

KIC 006266219

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})
006266219-01	OBS	No	293.484158	235.348523	49.3	16.149	9.4	7.3	2.10	7996	1.62	14.61
006266219-02	OBS	No	1.114154	131.650192	4.1	6.867	8.6	10.7	2.10	7996	0.46	24663.39

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
006266219-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_MARSHALL_SKYE—MOD_NONUNIQ_ALT—INCONSISTENT_TRANS—CENT_SATURATED
006266219-02	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_ALT—CENT_SATURATED

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

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

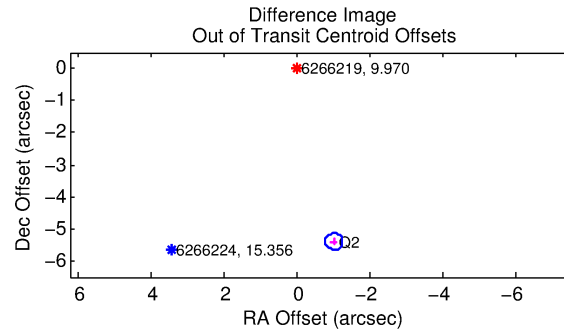
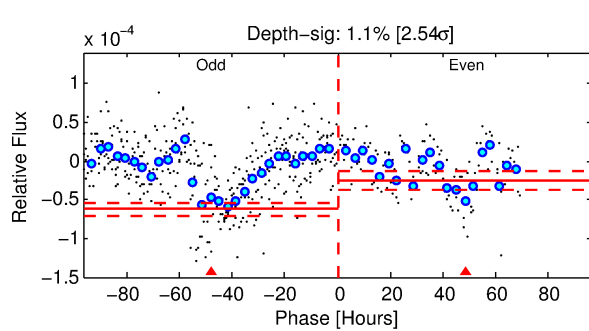
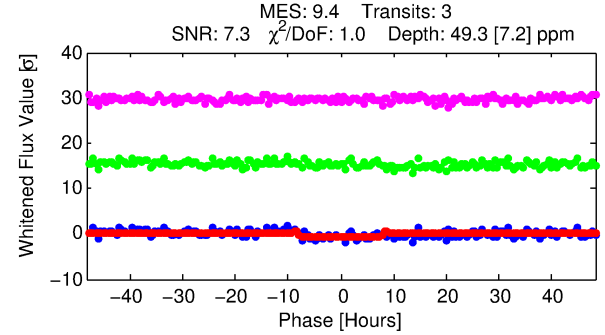
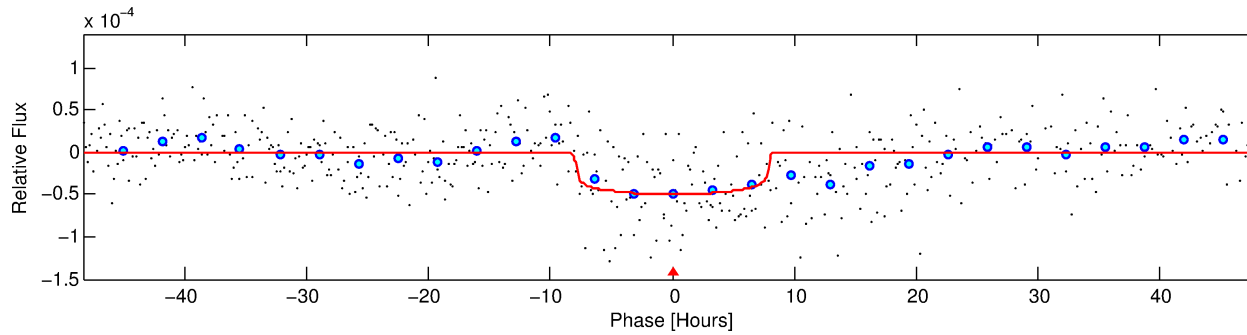
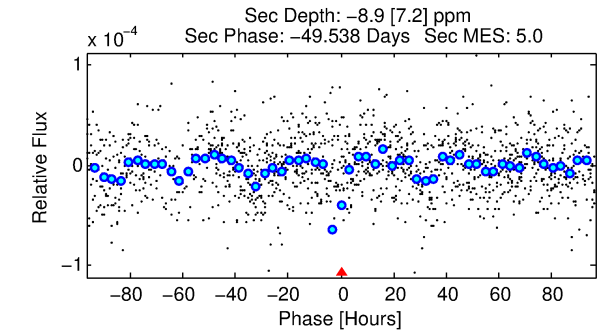
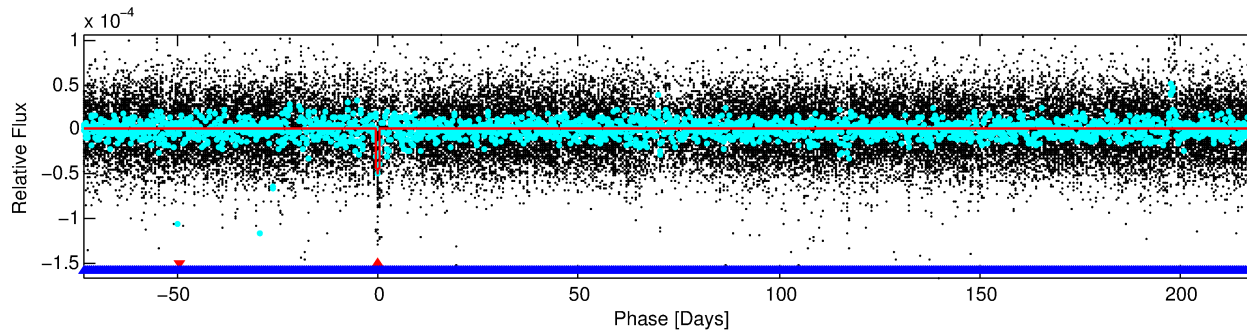
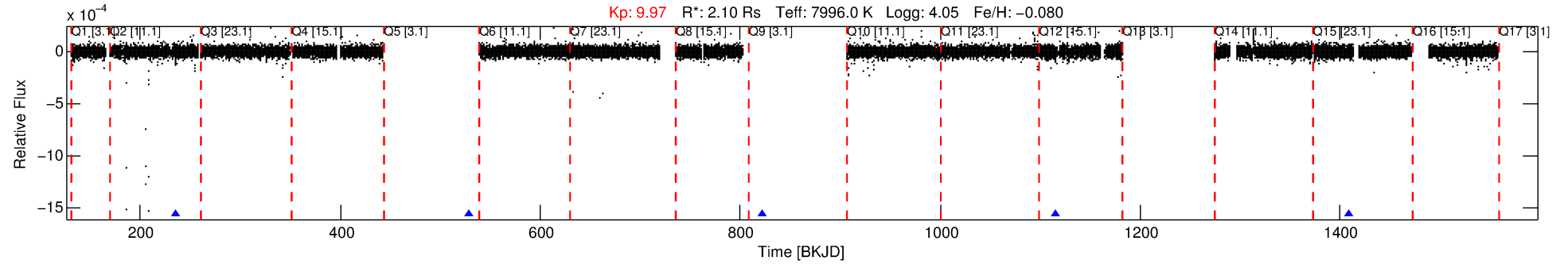
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 006266219-01

No Significant Match Found

DV One-Page Summary

KIC: 6266219 Candidate: 1 of 2 Period: 293.484 d



DV Fit Results:

Period = 293.48416 [0.00548] d
Epoch = 235.3485 [0.0172] BKJD
Rp/R* = 0.0071 [0.0020]
a/R* = 85.91 [139.87]
b = 0.79 [0.76]
Seff = 14.61 [5.20]
Teq = 498 [44] K
Rp = 1.62 [0.61] Re
a = 1.0496 [0.2258] AU
Ag = N/A
Teffp = N/A

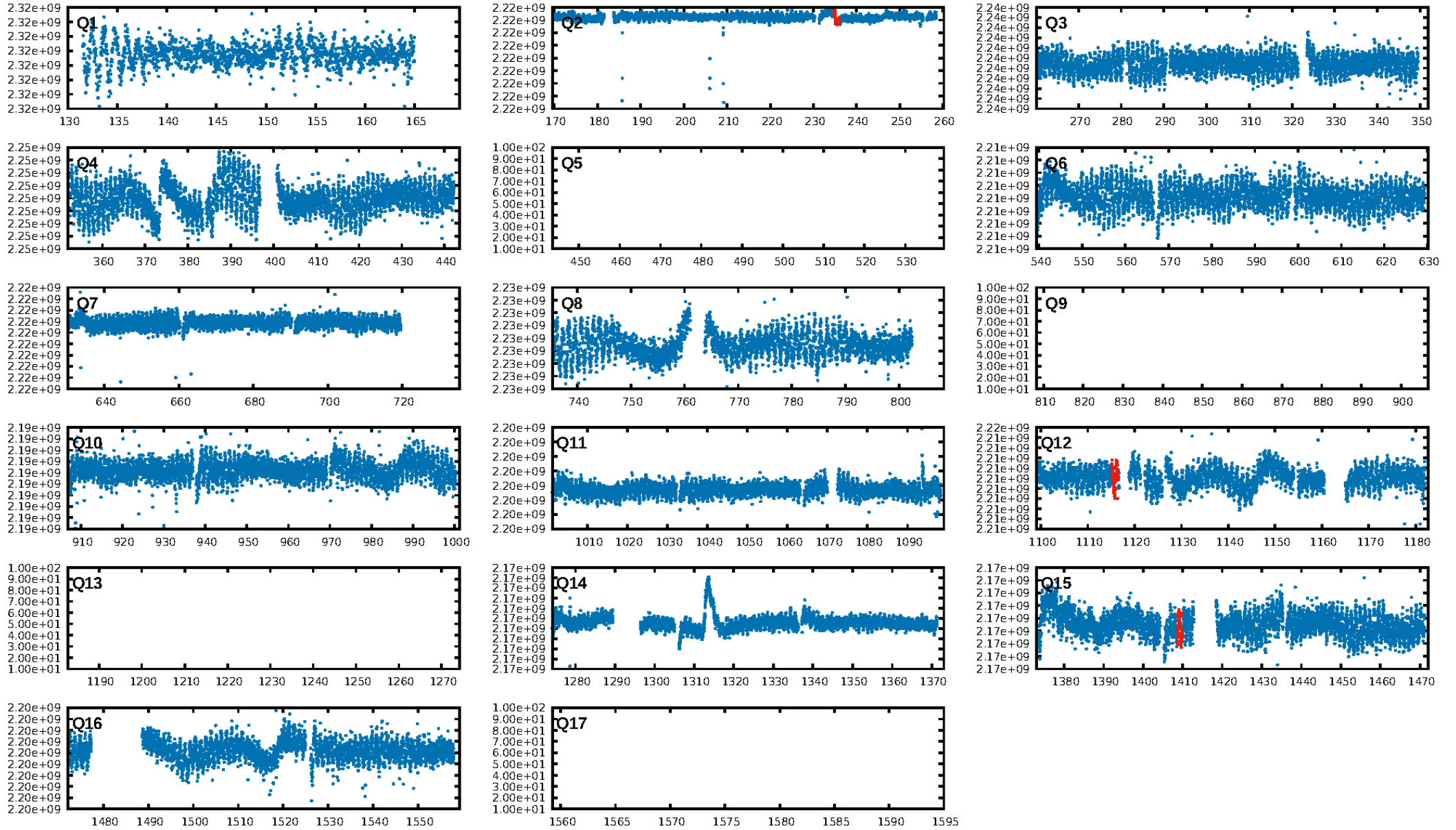
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [399.87σ]
LongPeriod-sig: N/A
ModelChiSquare2-sig: 0.1%
ModelChiSquareGof-sig: 95.5%
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [3/3]
GhostDiagnostic-chr: N/A
Centroid-sig: 0.5%
Centroid-so: 8.516 arcsec [1.80σ]
OotOffset-rm: 5.492 arcsec [66.13σ]
KicOffset-rm: 4.307 arcsec [51.96σ]
OotOffset-st: 1/0/0/0 [1]
KicOffset-st: 1/0/0/0 [1]
DiffImageQuality-fgm: 0.00 [0/1]
DiffImageOverlap-fno: 0.00 [0/1]

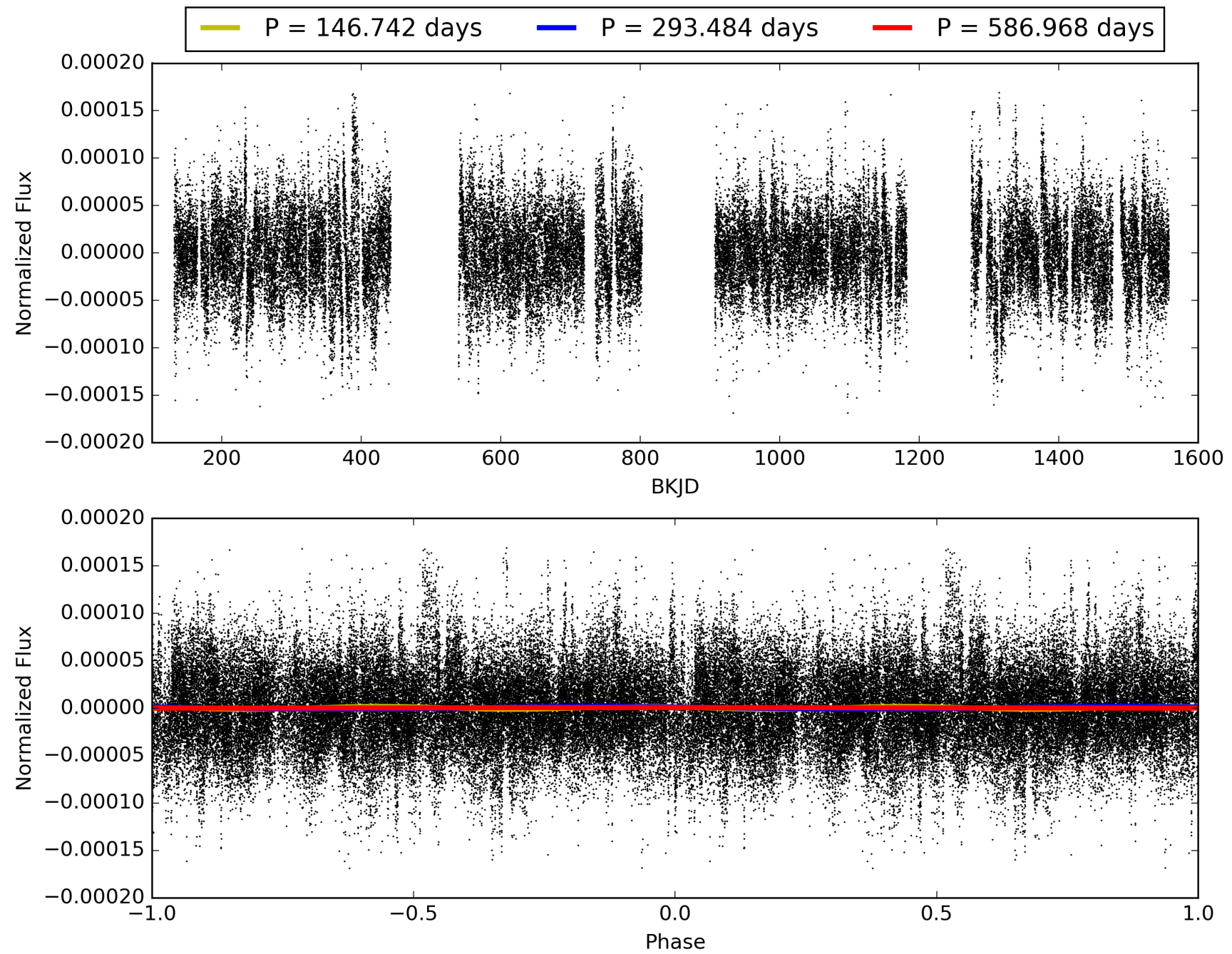
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 02-Feb-2016 07:00:52 Z

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

TCE 006266219-01, PDC Light Curves

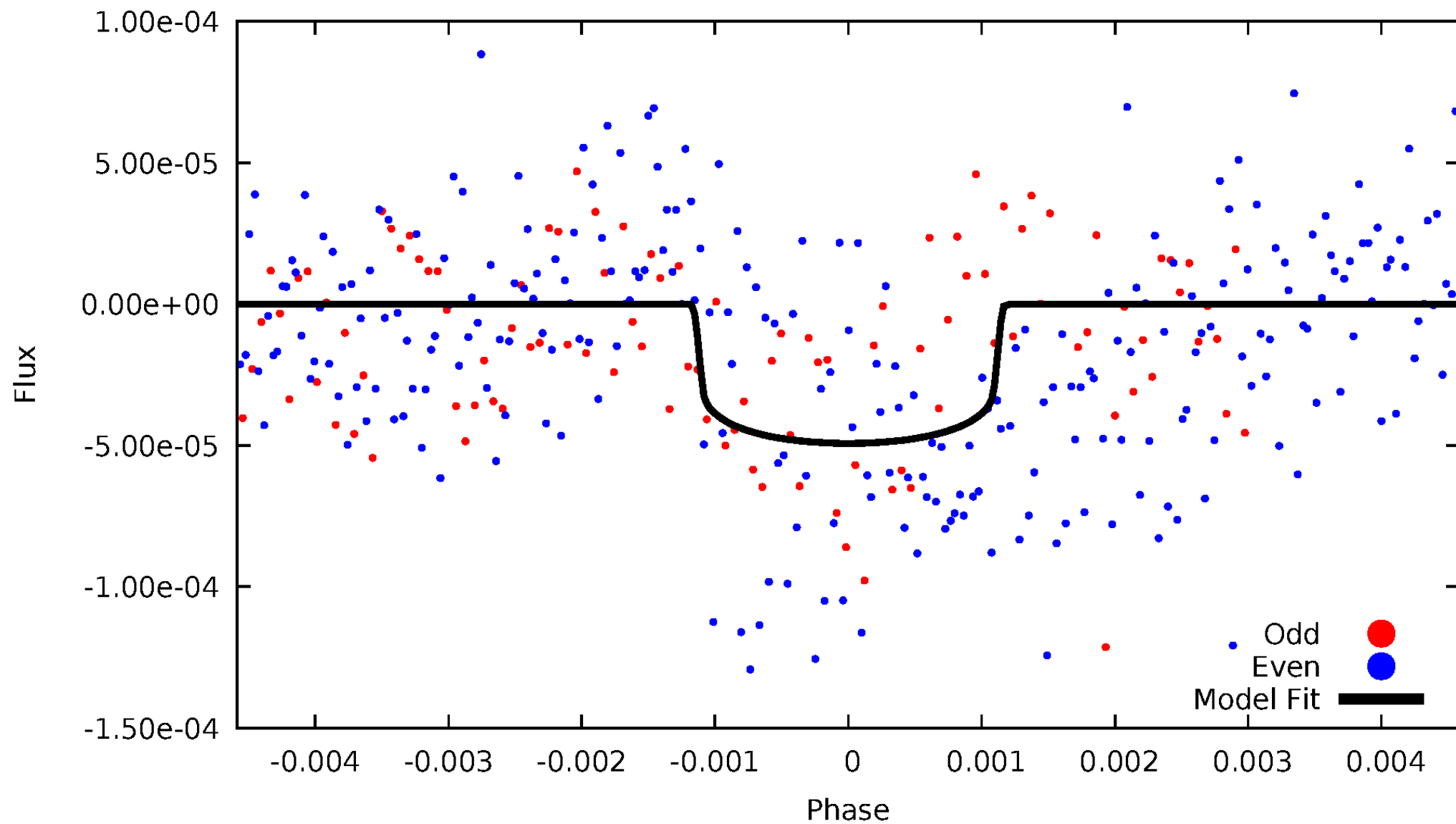


TCE 006266219-01



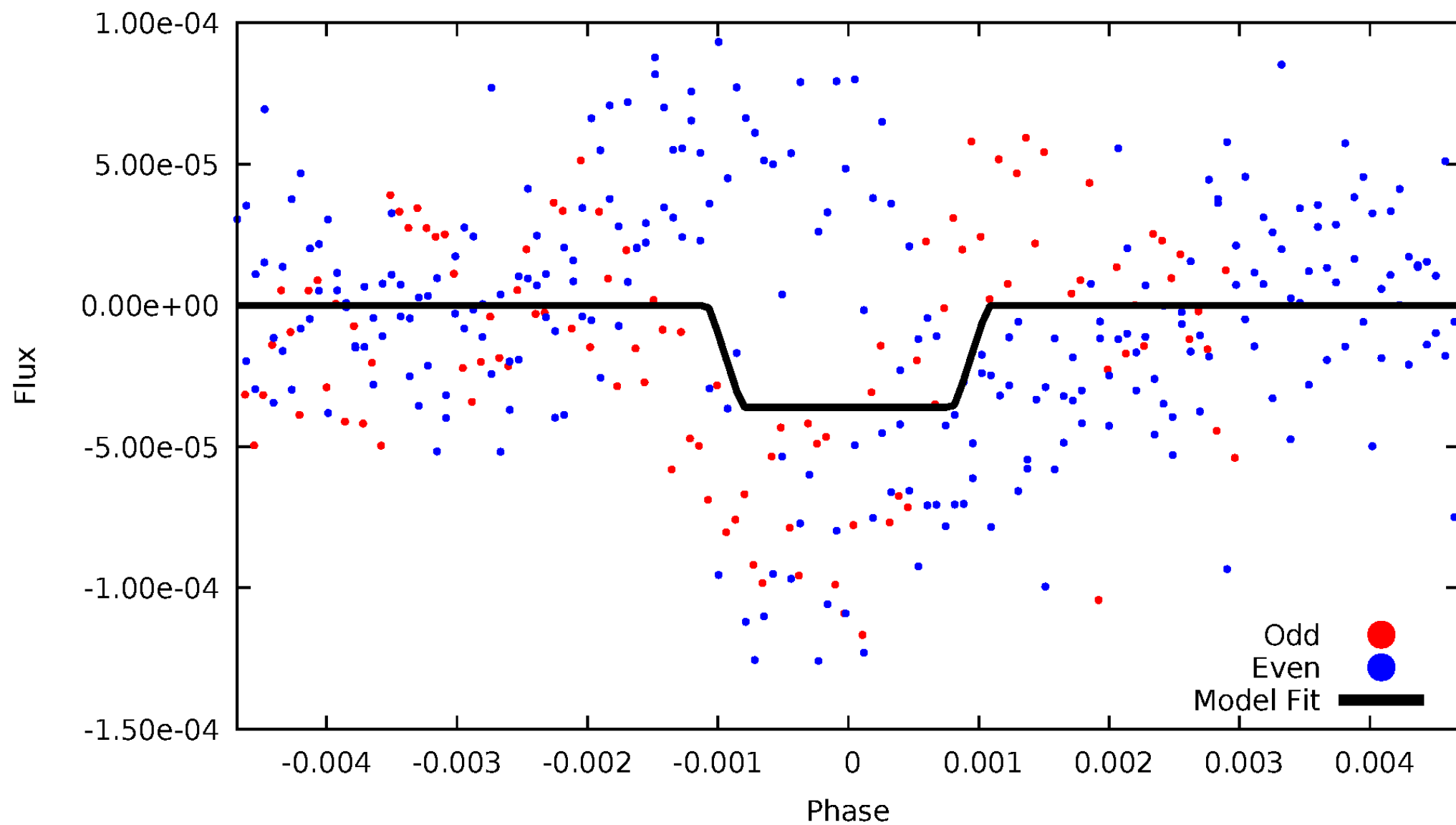
DV Odd/Even

TCE 006266219-01



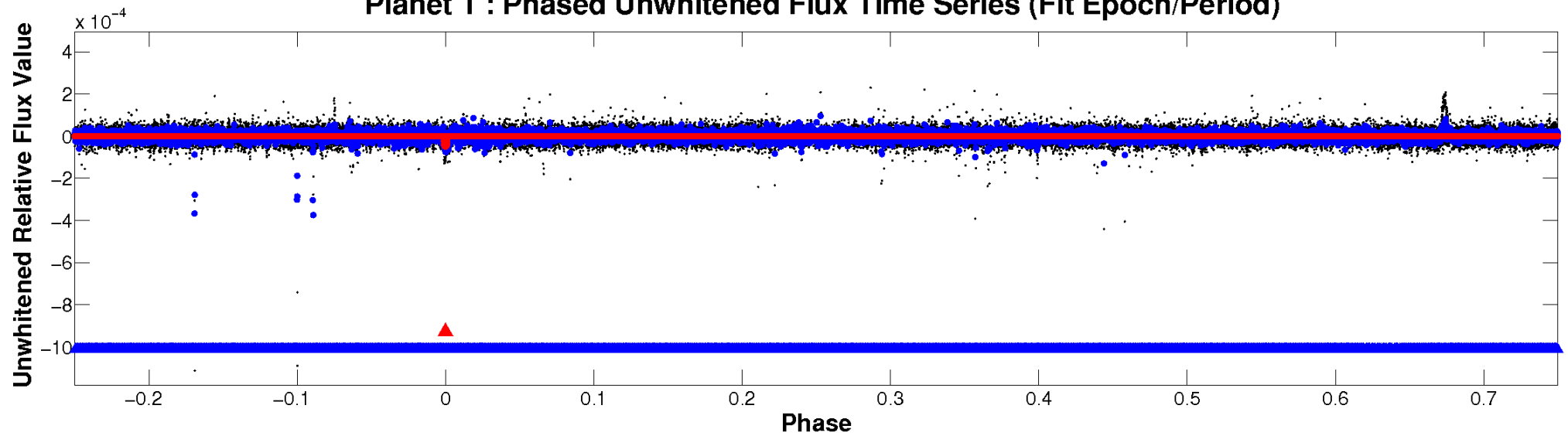
ALT Odd/Even

TCE 006266219-01

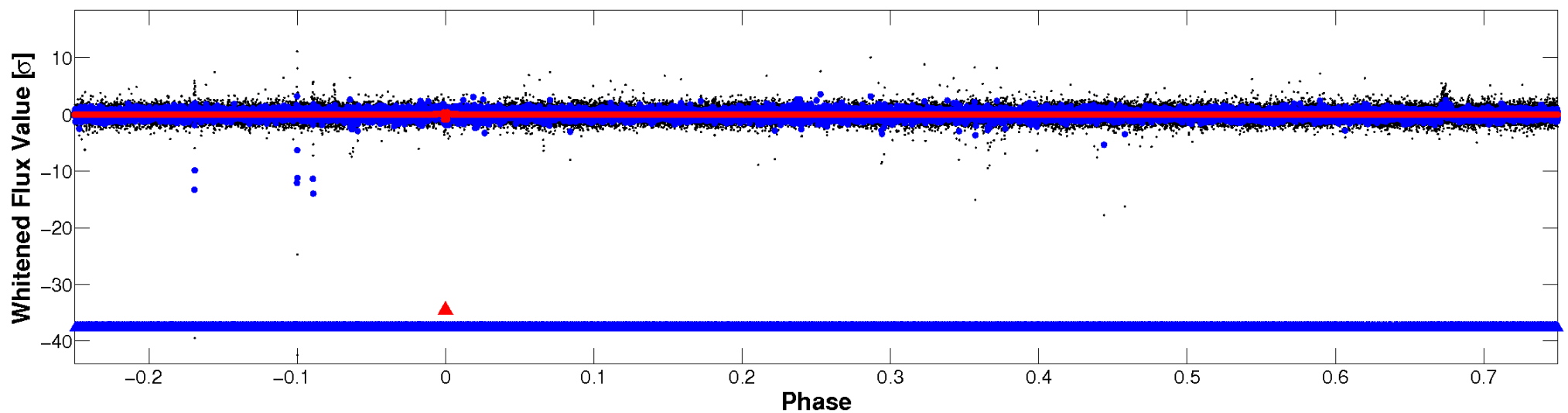


Non-Whitened Vs. Whitened Light Curve

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



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



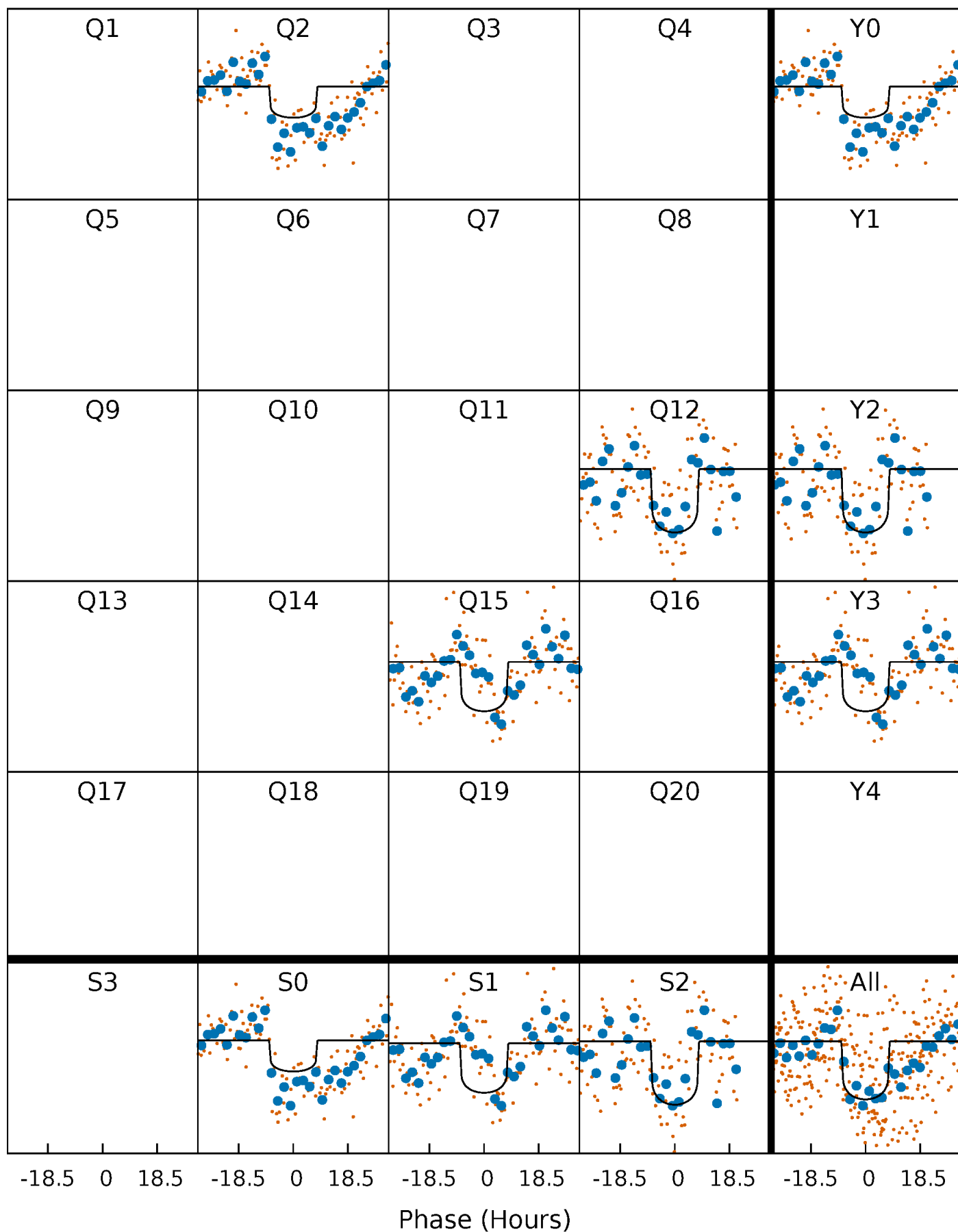
PDC Quarter-Phased Transit Curves

TCE 006266219-01 P=293.484158 Days $T_0=235.348523$ (BKJD)



DV Quarter-Phased Transit Curves

TCE 006266219-01 P=293.484158 Days $T_0=235.348523$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

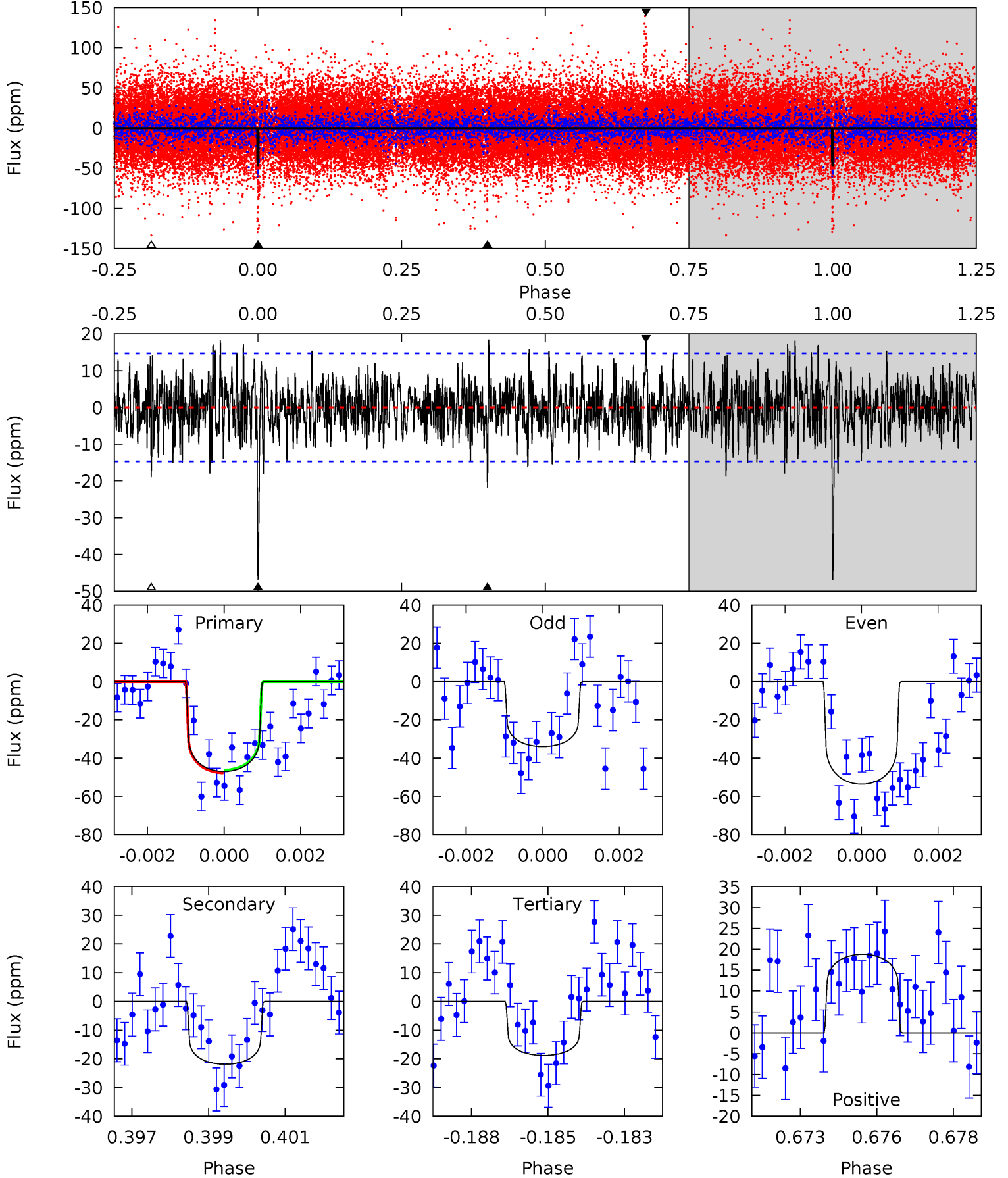
TCE 006266219-01 P=293.487222 Days $T_0=235.343075$ (BKJD)



DV Model-Shift Uniqueness Test

006266219-01, P = 293.484158 Days, E = 235.348523 Days

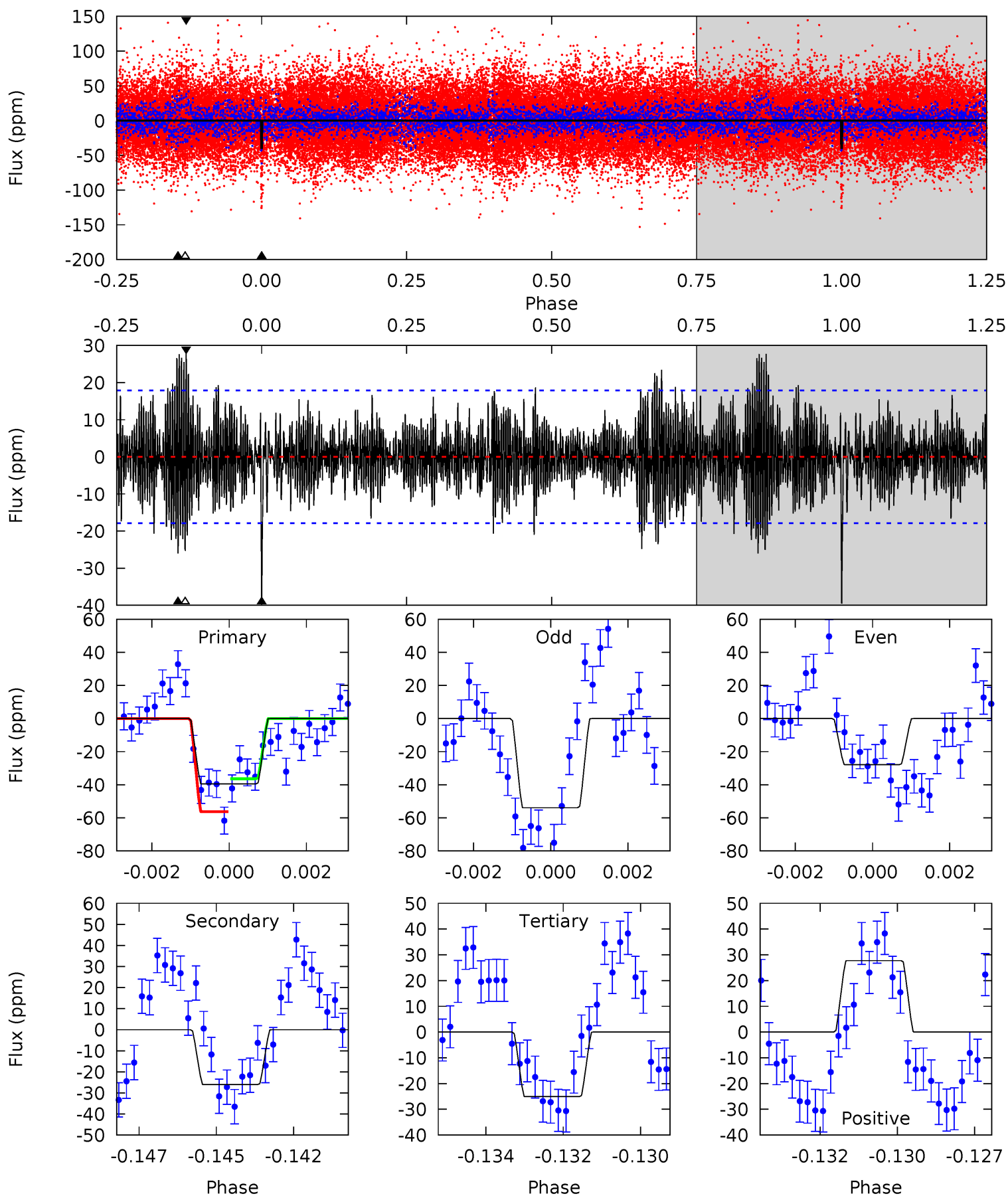
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
16.9	7.88	6.77	6.77	5.30	3.04	1.98	10.1	10.1	1.11	1.11	3.34	1.37	0.29	0.26



Alt Model-Shift Uniqueness Test

006266219-01, P = 293.487222 Days, E = 235.343075 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
11.7	7.73	7.45	8.25	5.31	3.07	2.20	4.30	3.50	0.28	-0.51	3.67	0.66	0.41	2.87



Stellar Parameters For KIC 006266219

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	7996^{+225}_{-338}	$4.048^{+0.171}_{-0.140}$	$-0.080^{+0.200}_{-0.400}$	$2.096^{+0.487}_{-0.536}$	$1.789^{+0.133}_{-0.332}$	$0.274^{+0.260}_{-0.115}$
	+3%/-4%	+4%/-3%	+250%/-500%	+23%/-26%	+7%/-19%	+95%/-42%
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 006266219-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-22 ± 3	$1.59^{+0.51}_{-0.44}$	692^{+45}_{-49}	6265^{+1189}_{-757}	4917^{+4970}_{-2014}
Alt.	-26 ± 3	$1.33^{+0.49}_{-0.41}$	689^{+49}_{-47}	7171^{+1797}_{-994}	8527^{+9168}_{-4032}

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

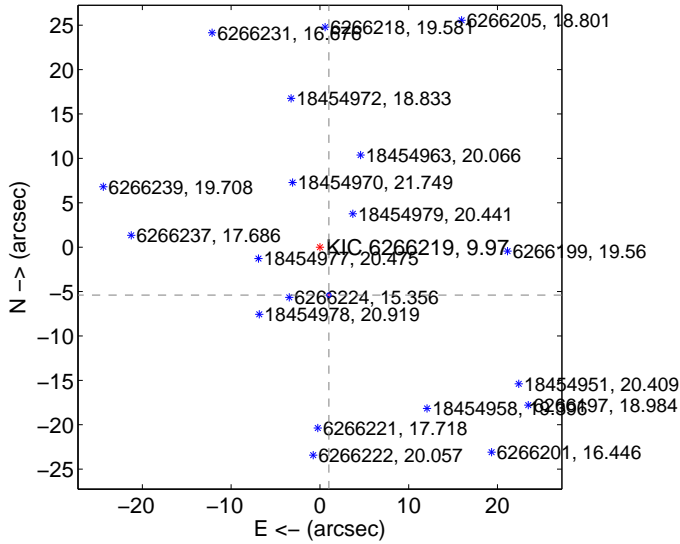
Supplemental centroid analysis for 006266219-01. **Kepler magnitude: 9.97.** Transit SNR 7.32

There are 0 quarters with good PRF difference image offsets

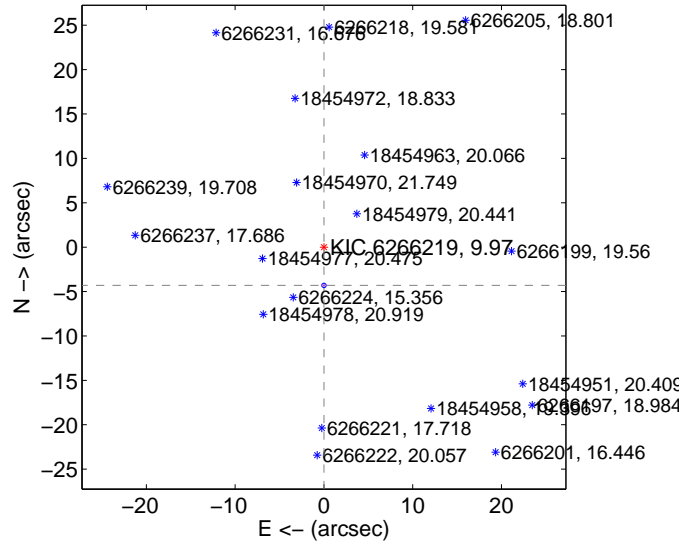
The direct PRF centroid is offset from the target star catalog position by about 1.49 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	5.492 \pm 0.083	66.13	-1.014 \pm 0.088	-5.398 \pm 0.083
PRF-fit source offset from KIC position	4.307 \pm 0.083	51.96	-0.005 \pm 0.088	-4.307 \pm 0.083
photometric centroid source offset	8.52 \pm 4.73	1.80	5.88 \pm 5.20	-6.16 \pm 4.26

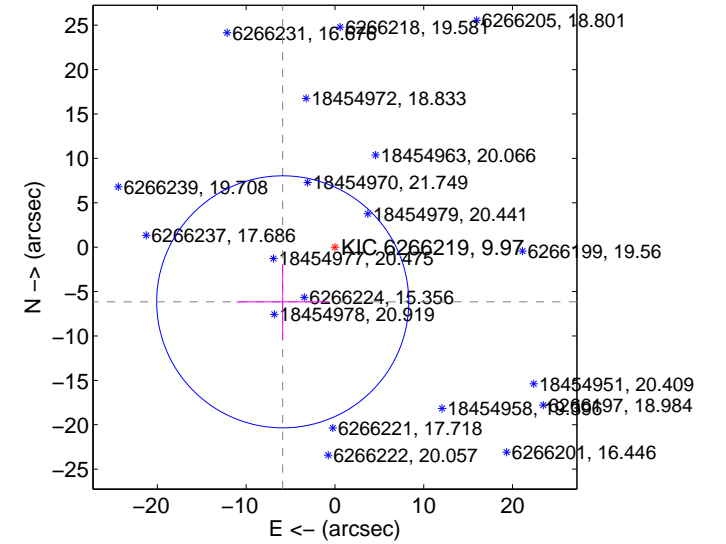
offset from difference PRF-fit to OOT PRF-fit



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.

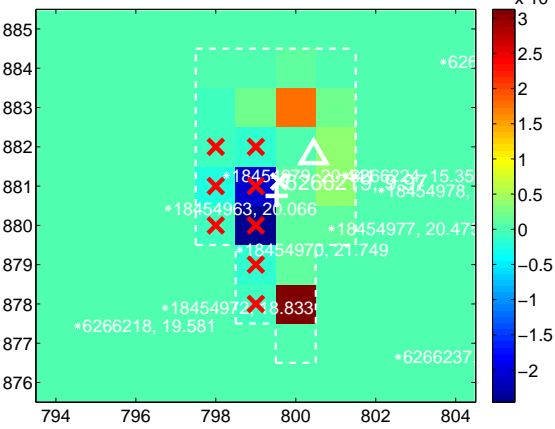
Q1 no difference image



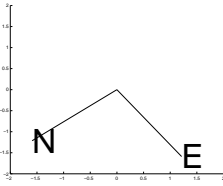
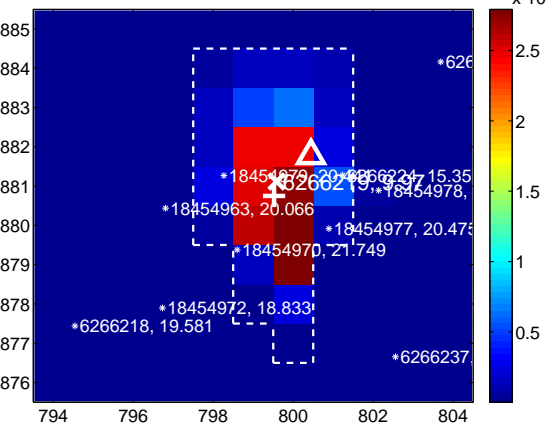
Q1 no OOT image



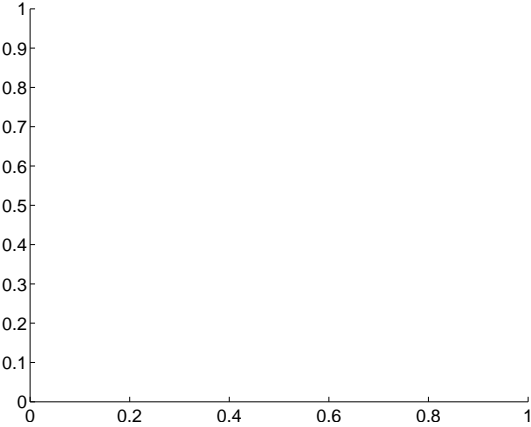
Q2 difference image. Poor Quality



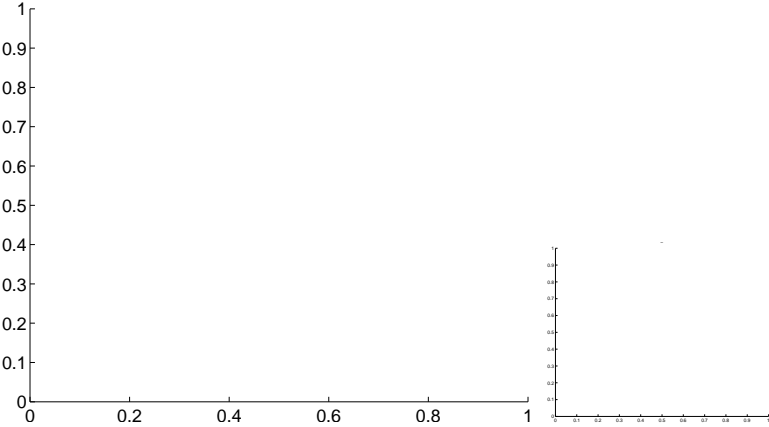
Q2 OOT image



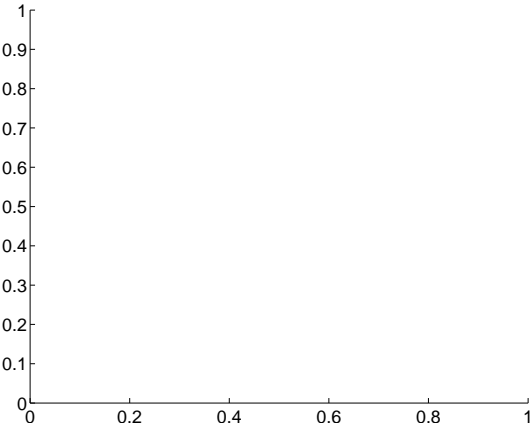
Q3 no difference image



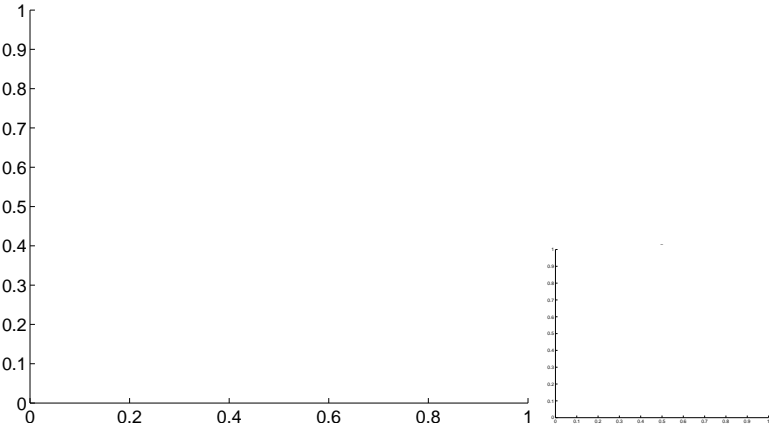
Q3 no OOT image



Q4 no difference image



Q4 no OOT image



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



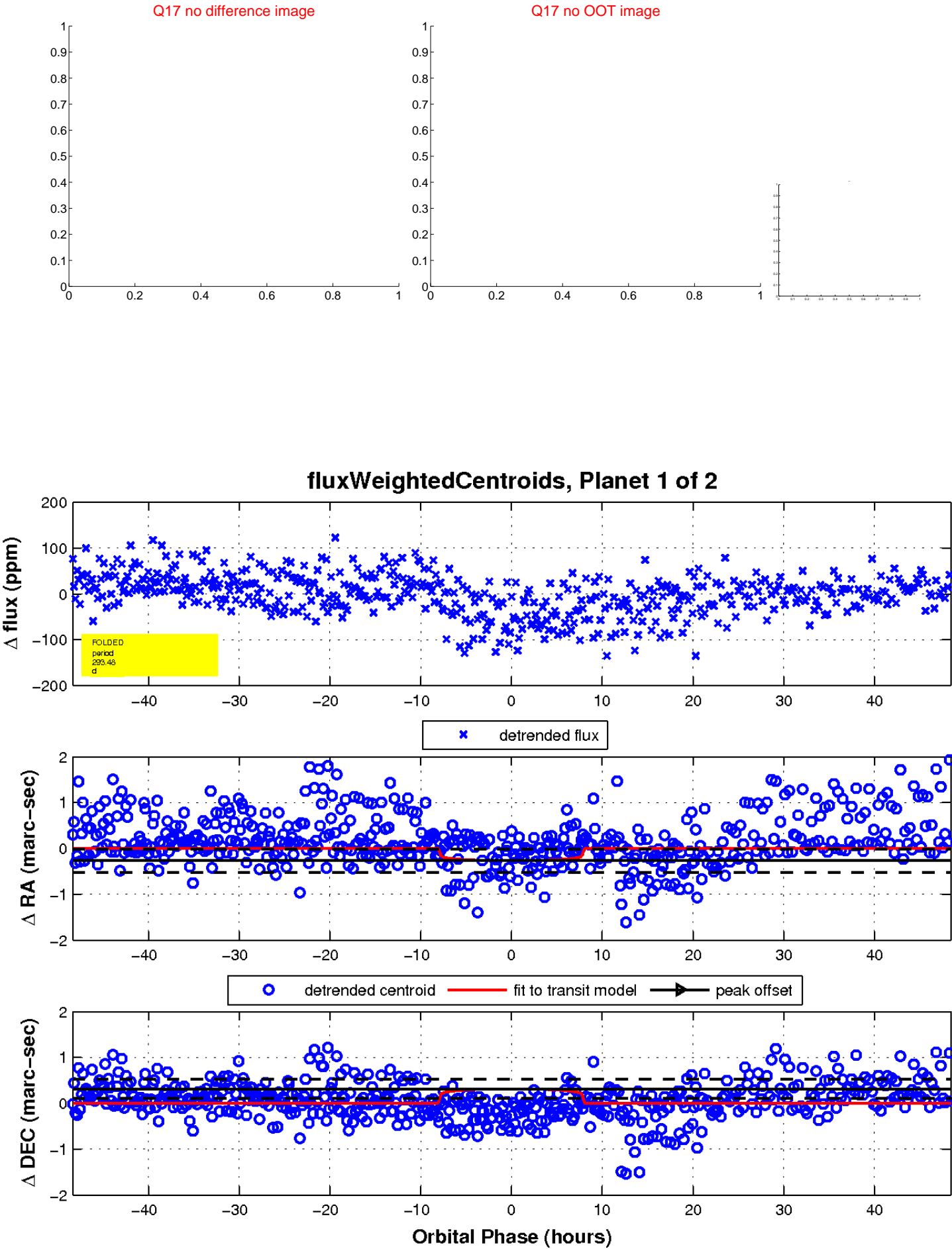
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

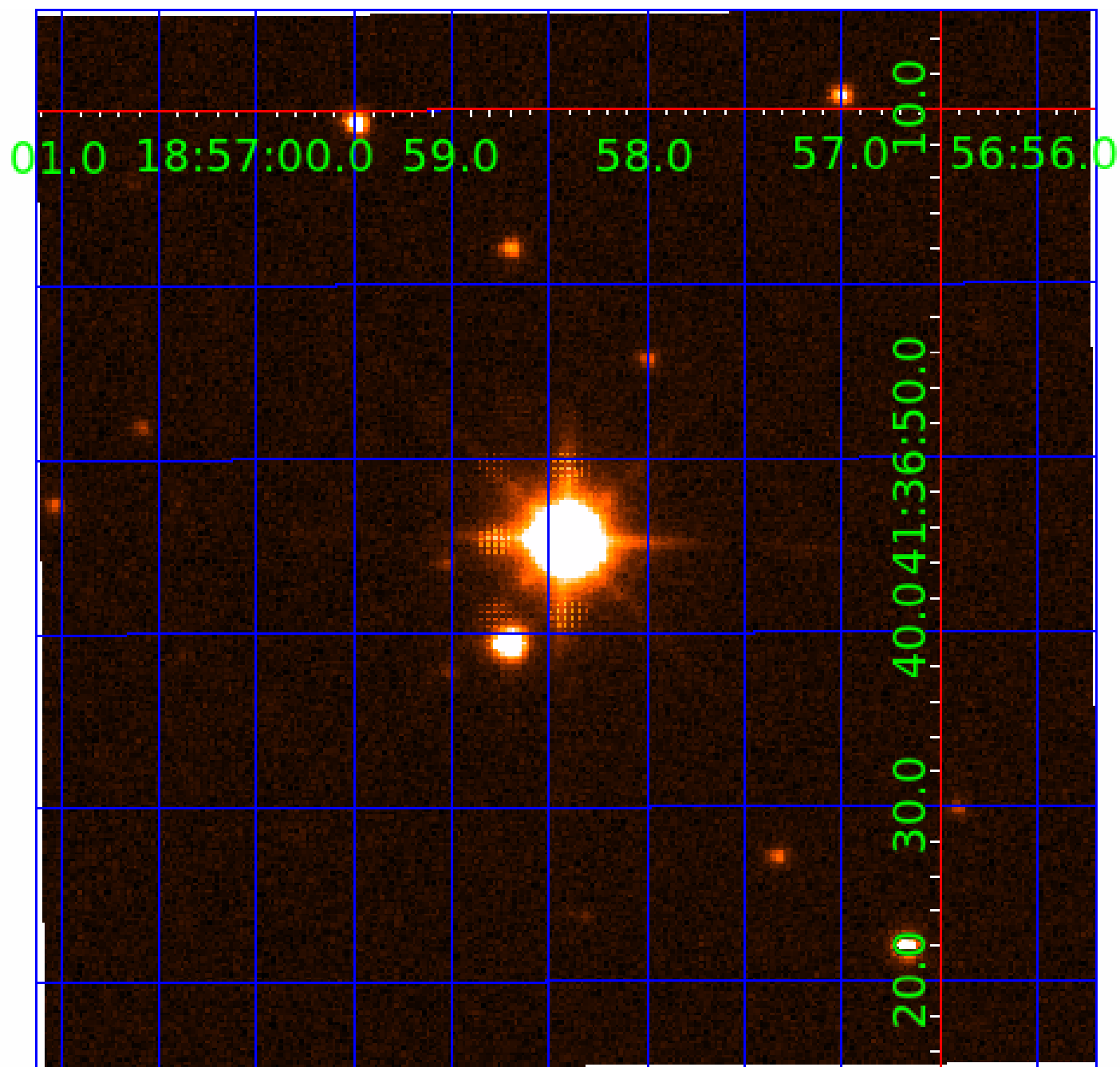


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 006266219

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})
006266219-01	OBS	No	293.484158	235.348523	49.3	16.149	9.4	7.3	2.10	7996	1.62	14.61
006266219-02	OBS	No	1.114154	131.650192	4.1	6.867	8.6	10.7	2.10	7996	0.46	24663.39

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
006266219-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_MARSHALL_SKYE—MOD_NONUNIQ_ALT—INCONSISTENT_TRANS—CENT_SATURATED
006266219-02	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_ALT—CENT_SATURATED

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

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

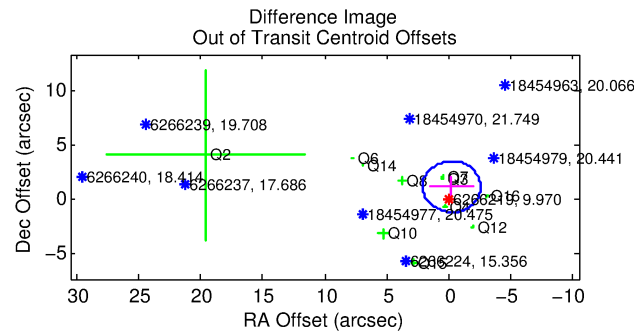
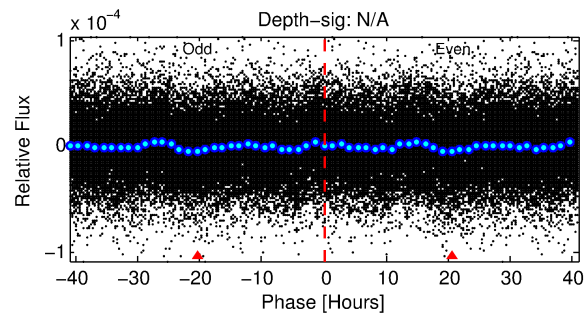
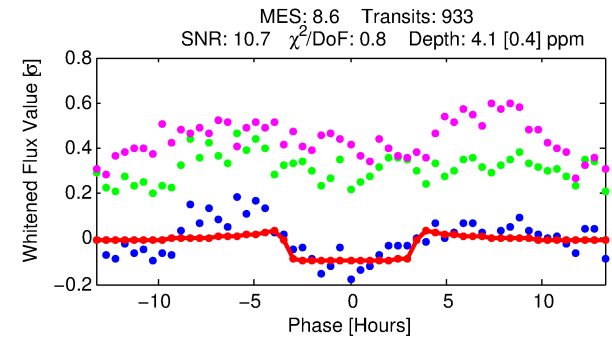
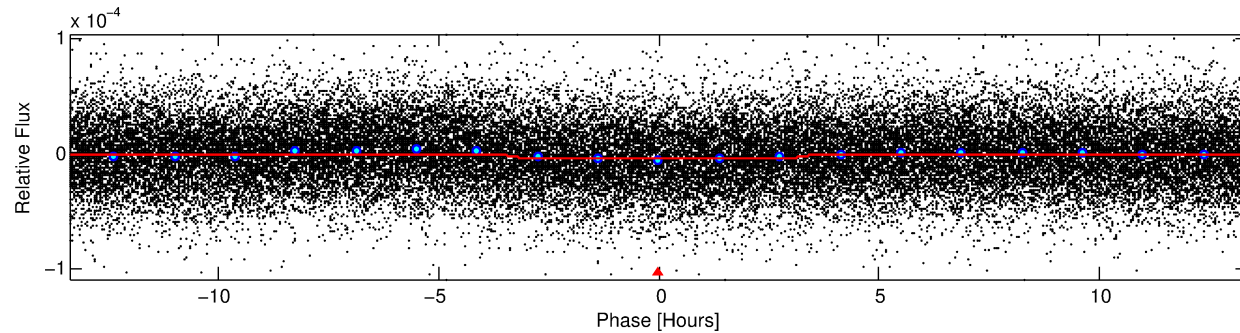
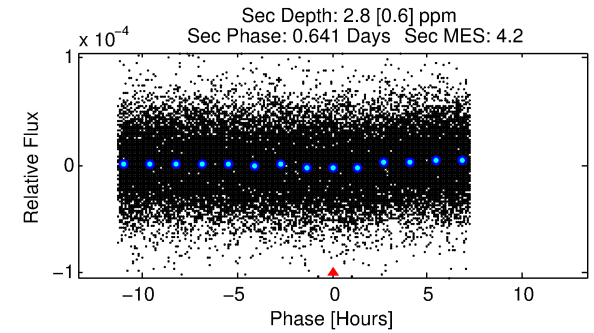
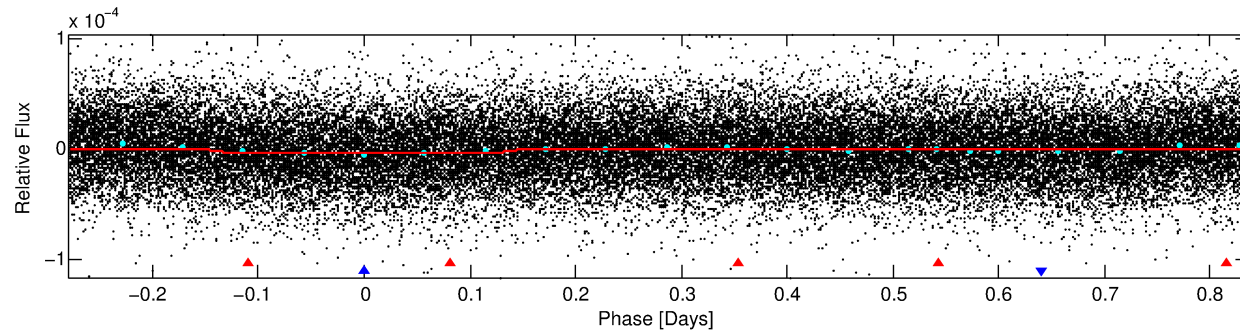
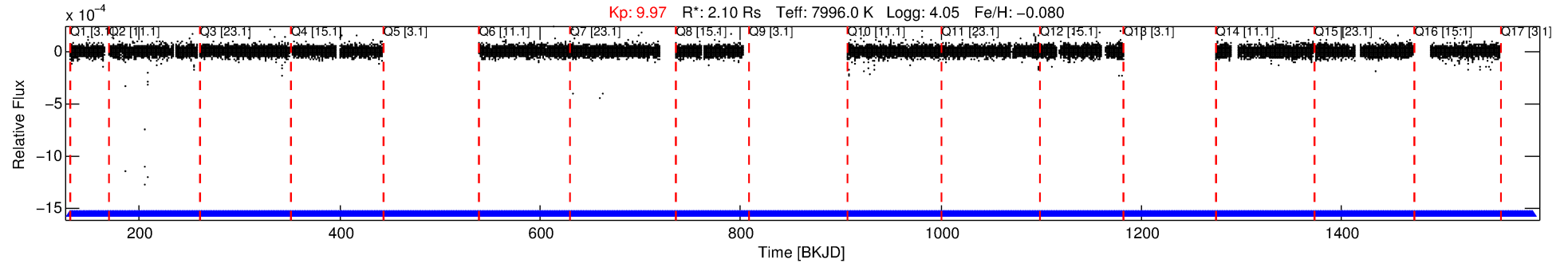
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 006266219-02

No Significant Match Found

DV One-Page Summary

KIC: 6266219 Candidate: 2 of 2 Period: 1.114 d



DV Fit Results:

Period = 1.11415 [0.00001] d
Epoch = 131.6502 [0.0042] BKJD
Rp/R* = 0.0020 [0.0002]
a/R* = 1.18 [0.22]
b = 0.76 [0.38]
Seff = 24663.39 [8773.99]
Teq = 3196 [284] K
Rp = 0.46 [0.13] Re
a = 0.0255 [0.0055] AU
Ag = 4.64 [2.09] [1.75σ]
Teffp = 7253 [659] K [5.65σ]

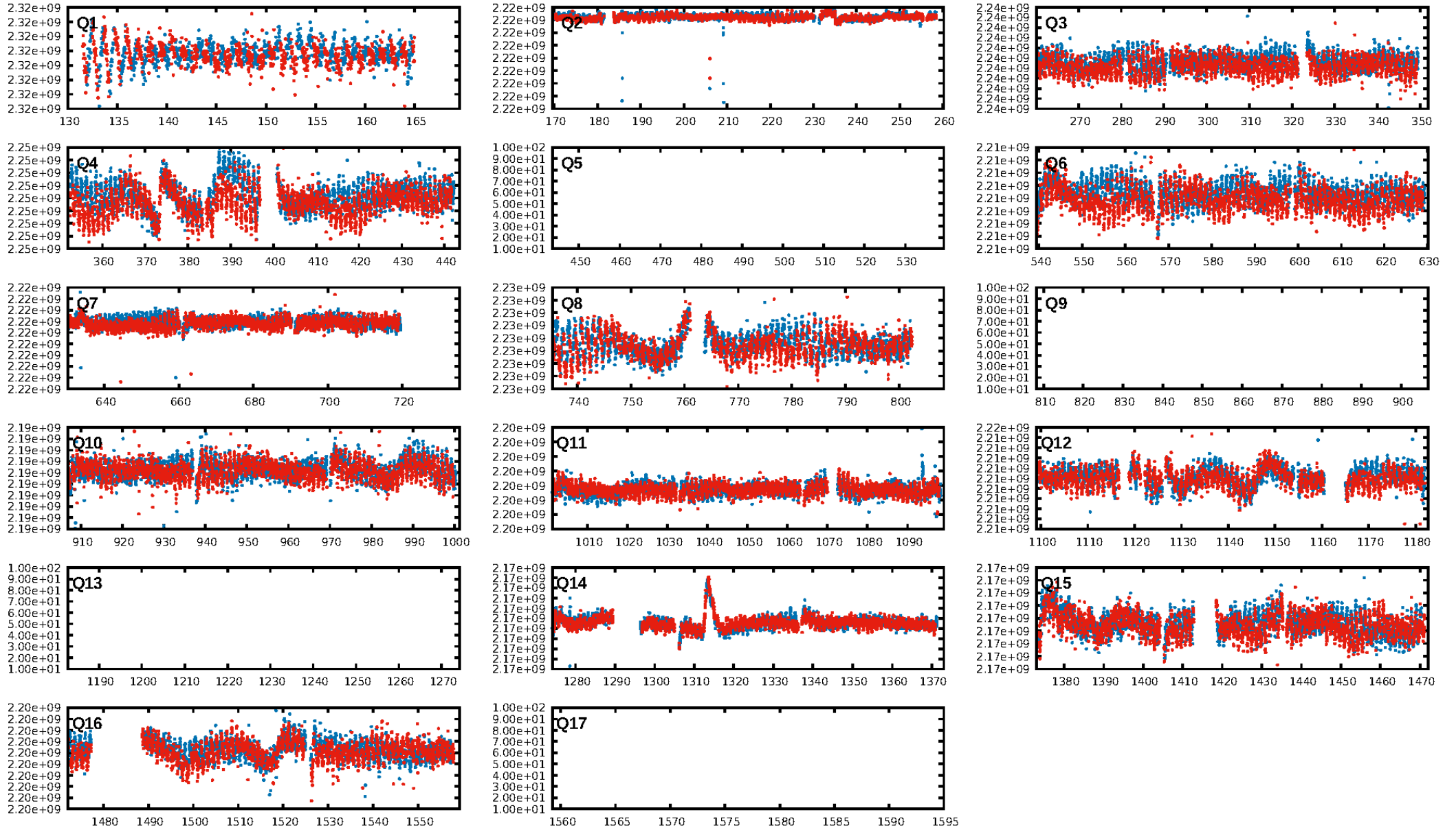
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: 100.0% [399.87σ]
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [902/902]
GhostDiagnostic-chr: N/A
Centroid-sig: N/A
Centroid-so: N/A
OotOffset-rm: 1.195 arcsec [1.54σ]
KicOffset-rm: 2.740 arcsec [2.39σ]
OotOffset-st: 4/3/4/0 [11]
KicOffset-st: 4/3/4/0 [11]
DiffImageQuality-fgm: 0.27 [3/11]
DiffImageOverlap-fno: 1.00 [13/13]

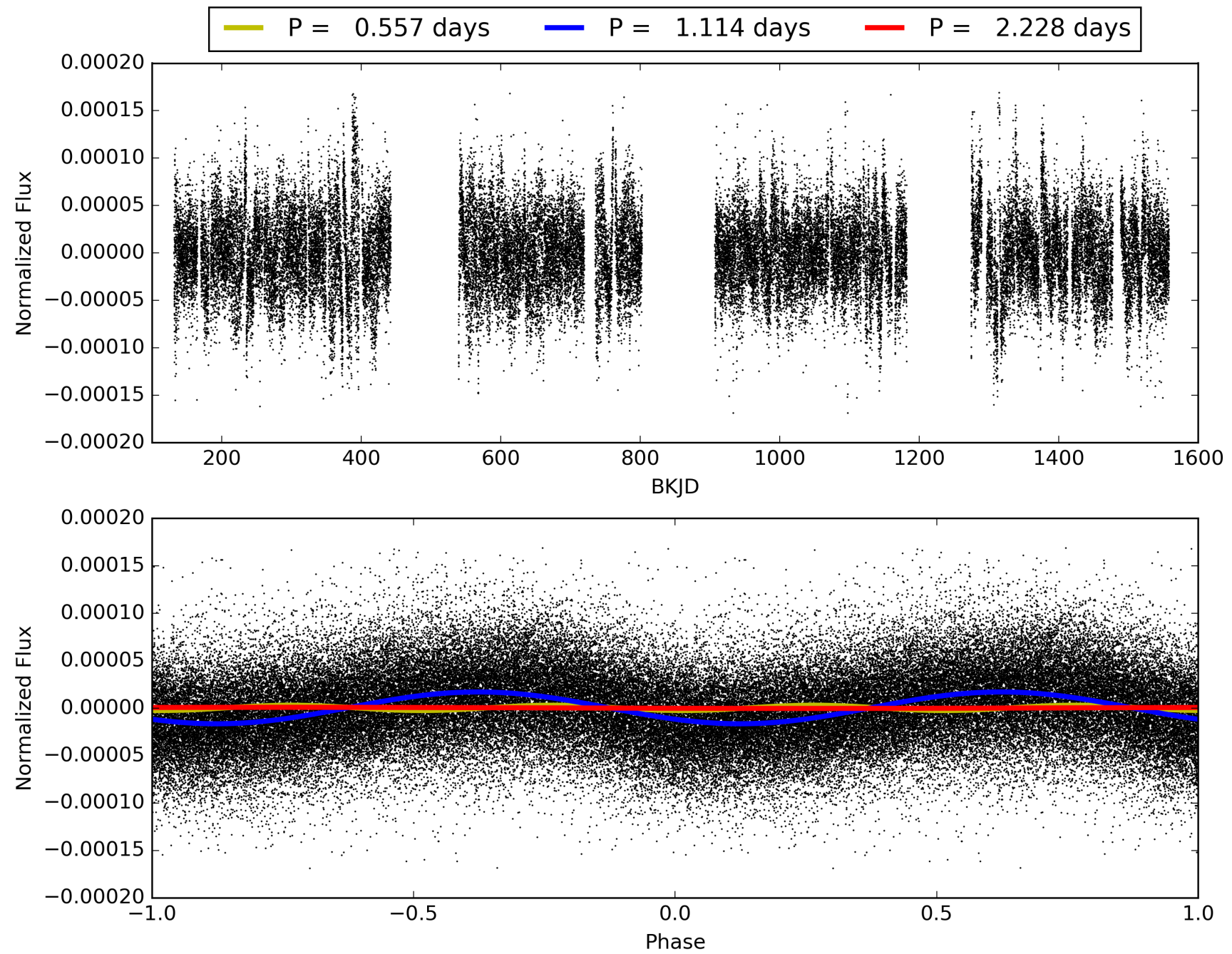
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 02-Feb-2016 07:01:00 Z

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

TCE 006266219-02, PDC Light Curves

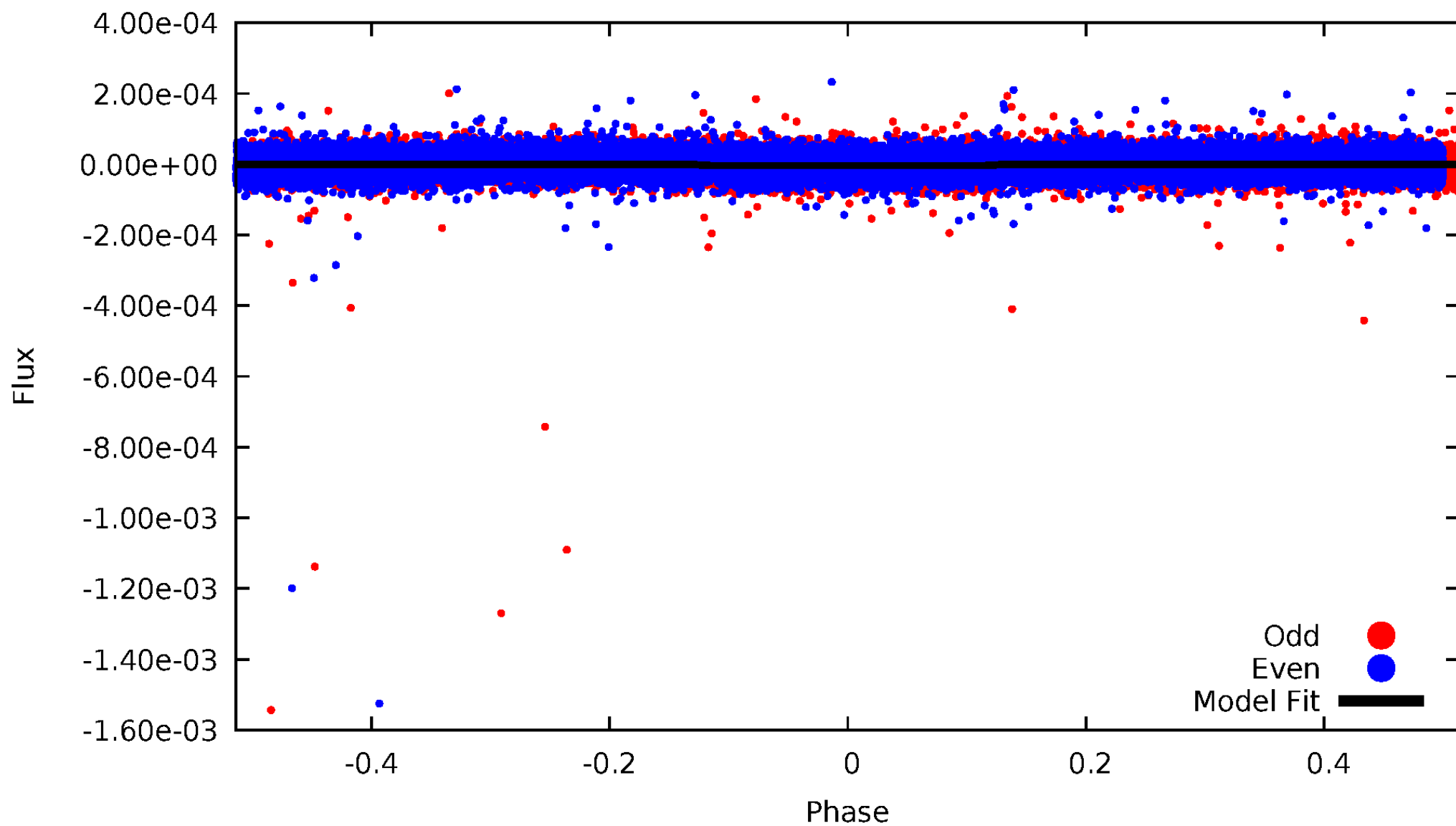


TCE 006266219-02



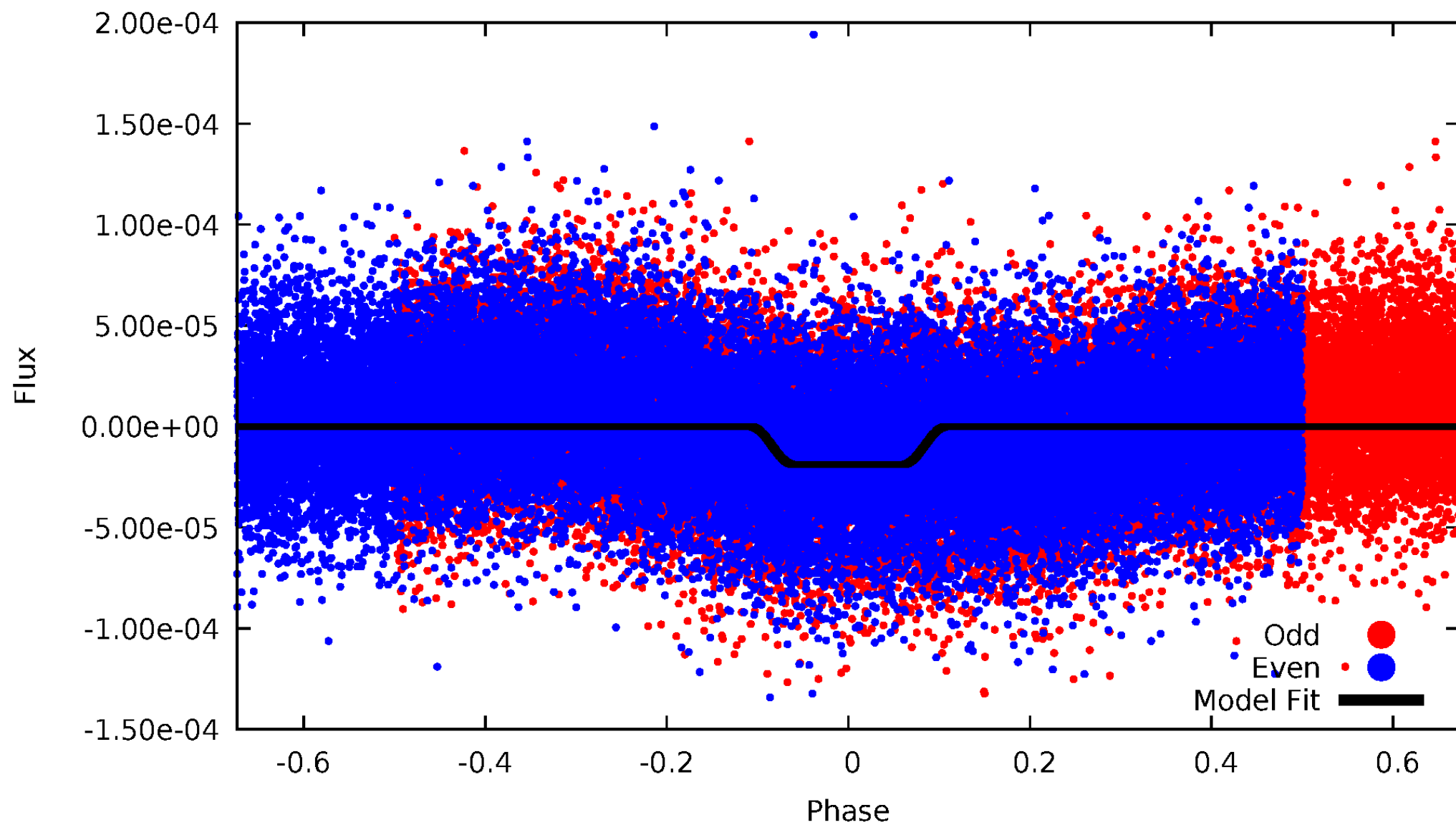
DV Odd/Even

TCE 006266219-02



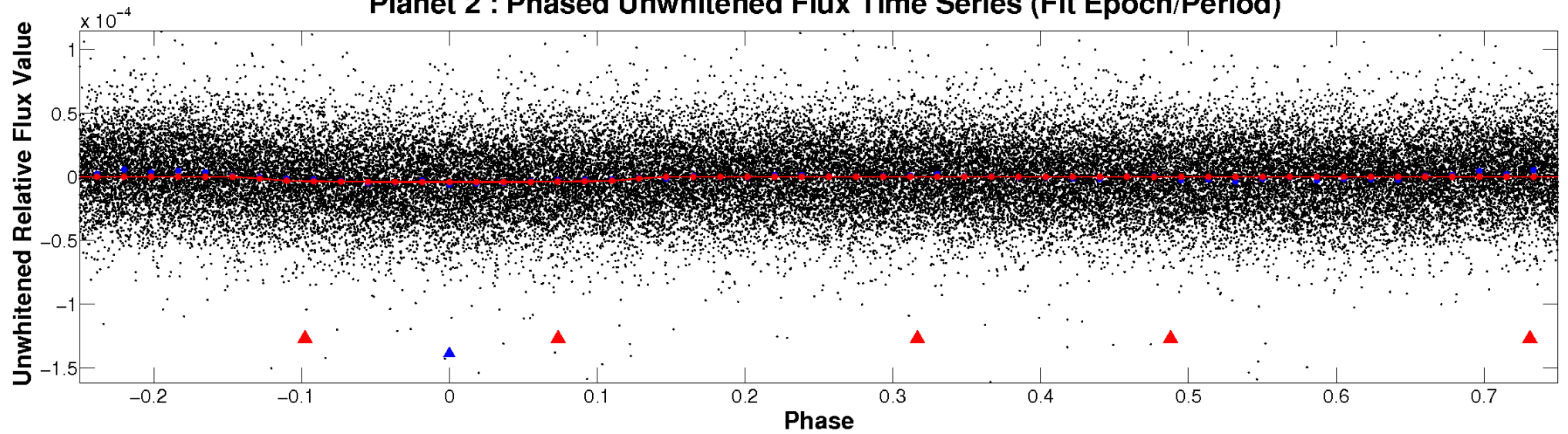
ALT Odd/Even

TCE 006266219-02

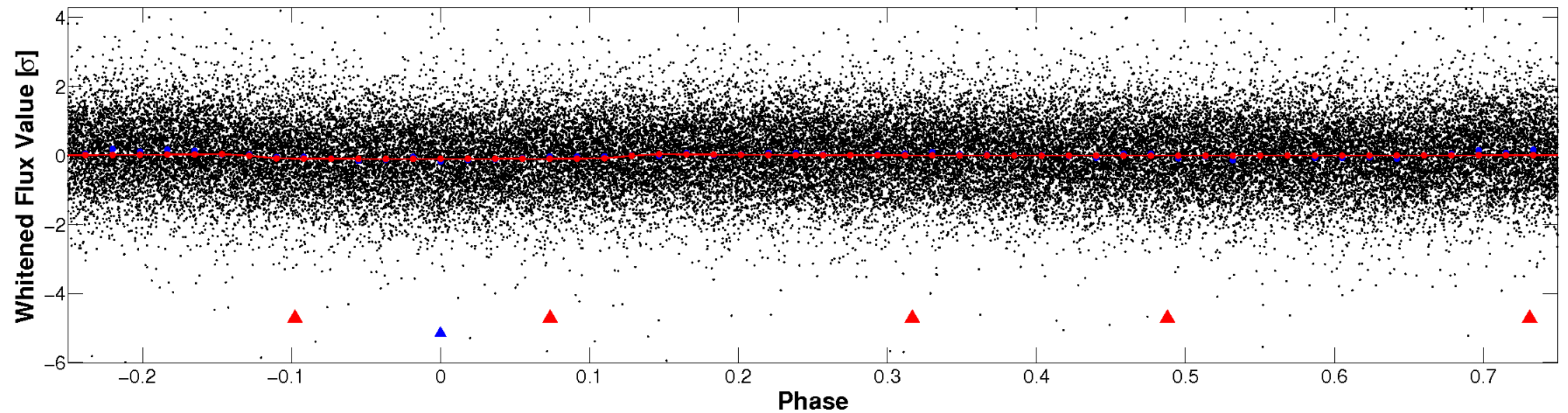


Non-Whitened Vs. Whitened Light Curve

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

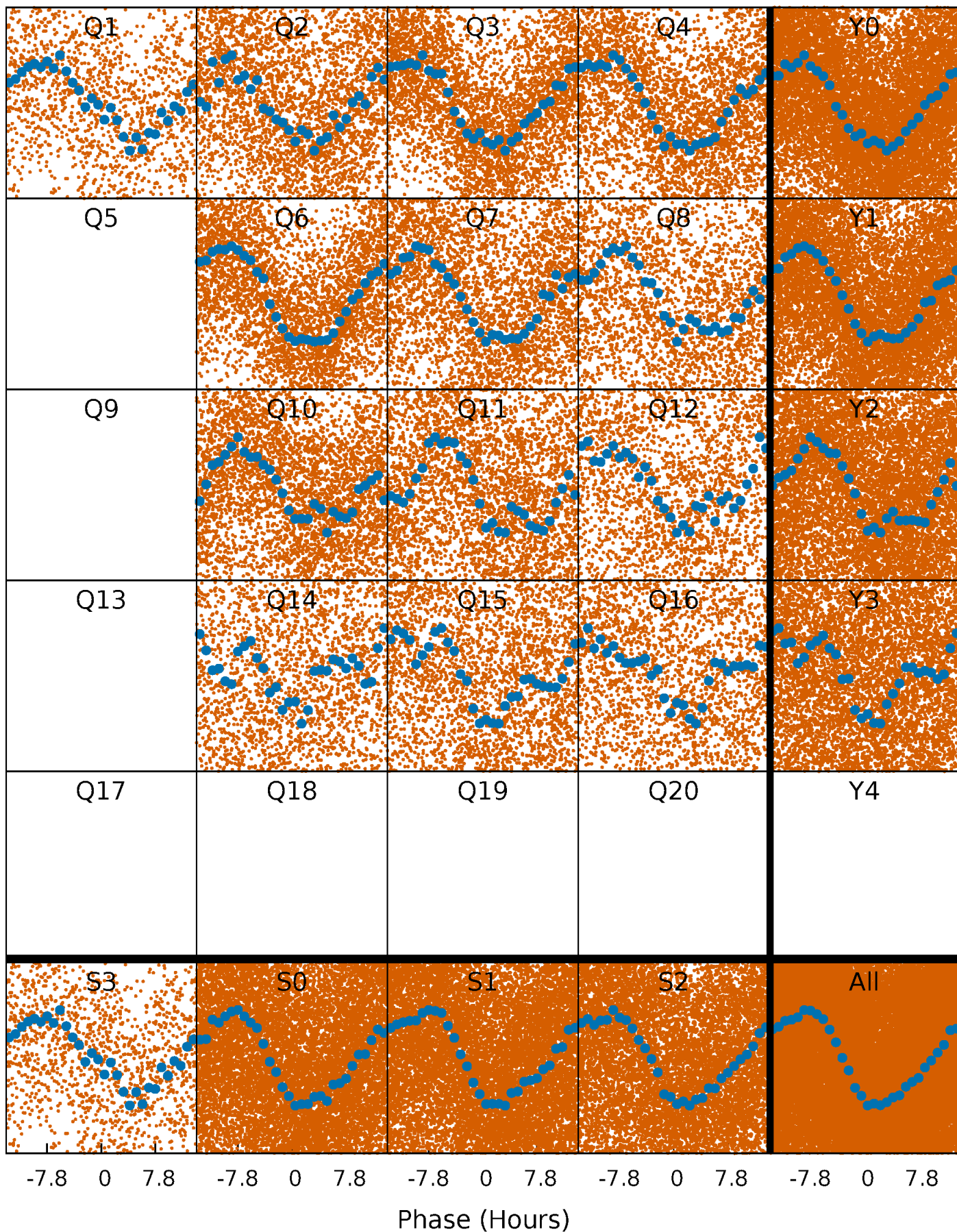


Planet 2 : Phased Whitened Flux Time Series (Fit Epoch/Period)



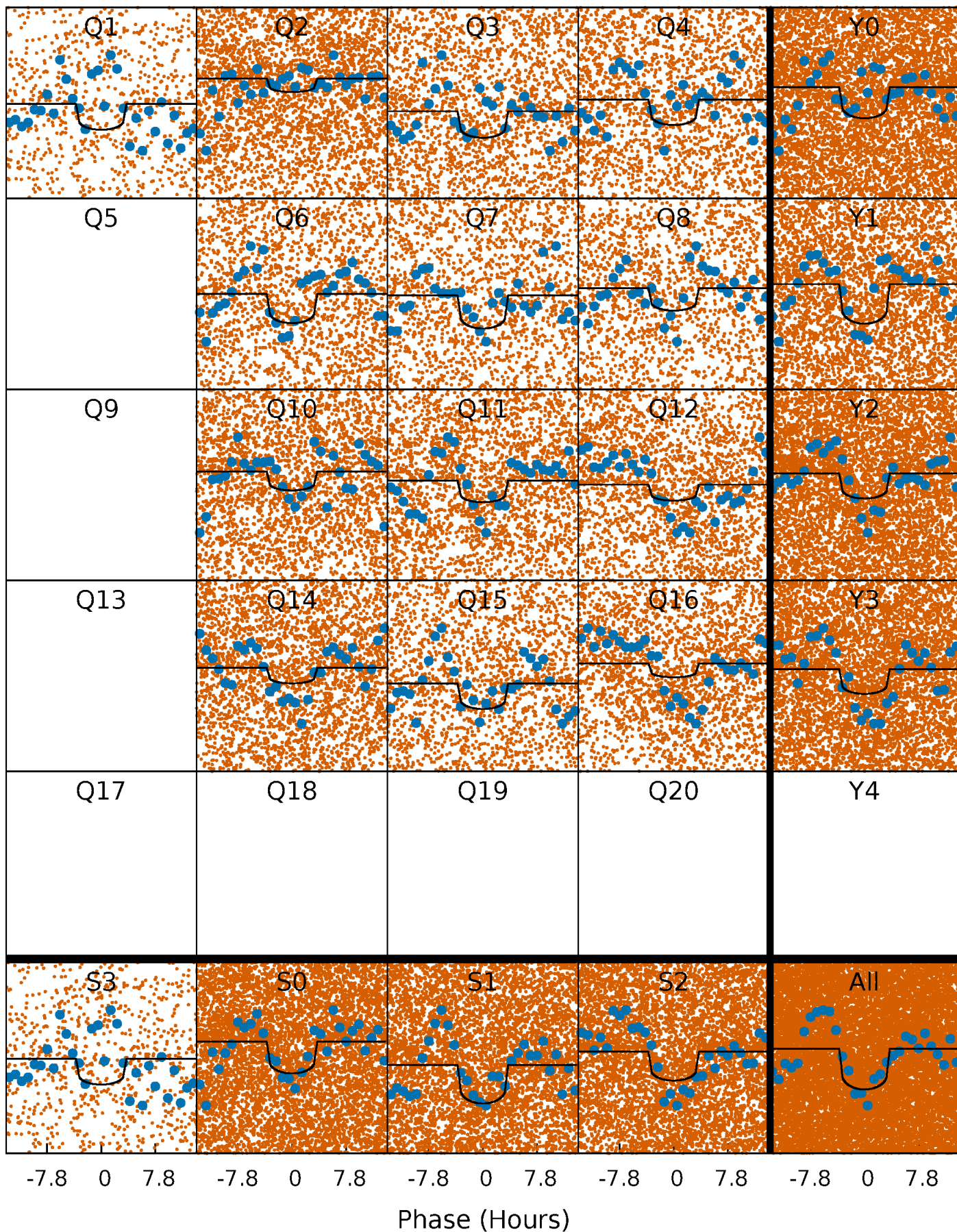
PDC Quarter-Phased Transit Curves

TCE 006266219-02 P= 1.114154 Days $T_0=131.650192$ (BKJD)



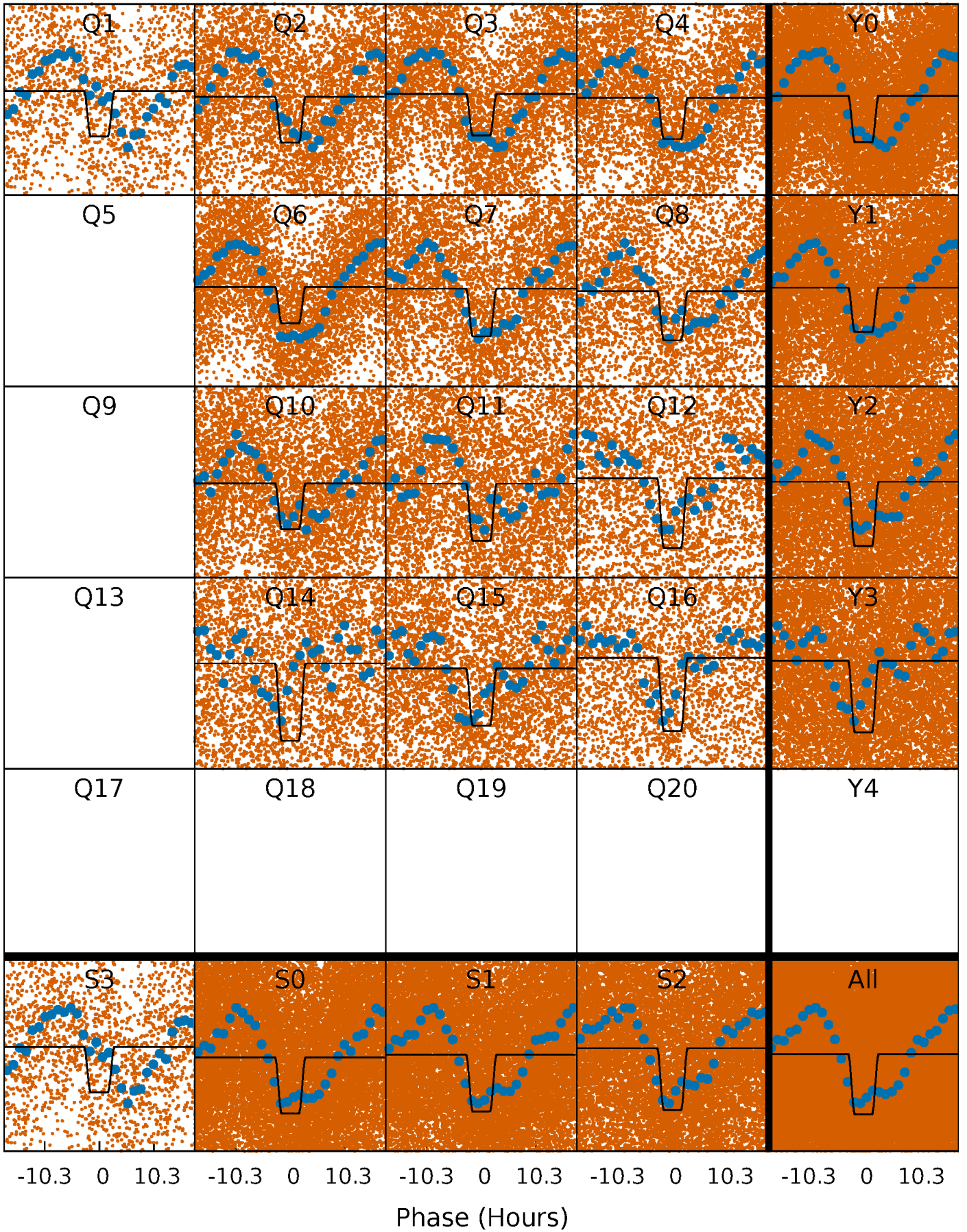
DV Quarter-Phased Transit Curves

TCE 006266219-02 P= 1.114154 Days $T_0=131.650192$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

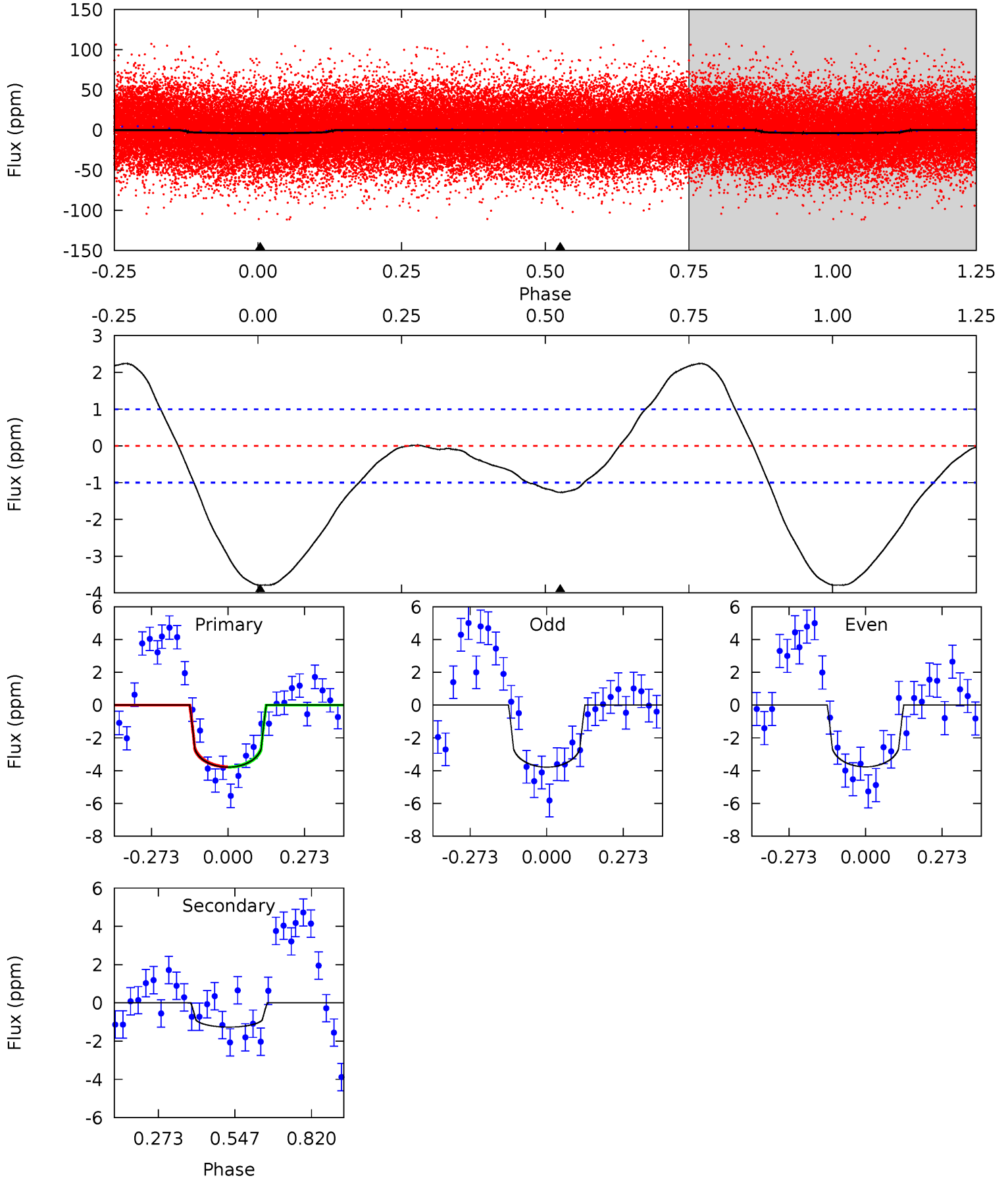
TCE 006266219-02 P= 1.114311 Days $T_0=131.610034$ (BKJD)



DV Model-Shift Uniqueness Test

006266219-02, P = 1.114154 Days, E = 130.536038 Days

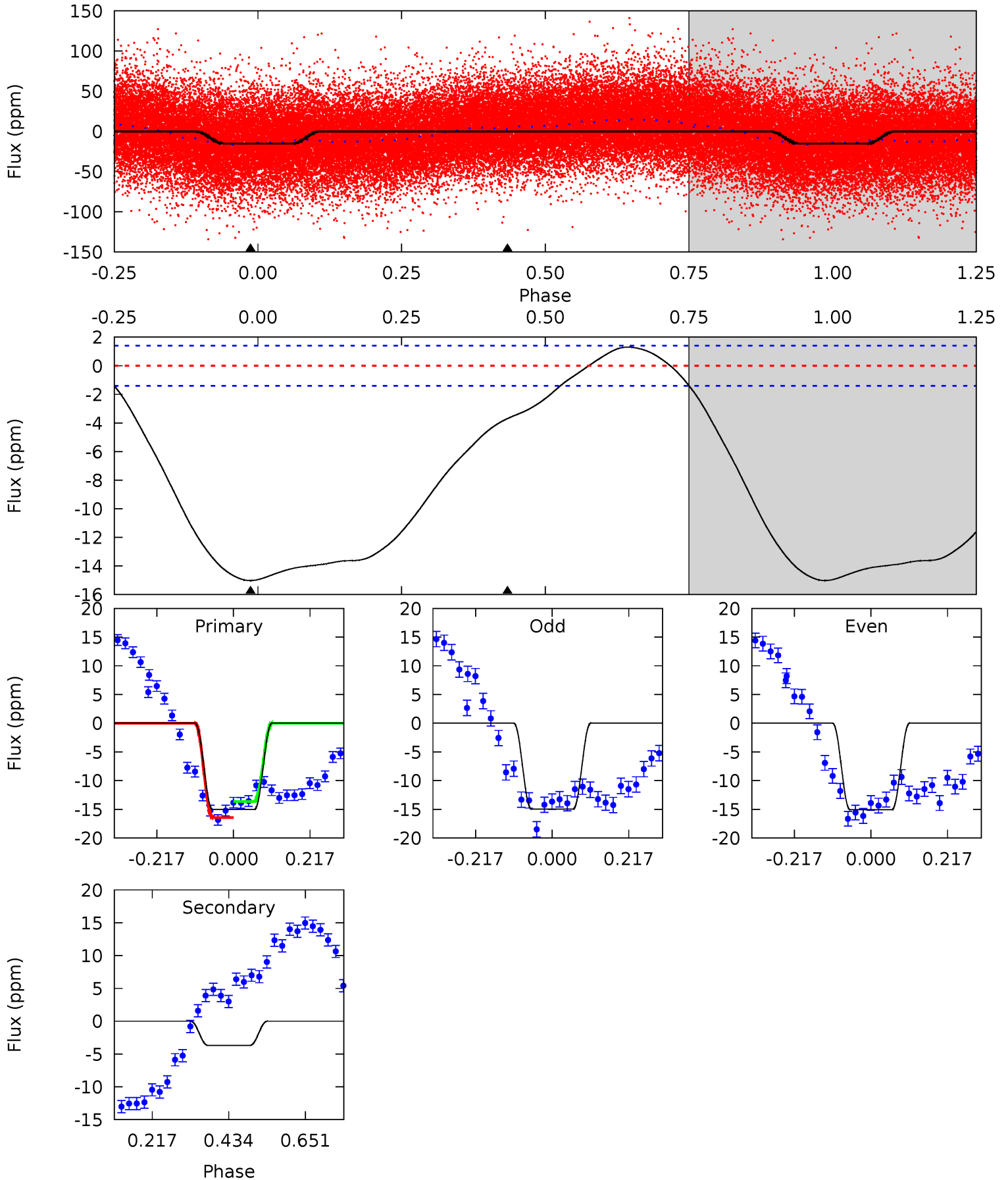
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
16.5	5.52	0	0	4.35	1.10	4.45	16.5	16.5	5.52	5.52	0.04	1.06	0.37	0.04



Alt Model-Shift Uniqueness Test

006266219-02, P = 1.114311 Days, E = 130.495723 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
47.0	11.6	0	0	4.40	1.23	12.6	47.0	47.0	11.6	11.6	0.19	1.01	0.08	4.64



Stellar Parameters For KIC 006266219

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	7996^{+225}_{-338}	$4.048^{+0.171}_{-0.140}$	$-0.080^{+0.200}_{-0.400}$	$2.096^{+0.487}_{-0.536}$	$1.789^{+0.133}_{-0.332}$	$0.274^{+0.260}_{-0.115}$
	+3%/-4%	+4%/-3%	+250%/-500%	+23%/-26%	+7%/-19%	+95%/-42%
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 006266219-02 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-1 ± 0	$0.45^{+0.08}_{-0.08}$	4459^{+280}_{-315}	5562^{+520}_{-463}	$2.110^{+0.995}_{-0.701}$
Alt.	-4 ± 0	$0.97^{+0.15}_{-0.13}$	4436^{+298}_{-325}	4937^{+241}_{-236}	$1.355^{+0.429}_{-0.329}$

T_{max} = Theoretical Maximum Planetary Temperature

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

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

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

DV Centroid Data

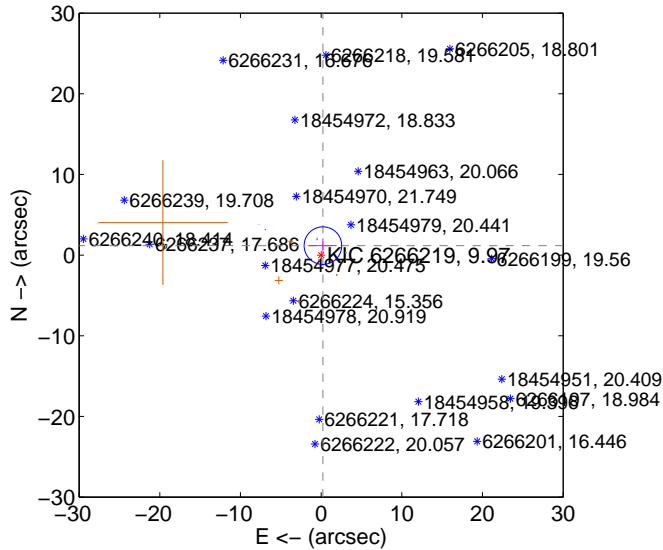
Supplemental centroid analysis for 006266219-02. **Kepler magnitude: 9.97.** Transit SNR 10.72

There are 3 quarters with good PRF difference image offsets

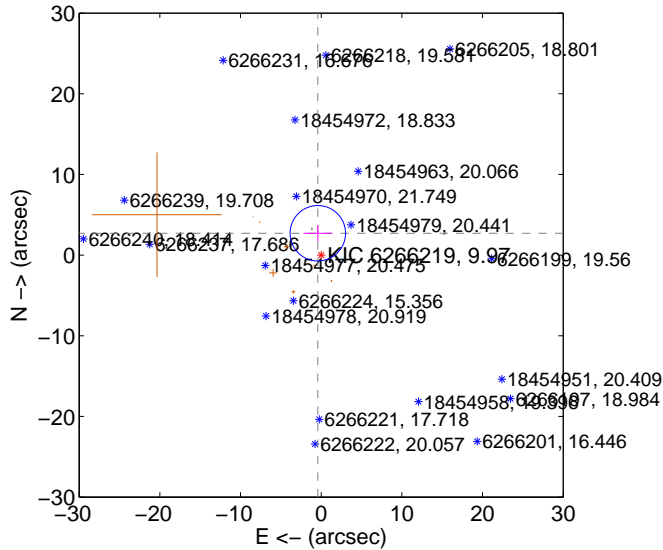
The direct PRF centroid is offset from the target star catalog position by about 0.94 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	1.195 ± 0.776	1.54	-0.223 ± 1.697	1.175 ± 0.901
PRF-fit source offset from KIC position	2.740 ± 1.145	2.39	0.418 ± 1.783	2.708 ± 0.983
photometric centroid source offset	—	—	—	—

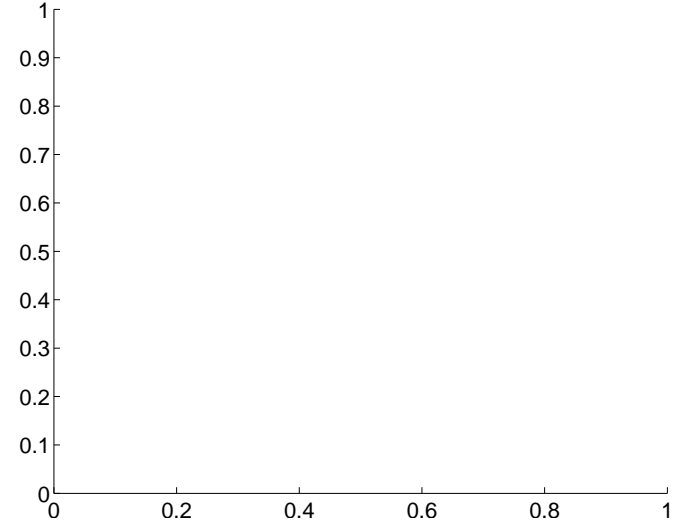
offset from difference PRF-fit to OOT PRF-fit



offset from difference PRF-fit to KIC position

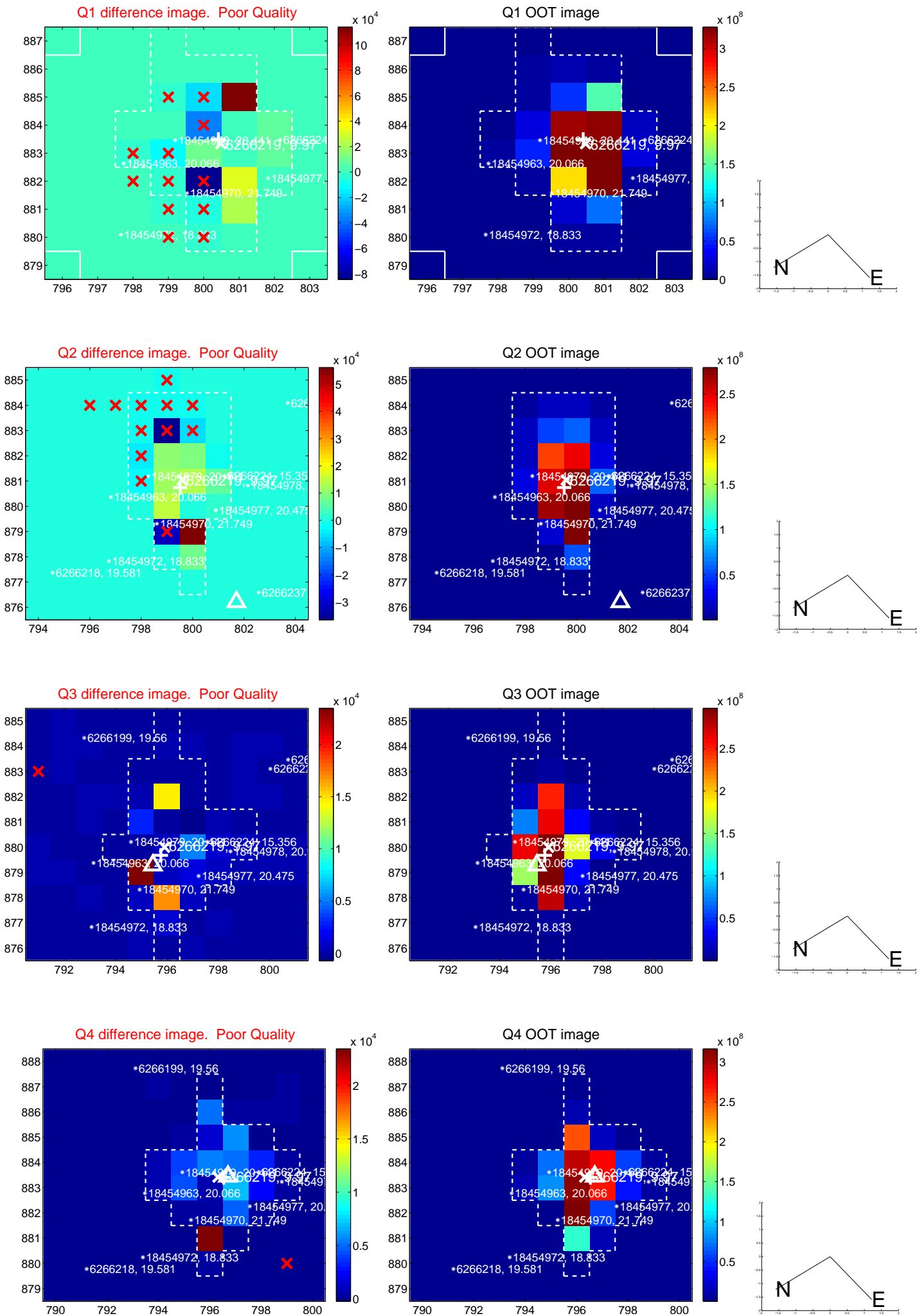


There are no photometric centroids

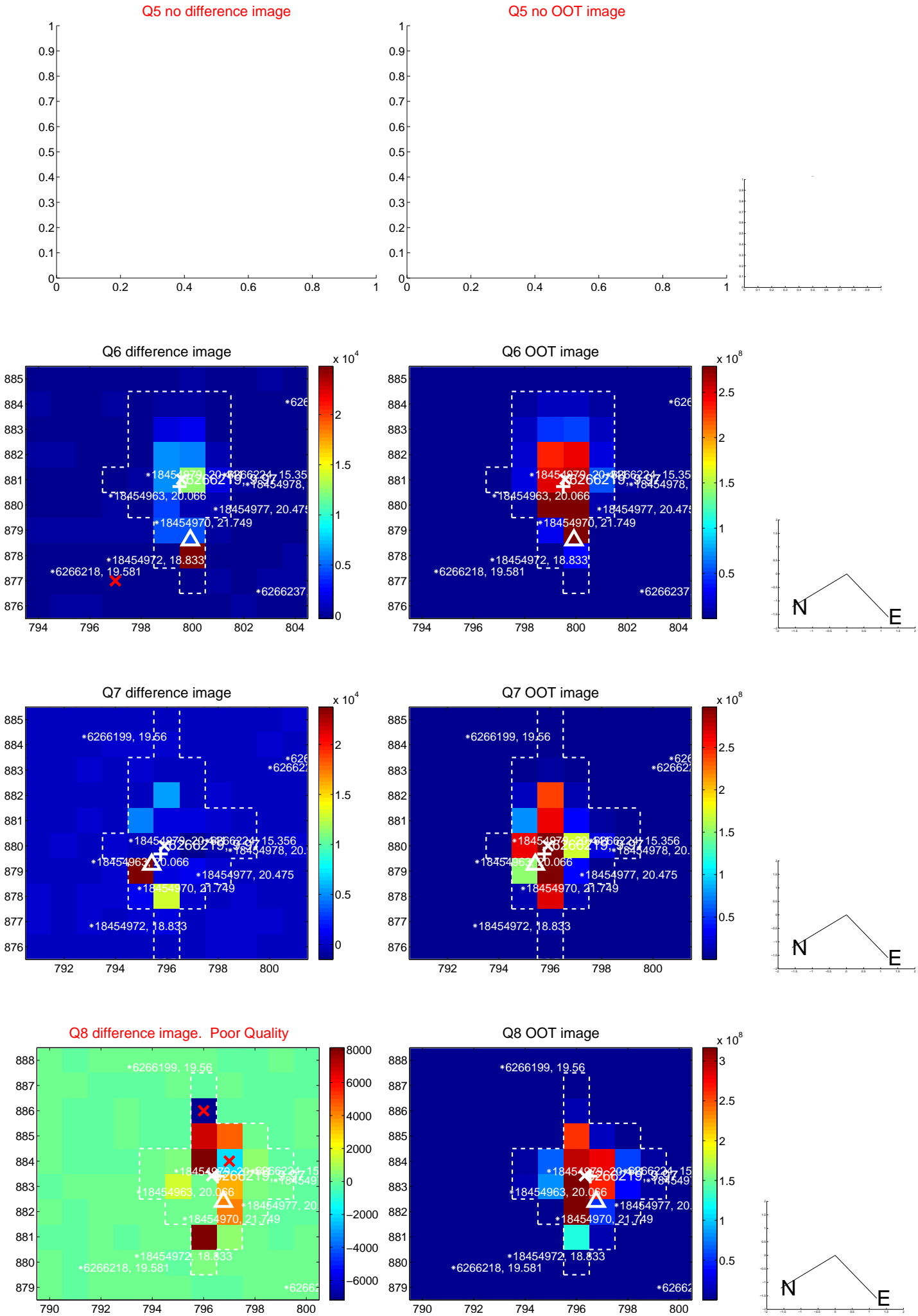


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets;** magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

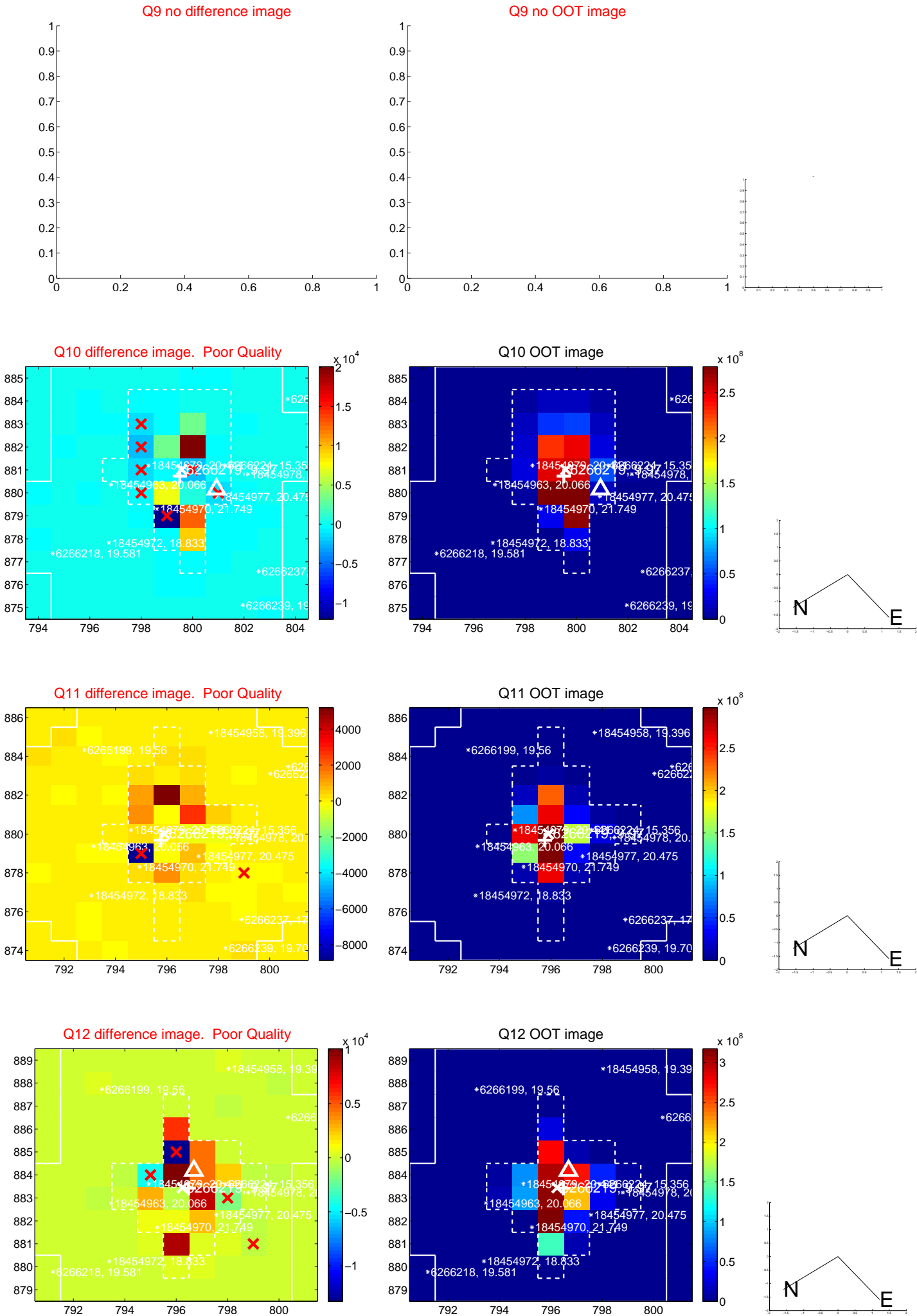
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



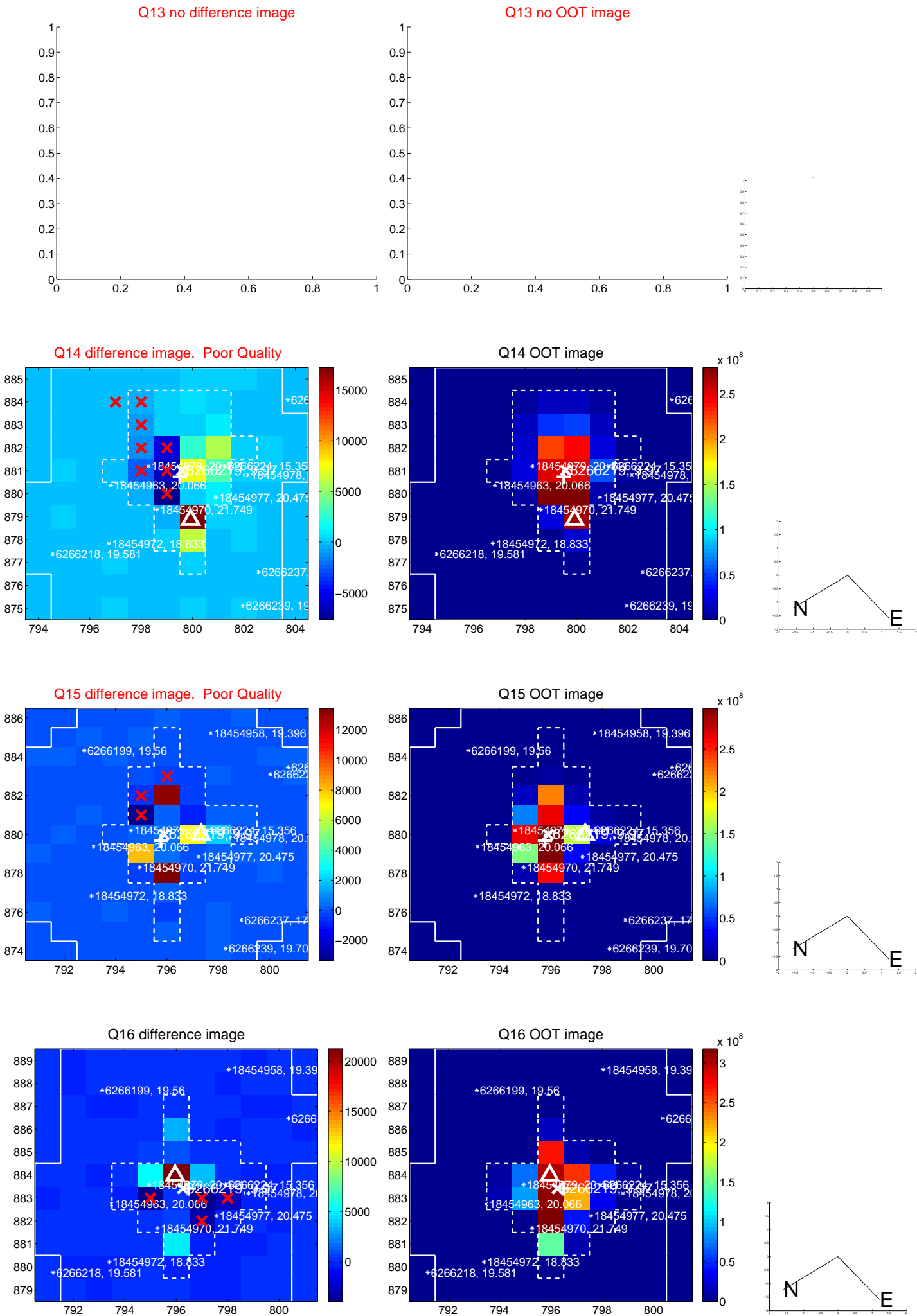
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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folded centroid time series figure for this object.

UKIRT Image

Declination

