

KIC 002576692

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})
002576692-01	OBS	6282.01	87.879693	194.095583	343541.3	9.000	20777.6	-1.0	1.64	5784	74.78	18.69
002576692-02	OBS	No	87.877281	142.167095	279491.6	12.000	18658.1	-1.0	1.64	5784	65.15	18.69
002576692-03	OBS	No	87.878932	196.172156	5178.9	51.572	407.3	184.3	1.64	5784	21.65	18.69
002576692-04	OBS	No	338.445920	295.514290	303.8	12.307	12.0	10.4	1.64	5784	3.52	3.10
002576692-05	OBS	No	349.285026	149.465320	120.2	14.226	10.2	4.2	1.64	5784	2.05	2.97
002576692-06	OBS	No	354.967683	486.422993	173.8	17.016	9.8	5.5	1.64	5784	2.56	2.90

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
002576692-01	OBS	FP	0.00	0	1	0	0	MOD_SEC_ALT—HAS_SEC_TCE—CENT_NOFITS
002576692-02	OBS	FP	0.00	1	1	0	0	IS_SEC_TCE—CENT_NOFITS
002576692-03	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—SAME_NTL_PERIOD—CENT_FEW_DIFFS
002576692-04	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_MARSHALL—LPP_DV—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—INCONSISTENT_TRANS—CENT_FEW_DIFFS
002576692-05	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_MARSHALL—LPP_DV—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_NONUNIQ_ALT—INCONSISTENT_TRANS—CENT_FEW_DIFFS
002576692-06	OBS	FP	0.00	1	0	1	0	INDIV_TRANS_MARSHALL—LPP_DV—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—MOD_NONUNIQ_ALT—INCONSISTENT_TRANS—CENT_FEW_DIFFS—HALO_GHOST

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 002576692-01

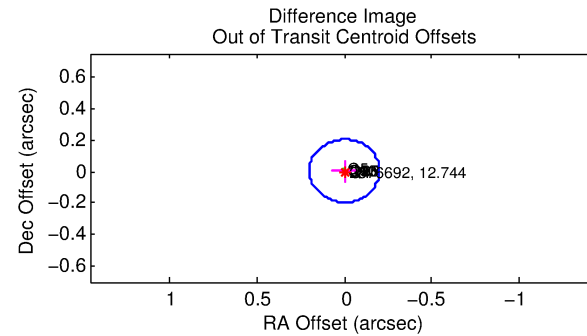
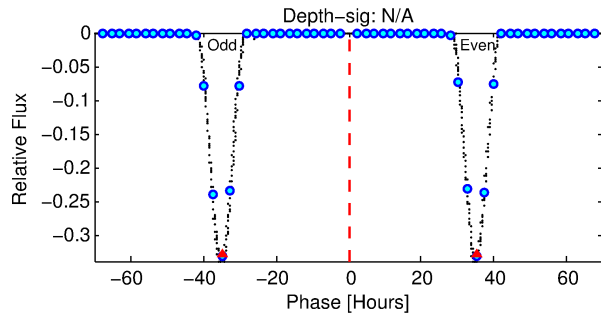
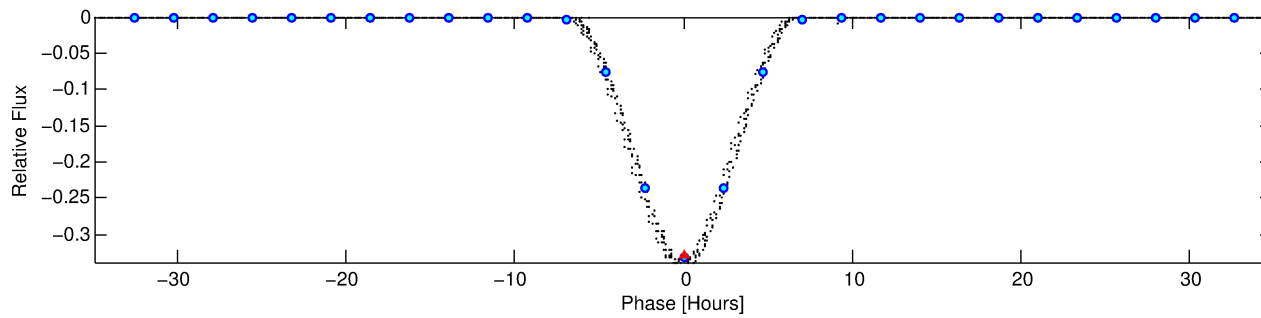
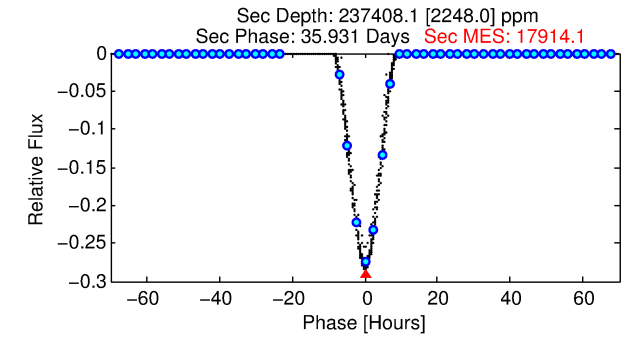
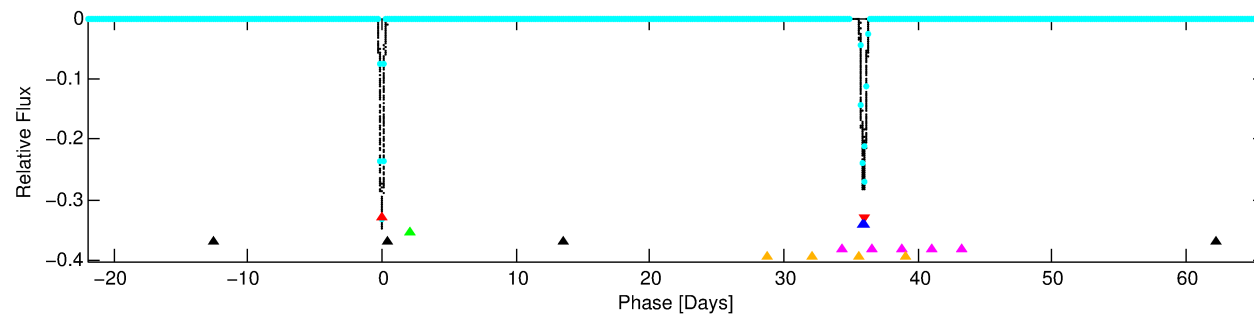
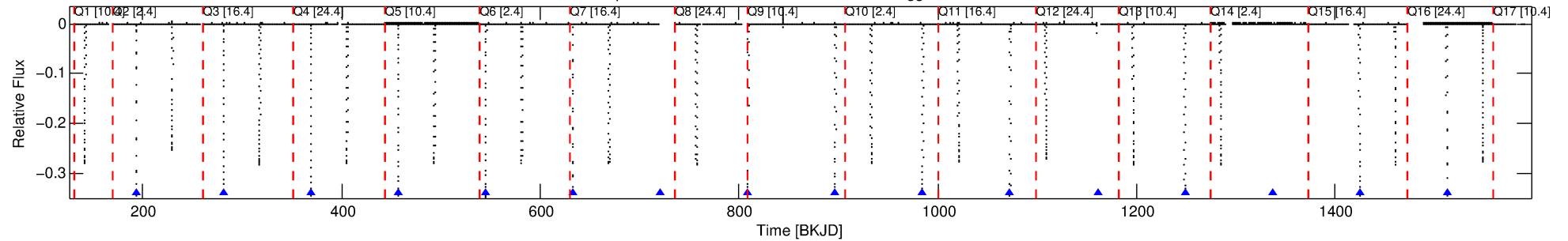
No Significant Match Found

DV One-Page Summary

KIC: 2576692 Candidate: 1 of 6 Period: 87.880 d

KOI: K06282.01 Corr: 0.838

Kp: 12.74 R*: 1.64 Rs Teff: 5784.0 K Logg: 3.98 Fe/H: -0.320



TPS TCE Results:

Period = 87.87969 d
Epoch = 194.0956 BKJD

DV fit results are unavailable

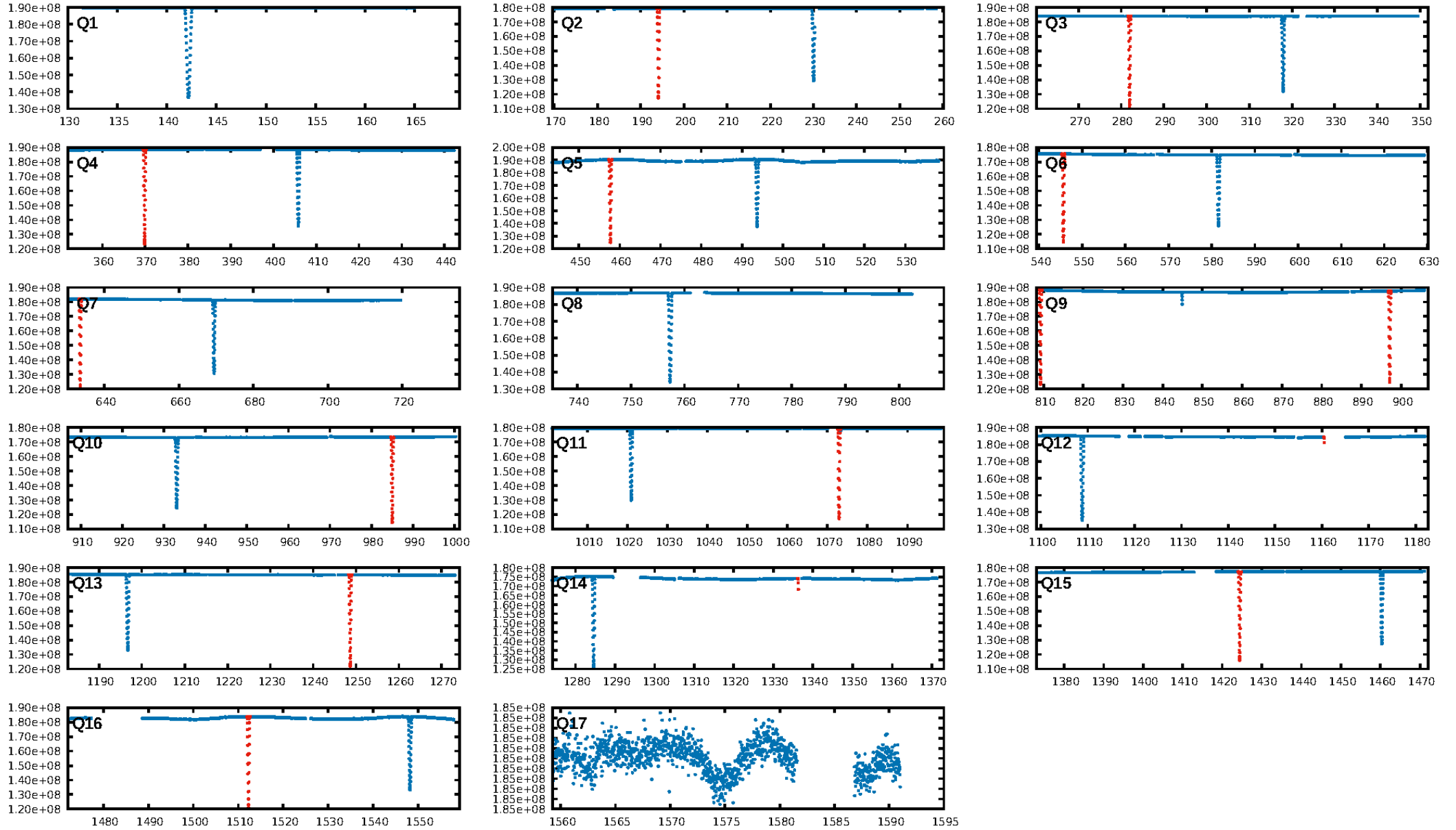
DV Diagnostic Results:

ShortPeriod-sig: 0.0% [0.00 σ]
LongPeriod-sig: 100.0% [394.42 σ]
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [15/15]
GhostDiagnostic-chr: 4.936
Centroid-sig: 0.0%
Centroid-so: 0.177 arcsec [309.92 σ]
OotOffset-rm: 0.005 arcsec [0.07 σ]
KicOffset-rm: 0.099 arcsec [1.46 σ]
OotOffset-st: 3/1/2/3 [9]
KicOffset-st: 3/1/2/3 [9]
DiffImageQuality-fgm: 1.00 [9/9]
DiffImageOverlap-fno: 1.00 [9/9]

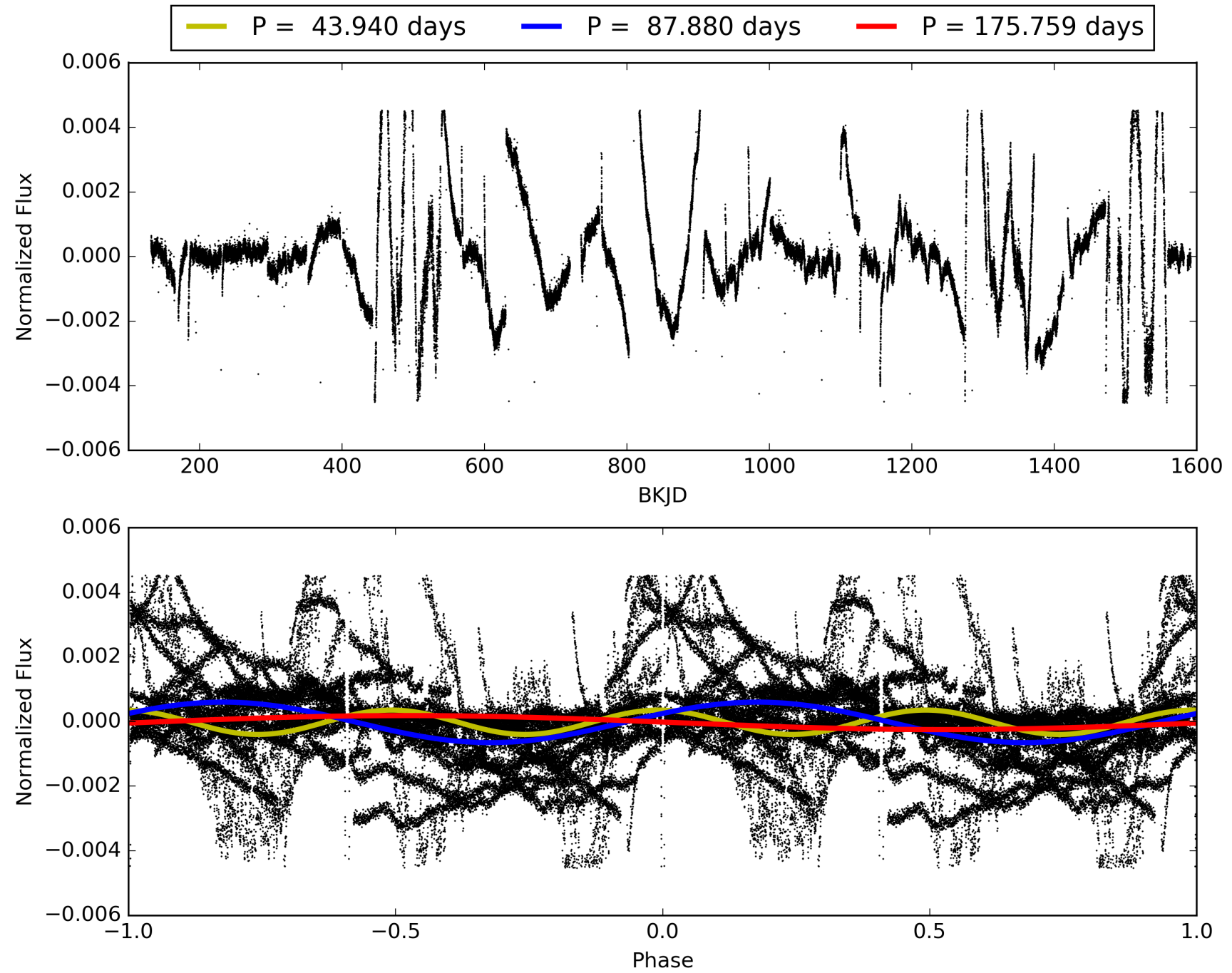
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 01-Feb-2016 14:15:42 Z

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

TCE 002576692-01, PDC Light Curves

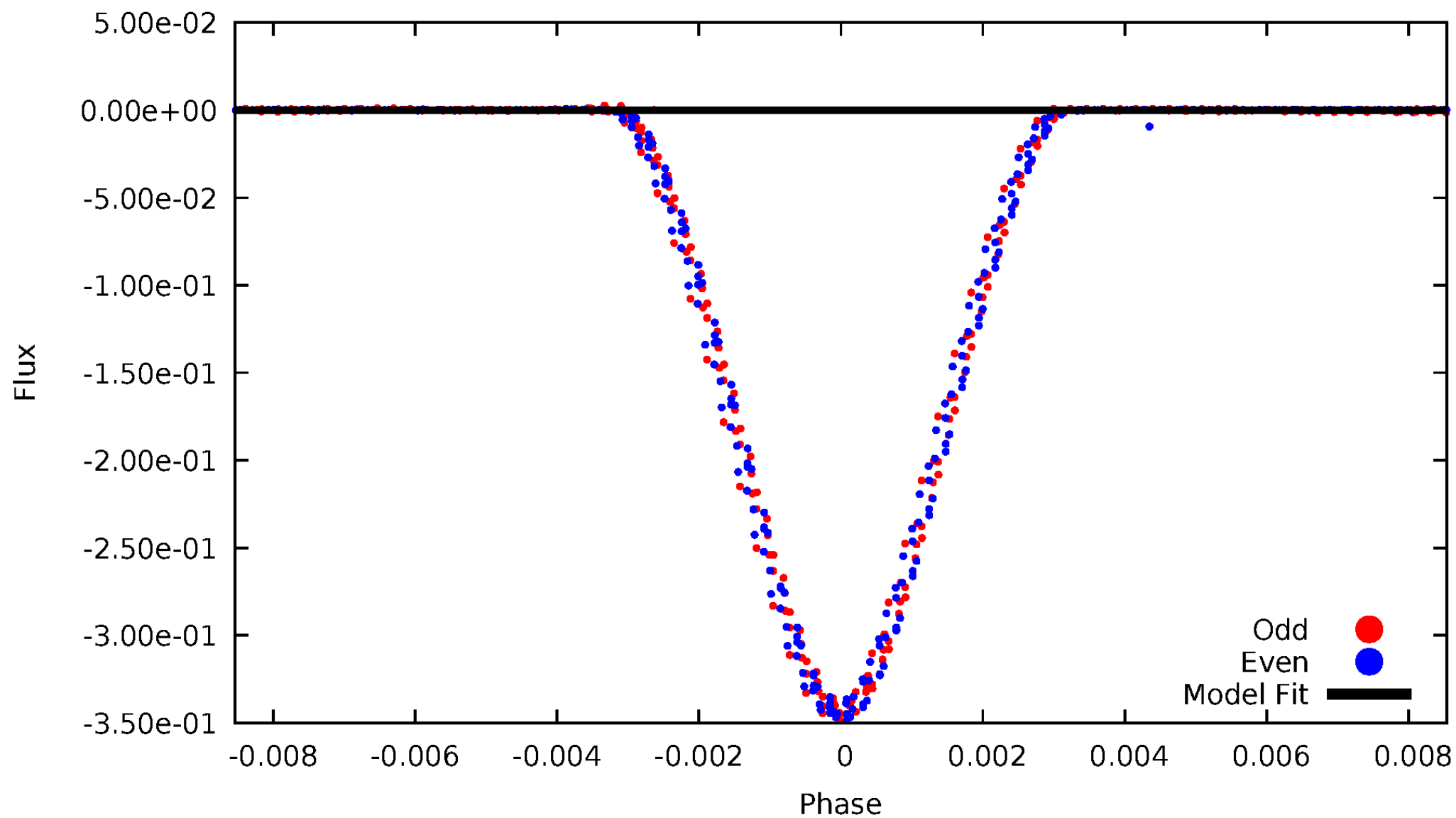


TCE 002576692-01



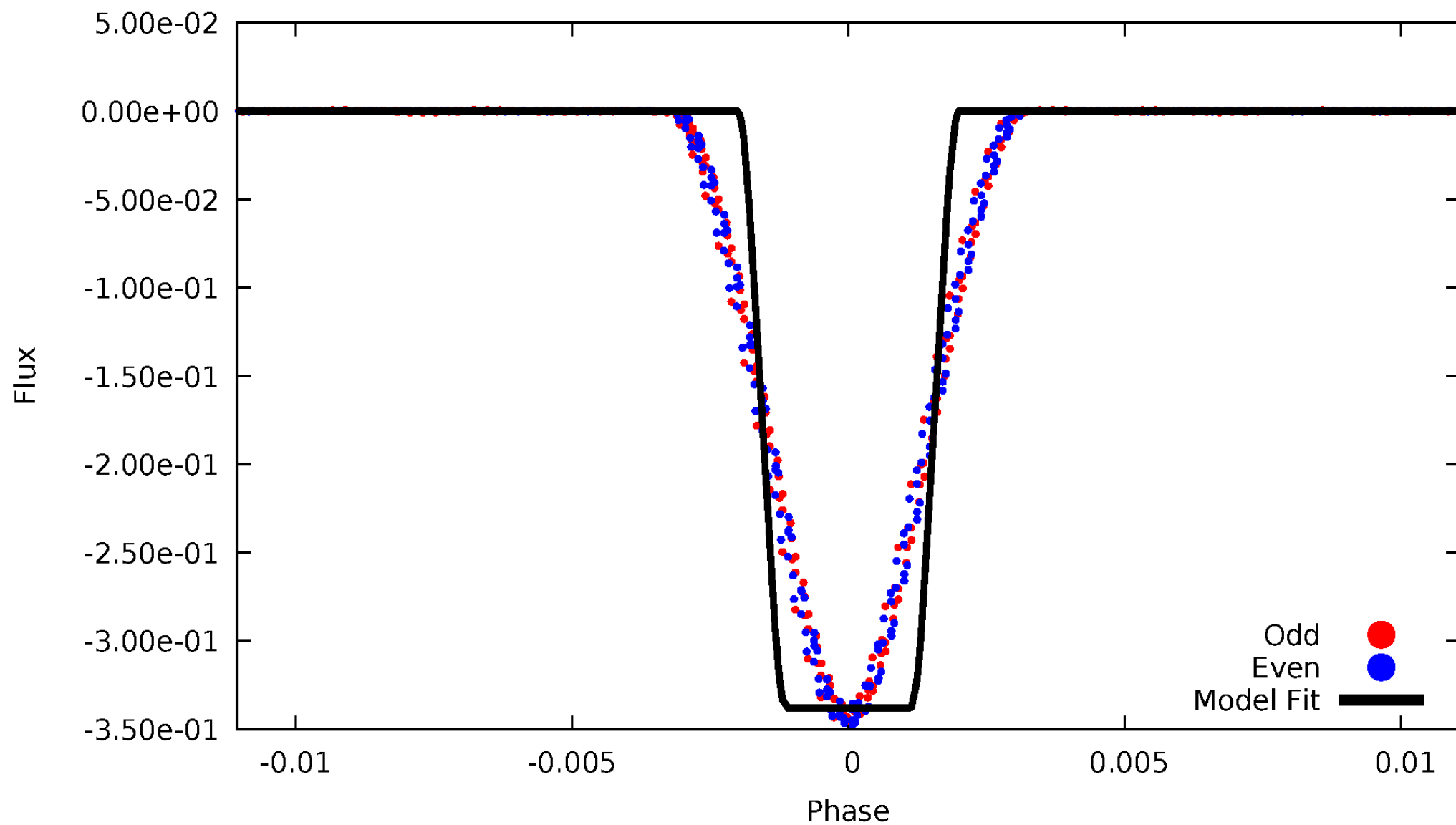
DV Odd/Even

TCE 002576692-01



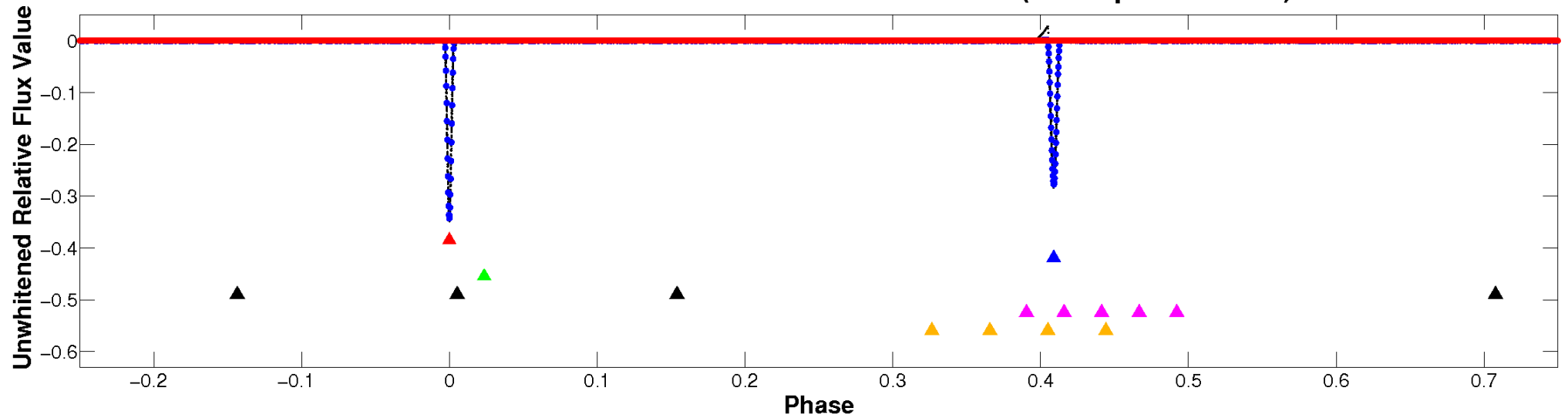
ALT Odd/Even

TCE 002576692-01



Non-Whitened Vs. Whitened Light Curve

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

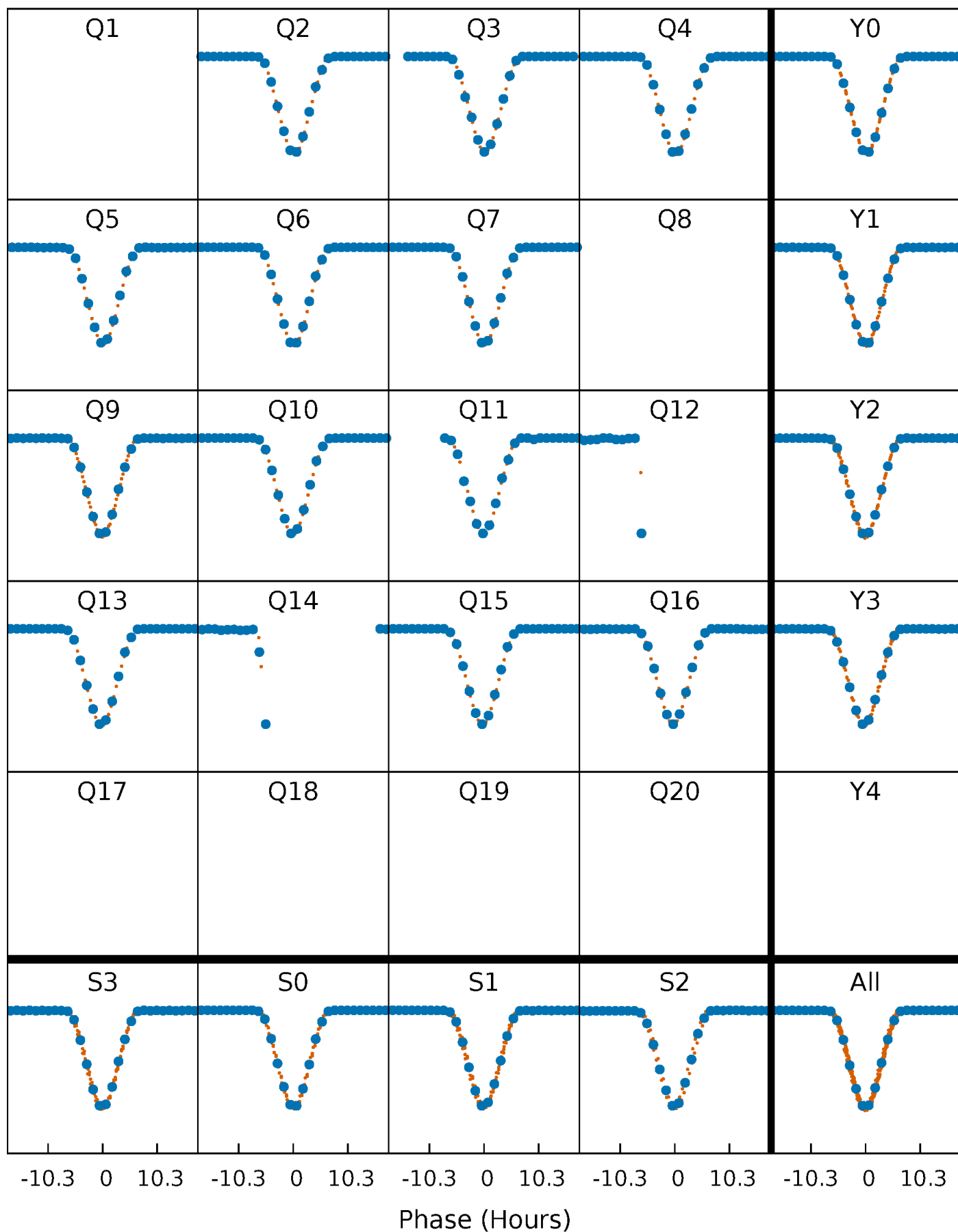


Planet 1 : Phased Whitened Flux Time Series (TPS Epoch/Period)



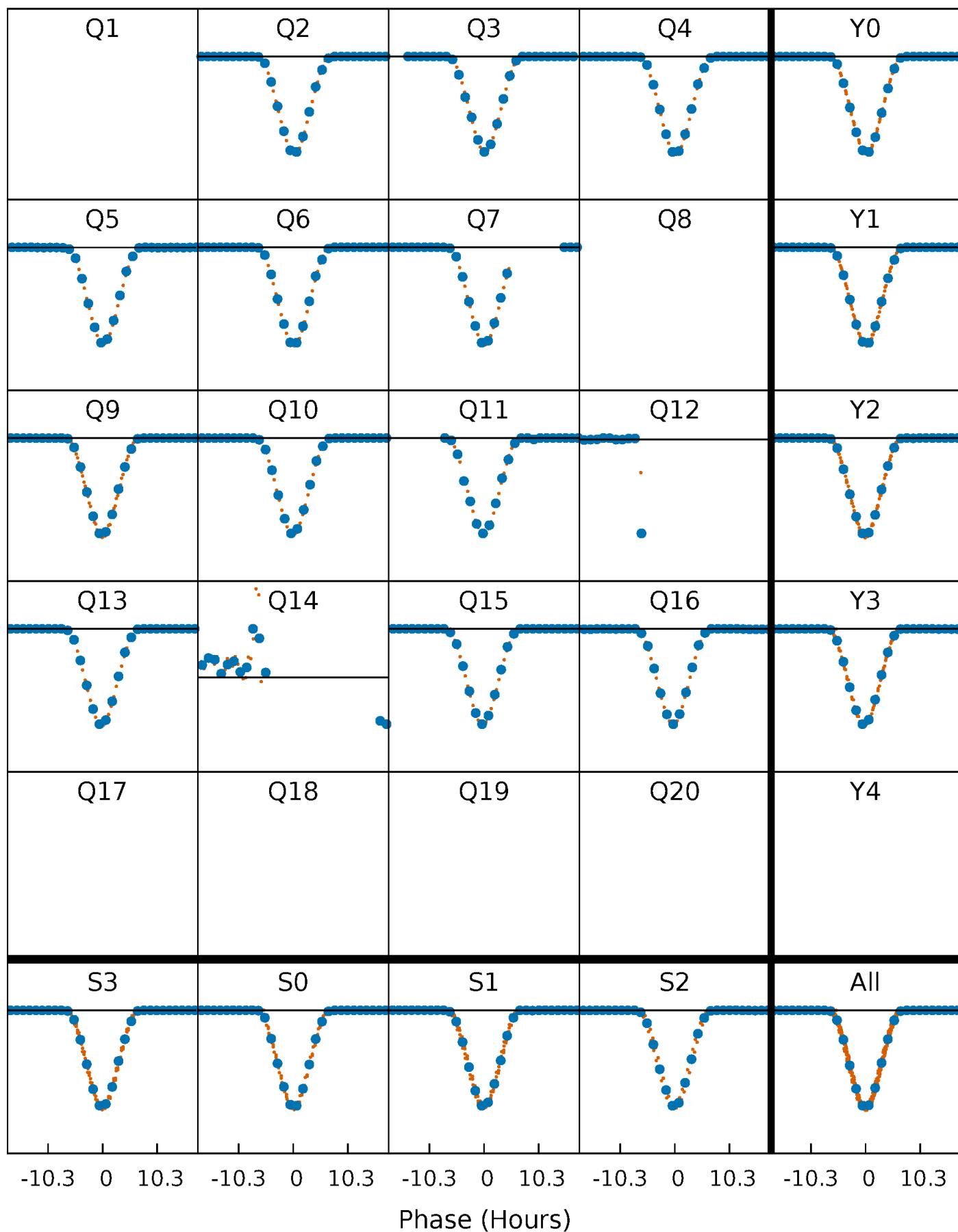
PDC Quarter-Phased Transit Curves

TCE 002576692-01 P= 87.879693 Days $T_0=194.095583$ (BKJD)



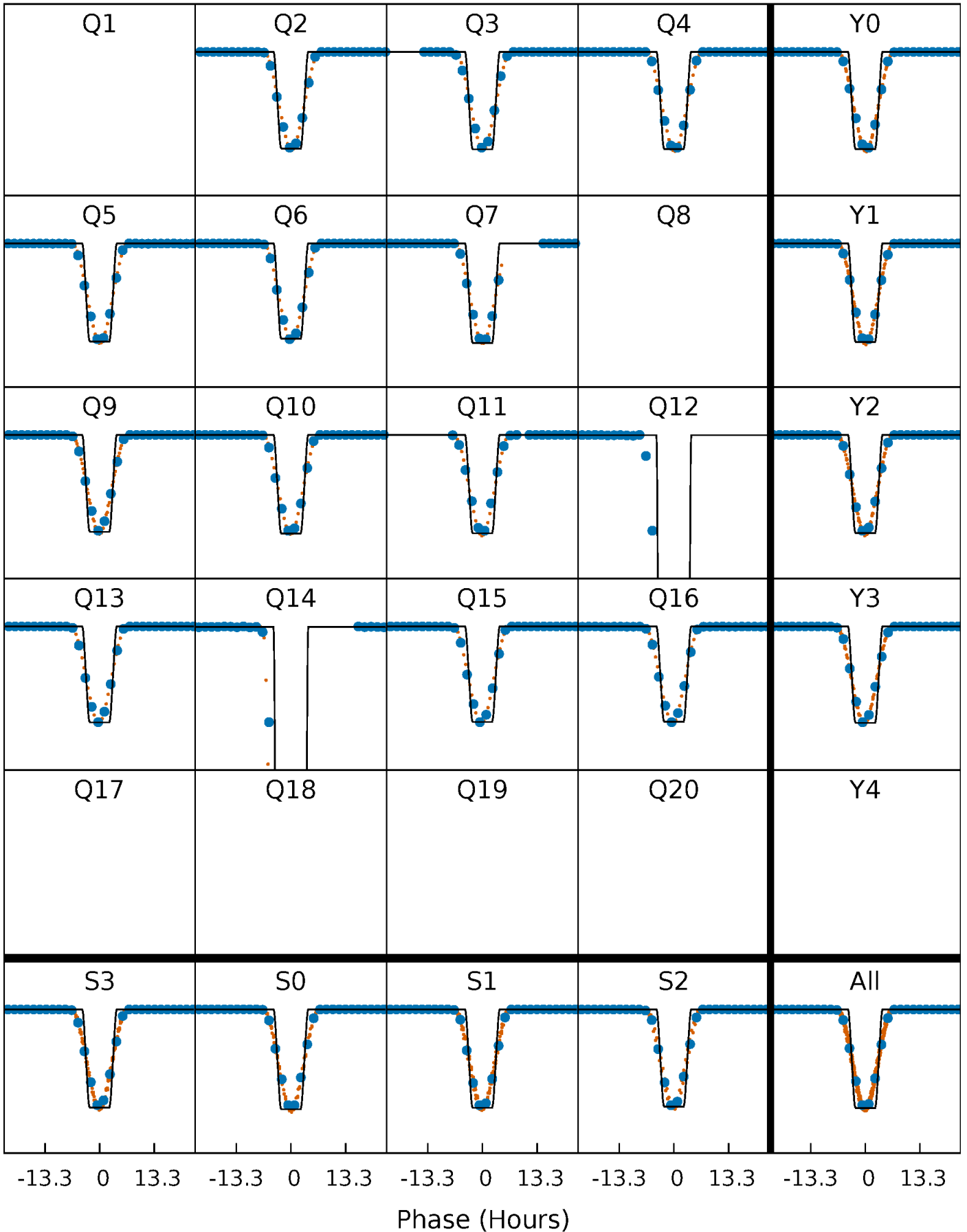
DV Quarter-Phased Transit Curves

TCE 002576692-01 P= 87.879693 Days $T_0=194.095583$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

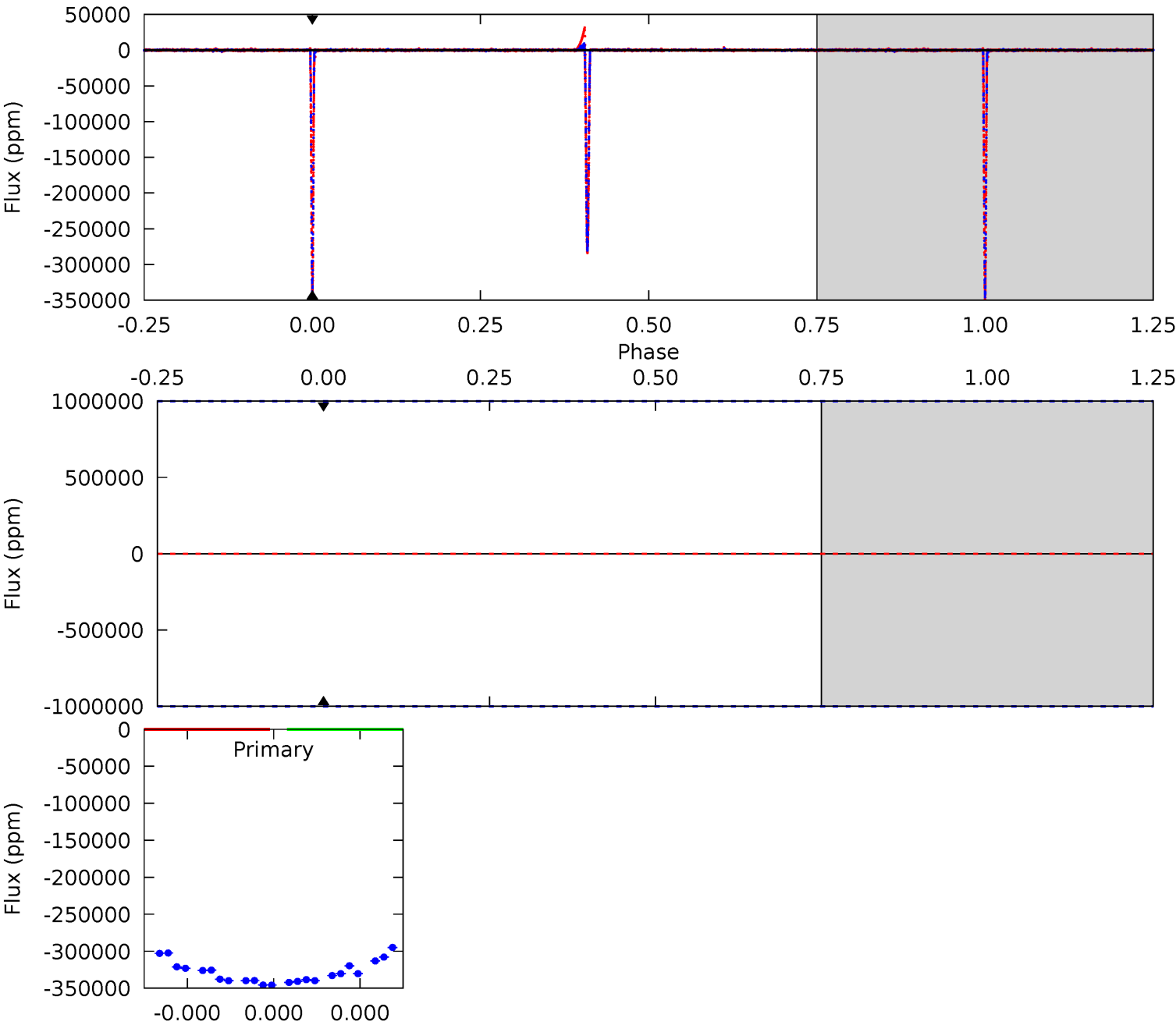
TCE 002576692-01 P= 87.879693 Days $T_0=194.095775$ (BKJD)



DV Model-Shift Uniqueness Test

002576692-01, P = 87.879693 Days, E = 106.215890 Days

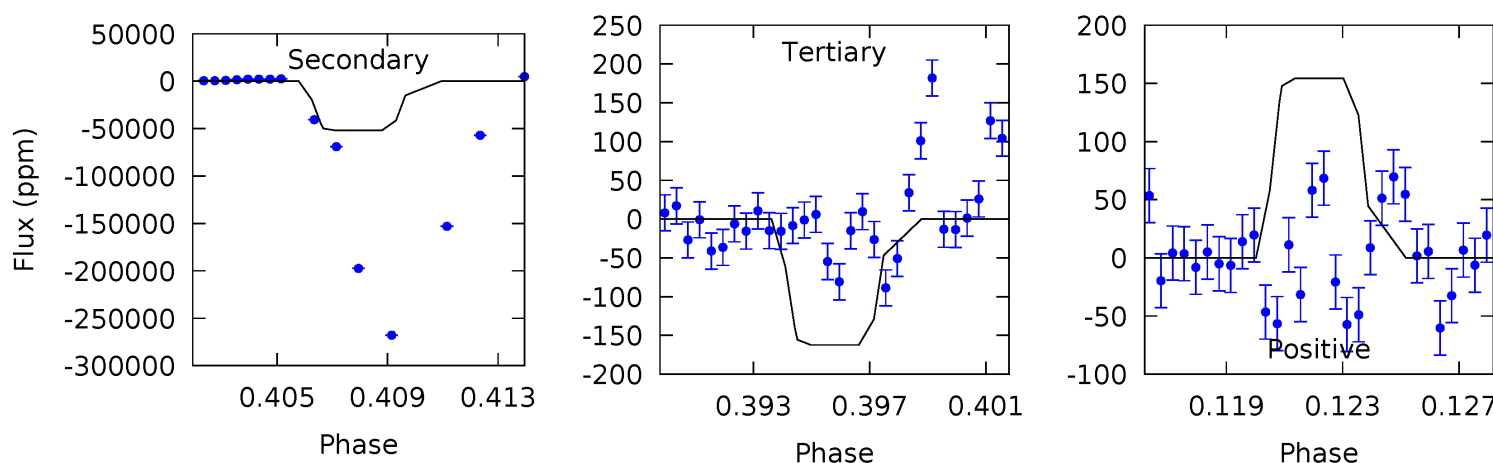
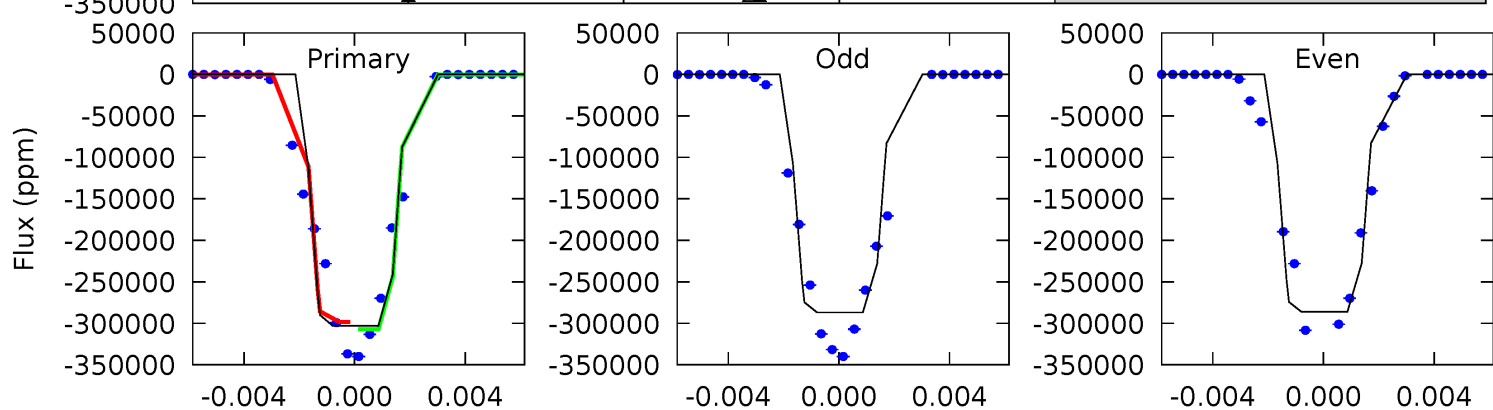
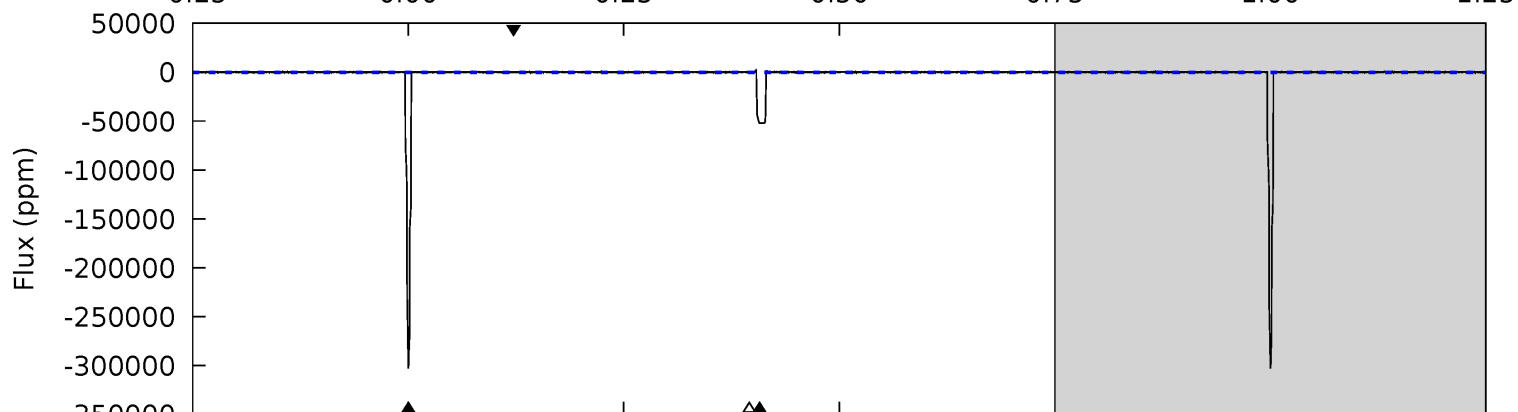
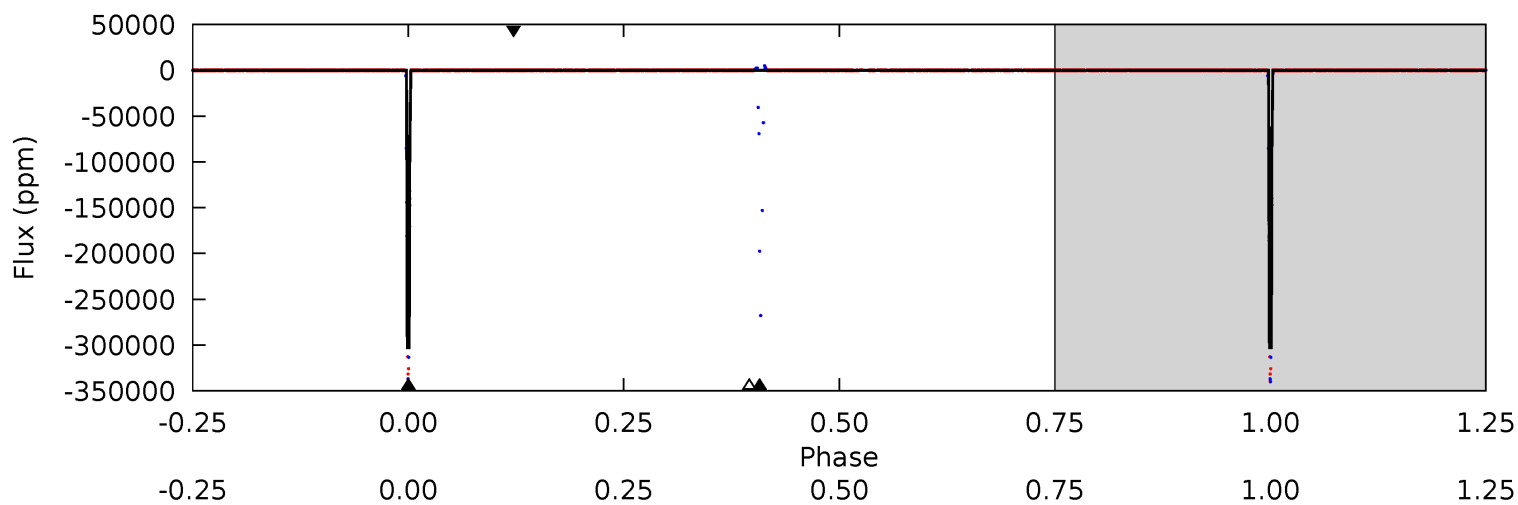
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
0	0	0	0	1.00	1.00	1.00	0	0	0	0	0	0	0	0



Alt Model-Shift Uniqueness Test

002576692-01, P = 87.879693 Days, E = 106.216082 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
5389	926.3	2.89	2.75	5.20	2.88	9.68	5386	5386	923.4	923.6	11.0	1.00	0.01	0



Stellar Parameters For KIC 002576692

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	5784^{+145}_{-131}	$3.985^{+0.308}_{-0.110}$	$-0.320^{+0.350}_{-0.200}$	$1.642^{+0.347}_{-0.520}$	$0.951^{+0.143}_{-0.091}$	$0.302^{+0.614}_{-0.116}$
	+3%/-2%	+8%/-3%	+109%/-62%	+21%/-32%	+15%/-10%	+203%/-38%
Source	PHO1	FLK73	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 002576692-01 / KOI 6282.01

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	0 ± 1000000	$73.05^{+20.61}_{-21.80}$	730^{+45}_{-73}	-2345^{+7568}_{-2670}	$-9.931^{+1814.451}_{-1547.320}$
Alt.	-52062 ± 56	$98.33^{+23.90}_{-21.11}$	727^{+49}_{-63}	4008^{+274}_{-238}	459^{+279}_{-160}

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 $A_{obs} \gg 1.0$

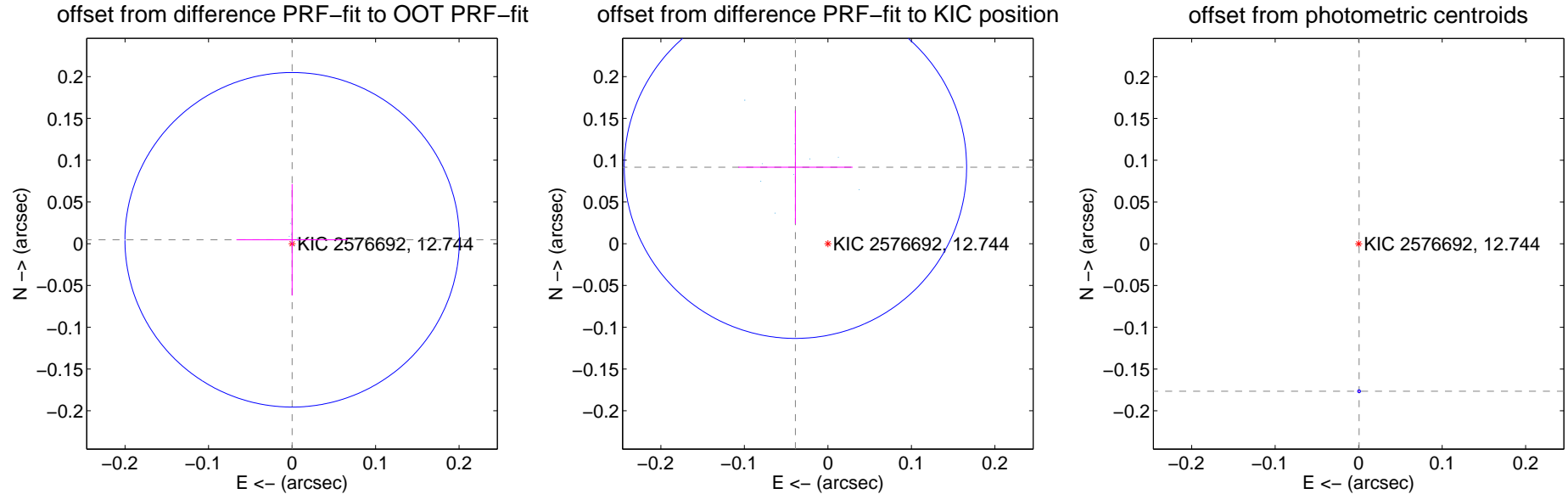
DV Centroid Data

Supplemental centroid analysis for 002576692-01. Kepler magnitude: 12.74. Transit SNR -1.00

There are 9 quarters with good PRF difference image offsets

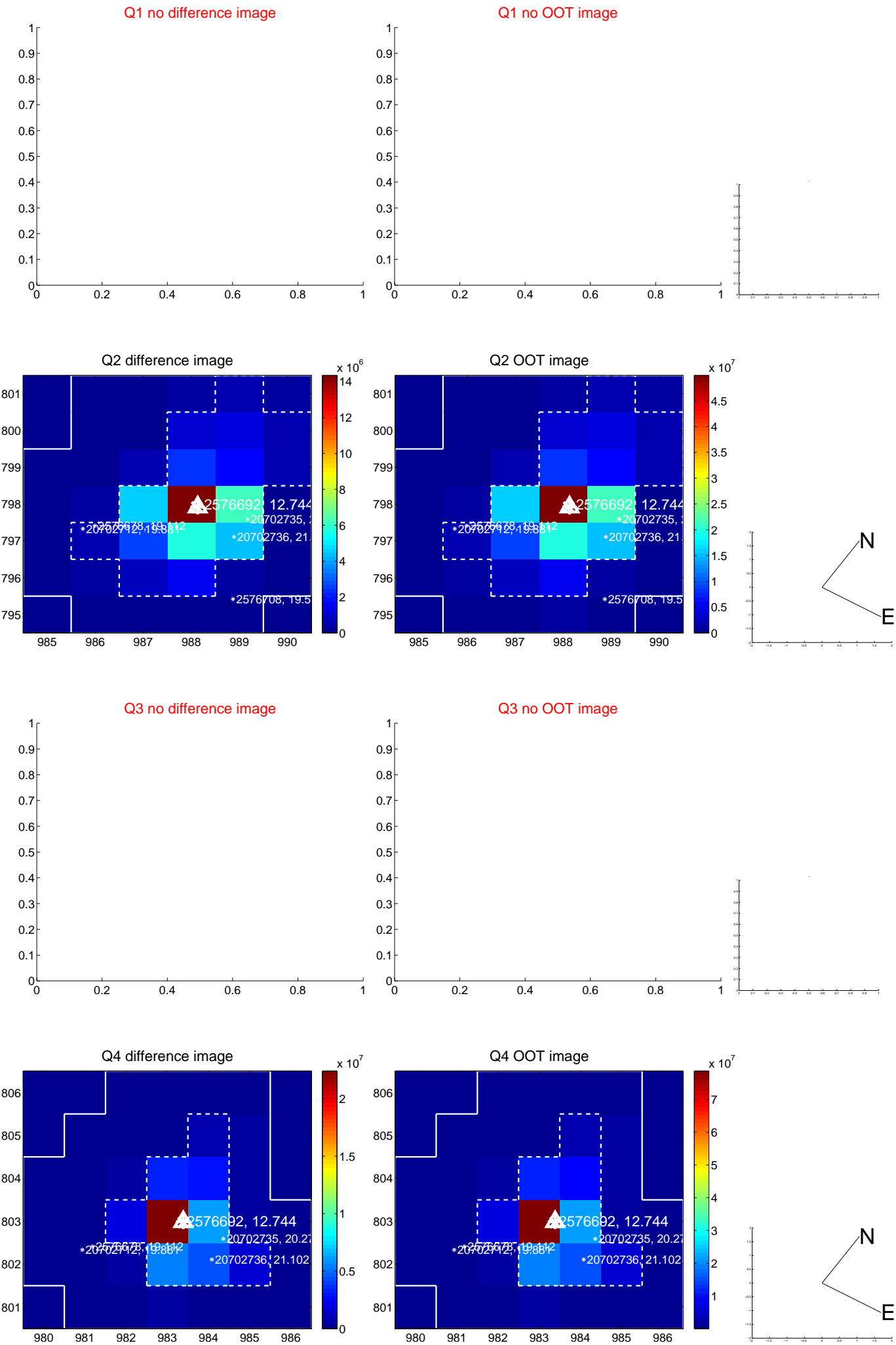
The direct PRF centroid is offset from the target star catalog position by about 0.10 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.005 ± 0.067	0.07	-0.000 ± 0.067	0.005 ± 0.067
PRF-fit source offset from KIC position	0.099 ± 0.068	1.46	0.039 ± 0.068	0.092 ± 0.068
photometric centroid source offset	0.18 ± 0.00	309.92	-0.00 ± 0.00	-0.18 ± 0.00

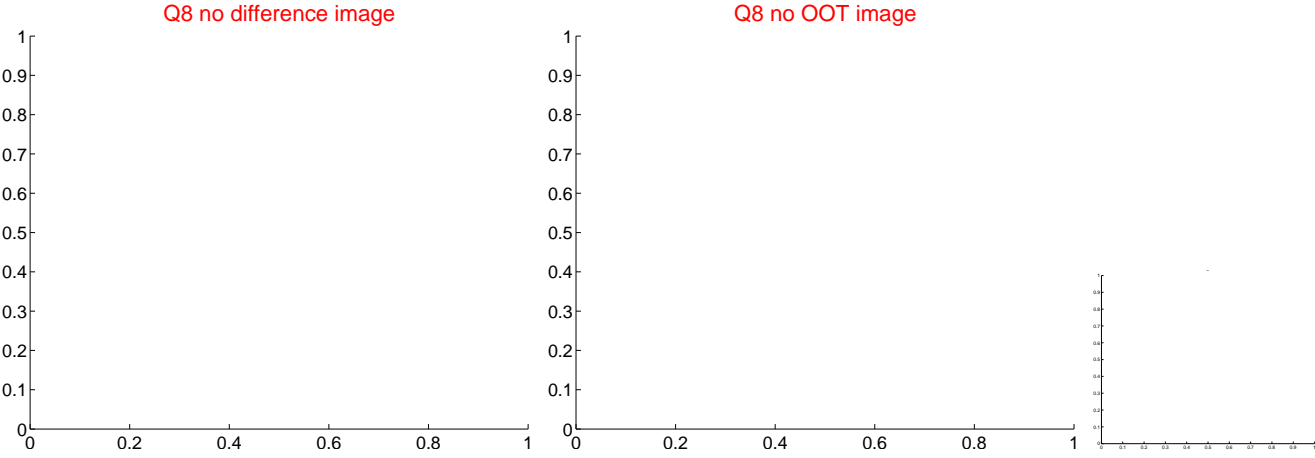
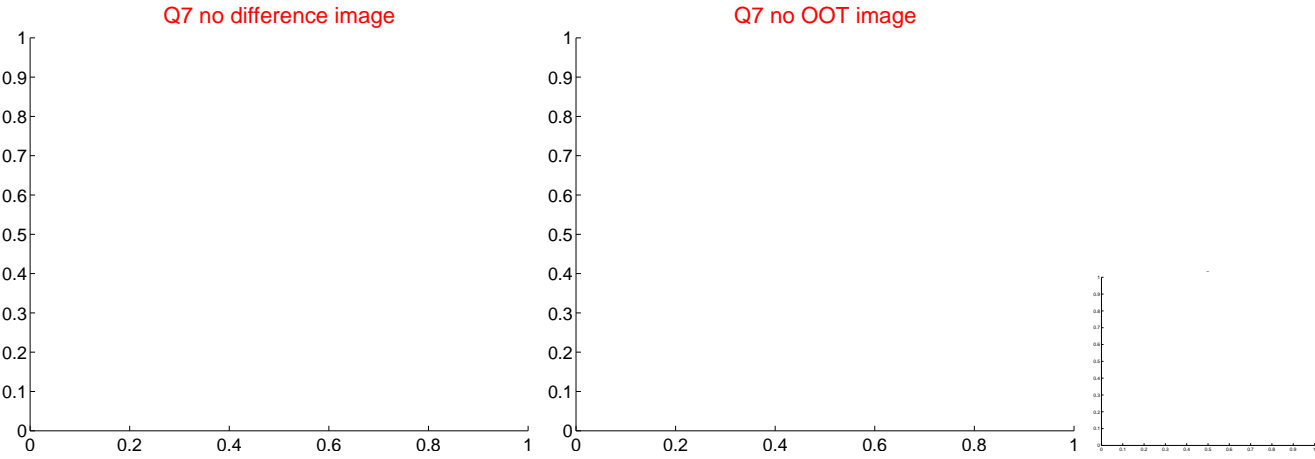
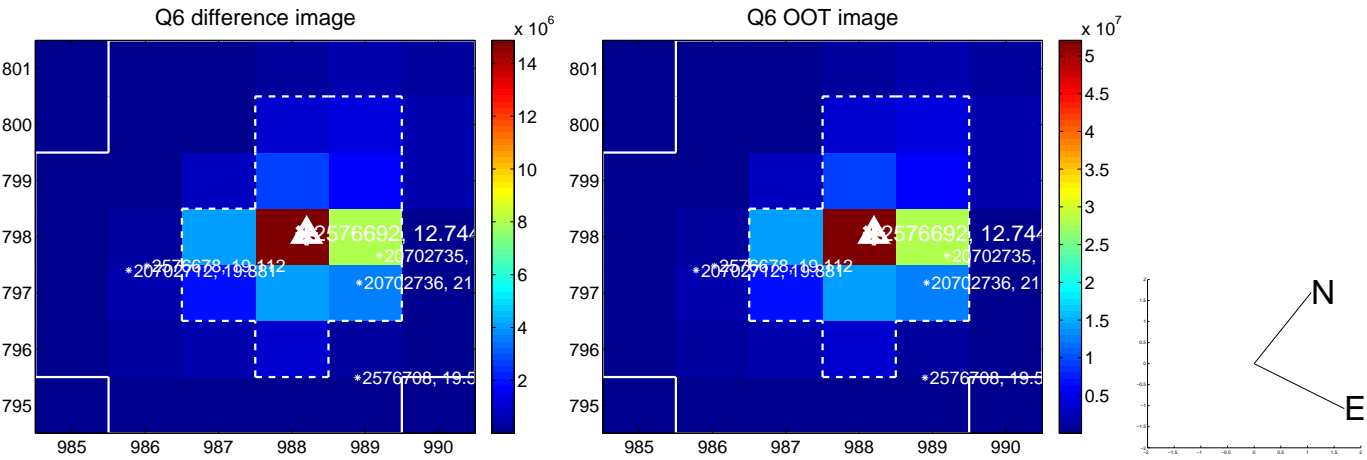
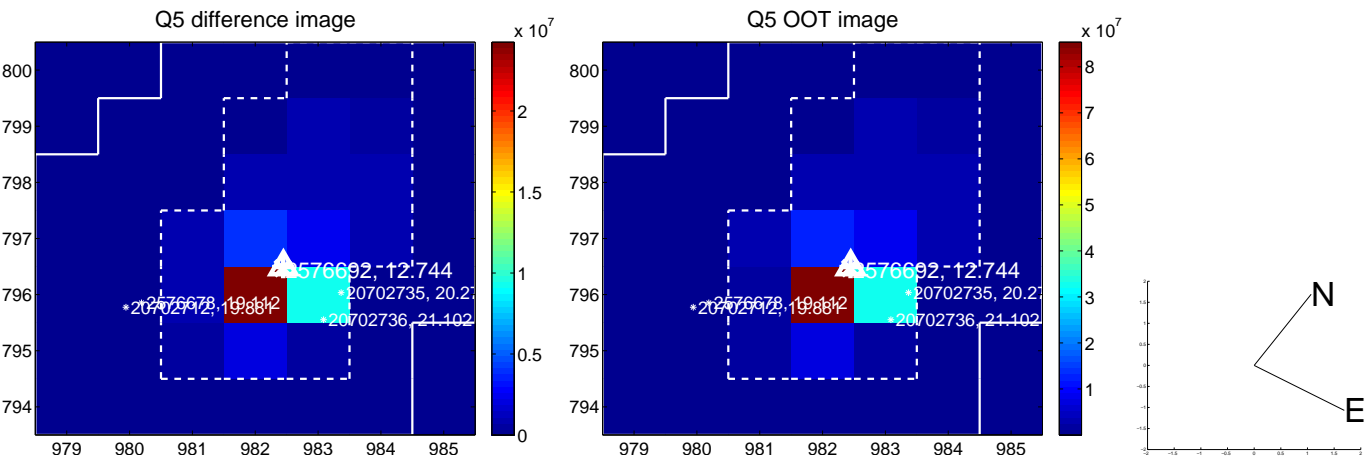


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets**; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

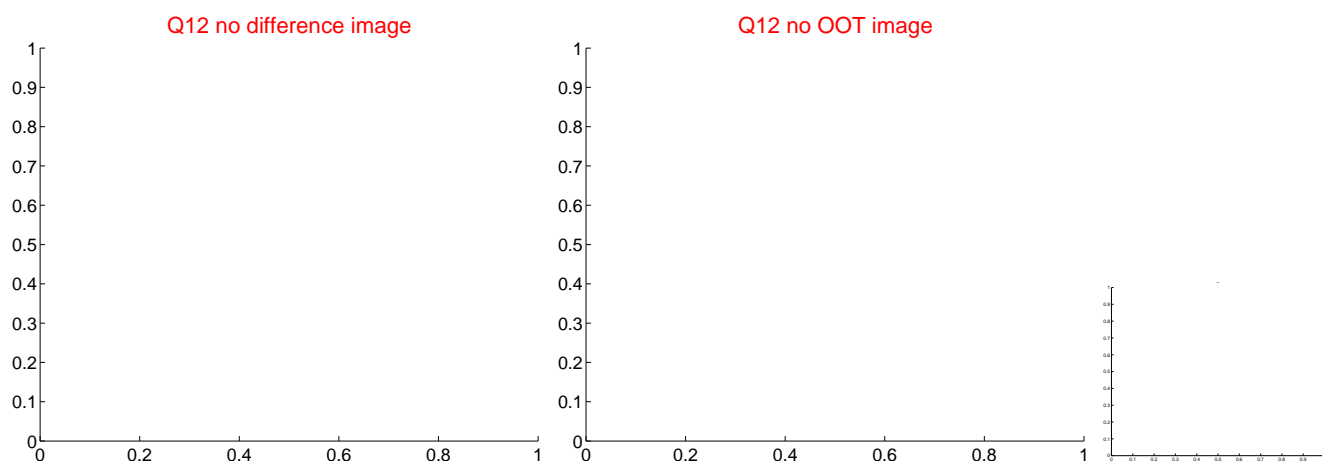
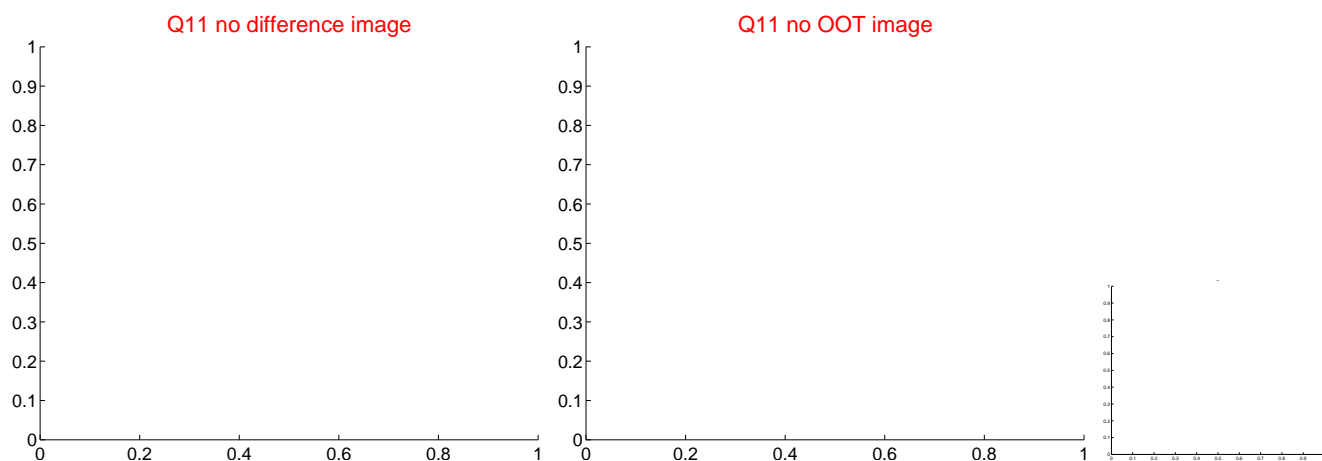
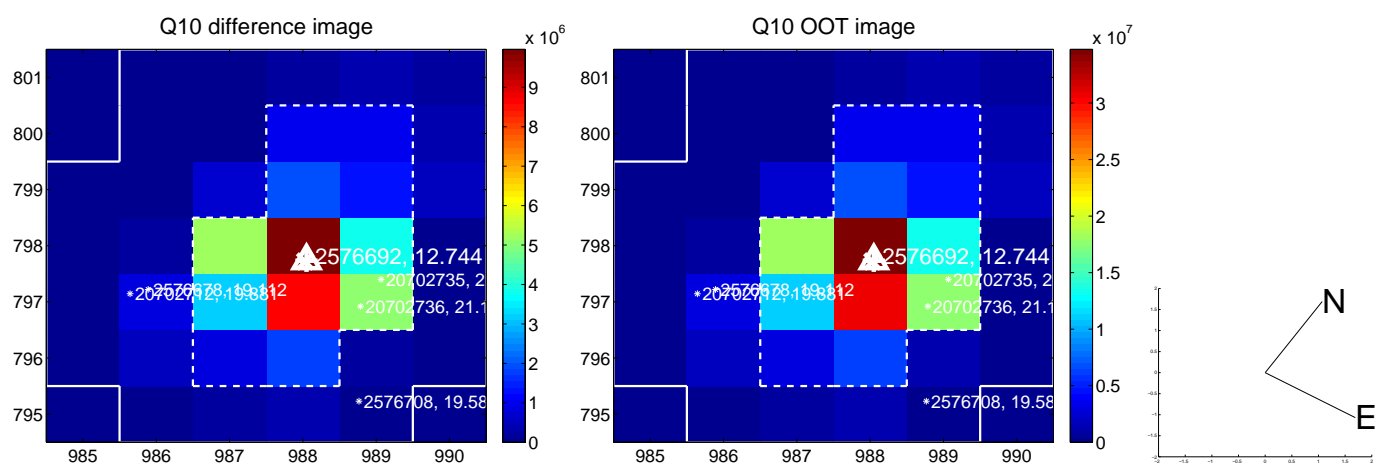
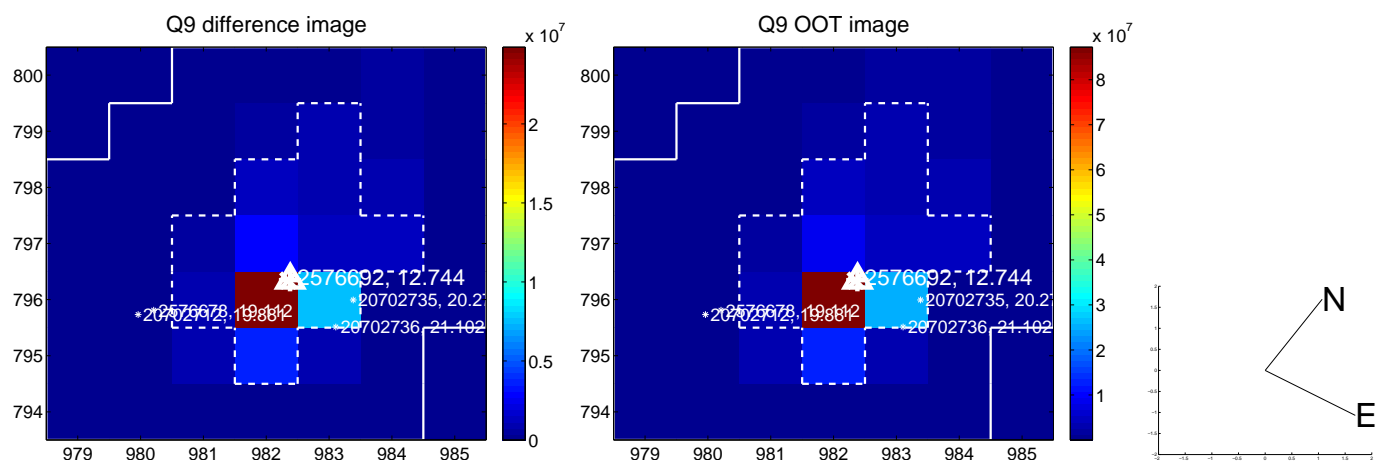
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



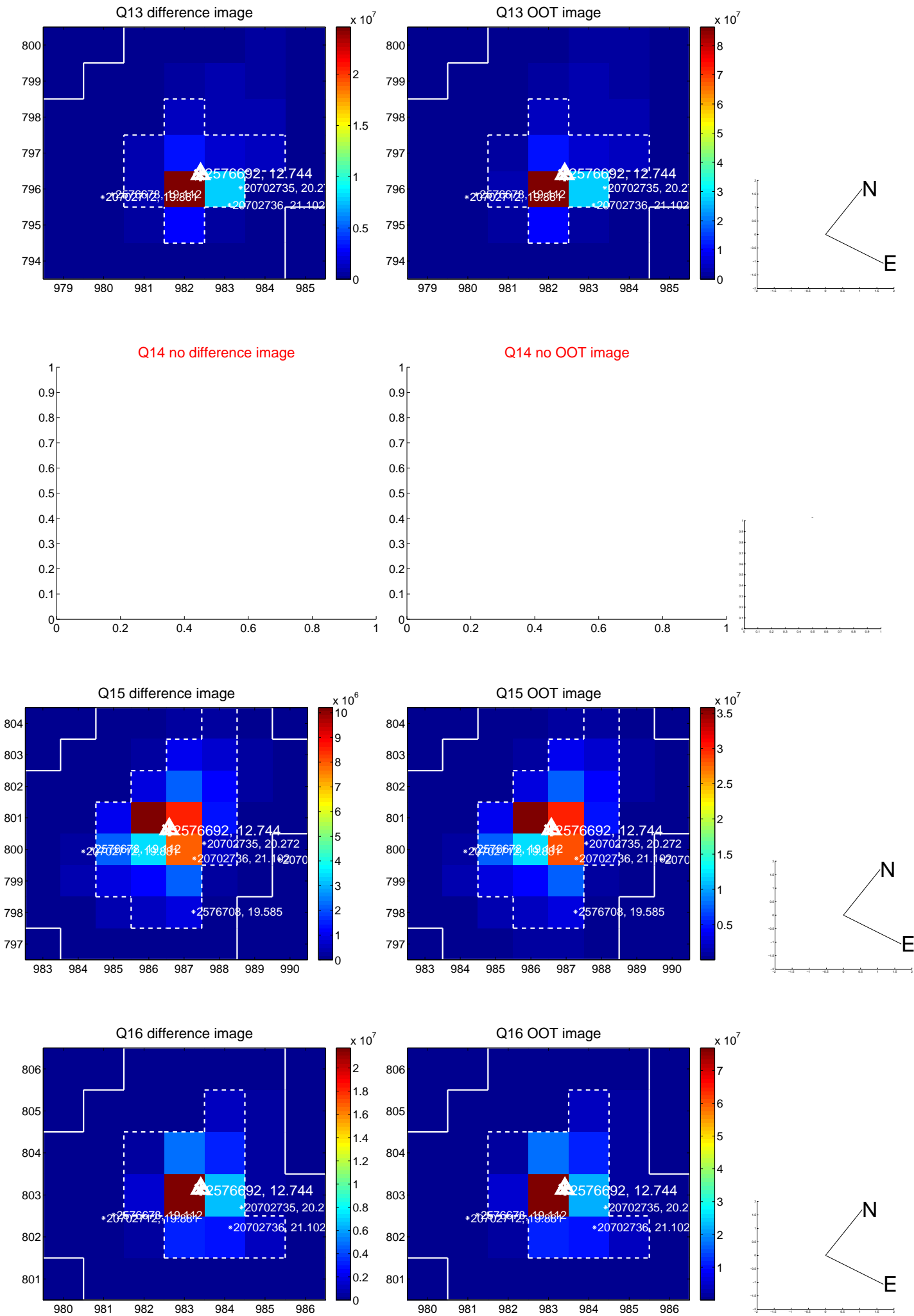
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



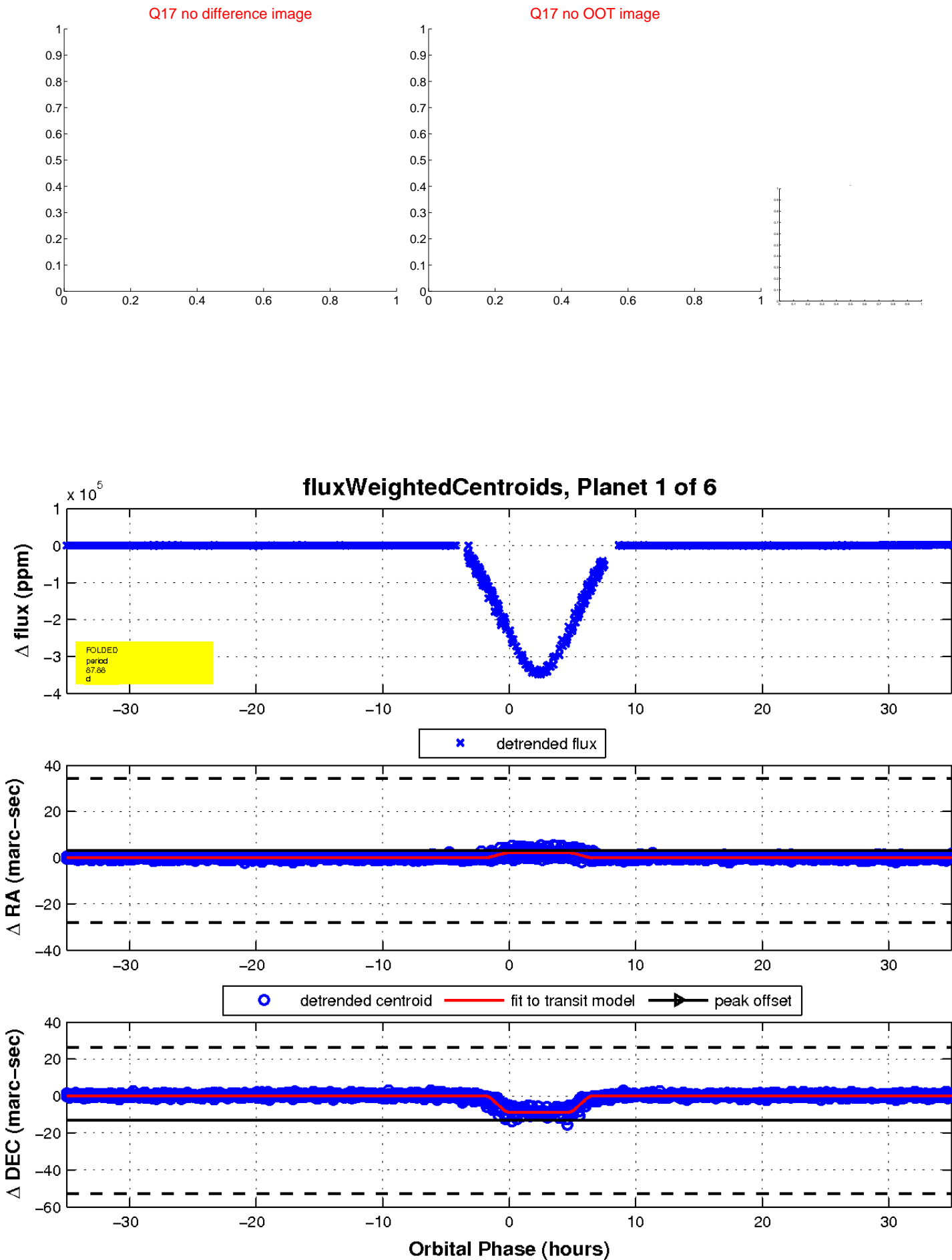
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white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.

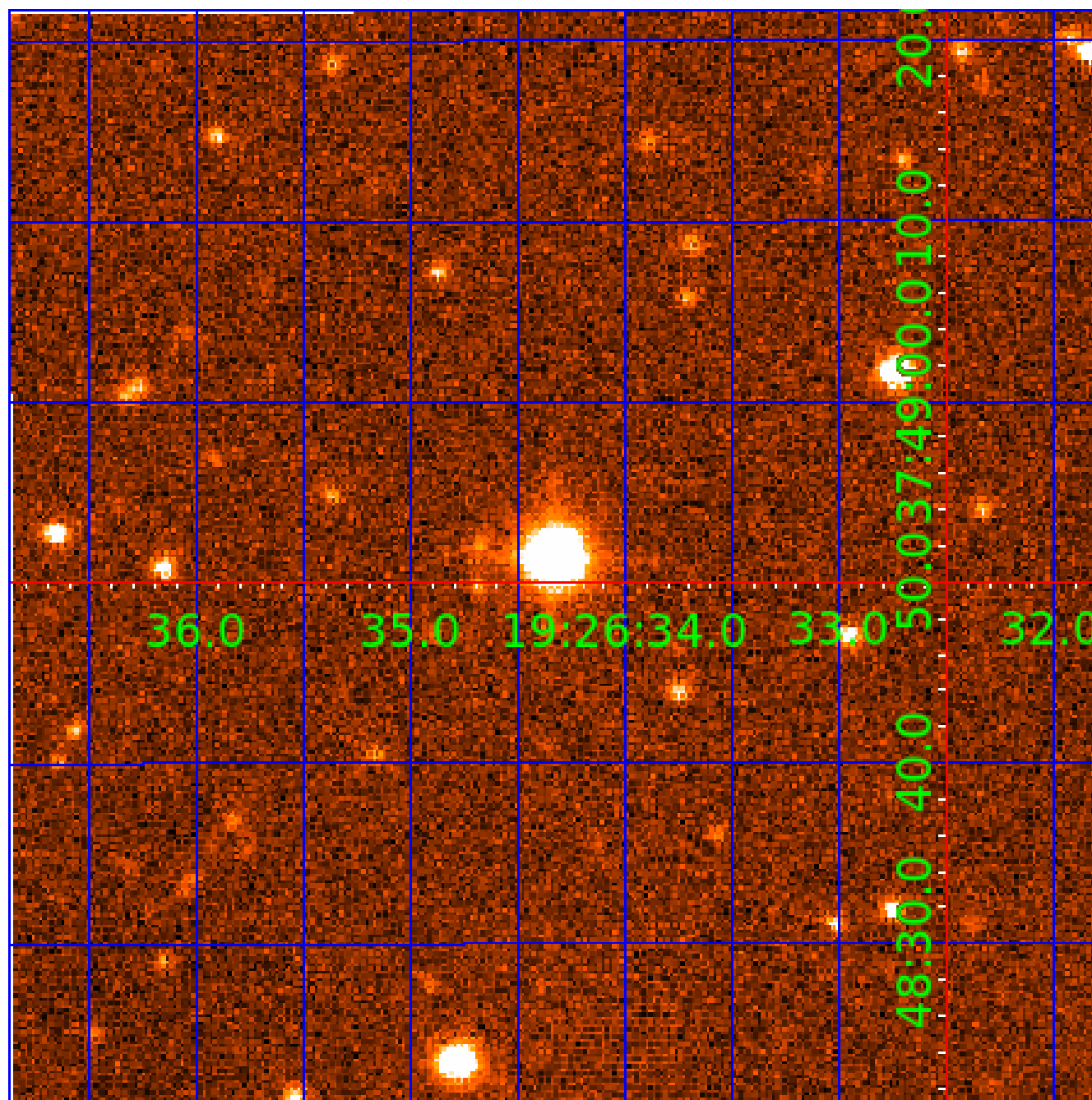


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 002576692

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})
002576692-01	OBS	6282.01	87.879693	194.095583	343541.3	9.000	20777.6	-1.0	1.64	5784	74.78	18.69
002576692-02	OBS	No	87.877281	142.167095	279491.6	12.000	18658.1	-1.0	1.64	5784	65.15	18.69
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Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
002576692-01	OBS	FP	0.00	0	1	0	0	MOD_SEC_ALT—HAS_SEC_TCE—CENT_NOFITS
002576692-02	OBS	FP	0.00	1	1	0	0	IS_SEC_TCE—CENT_NOFITS
002576692-03	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—SAME_NTL_PERIOD—CENT_FEW_DIFFS
002576692-04	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_MARSHALL—LPP_DV—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—INCONSISTENT_TRANS—CENT_FEW_DIFFS
002576692-05	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_MARSHALL—LPP_DV—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_NONUNIQ_ALT—INCONSISTENT_TRANS—CENT_FEW_DIFFS
002576692-06	OBS	FP	0.00	1	0	1	0	INDIV_TRANS_MARSHALL—LPP_DV—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—MOD_NONUNIQ_ALT—INCONSISTENT_TRANS—CENT_FEW_DIFFS—HALO_GHOST

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 002576692-02

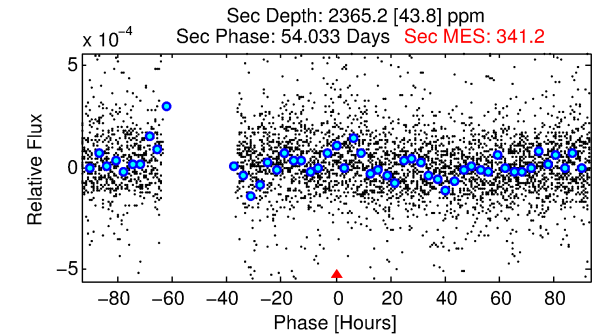
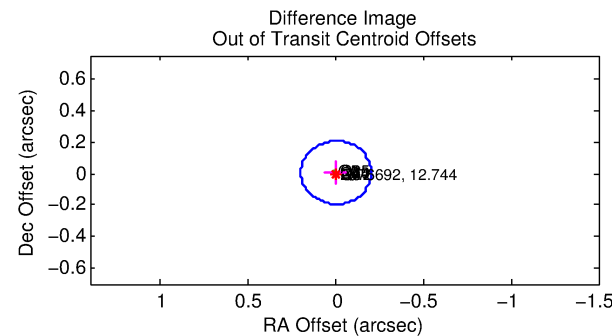
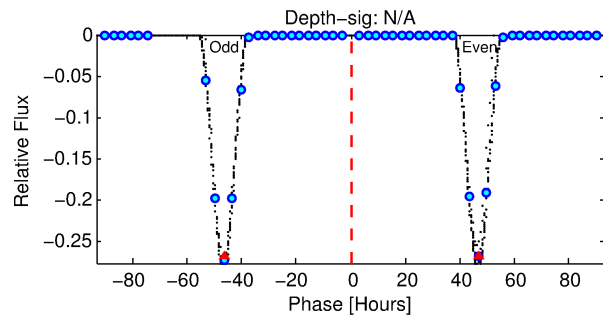
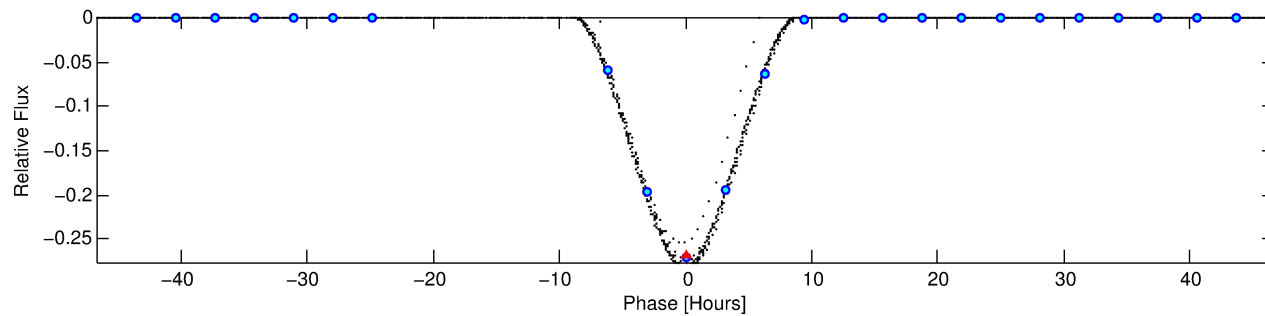
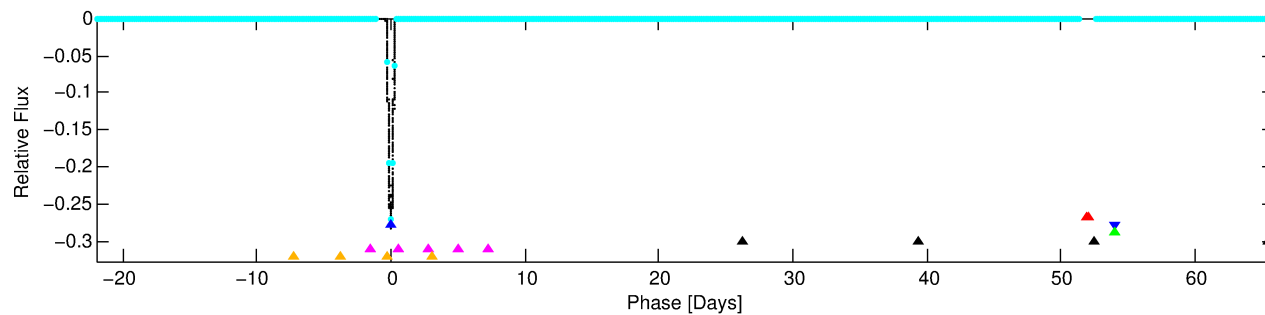
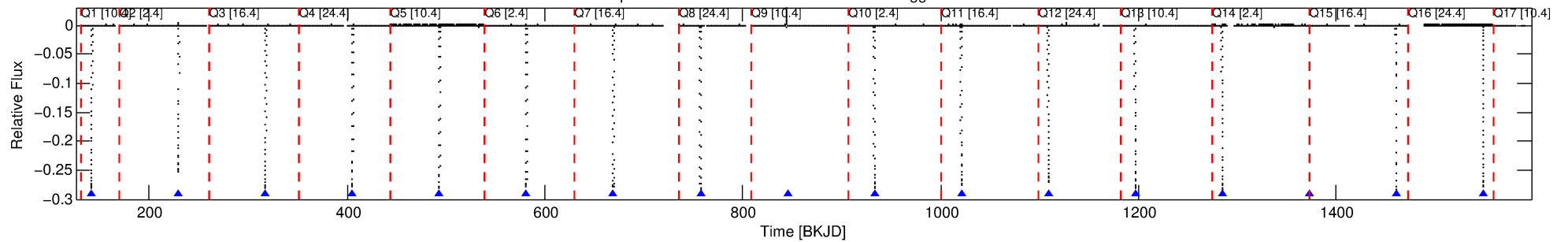
No Significant Match Found

DV One-Page Summary

KIC: 2576692 Candidate: 2 of 6 Period: 87.877 d

KOI: K06282 Corr: No Ephemeris Match

Kp: 12.74 R*: 1.64 Rs Teff: 5784.0 K Logg: 3.98 Fe/H: -0.320



TPS TCE Results:

Period = 87.87728 d
Epoch = 142.1671 BKJD

DV fit results are unavailable

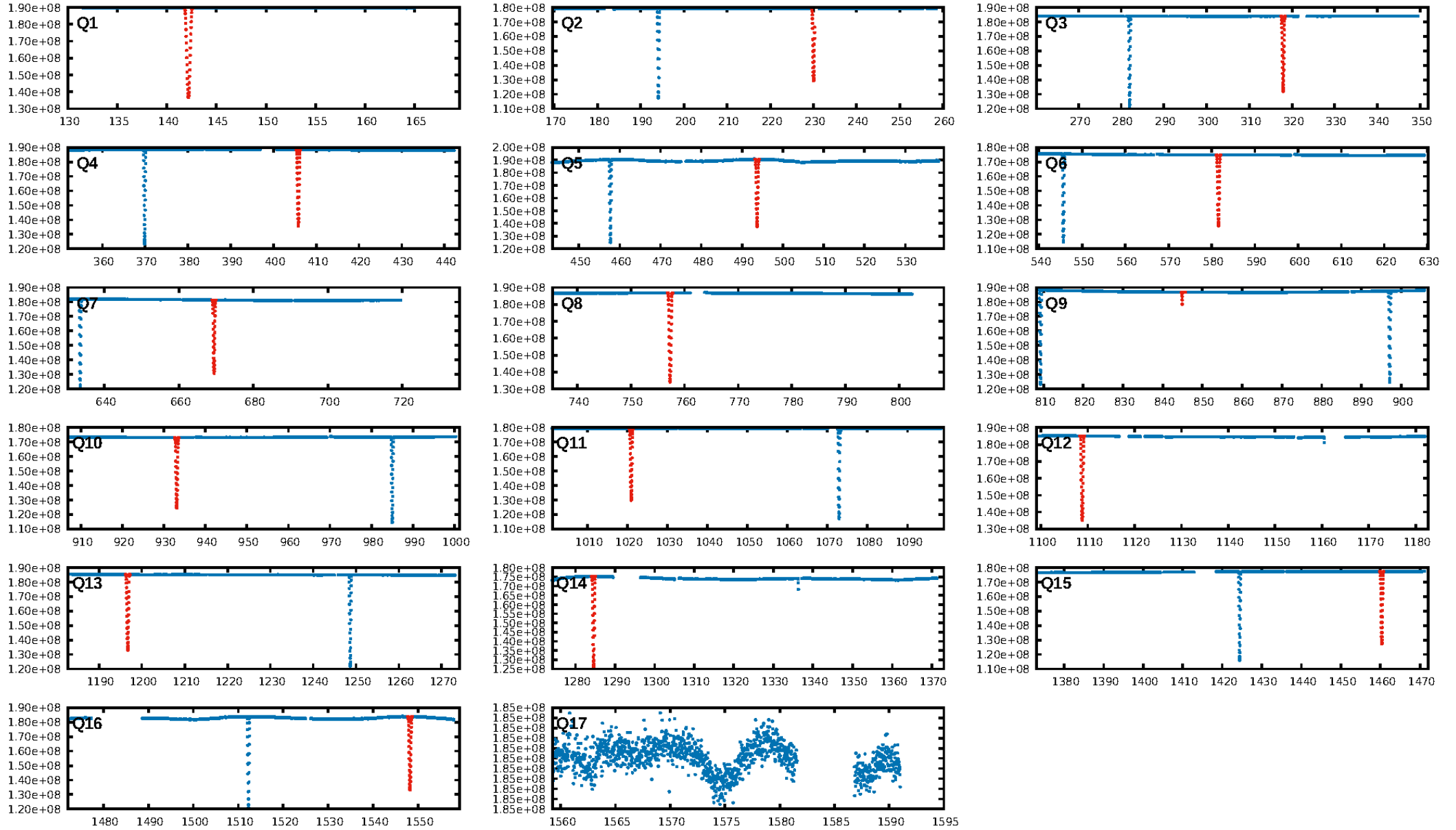
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: 0.1% [0.00σ]
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [15/15]
GhostDiagnostic-chr: 3.082
Centroid-sig: 0.0%
Centroid-so: 0.187 arcsec [329.10σ]
OotOffset-rm: 0.008 arcsec [0.12σ]
KicOffset-rm: 0.103 arcsec [1.51σ]
OotOffset-st: 3/3/4/2 [12]
KicOffset-st: 3/3/4/2 [12]
DiffImageQuality-fgm: 1.00 [12/12]
DiffImageOverlap-fno: 1.00 [12/12]

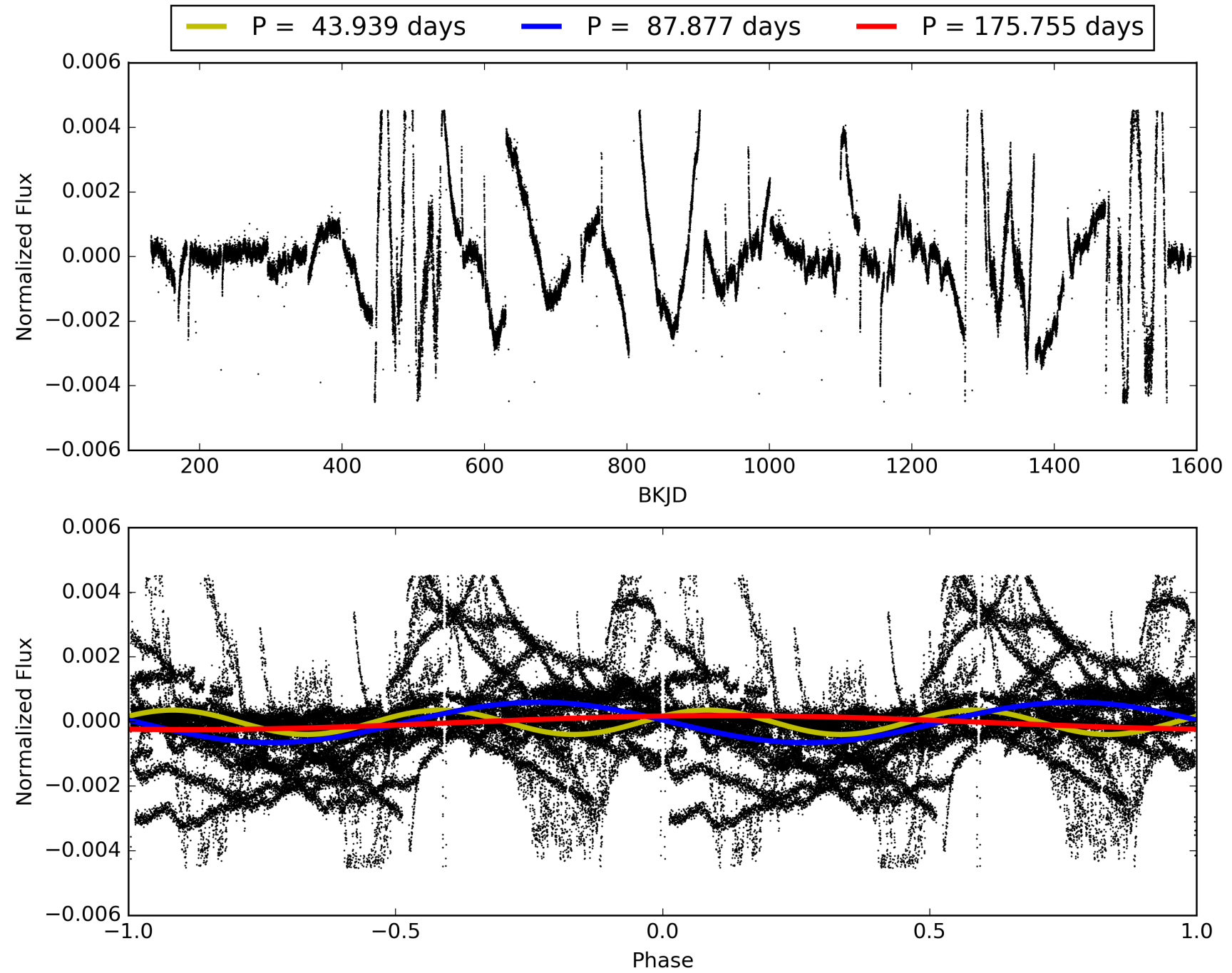
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This Data Validation Report Summary was produced in the Kepler Science Operations Center Pipeline at NASA Ames Research Center

TCE 002576692-02, PDC Light Curves

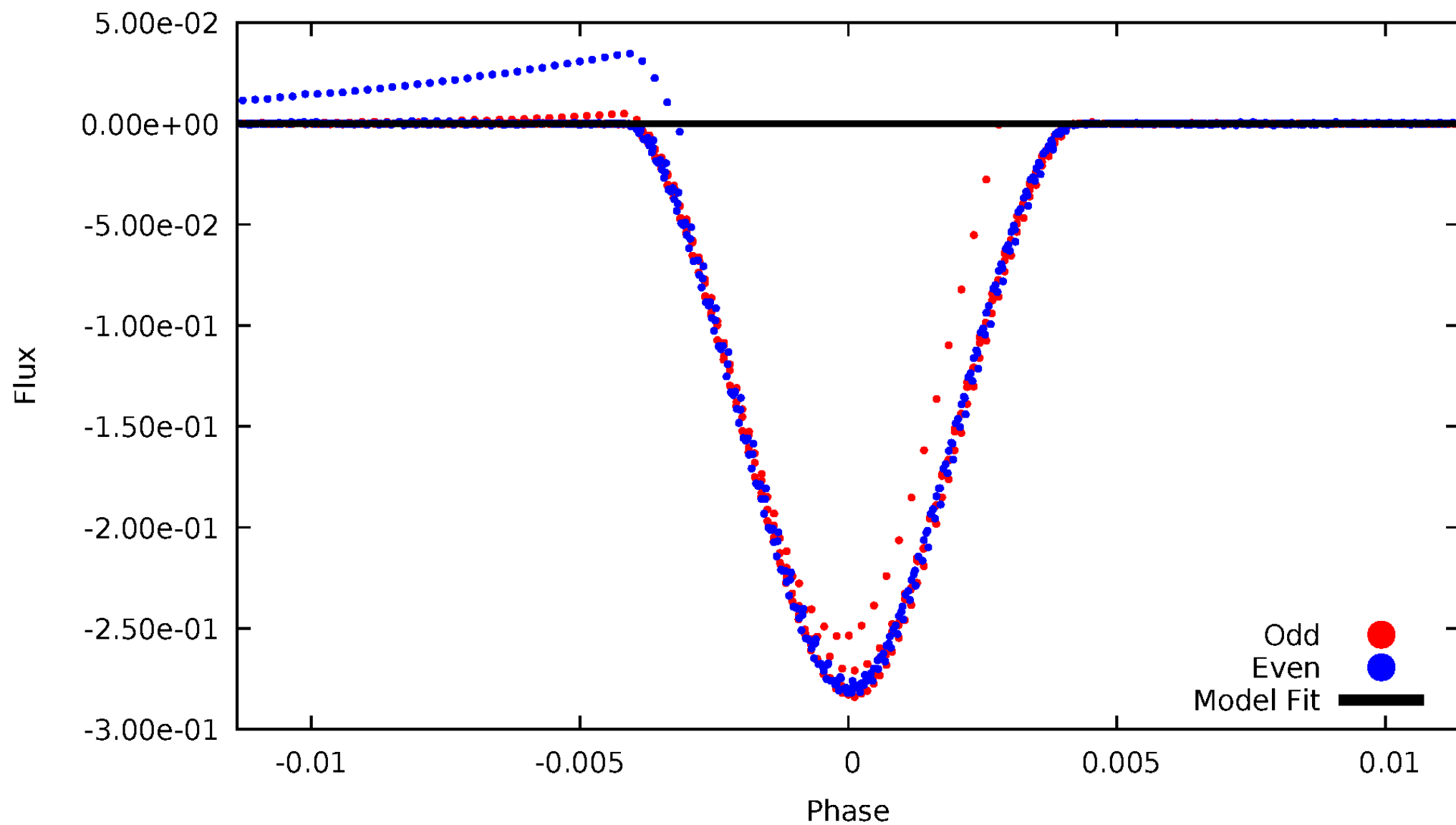


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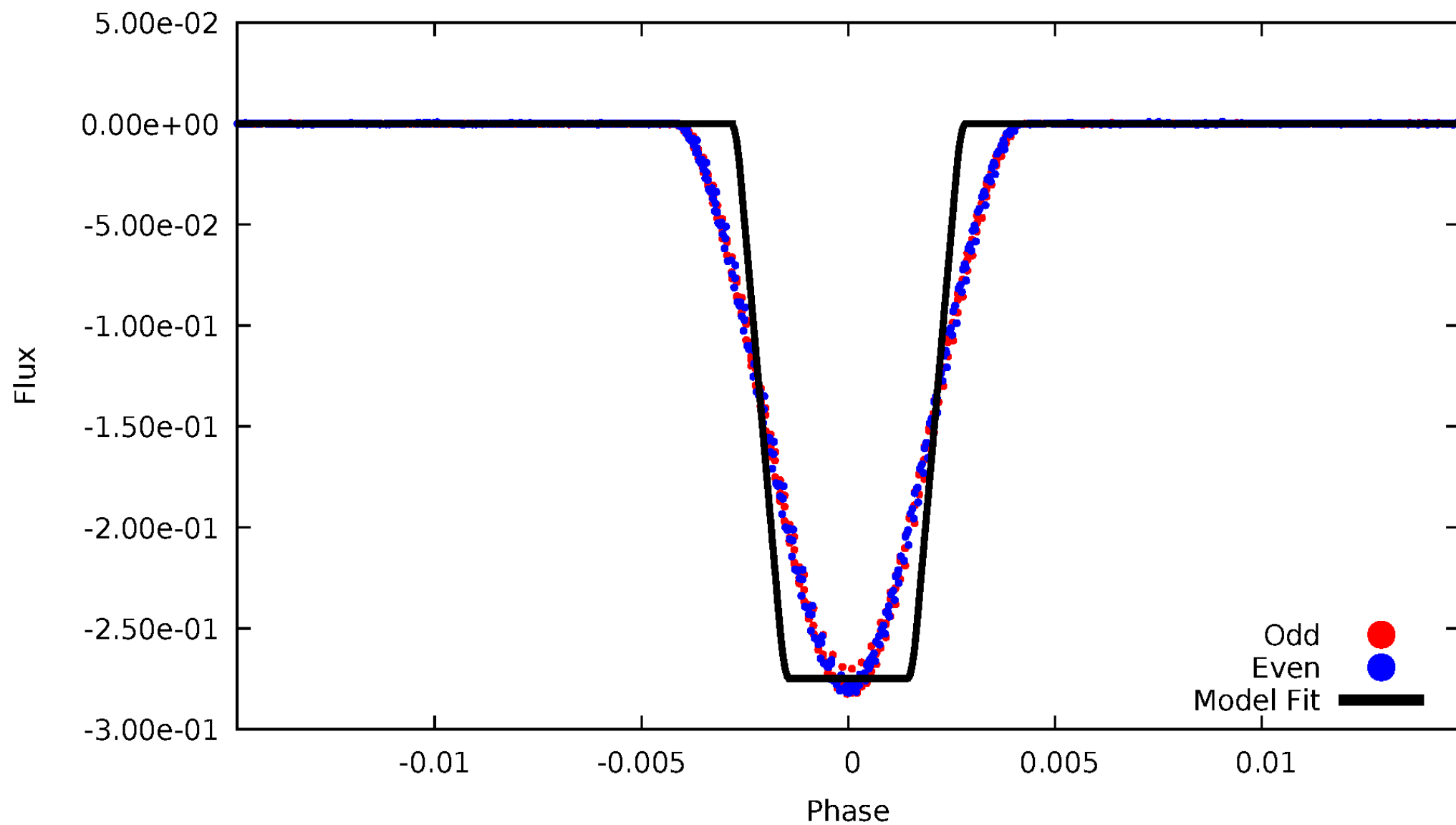
DV Odd/Even

TCE 002576692-02



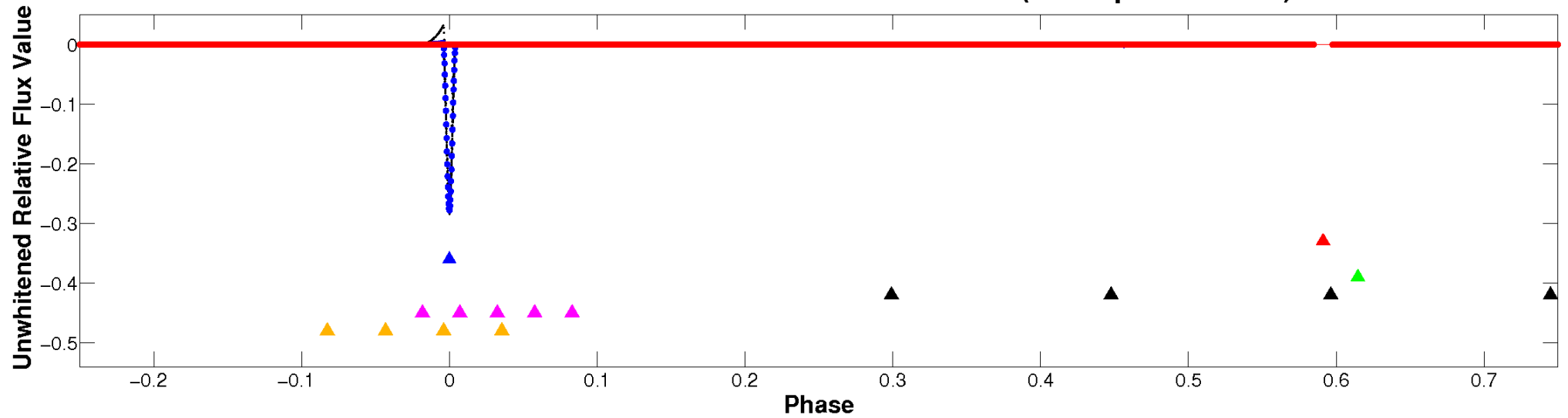
ALT Odd/Even

TCE 002576692-02

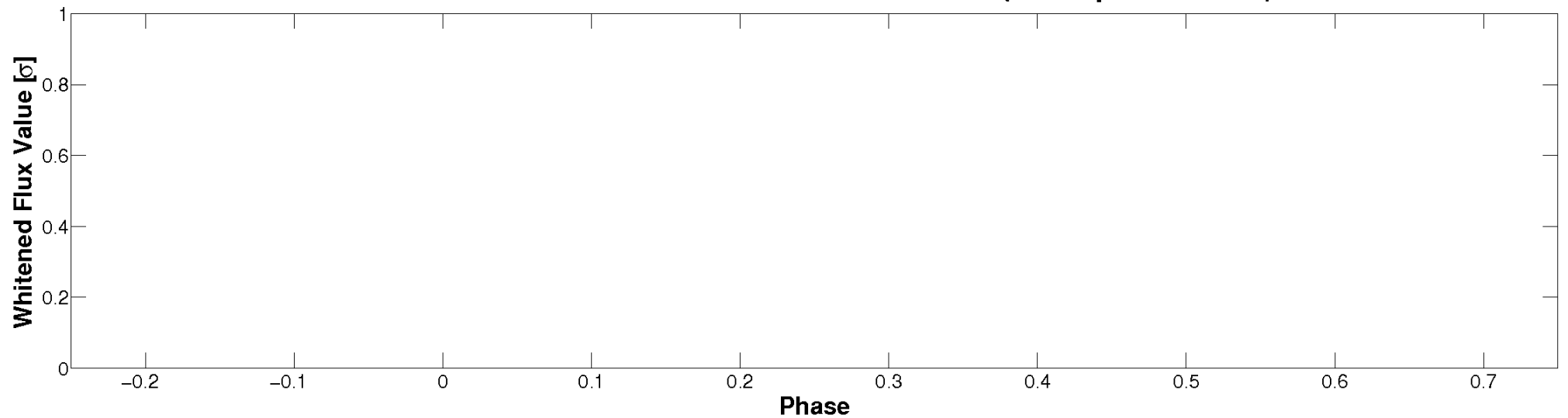


Non-Whitened Vs. Whitened Light Curve

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

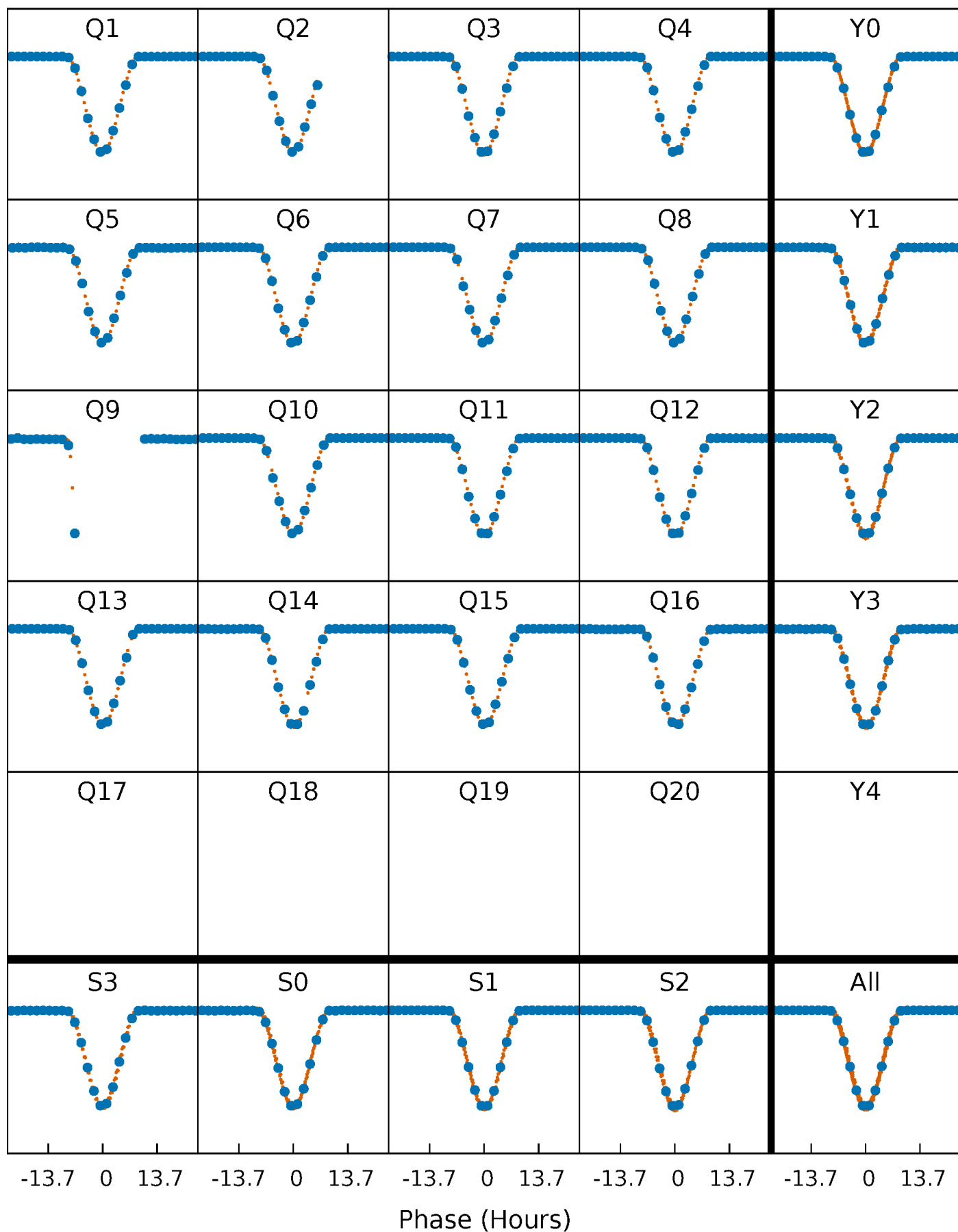


Planet 2 : Phased Whitened Flux Time Series (TPS Epoch/Period)



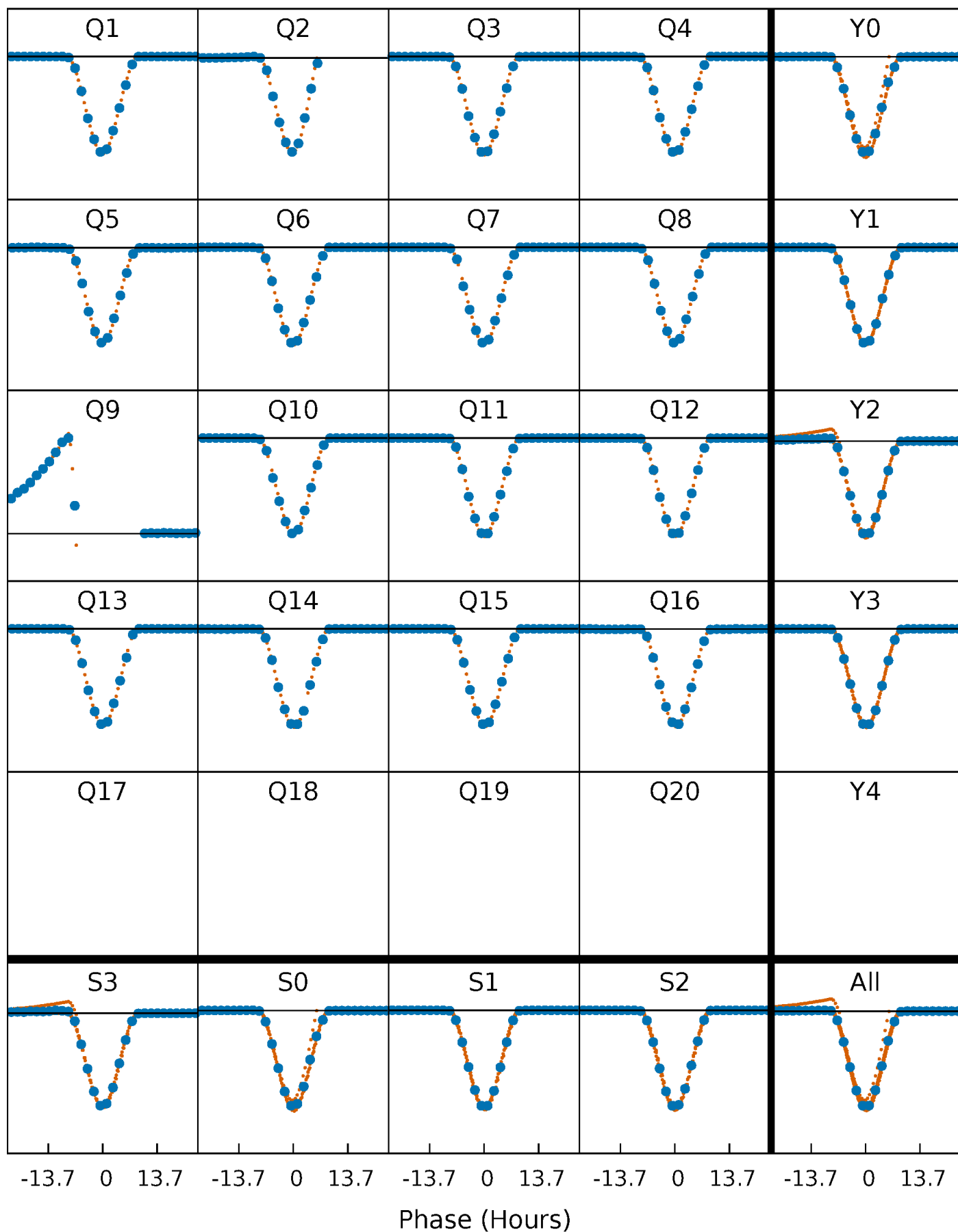
PDC Quarter-Phased Transit Curves

TCE 002576692-02 P= 87.877281 Days $T_0=142.167095$ (BKJD)



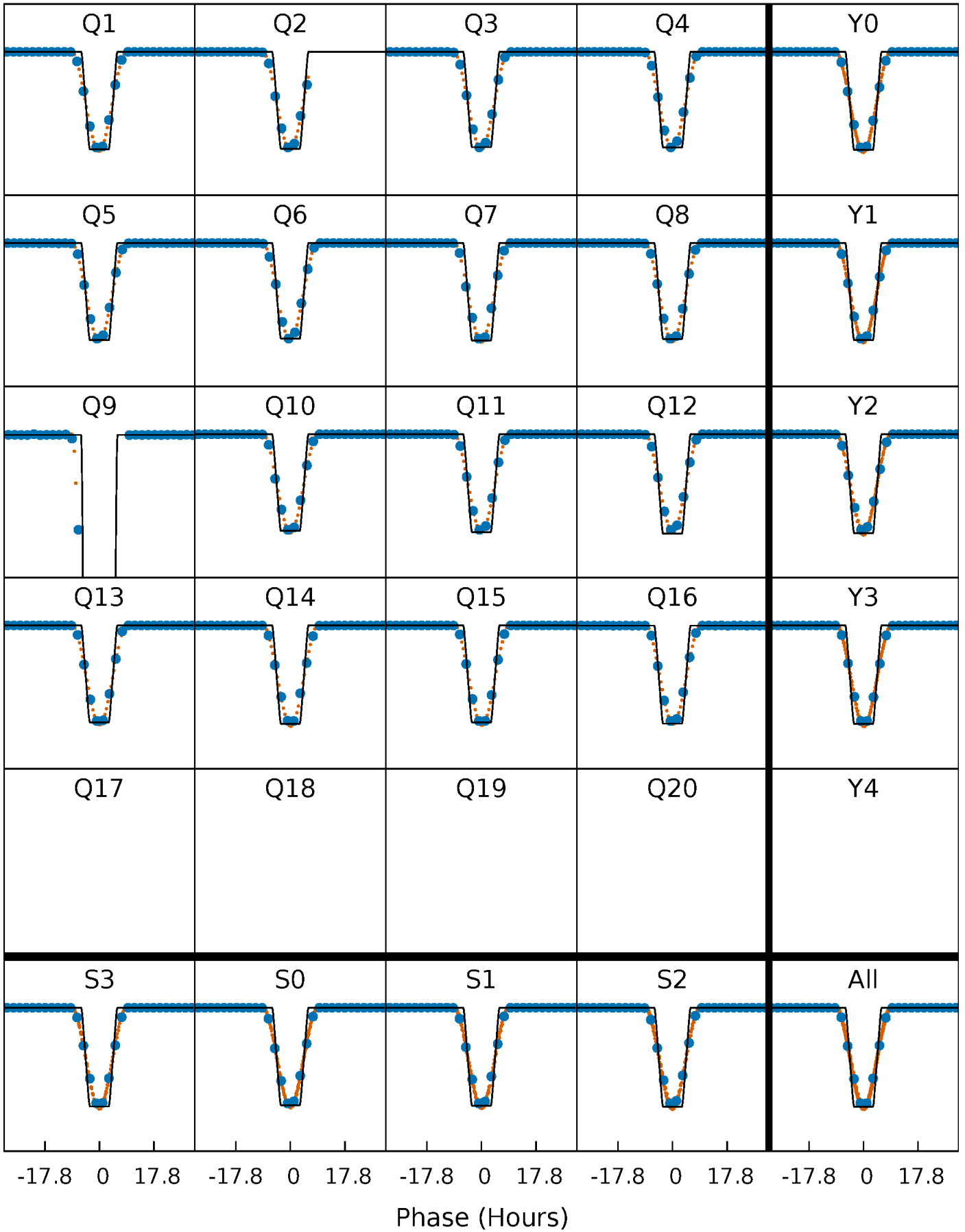
DV Quarter-Phased Transit Curves

TCE 002576692-02 P= 87.877281 Days $T_0=142.167095$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

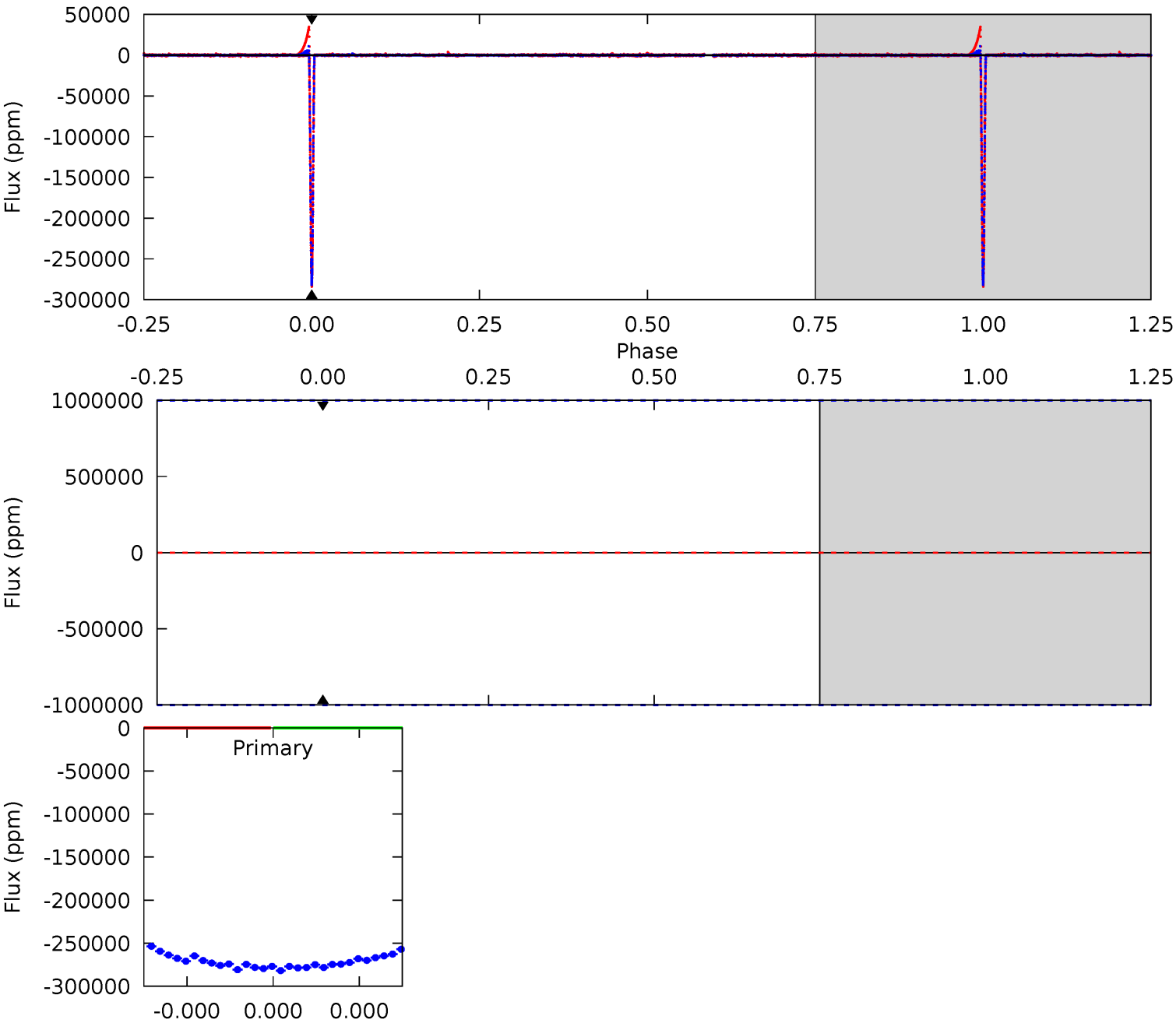
TCE 002576692-02 P= 87.877281 Days $T_0=142.169871$ (BKJD)



DV Model-Shift Uniqueness Test

002576692-02, P = 87.877281 Days, E = 54.289814 Days

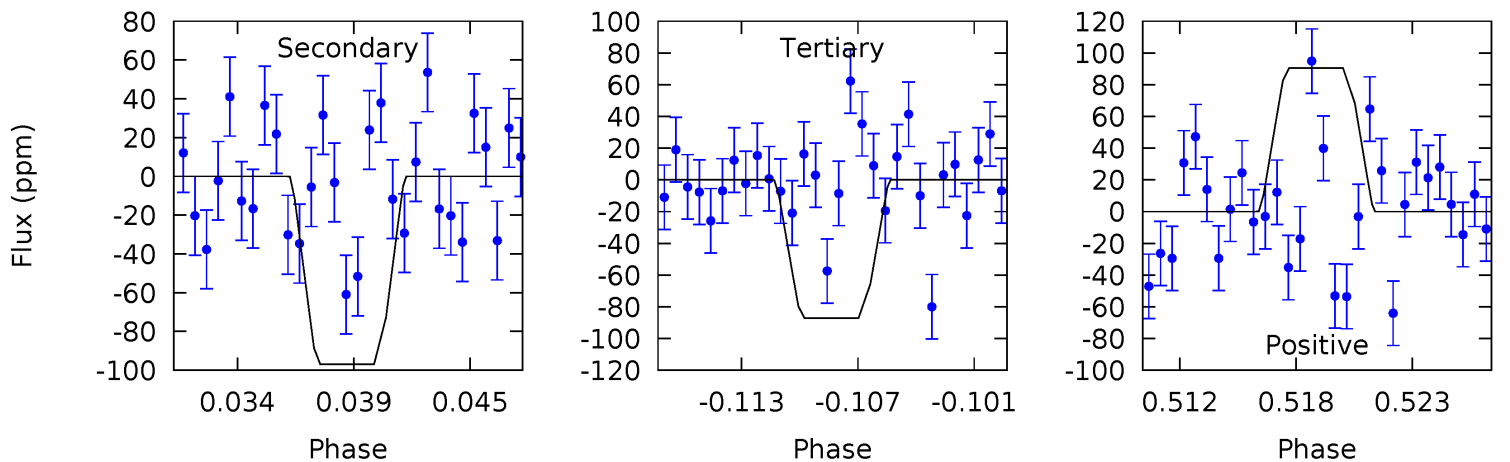
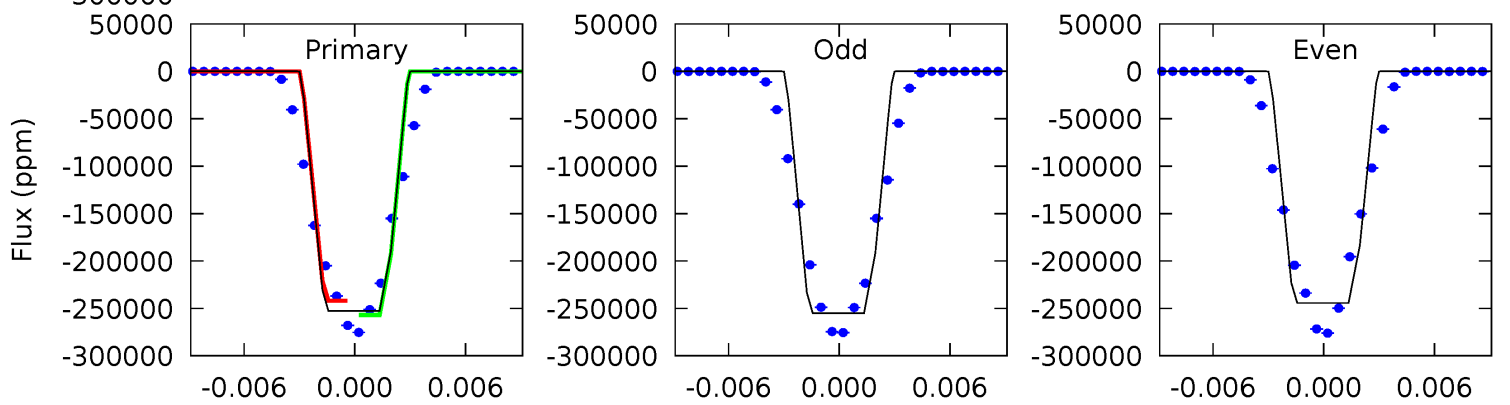
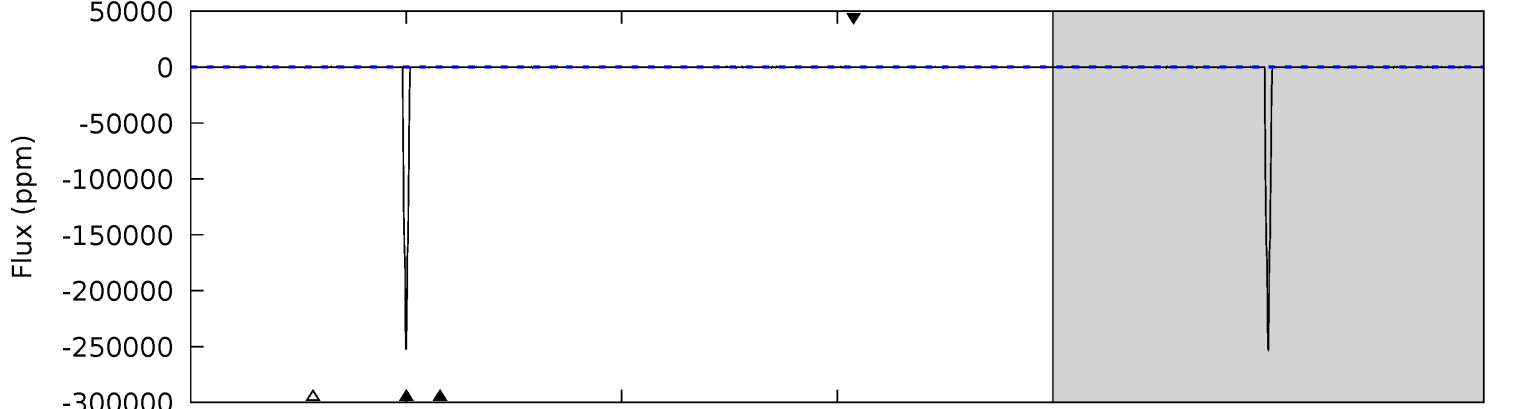
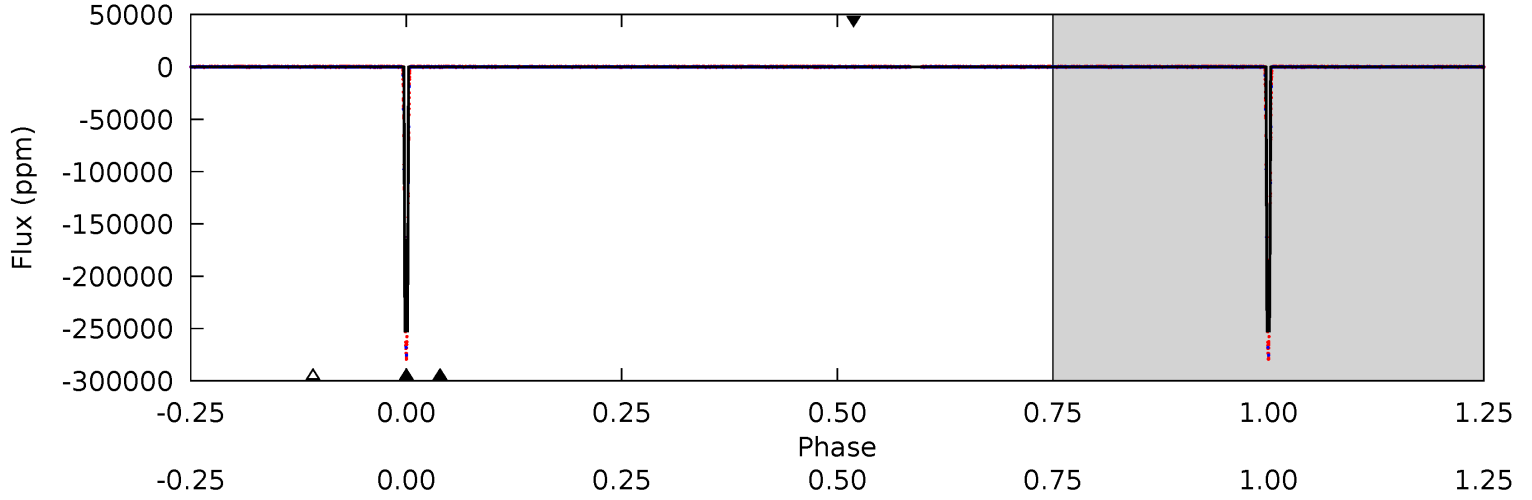
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
0	0	0	0	1.00	1.00	1.00	0	0	0	0	0	0	0	0



Alt Model-Shift Uniqueness Test

002576692-02, P = 87.877281 Days, E = 54.292590 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
13312	5.11	4.60	4.77	5.14	2.77	1.33	13307	13307	0.51	0.33	348.3	1.00	0.00	0



Stellar Parameters For KIC 002576692

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	5784^{+145}_{-131}	$3.985^{+0.308}_{-0.110}$	$-0.320^{+0.350}_{-0.200}$	$1.642^{+0.347}_{-0.520}$	$0.951^{+0.143}_{-0.091}$	$0.302^{+0.614}_{-0.116}$
	+3%/-2%	+8%/-3%	+109%/-62%	+21%/-32%	+15%/-10%	+203%/-38%
Source	PHO1	FLK73	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 002576692-02 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	0 ± 1000000	$62.25^{+19.49}_{-20.07}$	731^{+43}_{-62}	-3021^{+8754}_{-2464}	$-87.041^{+2647.128}_{-2221.284}$
Alt.	-97 ± 19	$90.58^{+23.51}_{-22.16}$	729^{+46}_{-61}	1762^{+110}_{-113}	$0.955^{+0.728}_{-0.378}$

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

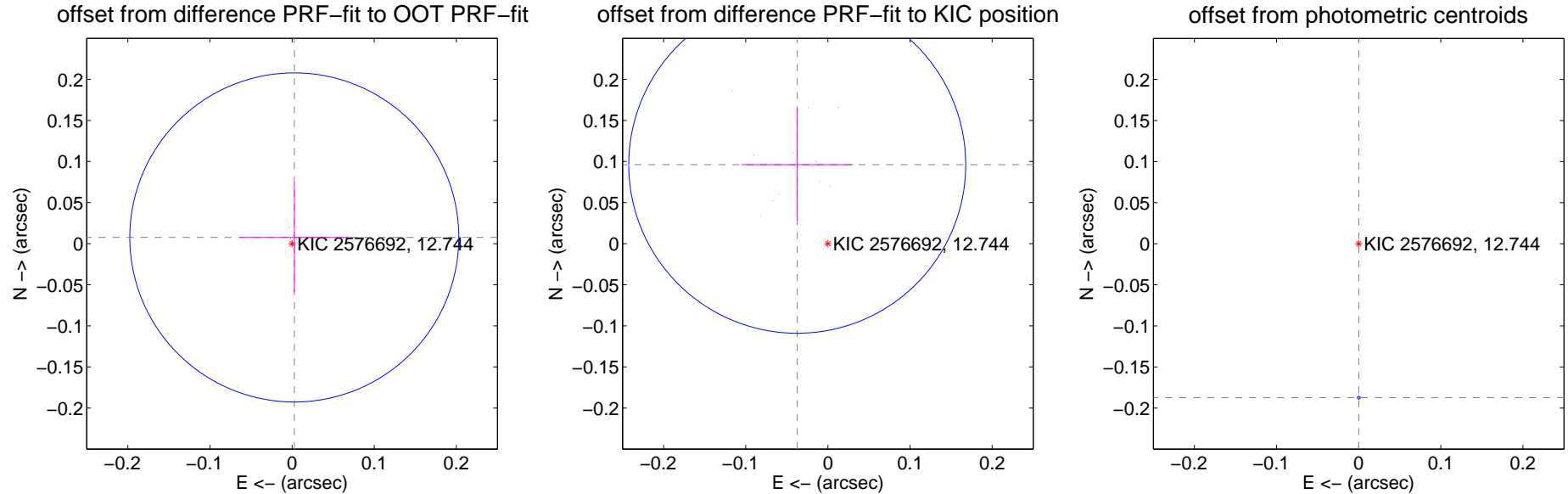
DV Centroid Data

Supplemental centroid analysis for 002576692-02. Kepler magnitude: 12.74. Transit SNR -1.00

There are 12 quarters with good PRF difference image offsets

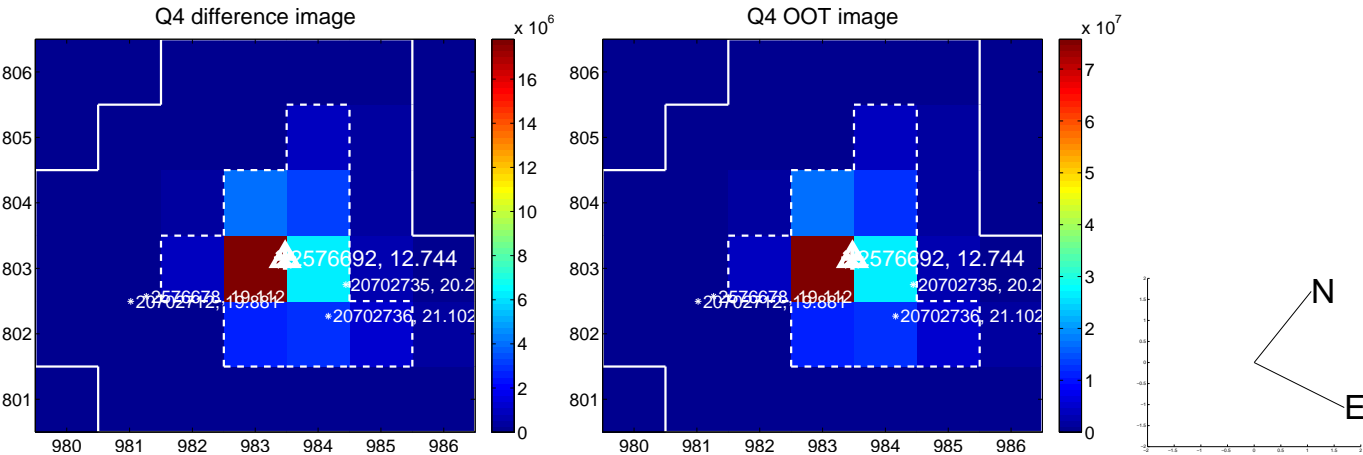
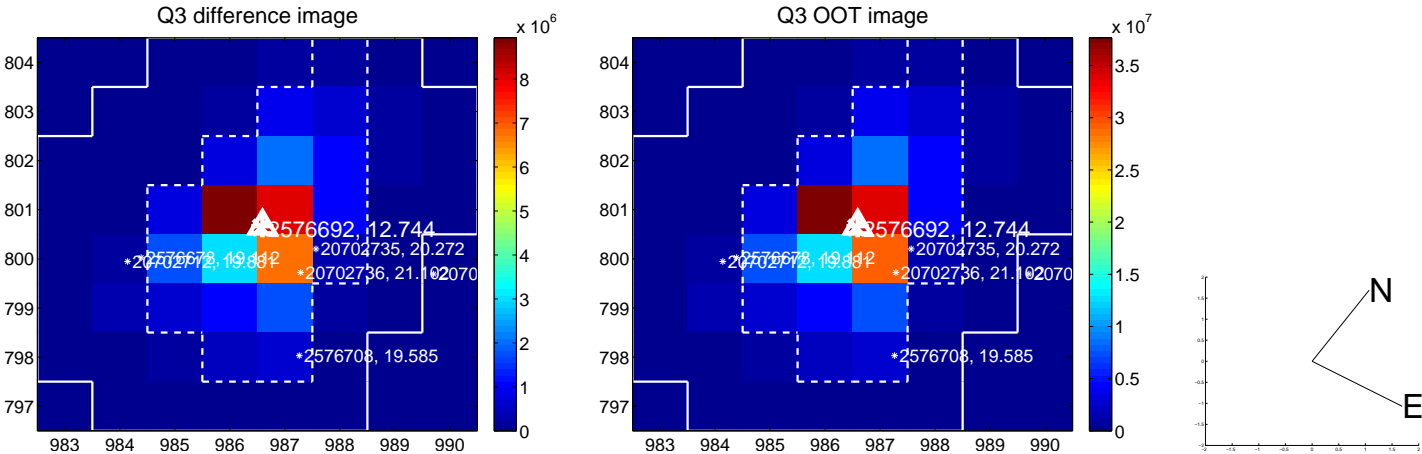
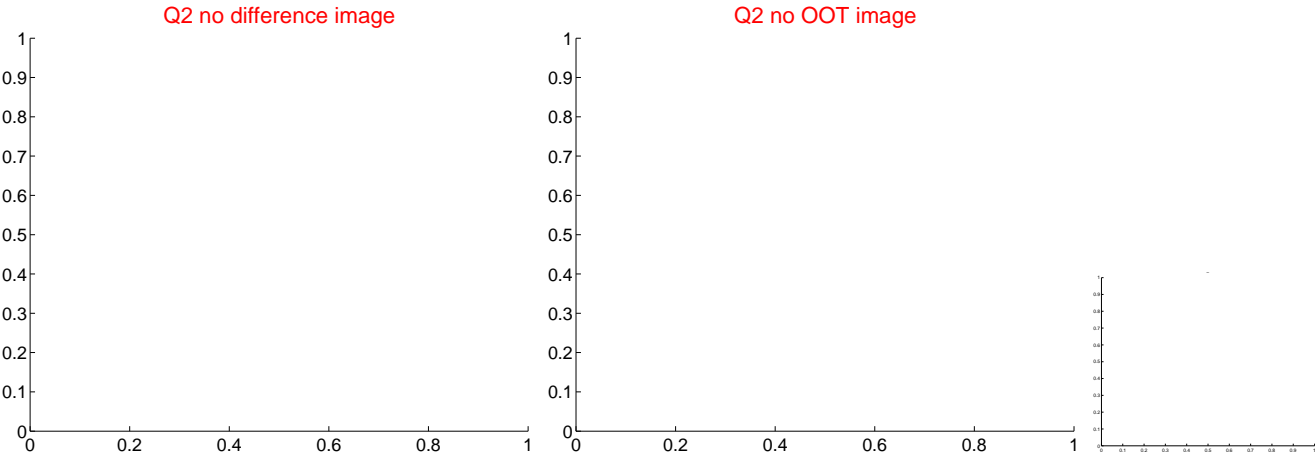
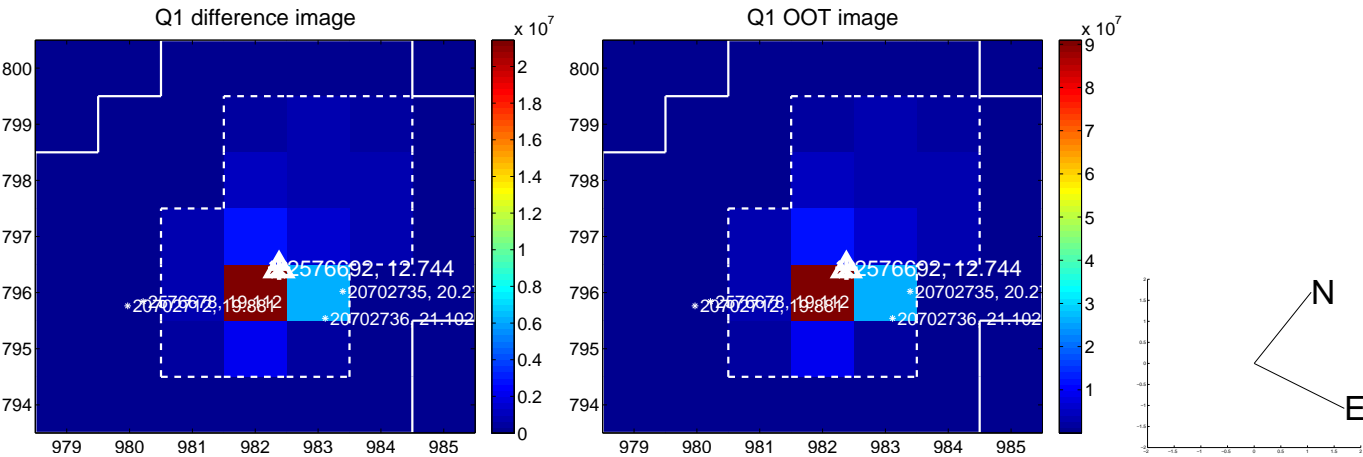
The direct PRF centroid is offset from the target star catalog position by about 0.12 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.008 ± 0.067	0.12	-0.003 ± 0.067	0.008 ± 0.067
PRF-fit source offset from KIC position	0.103 ± 0.068	1.51	0.037 ± 0.068	0.096 ± 0.068
photometric centroid source offset	0.19 ± 0.00	329.10	-0.00 ± 0.00	-0.19 ± 0.00

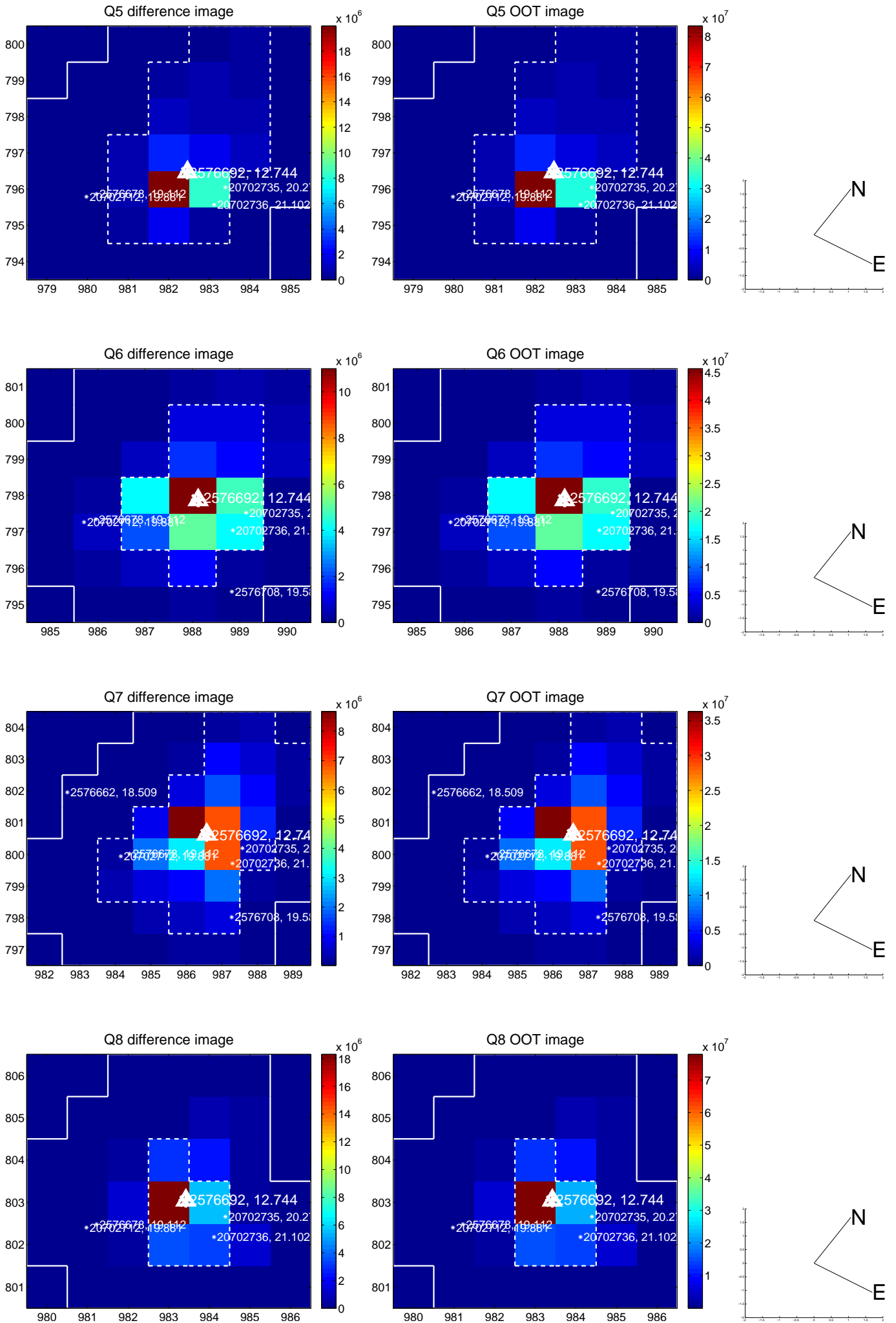


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets**; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

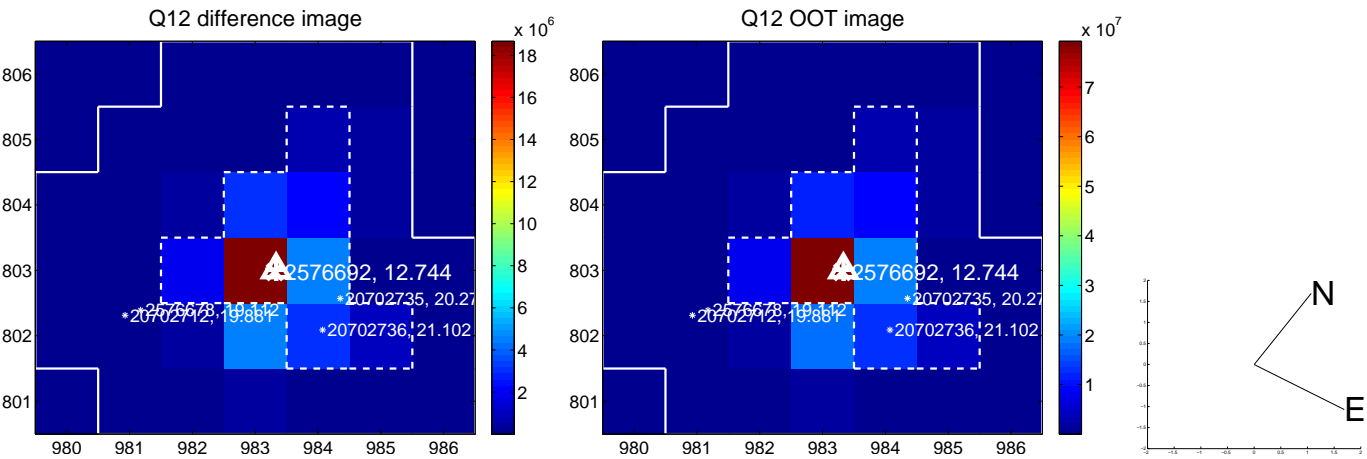
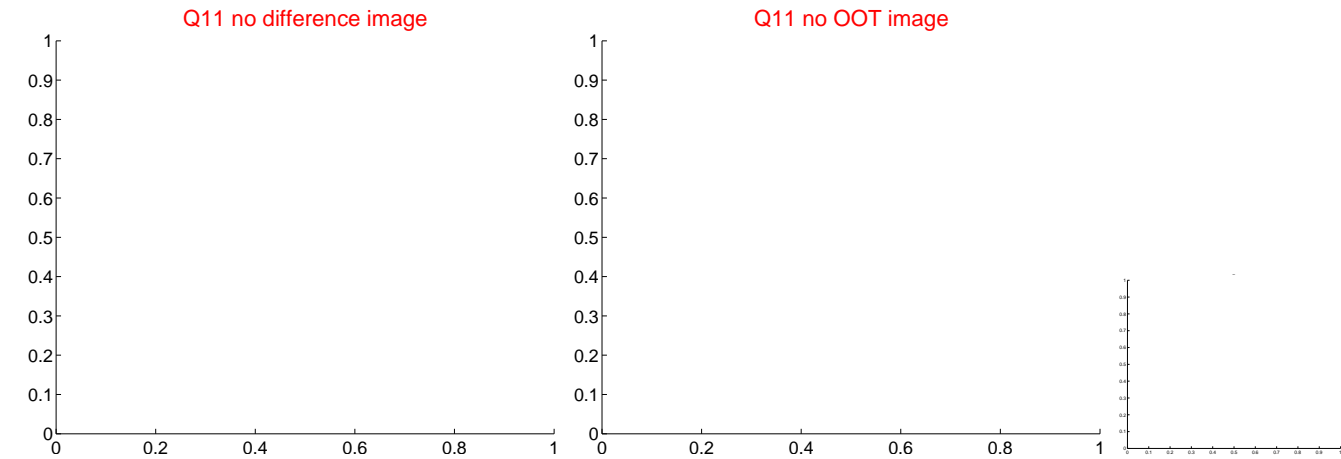
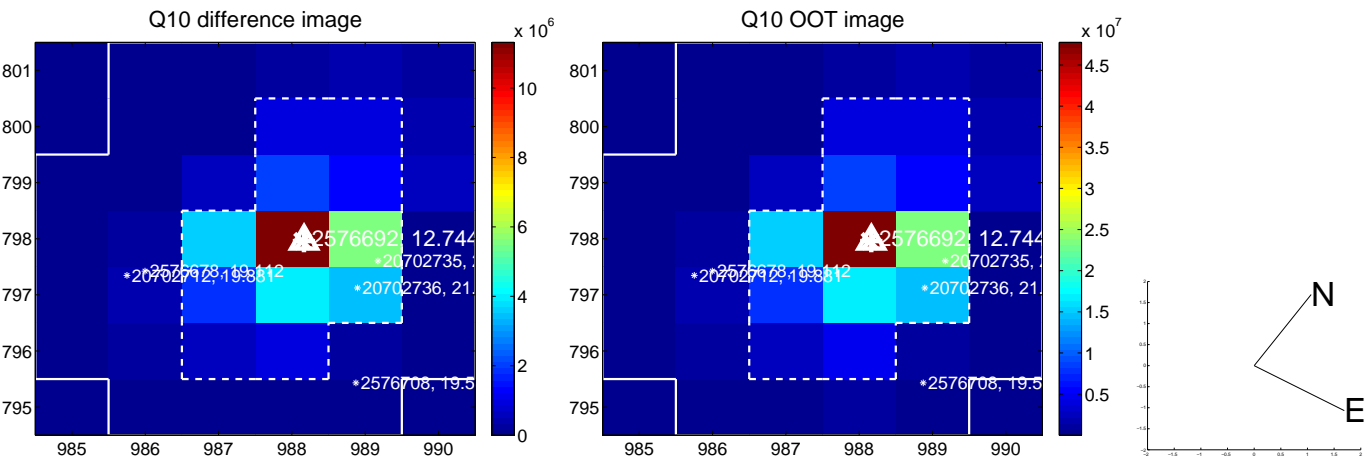
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



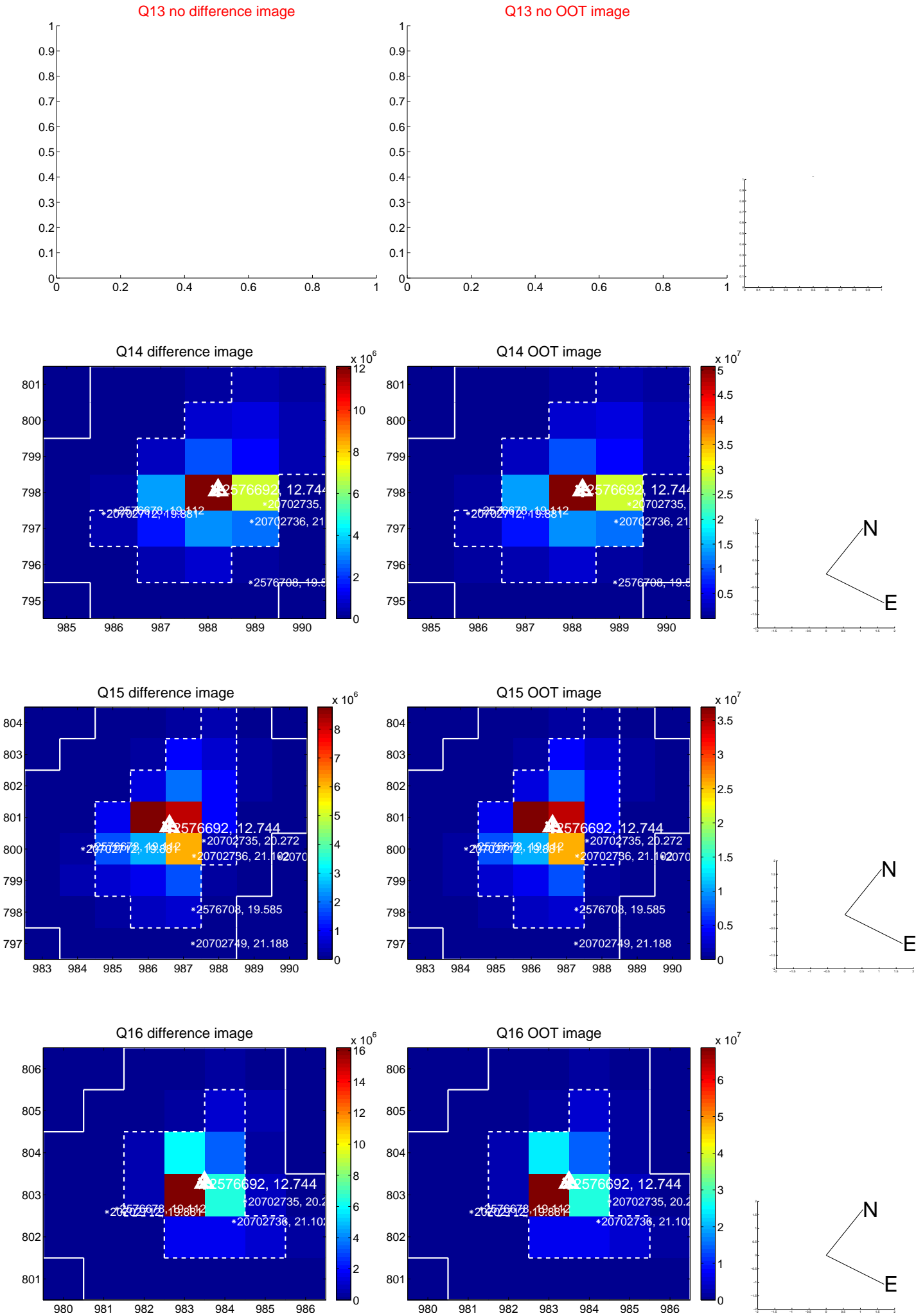
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



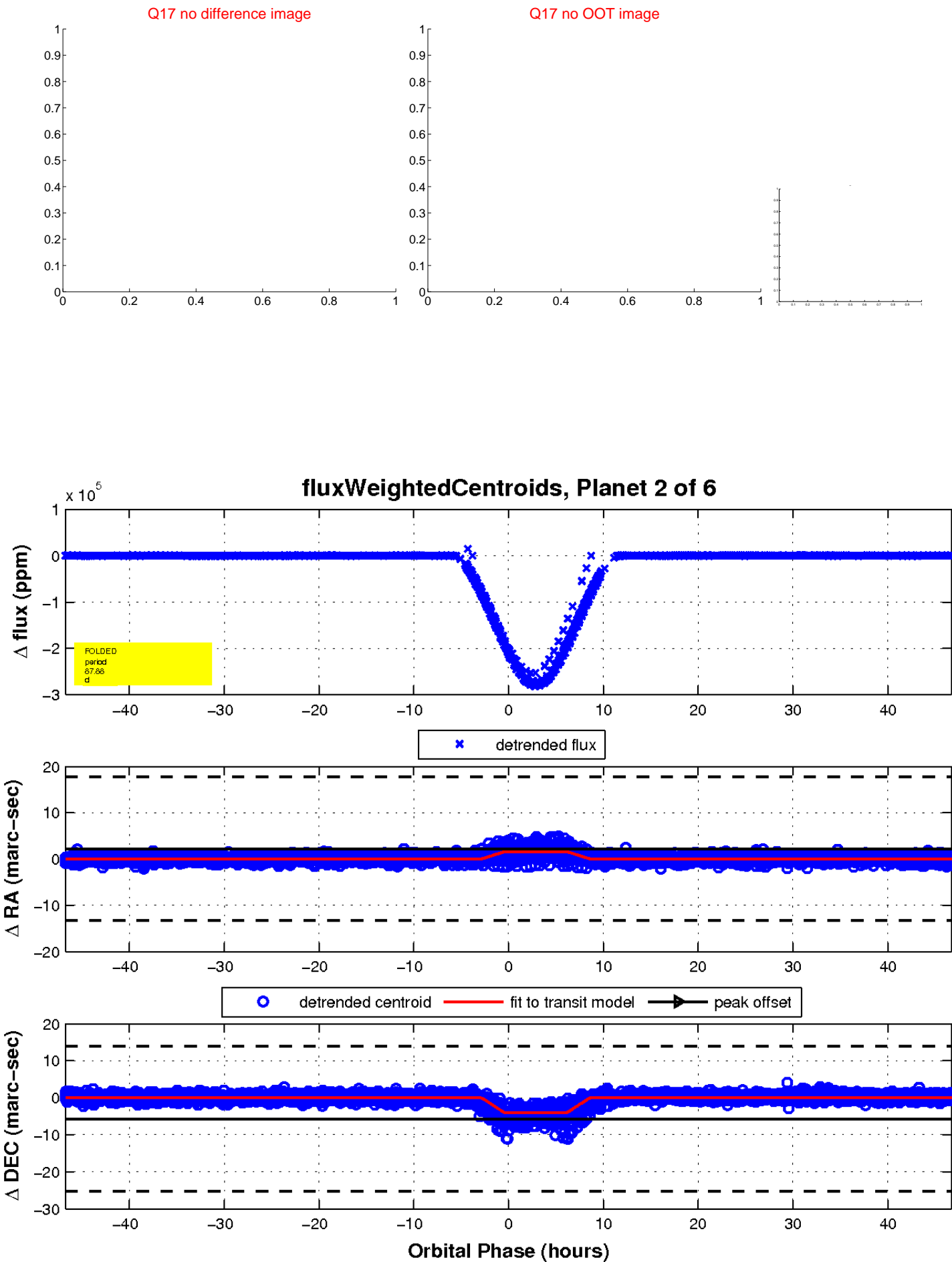
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

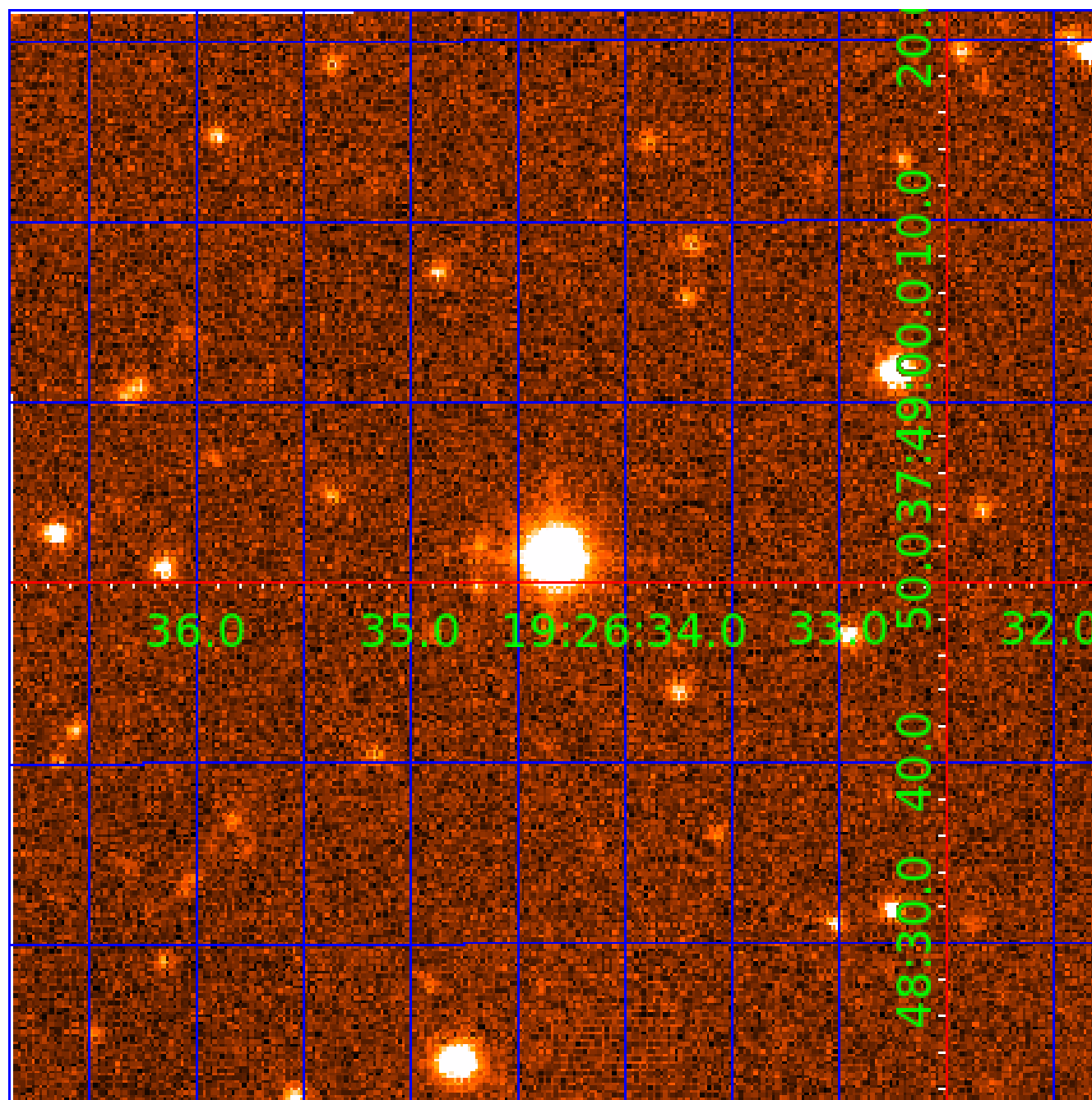


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 002576692

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})
002576692-01	OBS	6282.01	87.879693	194.095583	343541.3	9.000	20777.6	-1.0	1.64	5784	74.78	18.69
002576692-02	OBS	No	87.877281	142.167095	279491.6	12.000	18658.1	-1.0	1.64	5784	65.15	18.69
002576692-03	OBS	No	87.878932	196.172156	5178.9	51.572	407.3	184.3	1.64	5784	21.65	18.69
002576692-04	OBS	No	338.445920	295.514290	303.8	12.307	12.0	10.4	1.64	5784	3.52	3.10
002576692-05	OBS	No	349.285026	149.465320	120.2	14.226	10.2	4.2	1.64	5784	2.05	2.97
002576692-06	OBS	No	354.967683	486.422993	173.8	17.016	9.8	5.5	1.64	5784	2.56	2.90

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
002576692-01	OBS	FP	0.00	0	1	0	0	MOD_SEC_ALT—HAS_SEC_TCE—CENT_NOFITS
002576692-02	OBS	FP	0.00	1	1	0	0	IS_SEC_TCE—CENT_NOFITS
002576692-03	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—SAME_NTL_PERIOD—CENT_FEW_DIFFS
002576692-04	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_MARSHALL—LPP_DV—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—INCONSISTENT_TRANS—CENT_FEW_DIFFS
002576692-05	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_MARSHALL—LPP_DV—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_NONUNIQ_ALT—INCONSISTENT_TRANS—CENT_FEW_DIFFS
002576692-06	OBS	FP	0.00	1	0	1	0	INDIV_TRANS_MARSHALL—LPP_DV—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—MOD_NONUNIQ_ALT—INCONSISTENT_TRANS—CENT_FEW_DIFFS—HALO_GHOST

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.

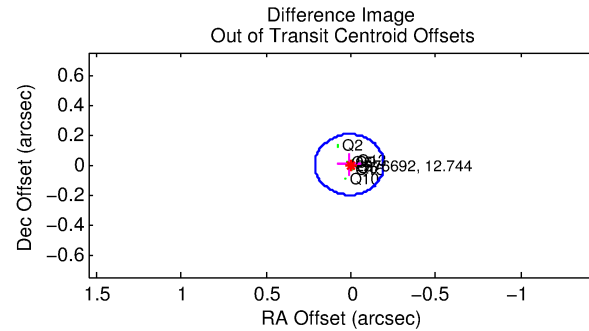
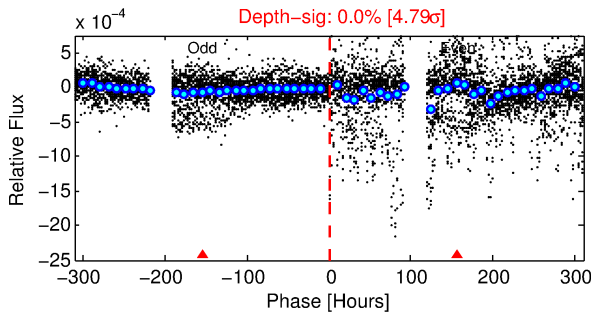
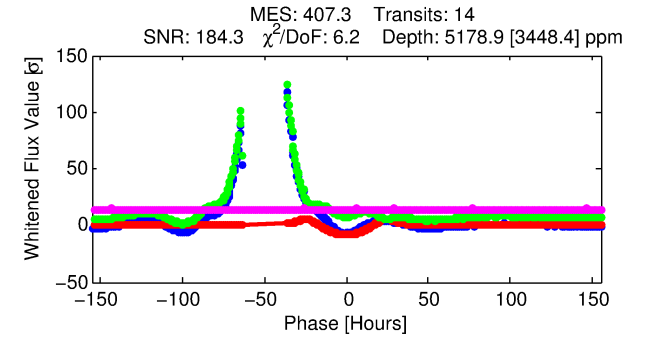
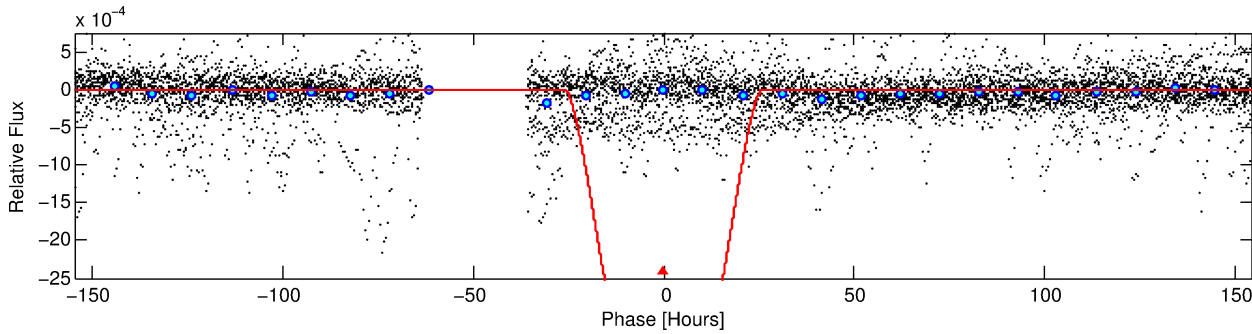
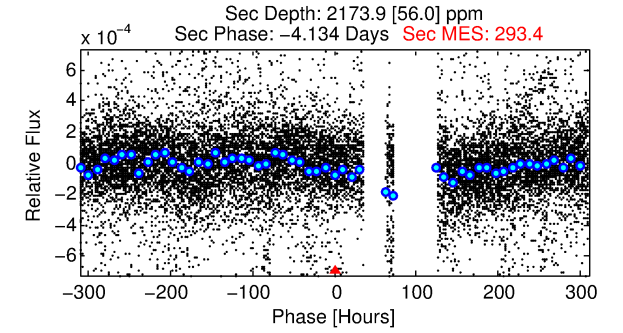
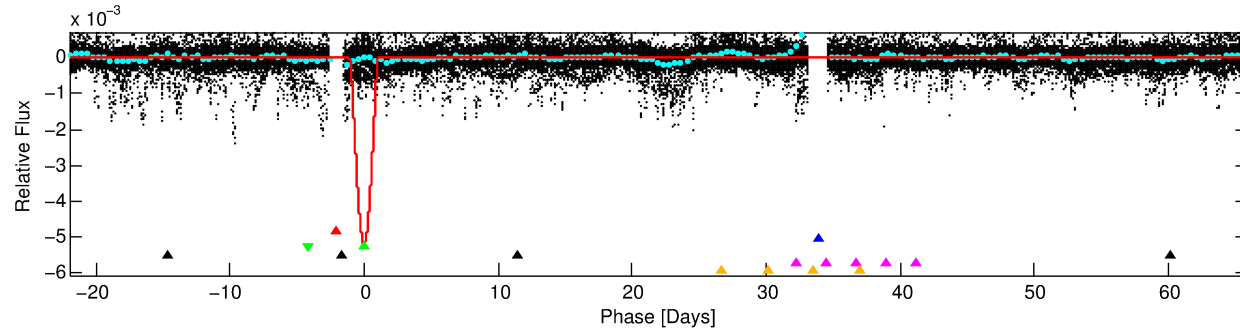
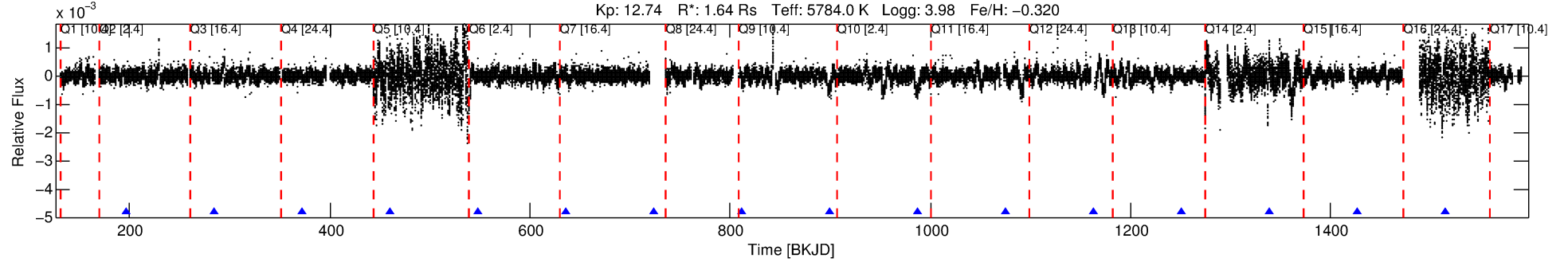
Ephemeris Match Information For 002576692-03

No Significant Match Found

DV One-Page Summary

KIC: 2576692 Candidate: 3 of 6 Period: 87.879 d
KOI: K06282 Corr: No Ephemeris Match

Kp: 12.74 R*: 1.64 Rs Teff: 5784.0 K Logg: 3.98 Fe/H: -0.320



DV Fit Results:

Period = 87.87893 [0.00097] d
Epoch = 196.1722 [0.0078] BKJD
Rp/R* = 0.1208 [0.0235]
a/R* = 6.67 [0.22]
b = 1.00 [0.02]
Seff = 18.69 [9.86]
Teq = 530 [70] K
Rp = 21.65 [8.05] Re
a = 0.3804 [0.1206] AU
Ag = 369.31 [239.45] [1.54σ]
Teffp = 3593 [362] K [8.31σ]

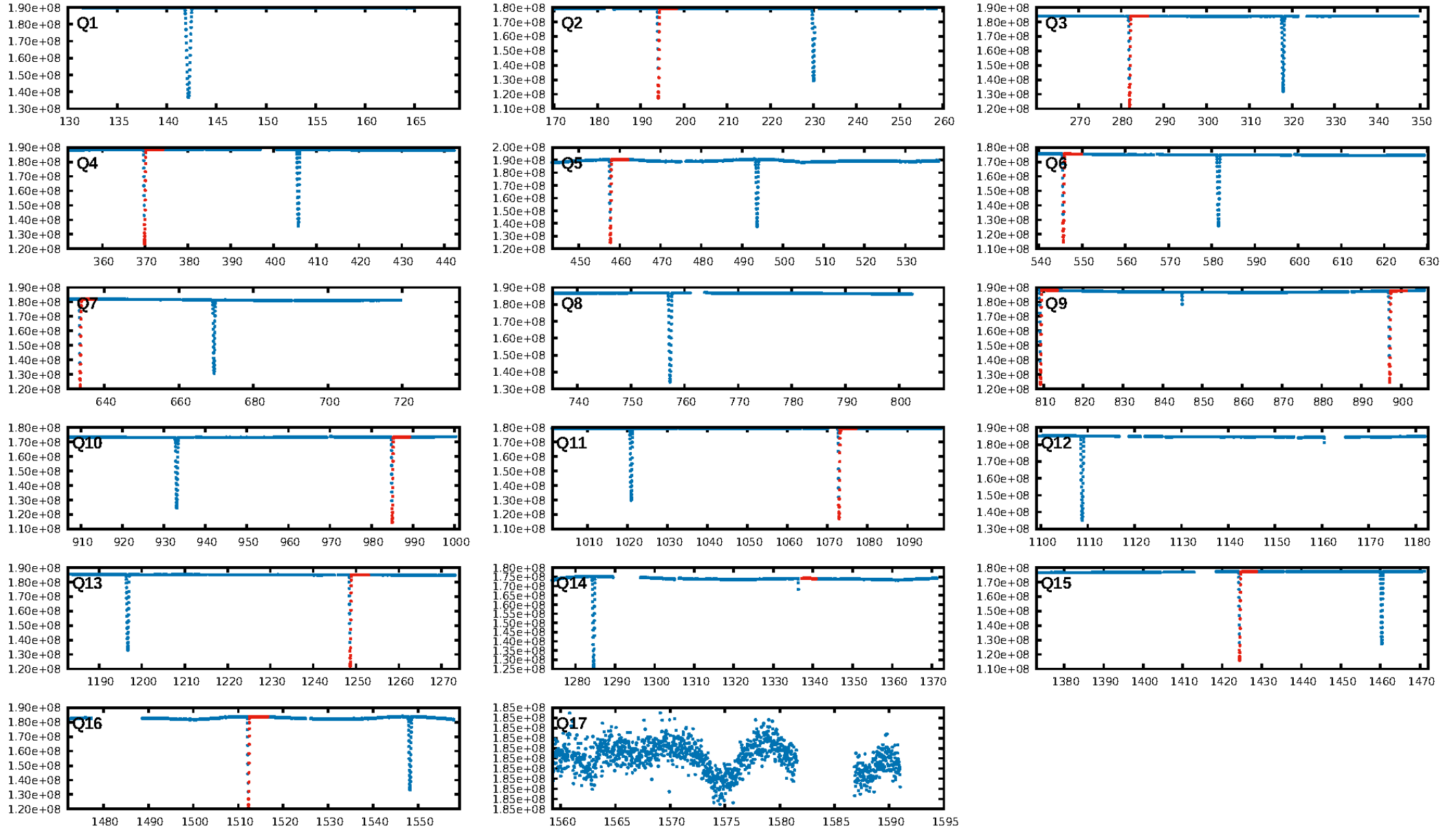
DV Diagnostic Results:

ShortPeriod-sig: 0.1% [0.00σ]
LongPeriod-sig: 0.0% [0.00σ]
ModelChiSquare2-sig: 0.0%
ModelChiSquareGof-sig: 0.0%
Bootstrap-pfa: 0.00e+00
RollingBand-fgt: 1.00 [14/14]
GhostDiagnostic-chr: 0.3674
Centroid-sig: 5.7%
Centroid-so: 0.224 arcsec [8.42σ]
OotOffset-rm: 0.011 arcsec [0.17σ]
OotOffset-st: 3/1/0/3 [7]
KicOffset-rm: 0.126 arcsec [1.76σ]
KicOffset-st: 3/1/0/3 [7]
DiffImageQuality-fgm: 0.00 [0/7]
DiffImageOverlap-fno: 0.00 [0/7]

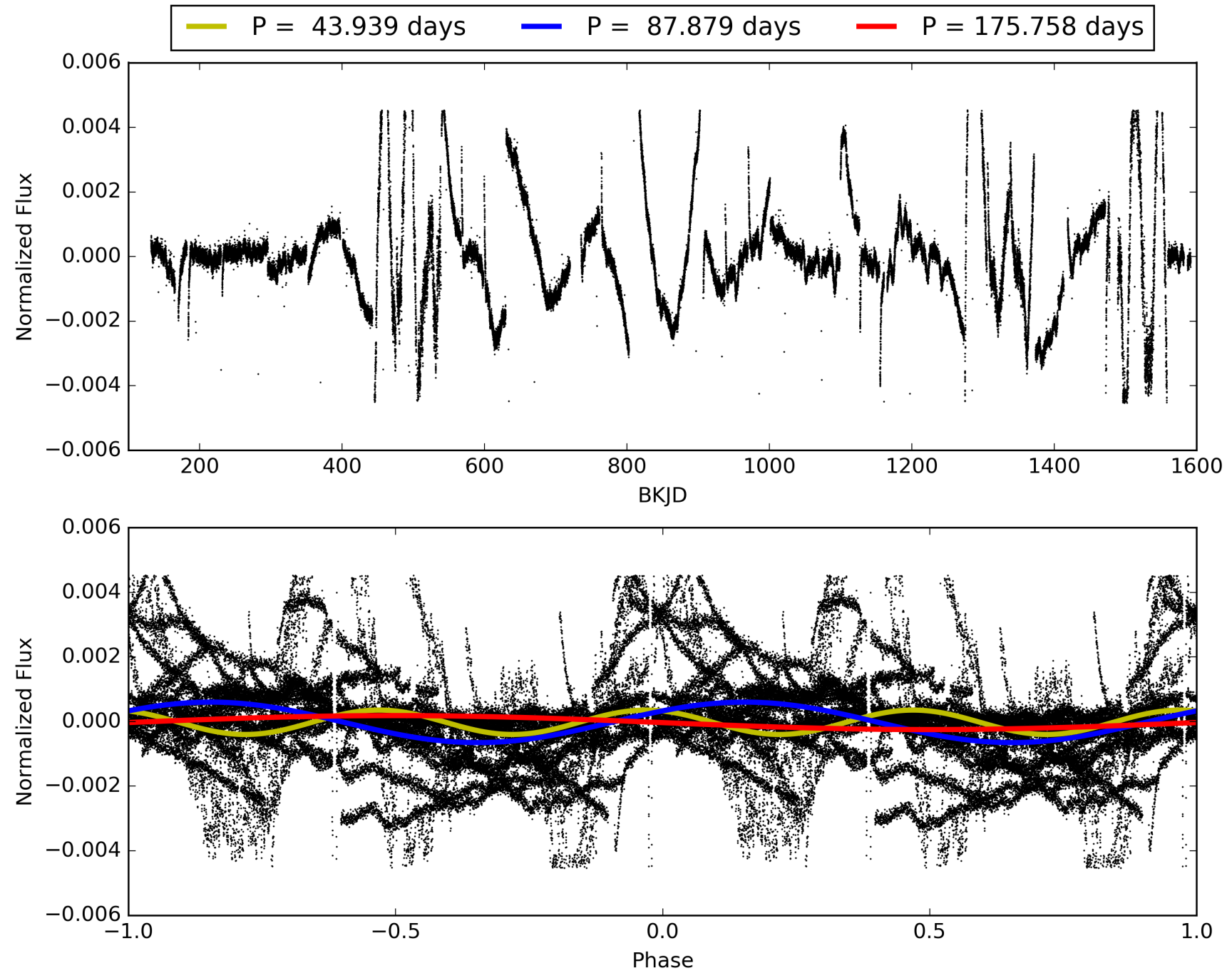
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 01-Feb-2016 14:15:51 Z

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

TCE 002576692-03, PDC Light Curves

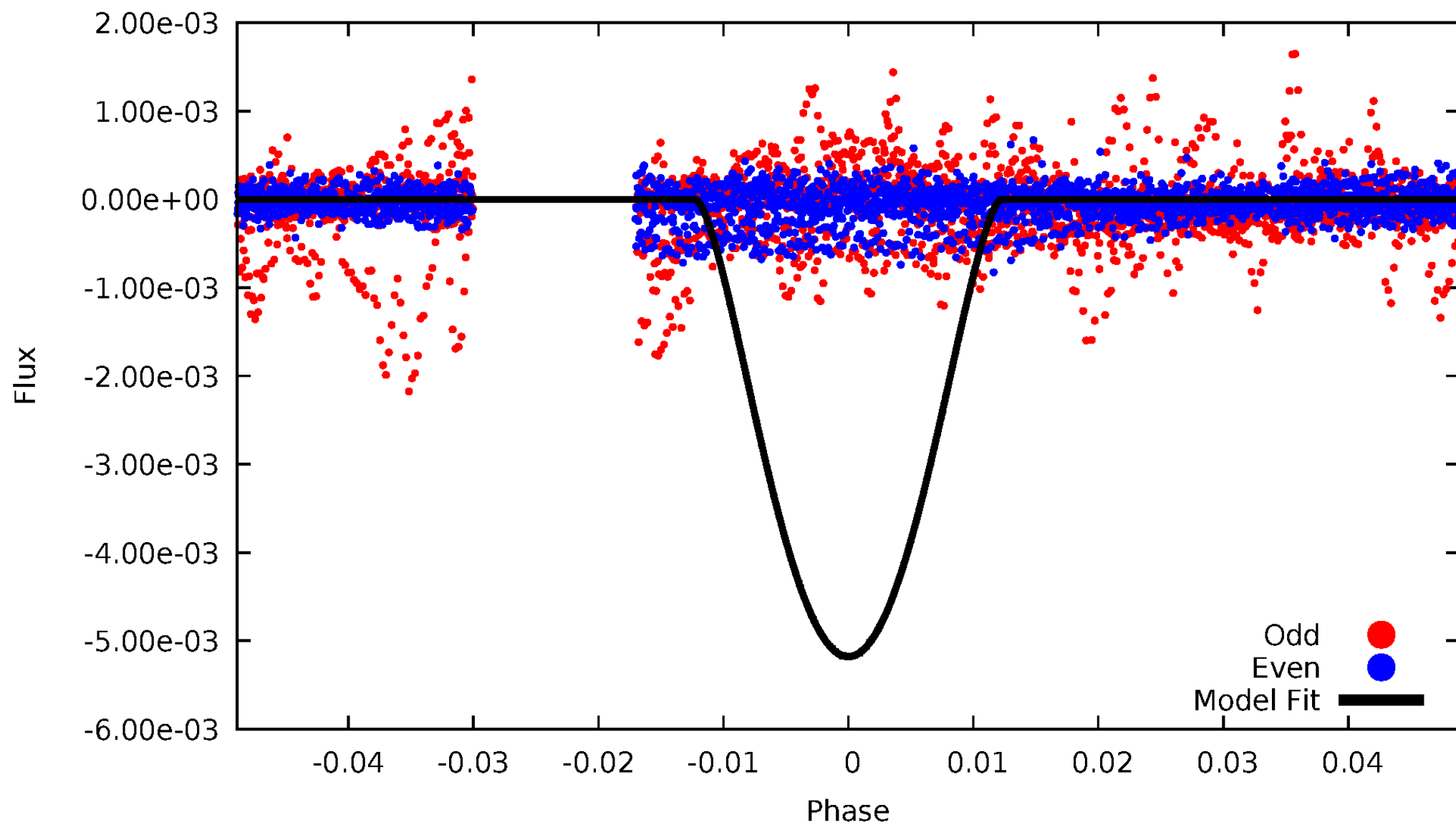


TCE 002576692-03



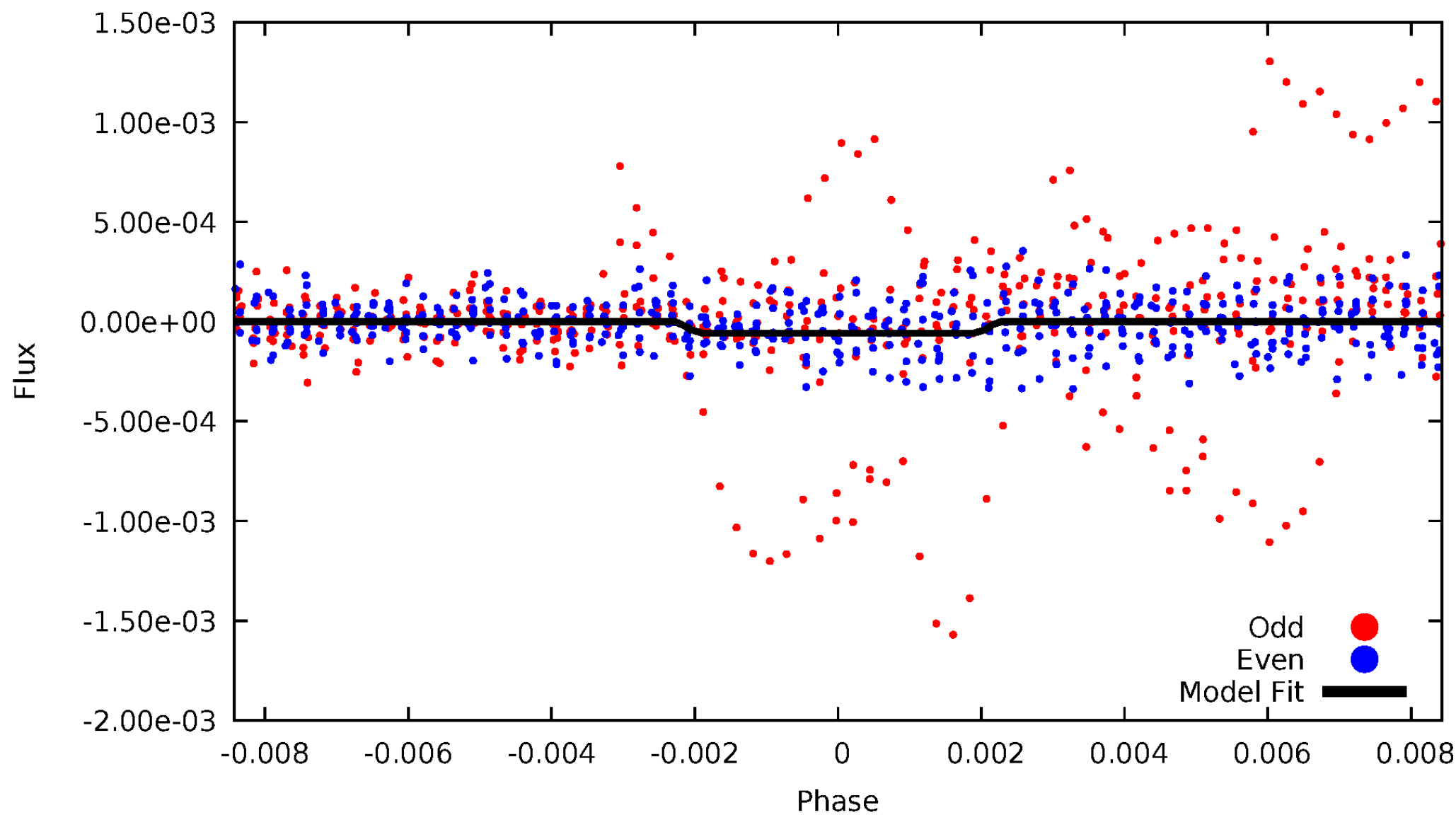
DV Odd/Even

TCE 002576692-03



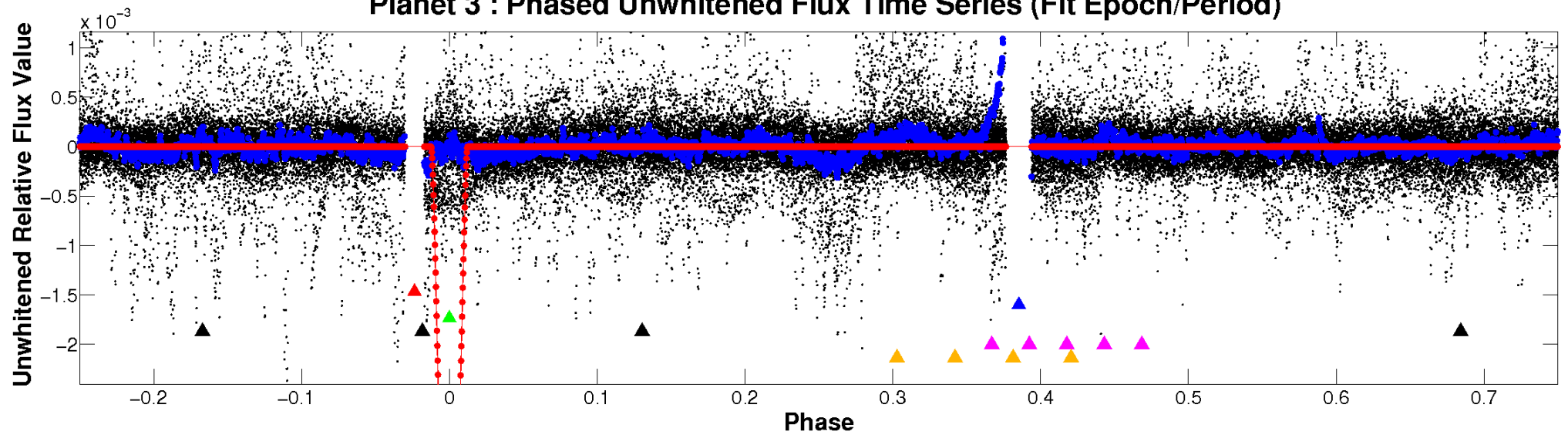
ALT Odd/Even

TCE 002576692-03

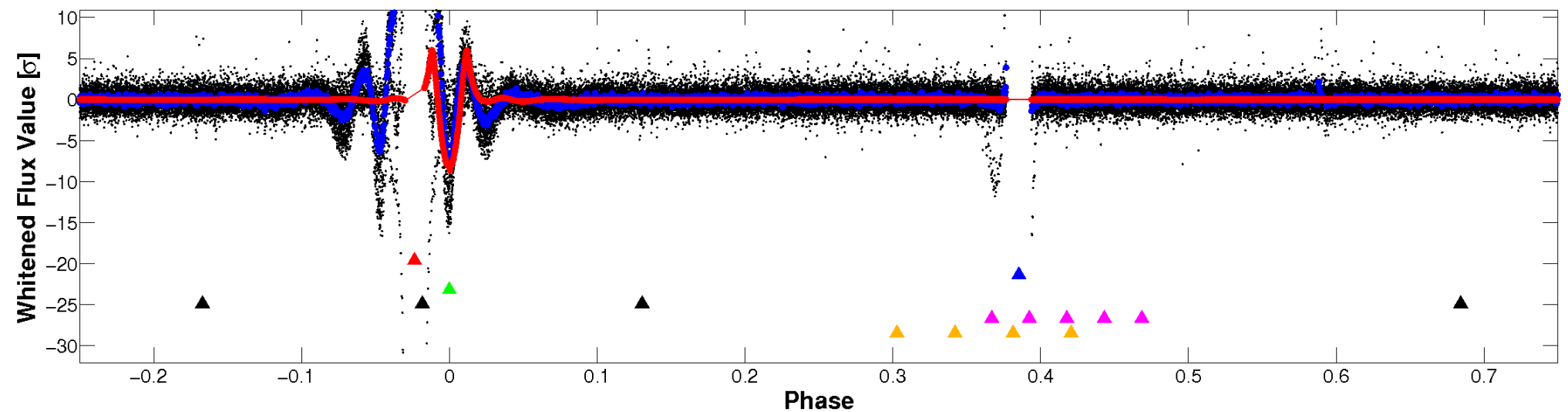


Non-Whitened Vs. Whitened Light Curve

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

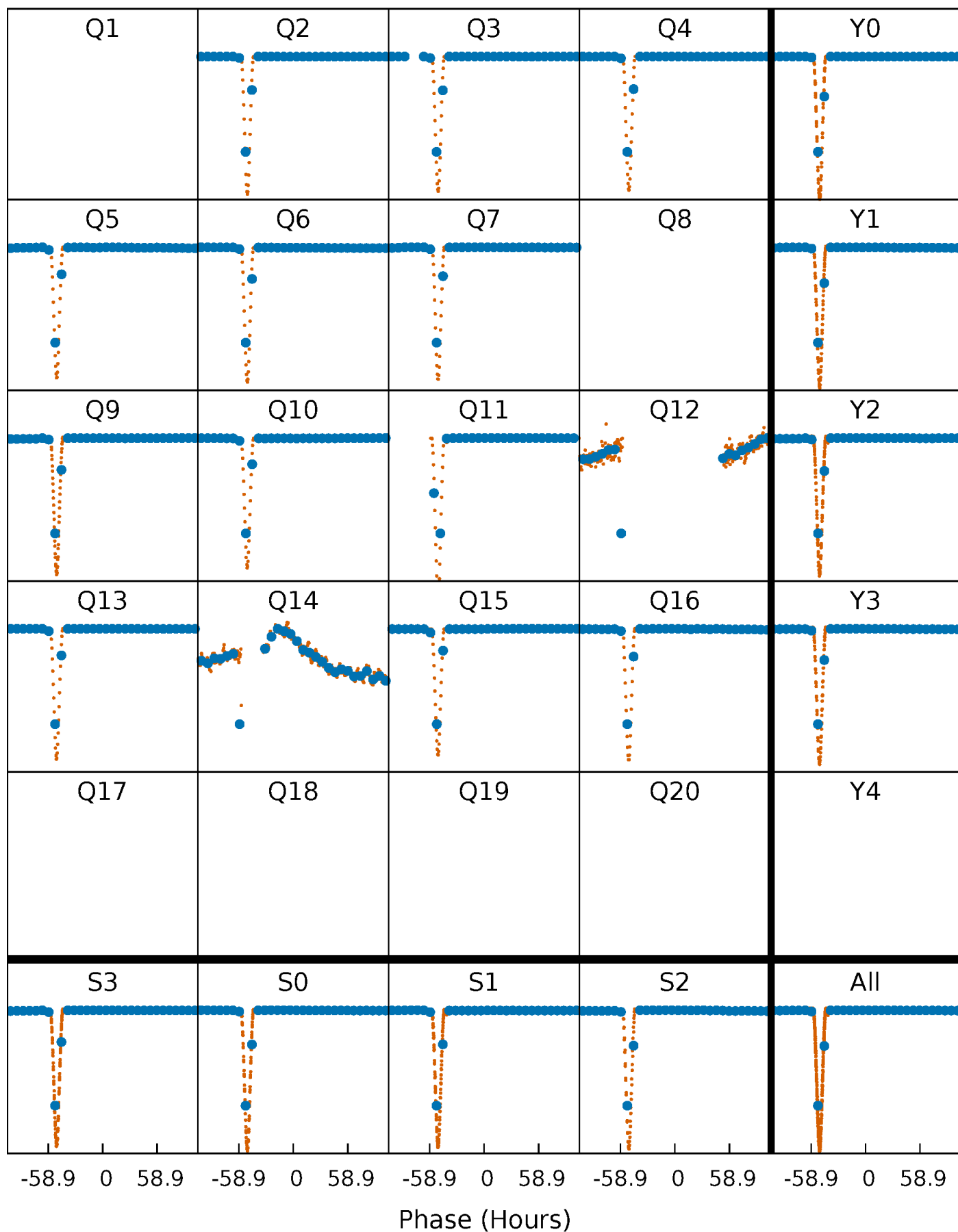


Planet 3 : Phased Whitened Flux Time Series (Fit Epoch/Period)



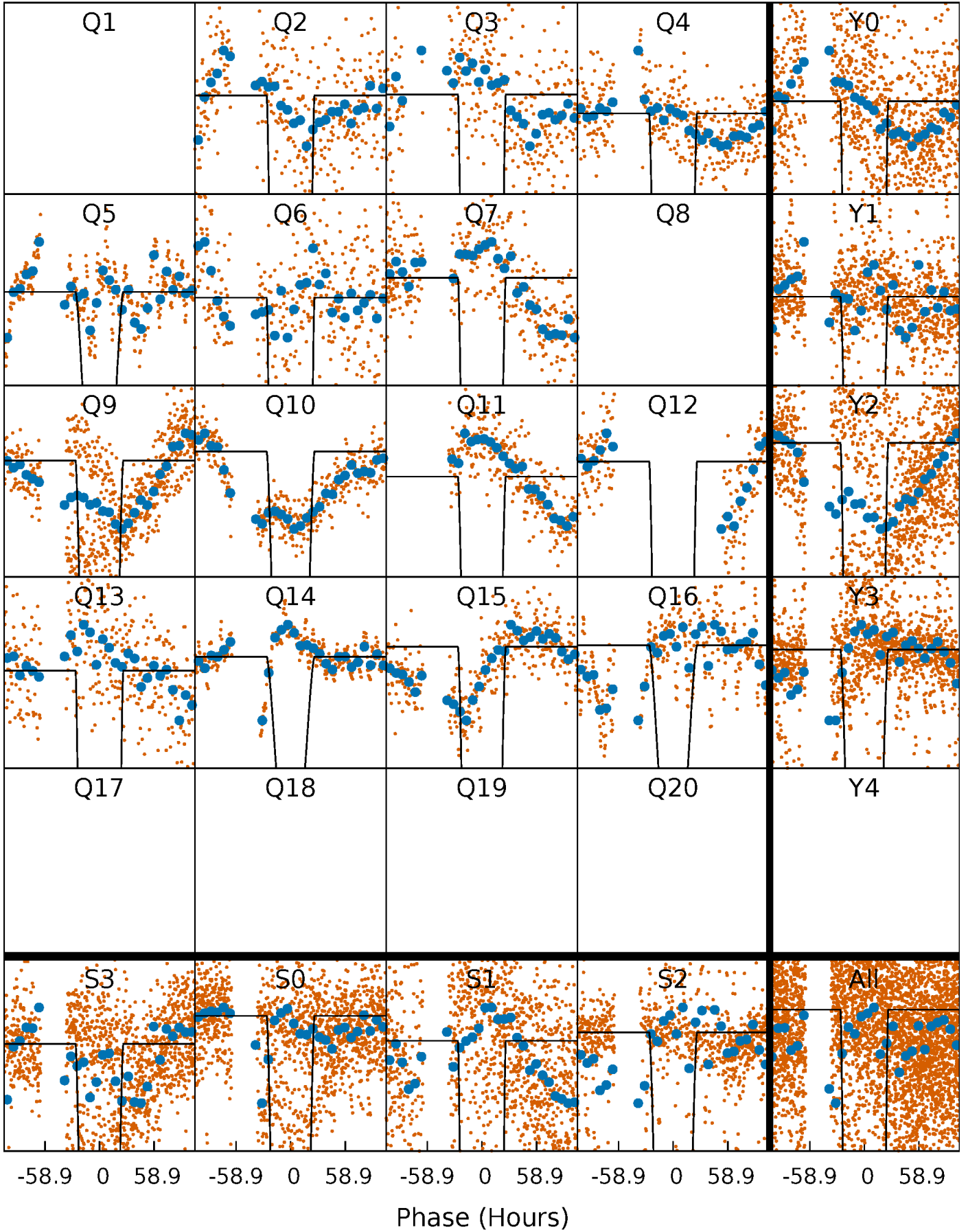
PDC Quarter-Phased Transit Curves

TCE 002576692-03 P= 87.878932 Days $T_0=196.172156$ (BKJD)



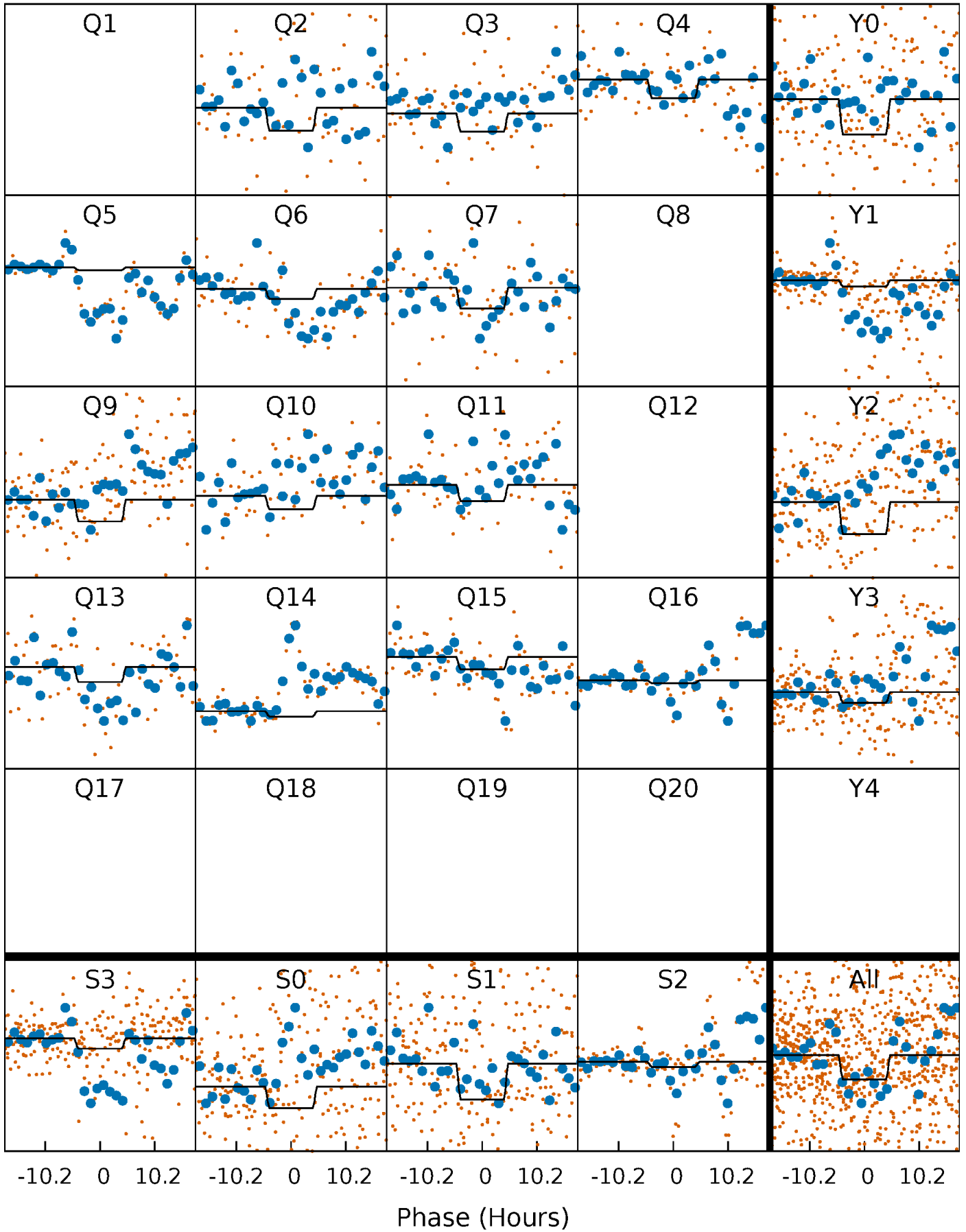
DV Quarter-Phased Transit Curves

TCE 002576692-03 $P = 87.878932$ Days $T_0 = 196.172156$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

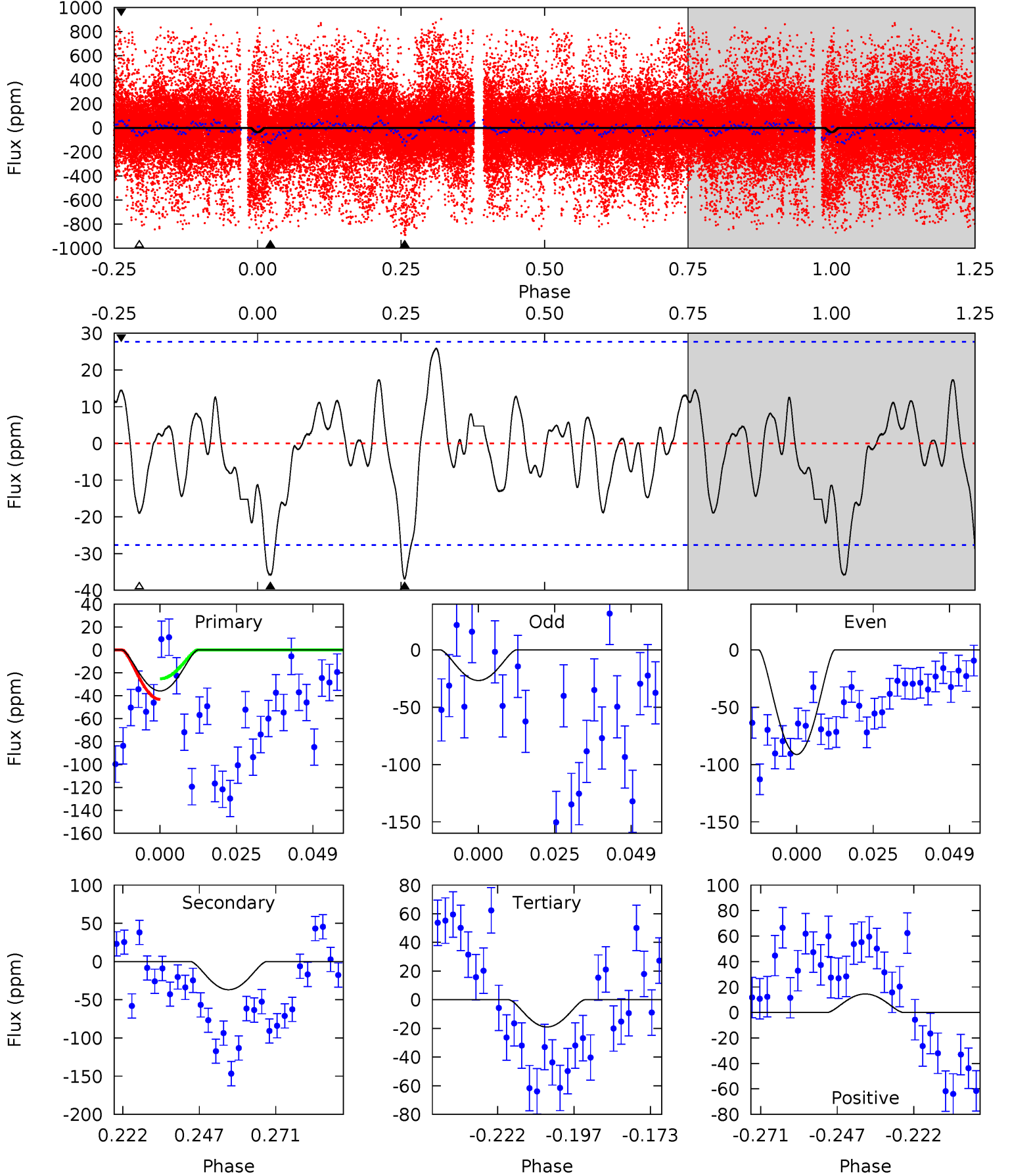
TCE 002576692-03 P= 87.884742 Days $T_0=195.817501$ (BKJD)



DV Model-Shift Uniqueness Test

002576692-03, P = 87.878932 Days, E = 108.293224 Days

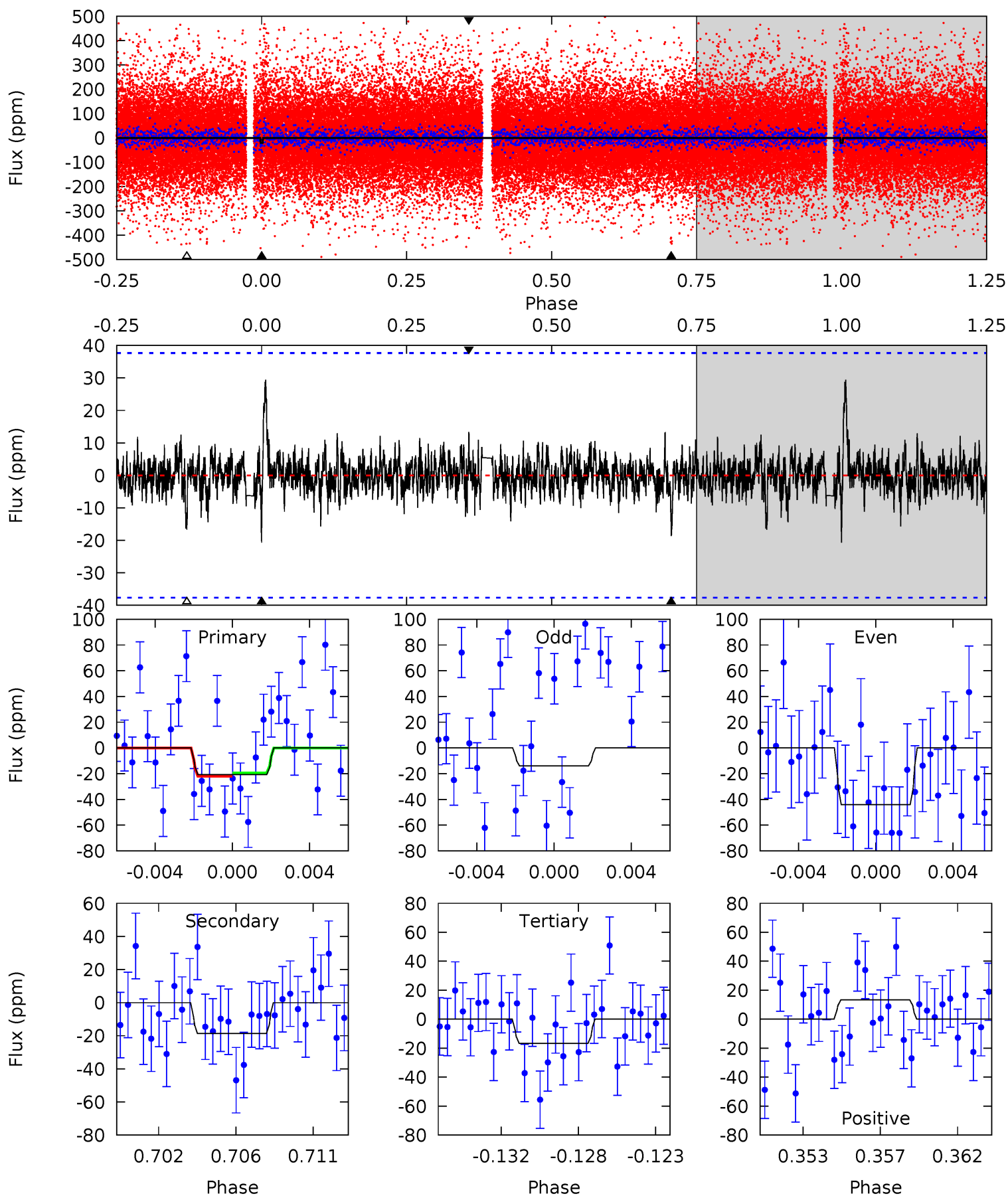
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
6.27	6.46	3.33	2.55	4.85	2.25	1.57	2.95	3.73	3.14	3.92	5.51	2.48	0.41	1.60



Alt Model-Shift Uniqueness Test

002576692-03, P = 87.884742 Days, E = 107.932759 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
2.85	2.57	2.30	1.83	5.19	2.86	0.60	0.55	1.02	0.27	0.74	2.05	4.08	0.59	0.17



Stellar Parameters For KIC 002576692

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	5784^{+145}_{-131}	$3.985^{+0.308}_{-0.110}$	$-0.320^{+0.350}_{-0.200}$	$1.642^{+0.347}_{-0.520}$	$0.951^{+0.143}_{-0.091}$	$0.302^{+0.614}_{-0.116}$
	+3%/-2%	+8%/-3%	+109%/-62%	+21%/-32%	+15%/-10%	+203%/-38%
Source	PHO1	FLK73	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 002576692-03 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-37 ± 6	$20.96^{+5.11}_{-5.32}$	729^{+47}_{-58}	2223^{+132}_{-96}	$6.934^{+5.330}_{-2.683}$
Alt.	-19 ± 7	$3.06^{+3.55}_{-2.06}$	727^{+44}_{-58}	3341^{+1677}_{-686}	150^{+1386}_{-119}

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

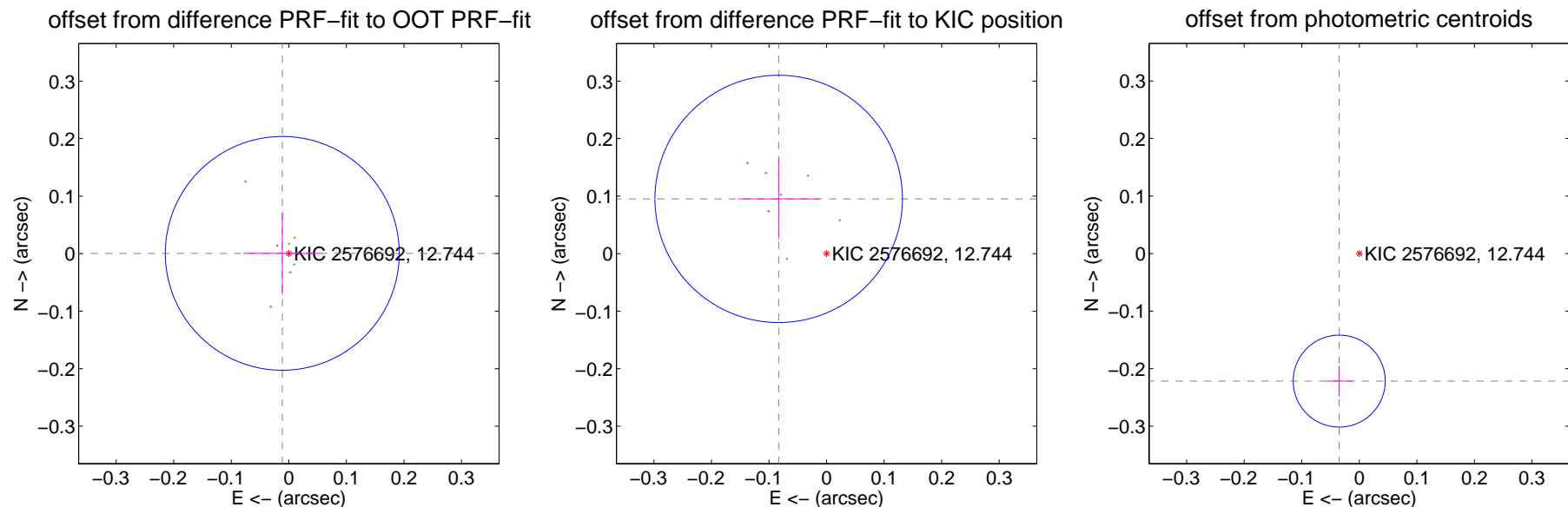
DV Centroid Data

Supplemental centroid analysis for 002576692-03. Kepler magnitude: 12.74. Transit SNR 184.26

There are 0 quarters with good PRF difference image offsets

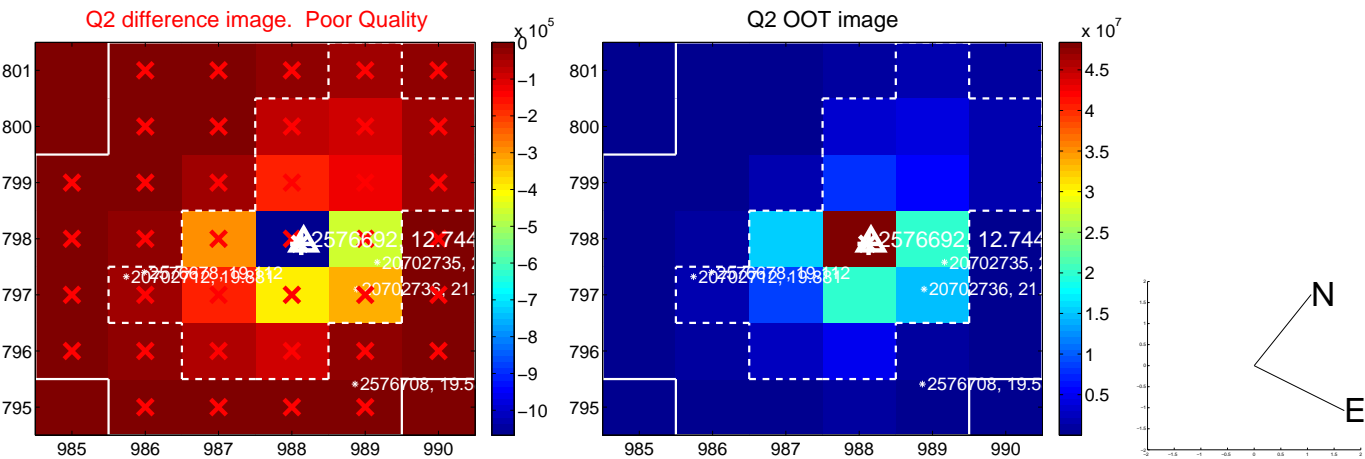
The direct PRF centroid is offset from the target star catalog position by about 0.20 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.011 ± 0.068	0.17	0.011 ± 0.068	0.001 ± 0.072
PRF-fit source offset from KIC position	0.126 ± 0.072	1.76	0.083 ± 0.070	0.095 ± 0.070
photometric centroid source offset	0.22 ± 0.03	8.42	0.03 ± 0.02	-0.22 ± 0.03

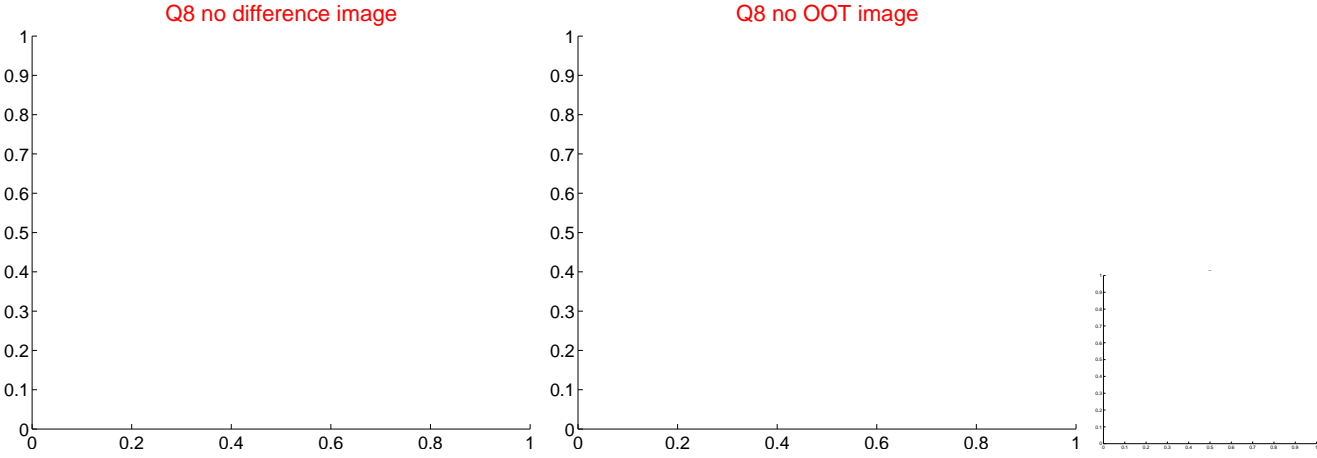
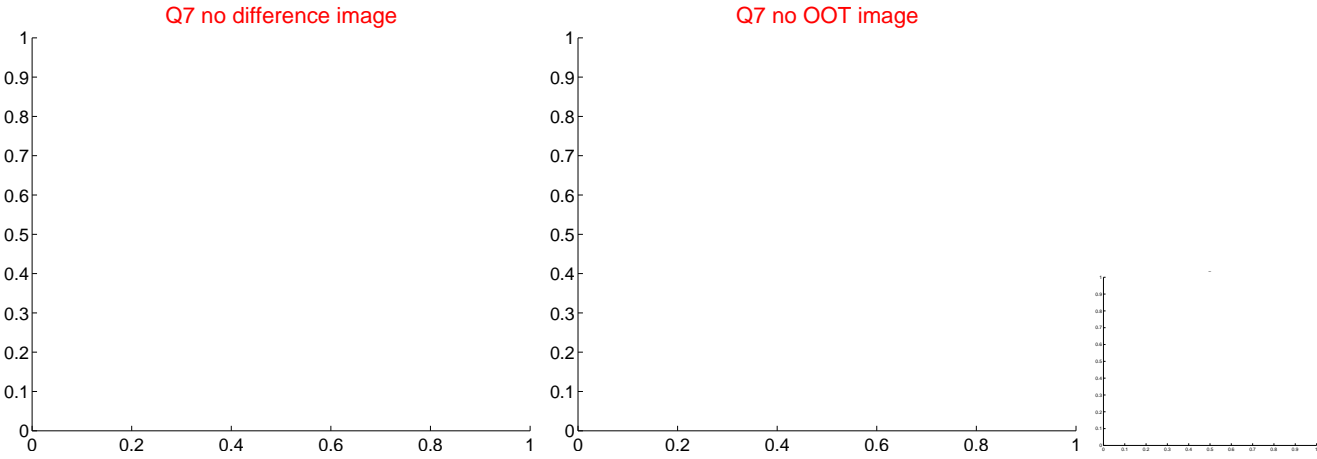
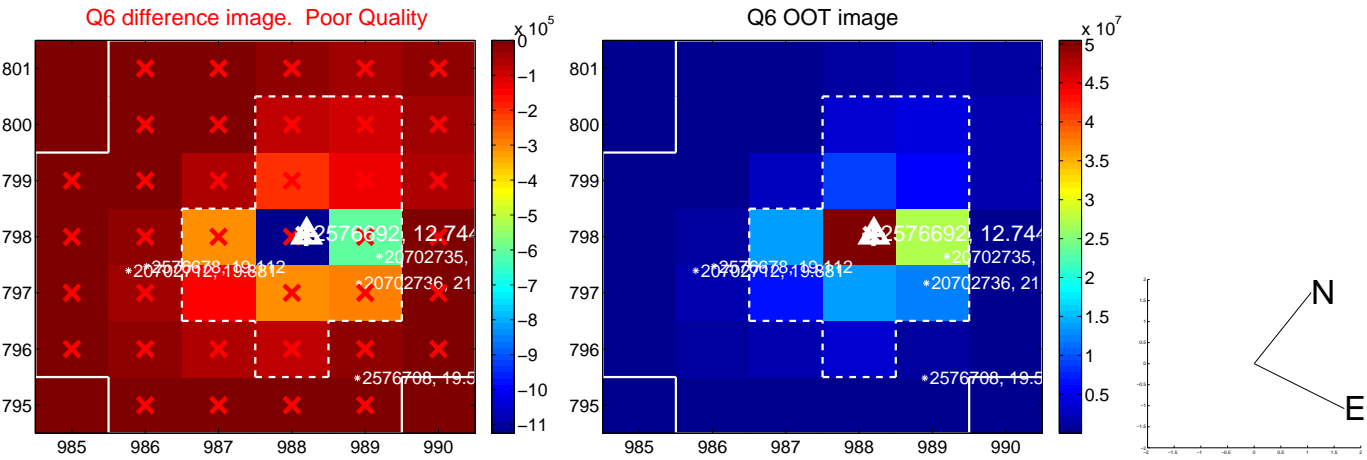
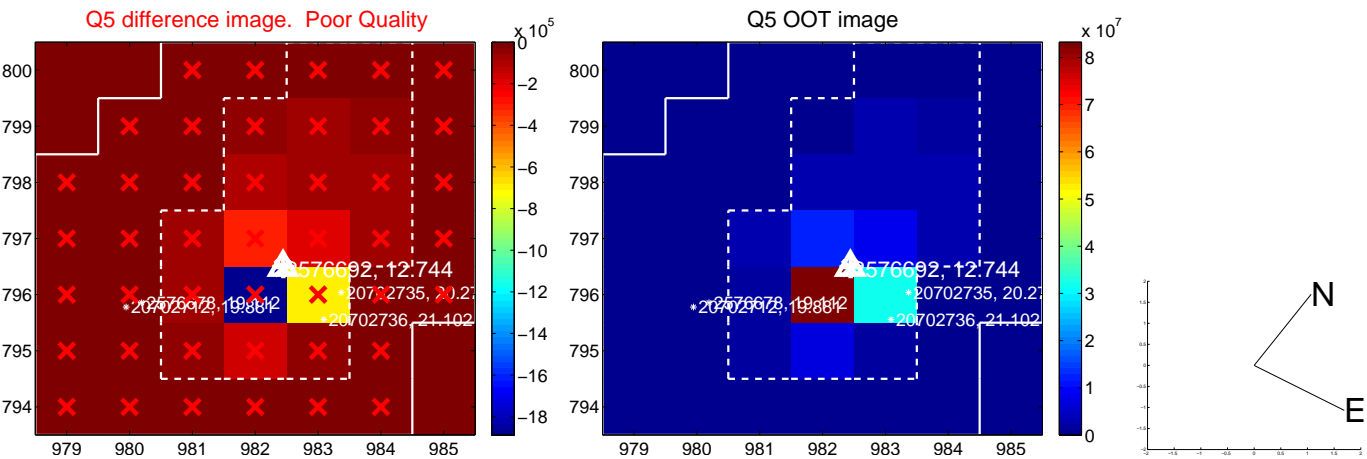


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

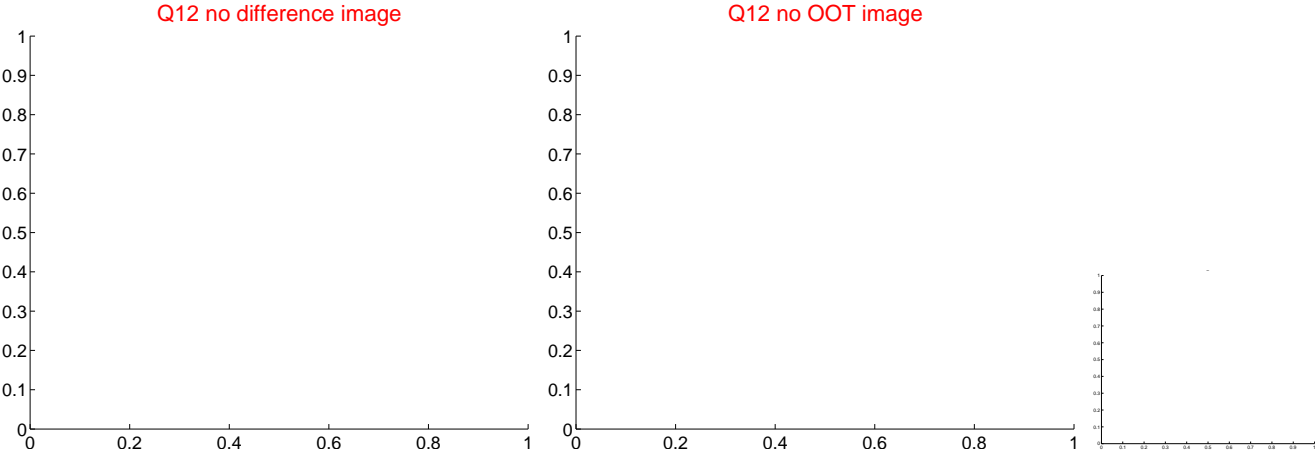
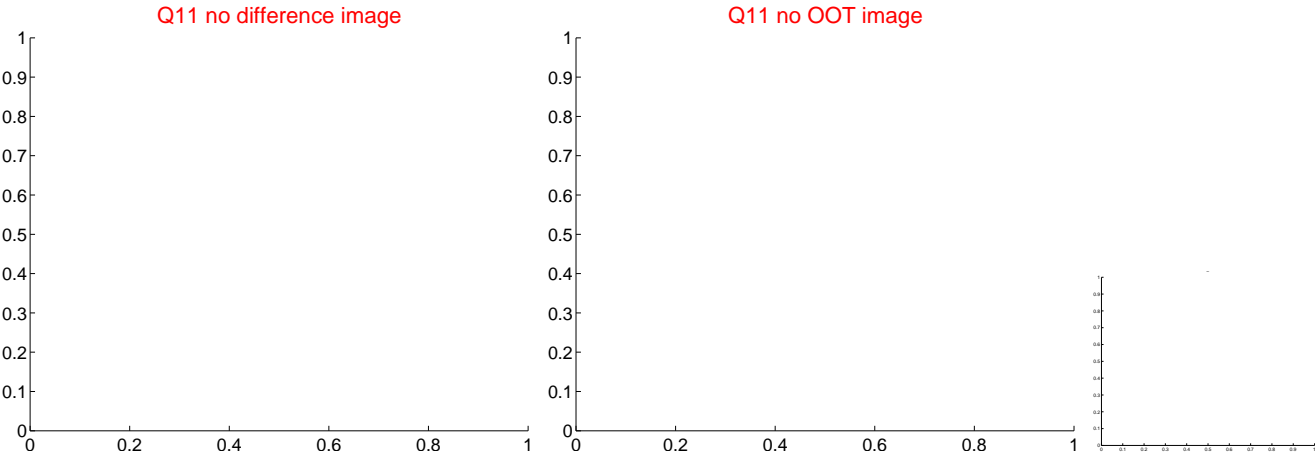
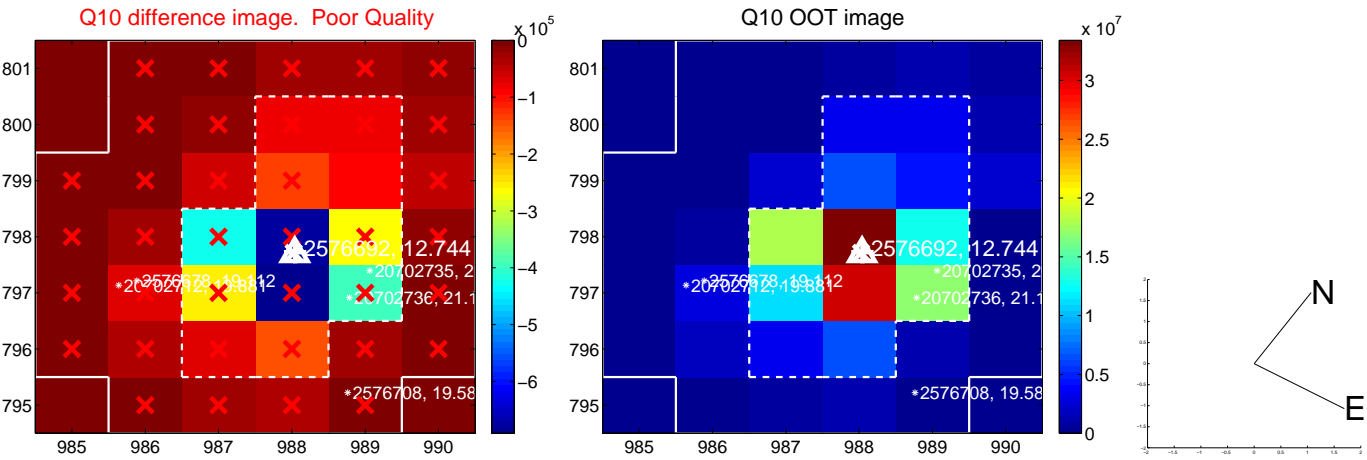
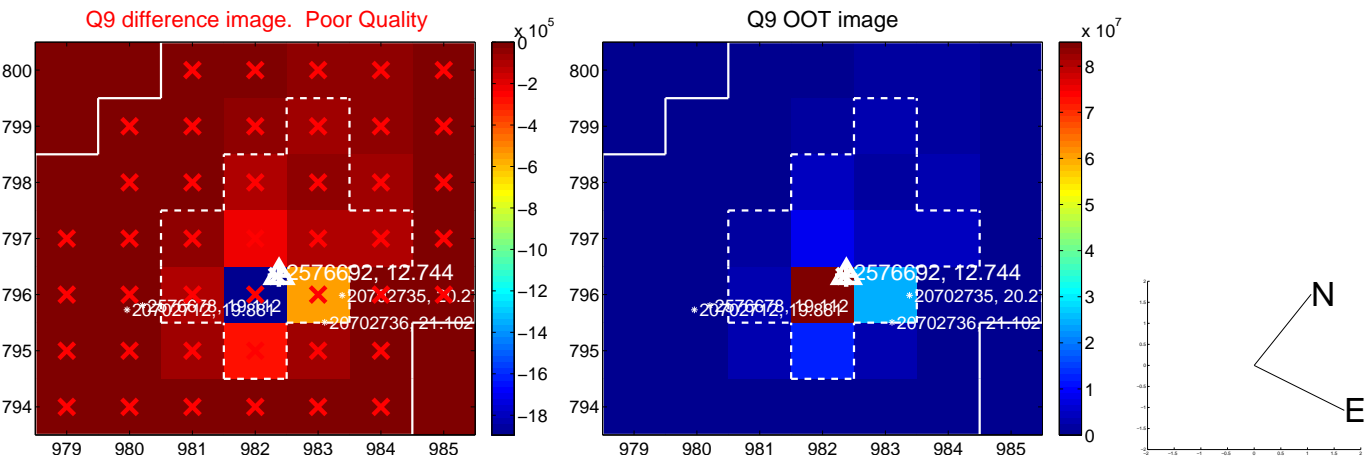
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



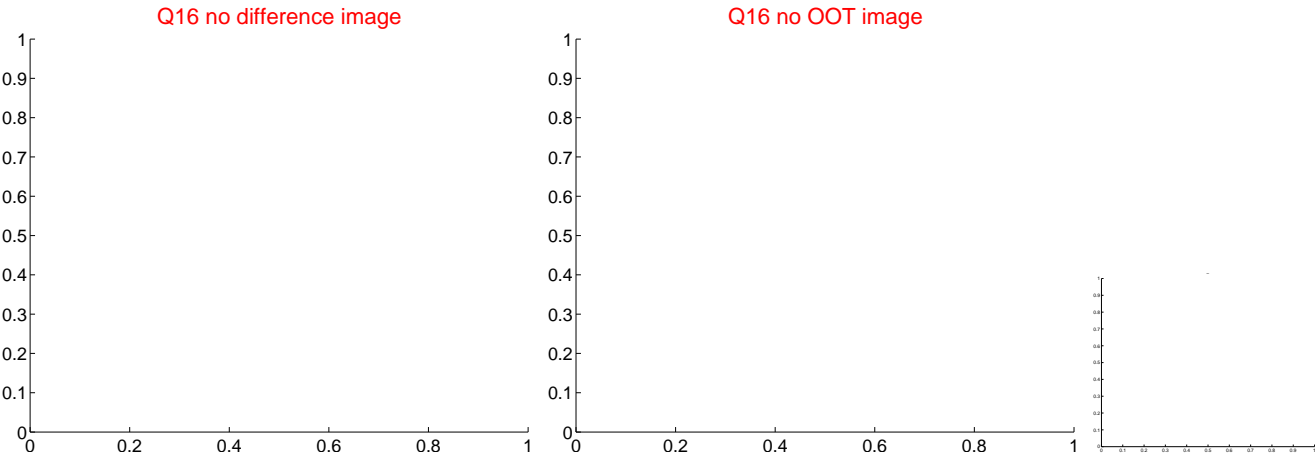
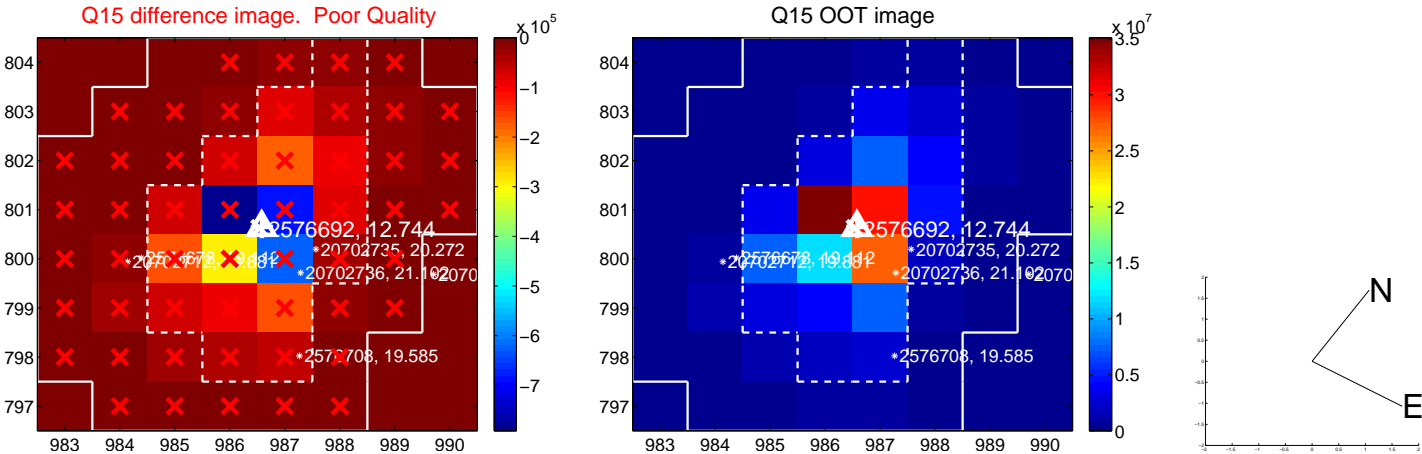
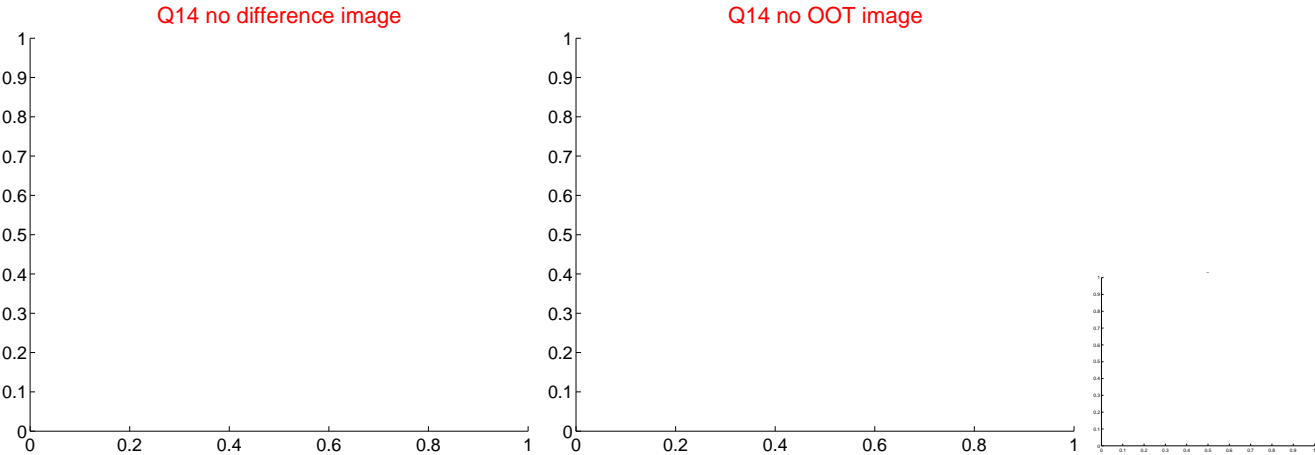
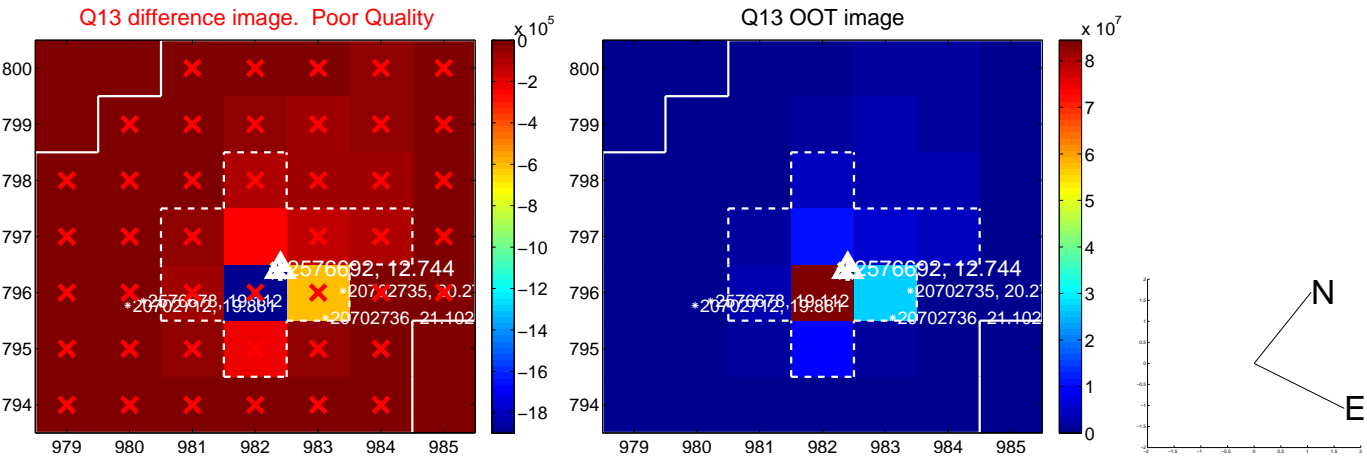
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



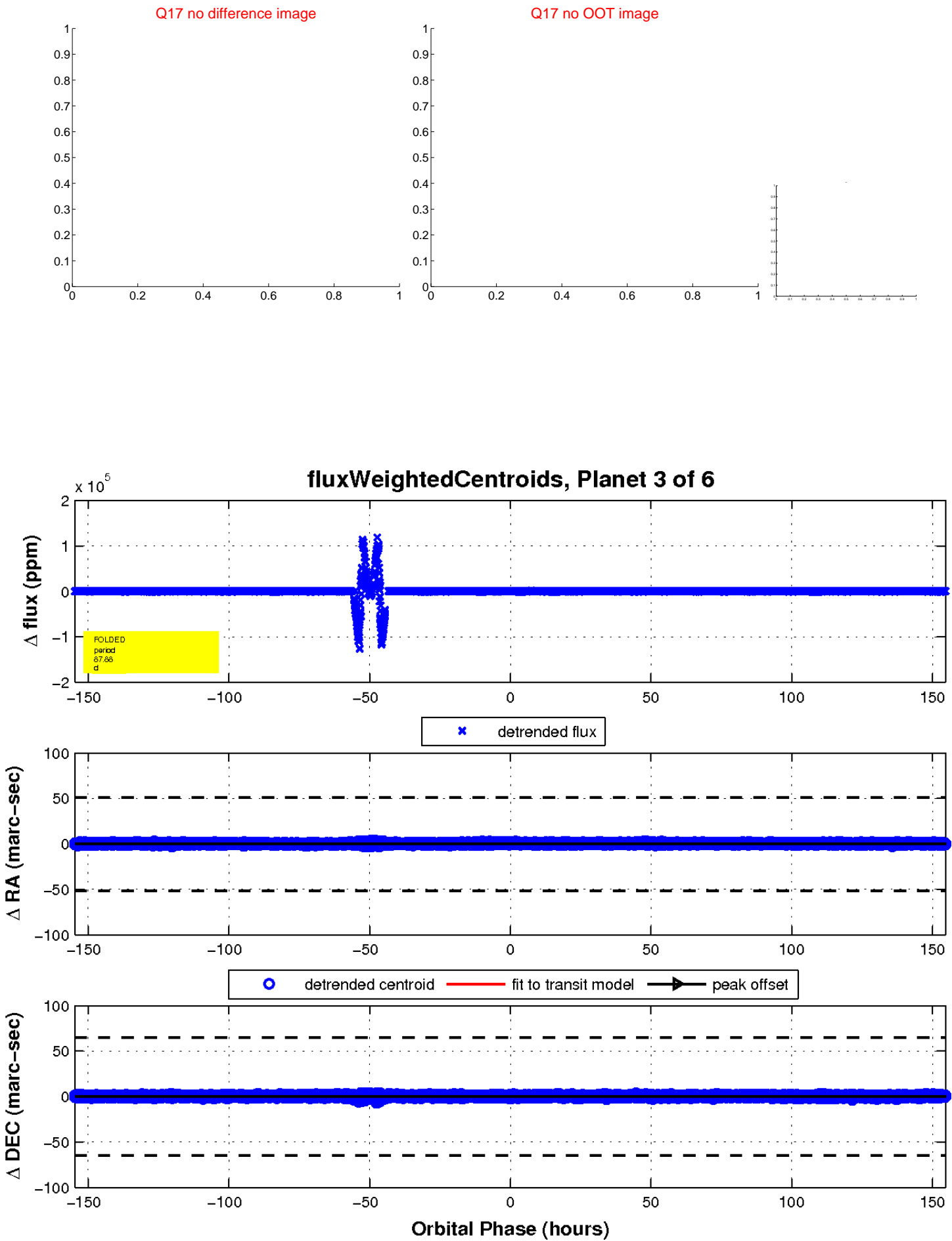
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

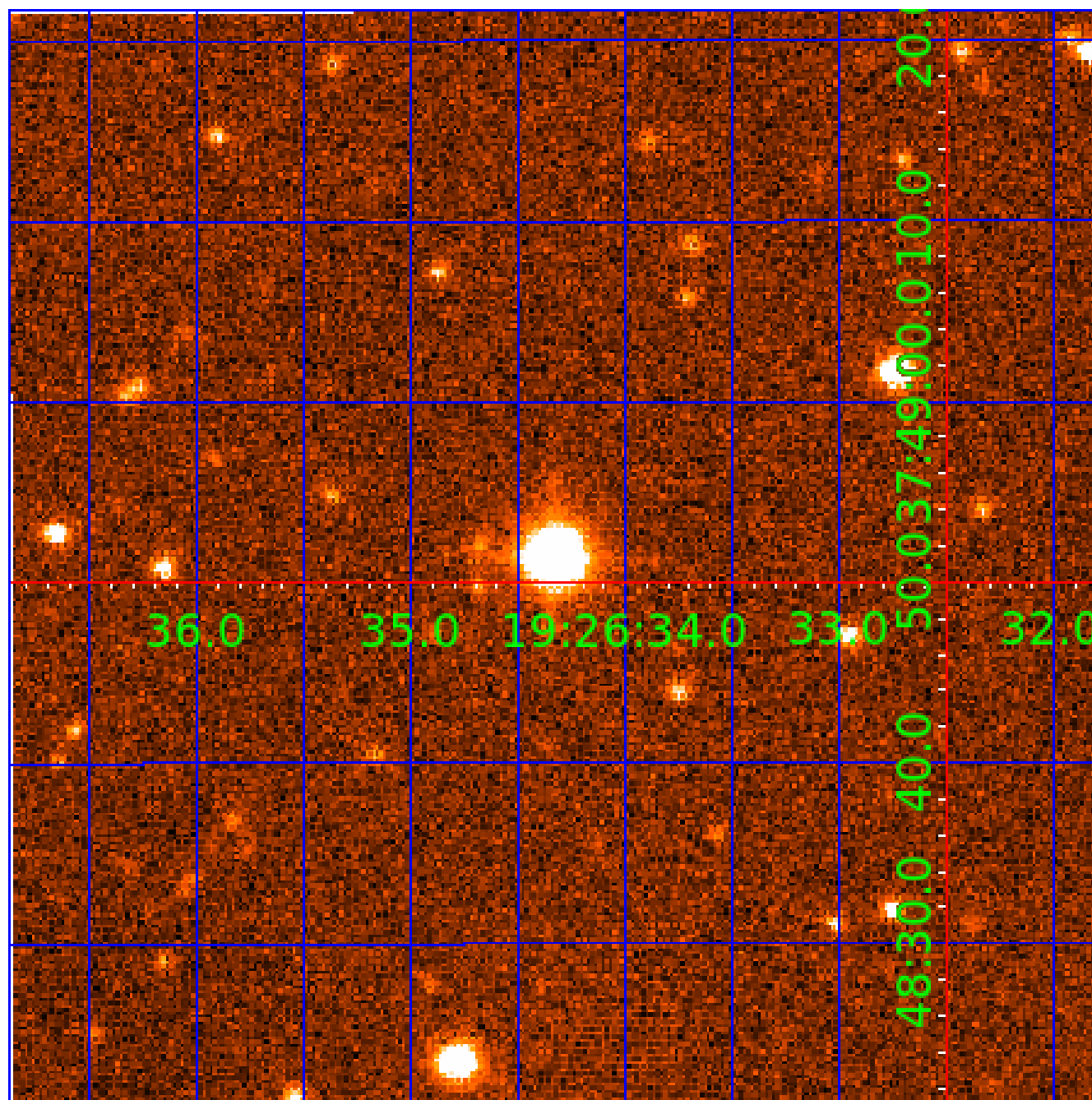


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 002576692

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})
002576692-01	OBS	6282.01	87.879693	194.095583	343541.3	9.000	20777.6	-1.0	1.64	5784	74.78	18.69
002576692-02	OBS	No	87.877281	142.167095	279491.6	12.000	18658.1	-1.0	1.64	5784	65.15	18.69
002576692-03	OBS	No	87.878932	196.172156	5178.9	51.572	407.3	184.3	1.64	5784	21.65	18.69
002576692-04	OBS	No	338.445920	295.514290	303.8	12.307	12.0	10.4	1.64	5784	3.52	3.10
002576692-05	OBS	No	349.285026	149.465320	120.2	14.226	10.2	4.2	1.64	5784	2.05	2.97
002576692-06	OBS	No	354.967683	486.422993	173.8	17.016	9.8	5.5	1.64	5784	2.56	2.90

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
002576692-01	OBS	FP	0.00	0	1	0	0	MOD_SEC_ALT—HAS_SEC_TCE—CENT_NOFITS
002576692-02	OBS	FP	0.00	1	1	0	0	IS_SEC_TCE—CENT_NOFITS
002576692-03	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—SAME_NTL_PERIOD—CENT_FEW_DIFFS
002576692-04	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_MARSHALL—LPP_DV—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—INCONSISTENT_TRANS—CENT_FEW_DIFFS
002576692-05	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_MARSHALL—LPP_DV—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_NONUNIQ_ALT—INCONSISTENT_TRANS—CENT_FEW_DIFFS
002576692-06	OBS	FP	0.00	1	0	1	0	INDIV_TRANS_MARSHALL—LPP_DV—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—MOD_NONUNIQ_ALT—INCONSISTENT_TRANS—CENT_FEW_DIFFS—HALO_GHOST

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 002576692-04

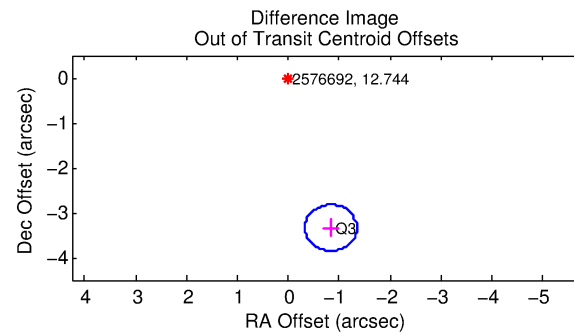
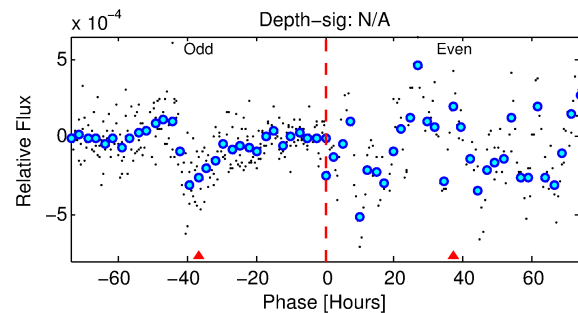
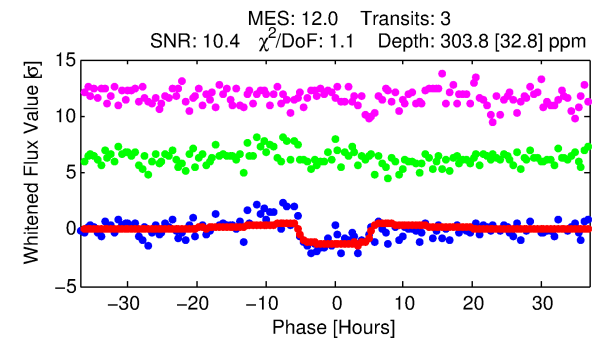
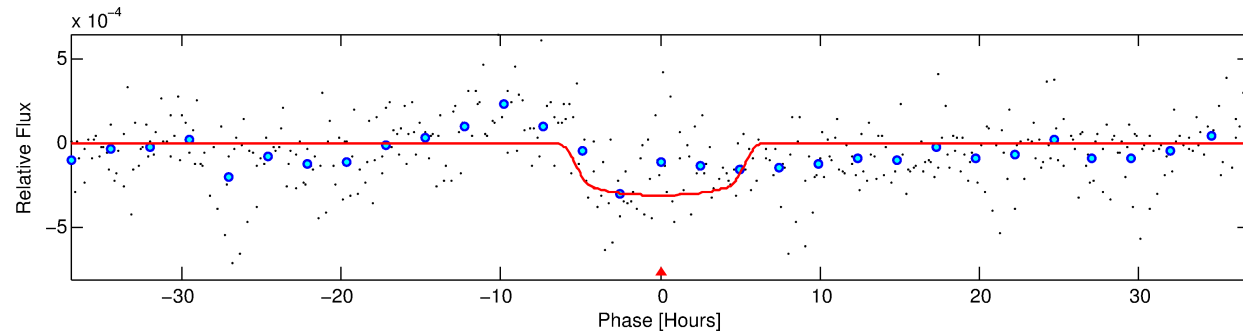
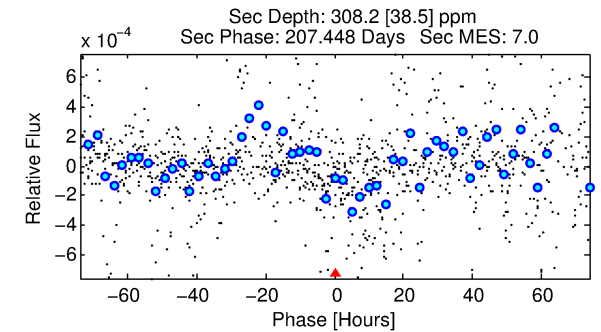
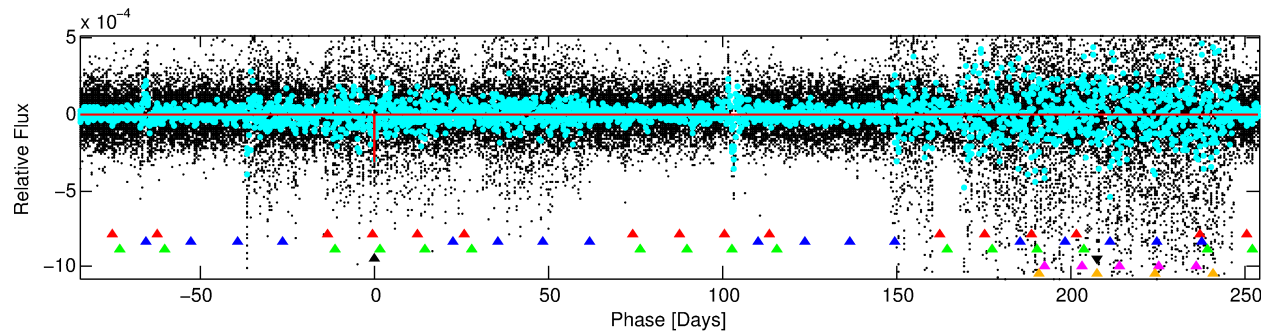
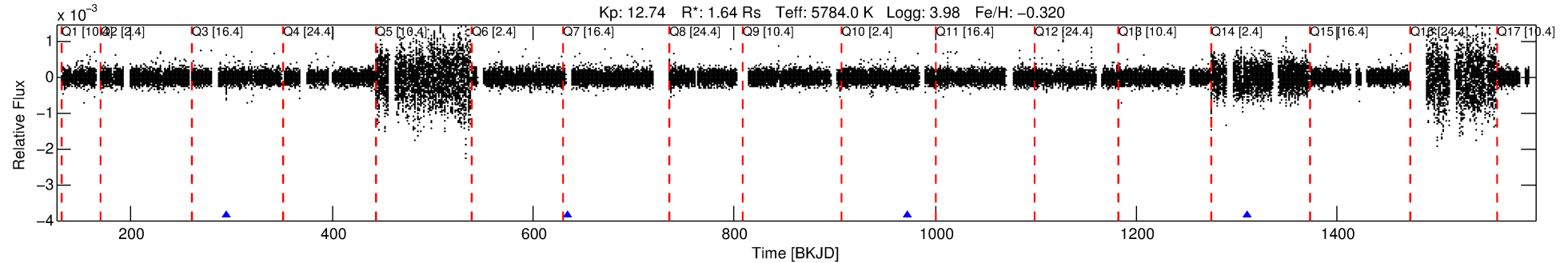
No Significant Match Found

DV One-Page Summary

KIC: 2576692 Candidate: 4 of 6 Period: 338.446 d

KOI: K06282 Corr: No Ephemeris Match

Kp: 12.74 R*: 1.64 Rs Teff: 5784.0 K Logg: 3.98 Fe/H: -0.320



DV Fit Results:

Period = 338.44592 [0.00922] d
Epoch = 295.5143 [0.0152] BKJD
Rp/R* = 0.0196 [0.0017]
a/R* = 85.56 [26.77]
b = 0.93 [0.04]
Seff = 3.10 [1.63]
Teq = 338 [45] K
Rp = 3.52 [1.16] Re
a = 0.9346 [0.2962] AU
Ag = 11947.54 [6694.16] [1.78σ]
Teffp = 5467 [323] K [15.73σ]

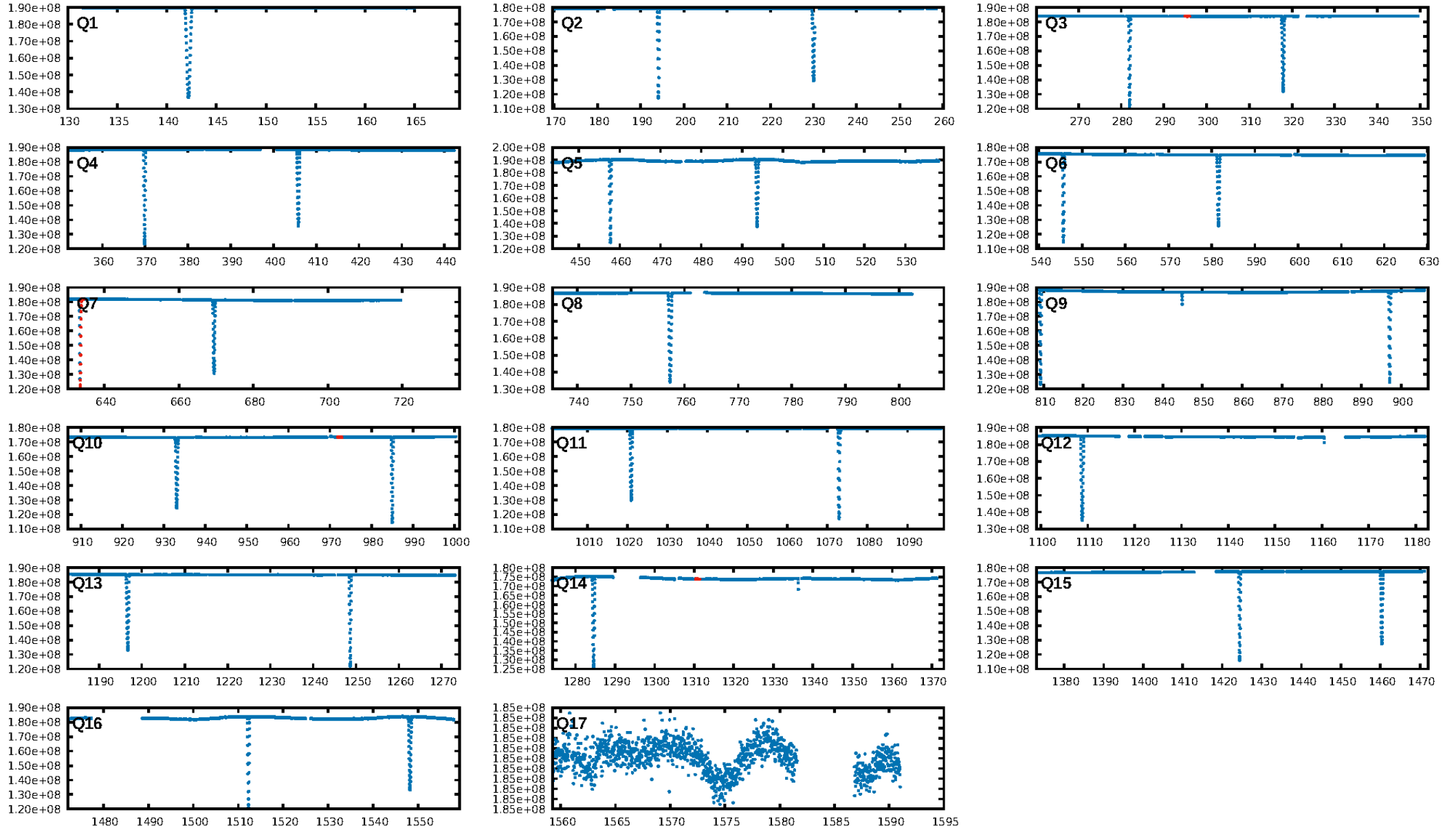
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [394.42σ]
LongPeriod-sig: 100.0% [13.83σ]
ModelChiSquare2-sig: 0.3%
ModelChiSquareGof-sig: 93.8%
Bootstrap-pfa: 2.52e-14
RollingBand-fgt: 1.00 [3/3]
GhostDiagnostic-chr: -1.845
Centroid-sig: 12.3%
Centroid-so: 1.745 arcsec [1.34σ]
OotOffset-rm: 3.441 arcsec [20.10σ]
KicOffset-rm: 3.334 arcsec [19.48σ]
OotOffset-st: 0/1/0/0 [1]
KicOffset-st: 0/1/0/0 [1]
DiffImageQuality-fgm: 0.00 [0/1]
DiffImageOverlap-fno: 1.00 [3/3]

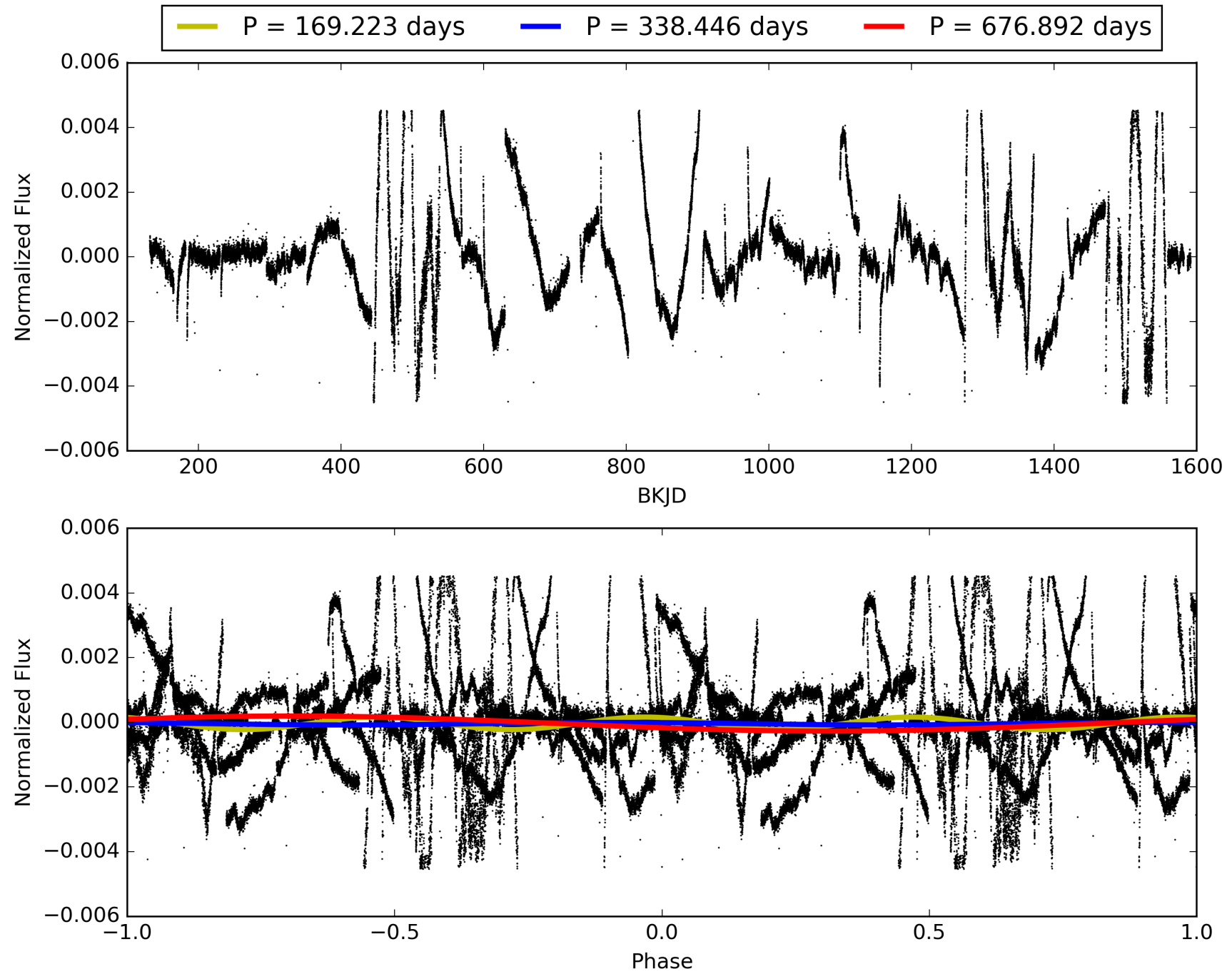
Software Revision: svn-ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 01-Feb-2016 14:16:00 Z

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

TCE 002576692-04, PDC Light Curves

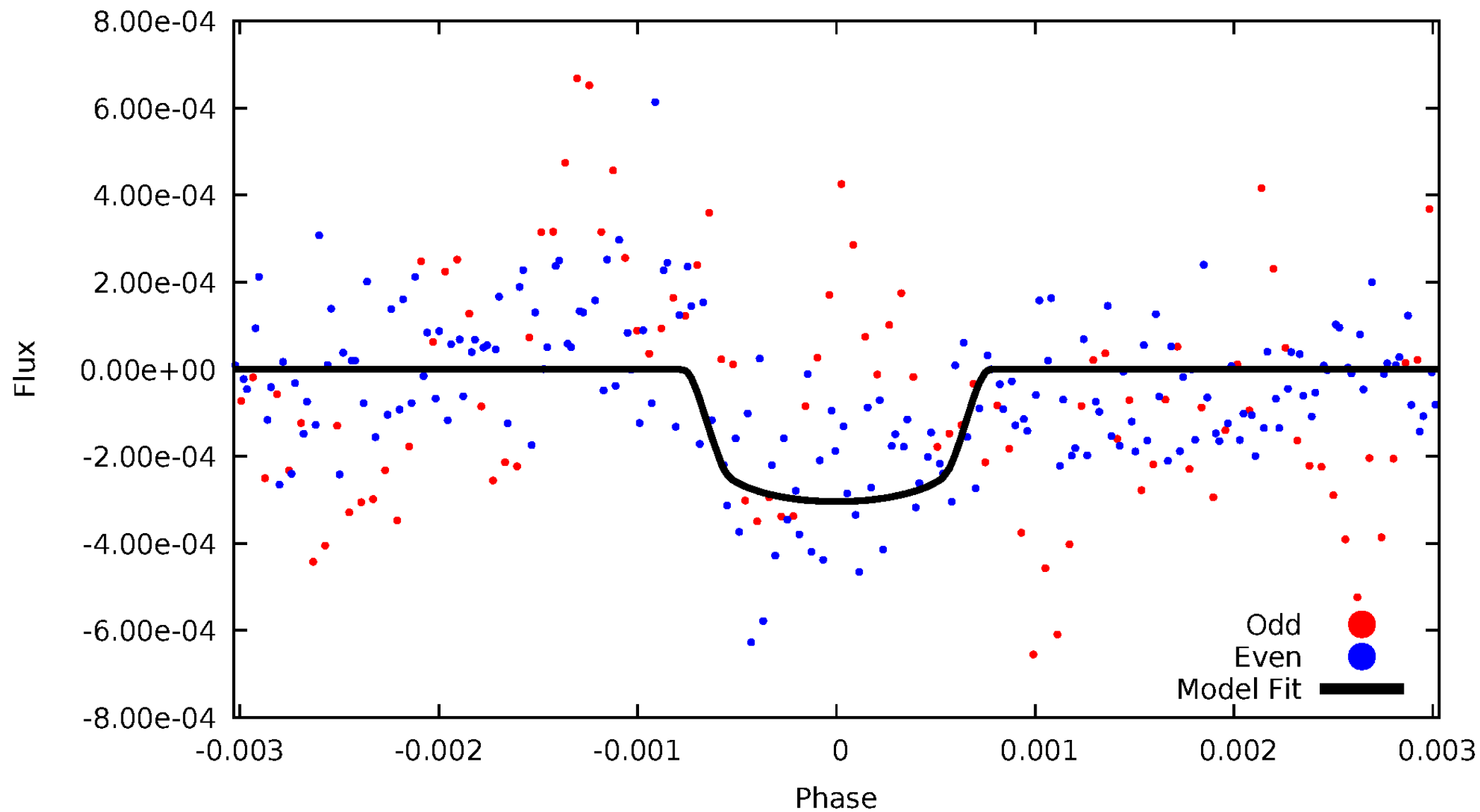


TCE 002576692-04



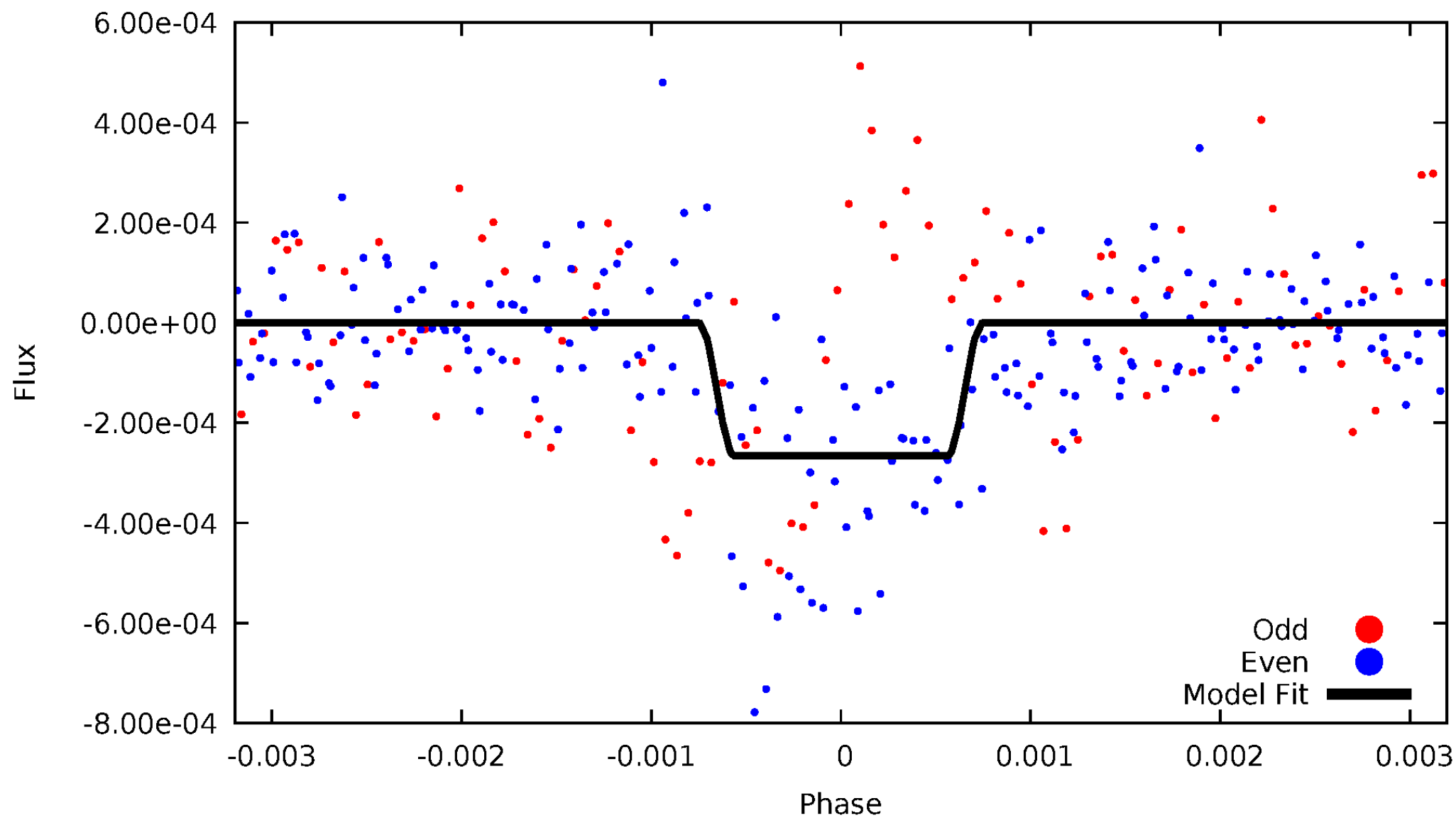
DV Odd/Even

TCE 002576692-04



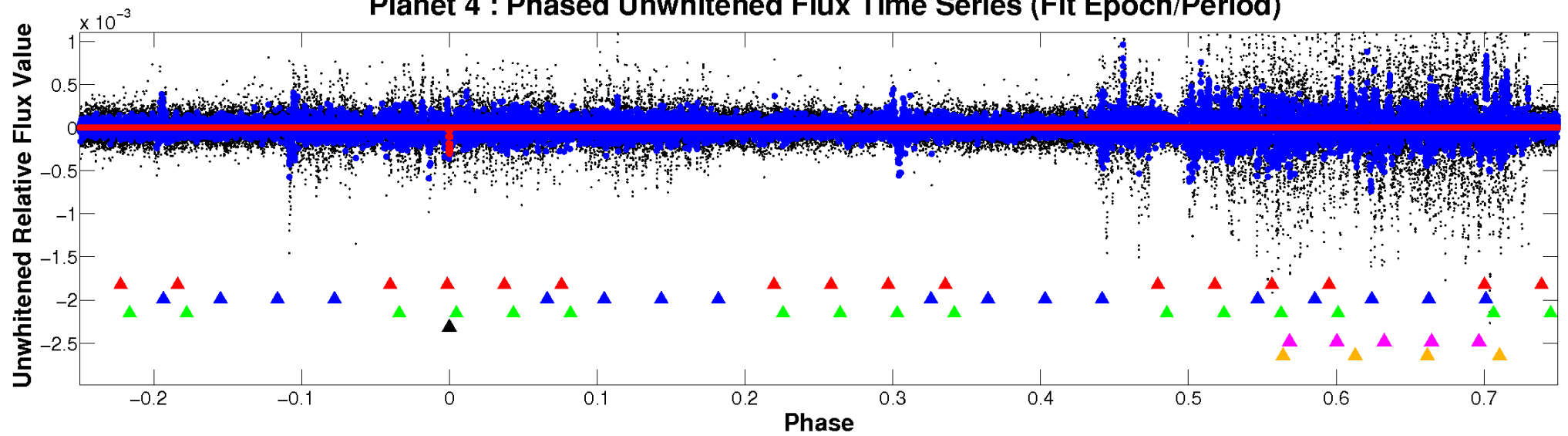
ALT Odd/Even

TCE 002576692-04

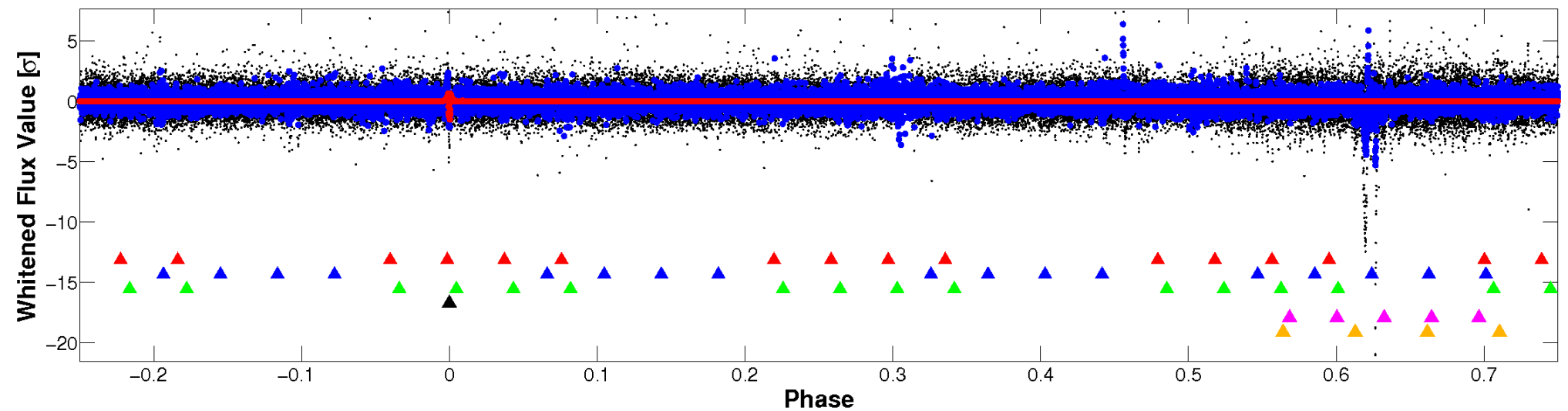


Non-Whitened Vs. Whitened Light Curve

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

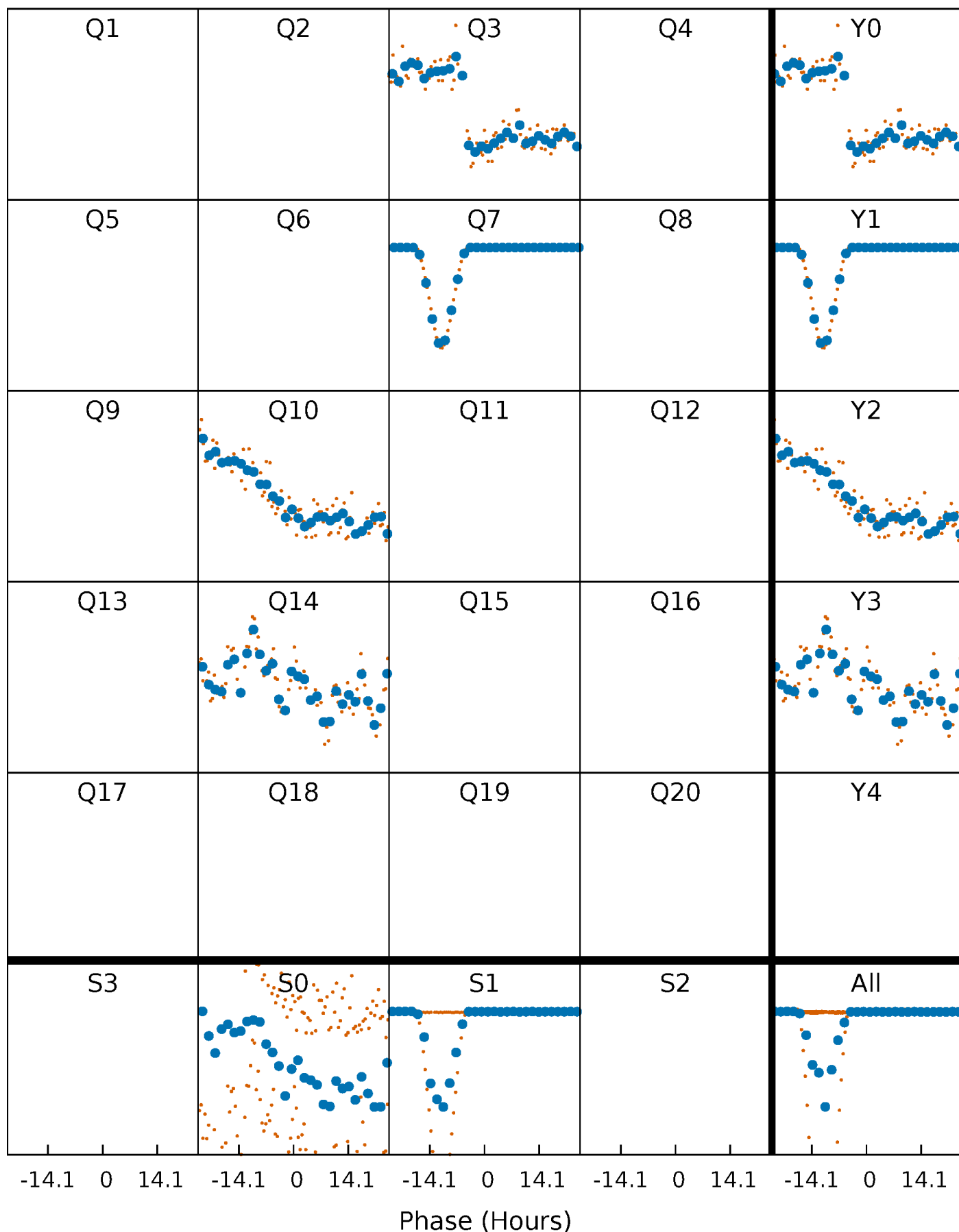


Planet 4 : Phased Whitened Flux Time Series (Fit Epoch/Period)



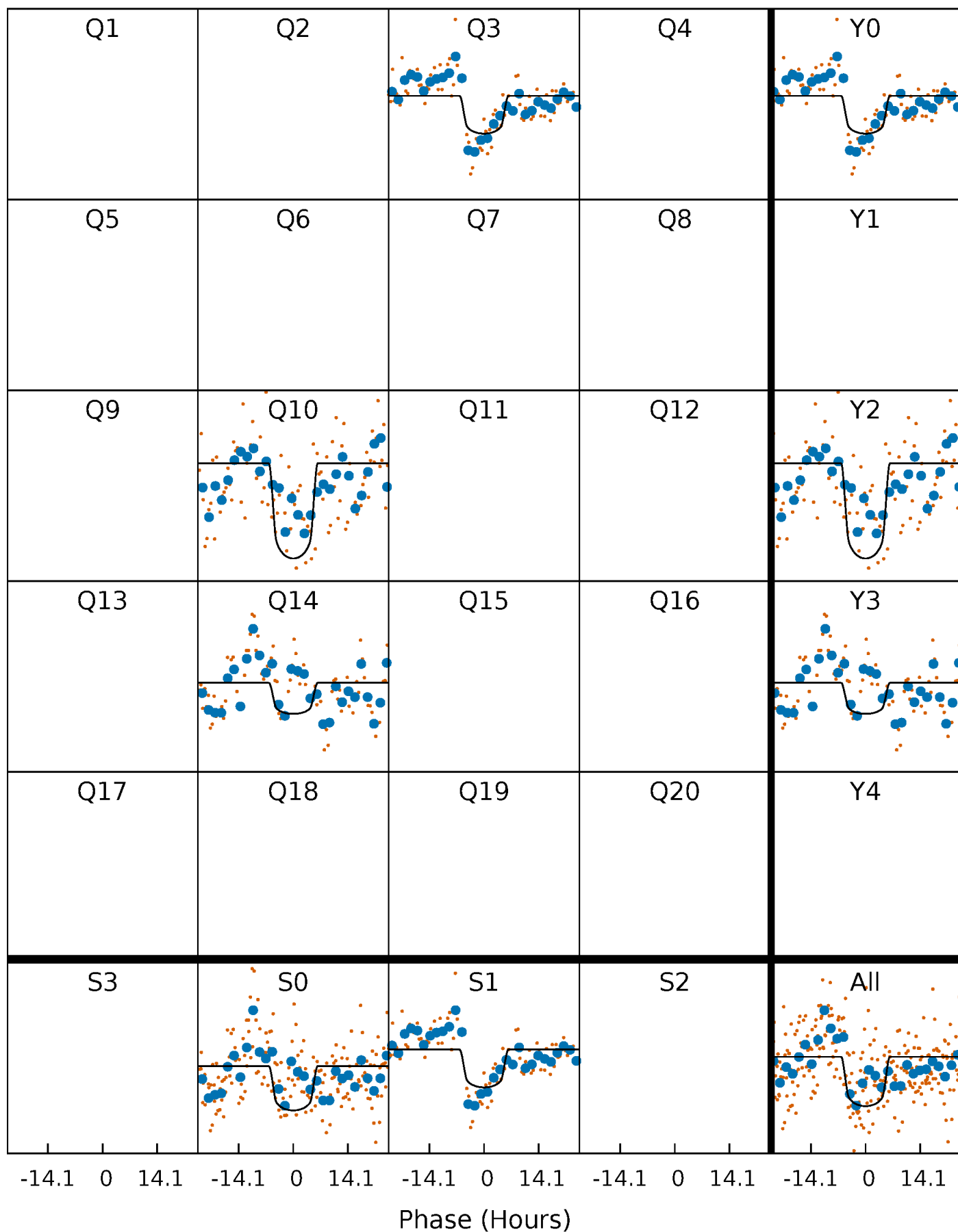
PDC Quarter-Phased Transit Curves

TCE 002576692-04 P=338.445920 Days $T_0=295.514290$ (BKJD)



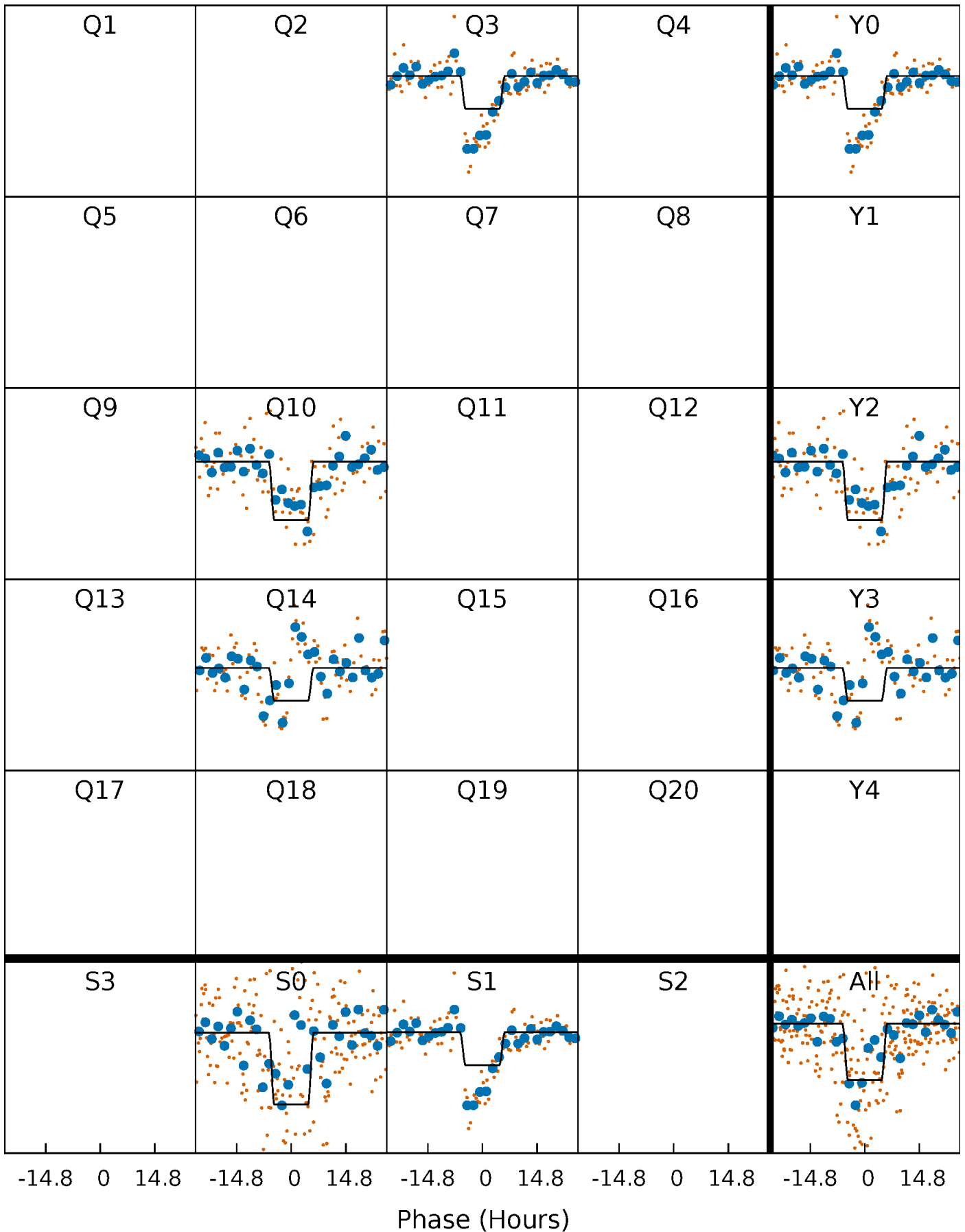
DV Quarter-Phased Transit Curves

TCE 002576692-04 $P=338.445920$ Days $T_0=295.514290$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

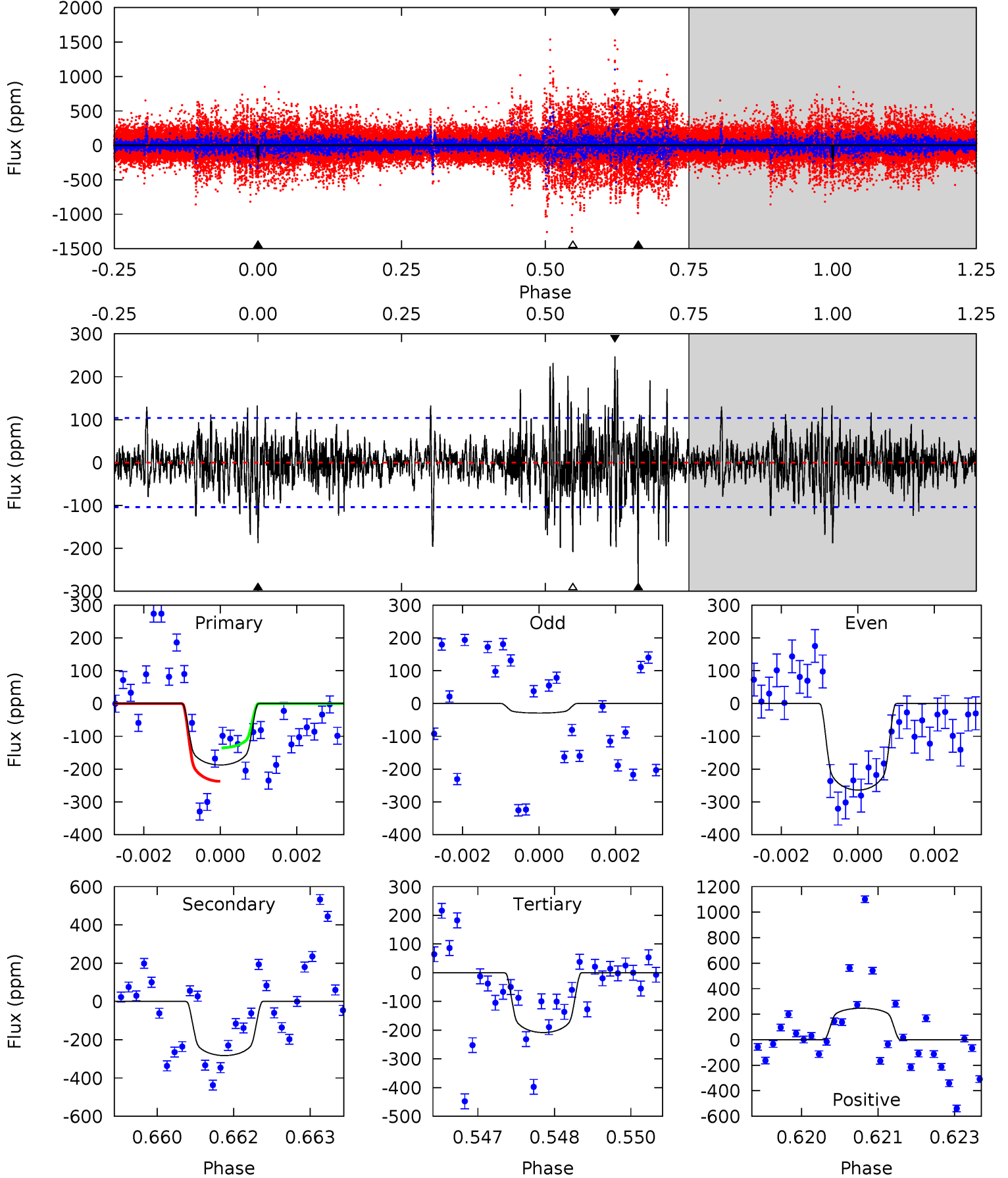
TCE 002576692-04 $P=338.434243$ Days $T_0=295.523219$ (BKJD)



DV Model-Shift Uniqueness Test

002576692-04, P = 338.445920 Days, E = 295.514290 Days

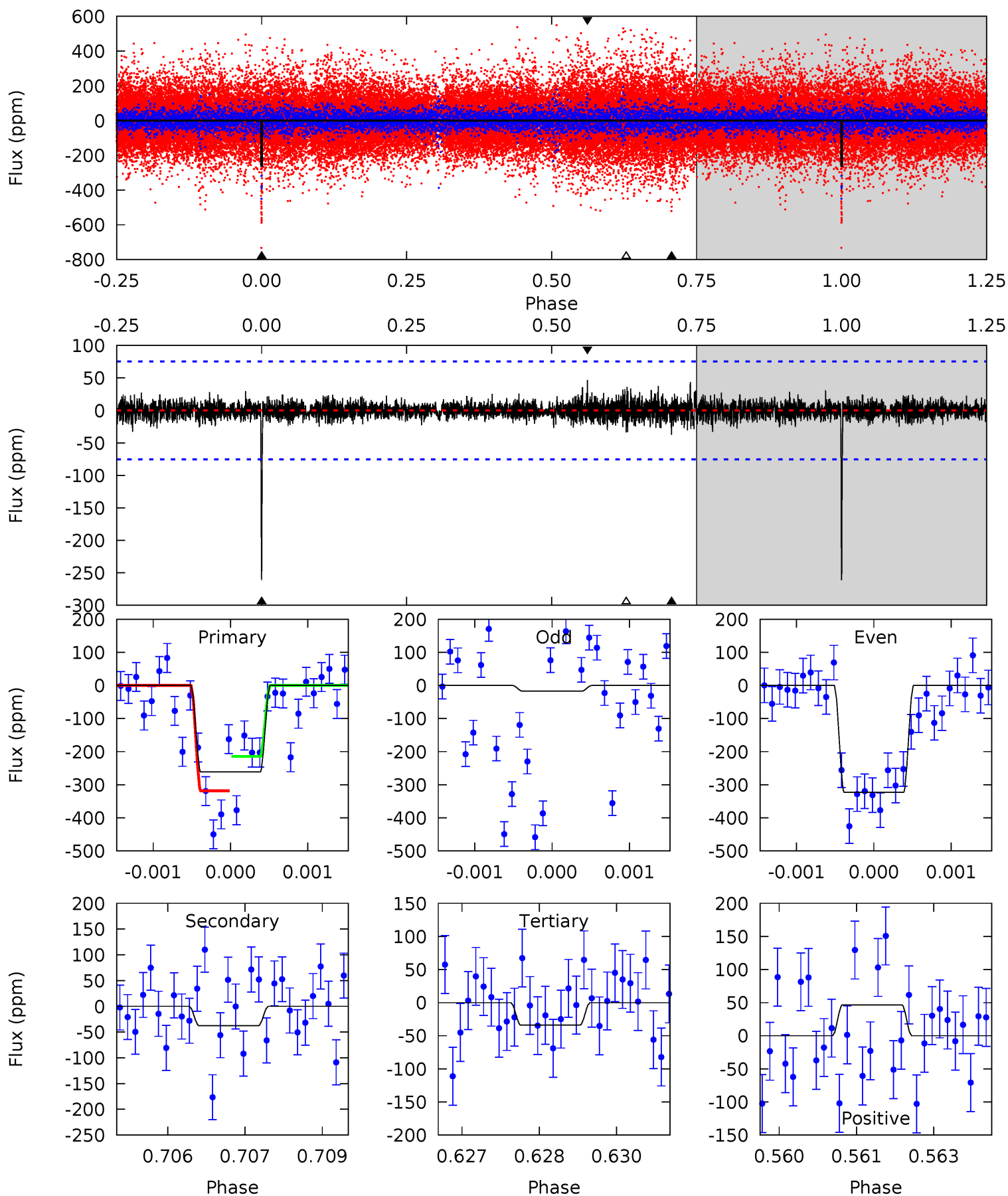
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
9.69	14.6	10.8	12.8	5.37	3.16	2.30	-1.08	-3.08	3.84	1.85	4.21	1.02	0.47	2.63



Alt Model-Shift Uniqueness Test

002576692-04, P = 338.434243 Days, E = 295.523219 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
18.7	2.69	2.42	3.33	5.38	3.18	0.60	16.3	15.3	0.27	-0.64	10.5	1.09	0.15	3.69



Stellar Parameters For KIC 002576692

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	5784^{+145}_{-131}	$3.985^{+0.308}_{-0.110}$	$-0.320^{+0.350}_{-0.200}$	$1.642^{+0.347}_{-0.520}$	$0.951^{+0.143}_{-0.091}$	$0.302^{+0.614}_{-0.116}$
	+3%/-2%	+8%/-3%	+109%/-62%	+21%/-32%	+15%/-10%	+203%/-38%
Source	PHO1	FLK73	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 002576692-04 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-283 ± 19	$3.42^{+0.57}_{-0.65}$	464^{+32}_{-41}	5384^{+259}_{-228}	11941^{+6071}_{-3081}
Alt.	-38 ± 14	$2.82^{+0.51}_{-0.51}$	466^{+29}_{-40}	3918^{+288}_{-338}	2365^{+1453}_{-1014}

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

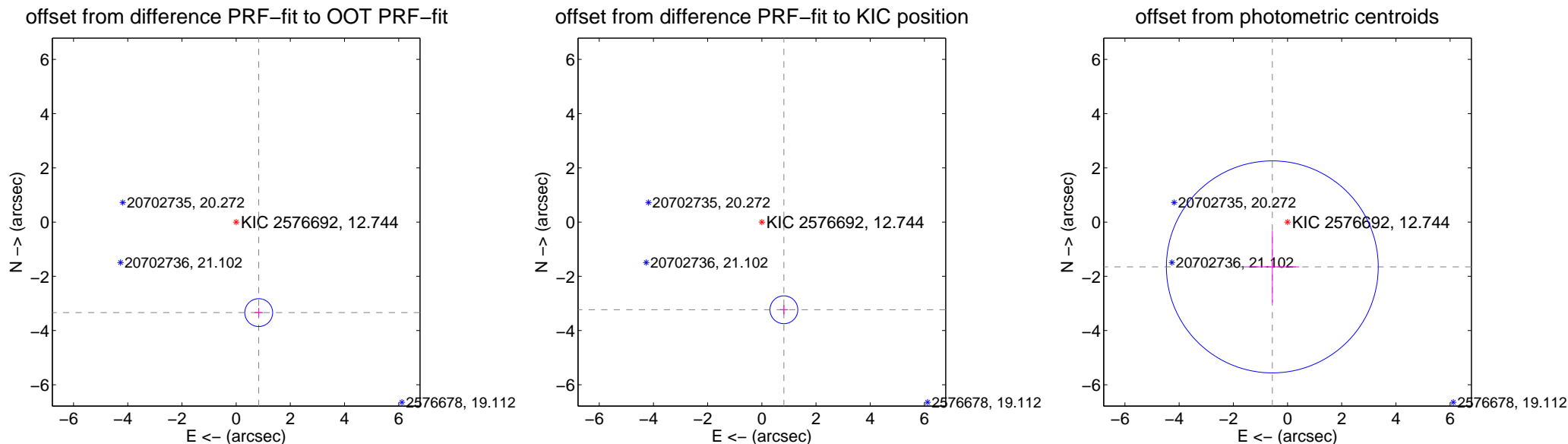
DV Centroid Data

Supplemental centroid analysis for 002576692-04. Kepler magnitude: 12.74. Transit SNR 10.39

There are 0 quarters with good PRF difference image offsets

The direct PRF centroid is offset from the target star catalog position by about 0.11 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	3.441 ± 0.171	20.10	-0.834 ± 0.156	-3.338 ± 0.172
PRF-fit source offset from KIC position	3.334 ± 0.171	19.48	-0.814 ± 0.156	-3.233 ± 0.172
photometric centroid source offset	1.74 ± 1.30	1.34	0.56 ± 0.99	-1.65 ± 1.33



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



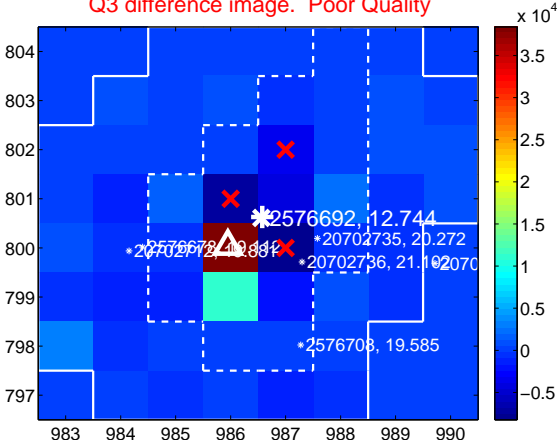
Q2 no difference image



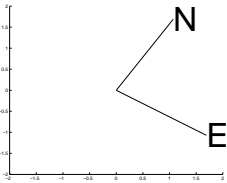
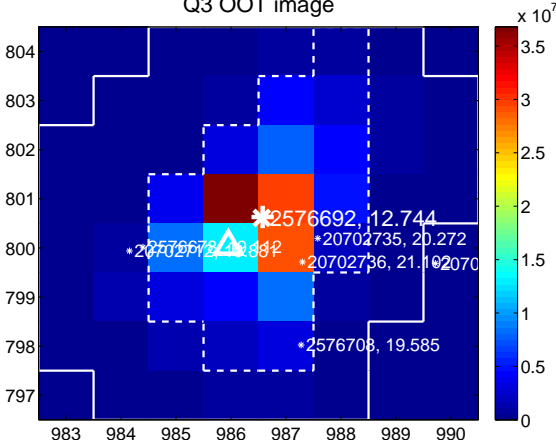
Q2 no OOT image



Q3 difference image. Poor Quality



Q3 OOT image



Q4 no difference image



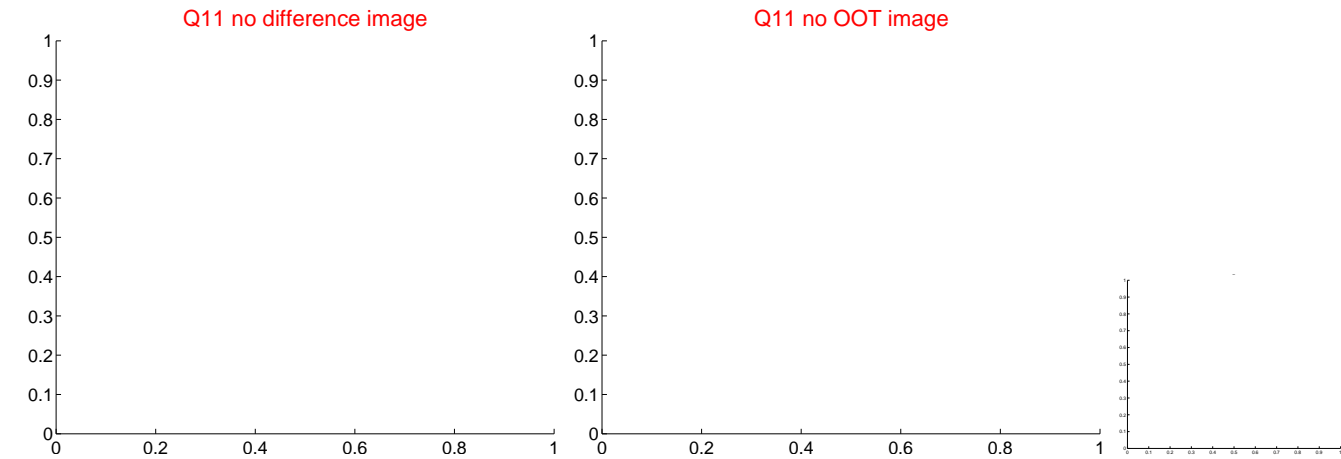
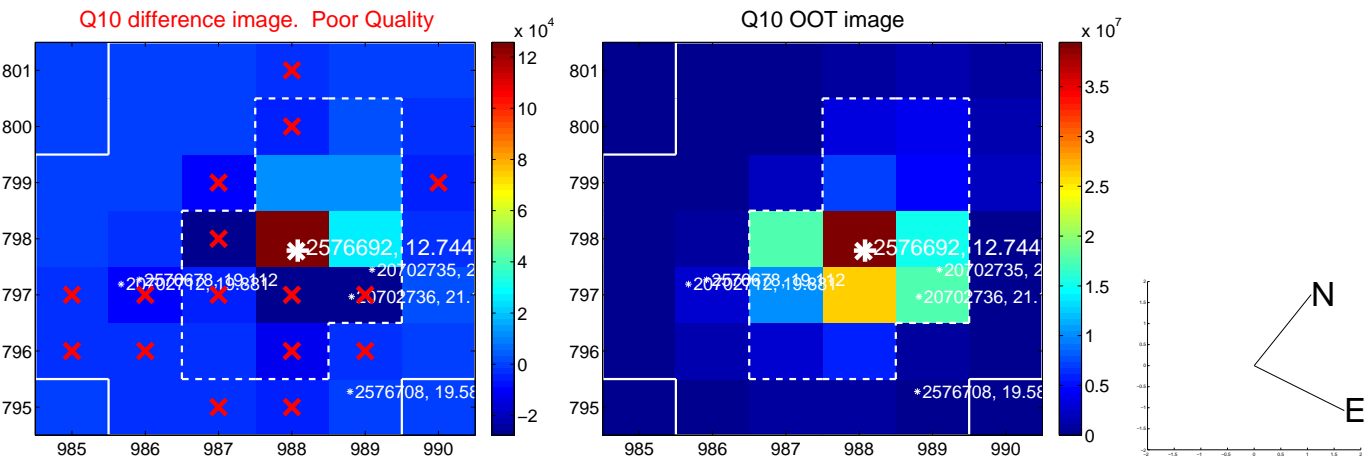
Q4 no OOT image



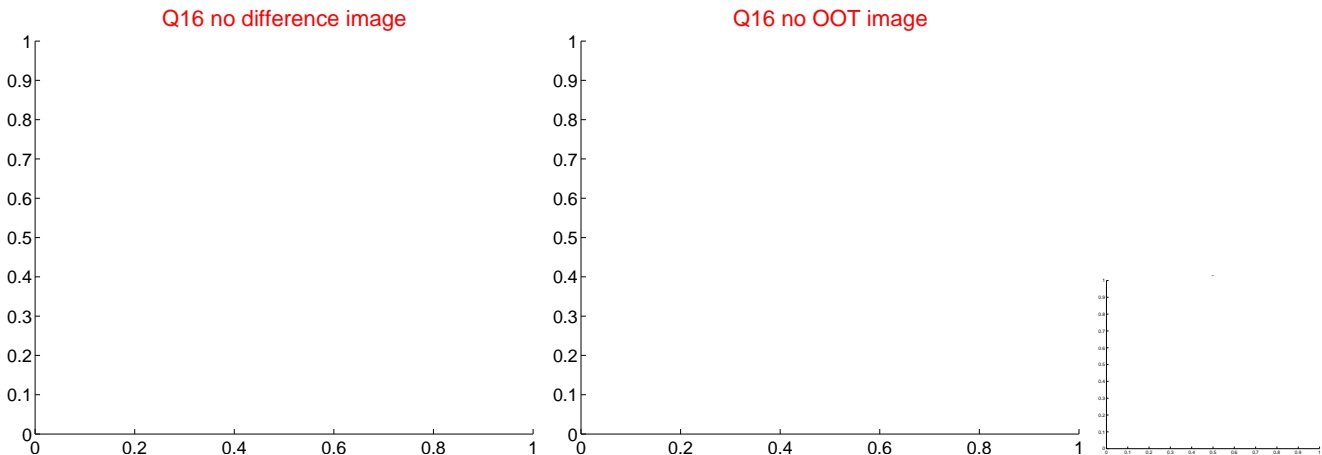
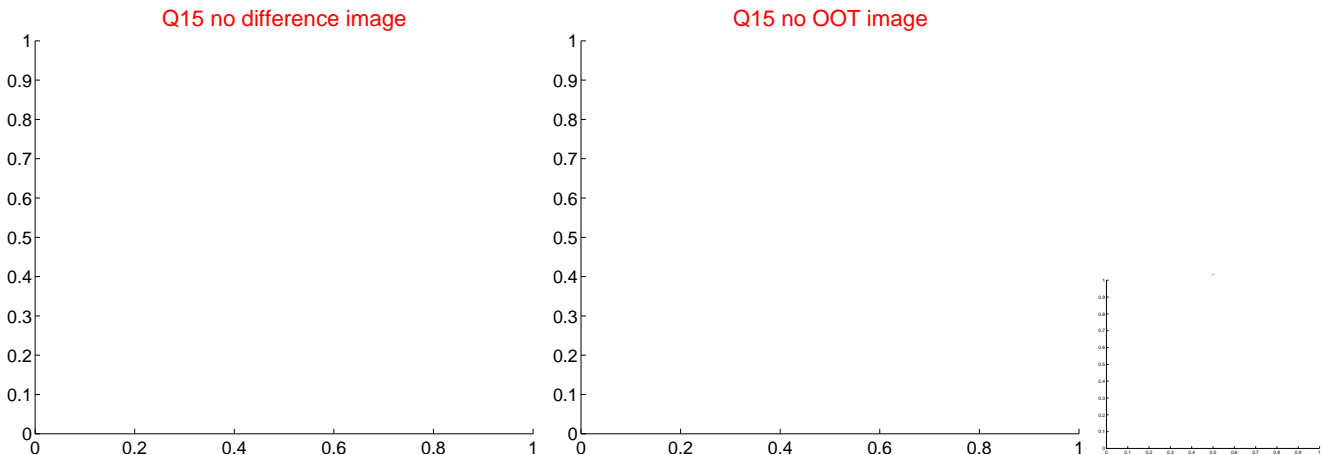
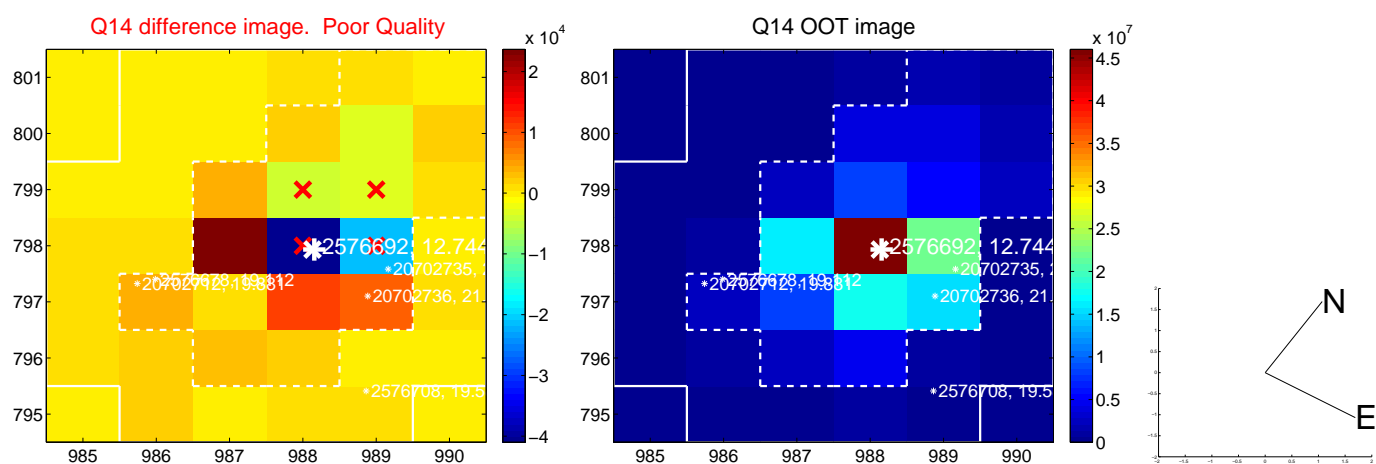
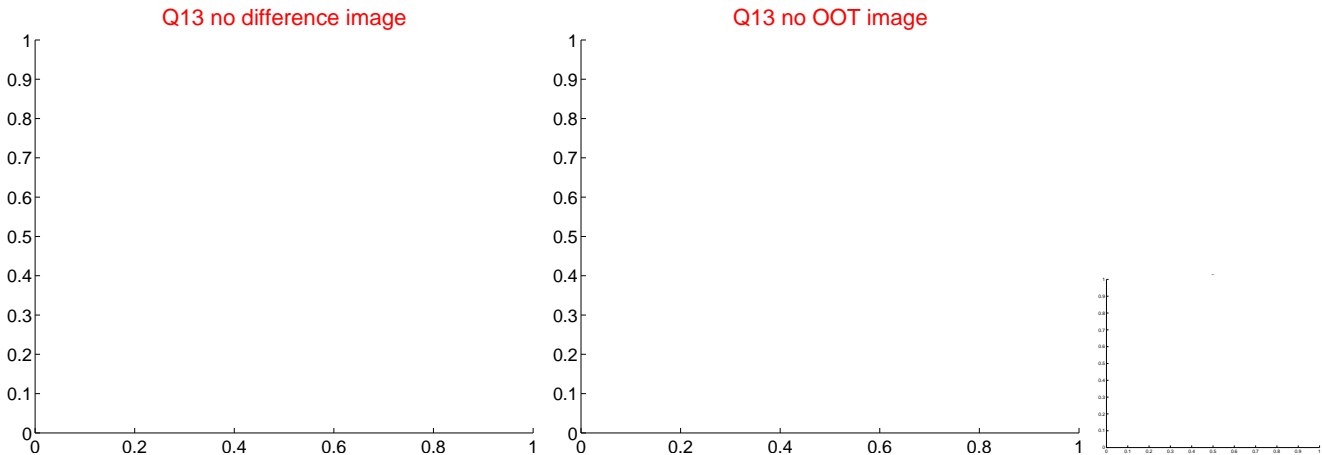
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



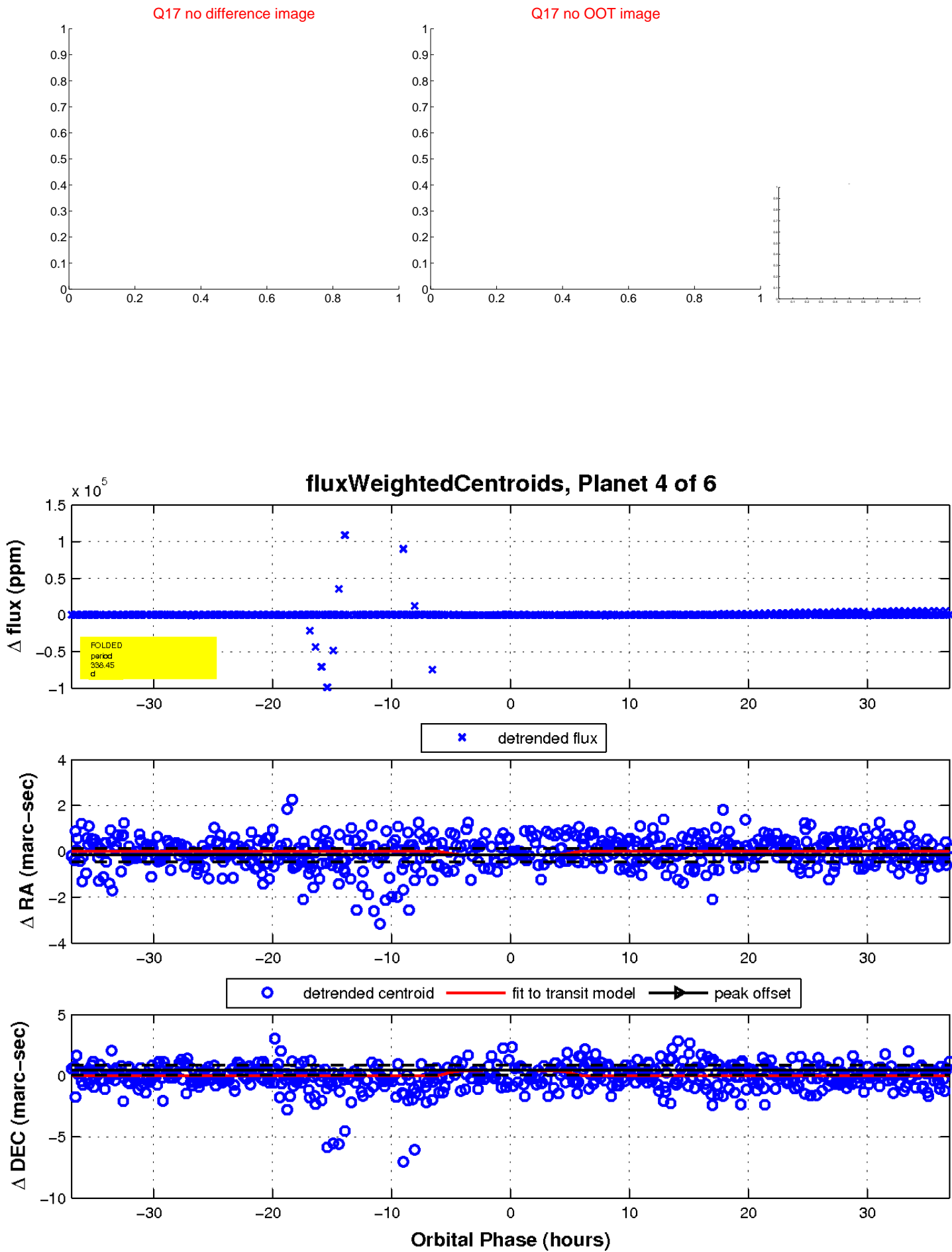
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

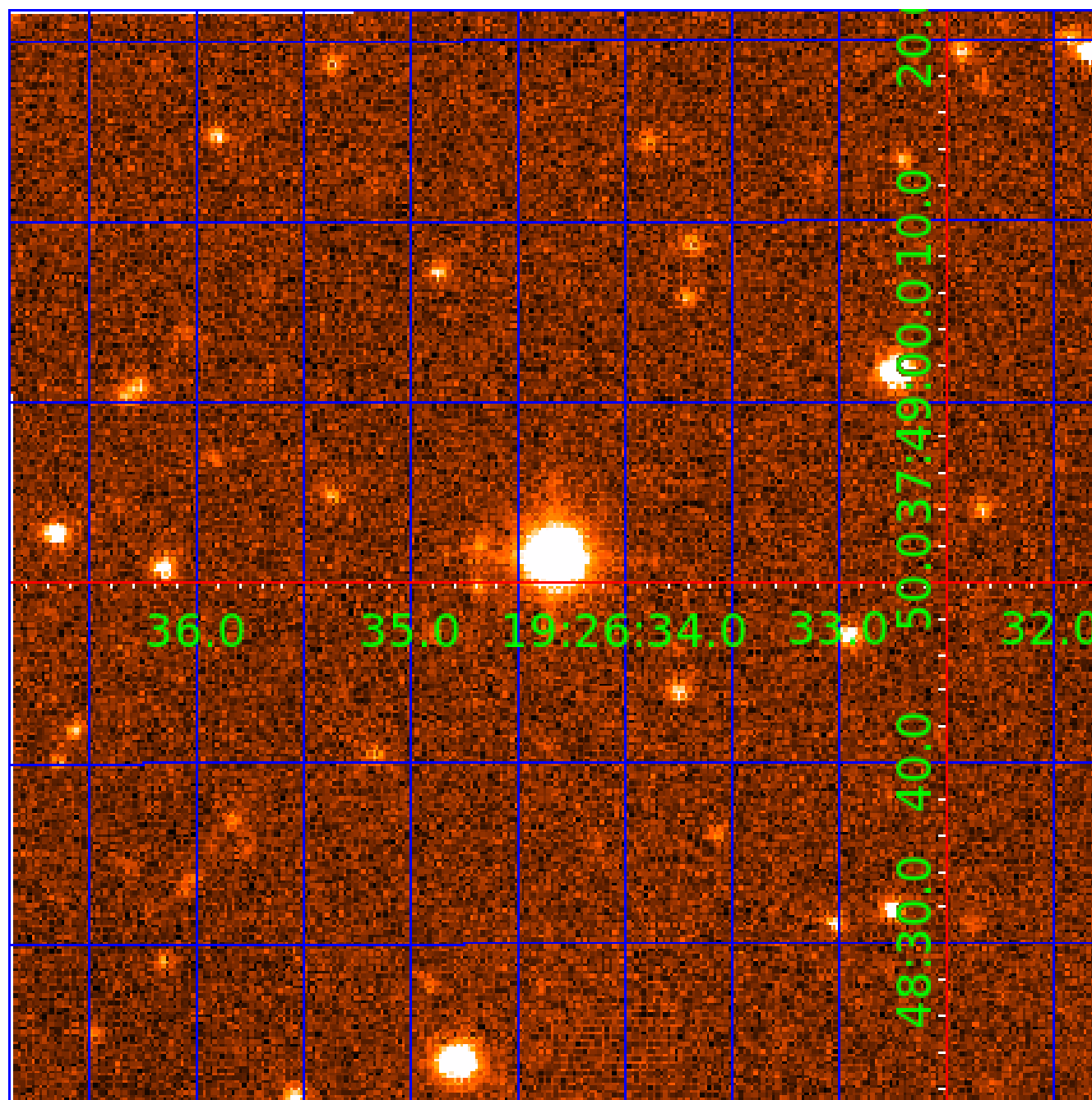


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 002576692

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})
002576692-01	OBS	6282.01	87.879693	194.095583	343541.3	9.000	20777.6	-1.0	1.64	5784	74.78	18.69
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002576692-05	OBS	No	349.285026	149.465320	120.2	14.226	10.2	4.2	1.64	5784	2.05	2.97
002576692-06	OBS	No	354.967683	486.422993	173.8	17.016	9.8	5.5	1.64	5784	2.56	2.90

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
002576692-01	OBS	FP	0.00	0	1	0	0	MOD_SEC_ALT—HAS_SEC_TCE—CENT_NOFITS
002576692-02	OBS	FP	0.00	1	1	0	0	IS_SEC_TCE—CENT_NOFITS
002576692-03	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—SAME_NTL_PERIOD—CENT_FEW_DIFFS
002576692-04	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_MARSHALL—LPP_DV—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—INCONSISTENT_TRANS—CENT_FEW_DIFFS
002576692-05	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_MARSHALL—LPP_DV—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_NONUNIQ_ALT—INCONSISTENT_TRANS—CENT_FEW_DIFFS
002576692-06	OBS	FP	0.00	1	0	1	0	INDIV_TRANS_MARSHALL—LPP_DV—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—MOD_NONUNIQ_ALT—INCONSISTENT_TRANS—CENT_FEW_DIFFS—HALO_GHOST

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.

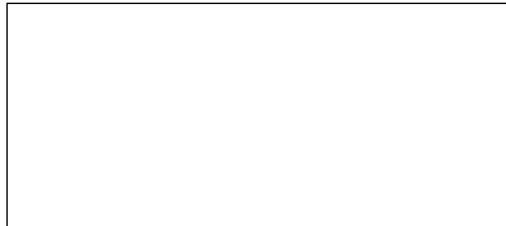
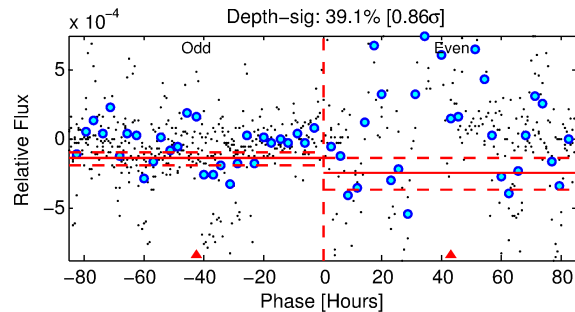
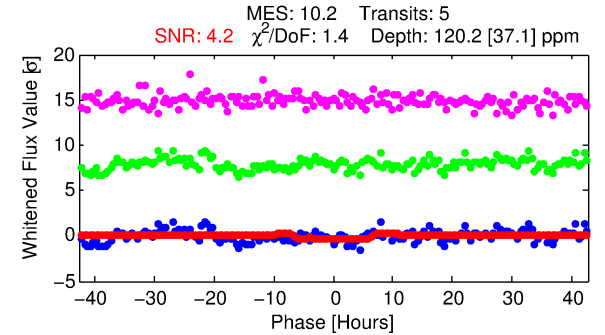
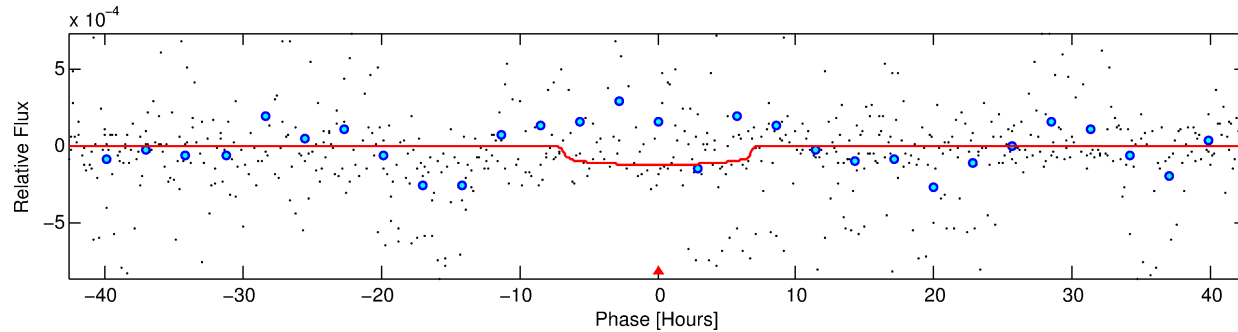
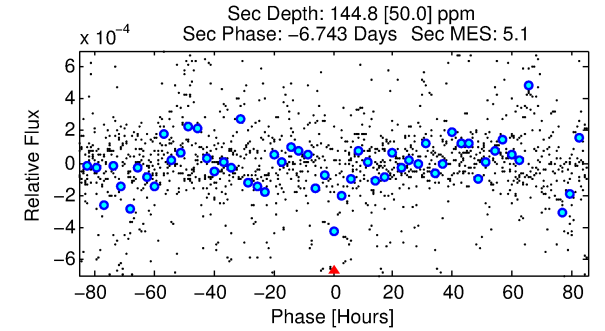
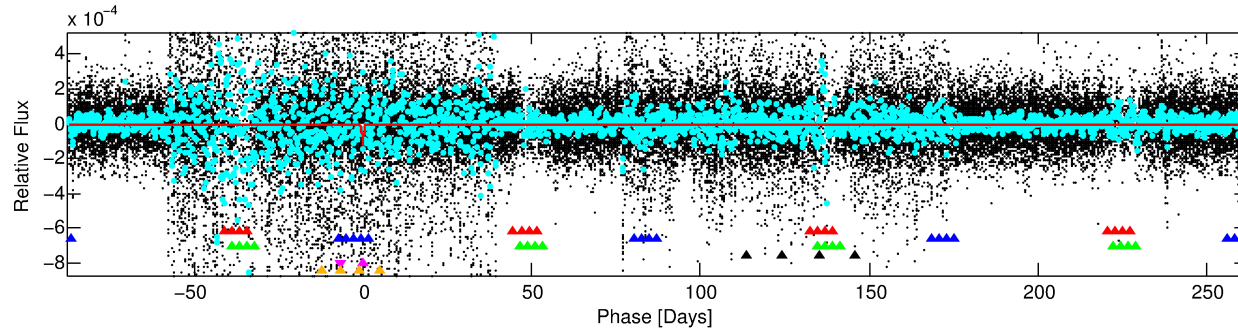
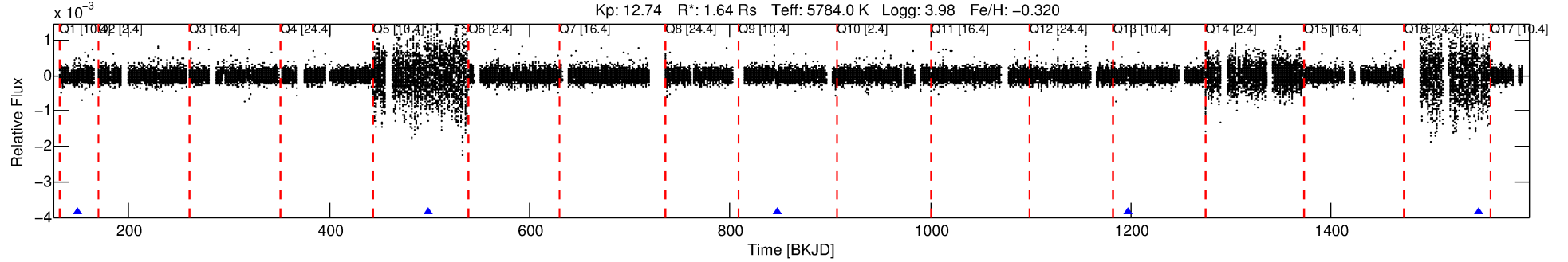
Ephemeris Match Information For 002576692-05

No Significant Match Found

DV One-Page Summary

KIC: 2576692 Candidate: 5 of 6 Period: 349.285 d
KOI: K06282 Corr: No Ephemeris Match

Kp: 12.74 R*: 1.64 Rs Teff: 5784.0 K Logg: 3.98 Fe/H: -0.320



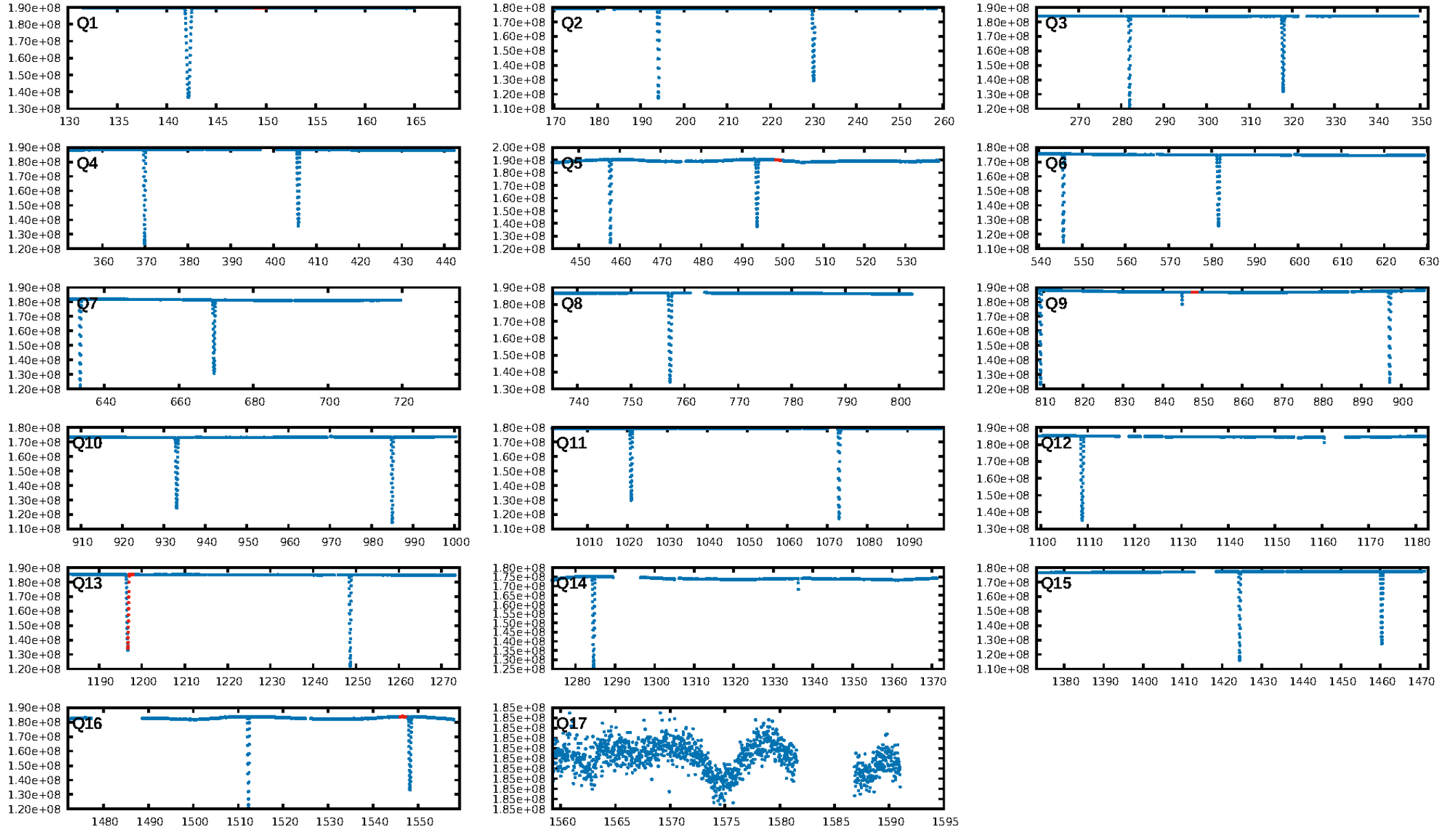
DV Fit Results:

Period = 349.28503 [0.01563] d
Epoch = 149.4653 [0.0317] BKJD
Rp/R* = 0.0115 [0.0044]
a/R* = 101.84 [169.03]
b = 0.85 [0.53]
Seff = 2.97 [1.57]
Teq = 335 [44] K
Rp = 2.05 [1.02] Re
a = 0.9544 [0.3025] AU
Ag = 17209.19 [16980.65] [1.01σ]
Teffp = 5927 [1253] K [4.46σ]

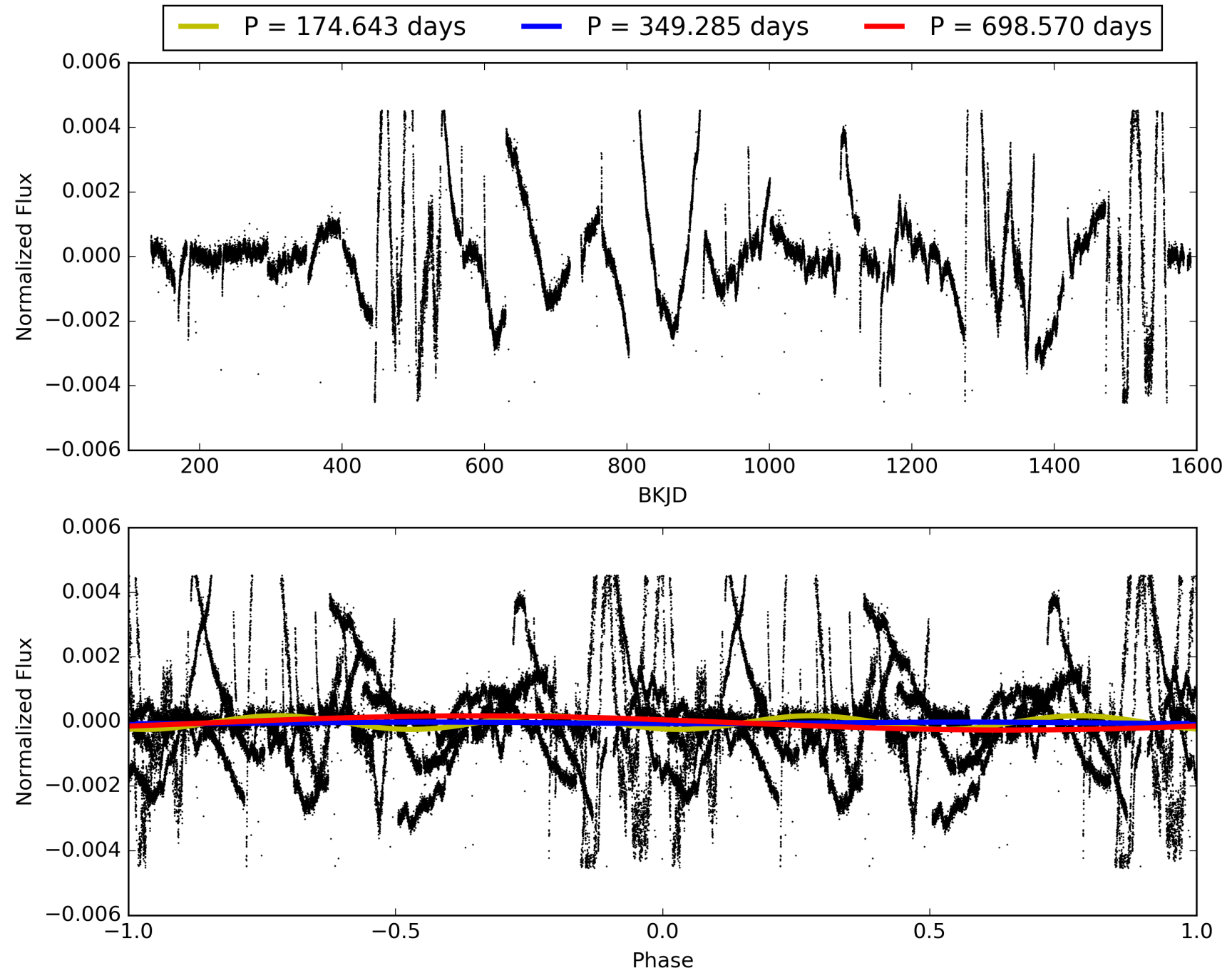
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [13.83σ]
LongPeriod-sig: 100.0% [6.15σ]
ModelChiSquare2-sig: 0.0%
ModelChiSquareGof-sig: 81.0%
Bootstrap-pfa: 7.56e-12
RollingBand-fgt: 1.00 [4/4]
GhostDiagnostic-chr: 0.5355
Centroid-sig: 1.8%
Centroid-so: 2.778 arcsec [1.85σ]
OotOffset-rm: N/A
KicOffset-rm: N/A
OotOffset-st: 0/0/0 [0]
KicOffset-st: 0/0/0 [0]
DiffImageQuality-fgm: N/A
DiffImageOverlap-fno: 1.00 [3/3]

TCE 002576692-05, PDC Light Curves

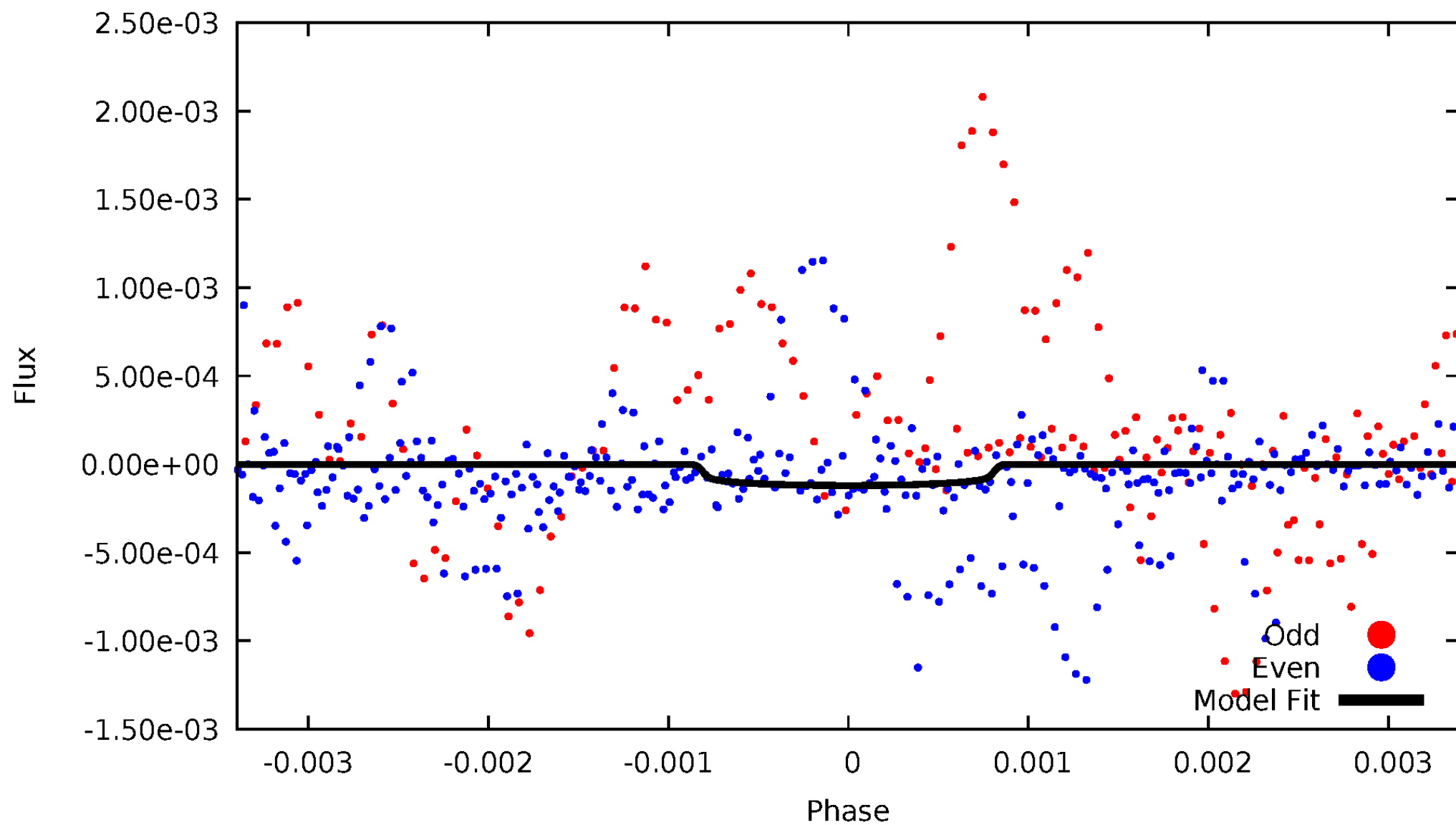


TCE 002576692-05



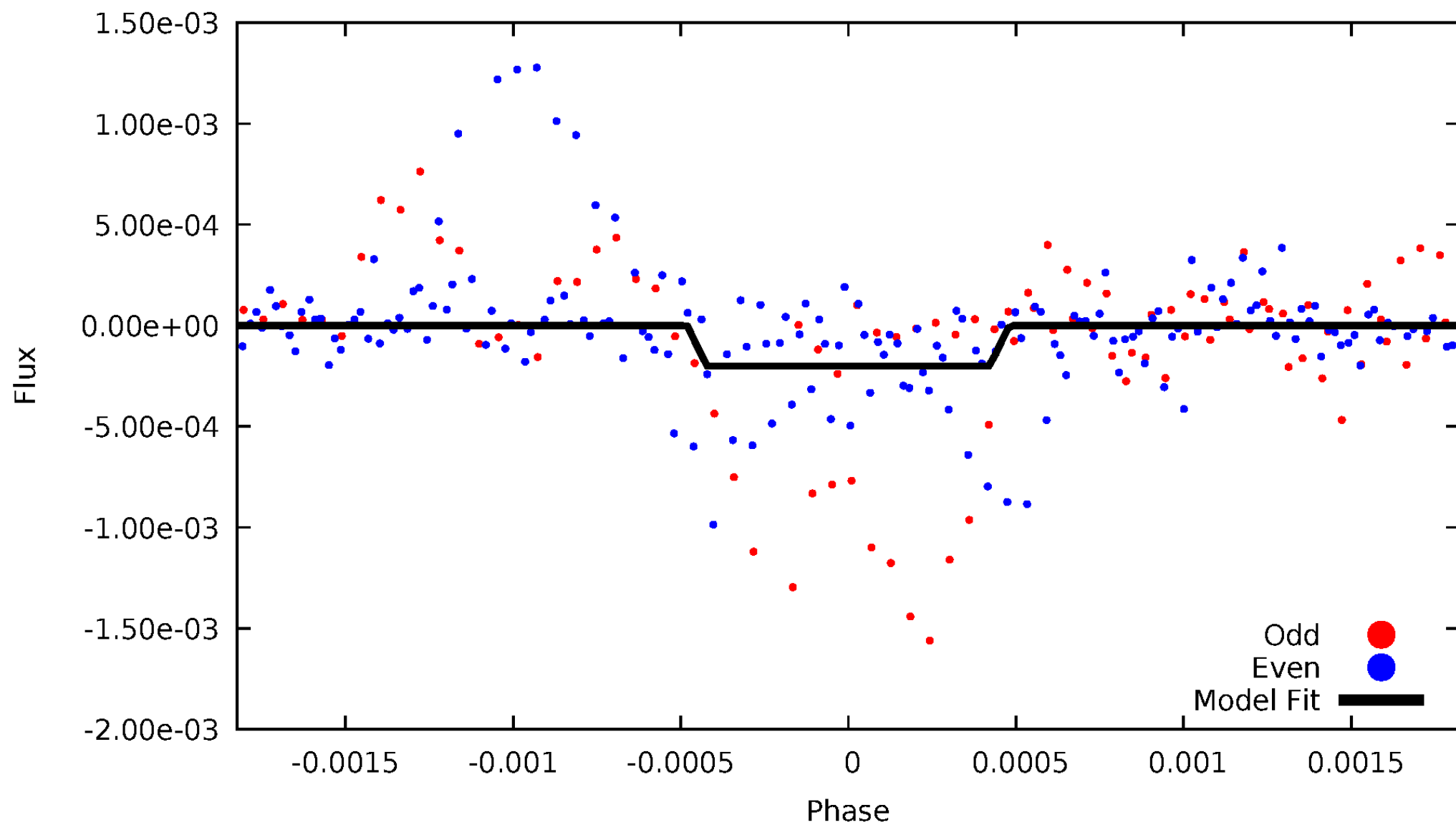
DV Odd/Even

TCE 002576692-05



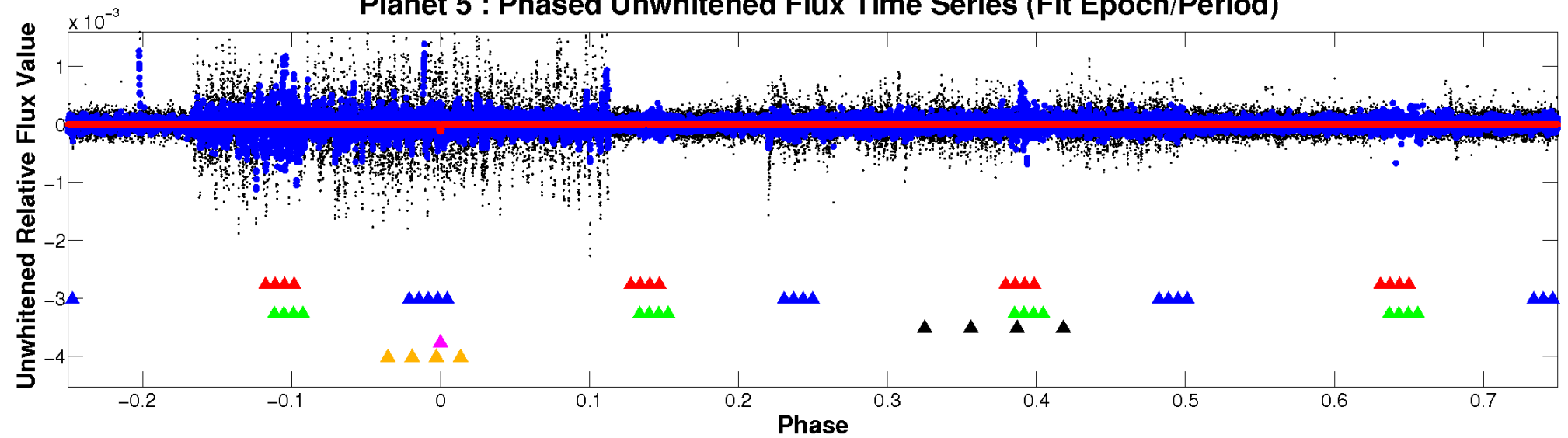
ALT Odd/Even

TCE 002576692-05

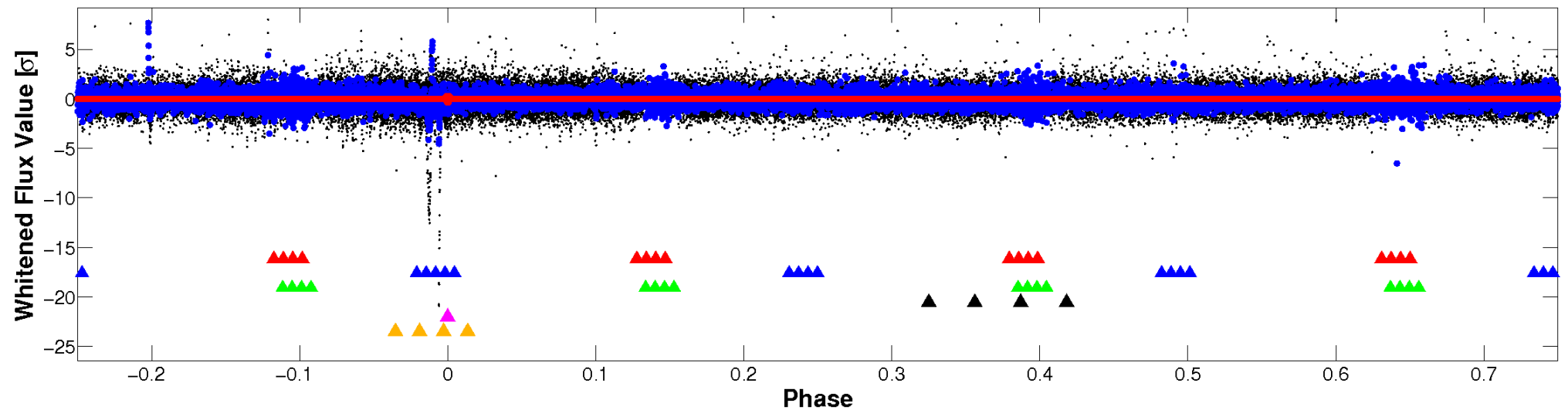


Non-Whitened Vs. Whitened Light Curve

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

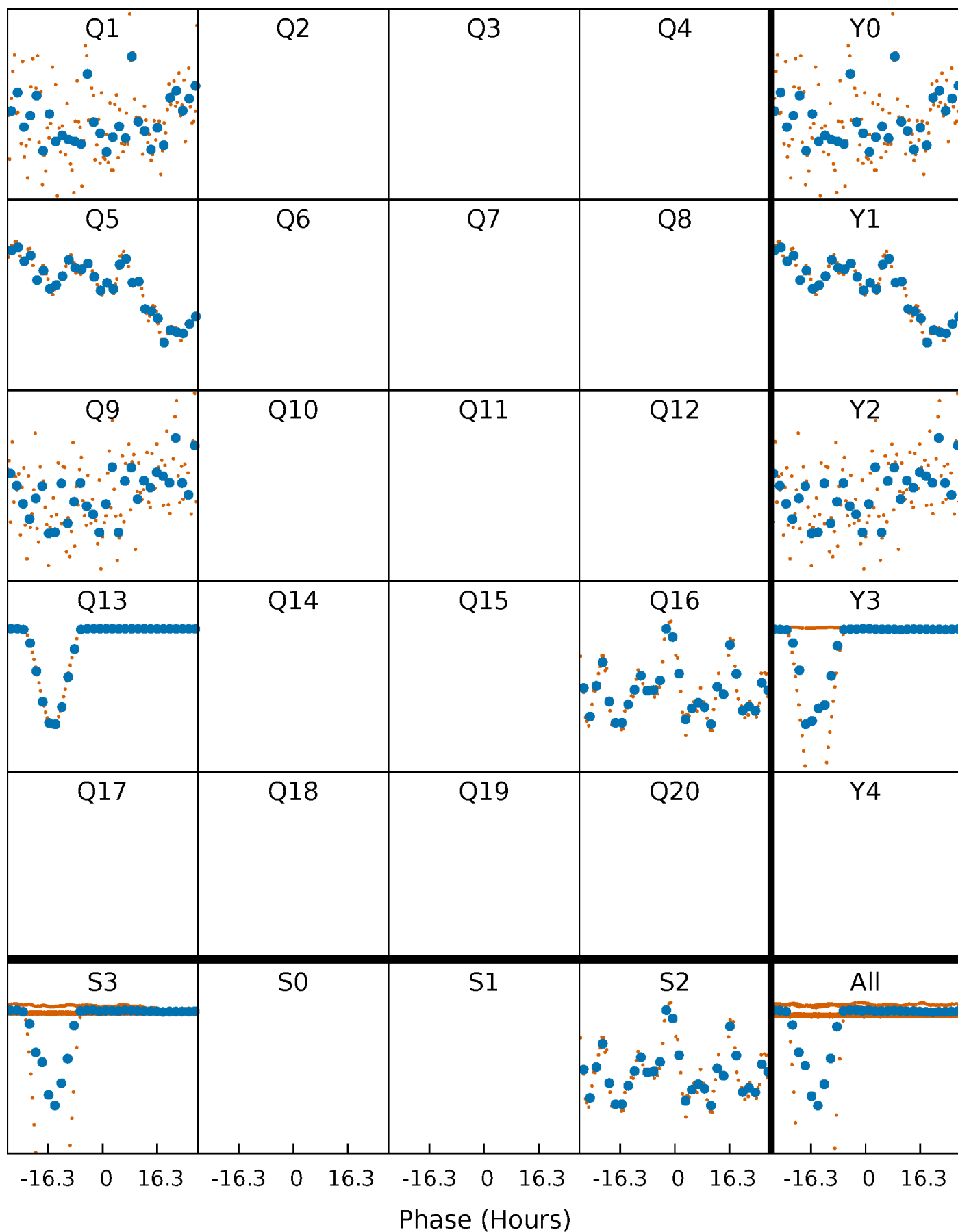


Planet 5 : Phased Whitened Flux Time Series (Fit Epoch/Period)



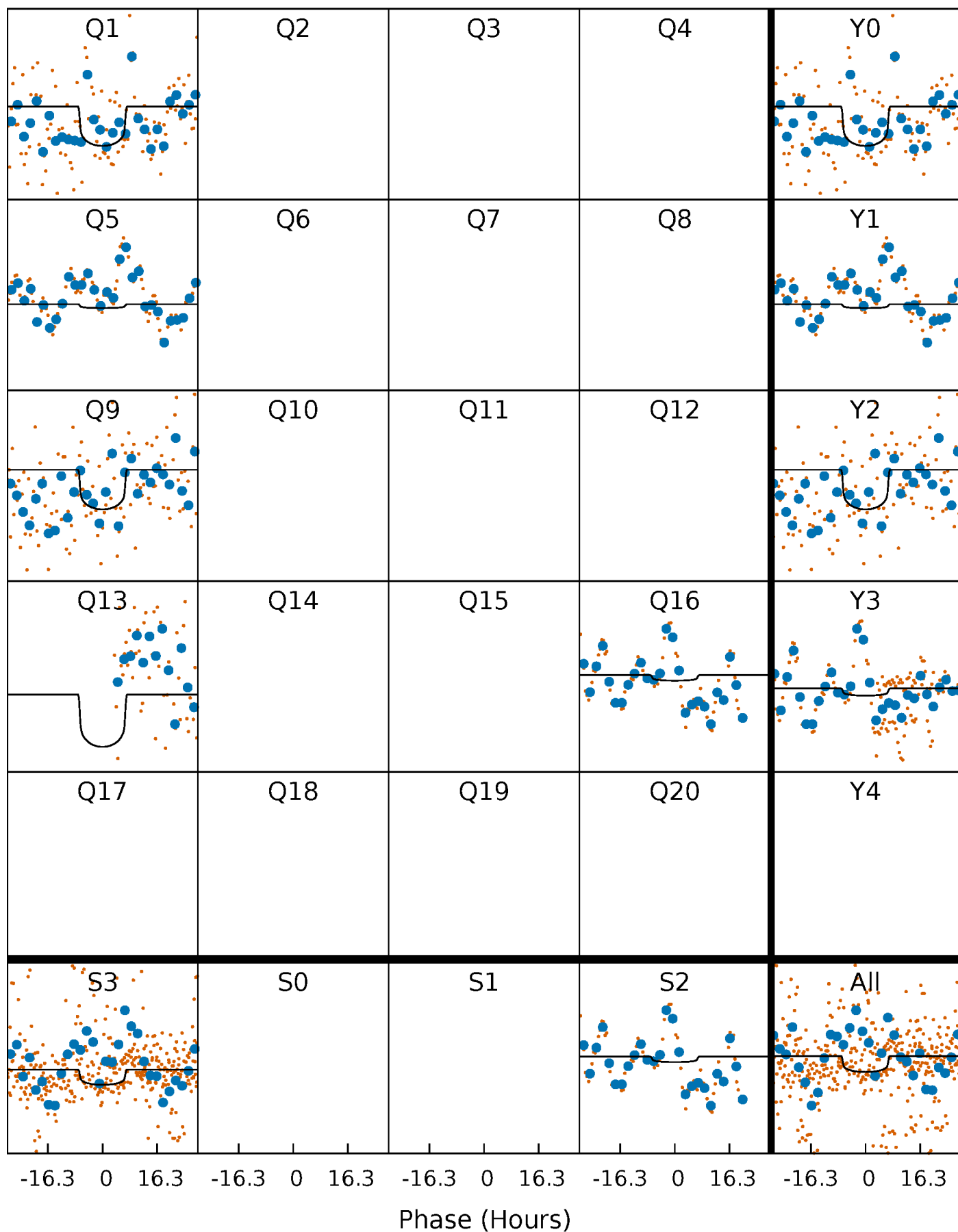
PDC Quarter-Phased Transit Curves

TCE 002576692-05 $P=349.285026$ Days $T_0=149.465320$ (BKJD)



DV Quarter-Phased Transit Curves

TCE 002576692-05 $P=349.285026$ Days $T_0=149.465320$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

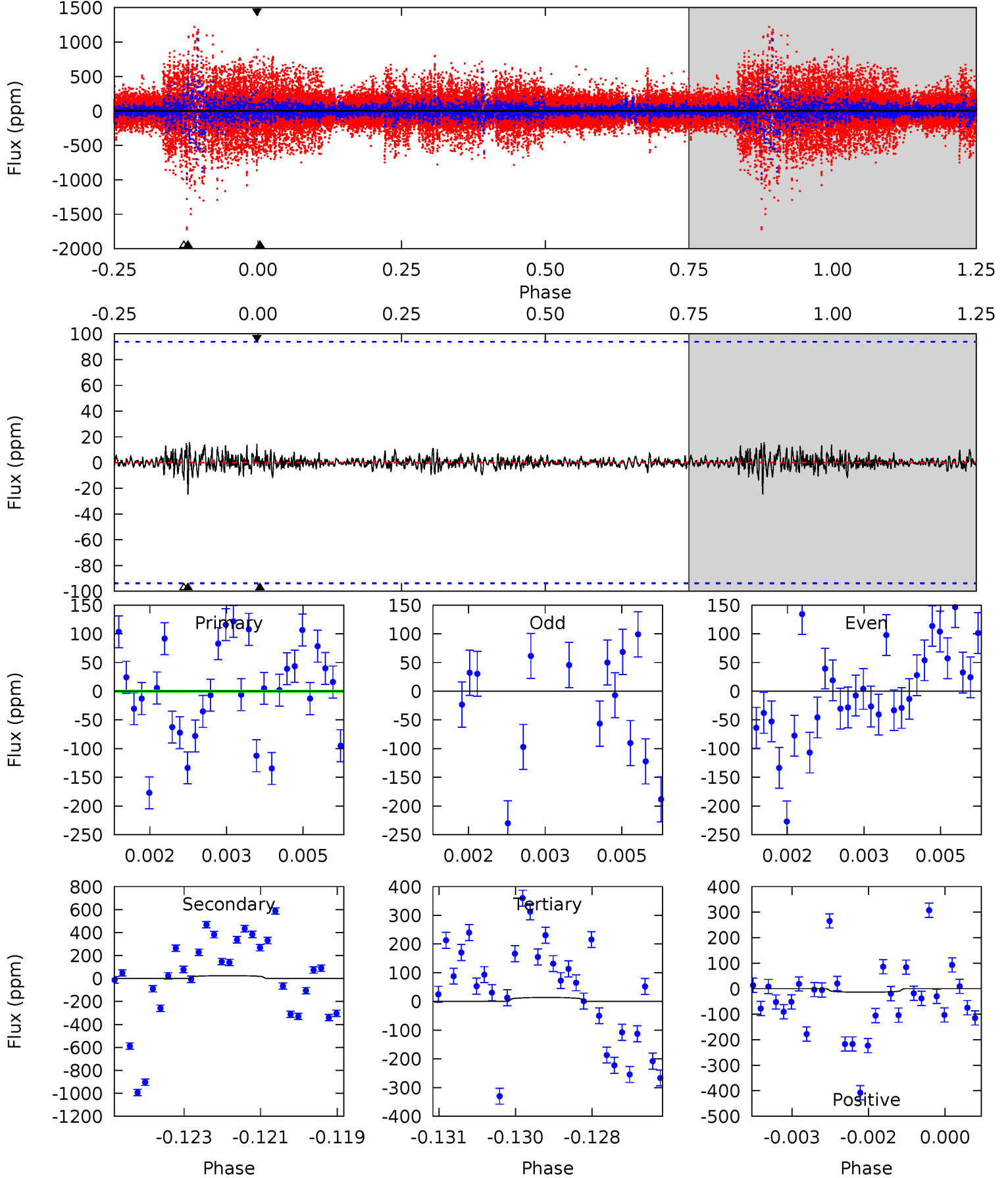
TCE 002576692-05 $P=349.359387$ Days $T_0=149.443626$ (BKJD)



DV Model-Shift Uniqueness Test

002576692-05, P = 349.285026 Days, E = 149.465320 Days

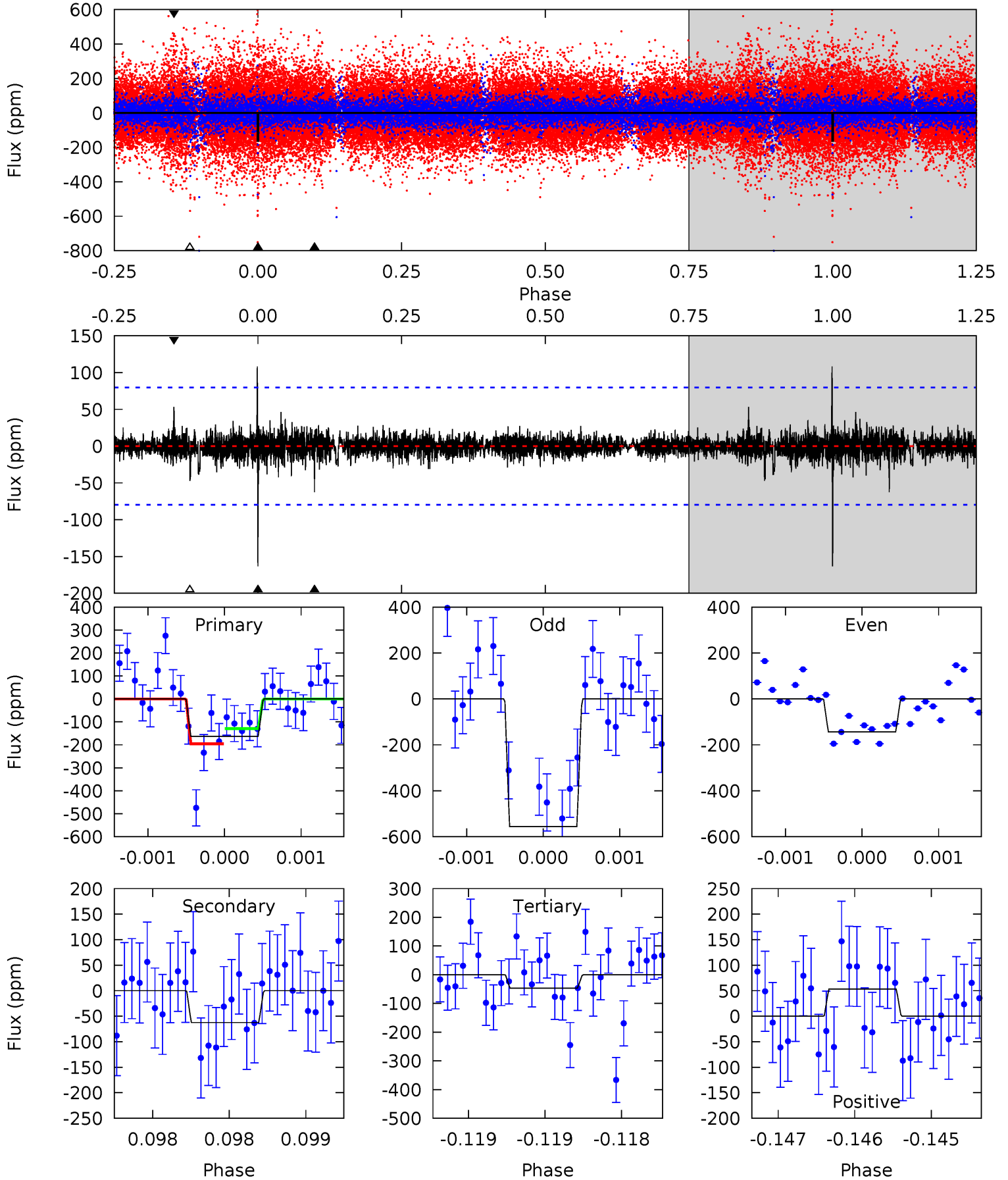
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
0.19	1.39	0.79	0.79	5.36	3.14	0.19	-0.60	-0.60	0.60	0.60	9.62	10.4	0.39	0.37



Alt Model-Shift Uniqueness Test

002576692-05, P = 349.359387 Days, E = 149.443626 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
11.2	4.28	3.22	3.66	5.46	3.30	0.62	7.95	7.52	1.06	0.62	14.3	3.63	0.40	2.26



Stellar Parameters For KIC 002576692

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	5784^{+145}_{-131}	$3.985^{+0.308}_{-0.110}$	$-0.320^{+0.350}_{-0.200}$	$1.642^{+0.347}_{-0.520}$	$0.951^{+0.143}_{-0.091}$	$0.302^{+0.614}_{-0.116}$
	+3%/-2%	+8%/-3%	+109%/-62%	+21%/-32%	+15%/-10%	+203%/-38%
Source	PHO1	FLK73	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 002576692-05 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-24 ± 18	$1.95^{+0.90}_{-0.73}$	460^{+31}_{-43}	4051^{+918}_{-804}	3163^{+6416}_{-2393}
Alt.	-62 ± 15	$2.45^{+0.81}_{-0.87}$	460^{+30}_{-42}	4458^{+879}_{-440}	5360^{+7937}_{-2546}

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

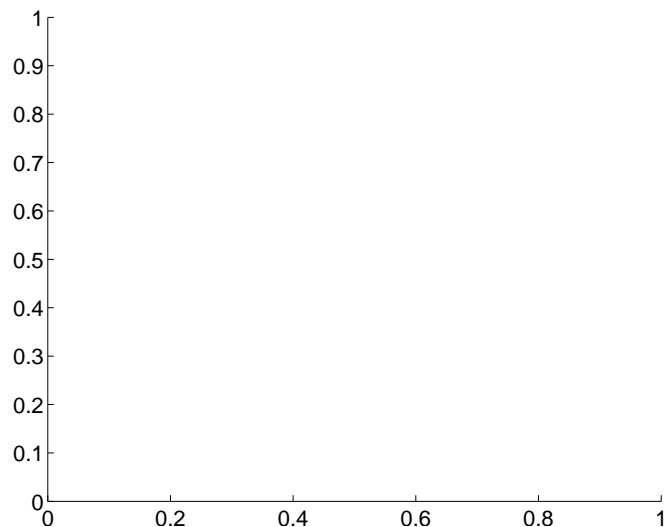
Supplemental centroid analysis for 002576692-05. Kepler magnitude: 12.74. Transit SNR 4.17

There are 0 quarters with good PRF difference image offsets

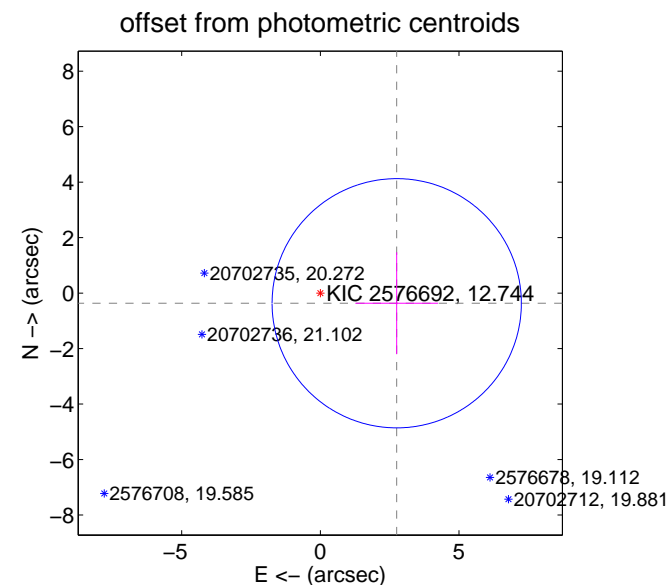
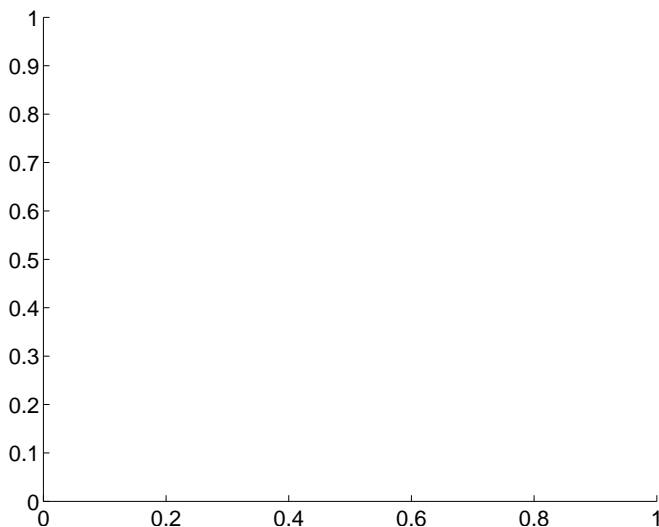
The direct PRF centroid is offset from the target star catalog position by about NaN arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	—	—	—	—
PRF-fit source offset from KIC position	—	—	—	—
photometric centroid source offset	2.78 ± 1.50	1.85	-2.75 ± 1.49	-0.37 ± 1.84

There is no PRF-fit offset from OOT-fit

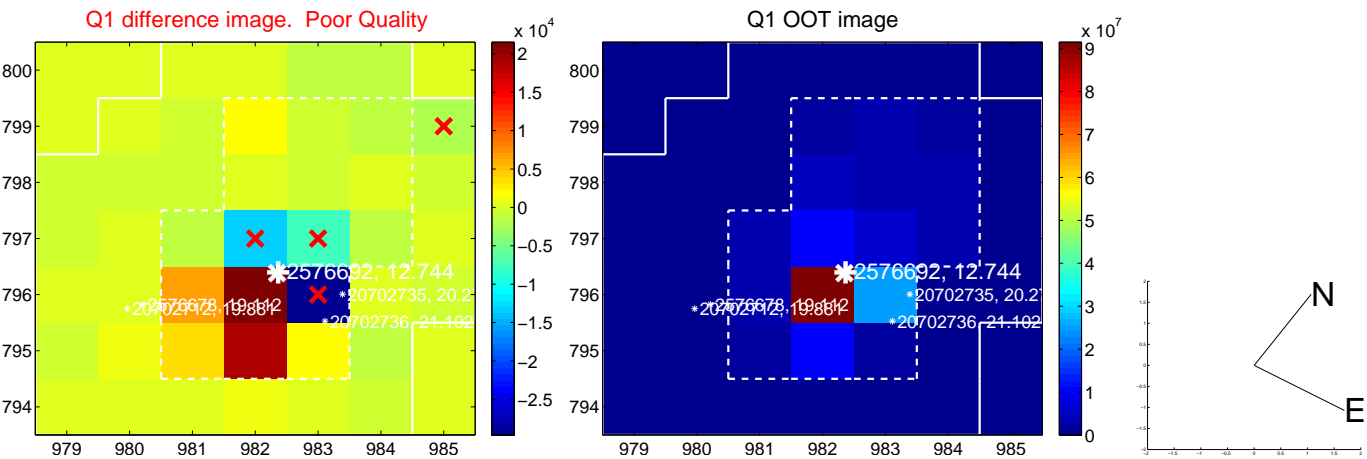


There is no PRF-fit offset from KIC

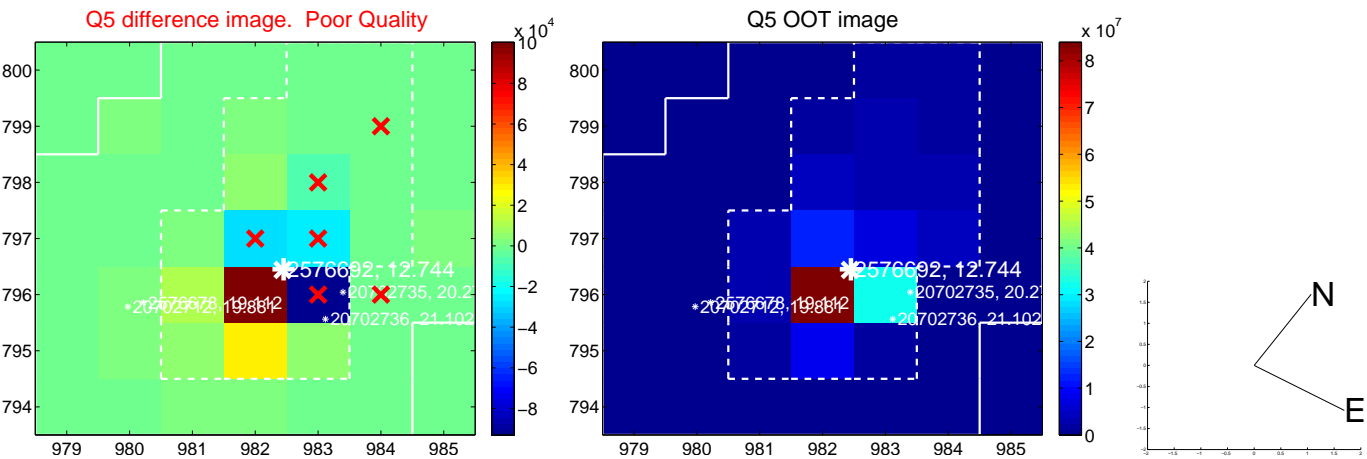


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

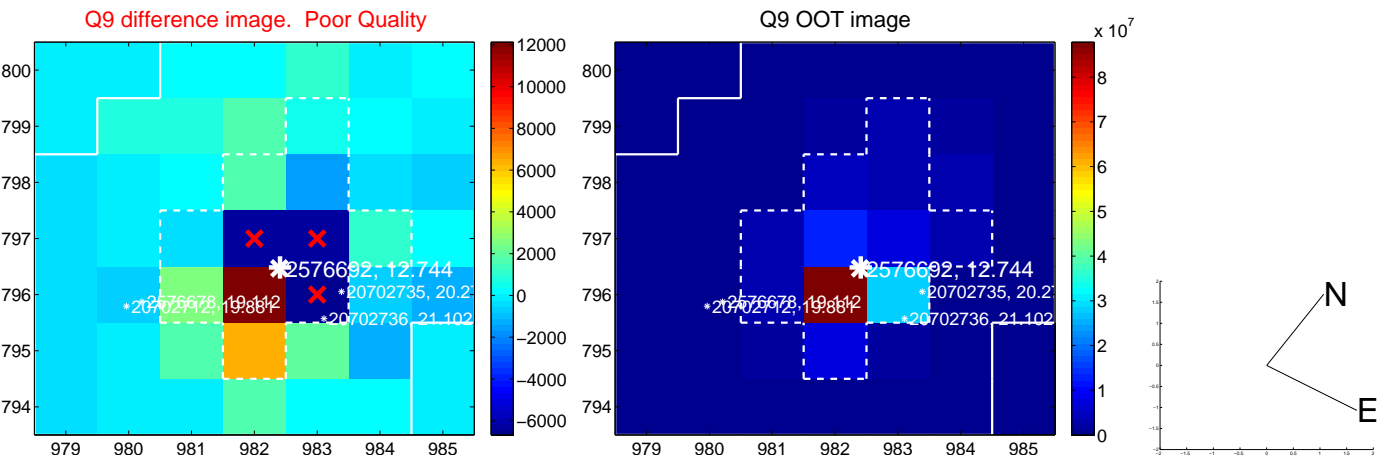
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



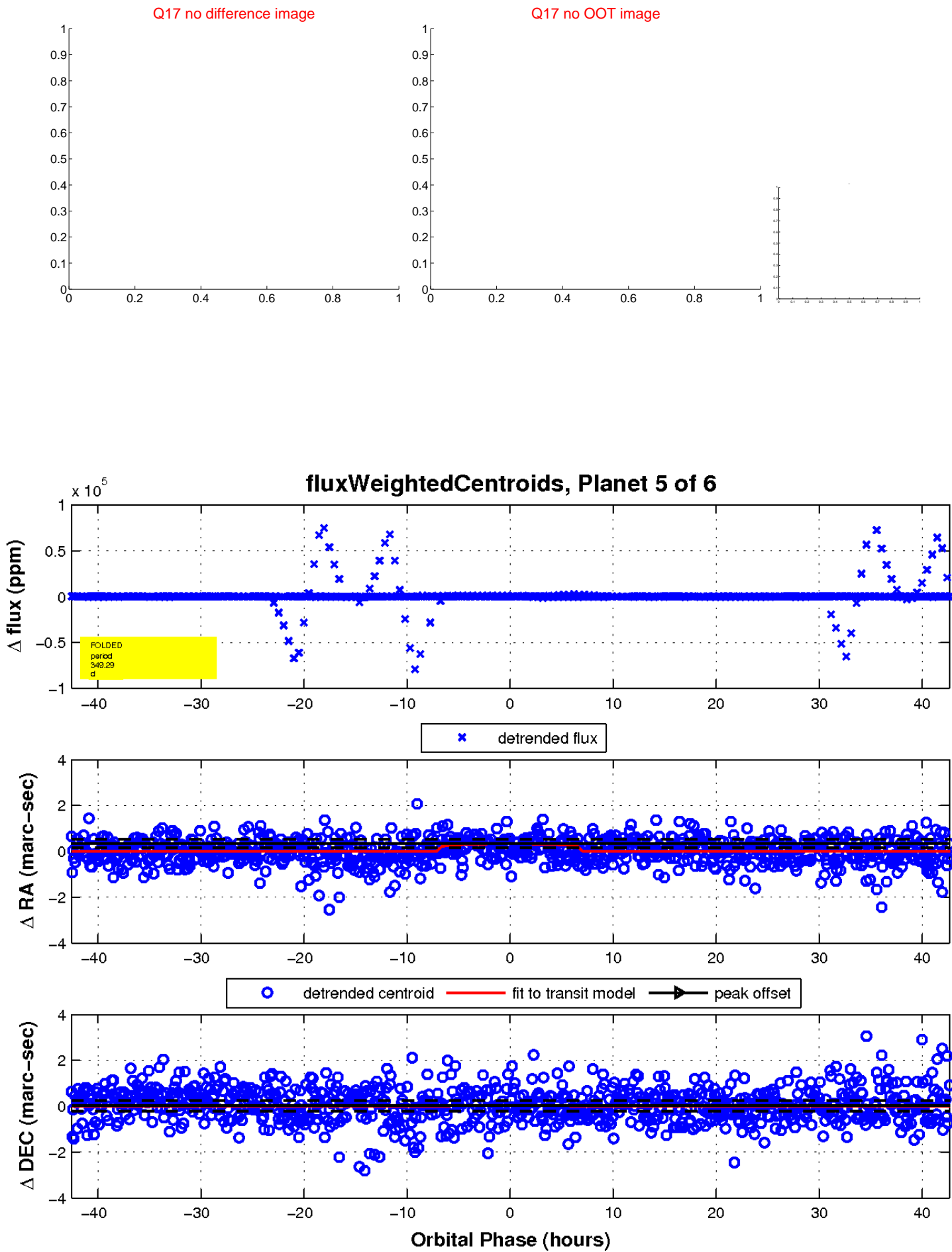
white ×: KIC target position; +: OOT centroid; △: difference centroid. red ×: large negative pixel value.



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

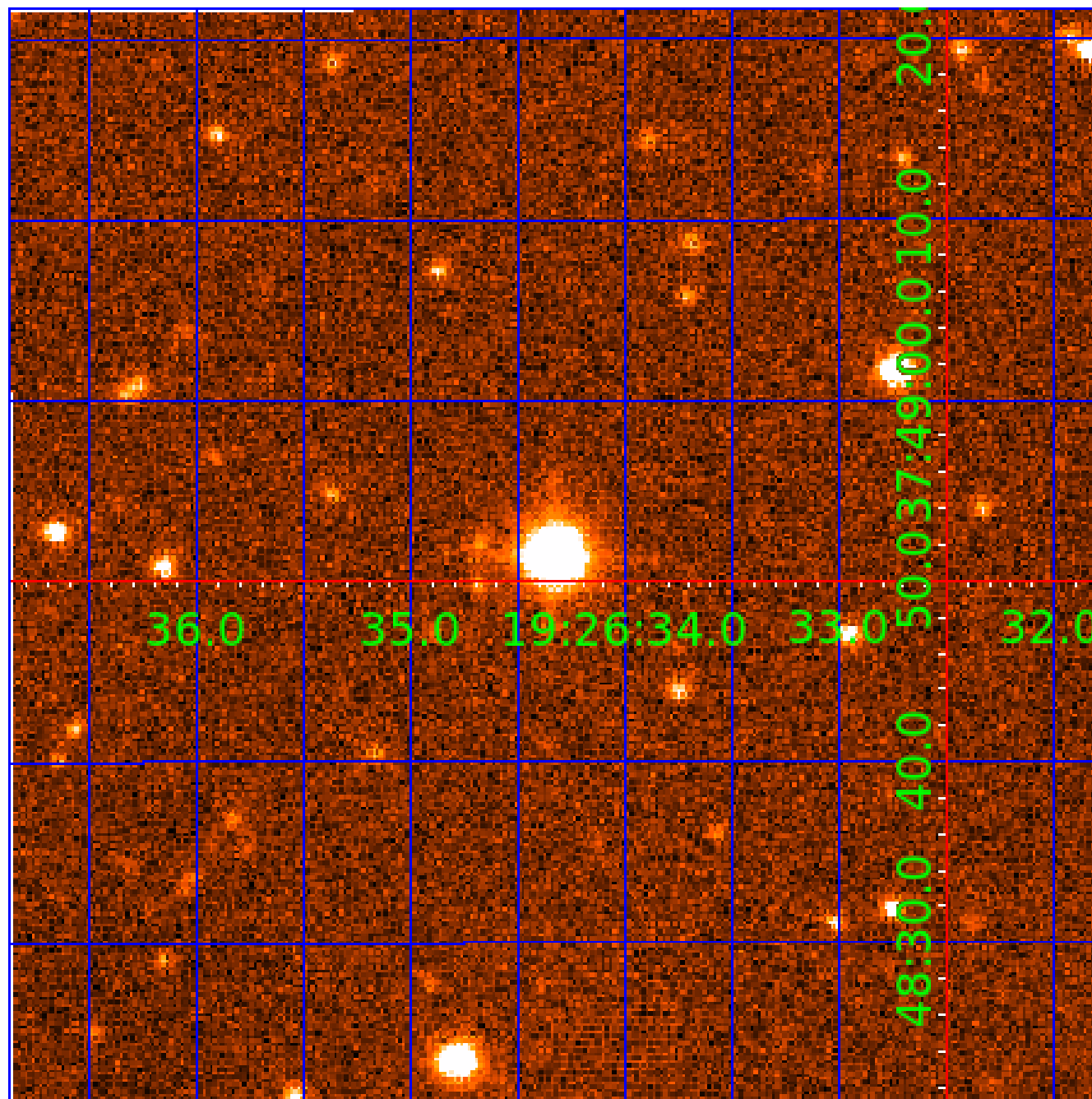


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 002576692

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})
002576692-01	OBS	6282.01	87.879693	194.095583	343541.3	9.000	20777.6	-1.0	1.64	5784	74.78	18.69
002576692-02	OBS	No	87.877281	142.167095	279491.6	12.000	18658.1	-1.0	1.64	5784	65.15	18.69
002576692-03	OBS	No	87.878932	196.172156	5178.9	51.572	407.3	184.3	1.64	5784	21.65	18.69
002576692-04	OBS	No	338.445920	295.514290	303.8	12.307	12.0	10.4	1.64	5784	3.52	3.10
002576692-05	OBS	No	349.285026	149.465320	120.2	14.226	10.2	4.2	1.64	5784	2.05	2.97
002576692-06	OBS	No	354.967683	486.422993	173.8	17.016	9.8	5.5	1.64	5784	2.56	2.90

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
002576692-01	OBS	FP	0.00	0	1	0	0	MOD_SEC_ALT—HAS_SEC_TCE—CENT_NOFITS
002576692-02	OBS	FP	0.00	1	1	0	0	IS_SEC_TCE—CENT_NOFITS
002576692-03	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—SAME_NTL_PERIOD—CENT_FEW_DIFFS
002576692-04	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_MARSHALL—LPP_DV—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—INCONSISTENT_TRANS—CENT_FEW_DIFFS
002576692-05	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_MARSHALL—LPP_DV—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_NONUNIQ_ALT—INCONSISTENT_TRANS—CENT_FEW_DIFFS
002576692-06	OBS	FP	0.00	1	0	1	0	INDIV_TRANS_MARSHALL—LPP_DV—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—MOD_NONUNIQ_ALT—INCONSISTENT_TRANS—CENT_FEW_DIFFS—HALO_GHOST

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

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

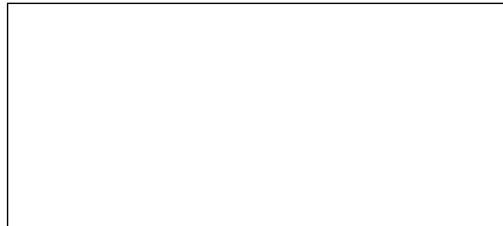
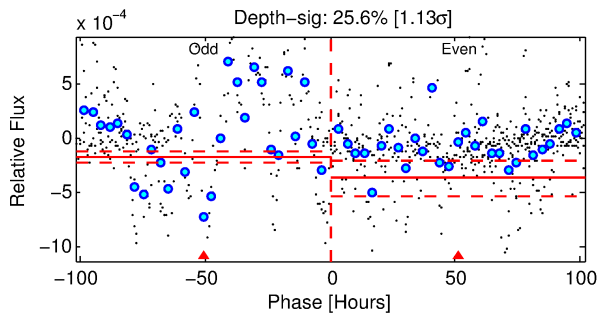
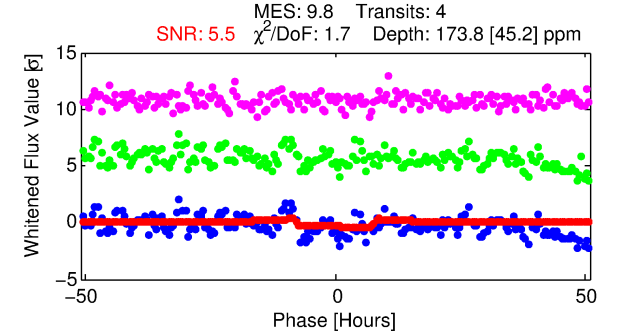
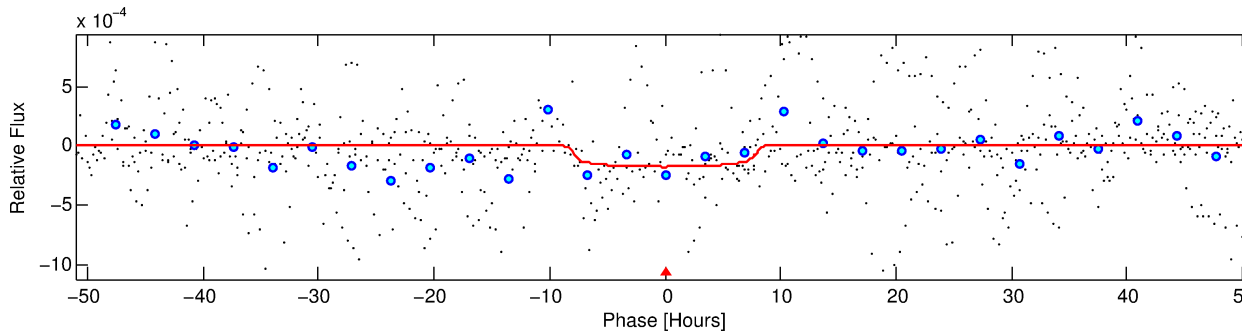
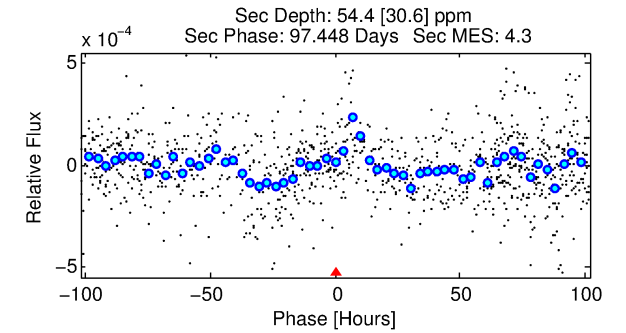
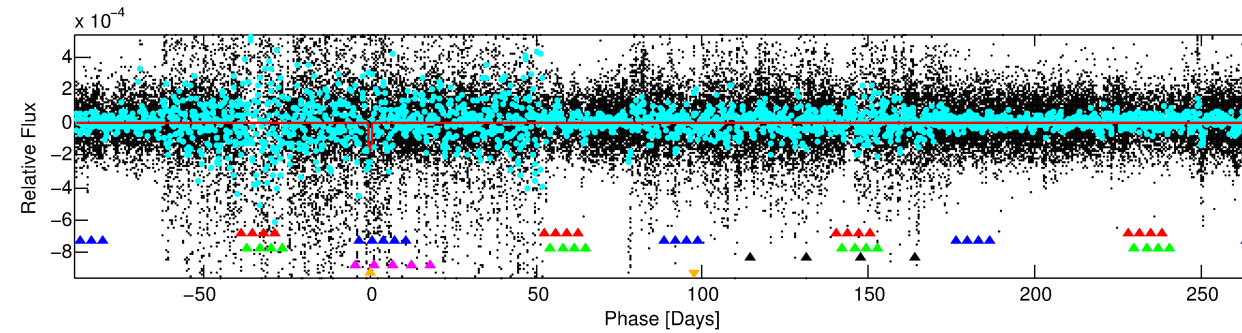
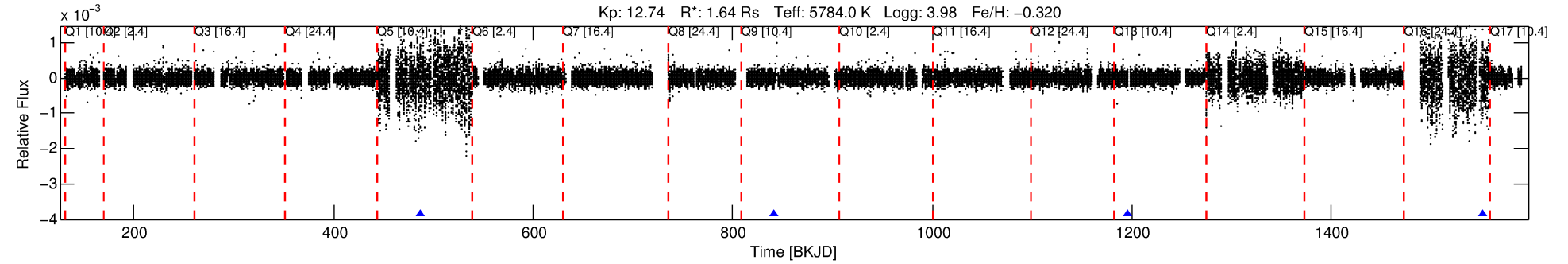
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 002576692-06

No Significant Match Found

DV One-Page Summary

KIC: 2576692 Candidate: 6 of 6 Period: 354.968 d
KOI: K06282 Corr: No Ephemeris Match



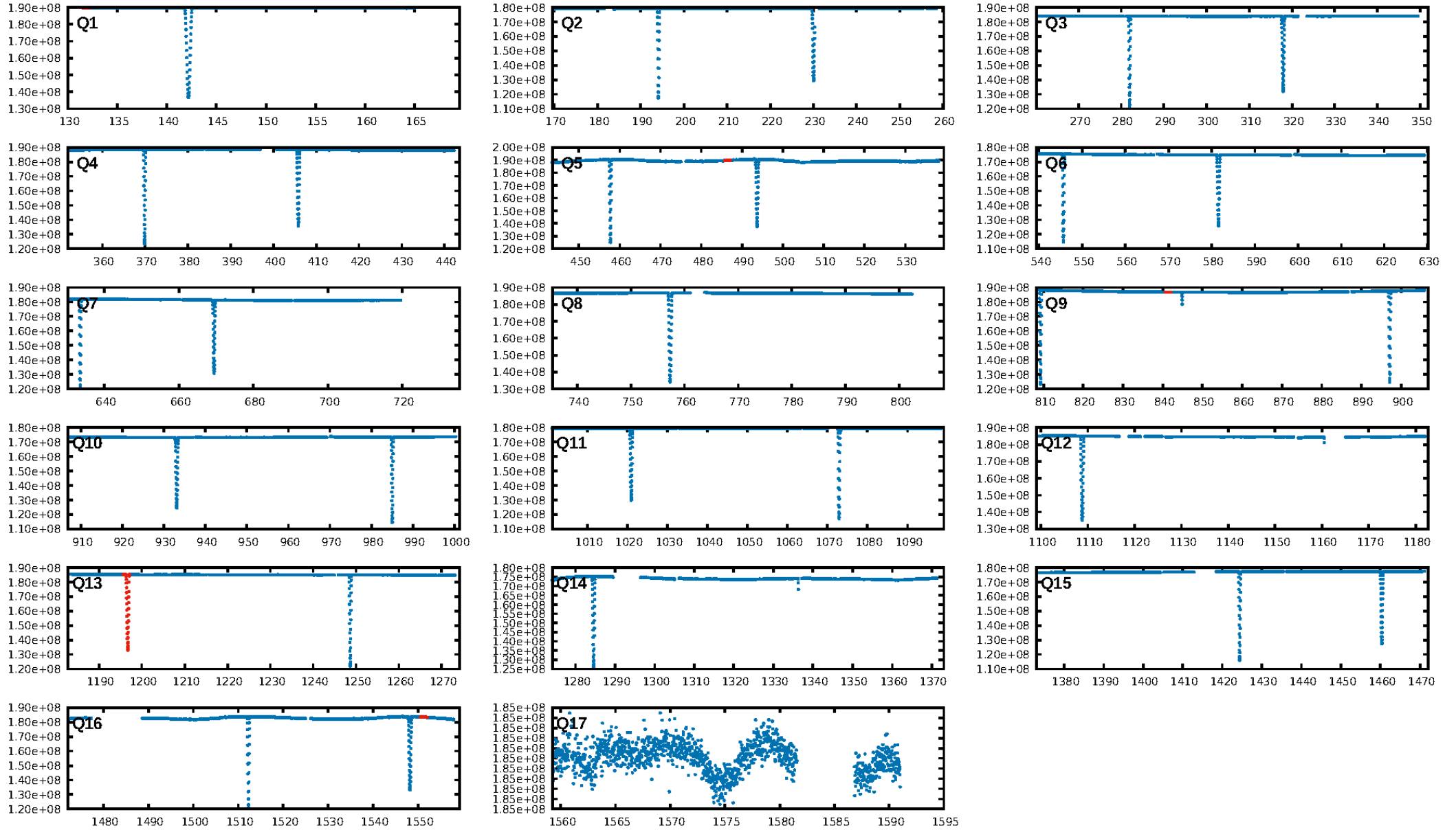
DV Fit Results:

Period = 354.96768 [0.02108] d
Epoch = 486.4230 [0.0284] BKJD
Rp/R* = 0.0143 [0.0031]
a/R* = 74.17 [62.42]
b = 0.90 [0.18]
Seff = 2.90 [1.53]
Teq = 333 [44] K
Rp = 2.56 [0.99] Re
a = 0.9647 [0.3058] AU
Ag = 4245.57 [3745.90] [1.13σ]
Teffp = 4155 [749] K [5.09σ]

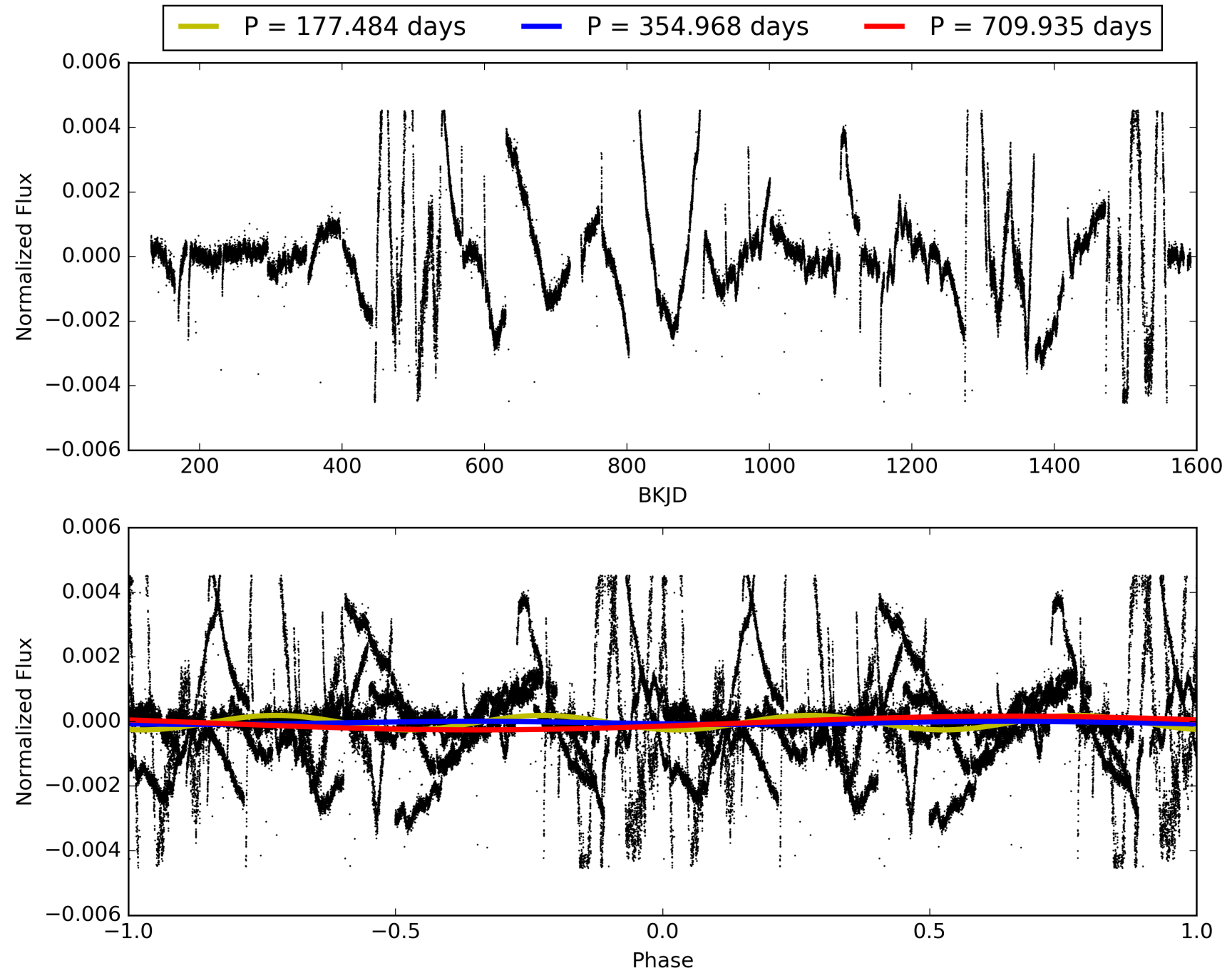
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [6.15σ]
LongPeriod-sig: N/A
ModelChiSquare2-sig: 0.0%
ModelChiSquareGof-sig: 0.6%
Bootstrap-pfa: 1.28e-10
RollingBand-fgt: 1.00 [3/3]
GhostDiagnostic-chr: 0.1621
Centroid-sig: 56.3%
Centroid-so: 0.552 arcsec [0.47σ]
OotOffset-rm: N/A
OotOffset-st: 0/0/0 [0]
KicOffset-rm: N/A
KicOffset-st: 0/0/0 [0]
DiffImageQuality-fgm: N/A
DiffImageOverlap-fno: 1.00 [3/3]

TCE 002576692-06, PDC Light Curves

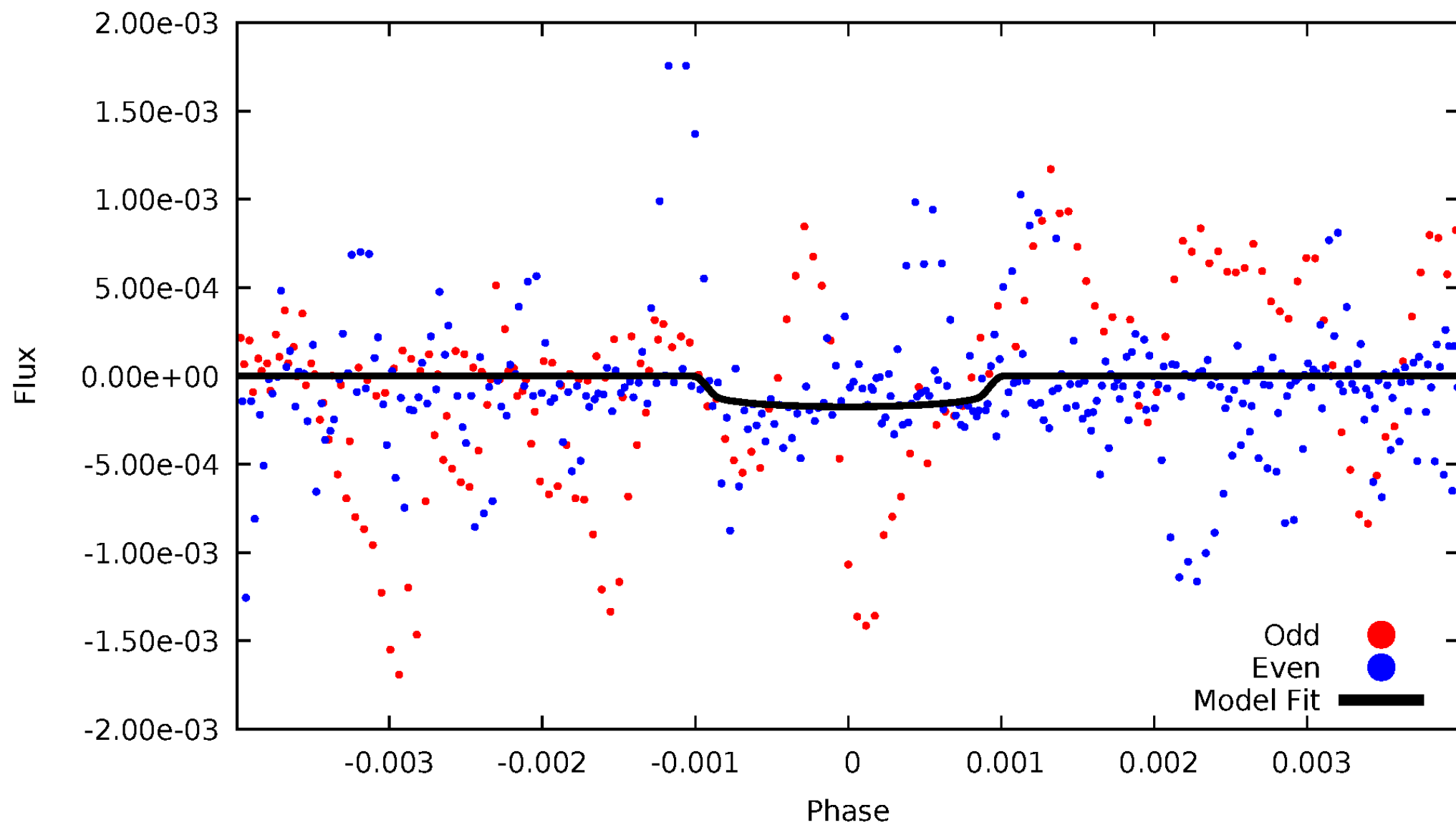


TCE 002576692-06



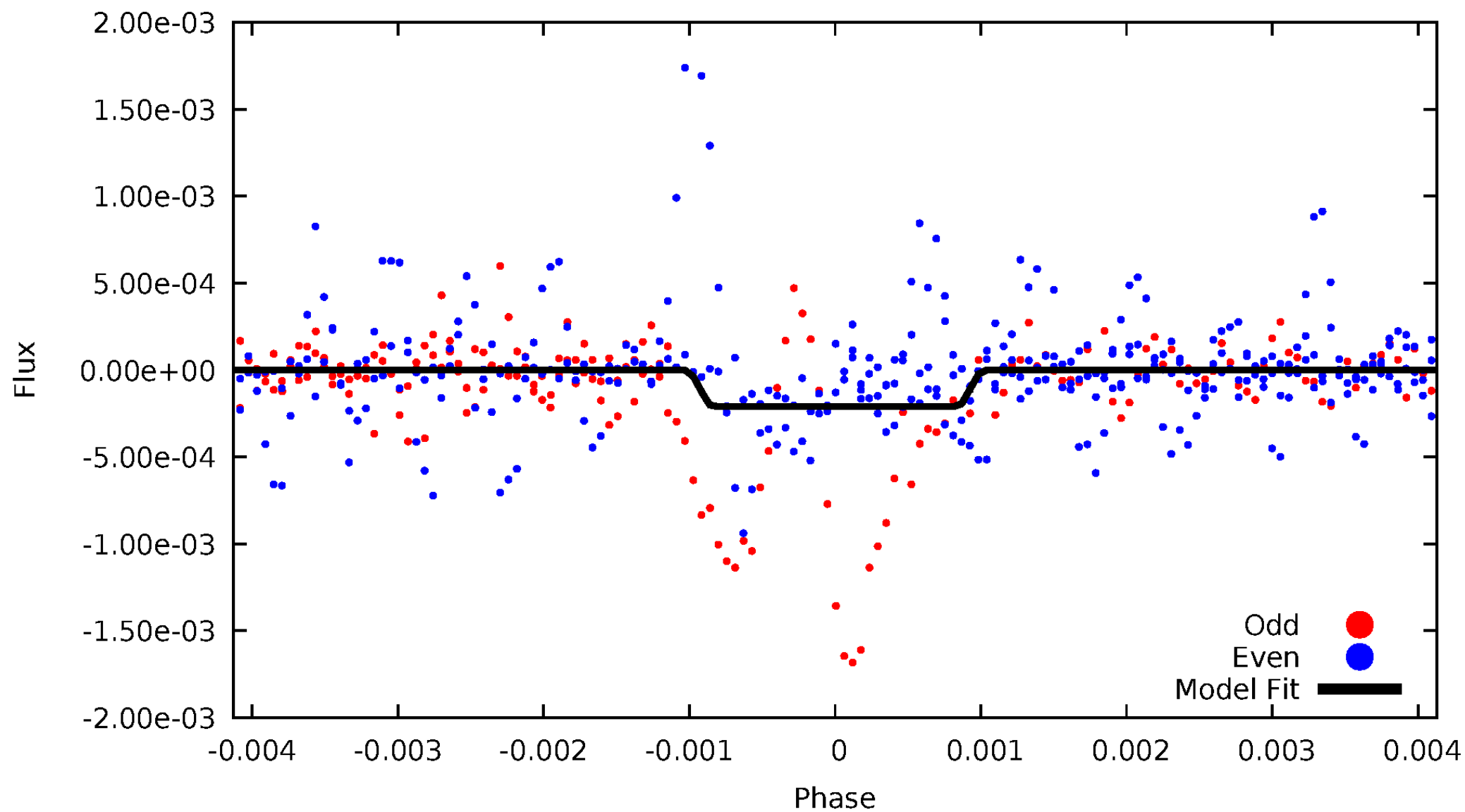
DV Odd/Even

TCE 002576692-06



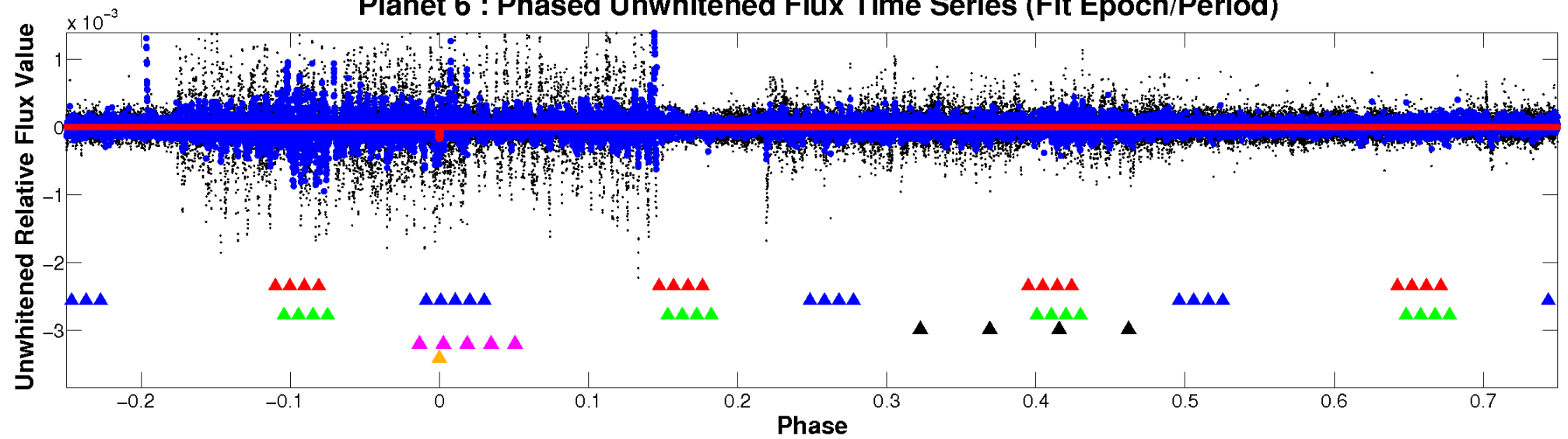
ALT Odd/Even

TCE 002576692-06

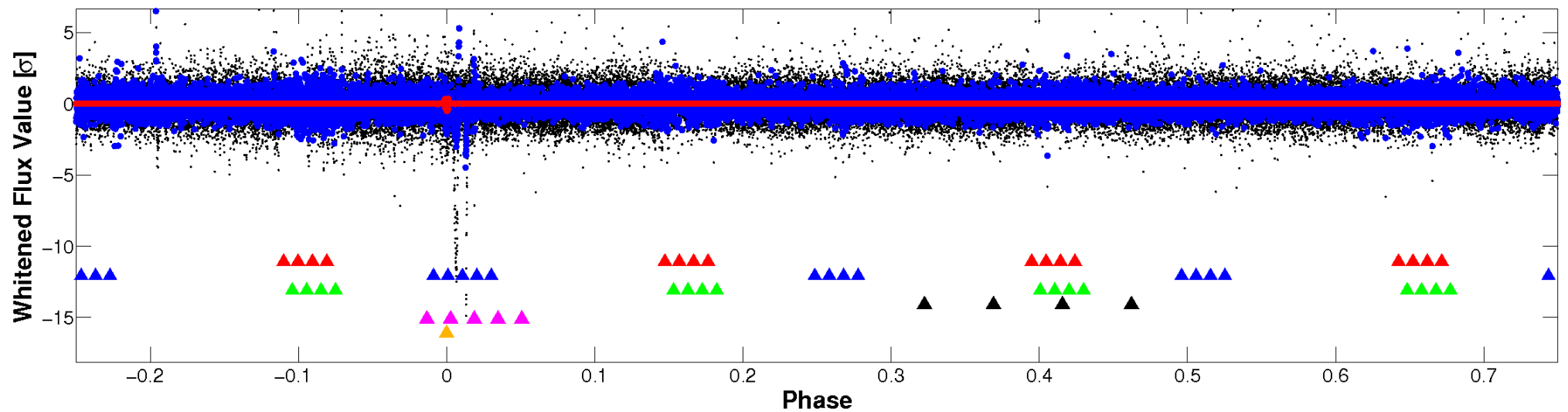


Non-Whitened Vs. Whitened Light Curve

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

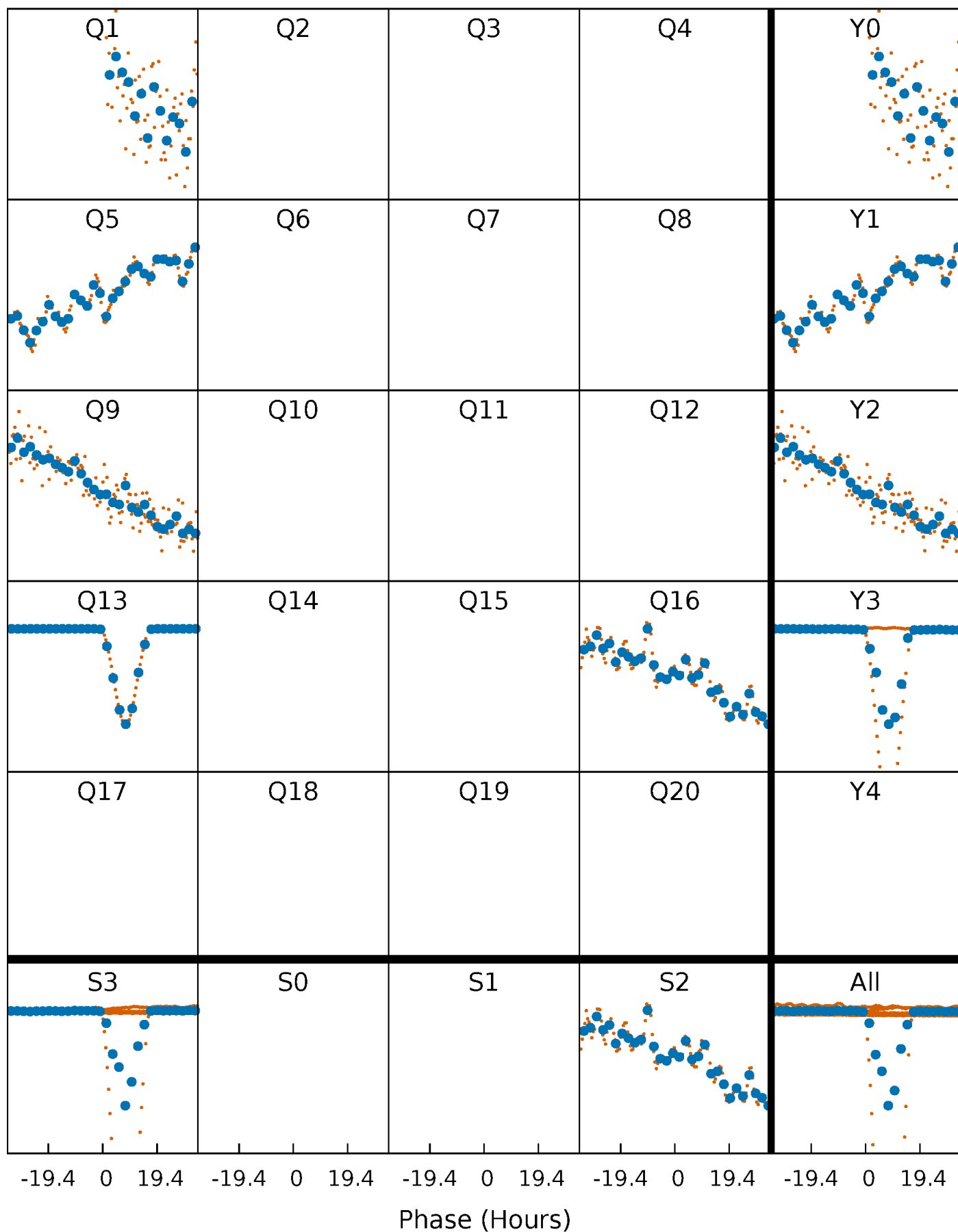


Planet 6 : Phased Whitened Flux Time Series (Fit Epoch/Period)



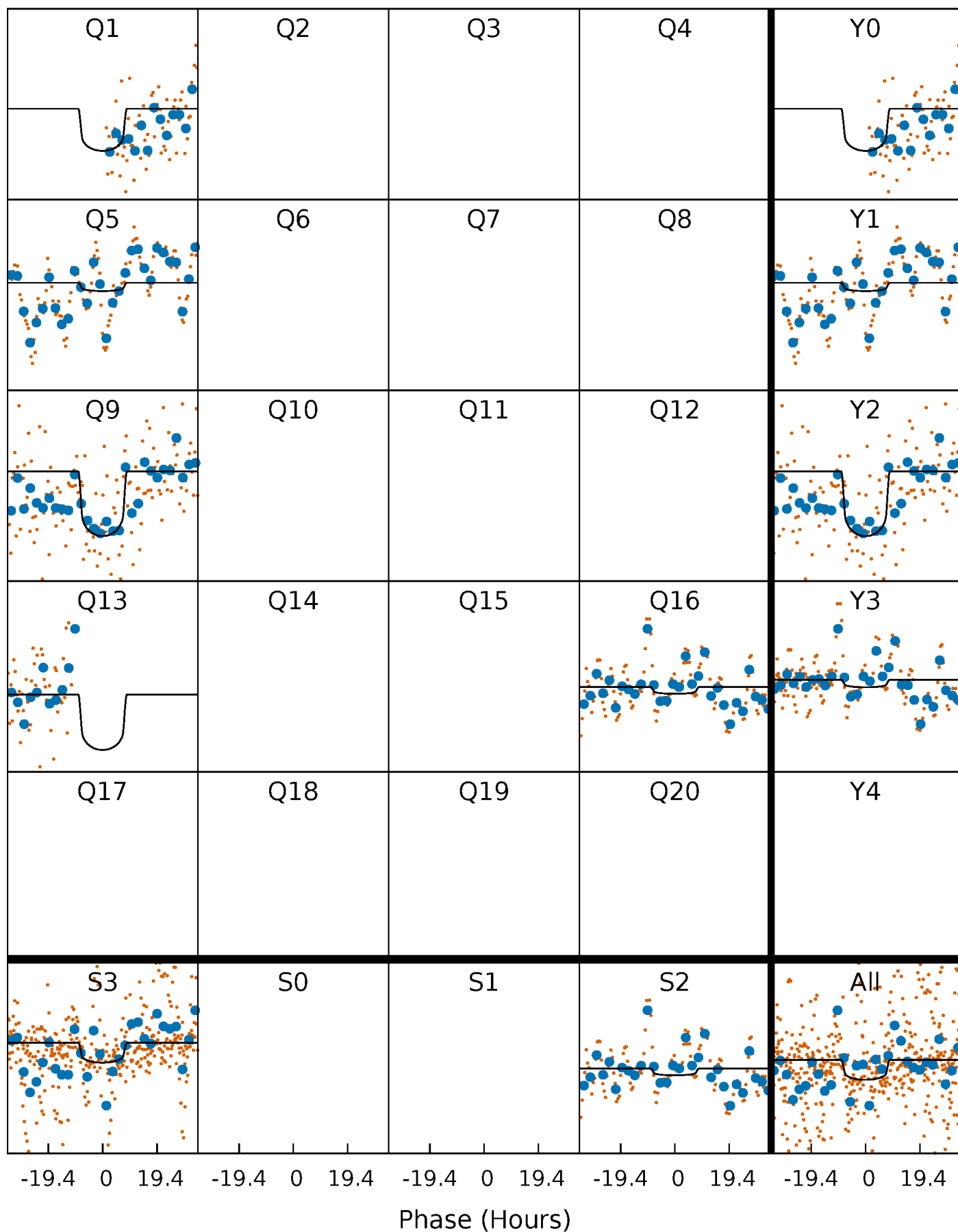
PDC Quarter-Phased Transit Curves

TCE 002576692-06 $P=354.967683$ Days $T_0=486.422993$ (BKJD)



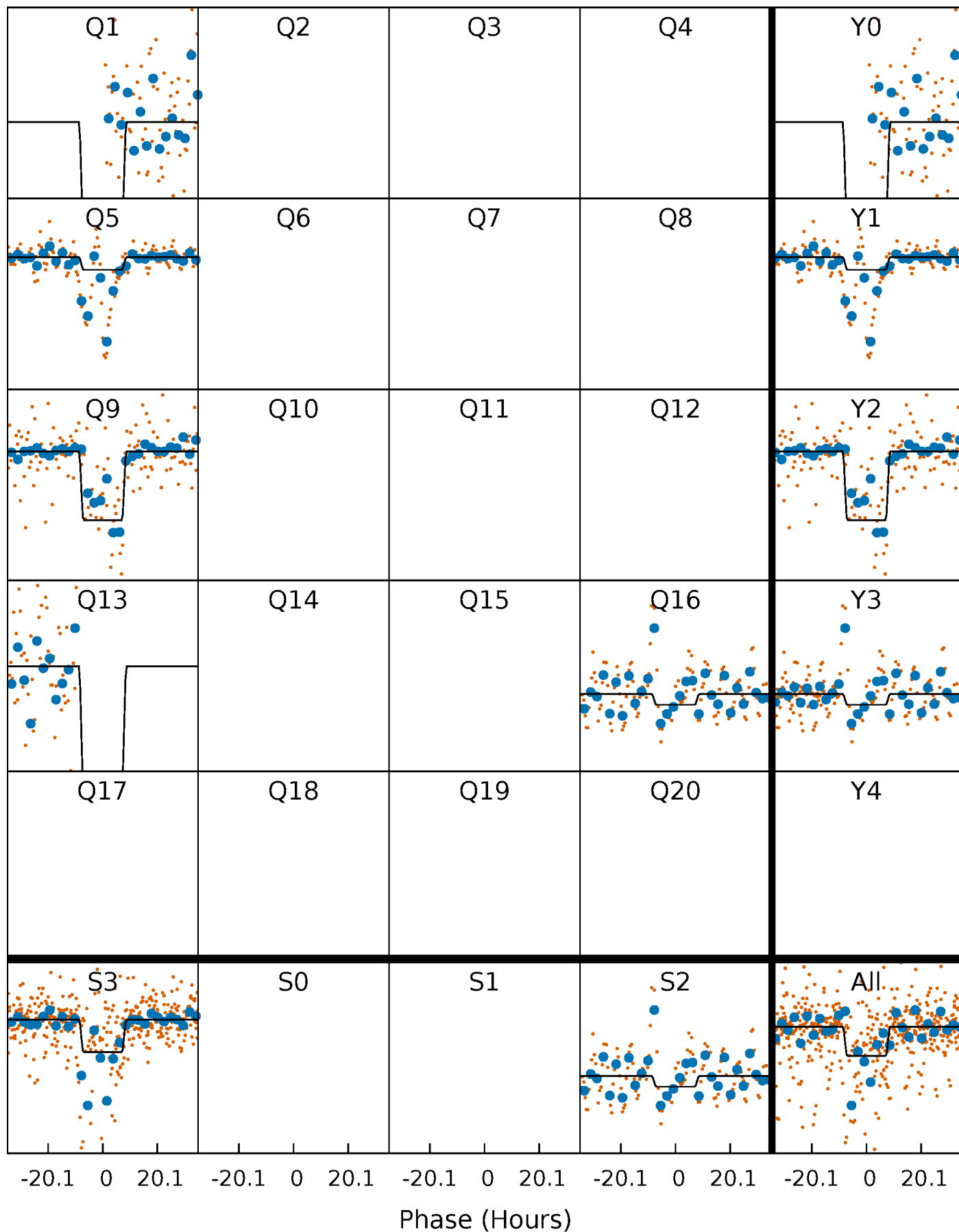
DV Quarter-Phased Transit Curves

TCE 002576692-06 $P=354.967683$ Days $T_0=486.422993$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

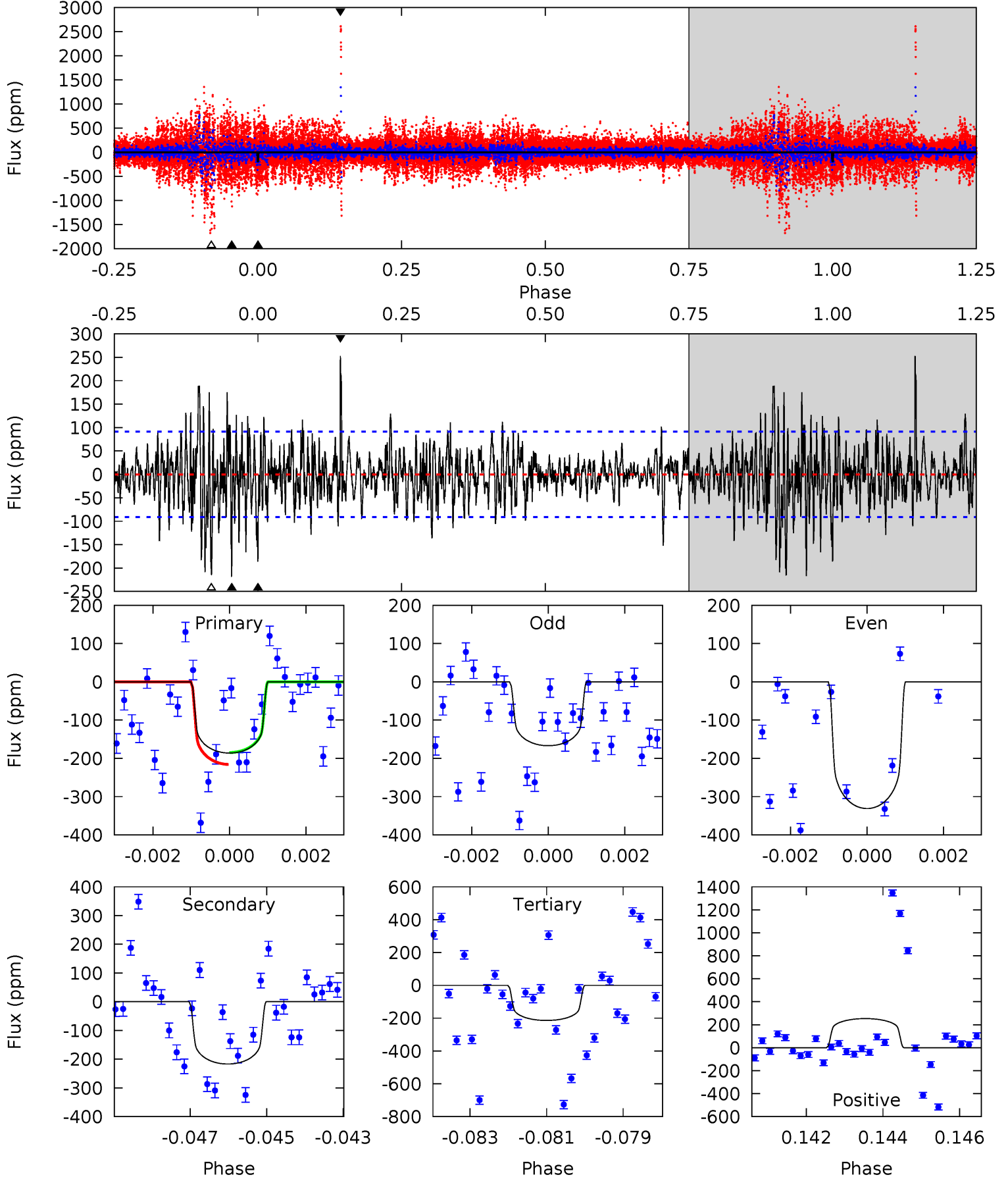
TCE 002576692-06 $P=354.951371$ Days $T_0=486.421176$ (BKJD)



DV Model-Shift Uniqueness Test

002576692-06, P = 354.967683 Days, E = 131.455310 Days

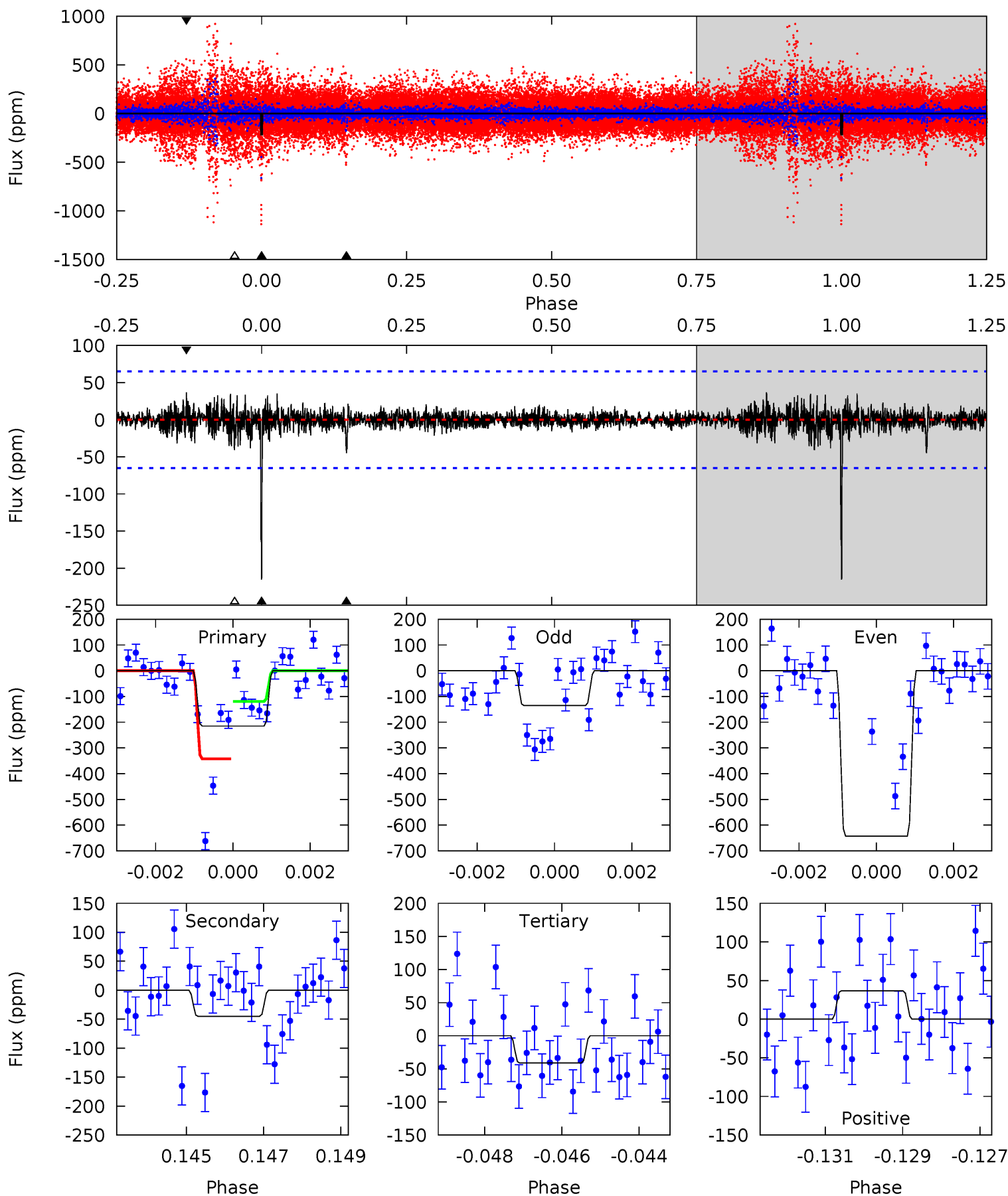
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
10.9	12.7	12.5	14.8	5.32	3.09	2.59	-1.64	-3.91	0.16	-2.11	3.40	1.05	0.54	0.92



Alt Model-Shift Uniqueness Test

002576692-06, P = 354.951371 Days, E = 131.469805 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
17.6	3.68	3.35	2.99	5.33	3.09	0.60	14.2	14.6	0.33	0.68	19.9	2.13	0.15	0



Stellar Parameters For KIC 002576692

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	5784^{+145}_{-131}	$3.985^{+0.308}_{-0.110}$	$-0.320^{+0.350}_{-0.200}$	$1.642^{+0.347}_{-0.520}$	$0.951^{+0.143}_{-0.091}$	$0.302^{+0.614}_{-0.116}$
	+3%/-2%	+8%/-3%	+109%/-62%	+21%/-32%	+15%/-10%	+203%/-38%
Source	PHO1	FLK73	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 002576692-06 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-217 ± 17	$2.48^{+0.62}_{-0.66}$	457^{+27}_{-39}	5824^{+797}_{-506}	18336^{+16205}_{-6572}
Alt.	-45 ± 12	$2.43^{+0.74}_{-0.63}$	458^{+27}_{-40}	4216^{+458}_{-402}	3856^{+3534}_{-1792}

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

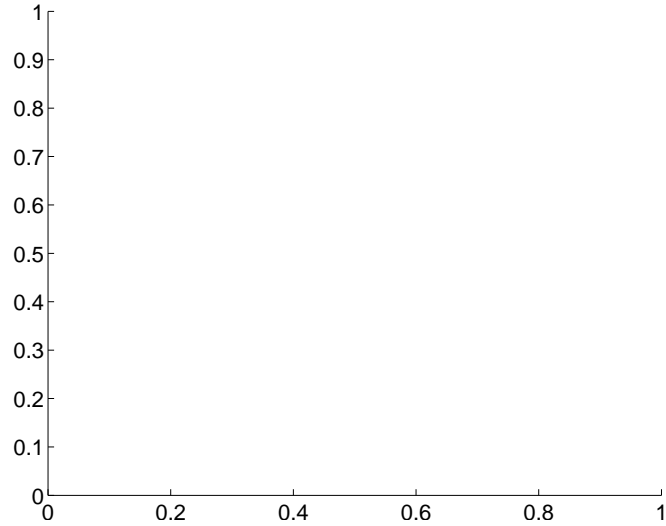
Supplemental centroid analysis for 002576692-06. Kepler magnitude: 12.74. Transit SNR 5.54

There are 0 quarters with good PRF difference image offsets

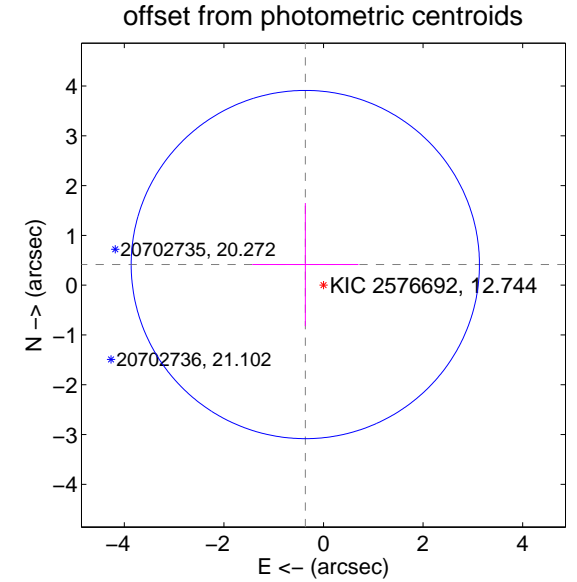
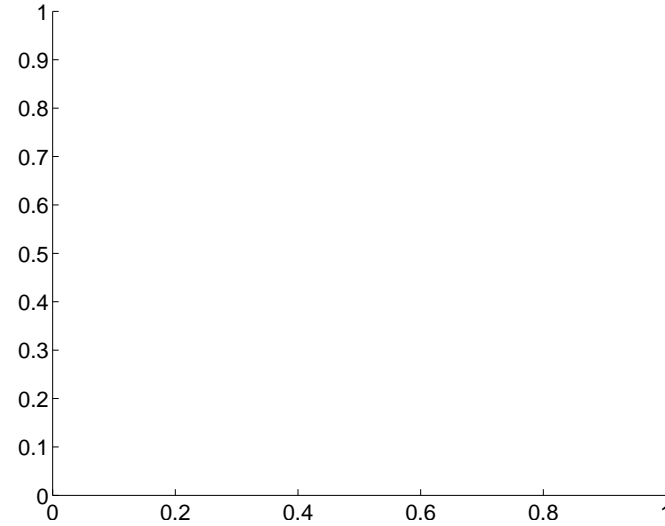
The direct PRF centroid is offset from the target star catalog position by about NaN arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	—	—	—	—
PRF-fit source offset from KIC position	—	—	—	—
photometric centroid source offset	0.55 ± 1.17	0.47	0.37 ± 1.07	0.41 ± 1.24

There is no PRF-fit offset from OOT-fit



There is no PRF-fit offset from KIC

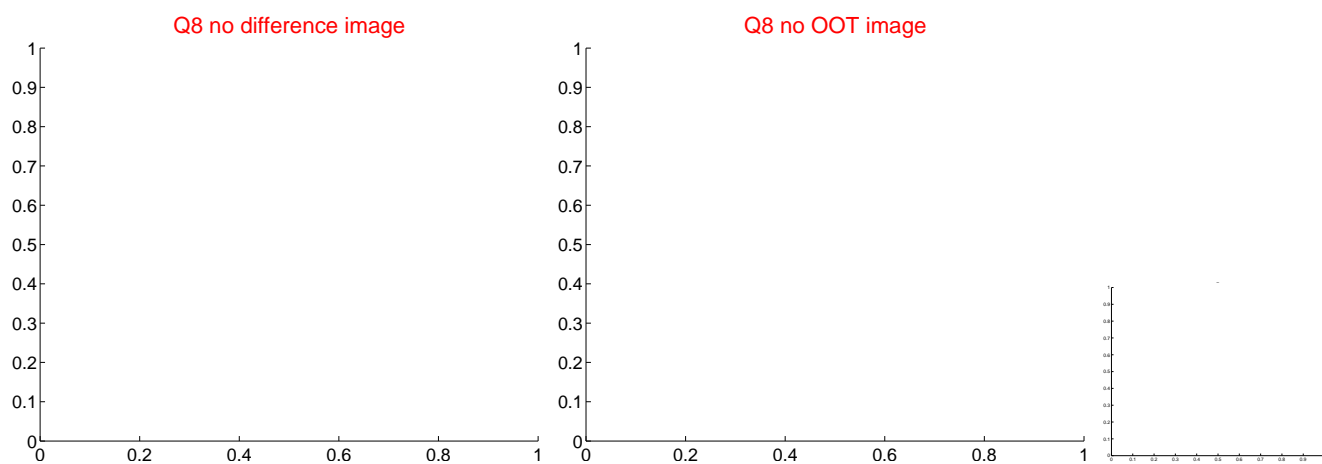
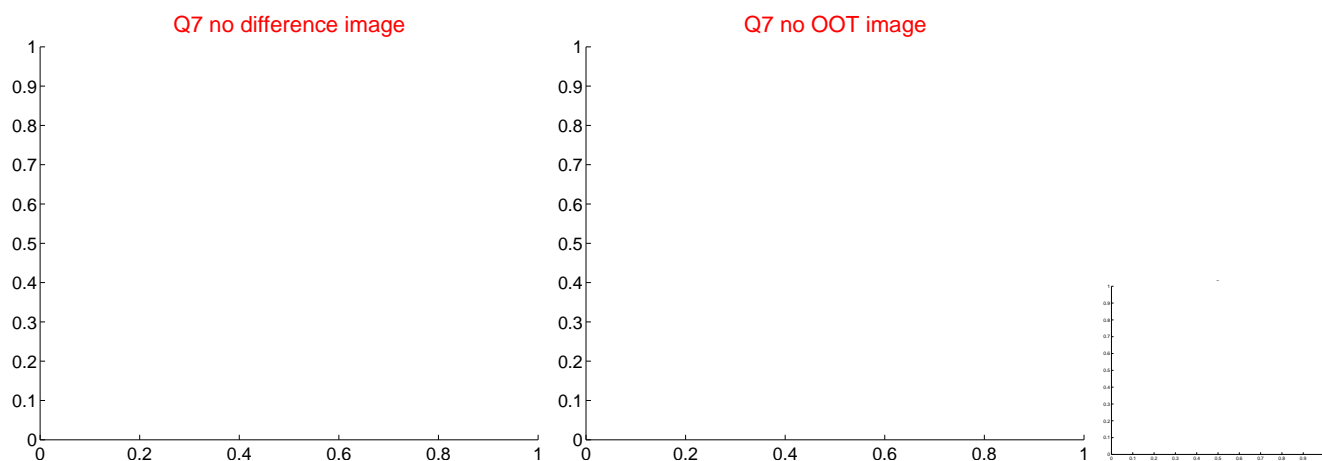
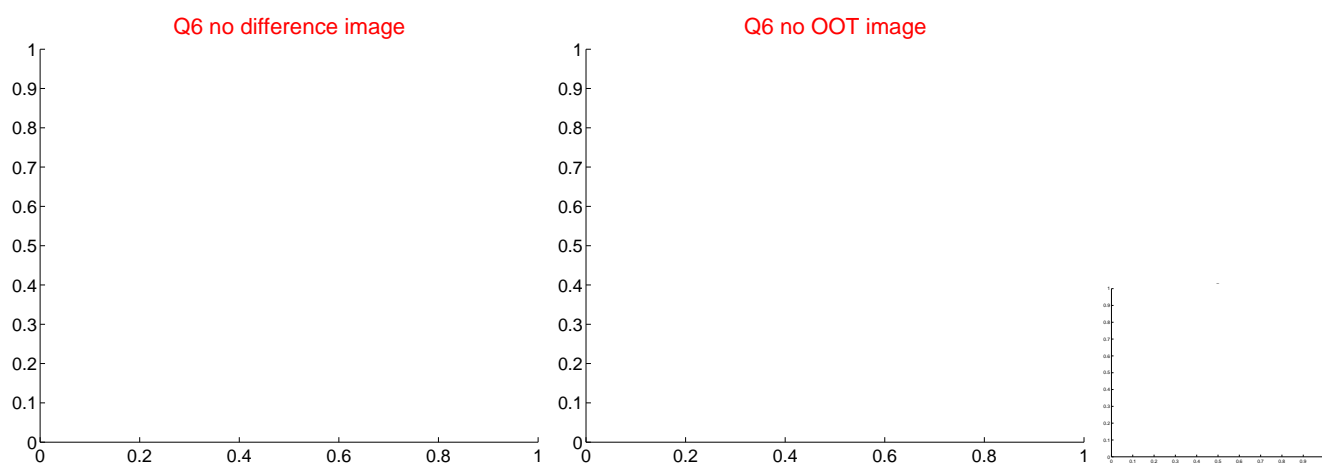
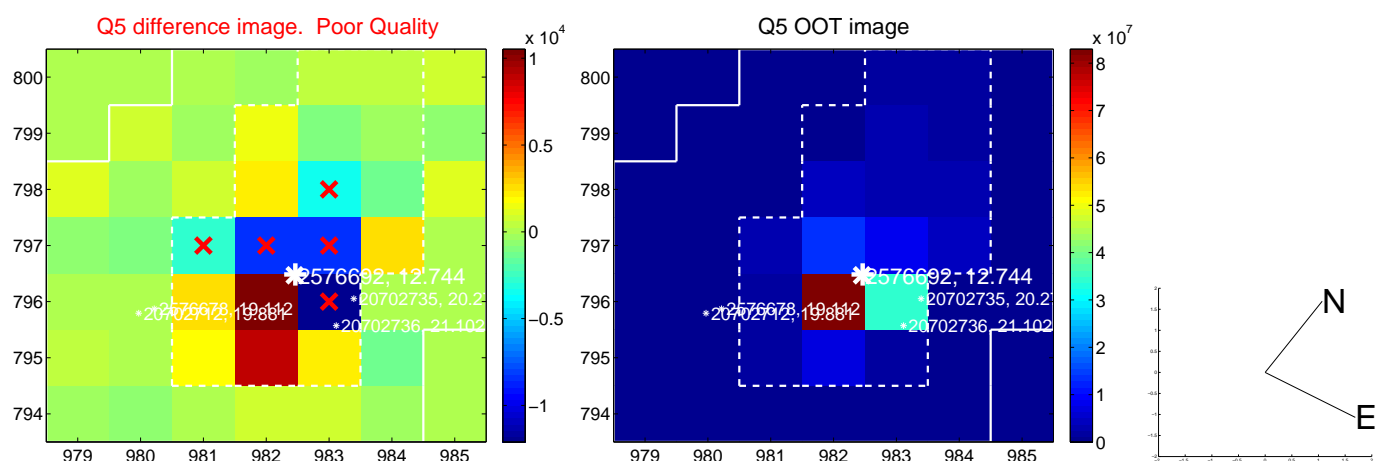


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

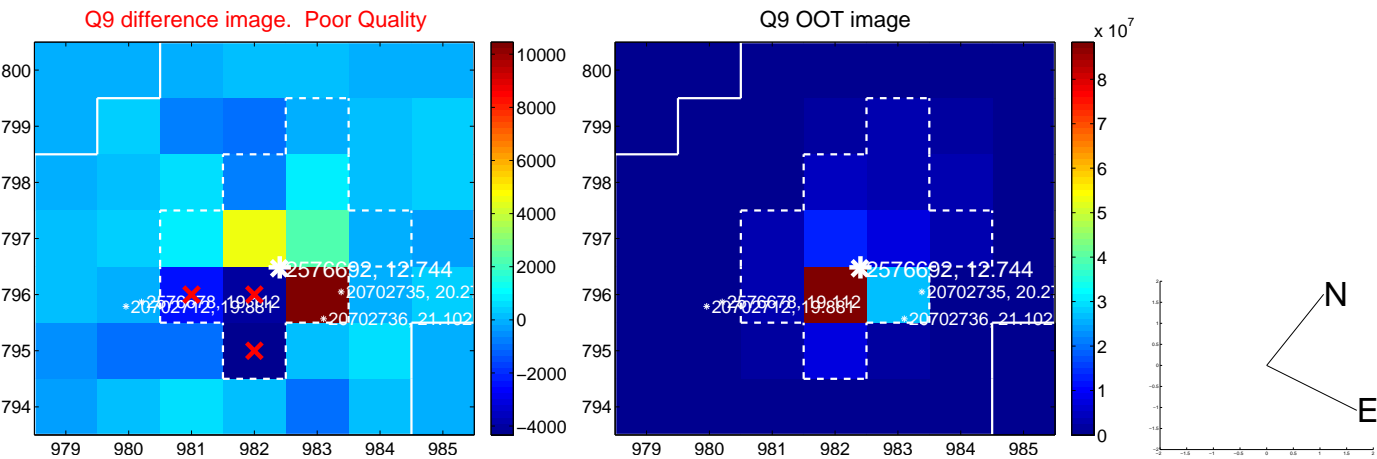
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



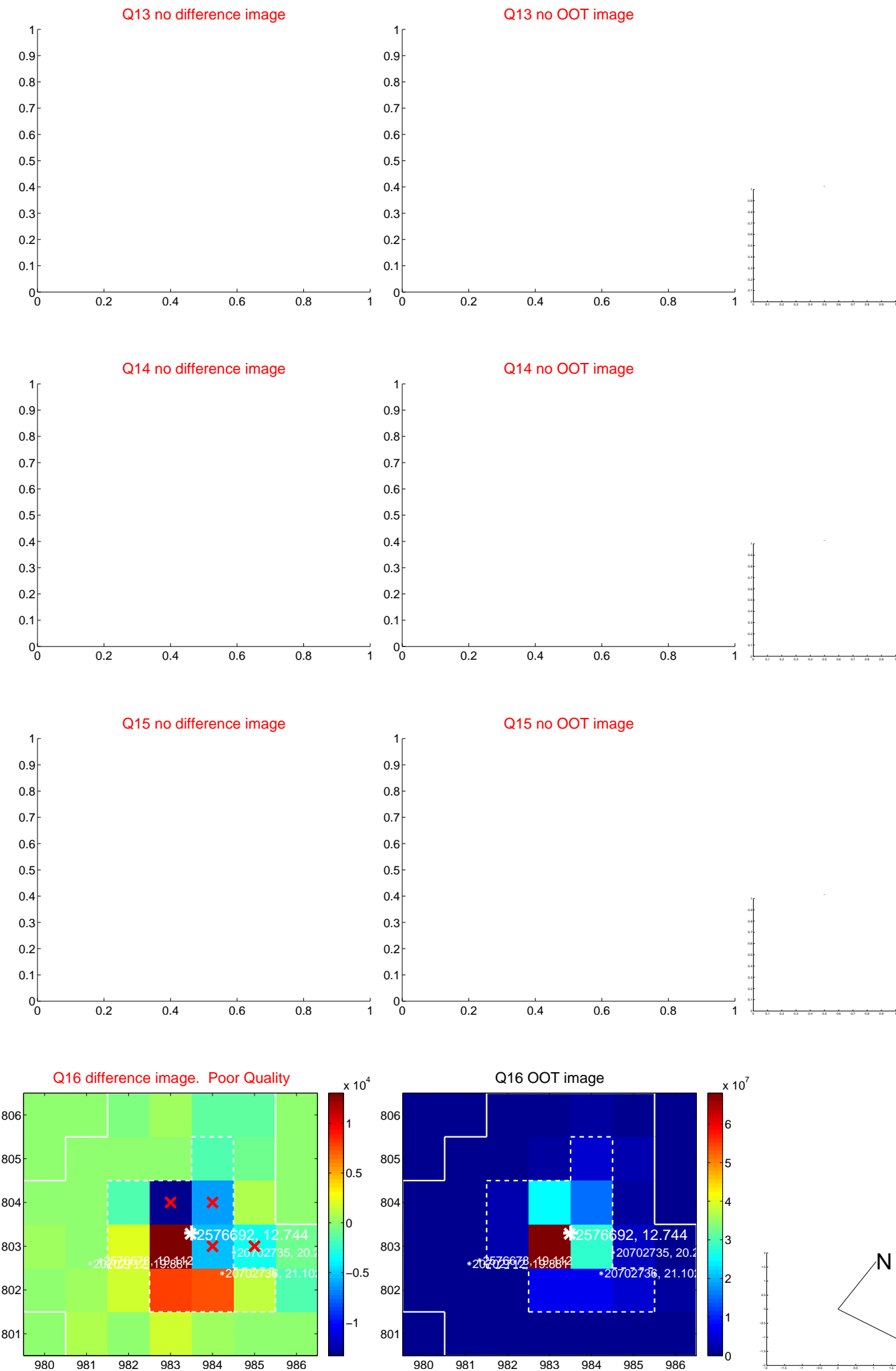
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value



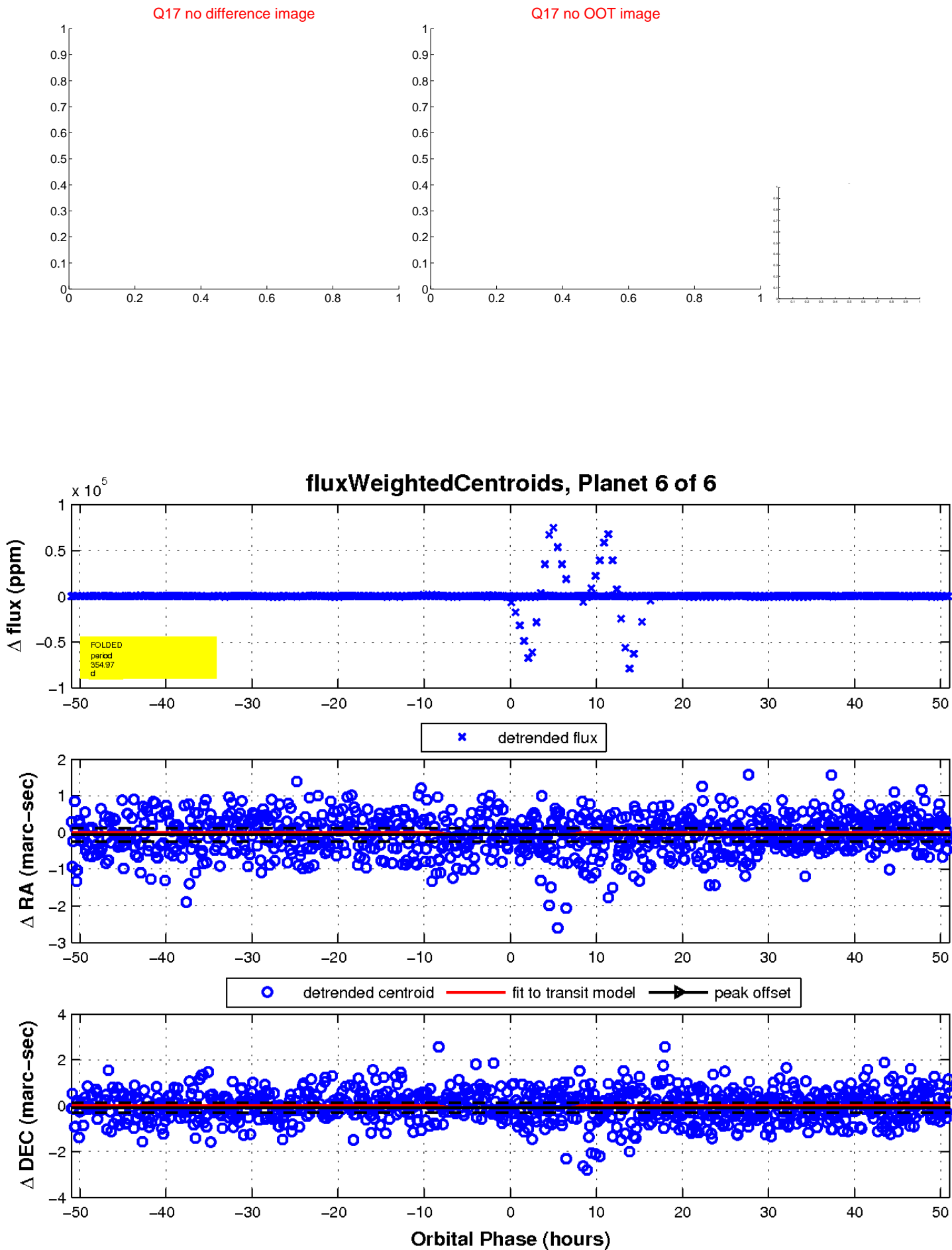
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

Declination

