

KIC 005296692

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})
005296692-01	OBS	No	0.521755	131.590831	145.5	1.394	10.6	9.7	1.58	6997	2.04	27027.57
005296692-02	OBS	No	187.578289	260.128968	16038.5	3.647	23.2	12.9	1.58	6997	34.69	10.57
005296692-03	OBS	No	373.981826	279.640681	1723.3	4.500	24.1	-1.0	1.58	6997	6.62	4.21

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
005296692-01	OBS	FP	0.00	1	0	1	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—CENT_KIC_POS—HALO_GHOST
005296692-02	OBS	FP	0.00	1	0	1	0	TRANS_GAPPED—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—INCONSISTENT_TRANS—CENT_KIC_POS—HALO_GHOST
005296692-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_CHASES_MARSHALL—LPP_DV—LPP_ALT—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—INCONSISTENT_TRANS—CENT_NOFITS

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

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

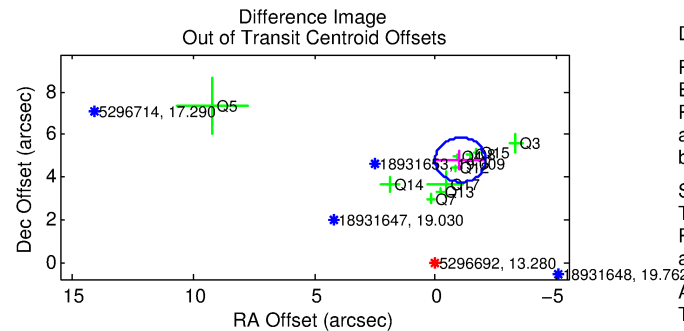
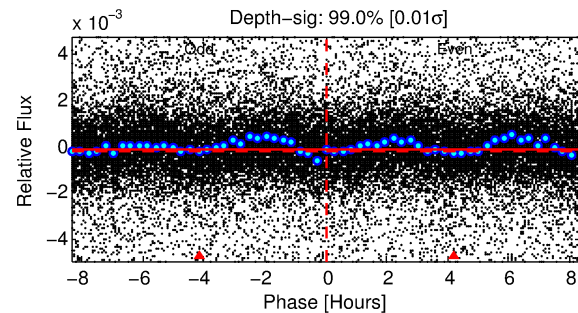
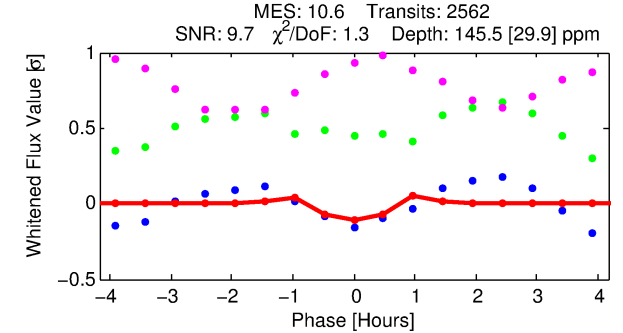
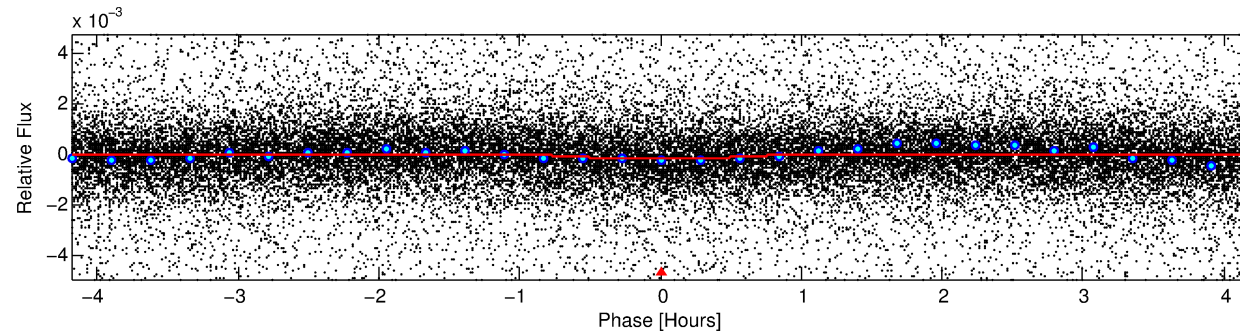
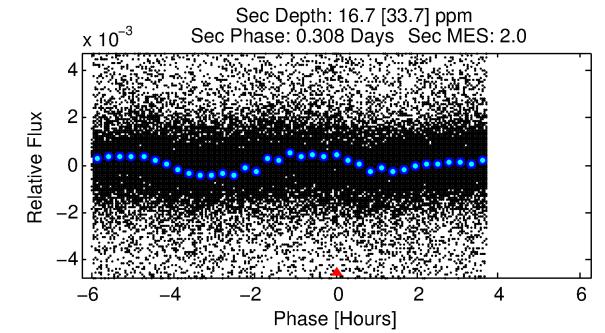
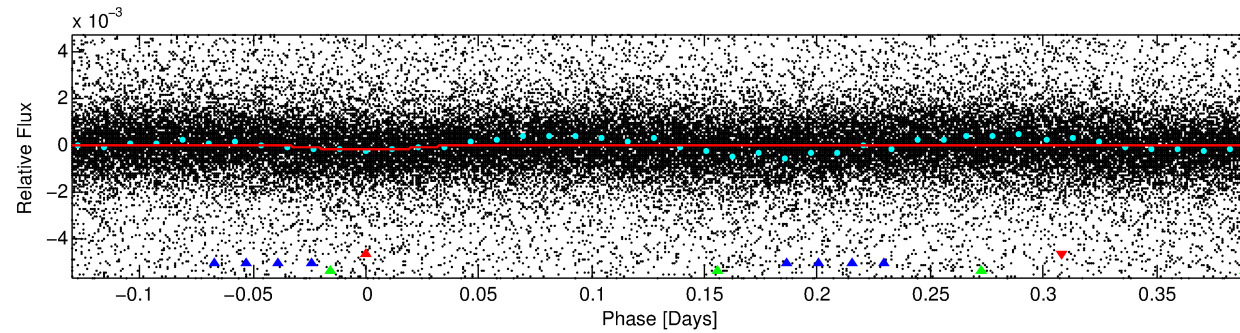
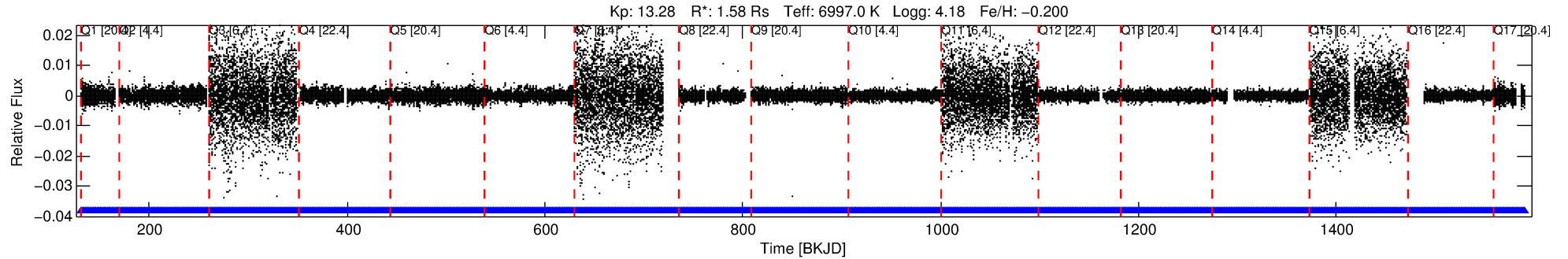
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 005296692-01

No Significant Match Found

DV One-Page Summary

KIC: 5296692 Candidate: 1 of 3 Period: 0.522 d



DV Fit Results:

Period = 0.52176 [0.00002] d
Epoch = 131.5908 [0.0018] BKJD
Rp/R* = 0.0118 [0.0041]
a/R* = 2.28 [3.60]
b = 0.68 [1.54]
Seff = 27027.57 [10760.24]
Teq = 3269 [325] K
Rp = 2.04 [0.95] Re
a = 0.0141 [0.0035] AU
Ag = 0.44 [0.94] [-0.60σ]
Teff = 4111 [2200] K [0.38σ]

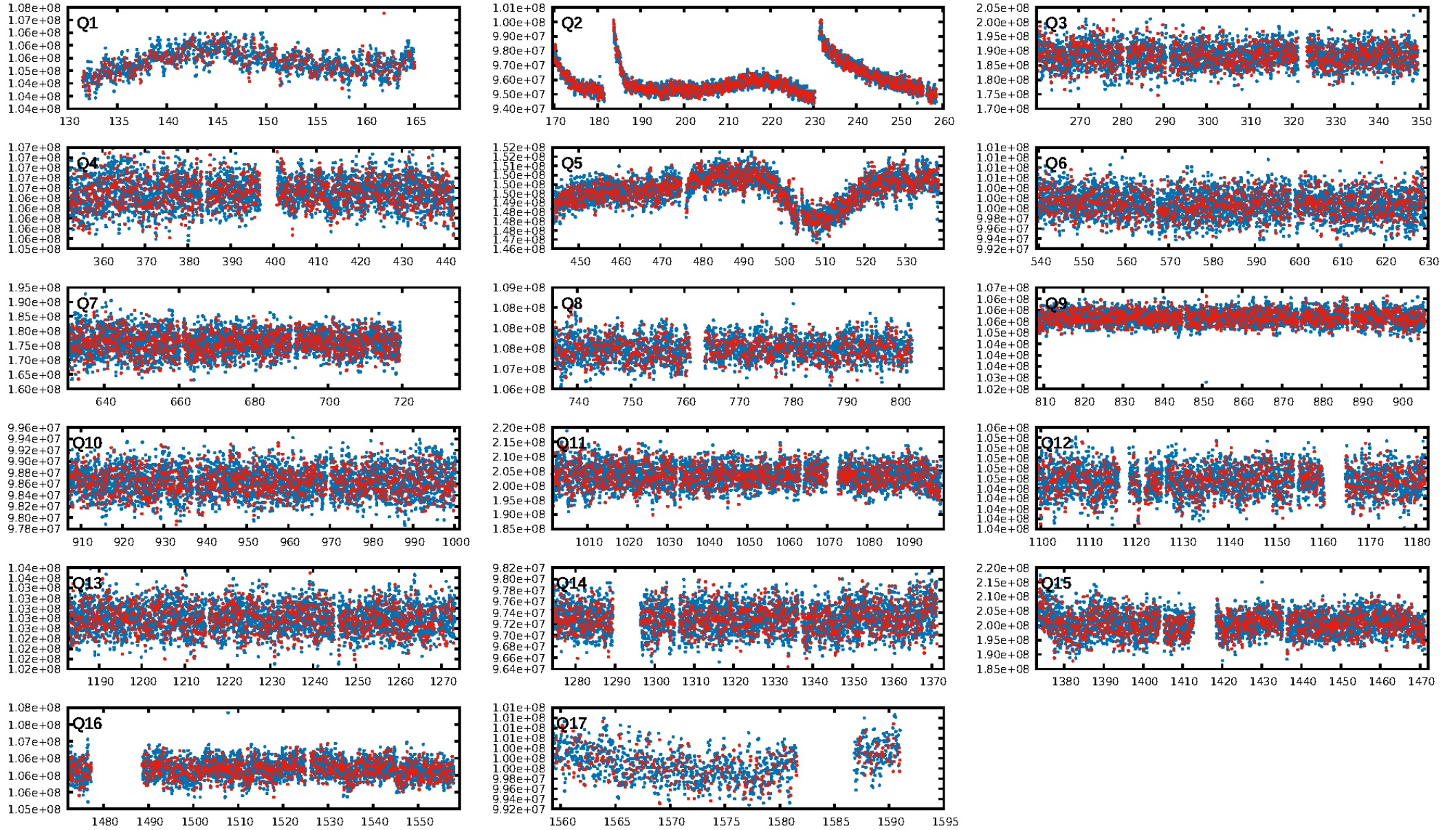
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: 100.0% [1149.84σ]
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [2446/2446]
GhostDiagnostic-chr: -0.1019
Centroid-sig: N/A
Centroid-so: 2.483 arcsec [12.13σ]
OotOffset-rm: 4.917 arcsec [14.24σ]
KicOffset-rm: 0.260 arcsec [0.35σ]
OotOffset-st: 1/3/3/3 [10]
KicOffset-st: 1/3/3/3 [10]
DiffImageQuality-fgm: 0.70 [7/10]
DiffImageOverlap-fno: 1.00 [17/17]

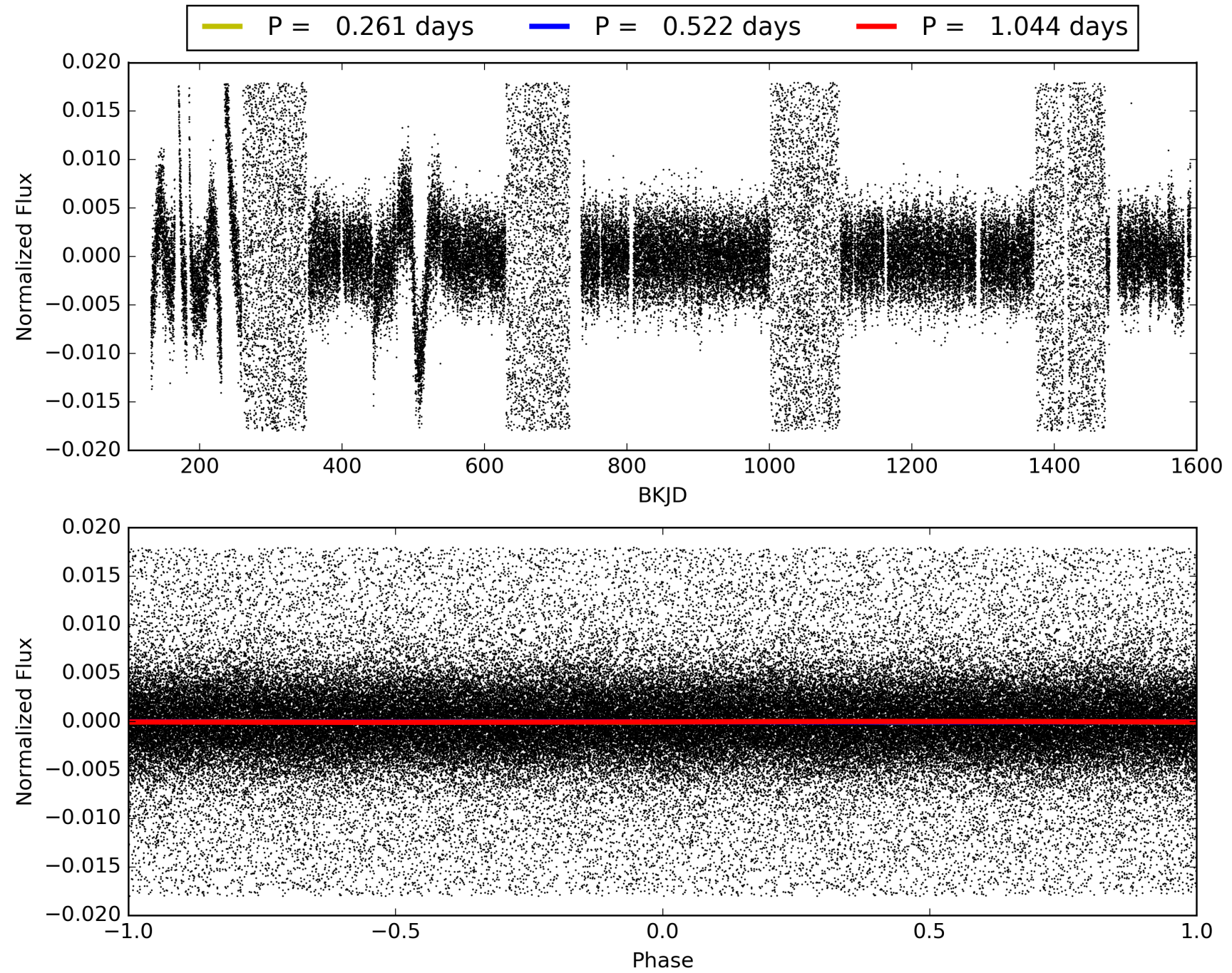
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 16:41:43 Z

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

TCE 005296692-01, PDC Light Curves

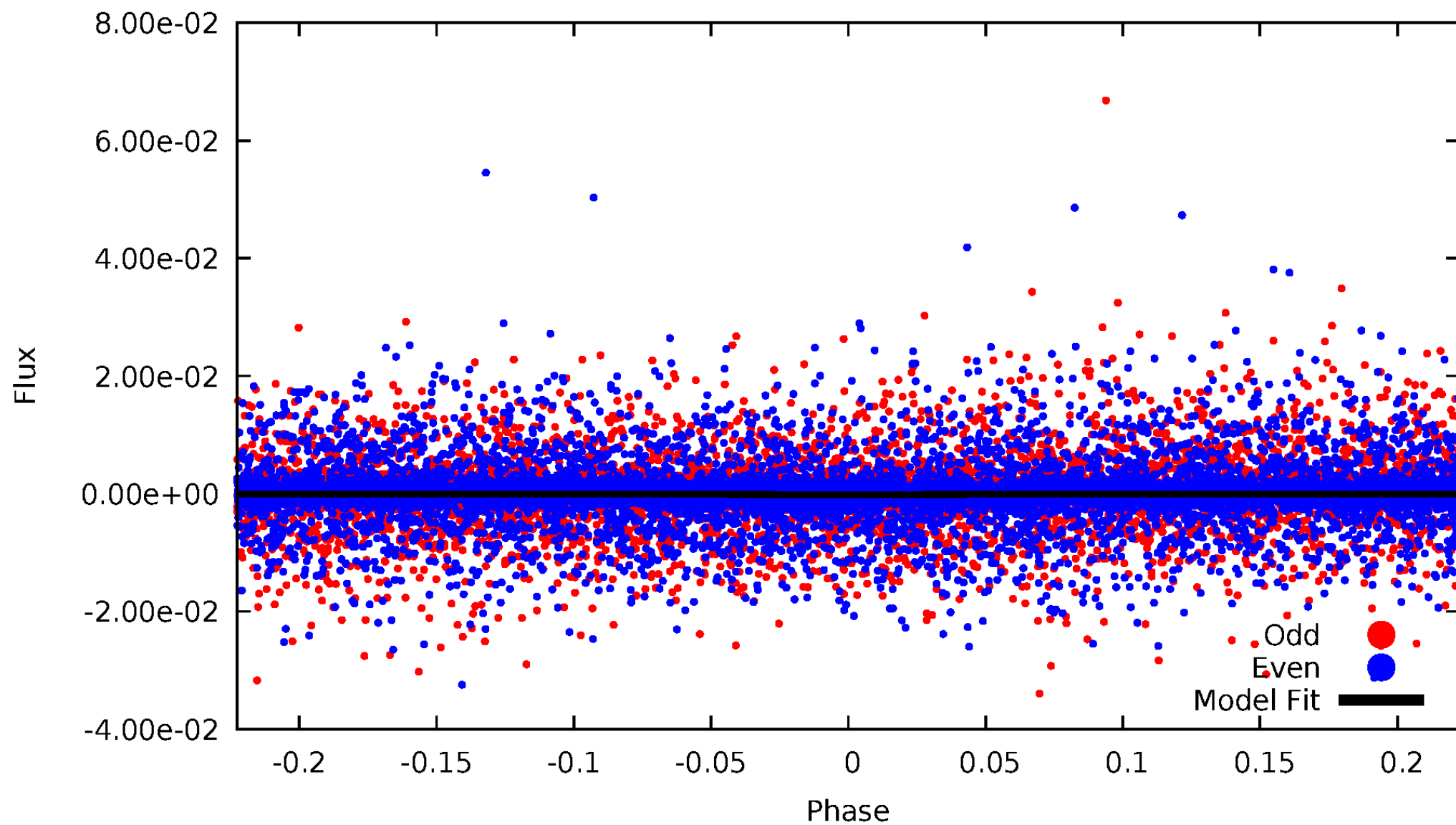


TCE 005296692-01



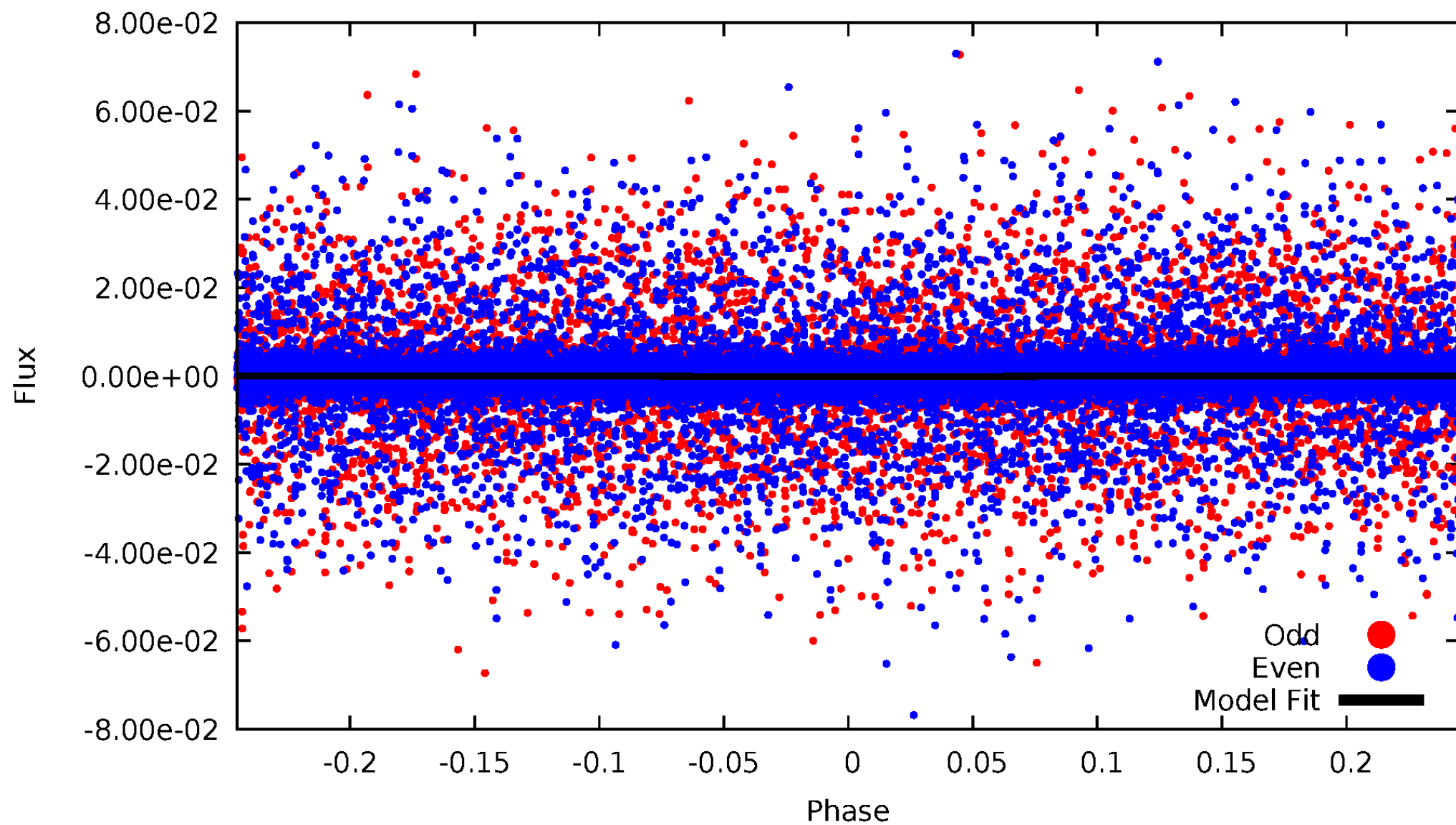
DV Odd/Even

TCE 005296692-01



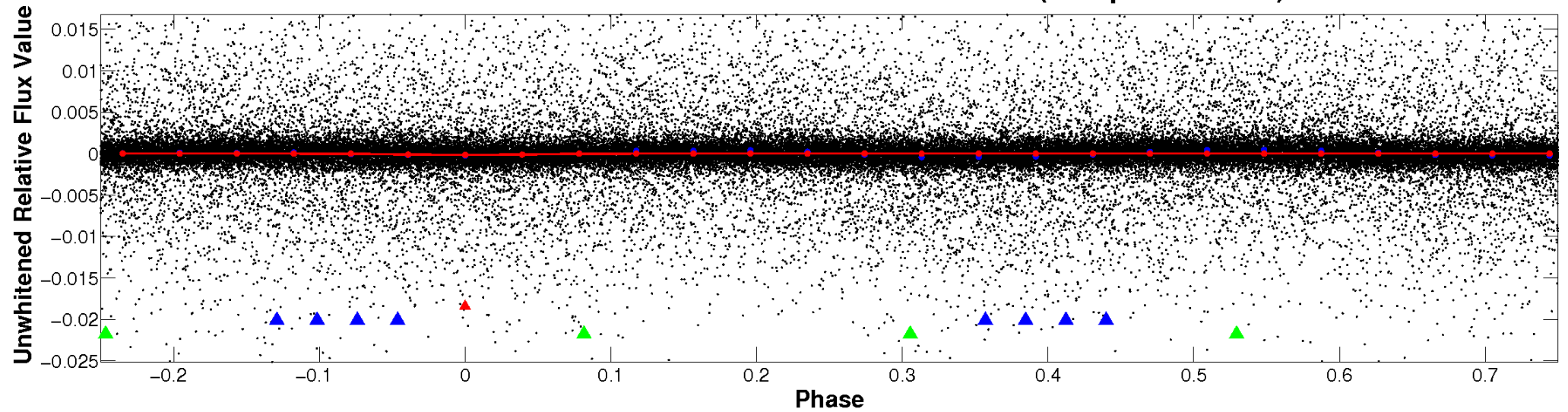
ALT Odd/Even

TCE 005296692-01

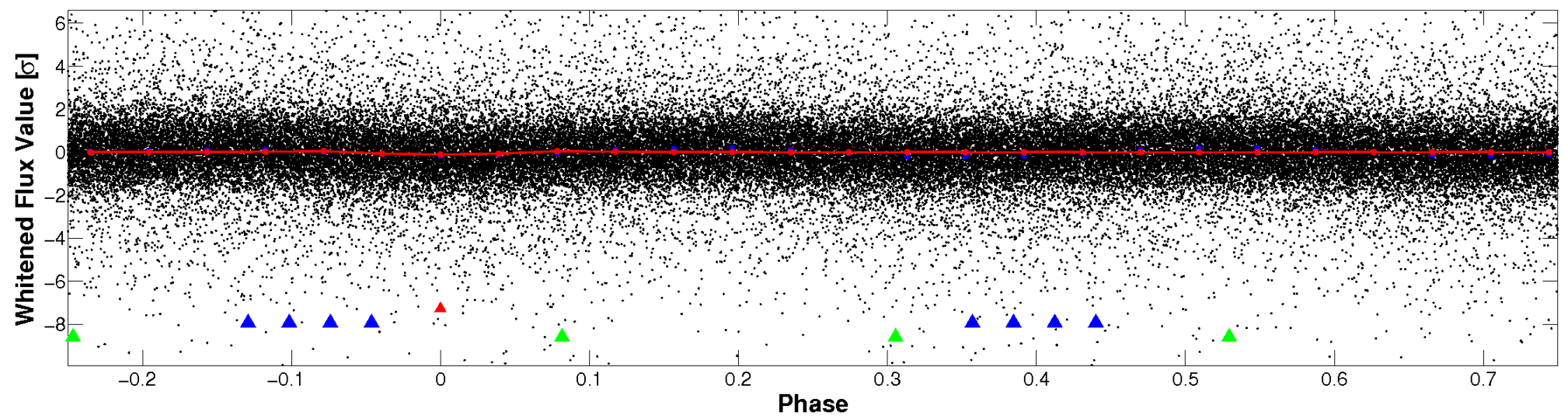


Non-Whitened Vs. Whitened Light Curve

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

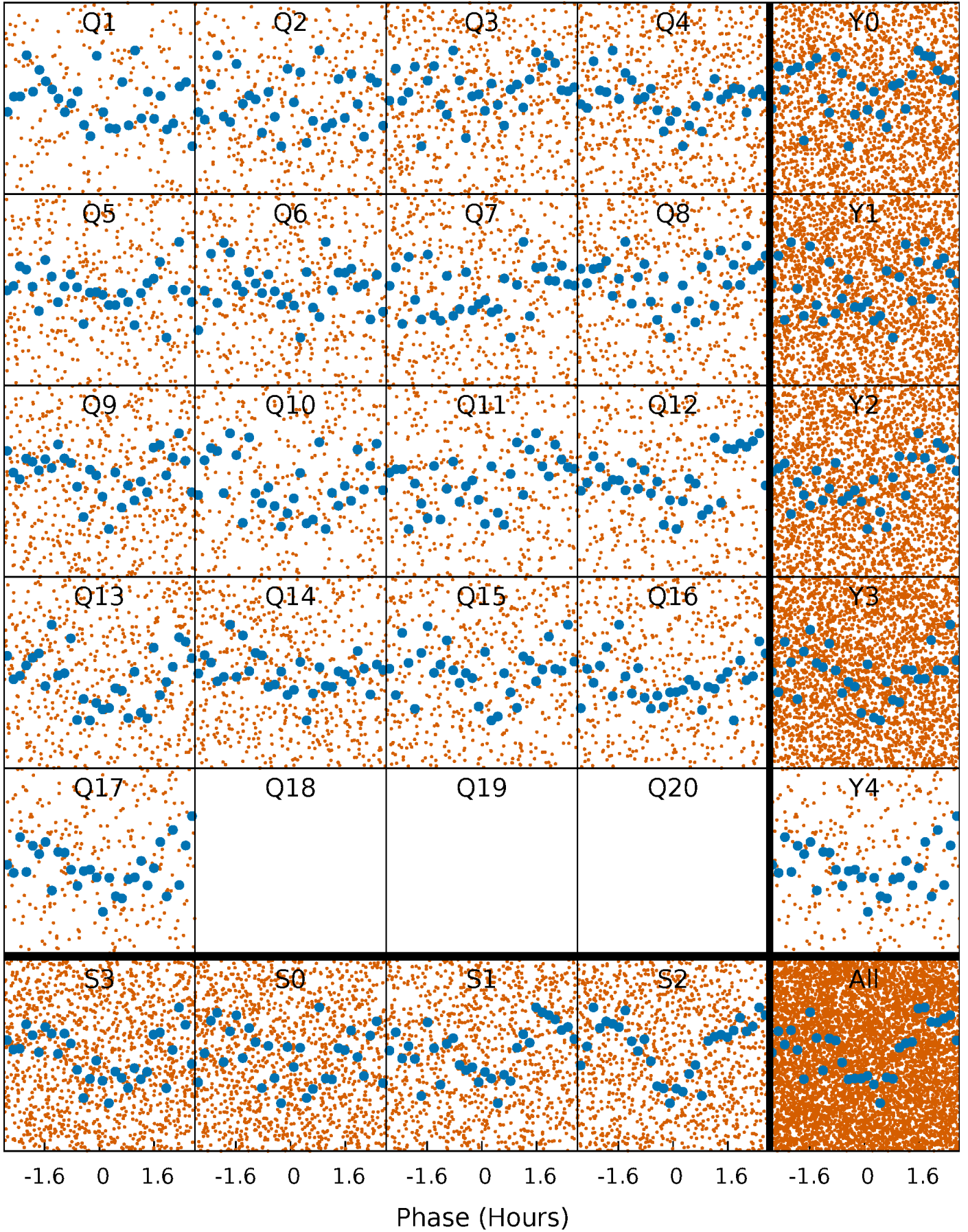


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



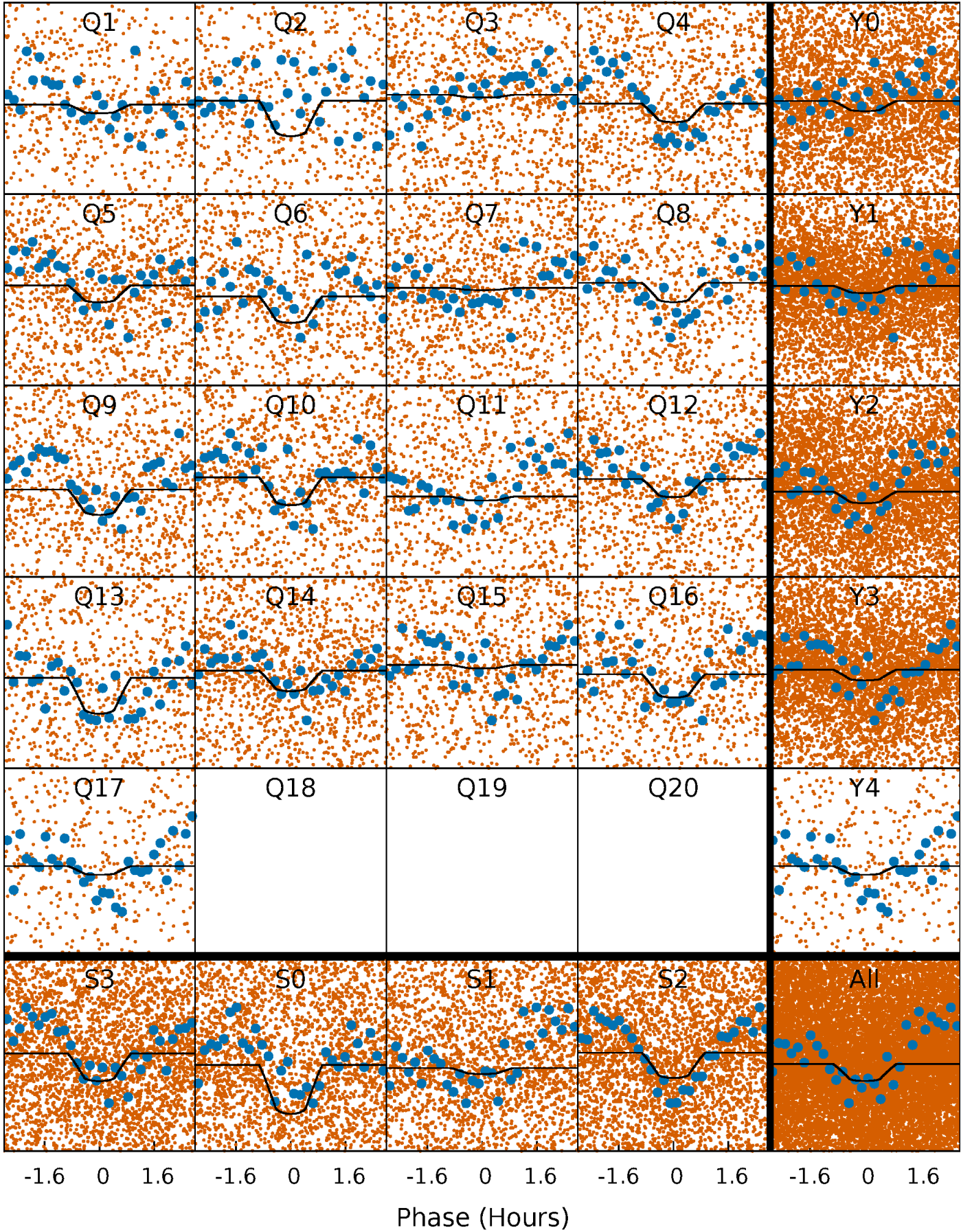
PDC Quarter-Phased Transit Curves

TCE 005296692-01 P= 0.521755 Days $T_0=131.590831$ (BKJD)



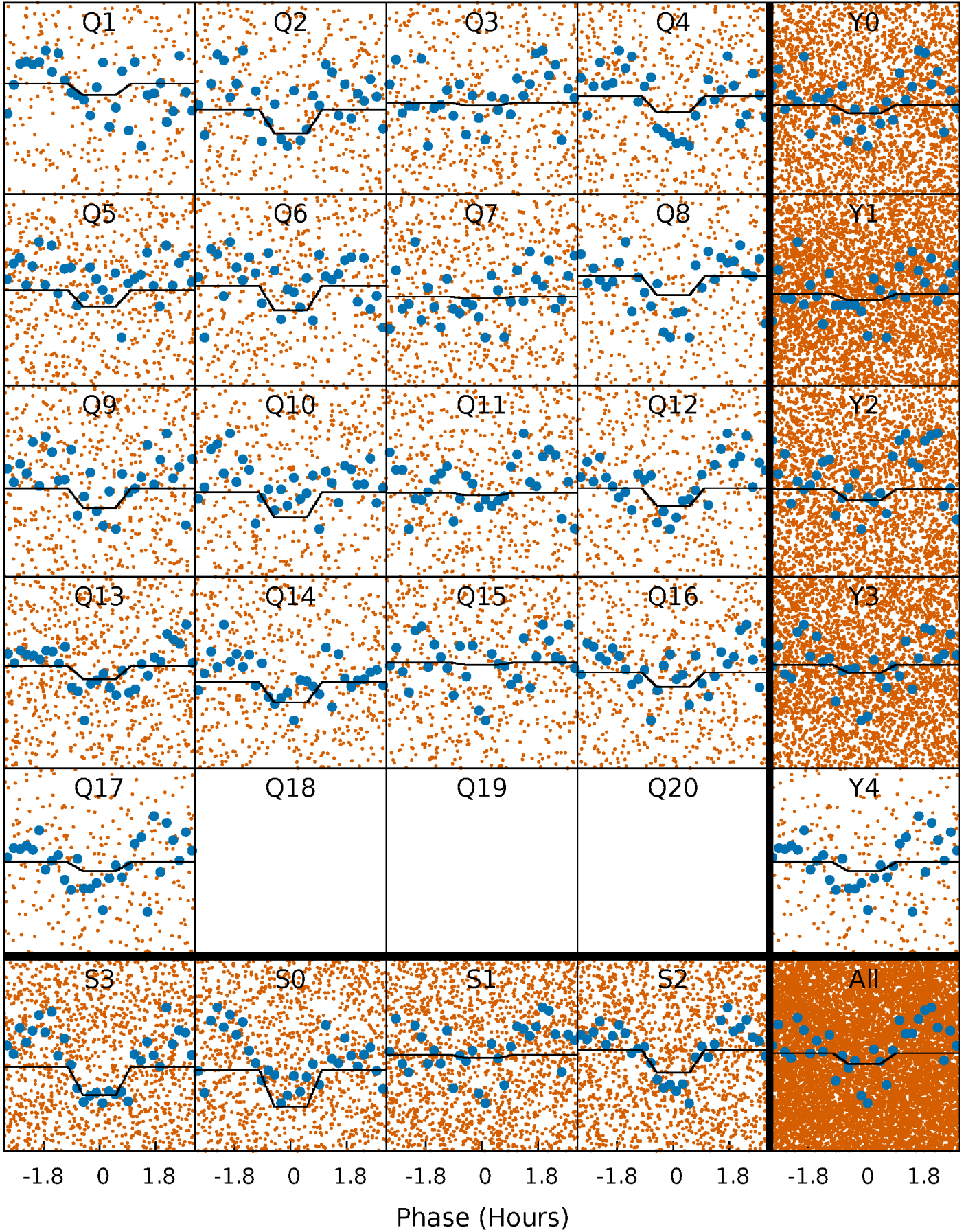
DV Quarter-Phased Transit Curves

TCE 005296692-01 P= 0.521755 Days $T_0=131.590831$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

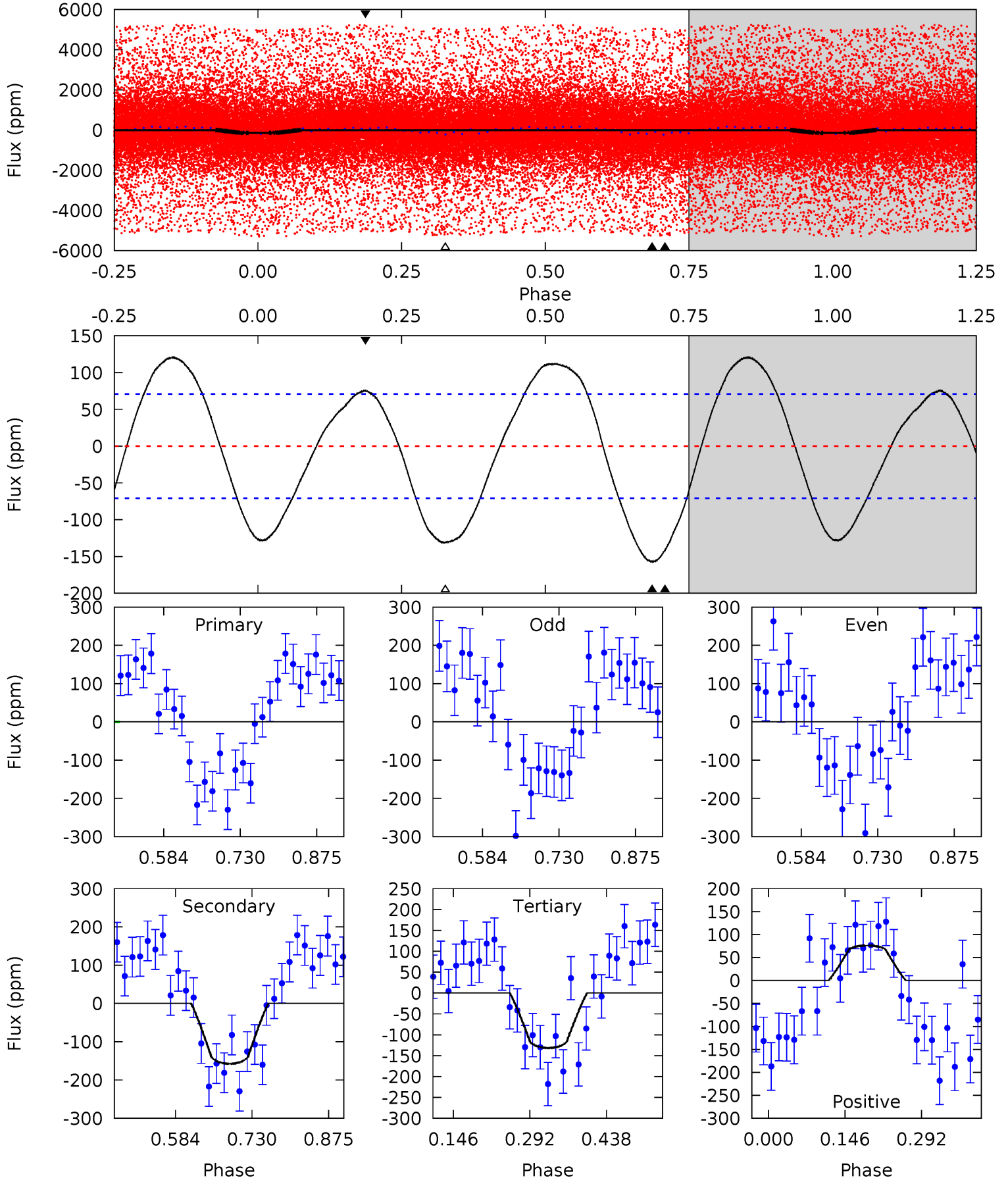
TCE 005296692-01 P= 0.521762 Days $T_0=131.589065$ (BKJD)



DV Model-Shift Uniqueness Test

005296692-01, P = 0.521755 Days, E = 131.069076 Days

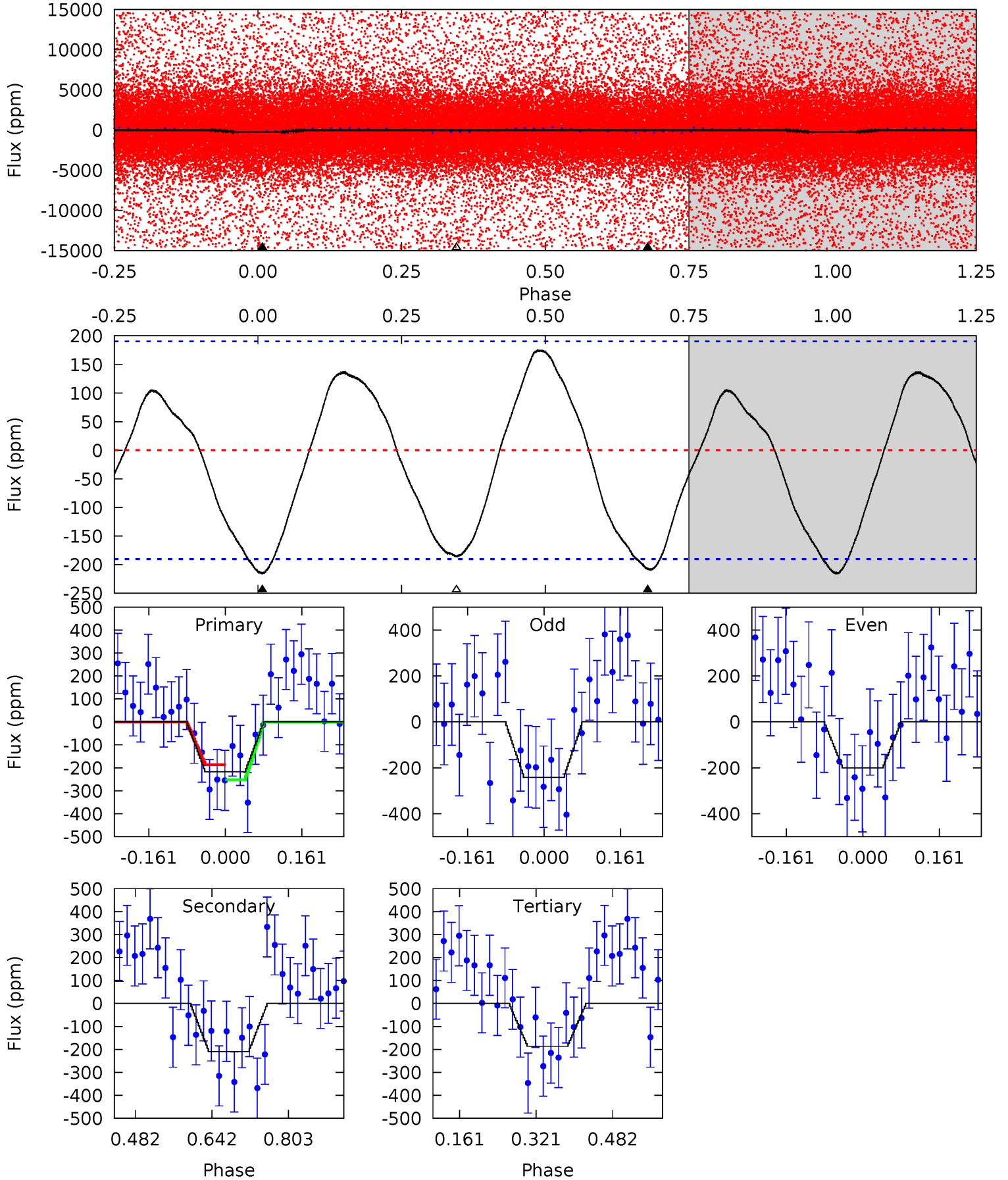
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
8.98	9.98	8.33	4.83	4.48	1.45	5.18	0.64	4.15	1.65	5.15	1.41	1.32	0.43	1.64



Alt Model-Shift Uniqueness Test

005296692-01, P = 0.521762 Days, E = 131.067303 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
5.09	4.91	4.38	0	4.46	1.40	2.84	0.70	5.09	0.52	4.91	0.50	1.53	0.45	0.78



Stellar Parameters For KIC 005296692

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6997^{+225}_{-338}	$4.176^{+0.148}_{-0.181}$	$-0.200^{+0.250}_{-0.350}$	$1.577^{+0.496}_{-0.330}$	$1.369^{+0.195}_{-0.239}$	$0.491^{+0.381}_{-0.249}$
	+3%/-5%	+4%/-4%	+125%/-175%	+31%/-21%	+14%/-17%	+78%/-51%
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 005296692-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-158 ± 16	$2.01^{+0.80}_{-0.69}$	4562^{+361}_{-327}	7097^{+2166}_{-1315}	$4.260^{+5.520}_{-2.169}$
Alt.	-209 ± 43	$2.16^{+0.73}_{-0.75}$	4569^{+340}_{-322}	7301^{+2390}_{-1150}	$4.835^{+6.322}_{-2.340}$

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

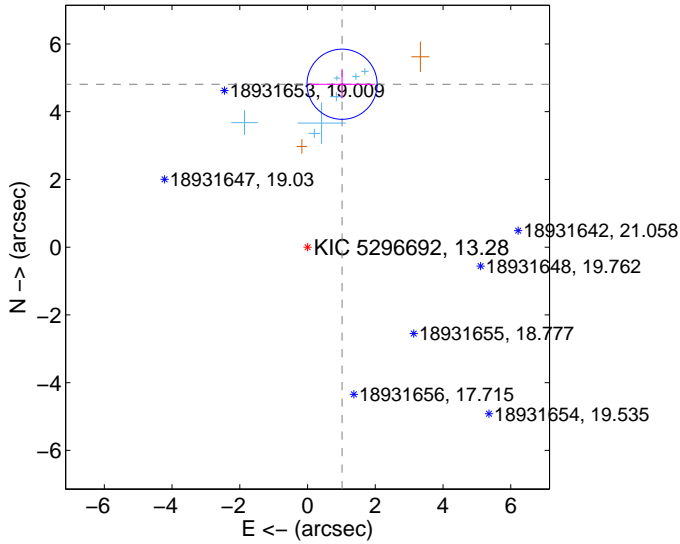
Supplemental centroid analysis for 005296692-01. Kepler magnitude: 13.28. Transit SNR 9.70

There are 7 quarters with good PRF difference image offsets

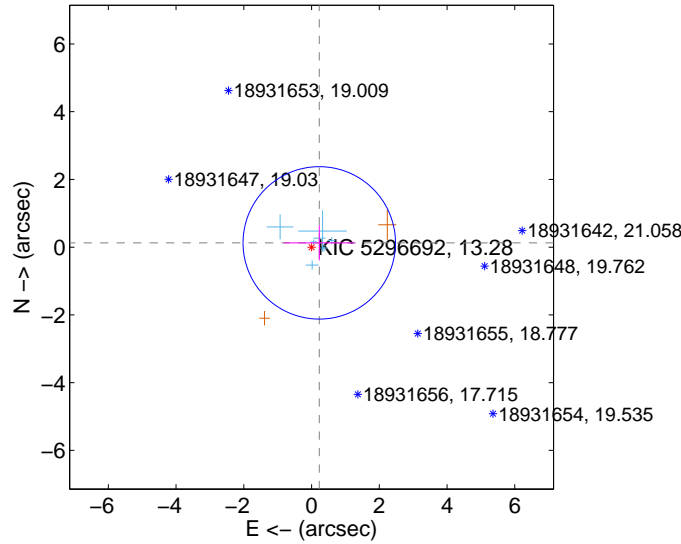
The OOT PRF centroid is offset from the target star catalog position by about 3.19 arcsec so the offset from difference PRF-fit to OOT-fit may be invalid.

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	4.917 ± 0.345	14.24	-1.019 ± 0.966	4.811 ± 0.417
PRF-fit source offset from KIC position	0.260 ± 0.750	0.35	-0.228 ± 1.047	0.127 ± 0.516
photometric centroid source offset	2.48 ± 0.20	12.13	0.98 ± 0.18	-2.28 ± 0.21

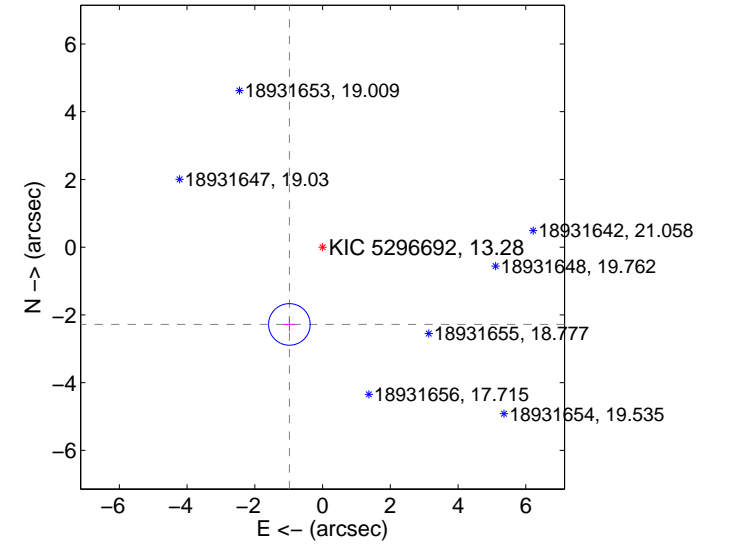
offset from difference PRF-fit to OOT PRF-fit



offset from difference PRF-fit to KIC position

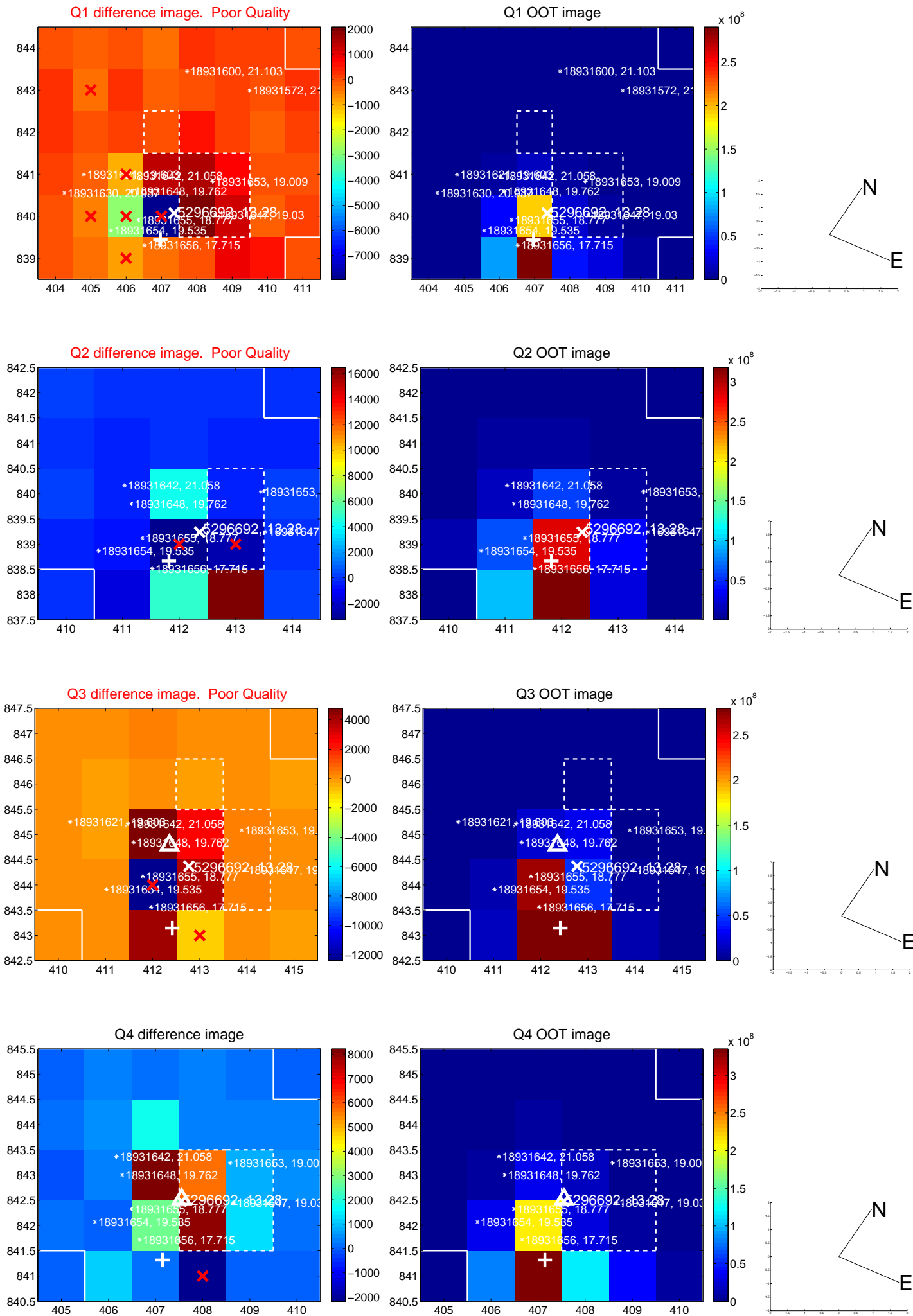


offset from photometric centroids

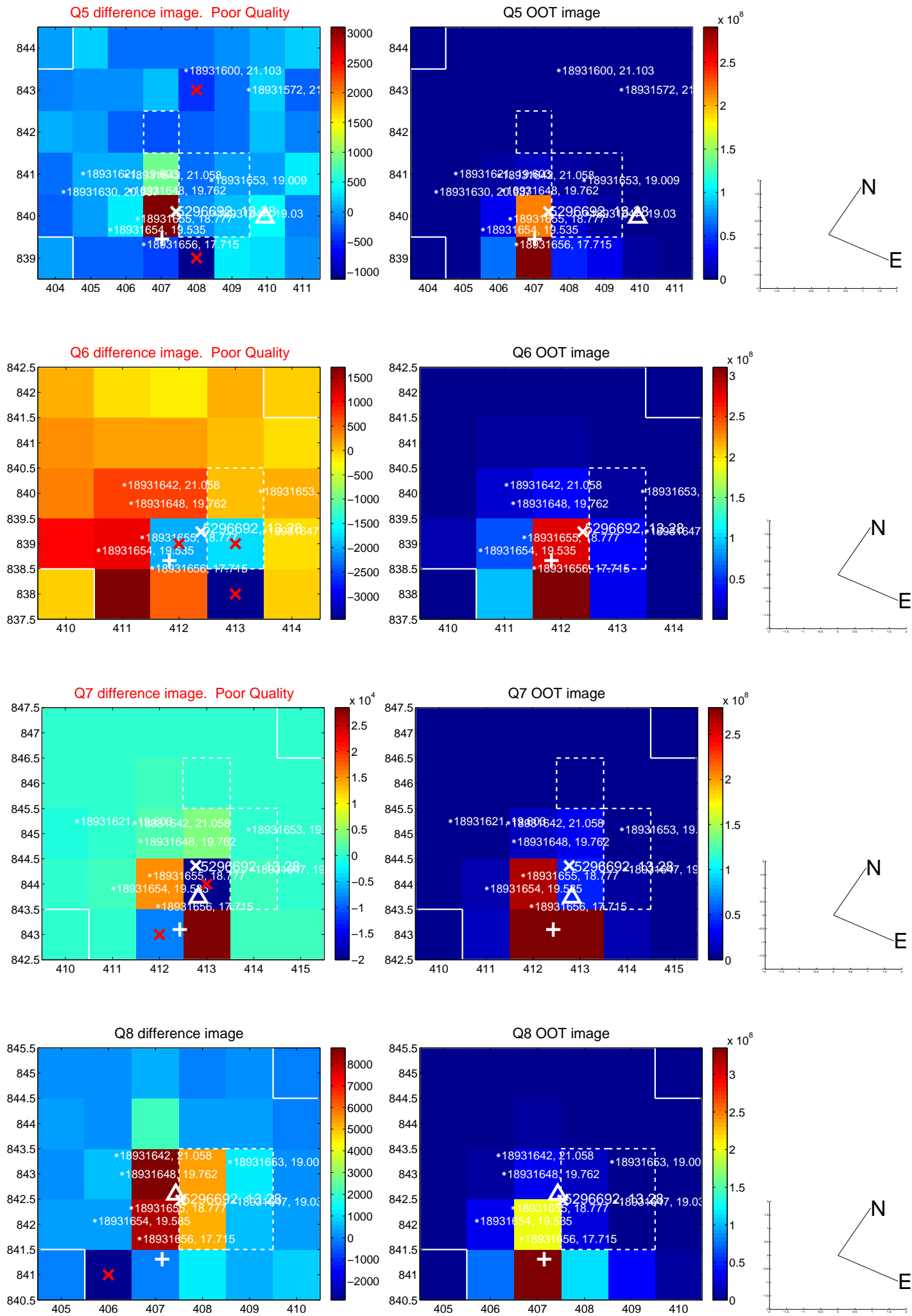


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

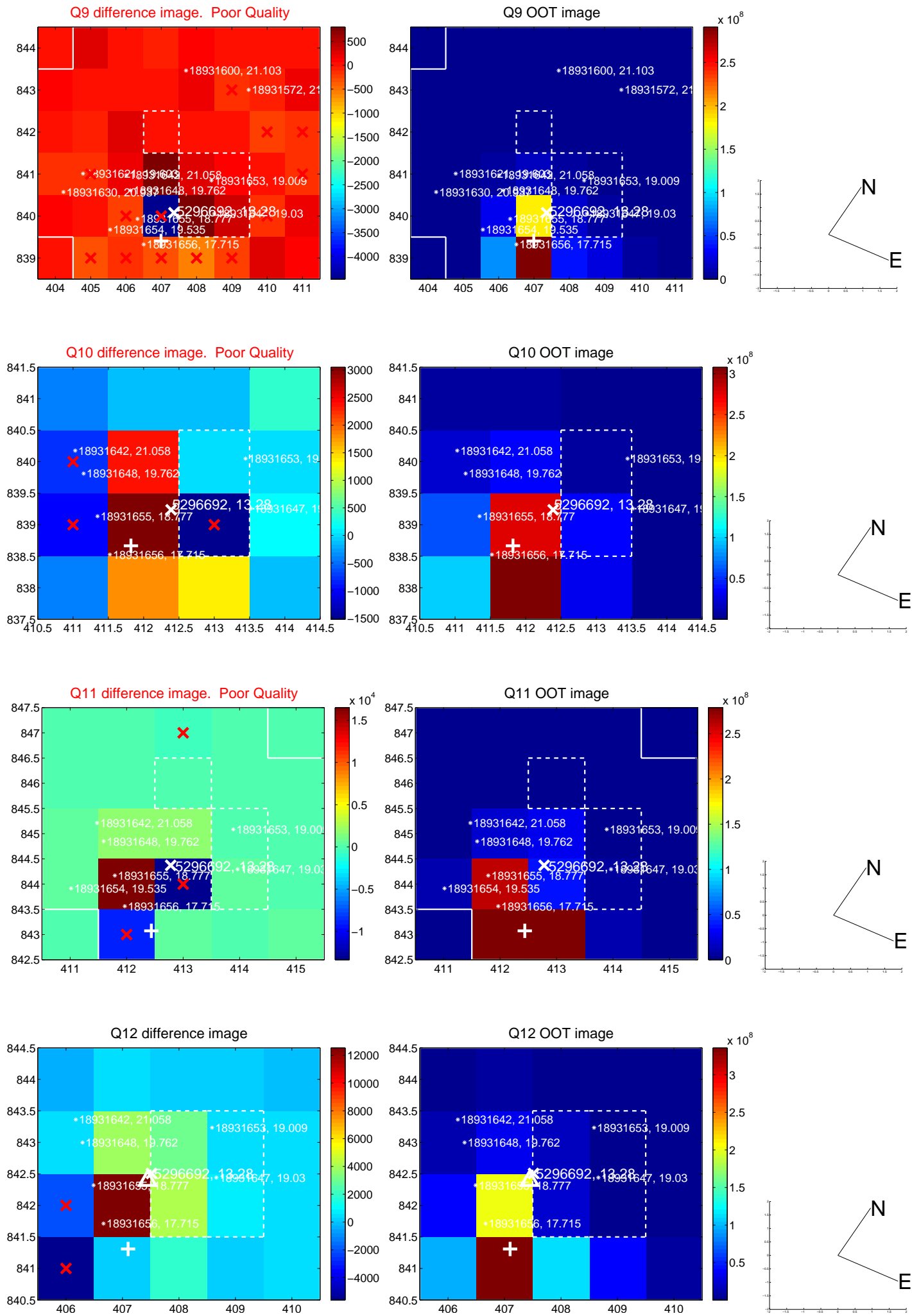
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



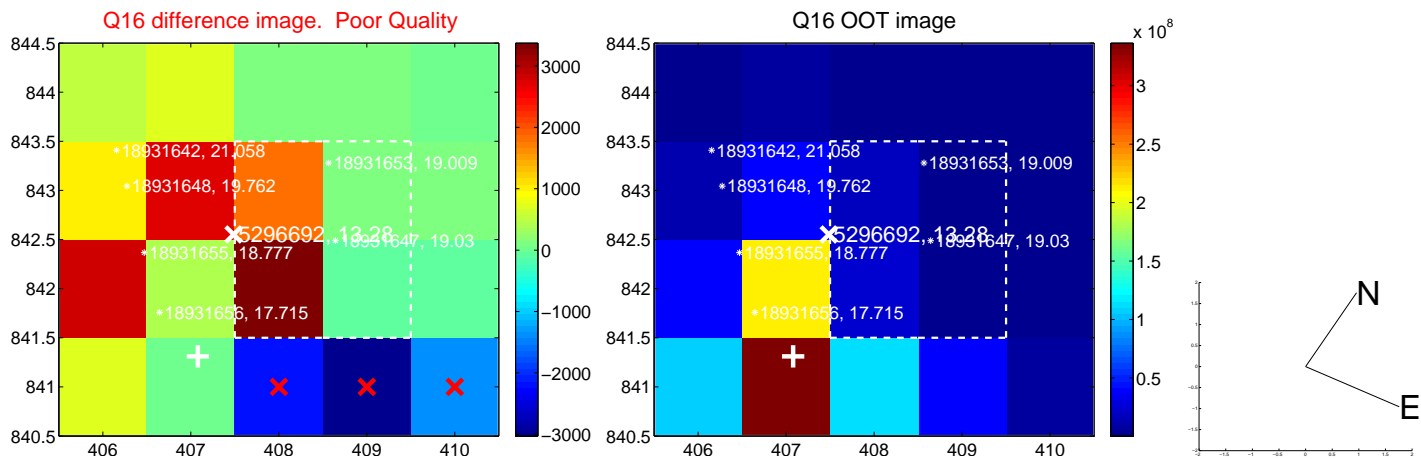
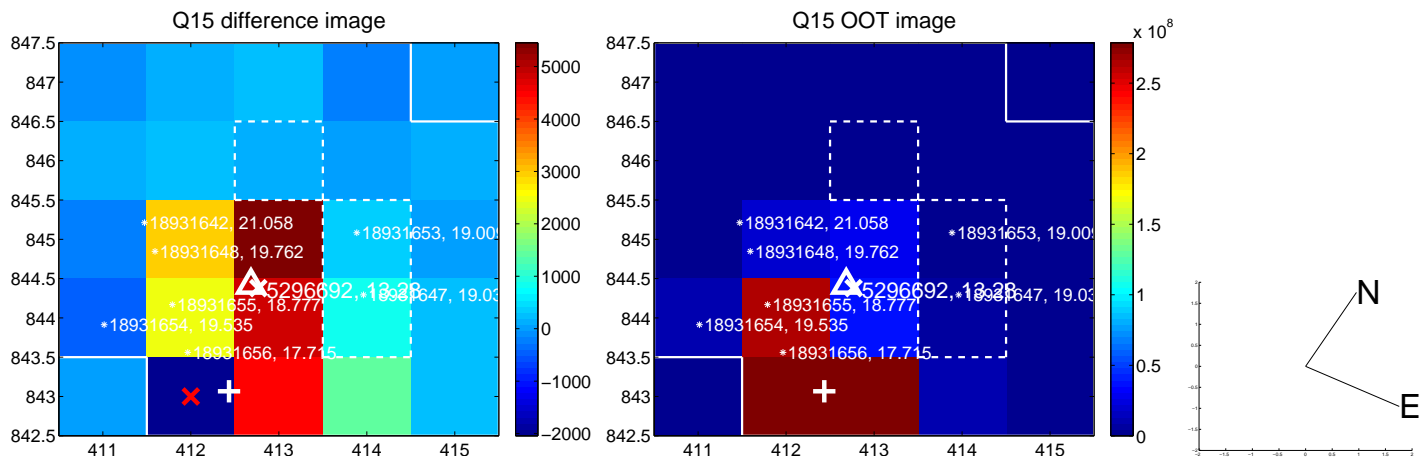
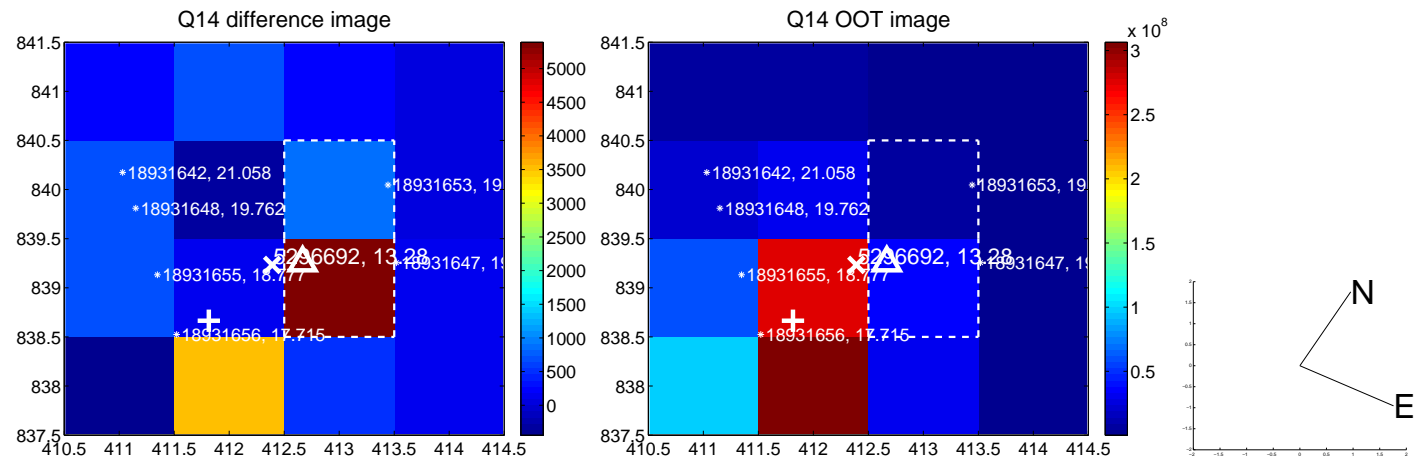
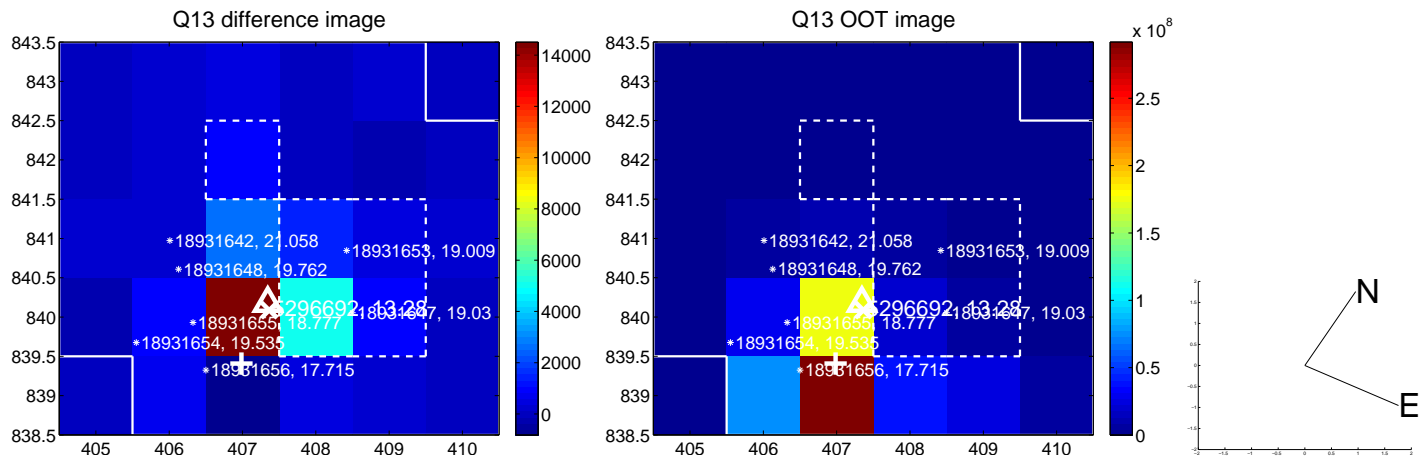
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



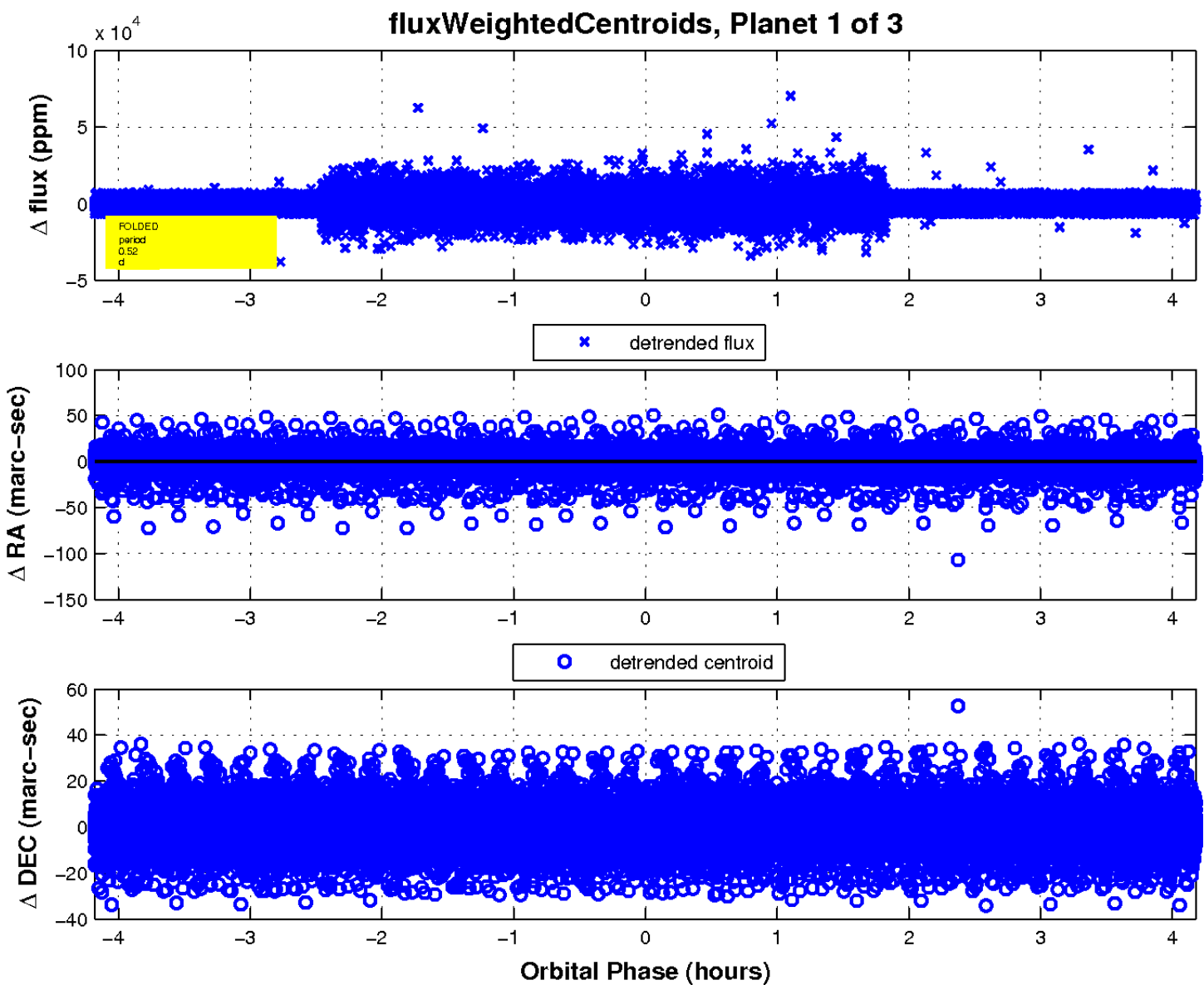
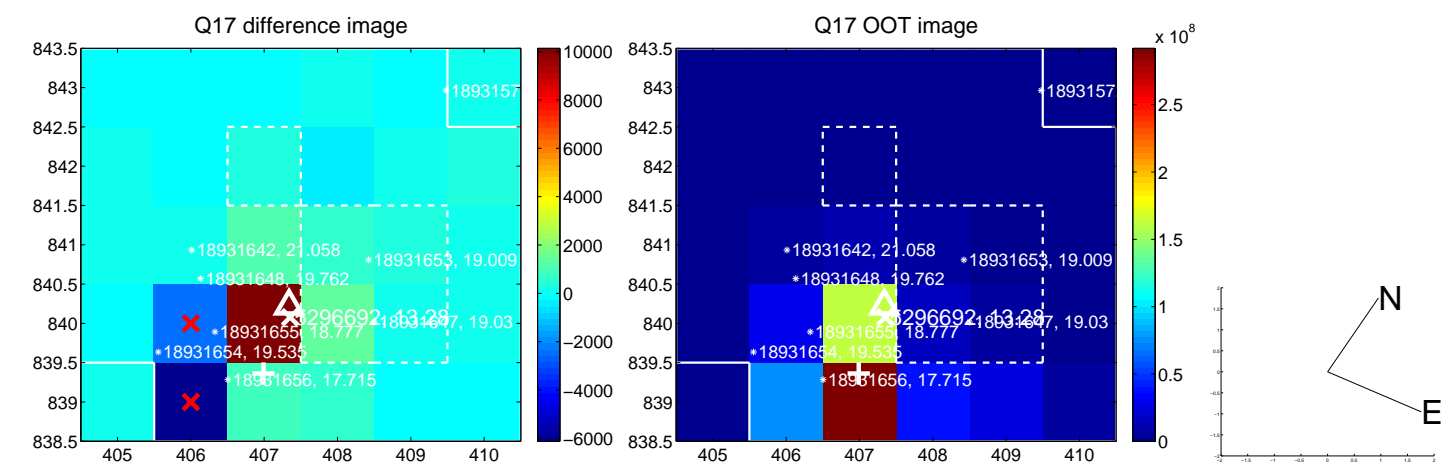
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



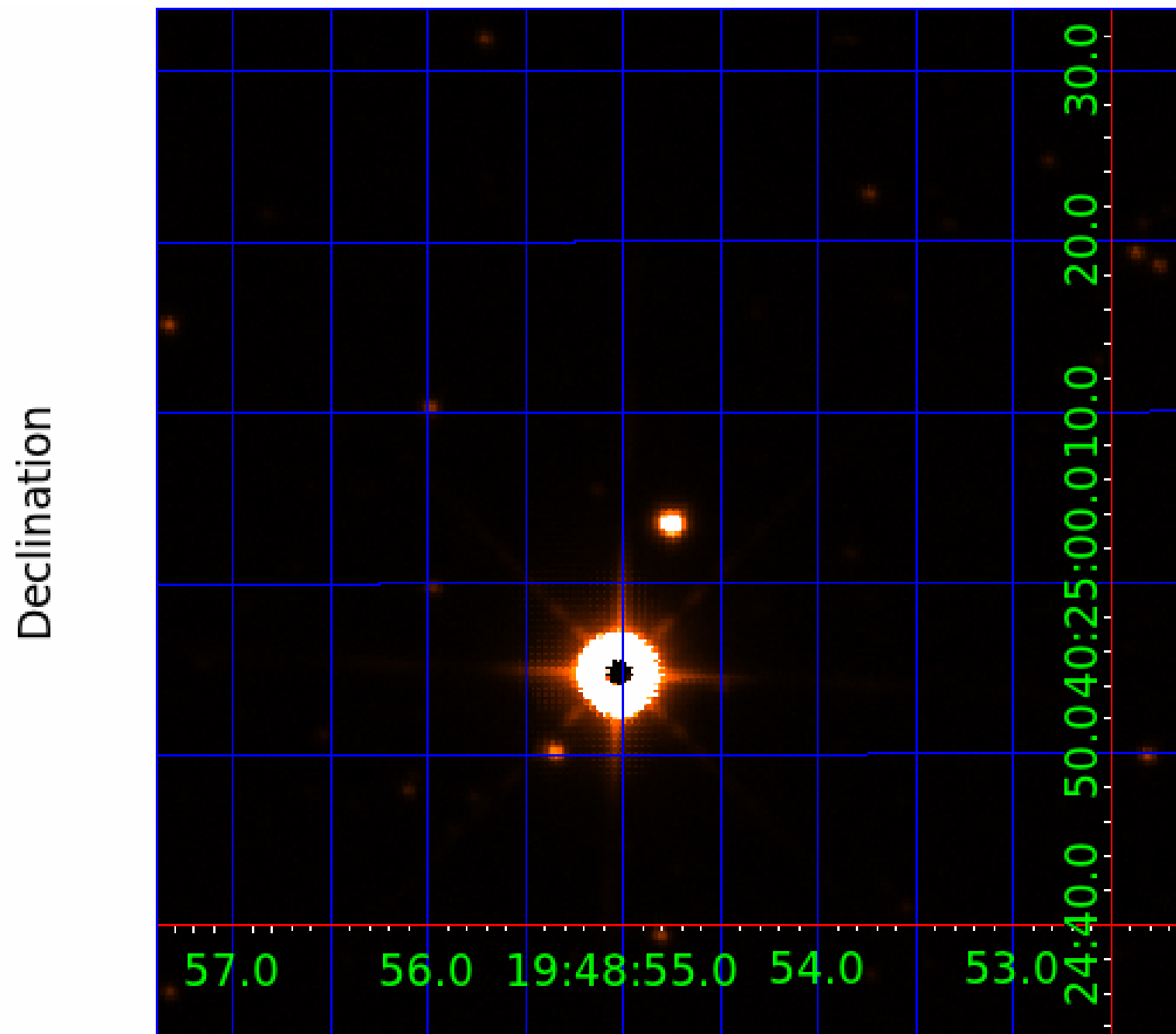
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



UKIRT Image



KIC 005296692

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})
005296692-01	OBS	No	0.521755	131.590831	145.5	1.394	10.6	9.7	1.58	6997	2.04	27027.57
005296692-02	OBS	No	187.578289	260.128968	16038.5	3.647	23.2	12.9	1.58	6997	34.69	10.57
005296692-03	OBS	No	373.981826	279.640681	1723.3	4.500	24.1	-1.0	1.58	6997	6.62	4.21

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
005296692-01	OBS	FP	0.00	1	0	1	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—CENT_KIC_POS—HALO_GHOST
005296692-02	OBS	FP	0.00	1	0	1	0	TRANS_GAPPED—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—INCONSISTENT_TRANS—CENT_KIC_POS—HALO_GHOST
005296692-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_CHASES_MARSHALL—LPP_DV—LPP_ALT—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—INCONSISTENT_TRANS—CENT_NOFITS

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

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

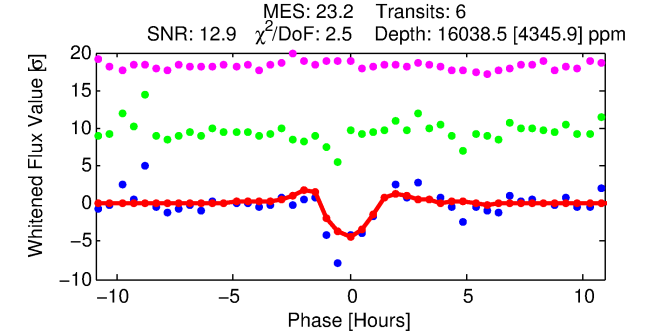
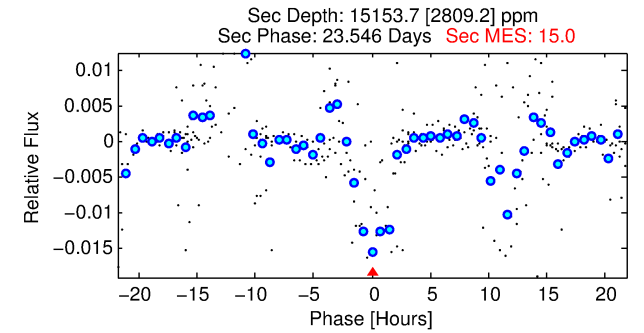
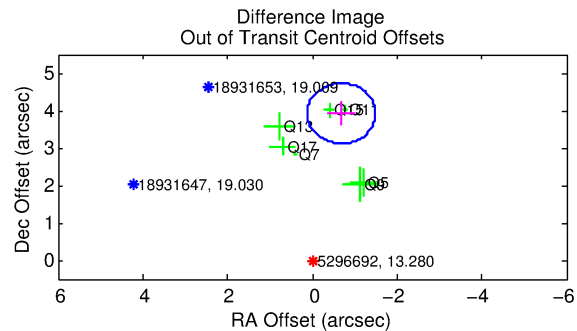
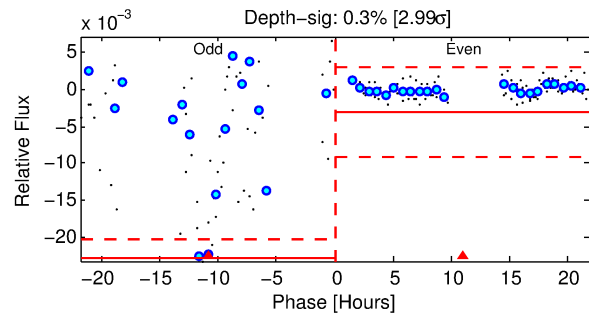
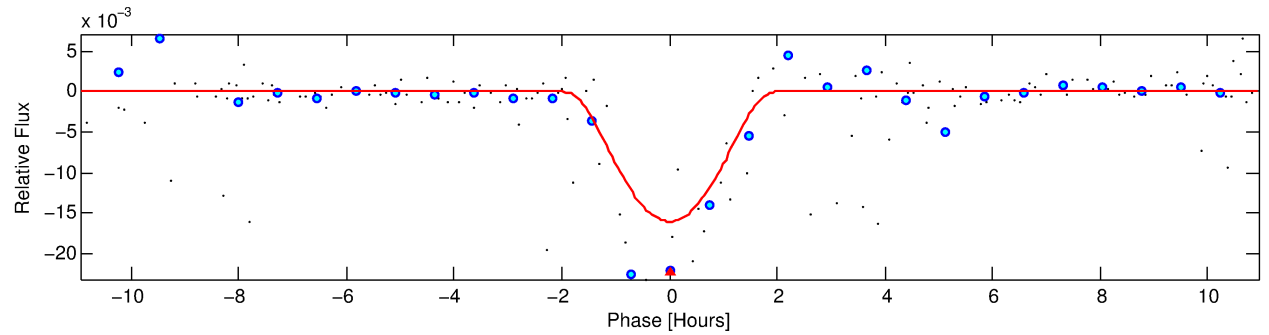
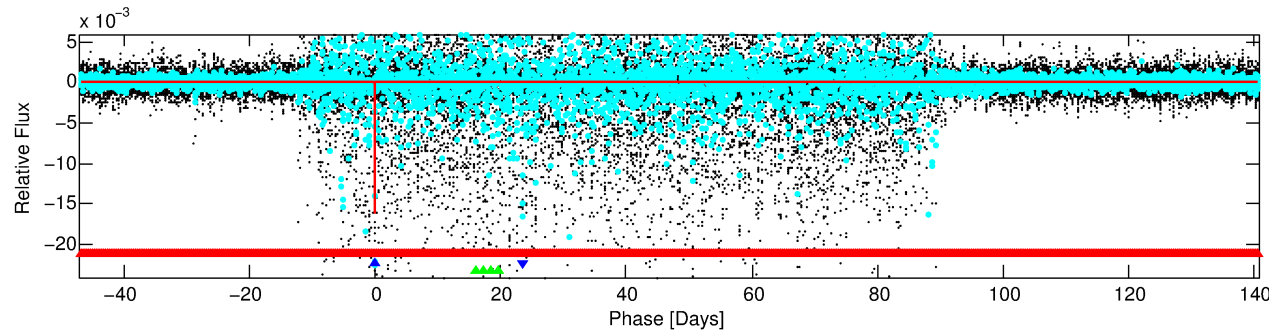
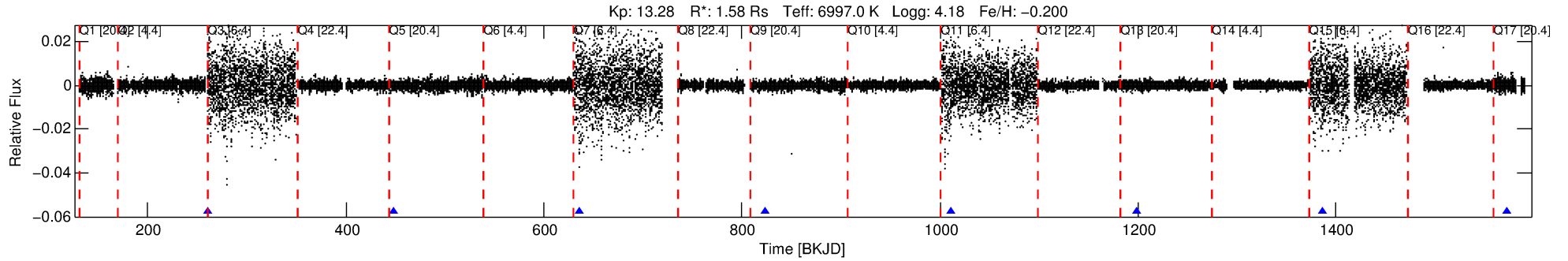
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 005296692-02

No Significant Match Found

DV One-Page Summary

KIC: 5296692 Candidate: 2 of 3 Period: 187.578 d



DV Fit Results:

Period = 187.57829 [0.00226] d
Epoch = 260.1290 [0.0087] BKJD
Rp/R* = 0.2016 [0.8105]
a/R* = 262.04 [117.69]
b = 1.00 [1.16]
Seff = 10.57 [4.21]
Teq = 460 [46] K
Rp = 34.69 [139.90] Re
a = 0.7107 [0.1788] AU
Ag = 3499.96 [28180.64] [0.12 σ]
Teffp = 5468 [11000] K [0.46 σ]

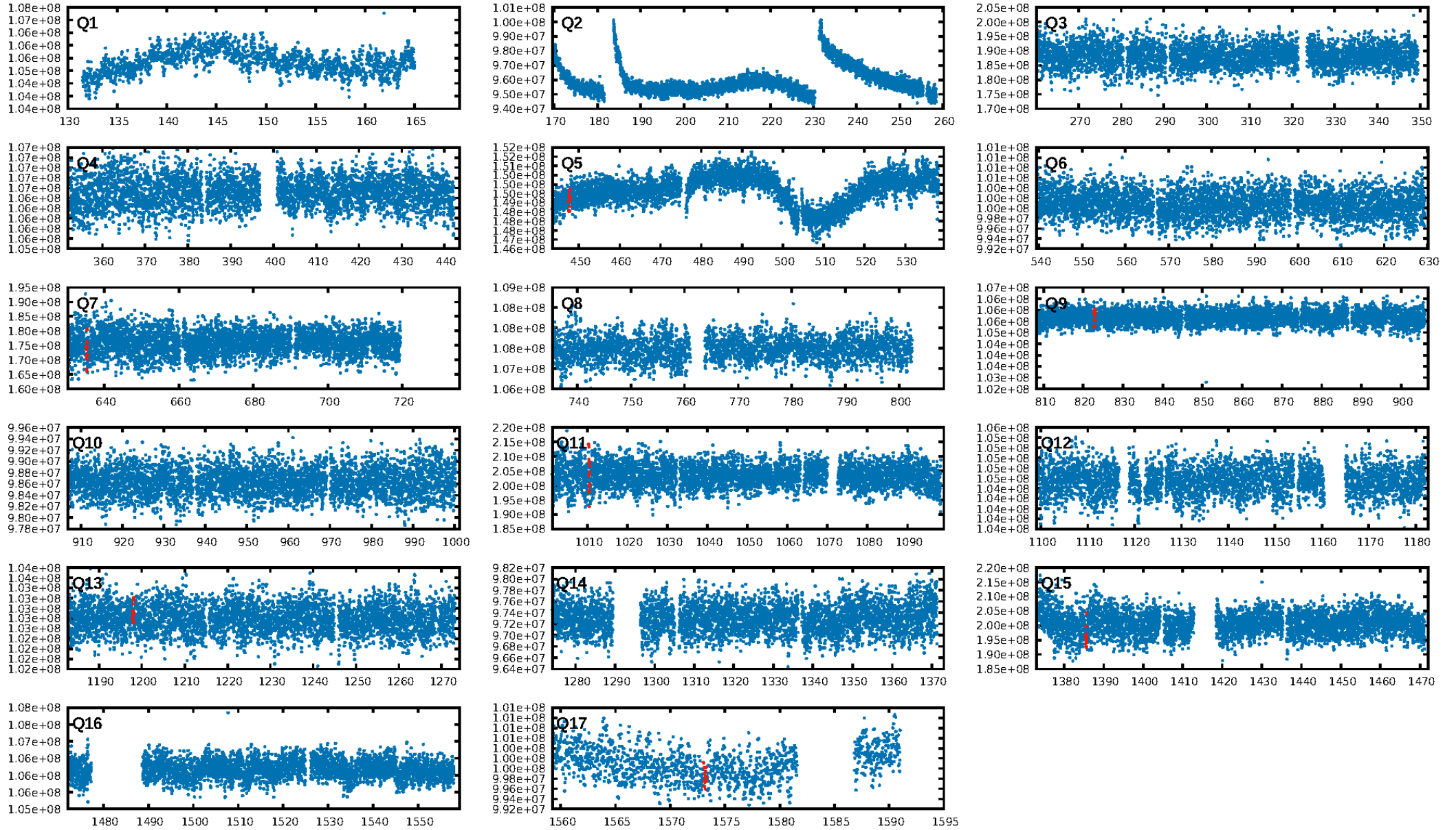
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [1149.84 σ]
LongPeriod-sig: 100.0% [772.35 σ]
ModelChiSquare2-sig: 0.2%
ModelChiSquareGof-sig: 39.4%
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [6/6]
GhostDiagnostic-chr: -0.1597
Centroid-sig: N/A
Centroid-so: 3.151 arcsec [69.34 σ]
OotOffset-rm: 3.978 arcsec [14.84 σ]
KicOffset-rm: 1.247 arcsec [4.36 σ]
OotOffset-st: 0/3/0/4 [7]
KicOffset-st: 0/3/0/4 [7]
DiffImageQuality-fgm: 0.71 [5/7]
DiffImageOverlap-fno: 0.00 [0/7]

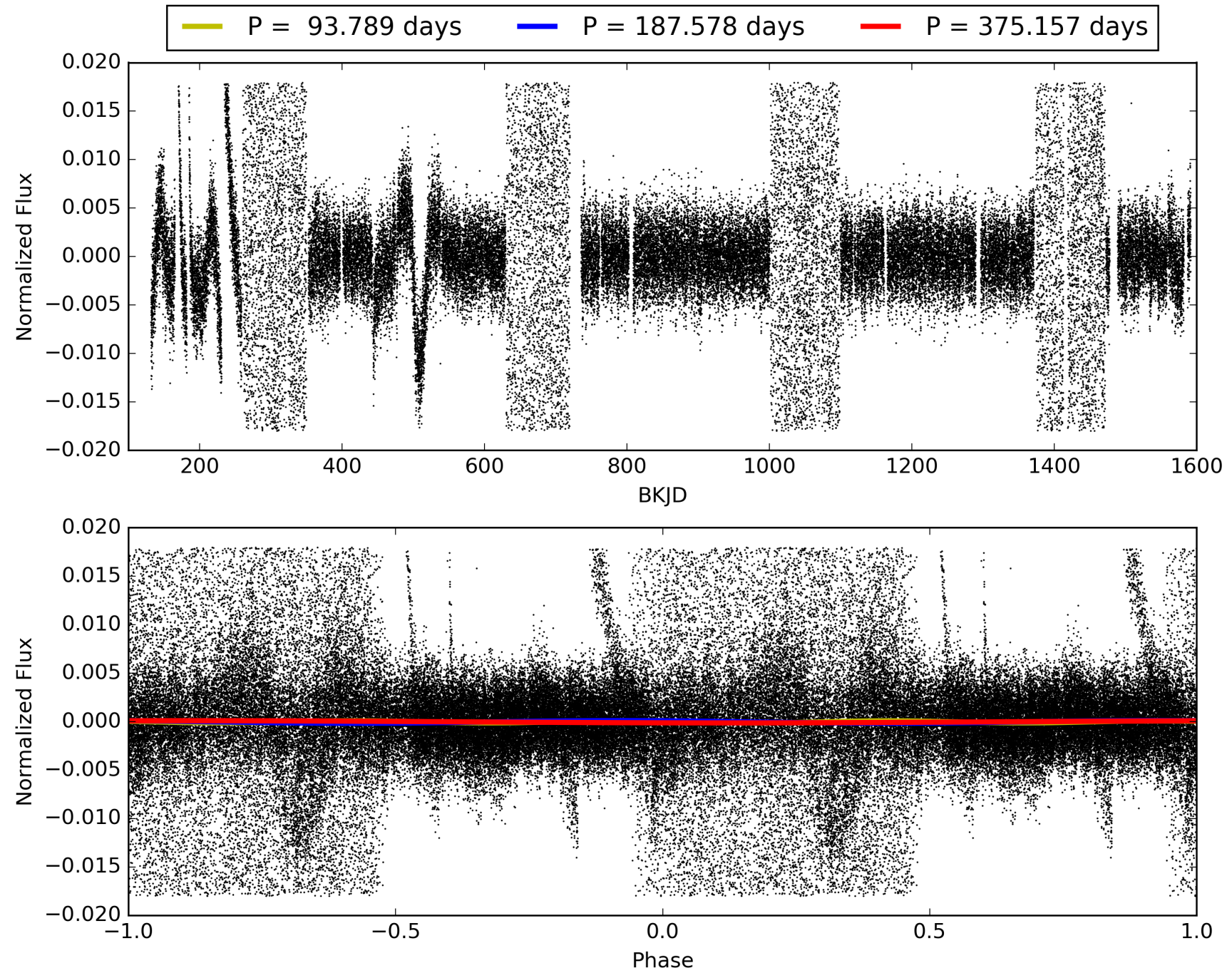
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 16:41:55 Z

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

TCE 005296692-02, PDC Light Curves

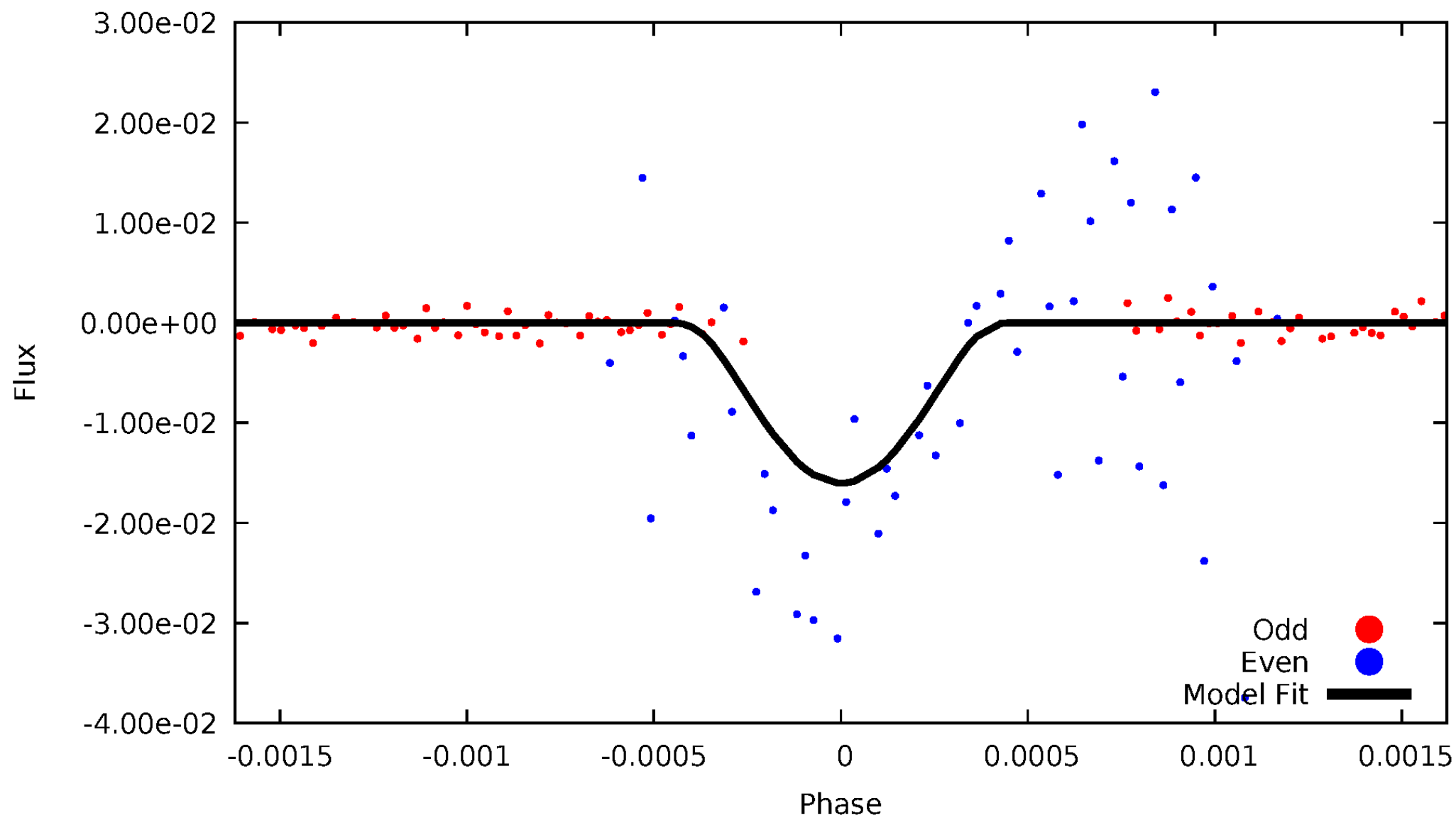


TCE 005296692-02



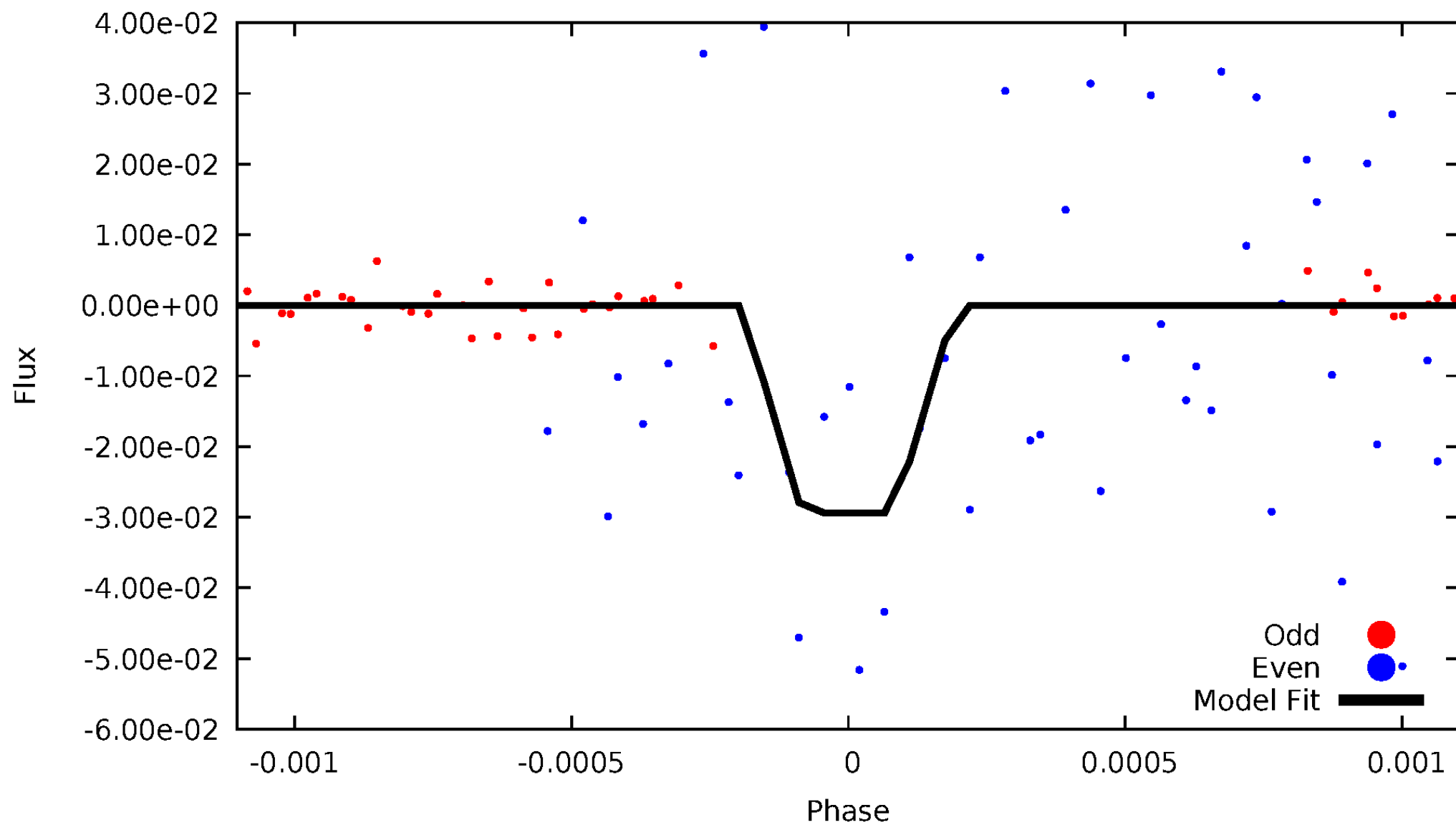
DV Odd/Even

TCE 005296692-02



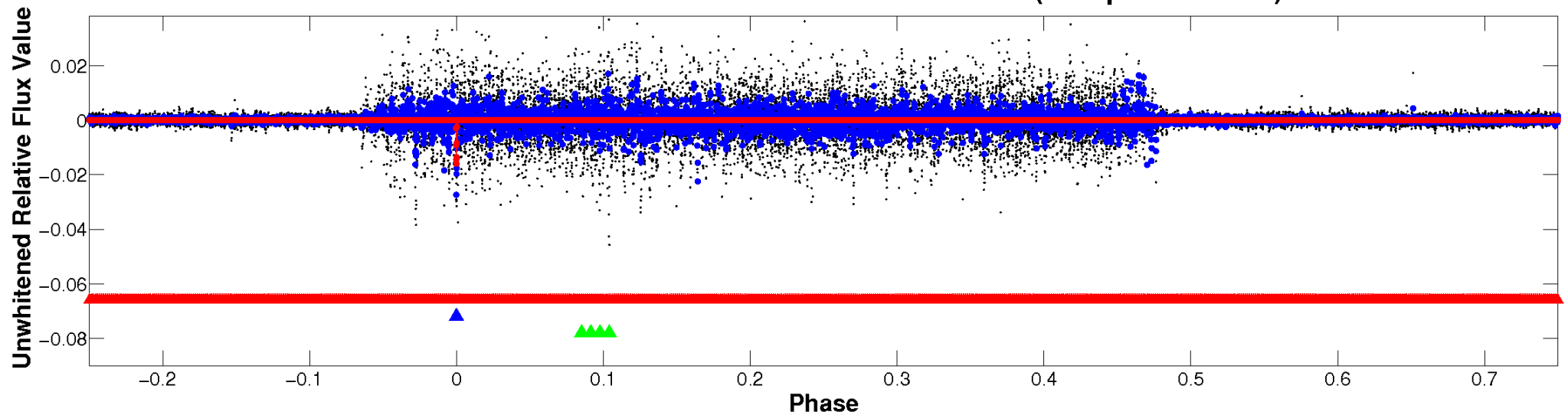
ALT Odd/Even

TCE 005296692-02

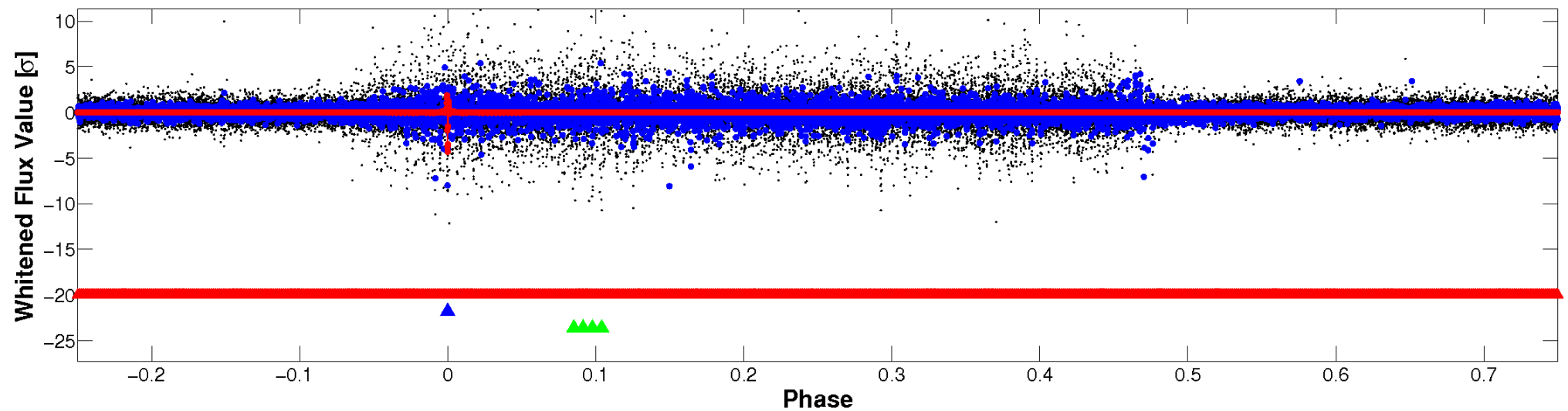


Non-Whitened Vs. Whitened Light Curve

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

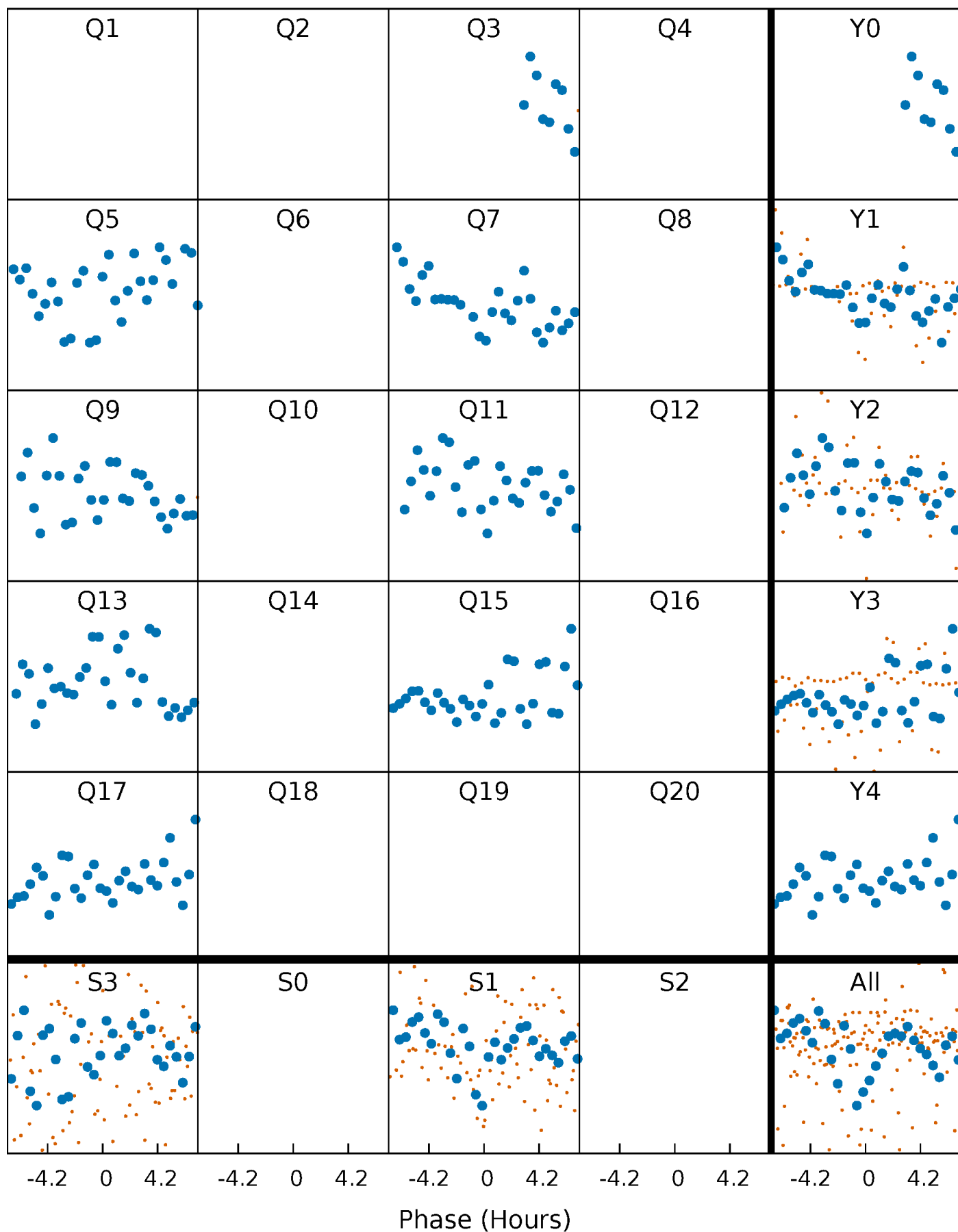


Planet 2 : Phased Whitened Flux Time Series (Fit Epoch/Period)



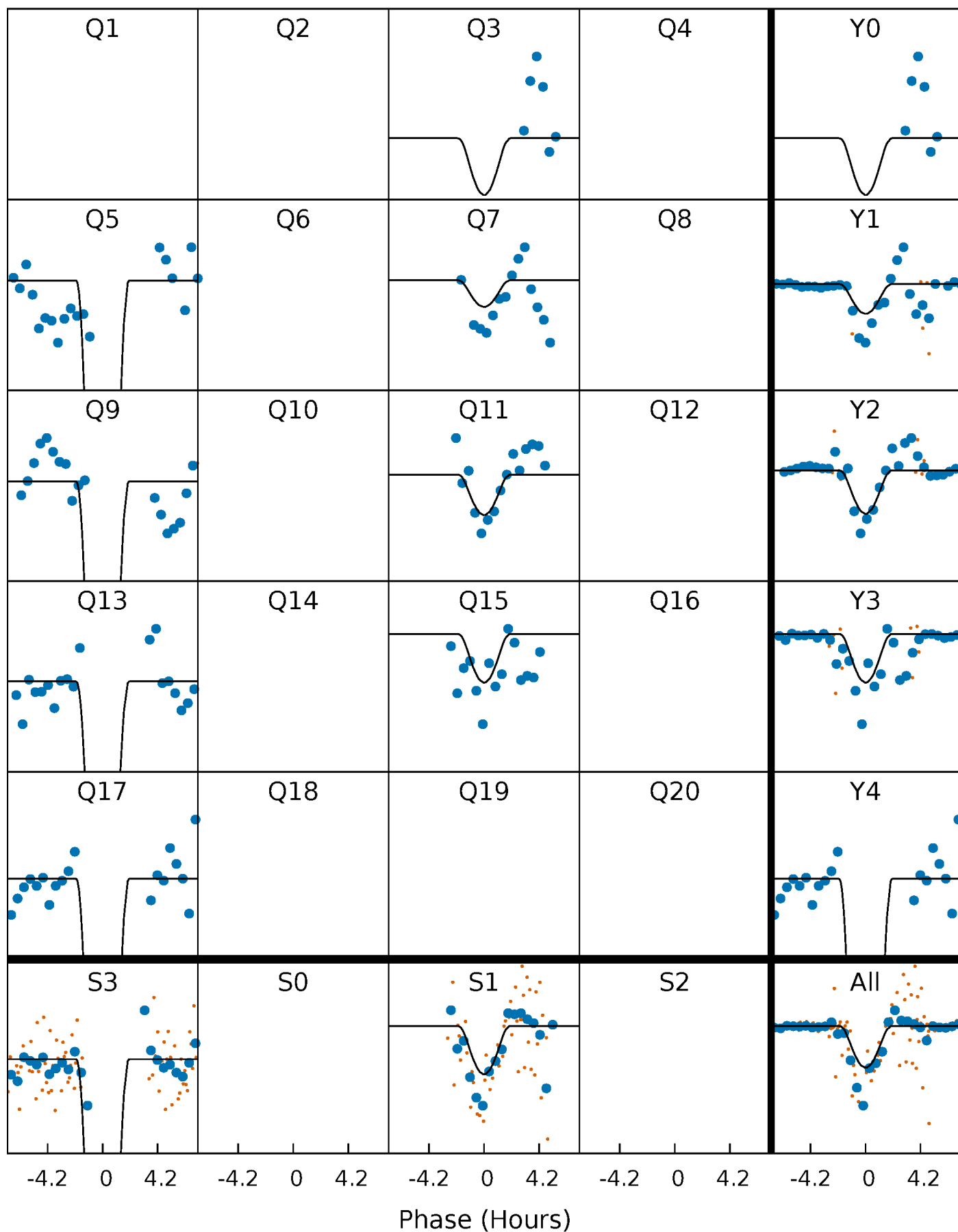
PDC Quarter-Phased Transit Curves

TCE 005296692-02 $P=187.578289$ Days $T_0=260.128968$ (BKJD)



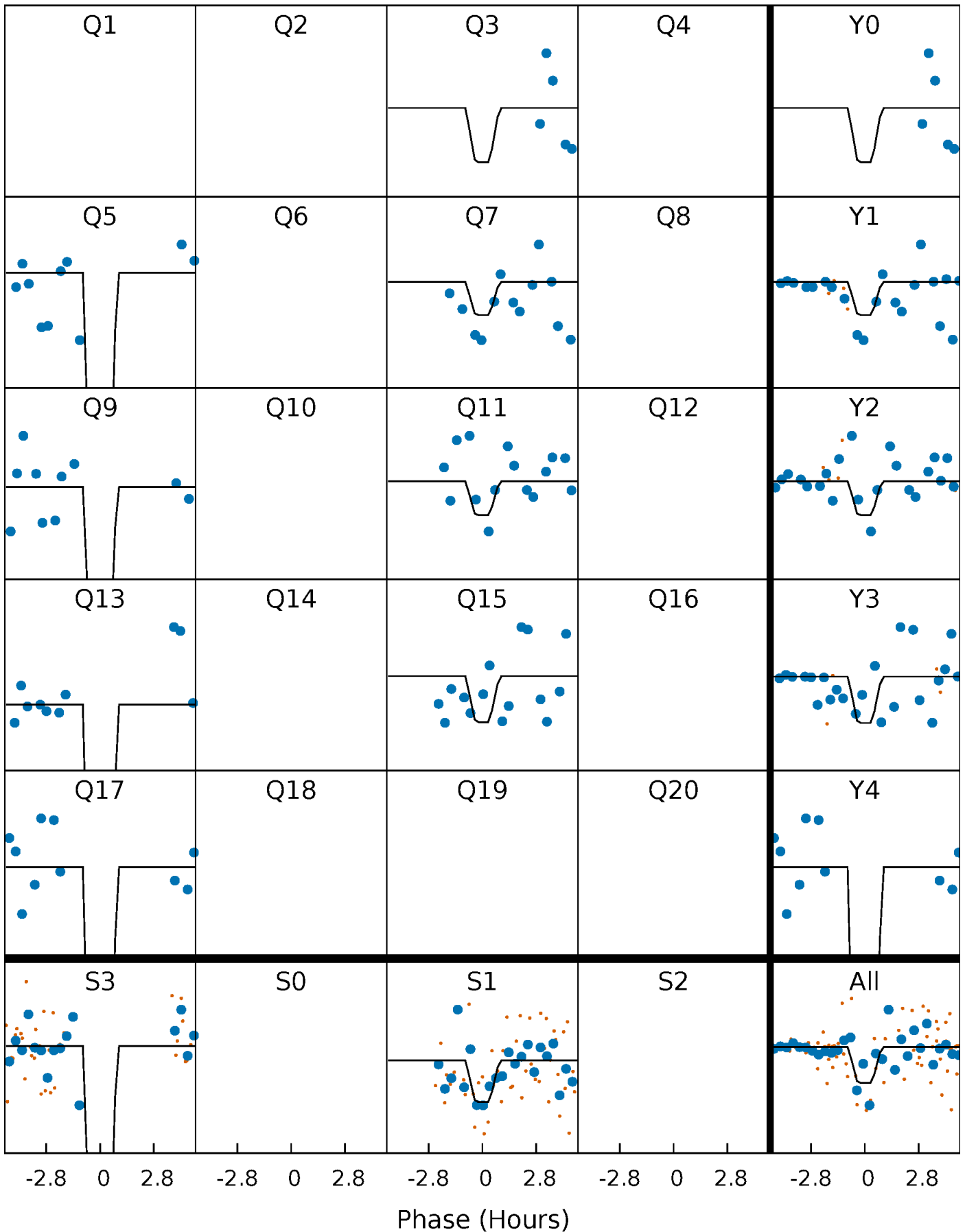
DV Quarter-Phased Transit Curves

TCE 005296692-02 $P=187.578289$ Days $T_0=260.128968$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

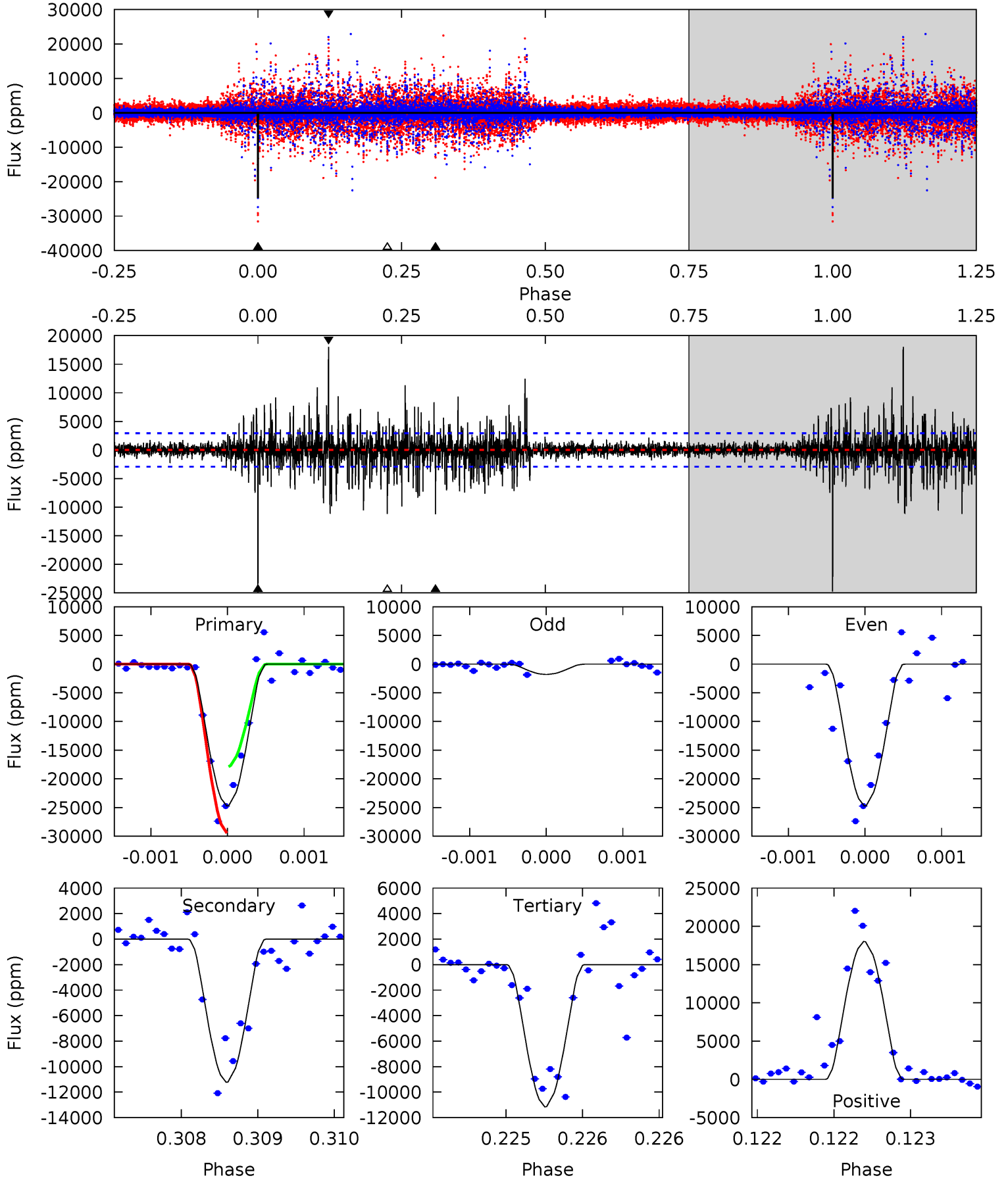
TCE 005296692-02 $P=187.576121$ Days $T_0=260.127975$ (BKJD)



DV Model-Shift Uniqueness Test

005296692-02, P = 187.578289 Days, E = 72.550679 Days

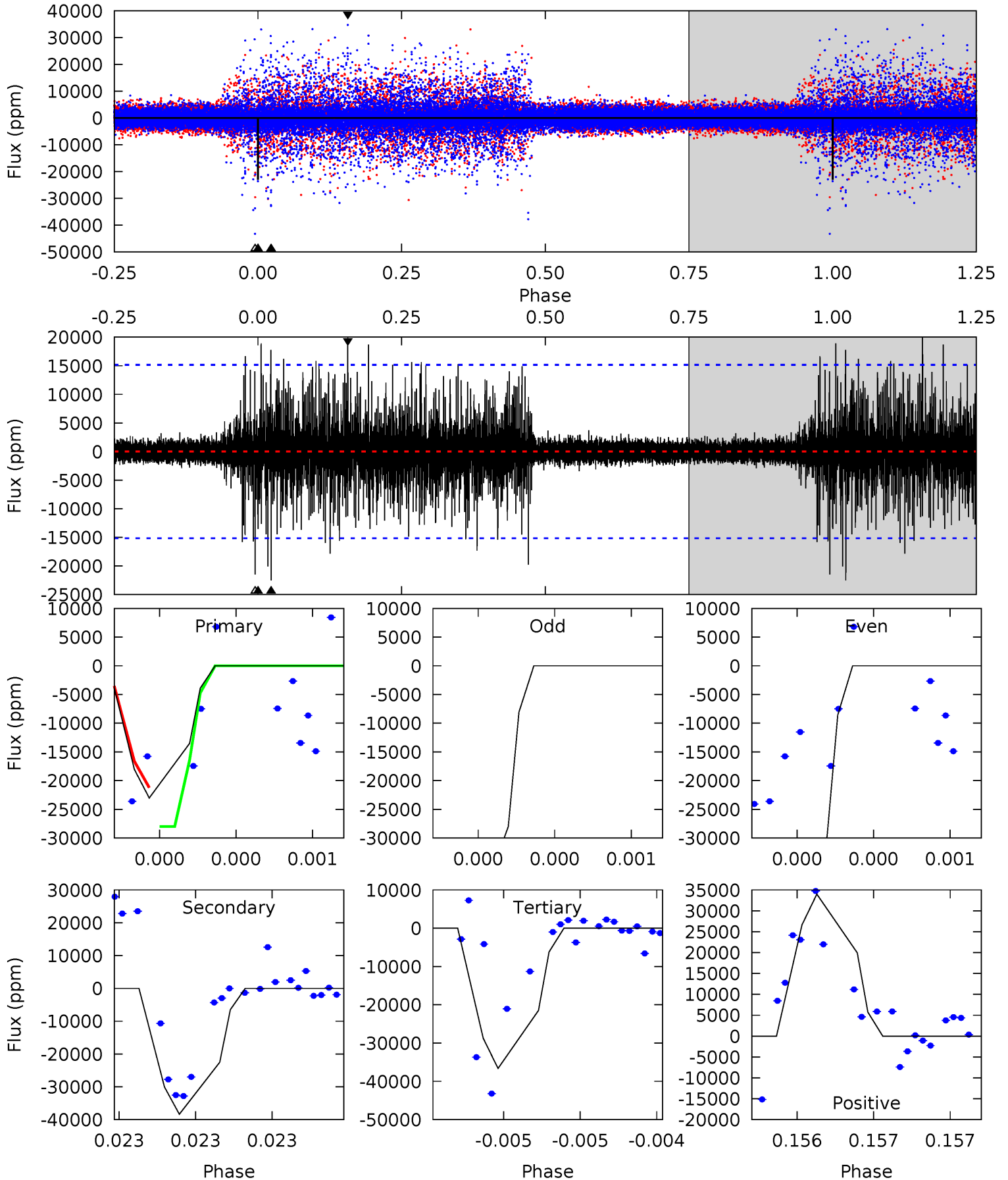
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
46.3	21.0	20.9	33.7	5.47	3.33	2.86	25.4	12.6	0.13	-12.7	18.6	0.92	0.42	8.67



Alt Model-Shift Uniqueness Test

005296692-02, P = 187.576121 Days, E = 72.551854 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
5.03	8.38	8.00	7.43	5.65	3.59	0.86	-2.97	-2.39	0.38	0.96	0.31	1.26	0.47	1.36



Stellar Parameters For KIC 005296692

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6997^{+225}_{-338}	$4.176^{+0.148}_{-0.181}$	$-0.200^{+0.250}_{-0.350}$	$1.577^{+0.496}_{-0.330}$	$1.369^{+0.195}_{-0.239}$	$0.491^{+0.381}_{-0.249}$
	+3%/-5%	+4%/-4%	+125%/-175%	+31%/-21%	+14%/-17%	+78%/-51%
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 005296692-02 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-11218 ± 534	$107.78^{+112.22}_{-76.44}$	639^{+49}_{-44}	3402^{+1944}_{-618}	283^{+2863}_{-215}
Alt.	-22504 ± 2685	$103.72^{+108.98}_{-71.02}$	639^{+53}_{-47}	3817^{+2569}_{-747}	585^{+5917}_{-450}

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

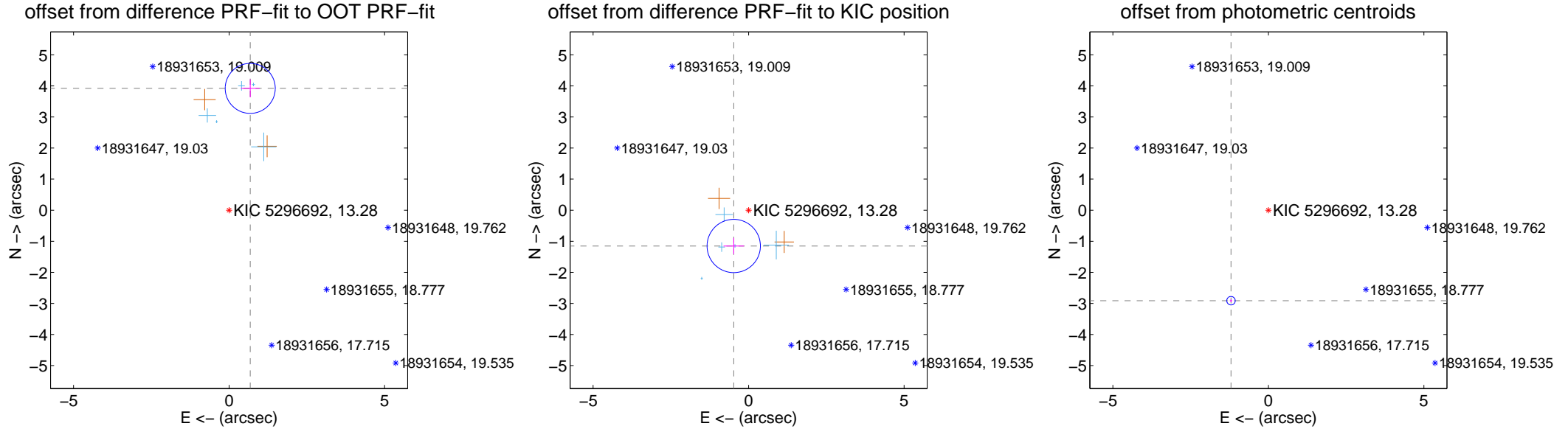
DV Centroid Data

Supplemental centroid analysis for 005296692-02. Kepler magnitude: 13.28. Transit SNR 12.89

There are 5 quarters with good PRF difference image offsets

The OOT PRF centroid is offset from the target star catalog position by about 3.19 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	3.978 ± 0.268	14.84	-0.680 ± 0.301	3.920 ± 0.288
PRF-fit source offset from KIC position	1.247 ± 0.286	4.36	0.478 ± 0.327	-1.152 ± 0.260
photometric centroid source offset	3.15 ± 0.05	69.34	1.20 ± 0.04	-2.91 ± 0.05

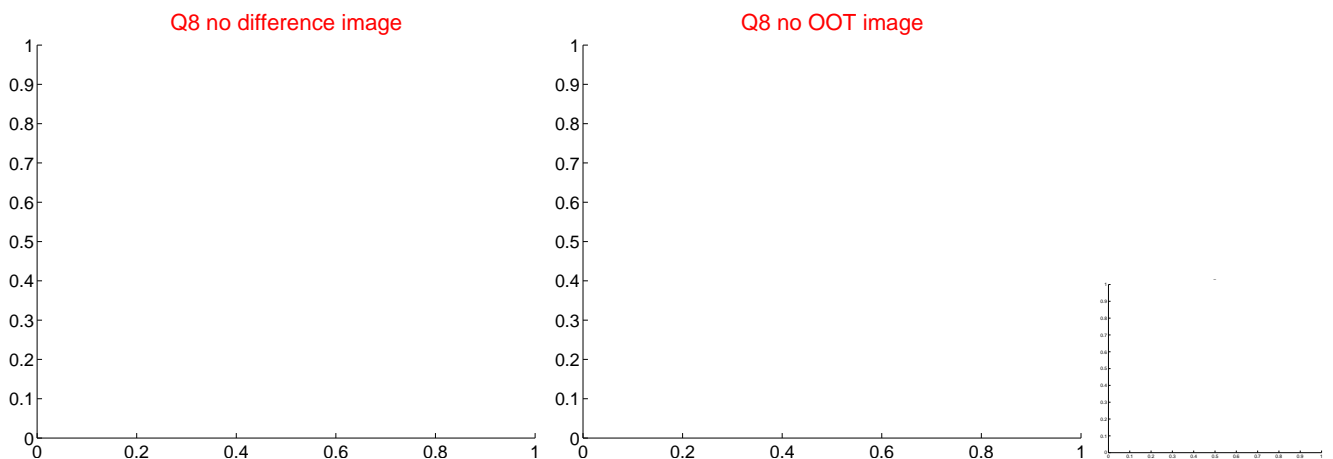
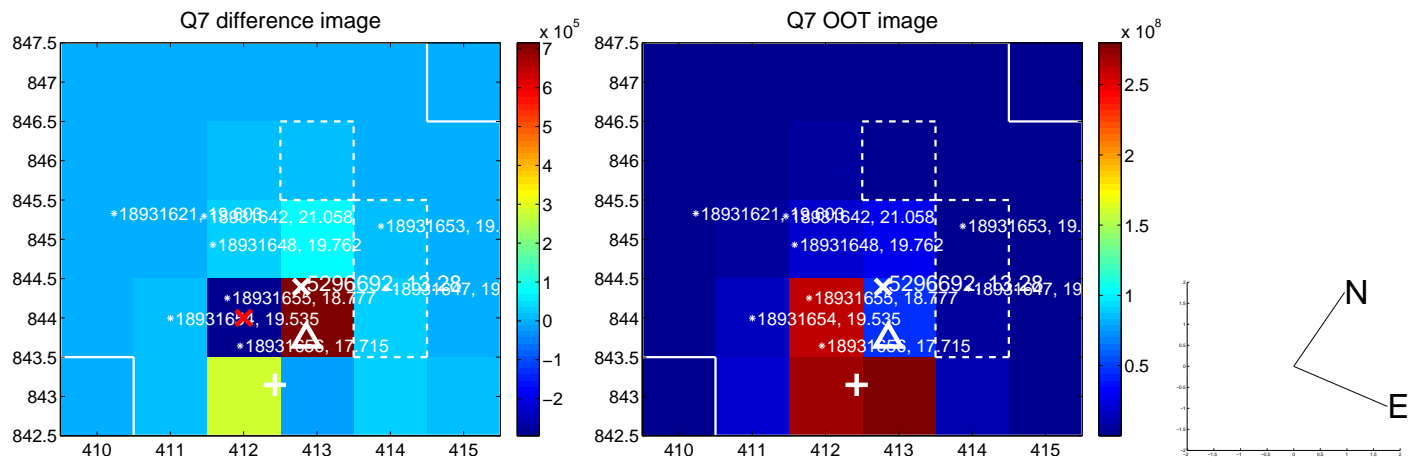
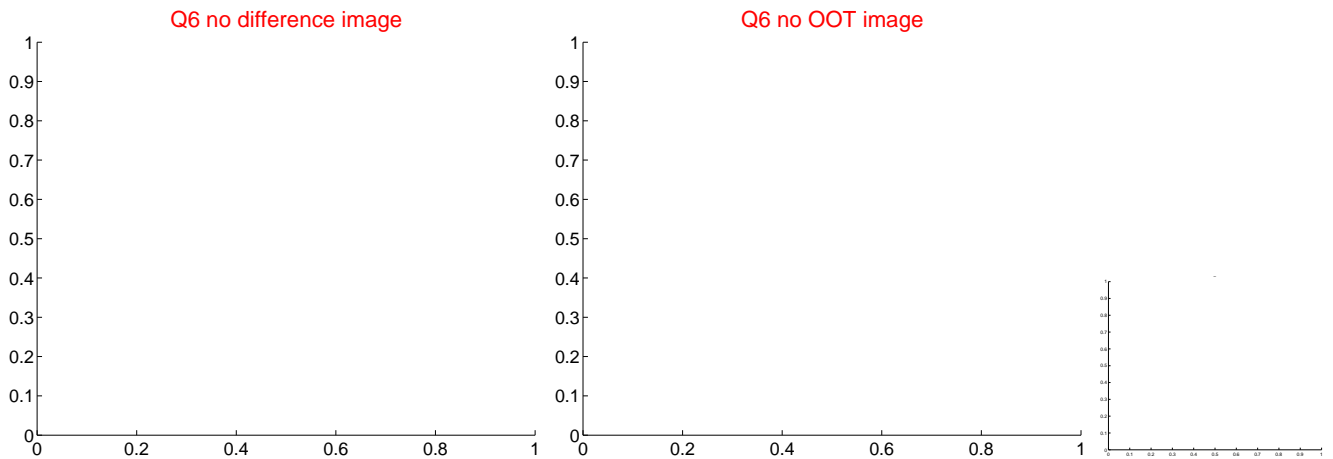
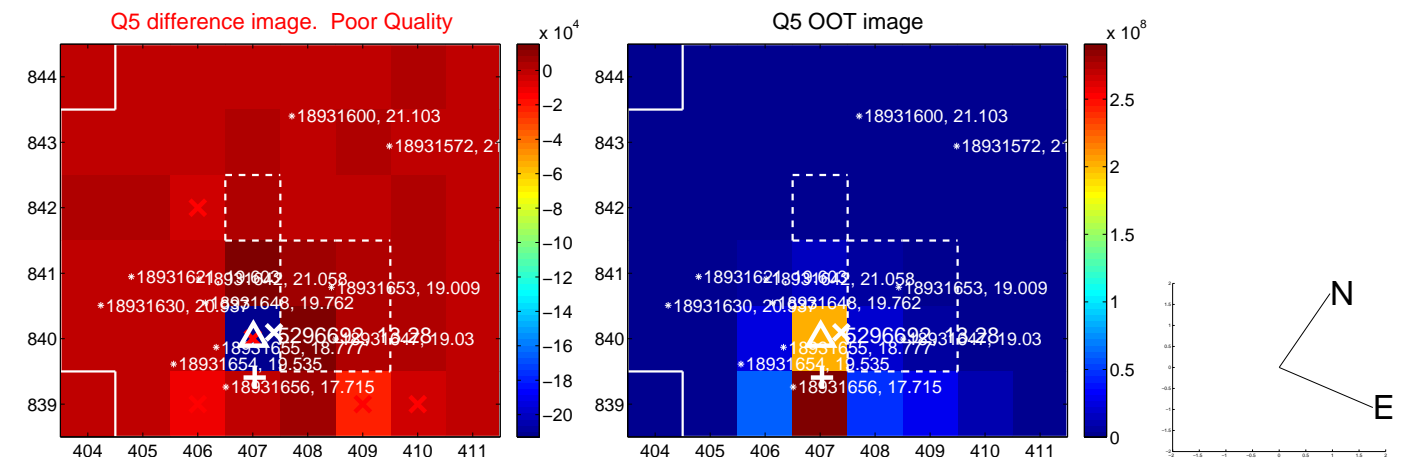


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

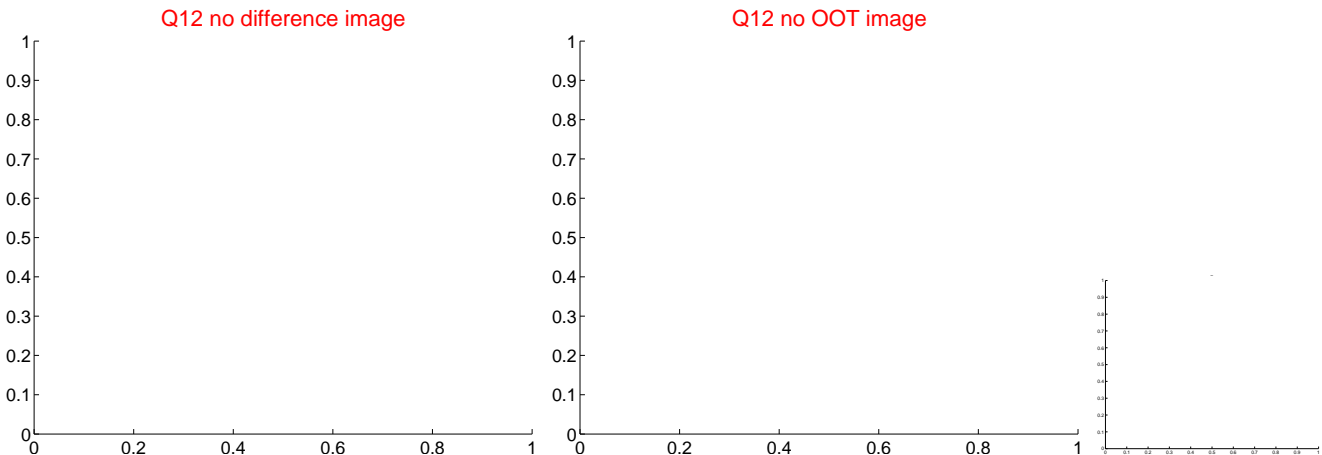
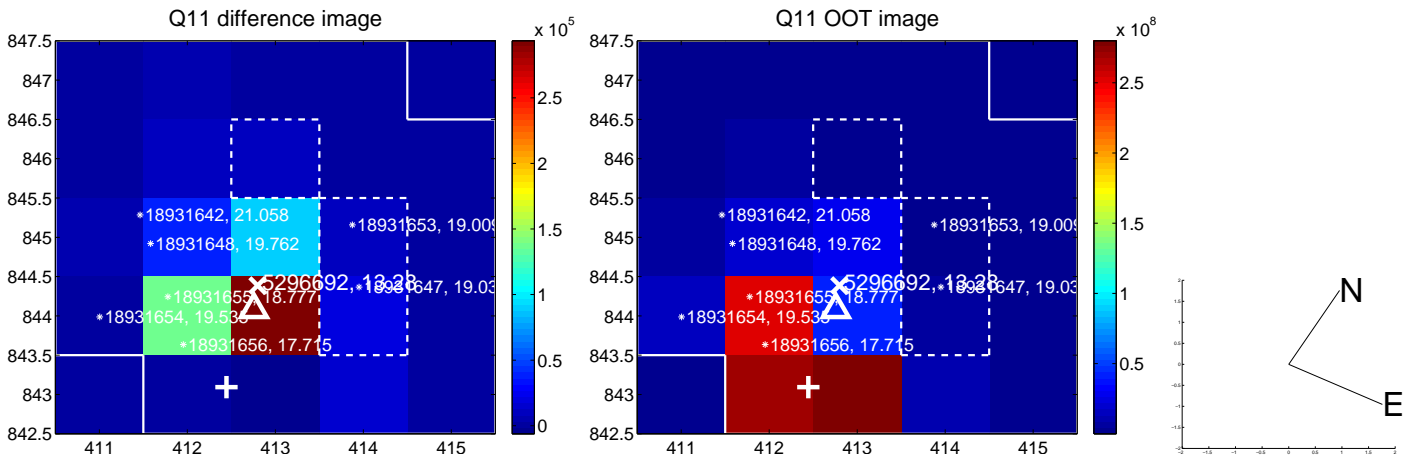
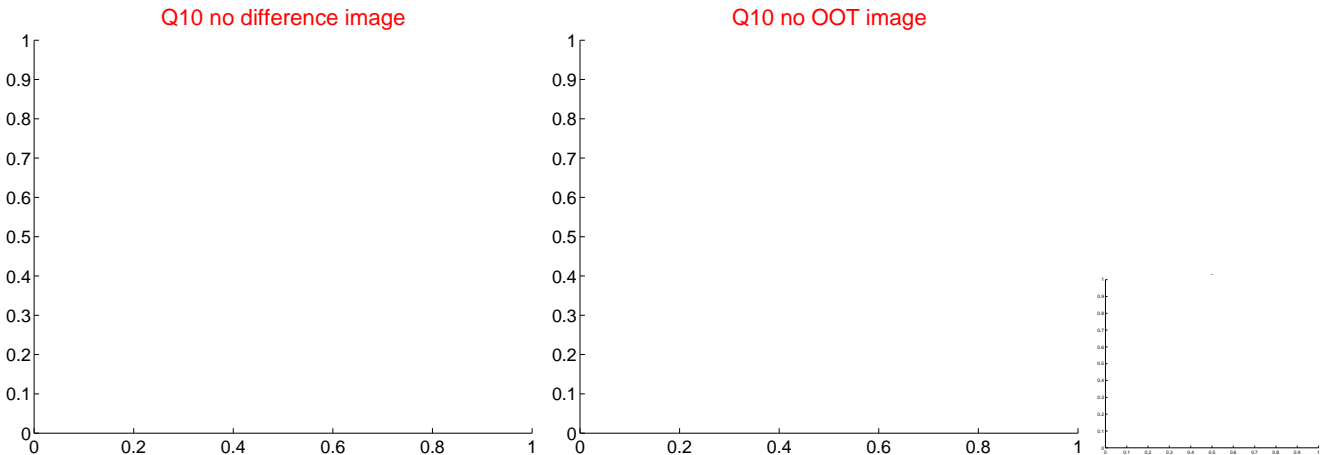
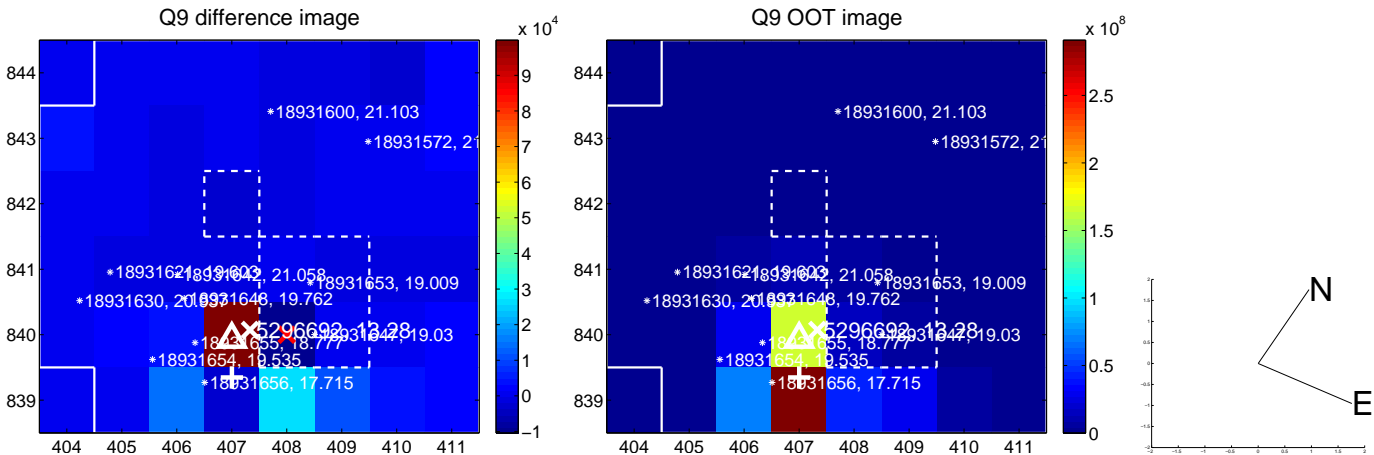
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



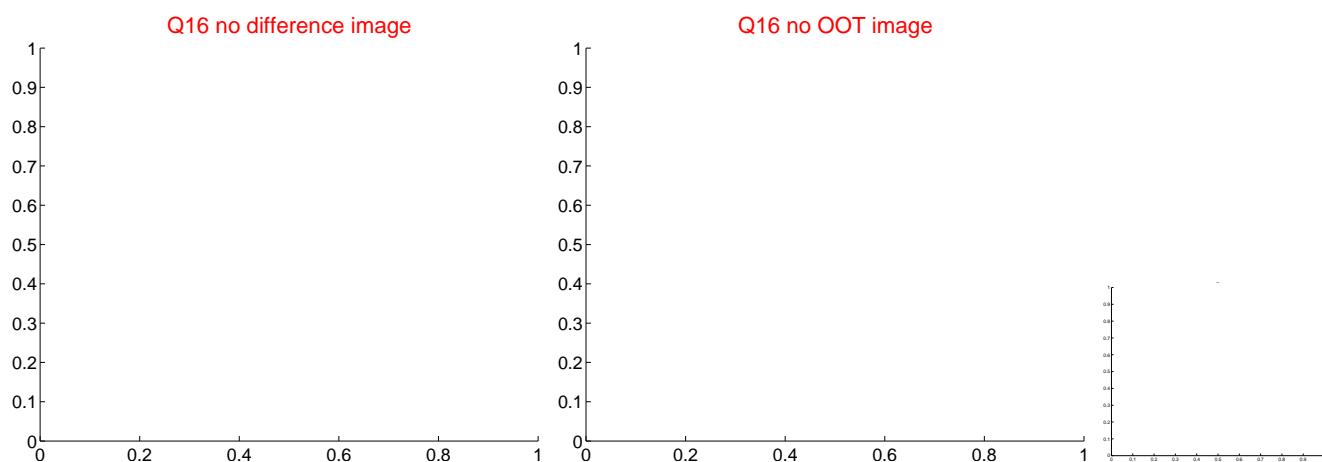
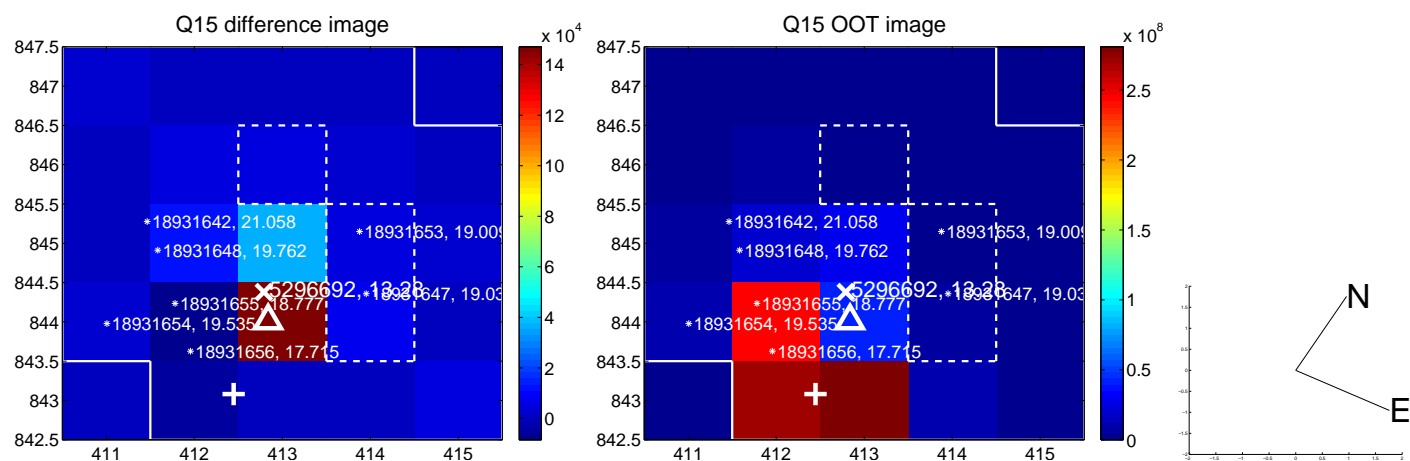
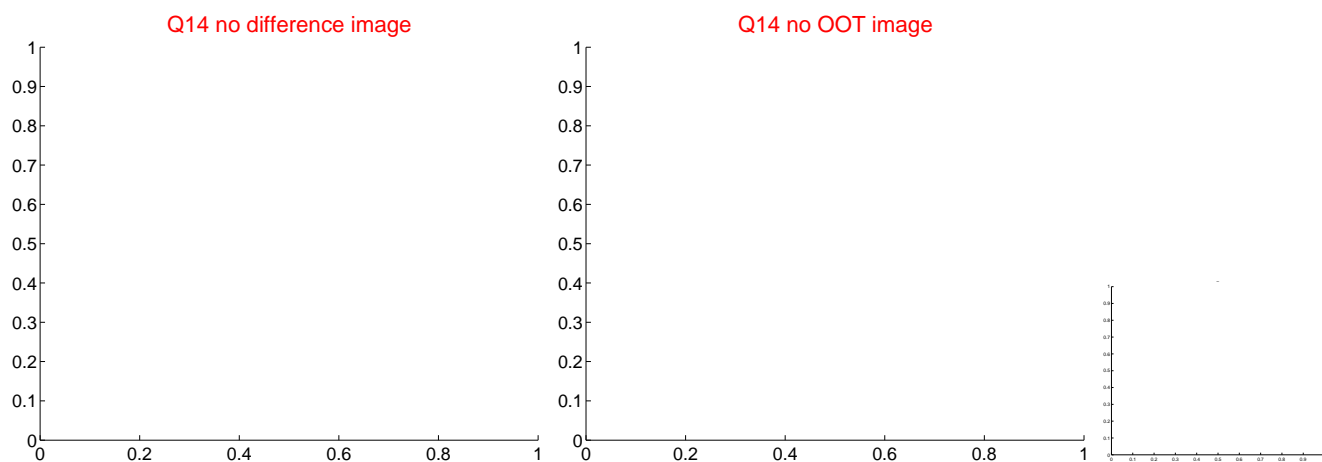
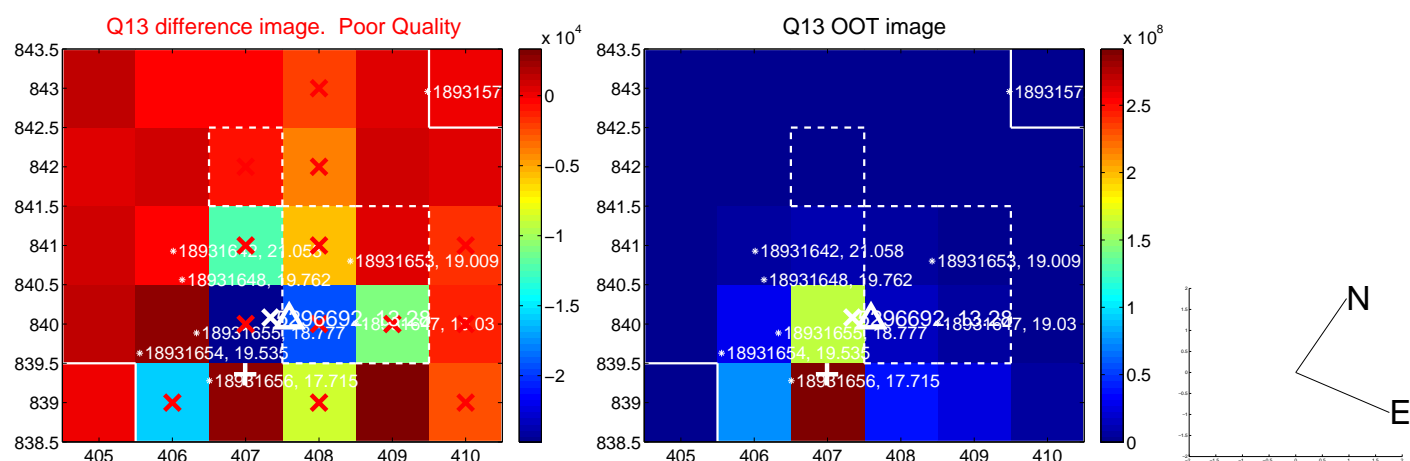
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



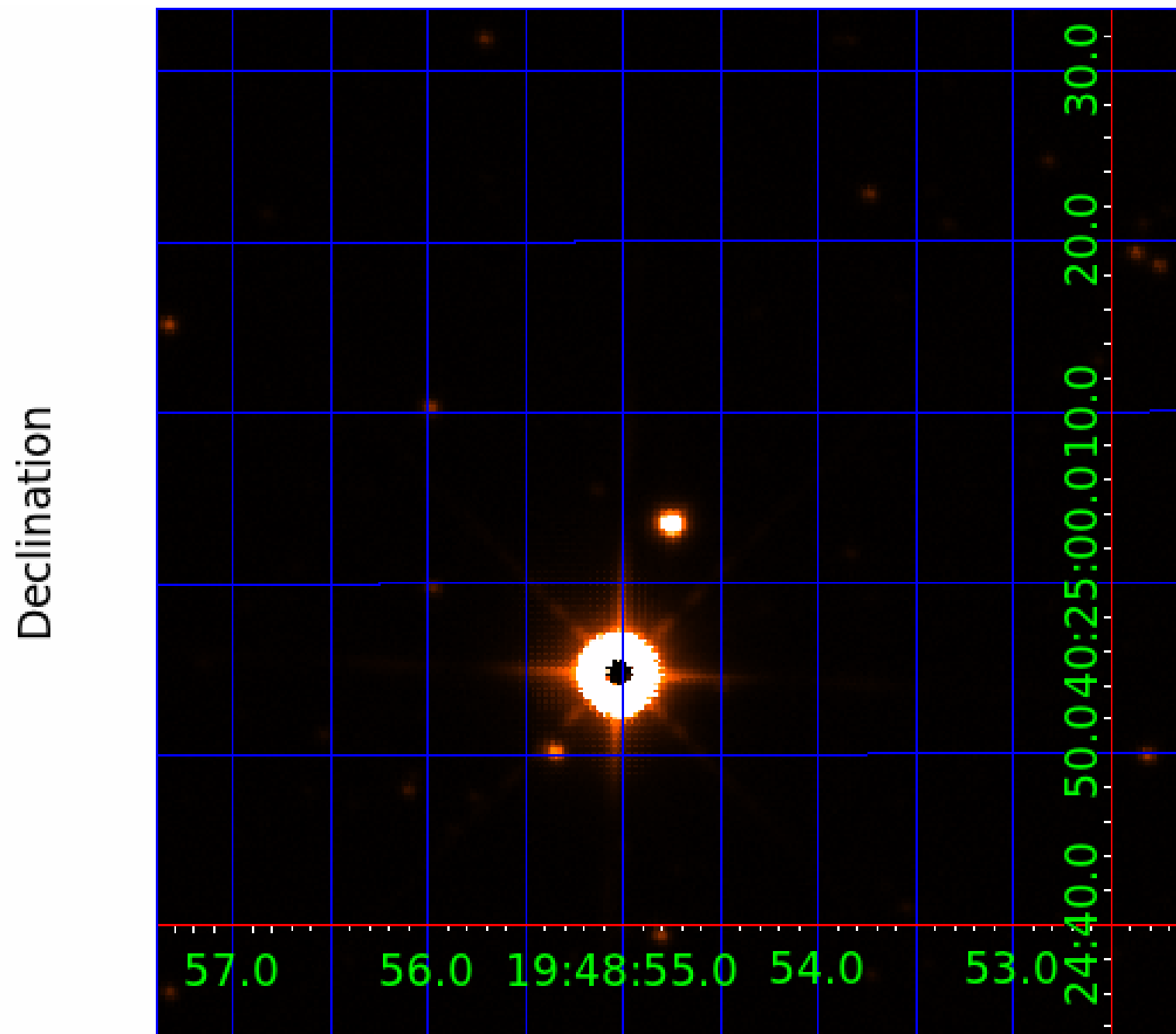
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



UKIRT Image



KIC 005296692

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})
005296692-01	OBS	No	0.521755	131.590831	145.5	1.394	10.6	9.7	1.58	6997	2.04	27027.57
005296692-02	OBS	No	187.578289	260.128968	16038.5	3.647	23.2	12.9	1.58	6997	34.69	10.57
005296692-03	OBS	No	373.981826	279.640681	1723.3	4.500	24.1	-1.0	1.58	6997	6.62	4.21

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
005296692-01	OBS	FP	0.00	1	0	1	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—CENT_KIC_POS—HALO_GHOST
005296692-02	OBS	FP	0.00	1	0	1	0	TRANS_GAPPED—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—INCONSISTENT_TRANS—CENT_KIC_POS—HALO_GHOST
005296692-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_CHASES_MARSHALL—LPP_DV—LPP_ALT—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—INCONSISTENT_TRANS—CENT_NOFITS

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

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

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

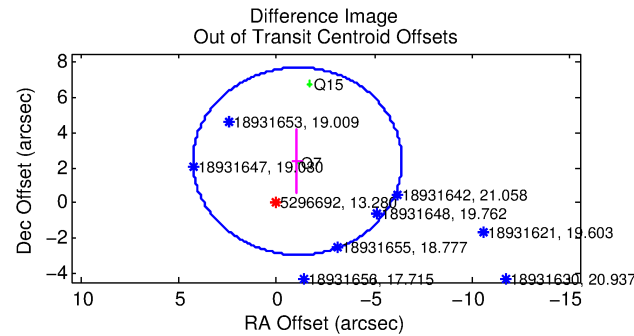
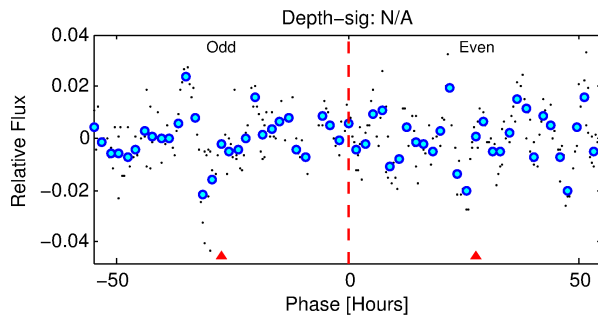
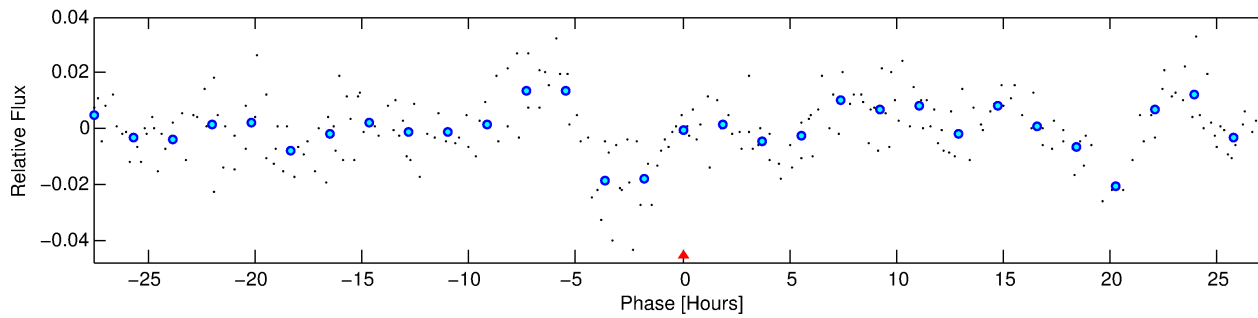
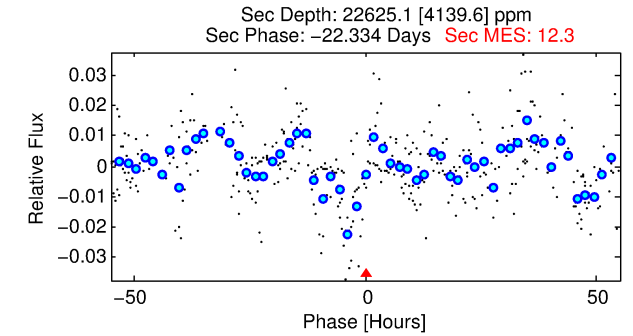
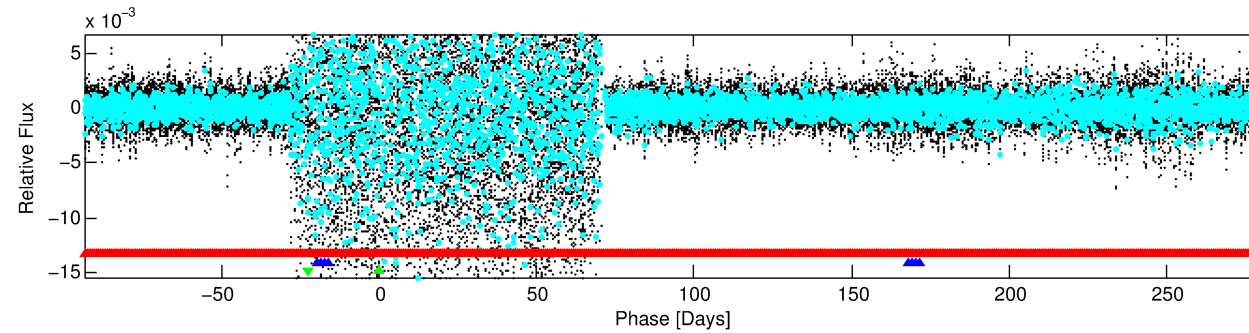
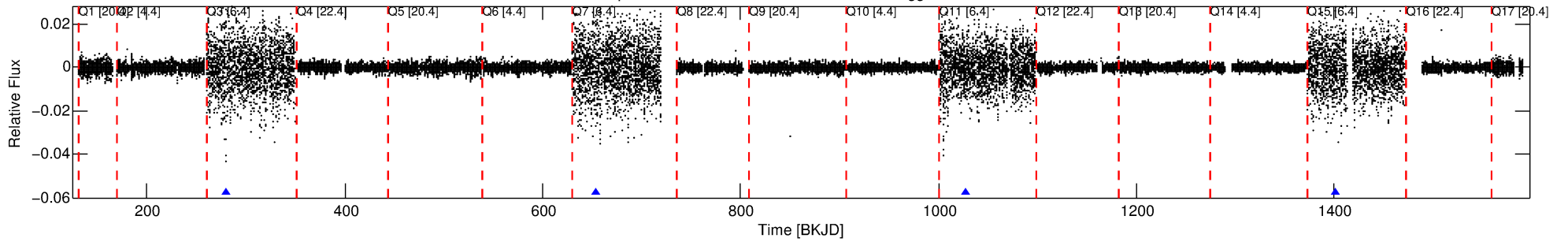
Ephemeris Match Information For 005296692-03

No Significant Match Found

DV One-Page Summary

KIC: 5296692 Candidate: 3 of 3 Period: 373.982 d

Kp: 13.28 R*: 1.58 Rs Teff: 6997.0 K Logg: 4.18 Fe/H: -0.200



TPS TCE Results:

Period = 373.98183 d
Epoch = 279.6407 BKJD

DV fit results are unavailable

DV Diagnostic Results:

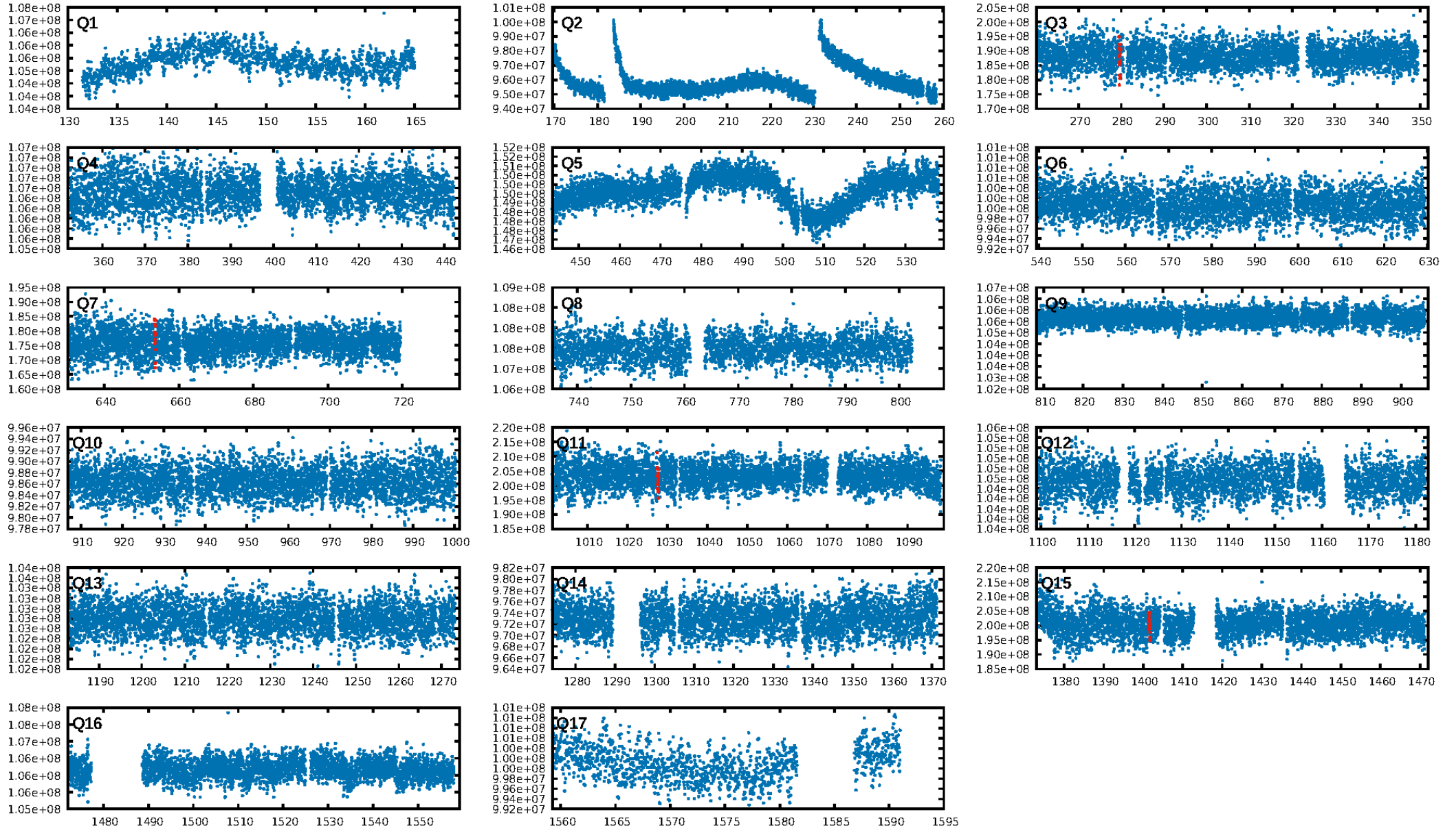
ShortPeriod-sig: 100.0% [772.35σ]
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [4/4]
GhostDiagnostic-chr: -1.219

Centroid-sig: N/A
Centroid-so: 3.299 arcsec [20.69σ]
OotOffset-rm: 2.601 arcsec [1.46σ]
KicOffset-rm: 2.522 arcsec [1.22σ]
OotOffset-st: 0/2/0/0 [2]
KicOffset-st: 0/2/0/0 [2]
DiffImageQuality-fgm: 0.50 [1/2]
DiffImageOverlap-fno: 0.00 [0/3]

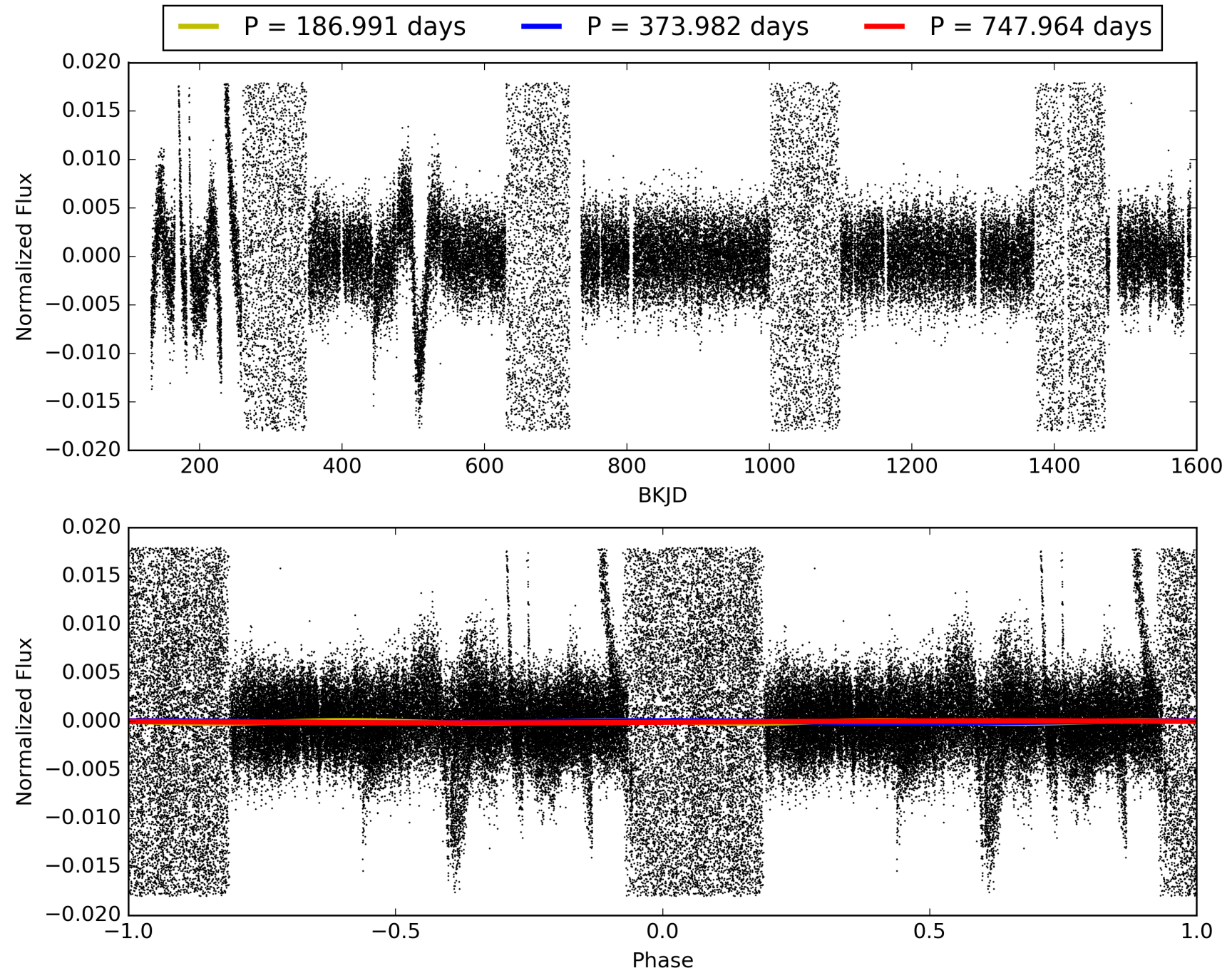
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 16:42:01 Z

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

TCE 005296692-03, PDC Light Curves

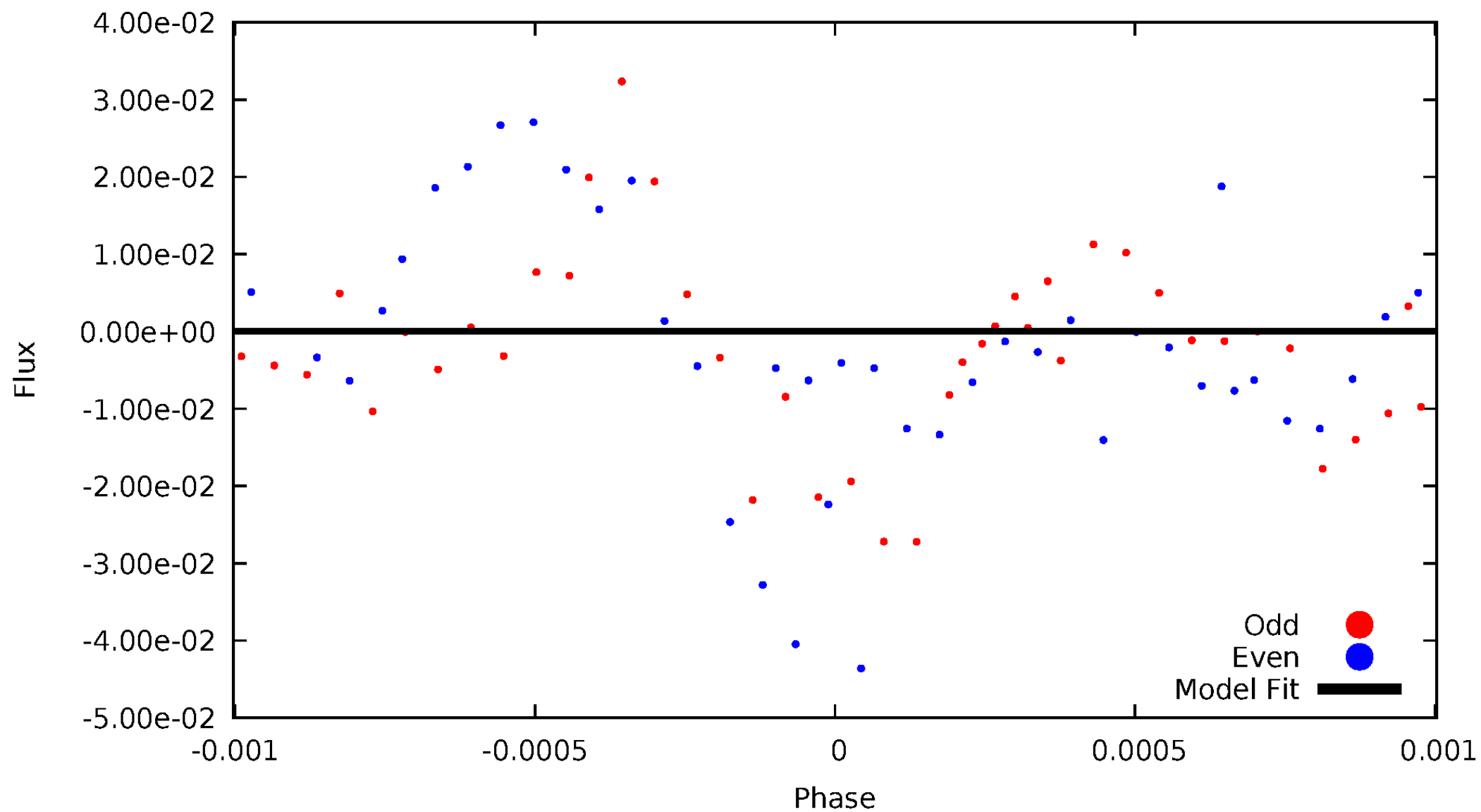


TCE 005296692-03



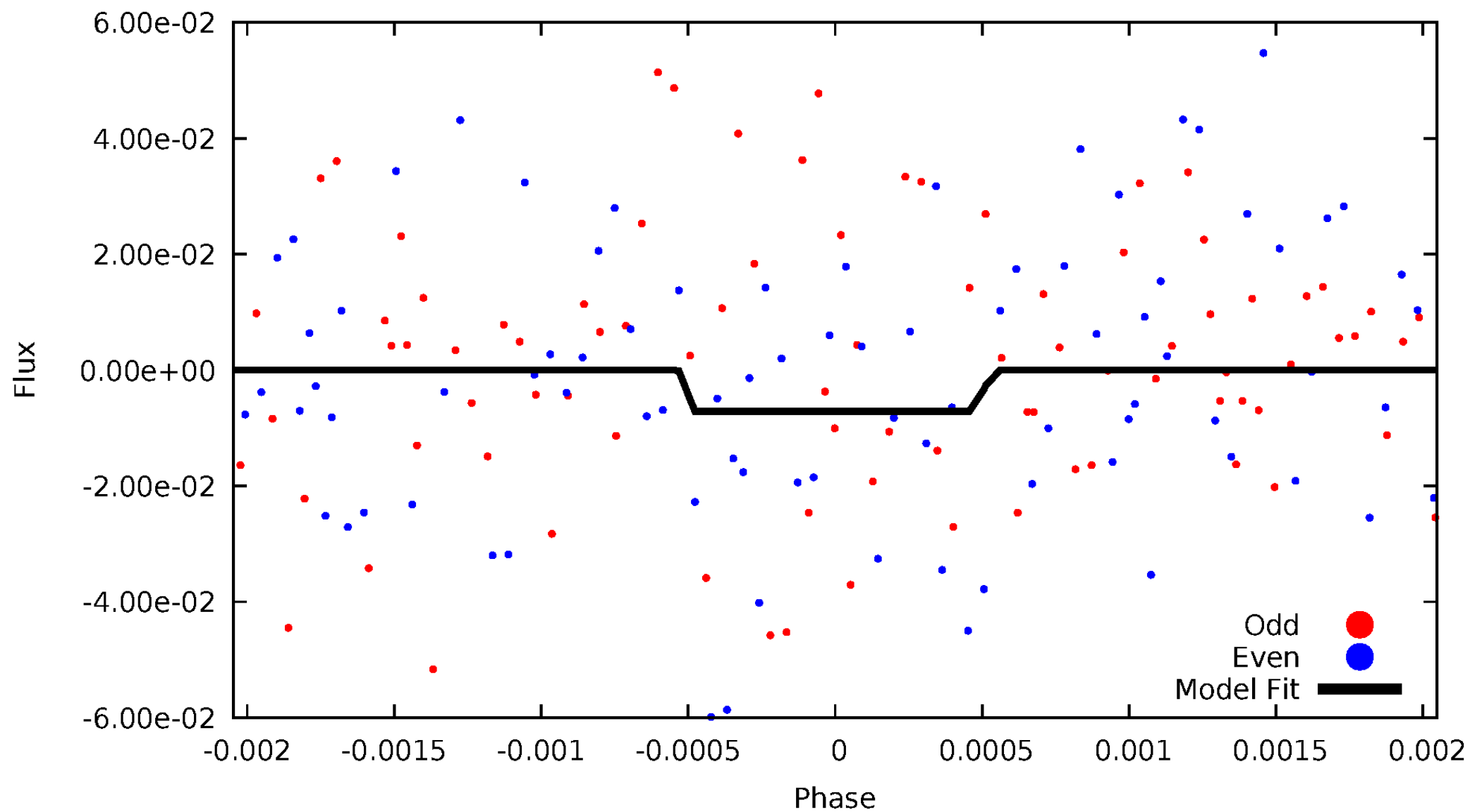
DV Odd/Even

TCE 005296692-03



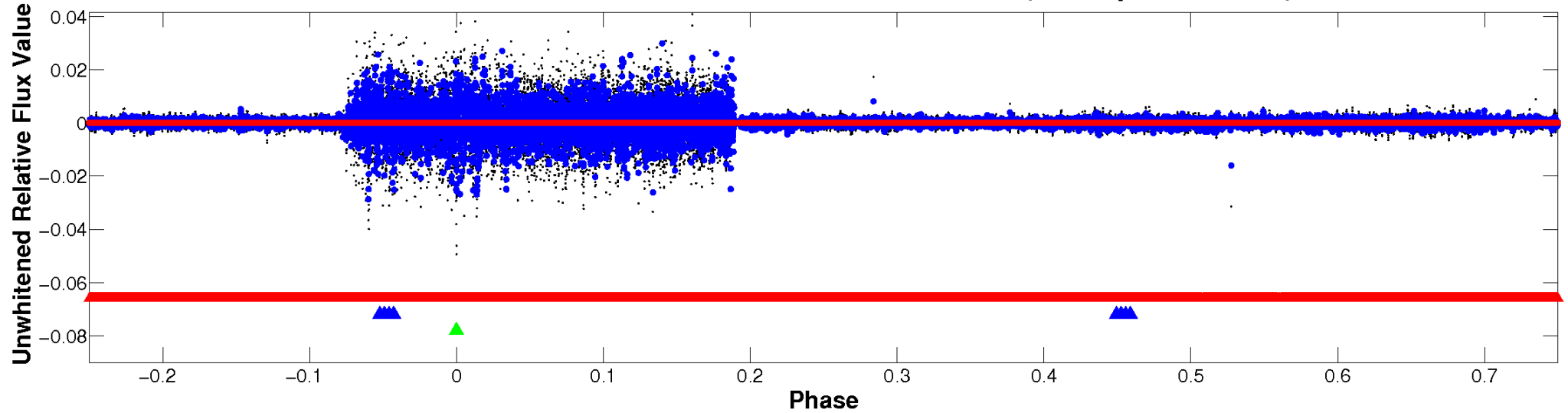
ALT Odd/Even

TCE 005296692-03

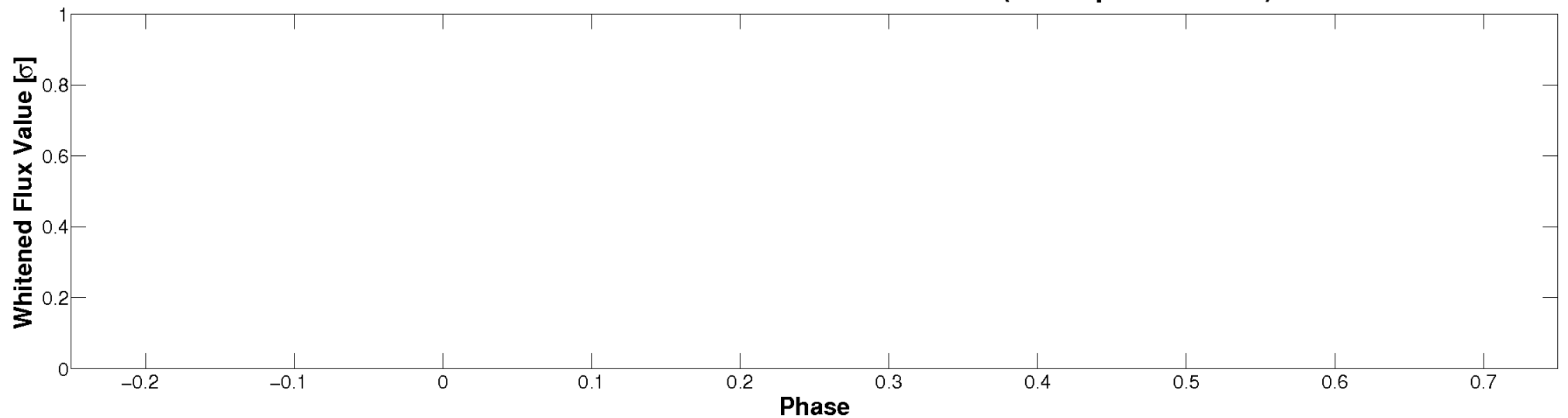


Non-Whitened Vs. Whitened Light Curve

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

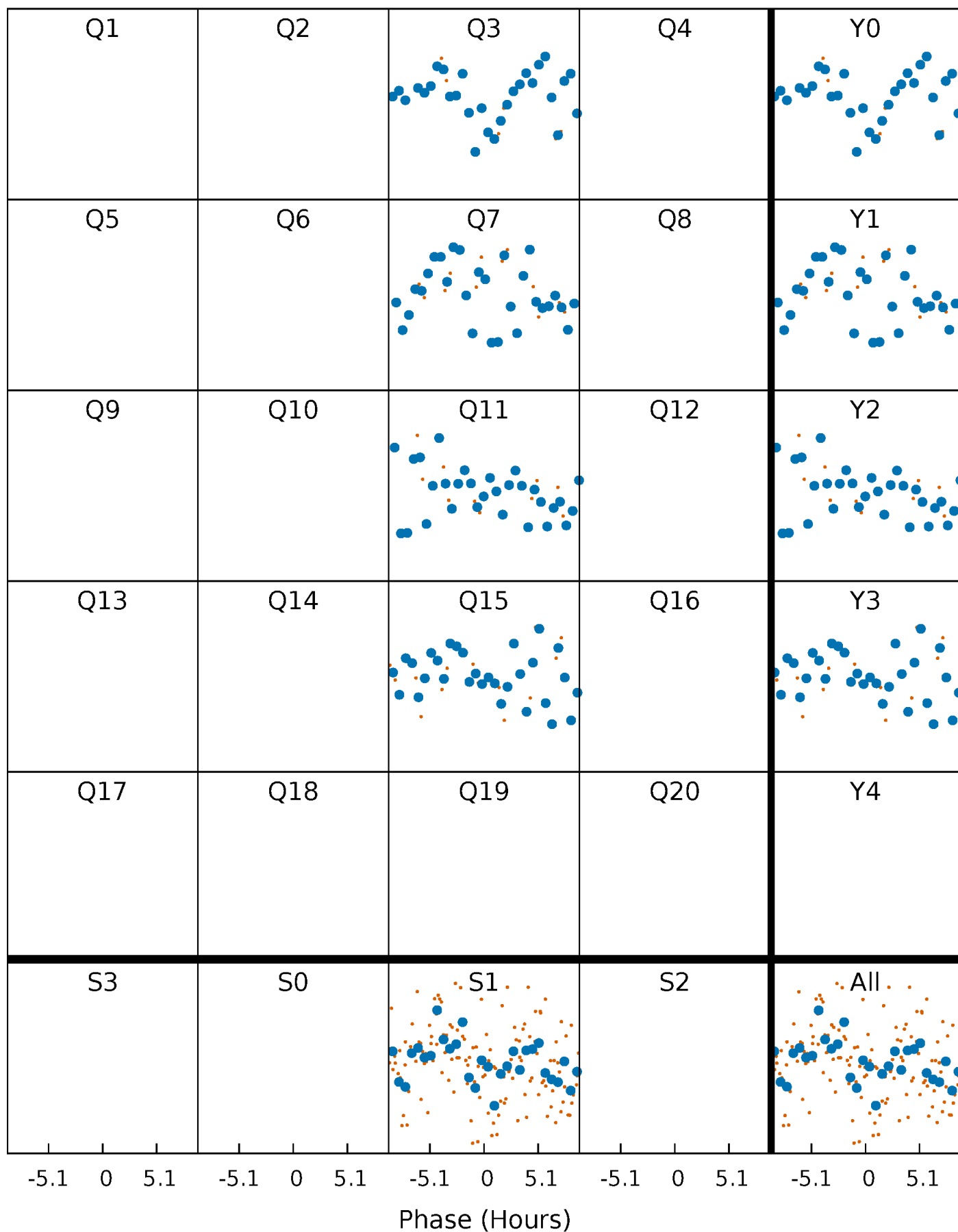


Planet 3 : Phased Whitened Flux Time Series (TPS Epoch/Period)



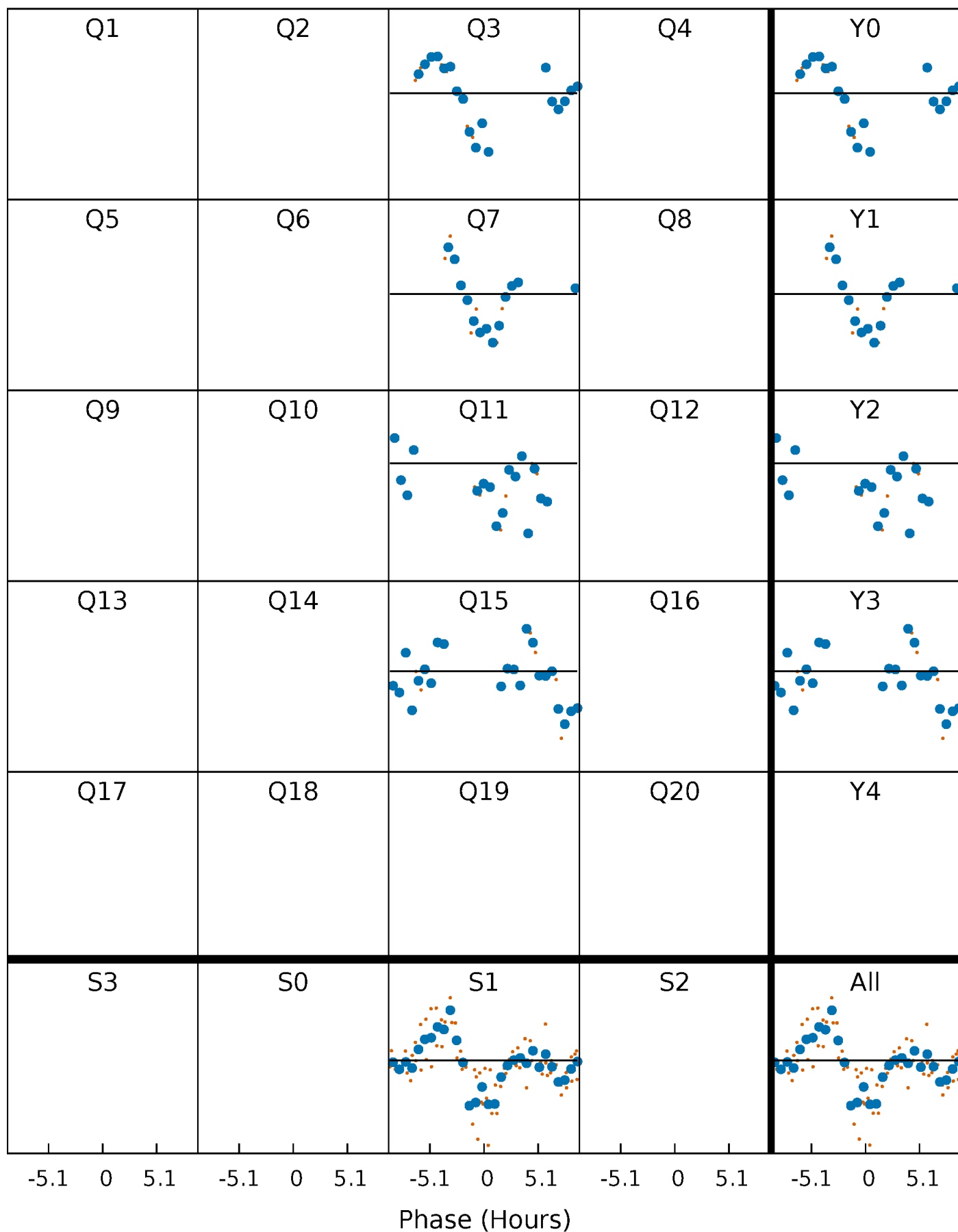
PDC Quarter-Phased Transit Curves

TCE 005296692-03 $P=373.981826$ Days $T_0=279.640681$ (BKJD)



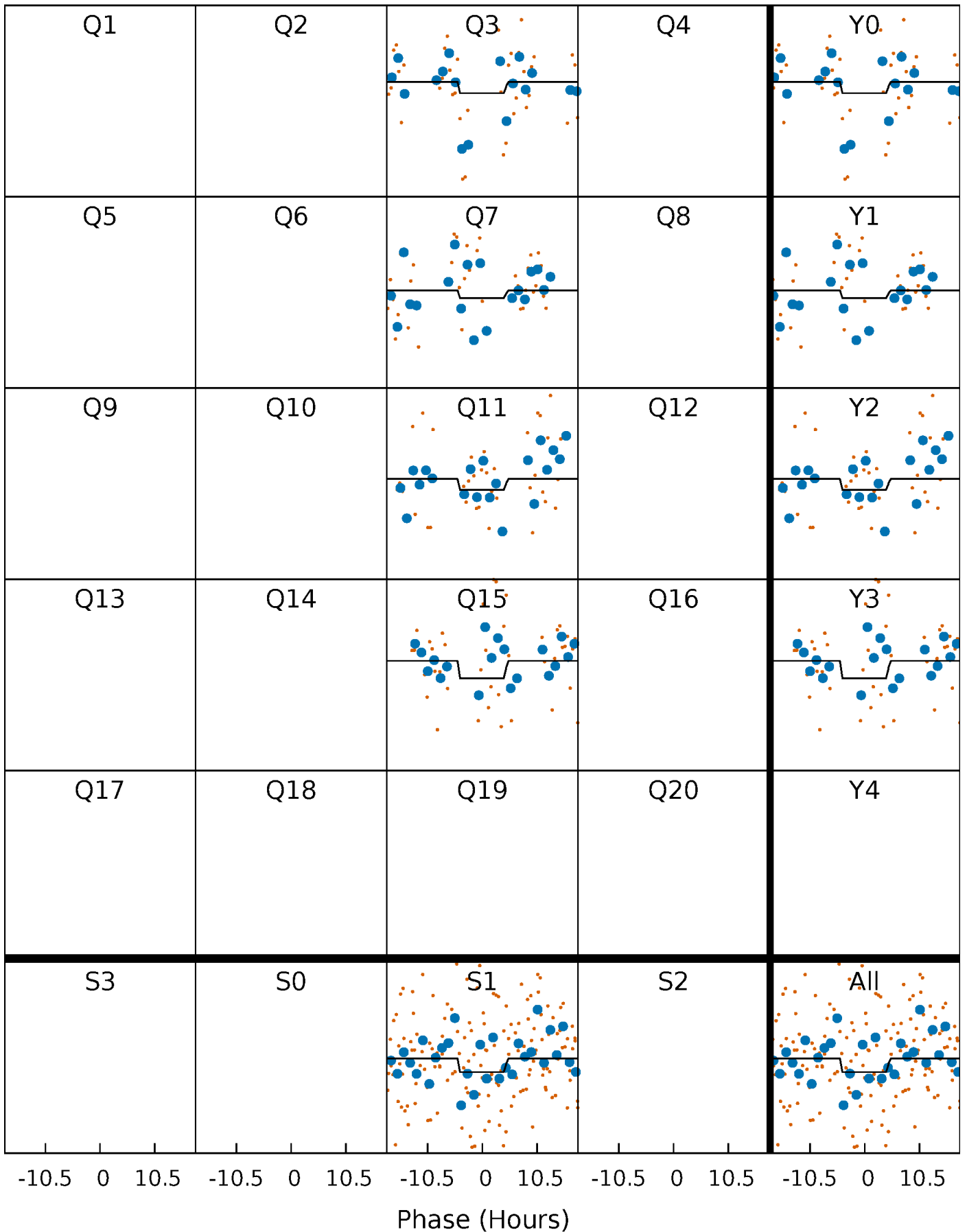
DV Quarter-Phased Transit Curves

TCE 005296692-03 $P=373.981826$ Days $T_0=279.640681$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

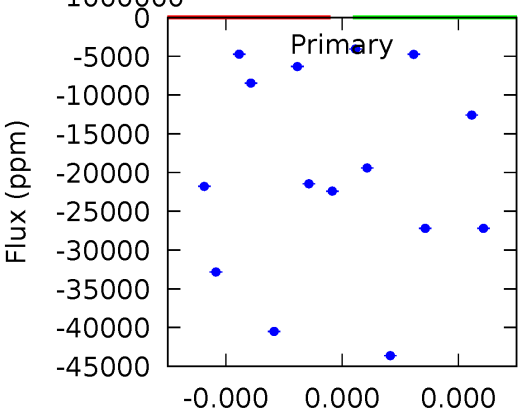
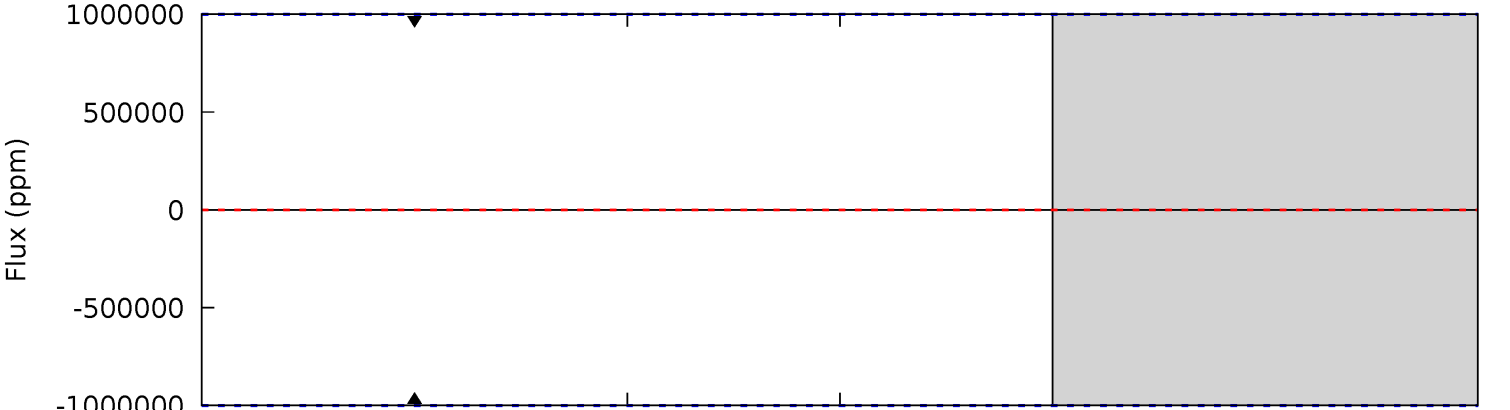
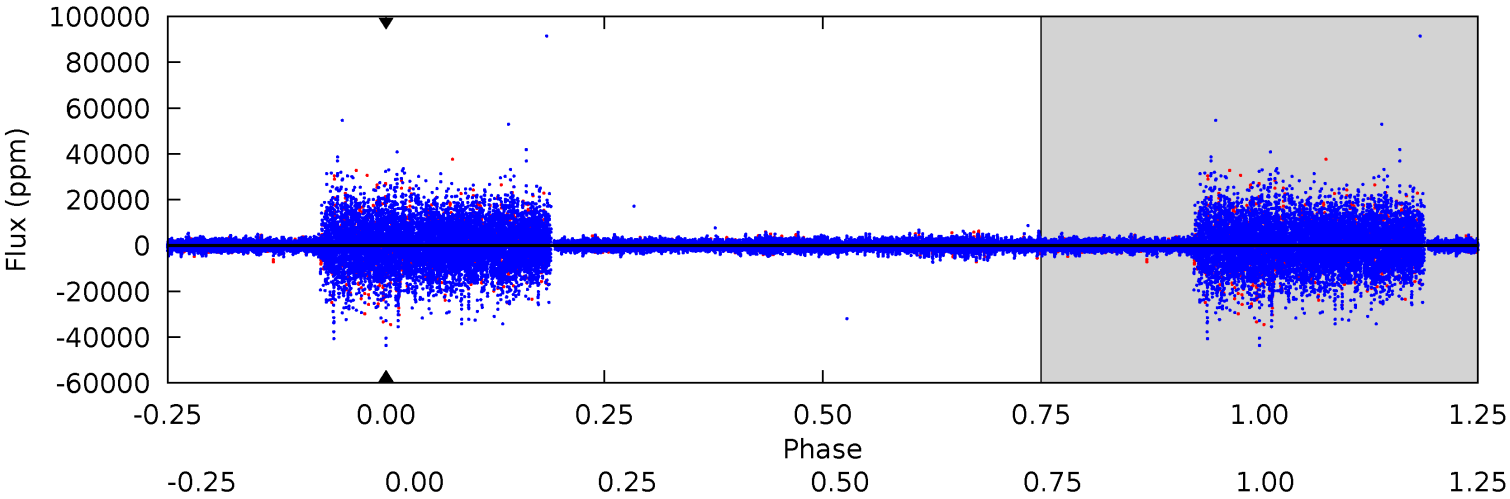
TCE 005296692-03 $P=373.981826$ Days $T_0=279.753574$ (BKJD)



DV Model-Shift Uniqueness Test

005296692-03, P = 373.981826 Days, E = 279.640681 Days

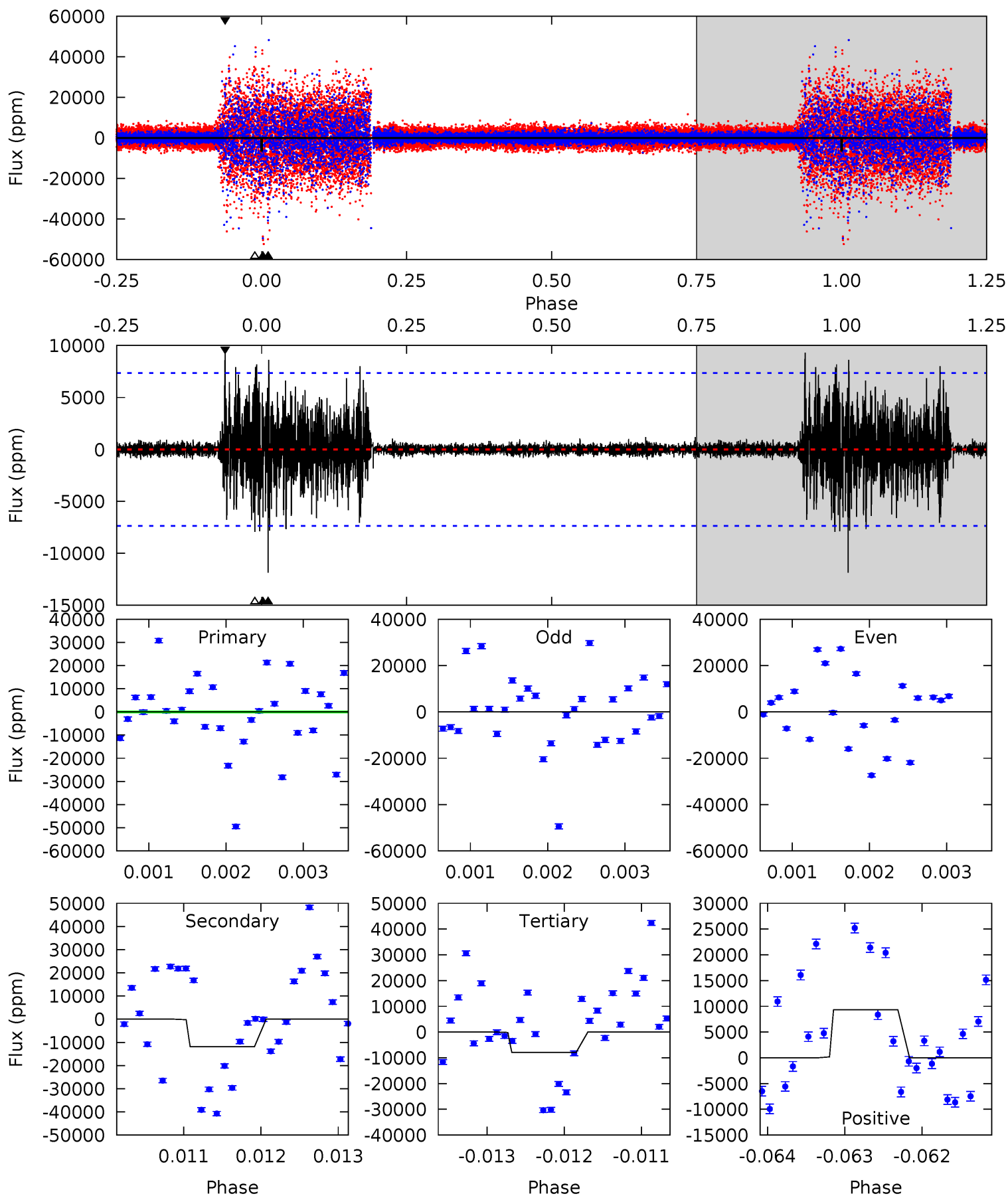
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
0	0	0	0	1.00	1.00	1.00	0	0	0	0	0	0	0	0



Alt Model-Shift Uniqueness Test

005296692-03, P = 373.981826 Days, E = 279.753574 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
4.67	8.78	5.85	6.89	5.44	3.28	0.87	-1.18	-2.22	2.92	1.89	3.64	2.15	0.44	3.51



Stellar Parameters For KIC 005296692

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6997^{+225}_{-338}	$4.176^{+0.148}_{-0.181}$	$-0.200^{+0.250}_{-0.350}$	$1.577^{+0.496}_{-0.330}$	$1.369^{+0.195}_{-0.239}$	$0.491^{+0.381}_{-0.249}$
	+3%/-5%	+4%/-4%	+125%/-175%	+31%/-21%	+14%/-17%	+78%/-51%
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 005296692-03 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	0 ± 1000000	$14.30^{+15.76}_{-9.36}$	511^{+39}_{-36}	4319^{+23905}_{-30734}	$2698^{+599966}_{-526343}$
Alt.	-11859 ± 1351	$19.16^{+15.04}_{-12.25}$	510^{+41}_{-37}	7015^{+7042}_{-1819}	$22510^{+144921}_{-15700}$

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

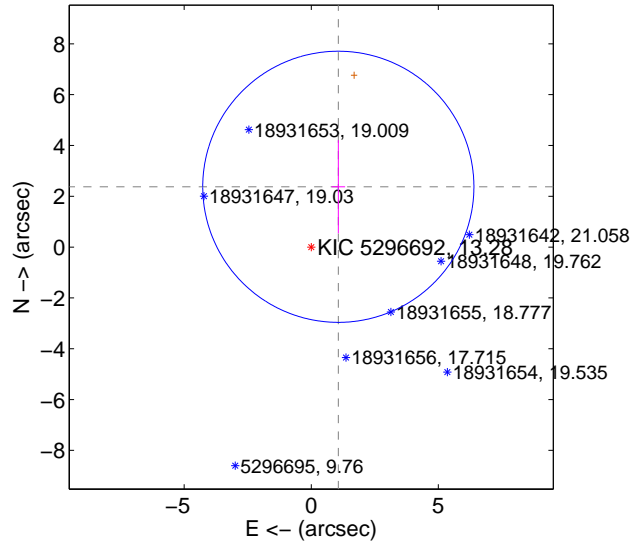
Supplemental centroid analysis for 005296692-03. Kepler magnitude: 13.28. Transit SNR -1.00

There are 1 quarters with good PRF difference image offsets

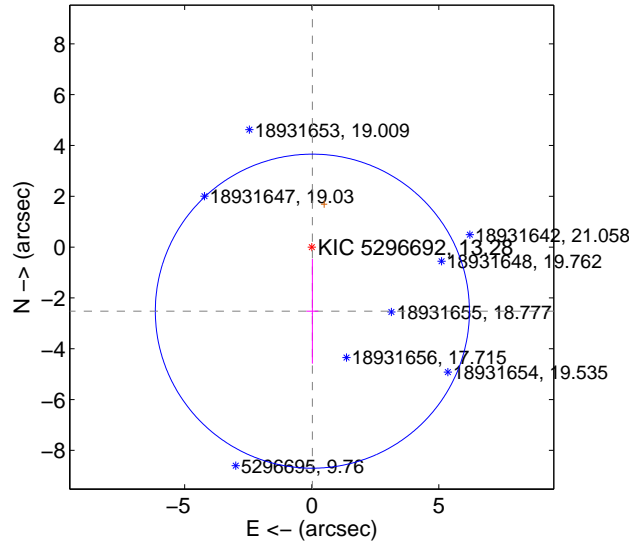
The OOT PRF centroid is offset from the target star catalog position by about 5.21 arcsec so the offset from difference PRF-fit to OOT-fit may be invalid.

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	2.601 ± 1.778	1.46	-1.066 ± 0.265	2.373 ± 1.834
PRF-fit source offset from KIC position	2.522 ± 2.060	1.22	-0.025 ± 0.234	-2.522 ± 2.062
photometric centroid source offset	3.30 ± 0.16	20.69	1.31 ± 0.15	-3.03 ± 0.16

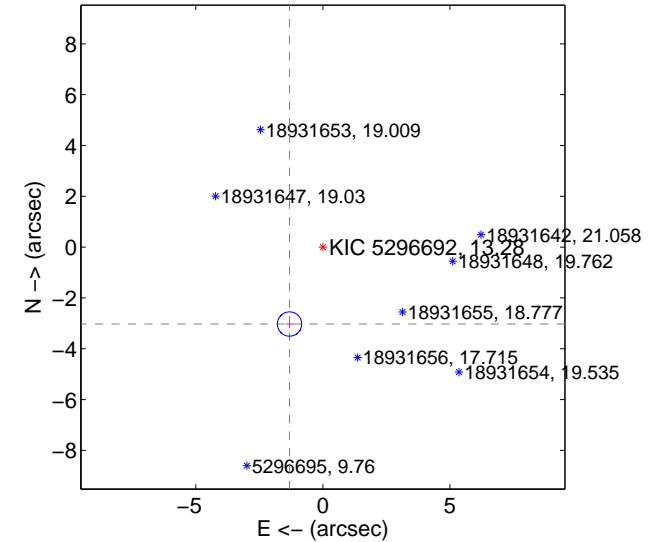
offset from difference PRF-fit to OOT PRF-fit



offset from difference PRF-fit to KIC position

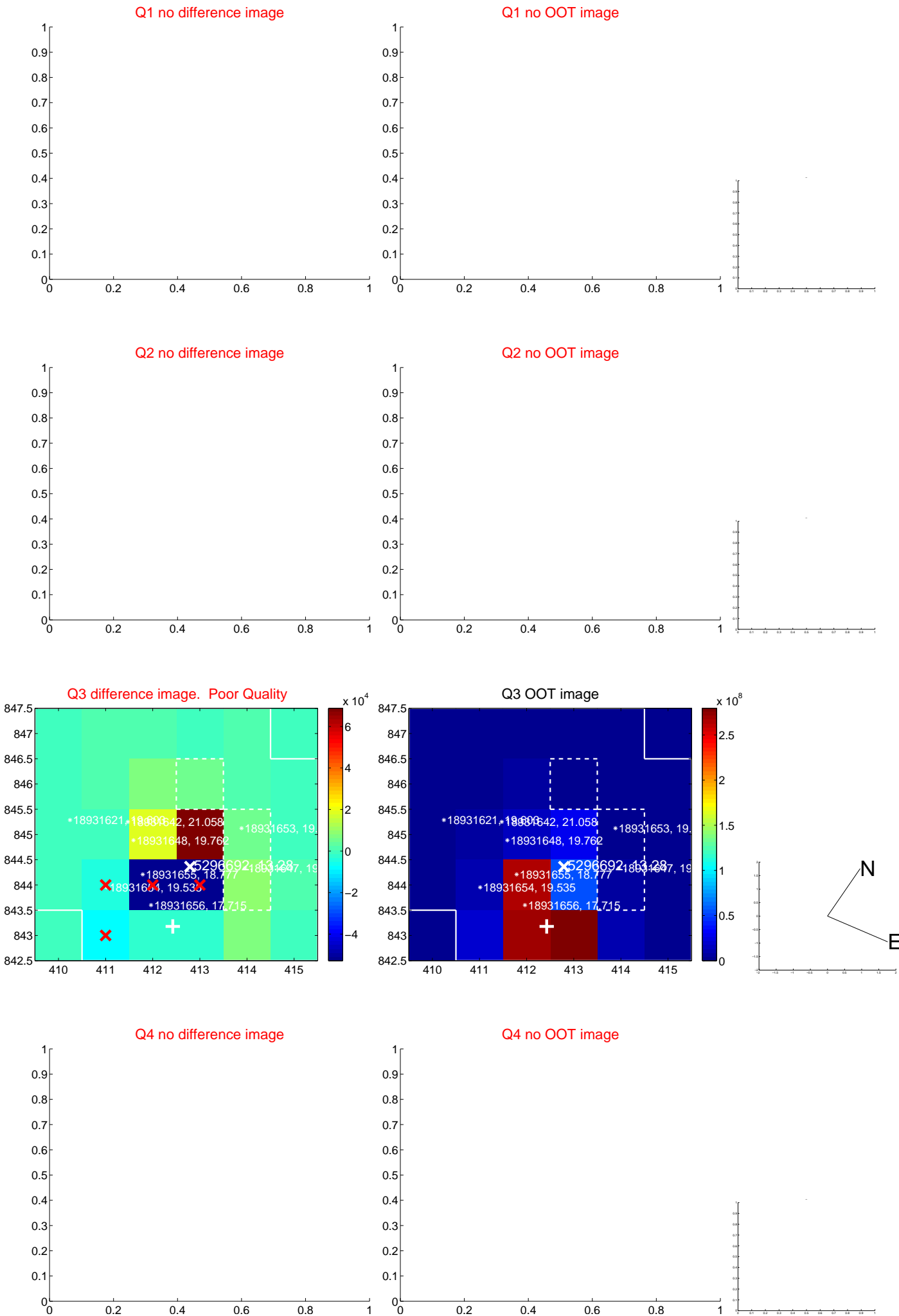


offset from photometric centroids

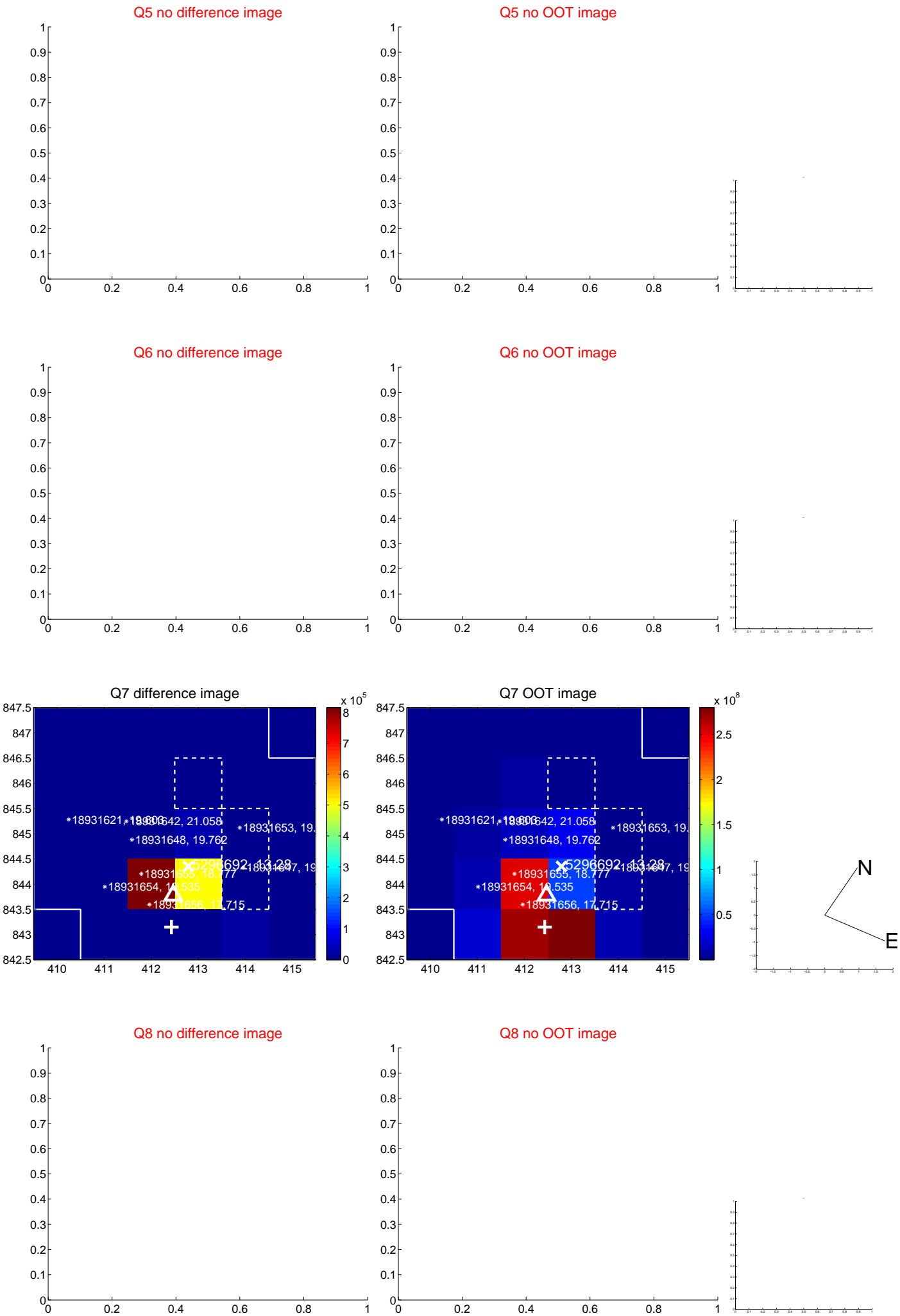


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

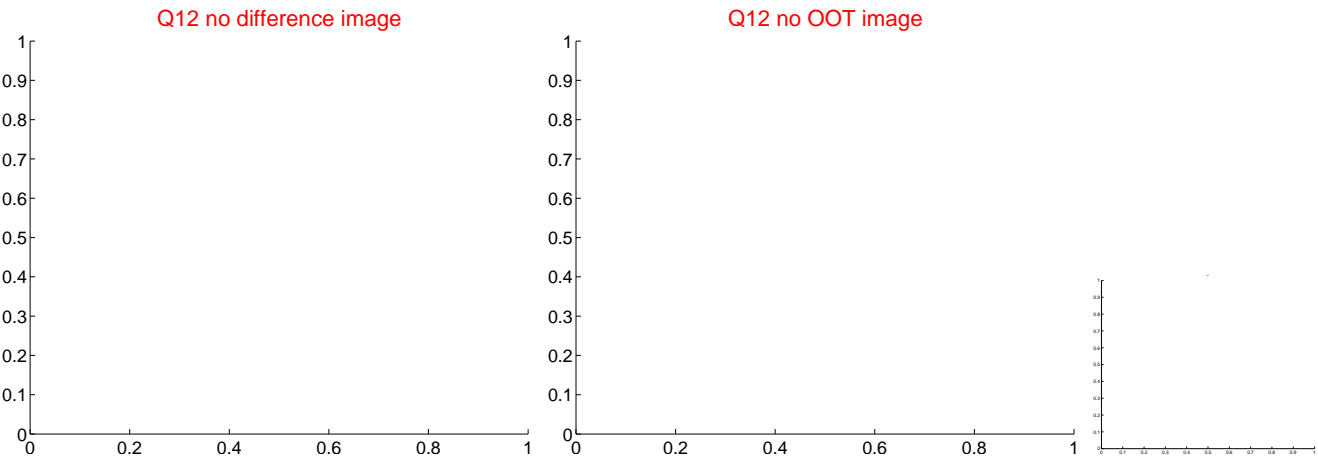
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



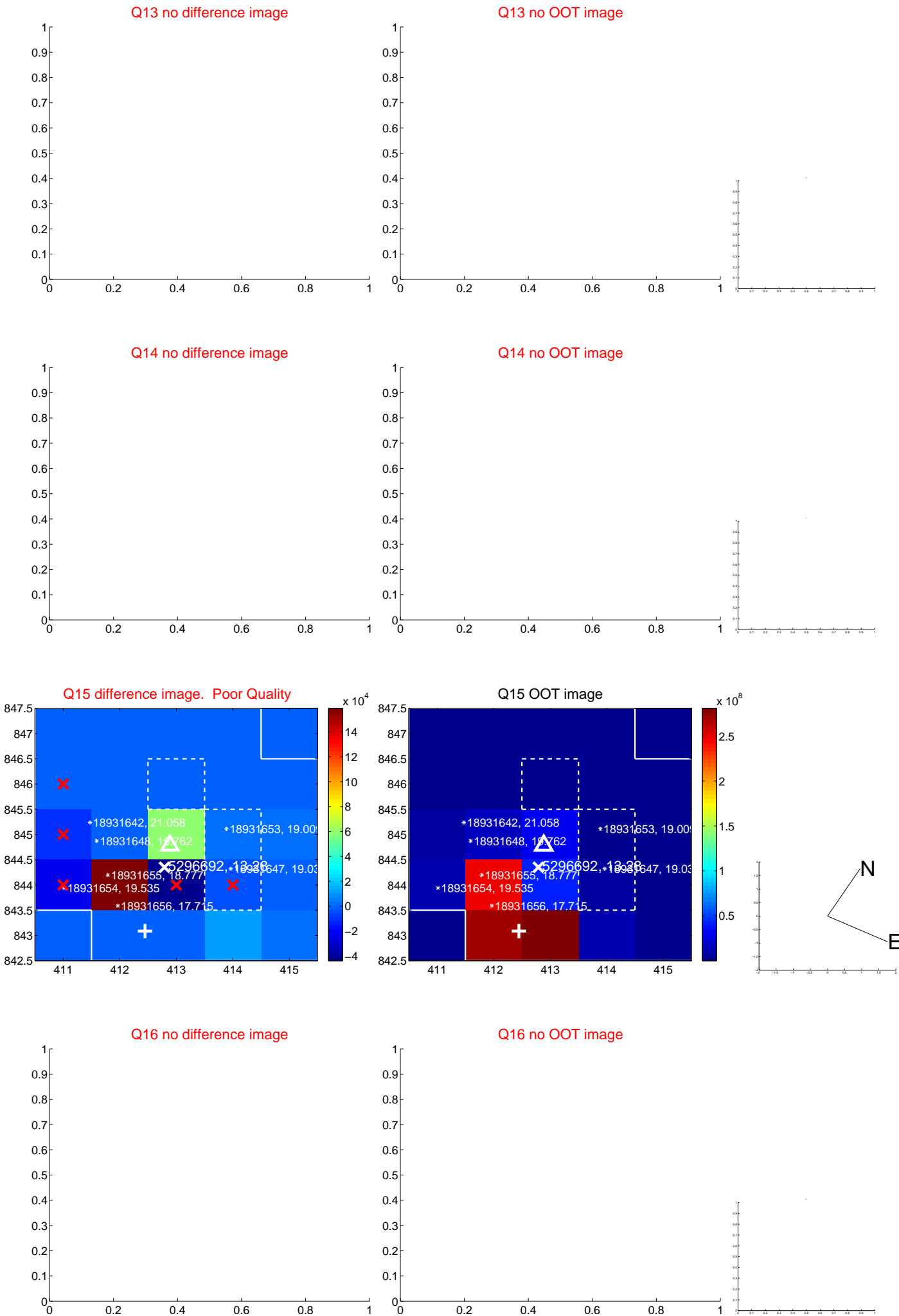
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



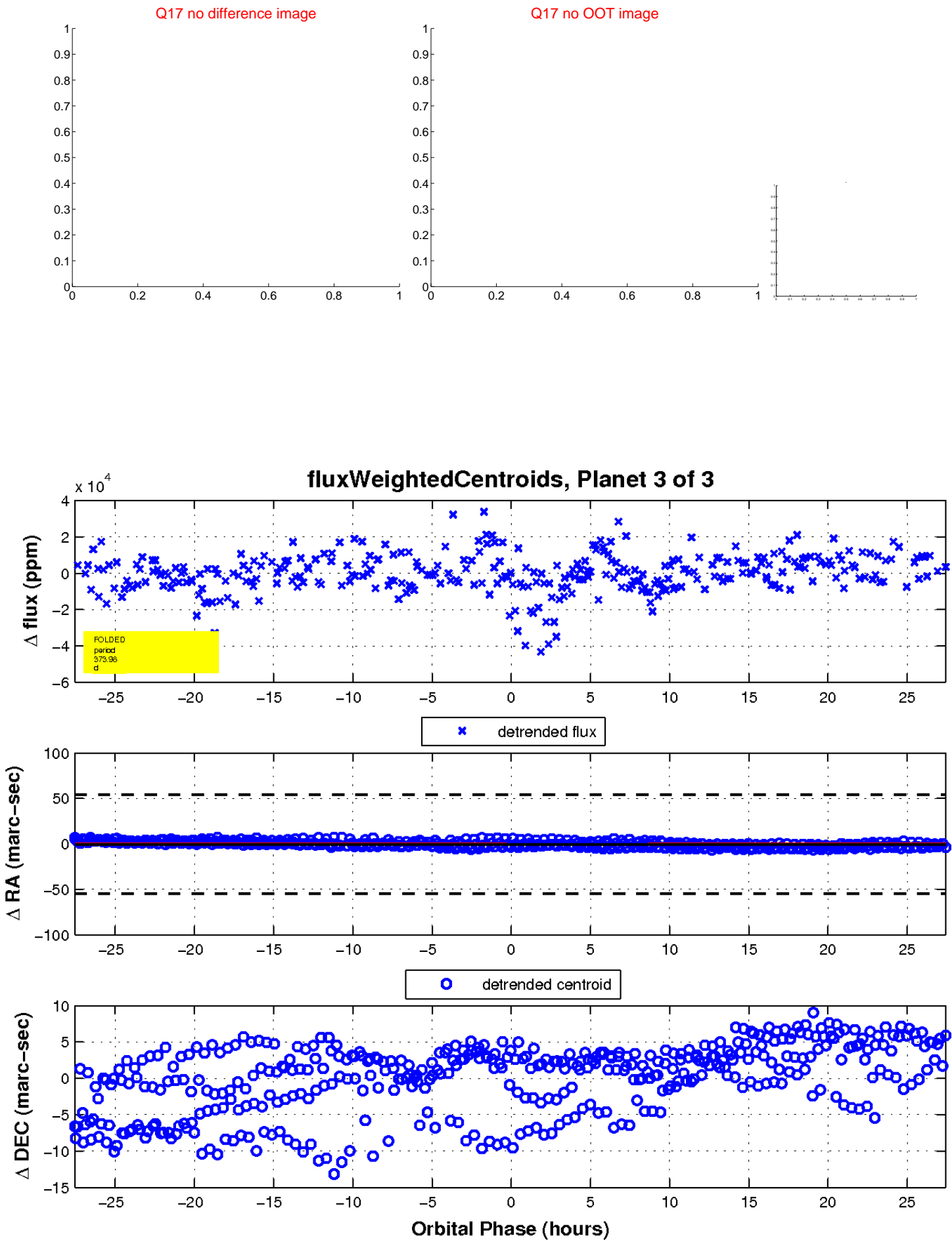
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

