

KIC 008505554

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})
008505554-01	OBS	No	2.853090	132.692487	23.7	19.730	8.5	10.6	1.12	6488	0.58	1185.03
008505554-02	OBS	No	211.021904	248.424420	194.0	15.167	12.9	10.6	1.12	6488	1.70	3.82
008505554-03	OBS	No	71.711636	150.106040	88.3	15.824	9.7	4.9	1.12	6488	1.19	16.09
008505554-04	OBS	No	35.010934	161.008632	71.7	9.062	9.6	5.8	1.12	6488	1.06	41.87
008505554-05	OBS	No	63.035047	142.876444	147.5	6.845	10.6	9.1	1.12	6488	1.71	19.11

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
008505554-01	OBS	FP	0.00	1	0	0	0	LPP_DV
008505554-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—INCONSISTENT_TRANS—CENT_FEW_DIFFS
008505554-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_POS_ALT
008505554-04	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_POS_ALT
008505554-05	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—CENT_FEW_MEAS

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

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

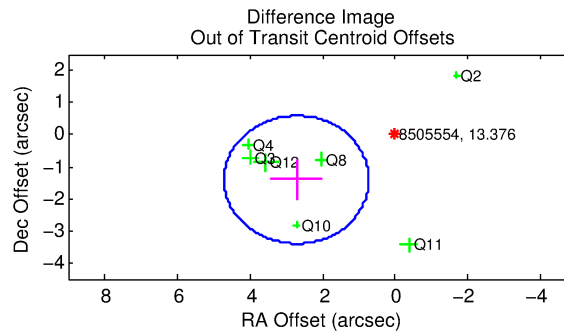
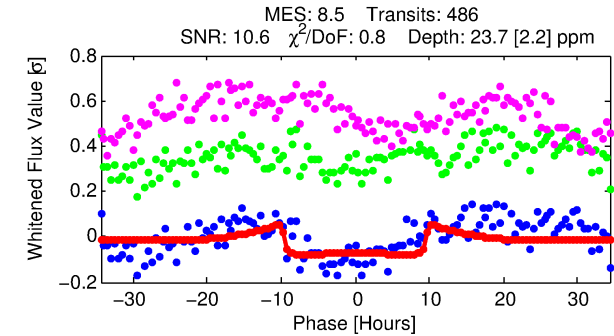
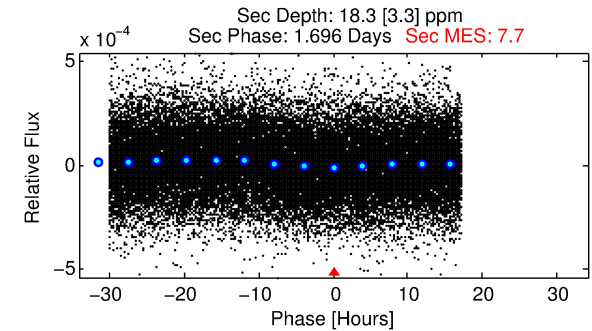
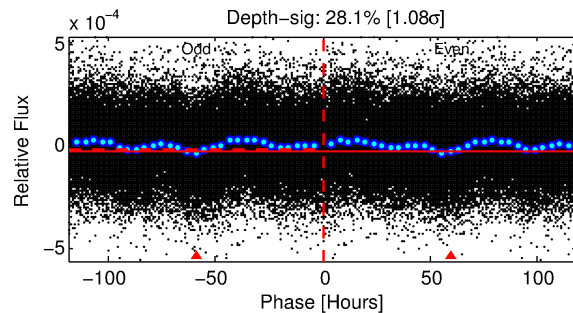
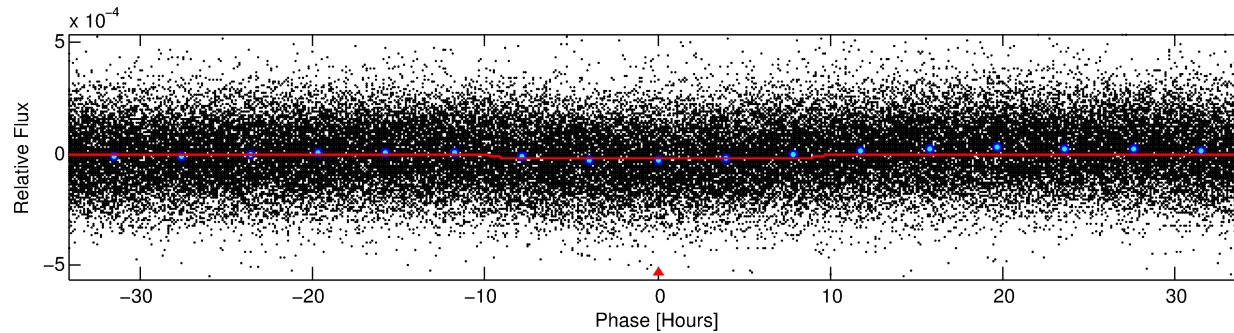
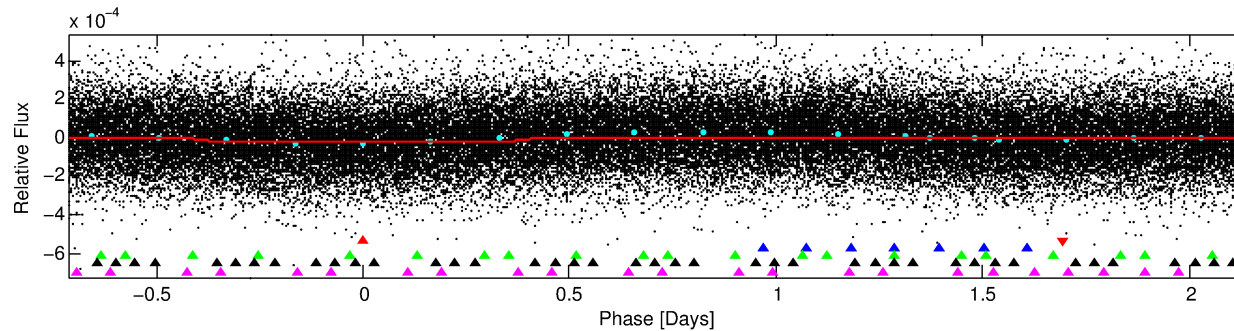
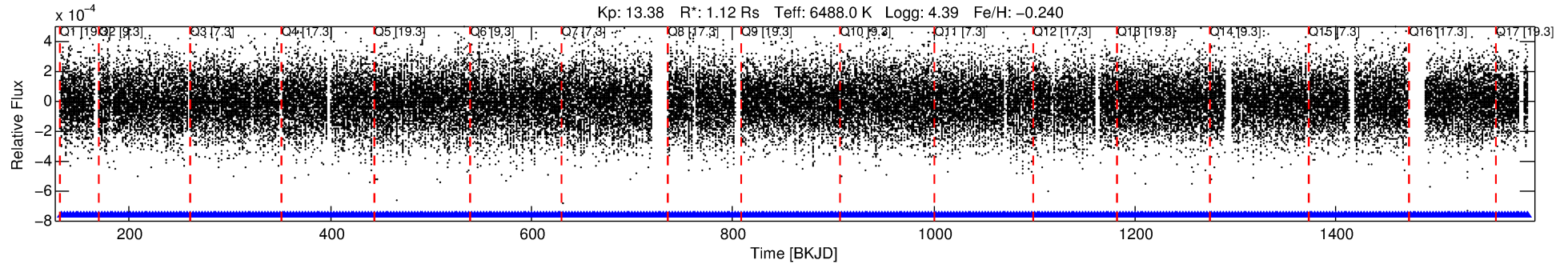
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 008505554-01

No Significant Match Found

DV One-Page Summary

KIC: 8505554 Candidate: 1 of 5 Period: 2.853 d



DV Fit Results:

Period = 2.85309 [0.00004] d
Epoch = 132.6925 [0.0079] BKJD
Rp/R* = 0.0047 [0.0016]
a/R* = 1.16 [0.57]
b = 0.68 [1.54]
Seff = 1185.03 [484.47]
Teq = 1496 [153] K
Rp = 0.58 [0.28] Re
a = 0.0410 [0.0112] AU
Ag = 50.36 [41.05] [1.20 σ]
Teffp = 6162 [1118] K [4.14 σ]

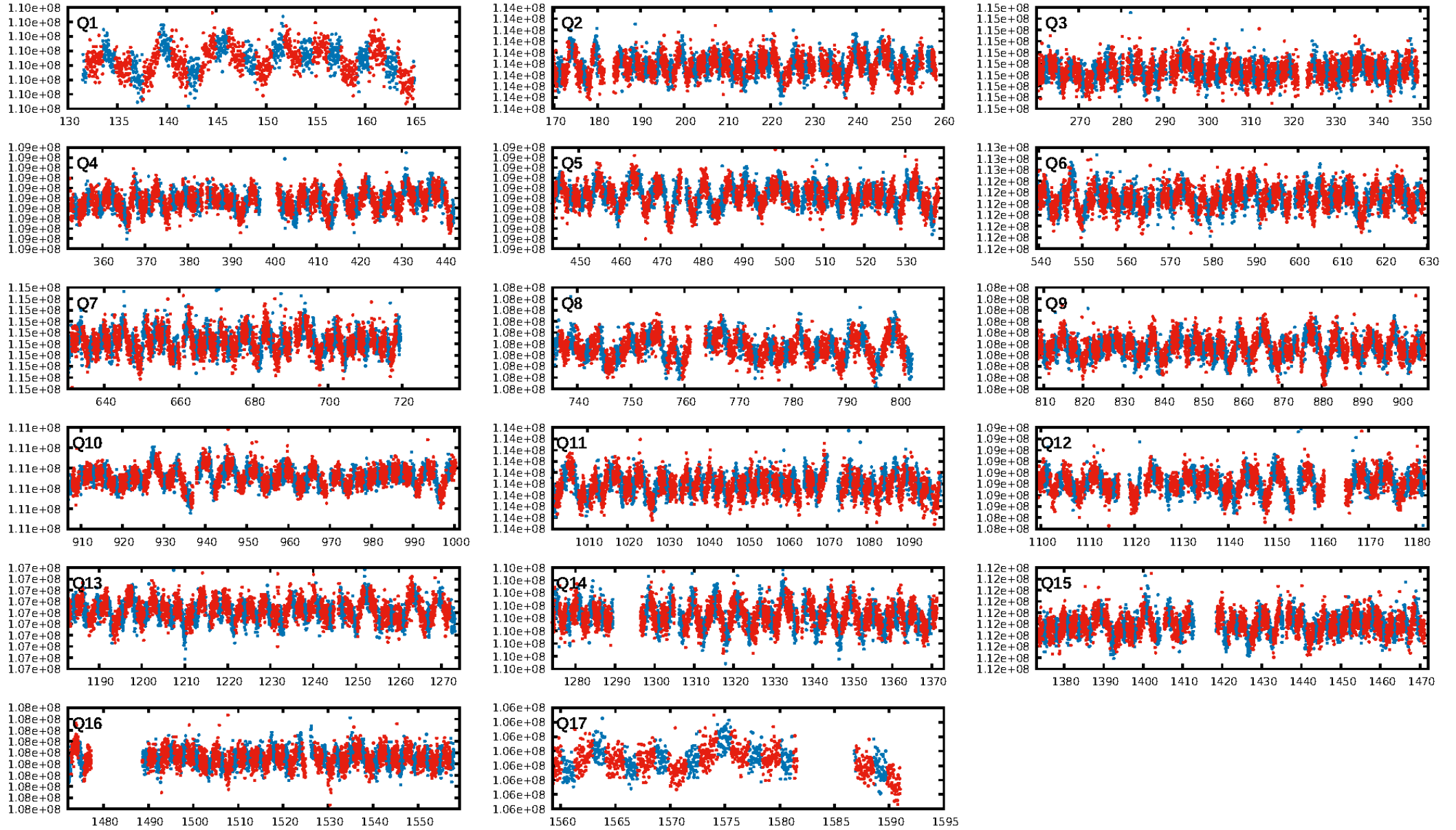
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: 100.0% [35.55 σ]
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 5.55e-07
RollingBand-fgt: 1.00 [464/464]
GhostDiagnostic-chr: 1.047
Centroid-sig: N/A
Centroid-so: N/A
OotOffset-rm: 3.061 arcsec [4.61 σ]
KicOffset-rm: 2.859 arcsec [3.30 σ]
OotOffset-st: 2/2/3/0 [7]
KicOffset-st: 2/2/3/0 [7]
DiffImageQuality-fgm: 0.43 [3/7]
DiffImageOverlap-fno: 1.00 [17/17]

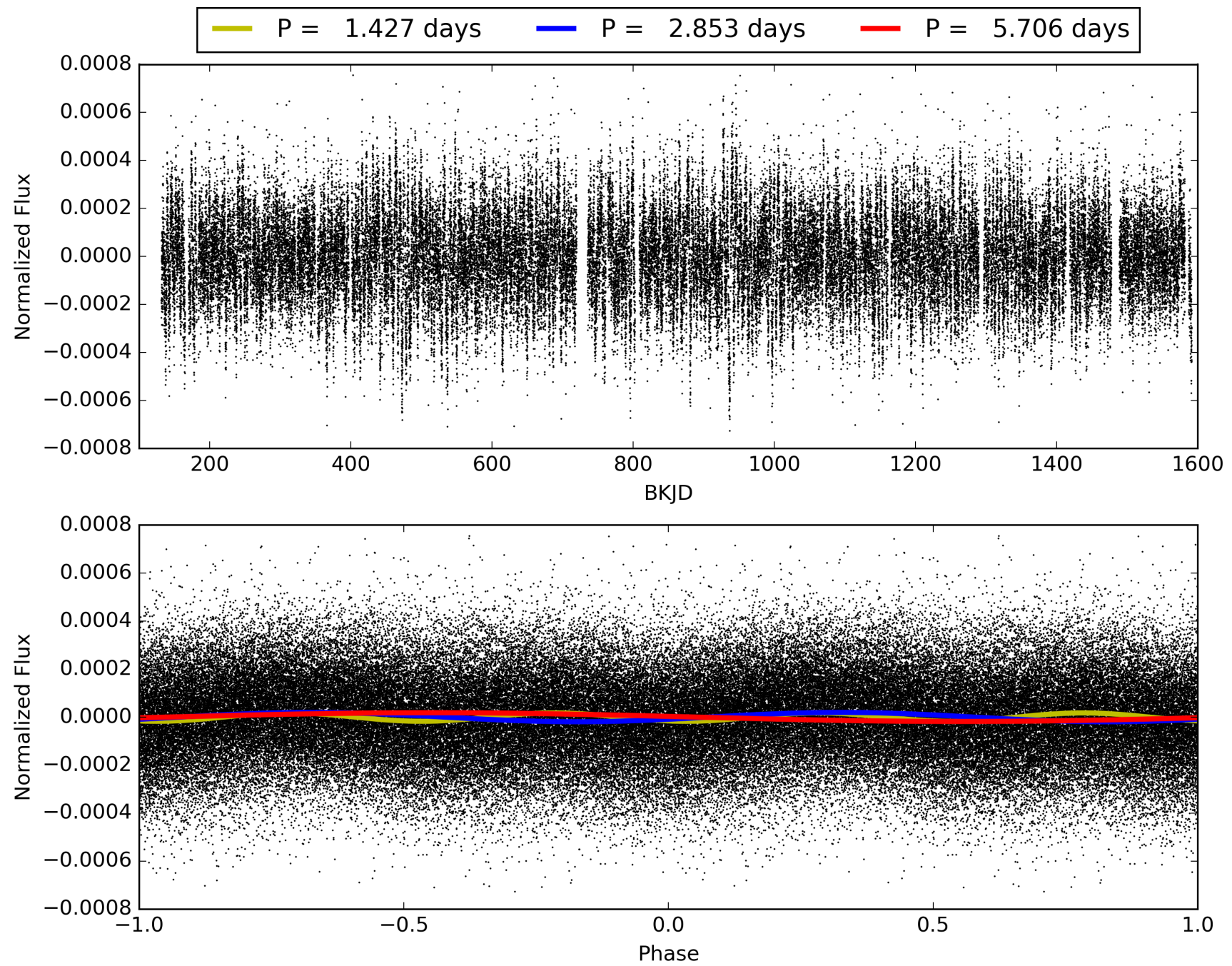
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 31-Jan-2016 14:09:28 Z

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

TCE 008505554-01, PDC Light Curves

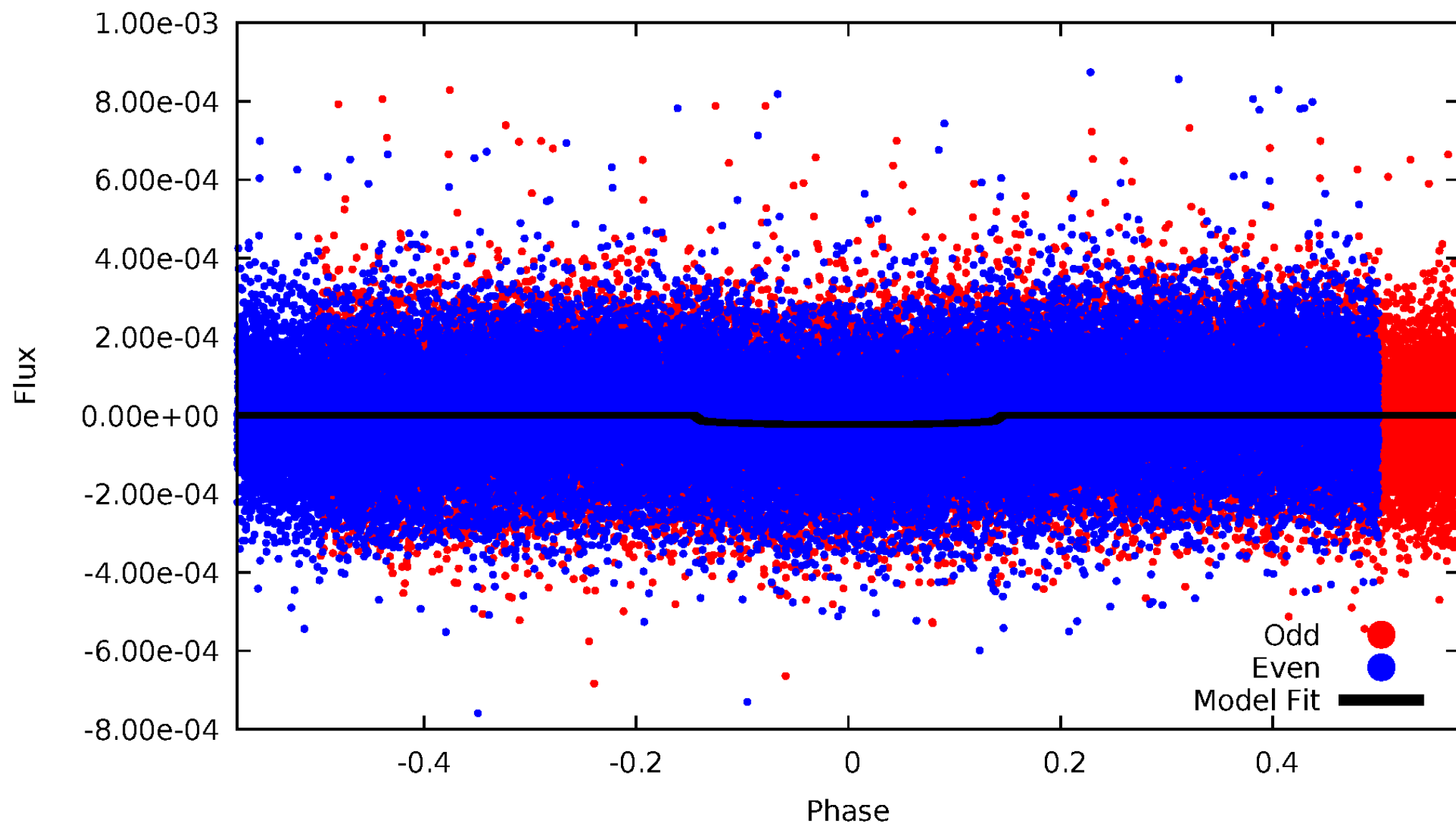


TCE 008505554-01



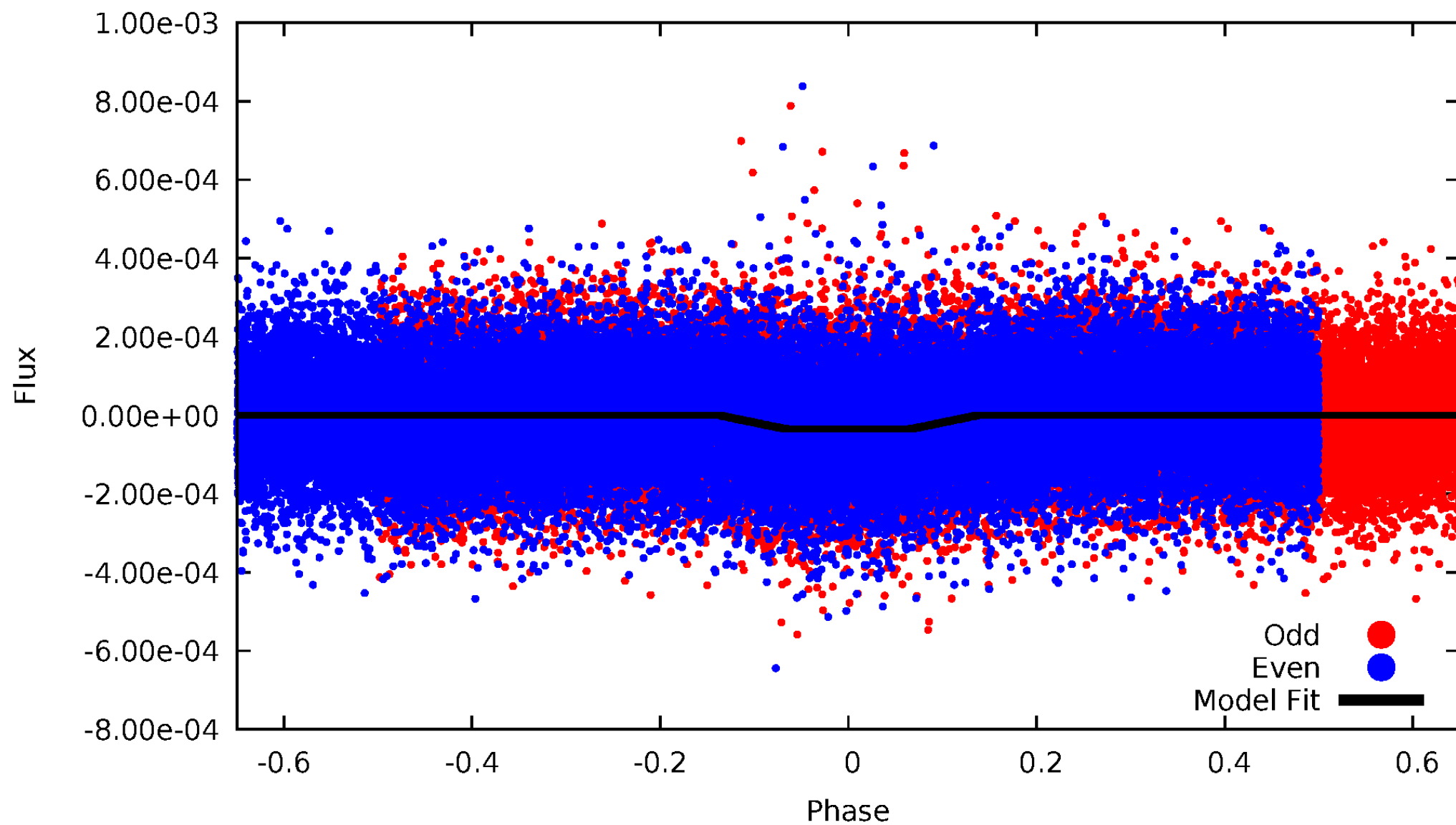
DV Odd/Even

TCE 008505554-01

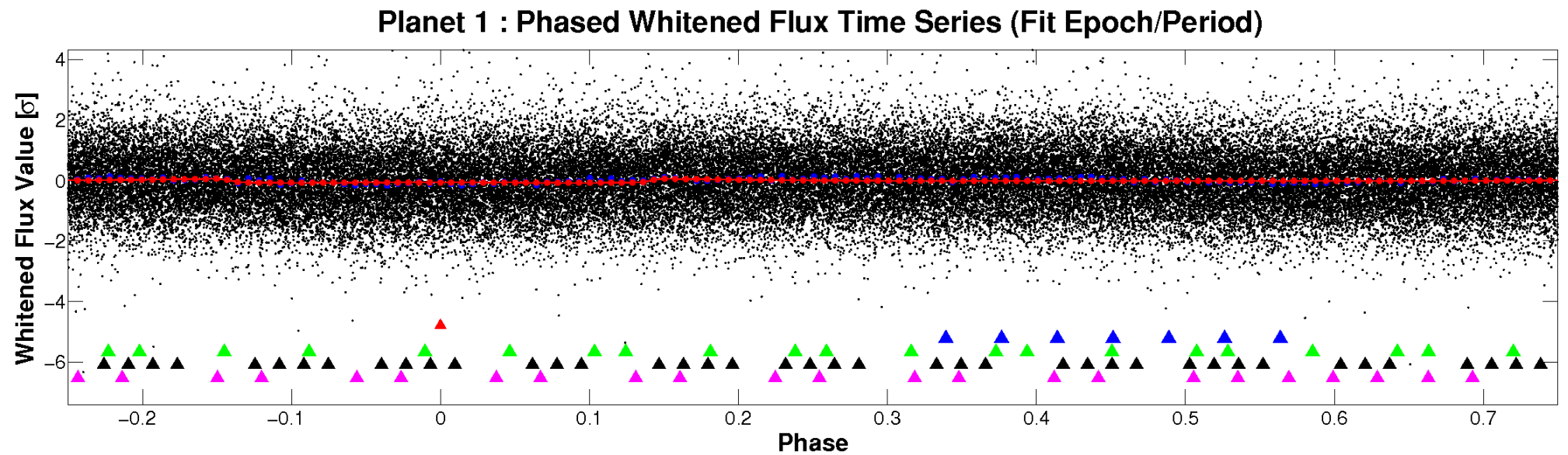
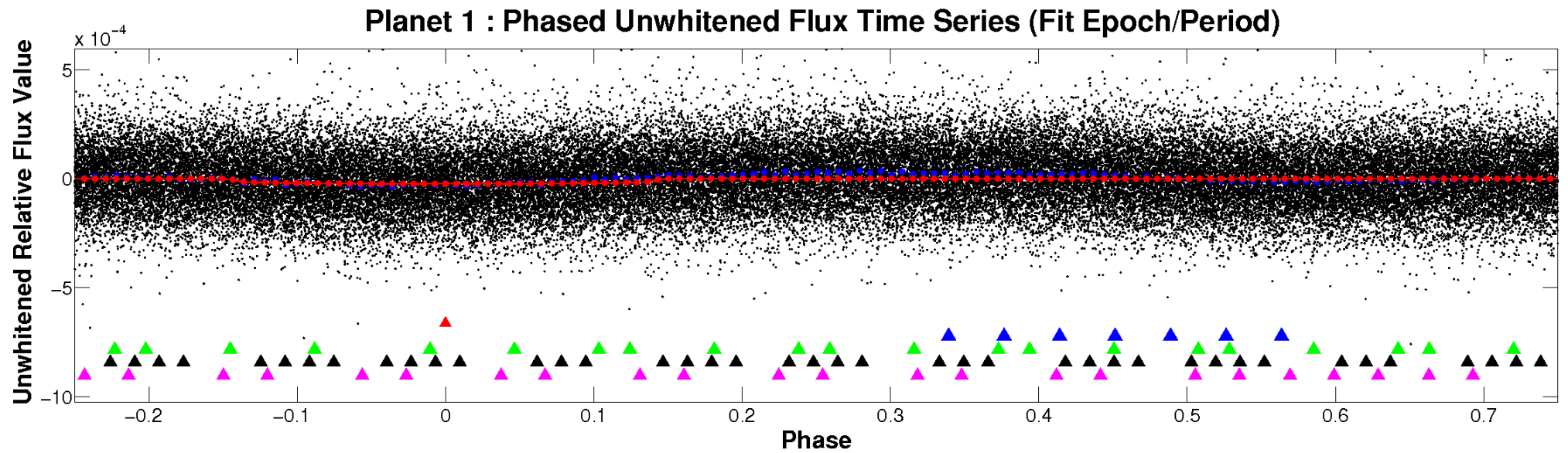


ALT Odd/Even

TCE 008505554-01

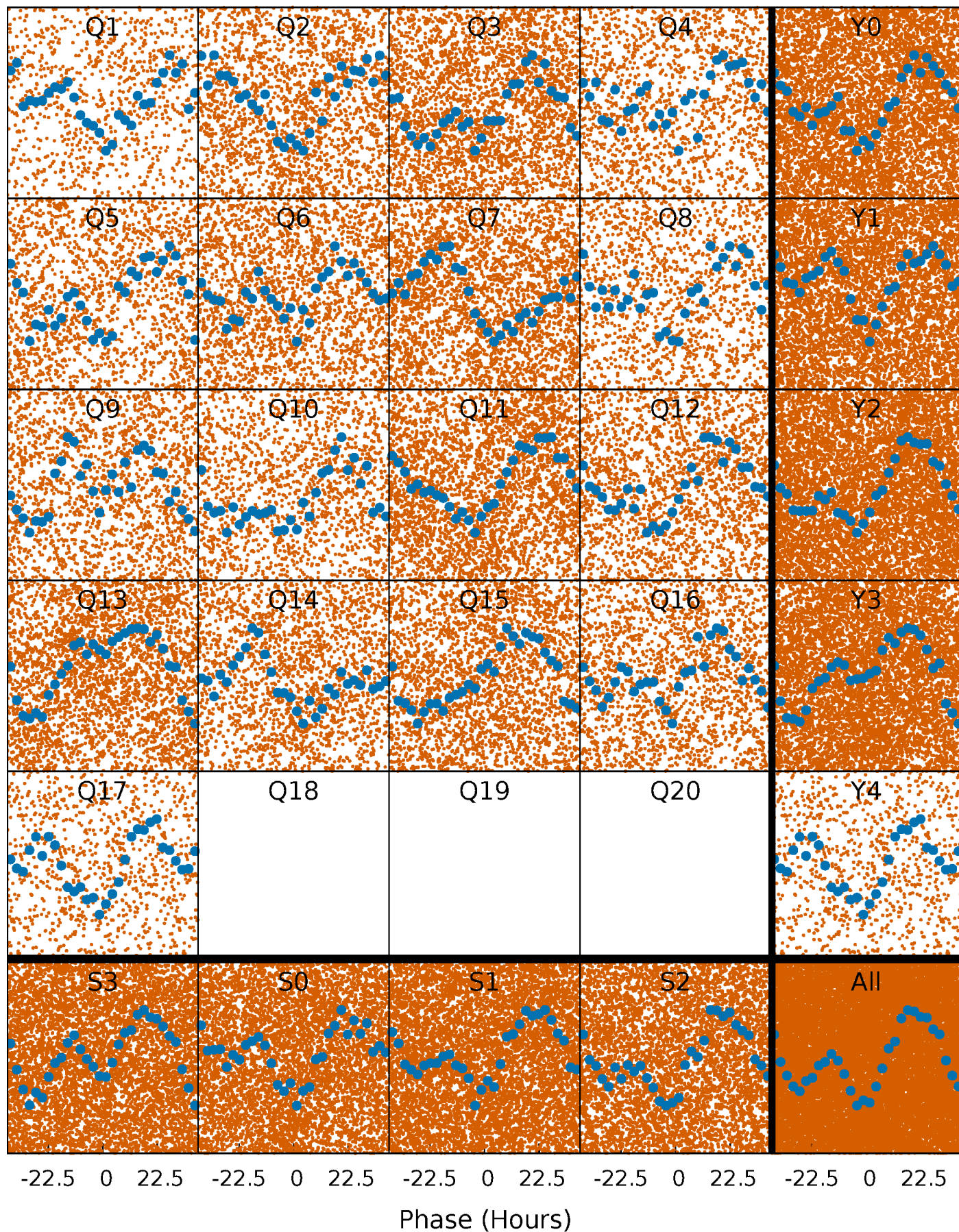


Non-Whitened Vs. Whitened Light Curve



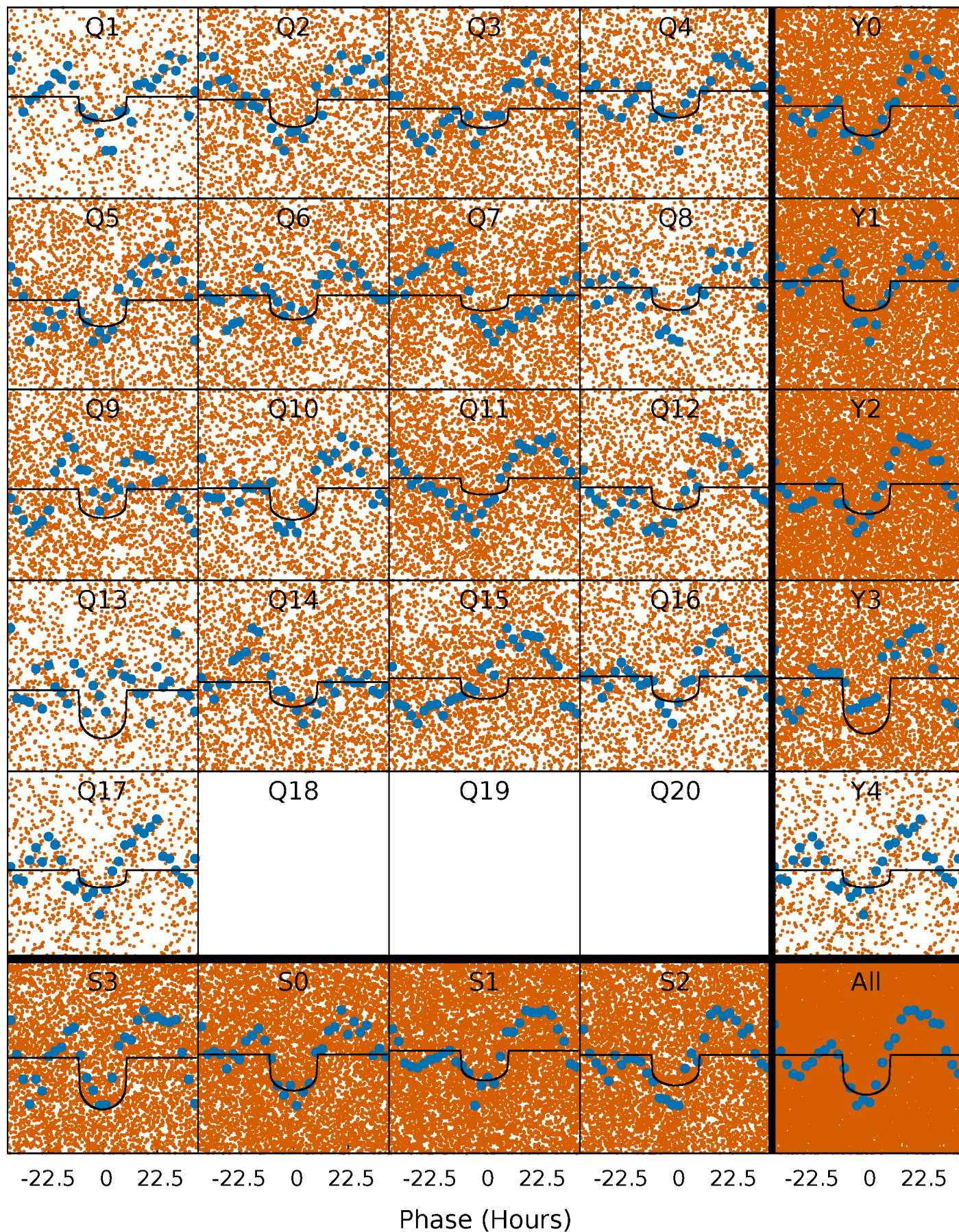
PDC Quarter-Phased Transit Curves

TCE 008505554-01 P= 2.853090 Days $T_0=132.692487$ (BKJD)



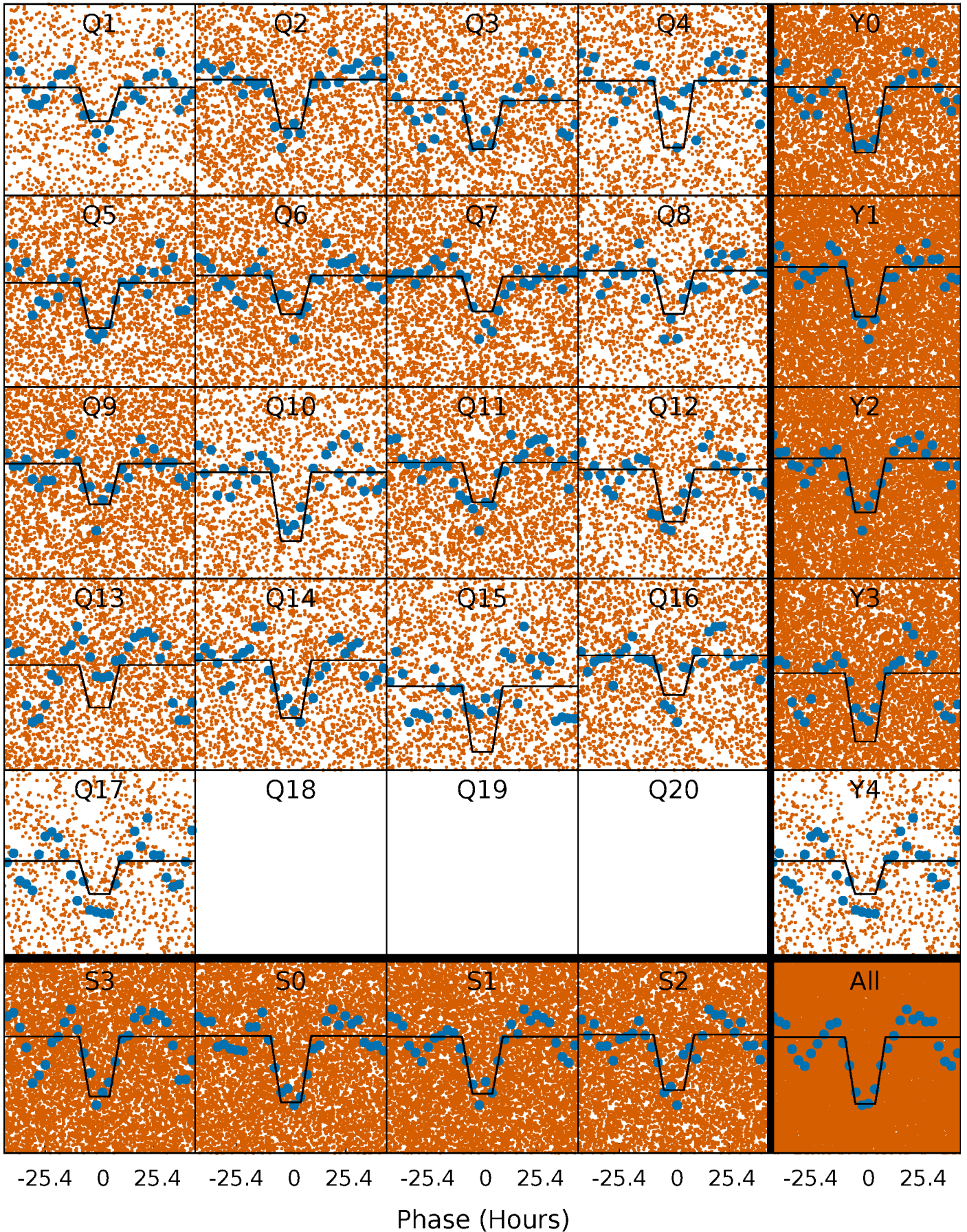
DV Quarter-Phased Transit Curves

TCE 008505554-01 P= 2.853090 Days $T_0=132.692487$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

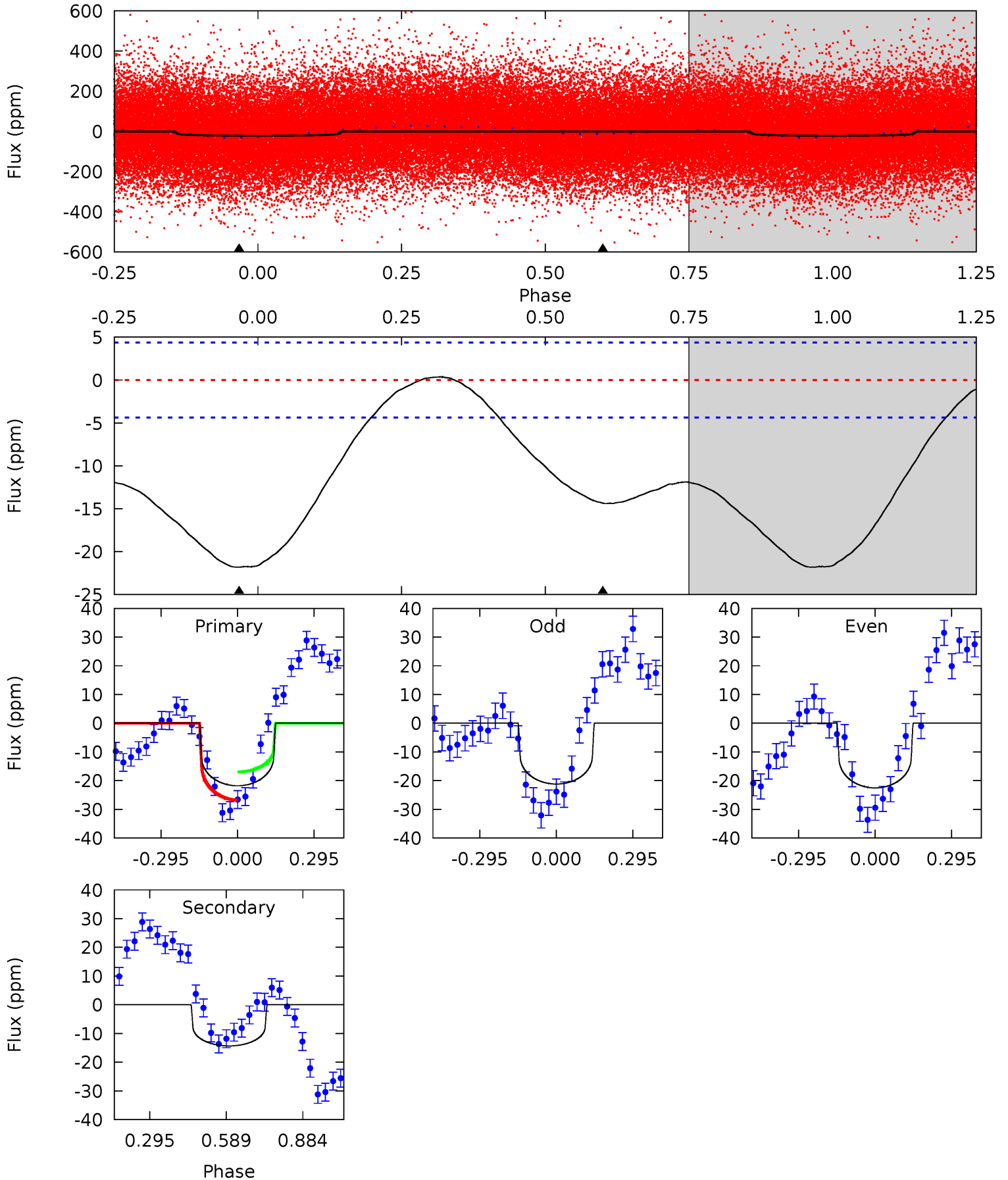
TCE 008505554-01 P= 2.852987 Days $T_0=132.690139$ (BKJD)



DV Model-Shift Uniqueness Test

008505554-01, P = 2.853090 Days, E = 129.839397 Days

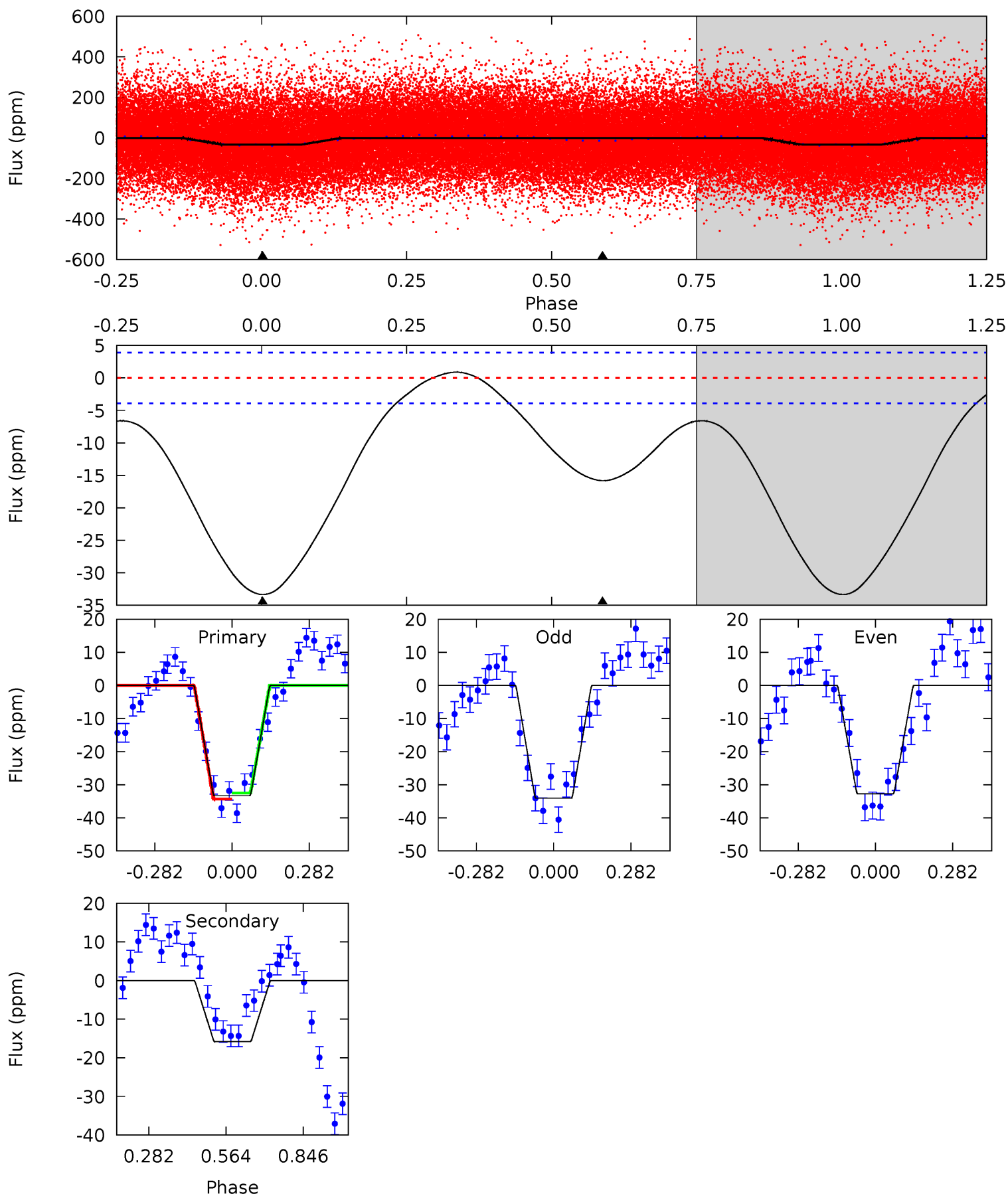
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
21.6	14.2	0	0	4.33	1.05	0.66	21.6	21.6	14.2	14.2	0.67	0.90	0.02	4.94



Alt Model-Shift Uniqueness Test

008505554-01, P = 2.852987 Days, E = 129.837152 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
37.2	17.6	0	0	4.34	1.08	1.34	37.2	37.2	17.6	17.6	0.71	1.04	0.03	0.97



Stellar Parameters For KIC 008505554

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6488^{+146}_{-195}	$4.392^{+0.070}_{-0.210}$	$-0.240^{+0.250}_{-0.300}$	$1.120^{+0.371}_{-0.124}$	$1.127^{+0.170}_{-0.139}$	$1.130^{+0.339}_{-0.620}$
	+2%/-3%	+2%/-5%	+104%/-125%	+33%/-11%	+15%/-12%	+30%/-55%
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 008505554-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-14 ± 1	$0.60^{+0.22}_{-0.23}$	2119^{+154}_{-98}	5776^{+1629}_{-713}	36^{+58}_{-17}
Alt.	-16 ± 1	$0.74^{+0.24}_{-0.21}$	2117^{+165}_{-99}	5355^{+914}_{-585}	26^{+25}_{-11}

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 $A_{obs} \gg 1.0$

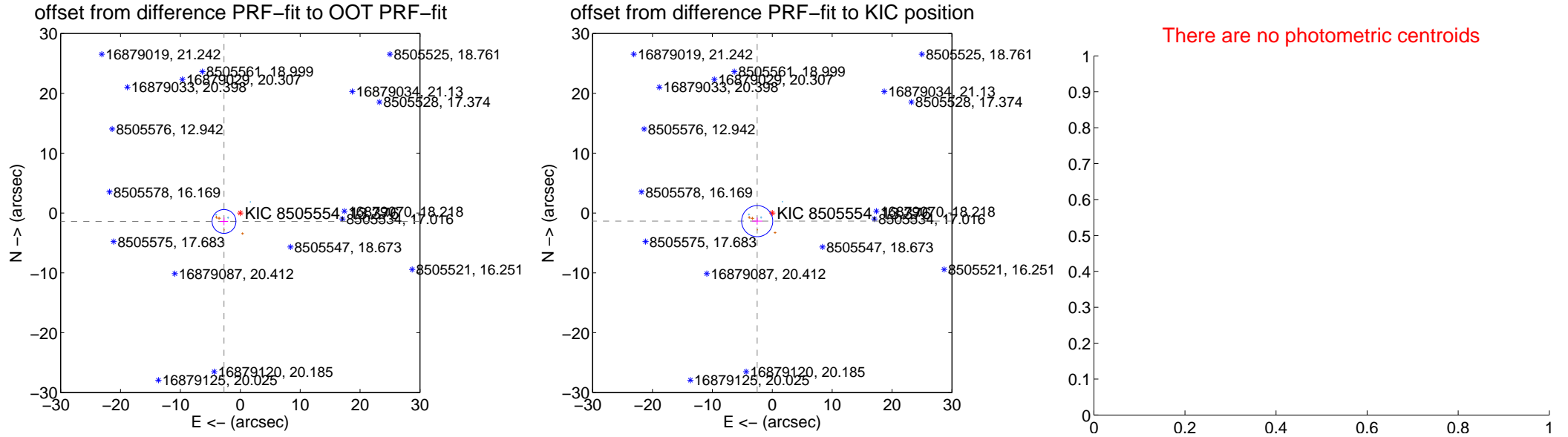
DV Centroid Data

Supplemental centroid analysis for 008505554-01. Kepler magnitude: 13.38. Transit SNR 10.61

There are 3 quarters with good PRF difference image offsets

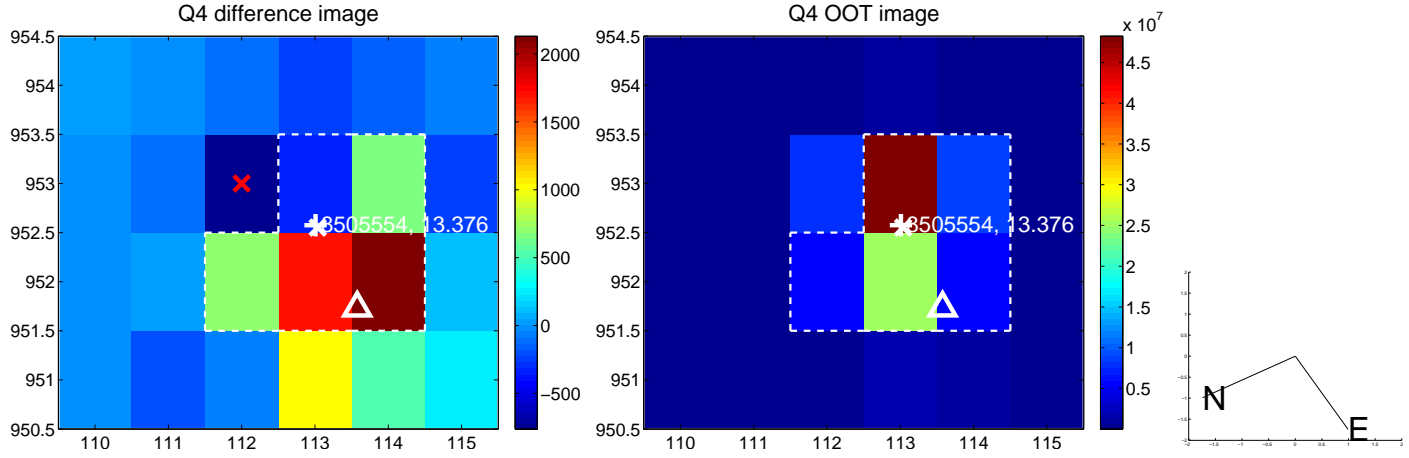
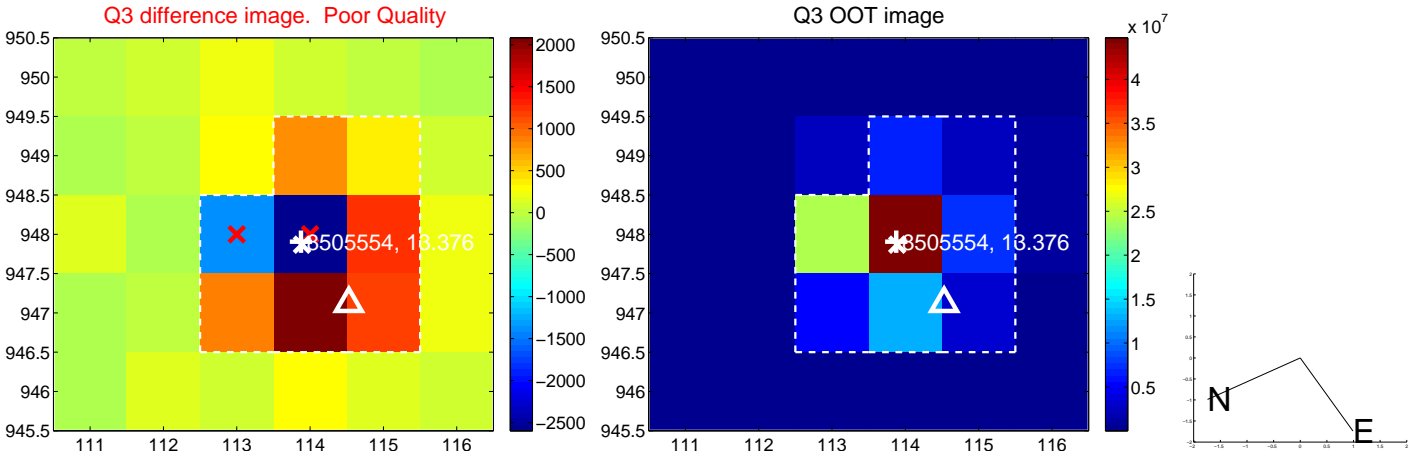
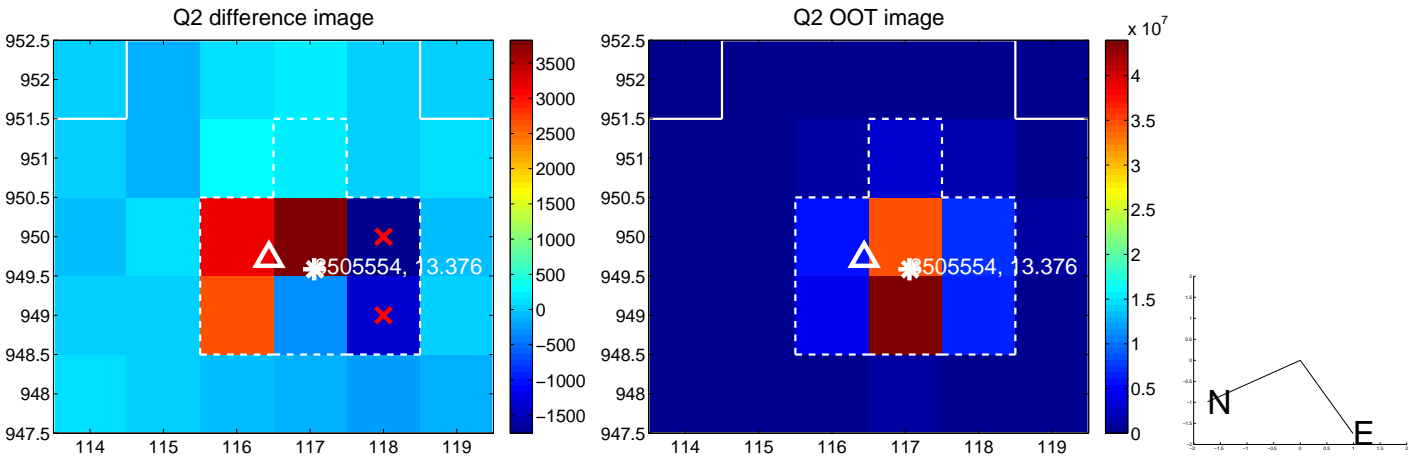
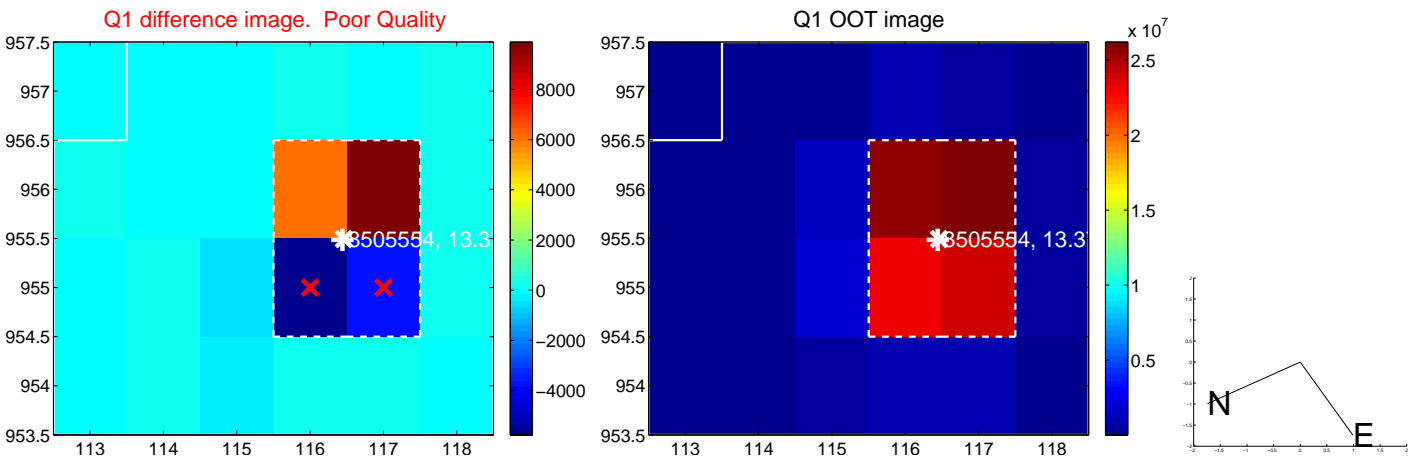
The direct PRF centroid is offset from the target star catalog position by about 0.22 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	3.061 ± 0.664	4.61	2.719 ± 0.686	-1.408 ± 0.637
PRF-fit source offset from KIC position	2.859 ± 0.867	3.30	2.514 ± 0.867	-1.361 ± 0.588
photometric centroid source offset	—	—	—	—

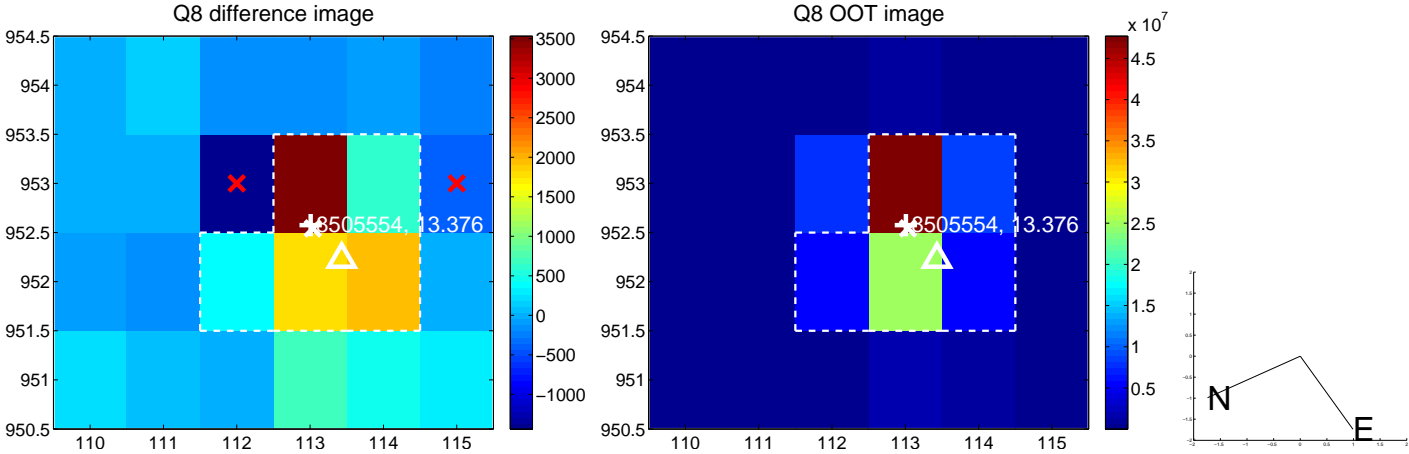
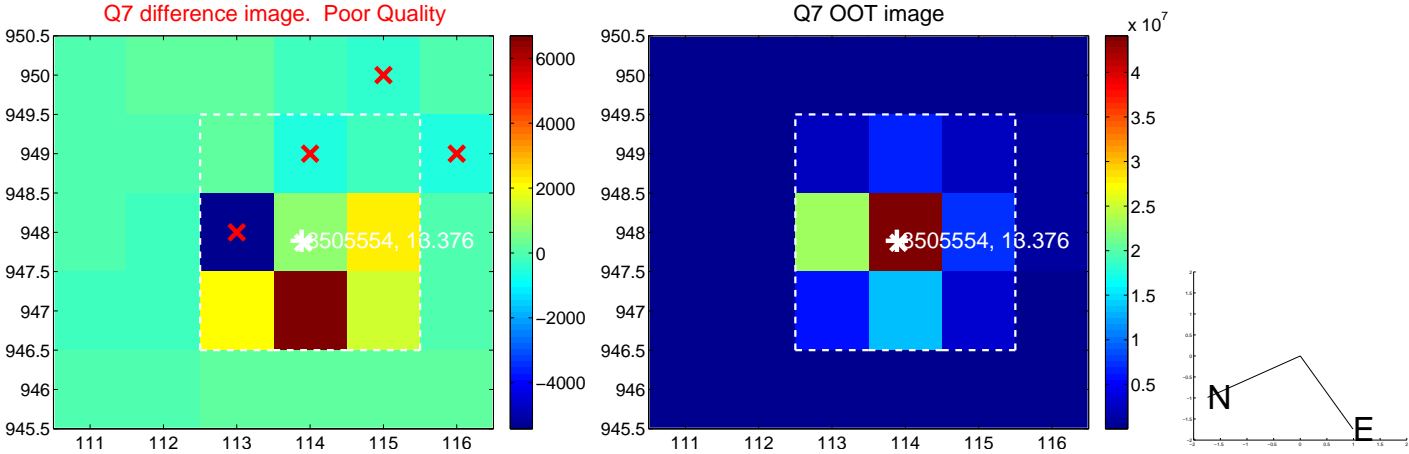
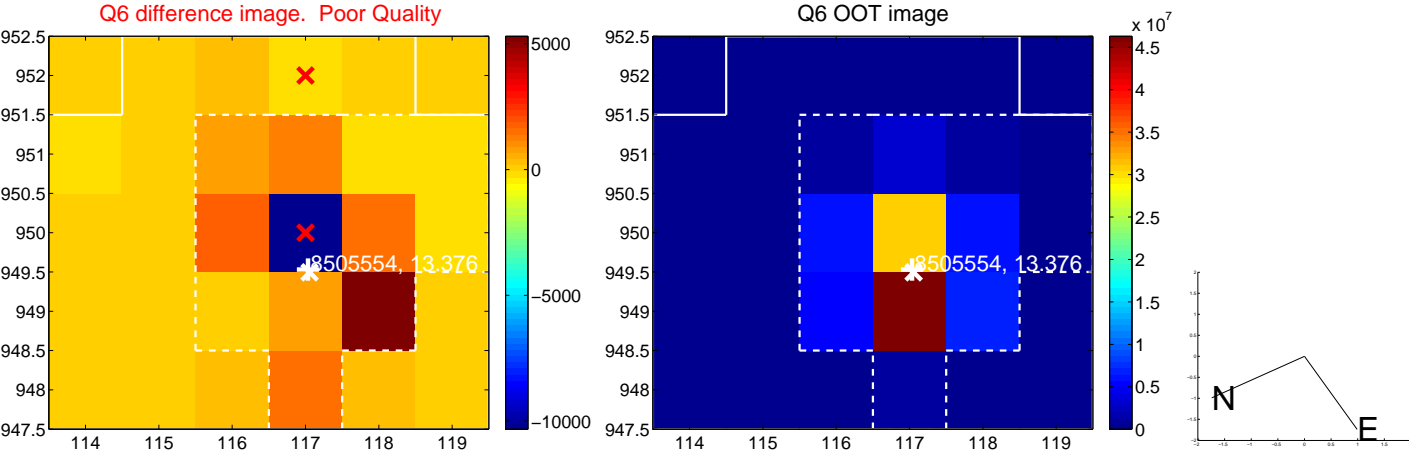
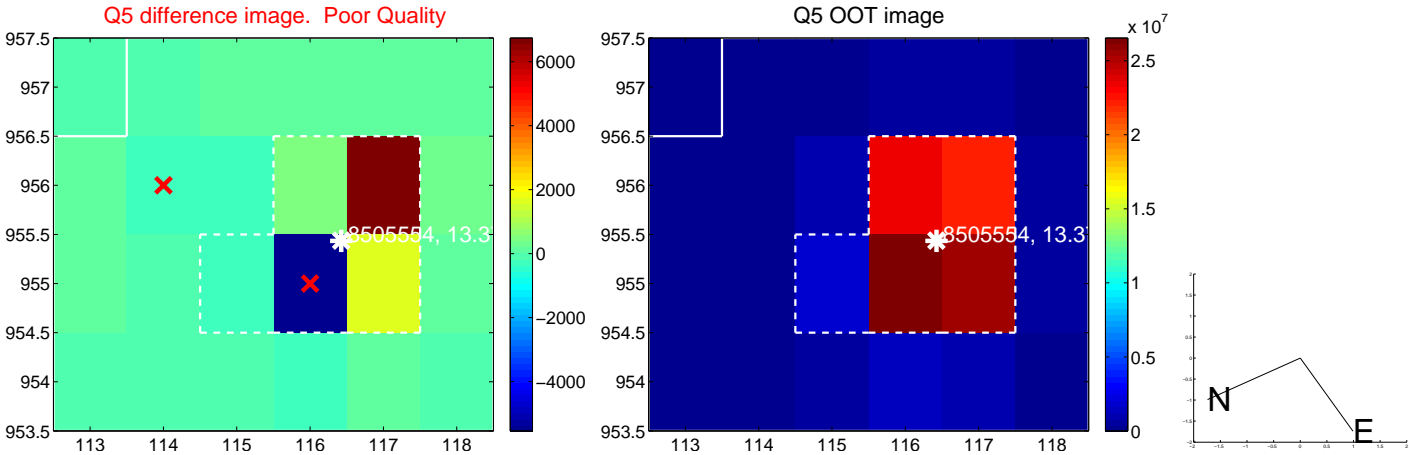


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

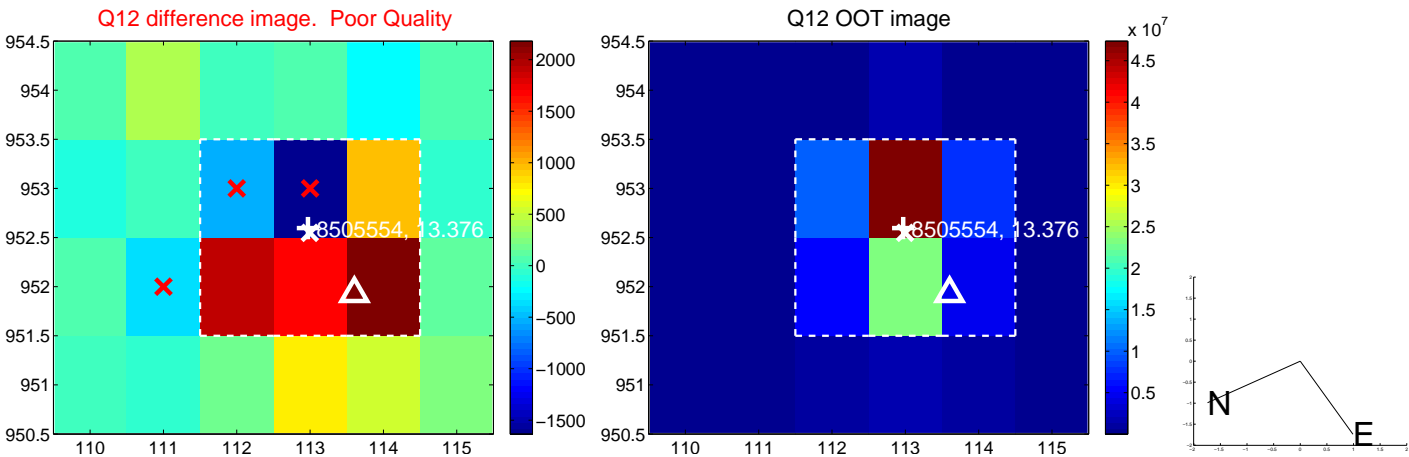
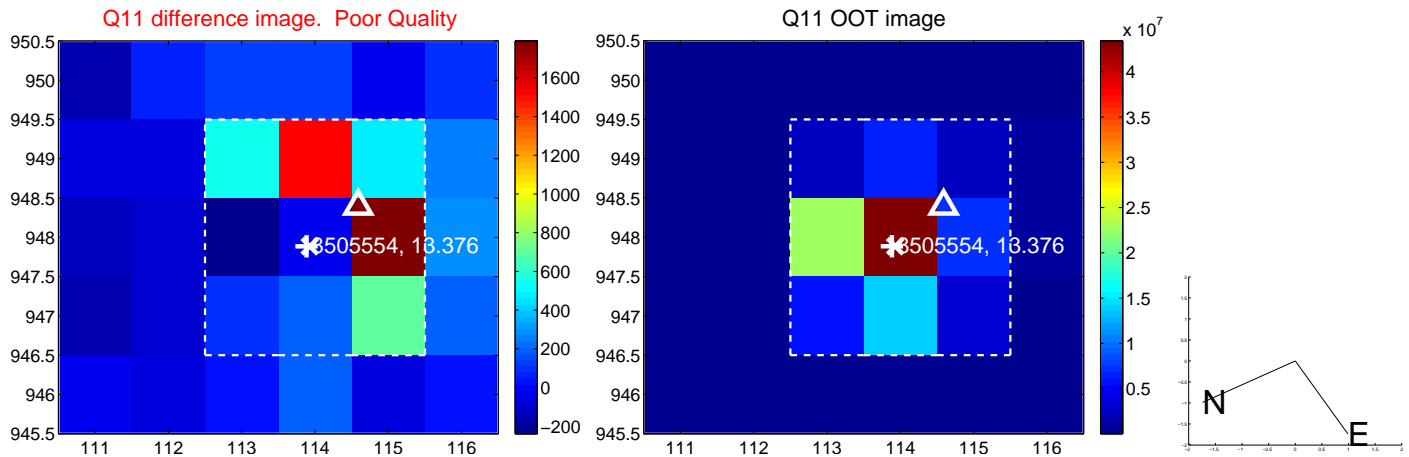
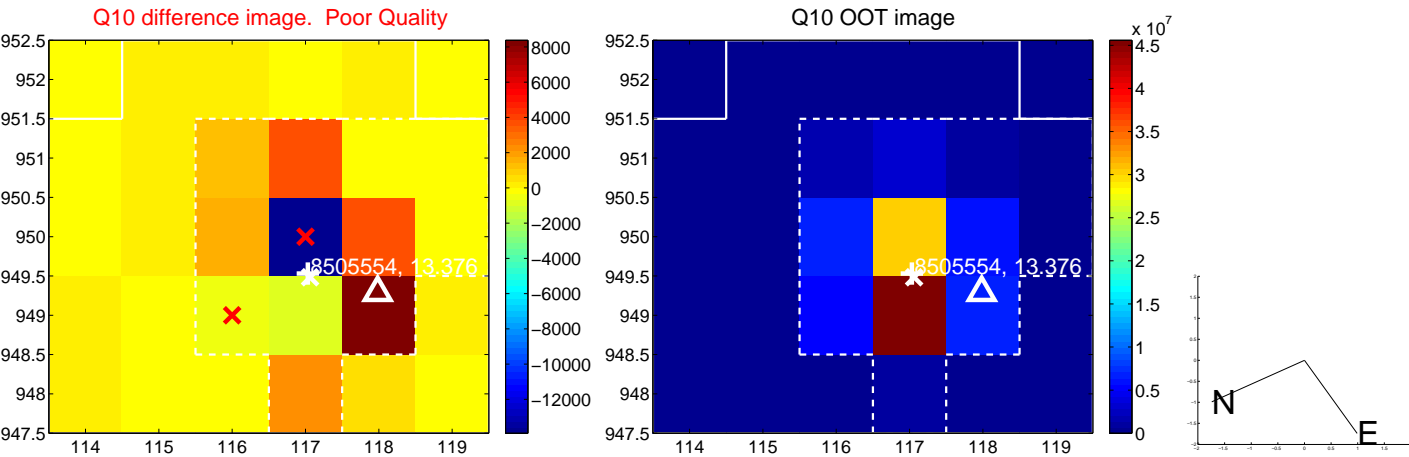
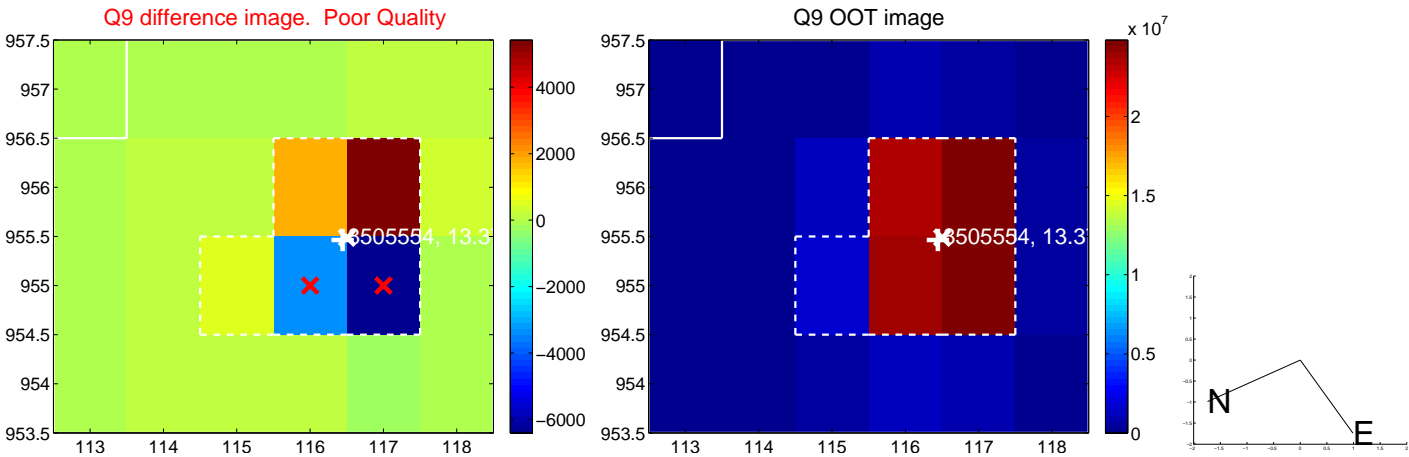
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



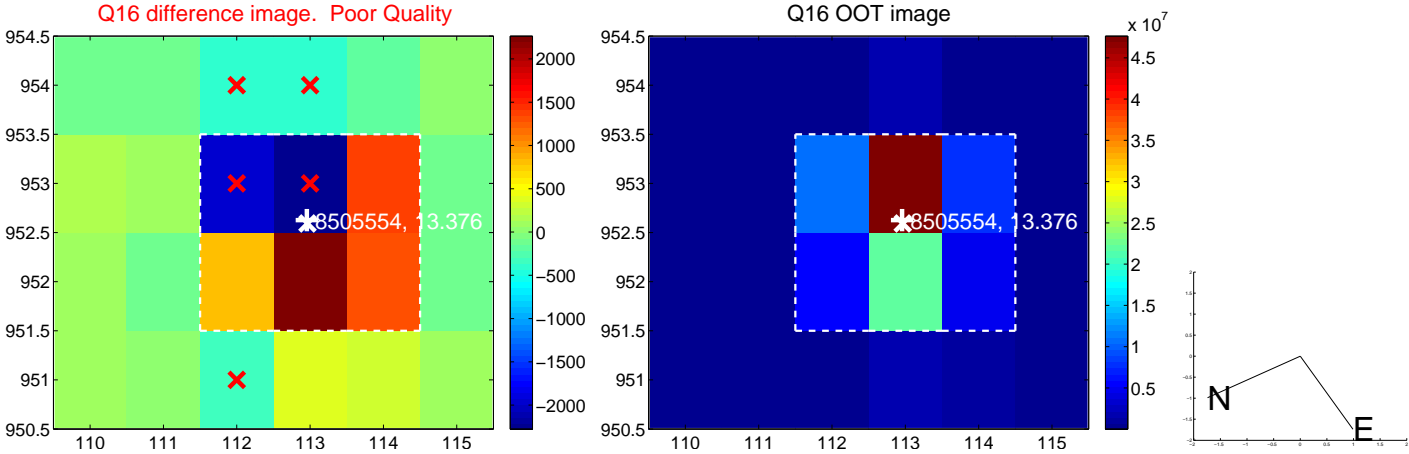
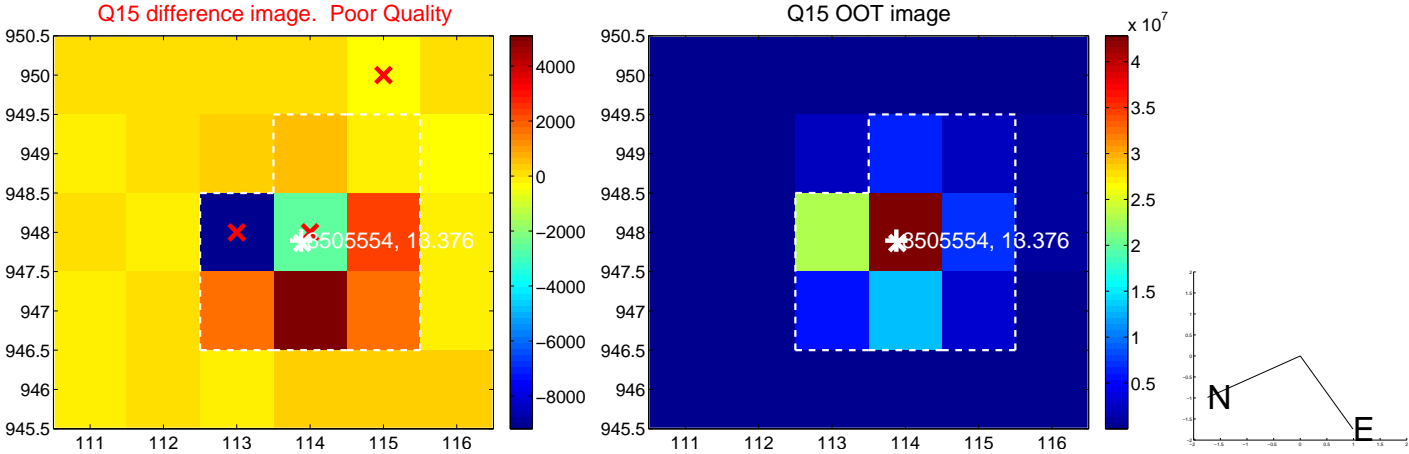
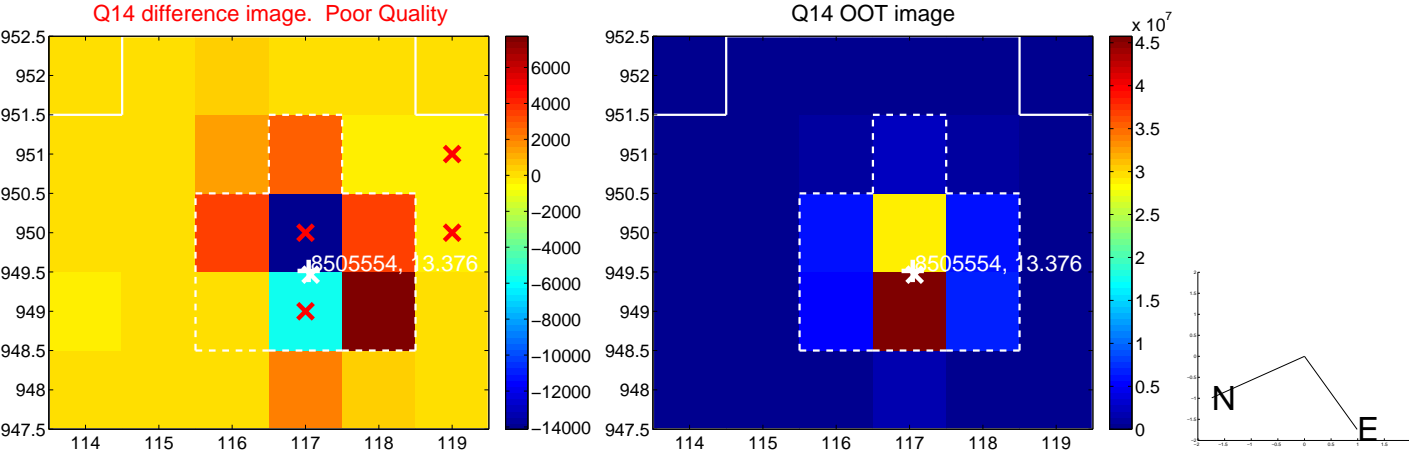
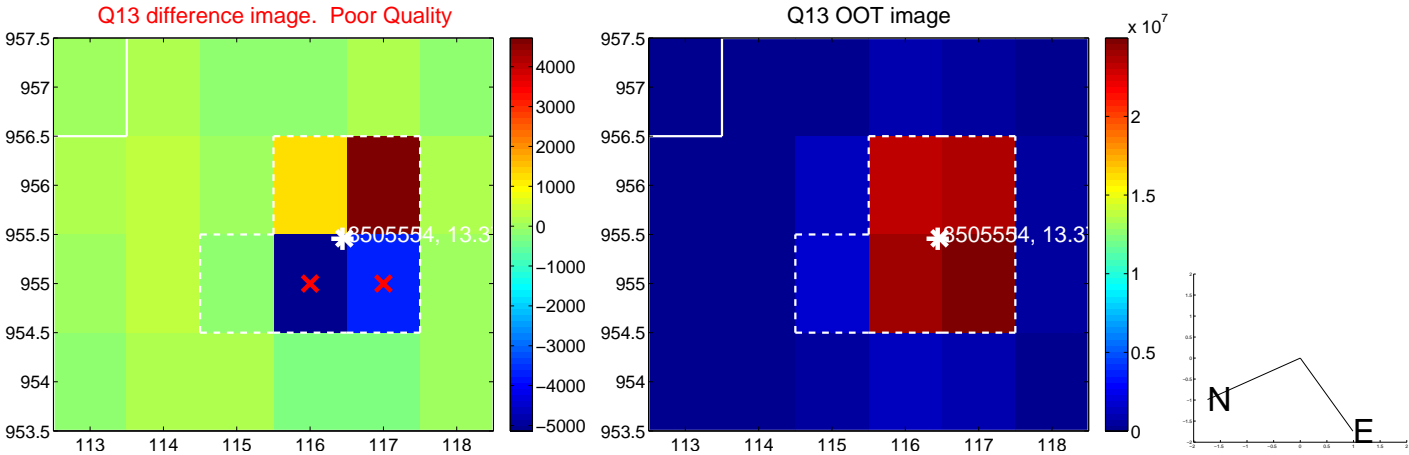
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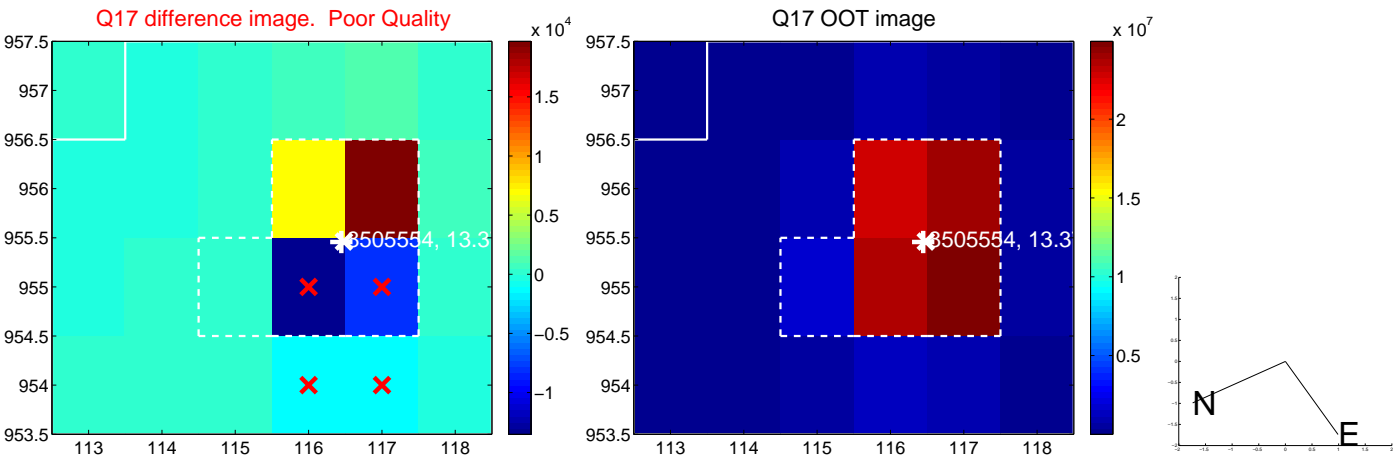
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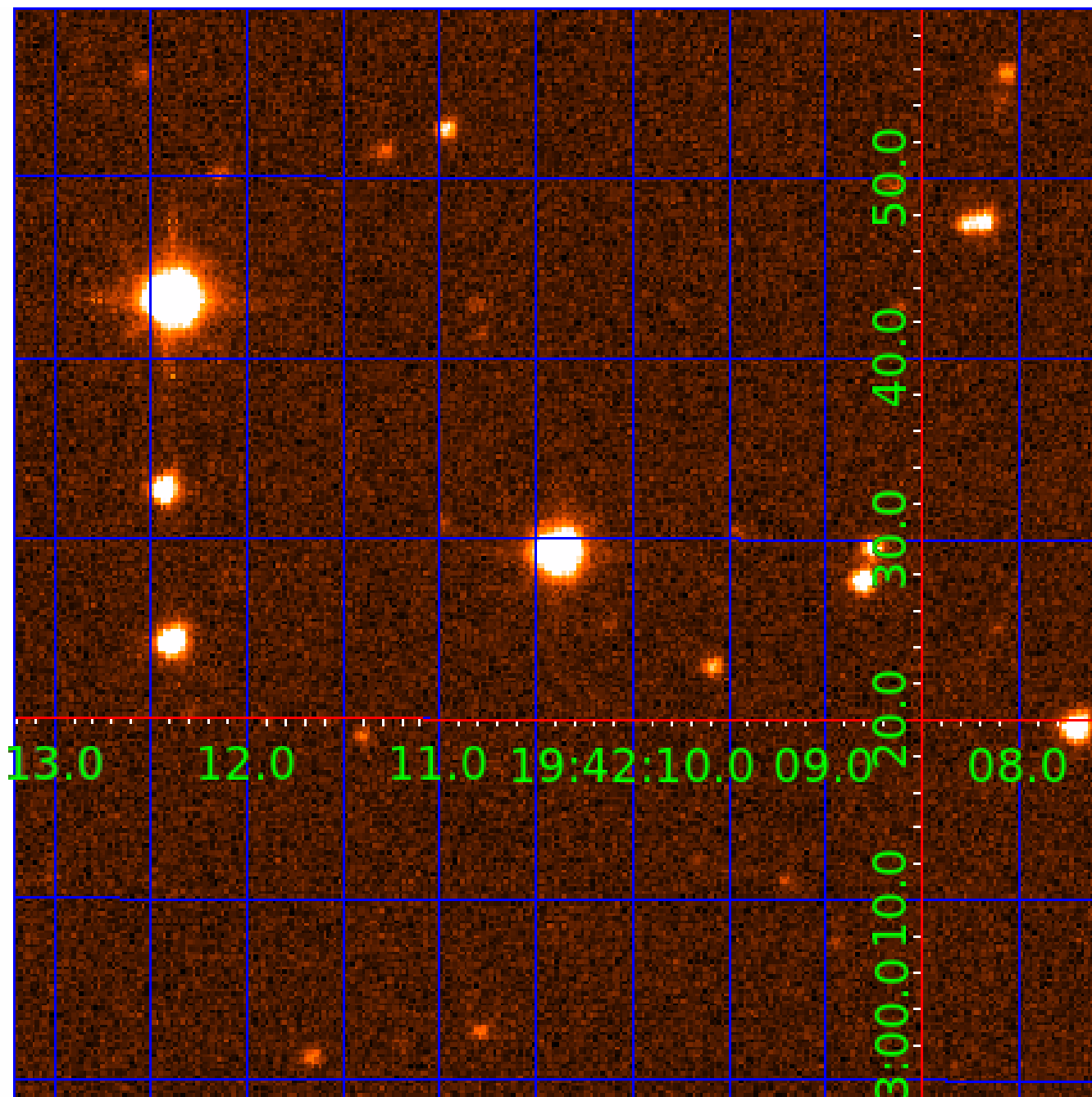
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



folded centroid time series figure for this object.

UKIRT Image

Declination



KIC 008505554

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})
008505554-01	OBS	No	2.853090	132.692487	23.7	19.730	8.5	10.6	1.12	6488	0.58	1185.03
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008505554-03	OBS	No	71.711636	150.106040	88.3	15.824	9.7	4.9	1.12	6488	1.19	16.09
008505554-04	OBS	No	35.010934	161.008632	71.7	9.062	9.6	5.8	1.12	6488	1.06	41.87
008505554-05	OBS	No	63.035047	142.876444	147.5	6.845	10.6	9.1	1.12	6488	1.71	19.11

Robovetter Results

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008505554-01	OBS	FP	0.00	1	0	0	0	LPP_DV
008505554-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—INCONSISTENT_TRANS—CENT_FEW_DIFFS
008505554-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_POS_ALT
008505554-04	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_POS_ALT
008505554-05	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—CENT_FEW_MEAS

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

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

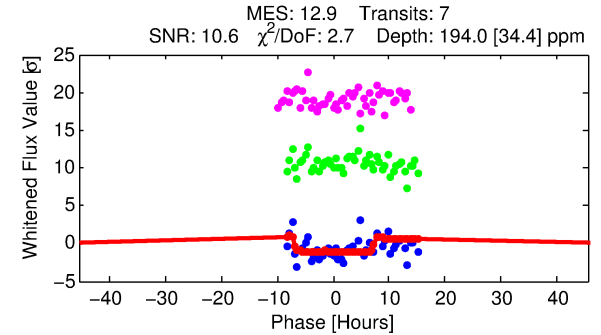
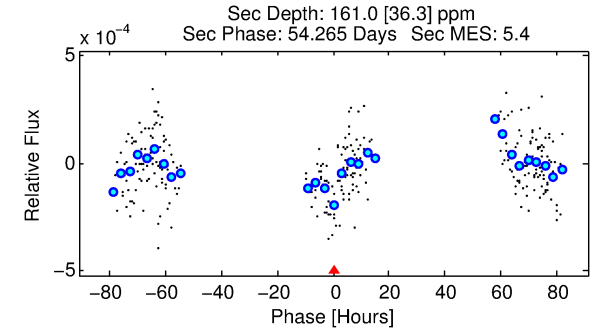
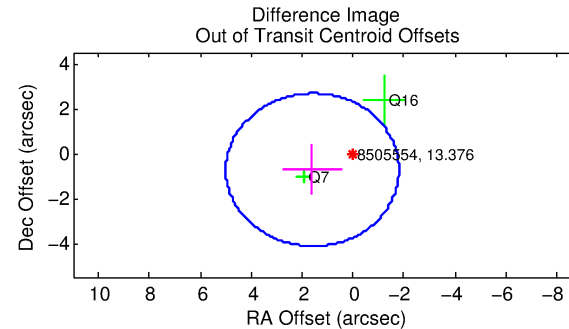
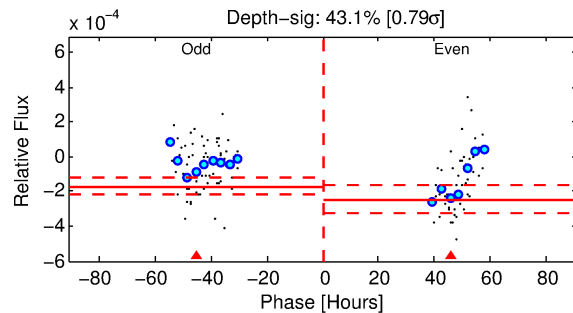
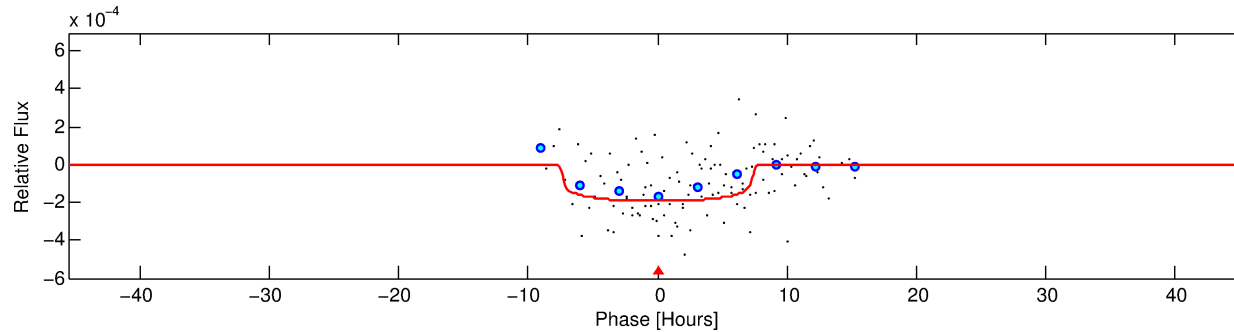
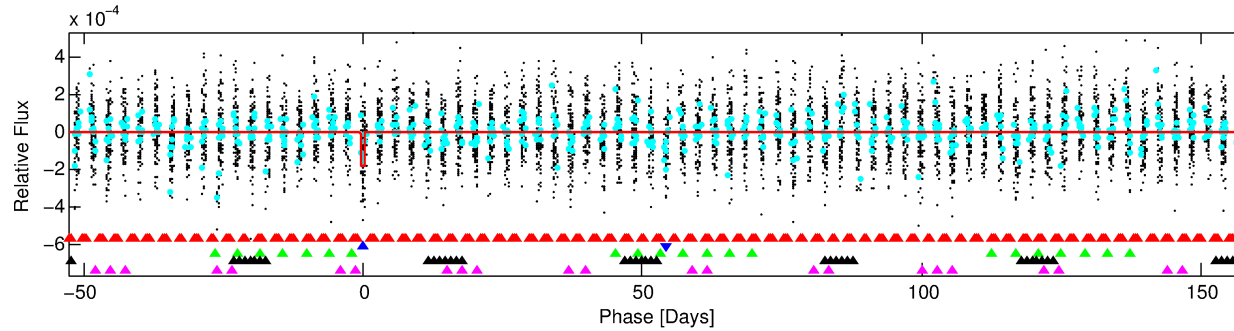
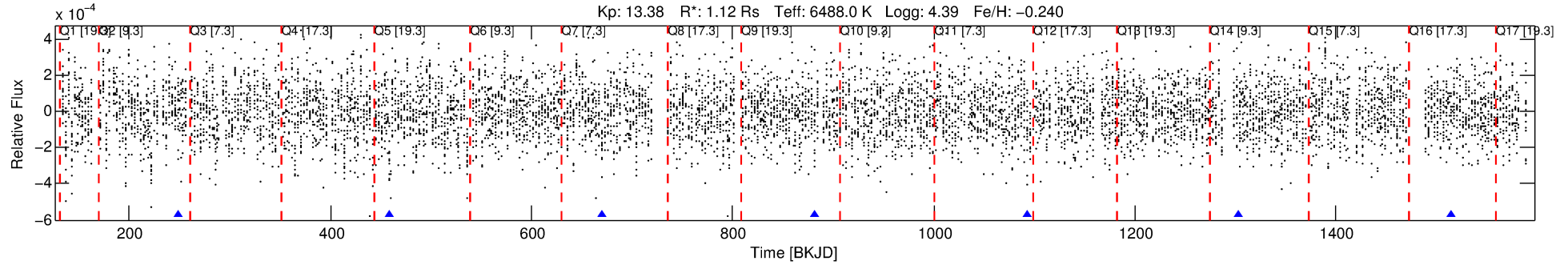
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 008505554-02

No Significant Match Found

DV One-Page Summary

KIC: 8505554 Candidate: 2 of 5 Period: 211.022 d



DV Fit Results:

Period = 211.02190 [0.01053] d
Epoch = 248.4244 [0.0291] BKJD
Rp/R* = 0.0139 [0.0039]
a/R* = 70.96 [100.48]
b = 0.76 [0.77]
Seff = 3.82 [1.56]
Teq = 356 [36] K
Rp = 1.70 [0.74] Re
a = 0.7223 [0.1975] AU
Ag = 15995.39 [11473.16] [1.39 σ]
Teffp = 6197 [950] K [6.14 σ]

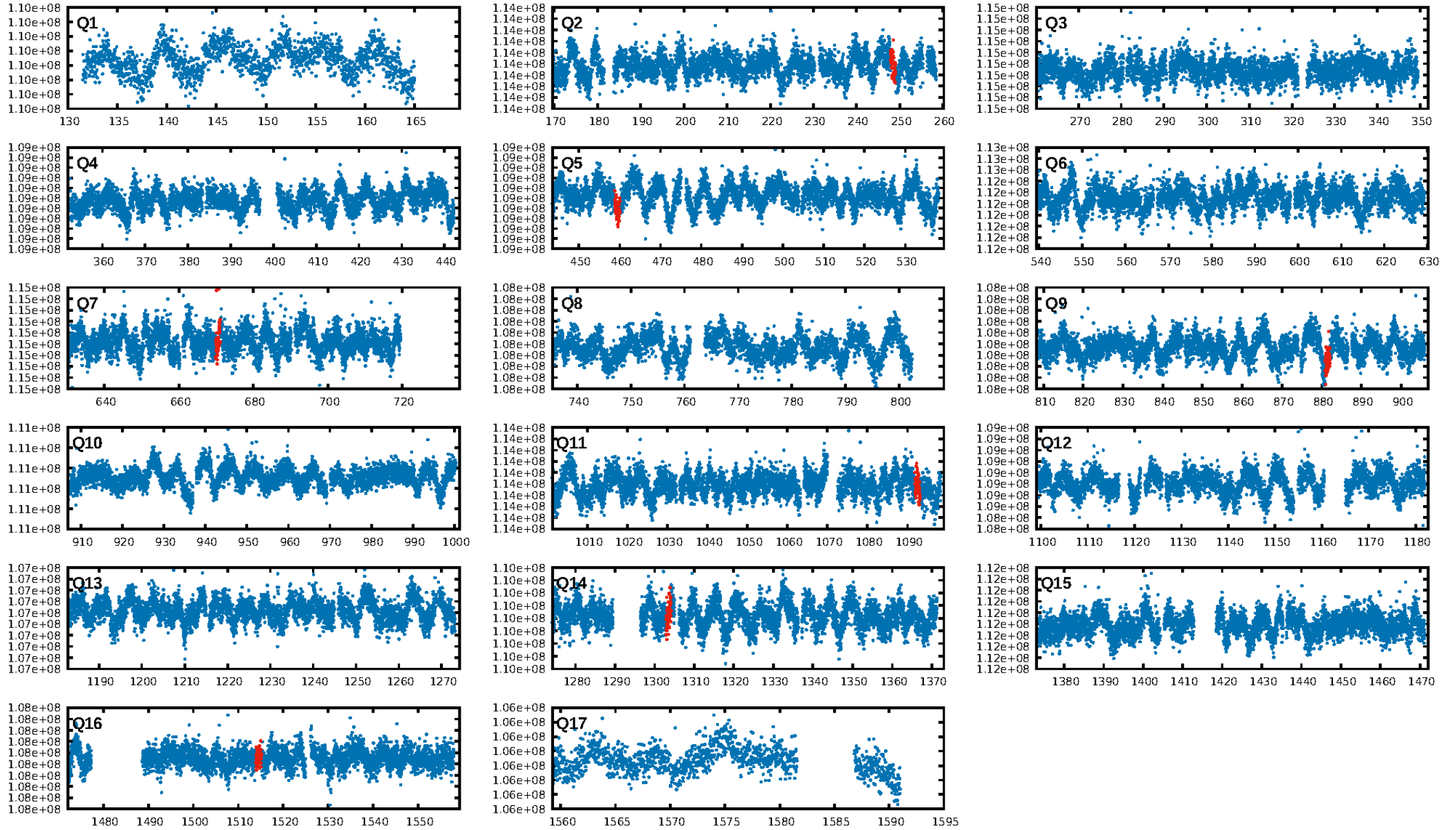
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [152.54 σ]
LongPeriod-sig: N/A
ModelChiSquare2-sig: 0.0%
ModelChiSquareGof-sig: 94.3%
Bootstrap-pfa: 1.04e-12
RollingBand-fgt: 1.00 [7/7]
GhostDiagnostic-chr: -3.677
Centroid-sig: N/A
Centroid-so: N/A
OotOffset-rm: 1.750 arcsec [1.54 σ]
KicOffset-rm: 1.626 arcsec [1.44 σ]
OotOffset-st: 0/1/1/0 [2]
KicOffset-st: 0/1/1/0 [2]
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DiffImageOverlap-fno: 0.00 [0/6]

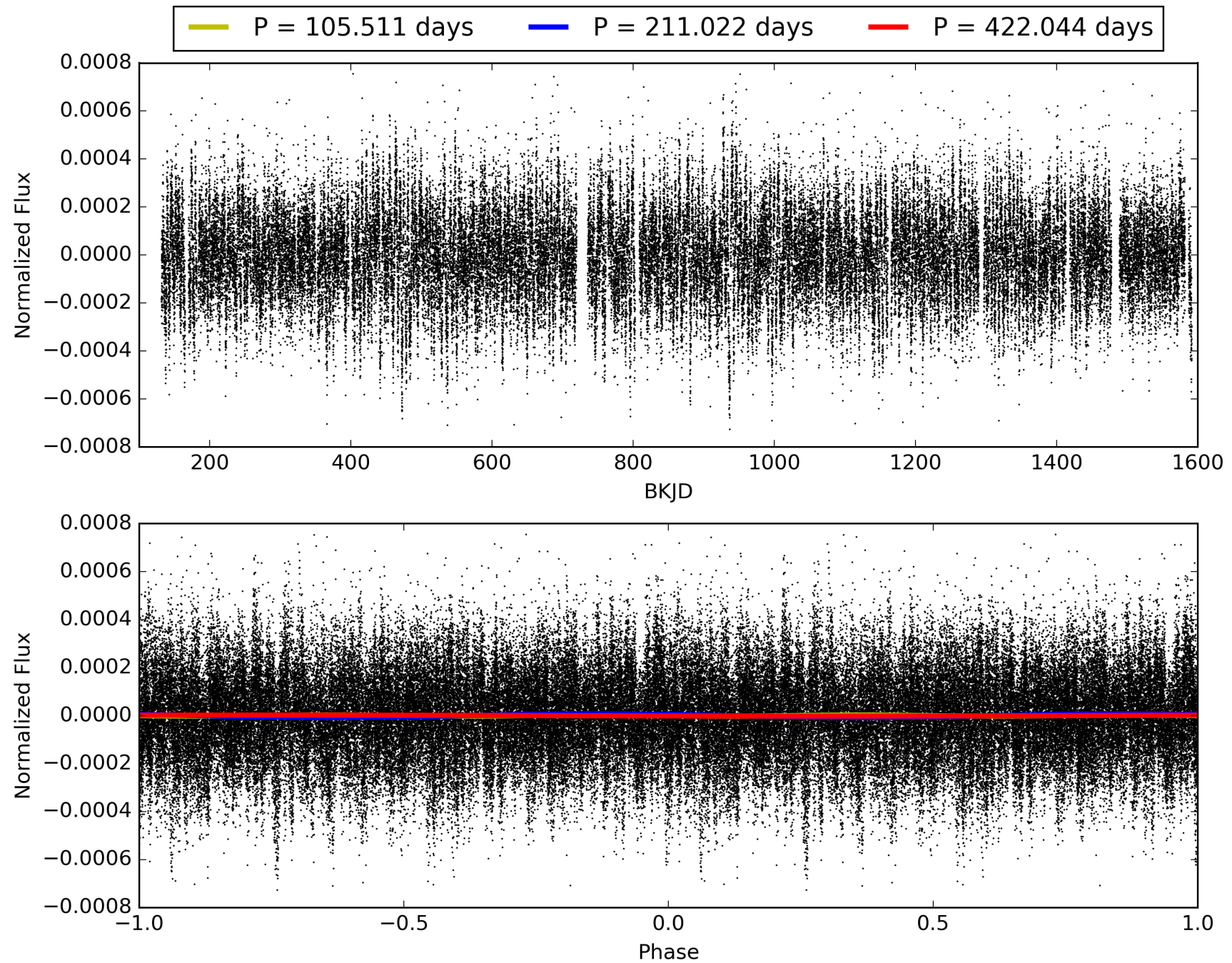
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 31-Jan-2016 14:09:39 Z

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

TCE 008505554-02, PDC Light Curves

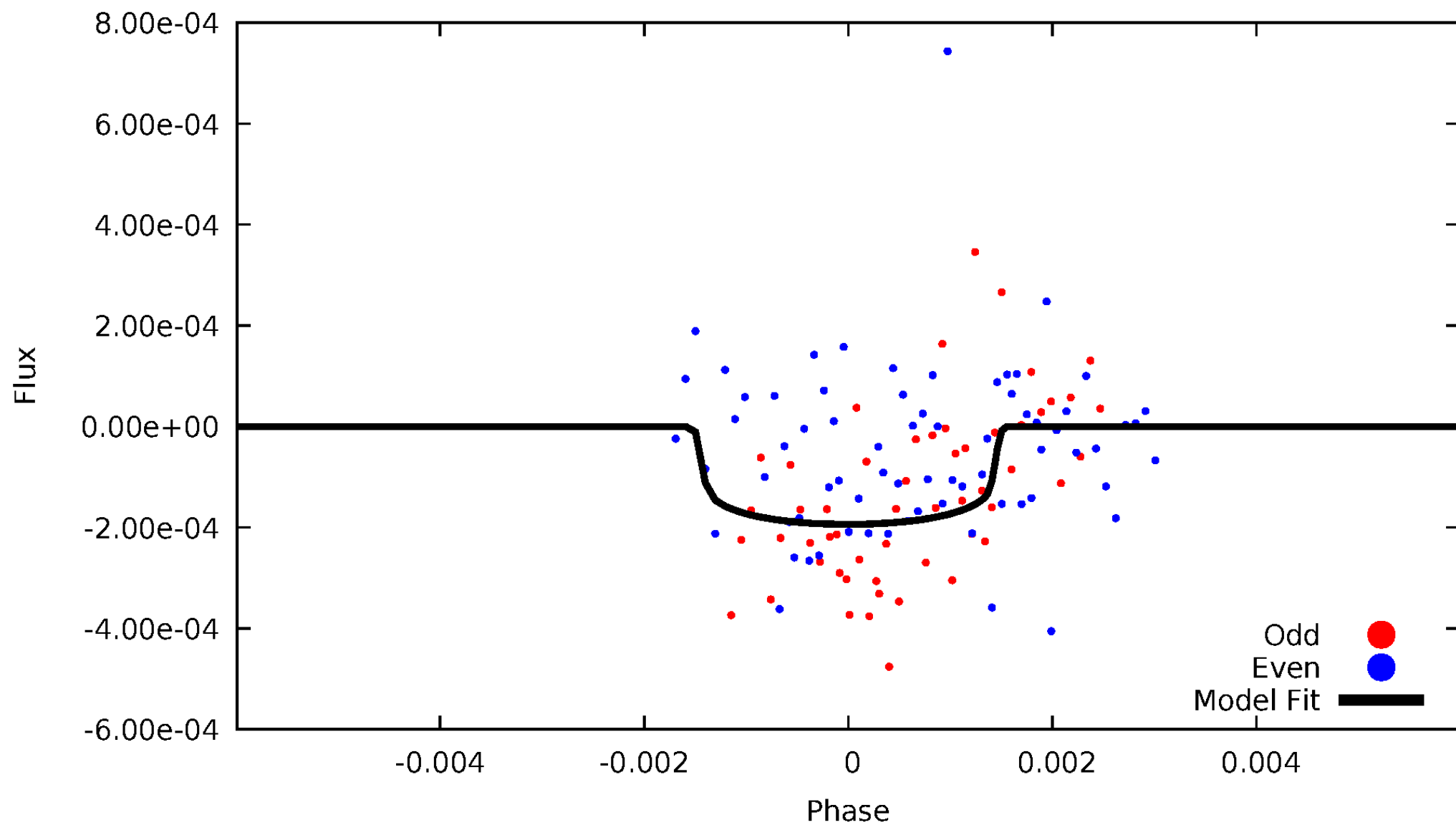


TCE 008505554-02



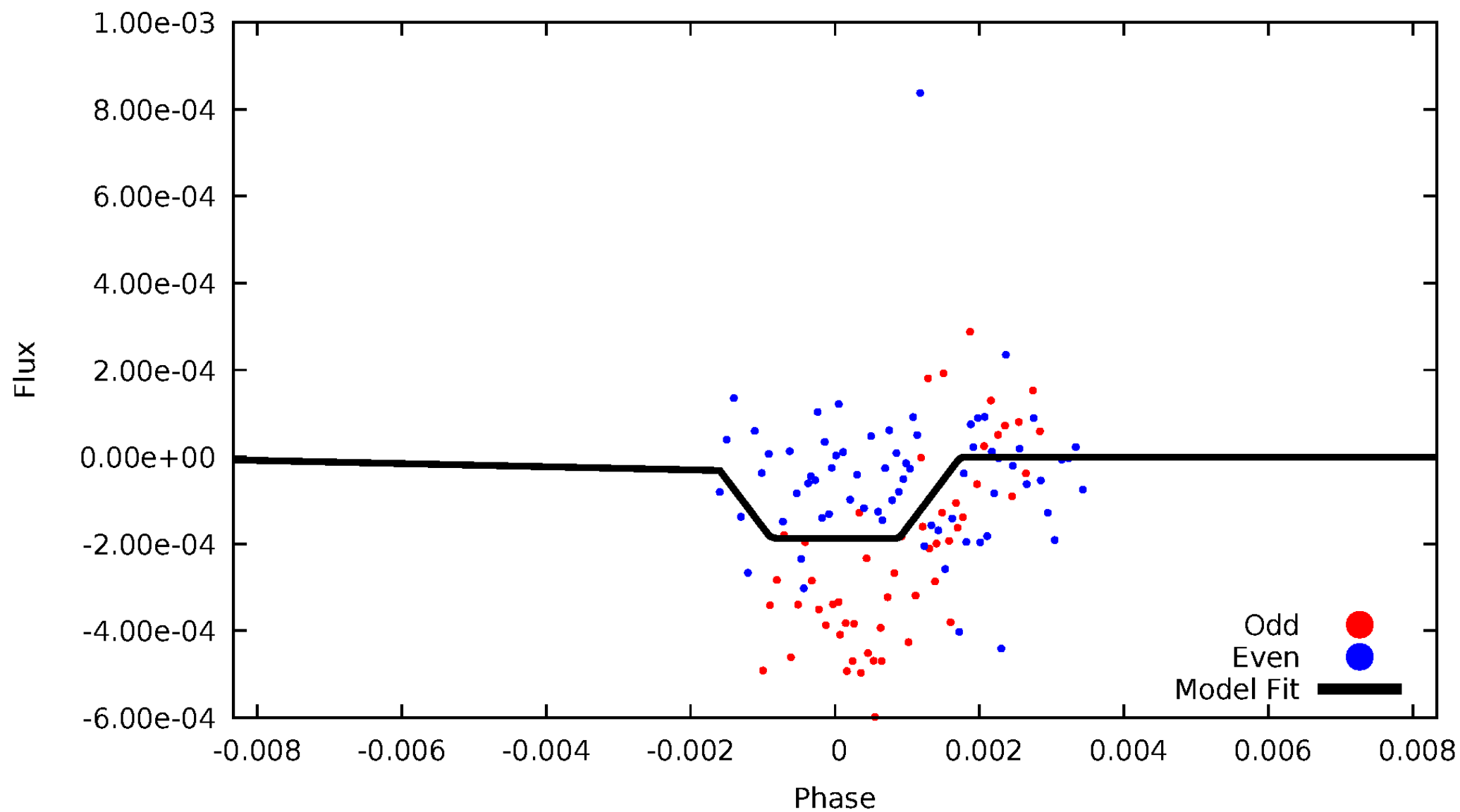
DV Odd/Even

TCE 008505554-02



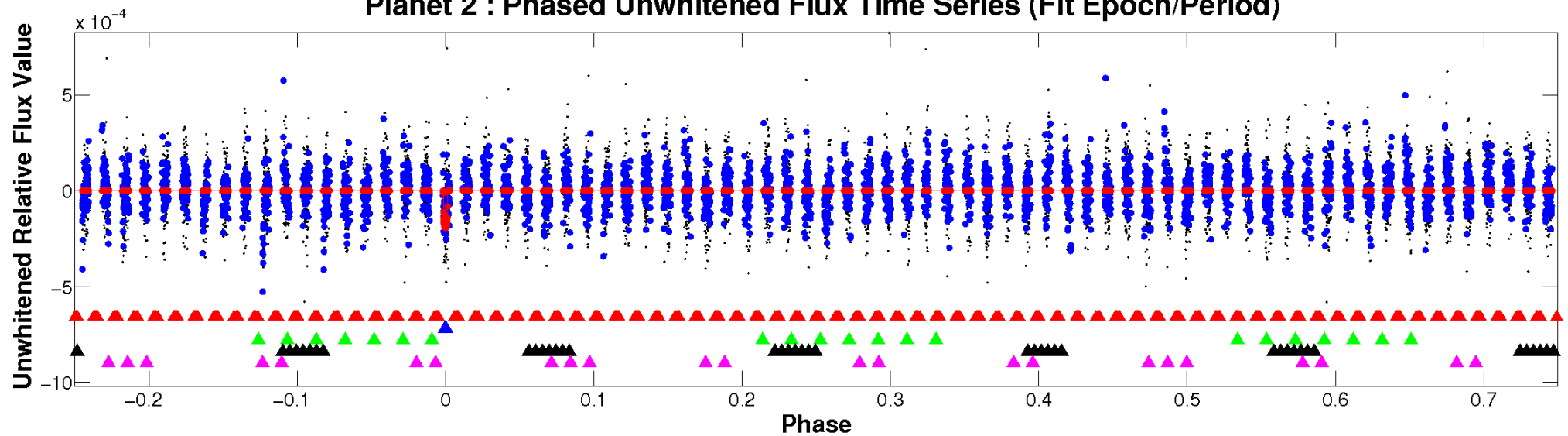
ALT Odd/Even

TCE 008505554-02

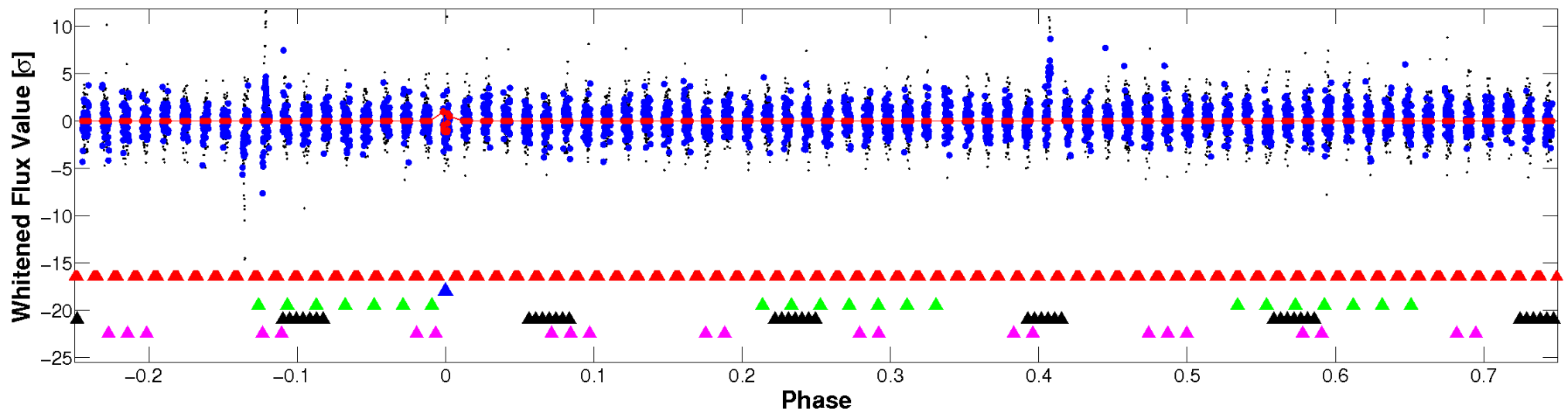


Non-Whitened Vs. Whitened Light Curve

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

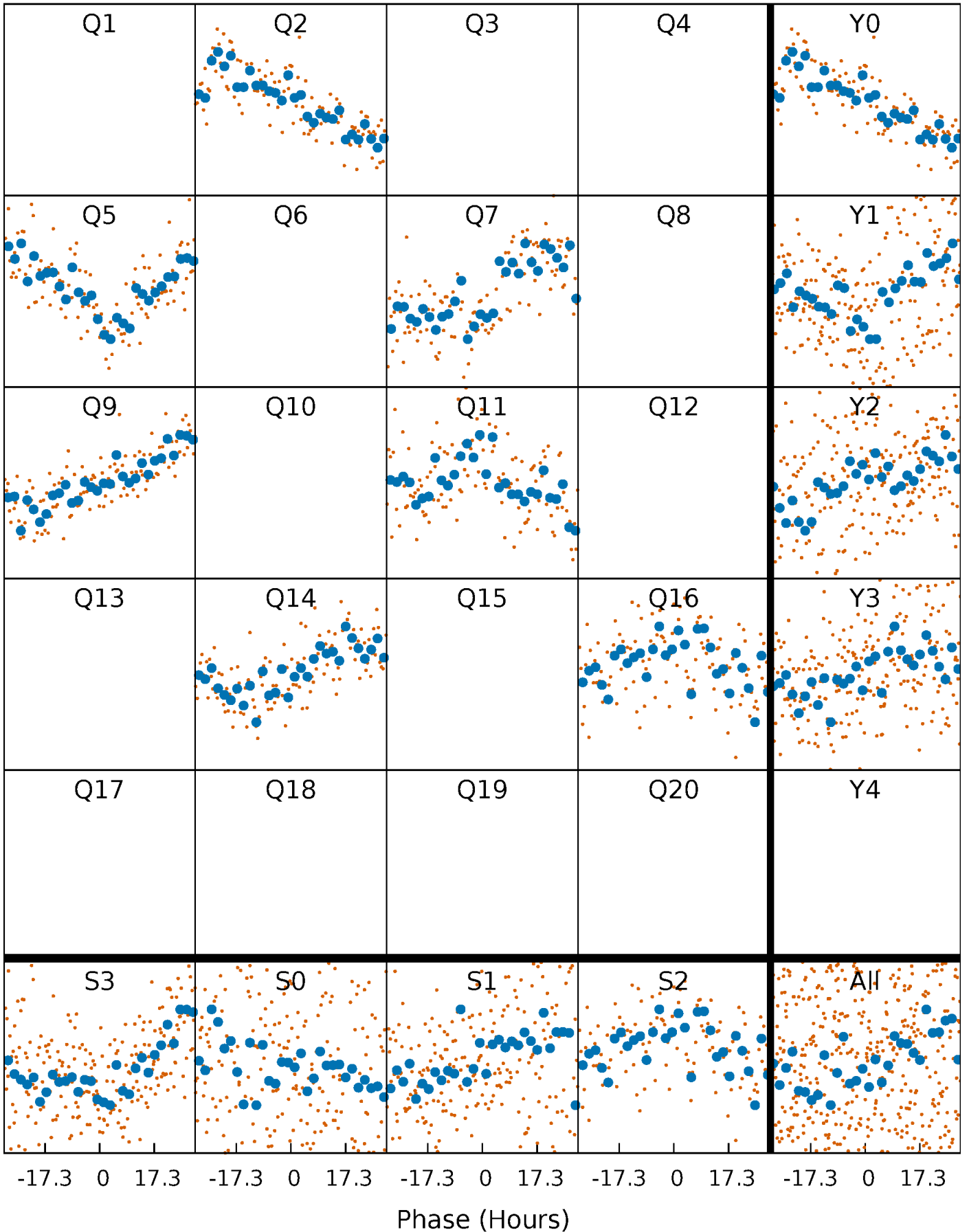


Planet 2 : Phased Whitened Flux Time Series (Fit Epoch/Period)



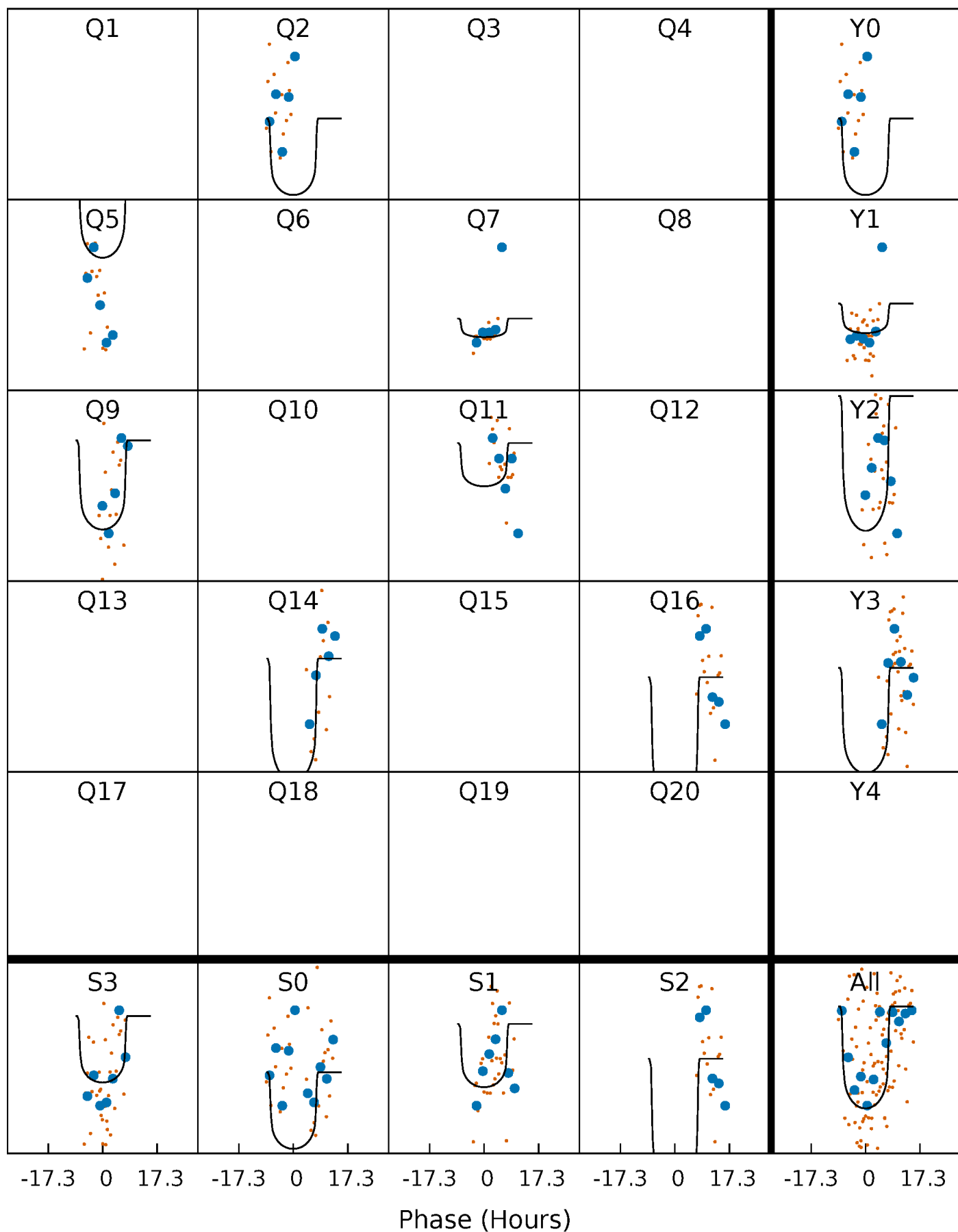
PDC Quarter-Phased Transit Curves

TCE 008505554-02 P=211.021904 Days $T_0=248.424420$ (BKJD)



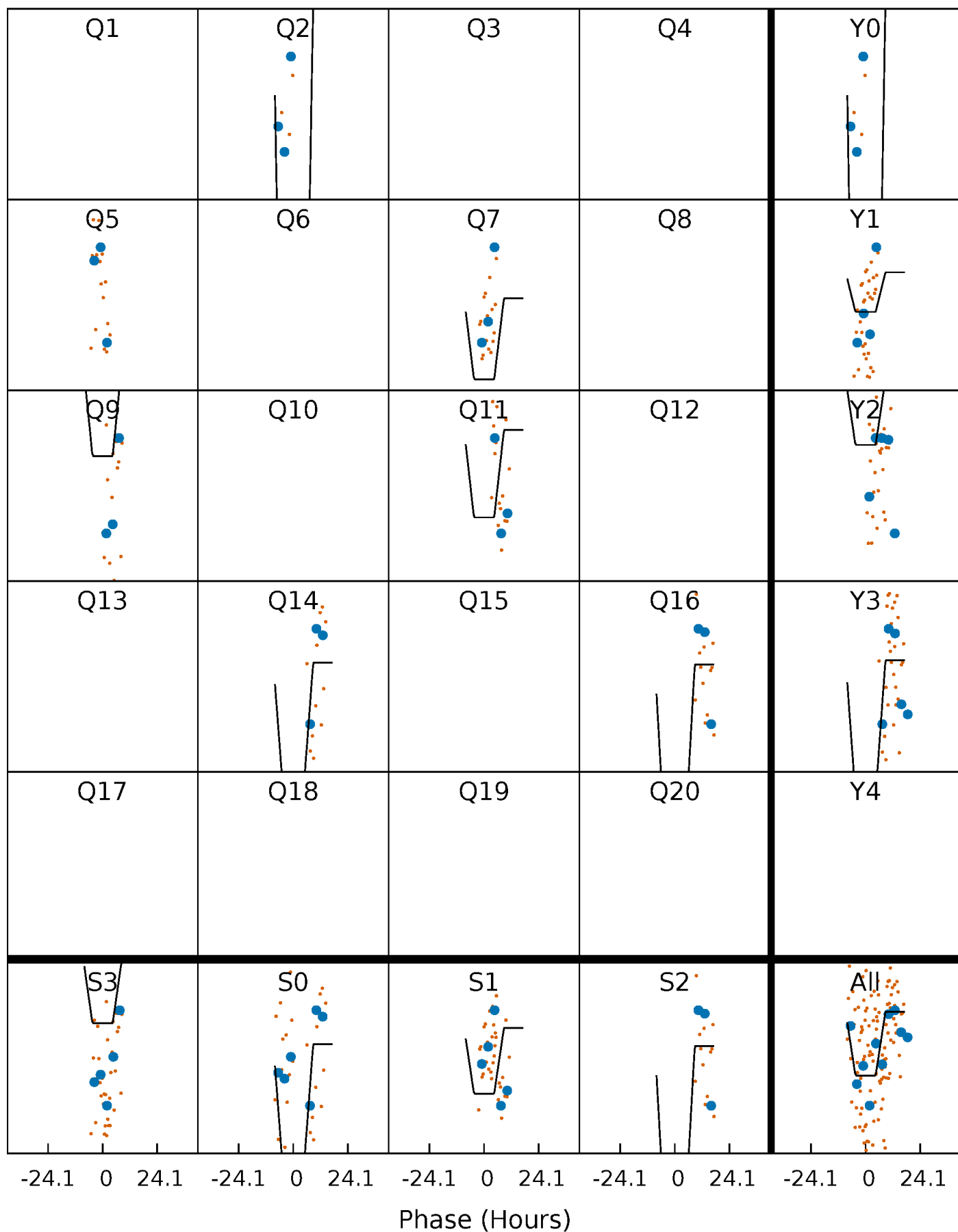
DV Quarter-Phased Transit Curves

TCE 008505554-02 P=211.021904 Days $T_0=248.424420$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

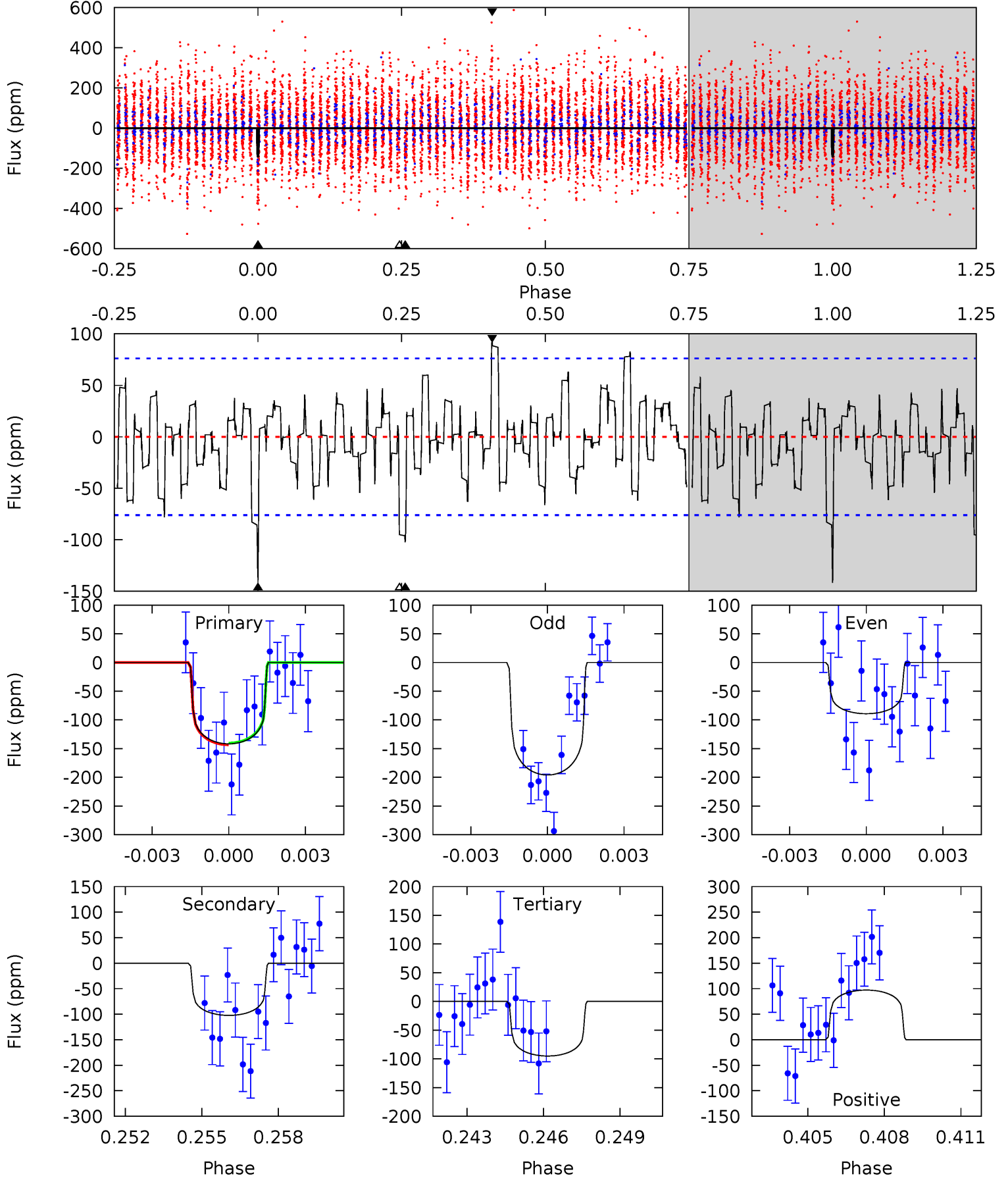
TCE 008505554-02 P=211.010563 Days $T_0=248.403894$ (BKJD)



DV Model-Shift Uniqueness Test

008505554-02, P = 211.021904 Days, E = 37.402516 Days

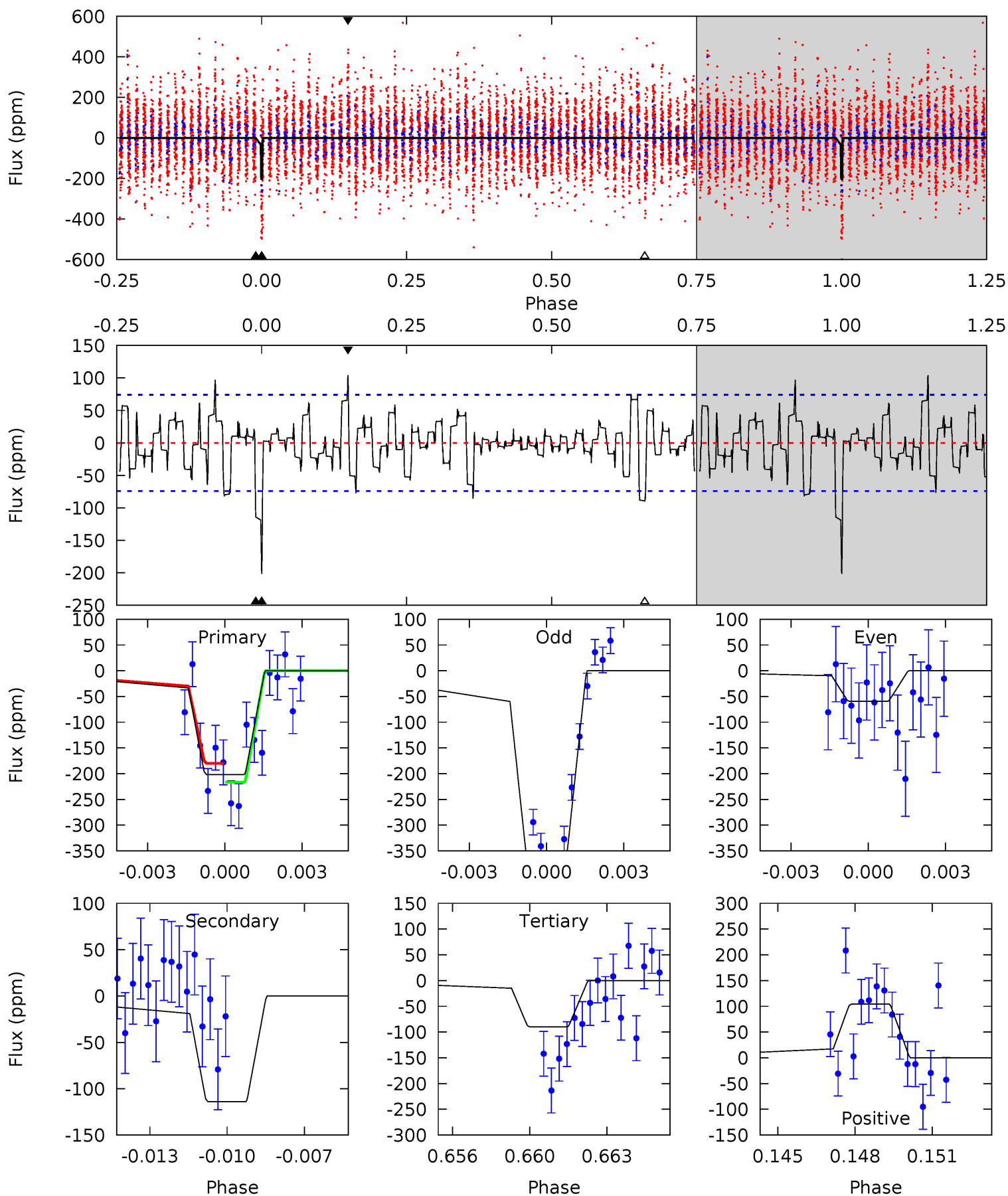
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
9.78	7.06	6.56	6.72	5.25	2.97	1.95	3.22	3.07	0.50	0.35	3.67	0.81	0.41	0.10



Alt Model-Shift Uniqueness Test

008505554-02, P = 211.010563 Days, E = 37.393331 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
14.2	8.05	6.34	7.36	5.23	2.93	2.10	7.89	6.87	1.71	0.70	10.6	1.76	0.34	1.25



Stellar Parameters For KIC 008505554

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	M (M_{\odot})	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	6488^{+146}_{-195}	$4.392^{+0.070}_{-0.210}$	$-0.240^{+0.250}_{-0.300}$	$1.120^{+0.371}_{-0.124}$	$1.127^{+0.170}_{-0.139}$	$1.130^{+0.339}_{-0.620}$
	+2%/-3%	+2%/-5%	+104%/-125%	+33%/-11%	+15%/-12%	+30%/-55%
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 008505554-02 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-102 ± 14	$1.80^{+0.54}_{-0.59}$	507^{+39}_{-26}	5521^{+1074}_{-572}	9042^{+10188}_{-3792}
Alt.	-114 ± 14	$1.77^{+0.60}_{-0.56}$	508^{+37}_{-26}	5730^{+1085}_{-657}	10405^{+11231}_{-4689}

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 $A_{obs} \gg 1.0$

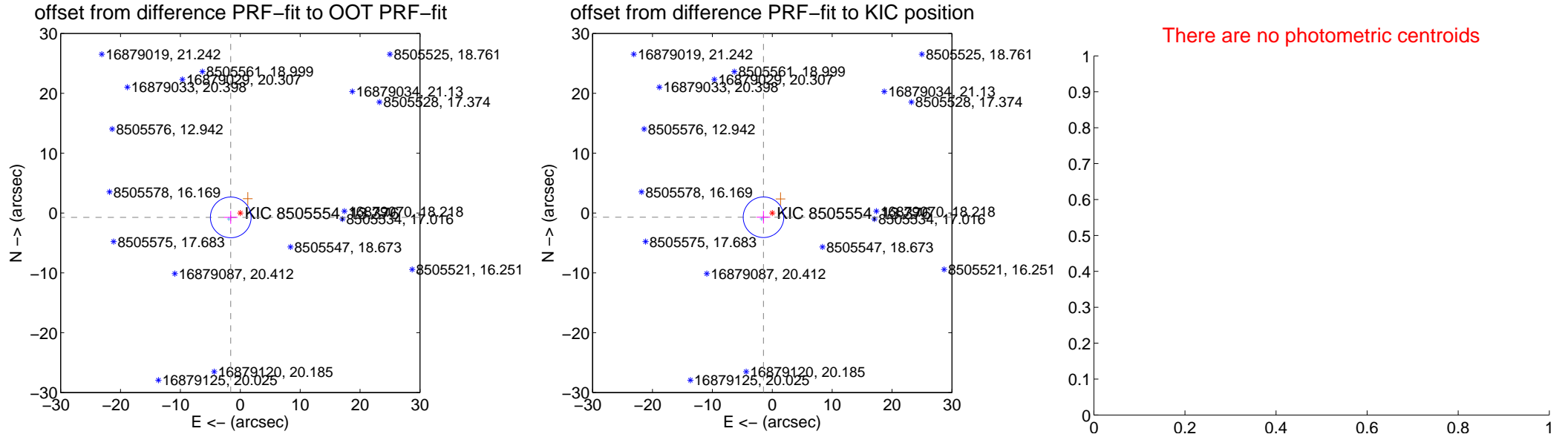
DV Centroid Data

Supplemental centroid analysis for 008505554-02. Kepler magnitude: 13.38. Transit SNR 10.63

There are 1 quarters with good PRF difference image offsets

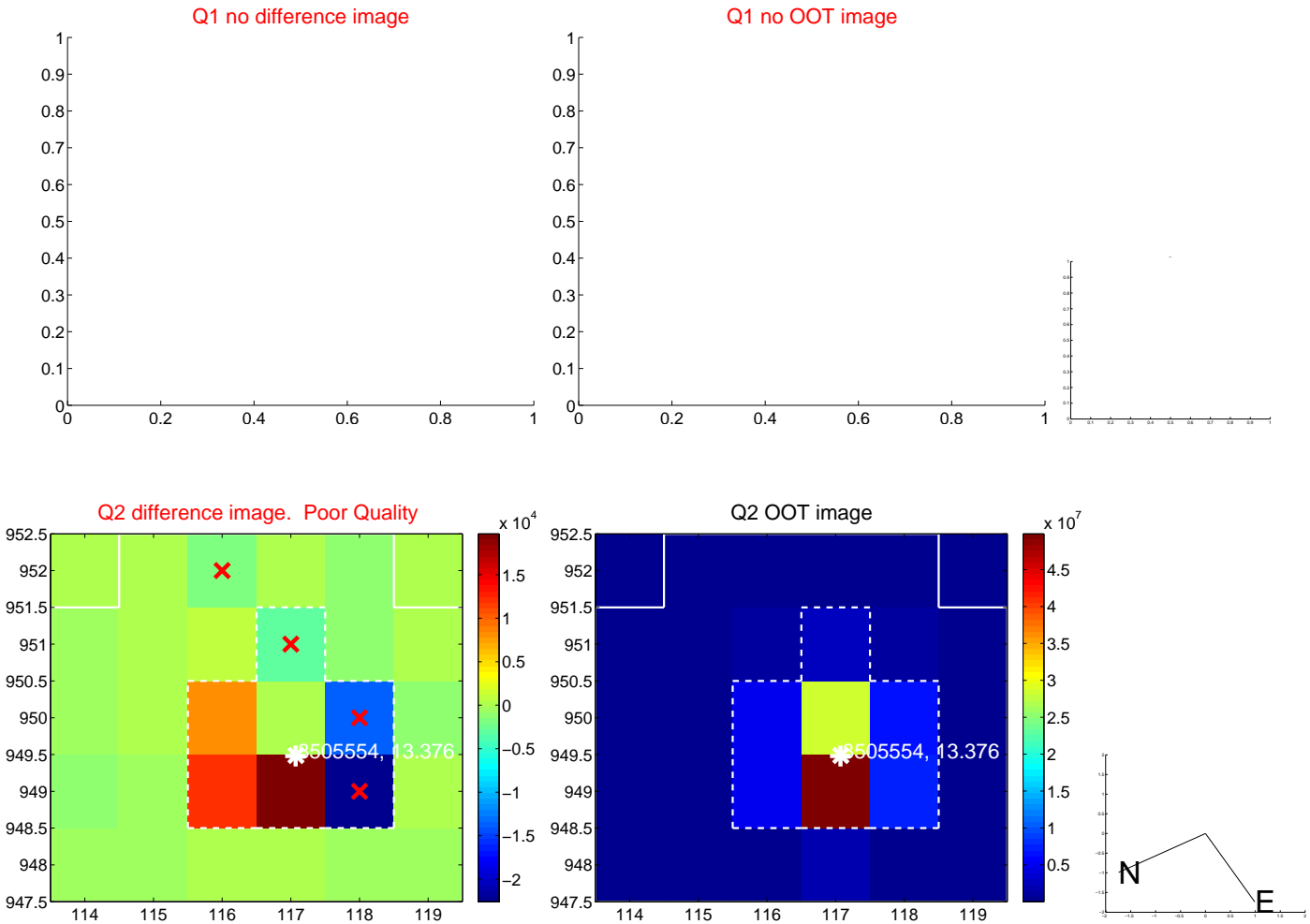
The direct PRF centroid is offset from the target star catalog position by about 0.13 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	1.750 ± 1.134	1.54	1.591 ± 1.144	-0.729 ± 1.080
PRF-fit source offset from KIC position	1.626 ± 1.130	1.44	1.464 ± 1.145	-0.707 ± 1.060
photometric centroid source offset	—	—	—	—

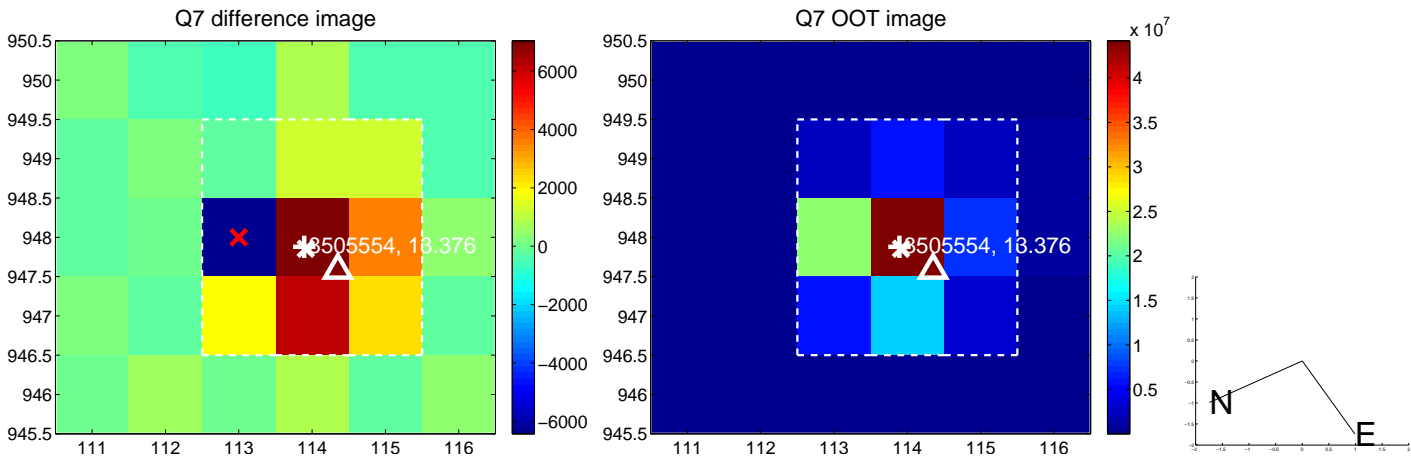
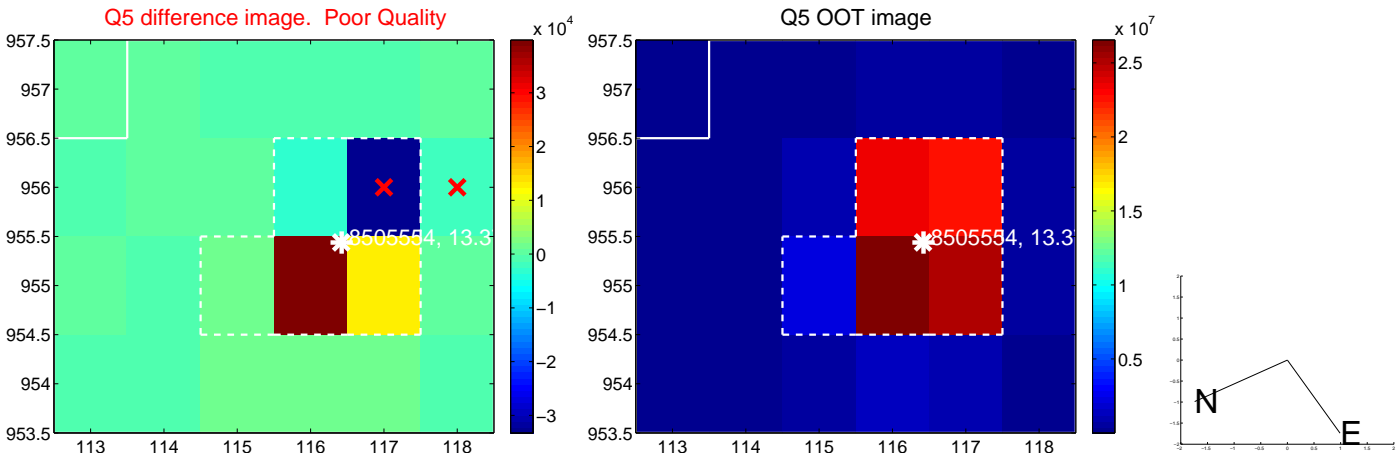


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

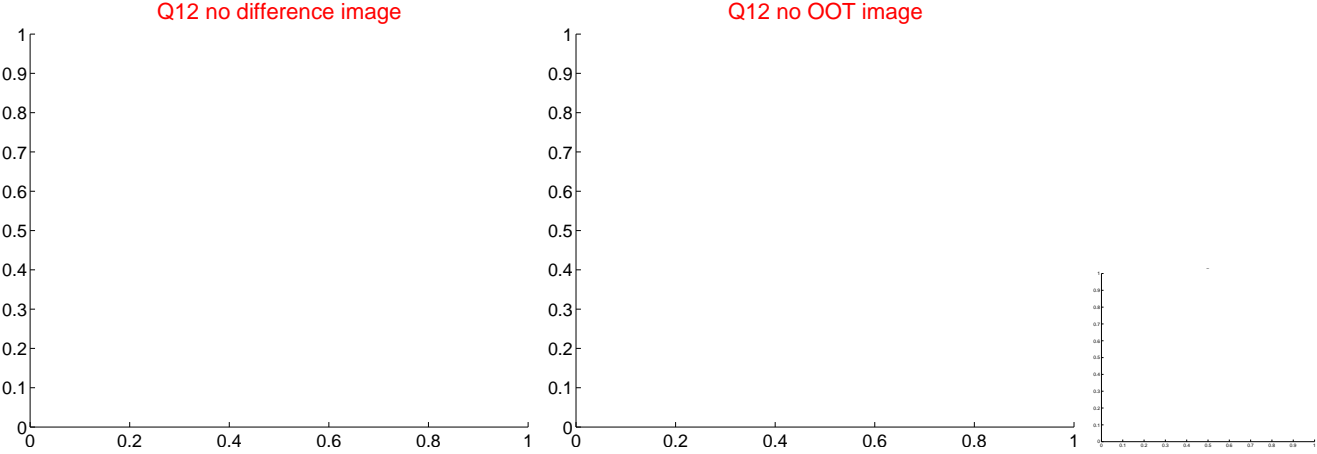
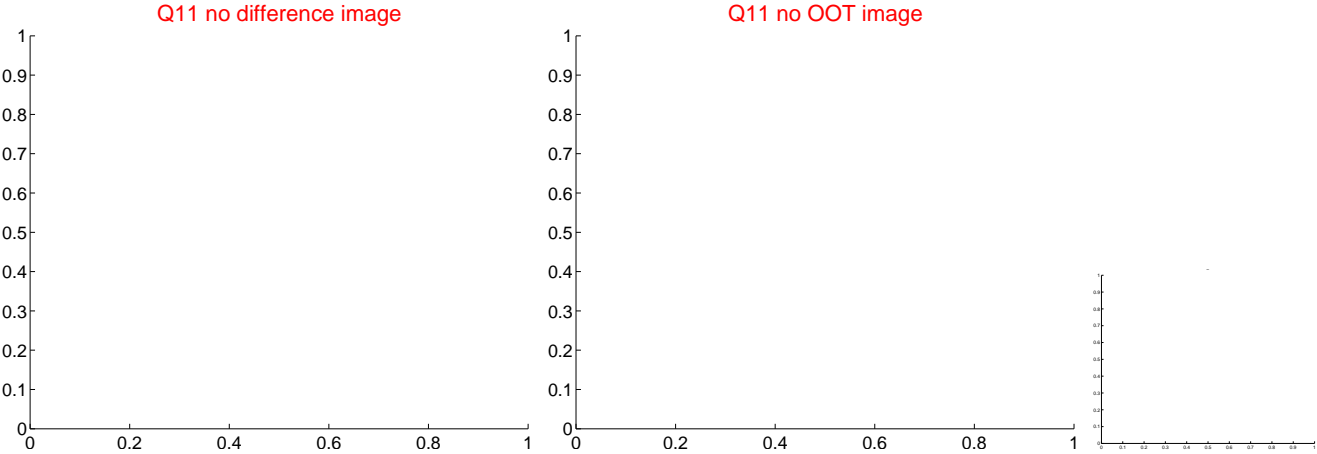
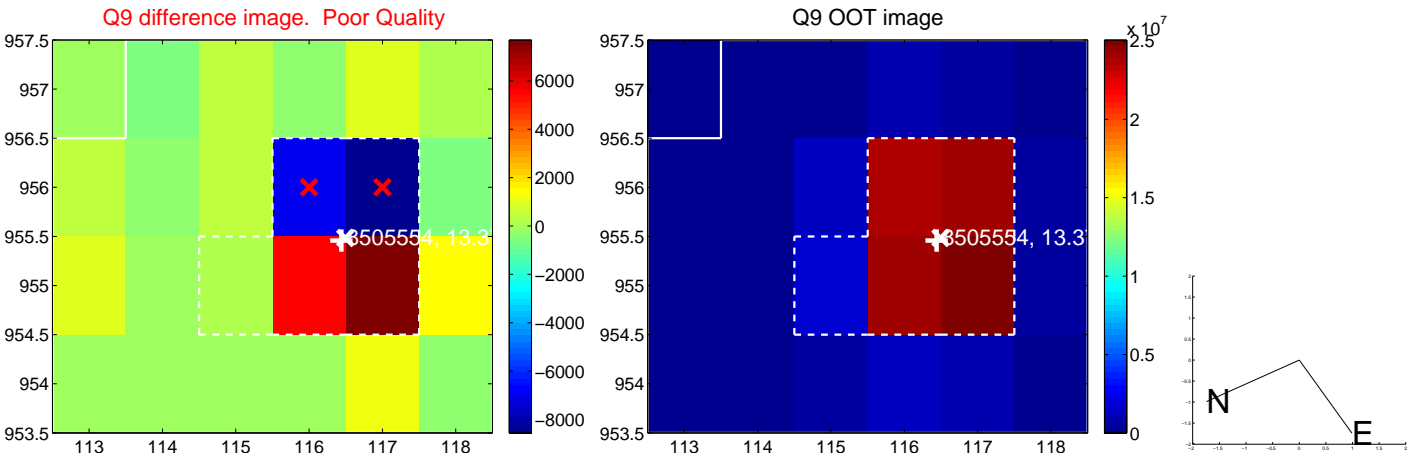
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

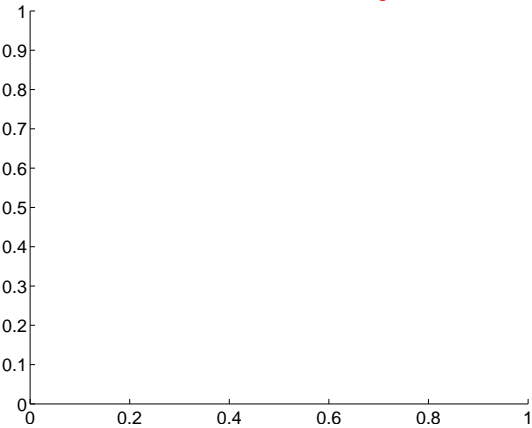


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

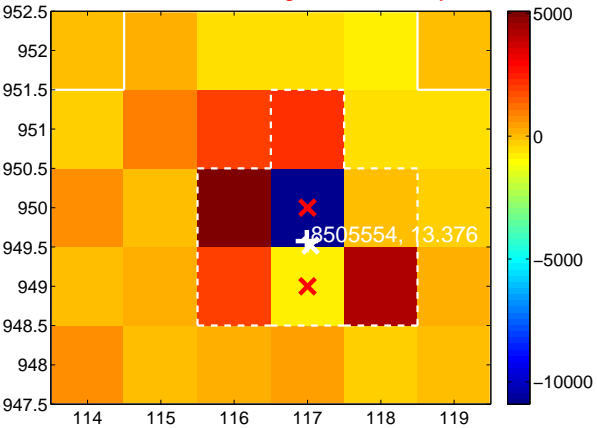
Q13 no difference image



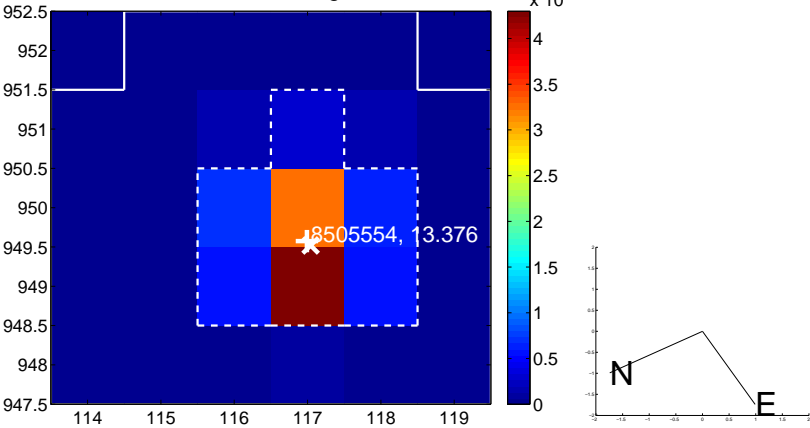
Q13 no OOT image



Q14 difference image. Poor Quality



Q14 OOT image



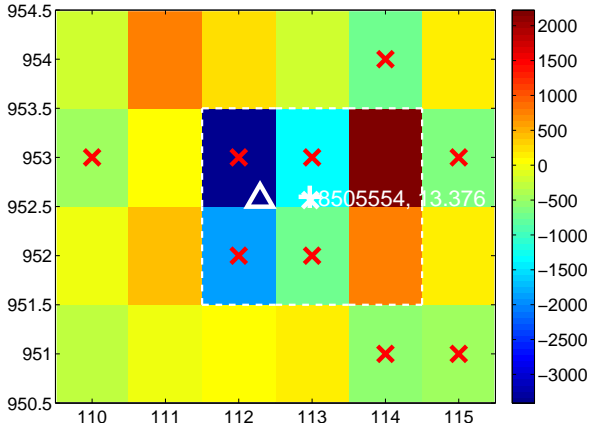
Q15 no difference image



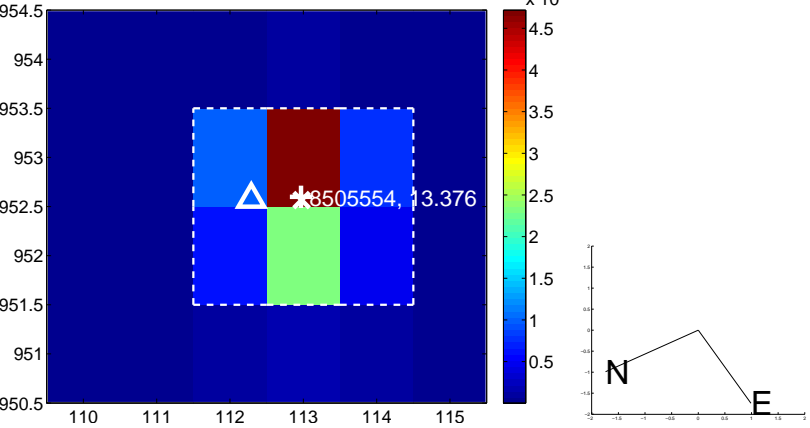
Q15 no OOT image



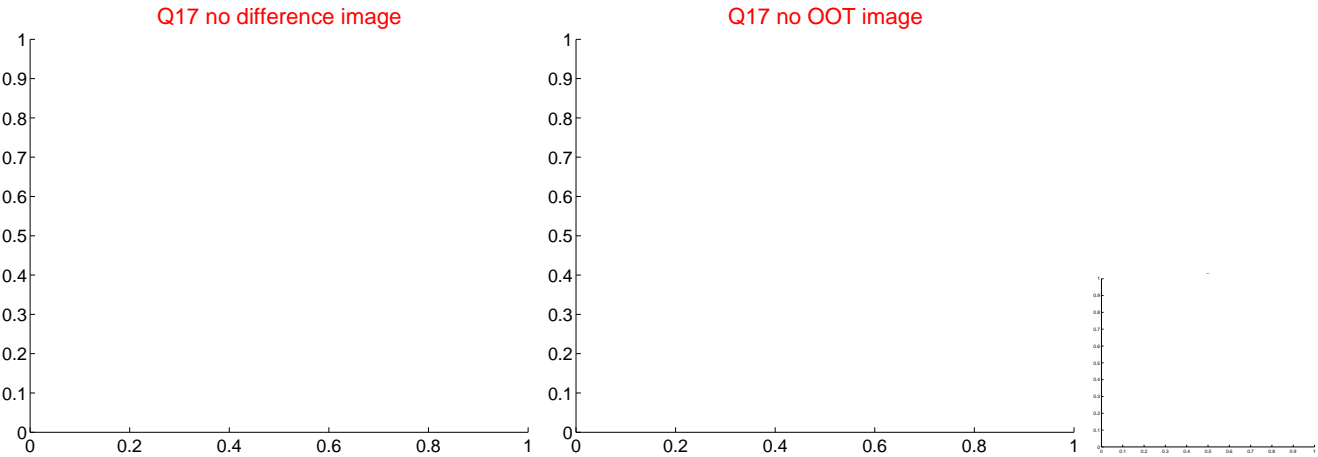
Q16 difference image. Poor Quality



Q16 OOT image



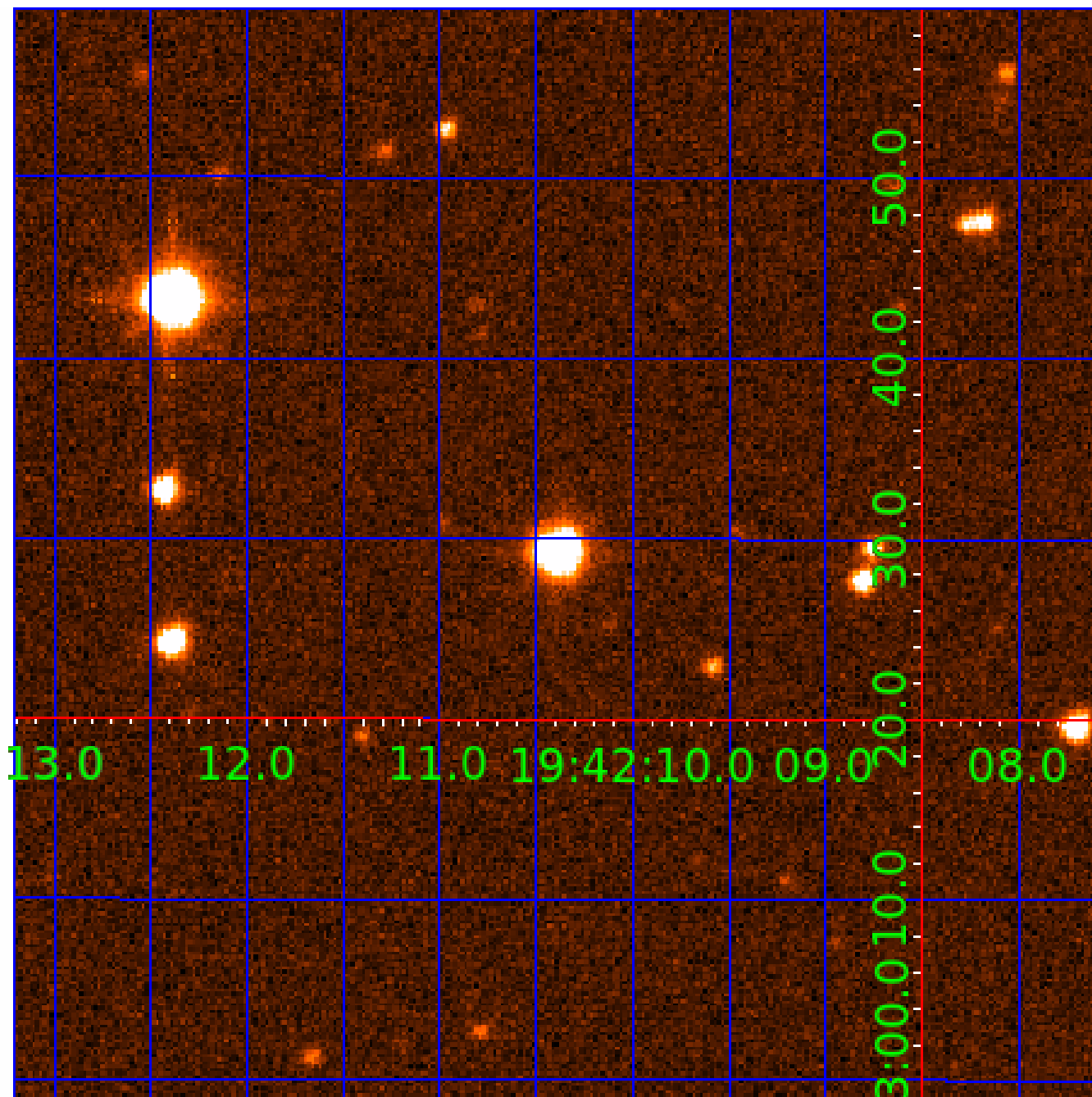
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



folded centroid time series figure for this object.

UKIRT Image

Declination



KIC 008505554

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})
008505554-01	OBS	No	2.853090	132.692487	23.7	19.730	8.5	10.6	1.12	6488	0.58	1185.03
008505554-02	OBS	No	211.021904	248.424420	194.0	15.167	12.9	10.6	1.12	6488	1.70	3.82
008505554-03	OBS	No	71.711636	150.106040	88.3	15.824	9.7	4.9	1.12	6488	1.19	16.09
008505554-04	OBS	No	35.010934	161.008632	71.7	9.062	9.6	5.8	1.12	6488	1.06	41.87
008505554-05	OBS	No	63.035047	142.876444	147.5	6.845	10.6	9.1	1.12	6488	1.71	19.11

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
008505554-01	OBS	FP	0.00	1	0	0	0	LPP_DV
008505554-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—INCONSISTENT_TRANS—CENT_FEW_DIFFS
008505554-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_POS_ALT
008505554-04	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_POS_ALT
008505554-05	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—CENT_FEW_MEAS

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

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

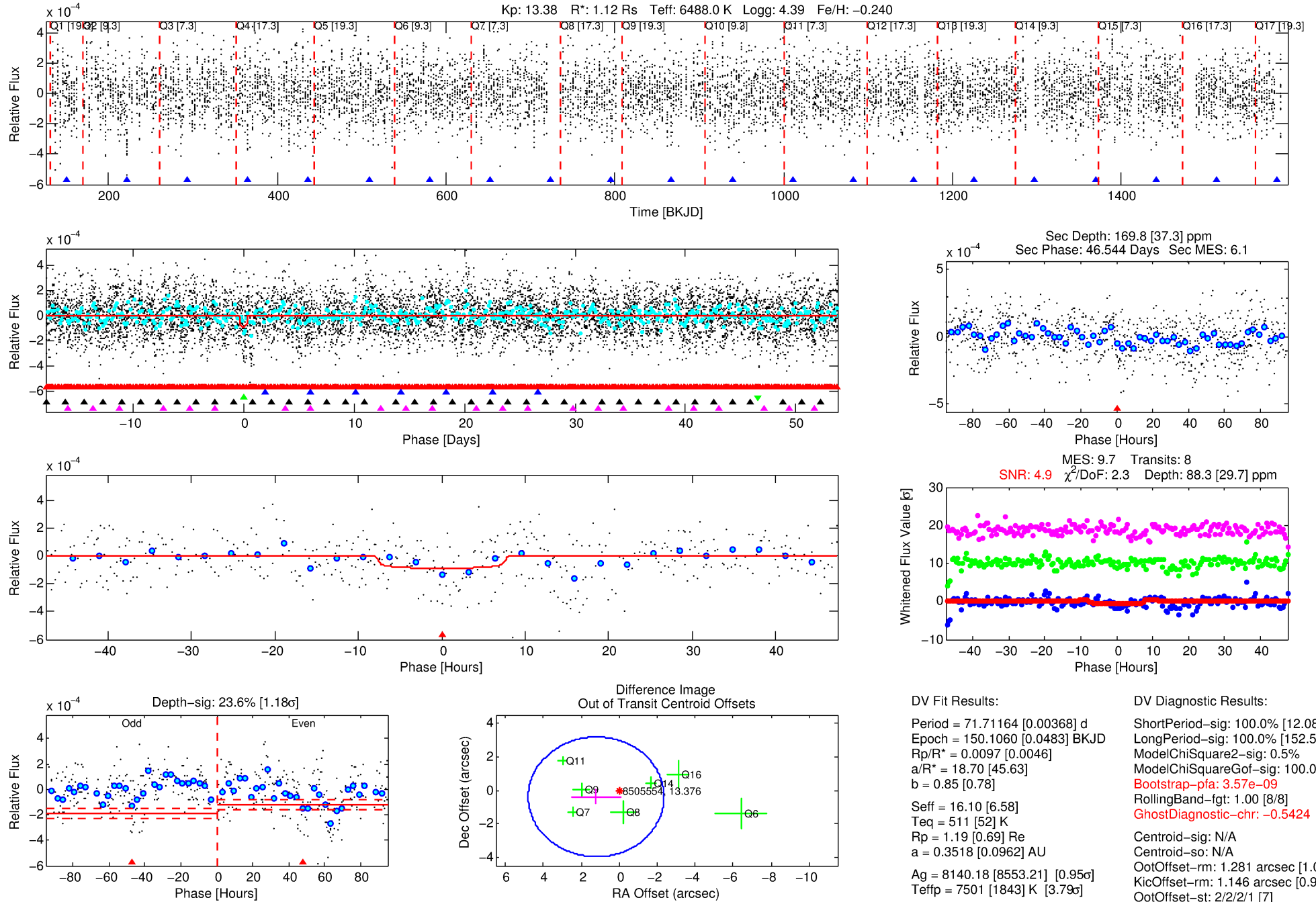
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 008505554-03

No Significant Match Found

DV One-Page Summary

KIC: 8505554 Candidate: 3 of 5 Period: 71.712 d



DV Fit Results:

Period = 71.71164 [0.00368] d
Epoch = 150.1060 [0.0483] BKJD
Rp/R* = 0.0097 [0.0046]
a/R* = 18.70 [45.63]
b = 0.85 [0.78]
Seff = 16.10 [6.58]
Teq = 511 [52] K
Rp = 1.19 [0.69] Re
a = 0.3518 [0.0962] AU
Ag = 8140.18 [8553.21] [0.95 σ]
Teffp = 7501 [1843] K [3.79 σ]

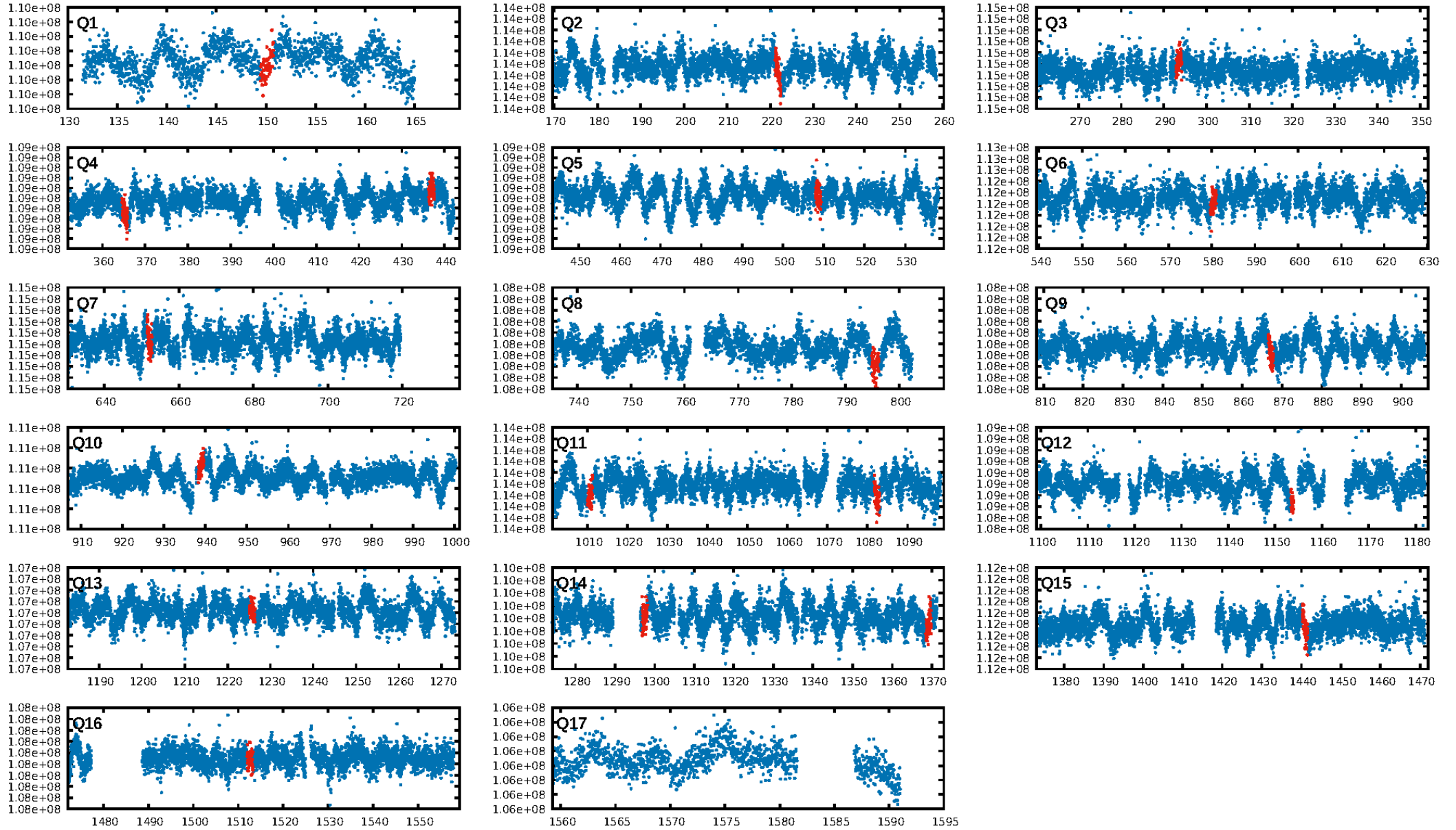
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [12.08 σ]
LongPeriod-sig: 100.0% [152.54 σ]
ModelChiSquare2-sig: 0.5%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: 3.57e-09
RollingBand-fgt: 1.00 [8/8]
GhostDiagnostic-chr: -0.5424
Centroid-sig: N/A
Centroid-so: N/A
OotOffset-rm: 1.281 arcsec [1.07 σ]
KicOffset-rm: 1.146 arcsec [0.92 σ]
OotOffset-st: 2/2/2/1 [7]
KicOffset-st: 2/2/2/1 [7]
DiffImageQuality-fgm: 0.57 [4/7]
DiffImageOverlap-fno: 0.00 [0/13]

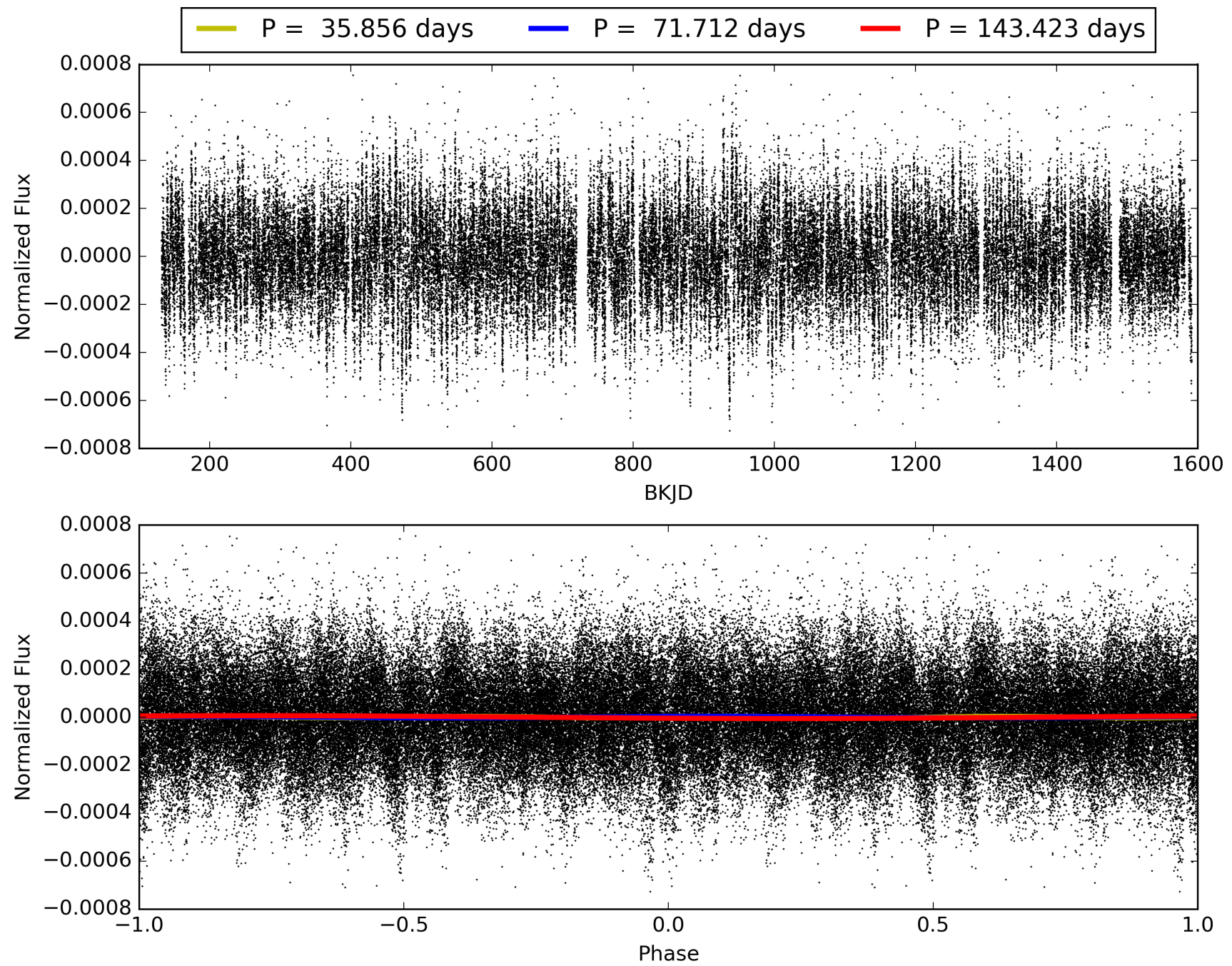
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 31-Jan-2016 14:09:43 Z

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

TCE 008505554-03, PDC Light Curves

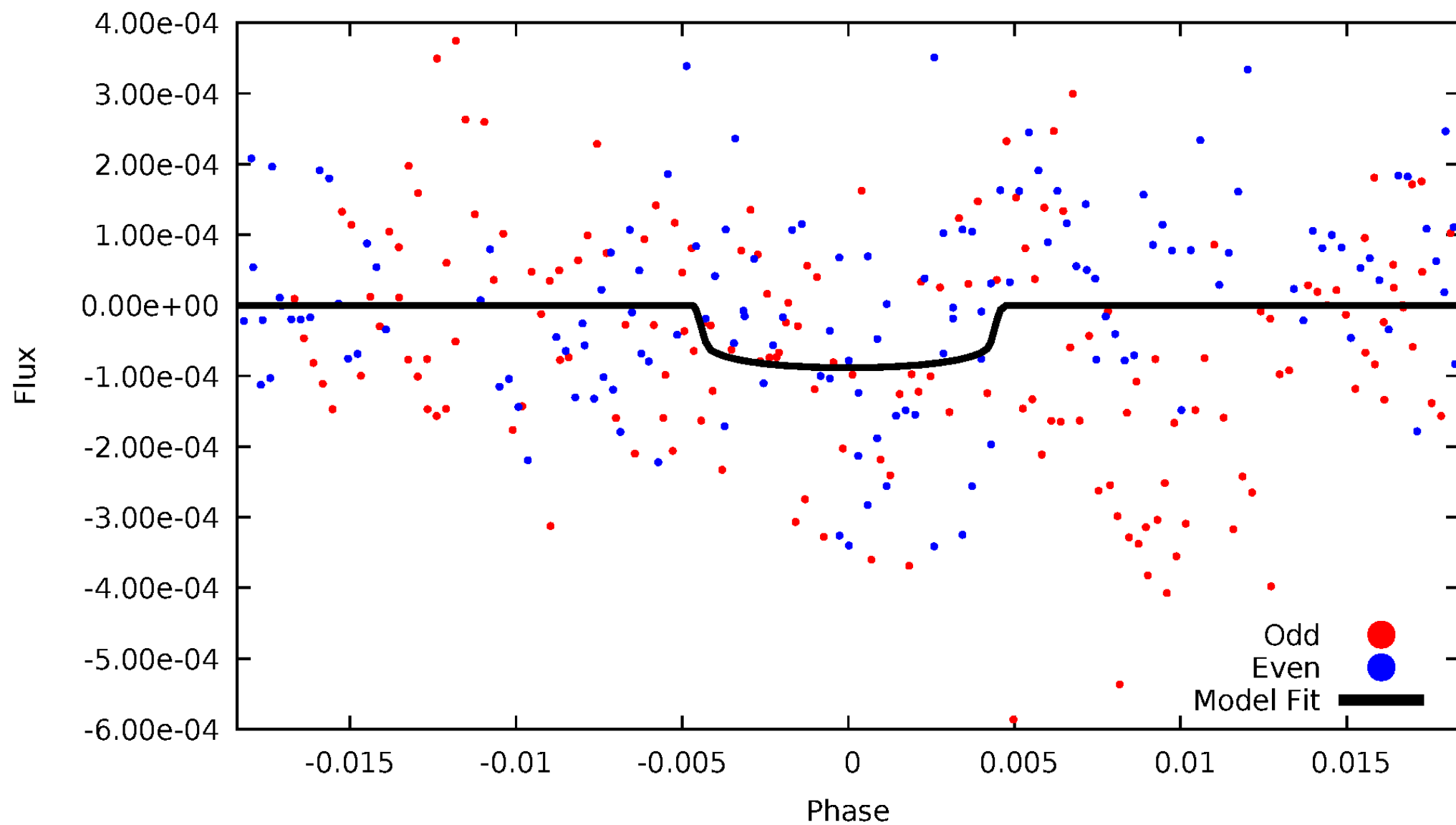


TCE 008505554-03



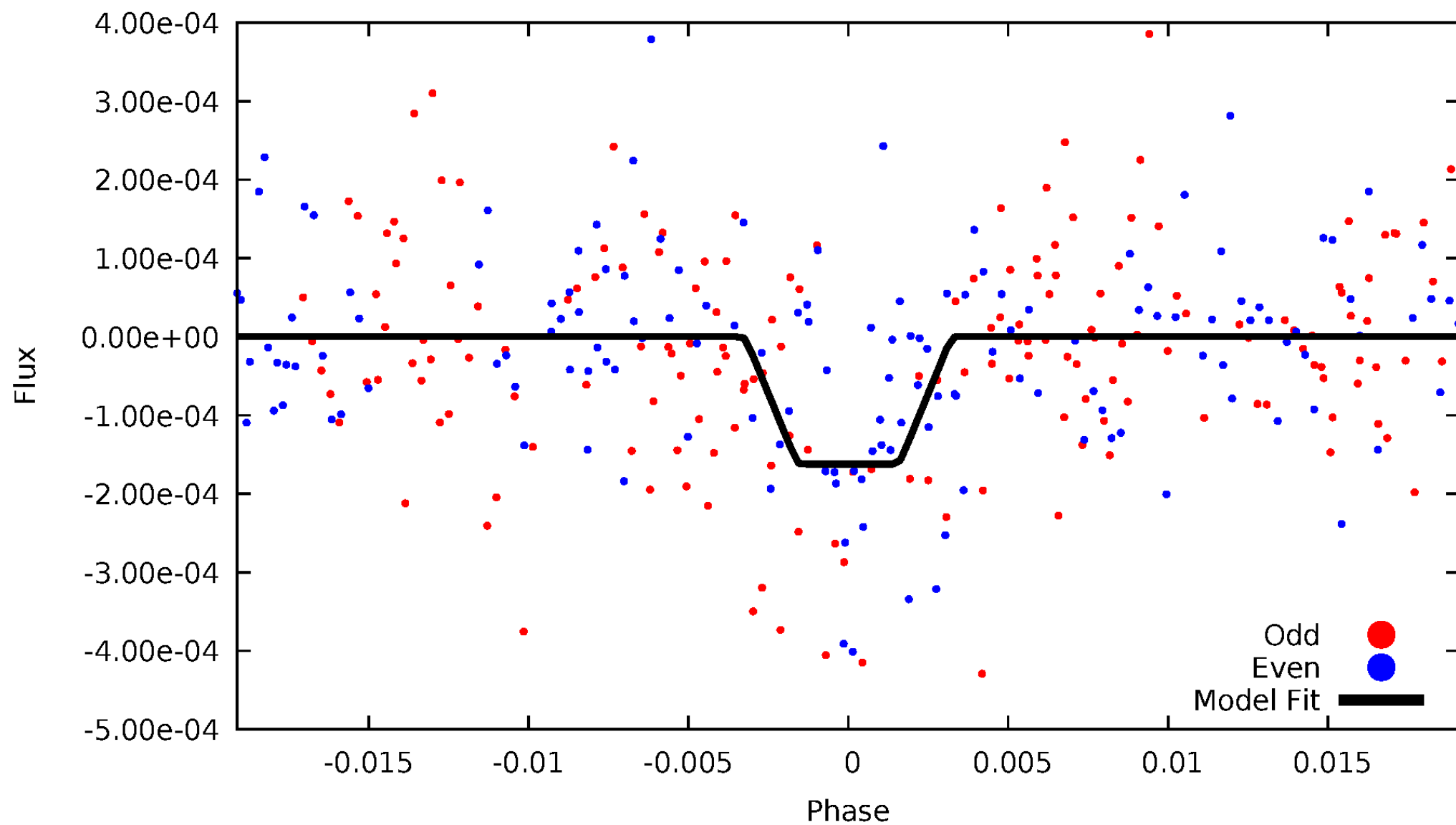
DV Odd/Even

TCE 008505554-03



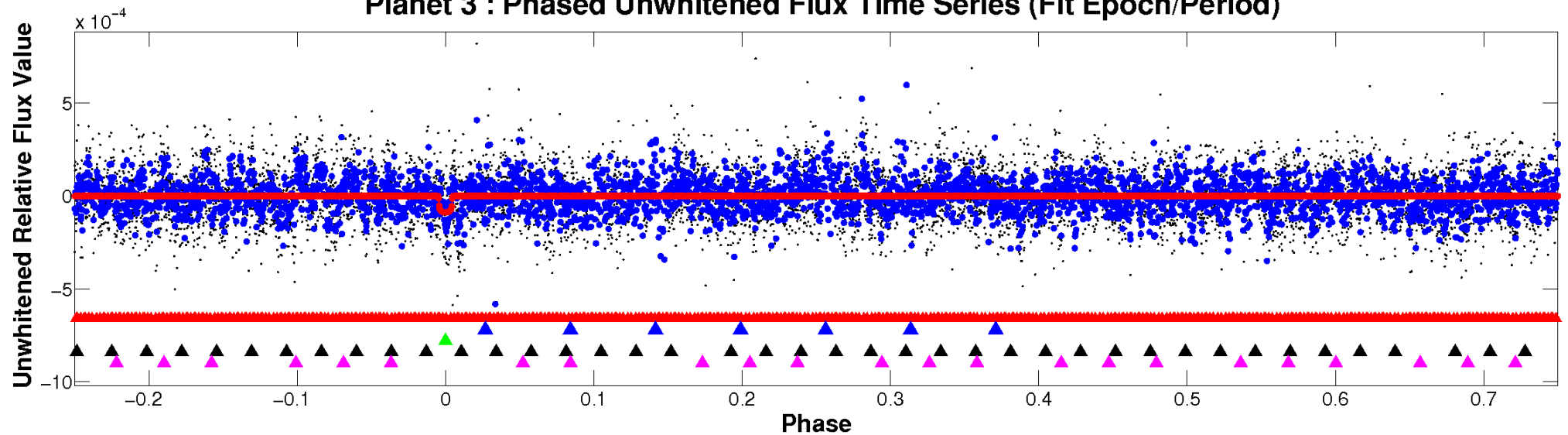
ALT Odd/Even

TCE 008505554-03

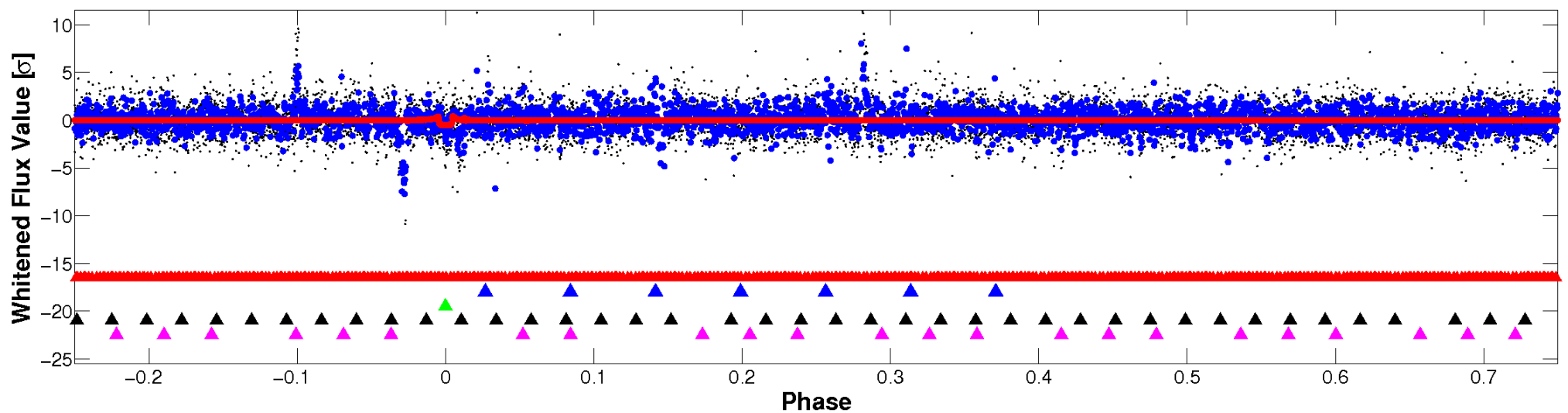


Non-Whitened Vs. Whitened Light Curve

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

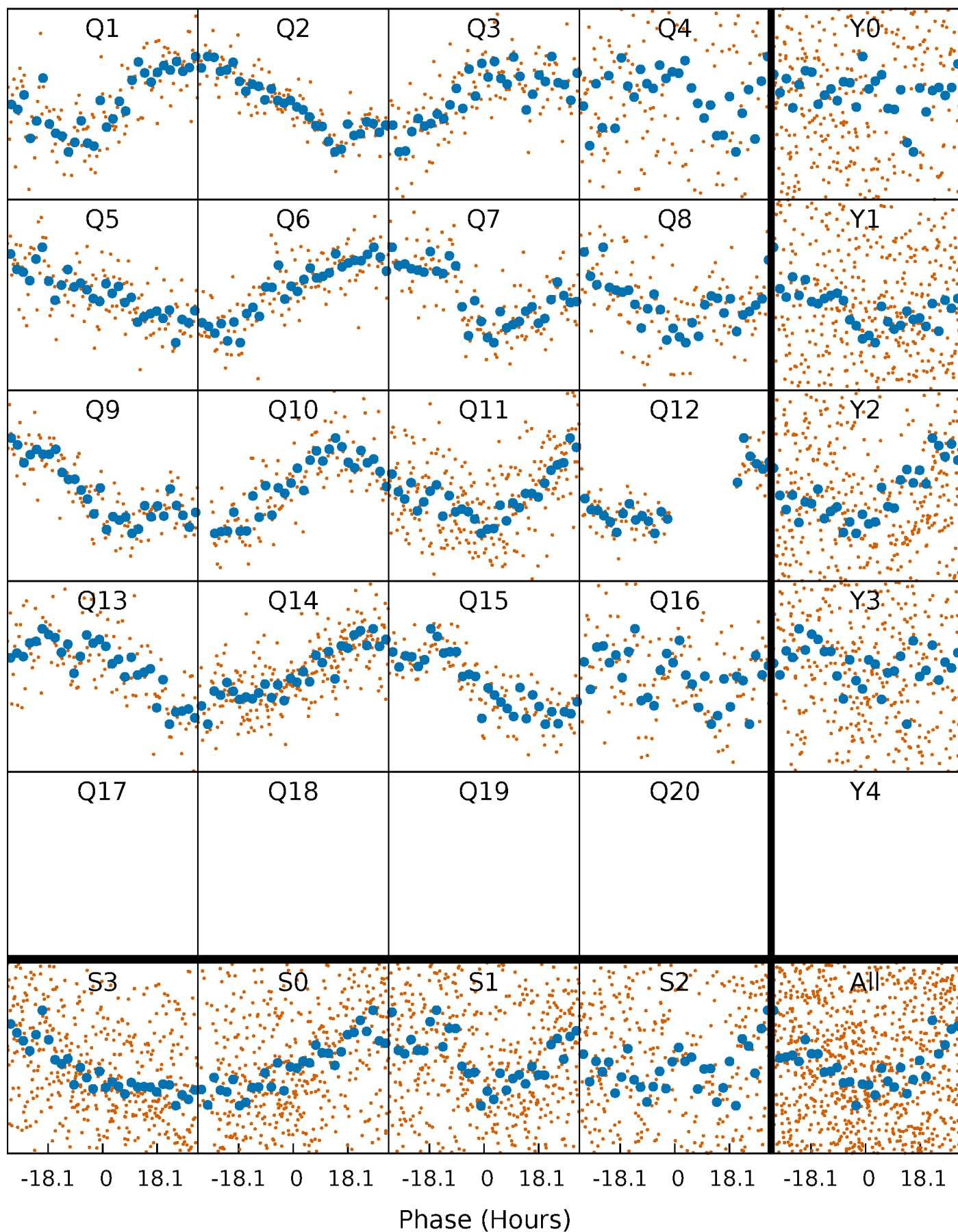


Planet 3 : Phased Whitened Flux Time Series (Fit Epoch/Period)



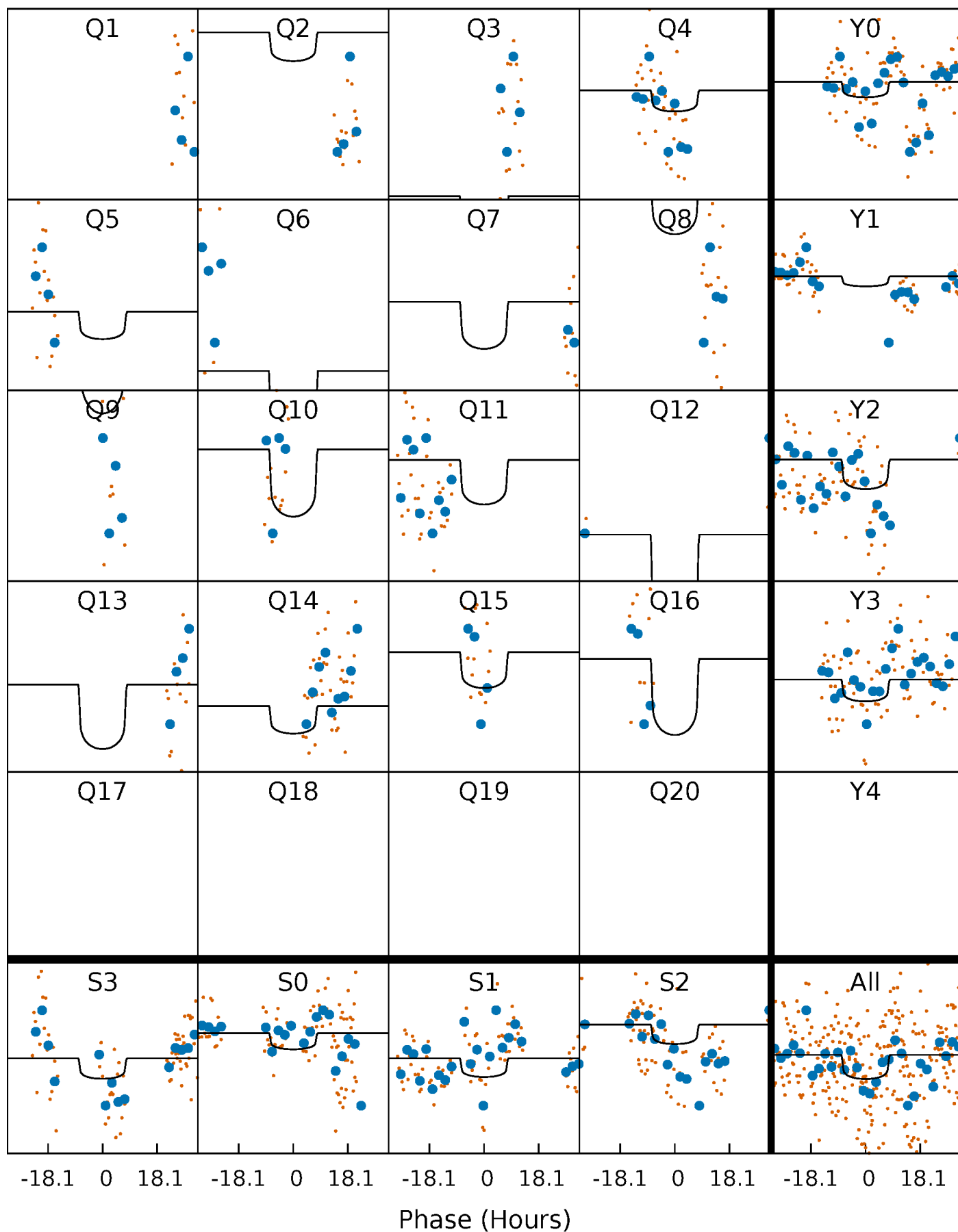
PDC Quarter-Phased Transit Curves

TCE 008505554-03 P= 71.711636 Days $T_0=150.106040$ (BKJD)



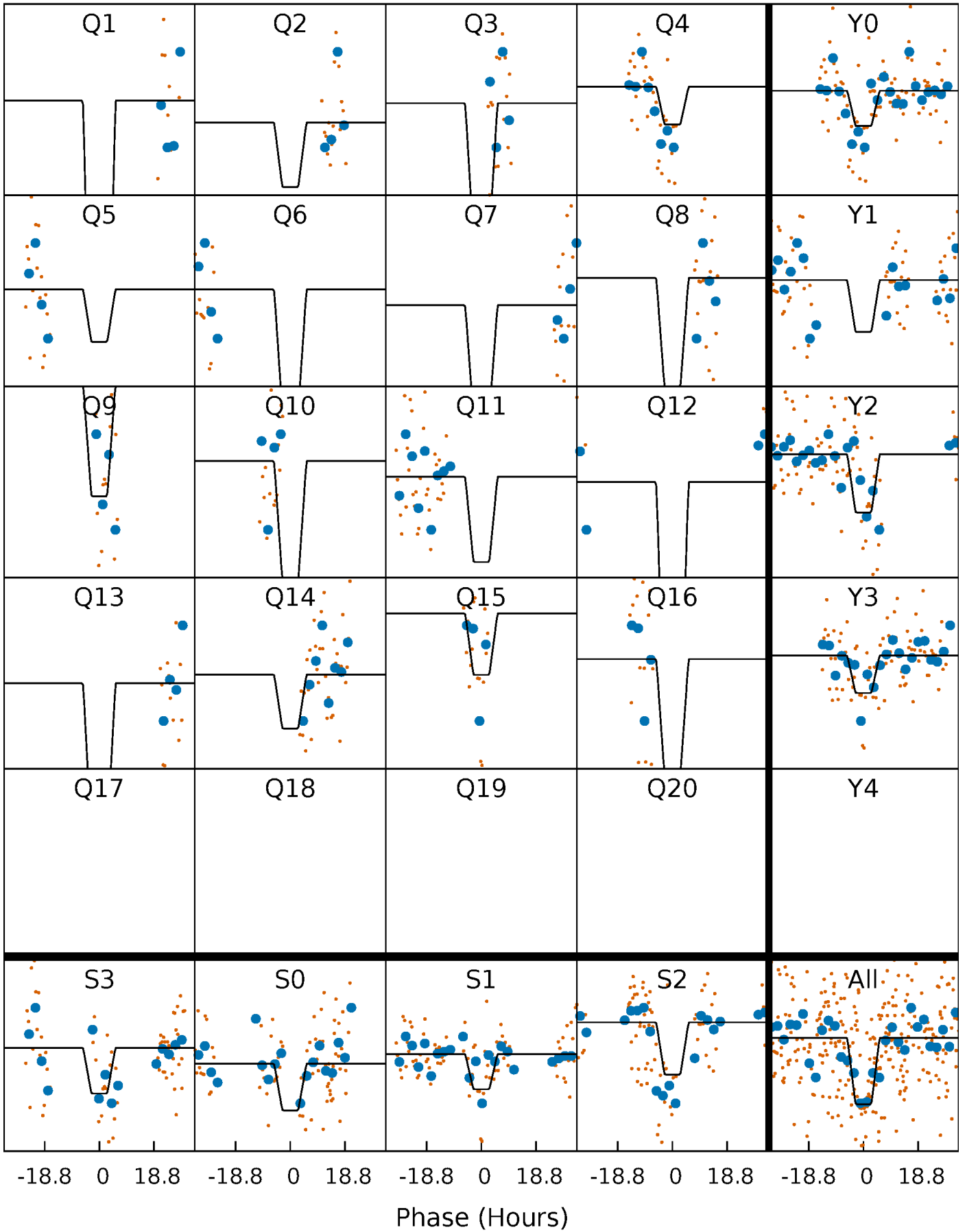
DV Quarter-Phased Transit Curves

TCE 008505554-03 P= 71.711636 Days $T_0=150.106040$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

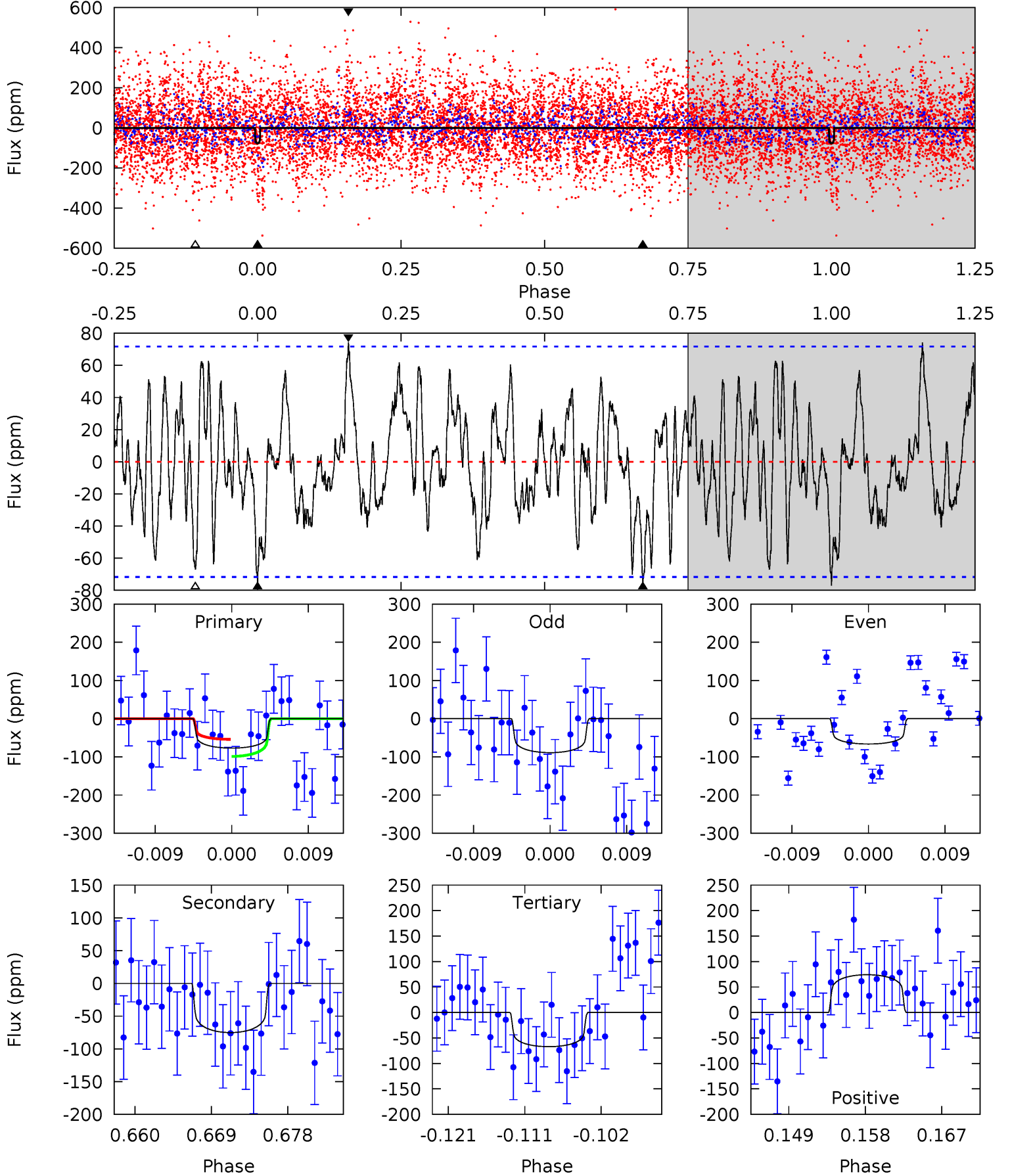
TCE 008505554-03 P= 71.704396 Days $T_0=150.227619$ (BKJD)



DV Model-Shift Uniqueness Test

008505554-03, P = 71.711636 Days, E = 78.394404 Days

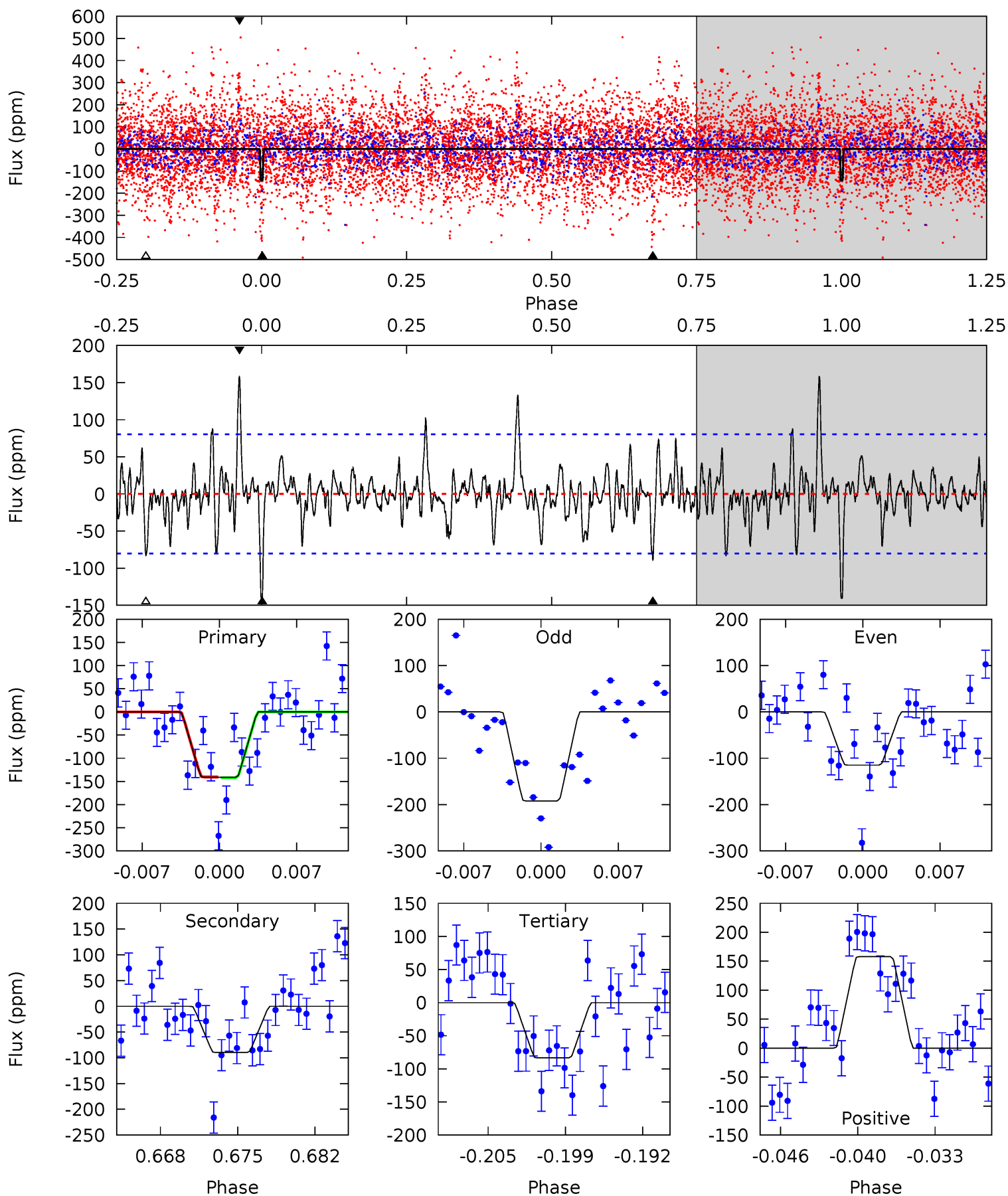
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
5.41	5.28	4.71	5.21	5.04	2.60	2.00	0.70	0.20	0.57	0.07	0.80	1.20	0.49	1.57



Alt Model-Shift Uniqueness Test

008505554-03, P = 71.704396 Days, E = 78.523223 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
8.98	5.70	5.30	10.0	5.10	2.72	1.89	3.67	-1.07	0.40	-4.34	2.42	0.83	0.53	0.04



Stellar Parameters For KIC 008505554

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	6488^{+146}_{-195}	$4.392^{+0.070}_{-0.210}$	$-0.240^{+0.250}_{-0.300}$	$1.120^{+0.371}_{-0.124}$	$1.127^{+0.170}_{-0.139}$	$1.130^{+0.339}_{-0.620}$
	+2%/-3%	+2%/-5%	+104%/-125%	+33%/-11%	+15%/-12%	+30%/-55%
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 008505554-03 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-75 ± 14	$1.23^{+0.65}_{-0.56}$	724^{+53}_{-31}	6109^{+2725}_{-1068}	3294^{+8138}_{-1907}
Alt.	-90 ± 16	$1.63^{+0.60}_{-0.60}$	724^{+51}_{-35}	5598^{+1482}_{-786}	2301^{+3404}_{-1163}

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

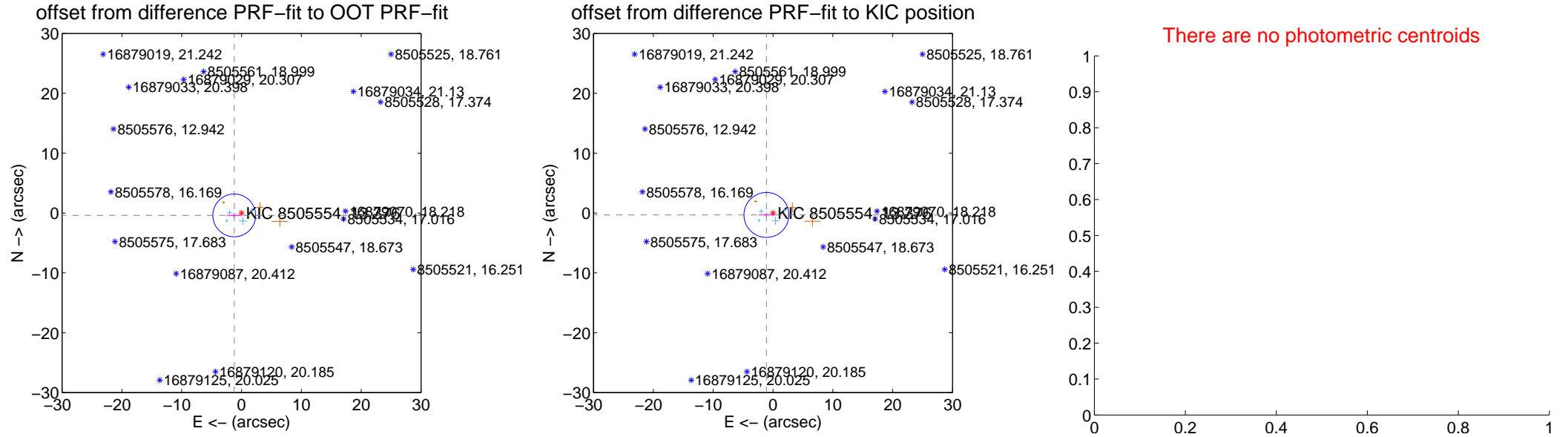
DV Centroid Data

Supplemental centroid analysis for 008505554-03. Kepler magnitude: 13.38. Transit SNR 4.88

There are 4 quarters with good PRF difference image offsets

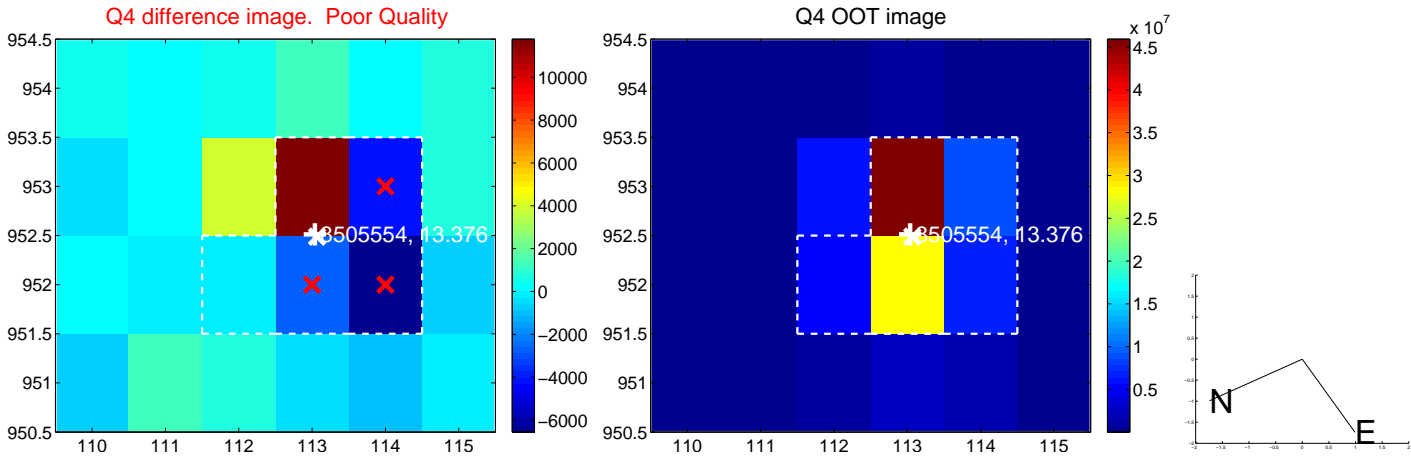
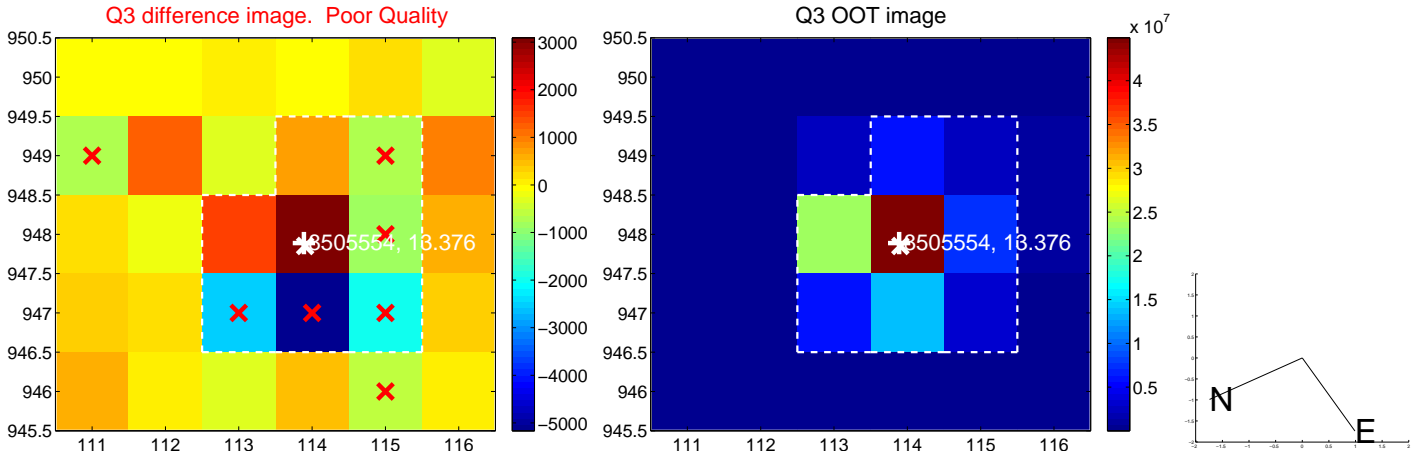
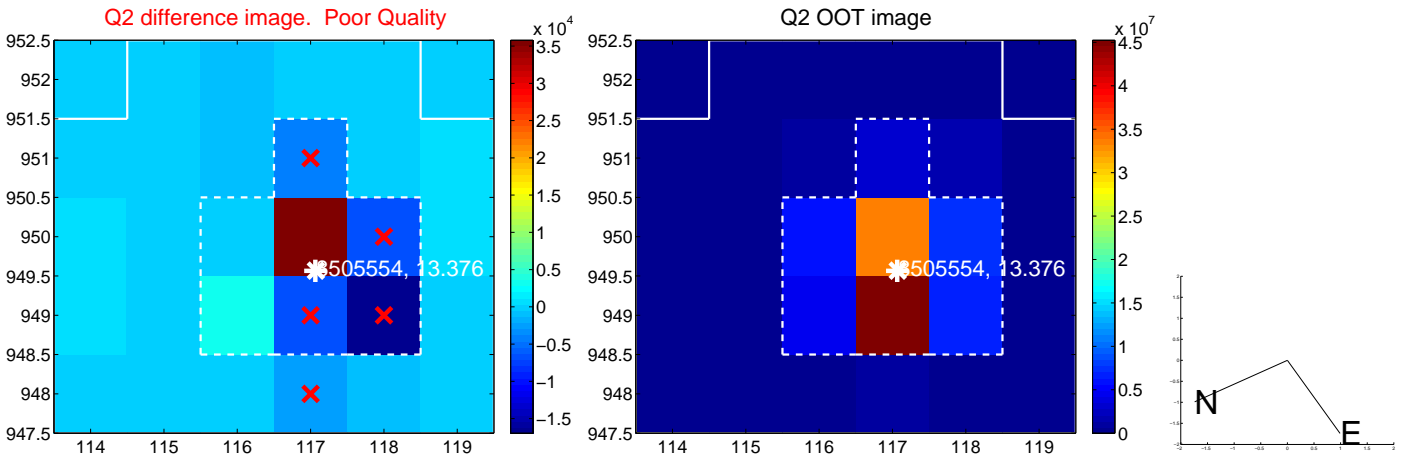
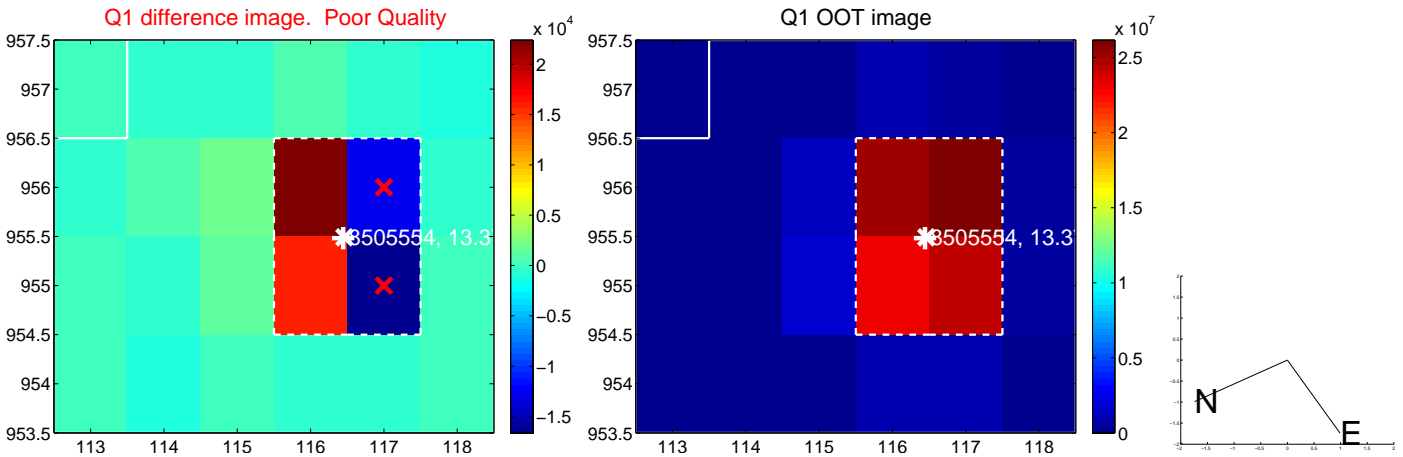
The direct PRF centroid is offset from the target star catalog position by about 0.13 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	1.281 ± 1.191	1.07	1.218 ± 1.274	-0.395 ± 0.403
PRF-fit source offset from KIC position	1.146 ± 1.252	0.92	1.099 ± 1.307	-0.322 ± 0.418
photometric centroid source offset	—	—	—	—

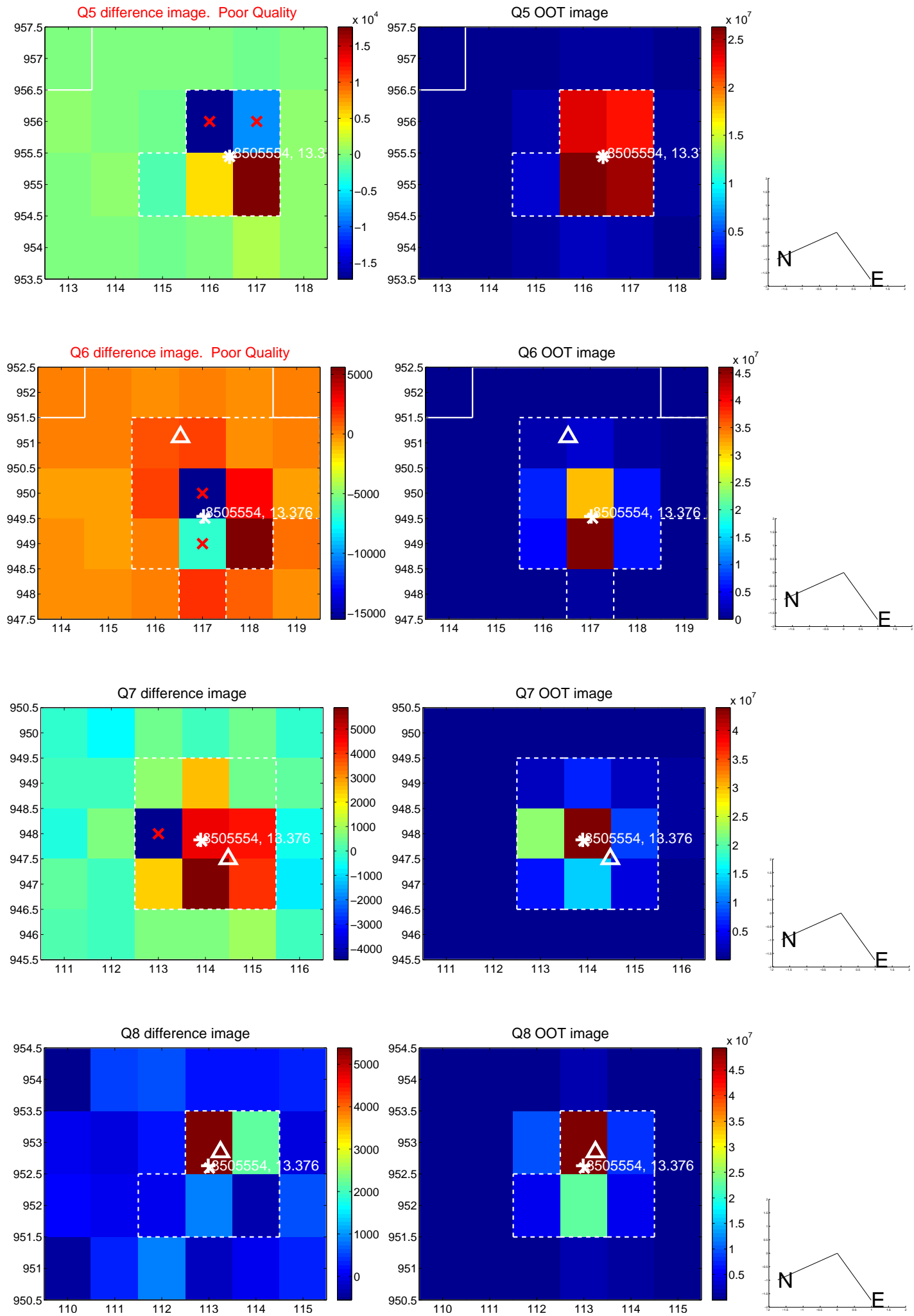


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets;** magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

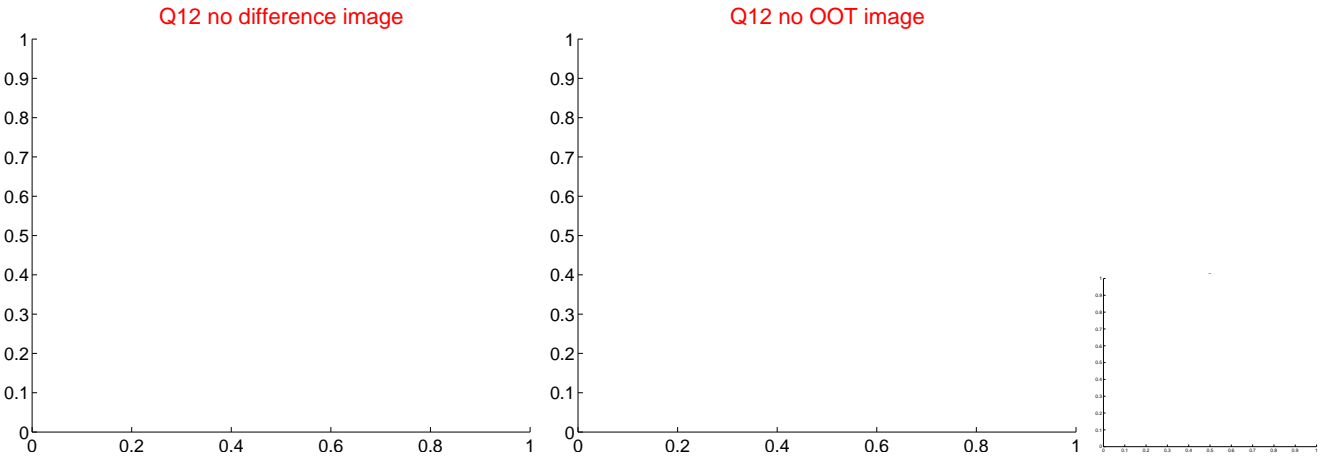
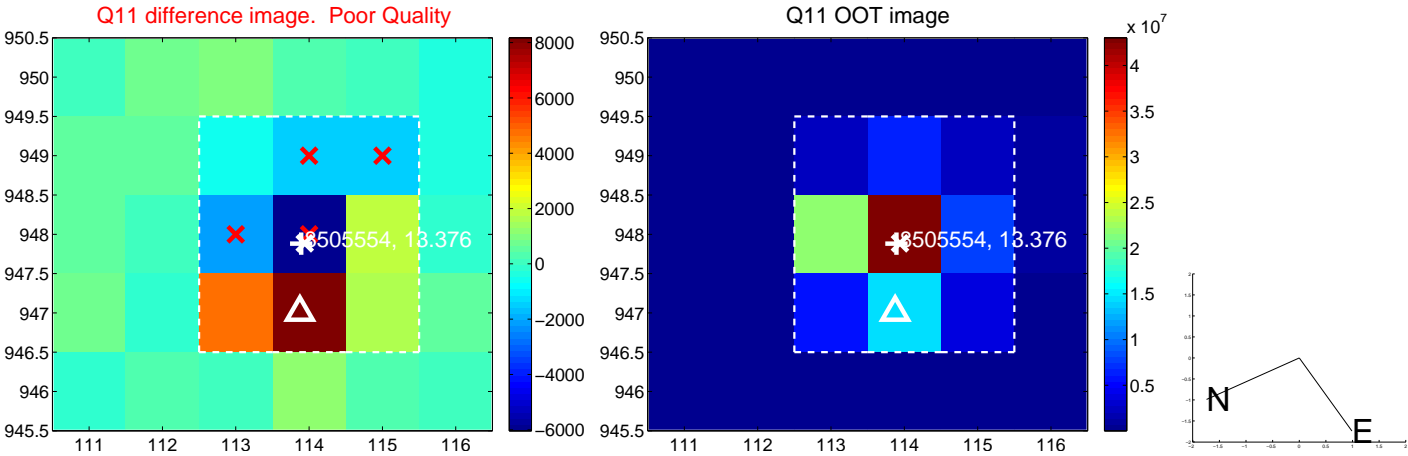
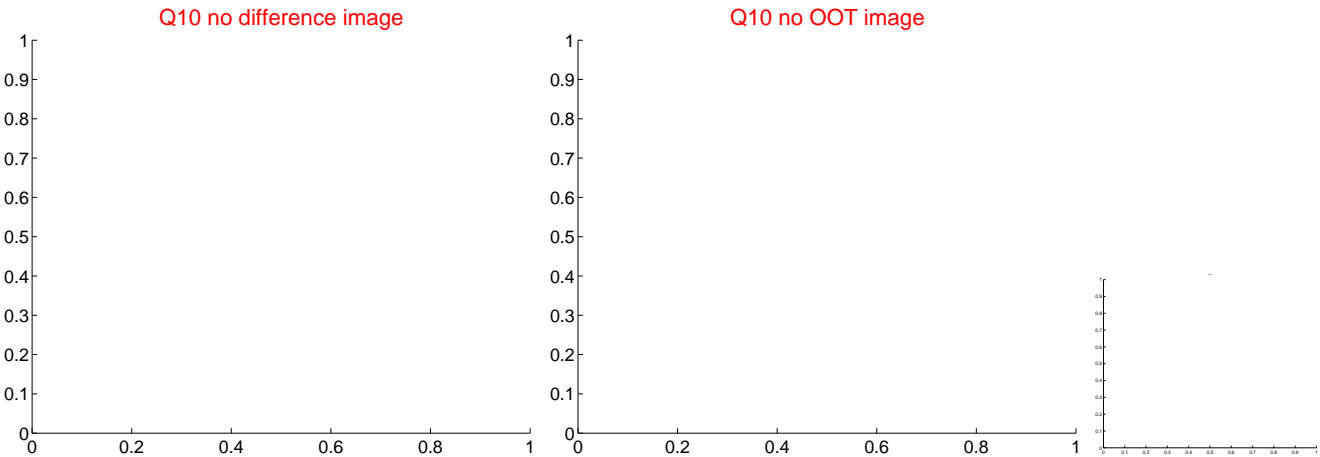
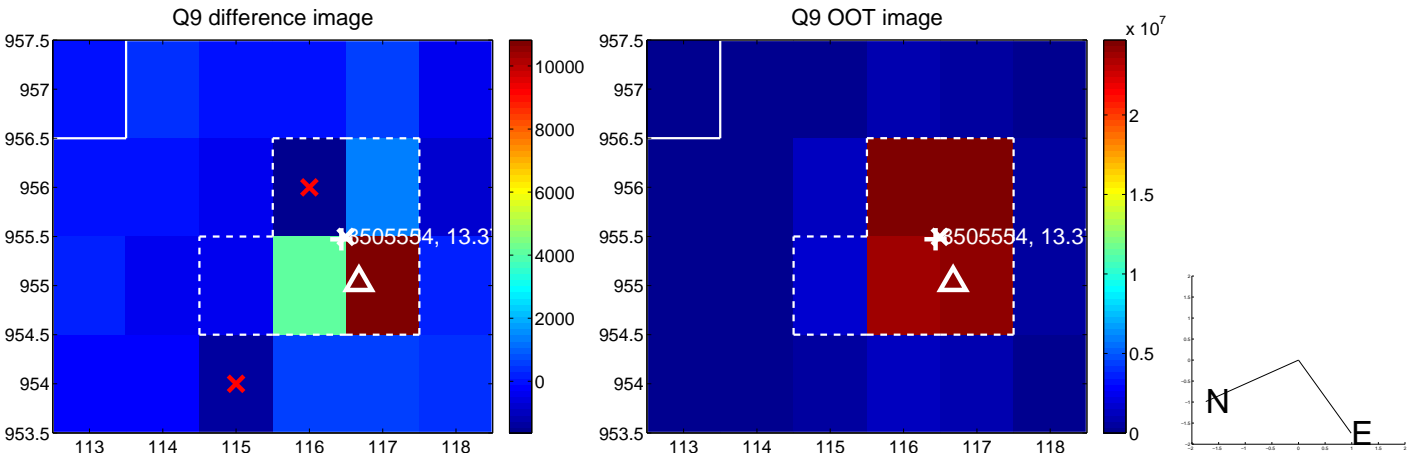
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



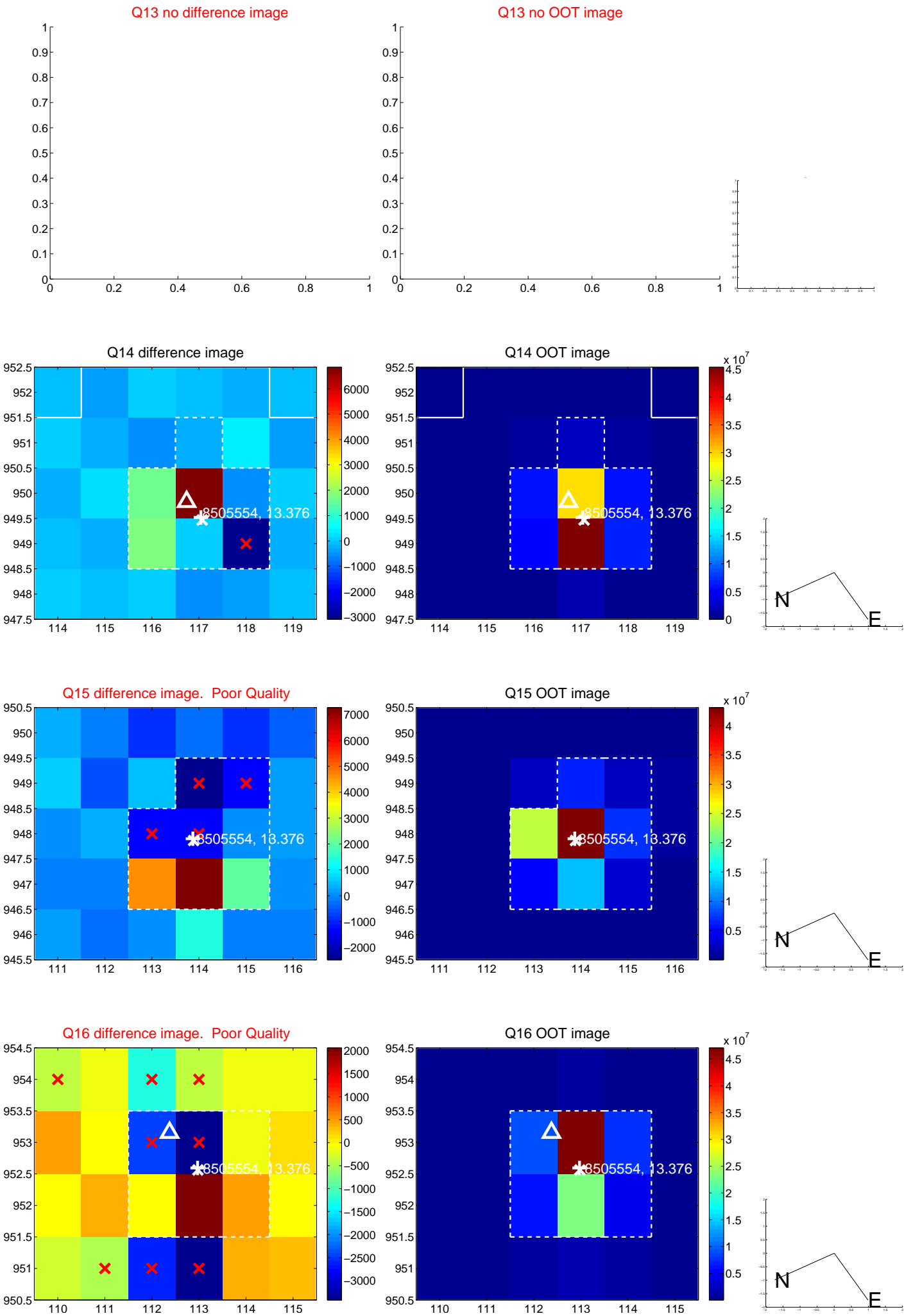
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



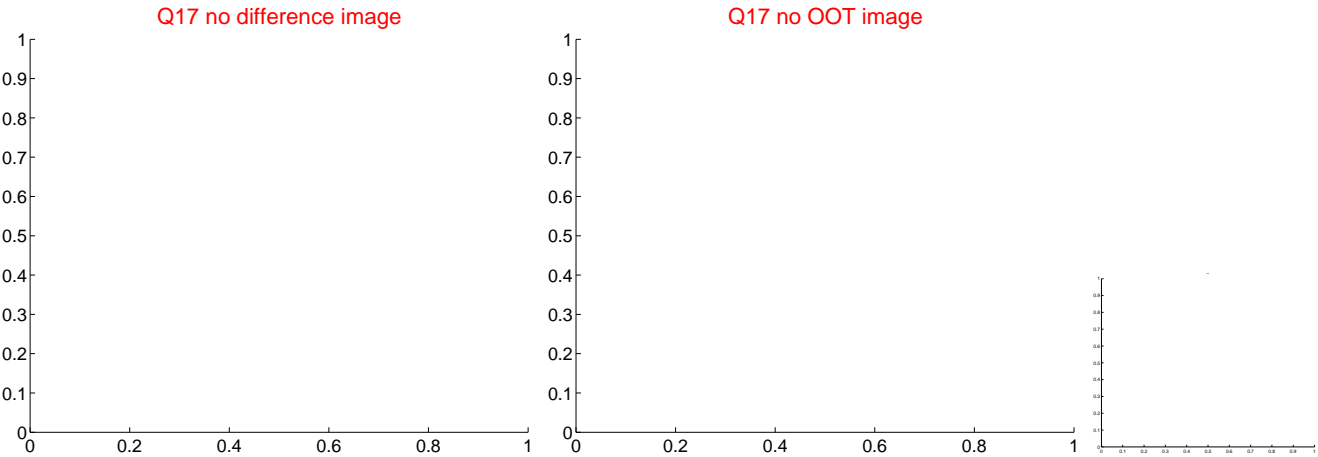
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



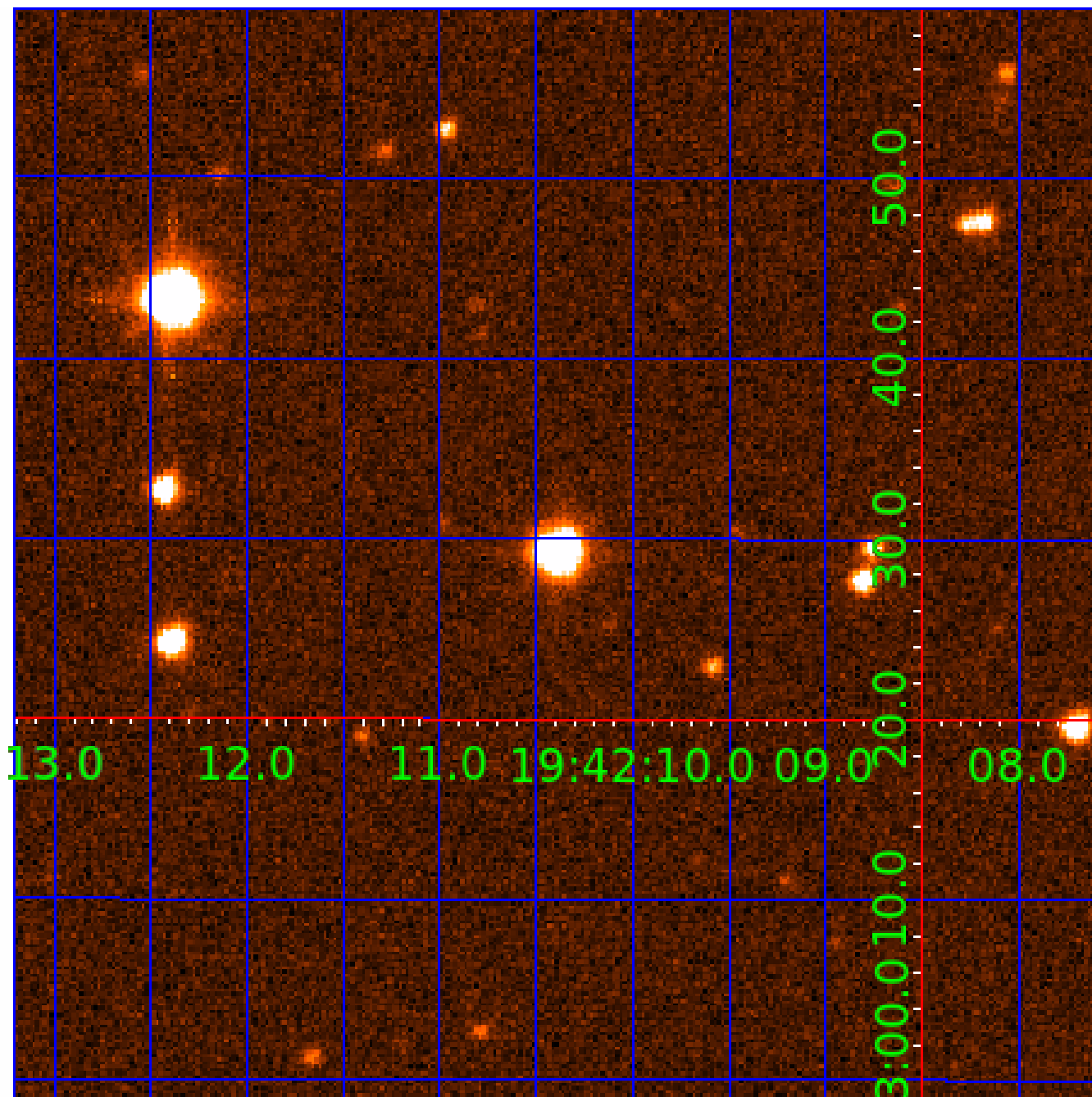
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



folded centroid time series figure for this object.

UKIRT Image

Declination



KIC 008505554

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})
008505554-01	OBS	No	2.853090	132.692487	23.7	19.730	8.5	10.6	1.12	6488	0.58	1185.03
008505554-02	OBS	No	211.021904	248.424420	194.0	15.167	12.9	10.6	1.12	6488	1.70	3.82
008505554-03	OBS	No	71.711636	150.106040	88.3	15.824	9.7	4.9	1.12	6488	1.19	16.09
008505554-04	OBS	No	35.010934	161.008632	71.7	9.062	9.6	5.8	1.12	6488	1.06	41.87
008505554-05	OBS	No	63.035047	142.876444	147.5	6.845	10.6	9.1	1.12	6488	1.71	19.11

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
008505554-01	OBS	FP	0.00	1	0	0	0	LPP_DV
008505554-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—INCONSISTENT_TRANS—CENT_FEW_DIFFS
008505554-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_POS_ALT
008505554-04	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_POS_ALT
008505554-05	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—CENT_FEW_MEAS

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

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

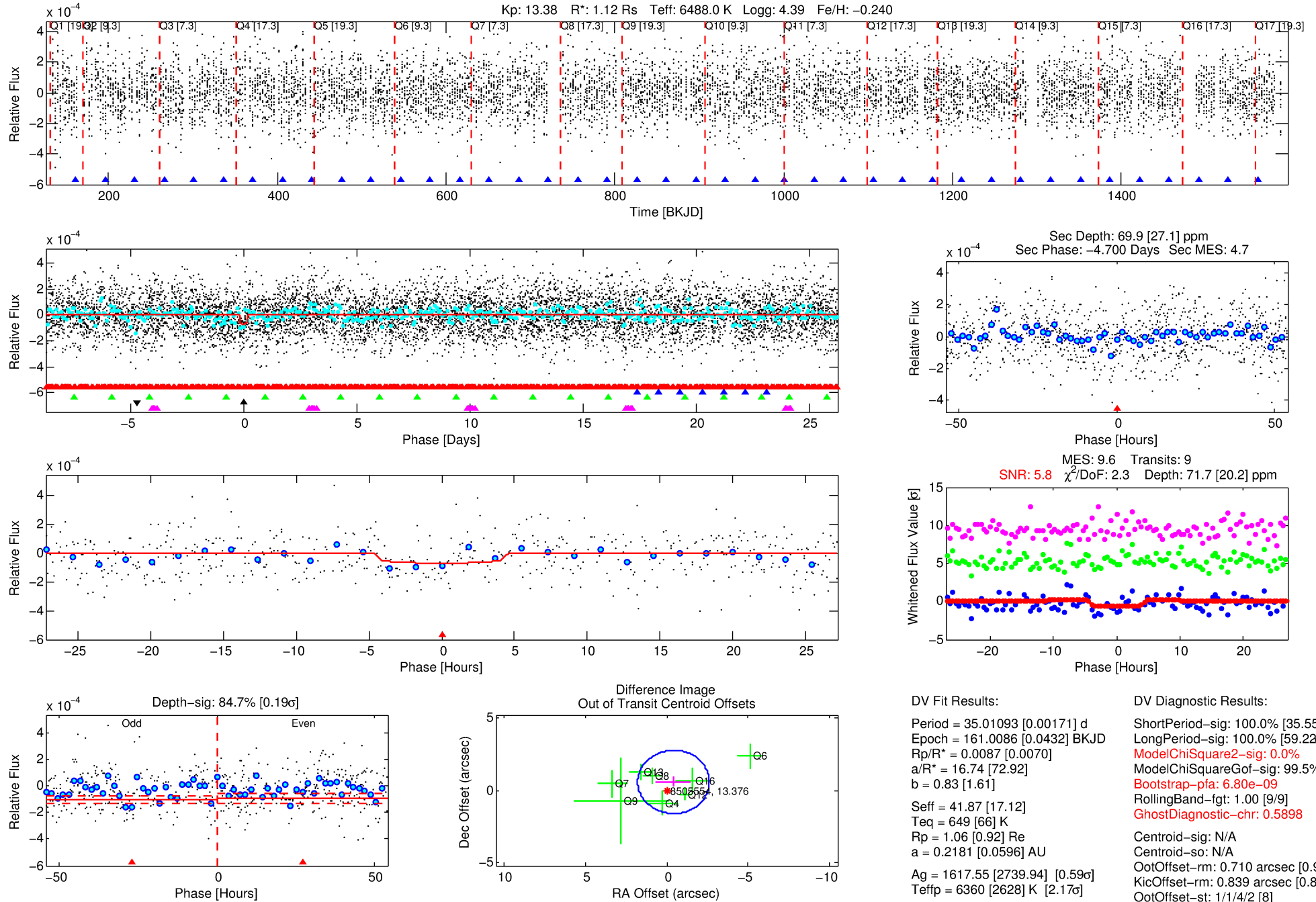
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 008505554-04

No Significant Match Found

DV One-Page Summary

KIC: 8505554 Candidate: 4 of 5 Period: 35.011 d



DV Fit Results:

Period = 35.01093 [0.00171] d
Epoch = 161.0086 [0.0432] BKJD
Rp/R* = 0.0087 [0.0070]
a/R* = 16.74 [72.92]
b = 0.83 [1.61]
Seff = 41.87 [17.12]
Teq = 649 [66] K
Rp = 1.06 [0.92] Re
a = 0.2181 [0.0596] AU
Ag = 1617.55 [2739.94] [0.59 σ]
Teffp = 6360 [2628] K [2.17 σ]

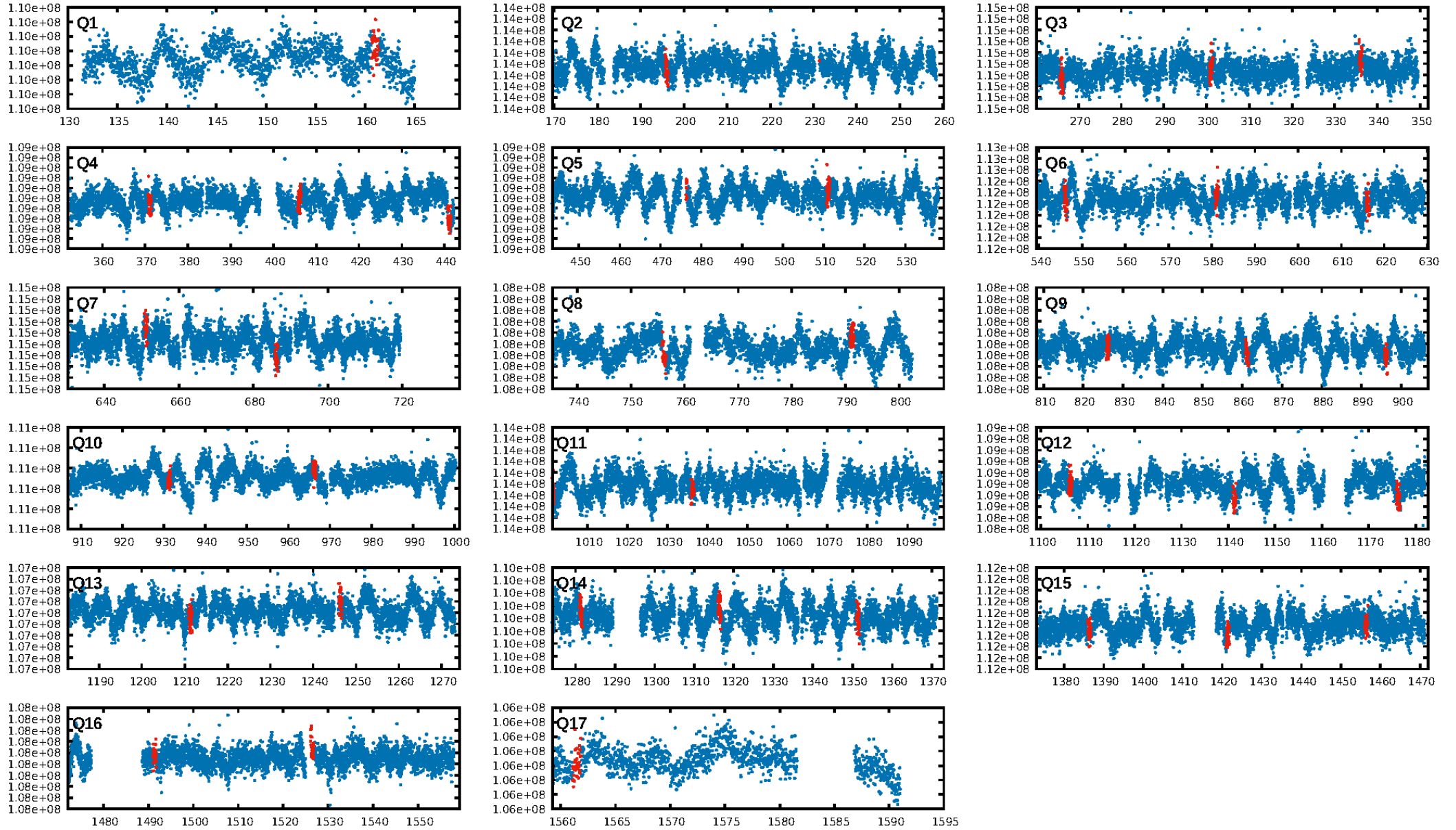
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [35.55 σ]
LongPeriod-sig: 100.0% [59.22 σ]
ModelChiSquare2-sig: 0.0%
ModelChiSquareGof-sig: 99.5%
Bootstrap-pfa: 6.80e-09
RollingBand-fgt: 1.00 [9/9]
GhostDiagnostic-chr: 0.5898
Centroid-sig: N/A
Centroid-so: N/A
OotOffset-rm: 0.710 arcsec [0.97 σ]
KicOffset-rm: 0.839 arcsec [0.89 σ]
OotOffset-st: 1/1/4/2 [8]
KicOffset-st: 1/1/4/2 [8]
DiffImageQuality-fgm: 0.62 [5/8]
DiffImageOverlap-fno: 0.38 [6/16]

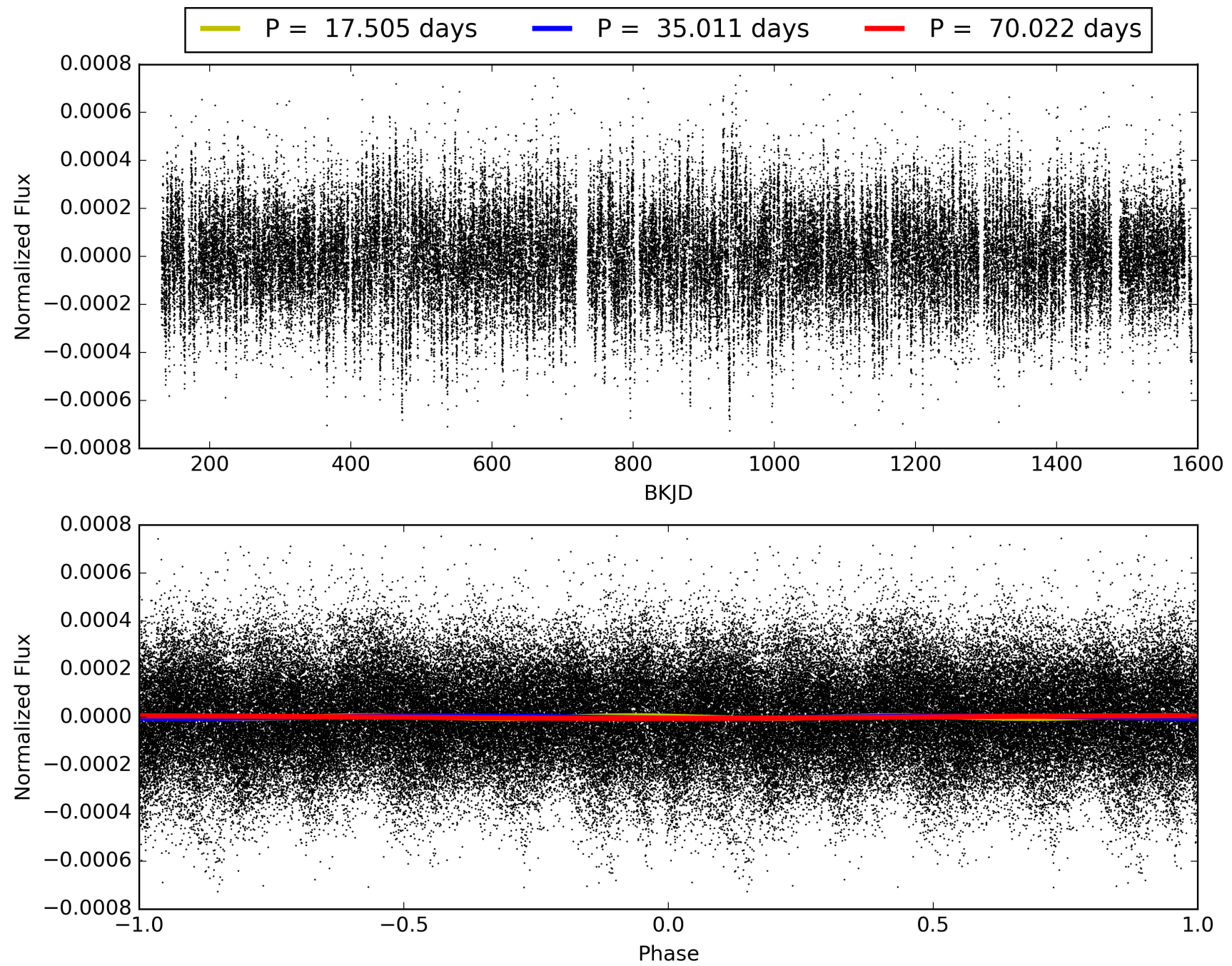
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 31-Jan-2016 14:09:46 Z

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

TCE 008505554-04, PDC Light Curves

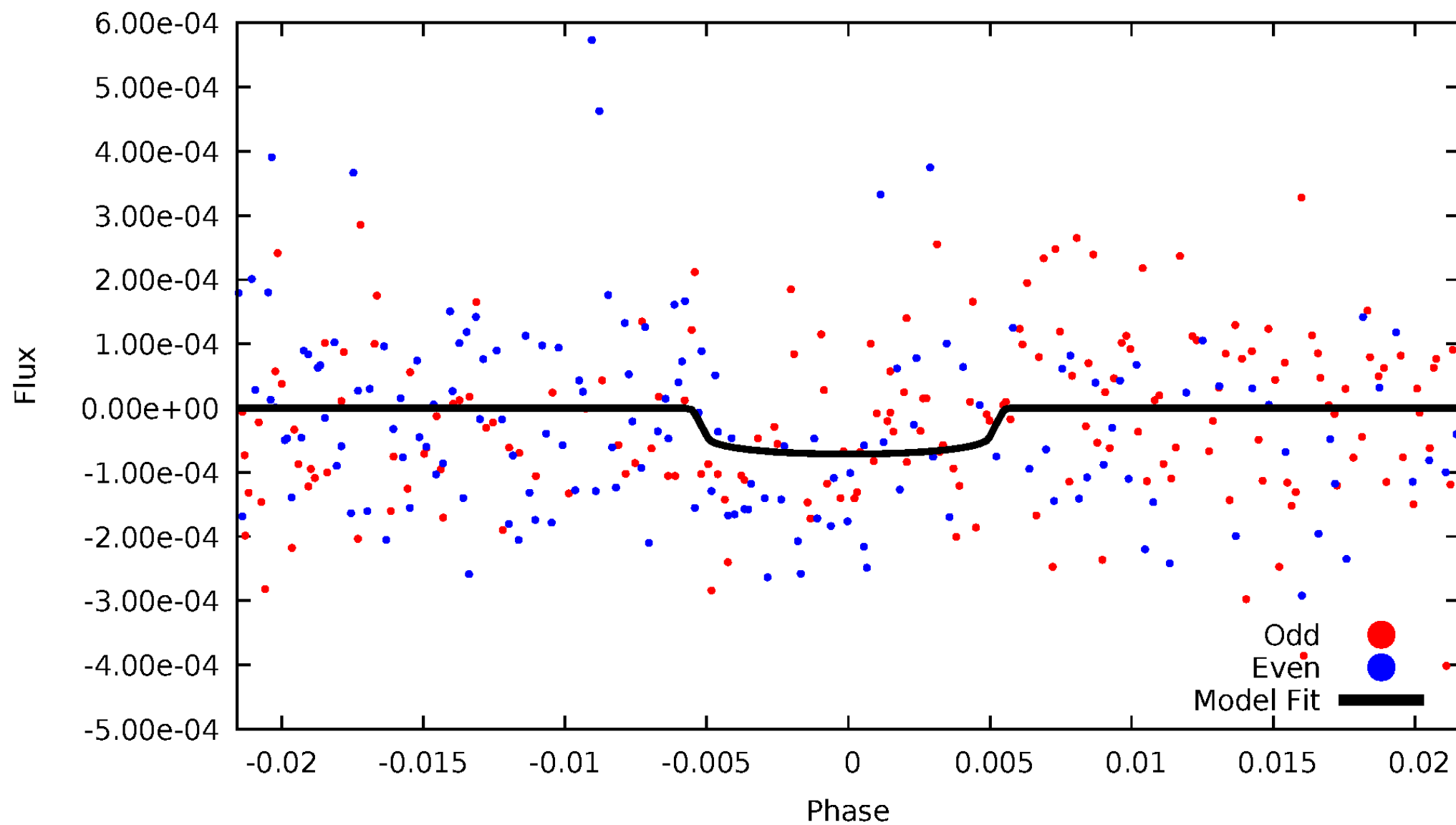


TCE 008505554-04



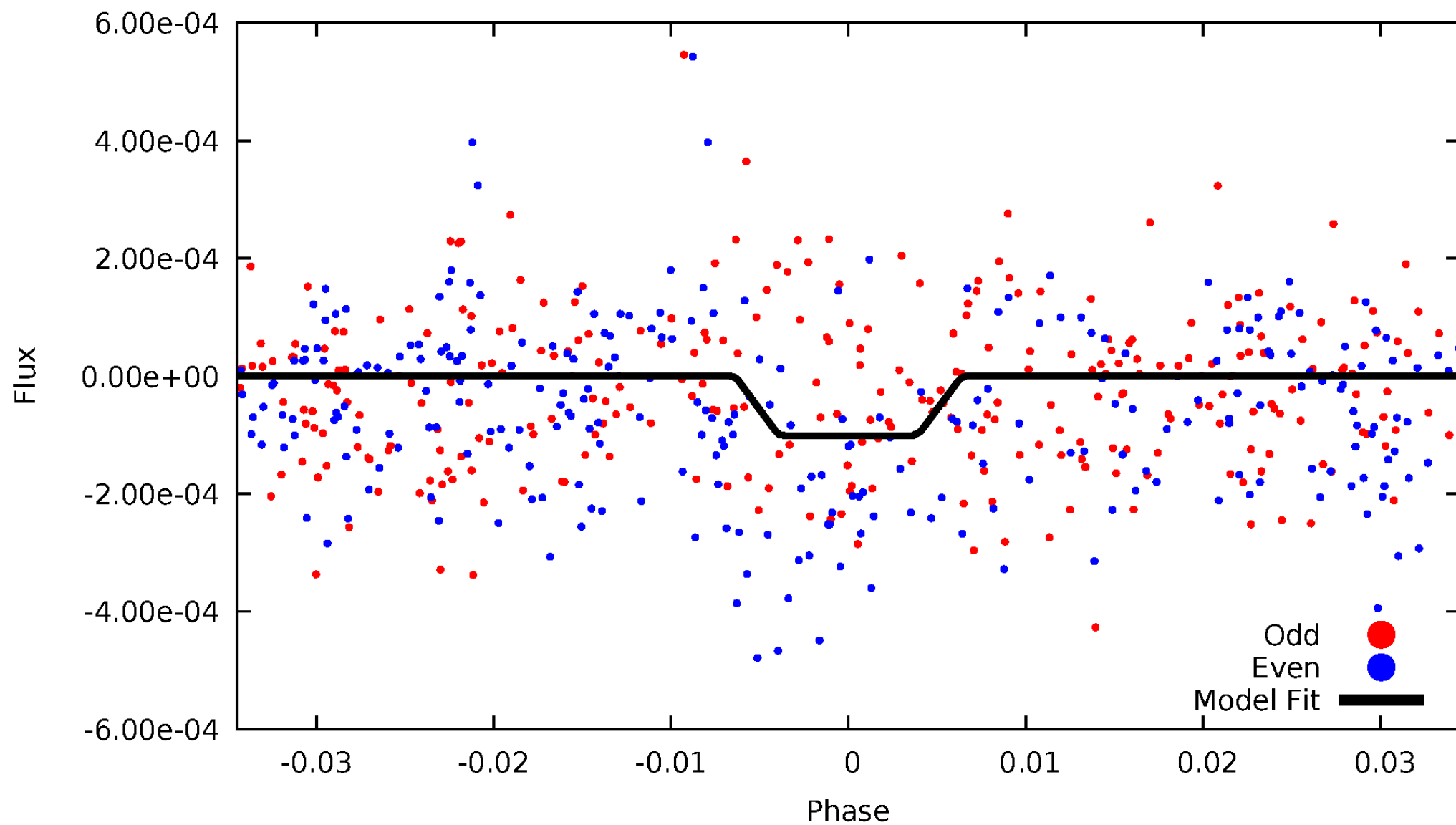
DV Odd/Even

TCE 008505554-04



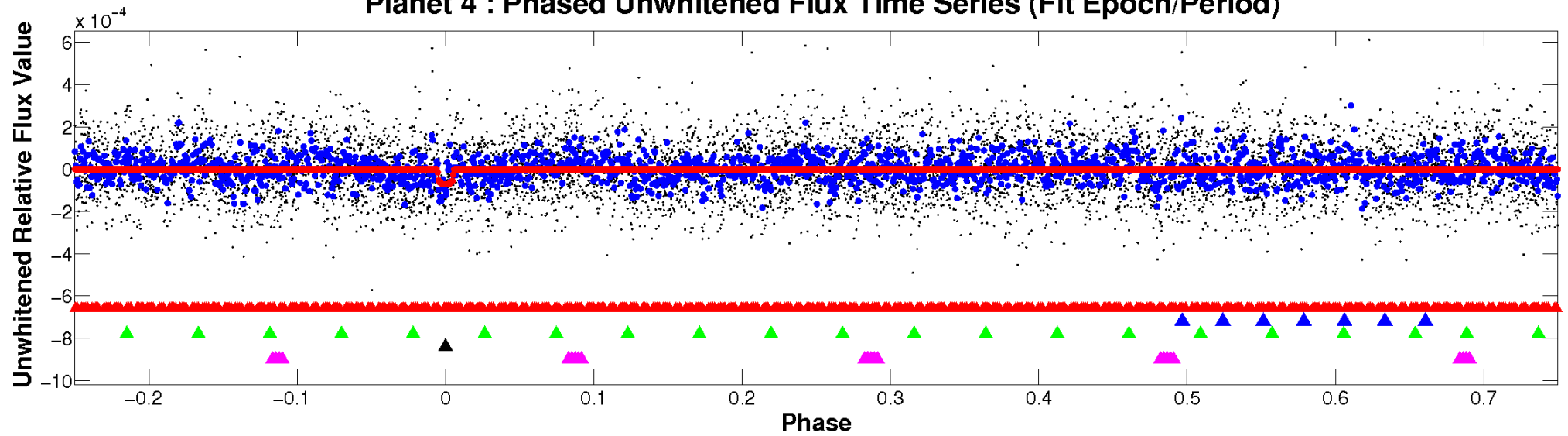
ALT Odd/Even

TCE 008505554-04

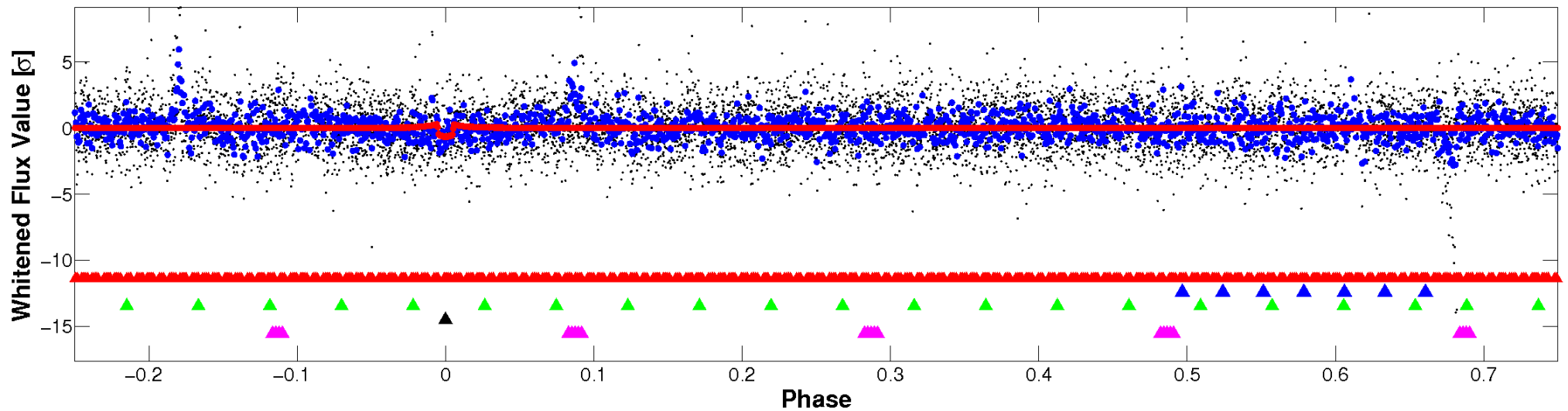


Non-Whitened Vs. Whitened Light Curve

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

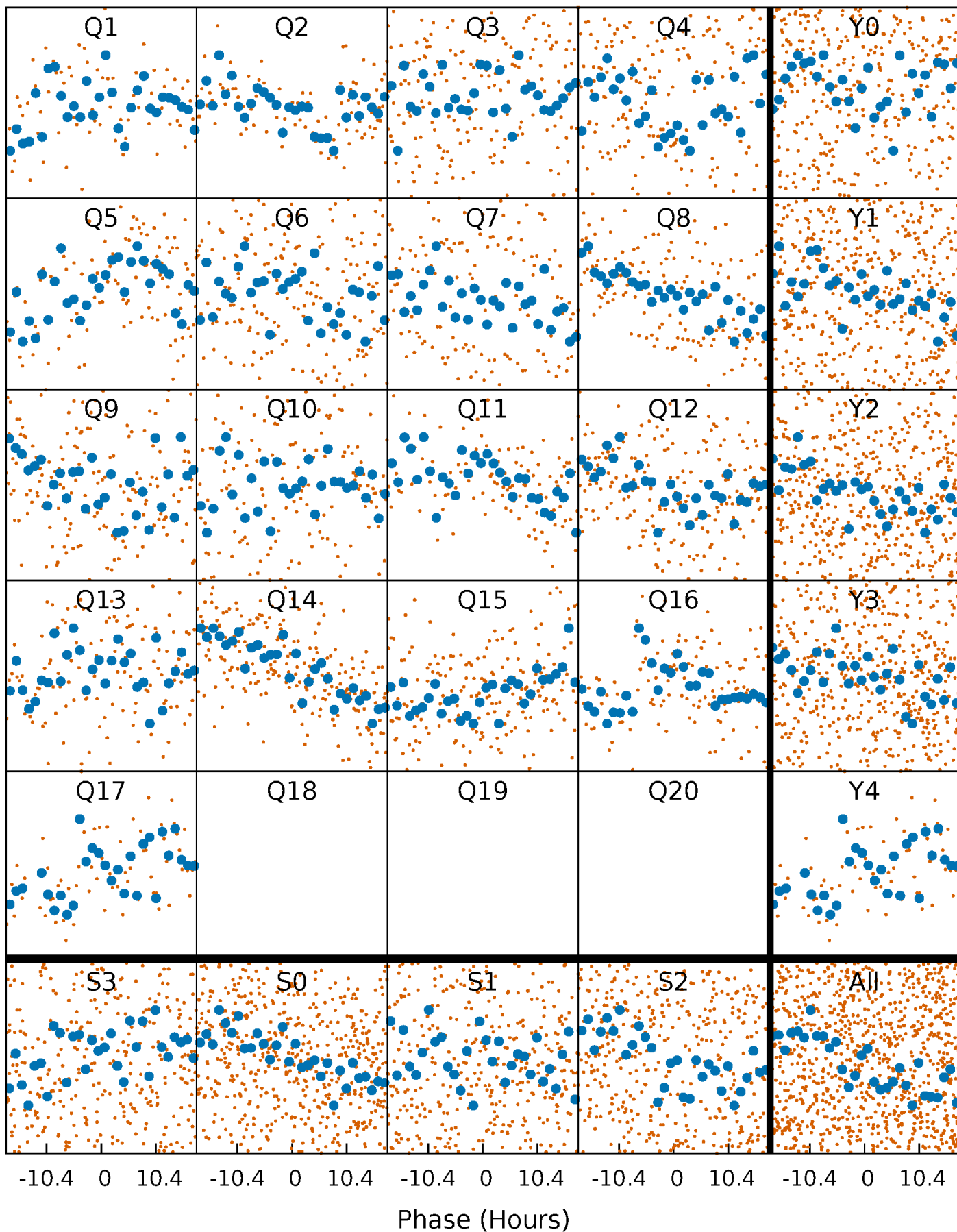


Planet 4 : Phased Whitened Flux Time Series (Fit Epoch/Period)



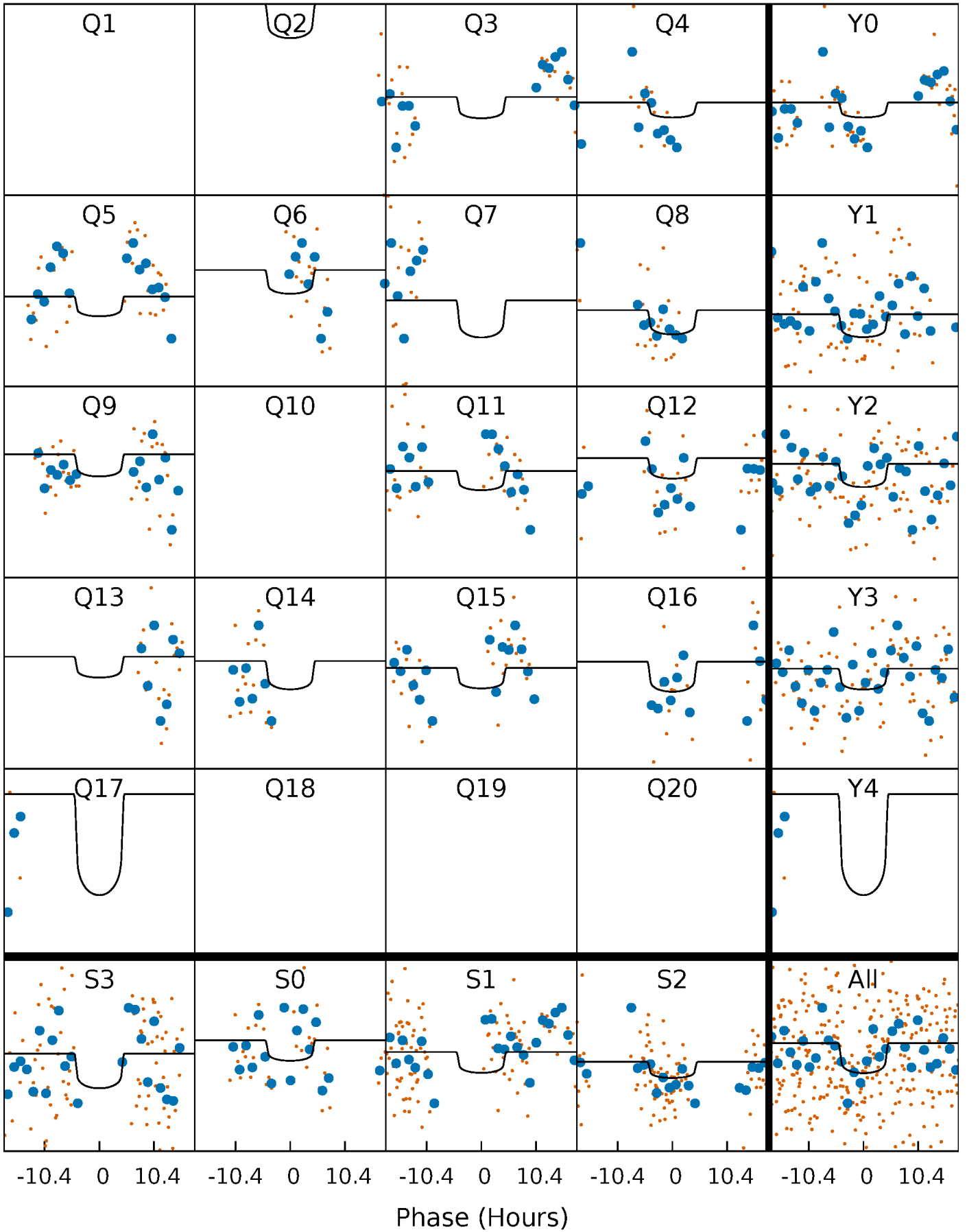
PDC Quarter-Phased Transit Curves

TCE 008505554-04 P= 35.010934 Days $T_0=161.008632$ (BKJD)



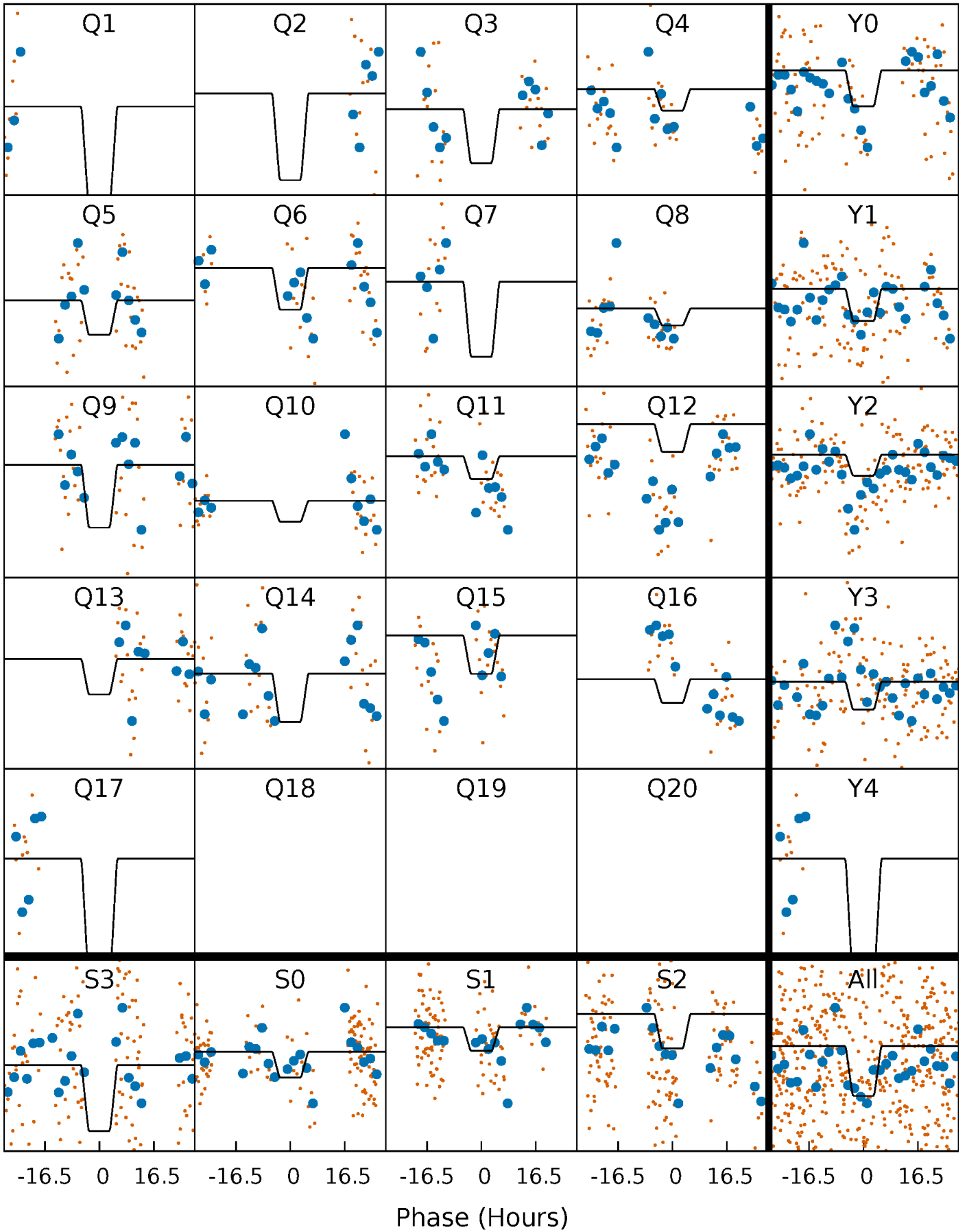
DV Quarter-Phased Transit Curves

TCE 008505554-04 P= 35.010934 Days $T_0=161.008632$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

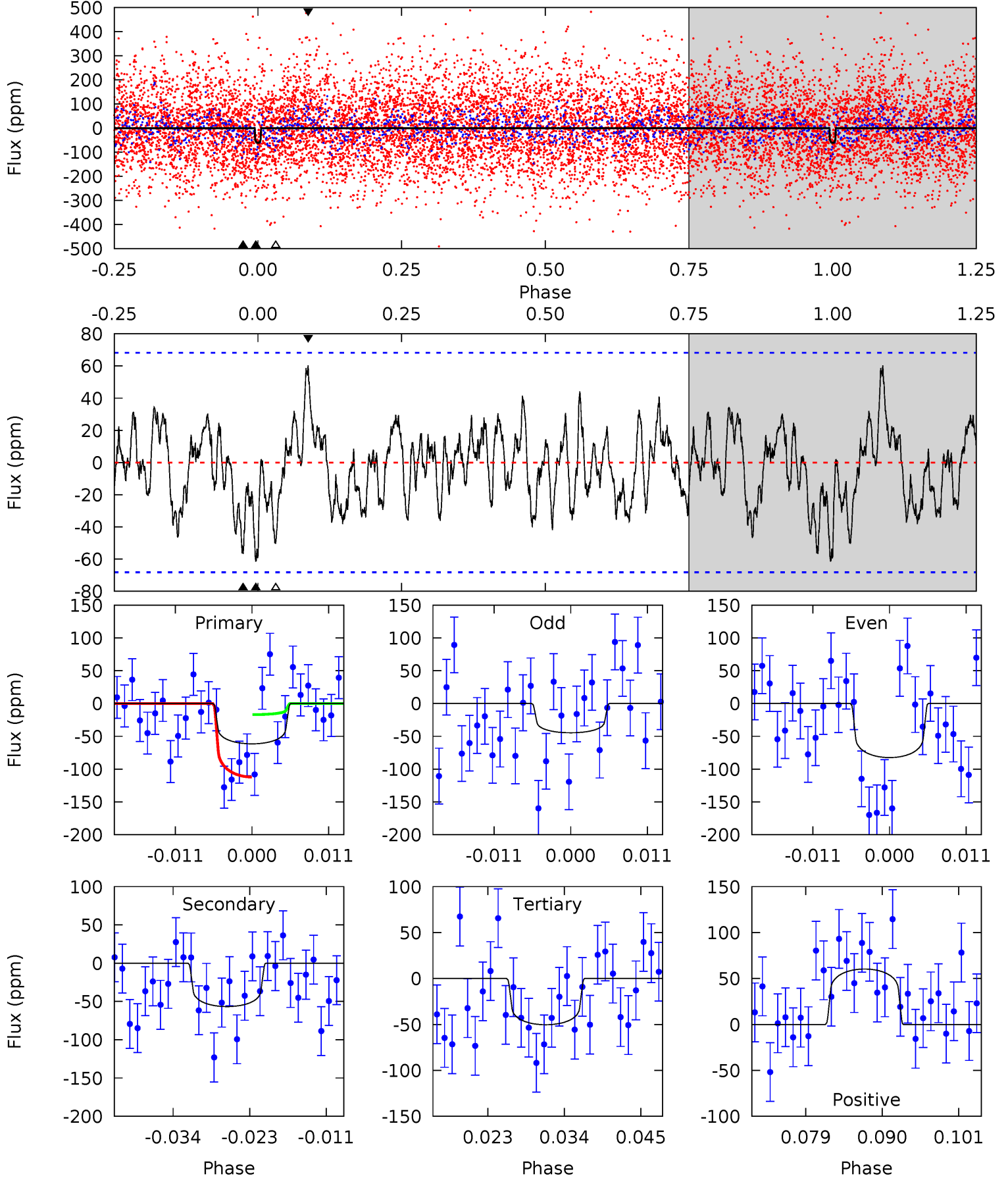
TCE 008505554-04 P= 35.015937 Days $T_0=160.948266$ (BKJD)



DV Model-Shift Uniqueness Test

008505554-04, P = 35.010934 Days, E = 125.997698 Days

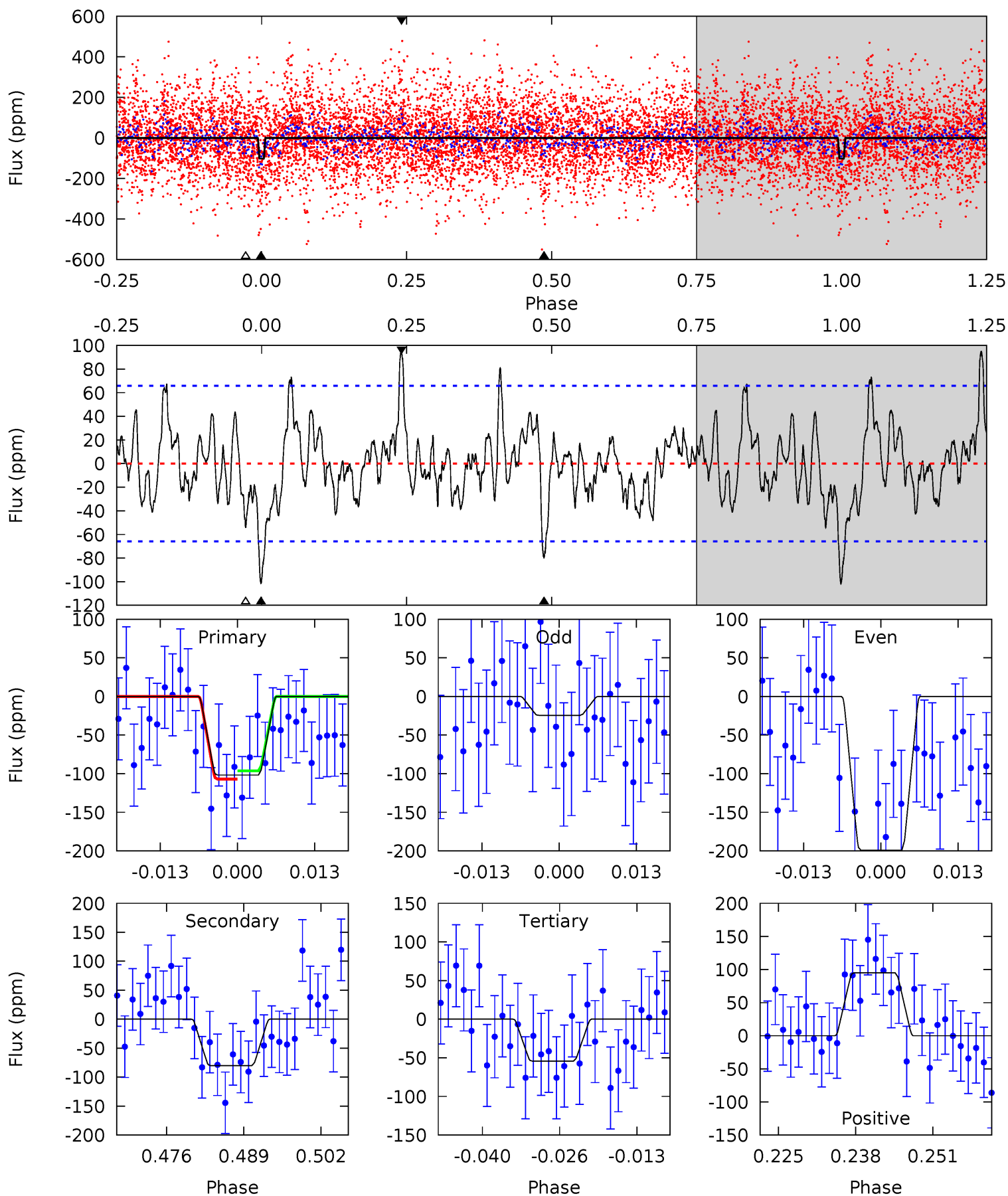
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
4.51	4.16	3.69	4.43	5.00	2.53	1.44	0.82	0.09	0.47	-0.27	1.38	0.74	0.50	3.50



Alt Model-Shift Uniqueness Test

008505554-04, P = 35.015937 Days, E = 125.932329 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
7.69	6.06	4.10	7.18	4.97	2.48	1.90	3.58	0.51	1.96	-1.12	6.57	0.45	0.48	0.40



Stellar Parameters For KIC 008505554

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6488^{+146}_{-195}	$4.392^{+0.070}_{-0.210}$	$-0.240^{+0.250}_{-0.300}$	$1.120^{+0.371}_{-0.124}$	$1.127^{+0.170}_{-0.139}$	$1.130^{+0.339}_{-0.620}$
	+2%/-3%	+2%/-5%	+104%/-125%	+33%/-11%	+15%/-12%	+30%/-55%
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 008505554-04 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-57 ± 14	$1.20^{+0.84}_{-0.72}$	923^{+74}_{-46}	5792^{+4359}_{-1245}	1025^{+5590}_{-695}
Alt.	-80 ± 13	$1.45^{+0.84}_{-0.82}$	922^{+66}_{-44}	5791^{+3340}_{-1089}	1016^{+4078}_{-630}

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

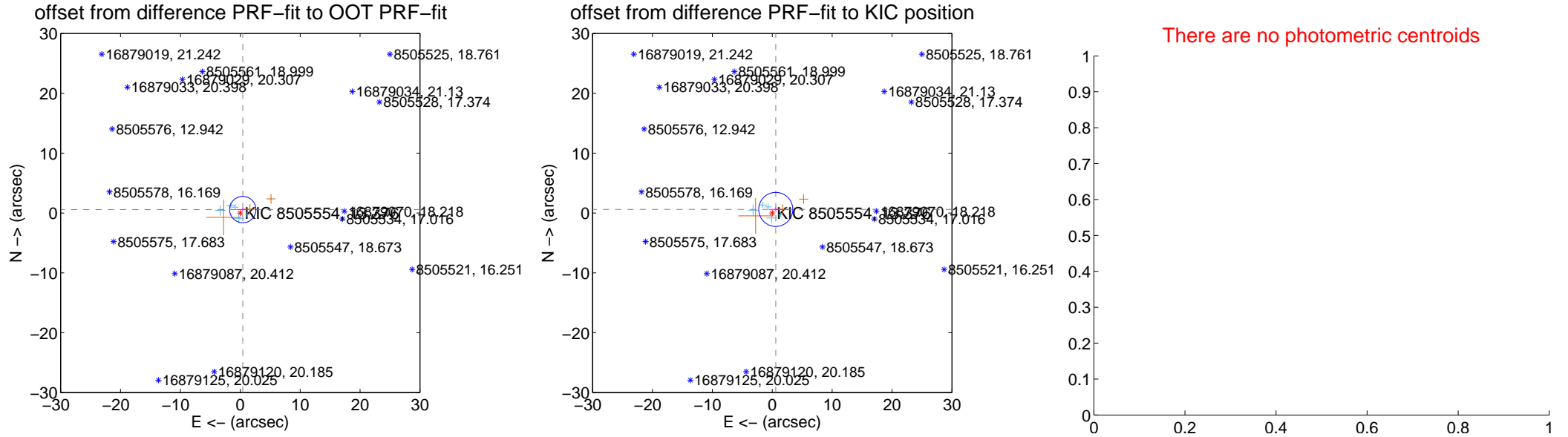
DV Centroid Data

Supplemental centroid analysis for 008505554-04. Kepler magnitude: 13.38. Transit SNR 5.75

There are 5 quarters with good PRF difference image offsets

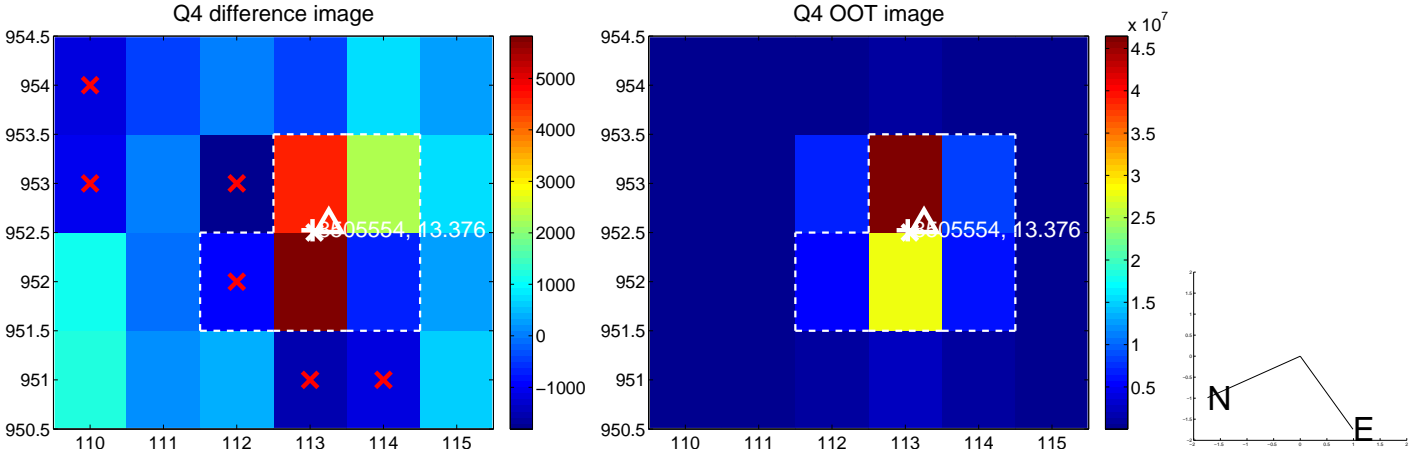
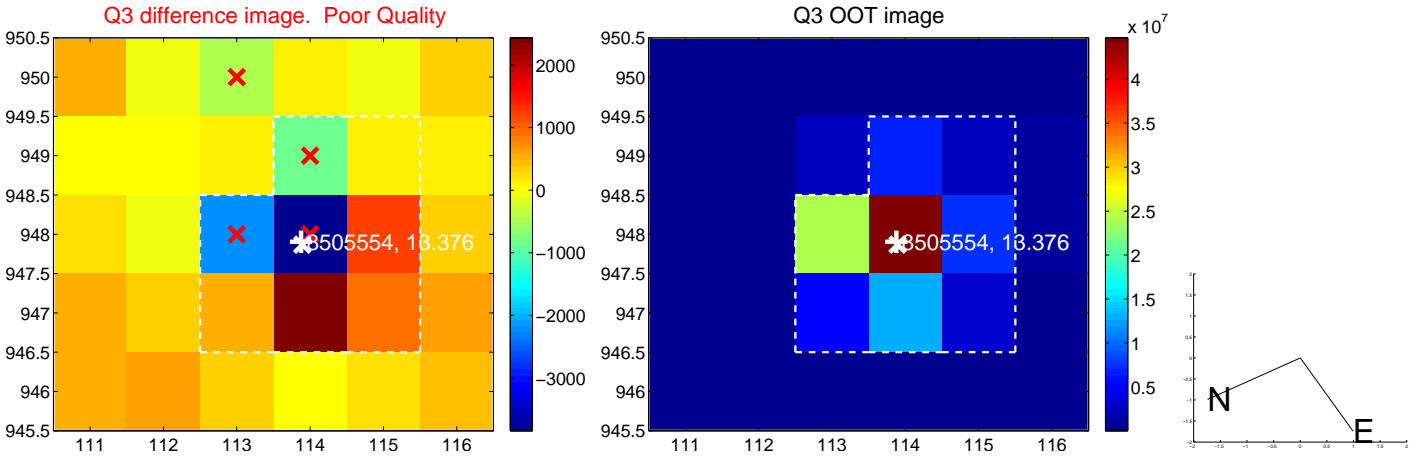
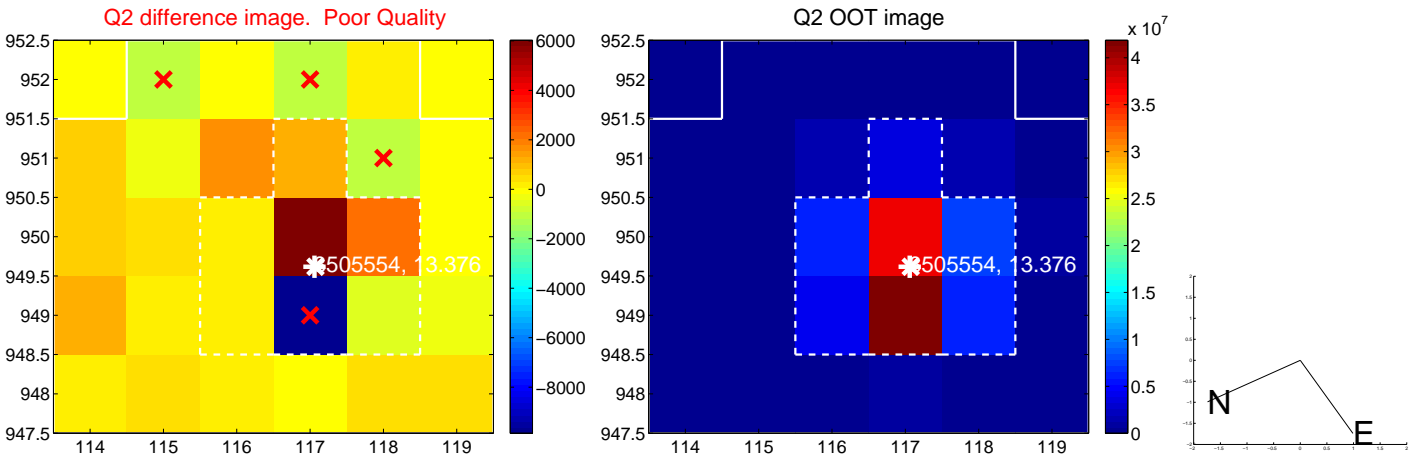
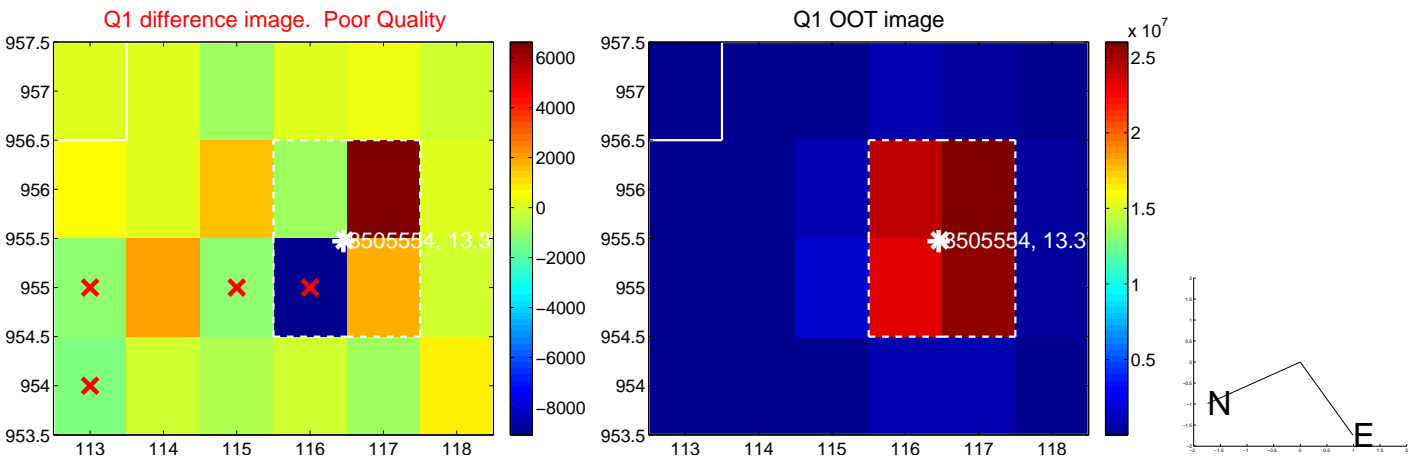
The direct PRF centroid is offset from the target star catalog position by about 0.12 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.710 ± 0.734	0.97	-0.415 ± 1.040	0.576 ± 0.300
PRF-fit source offset from KIC position	0.839 ± 0.948	0.89	-0.586 ± 1.093	0.601 ± 0.370
photometric centroid source offset	—	—	—	—

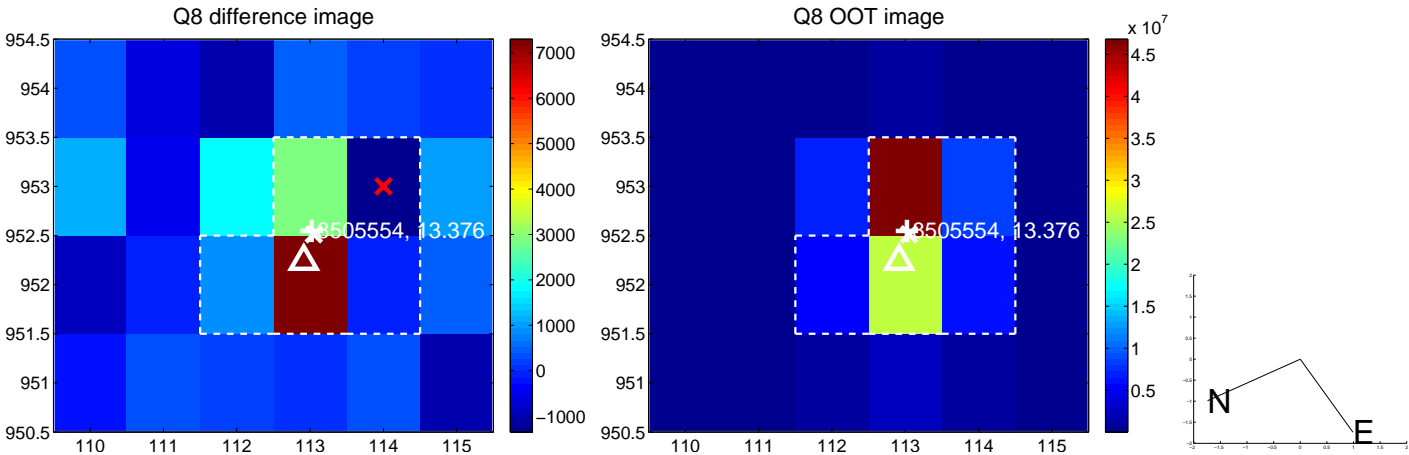
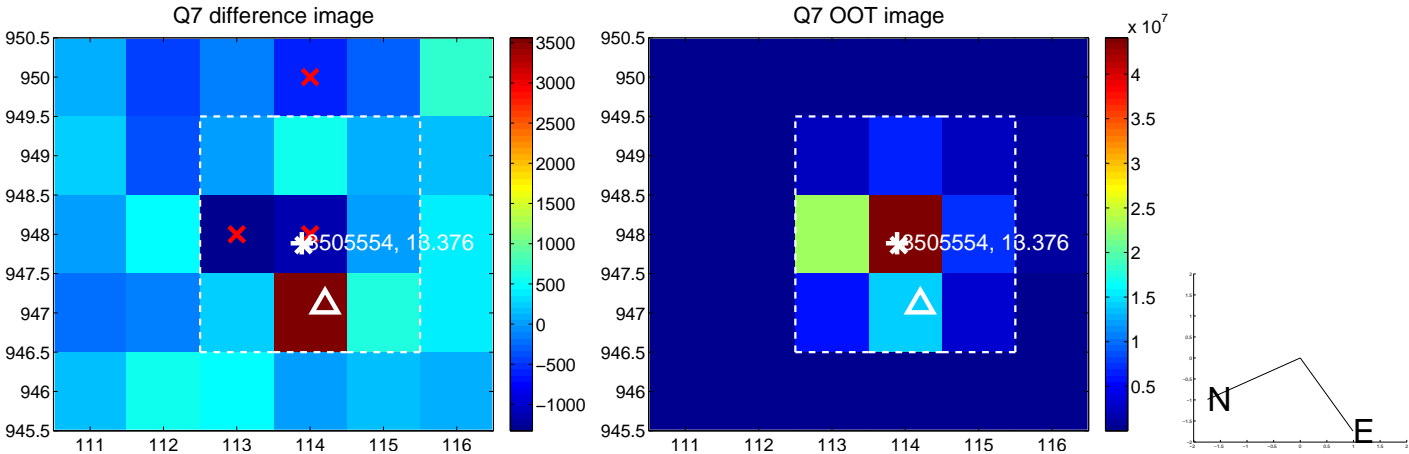
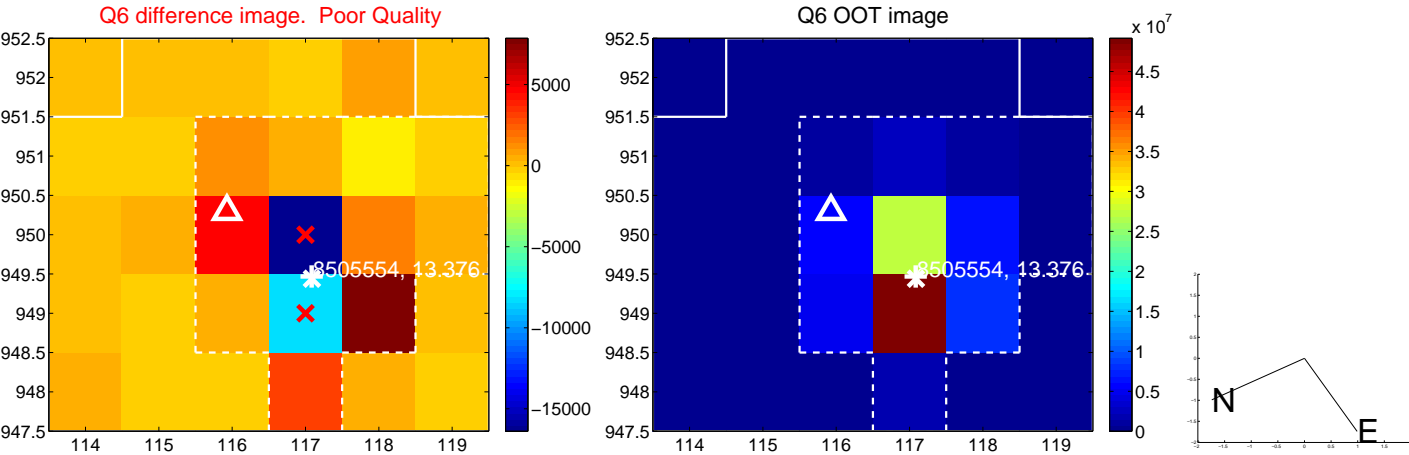
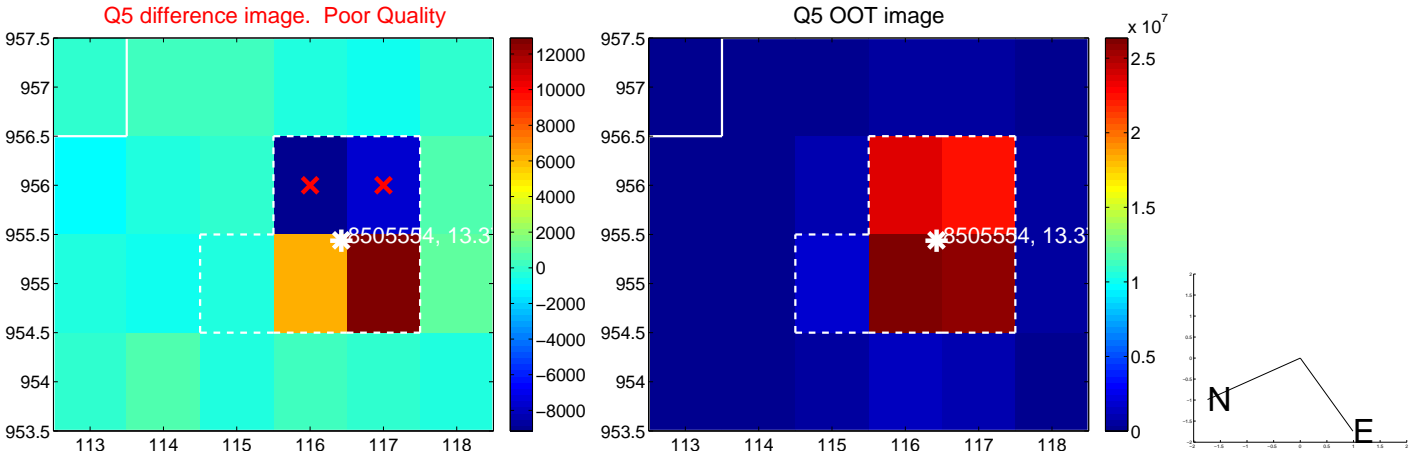


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

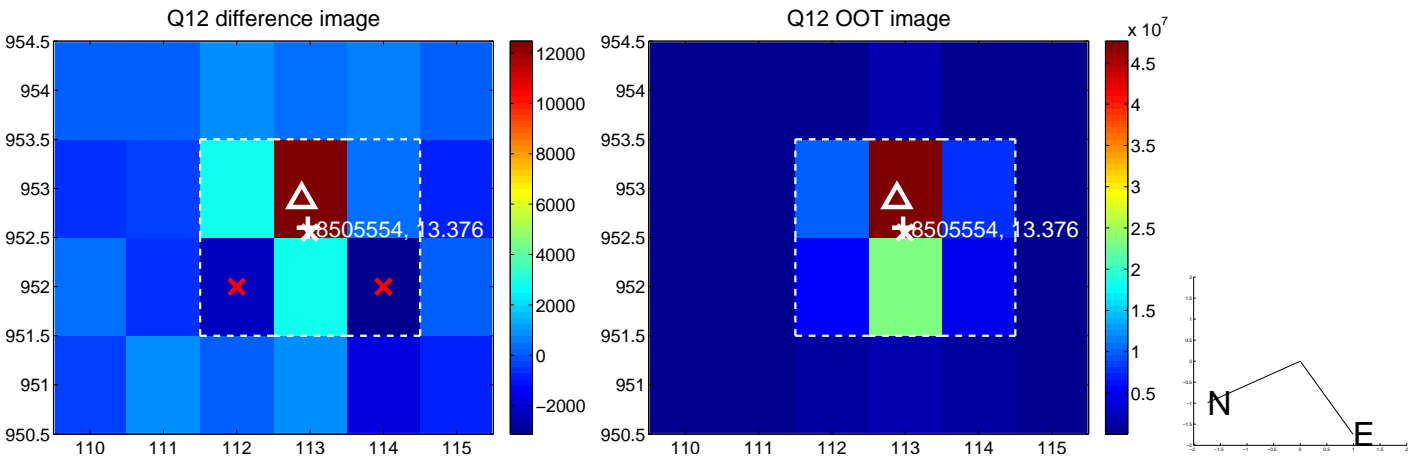
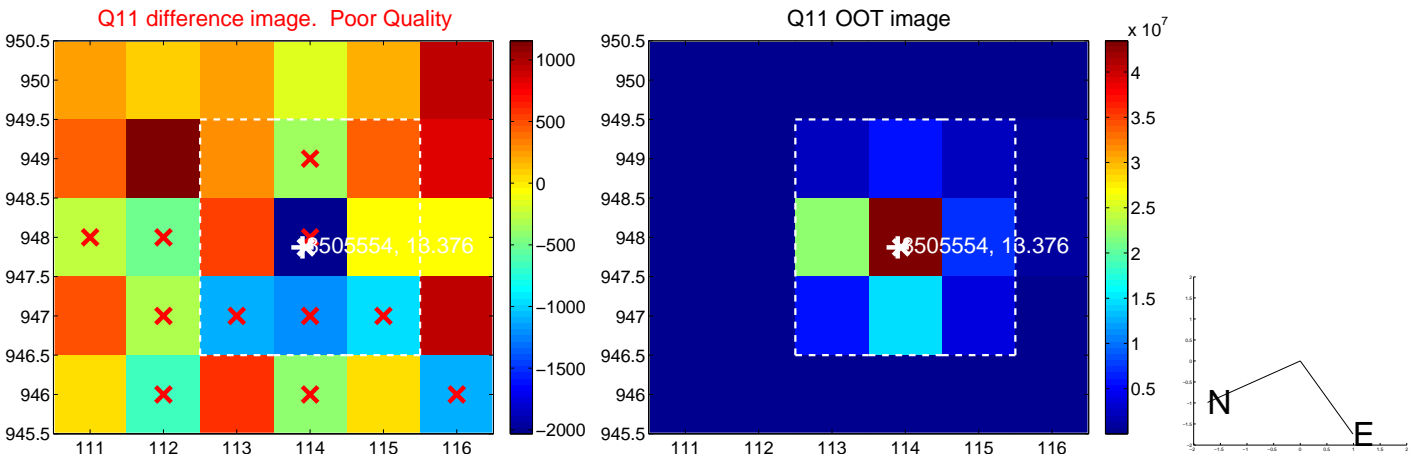
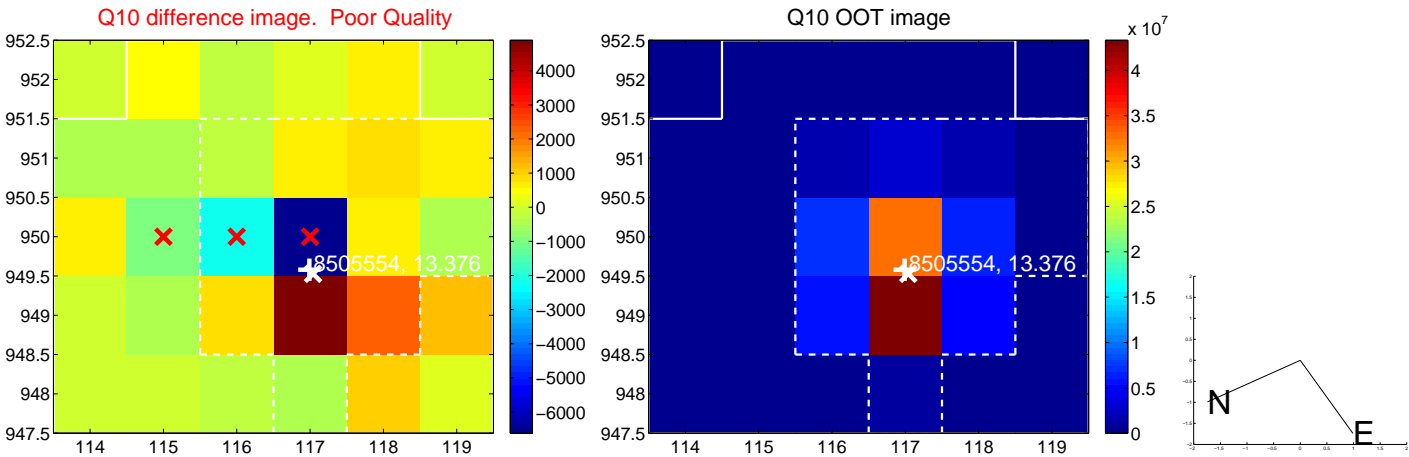
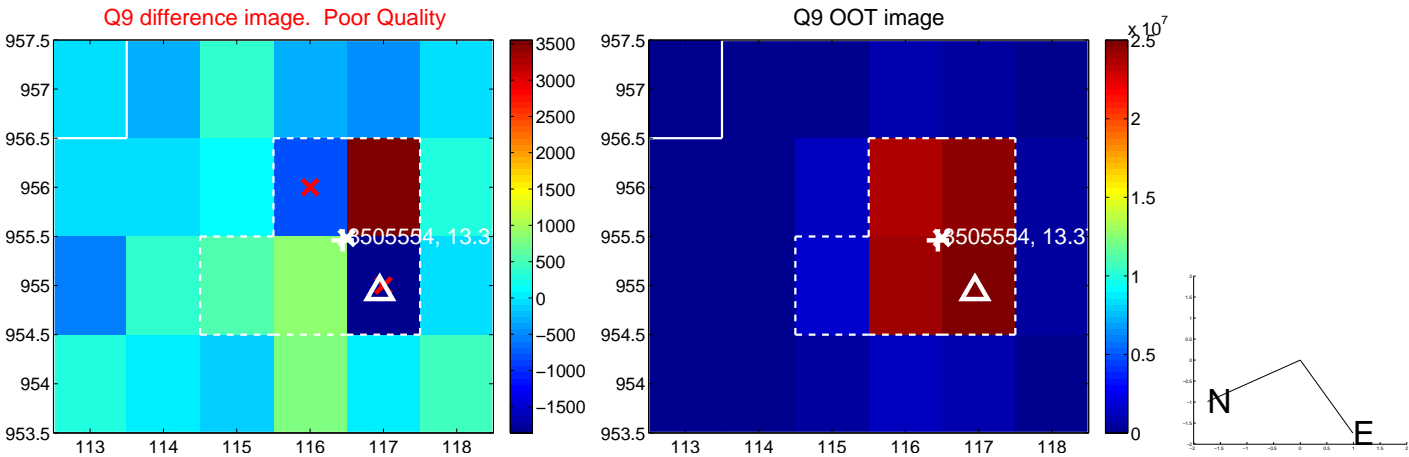
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



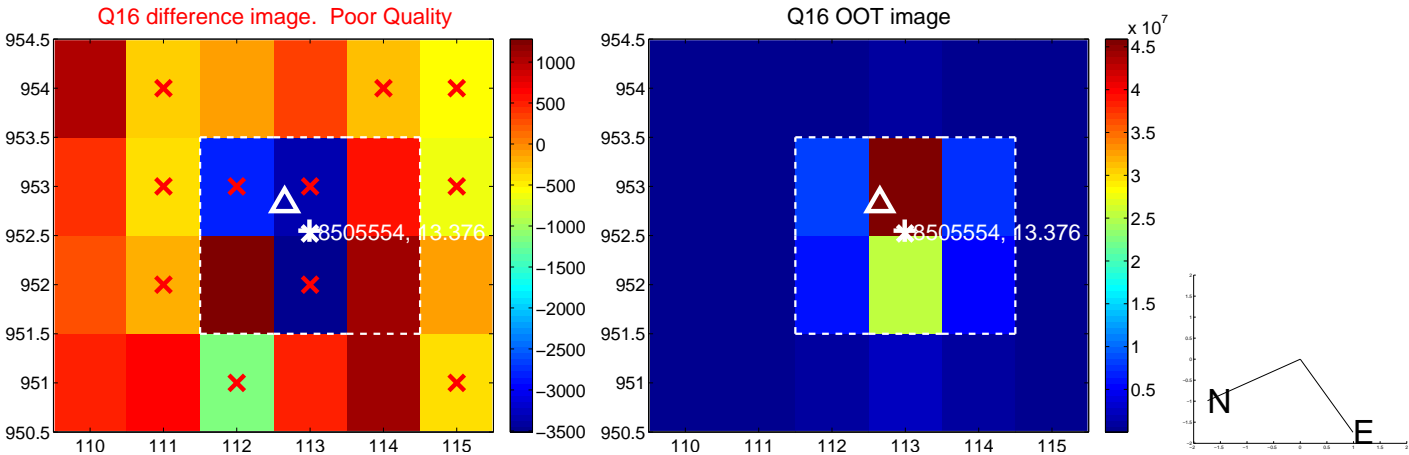
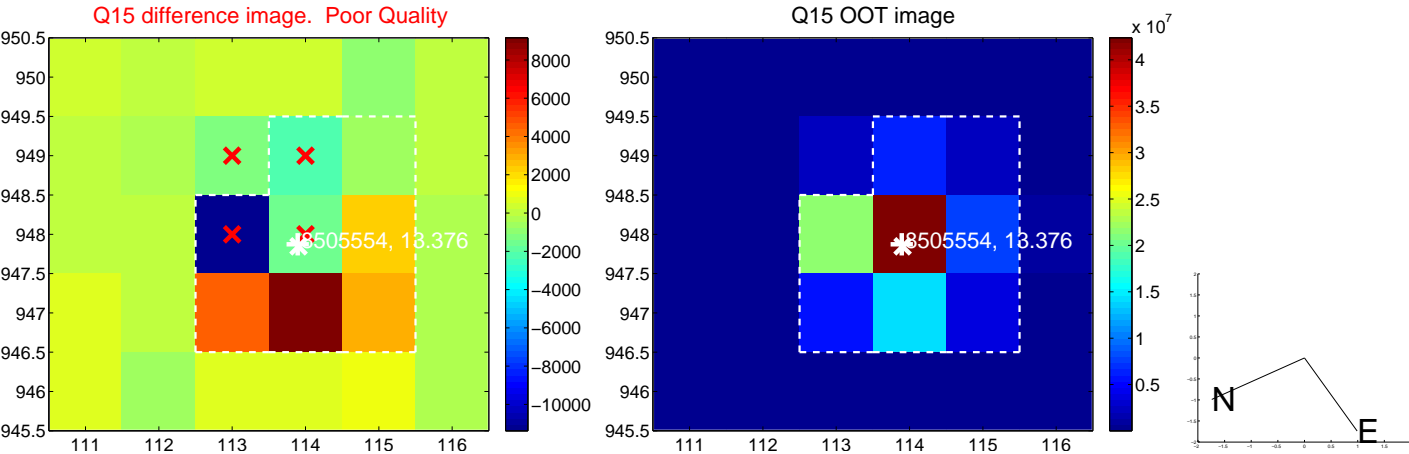
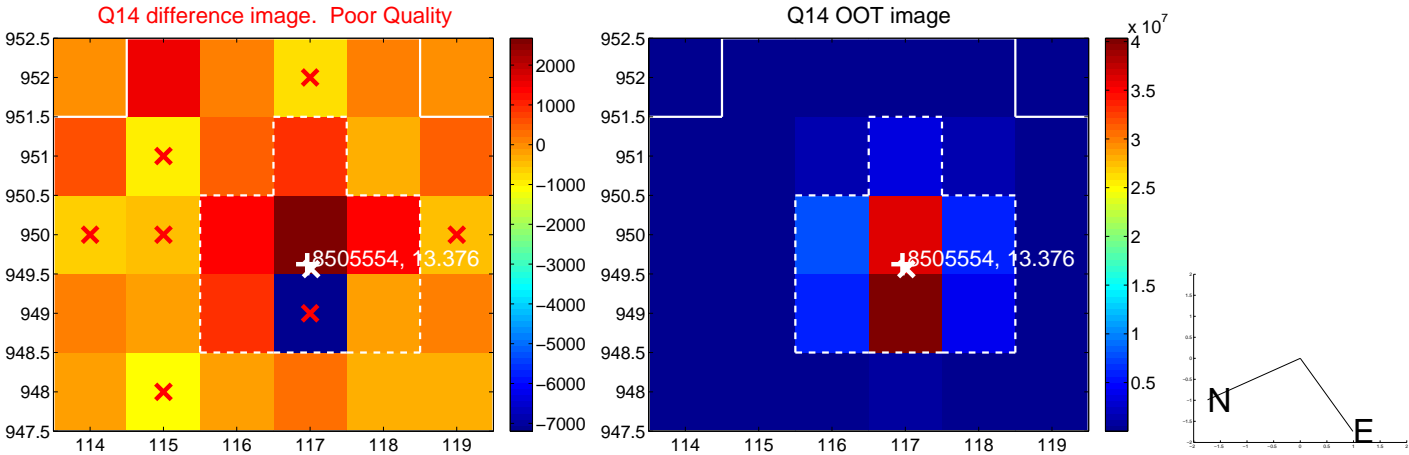
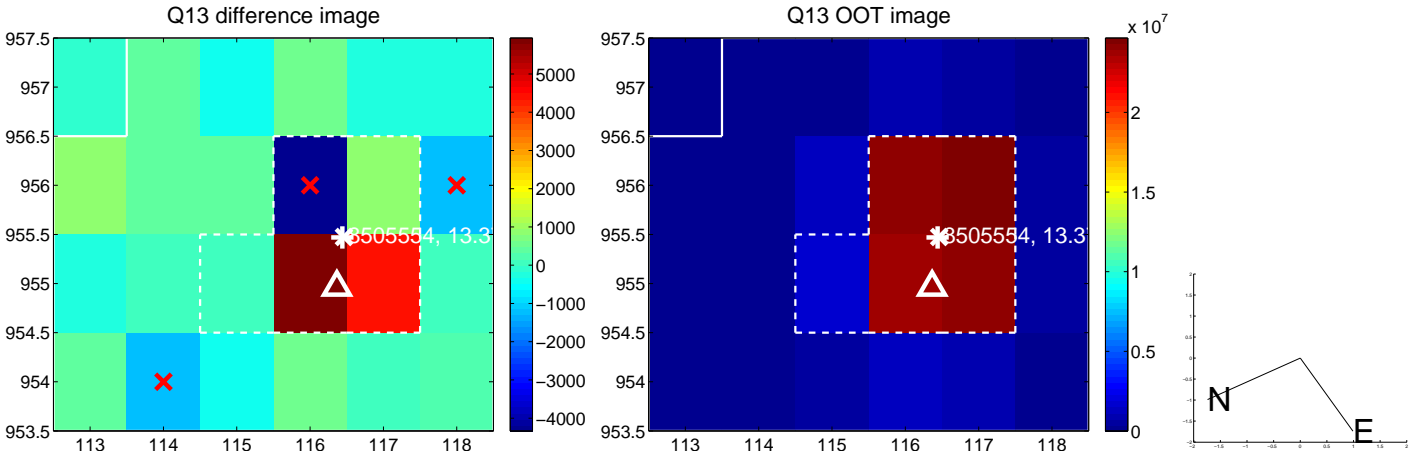
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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.



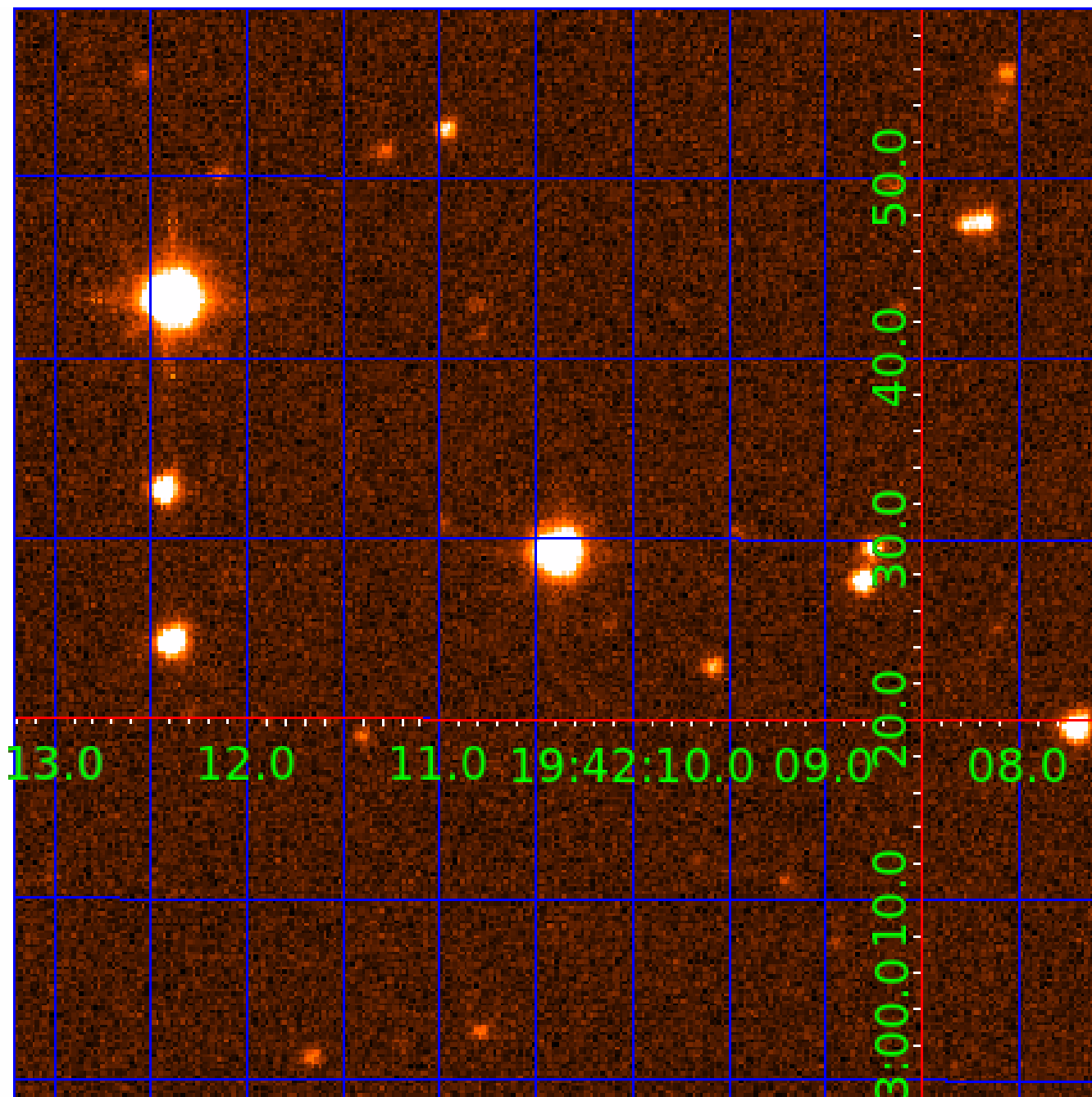
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



folded centroid time series figure for this object.

UKIRT Image

Declination



KIC 008505554

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})
008505554-01	OBS	No	2.853090	132.692487	23.7	19.730	8.5	10.6	1.12	6488	0.58	1185.03
008505554-02	OBS	No	211.021904	248.424420	194.0	15.167	12.9	10.6	1.12	6488	1.70	3.82
008505554-03	OBS	No	71.711636	150.106040	88.3	15.824	9.7	4.9	1.12	6488	1.19	16.09
008505554-04	OBS	No	35.010934	161.008632	71.7	9.062	9.6	5.8	1.12	6488	1.06	41.87
008505554-05	OBS	No	63.035047	142.876444	147.5	6.845	10.6	9.1	1.12	6488	1.71	19.11

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
008505554-01	OBS	FP	0.00	1	0	0	0	LPP_DV
008505554-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—INCONSISTENT_TRANS—CENT_FEW_DIFFS
008505554-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_POS_ALT
008505554-04	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_POS_ALT
008505554-05	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—CENT_FEW_MEAS

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

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

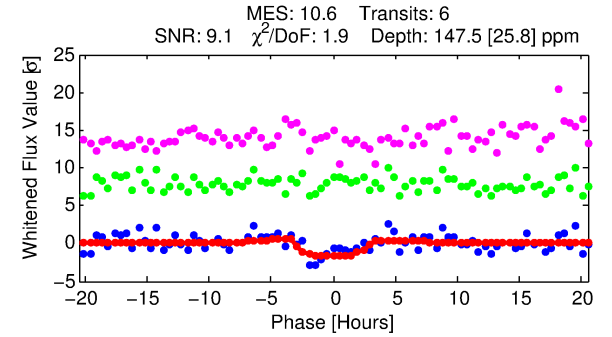
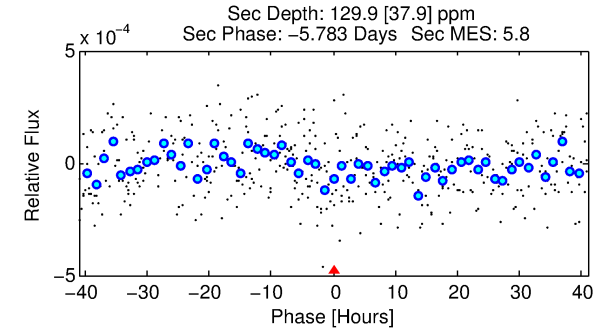
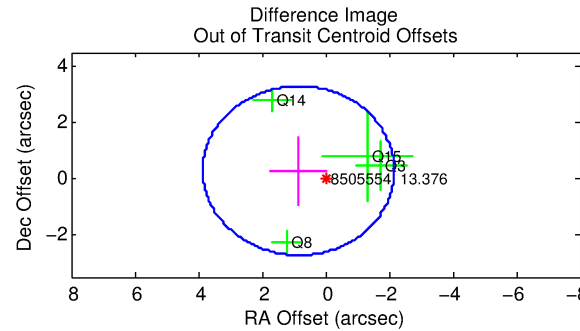
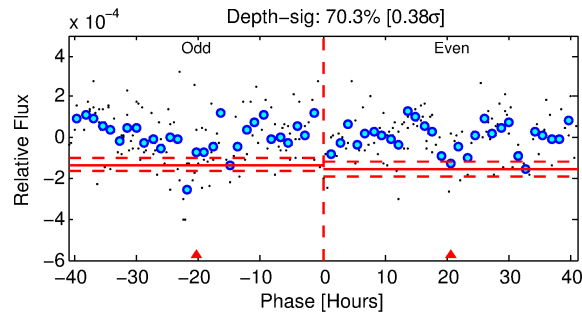
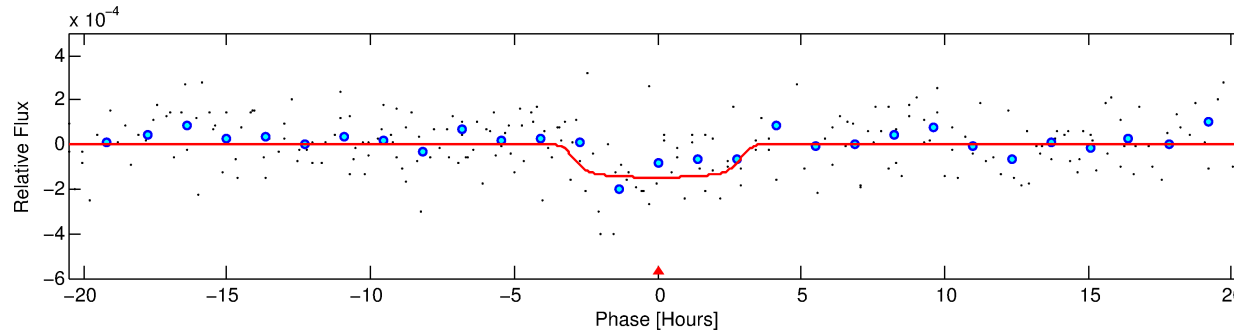
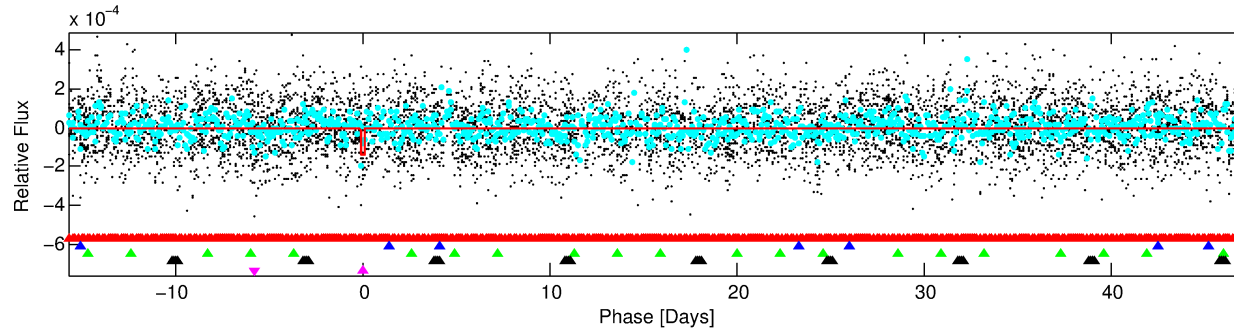
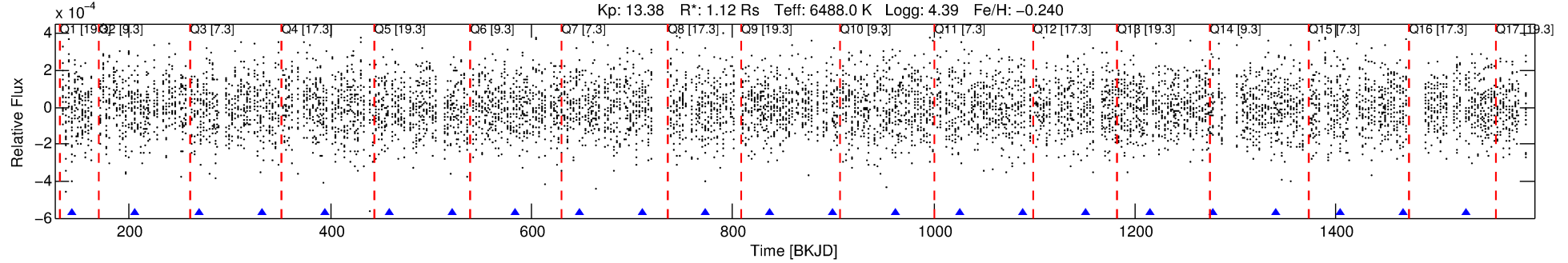
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 008505554-05

No Significant Match Found

DV One-Page Summary

KIC: 8505554 Candidate: 5 of 5 Period: 63.035 d



DV Fit Results:

Period = 63.03505 [0.00144] d
Epoch = 142.8764 [0.0209] BKJD
Rp/R* = 0.0140 [0.0024]
a/R* = 23.22 [18.54]
b = 0.96 [0.07]
Seff = 19.11 [7.81]
Teq = 533 [54] K
Rp = 1.71 [0.64] Re
a = 0.3228 [0.0882] AU
Ag = 2561.08 [1528.03] [1.68 σ]
Teffp = 5864 [684] K [7.77 σ]

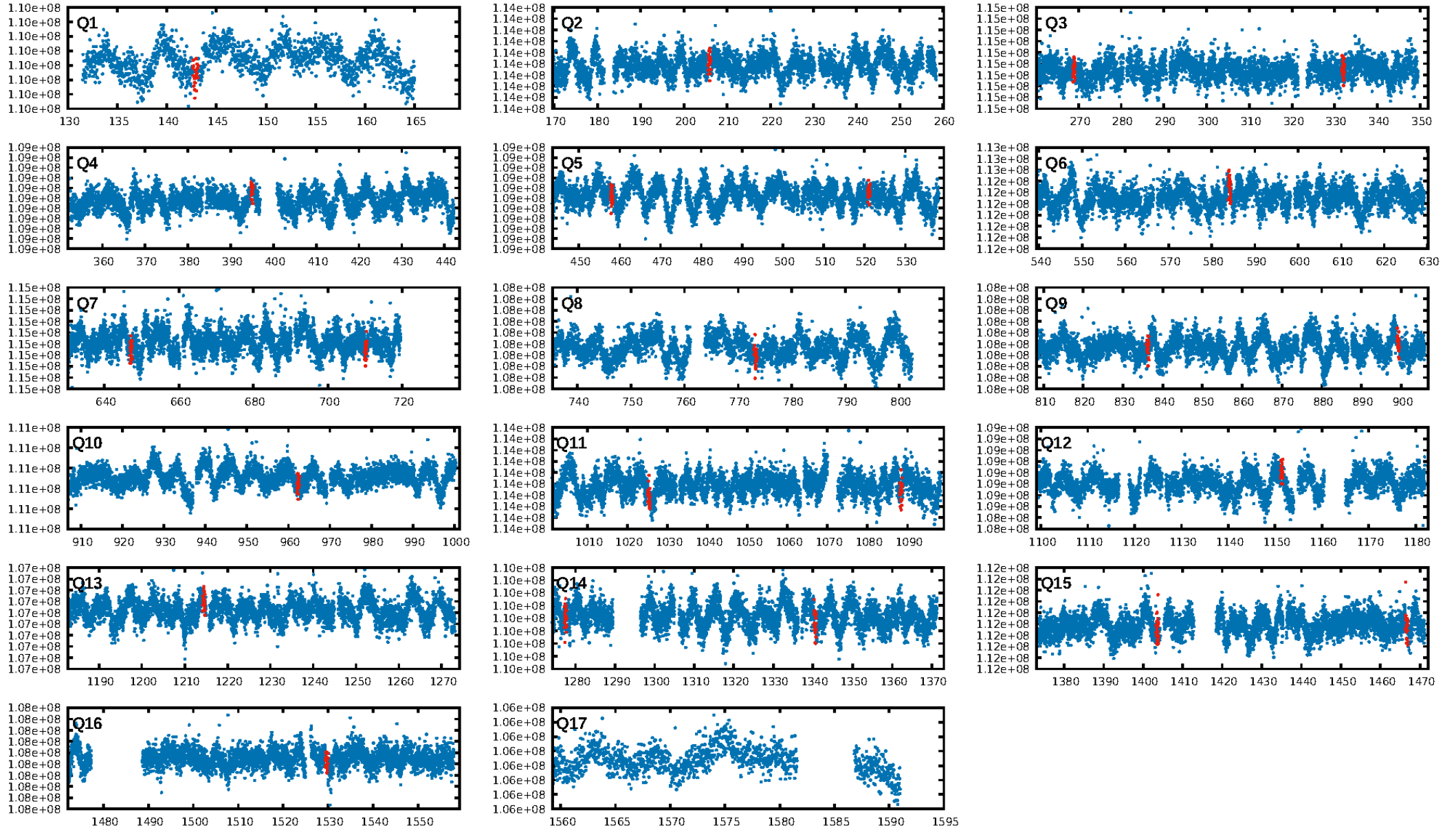
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [59.22 σ]
LongPeriod-sig: 100.0% [12.08 σ]
ModelChiSquare2-sig: 0.0%
ModelChiSquareGof-sig: 99.3%
Bootstrap-pfa: 5.26e-11
RollingBand-fgt: 1.00 [5/5]
GhostDiagnostic-chr: 0.6715
Centroid-sig: N/A
Centroid-so: N/A
OotOffset-rm: 0.897 arcsec [0.89 σ]
KicOffset-rm: 0.737 arcsec [0.75 σ]
OotOffset-st: 1/2/1/0 [4]
KicOffset-st: 1/2/1/0 [4]
DiffImageQuality-fgm: 0.50 [2/4]
DiffImageOverlap-fno: 0.44 [7/16]

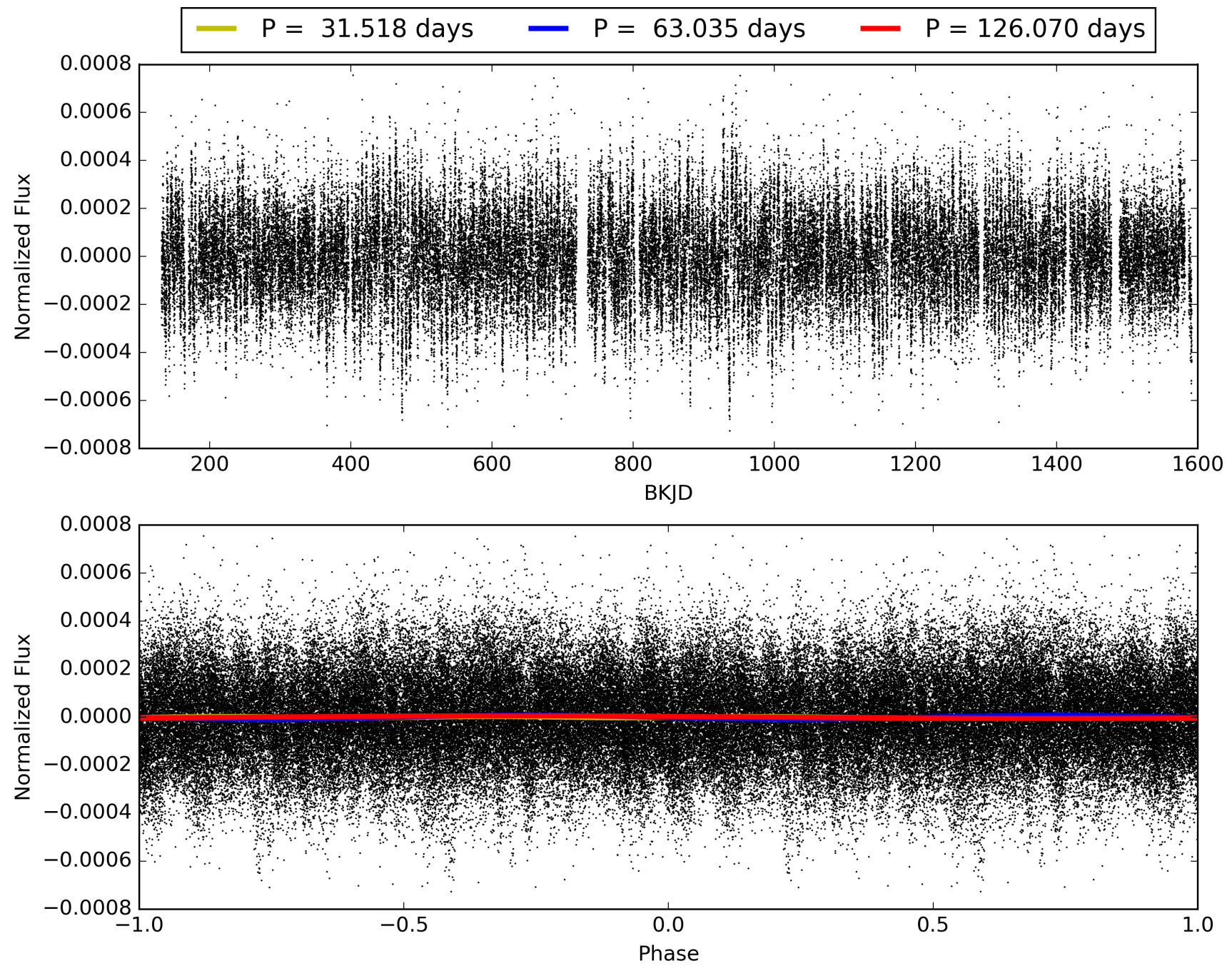
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 31-Jan-2016 14:09:50 Z

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

TCE 008505554-05, PDC Light Curves

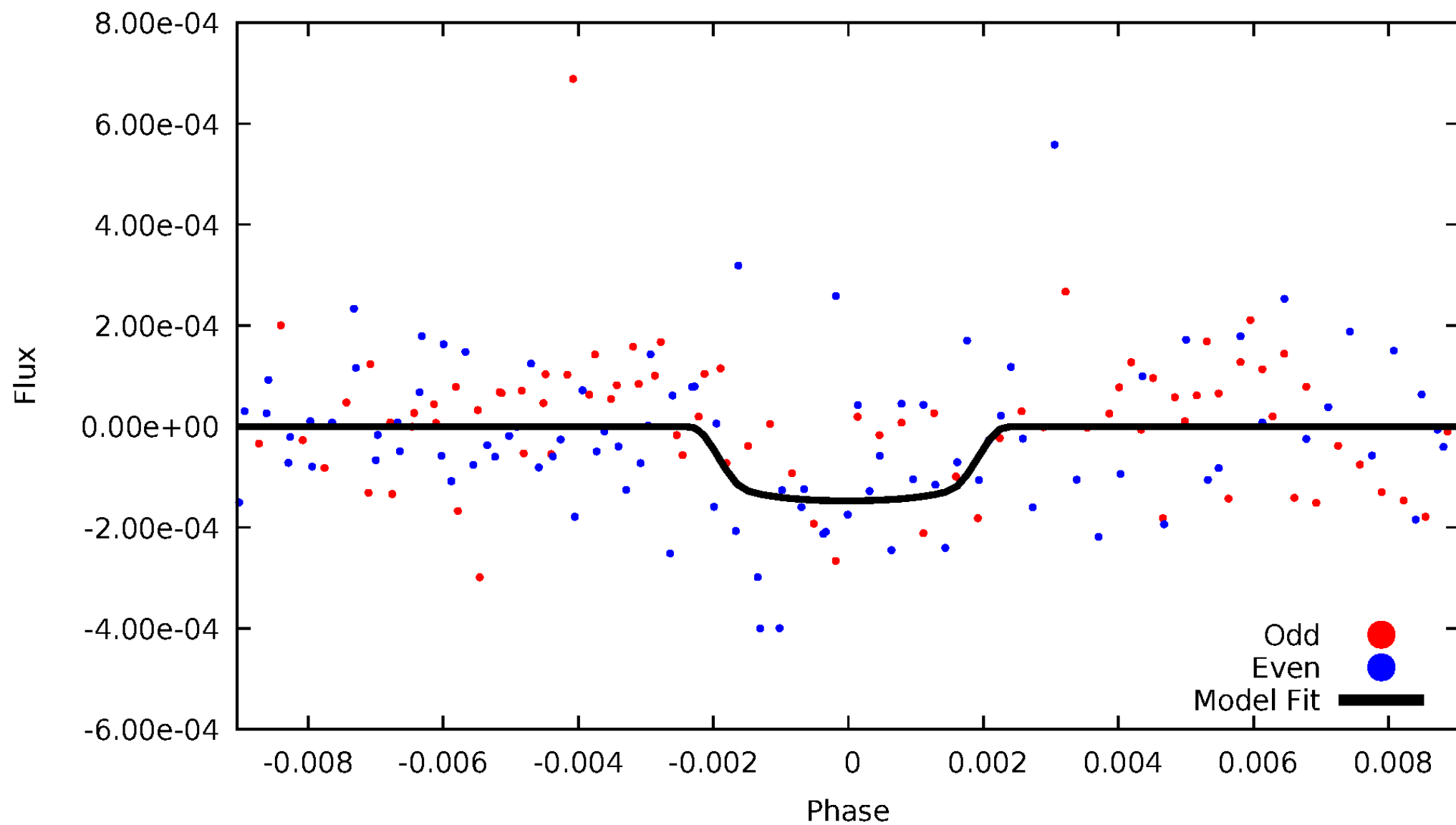


TCE 008505554-05



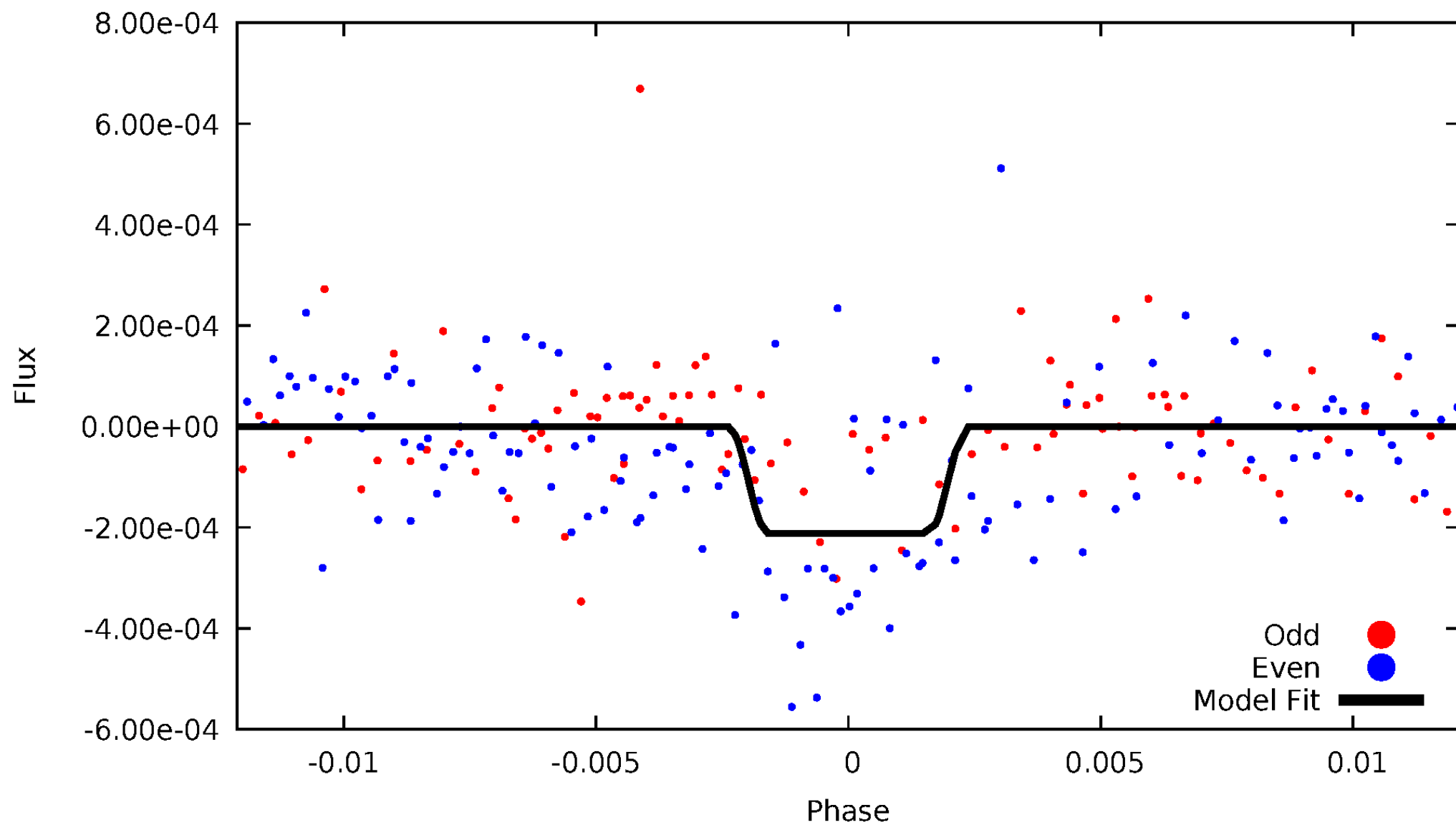
DV Odd/Even

TCE 008505554-05



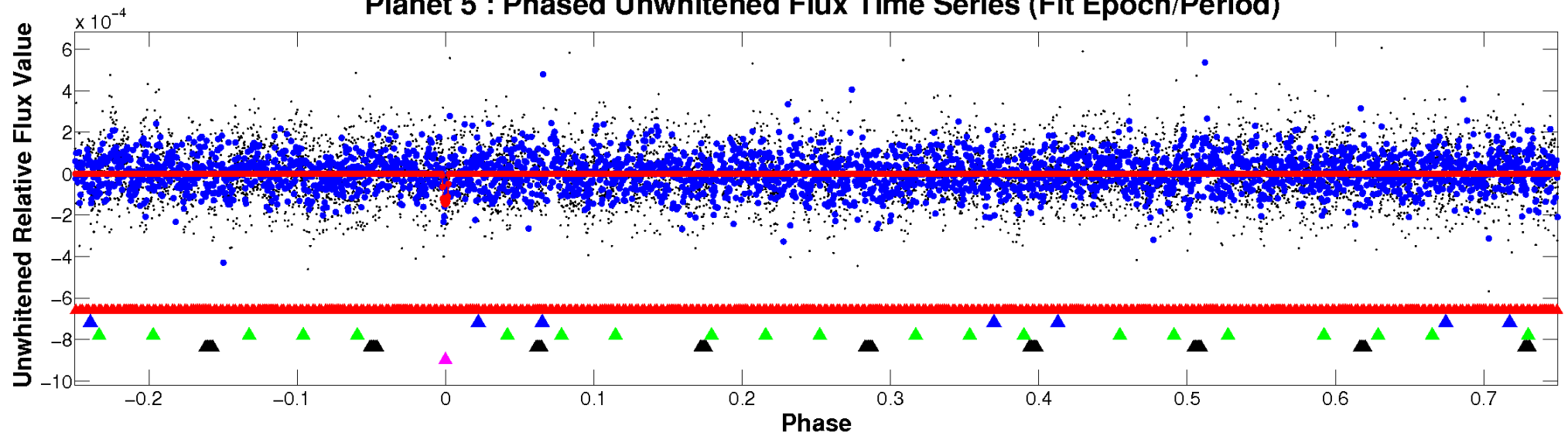
ALT Odd/Even

TCE 008505554-05

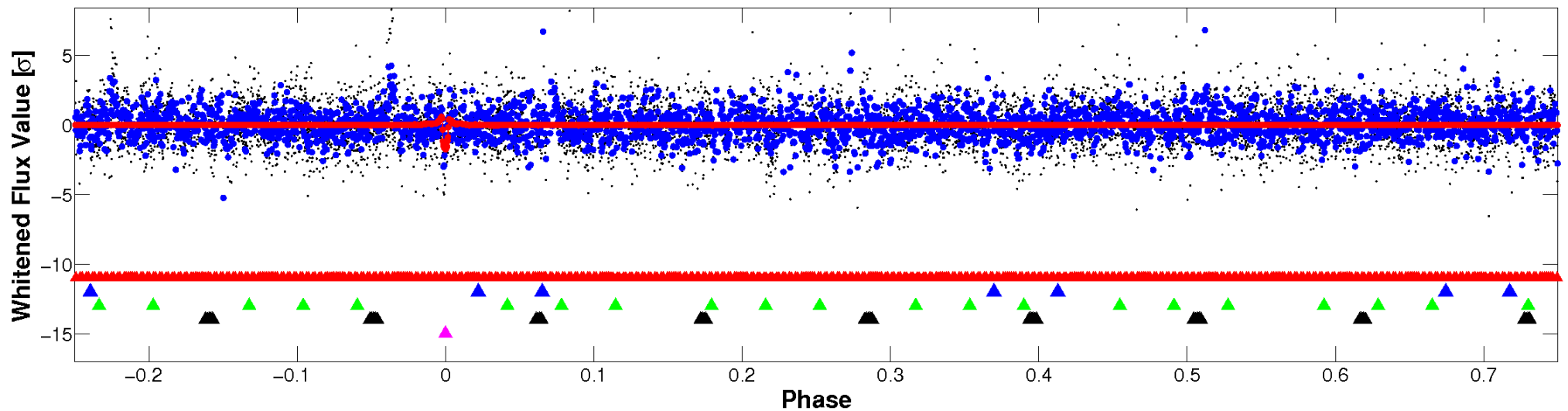


Non-Whitened Vs. Whitened Light Curve

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

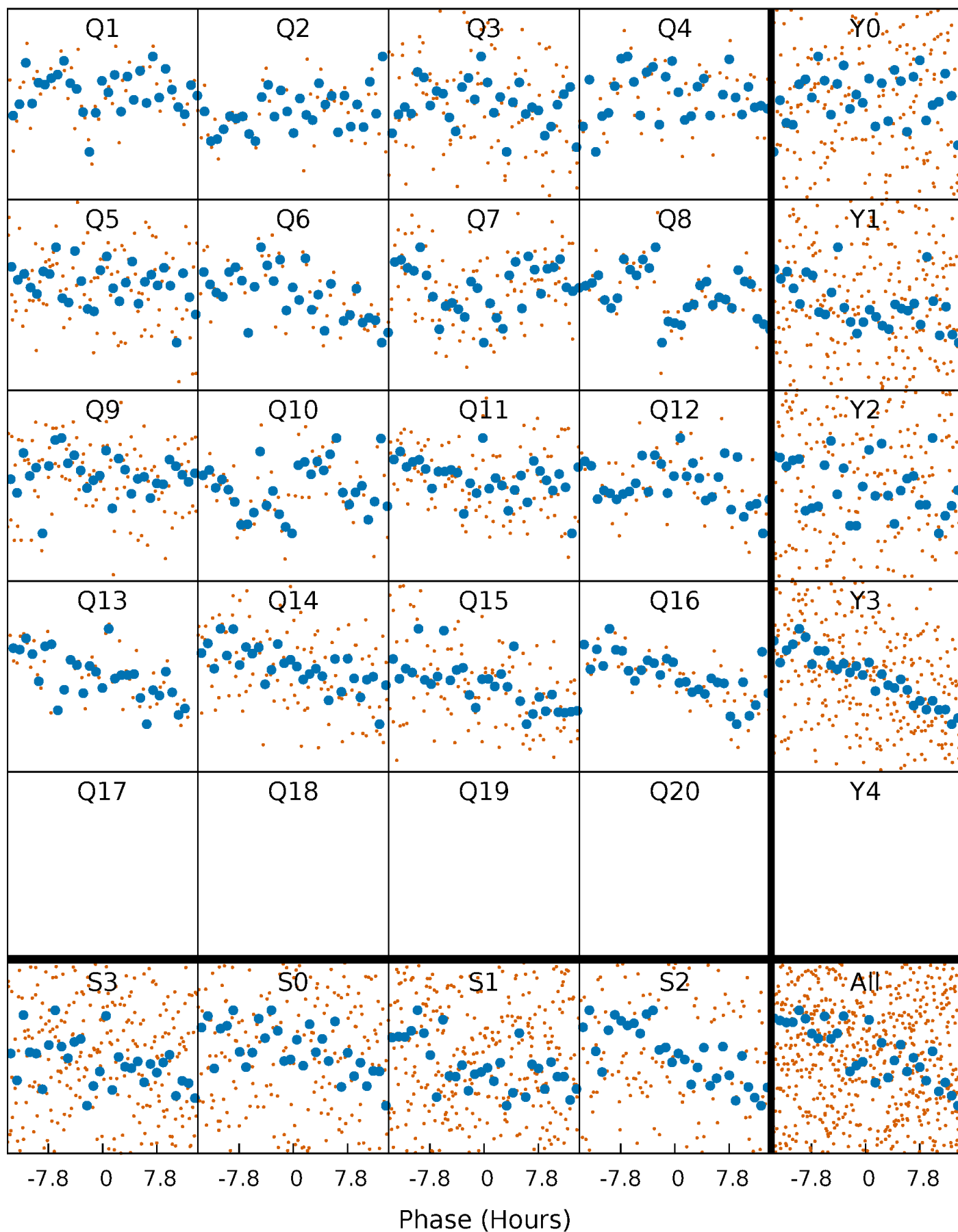


Planet 5 : Phased Whitened Flux Time Series (Fit Epoch/Period)



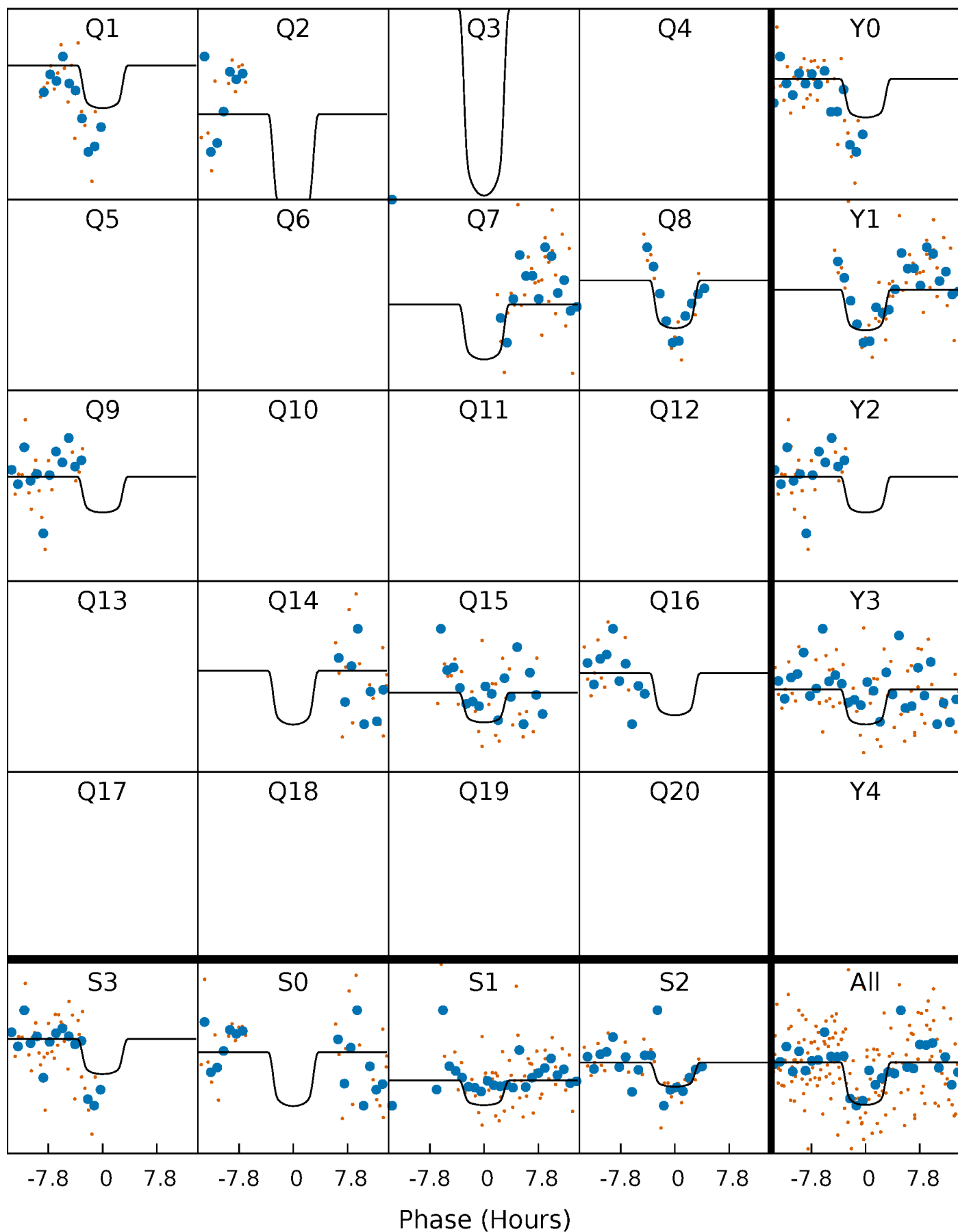
PDC Quarter-Phased Transit Curves

TCE 008505554-05 P= 63.035047 Days $T_0=142.876444$ (BKJD)



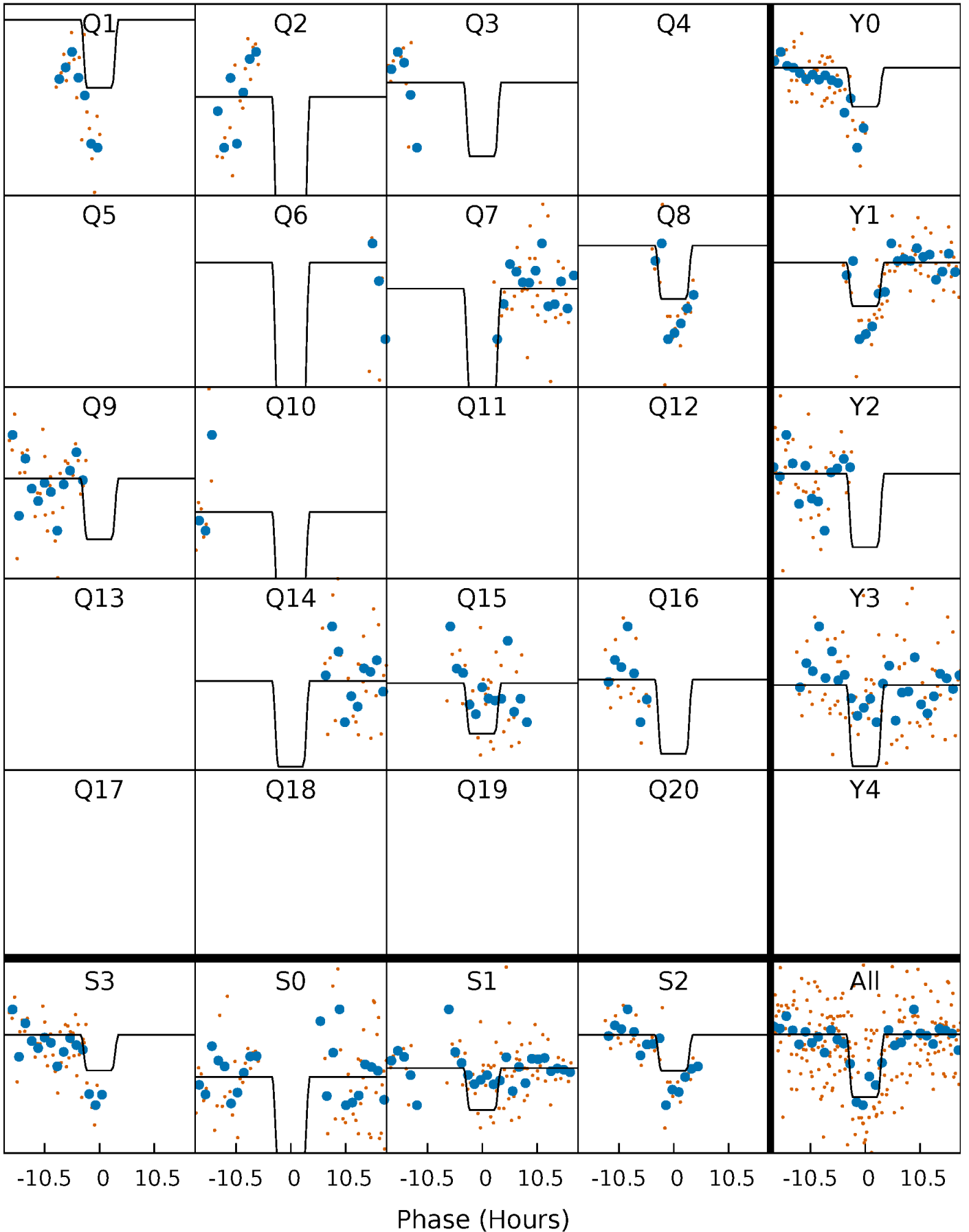
DV Quarter-Phased Transit Curves

TCE 008505554-05 P= 63.035047 Days $T_0=142.876444$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

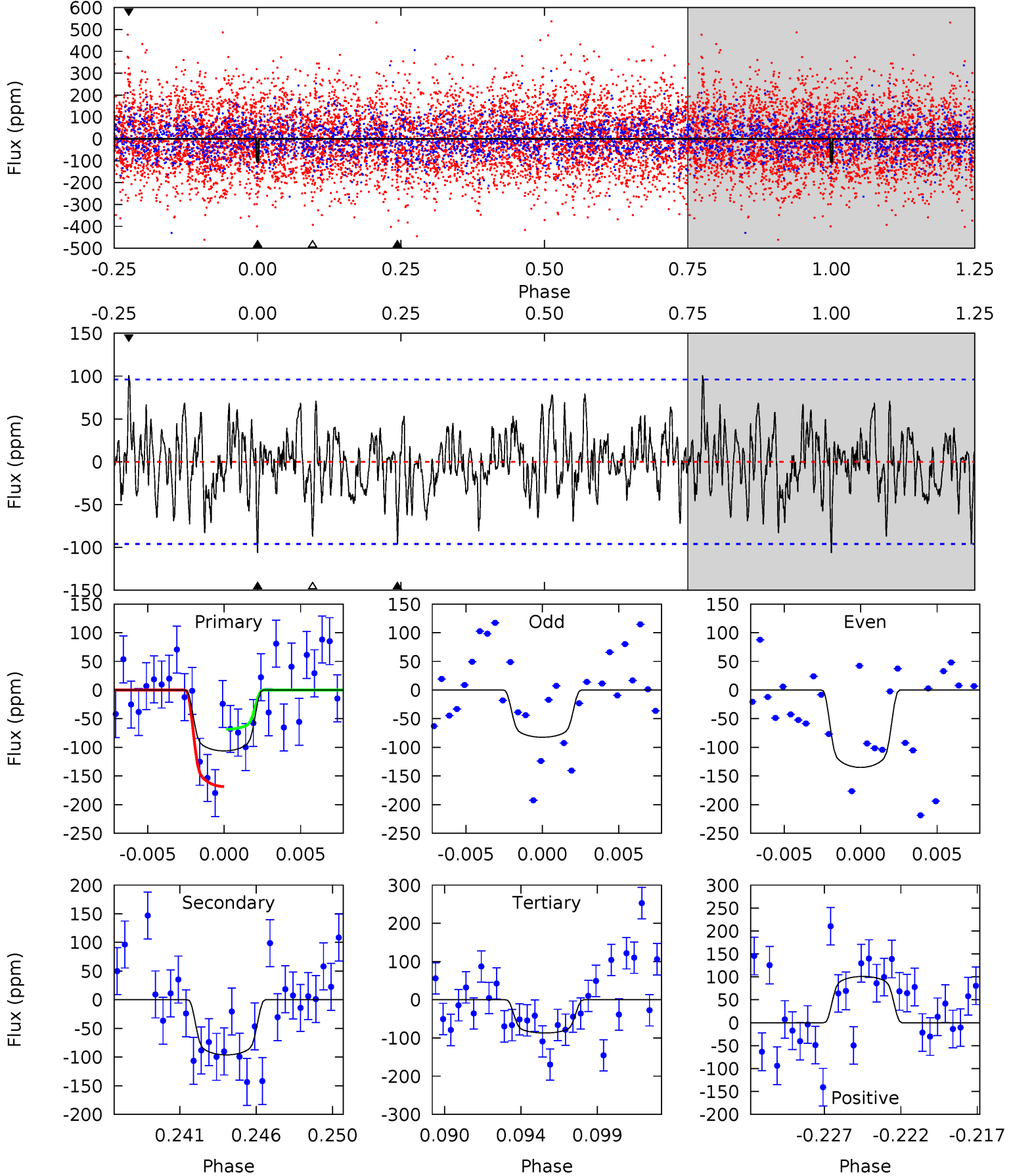
TCE 008505554-05 $P = 63.036381$ Days $T_0 = 142.851598$ (BKJD)



DV Model-Shift Uniqueness Test

008505554-05, P = 63.035047 Days, E = 79.841397 Days

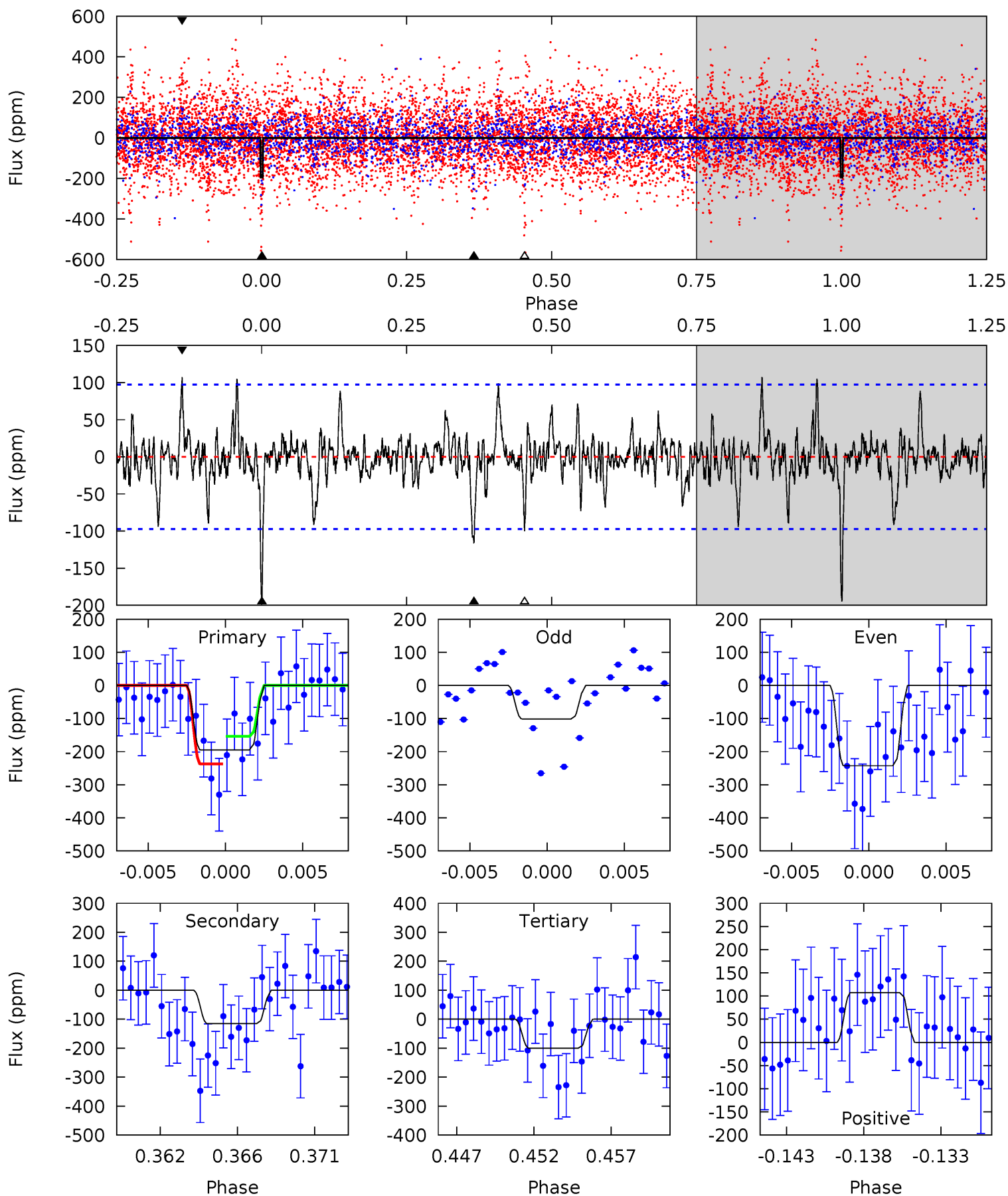
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
5.71	5.18	4.68	5.42	5.17	2.83	1.60	1.03	0.29	0.49	-0.25	1.37	0.60	0.49	2.67



Alt Model-Shift Uniqueness Test

008505554-05, P = 63.036381 Days, E = 79.815217 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
10.3	6.13	5.31	5.69	5.17	2.82	1.40	5.02	4.64	0.82	0.44	3.63	1.34	0.36	2.21



Stellar Parameters For KIC 008505554

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6488^{+146}_{-195}	$4.392^{+0.070}_{-0.210}$	$-0.240^{+0.250}_{-0.300}$	$1.120^{+0.371}_{-0.124}$	$1.127^{+0.170}_{-0.139}$	$1.130^{+0.339}_{-0.620}$
	+2%/-3%	+2%/-5%	+104%/-125%	+33%/-11%	+15%/-12%	+30%/-55%
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 008505554-05 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-96 ± 19	$1.75^{+0.40}_{-0.34}$	756^{+50}_{-36}	5457^{+538}_{-460}	1724^{+990}_{-606}
Alt.	-116 ± 19	$1.82^{+0.47}_{-0.36}$	759^{+56}_{-40}	5582^{+594}_{-448}	1877^{+1084}_{-649}

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 $A_{obs} \gg 1.0$

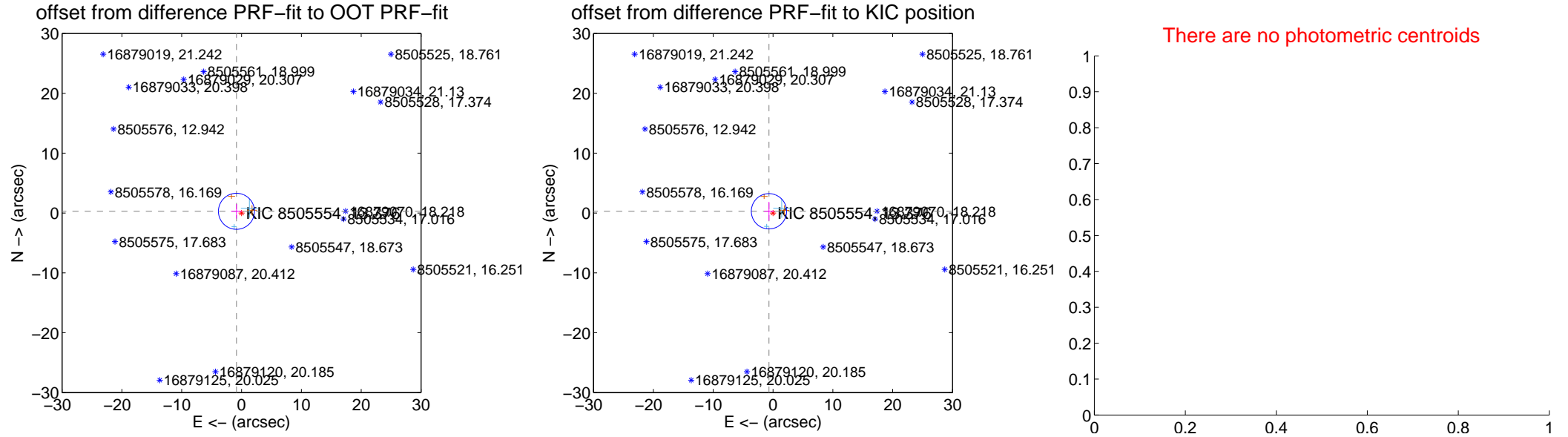
DV Centroid Data

Supplemental centroid analysis for 008505554-05. Kepler magnitude: 13.38. Transit SNR 9.06

There are 2 quarters with good PRF difference image offsets

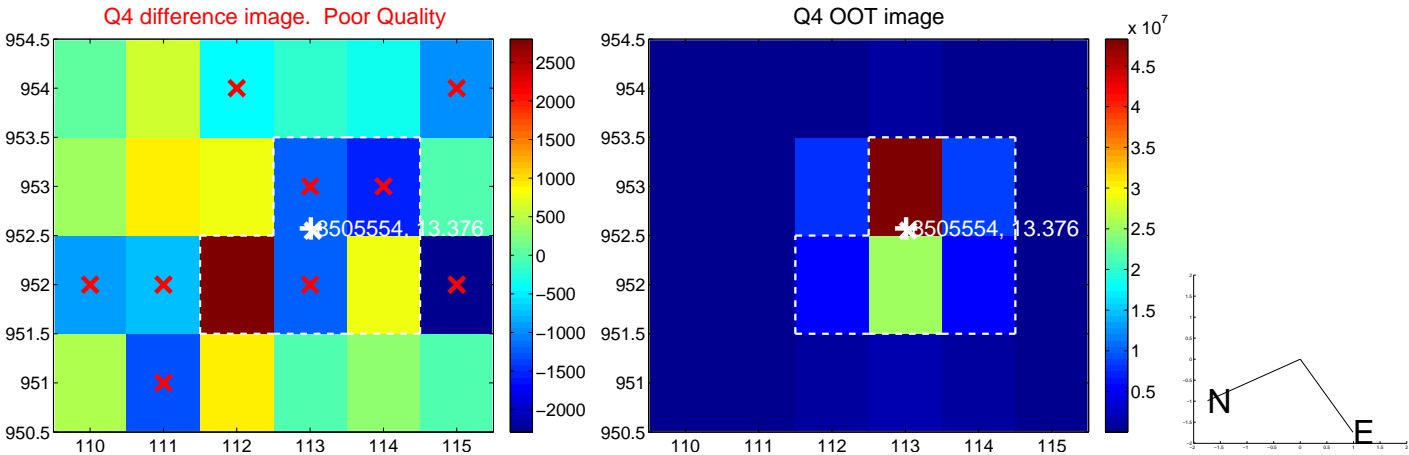
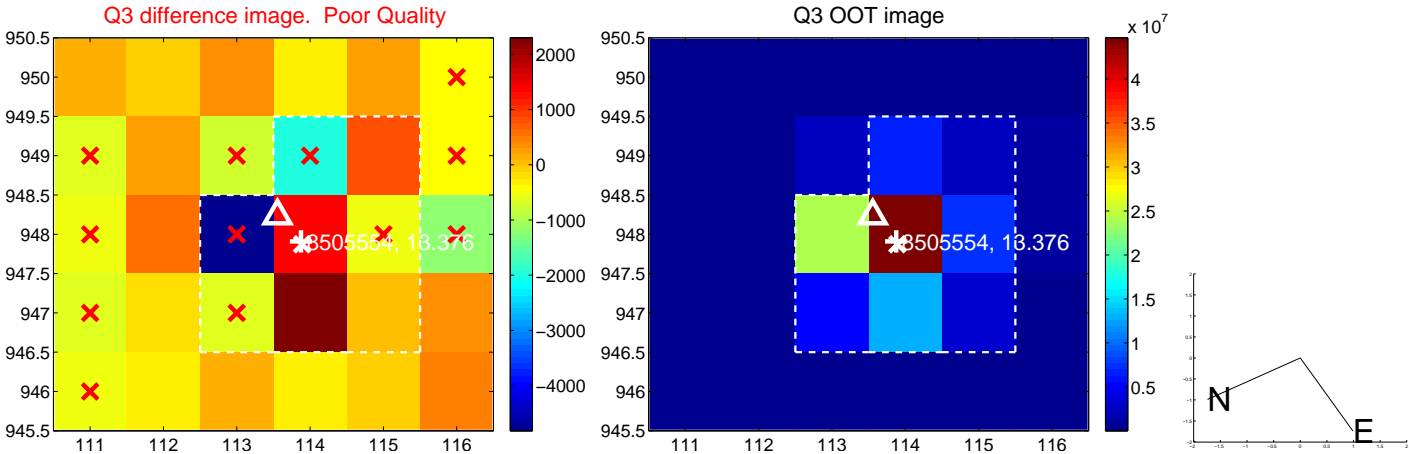
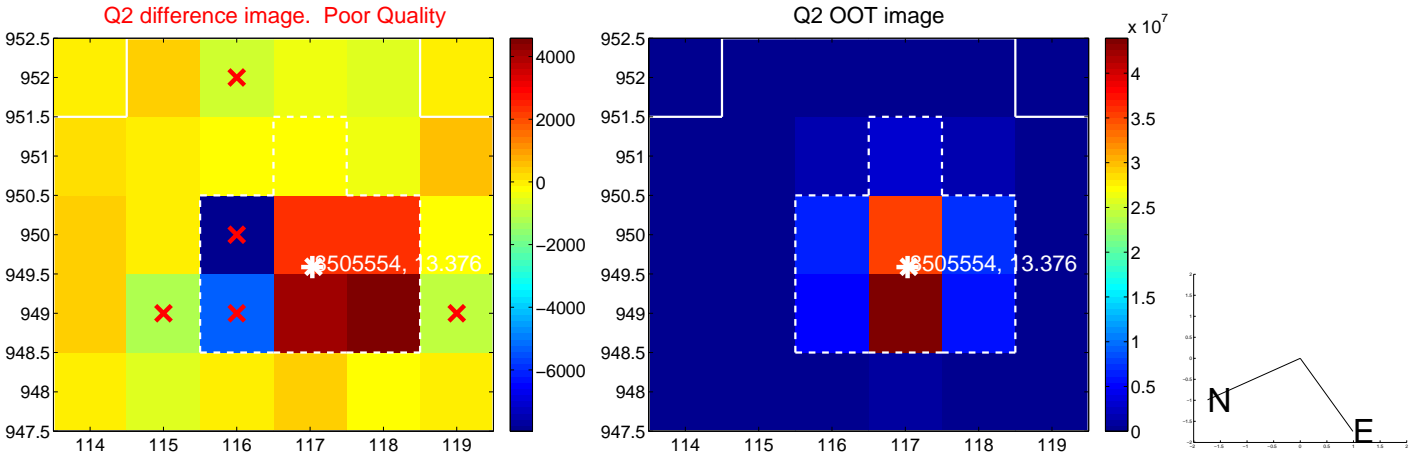
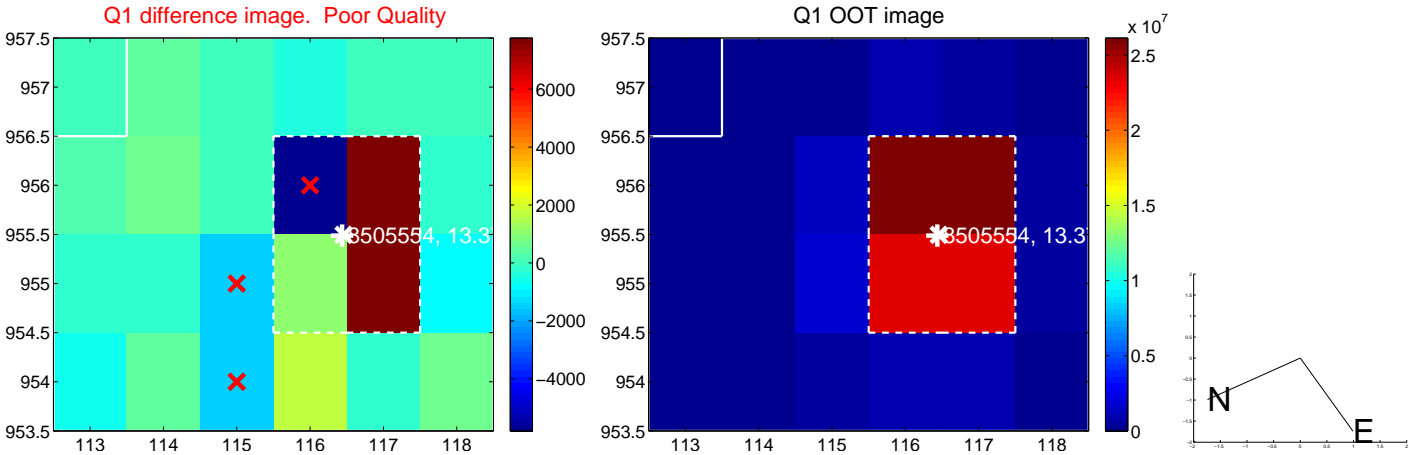
The direct PRF centroid is offset from the target star catalog position by about 0.14 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.897 ± 1.004	0.89	0.850 ± 0.891	0.285 ± 1.209
PRF-fit source offset from KIC position	0.737 ± 0.983	0.75	0.678 ± 0.829	0.290 ± 1.576
photometric centroid source offset	—	—	—	—

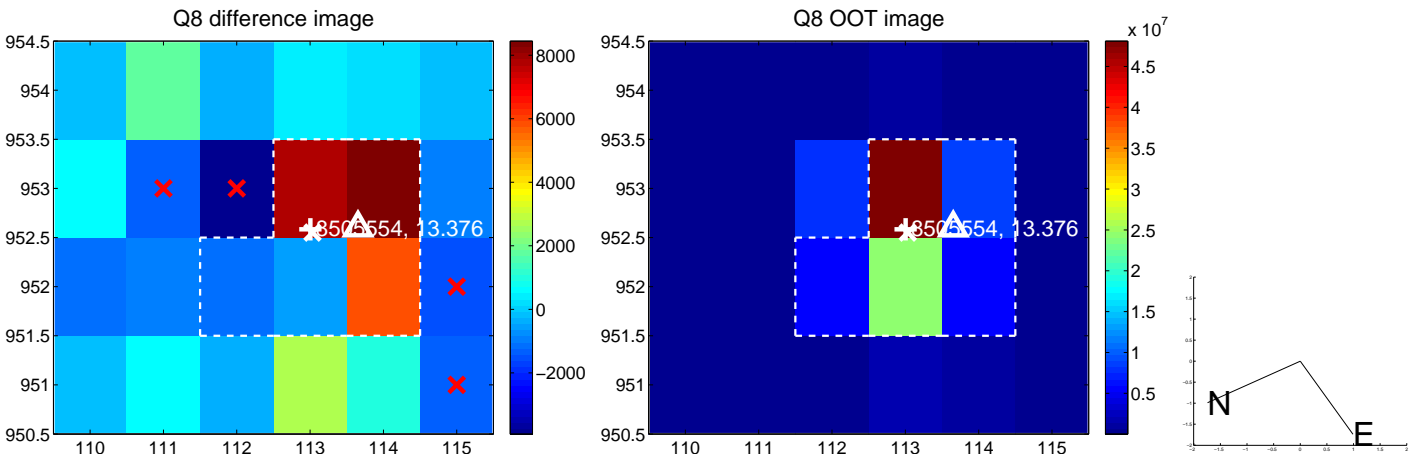
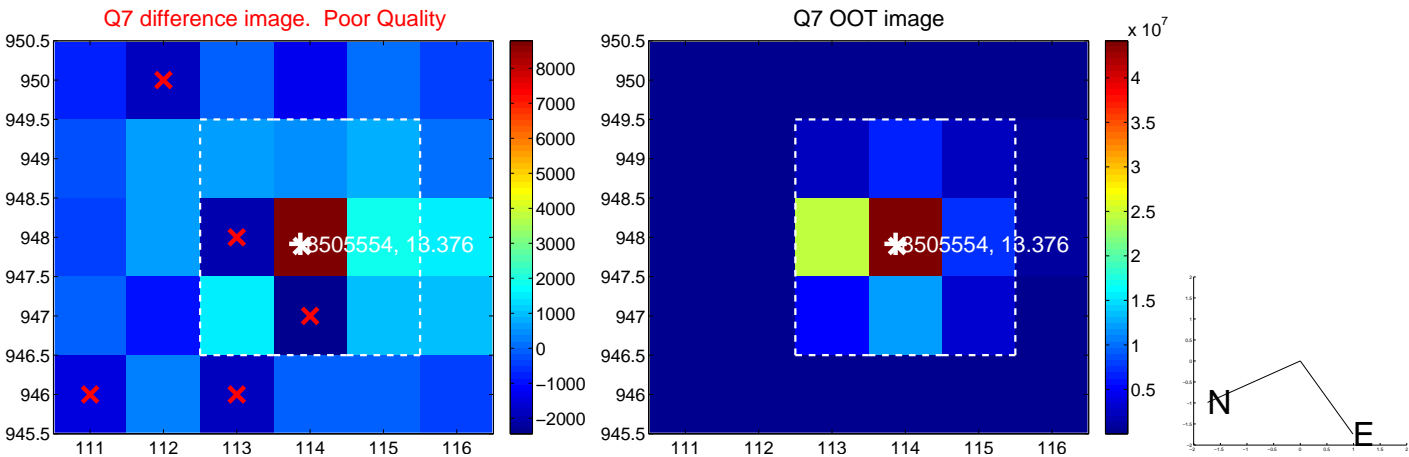
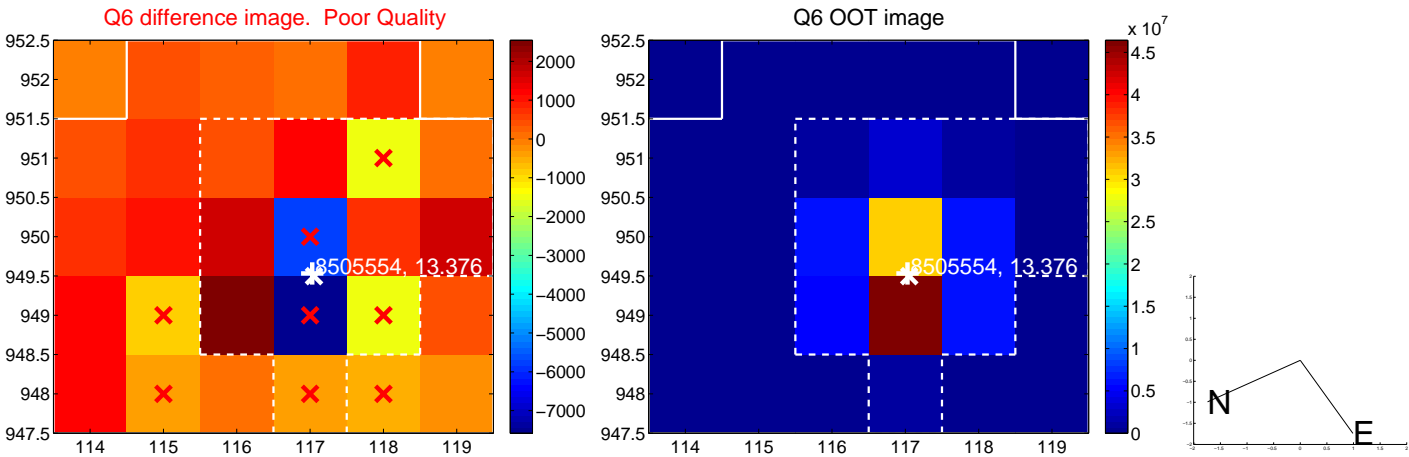
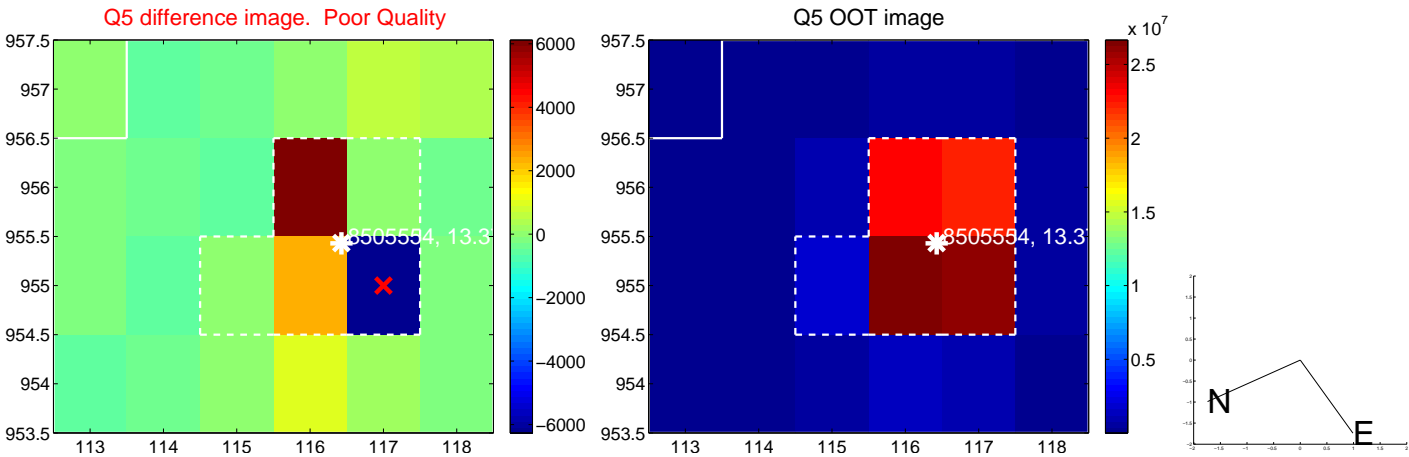


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

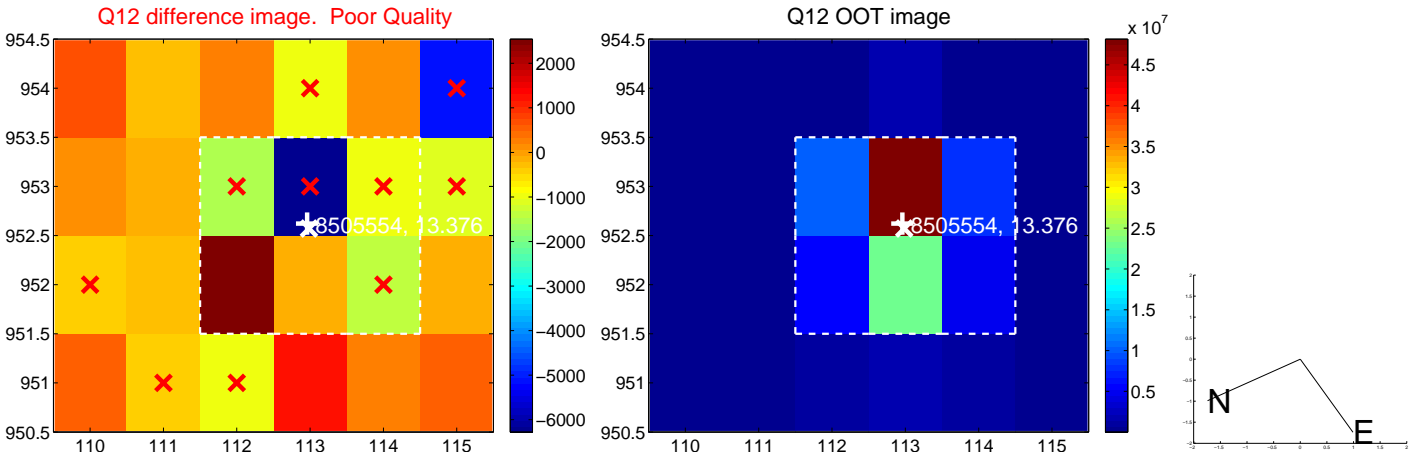
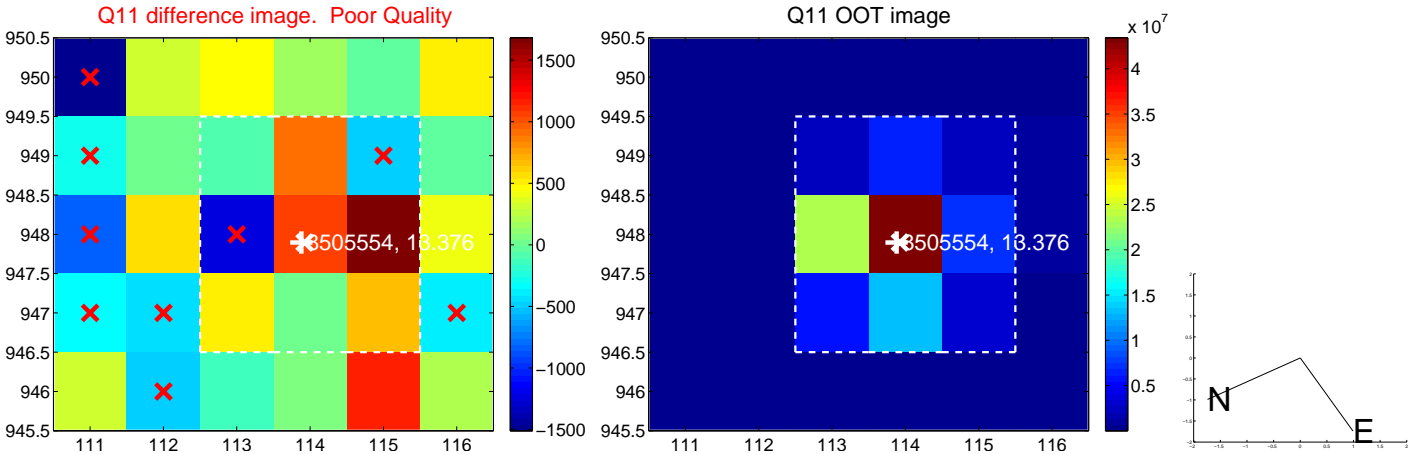
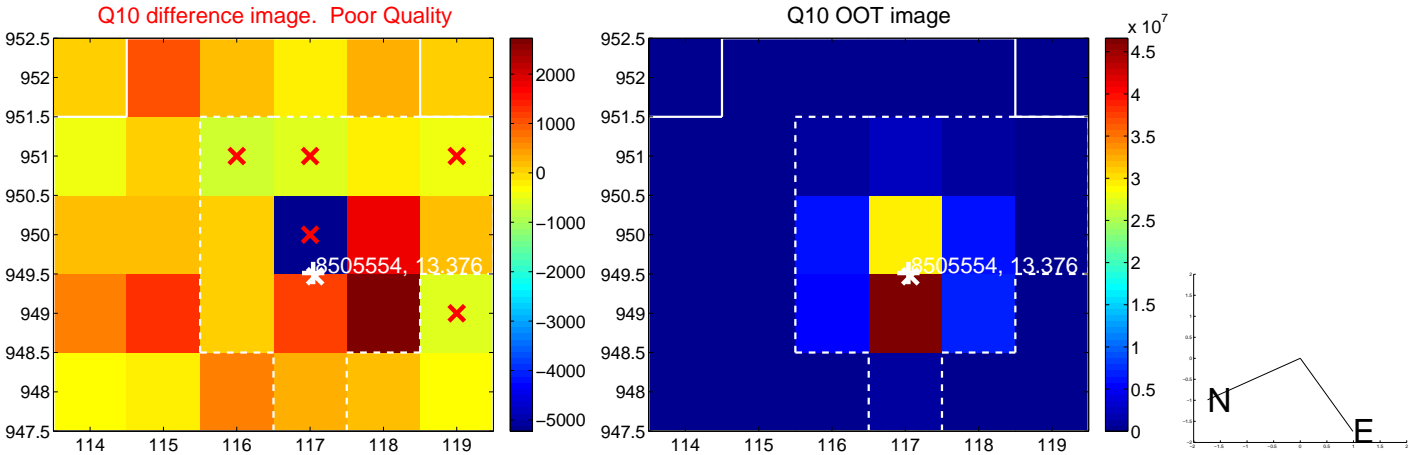
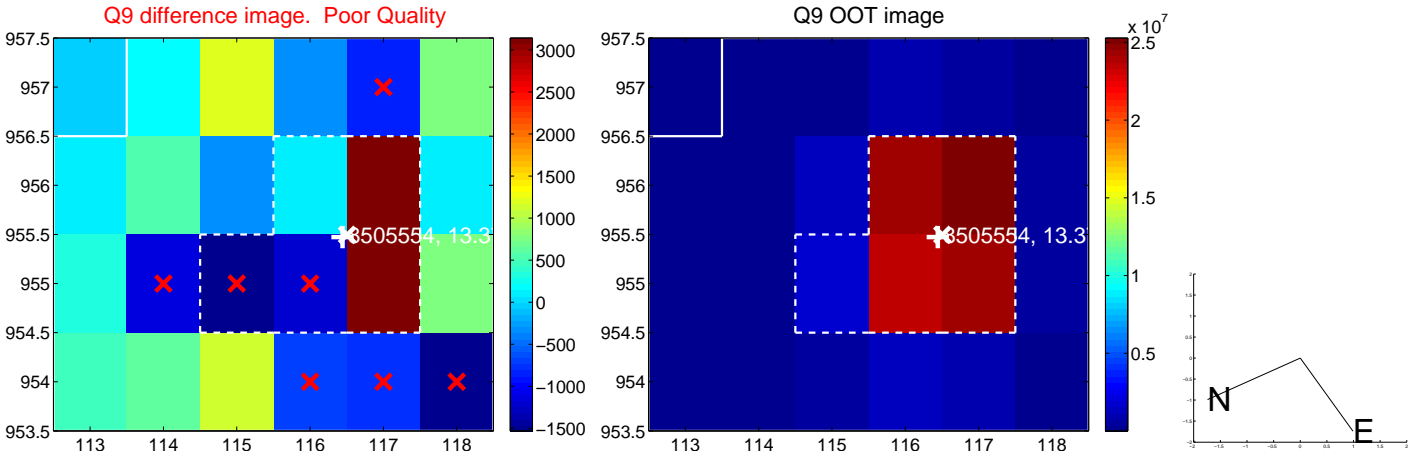
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



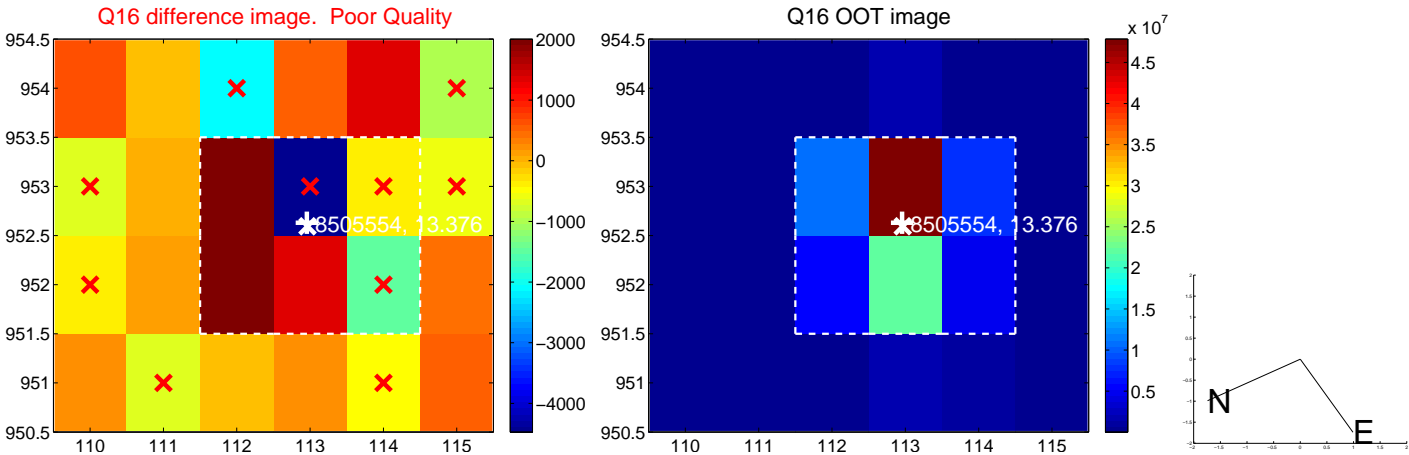
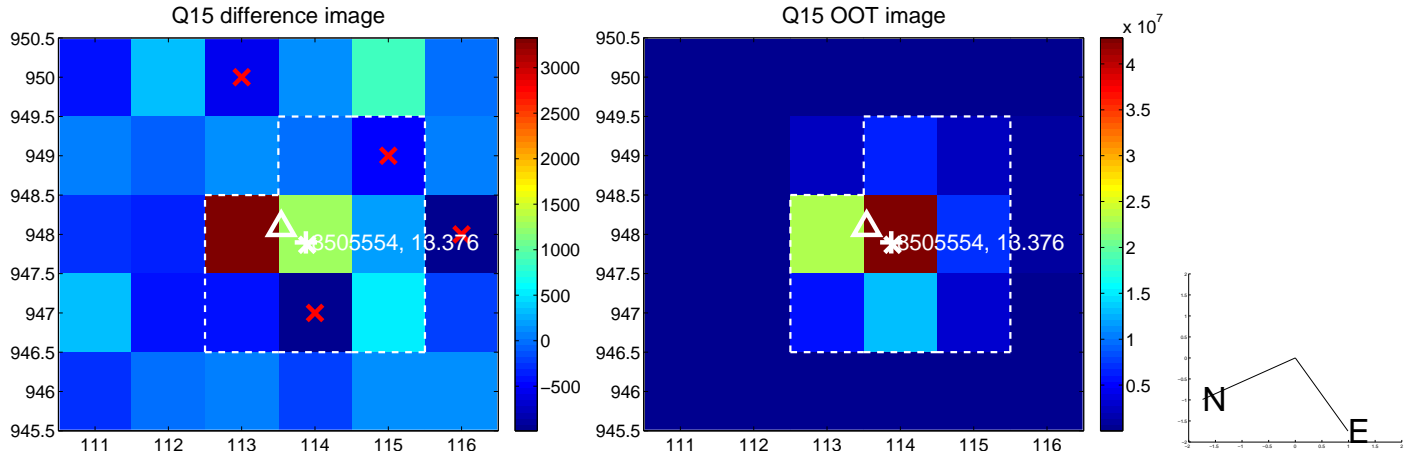
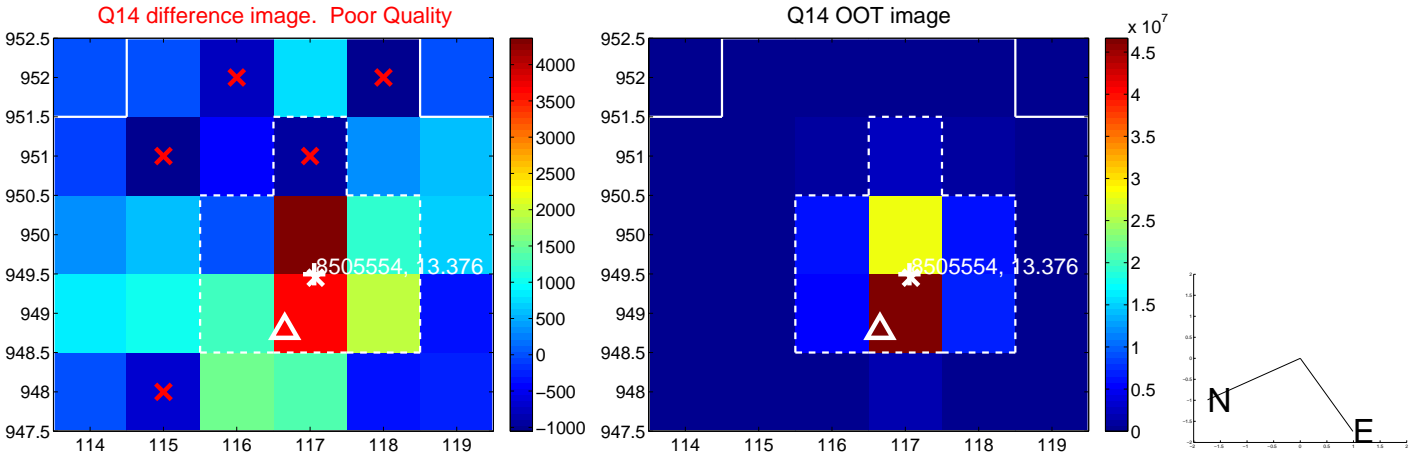
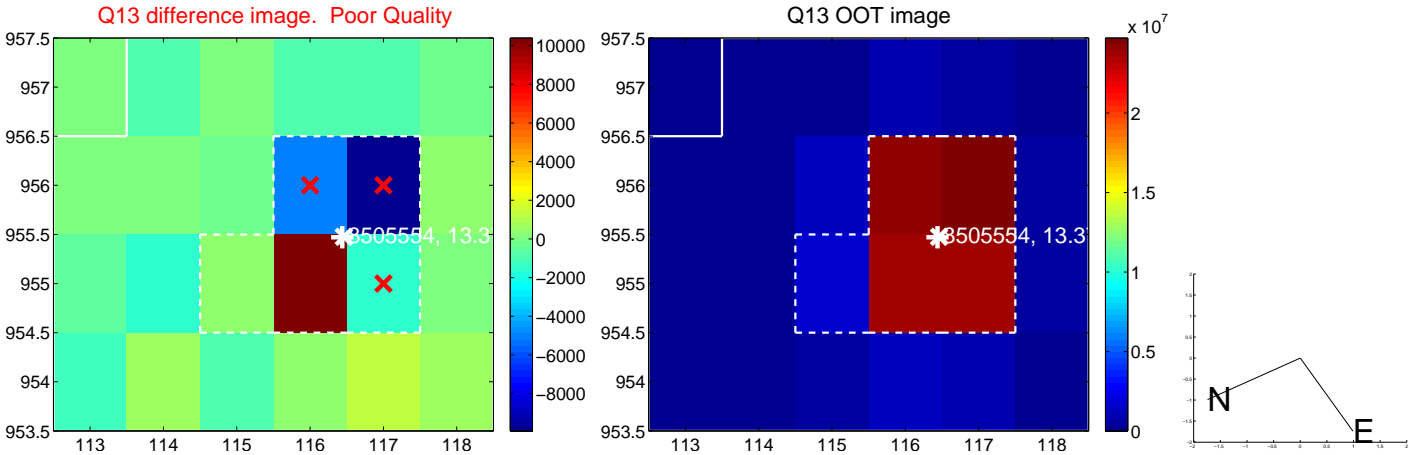
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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folded centroid time series figure for this object.

UKIRT Image

Declination

