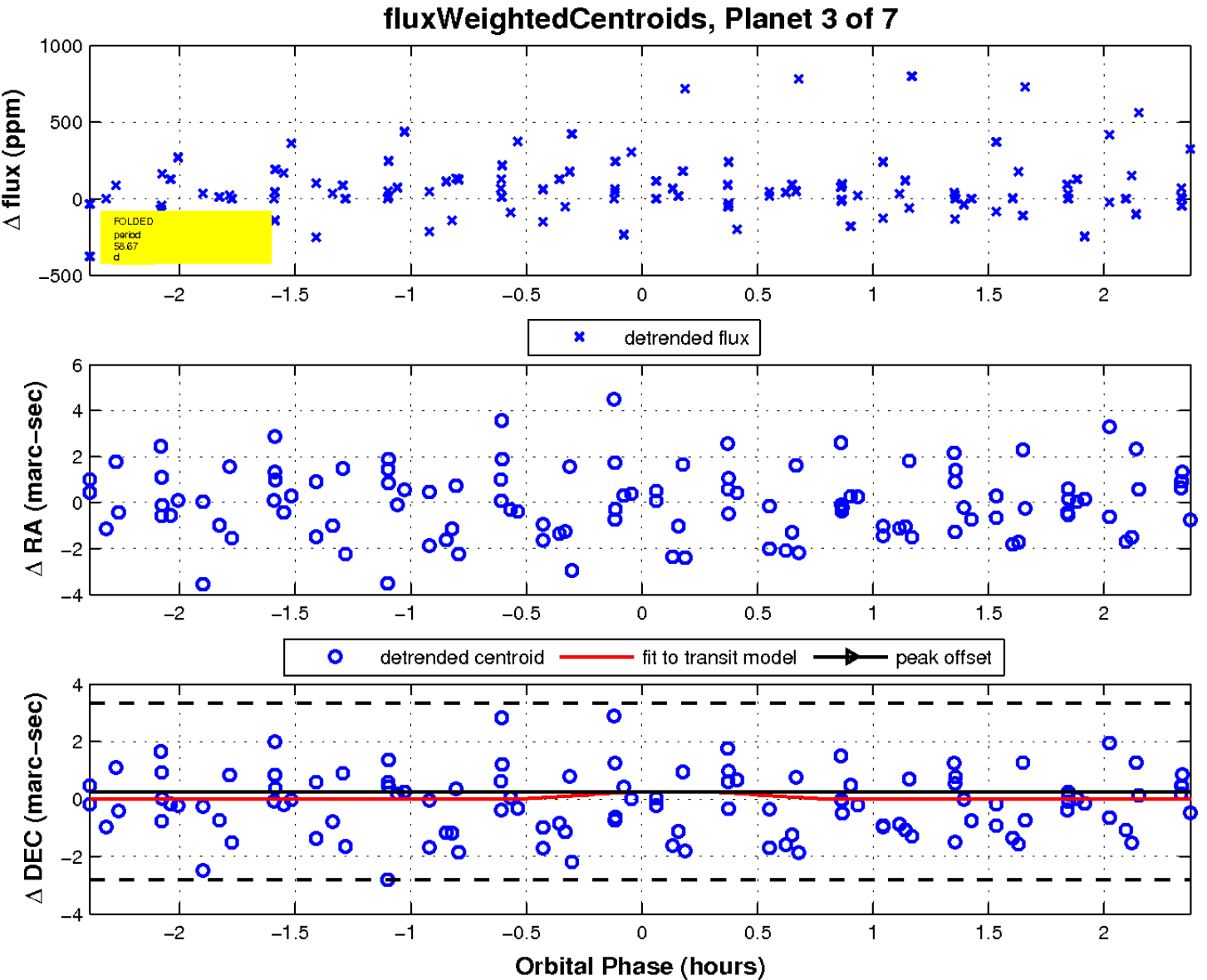
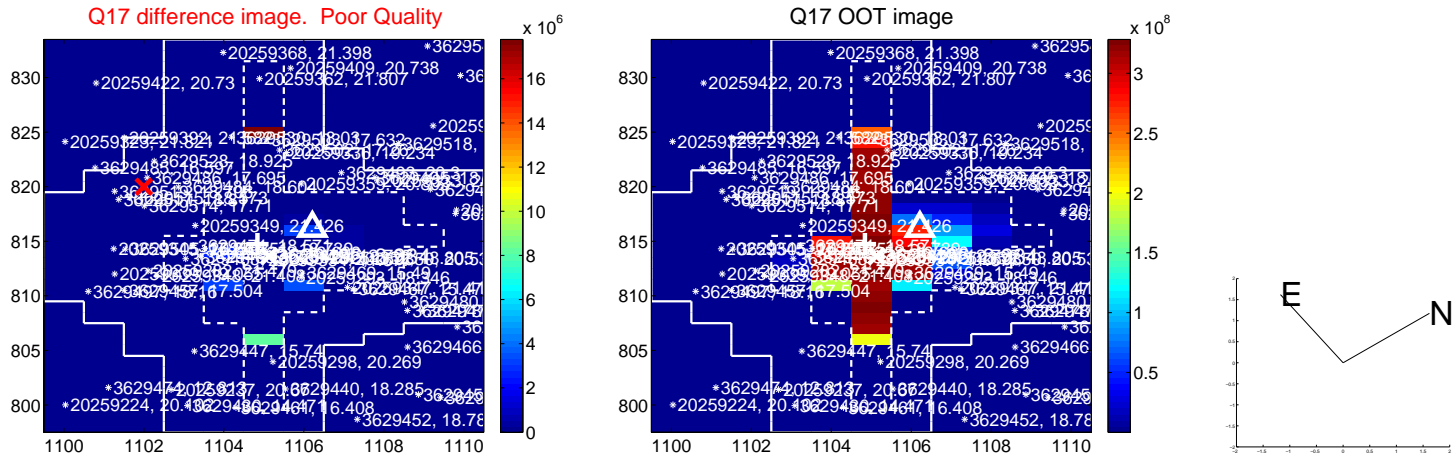
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



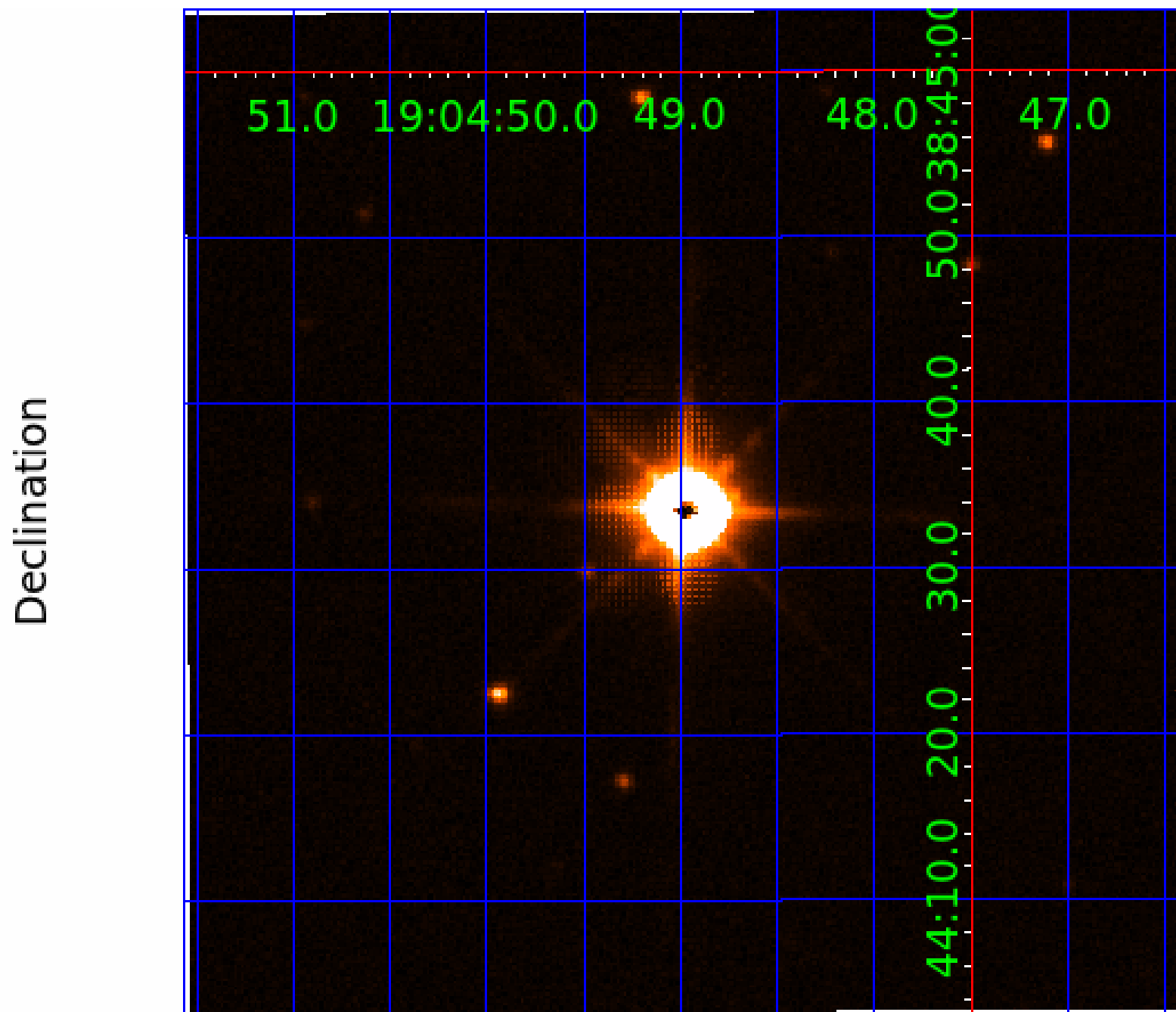
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



UKIRT Image



KIC 003629496

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})
003629496-01	OBS	No	1.159741	132.223875	18.6	6.497	20.4	7.1	2.59	9967	1.20	65243.17
003629496-02	OBS	No	92.349203	135.096359	907.3	6.212	14.8	15.4	2.59	9967	9.51	190.45
003629496-03	OBS	No	58.674936	166.077766	38.8	4.500	13.4	-1.0	2.59	9967	1.65	348.67
003629496-04	OBS	No	360.976046	160.588947	754.1	10.841	9.6	8.6	2.59	9967	10.47	30.93
003629496-05	OBS	No	282.028572	154.982651	657.4	3.606	10.0	8.5	2.59	9967	6.81	42.98
003629496-06	OBS	No	230.094834	133.885270	574.4	3.251	8.7	8.6	2.59	9967	6.63	56.38
003629496-07	OBS	No	282.008740	151.569591	1025.7	7.620	12.6	15.3	2.59	9967	9.87	42.99

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
003629496-01	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—CENT_SATURATED
003629496-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_ALT—INCONSISTENT_TRANS—CENT_SATURATED
003629496-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_SATURATED
003629496-04	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_TRACKER—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—INCONSISTENT_TRANS—CENT_SATURATED
003629496-05	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_CHASES—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_TER_DV—MOD_POS_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_SATURATED
003629496-06	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_CHASES—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_TER_DV—MOD_POS_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—INCONSISTENT_TRANS—CENT_SATURATED
003629496-07	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_CHASES—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—SAME_NTL_PERIOD—CENT_SATURATED

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

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

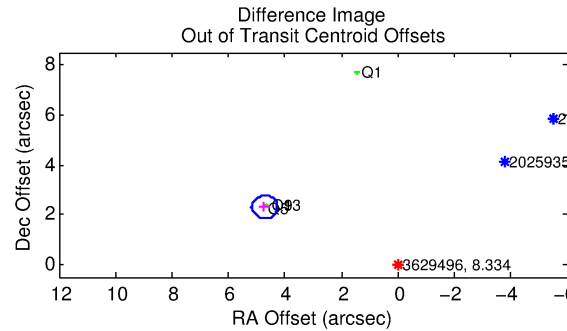
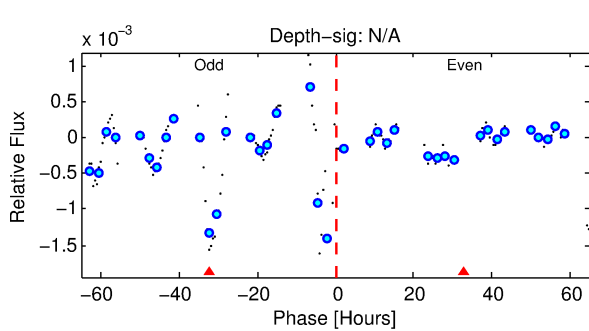
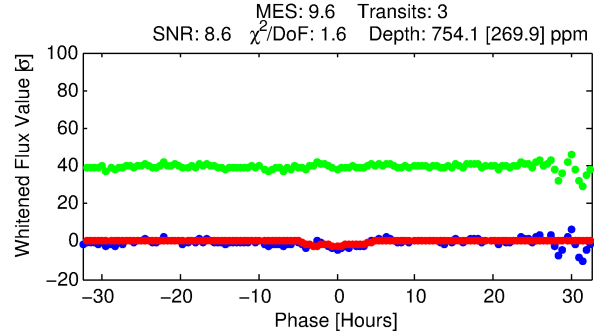
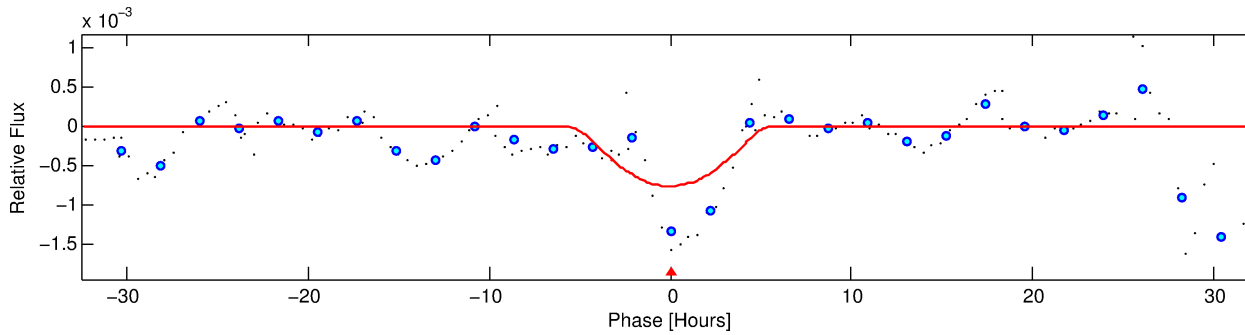
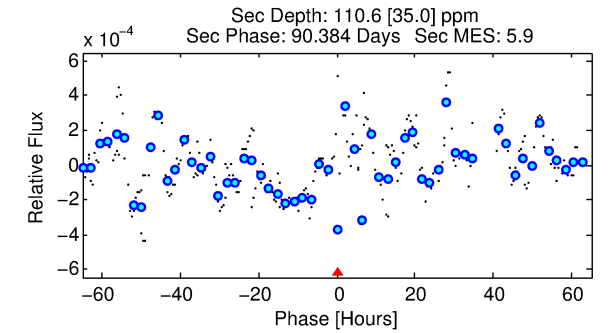
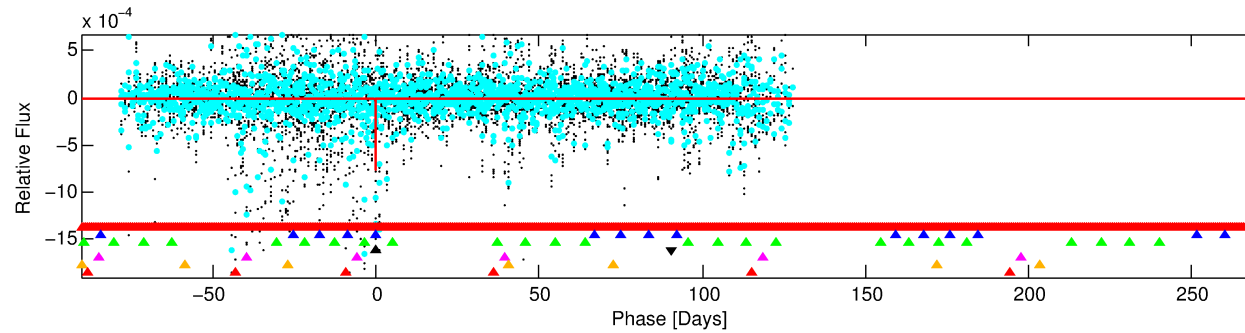
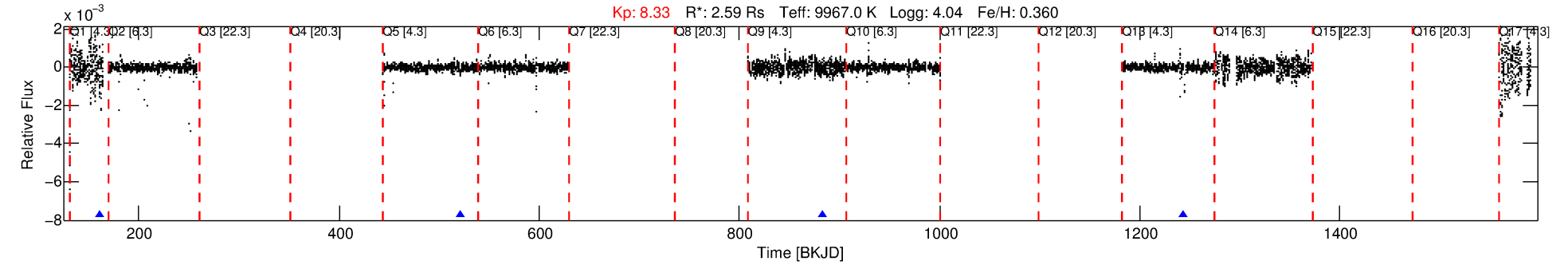
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 003629496-04

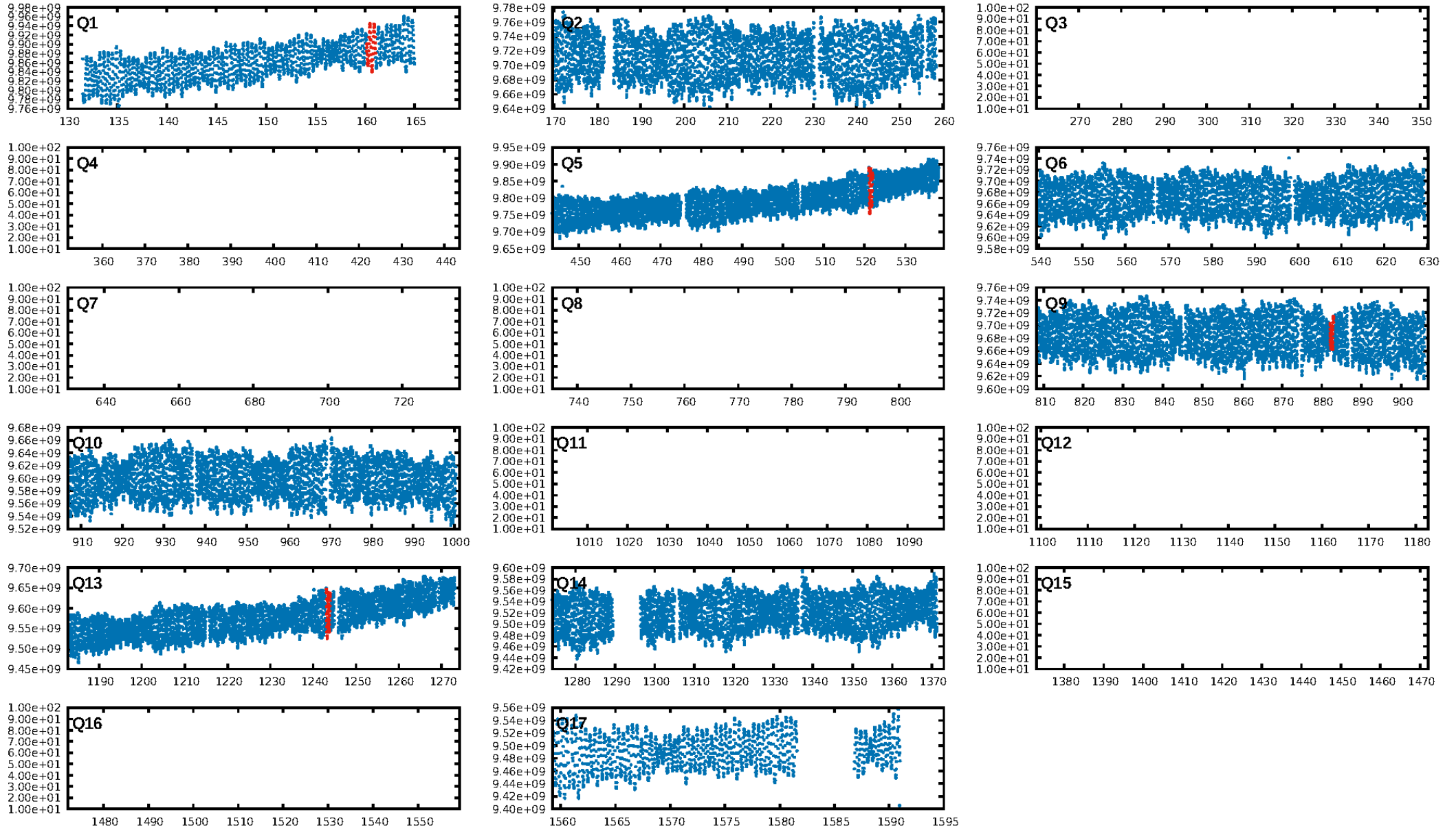
No Significant Match Found

DV One-Page Summary

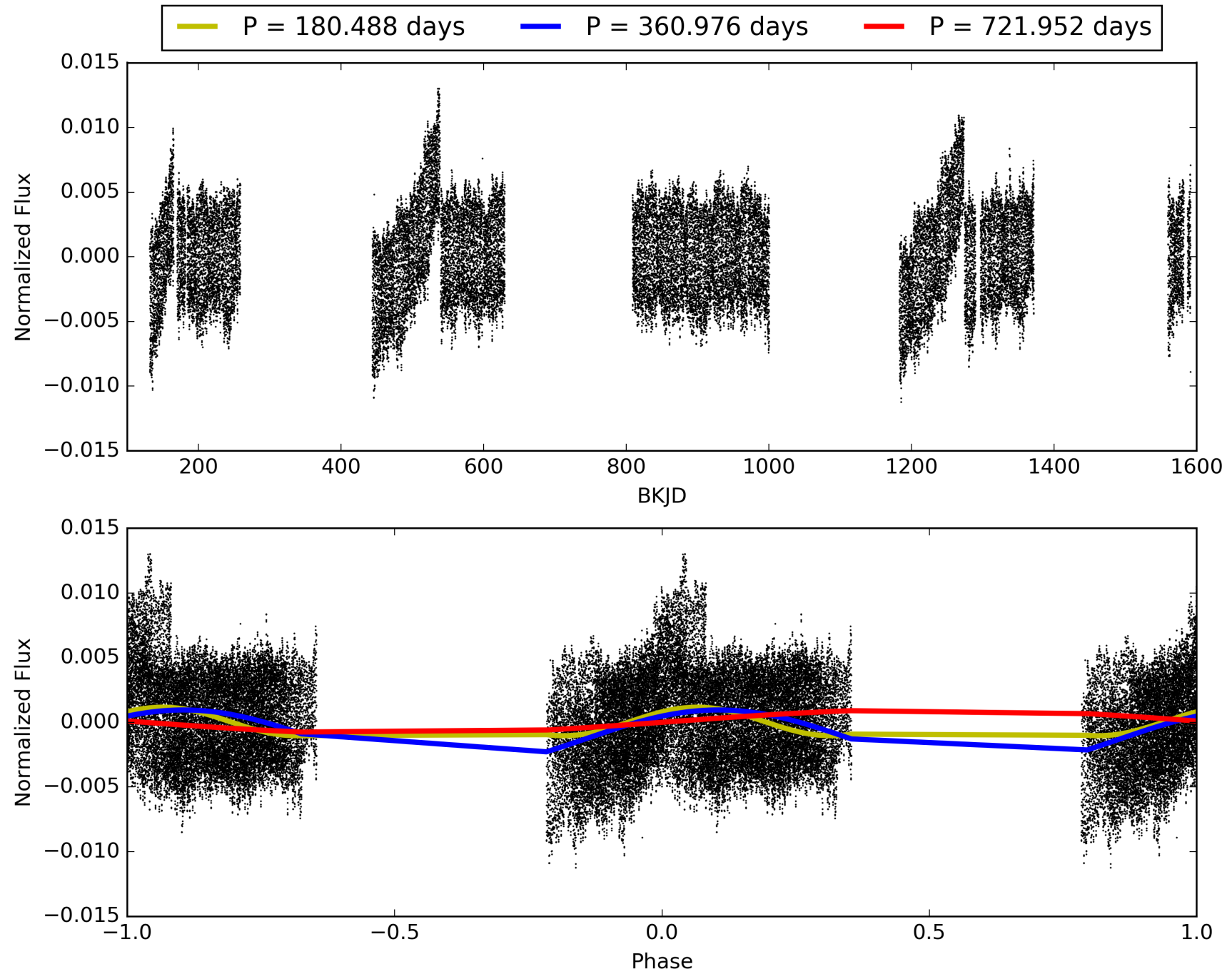
KIC: 3629496 Candidate: 4 of 7 Period: 360.976 d



TCE 003629496-04, PDC Light Curves

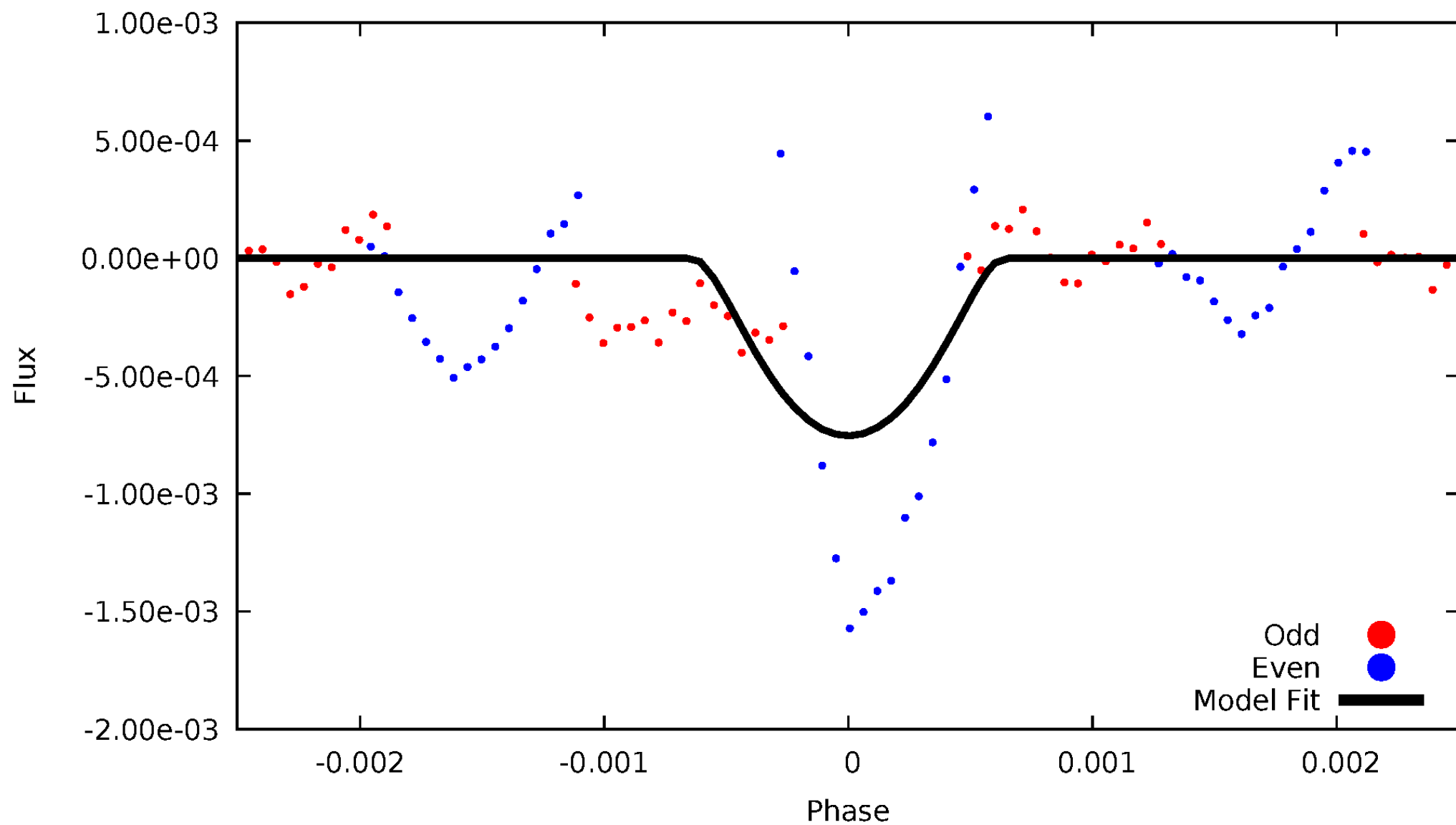


TCE 003629496-04



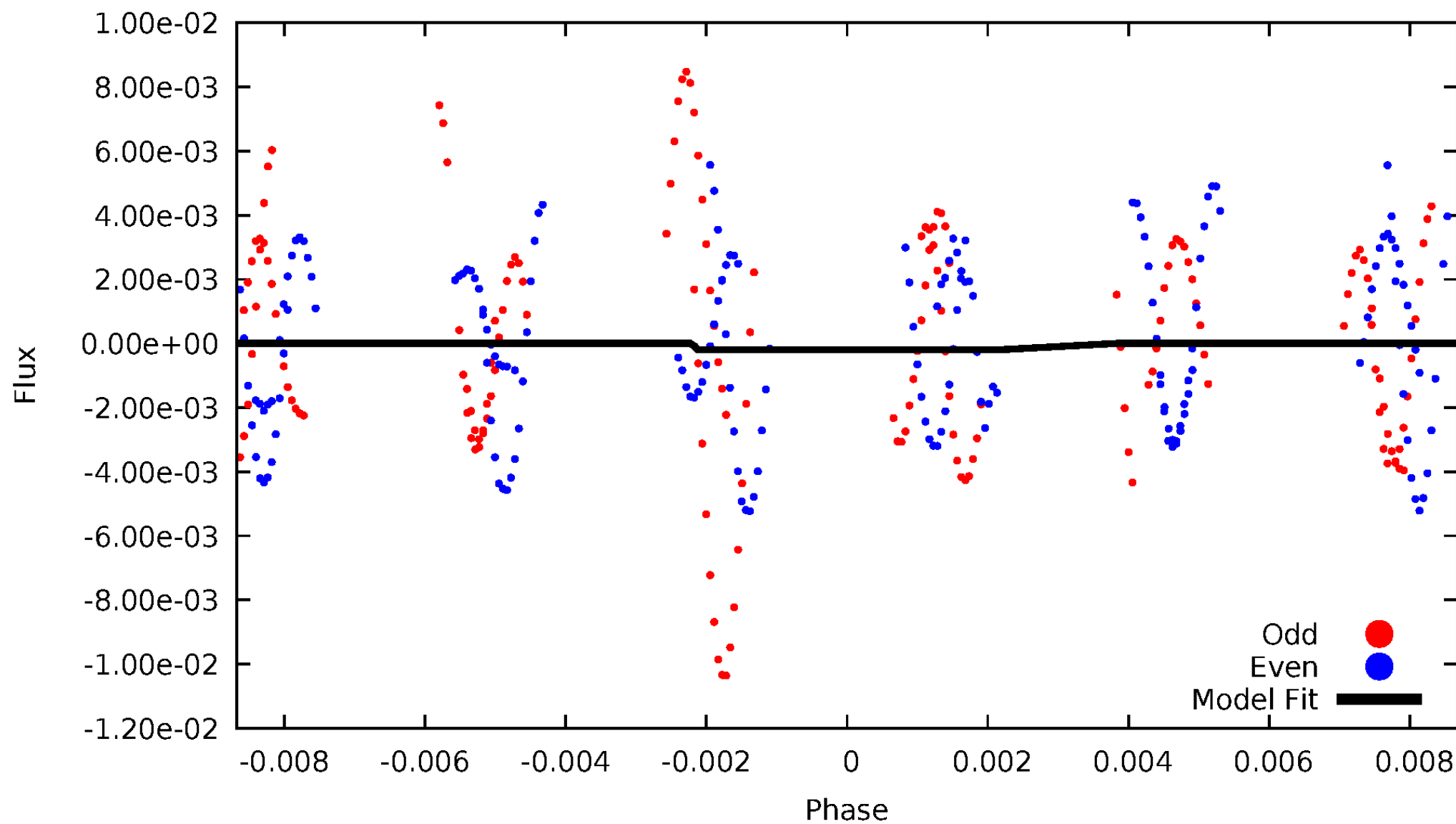
DV Odd/Even

TCE 003629496-04



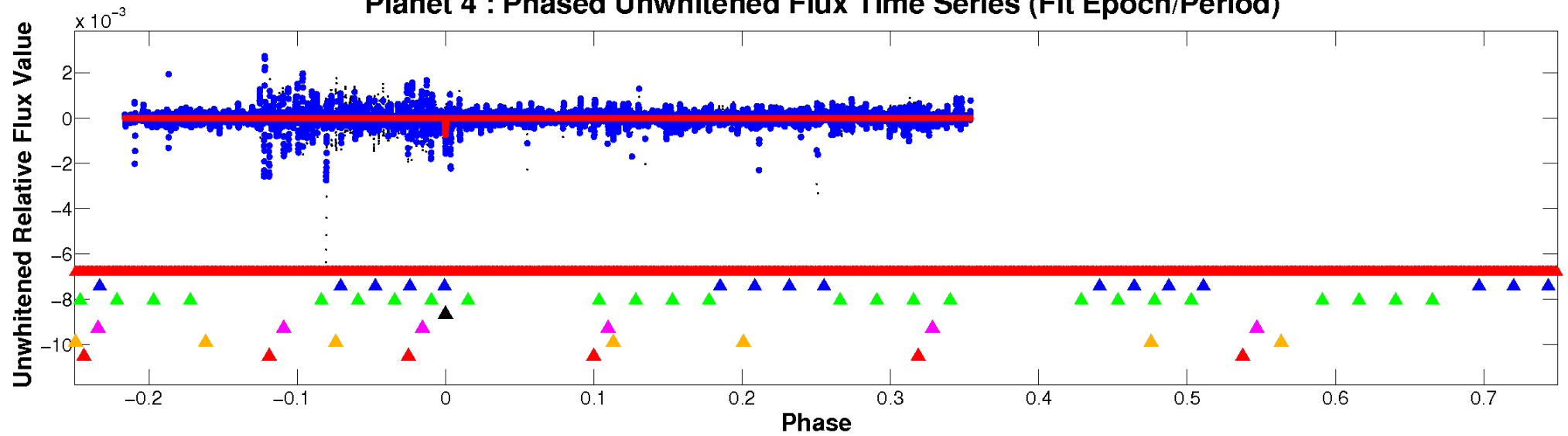
ALT Odd/Even

TCE 003629496-04

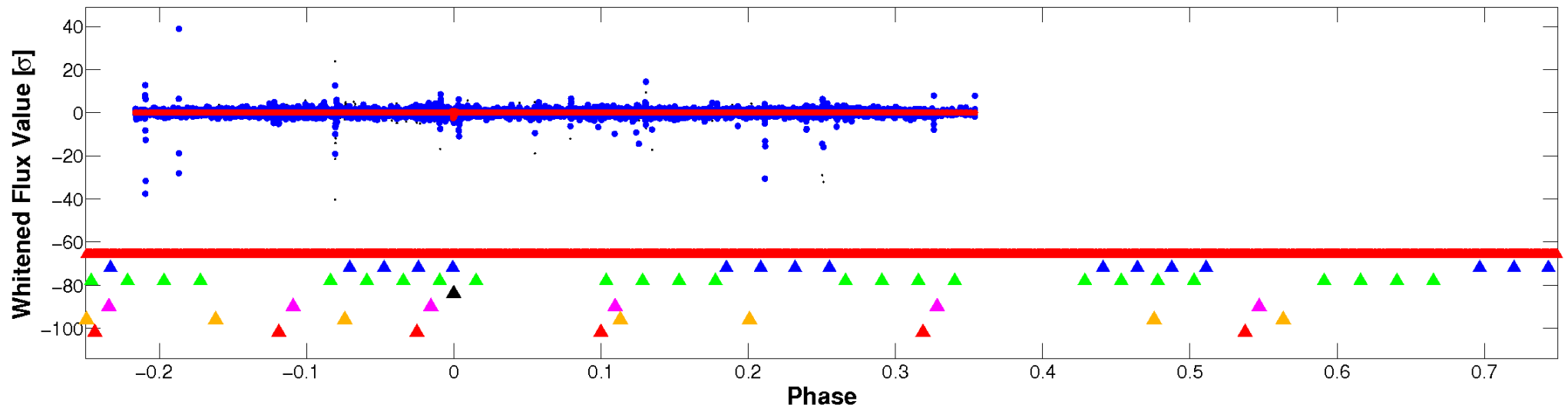


Non-Whitened Vs. Whitened Light Curve

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

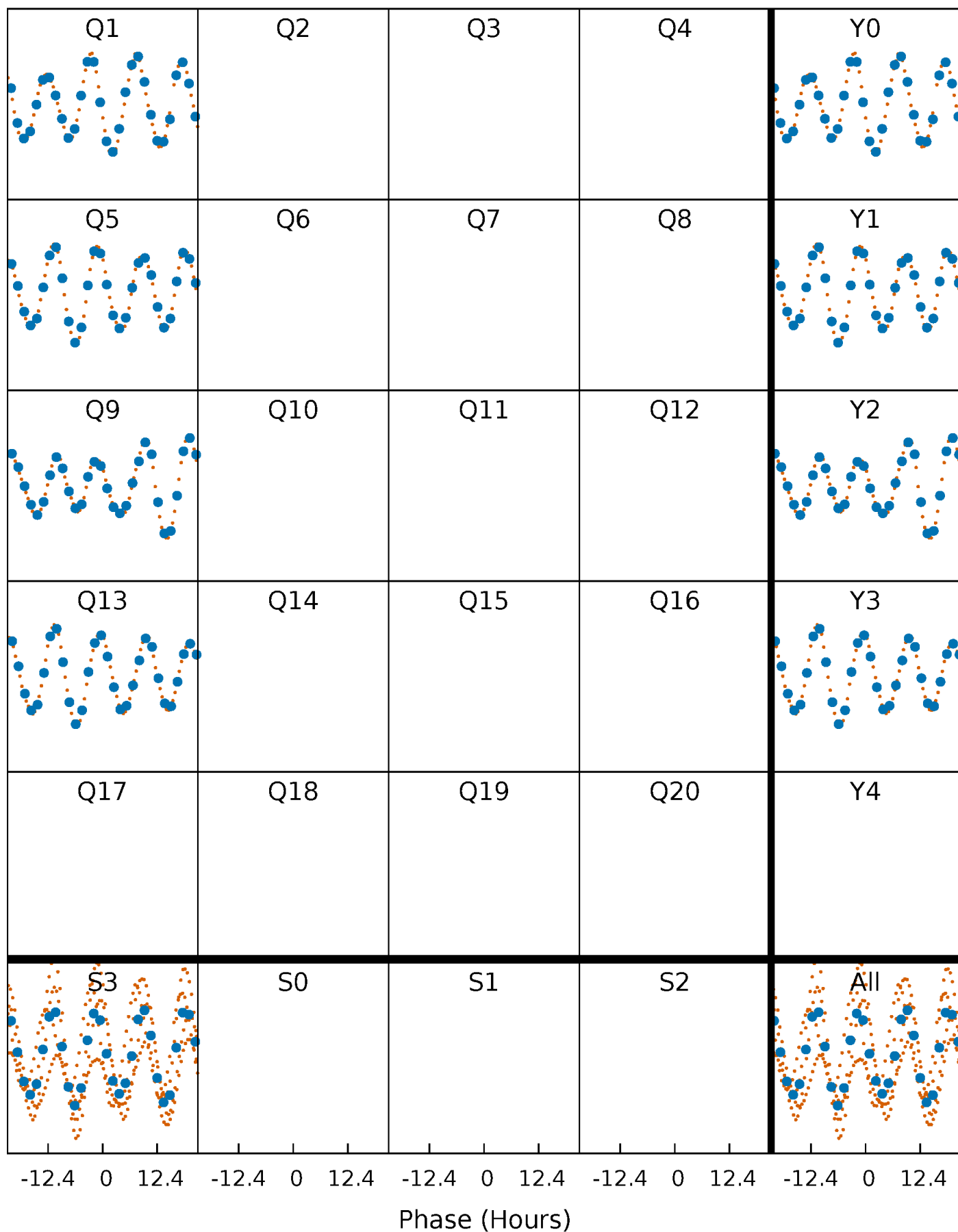


Planet 4 : Phased Whitened Flux Time Series (Fit Epoch/Period)



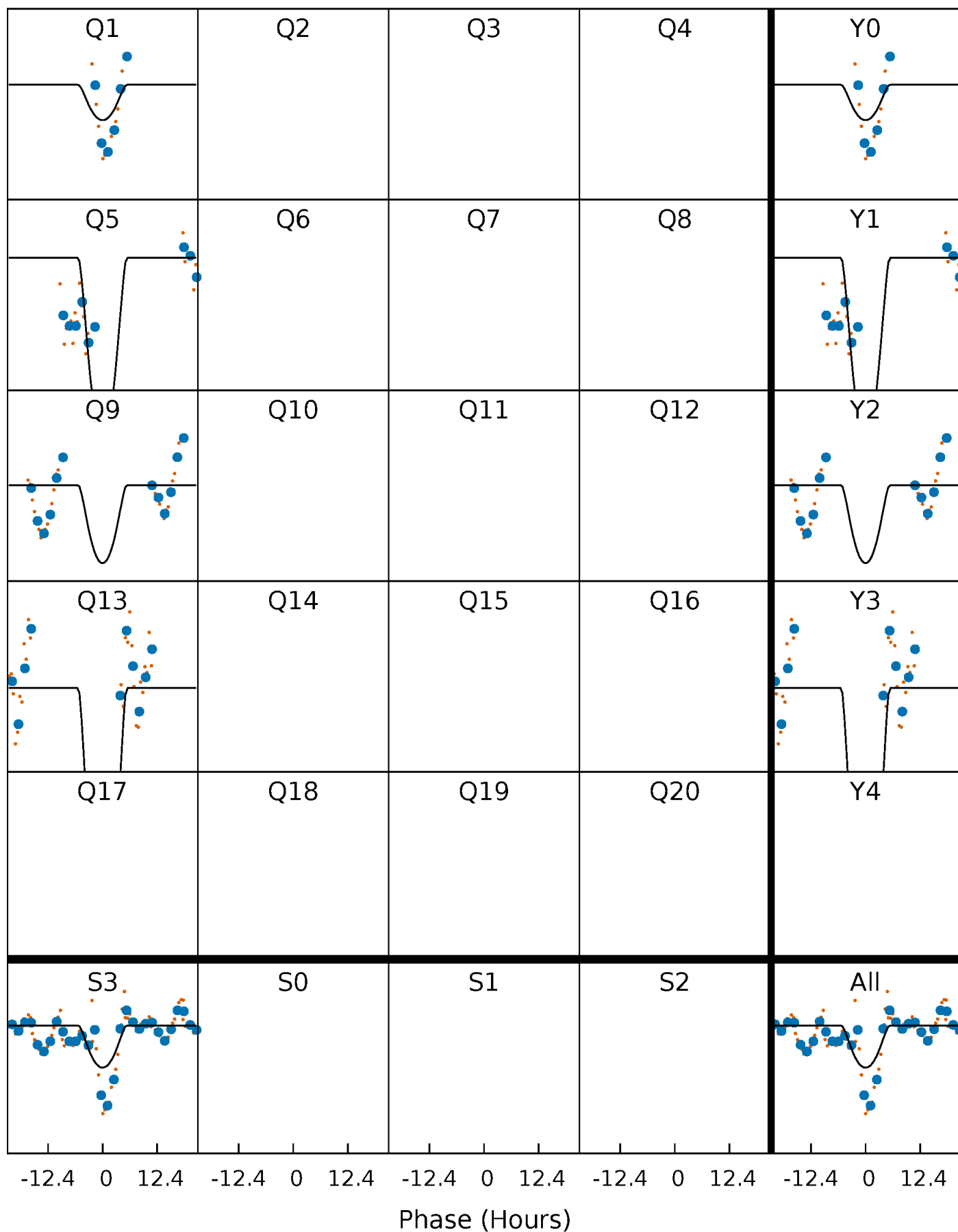
PDC Quarter-Phased Transit Curves

TCE 003629496-04 $P=360.976046$ Days $T_0=160.588947$ (BKJD)



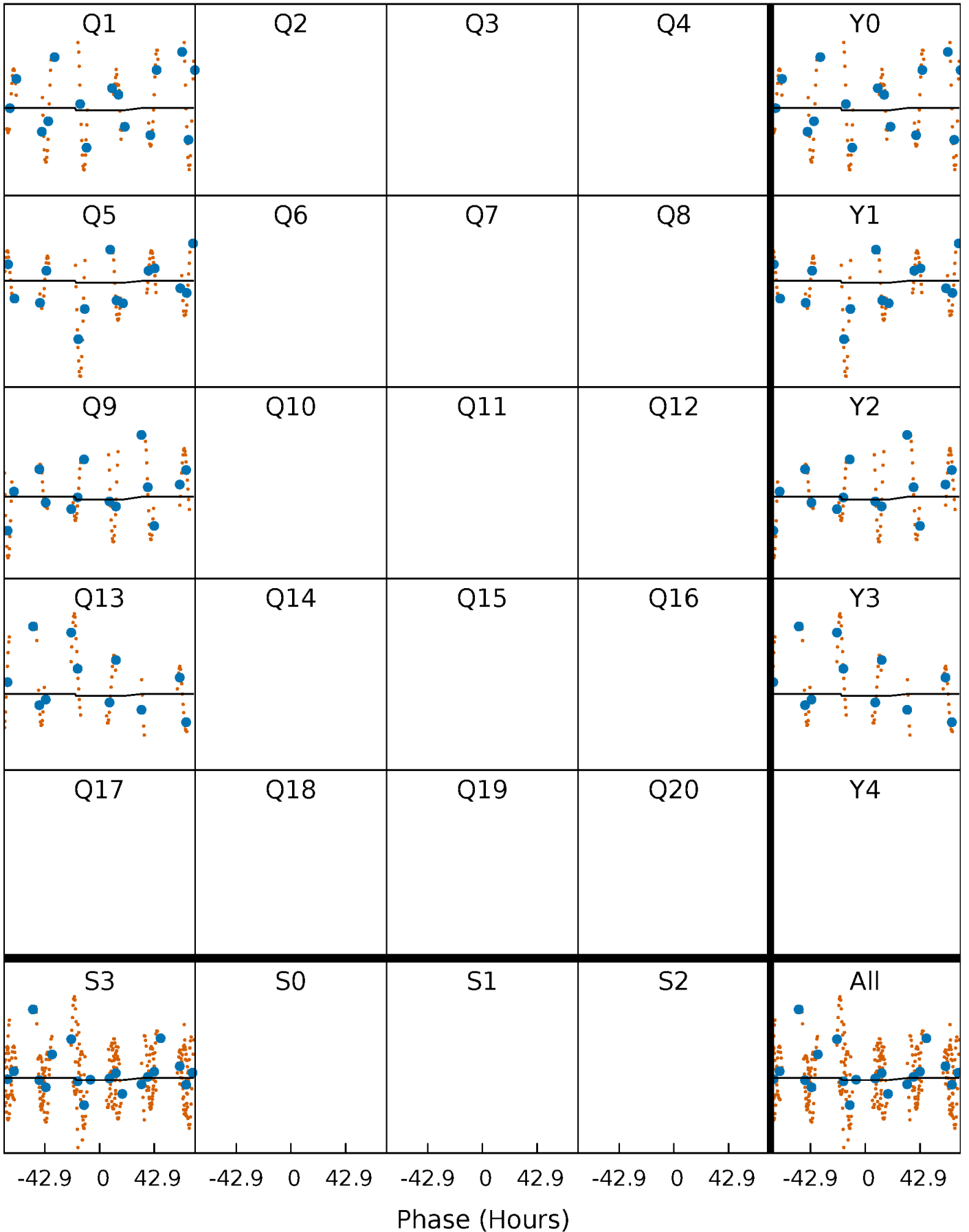
DV Quarter-Phased Transit Curves

TCE 003629496-04 $P=360.976046$ Days $T_0=160.588947$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

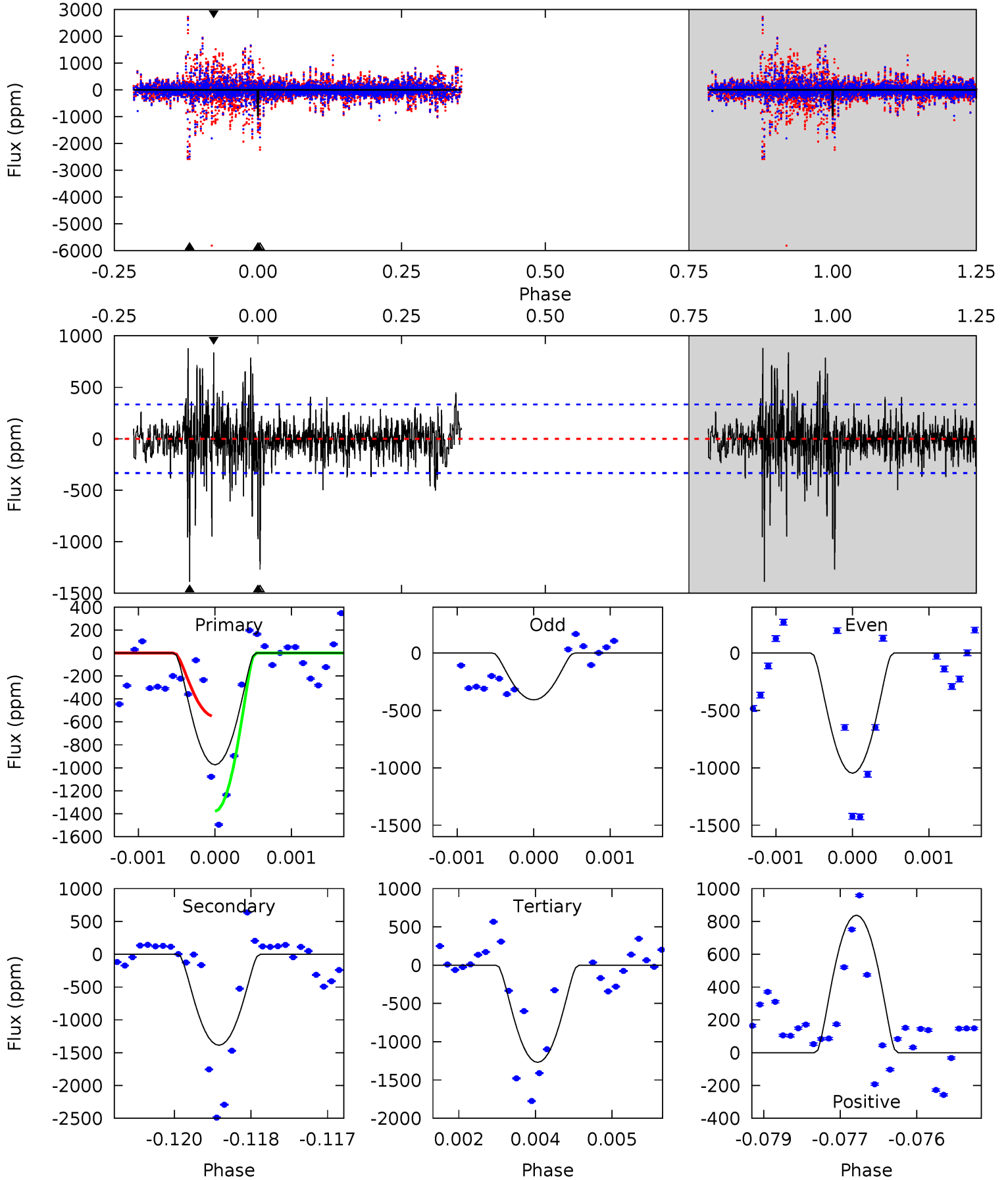
TCE 003629496-04 $P=360.754502$ Days $T_0=161.191388$ (BKJD)



DV Model-Shift Uniqueness Test

003629496-04, P = 360.976046 Days, E = 160.588947 Days

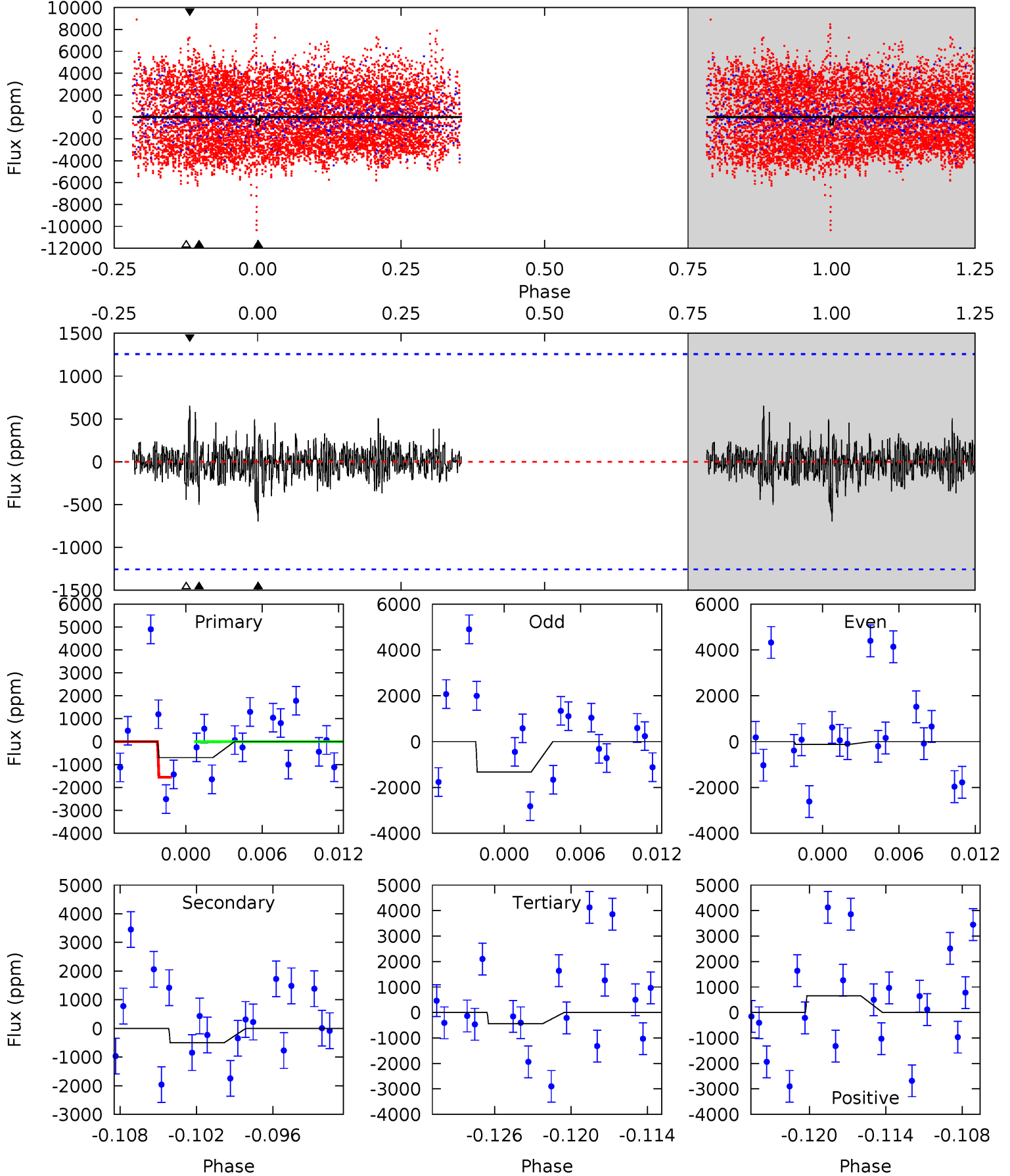
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
15.9	22.6	20.7	13.7	5.42	3.24	2.74	-4.83	2.21	1.90	8.94	5.26	0.96	0.39	6.09



Alt Model-Shift Uniqueness Test

003629496-04, P = 360.754502 Days, E = 161.191388 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
2.84	2.04	1.81	2.67	5.12	2.75	0.58	1.03	0.18	0.23	-0.62	2.47	5.33	0.48	3.08



Stellar Parameters For KIC 003629496

	$T_{\text{eff}} (K)$	$\log(g)$	$[\text{Fe}/\text{H}]$	$R (R_{\odot})$	$M (M_{\odot})$	$\rho_{\star} (\text{g}\cdot\text{cm}^{-3})$
	9967^{+280}_{-385}	$4.045^{+0.094}_{-0.175}$	$0.360^{+0.050}_{-0.250}$	$2.587^{+0.659}_{-0.384}$	$2.707^{+0.273}_{-0.273}$	$0.220^{+0.110}_{-0.100}$
	+3%/-4%	+2%/-4%	+14%/-69%	+25%/-15%	+10%/-10%	+50%/-45%
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 003629496-04 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-1387 ± 61	$15.89^{+13.57}_{-10.07}$	849^{+61}_{-46}	7597^{+9347}_{-1991}	5601^{+37212}_{-3914}
Alt.	-501 ± 245	$12.90^{+13.17}_{-8.75}$	848^{+60}_{-47}	6281^{+7753}_{-1794}	2799^{+25438}_{-2198}

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

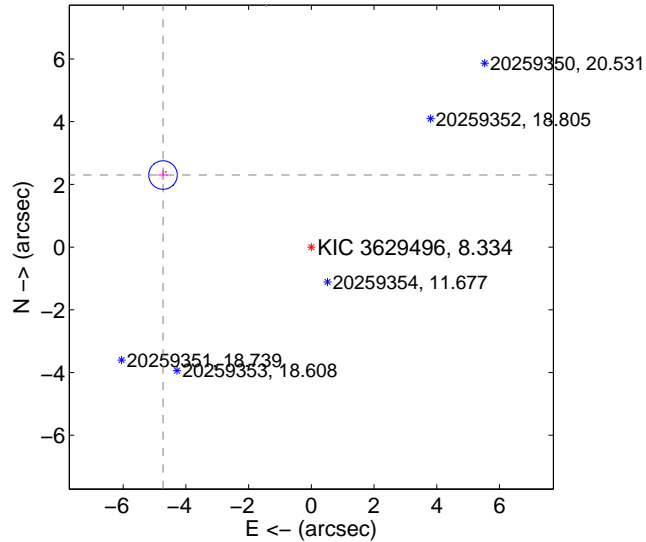
Supplemental centroid analysis for 003629496-04. **Kepler magnitude: 8.33.** Transit SNR 8.60

There are 0 quarters with good PRF difference image offsets

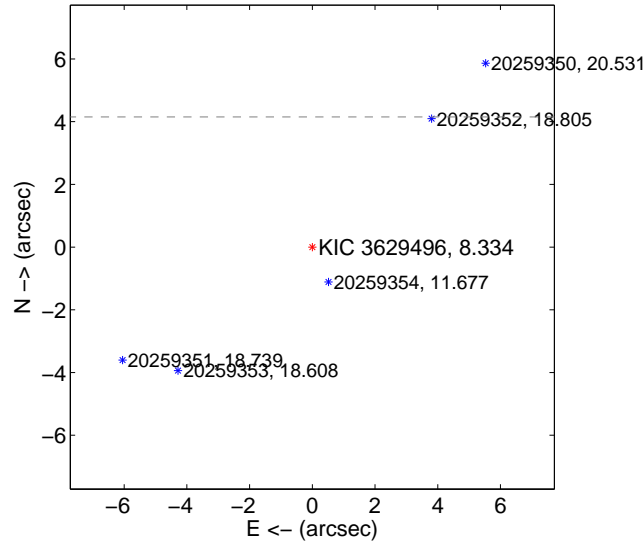
The OOT PRF centroid is offset from the target star catalog position by about 4.67 arcsec so the offset from difference PRF-fit to OOT-fit may be invalid.

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	5.258 ± 0.152	34.70	4.729 ± 0.151	2.299 ± 0.155
PRF-fit source offset from KIC position	9.926 ± 0.135	73.72	9.016 ± 0.130	4.152 ± 0.154
photometric centroid source offset	1.72 ± 1.57	1.10	0.86 ± 1.94	1.50 ± 1.42

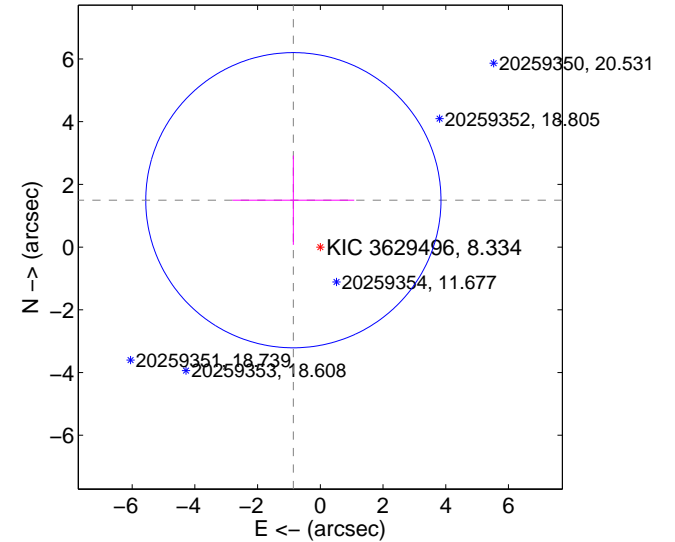
offset from difference PRF-fit to OOT PRF-fit



offset from difference PRF-fit to KIC position

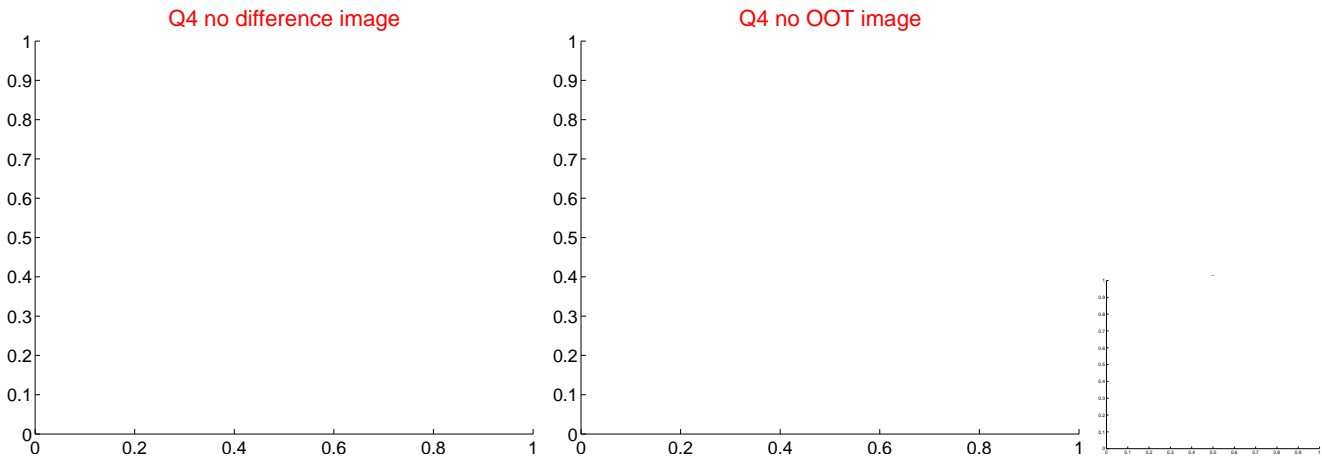
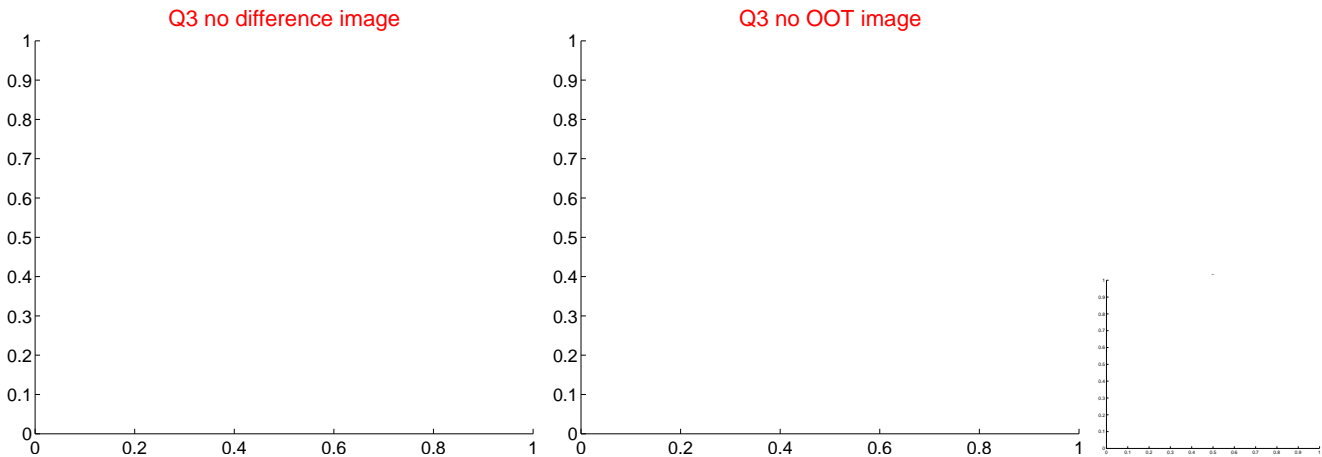
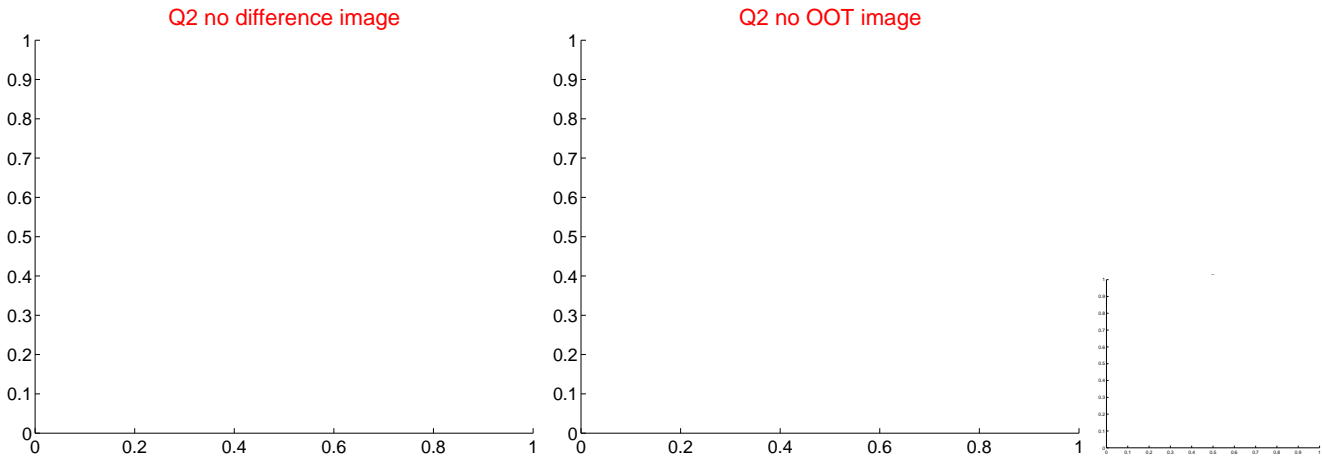
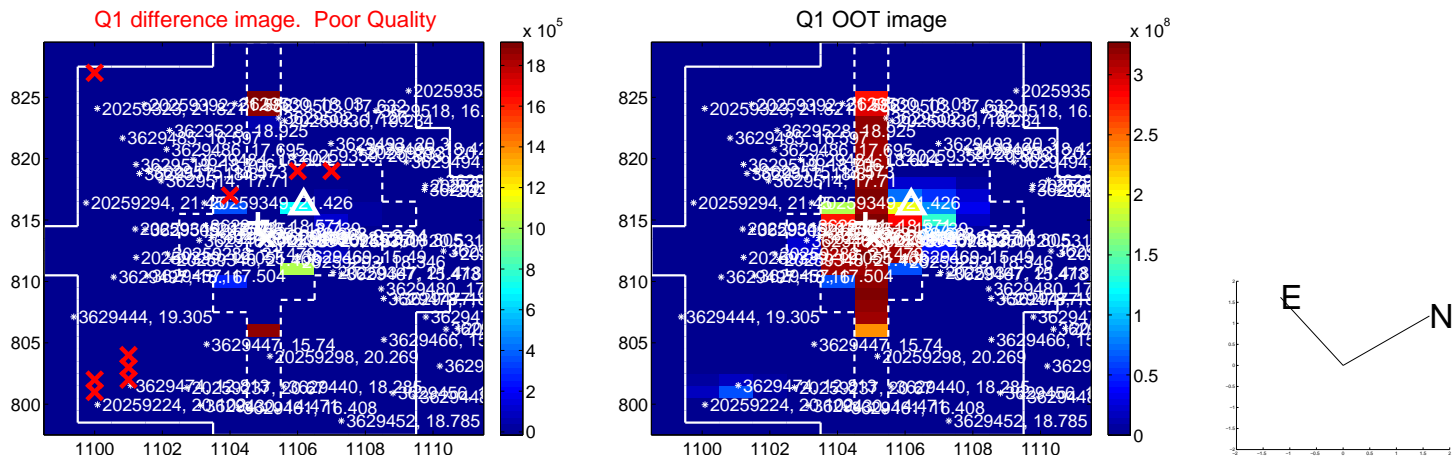


offset from photometric centroids

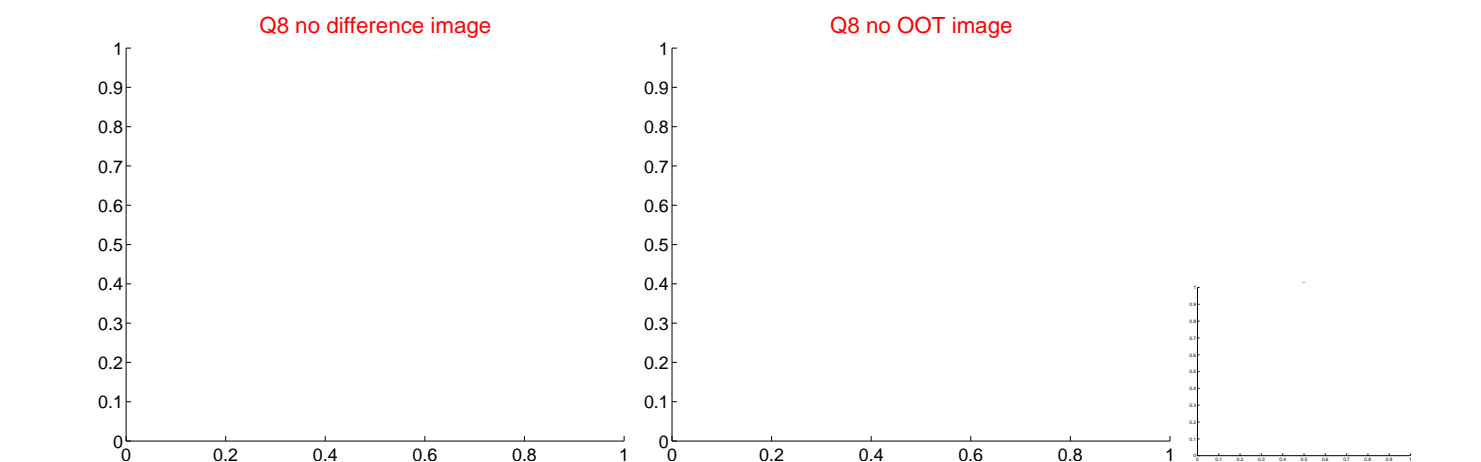
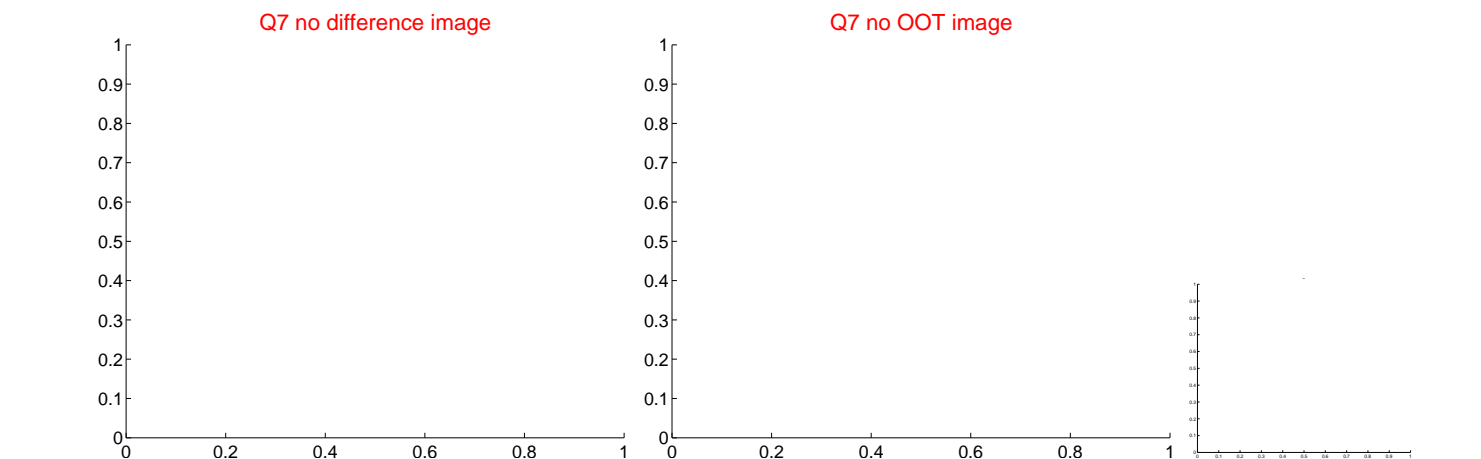
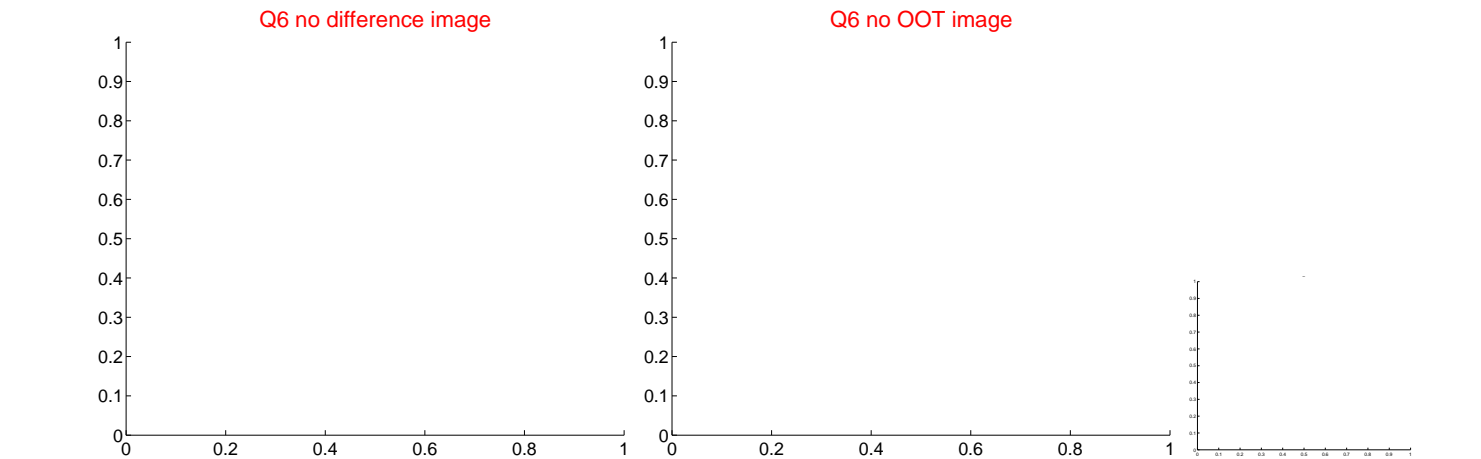
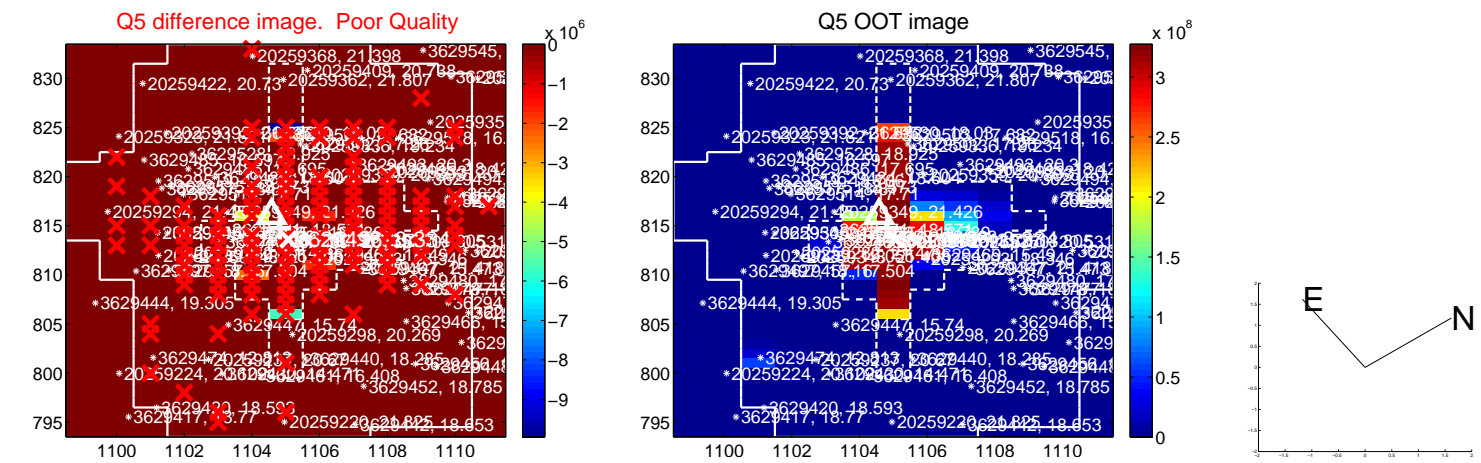


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets;** magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

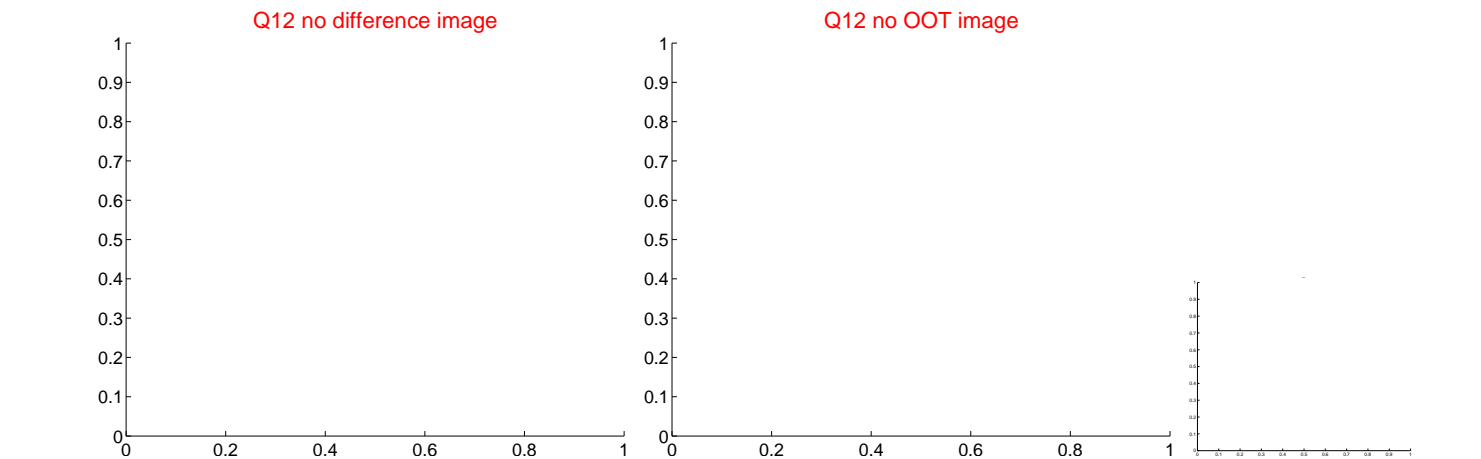
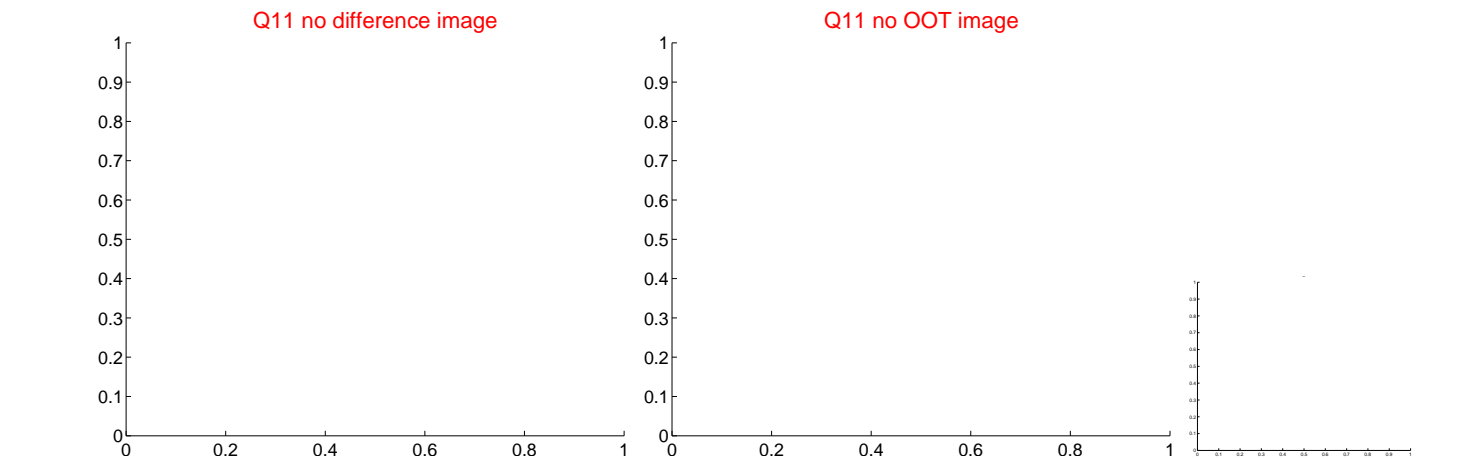
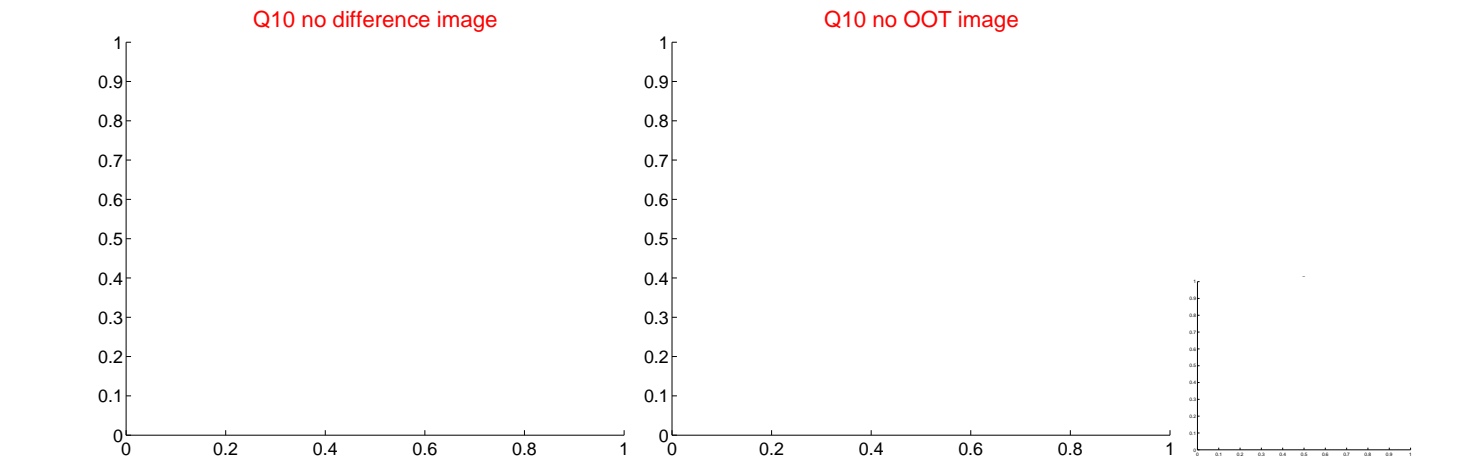
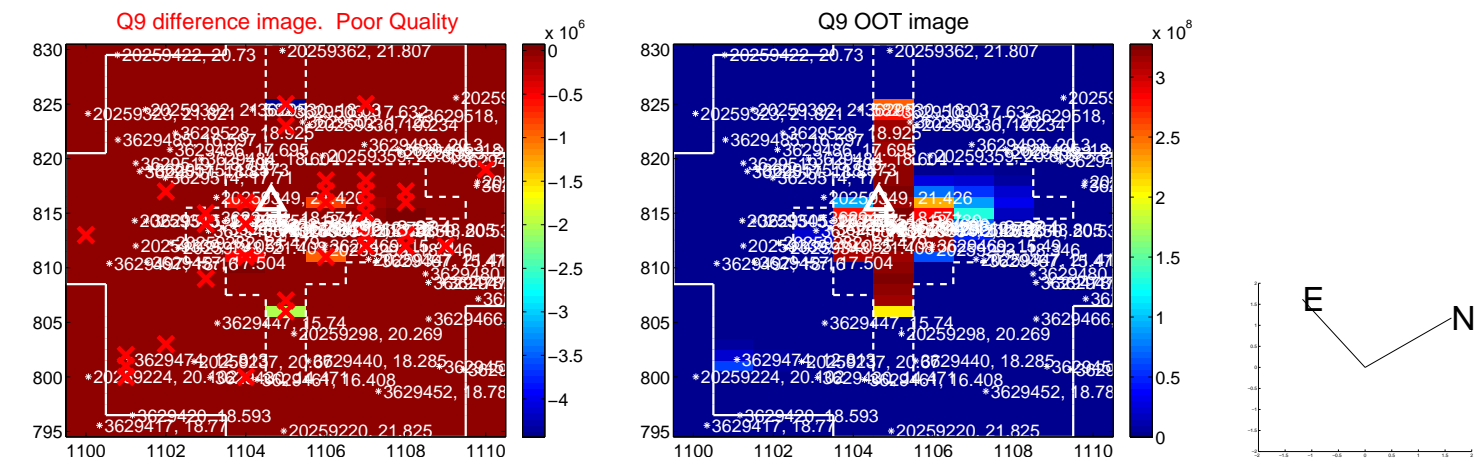
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



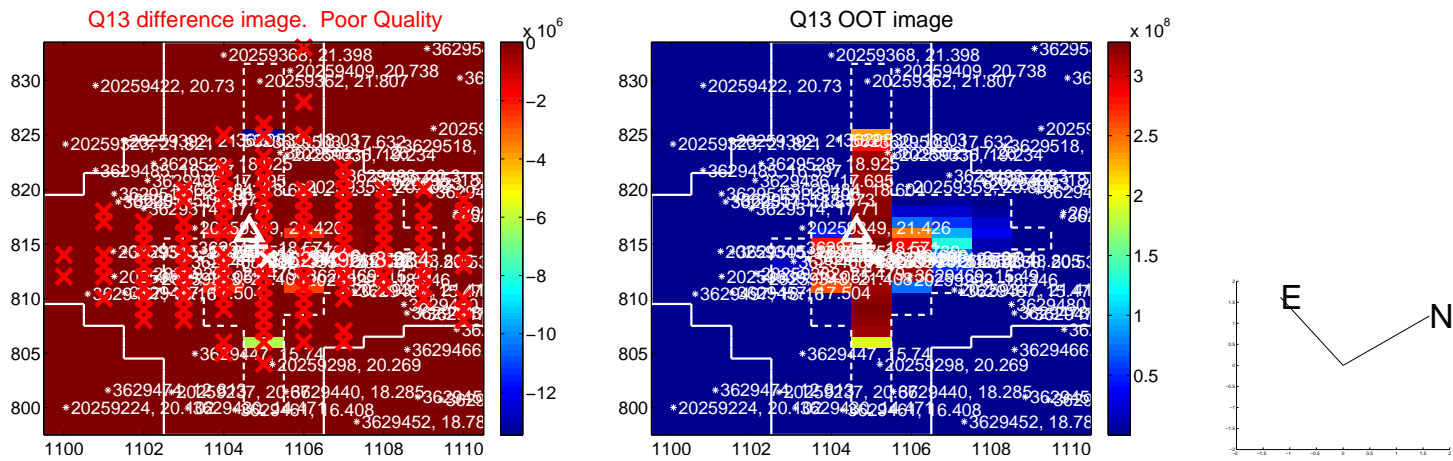
white ×: KIC target position; +: OOT centroid; △: difference centroid. red ×: large negative pixel value.



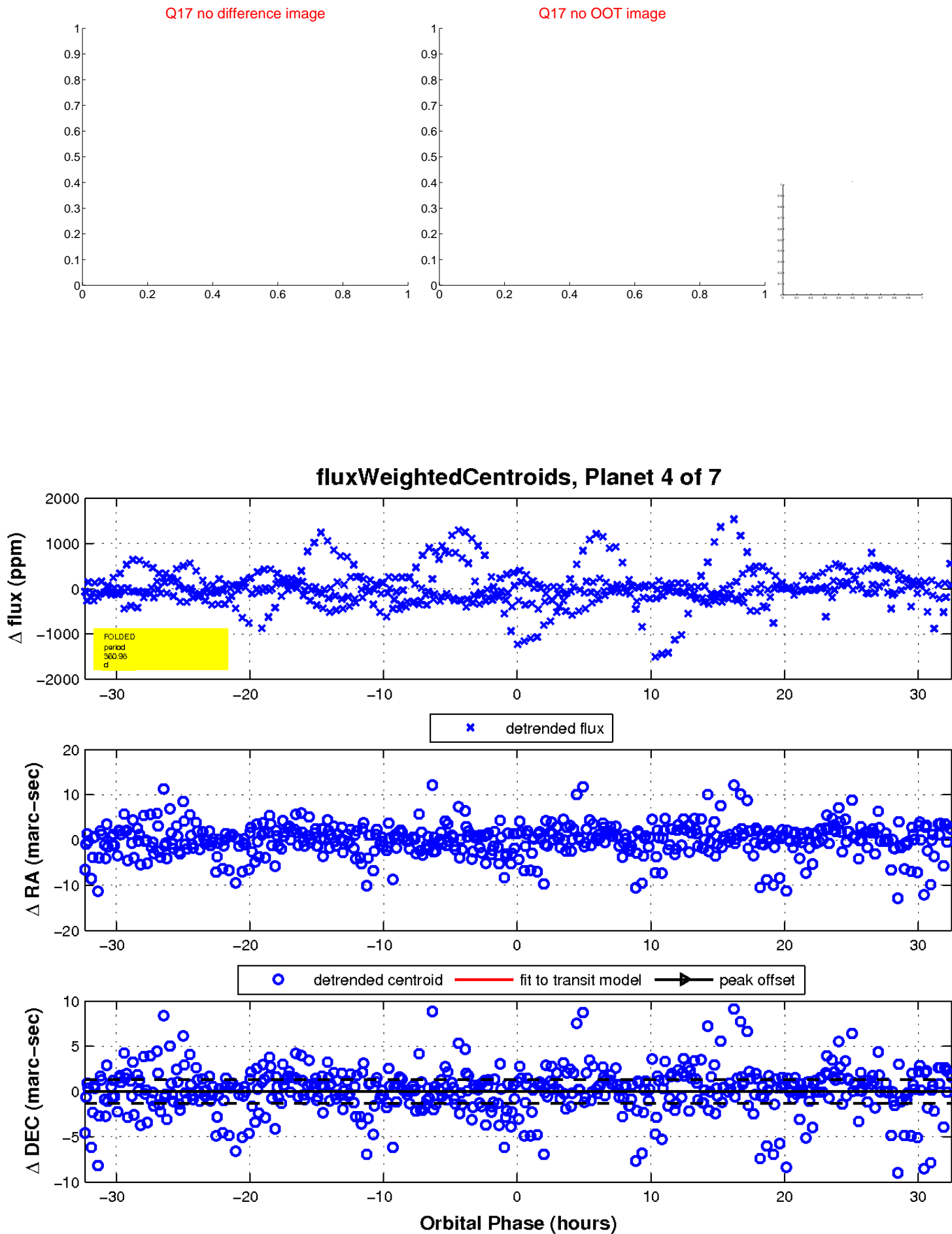
white ×: KIC target position; +: OOT centroid; △: difference centroid. red ×: large negative pixel value.



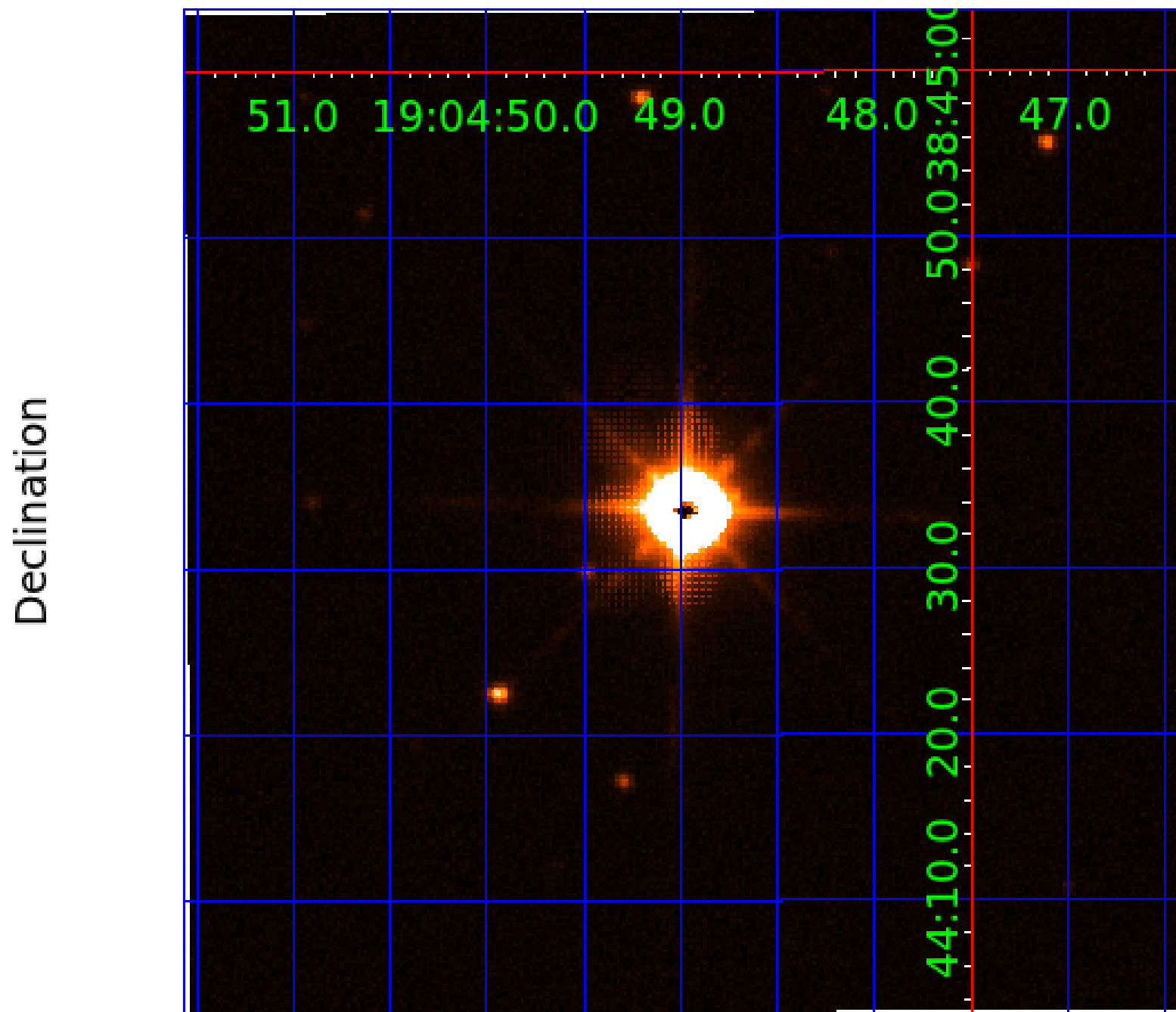
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



UKIRT Image



KIC 003629496

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})
003629496-01	OBS	No	1.159741	132.223875	18.6	6.497	20.4	7.1	2.59	9967	1.20	65243.17
003629496-02	OBS	No	92.349203	135.096359	907.3	6.212	14.8	15.4	2.59	9967	9.51	190.45
003629496-03	OBS	No	58.674936	166.077766	38.8	4.500	13.4	-1.0	2.59	9967	1.65	348.67
003629496-04	OBS	No	360.976046	160.588947	754.1	10.841	9.6	8.6	2.59	9967	10.47	30.93
003629496-05	OBS	No	282.028572	154.982651	657.4	3.606	10.0	8.5	2.59	9967	6.81	42.98
003629496-06	OBS	No	230.094834	133.885270	574.4	3.251	8.7	8.6	2.59	9967	6.63	56.38
003629496-07	OBS	No	282.008740	151.569591	1025.7	7.620	12.6	15.3	2.59	9967	9.87	42.99

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
003629496-01	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—CENT_SATURATED
003629496-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_ALT—INCONSISTENT_TRANS—CENT_SATURATED
003629496-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_SATURATED
003629496-04	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_TRACKER—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—INCONSISTENT_TRANS—CENT_SATURATED
003629496-05	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_CHASES—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_TER_DV—MOD_POS_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_SATURATED
003629496-06	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_CHASES—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_TER_DV—MOD_POS_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—INCONSISTENT_TRANS—CENT_SATURATED
003629496-07	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_CHASES—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—SAME_NTL_PERIOD—CENT_SATURATED

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

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

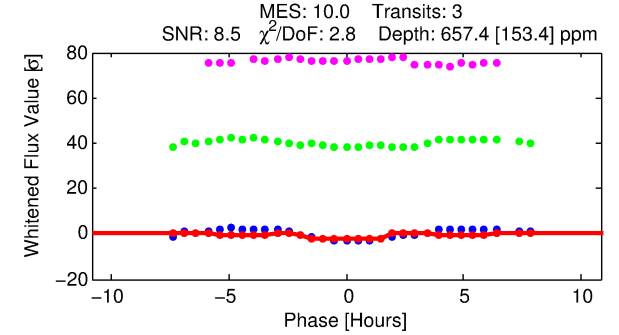
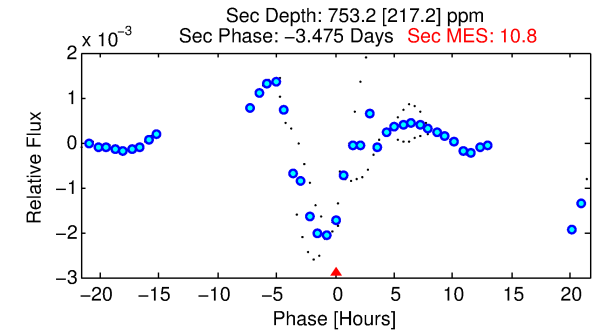
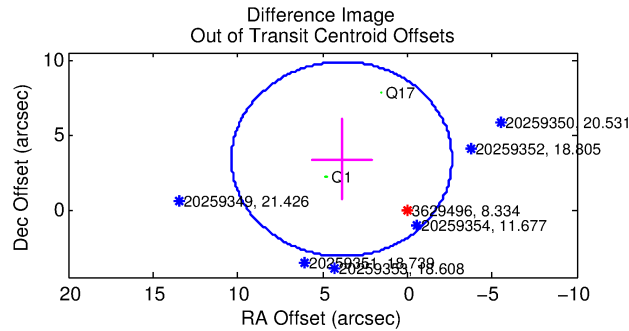
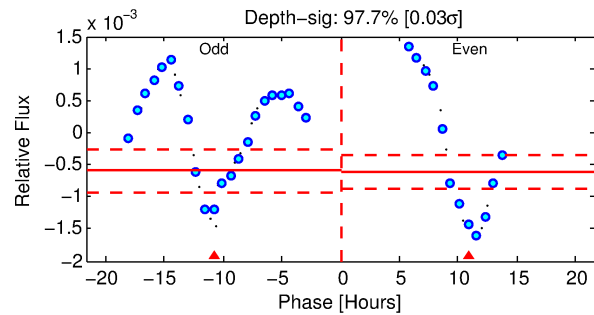
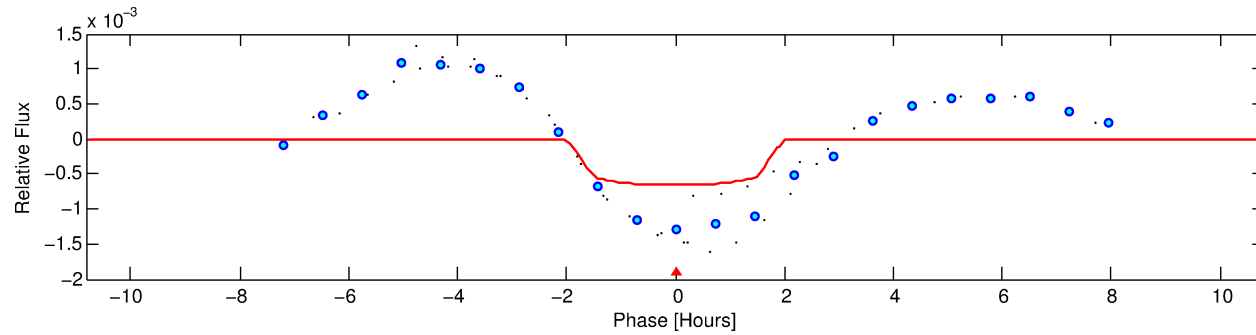
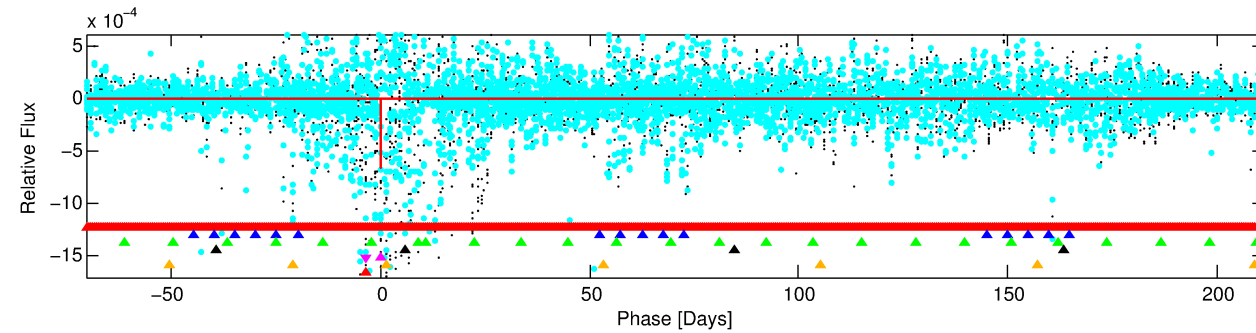
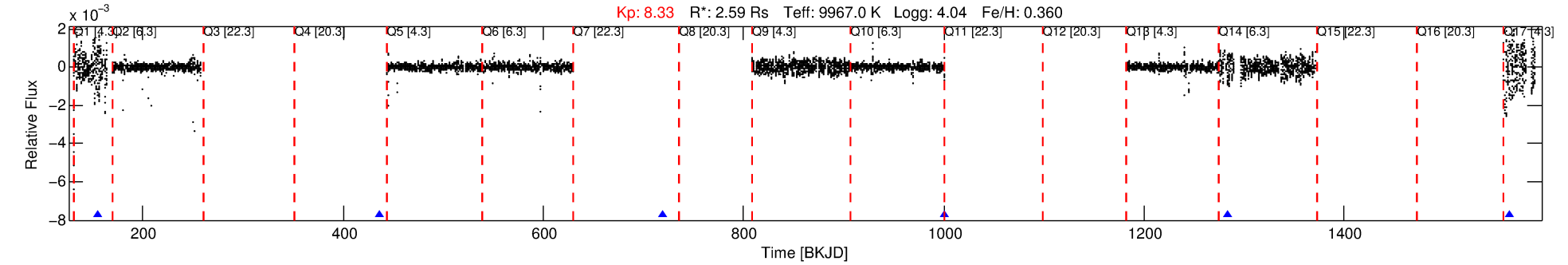
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 003629496-05

No Significant Match Found

DV One-Page Summary

KIC: 3629496 Candidate: 5 of 7 Period: 282.029 d



DV Fit Results:

Period = 282.02857 [0.00360] d
Epoch = 154.9827 [0.0119] BKJD
Rp/R* = 0.0241 [0.0463]
a/R* = 604.34 [8258.43]
b = 0.16 [82.82]
Seff = 42.98 [15.19]
Teq = 653 [58] K
Rp = 6.81 [13.17] Re
a = 1.1733 [0.2541] AU
Ag = 12286.67 [47392.53] [0.26 σ]
Teff = 10628 [10222] K [0.98 σ]

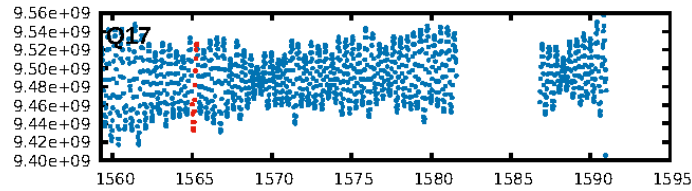
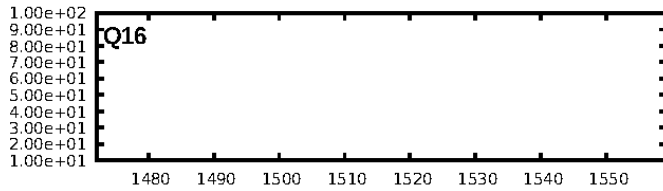
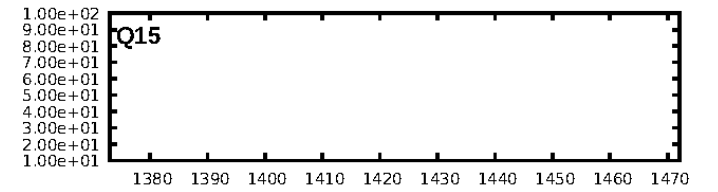
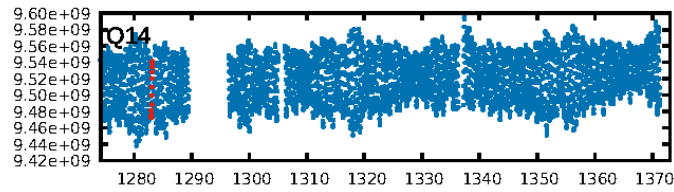
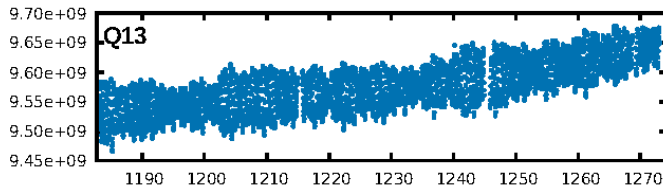
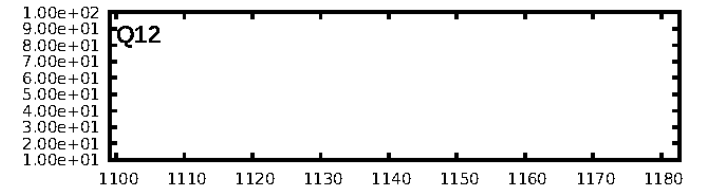
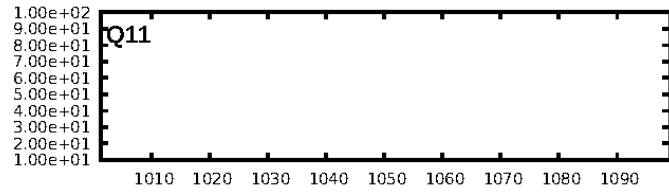
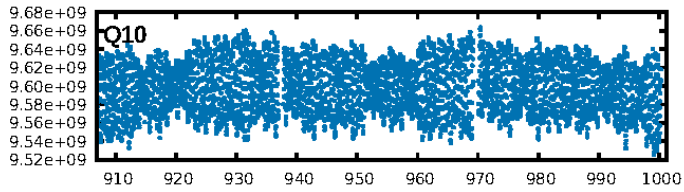
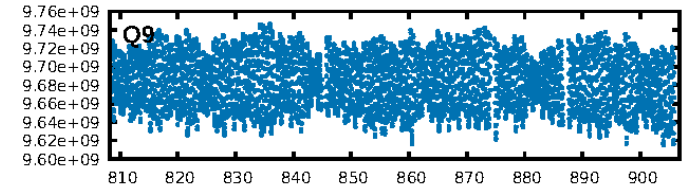
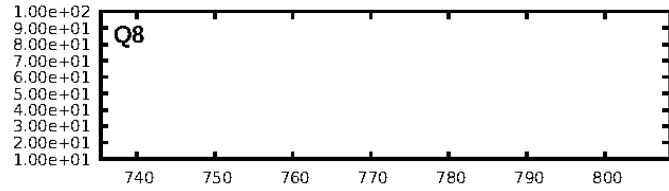
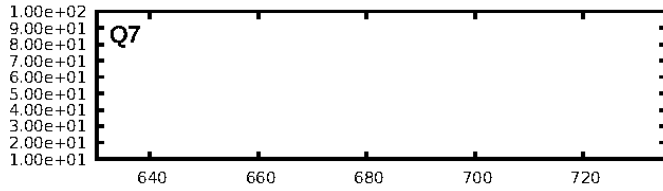
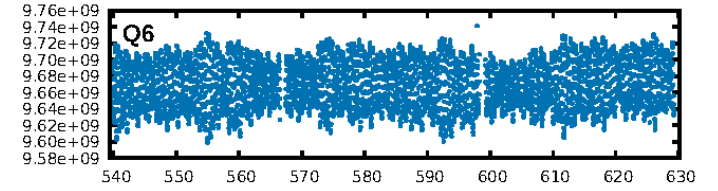
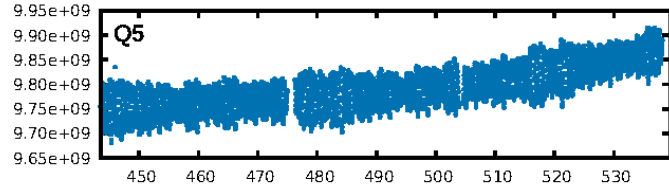
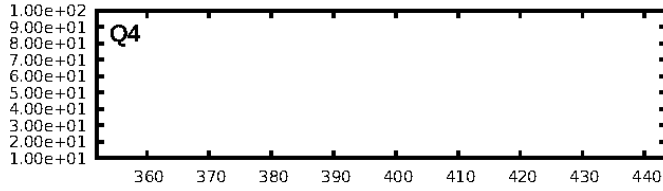
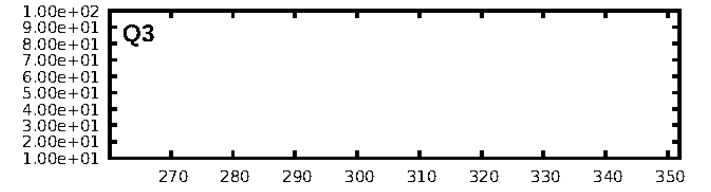
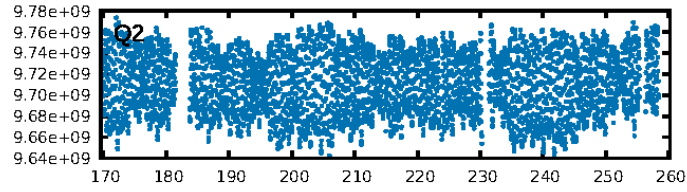
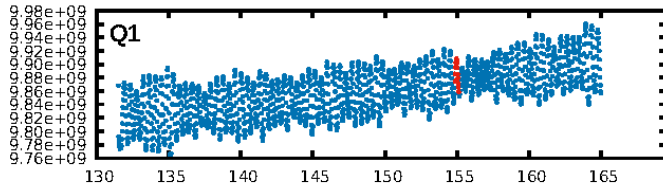
DV Diagnostic Results:

ShortPeriod-sig: 4.5% [0.06 σ]
LongPeriod-sig: 100.0% [165.84 σ]
ModelChiSquare2-sig: 67.4%
ModelChiSquareGof-sig: 99.3%
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [1/1]
GhostDiagnostic-chr: N/A
Centroid-sig: N/A
Centroid-so: 2.851 arcsec [1.60 σ]
OotOffset-rm: 5.120 arcsec [2.36 σ]
OotOffset-st: 0/0/0/2 [2]
KicOffset-rm: 9.941 arcsec [4.82 σ]
KicOffset-st: 0/0/0/2 [2]
DiffImageQuality-fgm: 0.00 [0/2]
DiffImageOverlap-fno: 0.50 [1/2]

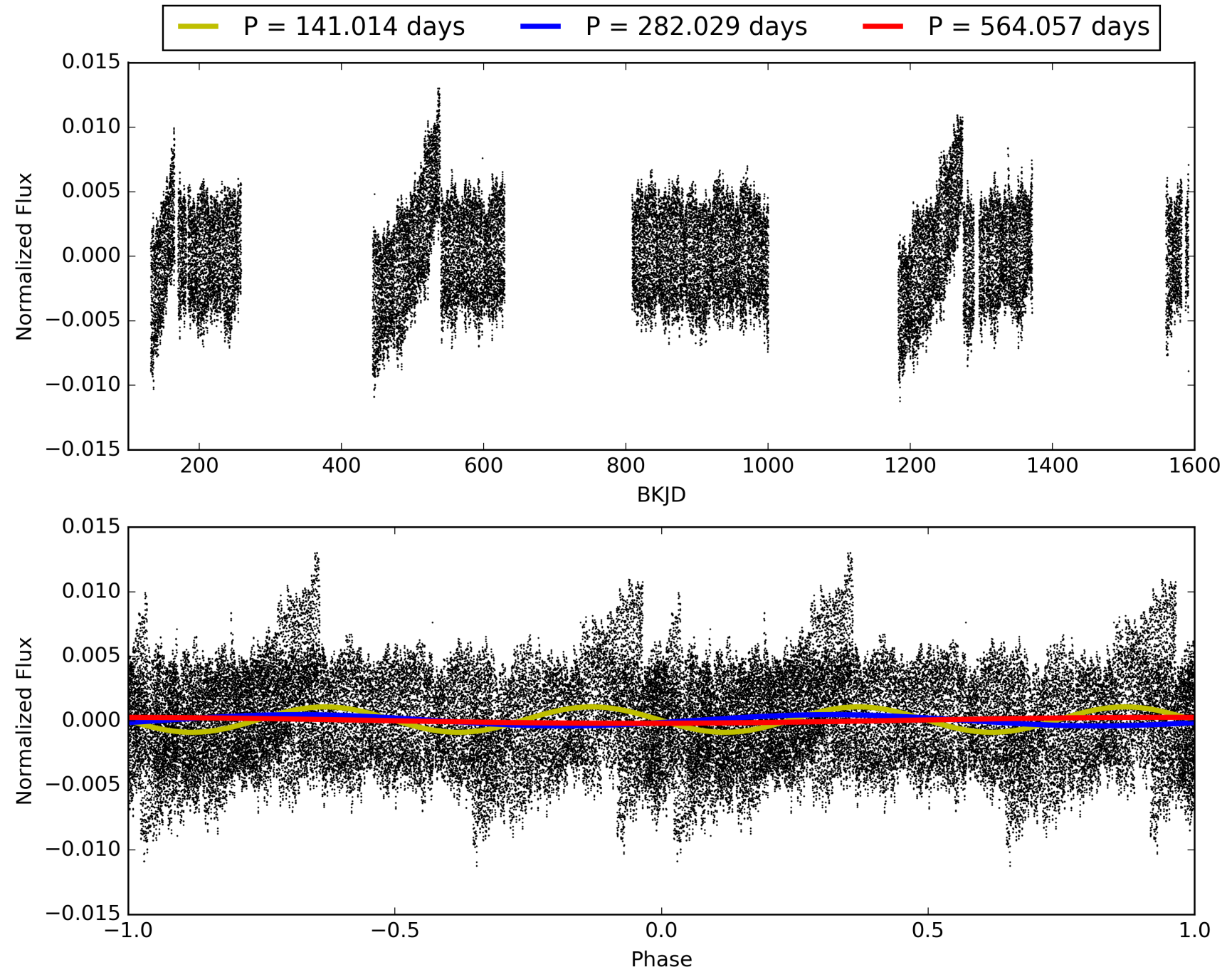
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 02-Feb-2016 01:32:36 Z

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

TCE 003629496-05, PDC Light Curves

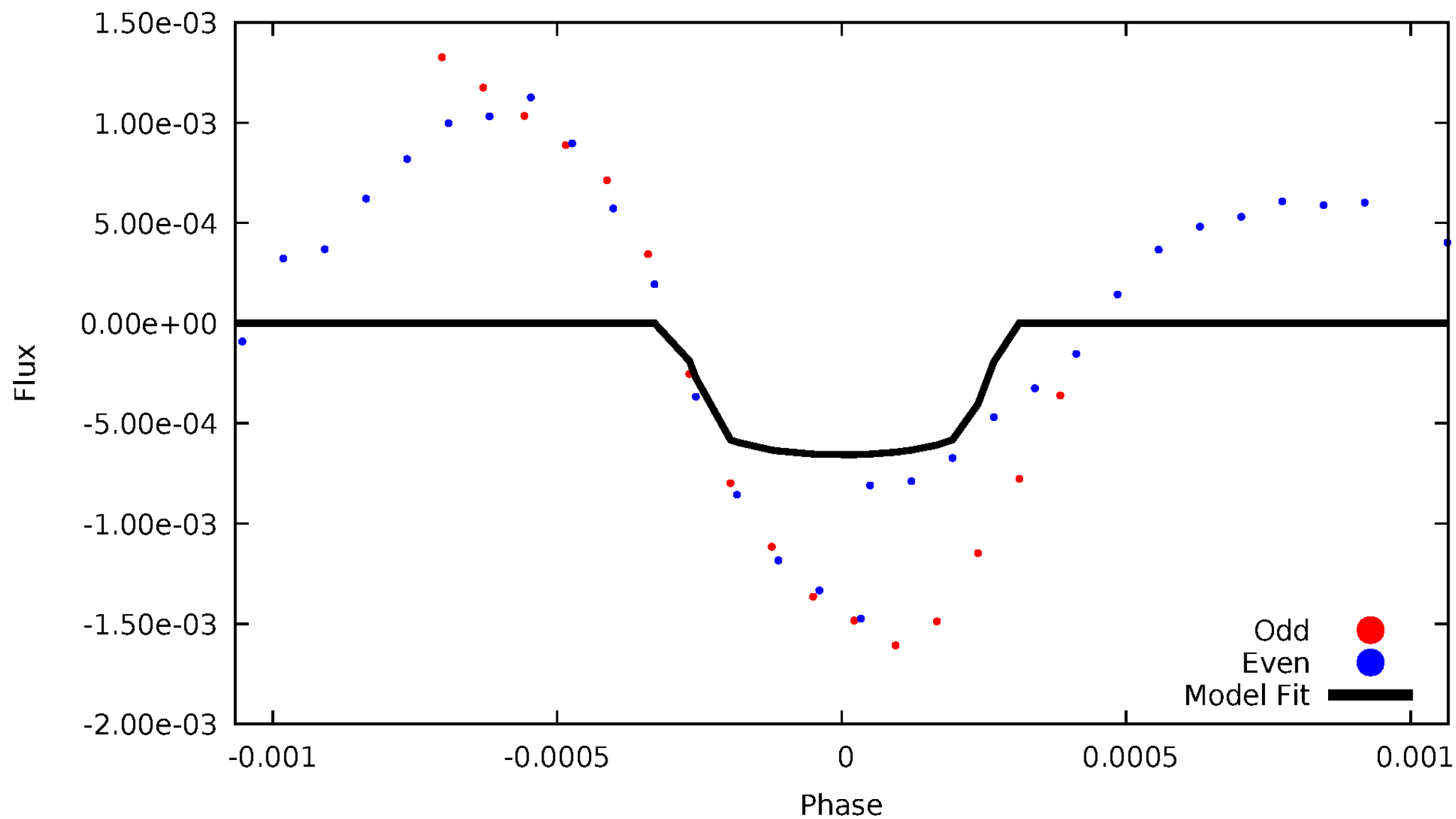


TCE 003629496-05



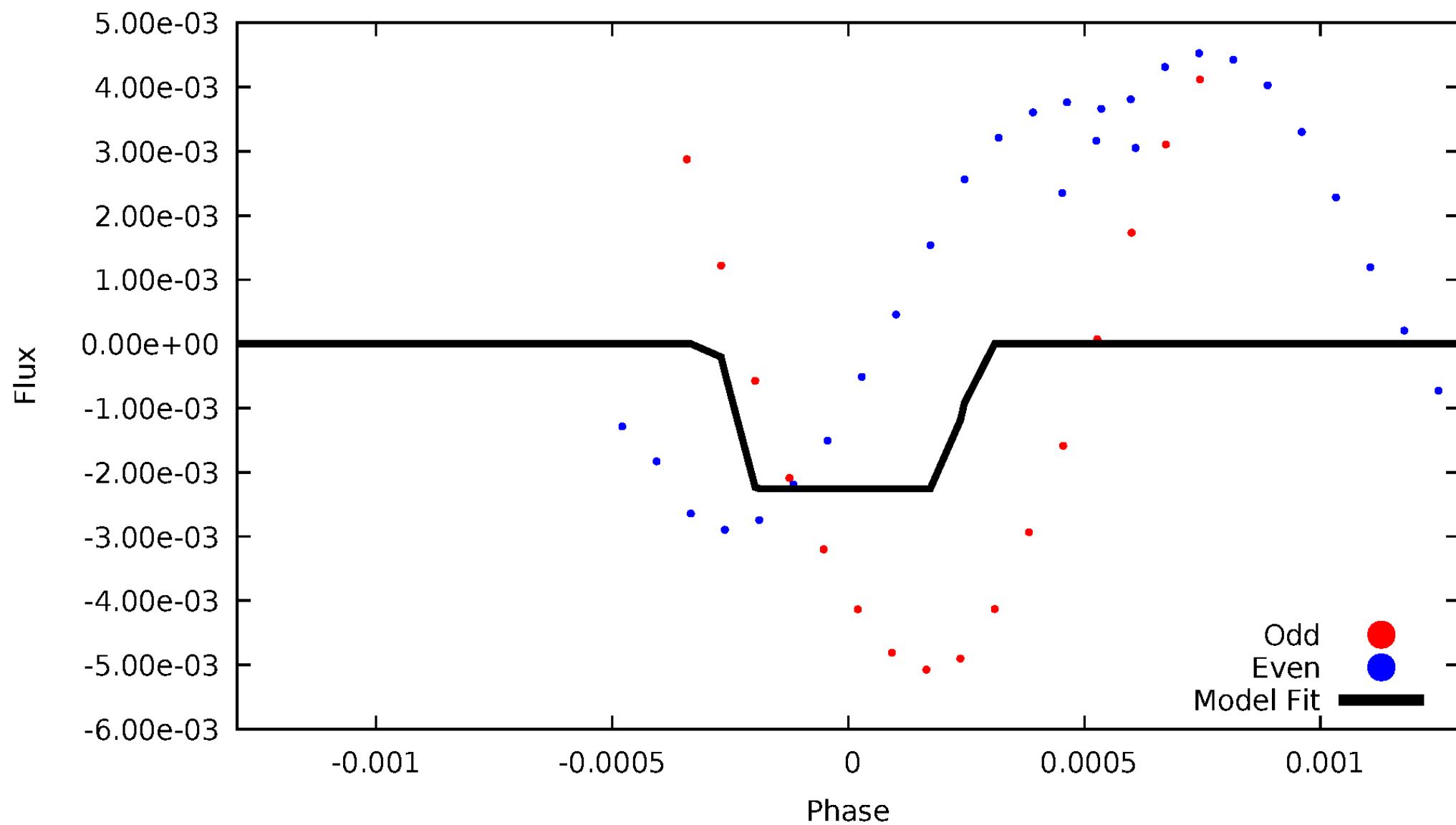
DV Odd/Even

TCE 003629496-05



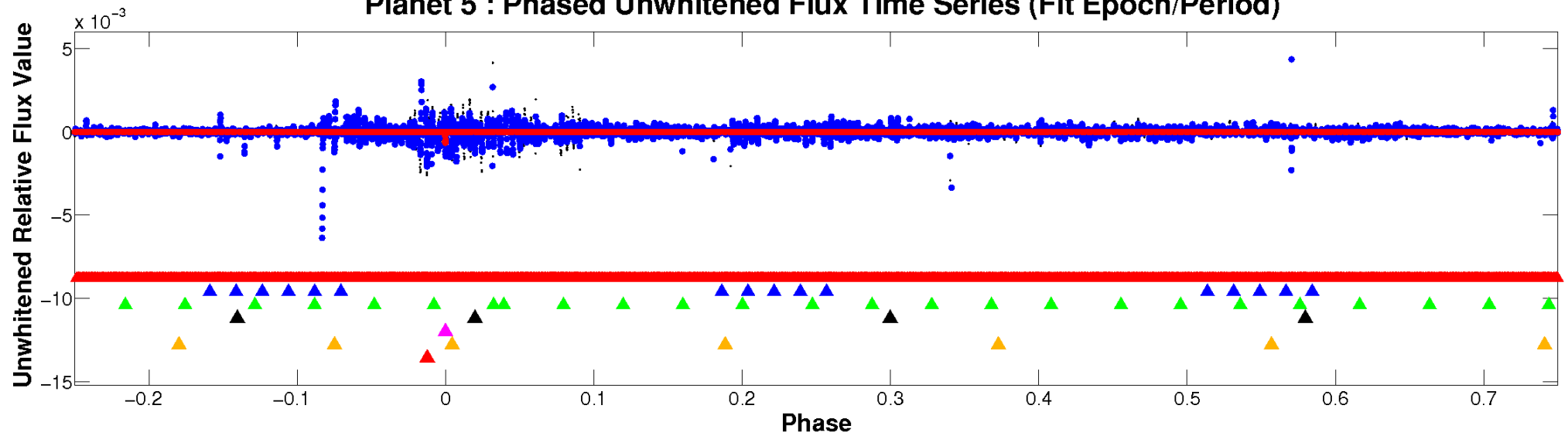
ALT Odd/Even

TCE 003629496-05

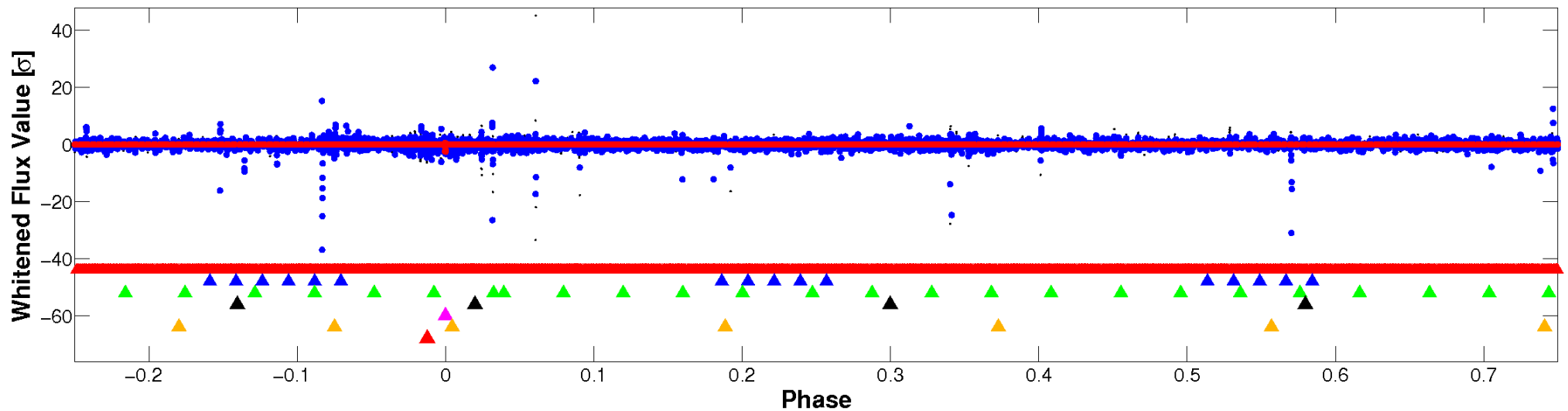


Non-Whitened Vs. Whitened Light Curve

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

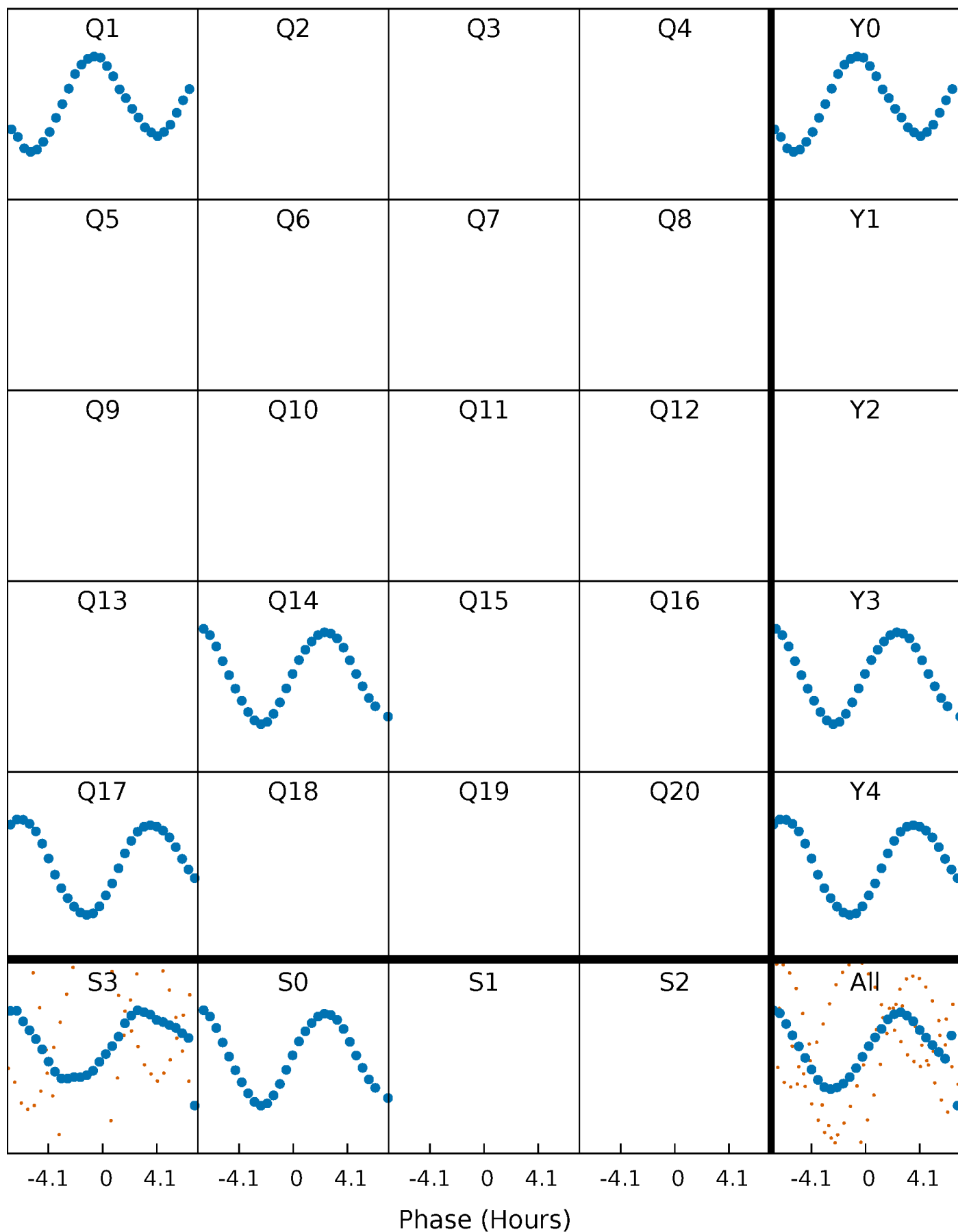


Planet 5 : Phased Whitened Flux Time Series (Fit Epoch/Period)



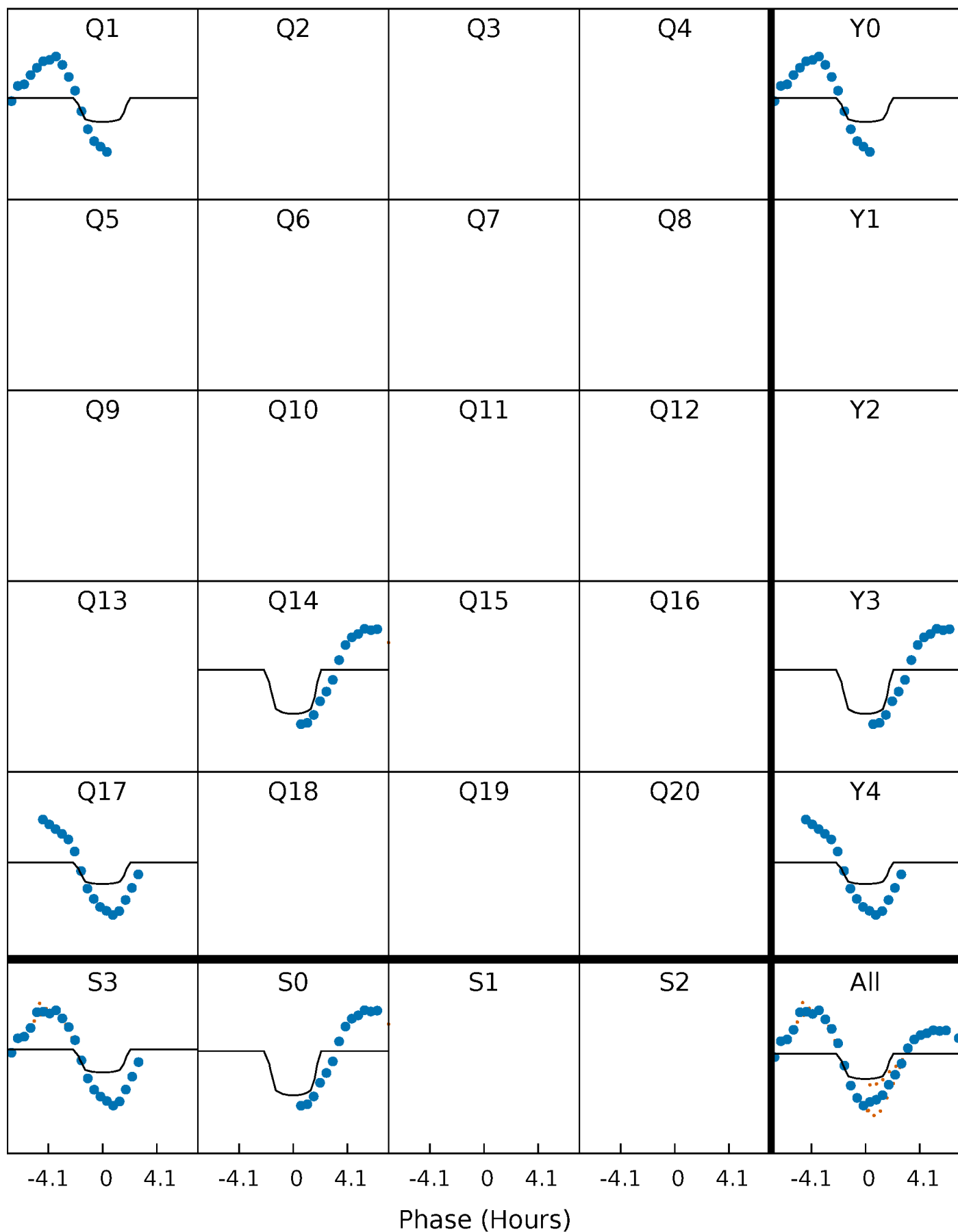
PDC Quarter-Phased Transit Curves

TCE 003629496-05 $P=282.028572$ Days $T_0=154.982651$ (BKJD)



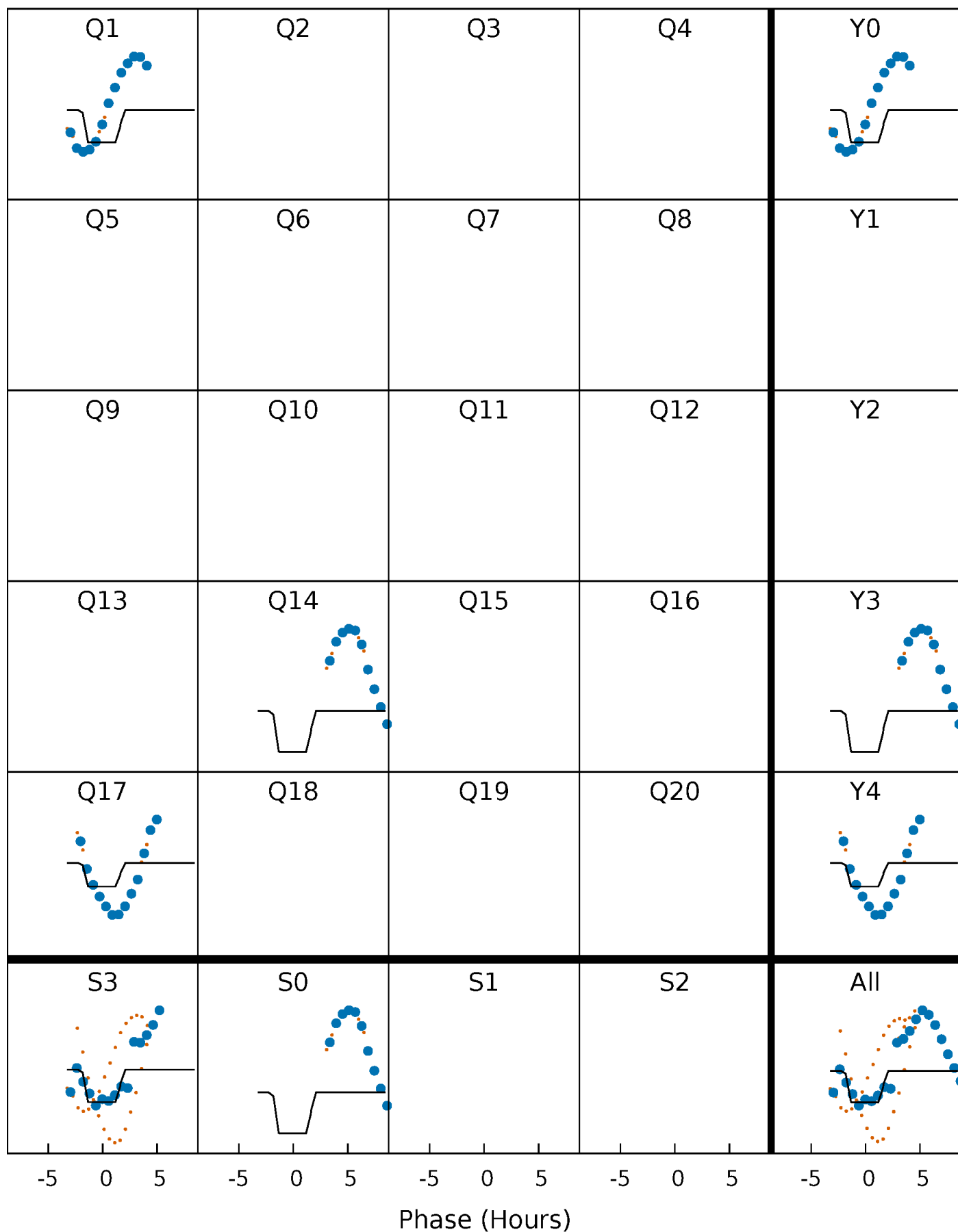
DV Quarter-Phased Transit Curves

TCE 003629496-05 $P=282.028572$ Days $T_0=154.982651$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

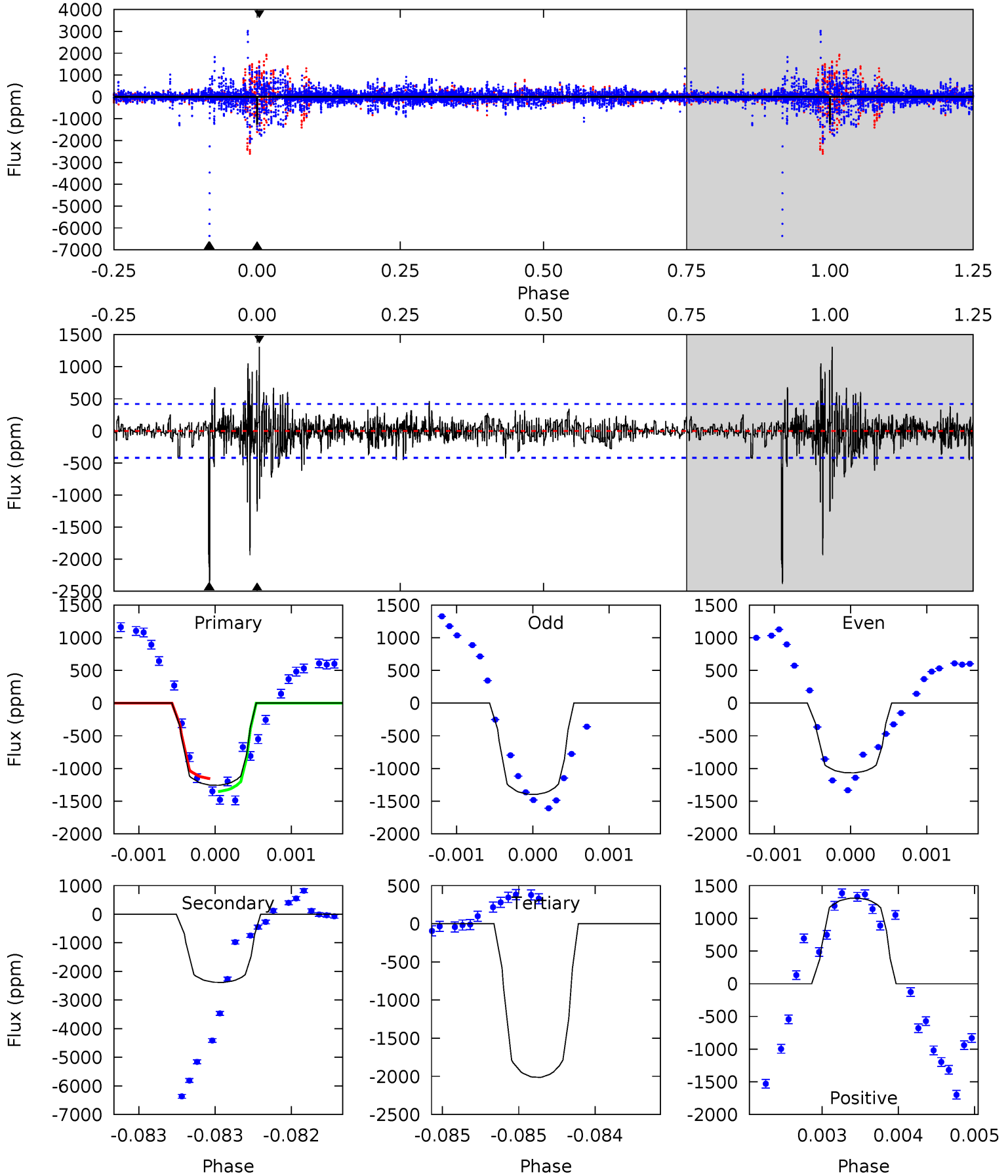
TCE 003629496-05 P=282.040667 Days $T_0=154.820540$ (BKJD)



DV Model-Shift Uniqueness Test

003629496-05, P = 282.028572 Days, E = 154.982651 Days

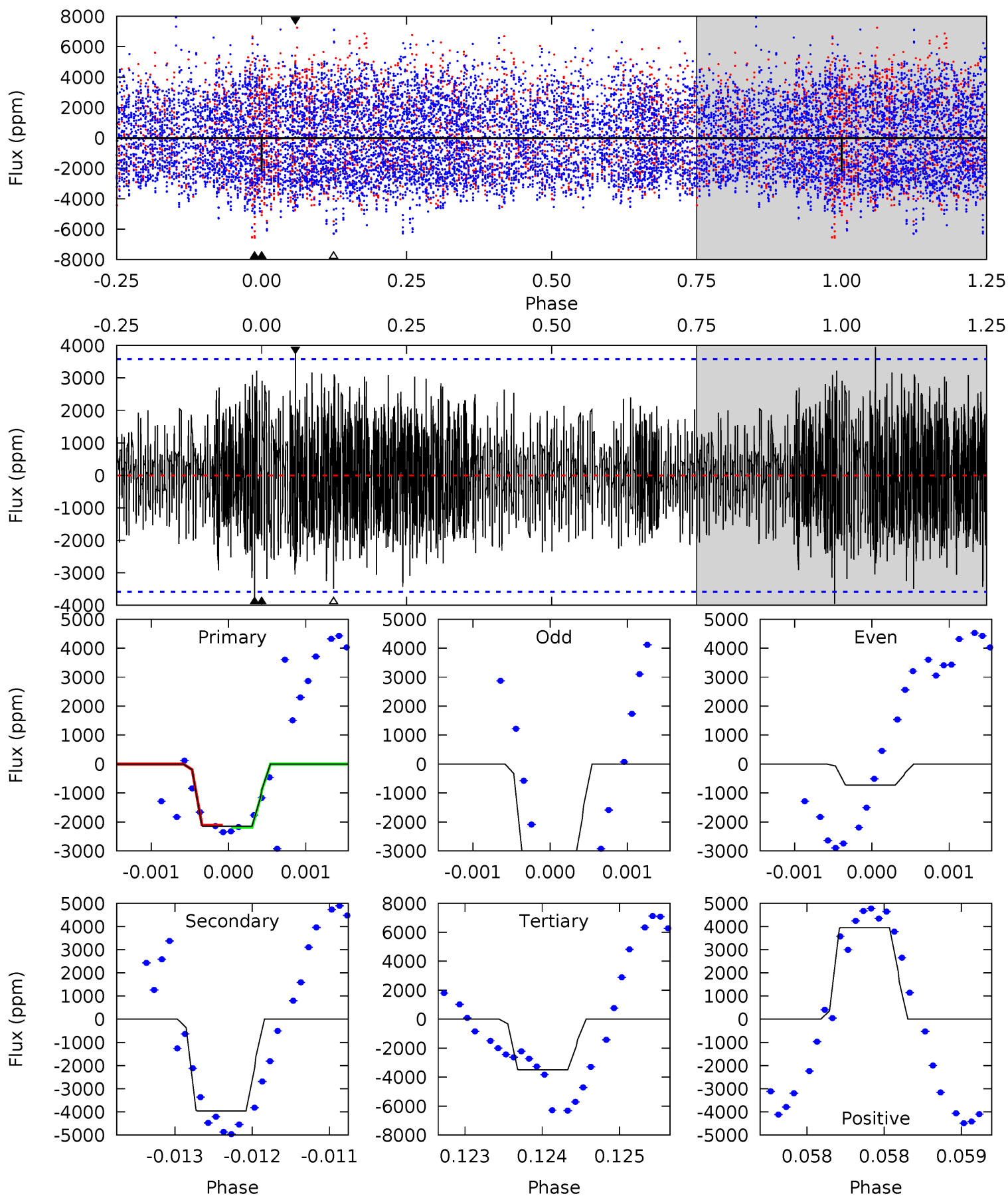
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
16.6	31.5	26.6	17.3	5.55	3.44	2.29	-10.0	-0.67	4.89	14.2	2.17	0.93	0.35	1.31



Alt Model-Shift Uniqueness Test

003629496-05, P = 282.040667 Days, E = 154.820540 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
3.33	6.13	5.42	6.12	5.55	3.44	1.86	-2.08	-2.79	0.71	0.00	2.22	1.00	0.50	0.05



Stellar Parameters For KIC 003629496

	$T_{\text{eff}} (K)$	$\log(g)$	$[\text{Fe}/\text{H}]$	$R (R_{\odot})$	$M (M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	9967^{+280}_{-385}	$4.045^{+0.094}_{-0.175}$	$0.360^{+0.050}_{-0.250}$	$2.587^{+0.659}_{-0.384}$	$2.707^{+0.273}_{-0.273}$	$0.220^{+0.110}_{-0.100}$
	+3%/-4%	+2%/-4%	+14%/-69%	+25%/-15%	+10%/-10%	+50%/-45%
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 003629496-05 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-2383 ± 76	$11.92^{+11.39}_{-7.88}$	917^{+62}_{-49}	11314^{+23920}_{-4052}	12692^{+95636}_{-9362}
Alt.	-3956 ± 646	$15.96^{+12.00}_{-9.88}$	917^{+60}_{-52}	10998^{+17834}_{-3467}	12165^{+64591}_{-8365}

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

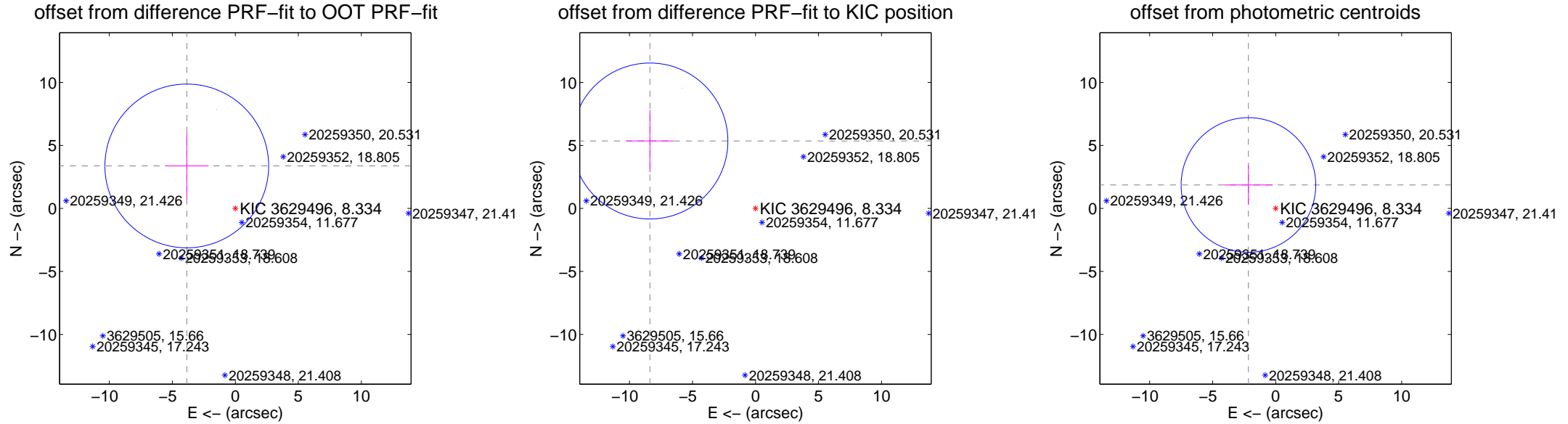
DV Centroid Data

Supplemental centroid analysis for 003629496-05. **Kepler magnitude: 8.33.** Transit SNR 8.49

There are 0 quarters with good PRF difference image offsets

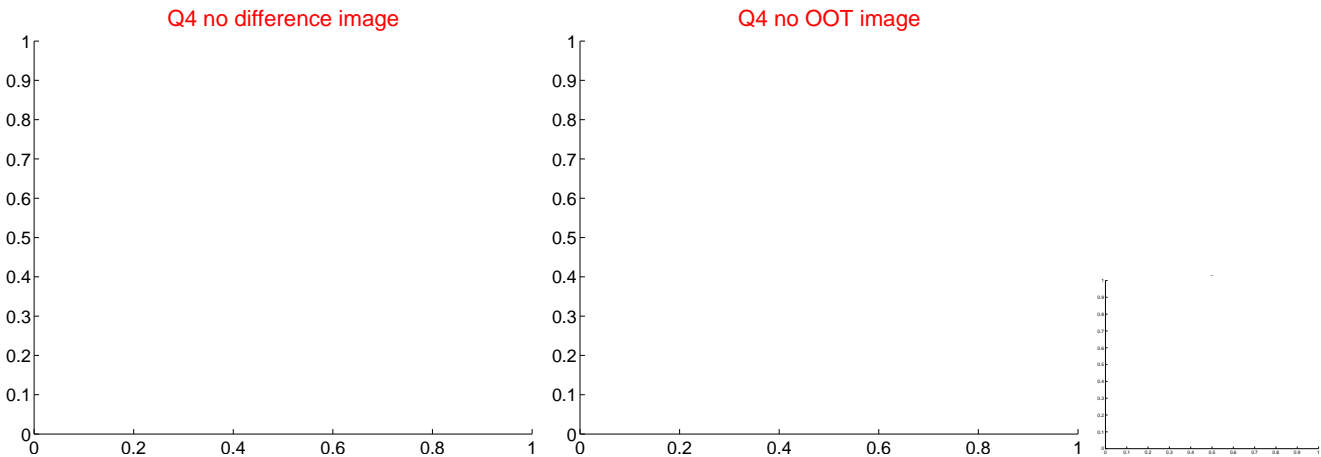
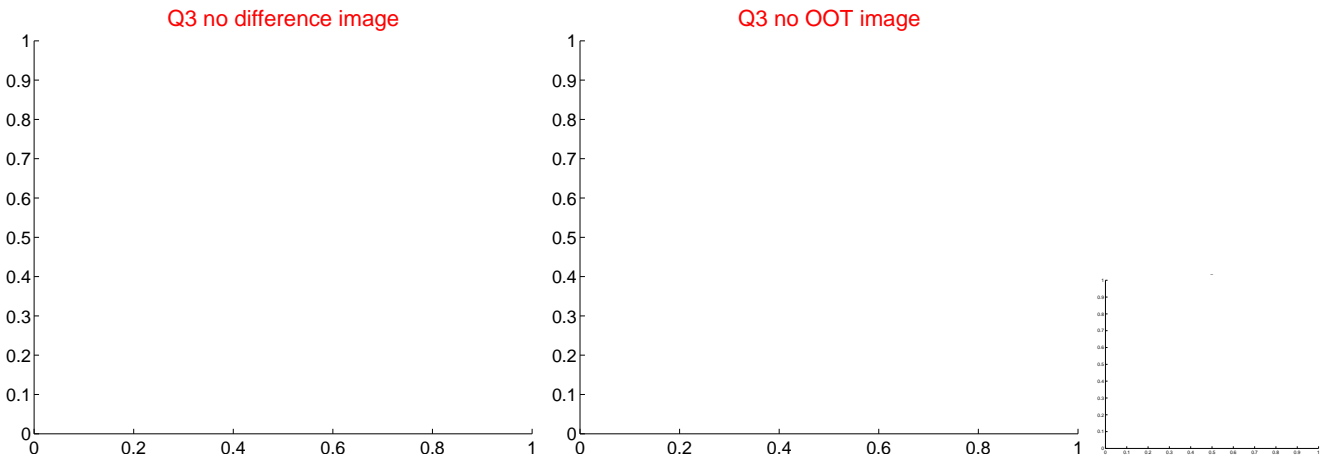
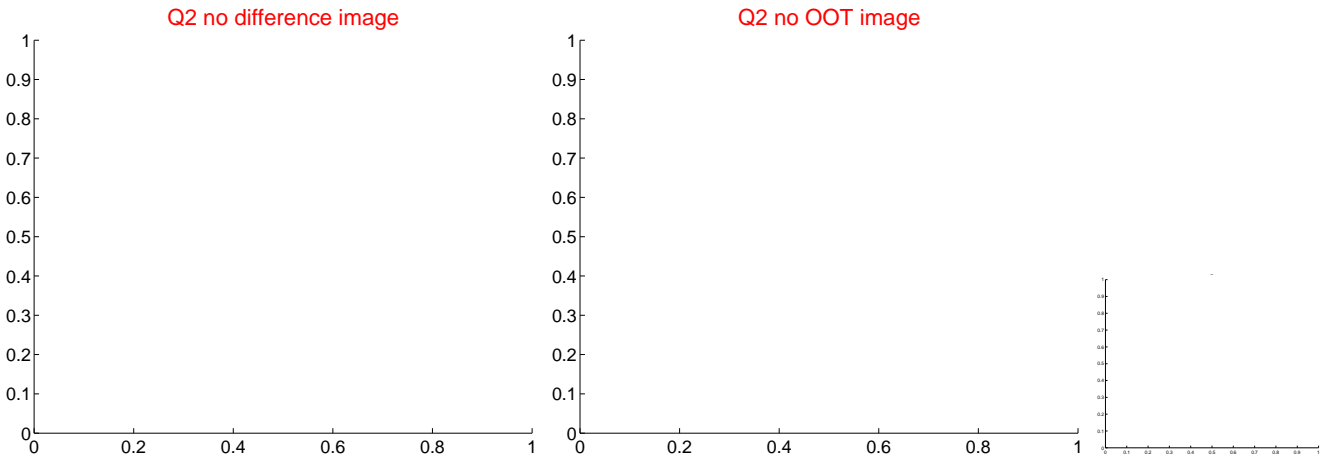
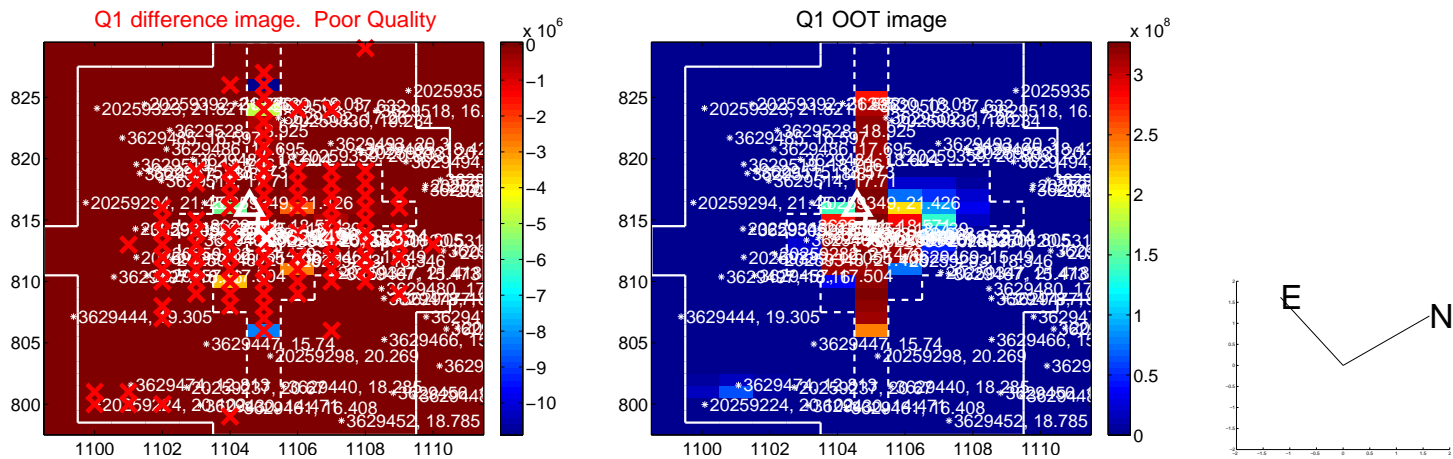
The OOT PRF centroid is offset from the target star catalog position by about 4.62 arcsec so the offset from difference PRF-fit to OOT-fit may be invalid.

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	5.120 ± 2.165	2.36	3.852 ± 1.726	3.372 ± 2.631
PRF-fit source offset from KIC position	9.941 ± 2.062	4.82	8.378 ± 1.874	5.351 ± 2.463
photometric centroid source offset	2.85 ± 1.78	1.60	2.16 ± 1.94	1.86 ± 1.54

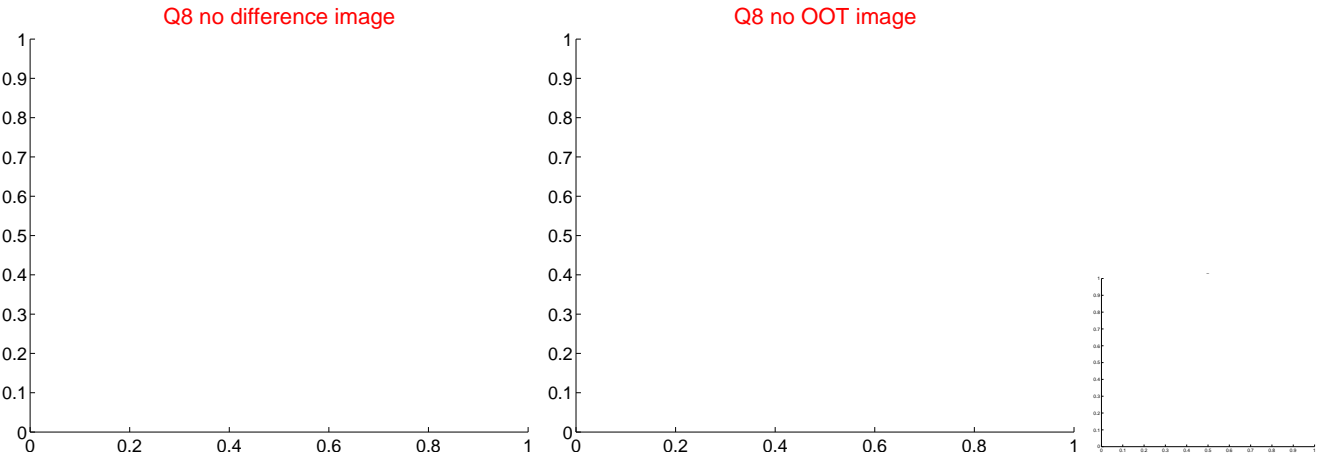
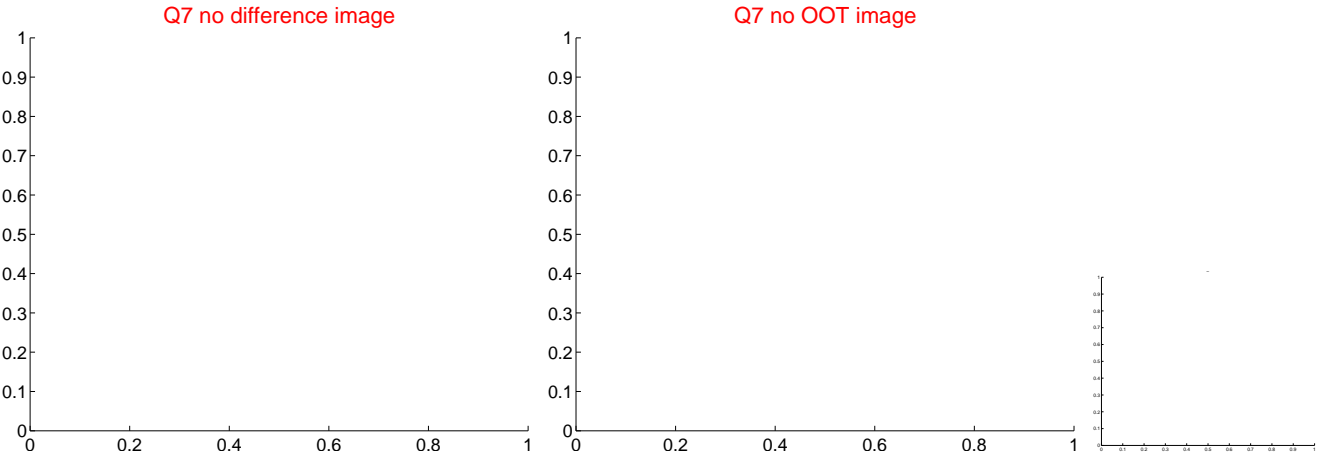
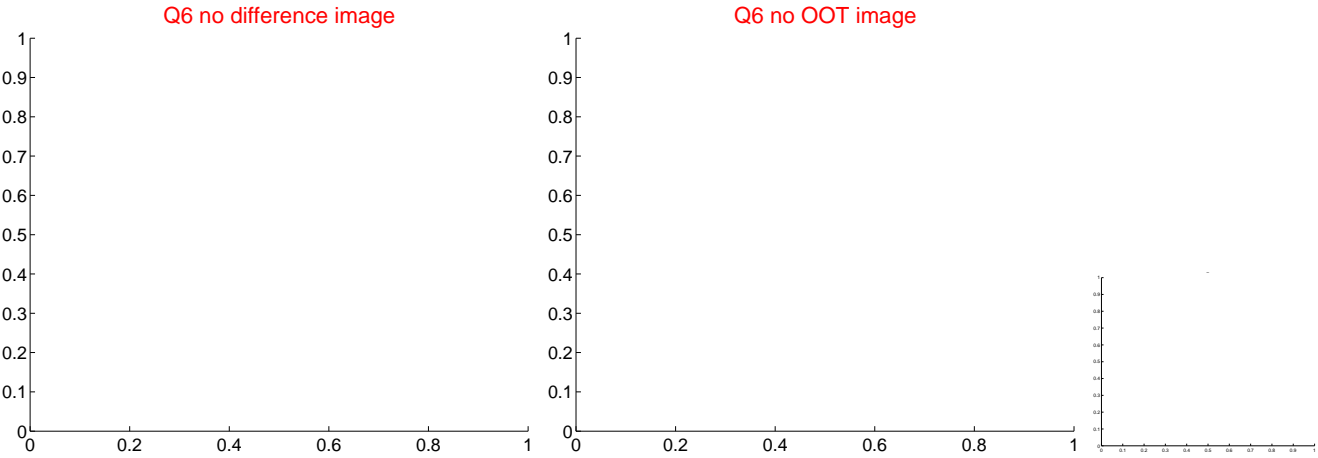
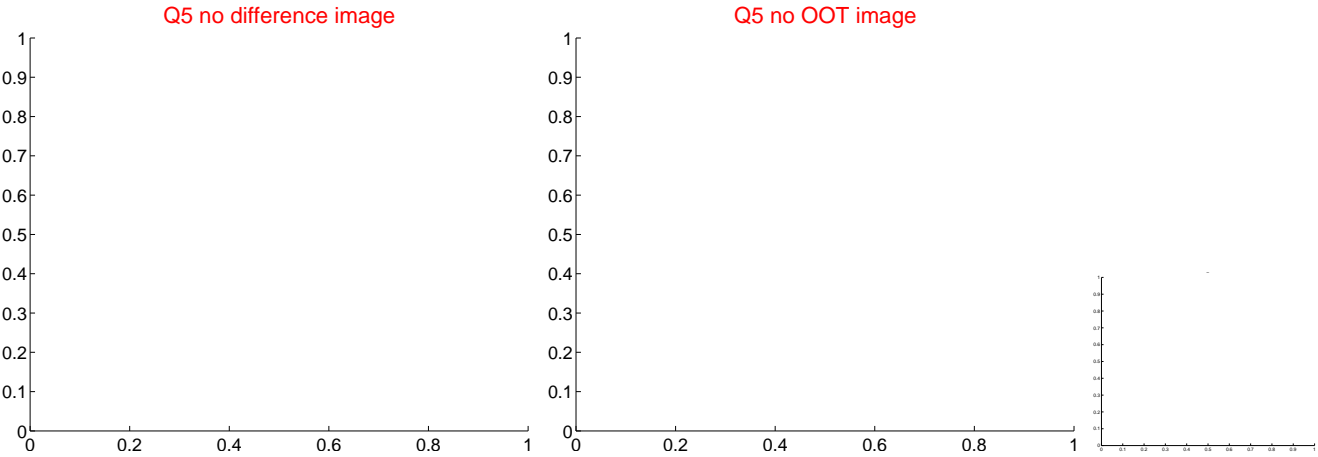


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets;** magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

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



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



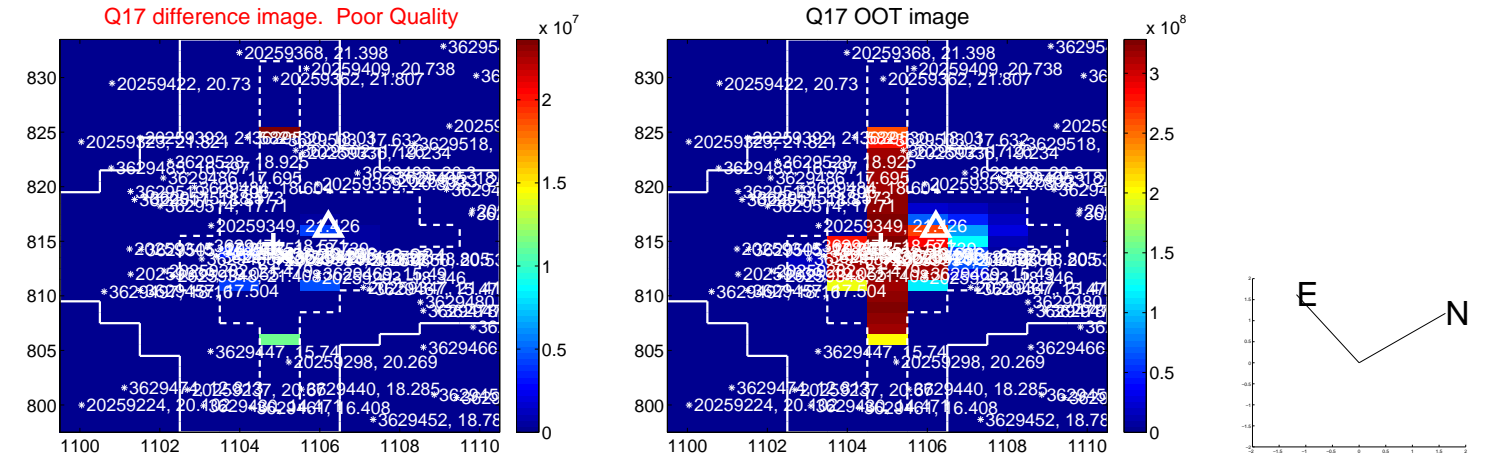
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



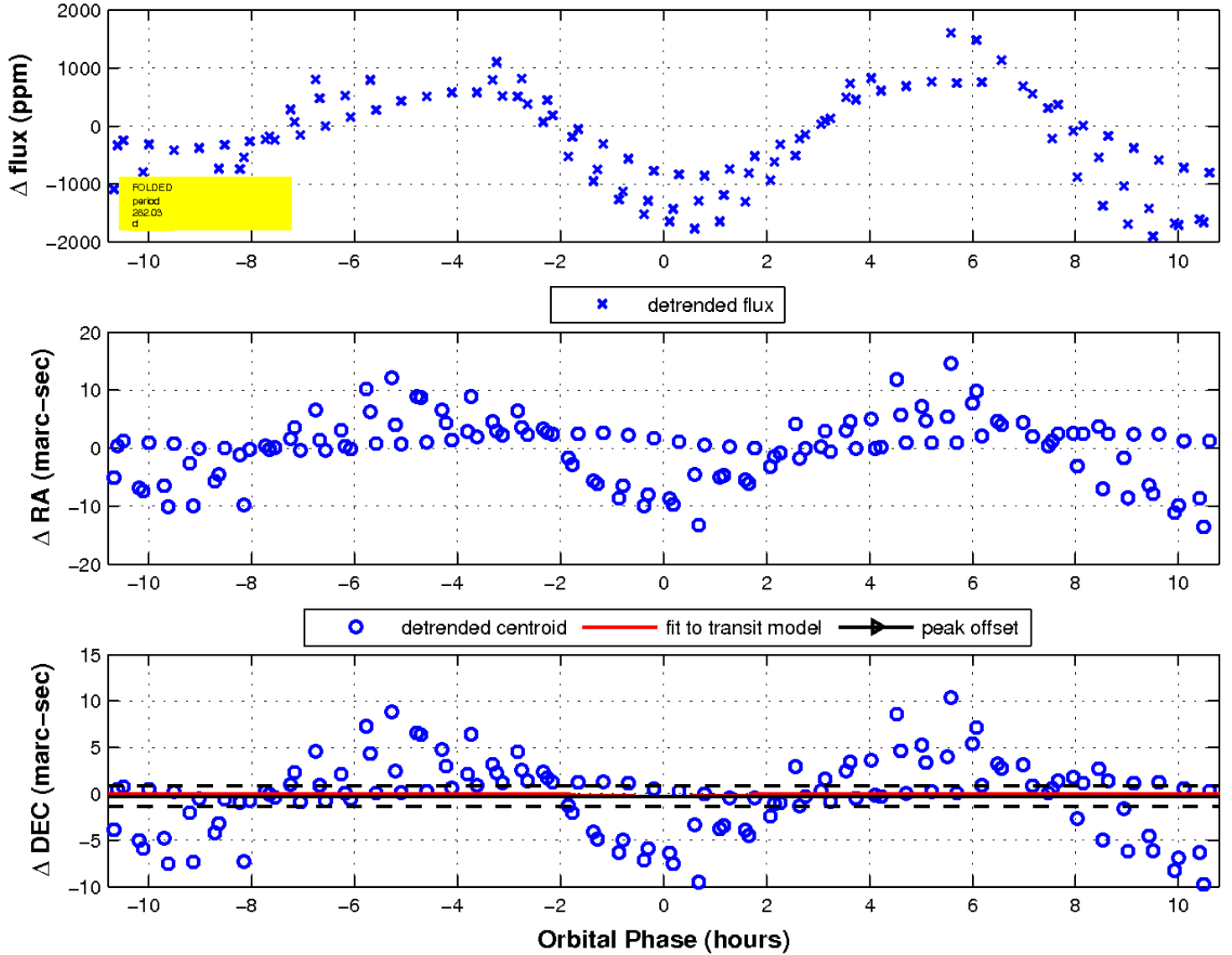
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



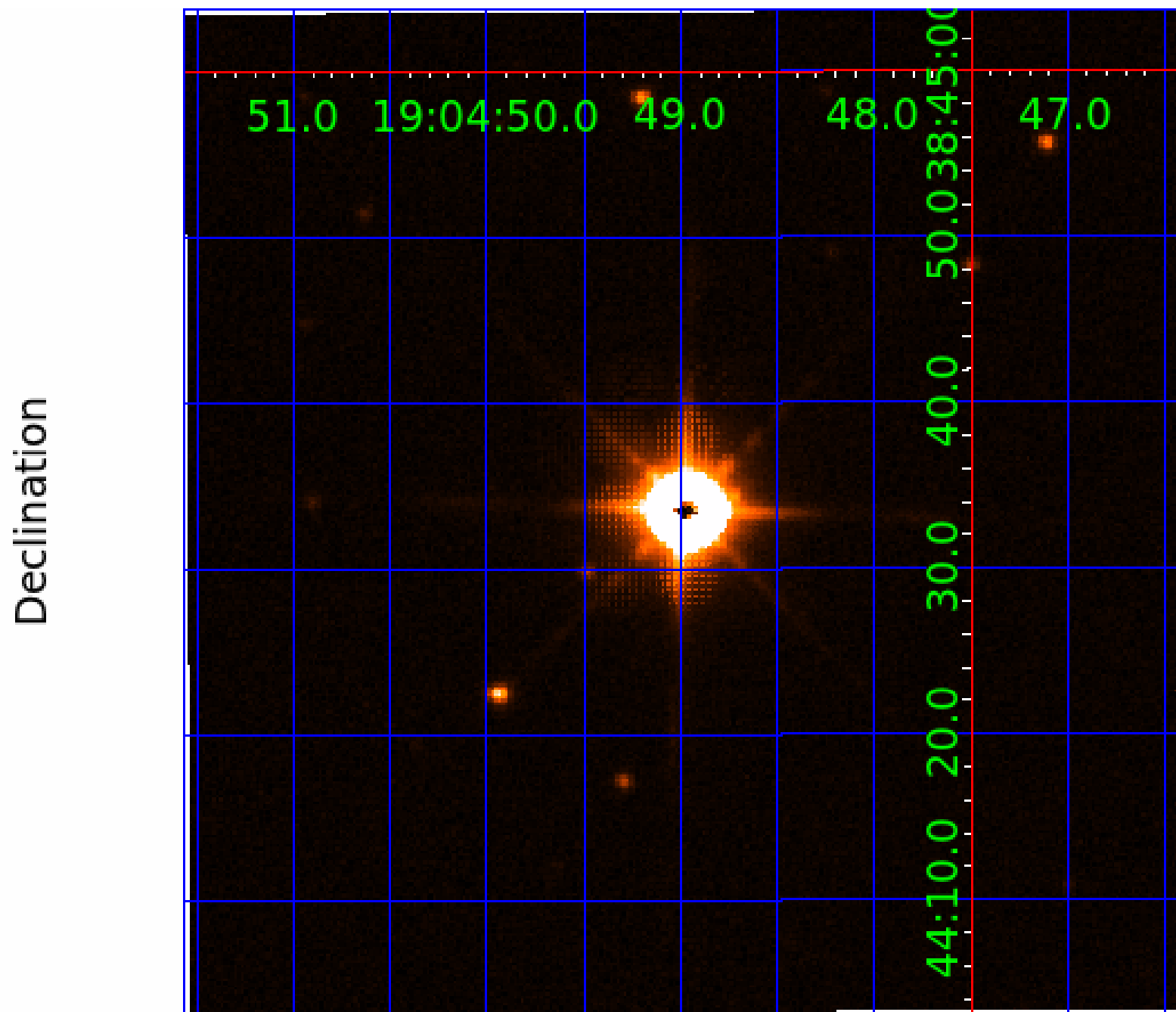
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



fluxWeightedCentroids, Planet 5 of 7



UKIRT Image



KIC 003629496

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})
003629496-01	OBS	No	1.159741	132.223875	18.6	6.497	20.4	7.1	2.59	9967	1.20	65243.17
003629496-02	OBS	No	92.349203	135.096359	907.3	6.212	14.8	15.4	2.59	9967	9.51	190.45
003629496-03	OBS	No	58.674936	166.077766	38.8	4.500	13.4	-1.0	2.59	9967	1.65	348.67
003629496-04	OBS	No	360.976046	160.588947	754.1	10.841	9.6	8.6	2.59	9967	10.47	30.93
003629496-05	OBS	No	282.028572	154.982651	657.4	3.606	10.0	8.5	2.59	9967	6.81	42.98
003629496-06	OBS	No	230.094834	133.885270	574.4	3.251	8.7	8.6	2.59	9967	6.63	56.38
003629496-07	OBS	No	282.008740	151.569591	1025.7	7.620	12.6	15.3	2.59	9967	9.87	42.99

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
003629496-01	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—CENT_SATURATED
003629496-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_ALT—INCONSISTENT_TRANS—CENT_SATURATED
003629496-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_SATURATED
003629496-04	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_TRACKER—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—INCONSISTENT_TRANS—CENT_SATURATED
003629496-05	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_CHASES—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_TER_DV—MOD_POS_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_SATURATED
003629496-06	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_CHASES—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_TER_DV—MOD_POS_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—INCONSISTENT_TRANS—CENT_SATURATED
003629496-07	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_CHASES—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—SAME_NTL_PERIOD—CENT_SATURATED

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

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

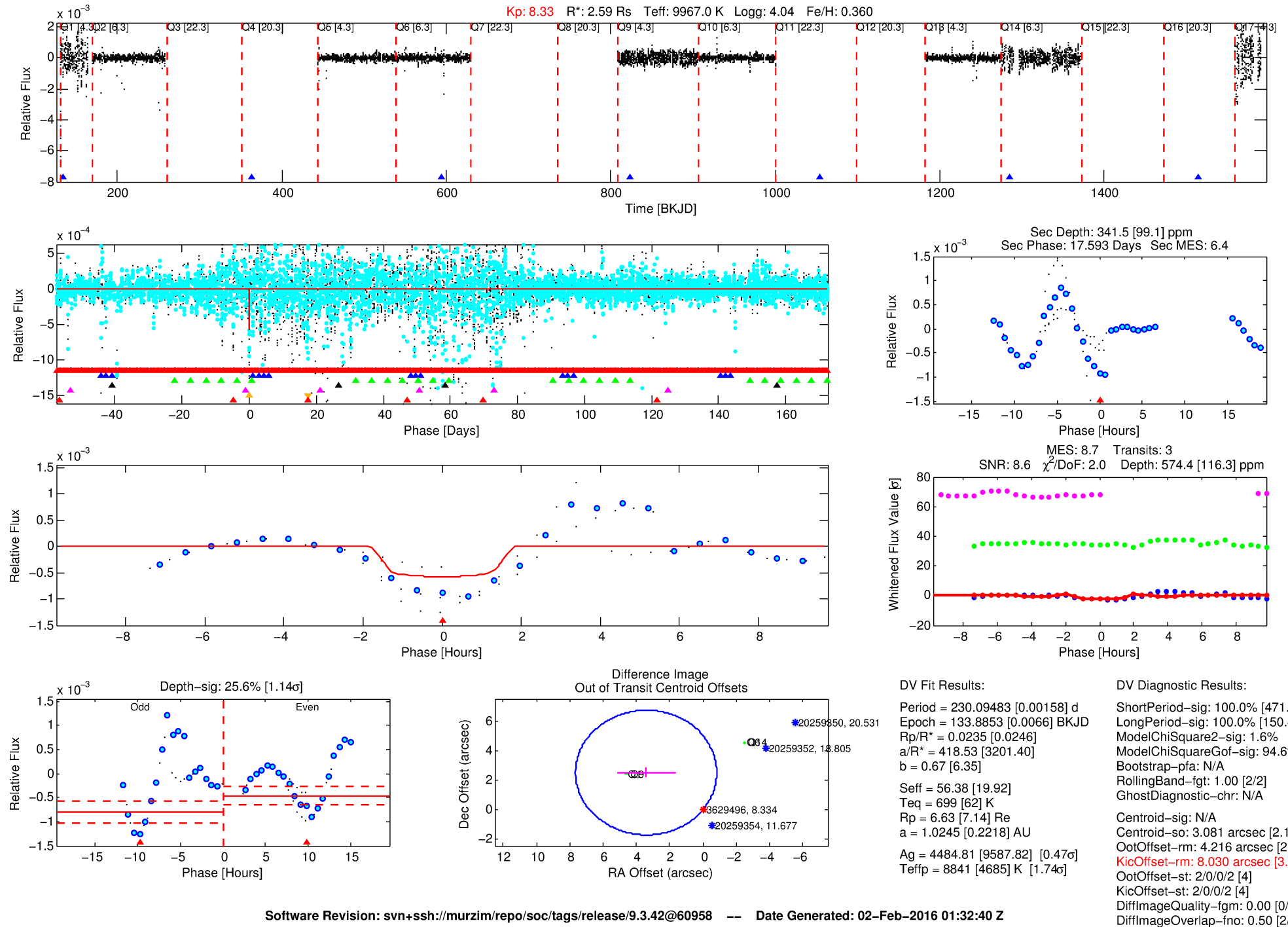
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 003629496-06

No Significant Match Found

DV One-Page Summary

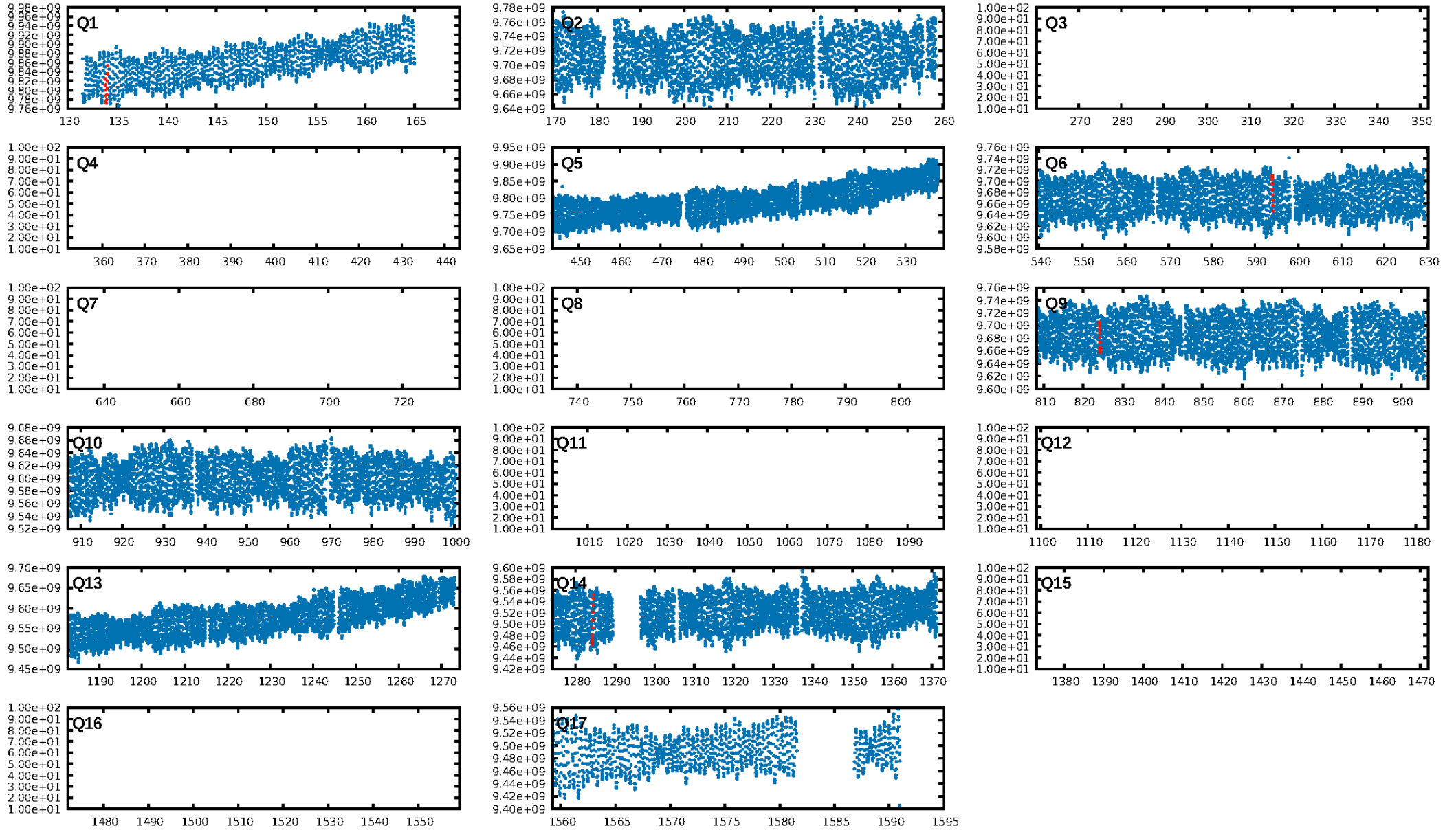
KIC: 3629496 Candidate: 6 of 7 Period: 230.095 d



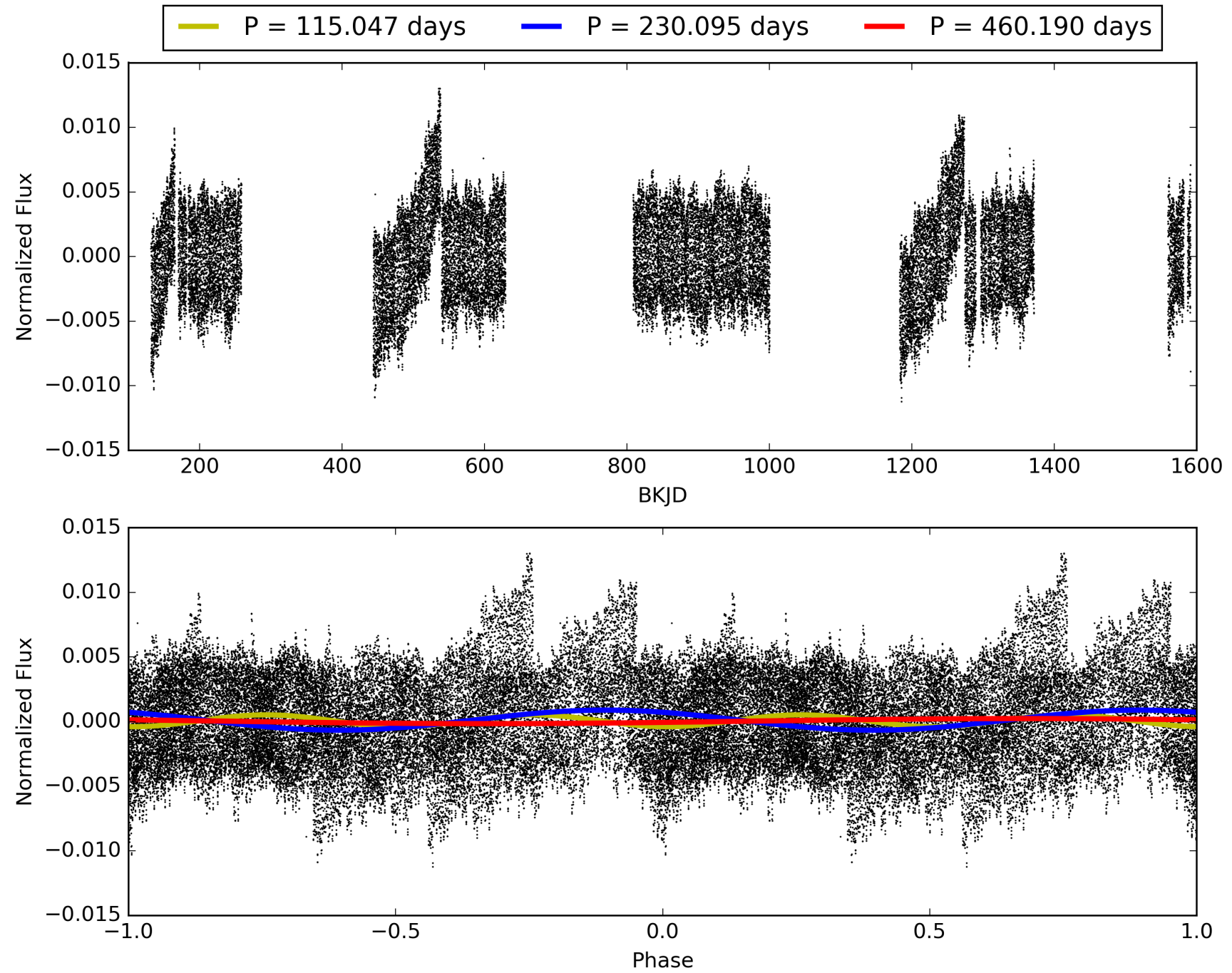
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 02-Feb-2016 01:32:40 Z

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

TCE 003629496-06, PDC Light Curves

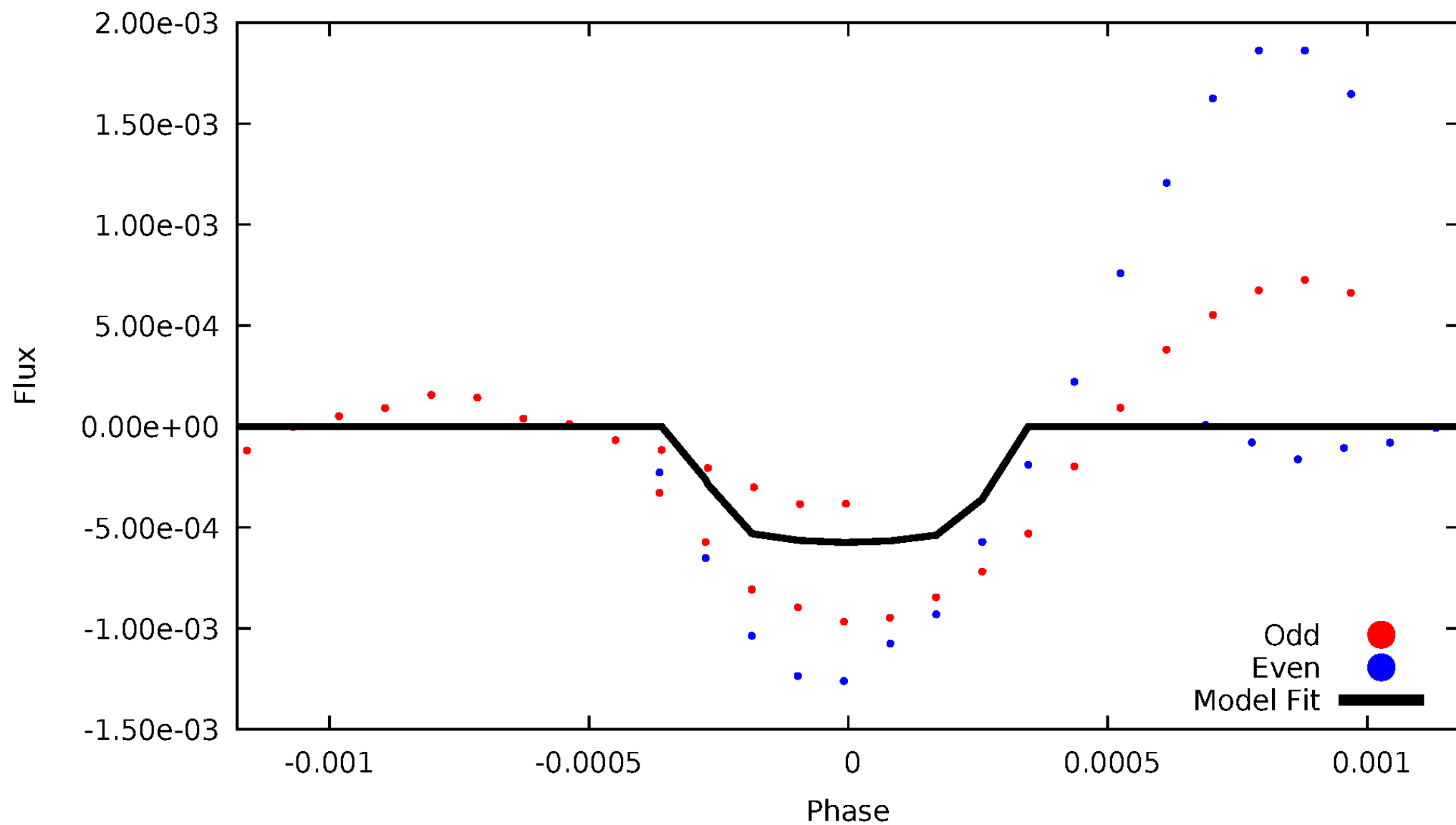


TCE 003629496-06



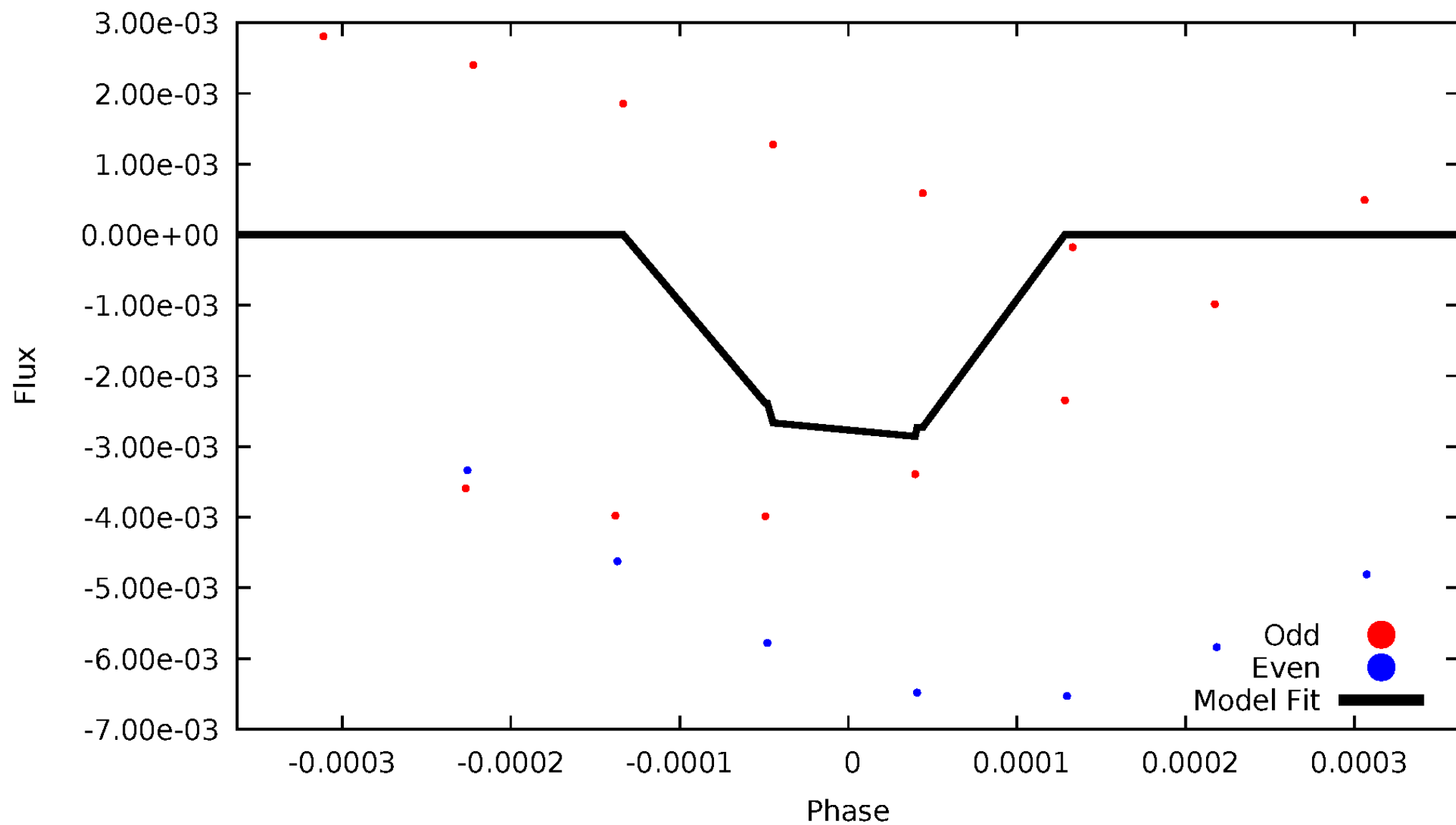
DV Odd/Even

TCE 003629496-06



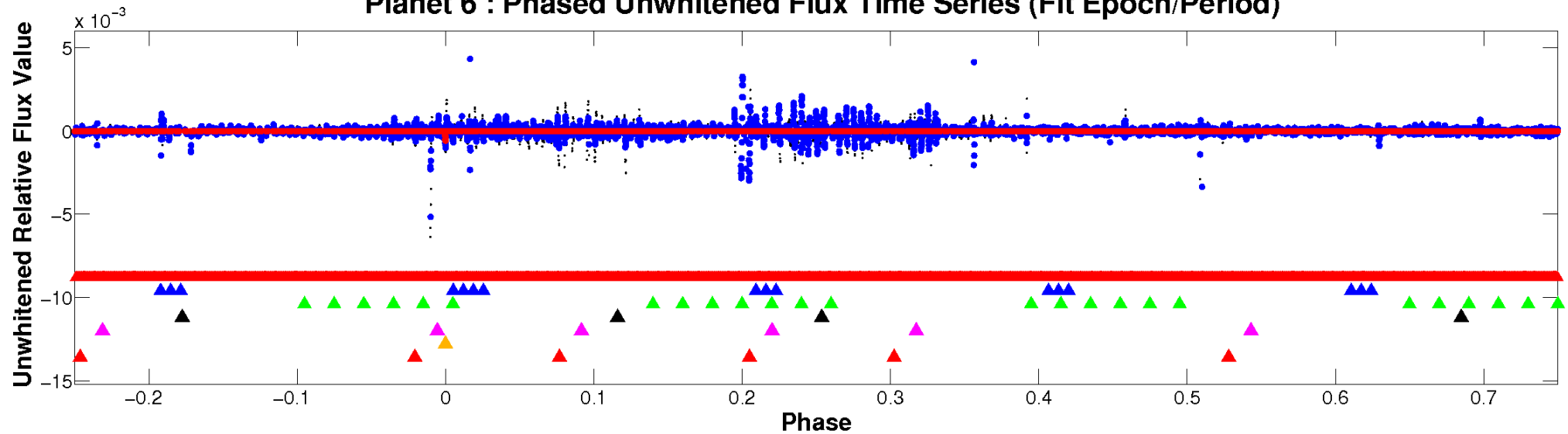
ALT Odd/Even

TCE 003629496-06

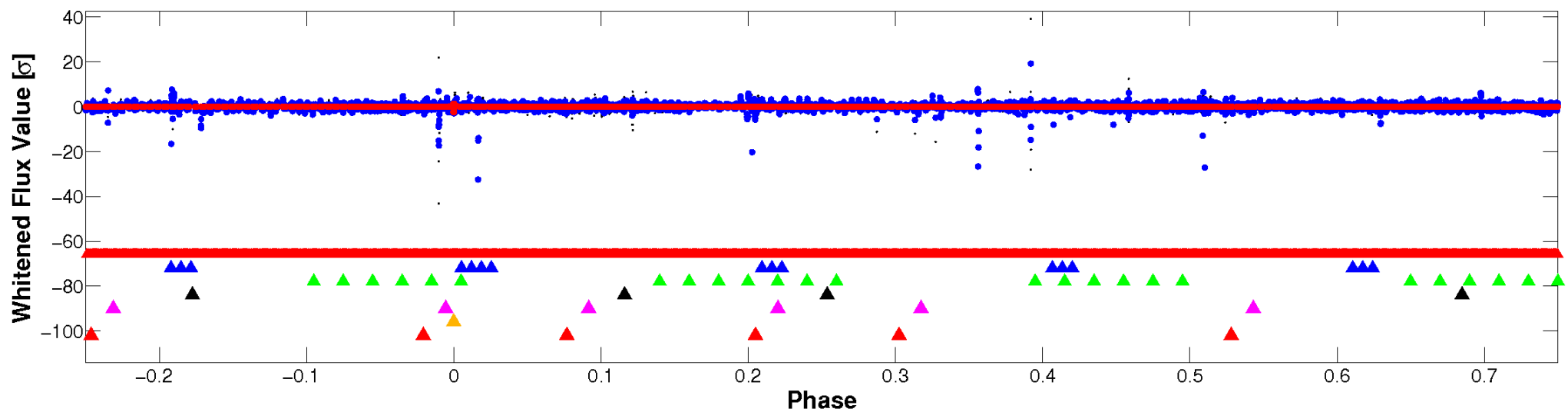


Non-Whitened Vs. Whitened Light Curve

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

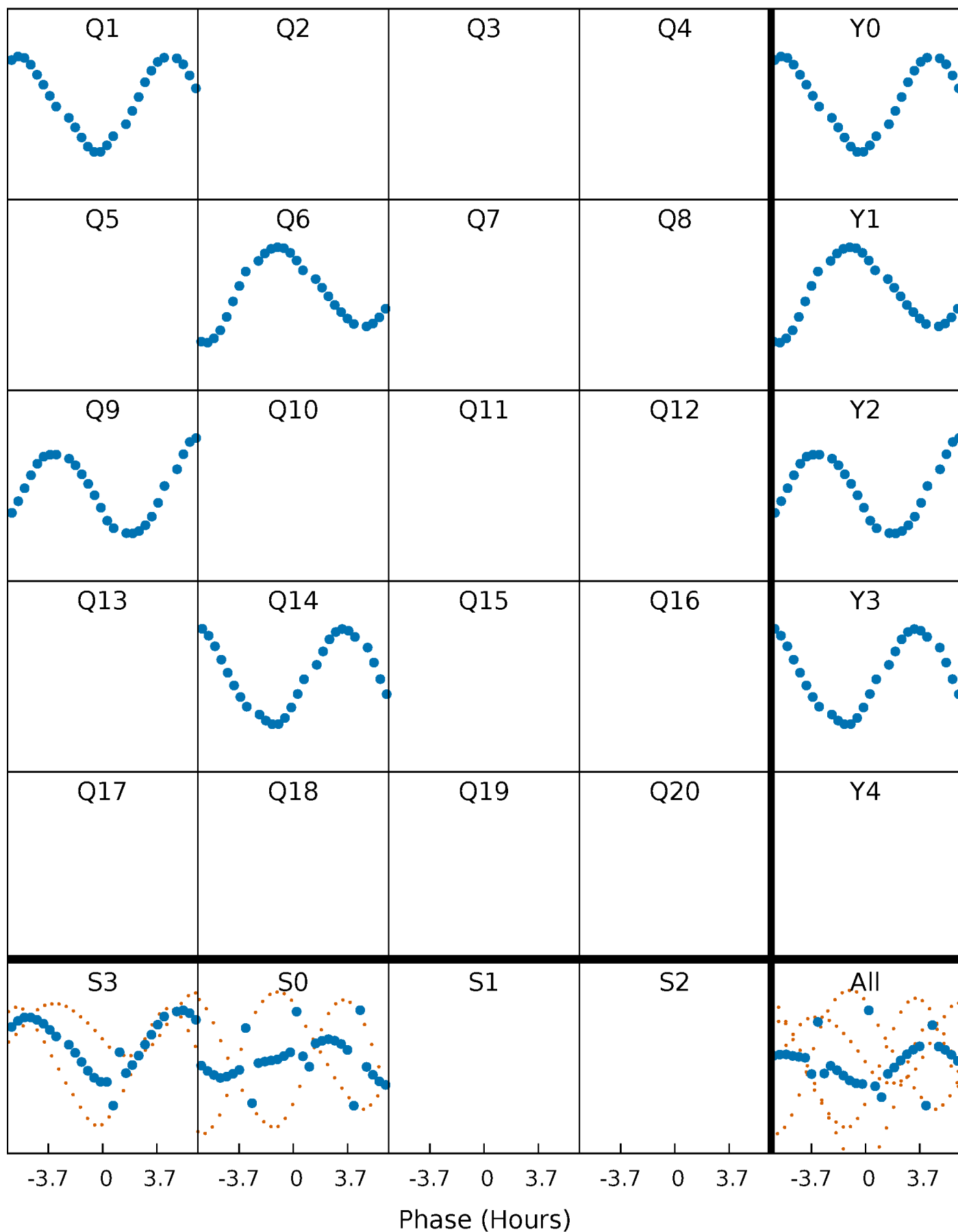


Planet 6 : Phased Whitened Flux Time Series (Fit Epoch/Period)



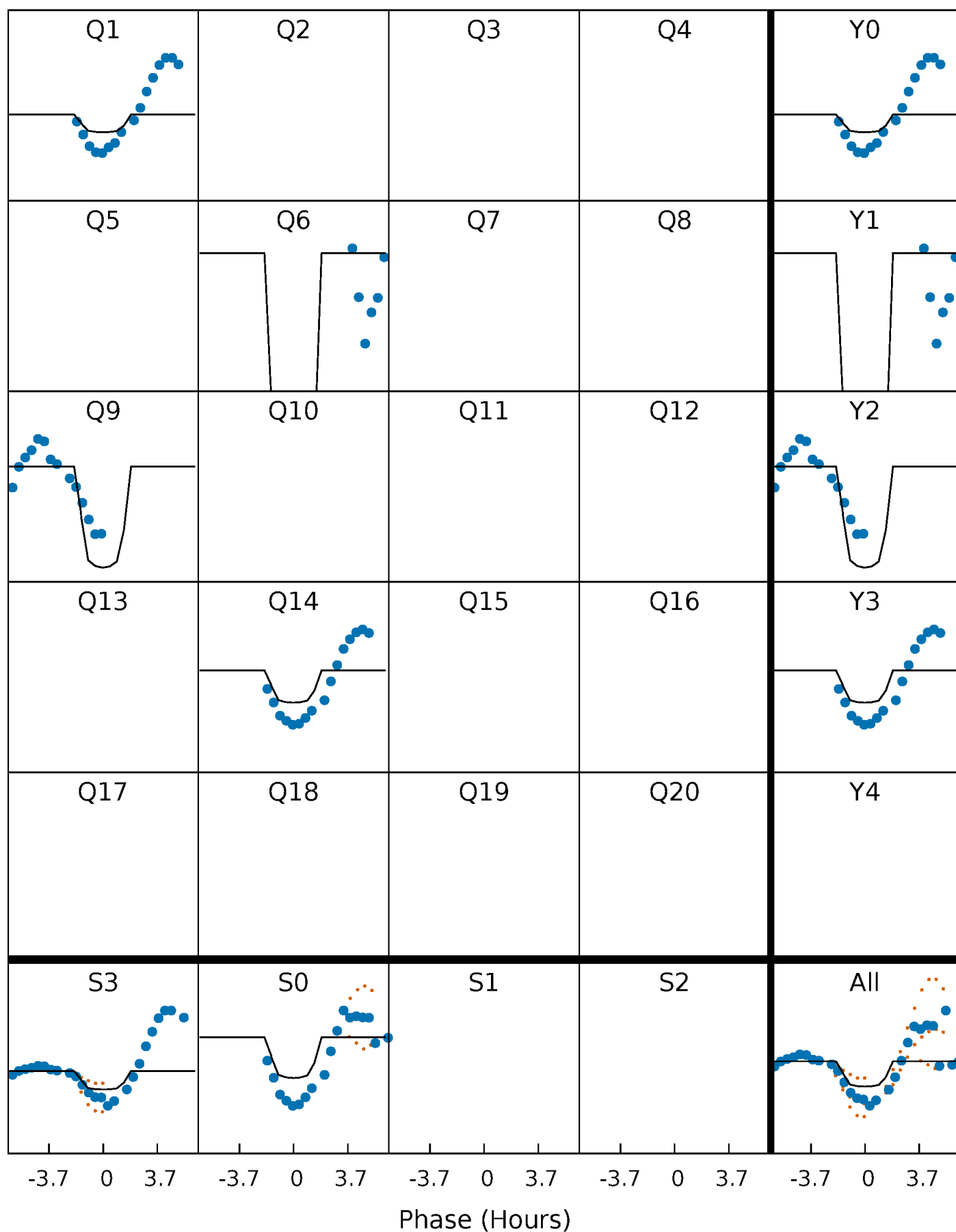
PDC Quarter-Phased Transit Curves

TCE 003629496-06 $P=230.094833$ Days $T_0=133.885270$ (BKJD)



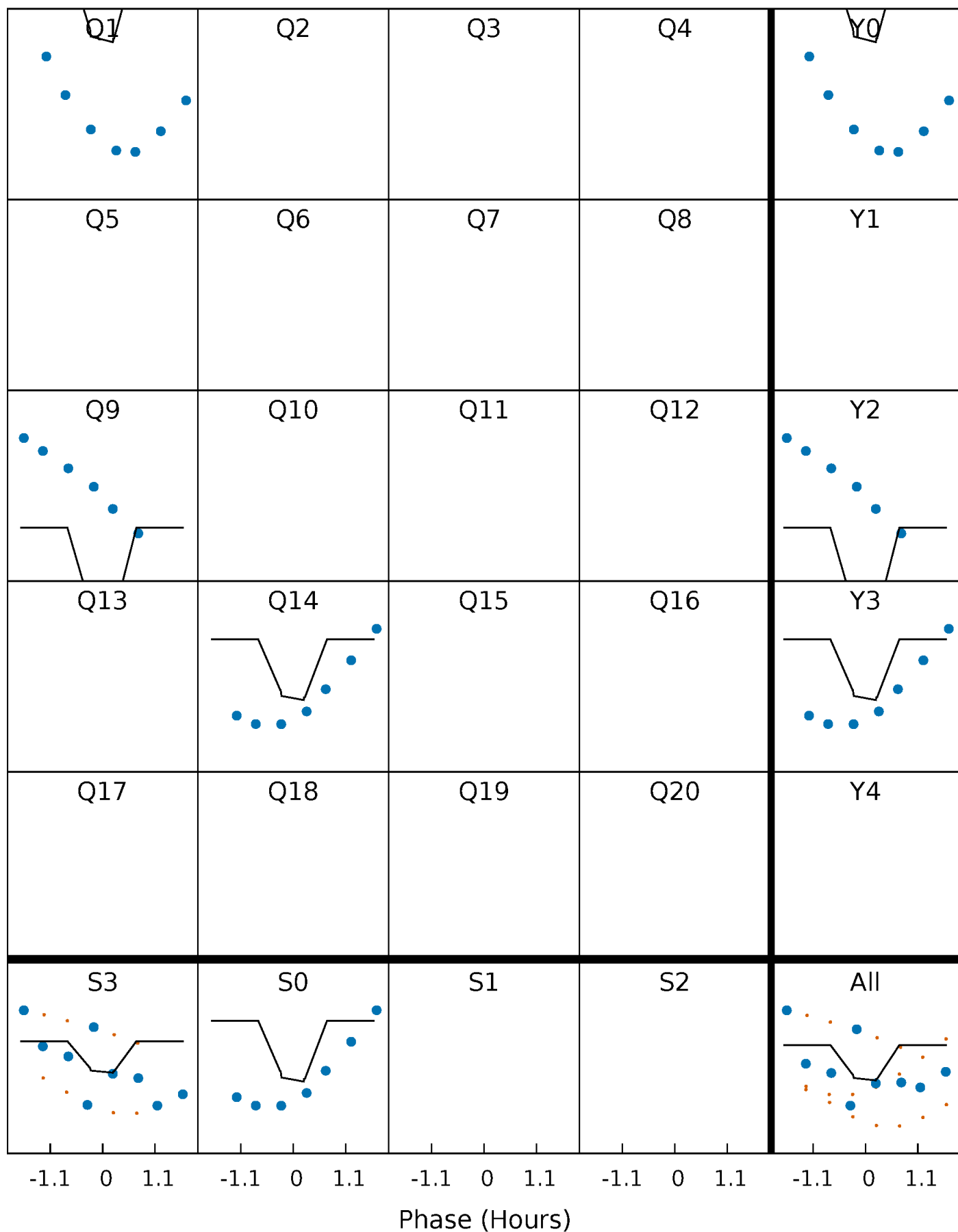
DV Quarter-Phased Transit Curves

TCE 003629496-06 P=230.094833 Days $T_0=133.885270$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

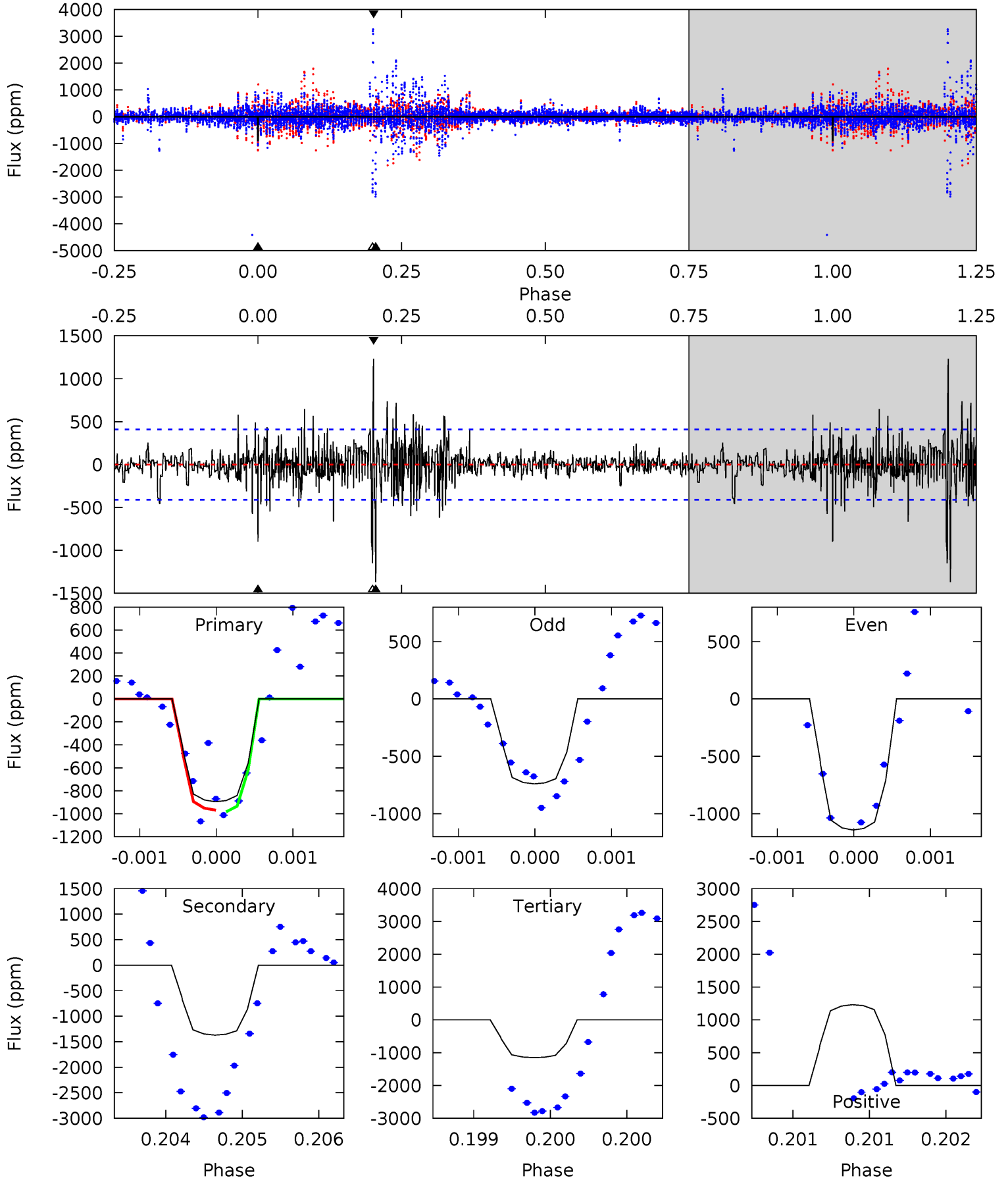
TCE 003629496-06 P=230.094881 Days $T_0=133.853534$ (BKJD)



DV Model-Shift Uniqueness Test

003629496-06, P = 230.094833 Days, E = 133.885270 Days

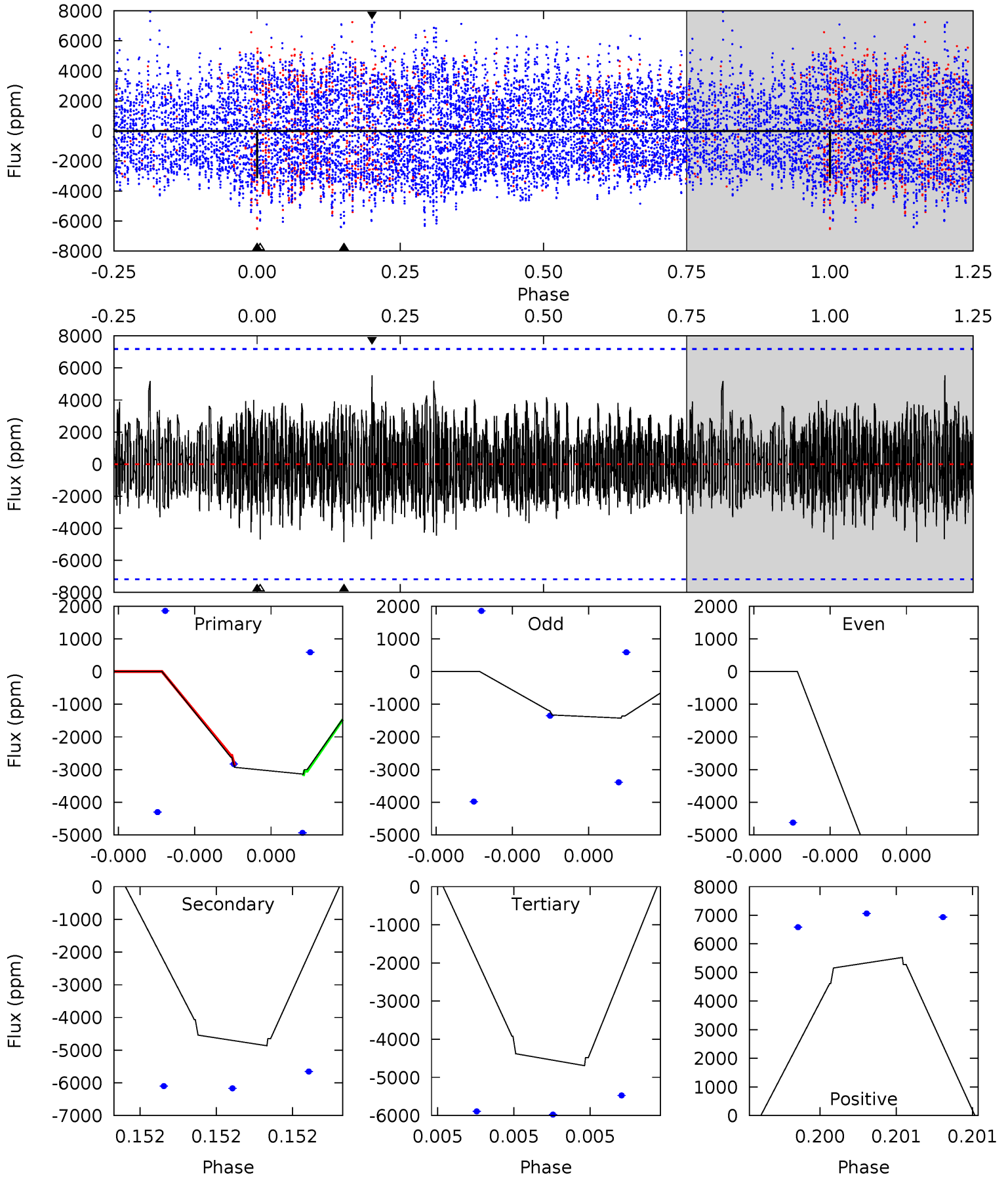
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
12.1	18.5	15.6	16.7	5.54	3.42	2.02	-3.46	-4.54	2.95	1.87	2.30	0.86	0.47	0.09



Alt Model-Shift Uniqueness Test

003629496-06, P = 230.094881 Days, E = 133.853534 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
2.56	3.97	3.83	4.51	5.86	3.91	1.29	-1.27	-1.95	0.14	-0.54	2.09	0.83	0.53	0.14



Stellar Parameters For KIC 003629496

	$T_{\text{eff}} (K)$	$\log(g)$	$[\text{Fe}/\text{H}]$	$R (R_{\odot})$	$M (M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	9967^{+280}_{-385}	$4.045^{+0.094}_{-0.175}$	$0.360^{+0.050}_{-0.250}$	$2.587^{+0.659}_{-0.384}$	$2.707^{+0.273}_{-0.273}$	$0.220^{+0.110}_{-0.100}$
	+3%/-4%	+2%/-4%	+14%/-69%	+25%/-15%	+10%/-10%	+50%/-45%
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 003629496-06 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-1370 ± 74	$8.55^{+6.71}_{-5.42}$	986^{+62}_{-59}	11794^{+24264}_{-3886}	10783^{+69578}_{-7376}
Alt.	-4866 ± 1226	$20.58^{+7.52}_{-7.51}$	987^{+64}_{-58}	9847^{+4395}_{-2055}	6683^{+9435}_{-3470}

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

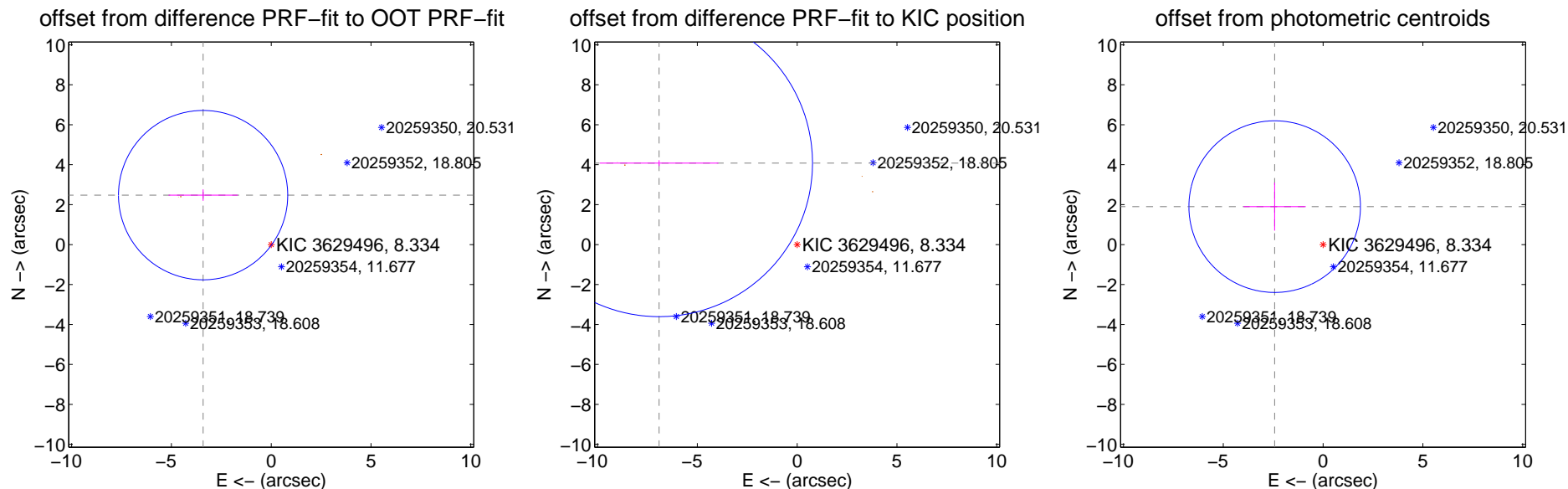
DV Centroid Data

Supplemental centroid analysis for 003629496-06. **Kepler magnitude: 8.33**. Transit SNR 8.61

There are 0 quarters with good PRF difference image offsets

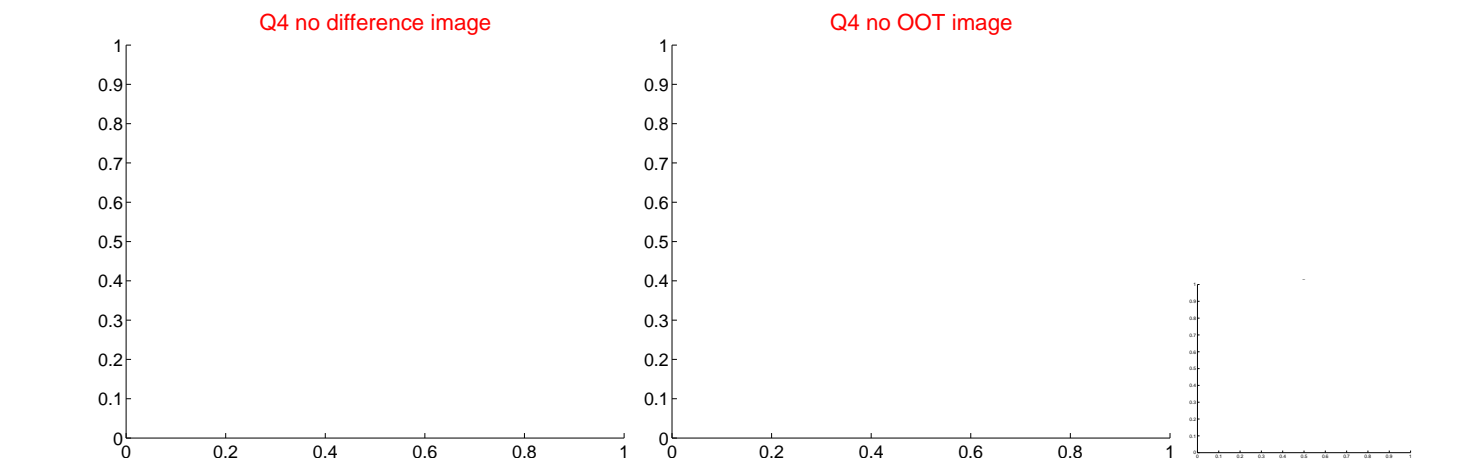
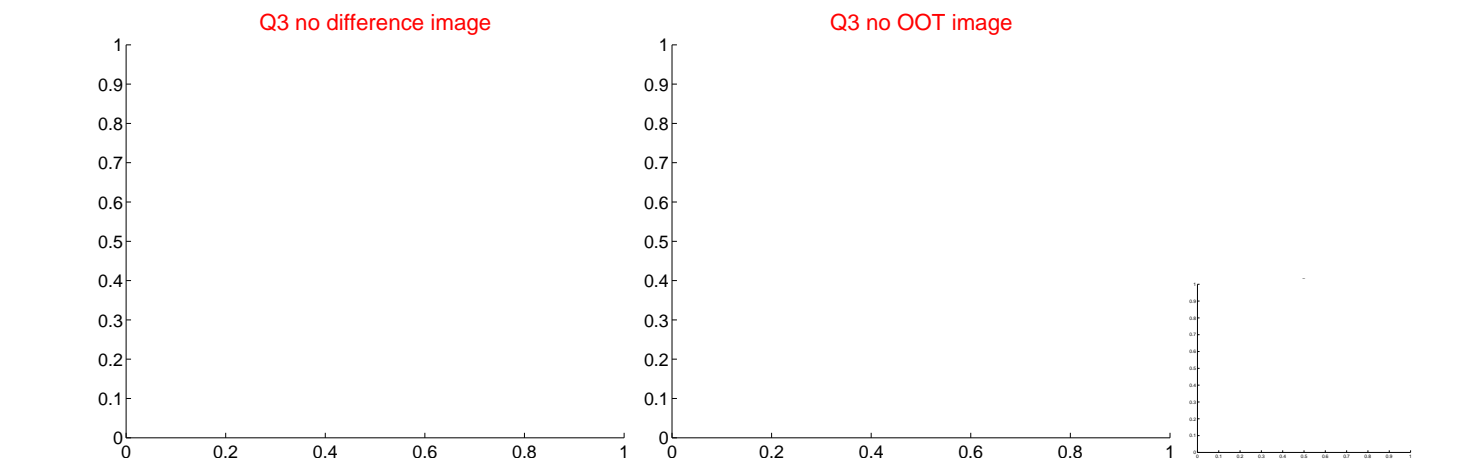
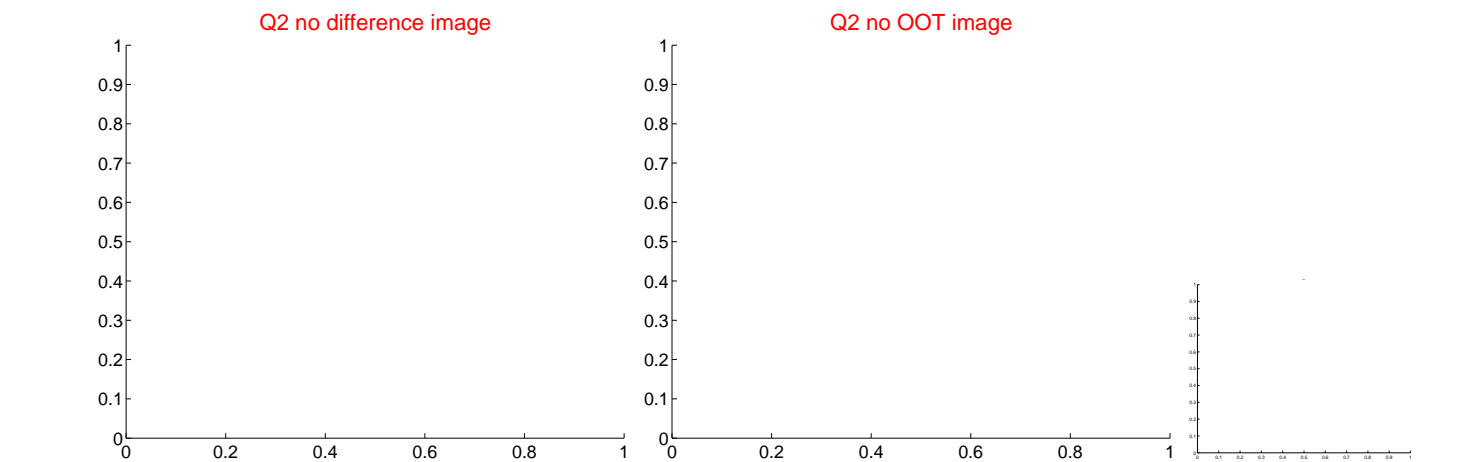
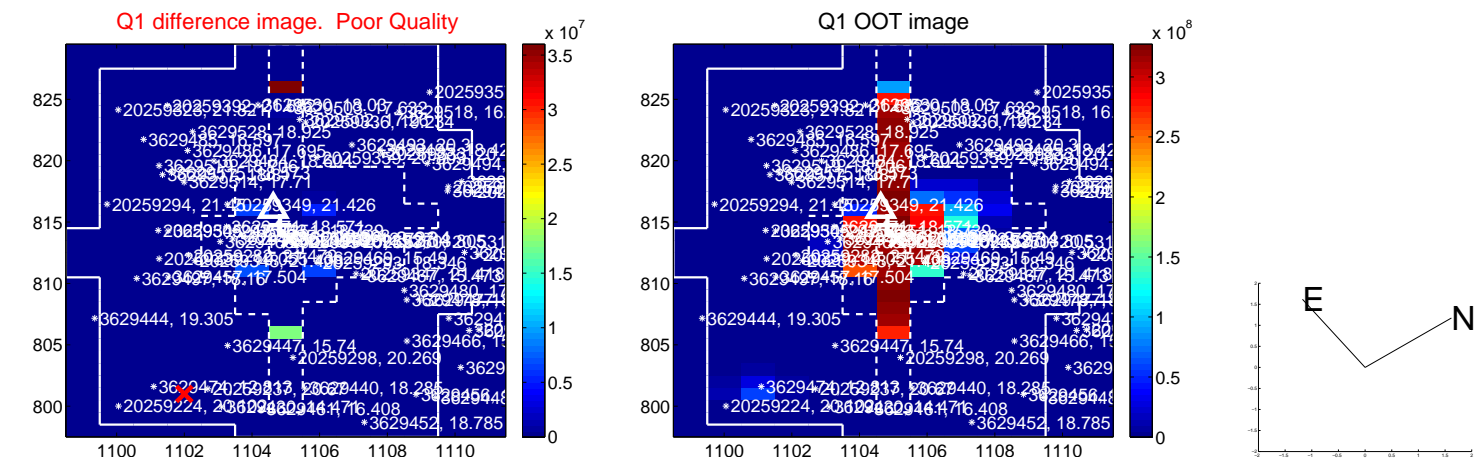
The OOT PRF centroid is offset from the target star catalog position by about 2.25 arcsec so the offset from difference PRF-fit to OOT-fit may be invalid.

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	4.216 ± 1.413	2.98	3.412 ± 1.734	2.476 ± 0.285
PRF-fit source offset from KIC position	8.030 ± 2.562	3.13	6.917 ± 2.973	4.078 ± 0.144
photometric centroid source offset	3.08 ± 1.43	2.15	2.42 ± 1.56	1.90 ± 1.20

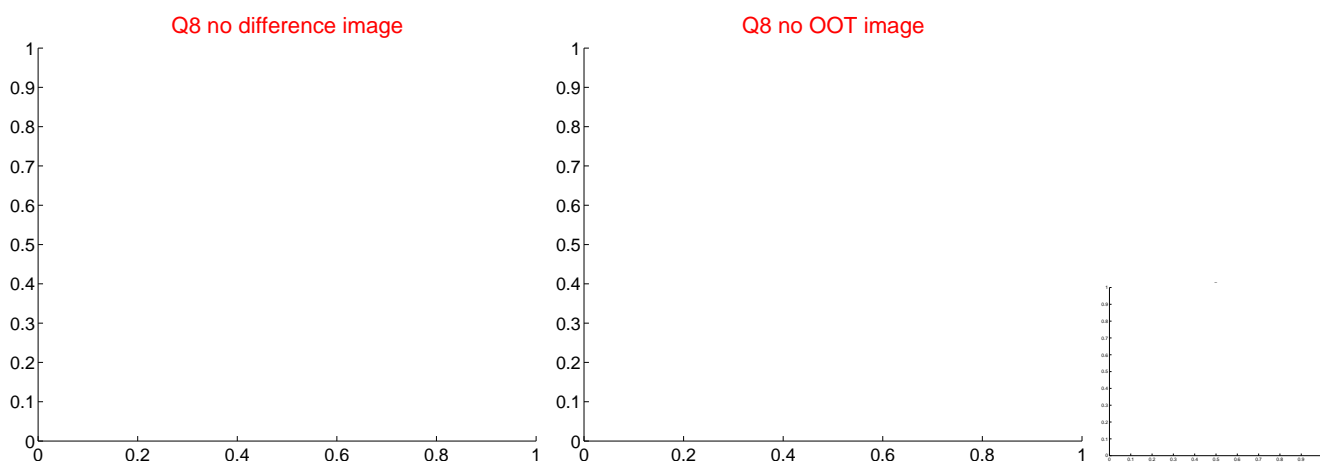
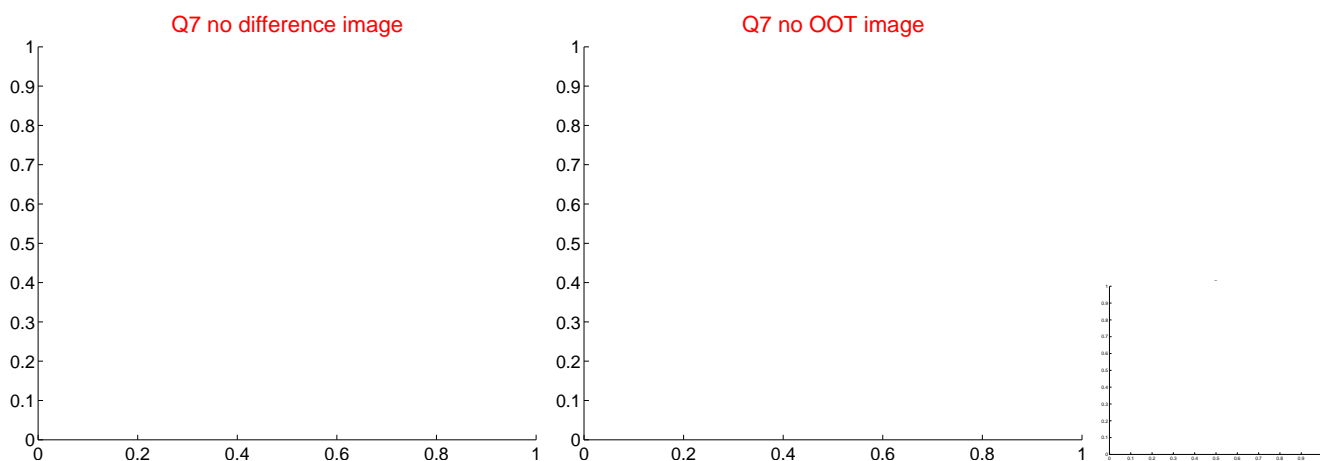
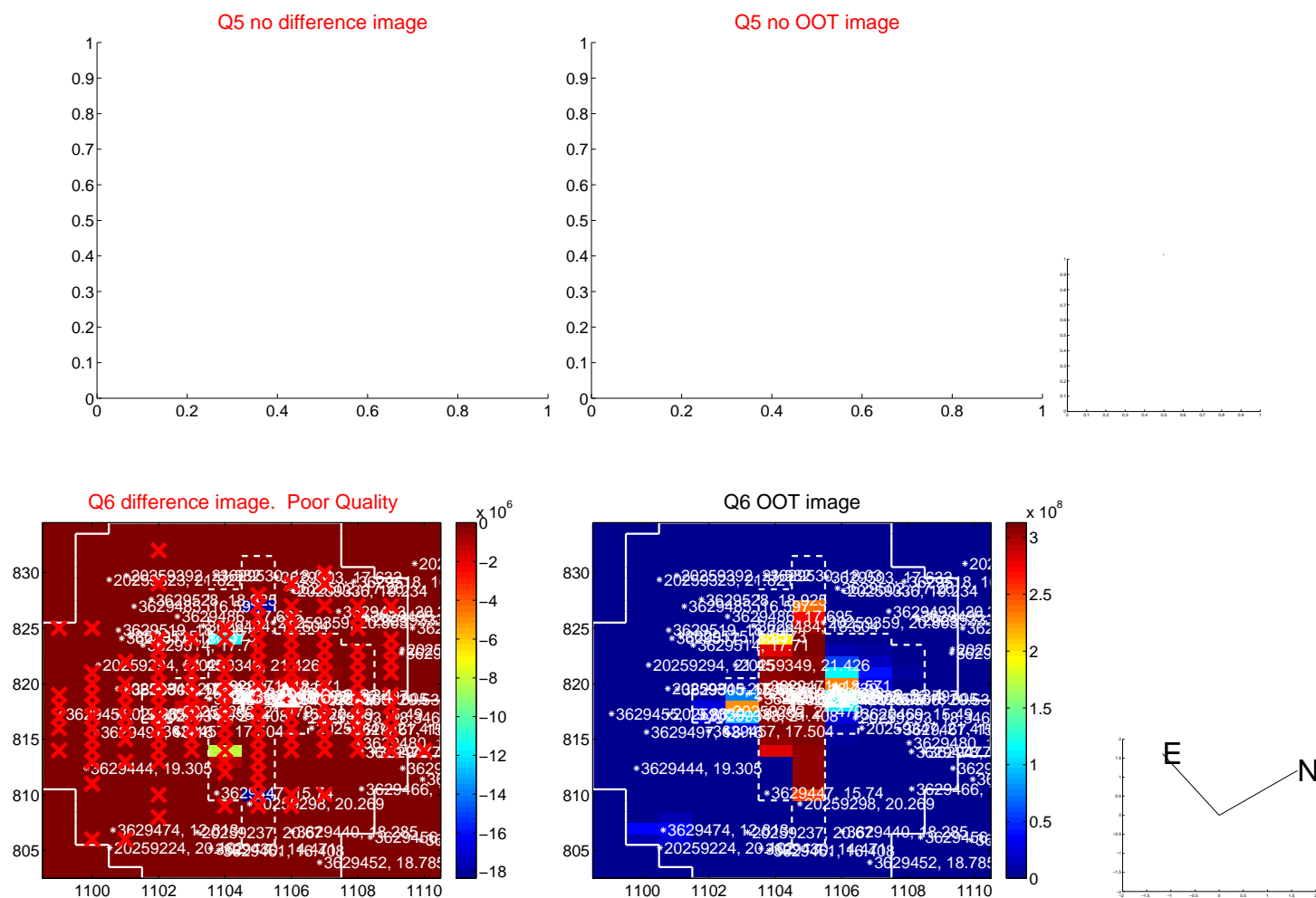


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets**; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

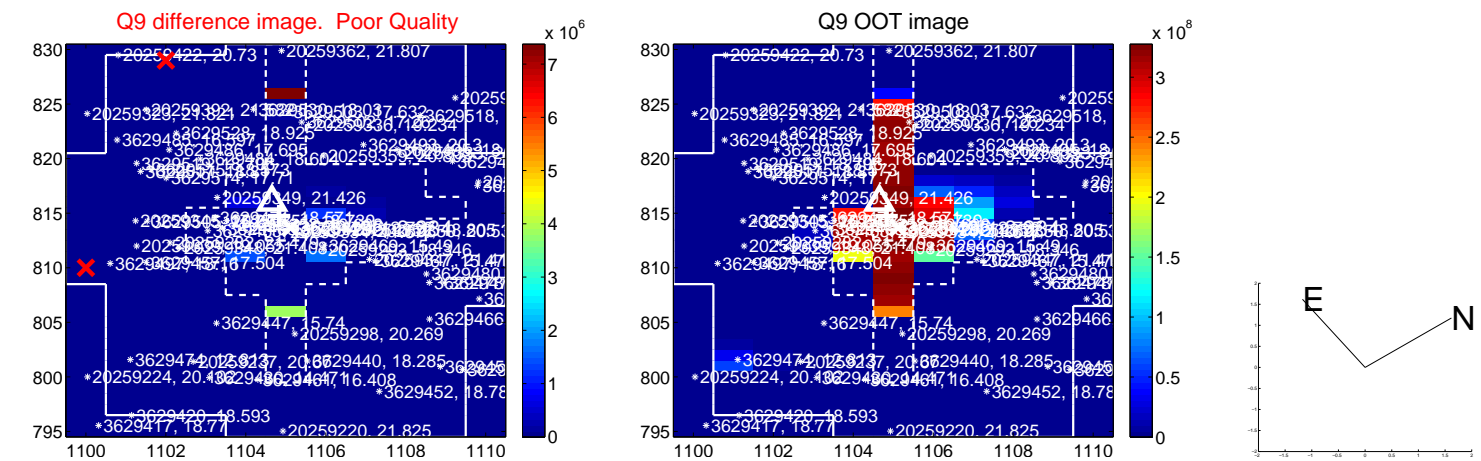
white ×: KIC target position; +: OOT centroid; △: difference centroid. red ✕: large negative pixel value.



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.



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

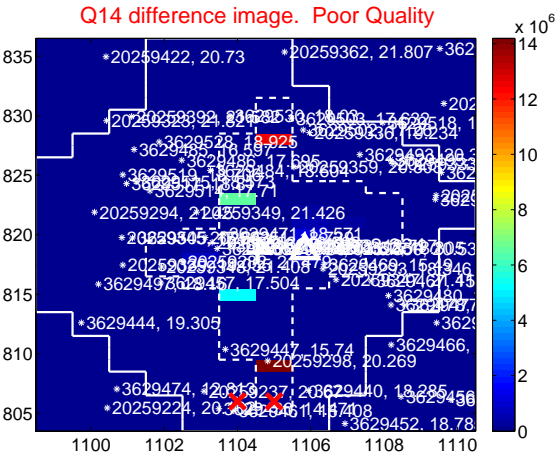
Q13 no difference image



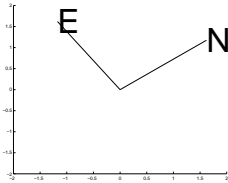
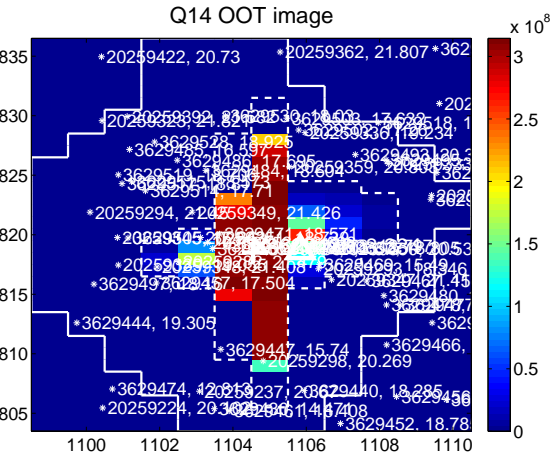
Q13 no OOT image



Q14 difference image. Poor Quality



Q14 OOT image



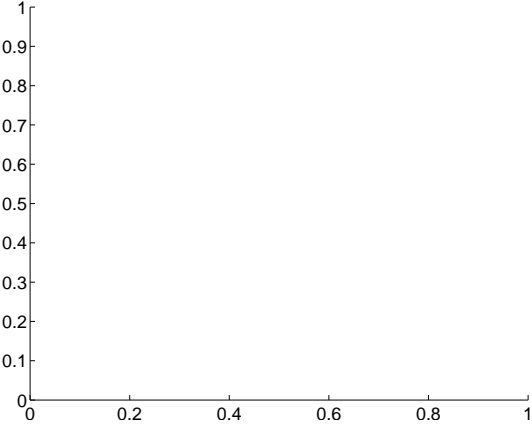
Q15 no difference image



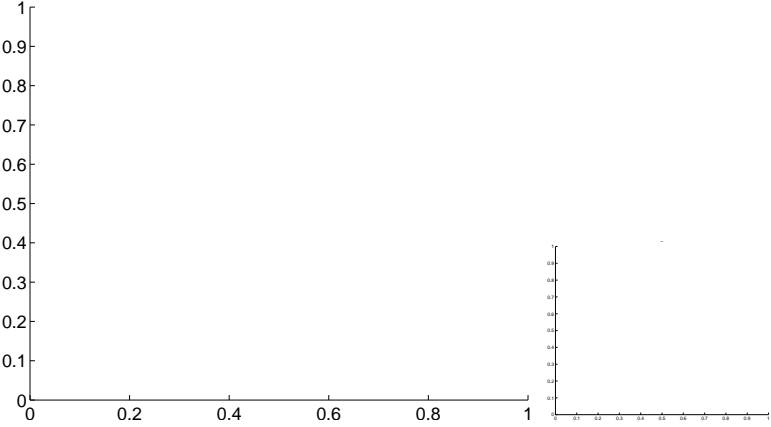
Q15 no OOT image



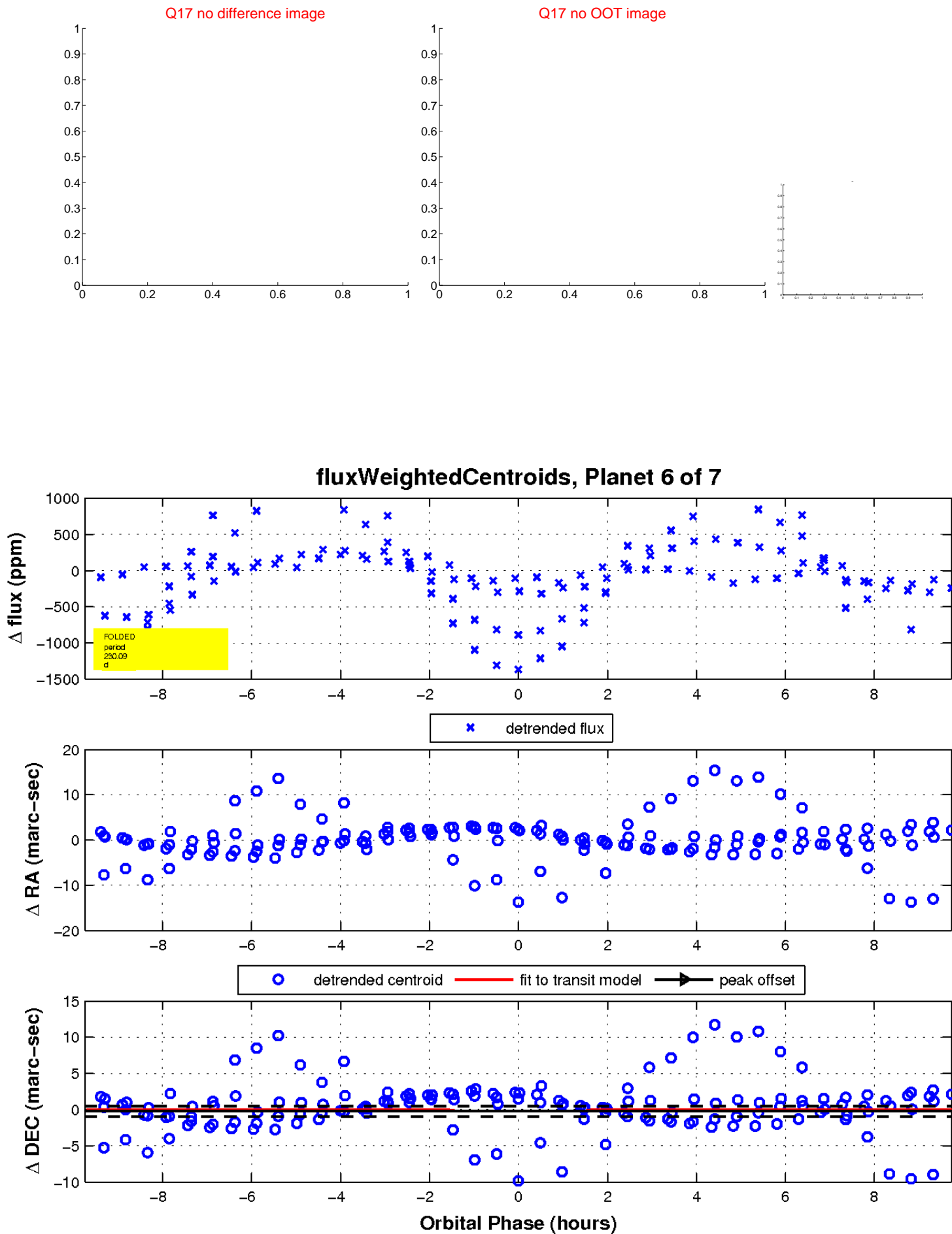
Q16 no difference image



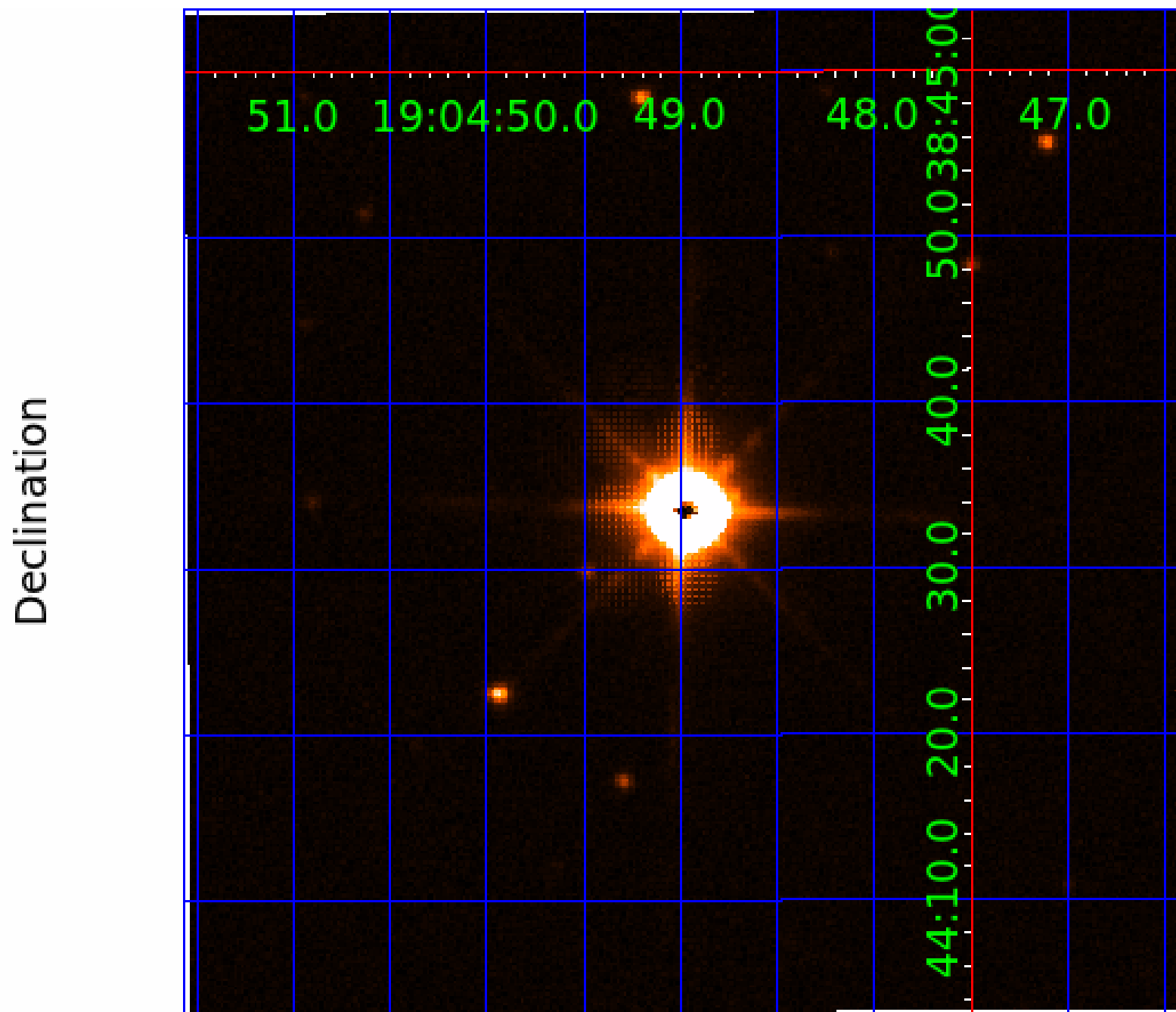
Q16 no OOT image



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



UKIRT Image



KIC 003629496

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})
003629496-01	OBS	No	1.159741	132.223875	18.6	6.497	20.4	7.1	2.59	9967	1.20	65243.17
003629496-02	OBS	No	92.349203	135.096359	907.3	6.212	14.8	15.4	2.59	9967	9.51	190.45
003629496-03	OBS	No	58.674936	166.077766	38.8	4.500	13.4	-1.0	2.59	9967	1.65	348.67
003629496-04	OBS	No	360.976046	160.588947	754.1	10.841	9.6	8.6	2.59	9967	10.47	30.93
003629496-05	OBS	No	282.028572	154.982651	657.4	3.606	10.0	8.5	2.59	9967	6.81	42.98
003629496-06	OBS	No	230.094834	133.885270	574.4	3.251	8.7	8.6	2.59	9967	6.63	56.38
003629496-07	OBS	No	282.008740	151.569591	1025.7	7.620	12.6	15.3	2.59	9967	9.87	42.99

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
003629496-01	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—CENT_SATURATED
003629496-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_ALT—INCONSISTENT_TRANS—CENT_SATURATED
003629496-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_SATURATED
003629496-04	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_TRACKER—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—INCONSISTENT_TRANS—CENT_SATURATED
003629496-05	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_CHASES—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_TER_DV—MOD_POS_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_SATURATED
003629496-06	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_CHASES—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_TER_DV—MOD_POS_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—INCONSISTENT_TRANS—CENT_SATURATED
003629496-07	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_CHASES—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—SAME_NTL_PERIOD—CENT_SATURATED

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

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

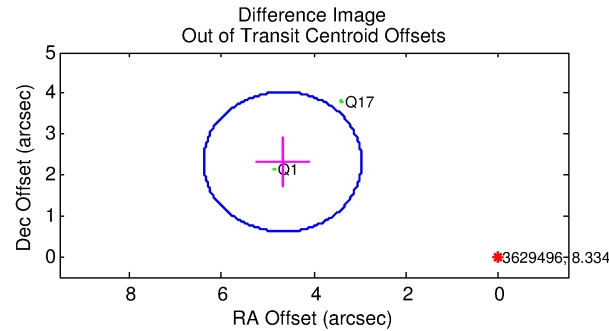
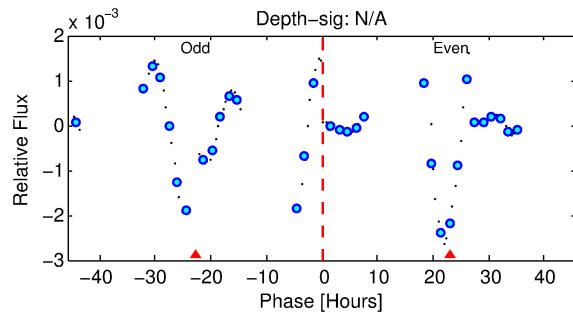
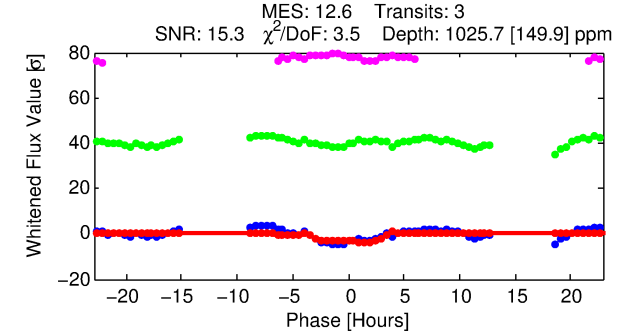
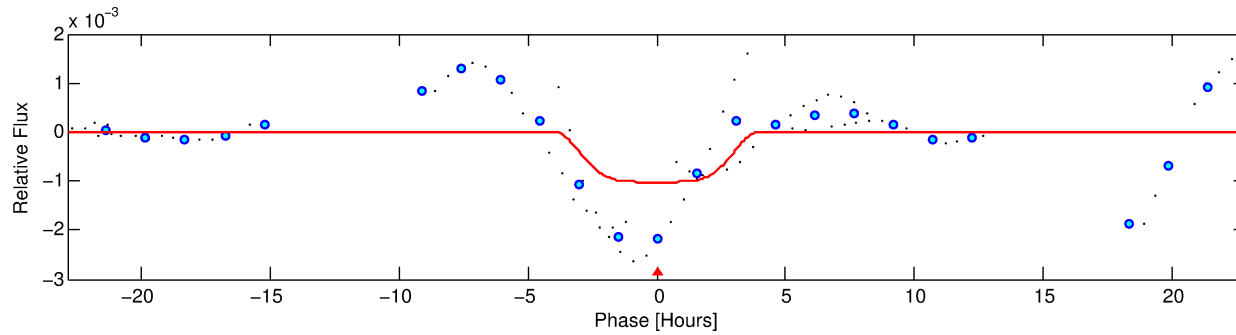
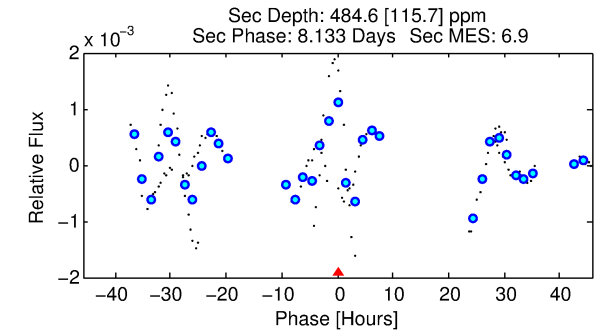
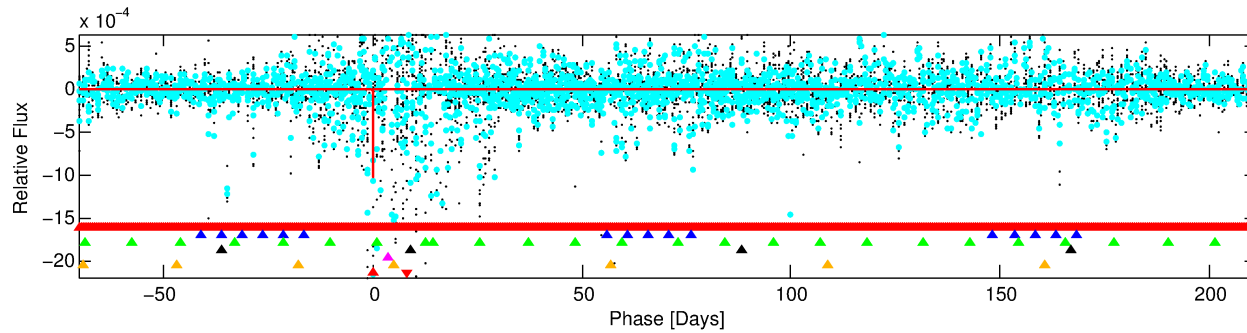
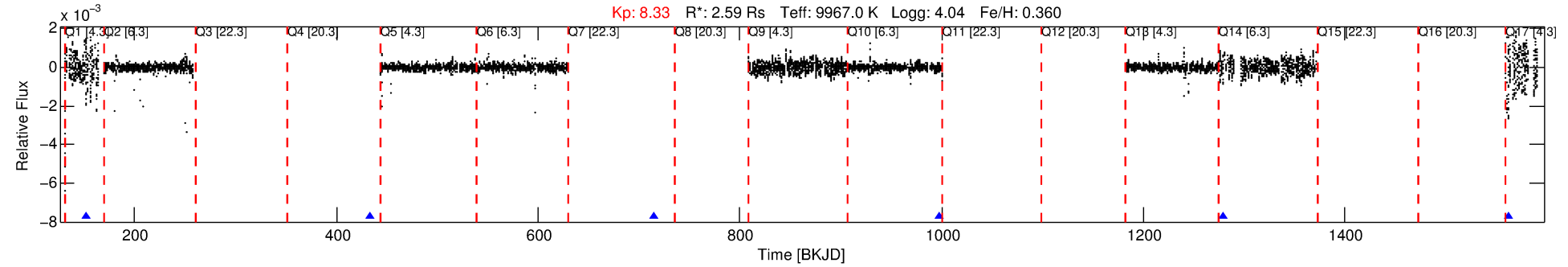
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 003629496-07

No Significant Match Found

DV One-Page Summary

KIC: 3629496 Candidate: 7 of 7 Period: 282.009 d



DV Fit Results:

Period = 282.00874 [0.00507] d
Epoch = 151.5696 [0.0192] BKJD
Rp/R* = 0.0349 [0.0029]
a/R* = 119.10 [20.36]
b = 0.95 [0.02]
Seff = 42.99 [15.19]
Teq = 653 [58] K
Rp = 9.87 [2.65] Re
a = 1.1733 [0.2540] AU
Ag = 3770.48 [1627.09] [2.32σ]
Teffp = 7910 [653] K [11.07σ]

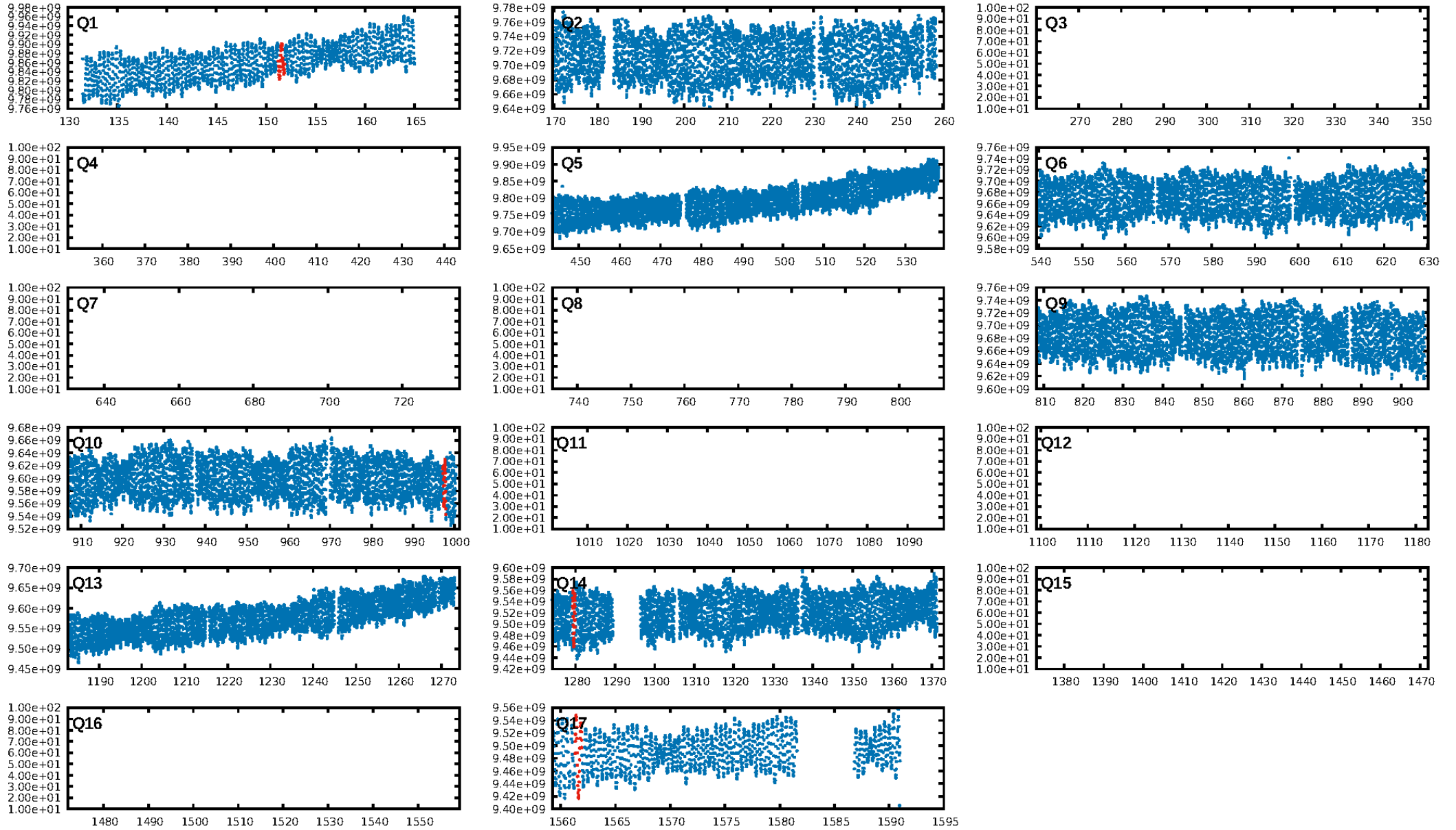
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [150.40σ]
LongPeriod-sig: 4.5% [0.06σ]
ModelChiSquare2-sig: 1.8%
ModelChiSquareGof-sig: 0.0%
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [1/1]
GhostDiagnostic-chr: N/A
Centroid-sig: N/A
Centroid-so: 5.039 arcsec [5.88σ]
OotOffset-rm: 5.217 arcsec [9.15σ]
KicOffset-rm: 10.149 arcsec [16.32σ]
OotOffset-st: 0/0/0/2 [2]
KicOffset-st: 0/0/0/2 [2]
DiffImageQuality-fgm: 0.00 [0/2]
DiffImageOverlap-fno: 0.00 [0/3]

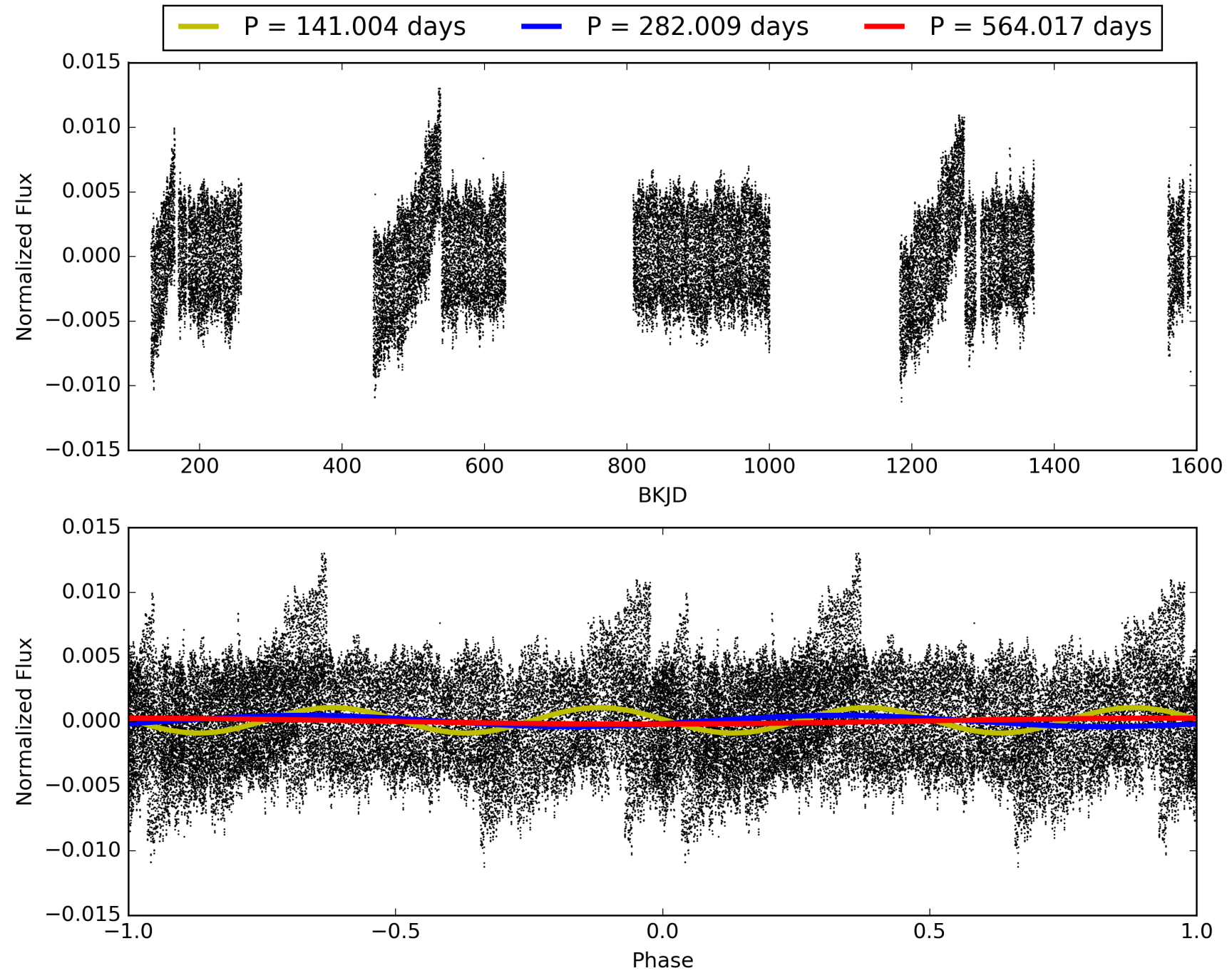
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 02-Feb-2016 01:32:44 Z

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

TCE 003629496-07, PDC Light Curves

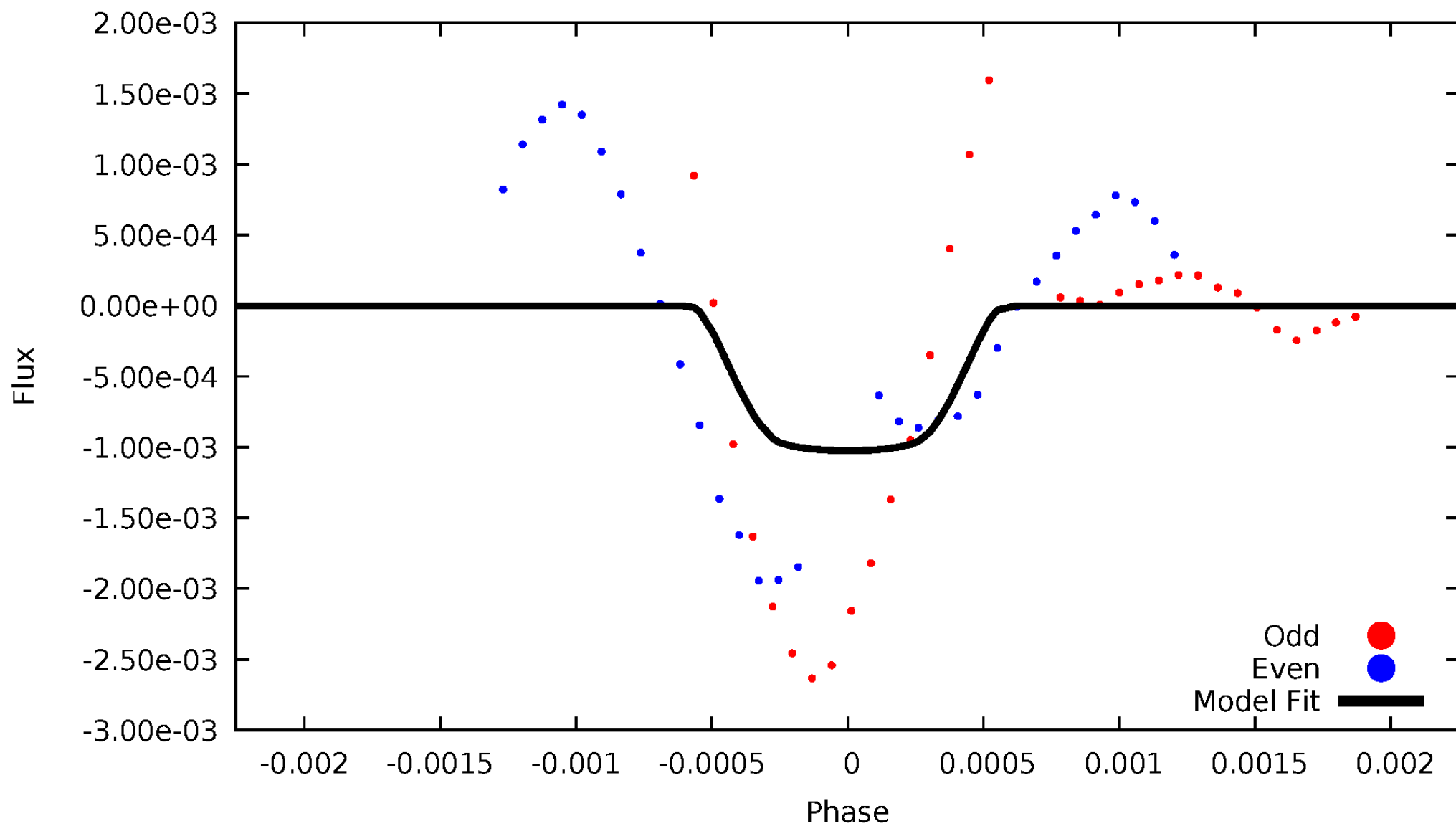


TCE 003629496-07



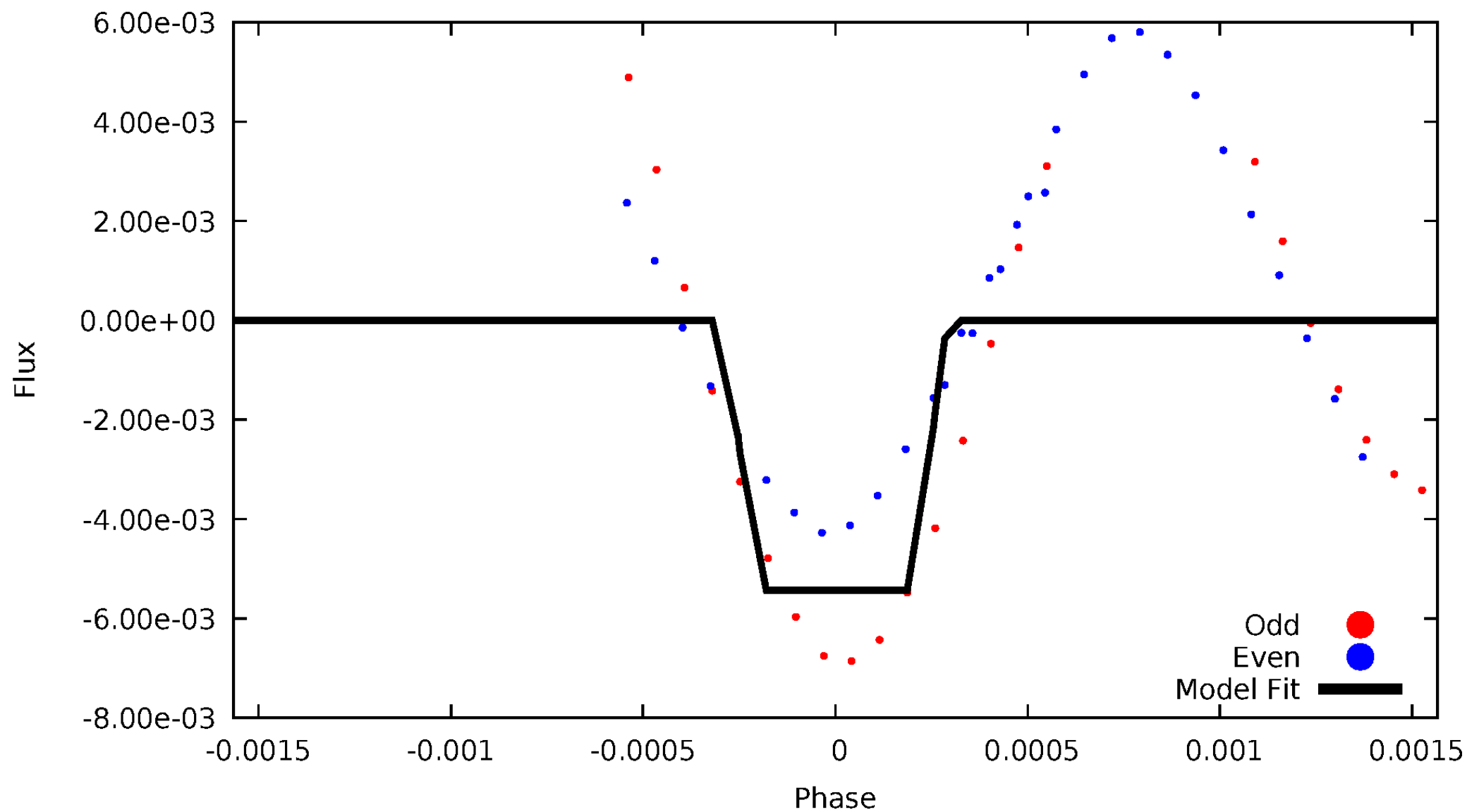
DV Odd/Even

TCE 003629496-07

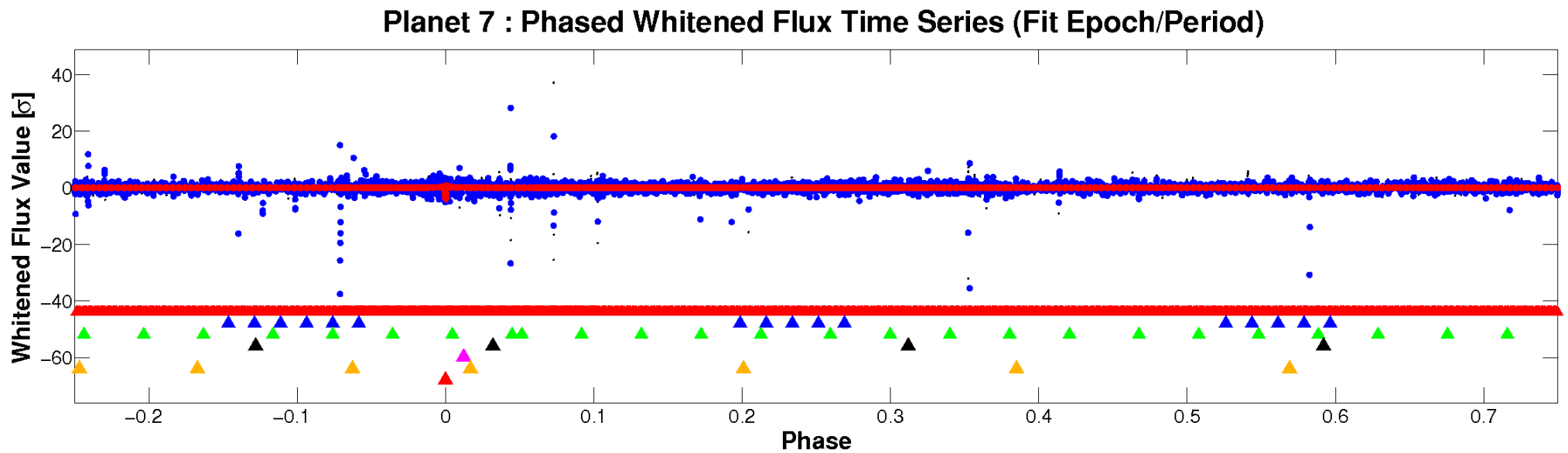
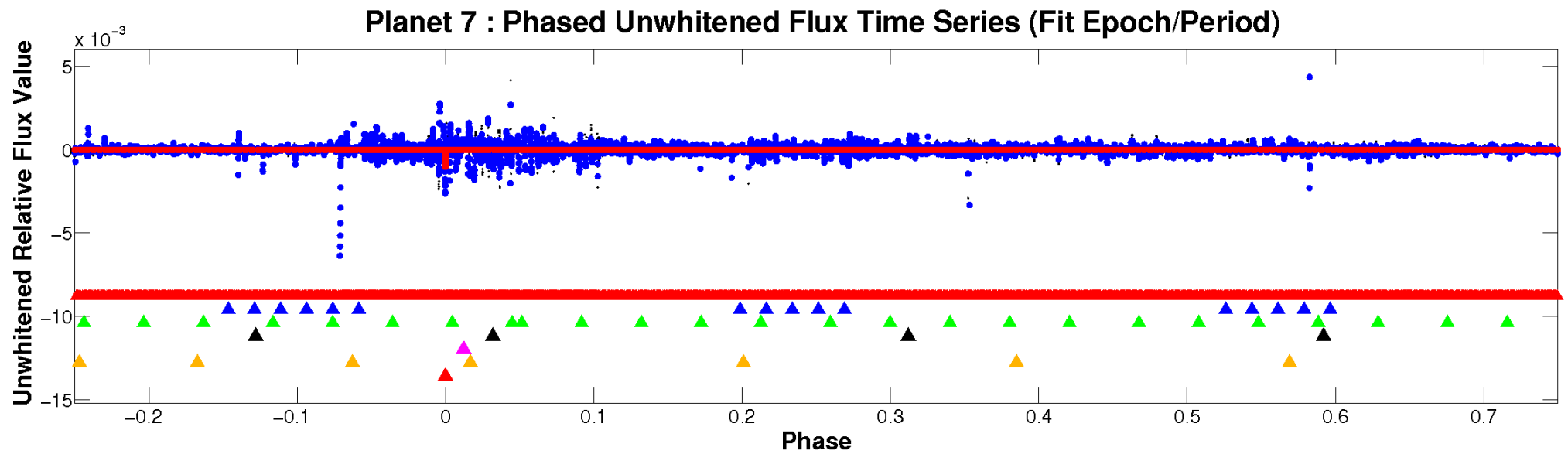


ALT Odd/Even

TCE 003629496-07

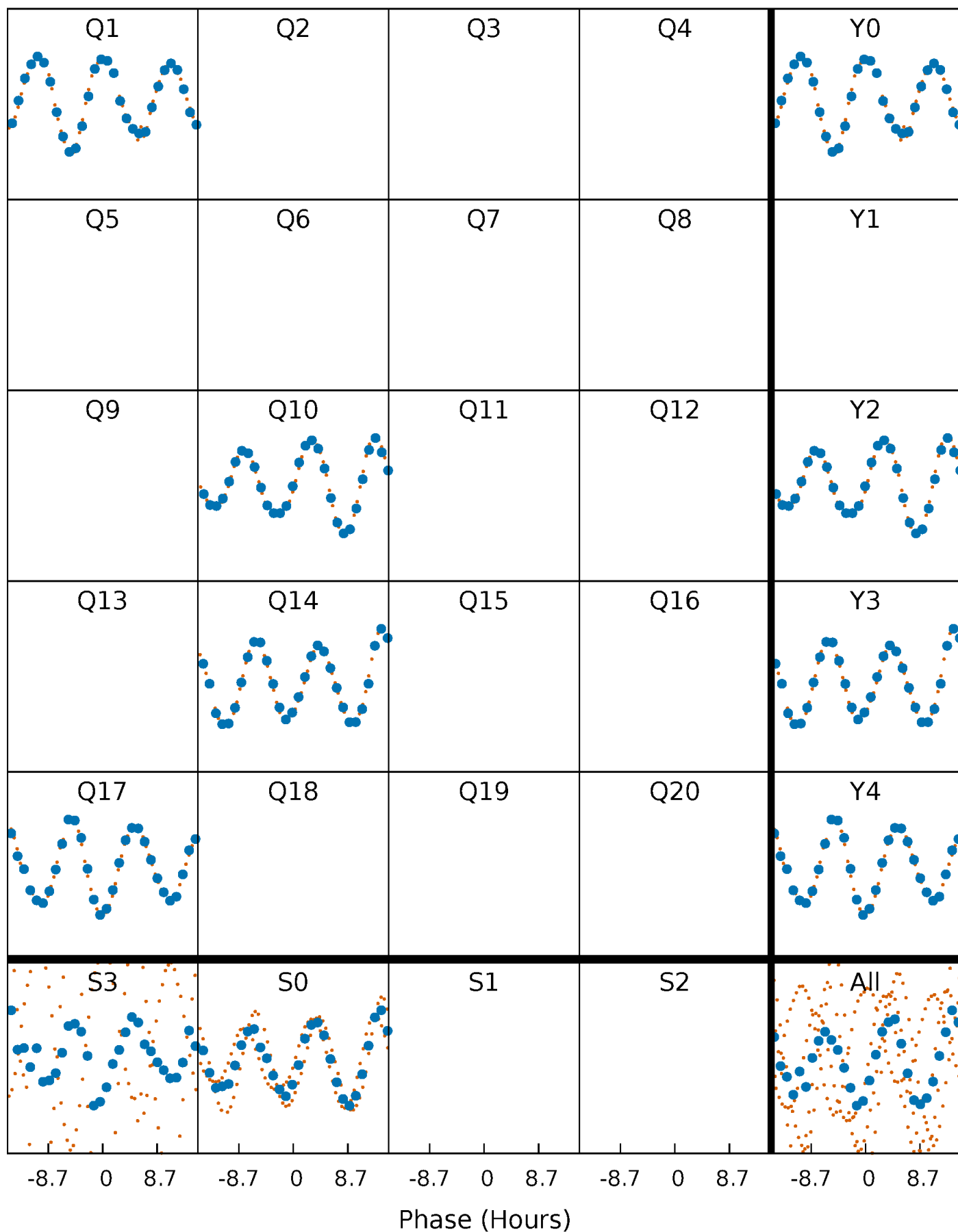


Non-Whitened Vs. Whitened Light Curve



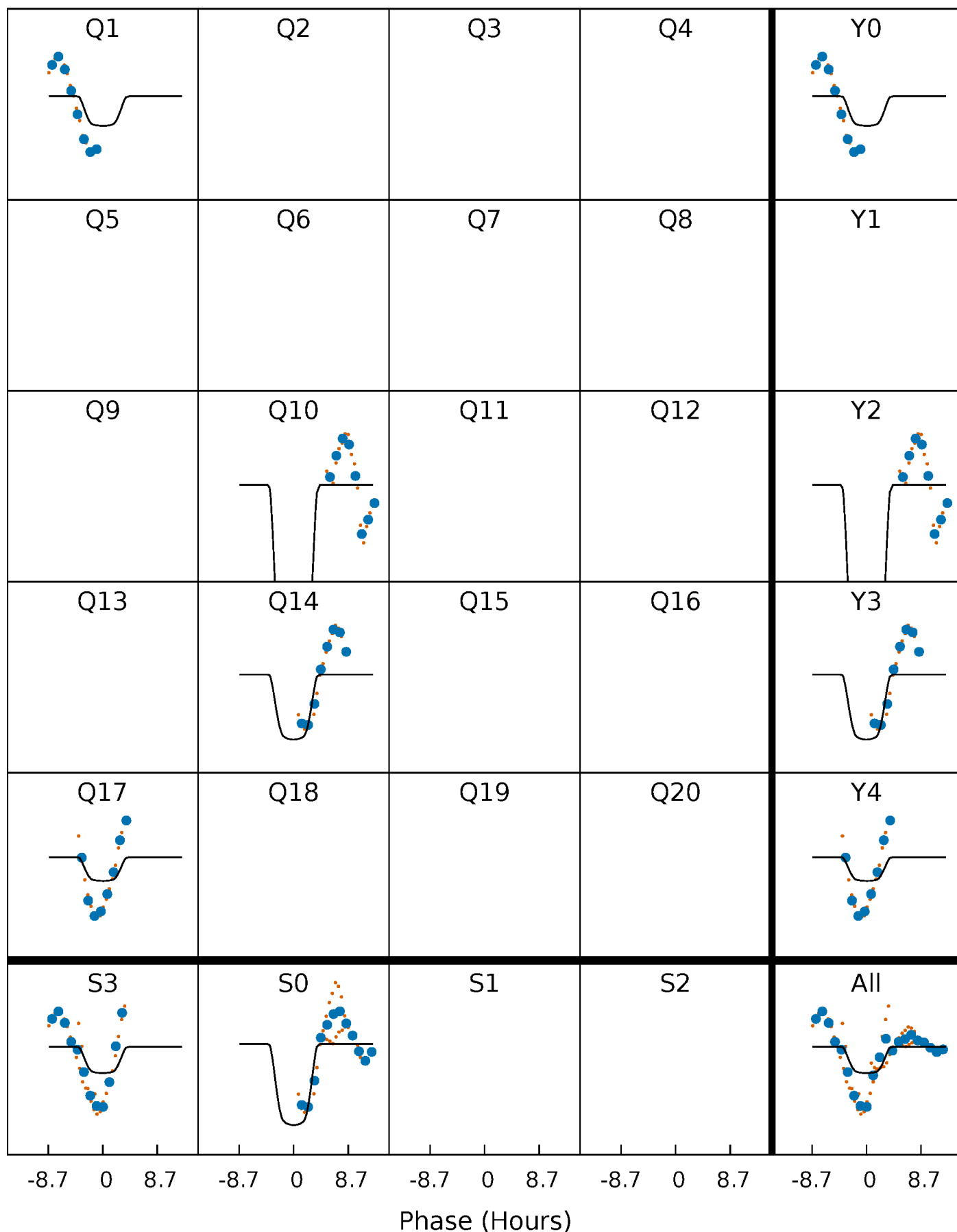
PDC Quarter-Phased Transit Curves

TCE 003629496-07 $P=282.008740$ Days $T_0=151.569591$ (BKJD)



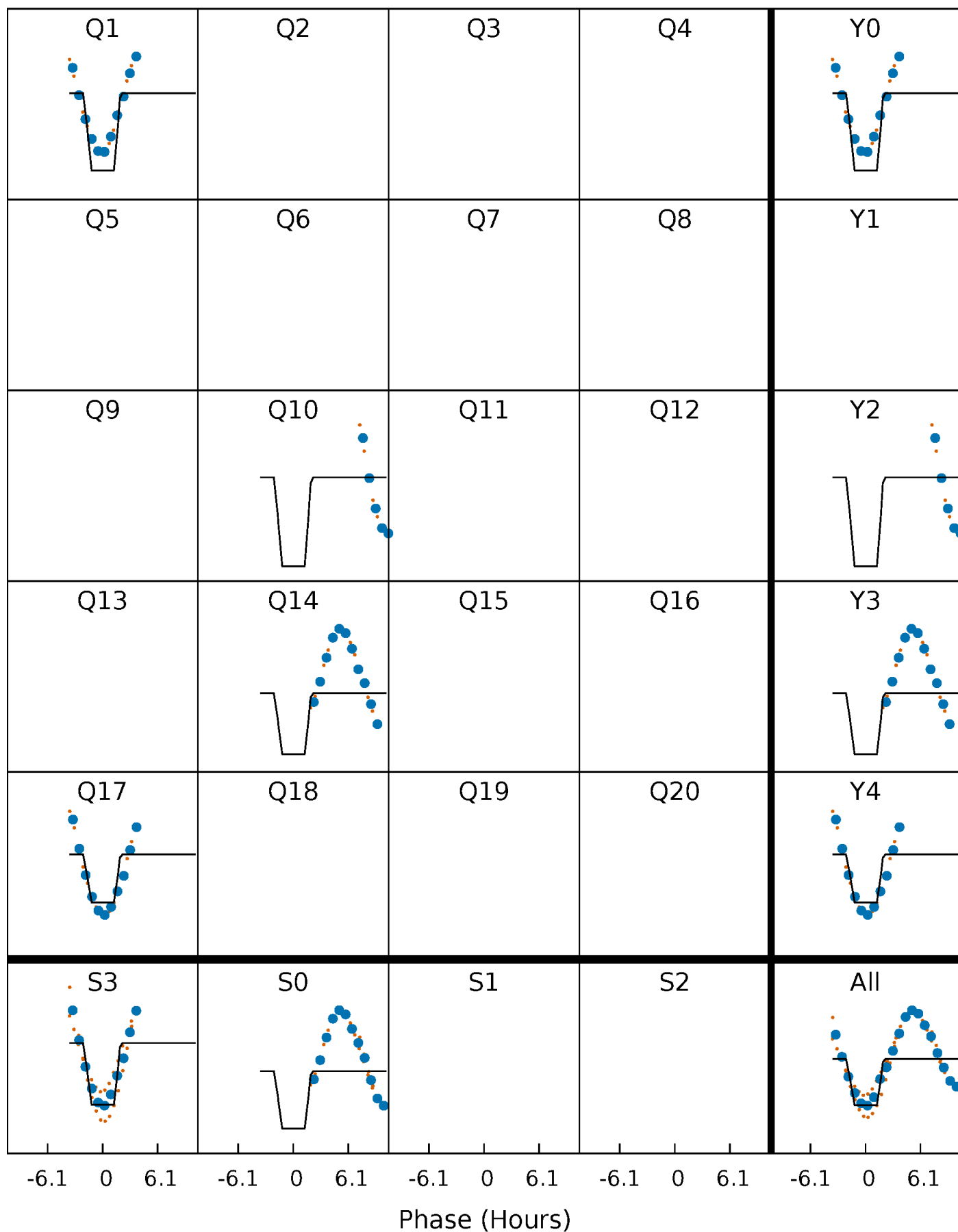
DV Quarter-Phased Transit Curves

TCE 003629496-07 $P=282.008740$ Days $T_0=151.569591$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

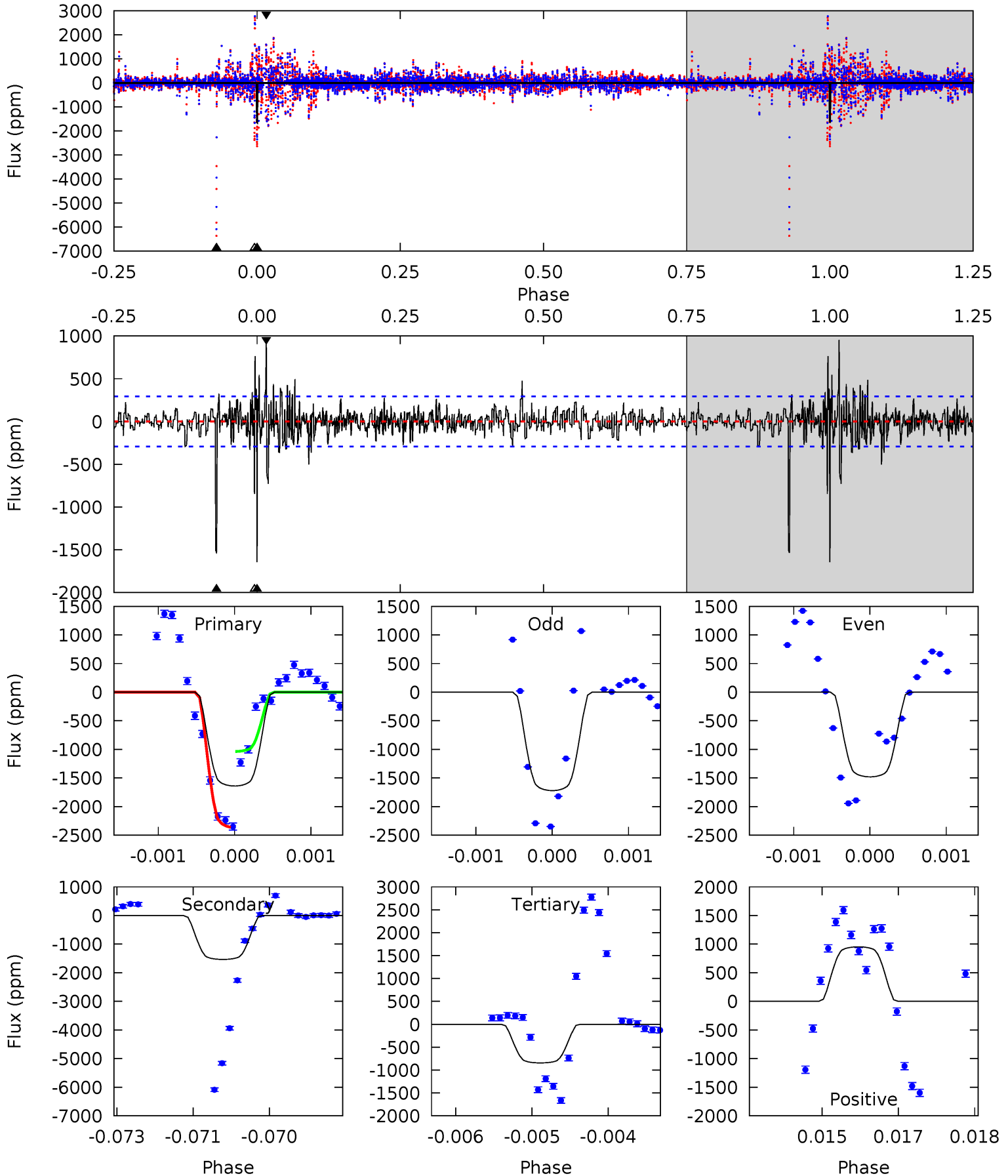
TCE 003629496-07 P=282.048110 Days $T_0=151.364610$ (BKJD)



DV Model-Shift Uniqueness Test

003629496-07, P = 282.008740 Days, E = 151.569591 Days

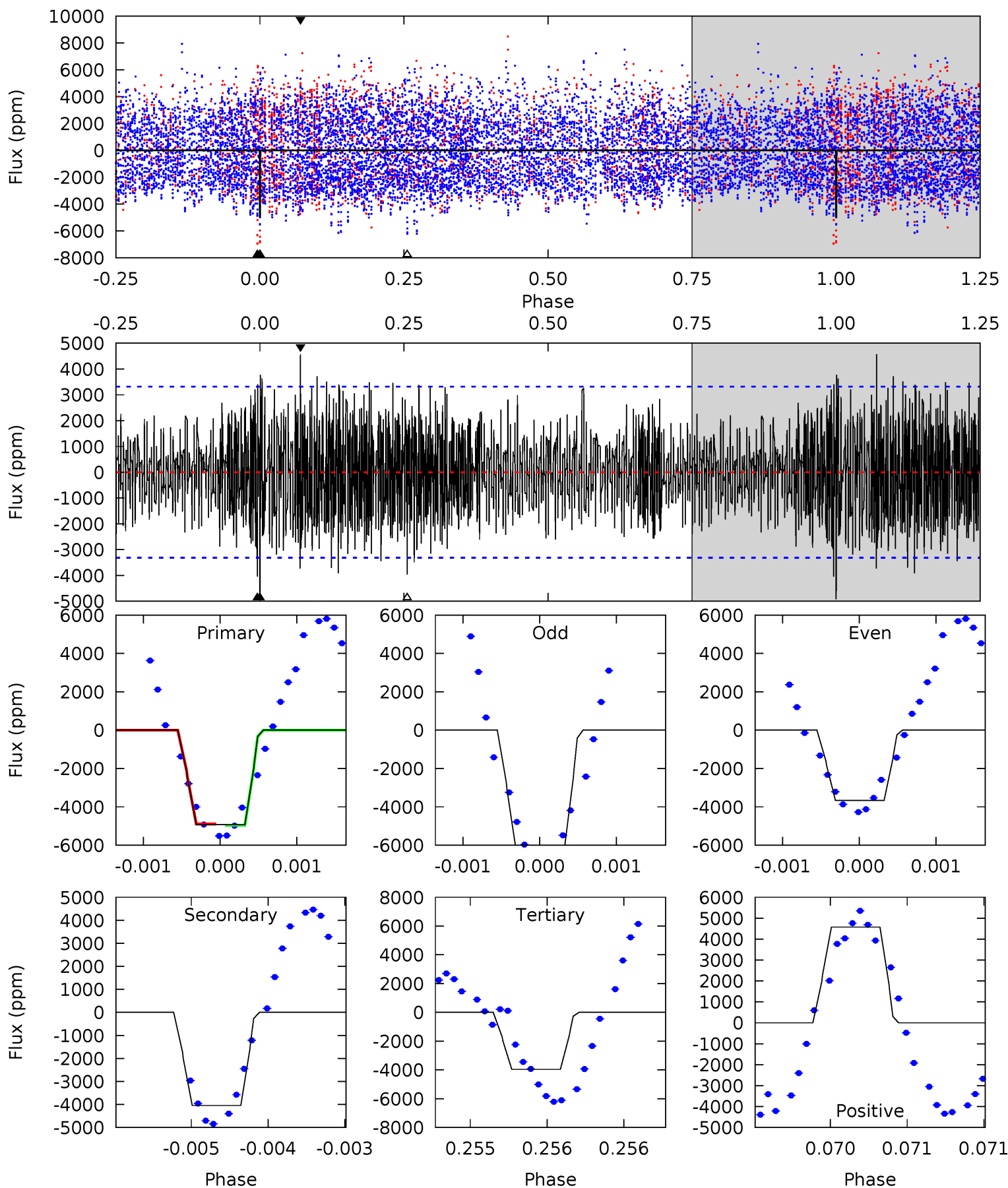
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
30.4	28.4	15.6	17.6	5.42	3.24	2.24	14.7	12.7	12.8	10.8	2.33	0.95	0.37	12.7



Alt Model-Shift Uniqueness Test

003629496-07, P = 282.048110 Days, E = 151.364610 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
8.24	6.77	6.63	7.65	5.55	3.44	2.23	1.61	0.59	0.14	-0.88	2.12	1.00	0.48	0.06



Stellar Parameters For KIC 003629496

	$T_{\text{eff}} (K)$	$\log(g)$	$[\text{Fe}/\text{H}]$	$R (R_{\odot})$	$M (M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	9967^{+280}_{-385}	$4.045^{+0.094}_{-0.175}$	$0.360^{+0.050}_{-0.250}$	$2.587^{+0.659}_{-0.384}$	$2.707^{+0.273}_{-0.273}$	$0.220^{+0.110}_{-0.100}$
	+3%/-4%	+2%/-4%	+14%/-69%	+25%/-15%	+10%/-10%	+50%/-45%
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 003629496-07 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-1535 ± 54	$10.08^{+1.57}_{-1.29}$	918^{+59}_{-51}	10815^{+911}_{-741}	11538^{+3365}_{-2921}
Alt.	-4046 ± 598	$21.15^{+2.88}_{-1.89}$	920^{+62}_{-53}	8949^{+621}_{-595}	6705^{+1862}_{-1701}

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

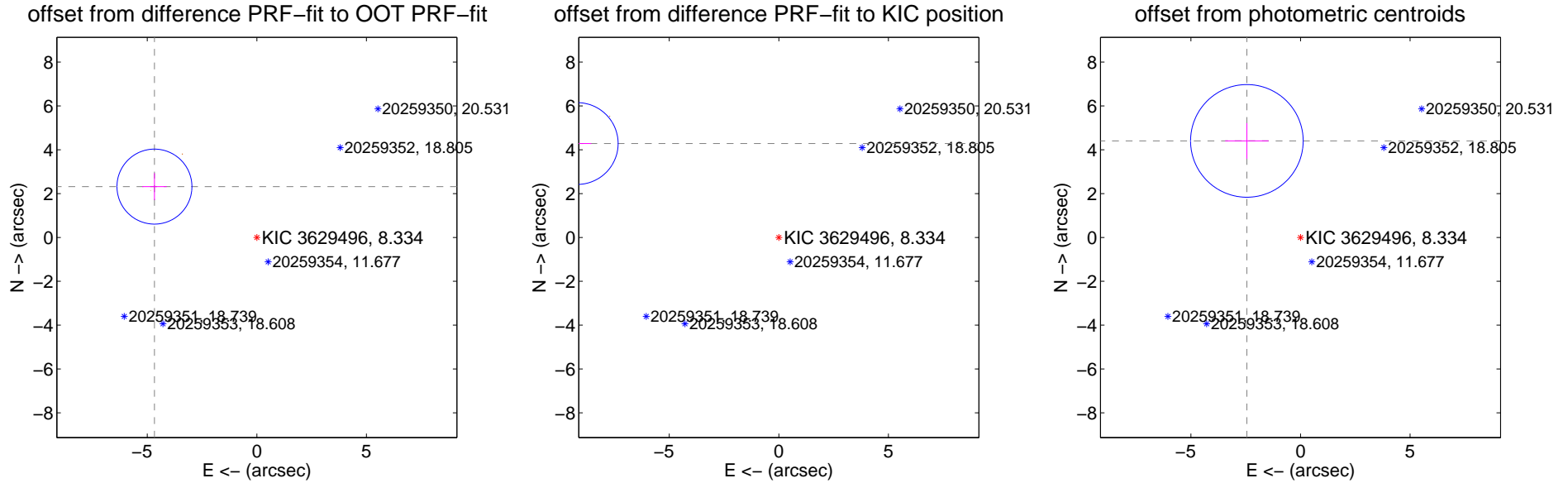
DV Centroid Data

Supplemental centroid analysis for 003629496-07. **Kepler magnitude: 8.33.** Transit SNR 15.30

There are 0 quarters with good PRF difference image offsets

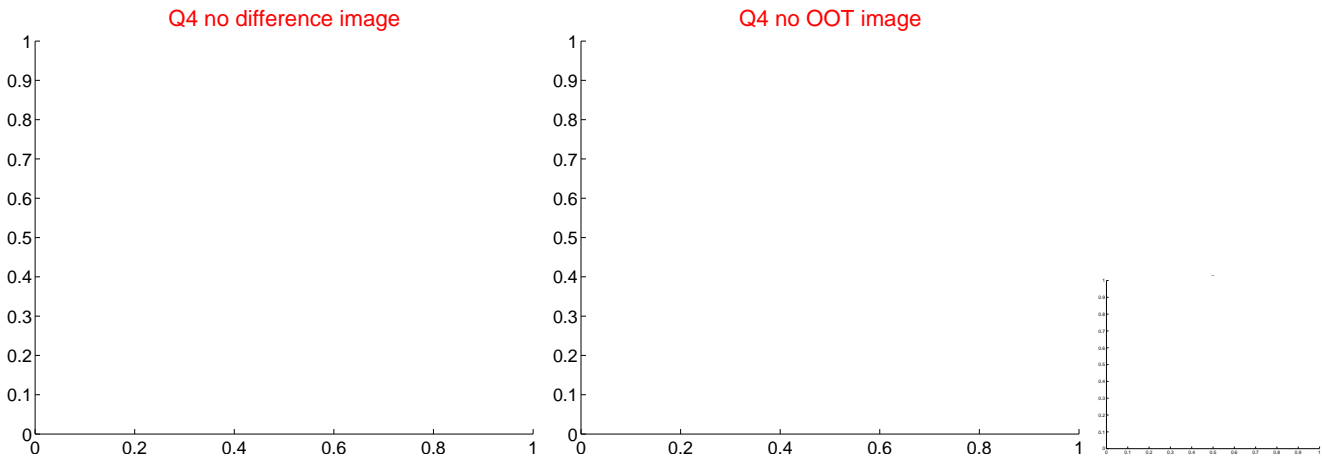
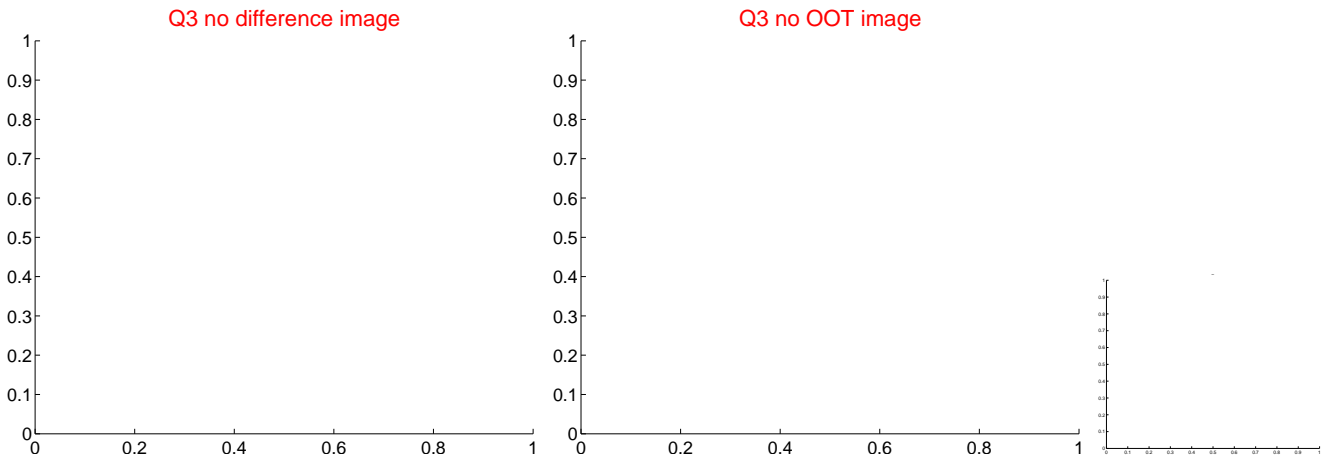
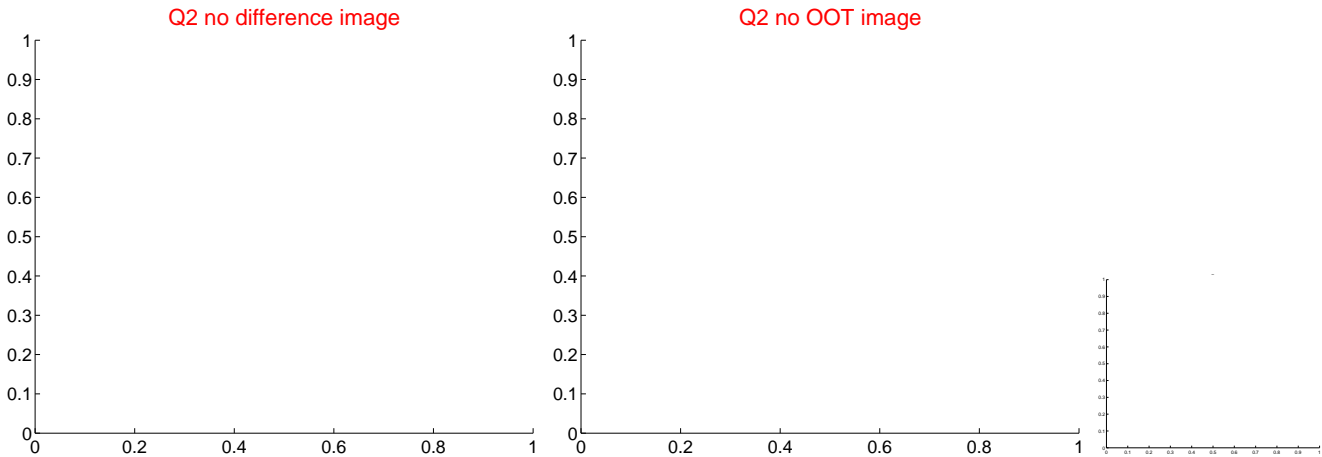
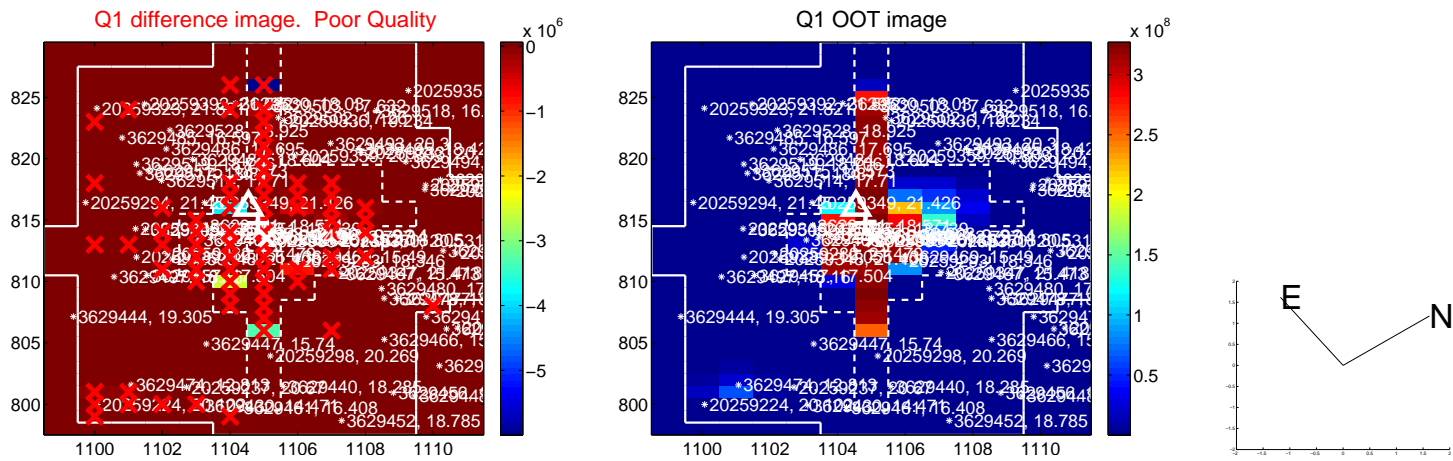
The OOT PRF centroid is offset from the target star catalog position by about 4.65 arcsec so the offset from difference PRF-fit to OOT-fit may be invalid.

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	5.217 ± 0.570	9.15	4.674 ± 0.559	2.319 ± 0.613
PRF-fit source offset from KIC position	10.149 ± 0.622	16.32	9.200 ± 0.643	4.284 ± 0.514
photometric centroid source offset	5.04 ± 0.86	5.88	2.45 ± 0.99	4.40 ± 0.81

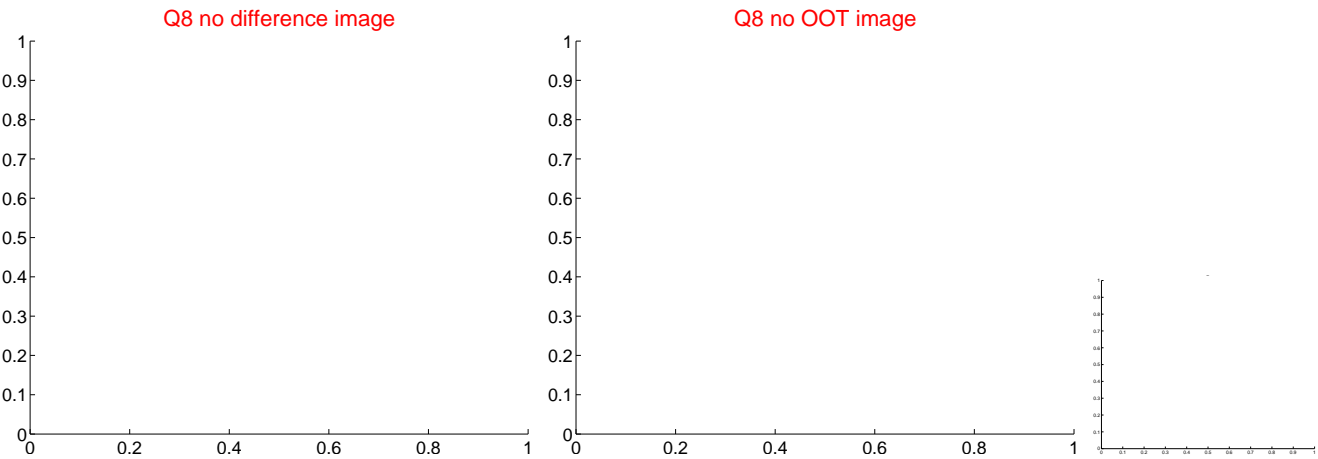
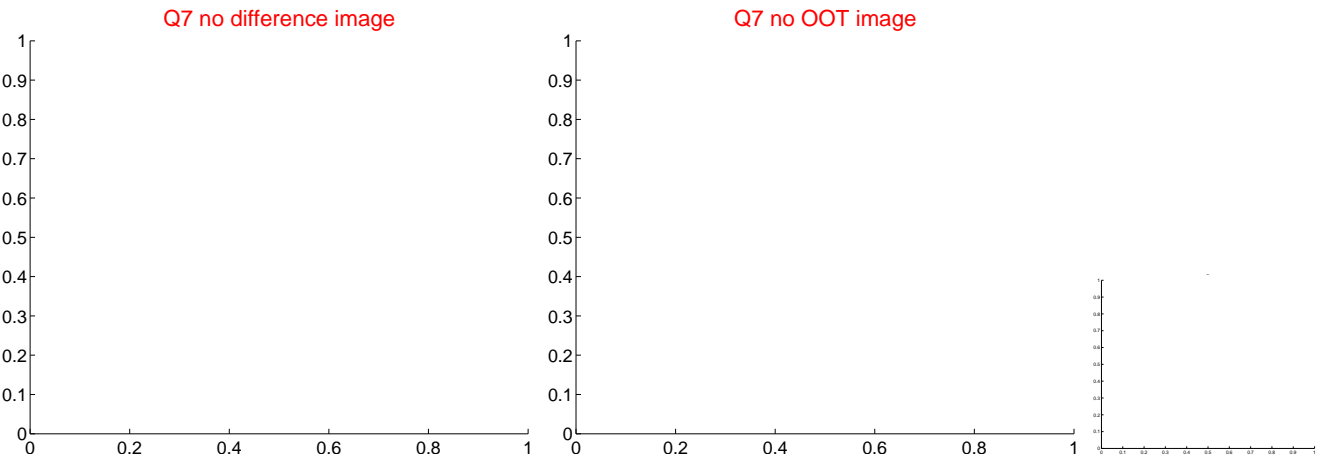
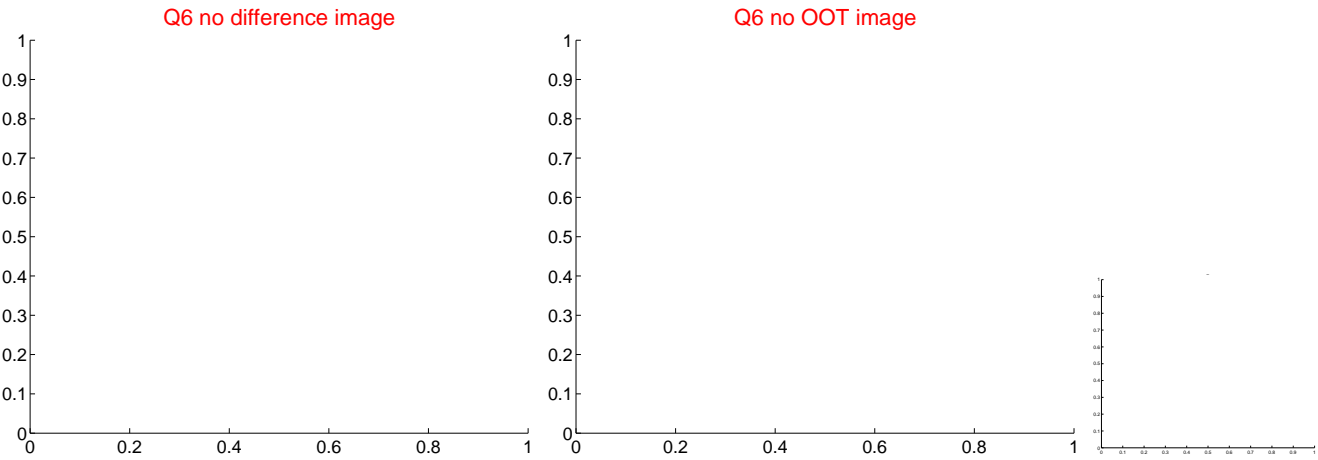
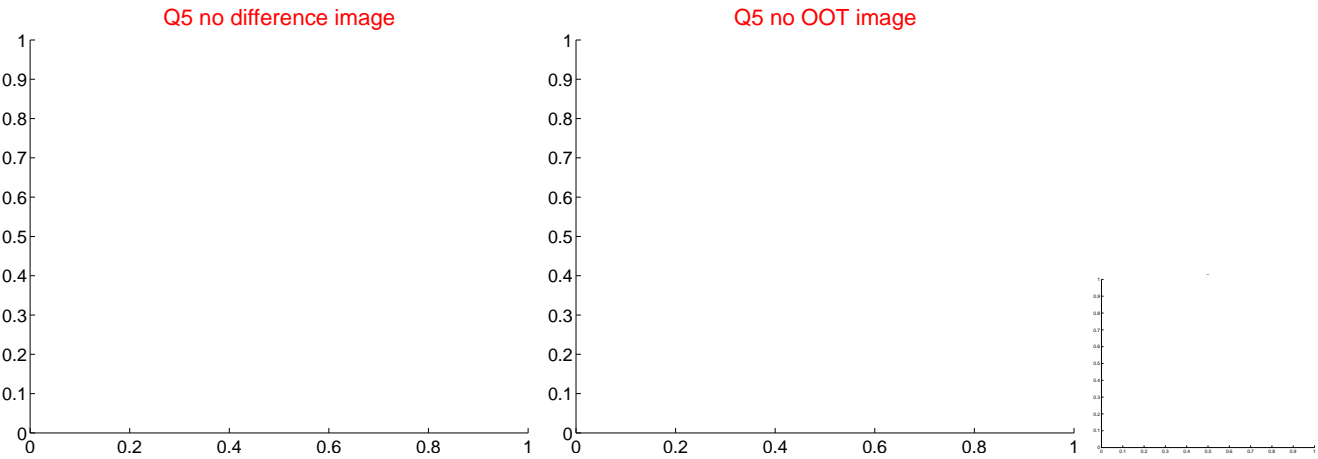


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets;** magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

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



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



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

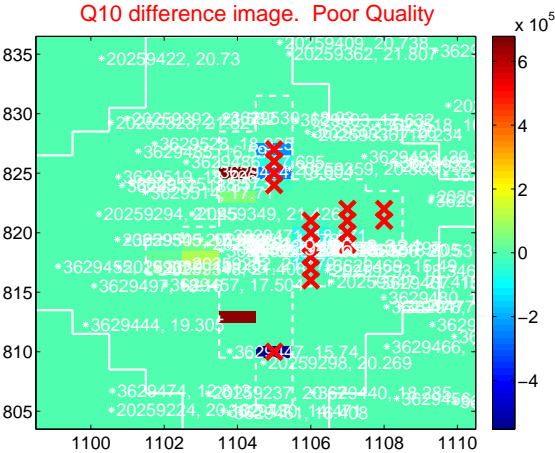
Q9 no difference image



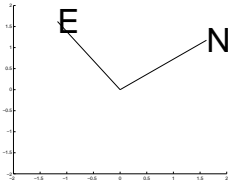
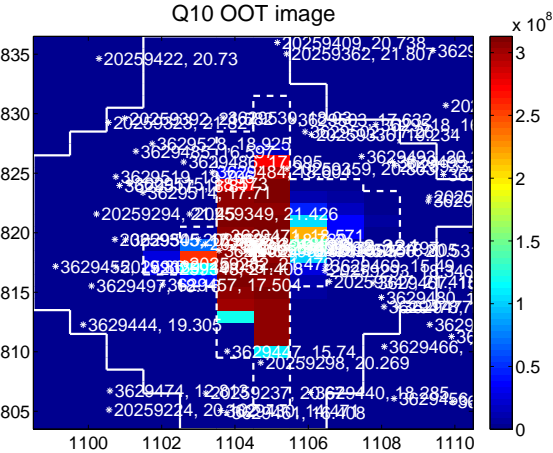
Q9 no OOT image



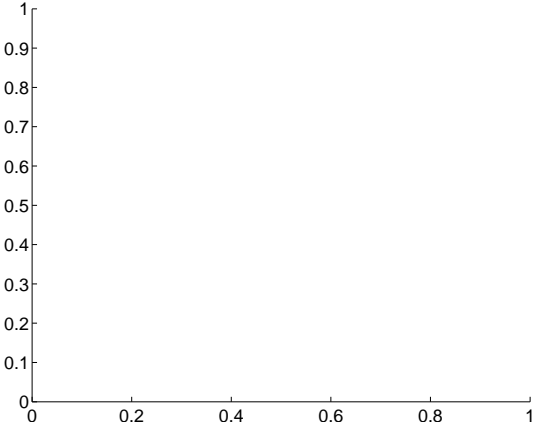
Q10 difference image. Poor Quality



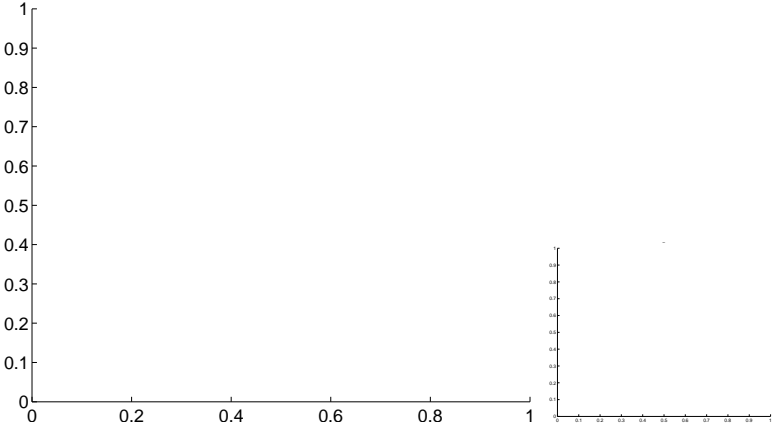
Q10 OOT image



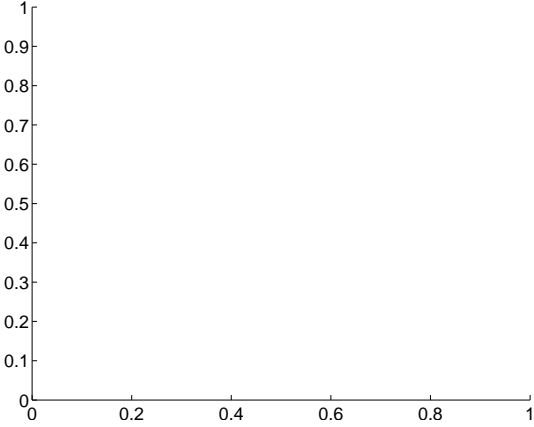
Q11 no difference image



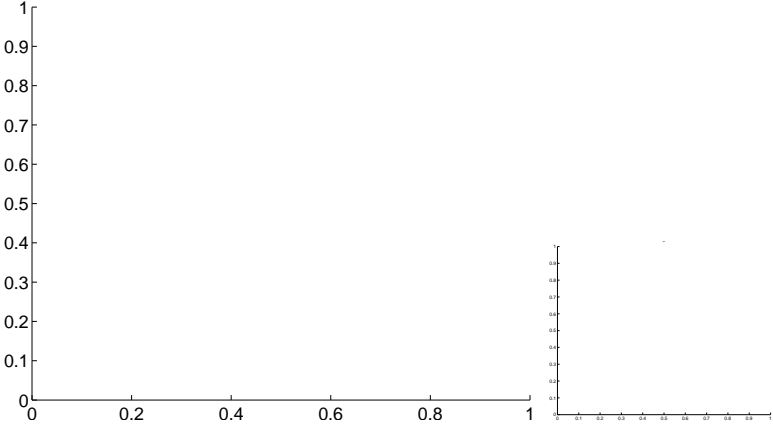
Q11 no OOT image



Q12 no difference image



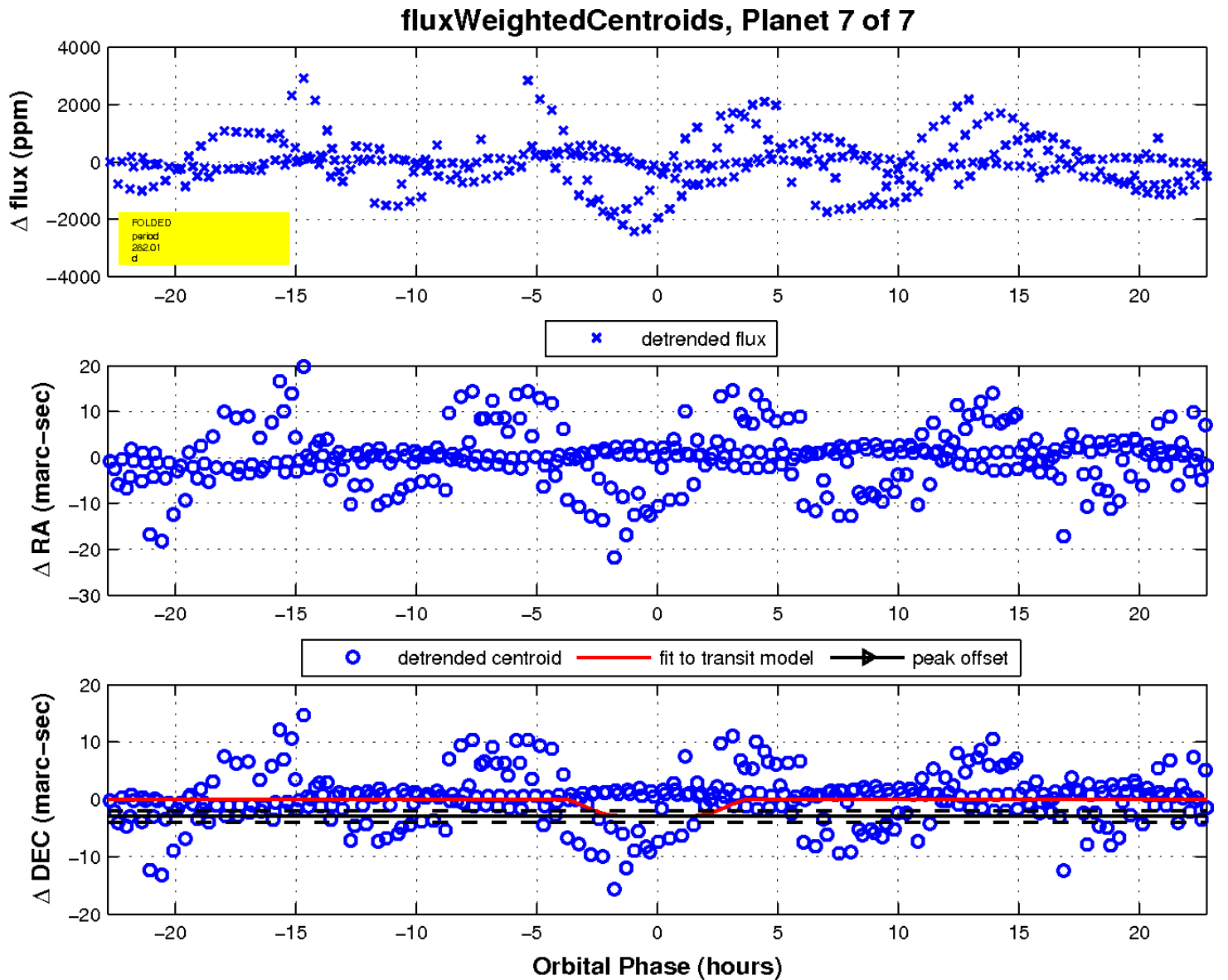
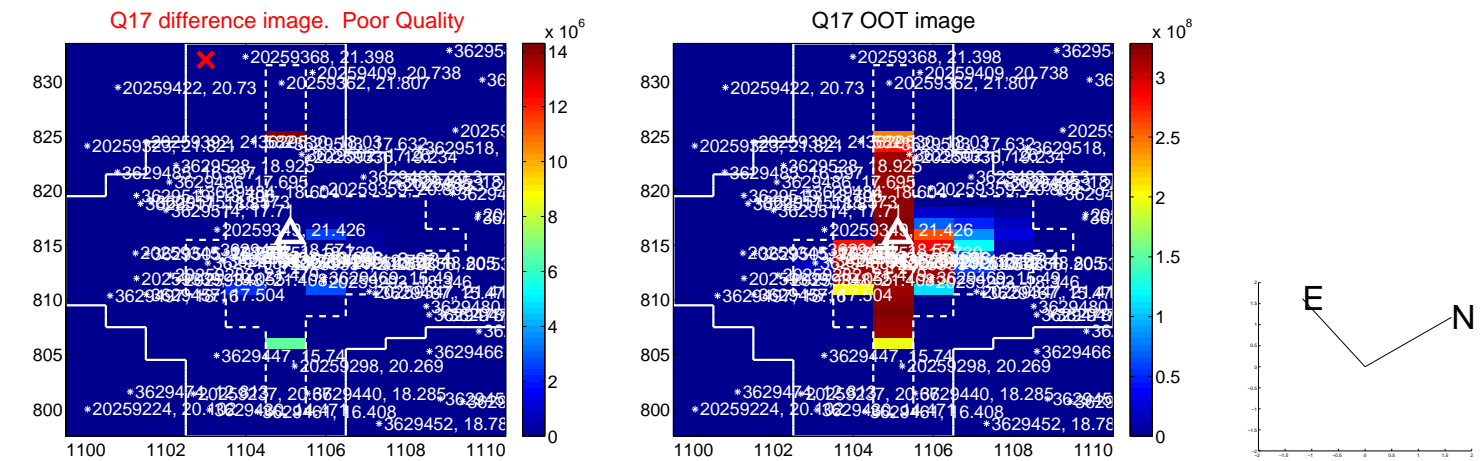
Q12 no OOT image



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



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



UKIRT Image

Declination

