

KIC 005938266

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})
005938266-01	OBS	No	1.089117	131.932395	13.1	7.610	10.6	5.3	3.26	6760	1.26	32851.02
005938266-02	OBS	No	72.635311	190.932171	169.5	12.598	15.4	8.3	3.26	6760	4.55	121.47
005938266-03	OBS	No	13.552544	131.876363	48.0	11.219	11.1	5.1	3.26	6760	2.55	1139.26
005938266-04	OBS	No	30.565476	153.049310	263.4	1.852	10.9	11.5	3.26	6760	5.78	385.19
005938266-05	OBS	No	50.735214	159.740808	238.3	2.077	10.5	10.8	3.26	6760	5.92	195.99
005938266-06	OBS	No	7.653263	137.237203	123.5	1.935	10.1	10.9	3.26	6760	4.25	2440.73
005938266-07	OBS	No	6.737365	135.089343	147.4	1.284	8.3	10.2	3.26	6760	4.63	2892.87

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
005938266-01	OBS	FP	0.00	1	0	0	0	SWEET_NTL—LPP_DV—MOD_NONUNIQ_ALT—CENT_SATURATED
005938266-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—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—CENT_SATURATED
005938266-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_TRACKER—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—CENT_SATURATED
005938266-04	OBS	FP	0.00	1	0	1	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_SATURATED—HALO_GHOST
005938266-05	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_NONUNIQ_ALT—MOD_POS_ALT—CENT_SATURATED
005938266-06	OBS	FP	0.00	1	0	1	0	INDIV_TRANS_RUBBLE_ZUMA—TRANS_GAPPED—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_SATURATED—HALO_GHOST
005938266-07	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_ZUMA—TRANS_GAPPED—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_SATURATED

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

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

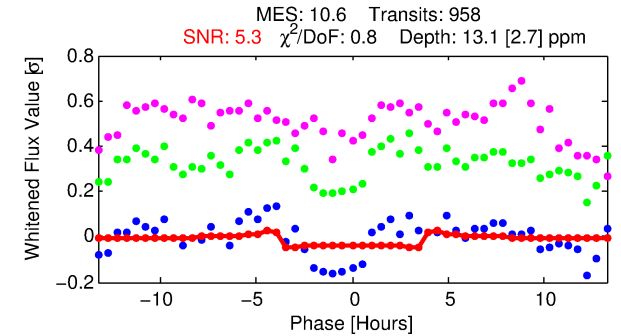
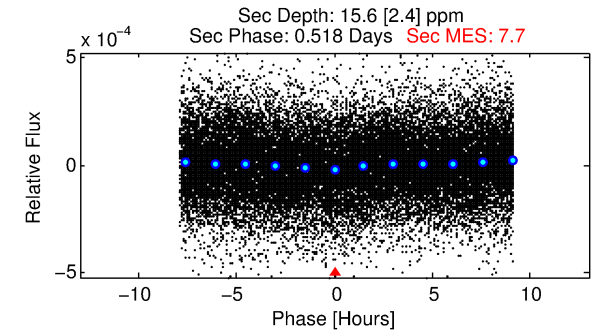
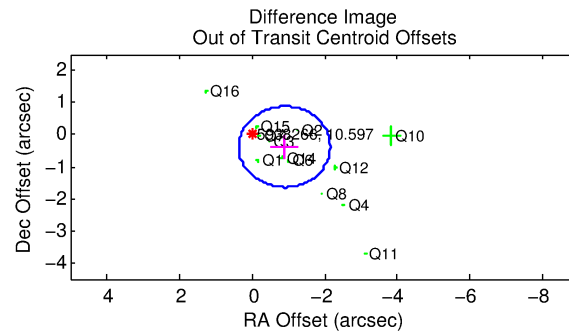
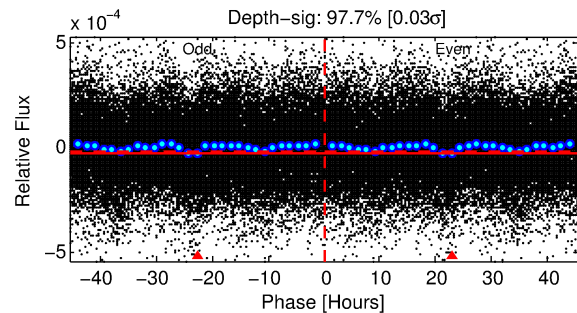
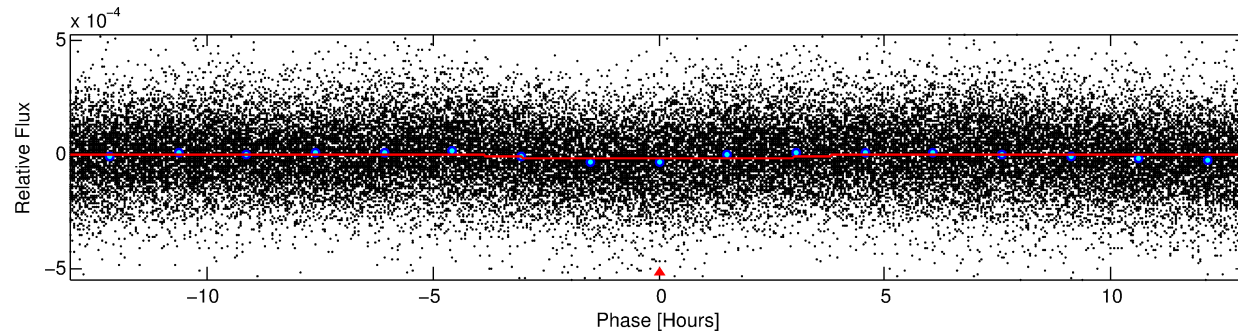
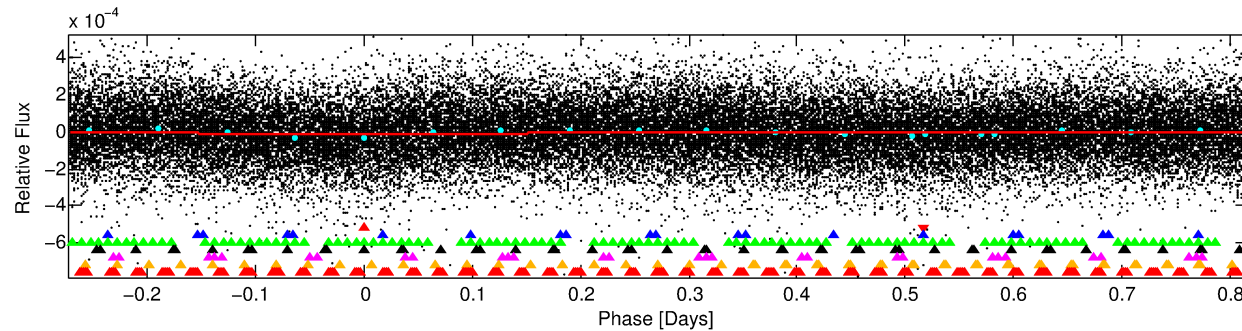
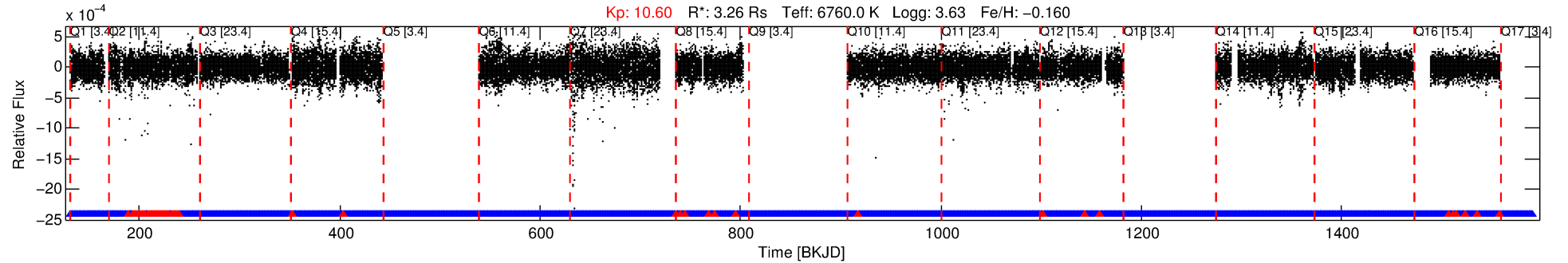
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 005938266-01

No Significant Match Found

DV One-Page Summary

KIC: 5938266 Candidate: 1 of 7 Period: 1.089 d



DV Fit Results:

Period = 1.08912 [0.00002] d
Epoch = 131.9324 [0.0053] BKJD
Rp/R* = 0.0035 [0.0018]
a/R* = 1.15 [0.78]
b = 0.70 [2.09]
Seff = 32851.02 [16778.53]
Teq = 3433 [438] K
Rp = 1.26 [0.76] Re
a = 0.0246 [0.0078] AU
Ag = 3.27 [3.65] [0.62 σ]
Teffp = 7135 [1801] K [2.00 σ]

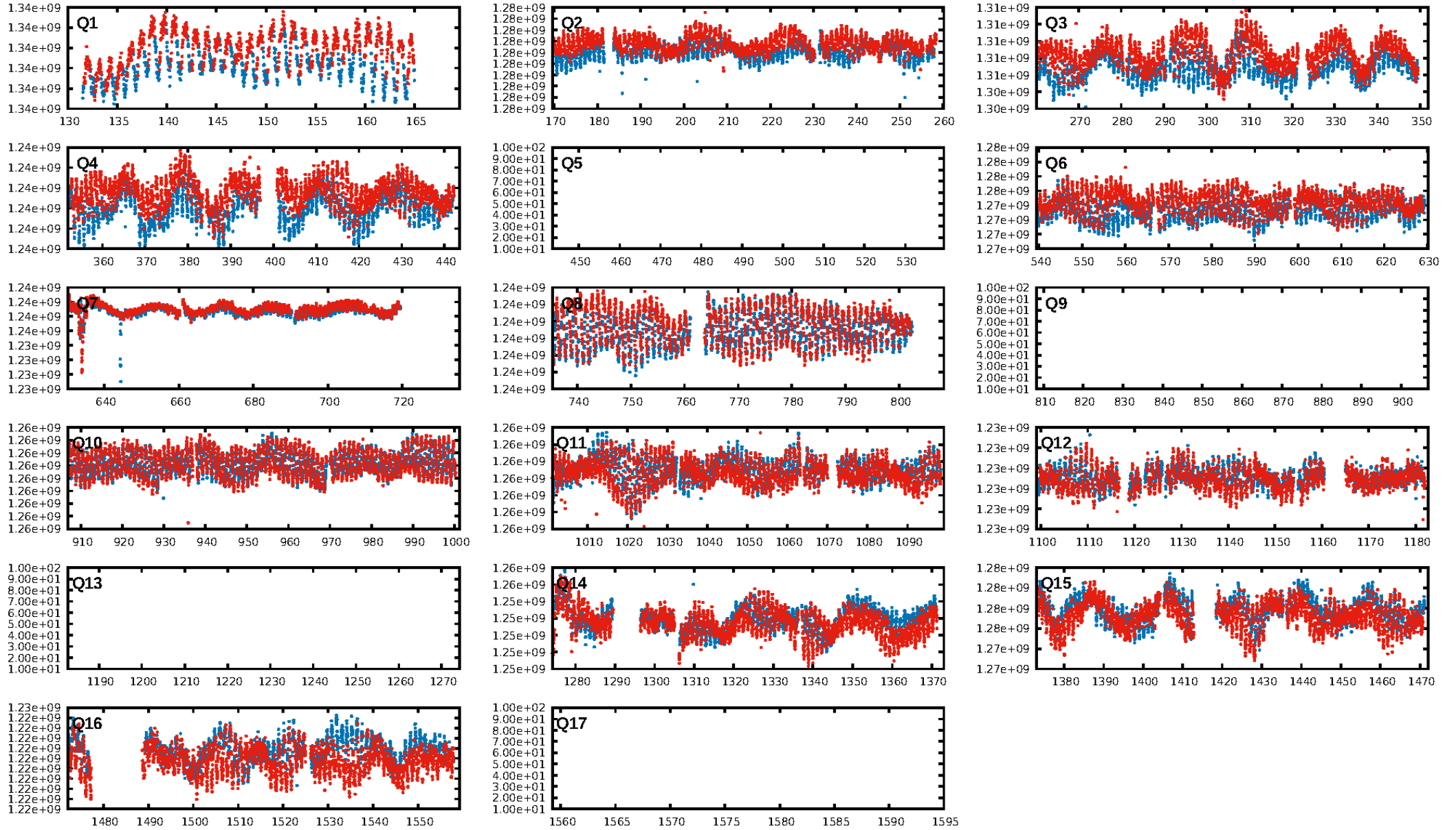
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: 100.0% [17.56 σ]
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 1.01e-13
RollingBand-fgt: 0.94 [869/927]
GhostDiagnostic-chr: 1.473
Centroid-sig: 35.3%
Centroid-so: 1.194 arcsec [1.12 σ]
OotOffset-rm: 0.974 arcsec [2.32 σ]
KicOffset-rm: 1.370 arcsec [2.84 σ]
OotOffset-st: 4/4/4/1 [13]
KicOffset-st: 4/4/4/1 [13]
DiffImageQuality-fgm: 0.38 [5/13]
DiffImageOverlap-fno: 1.00 [13/13]

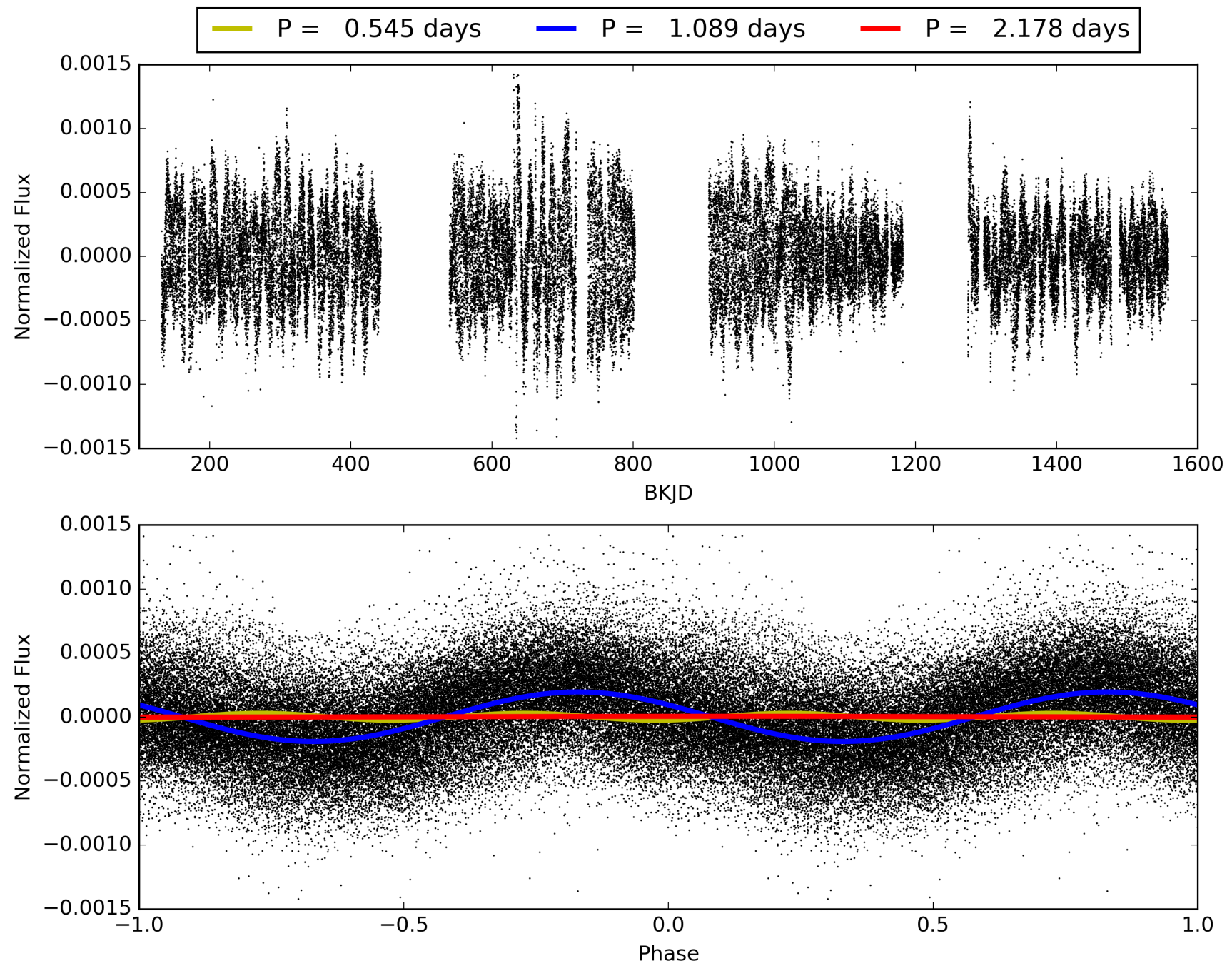
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This Data Validation Report Summary was produced in the Kepler Science Operations Center Pipeline at NASA Ames Research Center

TCE 005938266-01, PDC Light Curves

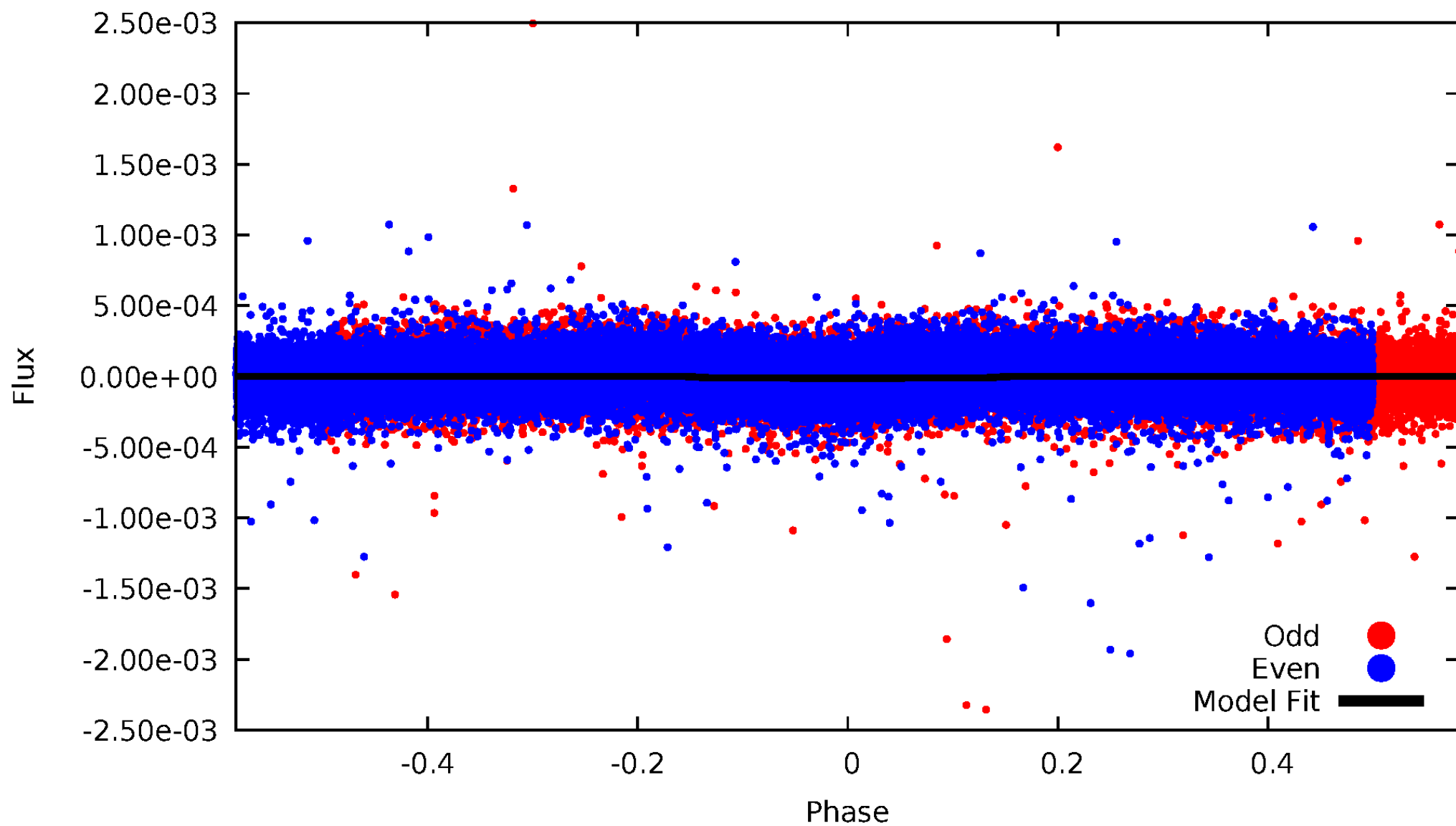


TCE 005938266-01



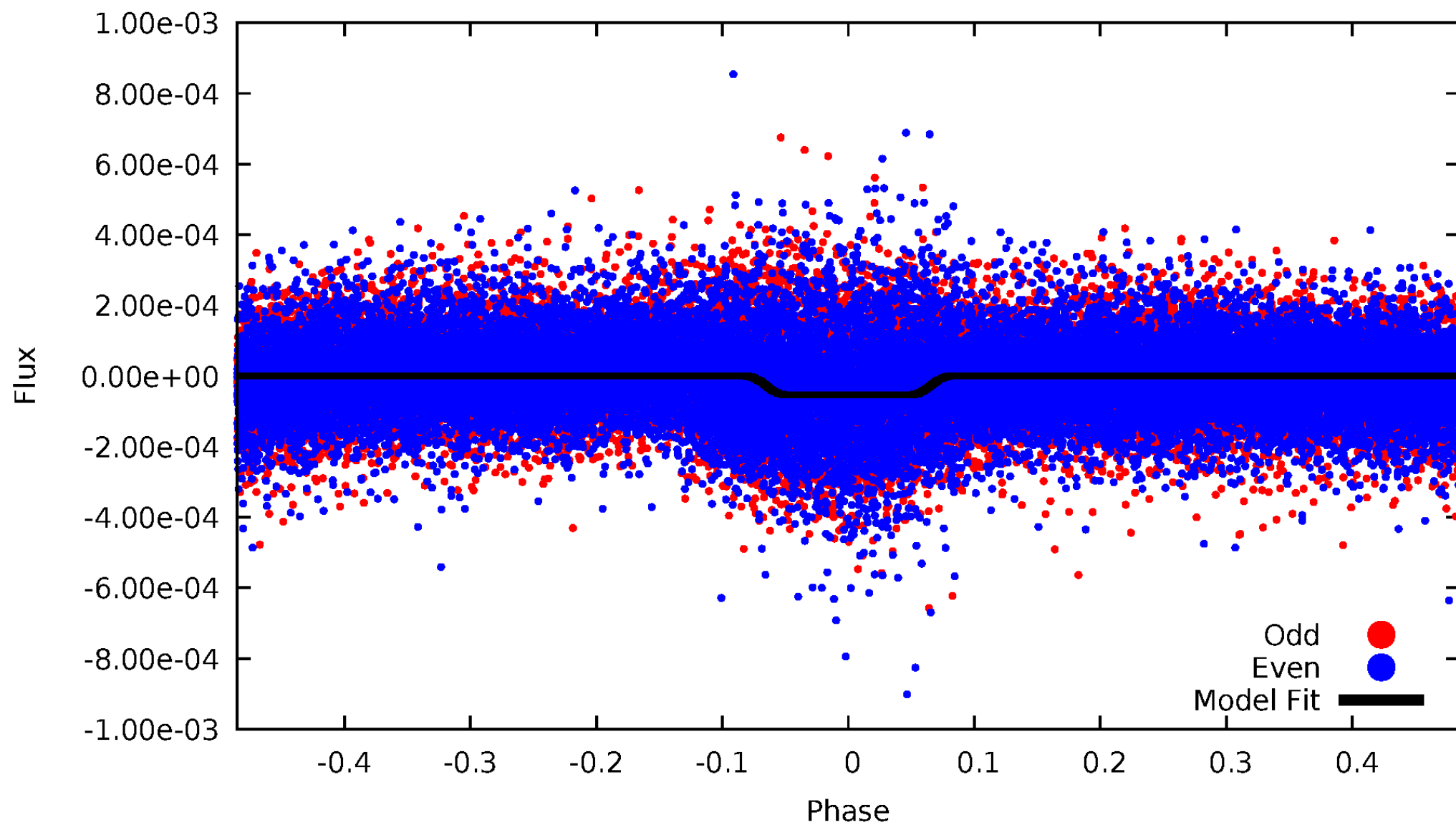
DV Odd/Even

TCE 005938266-01



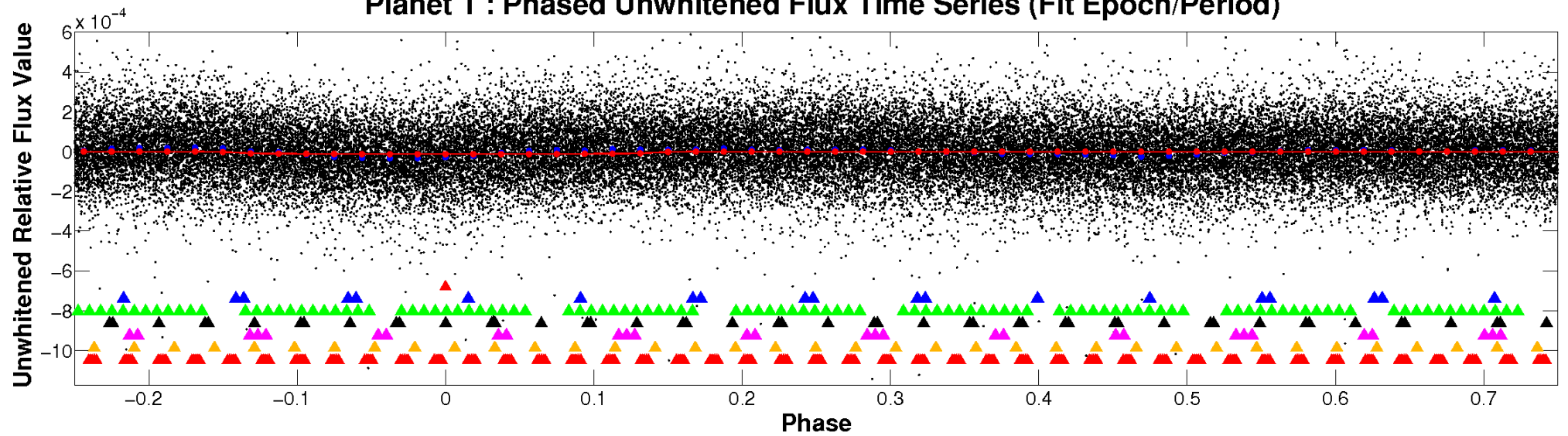
ALT Odd/Even

TCE 005938266-01

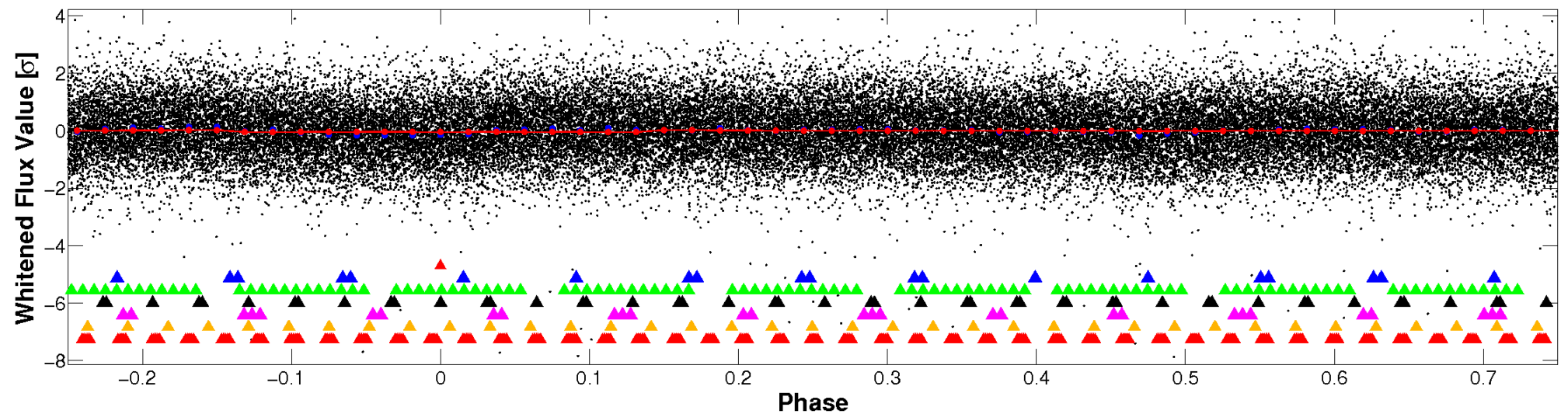


Non-Whitened Vs. Whitened Light Curve

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

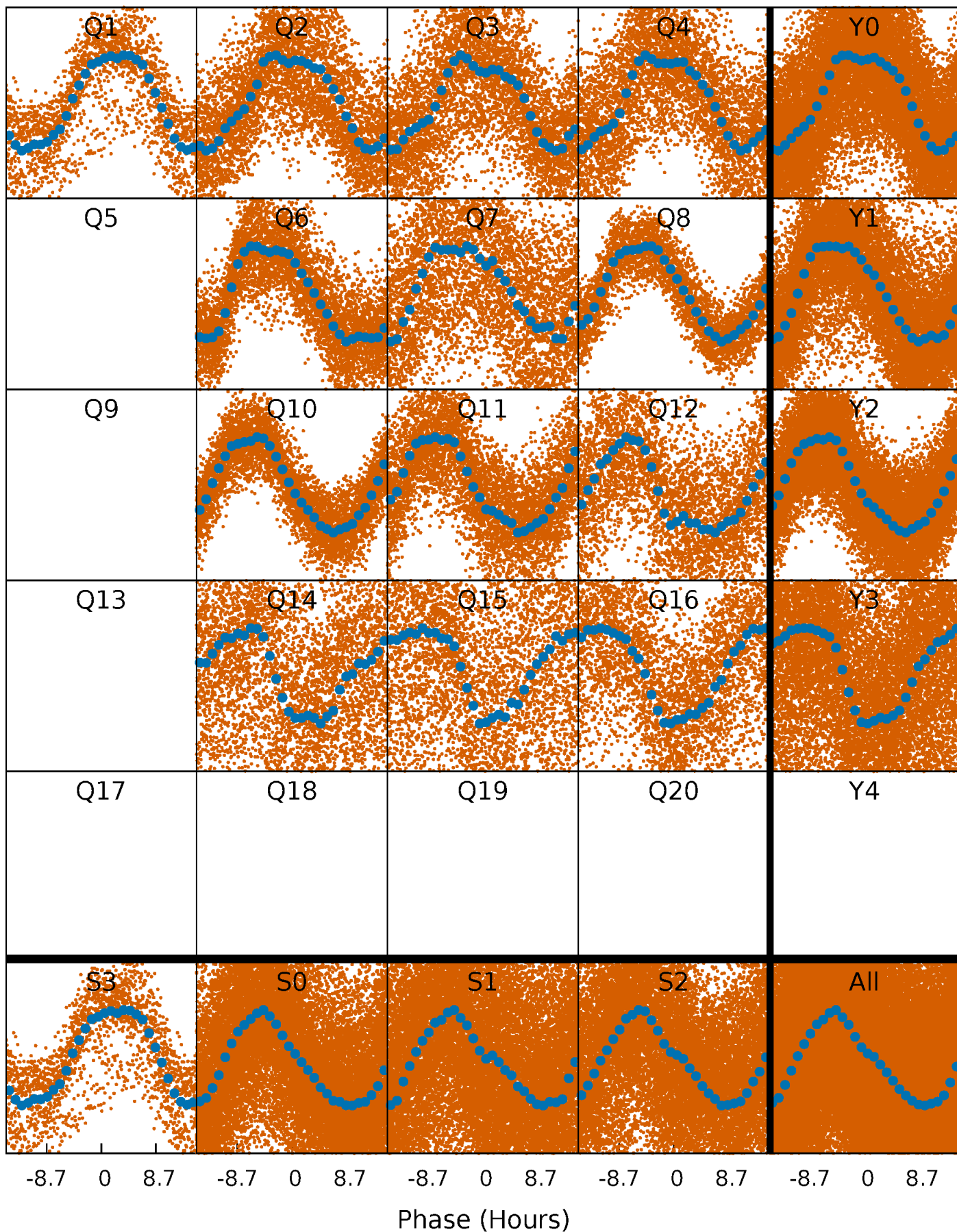


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



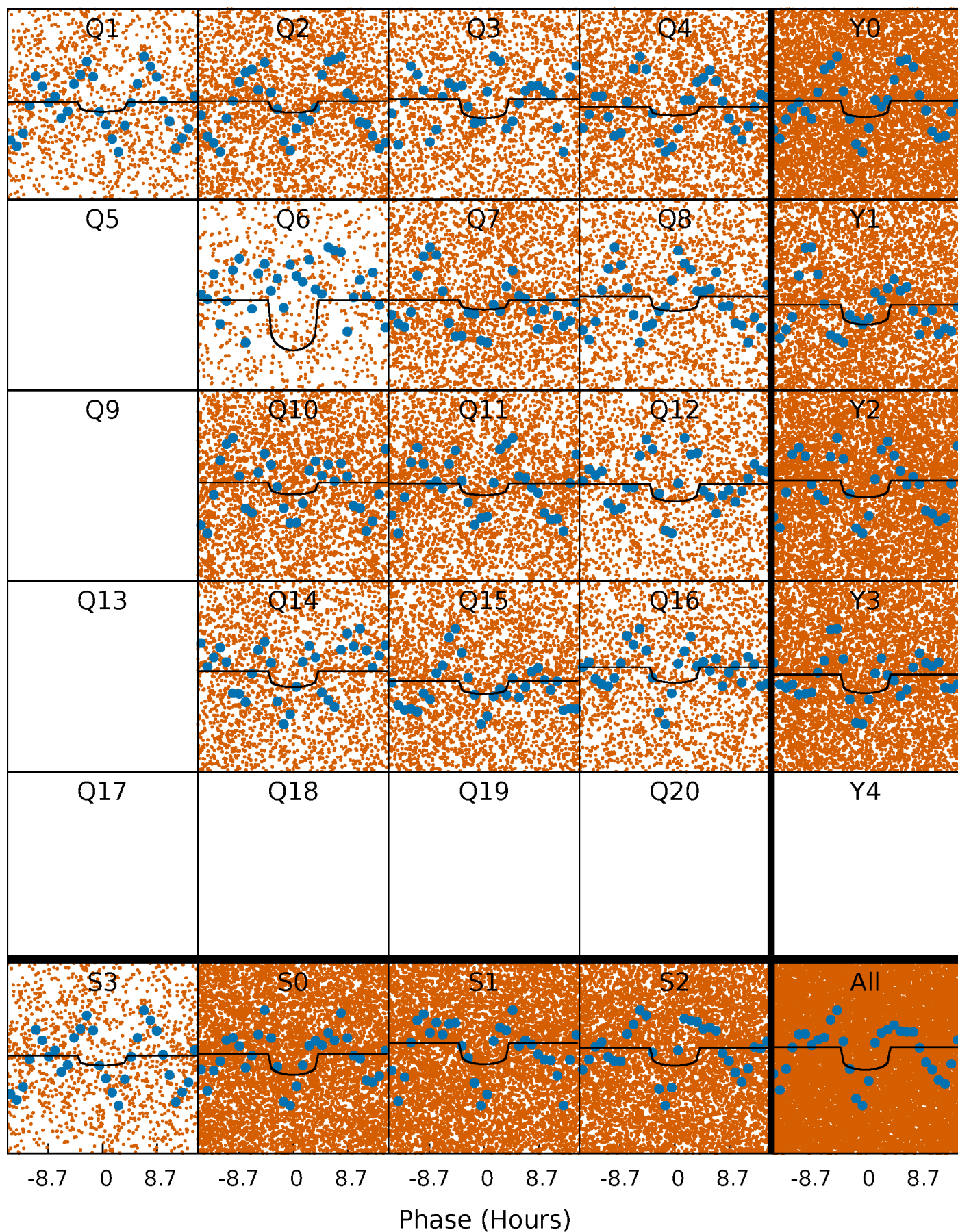
PDC Quarter-Phased Transit Curves

TCE 005938266-01 P= 1.089117 Days $T_0=131.932395$ (BKJD)



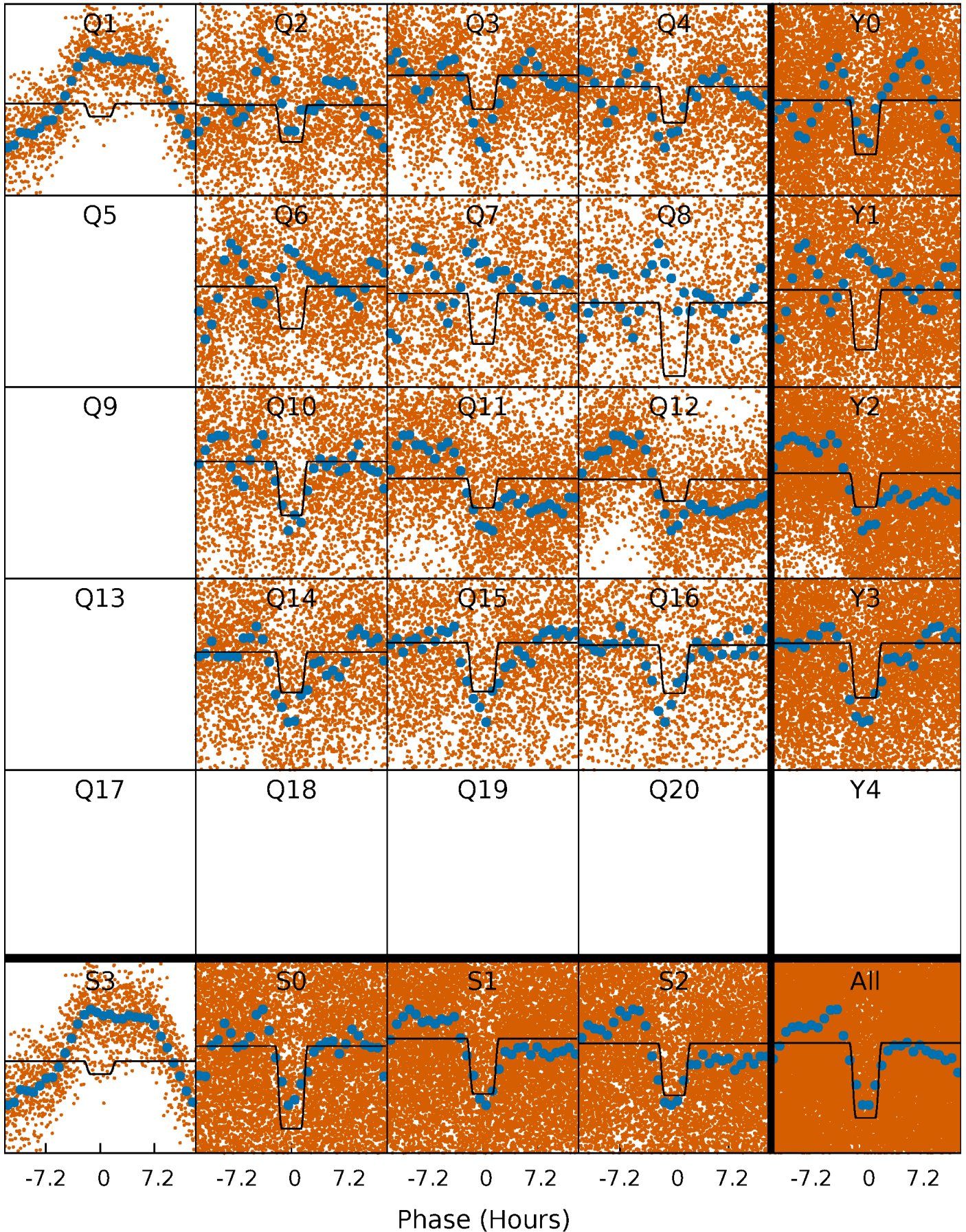
DV Quarter-Phased Transit Curves

TCE 005938266-01 P= 1.089117 Days $T_0=131.932395$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

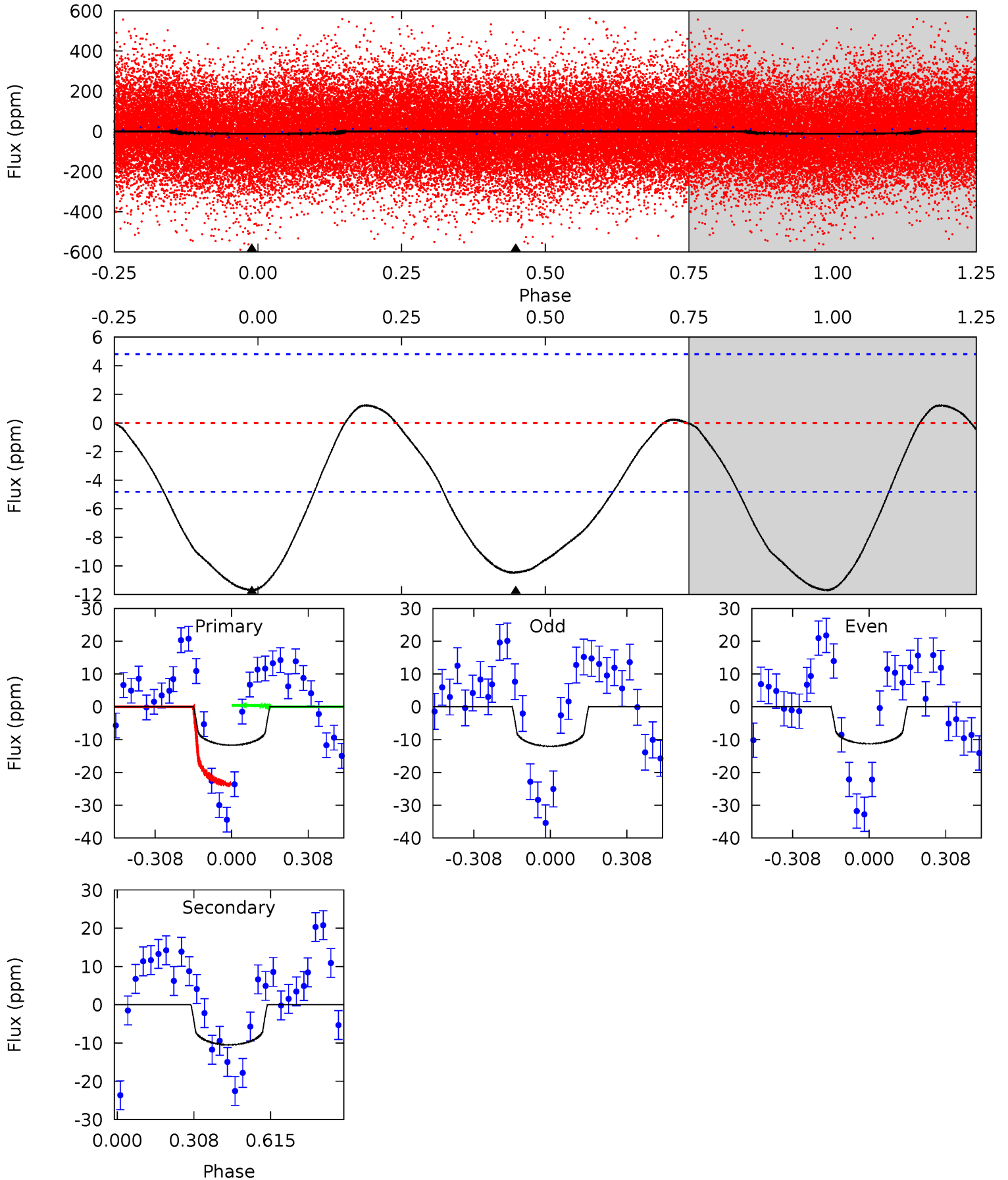
TCE 005938266-01 P= 1.089114 Days $T_0=131.918410$ (BKJD)



DV Model-Shift Uniqueness Test

005938266-01, P = 1.089117 Days, E = 130.843278 Days

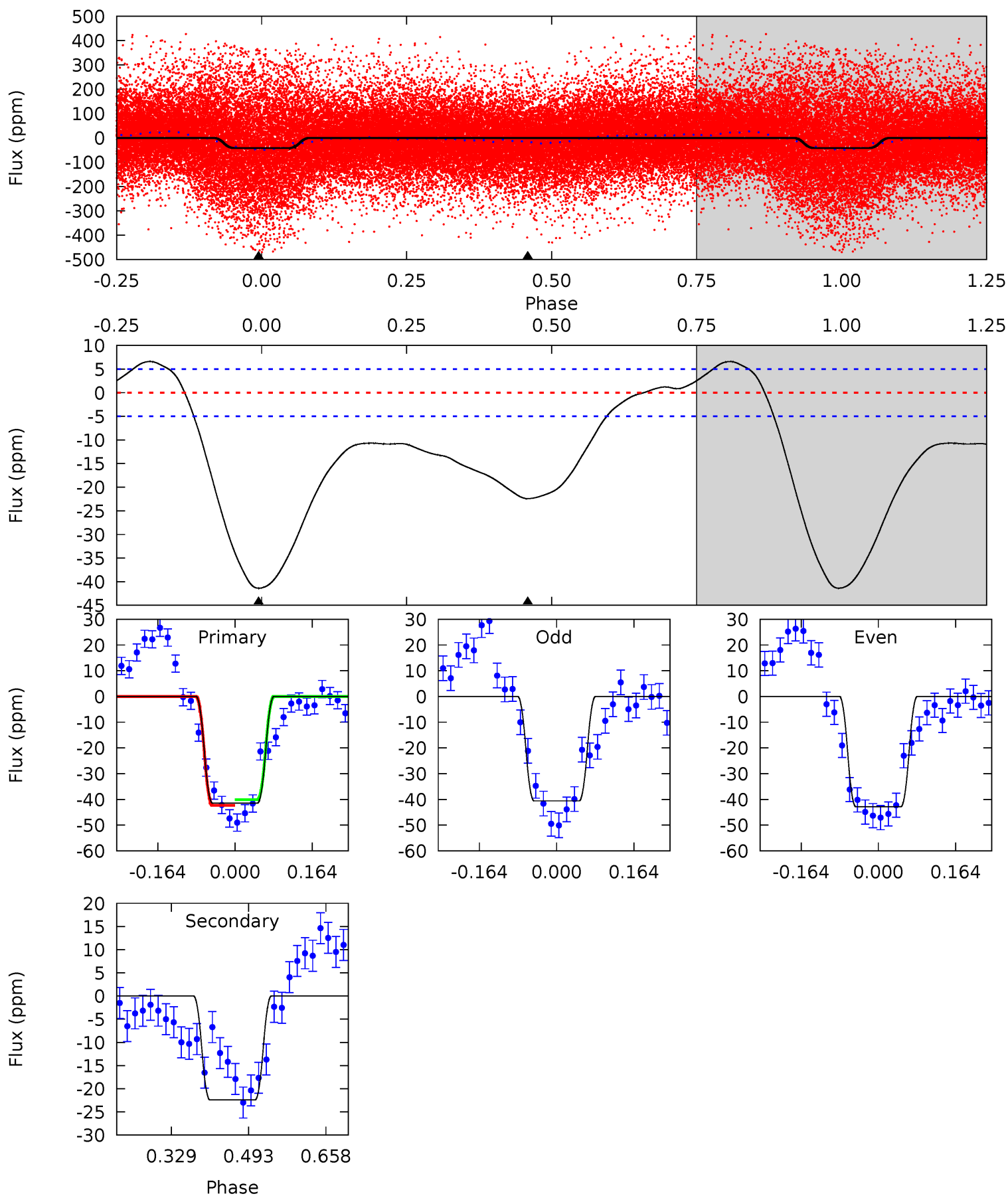
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
10.5	9.40	0	0	4.32	1.02	0.48	10.5	10.5	9.40	9.40	0.34	1.50	0.10	9.93



Alt Model-Shift Uniqueness Test

005938266-01, P = 1.089114 Days, E = 130.829296 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
37.1	20.1	0	0	4.46	1.39	6.22	37.1	37.1	20.1	20.1	1.00	0.93	0.14	0.97



Stellar Parameters For KIC 005938266

	$T_{\text{eff}} (K)$	$\log(g)$	$[\text{Fe}/\text{H}]$	$R (R_{\odot})$	$M (M_{\odot})$	$\rho_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6760^{+152}_{-202}	$3.635^{+0.288}_{-0.072}$	$-0.160^{+0.300}_{-0.250}$	$3.258^{+0.395}_{-1.105}$	$1.670^{+0.239}_{-0.292}$	$0.068^{+0.130}_{-0.016}$
	+2%/-3%	+8%/-2%	+188%/-156%	+12%/-34%	+14%/-17%	+191%/-23%
Source	PHO1	FLK73	KIC0	DSEP		

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

Secondary Eclipse Parameters for KIC 005938266-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-10 ± 1	$1.16^{+0.62}_{-0.57}$	4667^{+266}_{-403}	6277^{+3187}_{-1339}	$2.642^{+7.789}_{-1.526}$
Alt.	-22 ± 1	$2.42^{+0.75}_{-0.67}$	4694^{+253}_{-398}	5142^{+836}_{-662}	$1.299^{+1.056}_{-0.541}$

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

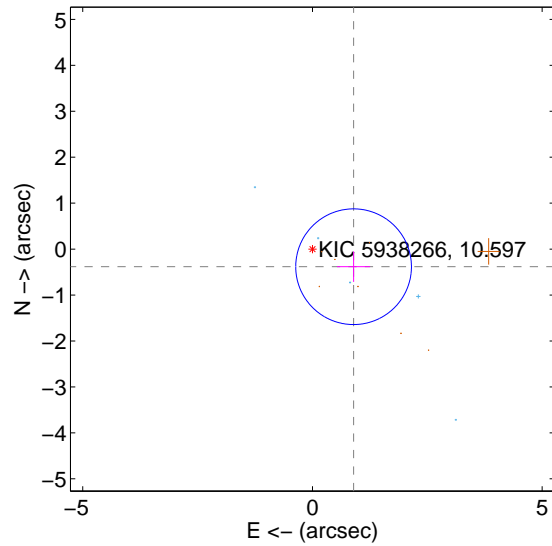
Supplemental centroid analysis for 005938266-01. **Kepler magnitude: 10.60.** Transit SNR 5.28

There are 5 quarters with good PRF difference image offsets

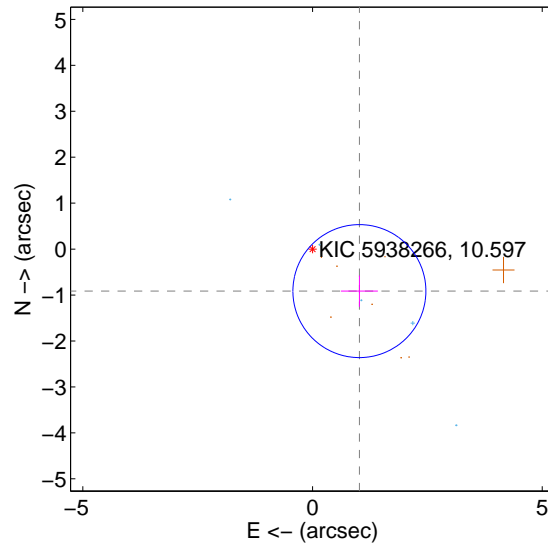
The direct PRF centroid is offset from the target star catalog position by about 0.60 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.974 ± 0.420	2.32	-0.895 ± 0.361	-0.383 ± 0.331
PRF-fit source offset from KIC position	1.370 ± 0.482	2.84	-1.020 ± 0.401	-0.914 ± 0.340
photometric centroid source offset	1.19 ± 1.07	1.12	1.18 ± 1.07	-0.15 ± 0.90

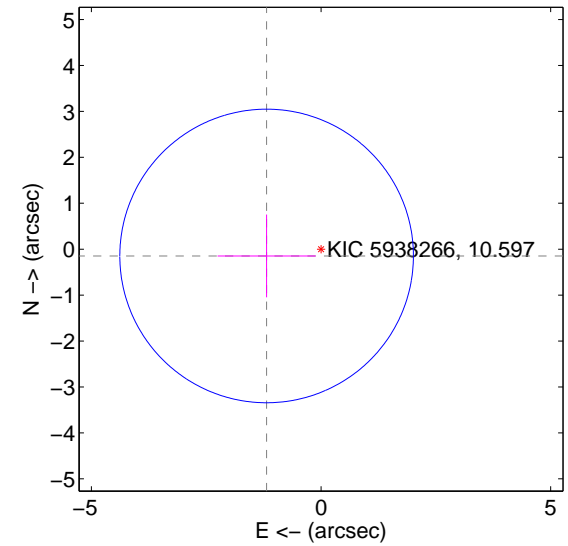
offset from difference PRF-fit to OOT PRF-fit



offset from difference PRF-fit to KIC position

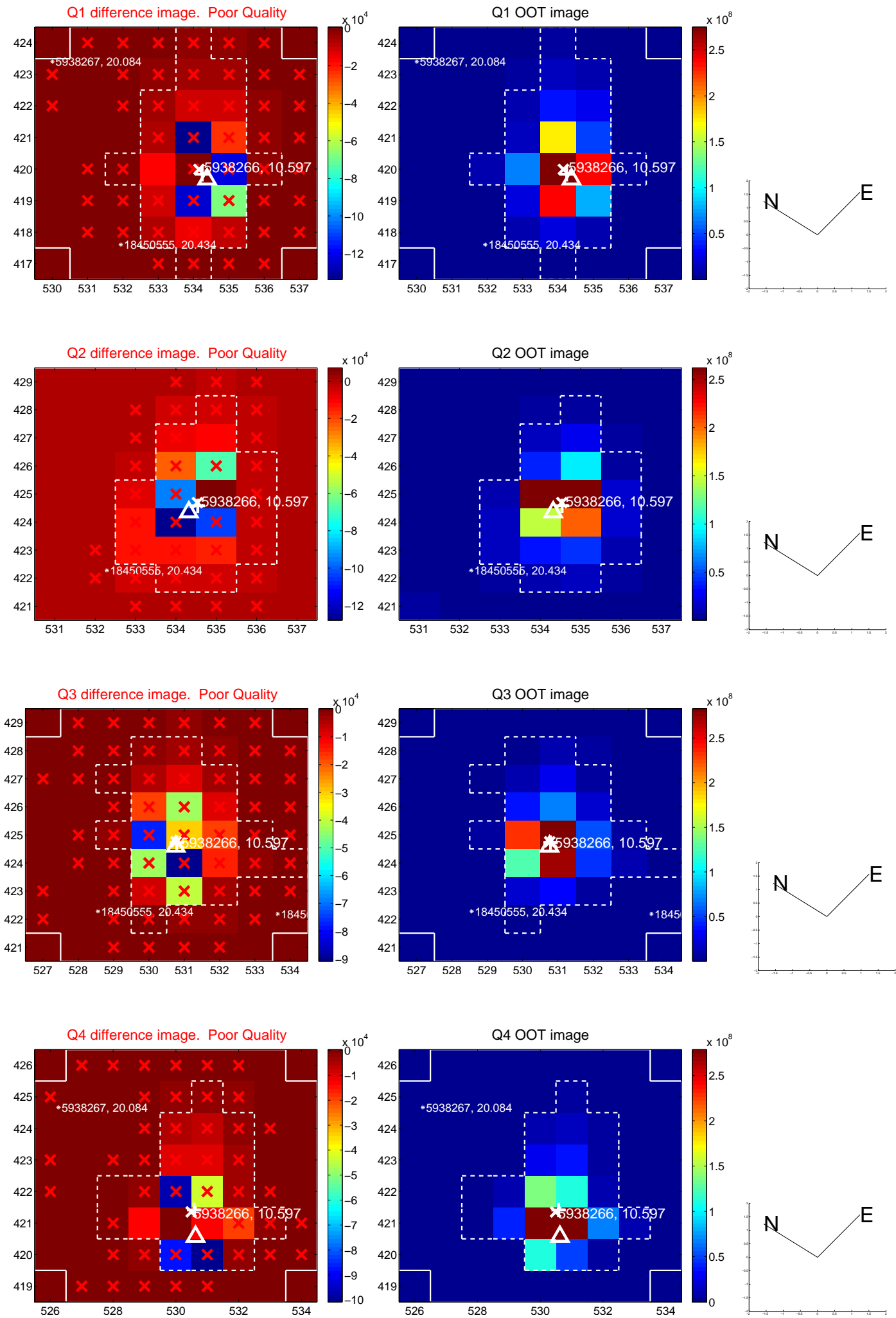


offset from photometric centroids

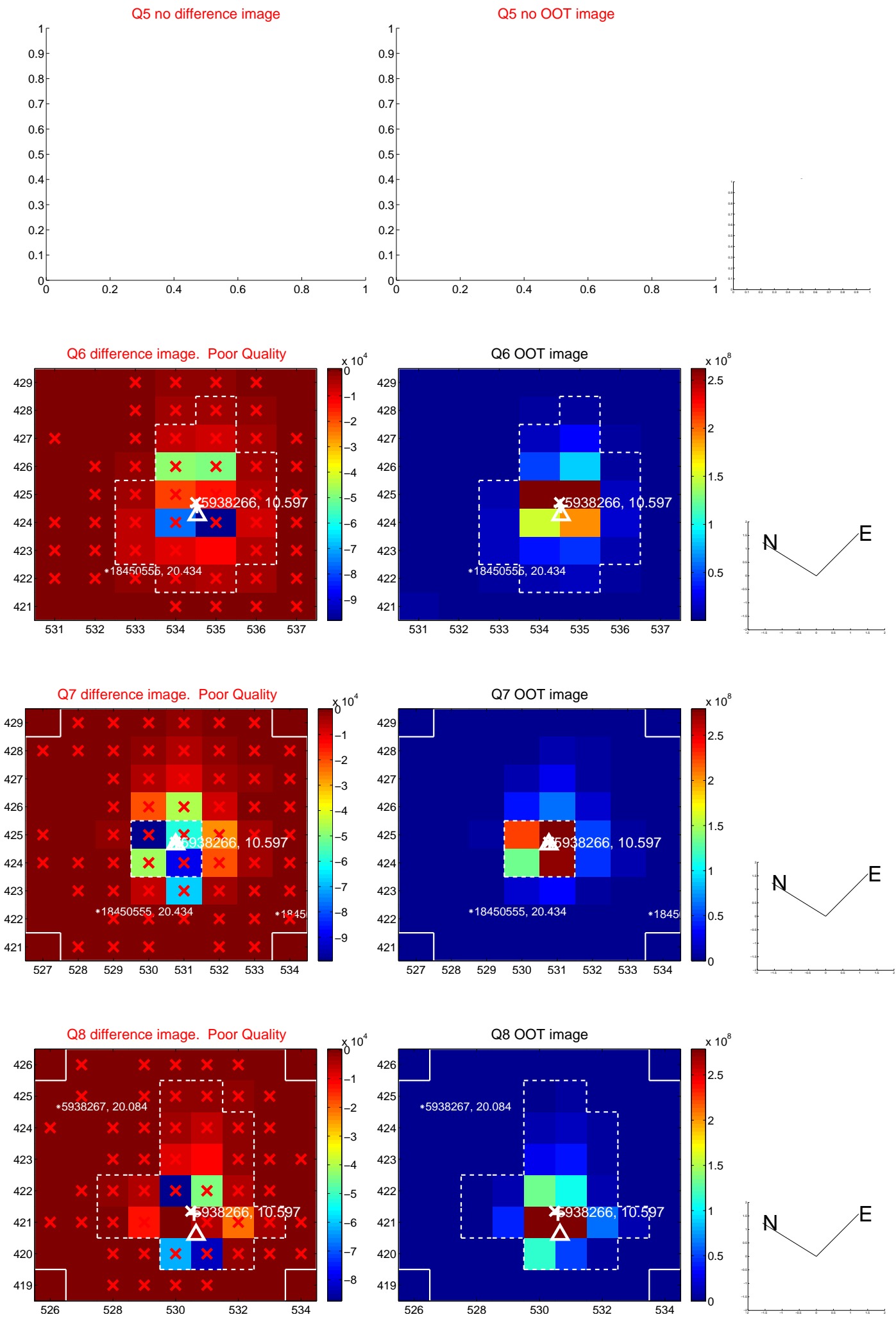


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets;** magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

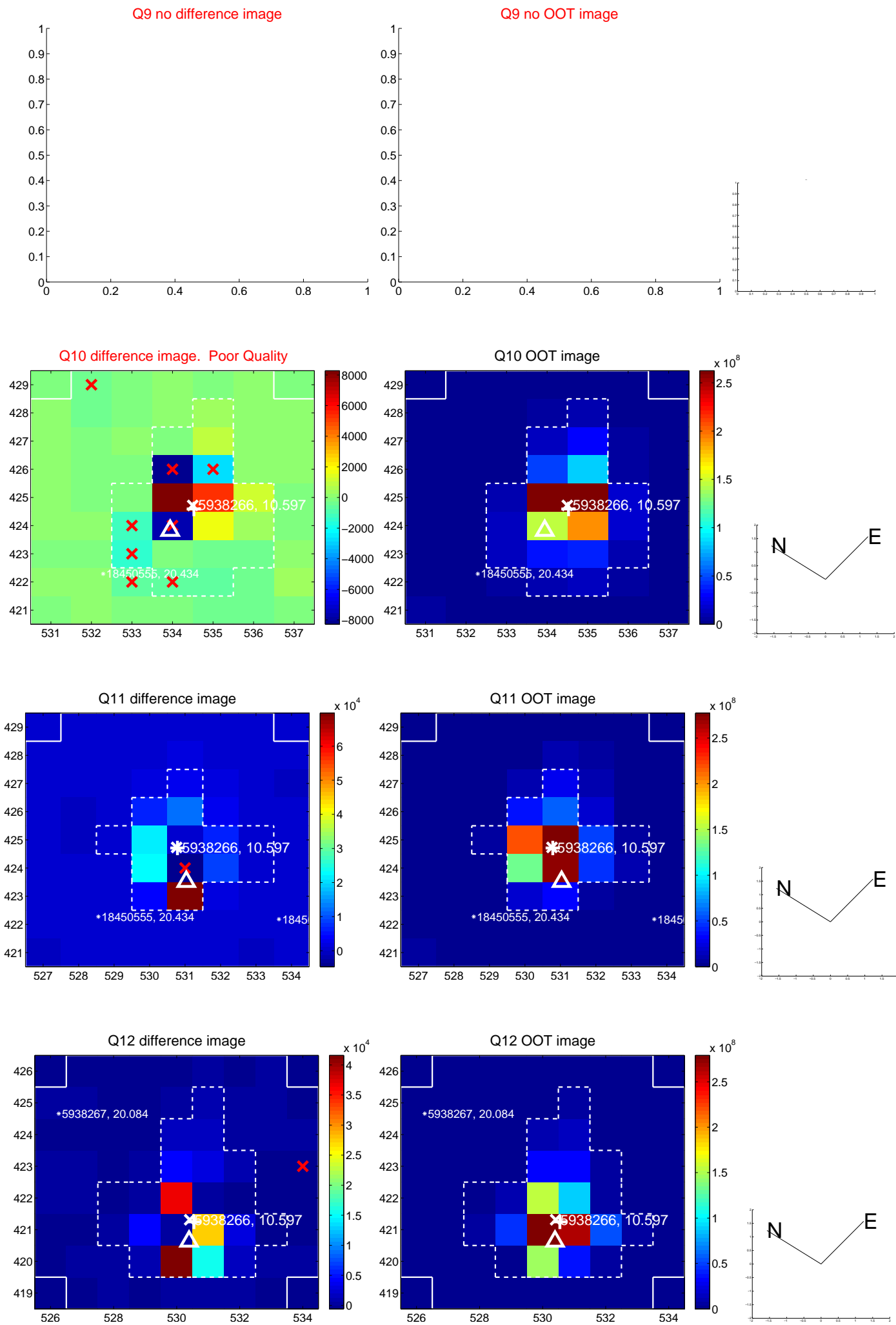
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



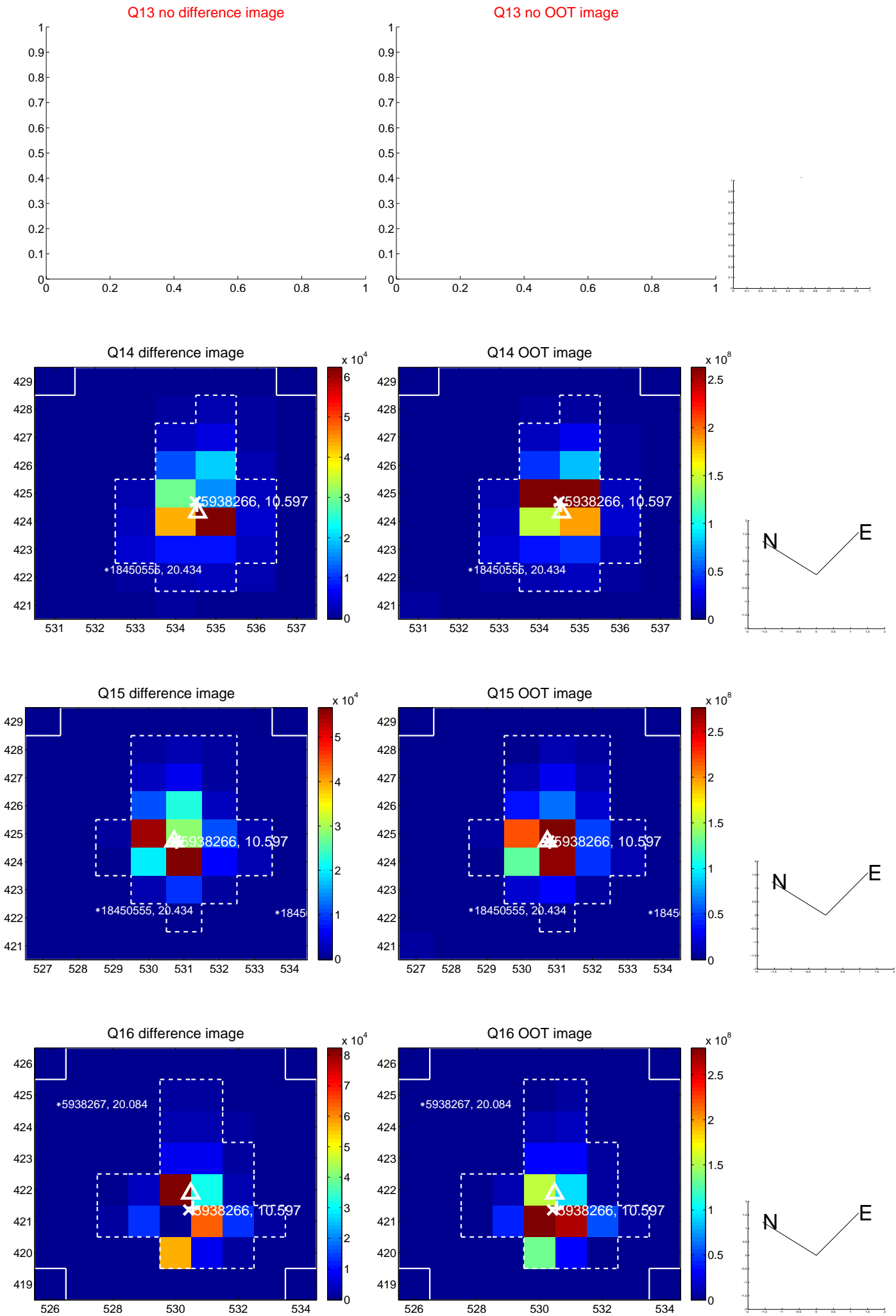
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



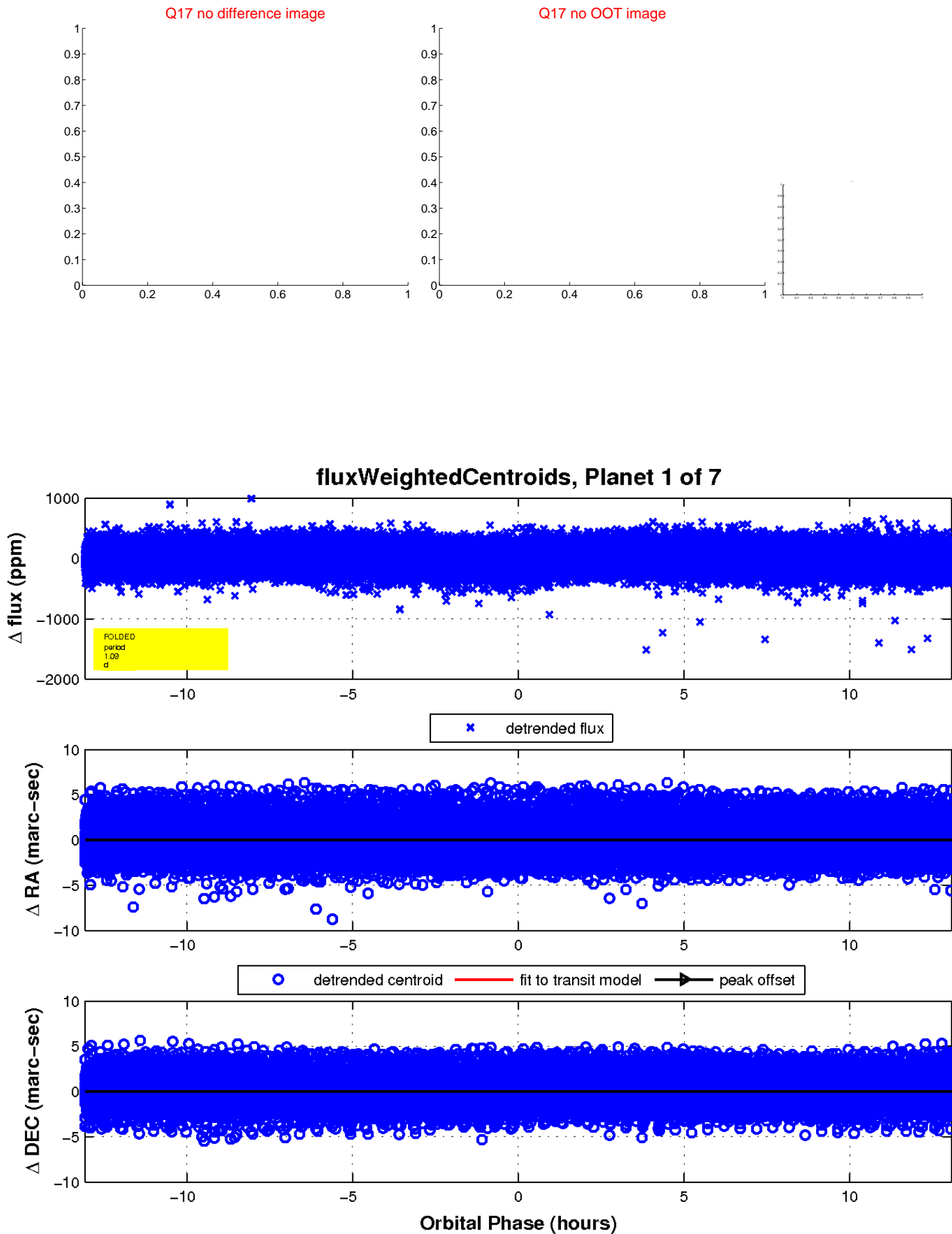
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

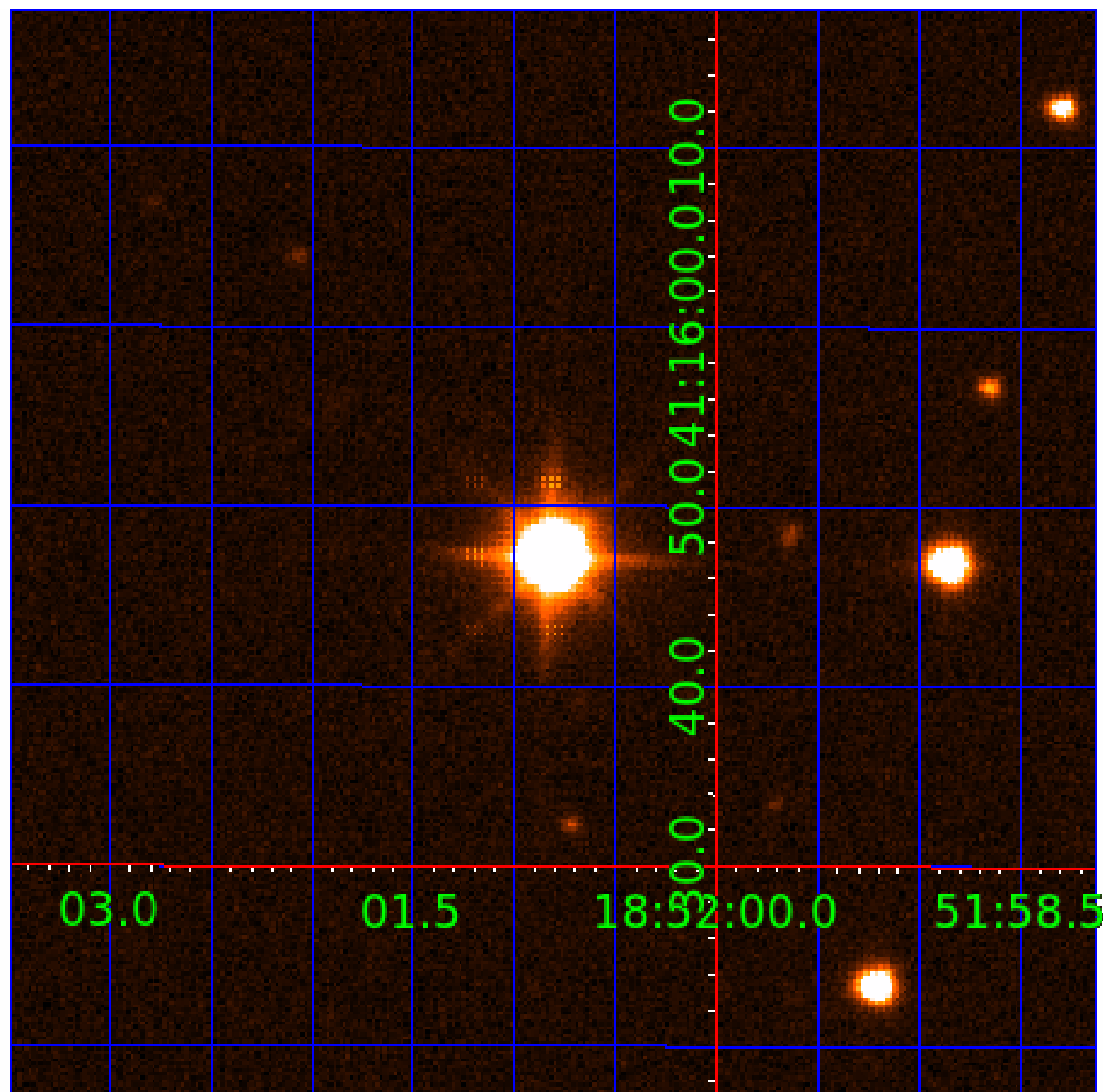


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 005938266

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})
005938266-01	OBS	No	1.089117	131.932395	13.1	7.610	10.6	5.3	3.26	6760	1.26	32851.02
005938266-02	OBS	No	72.635311	190.932171	169.5	12.598	15.4	8.3	3.26	6760	4.55	121.47
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005938266-07	OBS	No	6.737365	135.089343	147.4	1.284	8.3	10.2	3.26	6760	4.63	2892.87

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
005938266-01	OBS	FP	0.00	1	0	0	0	SWEET_NTL—LPP_DV—MOD_NONUNIQ_ALT—CENT_SATURATED
005938266-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—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—CENT_SATURATED
005938266-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_TRACKER—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—CENT_SATURATED
005938266-04	OBS	FP	0.00	1	0	1	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT— CENT_SATURATED—HALO_GHOST
005938266-05	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_NONUNIQ_ALT—MOD_POS_ALT—CENT_SATURATED
005938266-06	OBS	FP	0.00	1	0	1	0	INDIV_TRANS_RUBBLE_ZUMA—TRANS_GAPPED—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_SATURATED—HALO_GHOST
005938266-07	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_ZUMA—TRANS_GAPPED—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_SATURATED

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

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

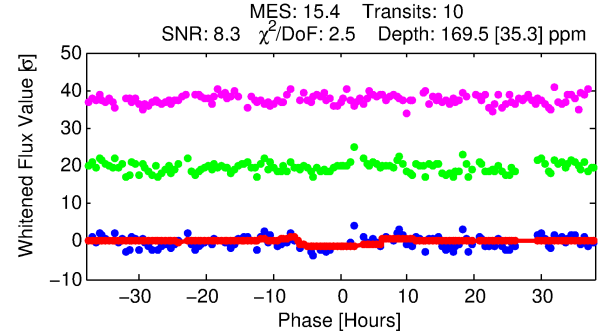
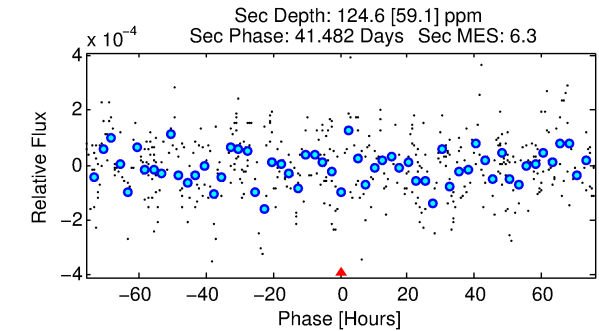
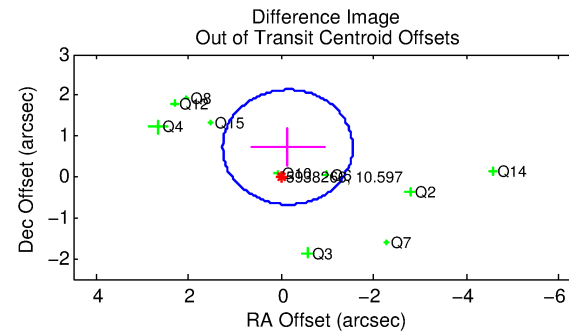
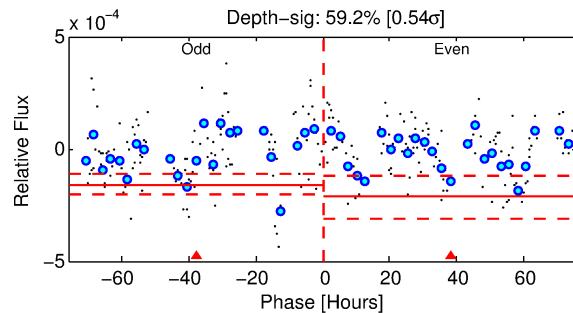
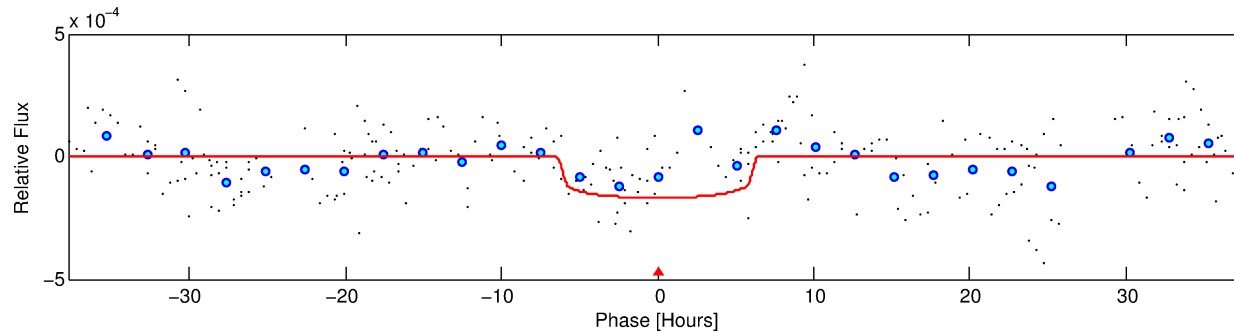
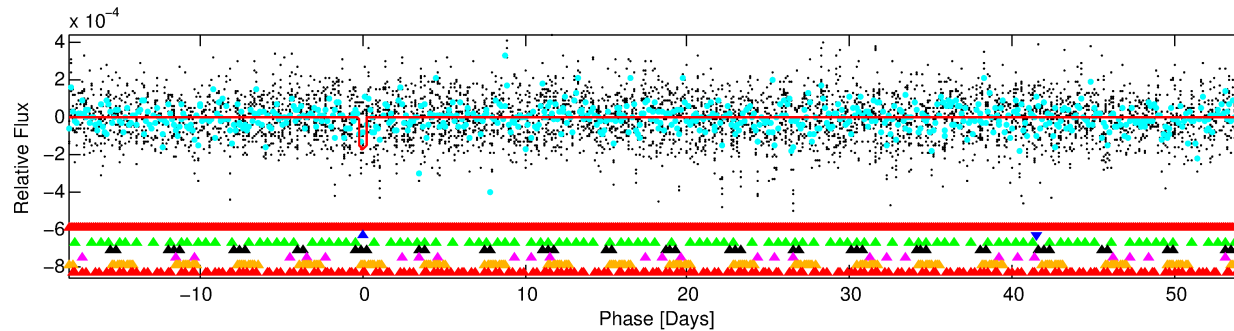
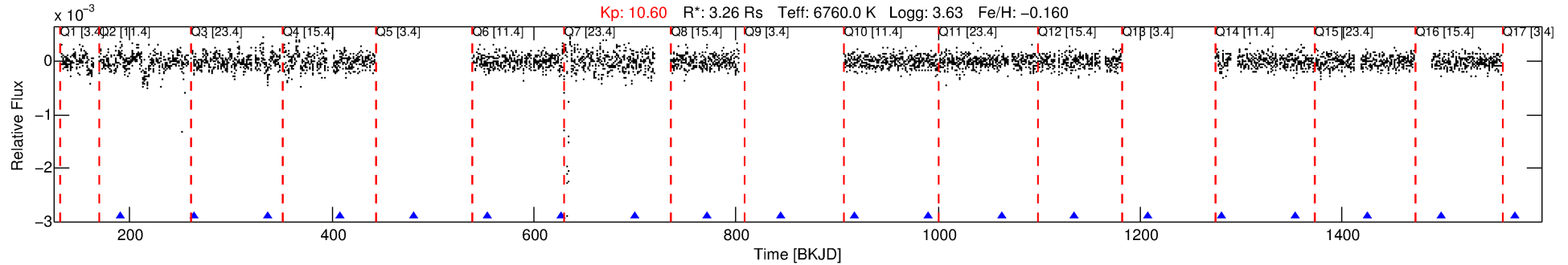
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 005938266-02

No Significant Match Found

DV One-Page Summary

KIC: 5938266 Candidate: 2 of 7 Period: 72.635 d



DV Fit Results:

Period = 72.63531 [0.00249] d
Epoch = 190.9322 [0.0280] BKJD
Rp/R* = 0.0128 [0.0044]
a/R* = 31.77 [57.72]
b = 0.71 [1.27]
Seff = 121.47 [62.04]
Teq = 847 [108] K
Rp = 4.55 [2.21] Re
a = 0.4044 [0.1279] AU
Ag = 540.31 [526.81] [1.02 σ]
Teffp = 6310 [1337] K [4.07 σ]

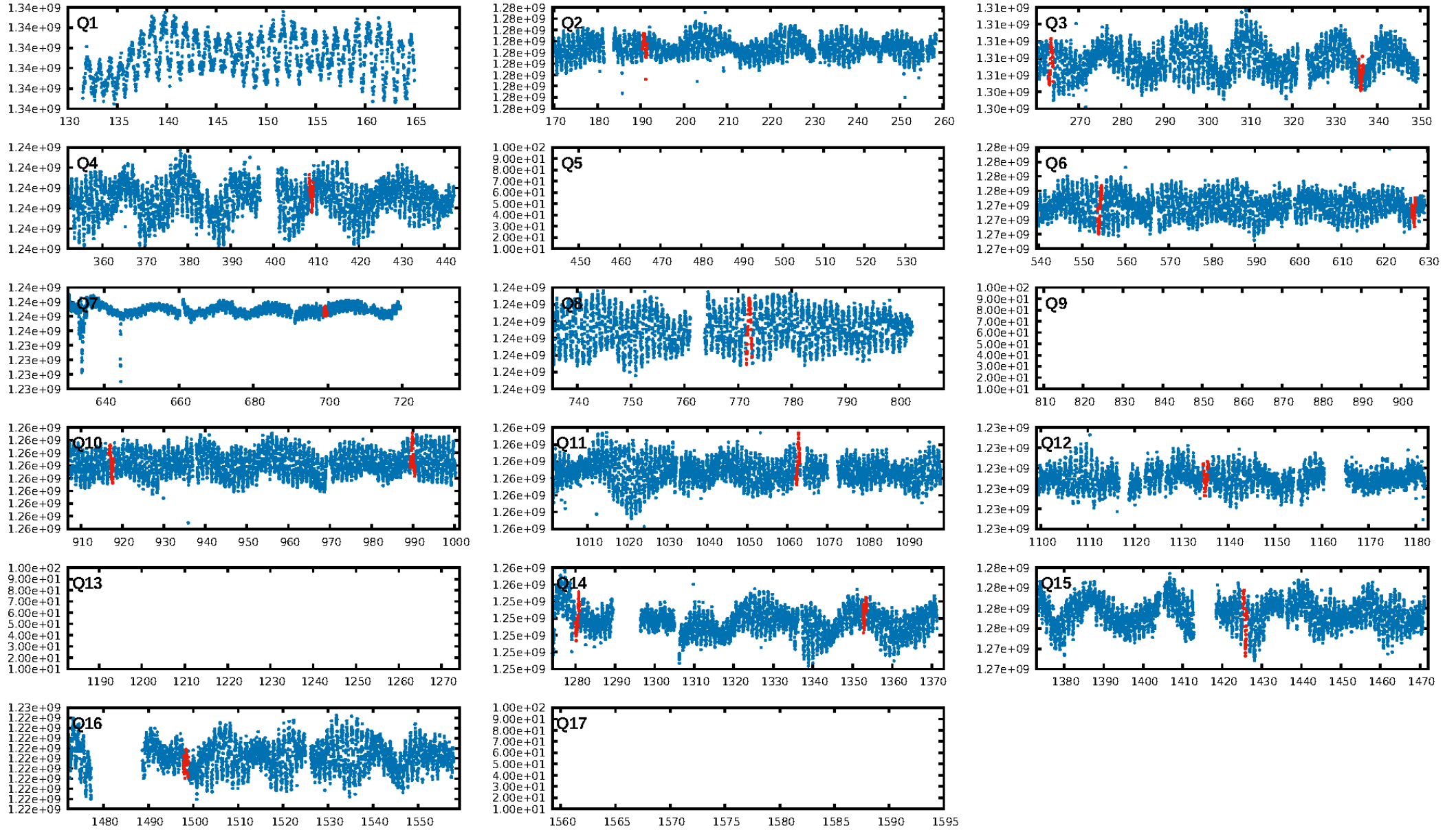
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [41.17 σ]
LongPeriod-sig: N/A
ModelChiSquare2-sig: 0.0%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: 5.37e-48
RollingBand-fgt: 1.00 [10/10]
GhostDiagnostic-chr: -0.777
Centroid-sig: 0.6%
Centroid-so: 1.329 arcsec [2.03 σ]
OotOffset-rm: 0.740 arcsec [1.58 σ]
OotOffset-st: 4/3/3/0 [10]
KicOffset-rm: 0.450 arcsec [0.75 σ]
KicOffset-st: 4/3/3/0 [10]
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DiffImageOverlap-fno: 0.00 [0/10]

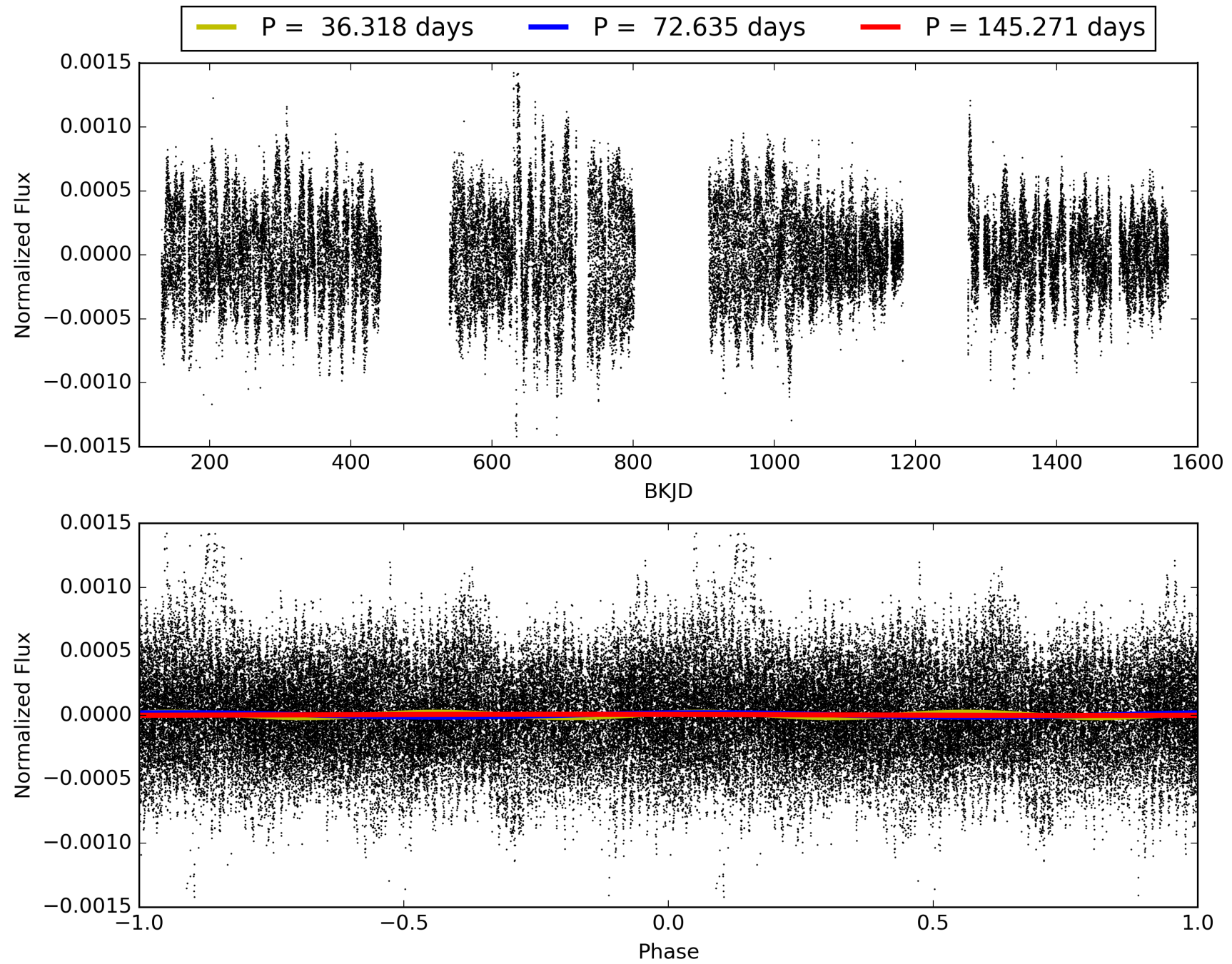
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This Data Validation Report Summary was produced in the Kepler Science Operations Center Pipeline at NASA Ames Research Center

TCE 005938266-02, PDC Light Curves

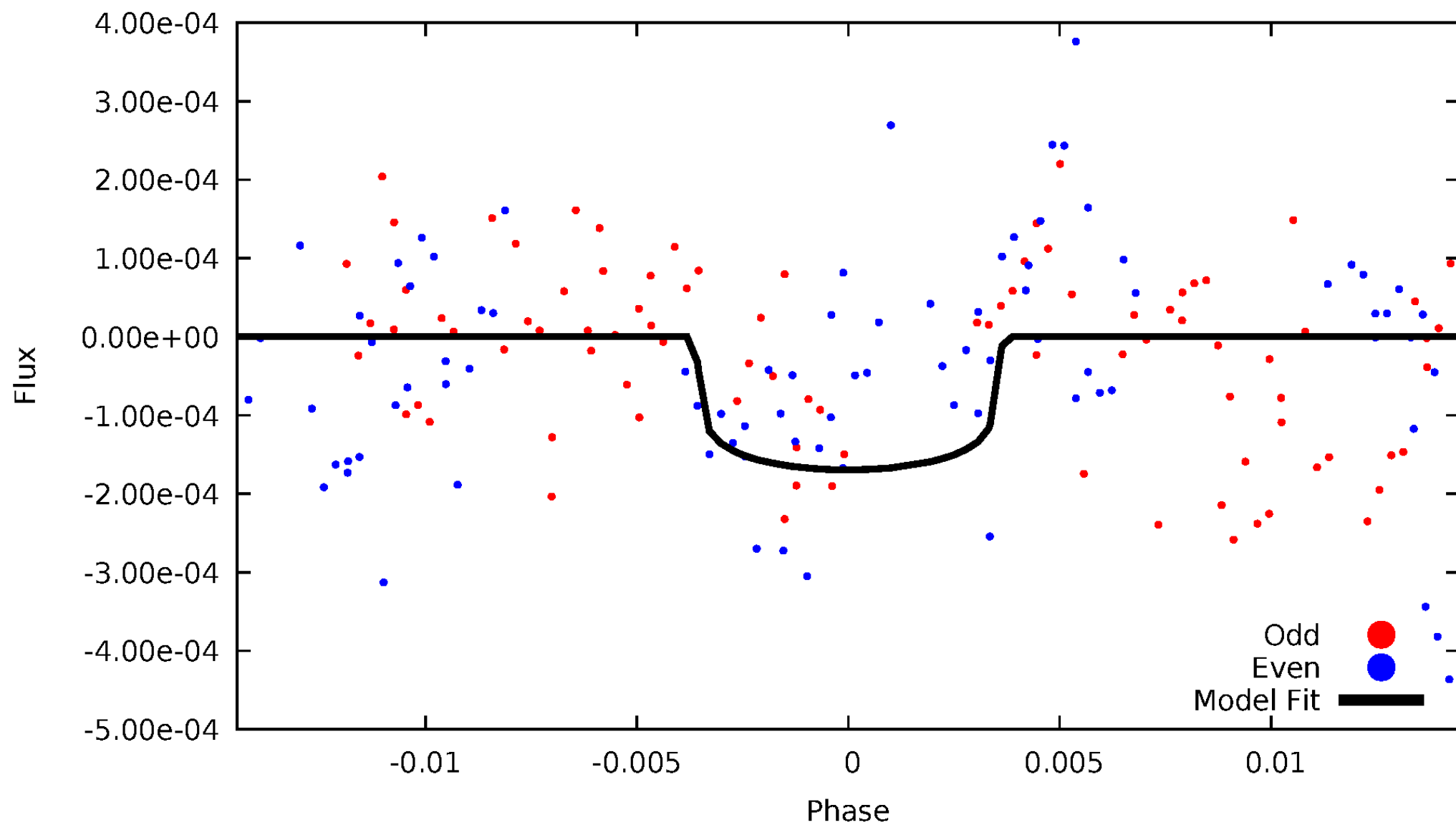


TCE 005938266-02



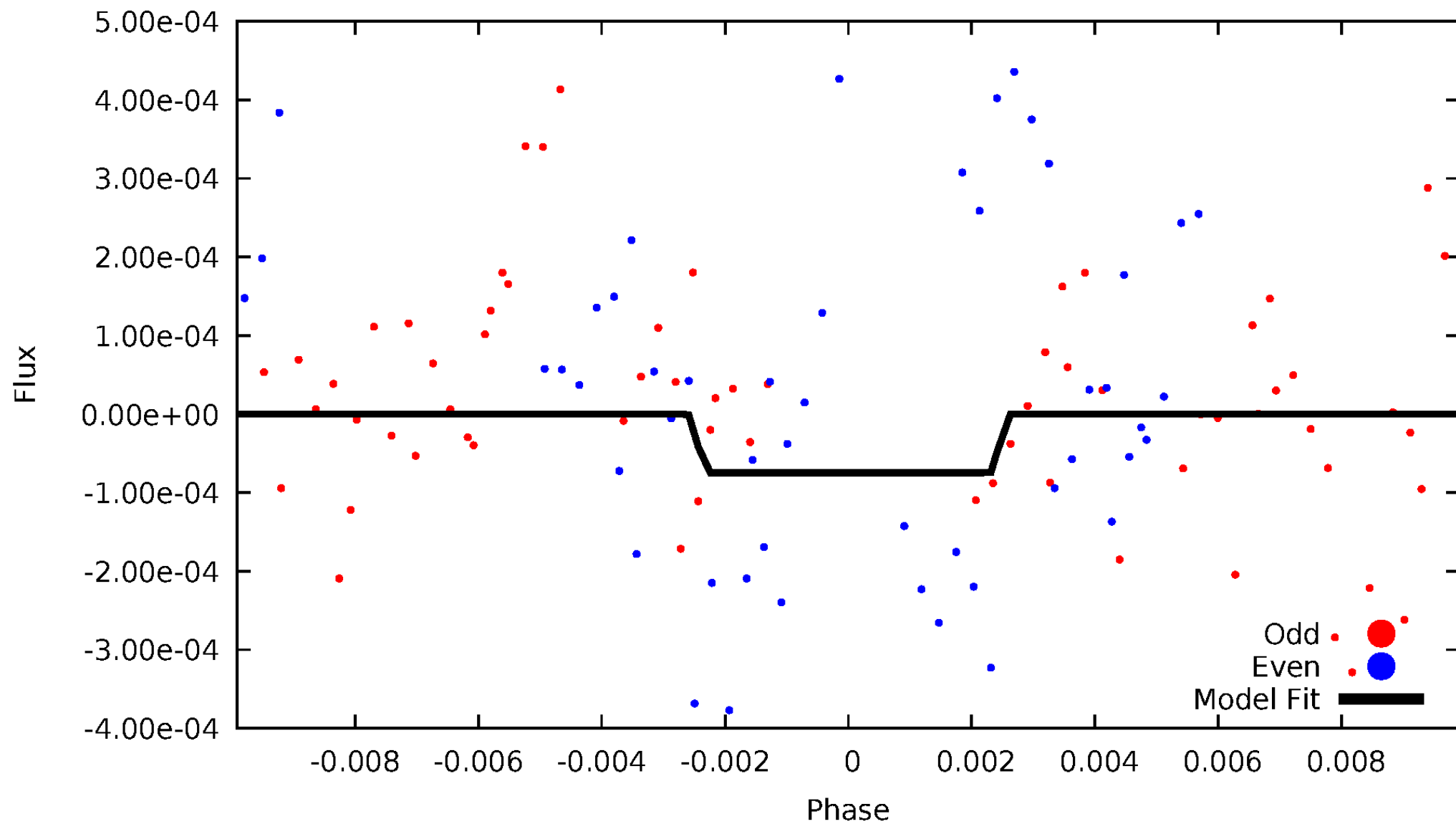
DV Odd/Even

TCE 005938266-02



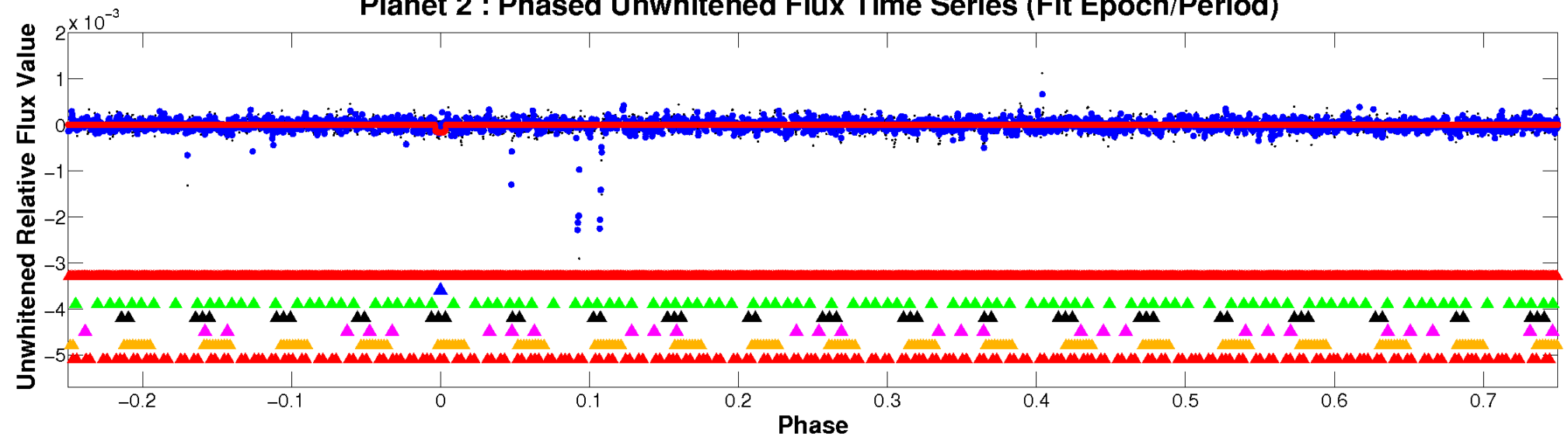
ALT Odd/Even

TCE 005938266-02

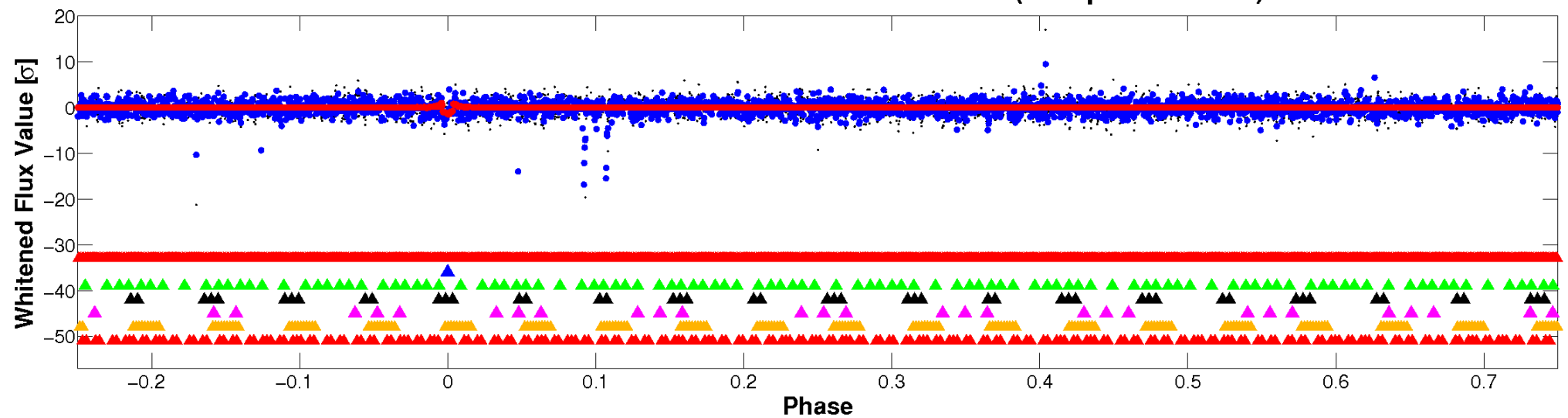


Non-Whitened Vs. Whitened Light Curve

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

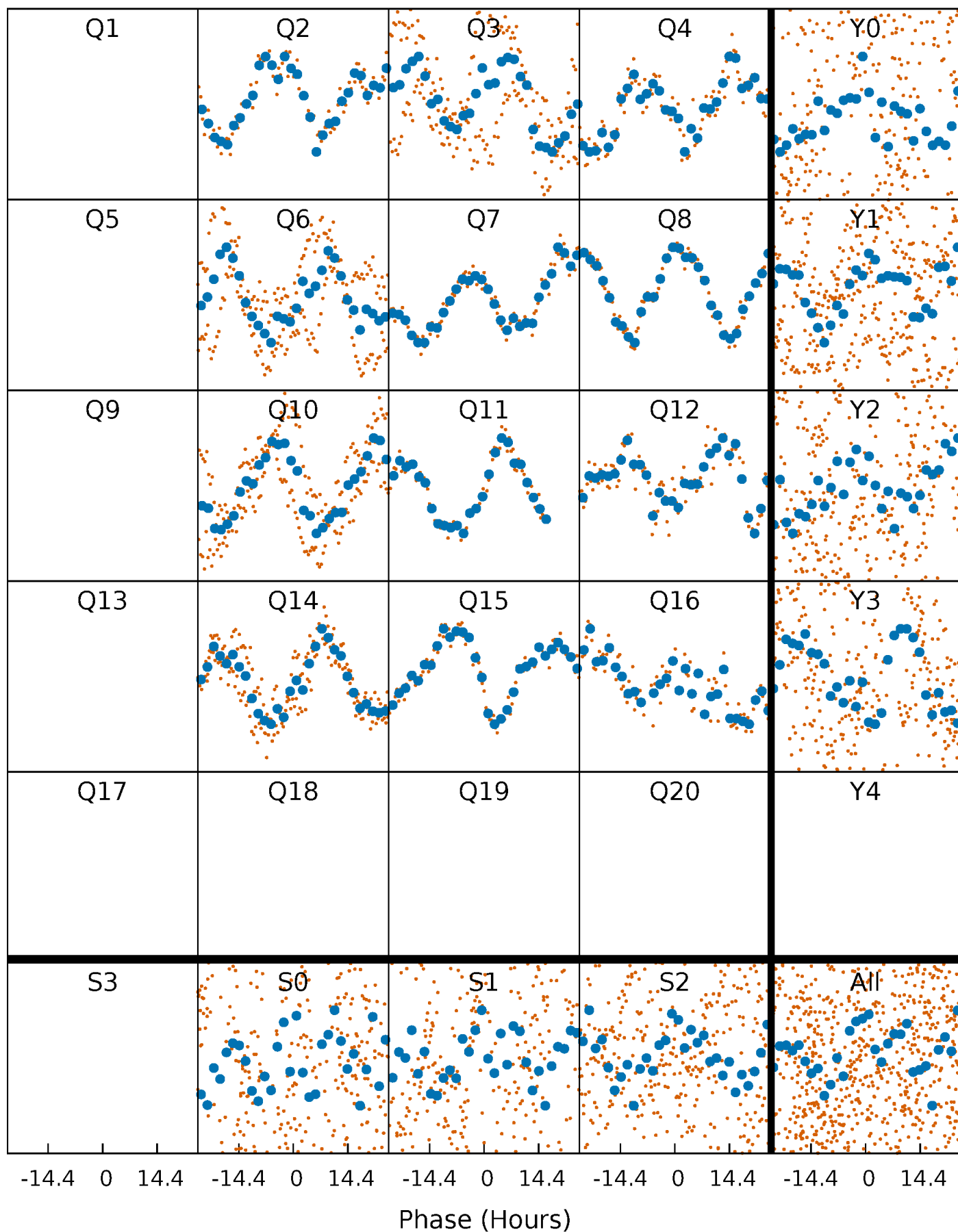


Planet 2 : Phased Whitened Flux Time Series (Fit Epoch/Period)



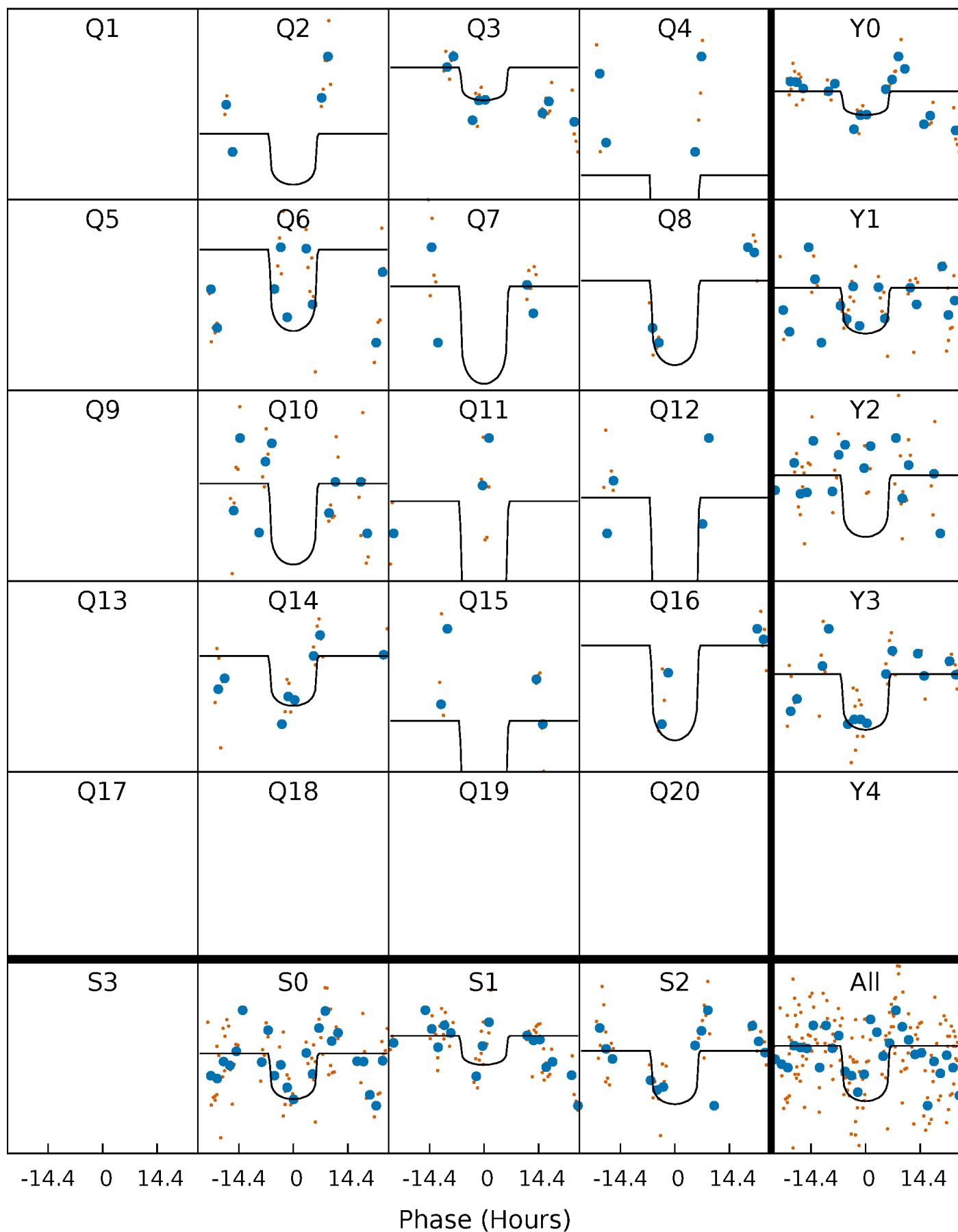
PDC Quarter-Phased Transit Curves

TCE 005938266-02 P= 72.635311 Days $T_0=190.932171$ (BKJD)



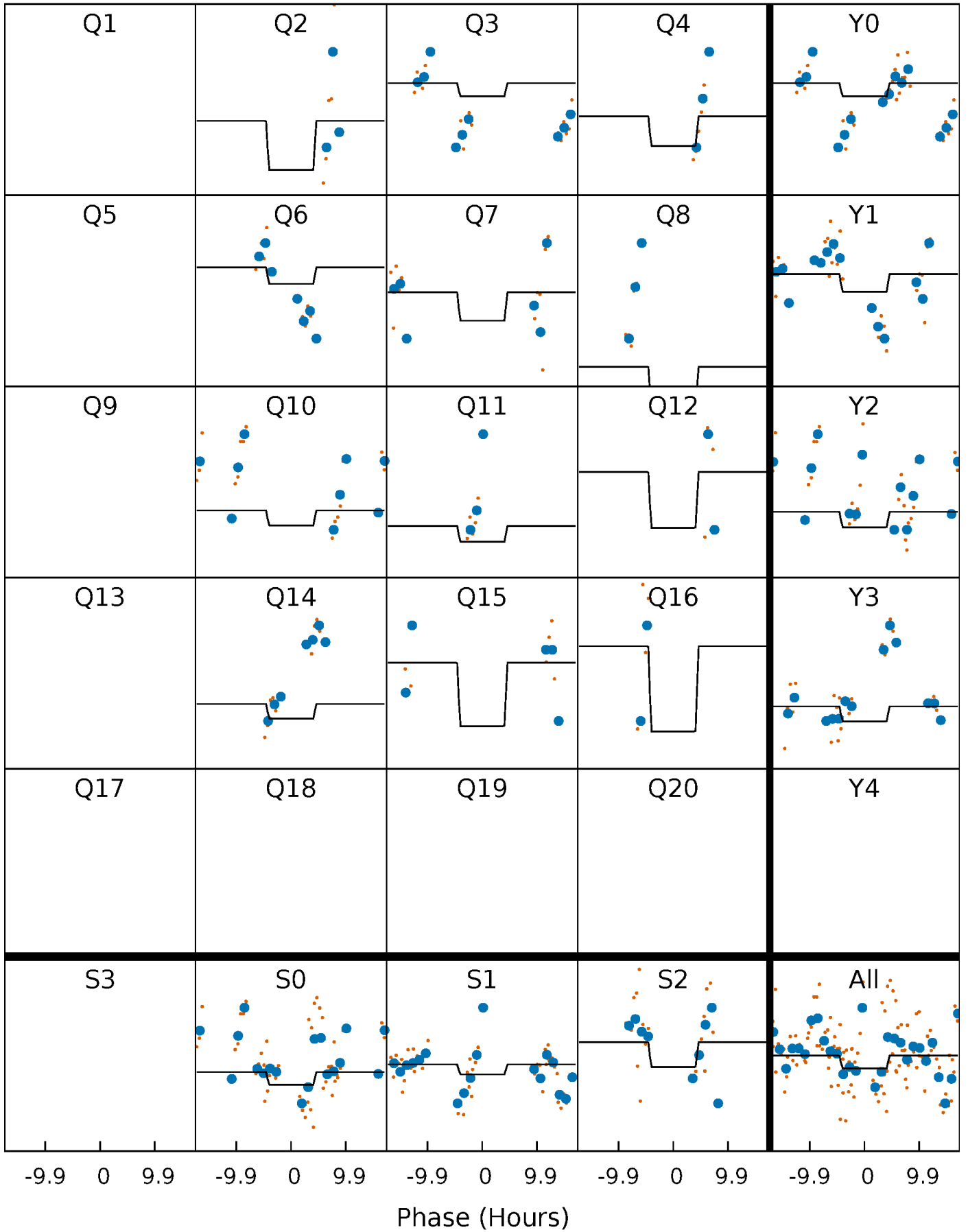
DV Quarter-Phased Transit Curves

TCE 005938266-02 P= 72.635311 Days $T_0=190.932171$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

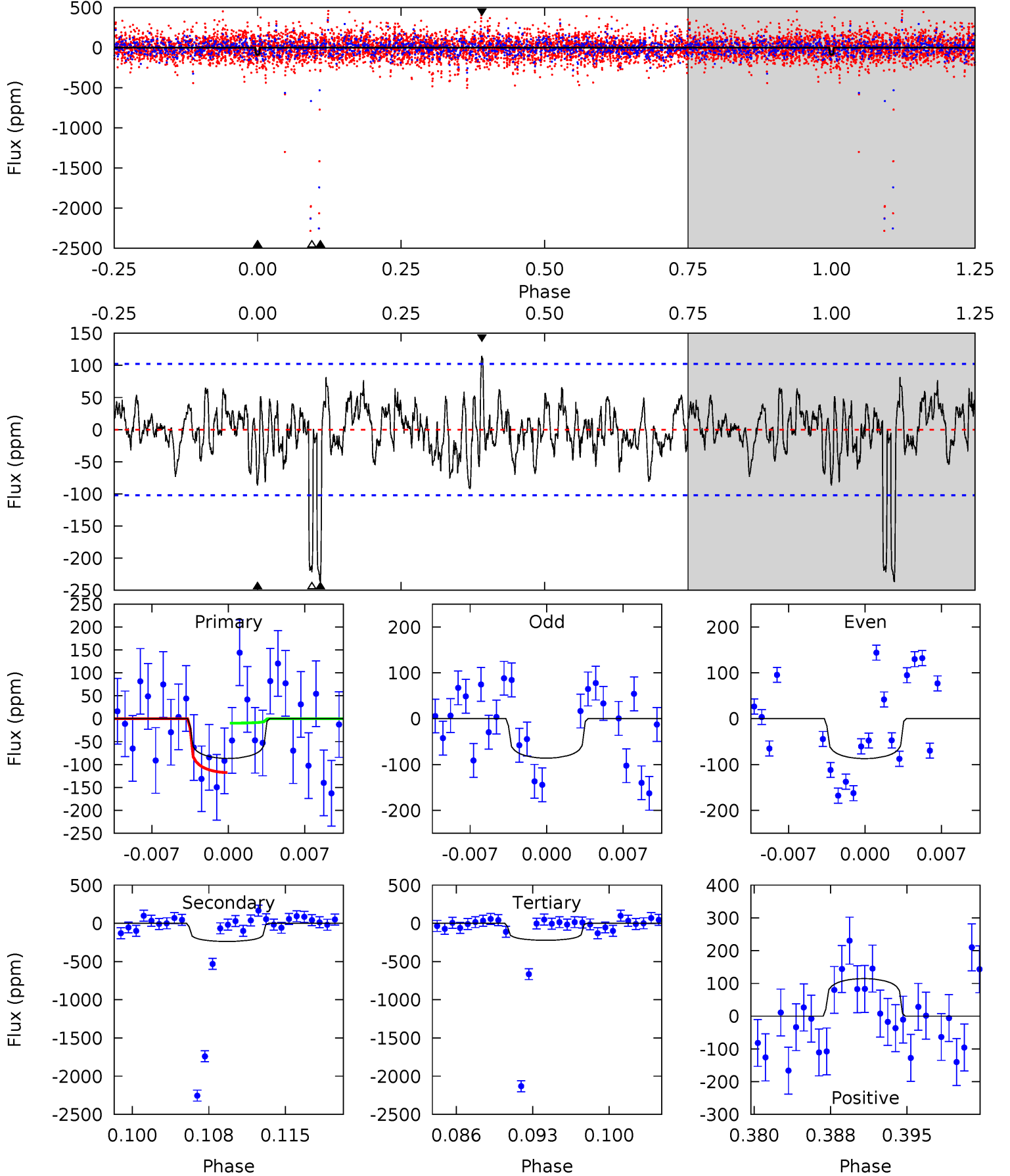
TCE 005938266-02 P= 72.636715 Days $T_0=190.998886$ (BKJD)



DV Model-Shift Uniqueness Test

005938266-02, P = 72.635311 Days, E = 118.296860 Days

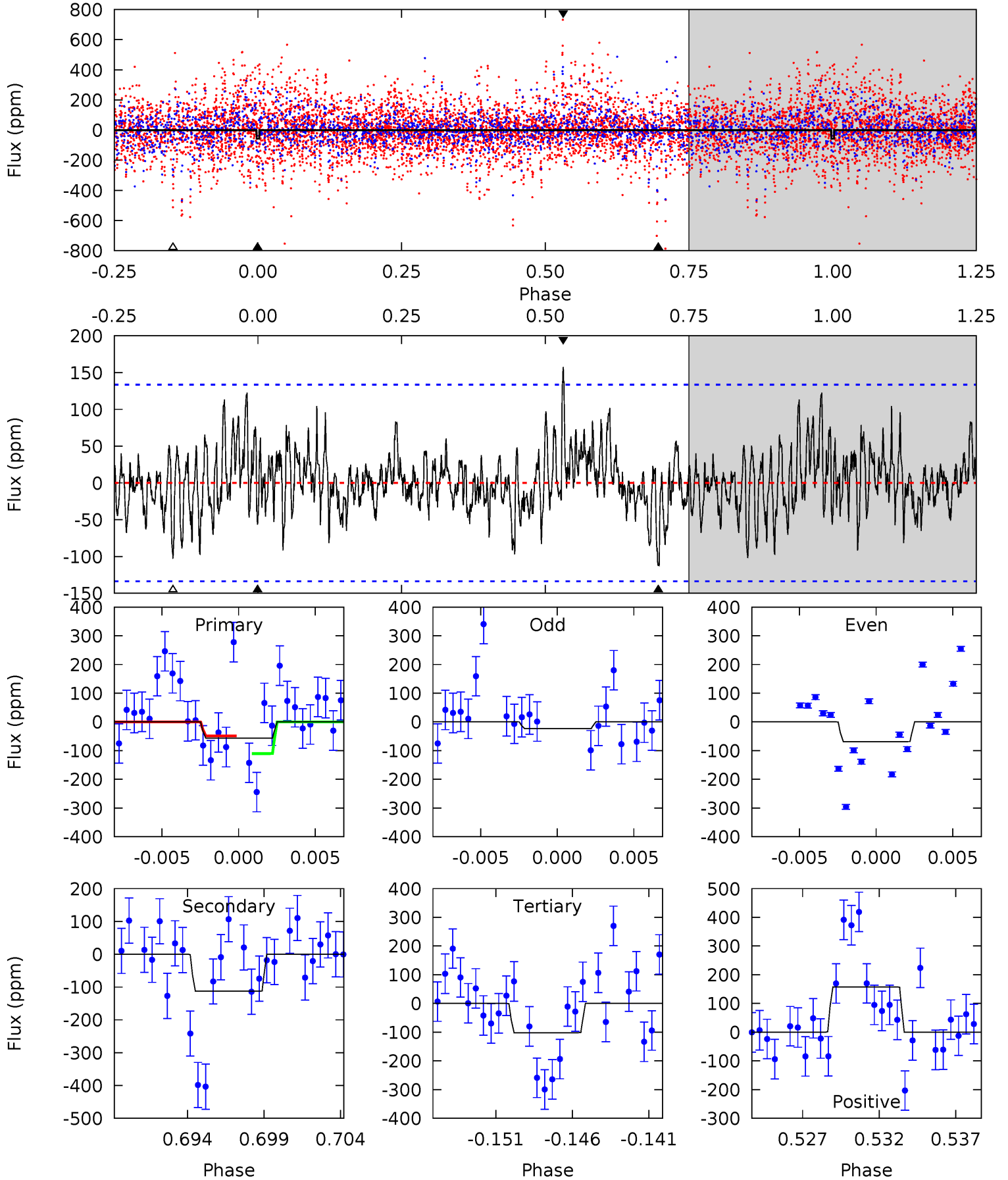
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
4.32	11.8	11.1	5.70	5.09	2.69	1.80	-6.73	-1.38	0.75	6.10	0.03	0.94	0.33	2.52



Alt Model-Shift Uniqueness Test

005938266-02, $P = 72.636715$ Days, $E = 118.362171$ Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
2.19	4.35	3.93	6.07	5.15	2.79	1.40	-1.74	-3.89	0.42	-1.72	0.82	11.8	0.58	1.13



Stellar Parameters For KIC 005938266

	$T_{\text{eff}} (K)$	$\log(g)$	$[\text{Fe}/\text{H}]$	$R (R_{\odot})$	$M (M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6760^{+152}_{-202}	$3.635^{+0.288}_{-0.072}$	$-0.160^{+0.300}_{-0.250}$	$3.258^{+0.395}_{-1.105}$	$1.670^{+0.239}_{-0.292}$	$0.068^{+0.130}_{-0.016}$
	+2%/-3%	+8%/-2%	+188%/-156%	+12%/-34%	+14%/-17%	+191%/-23%
Source	PHO1	FLK73	KIC0	DSEP		

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

Secondary Eclipse Parameters for KIC 005938266-02 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-237 ± 20	$4.31^{+1.82}_{-1.55}$	1155^{+61}_{-95}	7422^{+2350}_{-1159}	1171^{+1686}_{-596}
Alt.	-113 ± 26	$2.93^{+1.62}_{-1.50}$	1161^{+58}_{-89}	7504^{+4946}_{-1504}	1204^{+3746}_{-705}

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

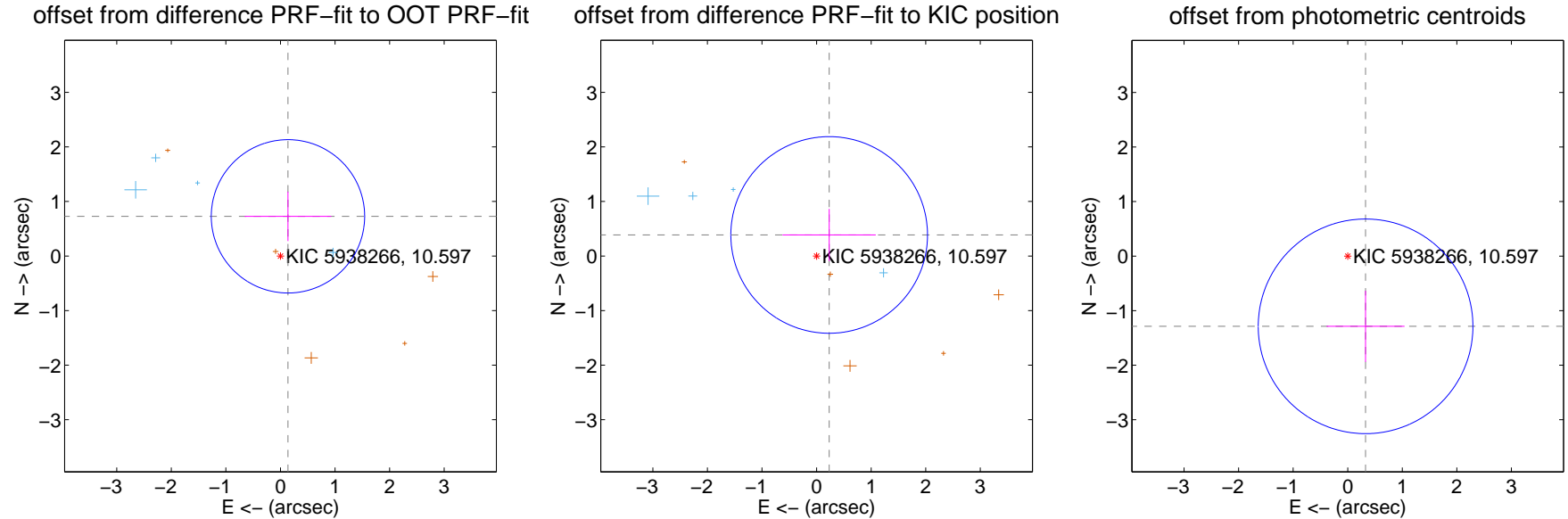
DV Centroid Data

Supplemental centroid analysis for 005938266-02. **Kepler magnitude: 10.60.** Transit SNR 8.28

There are 5 quarters with good PRF difference image offsets

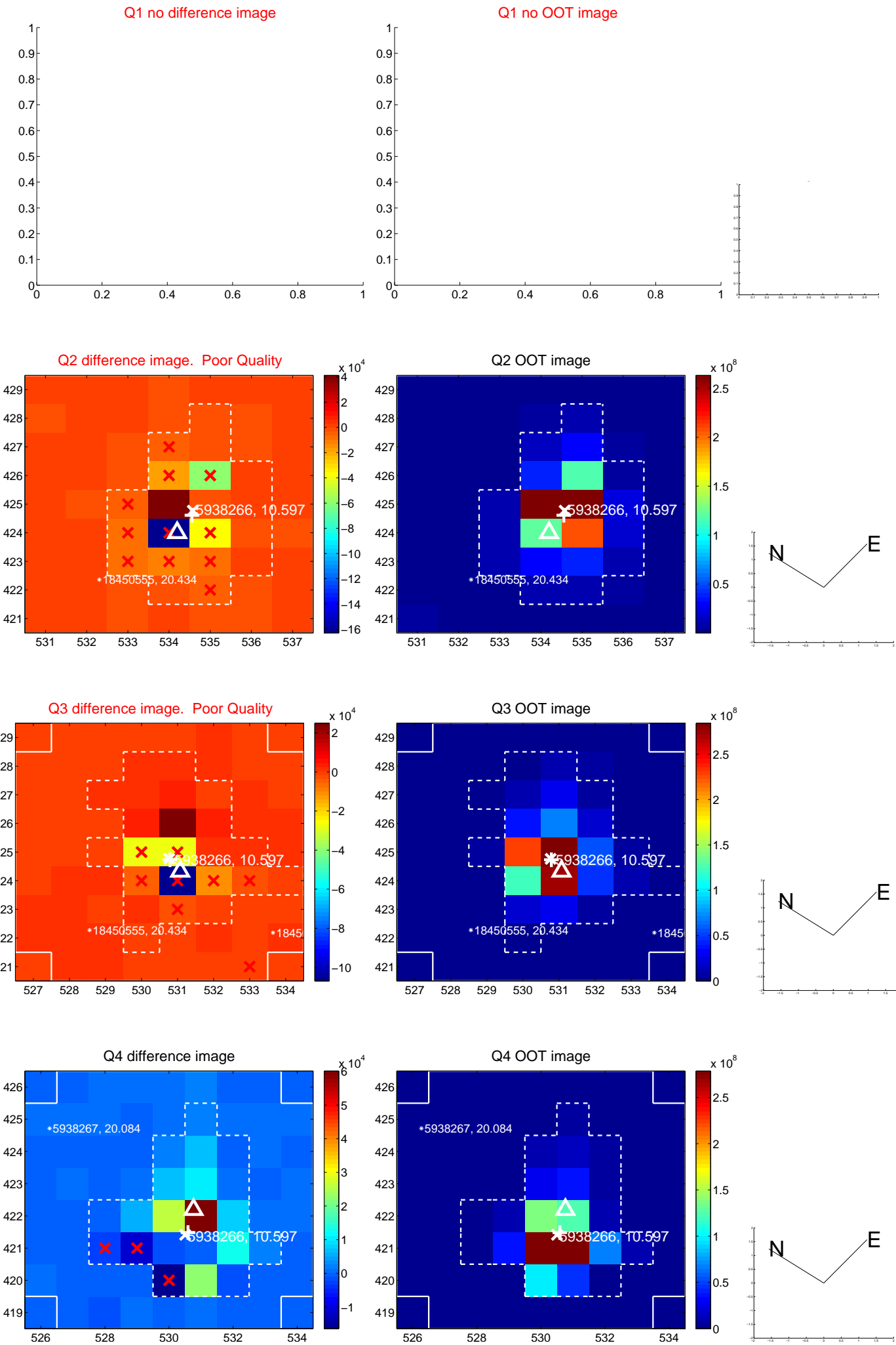
The direct PRF centroid is offset from the target star catalog position by about 0.12 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.740 ± 0.468	1.58	-0.137 ± 0.793	0.727 ± 0.452
PRF-fit source offset from KIC position	0.450 ± 0.601	0.75	-0.231 ± 0.854	0.386 ± 0.478
photometric centroid source offset	1.33 ± 0.66	2.03	-0.33 ± 0.72	-1.29 ± 0.65

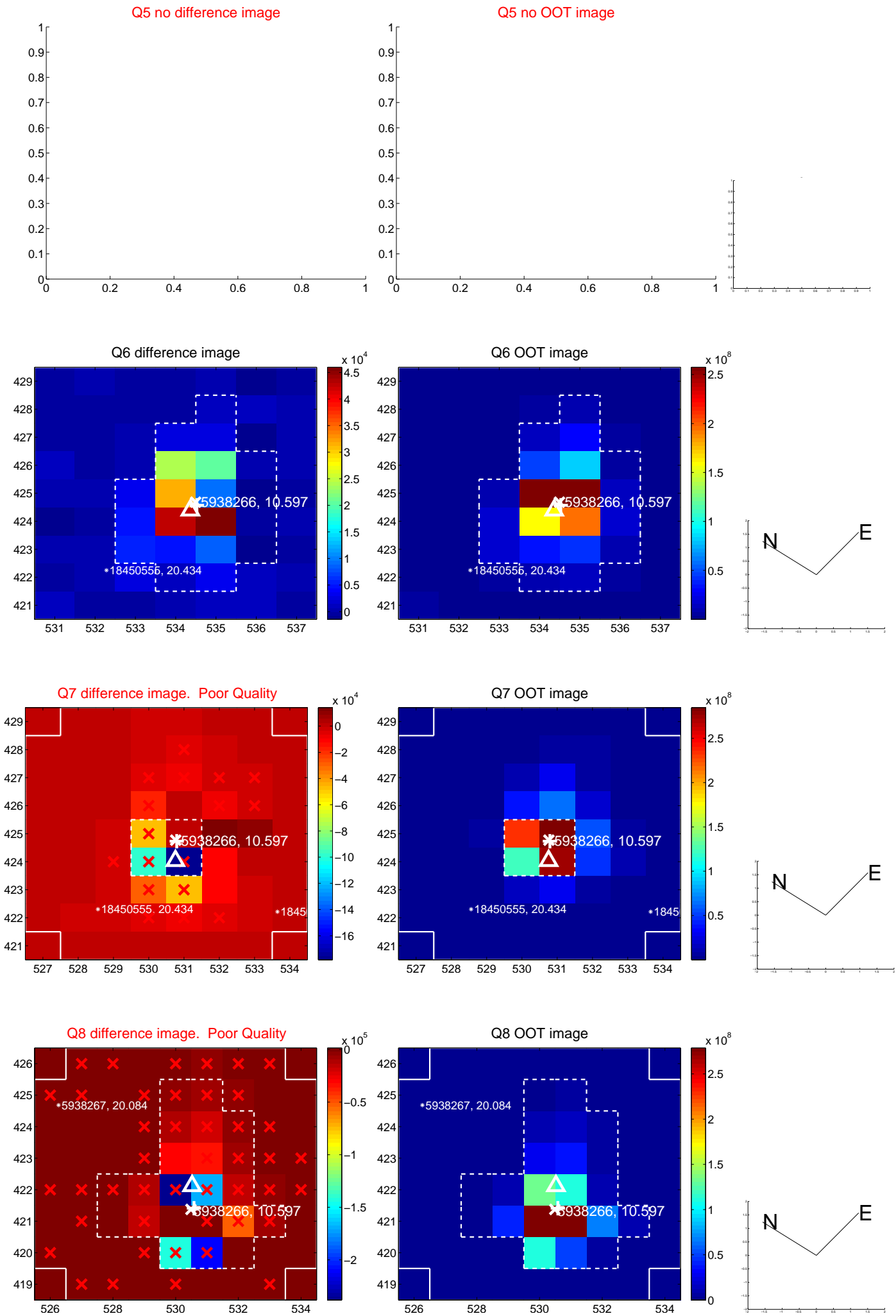


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets;** magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

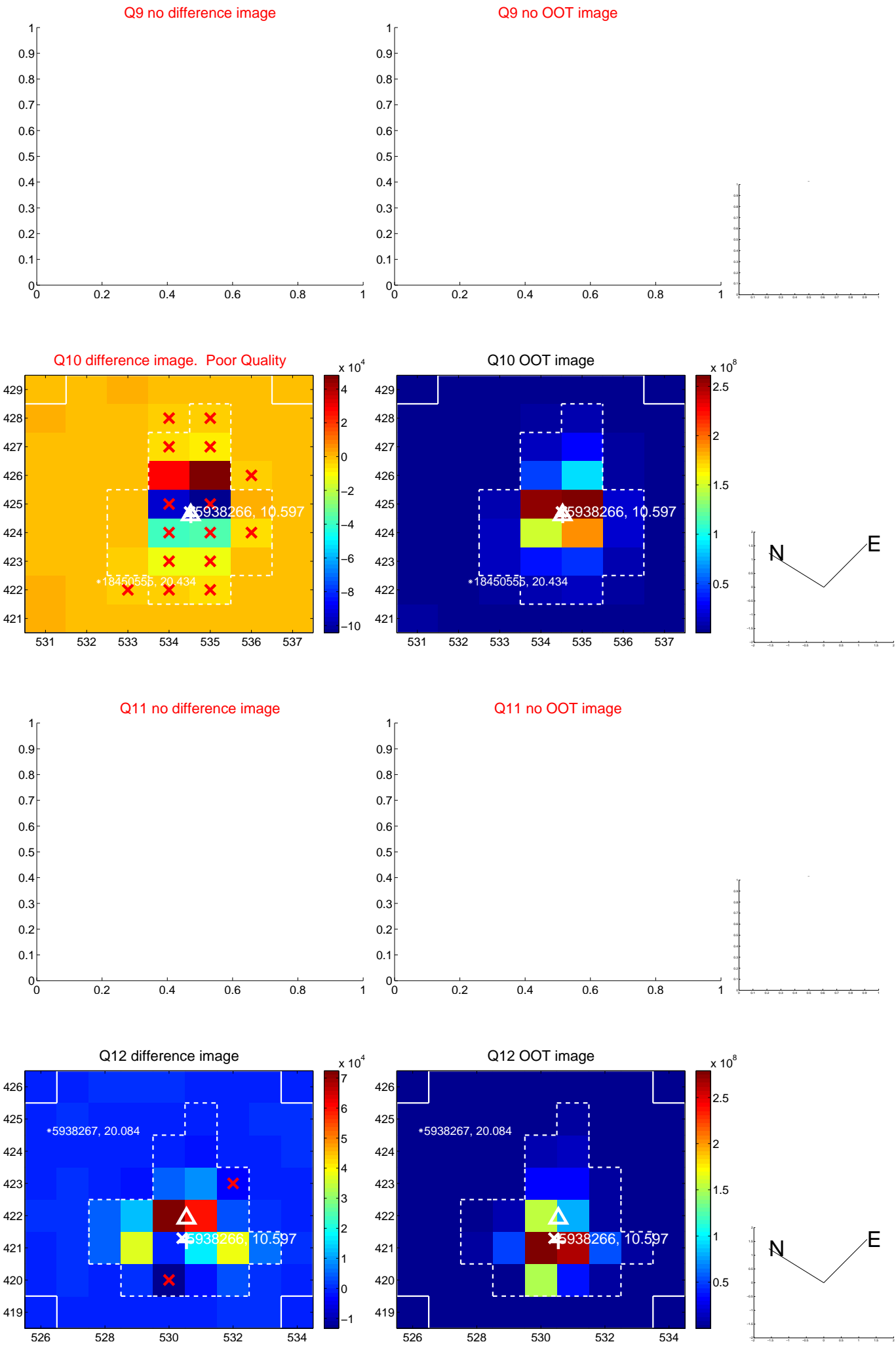
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



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



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

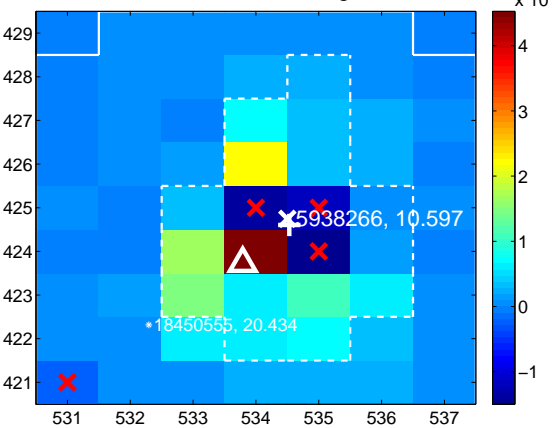
Q13 no difference image



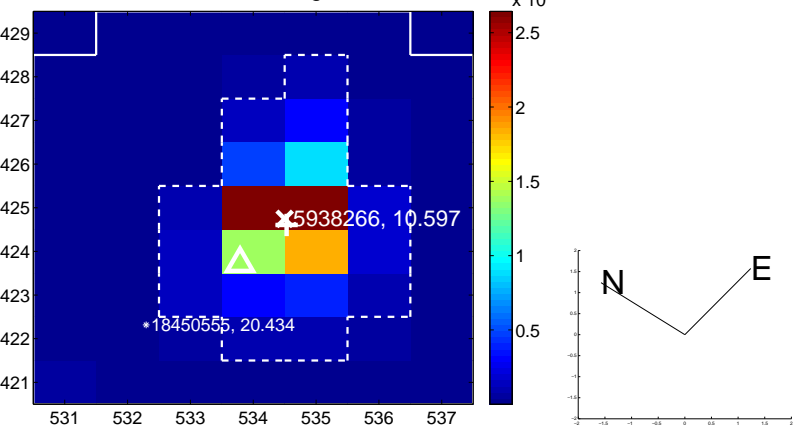
Q13 no OOT image



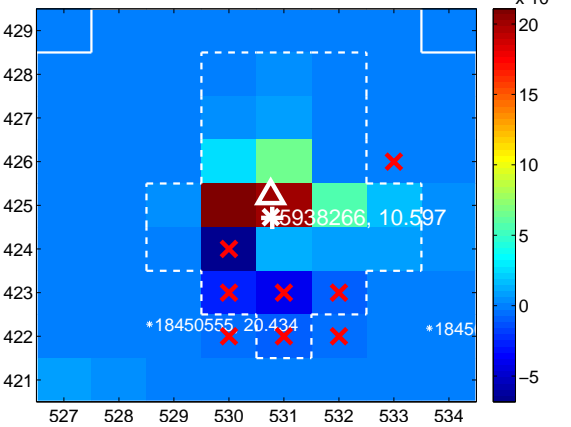
Q14 difference image



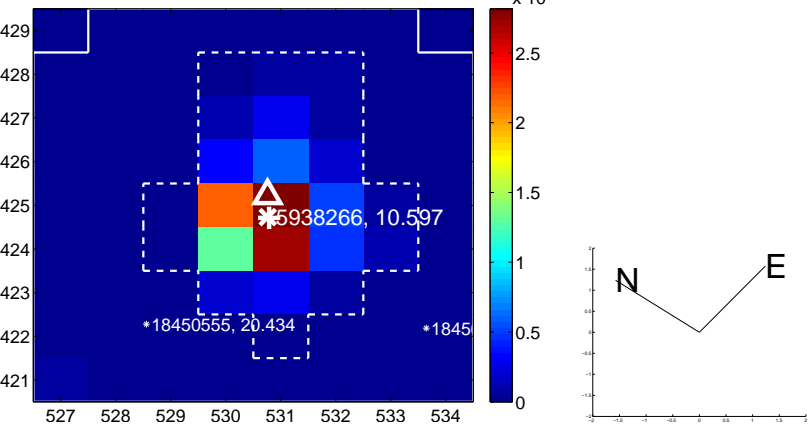
Q14 OOT image



Q15 difference image



Q15 OOT image



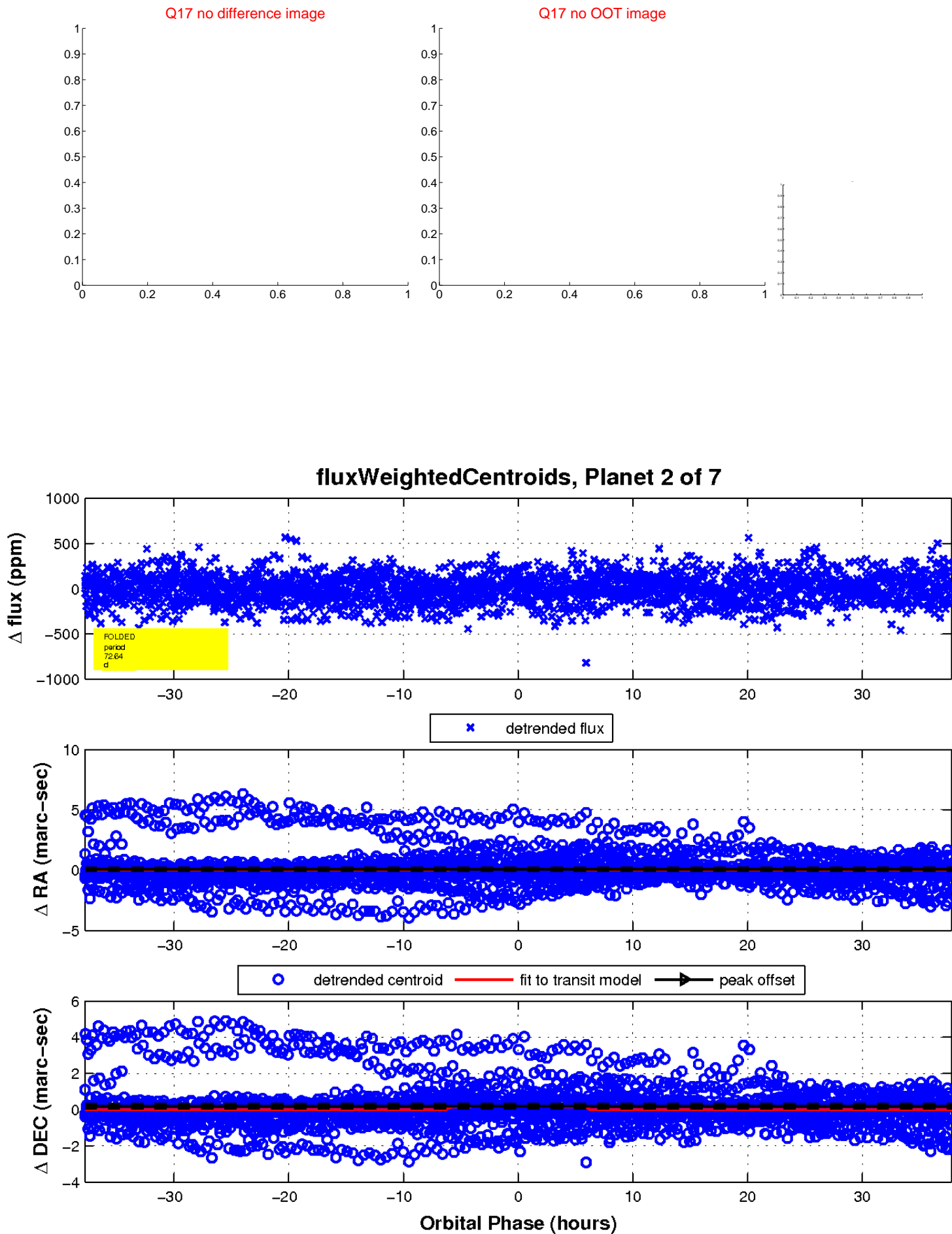
Q16 no difference image



Q16 no OOT image

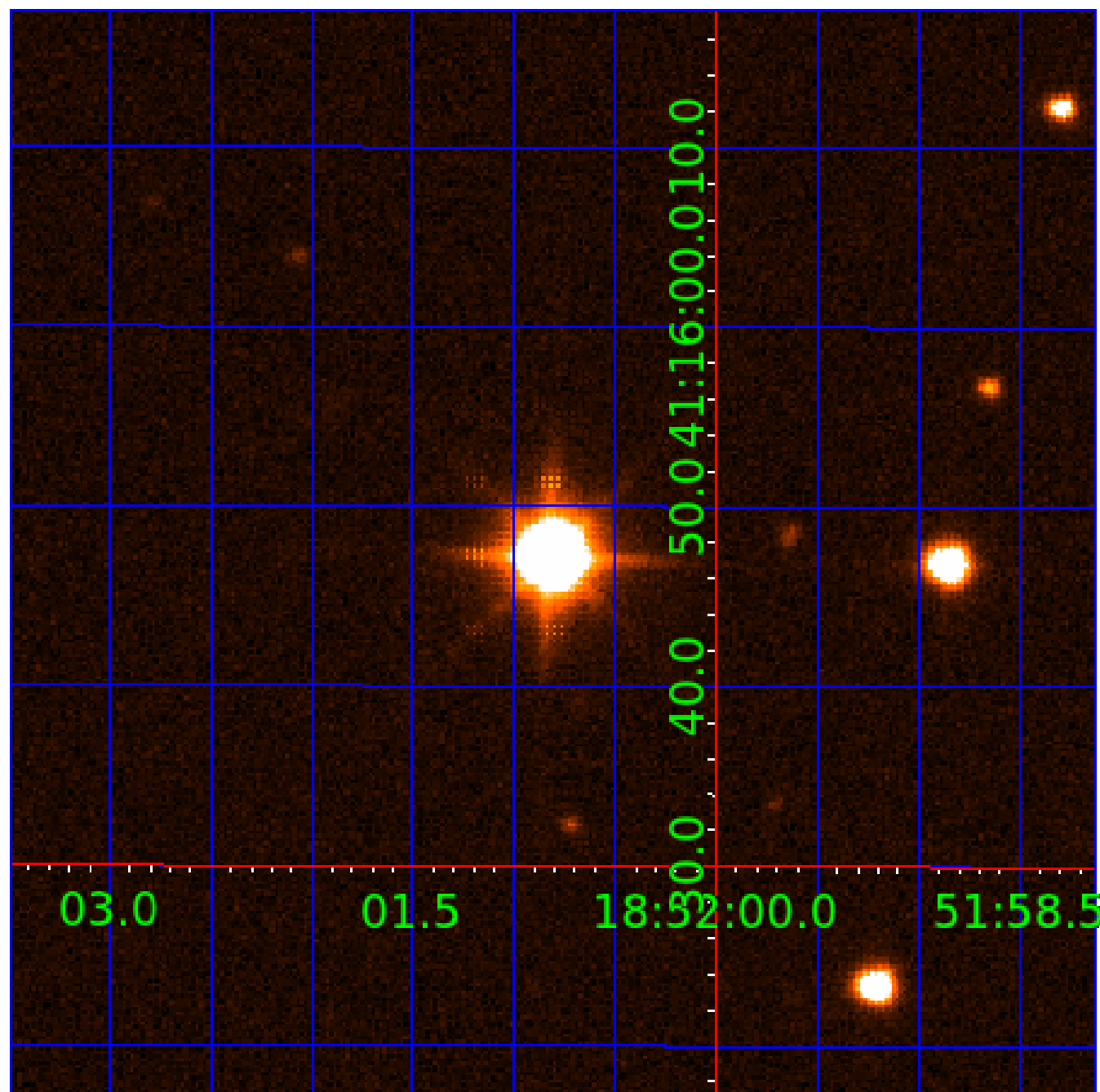


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 005938266

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})
005938266-01	OBS	No	1.089117	131.932395	13.1	7.610	10.6	5.3	3.26	6760	1.26	32851.02
005938266-02	OBS	No	72.635311	190.932171	169.5	12.598	15.4	8.3	3.26	6760	4.55	121.47
005938266-03	OBS	No	13.552544	131.876363	48.0	11.219	11.1	5.1	3.26	6760	2.55	1139.26
005938266-04	OBS	No	30.565476	153.049310	263.4	1.852	10.9	11.5	3.26	6760	5.78	385.19
005938266-05	OBS	No	50.735214	159.740808	238.3	2.077	10.5	10.8	3.26	6760	5.92	195.99
005938266-06	OBS	No	7.653263	137.237203	123.5	1.935	10.1	10.9	3.26	6760	4.25	2440.73
005938266-07	OBS	No	6.737365	135.089343	147.4	1.284	8.3	10.2	3.26	6760	4.63	2892.87

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
005938266-01	OBS	FP	0.00	1	0	0	0	SWEET_NTL—LPP_DV—MOD_NONUNIQ_ALT—CENT_SATURATED
005938266-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—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—CENT_SATURATED
005938266-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_TRACKER—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—CENT_SATURATED
005938266-04	OBS	FP	0.00	1	0	1	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT— CENT_SATURATED—HALO_GHOST
005938266-05	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_NONUNIQ_ALT—MOD_POS_ALT—CENT_SATURATED
005938266-06	OBS	FP	0.00	1	0	1	0	INDIV_TRANS_RUBBLE_ZUMA—TRANS_GAPPED—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_SATURATED—HALO_GHOST
005938266-07	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_ZUMA—TRANS_GAPPED—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_SATURATED

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

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

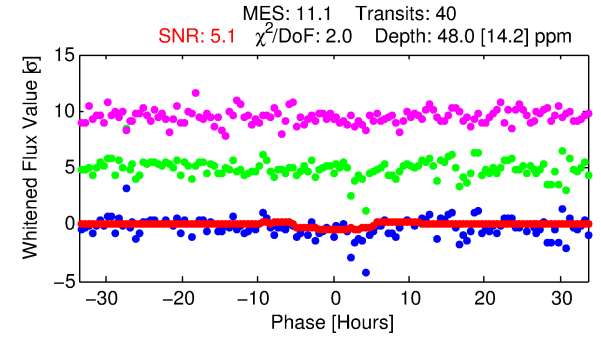
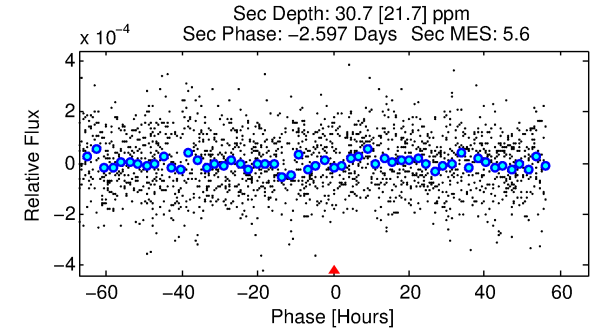
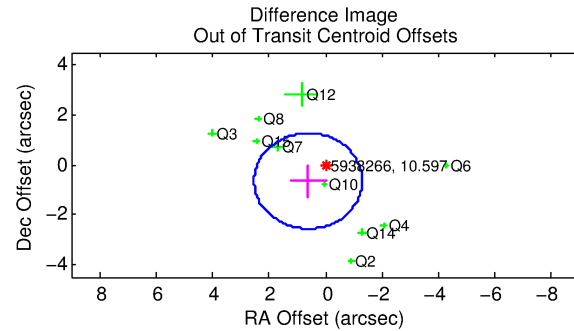
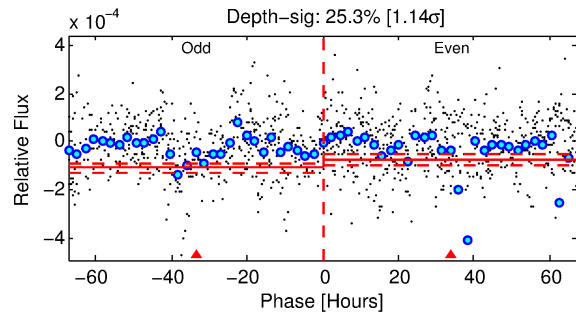
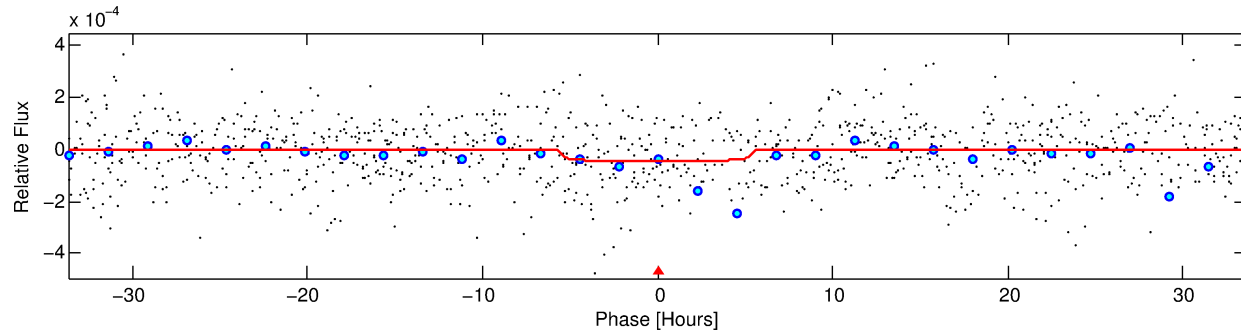
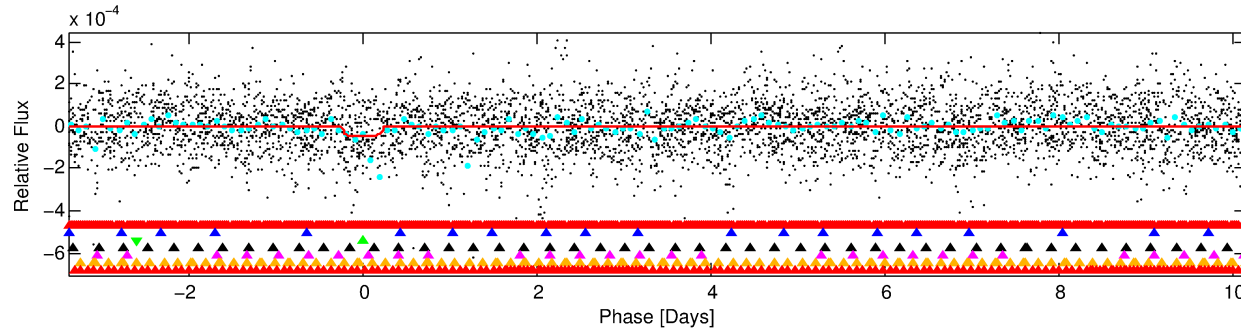
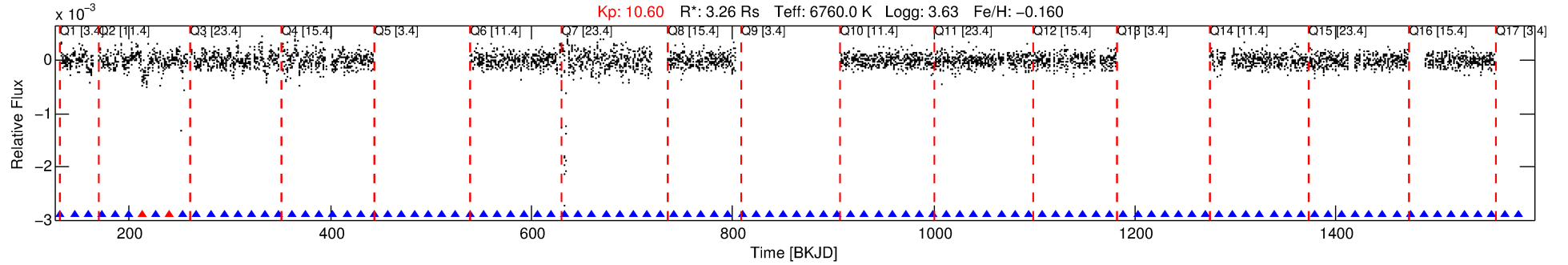
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 005938266-03

No Significant Match Found

DV One-Page Summary

KIC: 5938266 Candidate: 3 of 7 Period: 13.553 d



DV Fit Results:

Period = 13.55254 [0.00052] d
Epoch = 131.8764 [0.0290] BKJD
 $R_p/R^* = 0.0072$ [0.0035]
 $a/R^* = 4.99$ [12.81]
 $b = 0.86$ [0.84]
 $\text{Seff} = 1139.25$ [581.87]
 $T_{\text{eq}} = 1481$ [189] K
 $R_p = 2.55$ [1.51] R_{e}
 $a = 0.1320$ [0.0417] AU
 $A_g = 45.16$ [58.72] [0.75 σ]
 $T_{\text{eff}} = 5938$ [1793] K [2.47 σ]

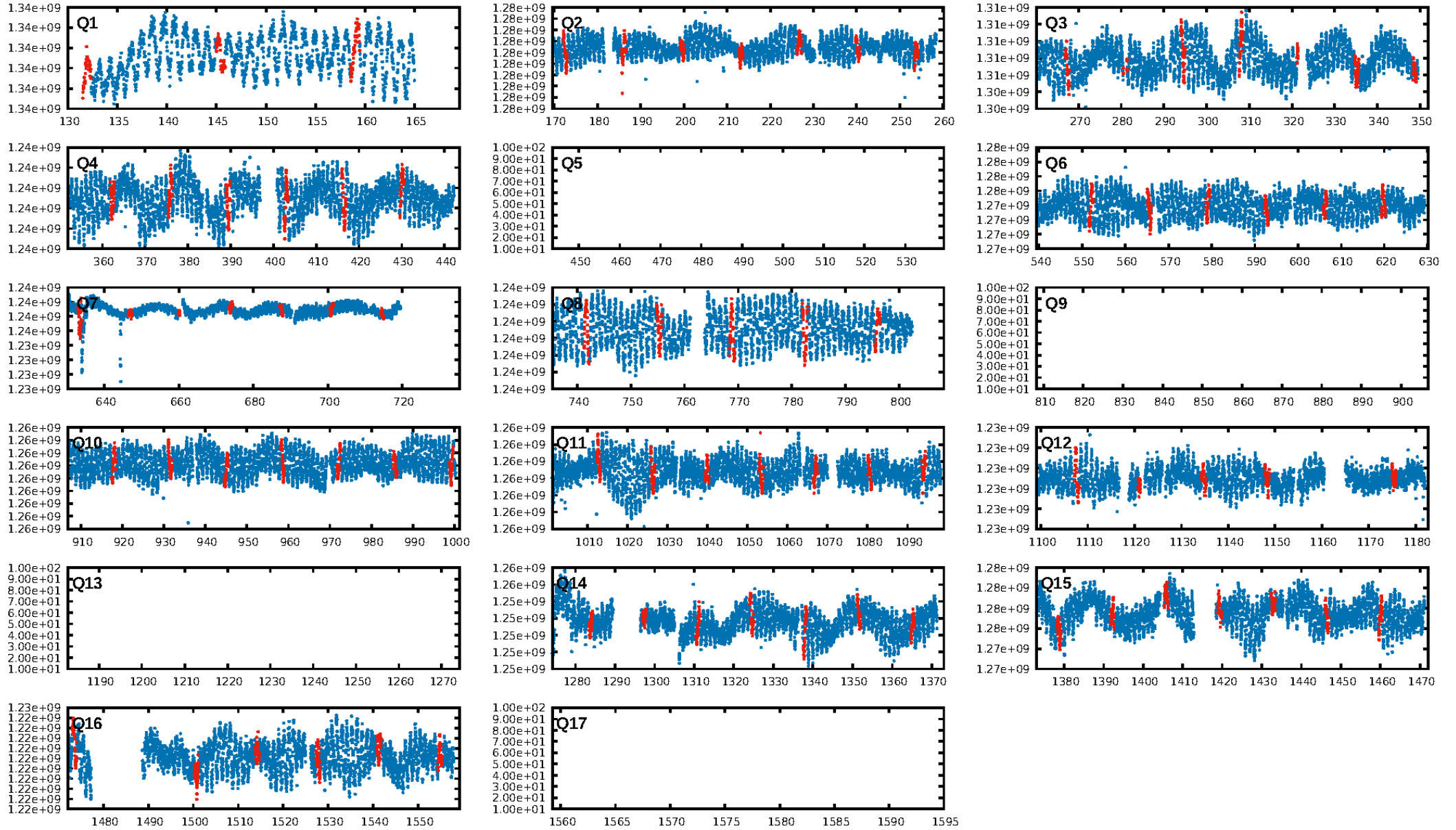
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [12.44 σ]
LongPeriod-sig: 100.0% [35.91 σ]
ModelChiSquare2-sig: 0.0%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: 1.08e-17
RollingBand-fgt: 0.95 [37/39]
GhostDiagnostic-chr: -1.967
Centroid-sig: 1.0%
Centroid-so: 2.002 arcsec [1.89 σ]
OotOffset-rm: 0.899 arcsec [1.41 σ]
OotOffset-st: 4/3/3/0 [10]
KicOffset-rm: 1.077 arcsec [1.68 σ]
KicOffset-st: 4/3/3/0 [10]
DiffImageQuality-fgm: 0.10 [1/10]
DiffImageOverlap-fno: 0.00 [0/13]

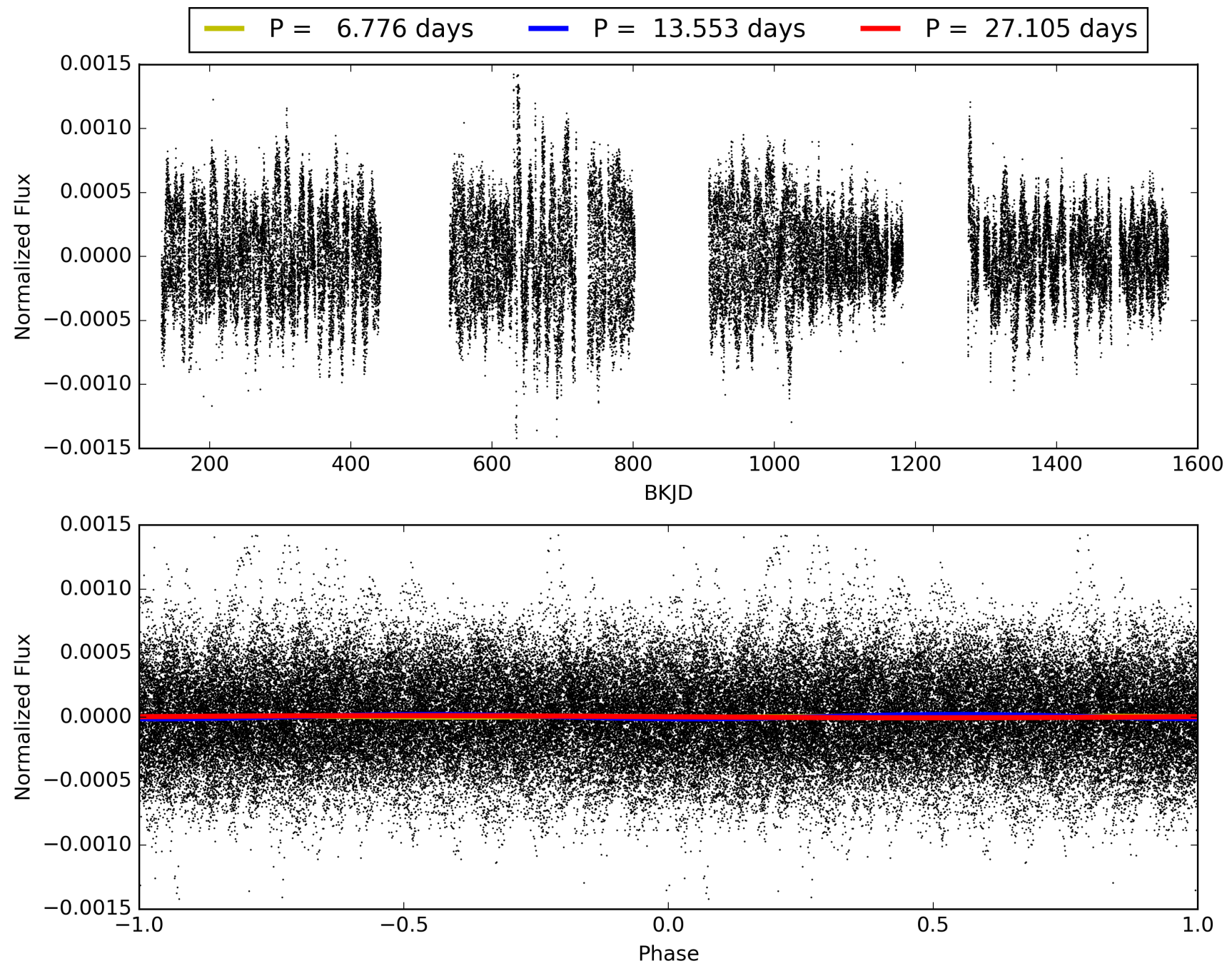
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 02-Feb-2016 07:27:40 Z

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

TCE 005938266-03, PDC Light Curves

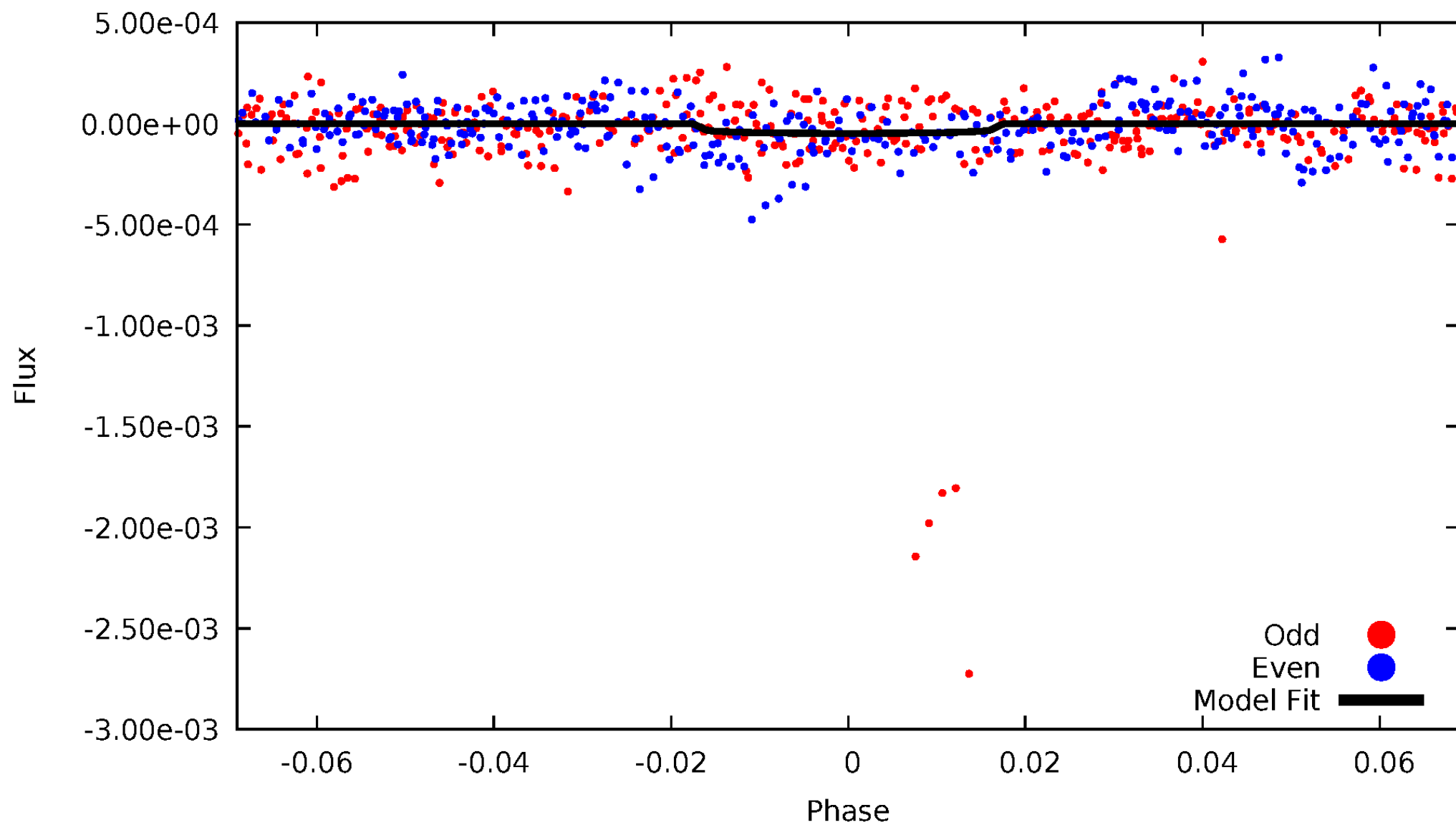


TCE 005938266-03



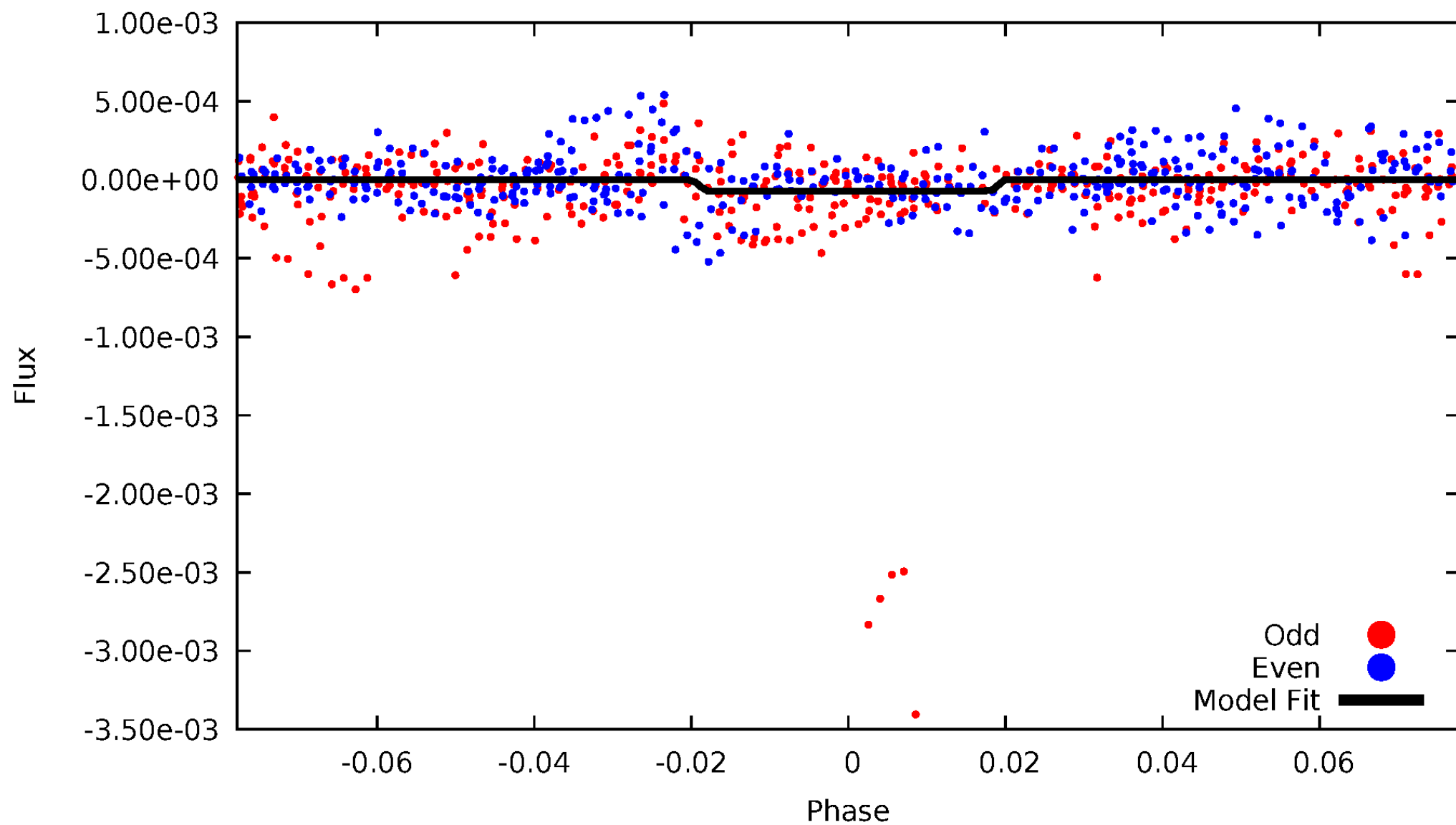
DV Odd/Even

TCE 005938266-03



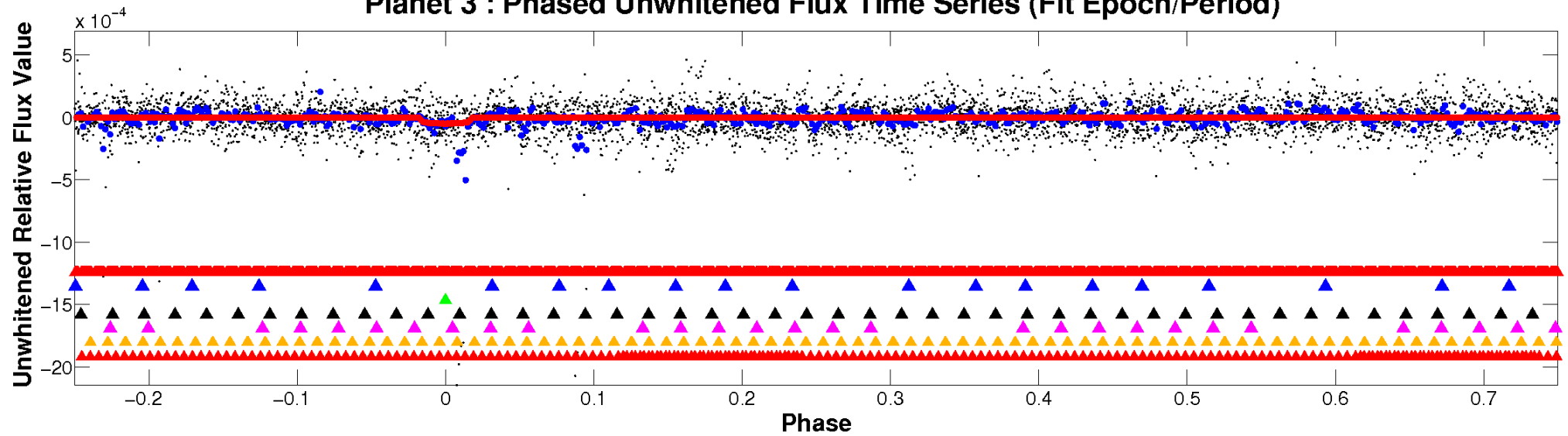
ALT Odd/Even

TCE 005938266-03

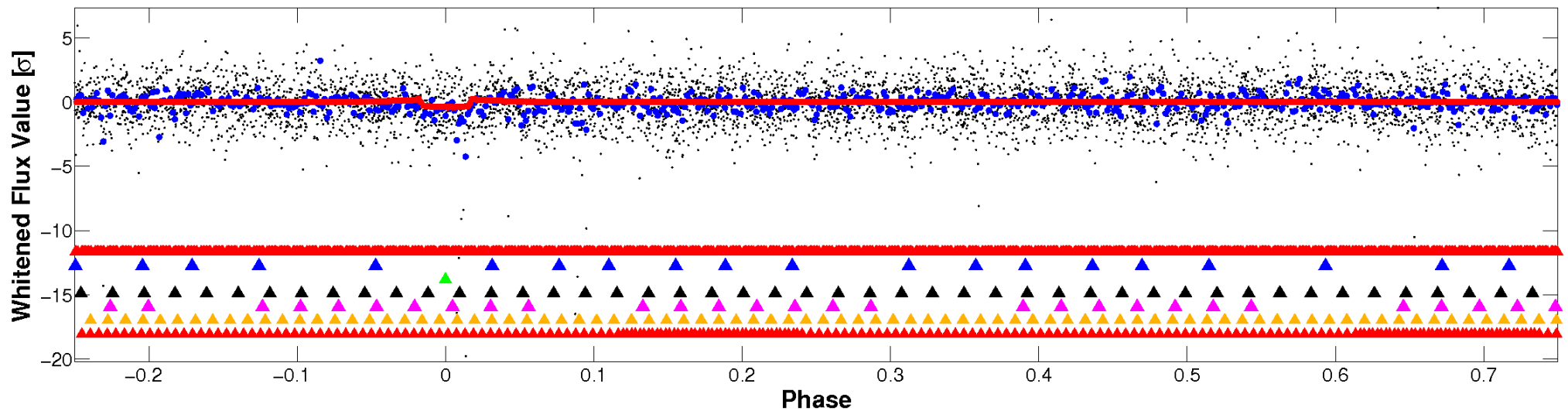


Non-Whitened Vs. Whitened Light Curve

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

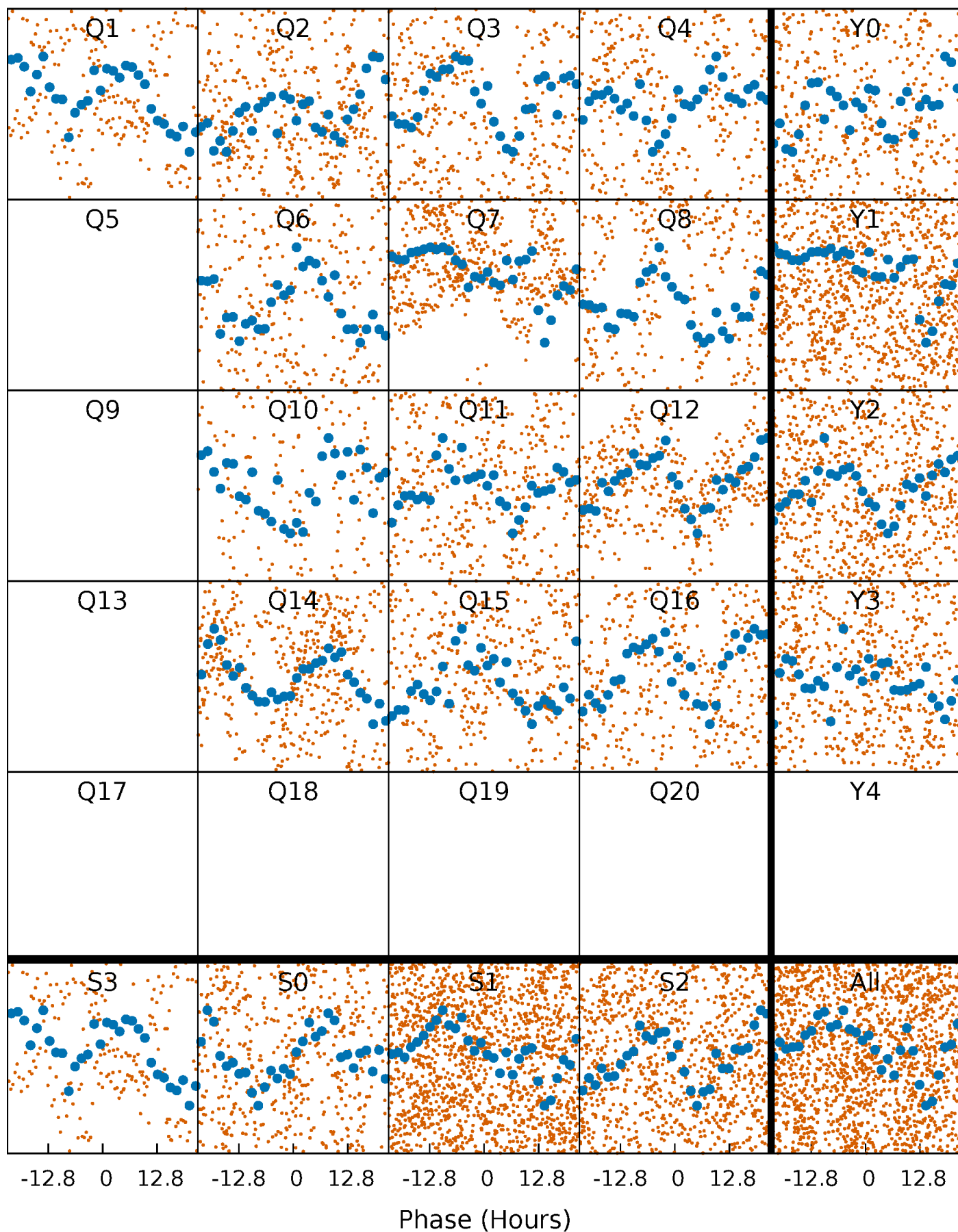


Planet 3 : Phased Whitened Flux Time Series (Fit Epoch/Period)



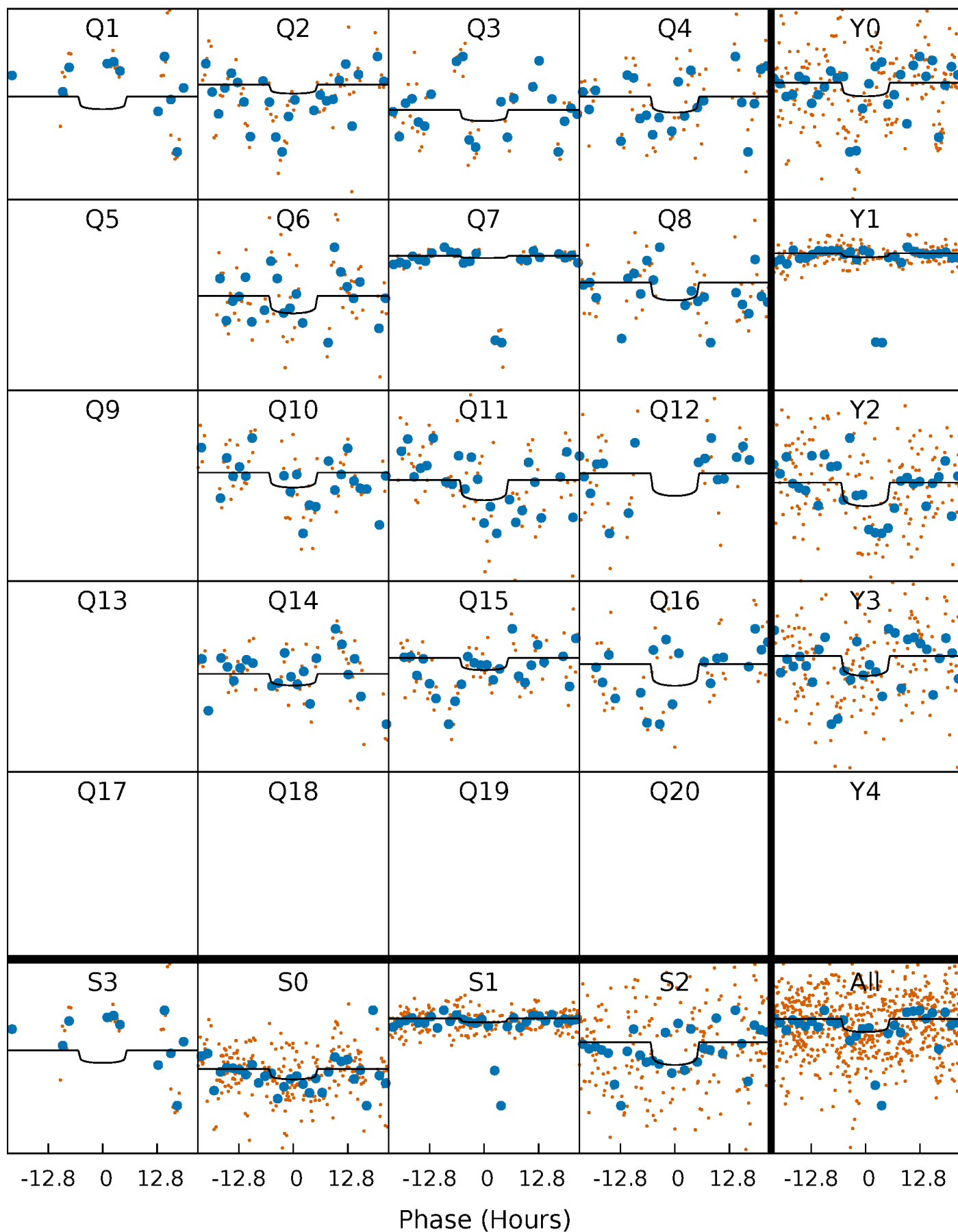
PDC Quarter-Phased Transit Curves

TCE 005938266-03 P= 13.552544 Days $T_0=131.876363$ (BKJD)



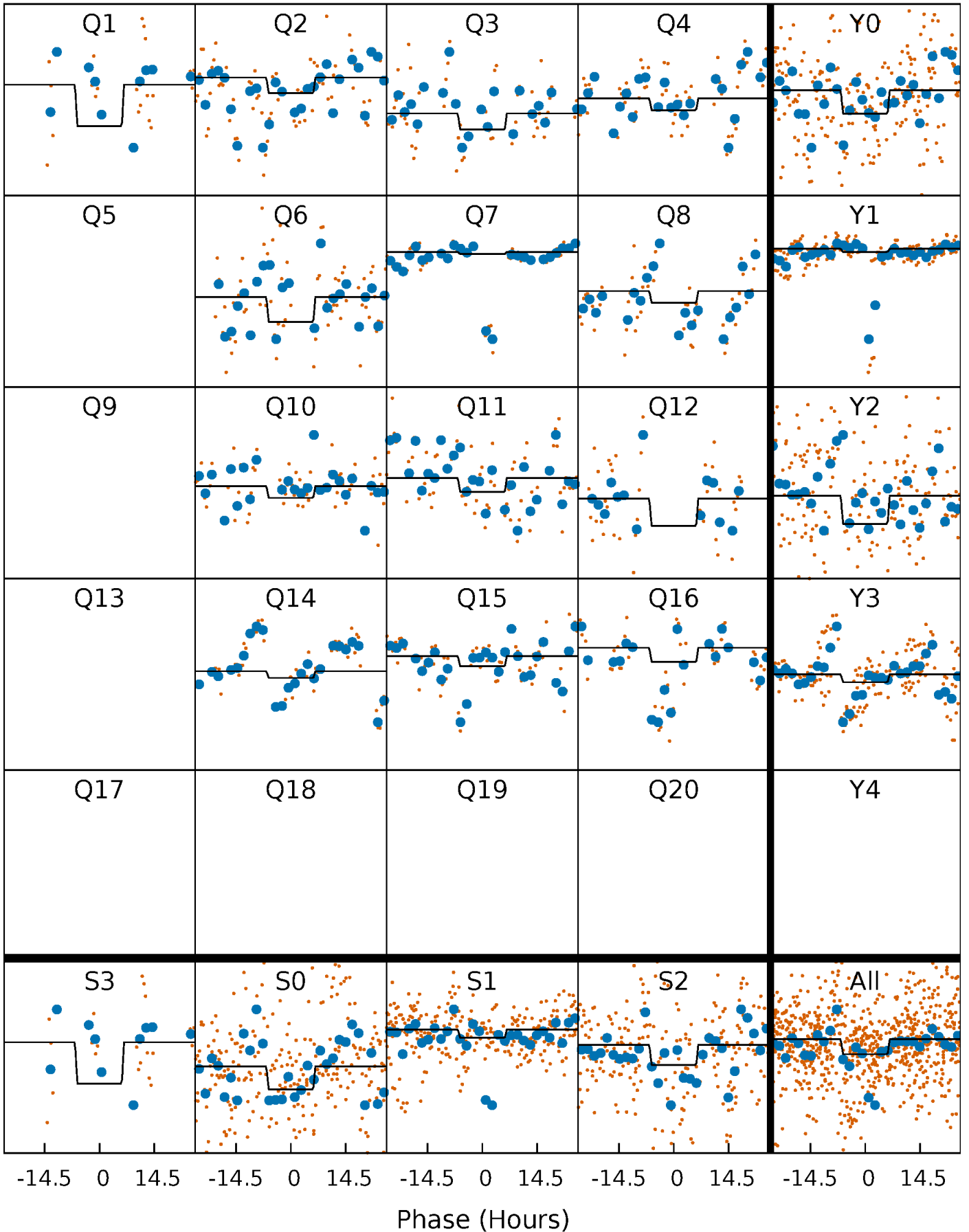
DV Quarter-Phased Transit Curves

TCE 005938266-03 P= 13.552544 Days $T_0=131.876363$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

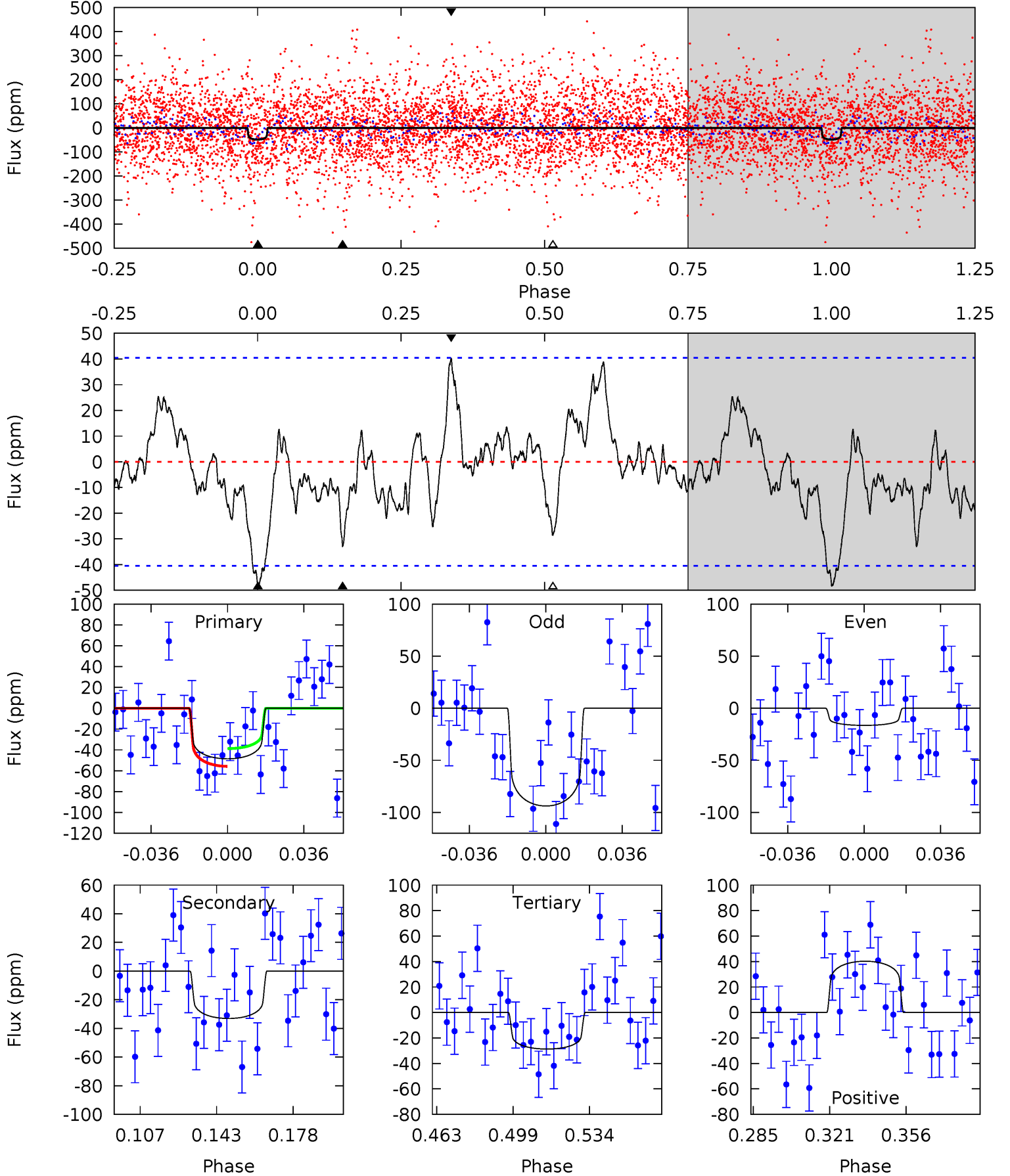
TCE 005938266-03 P= 13.549887 Days $T_0=132.043322$ (BKJD)



DV Model-Shift Uniqueness Test

005938266-03, $P = 13.552544$ Days, $E = 131.876363$ Days

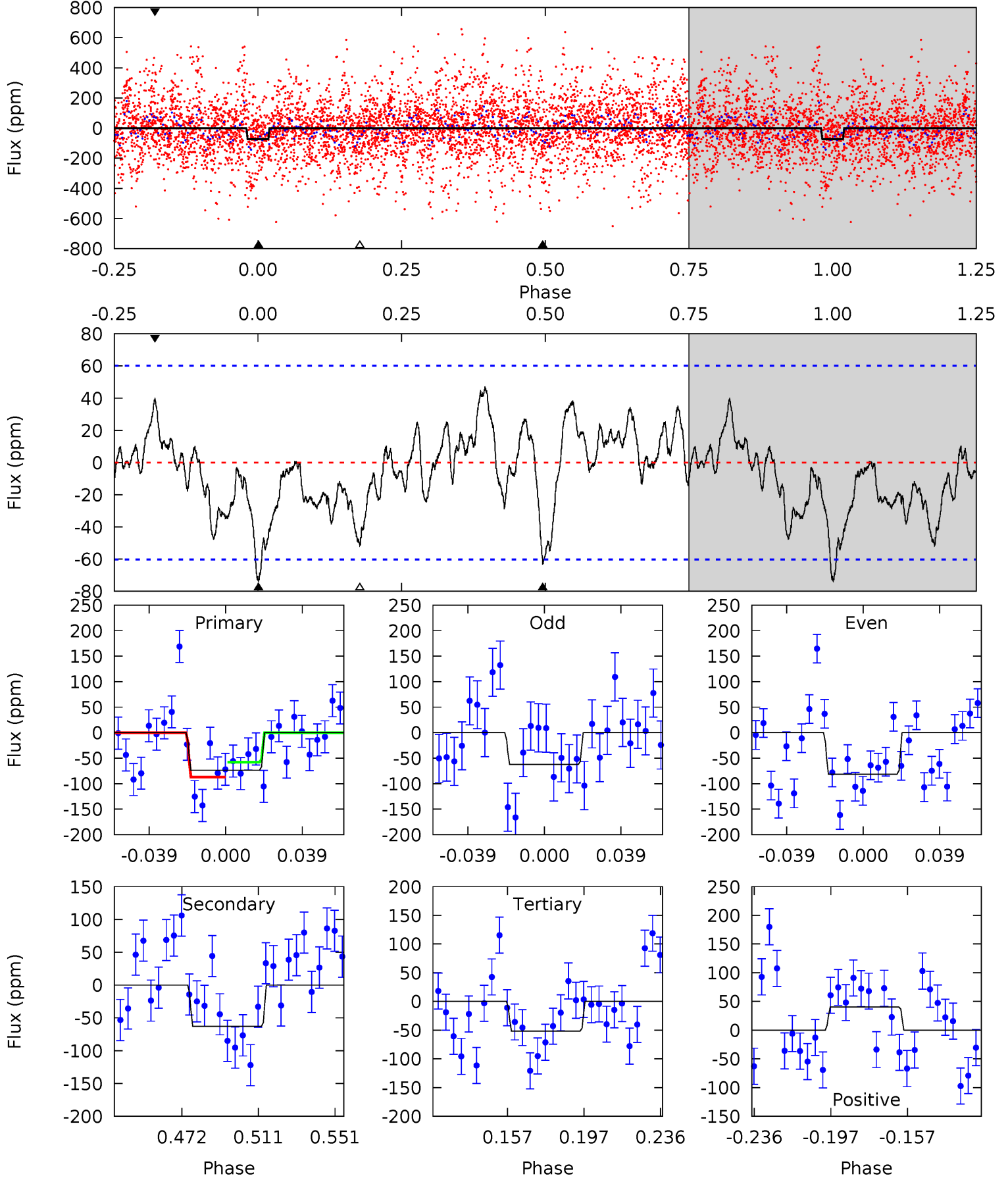
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
5.73	3.90	3.39	4.75	4.78	2.10	1.57	2.34	0.98	0.52	-0.85	4.52	2.90	0.45	0.99



Alt Model-Shift Uniqueness Test

005938266-03, P = 13.549887 Days, E = 132.043322 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
5.82	4.98	4.08	3.18	4.76	2.06	1.58	1.74	2.63	0.90	1.79	0.75	2.99	0.39	1.13



Stellar Parameters For KIC 005938266

	$T_{\text{eff}} (K)$	$\log(g)$	$[\text{Fe}/\text{H}]$	$R (R_{\odot})$	$M (M_{\odot})$	$\rho_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6760^{+152}_{-202}	$3.635^{+0.288}_{-0.072}$	$-0.160^{+0.300}_{-0.250}$	$3.258^{+0.395}_{-1.105}$	$1.670^{+0.239}_{-0.292}$	$0.068^{+0.130}_{-0.016}$
	+2%/-3%	+8%/-2%	+188%/-156%	+12%/-34%	+14%/-17%	+191%/-23%
Source	PHO1	FLK73	KIC0	DSEP		

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

Secondary Eclipse Parameters for KIC 005938266-03 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-33 ± 8	$2.38^{+1.27}_{-1.12}$	2023^{+102}_{-181}	5985^{+2456}_{-1033}	56^{+134}_{-32}
Alt.	-63 ± 13	$2.81^{+1.27}_{-1.25}$	2031^{+103}_{-159}	6528^{+2649}_{-1057}	76^{+167}_{-40}

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

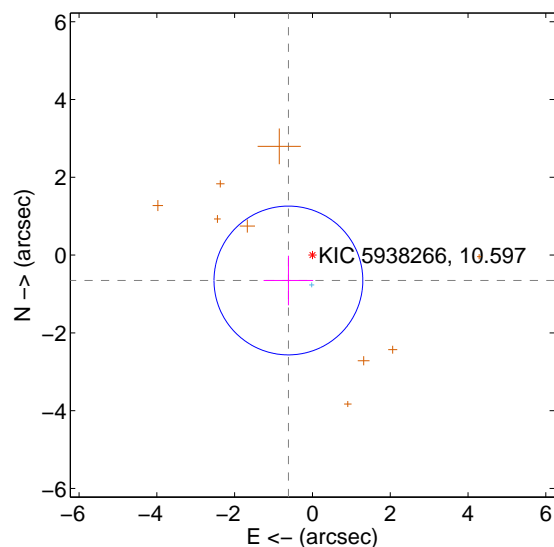
Supplemental centroid analysis for 005938266-03. **Kepler magnitude: 10.60.** Transit SNR 5.13

There are 1 quarters with good PRF difference image offsets

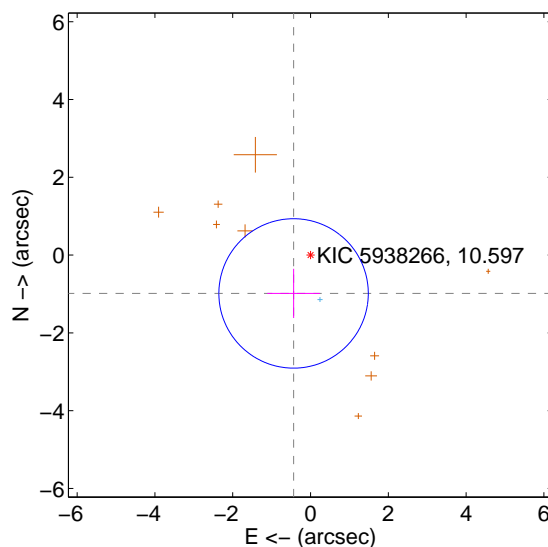
The direct PRF centroid is offset from the target star catalog position by about 0.14 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.899 ± 0.638	1.41	0.618 ± 0.638	-0.653 ± 0.637
PRF-fit source offset from KIC position	1.077 ± 0.640	1.68	0.436 ± 0.675	-0.985 ± 0.633
photometric centroid source offset	2.00 ± 1.06	1.89	-1.87 ± 1.08	0.72 ± 0.93

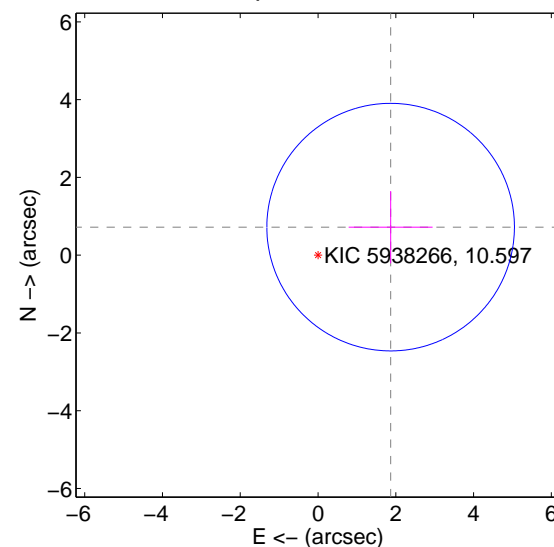
offset from difference PRF-fit to OOT PRF-fit



offset from difference PRF-fit to KIC position

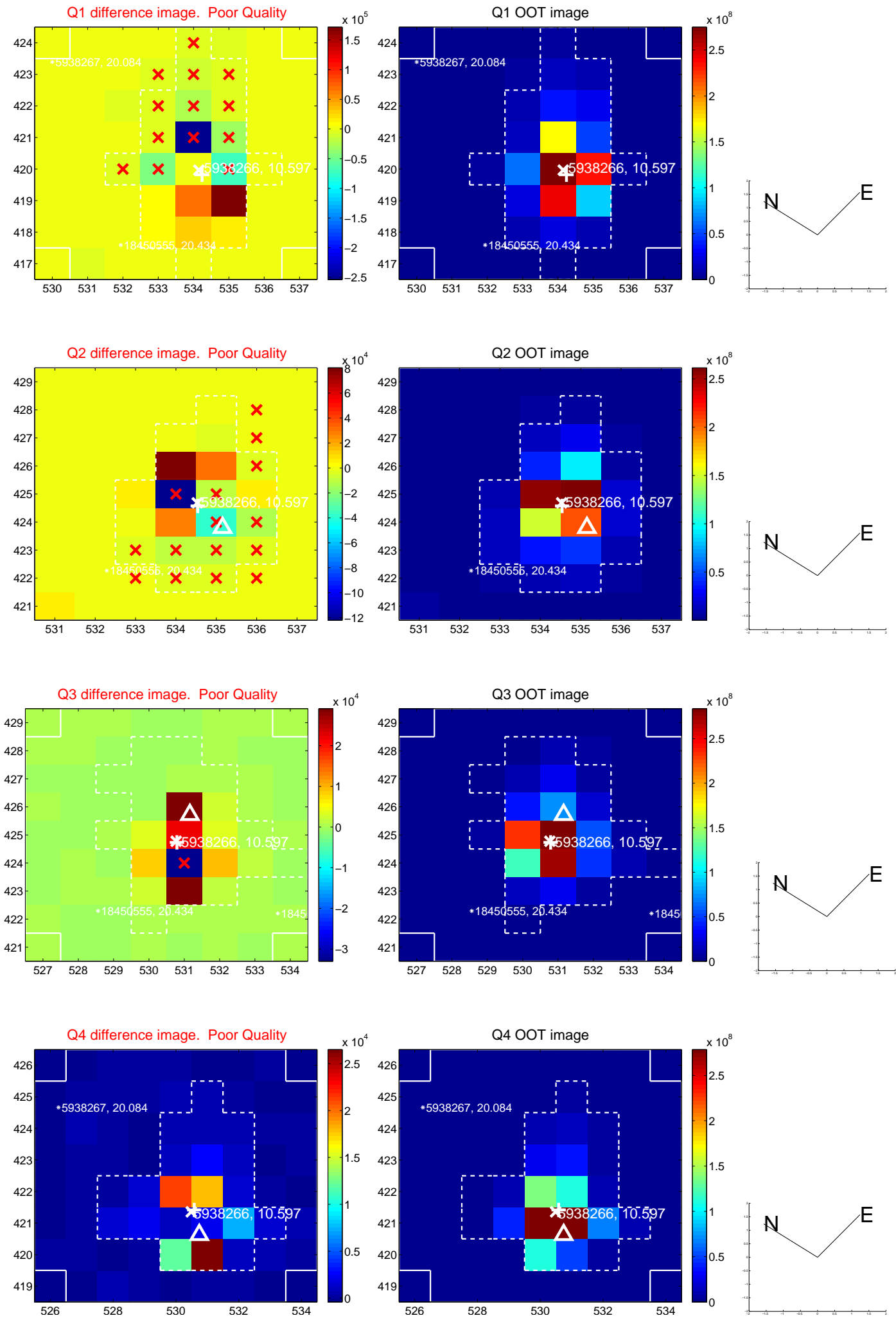


offset from photometric centroids

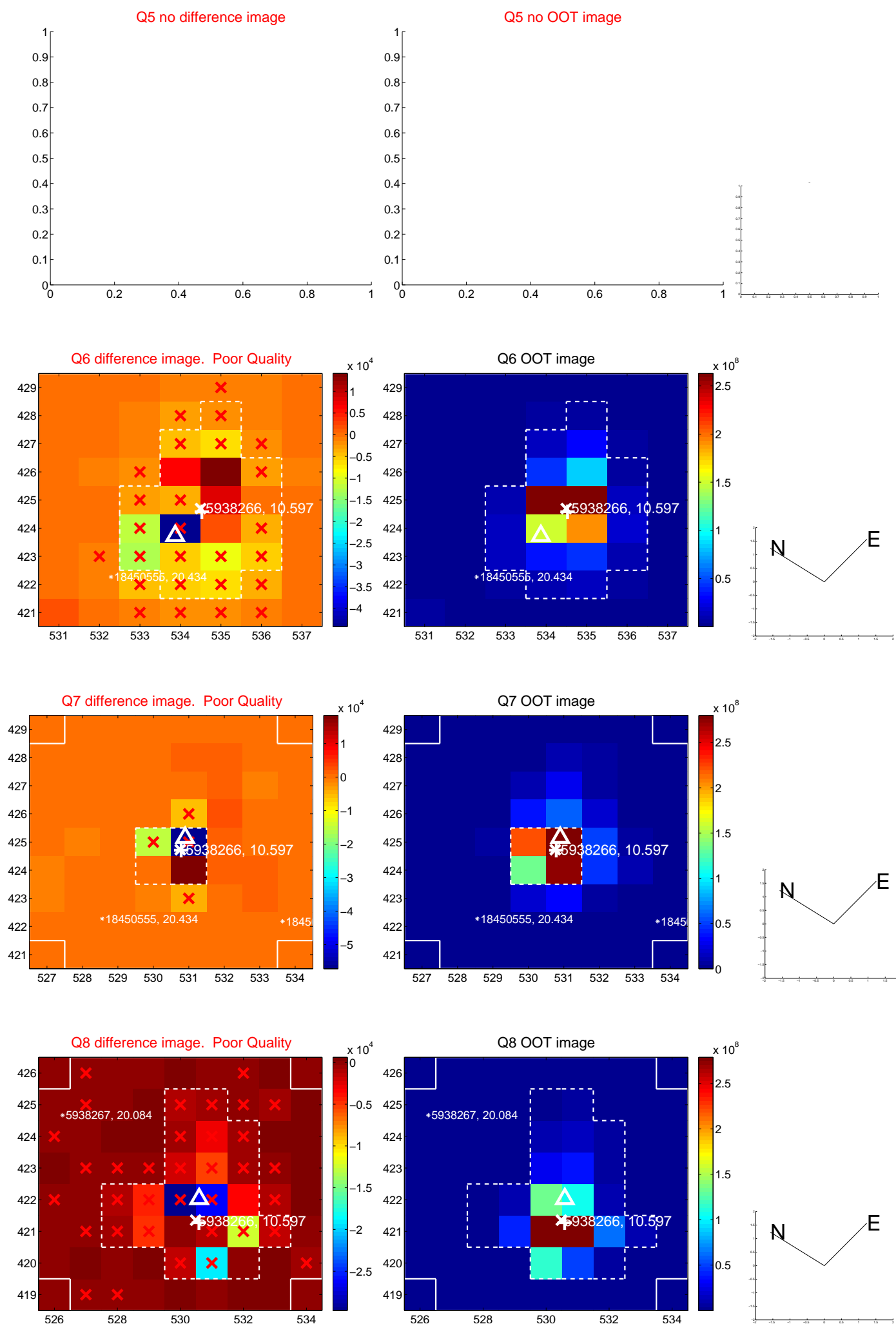


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets;** magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

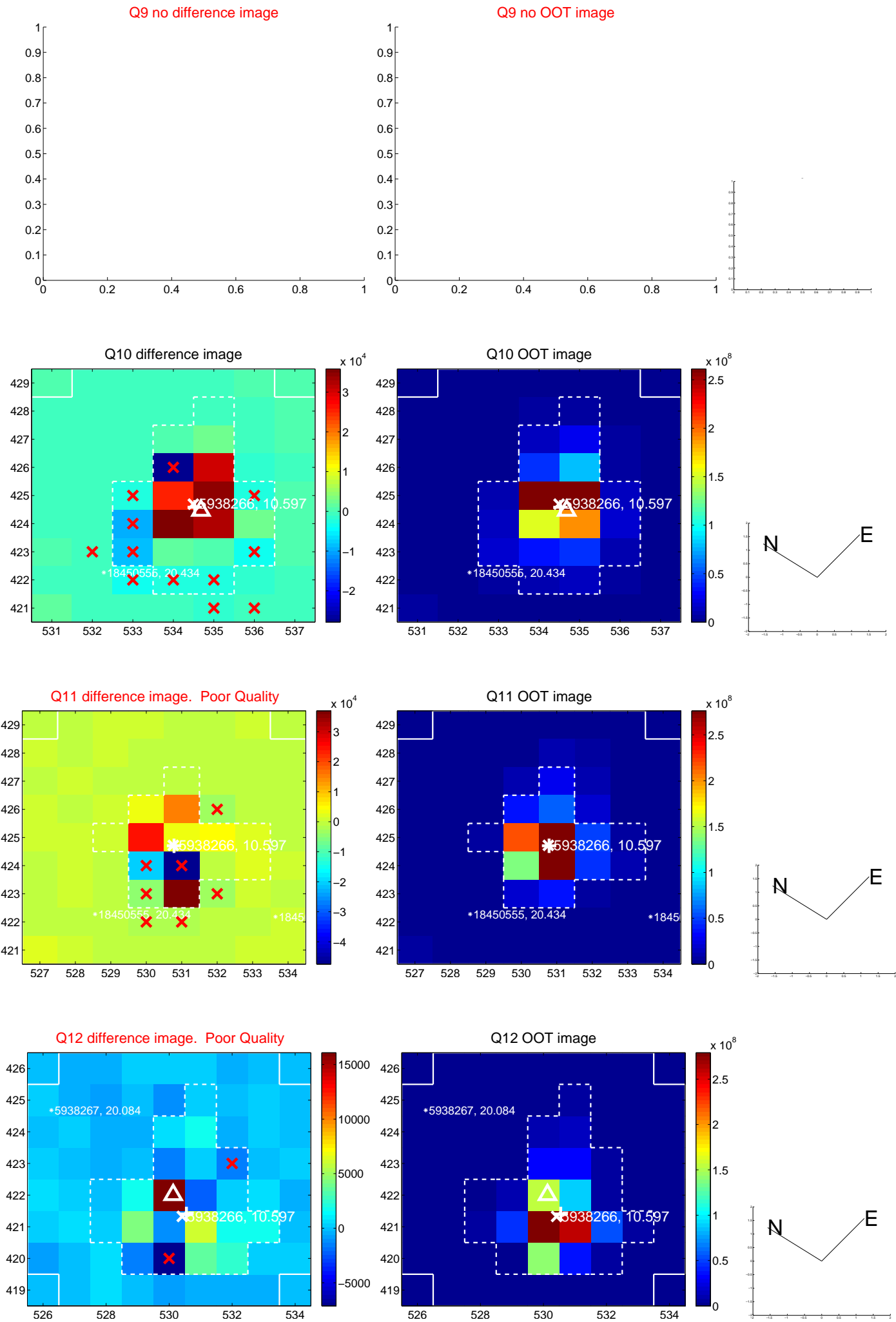
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



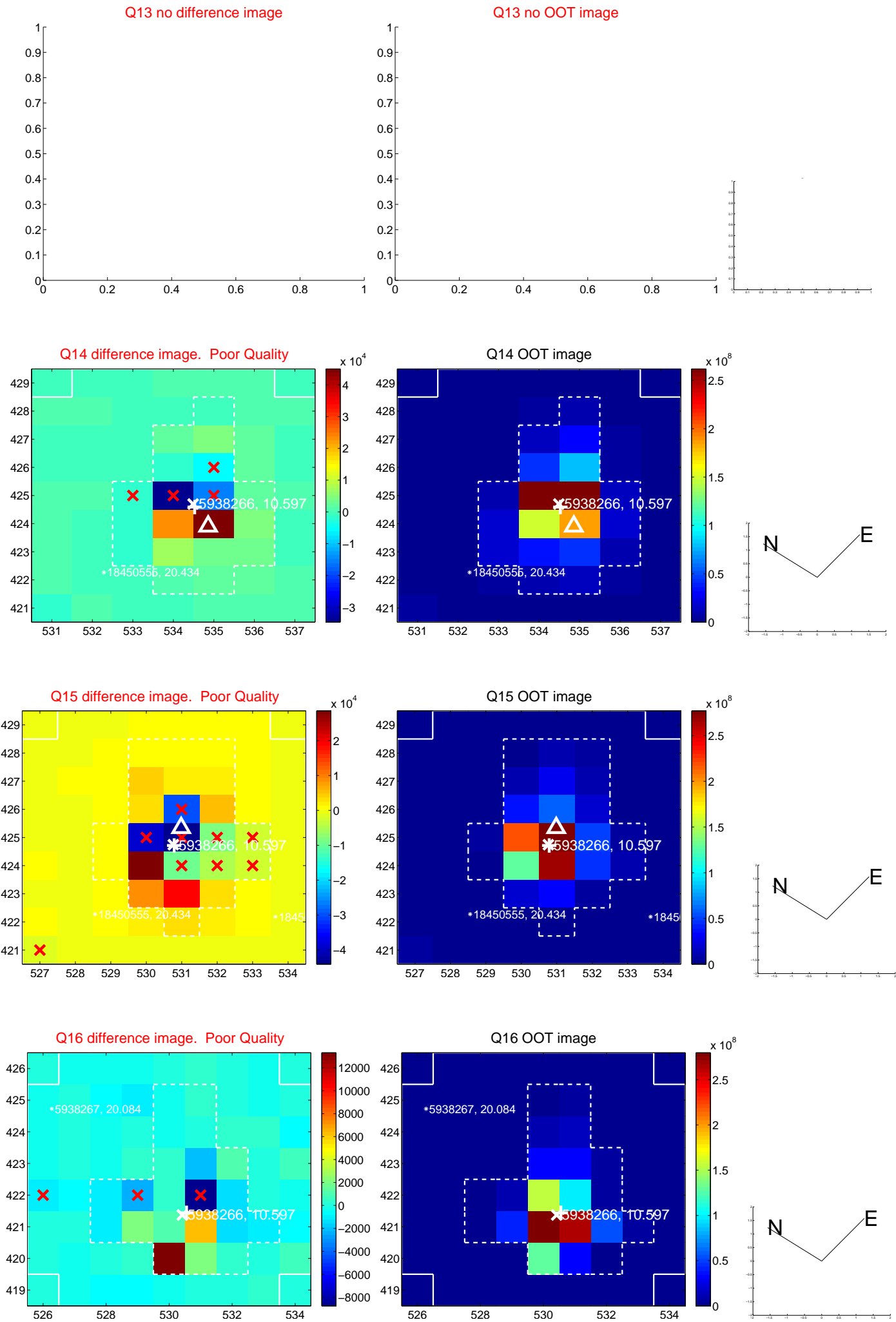
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



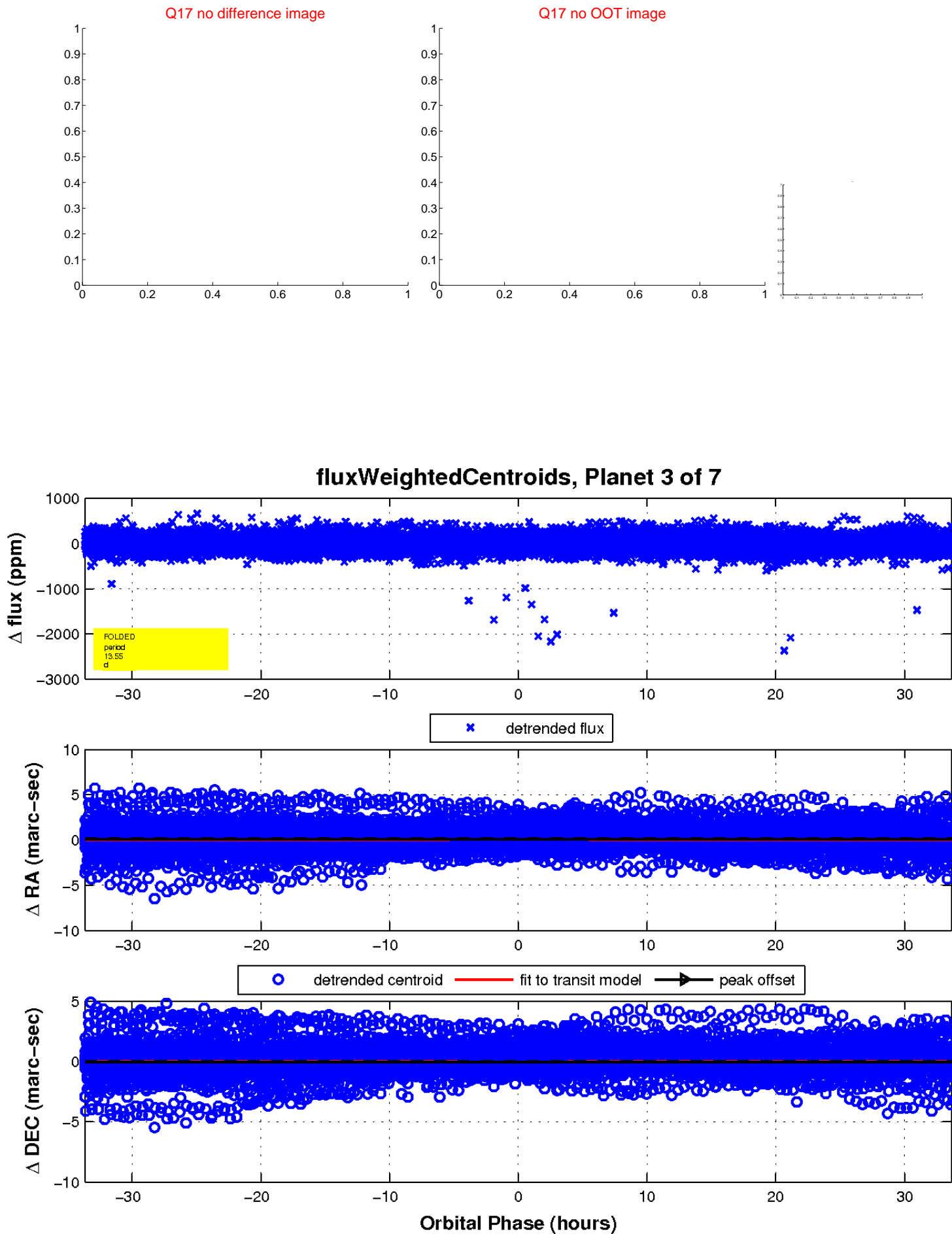
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

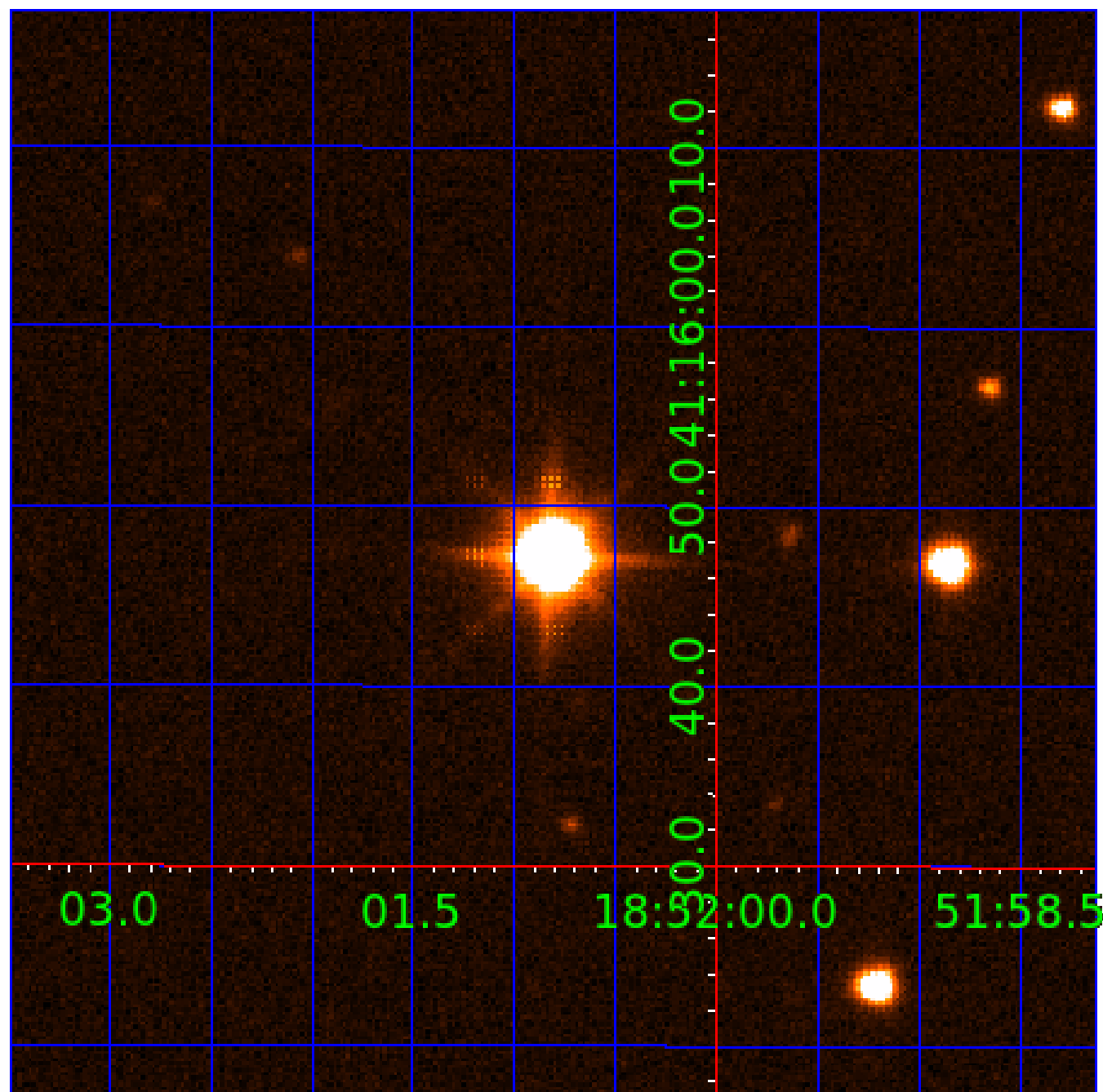


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 005938266

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})
005938266-01	OBS	No	1.089117	131.932395	13.1	7.610	10.6	5.3	3.26	6760	1.26	32851.02
005938266-02	OBS	No	72.635311	190.932171	169.5	12.598	15.4	8.3	3.26	6760	4.55	121.47
005938266-03	OBS	No	13.552544	131.876363	48.0	11.219	11.1	5.1	3.26	6760	2.55	1139.26
005938266-04	OBS	No	30.565476	153.049310	263.4	1.852	10.9	11.5	3.26	6760	5.78	385.19
005938266-05	OBS	No	50.735214	159.740808	238.3	2.077	10.5	10.8	3.26	6760	5.92	195.99
005938266-06	OBS	No	7.653263	137.237203	123.5	1.935	10.1	10.9	3.26	6760	4.25	2440.73
005938266-07	OBS	No	6.737365	135.089343	147.4	1.284	8.3	10.2	3.26	6760	4.63	2892.87

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
005938266-01	OBS	FP	0.00	1	0	0	0	SWEET_NTL—LPP_DV—MOD_NONUNIQ_ALT—CENT_SATURATED
005938266-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—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—CENT_SATURATED
005938266-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_TRACKER—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—CENT_SATURATED
005938266-04	OBS	FP	0.00	1	0	1	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT— CENT_SATURATED—HALO_GHOST
005938266-05	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_NONUNIQ_ALT—MOD_POS_ALT—CENT_SATURATED
005938266-06	OBS	FP	0.00	1	0	1	0	INDIV_TRANS_RUBBLE_ZUMA—TRANS_GAPPED—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_SATURATED—HALO_GHOST
005938266-07	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_ZUMA—TRANS_GAPPED—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_SATURATED

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

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

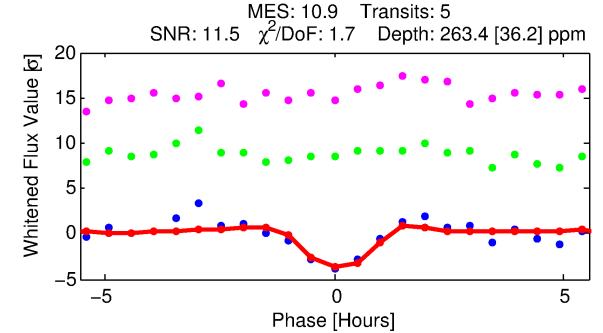
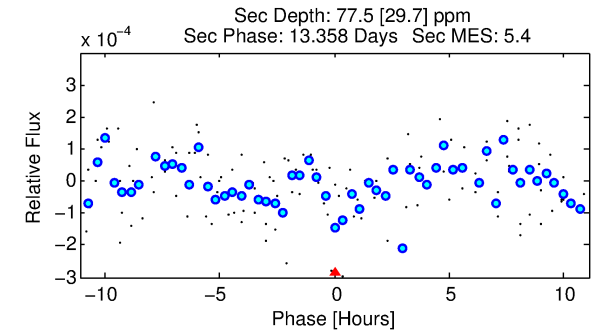
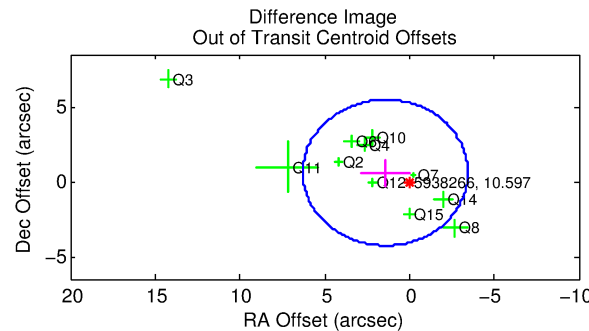
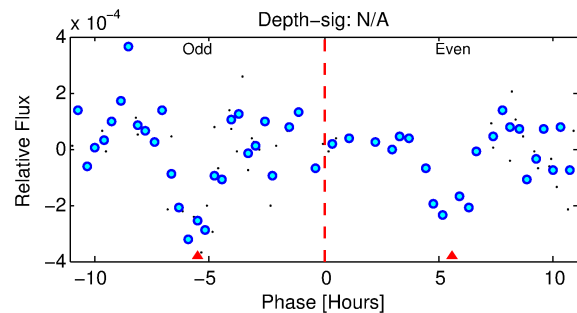
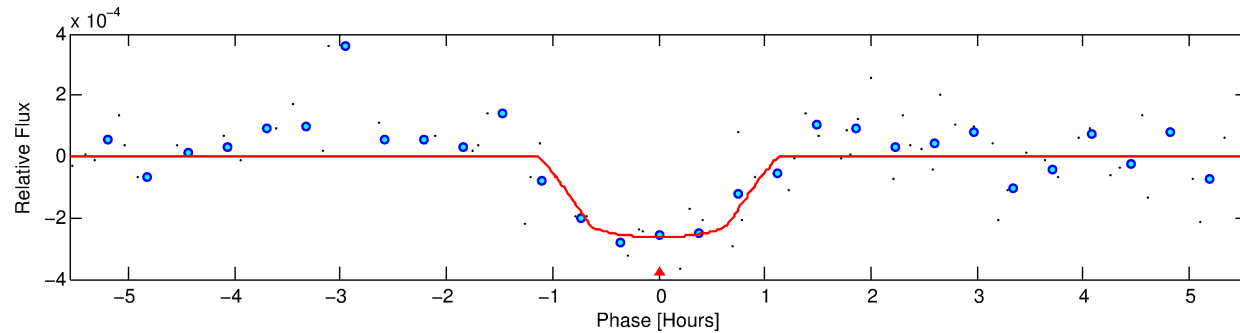
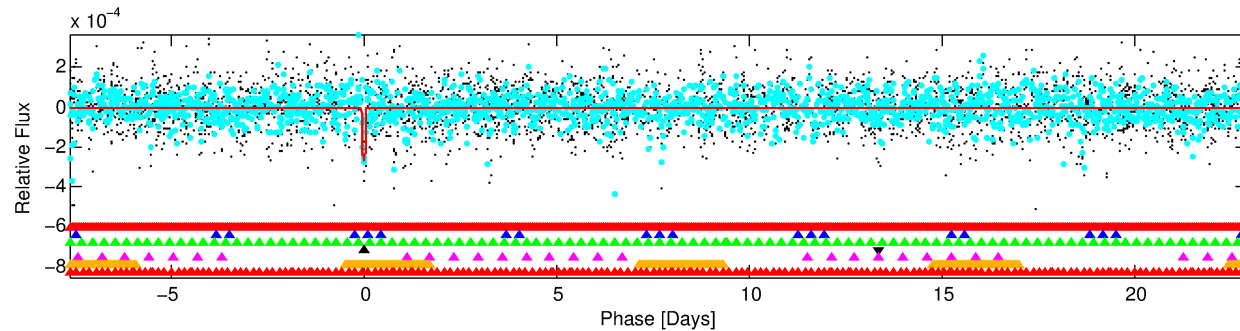
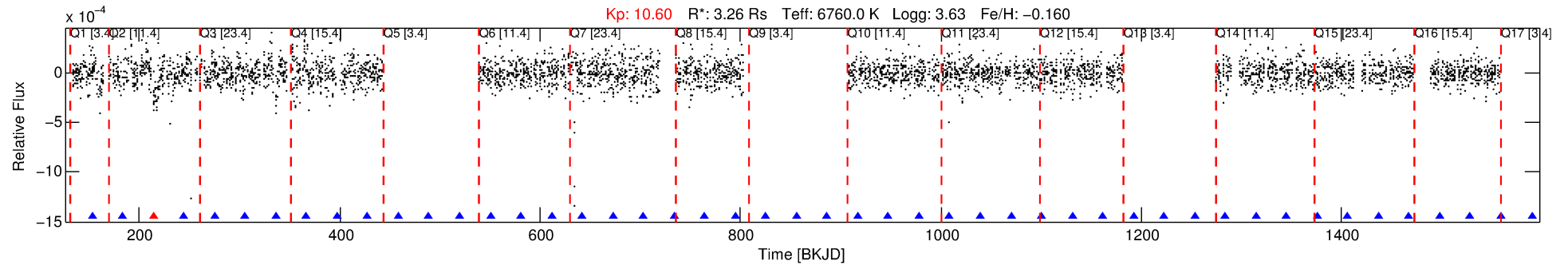
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 005938266-04

No Significant Match Found

DV One-Page Summary

KIC: 5938266 Candidate: 4 of 7 Period: 30.565 d



DV Fit Results:

Period = 30.56548 [0.00034] d
Epoch = 153.0493 [0.0069] BKJD
Rp/R* = 0.0163 [0.0172]
a/R* = 83.86 [505.96]
b = 0.77 [3.25]
Seff = 385.19 [196.73]
Teq = 1130 [144] K
Rp = 5.78 [6.43] Re
a = 0.2271 [0.0718] AU
Ag = 65.77 [145.39] [0.45σ]
Teffp = 4974 [2683] K [1.43σ]

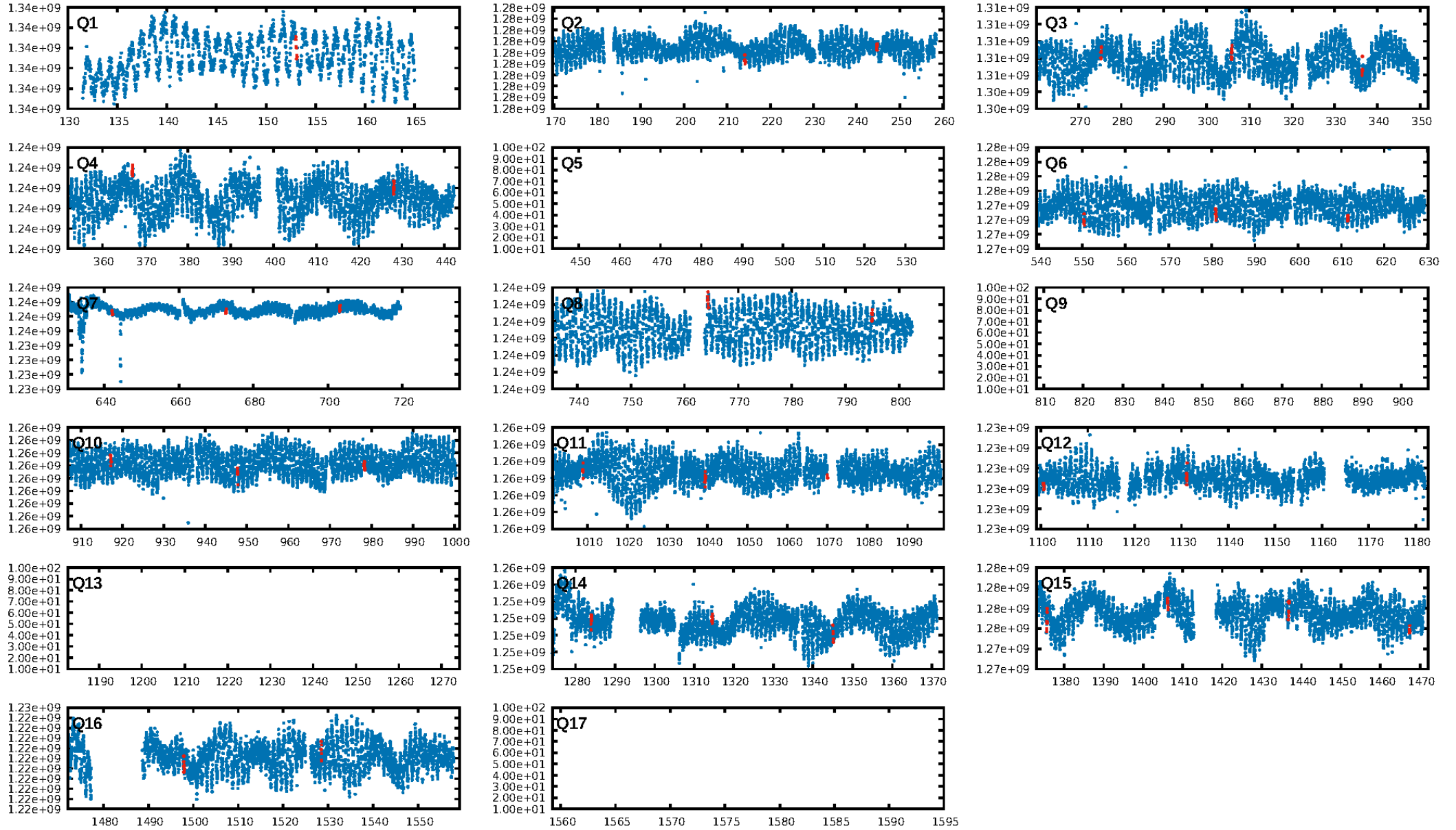
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [35.91σ]
LongPeriod-sig: 100.0% [173.92σ]
ModelChiSquare2-sig: 22.1%
ModelChiSquareGof-sig: 99.9%
Bootstrap-pfa: 2.24e-10
RollingBand-fgt: 0.80 [4/5]
GhostDiagnostic-chr: -0.1674
Centroid-sig: 34.1%
Centroid-so: 0.391 arcsec [1.12σ]
OotOffset-rm: 1.541 arcsec [0.95σ]
OotOffset-st: 4/4/3/0 [11]
KicOffset-rm: 1.189 arcsec [0.86σ]
KicOffset-st: 4/4/3/0 [11]
DiffImageQuality-fgm: 0.27 [3/11]
DiffImageOverlap-fno: 0.31 [4/13]

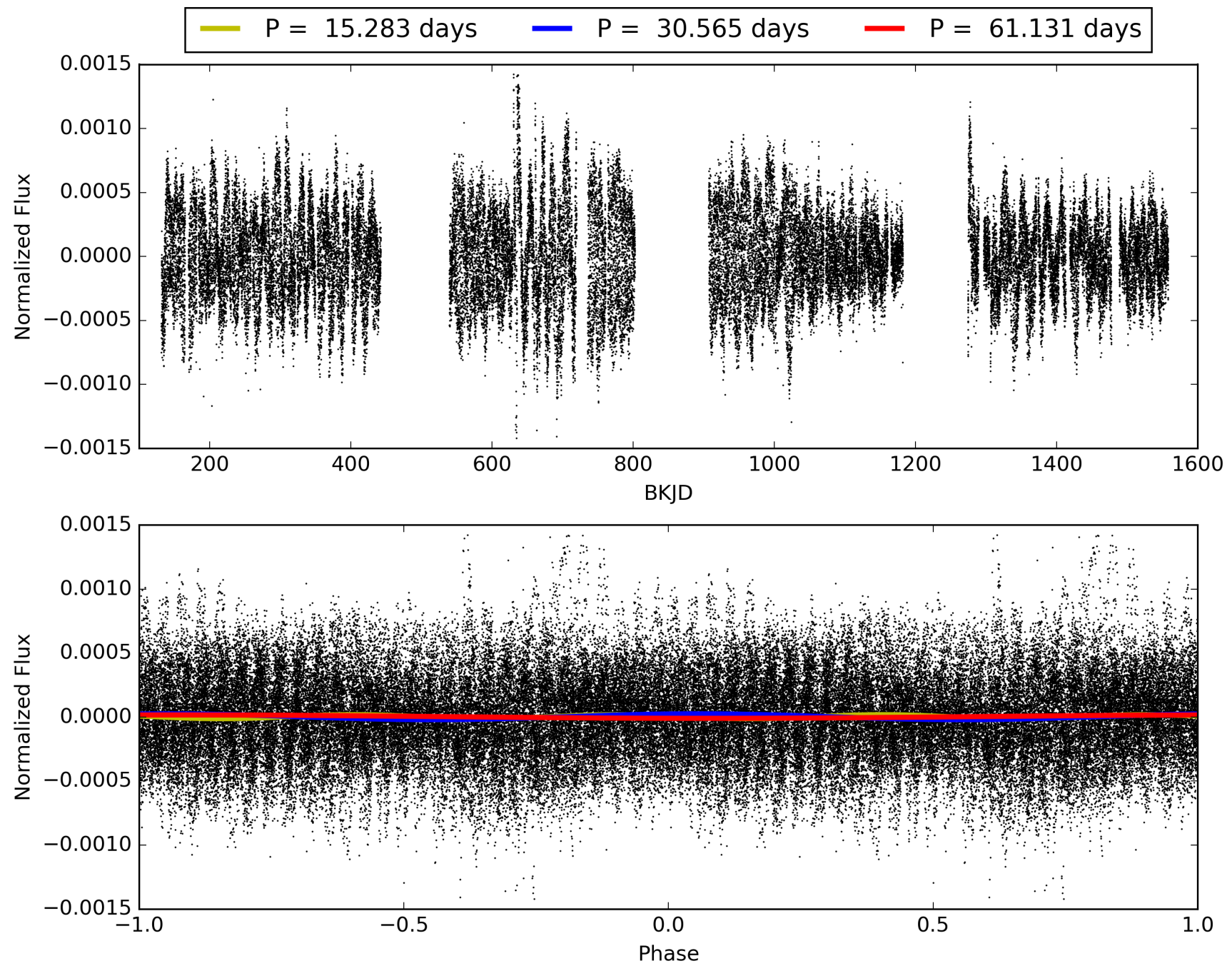
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 02-Feb-2016 07:27:44 Z

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

TCE 005938266-04, PDC Light Curves

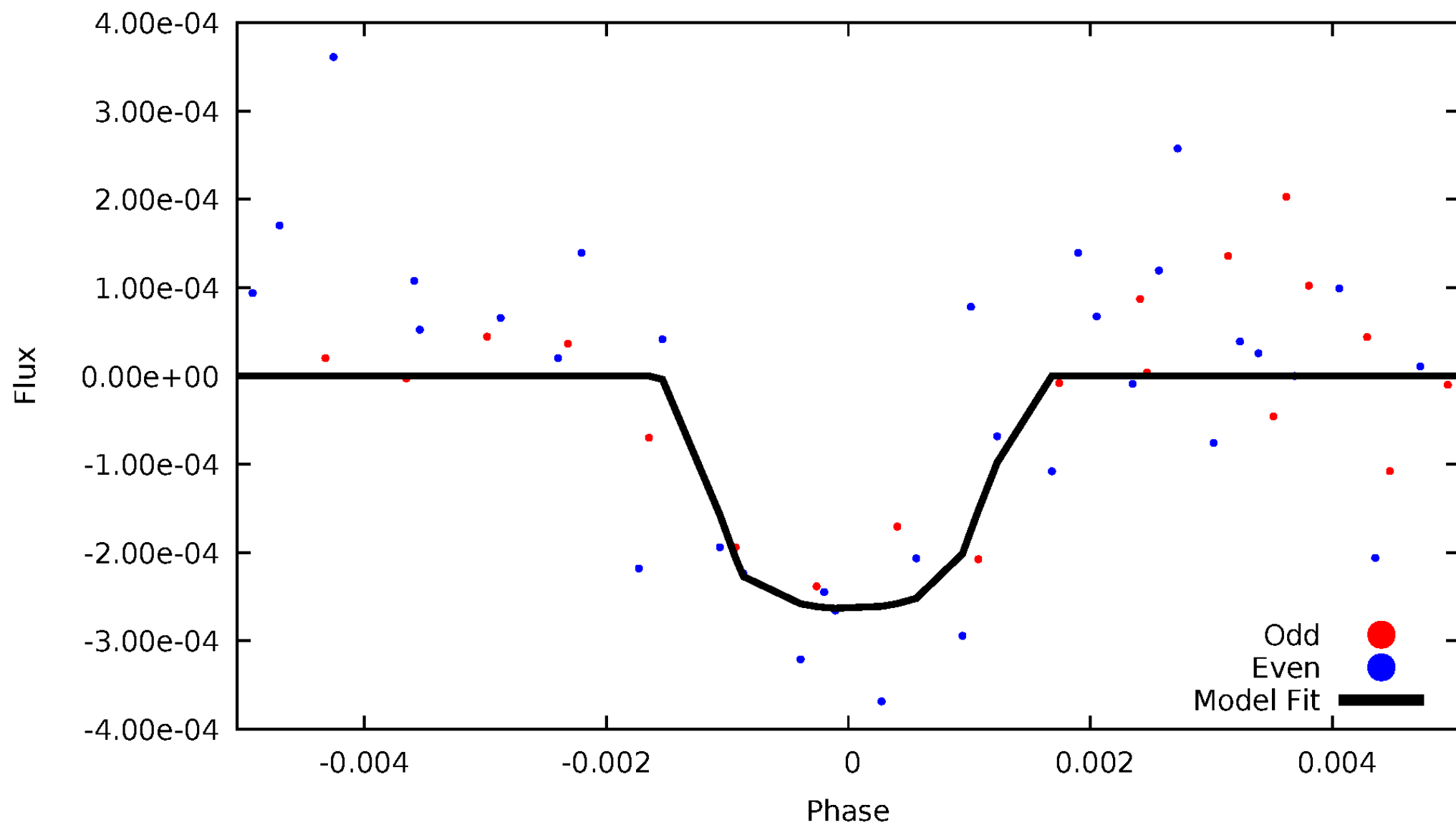


TCE 005938266-04



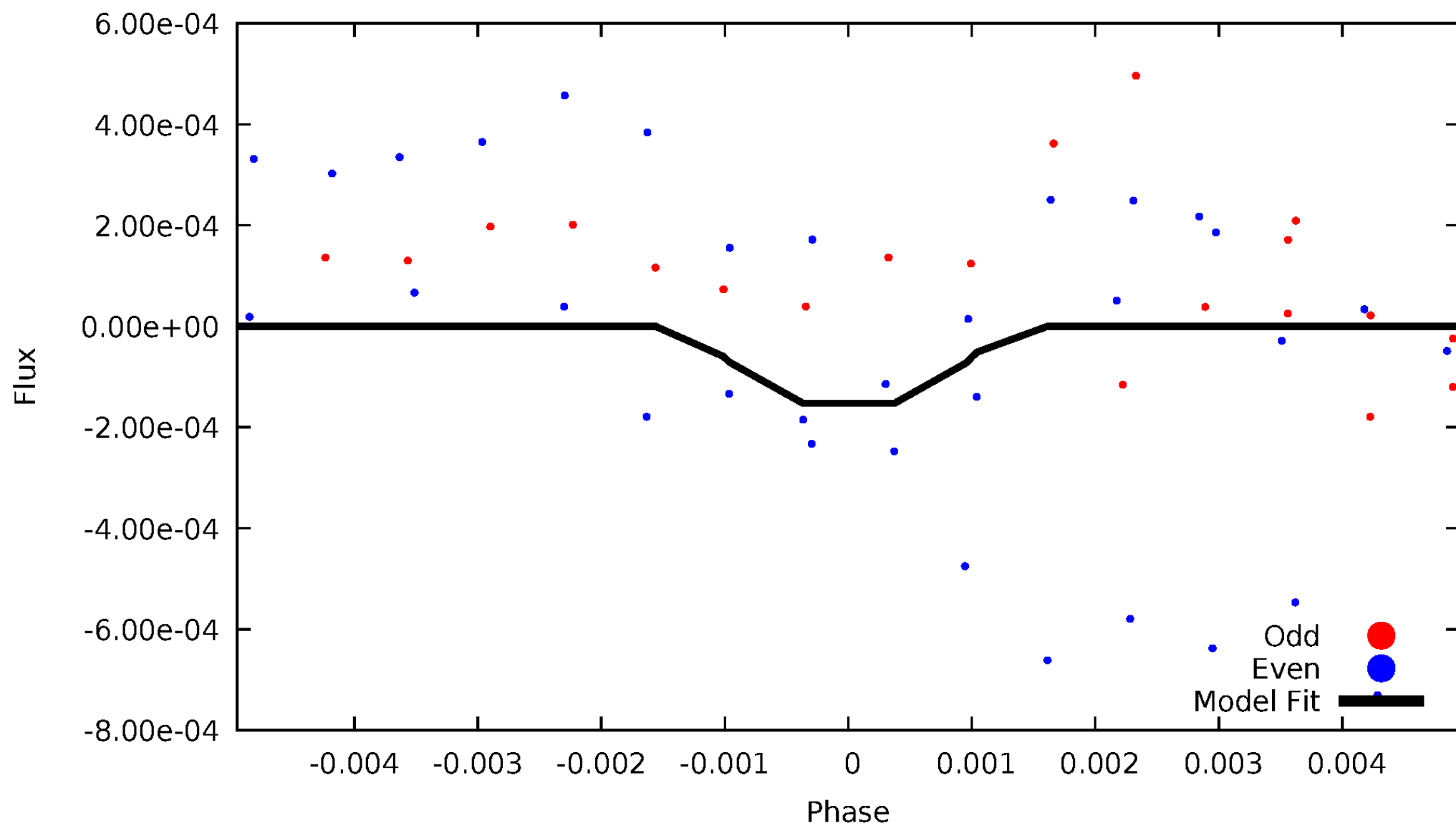
DV Odd/Even

TCE 005938266-04



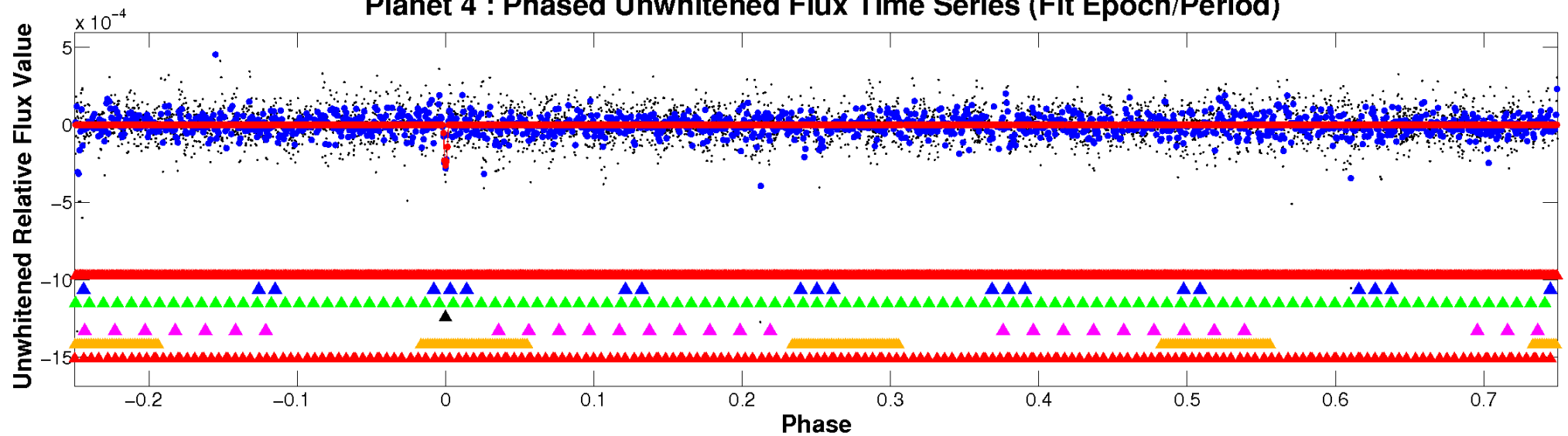
ALT Odd/Even

TCE 005938266-04

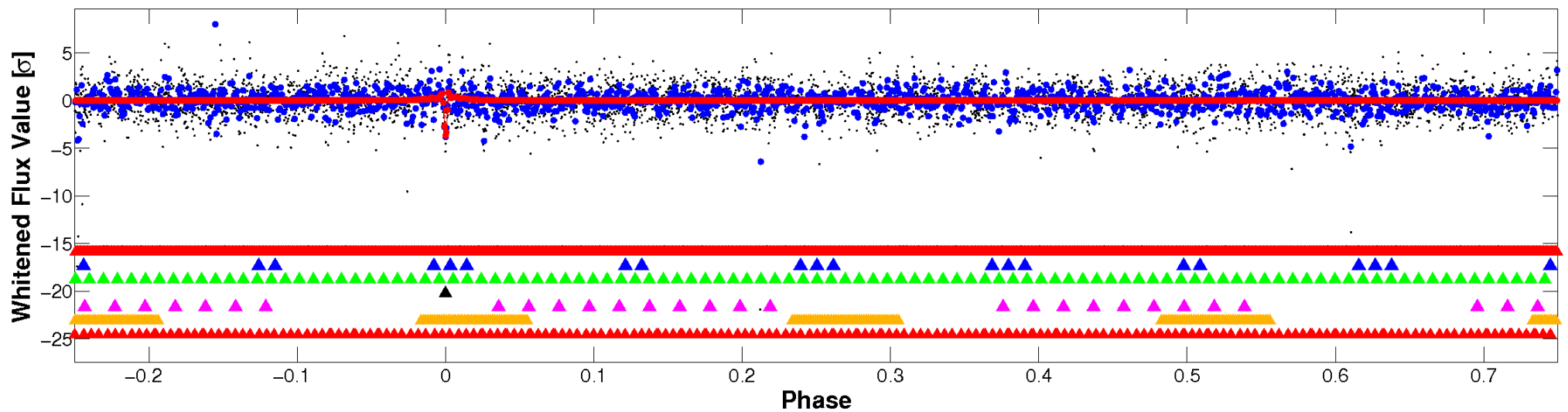


Non-Whitened Vs. Whitened Light Curve

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

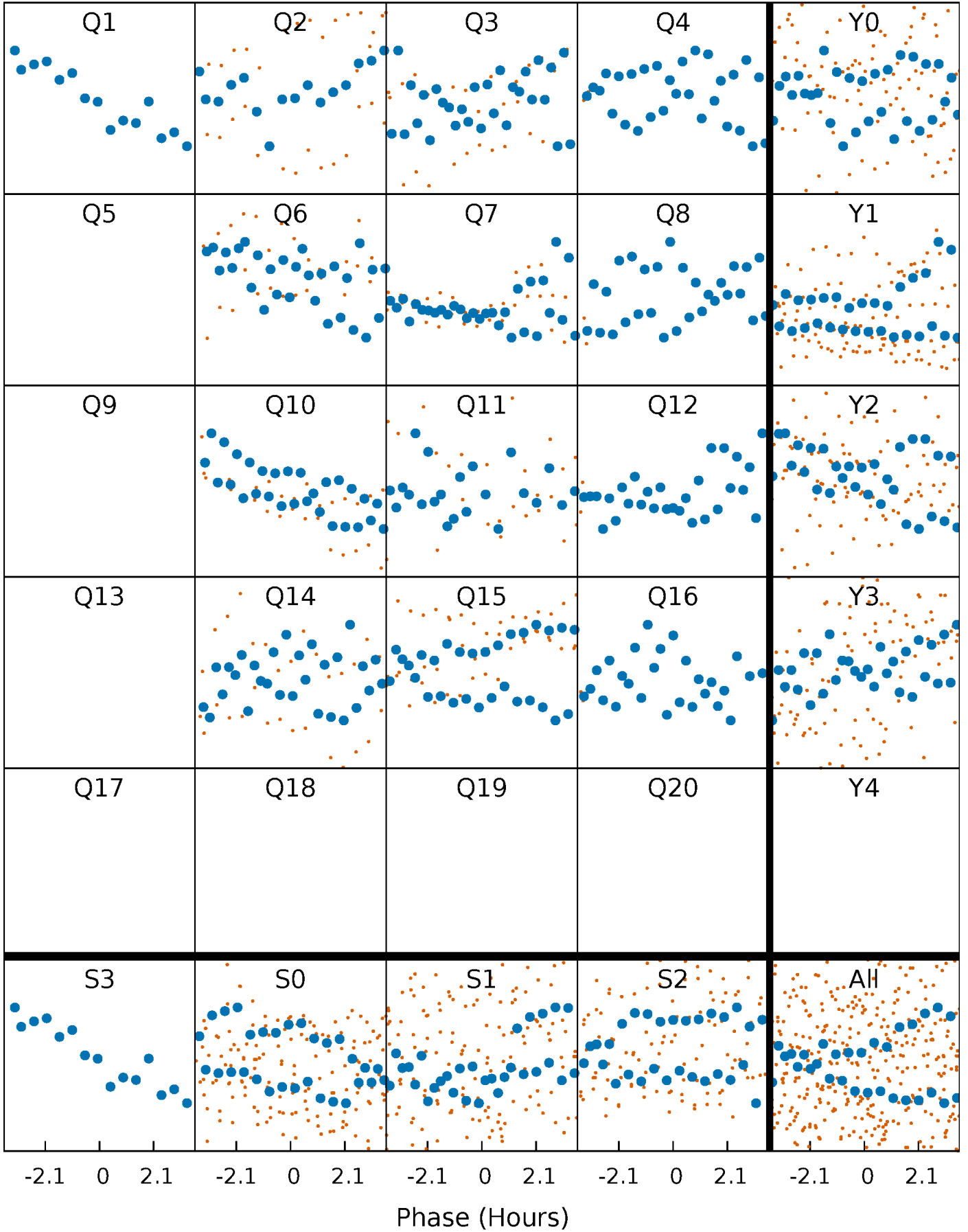


Planet 4 : Phased Whitened Flux Time Series (Fit Epoch/Period)



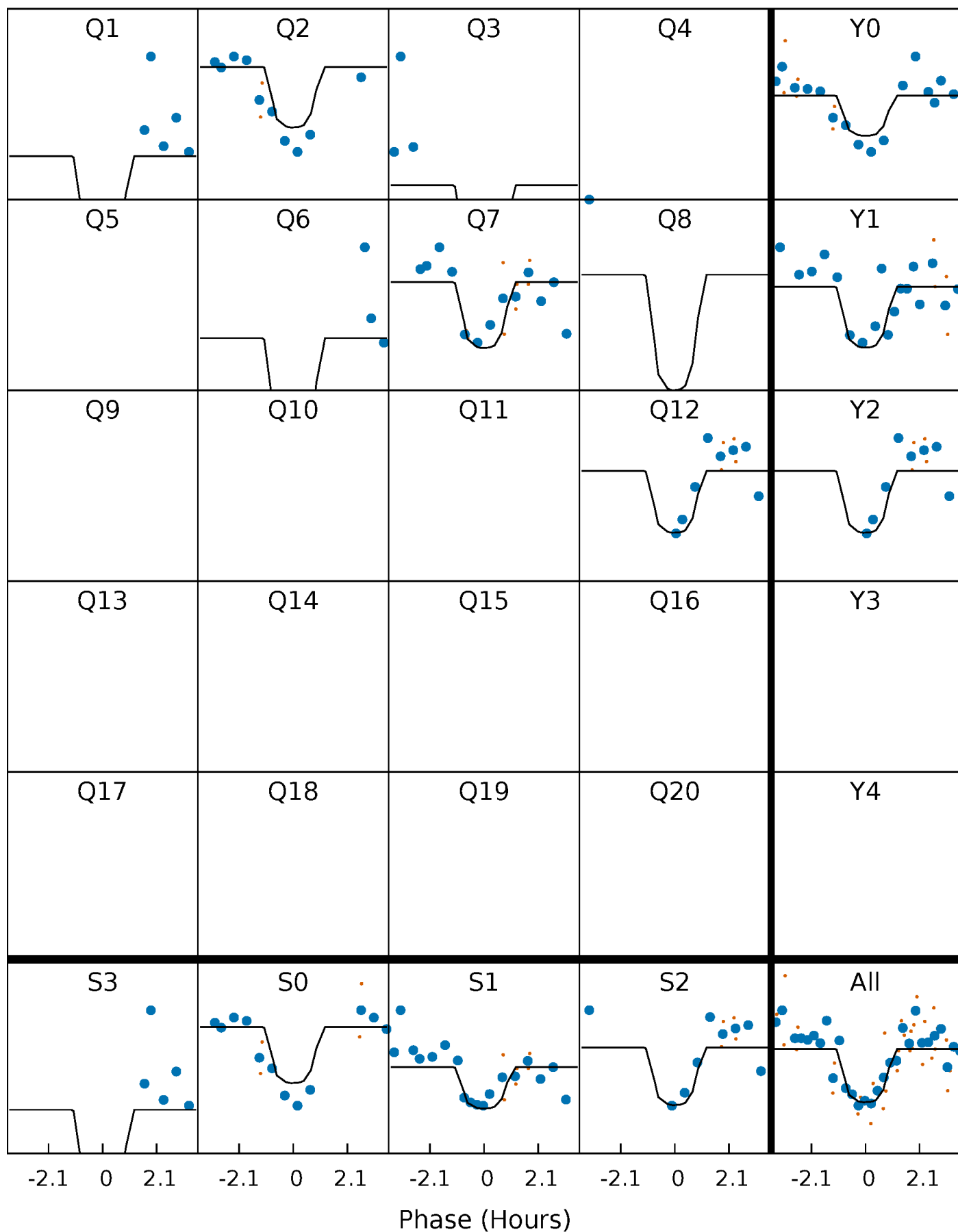
PDC Quarter-Phased Transit Curves

TCE 005938266-04 P= 30.565476 Days $T_0=153.049310$ (BKJD)



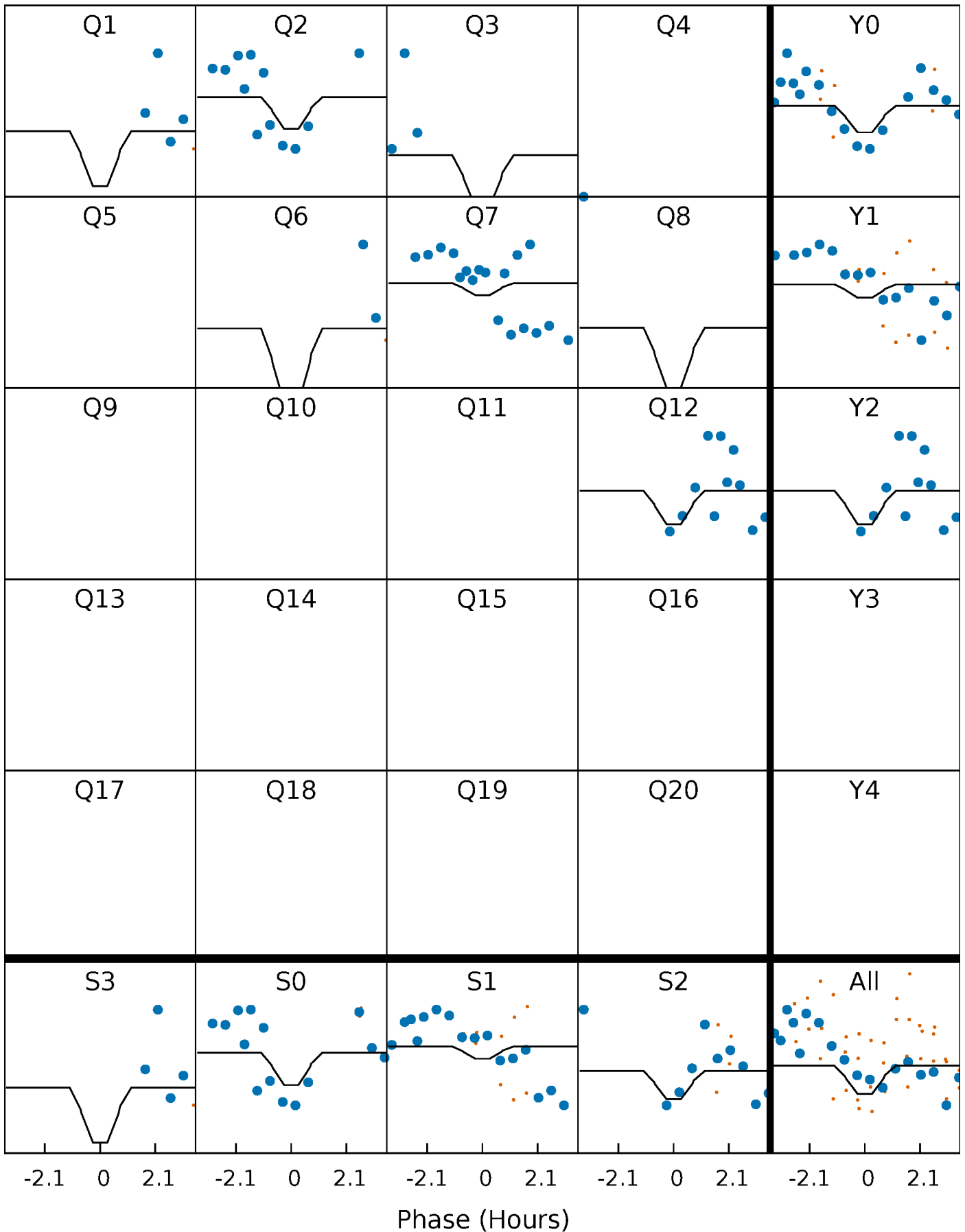
DV Quarter-Phased Transit Curves

TCE 005938266-04 P= 30.565476 Days $T_0=153.049310$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

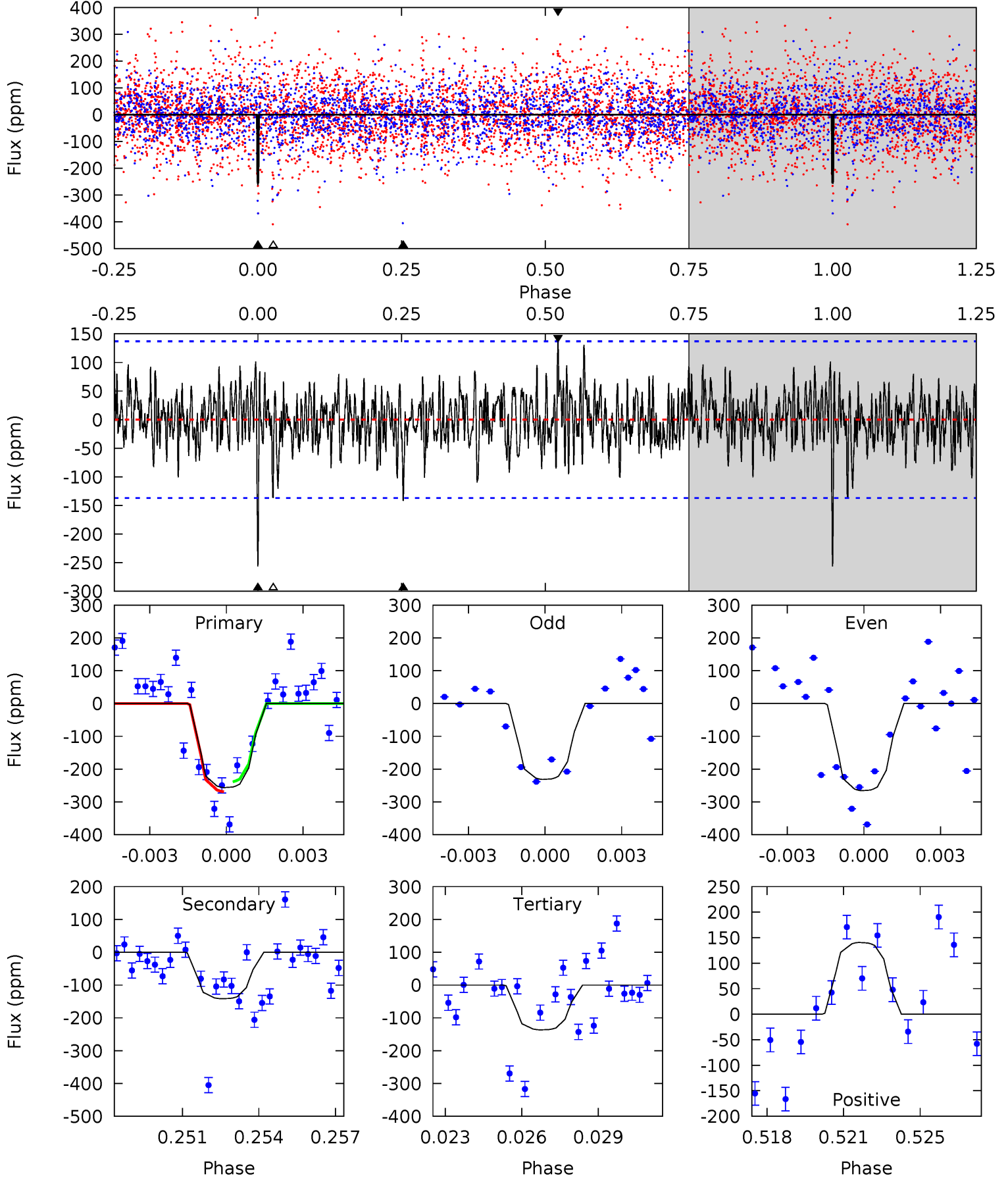
TCE 005938266-04 P= 30.565840 Days $T_0=153.045594$ (BKJD)



DV Model-Shift Uniqueness Test

005938266-04, P = 30.565476 Days, E = 122.483834 Days

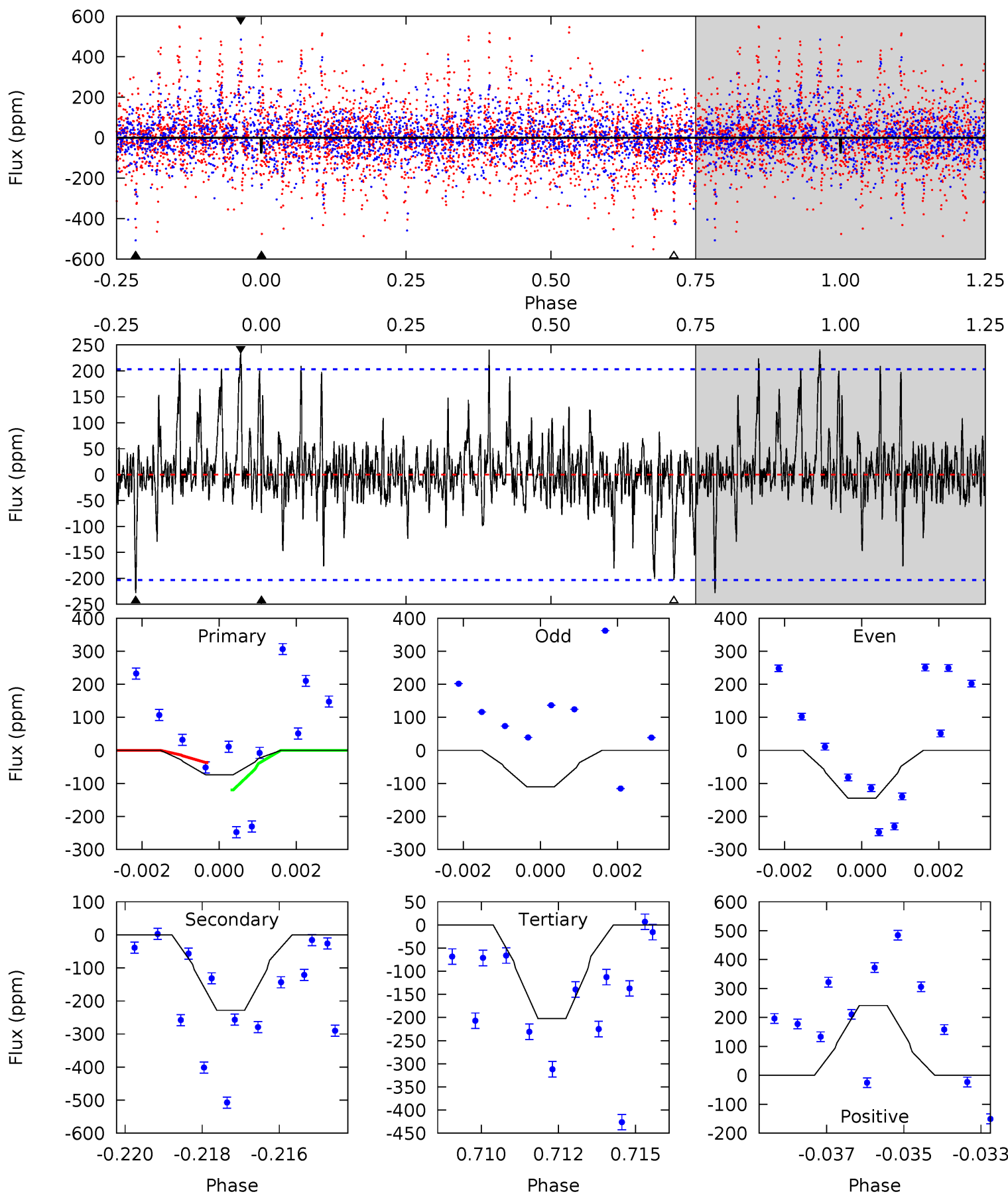
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
9.81	5.42	5.23	5.38	5.24	2.95	1.44	4.58	4.43	0.19	0.04	0.60	1.10	0.35	0.58



Alt Model-Shift Uniqueness Test

005938266-04, P = 30.565840 Days, E = 122.479754 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
1.93	5.98	5.30	6.33	5.32	3.08	1.40	-3.37	-4.40	0.68	-0.34	0.37	1.64	0.51	1.12



Stellar Parameters For KIC 005938266

	$T_{\text{eff}} (K)$	$\log(g)$	$[\text{Fe}/\text{H}]$	$R (R_{\odot})$	$M (M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6760^{+152}_{-202}	$3.635^{+0.288}_{-0.072}$	$-0.160^{+0.300}_{-0.250}$	$3.258^{+0.395}_{-1.105}$	$1.670^{+0.239}_{-0.292}$	$0.068^{+0.130}_{-0.016}$
	+2%/-3%	+8%/-2%	+188%/-156%	+12%/-34%	+14%/-17%	+191%/-23%
Source	PHO1	FLK73	KIC0	DSEP		

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

Secondary Eclipse Parameters for KIC 005938266-04 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-142 ± 26	$6.72^{+5.51}_{-4.46}$	1545^{+83}_{-129}	5225^{+3882}_{-1106}	90^{+640}_{-64}
Alt.	-228 ± 38	$5.65^{+5.33}_{-3.78}$	1543^{+81}_{-132}	6327^{+7356}_{-1631}	207^{+1645}_{-153}

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

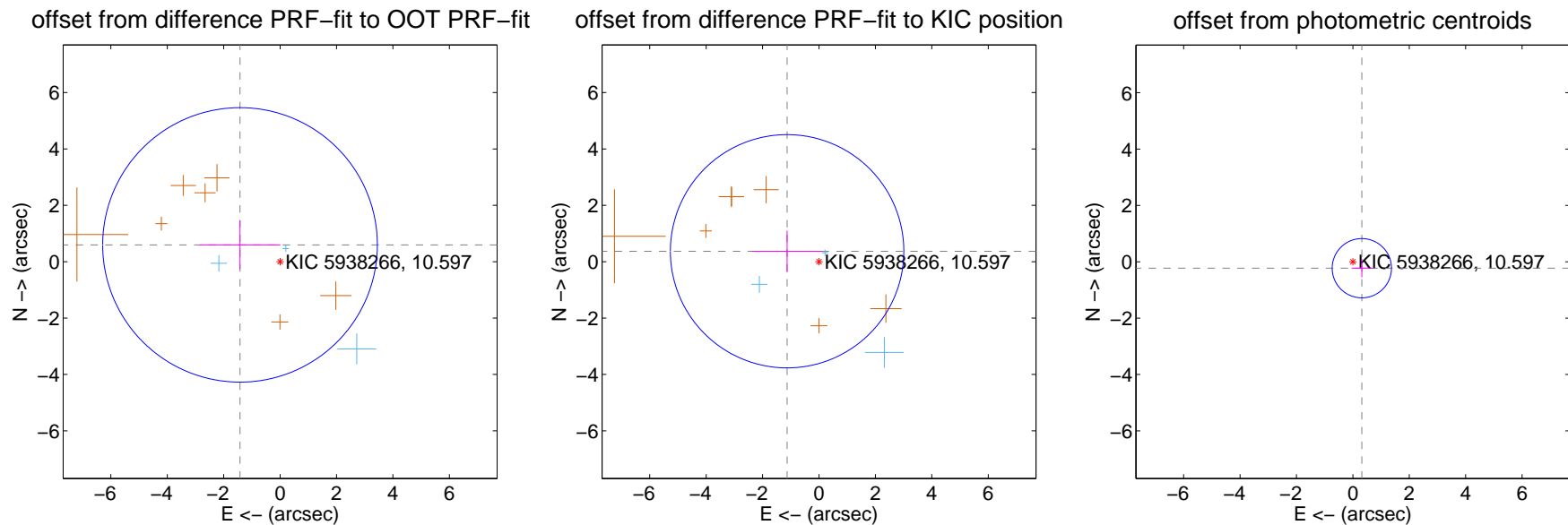
DV Centroid Data

Supplemental centroid analysis for 005938266-04. **Kepler magnitude: 10.60.** Transit SNR 11.46

There are 3 quarters with good PRF difference image offsets

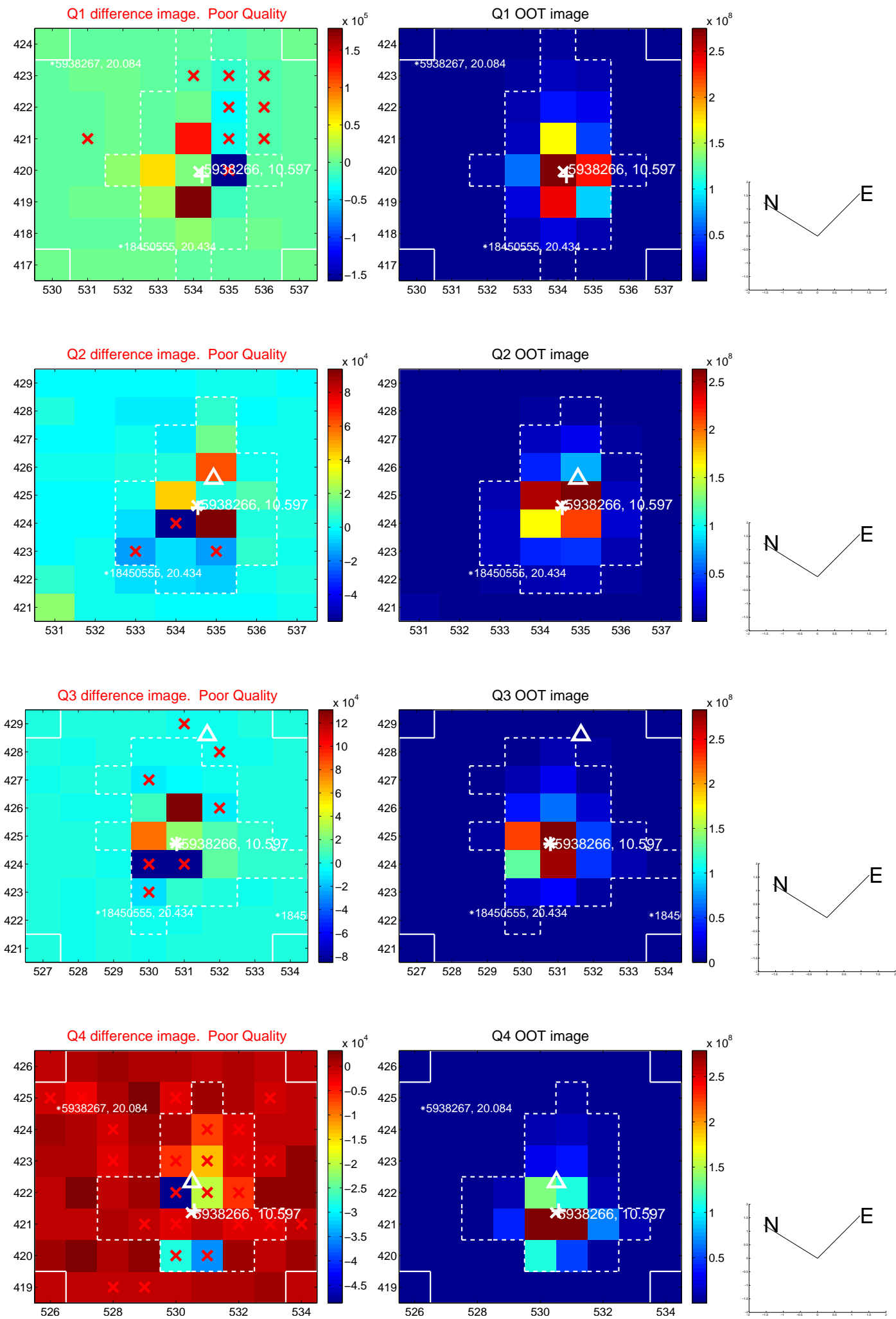
The direct PRF centroid is offset from the target star catalog position by about 0.13 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	1.541 ± 1.623	0.95	1.421 ± 1.431	0.596 ± 0.867
PRF-fit source offset from KIC position	1.189 ± 1.379	0.86	1.130 ± 1.246	0.370 ± 0.735
photometric centroid source offset	0.39 ± 0.35	1.12	-0.32 ± 0.36	-0.23 ± 0.32

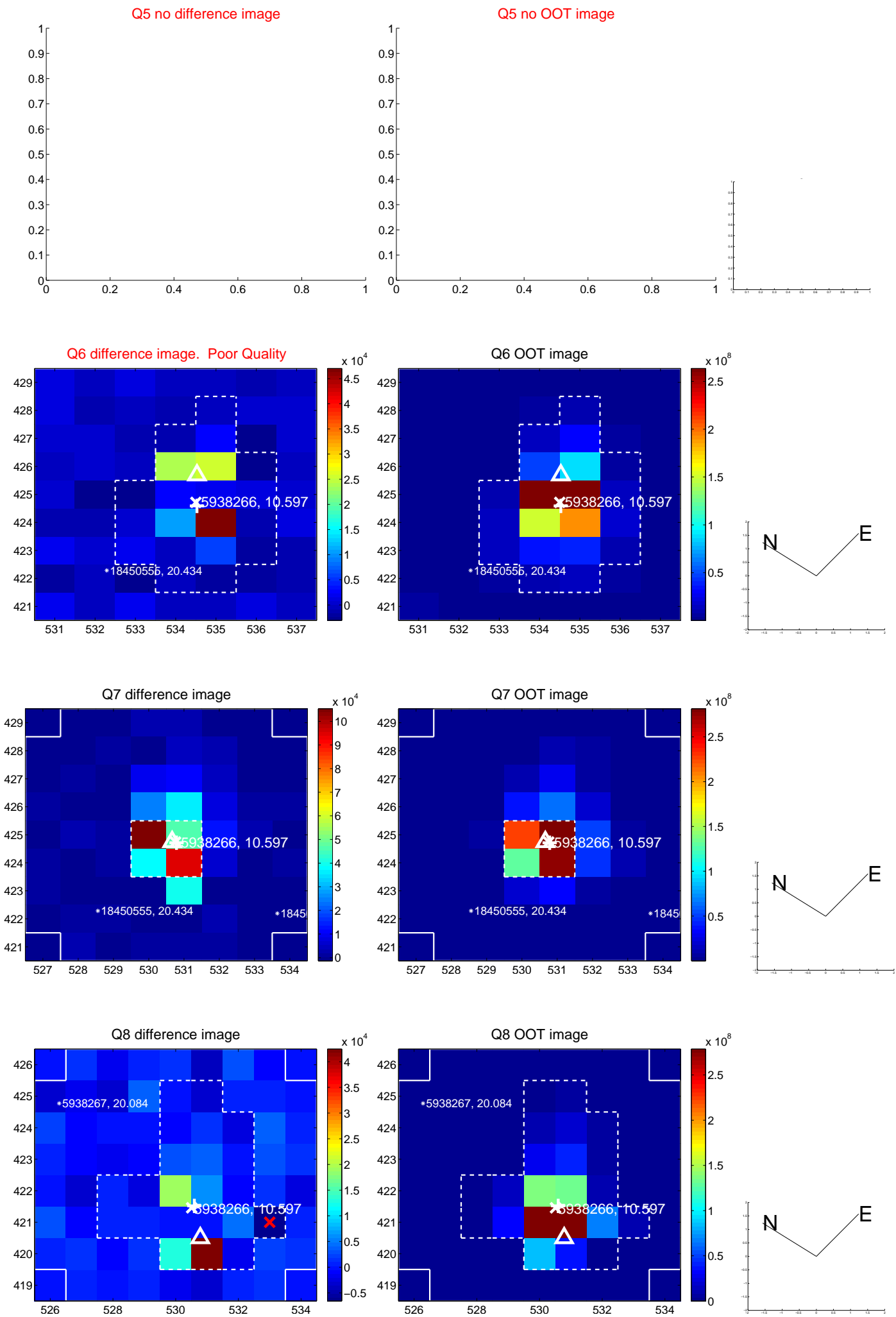


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets;** magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

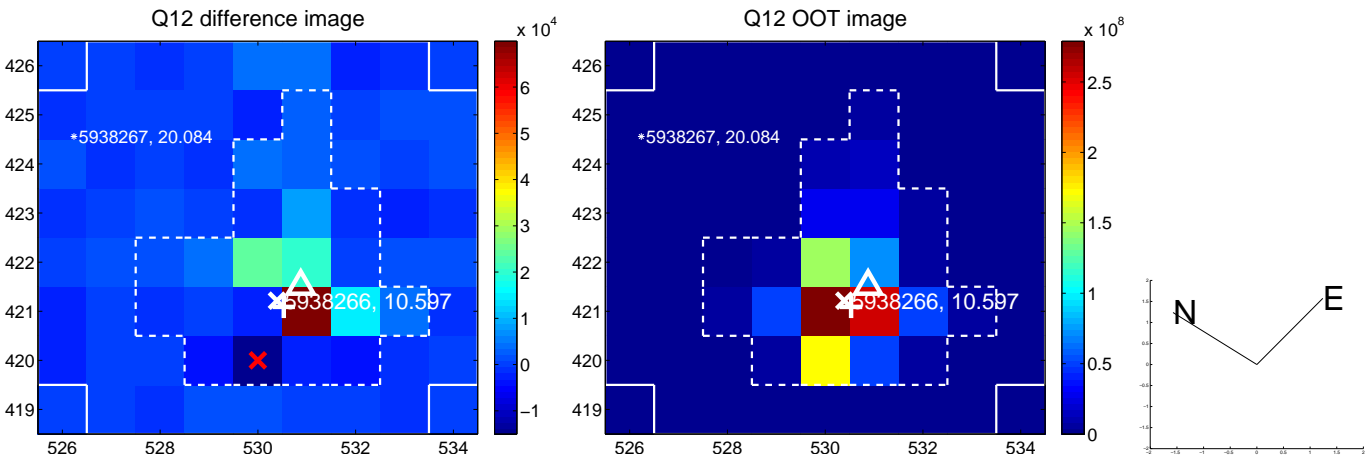
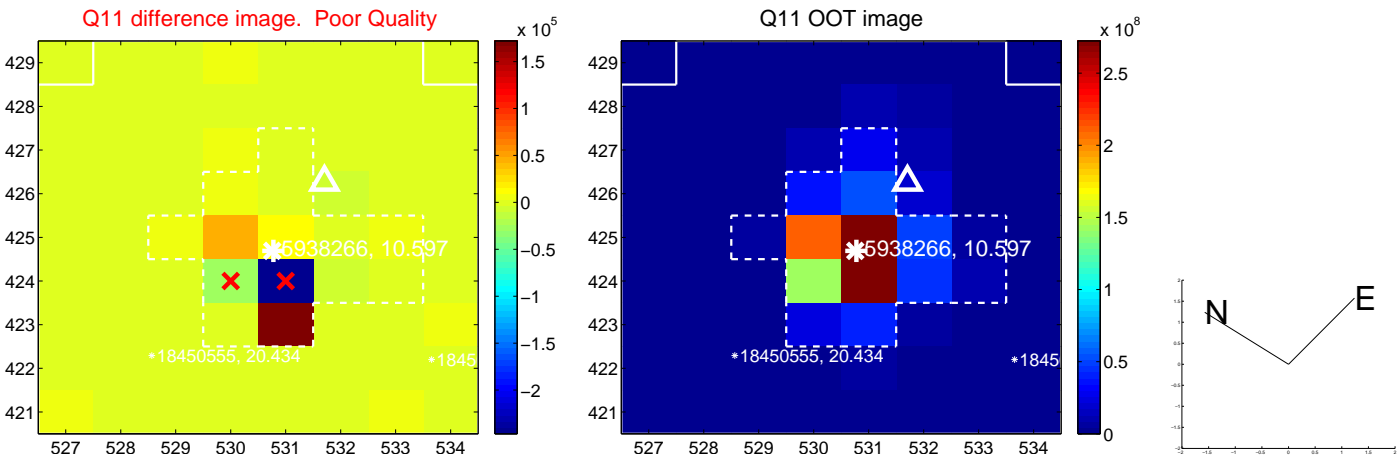
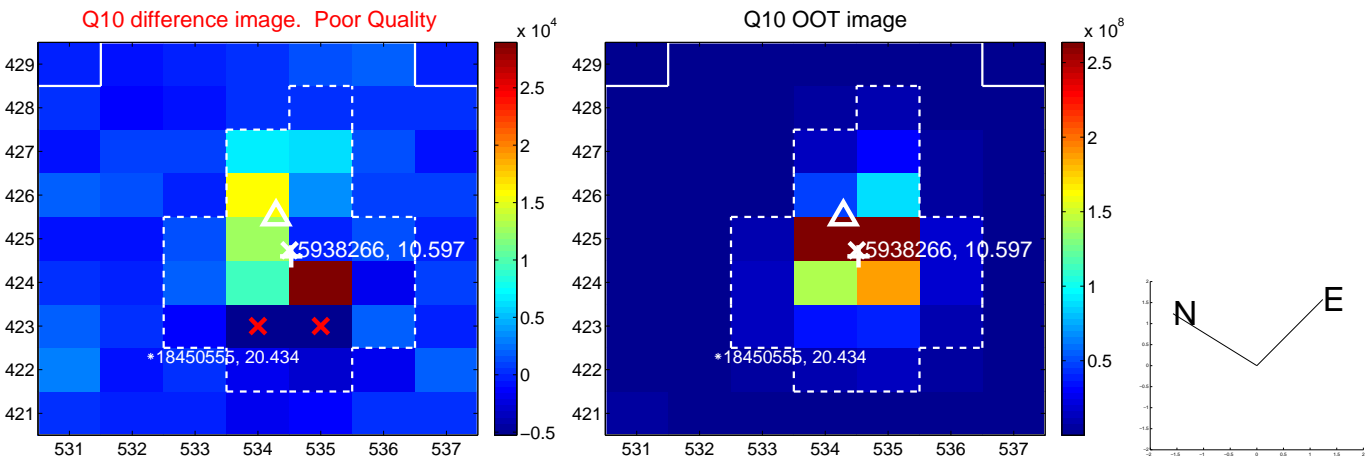
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



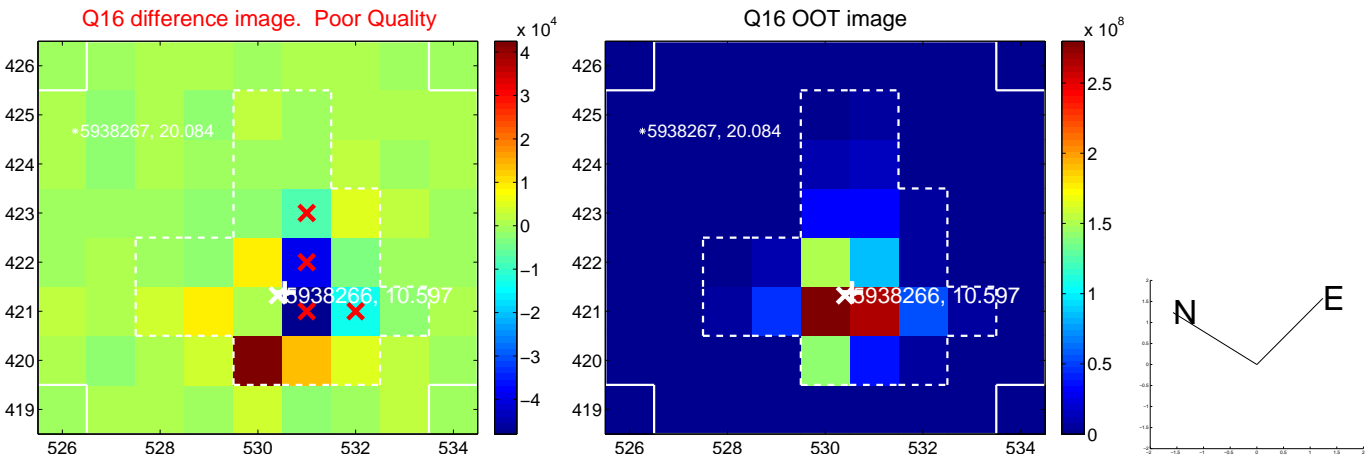
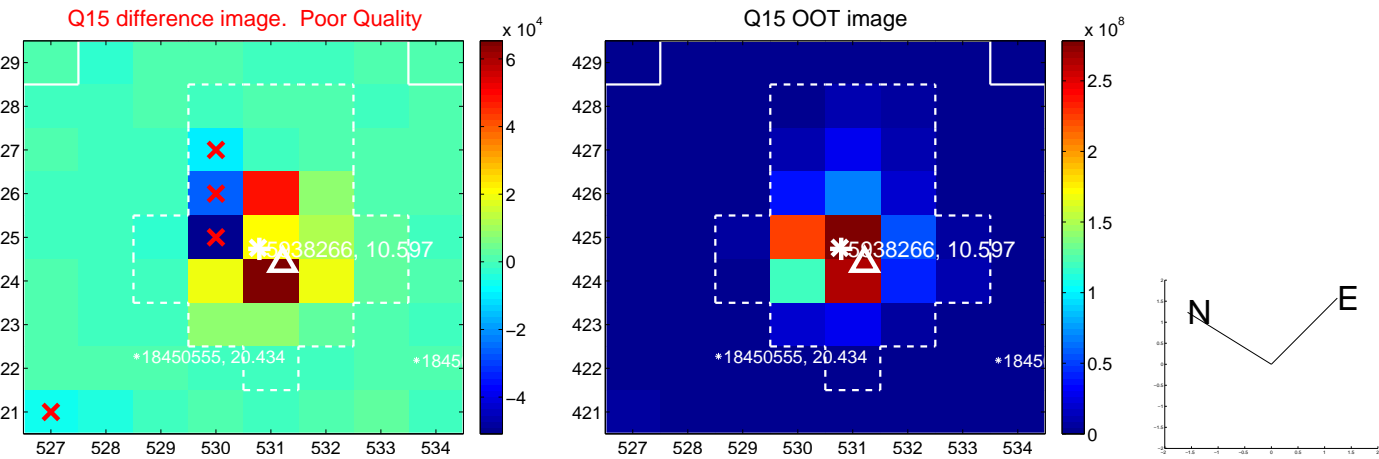
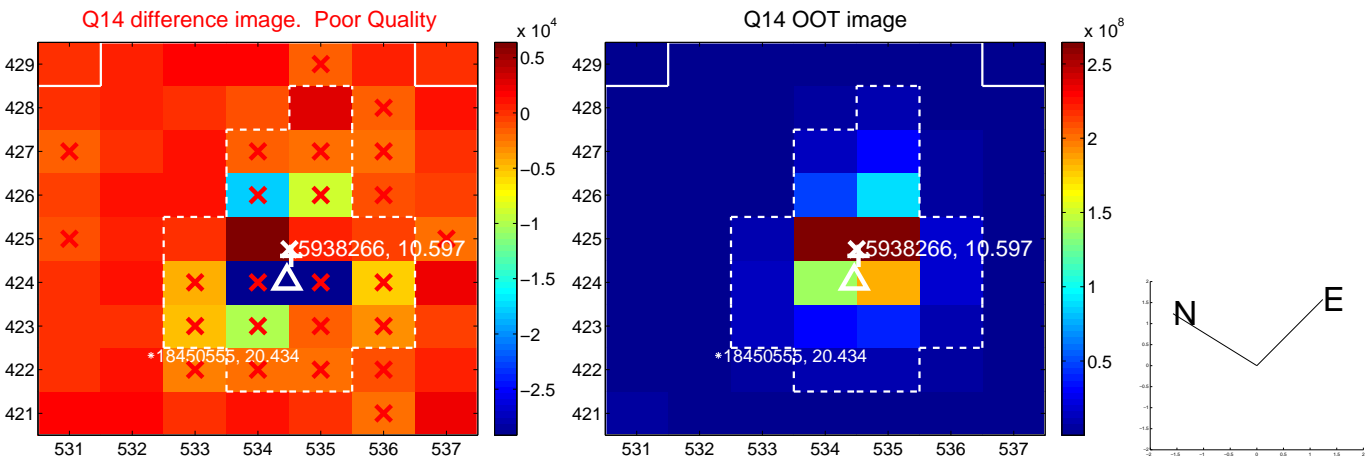
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



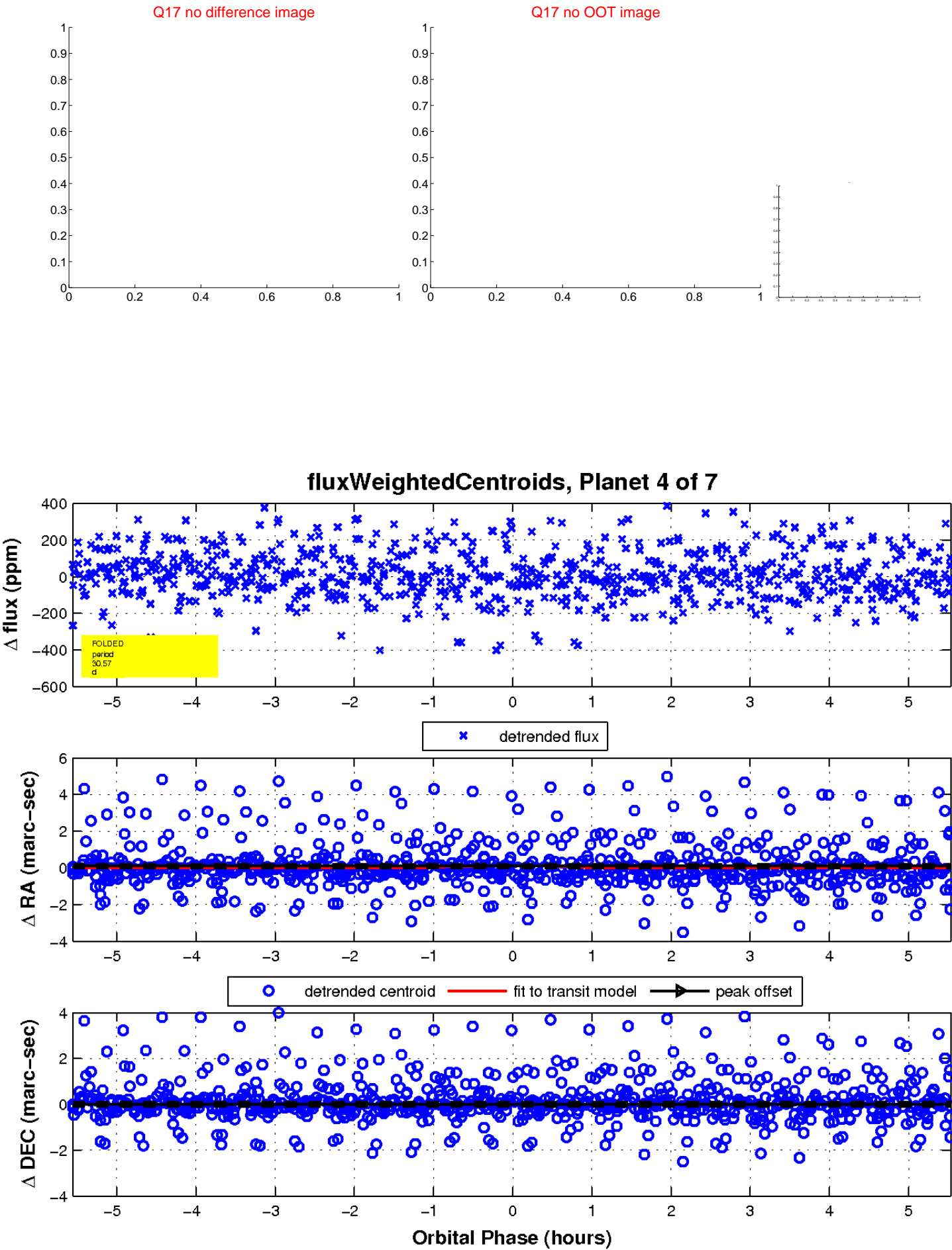
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

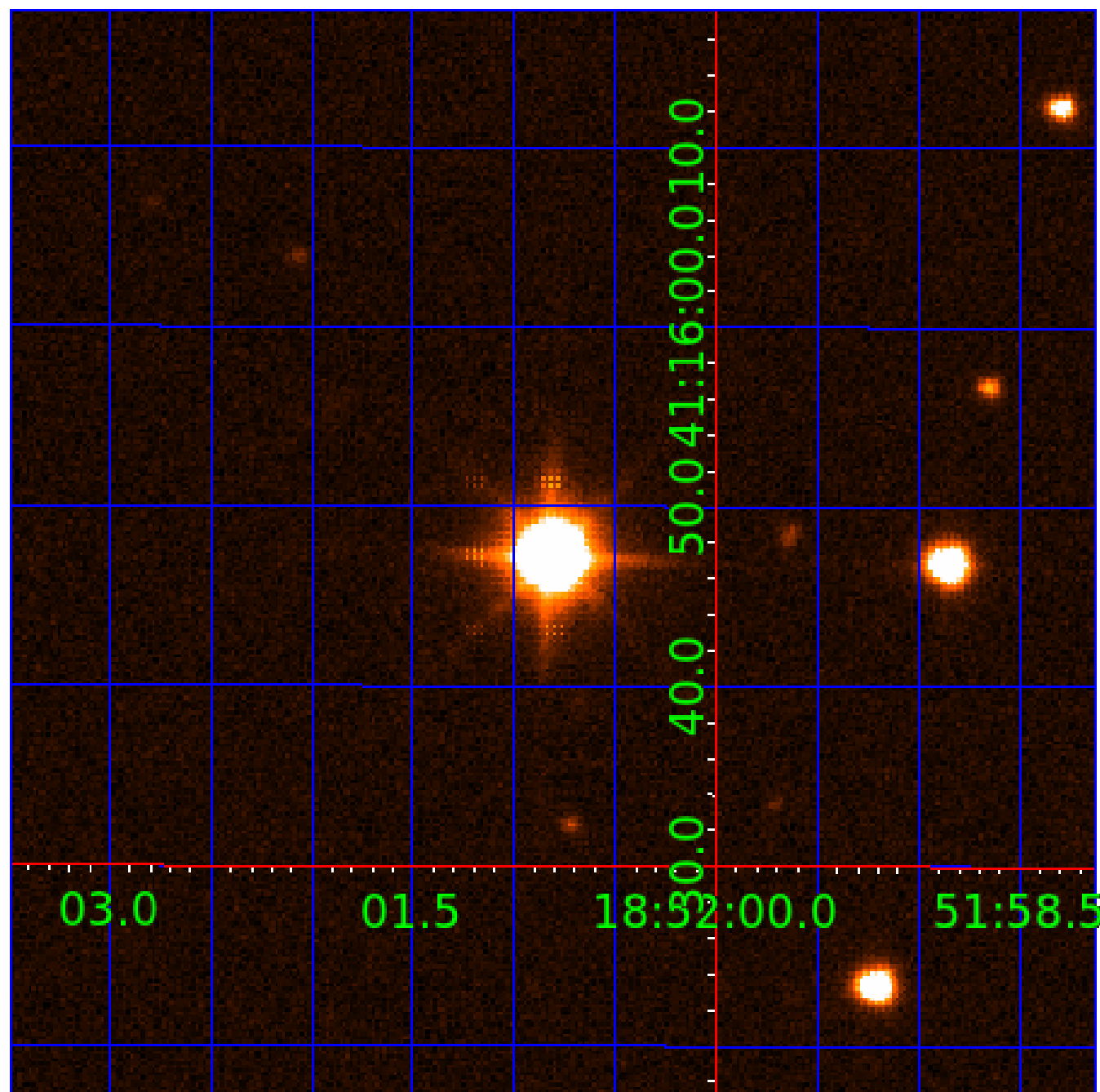


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 005938266

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})
005938266-01	OBS	No	1.089117	131.932395	13.1	7.610	10.6	5.3	3.26	6760	1.26	32851.02
005938266-02	OBS	No	72.635311	190.932171	169.5	12.598	15.4	8.3	3.26	6760	4.55	121.47
005938266-03	OBS	No	13.552544	131.876363	48.0	11.219	11.1	5.1	3.26	6760	2.55	1139.26
005938266-04	OBS	No	30.565476	153.049310	263.4	1.852	10.9	11.5	3.26	6760	5.78	385.19
005938266-05	OBS	No	50.735214	159.740808	238.3	2.077	10.5	10.8	3.26	6760	5.92	195.99
005938266-06	OBS	No	7.653263	137.237203	123.5	1.935	10.1	10.9	3.26	6760	4.25	2440.73
005938266-07	OBS	No	6.737365	135.089343	147.4	1.284	8.3	10.2	3.26	6760	4.63	2892.87

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
005938266-01	OBS	FP	0.00	1	0	0	0	SWEET_NTL—LPP_DV—MOD_NONUNIQ_ALT—CENT_SATURATED
005938266-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—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—CENT_SATURATED
005938266-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_TRACKER—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—CENT_SATURATED
005938266-04	OBS	FP	0.00	1	0	1	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT— CENT_SATURATED—HALO_GHOST
005938266-05	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_NONUNIQ_ALT—MOD_POS_ALT—CENT_SATURATED
005938266-06	OBS	FP	0.00	1	0	1	0	INDIV_TRANS_RUBBLE_ZUMA—TRANS_GAPPED—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_SATURATED—HALO_GHOST
005938266-07	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_ZUMA—TRANS_GAPPED—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_SATURATED

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

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

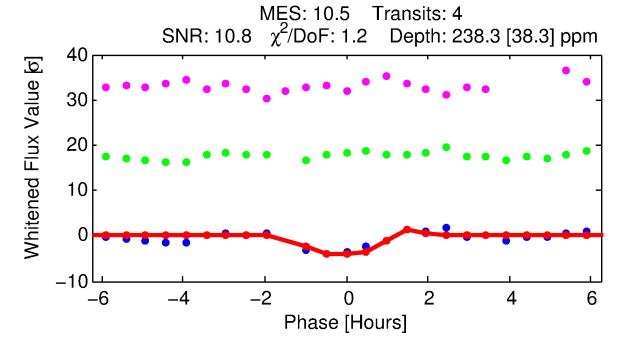
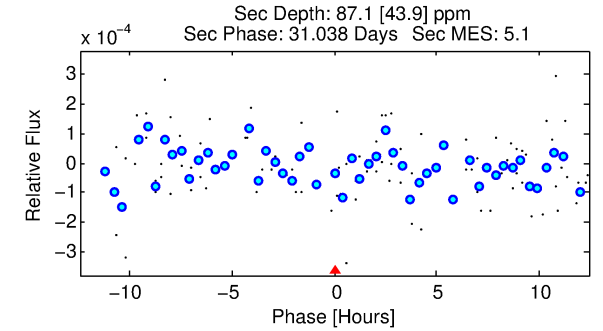
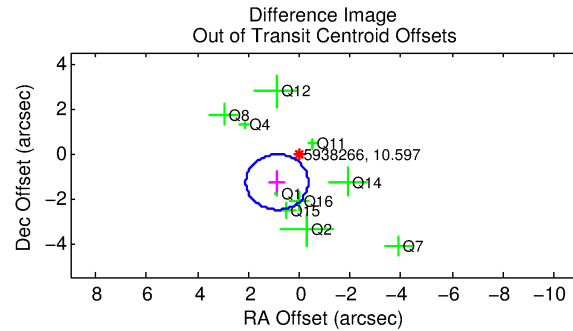
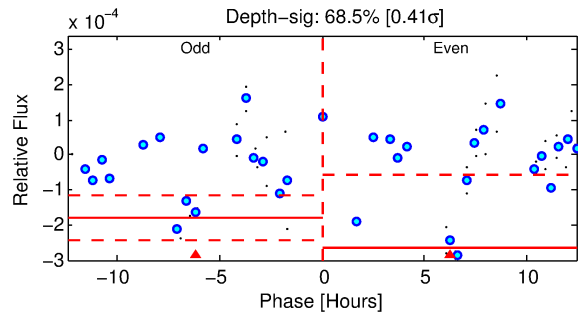
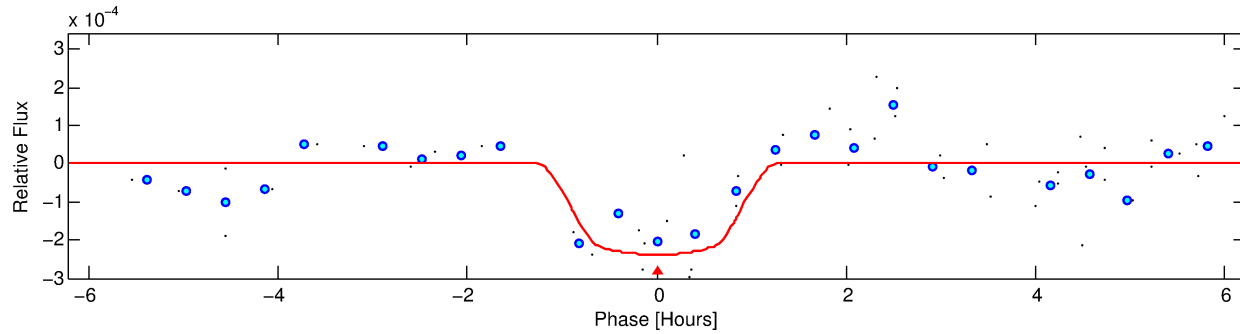
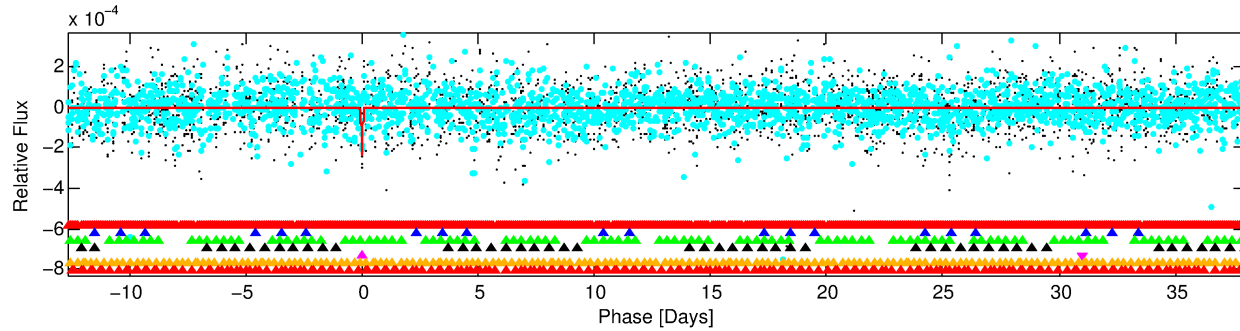
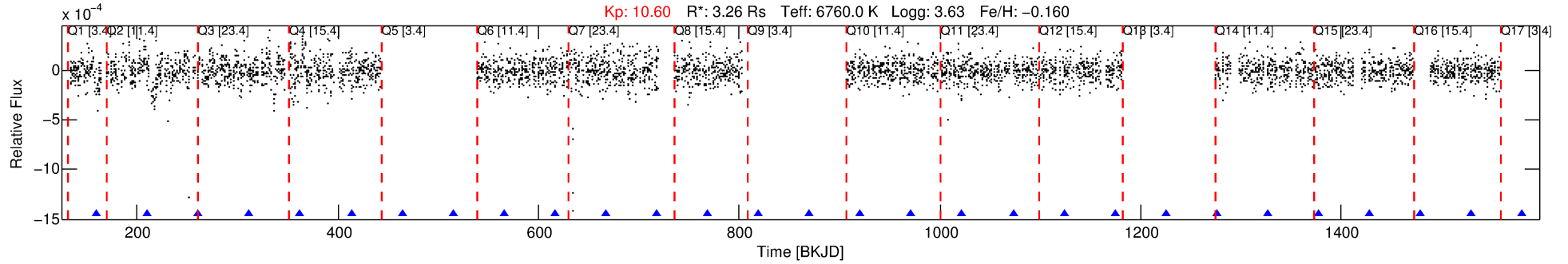
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 005938266-05

No Significant Match Found

DV One-Page Summary

KIC: 5938266 Candidate: 5 of 7 Period: 50.735 d



DV Fit Results:

Period = 50.73521 [0.00070] d
Epoch = 159.7408 [0.0141] BKJD
Rp/R* = 0.0166 [0.0180]
a/R* = 84.40 [551.50]
b = 0.91 [1.22]
Seff = 195.99 [100.10]
Teq = 954 [122] K
Rp = 5.92 [6.71] Re
a = 0.3183 [0.1007] AU
Ag = 138.77 [315.92] [0.44 σ]
Teffp = 5063 [2816] K [1.46 σ]

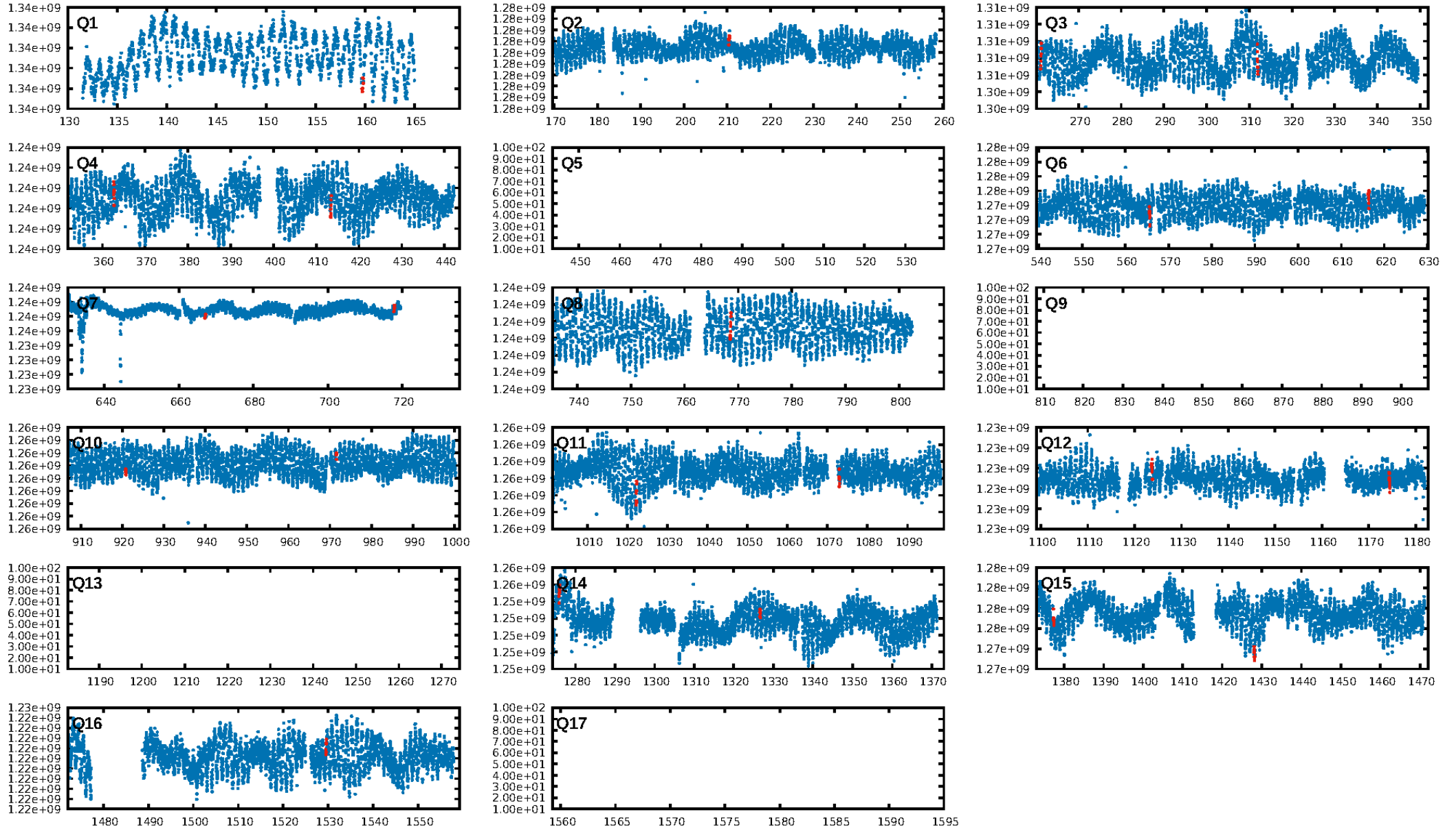
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [173.92 σ]
LongPeriod-sig: 100.0% [41.17 σ]
ModelChiSquare2-sig: 9.5%
ModelChiSquareGof-sig: 97.2%
Bootstrap-pfa: 7.46e-10
RollingBand-fgt: 1.00 [3/3]
GhostDiagnostic-chr: -1.034
Centroid-sig: 4.3%
Centroid-so: 0.392 arcsec [0.95 σ]
OotOffset-rm: 1.549 arcsec [3.79 σ]
KicOffset-rm: 0.705 arcsec [1.07 σ]
OotOffset-st: 2/3/4/1 [10]
KicOffset-st: 2/3/4/1 [10]
DiffImageQuality-fgm: 0.40 [4/10]
DiffImageOverlap-fno: 0.31 [4/13]

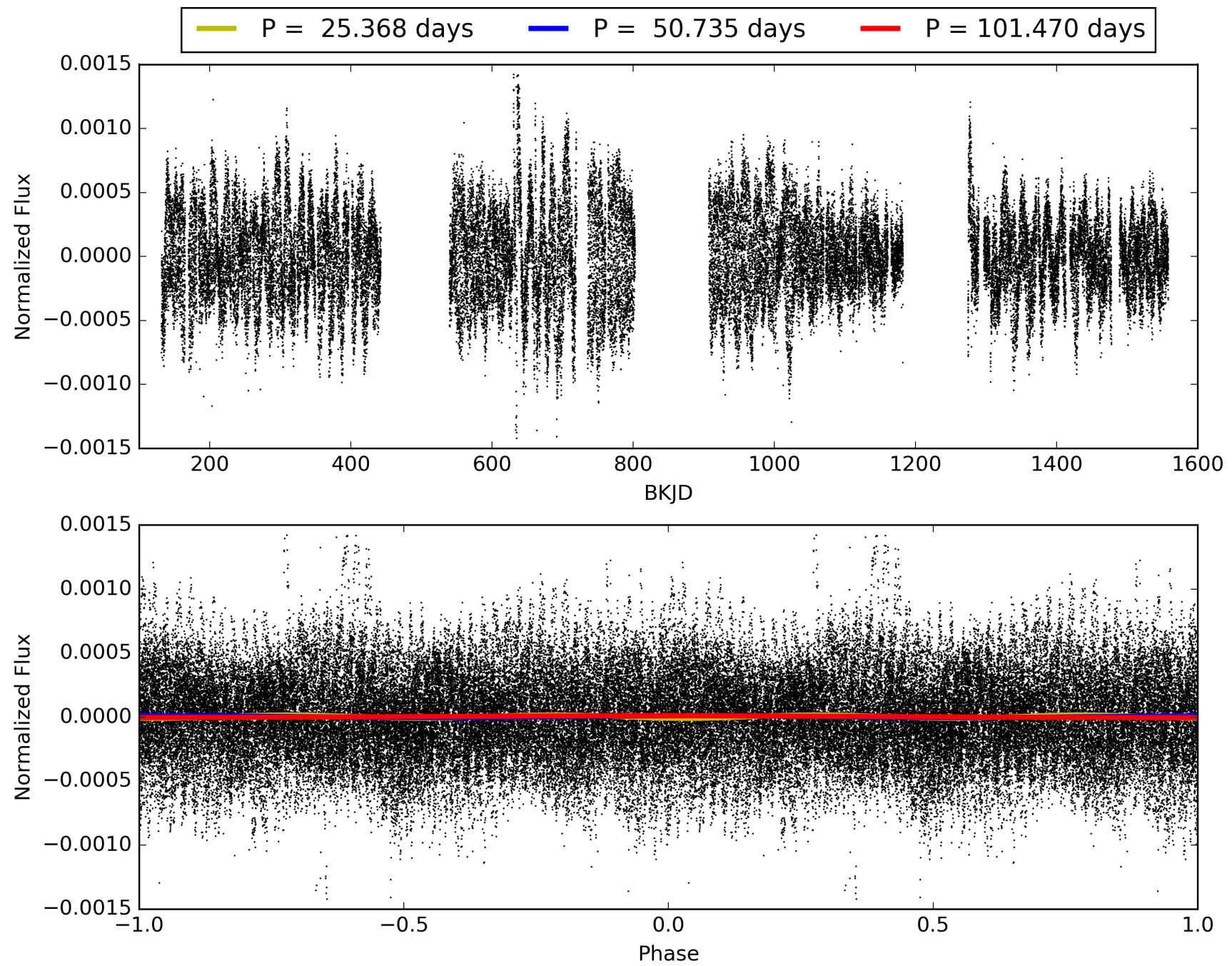
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 02-Feb-2016 07:27:47 Z

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

TCE 005938266-05, PDC Light Curves

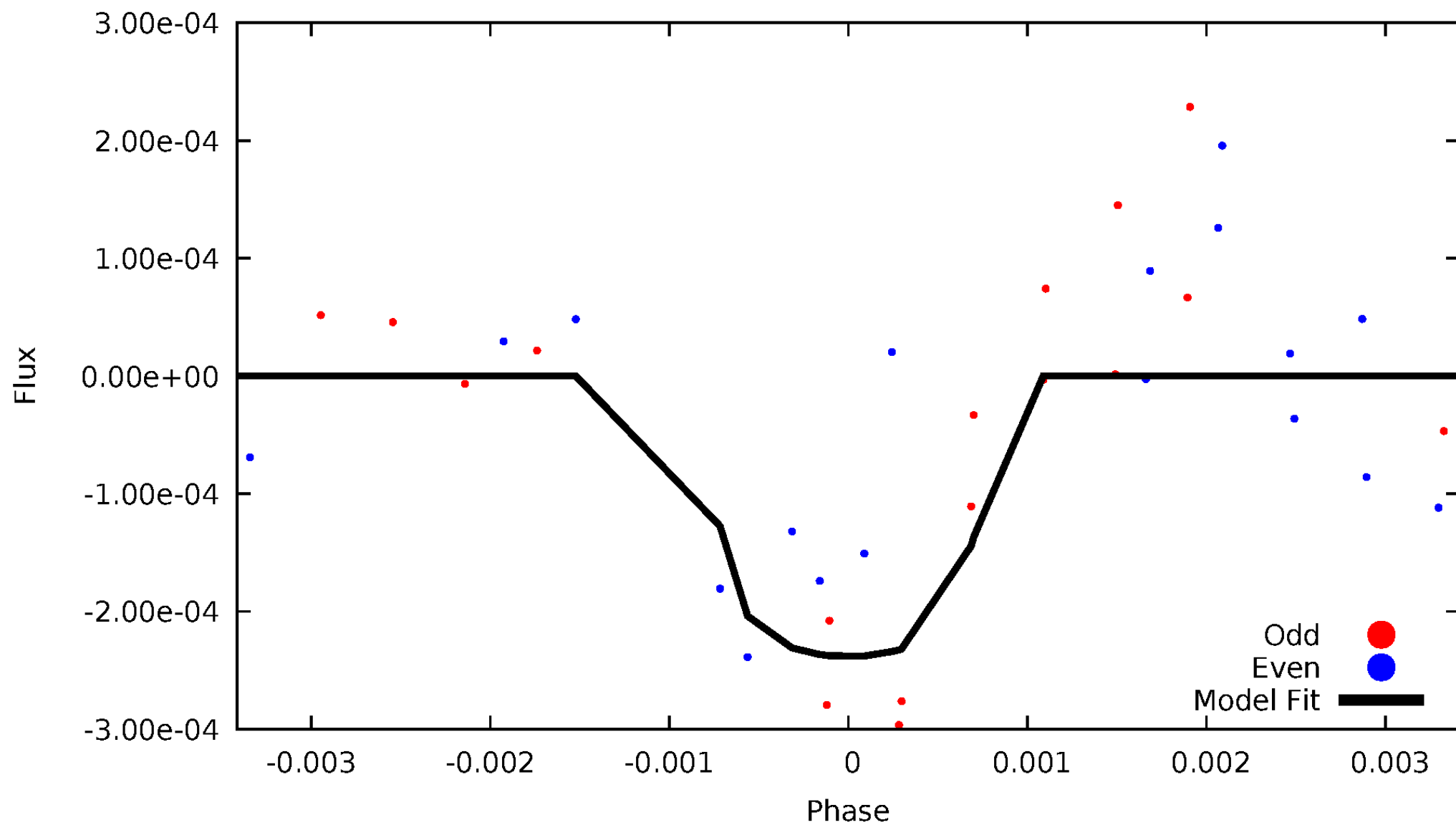


TCE 005938266-05



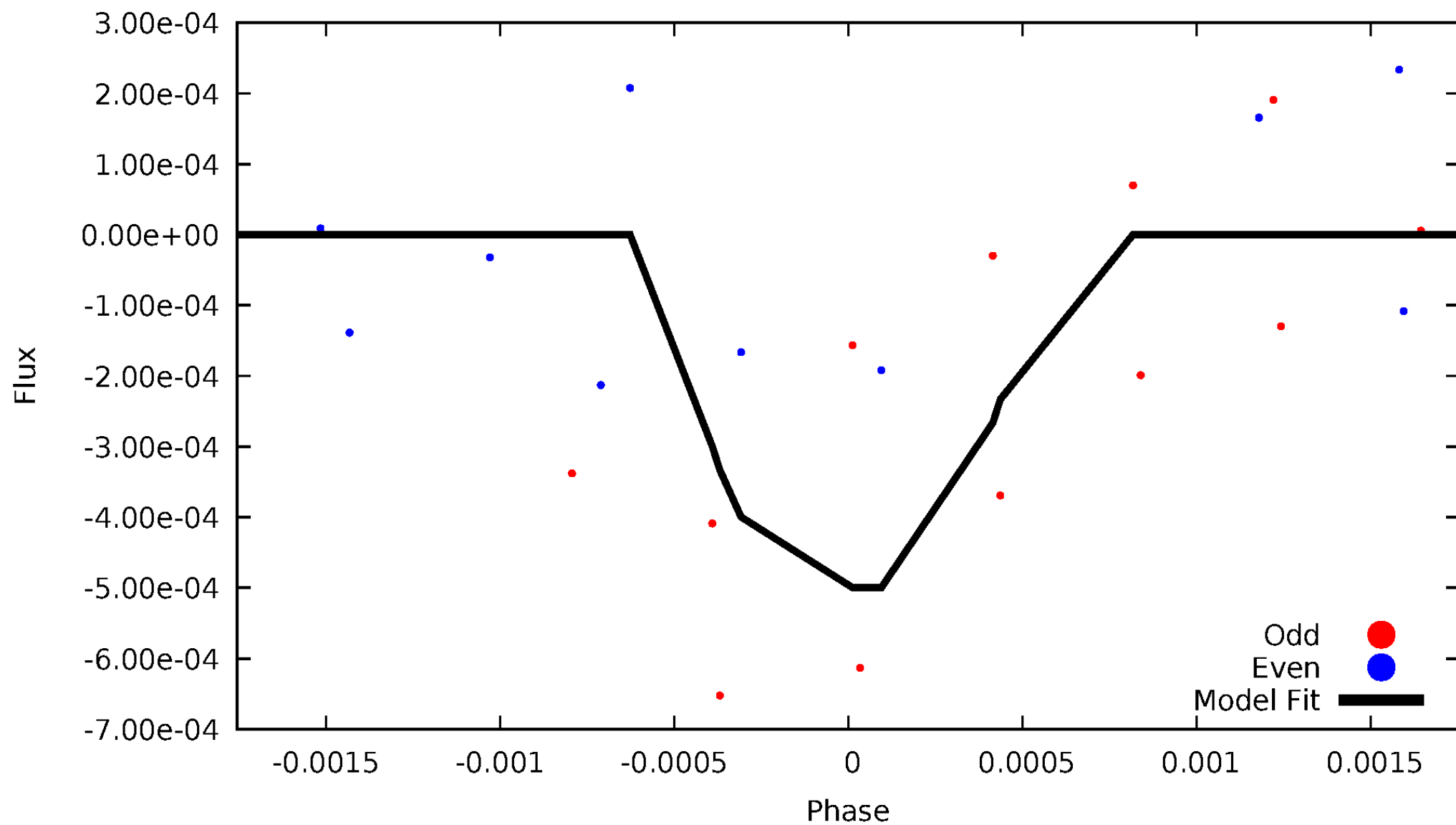
DV Odd/Even

TCE 005938266-05



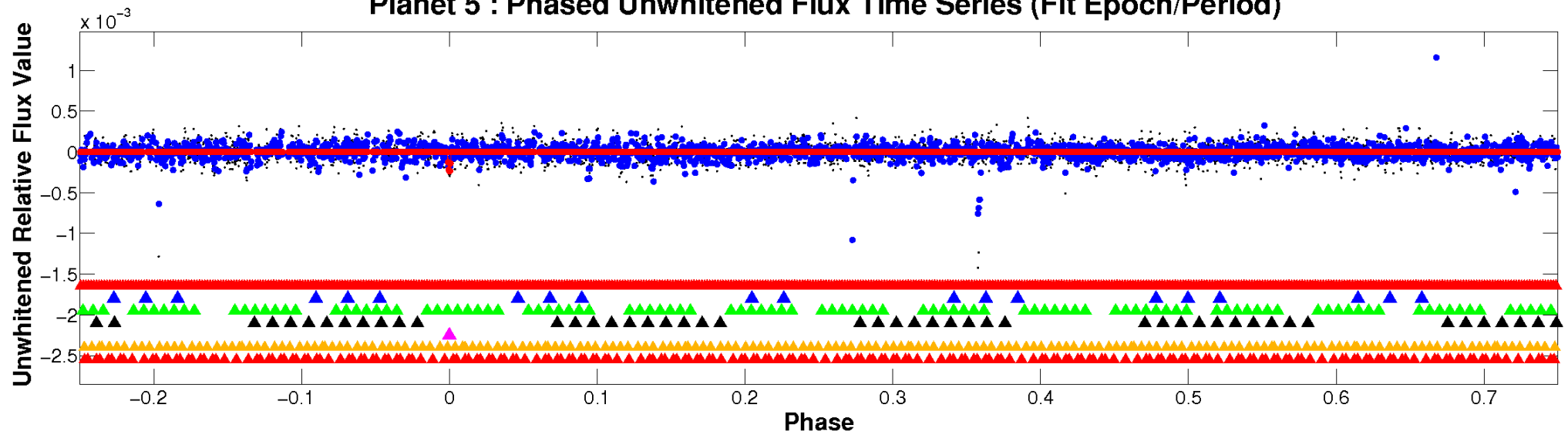
ALT Odd/Even

TCE 005938266-05

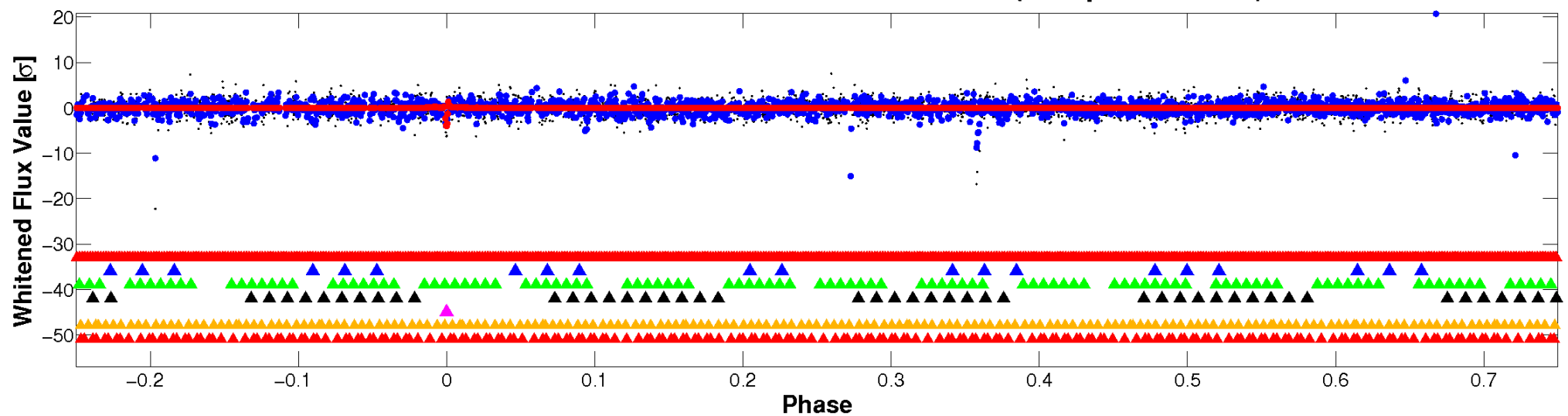


Non-Whitened Vs. Whitened Light Curve

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

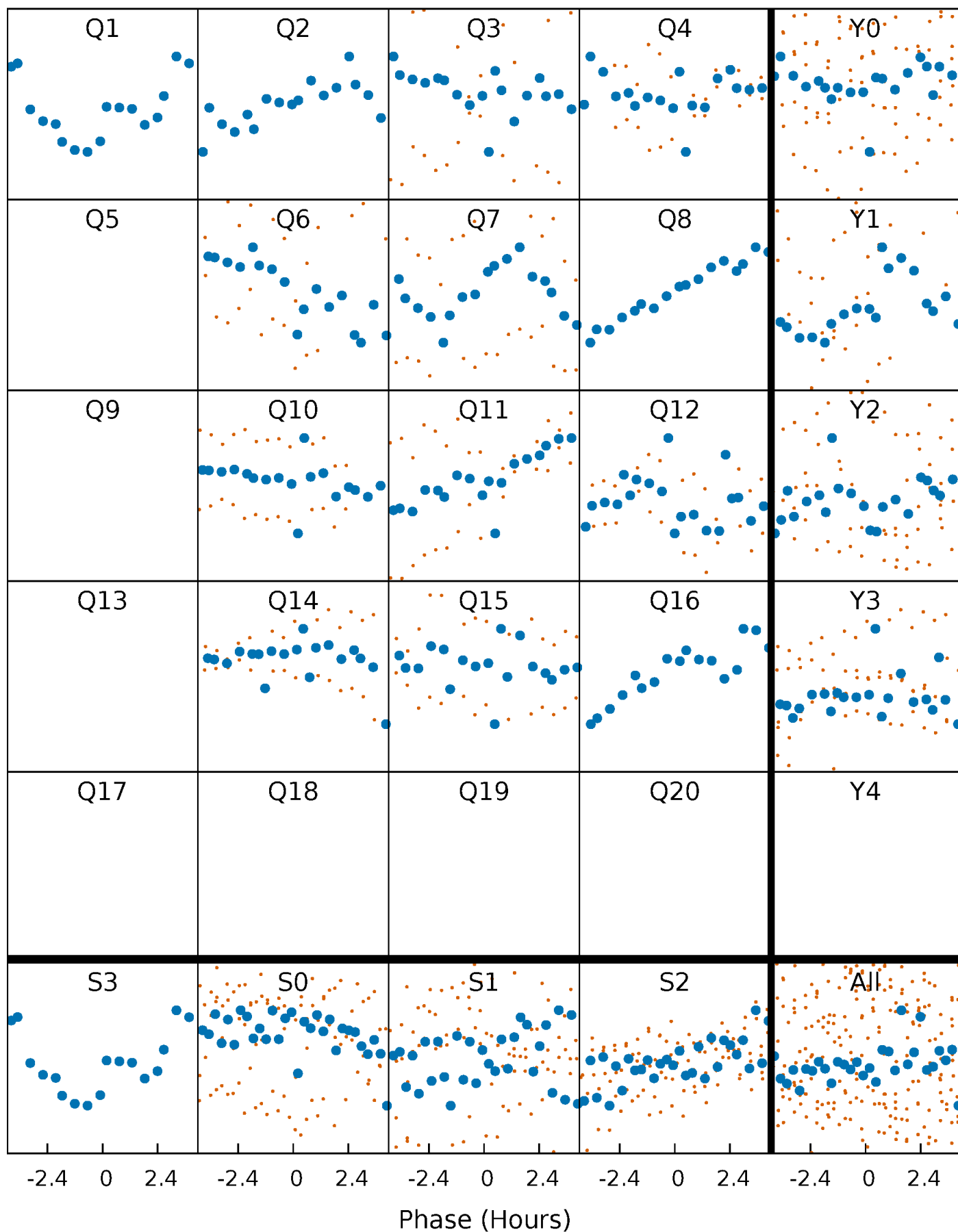


Planet 5 : Phased Whitened Flux Time Series (Fit Epoch/Period)



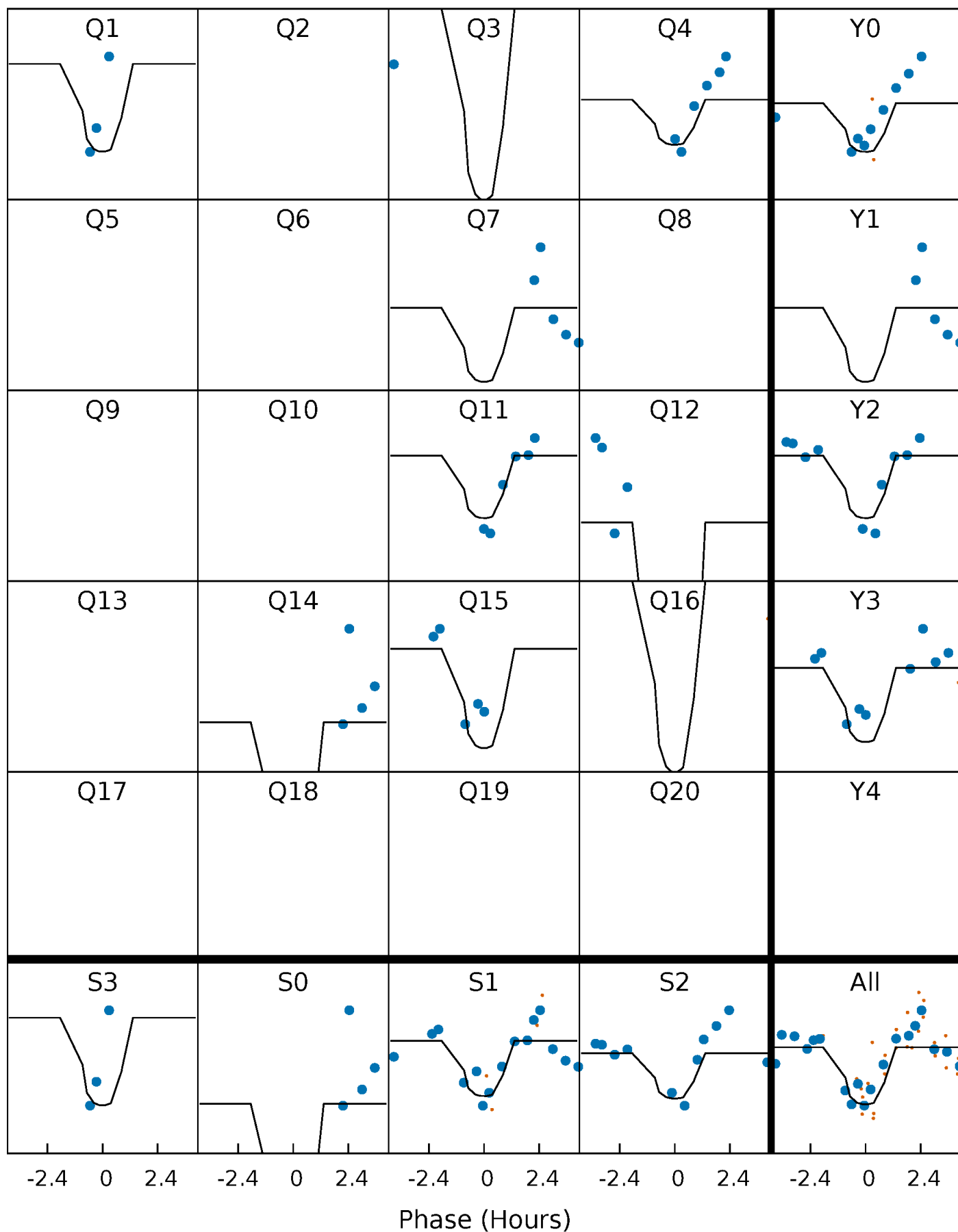
PDC Quarter-Phased Transit Curves

TCE 005938266-05 $P = 50.735214$ Days $T_0 = 159.740808$ (BKJD)



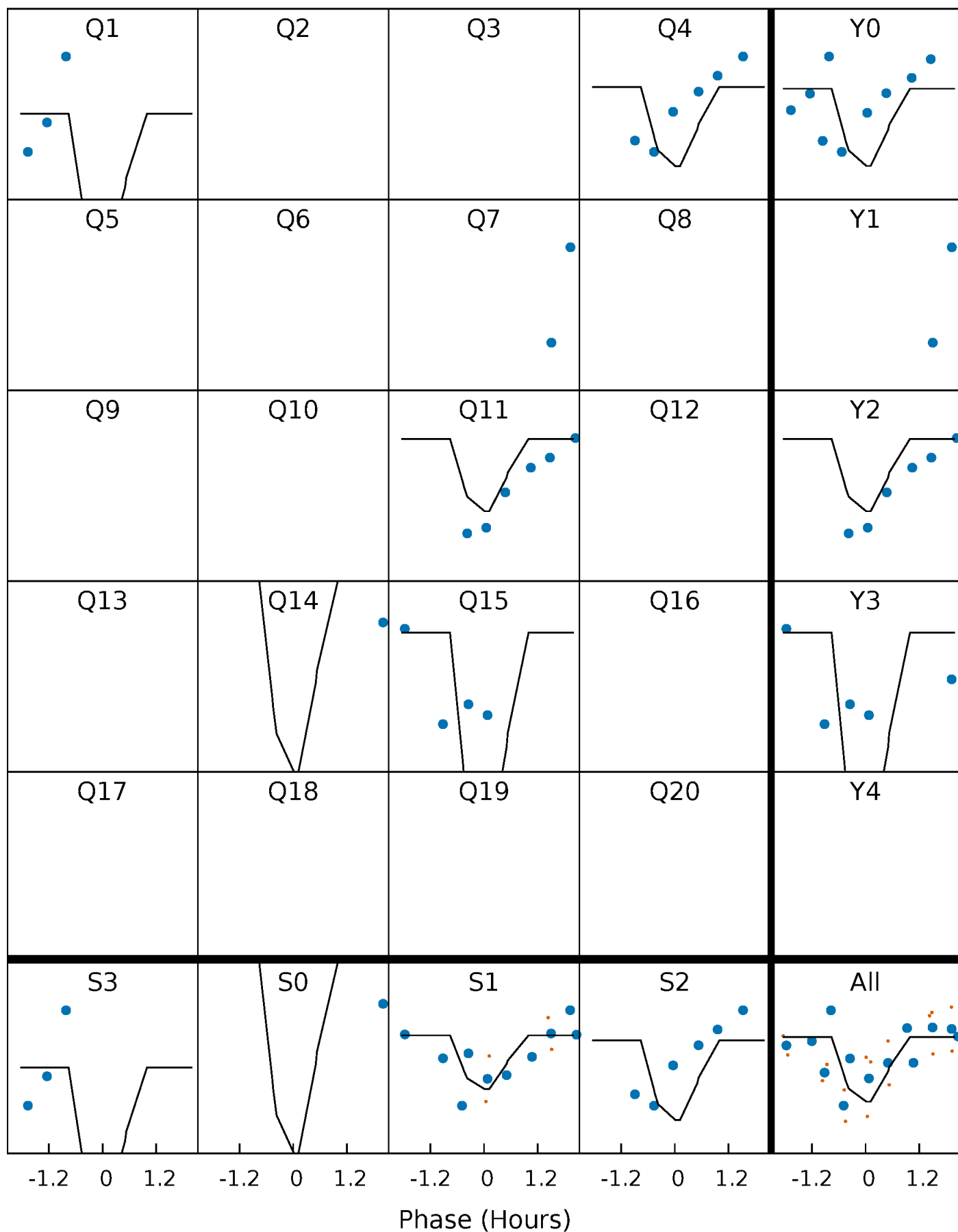
DV Quarter-Phased Transit Curves

TCE 005938266-05 $P = 50.735214$ Days $T_0 = 159.740808$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

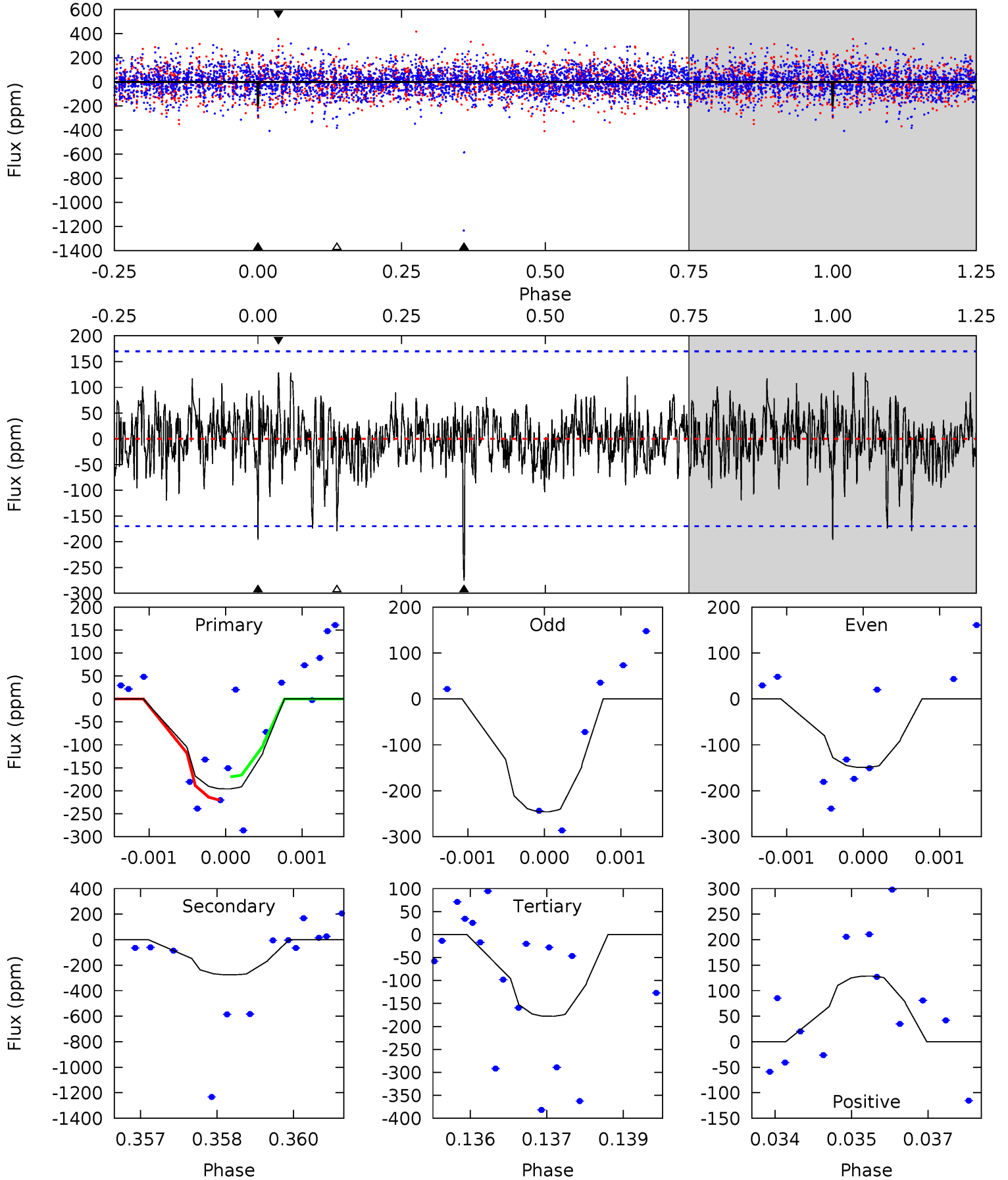
TCE 005938266-05 P= 50.733363 Days $T_0=159.784932$ (BKJD)



DV Model-Shift Uniqueness Test

005938266-05, P = 50.735214 Days, E = 109.005594 Days

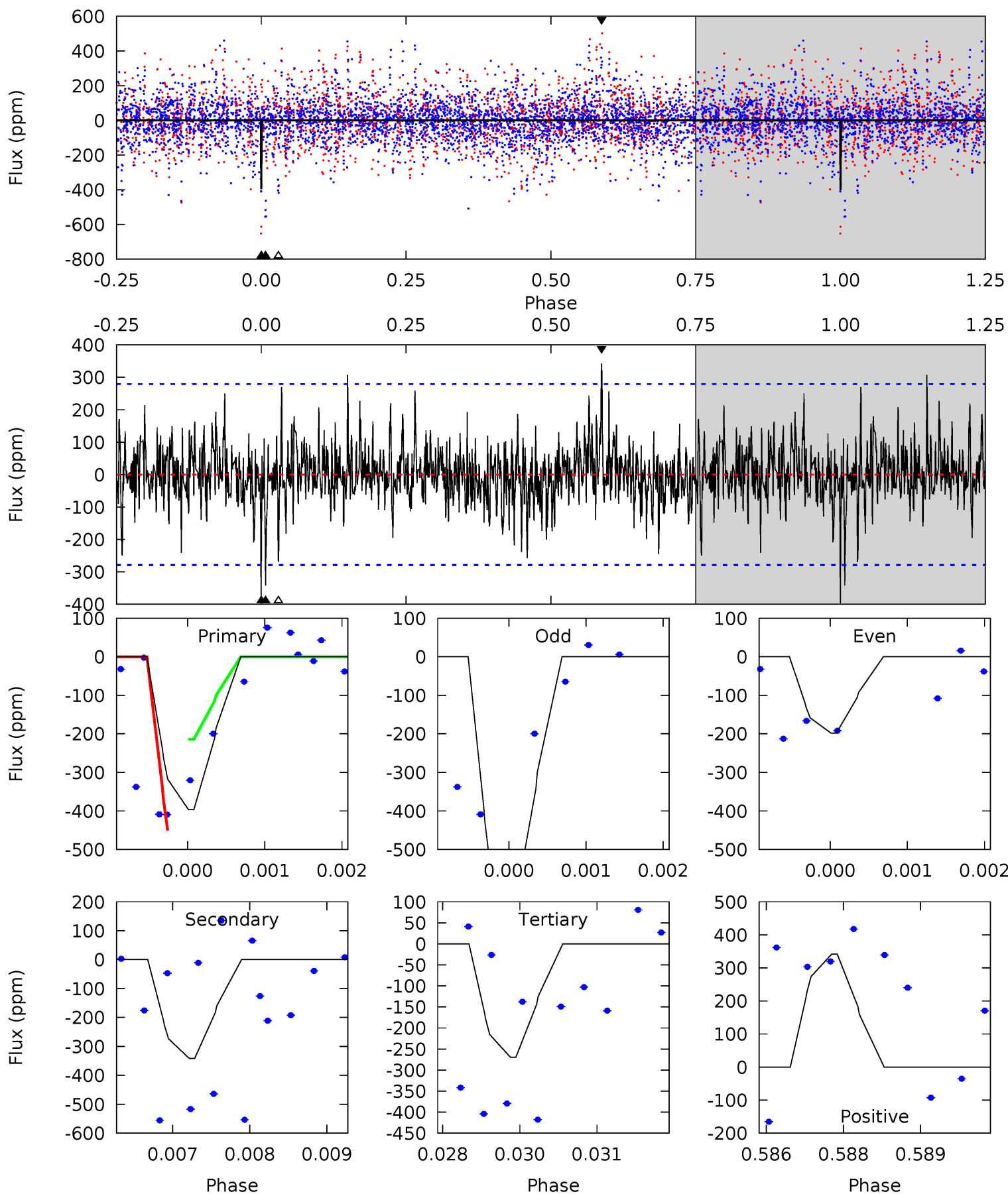
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
6.21	8.74	5.64	4.08	5.39	3.19	1.25	0.57	2.14	3.09	4.66	1.54	1.03	0.32	0.80



Alt Model-Shift Uniqueness Test

005938266-05, P = 50.733363 Days, E = 109.051569 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
7.71	6.64	5.24	6.64	5.42	3.24	1.41	2.47	1.06	1.40	-0.01	3.79	1.56	0.46	1.70



Stellar Parameters For KIC 005938266

	$T_{\text{eff}} (K)$	$\log(g)$	$[\text{Fe}/\text{H}]$	$R (R_{\odot})$	$M (M_{\odot})$	$\rho_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6760^{+152}_{-202}	$3.635^{+0.288}_{-0.072}$	$-0.160^{+0.300}_{-0.250}$	$3.258^{+0.395}_{-1.105}$	$1.670^{+0.239}_{-0.292}$	$0.068^{+0.130}_{-0.016}$
	+2%/-3%	+8%/-2%	+188%/-156%	+12%/-34%	+14%/-17%	+191%/-23%
Source	PHO1	FLK73	KIC0	DSEP		

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

Secondary Eclipse Parameters for KIC 005938266-05 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-275 ± 32	$6.68^{+5.63}_{-3.97}$	1307^{+61}_{-105}	6040^{+4480}_{-1384}	347^{+1679}_{-247}
Alt.	-342 ± 51	$8.49^{+5.62}_{-5.12}$	1306^{+66}_{-112}	5688^{+4060}_{-1067}	268^{+1395}_{-170}

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

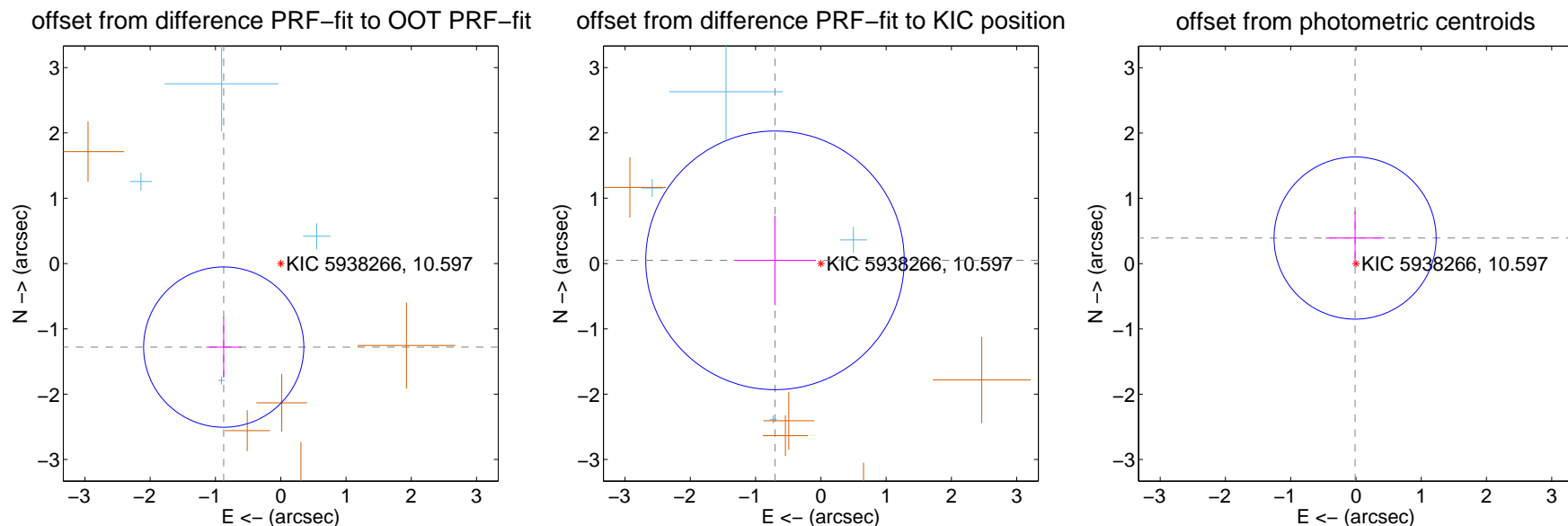
DV Centroid Data

Supplemental centroid analysis for 005938266-05. **Kepler magnitude: 10.60.** Transit SNR 10.82

There are 4 quarters with good PRF difference image offsets

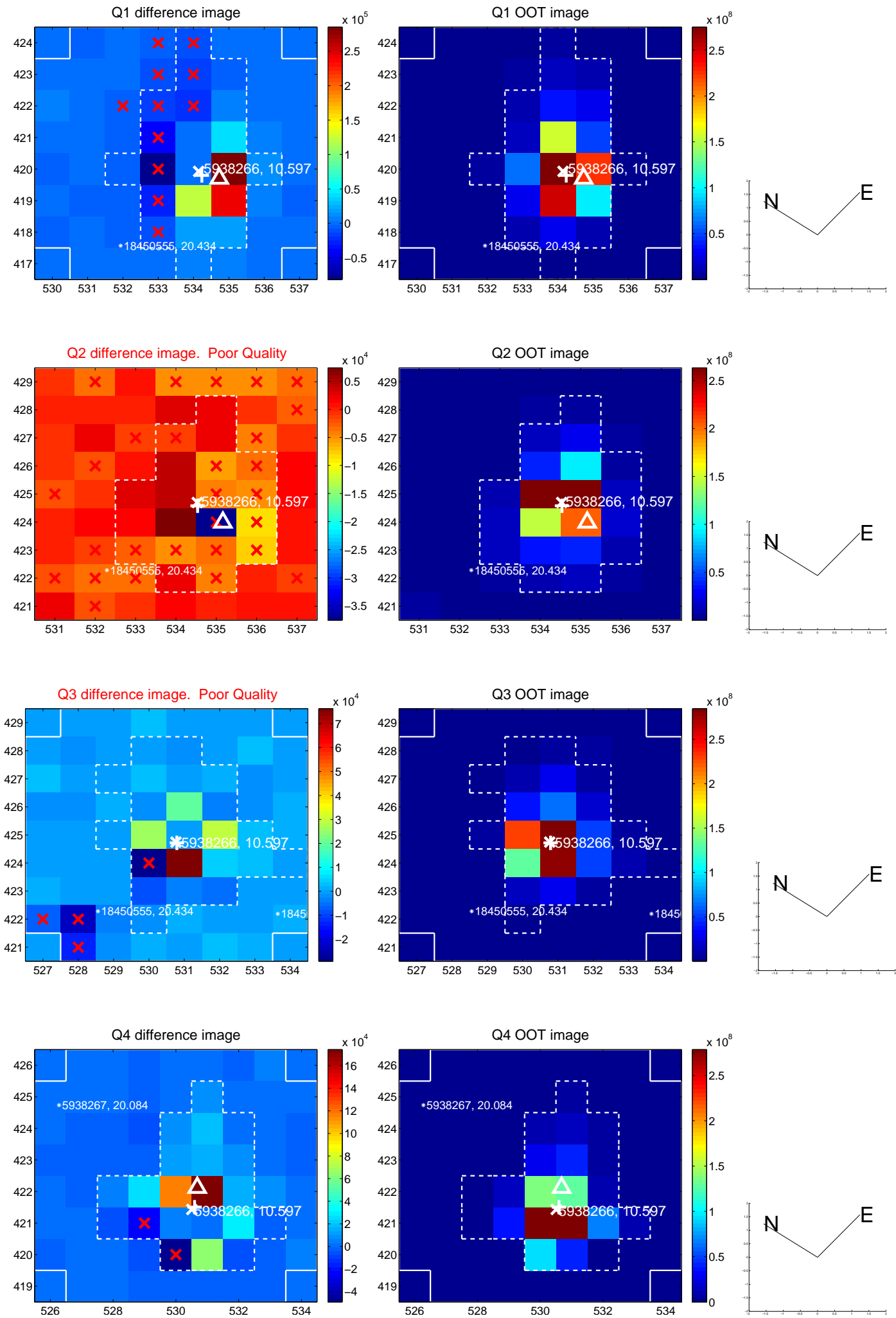
The direct PRF centroid is offset from the target star catalog position by about 0.58 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	1.549 ± 0.409	3.79	0.874 ± 0.268	-1.280 ± 0.460
PRF-fit source offset from KIC position	0.705 ± 0.660	1.07	0.703 ± 0.627	0.049 ± 0.685
photometric centroid source offset	0.39 ± 0.41	0.95	0.01 ± 0.45	0.39 ± 0.41

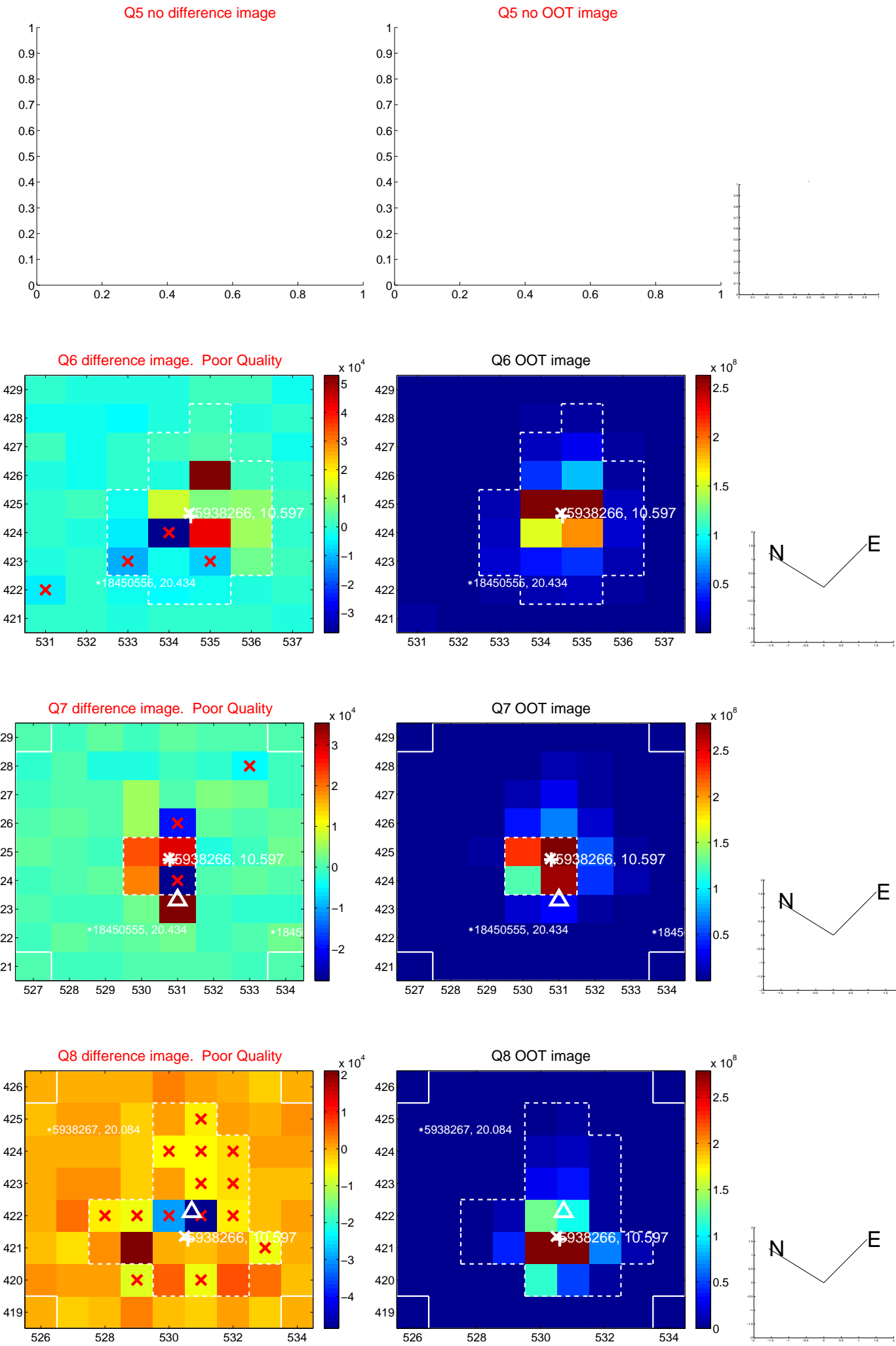


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets;** magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

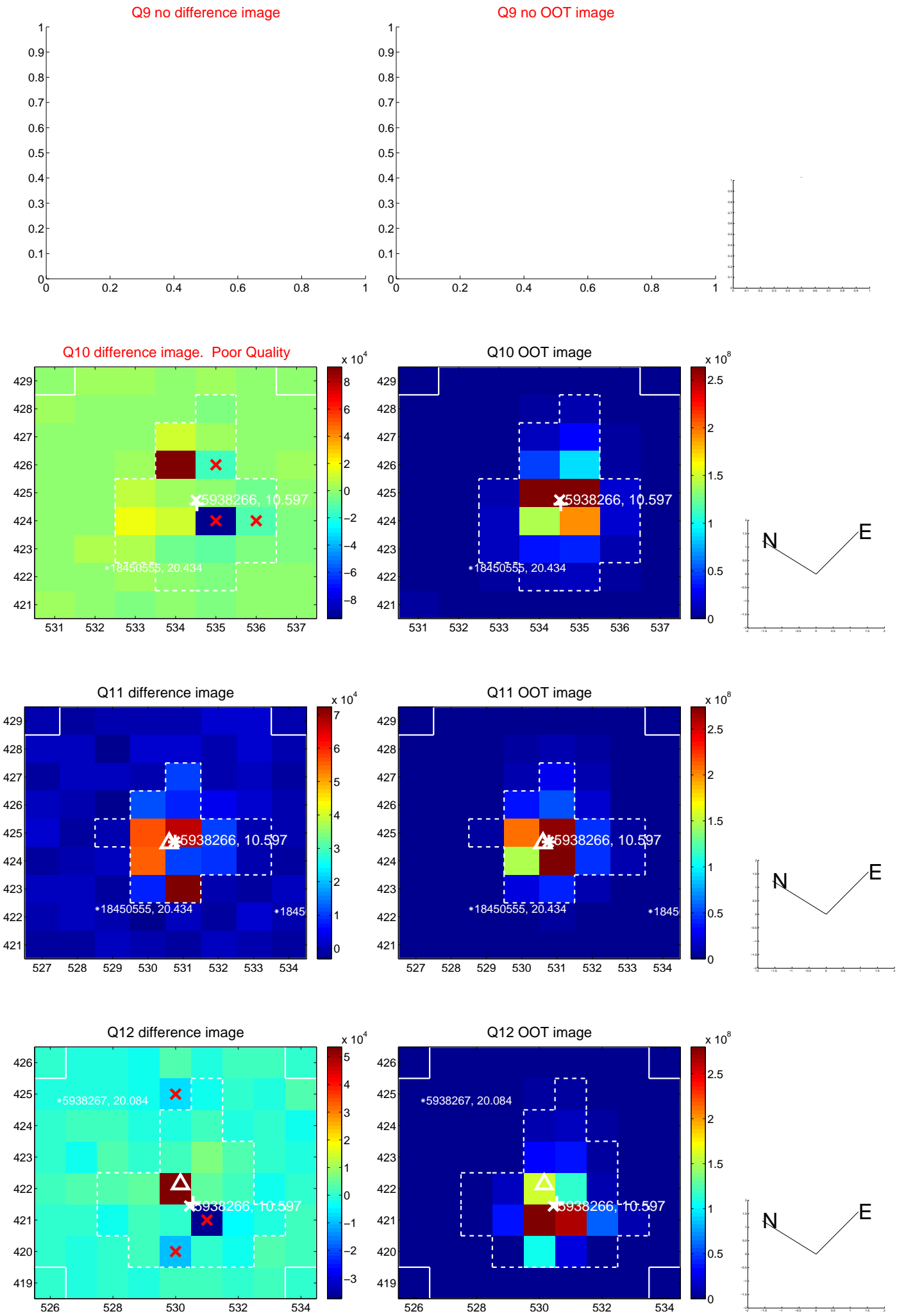
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



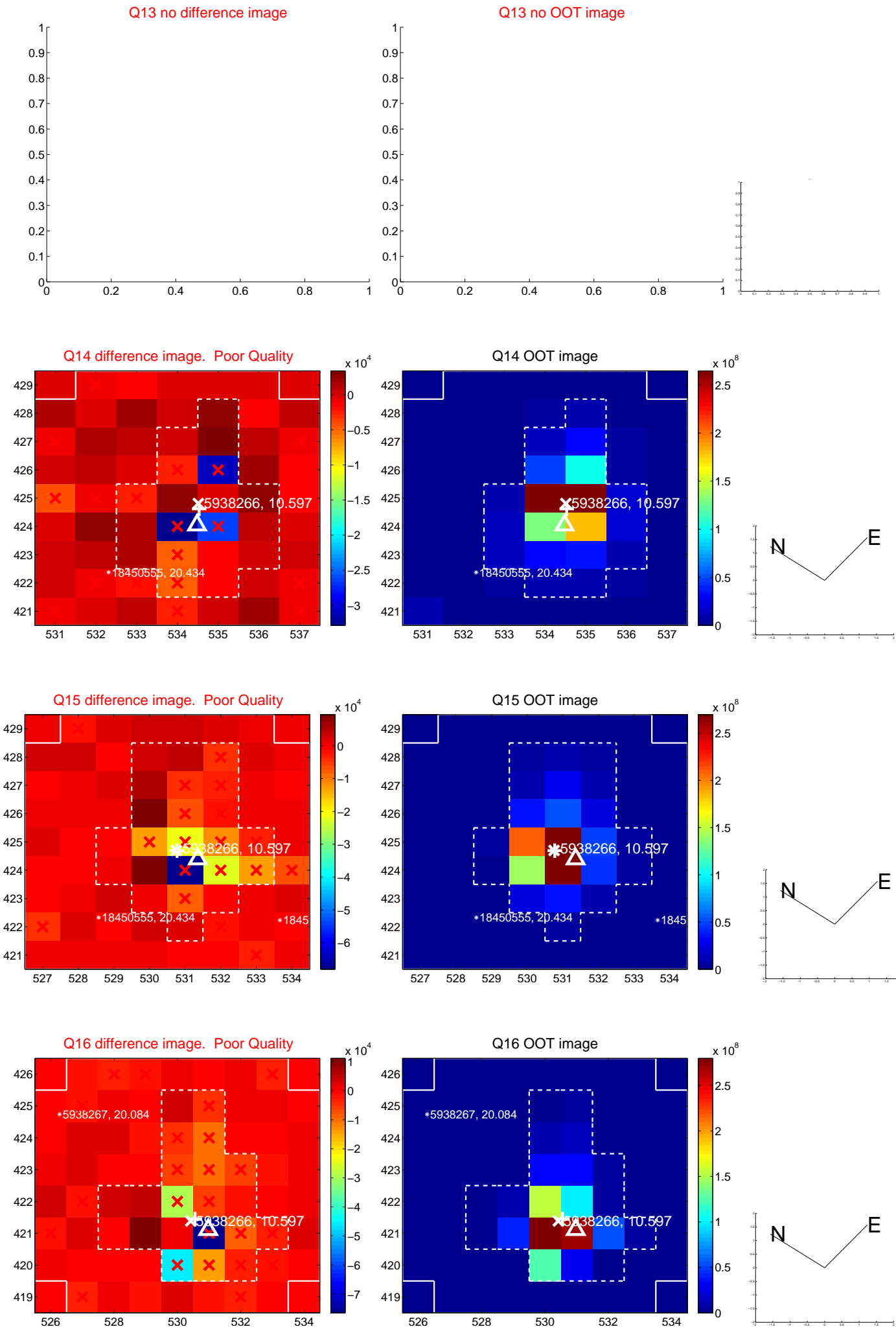
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



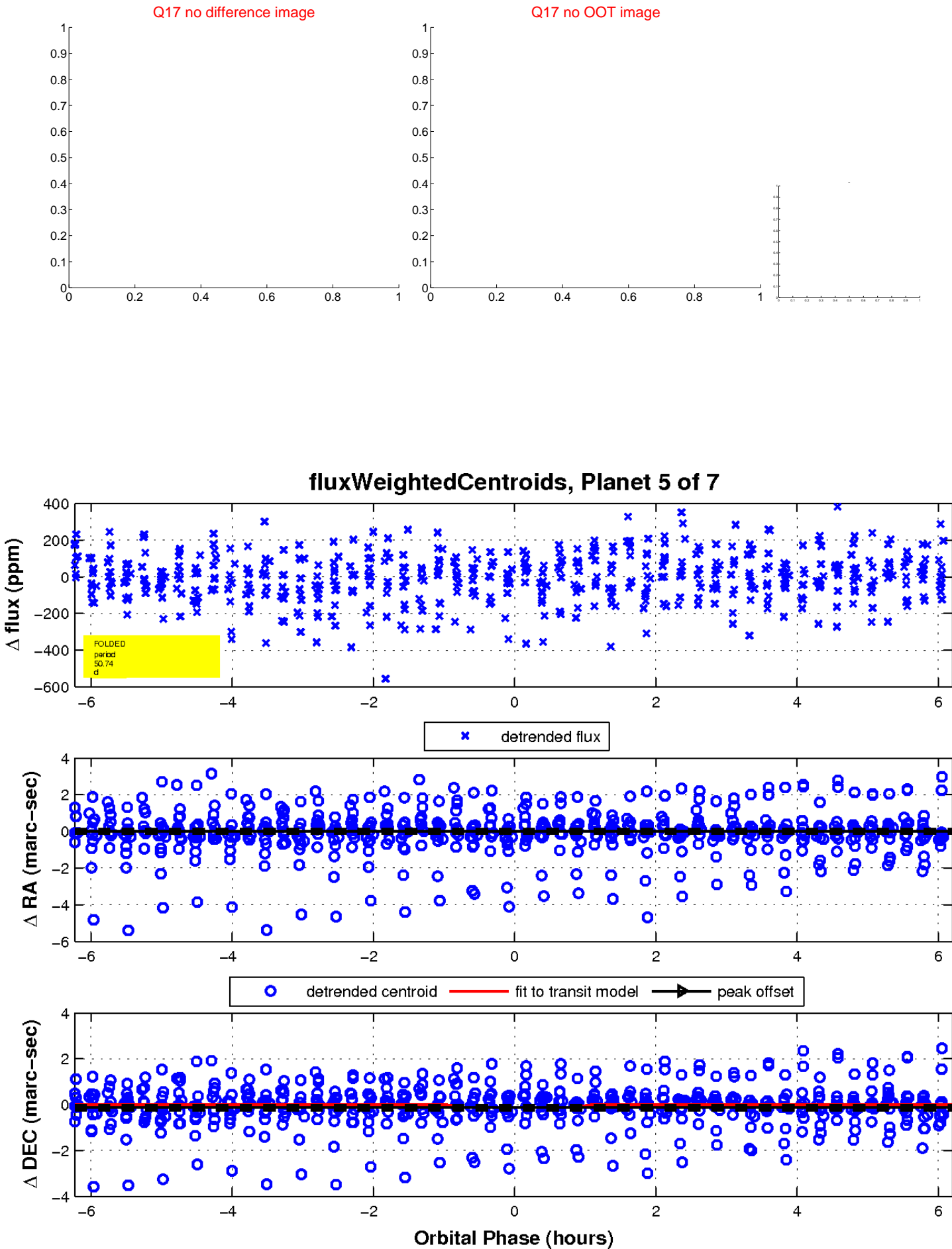
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

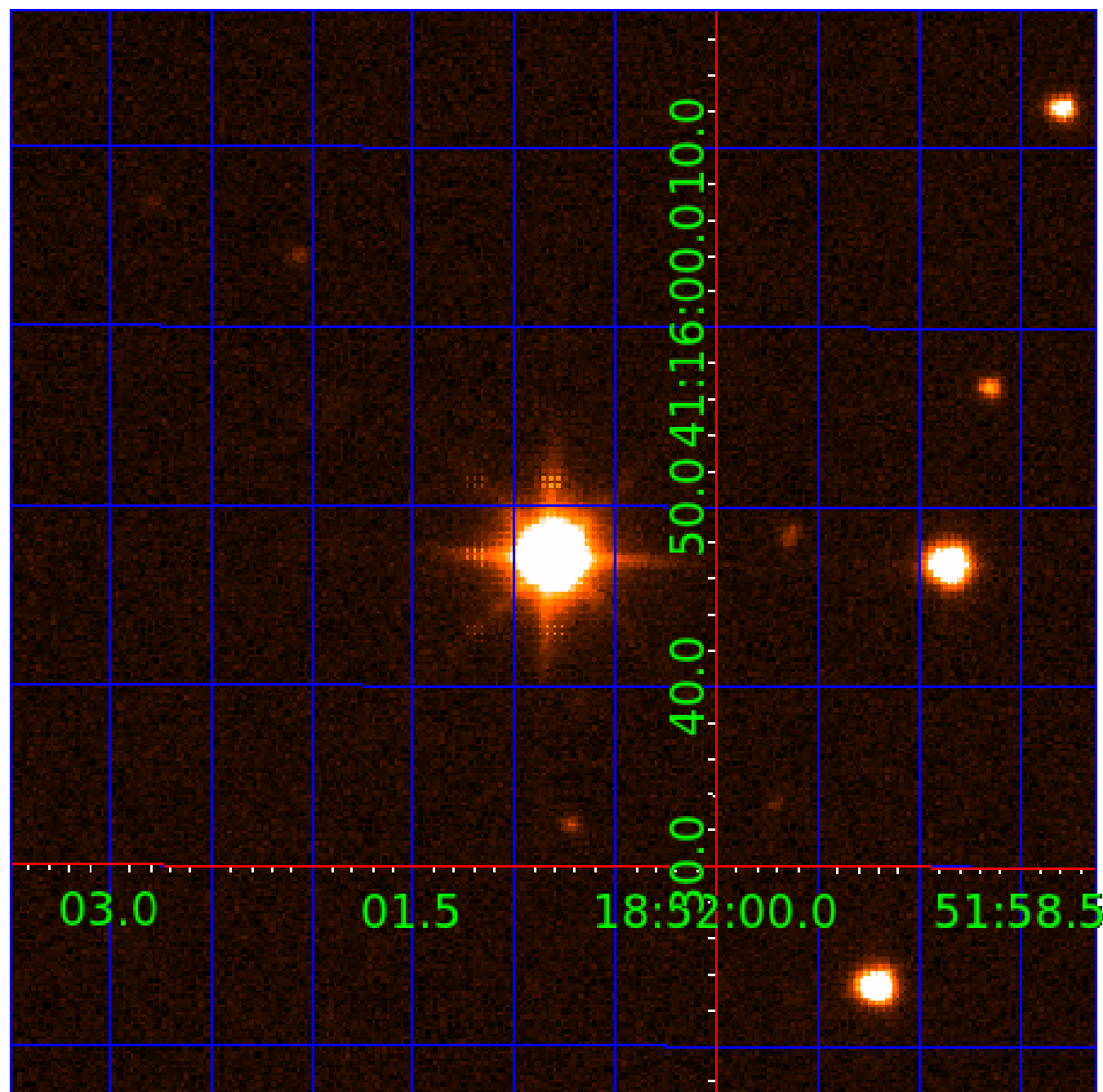


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 005938266

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})
005938266-01	OBS	No	1.089117	131.932395	13.1	7.610	10.6	5.3	3.26	6760	1.26	32851.02
005938266-02	OBS	No	72.635311	190.932171	169.5	12.598	15.4	8.3	3.26	6760	4.55	121.47
005938266-03	OBS	No	13.552544	131.876363	48.0	11.219	11.1	5.1	3.26	6760	2.55	1139.26
005938266-04	OBS	No	30.565476	153.049310	263.4	1.852	10.9	11.5	3.26	6760	5.78	385.19
005938266-05	OBS	No	50.735214	159.740808	238.3	2.077	10.5	10.8	3.26	6760	5.92	195.99
005938266-06	OBS	No	7.653263	137.237203	123.5	1.935	10.1	10.9	3.26	6760	4.25	2440.73
005938266-07	OBS	No	6.737365	135.089343	147.4	1.284	8.3	10.2	3.26	6760	4.63	2892.87

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
005938266-01	OBS	FP	0.00	1	0	0	0	SWEET_NTL—LPP_DV—MOD_NONUNIQ_ALT—CENT_SATURATED
005938266-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—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—CENT_SATURATED
005938266-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_TRACKER—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—CENT_SATURATED
005938266-04	OBS	FP	0.00	1	0	1	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_SATURATED—HALO_GHOST
005938266-05	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_NONUNIQ_ALT—MOD_POS_ALT—CENT_SATURATED
005938266-06	OBS	FP	0.00	1	0	1	0	INDIV_TRANS_RUBBLE_ZUMA—TRANS_GAPPED—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_SATURATED—HALO_GHOST
005938266-07	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_ZUMA—TRANS_GAPPED—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_SATURATED

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

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

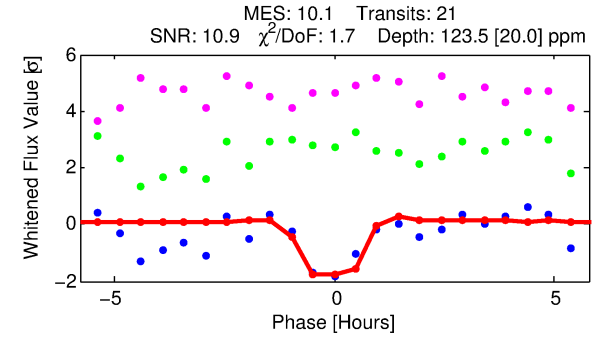
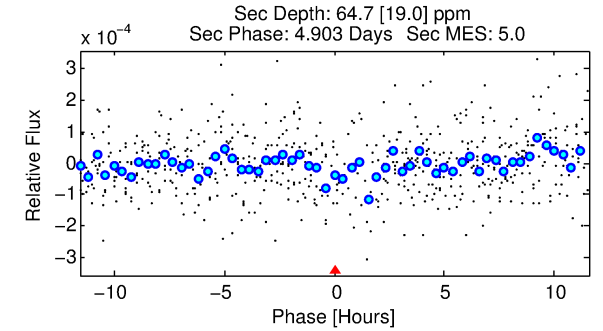
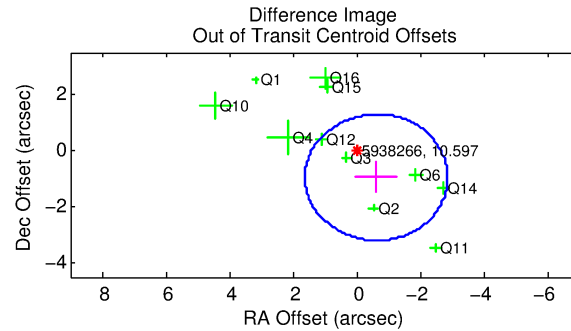
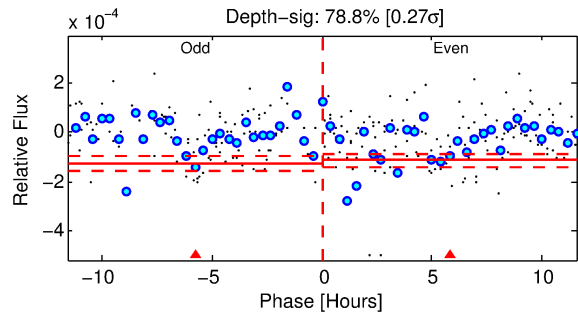
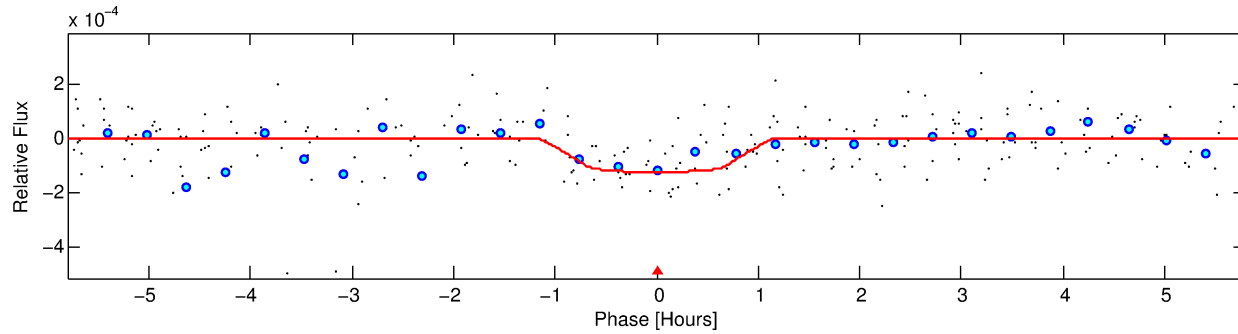
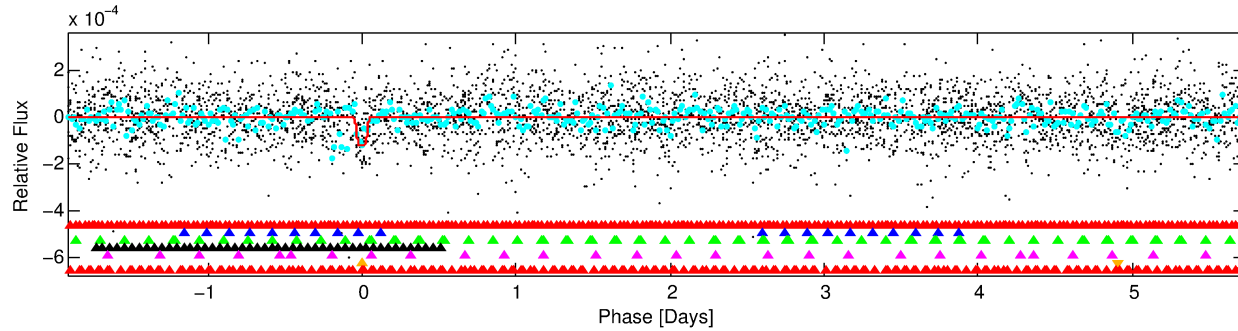
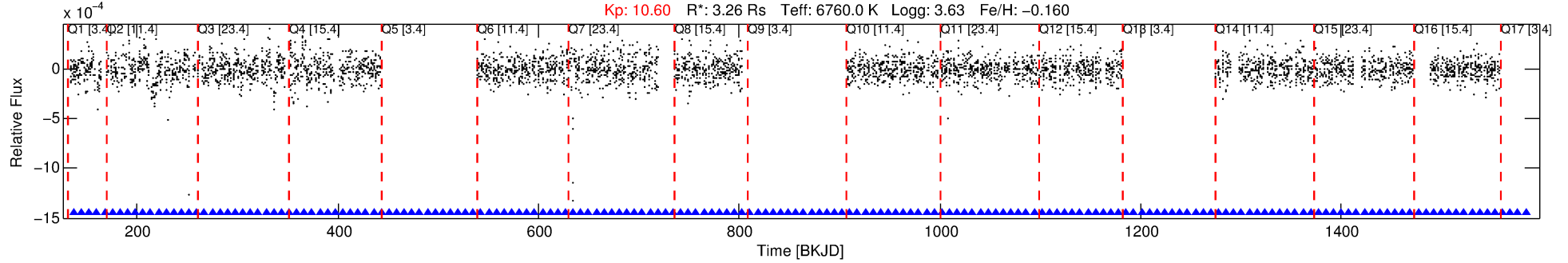
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 005938266-06

No Significant Match Found

DV One-Page Summary

KIC: 5938266 Candidate: 6 of 7 Period: 7.653 d



DV Fit Results:

Period = 7.65326 [0.00005] d
Epoch = 137.2372 [0.0052] BKJD
 R_p/R^* = 0.0119 [0.0071]
 a/R^* = 13.58 [47.22]
 b = 0.91 [0.69]
 S_{eff} = 2440.73 [1246.59]
 T_{eq} = 1792 [229] K
 R_p = 4.25 [2.92] R_e
 a = 0.0902 [0.0285] AU
 A_g = 16.06 [21.34] [0.71 σ]
 T_{effp} = 5547 [1717] K [2.17 σ]

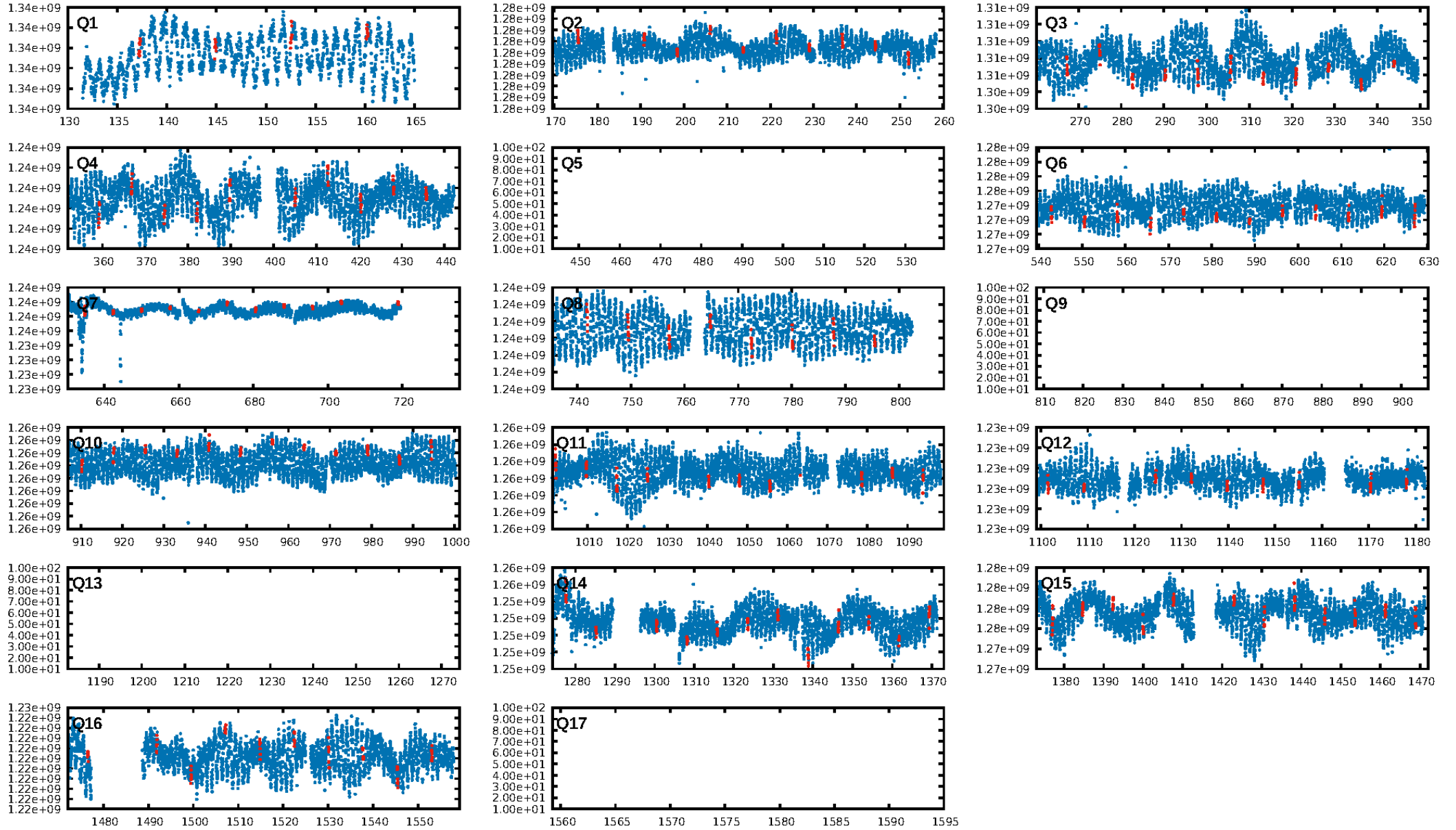
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [9.46 σ]
LongPeriod-sig: 100.0% [12.44 σ]
ModelChiSquare2-sig: 0.1%
ModelChiSquareGof-sig: 96.6%
Bootstrap-pfa: 2.61e-09
RollingBand-fgt: 1.00 [21/21]
GhostDiagnostic-chr: 0.2334
Centroid-sig: 9.6%
Centroid-so: 0.593 arcsec [1.61 σ]
OotOffset-rm: 1.142 arcsec [1.53 σ]
OotOffset-st: 4/3/3/1 [11]
KicOffset-rm: 1.130 arcsec [1.65 σ]
KicOffset-st: 4/3/3/1 [11]
DiffImageQuality-fgm: 0.45 [5/11]
DiffImageOverlap-fno: 0.46 [6/13]

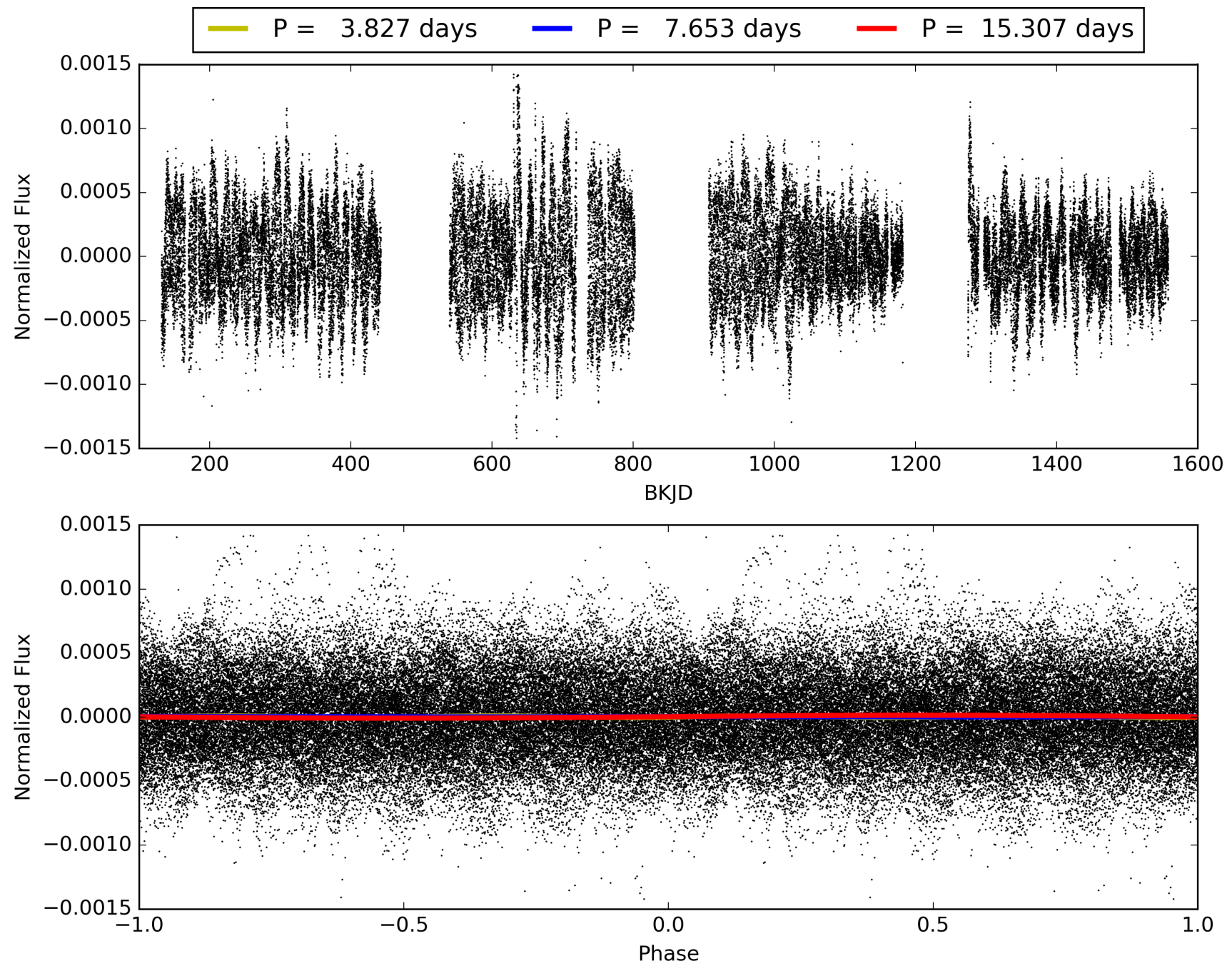
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 02-Feb-2016 07:27:50 Z

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

TCE 005938266-06, PDC Light Curves

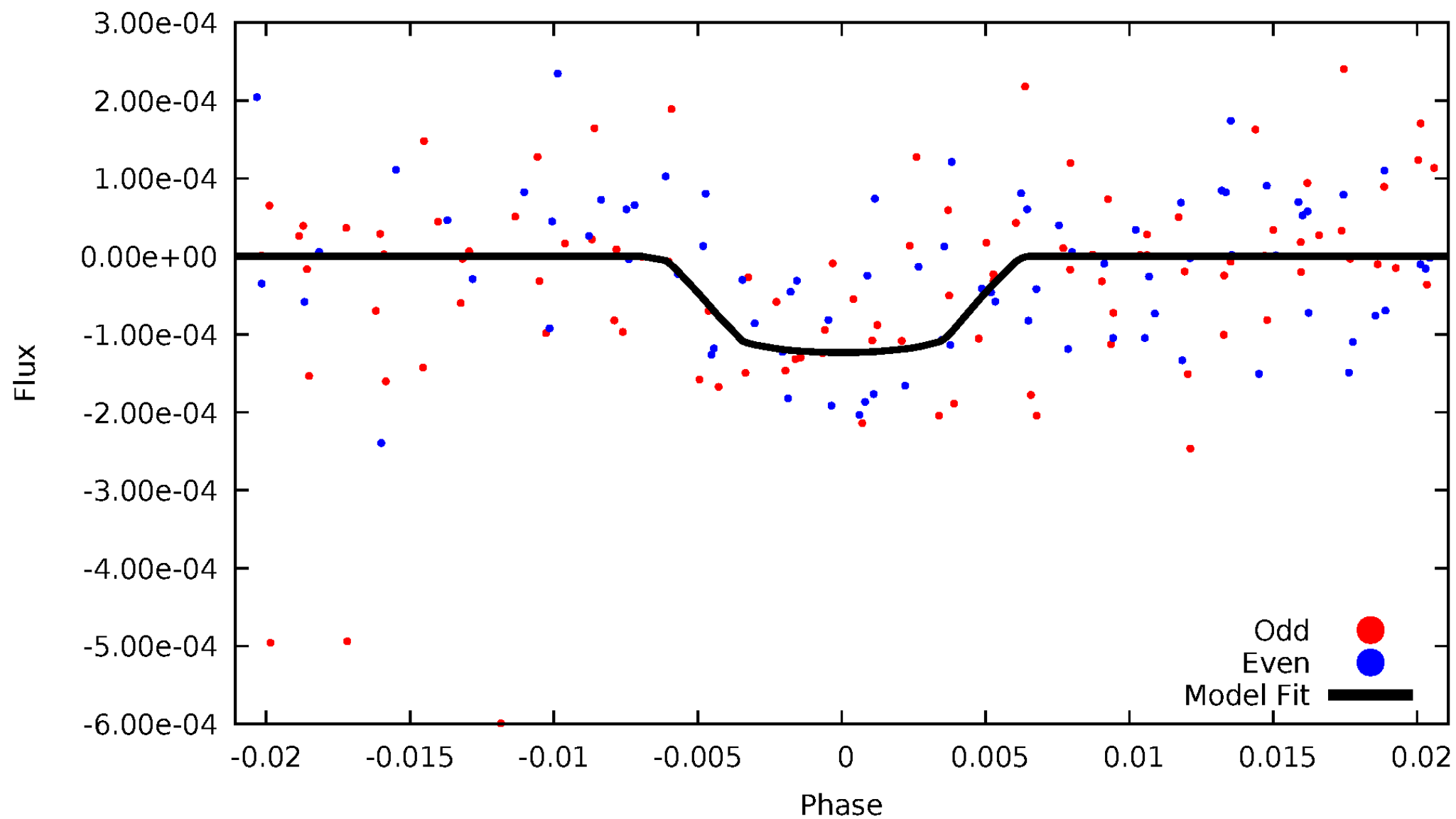


TCE 005938266-06



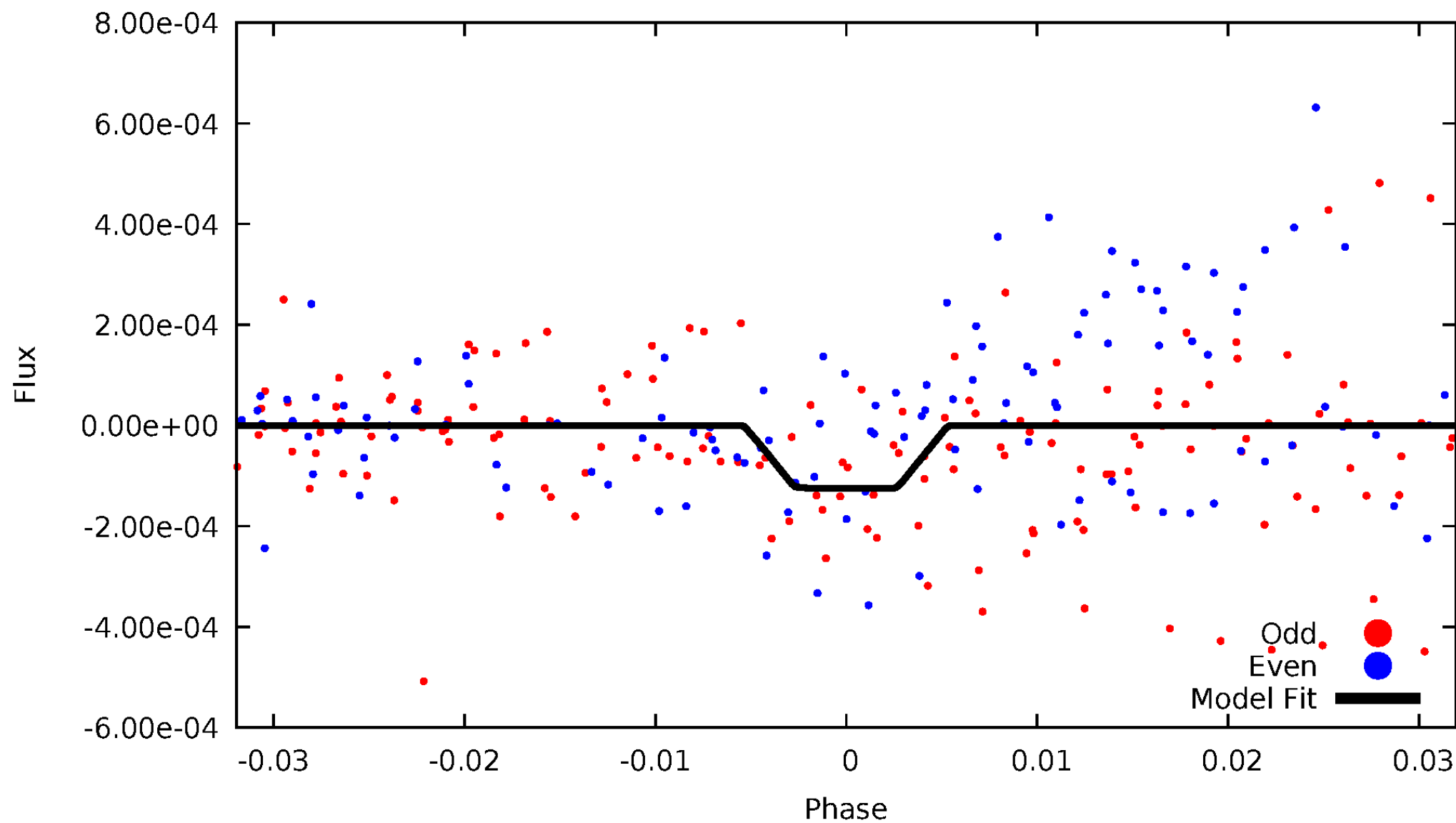
DV Odd/Even

TCE 005938266-06



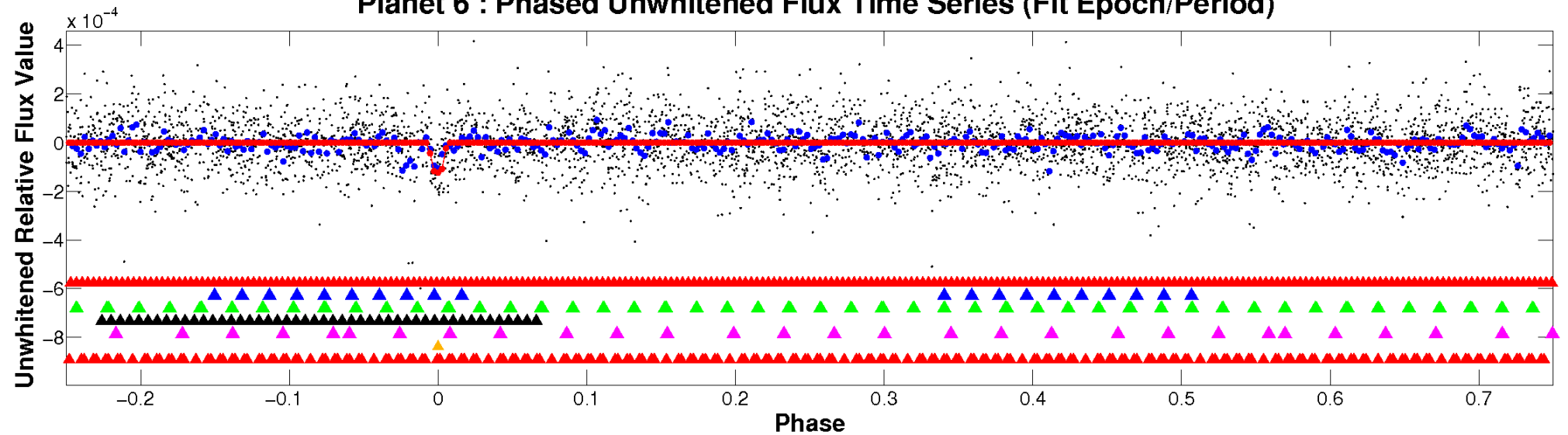
ALT Odd/Even

TCE 005938266-06

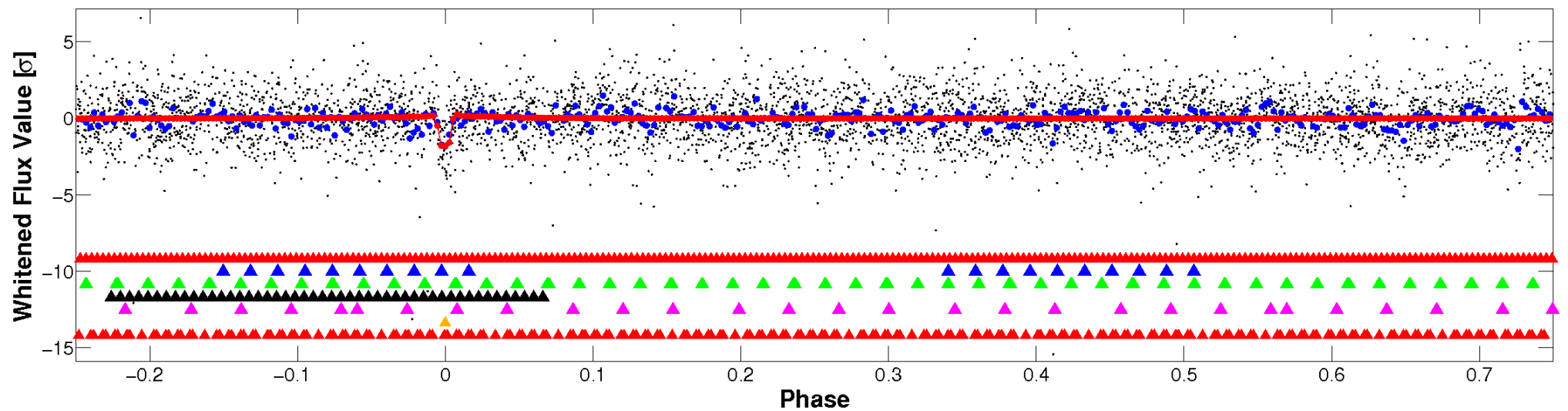


Non-Whitened Vs. Whitened Light Curve

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

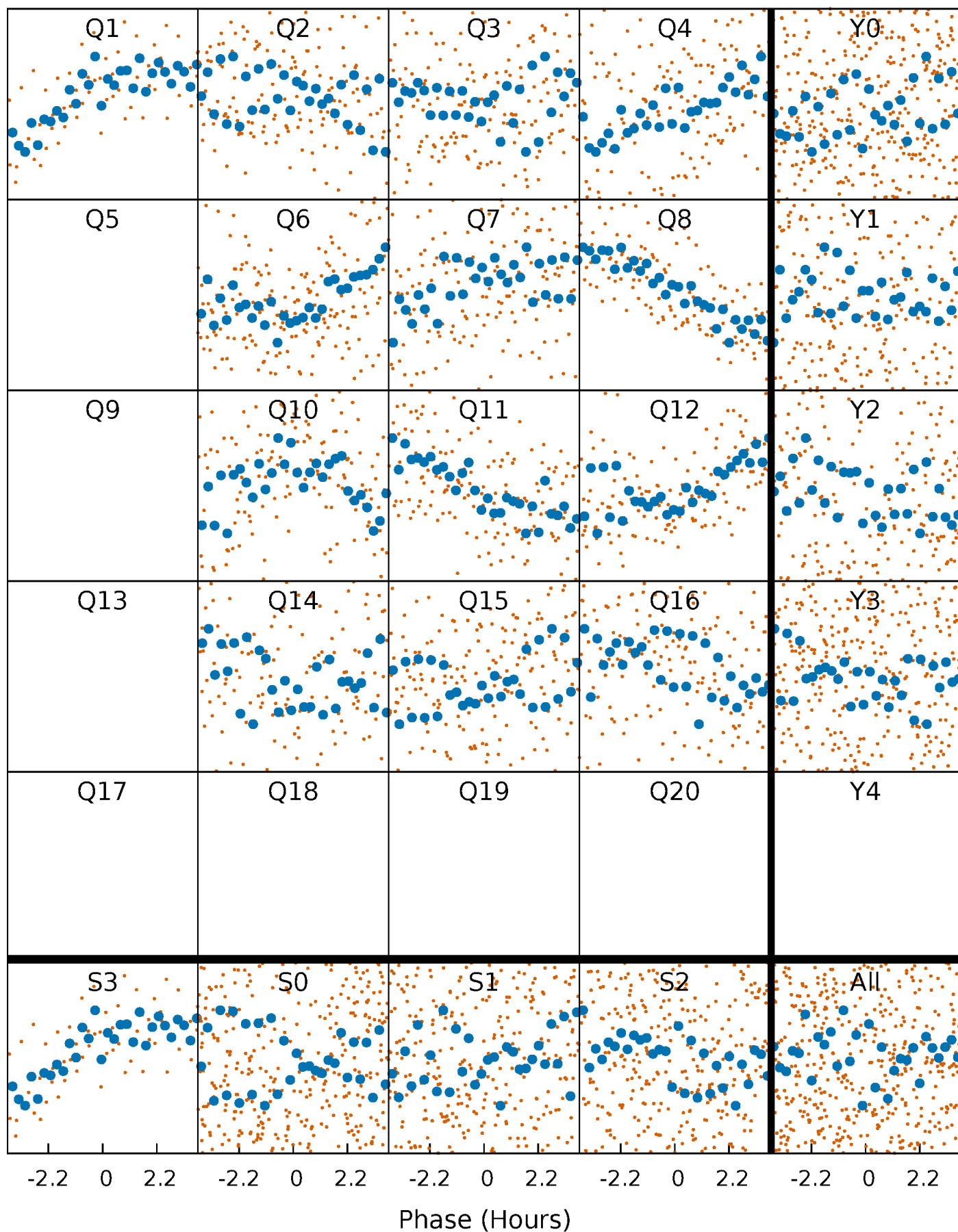


Planet 6 : Phased Whitened Flux Time Series (Fit Epoch/Period)



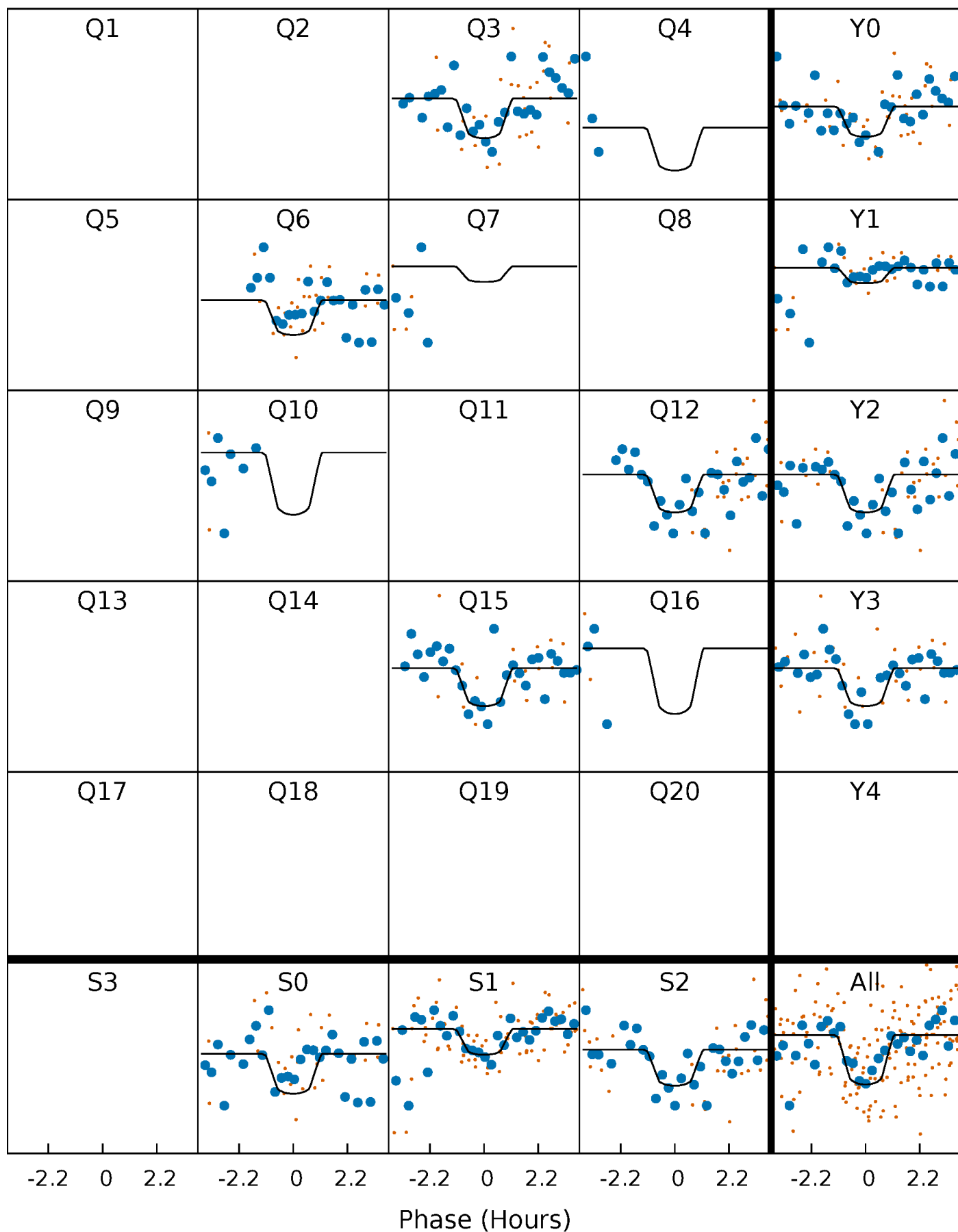
PDC Quarter-Phased Transit Curves

TCE 005938266-06 P= 7.653263 Days $T_0=137.237203$ (BKJD)



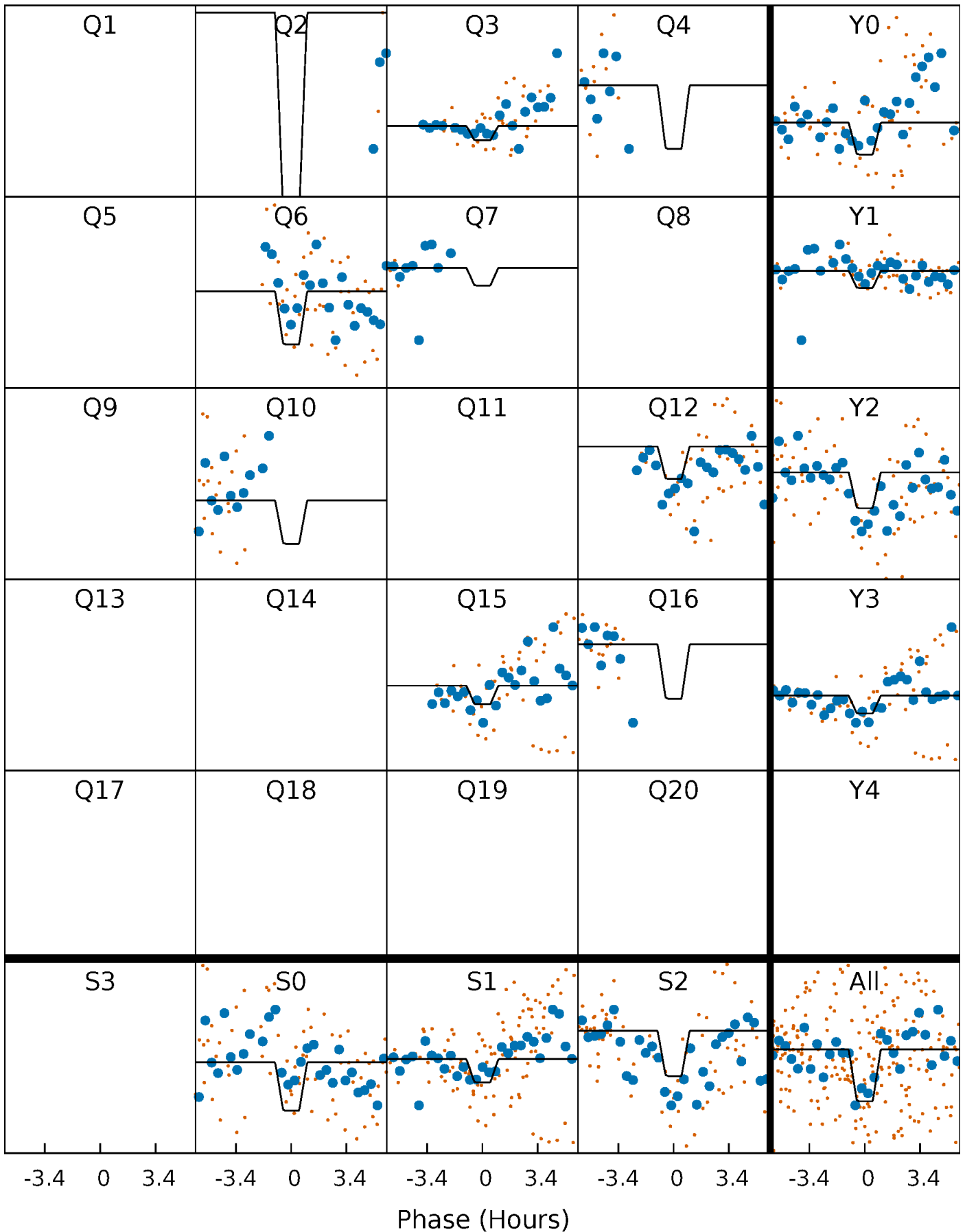
DV Quarter-Phased Transit Curves

TCE 005938266-06 P= 7.653263 Days $T_0=137.237203$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

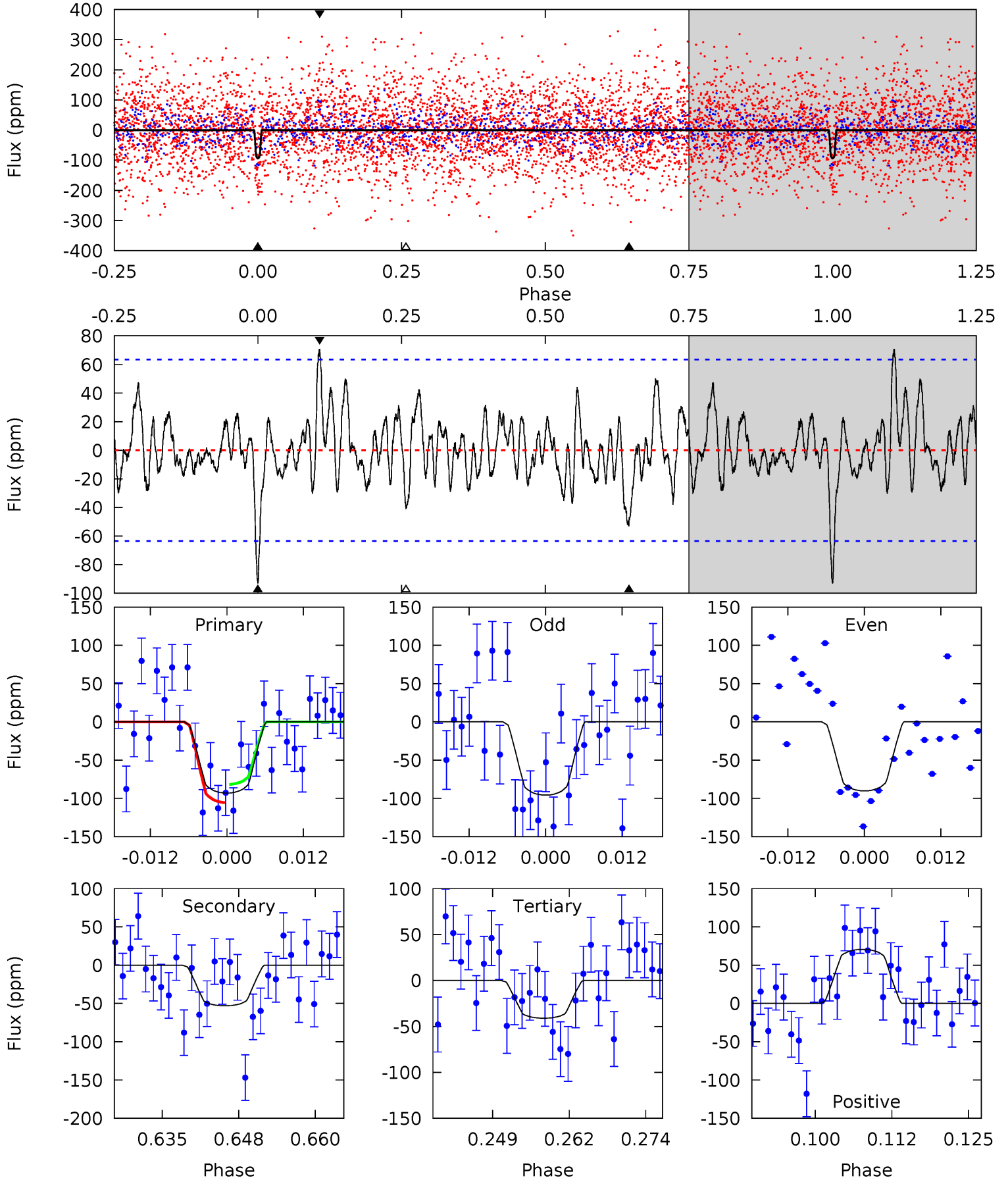
TCE 005938266-06 P= 7.653265 Days $T_0=137.234069$ (BKJD)



DV Model-Shift Uniqueness Test

005938266-06, P = 7.653263 Days, E = 129.583940 Days

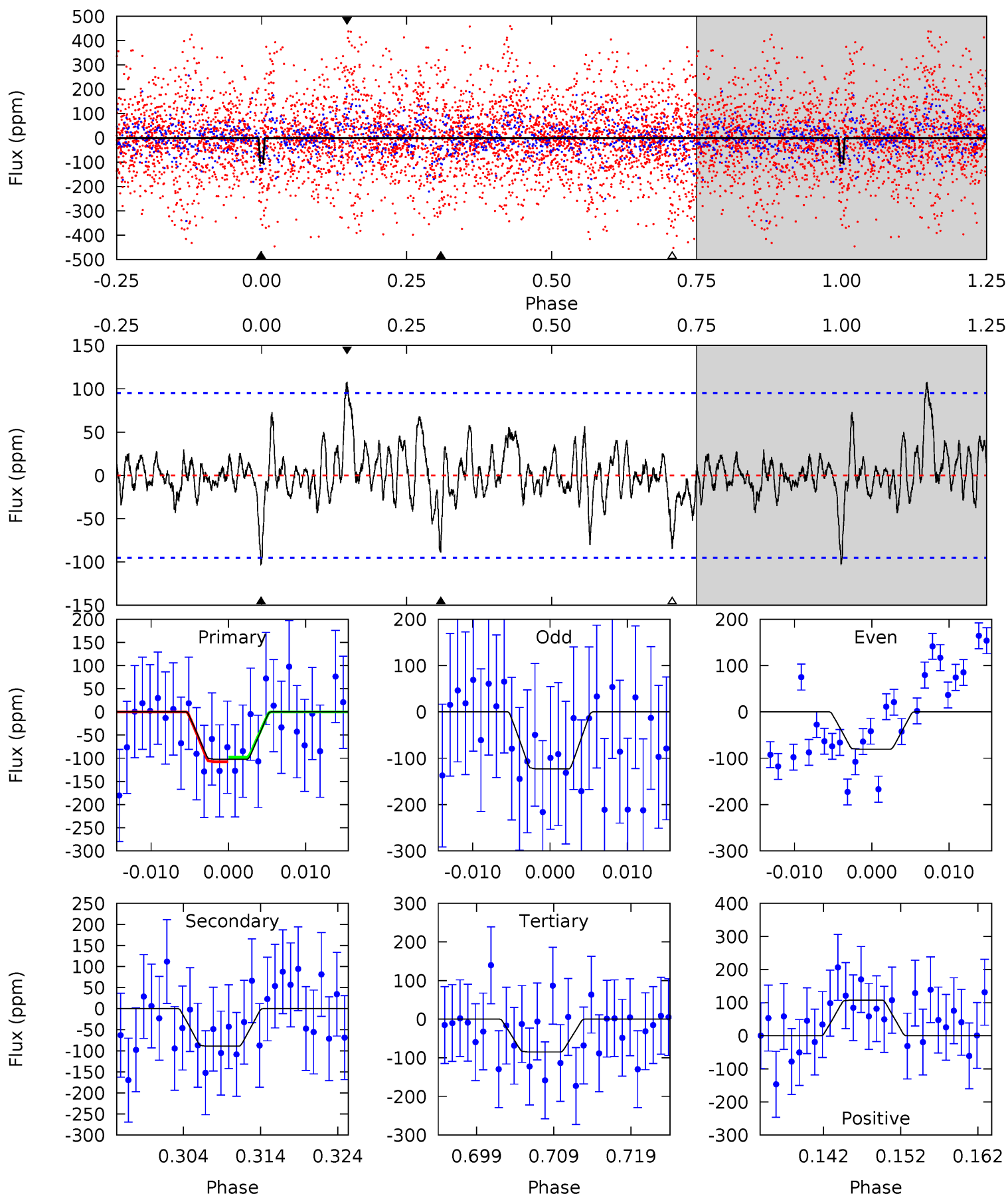
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
7.30	4.17	3.22	5.55	4.98	2.50	1.42	4.08	1.75	0.94	-1.38	0.22	0.70	0.43	0.93



Alt Model-Shift Uniqueness Test

005938266-06, P = 7.653265 Days, E = 129.580804 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
5.40	4.70	4.48	5.67	5.02	2.57	1.35	0.92	-0.26	0.22	-0.96	1.14	1.14	0.51	0.27



Stellar Parameters For KIC 005938266

	$T_{\text{eff}} (K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M (M_{\odot})$	$\rho_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6760^{+152}_{-202}	$3.635^{+0.288}_{-0.072}$	$-0.160^{+0.300}_{-0.250}$	$3.258^{+0.395}_{-1.105}$	$1.670^{+0.239}_{-0.292}$	$0.068^{+0.130}_{-0.016}$
	+2%/-3%	+8%/-2%	+188%/-156%	+12%/-34%	+14%/-17%	+191%/-23%
Source	PHO1	FLK73	KIC0	DSEP		

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

Secondary Eclipse Parameters for KIC 005938266-06 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-53 ± 13	$4.14^{+2.59}_{-2.22}$	2457^{+117}_{-210}	5125^{+2565}_{-917}	14^{+50}_{-9}
Alt.	-89 ± 19	$3.98^{+2.47}_{-2.23}$	2457^{+122}_{-194}	5929^{+3251}_{-1120}	25^{+103}_{-15}

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

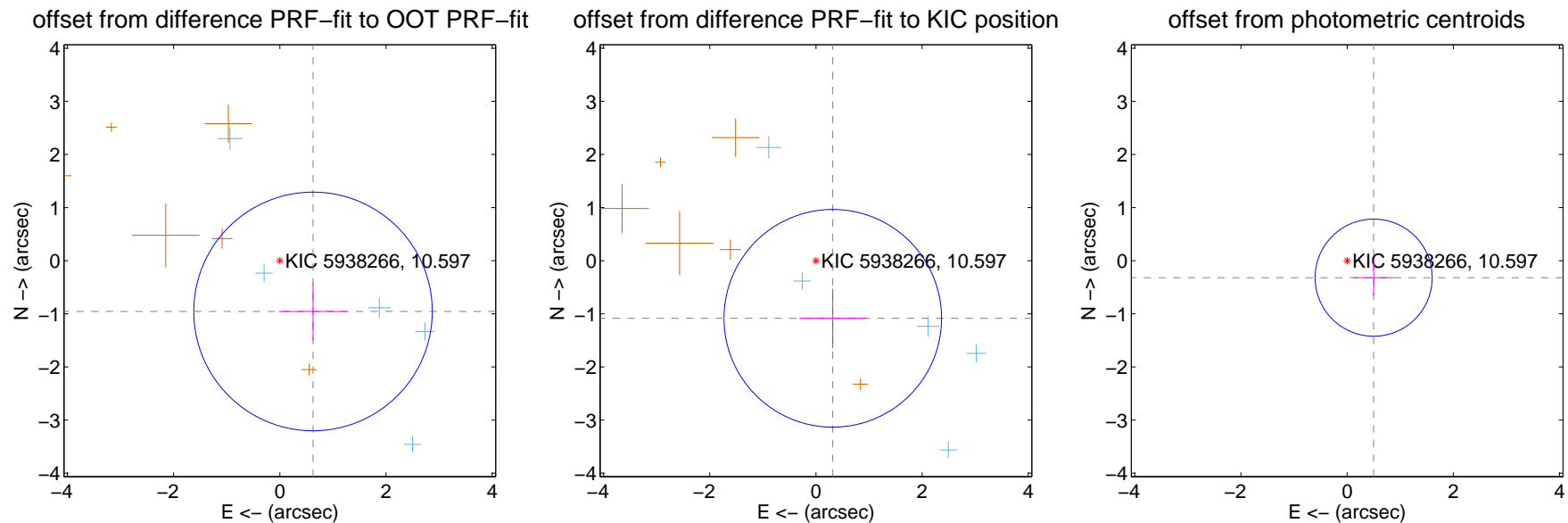
DV Centroid Data

Supplemental centroid analysis for 005938266-06. **Kepler magnitude: 10.60.** Transit SNR 10.92

There are 5 quarters with good PRF difference image offsets

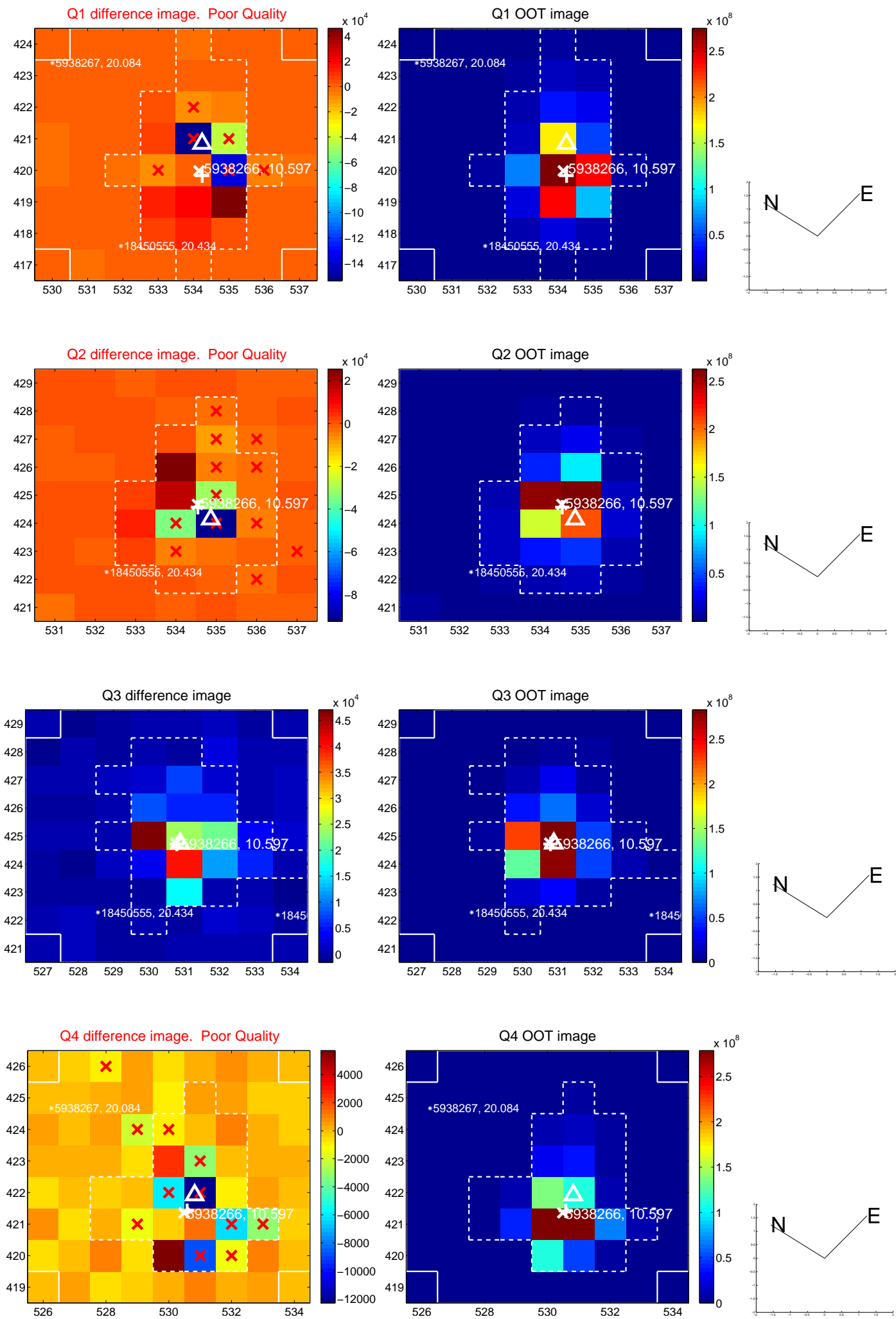
The direct PRF centroid is offset from the target star catalog position by about 0.60 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	1.142 ± 0.749	1.53	-0.626 ± 0.642	-0.955 ± 0.542
PRF-fit source offset from KIC position	1.130 ± 0.683	1.65	-0.317 ± 0.625	-1.085 ± 0.559
photometric centroid source offset	0.59 ± 0.37	1.61	-0.50 ± 0.38	-0.32 ± 0.34

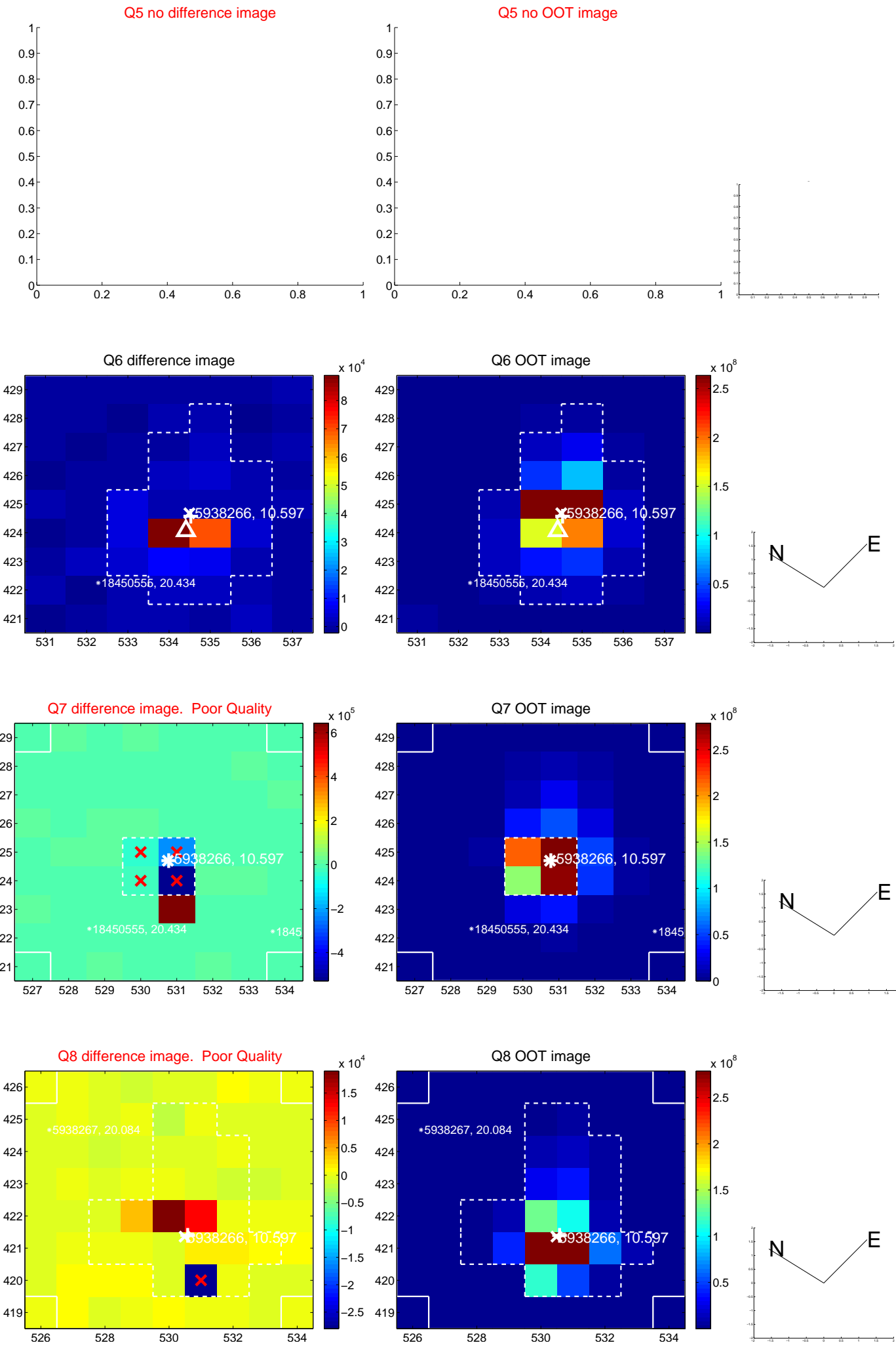


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets;** magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

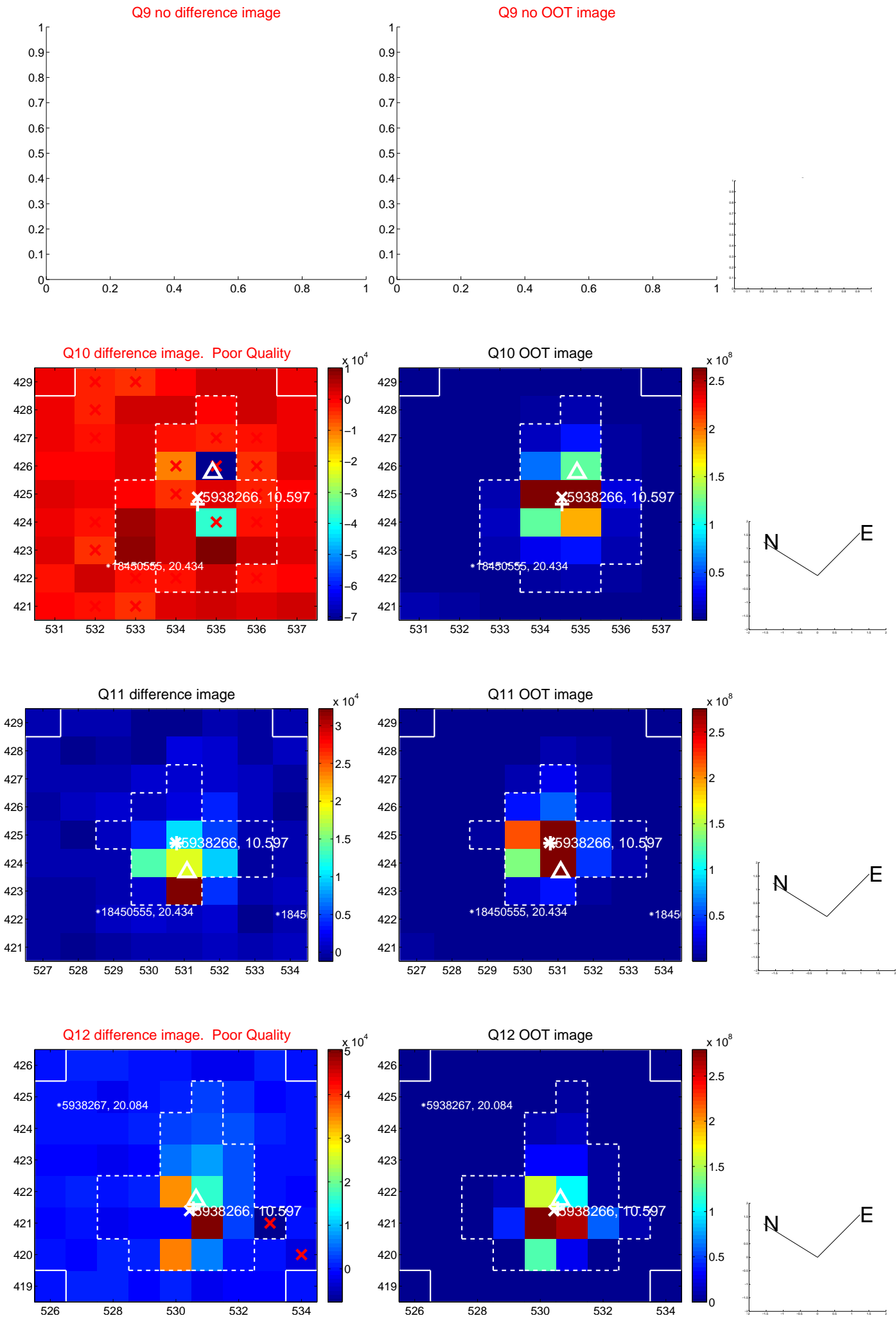
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



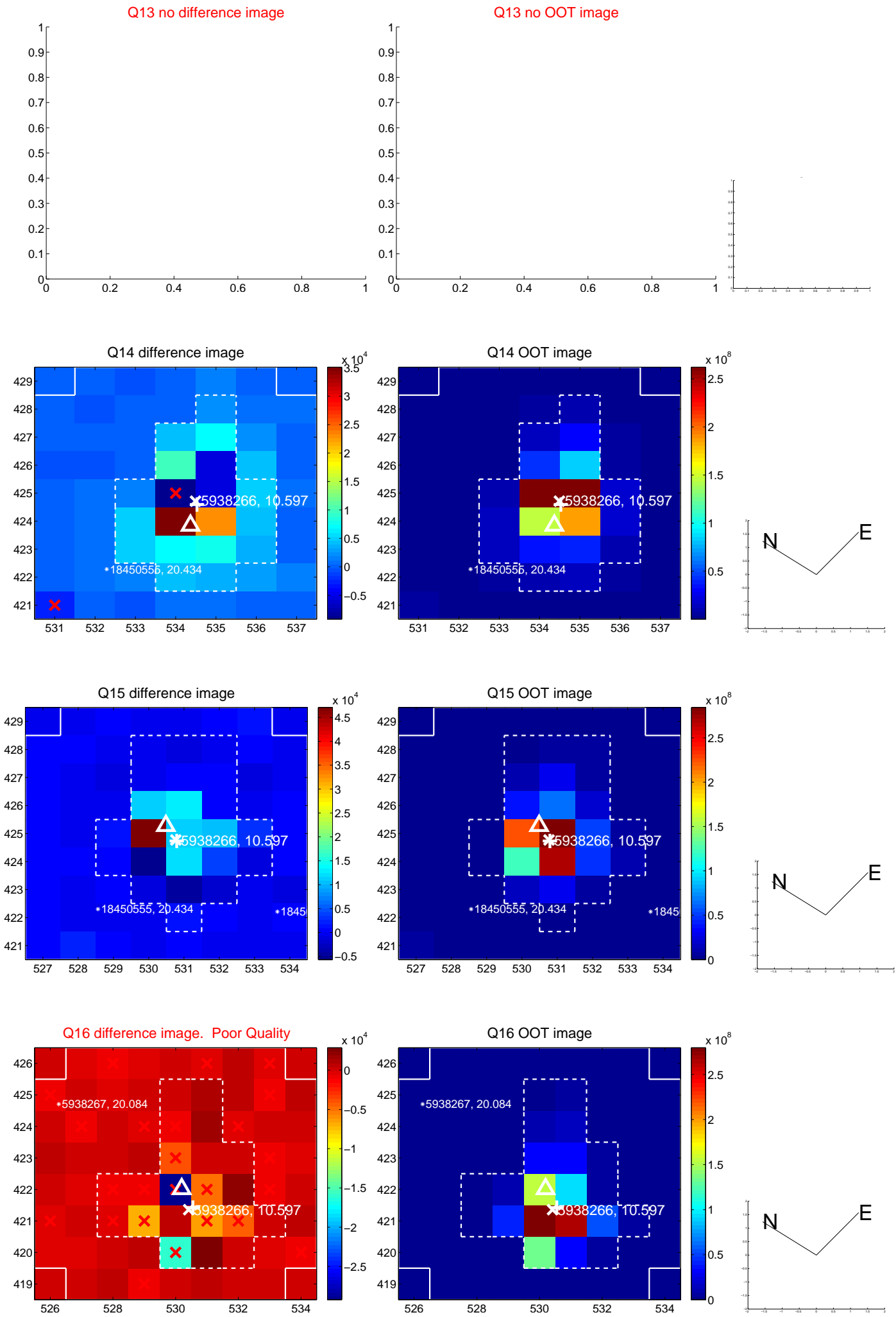
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



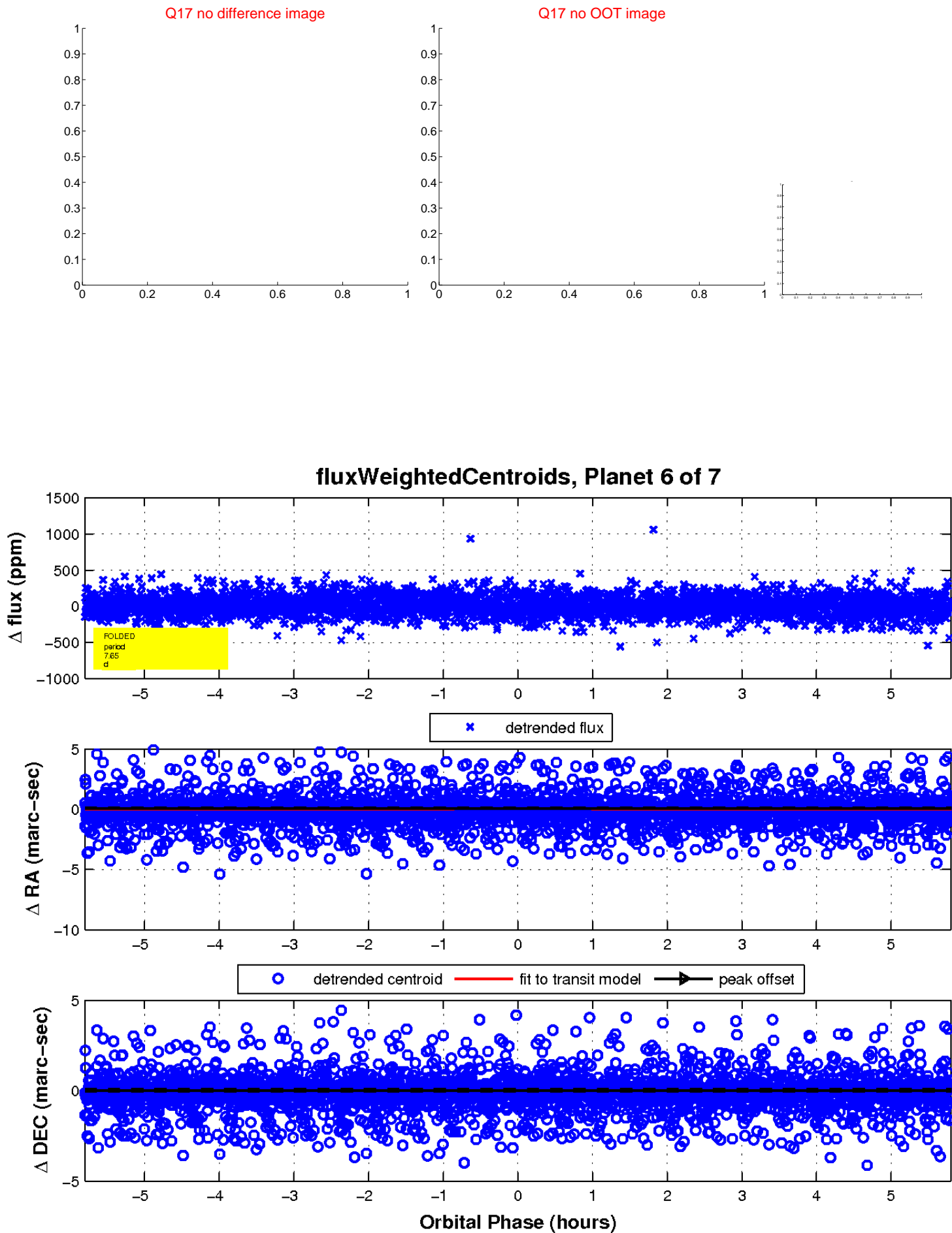
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

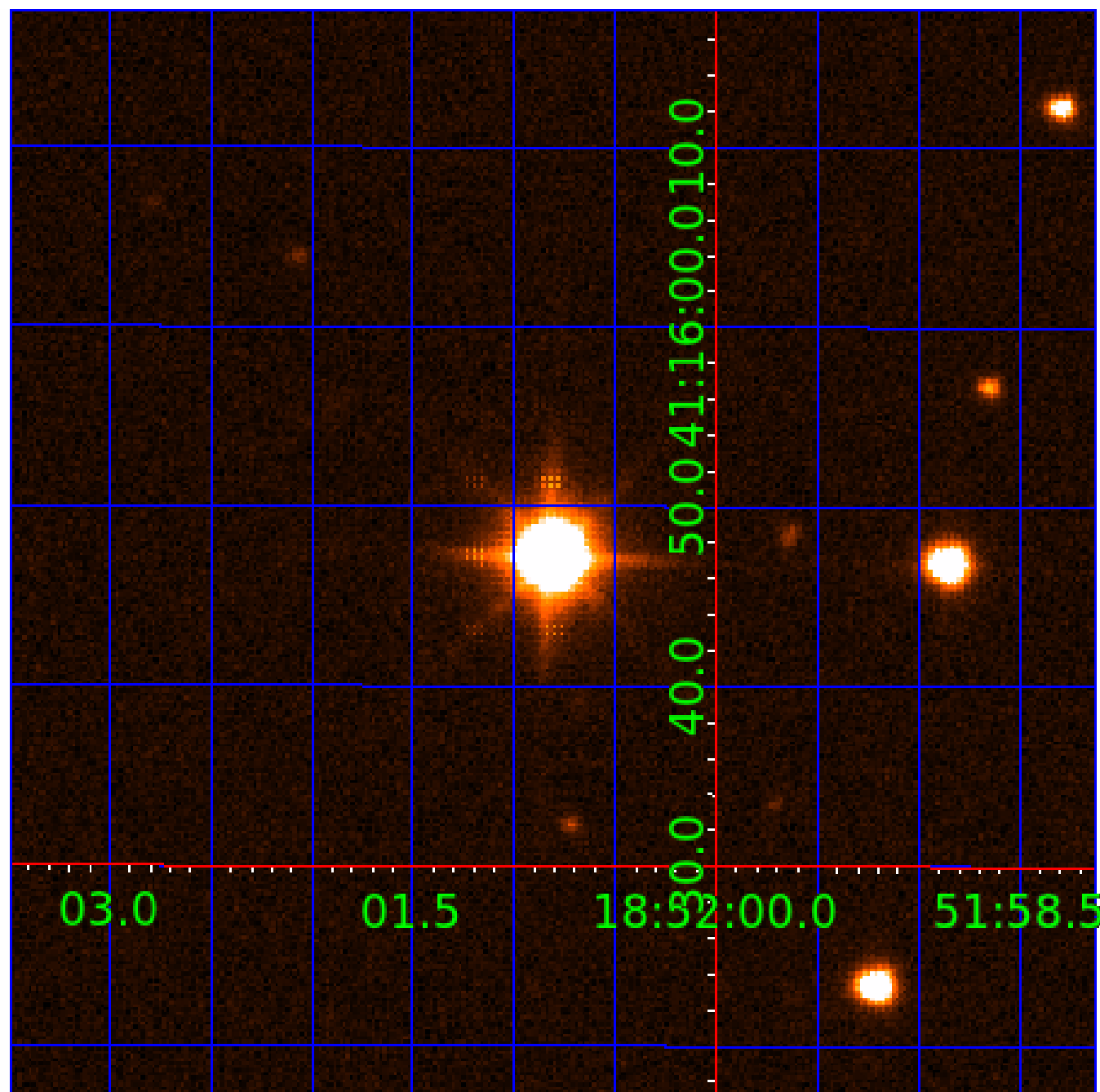


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 005938266

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})
005938266-01	OBS	No	1.089117	131.932395	13.1	7.610	10.6	5.3	3.26	6760	1.26	32851.02
005938266-02	OBS	No	72.635311	190.932171	169.5	12.598	15.4	8.3	3.26	6760	4.55	121.47
005938266-03	OBS	No	13.552544	131.876363	48.0	11.219	11.1	5.1	3.26	6760	2.55	1139.26
005938266-04	OBS	No	30.565476	153.049310	263.4	1.852	10.9	11.5	3.26	6760	5.78	385.19
005938266-05	OBS	No	50.735214	159.740808	238.3	2.077	10.5	10.8	3.26	6760	5.92	195.99
005938266-06	OBS	No	7.653263	137.237203	123.5	1.935	10.1	10.9	3.26	6760	4.25	2440.73
005938266-07	OBS	No	6.737365	135.089343	147.4	1.284	8.3	10.2	3.26	6760	4.63	2892.87

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
005938266-01	OBS	FP	0.00	1	0	0	0	SWEET_NTL—LPP_DV—MOD_NONUNIQ_ALT—CENT_SATURATED
005938266-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—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—CENT_SATURATED
005938266-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_TRACKER—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—CENT_SATURATED
005938266-04	OBS	FP	0.00	1	0	1	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_SATURATED—HALO_GHOST
005938266-05	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_NONUNIQ_ALT—MOD_POS_ALT—CENT_SATURATED
005938266-06	OBS	FP	0.00	1	0	1	0	INDIV_TRANS_RUBBLE_ZUMA—TRANS_GAPPED—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_SATURATED—HALO_GHOST
005938266-07	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_ZUMA—TRANS_GAPPED—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_SATURATED

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

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

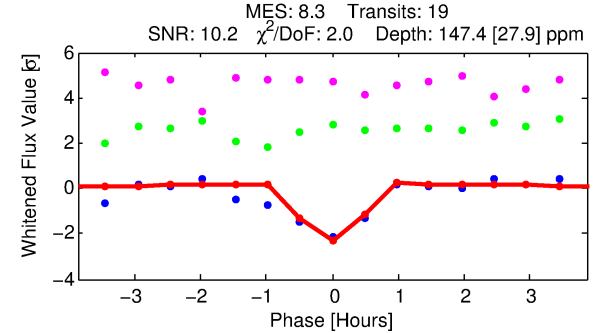
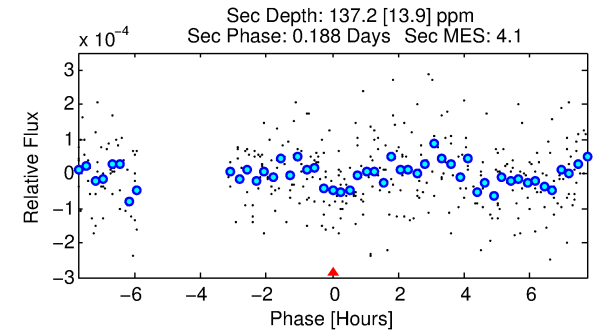
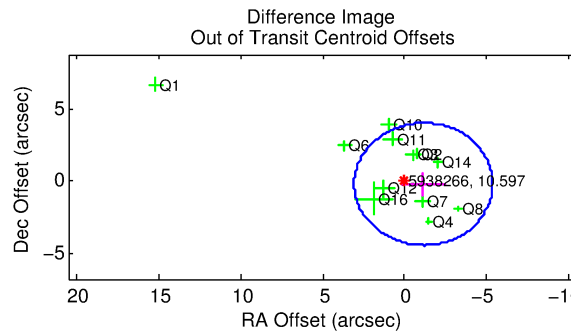
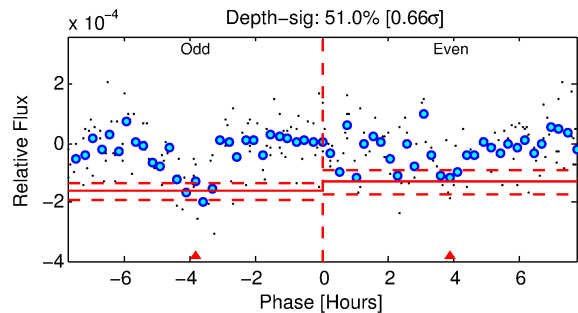
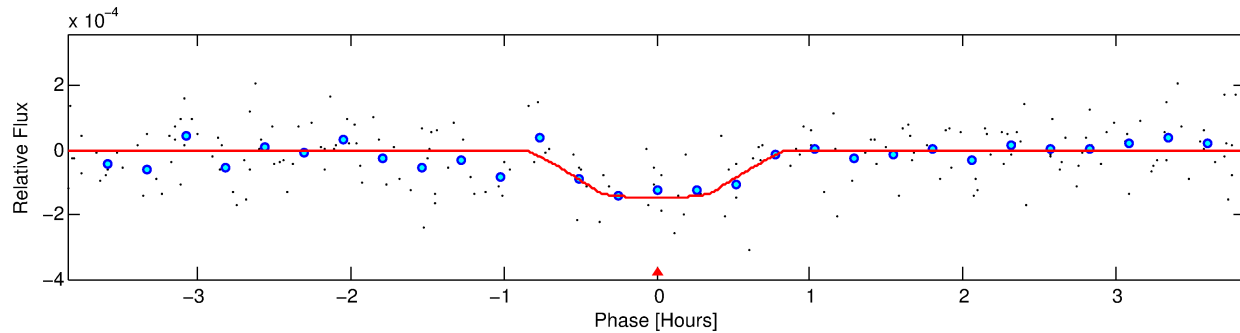
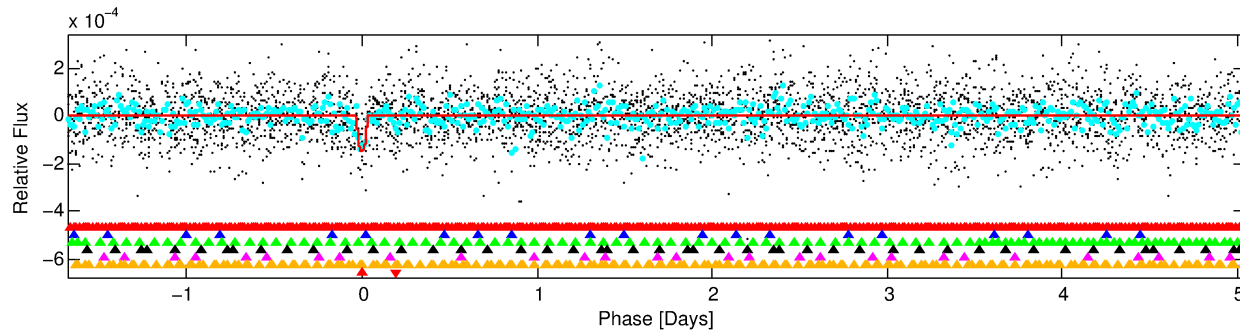
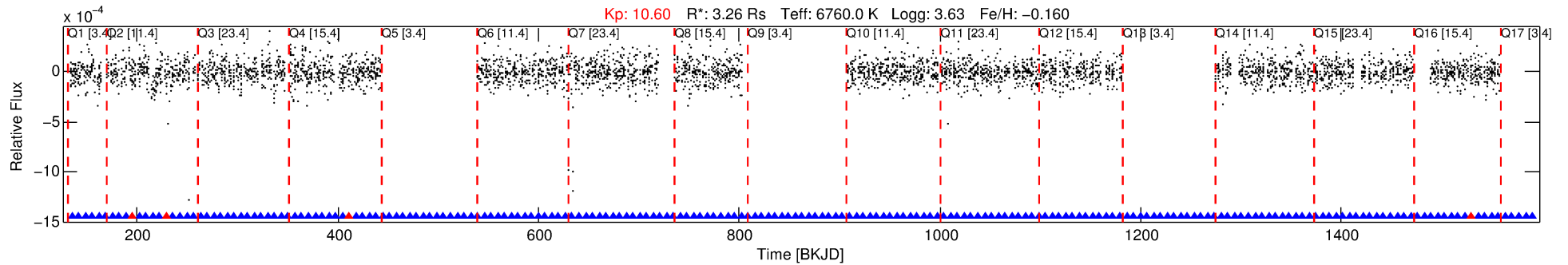
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 005938266-07

No Significant Match Found

DV One-Page Summary

KIC: 5938266 Candidate: 7 of 7 Period: 6.737 d



DV Fit Results:

Period = 6.73736 [0.00004] d
Epoch = 135.0893 [0.0044] BKJD
Rp/R* = 0.0130 [0.0115]
a/R* = 18.62 [98.66]
b = 0.90 [1.13]
Seff = 2892.87 [1477.52]
Teq = 1870 [239] K
Rp = 4.63 [4.38] Re
a = 0.0829 [0.0262] AU
Ag = 24.21 [44.49] [0.52 σ]
Teffp = 6414 [2843] K [1.59 σ]

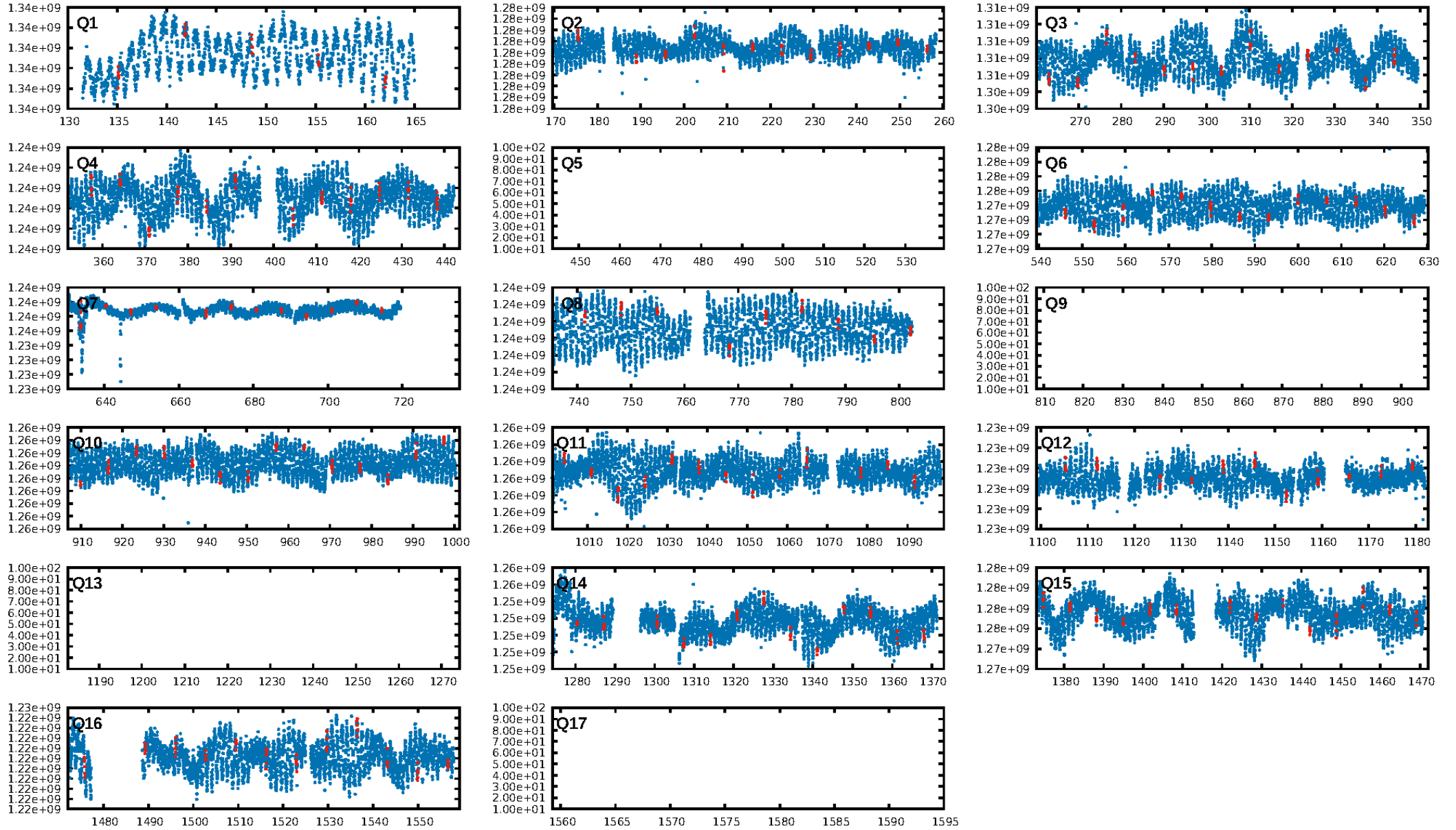
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [17.56 σ]
LongPeriod-sig: 100.0% [9.46 σ]
ModelChiSquare2-sig: 0.1%
ModelChiSquareGof-sig: 92.1%
Bootstrap-pfa: 8.07e-07
RollingBand-fgt: 0.78 [14/18]
GhostDiagnostic-chr: 0.3887
Centroid-sig: 56.4%
Centroid-so: 0.345 arcsec [1.04 σ]
OotOffset-rm: 1.160 arcsec [0.83 σ]
KicOffset-rm: 1.431 arcsec [0.87 σ]
OotOffset-st: 4/3/4/1 [12]
KicOffset-st: 4/3/4/1 [12]
DiffImageQuality-fgm: 0.50 [6/12]
DiffImageOverlap-fno: 0.92 [12/13]

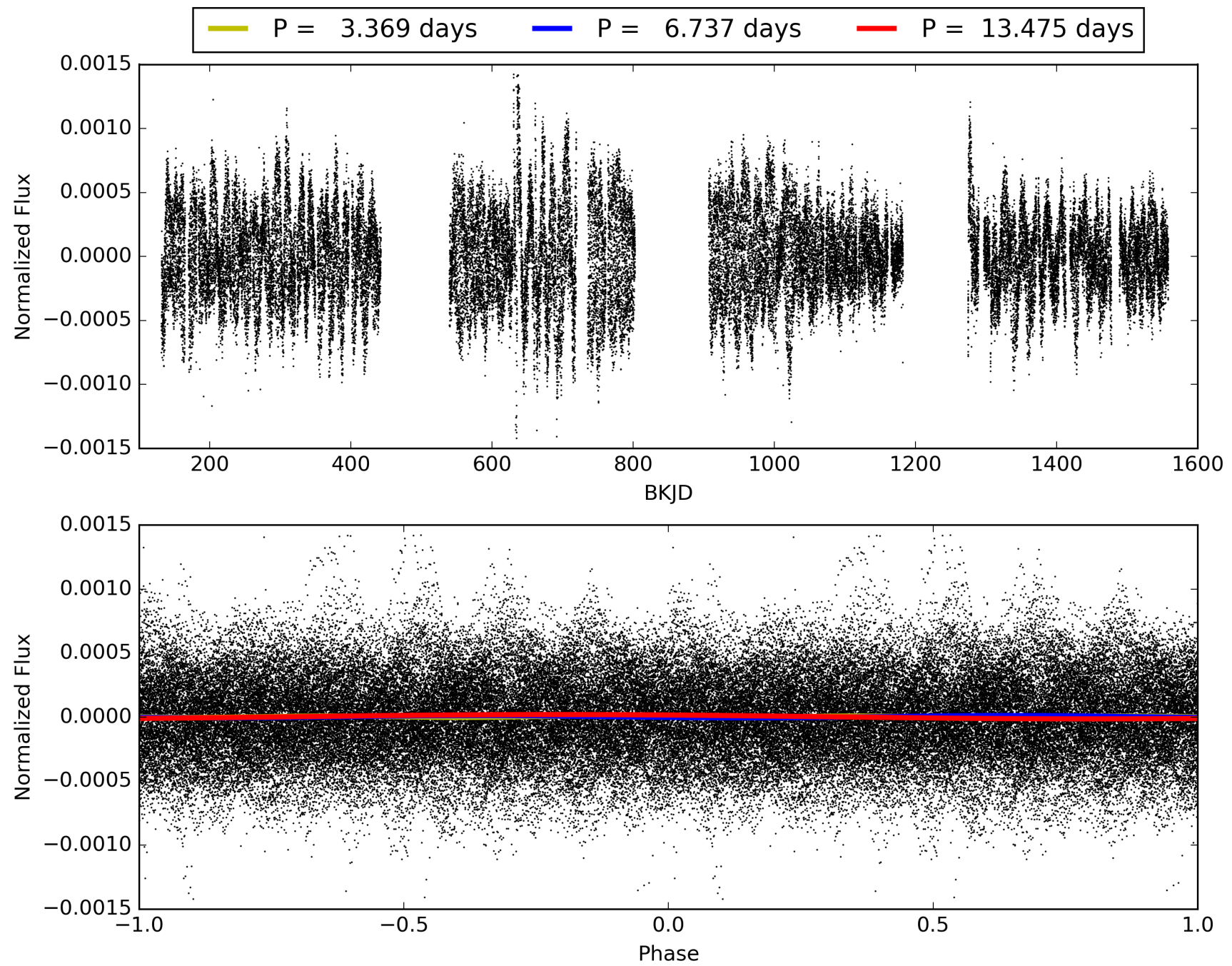
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 02-Feb-2016 07:27:53 Z

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

TCE 005938266-07, PDC Light Curves

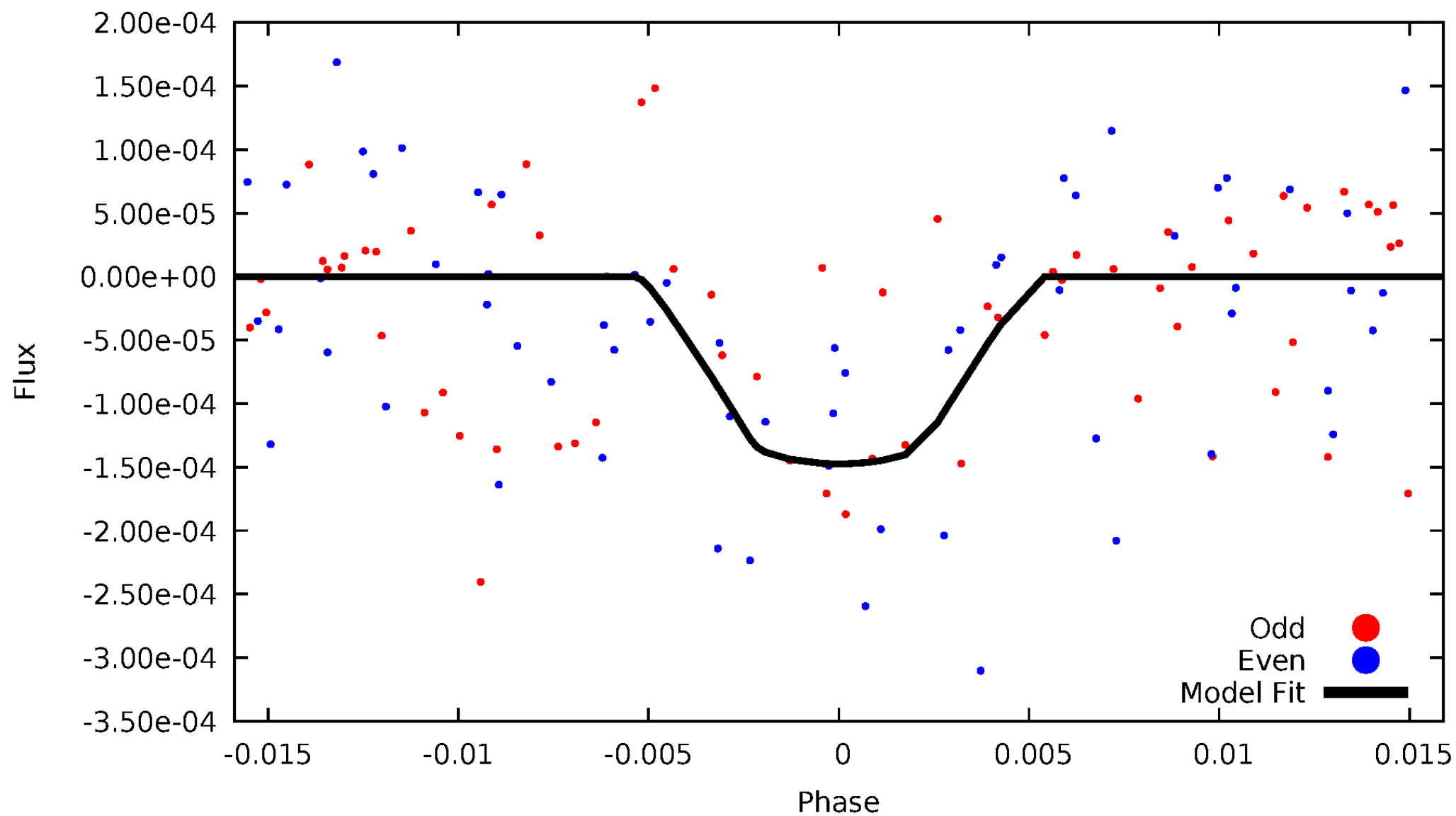


TCE 005938266-07



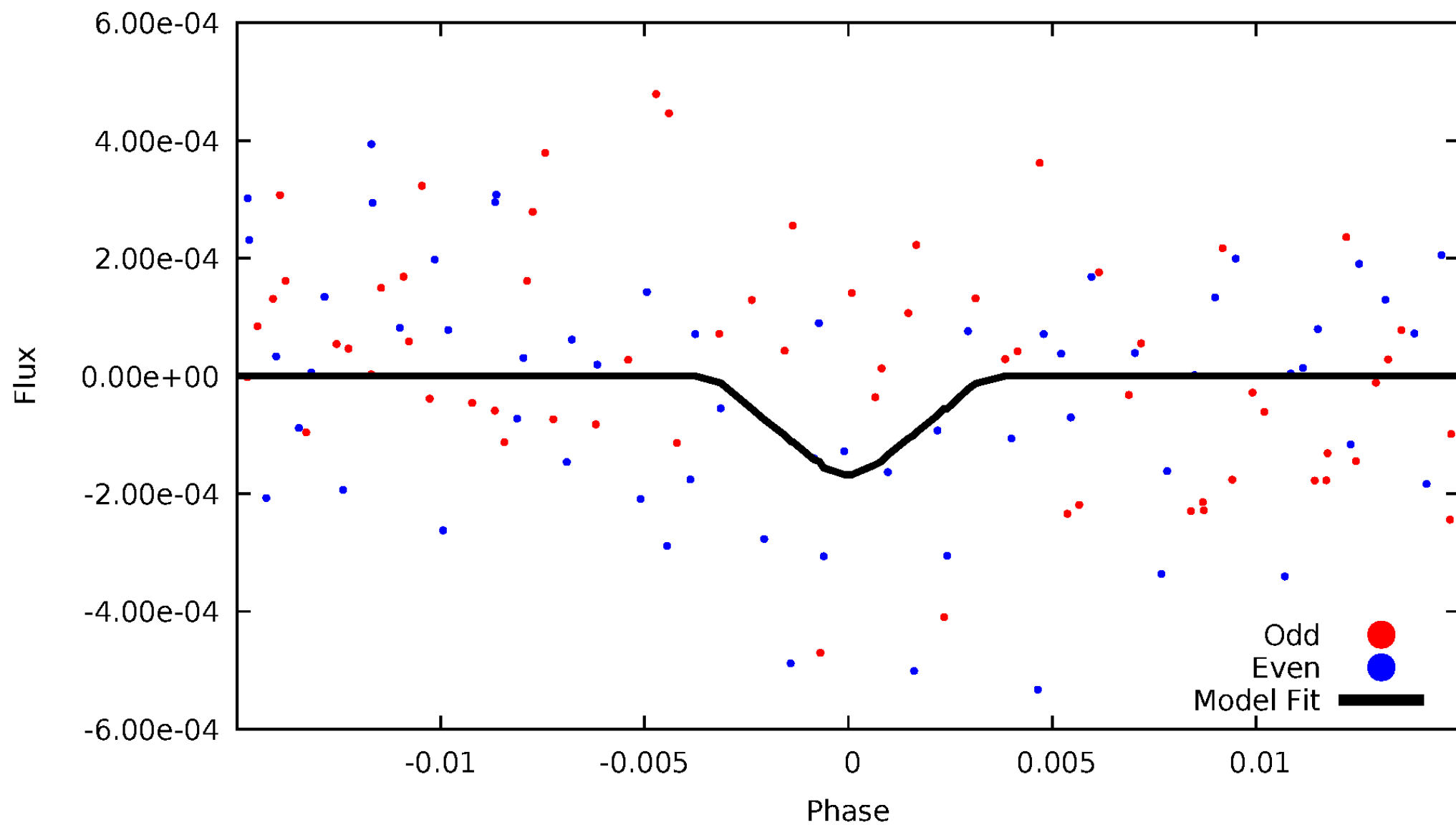
DV Odd/Even

TCE 005938266-07



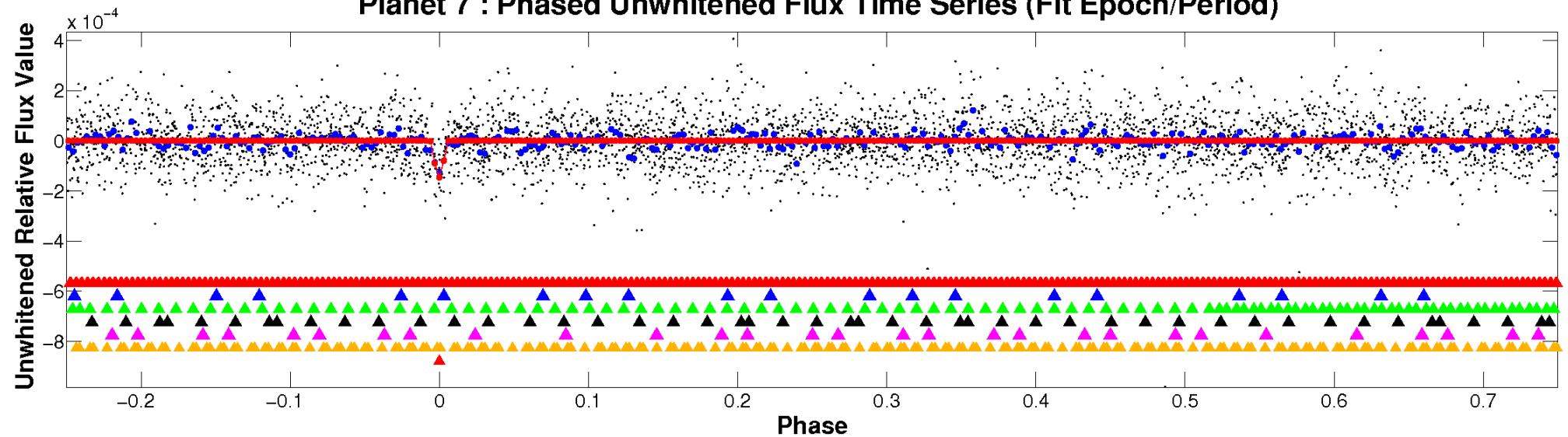
ALT Odd/Even

TCE 005938266-07

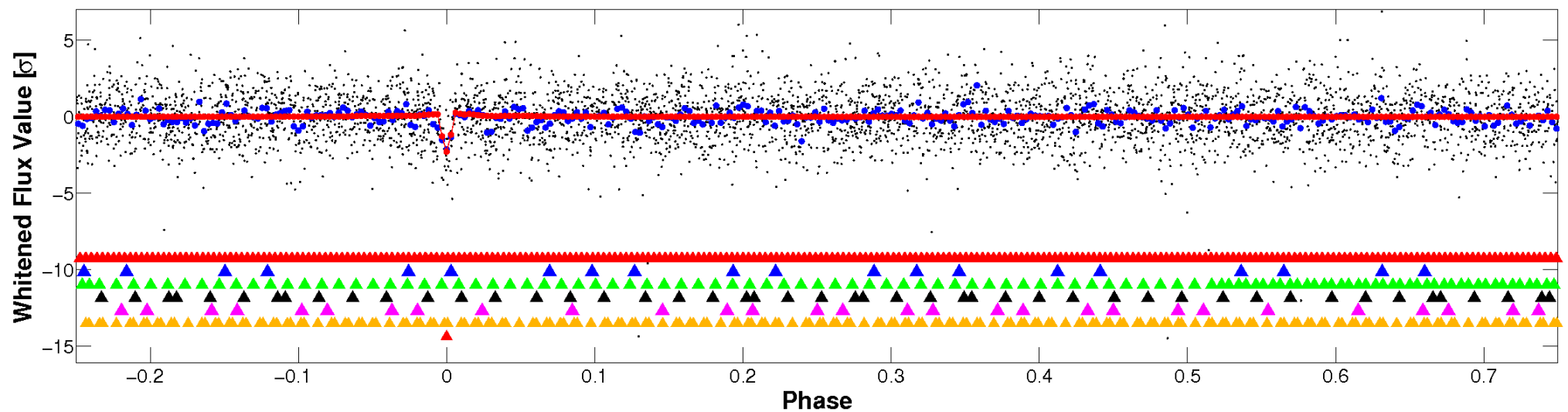


Non-Whitened Vs. Whitened Light Curve

Planet 7 : Phased Unwhitened Flux Time Series (Fit Epoch/Period)

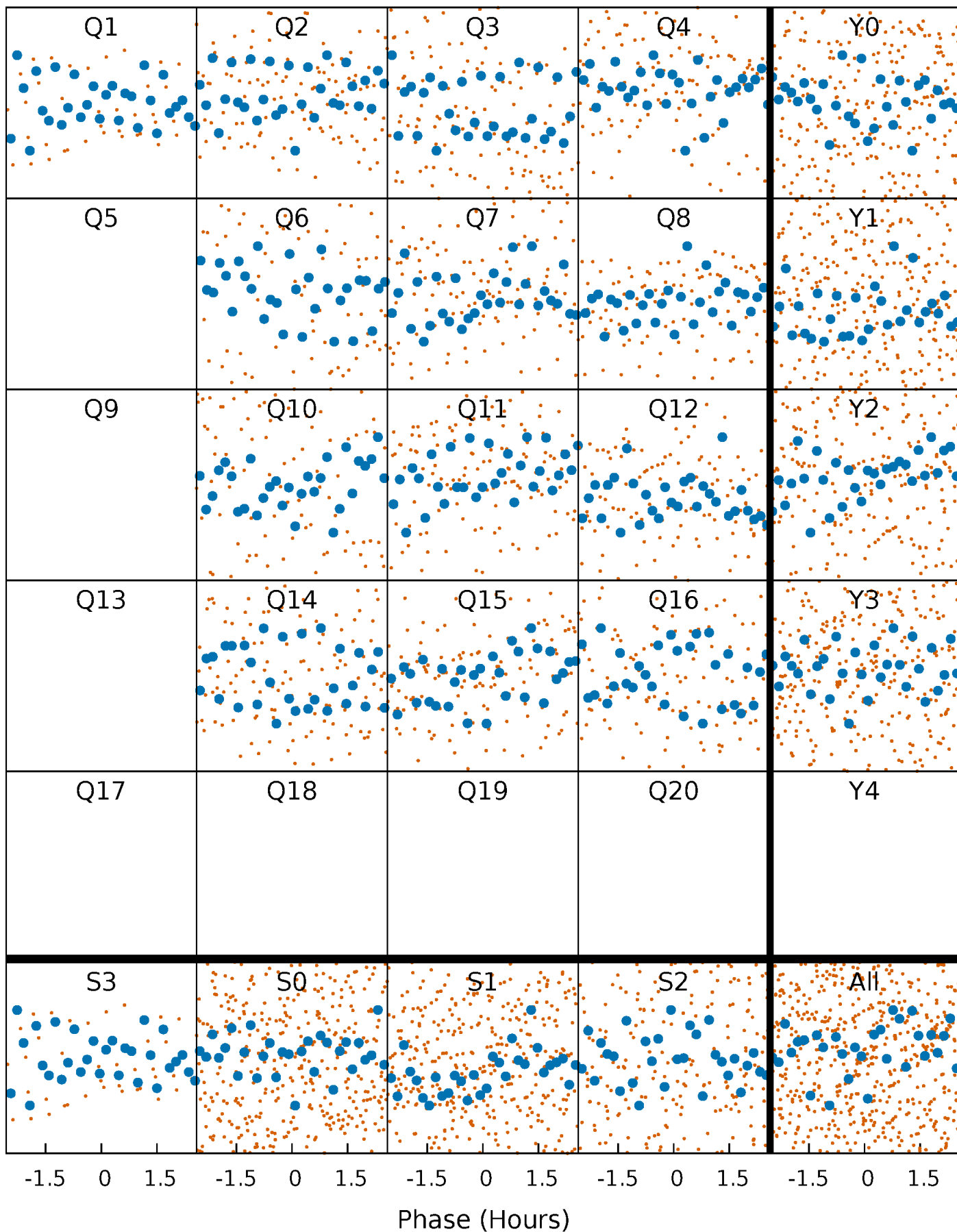


Planet 7 : Phased Whitened Flux Time Series (Fit Epoch/Period)



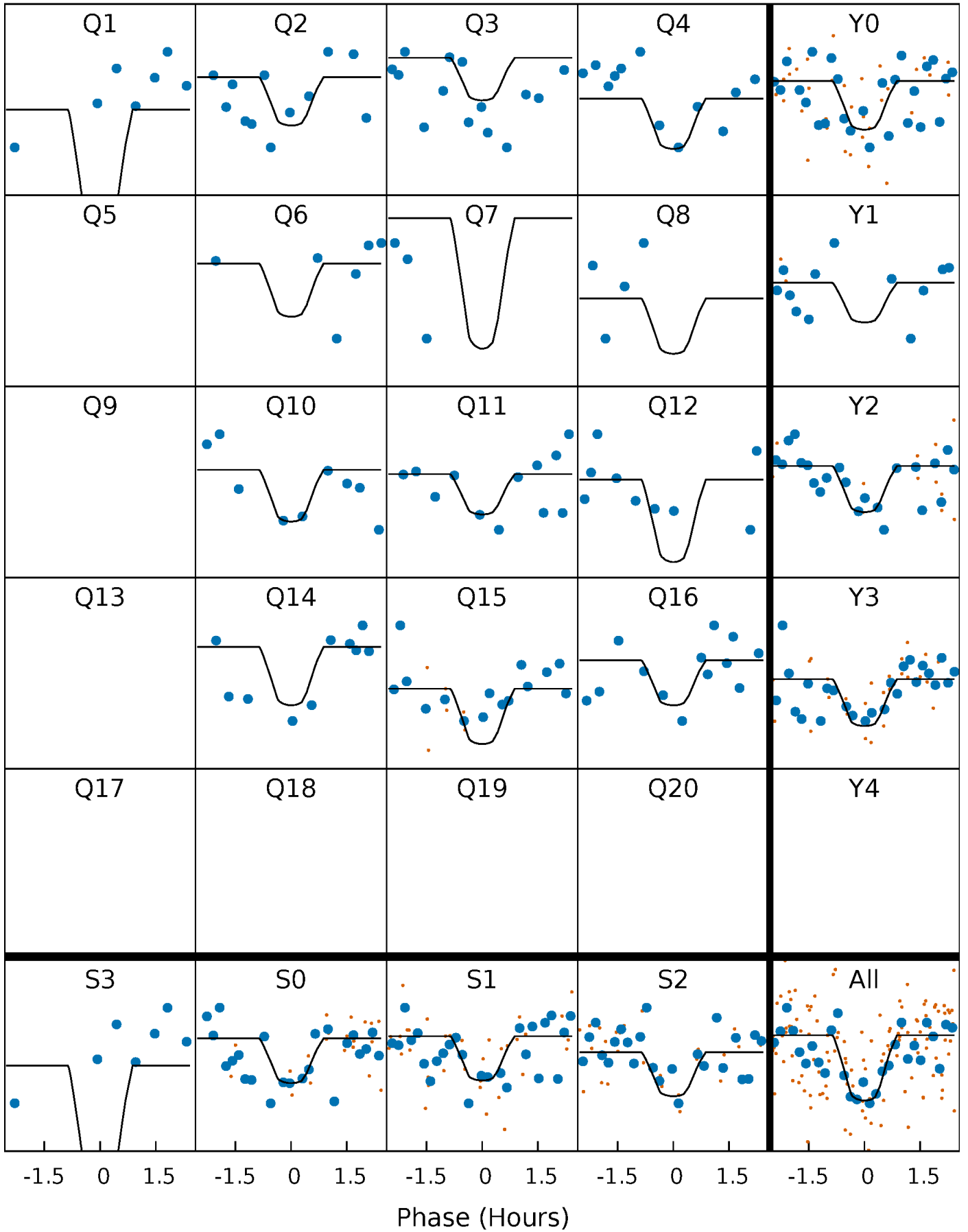
PDC Quarter-Phased Transit Curves

TCE 005938266-07 P= 6.737365 Days $T_0=135.089343$ (BKJD)



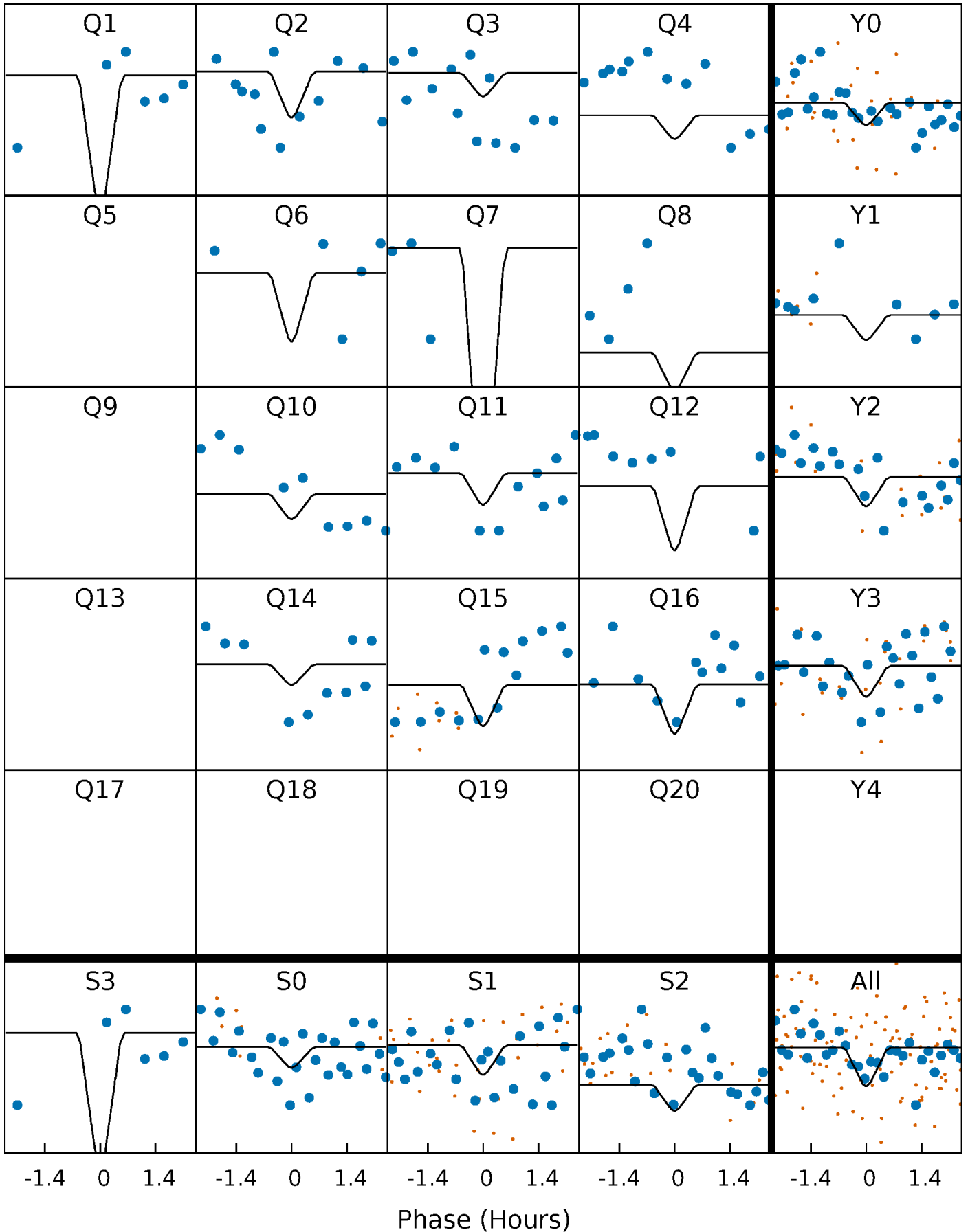
DV Quarter-Phased Transit Curves

TCE 005938266-07 P= 6.737365 Days $T_0=135.089343$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

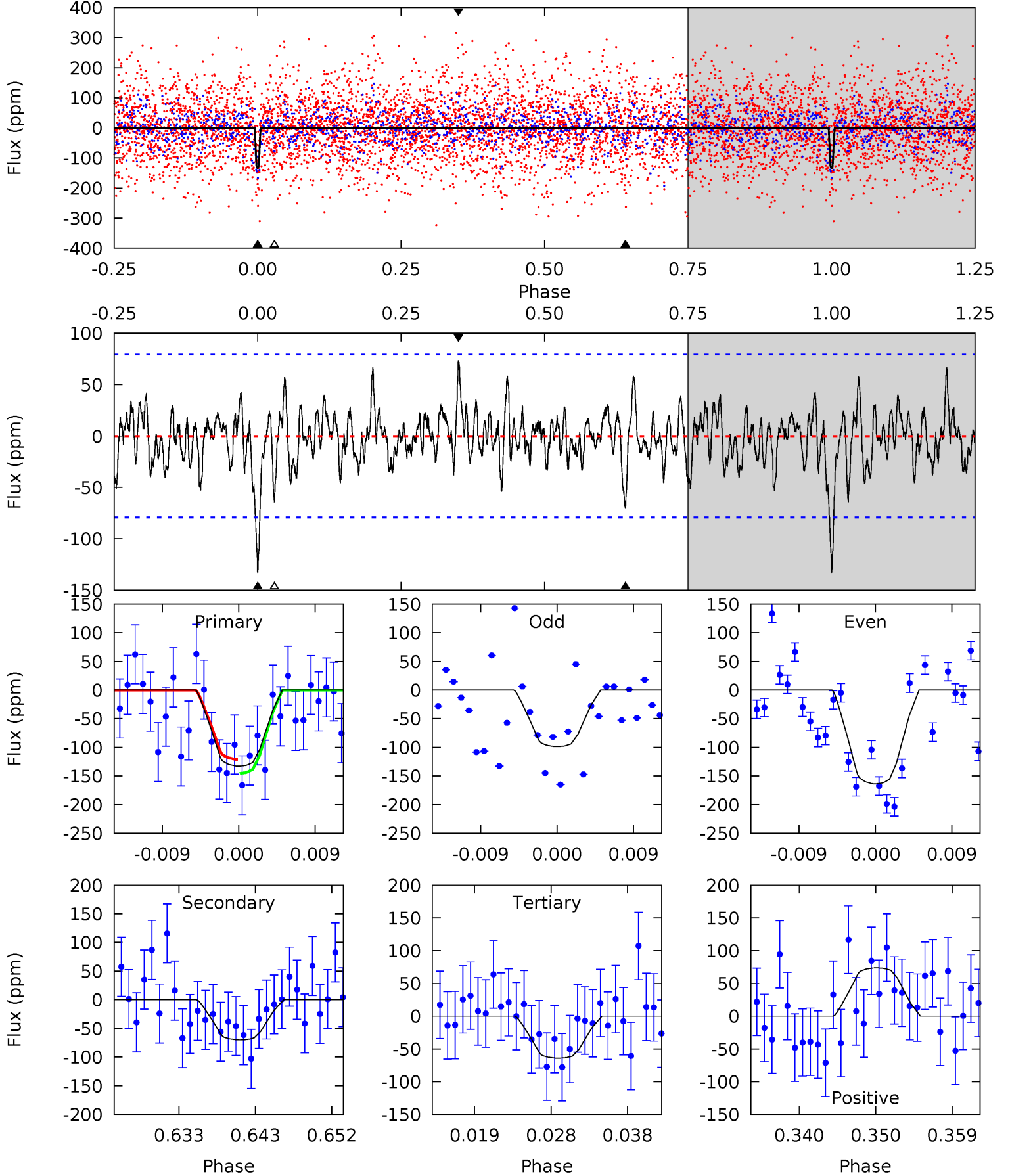
TCE 005938266-07 $P = 6.737448$ Days $T_0 = 135.080646$ (BKJD)



DV Model-Shift Uniqueness Test

005938266-07, P = 6.737365 Days, E = 128.351978 Days

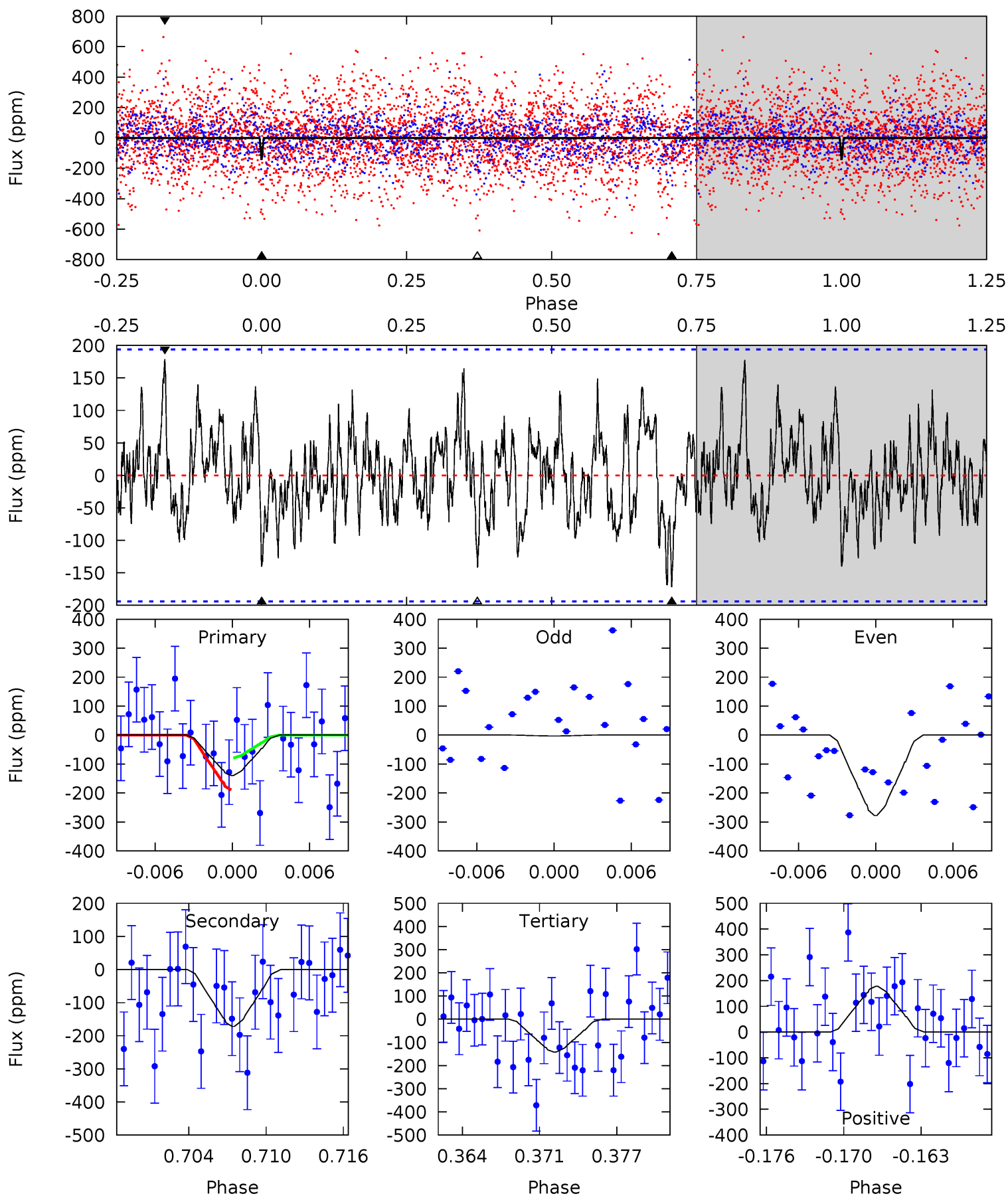
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
8.44	4.44	4.07	4.68	5.04	2.60	1.30	4.36	3.76	0.37	-0.23	2.07	0.92	0.36	0.78



Alt Model-Shift Uniqueness Test

005938266-07, P = 6.737448 Days, E = 128.343198 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
3.68	4.54	3.74	4.69	5.11	2.73	1.44	-0.05	-1.01	0.80	-0.15	3.63	1.16	0.51	1.47



Stellar Parameters For KIC 005938266

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6760^{+152}_{-202}	$3.635^{+0.288}_{-0.072}$	$-0.160^{+0.300}_{-0.250}$	$3.258^{+0.395}_{-1.105}$	$1.670^{+0.239}_{-0.292}$	$0.068^{+0.130}_{-0.016}$
	+2%/-3%	+8%/-2%	+188%/-156%	+12%/-34%	+14%/-17%	+191%/-23%
Source	PHO1	FLK73	KIC0	DSEP		

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

Secondary Eclipse Parameters for KIC 005938266-07 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-70 ± 16	$4.81^{+3.90}_{-3.06}$	2545^{+134}_{-196}	5168^{+3140}_{-1148}	12^{+73}_{-8}
Alt.	-172 ± 38	$4.62^{+3.88}_{-2.97}$	2557^{+137}_{-226}	6469^{+5953}_{-1610}	30^{+190}_{-21}

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

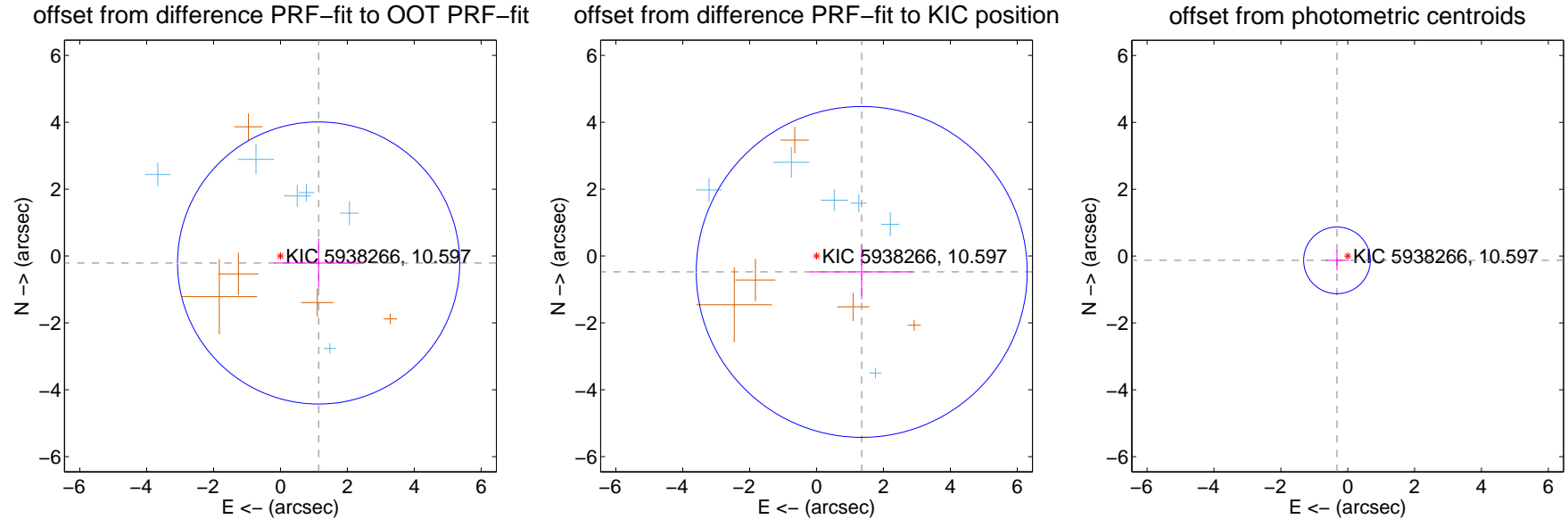
DV Centroid Data

Supplemental centroid analysis for 005938266-07. **Kepler magnitude: 10.60.** Transit SNR 10.18

There are 6 quarters with good PRF difference image offsets

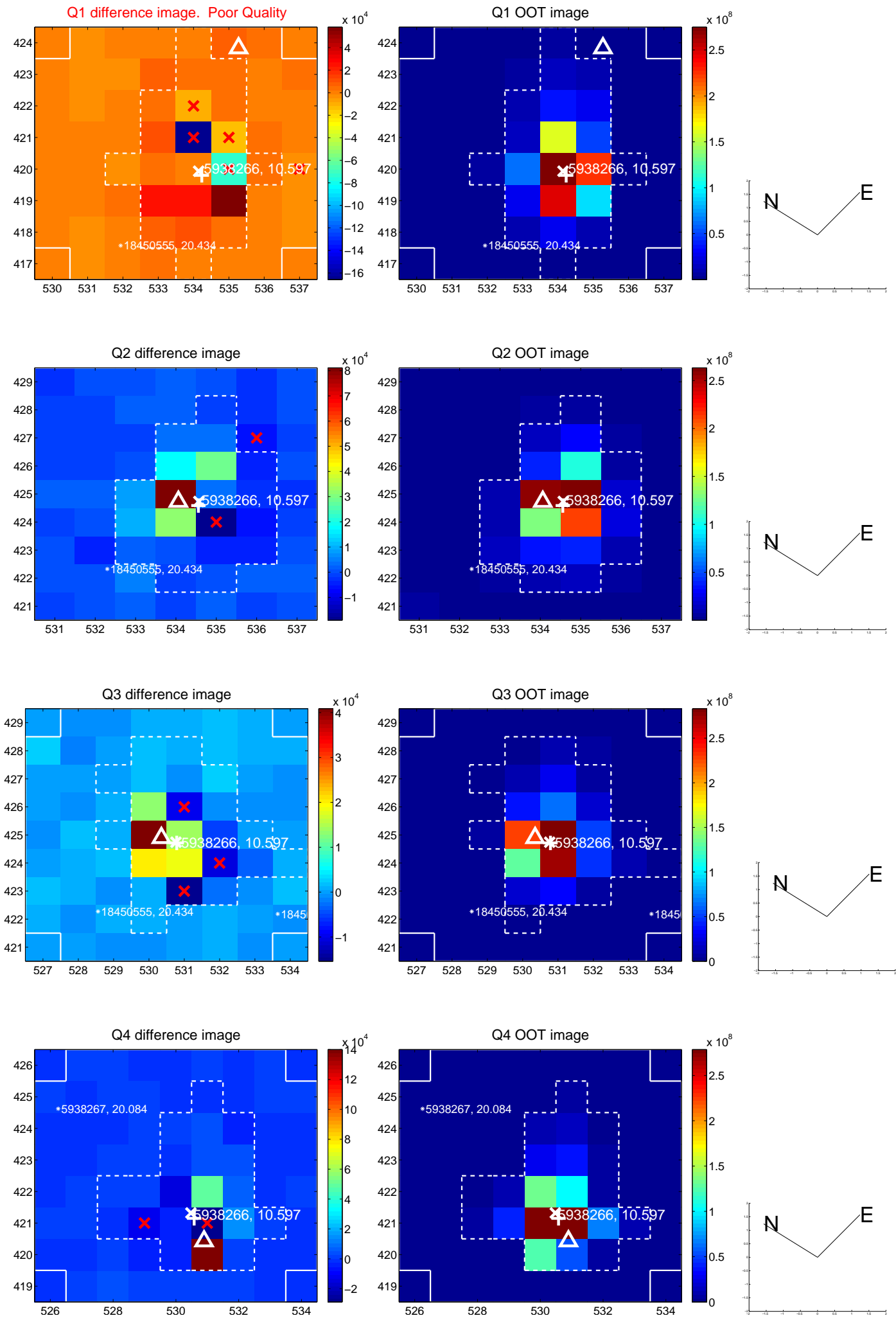
The direct PRF centroid is offset from the target star catalog position by about 0.68 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	1.160 ± 1.406	0.83	-1.141 ± 1.333	-0.208 ± 0.734
PRF-fit source offset from KIC position	1.431 ± 1.649	0.87	-1.349 ± 1.534	-0.476 ± 0.813
photometric centroid source offset	0.35 ± 0.33	1.04	0.32 ± 0.34	-0.13 ± 0.30

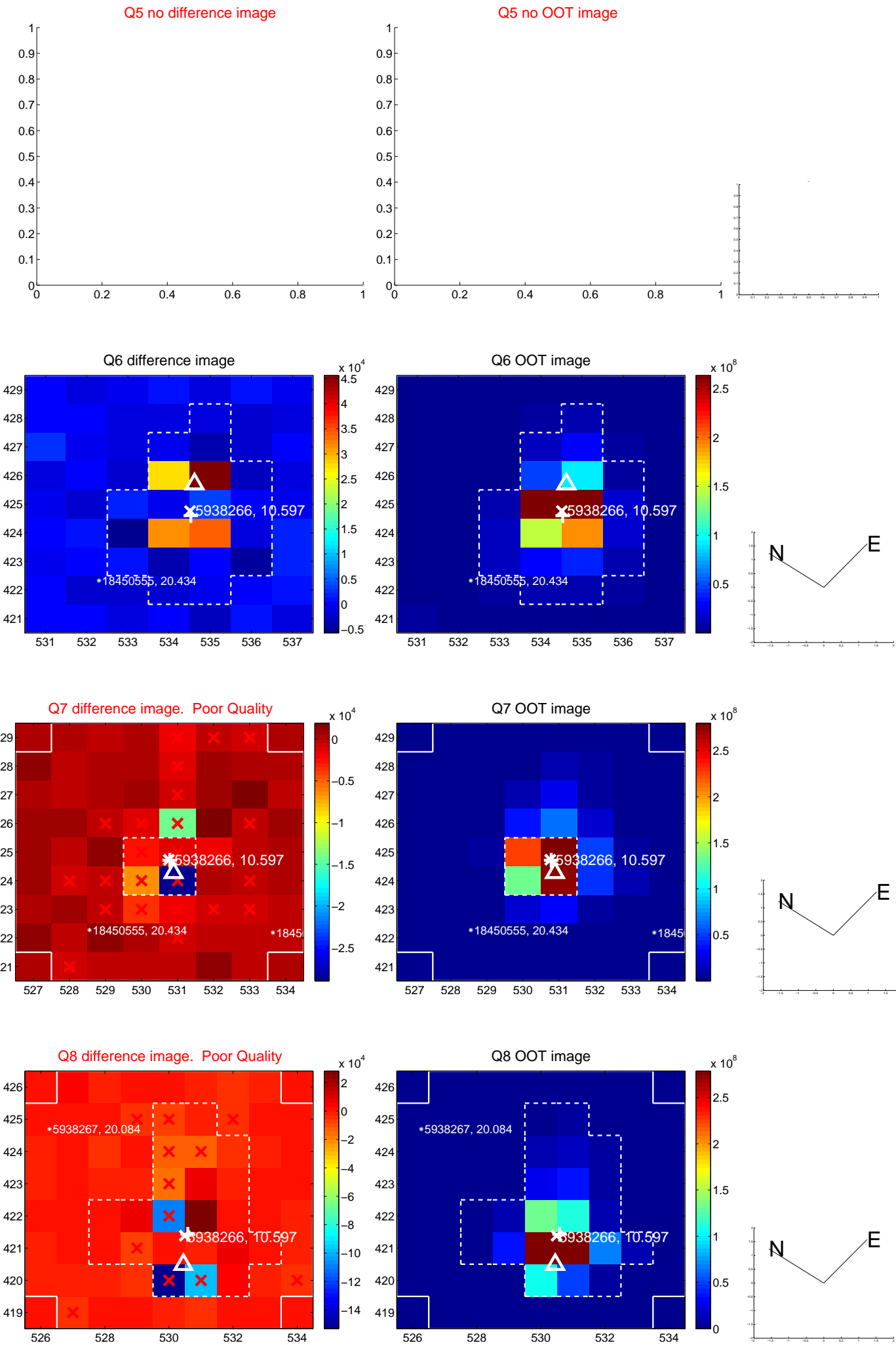


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets;** magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

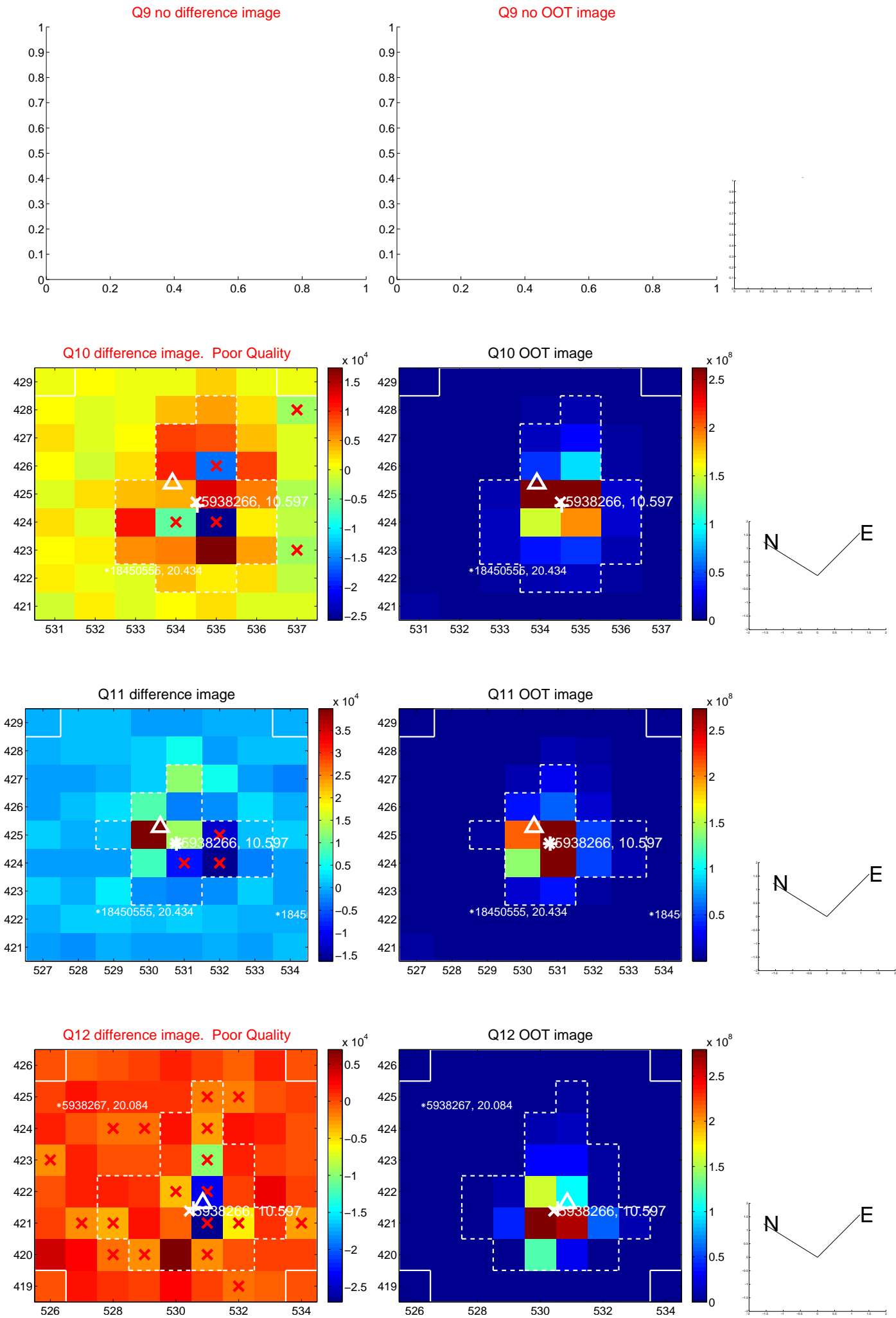
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



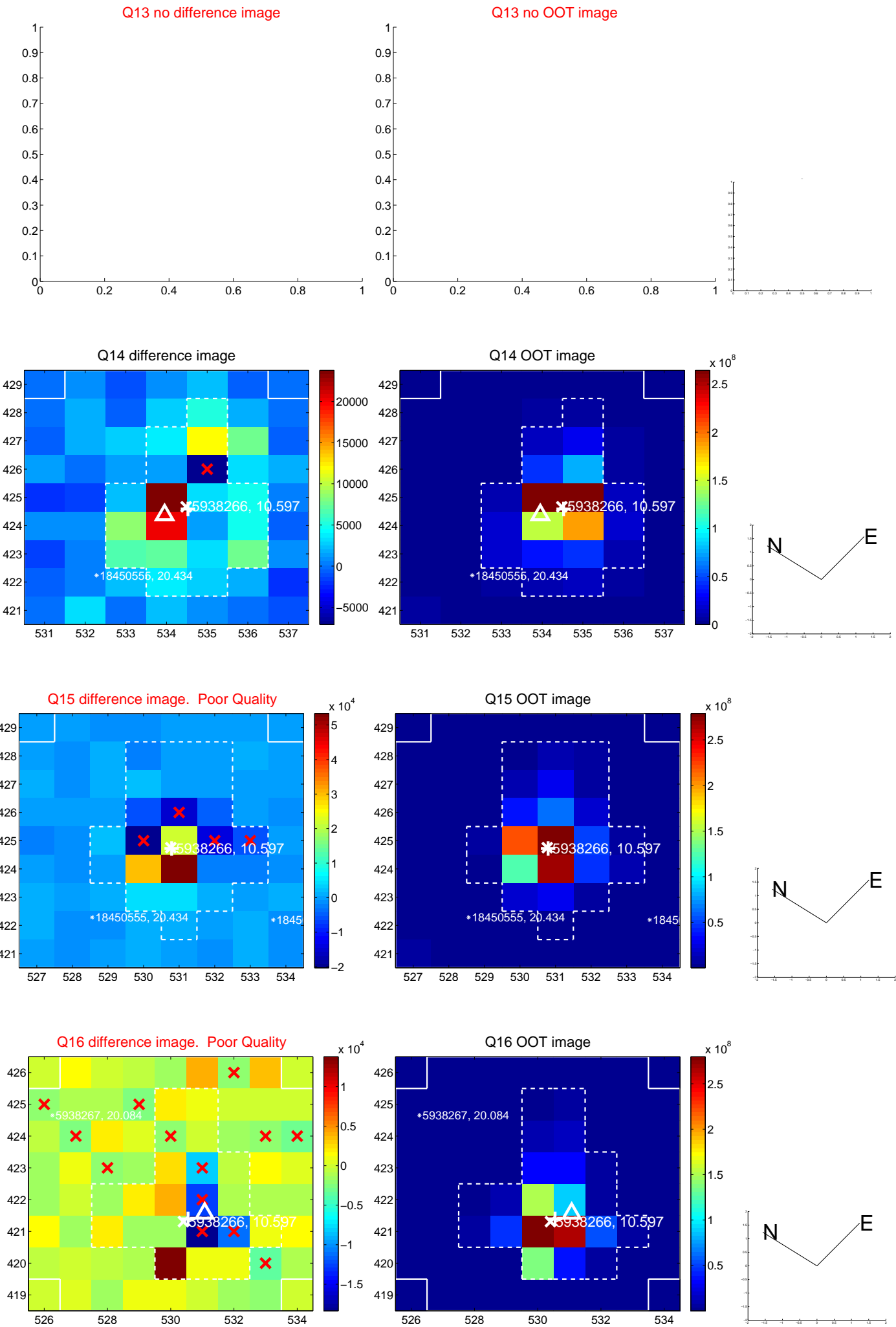
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



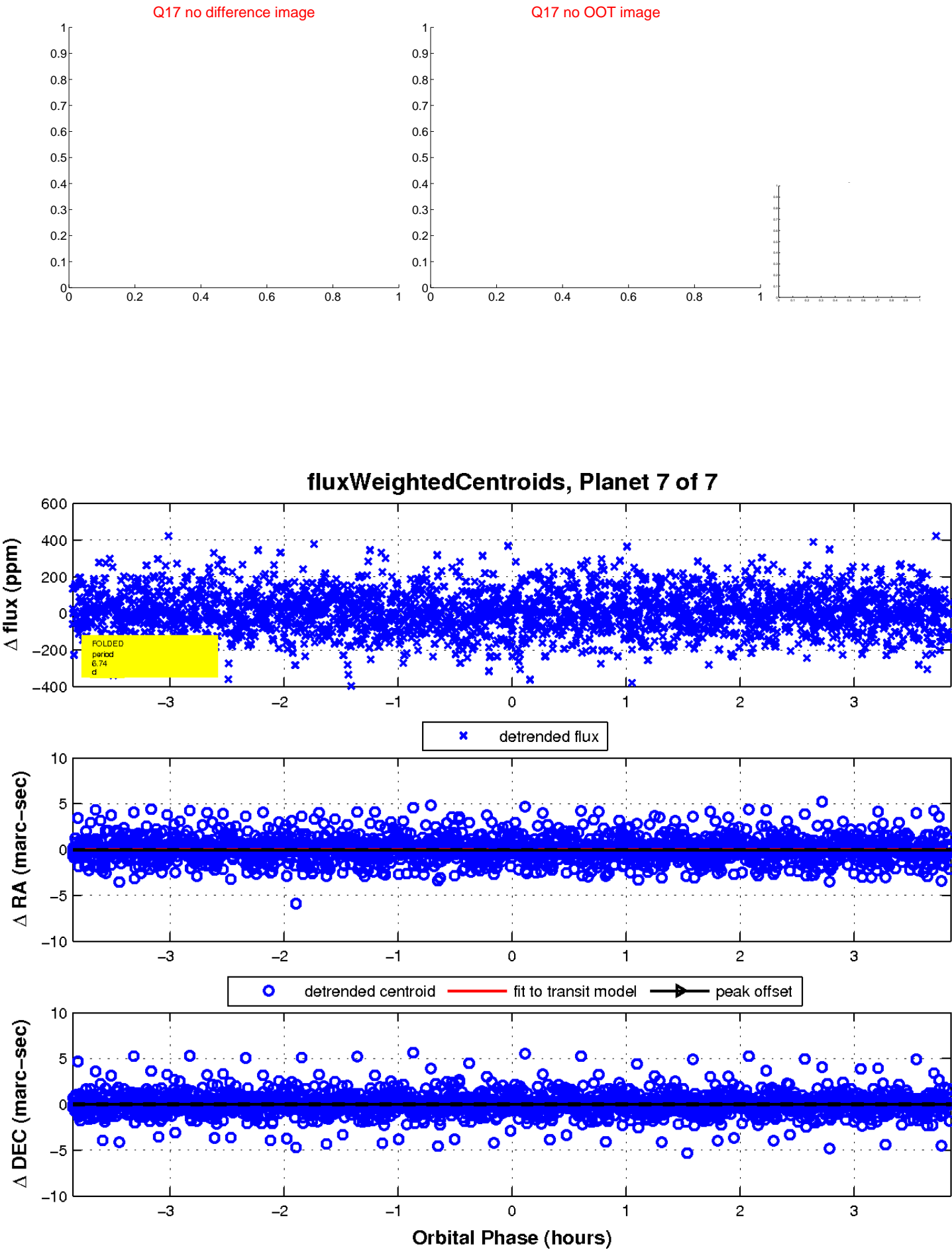
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

