

KIC 005786154

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})
005786154-01	OBS	No	197.912651	133.418126	915.9	15.000	56.5	-1.0	7.90	4611	22.89	59.77
005786154-02	OBS	No	197.912651	327.959240	1033.7	15.000	55.6	-1.0	7.90	4611	24.32	59.77
005786154-03	OBS	No	197.926273	189.024654	297.4	15.000	17.2	-1.0	7.90	4611	13.04	59.76
005786154-04	OBS	No	197.916708	187.964422	22328.8	86.123	16.5	97.5	7.90	4611	115.07	59.76
005786154-05	OBS	No	197.920693	131.684026	69559.6	116.979	32.5	350.9	7.90	4611	200.31	59.76

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
005786154-01	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—CENT_NOFITS
005786154-02	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—SAME_NTL_PERIOD—CENT_NOFITS
005786154-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_MARSHALL—LPP_DV—LPP_ALT—SAME_NTL_PERIOD—CENT_NOFITS
005786154-04	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_MARSHALL—MOD_TER_DV—SAME_NTL_PERIOD
005786154-05	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—SAME_NTL_PERIOD—CENT_FEW_DIFFS

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

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

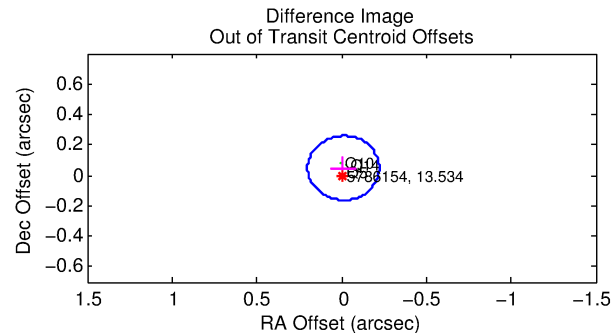
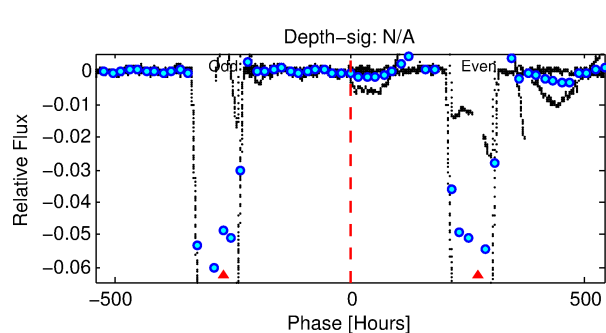
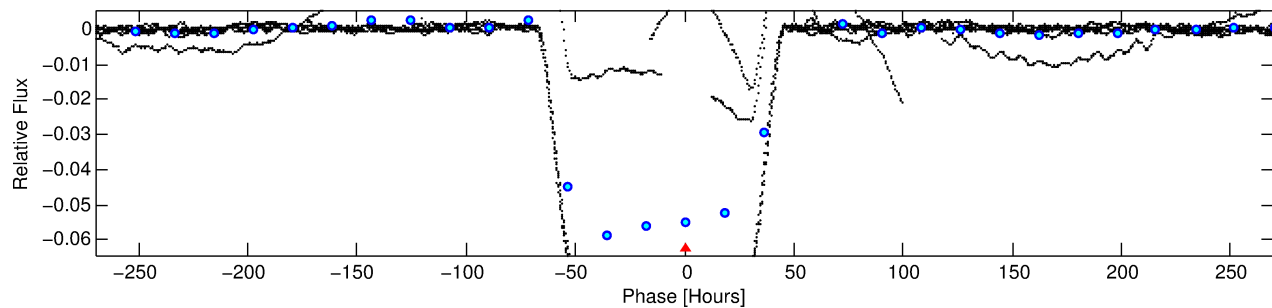
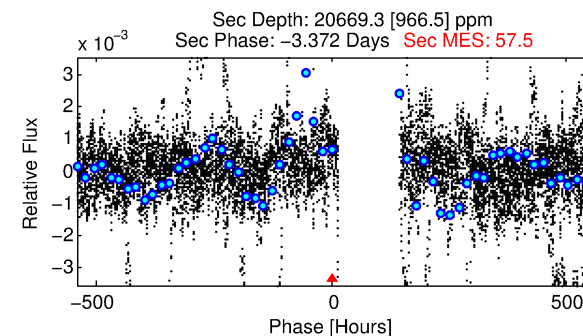
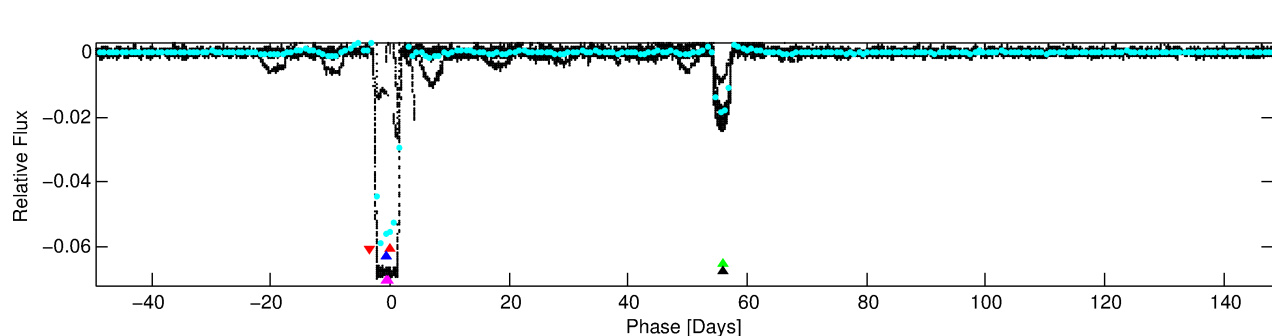
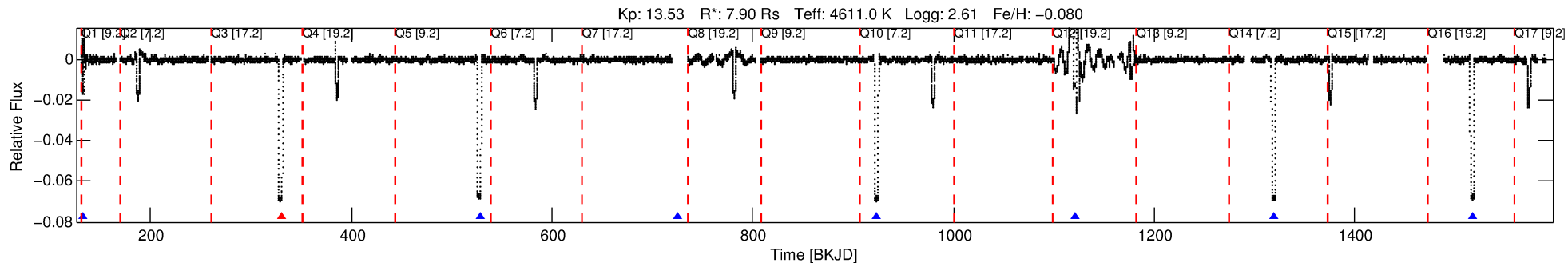
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 005786154-01

No Significant Match Found

DV One-Page Summary

KIC: 5786154 Candidate: 1 of 5 Period: 197.913 d



TPS TCE Results:

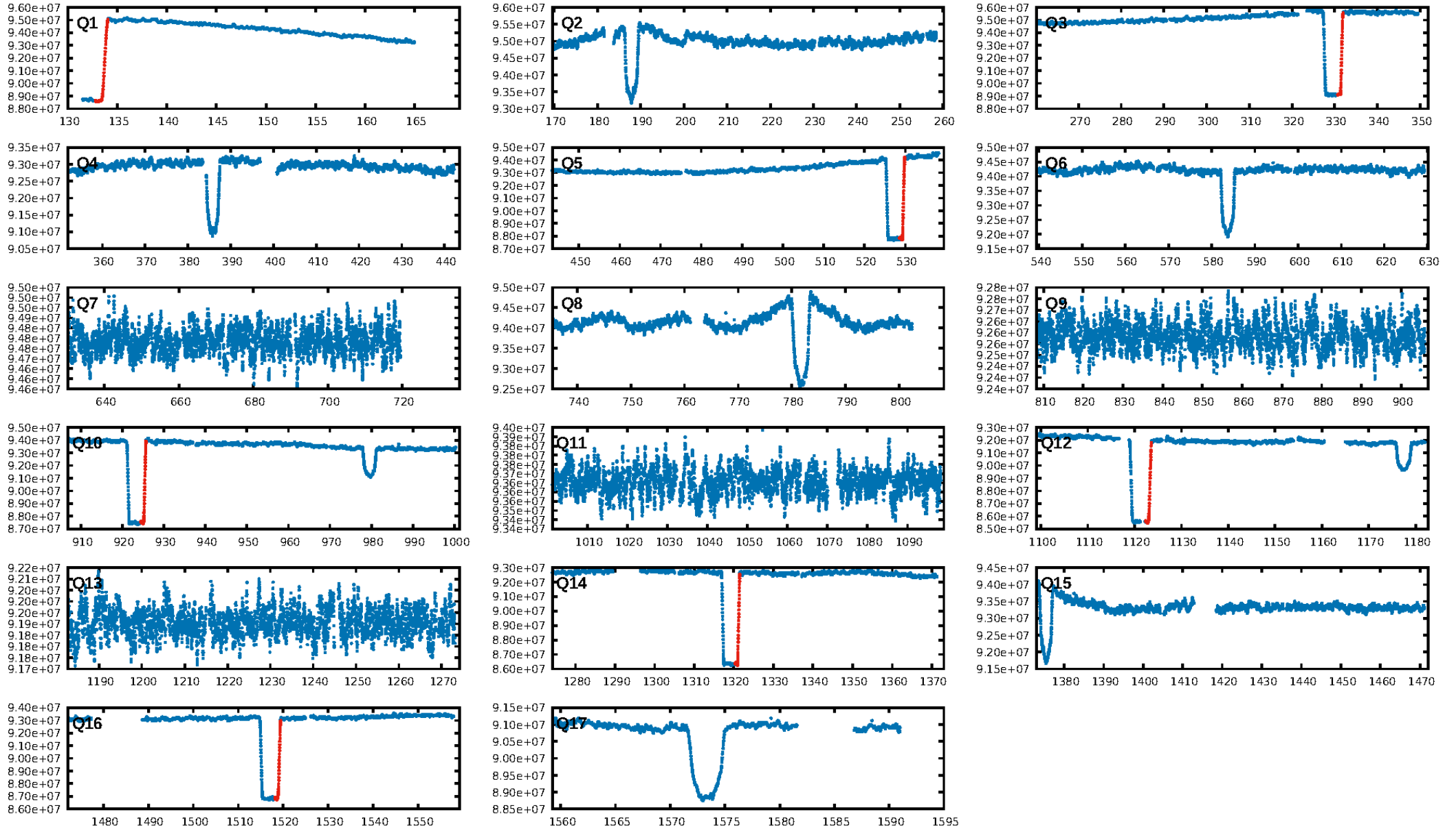
Period = 197.91265 d
Epoch = 133.4181 BKJD

DV fit results are unavailable

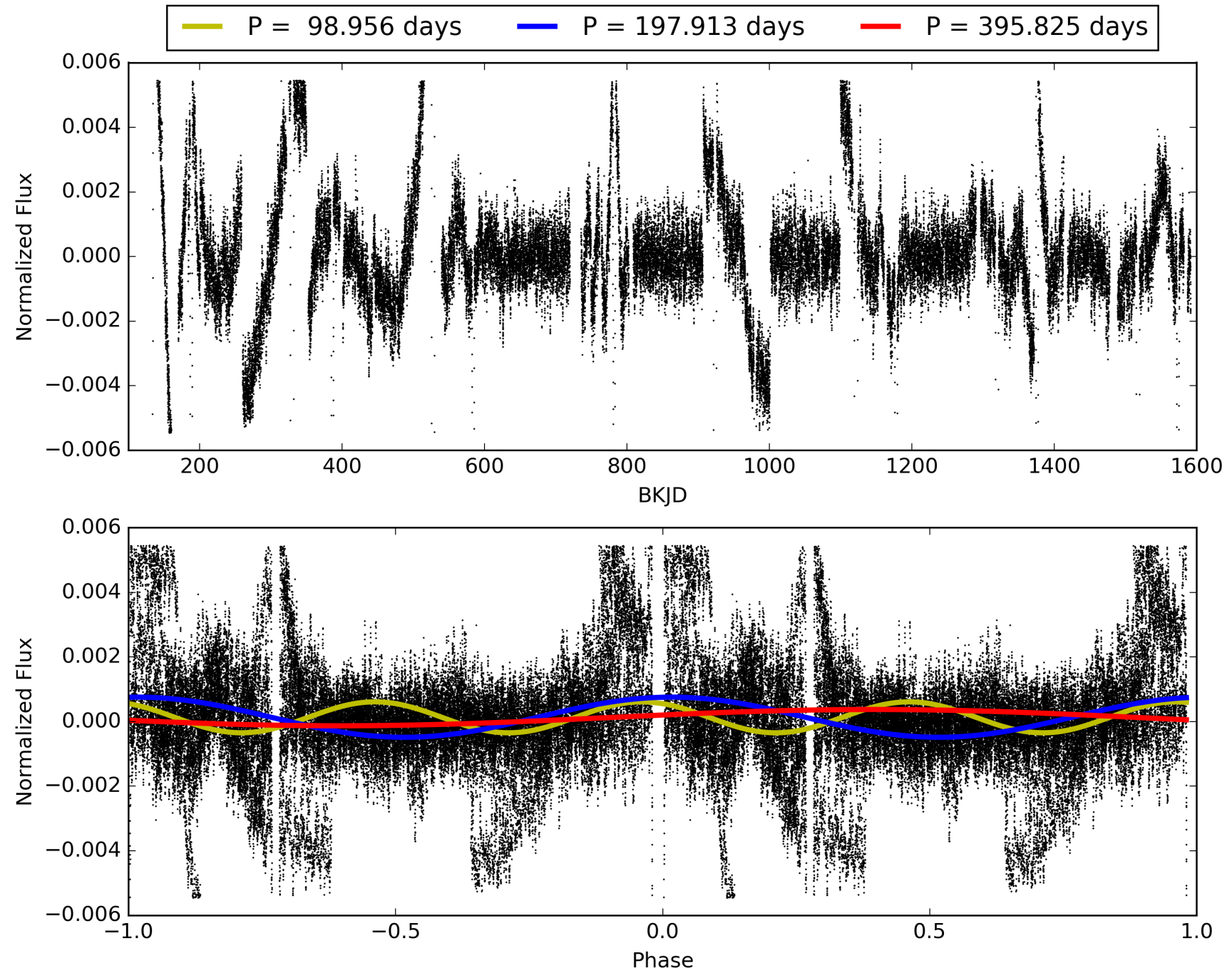
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: 0.0% [0.00σ]
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 0.00e+00
RollingBand-fgt: 0.83 [5/6]
GhostDiagnostic-chr: 0.3788
Centroid-sig: 0.0%
Centroid-so: 0.225 arcsec [14.45σ]
OotOffset-rm: 0.050 arcsec [0.71σ]
KicOffset-rm: 0.106 arcsec [1.39σ]
OotOffset-st: 2/0/0/1 [3]
KicOffset-st: 2/0/0/1 [3]
DiffImageQuality-fgm: 1.00 [3/3]
DiffImageOverlap-fno: 0.00 [0/3]

TCE 005786154-01, PDC Light Curves

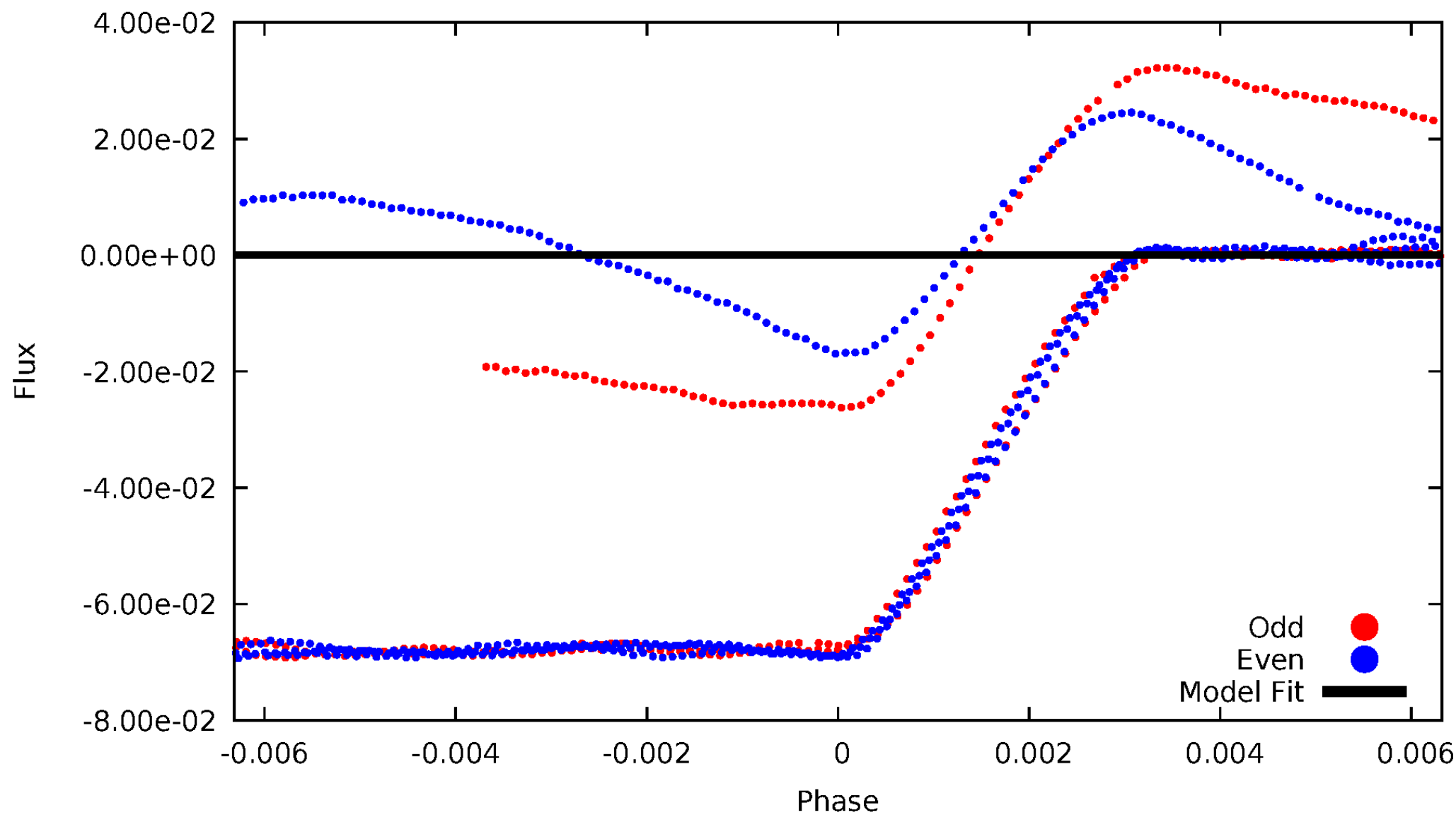


TCE 005786154-01



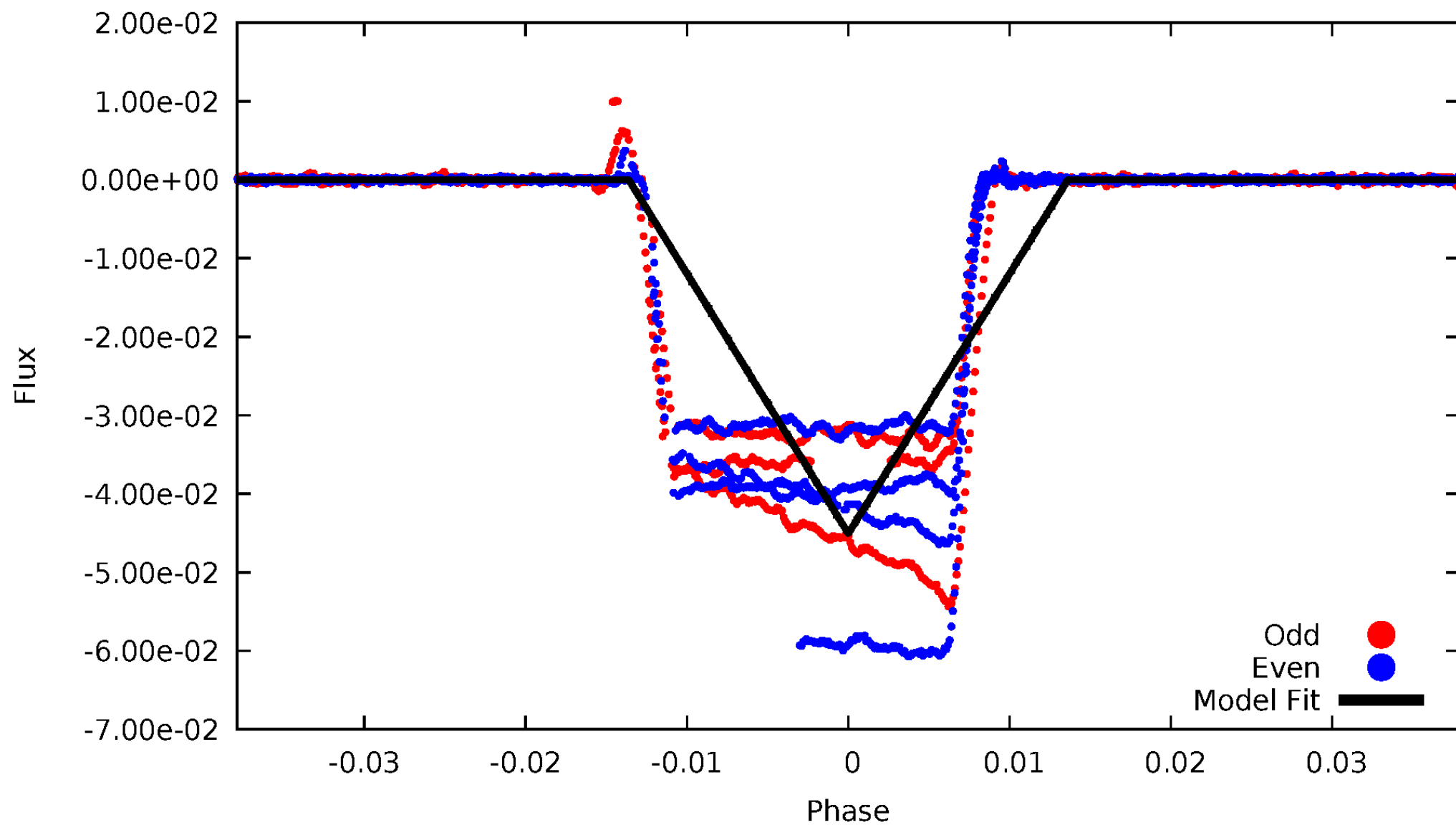
DV Odd/Even

TCE 005786154-01

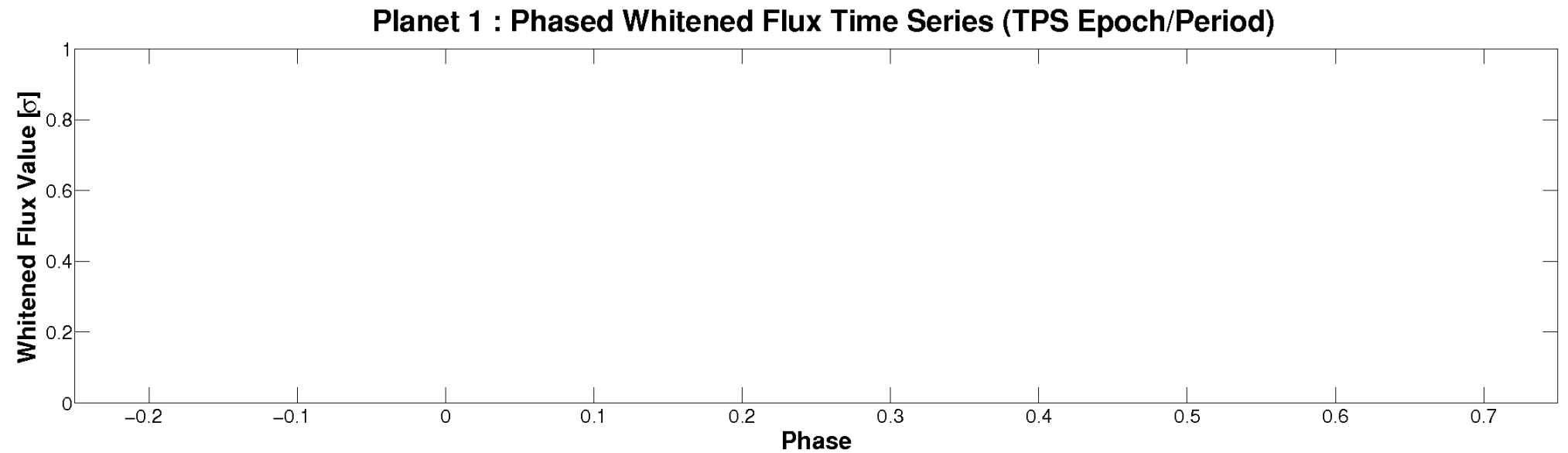
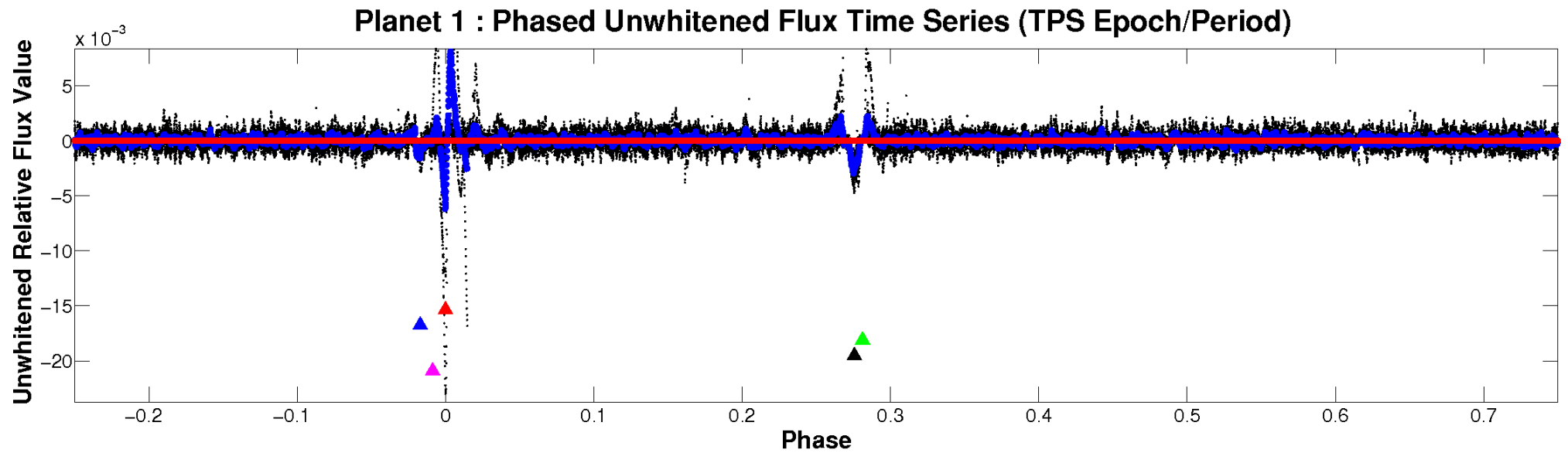


ALT Odd/Even

TCE 005786154-01

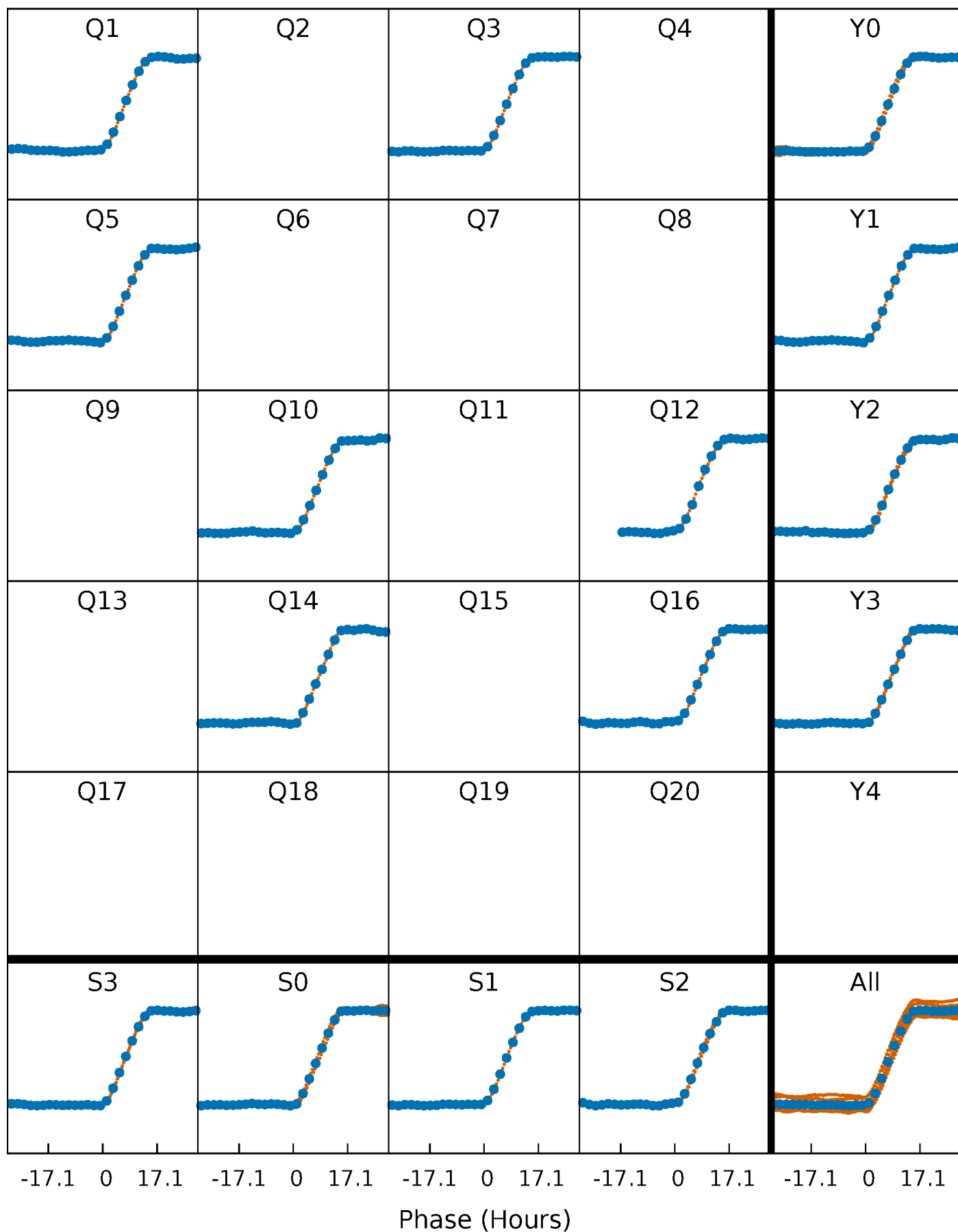


Non-Whitened Vs. Whitened Light Curve



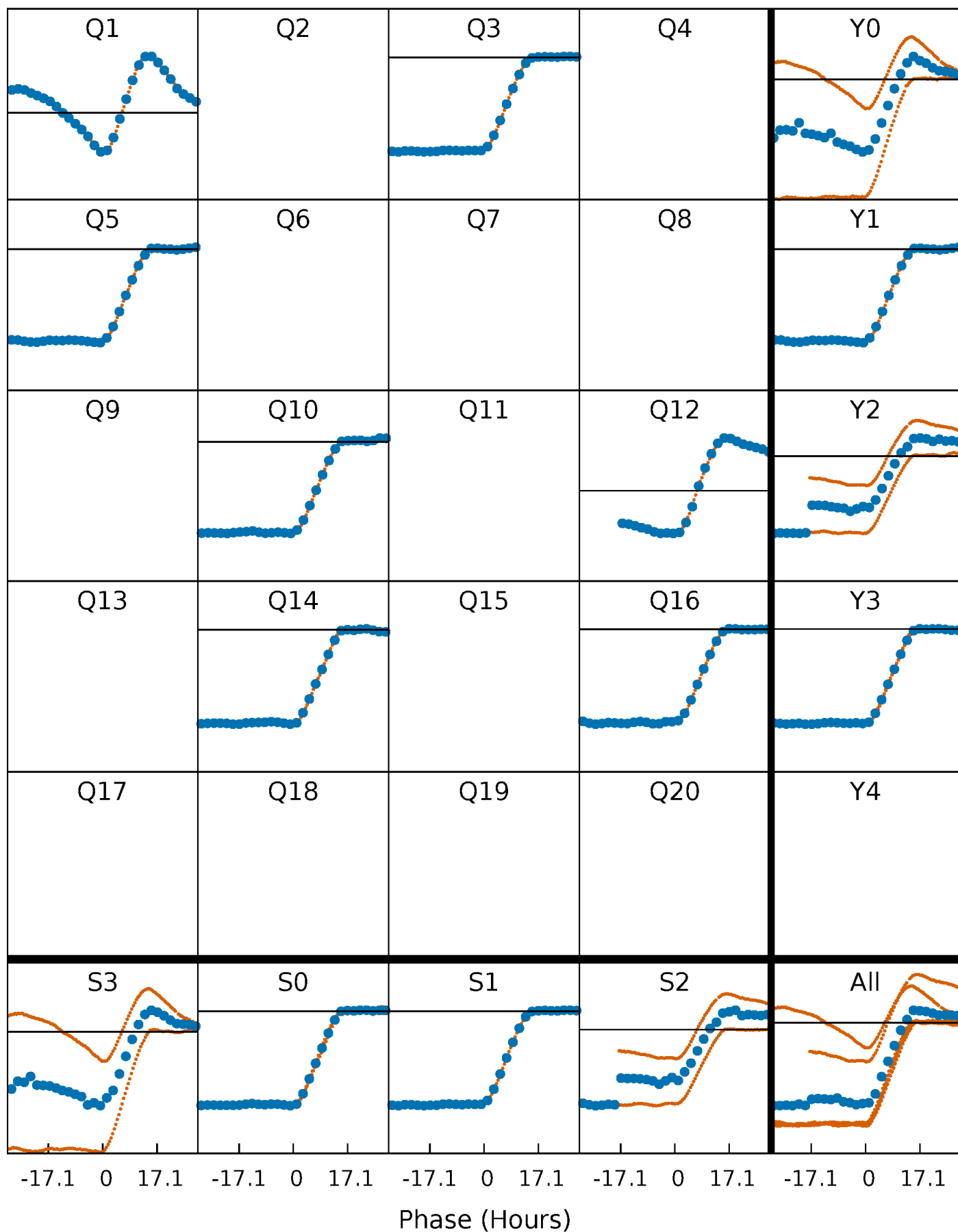
PDC Quarter-Phased Transit Curves

TCE 005786154-01 P=197.912651 Days $T_0=133.418126$ (BKJD)



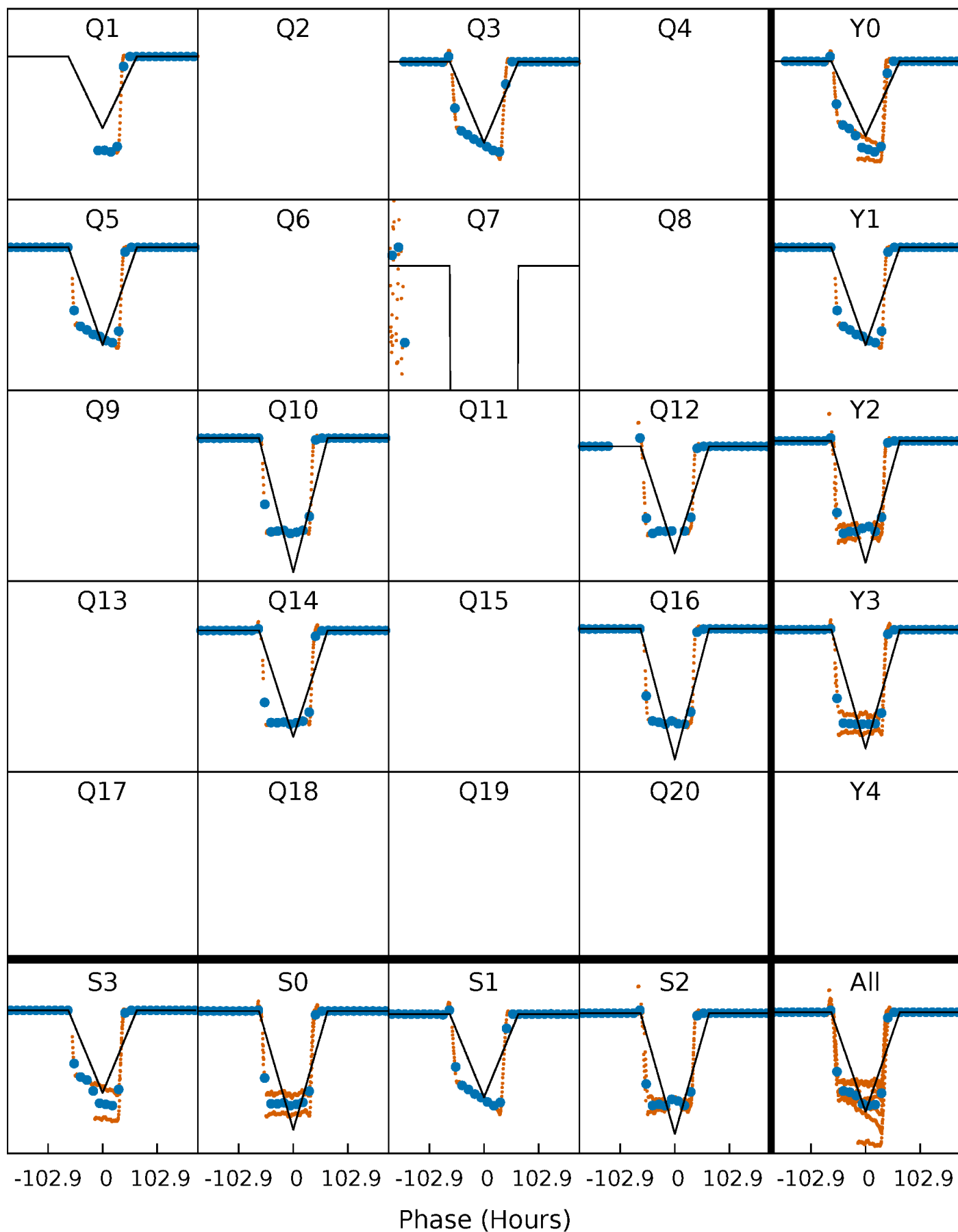
DV Quarter-Phased Transit Curves

TCE 005786154-01 P=197.912651 Days $T_0=133.418126$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

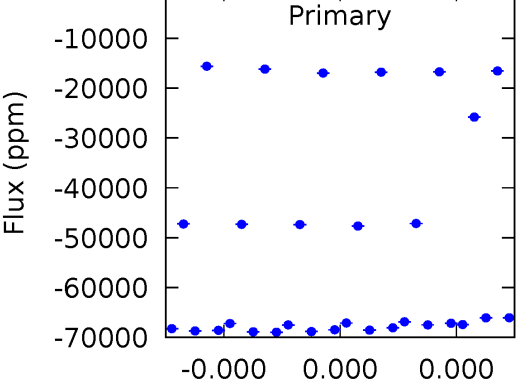
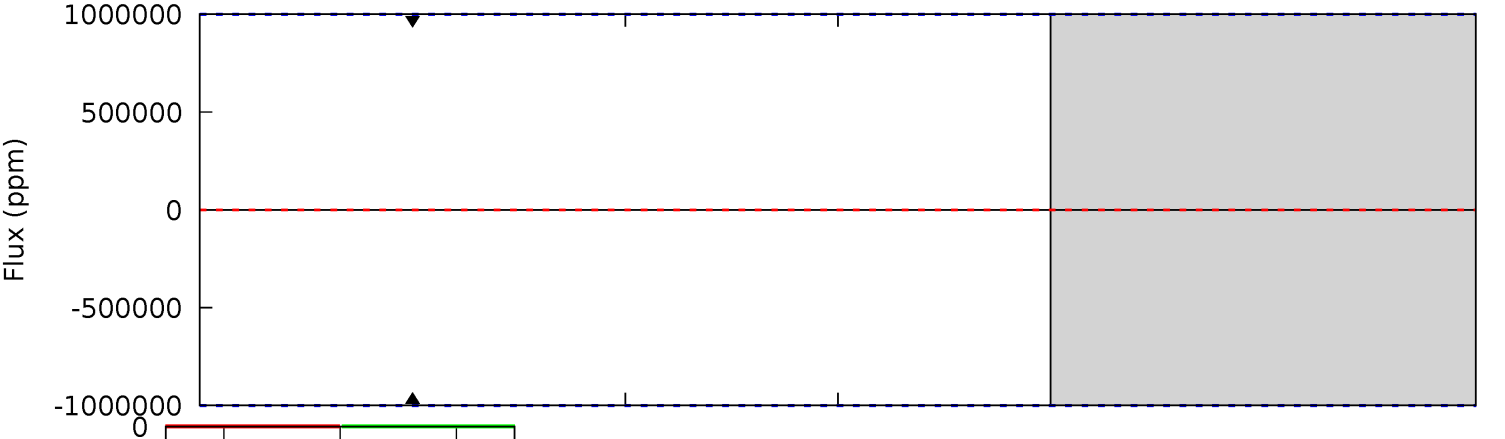
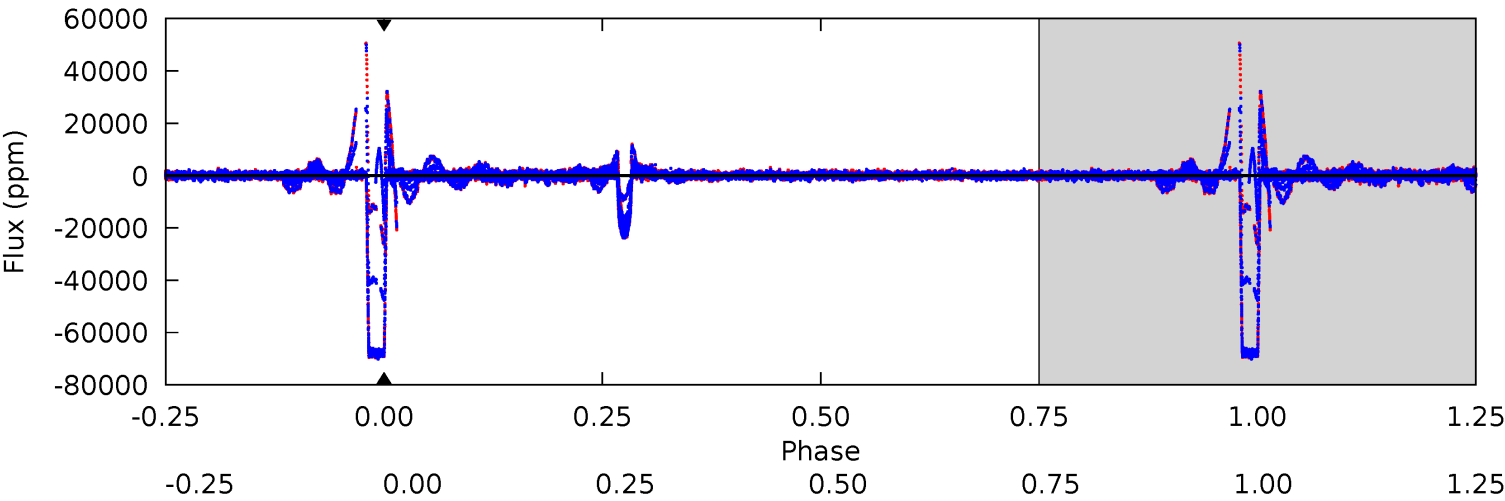
TCE 005786154-01 P=197.912651 Days $T_0=132.169948$ (BKJD)



DV Model-Shift Uniqueness Test

005786154-01, P = 197.912651 Days, E = 133.418126 Days

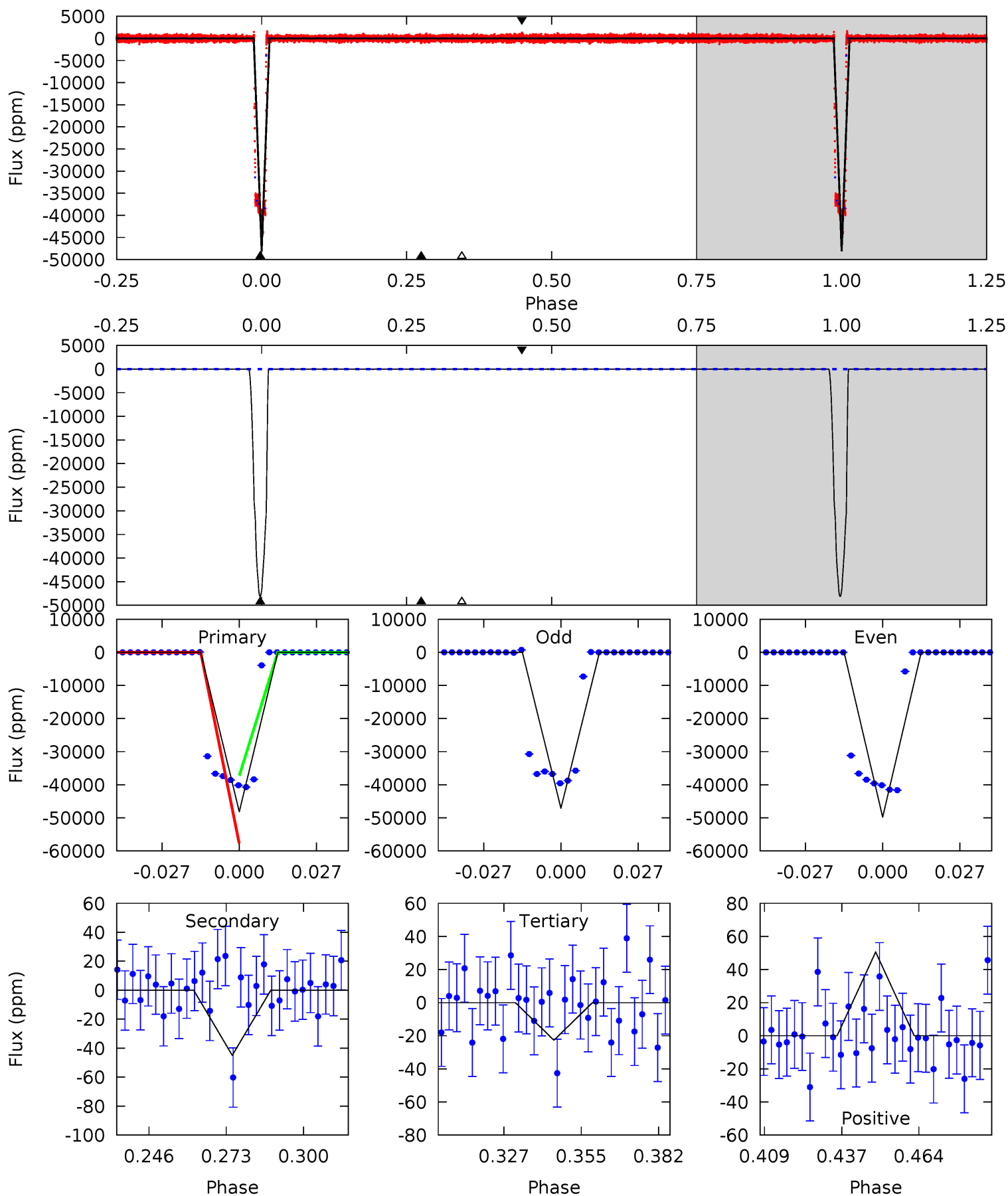
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
0	0	0	0	1.00	1.00	1.00	0	0	0	0	0	0	0	0



Alt Model-Shift Uniqueness Test

005786154-01, P = 197.912651 Days, E = 132.169948 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
4824	4.50	2.27	5.07	4.83	2.21	0.78	4821	4818	2.23	-0.56	153.5	0.99	0.00	0



Stellar Parameters For KIC 005786154

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	4611^{+69}_{-48}	$2.614^{+0.120}_{-0.120}$	$-0.080^{+0.150}_{-0.100}$	$7.898^{+2.660}_{-0.887}$	$0.935^{+0.427}_{-0.022}$	$0.003^{+0.001}_{-0.001}$
	+1%/-1%	+5%/-5%	+188%/-125%	+34%/-11%	+46%/-2%	+47%/-44%
Source	SPE68	SPE68	SPE68	DSEP		

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

Secondary Eclipse Parameters for KIC 005786154-01 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	0 ± 1000000	$71.30^{+72.49}_{-46.20}$	986^{+55}_{-40}	-3241^{+15084}_{-7082}	$-40.801^{+9608.179}_{-6653.723}$
Alt.	-45 ± 10	$216.94^{+92.75}_{-88.84}$	984^{+56}_{-37}	-1592^{+3470}_{-159}	$0.228^{+0.476}_{-0.118}$

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 $A_{obs} \gg 1.0$

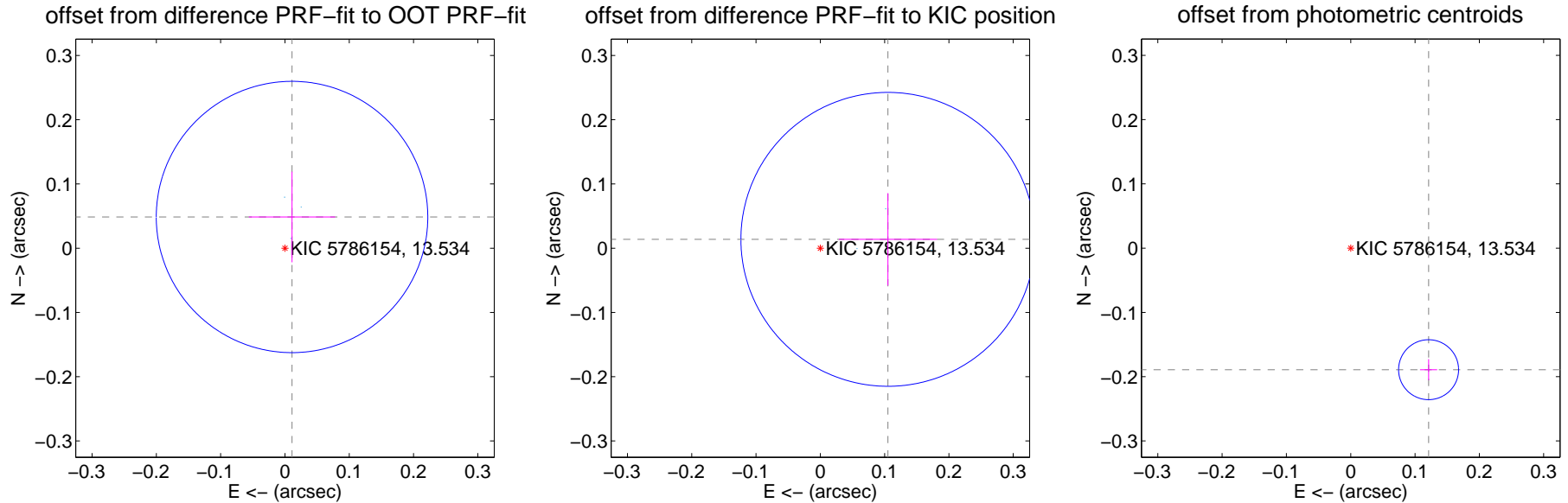
DV Centroid Data

Supplemental centroid analysis for 005786154-01. Kepler magnitude: 13.53. Transit SNR -1.00

There are 3 quarters with good PRF difference image offsets

The direct PRF centroid is offset from the target star catalog position by about 0.16 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.050 ± 0.070	0.71	-0.011 ± 0.067	0.049 ± 0.071
PRF-fit source offset from KIC position	0.106 ± 0.076	1.39	-0.105 ± 0.076	0.014 ± 0.072
photometric centroid source offset	0.22 ± 0.02	14.45	-0.12 ± 0.01	-0.19 ± 0.02

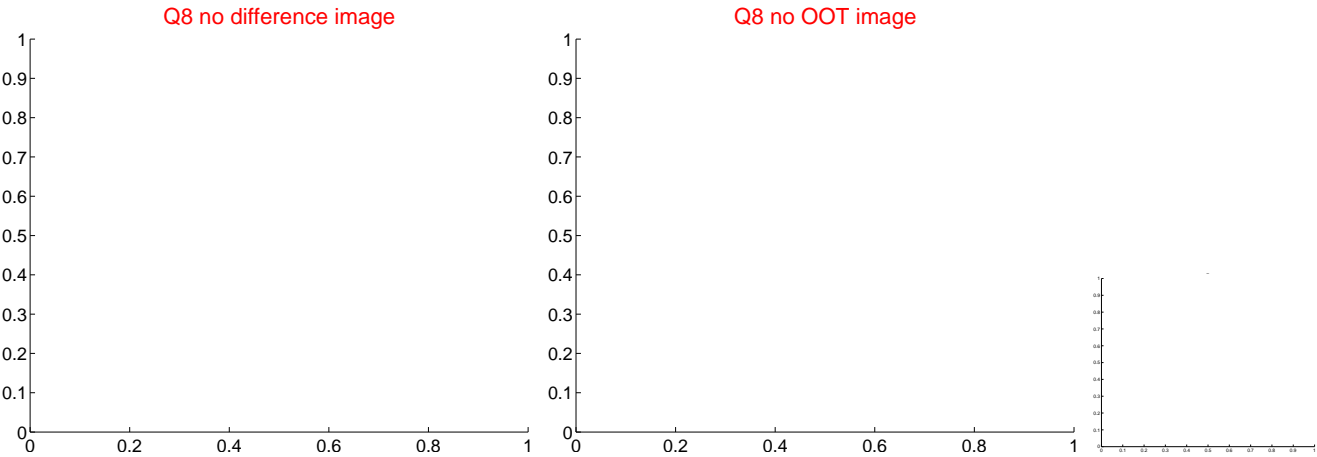
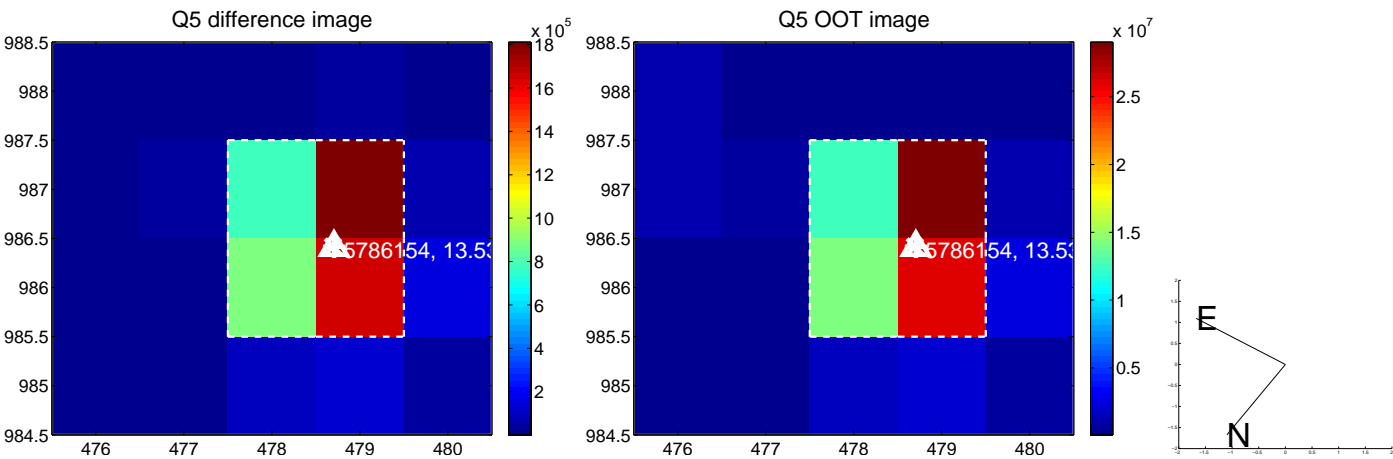


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

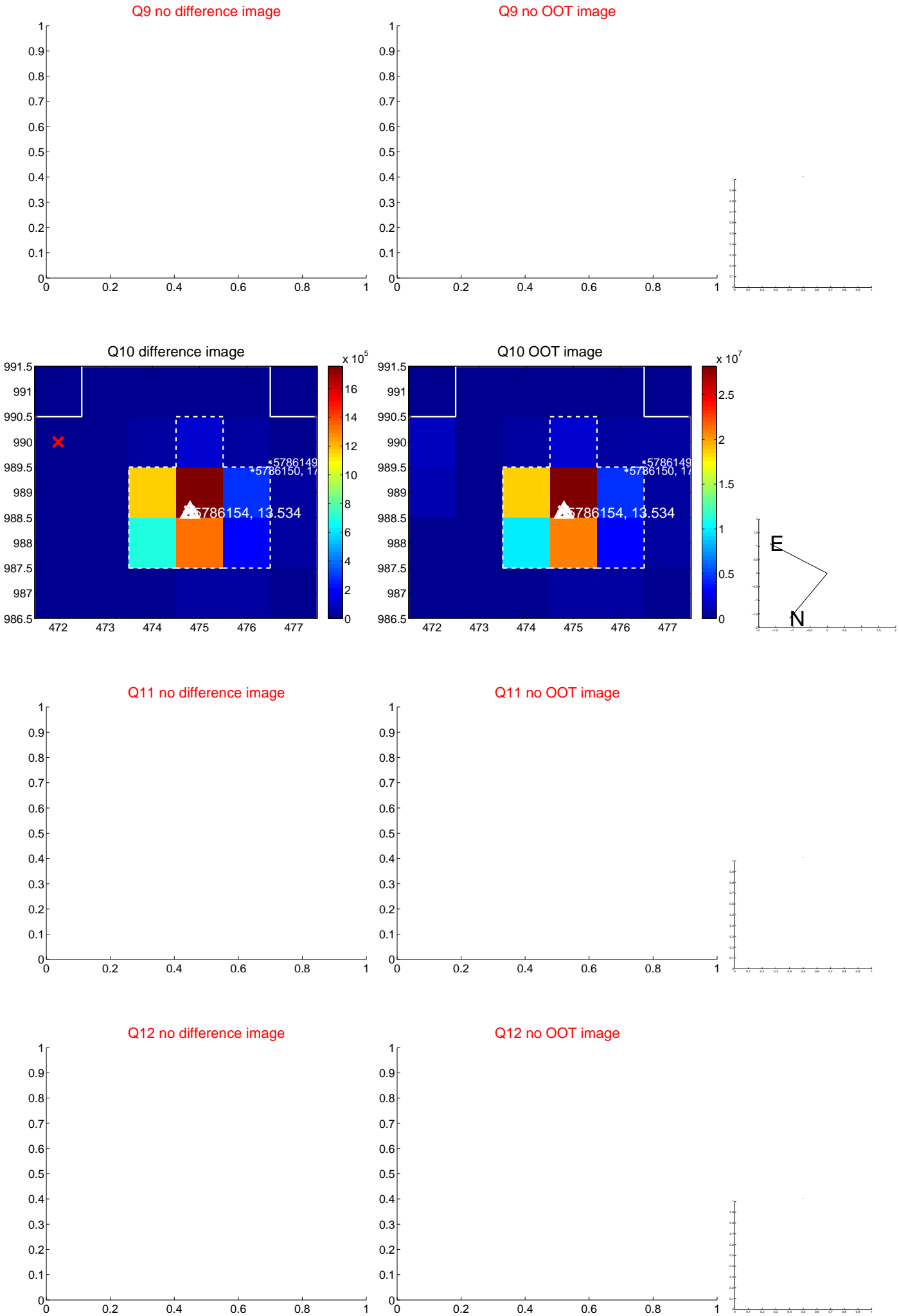
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

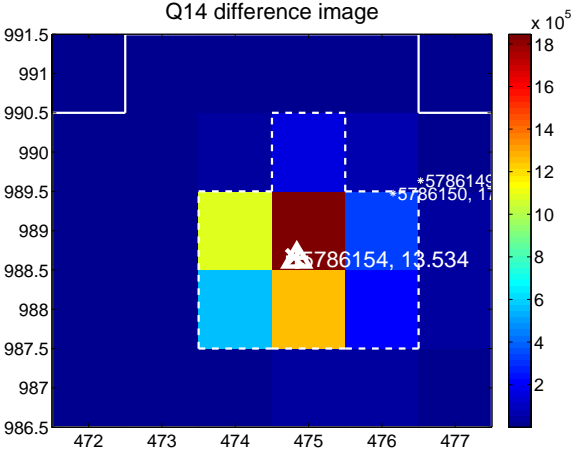
Q13 no difference image



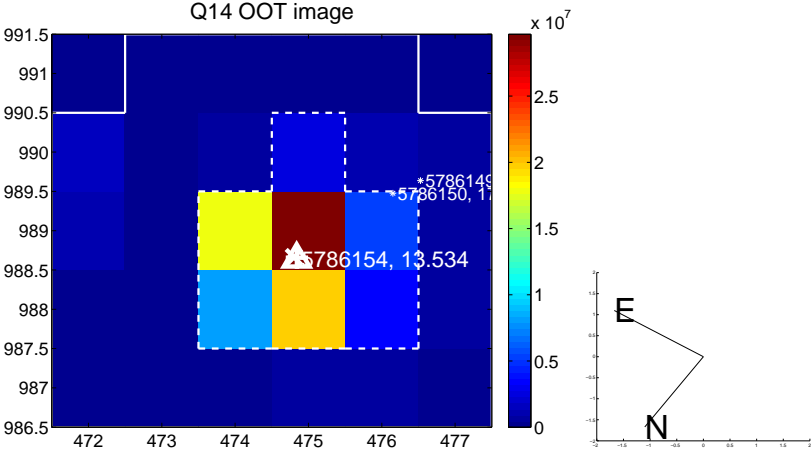
Q13 no OOT image



Q14 difference image



Q14 OOT image



Q15 no difference image



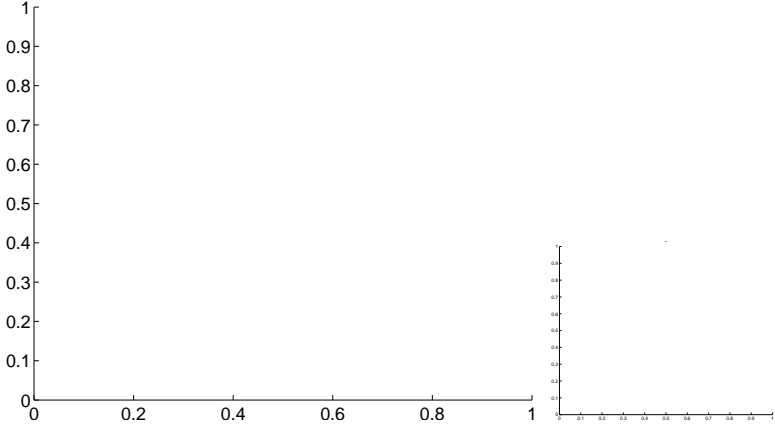
Q15 no OOT image



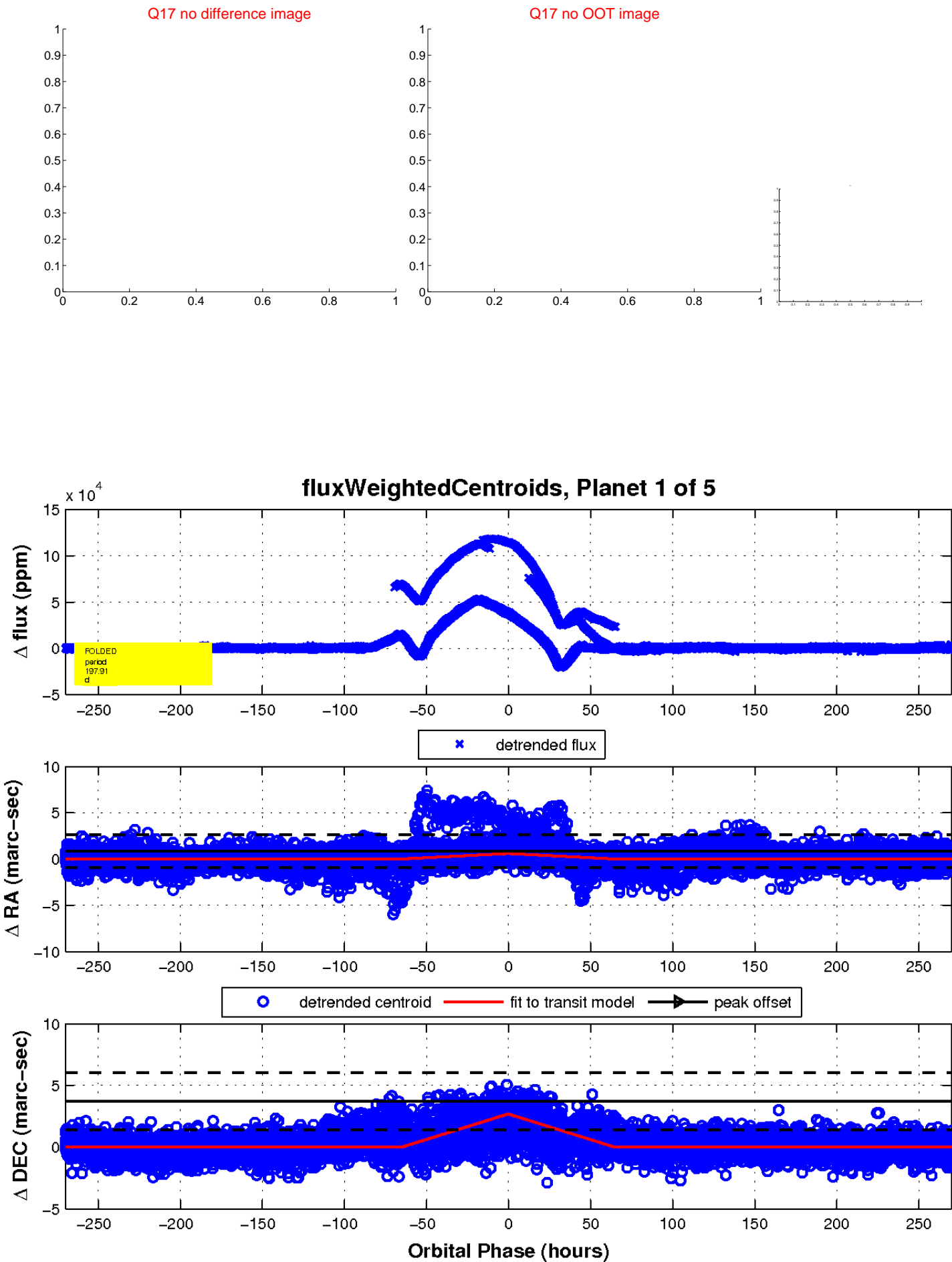
Q16 no difference image



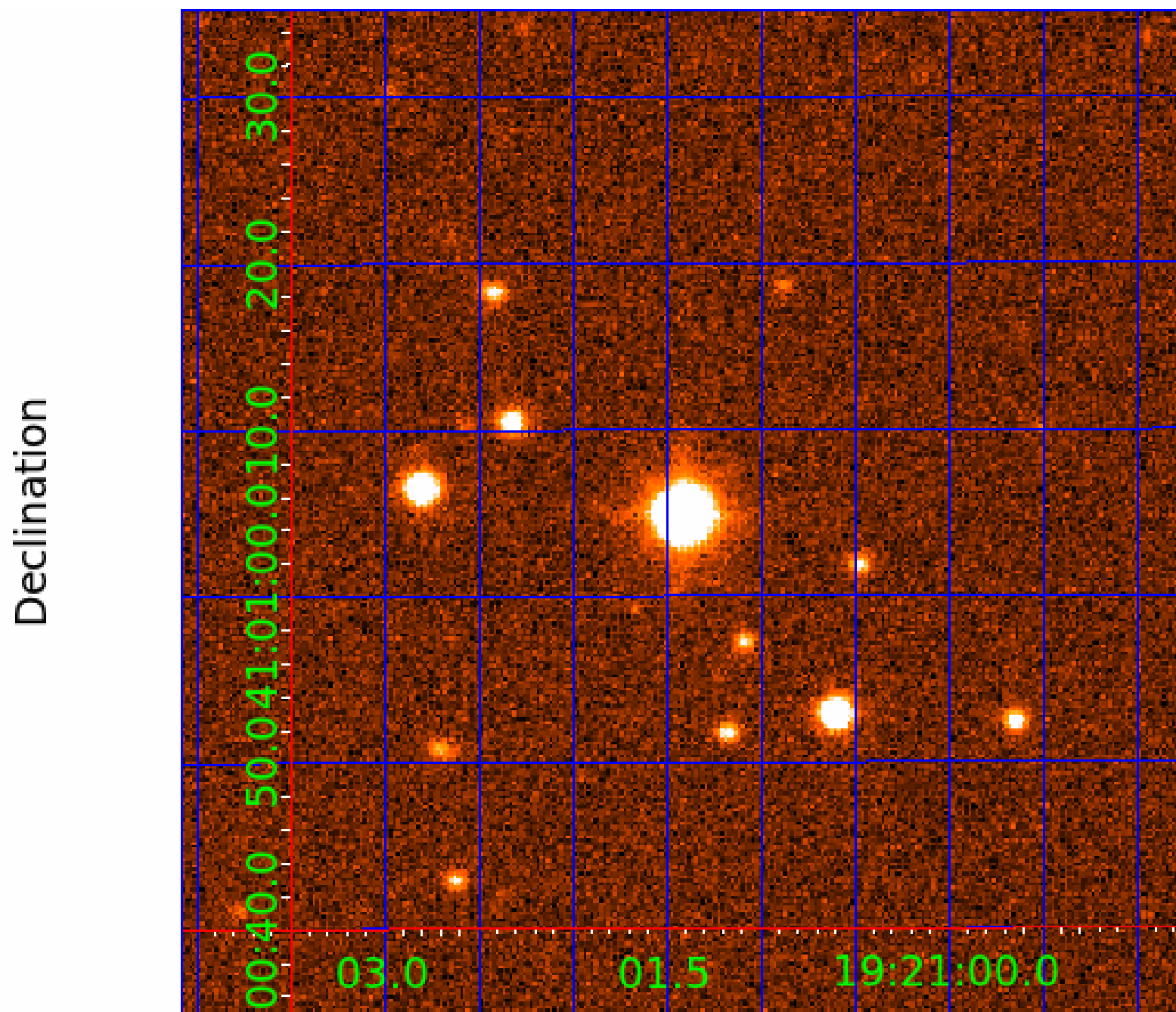
Q16 no OOT image



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



UKIRT Image



KIC 005786154

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})
005786154-01	OBS	No	197.912651	133.418126	915.9	15.000	56.5	-1.0	7.90	4611	22.89	59.77
005786154-02	OBS	No	197.912651	327.959240	1033.7	15.000	55.6	-1.0	7.90	4611	24.32	59.77
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005786154-05	OBS	No	197.920693	131.684026	69559.6	116.979	32.5	350.9	7.90	4611	200.31	59.76

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
005786154-01	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—CENT_NOFITS
005786154-02	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—SAME_NTL_PERIOD—CENT_NOFITS
005786154-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_MARSHALL—LPP_DV—LPP_ALT—SAME_NTL_PERIOD—CENT_NOFITS
005786154-04	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_MARSHALL—MOD_TER_DV—SAME_NTL_PERIOD
005786154-05	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—SAME_NTL_PERIOD—CENT_FEW_DIFFS

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

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

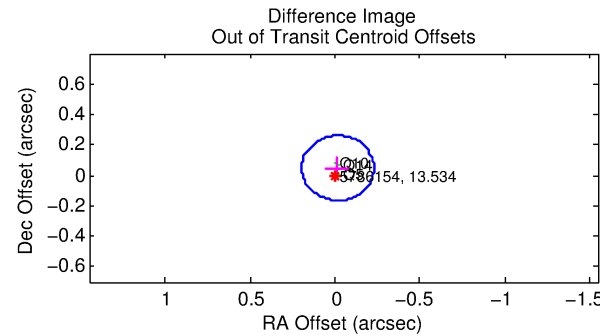
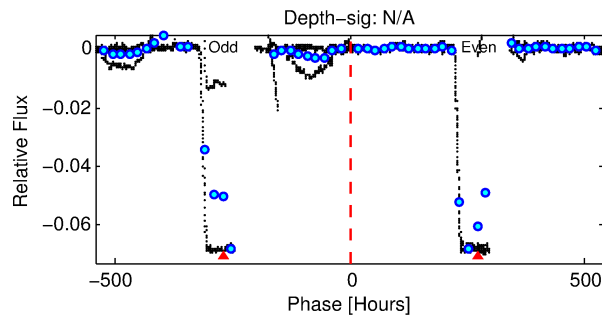
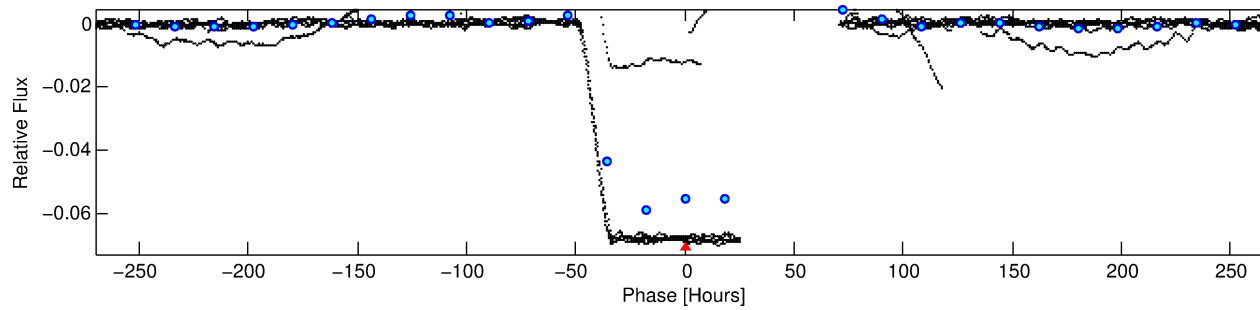
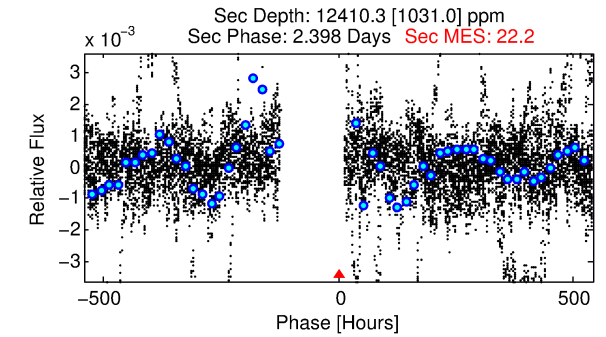
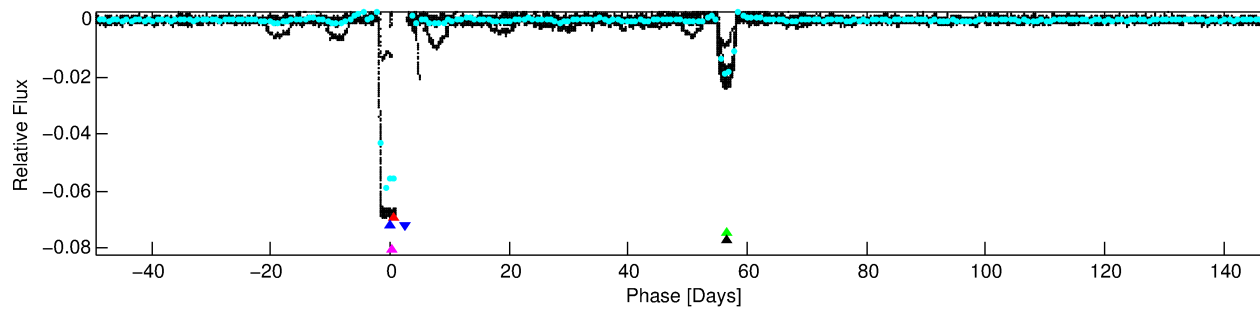
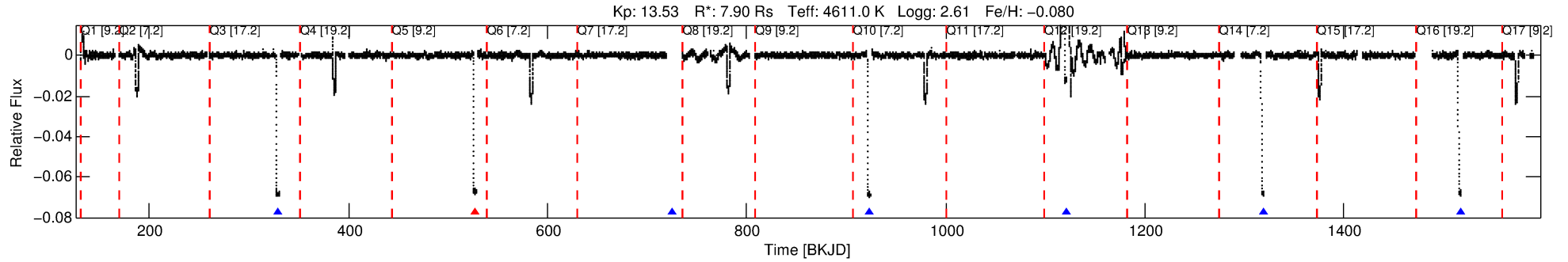
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 005786154-02

No Significant Match Found

DV One-Page Summary

KIC: 5786154 Candidate: 2 of 5 Period: 197.913 d



TPS TCE Results:

Period = 197.91265 d
Epoch = 327.9592 BKJD

DV fit results are unavailable

DV Diagnostic Results:

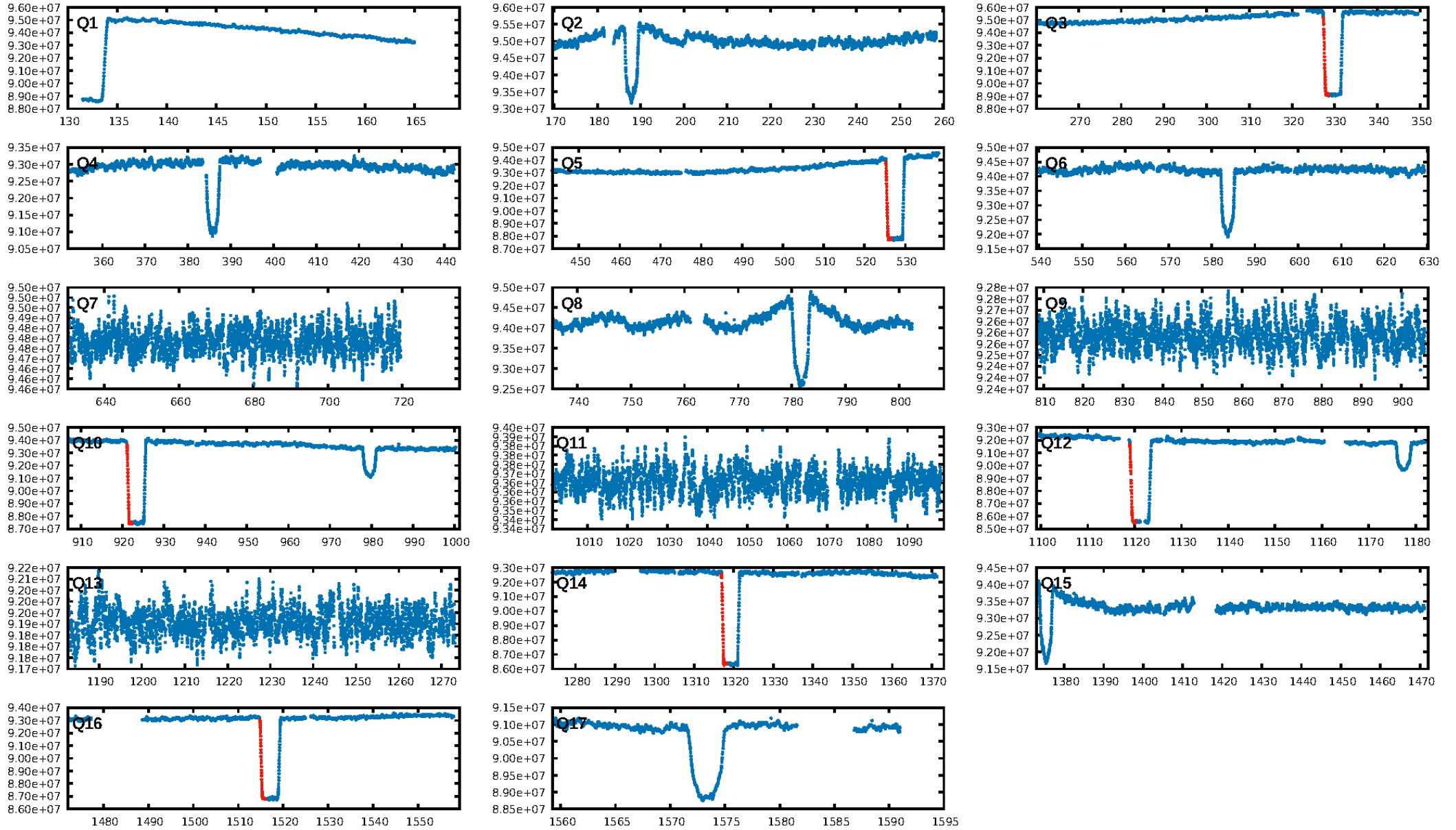
ShortPeriod-sig: 0.0% [0.00σ]
LongPeriod-sig: 0.1% [0.00σ]
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 0.00e+00
RollingBand-fgt: 0.83 [5/6]
GhostDiagnostic-chr: 1.009

Centroid-sig: 0.0%
Centroid-so: 0.205 arcsec [12.07σ]
OotOffset-rm: 0.051 arcsec [0.71σ]
KicOffset-rm: 0.110 arcsec [1.48σ]
OotOffset-st: 2/0/0/1 [3]
KicOffset-st: 2/0/0/1 [3]
DiffImageQuality-fgm: 1.00 [3/3]
DiffImageOverlap-fno: 0.00 [0/3]

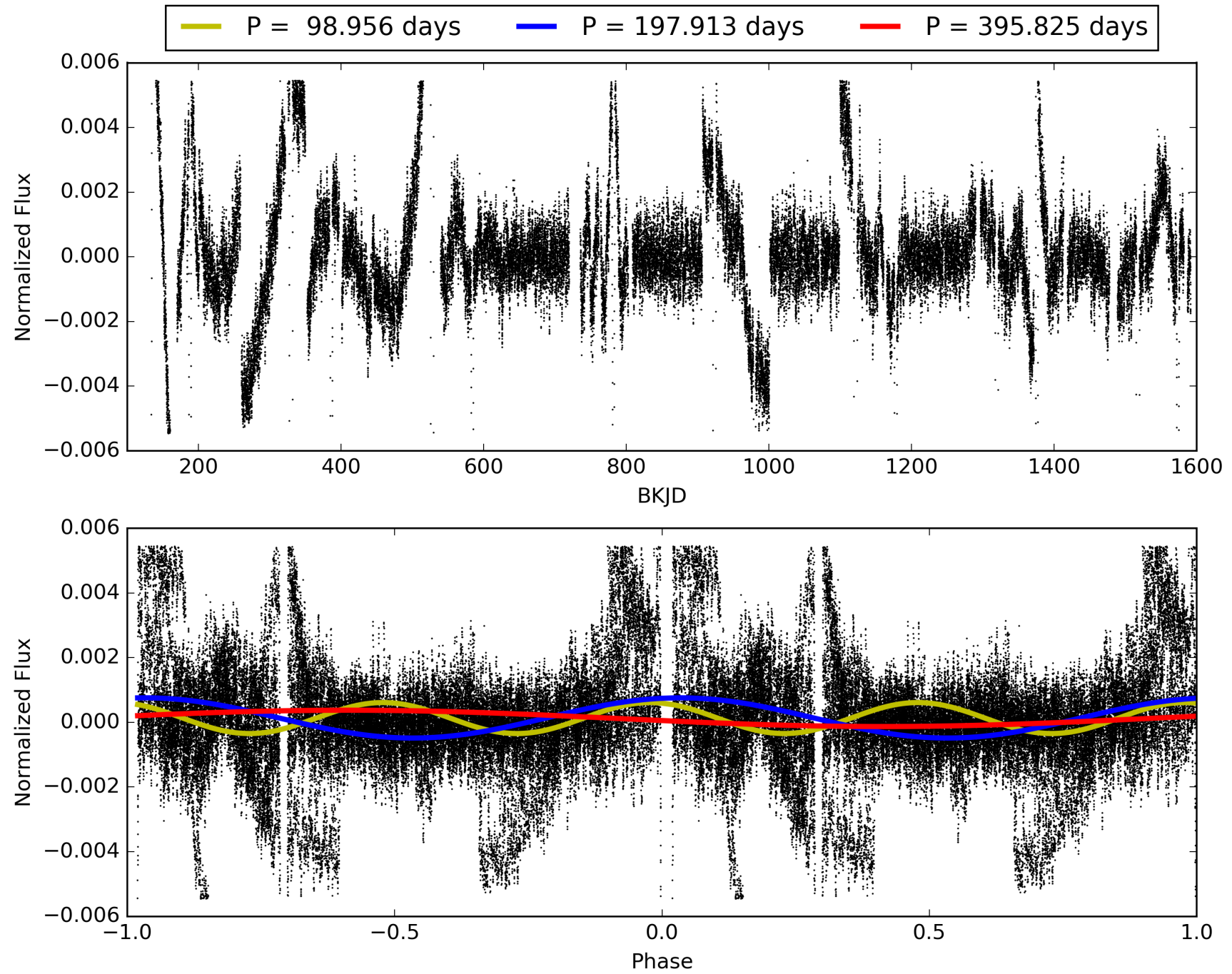
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 03:59:18 Z

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

TCE 005786154-02, PDC Light Curves

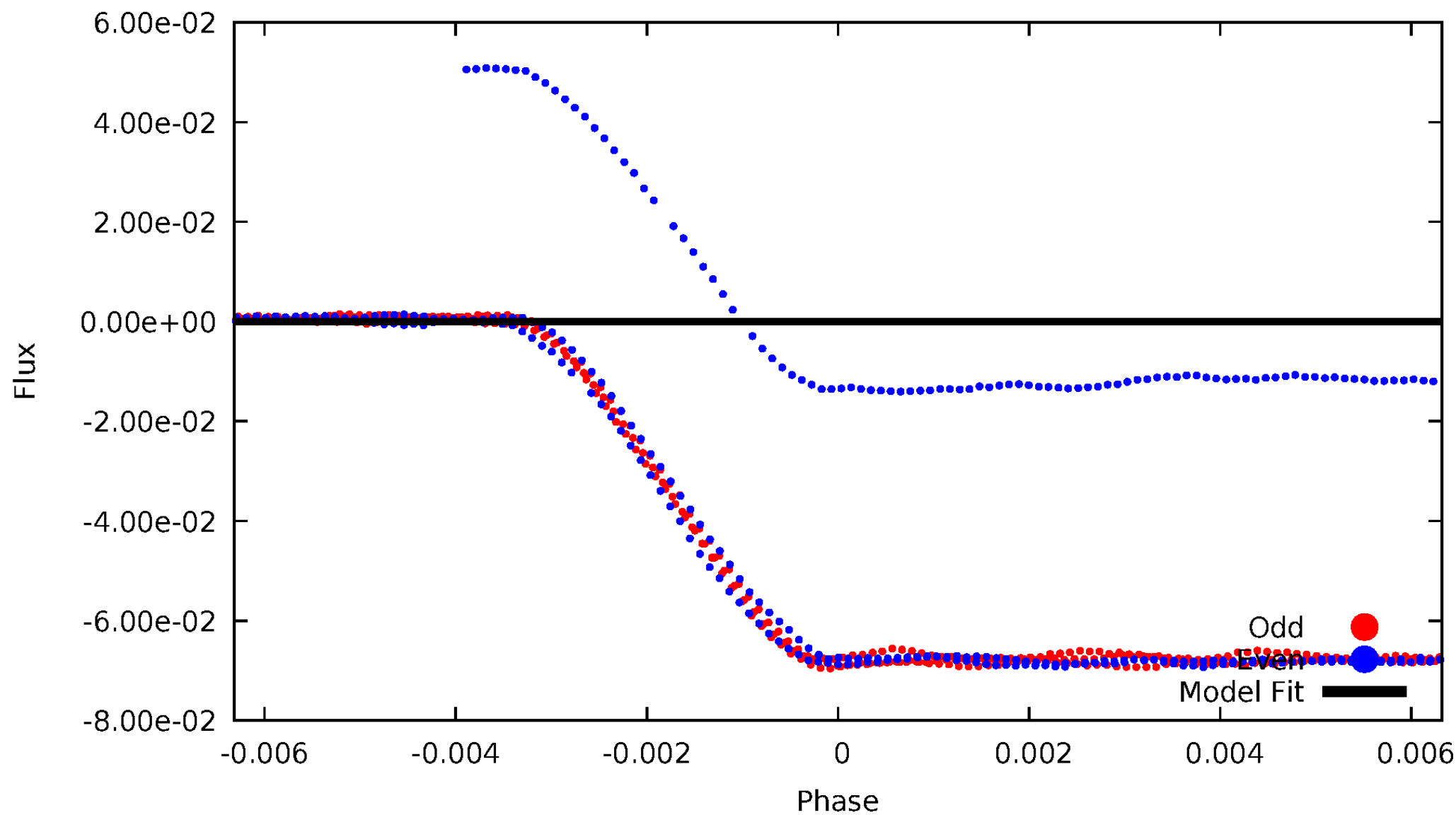


TCE 005786154-02



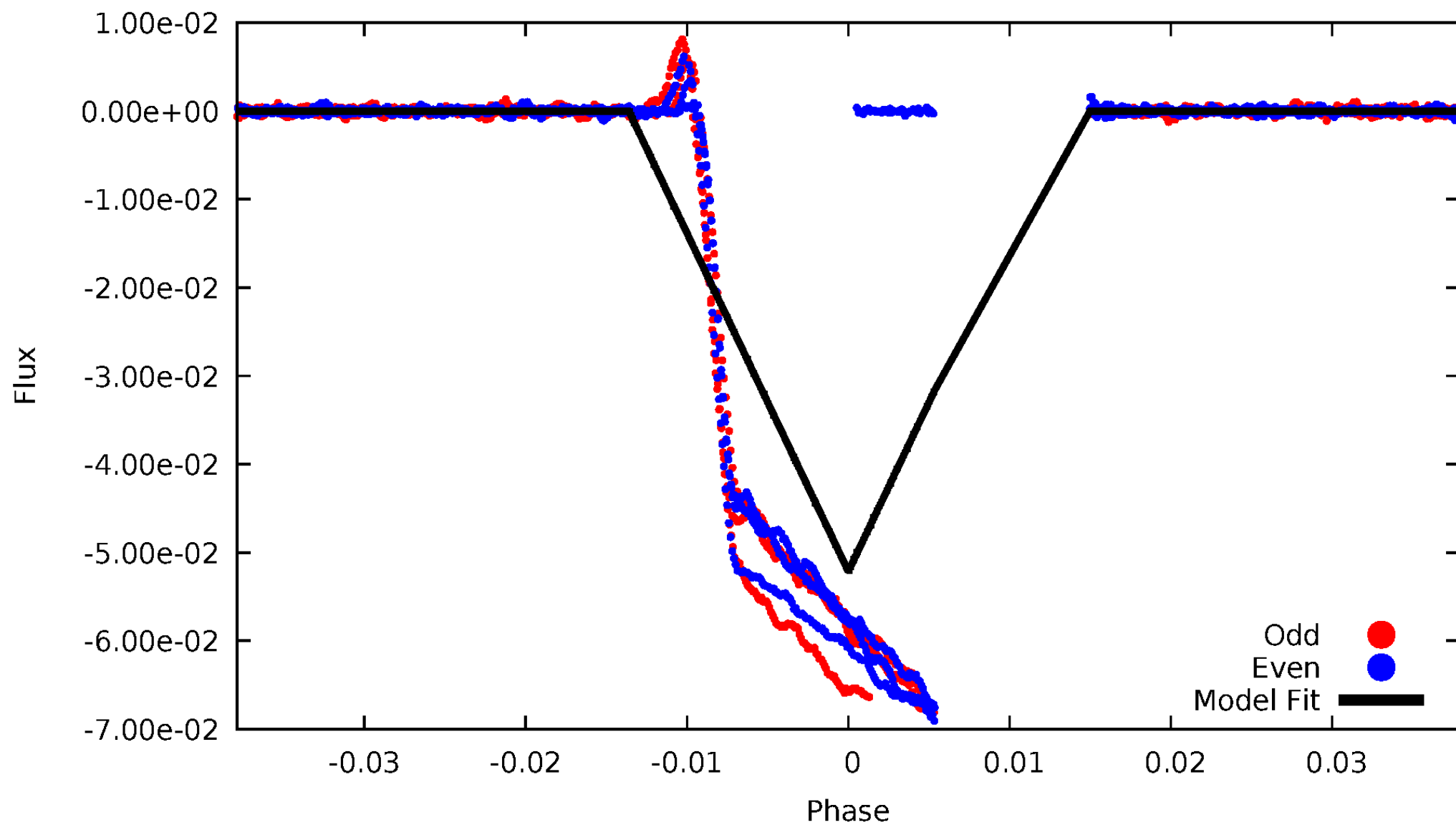
DV Odd/Even

TCE 005786154-02



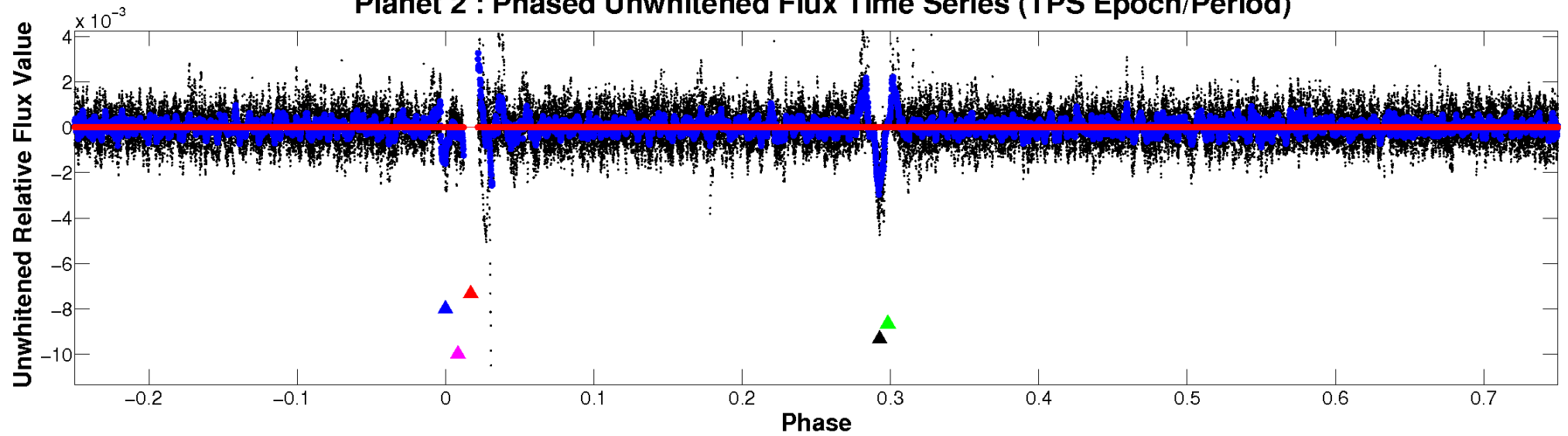
ALT Odd/Even

TCE 005786154-02

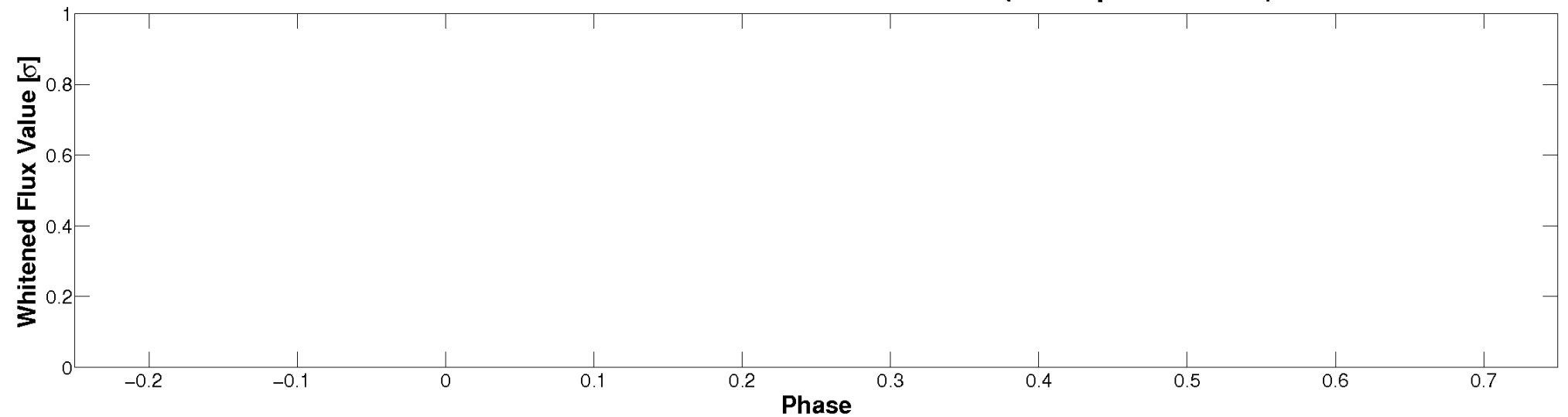


Non-Whitened Vs. Whitened Light Curve

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

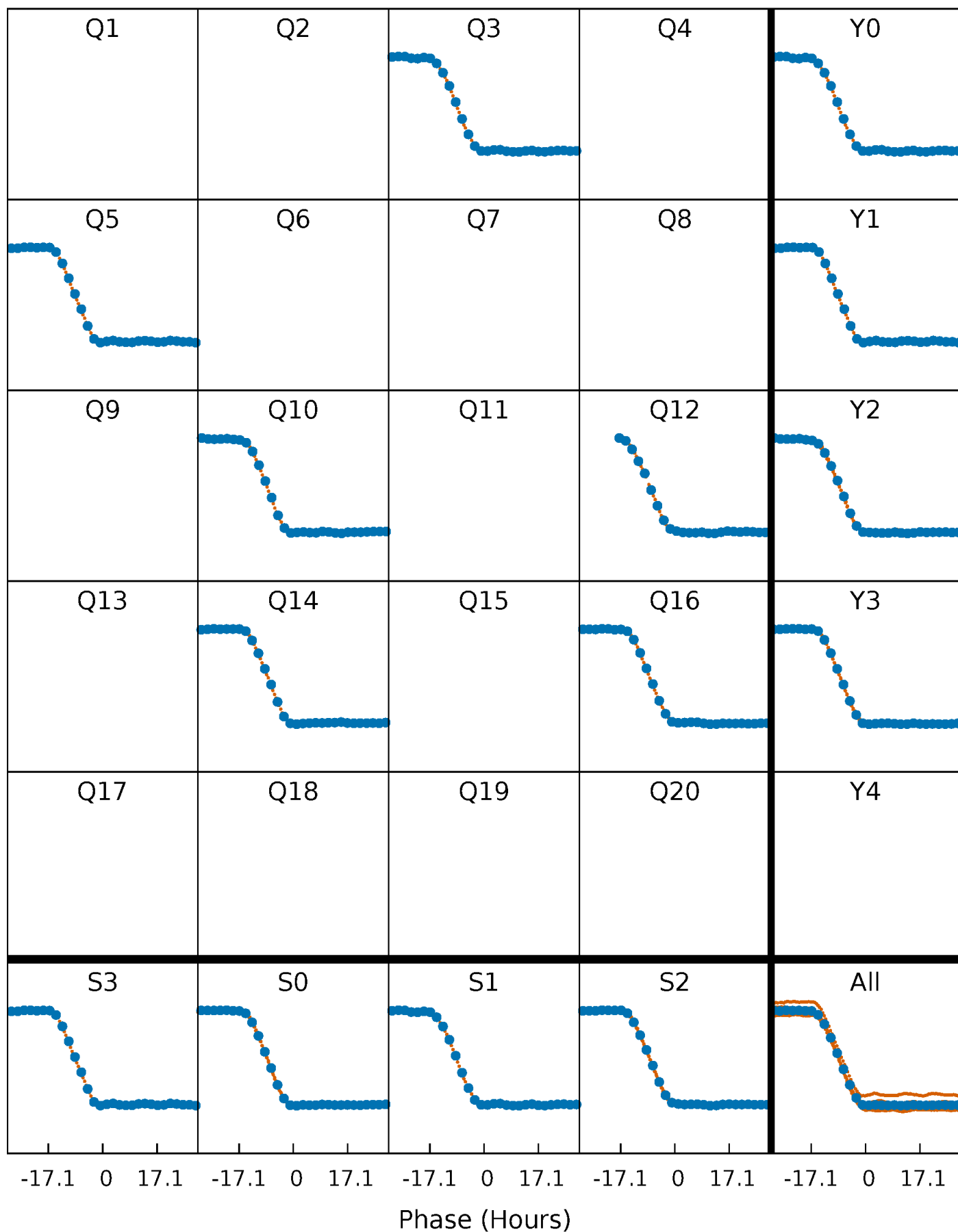


Planet 2 : Phased Whitened Flux Time Series (TPS Epoch/Period)



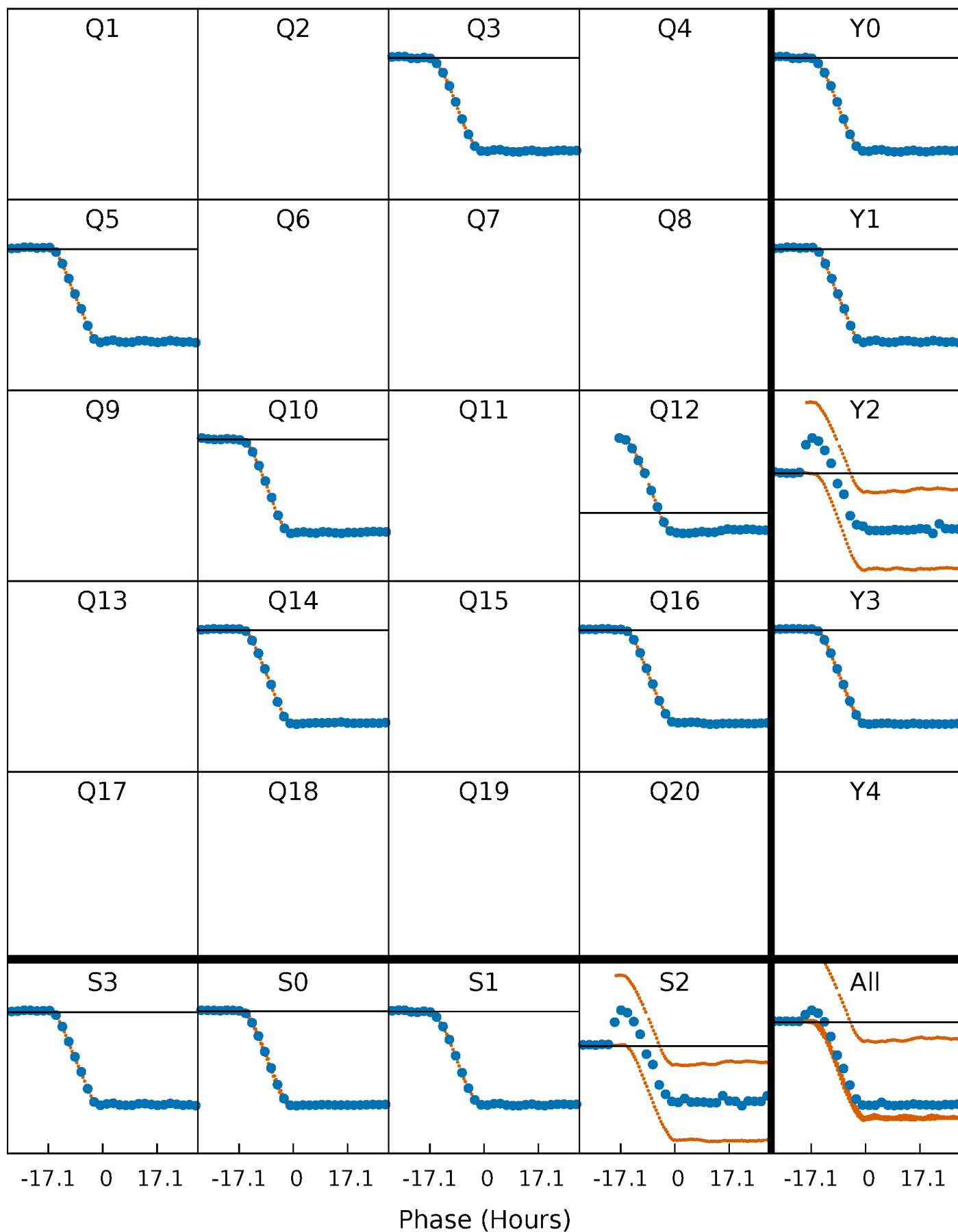
PDC Quarter-Phased Transit Curves

TCE 005786154-02 P=197.912651 Days $T_0=327.959240$ (BKJD)



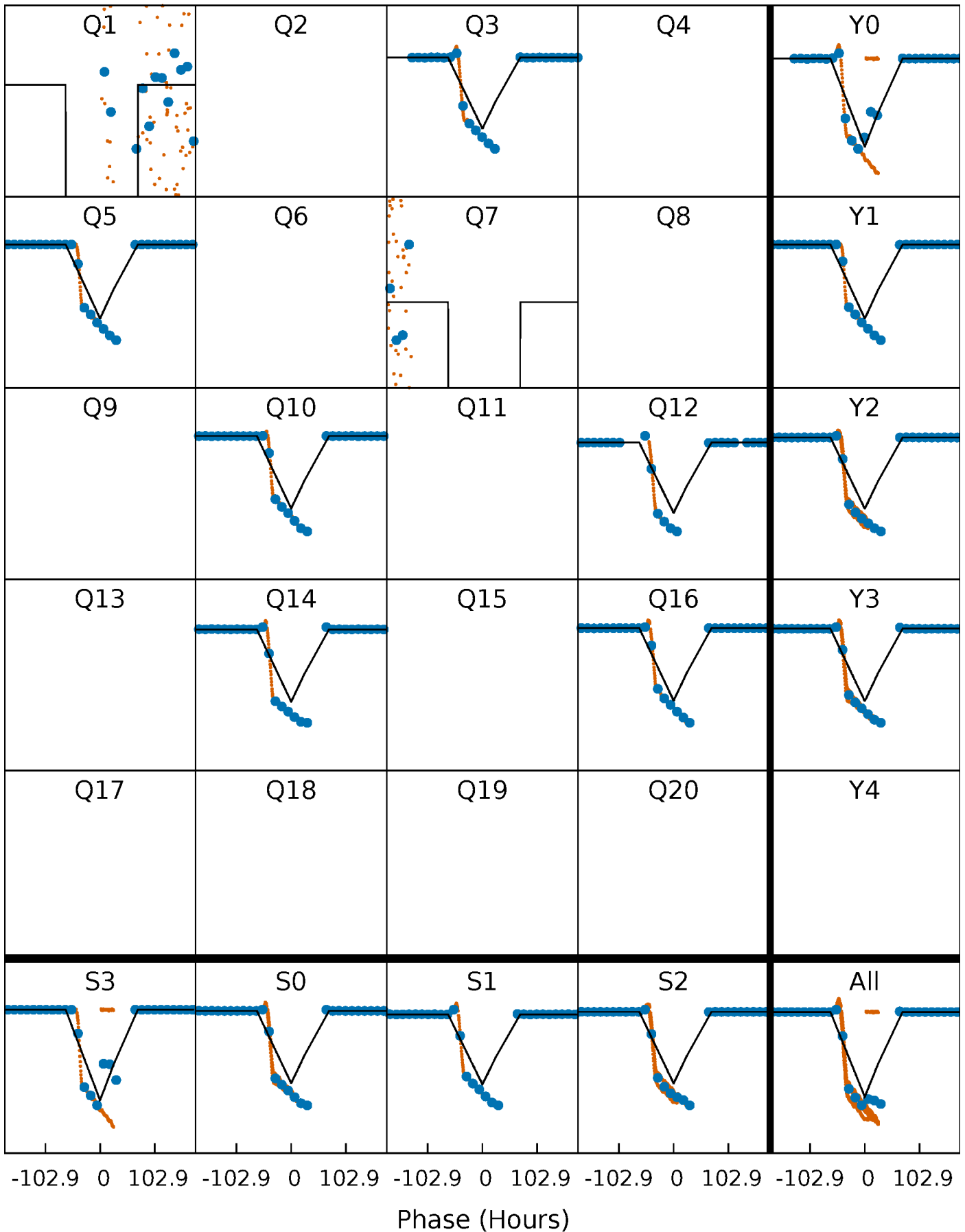
DV Quarter-Phased Transit Curves

TCE 005786154-02 $P=197.912651$ Days $T_0=327.959240$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

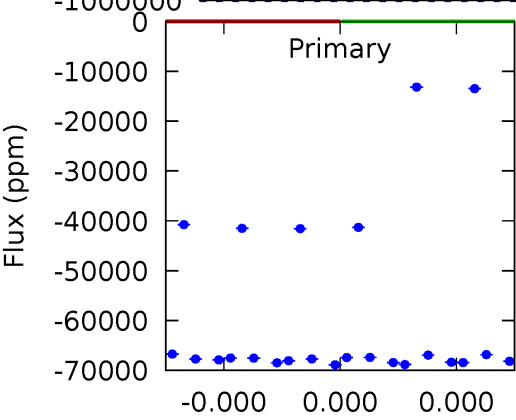
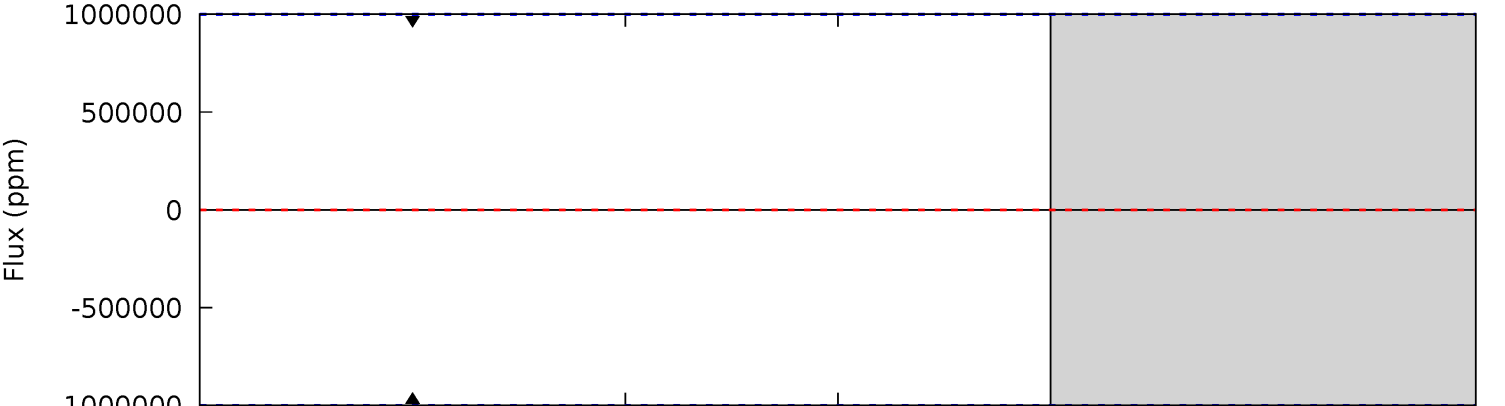
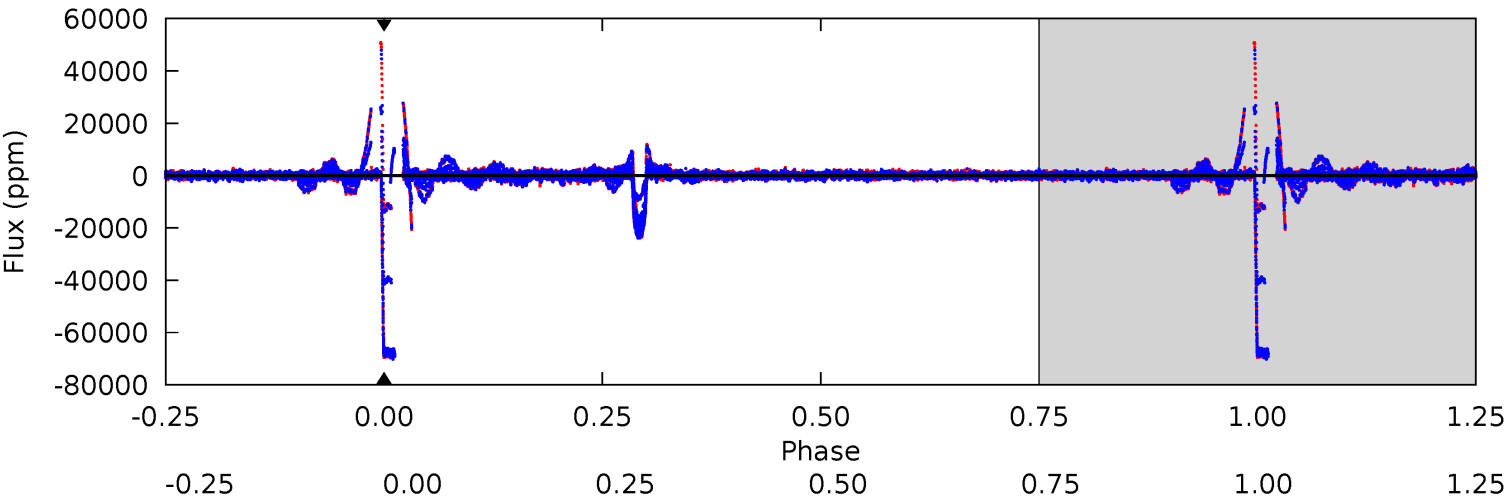
TCE 005786154-02 P=197.912651 Days $T_0=329.321398$ (BKJD)



DV Model-Shift Uniqueness Test

005786154-02, P = 197.912651 Days, E = 130.046589 Days

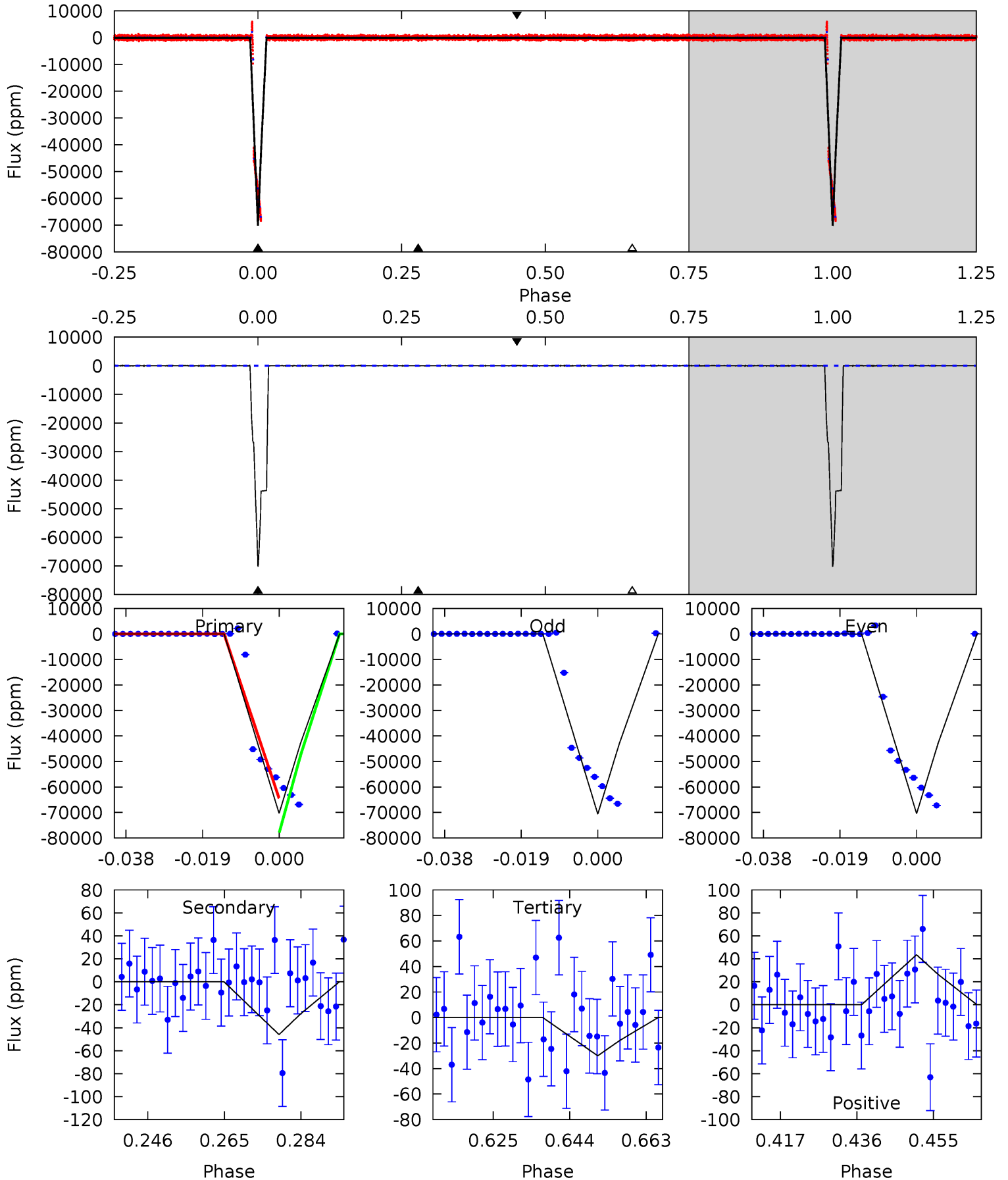
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
0	0	0	0	1.00	1.00	1.00	0	0	0	0	0	0	0	0



Alt Model-Shift Uniqueness Test

005786154-02, P = 197.912651 Days, E = 131.408747 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
5622	3.67	2.40	3.48	4.90	2.35	118.6	5619	5618	1.28	0.19	8.67	0.87	0.00	509.7



Stellar Parameters For KIC 005786154

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	4611^{+69}_{-48}	$2.614^{+0.120}_{-0.120}$	$-0.080^{+0.150}_{-0.100}$	$7.898^{+2.660}_{-0.887}$	$0.935^{+0.427}_{-0.022}$	$0.003^{+0.001}_{-0.001}$
	+1%/-1%	+5%/-5%	+188%/-125%	+34%/-11%	+46%/-2%	+47%/-44%
Source	SPE68	SPE68	SPE68	DSEP		

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

Secondary Eclipse Parameters for KIC 005786154-02 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	0 ± 1000000	$69.97^{+66.69}_{-49.40}$	987^{+55}_{-40}	2707^{+9682}_{-14177}	12^{+9728}_{-8286}
Alt.	-46 ± 12	$227.52^{+89.44}_{-84.81}$	990^{+55}_{-41}	-1637^{+3439}_{-124}	$0.207^{+0.377}_{-0.104}$

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 $A_{obs} \gg 1.0$

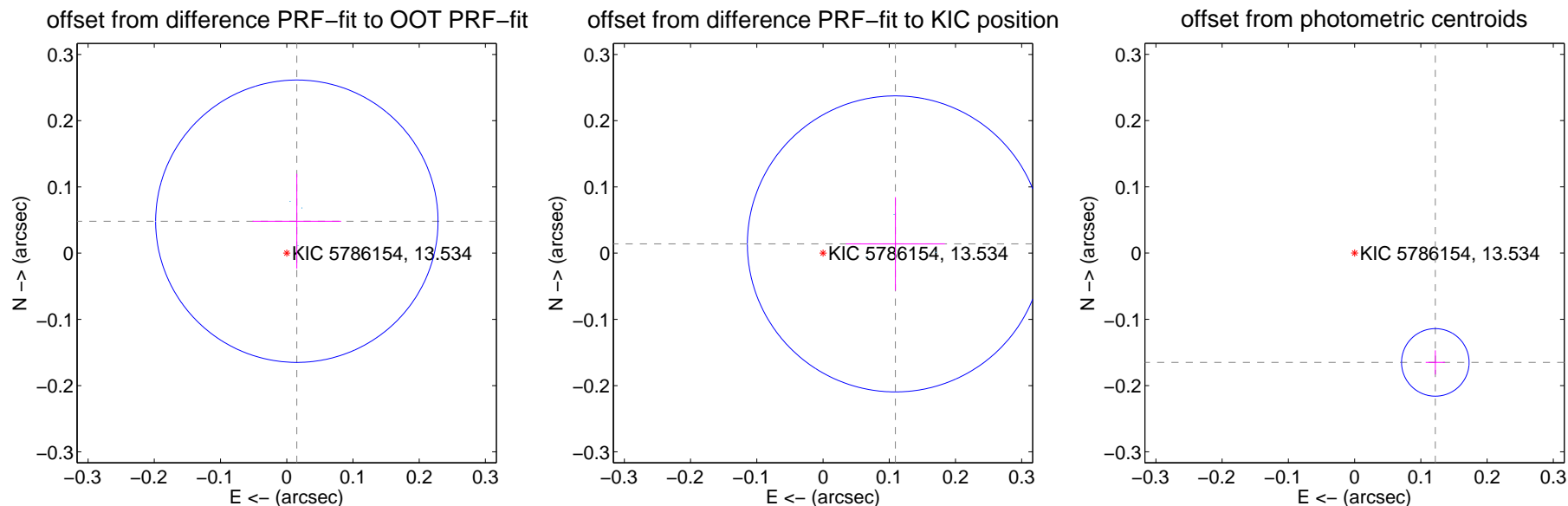
DV Centroid Data

Supplemental centroid analysis for 005786154-02. Kepler magnitude: 13.53. Transit SNR -1.00

There are 3 quarters with good PRF difference image offsets

The direct PRF centroid is offset from the target star catalog position by about 0.16 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.051 ± 0.071	0.71	-0.015 ± 0.067	0.048 ± 0.071
PRF-fit source offset from KIC position	0.110 ± 0.074	1.48	-0.109 ± 0.075	0.014 ± 0.071
photometric centroid source offset	0.21 ± 0.02	12.07	-0.12 ± 0.01	-0.17 ± 0.02

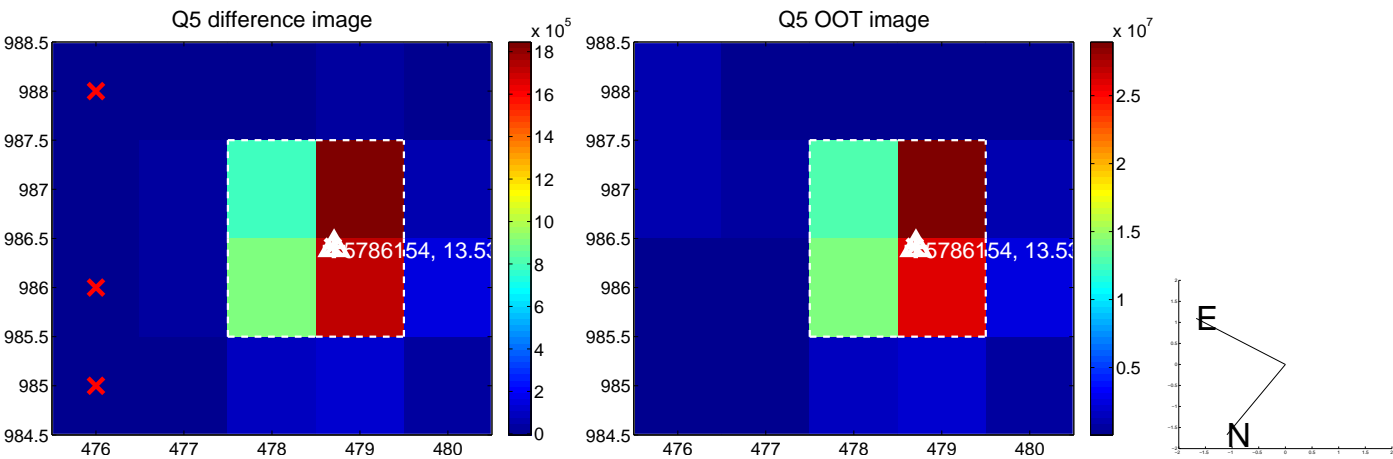


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

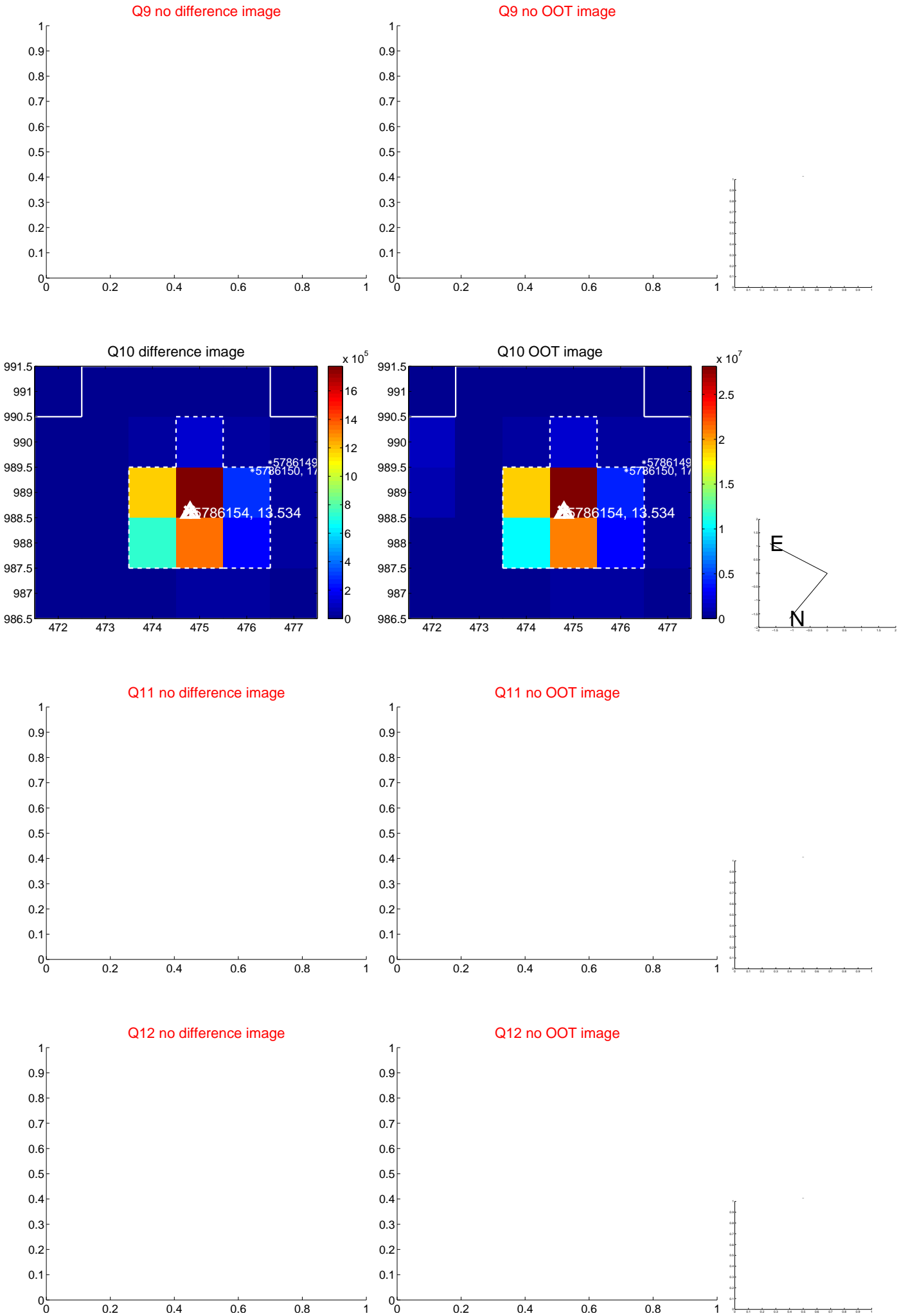
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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.

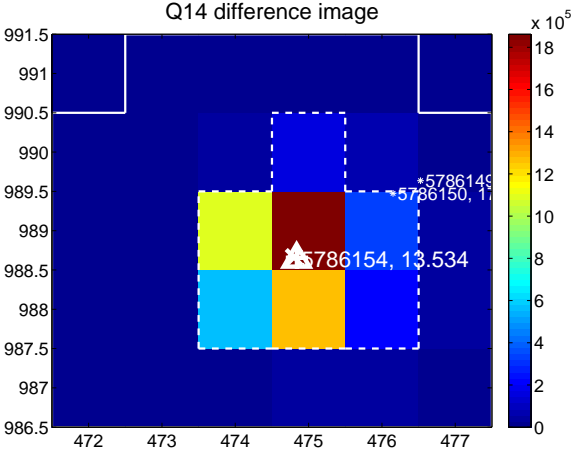
Q13 no difference image



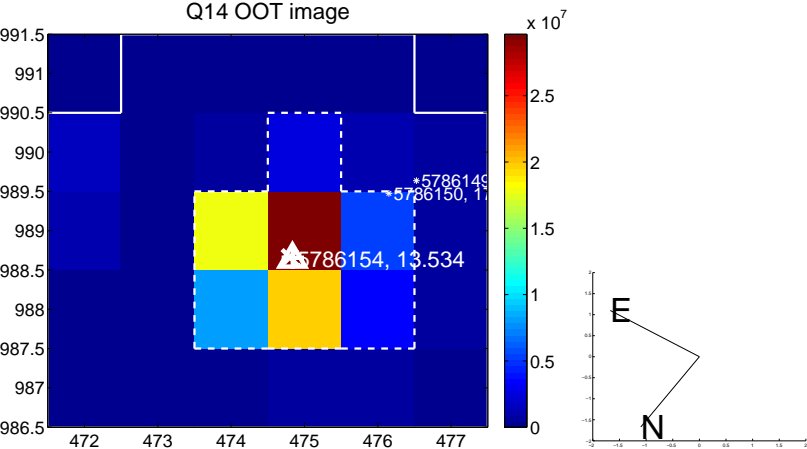
Q13 no OOT image



Q14 difference image



Q14 OOT image



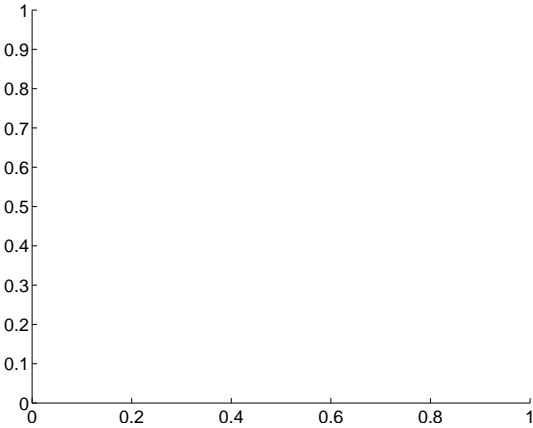
Q15 no difference image



Q15 no OOT image



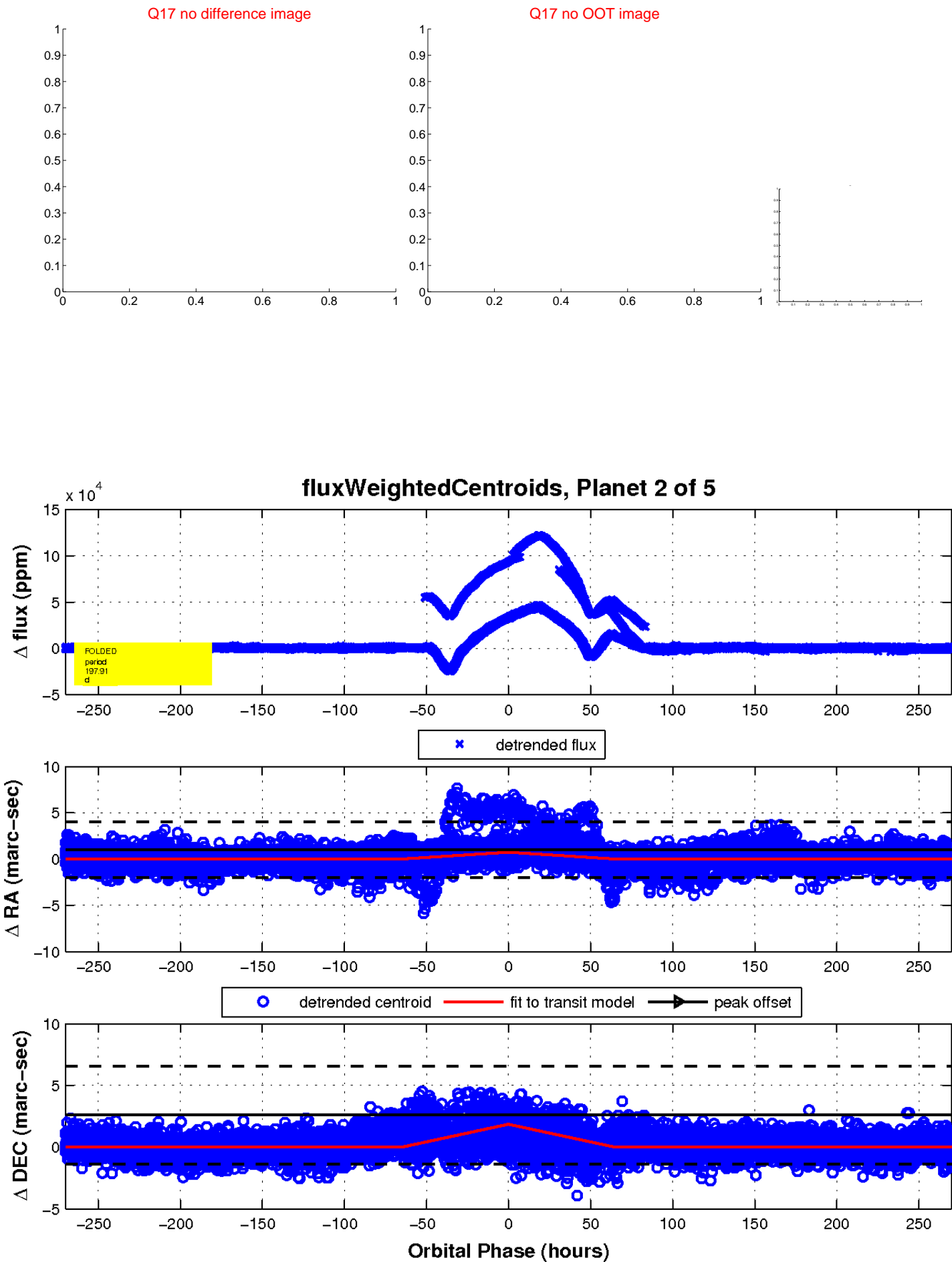
Q16 no difference image



Q16 no OOT image

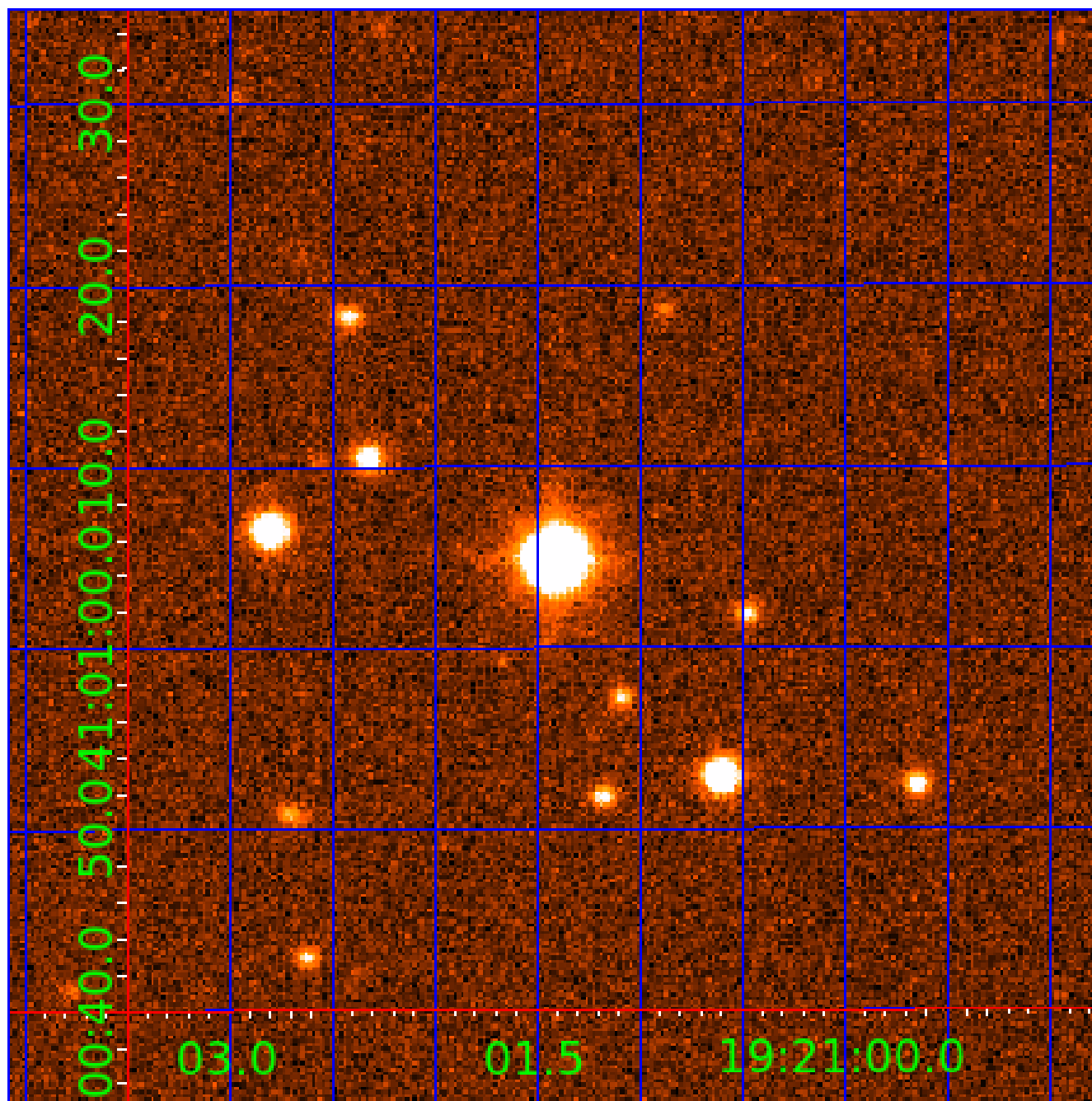


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 005786154

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})
005786154-01	OBS	No	197.912651	133.418126	915.9	15.000	56.5	-1.0	7.90	4611	22.89	59.77
005786154-02	OBS	No	197.912651	327.959240	1033.7	15.000	55.6	-1.0	7.90	4611	24.32	59.77
005786154-03	OBS	No	197.926273	189.024654	297.4	15.000	17.2	-1.0	7.90	4611	13.04	59.76
005786154-04	OBS	No	197.916708	187.964422	22328.8	86.123	16.5	97.5	7.90	4611	115.07	59.76
005786154-05	OBS	No	197.920693	131.684026	69559.6	116.979	32.5	350.9	7.90	4611	200.31	59.76

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
005786154-01	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—CENT_NOFITS
005786154-02	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—SAME_NTL_PERIOD—CENT_NOFITS
005786154-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_MARSHALL—LPP_DV—LPP_ALT—SAME_NTL_PERIOD—CENT_NOFITS
005786154-04	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_MARSHALL—MOD_TER_DV—SAME_NTL_PERIOD
005786154-05	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—SAME_NTL_PERIOD—CENT_FEW_DIFFS

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

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

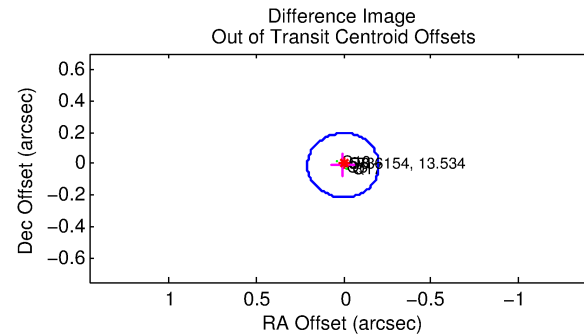
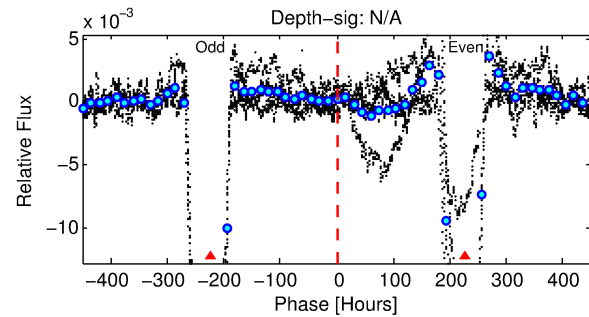
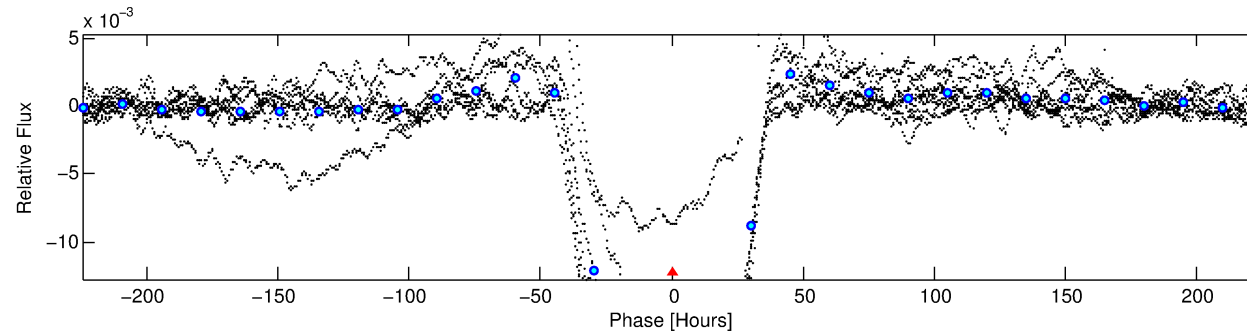
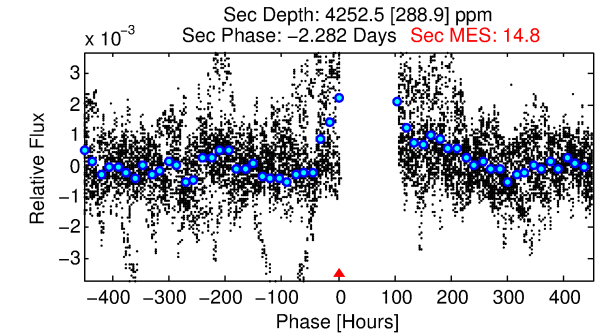
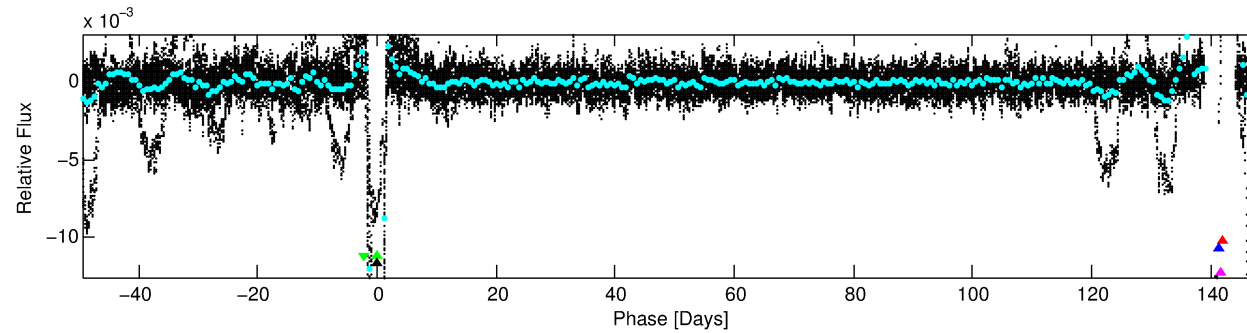
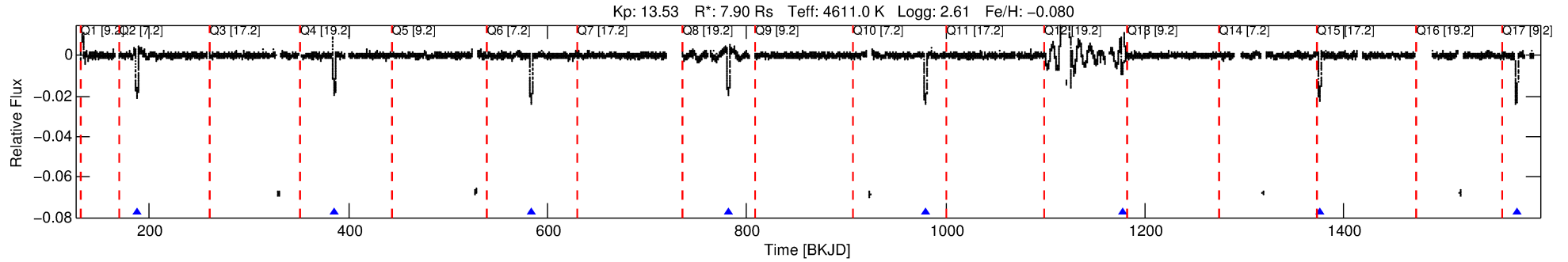
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 005786154-03

No Significant Match Found

DV One-Page Summary

KIC: 5786154 Candidate: 3 of 5 Period: 197.926 d



TPS TCE Results:

Period = 197.92627 d
Epoch = 189.0247 BKJD

DV fit results are unavailable

DV Diagnostic Results:

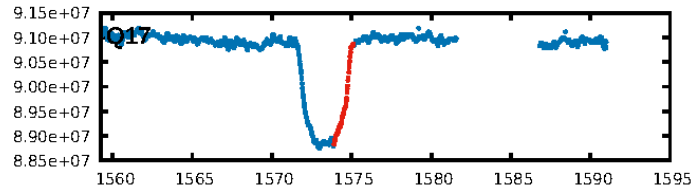
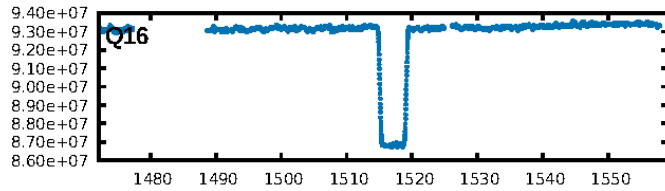
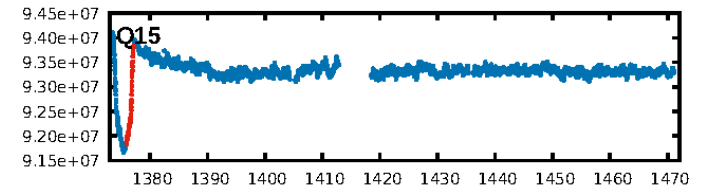
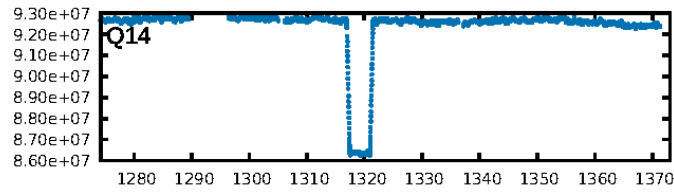
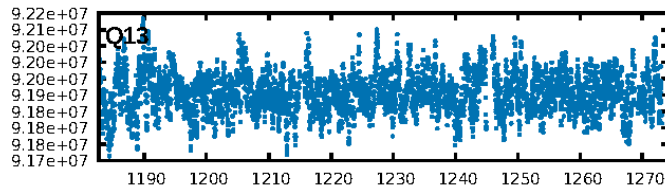
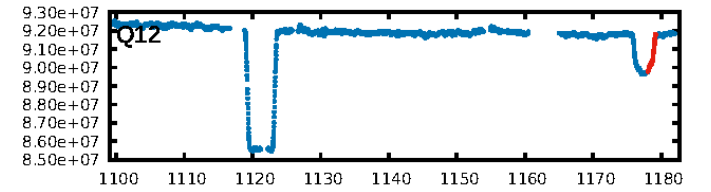
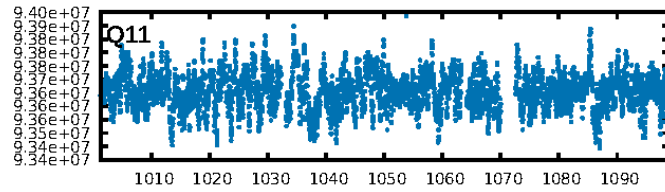
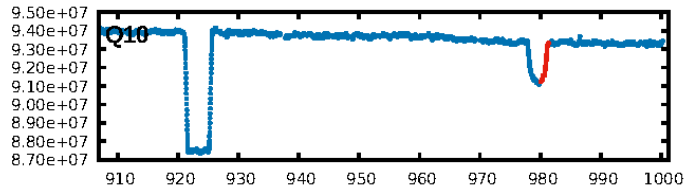
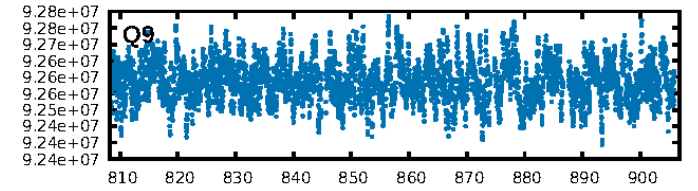
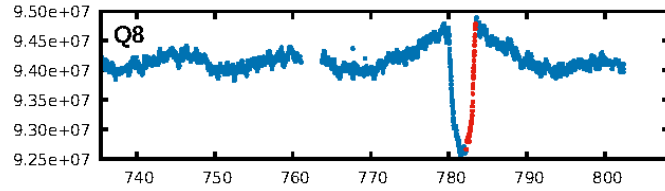
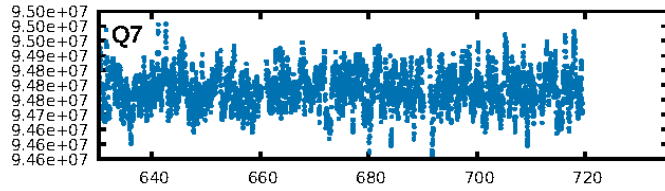
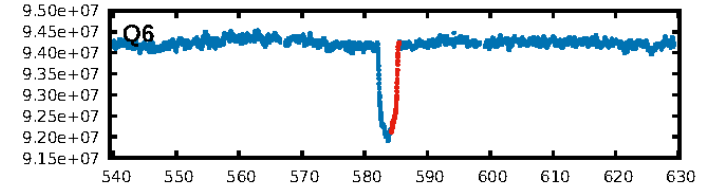
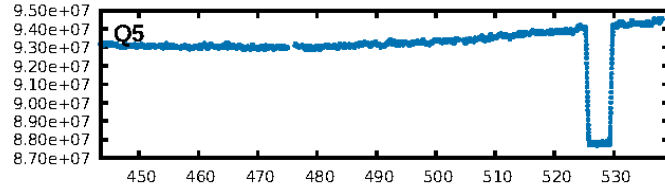
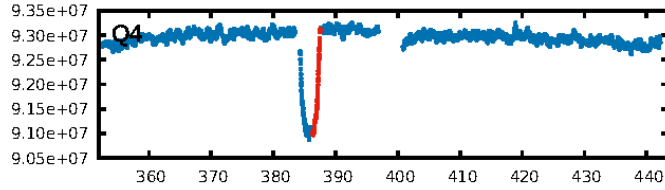
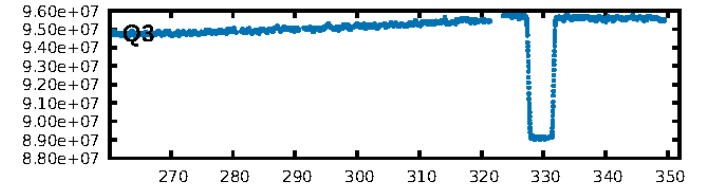
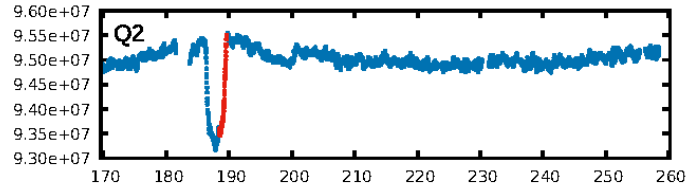
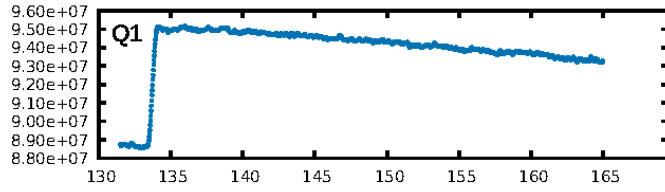
ShortPeriod-sig: 0.1% [0.00σ]
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 1.01e-47
RollingBand-fgt: 1.00 [7/7]
GhostDiagnostic-chr: 0.9377

Centroid-sig: 0.0%
Centroid-so: 0.444 arcsec [4.45σ]
OotOffset-rm: 0.010 arcsec [0.14σ]
KicOffset-rm: 0.136 arcsec [1.63σ]
OotOffset-st: 2/0/1/1 [4]
KicOffset-st: 2/0/1/1 [4]
DiffImageQuality-fgm: 1.00 [4/4]
DiffImageOverlap-fno: 0.00 [0/4]

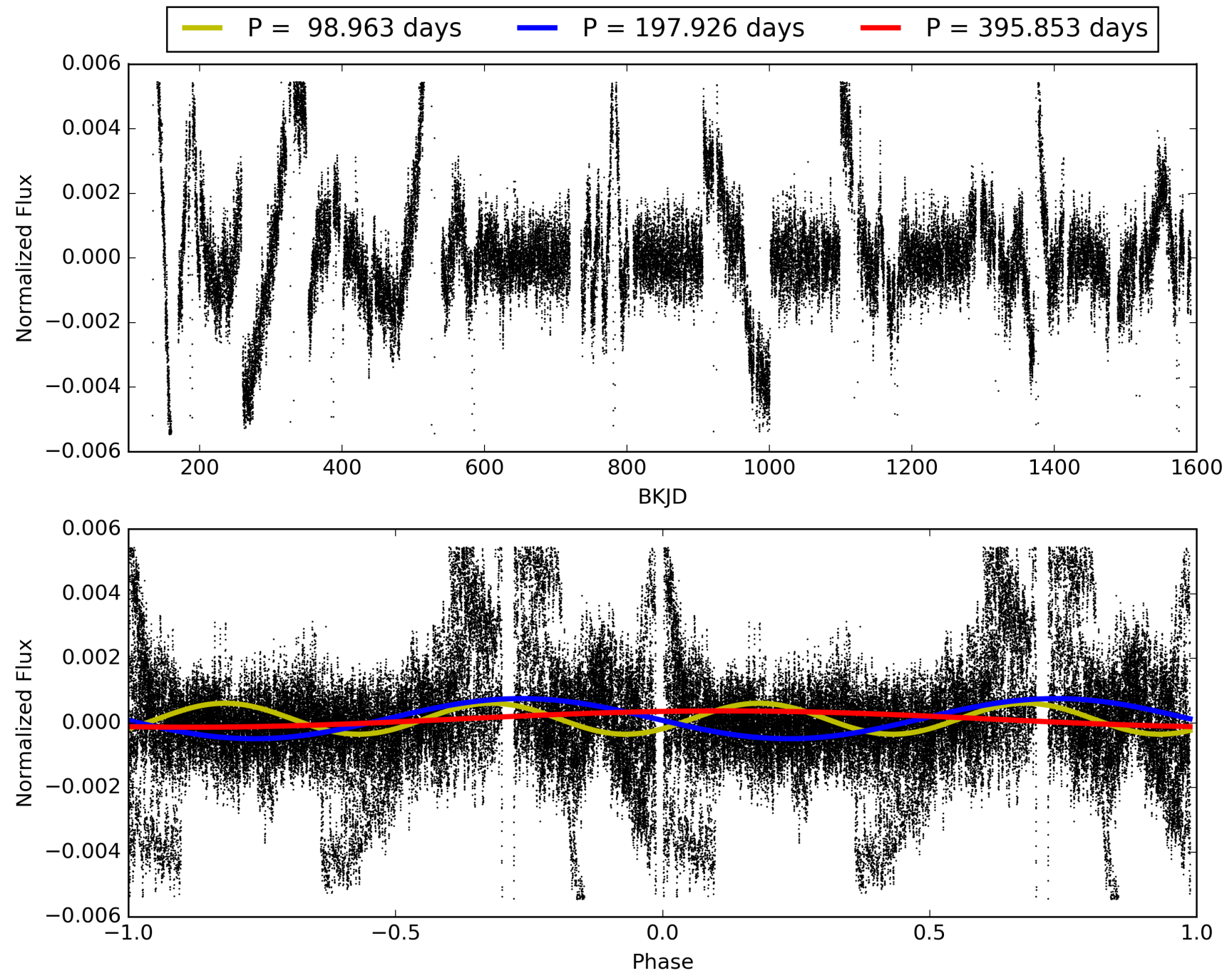
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 03:59:26 Z

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

TCE 005786154-03, PDC Light Curves

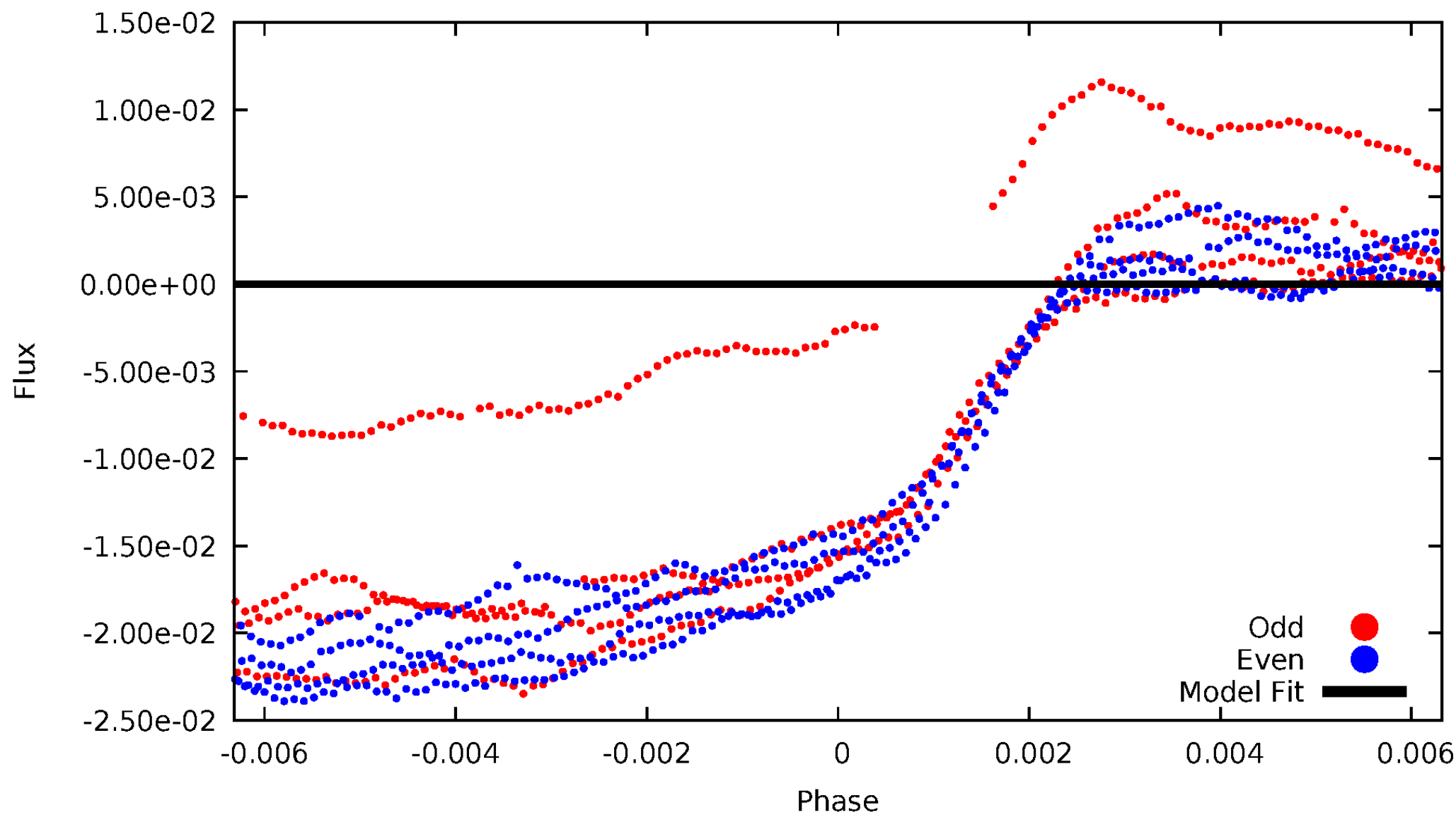


TCE 005786154-03



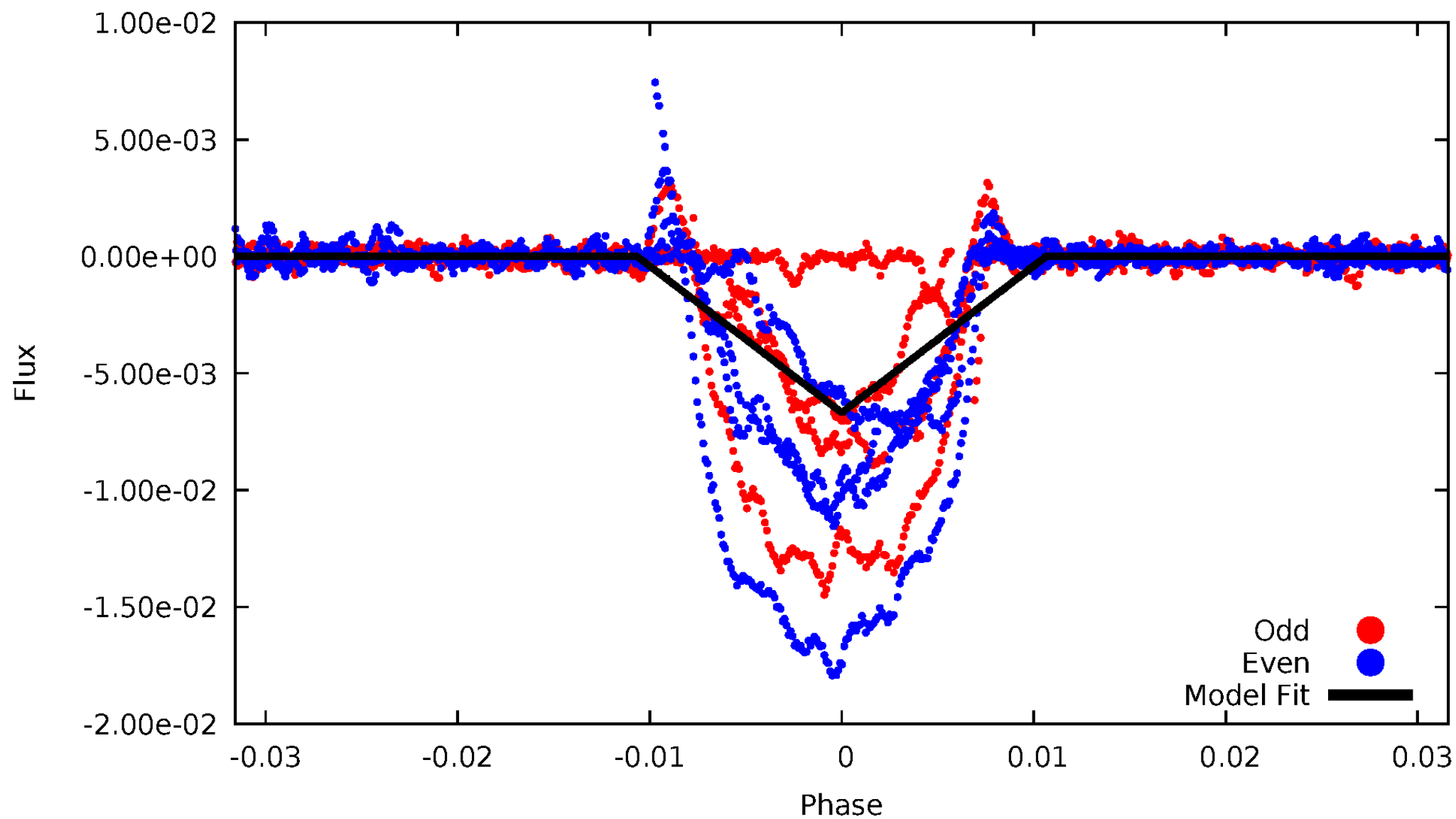
DV Odd/Even

TCE 005786154-03

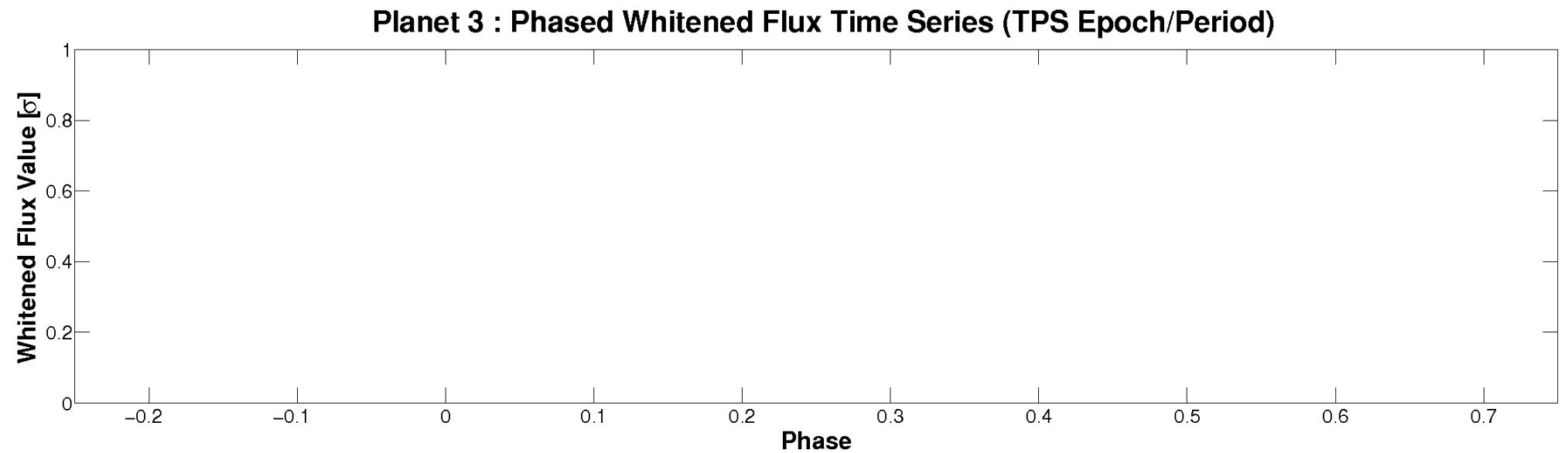
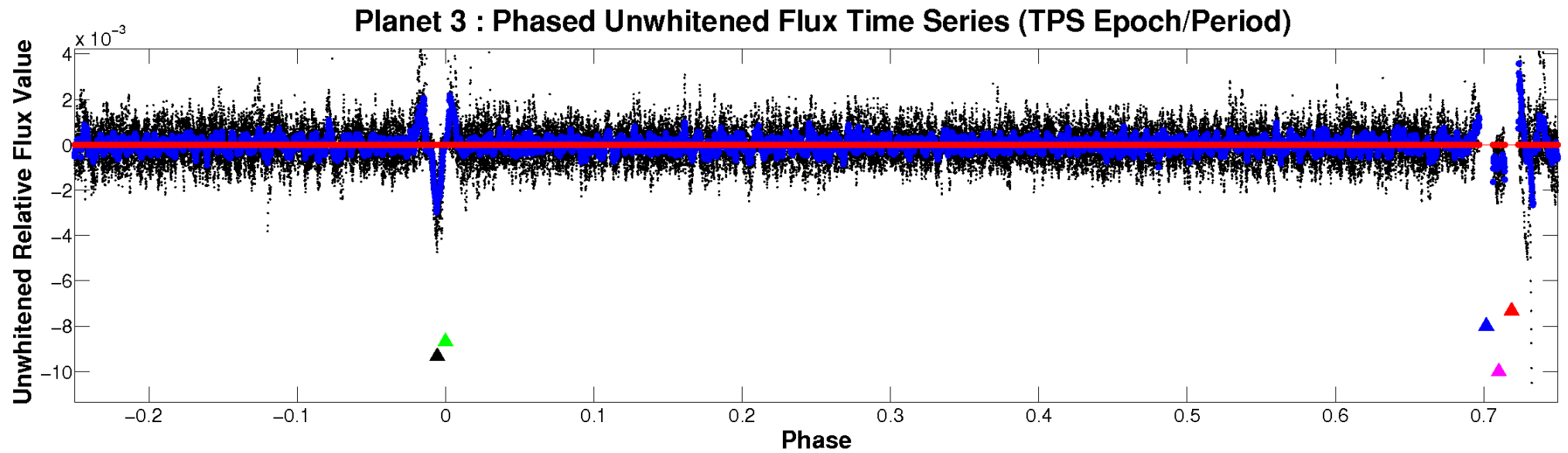


ALT Odd/Even

TCE 005786154-03

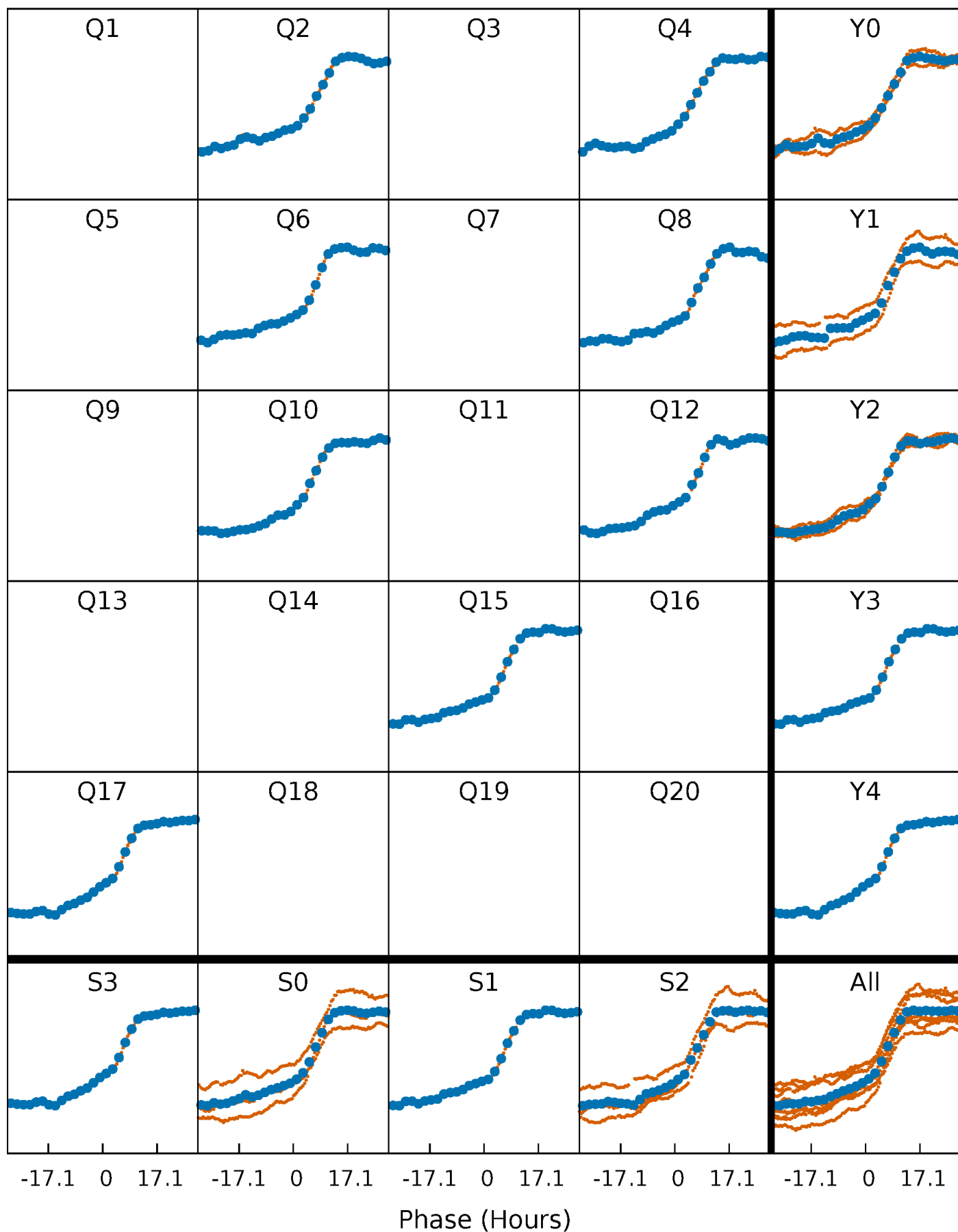


Non-Whitened Vs. Whitened Light Curve



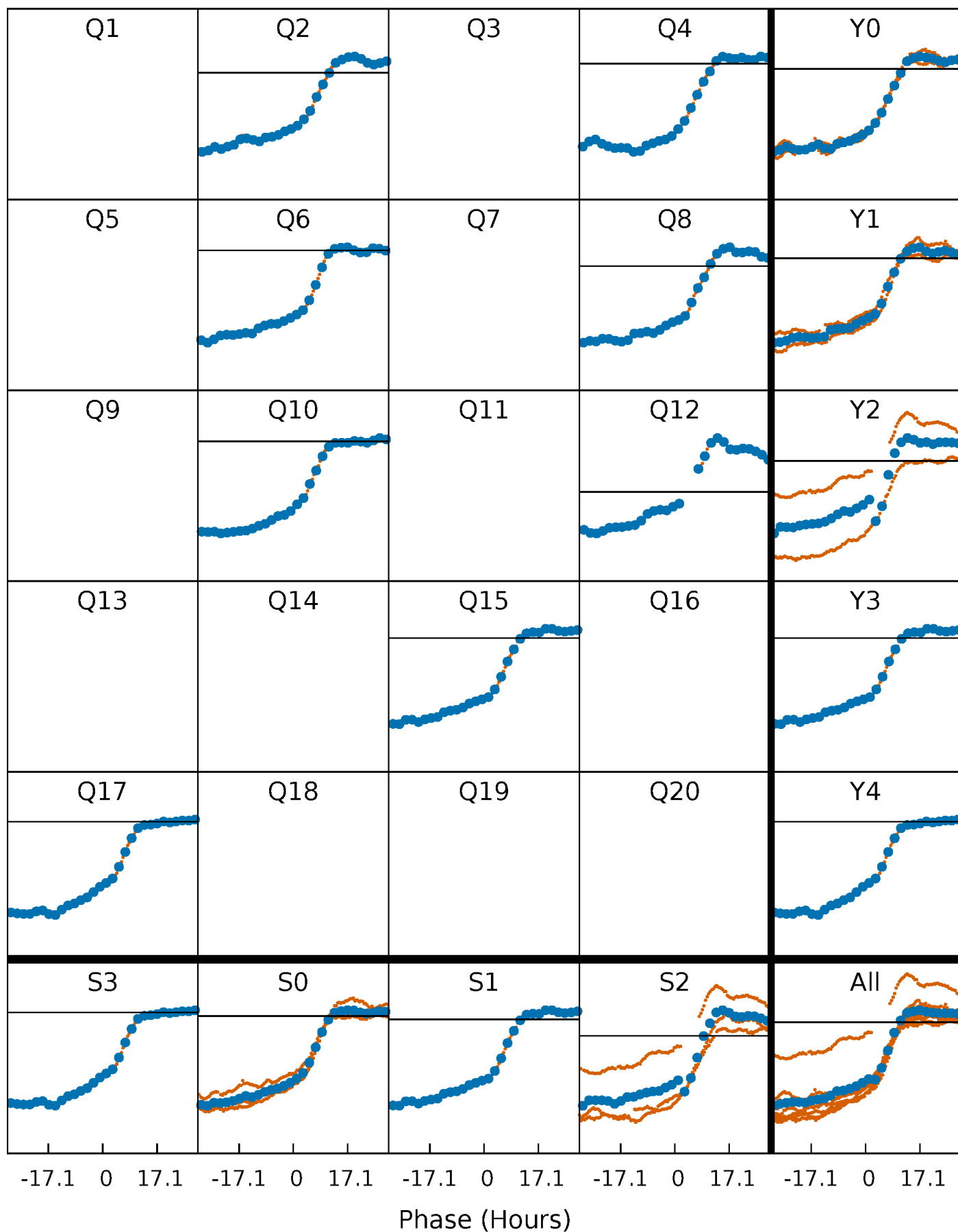
PDC Quarter-Phased Transit Curves

TCE 005786154-03 P=197.926273 Days $T_0=189.024654$ (BKJD)



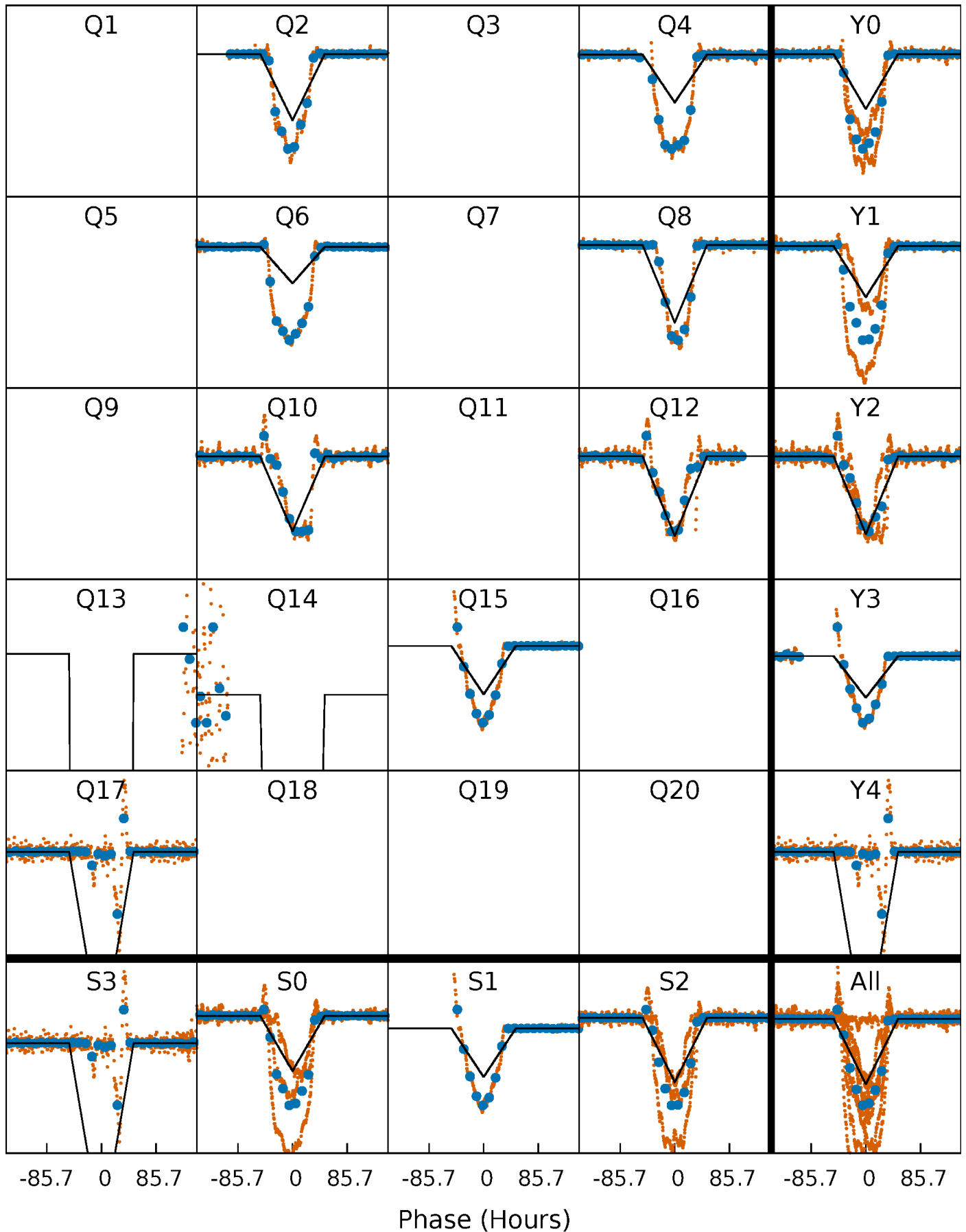
DV Quarter-Phased Transit Curves

TCE 005786154-03 P=197.926273 Days $T_0=189.024654$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

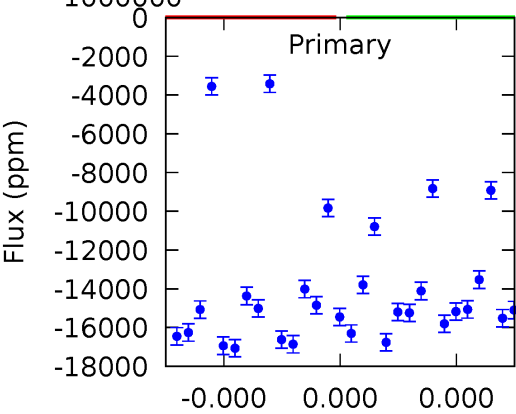
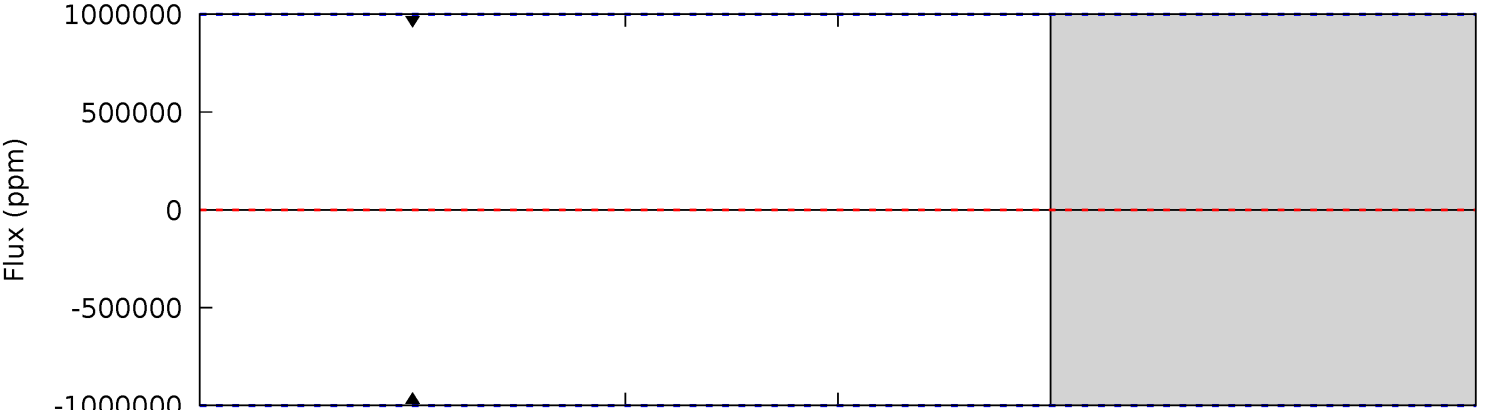
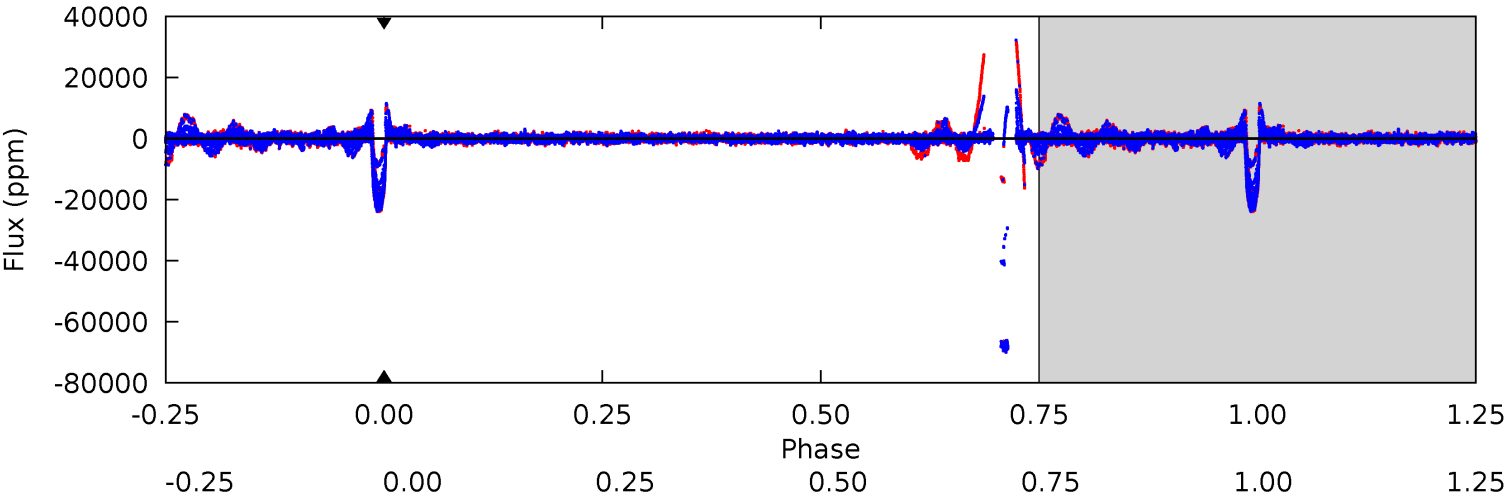
TCE 005786154-03 P=197.926273 Days $T_0=187.975699$ (BKJD)



DV Model-Shift Uniqueness Test

005786154-03, P = 197.926273 Days, E = 189.024654 Days

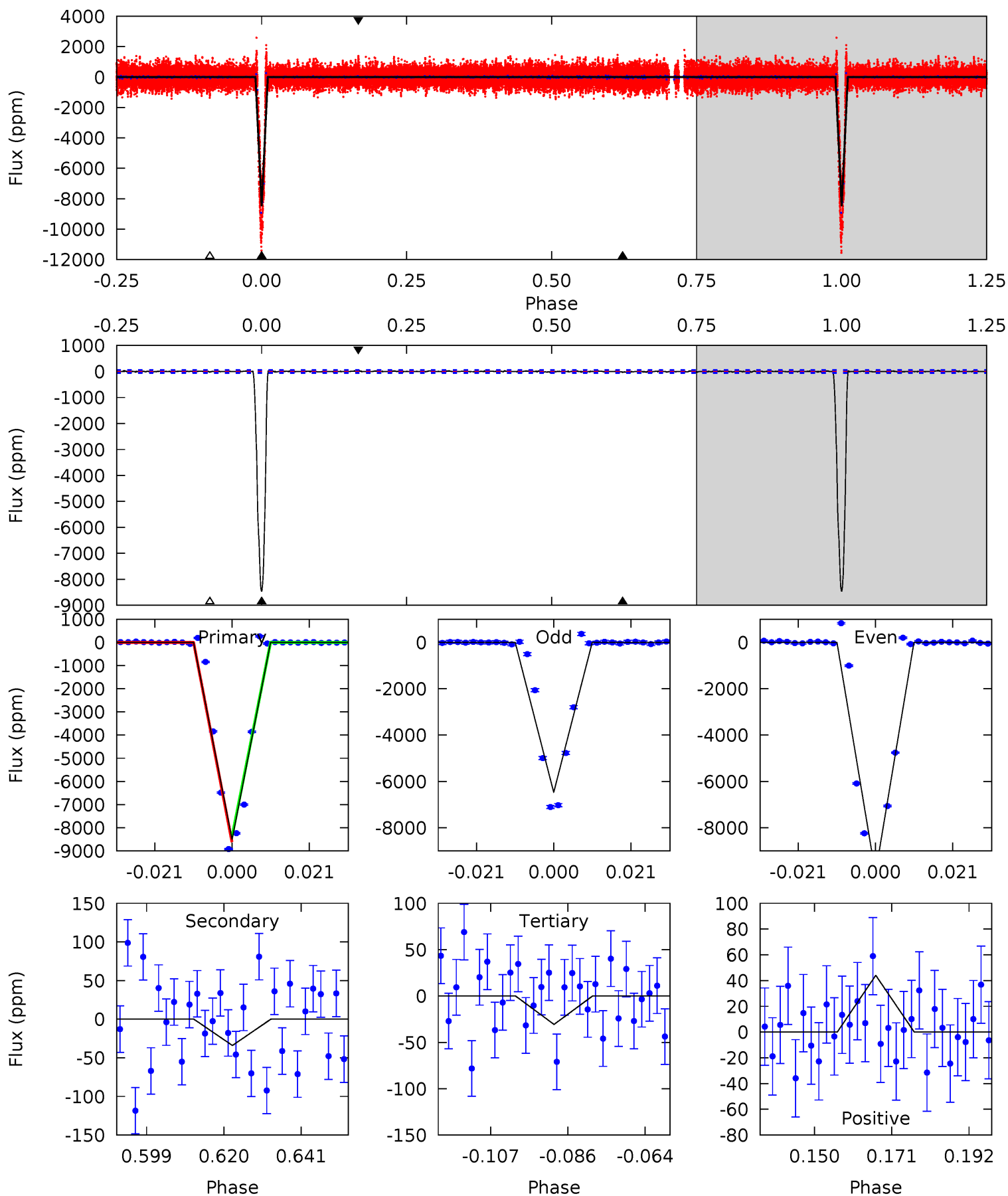
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
0	0	0	0	1.00	1.00	1.00	0	0	0	0	0	0	0	0



Alt Model-Shift Uniqueness Test

005786154-03, P = 197.926273 Days, E = 187.975699 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
756.8	3.03	2.73	3.92	4.88	2.30	0.80	754.1	752.9	0.30	-0.89	167.8	1.07	0.01	11.7



Stellar Parameters For KIC 005786154

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	4611^{+69}_{-48}	$2.614^{+0.120}_{-0.120}$	$-0.080^{+0.150}_{-0.100}$	$7.898^{+2.660}_{-0.887}$	$0.935^{+0.427}_{-0.022}$	$0.003^{+0.001}_{-0.001}$
	+1%/-1%	+5%/-5%	+188%/-125%	+34%/-11%	+46%/-2%	+47%/-44%
Source	SPE68	SPE68	SPE68	DSEP		

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

Secondary Eclipse Parameters for KIC 005786154-03 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	0 ± 1000000	$61.35^{+69.22}_{-42.79}$	986^{+61}_{-40}	3988^{+10405}_{-16492}	138^{+13364}_{-10562}
Alt.	-34 ± 11	$101.95^{+79.88}_{-65.14}$	987^{+59}_{-39}	1904^{+585}_{-3521}	$0.781^{+5.256}_{-0.564}$

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 $A_{obs} \gg 1.0$

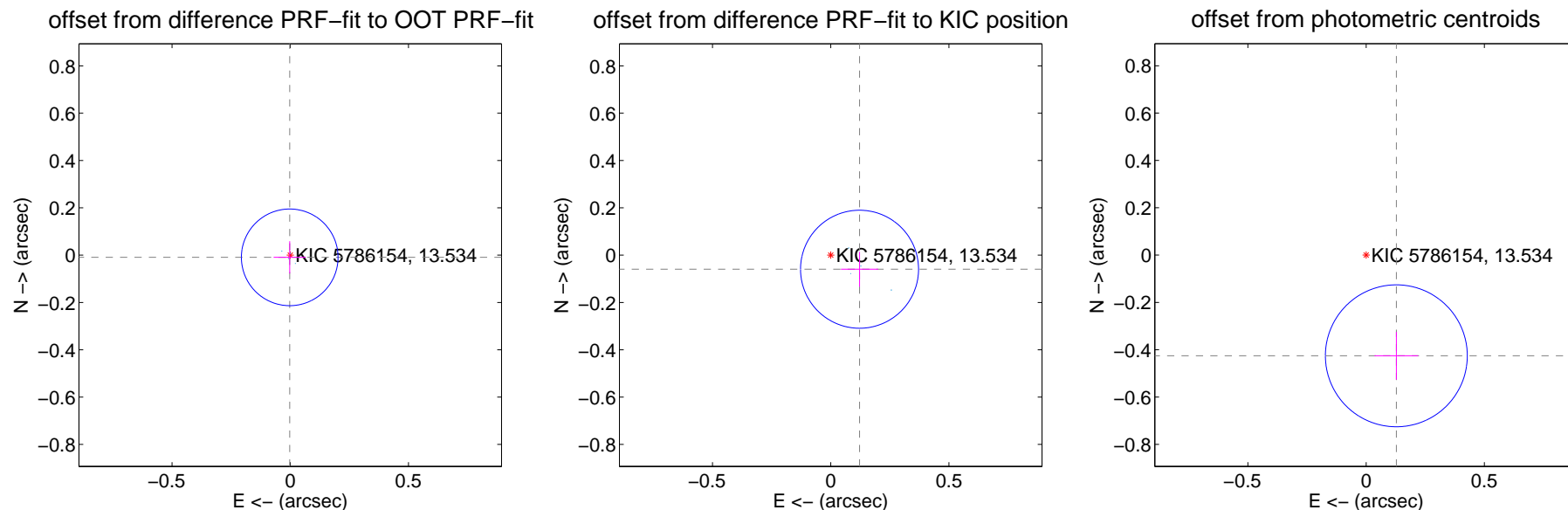
DV Centroid Data

Supplemental centroid analysis for 005786154-03. Kepler magnitude: 13.53. Transit SNR -1.00

There are 4 quarters with good PRF difference image offsets

The direct PRF centroid is offset from the target star catalog position by about 0.08 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.010 ± 0.068	0.14	0.002 ± 0.068	-0.009 ± 0.068
PRF-fit source offset from KIC position	0.136 ± 0.083	1.63	-0.122 ± 0.079	-0.060 ± 0.074
photometric centroid source offset	0.44 ± 0.10	4.45	-0.13 ± 0.09	-0.43 ± 0.10



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.

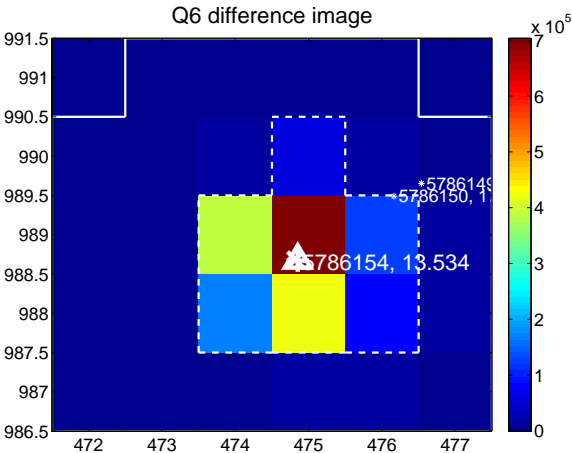
Q5 no difference image



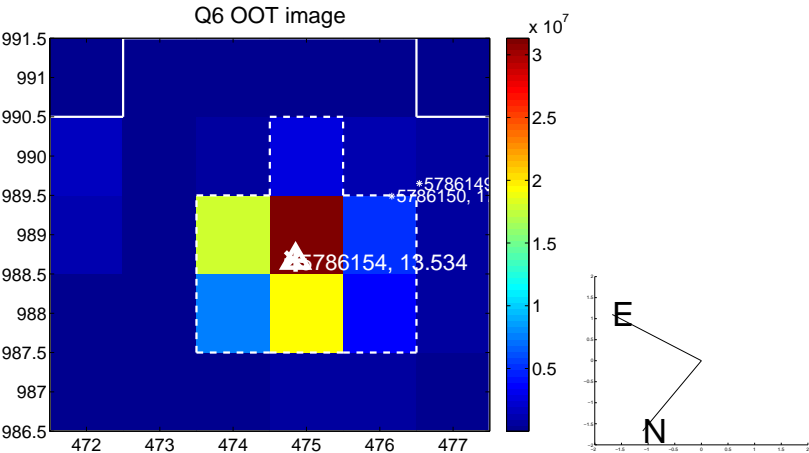
Q5 no OOT image



Q6 difference image



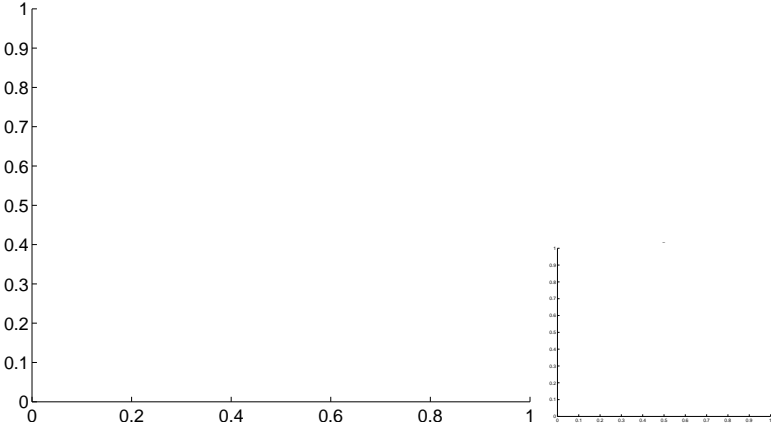
Q6 OOT image



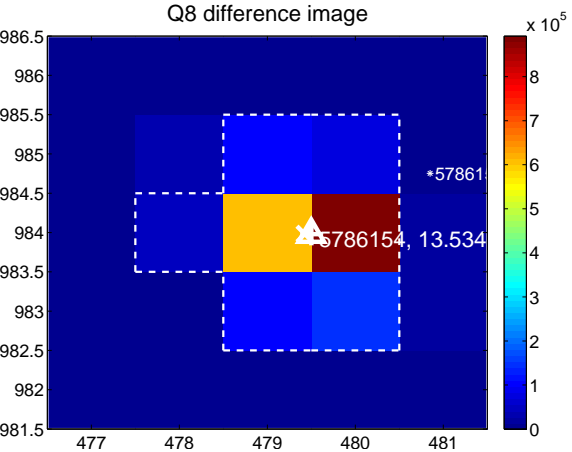
Q7 no difference image



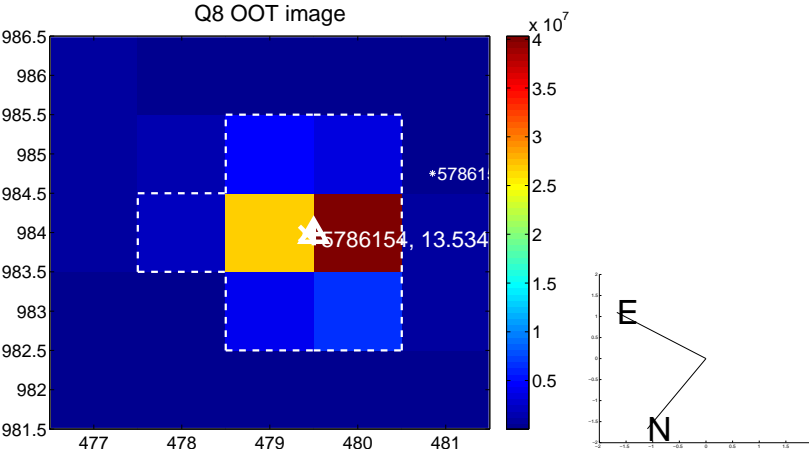
Q7 no OOT image



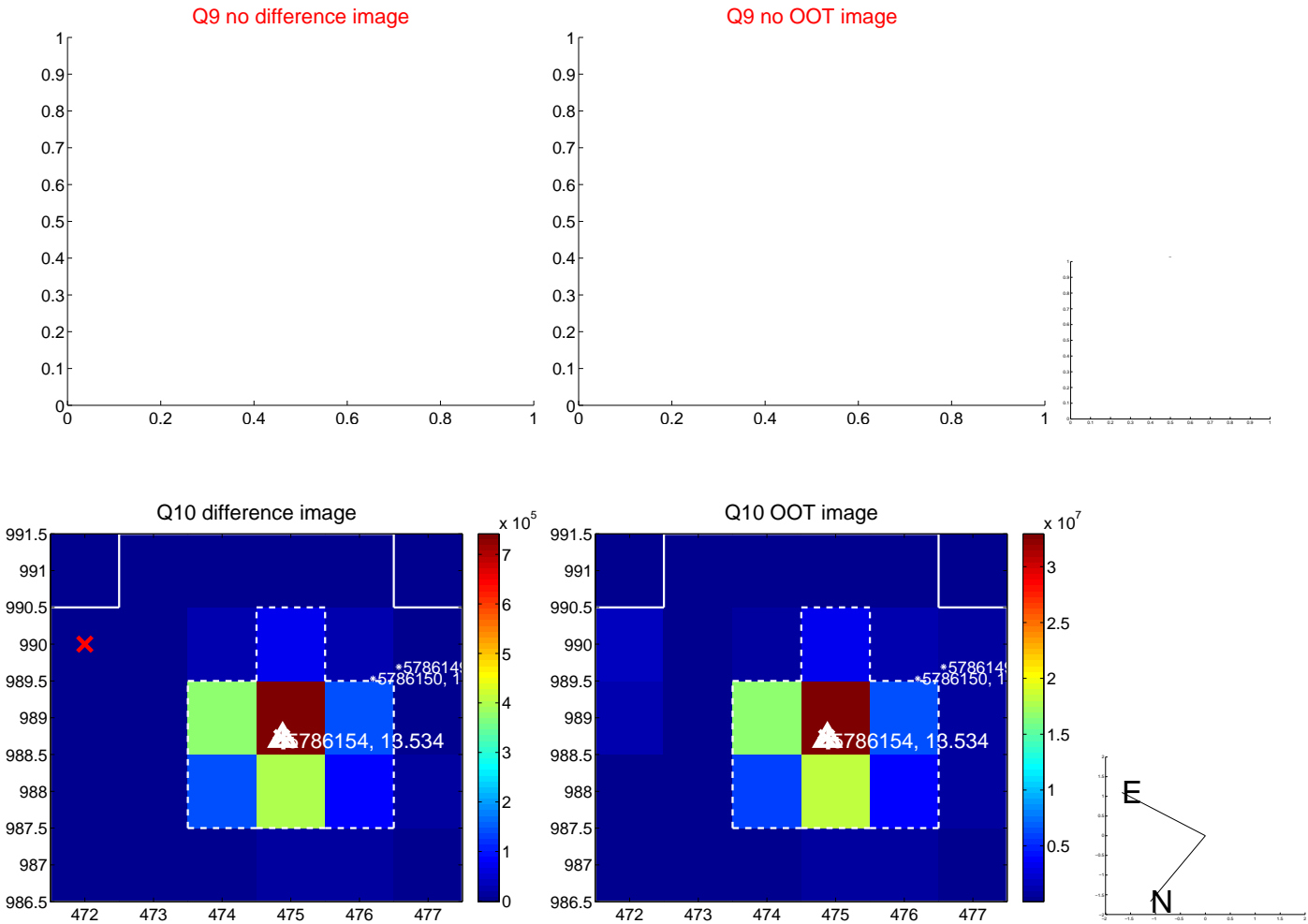
Q8 difference image



Q8 OOT image



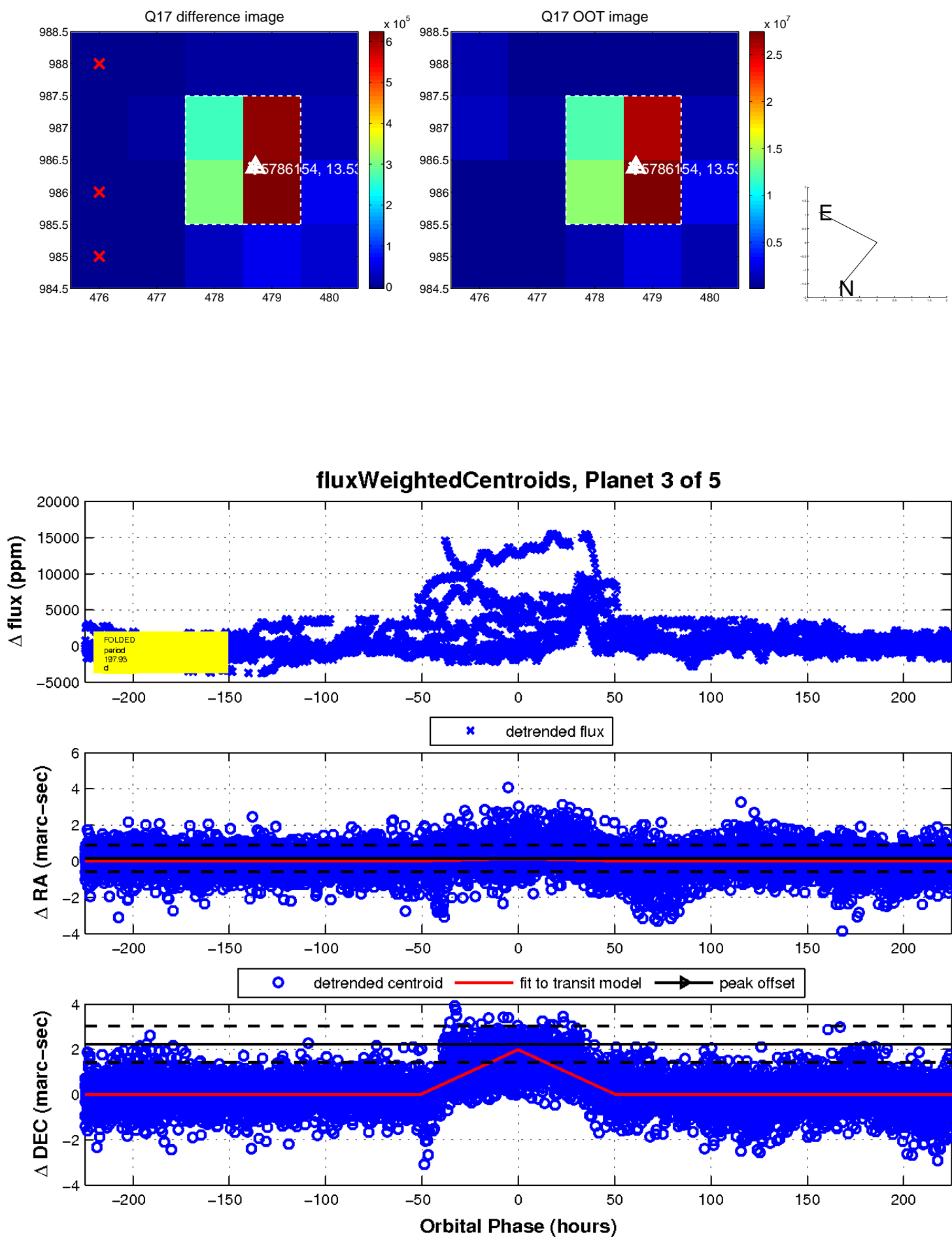
white ×: KIC target position; +: OOT centroid; △: difference centroid. red ✕: large negative pixel value.



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

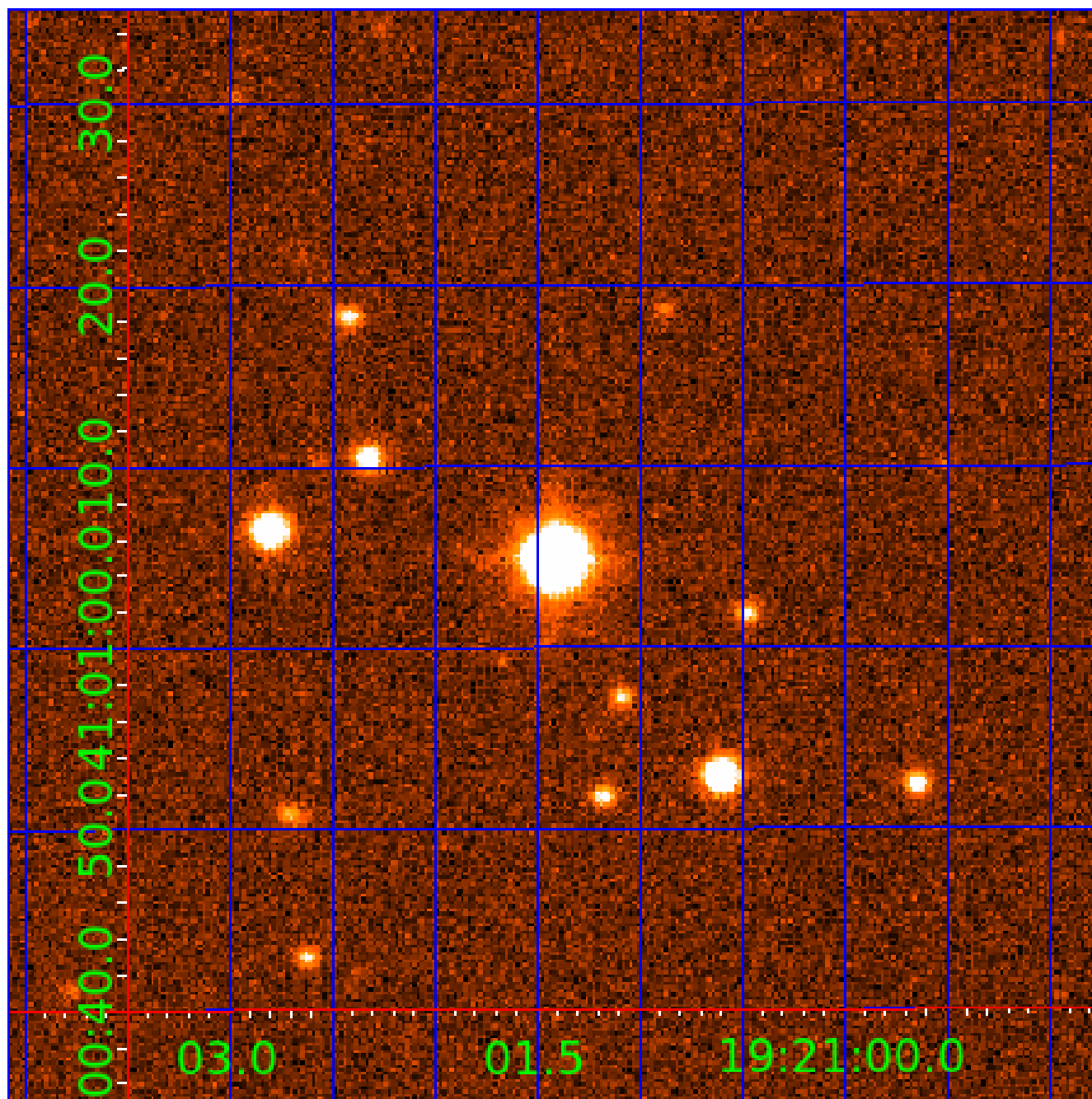


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 005786154

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})
005786154-01	OBS	No	197.912651	133.418126	915.9	15.000	56.5	-1.0	7.90	4611	22.89	59.77
005786154-02	OBS	No	197.912651	327.959240	1033.7	15.000	55.6	-1.0	7.90	4611	24.32	59.77
005786154-03	OBS	No	197.926273	189.024654	297.4	15.000	17.2	-1.0	7.90	4611	13.04	59.76
005786154-04	OBS	No	197.916708	187.964422	22328.8	86.123	16.5	97.5	7.90	4611	115.07	59.76
005786154-05	OBS	No	197.920693	131.684026	69559.6	116.979	32.5	350.9	7.90	4611	200.31	59.76

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
005786154-01	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—CENT_NOFITS
005786154-02	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—SAME_NTL_PERIOD—CENT_NOFITS
005786154-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_MARSHALL—LPP_DV—LPP_ALT—SAME_NTL_PERIOD—CENT_NOFITS
005786154-04	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_MARSHALL—MOD_TER_DV—SAME_NTL_PERIOD
005786154-05	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—SAME_NTL_PERIOD—CENT_FEW_DIFFS

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

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

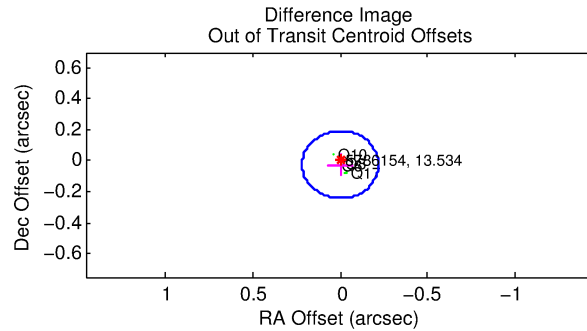
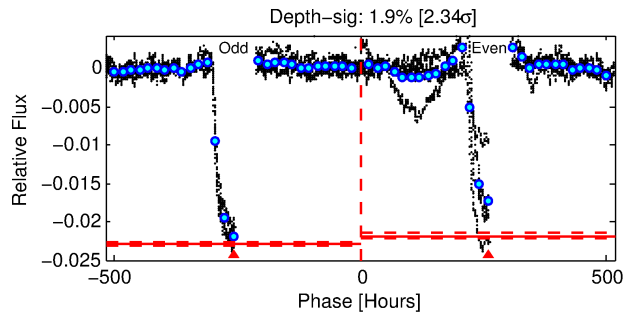
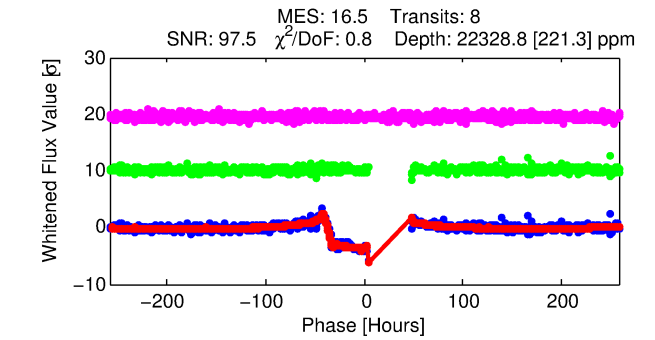
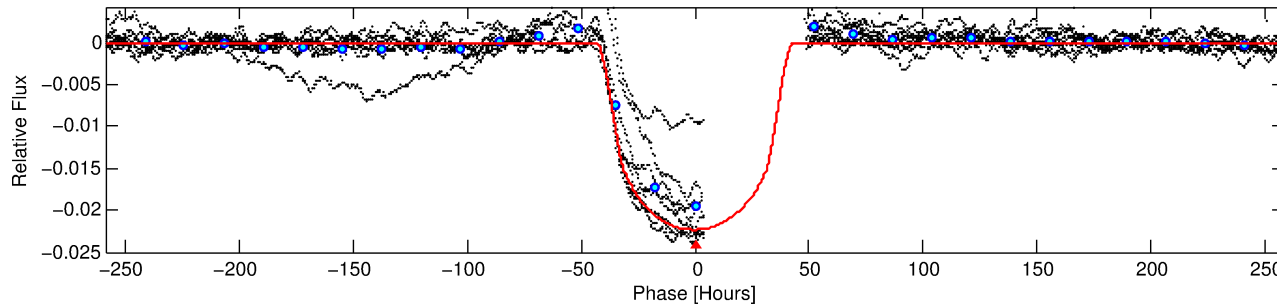
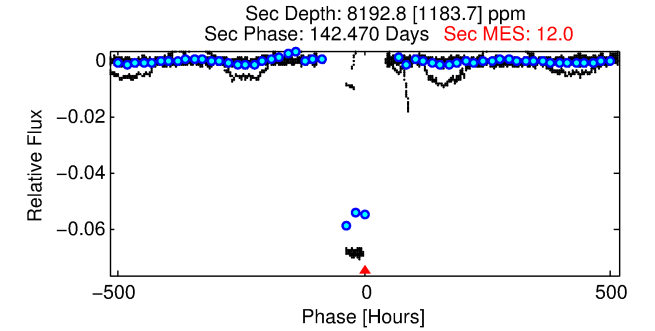
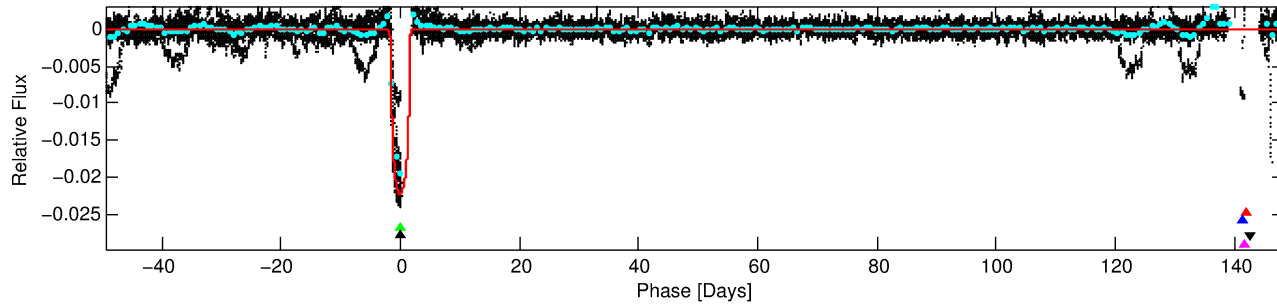
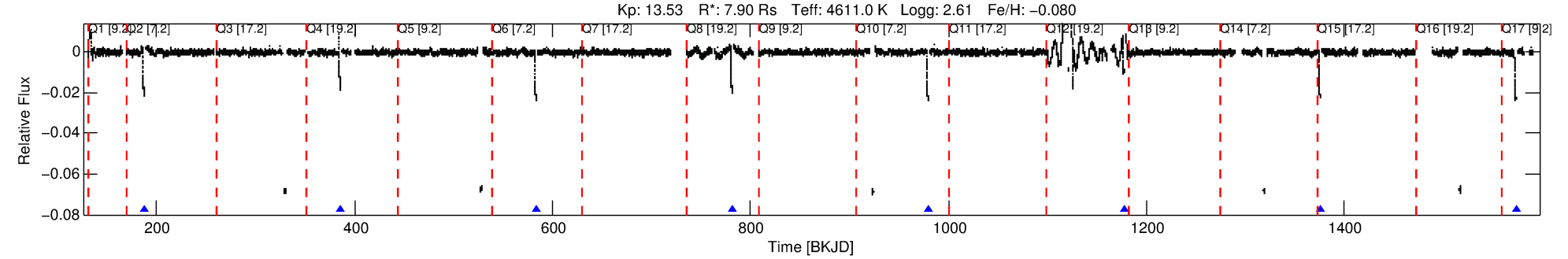
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 005786154-04

No Significant Match Found

DV One-Page Summary

KIC: 5786154 Candidate: 4 of 5 Period: 197.917 d



DV Fit Results:

Period = 197.91671 [0.00206] d
Epoch = 187.9644 [0.0194] BKJD
Rp/R* = 0.1335 [0.0009]
a/R* = 19.10 [0.28]
b = 0.32 [0.04]
Seff = 59.76 [17.72]
Teq = 709 [53] K
Rp = 115.07 [38.76] Re
a = 0.6502 [0.1578] AU
Ag = 143.89 [46.71] [3.06σ]
Teffp = 3796 [149] K [19.55σ]

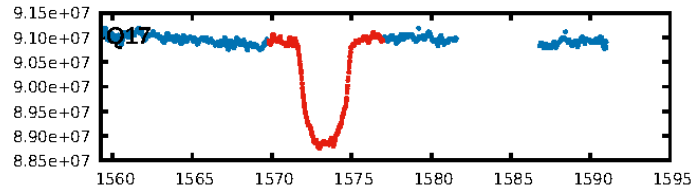
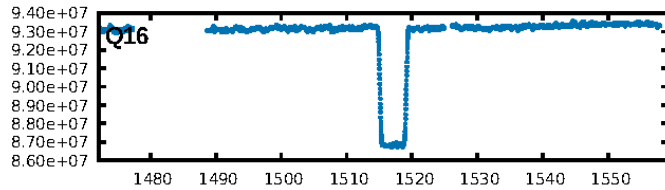
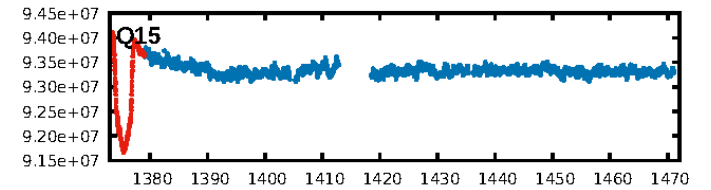
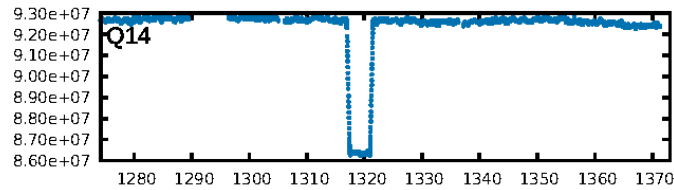
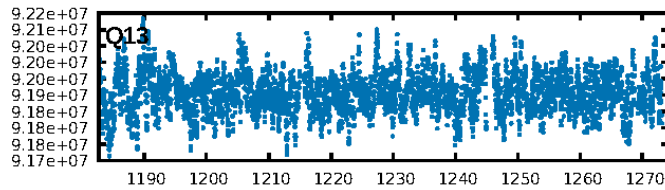
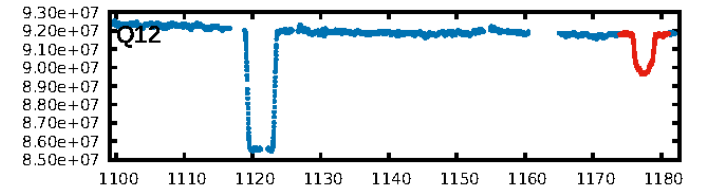
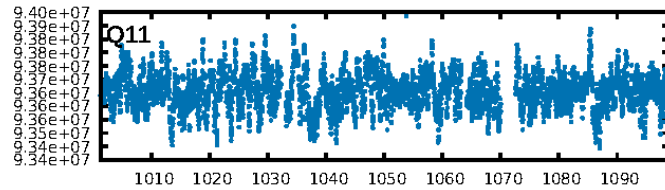
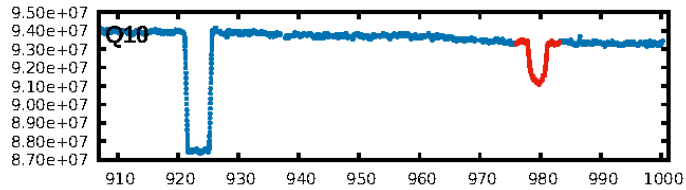
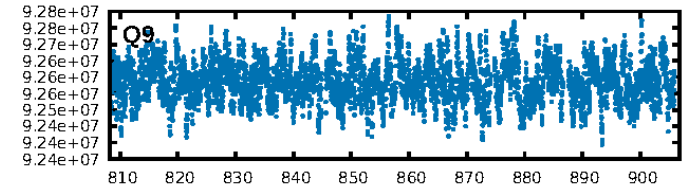
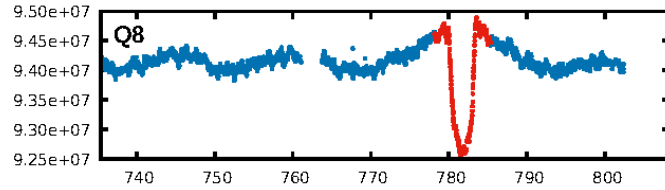
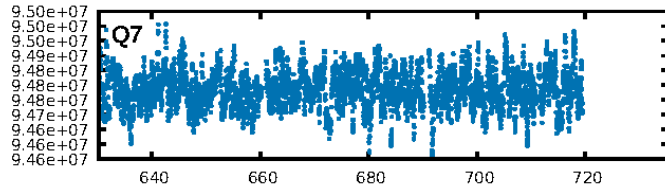
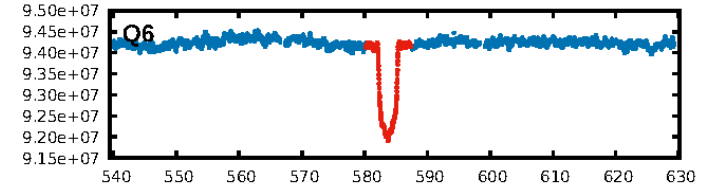
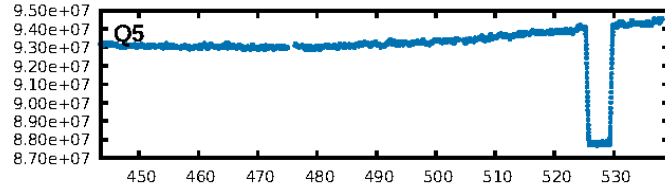
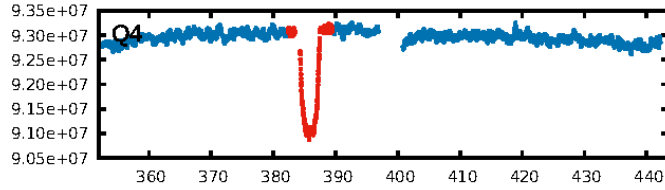
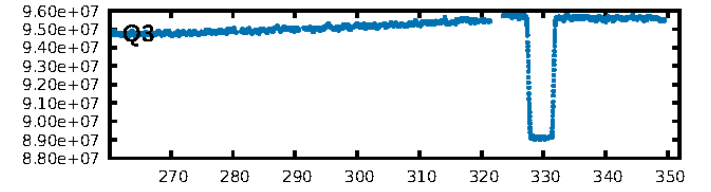
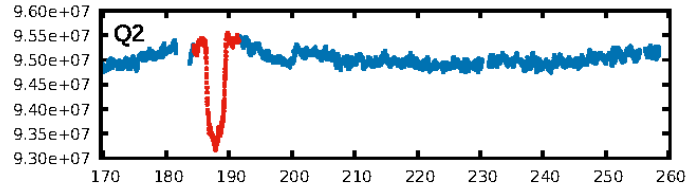
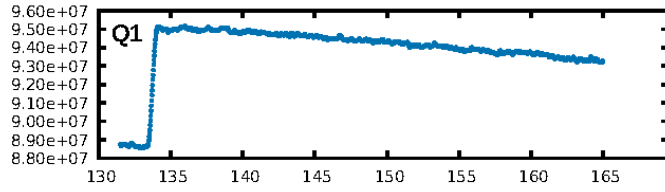
DV Diagnostic Results:

ShortPeriod-sig: 0.1% [0.00σ]
LongPeriod-sig: 0.1% [0.00σ]
ModelChiSquare2-sig: 0.5%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: 2.31e-44
RollingBand-fgt: 1.00 [7/7]
GhostDiagnostic-chr: 0.9621
Centroid-sig: 0.0%
Centroid-so: 0.114 arcsec [5.17σ]
OotOffset-rm: 0.025 arcsec [0.35σ]
KicOffset-rm: 0.124 arcsec [1.60σ]
OotOffset-st: 2/0/1/1 [4]
KicOffset-st: 2/0/1/1 [4]
DiffImageQuality-fgm: 1.00 [4/4]
DiffImageOverlap-fno: 0.00 [0/4]

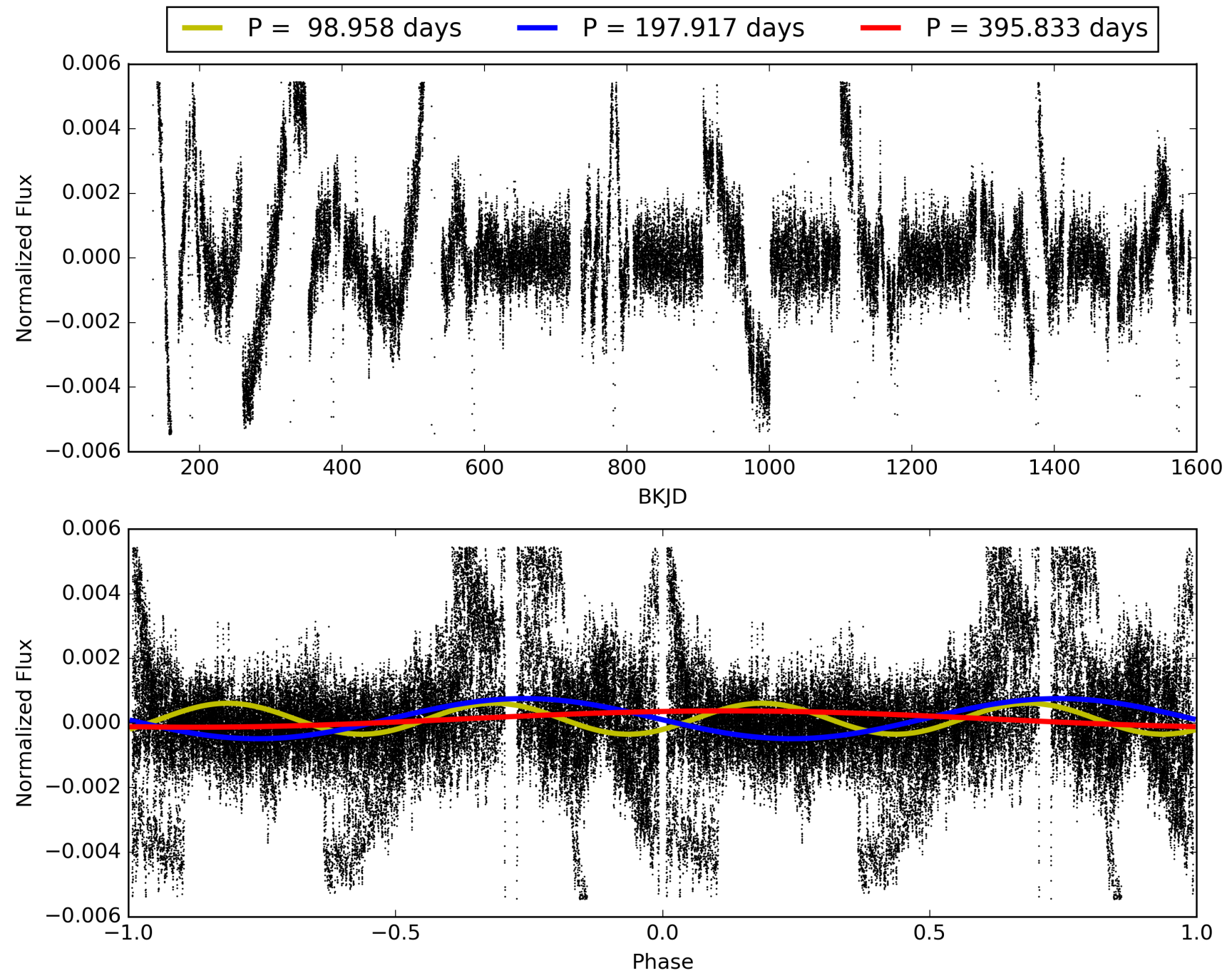
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 03:59:34 Z

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

TCE 005786154-04, PDC Light Curves

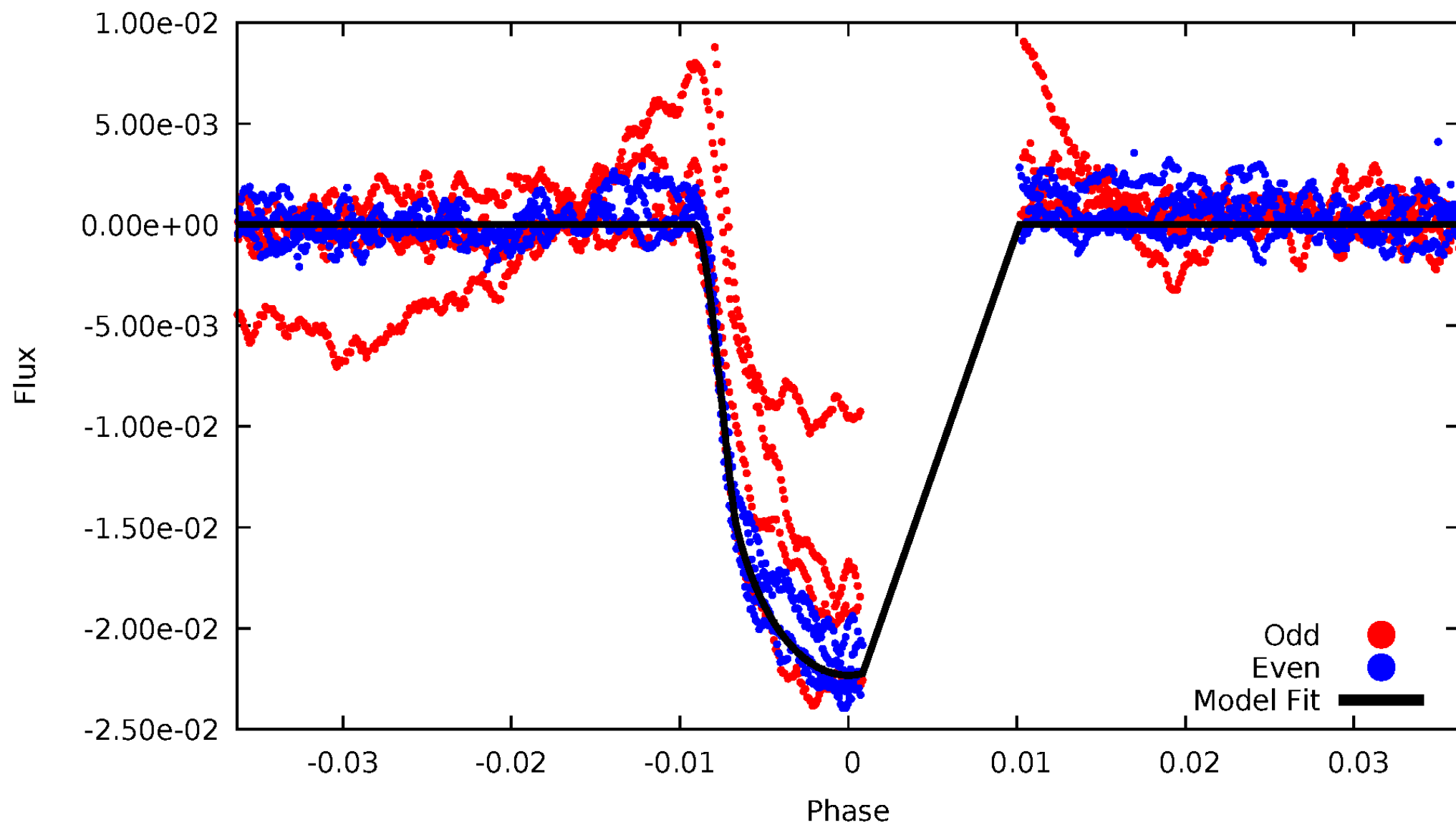


TCE 005786154-04



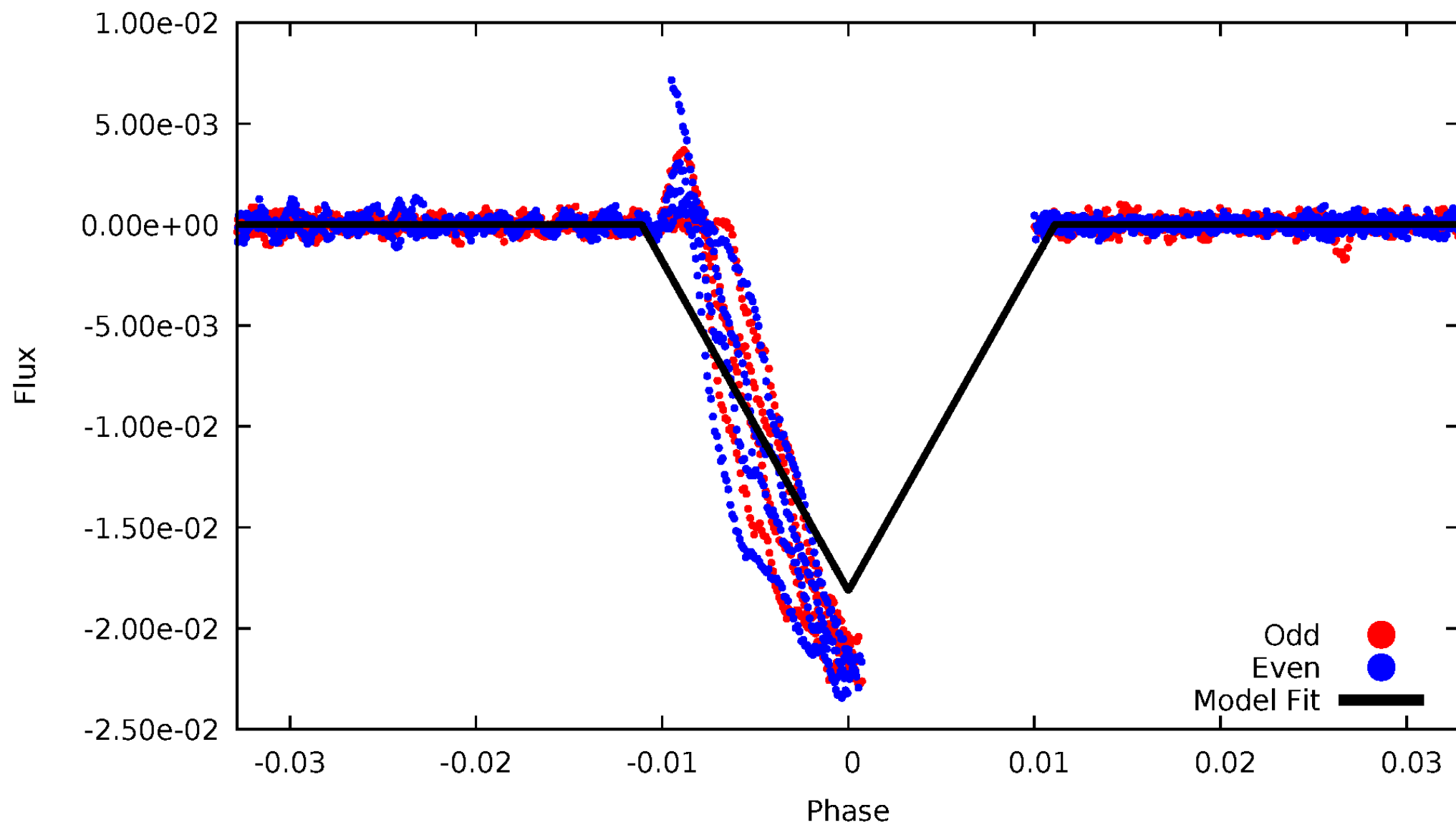
DV Odd/Even

TCE 005786154-04



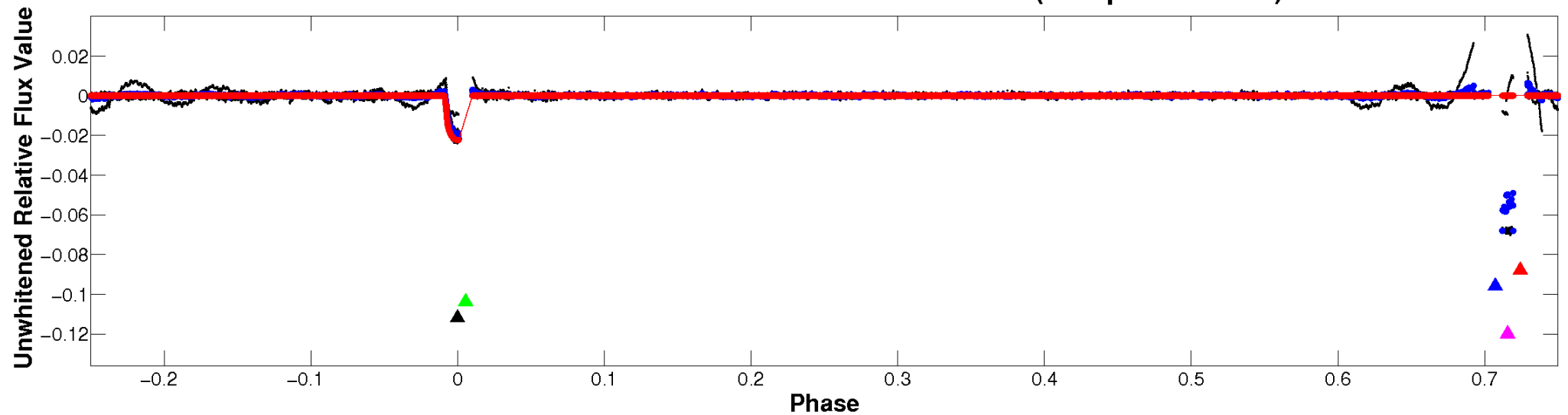
ALT Odd/Even

TCE 005786154-04

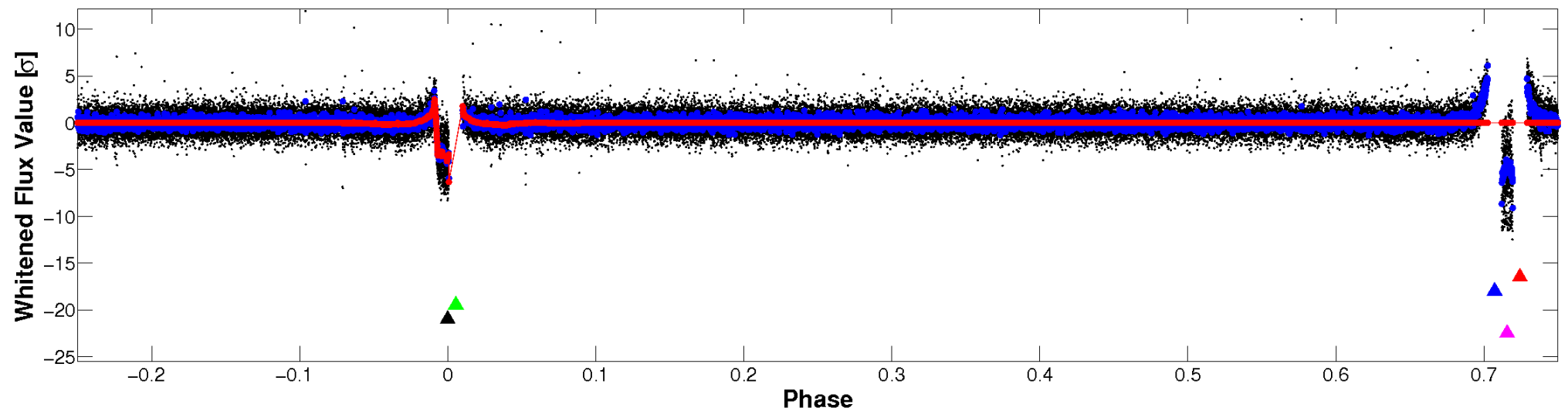


Non-Whitened Vs. Whitened Light Curve

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

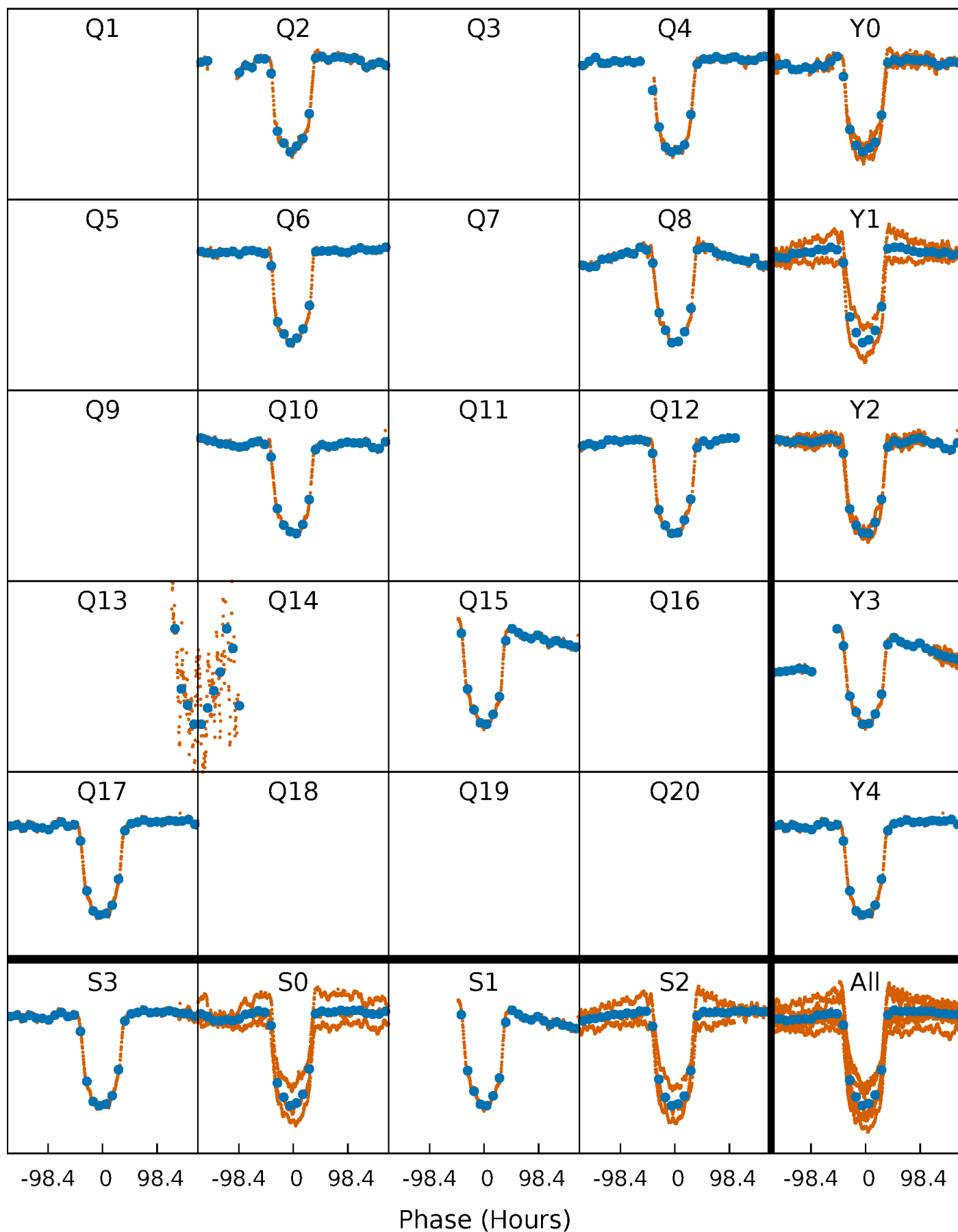


Planet 4 : Phased Whitened Flux Time Series (Fit Epoch/Period)



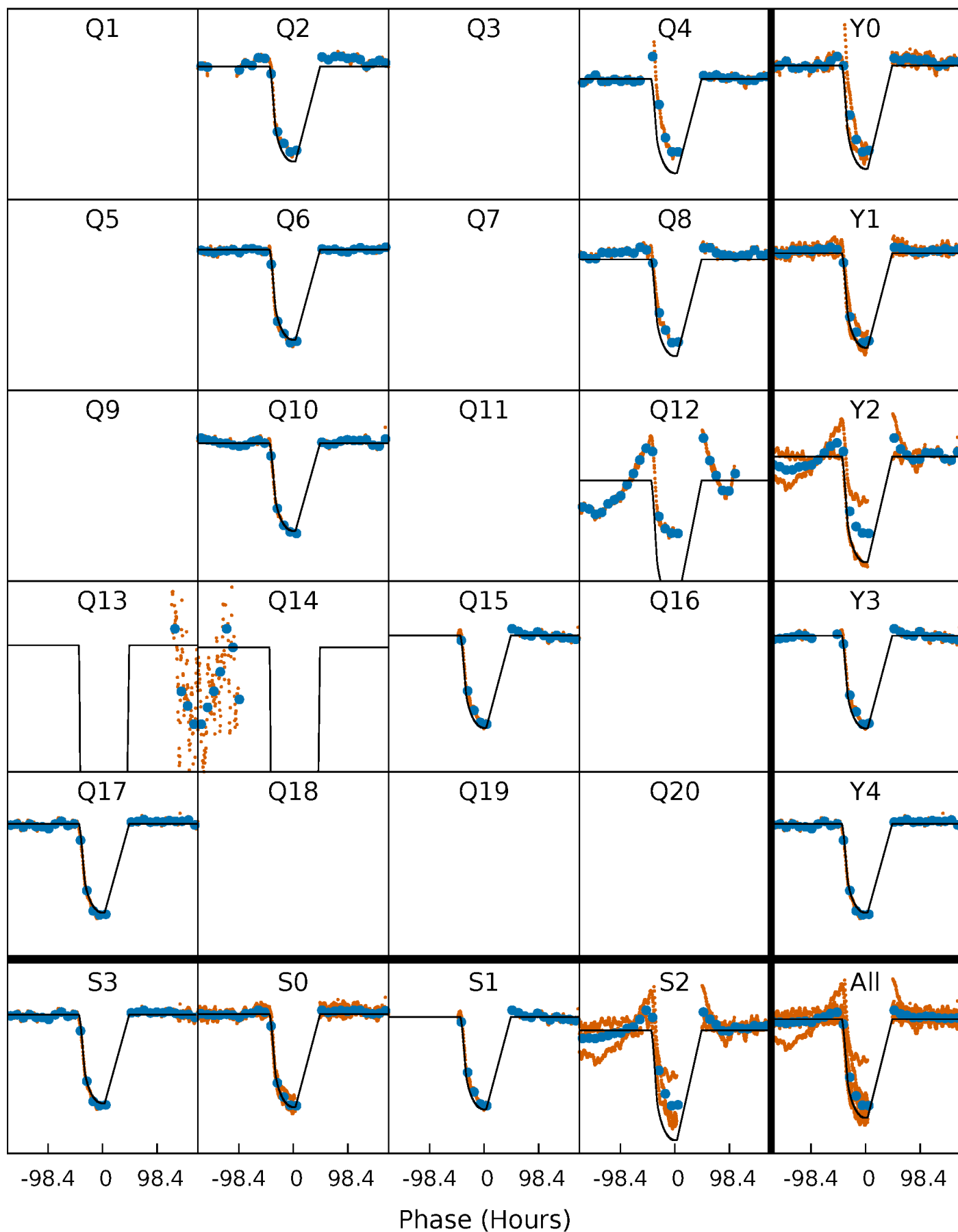
PDC Quarter-Phased Transit Curves

TCE 005786154-04 P=197.916708 Days $T_0=187.964423$ (BKJD)



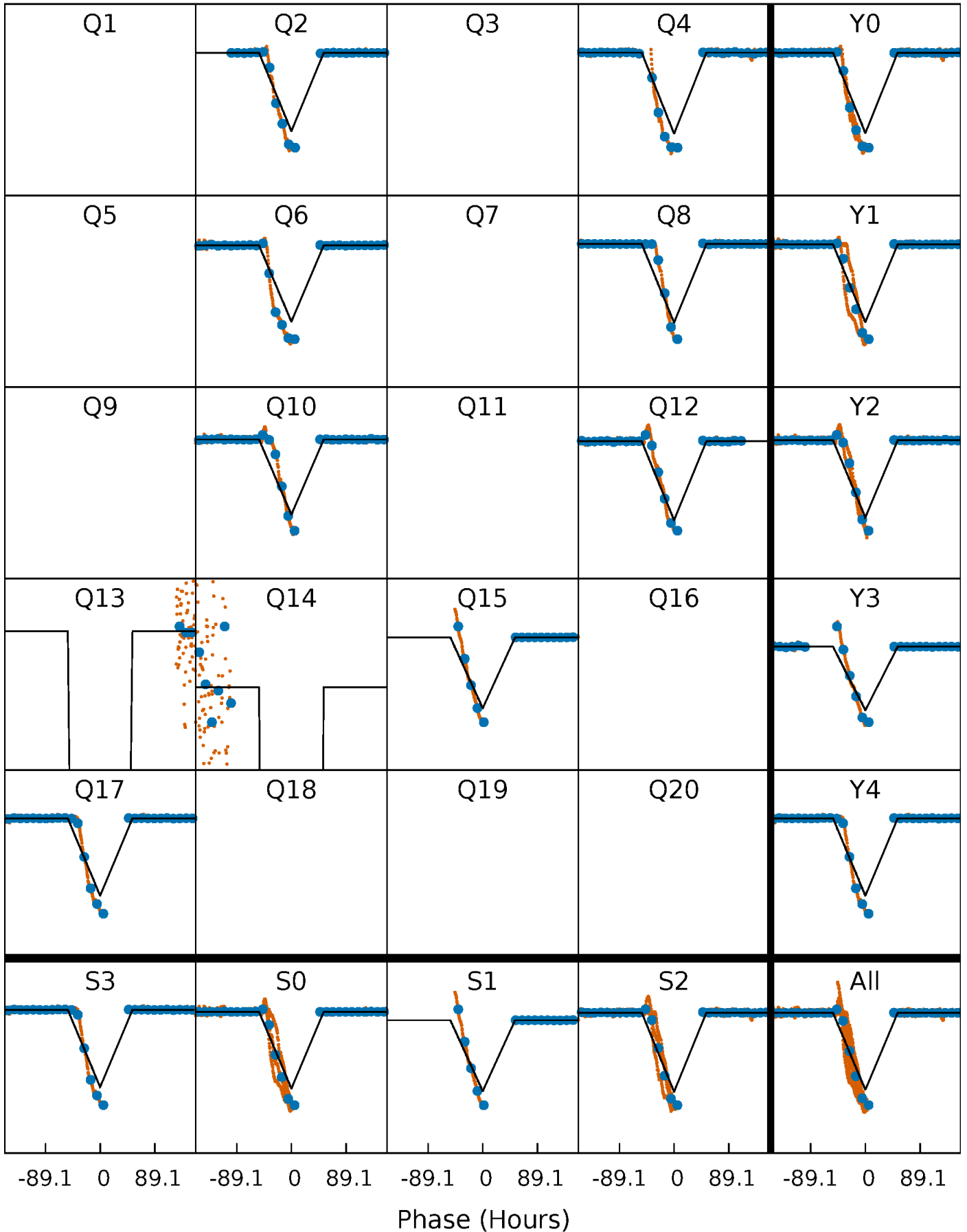
DV Quarter-Phased Transit Curves

TCE 005786154-04 P=197.916708 Days $T_0=187.964423$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

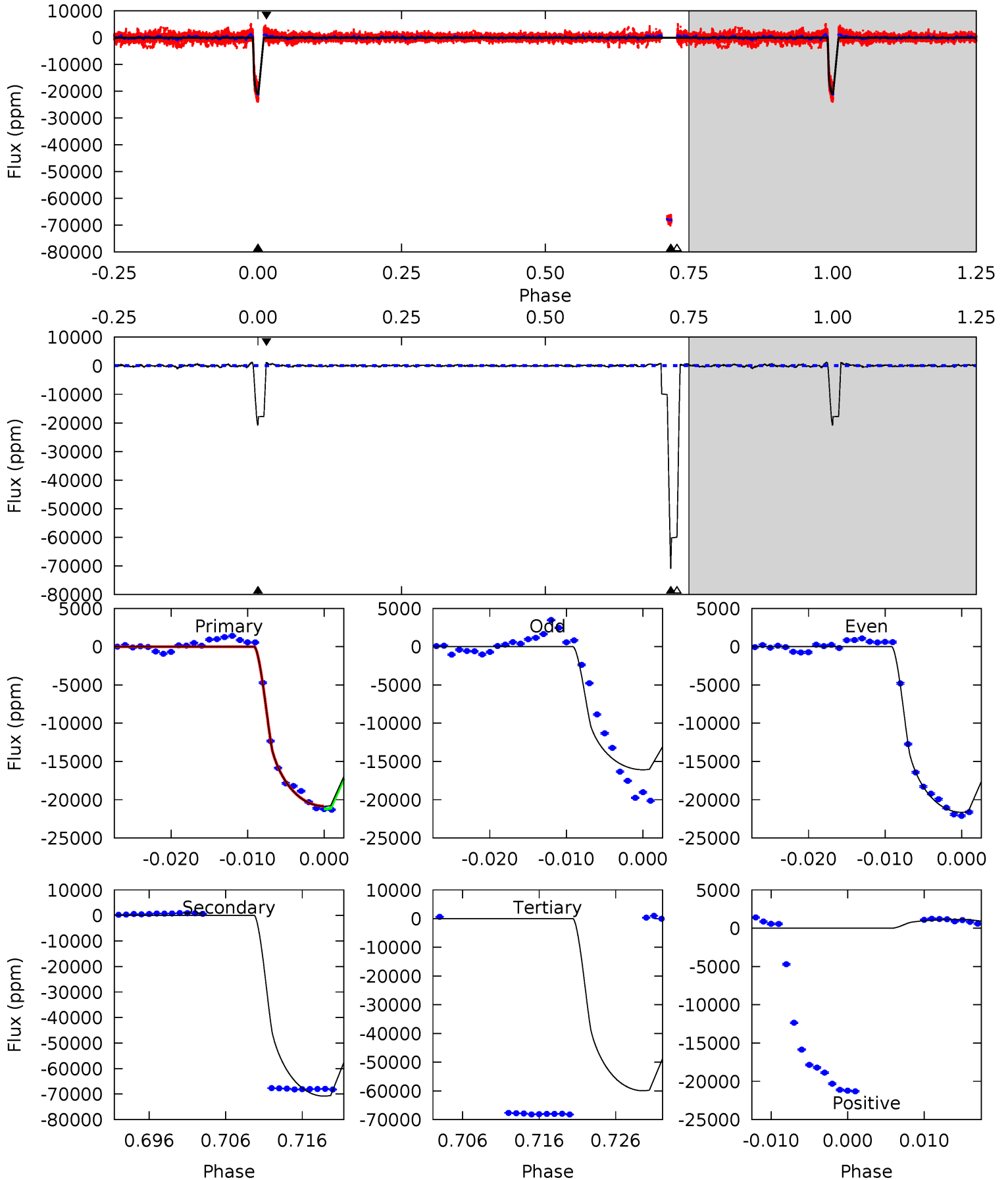
TCE 005786154-04 P=197.912651 Days $T_0=188.015969$ (BKJD)



DV Model-Shift Uniqueness Test

005786154-04, P = 197.916708 Days, E = 187.964423 Days

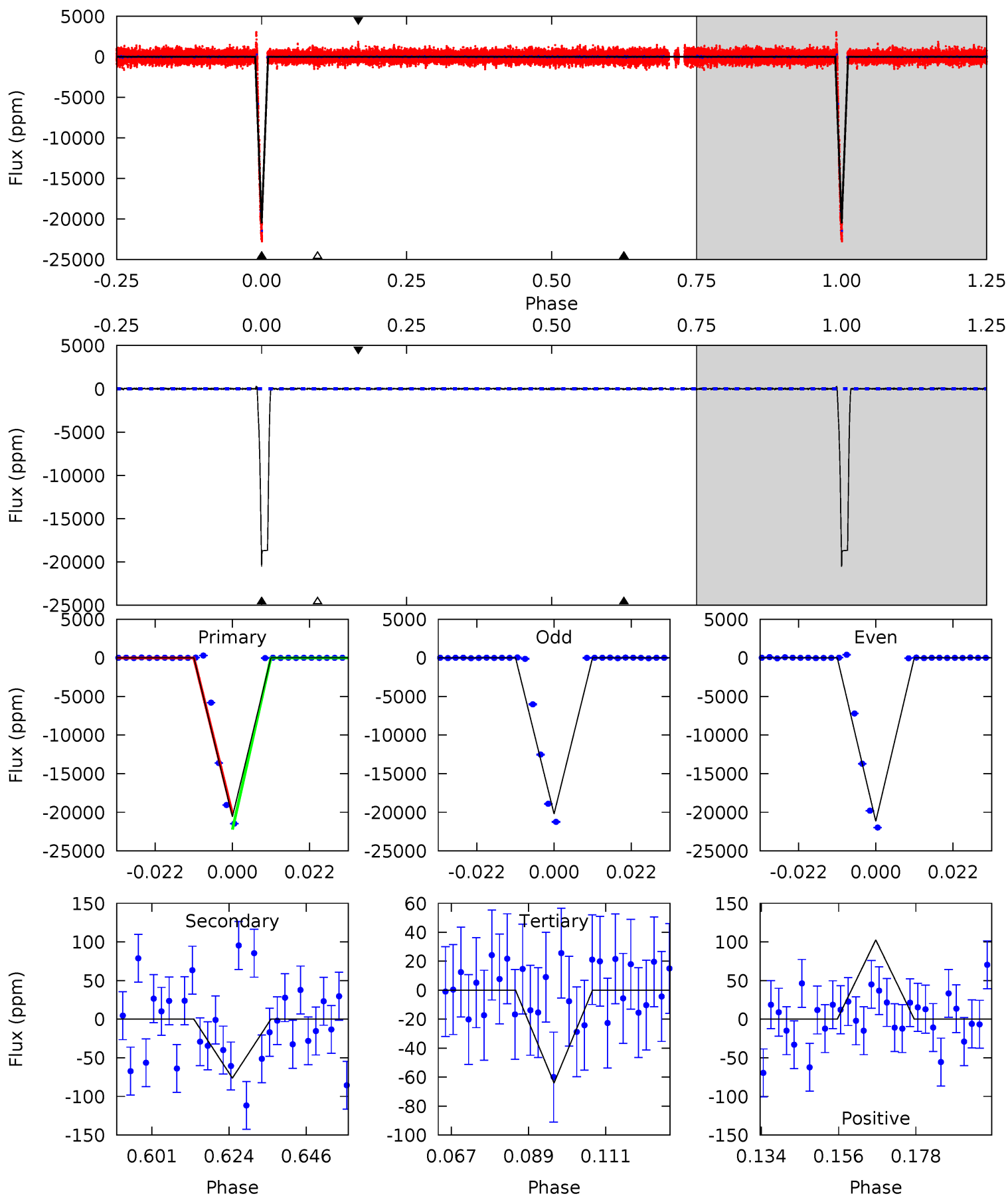
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
605.1	2054	1740	33.0	5.03	2.58	72.0	-1135	572.0	314.8	2021	73.1	0.93	0.02	0



Alt Model-Shift Uniqueness Test

005786154-04, P = 197.912651 Days, E = 188.015969 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
1410	5.23	4.39	7.03	4.87	2.29	1.25	1406	1403	0.84	-1.80	34.4	1.01	0.01	57.2



Stellar Parameters For KIC 005786154

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	4611^{+69}_{-48}	$2.614^{+0.120}_{-0.120}$	$-0.080^{+0.150}_{-0.100}$	$7.898^{+2.660}_{-0.887}$	$0.935^{+0.427}_{-0.022}$	$0.003^{+0.001}_{-0.001}$
	+1%/-1%	+5%/-5%	+188%/-125%	+34%/-11%	+46%/-2%	+47%/-44%
Source	SPE68	SPE68	SPE68	DSEP		

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

Secondary Eclipse Parameters for KIC 005786154-04 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-70795 ± 34	$114.45^{+19.40}_{-7.27}$	987^{+55}_{-36}	6397^{+124}_{-89}	1373^{+201}_{-260}
Alt.	-76 ± 15	$126.17^{+22.10}_{-9.67}$	984^{+57}_{-40}	2001^{+58}_{-66}	$1.093^{+0.359}_{-0.276}$

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 $A_{obs} \gg 1.0$

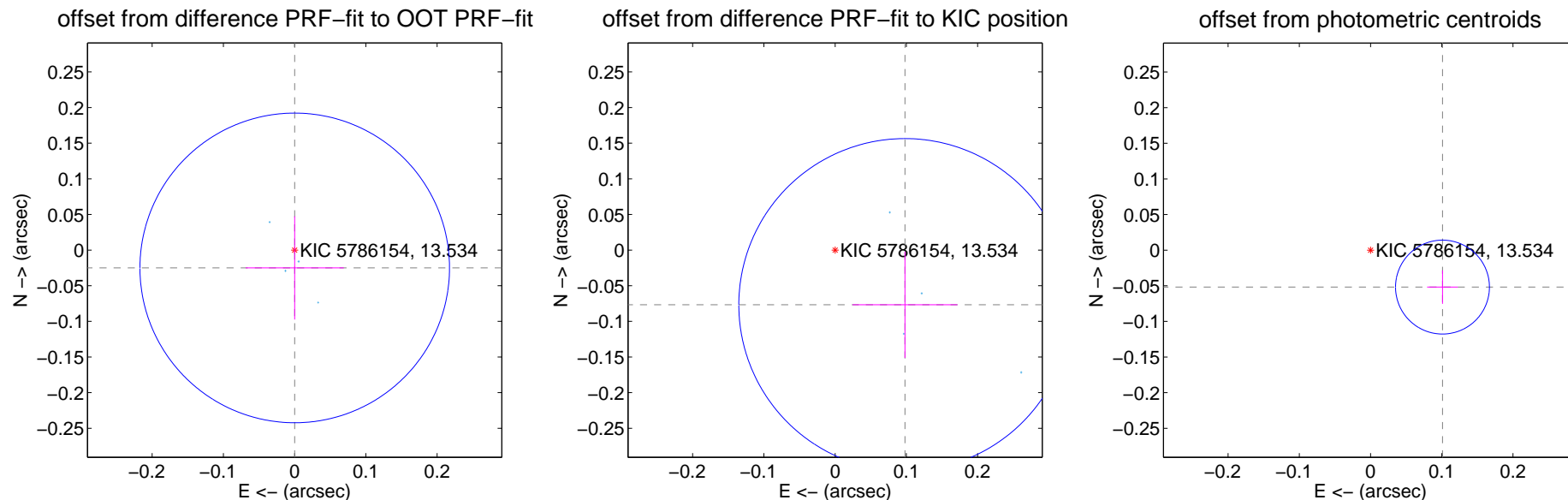
DV Centroid Data

Supplemental centroid analysis for 005786154-04. Kepler magnitude: 13.53. Transit SNR 97.52

There are 4 quarters with good PRF difference image offsets

The direct PRF centroid is offset from the target star catalog position by about 0.08 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.025 ± 0.072	0.35	-0.000 ± 0.069	-0.025 ± 0.072
PRF-fit source offset from KIC position	0.124 ± 0.078	1.60	-0.098 ± 0.074	-0.077 ± 0.075
photometric centroid source offset	0.11 ± 0.02	5.17	-0.10 ± 0.02	-0.05 ± 0.02

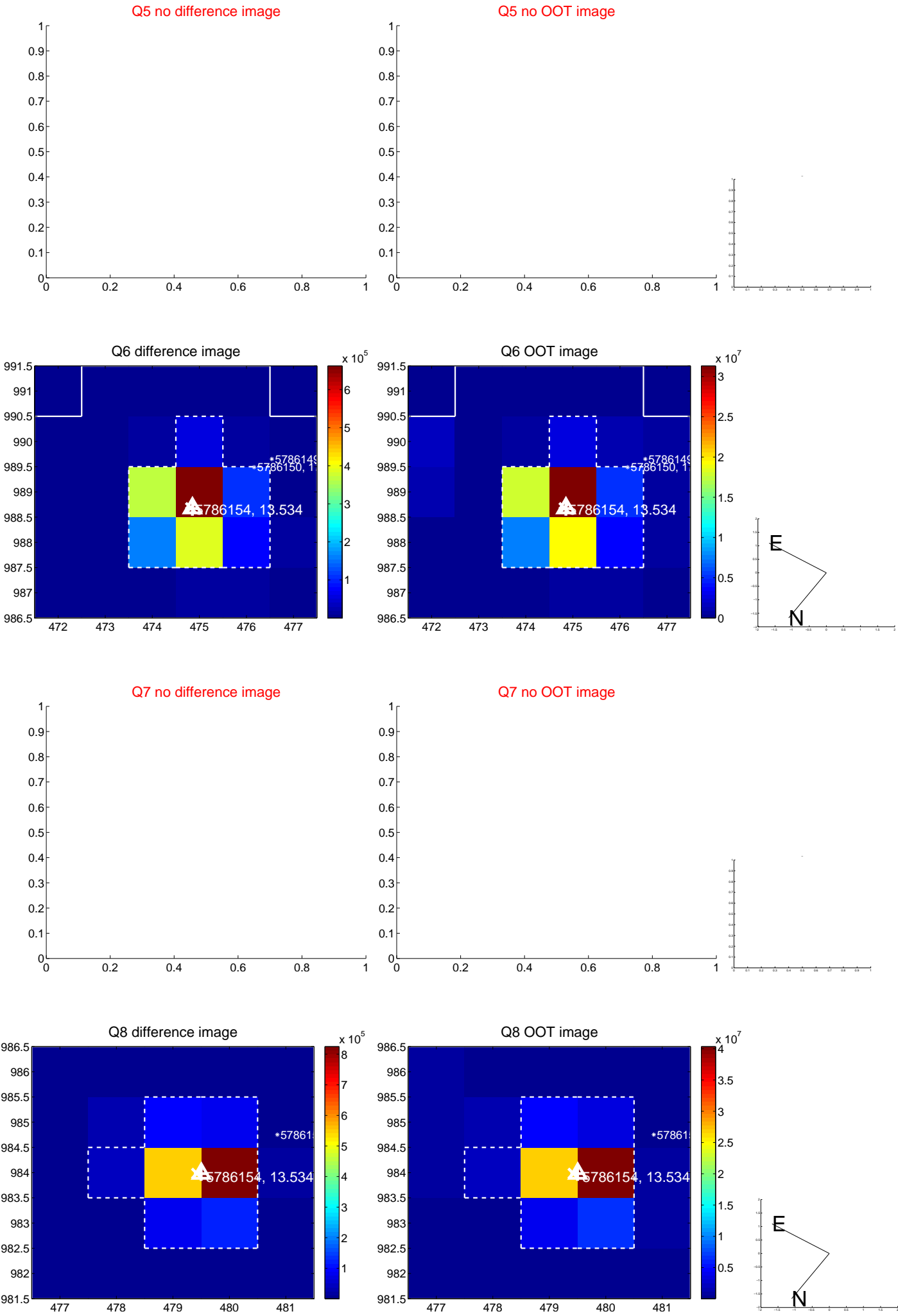


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets**; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

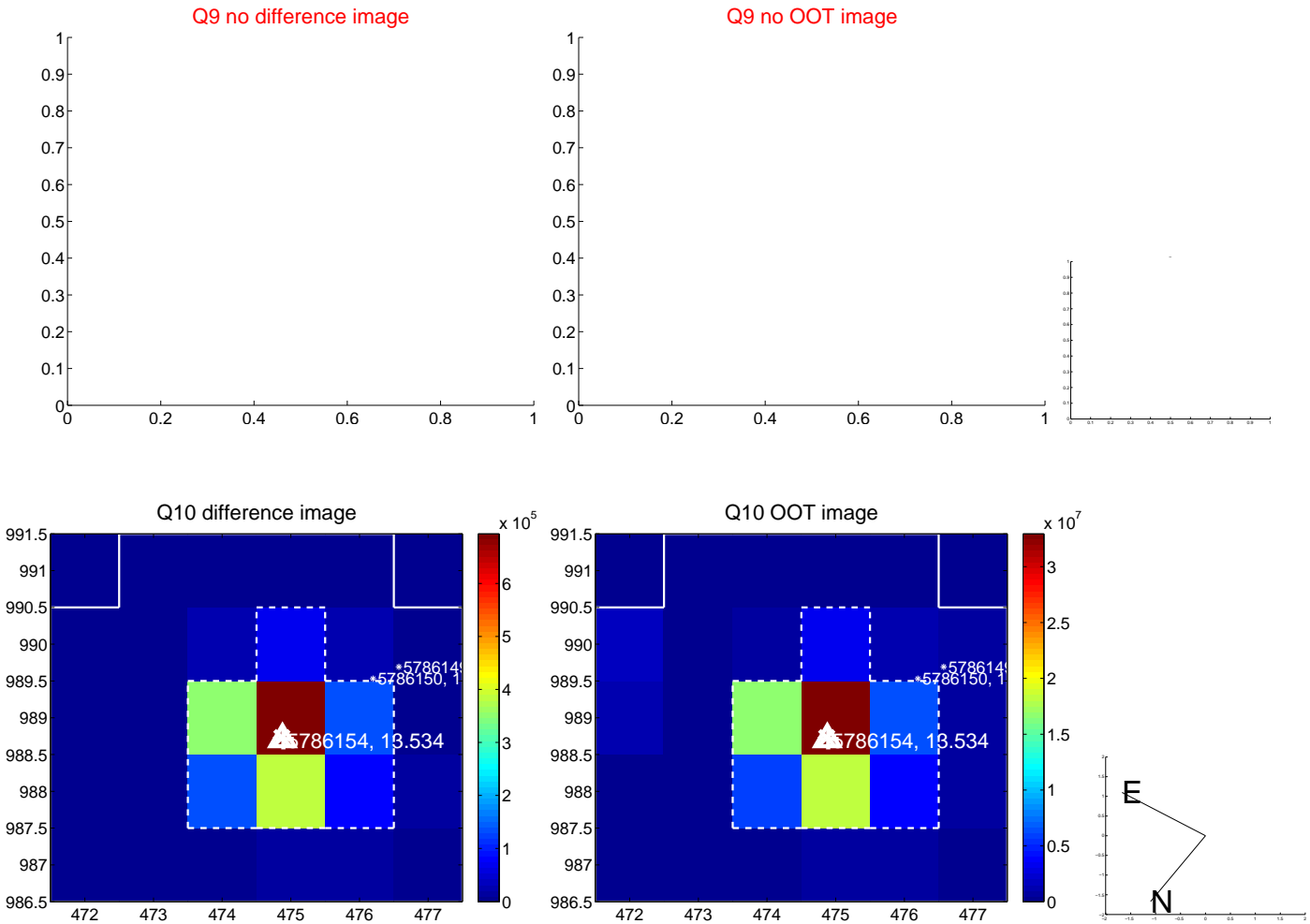
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



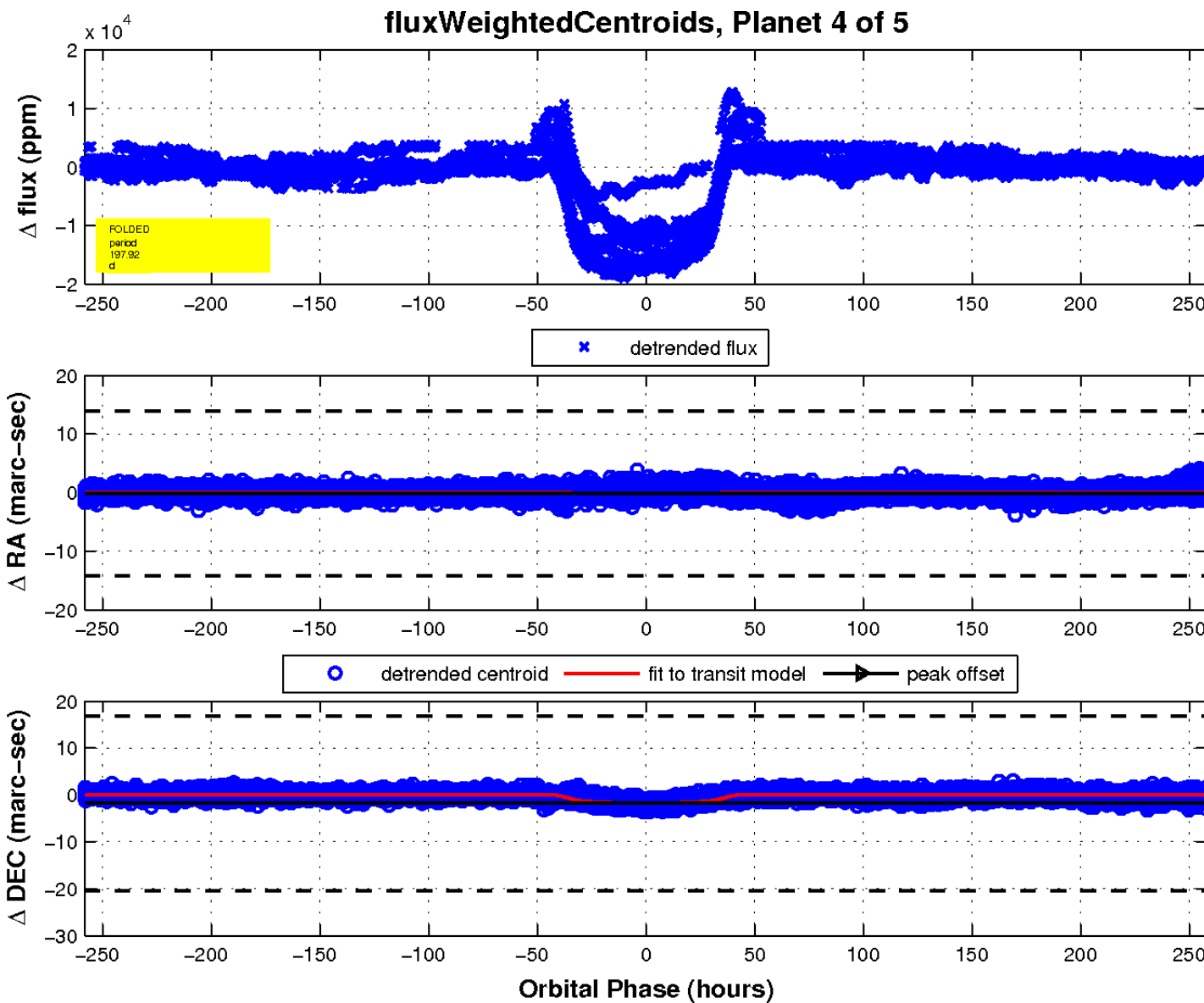
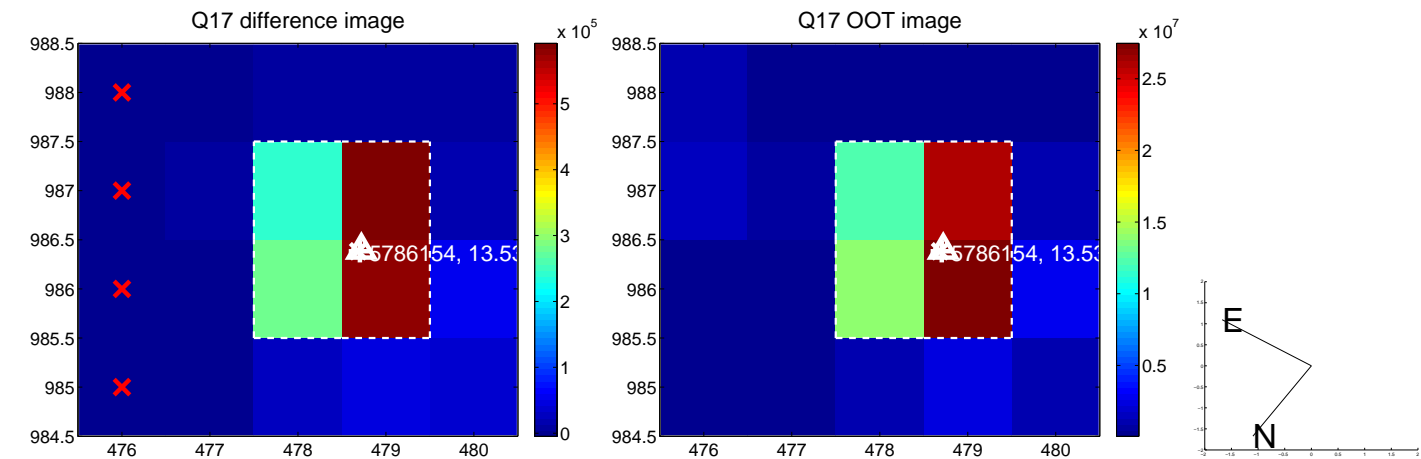
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



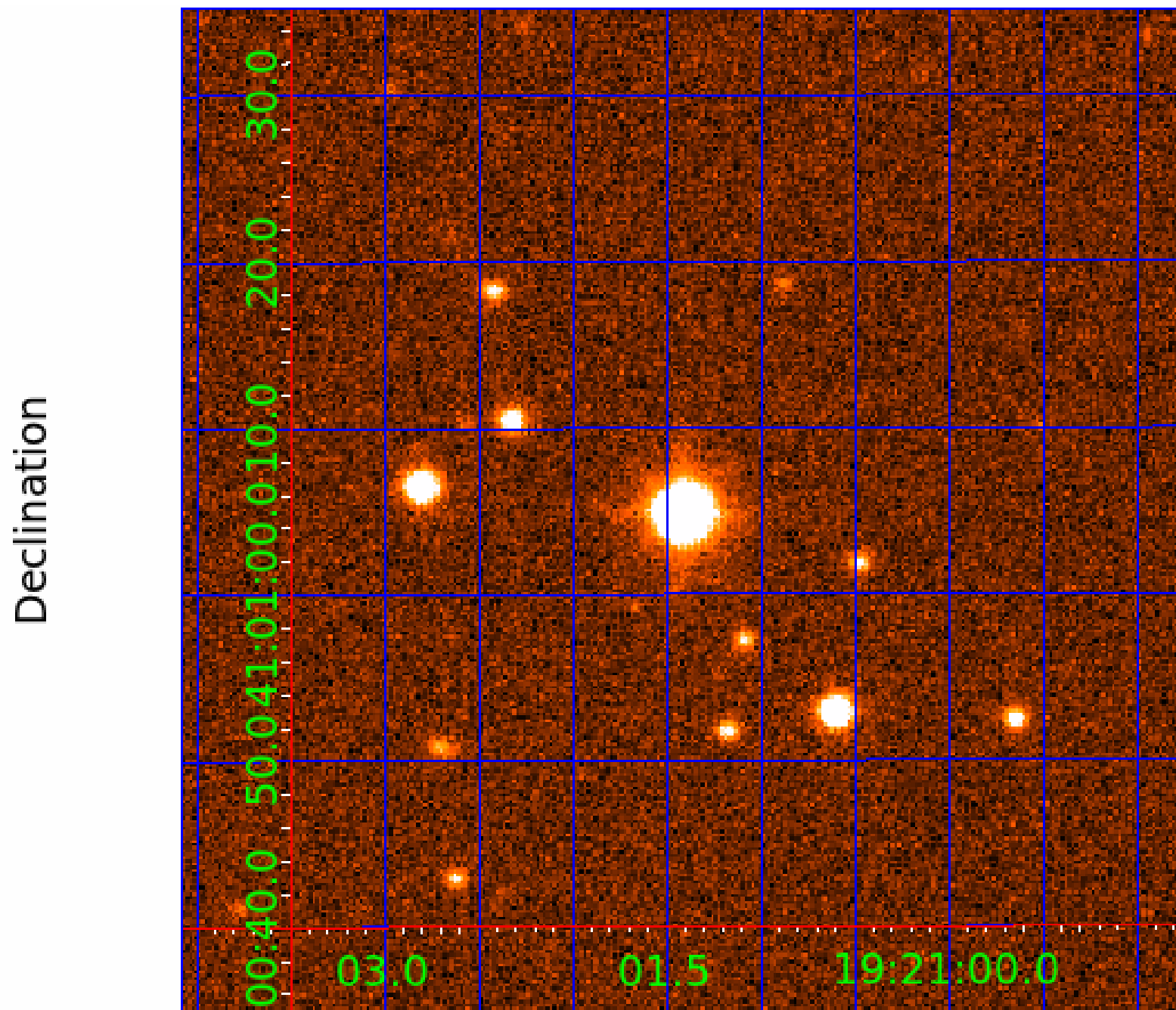
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



UKIRT Image



KIC 005786154

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})
005786154-01	OBS	No	197.912651	133.418126	915.9	15.000	56.5	-1.0	7.90	4611	22.89	59.77
005786154-02	OBS	No	197.912651	327.959240	1033.7	15.000	55.6	-1.0	7.90	4611	24.32	59.77
005786154-03	OBS	No	197.926273	189.024654	297.4	15.000	17.2	-1.0	7.90	4611	13.04	59.76
005786154-04	OBS	No	197.916708	187.964422	22328.8	86.123	16.5	97.5	7.90	4611	115.07	59.76
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Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
005786154-01	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—CENT_NOFITS
005786154-02	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—SAME_NTL_PERIOD—CENT_NOFITS
005786154-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_MARSHALL—LPP_DV—LPP_ALT—SAME_NTL_PERIOD—CENT_NOFITS
005786154-04	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_MARSHALL—MOD_TER_DV—SAME_NTL_PERIOD
005786154-05	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—SAME_NTL_PERIOD—CENT_FEW_DIFFS

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

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

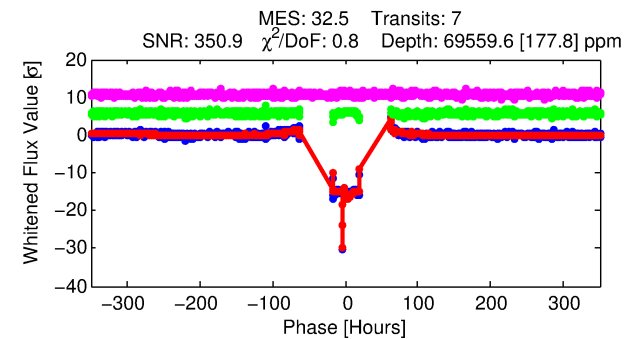
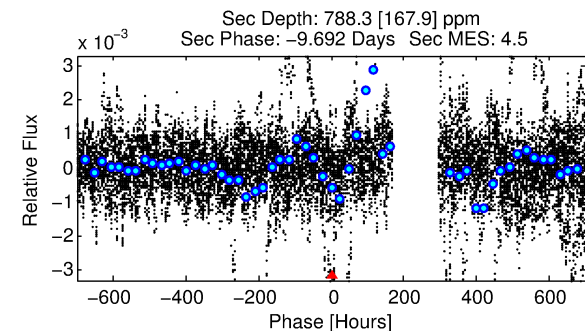
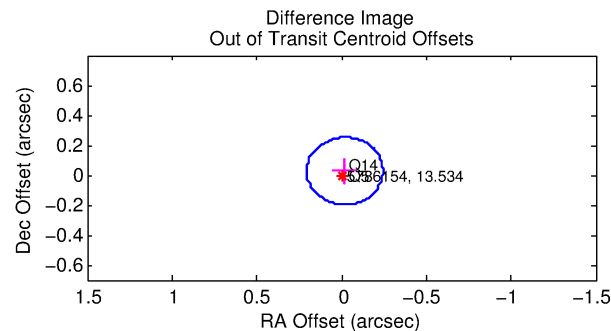
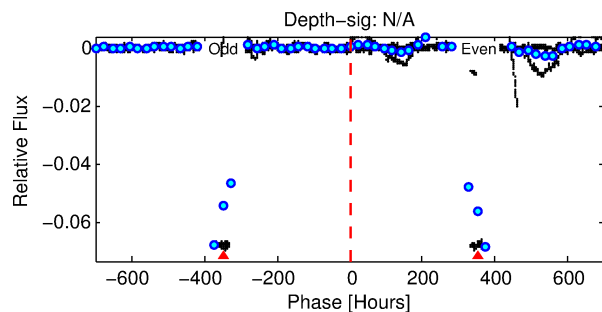
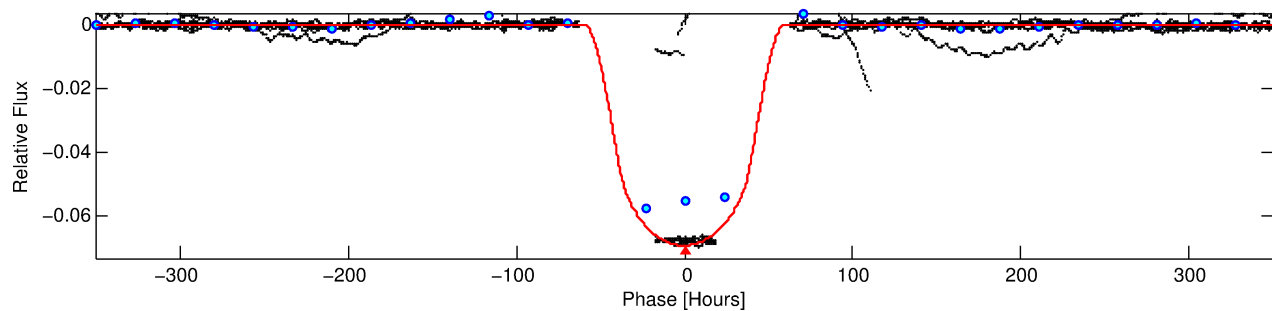
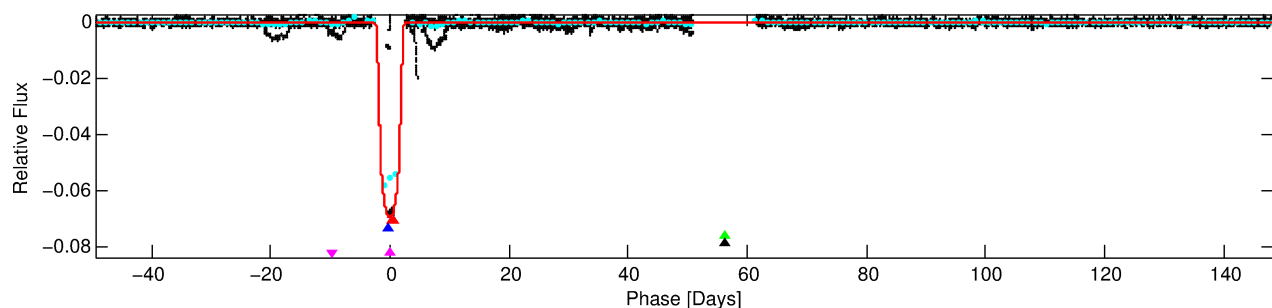
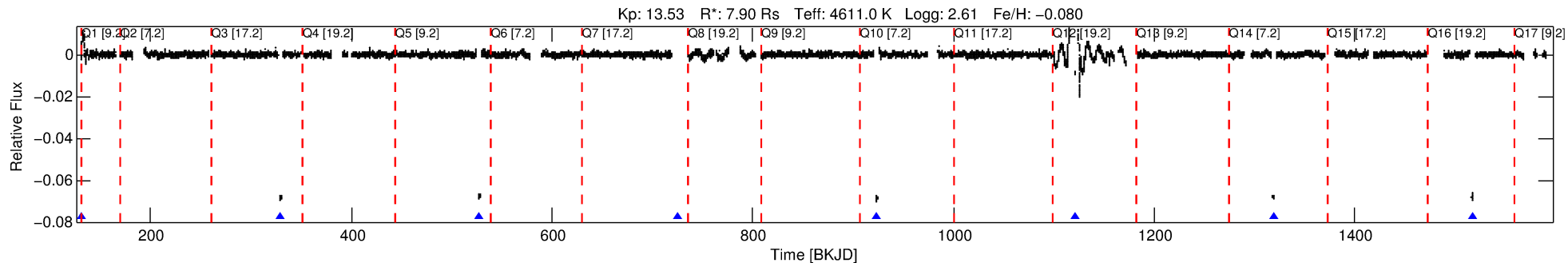
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 005786154-05

No Significant Match Found

DV One-Page Summary

KIC: 5786154 Candidate: 5 of 5 Period: 197.921 d



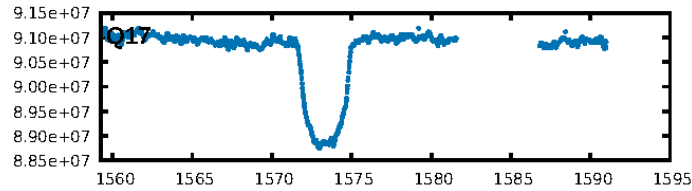
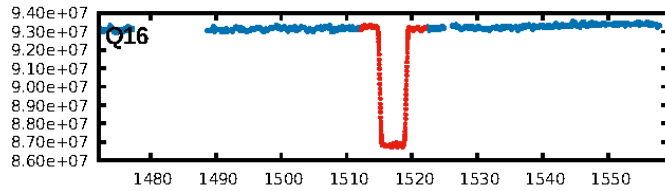
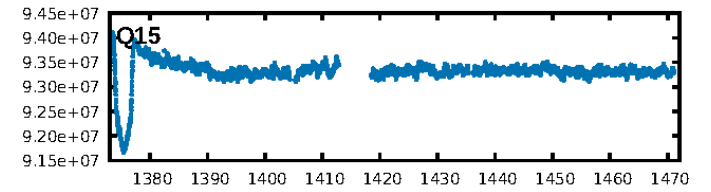
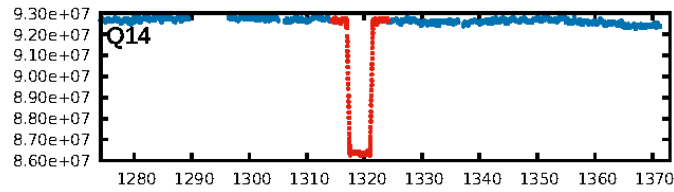
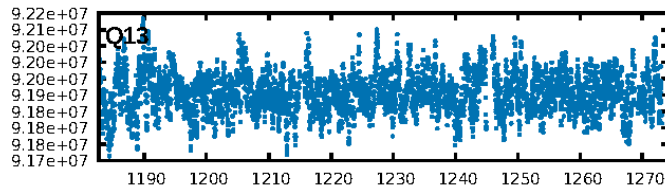
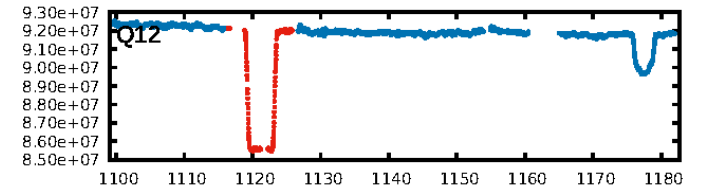
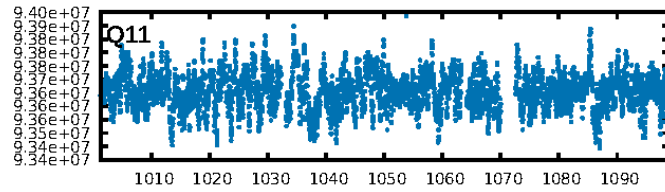
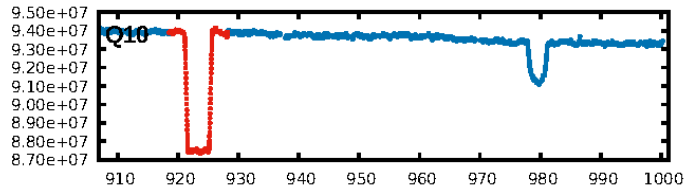
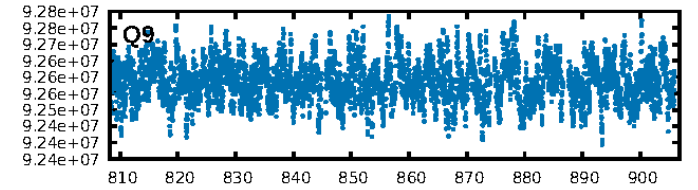
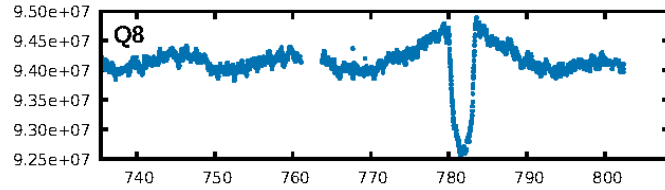
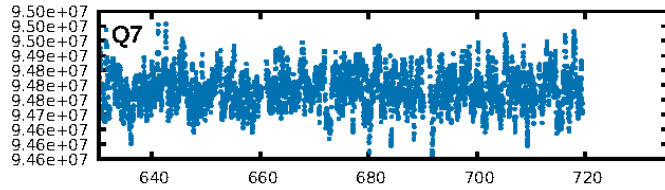
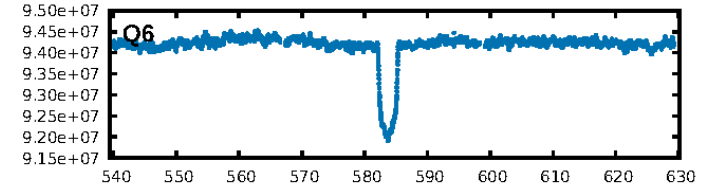
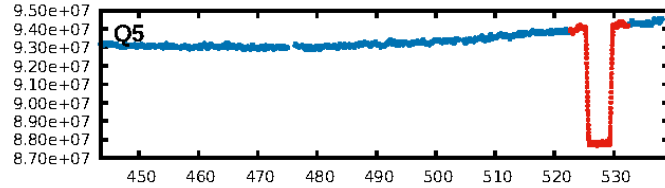
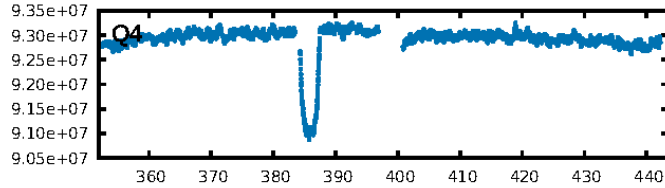
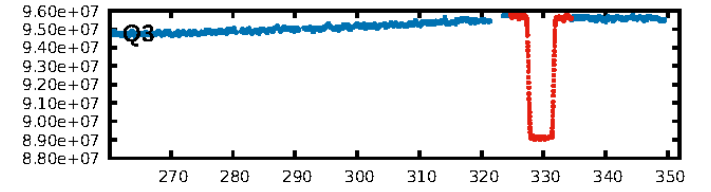
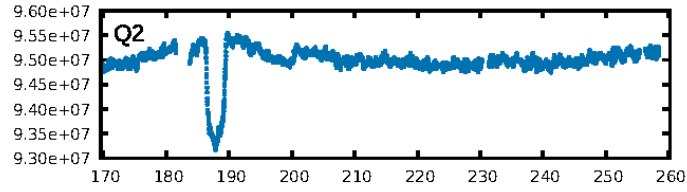
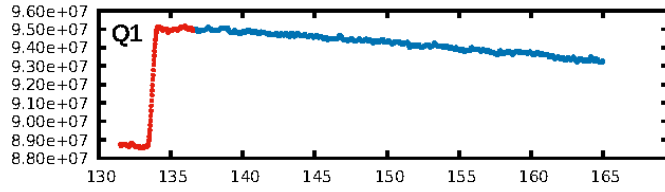
DV Fit Results:

Period = 197.92069 [0.00767] d
Epoch = 131.6840 [0.0398] BKJD
Rp/R* = 0.2324 [0.0065]
a/R* = 15.91 [1.20]
b = 0.08 [0.95]
Seff = 59.76 [17.72]
Teq = 709 [53] K
Rp = 200.31 [67.69] Re
a = 0.6502 [0.1578] AU
Ag = 4.57 [1.67] [2.14 σ]
Teffp = 1603 [91] K [8.47 σ]

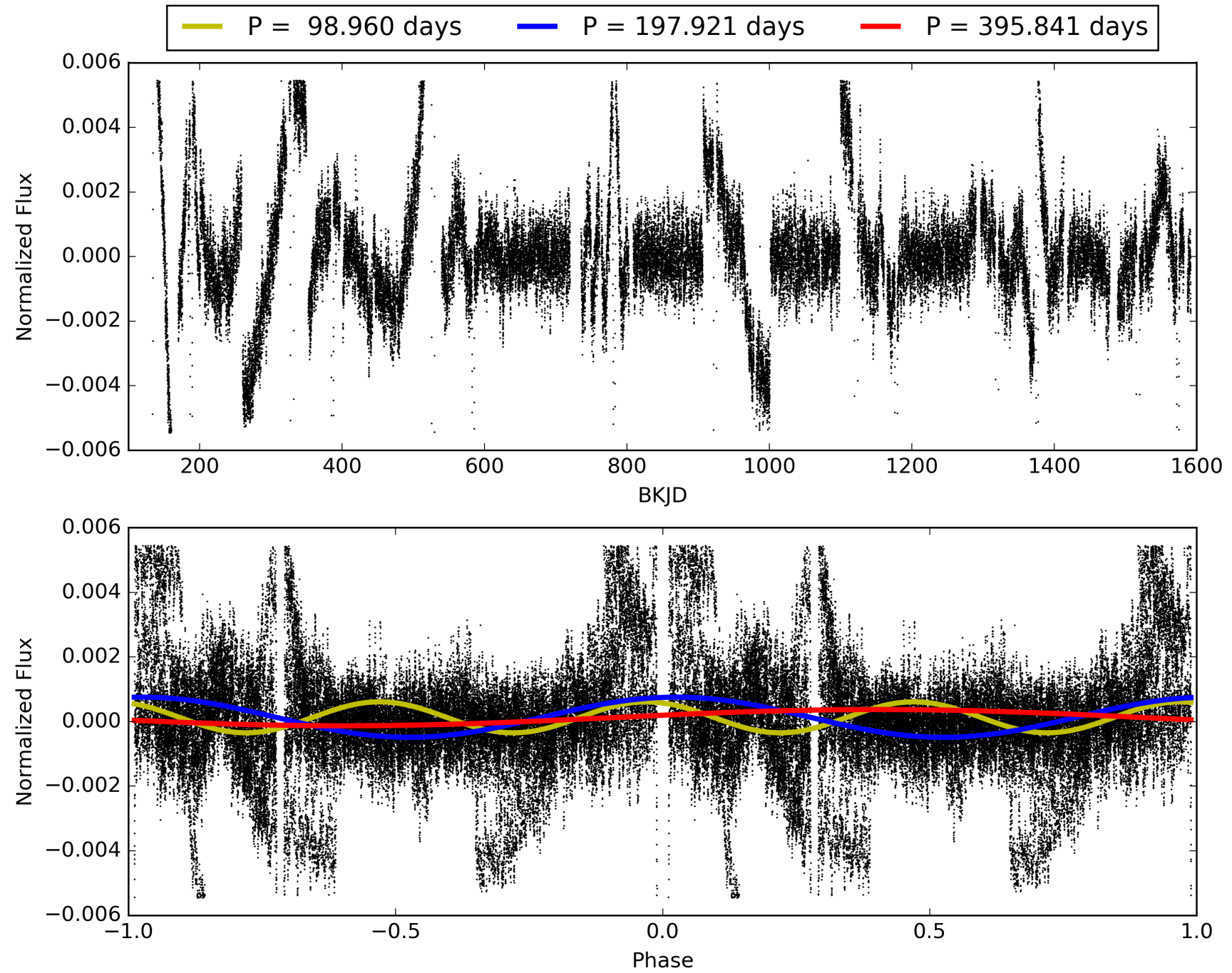
DV Diagnostic Results:

ShortPeriod-sig: 0.1% [0.00 σ]
LongPeriod-sig: 0.1% [0.00 σ]
ModelChiSquare2-sig: 0.0%
ModelChiSquareGof-sig: 0.0%
Bootstrap-pfa: 4.56e-158
RollingBand-fgt: 1.00 [6/6]
GhostDiagnostic-chr: 0.5558
Centroid-sig: 0.0%
Centroid-so: 0.115 arcsec [8.85 σ]
OotOffset-rm: 0.033 arcsec [0.45 σ]
OotOffset-st: 1/0/0/1 [2]
KicOffset-rm: 0.111 arcsec [1.26 σ]
KicOffset-st: 1/0/0/1 [2]
DiffImageQuality-fgm: 1.00 [2/2]
DiffImageOverlap-fno: 0.00 [0/2]

TCE 005786154-05, PDC Light Curves

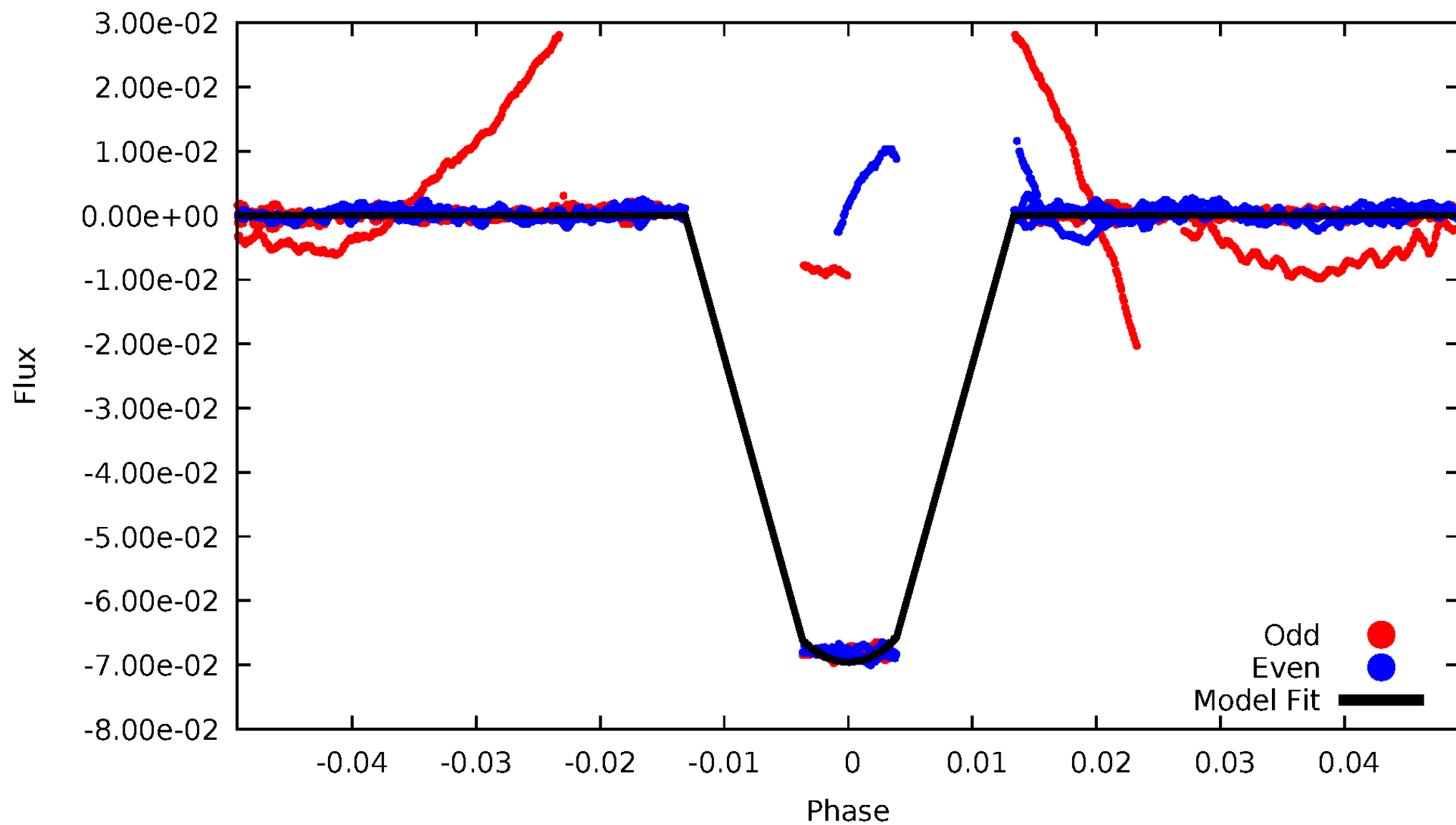


TCE 005786154-05



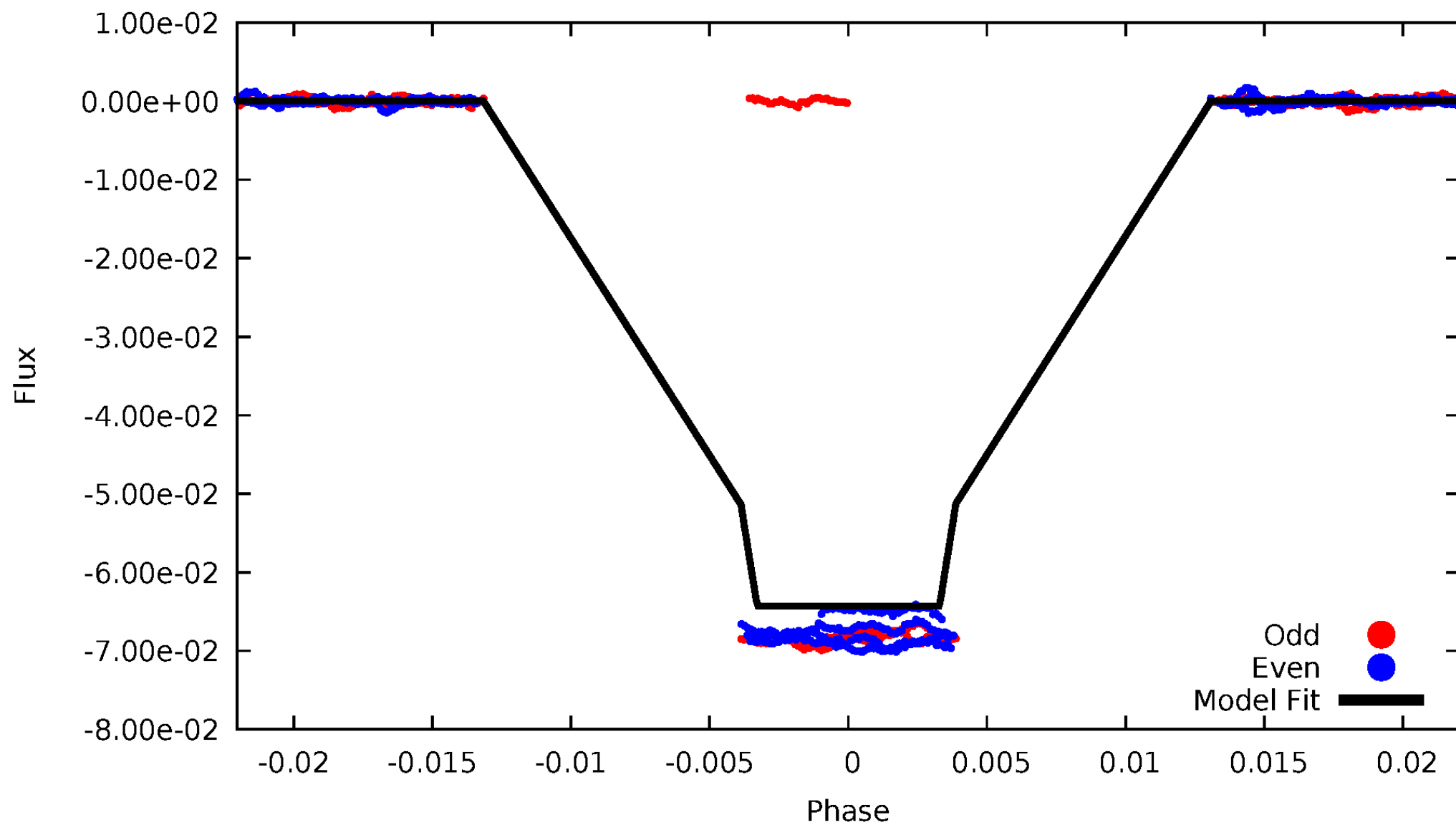
DV Odd/Even

TCE 005786154-05



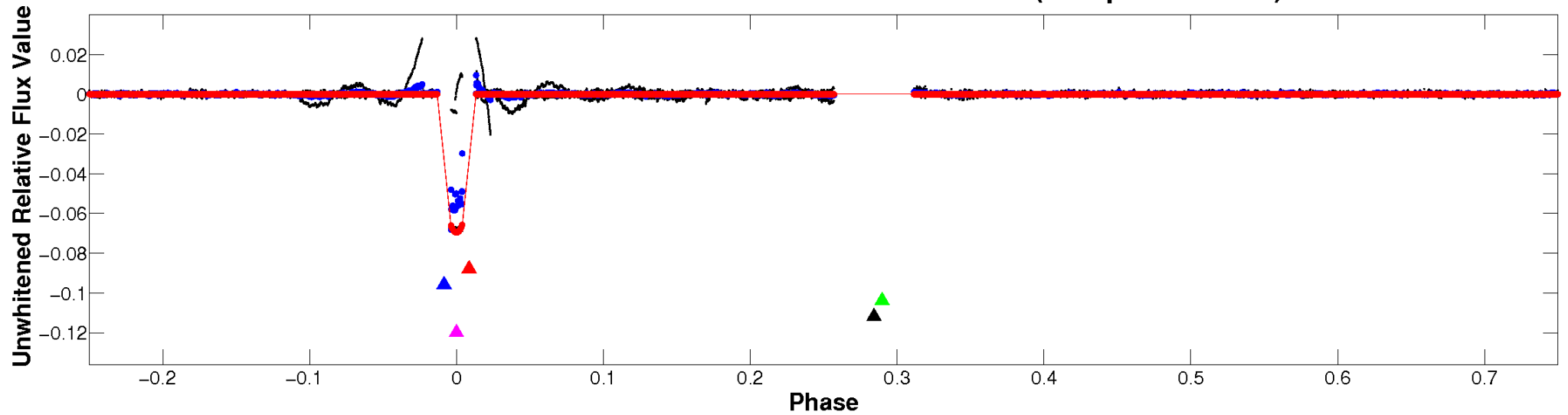
ALT Odd/Even

TCE 005786154-05

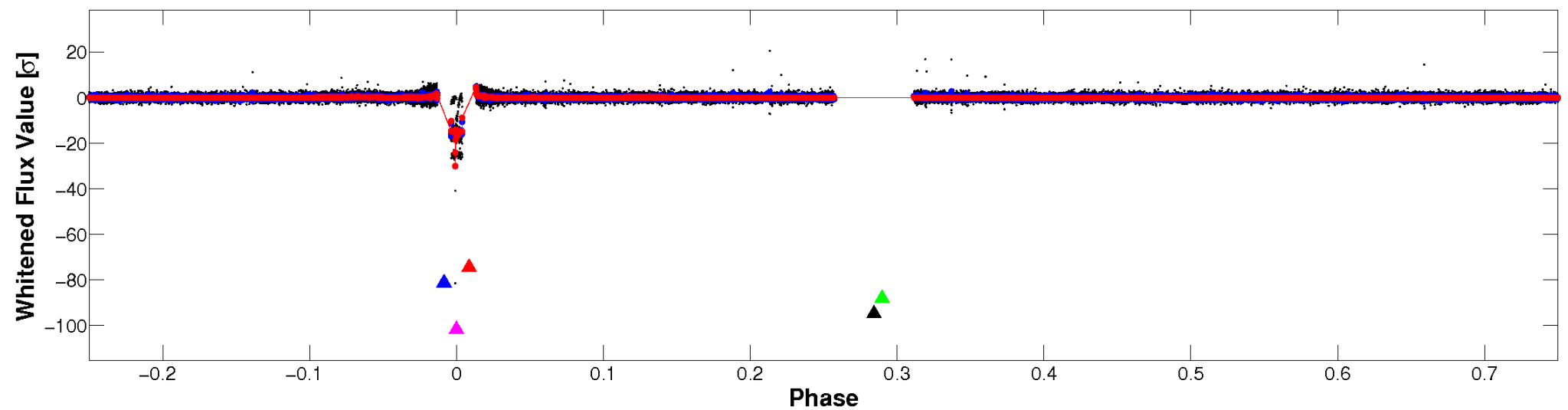


Non-Whitened Vs. Whitened Light Curve

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

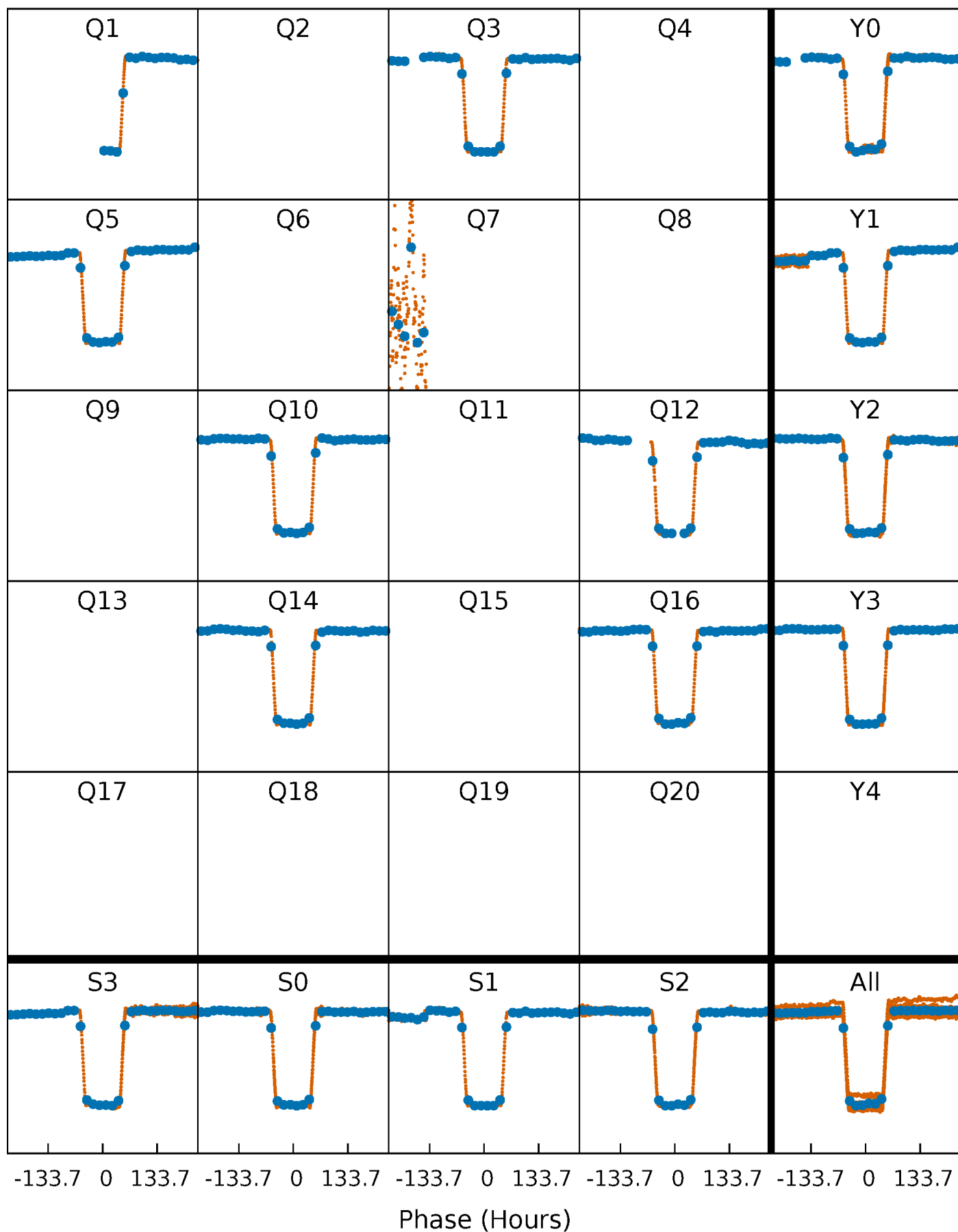


Planet 5 : Phased Whitened Flux Time Series (Fit Epoch/Period)



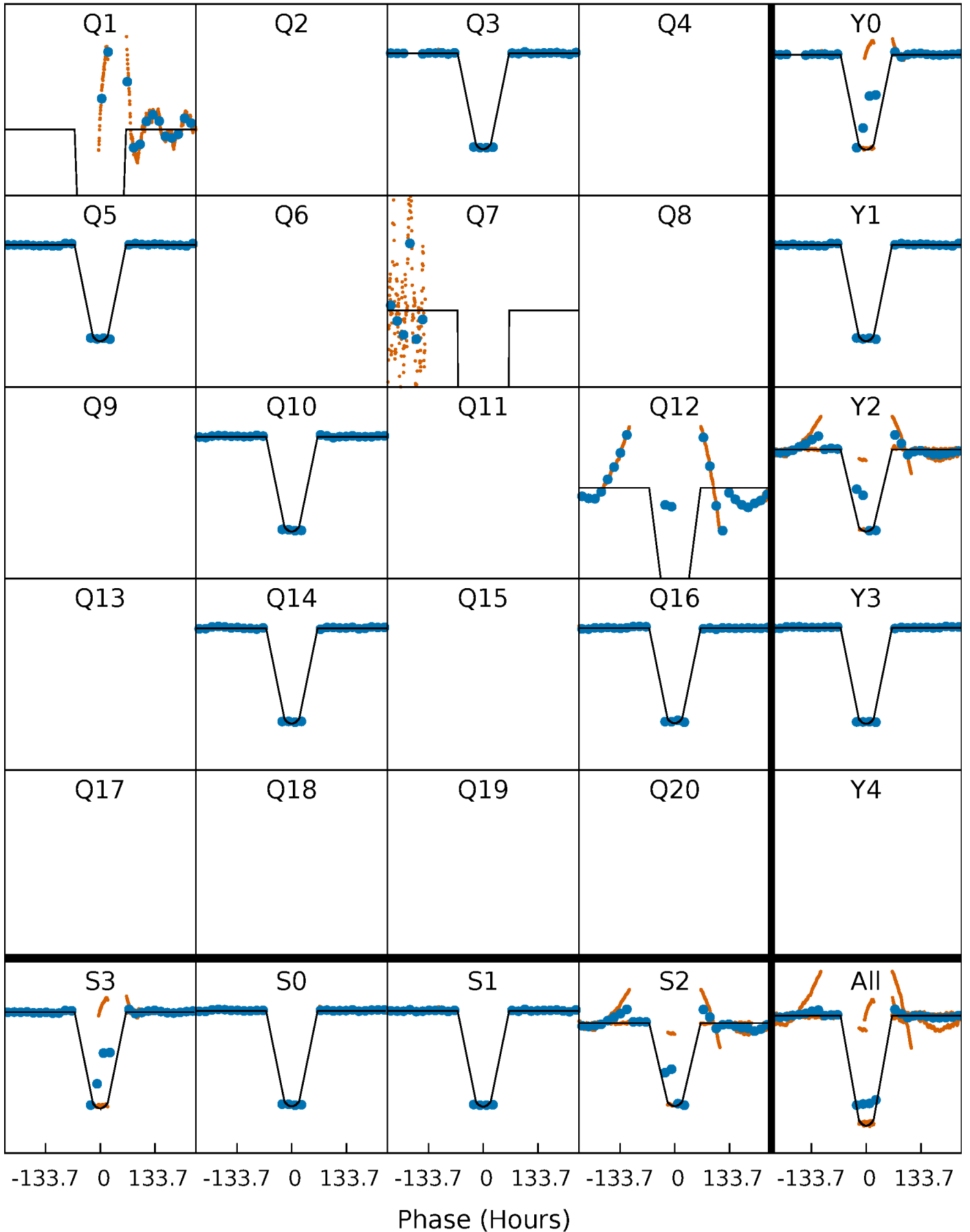
PDC Quarter-Phased Transit Curves

TCE 005786154-05 P=197.920693 Days $T_0=131.684026$ (BKJD)



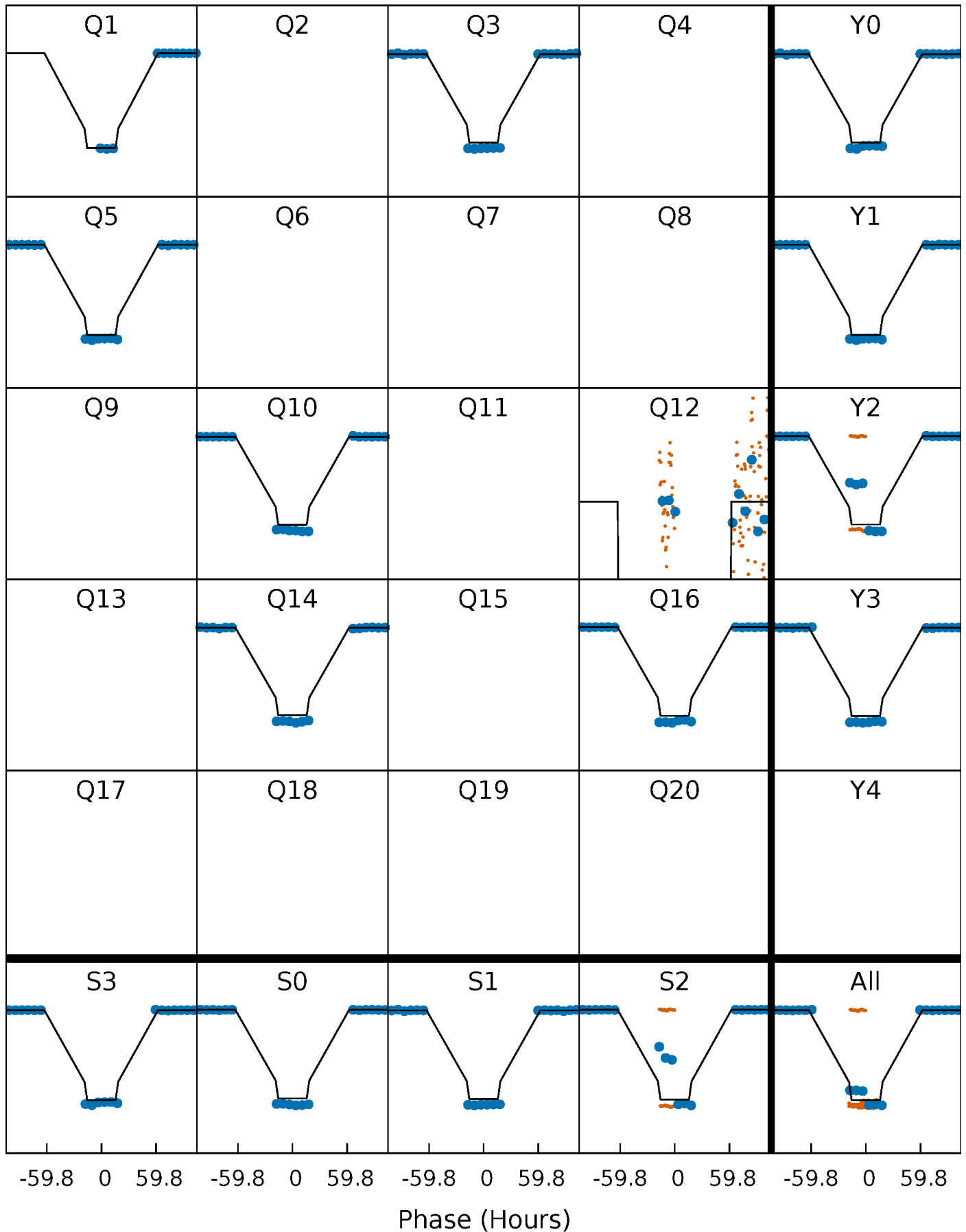
DV Quarter-Phased Transit Curves

TCE 005786154-05 $P=197.920693$ Days $T_0=131.684026$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

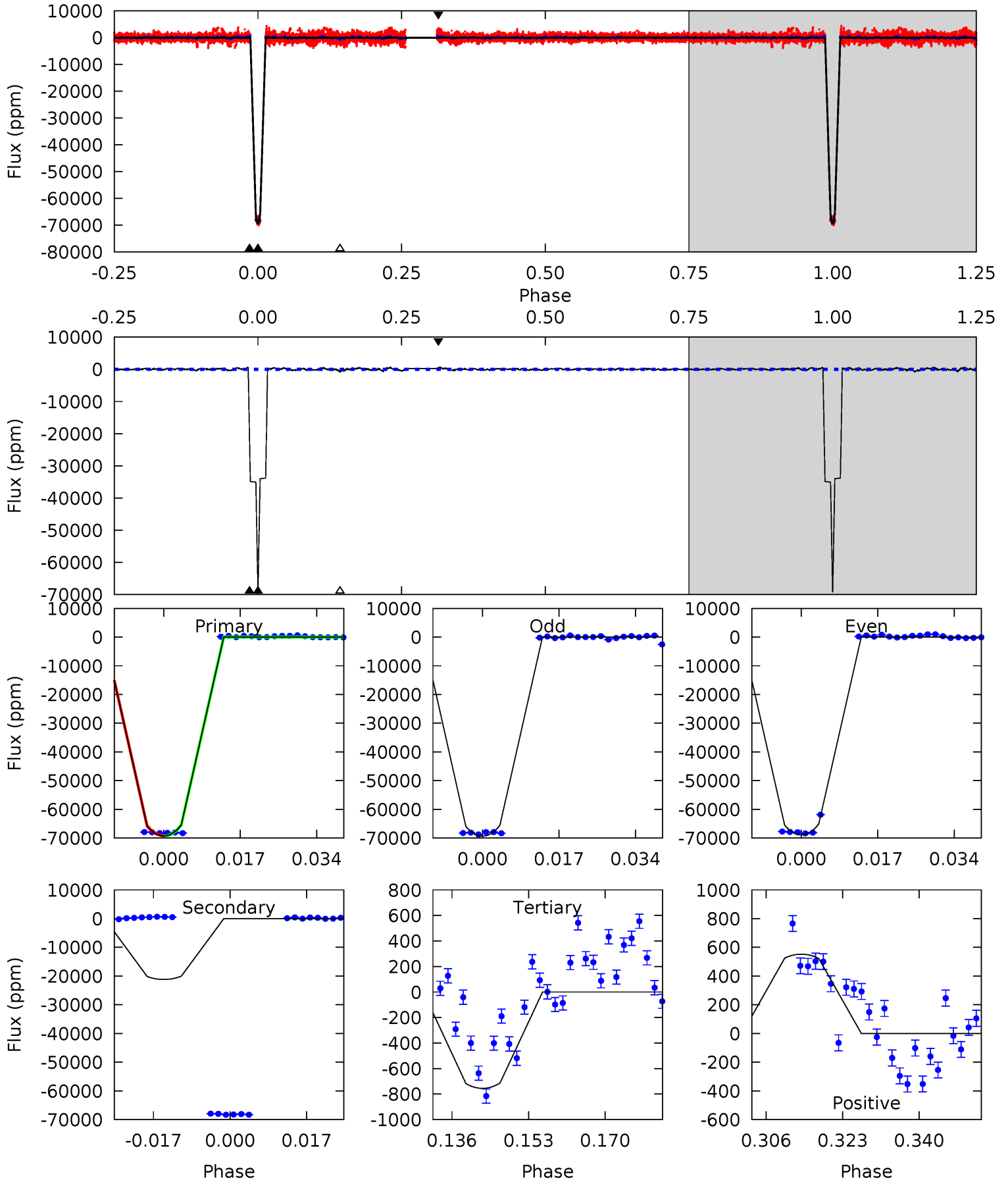
TCE 005786154-05 P=197.899029 Days $T_0=131.786671$ (BKJD)



DV Model-Shift Uniqueness Test

005786154-05, P = 197.920693 Days, E = 131.684026 Days

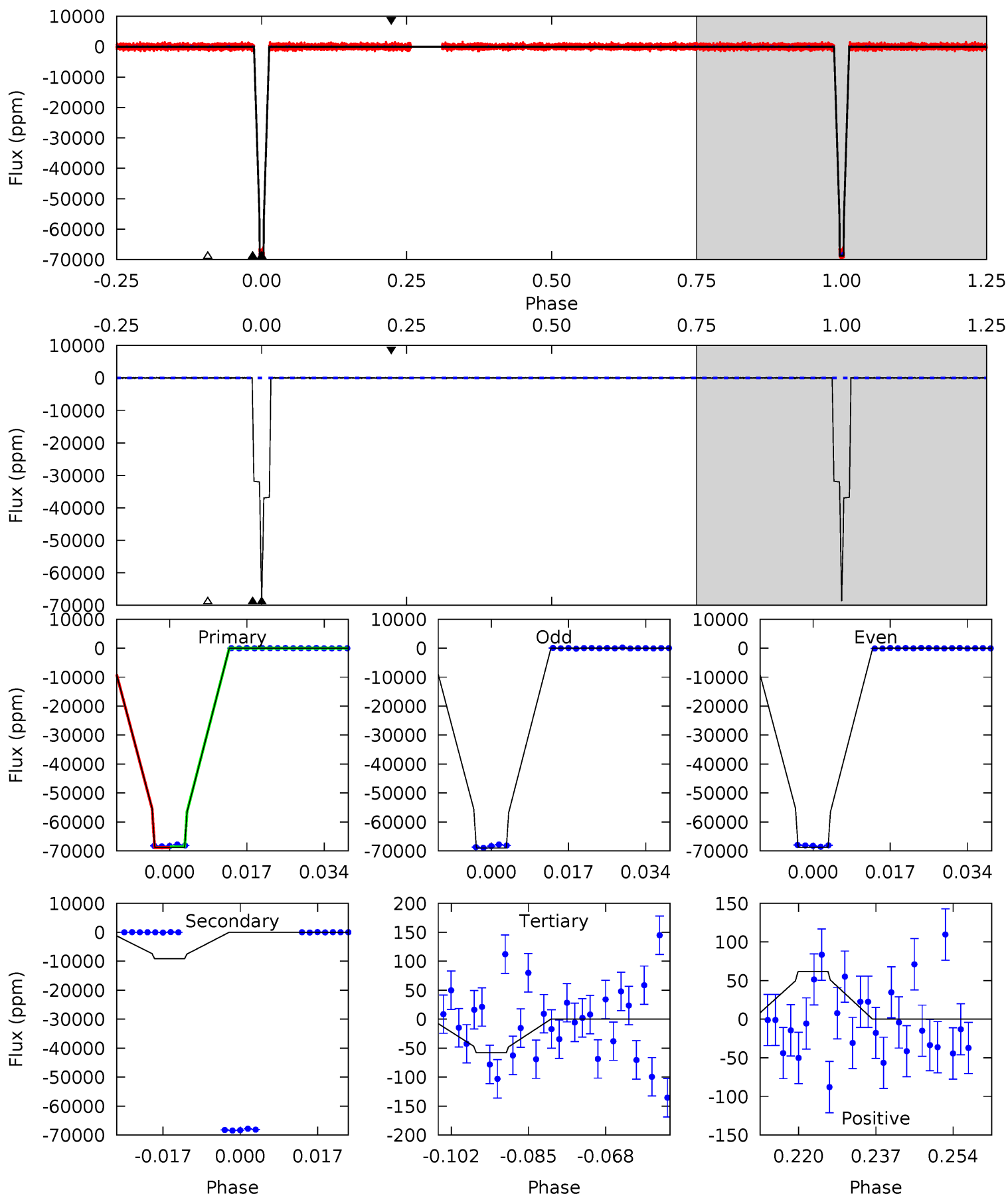
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
1607	491.6	17.5	12.8	4.92	2.39	4.31	1589	1594	474.1	478.8	4.62	0.72	0.01	0



Alt Model-Shift Uniqueness Test

005786154-05, P = 197.899029 Days, E = 131.786671 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
3512	467.3	2.96	3.15	4.92	2.39	0.89	3509	3509	464.3	464.1	7.04	0.85	0.00	7.23



Stellar Parameters For KIC 005786154

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	4611^{+69}_{-48}	$2.614^{+0.120}_{-0.120}$	$-0.080^{+0.150}_{-0.100}$	$7.898^{+2.660}_{-0.887}$	$0.935^{+0.427}_{-0.022}$	$0.003^{+0.001}_{-0.001}$
	+1%/-1%	+5%/-5%	+188%/-125%	+34%/-11%	+46%/-2%	+47%/-44%
Source	SPE68	SPE68	SPE68	DSEP		

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

Secondary Eclipse Parameters for KIC 005786154-05 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-21197 ± 43	$200.33^{+36.57}_{-15.43}$	987^{+55}_{-40}	3896^{+67}_{-54}	128^{+22}_{-25}
Alt.	-9146 ± 20	$218.75^{+39.89}_{-17.59}$	988^{+51}_{-37}	3296^{+44}_{-38}	46^{+8}_{-9}

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

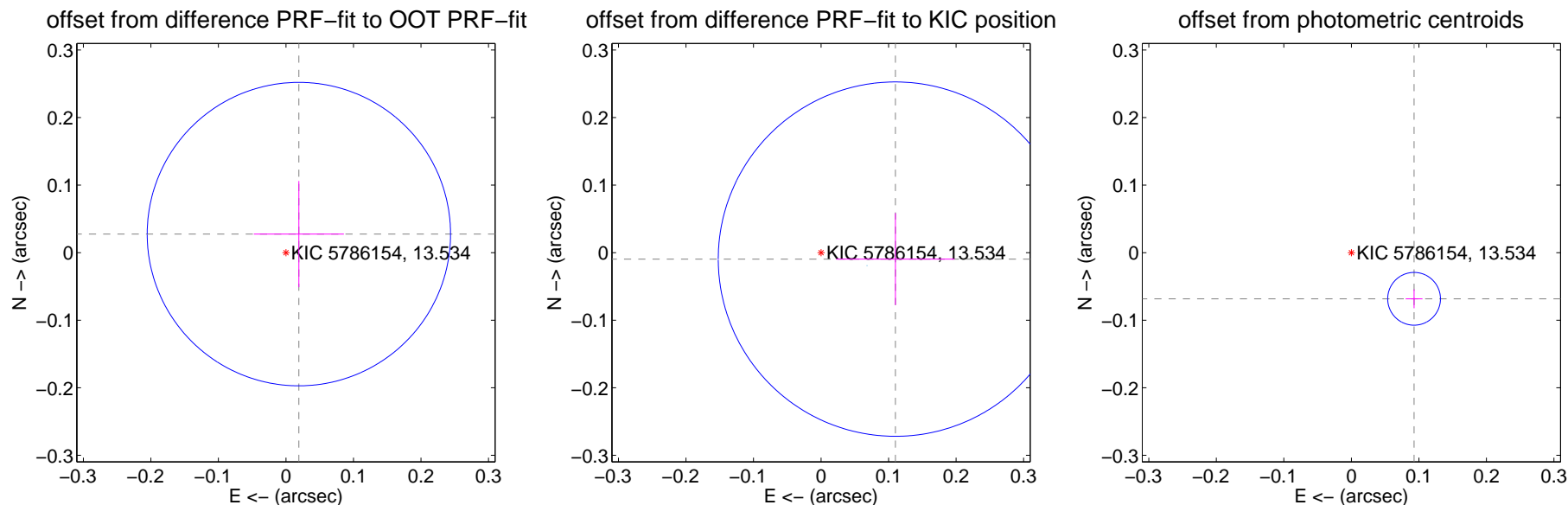
DV Centroid Data

Supplemental centroid analysis for 005786154-05. Kepler magnitude: 13.53. Transit SNR 350.94

There are 2 quarters with good PRF difference image offsets

The direct PRF centroid is offset from the target star catalog position by about 0.16 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.033 ± 0.075	0.45	-0.019 ± 0.067	0.027 ± 0.079
PRF-fit source offset from KIC position	0.111 ± 0.087	1.26	-0.110 ± 0.088	-0.010 ± 0.068
photometric centroid source offset	0.12 ± 0.01	8.85	-0.09 ± 0.01	-0.07 ± 0.01

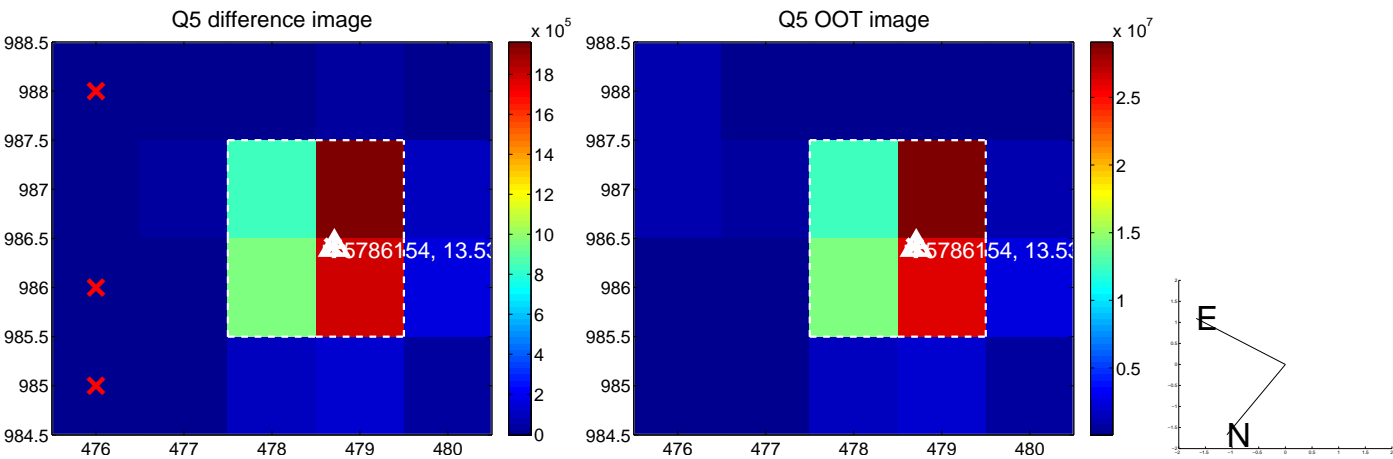


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

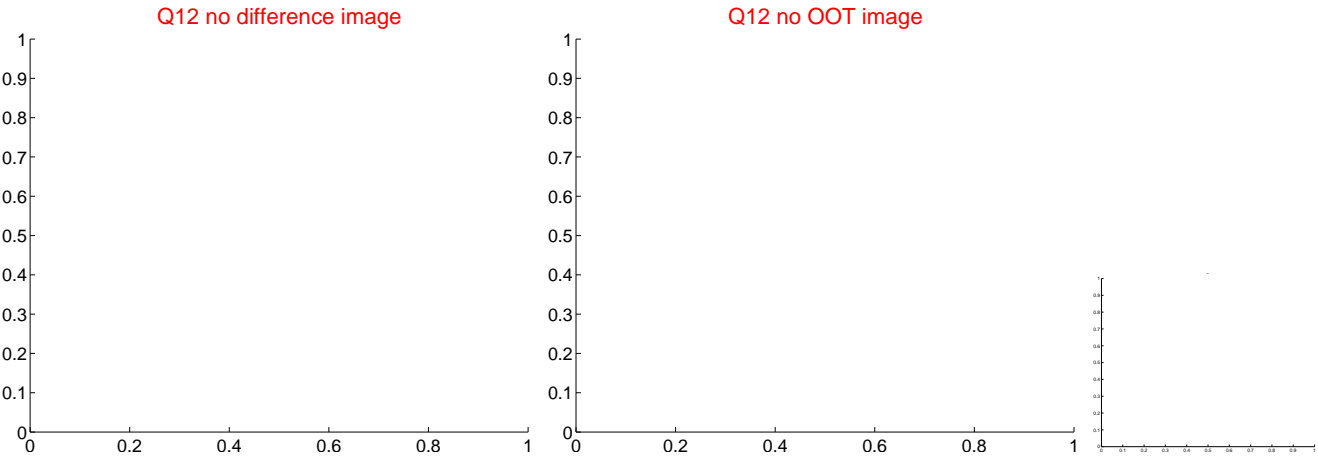
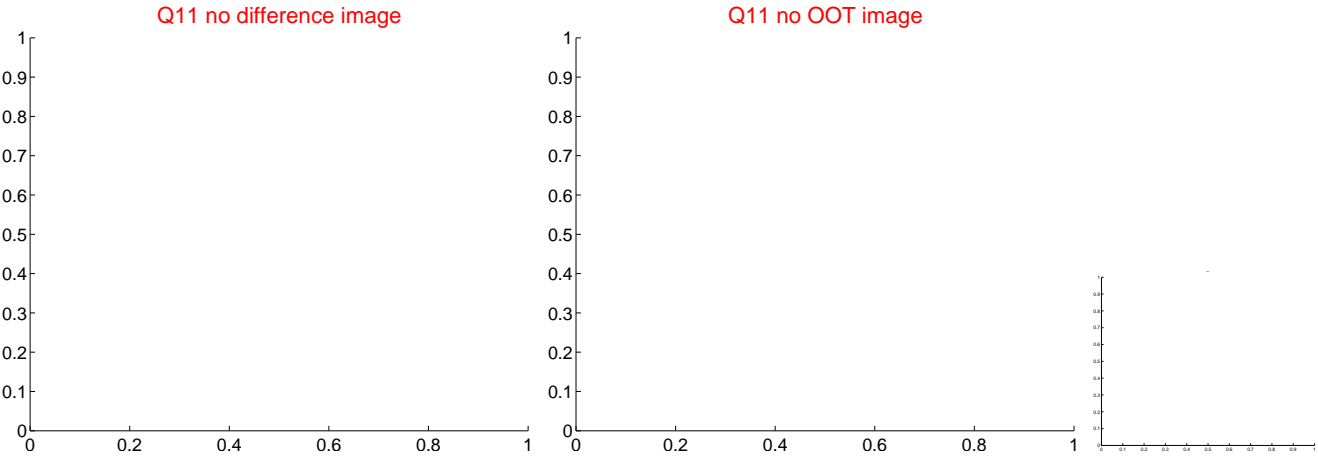
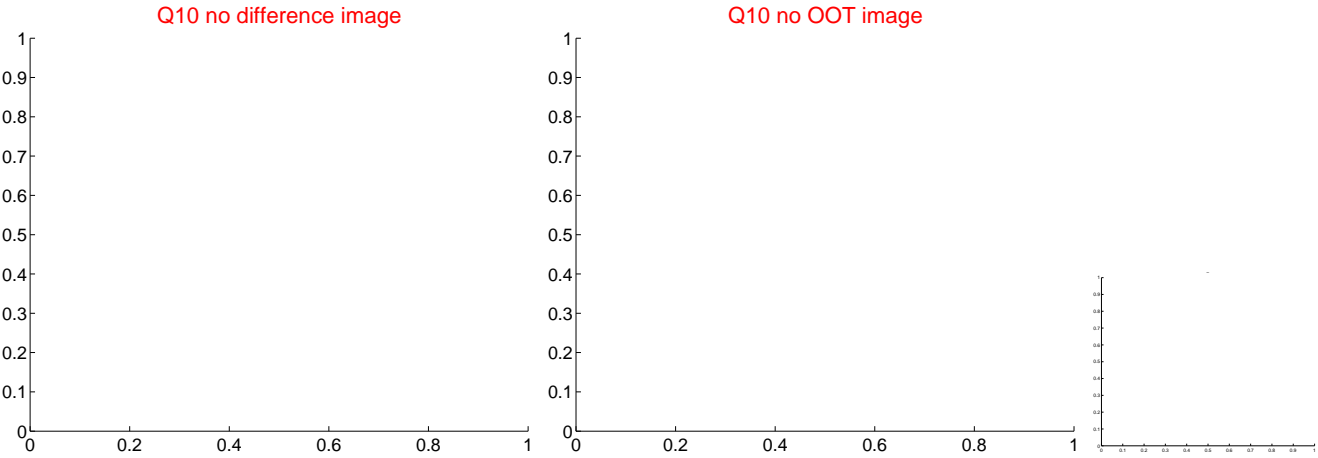
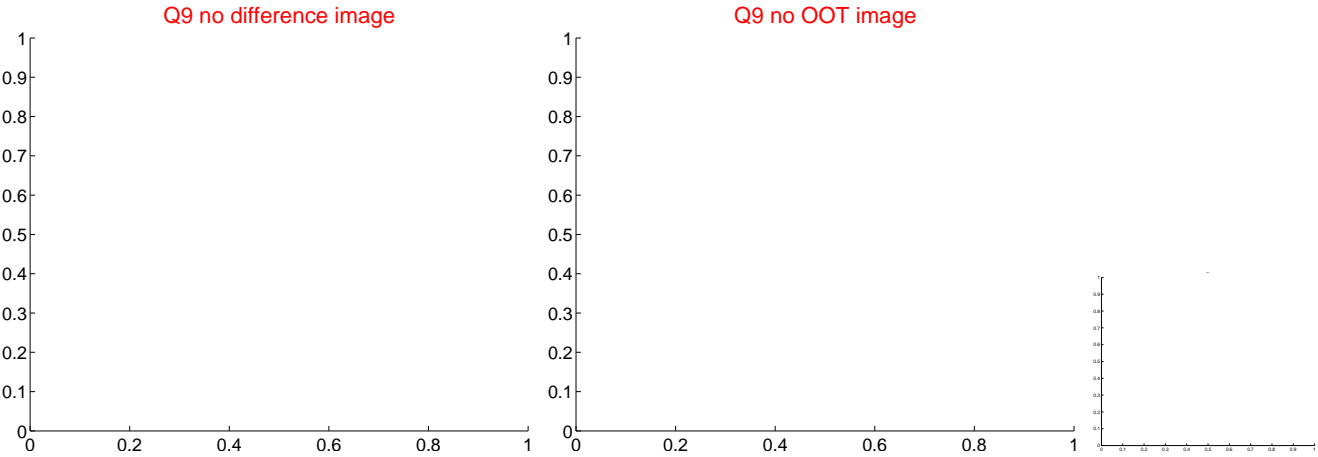
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



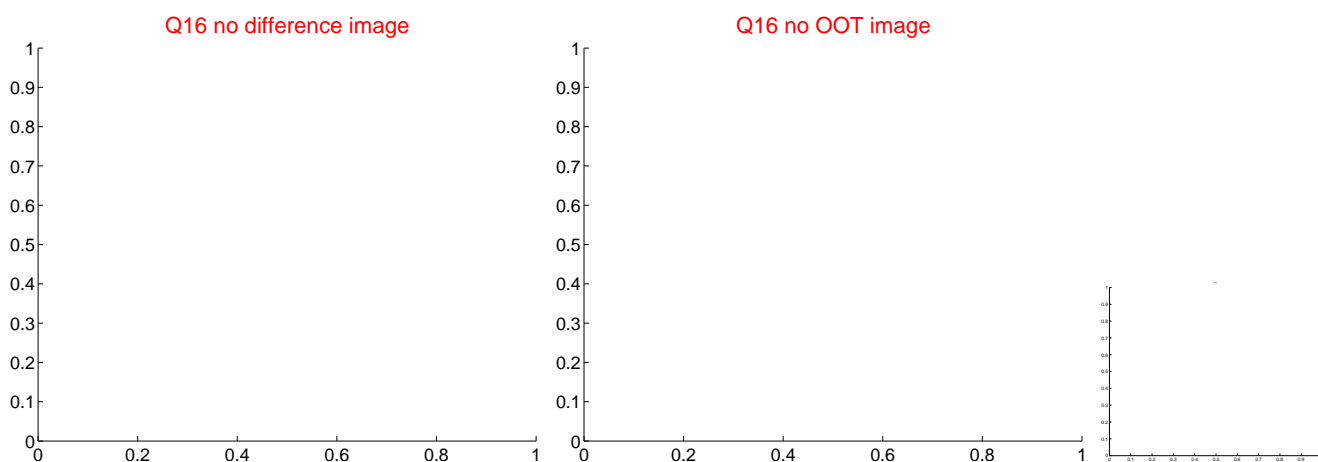
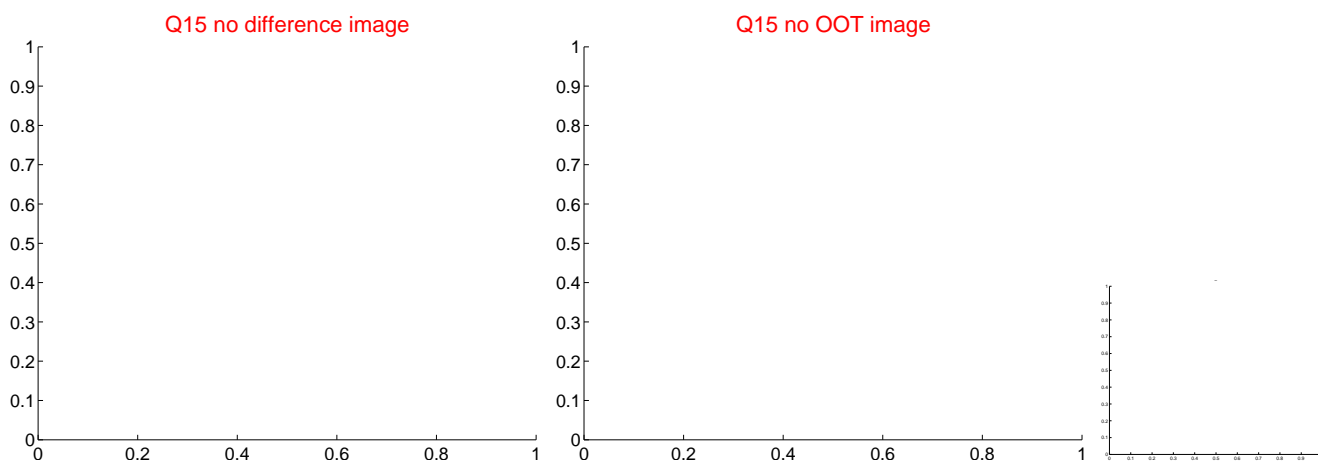
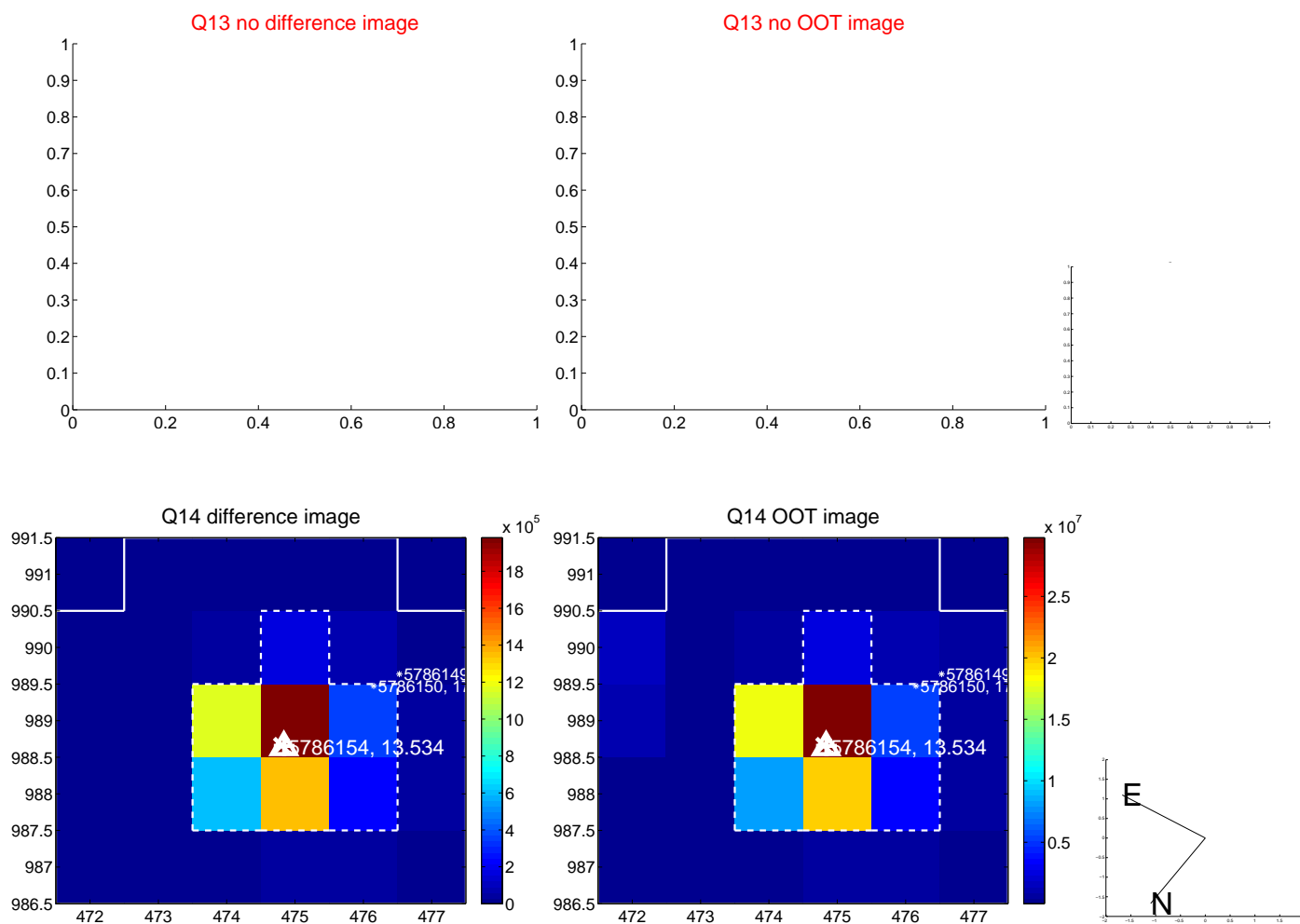
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



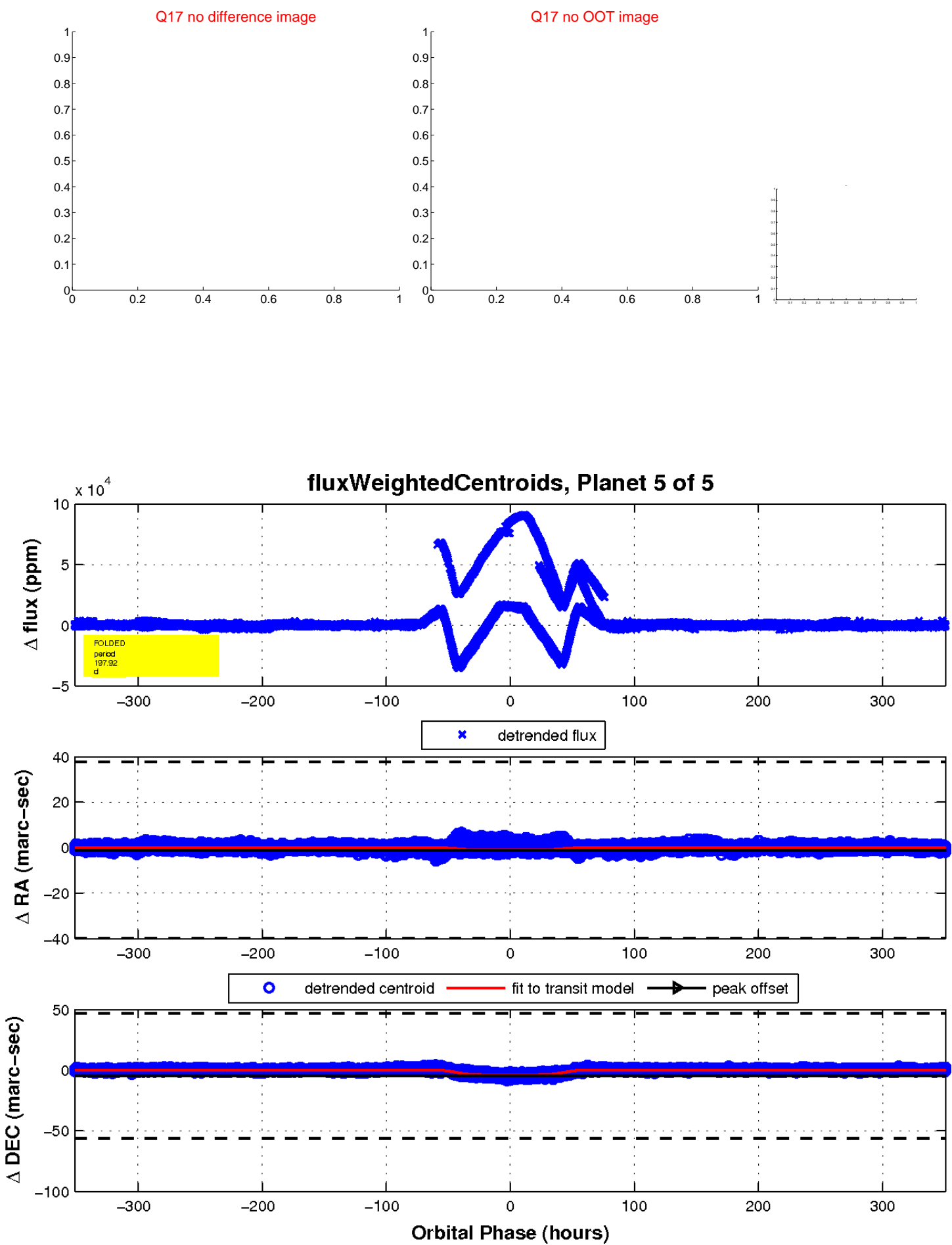
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

