

KIC 011572263

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})
011572263-01	OBS	No	2.097853	133.537638	26.2	11.171	8.8	7.5	1.46	6701	0.77	3231.82
011572263-02	OBS	No	184.173704	247.739245	371.0	20.301	13.5	8.1	1.46	6701	2.94	8.28
011572263-03	OBS	No	179.146025	141.519649	126.0	9.830	8.6	3.7	1.46	6701	1.83	8.59

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
011572263-01	OBS	FP	0.00	1	0	0	0	LPP_DV—MOD_NONUNIQ_DV
011572263-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_MARSHALL—TRANS_GAPPED—LPP_DV—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV— MOD_NONUNIQ_ALT—INCONSISTENT_TRANS
011572263-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_MARSHALL—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT— MOD_POS_ALT

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

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

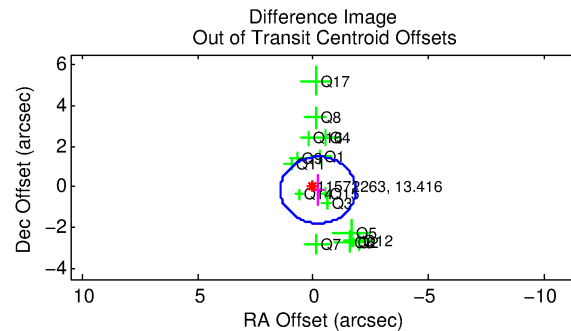
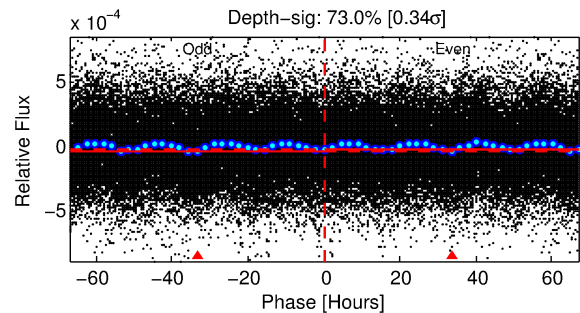
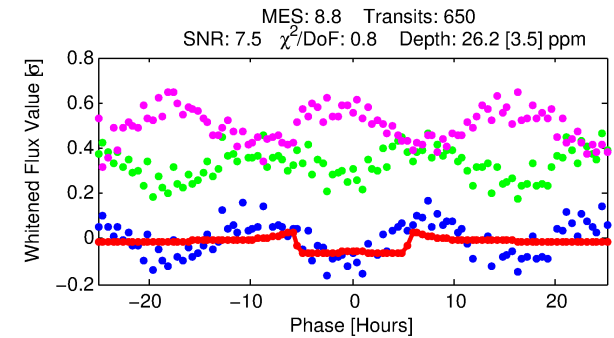
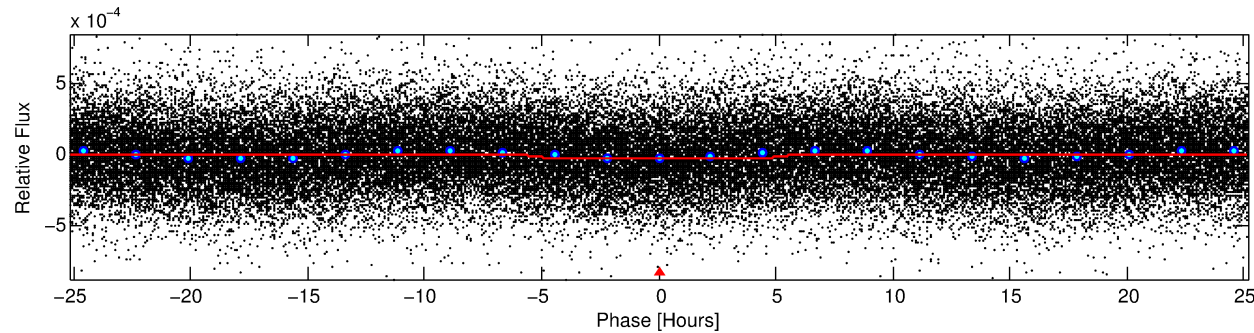
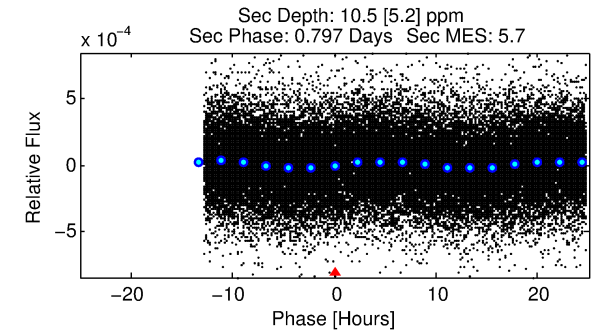
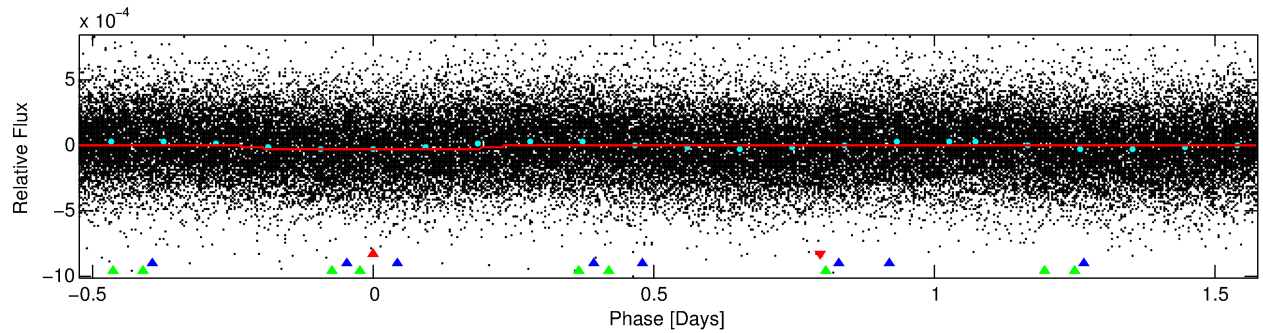
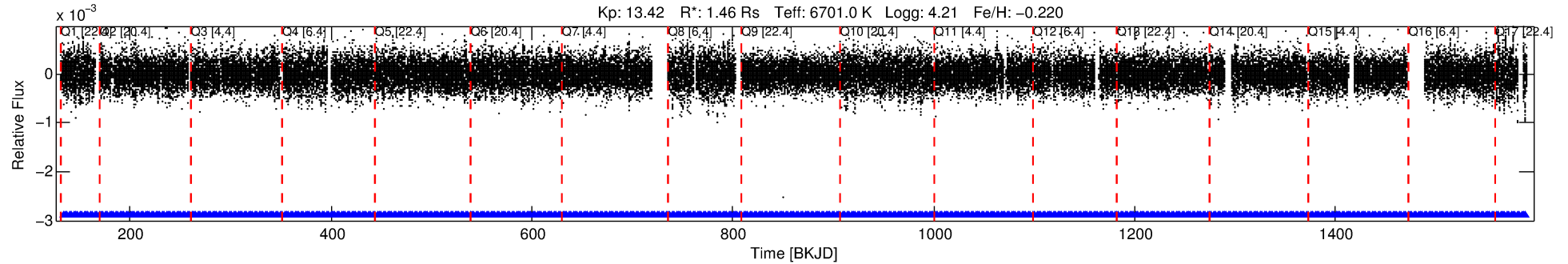
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 011572263-01

No Significant Match Found

DV One-Page Summary

KIC: 11572263 Candidate: 1 of 3 Period: 2.098 d



DV Fit Results:

Period = 2.09785 [0.00003] d
Epoch = 133.5376 [0.0072] BKJD
Rp/R* = 0.0048 [0.0025]
a/R* = 1.46 [2.25]
b = 0.47 [4.82]
Seff = 3231.82 [1193.37]
Teq = 1923 [177] K
Rp = 0.77 [0.46] Re
a = 0.0346 [0.0085] AU
Ag = 11.65 [13.96] [0.76σ]
Teffp = 5492 [1586] K [2.24σ]

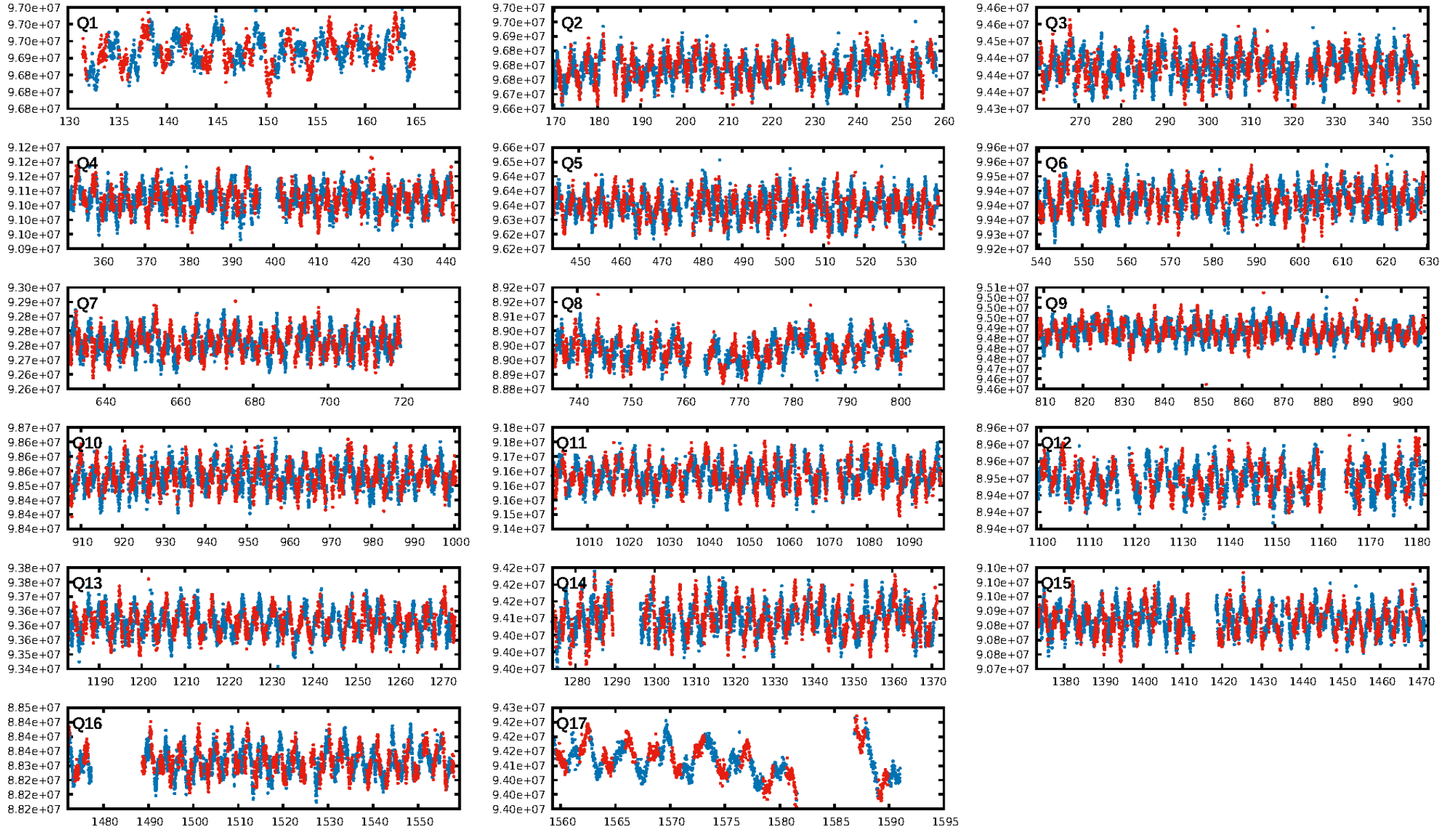
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: 100.0% [285.56σ]
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 5.45e-13
RollingBand-fgt: 1.00 [620/620]
GhostDiagnostic-chr: 1.171
Centroid-sig: 51.4%
Centroid-so: 0.536 arcsec [0.68σ]
OotOffset-rm: 0.262 arcsec [0.48σ]
KicOffset-rm: 0.280 arcsec [0.59σ]
OotOffset-st: 3/4/4/4 [15]
KicOffset-st: 3/4/4/4 [15]
DiffImageQuality-fgm: 0.60 [9/15]
DiffImageOverlap-fno: 1.00 [17/17]

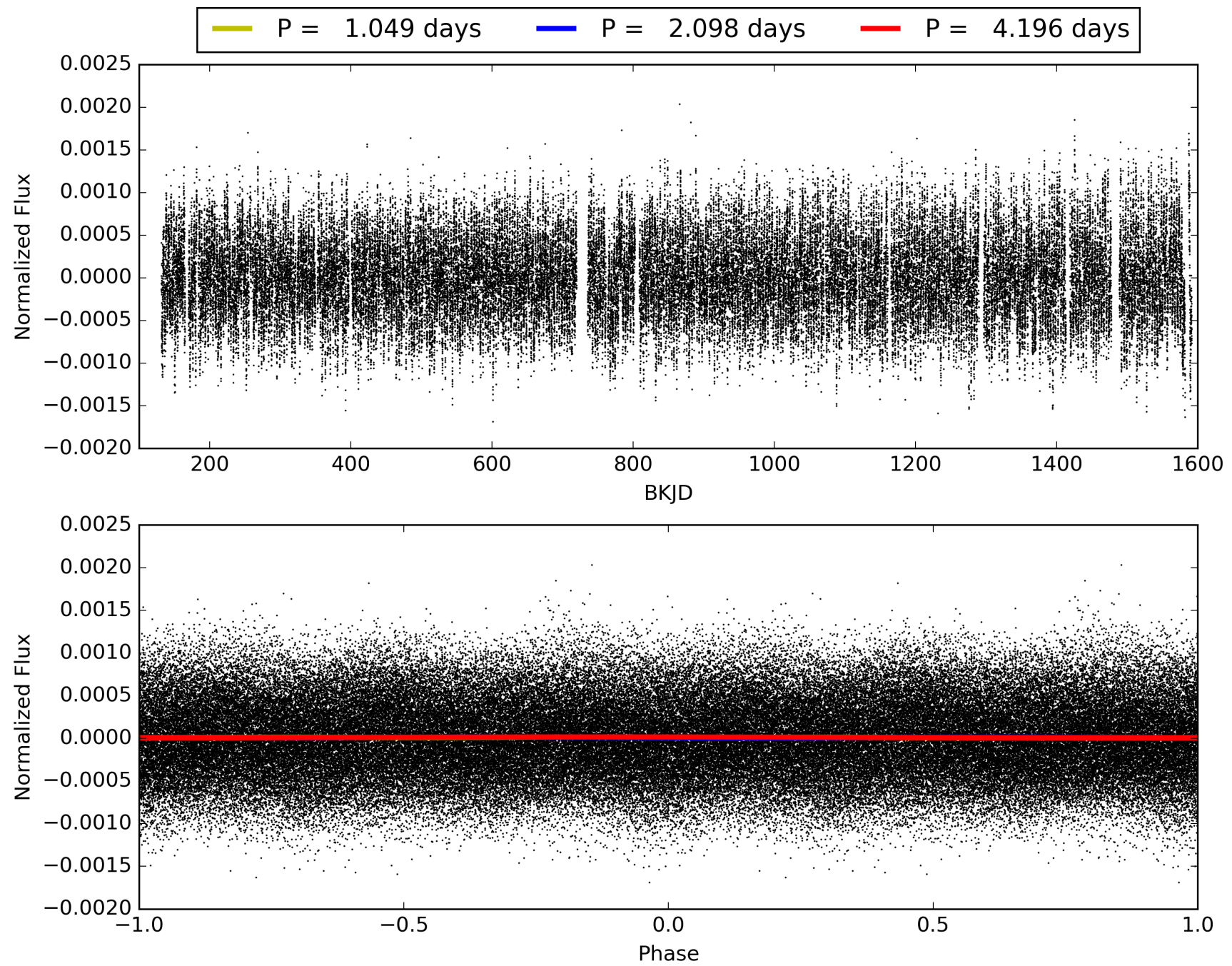
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This Data Validation Report Summary was produced in the Kepler Science Operations Center Pipeline at NASA Ames Research Center

TCE 011572263-01, PDC Light Curves

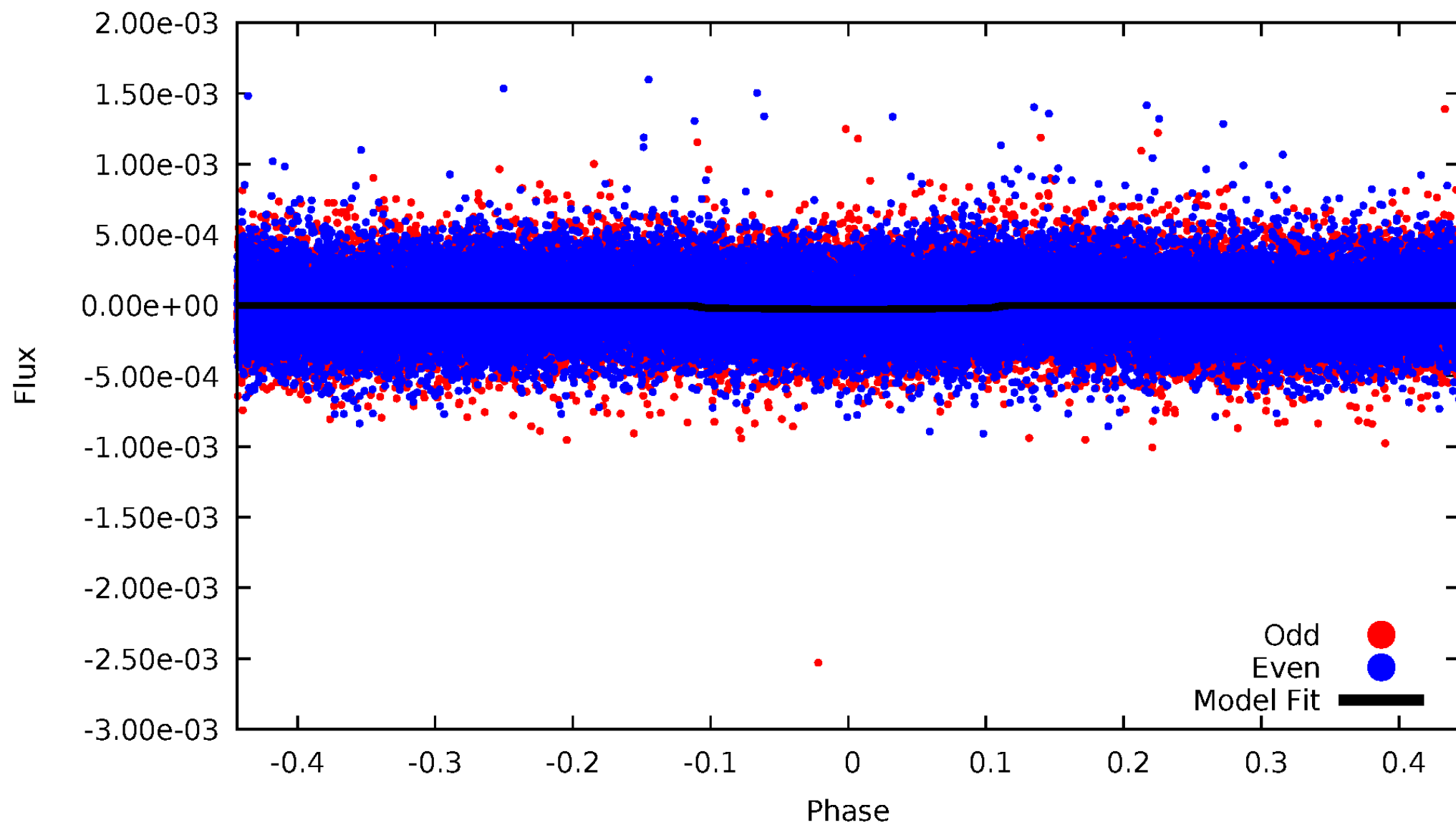


TCE 011572263-01



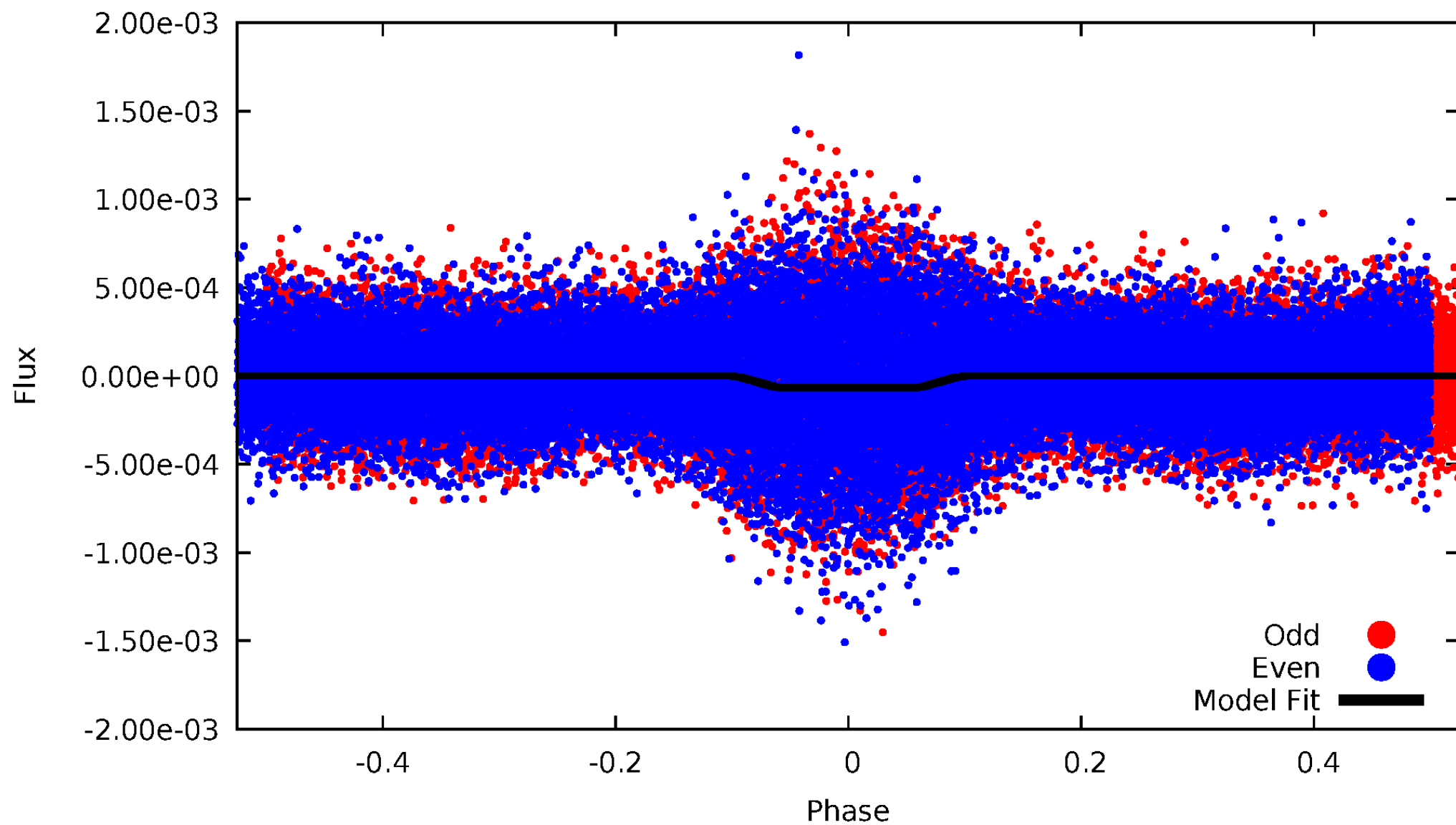
DV Odd/Even

TCE 011572263-01

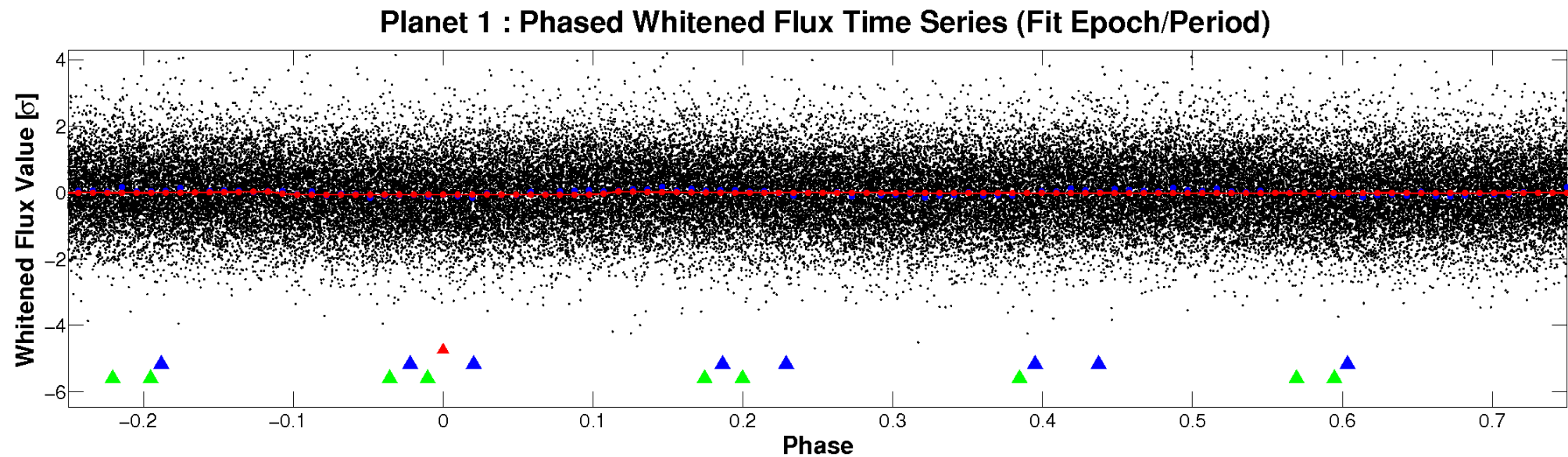
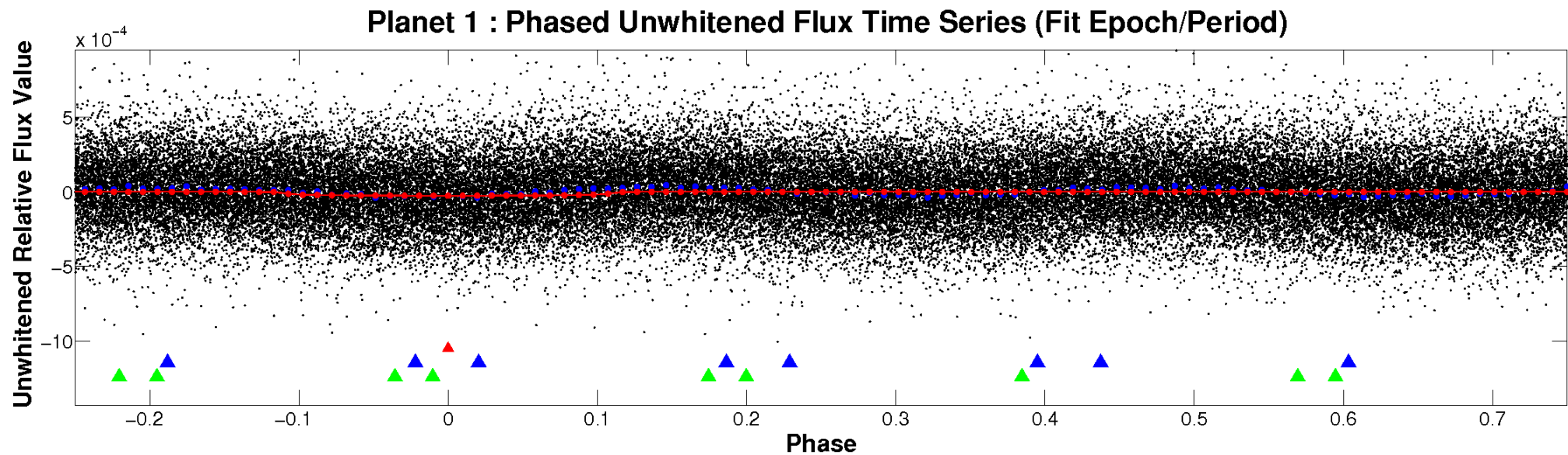


ALT Odd/Even

TCE 011572263-01

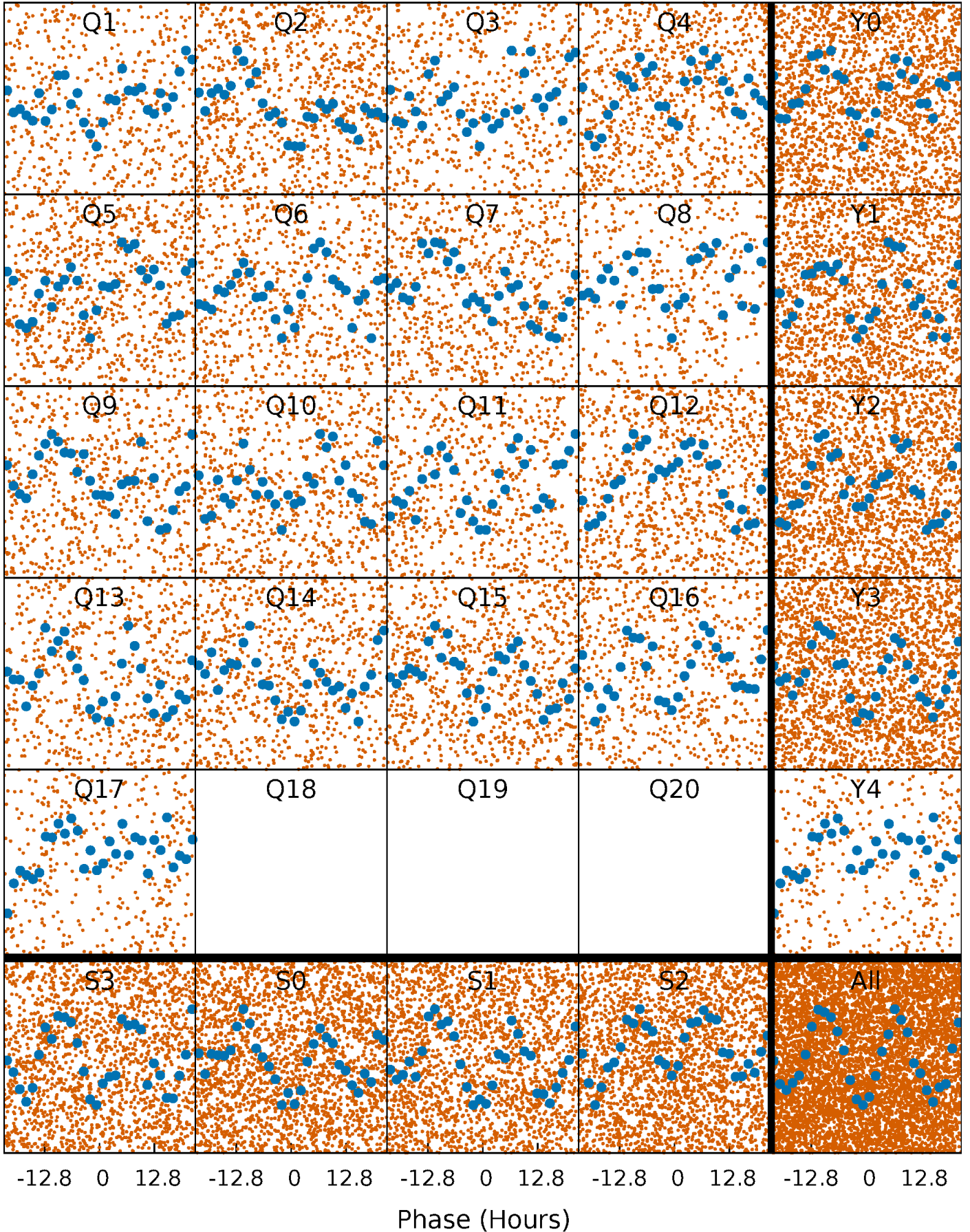


Non-Whitened Vs. Whitened Light Curve



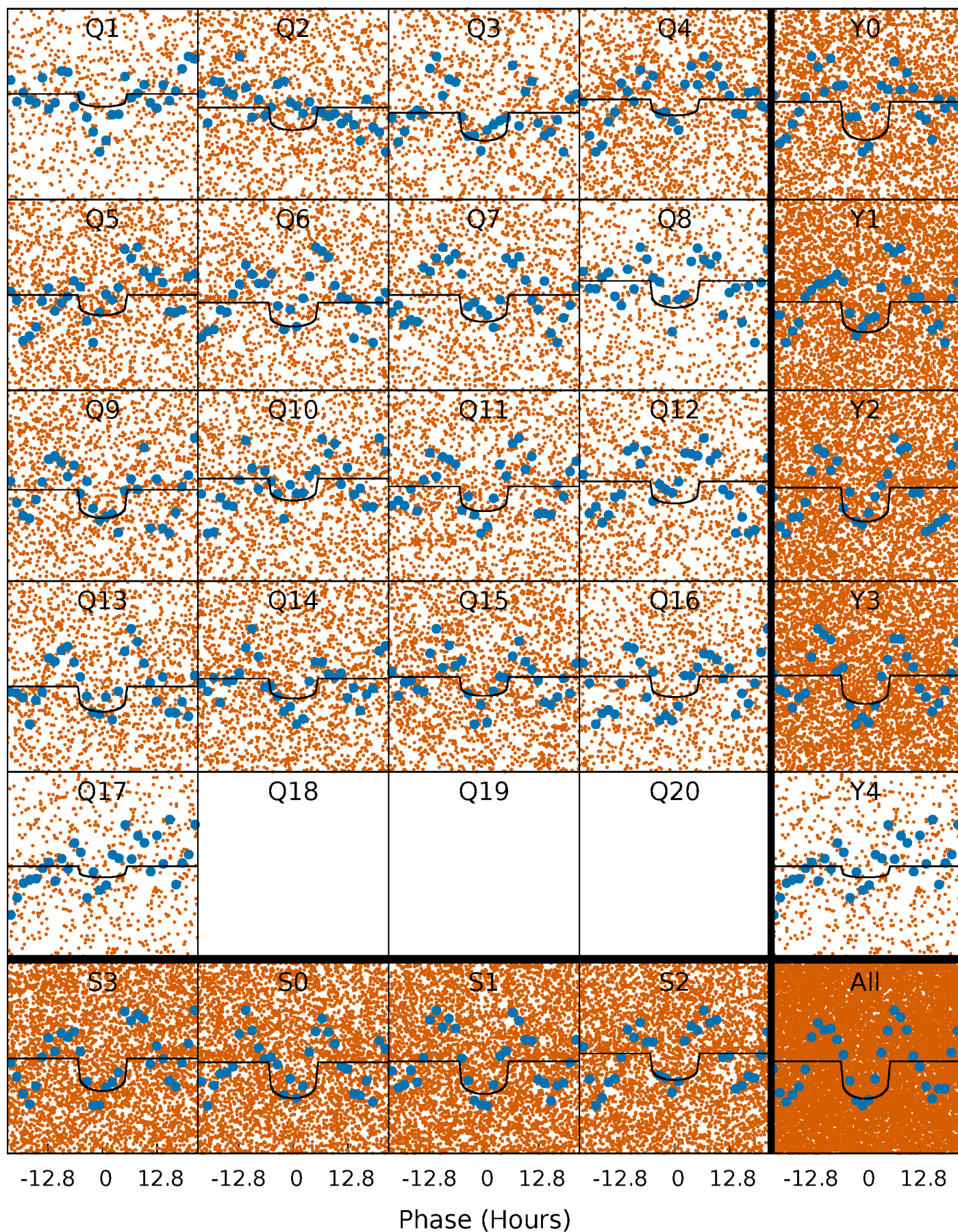
PDC Quarter-Phased Transit Curves

TCE 011572263-01 P= 2.097853 Days $T_0=133.537638$ (BKJD)



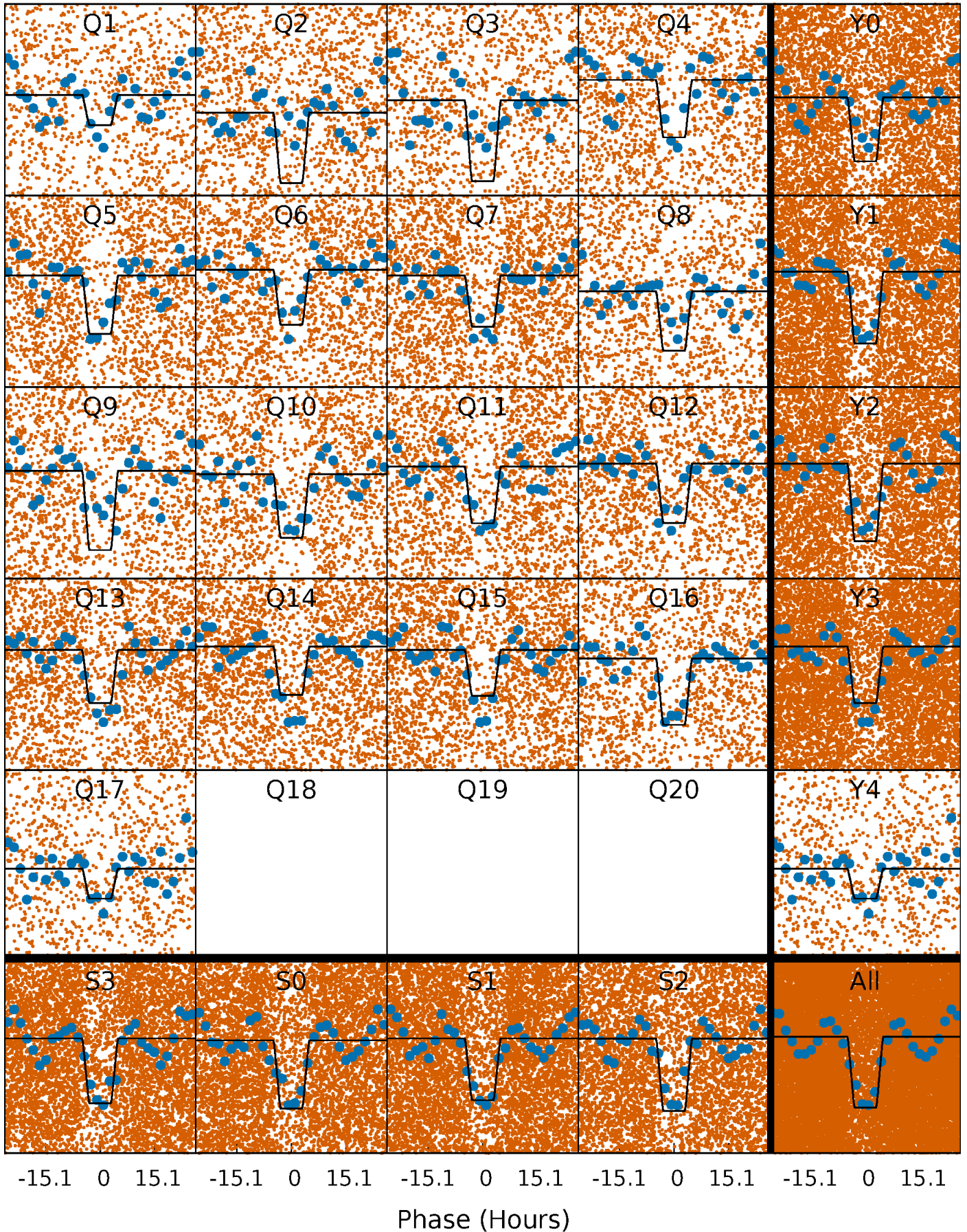
DV Quarter-Phased Transit Curves

TCE 011572263-01 P= 2.097853 Days $T_0=133.537638$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

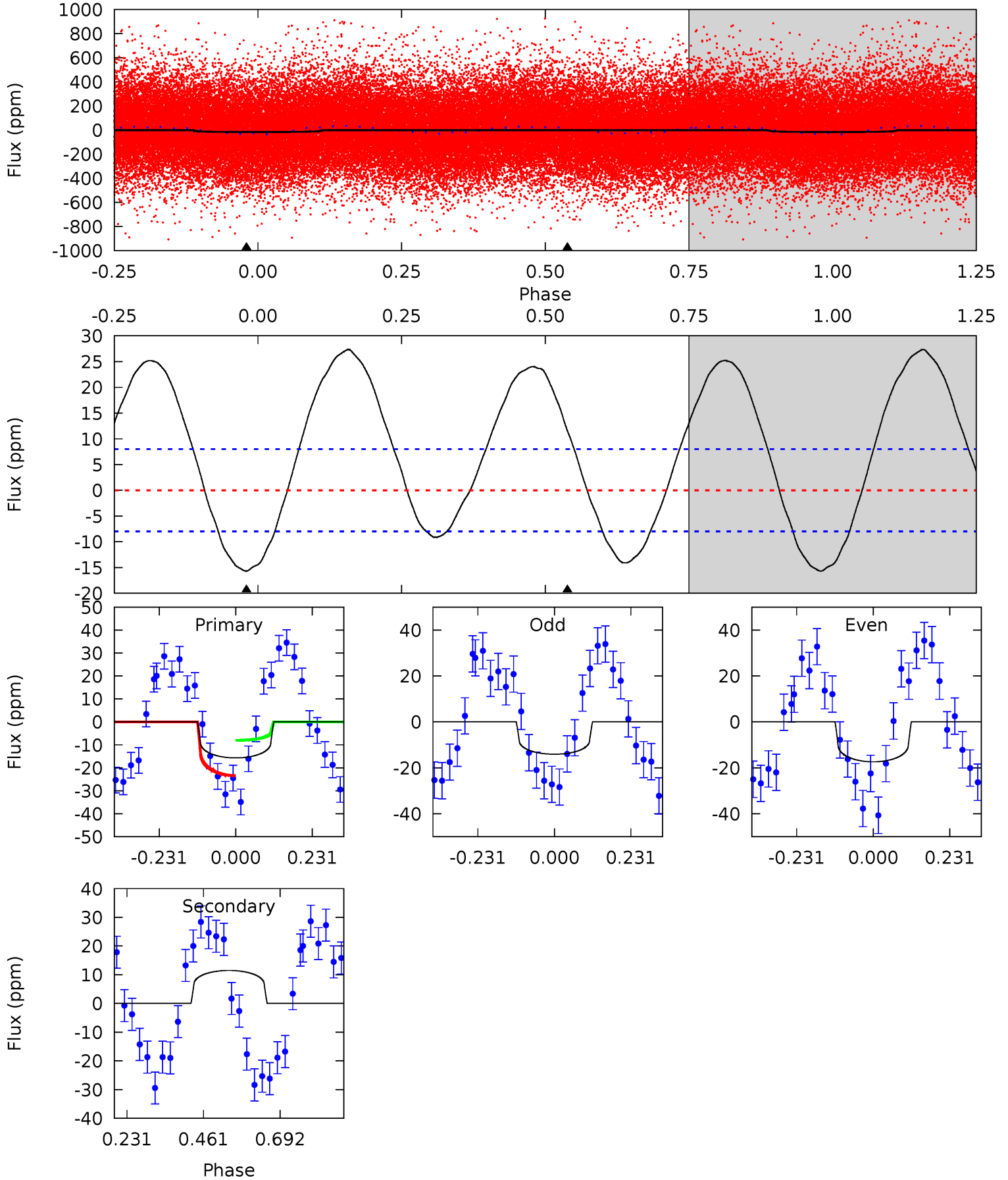
TCE 011572263-01 P= 2.097809 Days $T_0=133.511610$ (BKJD)



DV Model-Shift Uniqueness Test

011572263-01, P = 2.097853 Days, E = 131.439785 Days

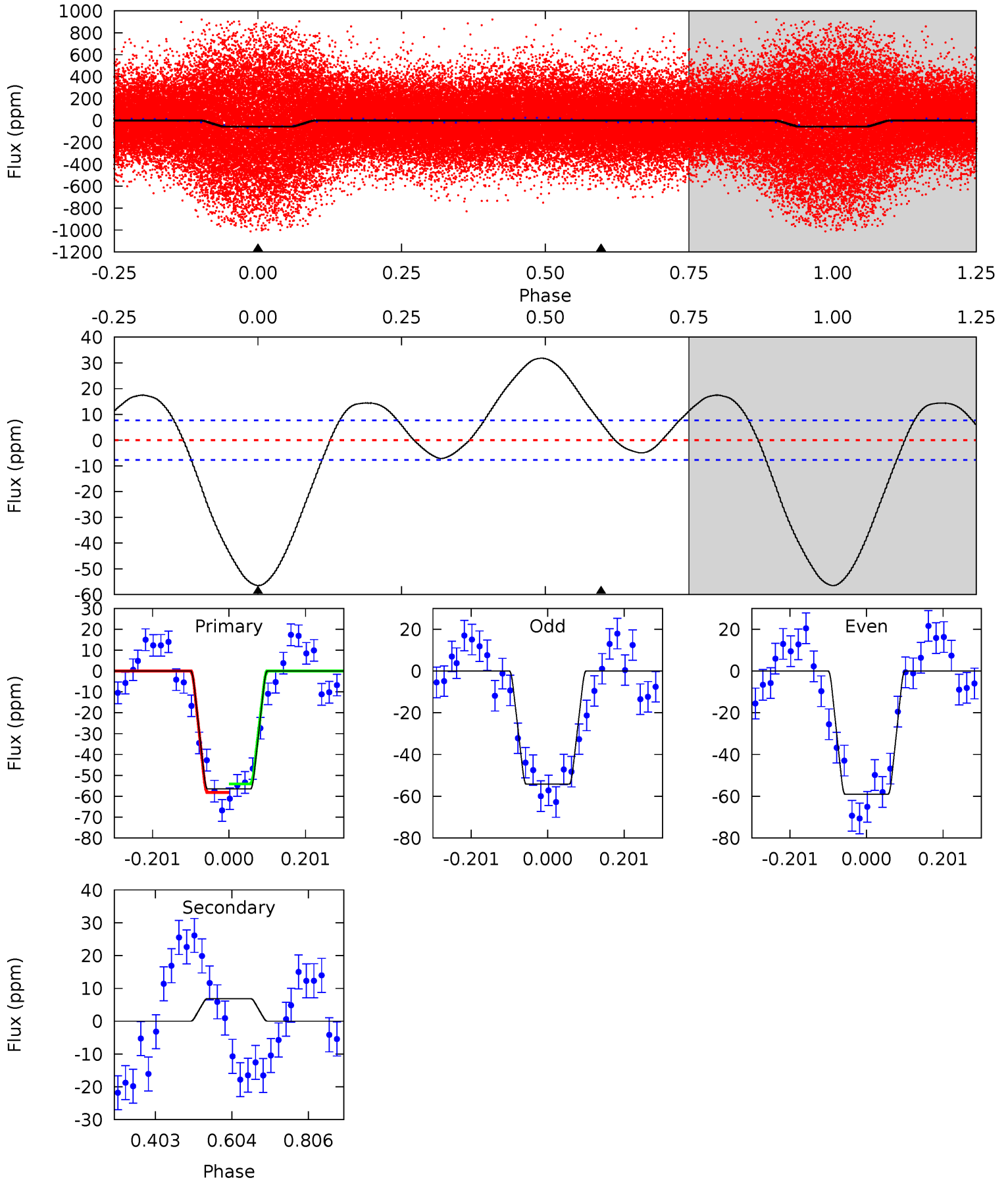
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
8.62	-6.31	0	0	4.39	1.20	4.63	8.62	8.62	-6.31	-6.31	0.91	0.86	0.64	4.31



Alt Model-Shift Uniqueness Test

011572263-01, P = 2.097809 Days, E = 131.413801 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
32.5	-3.95	0	0	4.42	1.28	3.89	32.5	32.5	-3.95	-3.95	1.38	1.25	0.36	1.20



Stellar Parameters For KIC 011572263

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6701^{+182}_{-223}	$4.206^{+0.148}_{-0.181}$	$-0.220^{+0.250}_{-0.300}$	$1.464^{+0.447}_{-0.298}$	$1.264^{+0.182}_{-0.202}$	$0.567^{+0.413}_{-0.273}$
	+3%/-3%	+4%/-4%	+114%/-136%	+31%/-20%	+14%/-16%	+73%/-48%
Source	PHO1	KIC0	KIC0	DSEP		

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

Secondary Eclipse Parameters for KIC 011572263-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	11 ± 2	$0.80^{+0.41}_{-0.40}$	2703^{+194}_{-177}	-5598^{+897}_{-2288}	$-12.063^{+7.039}_{-34.763}$
Alt.	7 ± 2	$1.30^{+0.43}_{-0.42}$	2688^{+206}_{-170}	-4182^{+382}_{-649}	$-2.760^{+1.390}_{-3.189}$

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

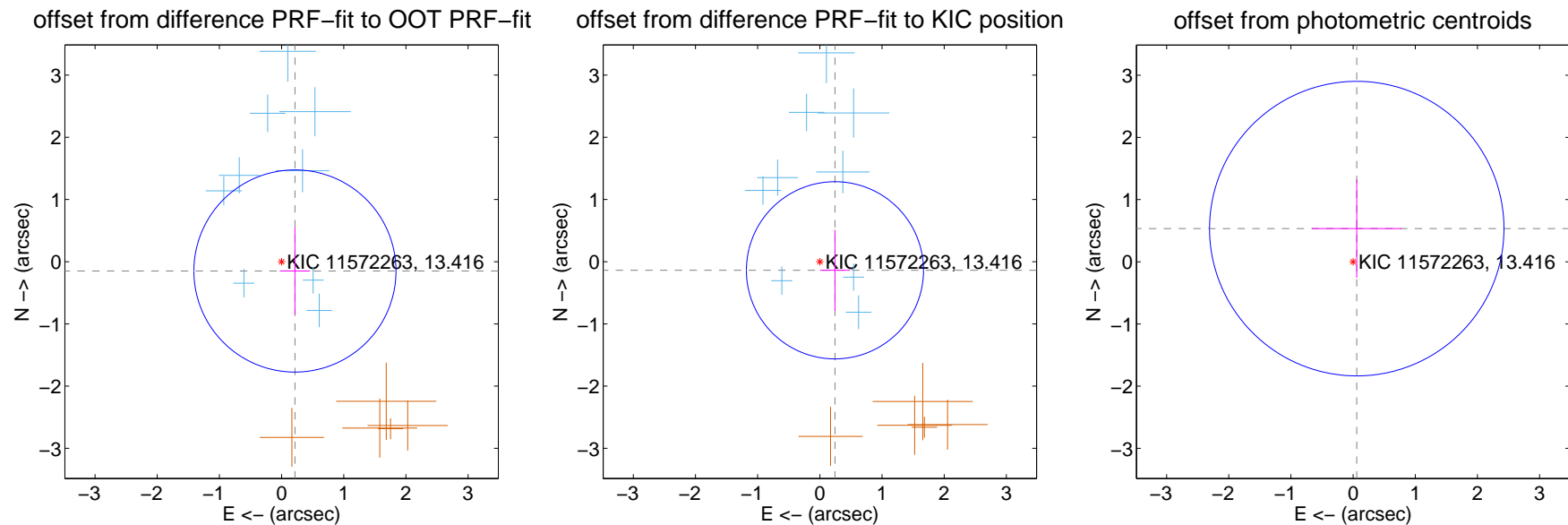
DV Centroid Data

Supplemental centroid analysis for 011572263-01. Kepler magnitude: 13.42. Transit SNR 7.48

There are 9 quarters with good PRF difference image offsets

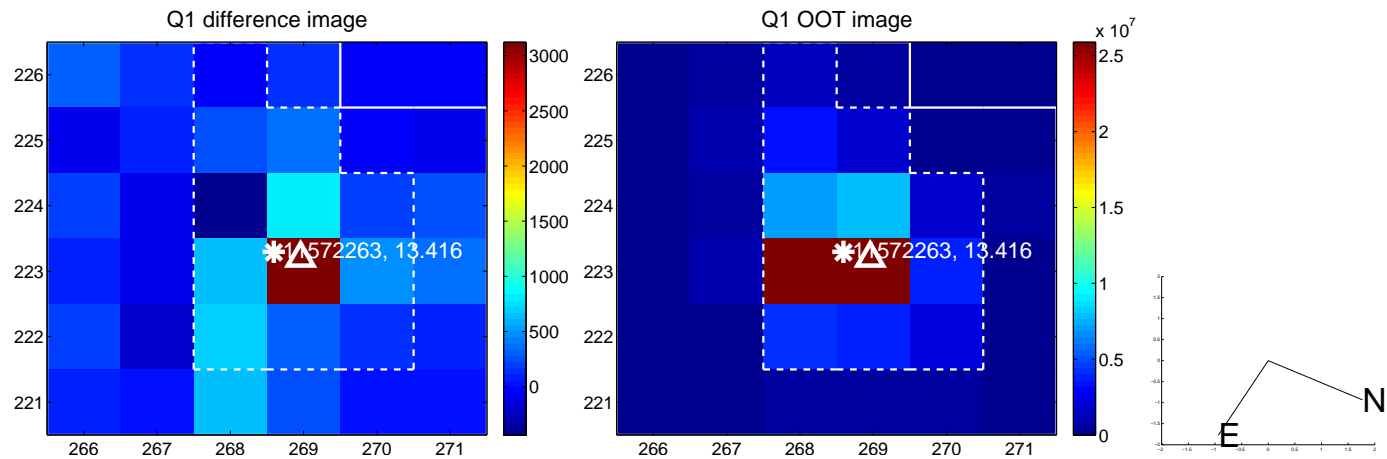
The direct PRF centroid is offset from the target star catalog position by about 0.01 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.262 ± 0.542	0.48	-0.215 ± 0.244	-0.149 ± 0.703
PRF-fit source offset from KIC position	0.280 ± 0.475	0.59	-0.243 ± 0.243	-0.138 ± 0.651
photometric centroid source offset	0.54 ± 0.79	0.68	-0.06 ± 0.72	0.53 ± 0.79

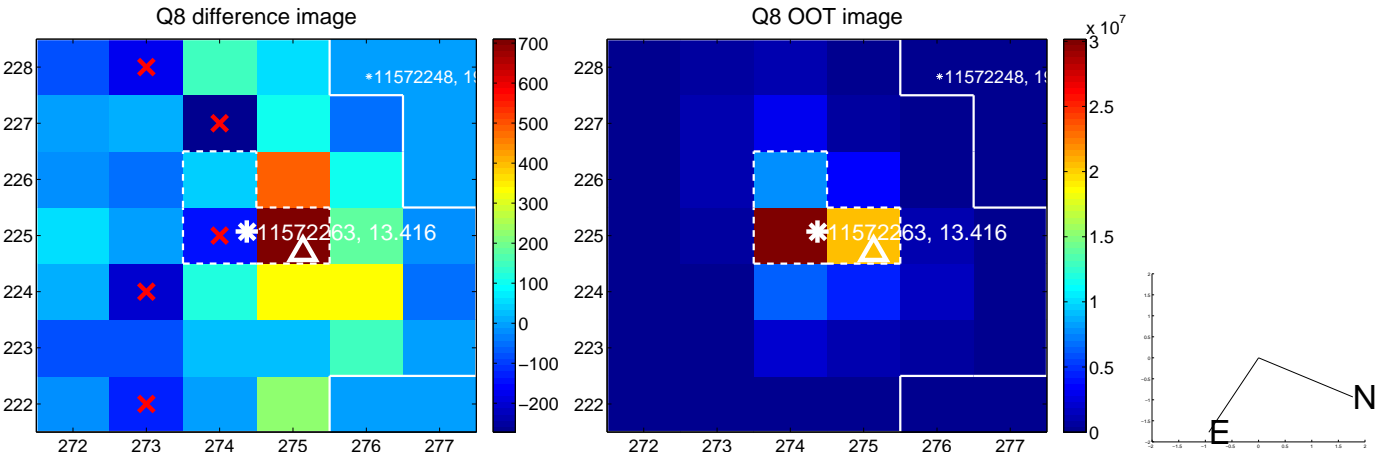
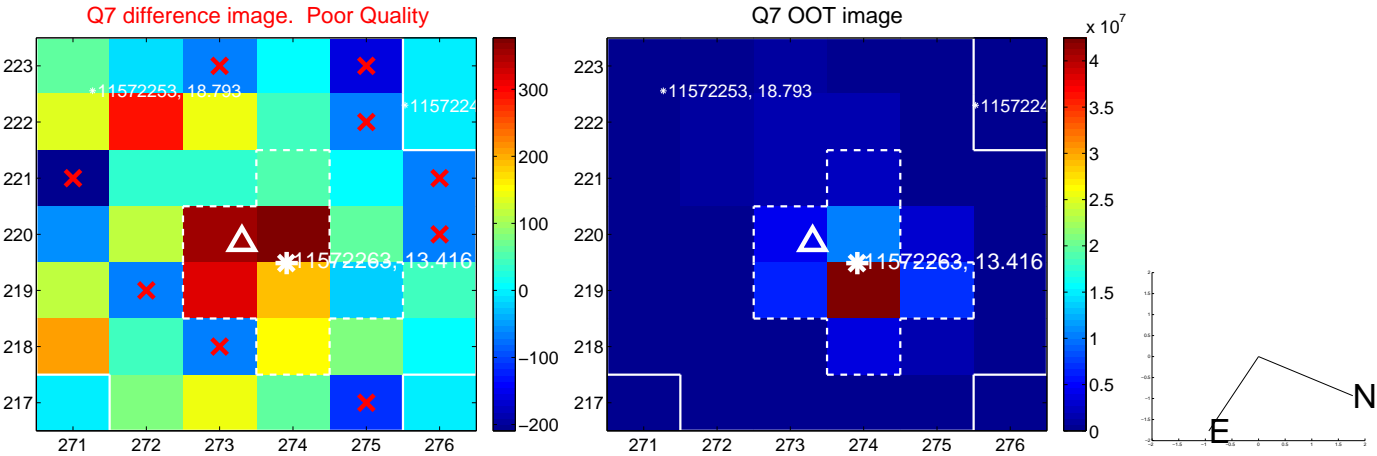
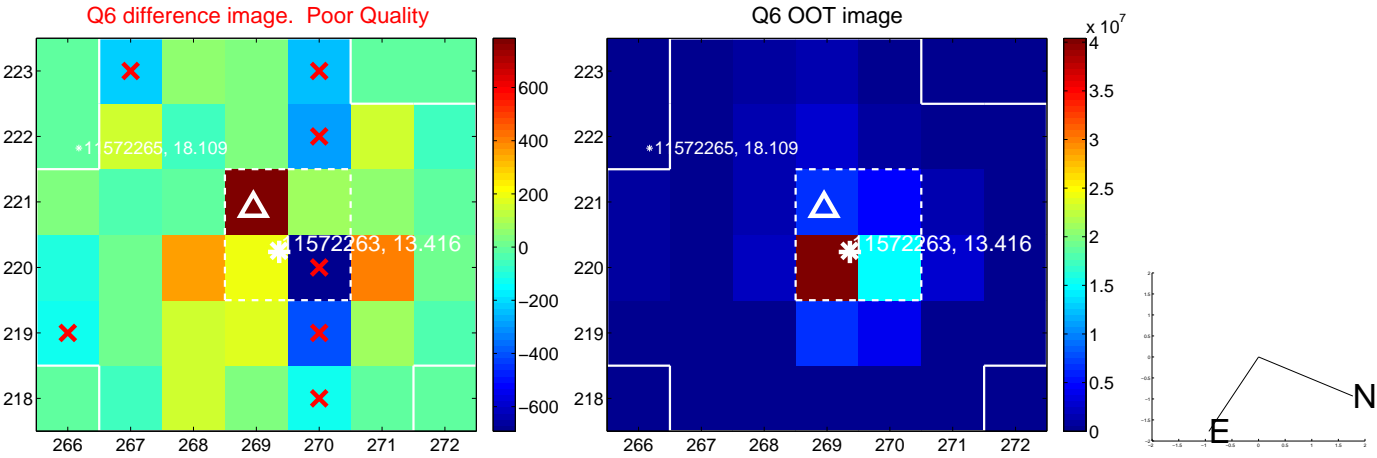
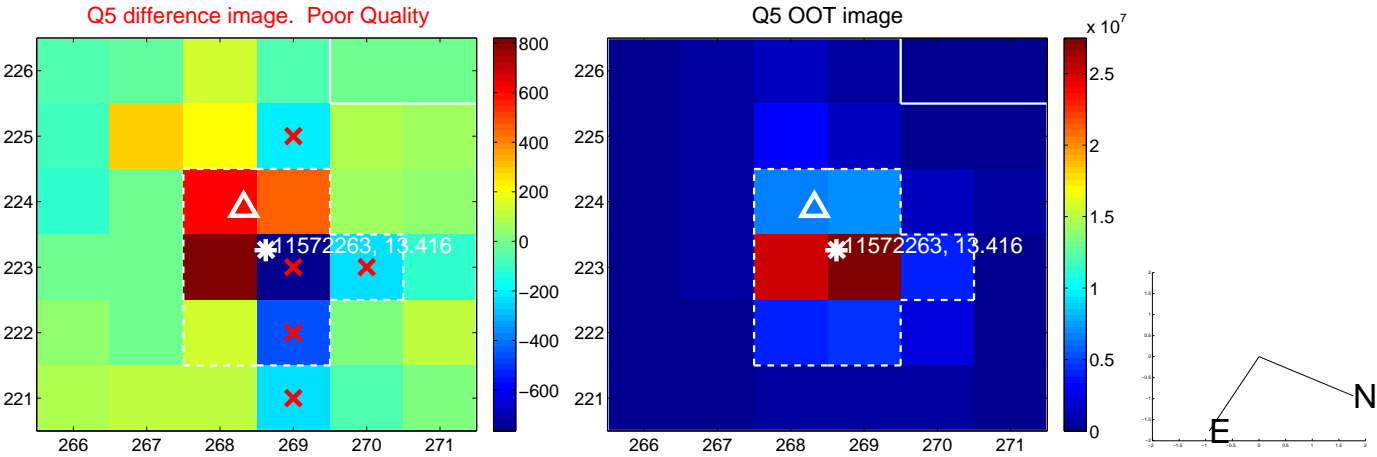


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets**; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

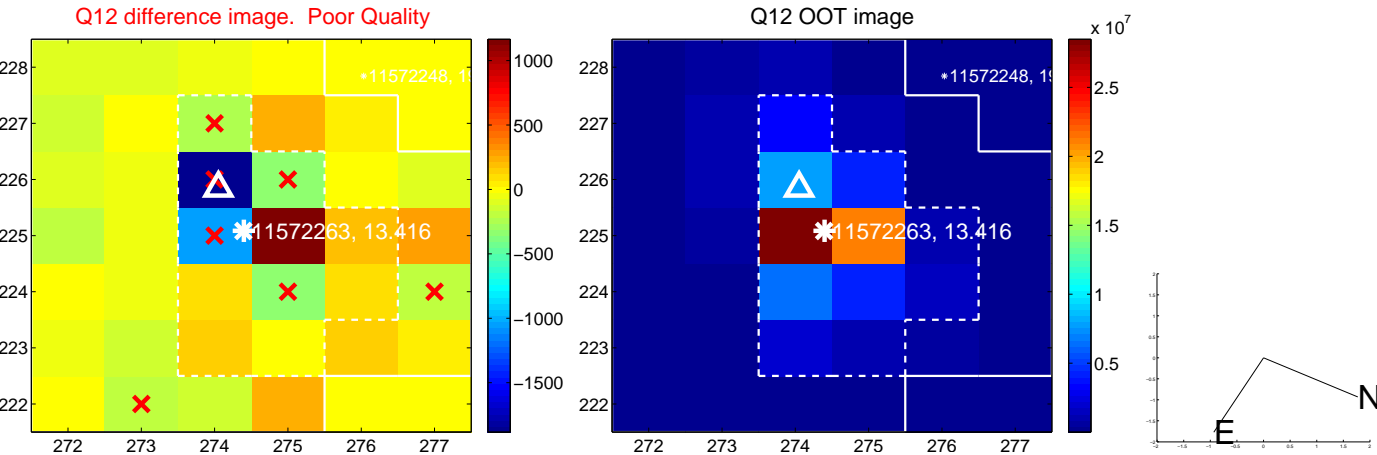
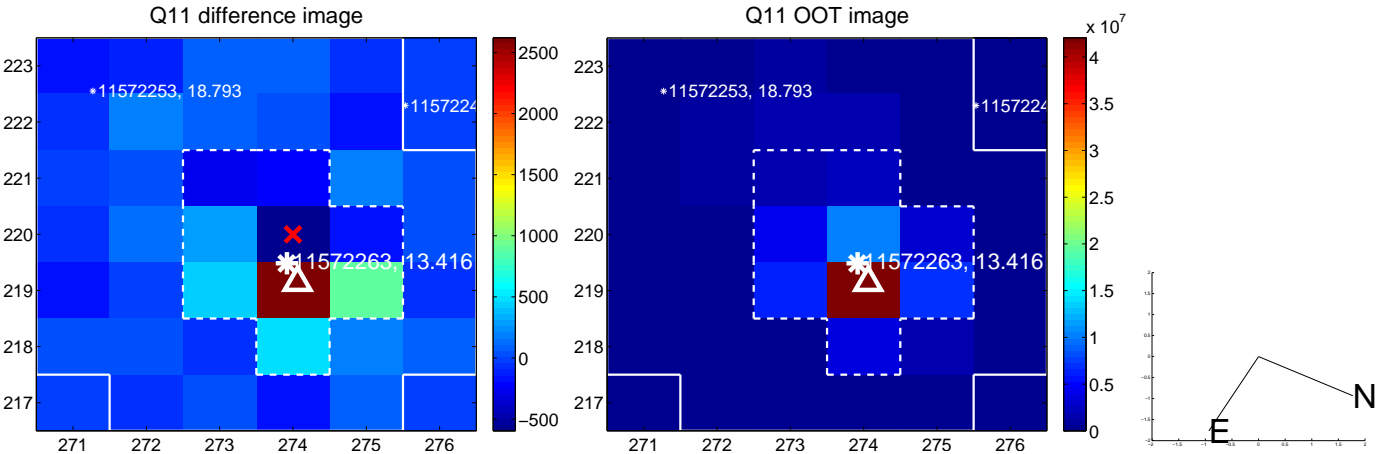
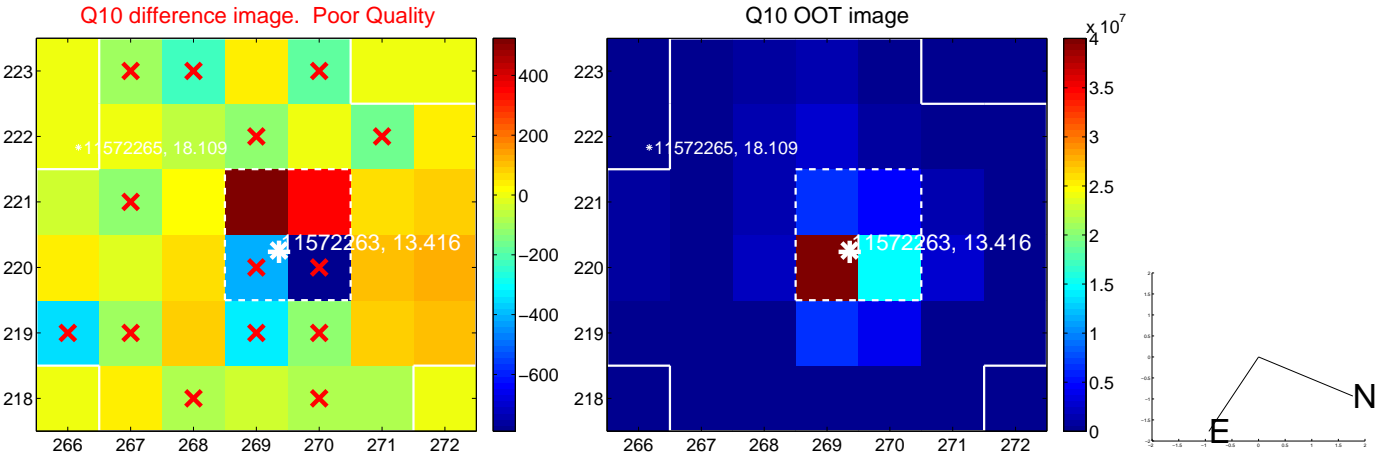
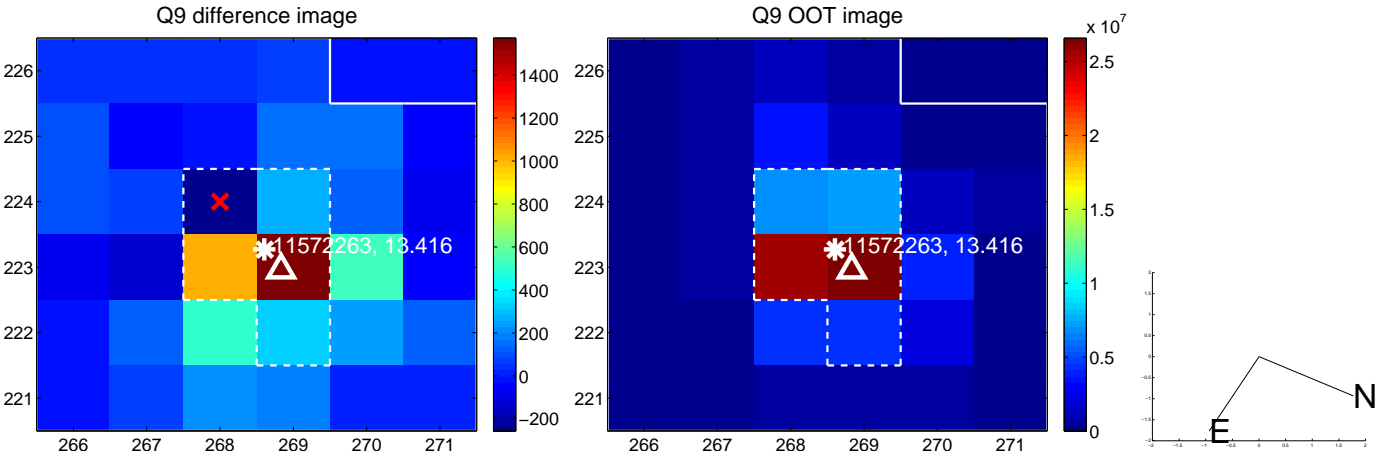
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



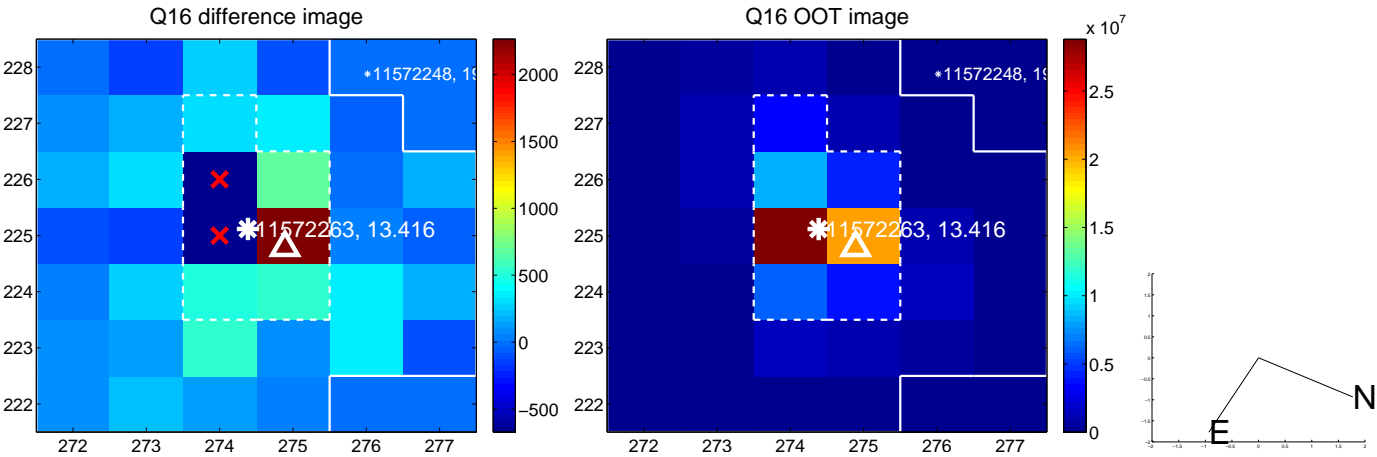
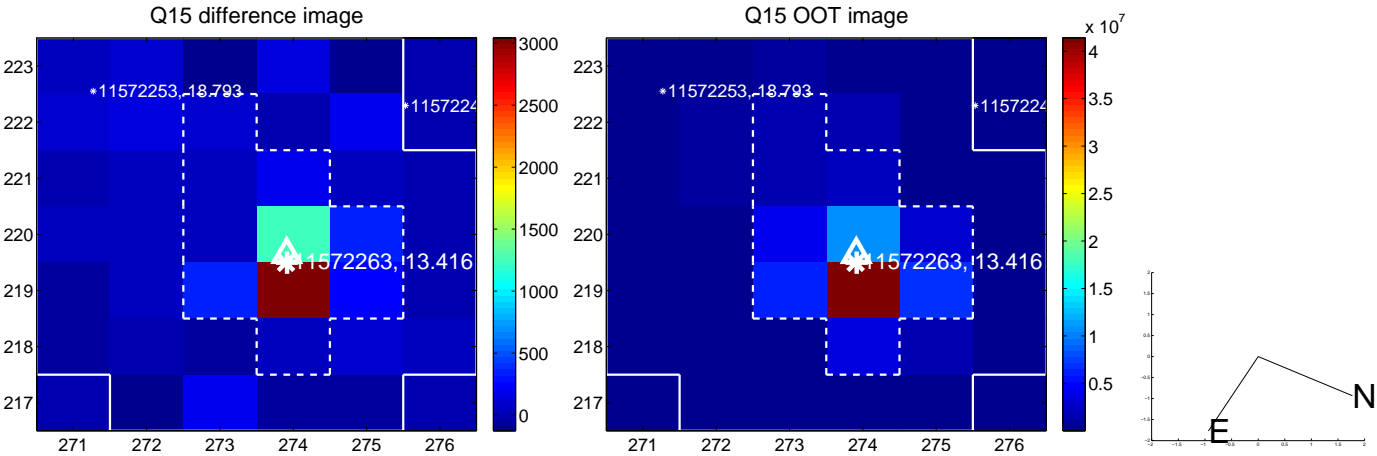
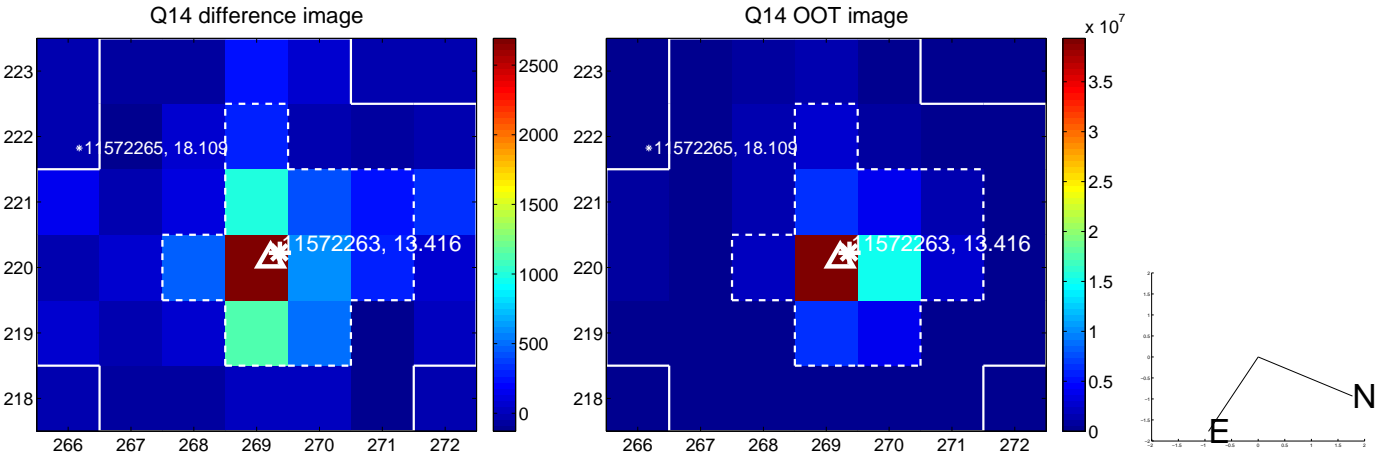
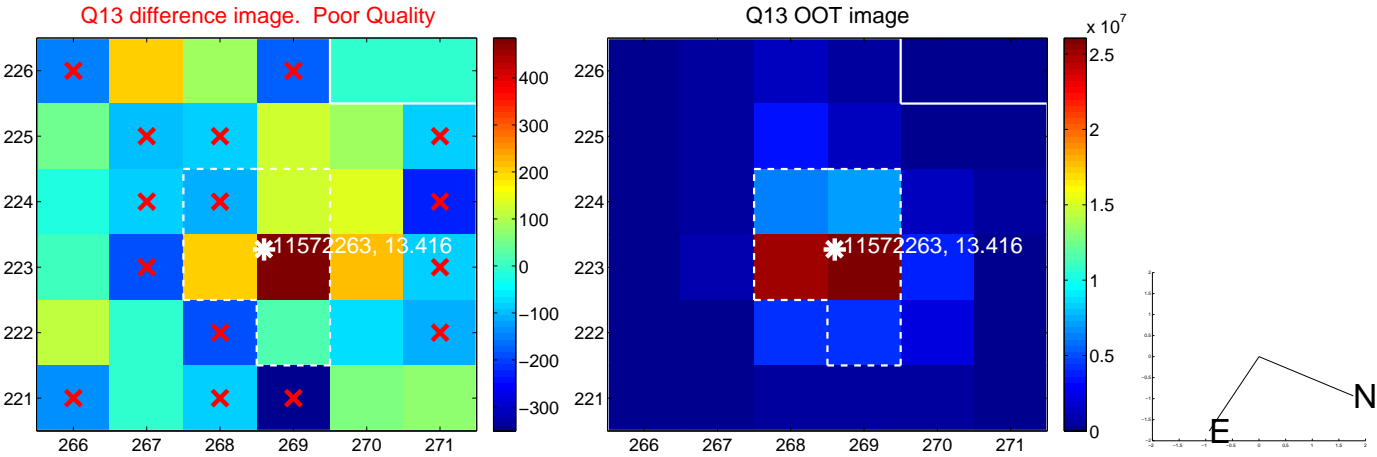
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



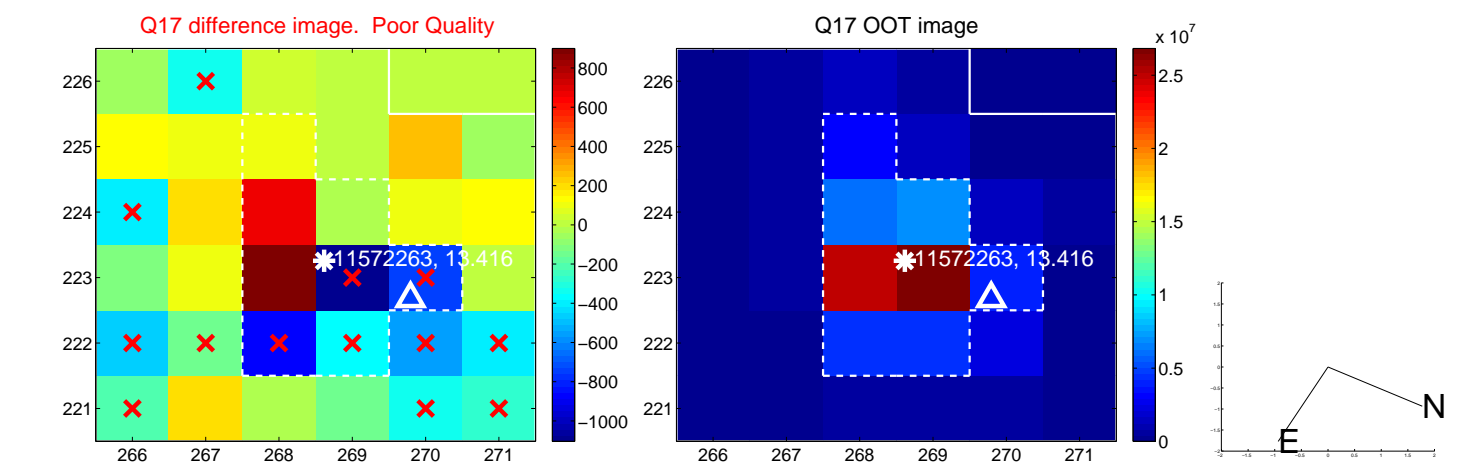
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



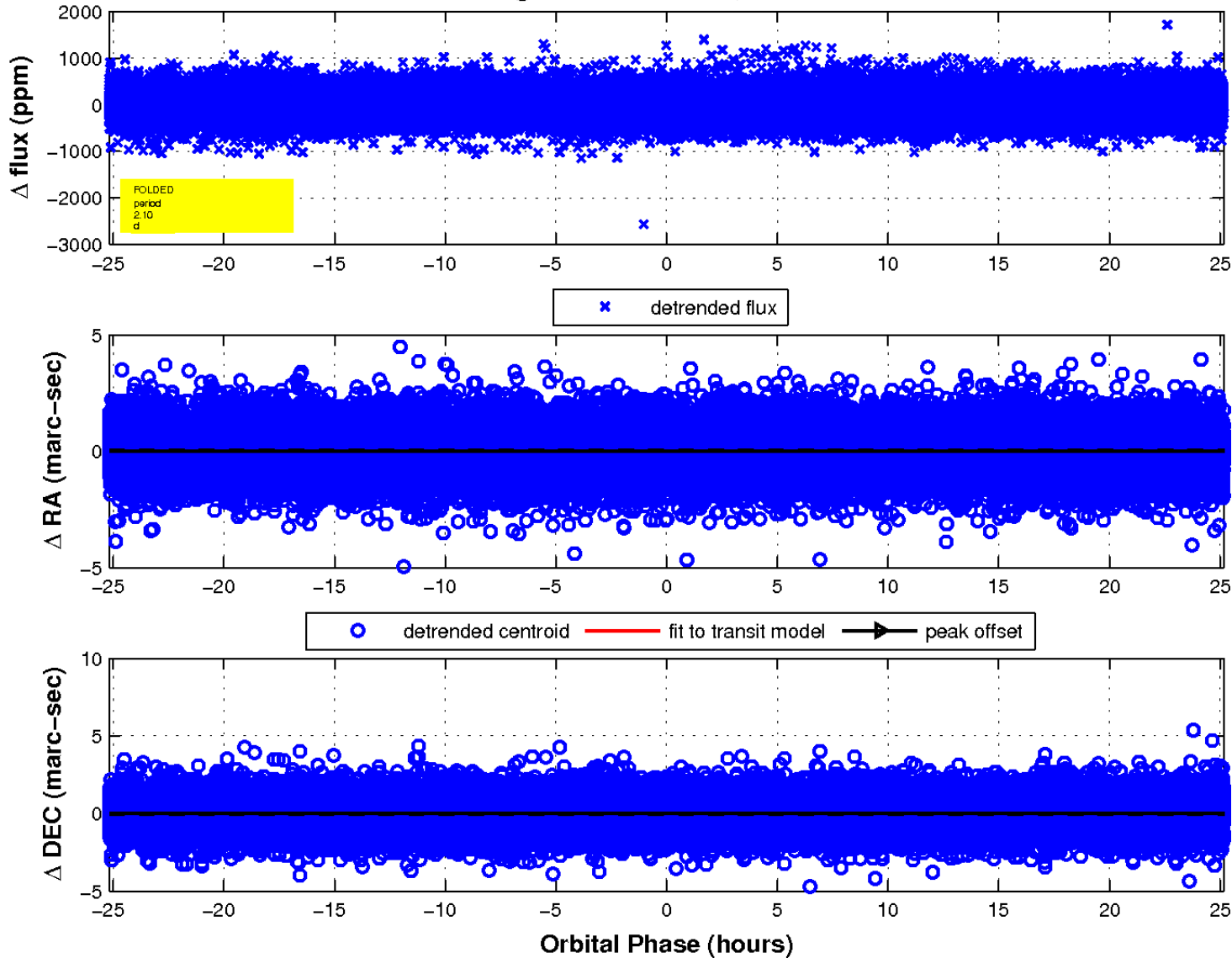
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

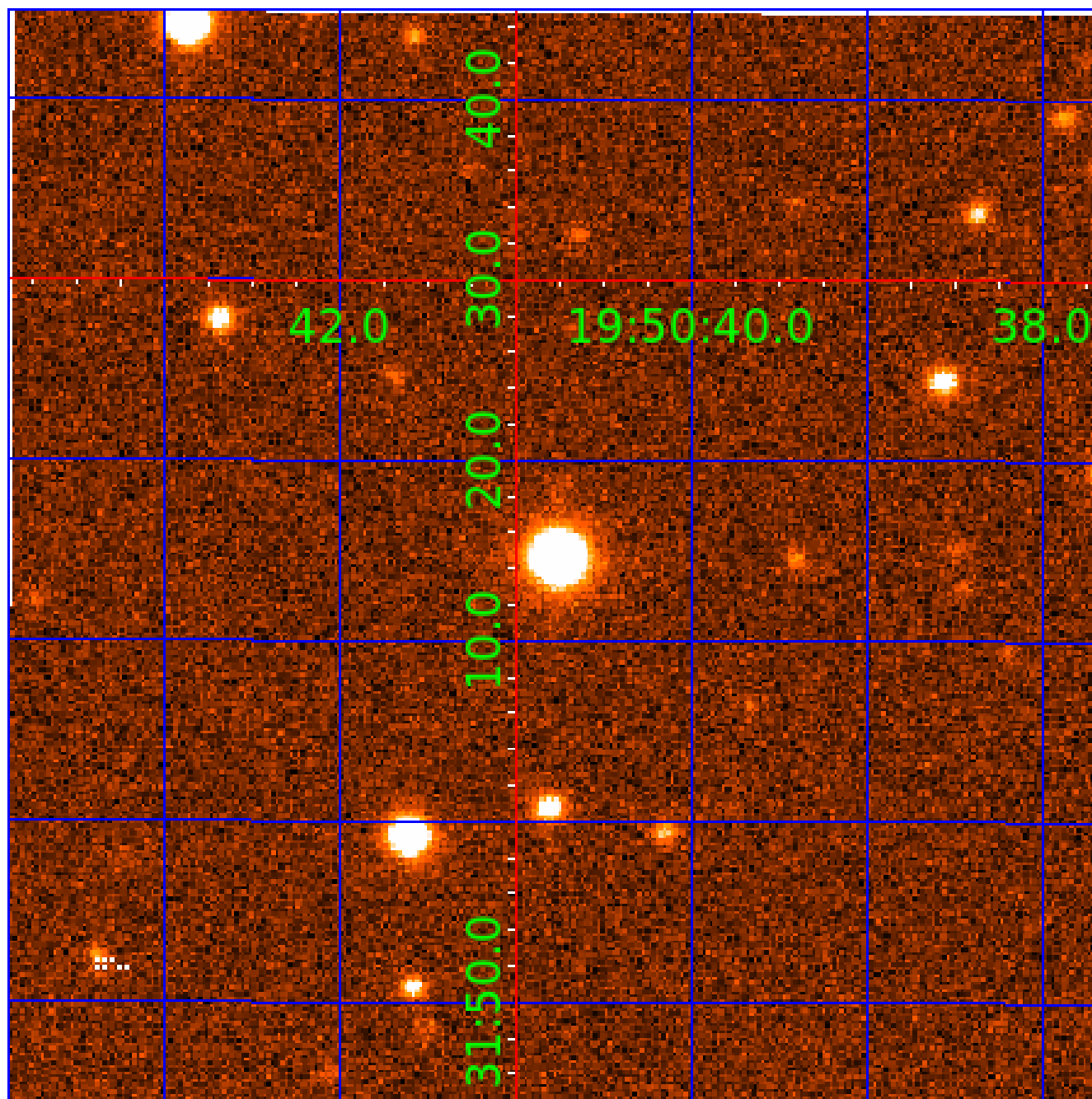


fluxWeightedCentroids, Planet 1 of 3



UKIRT Image

Declination



KIC 011572263

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})
011572263-01	OBS	No	2.097853	133.537638	26.2	11.171	8.8	7.5	1.46	6701	0.77	3231.82
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Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
011572263-01	OBS	FP	0.00	1	0	0	0	LPP_DV—MOD_NONUNIQ_DV
011572263-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_MARSHALL—TRANS_GAPPED—LPP_DV—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV— MOD_NONUNIQ_ALT—INCONSISTENT_TRANS
011572263-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_MARSHALL—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT— MOD_POS_ALT

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

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

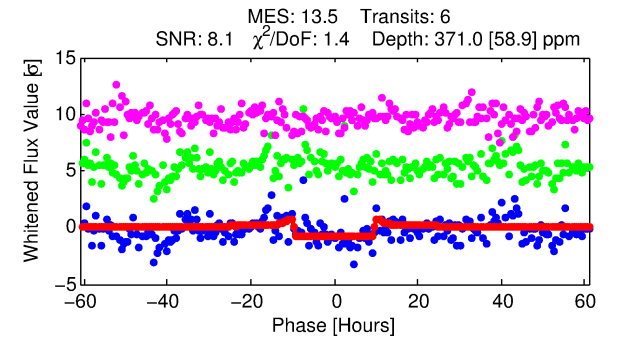
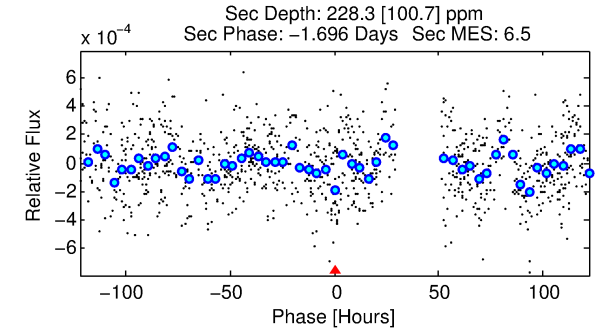
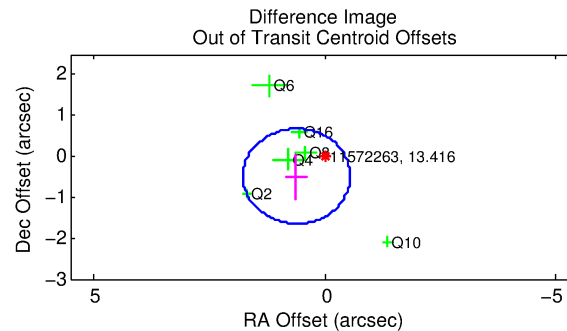
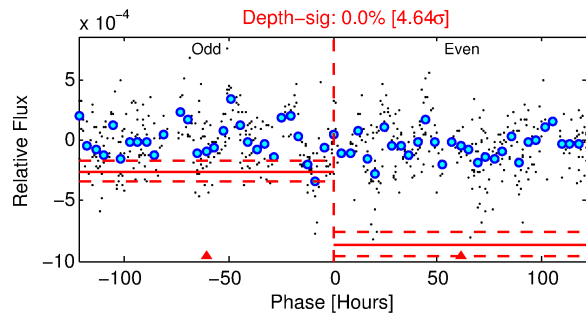
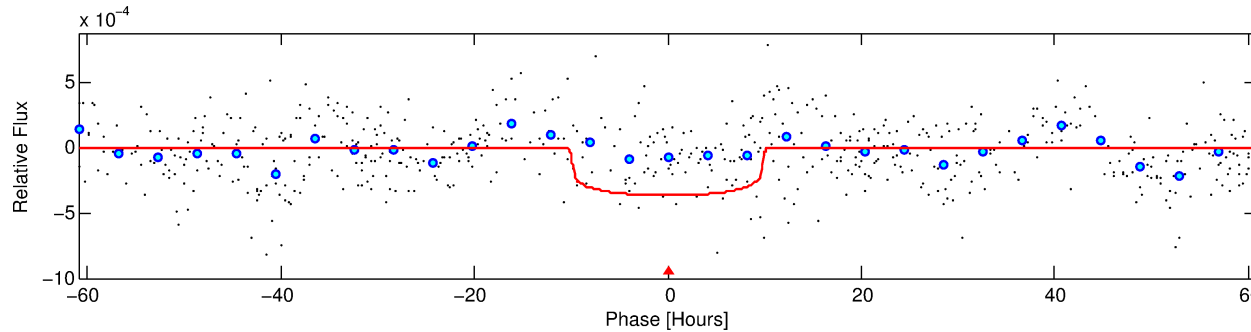
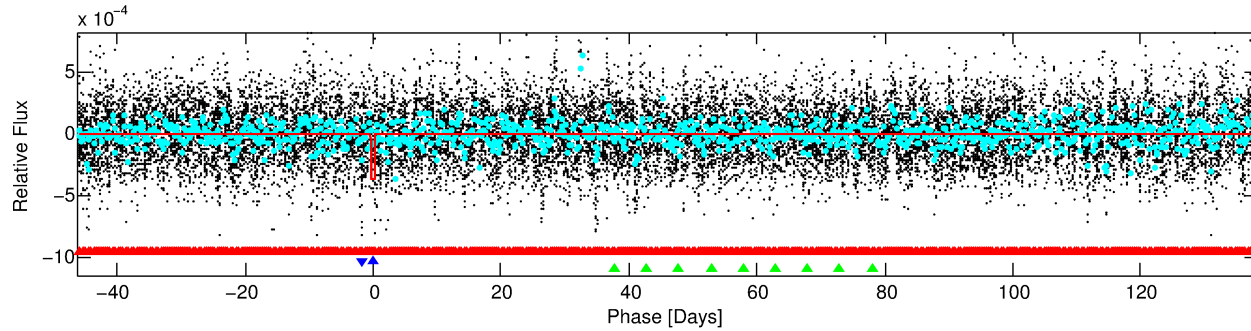
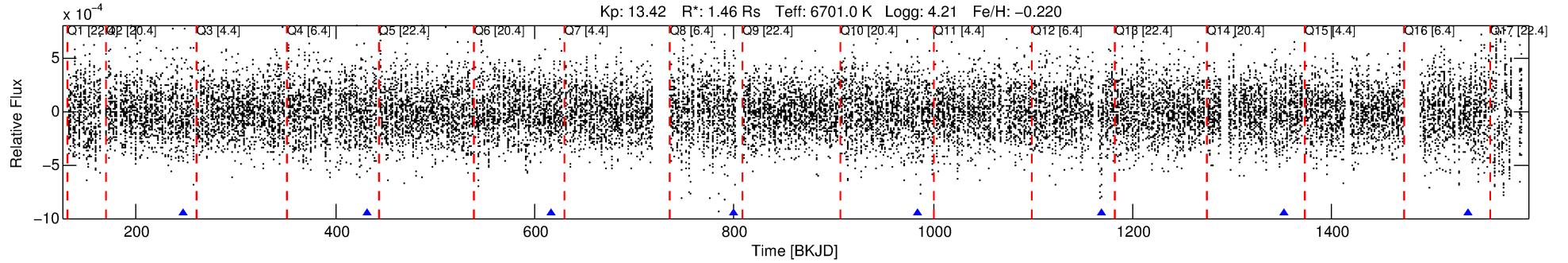
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 011572263-02

No Significant Match Found

DV One-Page Summary

KIC: 11572263 Candidate: 2 of 3 Period: 184.174 d



DV Fit Results:

Period = 184.17370 [0.00436] d
Epoch = 247.7392 [0.0176] BKJD
Rp/R* = 0.0184 [0.0050]
a/R* = 58.63 [82.92]
b = 0.57 [1.70]
Seff = 8.28 [3.06]
Teq = 433 [40] K
Rp = 2.94 [1.21] Re
a = 0.6837 [0.1685] AU
Ag = 6778.66 [5302.84] [1.28 σ]
Teffp = 6069 [1085] K [5.19 σ]

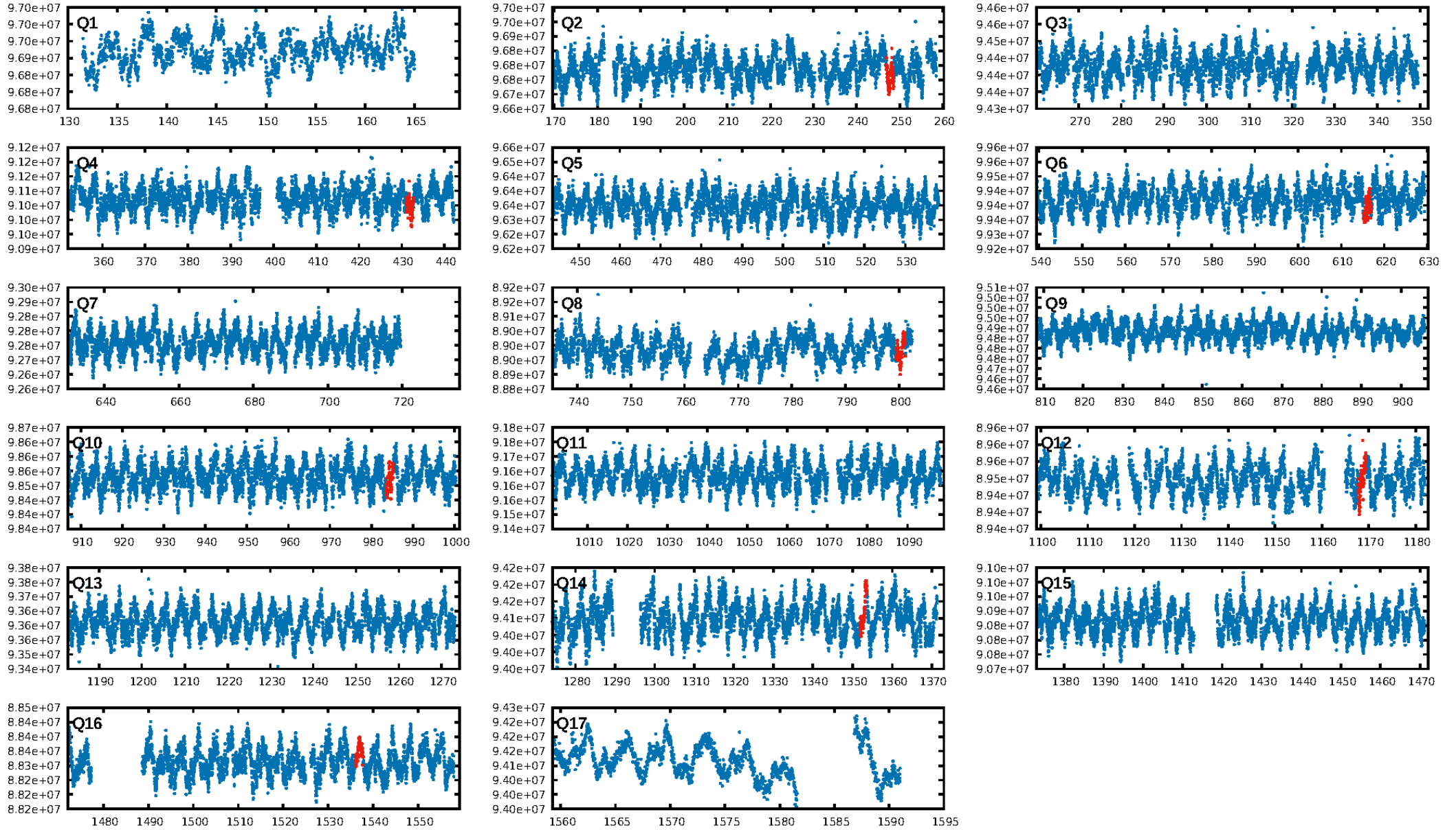
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [5.35 σ]
LongPeriod-sig: N/A
ModelChiSquare2-sig: 0.0%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: 1.08e-20
RollingBand-fgt: 1.00 [6/6]
GhostDiagnostic-chr: 1.031
Centroid-sig: 12.2%
Centroid-so: 0.747 arcsec [1.76 σ]
OotOffset-rm: 0.778 arcsec [2.01 σ]
OotOffset-st: 3/0/3/0 [6]
KicOffset-rm: 0.775 arcsec [2.07 σ]
KicOffset-st: 3/0/3/0 [6]
DiffImageQuality-fgm: 0.67 [4/6]
DiffImageOverlap-fno: 0.00 [0/8]

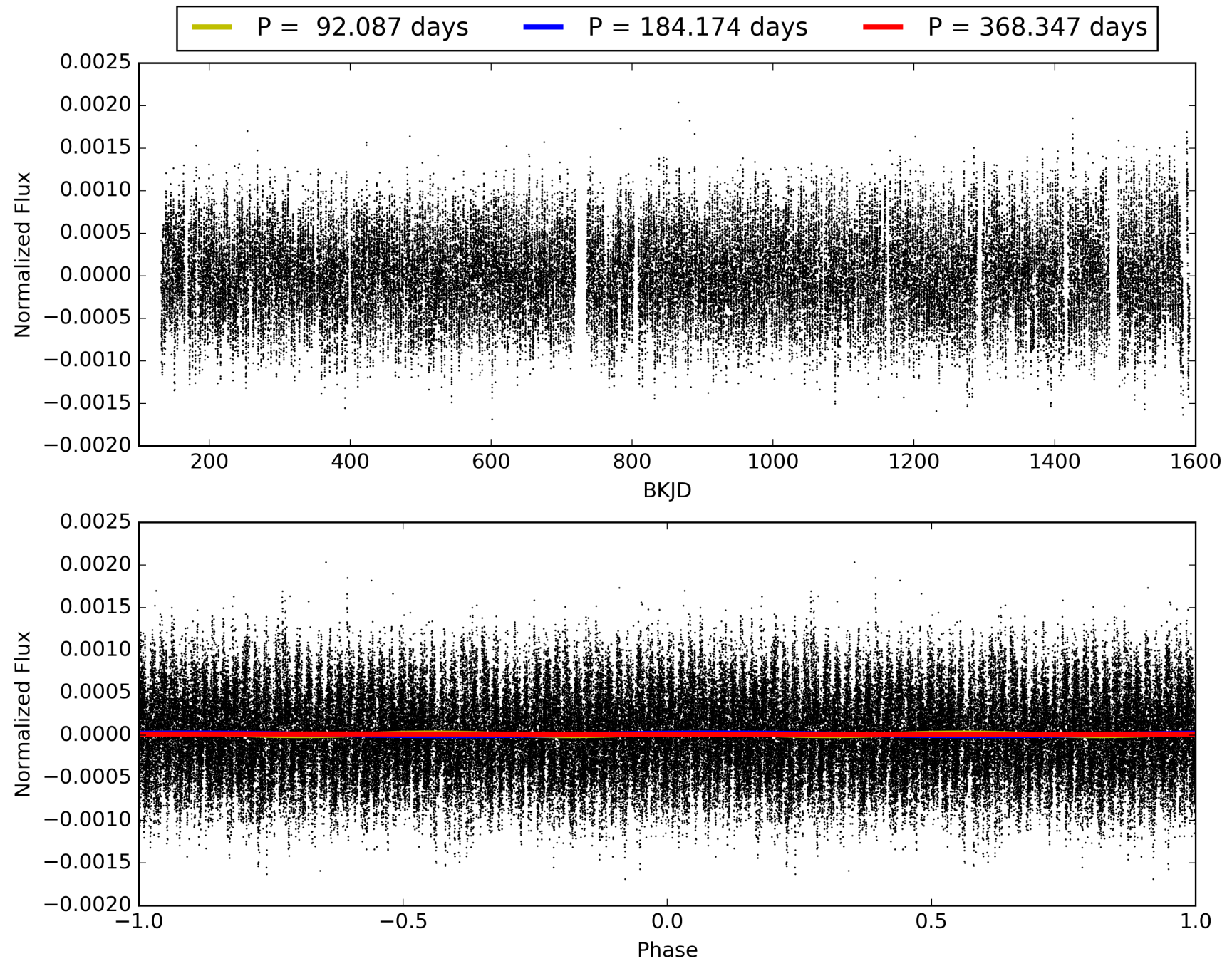
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 29-Jan-2016 05:27:44 Z

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

TCE 011572263-02, PDC Light Curves

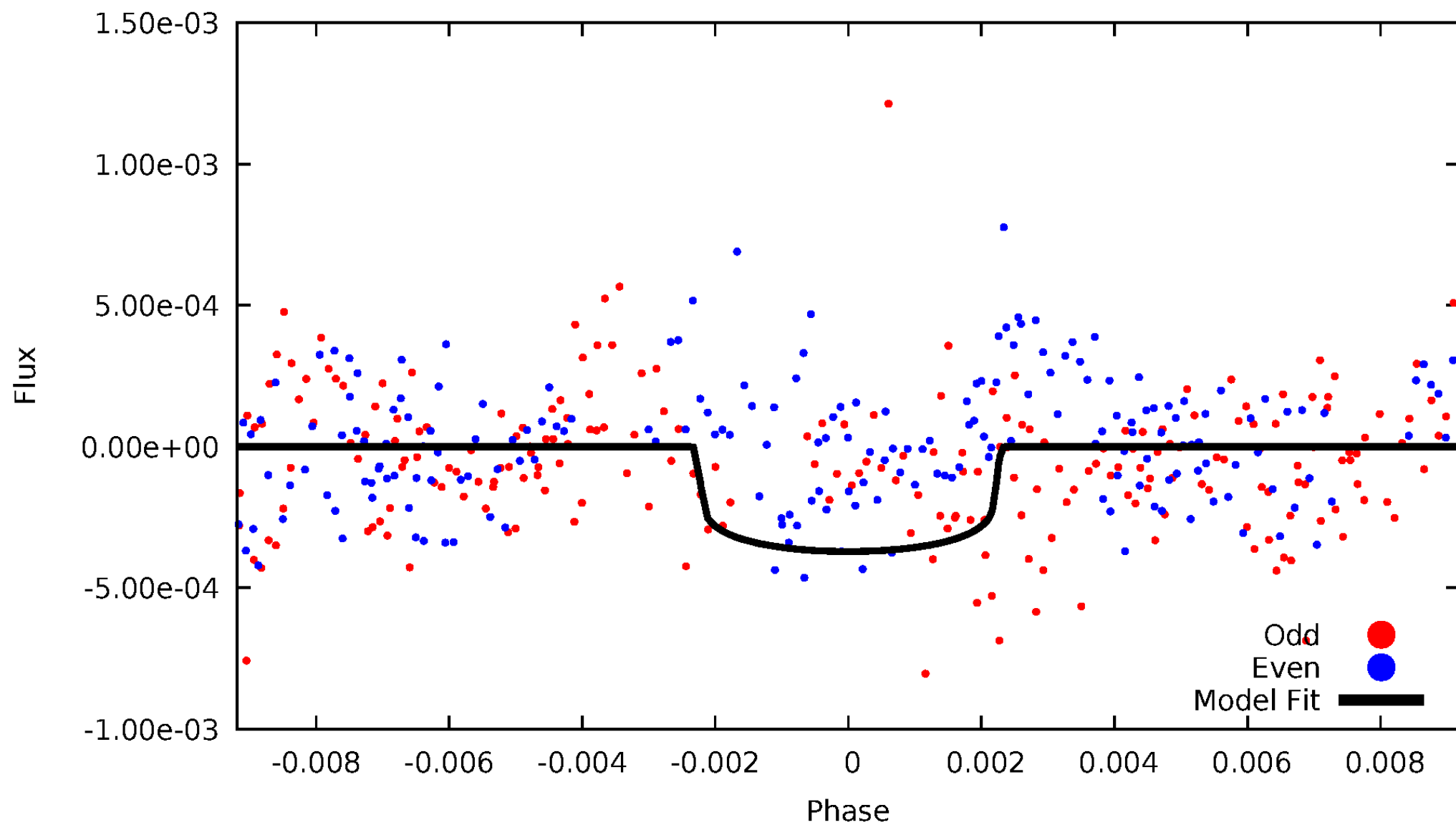


TCE 011572263-02



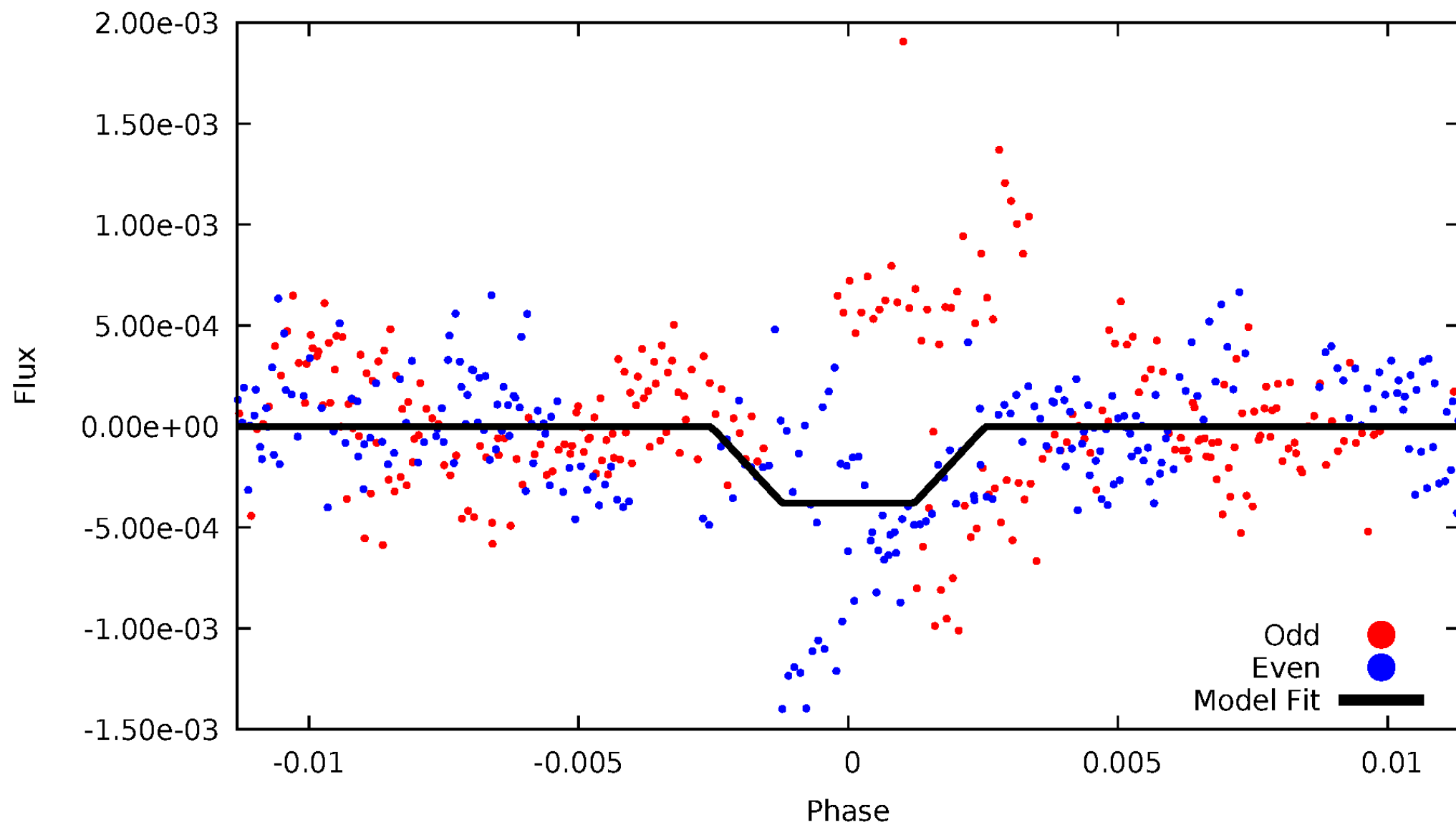
DV Odd/Even

TCE 011572263-02



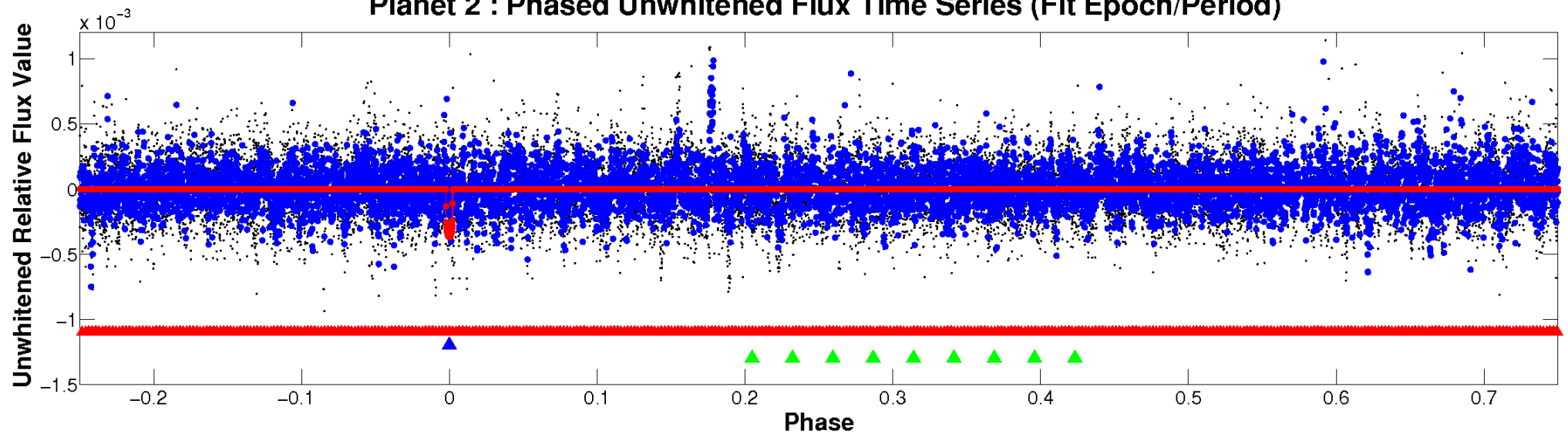
ALT Odd/Even

TCE 011572263-02

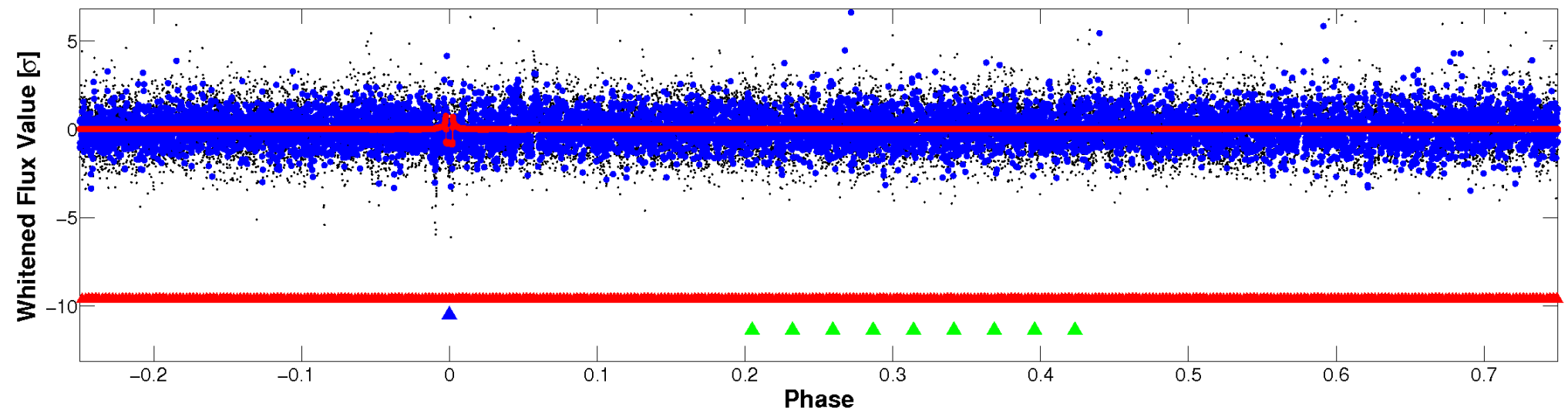


Non-Whitened Vs. Whitened Light Curve

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

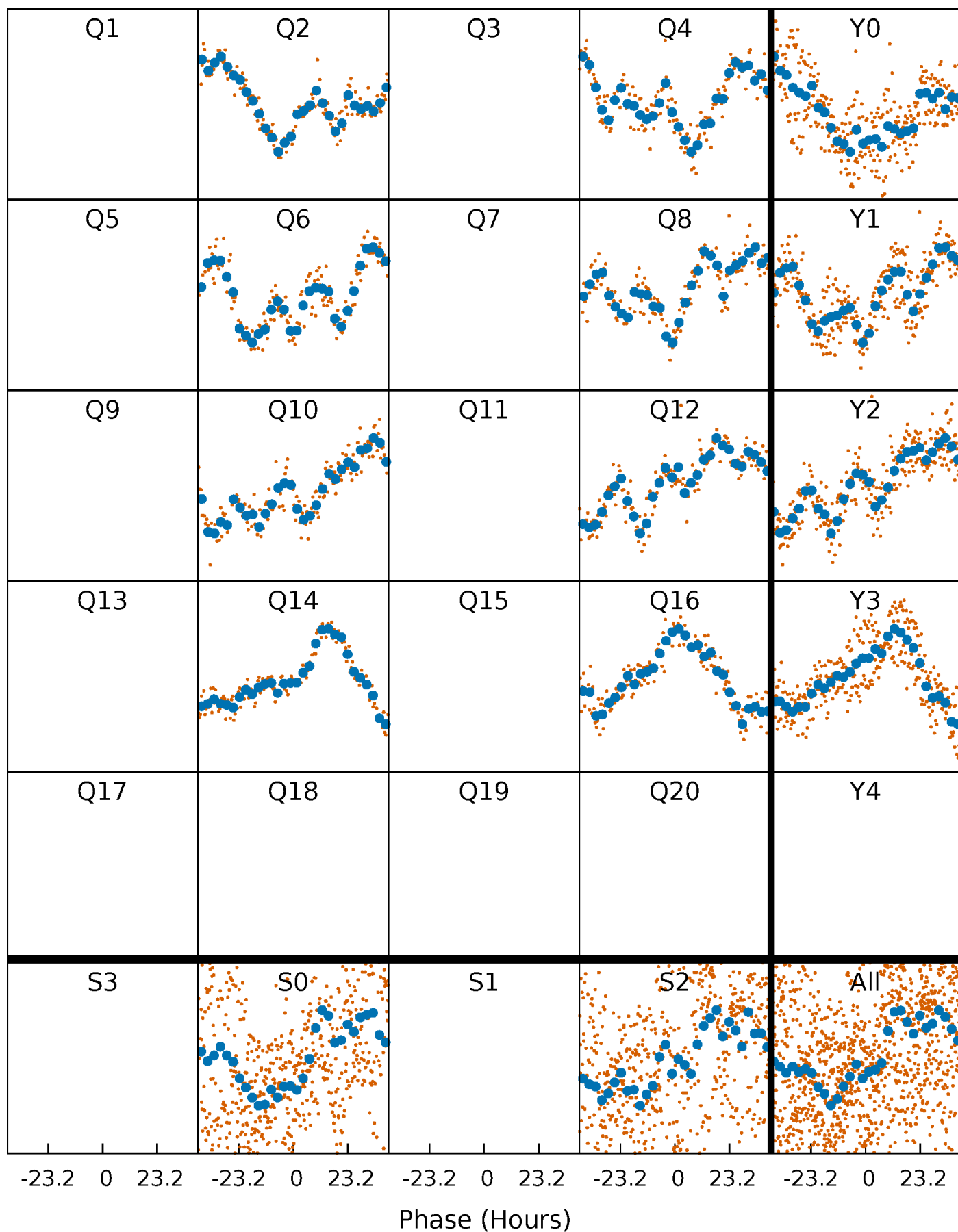


Planet 2 : Phased Whitened Flux Time Series (Fit Epoch/Period)



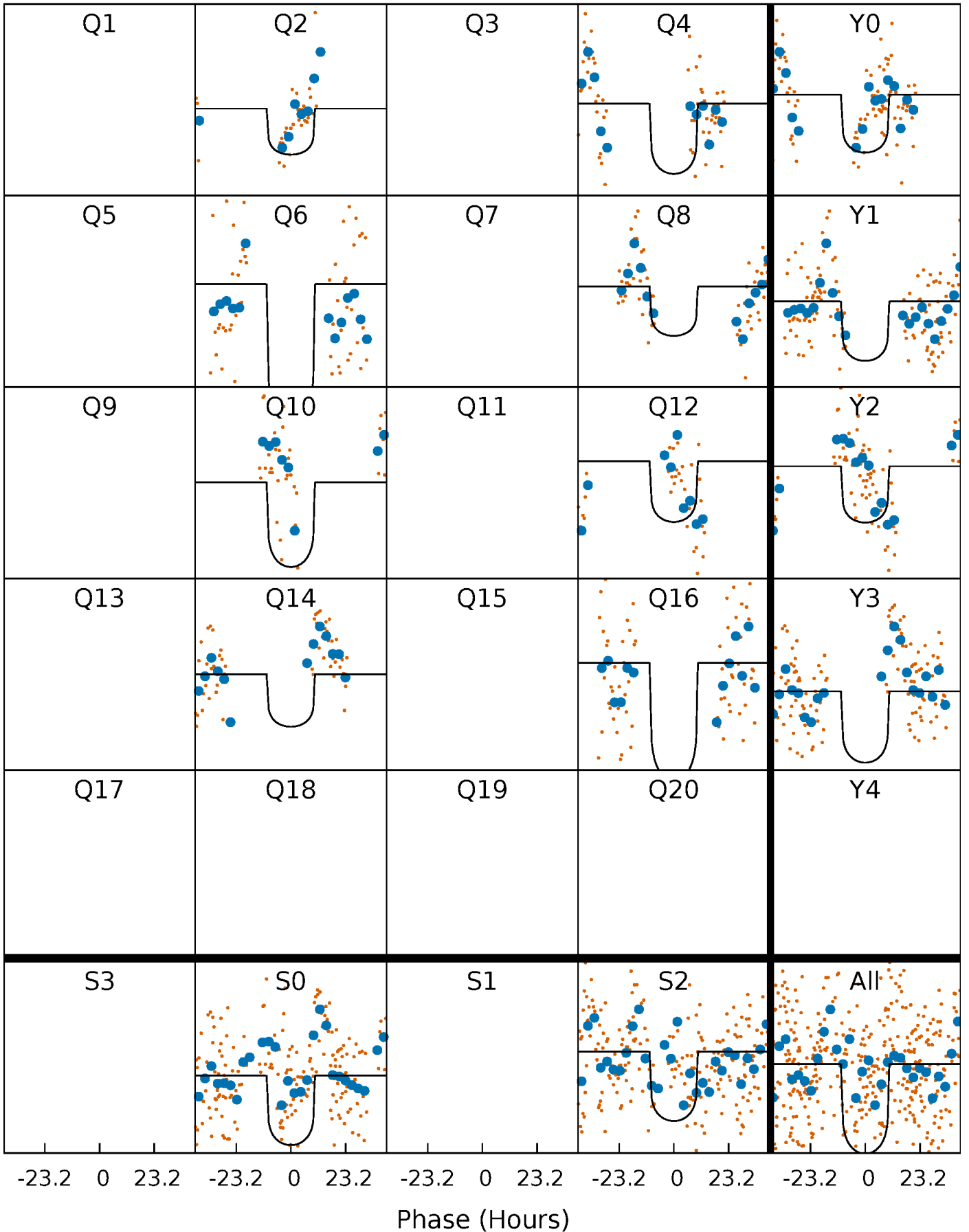
PDC Quarter-Phased Transit Curves

TCE 011572263-02 P=184.173704 Days $T_0=247.739245$ (BKJD)



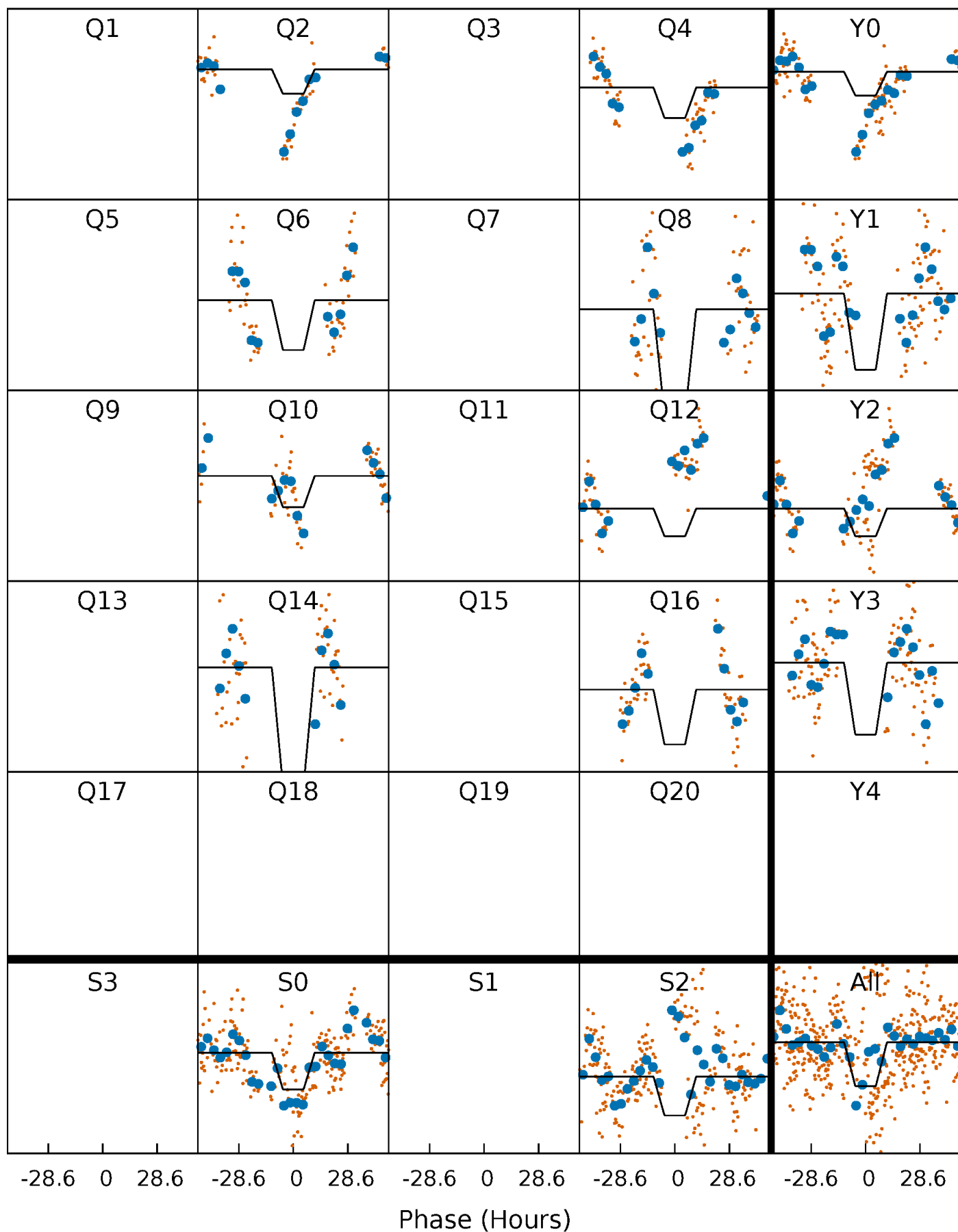
DV Quarter-Phased Transit Curves

TCE 011572263-02 P=184.173704 Days $T_0=247.739245$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

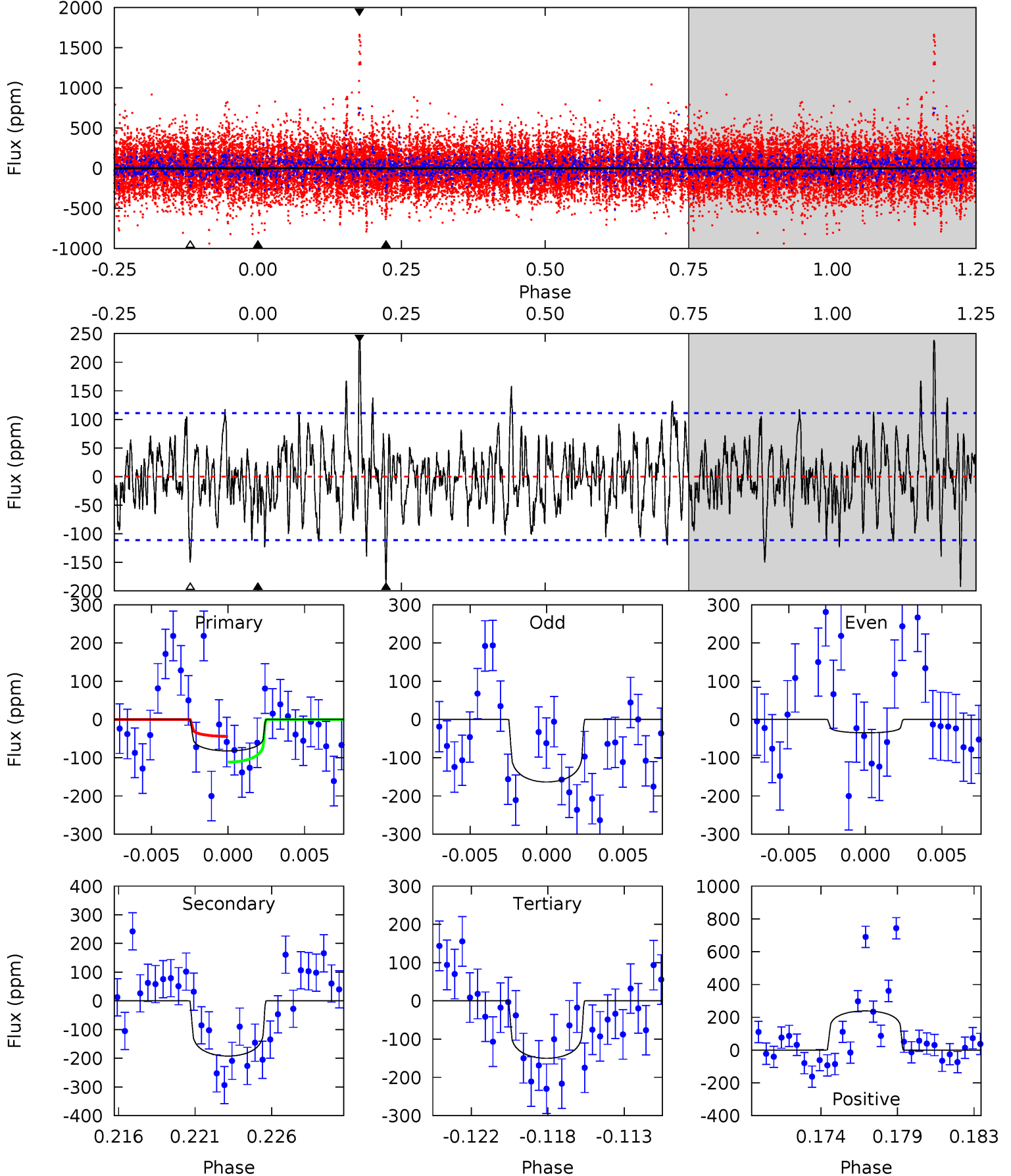
TCE 011572263-02 P=184.154054 Days $T_0=247.760967$ (BKJD)



DV Model-Shift Uniqueness Test

011572263-02, P = 184.173704 Days, E = 63.565541 Days

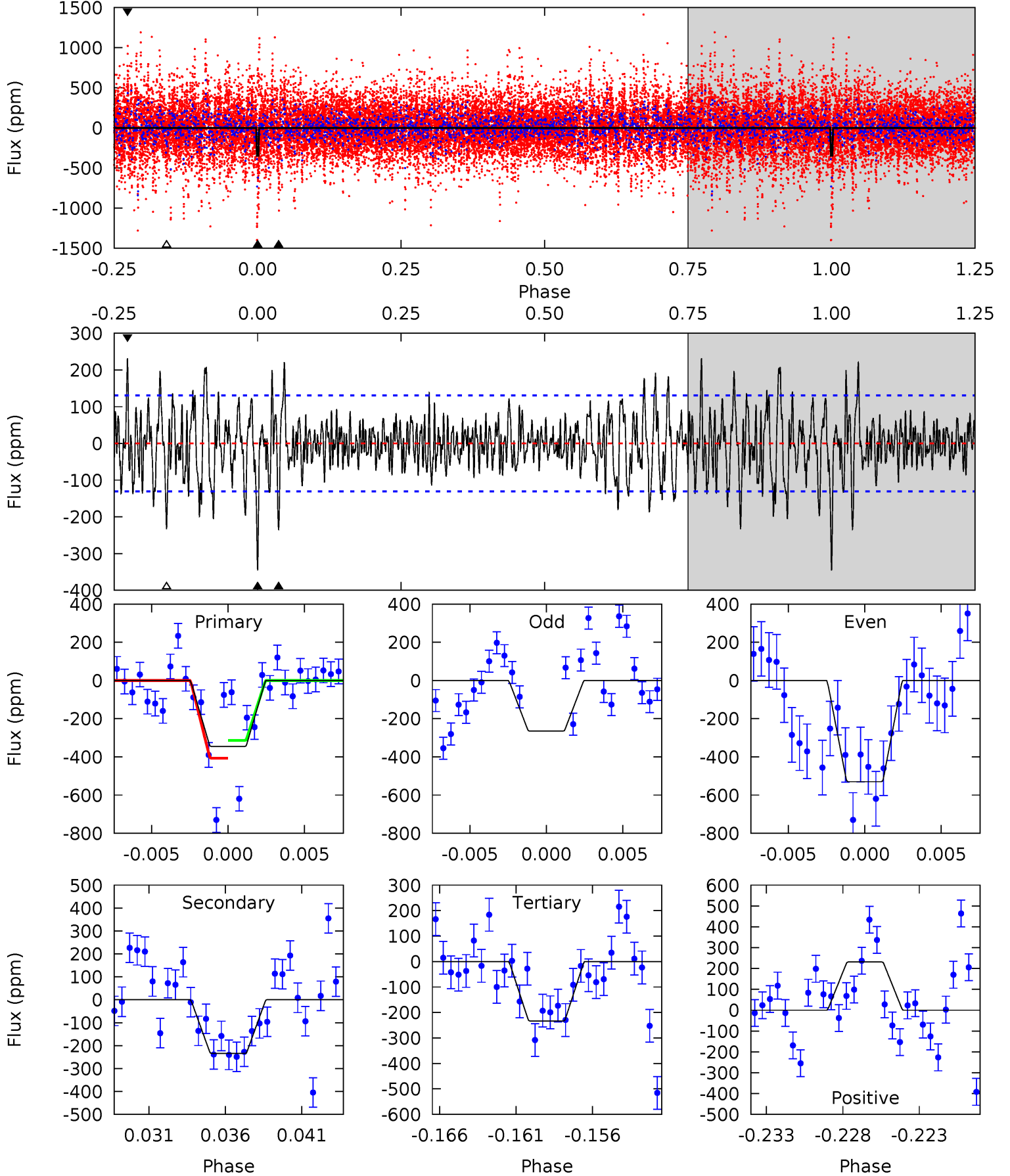
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
3.83	8.96	6.99	11.1	5.17	2.83	2.24	-3.16	-7.29	1.97	-2.16	2.86	0.82	0.55	1.55



Alt Model-Shift Uniqueness Test

011572263-02, P = 184.154054 Days, E = 63.606913 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
13.6	9.25	9.20	9.13	5.15	2.80	2.63	4.44	4.51	0.04	0.12	5.24	1.27	0.40	1.77



Stellar Parameters For KIC 011572263

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6701^{+182}_{-223}	$4.206^{+0.148}_{-0.181}$	$-0.220^{+0.250}_{-0.300}$	$1.464^{+0.447}_{-0.298}$	$1.264^{+0.182}_{-0.202}$	$0.567^{+0.413}_{-0.273}$
	+3%/-3%	+4%/-4%	+114%/-136%	+31%/-20%	+14%/-16%	+73%/-48%
Source	PHO1	KIC0	KIC0	DSEP		

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

Secondary Eclipse Parameters for KIC 011572263-02 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-192 ± 21	$2.96^{+1.06}_{-0.85}$	607^{+49}_{-40}	5763^{+1098}_{-621}	5455^{+5760}_{-2309}
Alt.	-234 ± 25	$3.13^{+0.92}_{-0.84}$	606^{+45}_{-41}	5877^{+991}_{-584}	6129^{+5357}_{-2505}

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

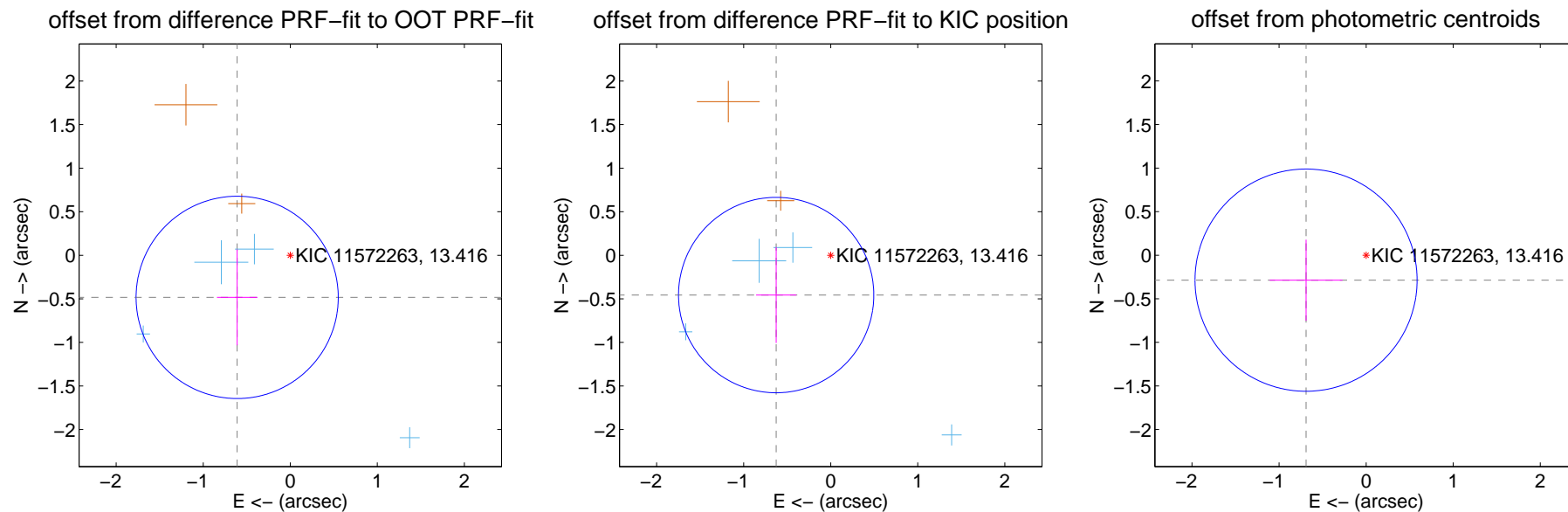
DV Centroid Data

Supplemental centroid analysis for 011572263-02. Kepler magnitude: 13.42. Transit SNR 8.13

There are 4 quarters with good PRF difference image offsets

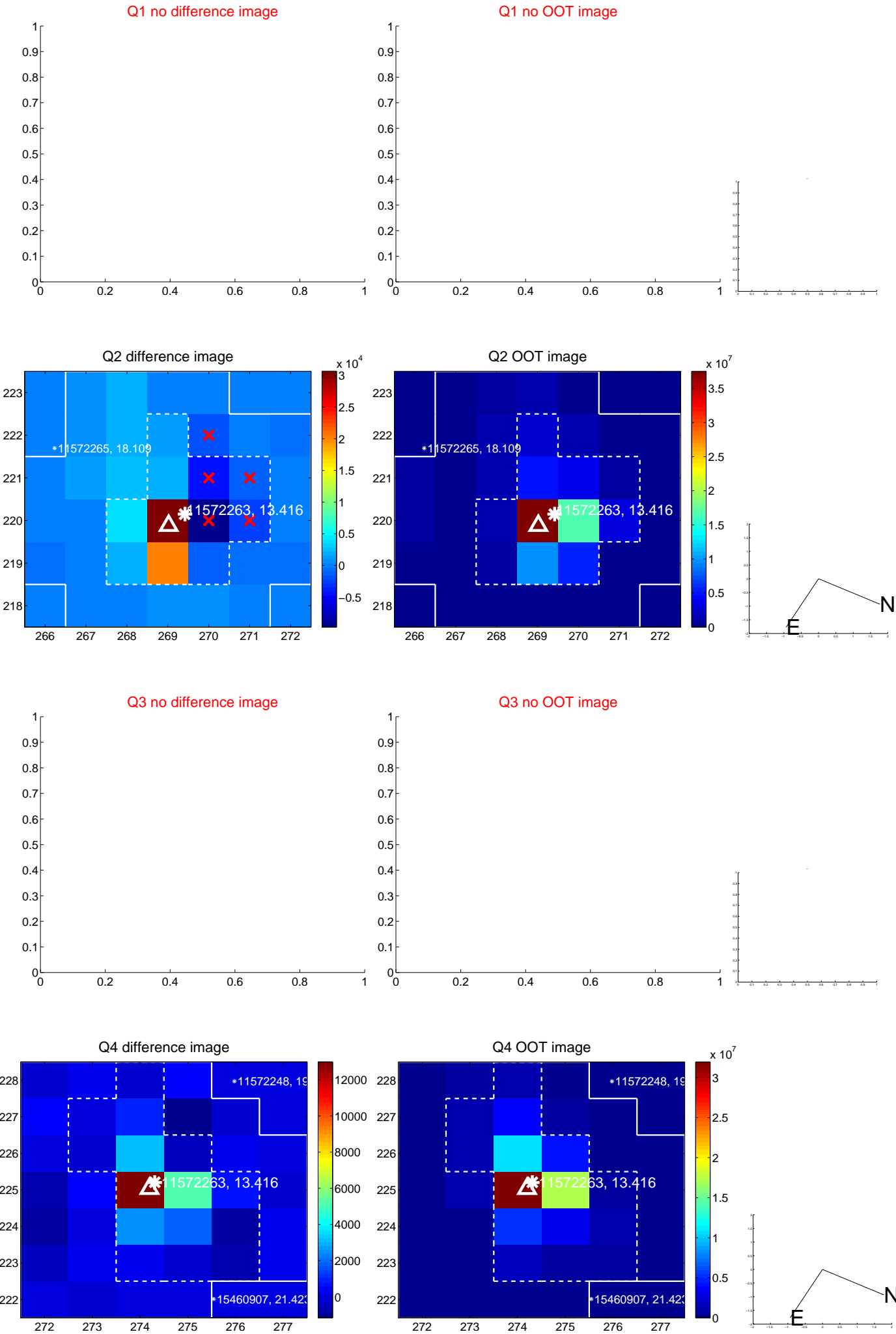
The direct PRF centroid is offset from the target star catalog position by about 0.04 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.778 ± 0.387	2.01	0.610 ± 0.232	-0.483 ± 0.550
PRF-fit source offset from KIC position	0.775 ± 0.374	2.07	0.627 ± 0.231	-0.457 ± 0.550
photometric centroid source offset	0.75 ± 0.43	1.76	0.69 ± 0.42	-0.29 ± 0.47



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

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



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

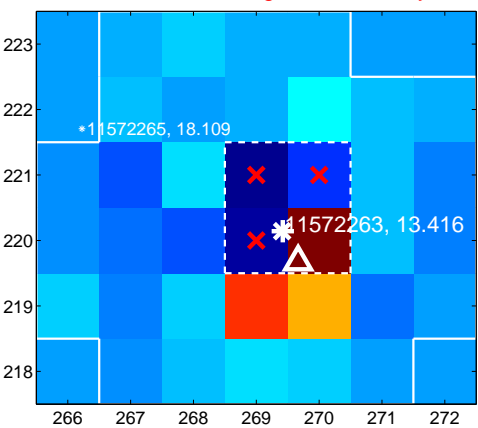
Q5 no difference image



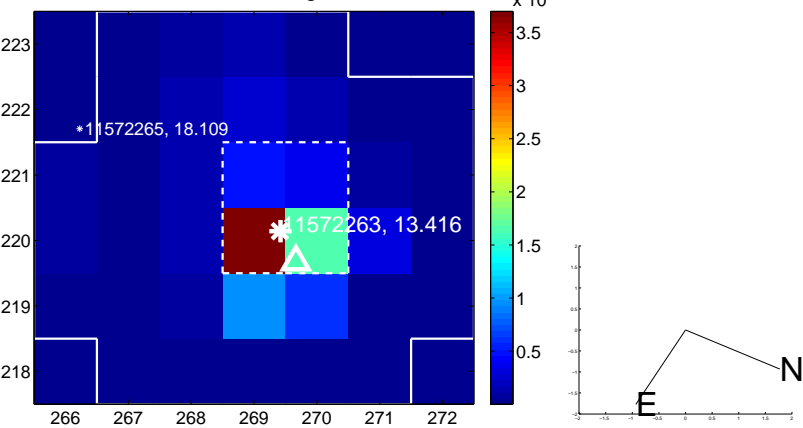
Q5 no OOT image



Q6 difference image. Poor Quality



Q6 OOT image



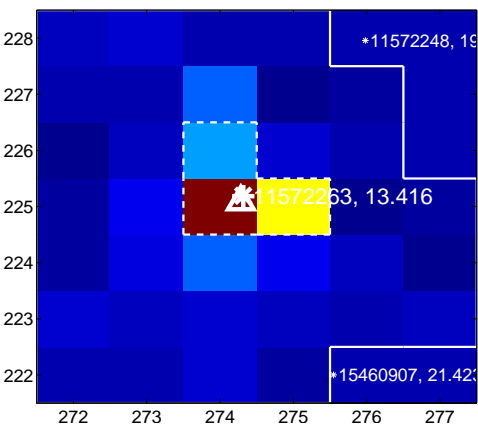
Q7 no difference image



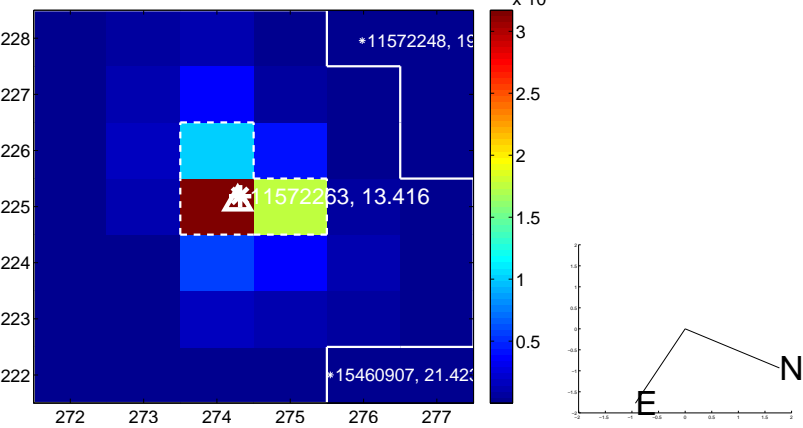
Q7 no OOT image



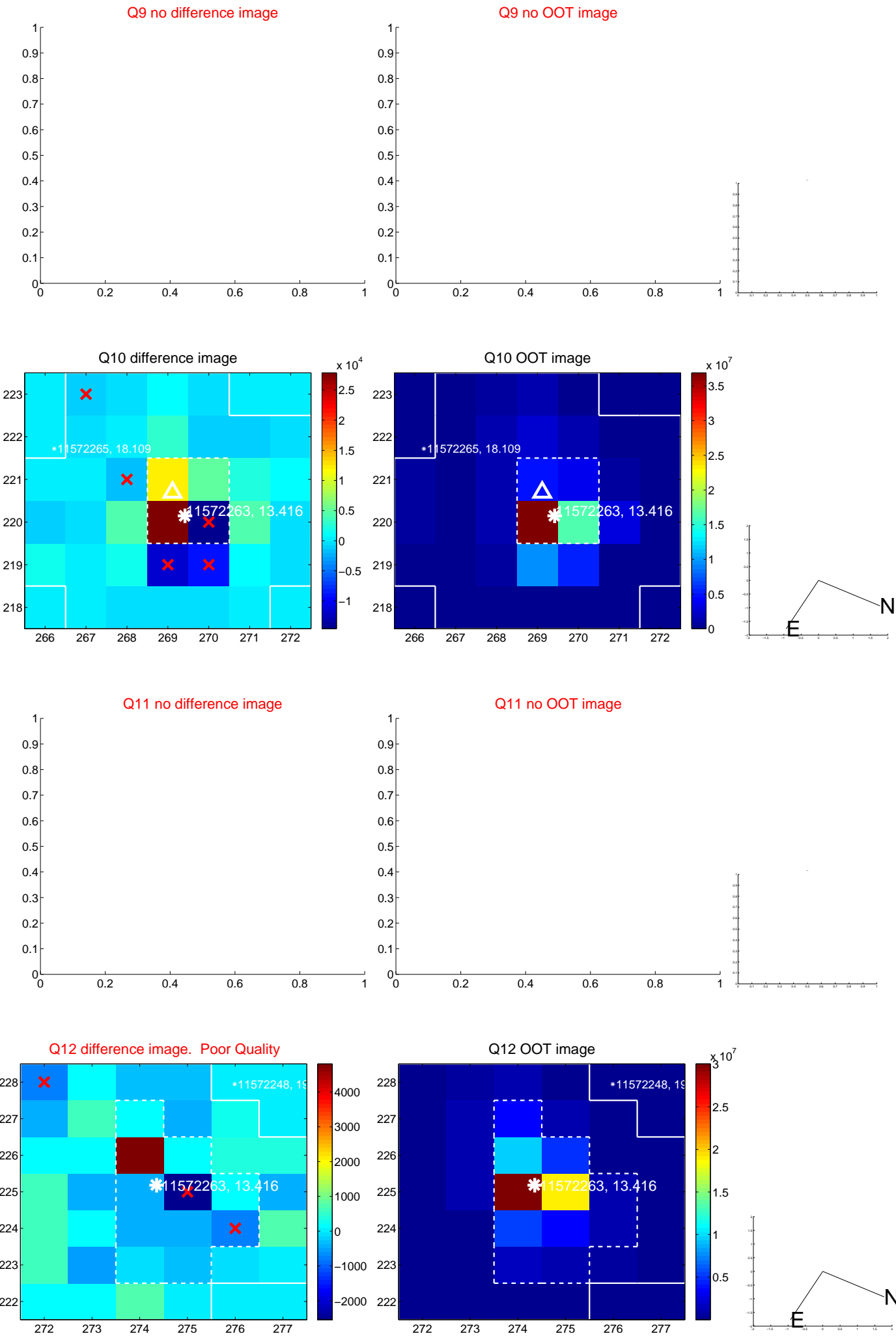
Q8 difference image



Q8 OOT image



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



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

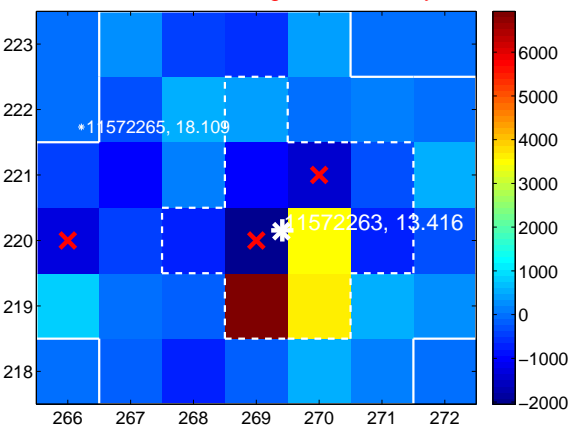
Q13 no difference image



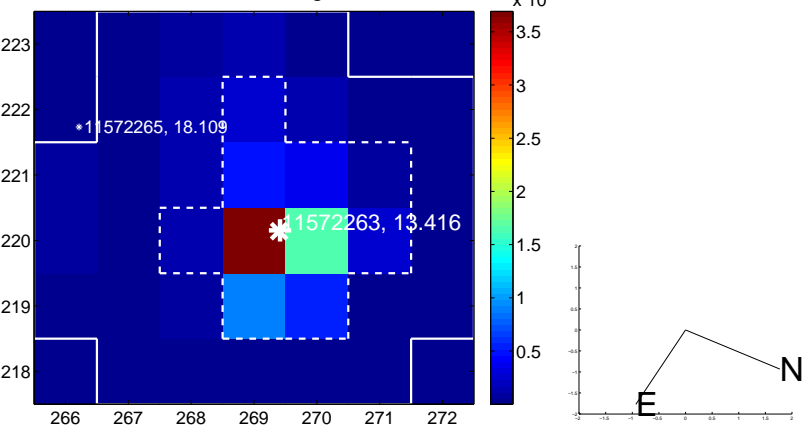
Q13 no OOT image



Q14 difference image. Poor Quality



Q14 OOT image



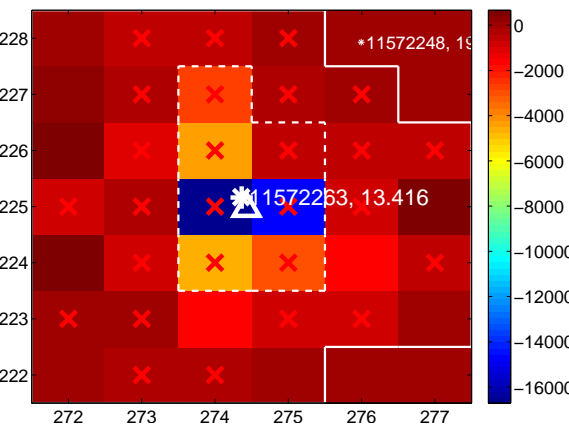
Q15 no difference image



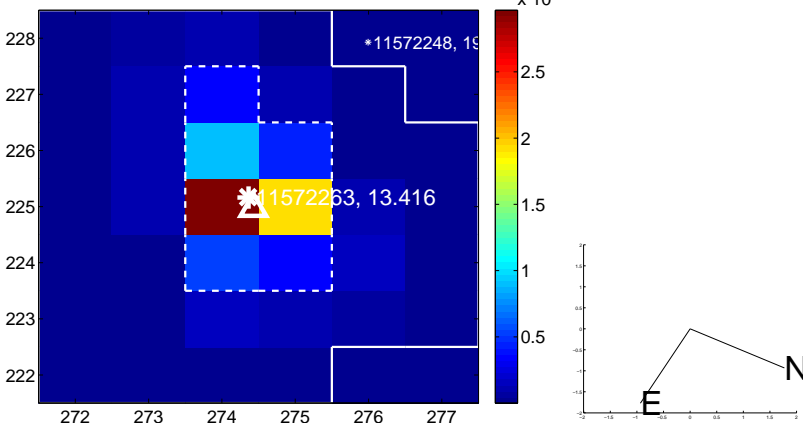
Q15 no OOT image



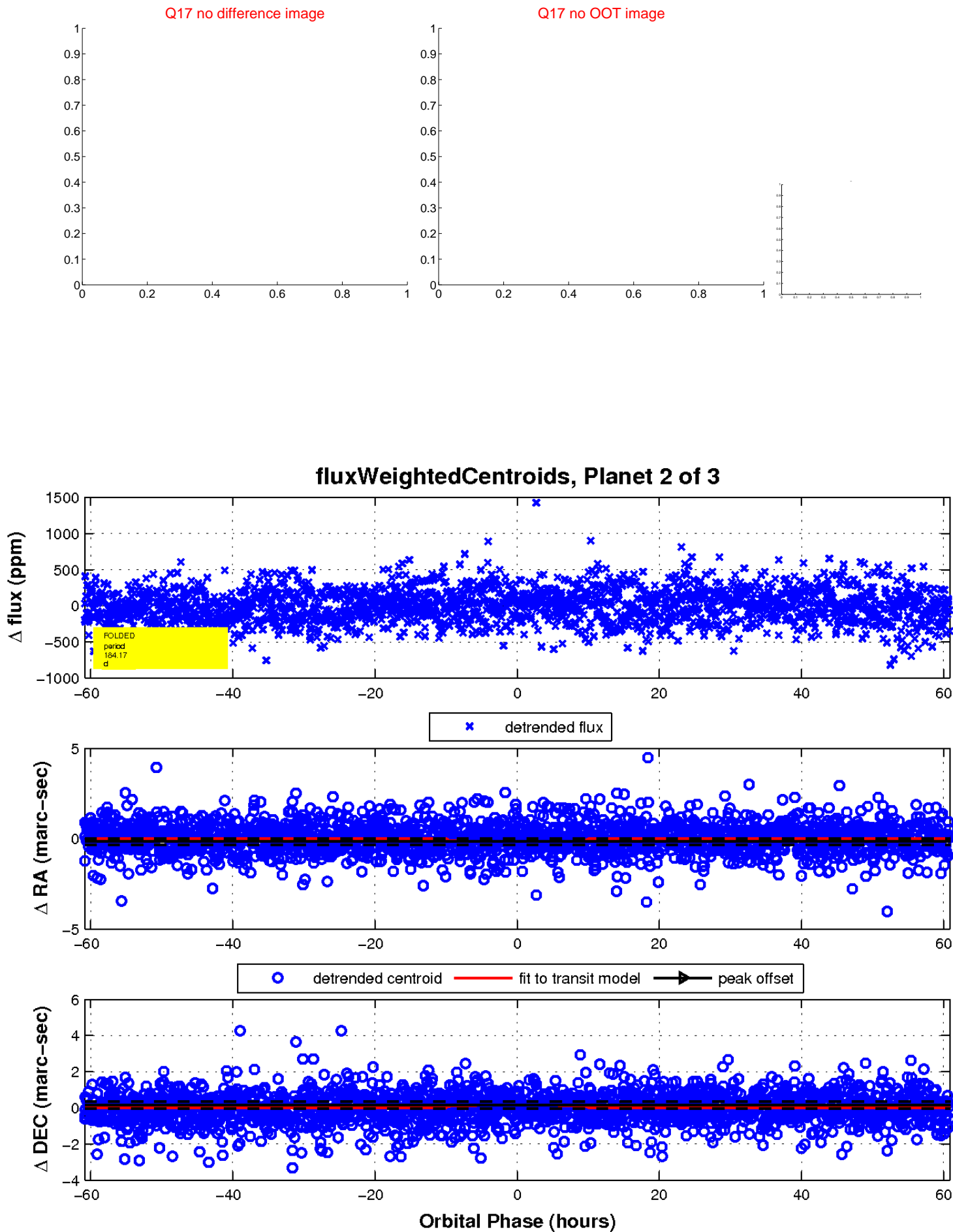
Q16 difference image. Poor Quality



Q16 OOT image

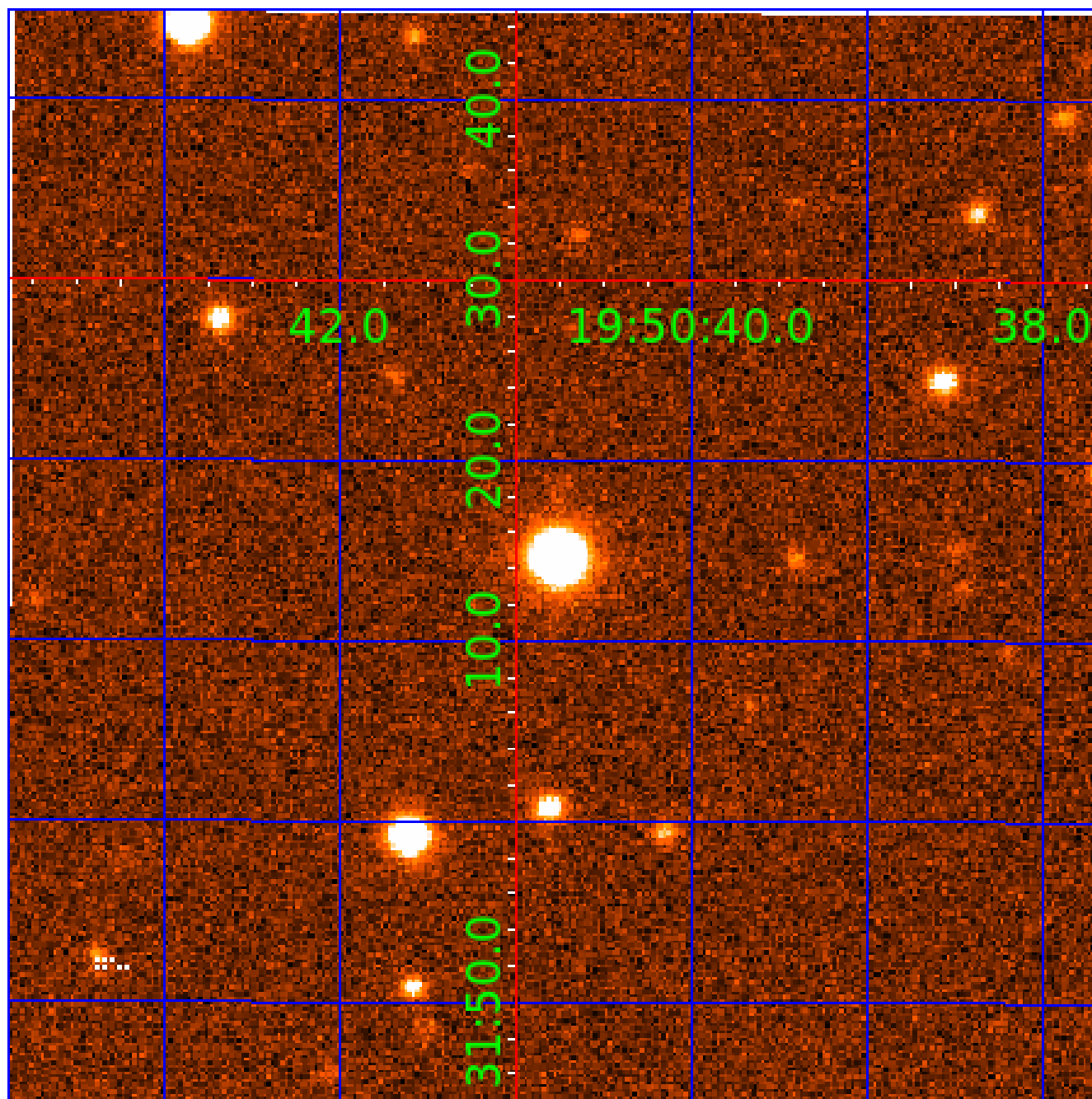


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 011572263

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})
011572263-01	OBS	No	2.097853	133.537638	26.2	11.171	8.8	7.5	1.46	6701	0.77	3231.82
011572263-02	OBS	No	184.173704	247.739245	371.0	20.301	13.5	8.1	1.46	6701	2.94	8.28
011572263-03	OBS	No	179.146025	141.519649	126.0	9.830	8.6	3.7	1.46	6701	1.83	8.59

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
011572263-01	OBS	FP	0.00	1	0	0	0	LPP_DV—MOD_NONUNIQ_DV
011572263-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_MARSHALL—TRANS_GAPPED—LPP_DV—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV— MOD_NONUNIQ_ALT—INCONSISTENT_TRANS
011572263-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_MARSHALL—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT— MOD_POS_ALT

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

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

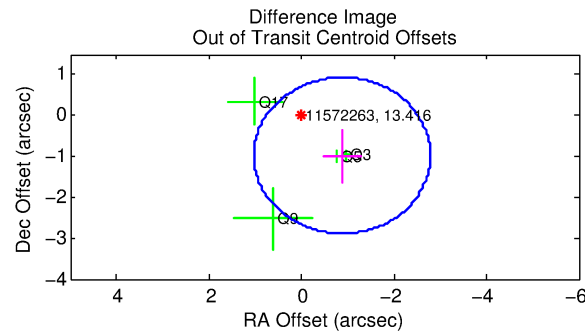
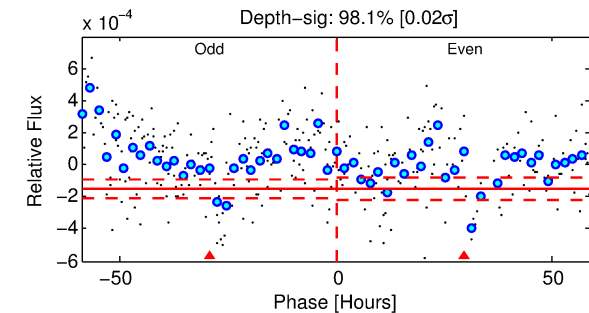
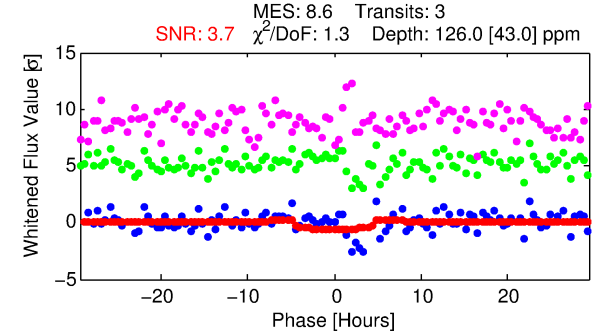
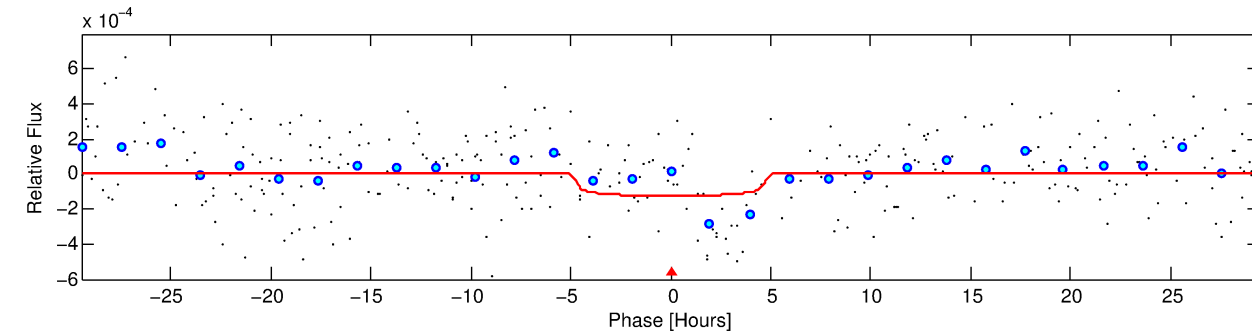
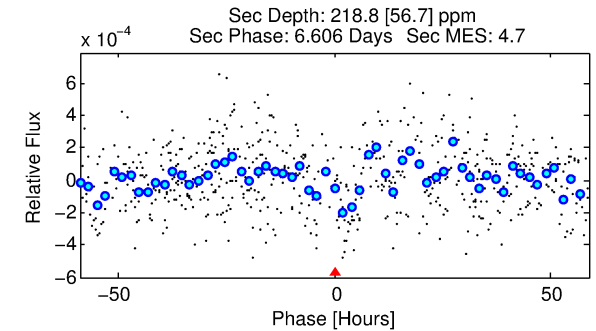
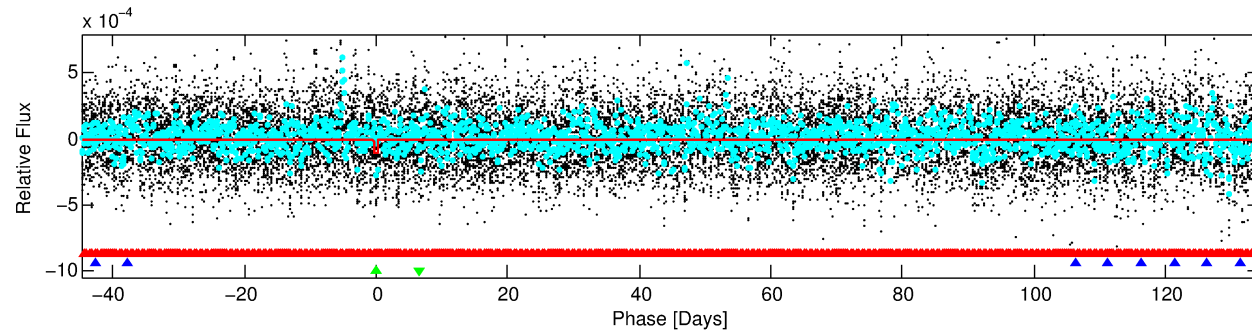
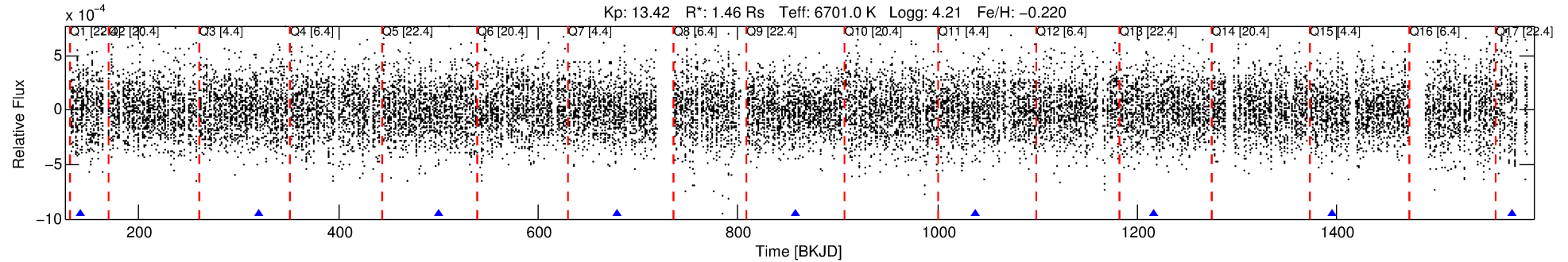
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 011572263-03

No Significant Match Found

DV One-Page Summary

KIC: 11572263 Candidate: 3 of 3 Period: 179.146 d



DV Fit Results:

Period = 179.14603 [0.01483] d
Epoch = 141.5196 [0.0752] BKJD
Rp/R* = 0.0115 [0.0122]
a/R* = 81.10 [494.73]
b = 0.83 [2.33]
Seff = 8.59 [3.17]
Teq = 437 [40] K
Rp = 1.83 [2.02] Re
a = 0.6712 [0.1654] AU
Ag = 16125.59 [34865.84] [0.46σ]
Teffp = 7607 [4067] K [1.76σ]

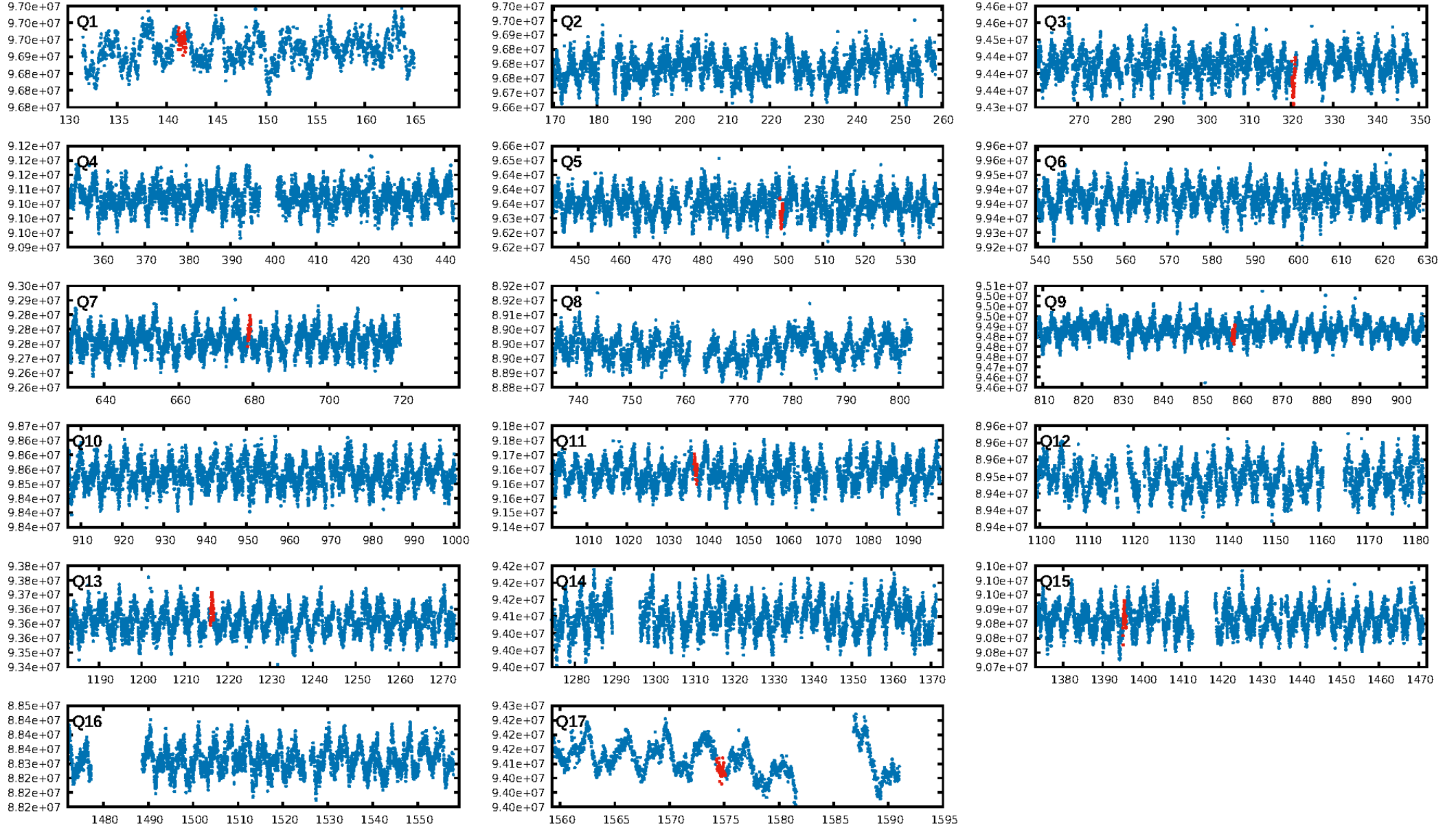
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [285.56σ]
LongPeriod-sig: 100.0% [5.35σ]
ModelChiSquare2-sig: 78.9%
ModelChiSquareGof-sig: 47.5%
Bootstrap-pfa: 3.02e-10
RollingBand-fgt: 1.00 [3/3]
GhostDiagnostic-chr: -0.695
Centroid-sig: 1.1%
Centroid-so: 2.666 arcsec [1.79σ]
OotOffset-rm: 1.312 arcsec [2.06σ]
KicOffset-rm: 1.324 arcsec [1.83σ]
OotOffset-st: 0/1/0/3 [4]
KicOffset-st: 0/1/0/3 [4]
DiffImageQuality-fgm: 0.75 [3/4]
DiffImageOverlap-fno: 0.00 [0/7]

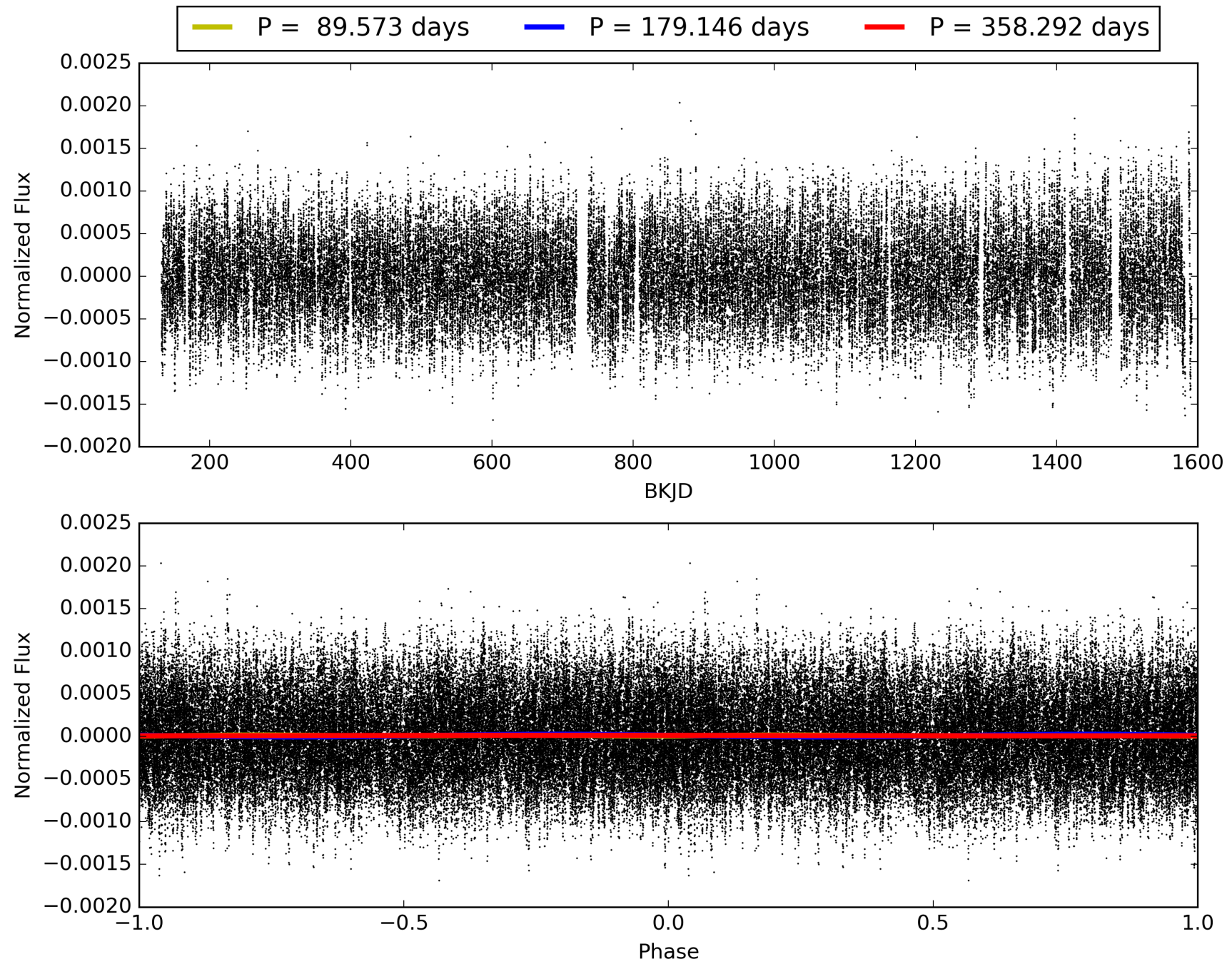
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 29-Jan-2016 05:27:49 Z

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

TCE 011572263-03, PDC Light Curves

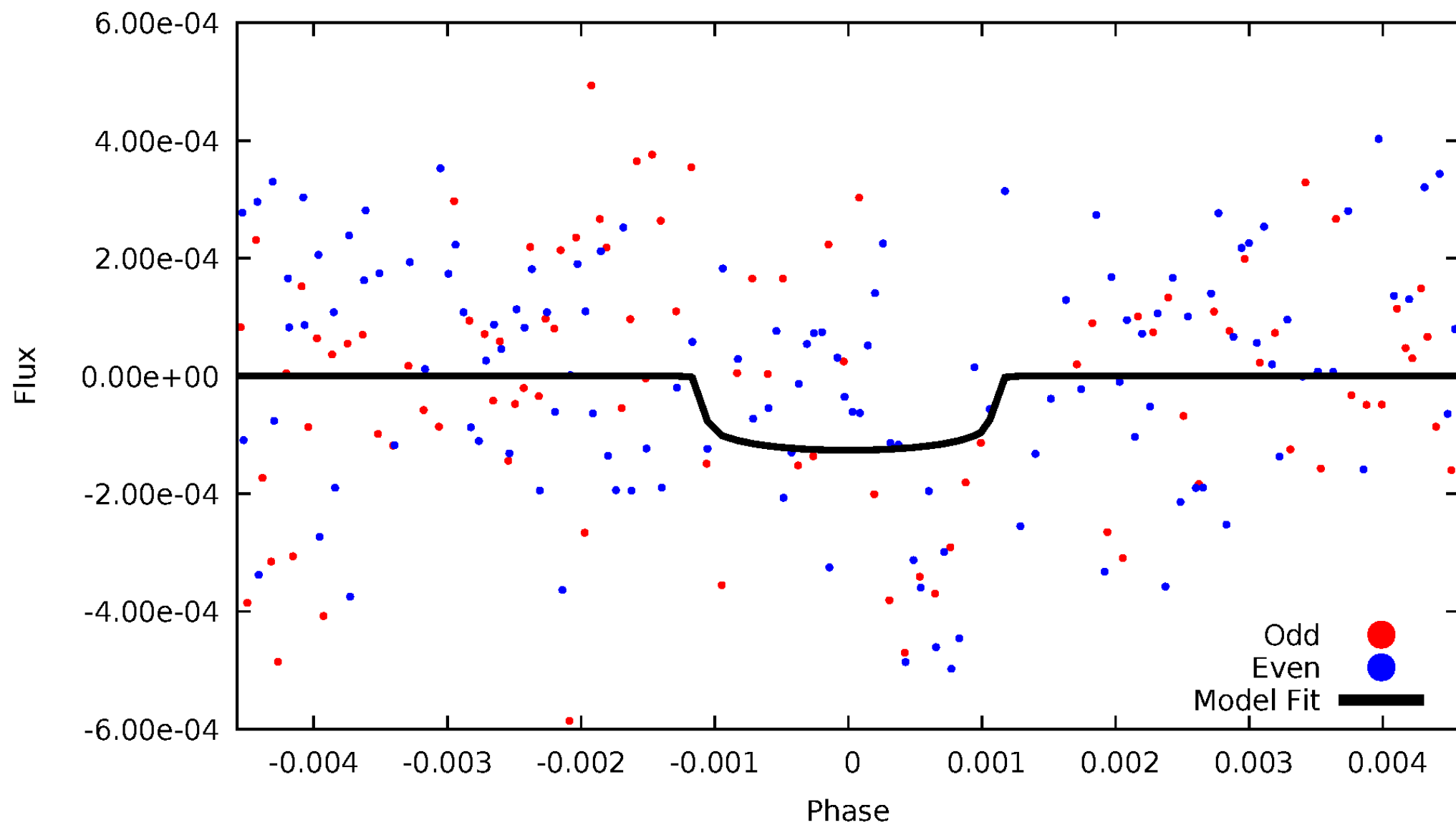


TCE 011572263-03



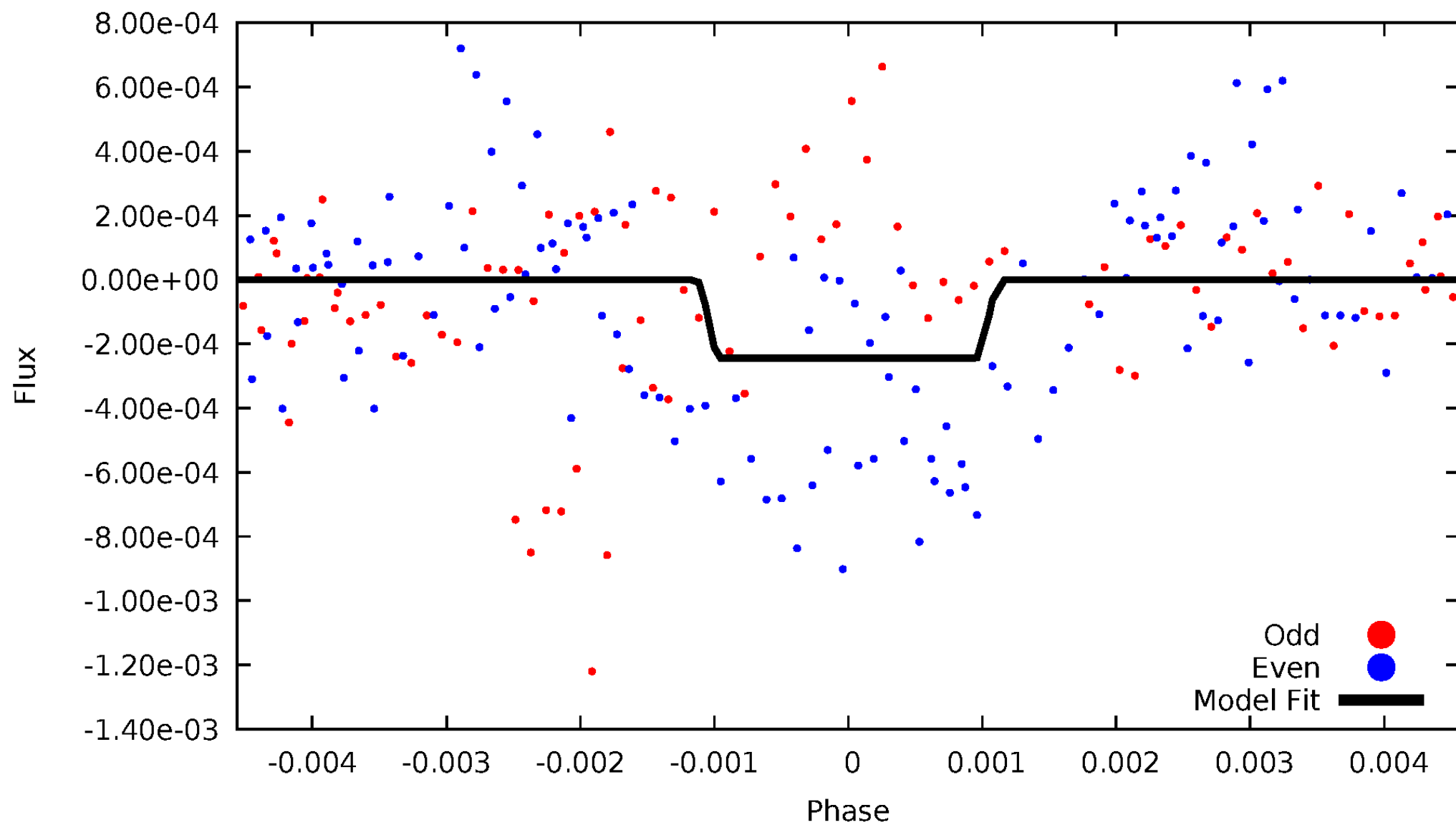
DV Odd/Even

TCE 011572263-03

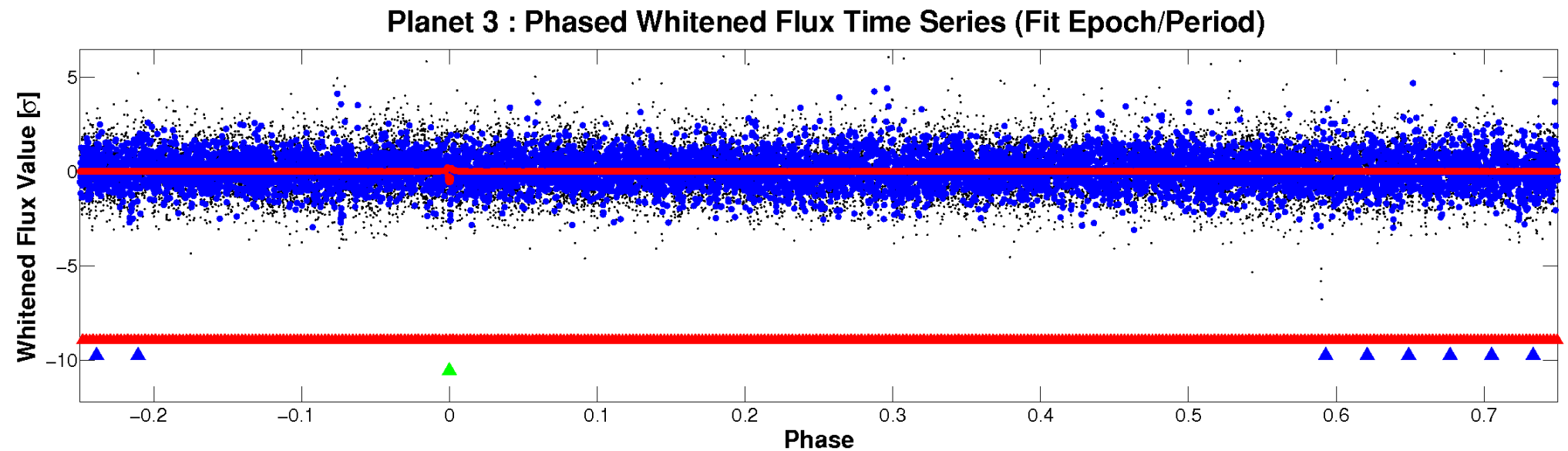
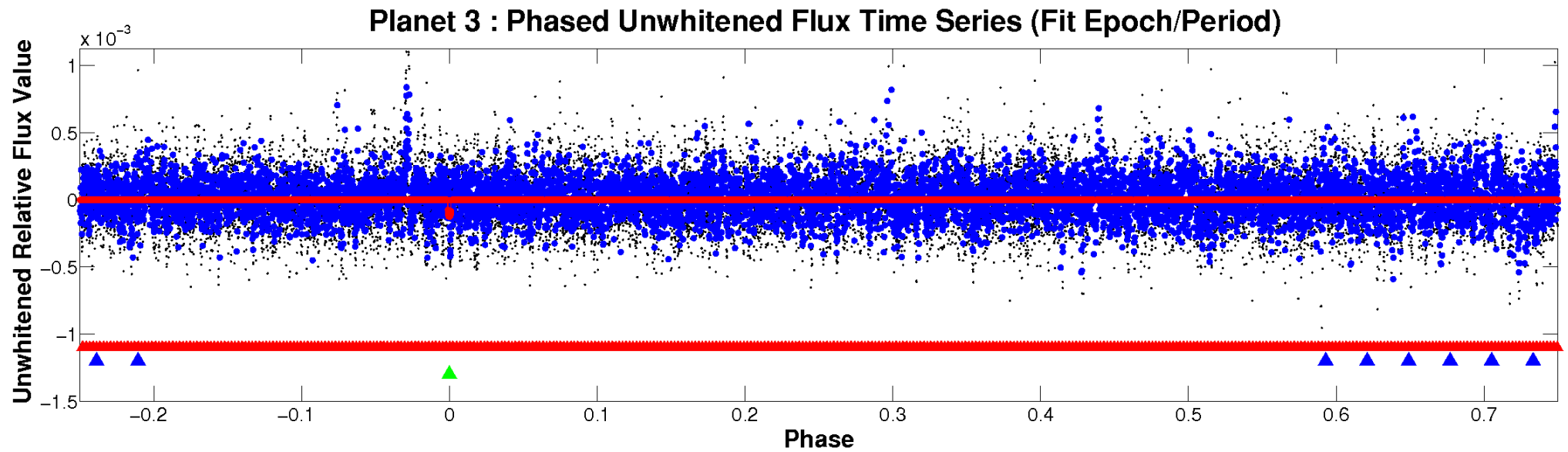


ALT Odd/Even

TCE 011572263-03

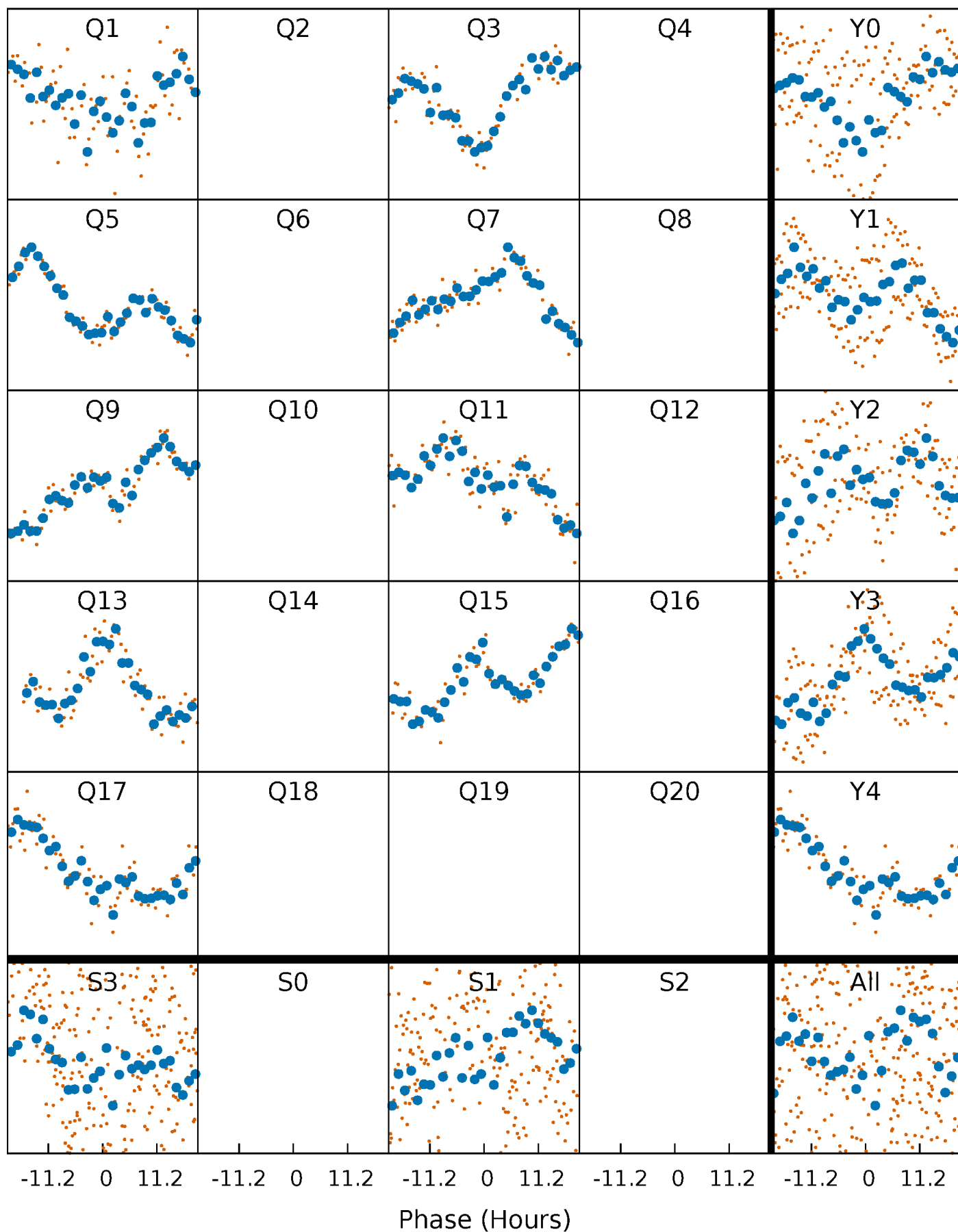


Non-Whitened Vs. Whitened Light Curve



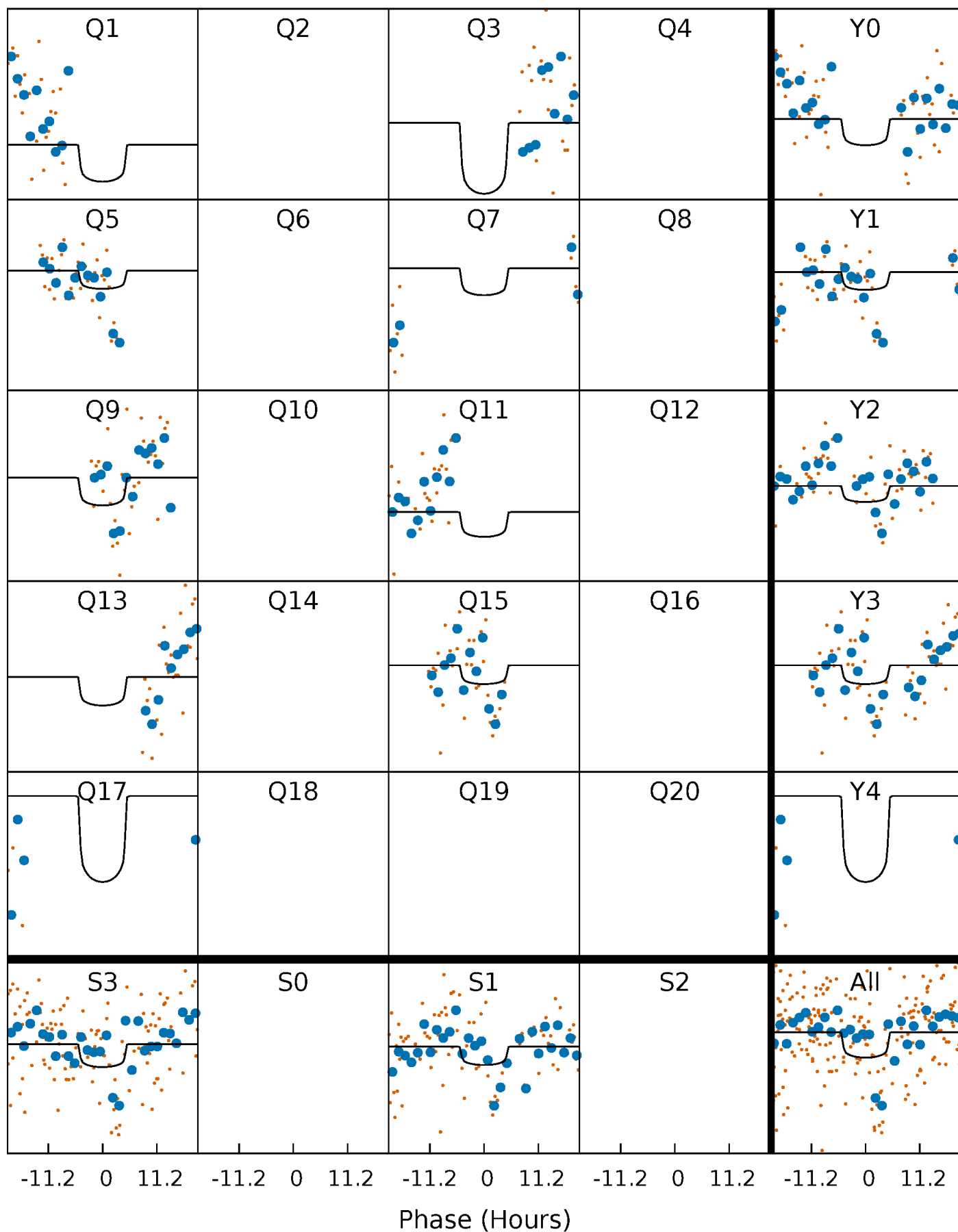
PDC Quarter-Phased Transit Curves

TCE 011572263-03 $P=179.146025$ Days $T_0=141.519649$ (BKJD)



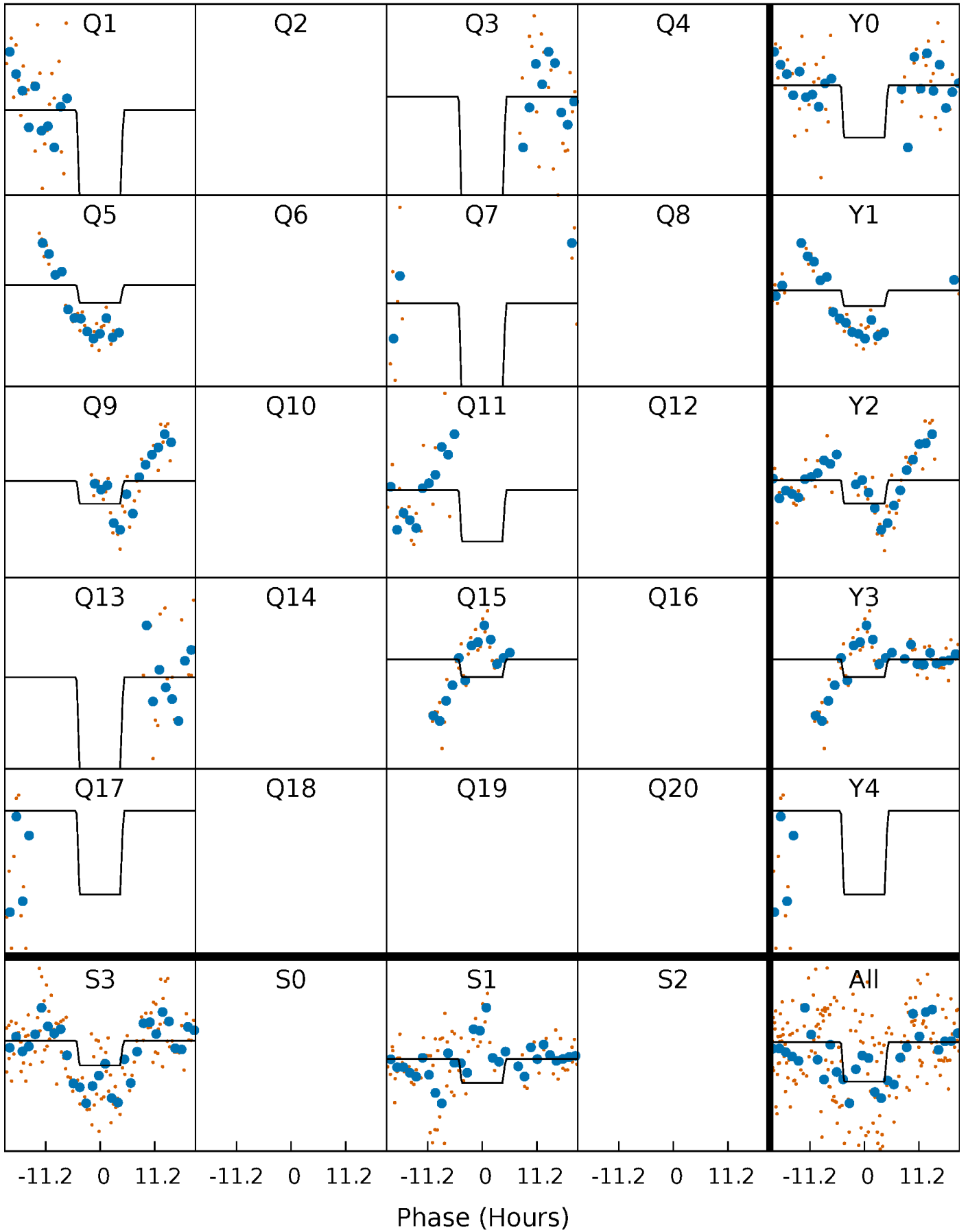
DV Quarter-Phased Transit Curves

TCE 011572263-03 $P=179.146025$ Days $T_0=141.519649$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

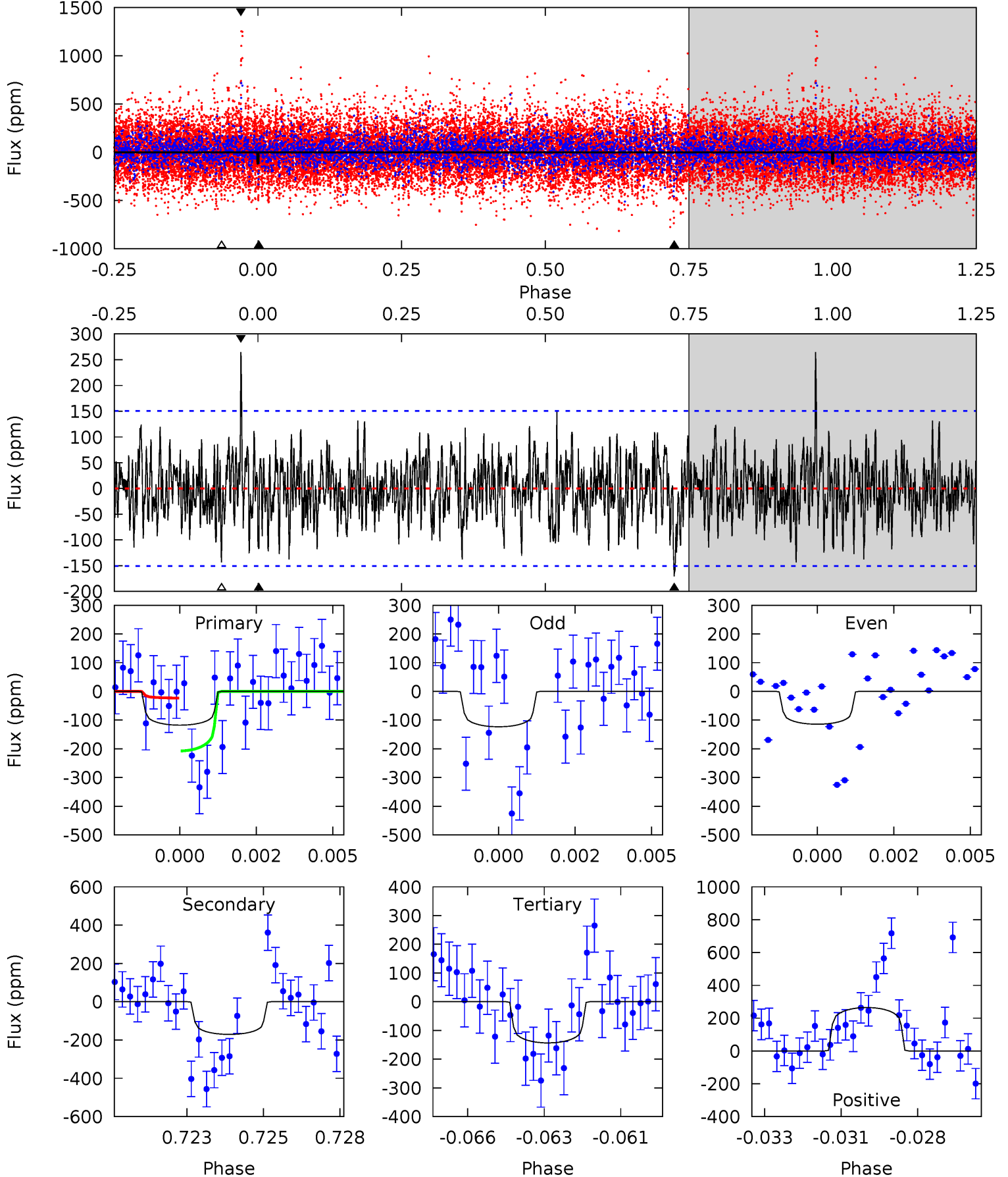
TCE 011572263-03 P=179.143420 Days $T_0=141.506726$ (BKJD)



DV Model-Shift Uniqueness Test

011572263-03, P = 179.146025 Days, E = 141.519649 Days

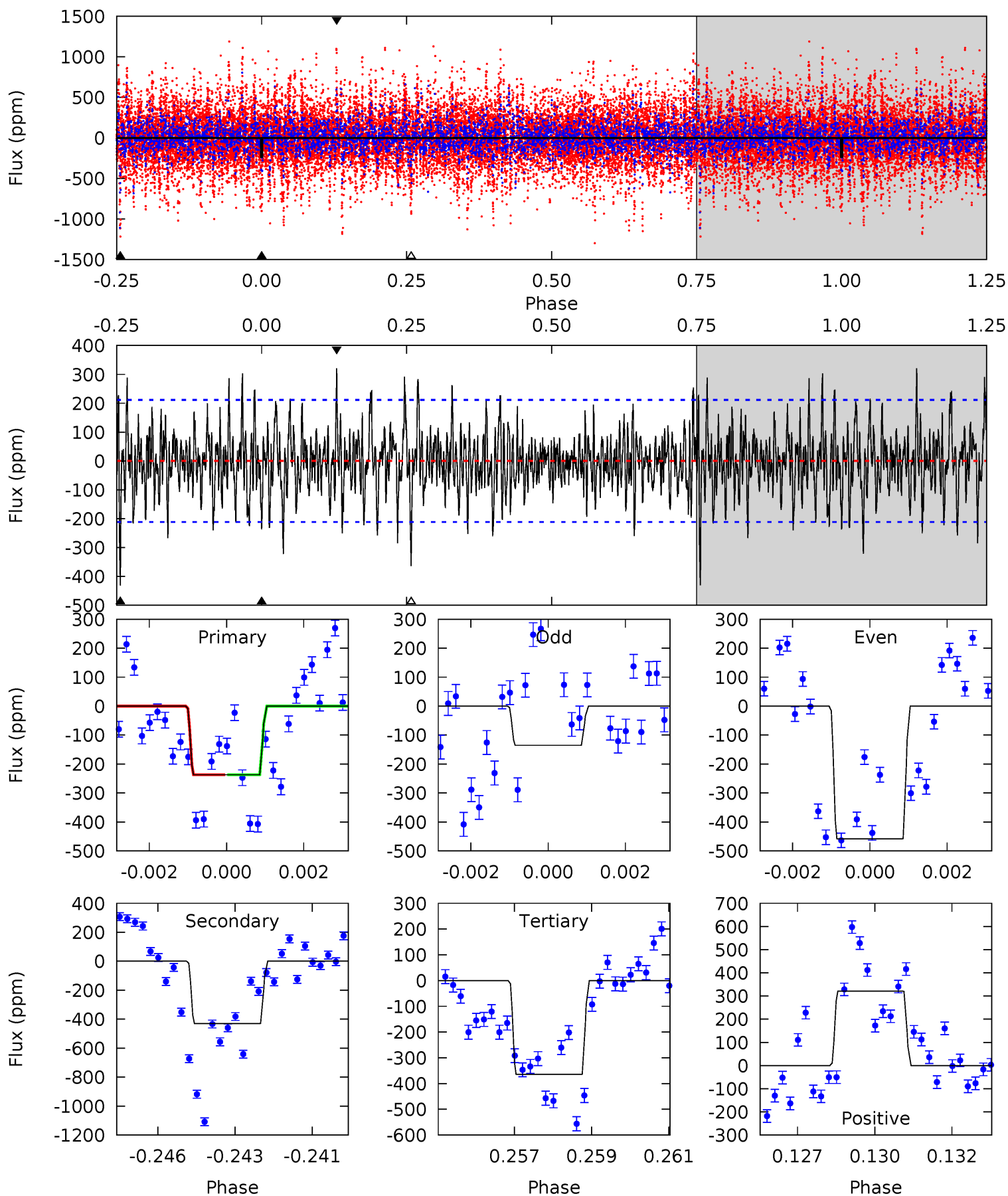
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
4.14	6.00	5.05	9.32	5.30	3.04	1.74	-0.91	-5.18	0.96	-3.31	0.15	0.94	0.61	3.25



Alt Model-Shift Uniqueness Test

011572263-03, P = 179.143420 Days, E = 141.506726 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
5.95	10.8	9.14	8.05	5.31	3.06	2.25	-3.19	-2.10	1.67	2.76	3.97	1.00	0.43	0.01



Stellar Parameters For KIC 011572263

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6701^{+182}_{-223}	$4.206^{+0.148}_{-0.181}$	$-0.220^{+0.250}_{-0.300}$	$1.464^{+0.447}_{-0.298}$	$1.264^{+0.182}_{-0.202}$	$0.567^{+0.413}_{-0.273}$
	+3%/-3%	+4%/-4%	+114%/-136%	+31%/-20%	+14%/-16%	+73%/-48%
Source	PHO1	KIC0	KIC0	DSEP		

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

Secondary Eclipse Parameters for KIC 011572263-03 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-171 ± 28	$2.38^{+1.69}_{-1.52}$	614^{+43}_{-40}	6262^{+5718}_{-1365}	7326^{+52424}_{-4825}
Alt.	-431 ± 40	$2.85^{+1.89}_{-1.75}$	611^{+44}_{-35}	7315^{+7461}_{-1658}	12831^{+74972}_{-8071}

T_{max} = Theoretical Maximum Planetary Temperature

T_{obs} = Observed Planetary Temperature (Assuming A=0.3)

A_{obs} = Observed Albedo (Assuming T=0)

If a secondary eclipse is present, the system is likely an EB if $T_{obs} \gg T_{max}$ AND $A_{obs} \gg 1.0$

DV Centroid Data

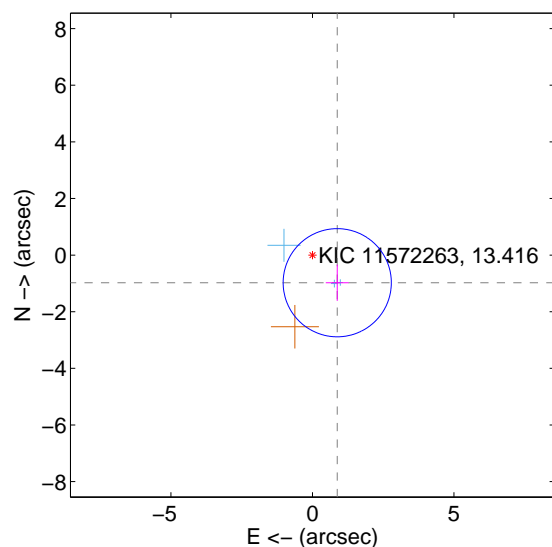
Supplemental centroid analysis for 011572263-03. Kepler magnitude: 13.42. Transit SNR 3.69

There are 3 quarters with good PRF difference image offsets

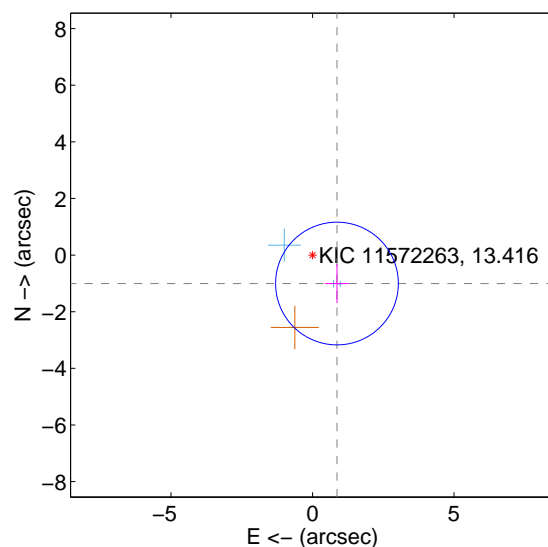
The direct PRF centroid is offset from the target star catalog position by about 0.01 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	1.312 ± 0.637	2.06	-0.876 ± 0.406	-0.976 ± 0.641
PRF-fit source offset from KIC position	1.324 ± 0.722	1.83	-0.863 ± 0.419	-1.004 ± 0.687
photometric centroid source offset	2.67 ± 1.49	1.79	1.68 ± 1.41	-2.07 ± 1.53

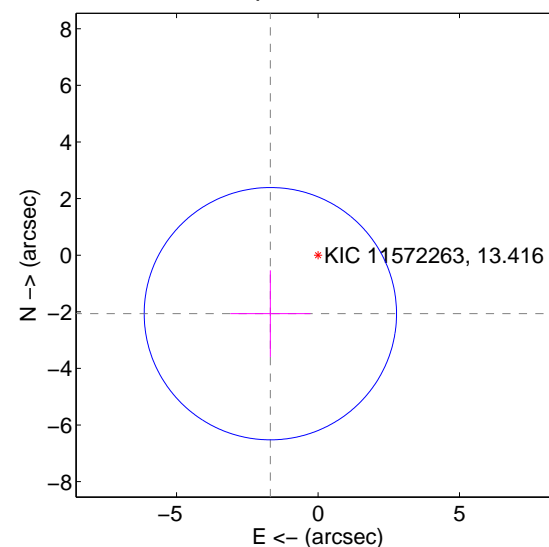
offset from difference PRF-fit to OOT PRF-fit



offset from difference PRF-fit to KIC position

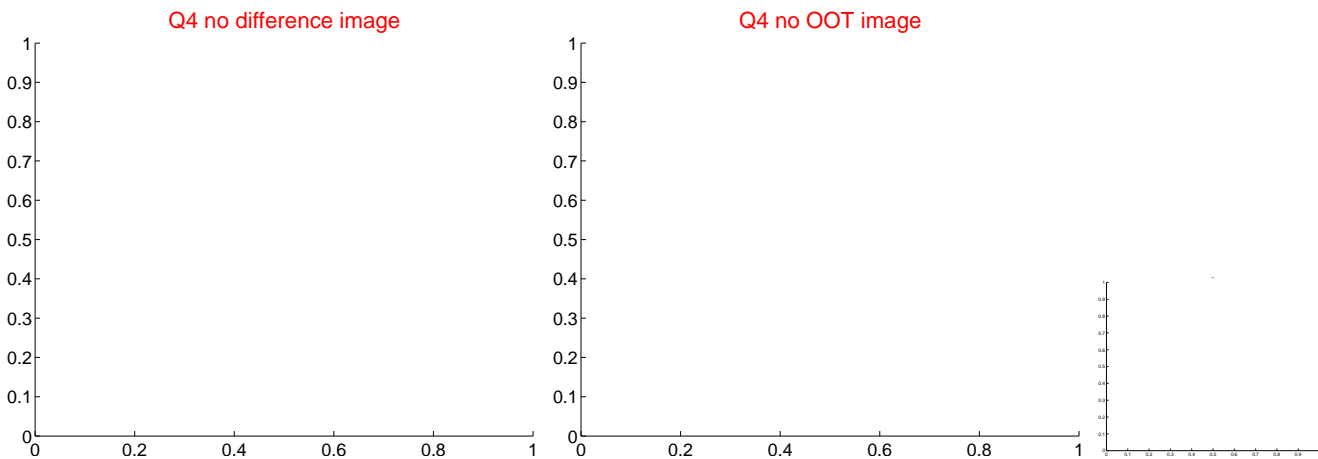
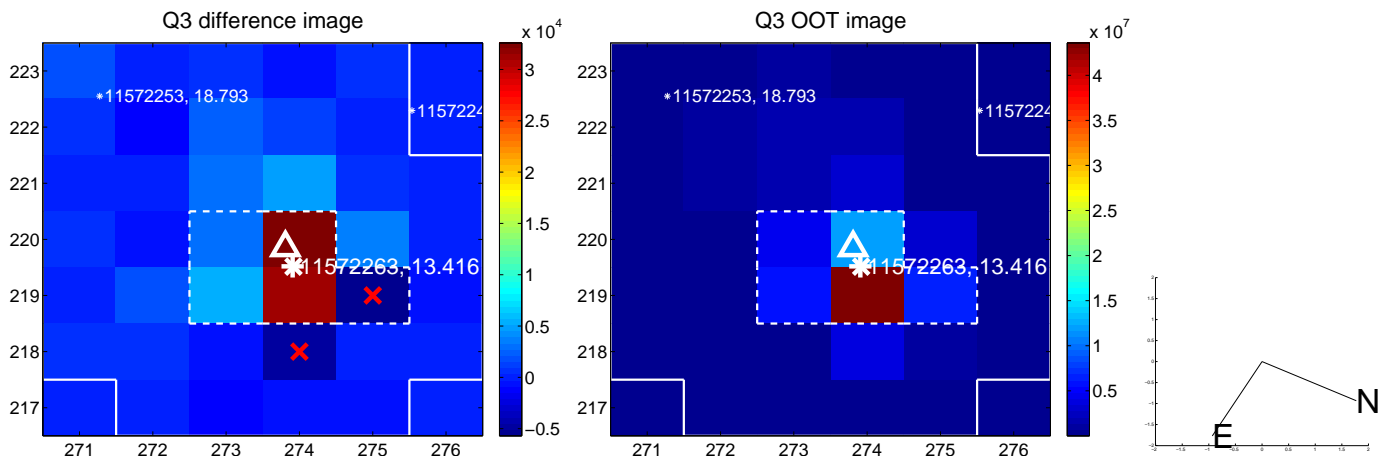
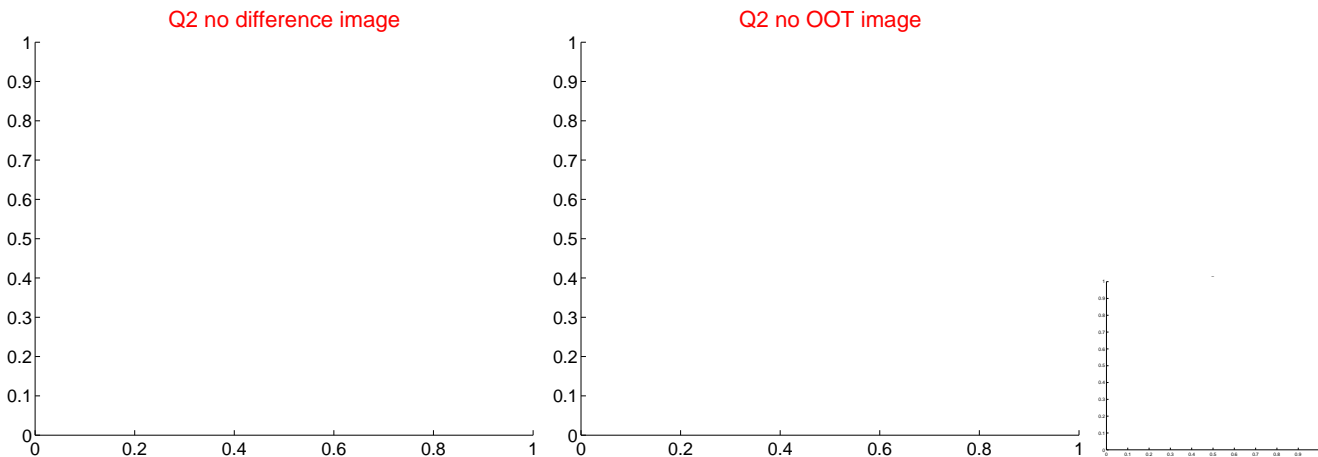
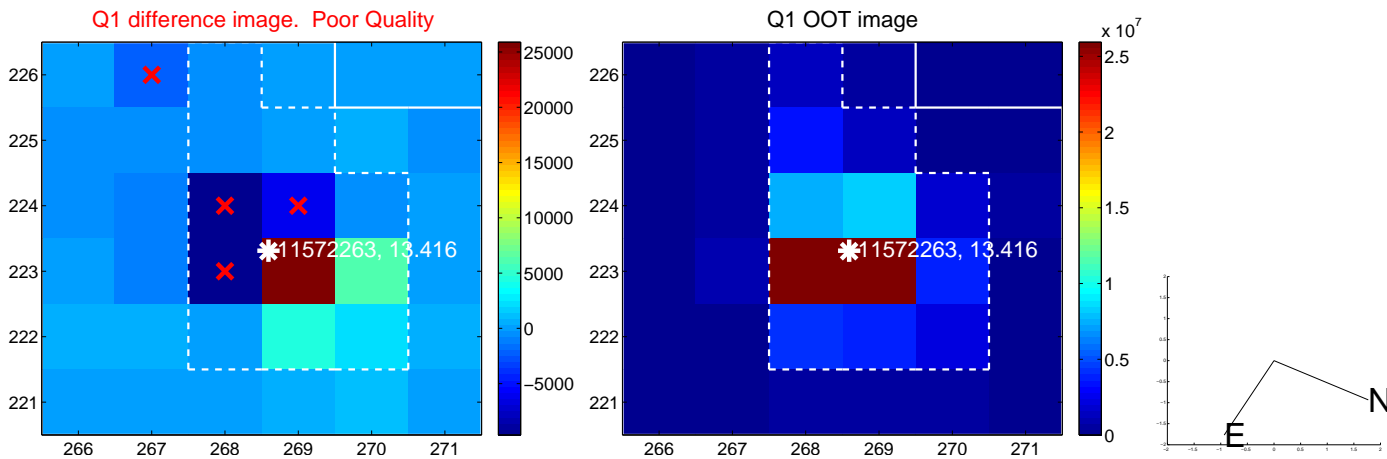


offset from photometric centroids

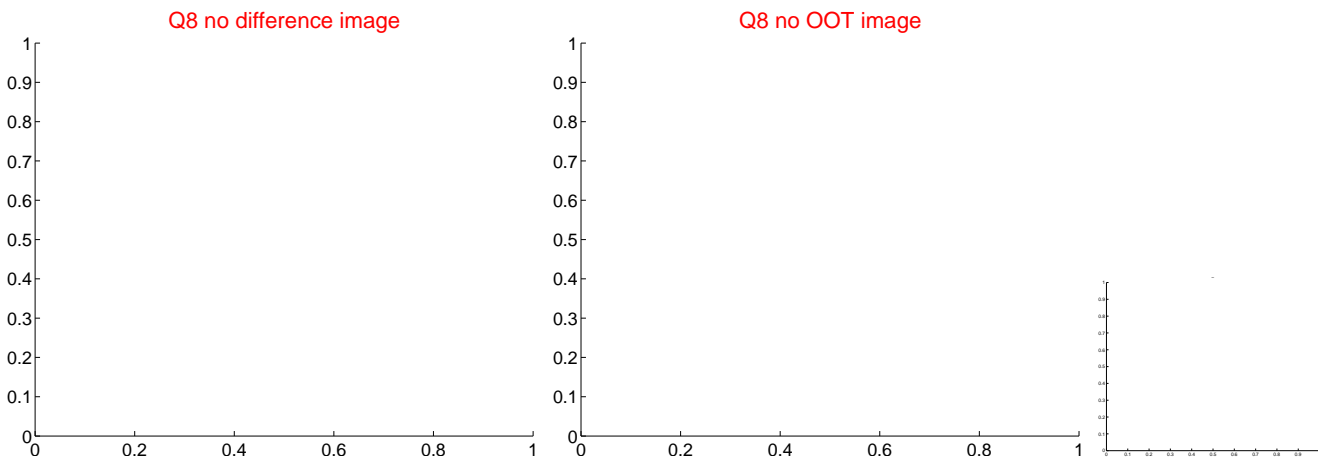
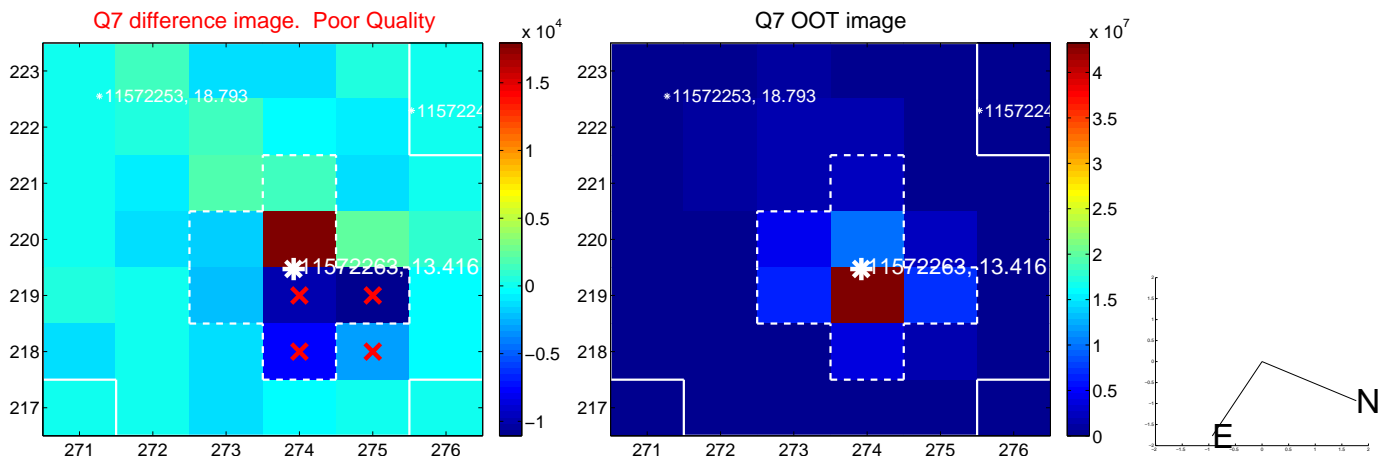
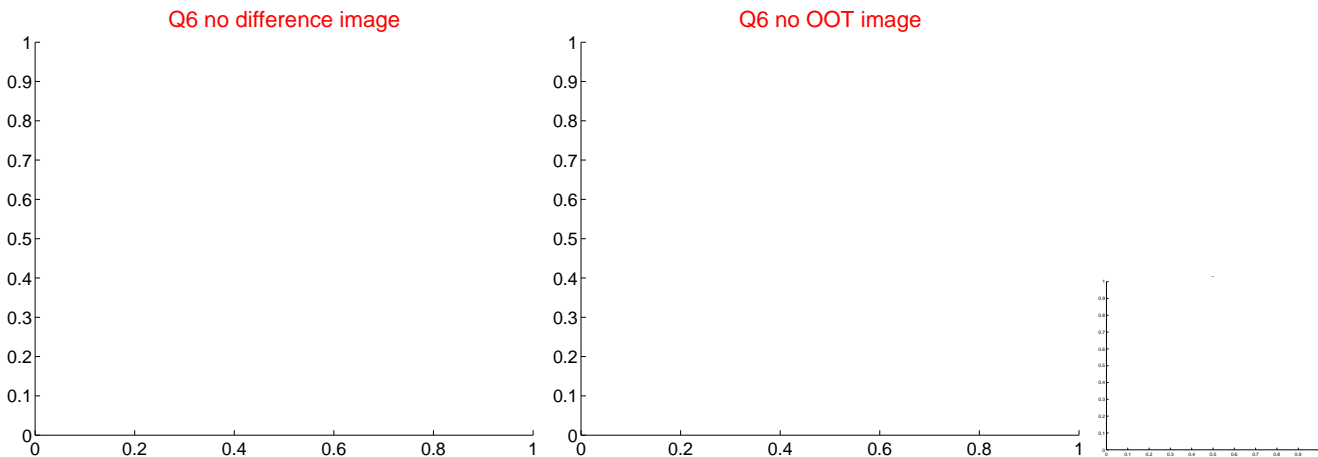
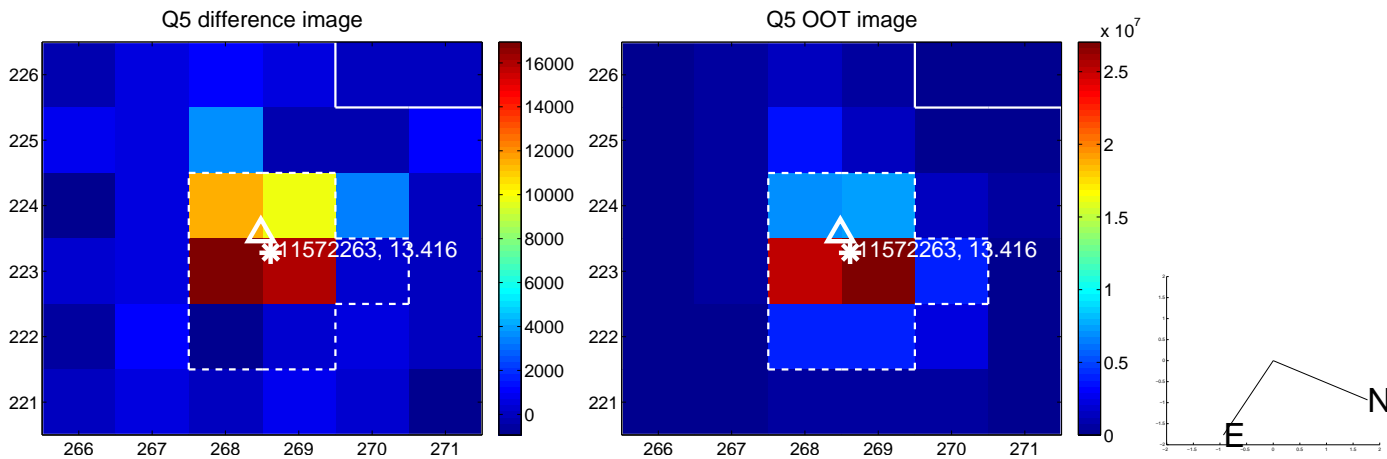


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

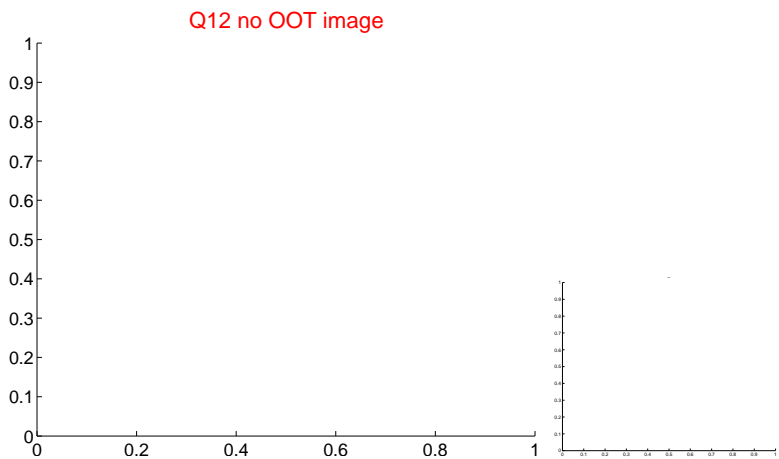
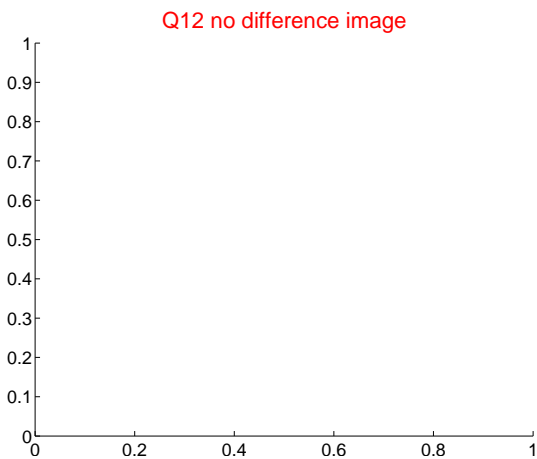
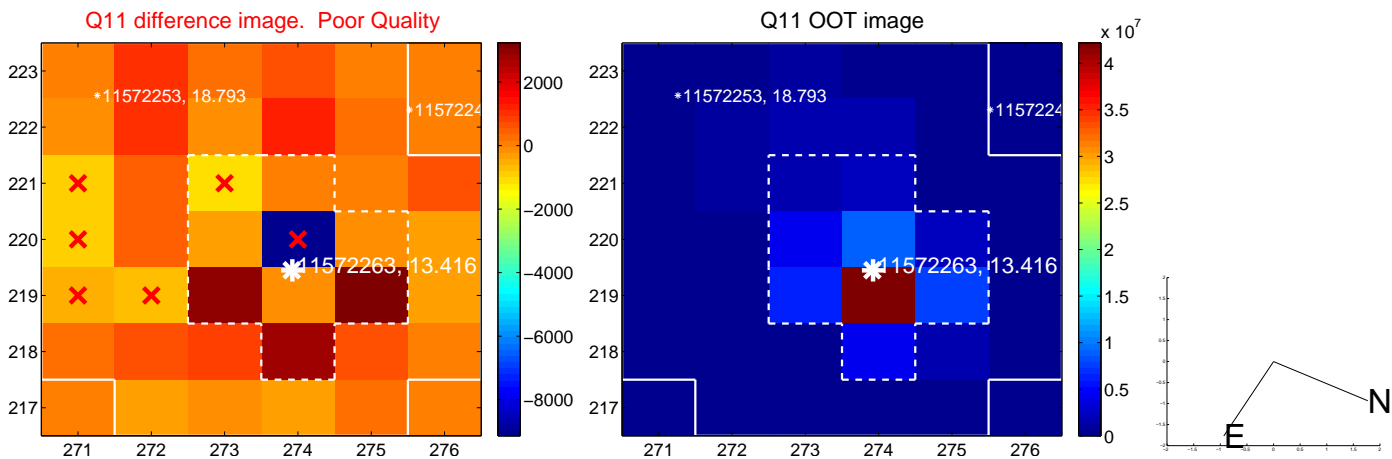
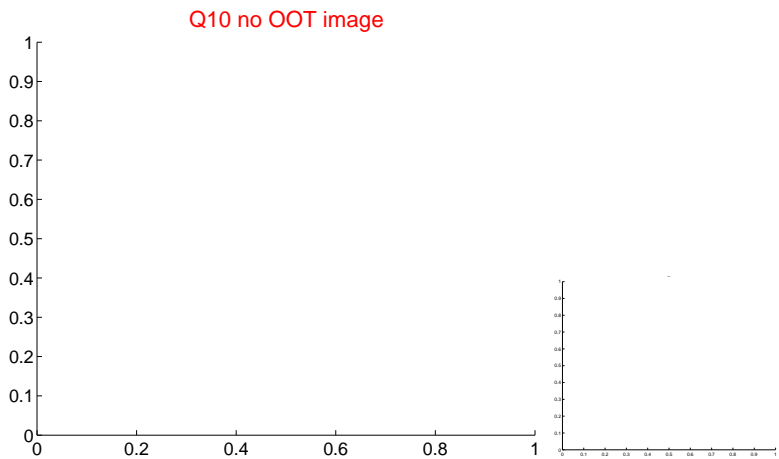
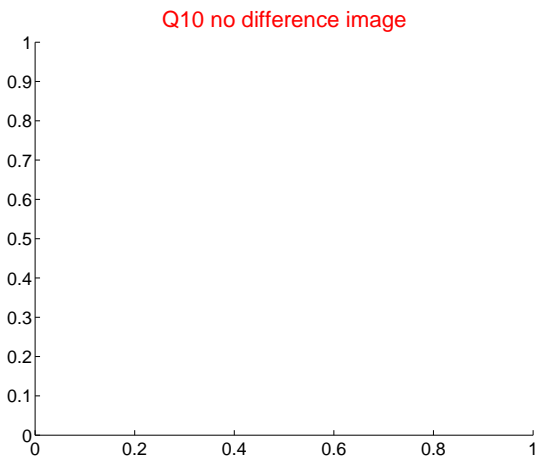
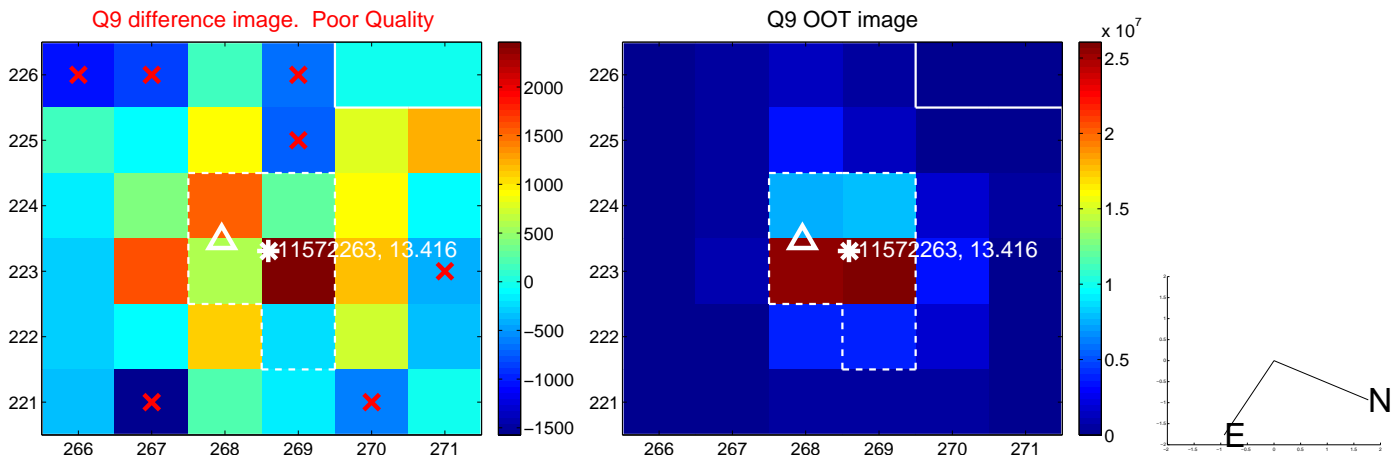
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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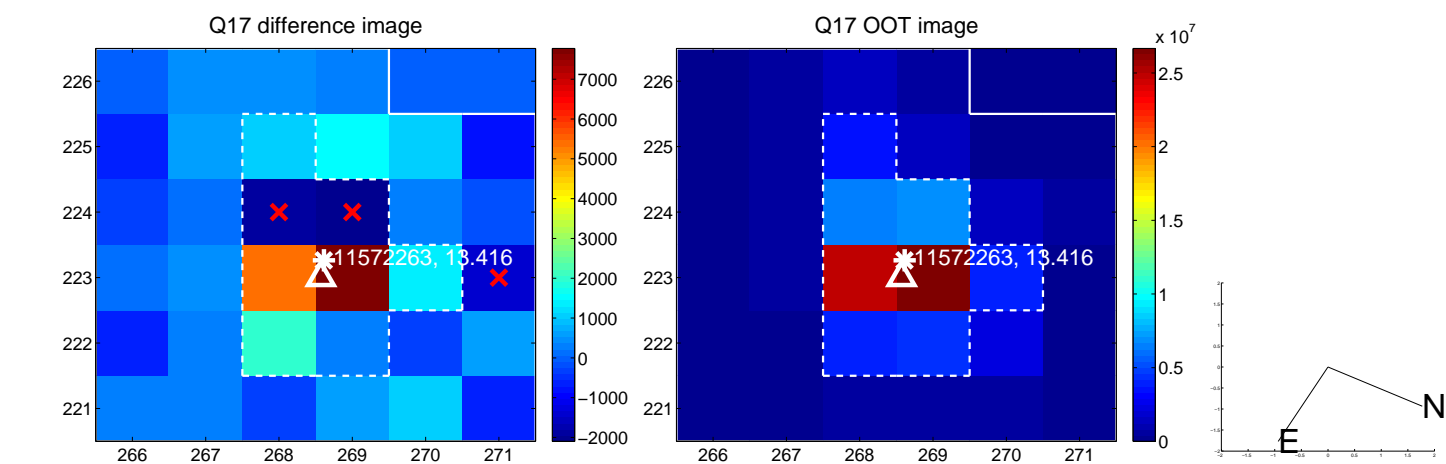
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



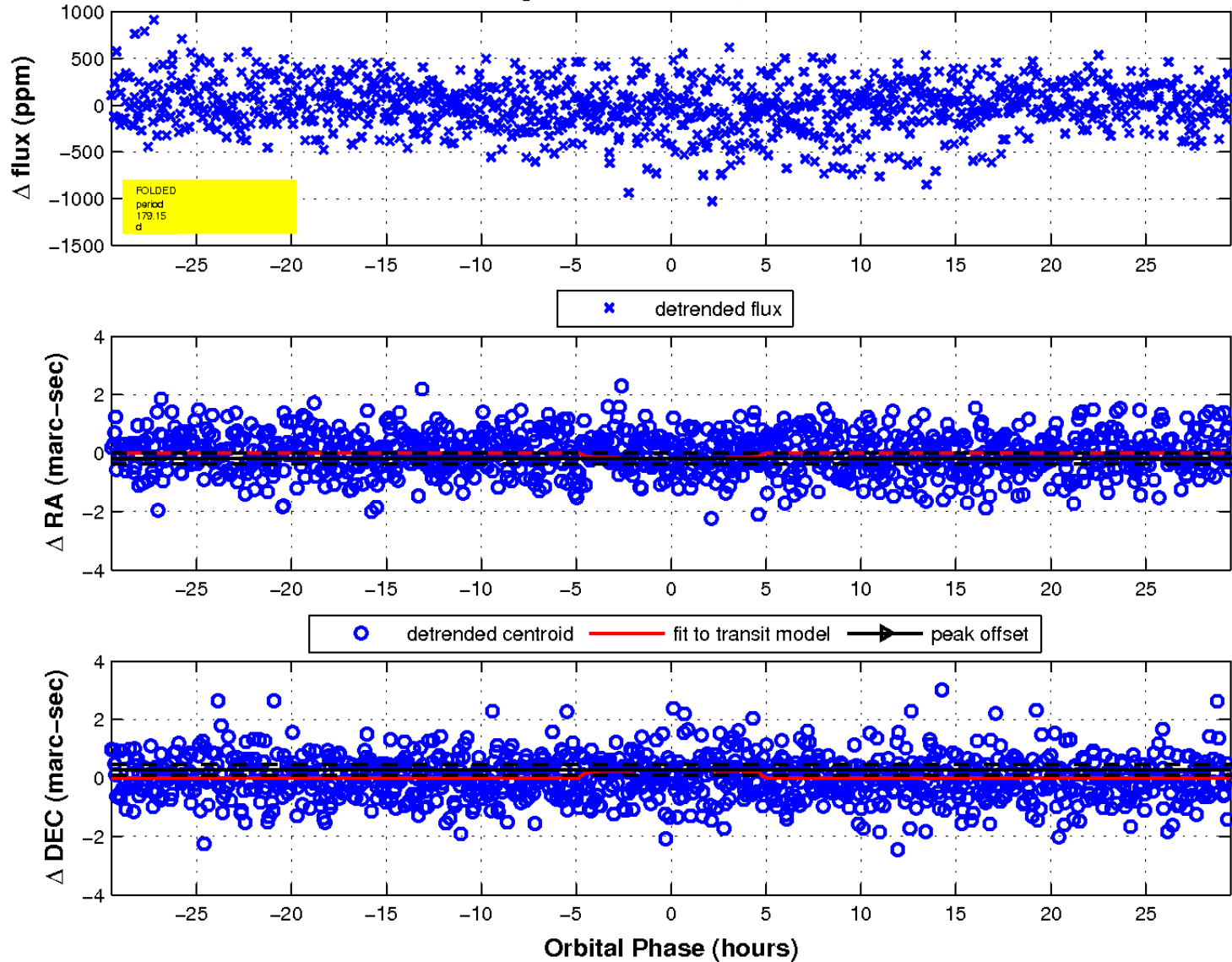
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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fluxWeightedCentroids, Planet 3 of 3



UKIRT Image

Declination

