

KIC 005254896

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})
005254896-01	OBS	No	454.299269	225.352178	429.5	3.236	16.2	1.9	1.44	5930	3.14	1.87
005254896-02	OBS	No	1.184905	132.164868	627.7	3.500	12.3	-1.0	1.44	5930	3.62	5198.92
005254896-03	OBS	No	158.180814	262.612238	1940.4	6.554	10.6	6.7	1.44	5930	7.65	7.62
005254896-04	OBS	No	188.575095	133.764987	1498.3	2.515	11.7	5.6	1.44	5930	5.74	6.03
005254896-05	OBS	No	1.184905	131.747274	110.0	2.763	7.5	9.3	1.44	5930	1.81	5198.92

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
005254896-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_TRACKER—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—INCONSISTENT_TRANS—CENT_FEW_DIFFS
005254896-02	OBS	FP	0.00	1	0	0	0	SWEET_NTL—LPP_DV—CENT_NOFITS
005254896-03	OBS	FP	0.00	1	0	1	0	LPP_DV—ALL_TRANS_CHASES—MOD_POS_DV—MOD_NONUNIQ_ALT—INCONSISTENT_TRANS—HALO_GHOST
005254896-04	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_CHASES_MARSHALL—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—INCONSISTENT_TRANS—CENT_FEW_DIFFS
005254896-05	OBS	FP	0.00	1	0	1	0	SWEET_NTL—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—SAME_NTL_PERIOD—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.

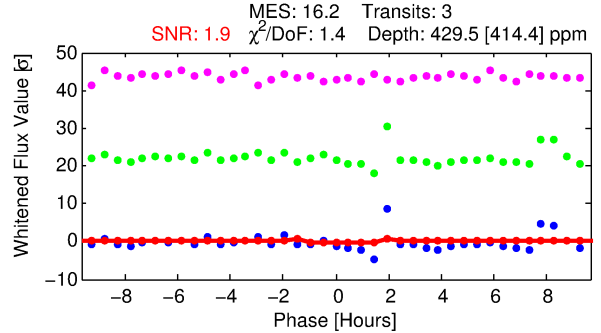
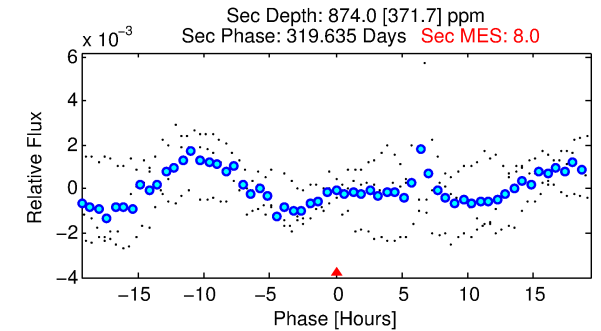
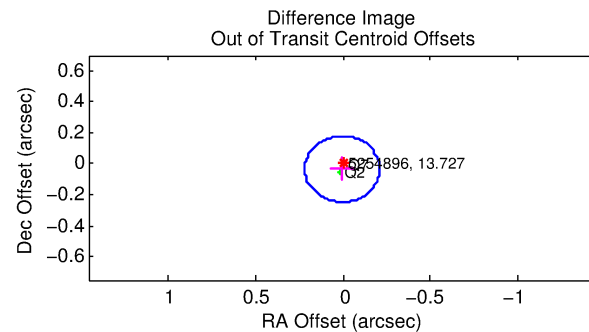
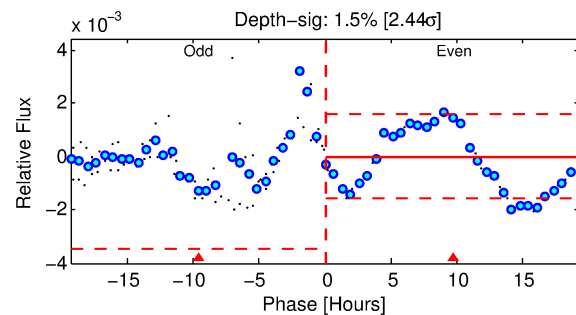
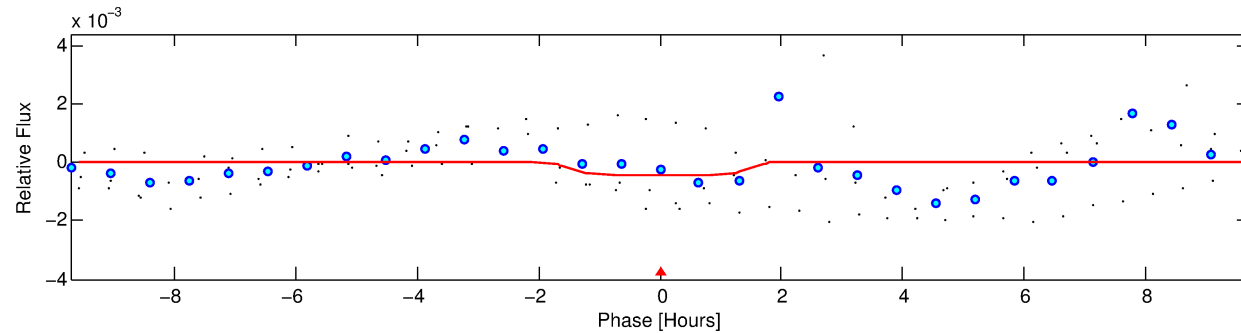
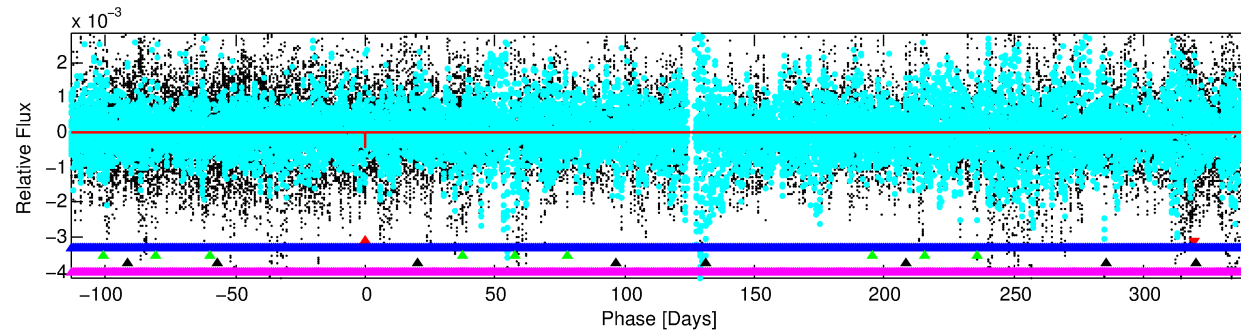
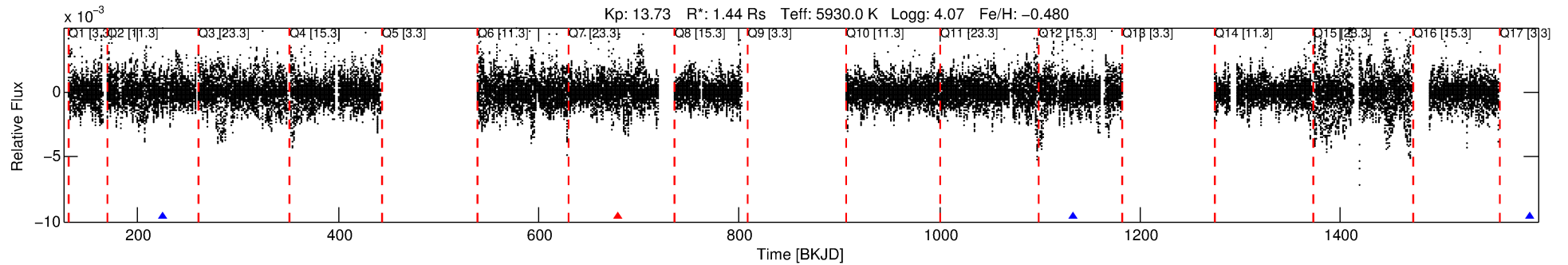
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 005254896-01

No Significant Match Found

DV One-Page Summary

KIC: 5254896 Candidate: 1 of 5 Period: 454.299 d



DV Fit Results:

Period = 454.29927 [0.01823] d
Epoch = 225.3522 [0.0231] BKJD
Rp/R* = 0.0199 [0.0820]
a/R* = 876.93 [17670.98]
b = 0.61 [20.90]
Seff = 1.87 [1.29]
Teq = 298 [51] K
Rp = 3.14 [12.99] Re
a = 1.1125 [0.4578] AU
Ag = 60431.04 [500138.95] [0.12 σ]
Teffp = 7225 [14900] K [0.46 σ]

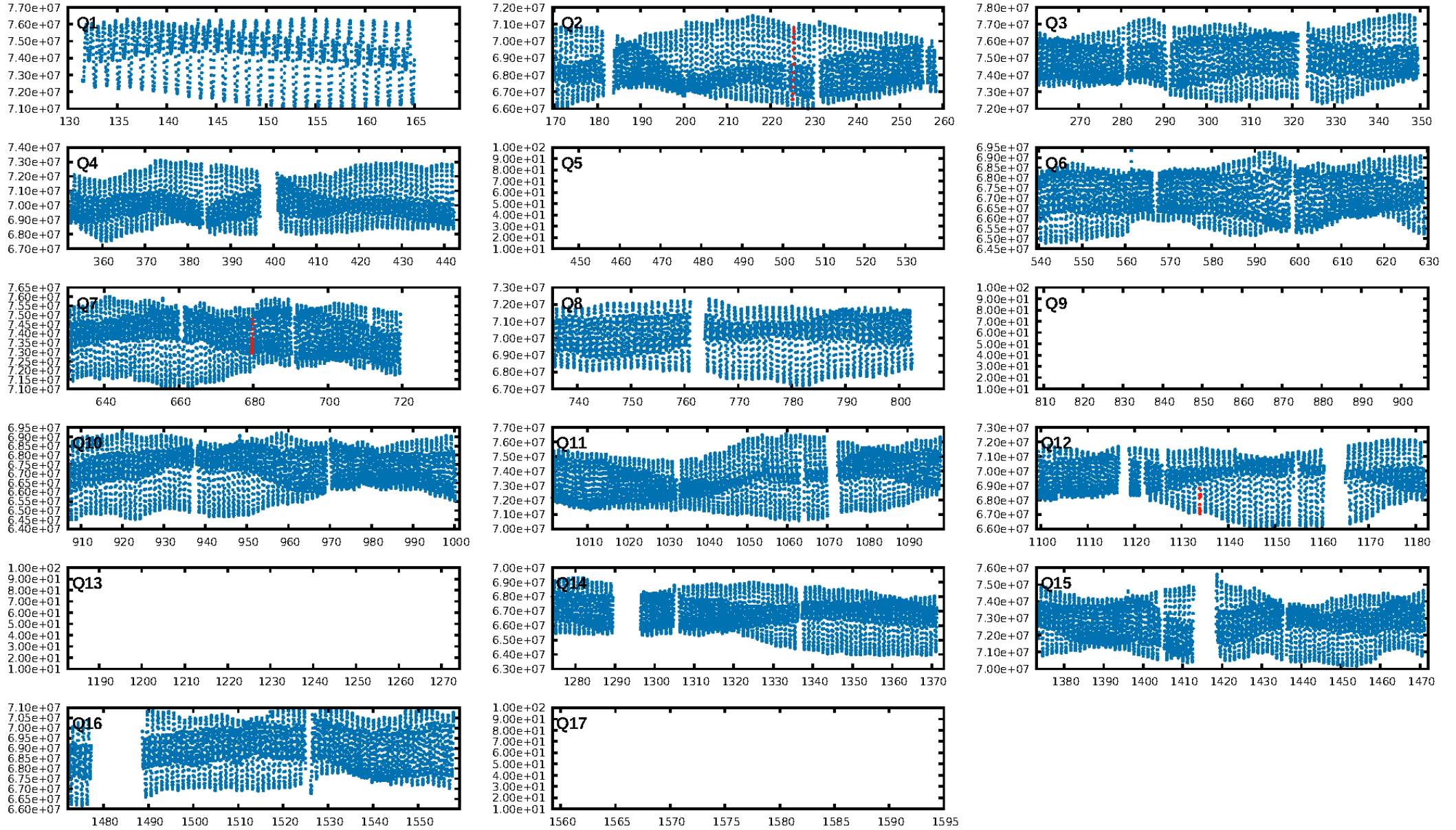
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [1555.92 σ]
LongPeriod-sig: N/A
ModelChiSquare2-sig: 33.4%
ModelChiSquareGof-sig: 98.6%
Bootstrap-pfa: N/A
RollingBand-fgt: 0.67 [2/3]
GhostDiagnostic-chr: 1.48
Centroid-sig: 0.4%
Centroid-so: 4.122 arcsec [1.86 σ]
OotOffset-rm: 0.034 arcsec [0.48 σ]
OotOffset-st: 1/1/0/0 [2]
KicOffset-rm: 0.074 arcsec [0.88 σ]
KicOffset-st: 1/1/0/0 [2]
DiffImageQuality-fgm: 0.50 [1/2]
DiffImageOverlap-fno: 0.00 [0/2]

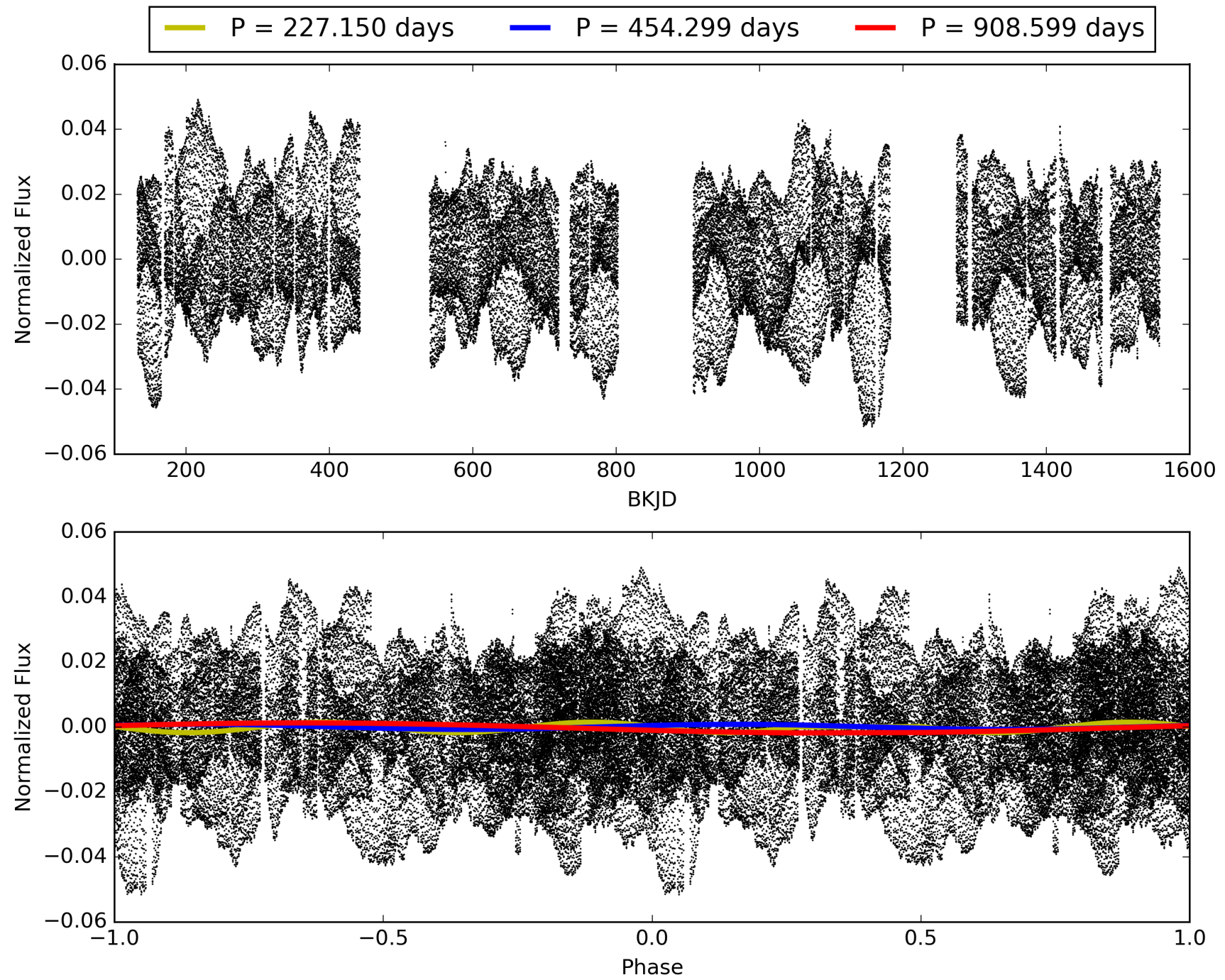
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 02-Feb-2016 07:48:18 Z

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

TCE 005254896-01, PDC Light Curves

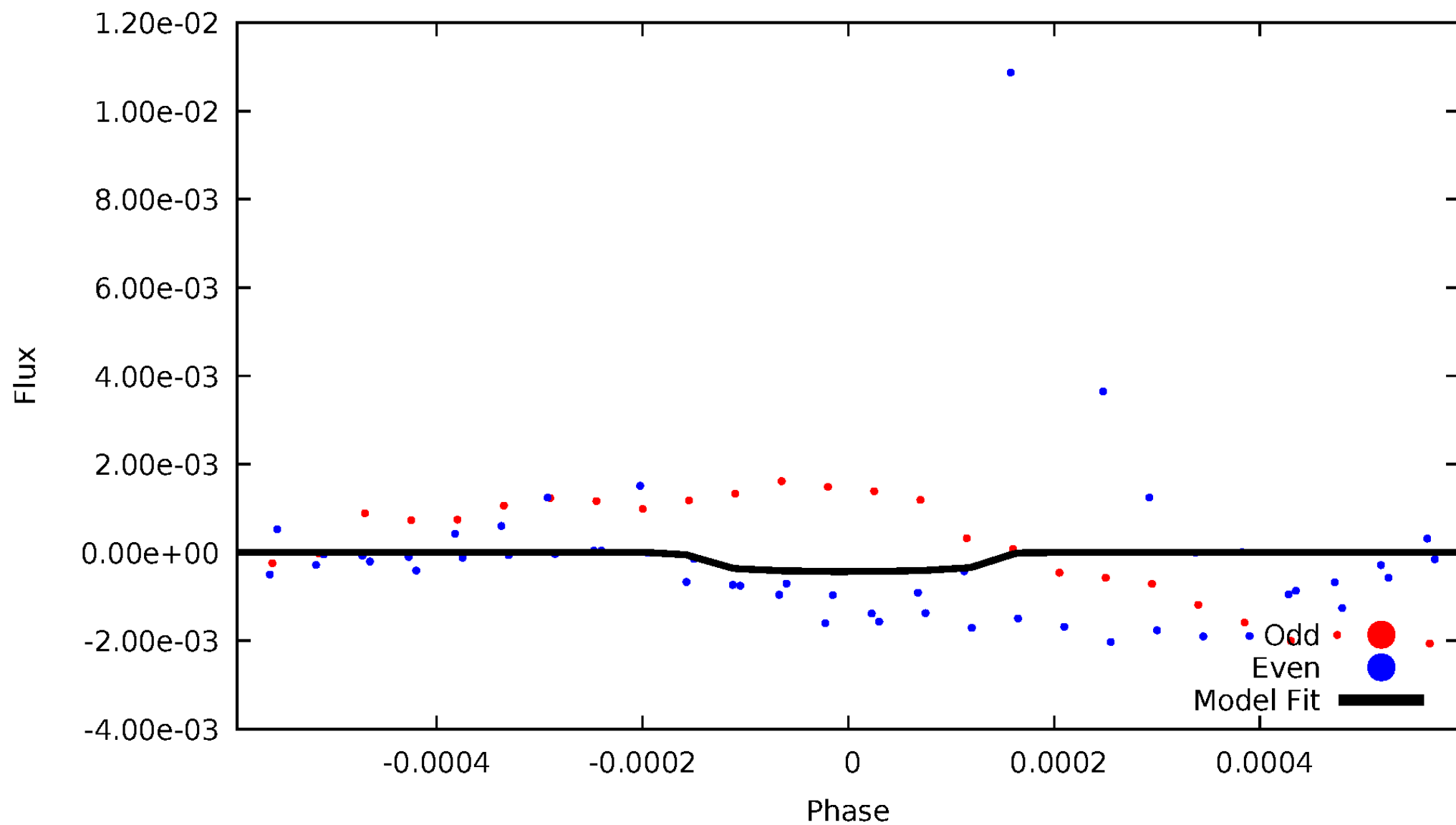


TCE 005254896-01



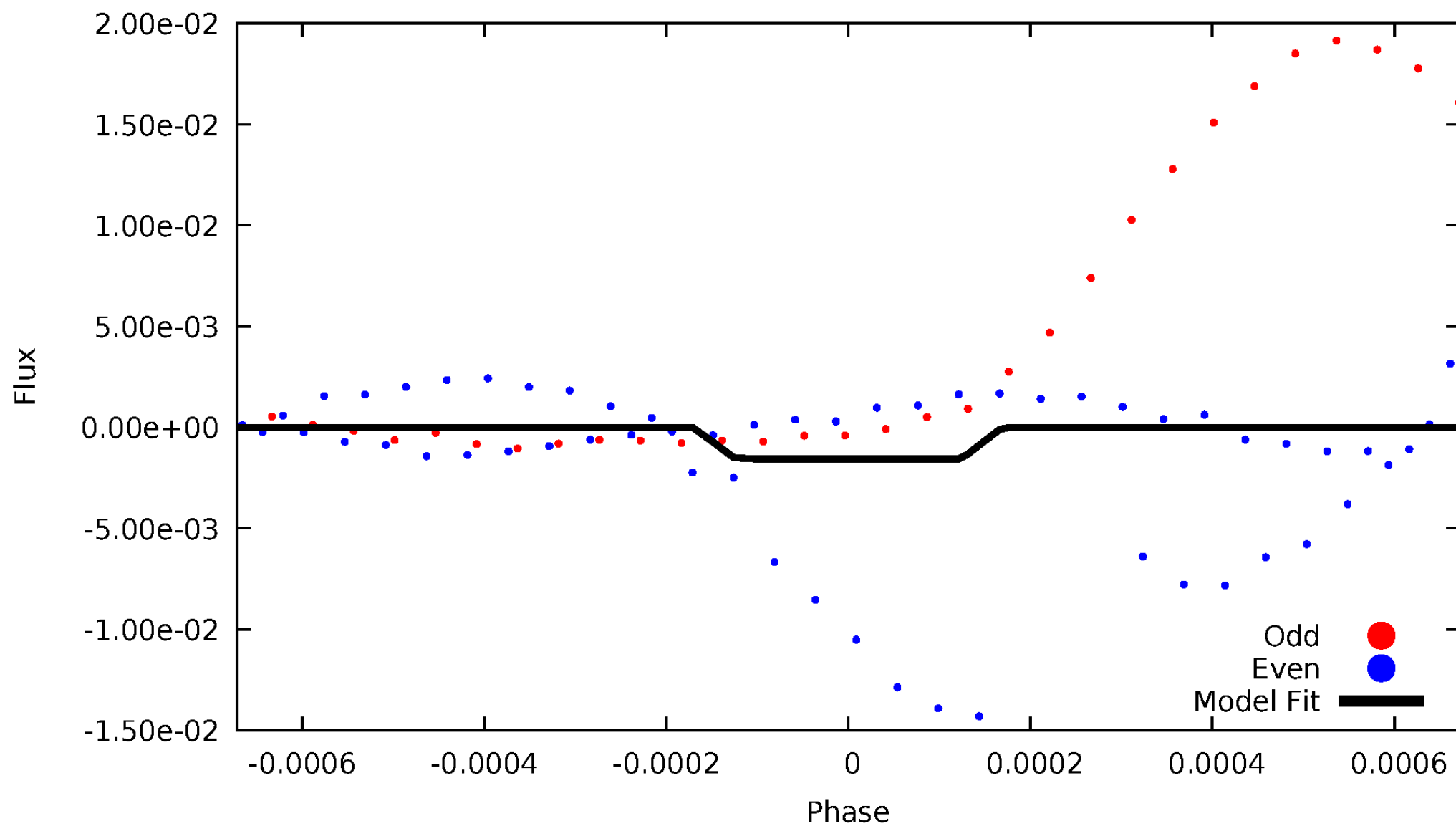
DV Odd/Even

TCE 005254896-01



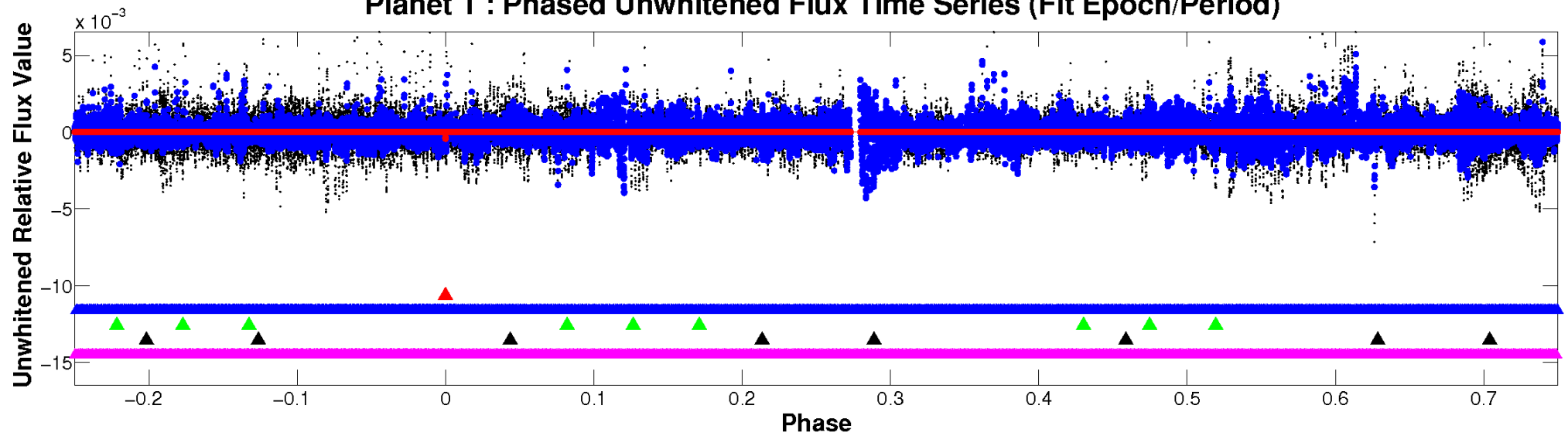
ALT Odd/Even

TCE 005254896-01

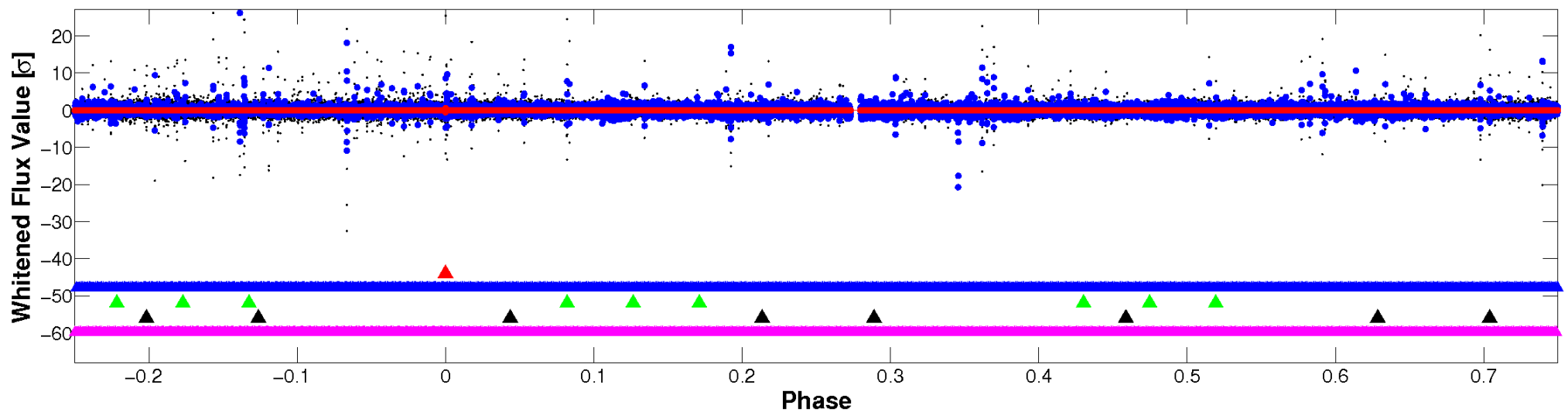


Non-Whitened Vs. Whitened Light Curve

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

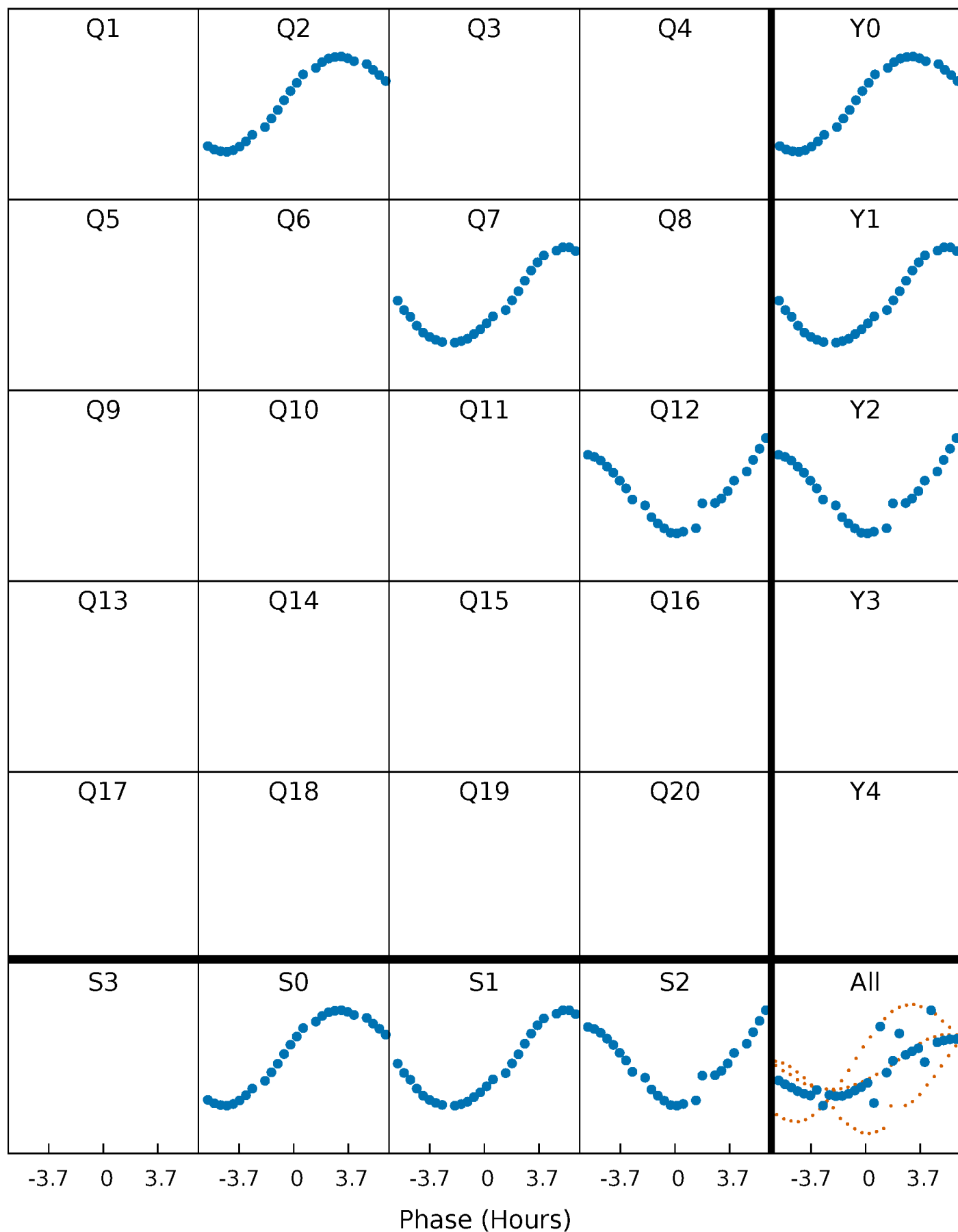


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



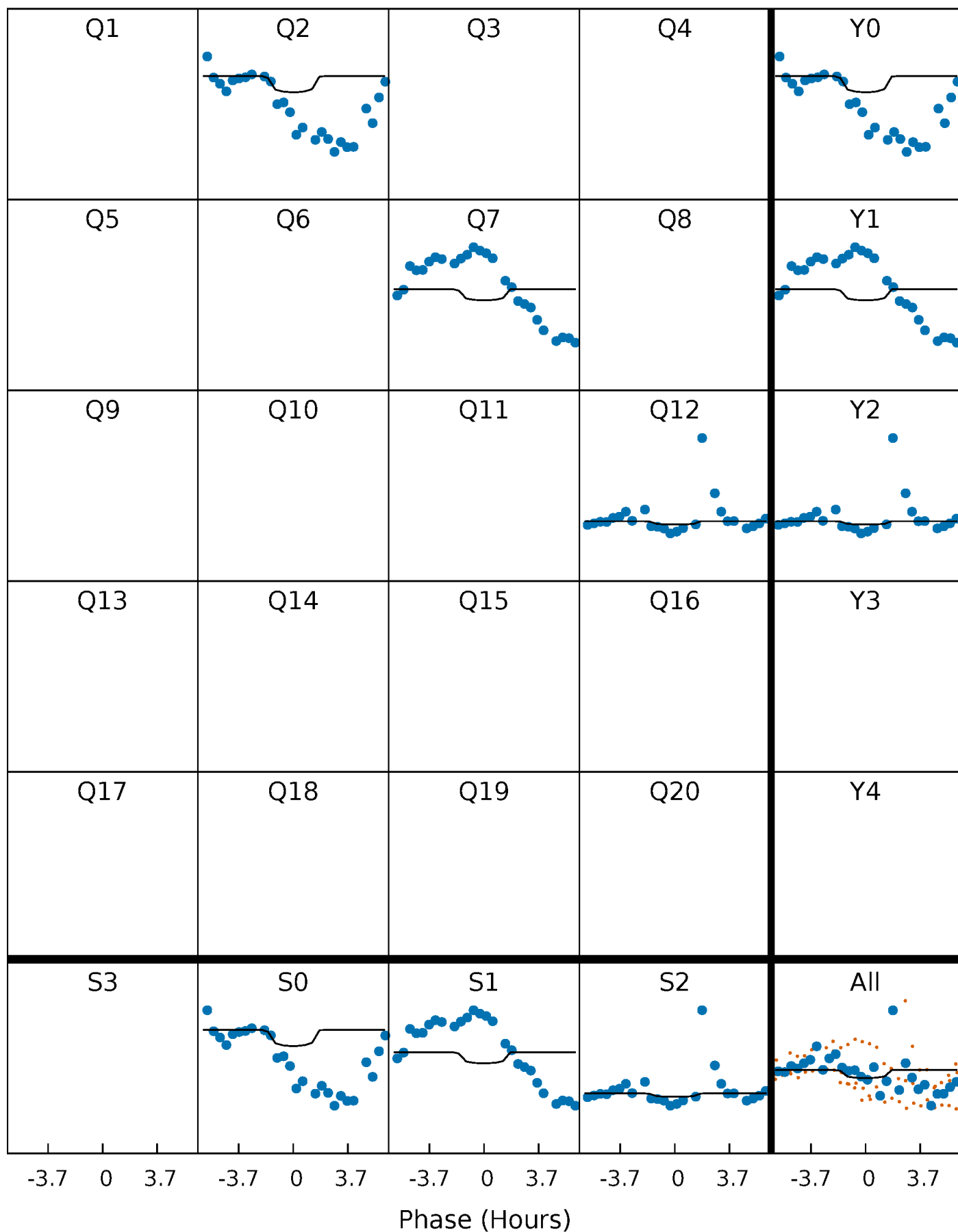
PDC Quarter-Phased Transit Curves

TCE 005254896-01 P=454.299269 Days $T_0=225.352178$ (BKJD)



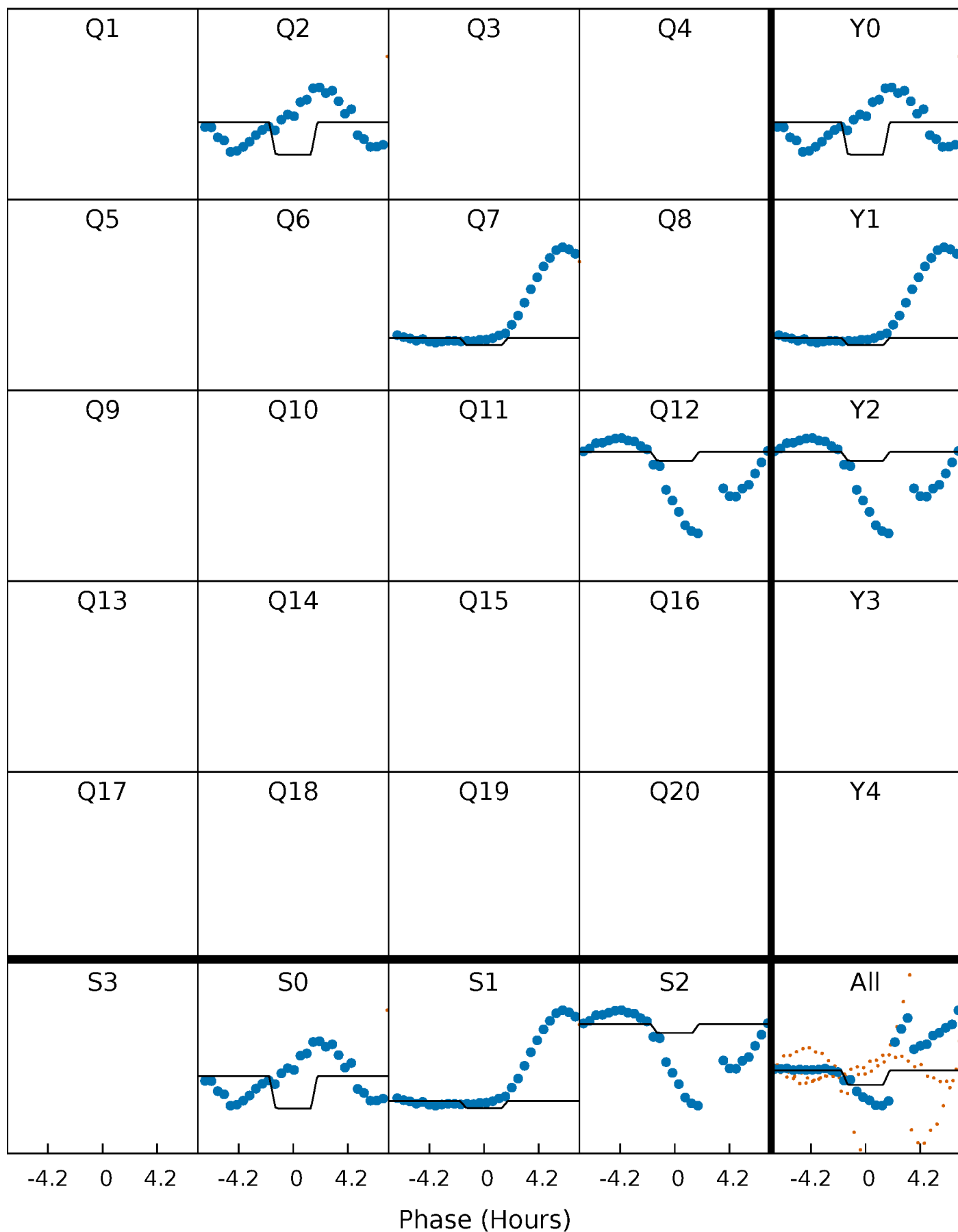
DV Quarter-Phased Transit Curves

TCE 005254896-01 P=454.299269 Days $T_0=225.352178$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

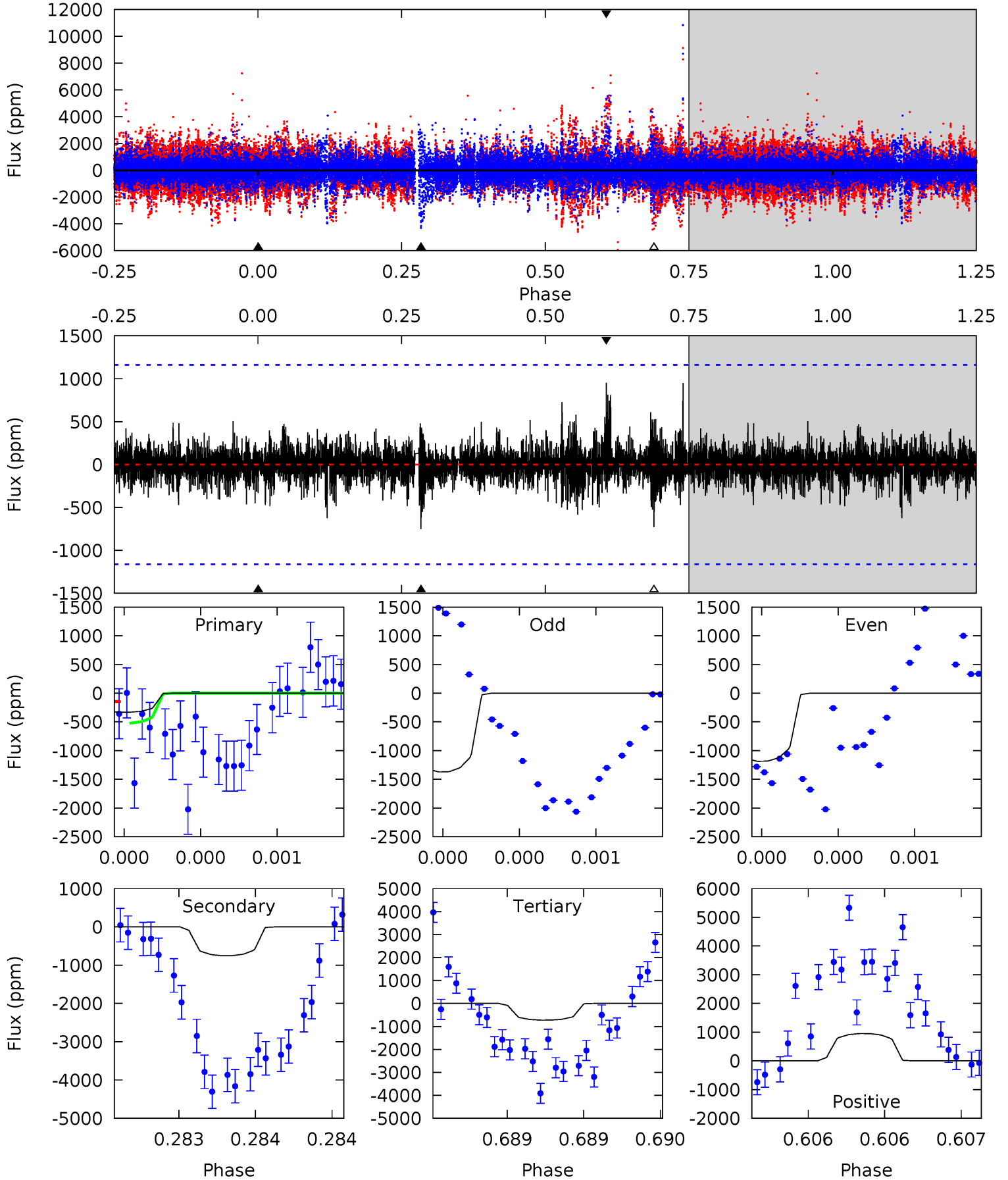
TCE 005254896-01 P=454.272095 Days $T_0=225.371954$ (BKJD)



DV Model-Shift Uniqueness Test

005254896-01, P = 454.299269 Days, E = 225.352178 Days

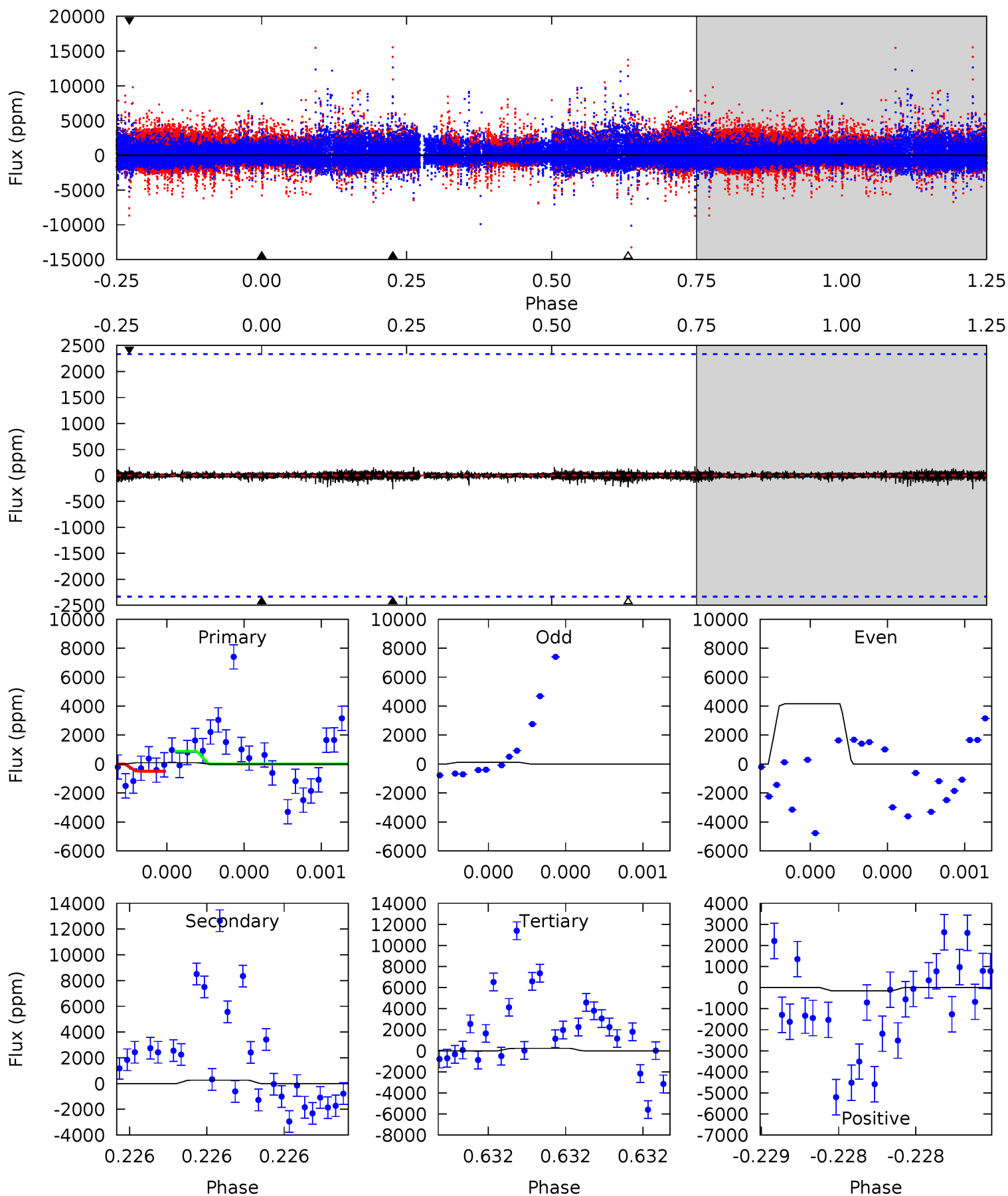
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
1.61	3.66	3.53	4.63	5.65	3.60	0.74	-1.91	-3.01	0.13	-0.97	0.41	0.29	0.56	0.93



Alt Model-Shift Uniqueness Test

005254896-01, P = 454.272095 Days, E = 225.371954 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
0.22	0.64	0.56	0.38	5.65	3.60	0.09	-0.34	-0.16	0.08	0.26	5.05	25.1	0.37	0.46



Stellar Parameters For KIC 005254896

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	M (M_{\odot})	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	5930^{+177}_{-159}	$4.068^{+0.406}_{-0.174}$	$-0.480^{+0.300}_{-0.250}$	$1.444^{+0.388}_{-0.582}$	$0.891^{+0.114}_{-0.091}$	$0.416^{+1.241}_{-0.202}$
	+3%/-3%	+10%/-4%	+62%/-52%	+27%/-40%	+13%/-10%	+298%/-49%
Source	PHO1	KIC0	KIC0	DSEP		

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

Secondary Eclipse Parameters for KIC 005254896-01 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-753 ± 206	$9.02^{+9.21}_{-6.28}$	413^{+32}_{-44}	4229^{+3108}_{-891}	6102^{+59446}_{-4717}
Alt.	-263 ± 413	$11.03^{+9.37}_{-7.66}$	412^{+31}_{-46}	3184^{+1525}_{-6164}	1023^{+11536}_{-1718}

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

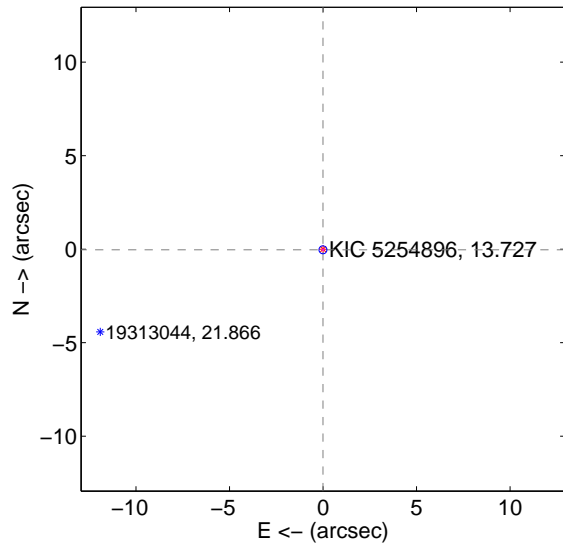
Supplemental centroid analysis for 005254896-01. Kepler magnitude: 13.73. Transit SNR 1.90

There are 1 quarters with good PRF difference image offsets

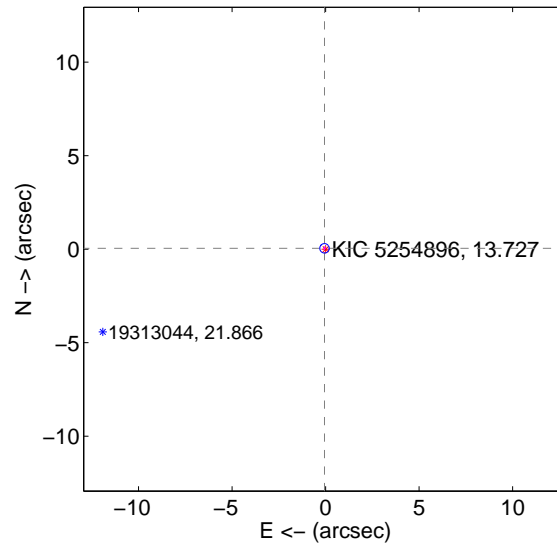
The direct PRF centroid is offset from the target star catalog position by about 0.13 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.034 ± 0.071	0.48	0.005 ± 0.068	-0.033 ± 0.071
PRF-fit source offset from KIC position	0.074 ± 0.084	0.88	0.058 ± 0.073	0.046 ± 0.100
photometric centroid source offset	4.12 ± 2.22	1.86	2.76 ± 2.15	3.06 ± 2.27

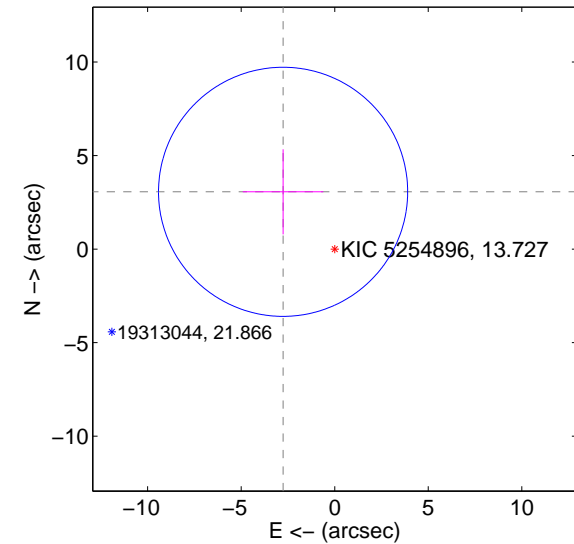
offset from difference PRF-fit to OOT PRF-fit



offset from difference PRF-fit to KIC position

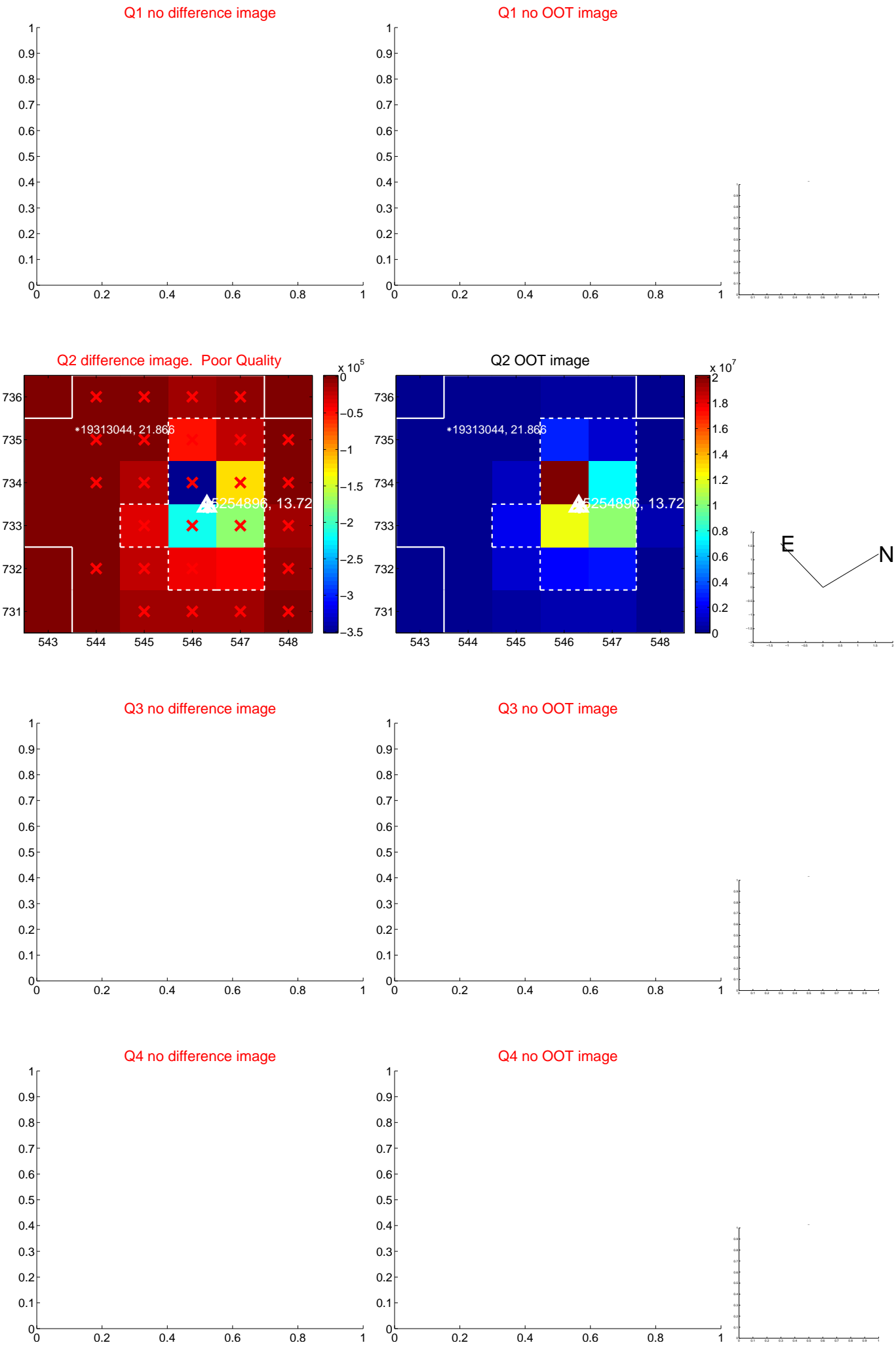


offset from photometric centroids

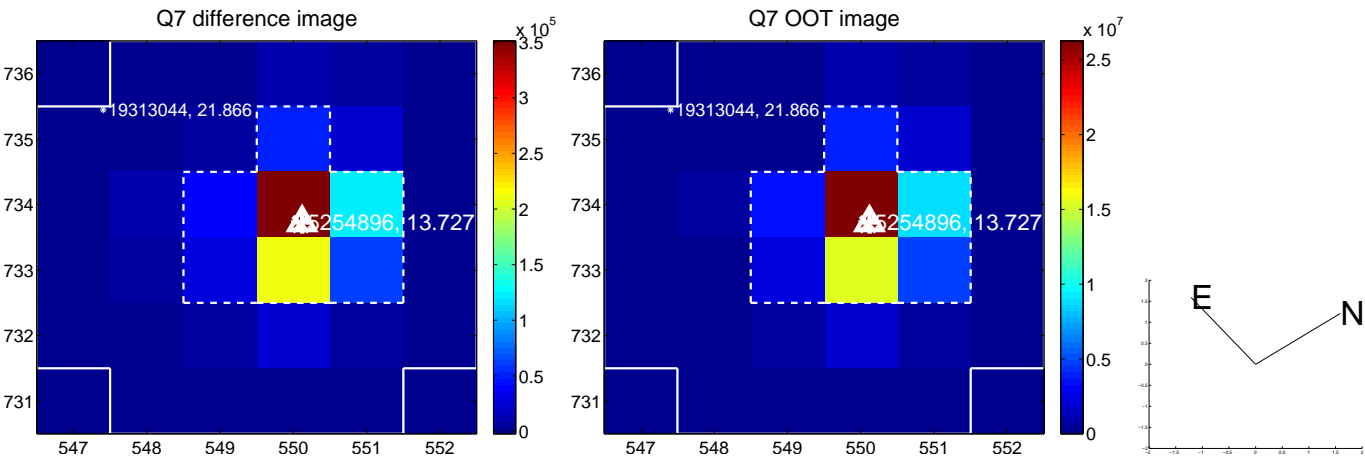


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

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



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



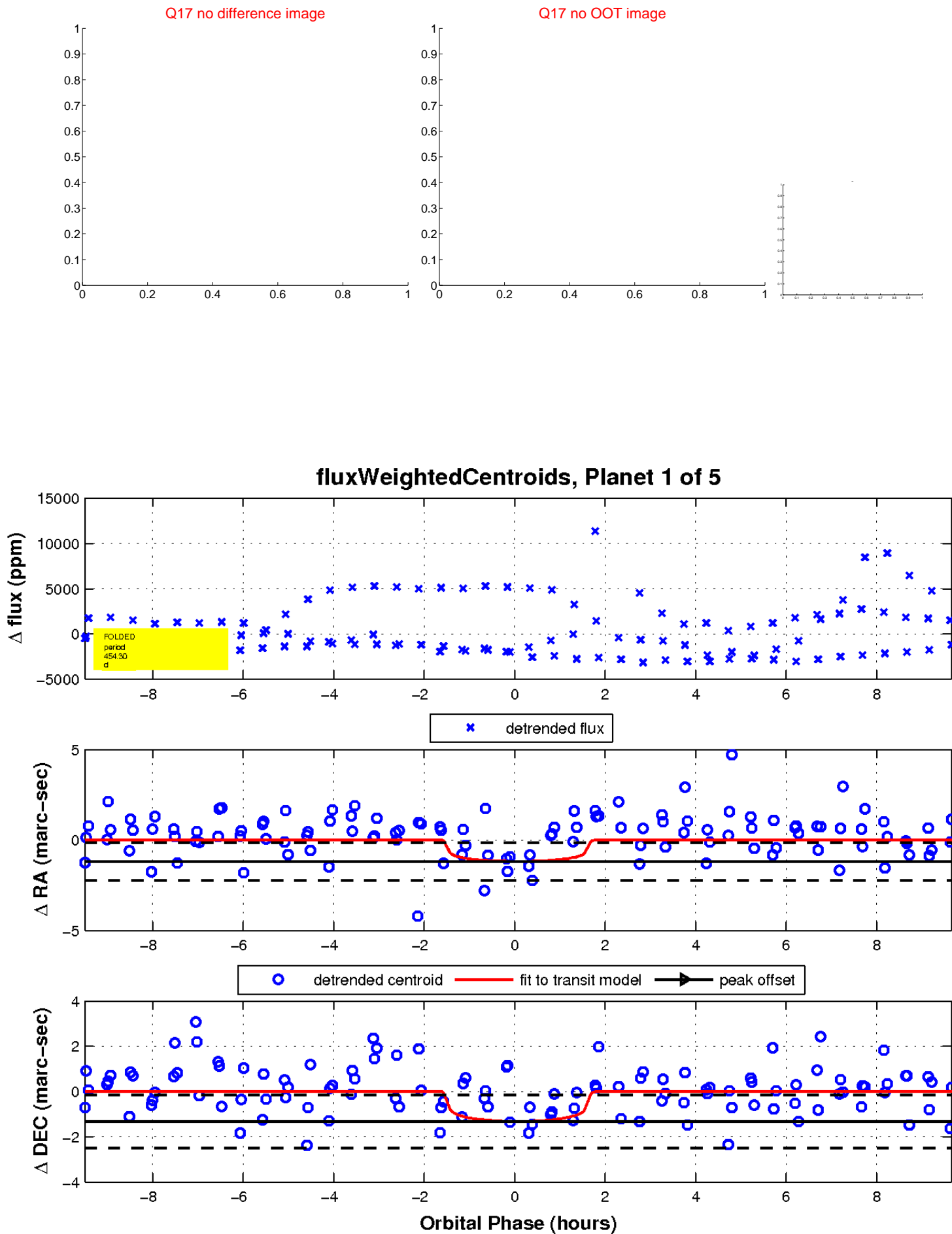
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

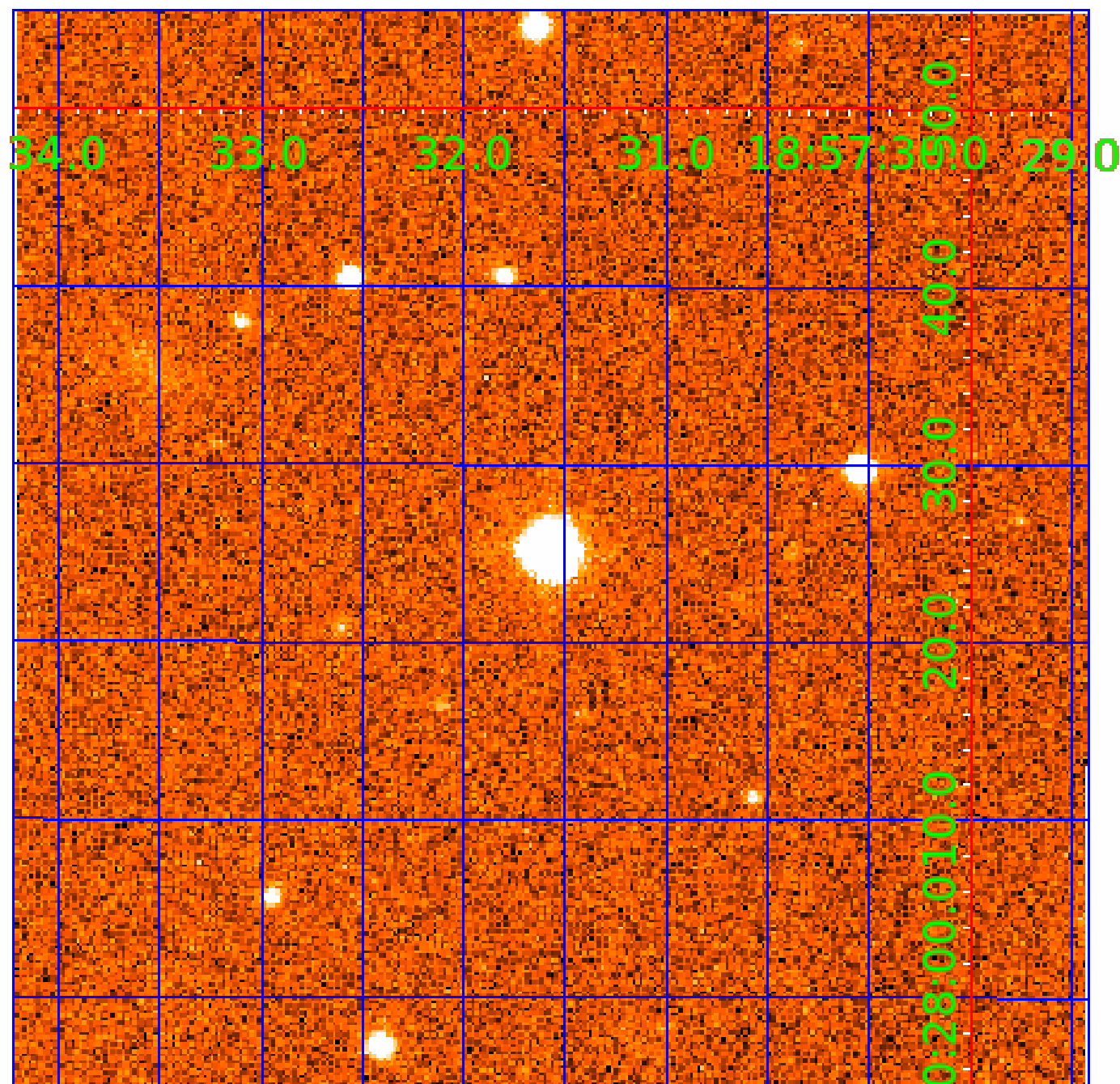


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 005254896

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})
005254896-01	OBS	No	454.299269	225.352178	429.5	3.236	16.2	1.9	1.44	5930	3.14	1.87
005254896-02	OBS	No	1.184905	132.164868	627.7	3.500	12.3	-1.0	1.44	5930	3.62	5198.92
005254896-03	OBS	No	158.180814	262.612238	1940.4	6.554	10.6	6.7	1.44	5930	7.65	7.62
005254896-04	OBS	No	188.575095	133.764987	1498.3	2.515	11.7	5.6	1.44	5930	5.74	6.03
005254896-05	OBS	No	1.184905	131.747274	110.0	2.763	7.5	9.3	1.44	5930	1.81	5198.92

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
005254896-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_TRACKER—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—INCONSISTENT_TRANS—CENT_FEW_DIFFS
005254896-02	OBS	FP	0.00	1	0	0	0	SWEET_NTL—LPP_DV—CENT_NOFITS
005254896-03	OBS	FP	0.00	1	0	1	0	LPP_DV—ALL_TRANS_CHASES—MOD_POS_DV—MOD_NONUNIQ_ALT—INCONSISTENT_TRANS—HALO_GHOST
005254896-04	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_CHASES_MARSHALL—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—INCONSISTENT_TRANS—CENT_FEW_DIFFS
005254896-05	OBS	FP	0.00	1	0	1	0	SWEET_NTL—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—SAME_NTL_PERIOD—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.

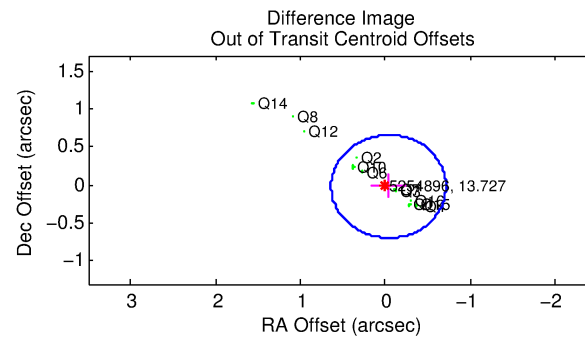
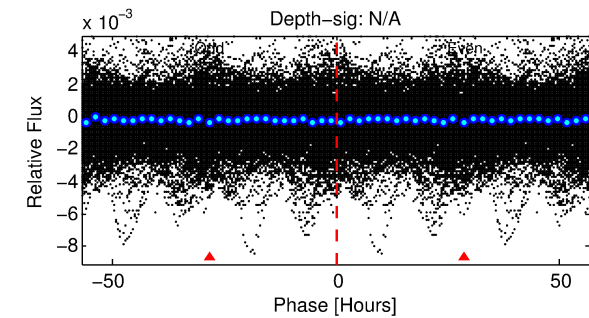
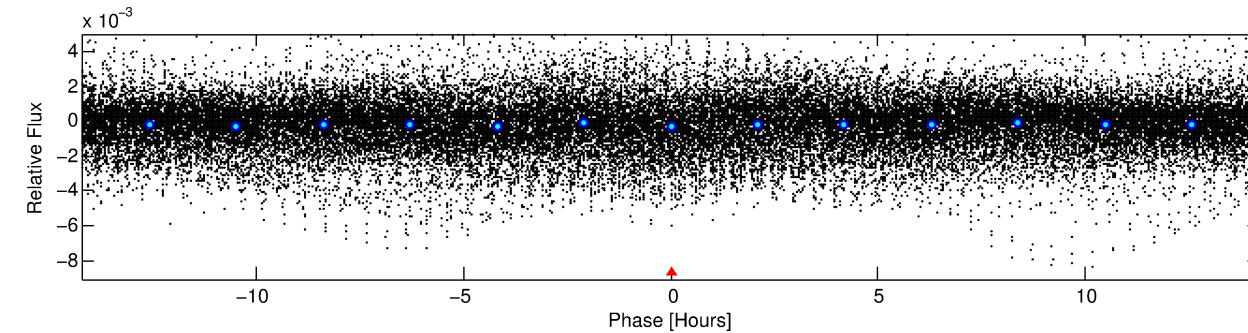
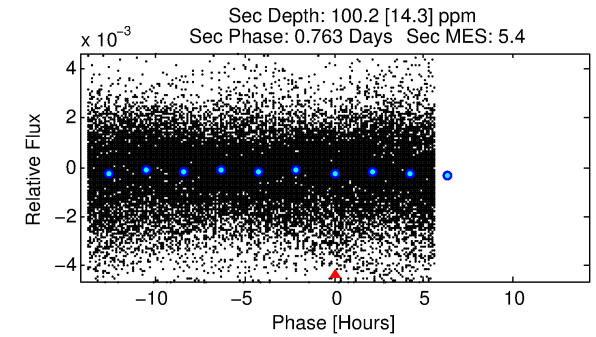
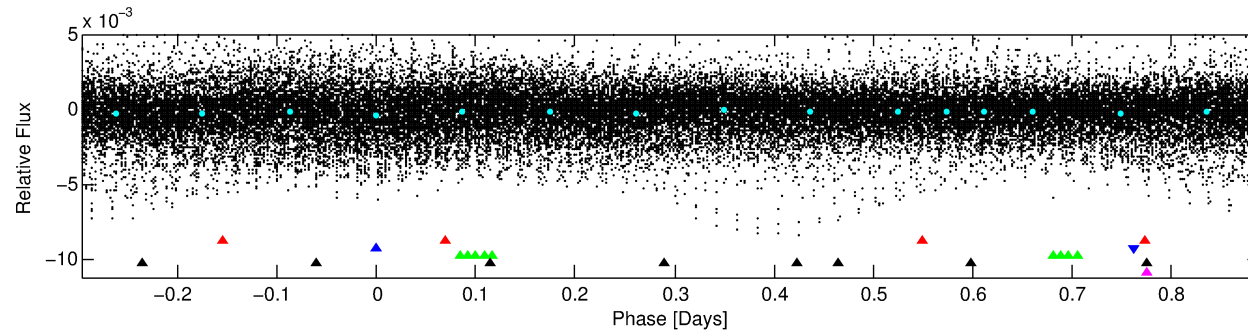
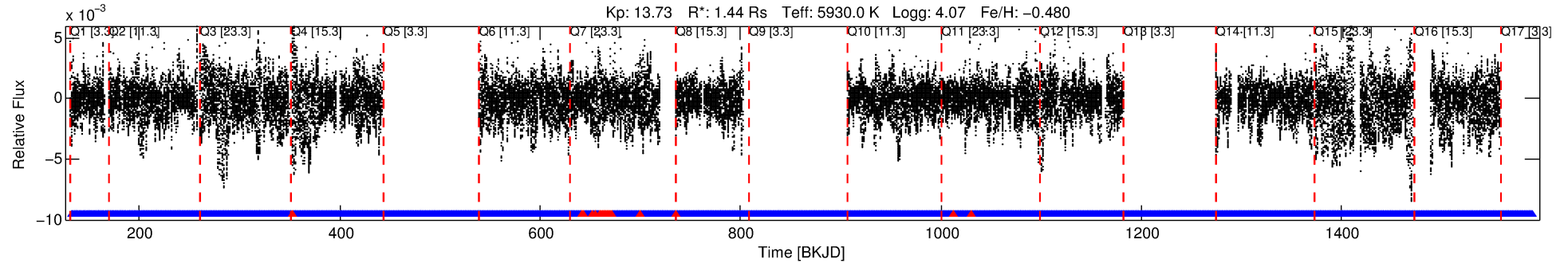
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 005254896-02

No Significant Match Found

DV One-Page Summary

KIC: 5254896 Candidate: 2 of 5 Period: 1.185 d



TPS TCE Results:

Period = 1.18491 d
Epoch = 132.1649 BKJD

DV fit results are unavailable

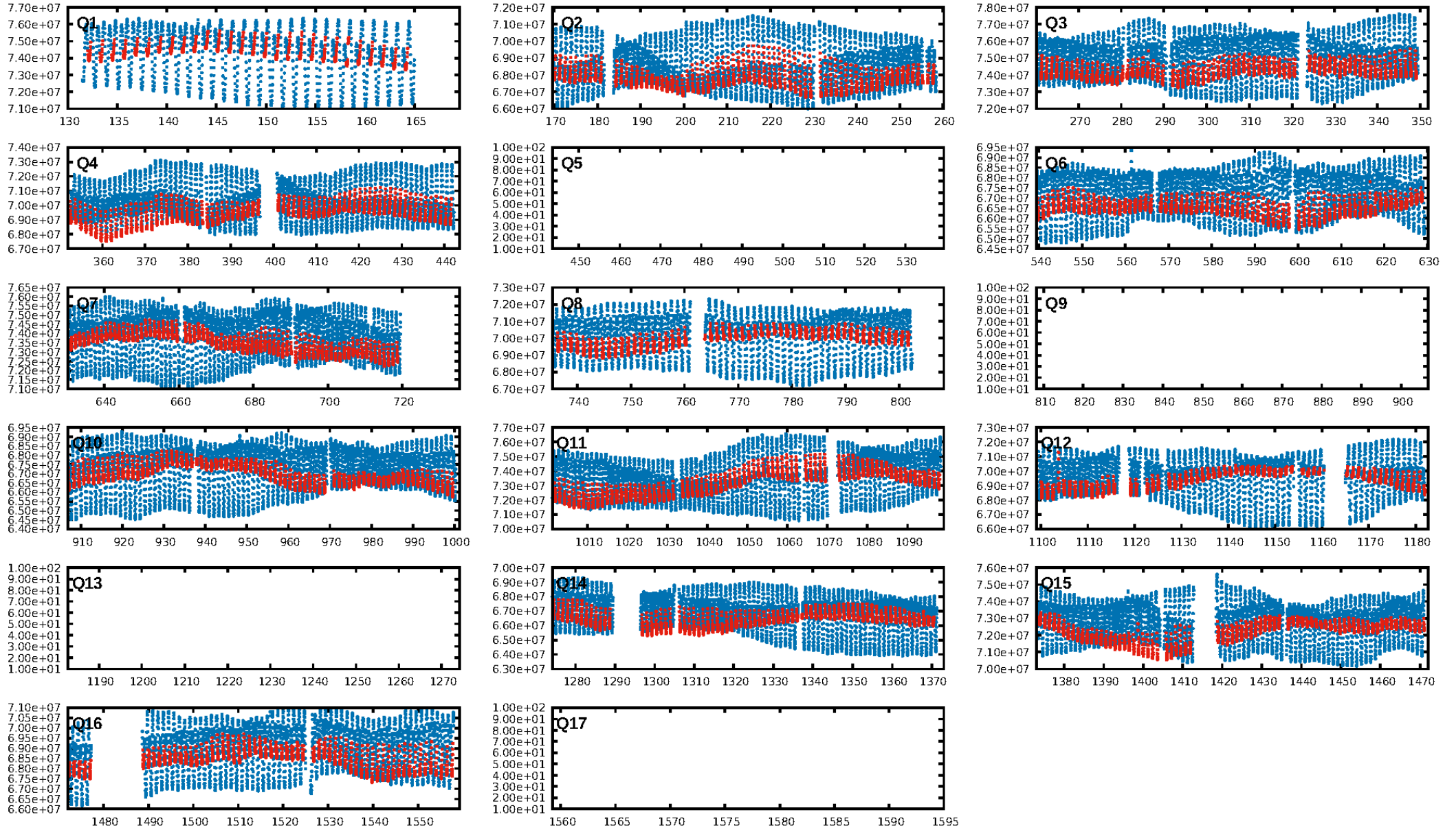
DV Diagnostic Results:

ShortPeriod-sig: 0.0% [0.00σ]
LongPeriod-sig: 100.0% [507.11σ]
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: N/A
RollingBand-fgt: 0.98 [835/855]
GhostDiagnostic-chr: 1.588
Centroid-sig: 0.0%
Centroid-so: 0.052 arcsec [5.64σ]
OotOffset-rm: 0.046 arcsec [0.20σ]
KicOffset-rm: 0.067 arcsec [0.31σ]
OotOffset-st: 4/3/4/1 [12]
KicOffset-st: 4/3/4/1 [12]
DiffImageQuality-fgm: 0.75 [9/12]
DiffImageOverlap-fno: 0.00 [0/13]

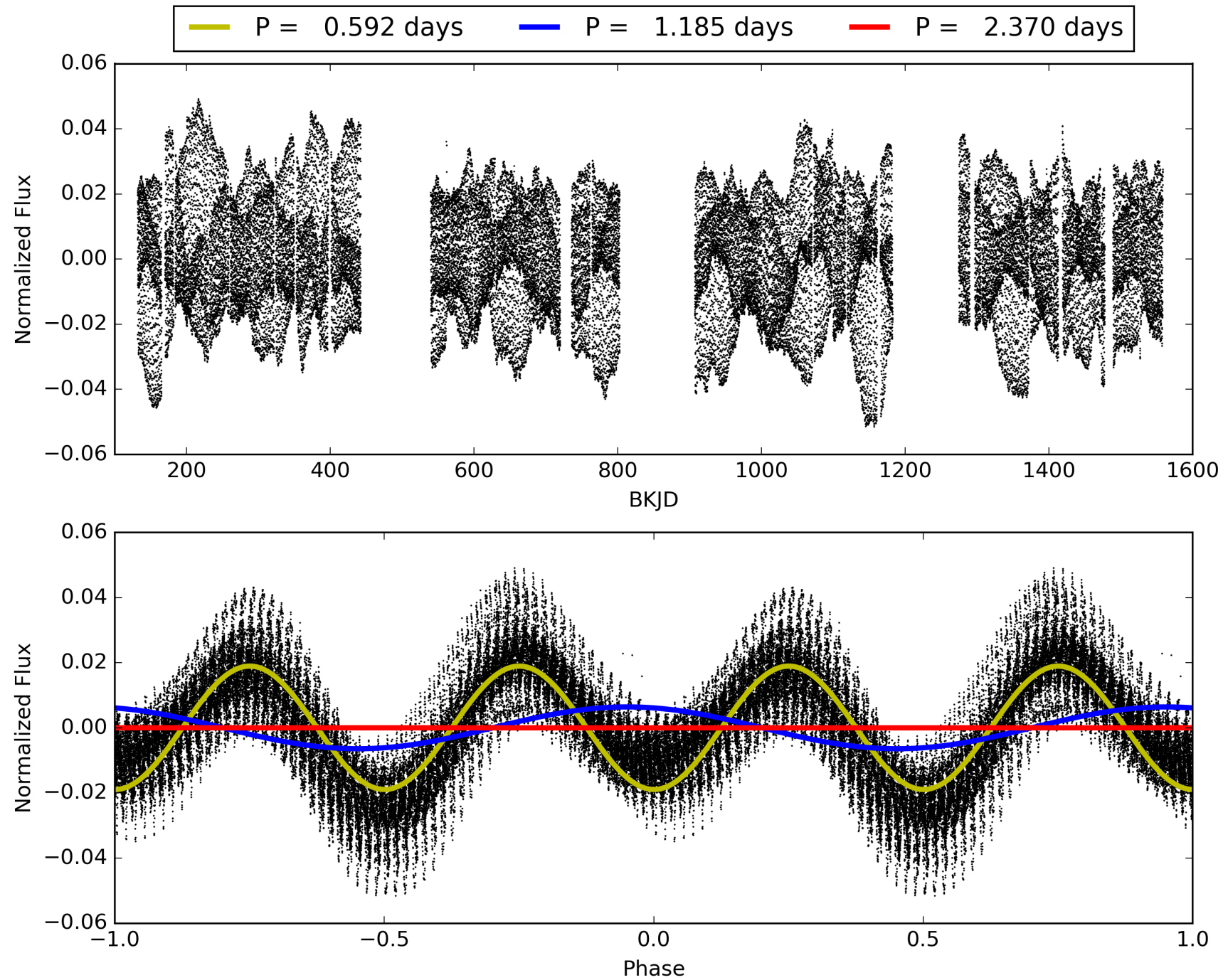
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 02-Feb-2016 07:48:28 Z

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

TCE 005254896-02, PDC Light Curves

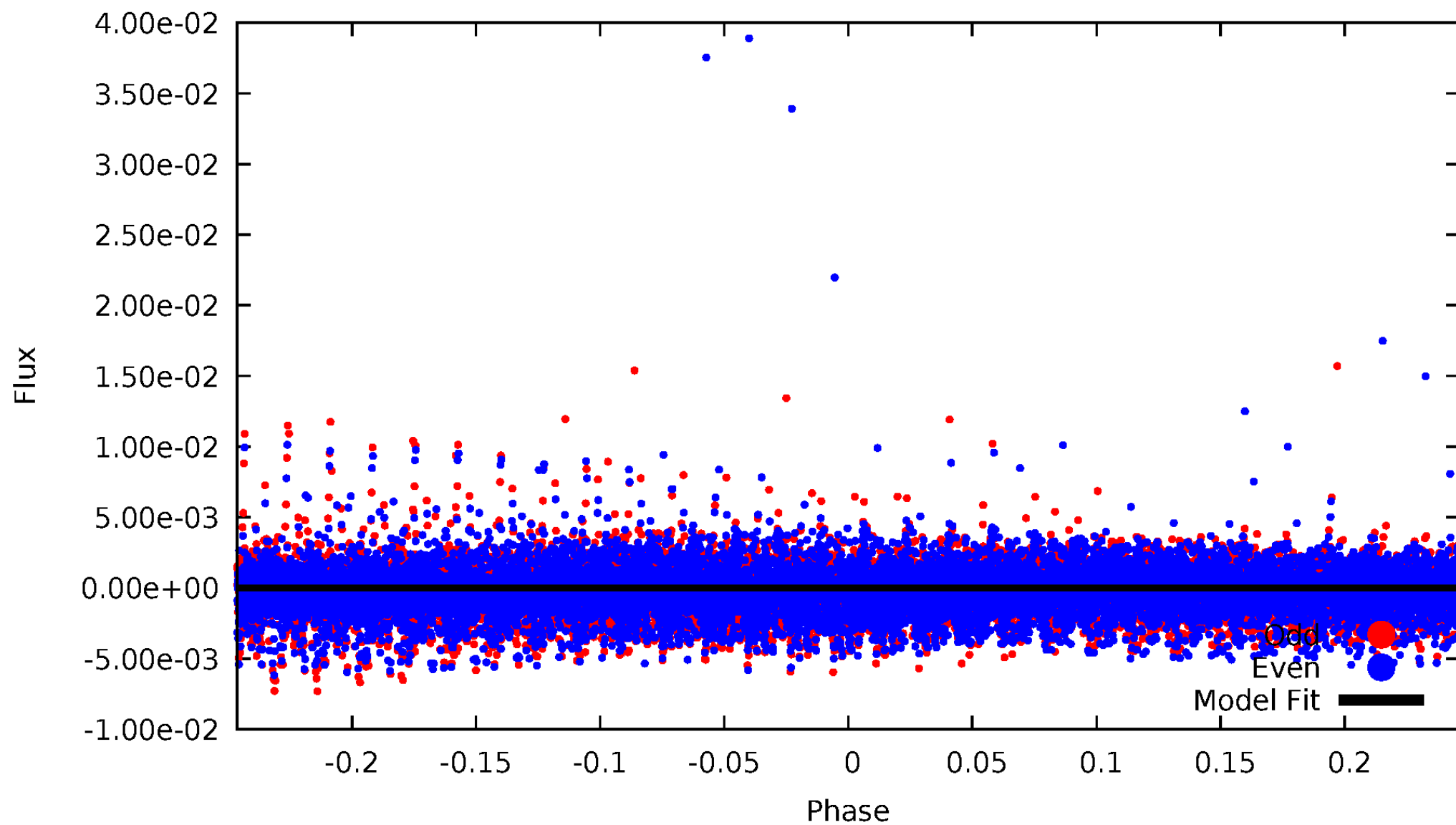


TCE 005254896-02



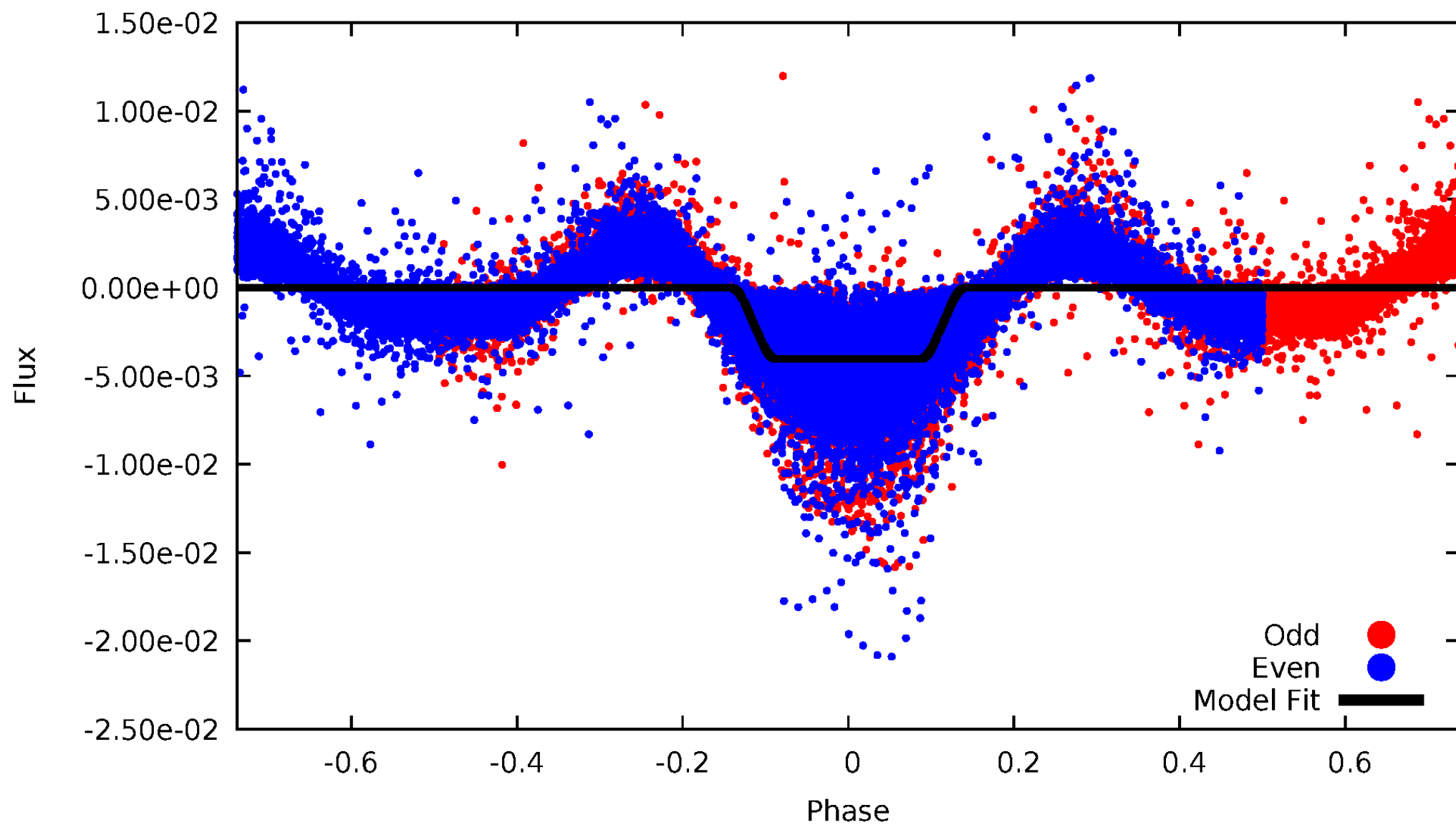
DV Odd/Even

TCE 005254896-02



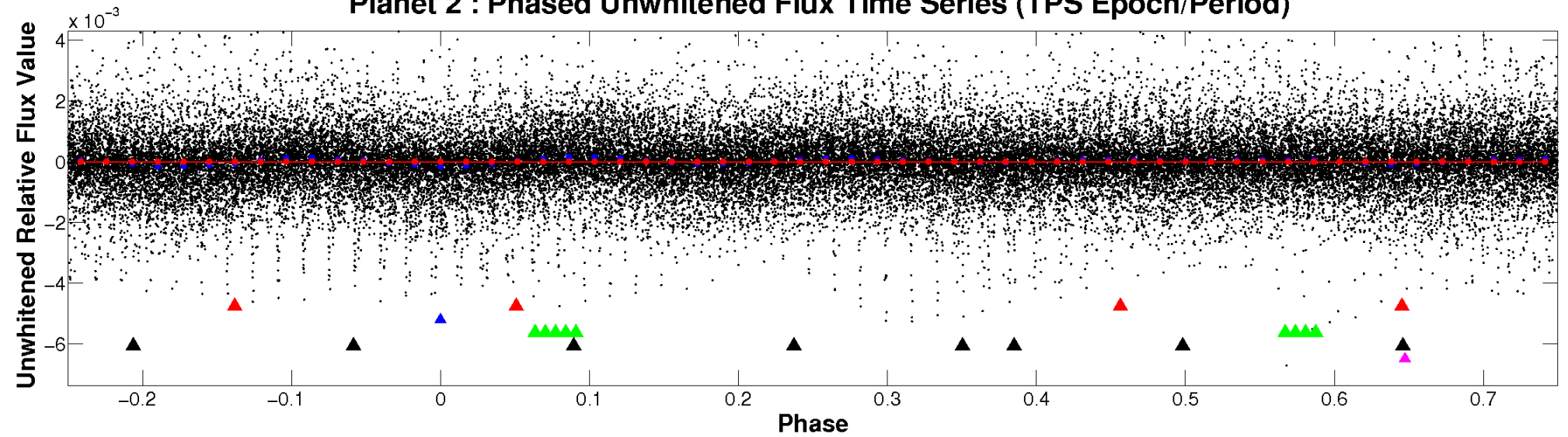
ALT Odd/Even

TCE 005254896-02



Non-Whitened Vs. Whitened Light Curve

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

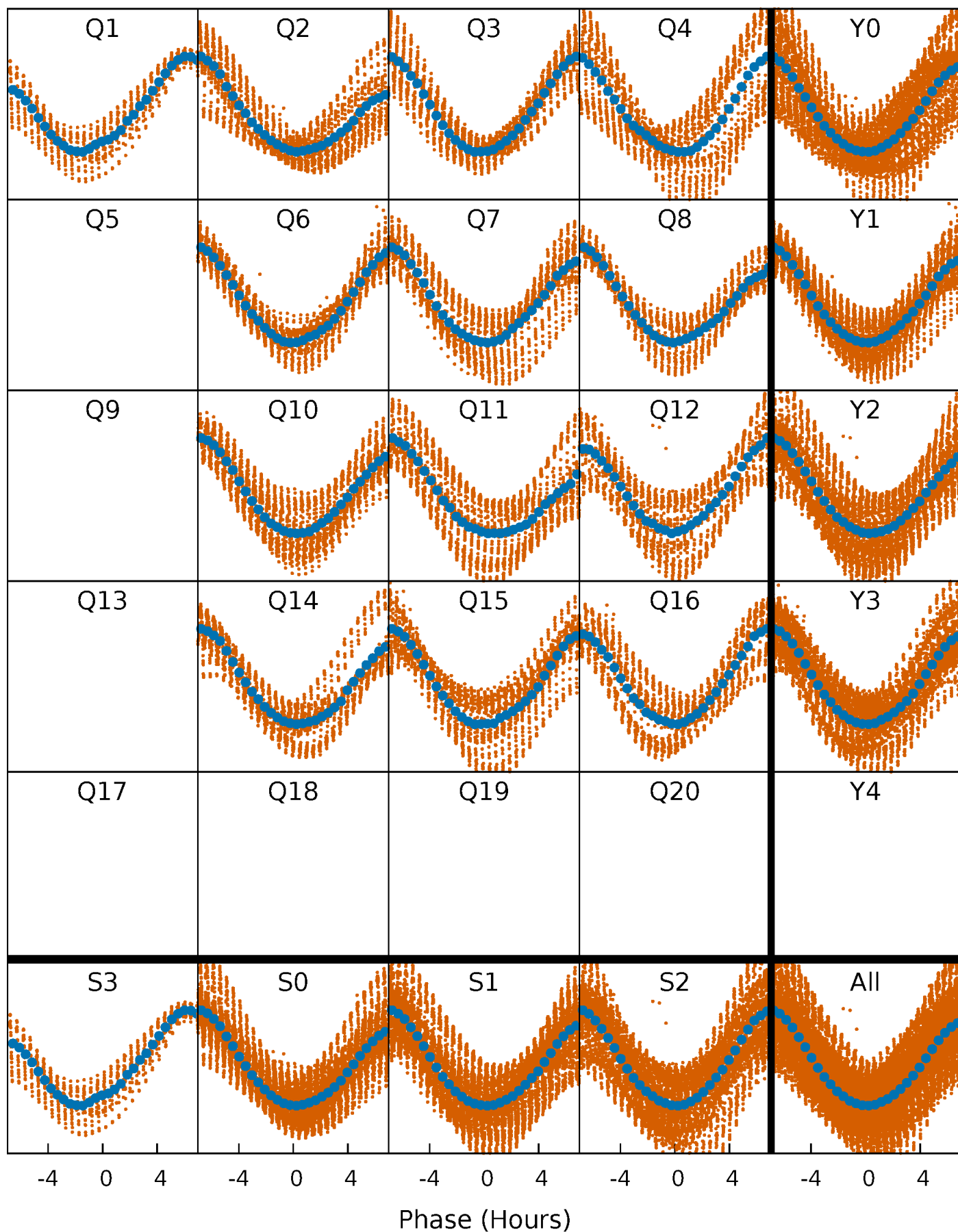


Planet 2 : Phased Whitened Flux Time Series (TPS Epoch/Period)



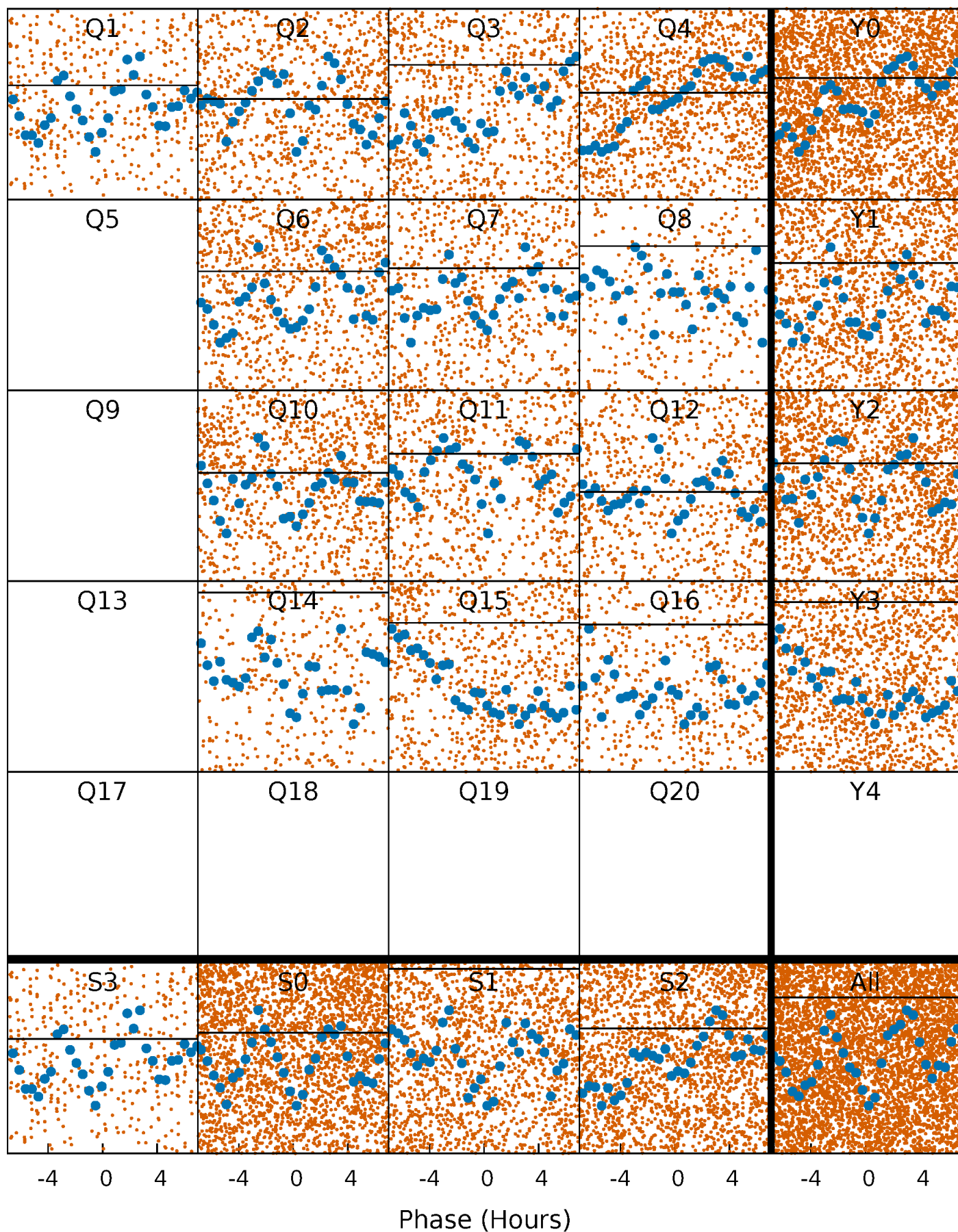
PDC Quarter-Phased Transit Curves

TCE 005254896-02 P= 1.184905 Days $T_0=132.164868$ (BKJD)



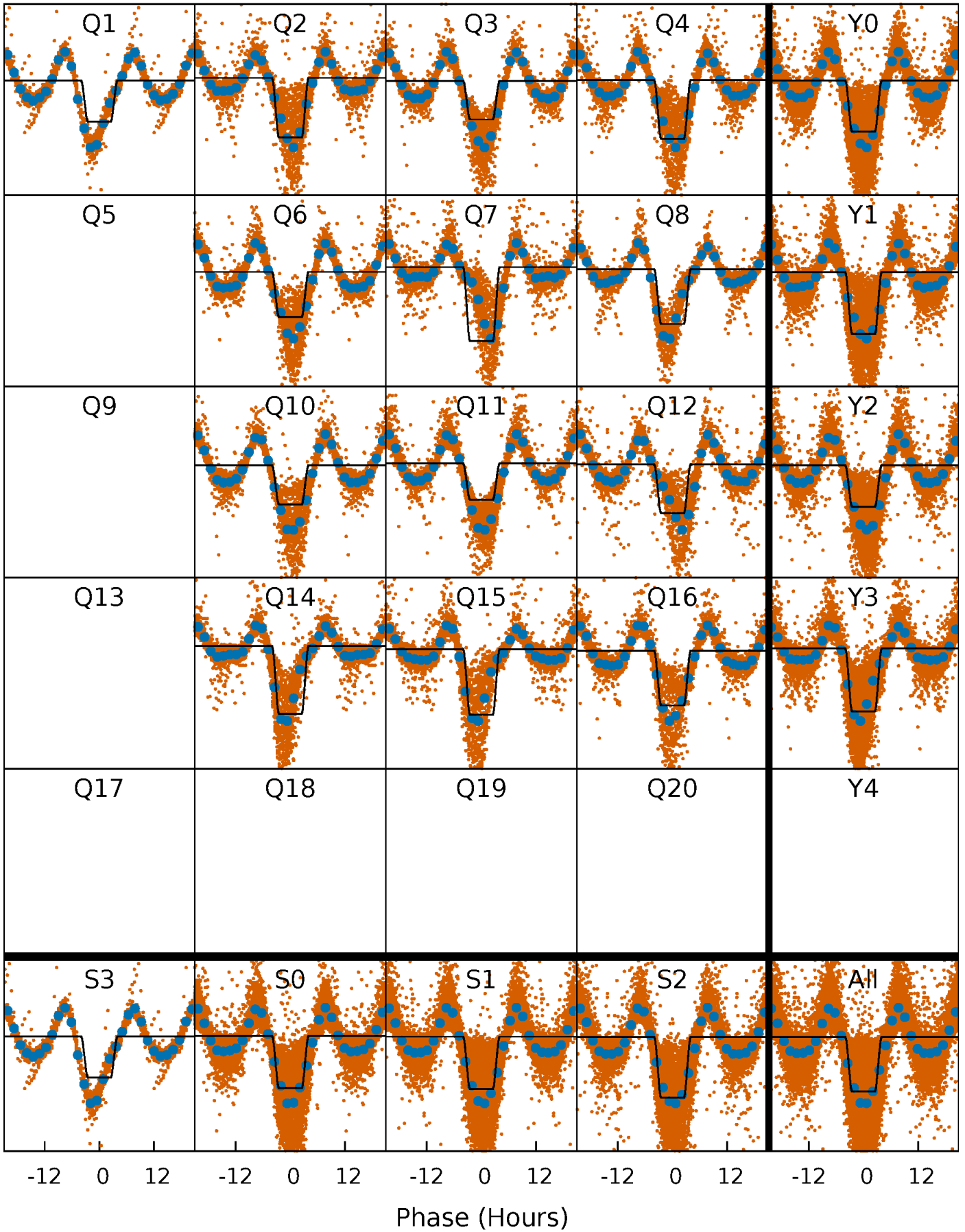
DV Quarter-Phased Transit Curves

TCE 005254896-02 P= 1.184905 Days $T_0=132.164868$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

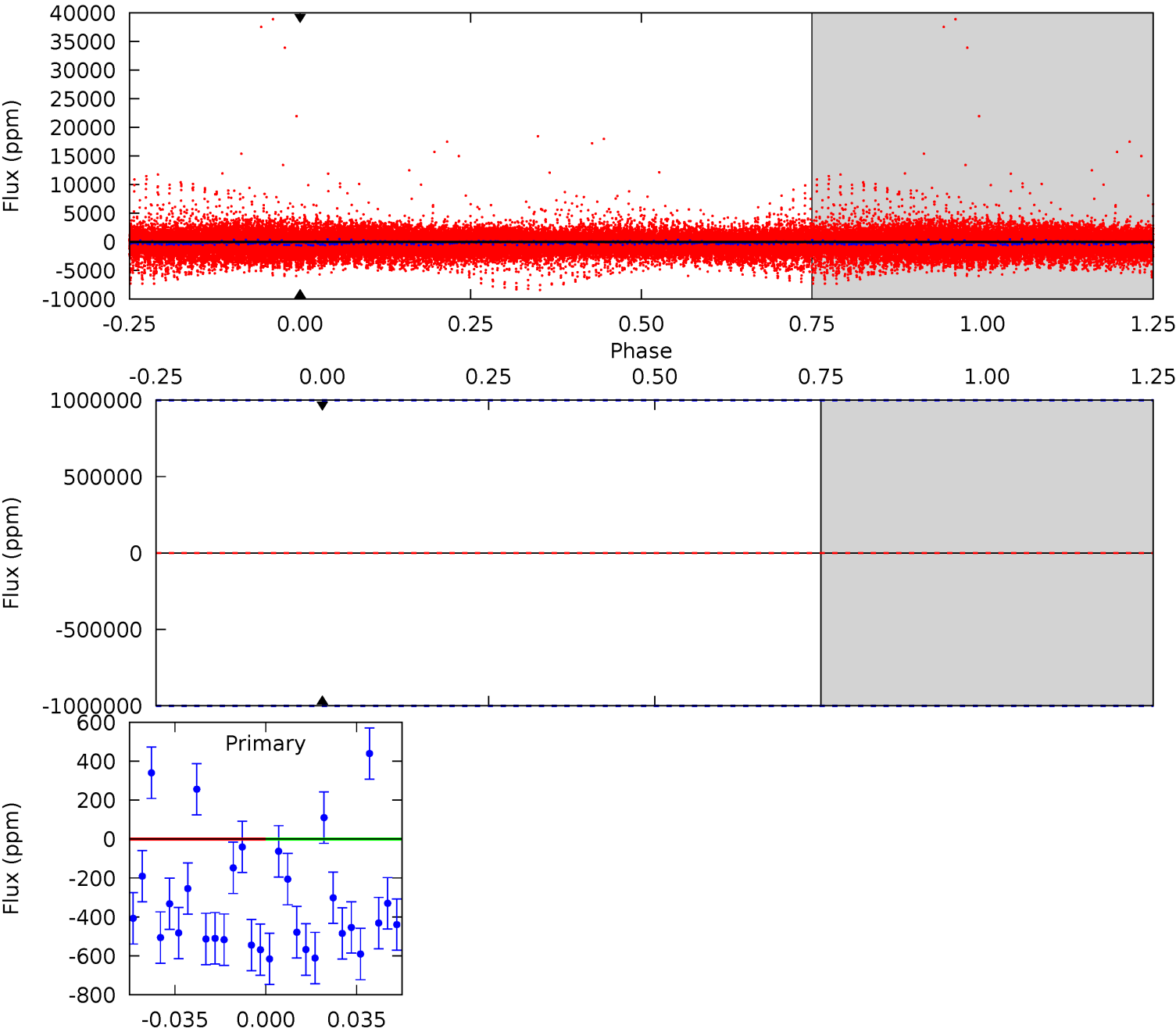
TCE 005254896-02 P= 1.184905 Days $T_0=132.156361$ (BKJD)



DV Model-Shift Uniqueness Test

005254896-02, P = 1.184905 Days, E = 130.979963 Days

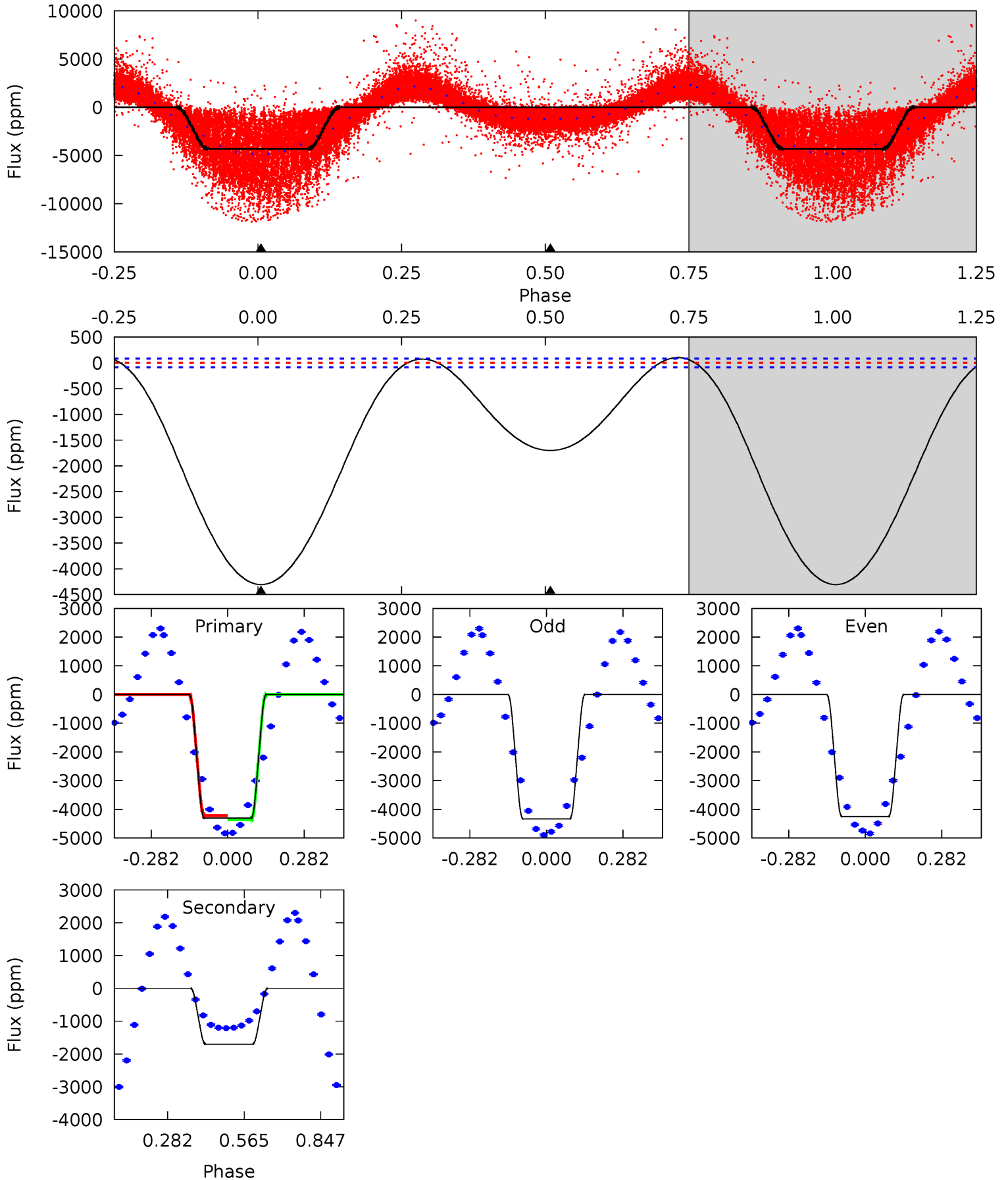
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
0	0	0	0	1.00	1.00	1.00	0	0	0	0	0	0	0	0



Alt Model-Shift Uniqueness Test

005254896-02, P = 1.184905 Days, E = 130.971456 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
221.5	87.5	0	0	4.34	1.08	5.29	221.5	221.5	87.5	87.5	2.10	1.06	0.02	4.39



Stellar Parameters For KIC 005254896

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	M (M_{\odot})	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	5930^{+177}_{-159}	$4.068^{+0.406}_{-0.174}$	$-0.480^{+0.300}_{-0.250}$	$1.444^{+0.388}_{-0.582}$	$0.891^{+0.114}_{-0.091}$	$0.416^{+1.241}_{-0.202}$
	+3%/-3%	+10%/-4%	+62%/-52%	+27%/-40%	+13%/-10%	+298%/-49%
Source	PHO1	KIC0	KIC0	DSEP		

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

Secondary Eclipse Parameters for KIC 005254896-02 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	0 ± 1000000	$11.32^{+11.62}_{-7.62}$	3000^{+240}_{-340}	4602^{+20099}_{-25121}	$3.483^{+419.980}_{-335.348}$
Alt.	-1701 ± 19	$13.19^{+13.90}_{-8.63}$	2995^{+246}_{-359}	4153^{+2694}_{-1136}	$2.395^{+17.000}_{-1.811}$

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 $A_{obs} \gg 1.0$

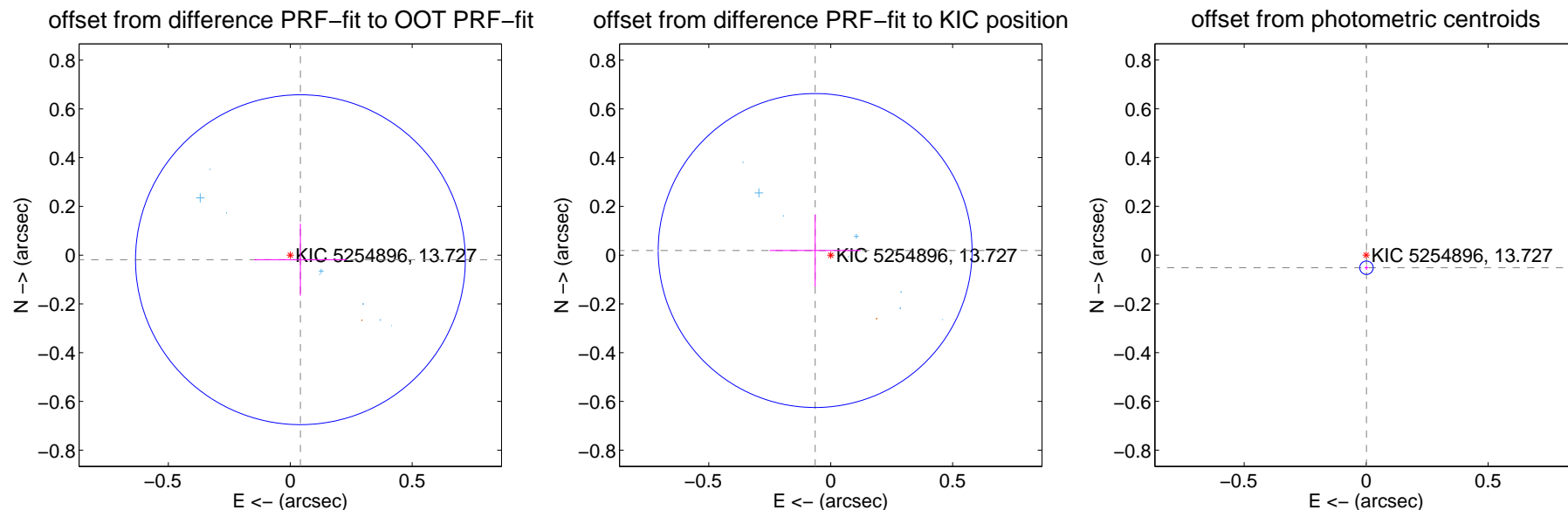
DV Centroid Data

Supplemental centroid analysis for 005254896-02. Kepler magnitude: 13.73. Transit SNR -1.00

There are 9 quarters with good PRF difference image offsets

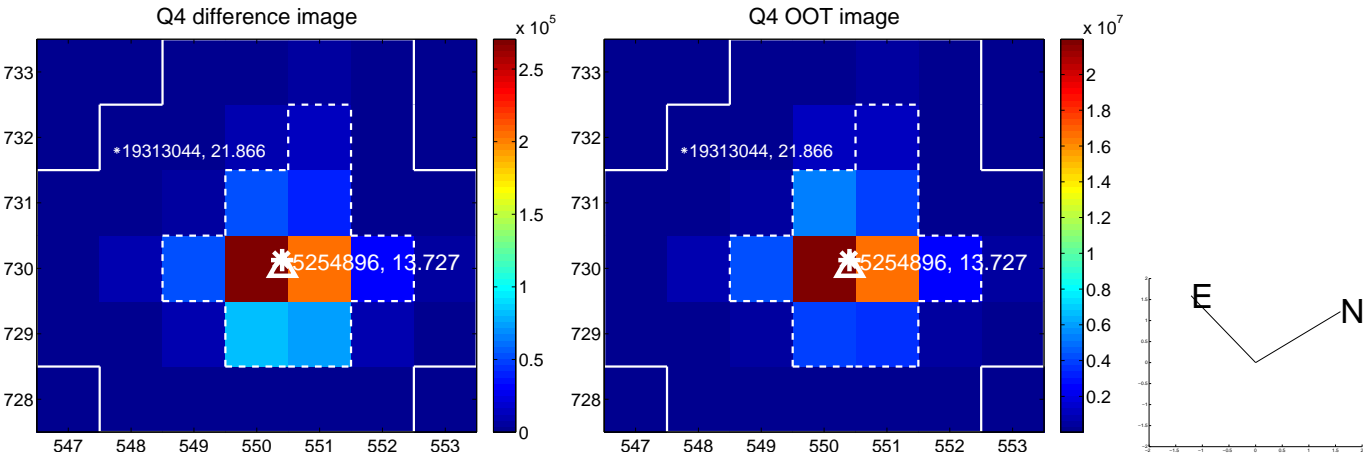
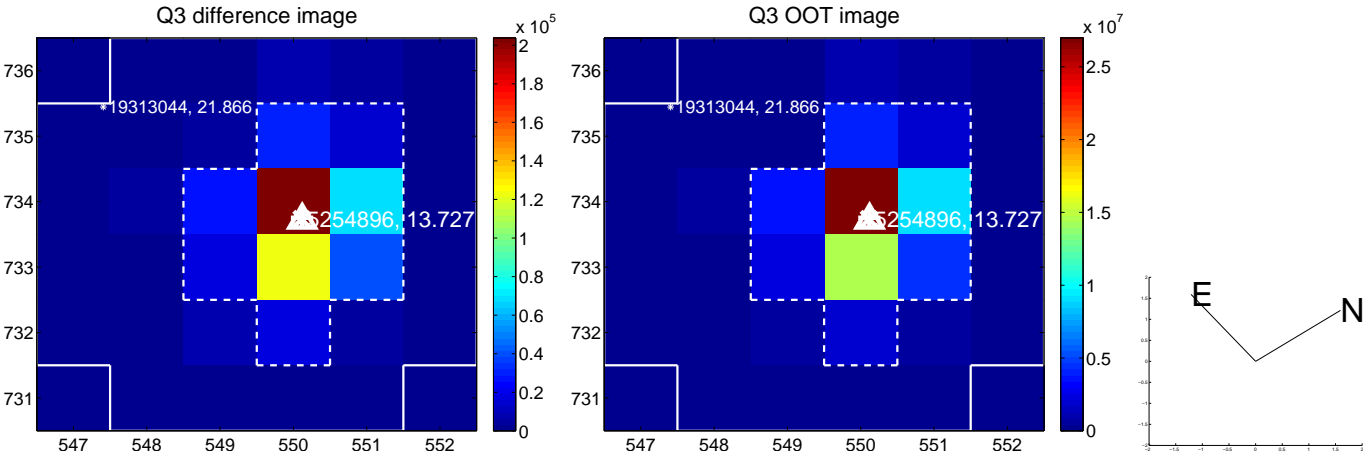
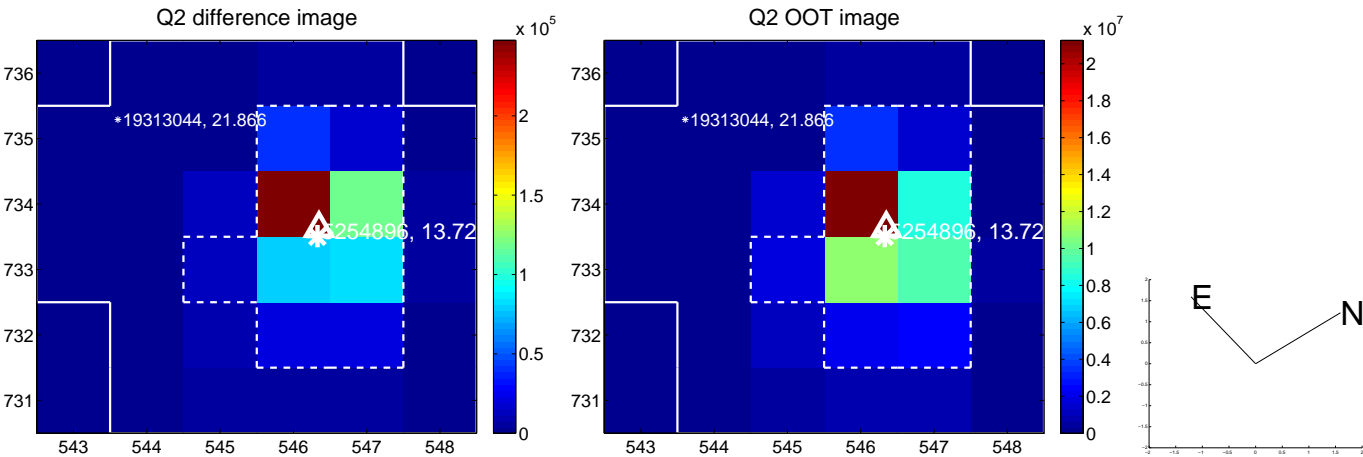
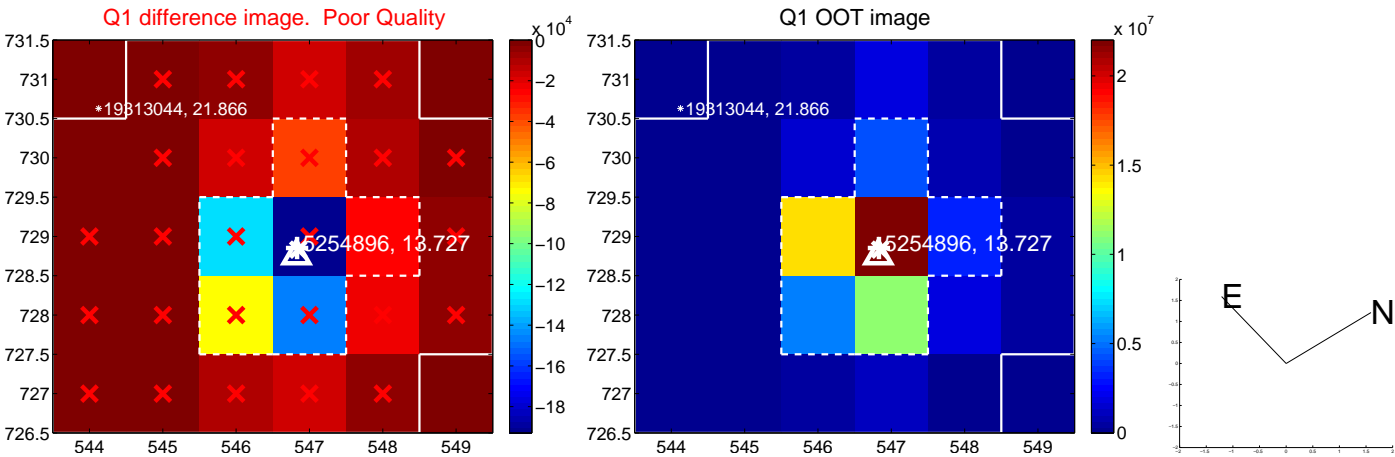
The direct PRF centroid is offset from the target star catalog position by about 0.02 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.046 ± 0.226	0.20	-0.042 ± 0.189	-0.019 ± 0.148
PRF-fit source offset from KIC position	0.067 ± 0.215	0.31	0.064 ± 0.186	0.019 ± 0.148
photometric centroid source offset	0.05 ± 0.01	5.64	-0.00 ± 0.01	-0.05 ± 0.01

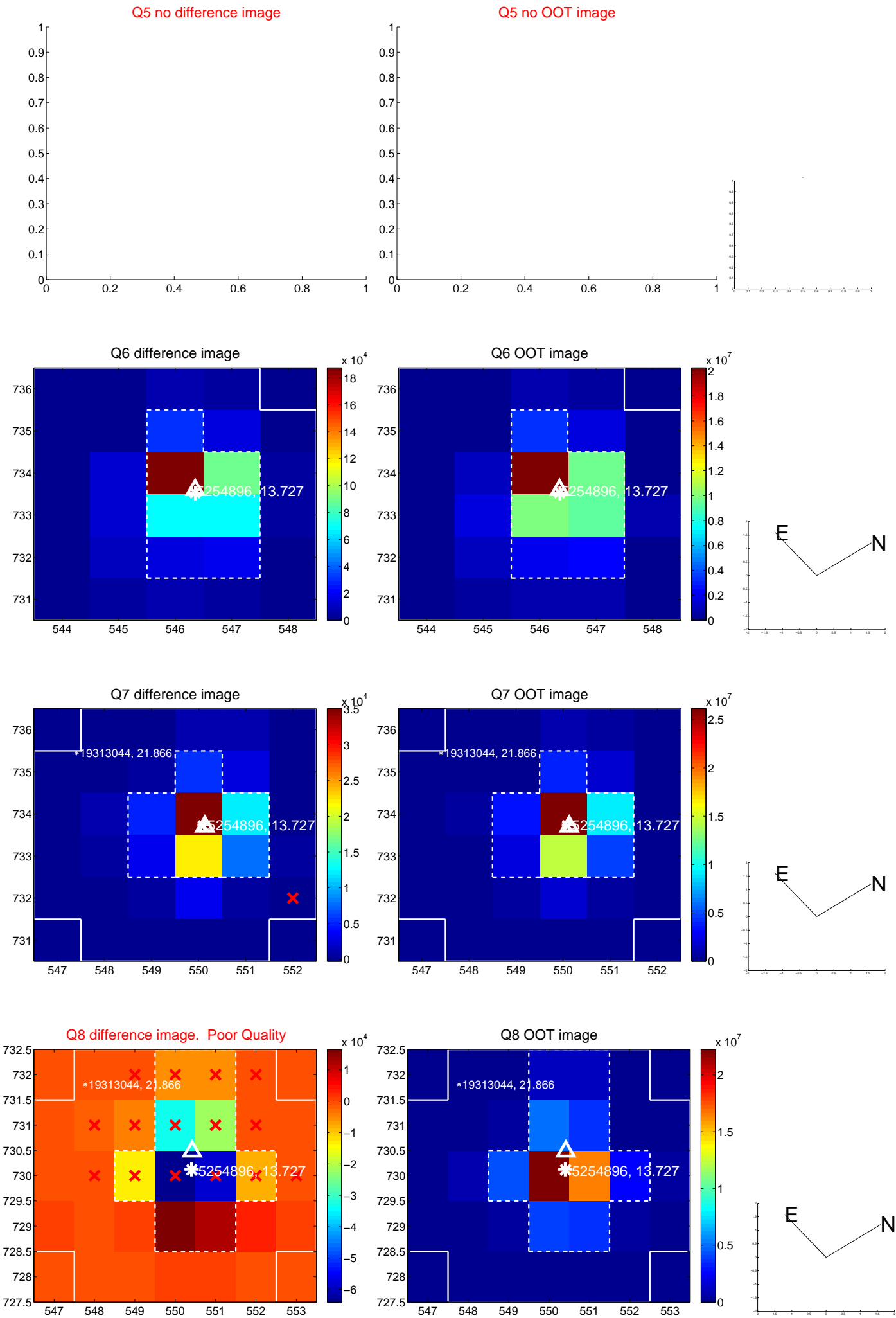


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

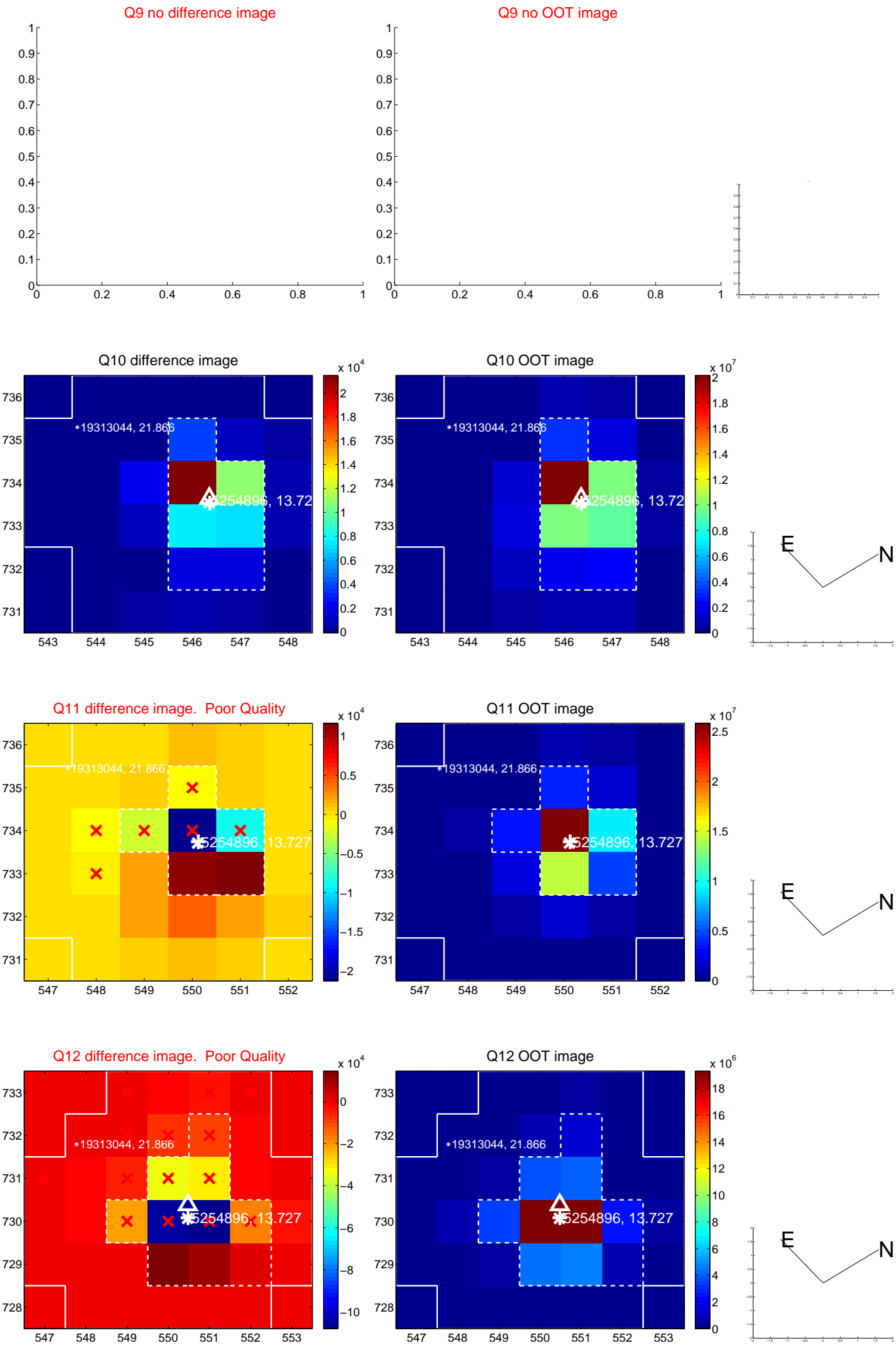
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



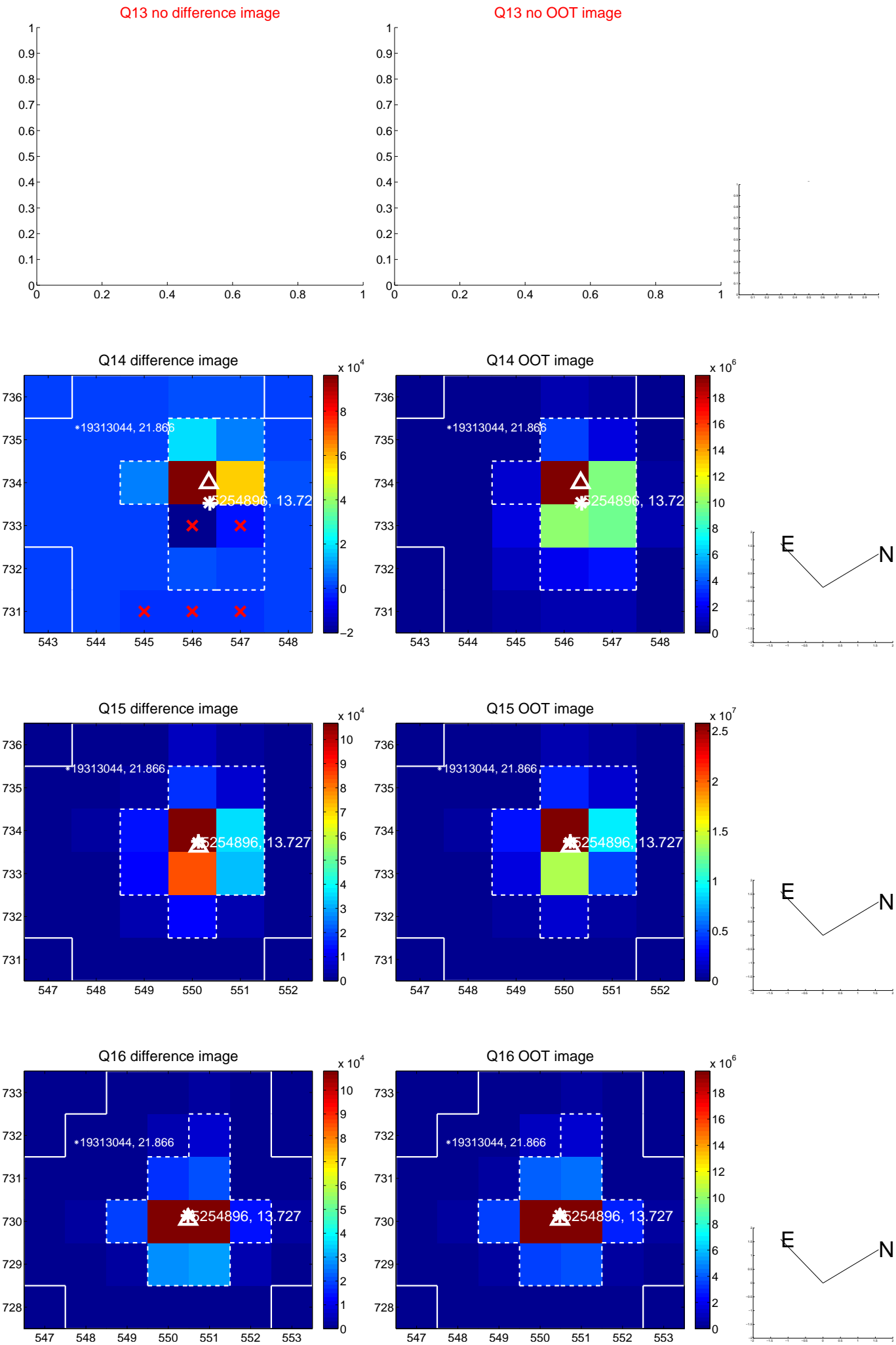
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



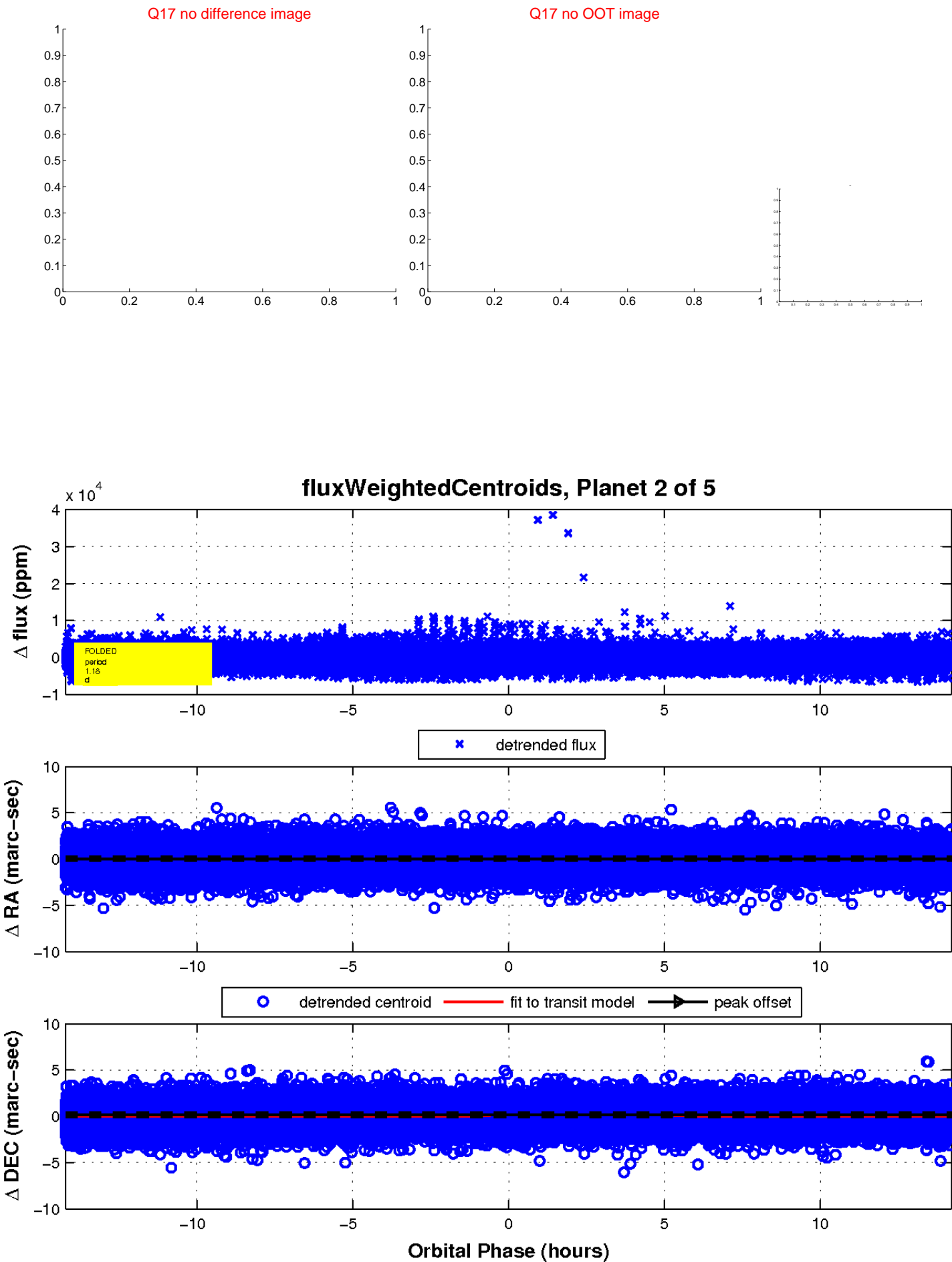
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

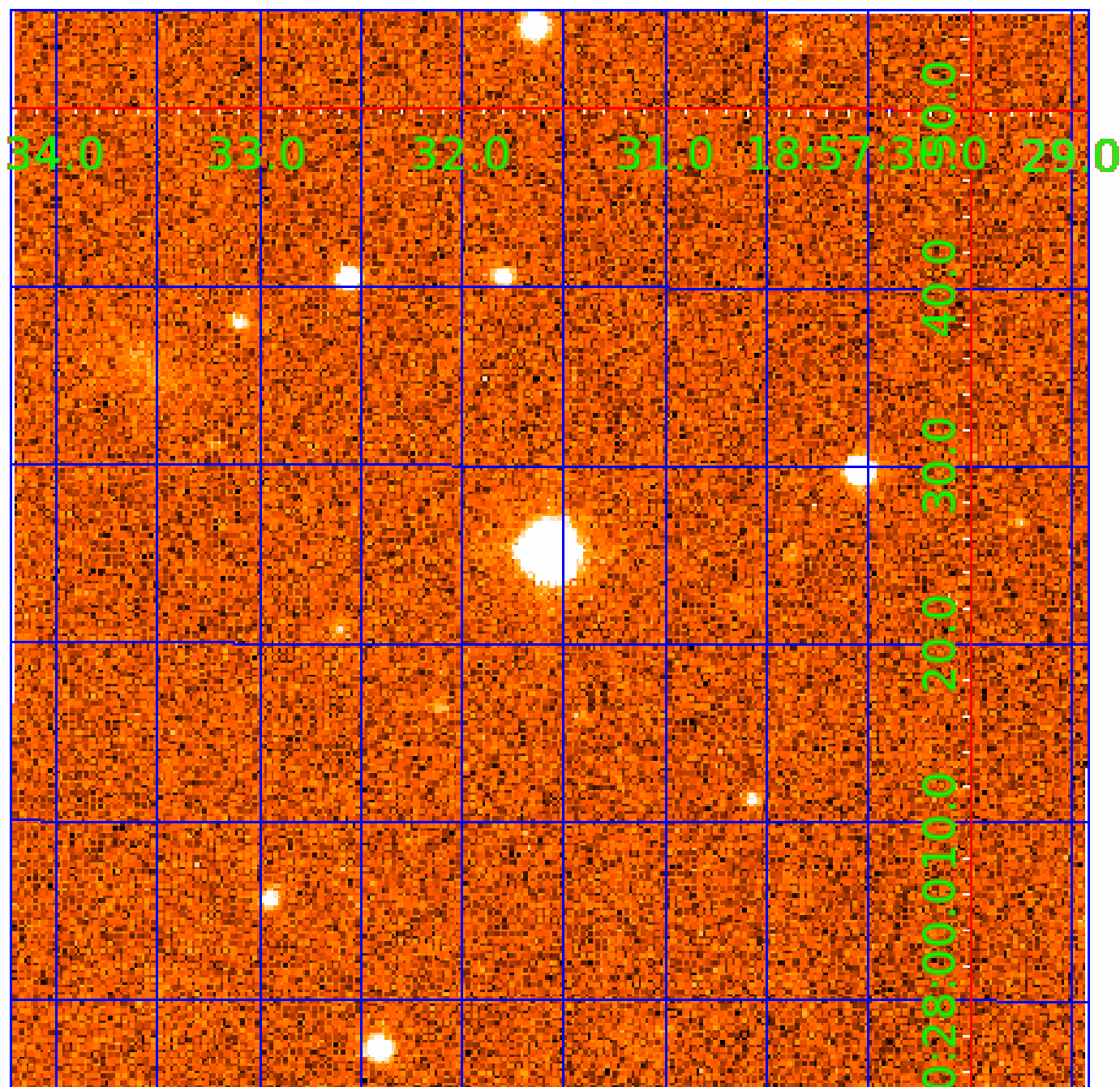


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 005254896

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})
005254896-01	OBS	No	454.299269	225.352178	429.5	3.236	16.2	1.9	1.44	5930	3.14	1.87
005254896-02	OBS	No	1.184905	132.164868	627.7	3.500	12.3	-1.0	1.44	5930	3.62	5198.92
005254896-03	OBS	No	158.180814	262.612238	1940.4	6.554	10.6	6.7	1.44	5930	7.65	7.62
005254896-04	OBS	No	188.575095	133.764987	1498.3	2.515	11.7	5.6	1.44	5930	5.74	6.03
005254896-05	OBS	No	1.184905	131.747274	110.0	2.763	7.5	9.3	1.44	5930	1.81	5198.92

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
005254896-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_TRACKER—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—INCONSISTENT_TRANS—CENT_FEW_DIFFS
005254896-02	OBS	FP	0.00	1	0	0	0	SWEET_NTL—LPP_DV—CENT_NOFITS
005254896-03	OBS	FP	0.00	1	0	1	0	LPP_DV—ALL_TRANS_CHASES—MOD_POS_DV—MOD_NONUNIQ_ALT—INCONSISTENT_TRANS—HALO_GHOST
005254896-04	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_CHASES_MARSHALL—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—INCONSISTENT_TRANS—CENT_FEW_DIFFS
005254896-05	OBS	FP	0.00	1	0	1	0	SWEET_NTL—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—SAME_NTL_PERIOD—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.

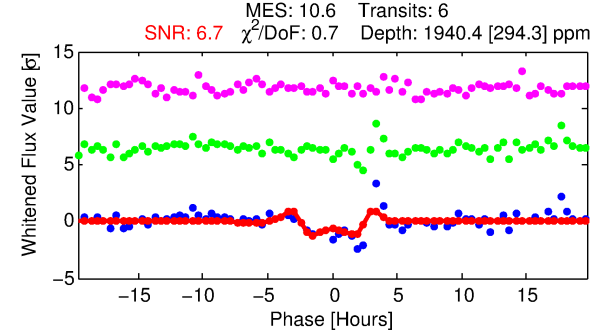
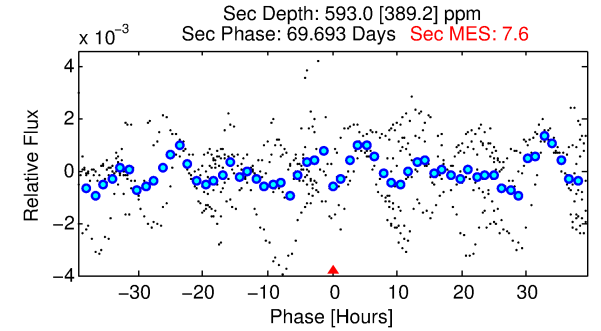
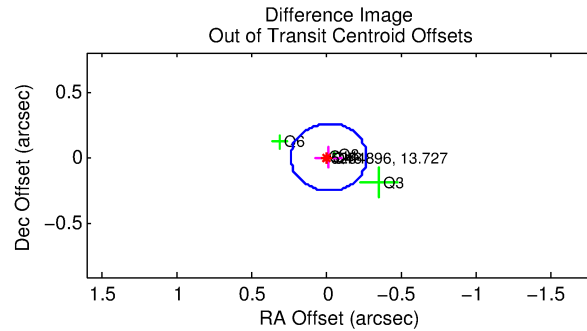
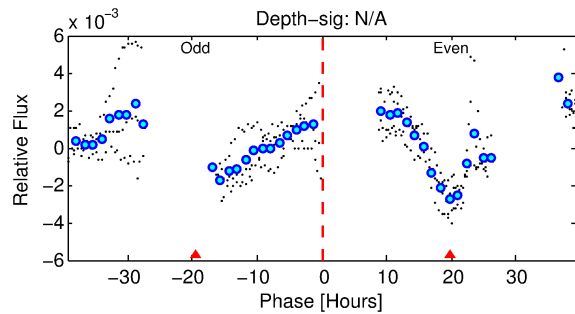
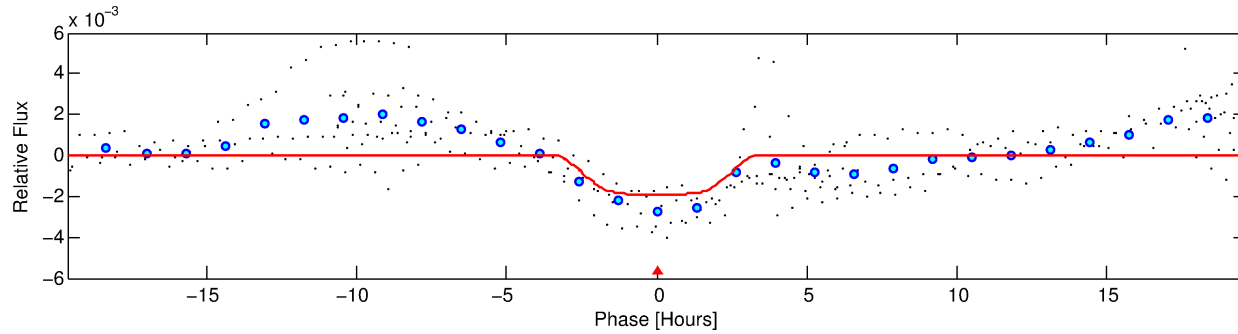
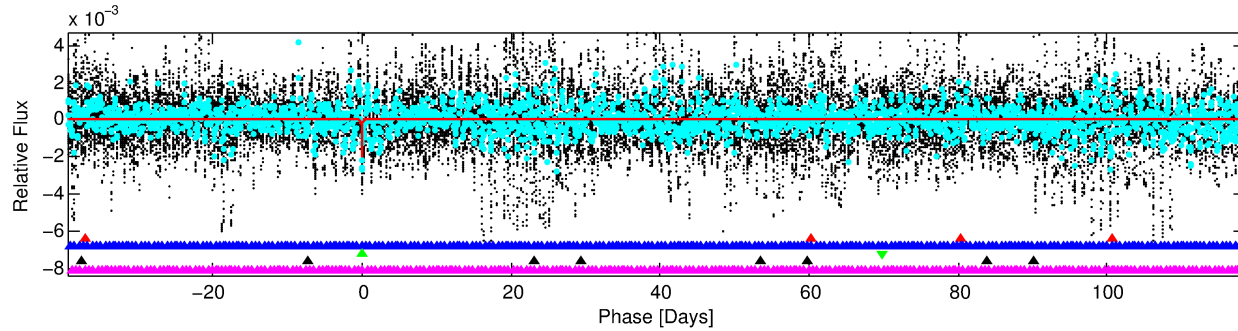
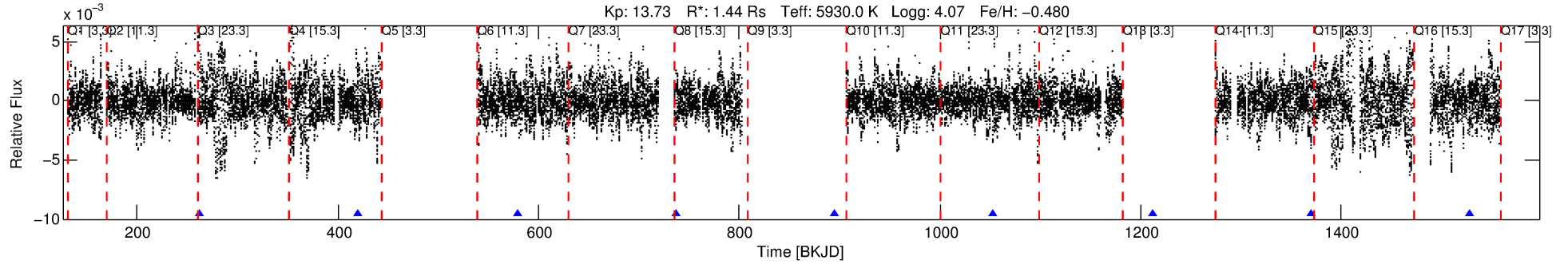
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 005254896-03

No Significant Match Found

DV One-Page Summary

KIC: 5254896 Candidate: 3 of 5 Period: 158.181 d



DV Fit Results:

Period = 158.18081 [0.00180] d
Epoch = 262.6122 [0.0077] BKJD
Rp/R* = 0.0485 [0.0041]
a/R* = 93.01 [8.98]
b = 0.92 [0.02]
Seff = 7.62 [5.25]
Teq = 424 [73] K
Rp = 7.65 [3.15] Re
a = 0.5506 [0.2266] AU
Ag = 1691.13 [1621.48] [1.04σ]
Teffp = 4200 [722] K [5.20σ]

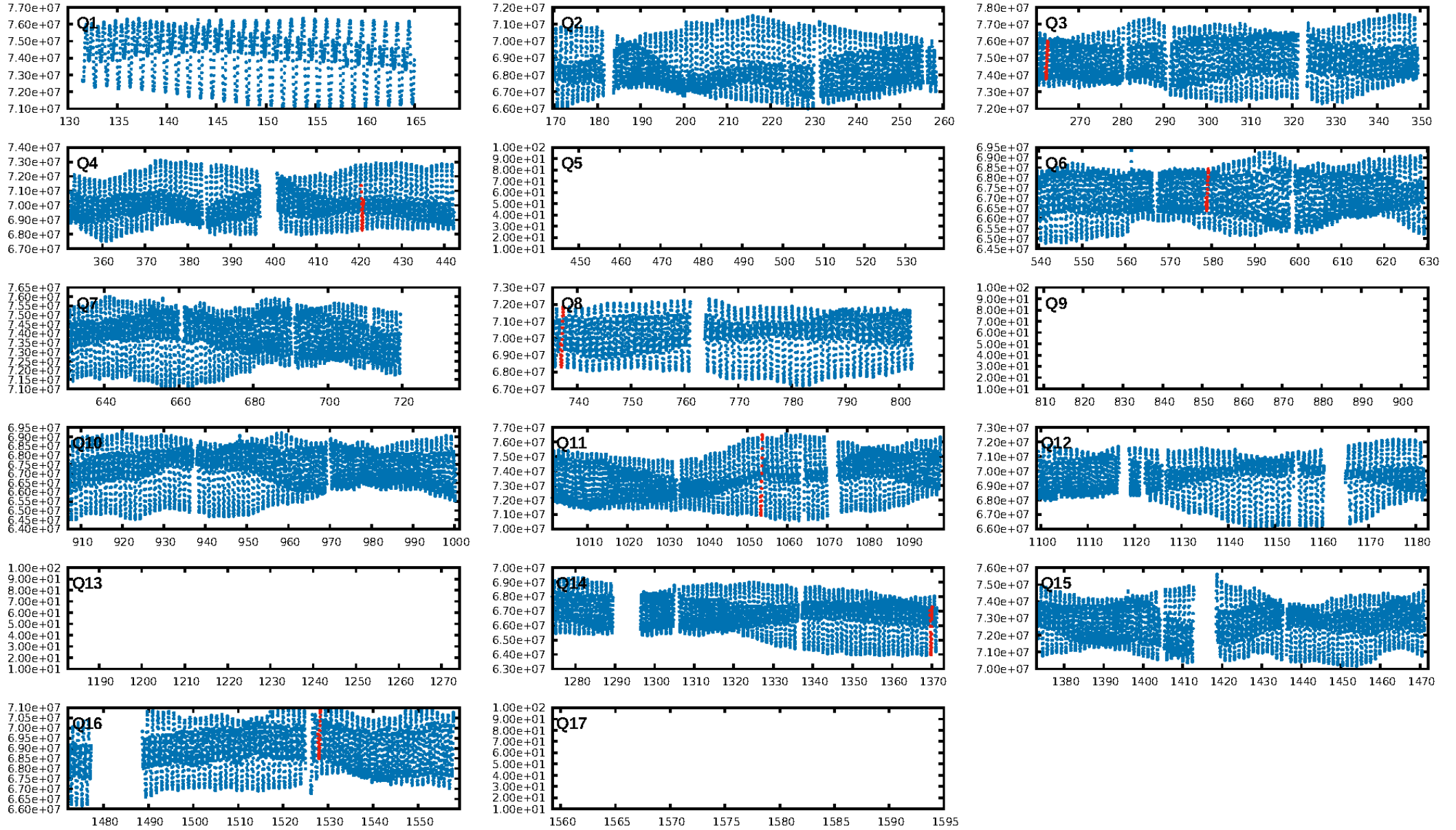
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [507.11σ]
LongPeriod-sig: 100.0% [103.91σ]
ModelChiSquare2-sig: 15.0%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [6/6]
GhostDiagnostic-chr: -0.1245
Centroid-sig: 8.6%
Centroid-so: 0.308 arcsec [1.25σ]
OotOffset-rm: 0.021 arcsec [0.24σ]
KicOffset-rm: 0.054 arcsec [0.67σ]
OotOffset-st: 1/2/3/0 [6]
KicOffset-st: 1/2/3/0 [6]
DiffImageQuality-fgm: 1.00 [6/6]
DiffImageOverlap-fno: 0.00 [0/6]

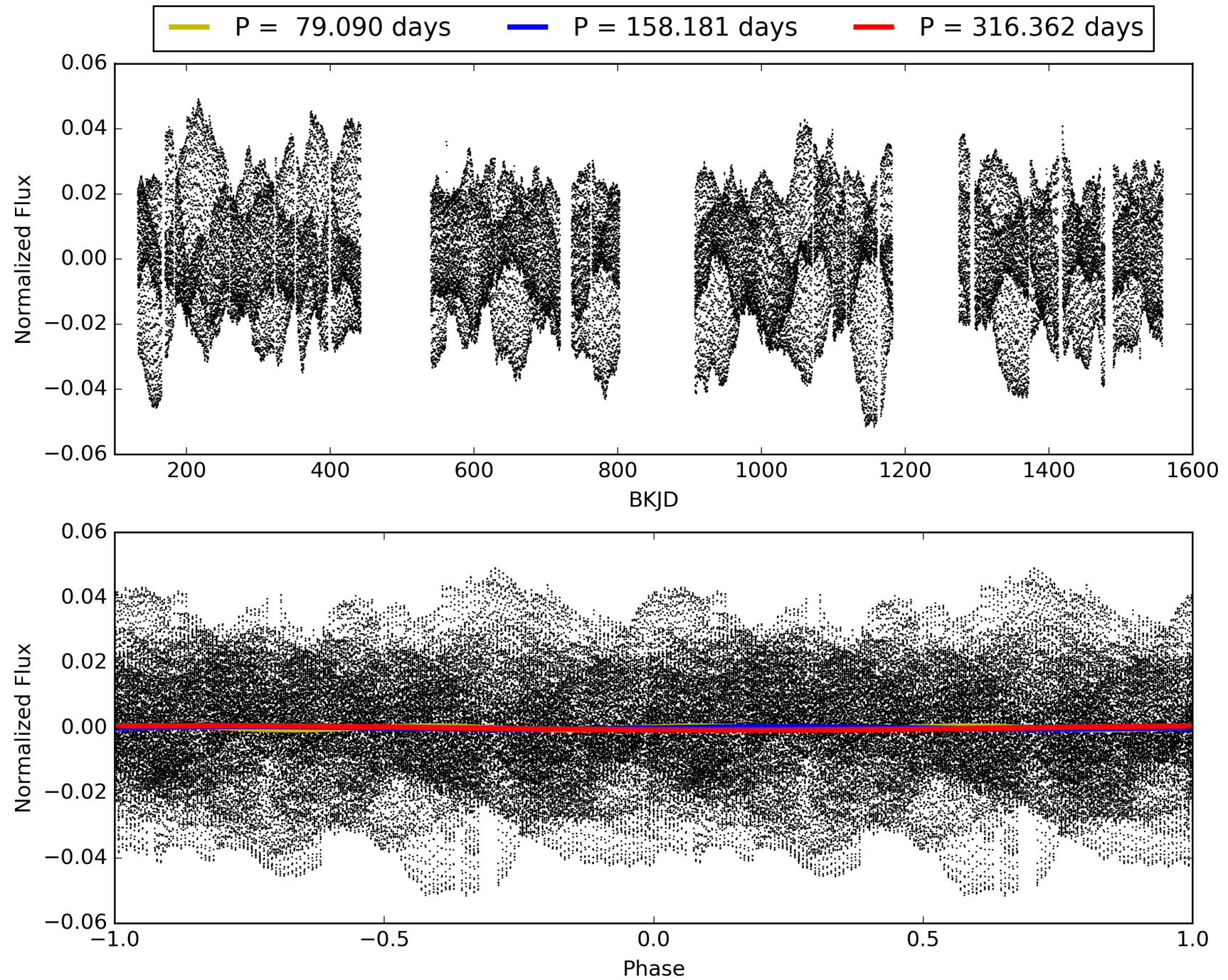
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 02-Feb-2016 07:48:38 Z

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

TCE 005254896-03, PDC Light Curves

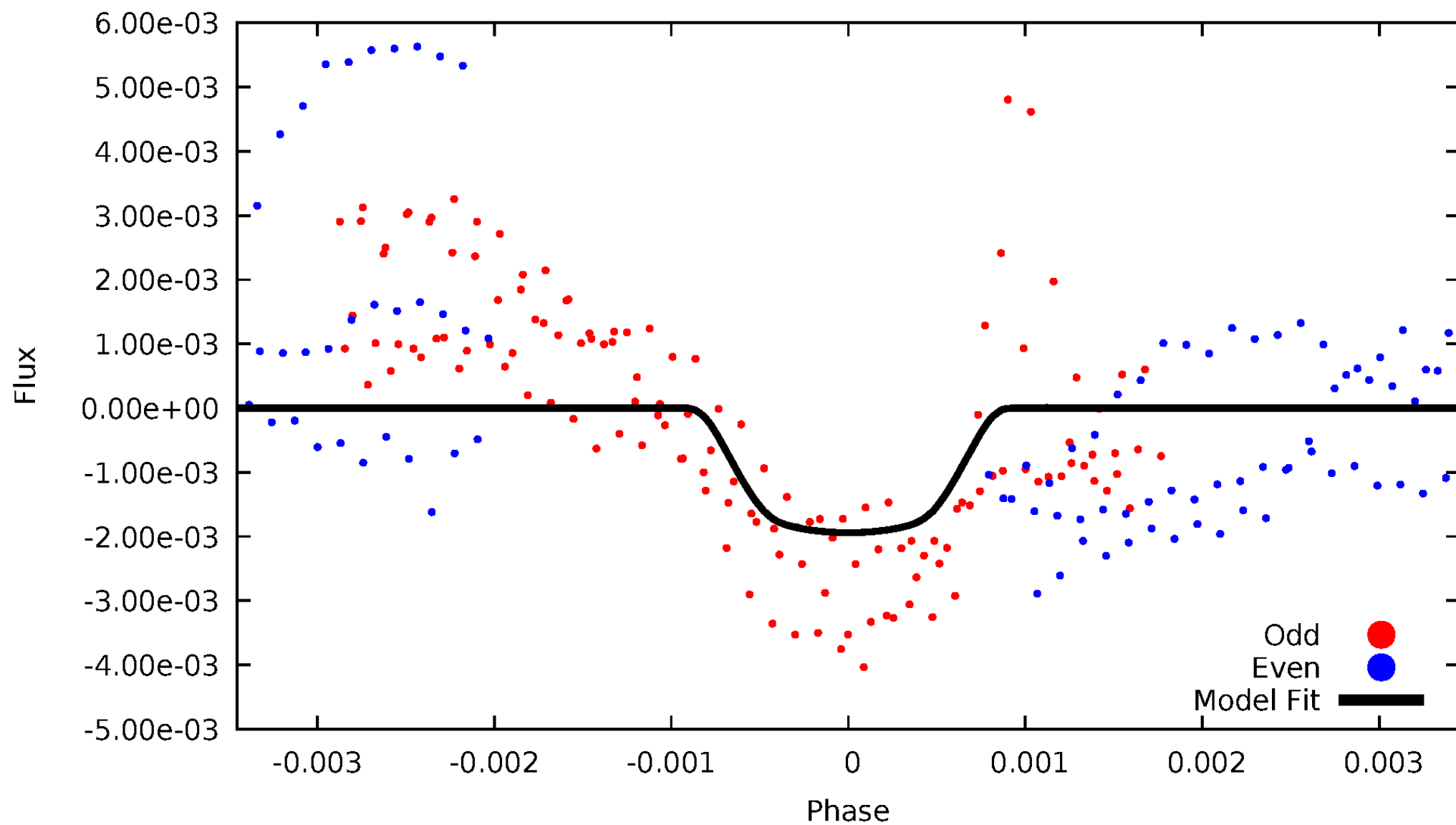


TCE 005254896-03



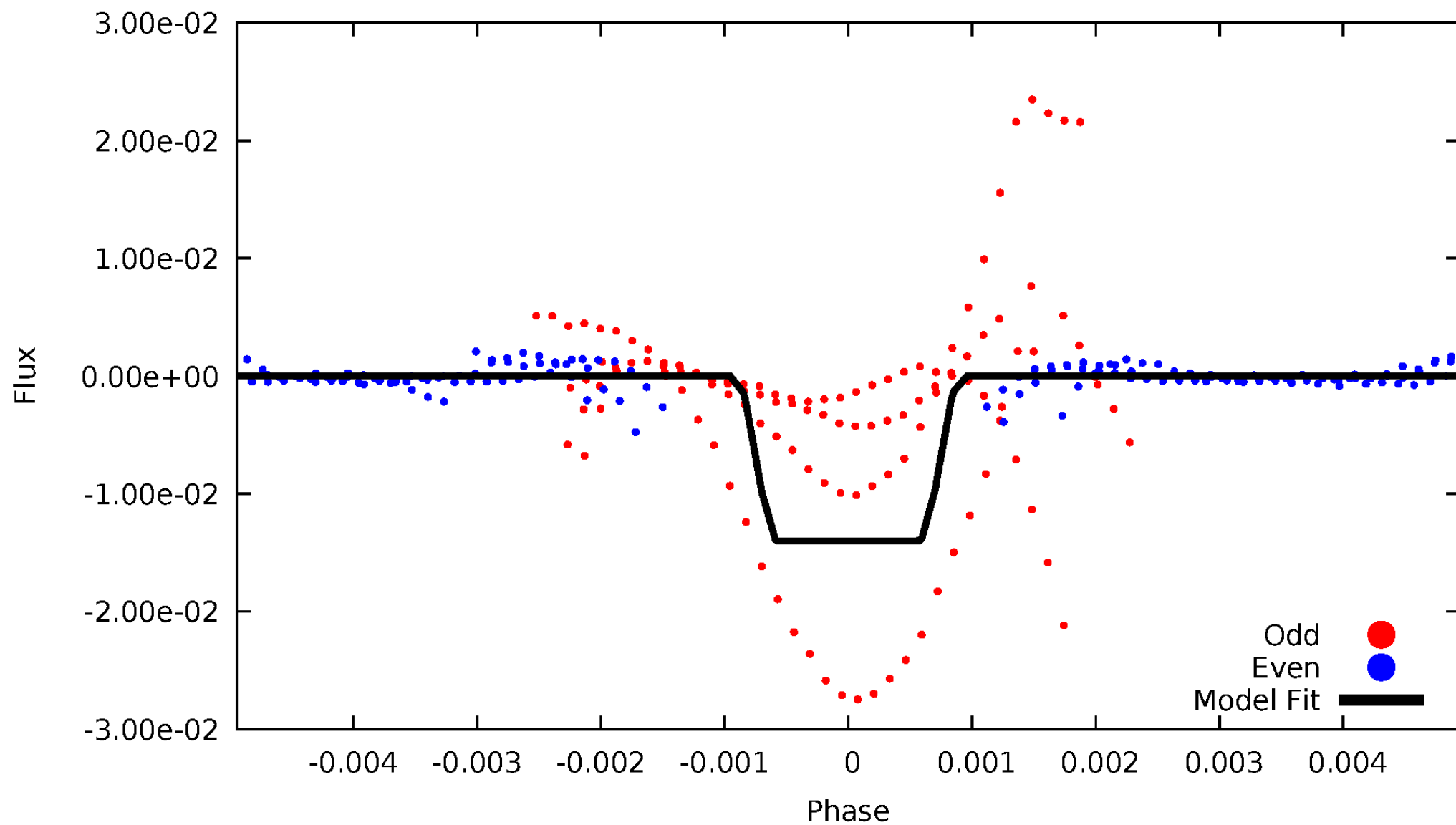
DV Odd/Even

TCE 005254896-03



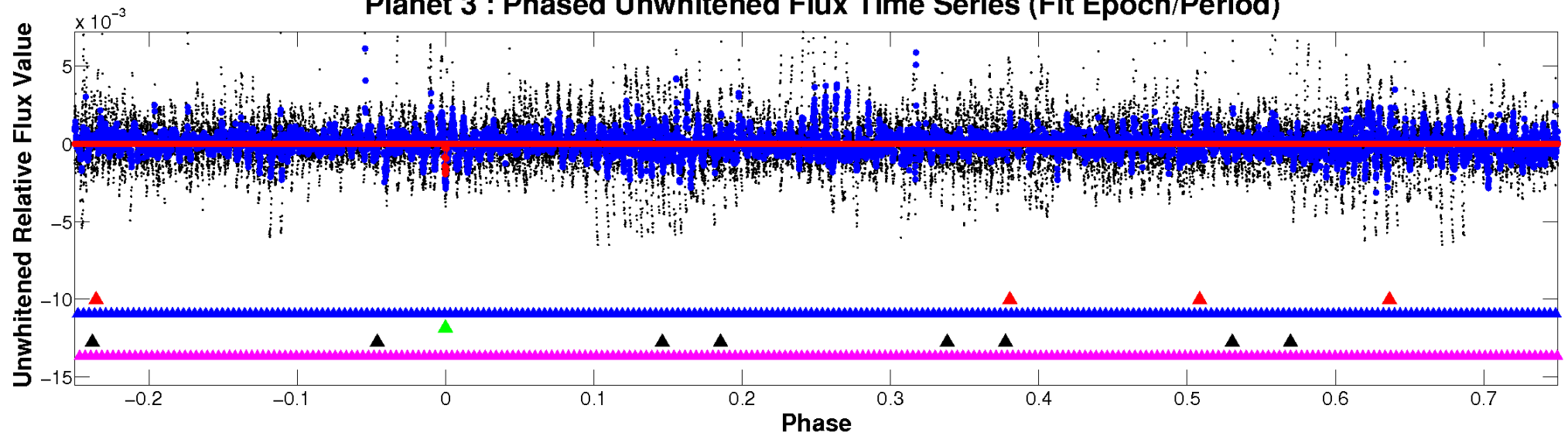
ALT Odd/Even

TCE 005254896-03

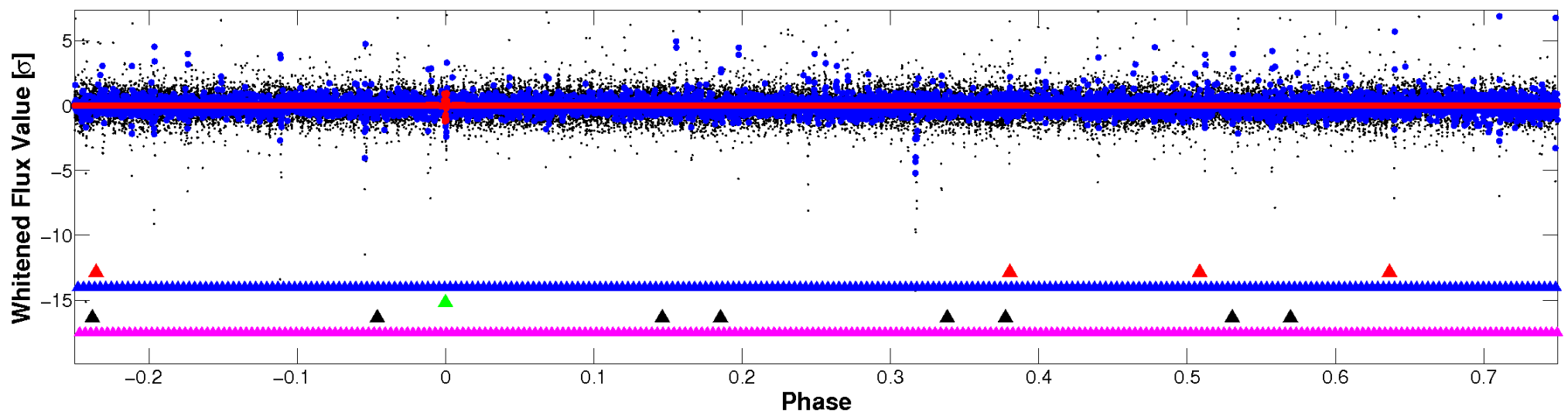


Non-Whitened Vs. Whitened Light Curve

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

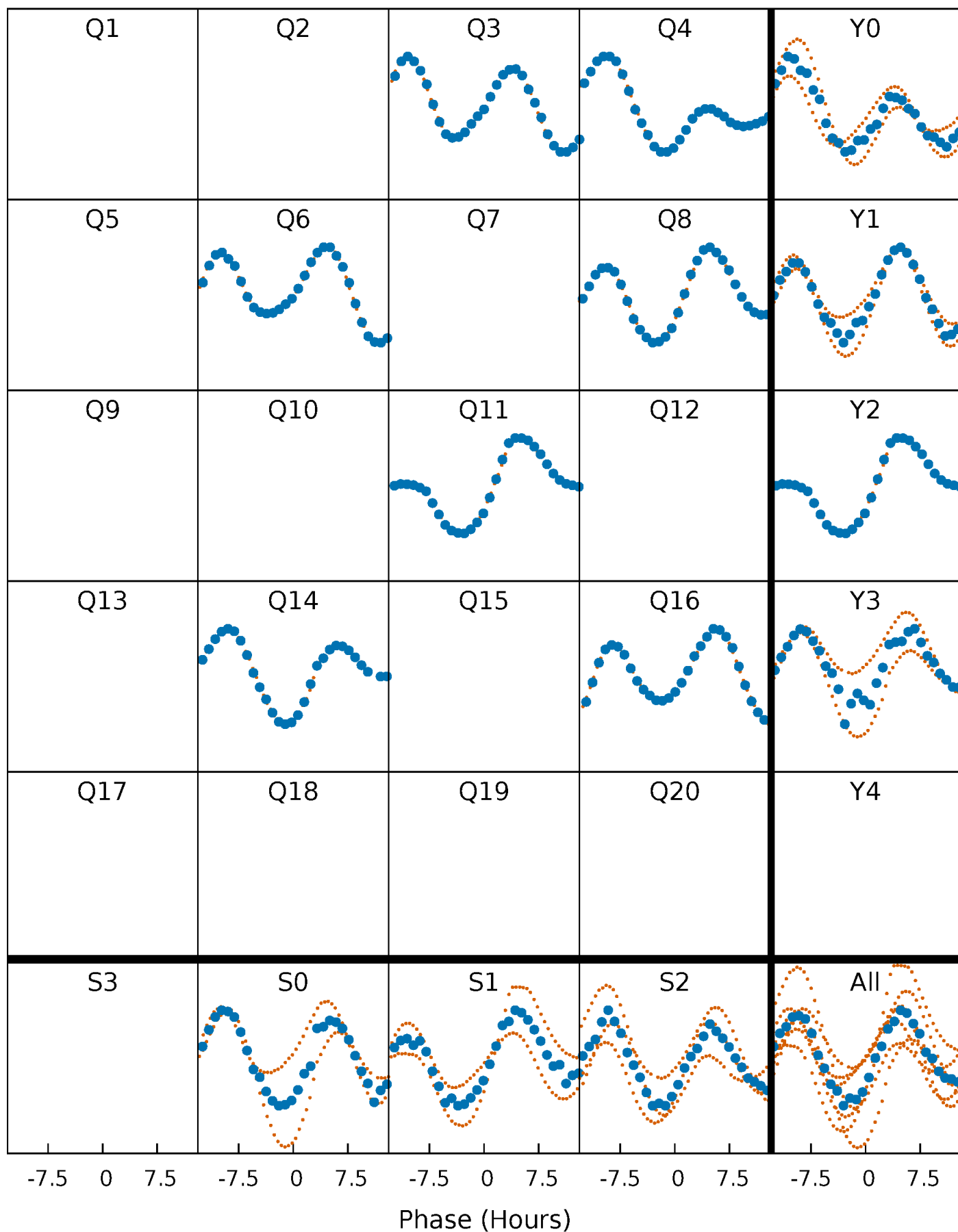


Planet 3 : Phased Whitened Flux Time Series (Fit Epoch/Period)



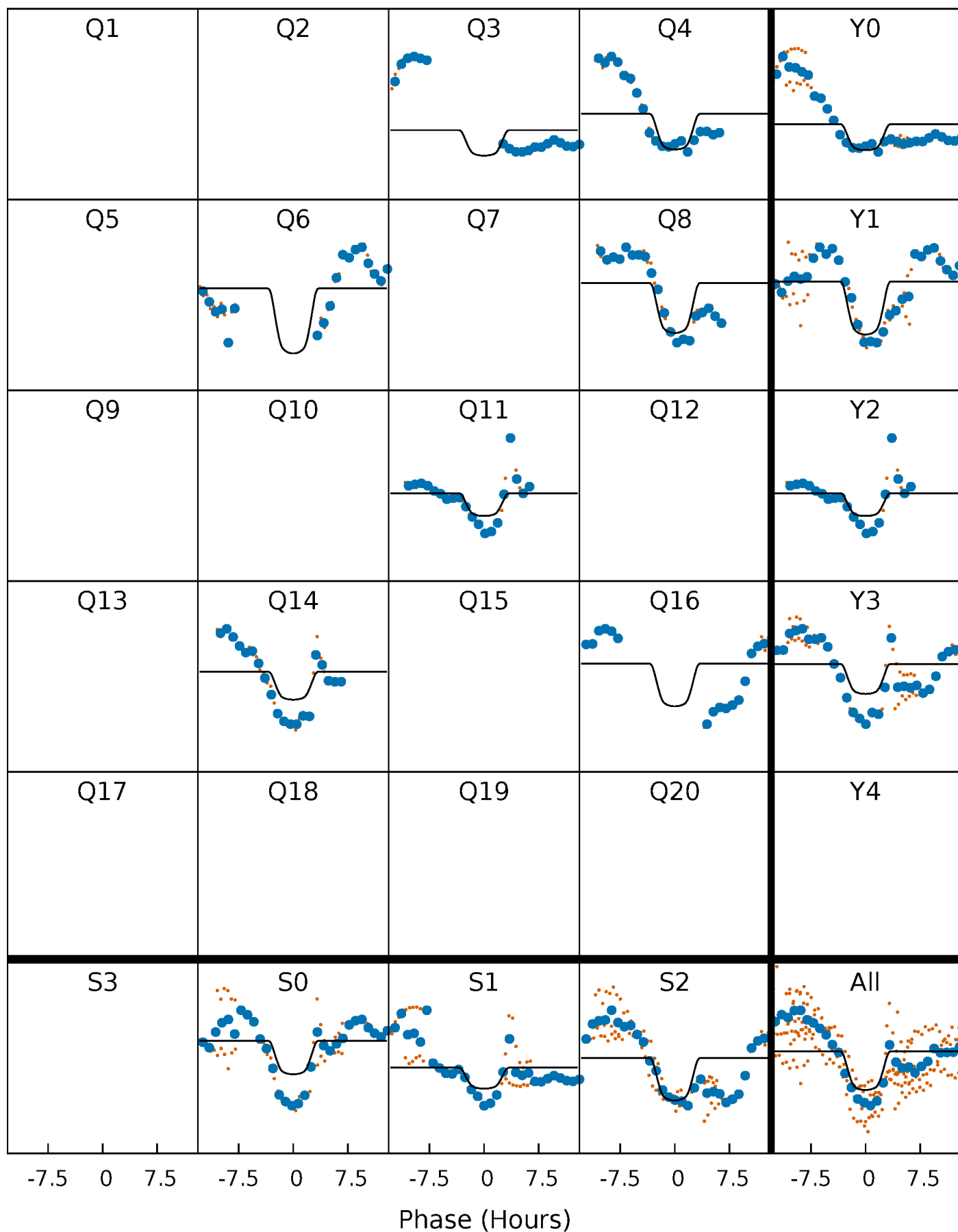
PDC Quarter-Phased Transit Curves

TCE 005254896-03 P=158.180814 Days $T_0=262.612238$ (BKJD)



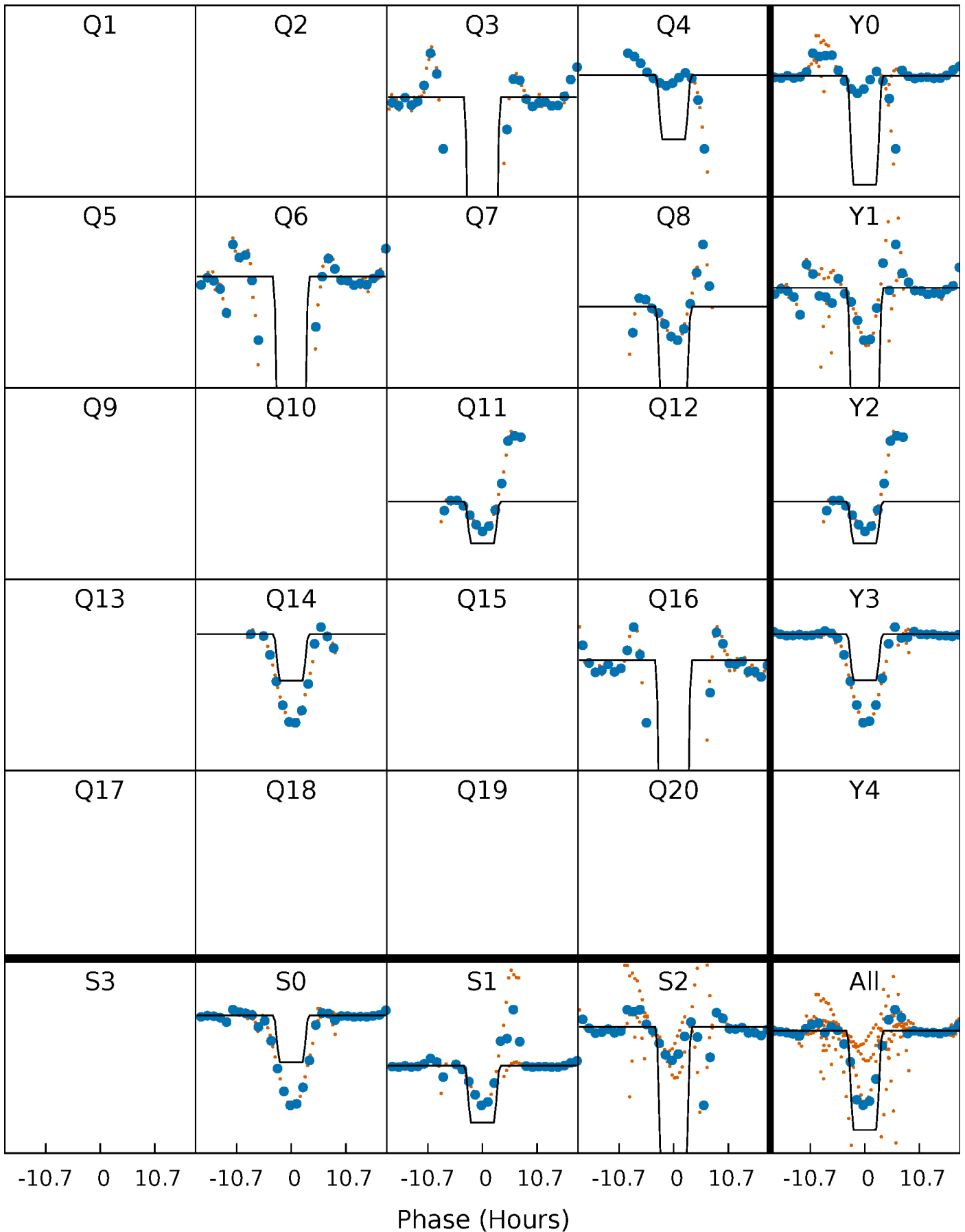
DV Quarter-Phased Transit Curves

TCE 005254896-03 P=158.180814 Days $T_0=262.612238$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

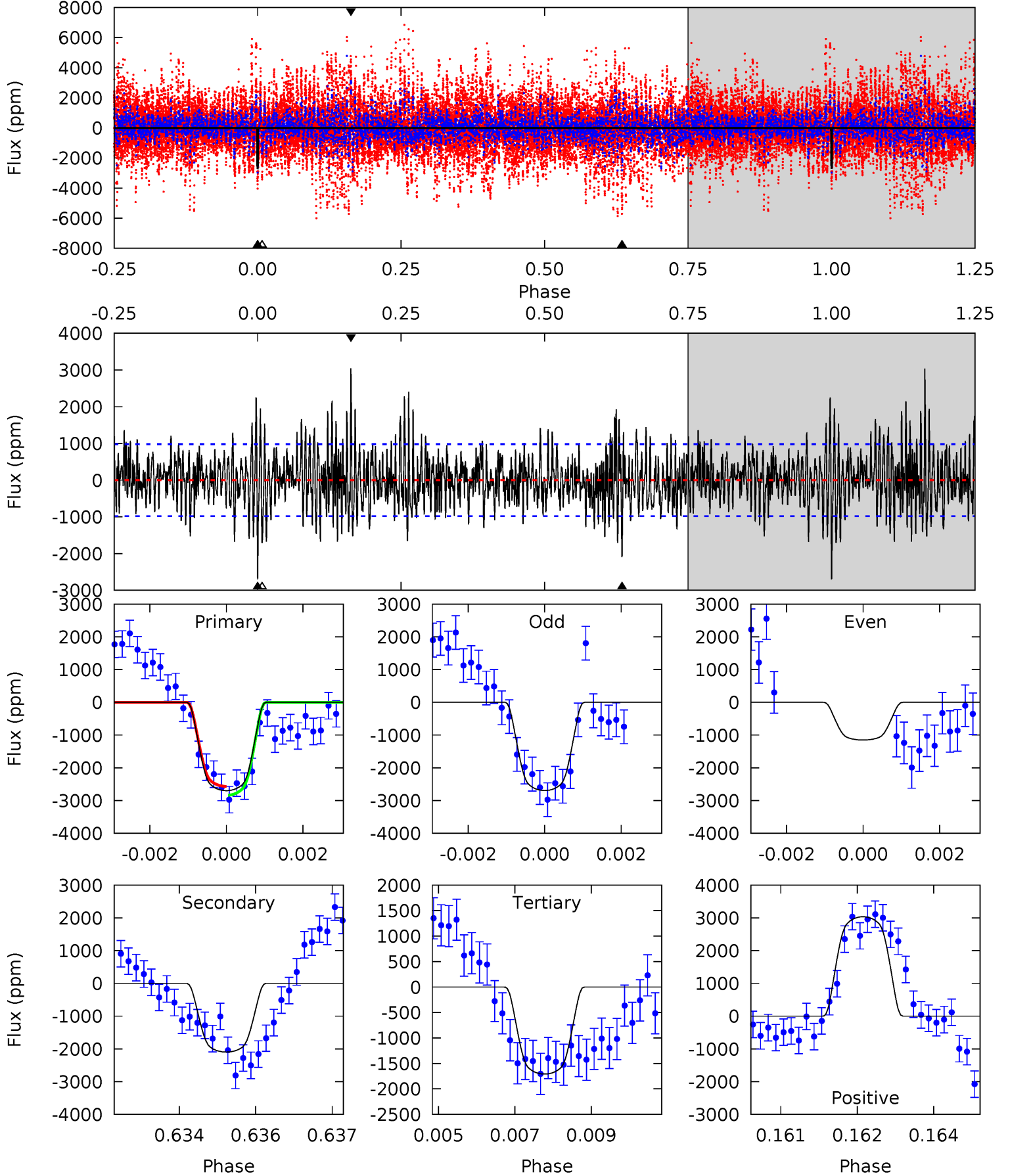
TCE 005254896-03 P=158.176745 Days $T_0=262.560624$ (BKJD)



DV Model-Shift Uniqueness Test

005254896-03, P = 158.180814 Days, E = 104.431424 Days

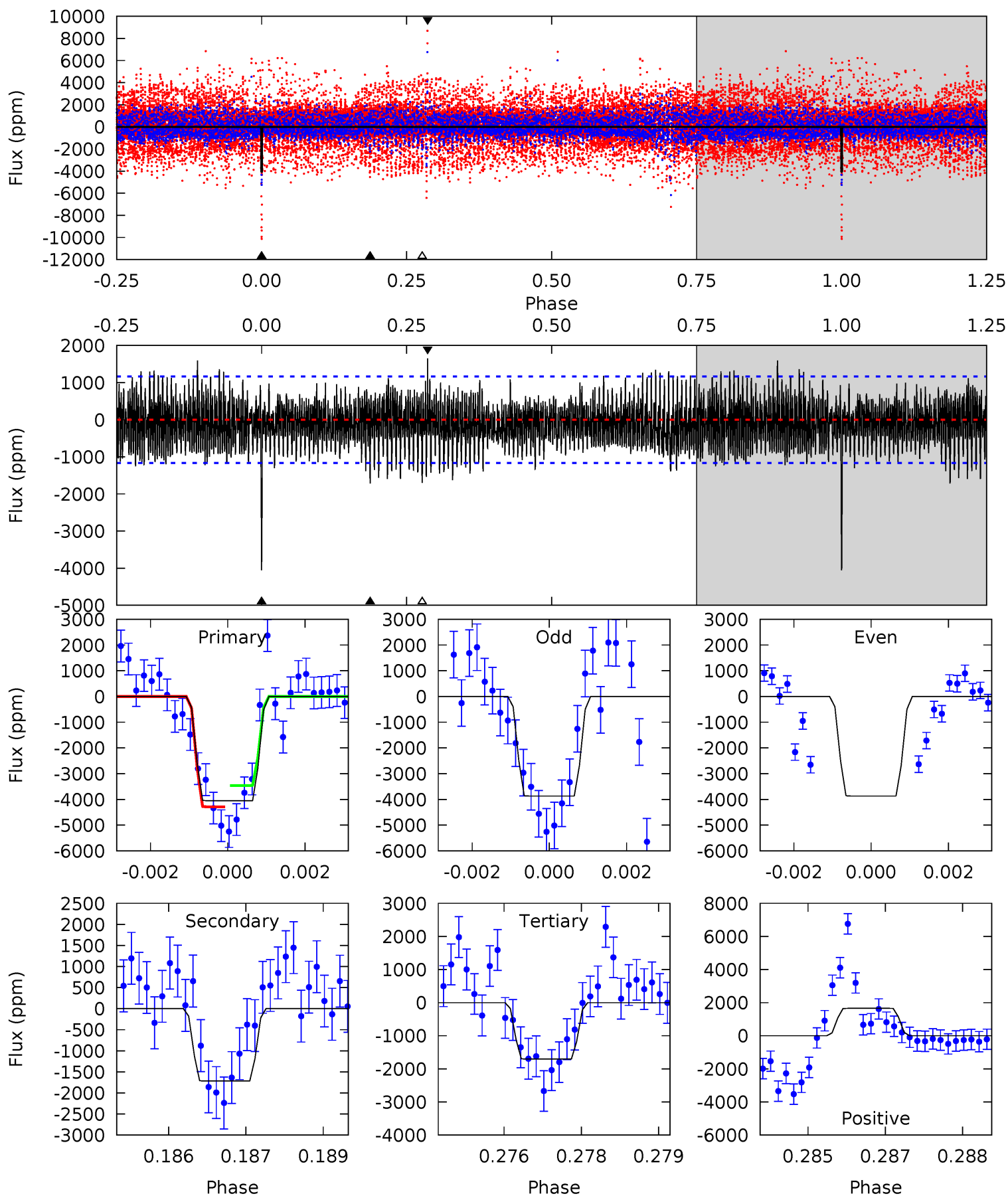
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
14.7	11.4	9.31	16.5	5.35	3.13	3.40	5.40	-1.83	2.12	-5.11	1.54	1.08	0.53	0.74



Alt Model-Shift Uniqueness Test

005254896-03, P = 158.176745 Days, E = 104.383879 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
18.6	7.87	7.81	7.57	5.35	3.12	2.49	10.8	11.0	0.07	0.30	0	1.74	0.29	0



Stellar Parameters For KIC 005254896

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	M (M_{\odot})	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	5930^{+177}_{-159}	$4.068^{+0.406}_{-0.174}$	$-0.480^{+0.300}_{-0.250}$	$1.444^{+0.388}_{-0.582}$	$0.891^{+0.114}_{-0.091}$	$0.416^{+1.241}_{-0.202}$
	+3%/-3%	+10%/-4%	+62%/-52%	+27%/-40%	+13%/-10%	+298%/-49%
Source	PHO1	KIC0	KIC0	DSEP		

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

Secondary Eclipse Parameters for KIC 005254896-03 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-2097 ± 184	$7.39^{+1.57}_{-1.64}$	585^{+50}_{-65}	5769^{+311}_{-287}	6421^{+4197}_{-2071}
Alt.	-1718 ± 218	$18.38^{+2.77}_{-4.25}$	585^{+47}_{-68}	3872^{+120}_{-136}	872^{+535}_{-246}

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

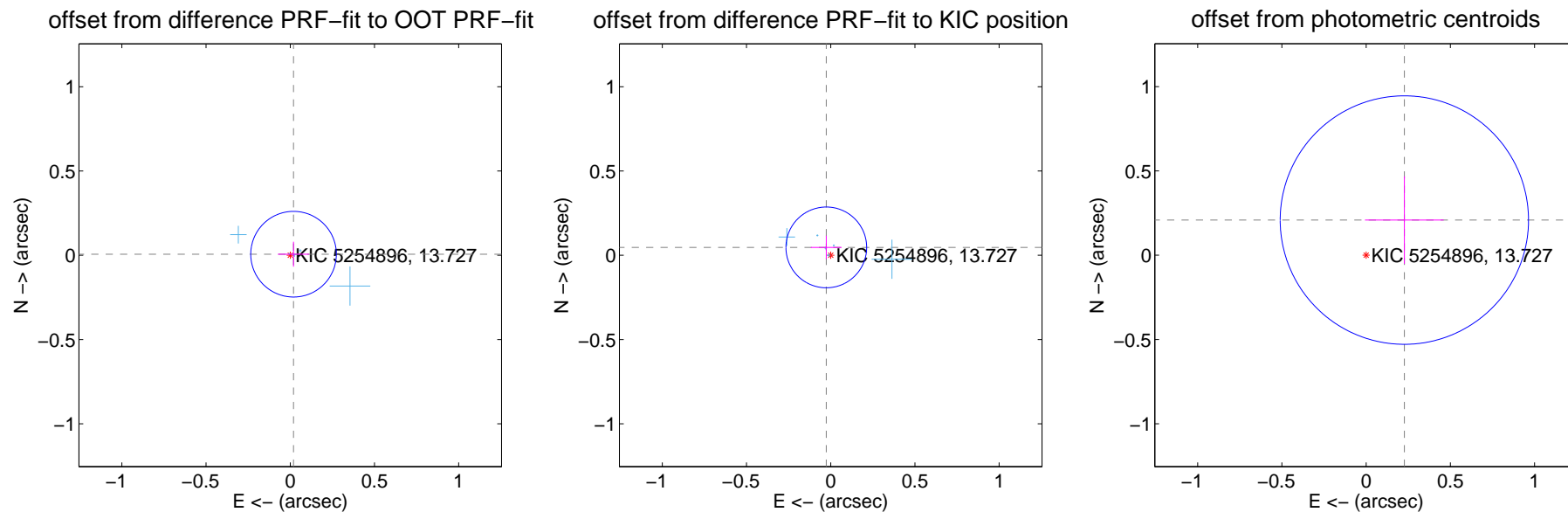
DV Centroid Data

Supplemental centroid analysis for 005254896-03. Kepler magnitude: 13.73. Transit SNR 6.75

There are 6 quarters with good PRF difference image offsets

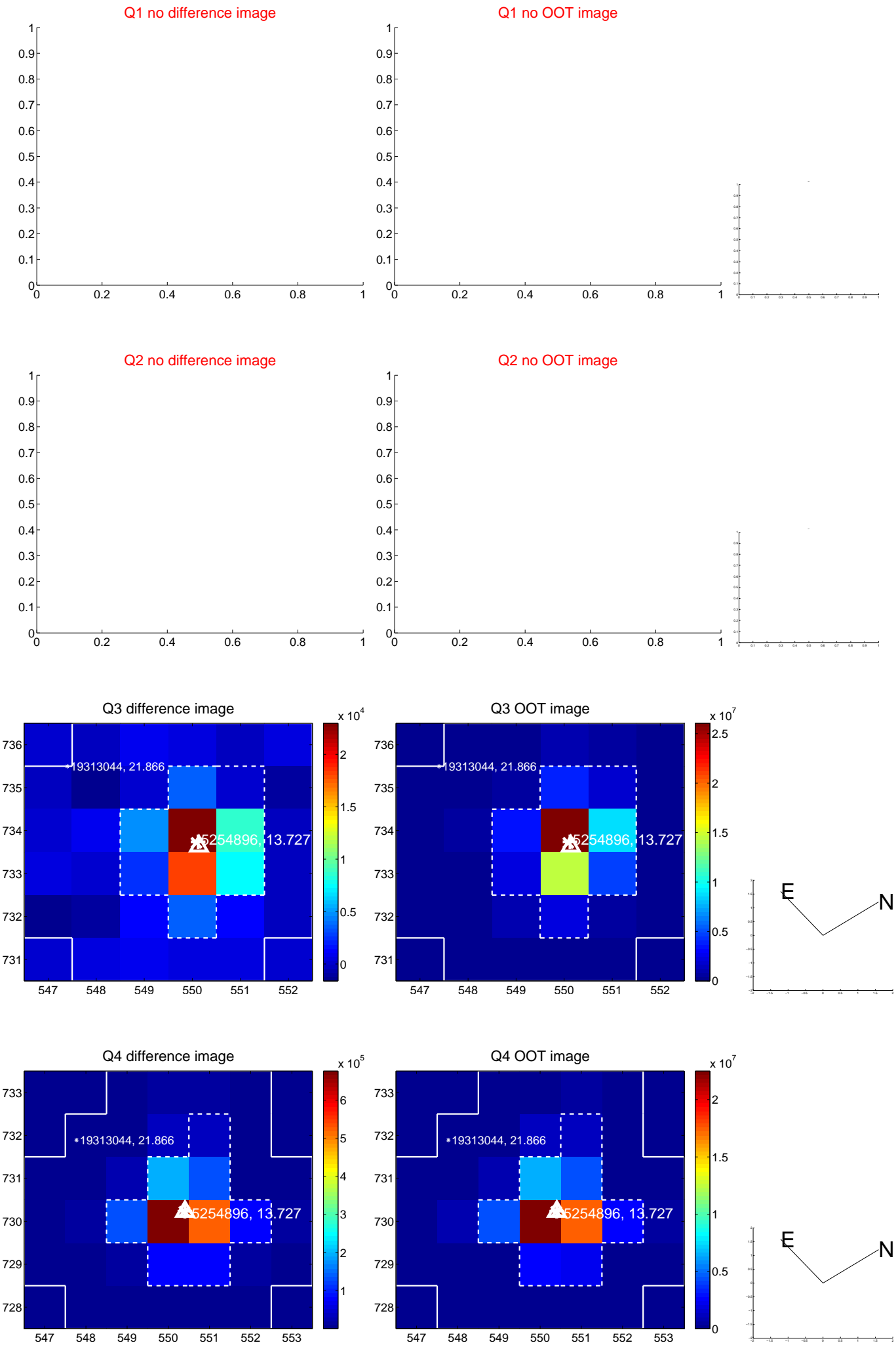
The direct PRF centroid is offset from the target star catalog position by about 0.03 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.021 ± 0.085	0.24	-0.020 ± 0.093	0.006 ± 0.074
PRF-fit source offset from KIC position	0.054 ± 0.080	0.67	0.026 ± 0.091	0.047 ± 0.069
photometric centroid source offset	0.31 ± 0.25	1.25	-0.23 ± 0.23	0.21 ± 0.26

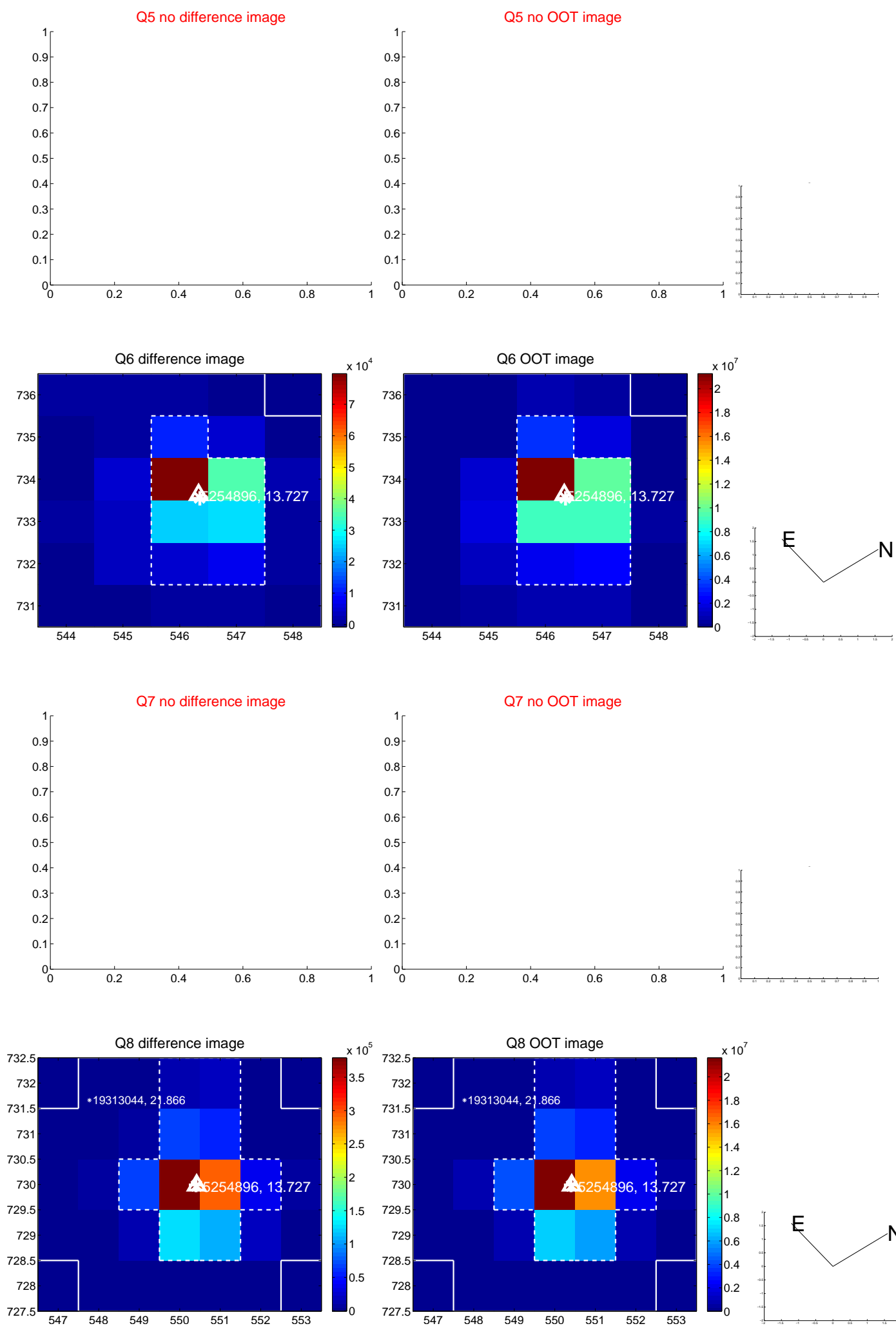


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

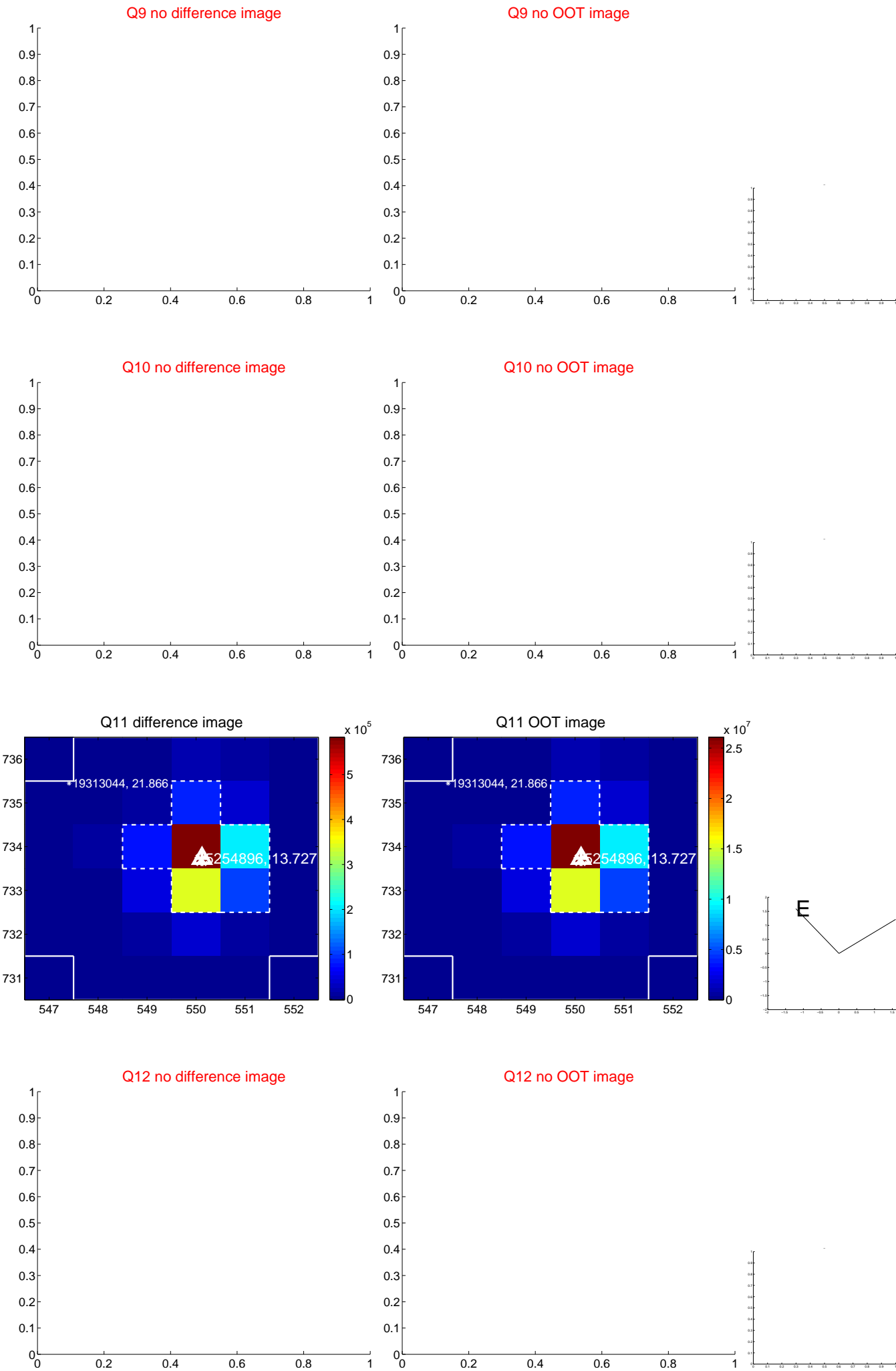
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



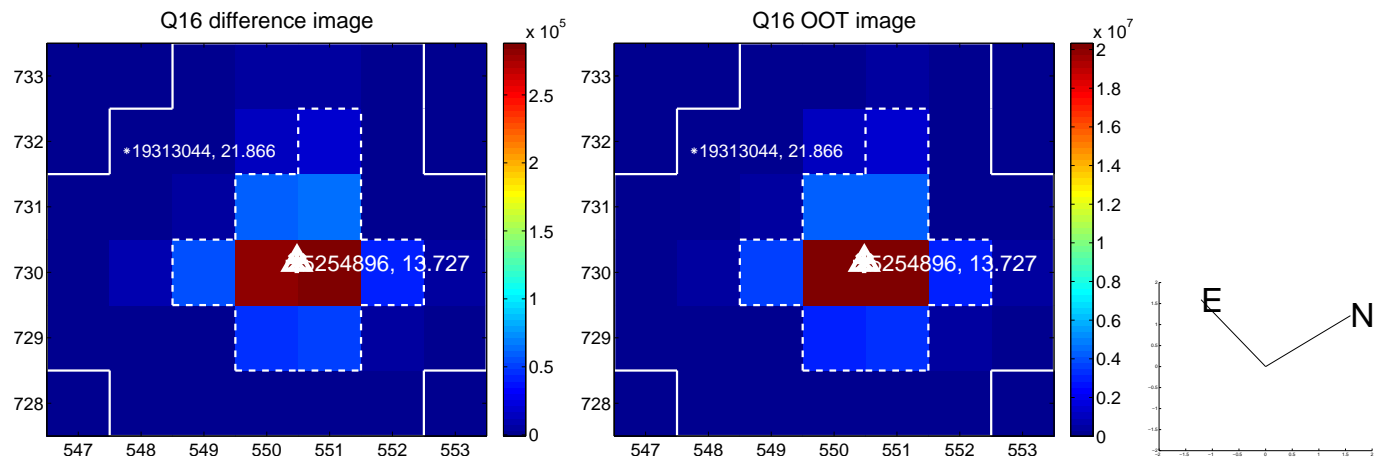
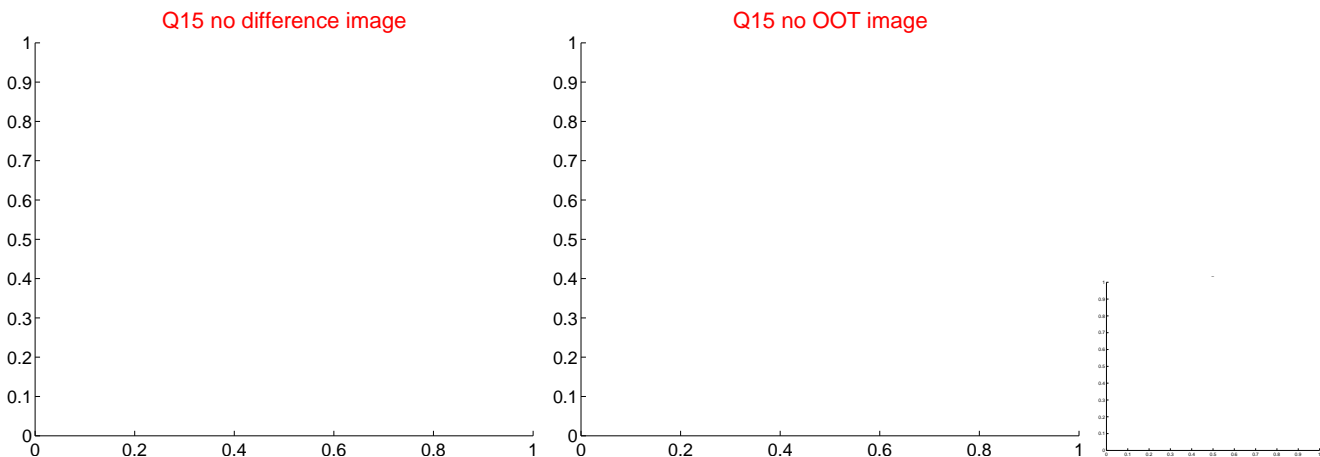
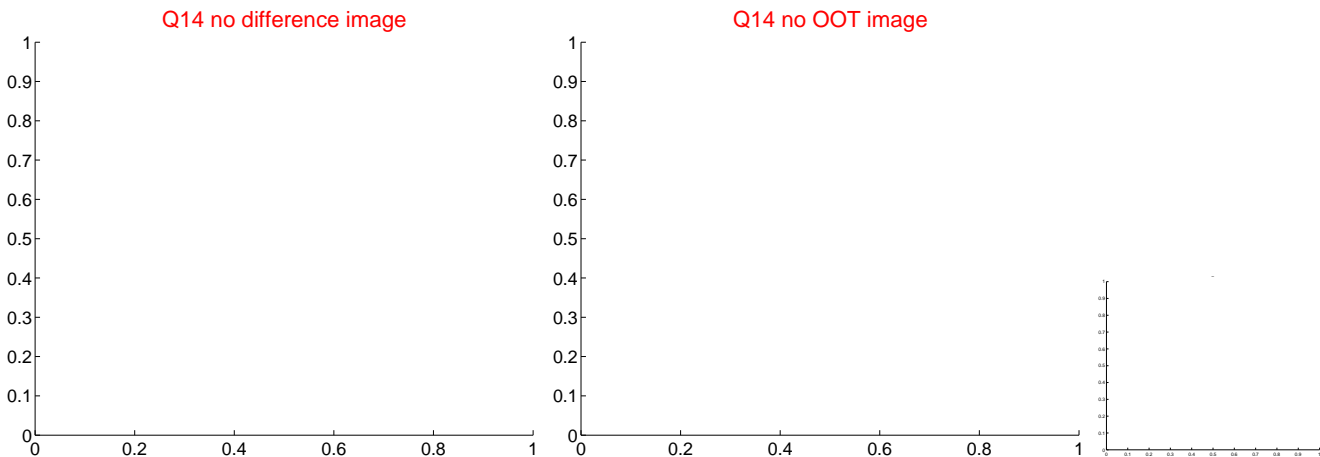
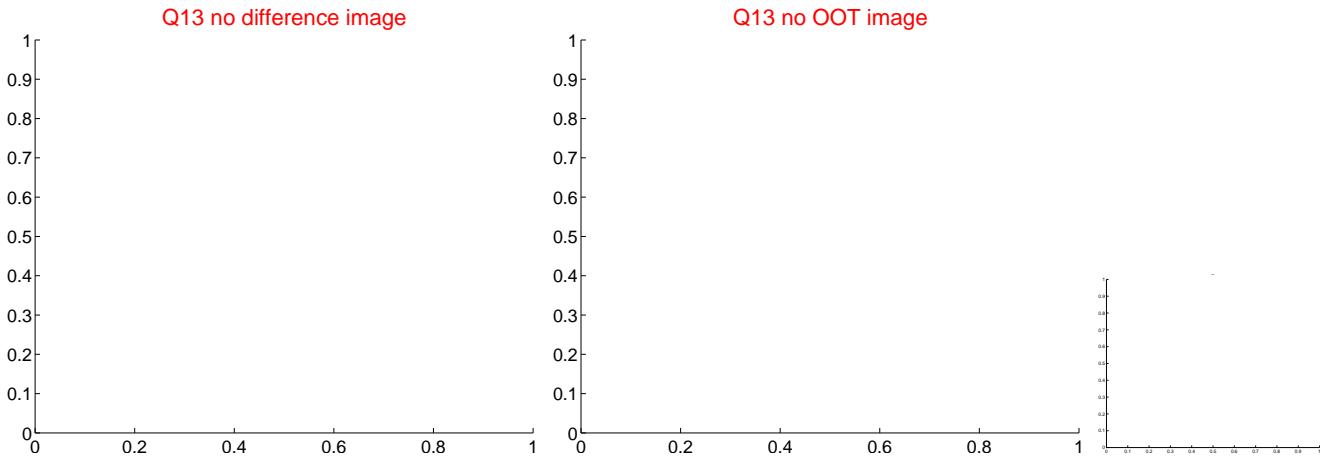
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value



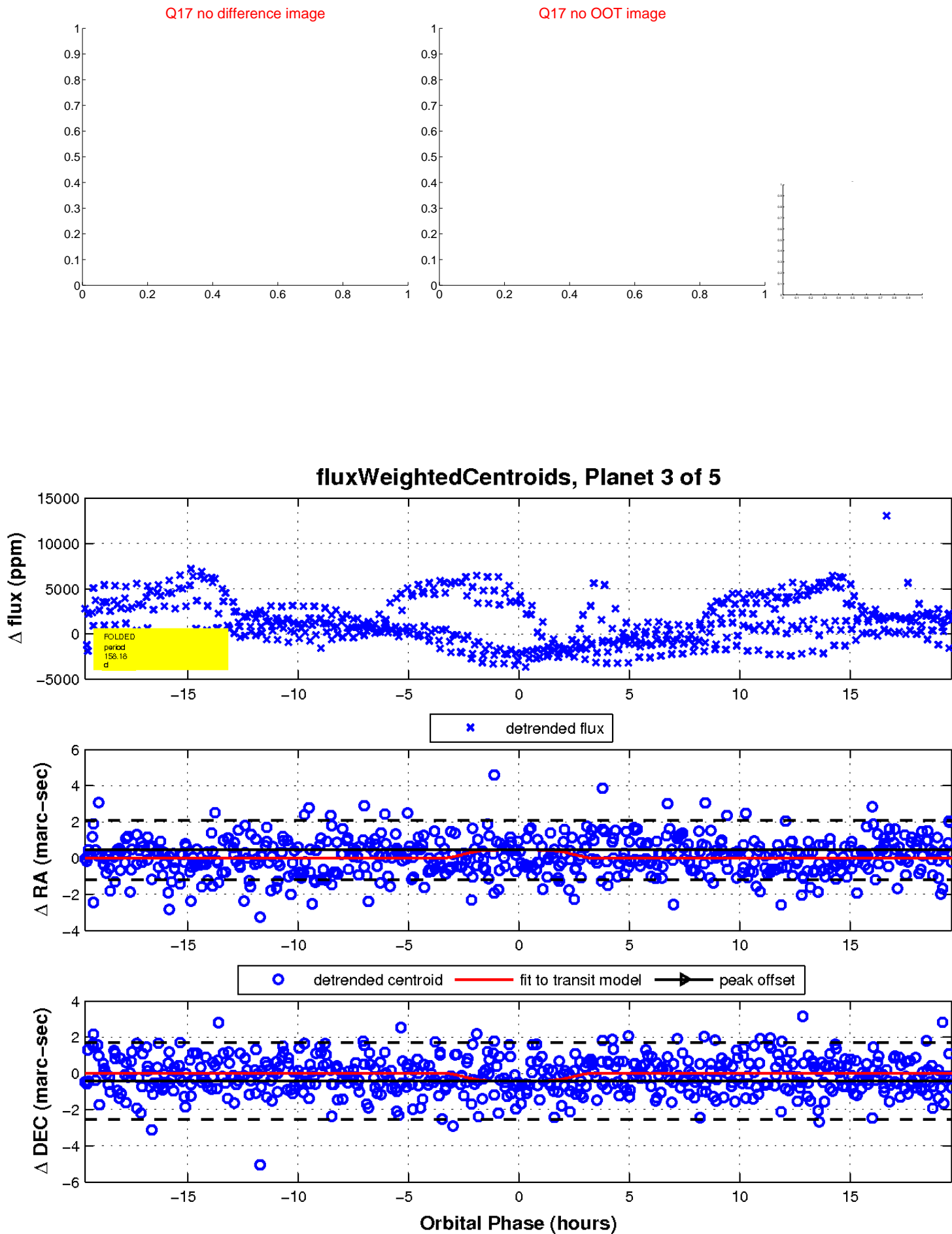
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

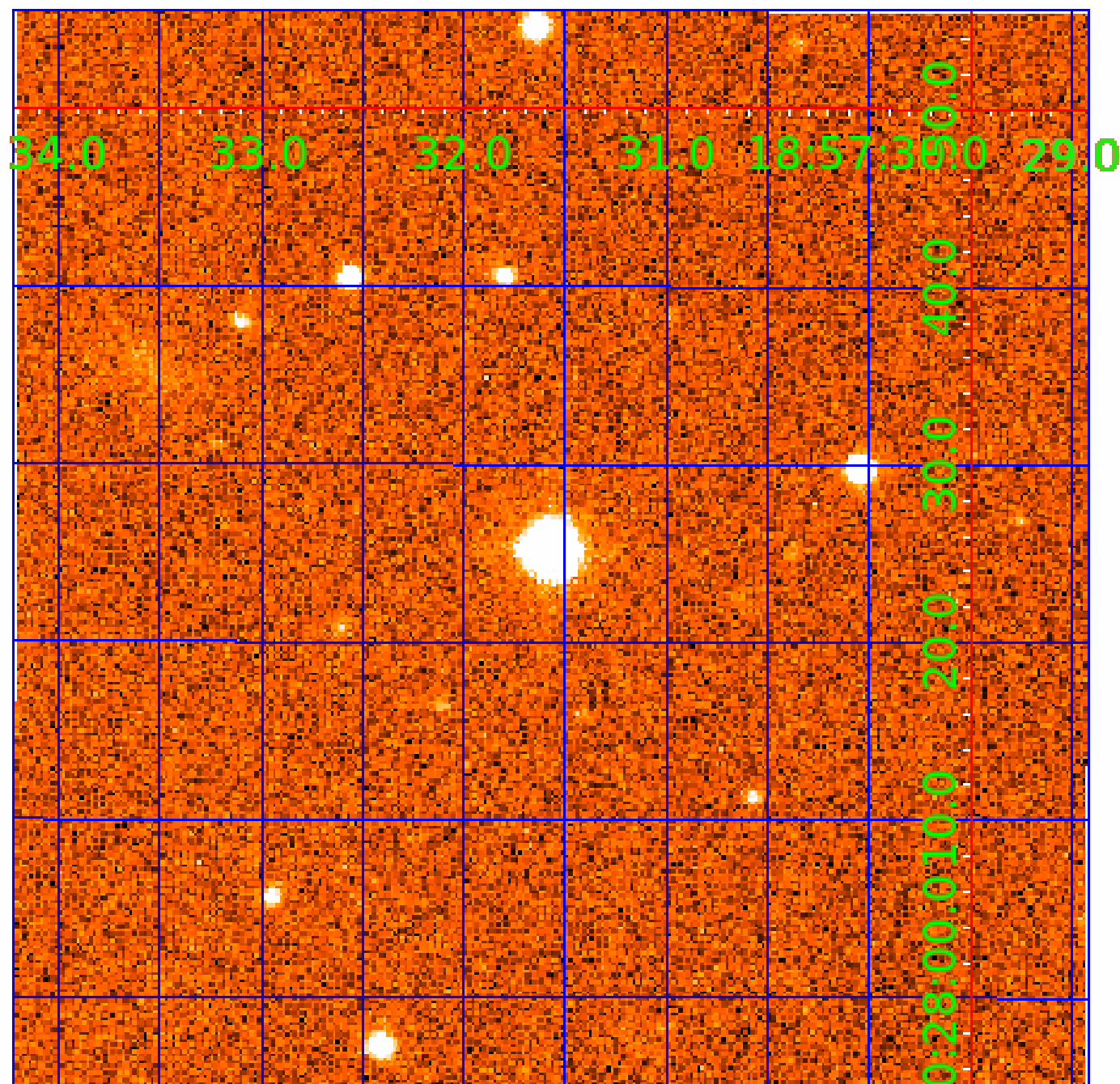


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 005254896

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})
005254896-01	OBS	No	454.299269	225.352178	429.5	3.236	16.2	1.9	1.44	5930	3.14	1.87
005254896-02	OBS	No	1.184905	132.164868	627.7	3.500	12.3	-1.0	1.44	5930	3.62	5198.92
005254896-03	OBS	No	158.180814	262.612238	1940.4	6.554	10.6	6.7	1.44	5930	7.65	7.62
005254896-04	OBS	No	188.575095	133.764987	1498.3	2.515	11.7	5.6	1.44	5930	5.74	6.03
005254896-05	OBS	No	1.184905	131.747274	110.0	2.763	7.5	9.3	1.44	5930	1.81	5198.92

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
005254896-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_TRACKER—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—INCONSISTENT_TRANS—CENT_FEW_DIFFS
005254896-02	OBS	FP	0.00	1	0	0	0	SWEET_NTL—LPP_DV—CENT_NOFITS
005254896-03	OBS	FP	0.00	1	0	1	0	LPP_DV—ALL_TRANS_CHASES—MOD_POS_DV—MOD_NONUNIQ_ALT—INCONSISTENT_TRANS—HALO_GHOST
005254896-04	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_CHASES_MARSHALL—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—INCONSISTENT_TRANS—CENT_FEW_DIFFS
005254896-05	OBS	FP	0.00	1	0	1	0	SWEET_NTL—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—SAME_NTL_PERIOD—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.

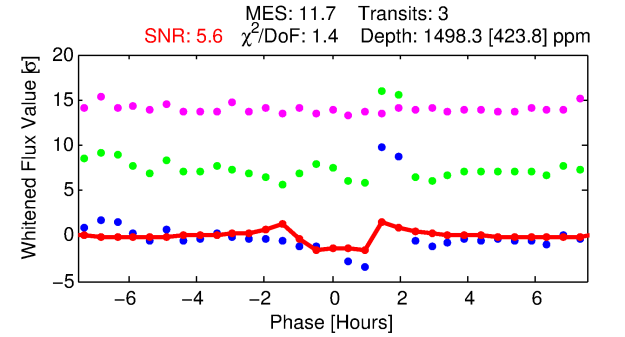
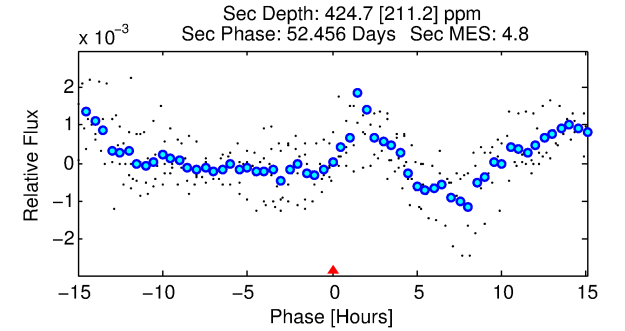
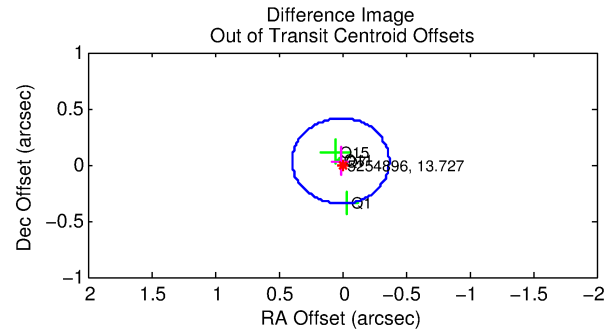
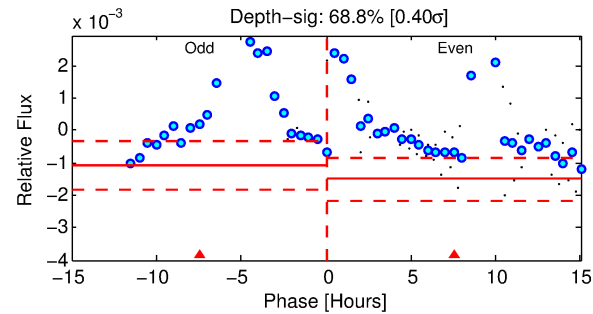
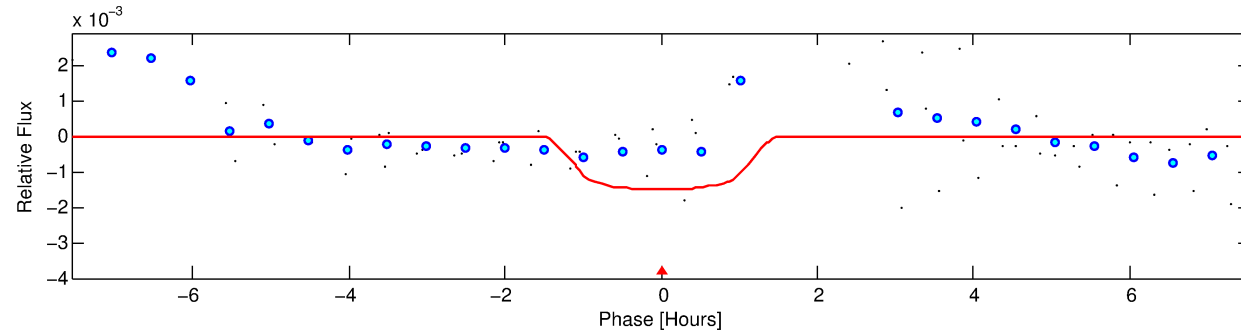
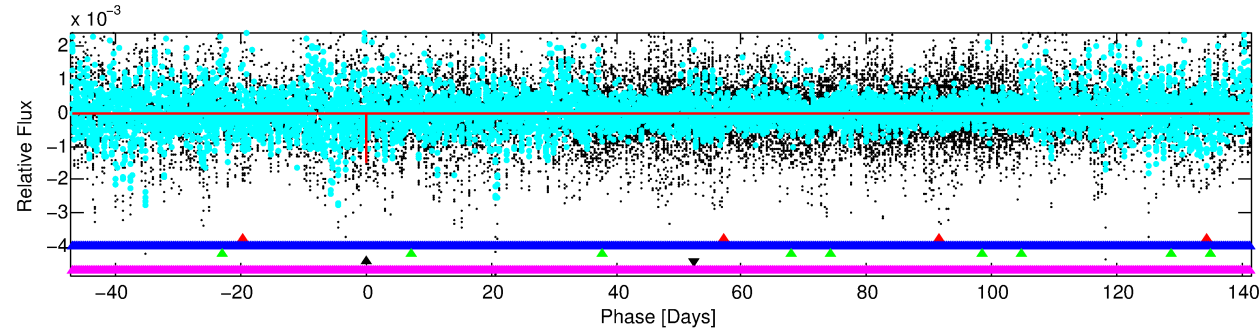
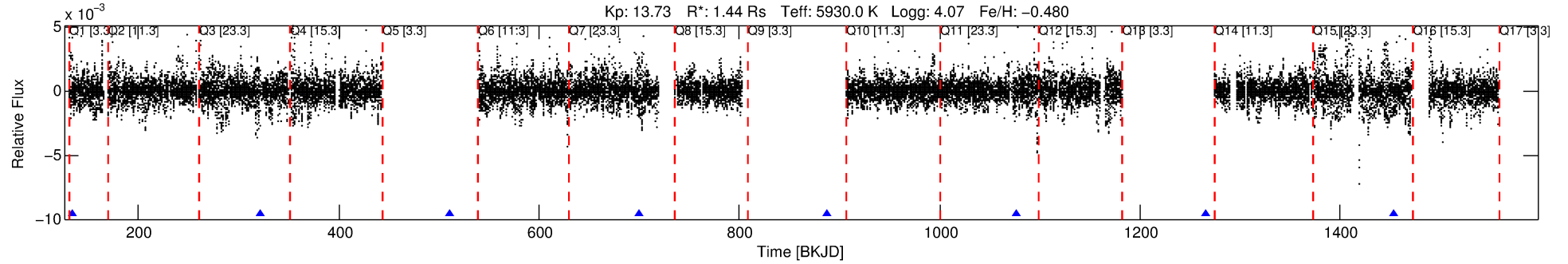
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 005254896-04

No Significant Match Found

DV One-Page Summary

KIC: 5254896 Candidate: 4 of 5 Period: 188.575 d



DV Fit Results:

Period = 188.57510 [0.00164] d
Epoch = 133.7650 [0.0067] BKJD
Rp/R* = 0.0364 [0.0560]
a/R* = 525.21 [3857.58]
b = 0.48 [11.77]
Seff = 6.03 [4.15]
Teq = 400 [69] K
Rp = 5.74 [9.13] Re
a = 0.6191 [0.2547] AU
Ag = 2716.06 [8662.38] [0.31 σ]
Teffp = 4460 [3477] K [1.17 σ]

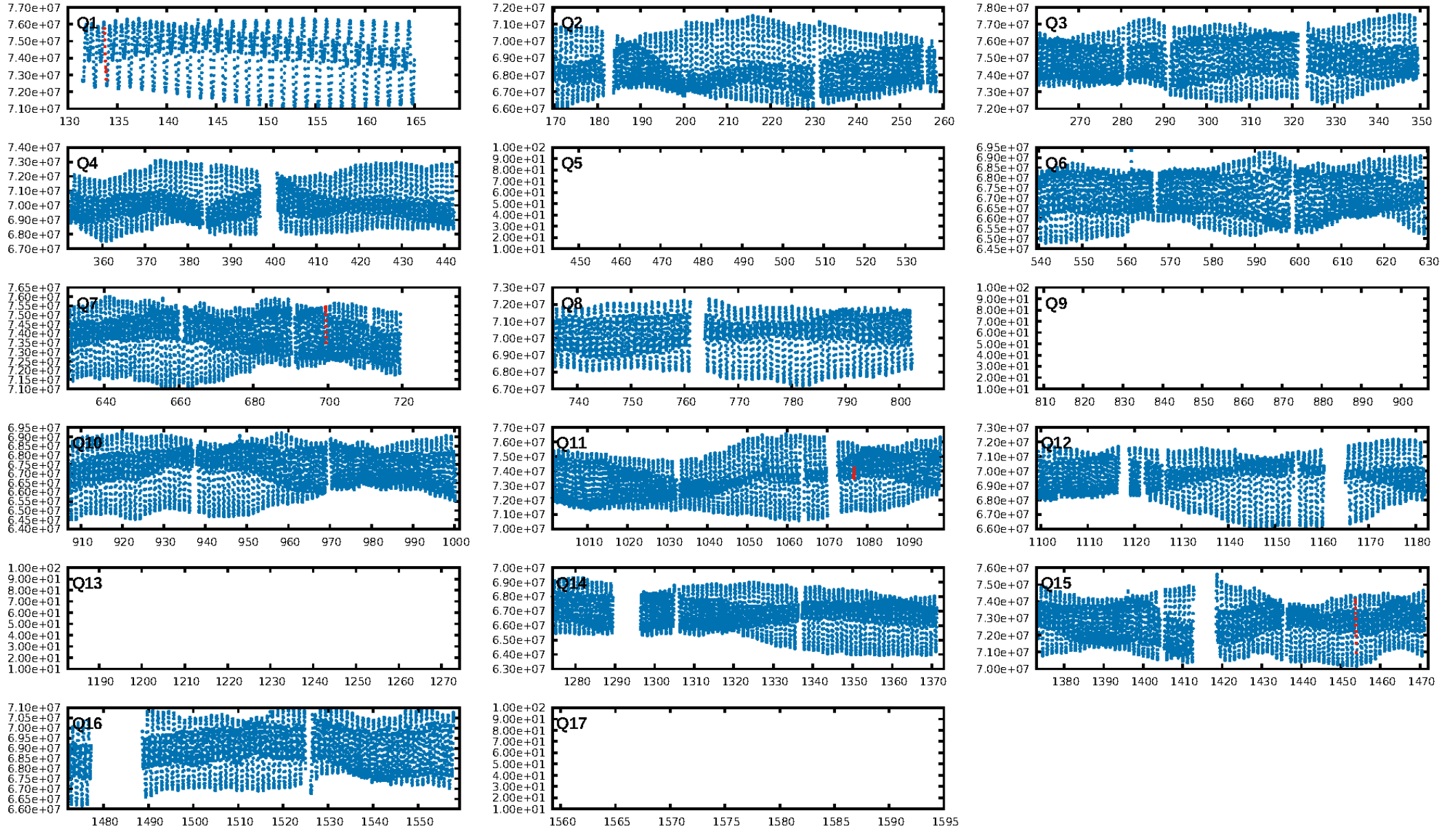
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [103.91 σ]
LongPeriod-sig: 100.0% [1555.92 σ]
ModelChiSquare2-sig: 26.3%
ModelChiSquareGof-sig: 81.9%
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [2/2]
GhostDiagnostic-chr: -16.74
Centroid-sig: 66.9%
Centroid-so: 0.257 arcsec [0.45 σ]
OotOffset-rm: 0.035 arcsec [0.27 σ]
OotOffset-st: 0/3/0/1 [4]
KicOffset-rm: 0.151 arcsec [1.17 σ]
KicOffset-st: 0/3/0/1 [4]
DiffImageQuality-fgm: 0.50 [2/4]
DiffImageOverlap-fno: 0.00 [0/4]

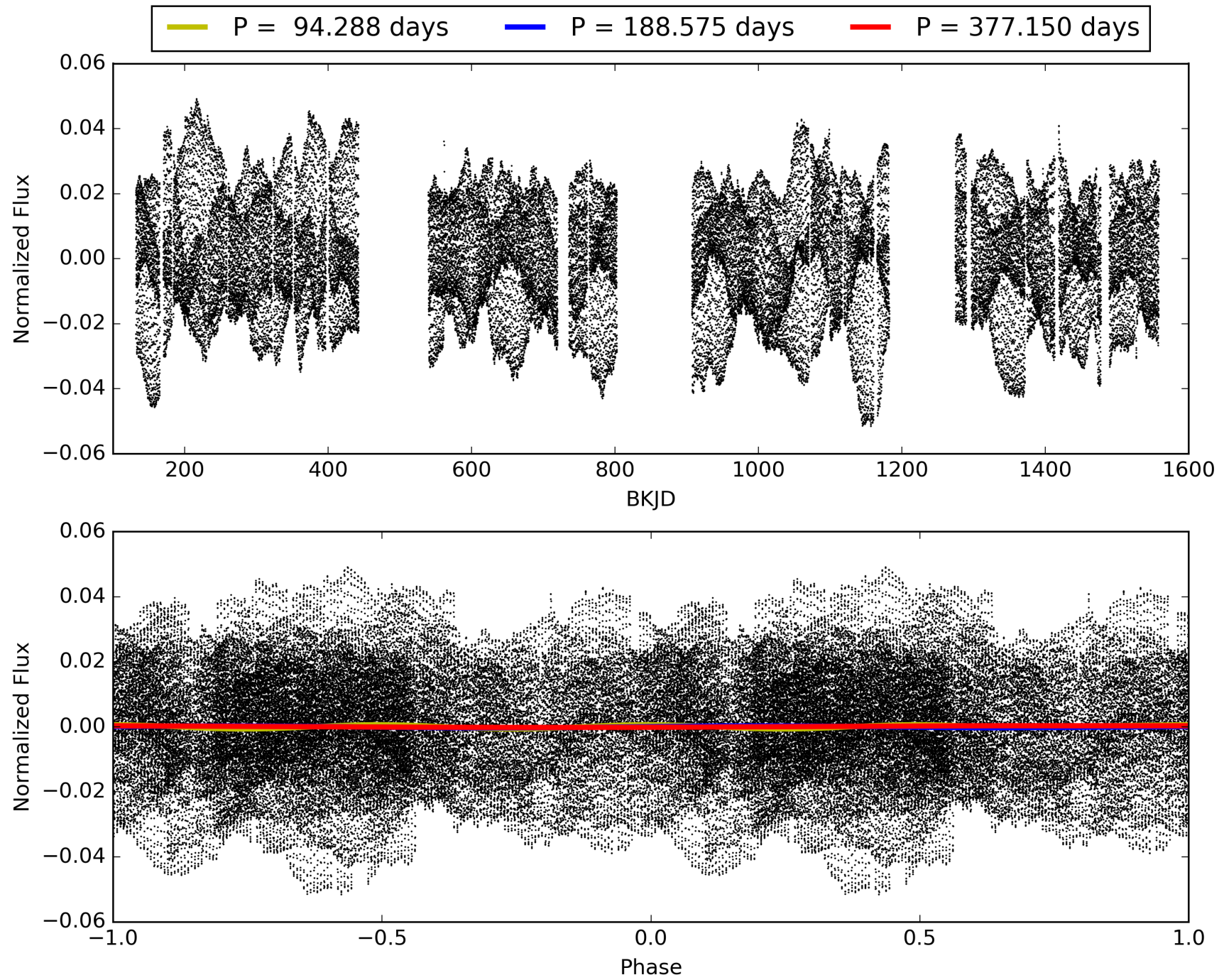
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 02-Feb-2016 07:48:46 Z

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

TCE 005254896-04, PDC Light Curves

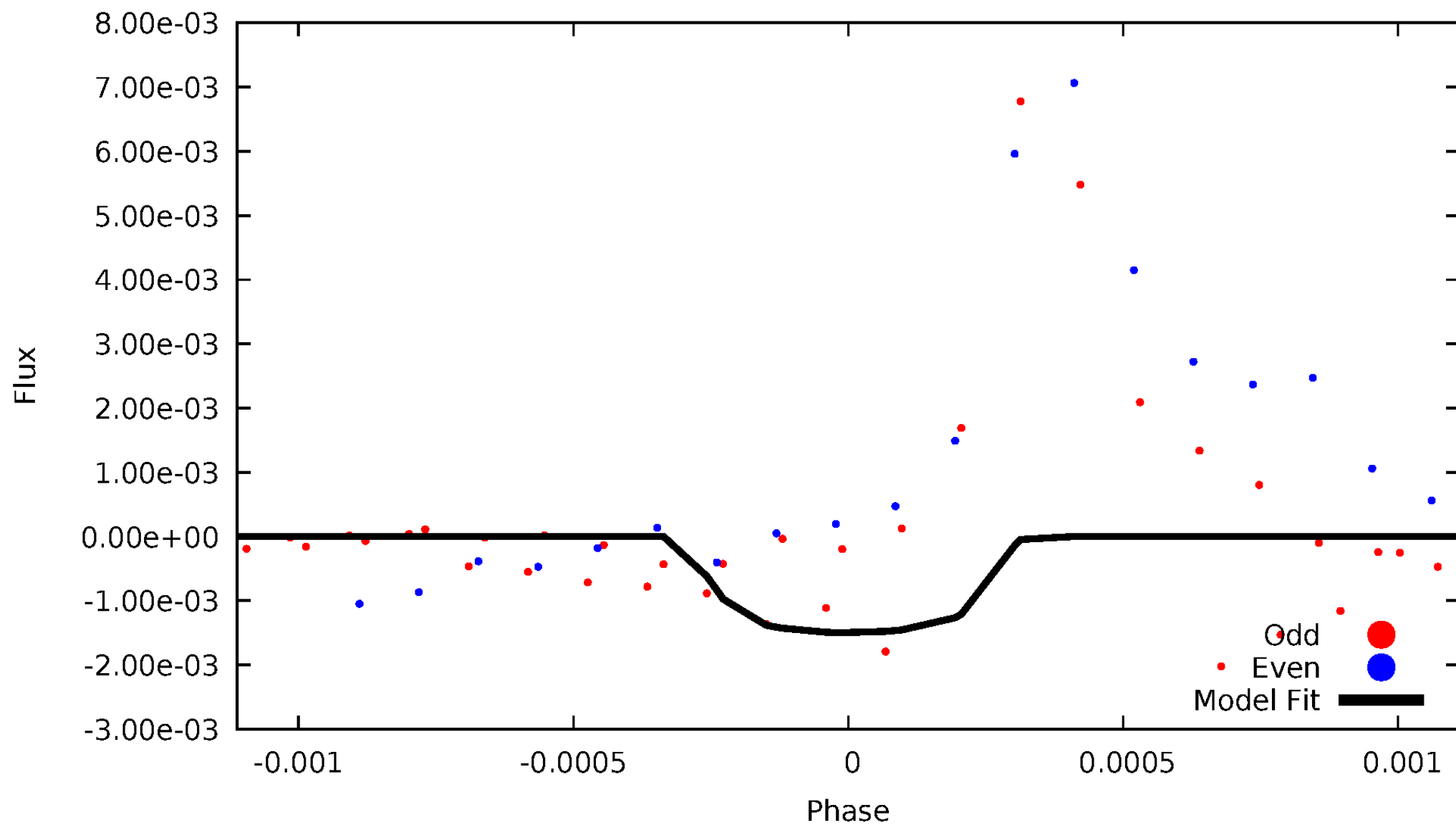


TCE 005254896-04



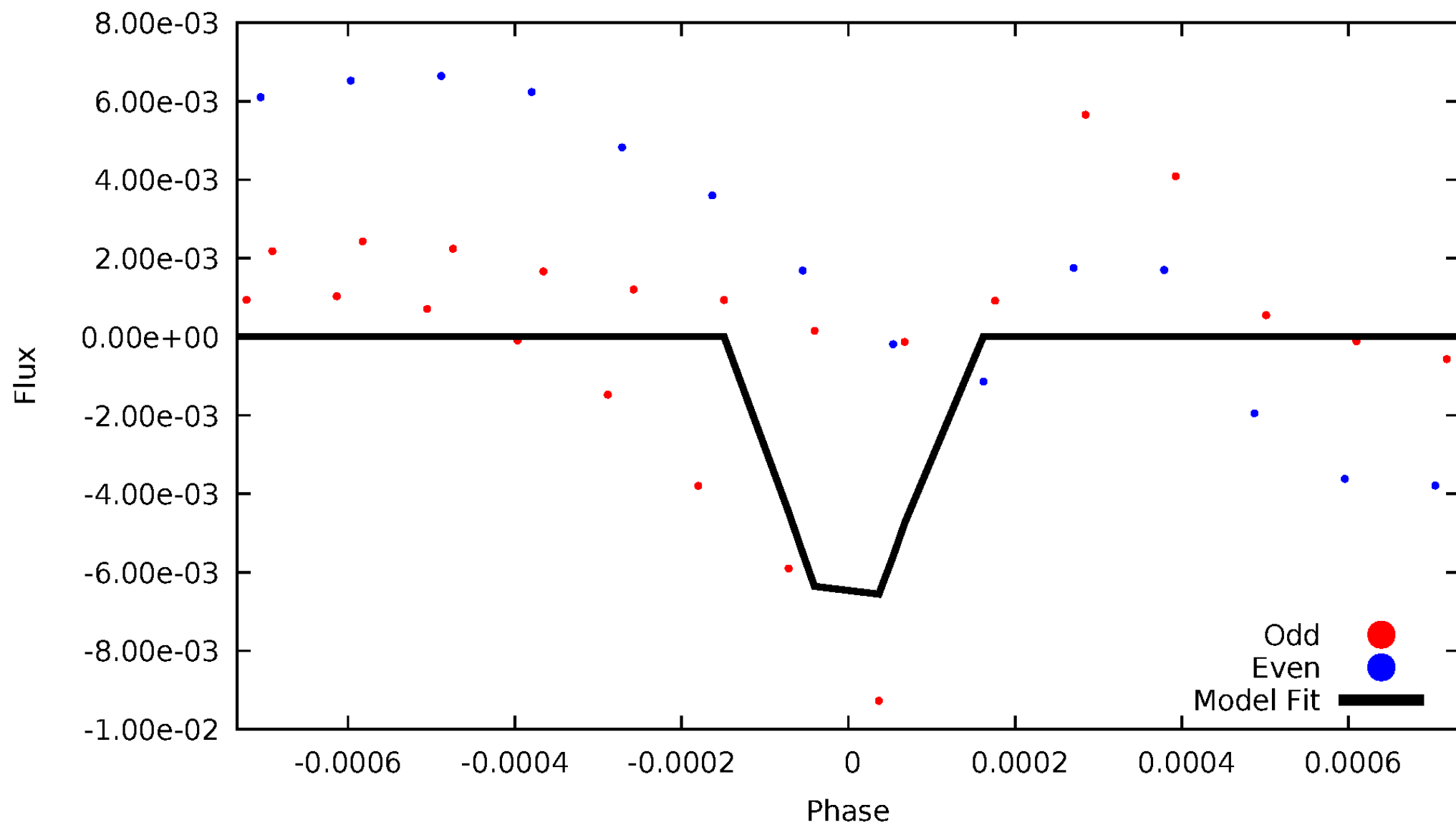
DV Odd/Even

TCE 005254896-04



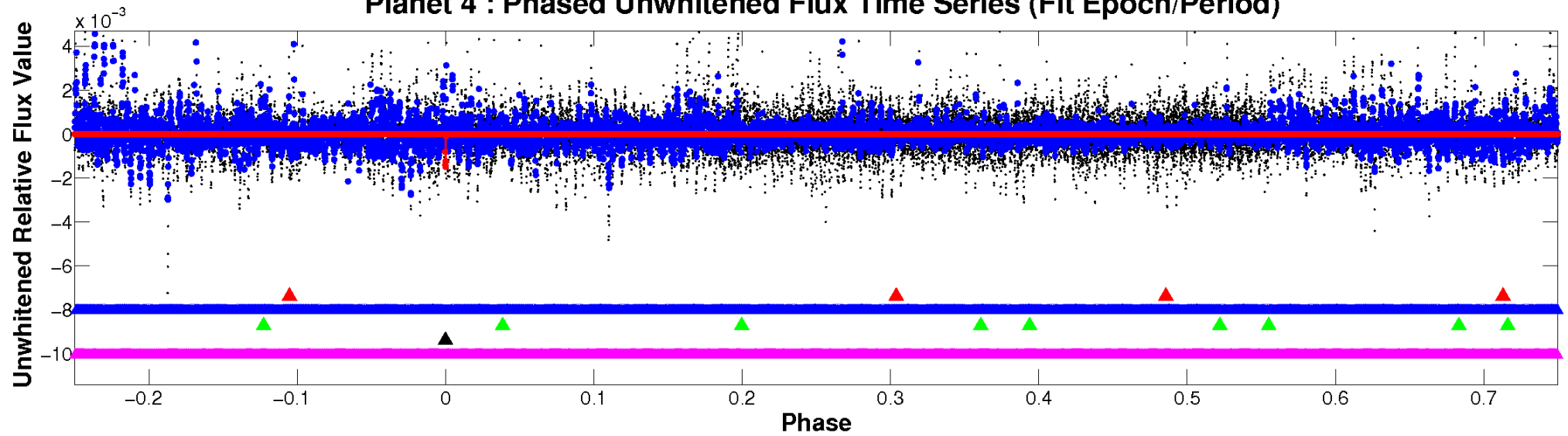
ALT Odd/Even

TCE 005254896-04

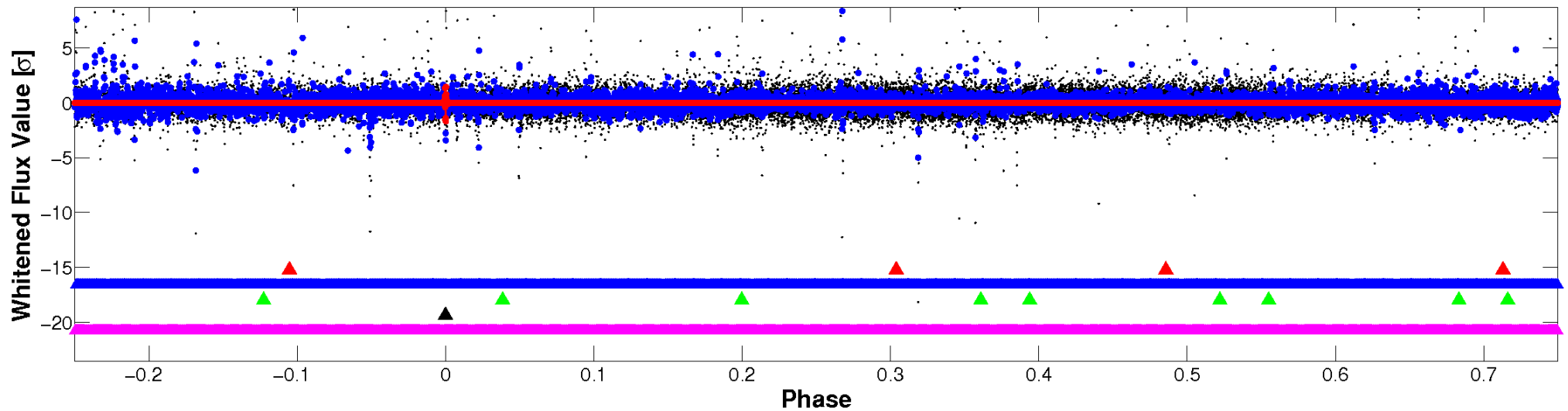


Non-Whitened Vs. Whitened Light Curve

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

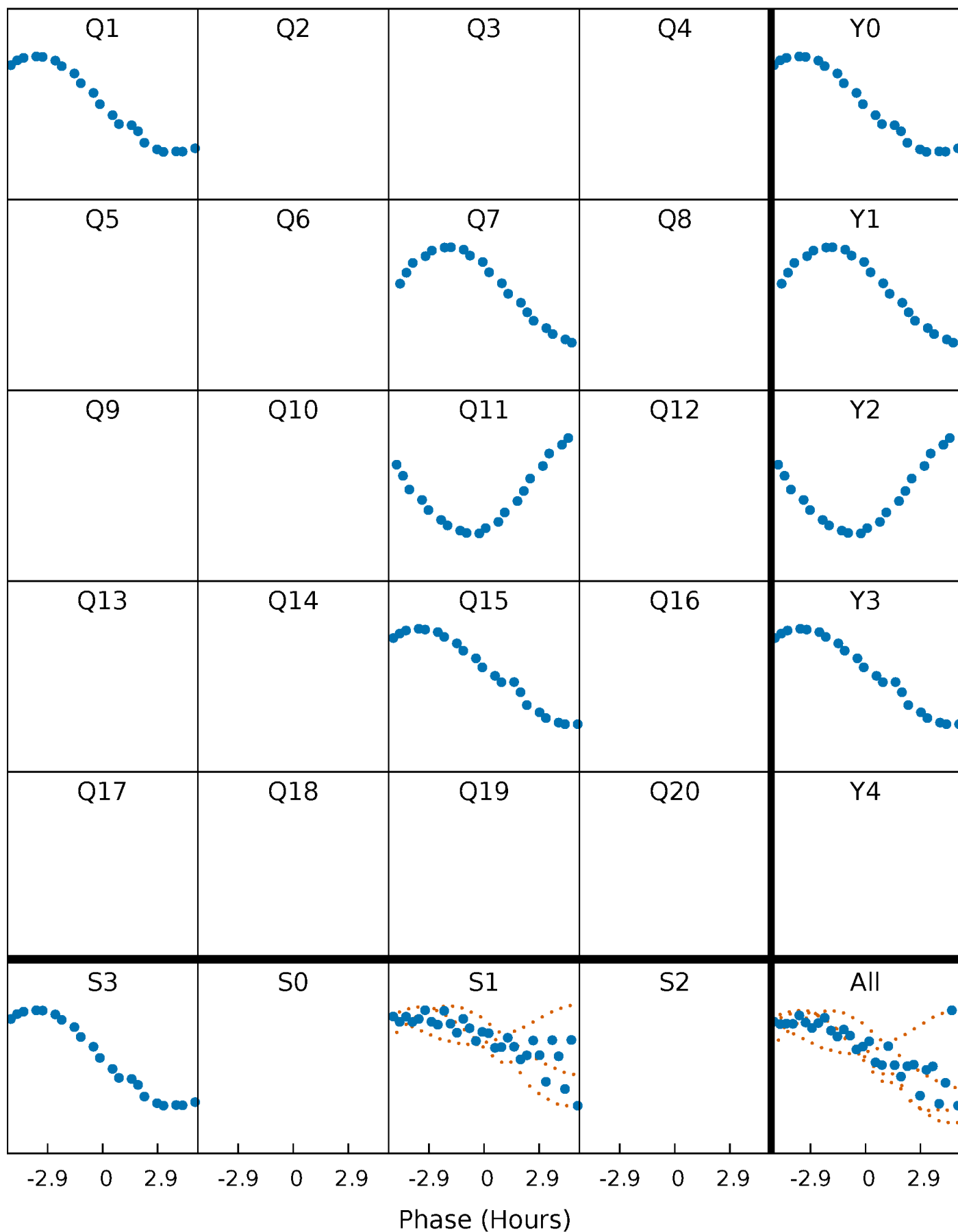


Planet 4 : Phased Whitened Flux Time Series (Fit Epoch/Period)



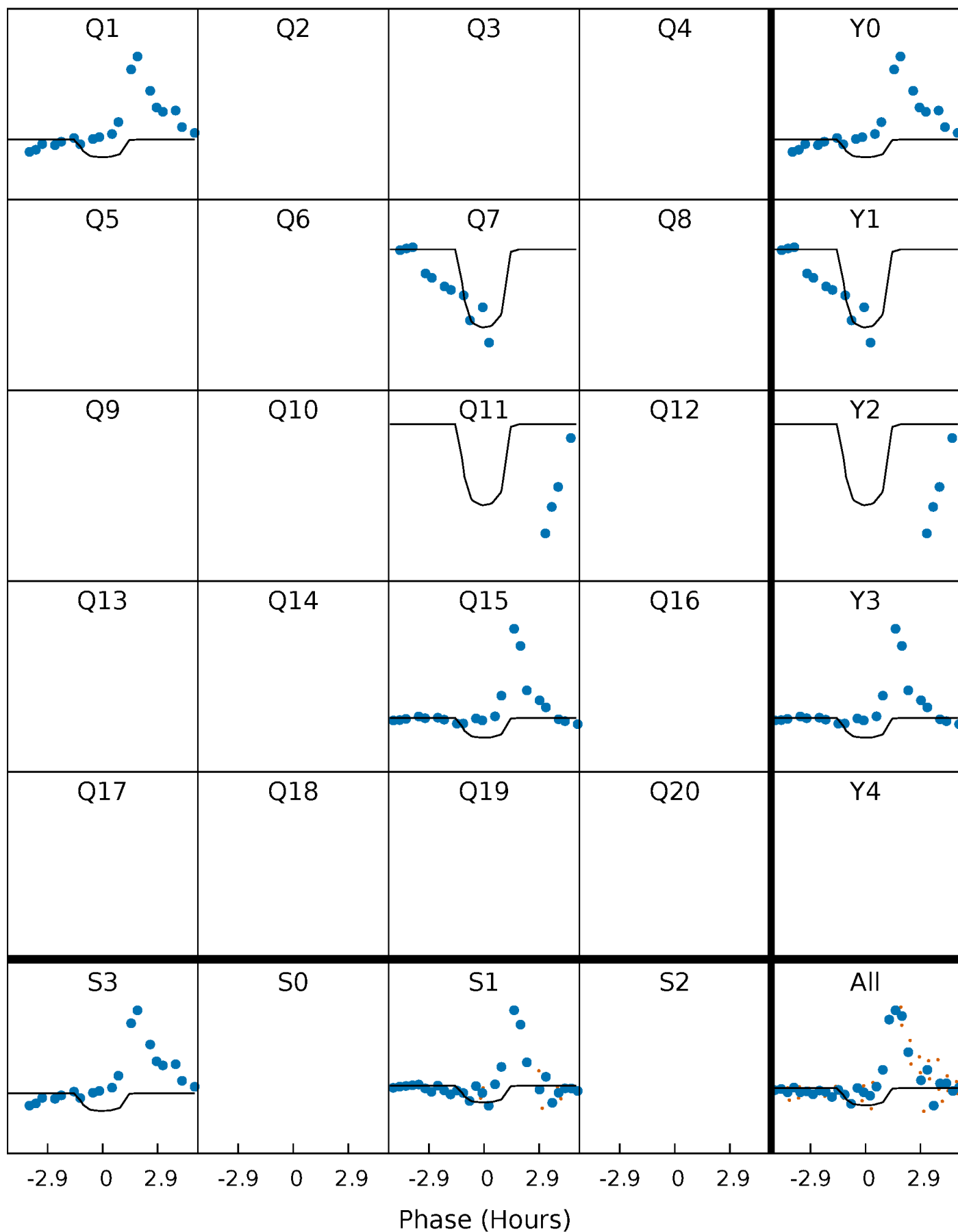
PDC Quarter-Phased Transit Curves

TCE 005254896-04 $P=188.575095$ Days $T_0=133.764987$ (BKJD)



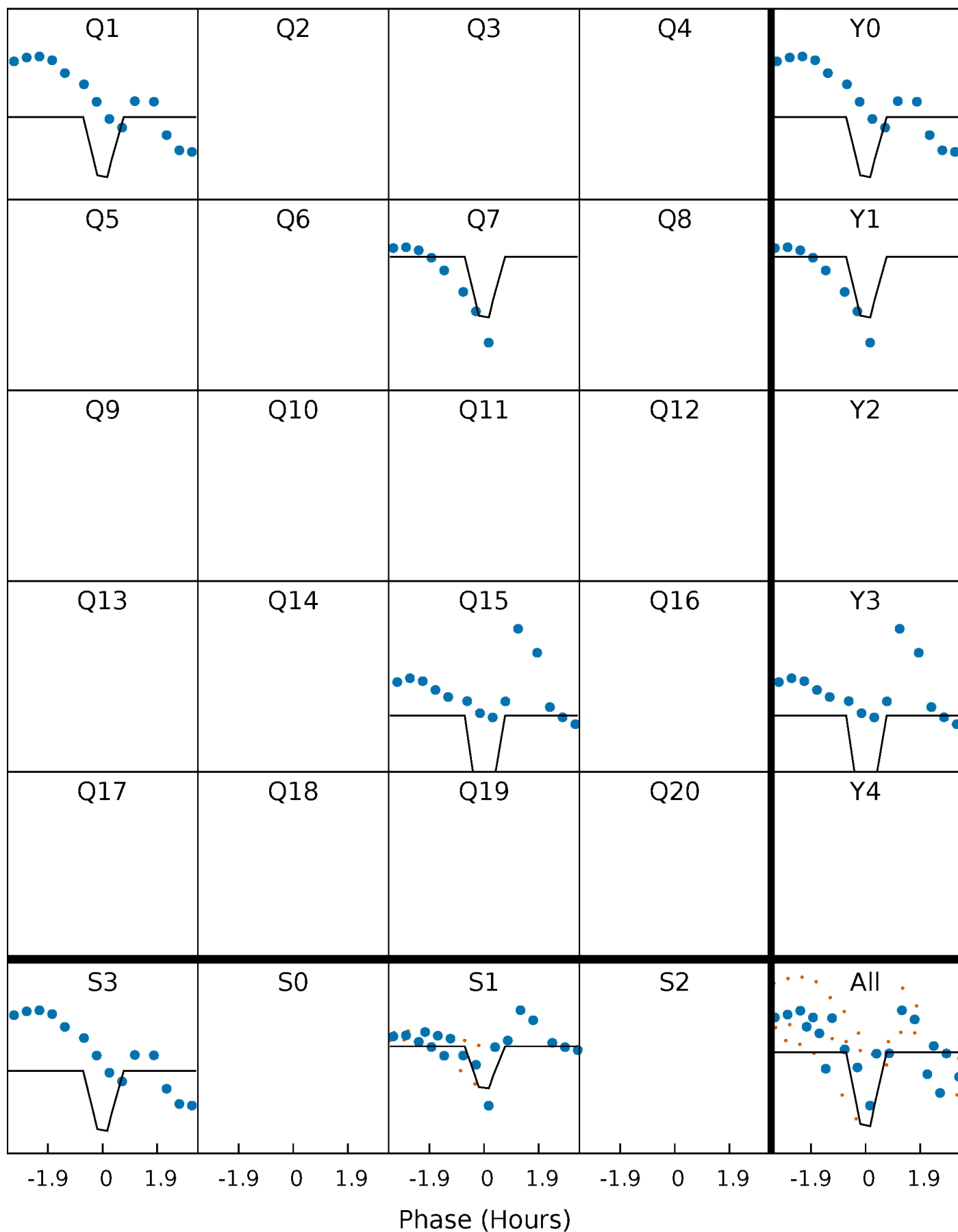
DV Quarter-Phased Transit Curves

TCE 005254896-04 P=188.575095 Days $T_0=133.764987$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

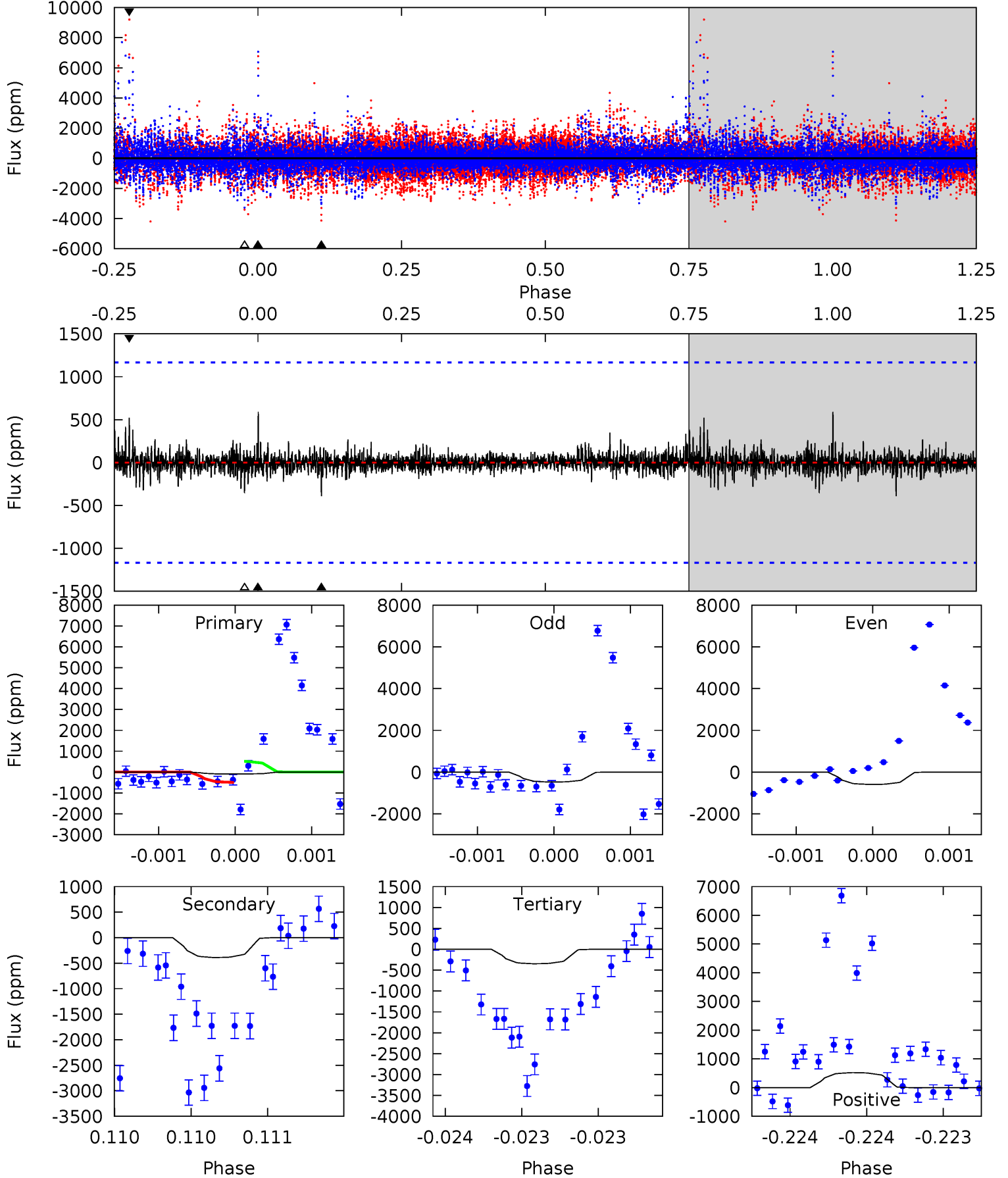
TCE 005254896-04 P=188.575020 Days $T_0=133.771065$ (BKJD)



DV Model-Shift Uniqueness Test

005254896-04, P = 188.575095 Days, E = 133.764987 Days

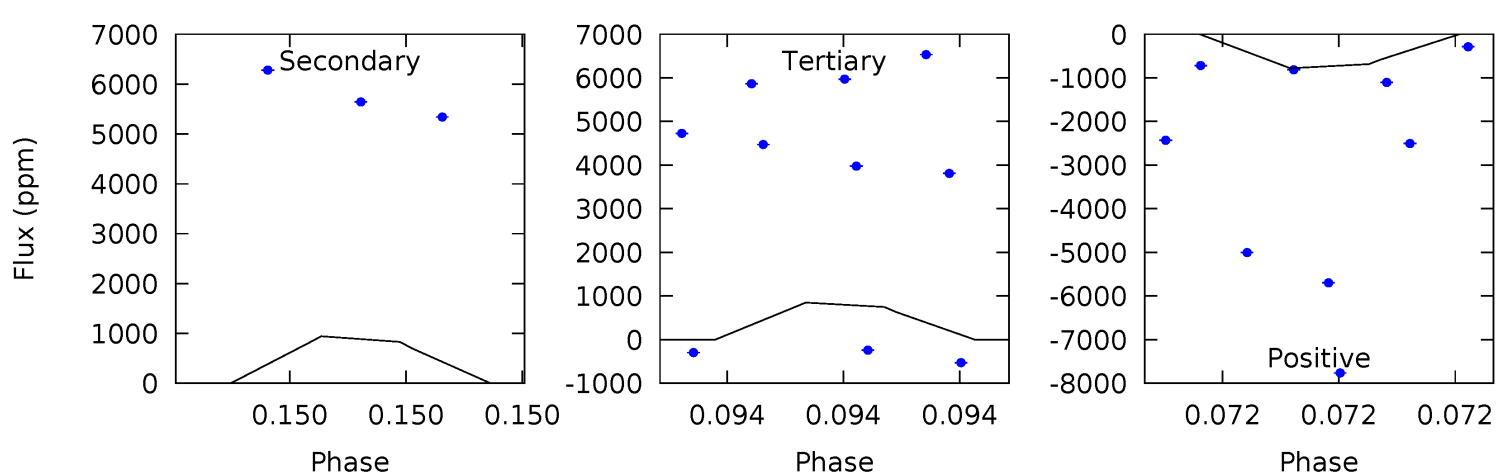
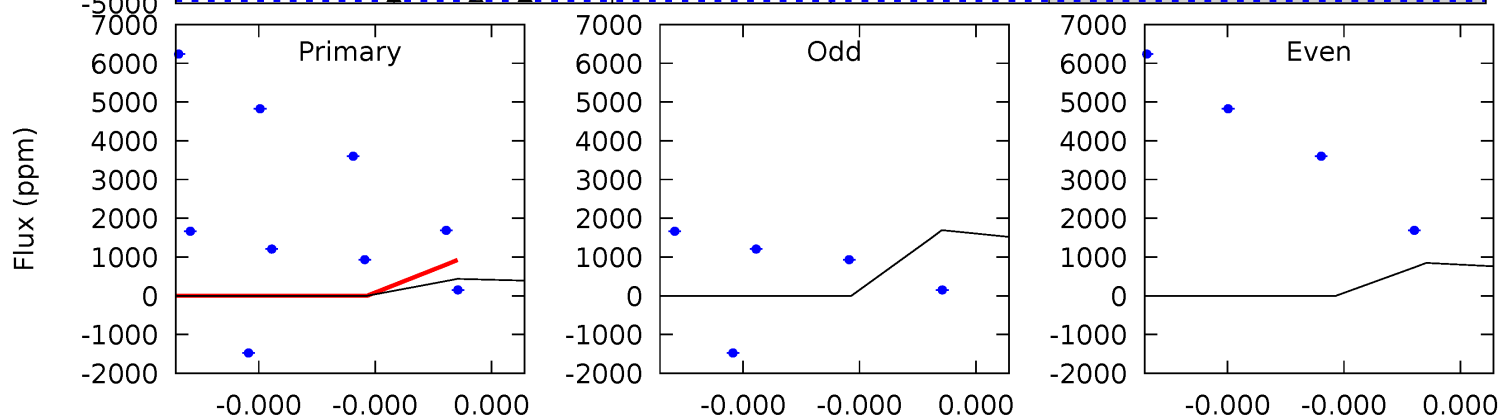
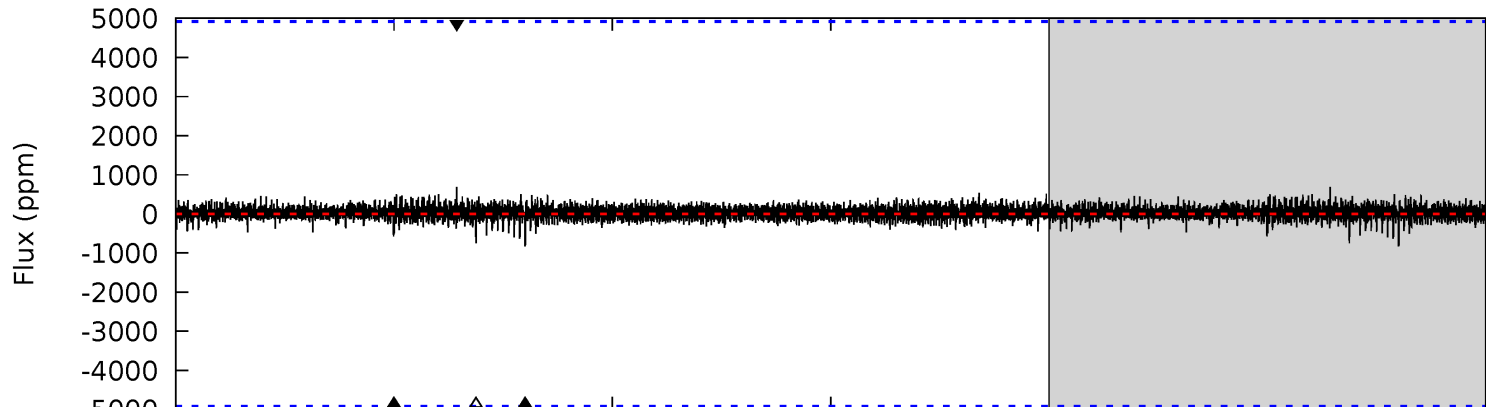
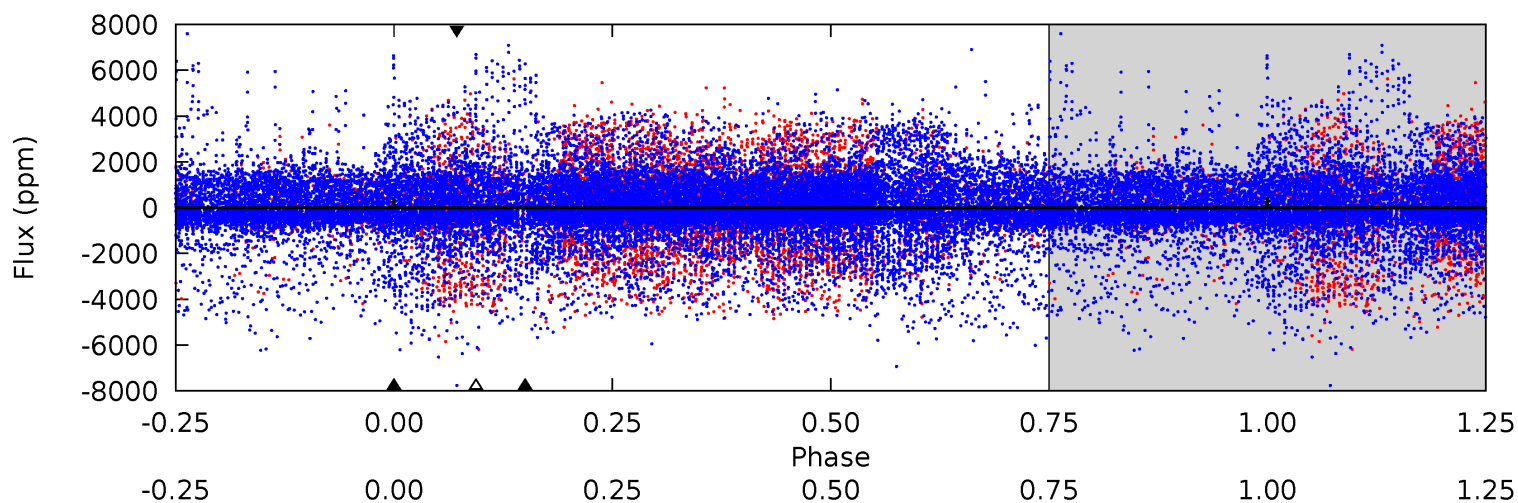
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
0.44	1.86	1.65	2.47	5.55	3.44	0.33	-1.21	-2.03	0.21	-0.62	0.27	-0.67	0.60	0.05



Alt Model-Shift Uniqueness Test

005254896-04, P = 188.575020 Days, E = 133.771065 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
0.45	0.98	0.88	0.81	5.79	3.81	0.14	-0.43	-0.35	0.10	0.17	0.40	-75.3	0.45	0.41



Stellar Parameters For KIC 005254896

	$T_{\text{eff}} (K)$	$\log(g)$	$[\text{Fe}/\text{H}]$	$R (R_{\odot})$	$M (M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	5930^{+177}_{-159}	$4.068^{+0.406}_{-0.174}$	$-0.480^{+0.300}_{-0.250}$	$1.444^{+0.388}_{-0.582}$	$0.891^{+0.114}_{-0.091}$	$0.416^{+1.241}_{-0.202}$
	+3%/-3%	+10%/-4%	+62%/-52%	+27%/-40%	+13%/-10%	+298%/-49%
Source	PHO1	KIC0	KIC0	DSEP		

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

Secondary Eclipse Parameters for KIC 005254896-04 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-390 ± 210	$8.32^{+8.18}_{-5.66}$	557^{+43}_{-59}	3803^{+2065}_{-794}	1004^{+9491}_{-793}
Alt.	-829 ± 850	$12.74^{+9.44}_{-7.61}$	551^{+49}_{-61}	3725^{+1494}_{-1168}	878^{+5049}_{-811}

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 $A_{obs} \gg 1.0$

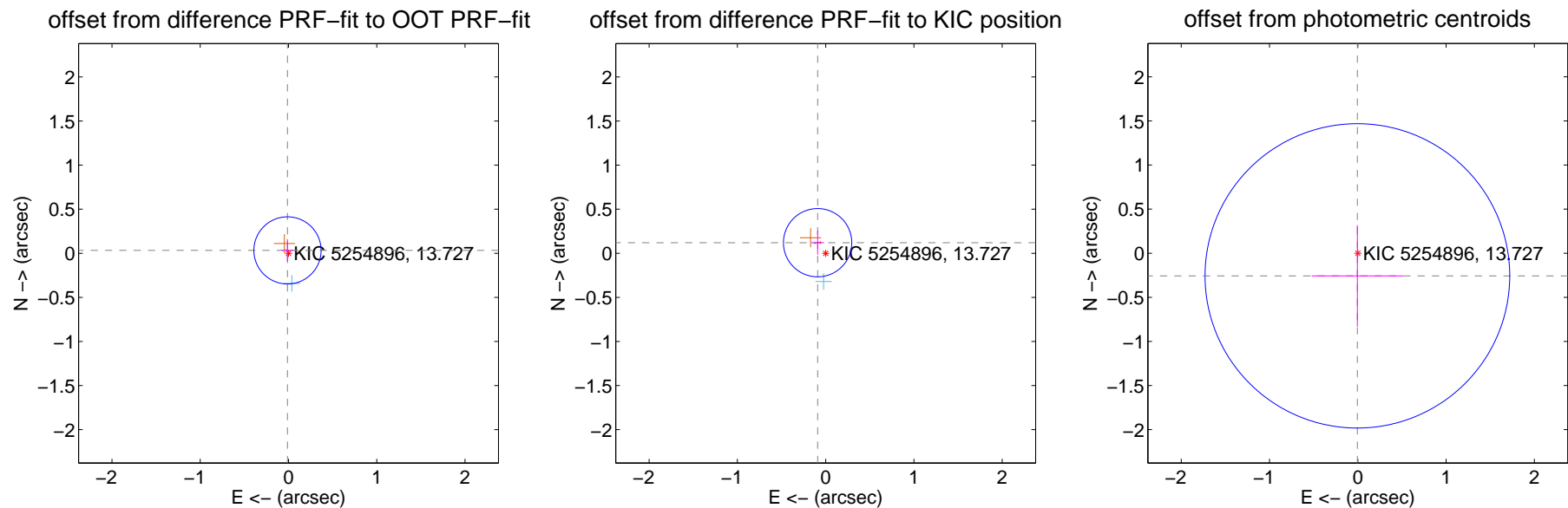
DV Centroid Data

Supplemental centroid analysis for 005254896-04. Kepler magnitude: 13.73. Transit SNR 5.58

There are 2 quarters with good PRF difference image offsets

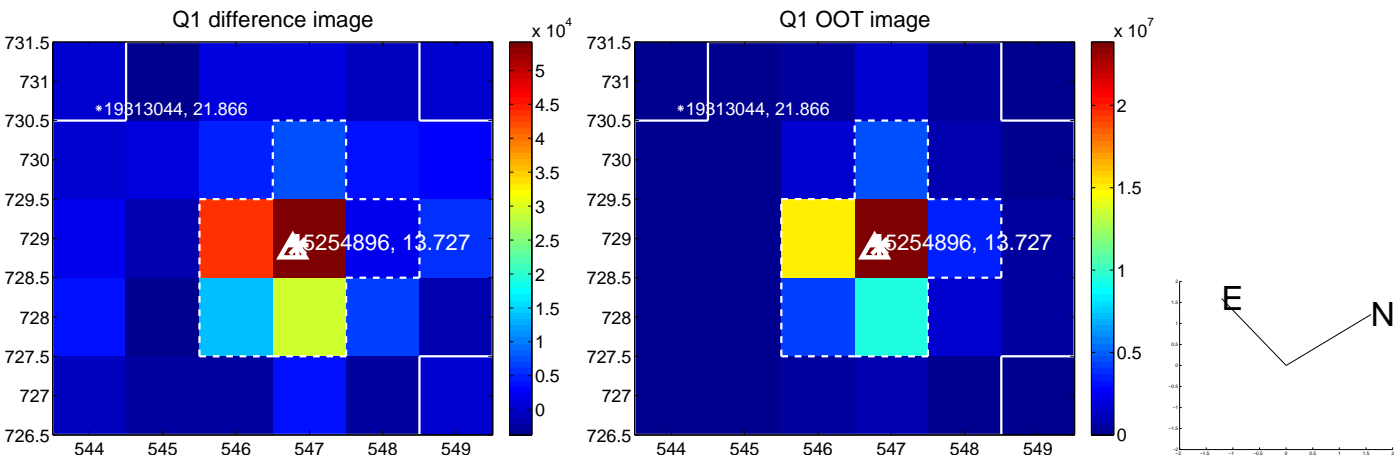
The direct PRF centroid is offset from the target star catalog position by about 0.14 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.035 ± 0.127	0.27	0.011 ± 0.069	0.033 ± 0.127
PRF-fit source offset from KIC position	0.151 ± 0.129	1.17	0.091 ± 0.074	0.120 ± 0.135
photometric centroid source offset	0.26 ± 0.58	0.45	0.00 ± 0.52	-0.26 ± 0.58

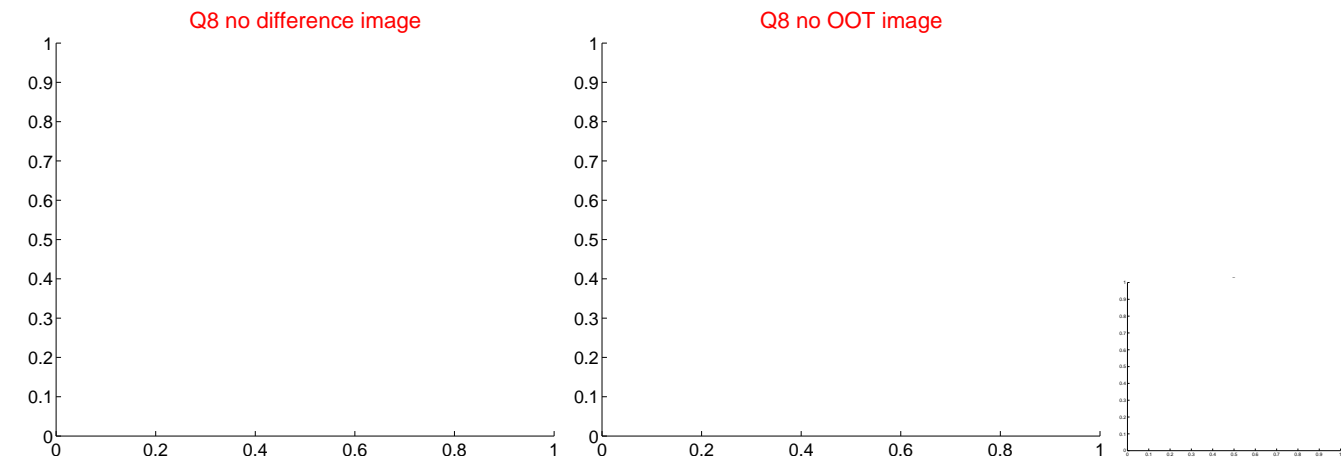
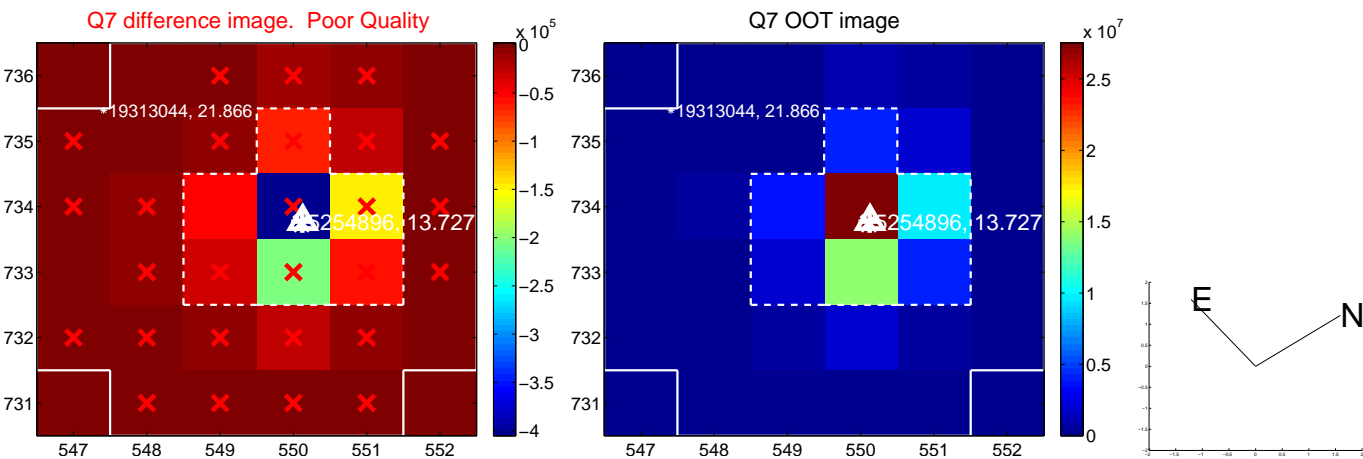


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

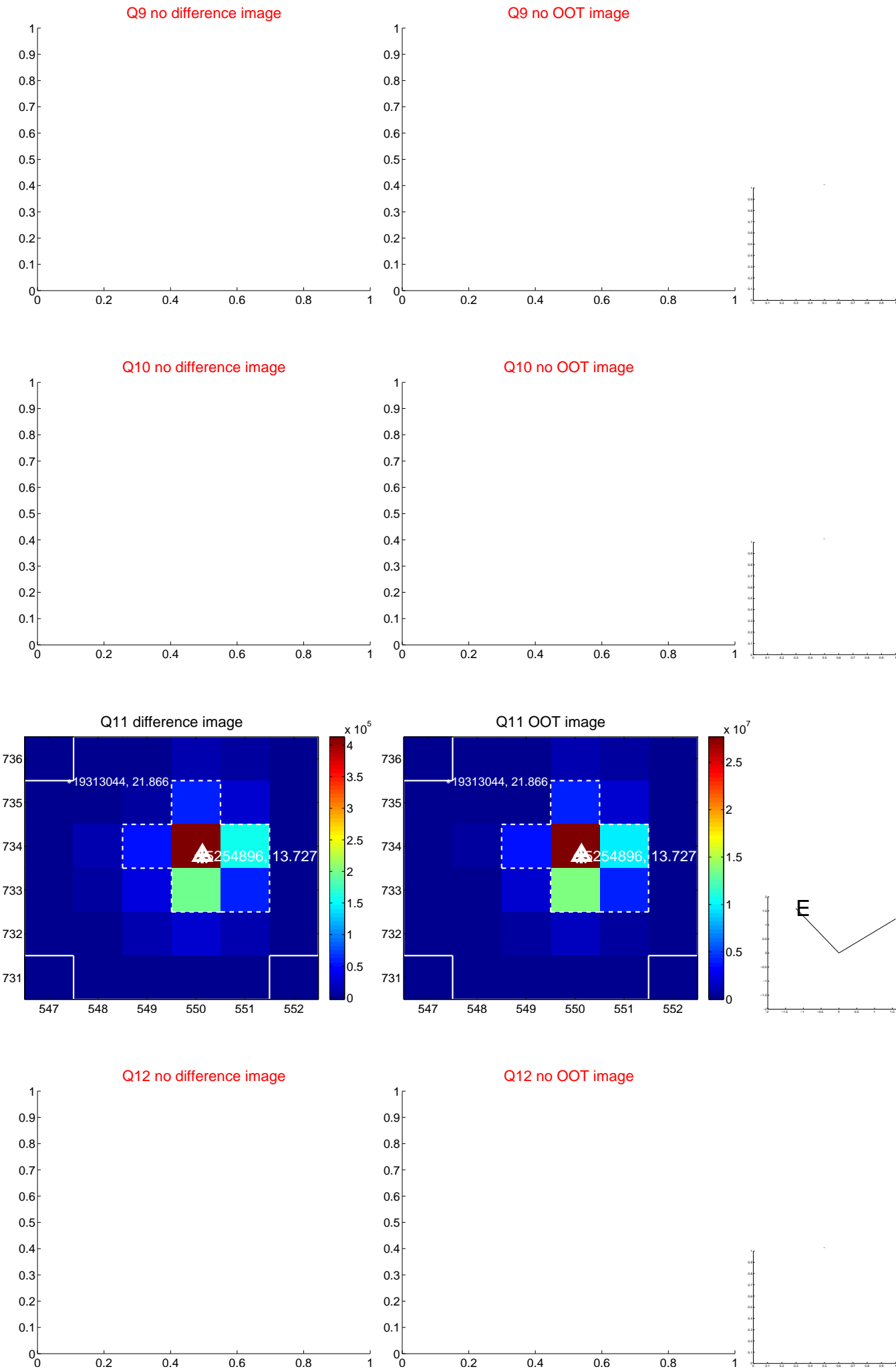
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



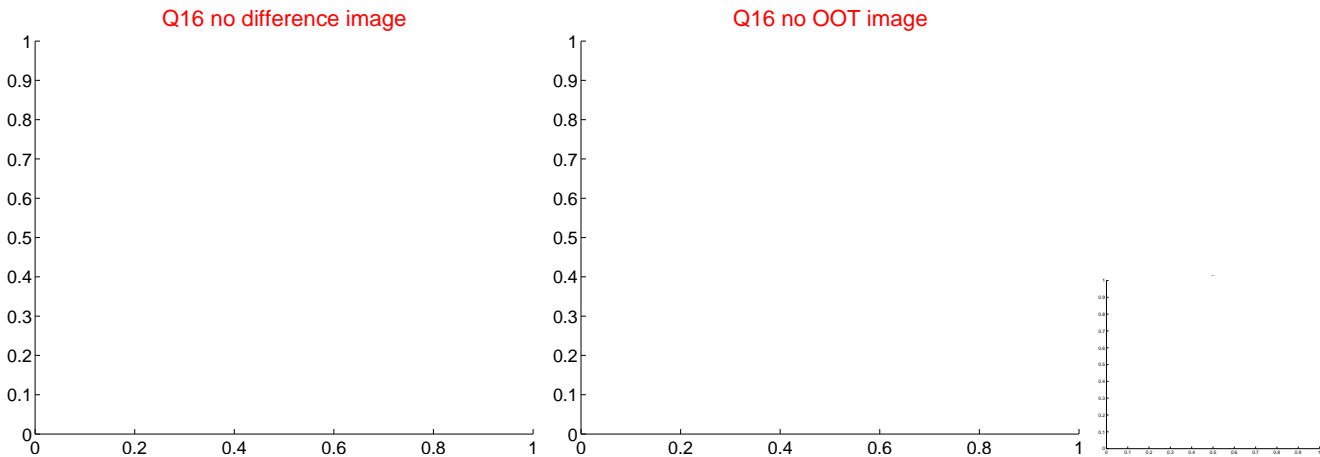
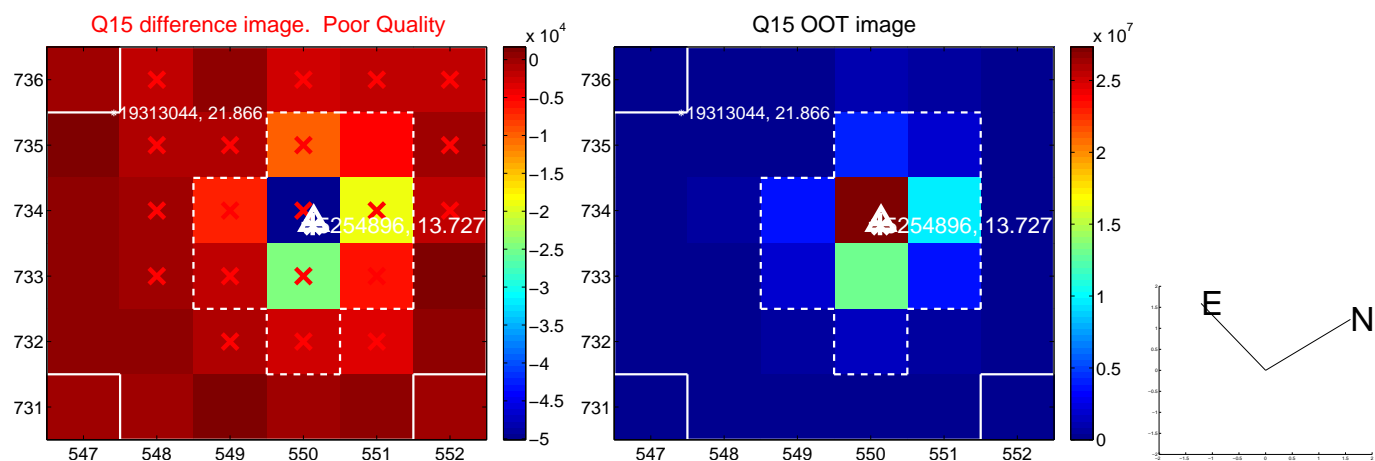
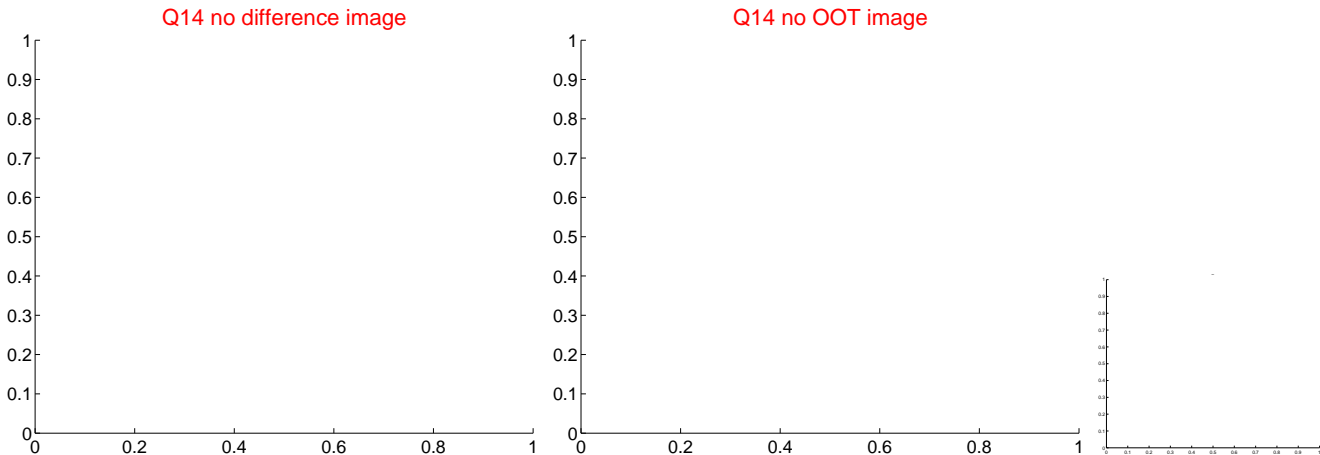
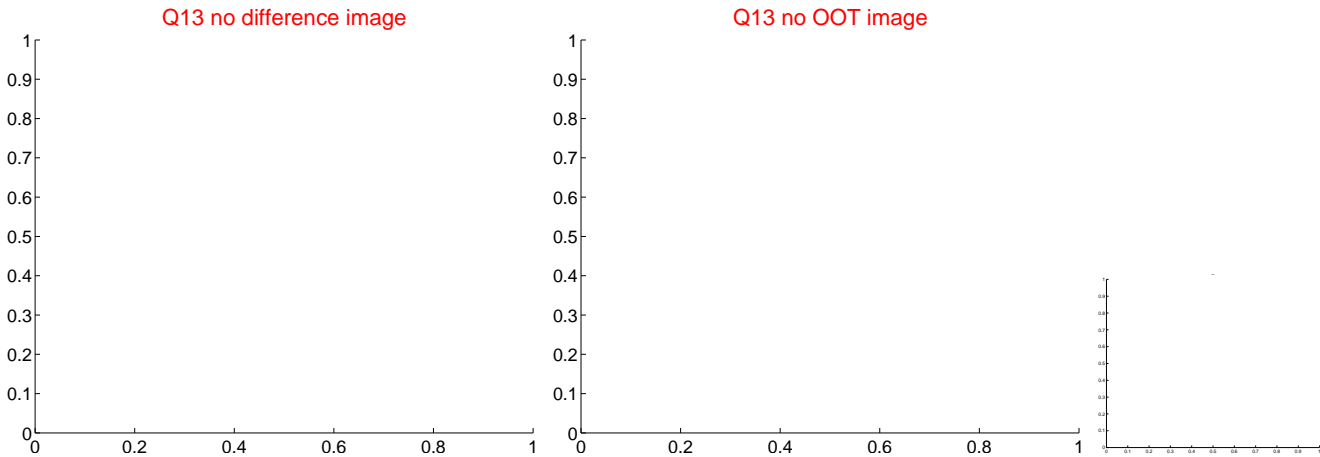
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



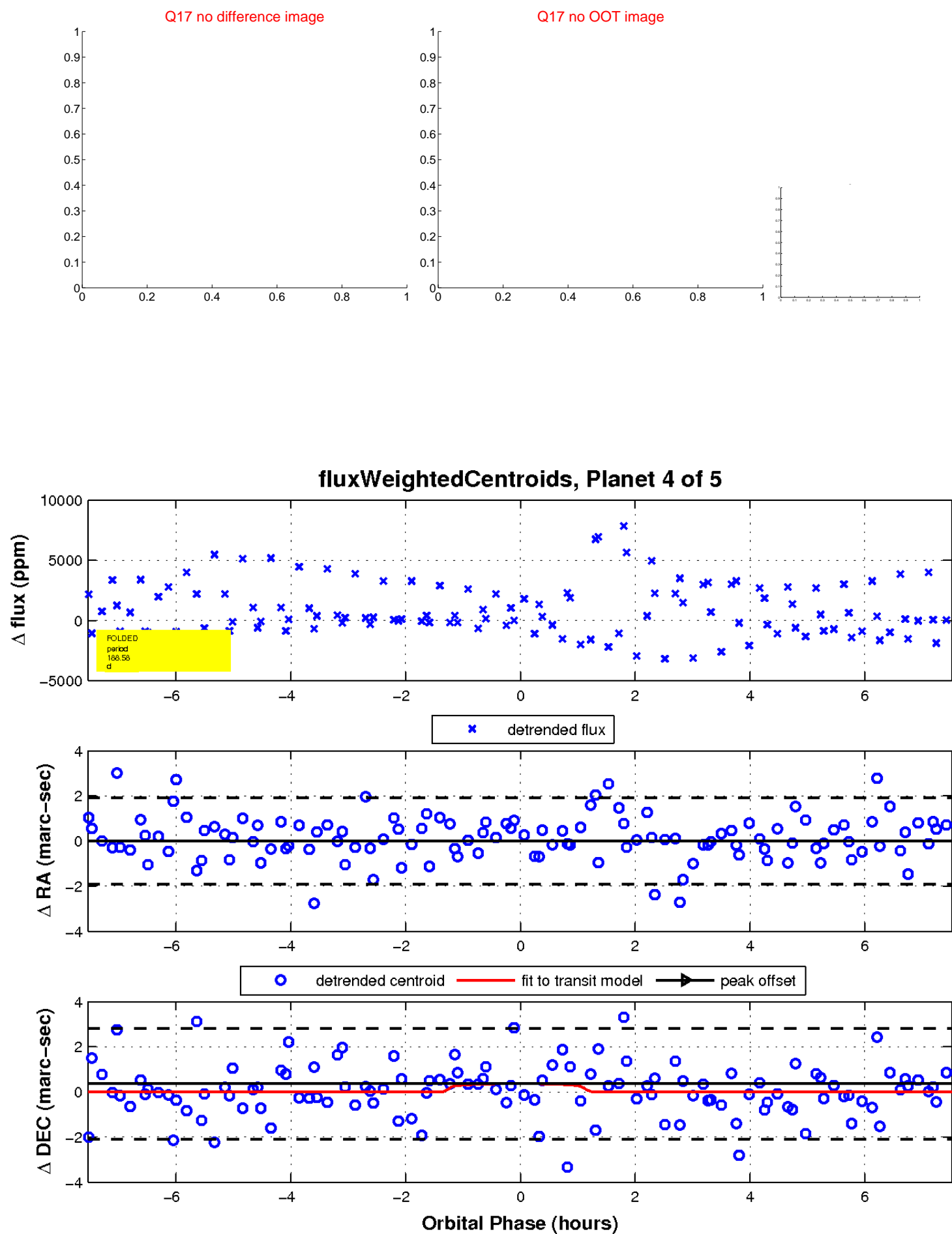
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

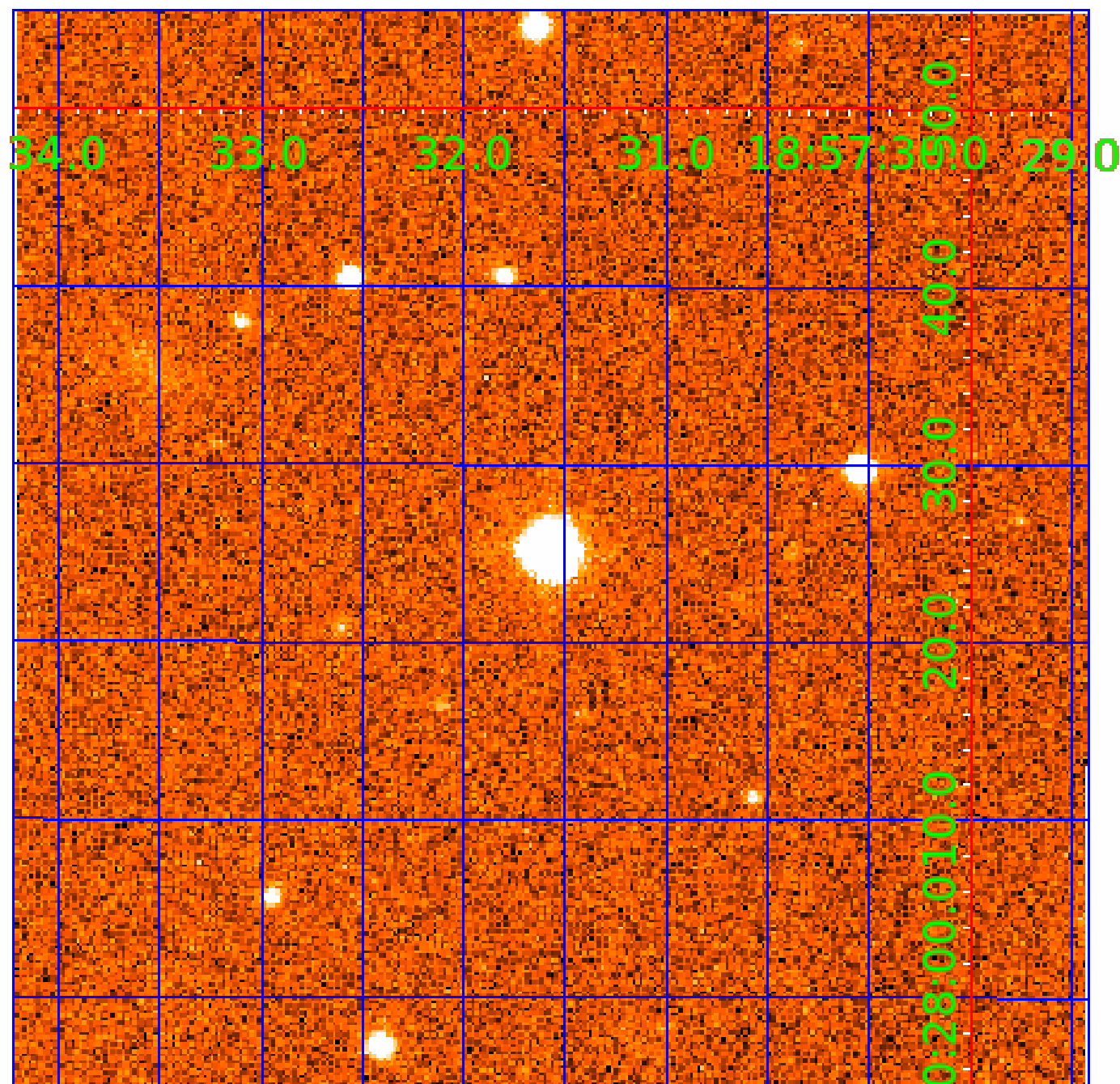


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 005254896

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})
005254896-01	OBS	No	454.299269	225.352178	429.5	3.236	16.2	1.9	1.44	5930	3.14	1.87
005254896-02	OBS	No	1.184905	132.164868	627.7	3.500	12.3	-1.0	1.44	5930	3.62	5198.92
005254896-03	OBS	No	158.180814	262.612238	1940.4	6.554	10.6	6.7	1.44	5930	7.65	7.62
005254896-04	OBS	No	188.575095	133.764987	1498.3	2.515	11.7	5.6	1.44	5930	5.74	6.03
005254896-05	OBS	No	1.184905	131.747274	110.0	2.763	7.5	9.3	1.44	5930	1.81	5198.92

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
005254896-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_TRACKER—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—INCONSISTENT_TRANS—CENT_FEW_DIFFS
005254896-02	OBS	FP	0.00	1	0	0	0	SWEET_NTL—LPP_DV—CENT_NOFITS
005254896-03	OBS	FP	0.00	1	0	1	0	LPP_DV—ALL_TRANS_CHASES—MOD_POS_DV—MOD_NONUNIQ_ALT—INCONSISTENT_TRANS—HALO_GHOST
005254896-04	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_CHASES_MARSHALL—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—INCONSISTENT_TRANS—CENT_FEW_DIFFS
005254896-05	OBS	FP	0.00	1	0	1	0	SWEET_NTL—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—SAME_NTL_PERIOD—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.

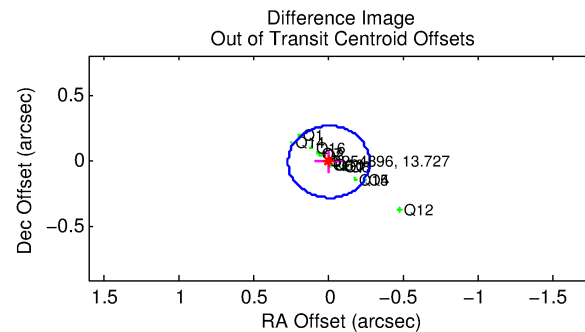
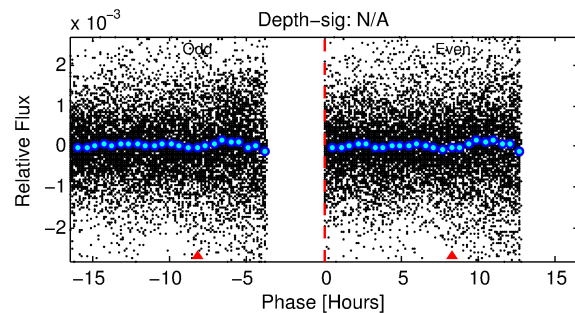
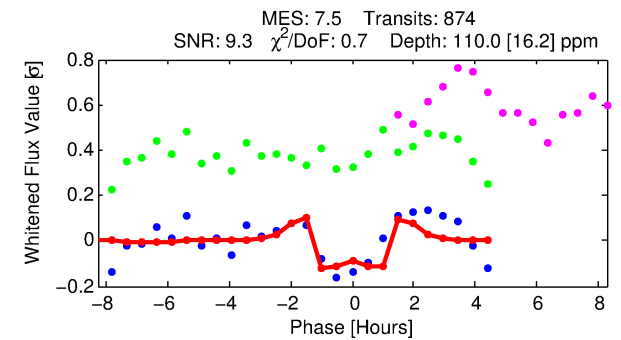
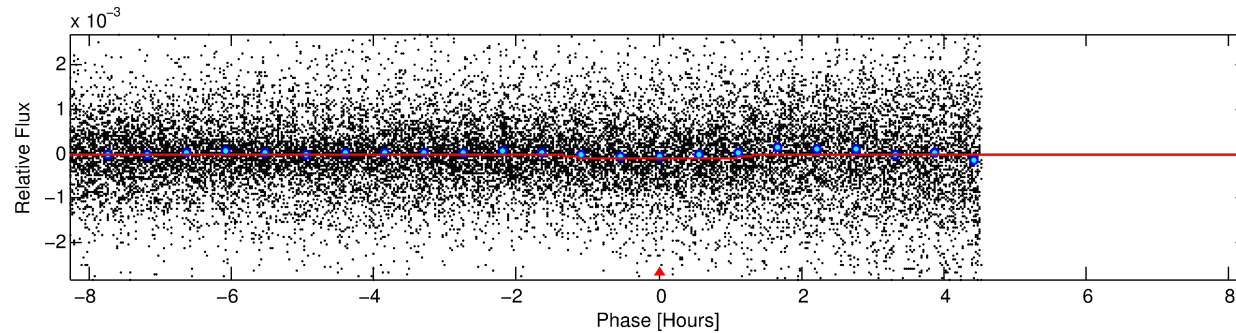
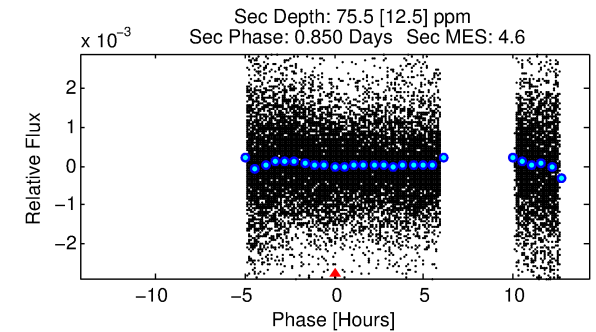
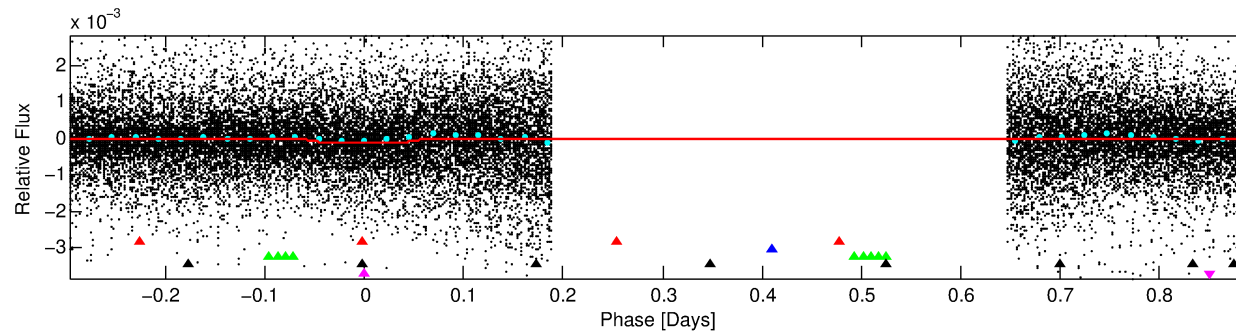
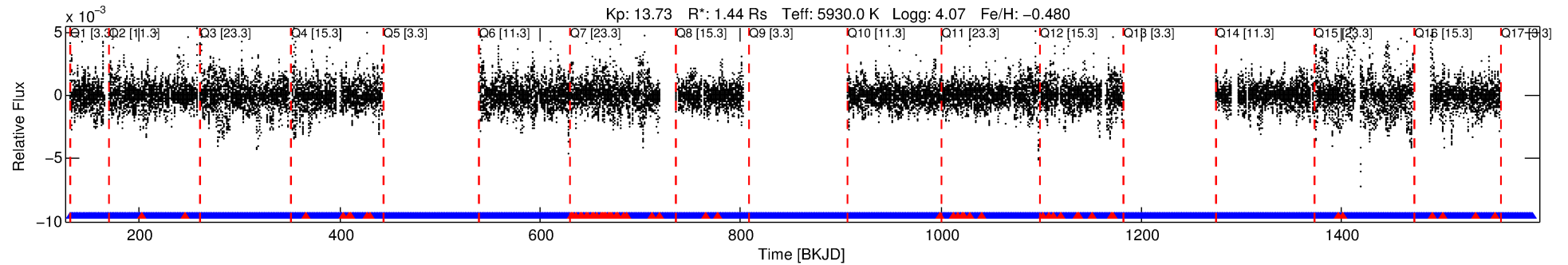
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 005254896-05

No Significant Match Found

DV One-Page Summary

KIC: 5254896 Candidate: 5 of 5 Period: 1.185 d



DV Fit Results:

Period = 1.18491 [0.00001] d
Epoch = 131.7473 [0.0016] BKJD
Rp/R* = 0.0115 [0.0026]
a/R* = 1.71 [1.21]
b = 0.91 [0.20]
Seff = 5198.92 [3582.63]
Teq = 2165 [373] K
Rp = 1.81 [0.83] Re
a = 0.0211 [0.0087] AU
Ag = 5.66 [4.69] [0.99σ]
Teffp = 5163 [635] K [4.07σ]

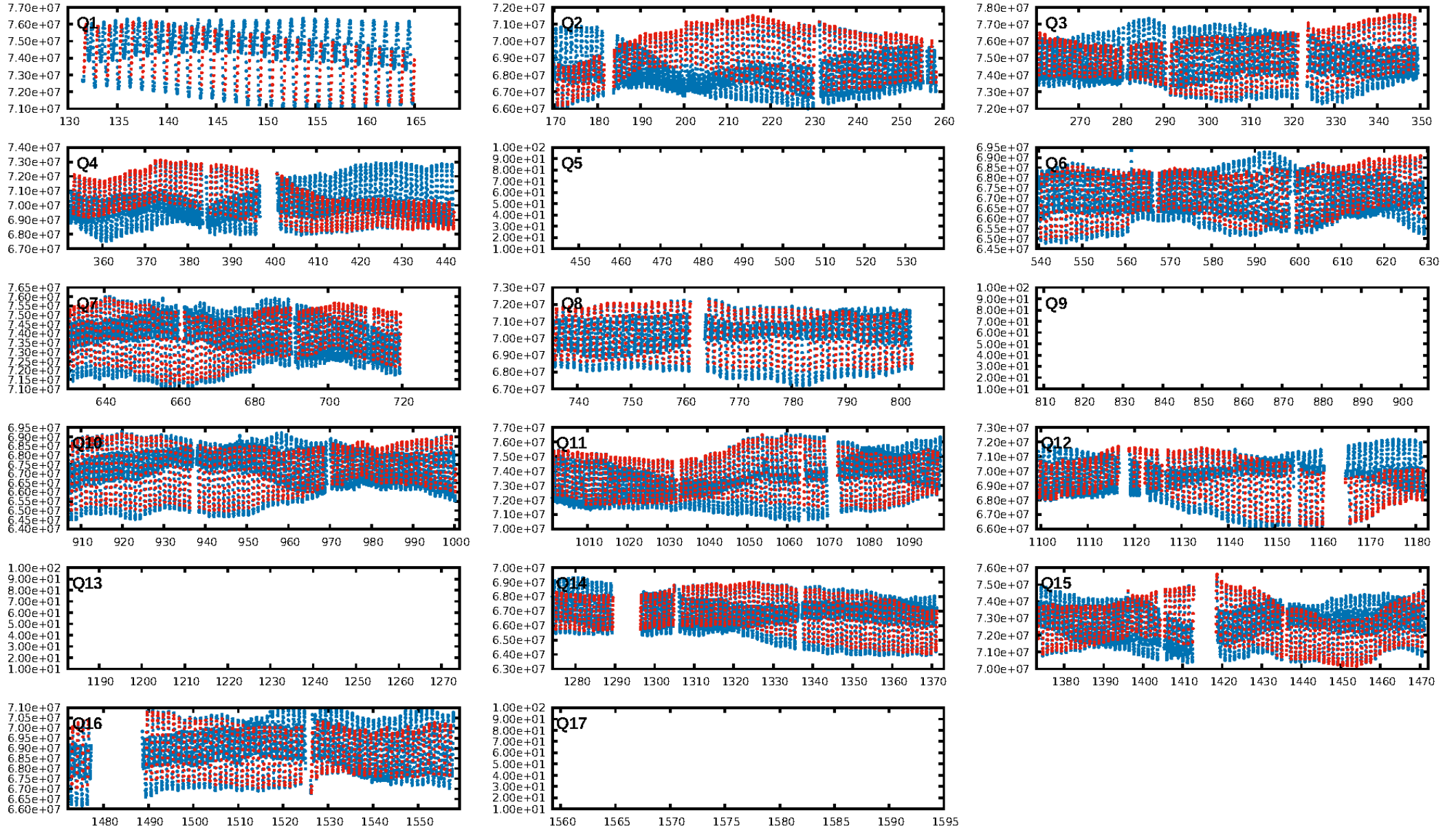
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: 0.0% [0.00σ]
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: N/A
RollingBand-fgt: 0.93 [787/845]
GhostDiagnostic-chr: -0.1725
Centroid-sig: 0.0%
Centroid-so: 1.283 arcsec [2.47σ]
OotOffset-rm: 0.010 arcsec [0.11σ]
KicOffset-rm: 0.037 arcsec [0.46σ]
OotOffset-st: 4/4/4/1 [13]
KicOffset-st: 4/4/4/1 [13]
DiffImageQuality-fgm: 0.00 [0/13]
DiffImageOverlap-fno: 0.00 [0/13]

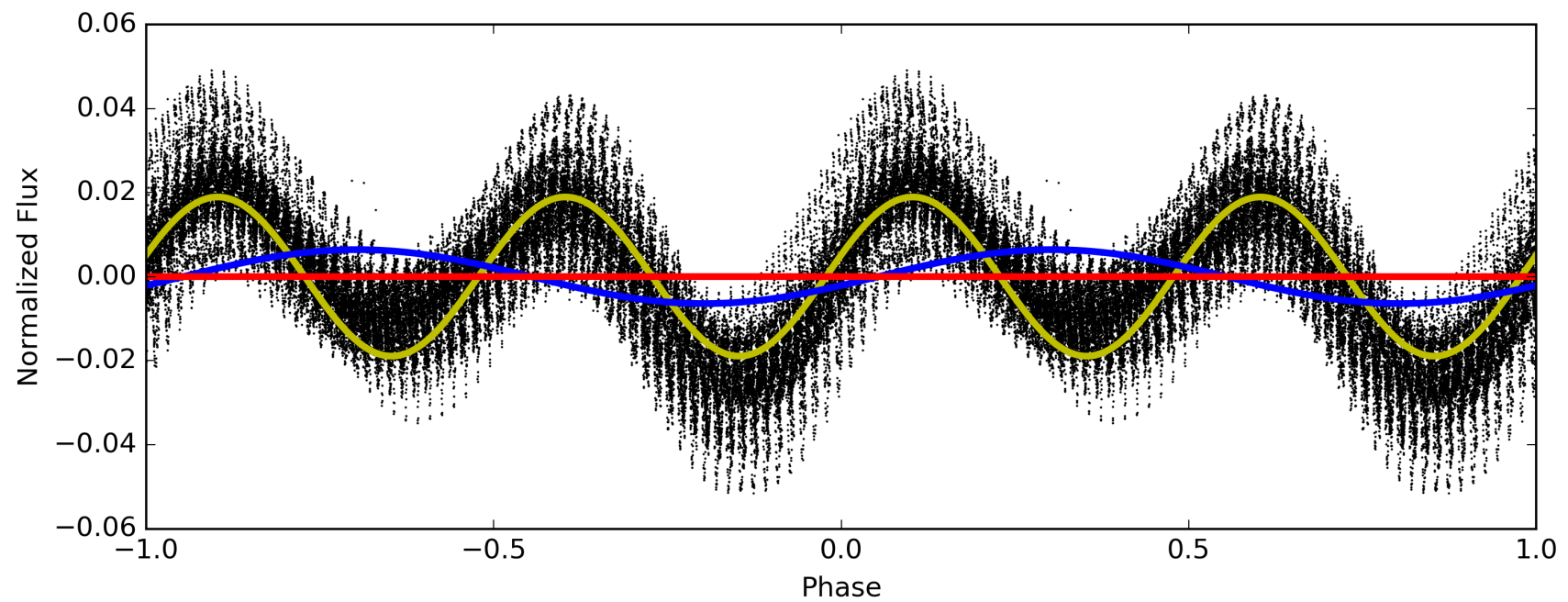
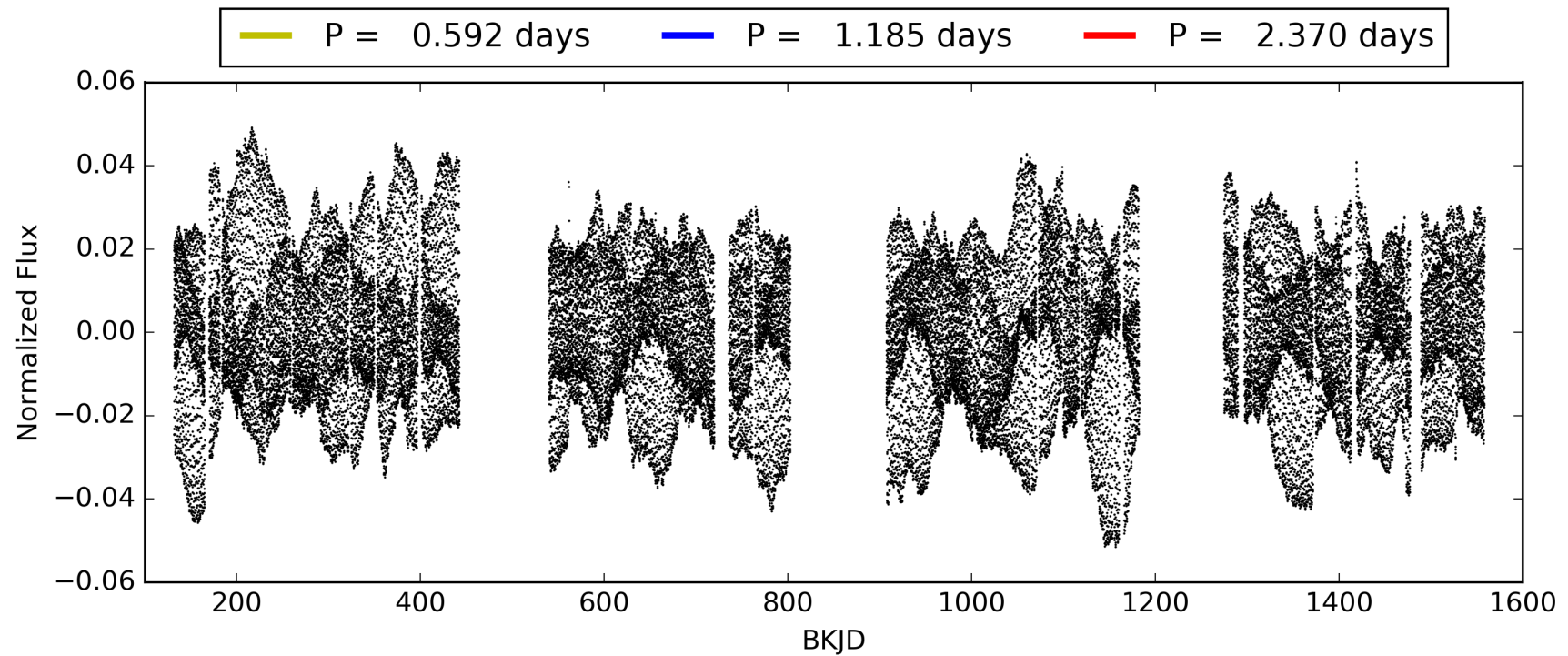
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 02-Feb-2016 07:48:52 Z

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

TCE 005254896-05, PDC Light Curves

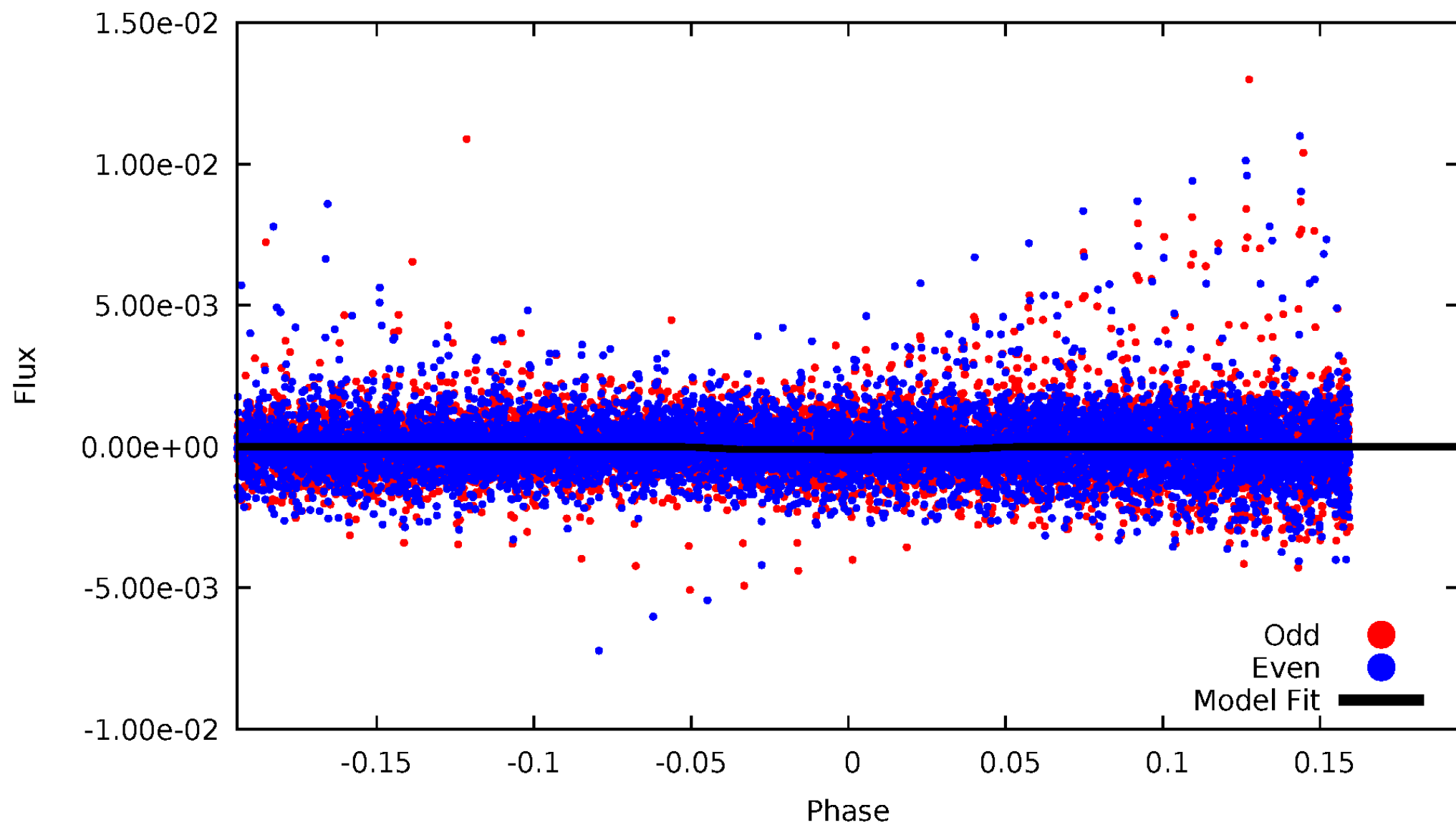


TCE 005254896-05



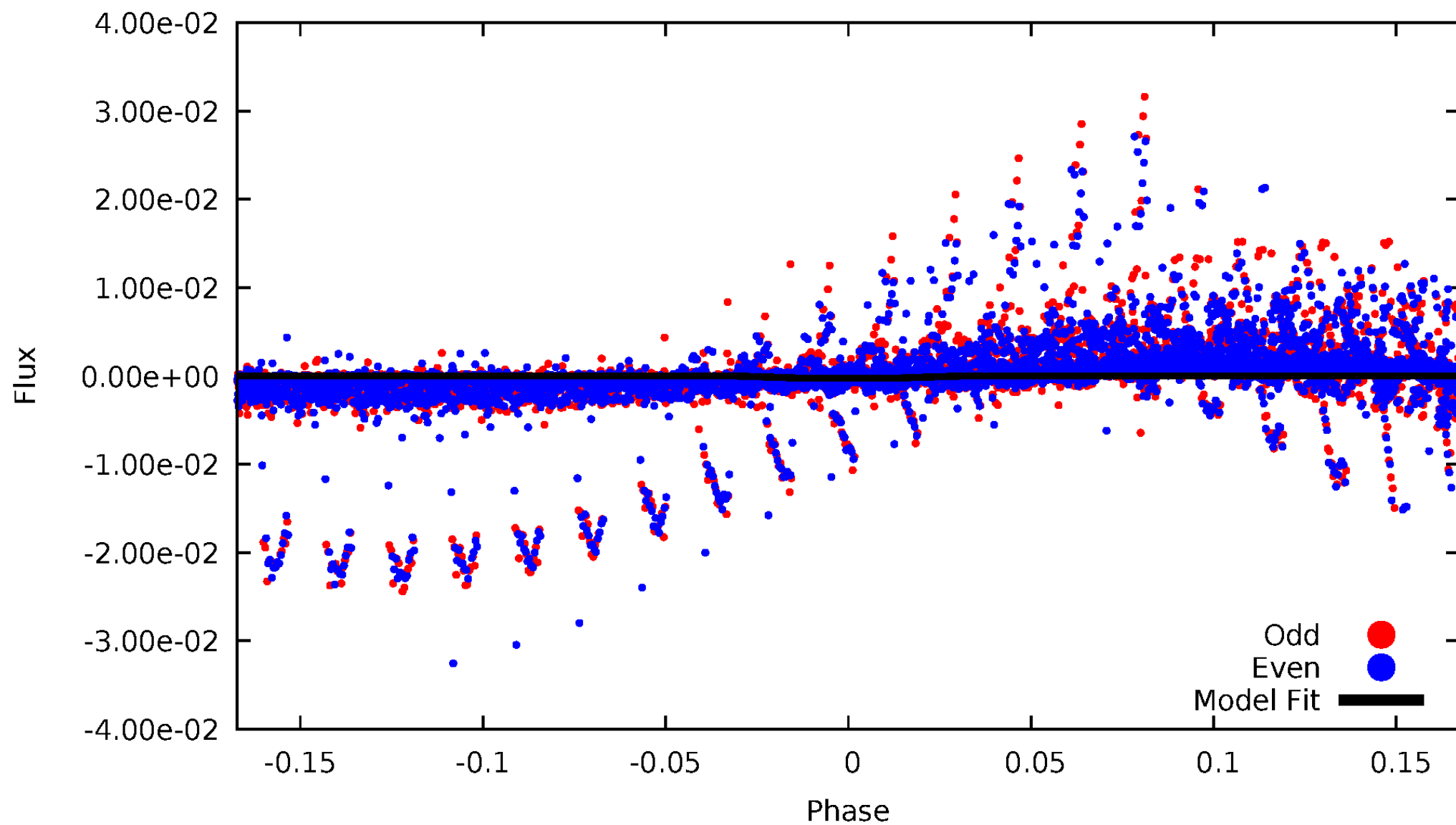
DV Odd/Even

TCE 005254896-05



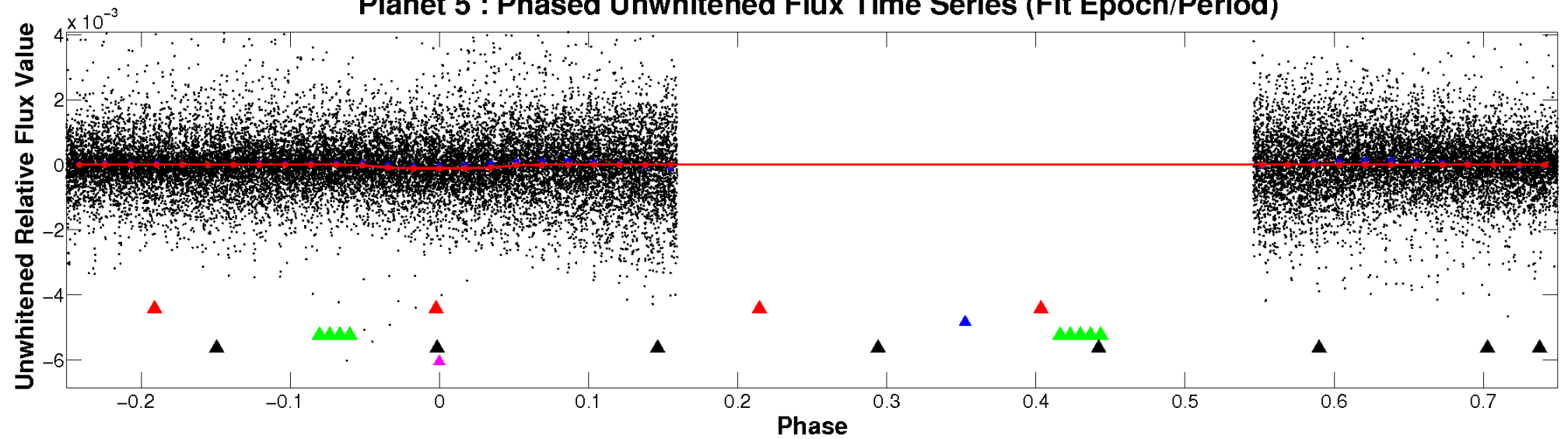
ALT Odd/Even

TCE 005254896-05

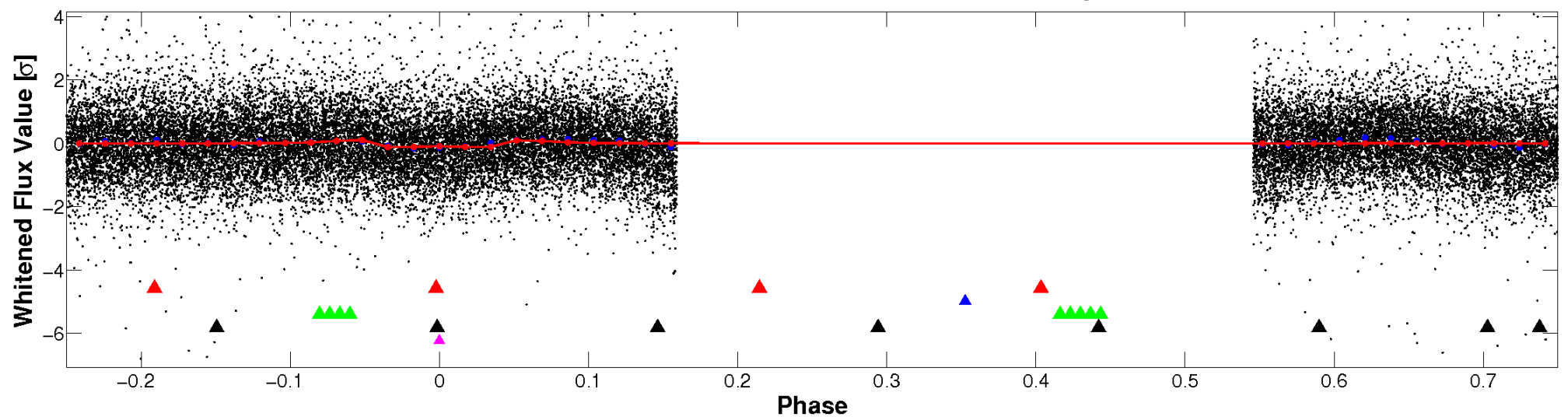


Non-Whitened Vs. Whitened Light Curve

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

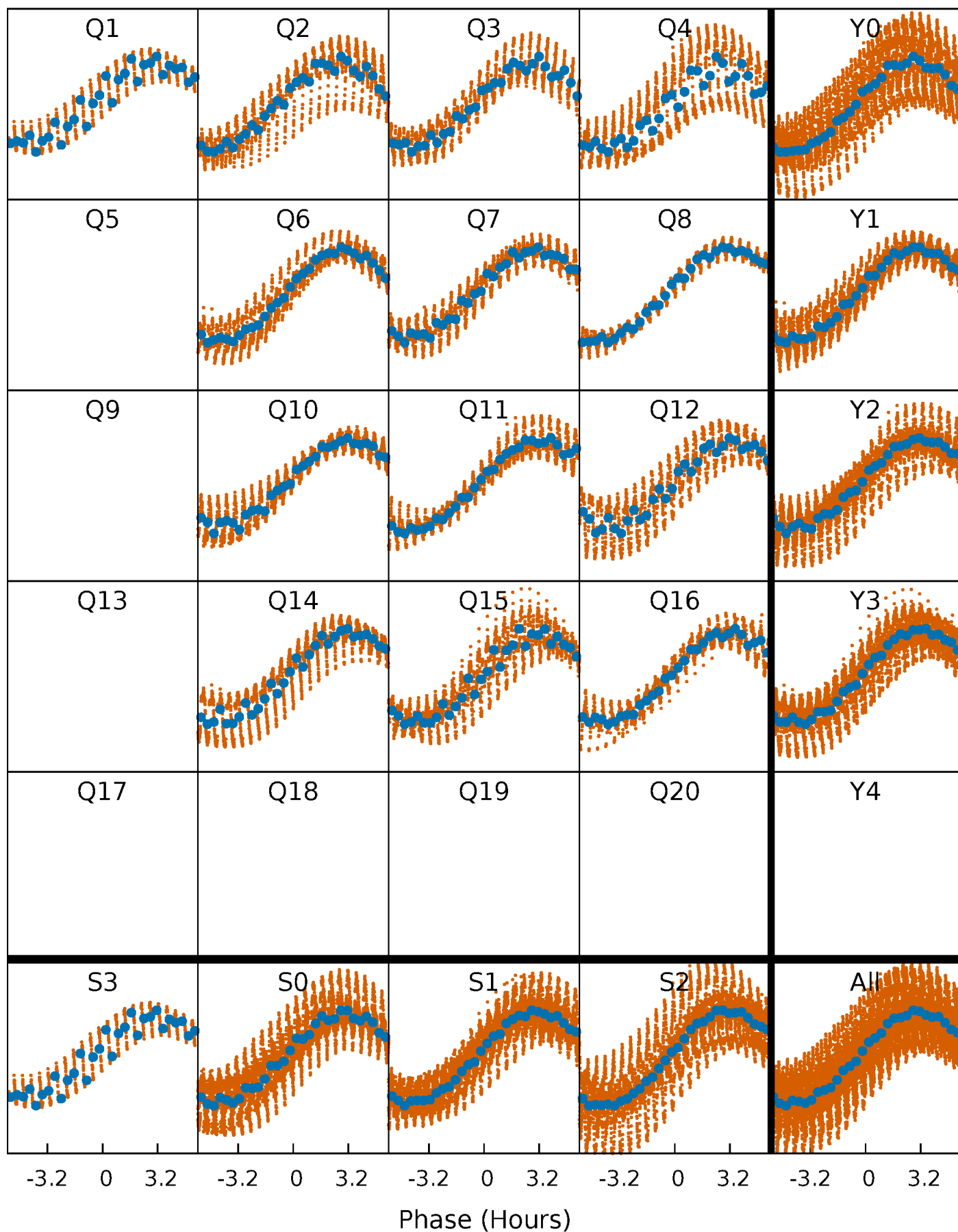


Planet 5 : Phased Whitened Flux Time Series (Fit Epoch/Period)



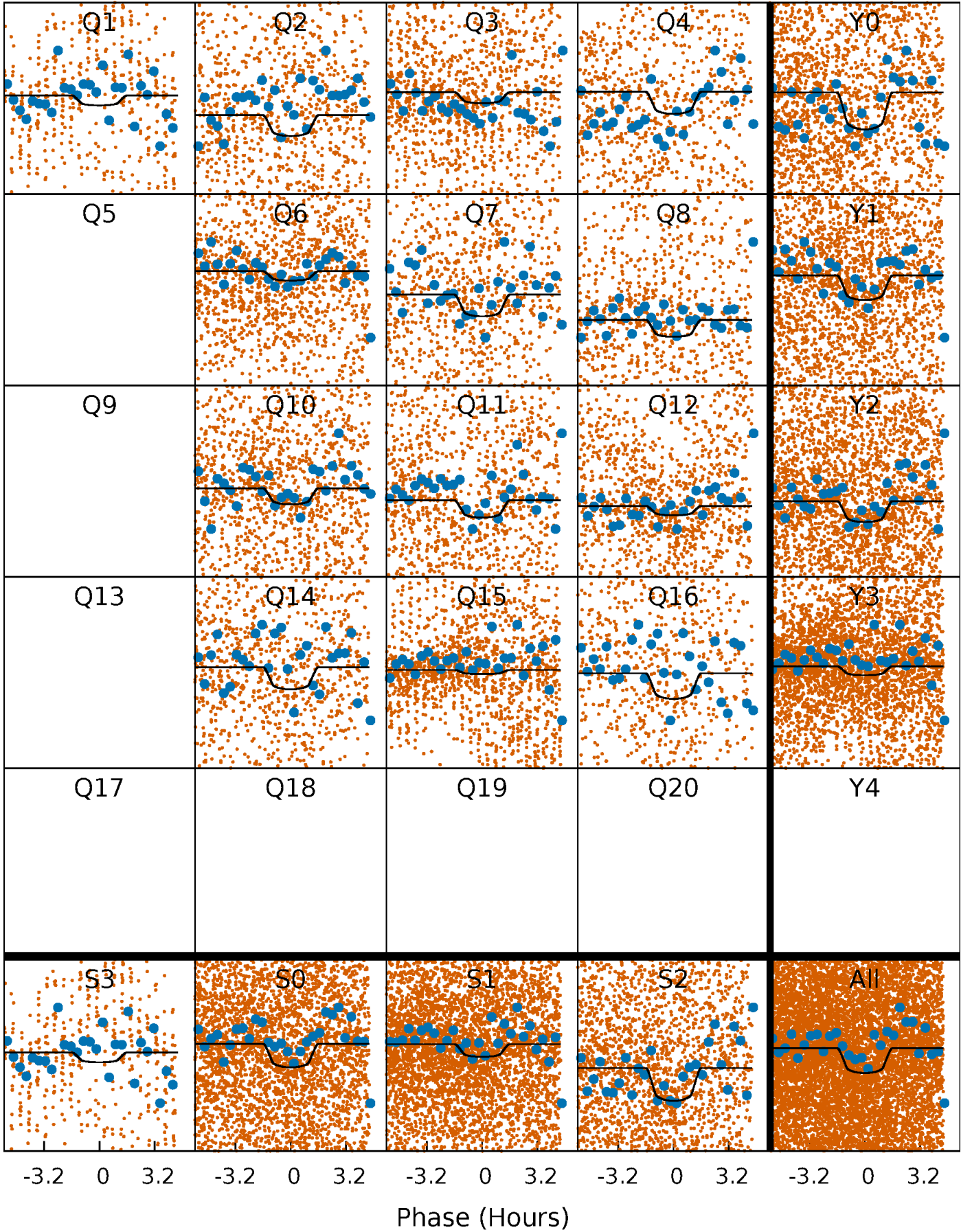
PDC Quarter-Phased Transit Curves

TCE 005254896-05 P= 1.184905 Days $T_0=131.747274$ (BKJD)



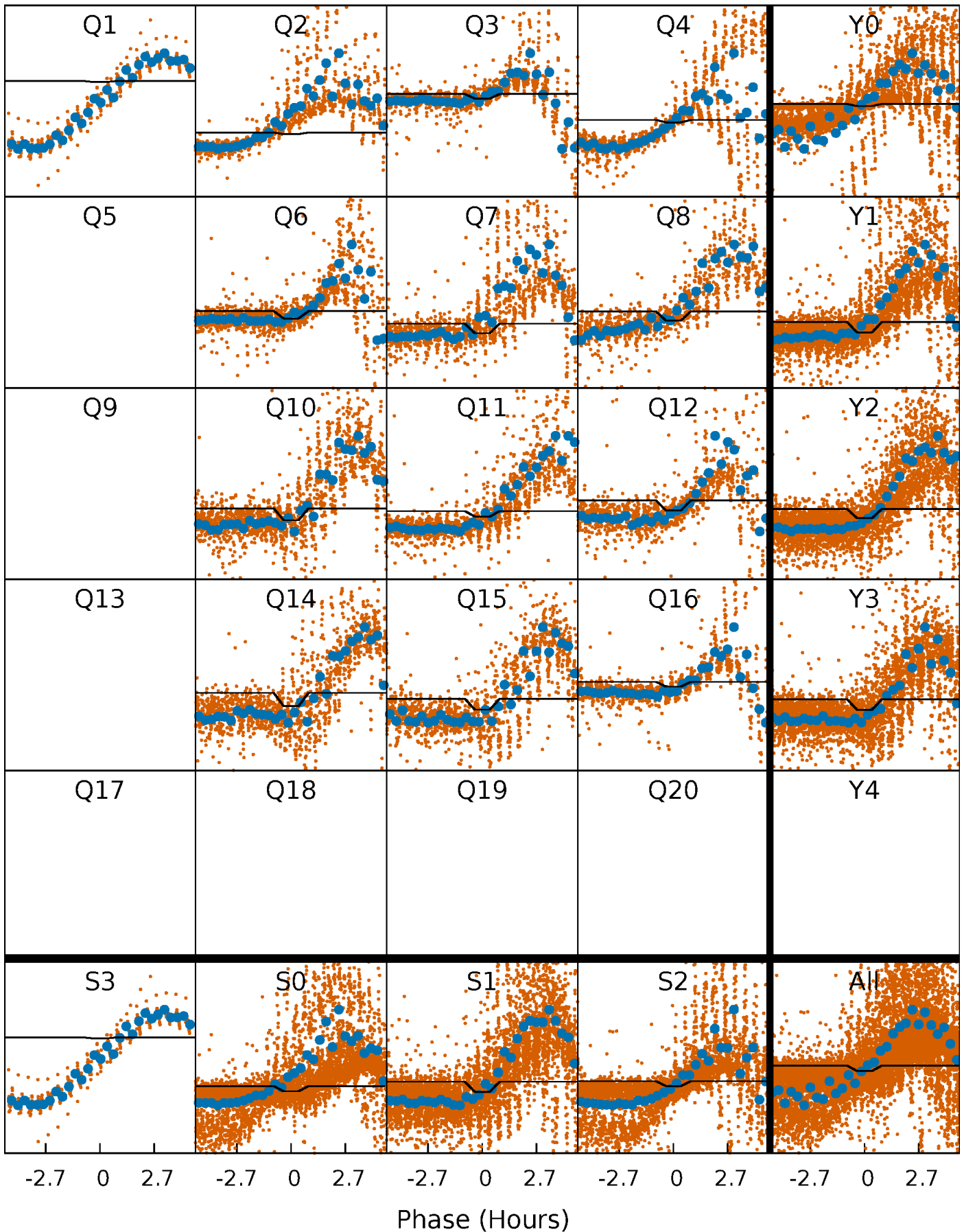
DV Quarter-Phased Transit Curves

TCE 005254896-05 P= 1.184905 Days $T_0=131.747274$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

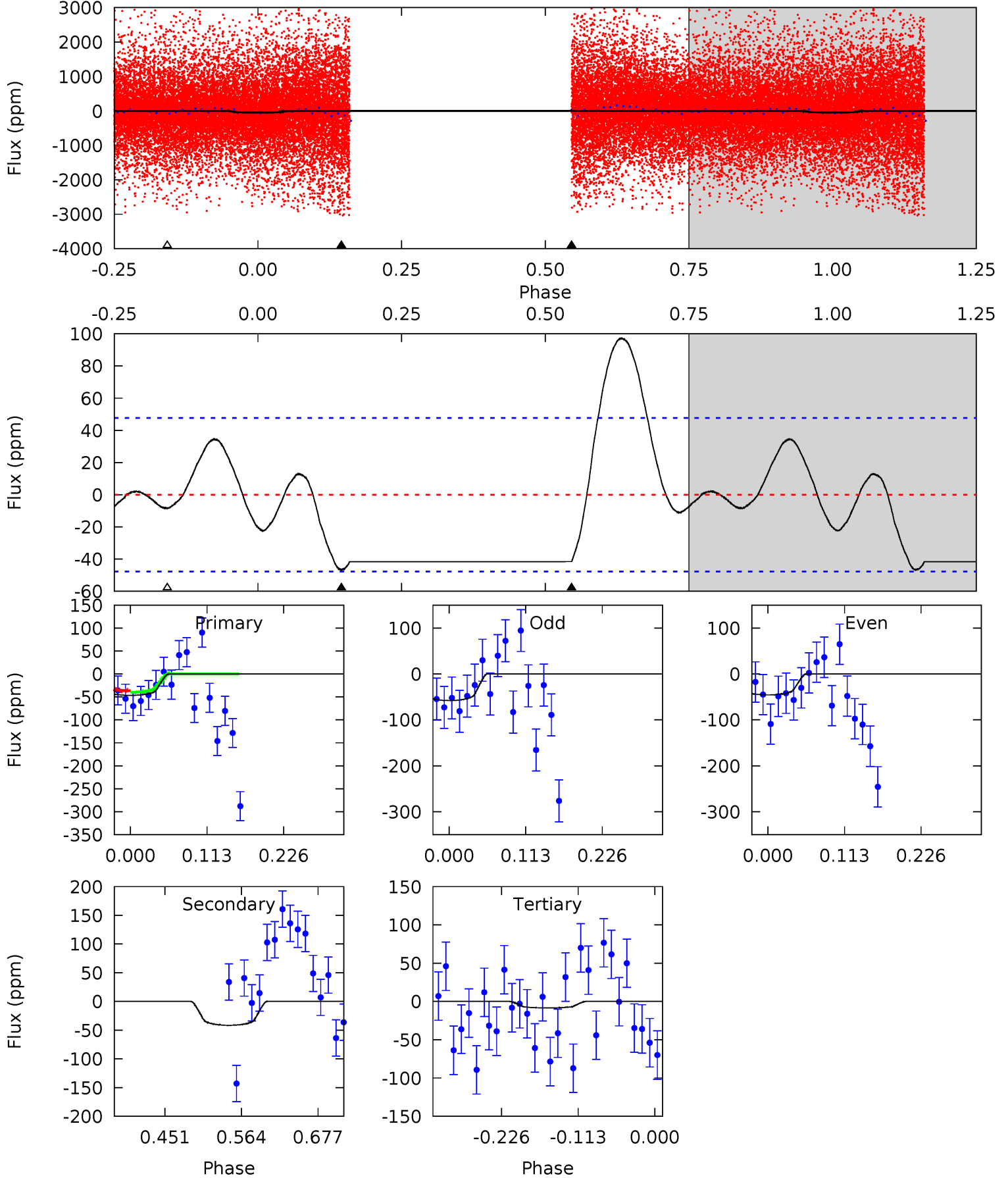
TCE 005254896-05 $P = 1.184888$ Days $T_0 = 131.702984$ (BKJD)



DV Model-Shift Uniqueness Test

005254896-05, P = 1.184905 Days, E = 130.562369 Days

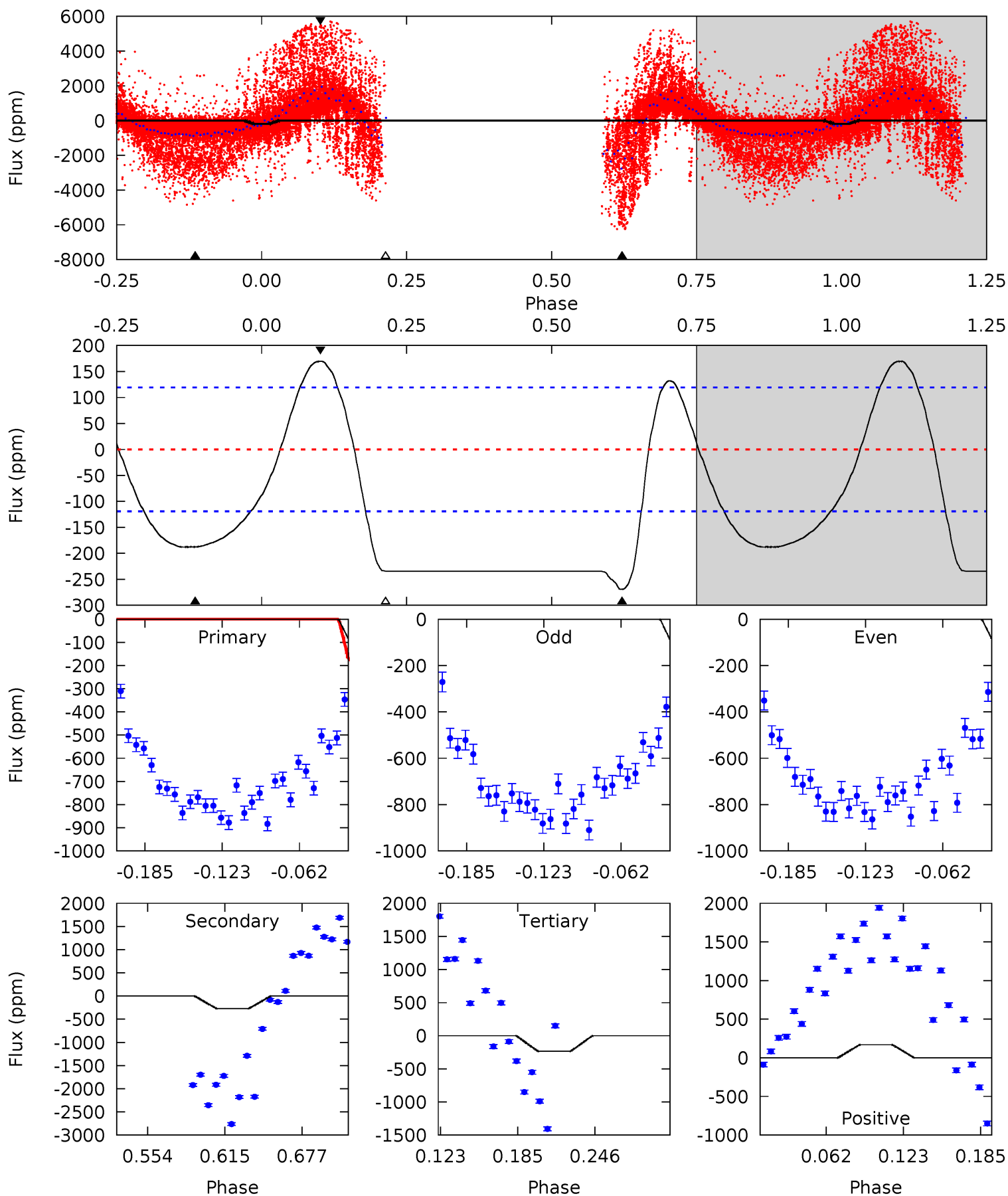
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
4.43	3.96	0.80	0	4.54	1.59	1.98	3.63	4.43	3.16	3.96	0.59	0.26	0.68	0.15



Alt Model-Shift Uniqueness Test

005254896-05, P = 1.184888 Days, E = 130.518096 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
7.35	10.5	9.17	6.64	4.67	1.87	4.40	-1.82	0.71	1.36	3.89	0.16	0.65	0.39	5.92



Stellar Parameters For KIC 005254896

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	M (M_{\odot})	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	5930^{+177}_{-159}	$4.068^{+0.406}_{-0.174}$	$-0.480^{+0.300}_{-0.250}$	$1.444^{+0.388}_{-0.582}$	$0.891^{+0.114}_{-0.091}$	$0.416^{+1.241}_{-0.202}$
	+3%/-3%	+10%/-4%	+62%/-52%	+27%/-40%	+13%/-10%	+298%/-49%
Source	PHO1	KIC0	KIC0	DSEP		

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

Secondary Eclipse Parameters for KIC 005254896-05 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-42 ± 11	$1.74^{+0.51}_{-0.50}$	2995^{+246}_{-316}	4513^{+611}_{-460}	$3.417^{+3.383}_{-1.595}$
Alt.	-269 ± 26	$2.40^{+0.64}_{-0.58}$	2986^{+249}_{-337}	5995^{+634}_{-486}	12^{+8}_{-4}

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

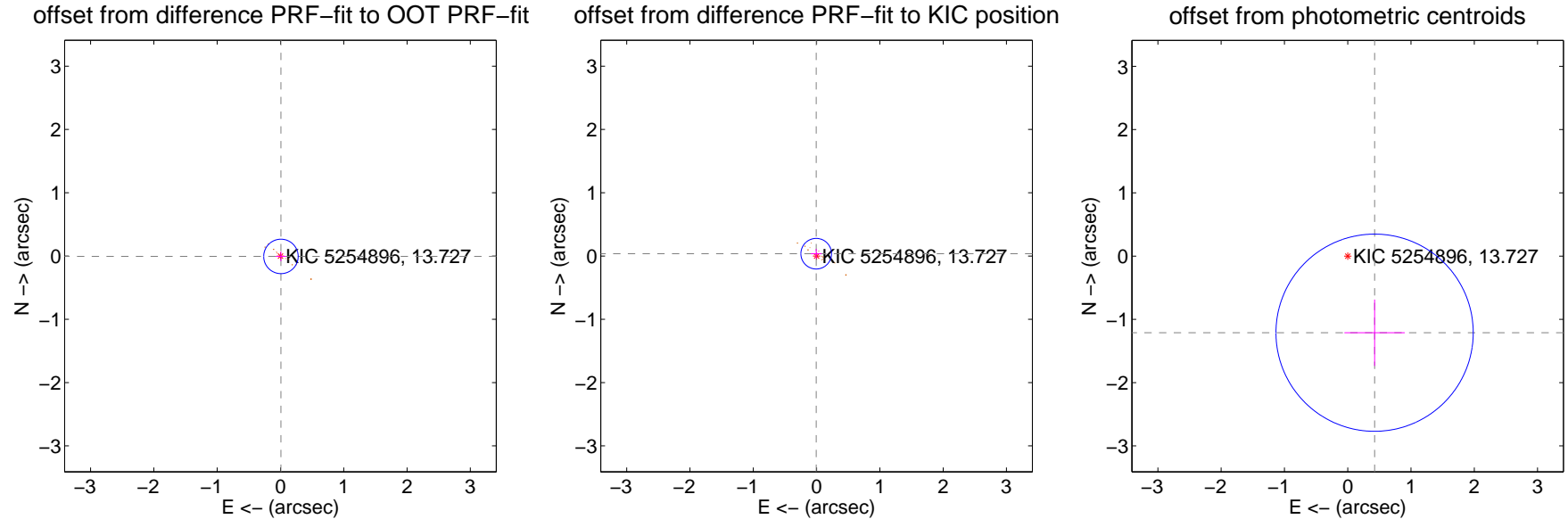
DV Centroid Data

Supplemental centroid analysis for 005254896-05. Kepler magnitude: 13.73. Transit SNR 9.26

There are 0 quarters with good PRF difference image offsets

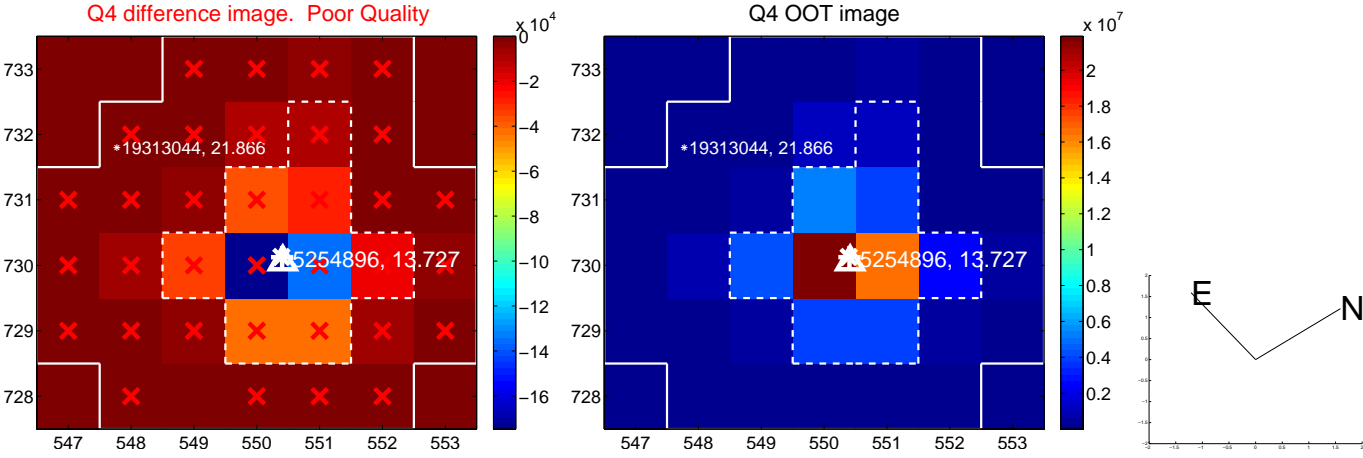
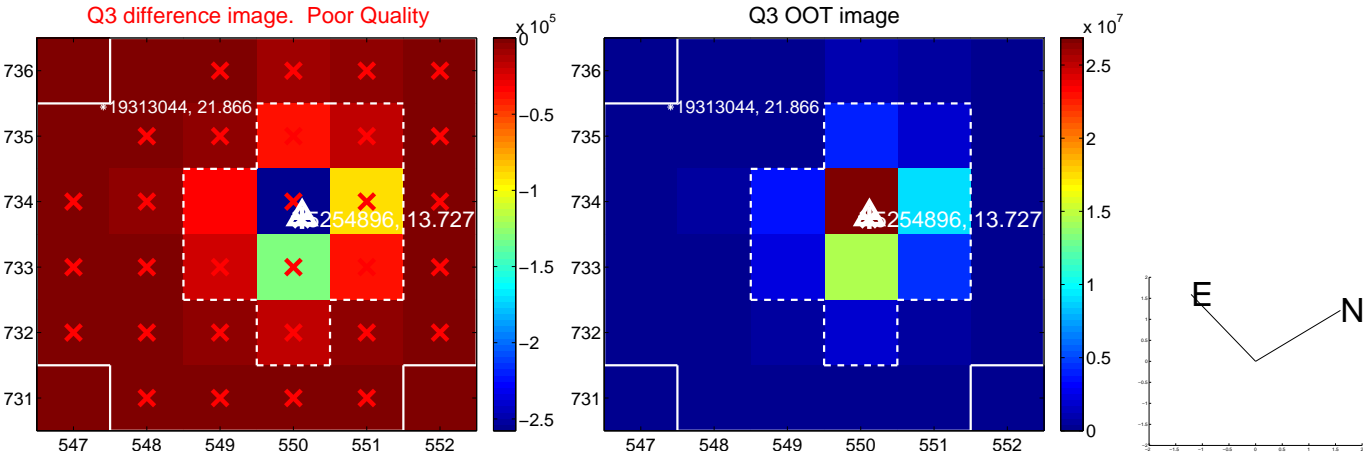
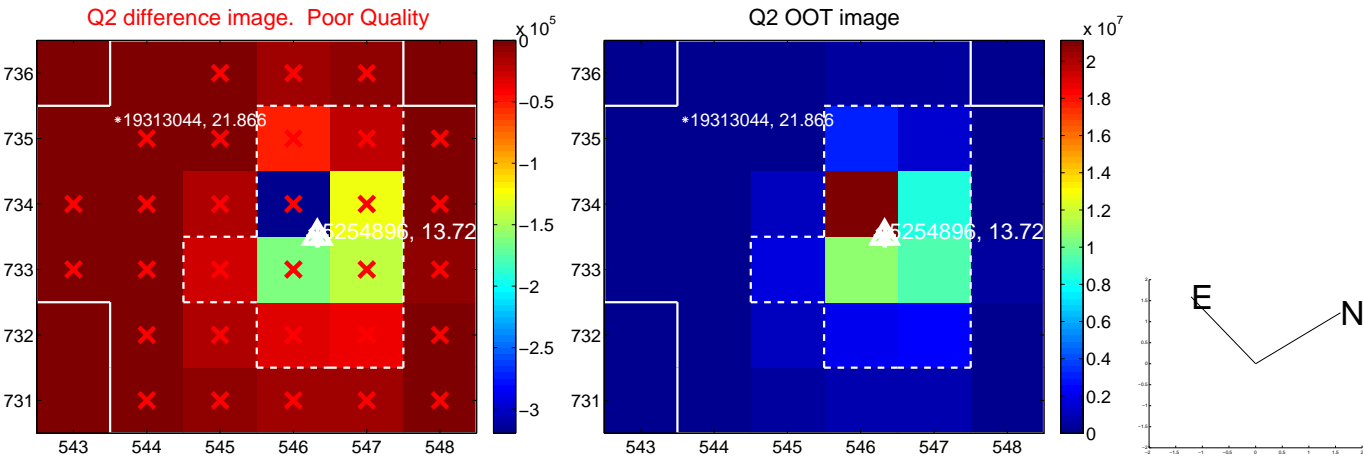
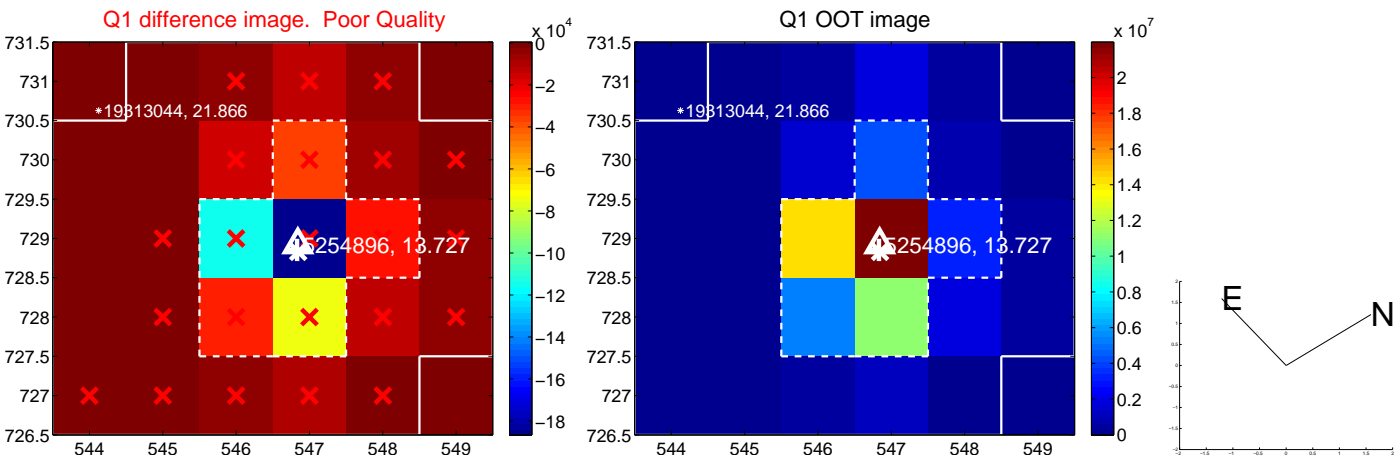
The direct PRF centroid is offset from the target star catalog position by about 0.03 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.010 ± 0.091	0.11	-0.008 ± 0.083	-0.006 ± 0.076
PRF-fit source offset from KIC position	0.037 ± 0.081	0.46	0.006 ± 0.085	0.037 ± 0.077
photometric centroid source offset	1.28 ± 0.52	2.47	-0.42 ± 0.48	-1.21 ± 0.52

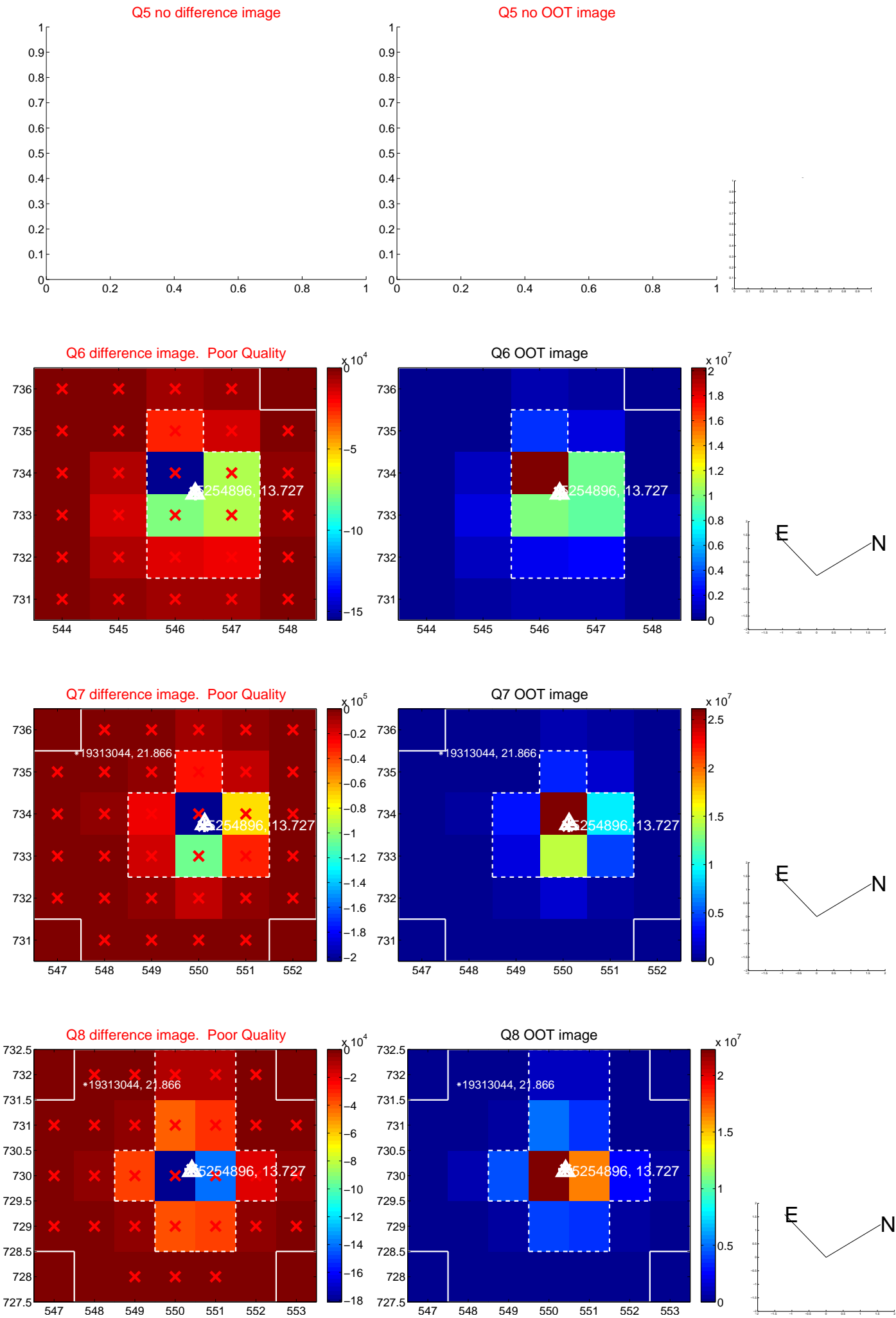


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

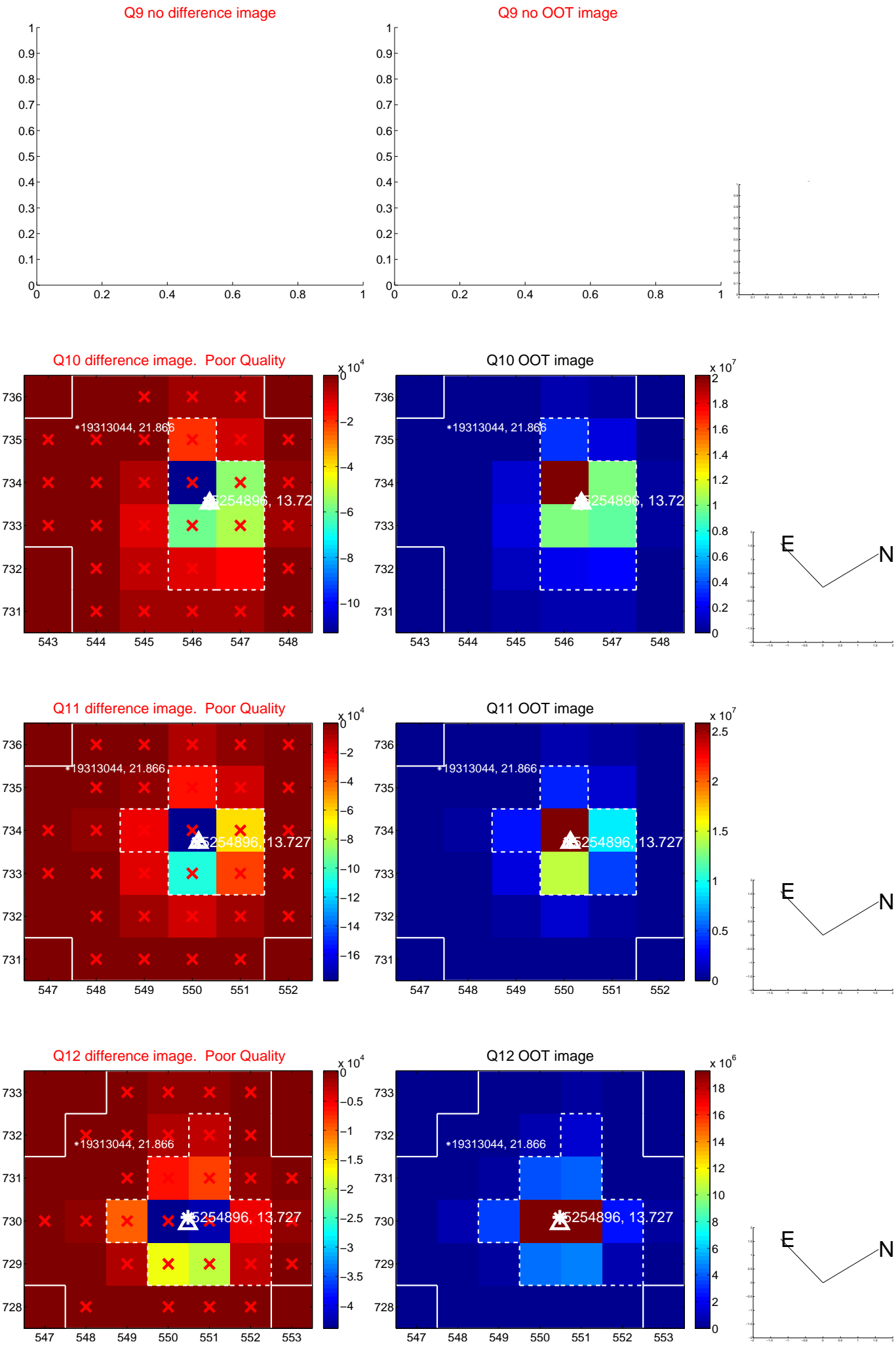
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



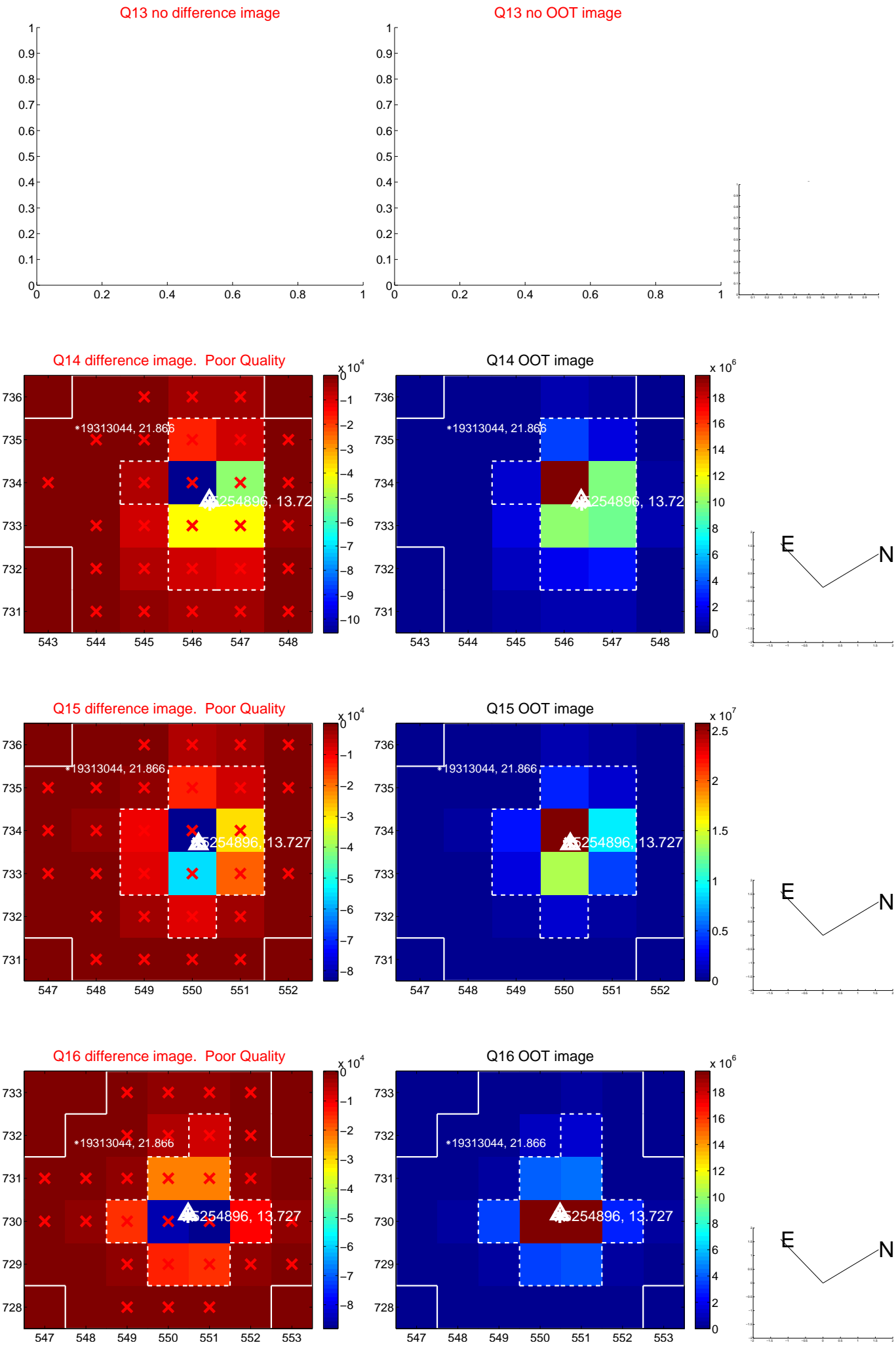
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



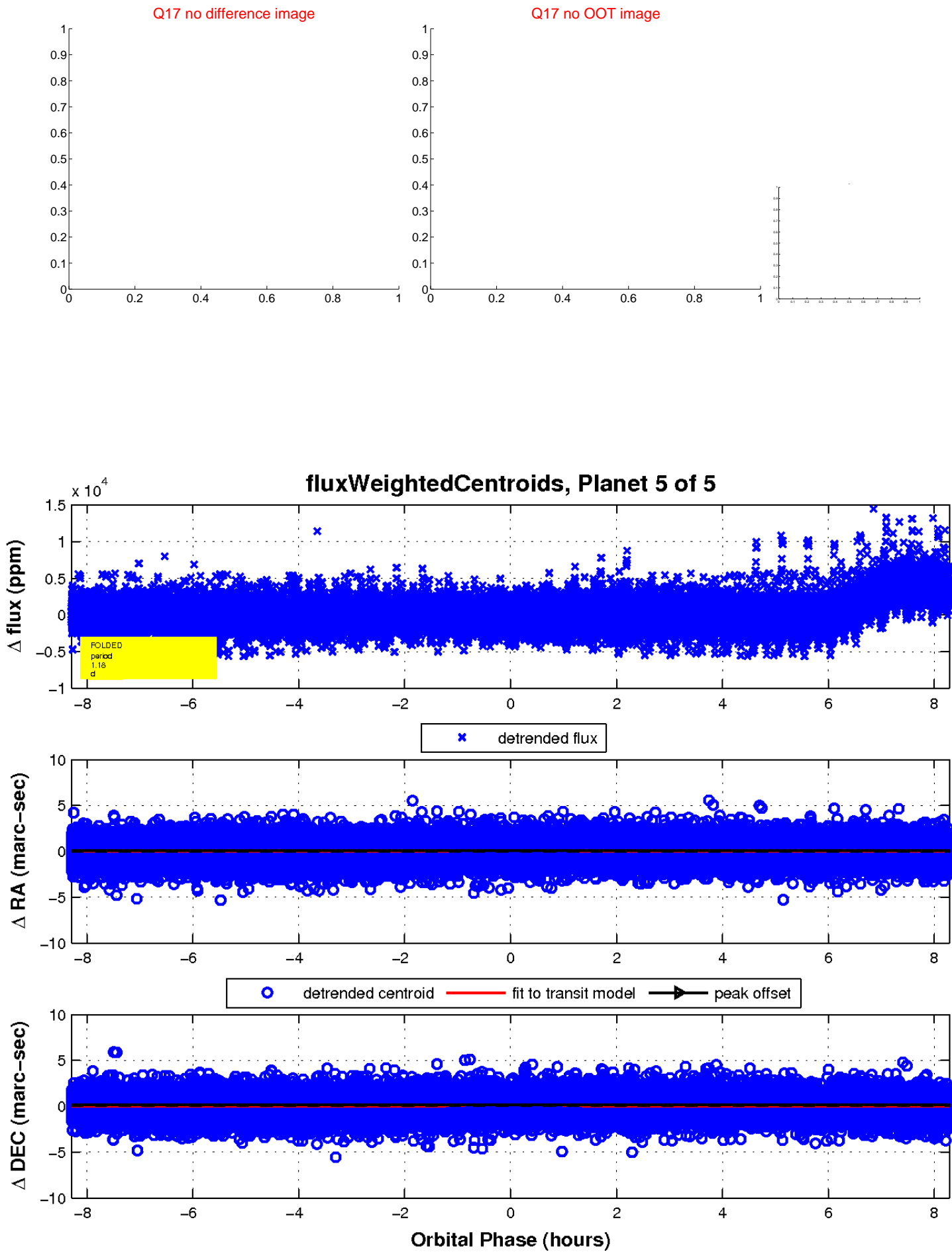
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

