

KIC 006425135

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})
006425135-01	OBS	No	2.030884	132.971373	13.1	14.392	7.5	7.8	2.55	5198	0.98	4070.86
006425135-02	OBS	No	62.864355	188.522928	1011.0	10.785	29.6	22.3	2.55	5198	16.15	41.88
006425135-03	OBS	No	28.998564	135.651150	465.8	20.532	27.9	14.0	2.55	5198	11.27	117.52
006425135-05	OBS	No	38.275026	158.526009	203.7	51.894	17.6	5.5	2.55	5198	4.16	81.17
006425135-06	OBS	No	30.498761	135.443758	258.5	9.979	12.0	6.6	2.55	5198	5.14	109.87
006425135-07	OBS	No	24.616981	140.066812	179.2	7.588	9.4	8.2	2.55	5198	3.50	146.20

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
006425135-01	OBS	FP	0.00	1	0	1	0	LPP_DV—CENT_RESOLVED_OFFSET
006425135-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—ALL_TRANS_CHASES—MOD_TER_ALT—MOD_POS_ALT—CENT_FEW_DIFFS
006425135-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—CENT_FEW_DIFFS
006425135-05	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_ALT
006425135-06	OBS	FP	0.00	1	0	1	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—LPP_ALT—CENT_RESOLVED_OFFSET
006425135-07	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_ZUMA—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_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.

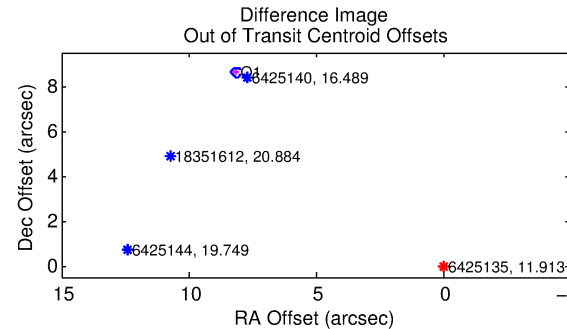
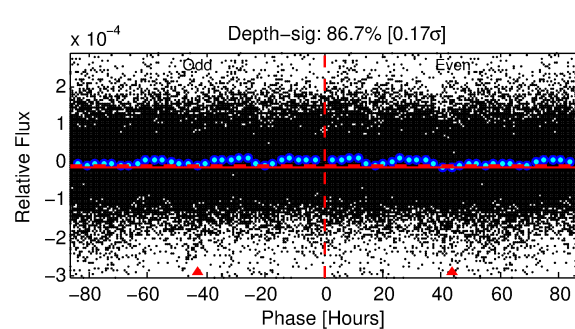
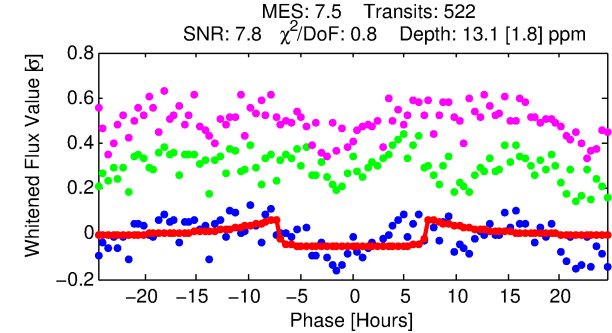
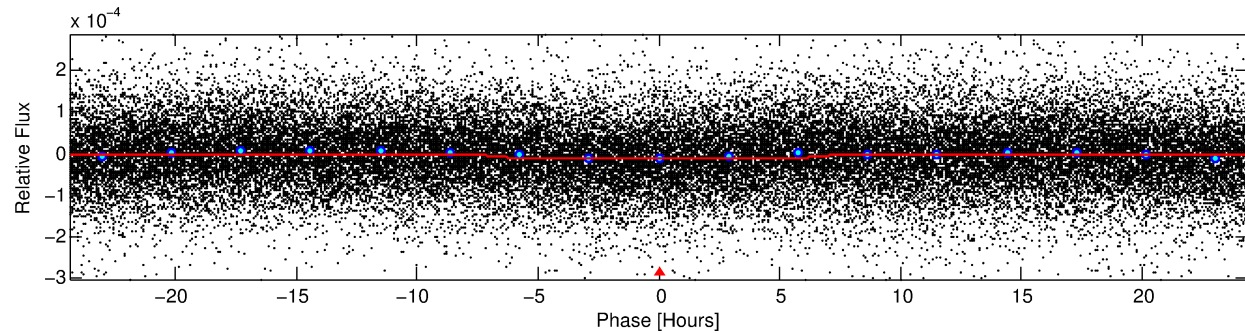
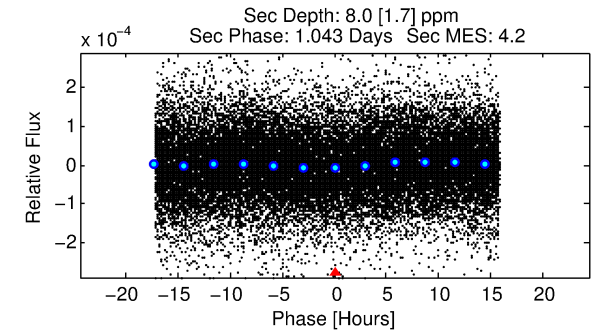
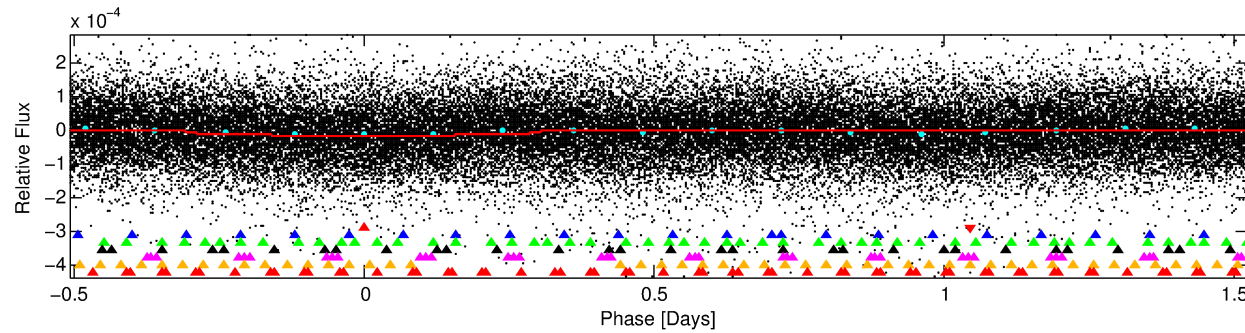
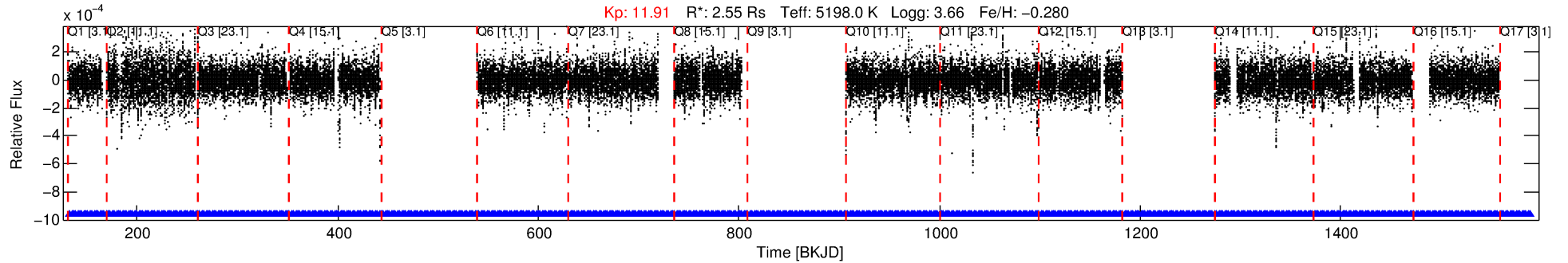
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 006425135-01

No Significant Match Found

DV One-Page Summary

KIC: 6425135 Candidate: 1 of 7 Period: 2.031 d



DV Fit Results:

Period = 2.03088 [0.00003] d
Epoch = 132.9714 [0.0074] BKJD
 R_p/R^* = 0.0035 [0.0014]
 a/R^* = 1.14 [0.42]
 b = 0.70 [1.21]
 T_{eff} = 4070.86 [5867.07]
 T_{eq} = 2037 [734] K
 R_p = 0.98 [0.78] R_e
 a = 0.0323 [0.0264] AU
 A_g = 4.75 [7.89] [0.48σ]
 T_{eff} = 4650 [991] K [2.12σ]

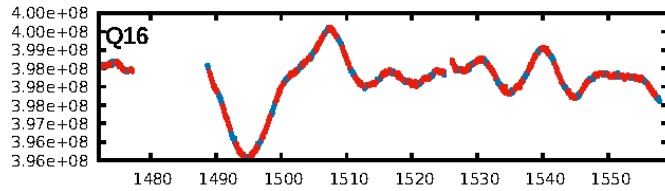
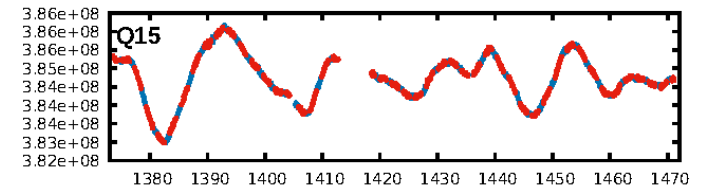
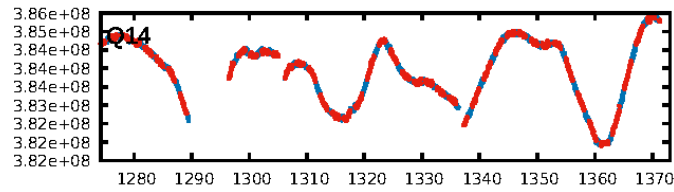
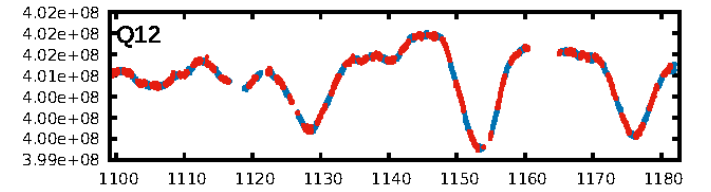
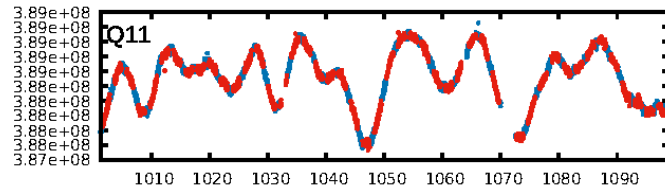
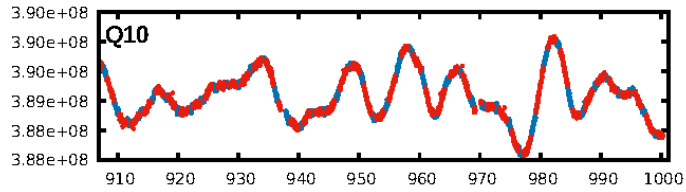
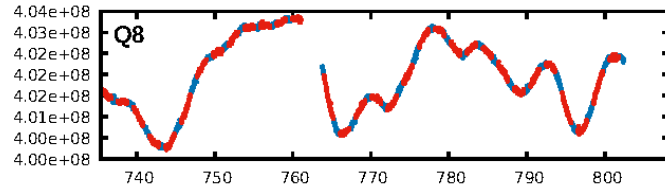
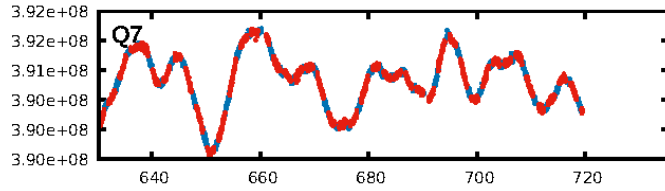
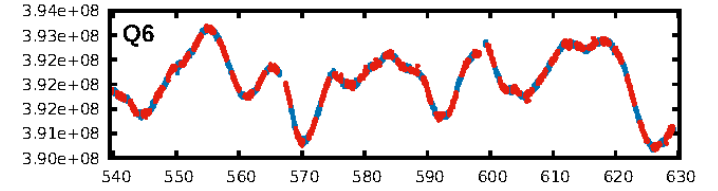
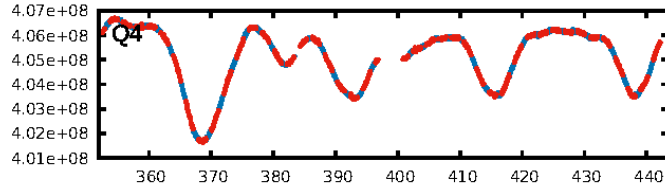
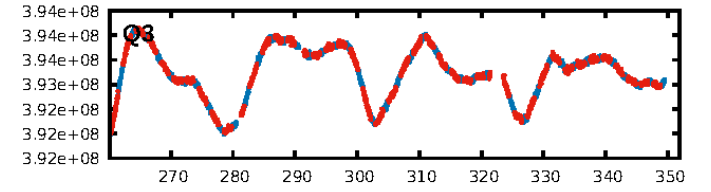
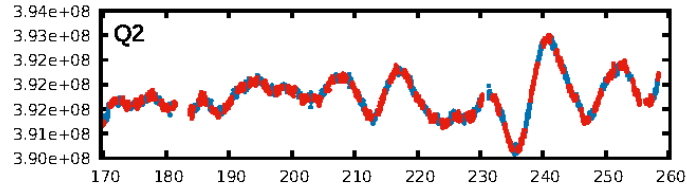
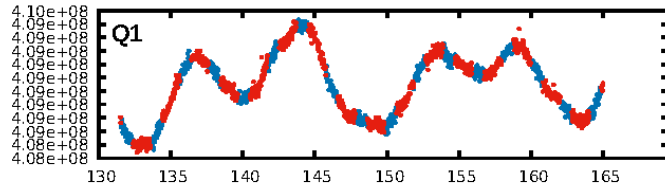
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: 100.0% [33.32σ]
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 4.83e-11
RollingBand-fgt: 1.00 [506/506]
GhostDiagnostic-chr: -0.5511
Centroid-sig: N/A
Centroid-so: 1.868 arcsec [1.97σ]
OotOffset-rm: 11.836 arcsec [173.80σ]
KicOffset-rm: 11.745 arcsec [172.46σ]
OotOffset-st: 0/0/0/1 [1]
KicOffset-st: 0/0/0/1 [1]
DiffImageQuality-fgm: 0.00 [0/1]
DiffImageOverlap-fno: 1.00 [13/13]

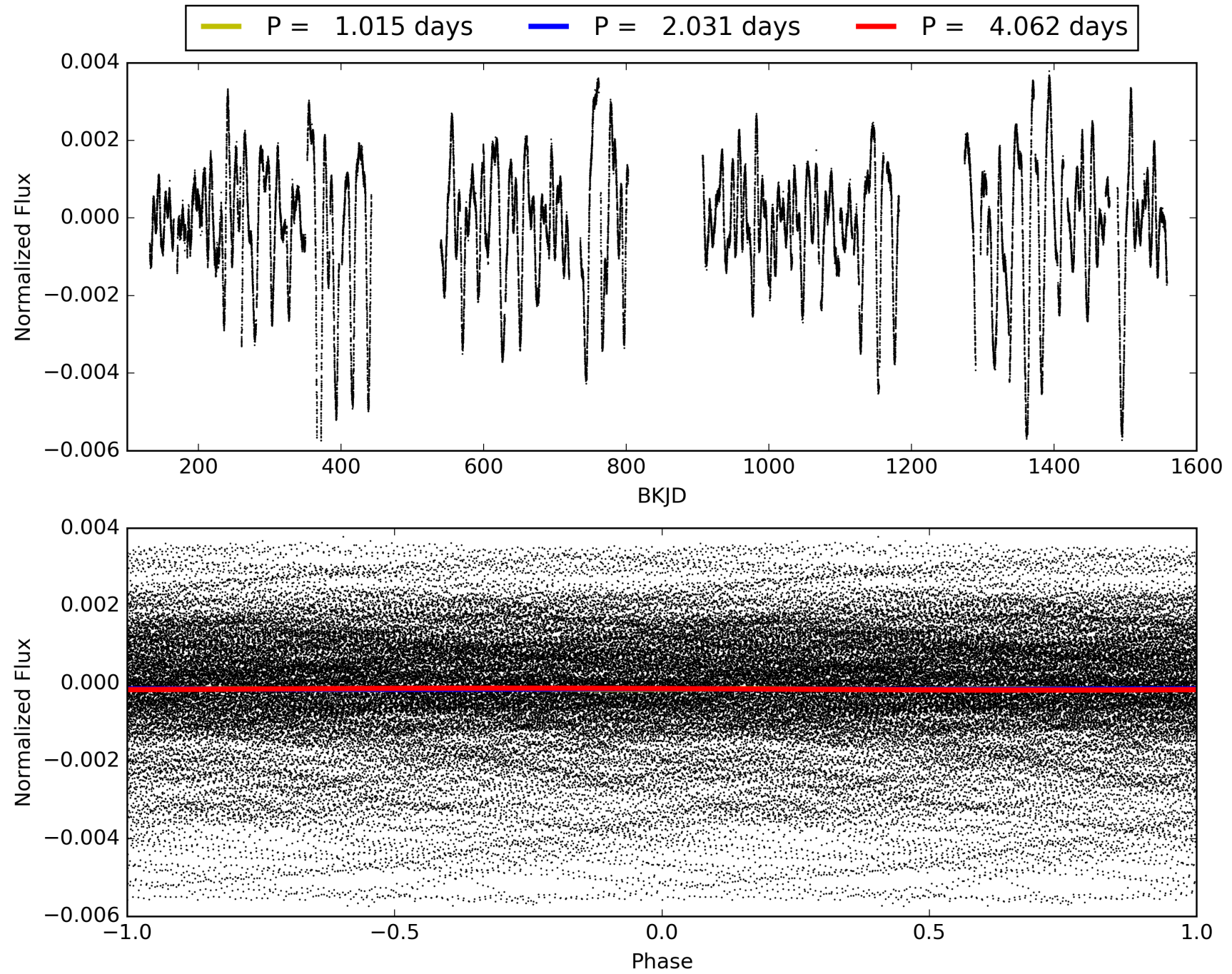
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This Data Validation Report Summary was produced in the Kepler Science Operations Center Pipeline at NASA Ames Research Center

TCE 006425135-01, PDC Light Curves

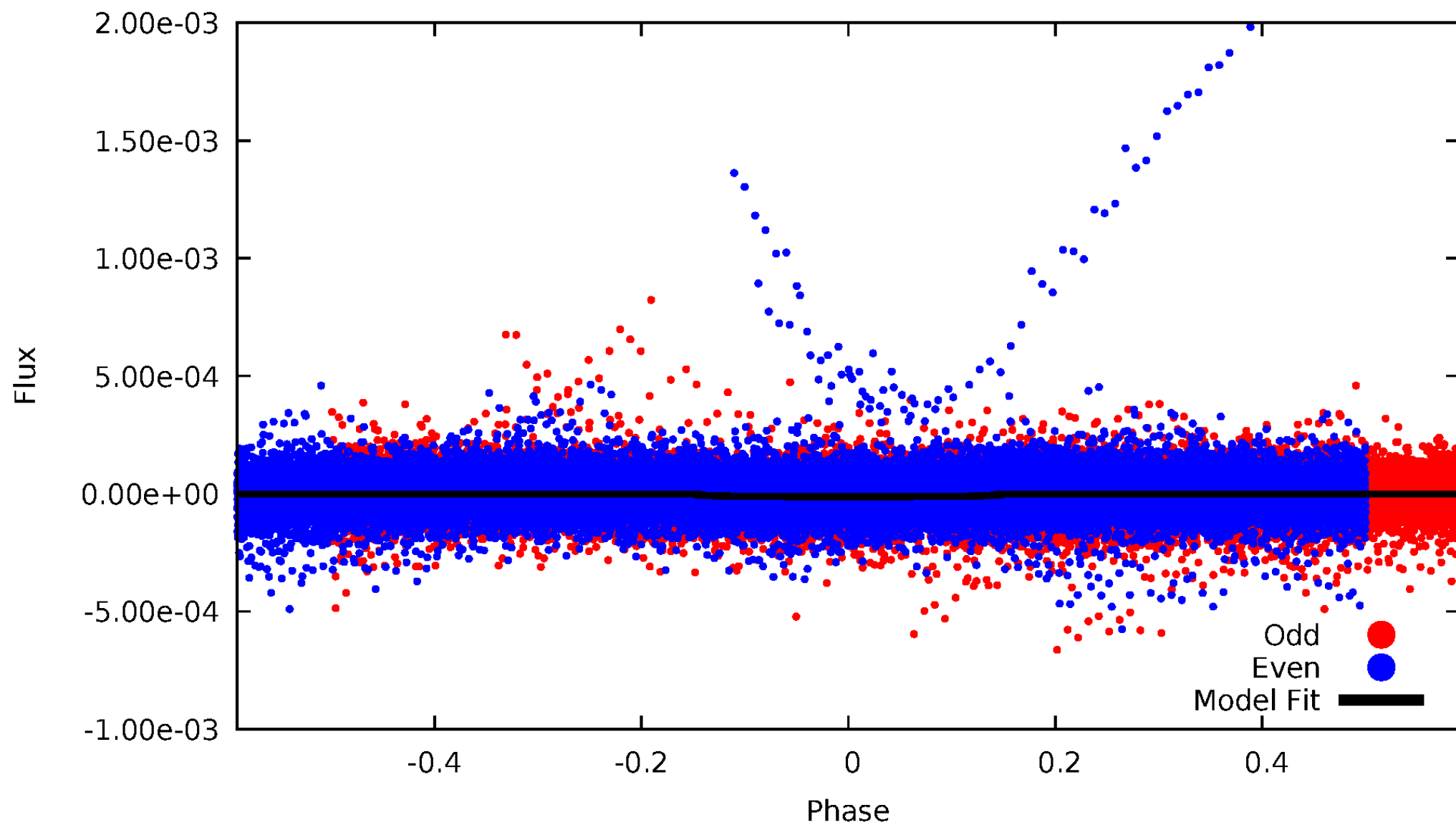


TCE 006425135-01



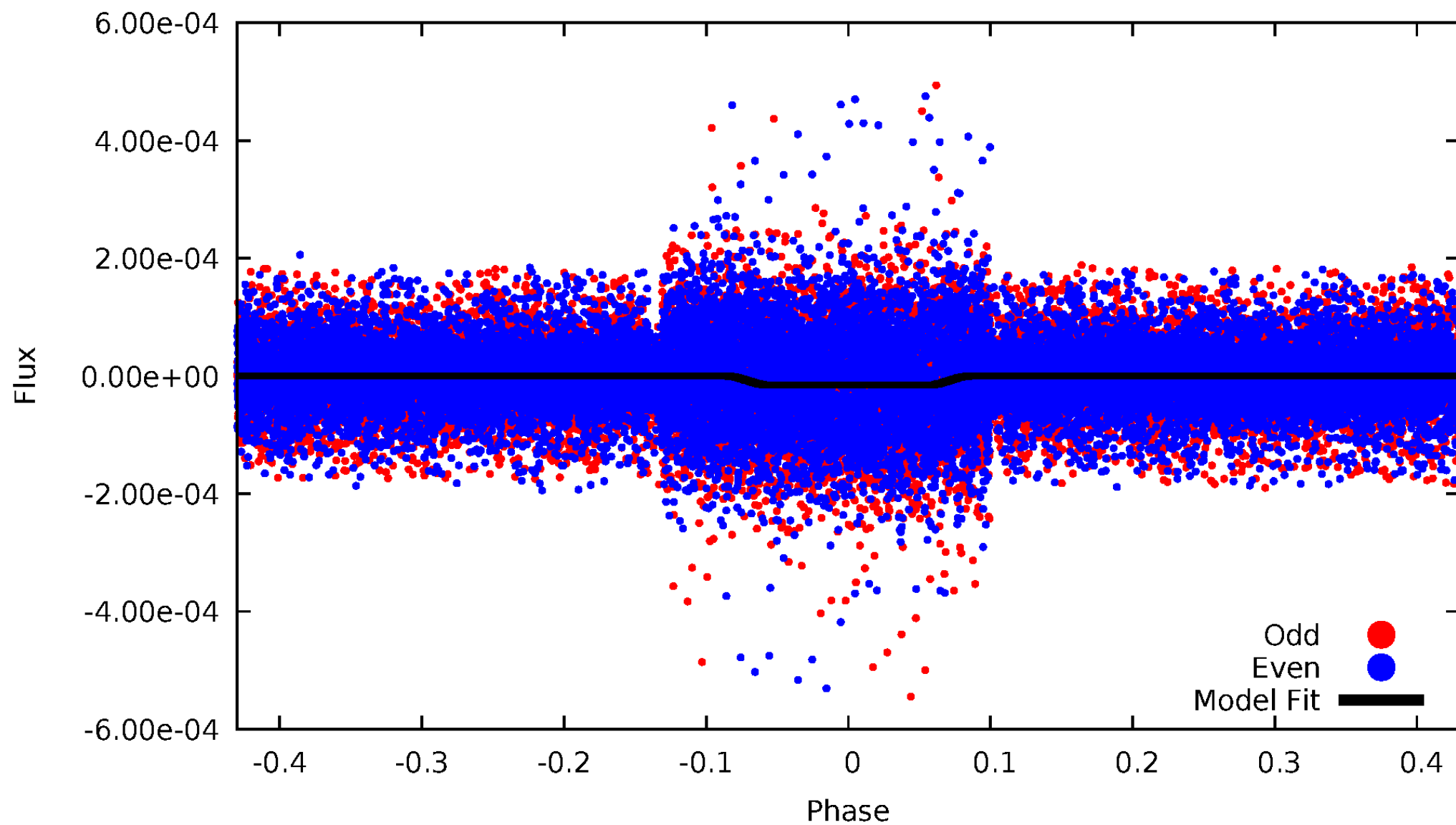
DV Odd/Even

TCE 006425135-01

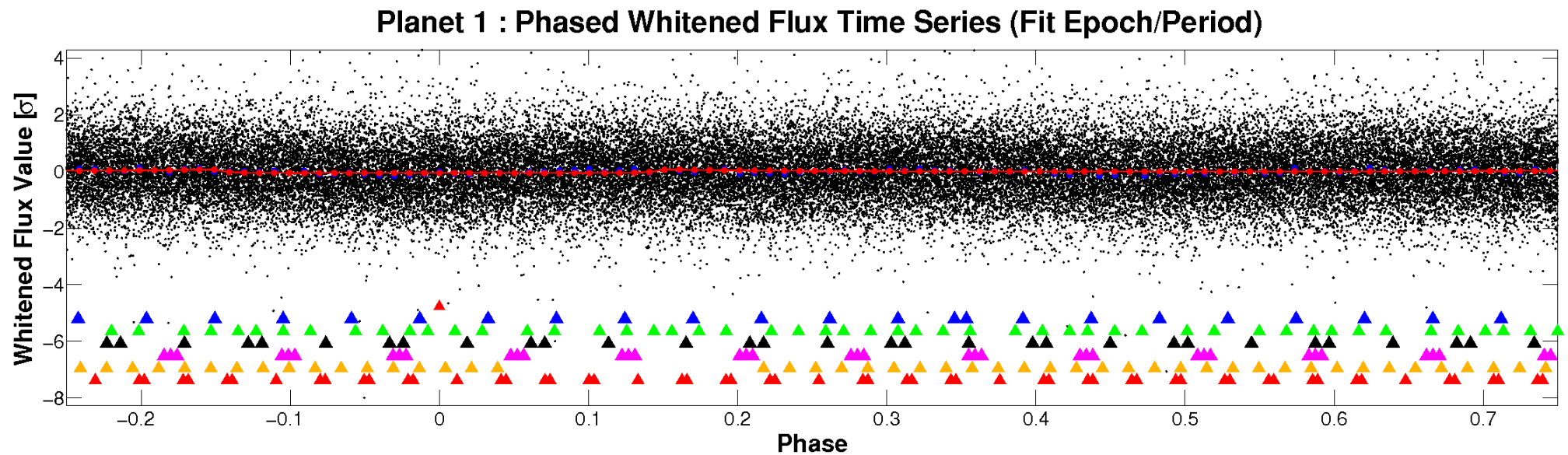
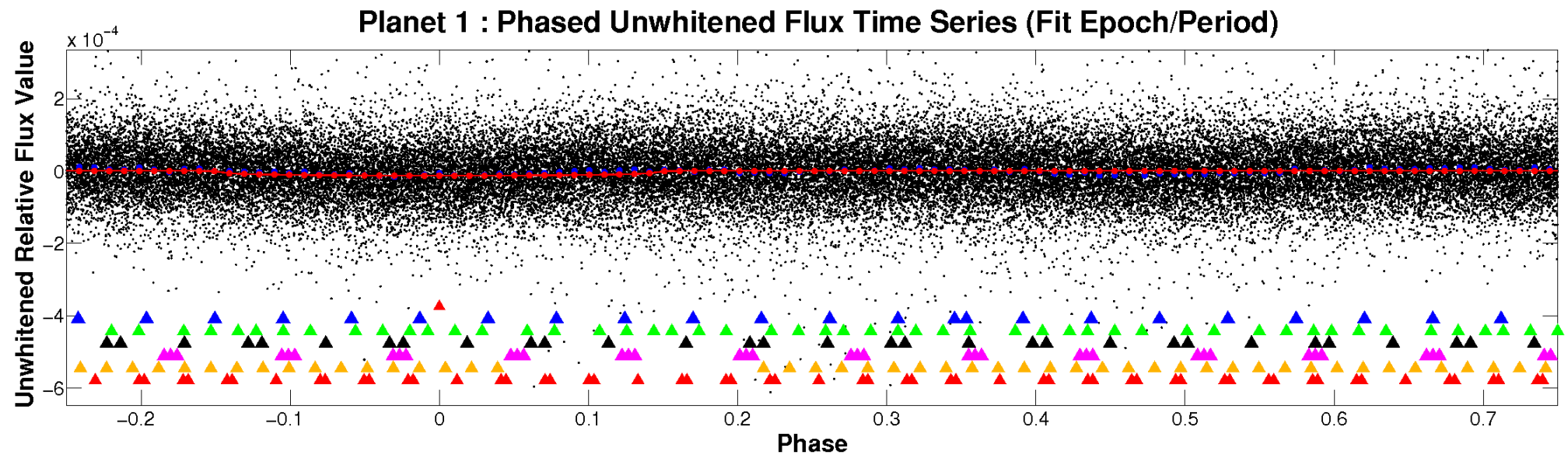


ALT Odd/Even

TCE 006425135-01

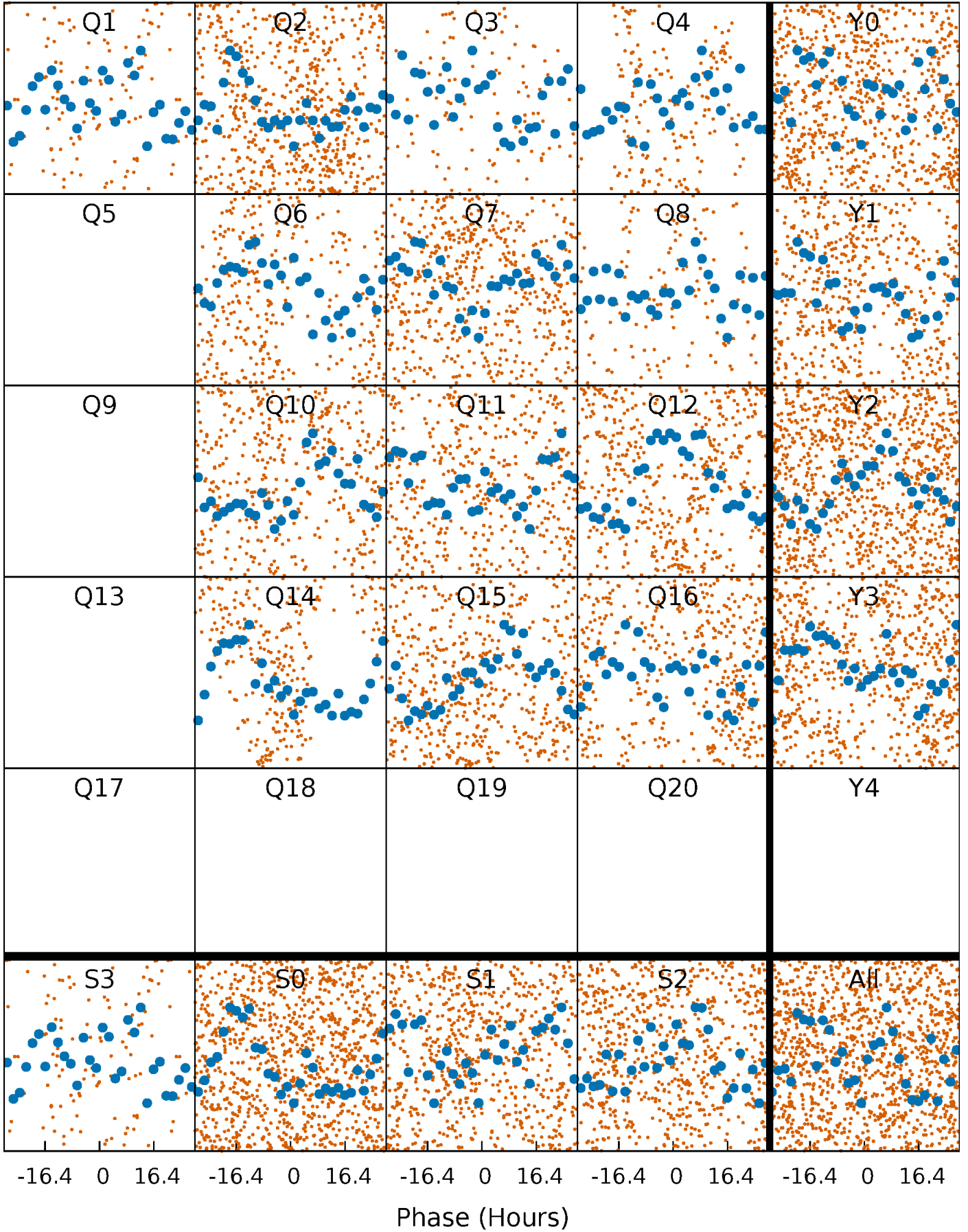


Non-Whitened Vs. Whitened Light Curve



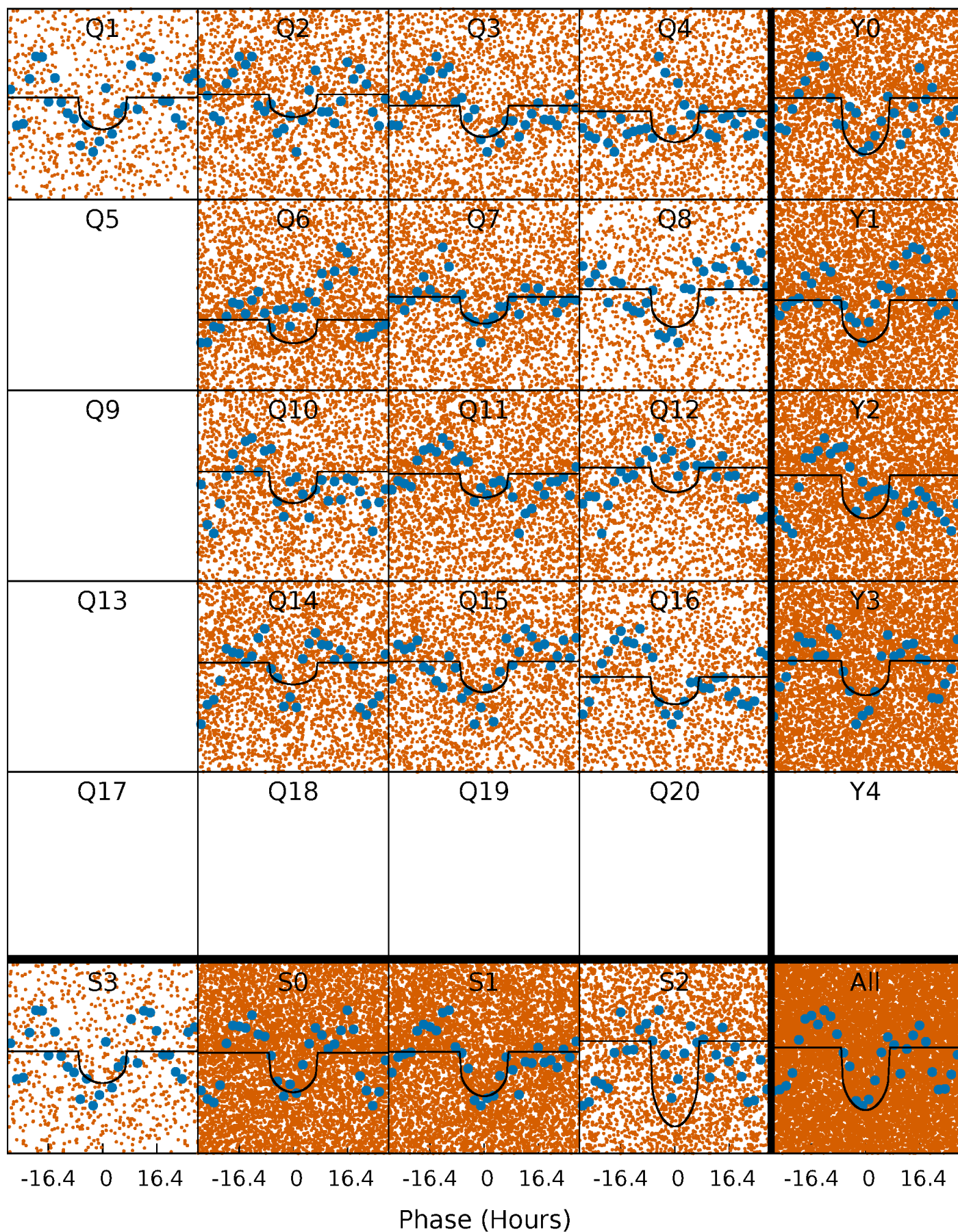
PDC Quarter-Phased Transit Curves

TCE 006425135-01 P= 2.030884 Days $T_0=132.971373$ (BKJD)



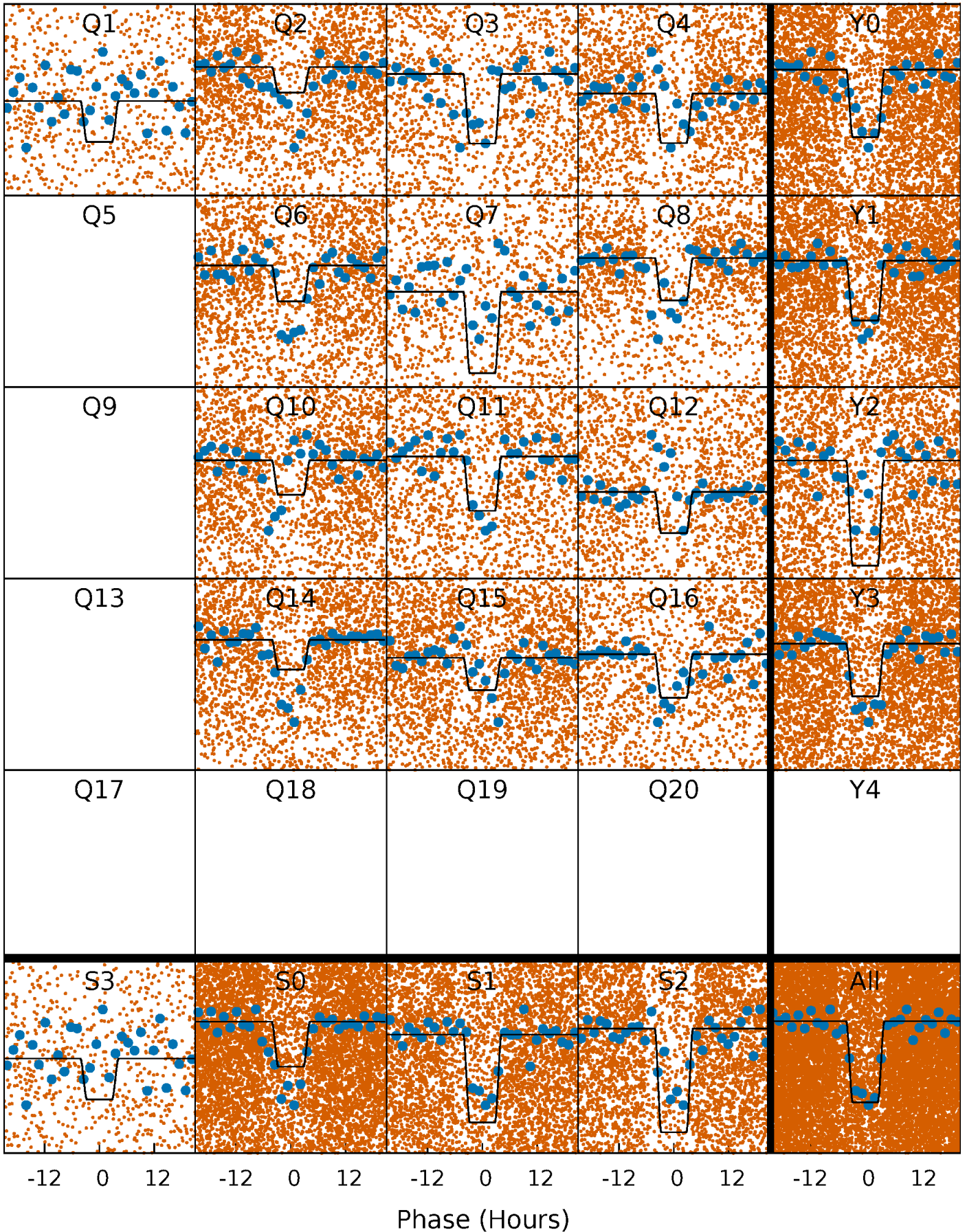
DV Quarter-Phased Transit Curves

TCE 006425135-01 P= 2.030884 Days $T_0=132.971373$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

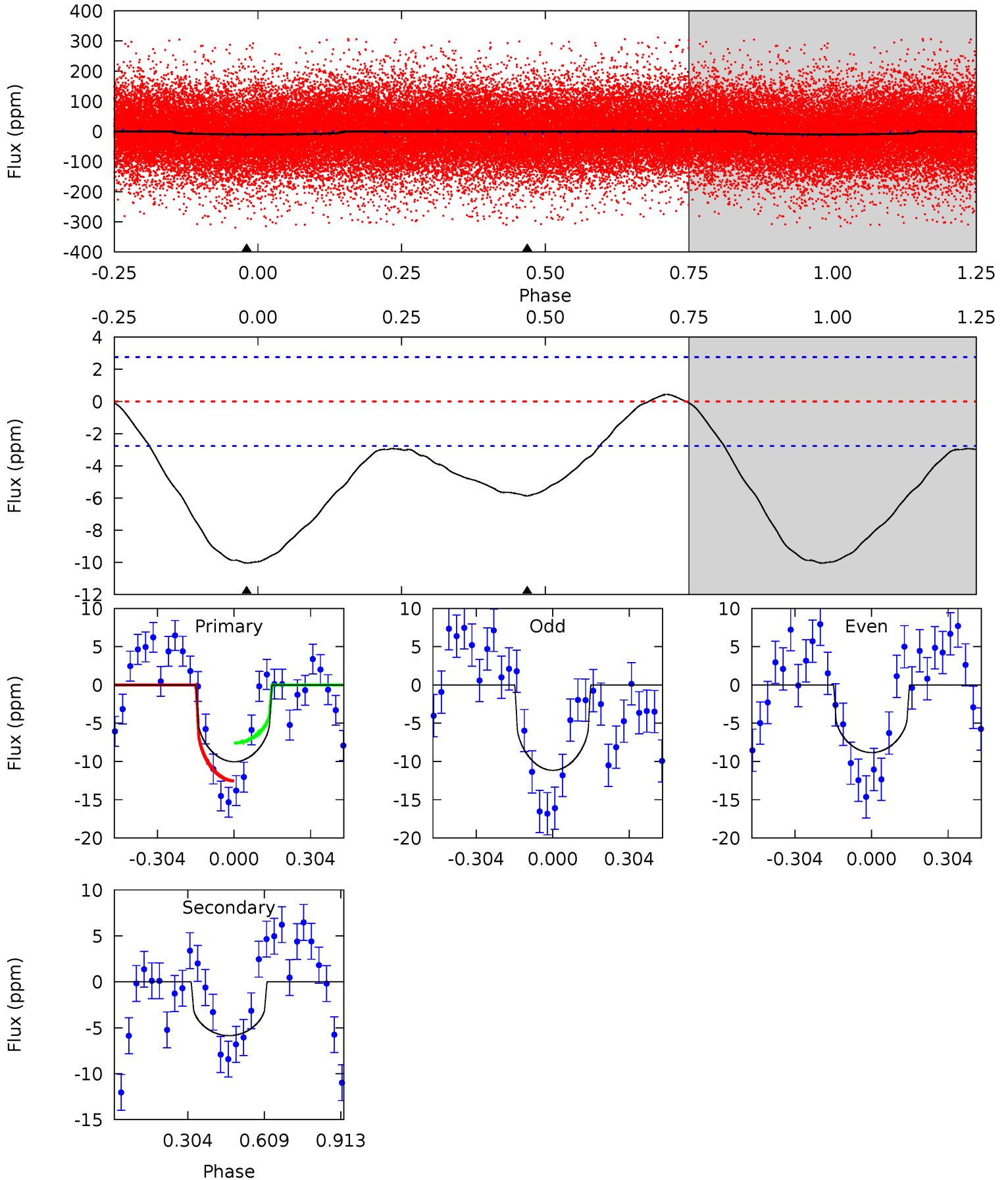
TCE 006425135-01 P= 2.030856 Days $T_0=132.974909$ (BKJD)



DV Model-Shift Uniqueness Test

006425135-01, P = 2.030884 Days, E = 130.940489 Days

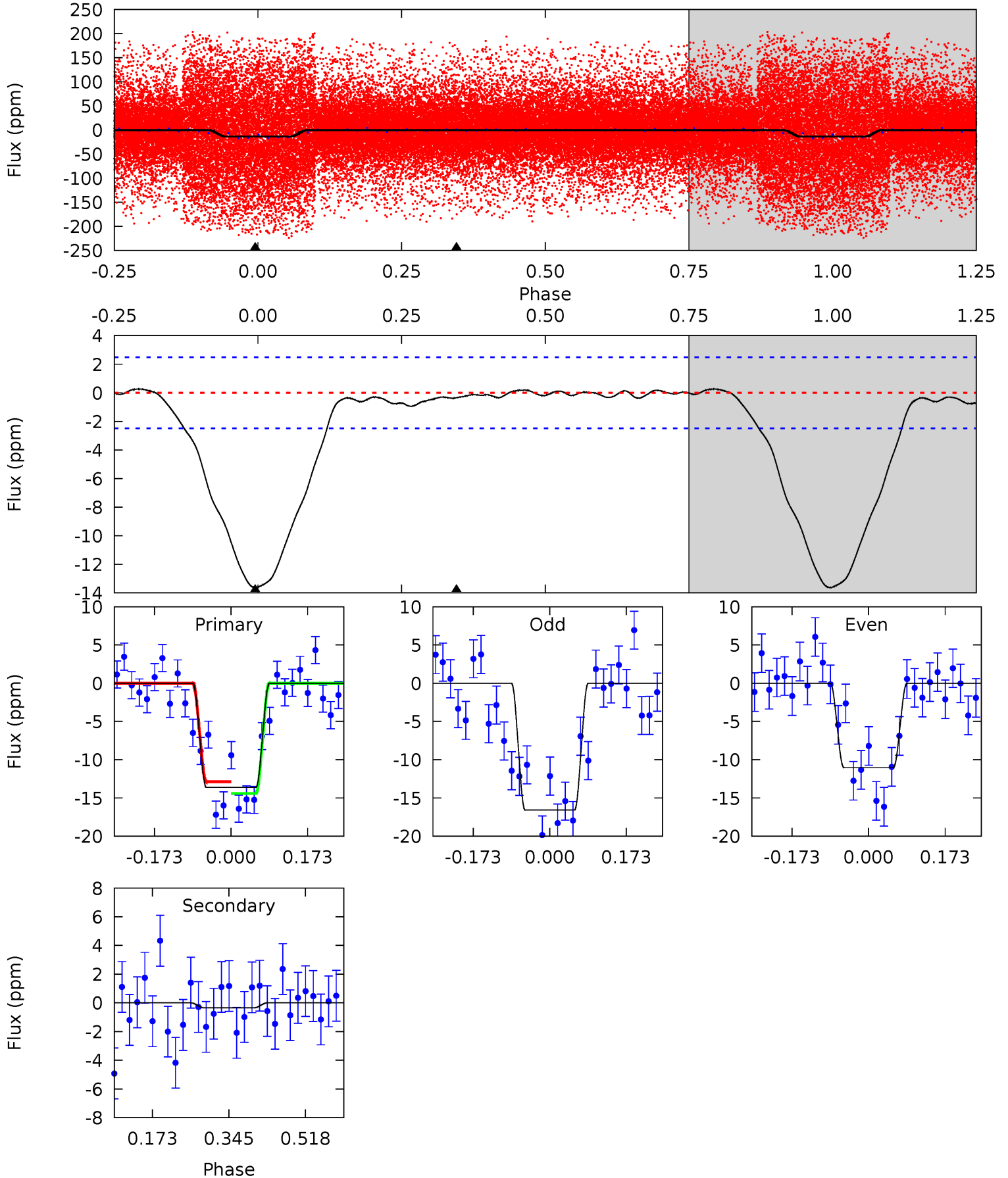
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
15.7	9.20	0	0	4.33	1.03	2.46	15.7	15.7	9.20	9.20	1.87	0.77	0.04	3.94



Alt Model-Shift Uniqueness Test

006425135-01, P = 2.030856 Days, E = 130.944053 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
24.4	0.63	0	0	4.45	1.36	0.30	24.4	24.4	0.63	0.63	4.96	0.95	0.02	1.38



Stellar Parameters For KIC 006425135

	$T_{\text{eff}}(K)$	$\log(g)$	$[\text{Fe}/\text{H}]$	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	5198^{+201}_{-165}	$3.663^{+0.885}_{-0.295}$	$-0.280^{+0.300}_{-0.250}$	$2.550^{+1.162}_{-1.743}$	$1.091^{+0.191}_{-0.286}$	$0.093^{+2.317}_{-0.065}$
	+4%/-3%	+24%/-8%	+107%/-89%	+46%/-68%	+18%/-26%	+2498%/-70%
Source	PHO54	PHO54	PHO54	DSEP		

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

Secondary Eclipse Parameters for KIC 006425135-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-6 ± 1	$0.87^{+0.56}_{-0.41}$	2784^{+404}_{-496}	4392^{+1086}_{-574}	$4.367^{+11.761}_{-2.687}$
Alt.	-0 ± 1	$0.96^{+0.55}_{-0.45}$	2761^{+424}_{-591}	-2662^{+5656}_{-517}	$0.144^{+0.693}_{-0.299}$

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

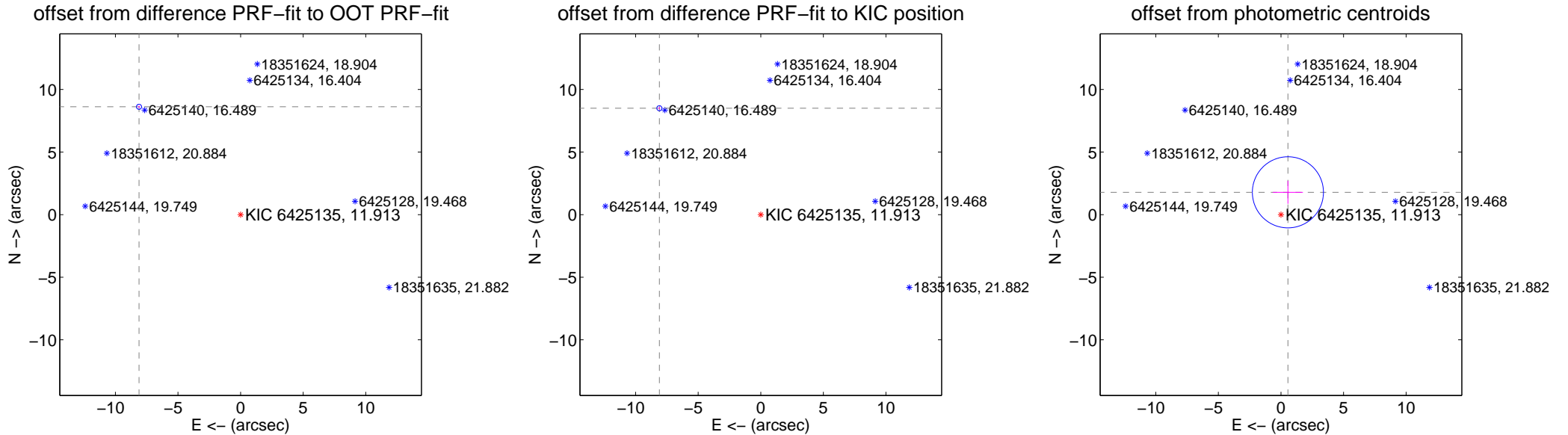
DV Centroid Data

Supplemental centroid analysis for 006425135-01. **Kepler magnitude: 11.91.** Transit SNR 7.80

There are 0 quarters with good PRF difference image offsets

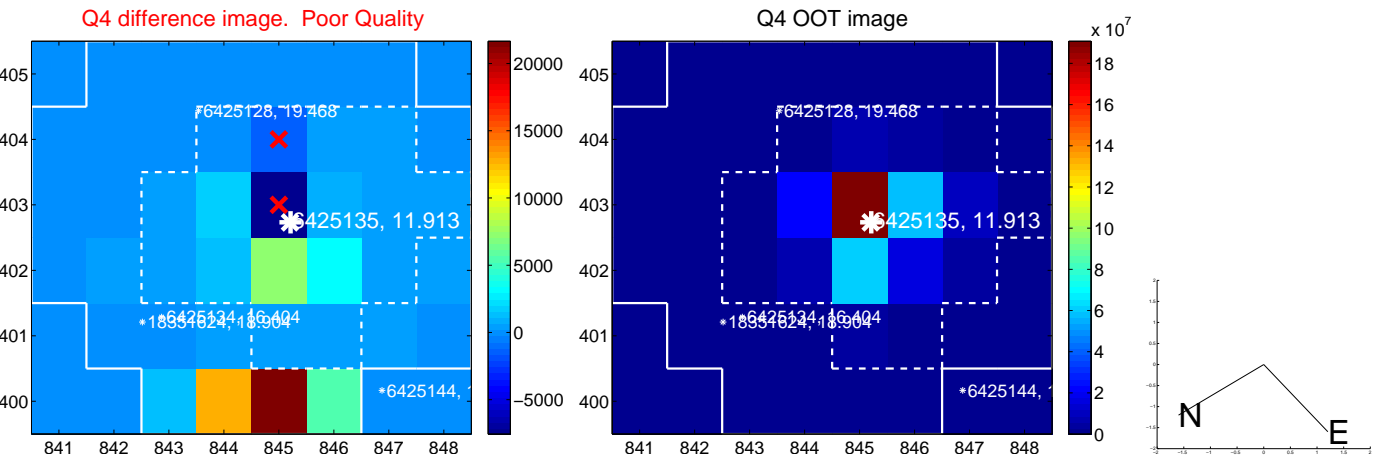
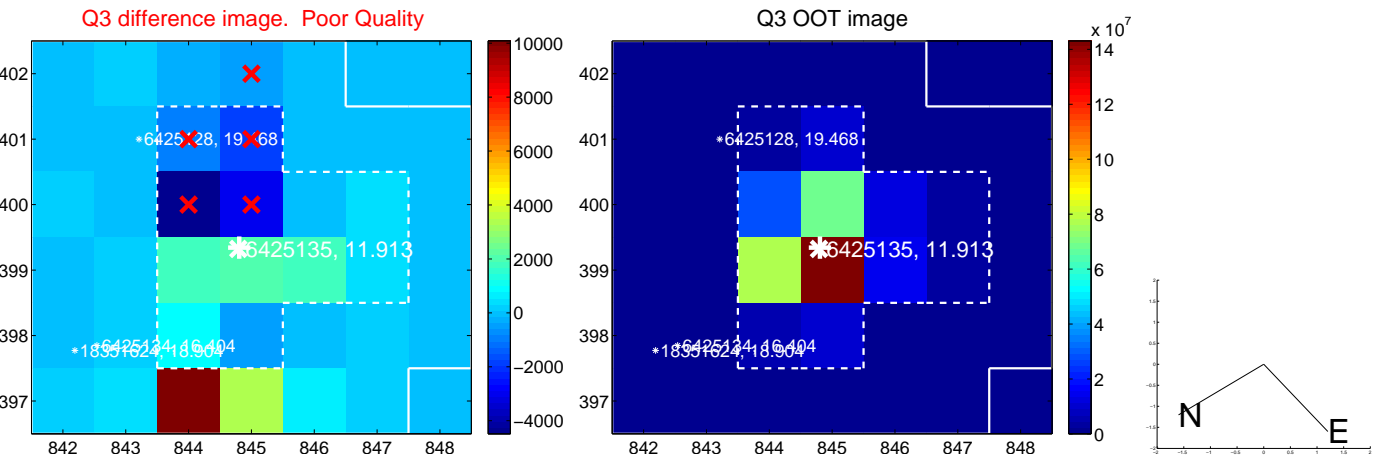
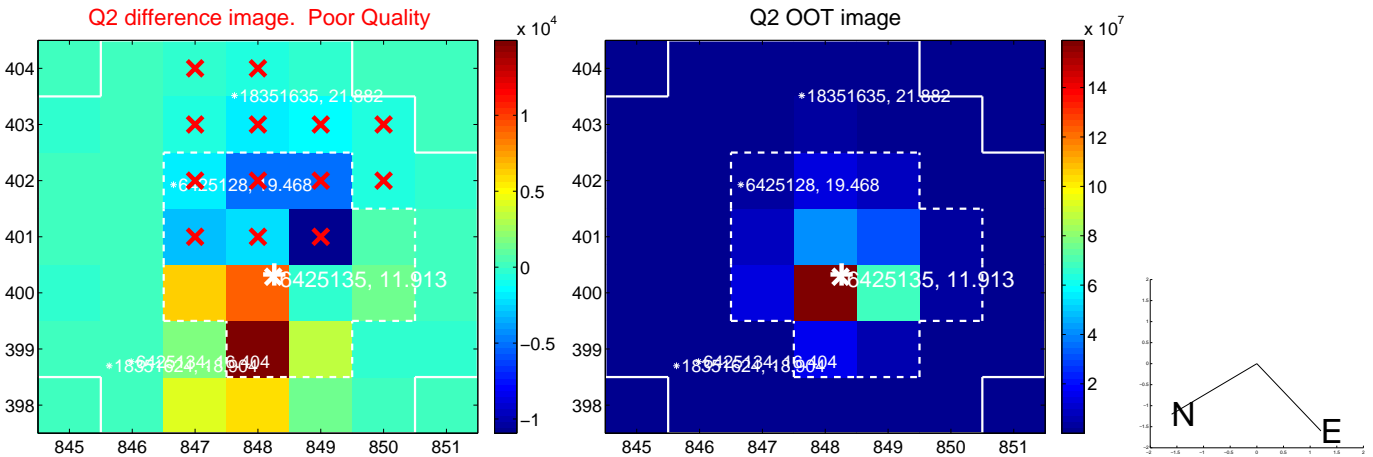
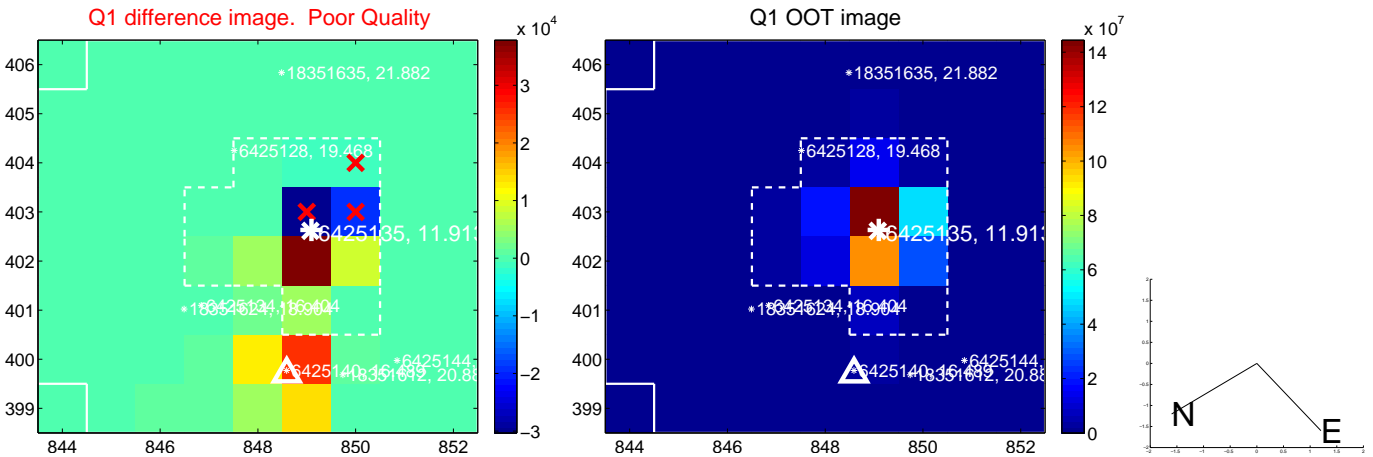
The direct PRF centroid is offset from the target star catalog position by about 0.11 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	11.836 \pm 0.068	173.80	8.115 \pm 0.068	8.616 \pm 0.068
PRF-fit source offset from KIC position	11.745 \pm 0.068	172.46	8.102 \pm 0.068	8.503 \pm 0.068
photometric centroid source offset	1.87 \pm 0.95	1.97	-0.56 \pm 1.20	1.78 \pm 0.92

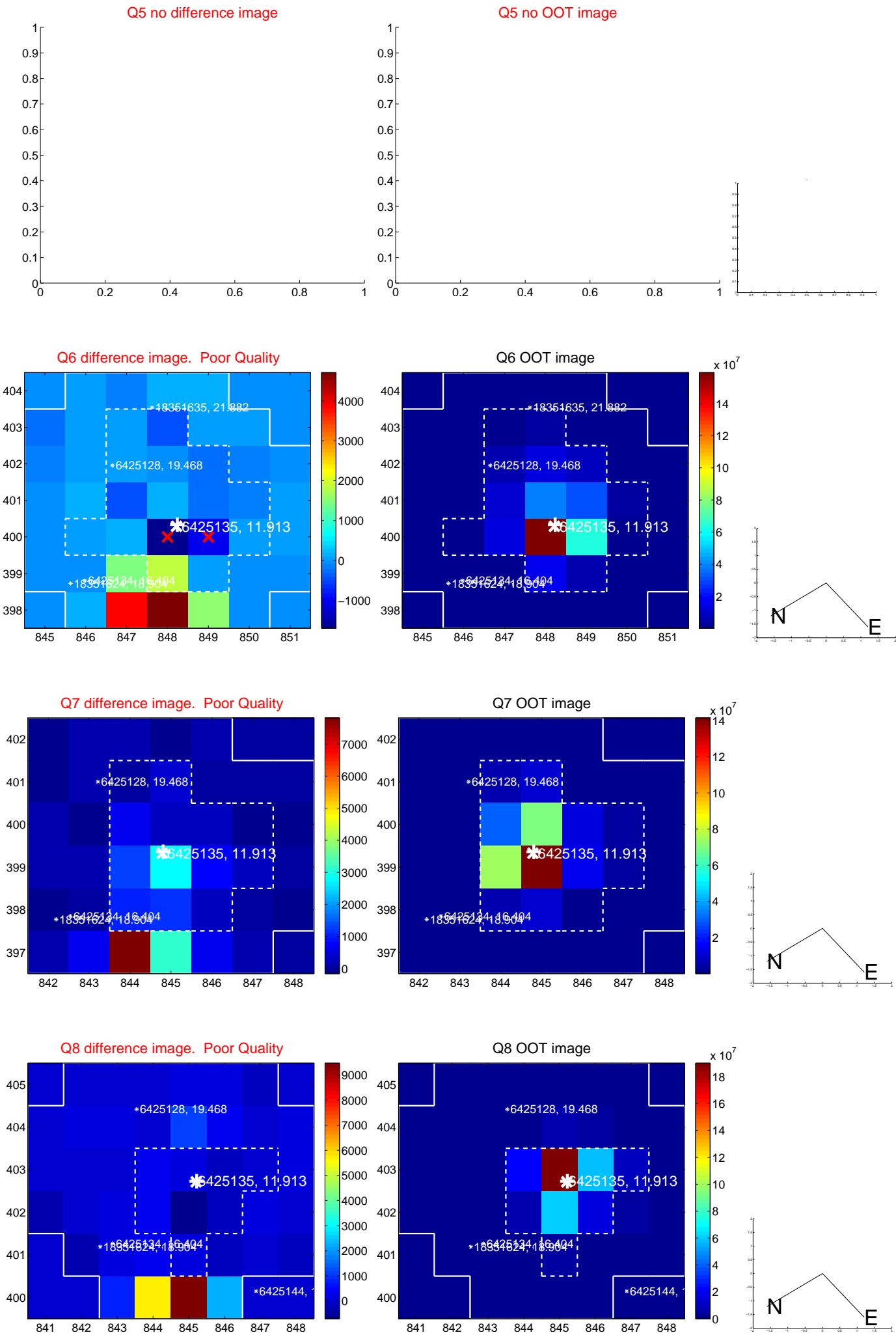


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets;** magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

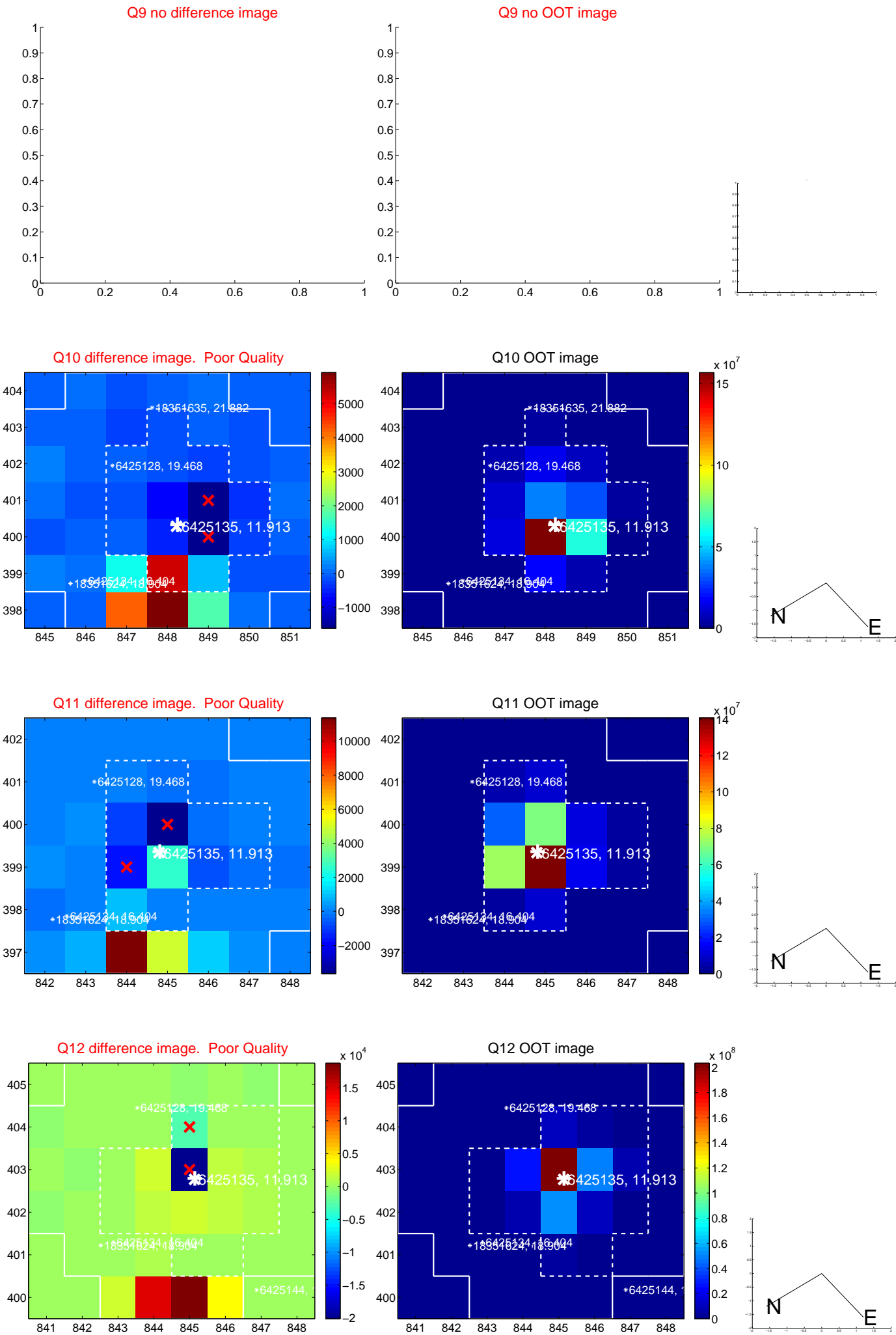
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



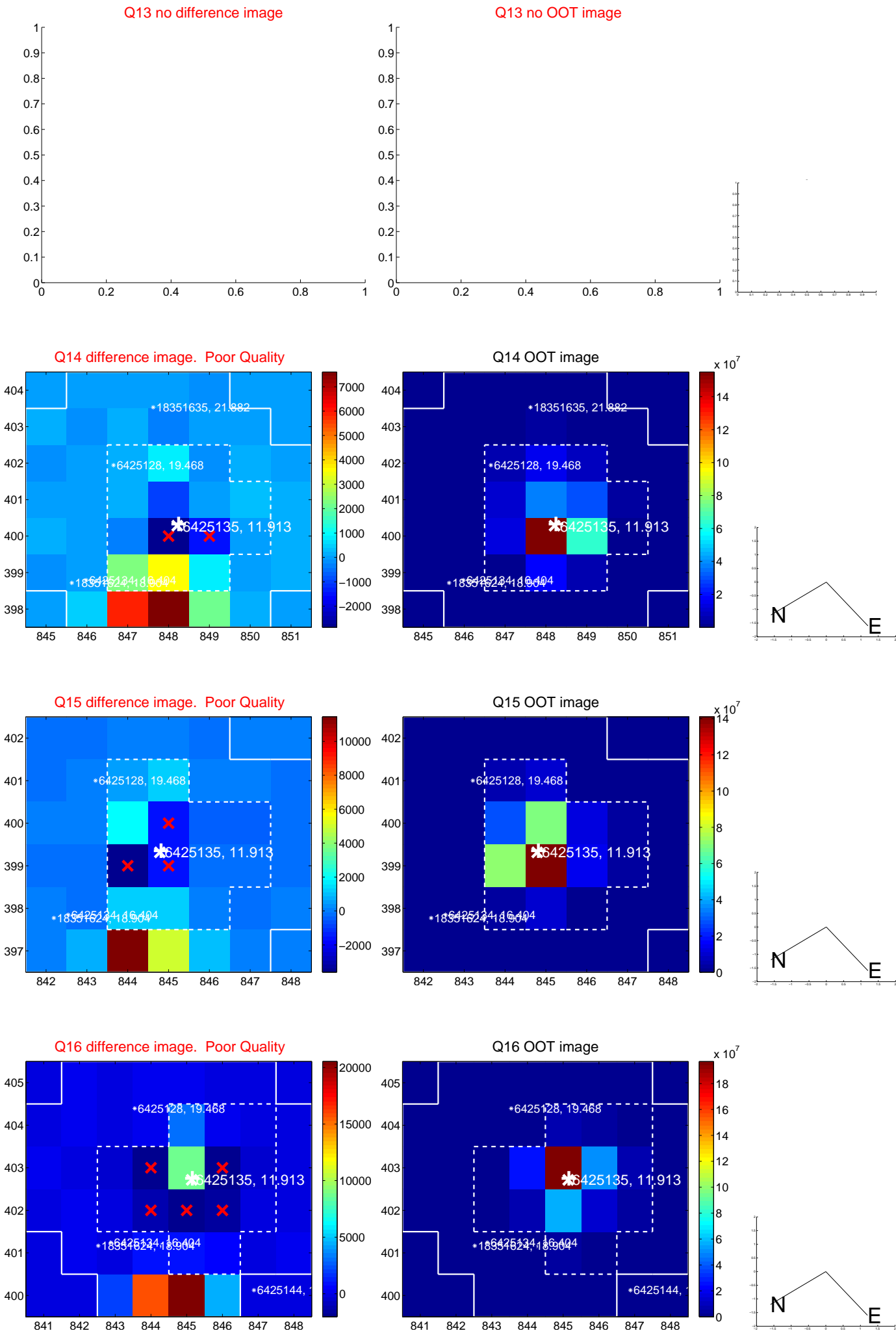
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



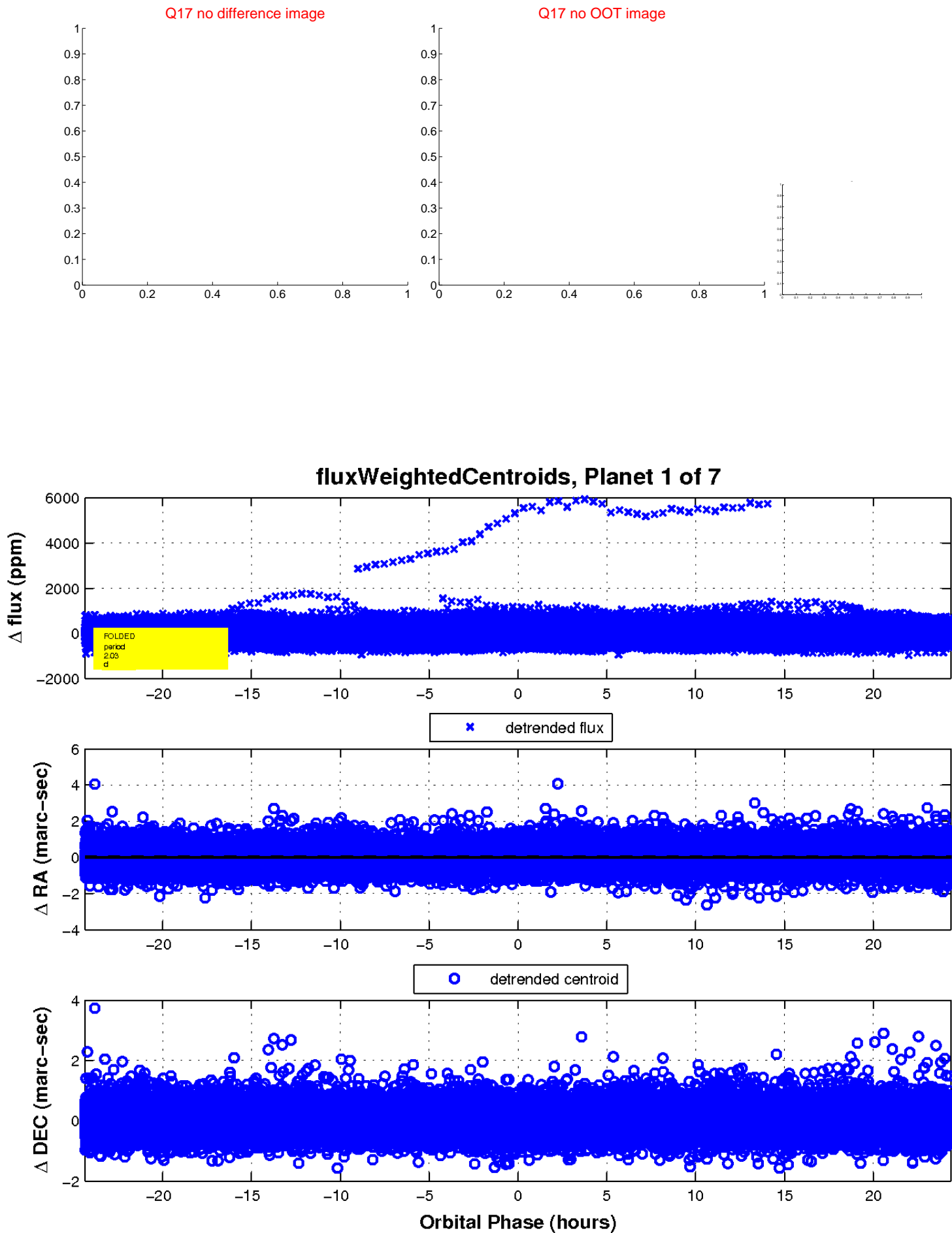
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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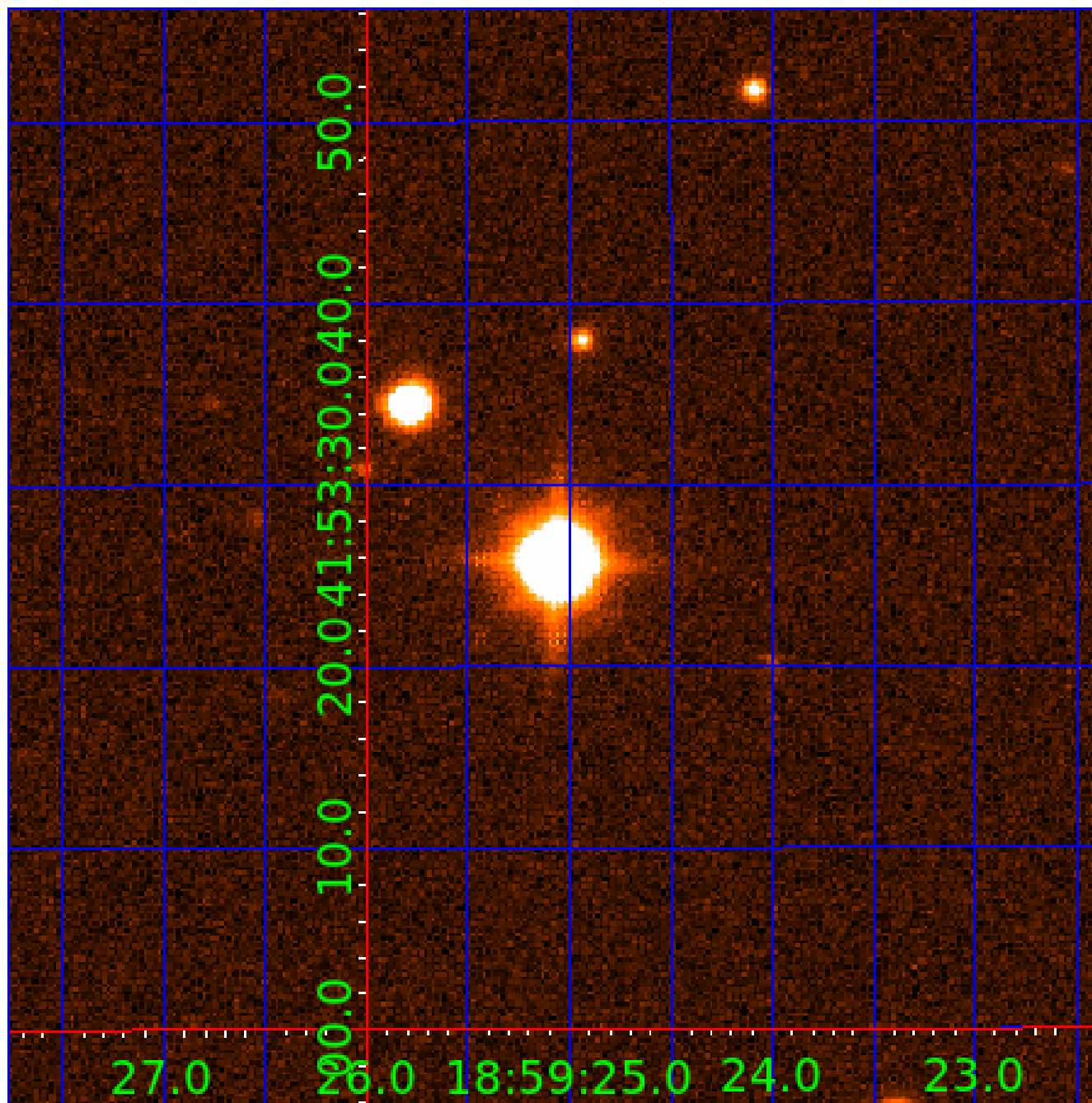


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 006425135

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})
006425135-01	OBS	No	2.030884	132.971373	13.1	14.392	7.5	7.8	2.55	5198	0.98	4070.86
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Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
006425135-01	OBS	FP	0.00	1	0	1	0	LPP_DV—CENT_RESOLVED_OFFSET
006425135-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—ALL_TRANS_CHASES—MOD_TER_ALT—MOD_POS_ALT—CENT_FEW_DIFFS
006425135-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—CENT_FEW_DIFFS
006425135-05	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_ALT
006425135-06	OBS	FP	0.00	1	0	1	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—LPP_ALT—CENT_RESOLVED_OFFSET
006425135-07	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_ZUMA—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_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.

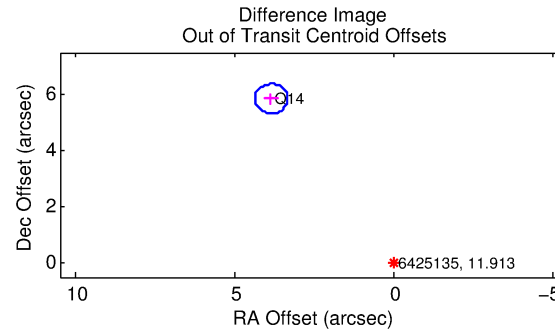
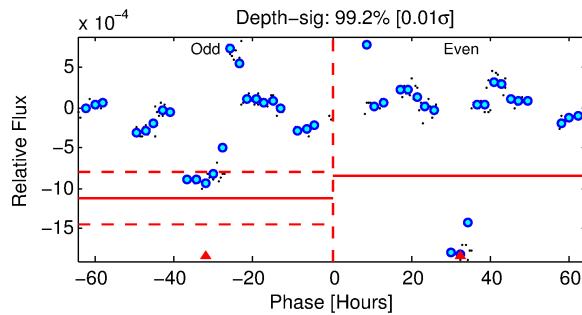
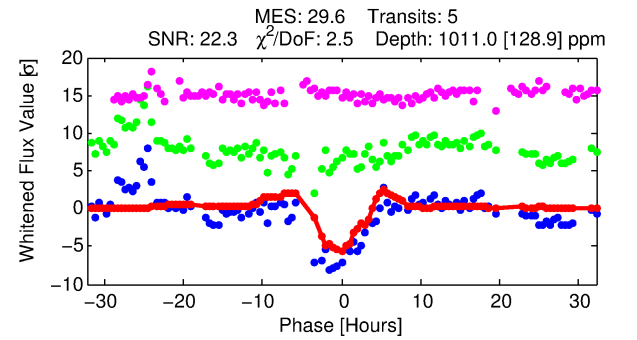
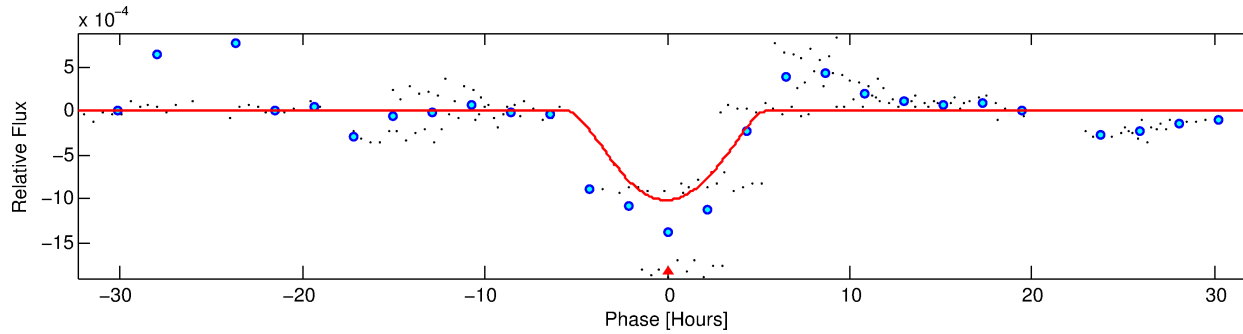
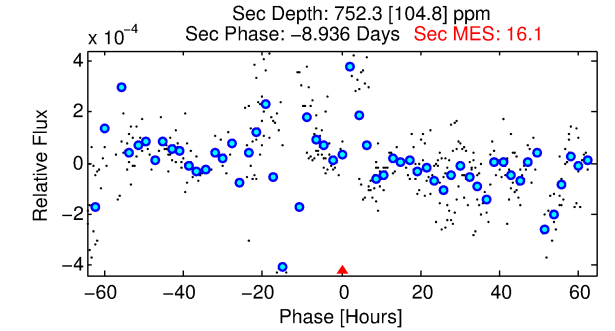
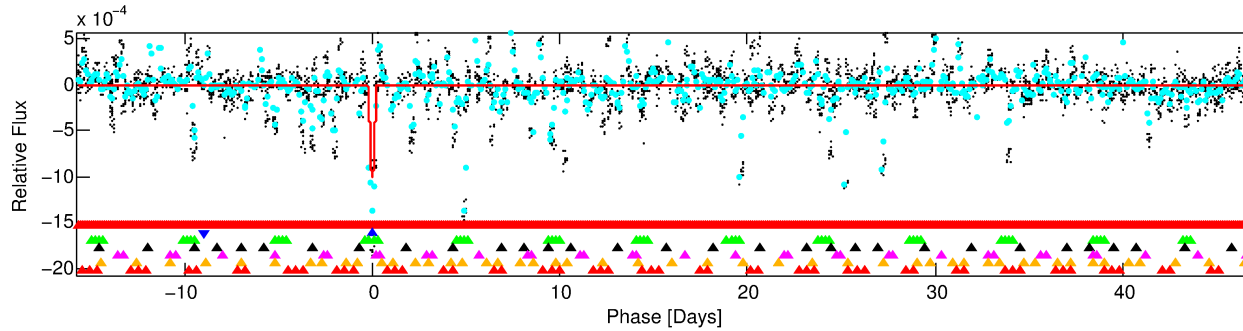
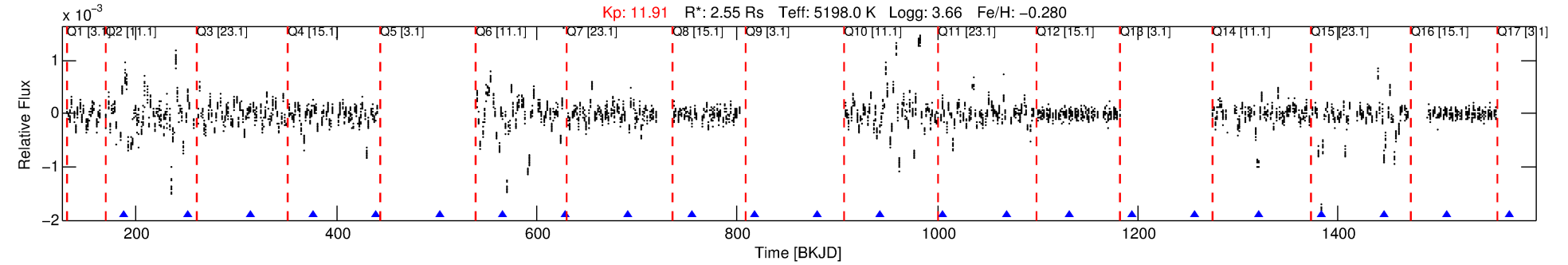
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 006425135-02

No Significant Match Found

DV One-Page Summary

KIC: 6425135 Candidate: 2 of 7 Period: 62.864 d



DV Fit Results:

Period = 62.86436 [0.00174] d
Epoch = 188.5229 [0.0344] BKJD
Rp/R* = 0.0580 [0.1203]
a/R* = 15.45 [7.65]
b = 1.00 [0.17]
Seff = 41.89 [60.37]
Teq = 649 [234] K
Rp = 16.15 [35.26] Re
a = 0.3187 [0.2606] AU
Ag = 161.08 [706.88] [0.23σ]
Teffp = 3573 [3708] K [0.79σ]

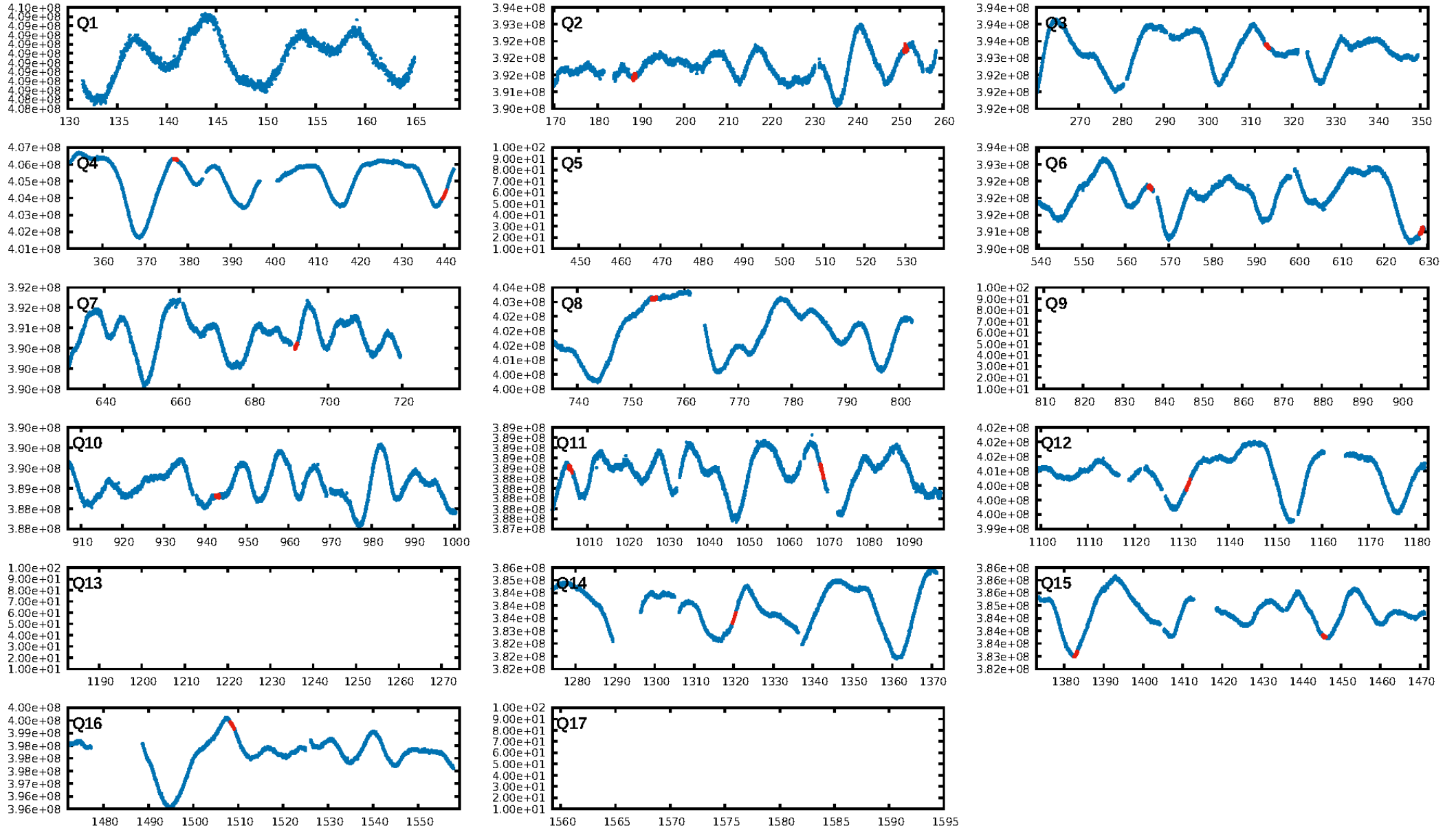
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [32.56σ]
LongPeriod-sig: N/A
ModelChiSquare2-sig: 0.0%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: 7.28e-108
RollingBand-fgt: 1.00 [5/5]
GhostDiagnostic-chr: 3.832
Centroid-sig: N/A
Centroid-so: 0.133 arcsec [1.34σ]
OotOffset-rm: 7.010 arcsec [40.44σ]
KicOffset-rm: 6.768 arcsec [39.00σ]
OotOffset-st: 1/0/0/0 [1]
KicOffset-st: 1/0/0/0 [1]
DiffImageQuality-fgm: 0.00 [0/1]
DiffImageOverlap-fno: 0.00 [0/11]

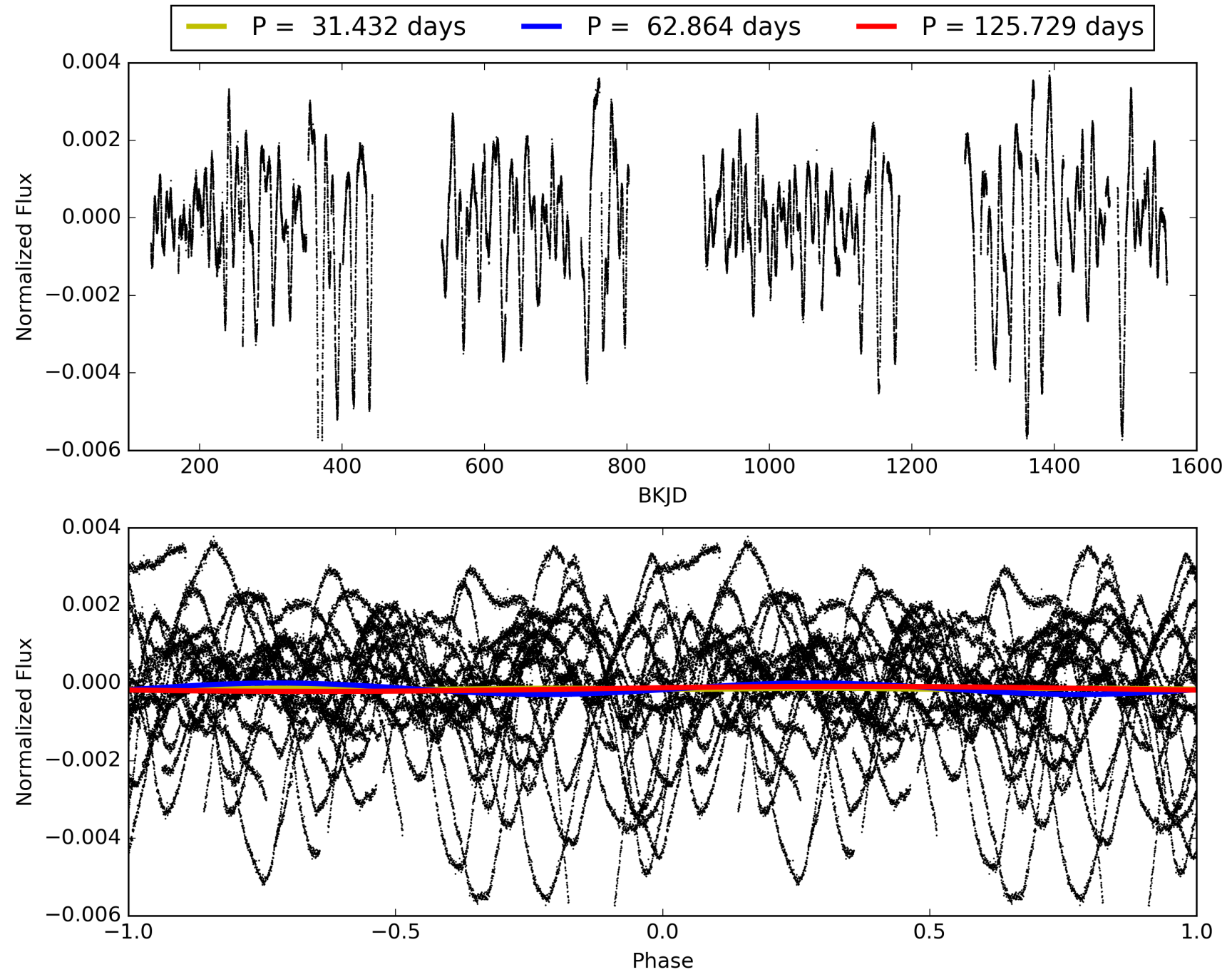
Software Revision: svn-ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 01-Feb-2016 23:59:26 Z

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

TCE 006425135-02, PDC Light Curves

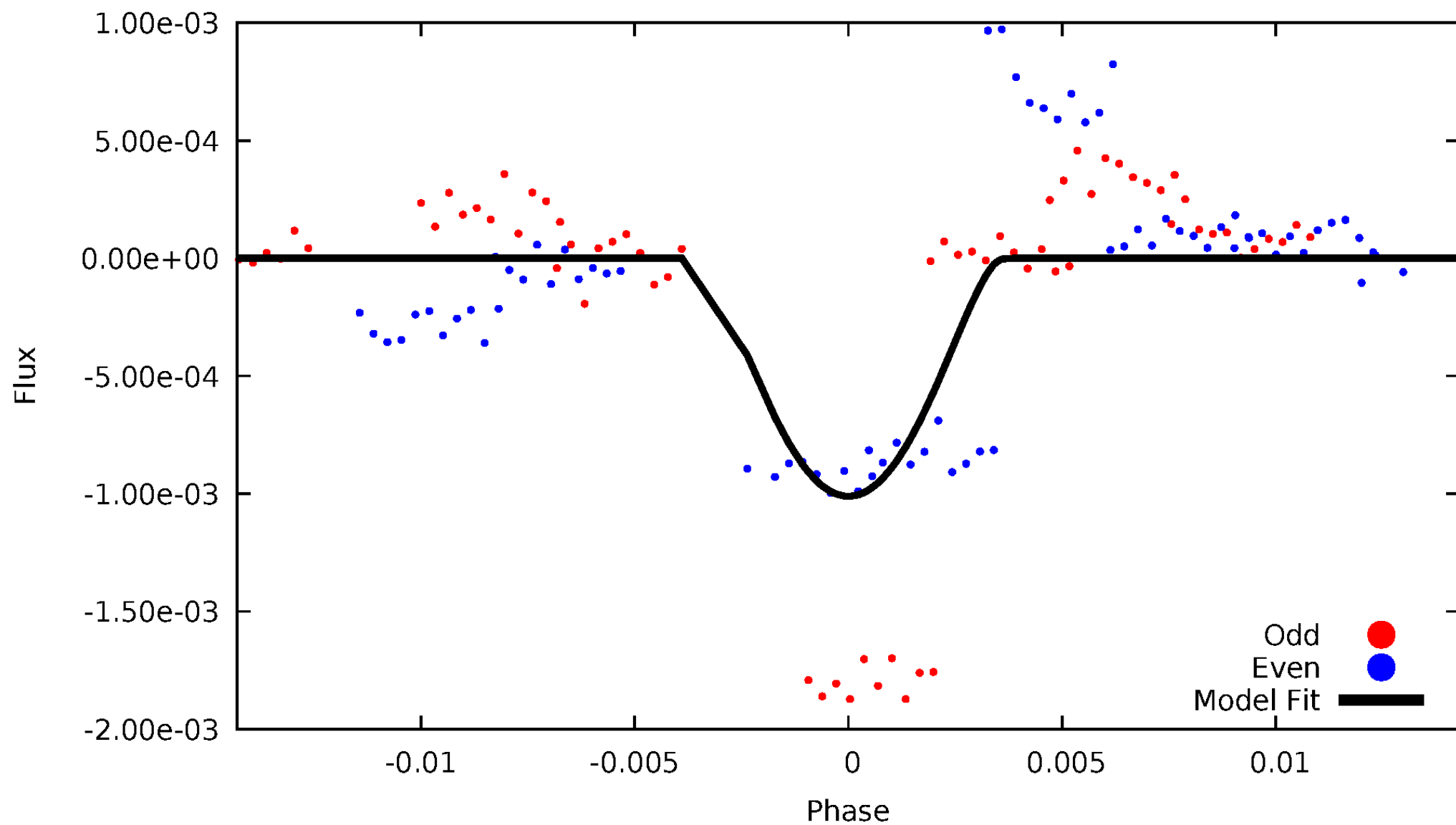


TCE 006425135-02



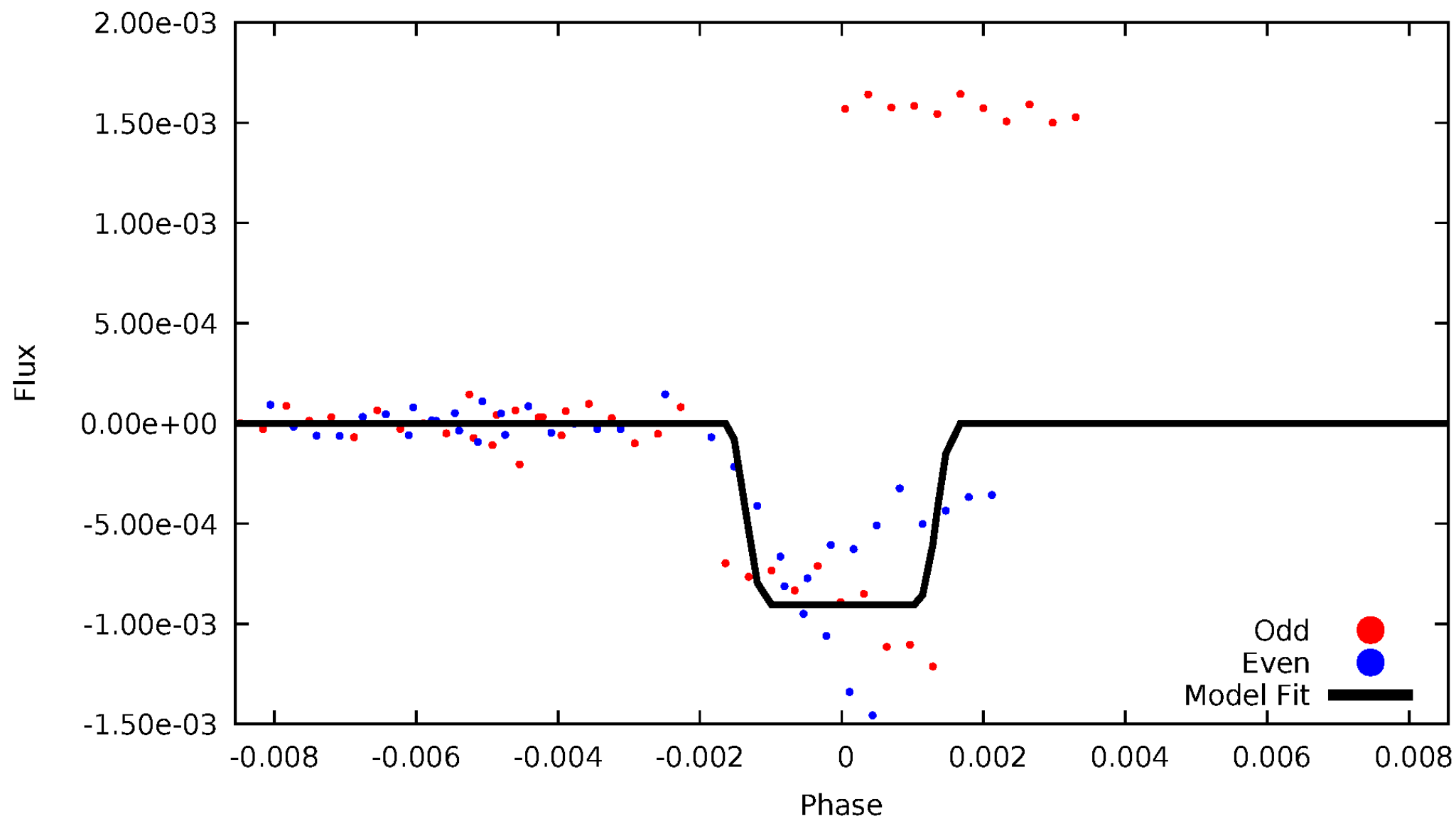
DV Odd/Even

TCE 006425135-02



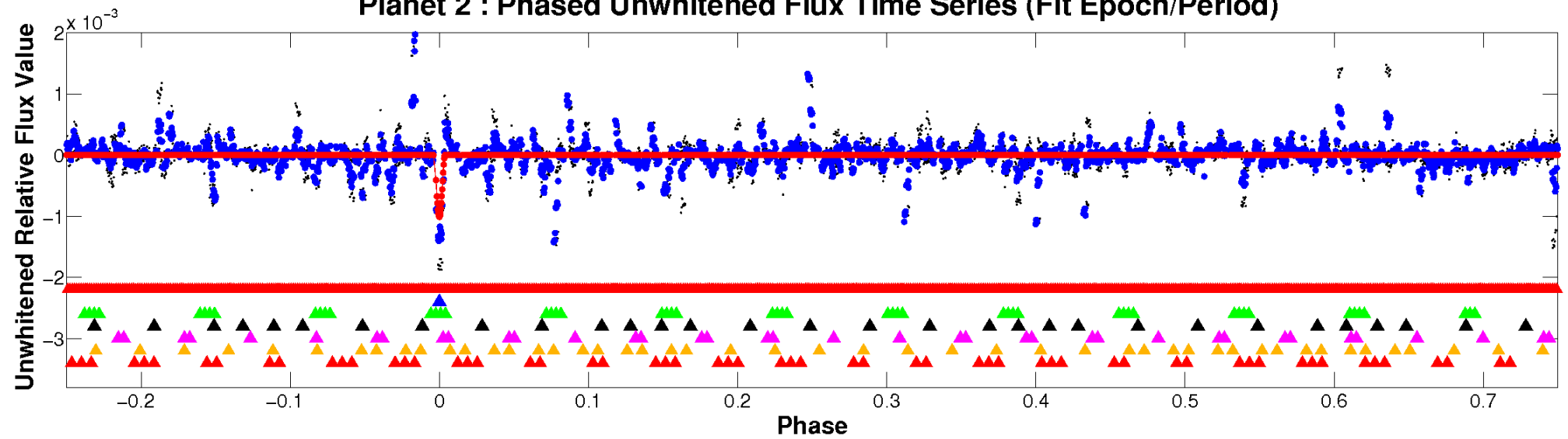
ALT Odd/Even

TCE 006425135-02

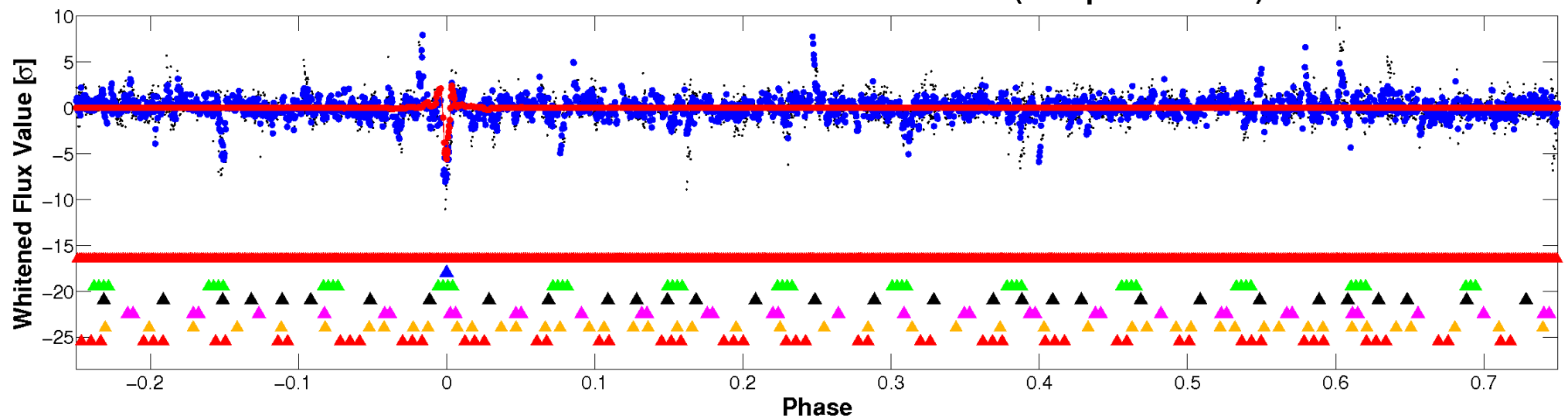


Non-Whitened Vs. Whitened Light Curve

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

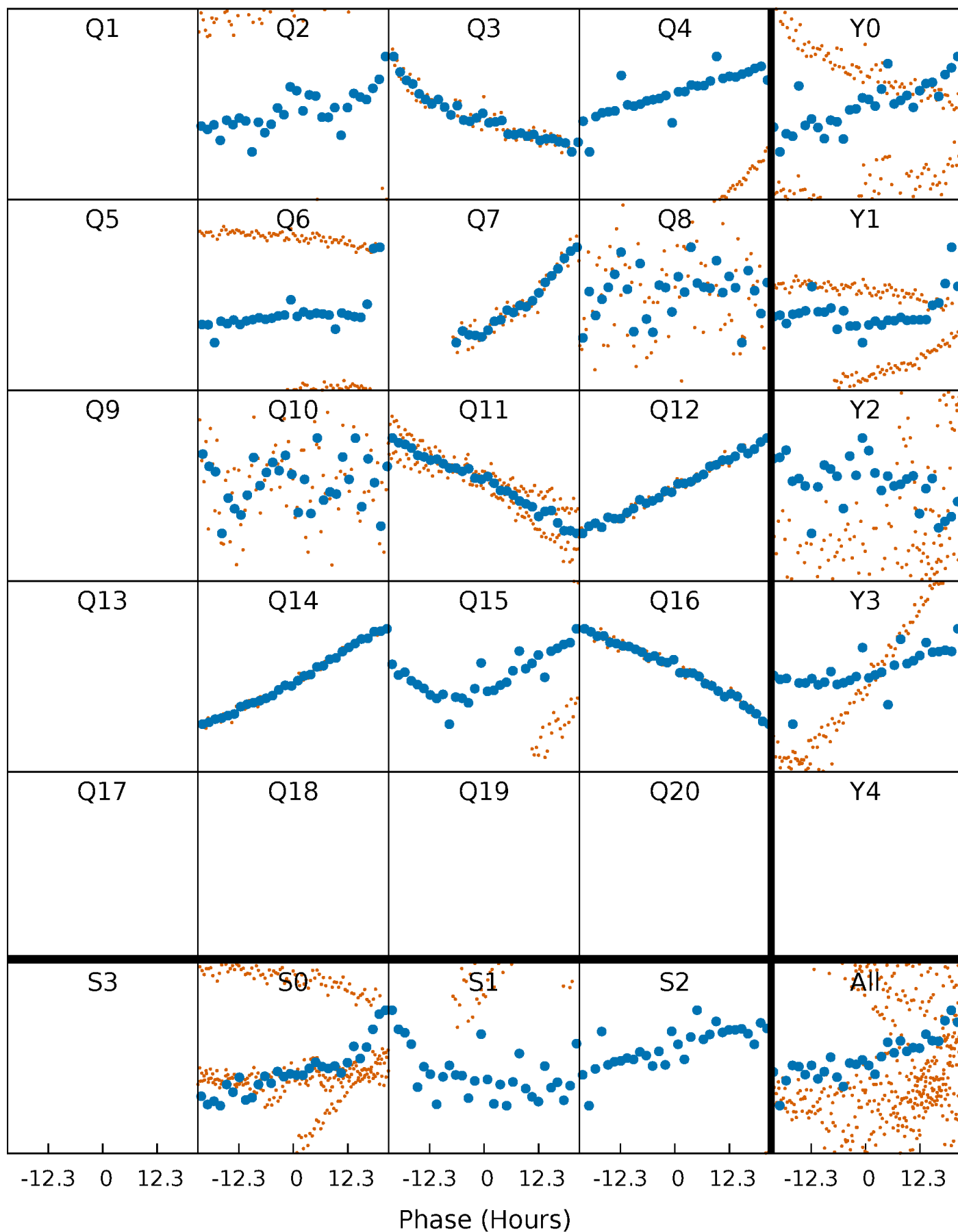


Planet 2 : Phased Whitened Flux Time Series (Fit Epoch/Period)



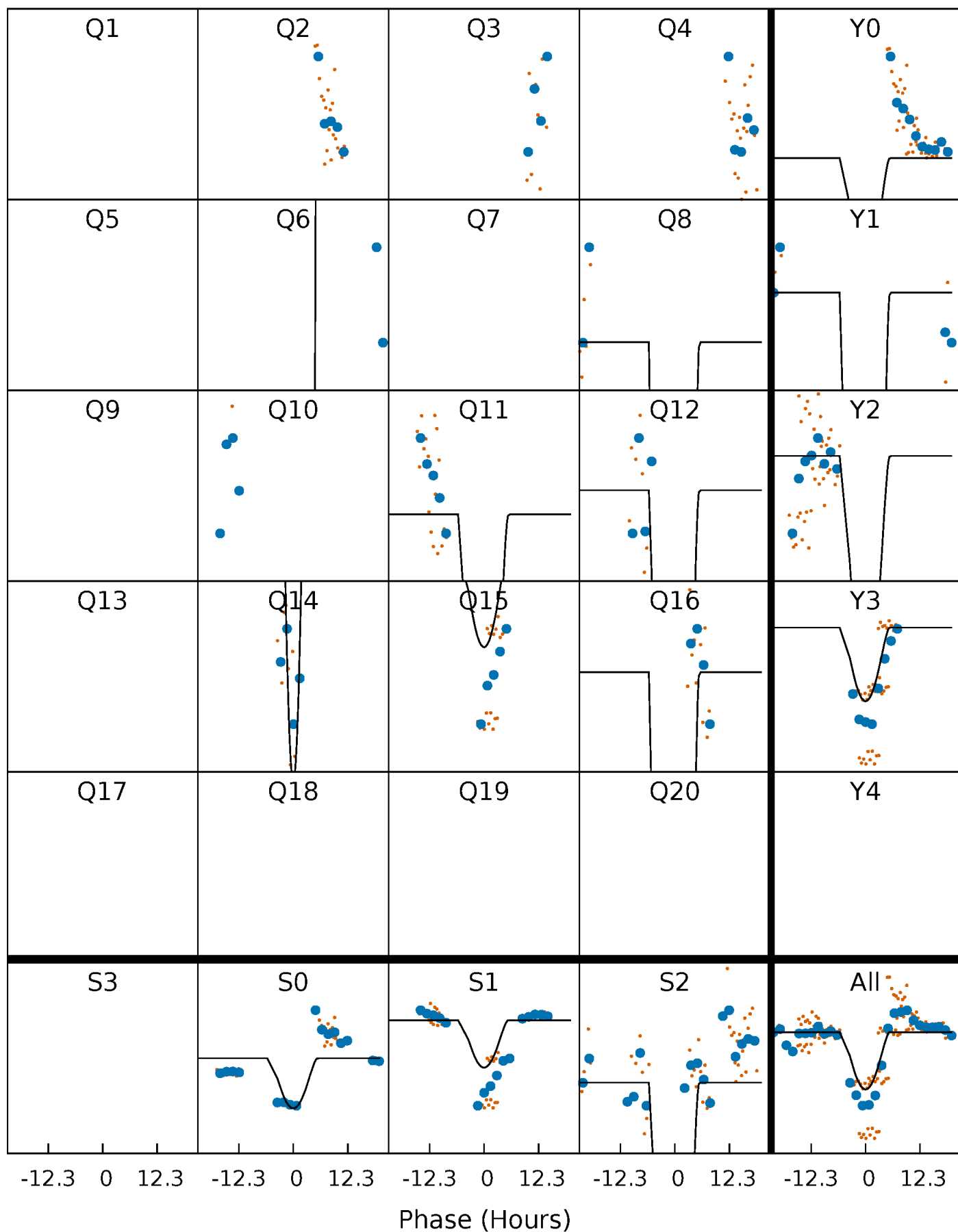
PDC Quarter-Phased Transit Curves

TCE 006425135-02 P= 62.864355 Days $T_0=188.522928$ (BKJD)



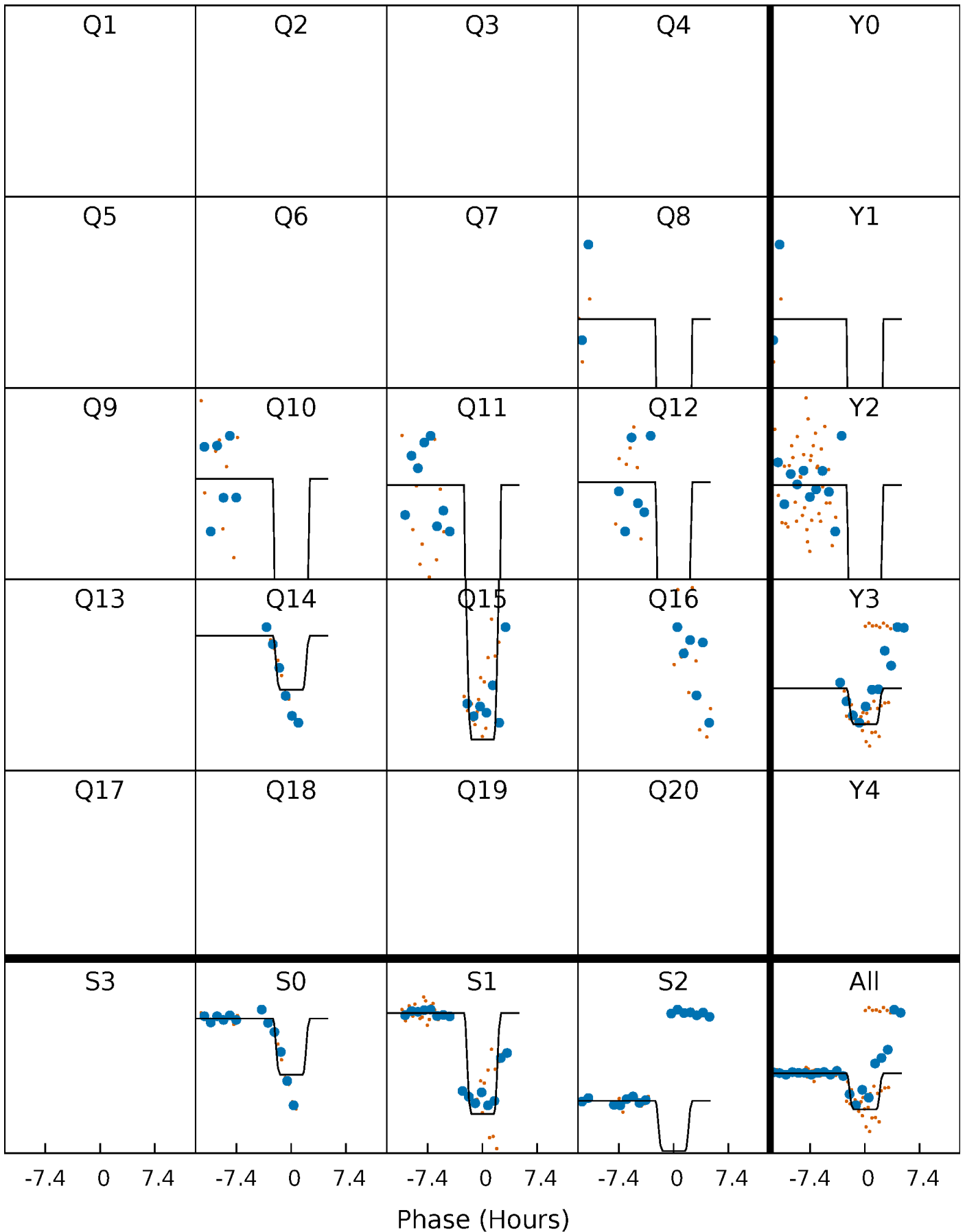
DV Quarter-Phased Transit Curves

TCE 006425135-02 P= 62.864355 Days $T_0=188.522928$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

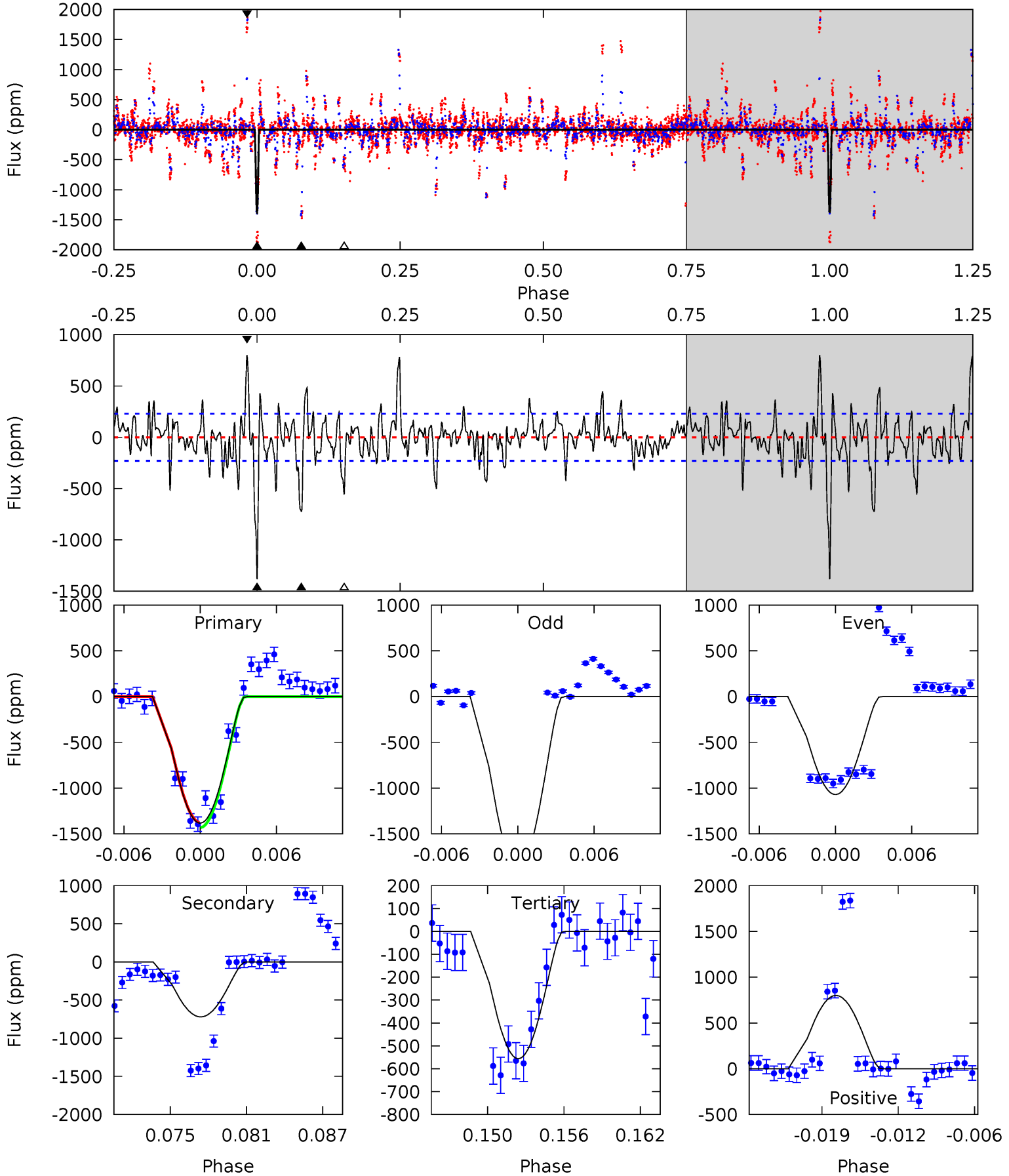
TCE 006425135-02 P= 62.900987 Days $T_0=187.871251$ (BKJD)



DV Model-Shift Uniqueness Test

006425135-02, P = 62.864355 Days, E = 125.658573 Days

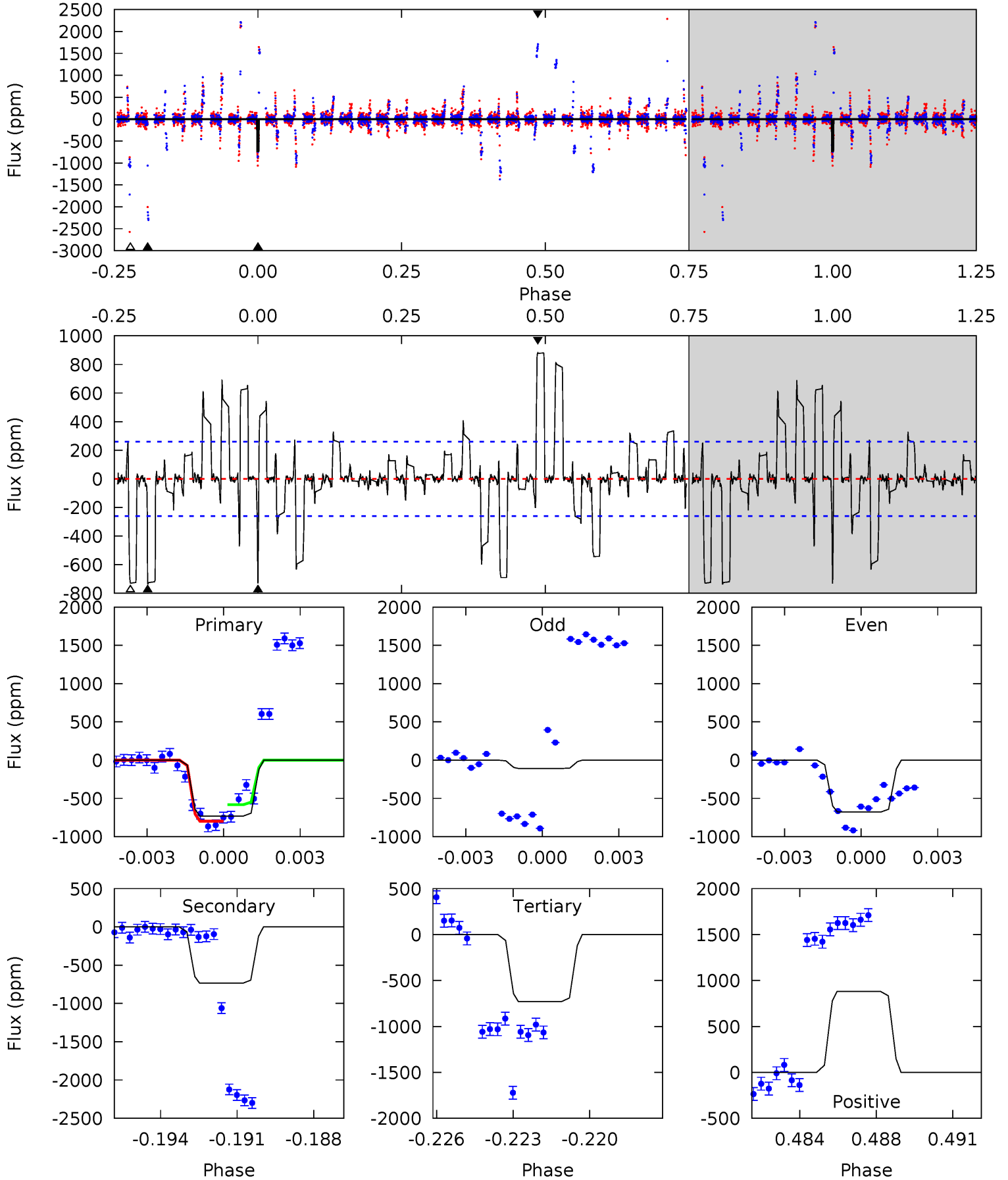
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
30.9	16.1	12.4	17.9	5.12	2.74	3.54	18.5	13.0	3.67	-1.78	8.81	-2.50	0.37	0.58



Alt Model-Shift Uniqueness Test

006425135-02, P = 62.900987 Days, E = 124.970264 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
14.7	14.8	14.7	17.8	5.24	2.95	2.67	0.03	-3.03	0.11	-2.95	5.04	0.29	0.55	2.18



Stellar Parameters For KIC 006425135

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	5198^{+201}_{-165}	$3.663^{+0.885}_{-0.295}$	$-0.280^{+0.300}_{-0.250}$	$2.550^{+1.162}_{-1.743}$	$1.091^{+0.191}_{-0.286}$	$0.093^{+2.317}_{-0.065}$
	+4%/-3%	+24%/-8%	+107%/-89%	+46%/-68%	+18%/-26%	+2498%/-70%
Source	PHO54	PHO54	PHO54	DSEP		

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

Secondary Eclipse Parameters for KIC 006425135-02 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-720 ± 45	$24.60^{+31.44}_{-16.44}$	900^{+116}_{-168}	3217^{+1341}_{-576}	63^{+493}_{-51}
Alt.	-735 ± 50	$21.54^{+25.86}_{-14.78}$	900^{+116}_{-176}	3379^{+1713}_{-617}	89^{+821}_{-72}

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

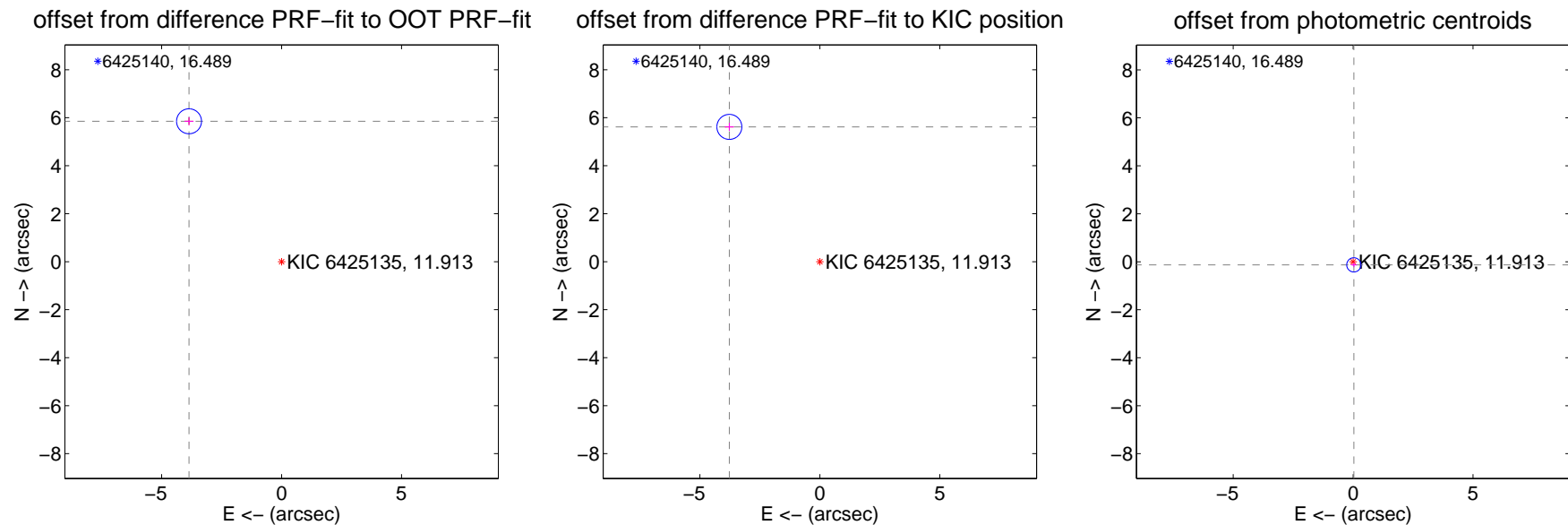
DV Centroid Data

Supplemental centroid analysis for 006425135-02. **Kepler magnitude: 11.91.** Transit SNR 22.34

There are 0 quarters with good PRF difference image offsets

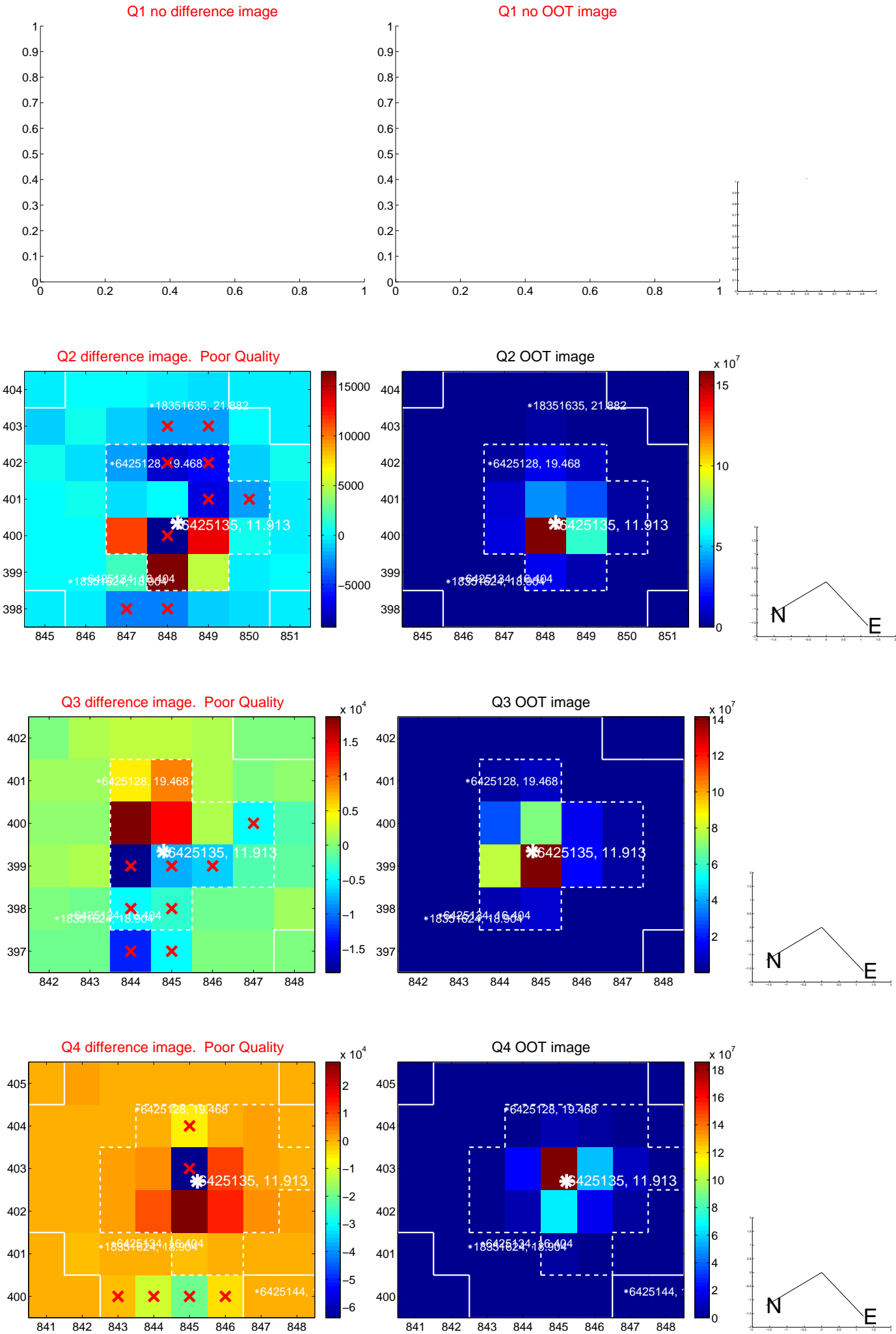
The direct PRF centroid is offset from the target star catalog position by about 0.25 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	7.010 \pm 0.173	40.44	3.859 \pm 0.188	5.852 \pm 0.166
PRF-fit source offset from KIC position	6.768 \pm 0.174	39.00	3.773 \pm 0.188	5.618 \pm 0.166
photometric centroid source offset	0.13 \pm 0.10	1.34	-0.03 \pm 0.12	-0.13 \pm 0.10

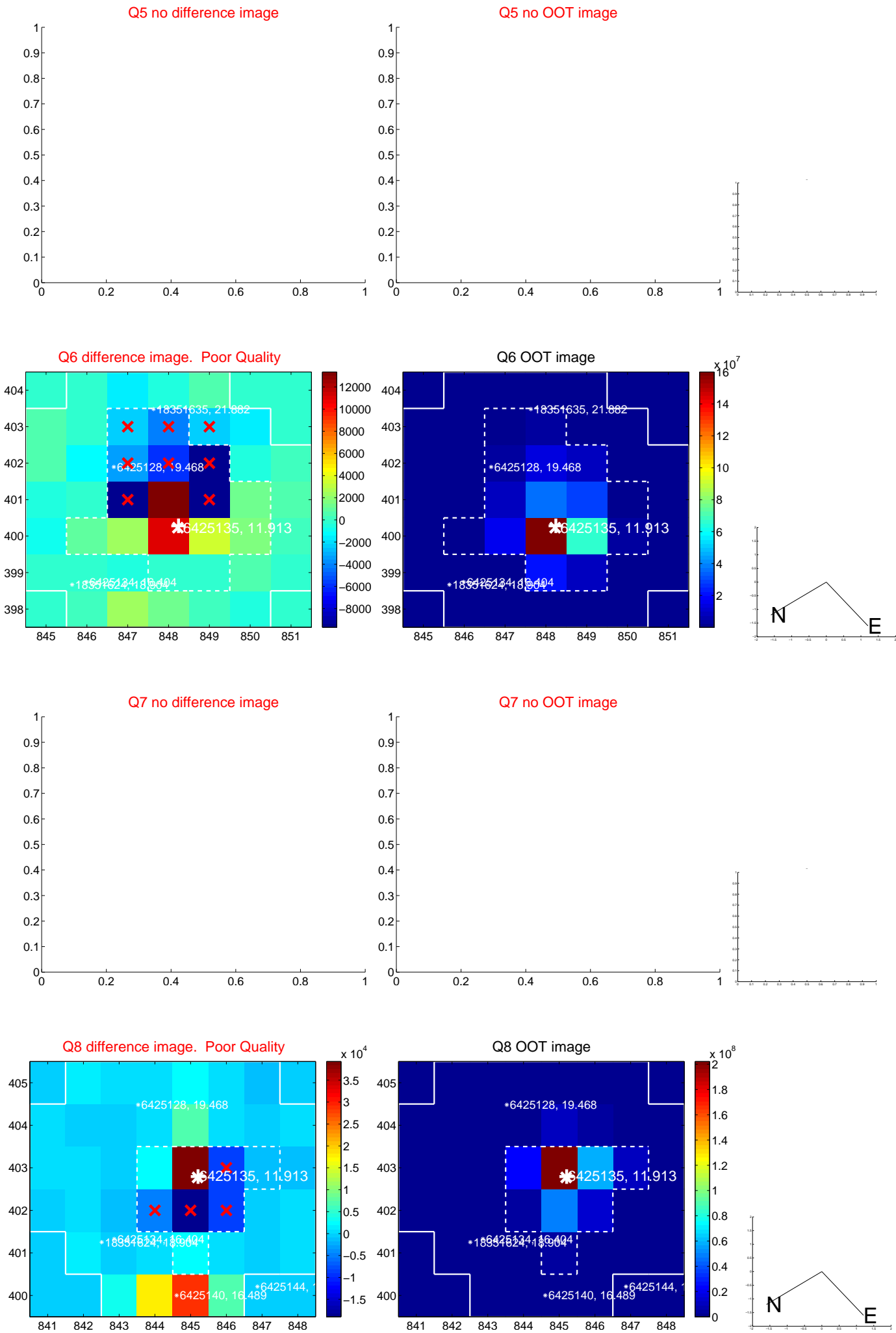


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets;** magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

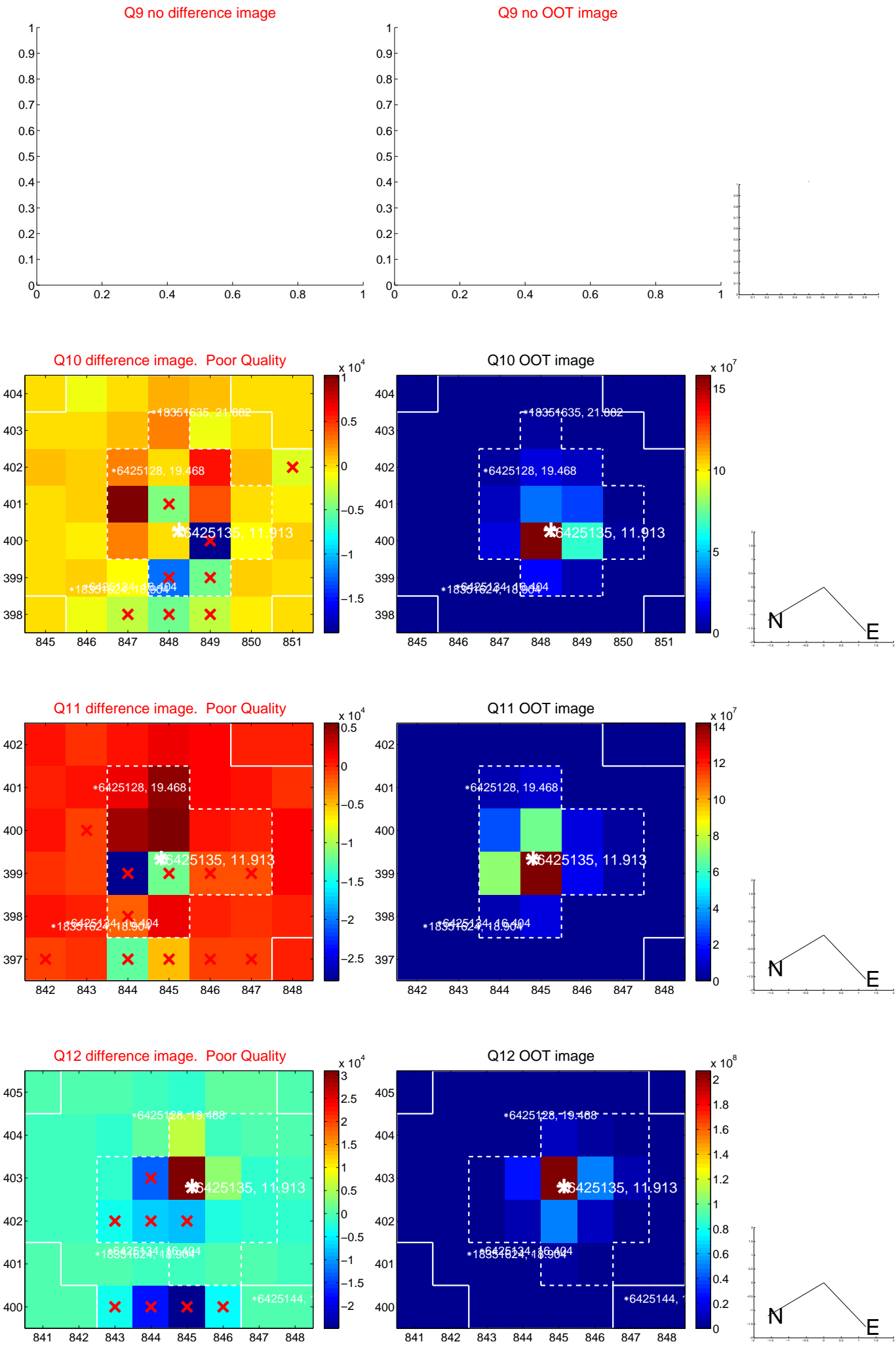
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



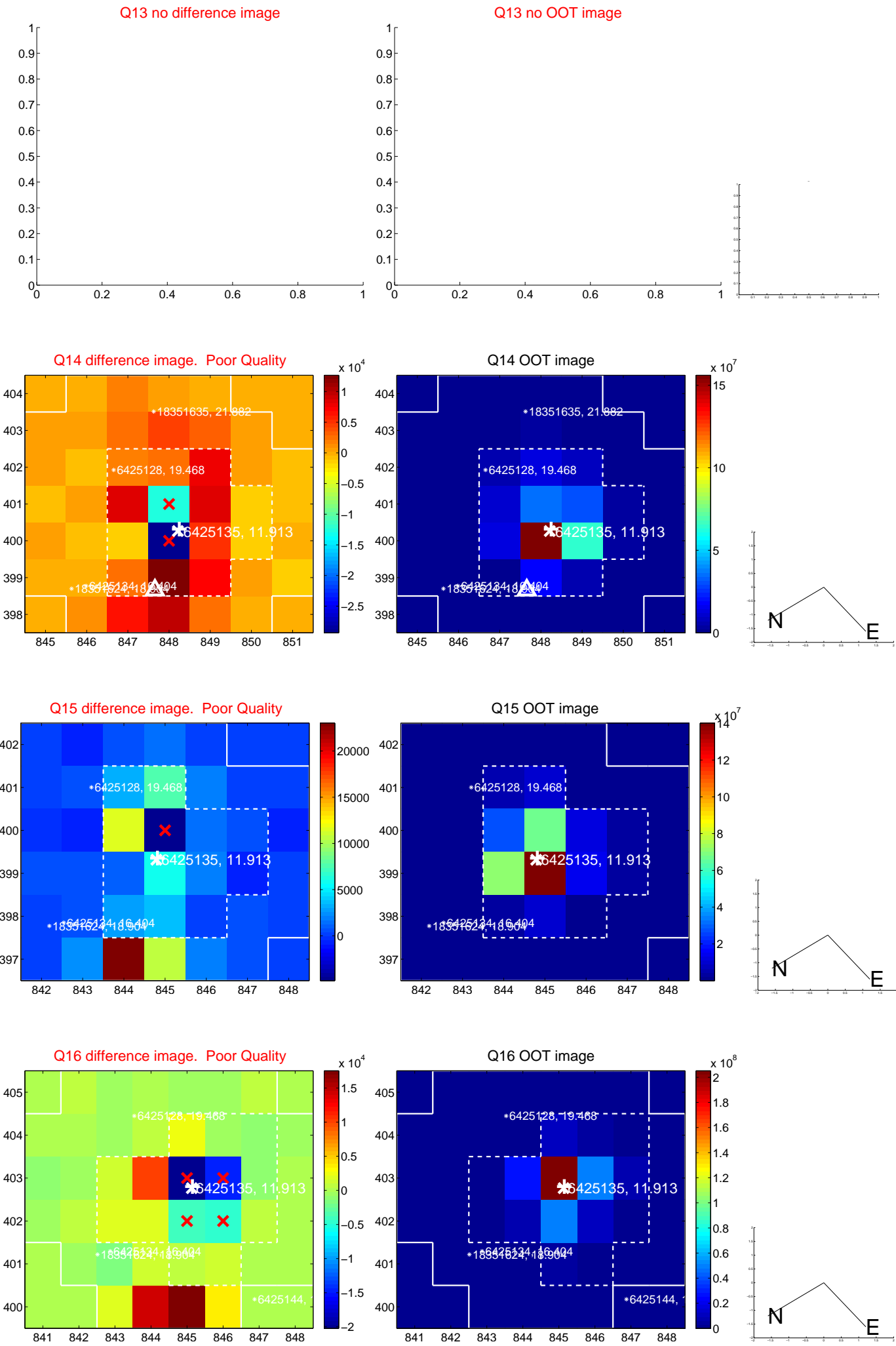
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



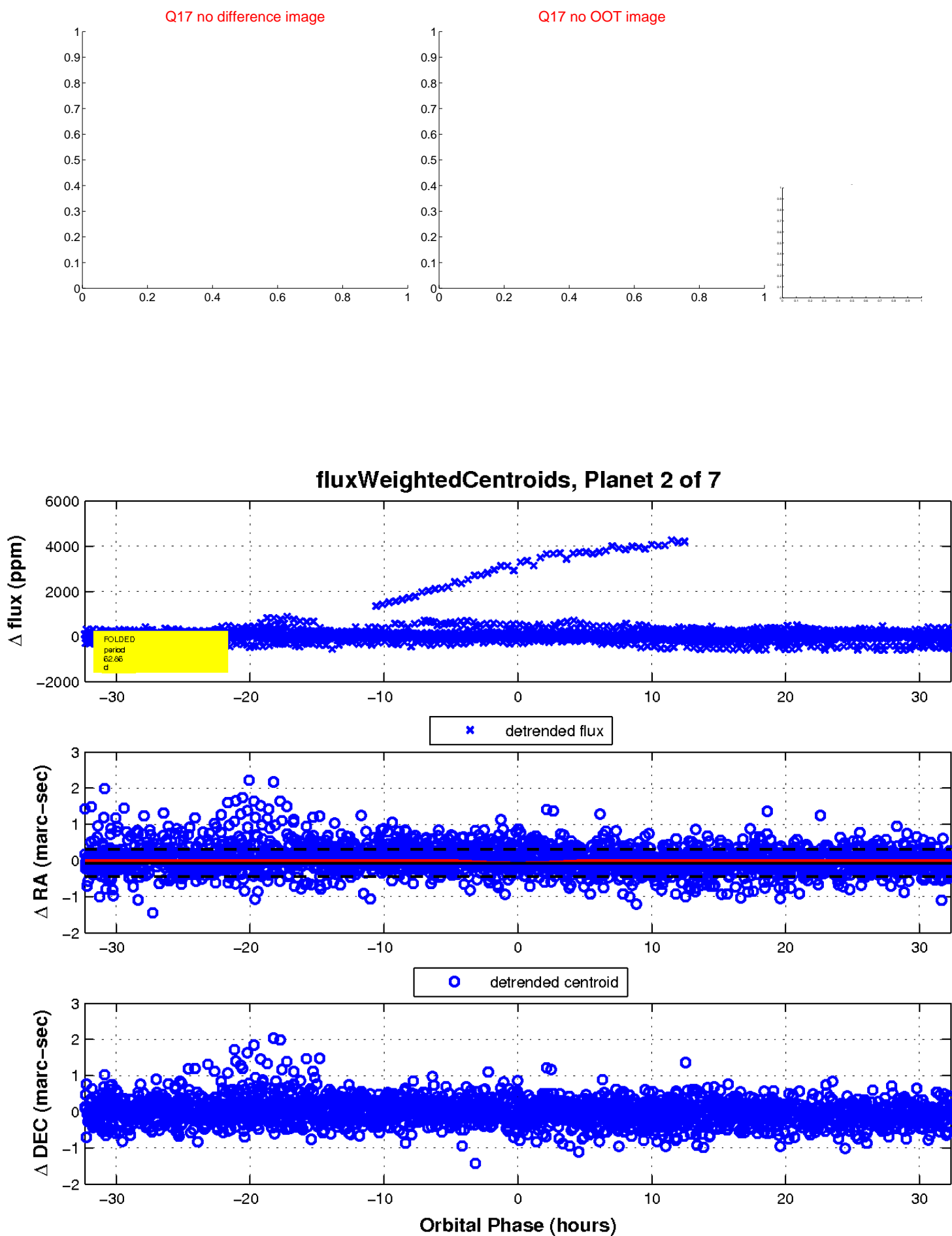
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

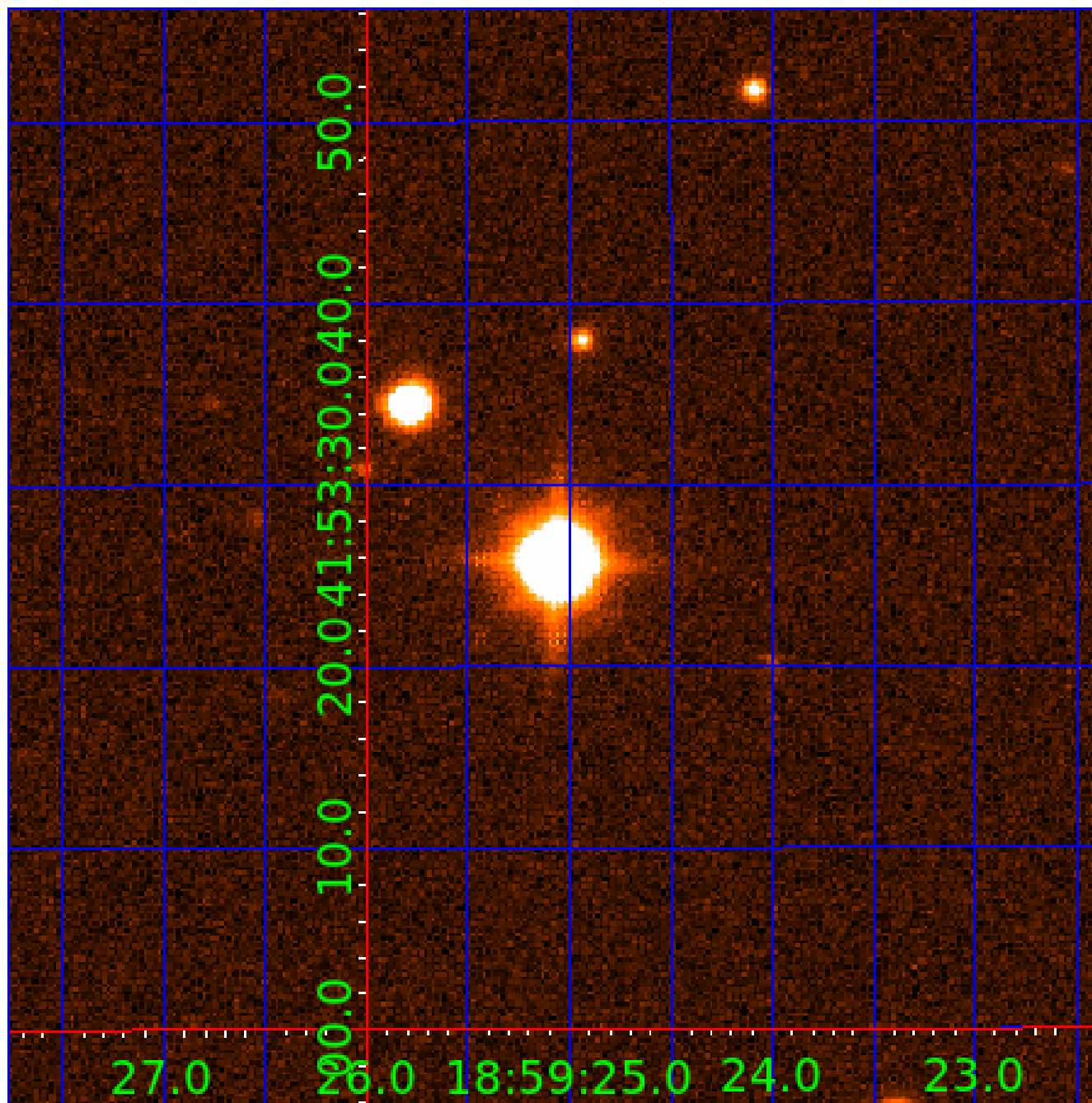


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 006425135

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})
006425135-01	OBS	No	2.030884	132.971373	13.1	14.392	7.5	7.8	2.55	5198	0.98	4070.86
006425135-02	OBS	No	62.864355	188.522928	1011.0	10.785	29.6	22.3	2.55	5198	16.15	41.88
006425135-03	OBS	No	28.998564	135.651150	465.8	20.532	27.9	14.0	2.55	5198	11.27	117.52
006425135-05	OBS	No	38.275026	158.526009	203.7	51.894	17.6	5.5	2.55	5198	4.16	81.17
006425135-06	OBS	No	30.498761	135.443758	258.5	9.979	12.0	6.6	2.55	5198	5.14	109.87
006425135-07	OBS	No	24.616981	140.066812	179.2	7.588	9.4	8.2	2.55	5198	3.50	146.20

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
006425135-01	OBS	FP	0.00	1	0	1	0	LPP_DV—CENT_RESOLVED_OFFSET
006425135-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—ALL_TRANS_CHASES—MOD_TER_ALT—MOD_POS_ALT—CENT_FEW_DIFFS
006425135-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—CENT_FEW_DIFFS
006425135-05	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_ALT
006425135-06	OBS	FP	0.00	1	0	1	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—LPP_ALT—CENT_RESOLVED_OFFSET
006425135-07	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_ZUMA—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_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.

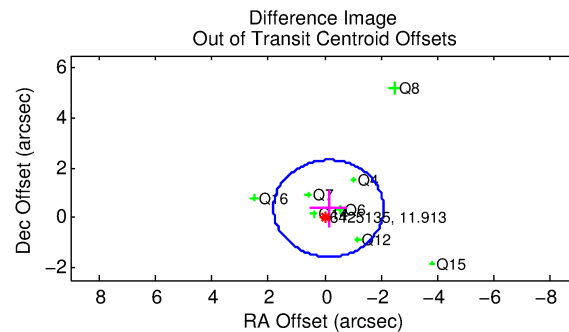
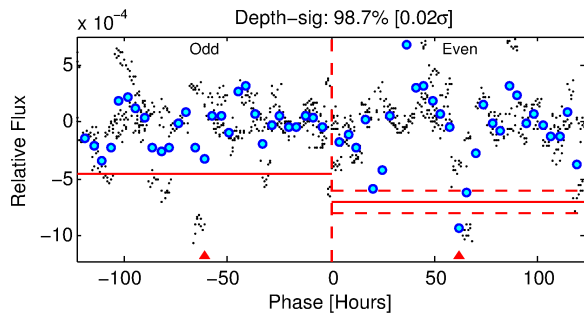
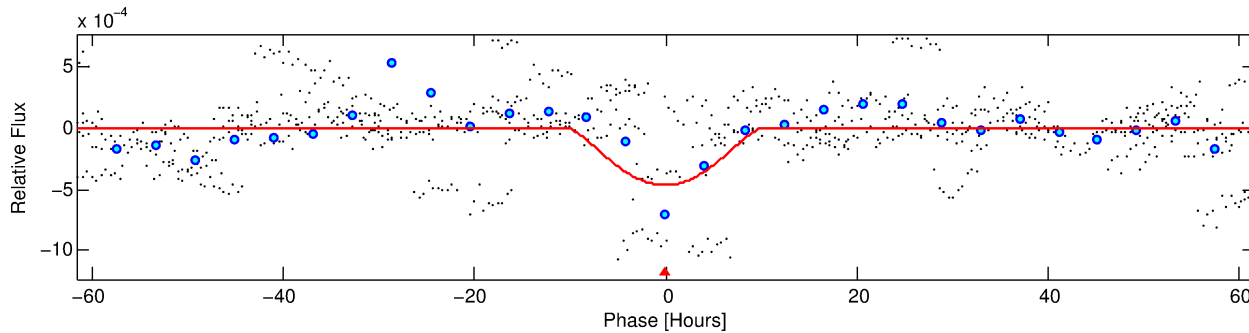
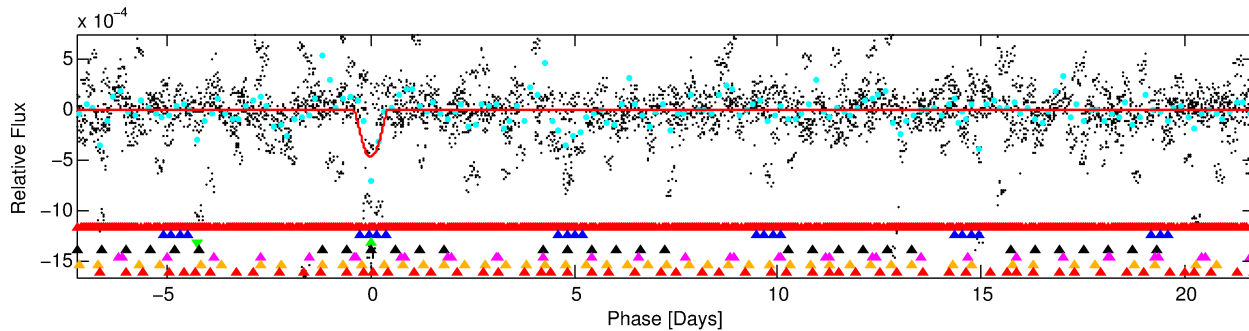
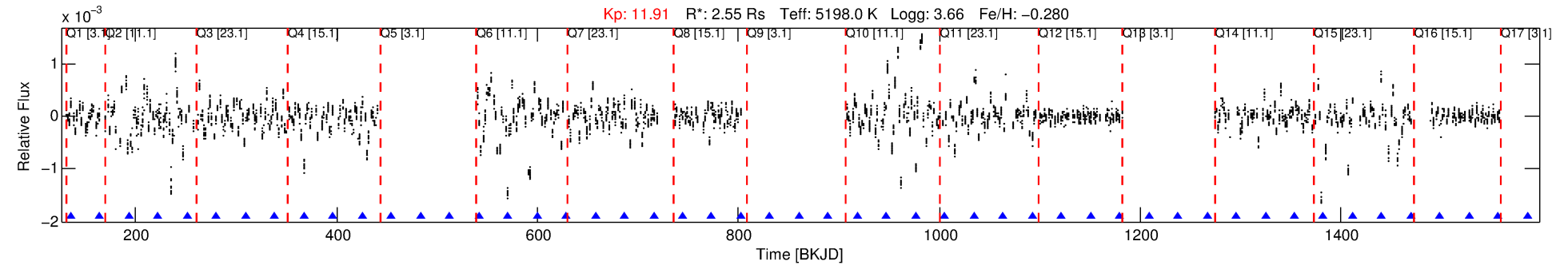
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 006425135-03

No Significant Match Found

DV One-Page Summary

KIC: 6425135 Candidate: 3 of 7 Period: 28.999 d



DV Fit Results:

Period = 28.99856 [0.00102] d
Epoch = 135.6512 [0.0330] BKJD
Rp/R* = 0.0405 [0.0739]
a/R* = 3.27 [1.27]
b = 1.00 [0.10]
Seff = 117.52 [169.37]
Teq = 840 [303] K
Rp = 11.27 [21.95] Re
a = 0.1902 [0.1556] AU
Ag = 68.29 [268.32] [0.25 σ]
Teffp = 3731 [3416] K [0.84 σ]

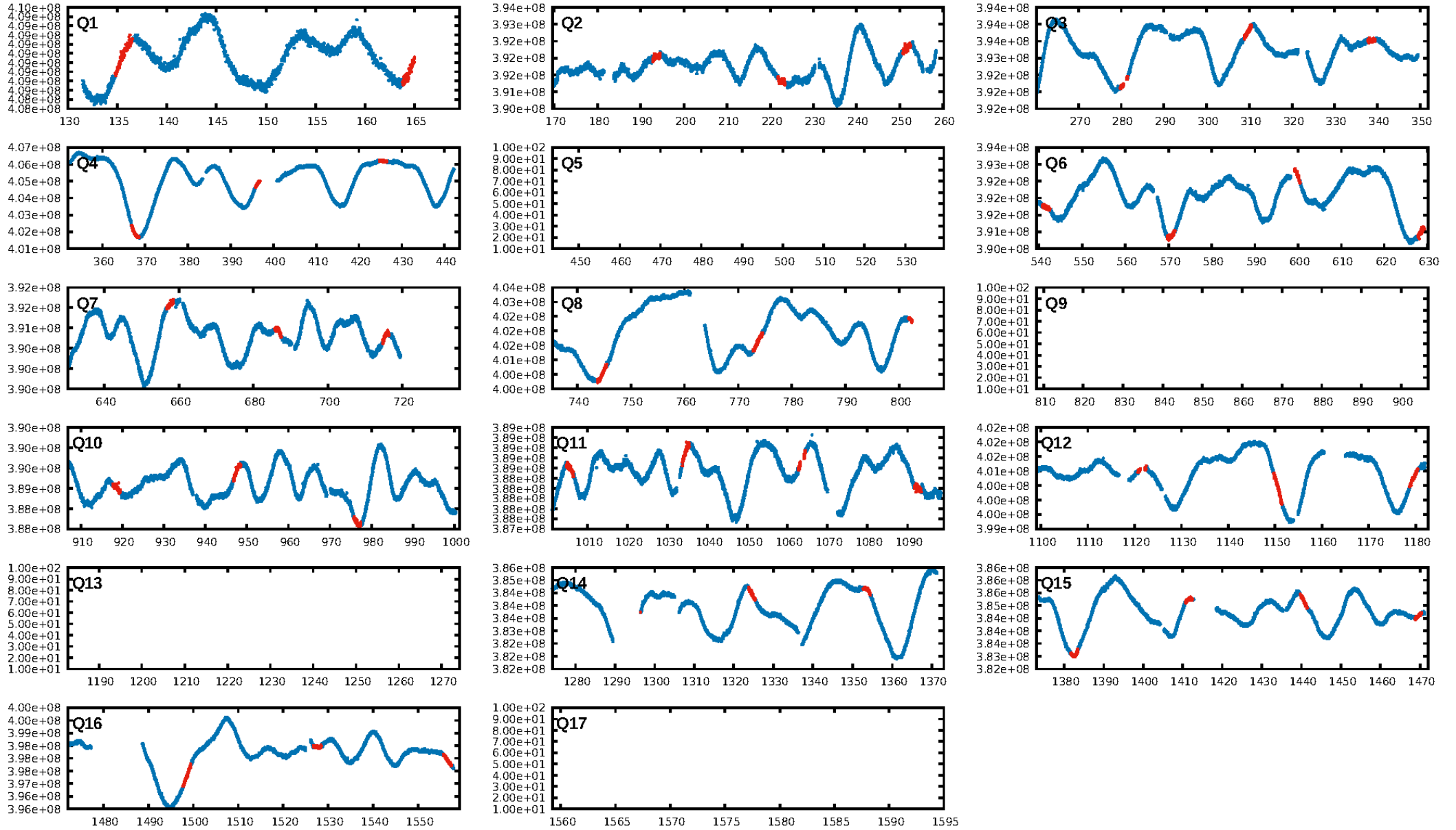
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [4.80 σ]
LongPeriod-sig: 88.5% [1.58 σ]
ModelChiSquare2-sig: 0.0%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: 1.08e-128
RollingBand-fgt: 1.00 [15/15]
GhostDiagnostic-chr: 5.579
Centroid-sig: N/A
Centroid-so: 0.297 arcsec [2.29 σ]
OotOffset-rm: 0.388 arcsec [0.60 σ]
KicOffset-rm: 0.377 arcsec [0.63 σ]
OotOffset-st: 2/2/4/0 [8]
KicOffset-st: 2/2/4/0 [8]
DiffImageQuality-fgm: 0.38 [3/8]
DiffImageOverlap-fno: 0.00 [0/12]

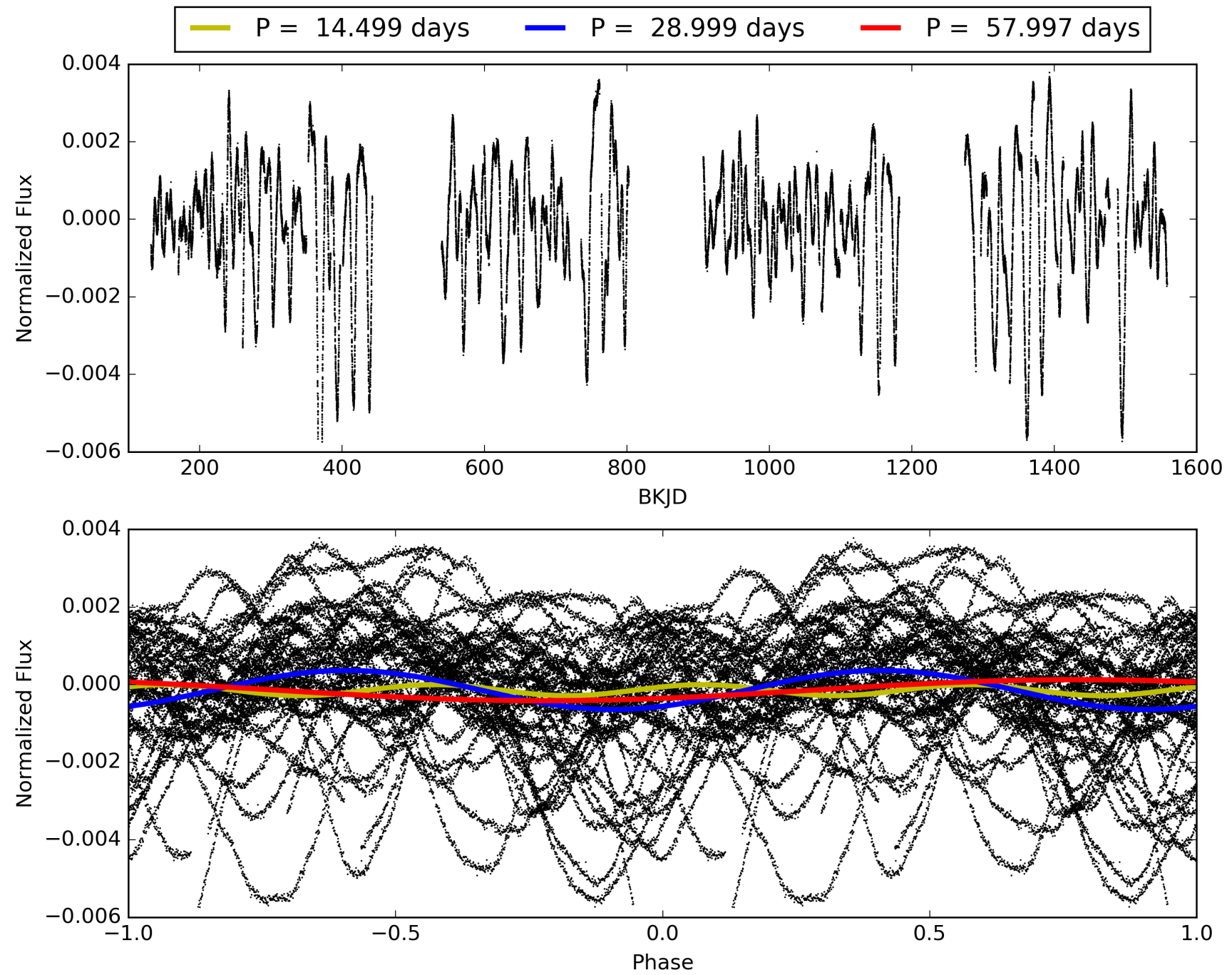
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 01-Feb-2016 23:59:30 Z

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

TCE 006425135-03, PDC Light Curves

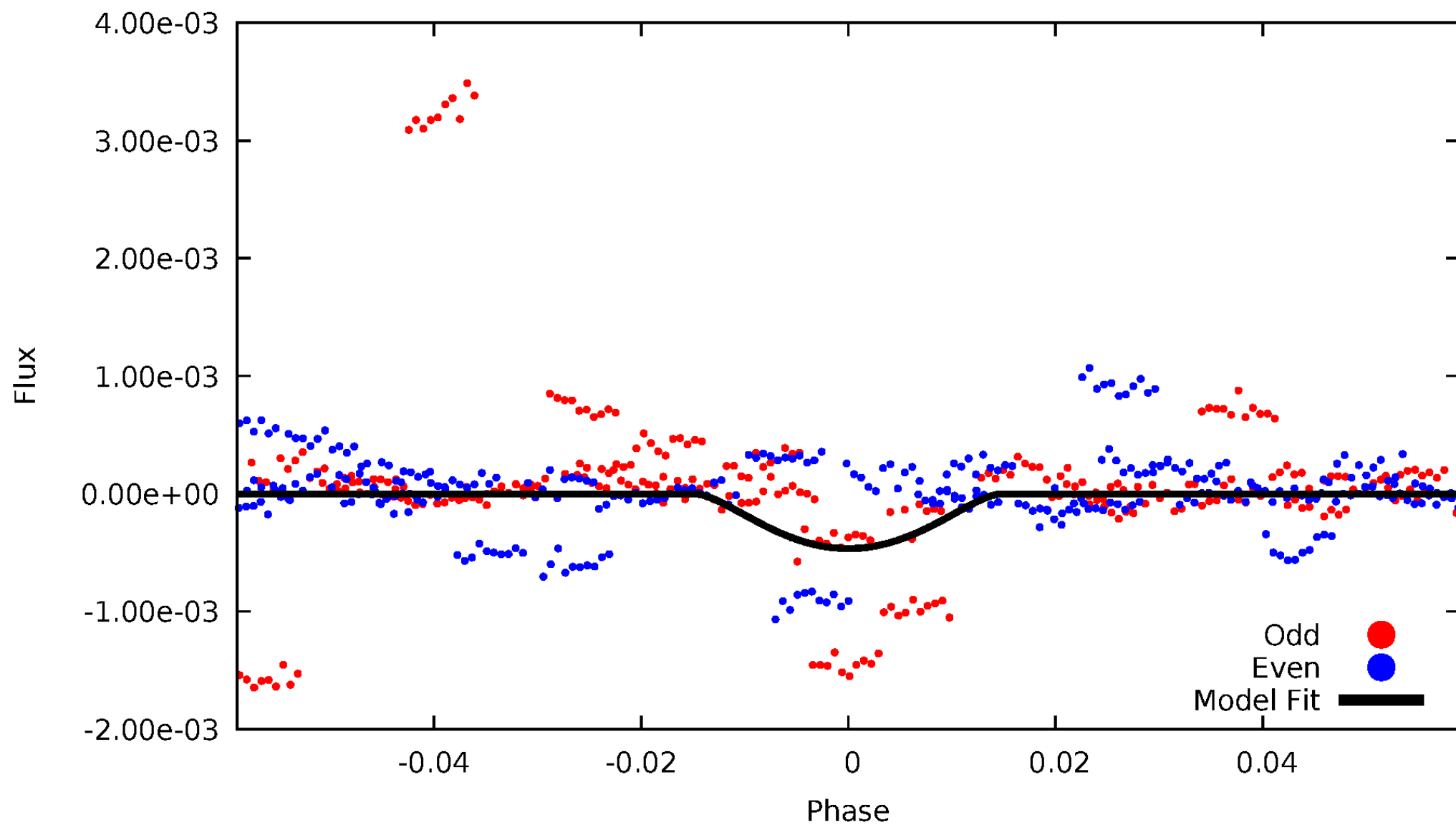


TCE 006425135-03



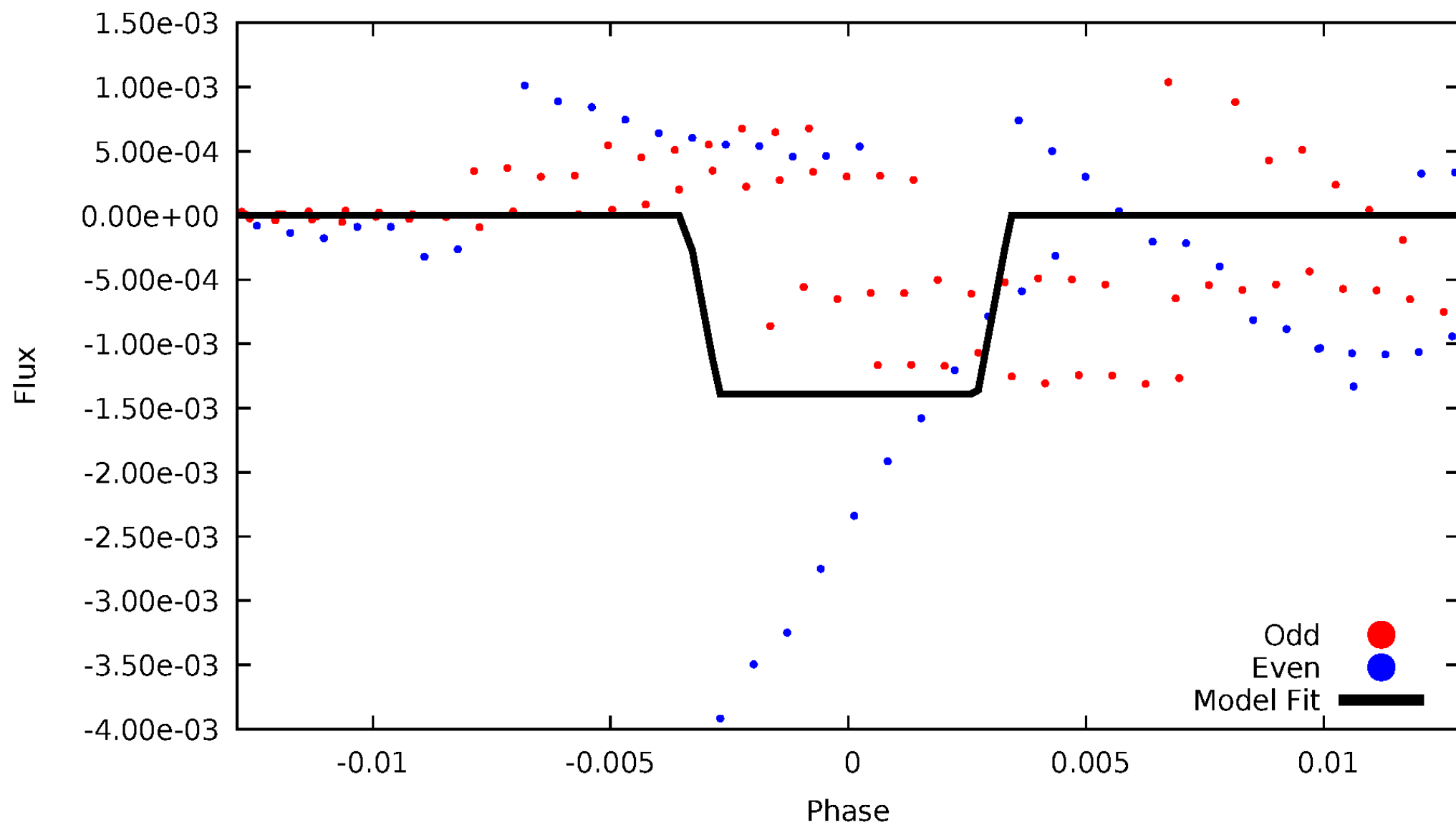
DV Odd/Even

TCE 006425135-03



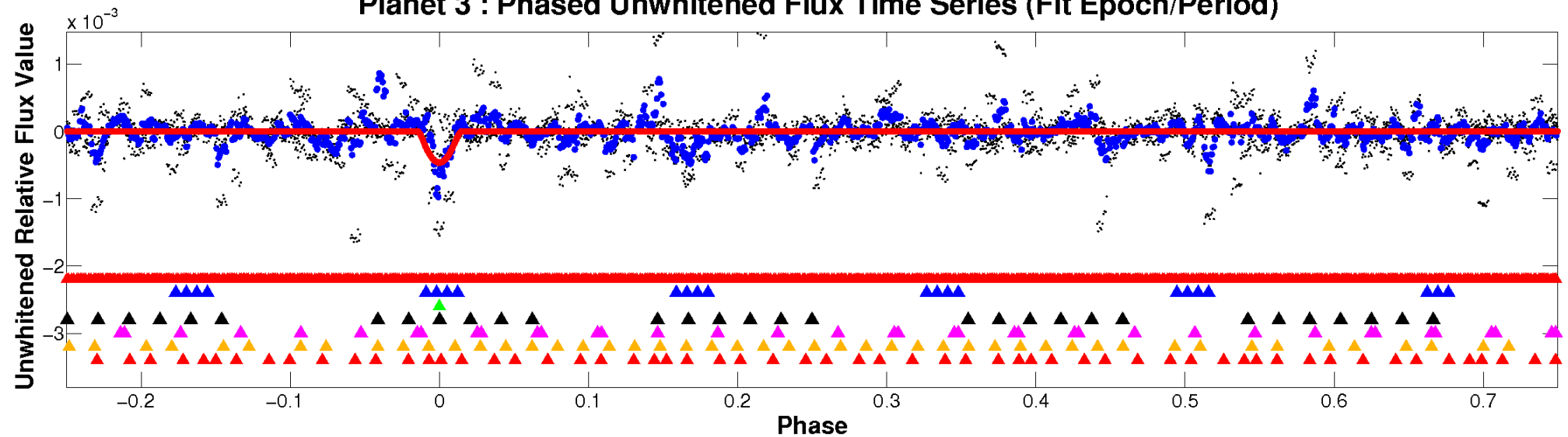
ALT Odd/Even

TCE 006425135-03

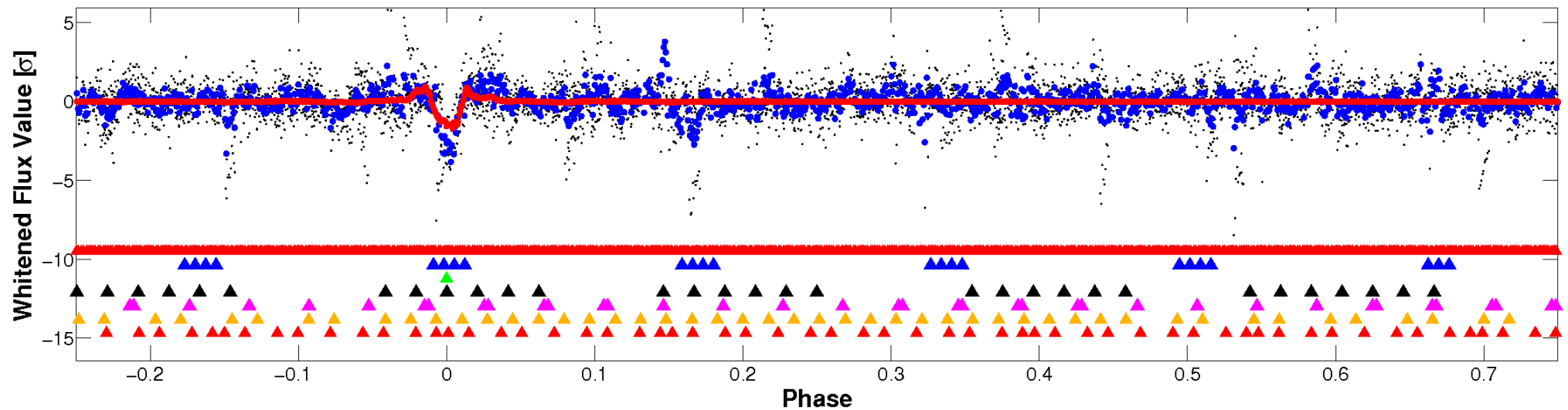


Non-Whitened Vs. Whitened Light Curve

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

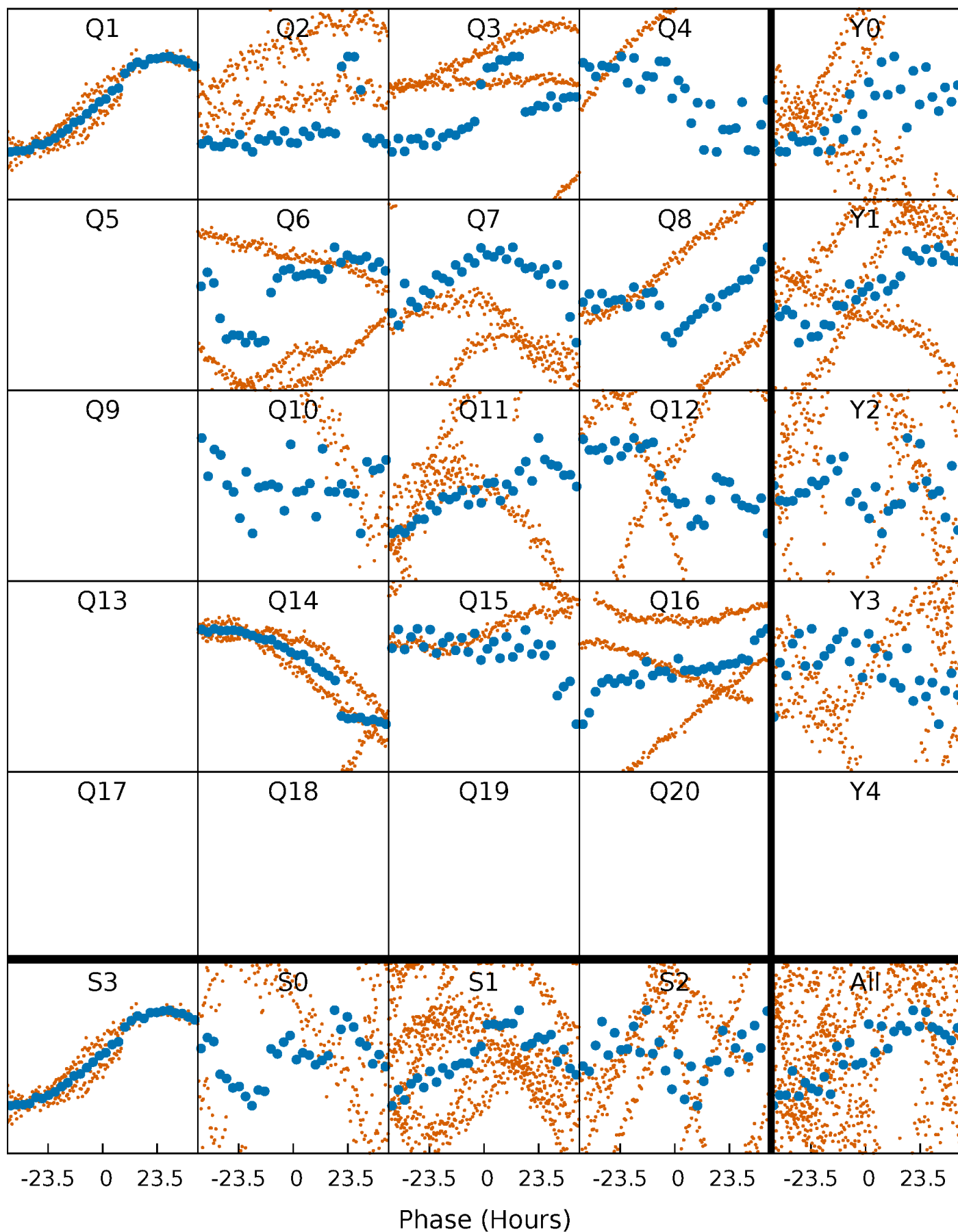


Planet 3 : Phased Whitened Flux Time Series (Fit Epoch/Period)



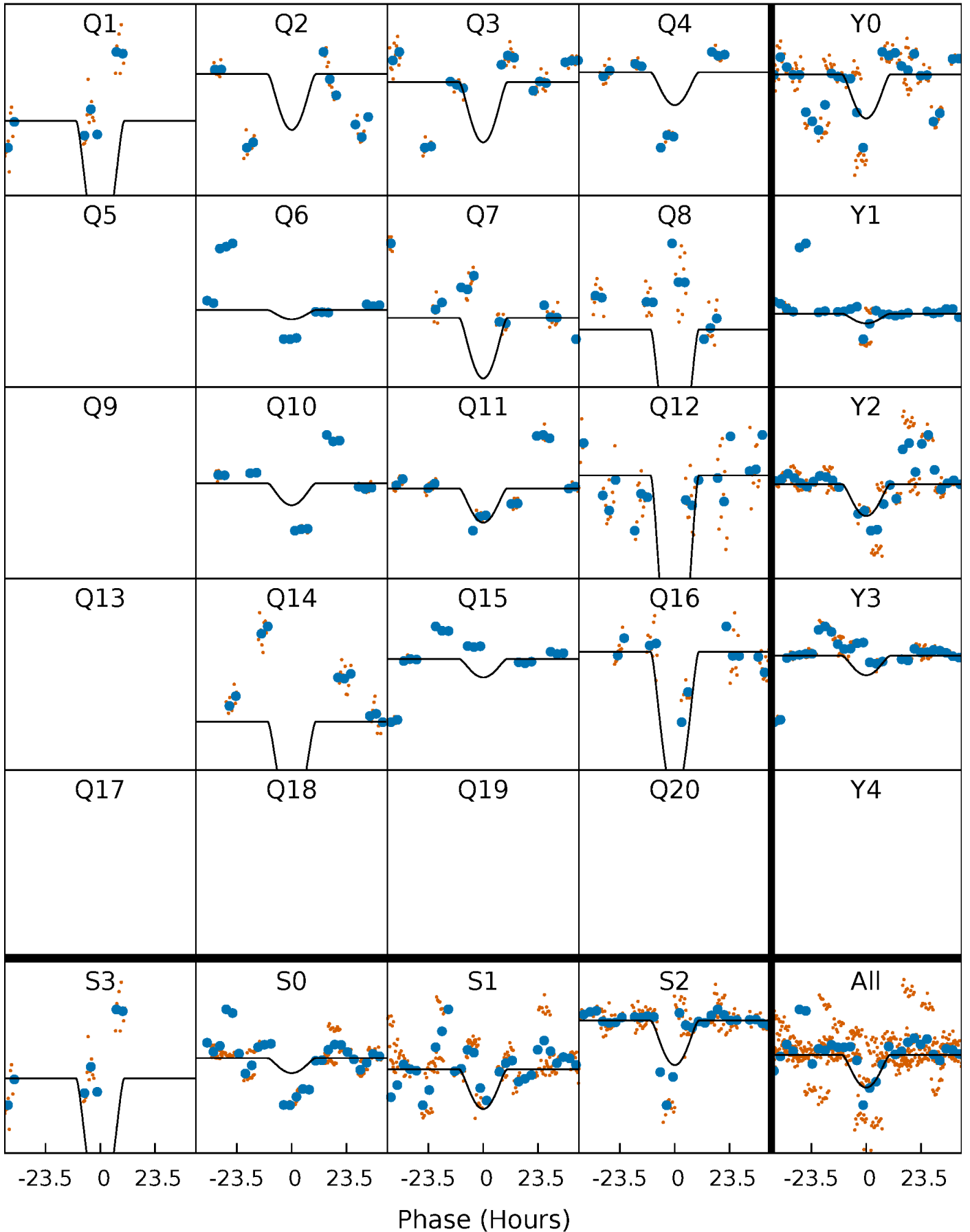
PDC Quarter-Phased Transit Curves

TCE 006425135-03 P= 28.998564 Days $T_0=135.651150$ (BKJD)



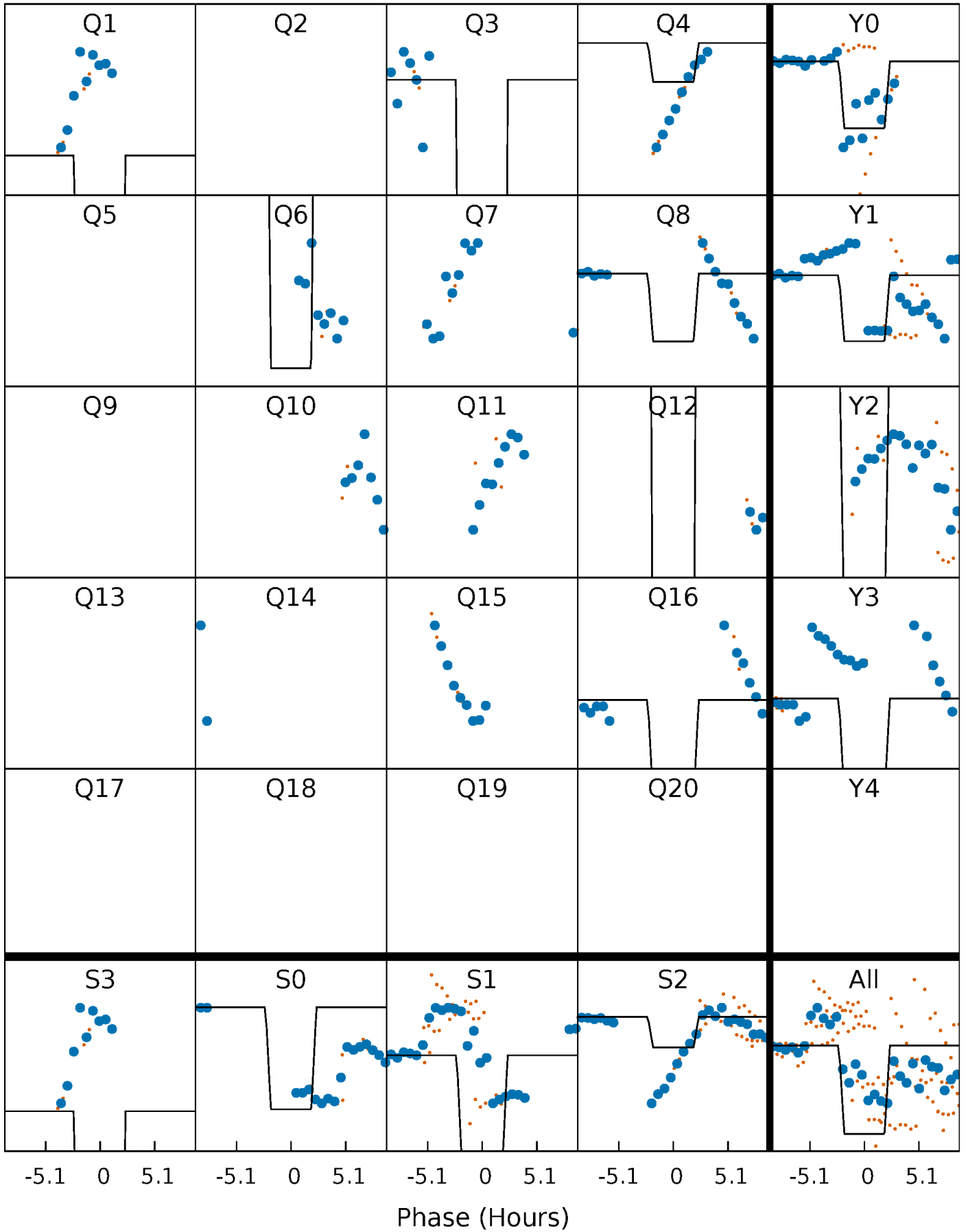
DV Quarter-Phased Transit Curves

TCE 006425135-03 P= 28.998564 Days $T_0=135.651150$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

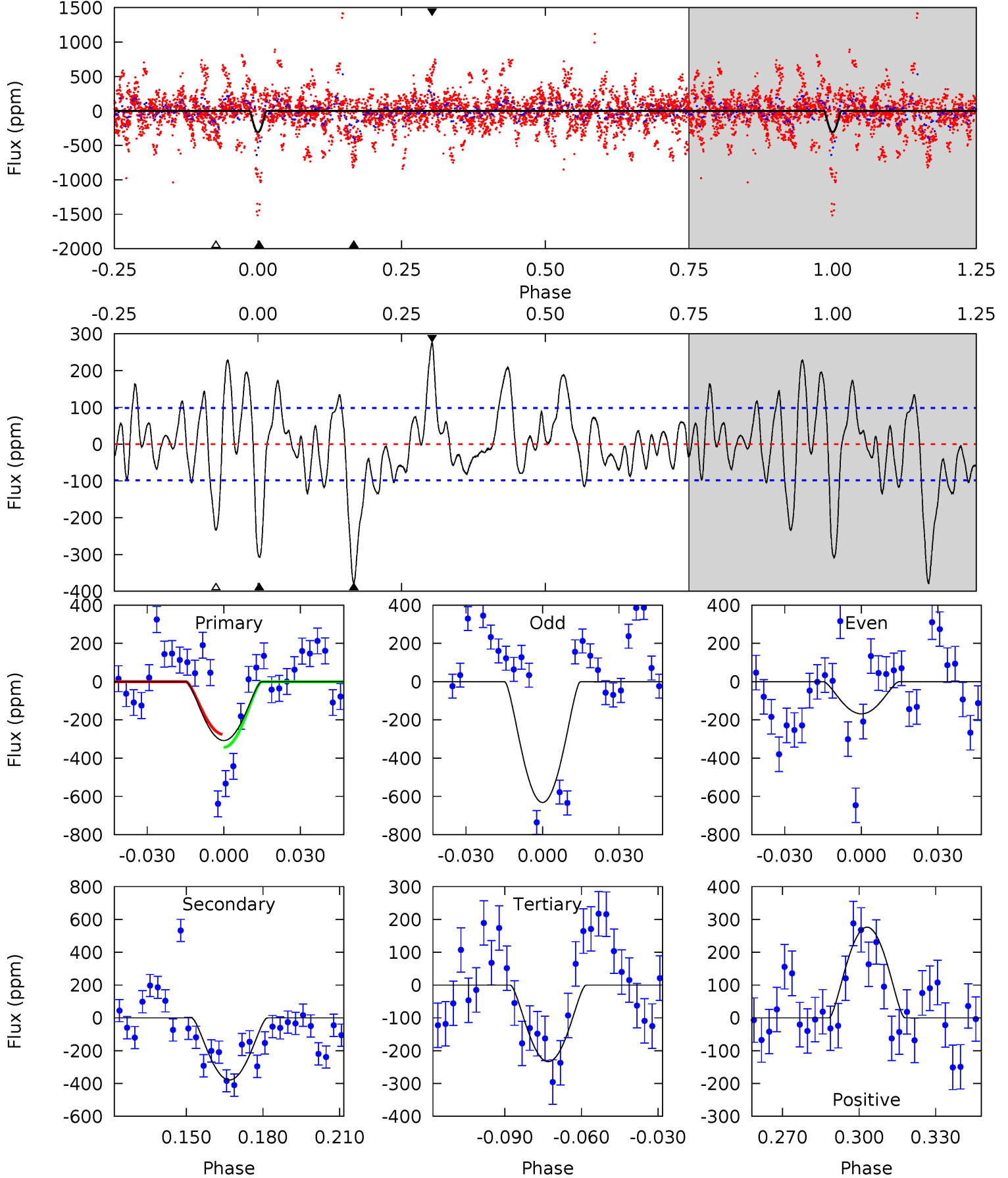
TCE 006425135-03 P= 28.999793 Days $T_0=135.515428$ (BKJD)



DV Model-Shift Uniqueness Test

006425135-03, P = 28.998564 Days, E = 106.652586 Days

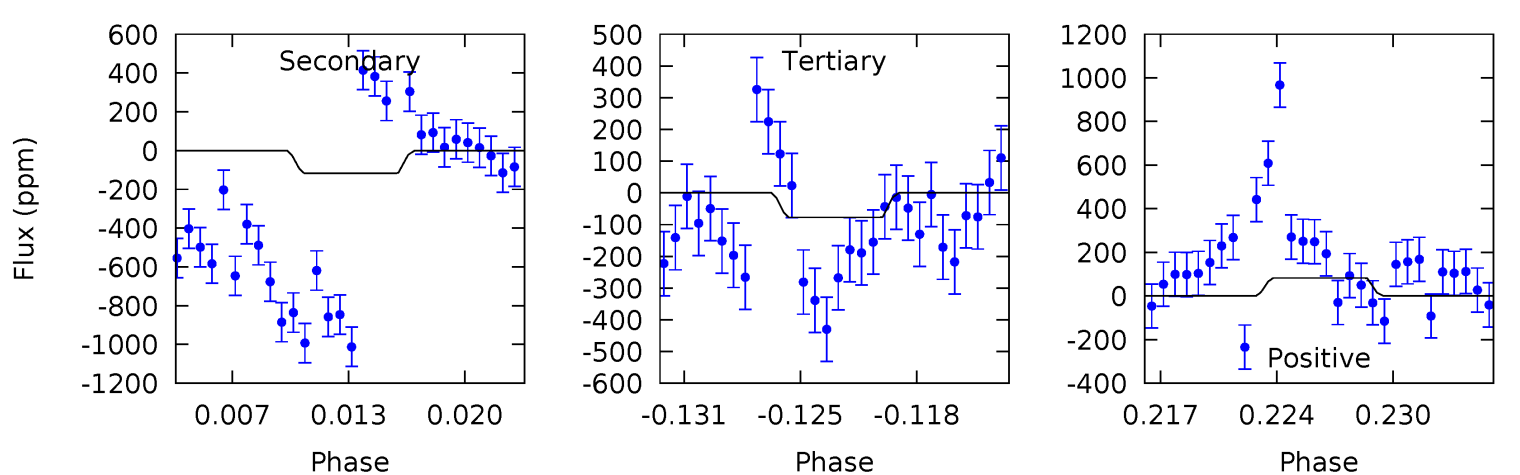
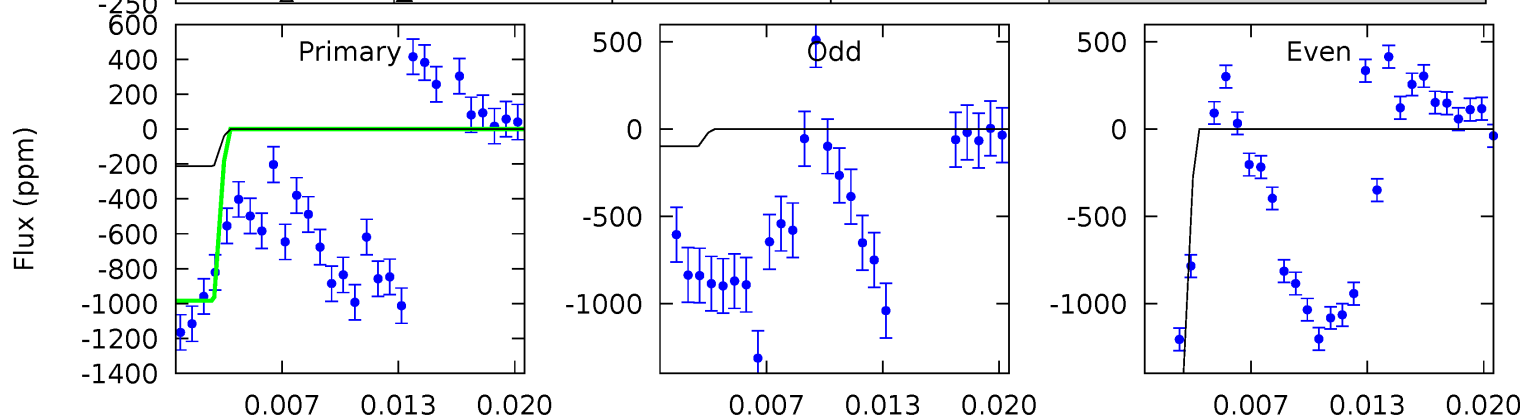
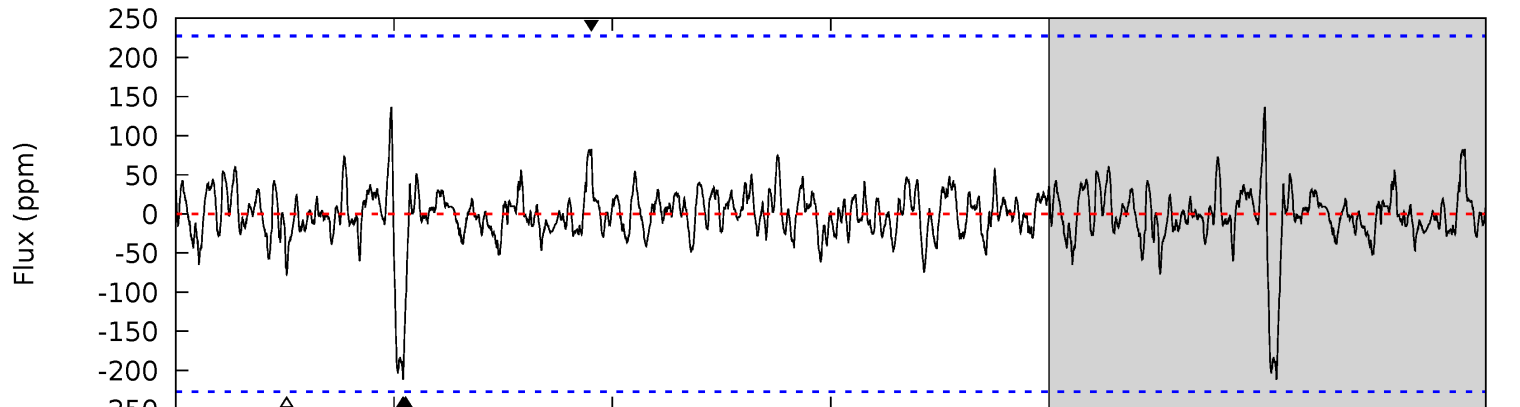
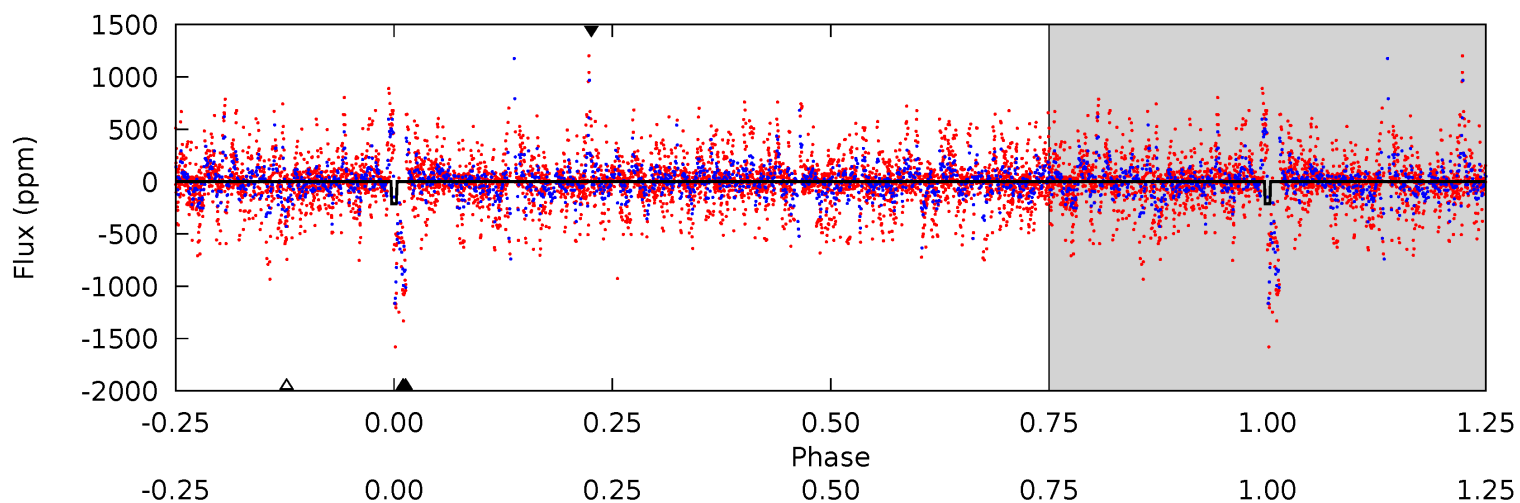
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
15.1	18.5	11.4	13.5	4.81	2.17	4.05	3.64	1.54	7.08	4.98	9.68	152.3	0.42	0



Alt Model-Shift Uniqueness Test

006425135-03, P = 28.999793 Days, E = 106.515635 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
4.76	2.64	1.73	1.86	5.11	2.72	0.60	3.02	2.90	0.90	0.78	13.4	2.72	0.39	5.55



Stellar Parameters For KIC 006425135

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	M (M_{\odot})	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	5198^{+201}_{-165}	$3.663^{+0.885}_{-0.295}$	$-0.280^{+0.300}_{-0.250}$	$2.550^{+1.162}_{-1.743}$	$1.091^{+0.191}_{-0.286}$	$0.093^{+2.317}_{-0.065}$
	+4%/-3%	+24%/-8%	+107%/-89%	+46%/-68%	+18%/-26%	+2498%/-70%
Source	PHO54	PHO54	PHO54	DSEP		

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

Secondary Eclipse Parameters for KIC 006425135-03 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-378 ± 20	$17.91^{+17.47}_{-12.46}$	1154^{+163}_{-209}	3261^{+1563}_{-541}	23^{+227}_{-17}
Alt.	-117 ± 45	$16.69^{+18.82}_{-11.36}$	1163^{+151}_{-207}	2764^{+1055}_{-471}	$7.910^{+73.523}_{-6.284}$

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

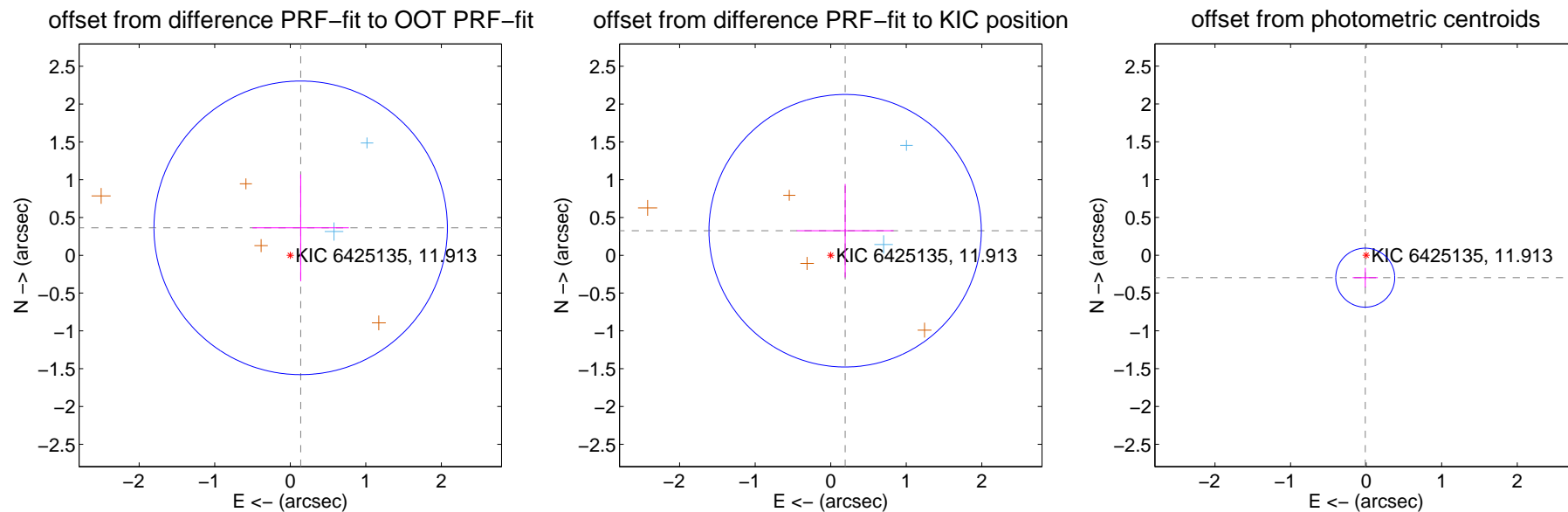
DV Centroid Data

Supplemental centroid analysis for 006425135-03. **Kepler magnitude: 11.91.** Transit SNR 14.03

There are 3 quarters with good PRF difference image offsets

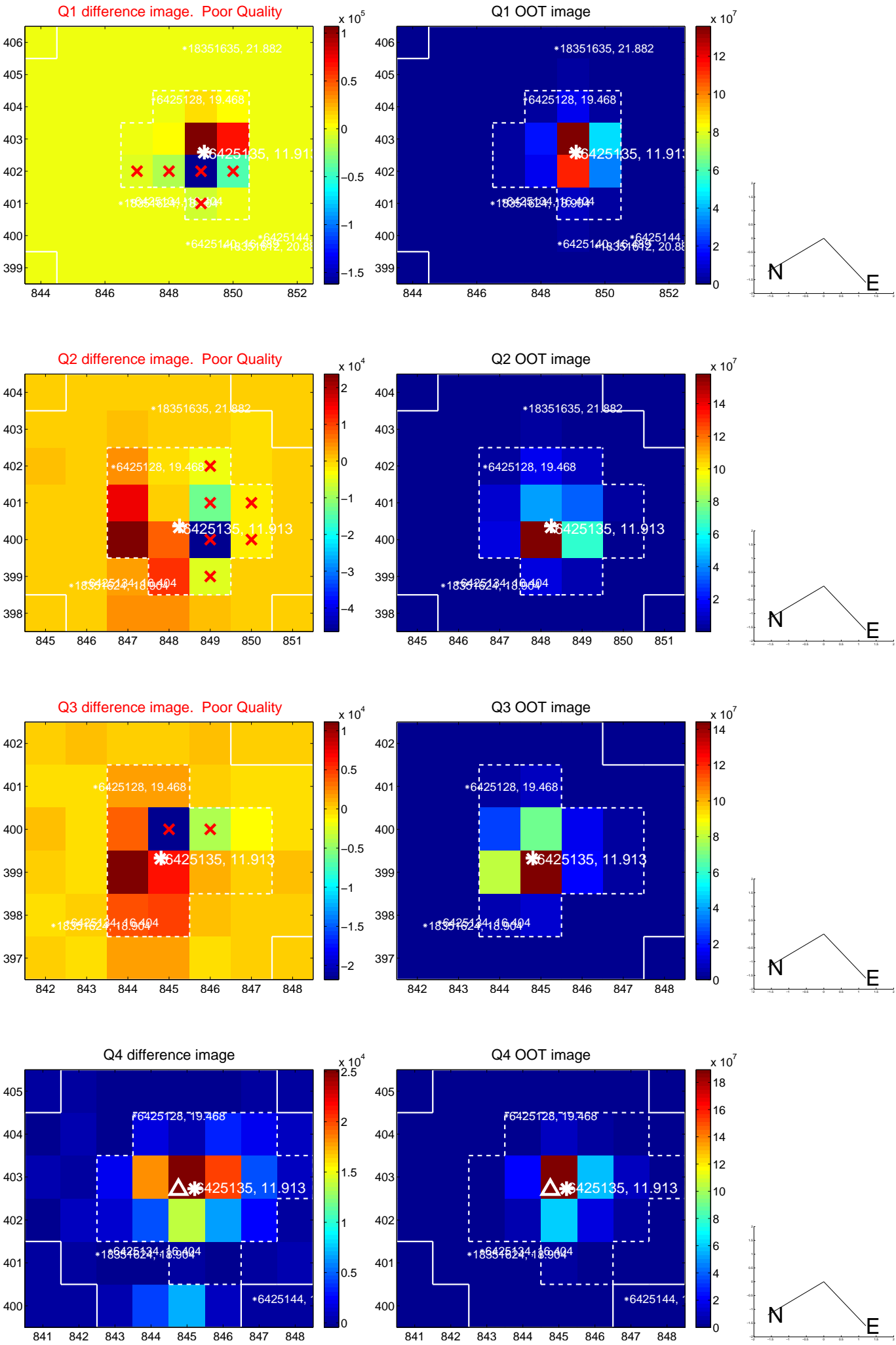
The direct PRF centroid is offset from the target star catalog position by about 0.18 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.388 ± 0.647	0.60	-0.138 ± 0.638	0.363 ± 0.706
PRF-fit source offset from KIC position	0.377 ± 0.601	0.63	-0.191 ± 0.641	0.325 ± 0.618
photometric centroid source offset	0.30 ± 0.13	2.29	0.01 ± 0.17	-0.30 ± 0.13

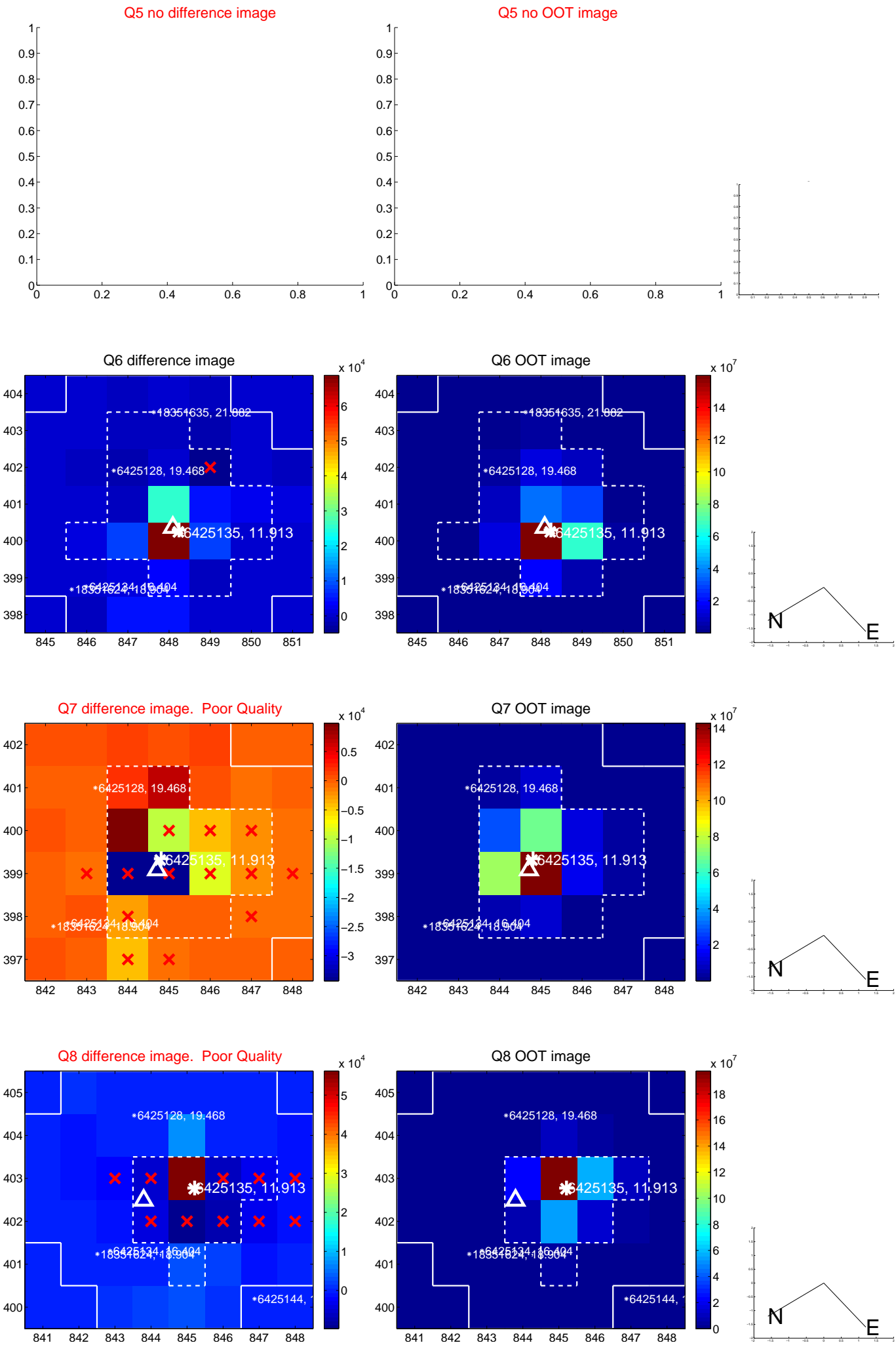


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets;** magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

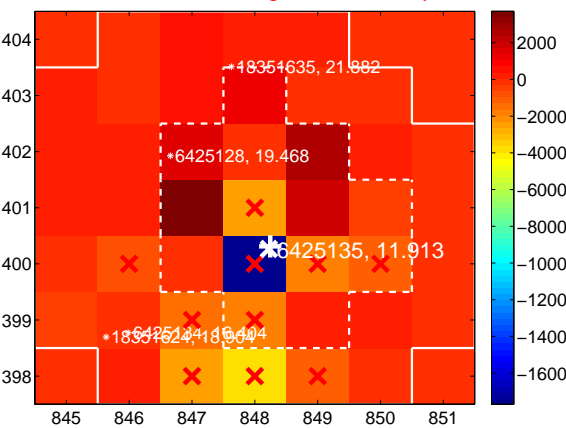
Q9 no difference image



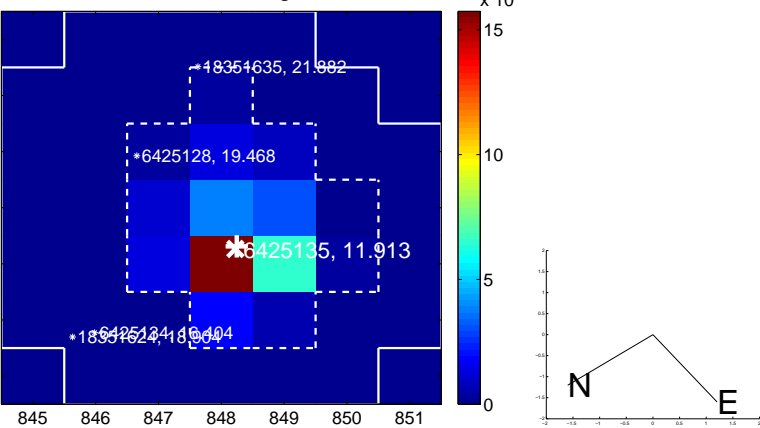
Q9 no OOT image



Q10 difference image. Poor Quality



Q10 OOT image



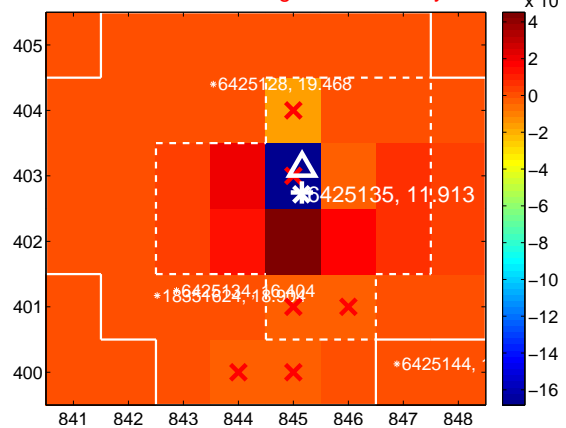
Q11 no difference image



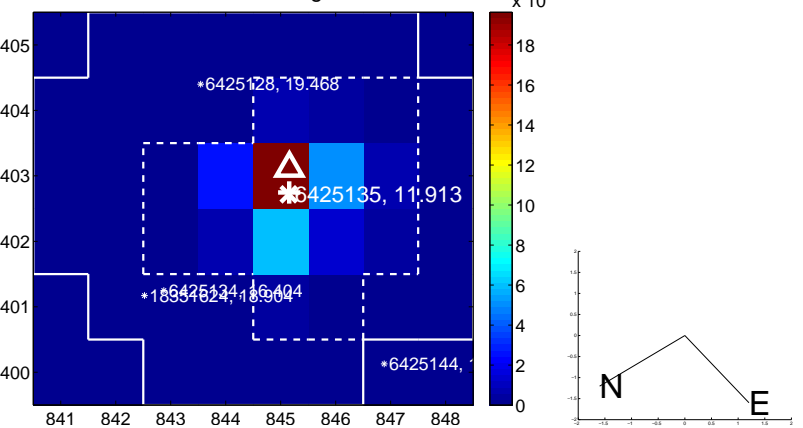
Q11 no OOT image



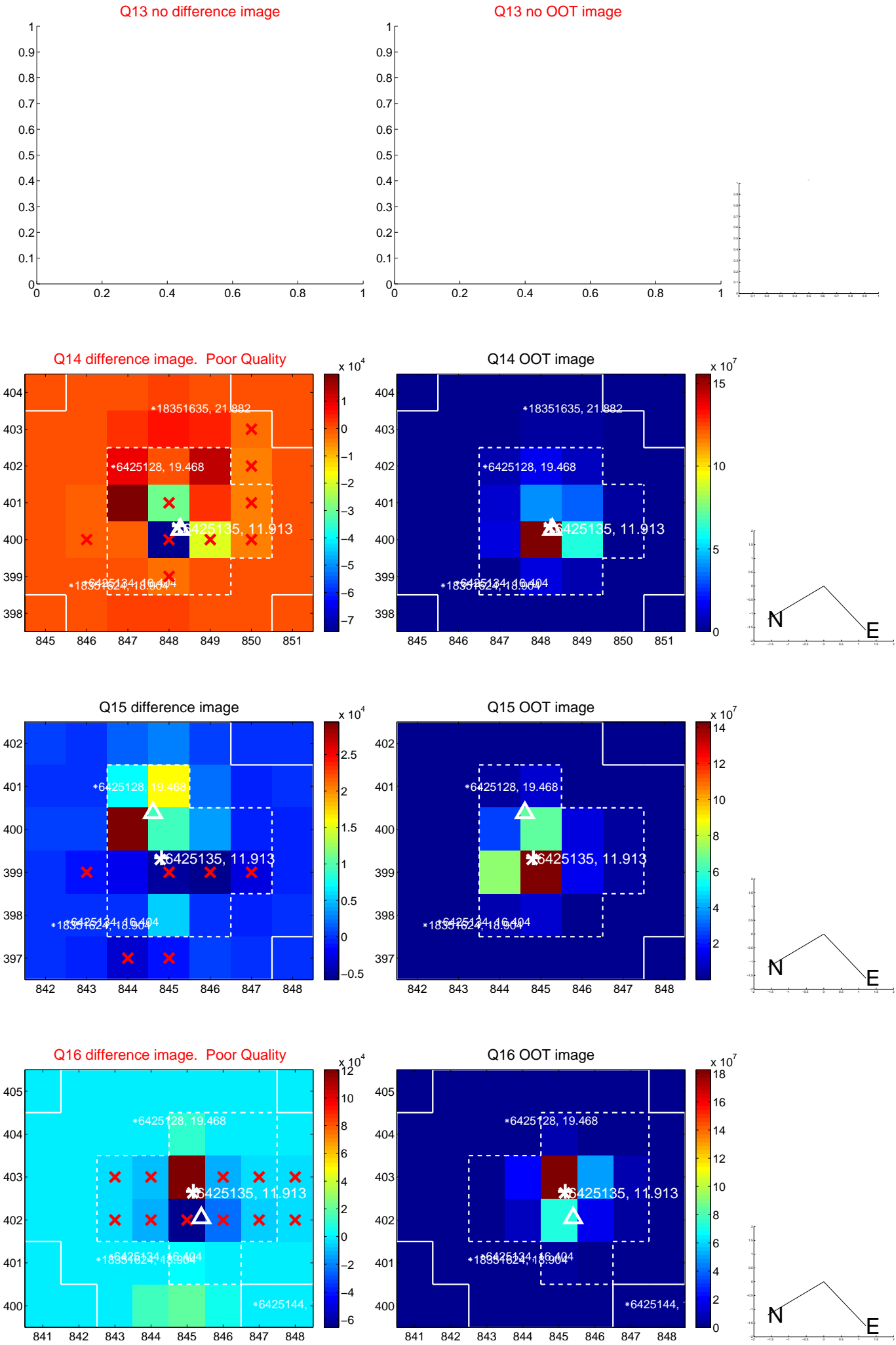
Q12 difference image. Poor Quality



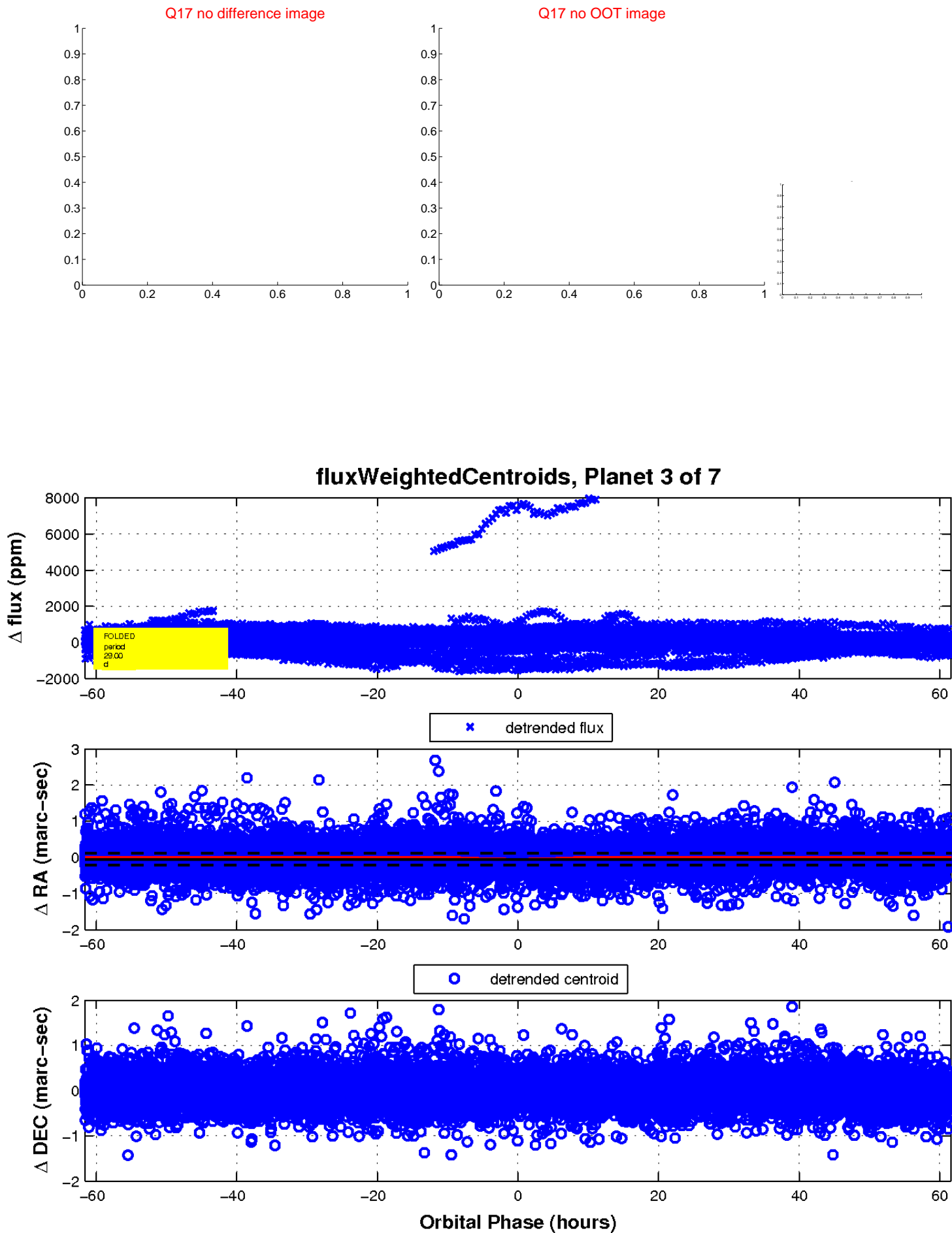
Q12 OOT image



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

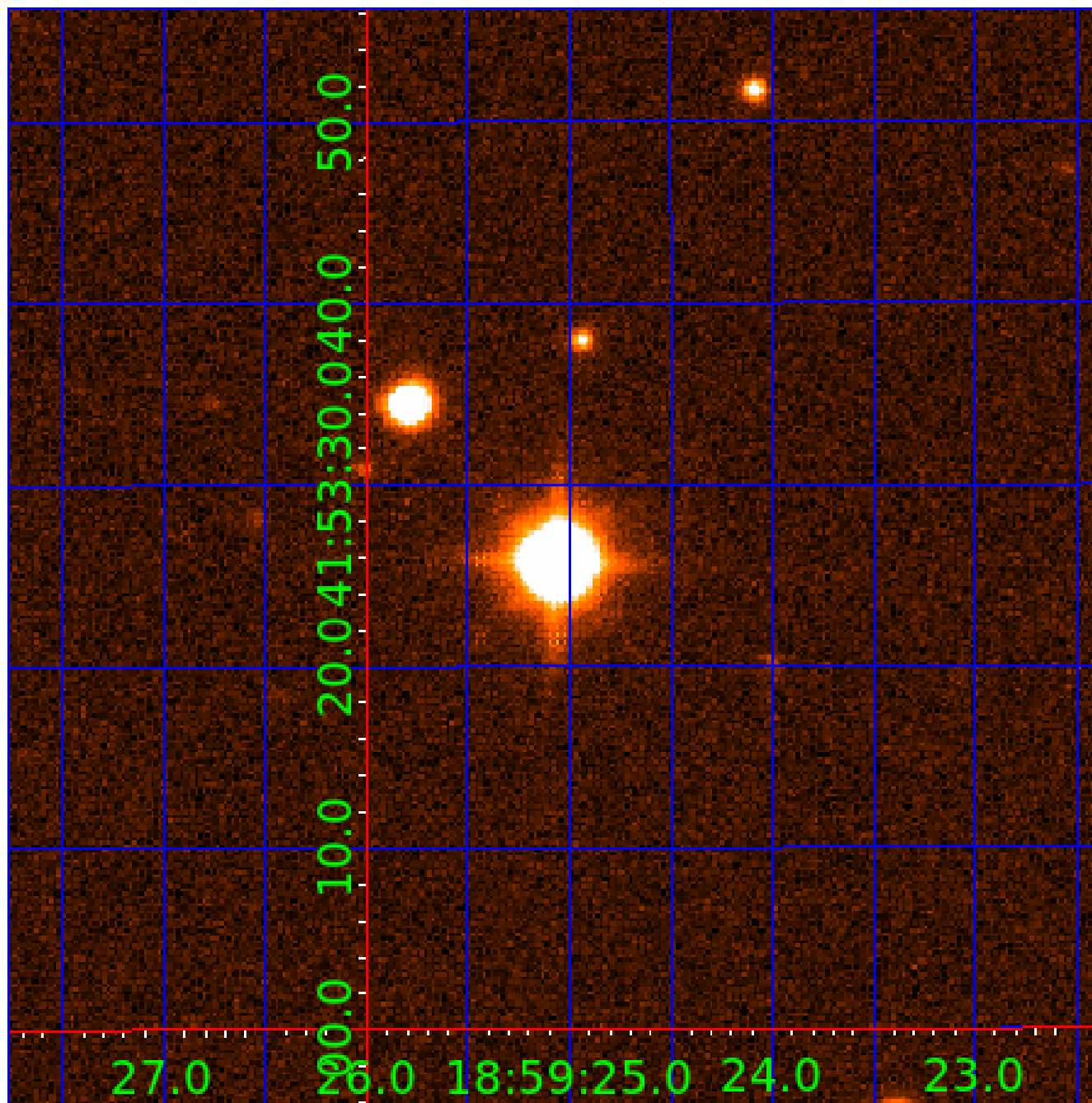


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 006425135

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})
006425135-01	OBS	No	2.030884	132.971373	13.1	14.392	7.5	7.8	2.55	5198	0.98	4070.86
006425135-02	OBS	No	62.864355	188.522928	1011.0	10.785	29.6	22.3	2.55	5198	16.15	41.88
006425135-03	OBS	No	28.998564	135.651150	465.8	20.532	27.9	14.0	2.55	5198	11.27	117.52
006425135-05	OBS	No	38.275026	158.526009	203.7	51.894	17.6	5.5	2.55	5198	4.16	81.17
006425135-06	OBS	No	30.498761	135.443758	258.5	9.979	12.0	6.6	2.55	5198	5.14	109.87
006425135-07	OBS	No	24.616981	140.066812	179.2	7.588	9.4	8.2	2.55	5198	3.50	146.20

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
006425135-01	OBS	FP	0.00	1	0	1	0	LPP_DV—CENT_RESOLVED_OFFSET
006425135-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—ALL_TRANS_CHASES—MOD_TER_ALT—MOD_POS_ALT—CENT_FEW_DIFFS
006425135-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—CENT_FEW_DIFFS
006425135-05	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_ALT
006425135-06	OBS	FP	0.00	1	0	1	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—LPP_ALT—CENT_RESOLVED_OFFSET
006425135-07	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_ZUMA—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_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.

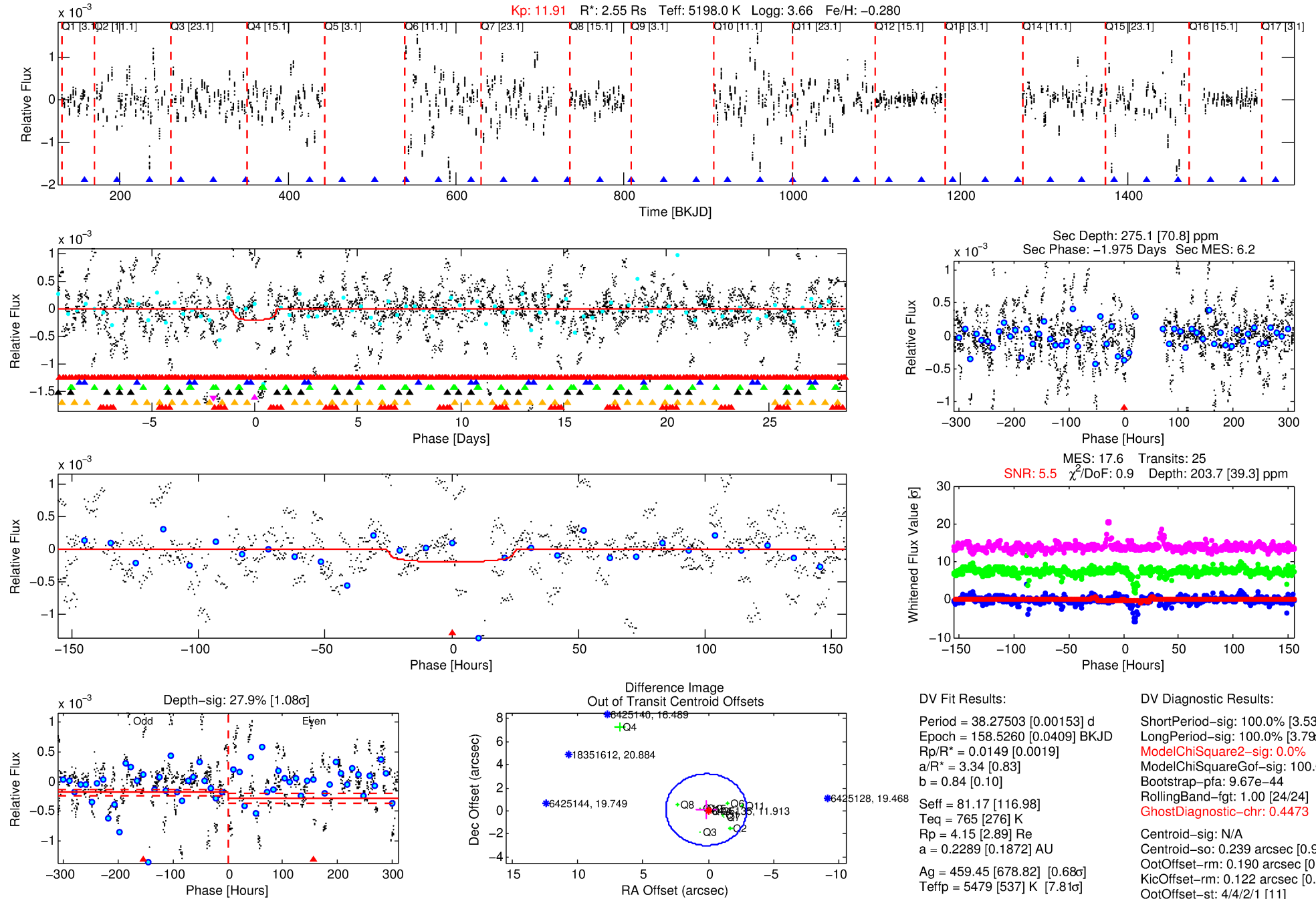
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 006425135-05

No Significant Match Found

DV One-Page Summary

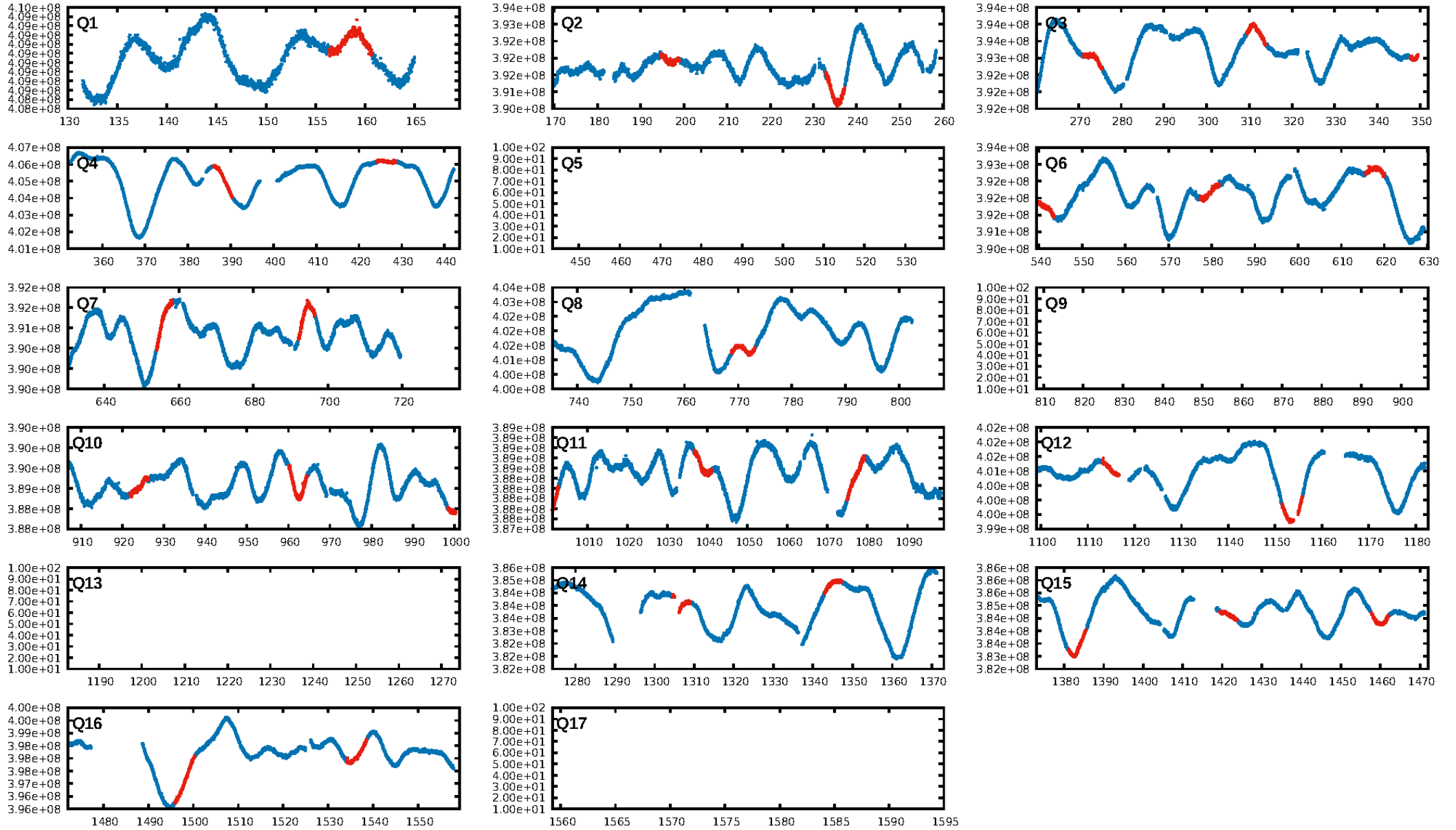
KIC: 6425135 Candidate: 5 of 7 Period: 38.275 d



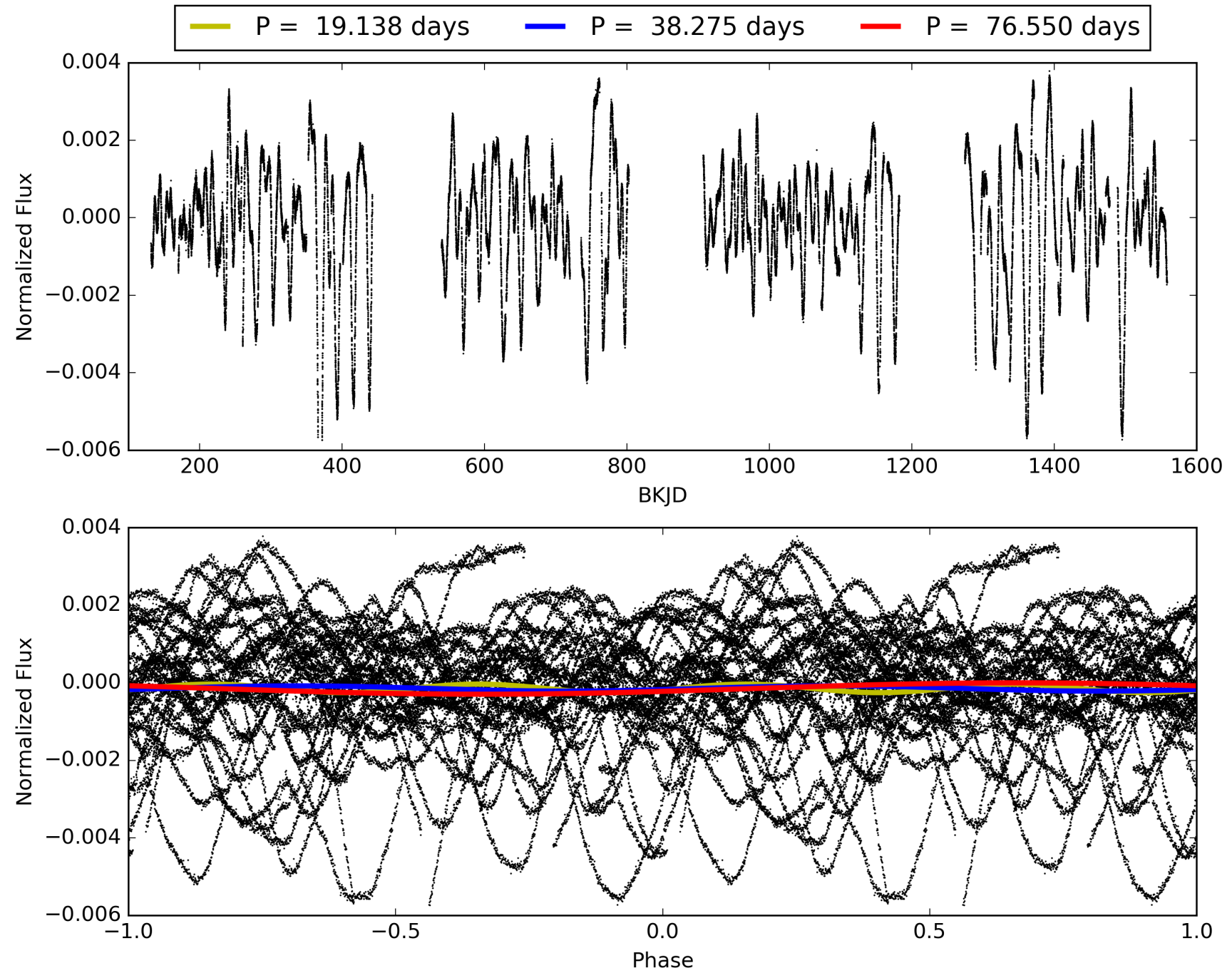
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 01-Feb-2016 23:59:39 Z

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

TCE 006425135-05, PDC Light Curves

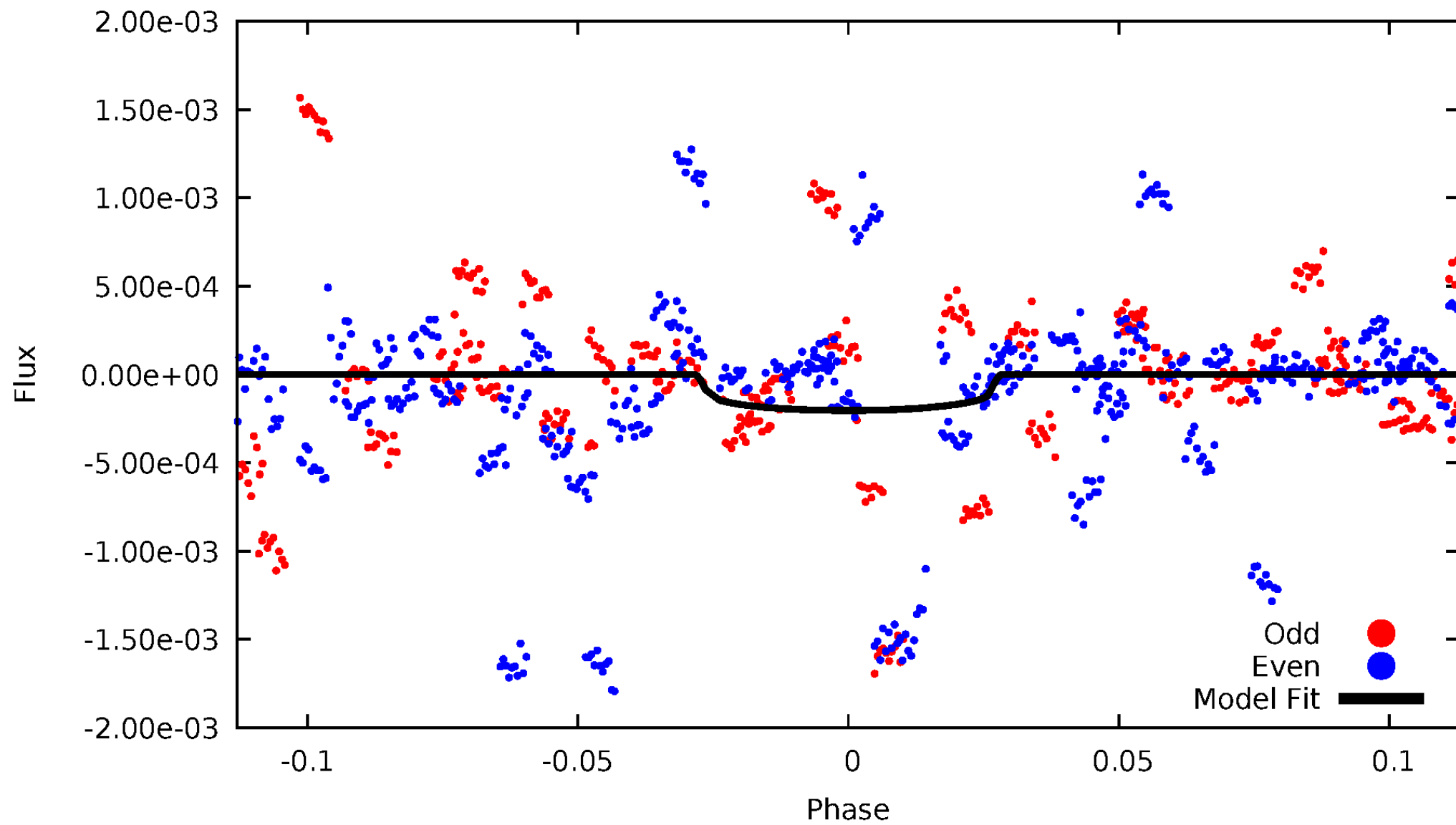


TCE 006425135-05



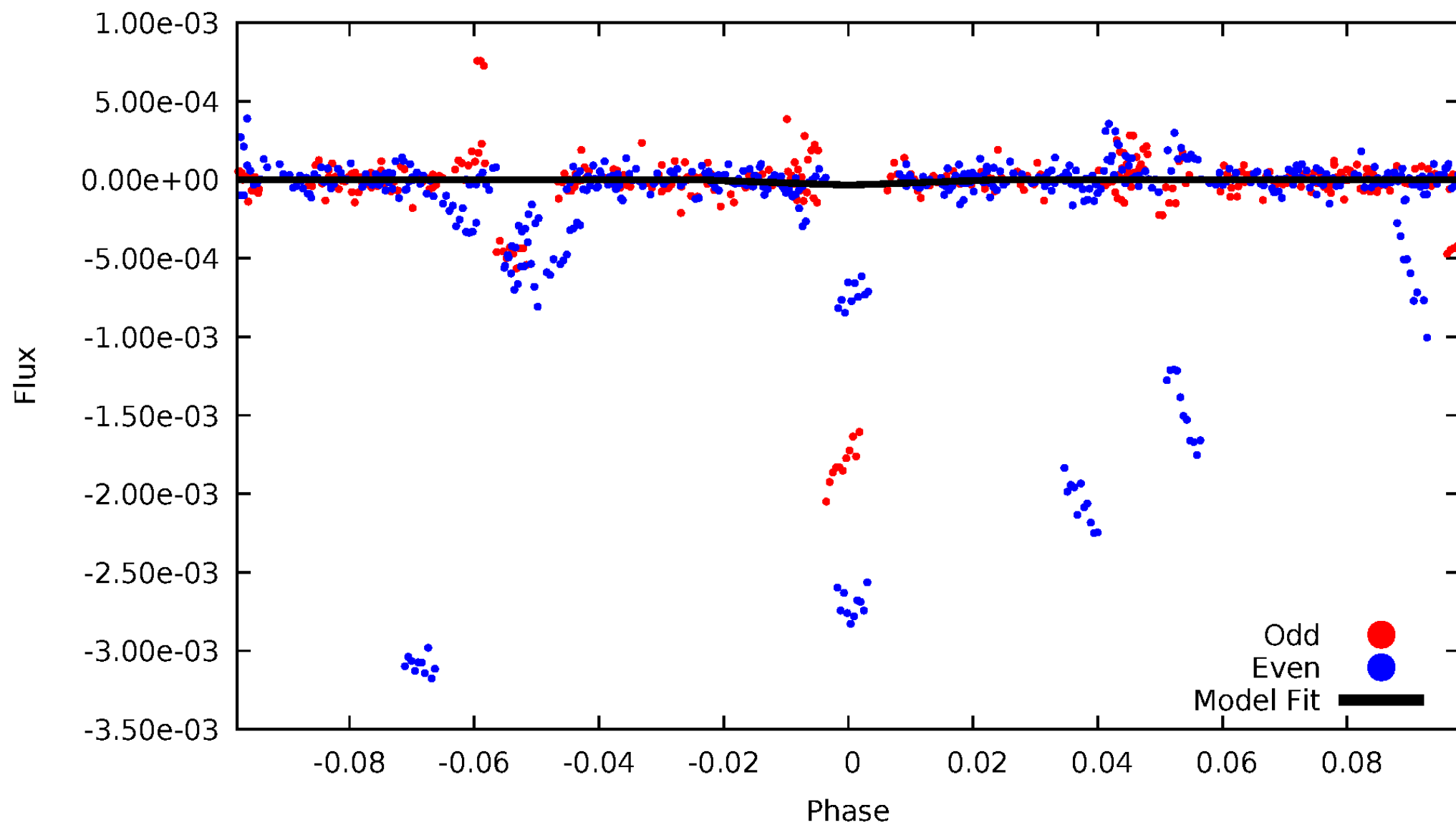
DV Odd/Even

TCE 006425135-05



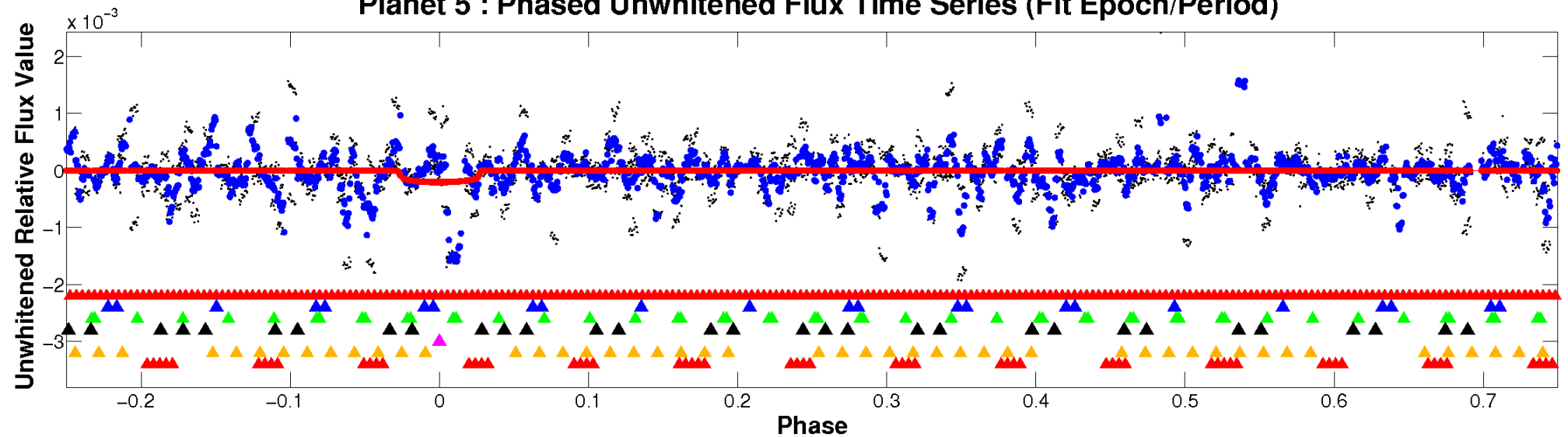
ALT Odd/Even

TCE 006425135-05

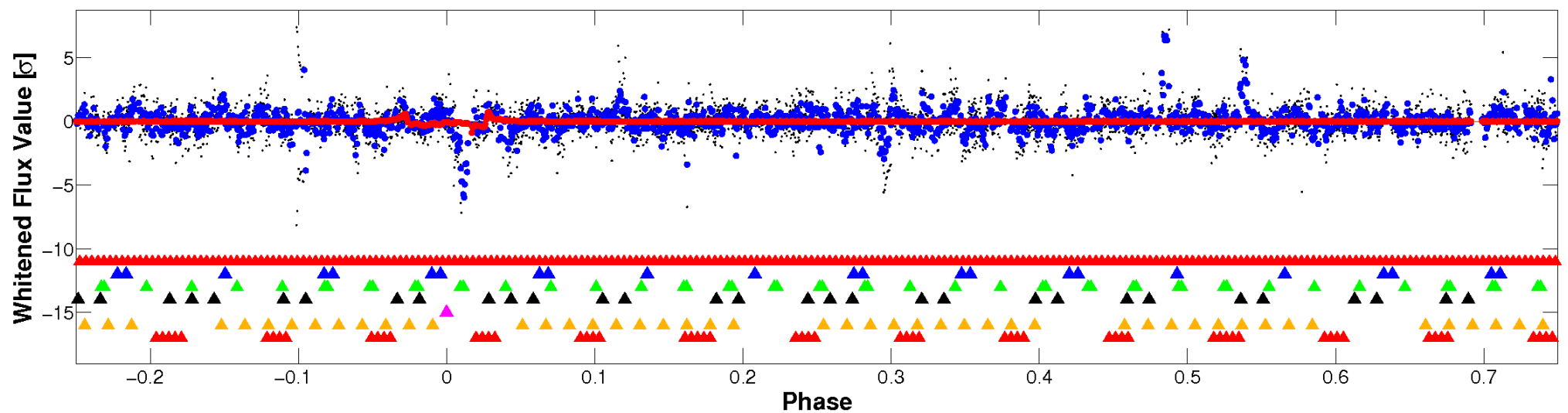


Non-Whitened Vs. Whitened Light Curve

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

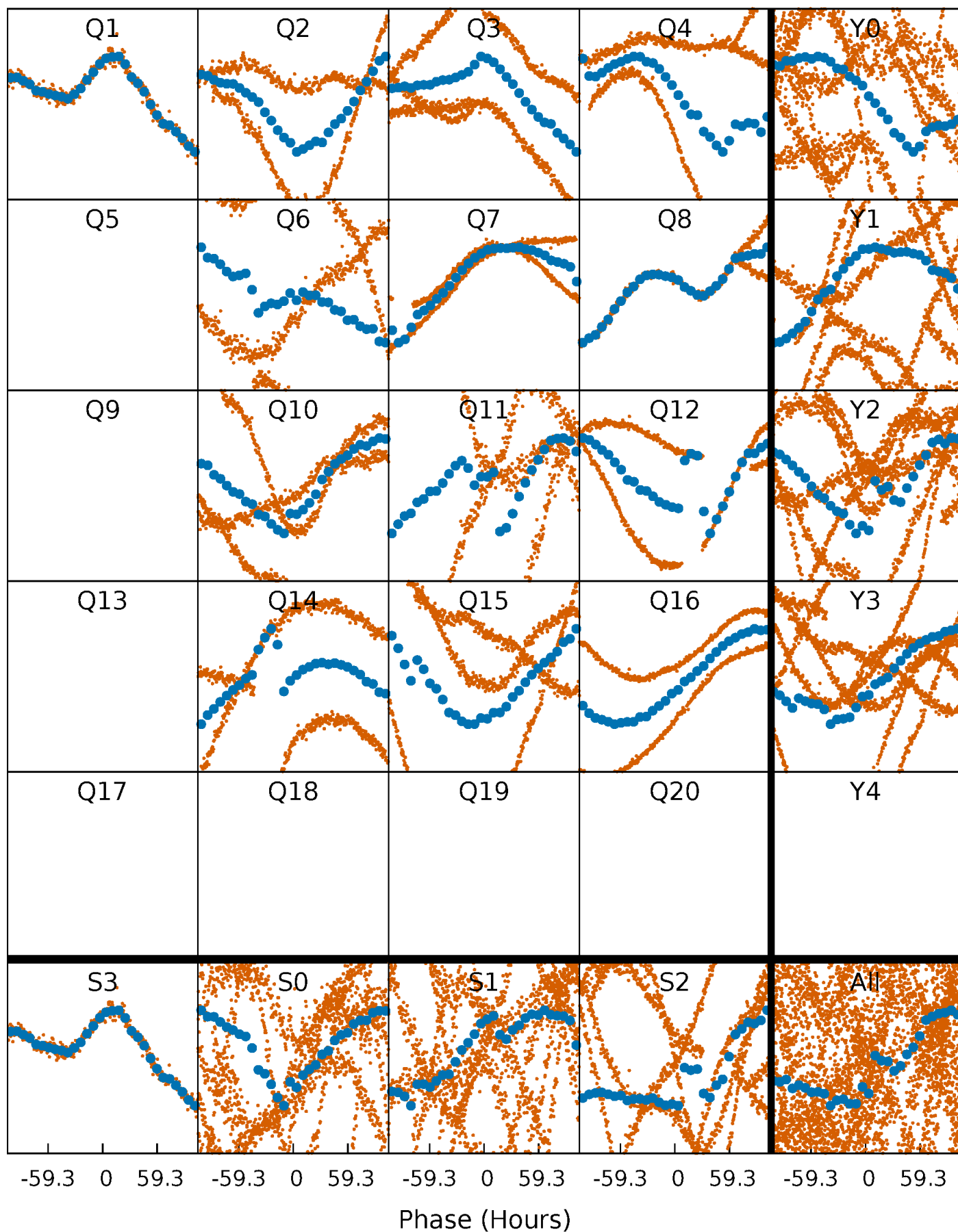


Planet 5 : Phased Whitened Flux Time Series (Fit Epoch/Period)



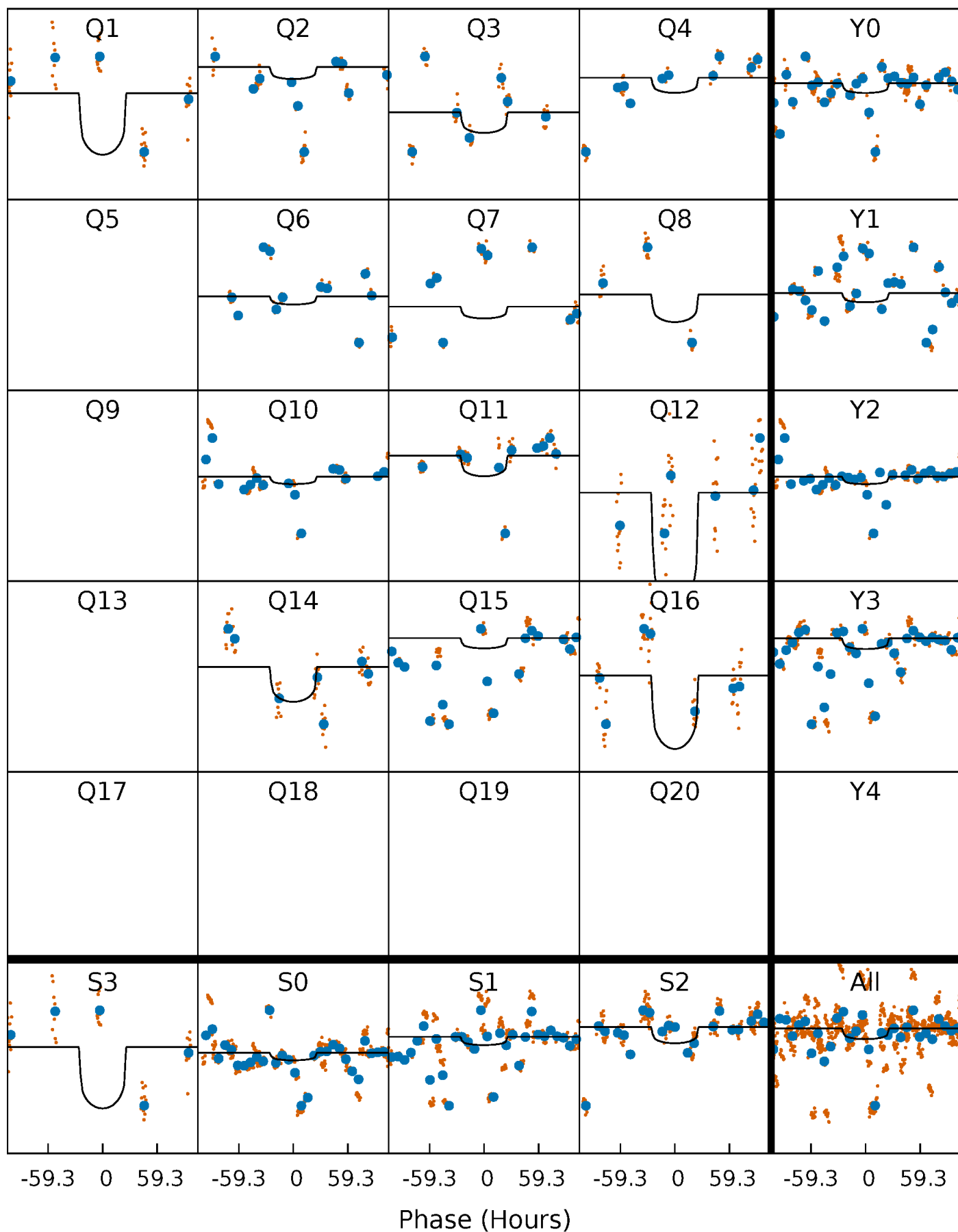
PDC Quarter-Phased Transit Curves

TCE 006425135-05 P= 38.275026 Days $T_0=158.526009$ (BKJD)



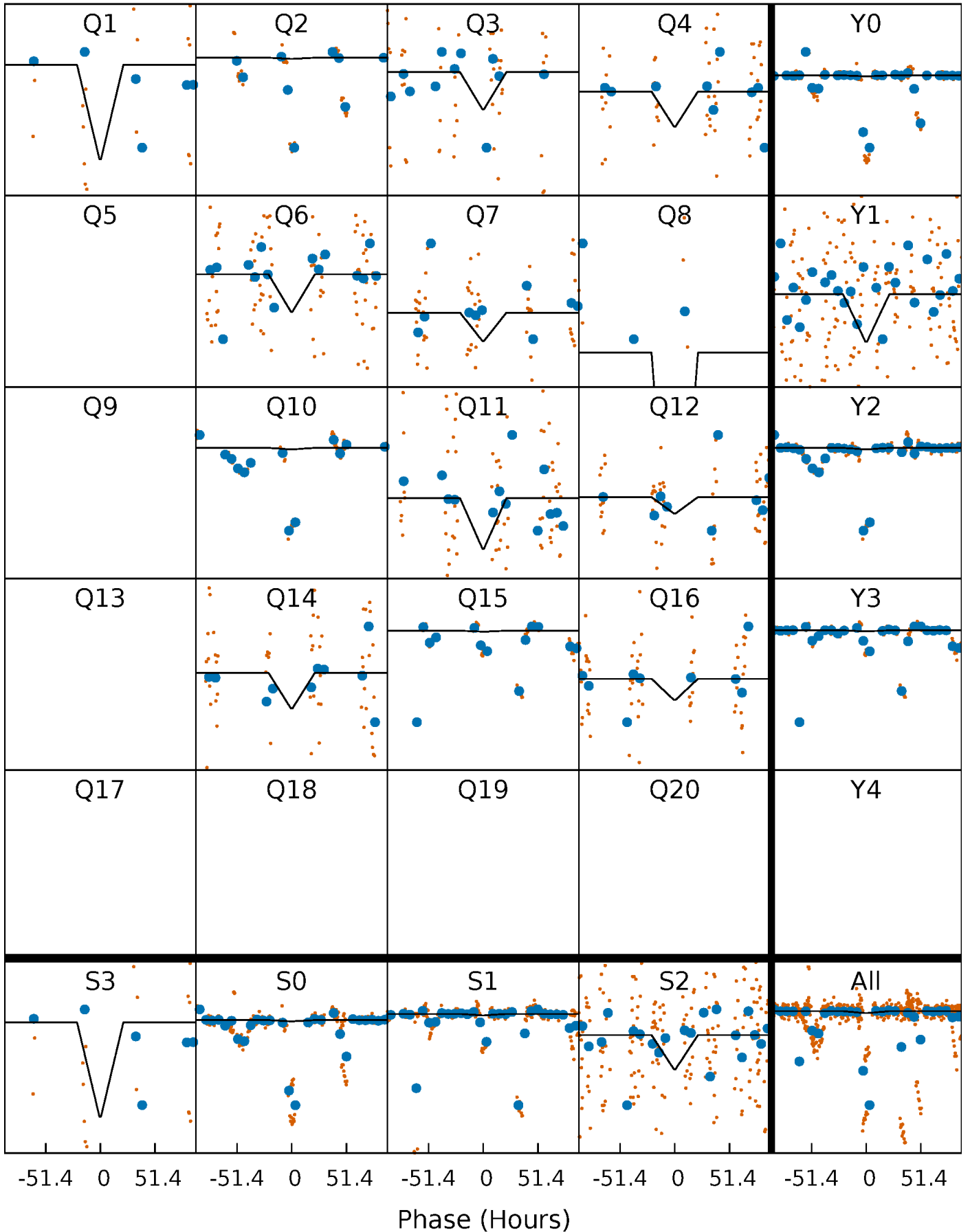
DV Quarter-Phased Transit Curves

TCE 006425135-05 $P = 38.275026$ Days $T_0 = 158.526009$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

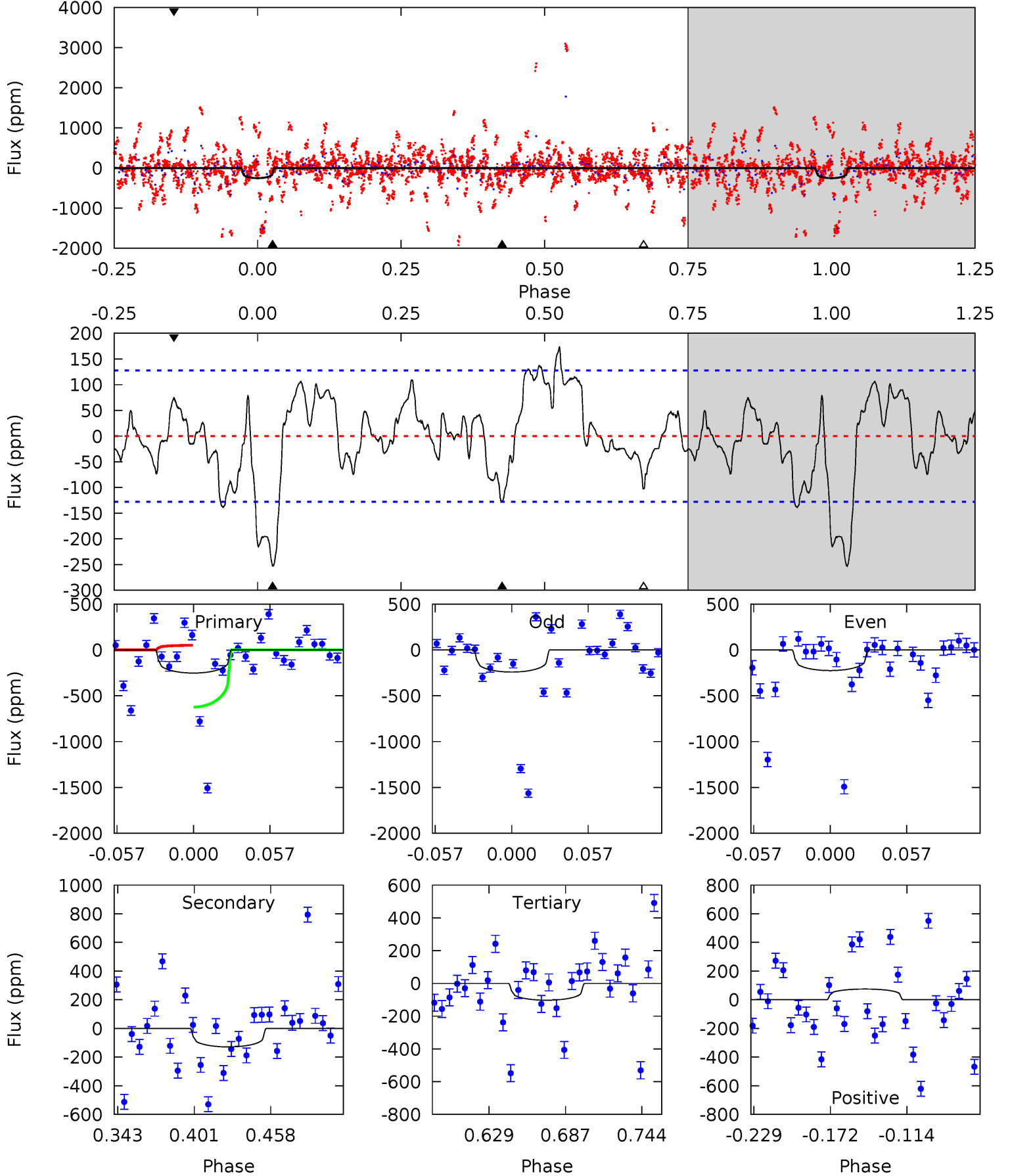
TCE 006425135-05 $P = 38.269278$ Days $T_0 = 158.968270$ (BKJD)



DV Model-Shift Uniqueness Test

006425135-05, P = 38.275026 Days, E = 120.250983 Days

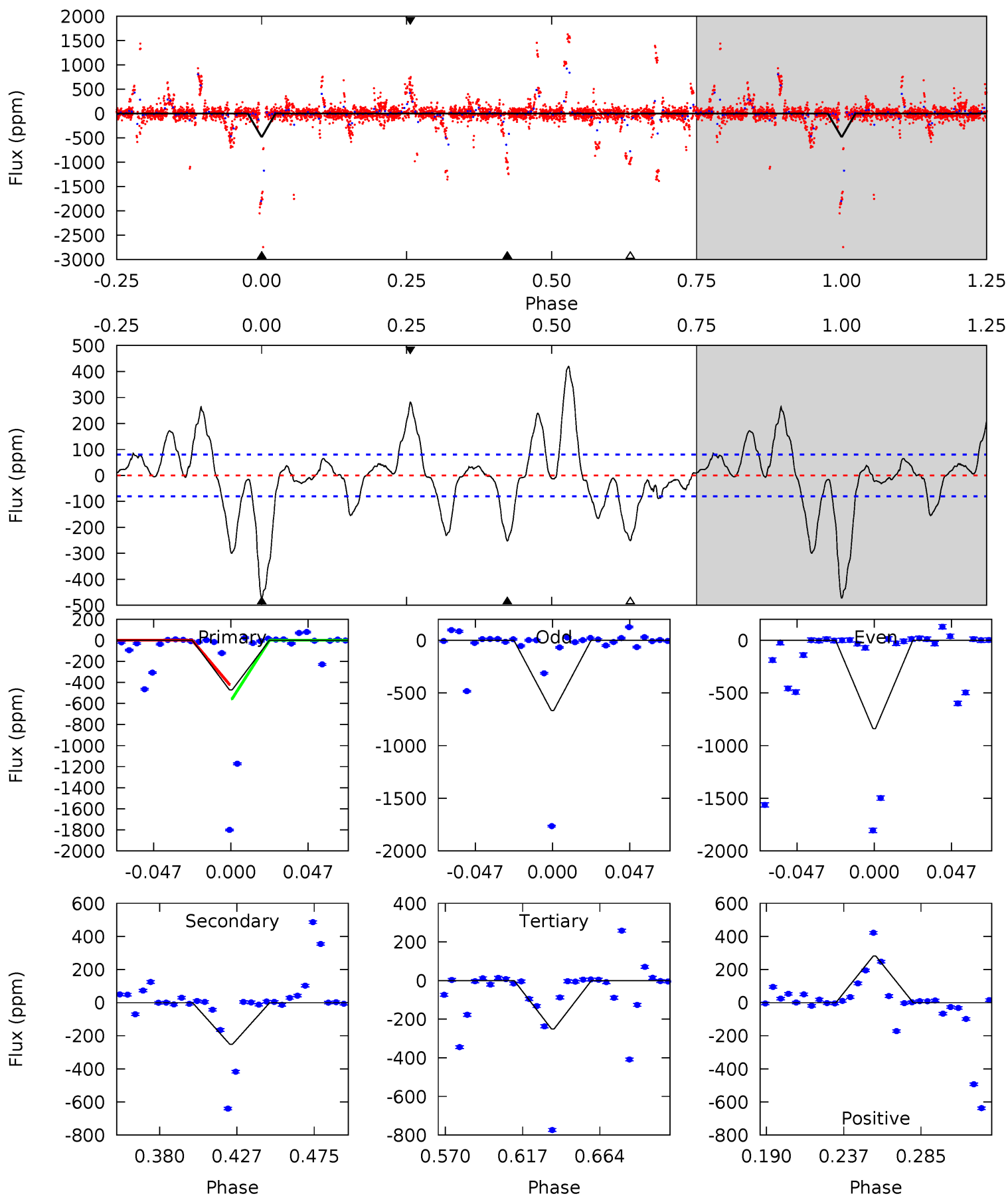
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
9.25	4.72	3.77	2.73	4.68	1.90	2.15	5.48	6.51	0.96	1.99	0.29	1.11	0.41	11.3



Alt Model-Shift Uniqueness Test

006425135-05, P = 38.269278 Days, E = 120.698992 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
27.7	14.8	14.7	16.5	4.72	1.98	6.43	13.0	11.2	0.08	-1.74	4.19	17.1	0.47	0



Stellar Parameters For KIC 006425135

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	M (M_{\odot})	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	5198^{+201}_{-165}	$3.663^{+0.885}_{-0.295}$	$-0.280^{+0.300}_{-0.250}$	$2.550^{+1.162}_{-1.743}$	$1.091^{+0.191}_{-0.286}$	$0.093^{+2.317}_{-0.065}$
	+4%/-3%	+24%/-8%	+107%/-89%	+46%/-68%	+18%/-26%	+2498%/-70%
Source	PHO54	PHO54	PHO54	DSEP		

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

Secondary Eclipse Parameters for KIC 006425135-05 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-129 ± 27	$3.93^{+1.45}_{-1.35}$	1065^{+138}_{-204}	4663^{+351}_{-336}	245^{+291}_{-123}
Alt.	-252 ± 17	$1.41^{+0.85}_{-0.62}$	1043^{+151}_{-207}	9020^{+3589}_{-1625}	3589^{+7593}_{-2141}

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

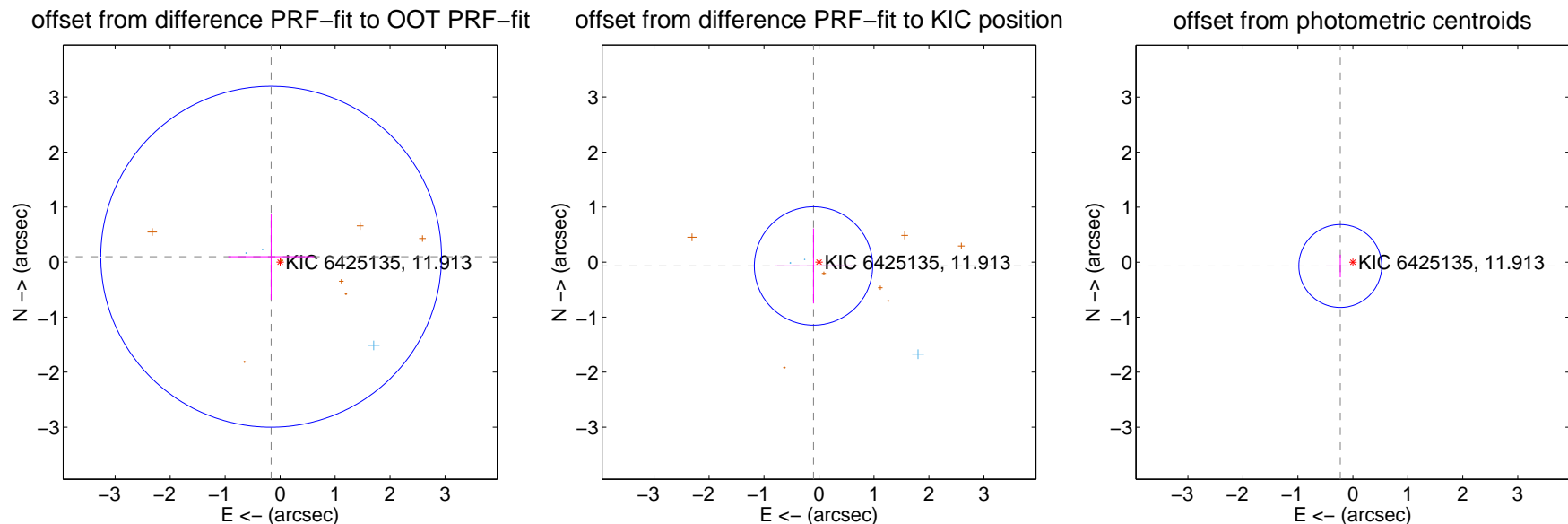
DV Centroid Data

Supplemental centroid analysis for 006425135-05. **Kepler magnitude: 11.91.** Transit SNR 5.49

There are 3 quarters with good PRF difference image offsets

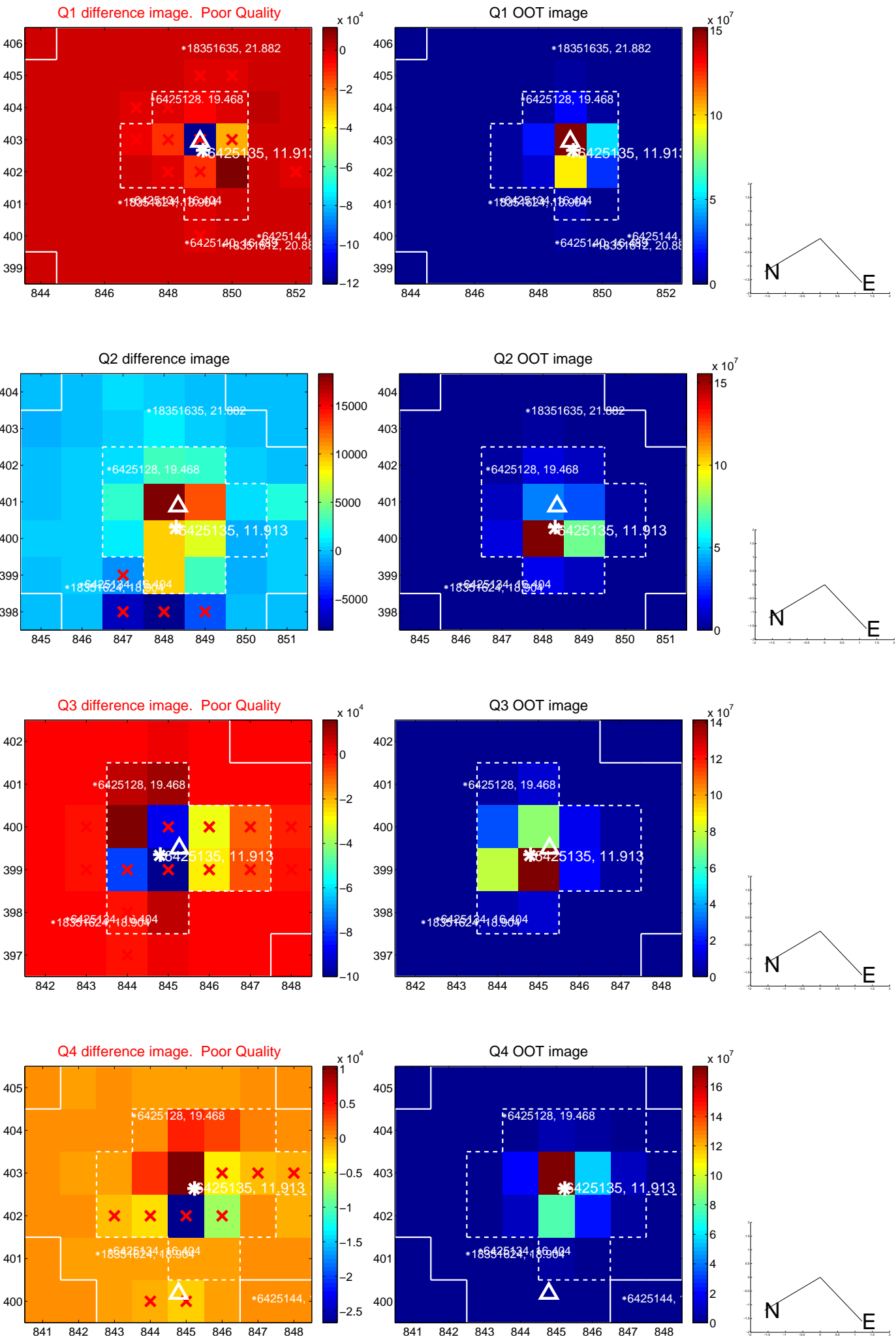
The direct PRF centroid is offset from the target star catalog position by about 0.19 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.190 ± 1.033	0.18	0.163 ± 0.781	0.098 ± 0.783
PRF-fit source offset from KIC position	0.122 ± 0.359	0.34	0.100 ± 0.699	-0.070 ± 0.681
photometric centroid source offset	0.24 ± 0.25	0.95	0.23 ± 0.26	-0.07 ± 0.21

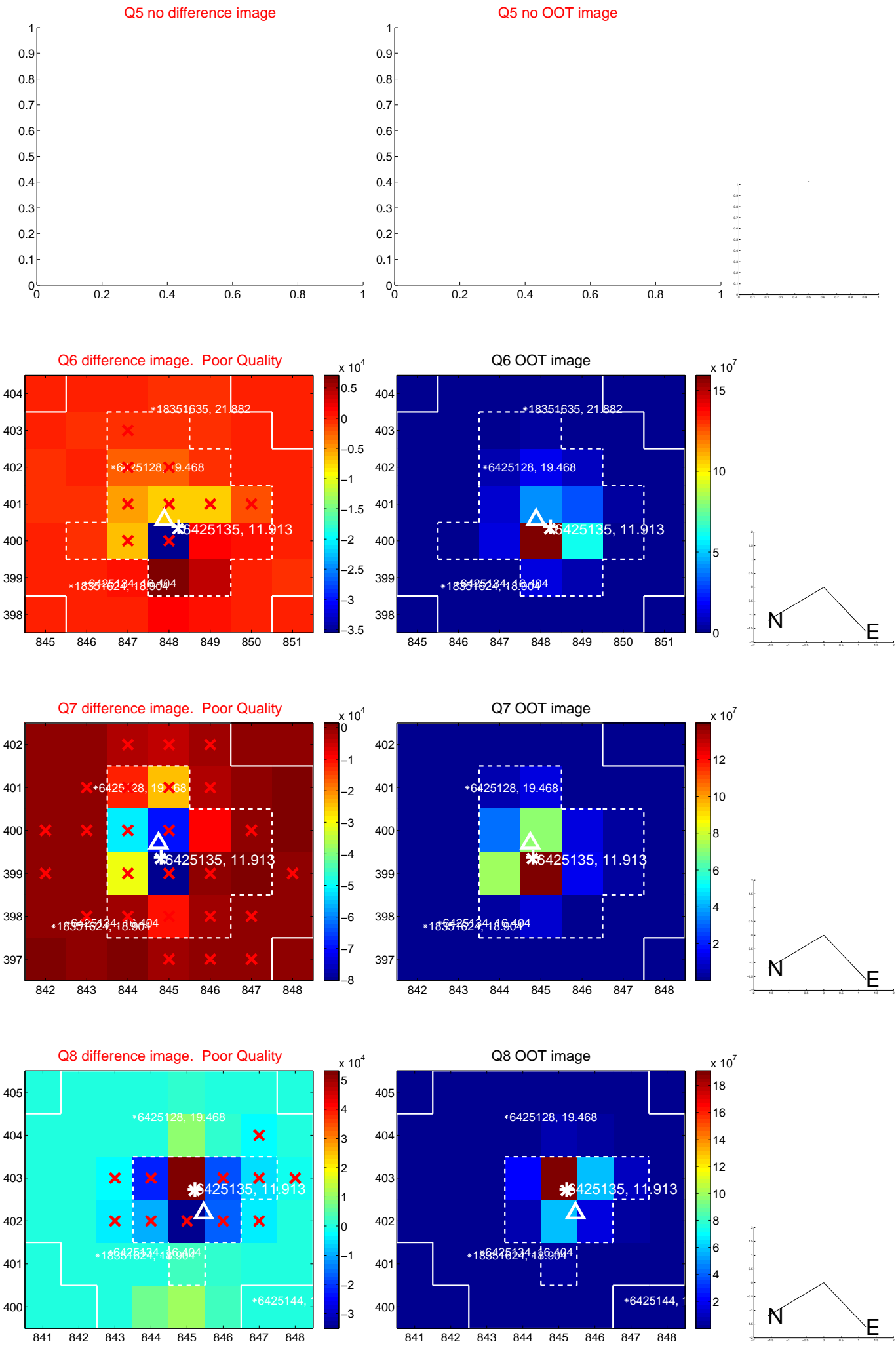


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets;** magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

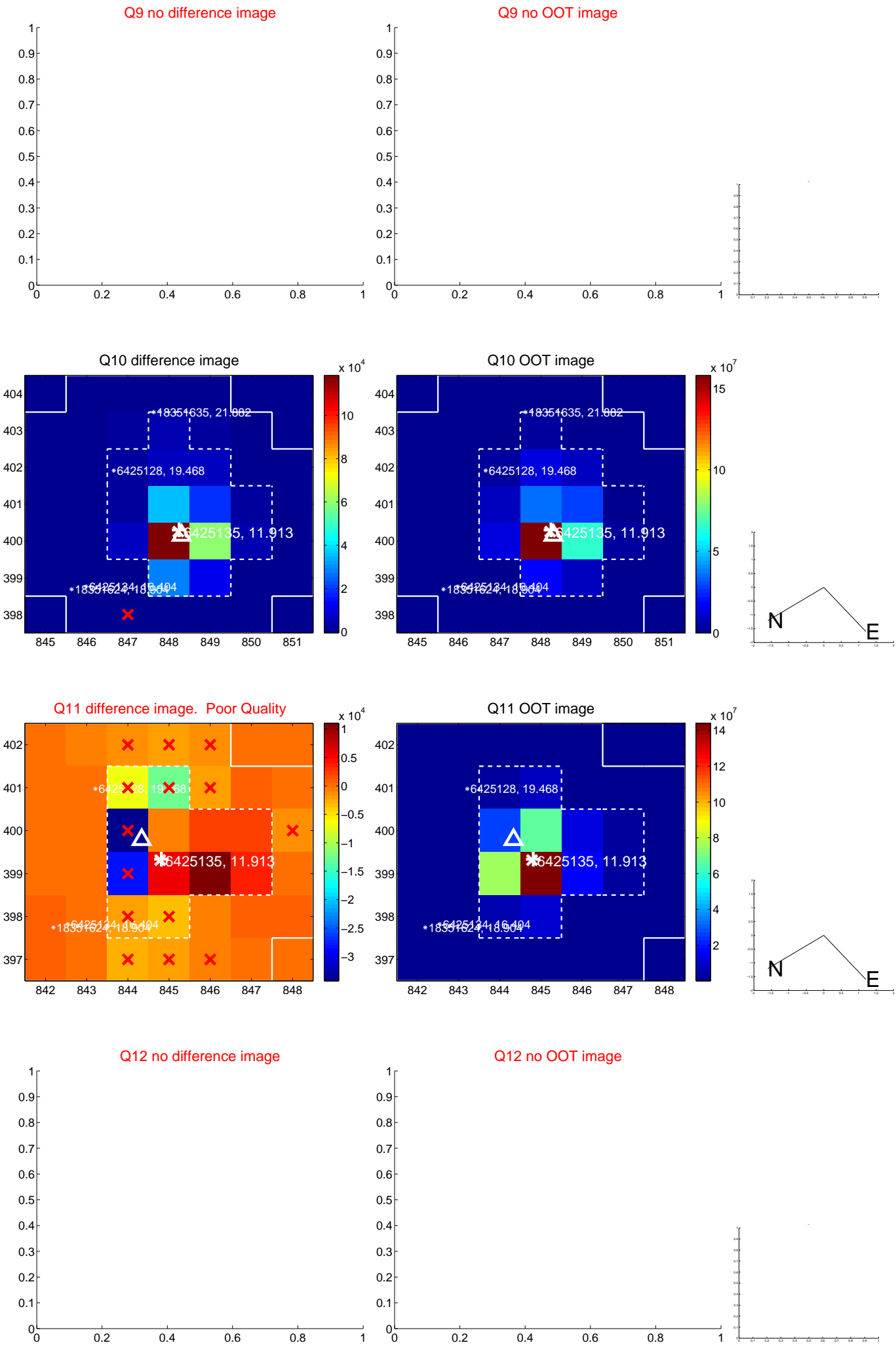
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



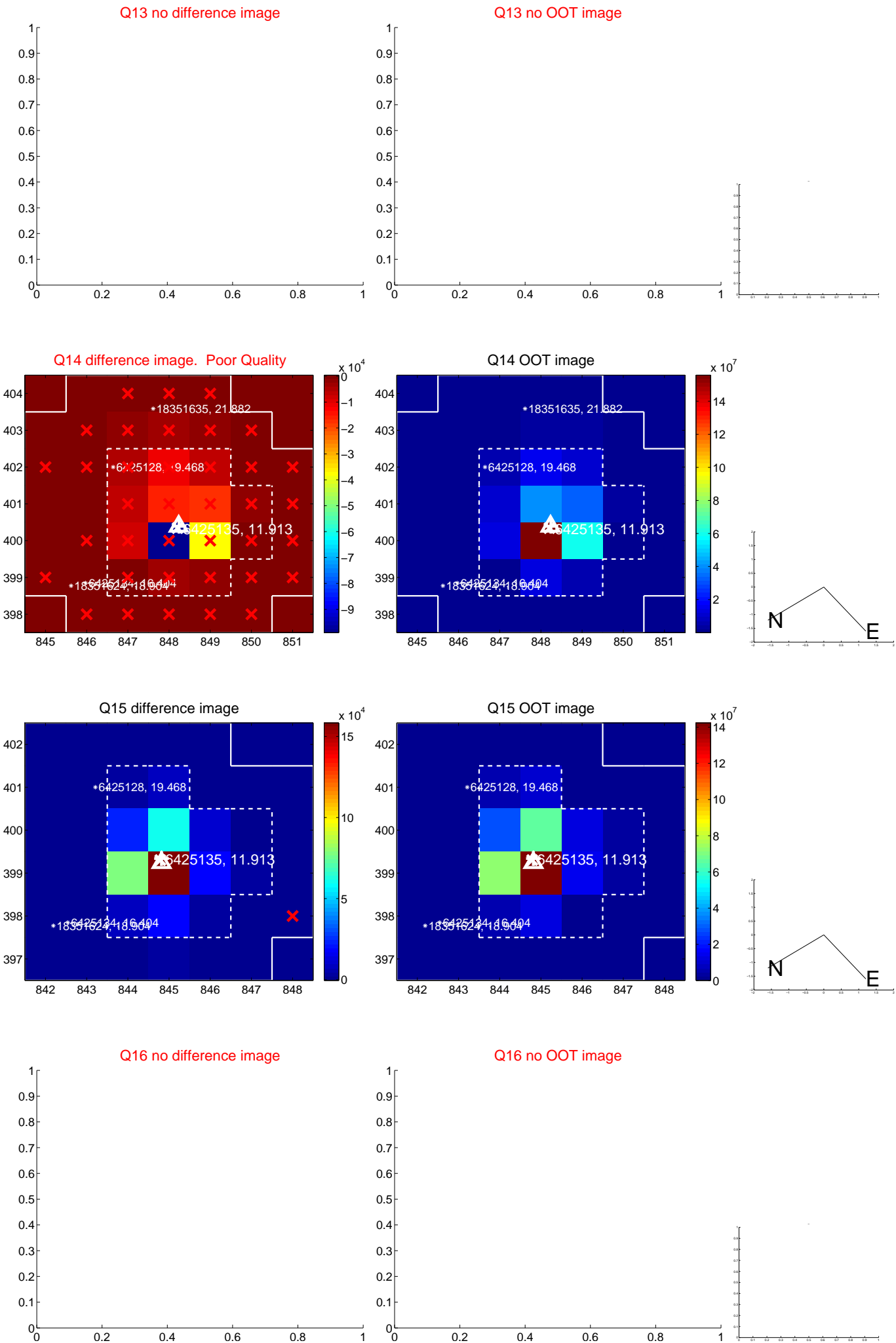
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



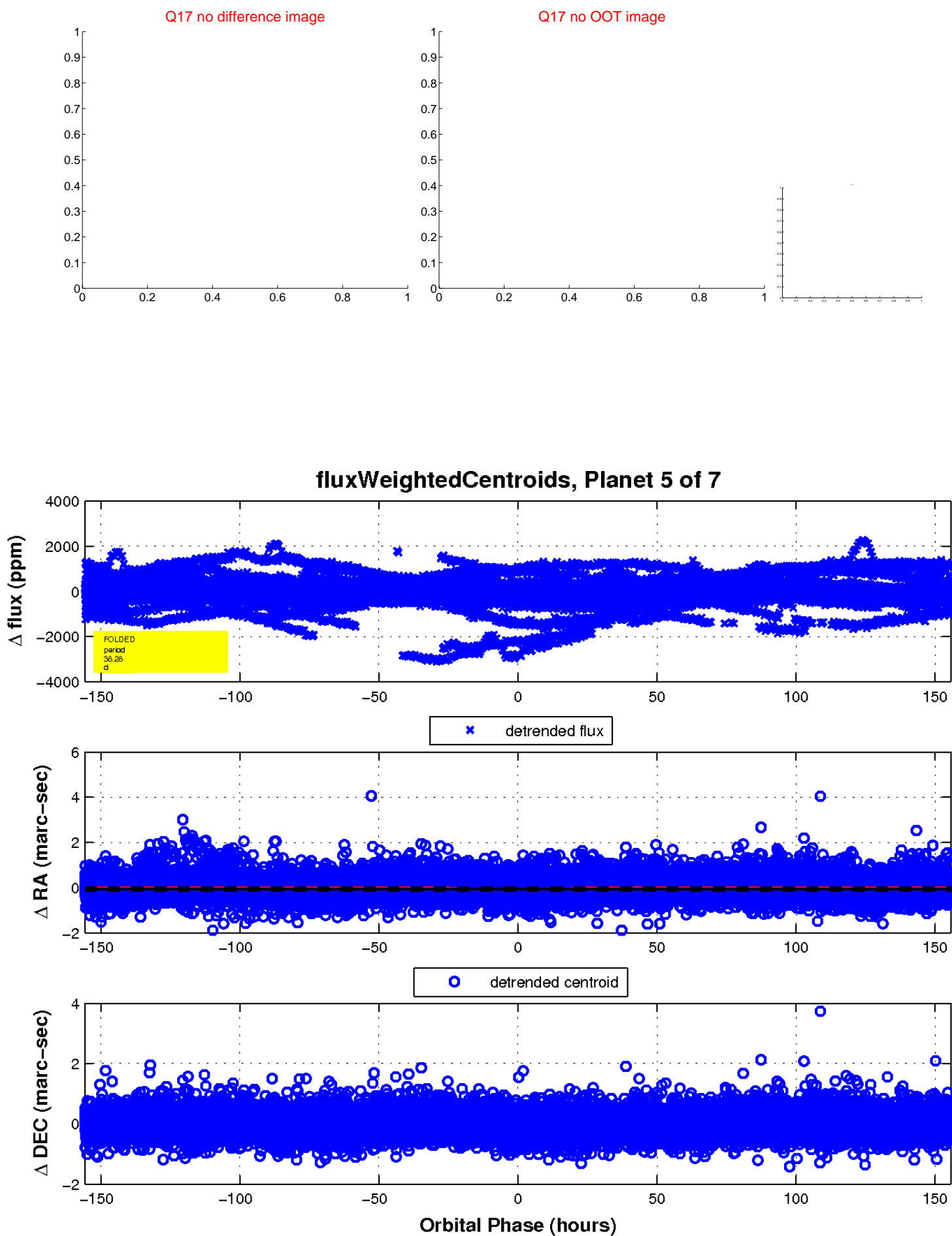
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

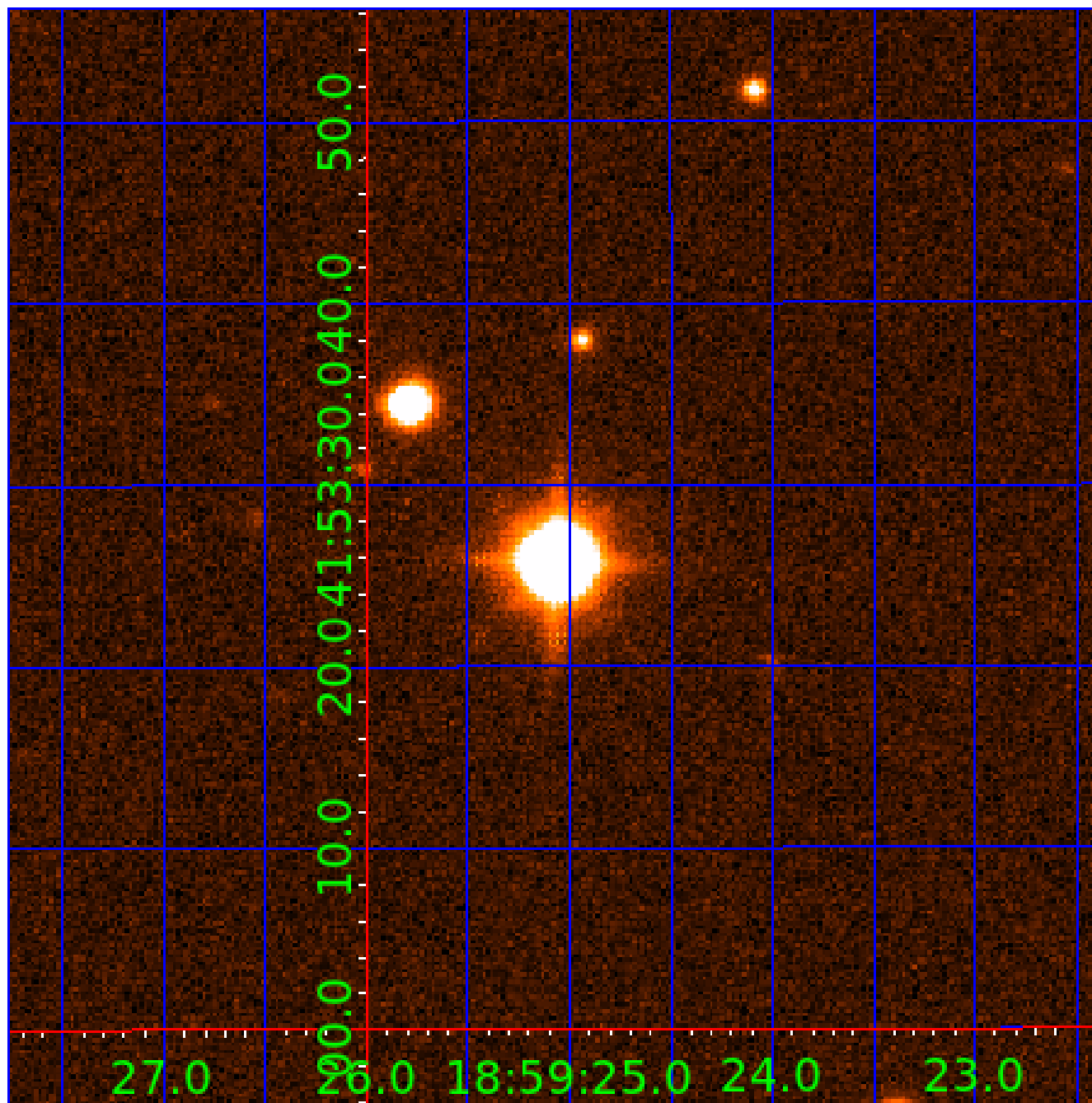


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 006425135

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})
006425135-01	OBS	No	2.030884	132.971373	13.1	14.392	7.5	7.8	2.55	5198	0.98	4070.86
006425135-02	OBS	No	62.864355	188.522928	1011.0	10.785	29.6	22.3	2.55	5198	16.15	41.88
006425135-03	OBS	No	28.998564	135.651150	465.8	20.532	27.9	14.0	2.55	5198	11.27	117.52
006425135-05	OBS	No	38.275026	158.526009	203.7	51.894	17.6	5.5	2.55	5198	4.16	81.17
006425135-06	OBS	No	30.498761	135.443758	258.5	9.979	12.0	6.6	2.55	5198	5.14	109.87
006425135-07	OBS	No	24.616981	140.066812	179.2	7.588	9.4	8.2	2.55	5198	3.50	146.20

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
006425135-01	OBS	FP	0.00	1	0	1	0	LPP_DV—CENT_RESOLVED_OFFSET
006425135-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—ALL_TRANS_CHASES—MOD_TER_ALT—MOD_POS_ALT—CENT_FEW_DIFFS
006425135-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—CENT_FEW_DIFFS
006425135-05	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_ALT
006425135-06	OBS	FP	0.00	1	0	1	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—LPP_ALT—CENT_RESOLVED_OFFSET
006425135-07	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_ZUMA—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_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.

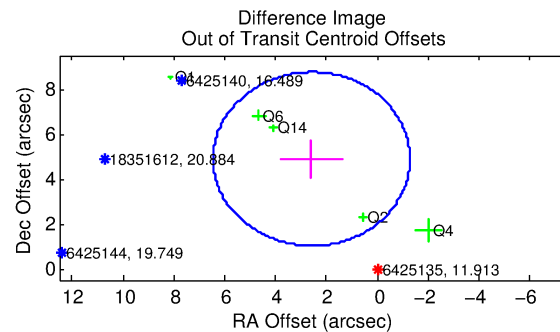
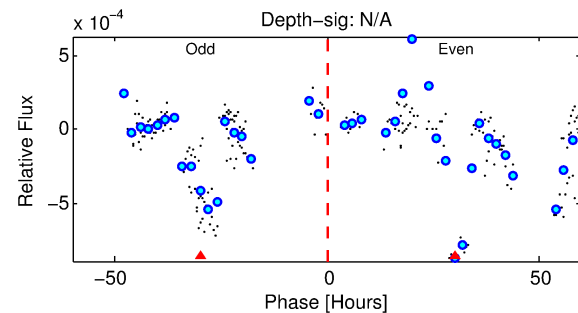
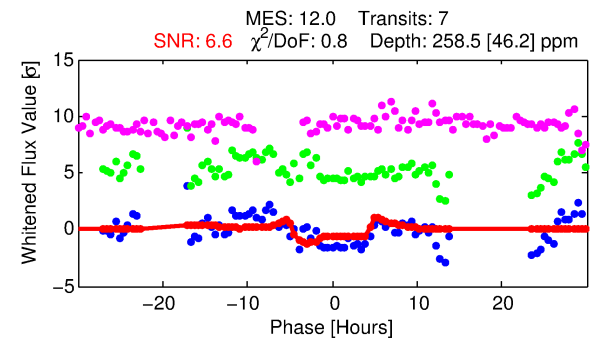
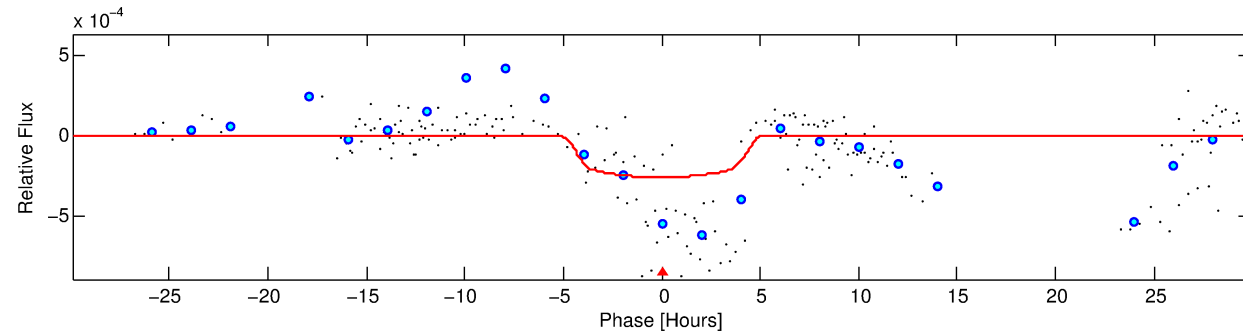
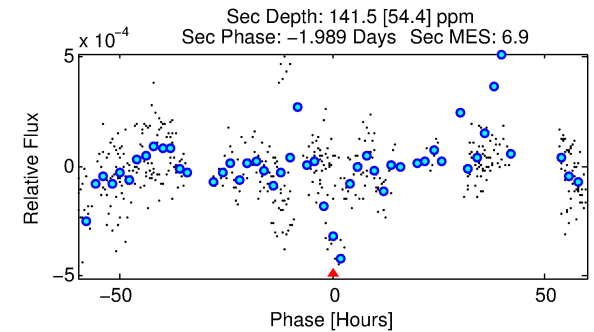
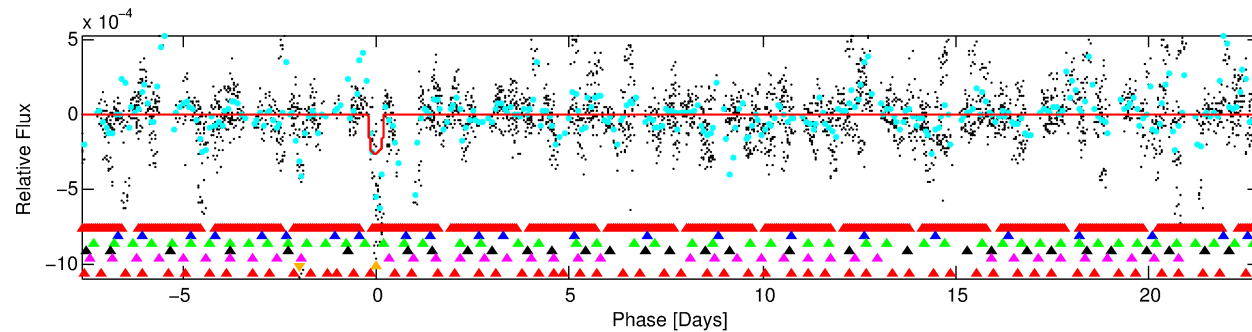
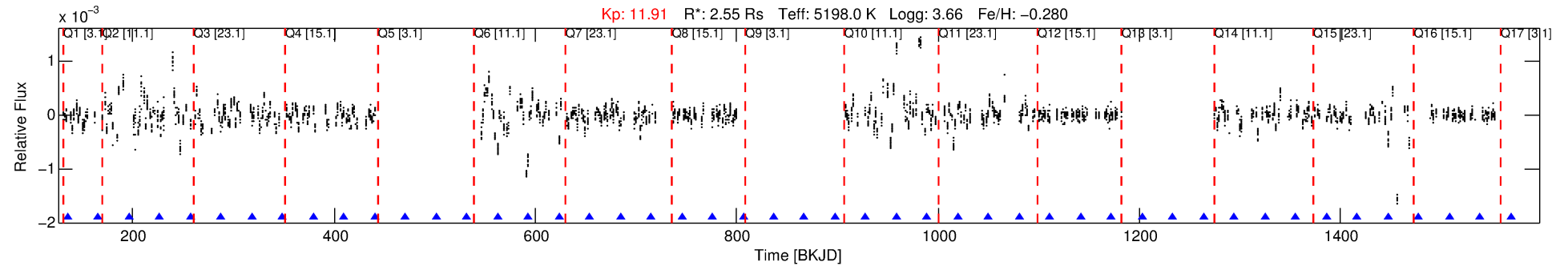
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 006425135-06

No Significant Match Found

DV One-Page Summary

KIC: 6425135 Candidate: 6 of 7 Period: 30.499 d



DV Fit Results:

Period = 30.49876 [0.00494] d
Epoch = 135.4438 [0.0769] BKJD
Rp/R* = 0.0185 [0.0032]
a/R* = 9.68 [6.17]
b = 0.93 [0.08]
Seff = 109.87 [158.35]
Teq = 826 [297] K
Rp = 5.14 [3.62] Re
a = 0.1967 [0.1609] AU
Ag = 114.21 [173.99] [0.65σ]
Teffp = 4173 [563] K [5.25σ]

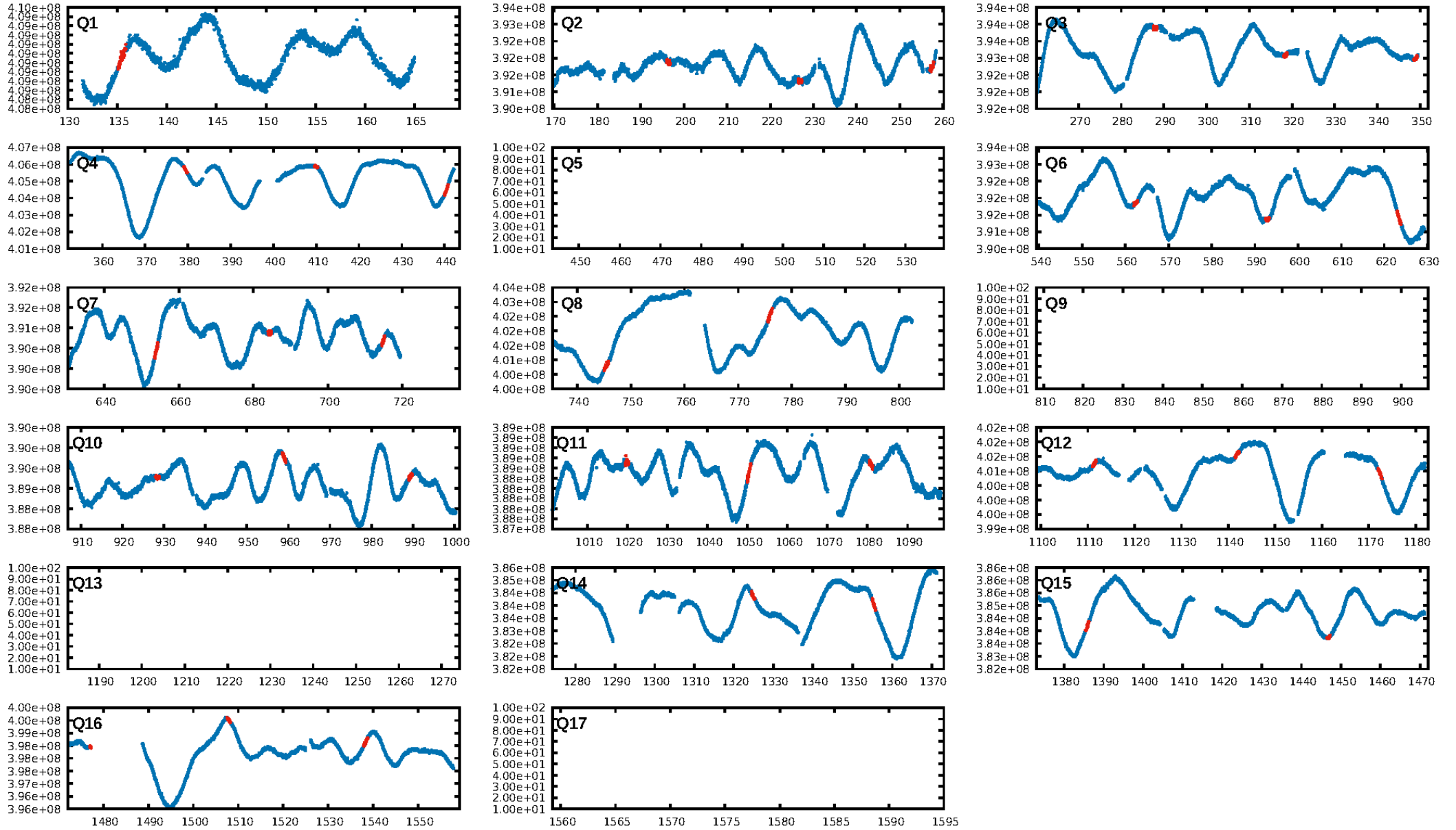
DV Diagnostic Results:

ShortPeriod-sig: 88.5% [1.58σ]
LongPeriod-sig: 100.0% [3.53σ]
ModelChiSquare2-sig: 0.0%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: 1.12e-22
RollingBand-fgt: 1.00 [7/7]
GhostDiagnostic-chr: 7.194
Centroid-sig: N/A
Centroid-so: 0.204 arcsec [0.88σ]
OotOffset-rm: 5.528 arcsec [4.29σ]
KicOffset-rm: 5.324 arcsec [3.83σ]
OotOffset-st: 3/0/1/1 [5]
KicOffset-st: 3/0/1/1 [5]
DiffImageQuality-fgm: 0.40 [2/5]
DiffImageOverlap-fno: 0.00 [0/13]

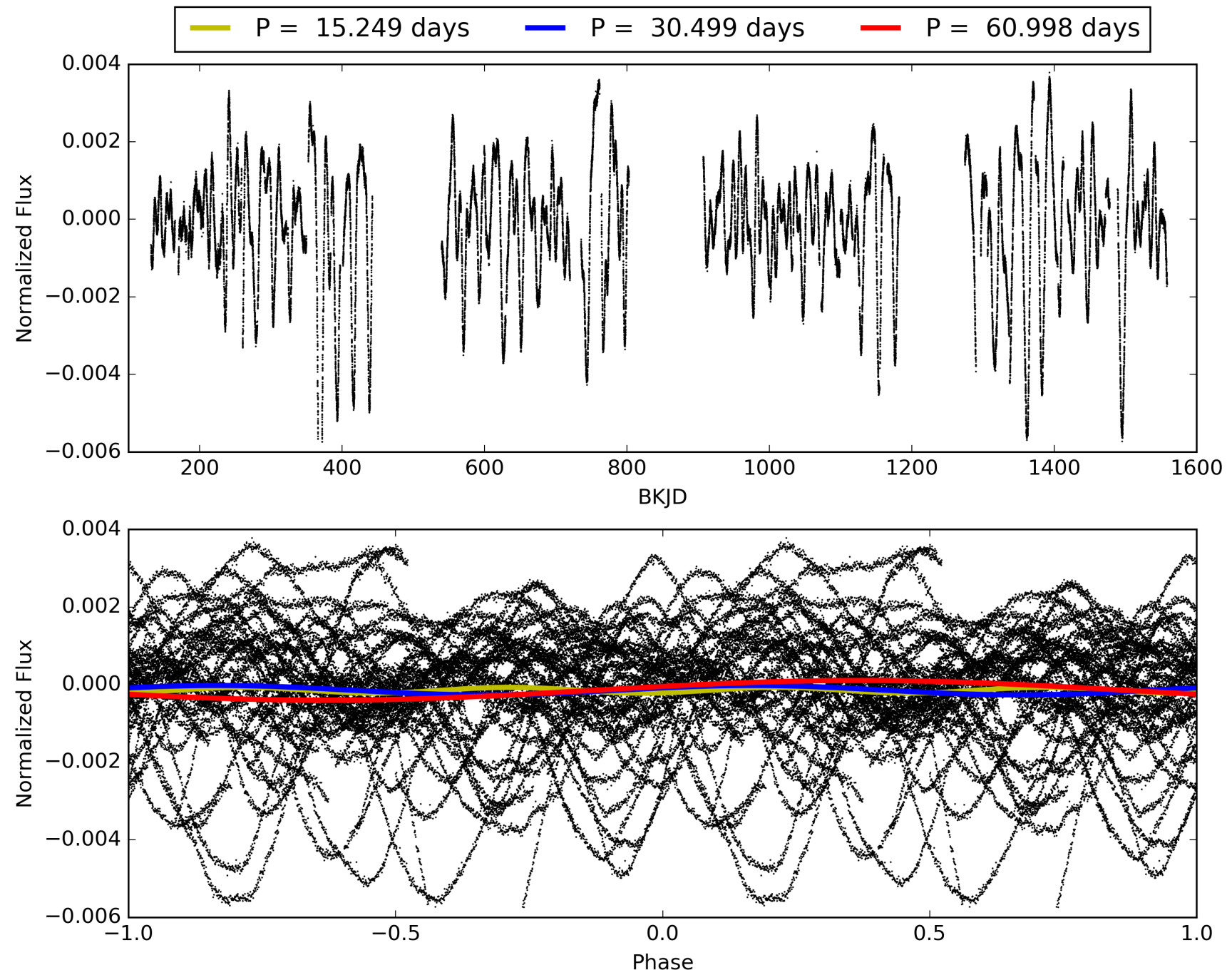
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 01-Feb-2016 23:59:42 Z

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

TCE 006425135-06, PDC Light Curves

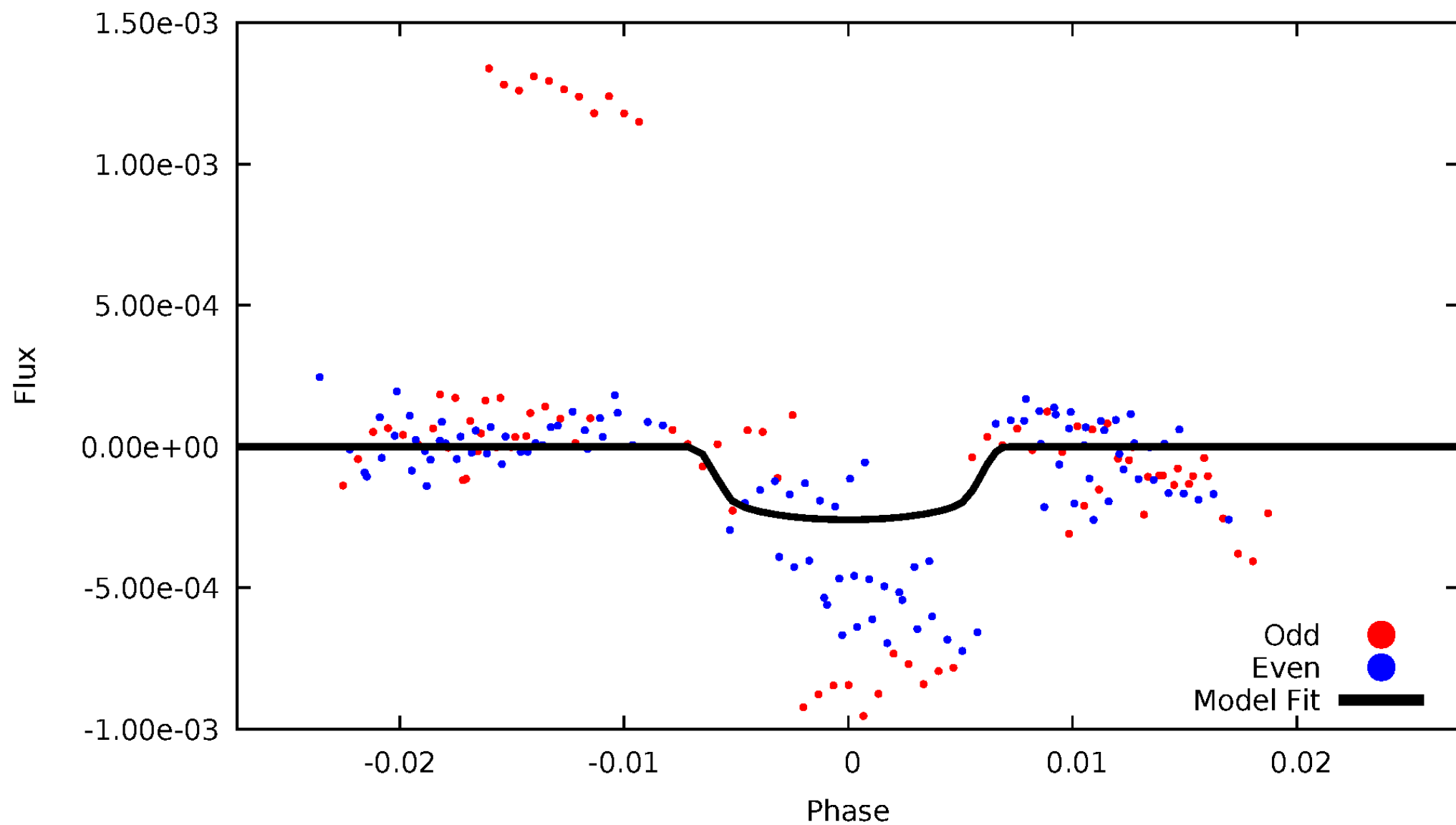


TCE 006425135-06



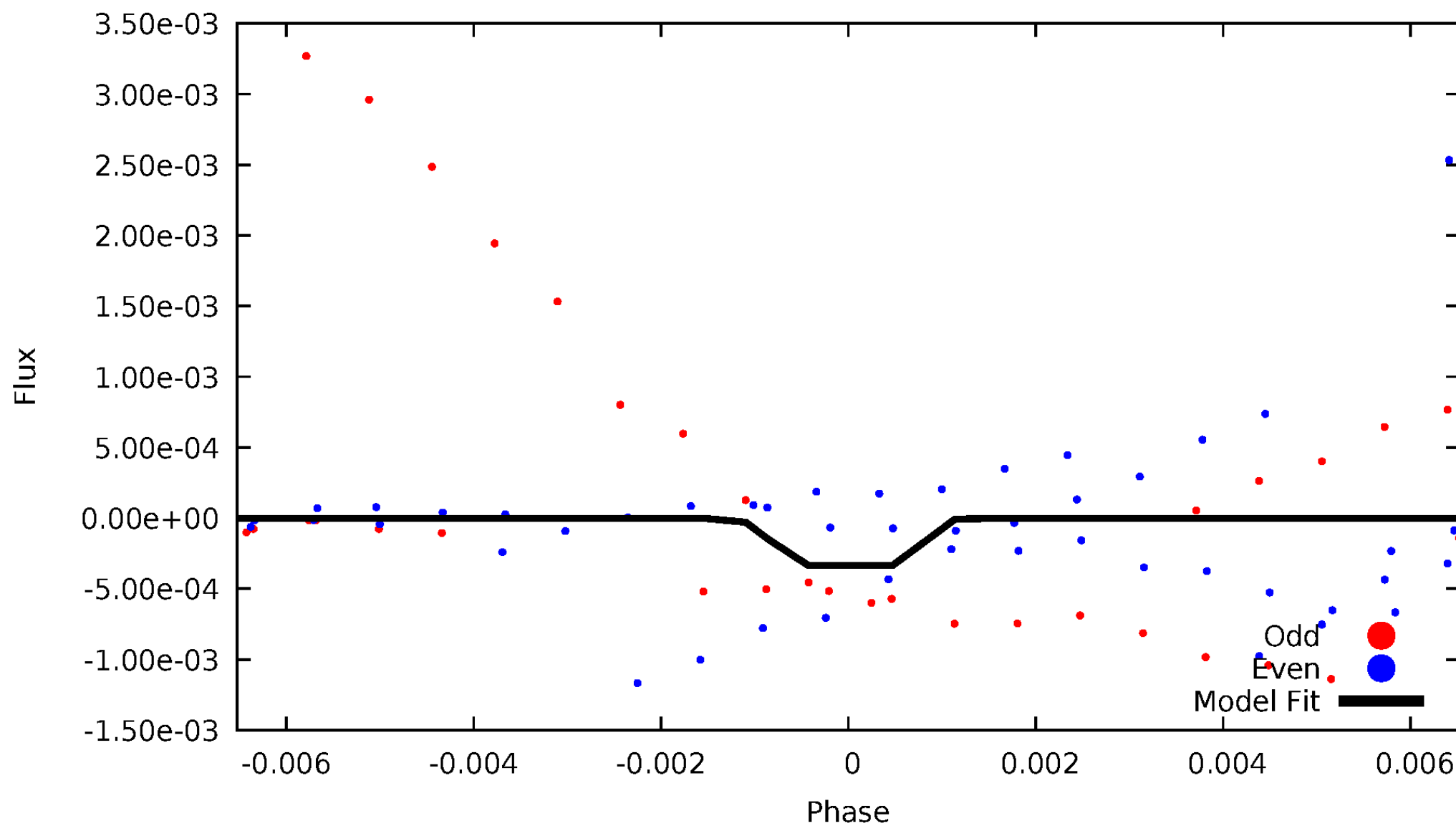
DV Odd/Even

TCE 006425135-06



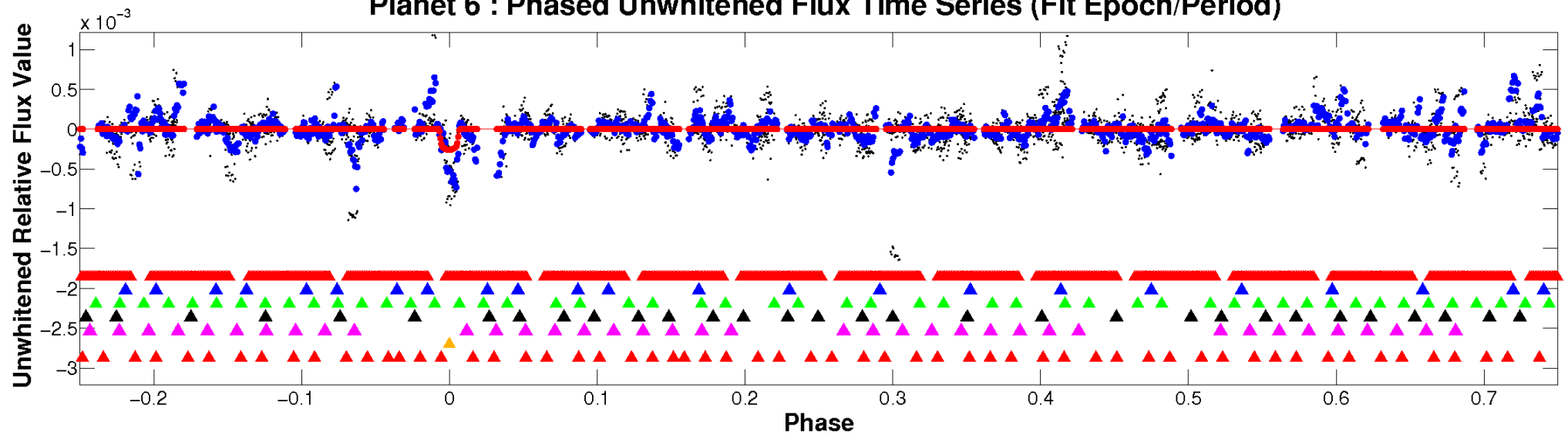
ALT Odd/Even

TCE 006425135-06

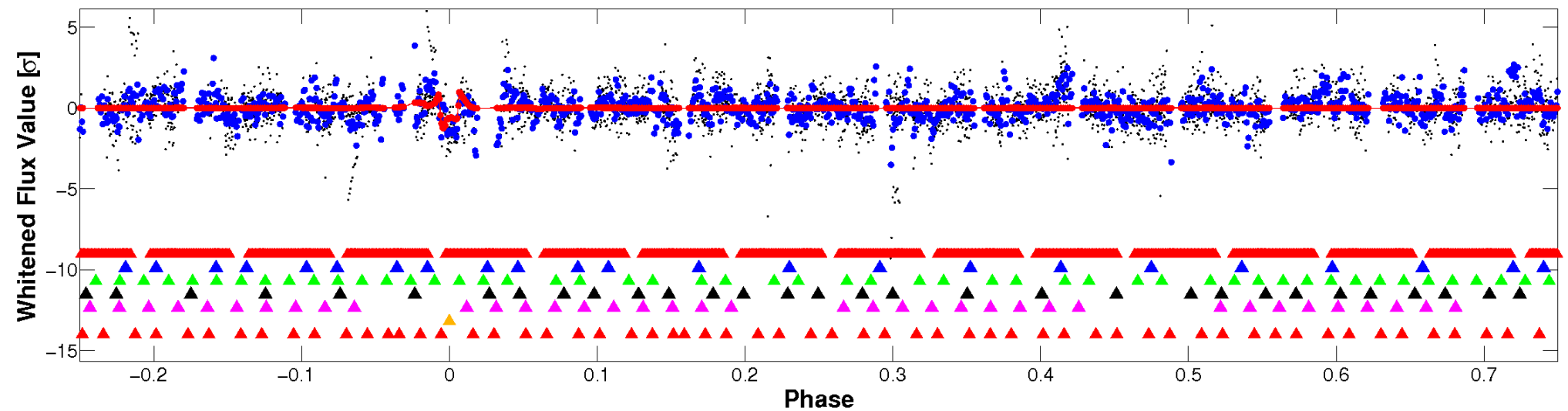


Non-Whitened Vs. Whitened Light Curve

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

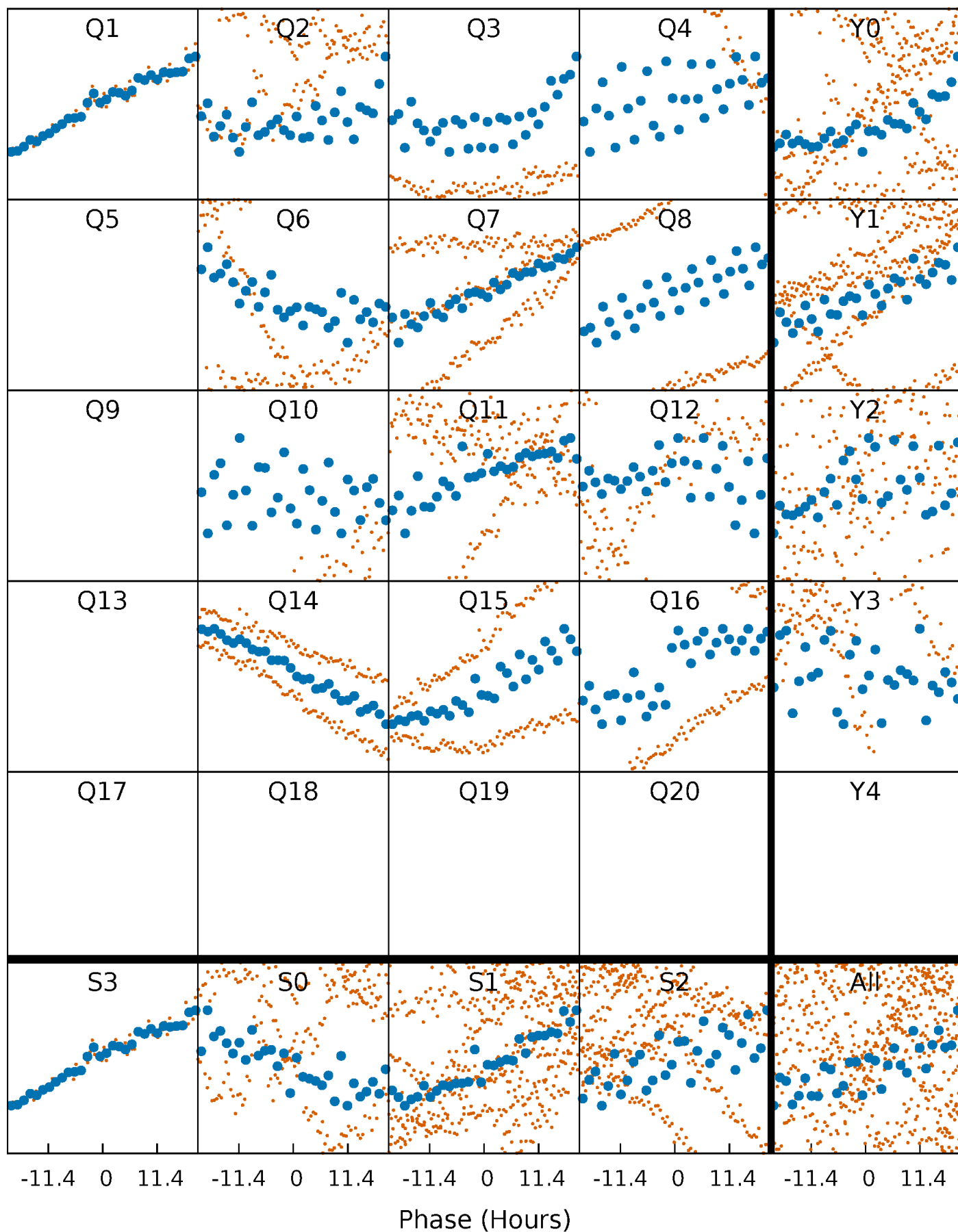


Planet 6 : Phased Whitened Flux Time Series (Fit Epoch/Period)



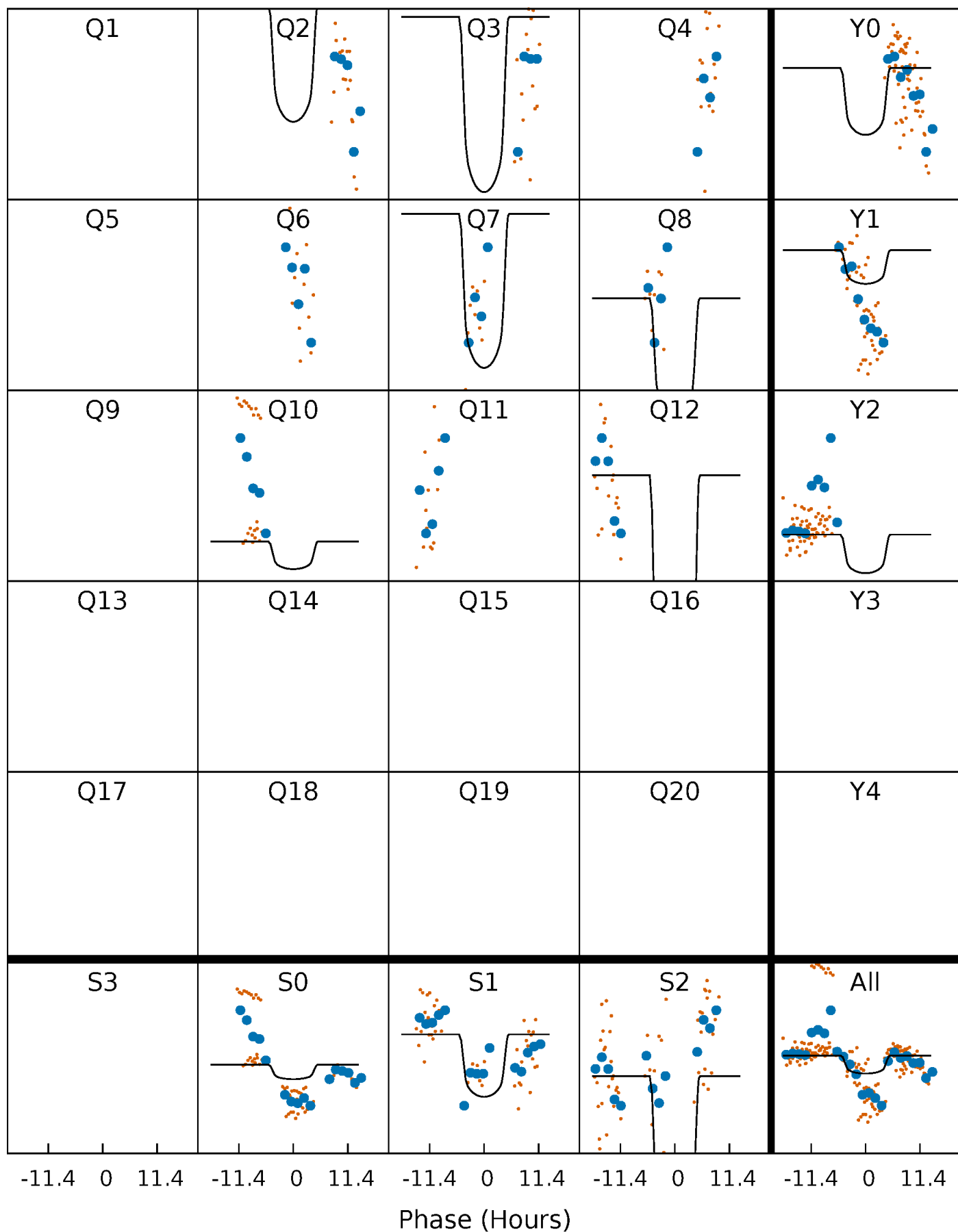
PDC Quarter-Phased Transit Curves

TCE 006425135-06 P= 30.498761 Days $T_0=135.443759$ (BKJD)



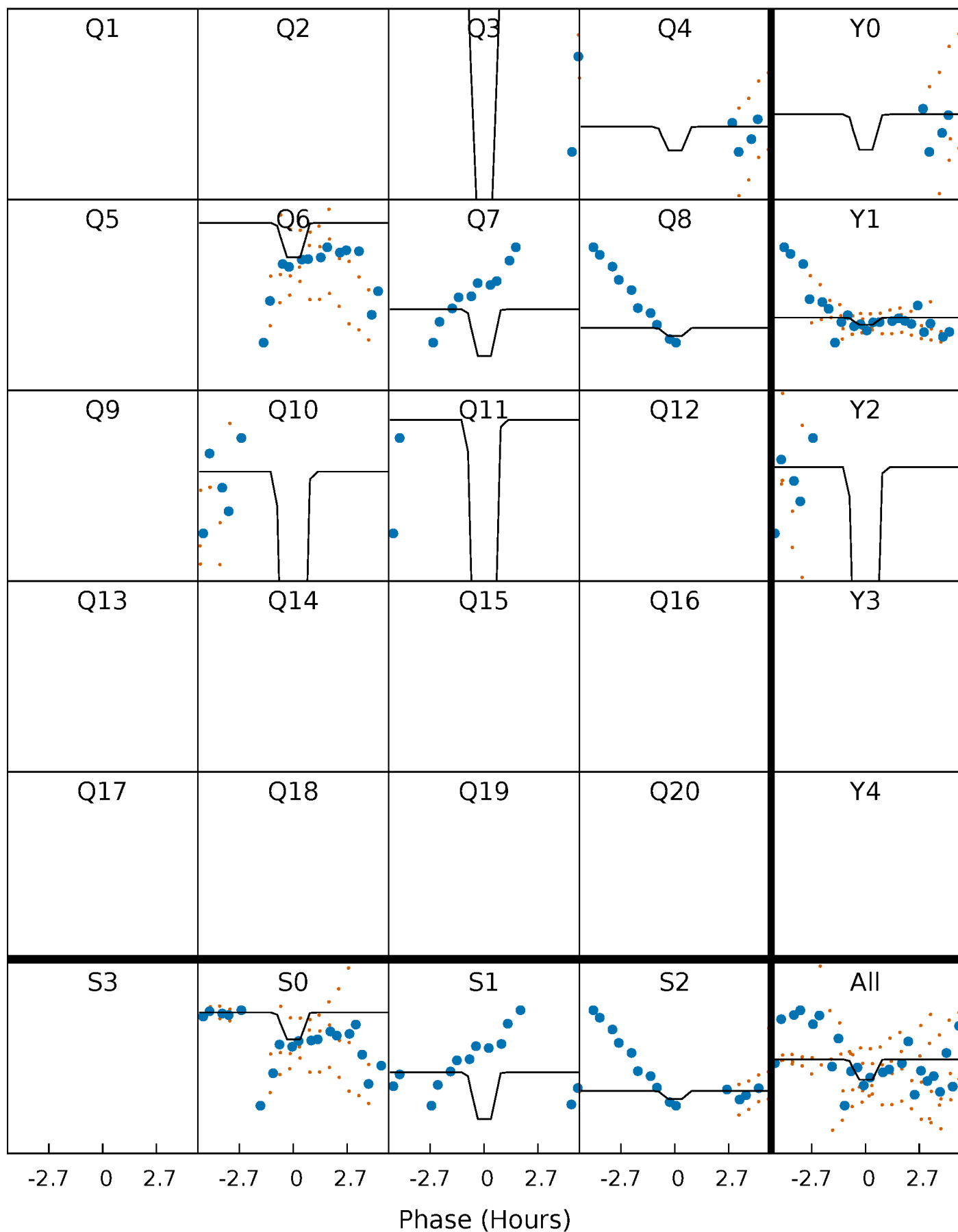
DV Quarter-Phased Transit Curves

TCE 006425135-06 P= 30.498761 Days $T_0=135.443759$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

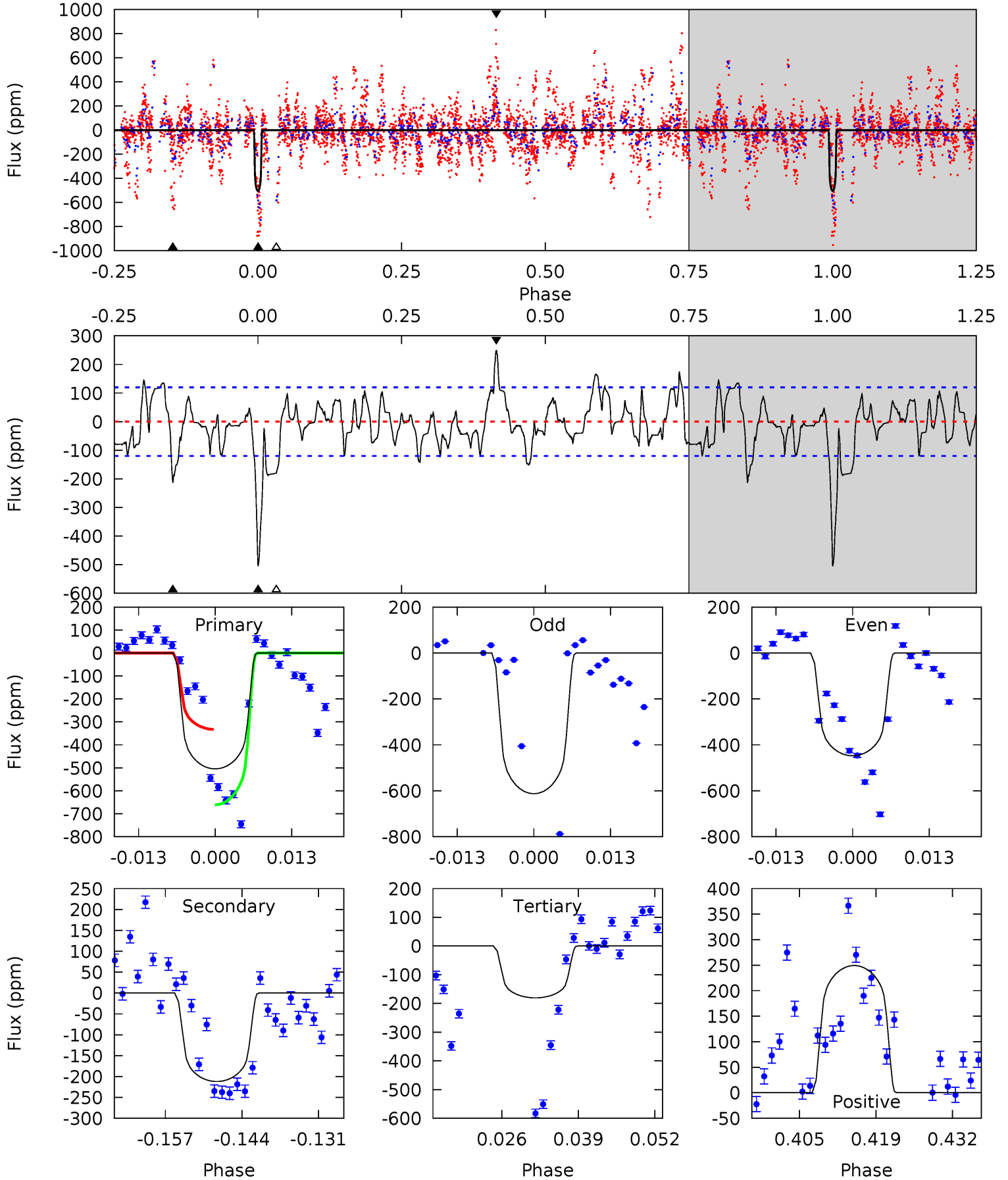
TCE 006425135-06 P= 30.487219 Days $T_0=135.602929$ (BKJD)



DV Model-Shift Uniqueness Test

006425135-06, P = 30.498761 Days, E = 104.944998 Days

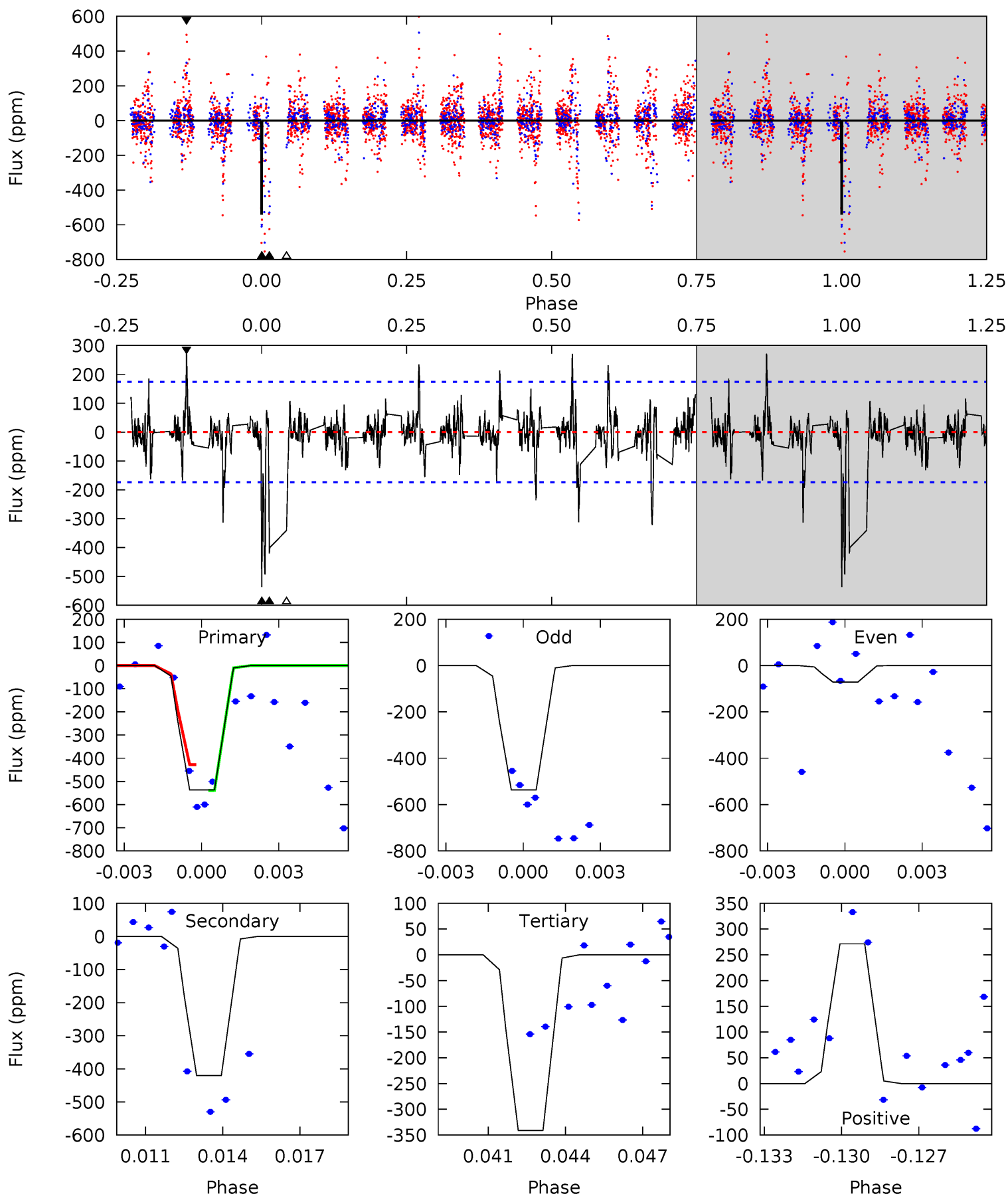
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
20.9	8.79	7.48	10.3	4.97	2.48	2.94	13.4	10.6	1.30	-1.55	2.85	1.18	0.33	6.72



Alt Model-Shift Uniqueness Test

006425135-06, P = 30.487219 Days, E = 105.115710 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
16.3	12.7	10.3	8.22	5.27	2.99	1.89	5.92	8.04	2.40	4.52	6.11	0.63	0.34	1.86



Stellar Parameters For KIC 006425135

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	5198^{+201}_{-165}	$3.663^{+0.885}_{-0.295}$	$-0.280^{+0.300}_{-0.250}$	$2.550^{+1.162}_{-1.743}$	$1.091^{+0.191}_{-0.286}$	$0.093^{+2.317}_{-0.065}$
	+4%/-3%	+24%/-8%	+107%/-89%	+46%/-68%	+18%/-26%	+2498%/-70%
Source	PHO54	PHO54	PHO54	DSEP		

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

Secondary Eclipse Parameters for KIC 006425135-06 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-212 ± 24	$4.83^{+2.05}_{-1.85}$	1135^{+166}_{-212}	4723^{+425}_{-348}	198^{+286}_{-101}
Alt.	-420 ± 33	$4.62^{+1.92}_{-1.63}$	1136^{+155}_{-210}	5501^{+552}_{-431}	409^{+517}_{-203}

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

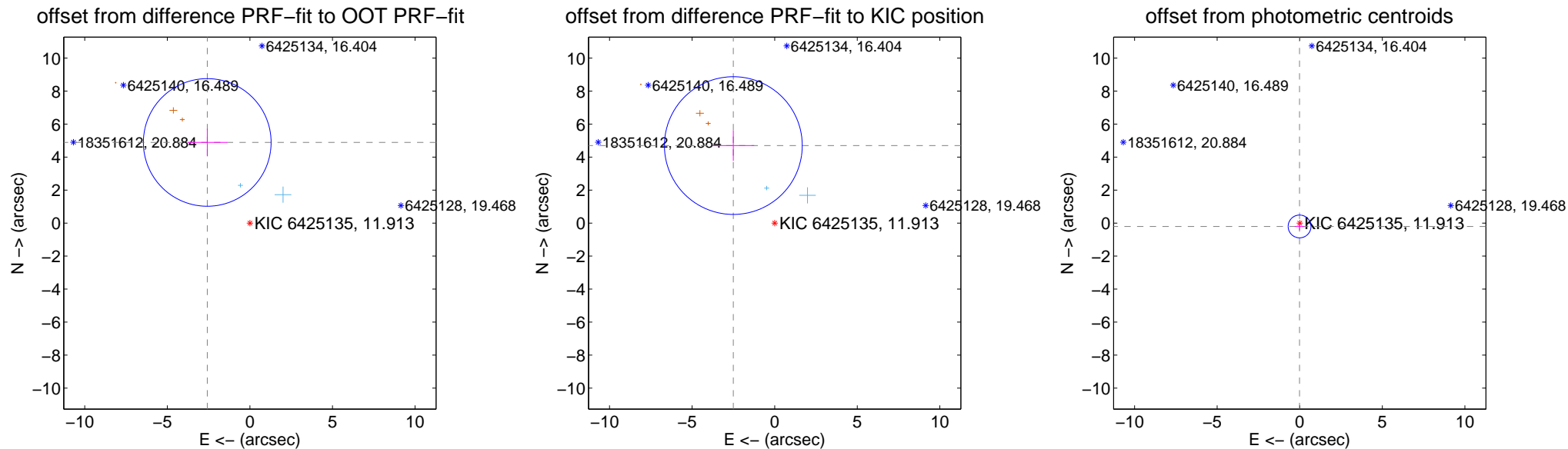
DV Centroid Data

Supplemental centroid analysis for 006425135-06. **Kepler magnitude: 11.91.** Transit SNR 6.63

There are 2 quarters with good PRF difference image offsets

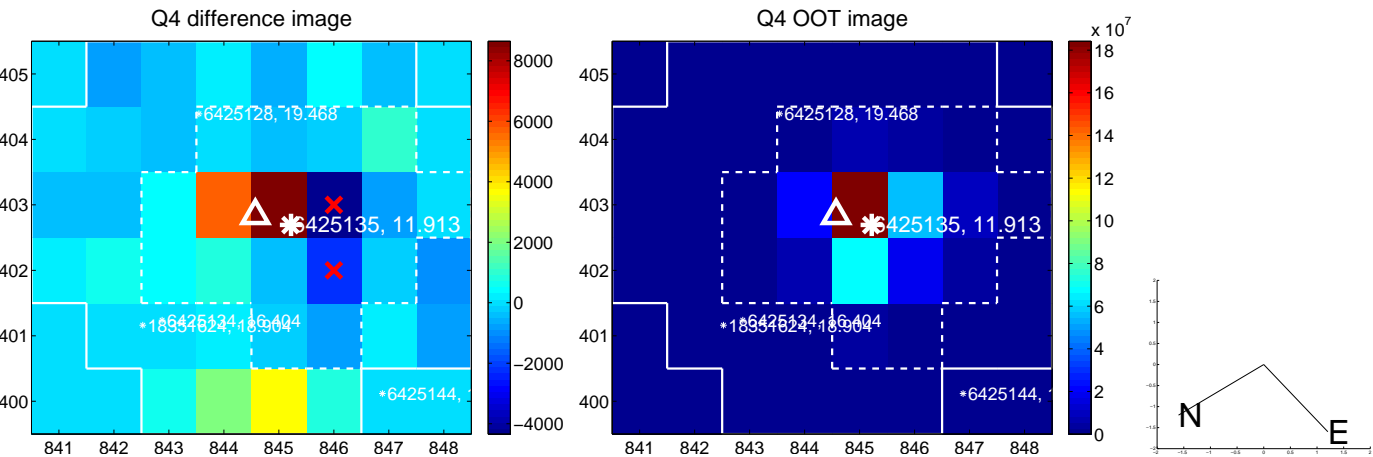
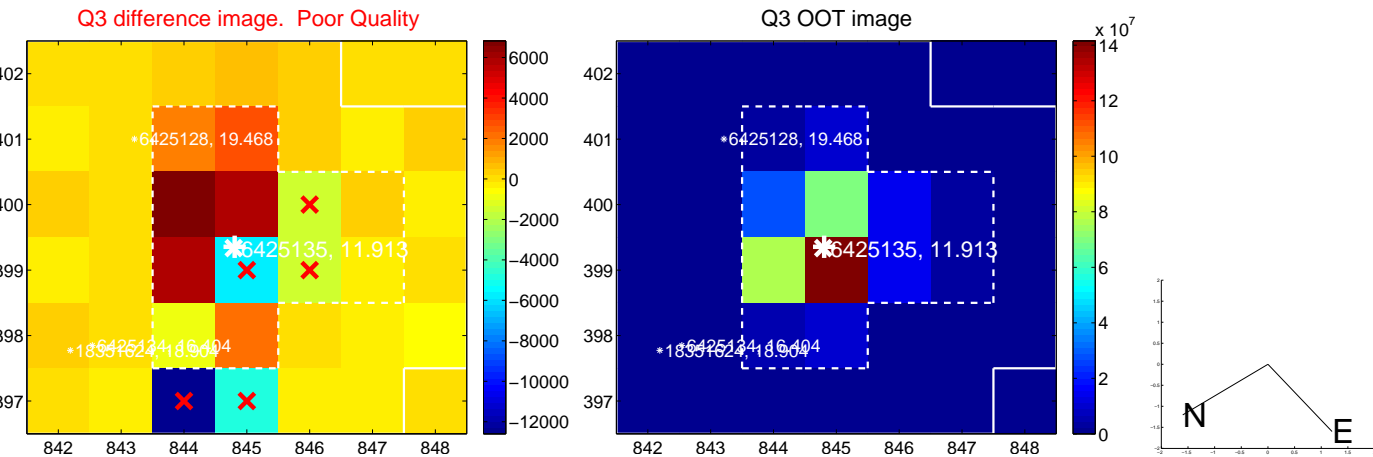
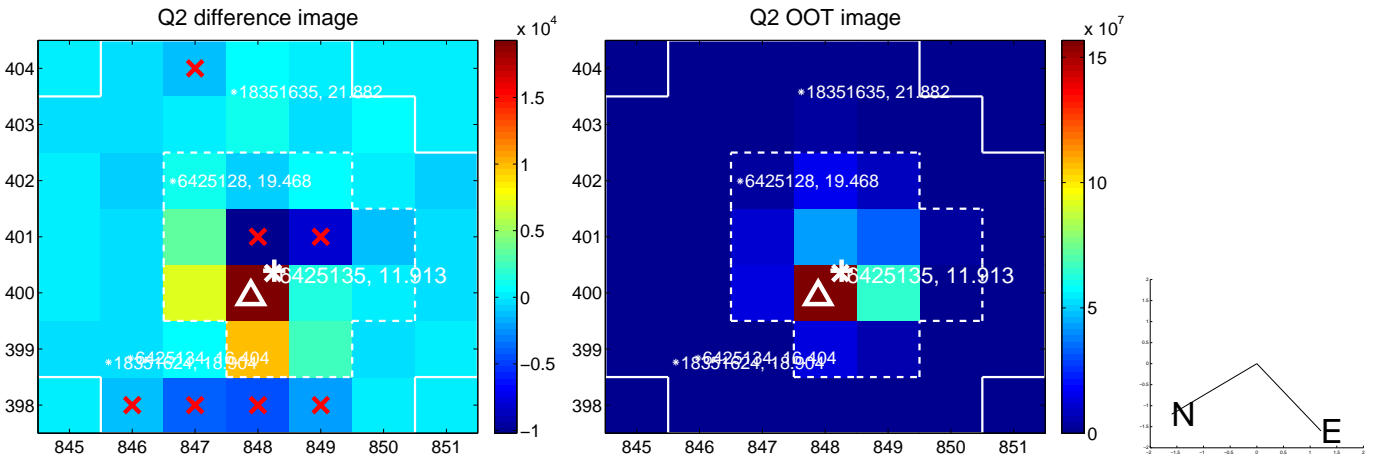
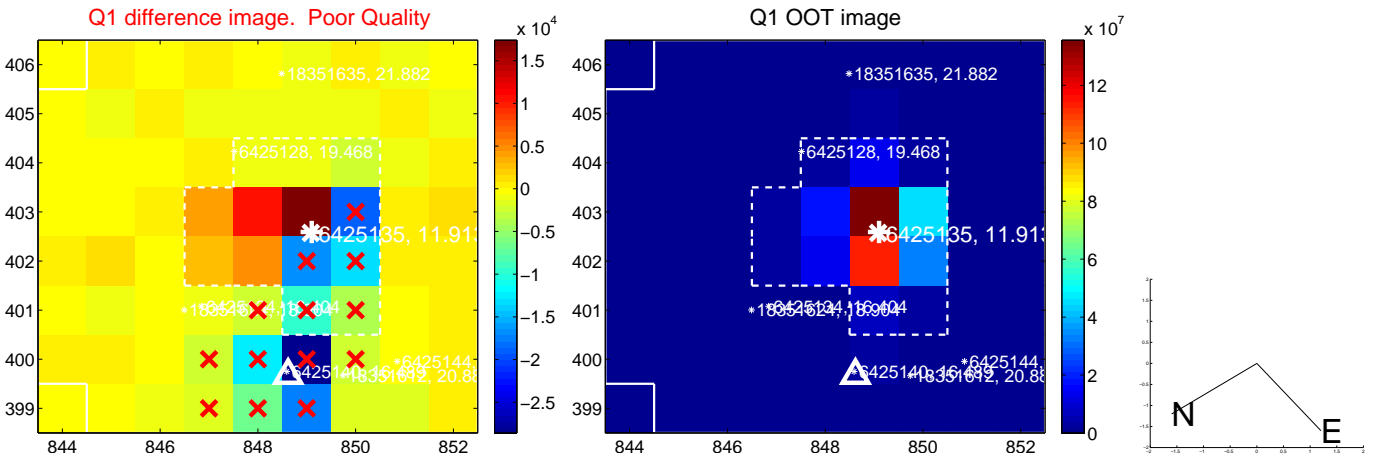
The direct PRF centroid is offset from the target star catalog position by about 0.24 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	5.528 ± 1.289	4.29	2.582 ± 1.201	4.888 ± 0.841
PRF-fit source offset from KIC position	5.324 ± 1.391	3.83	2.503 ± 1.260	4.698 ± 0.921
photometric centroid source offset	0.20 ± 0.23	0.88	0.01 ± 0.29	-0.20 ± 0.23

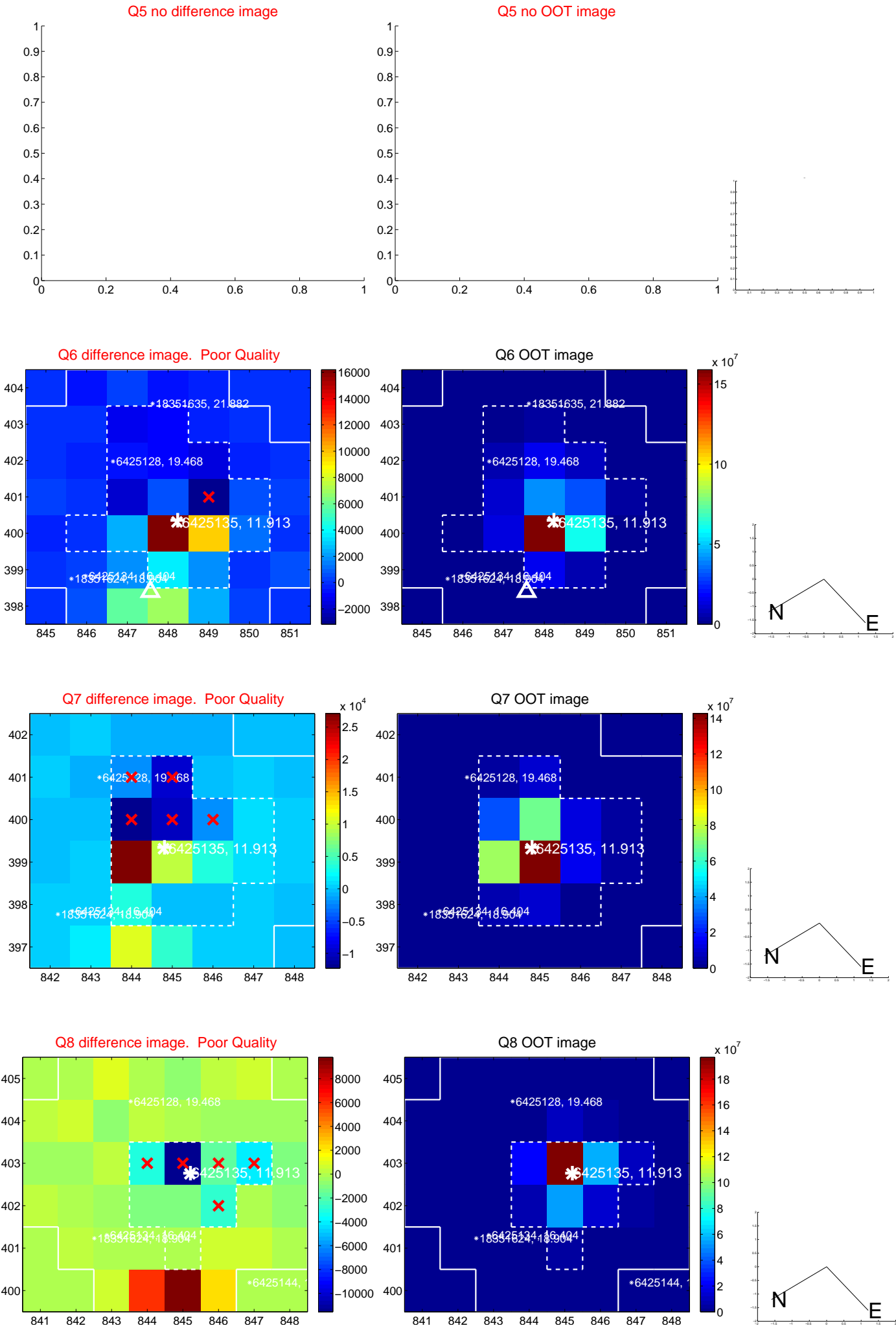


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets;** magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

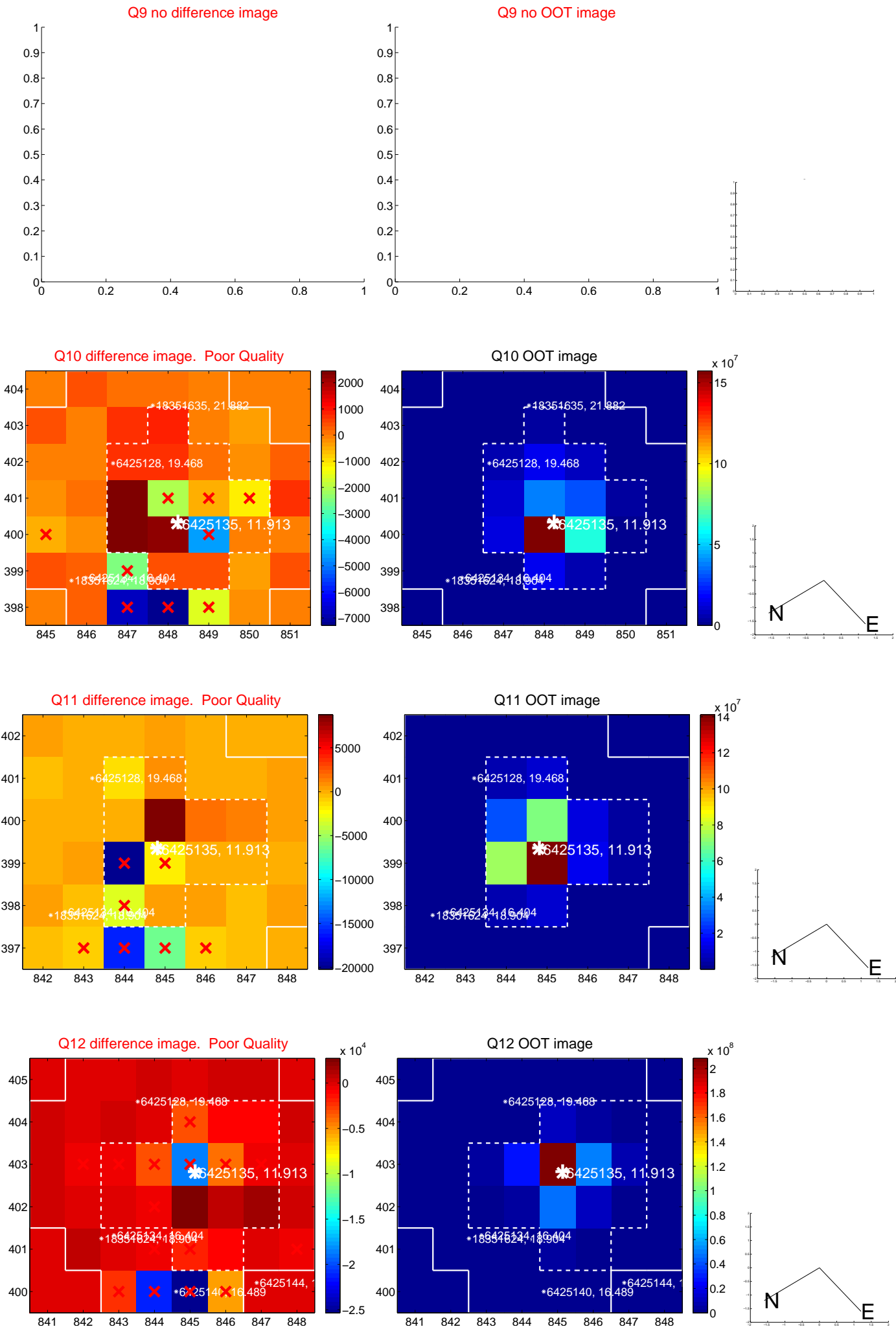
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



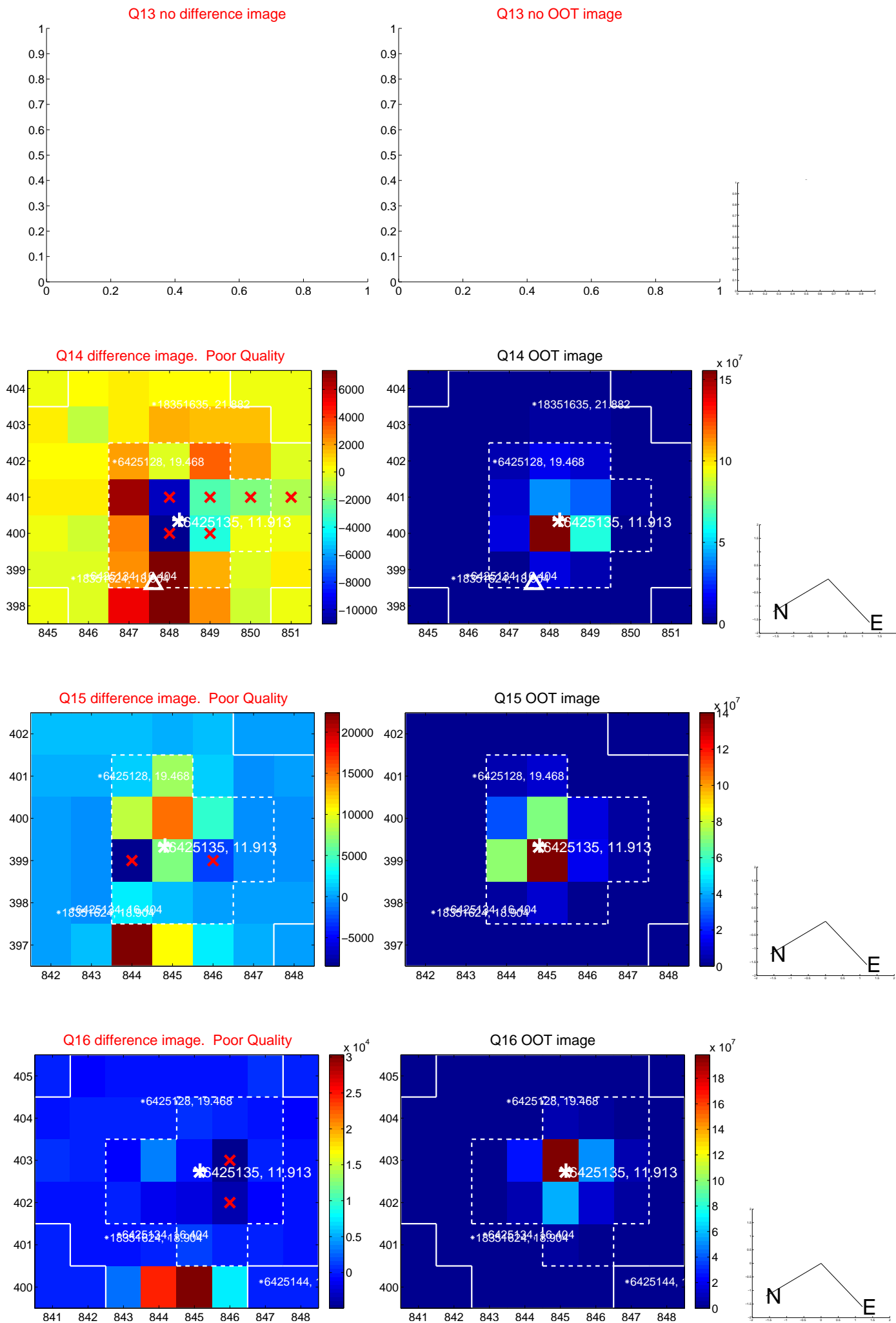
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



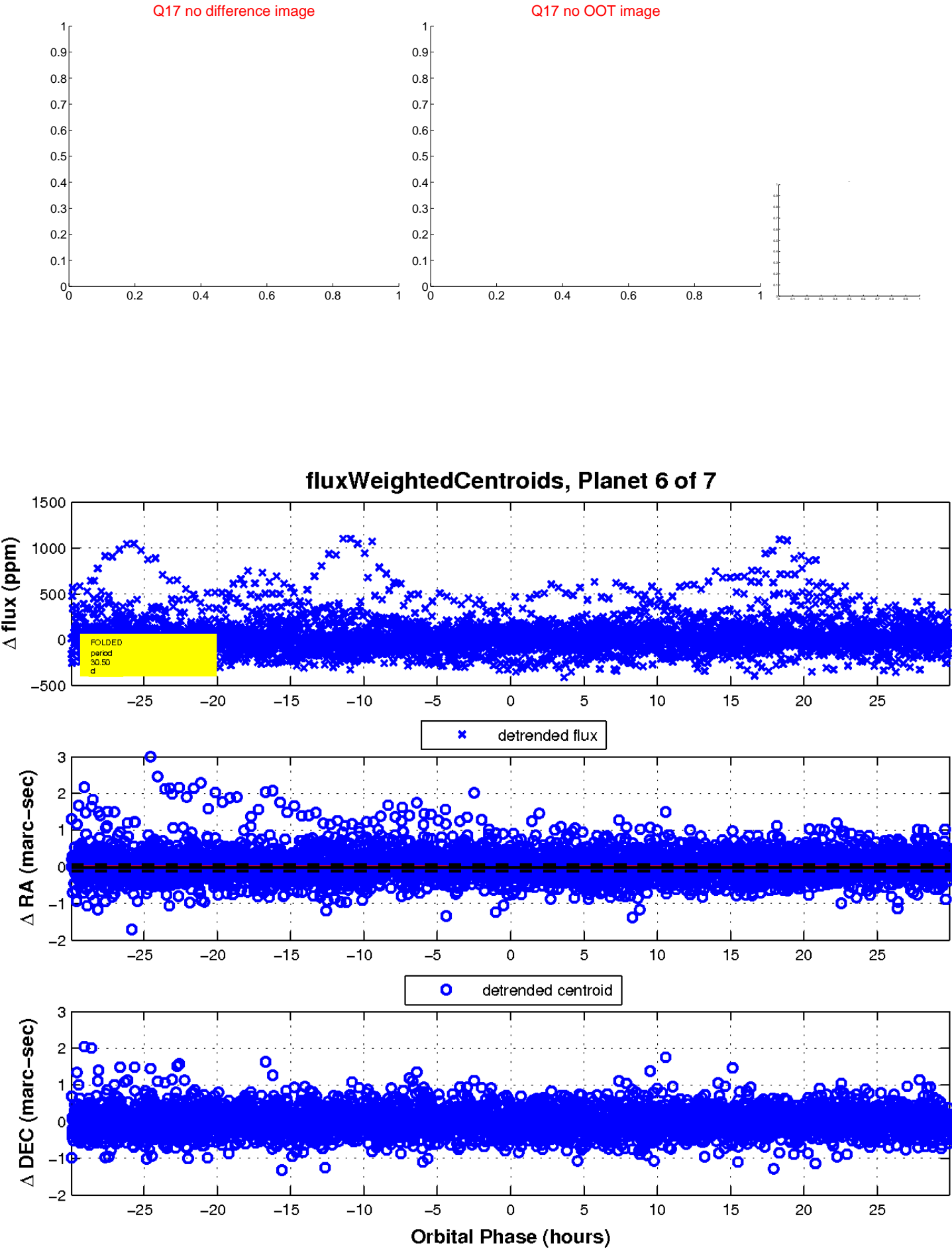
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

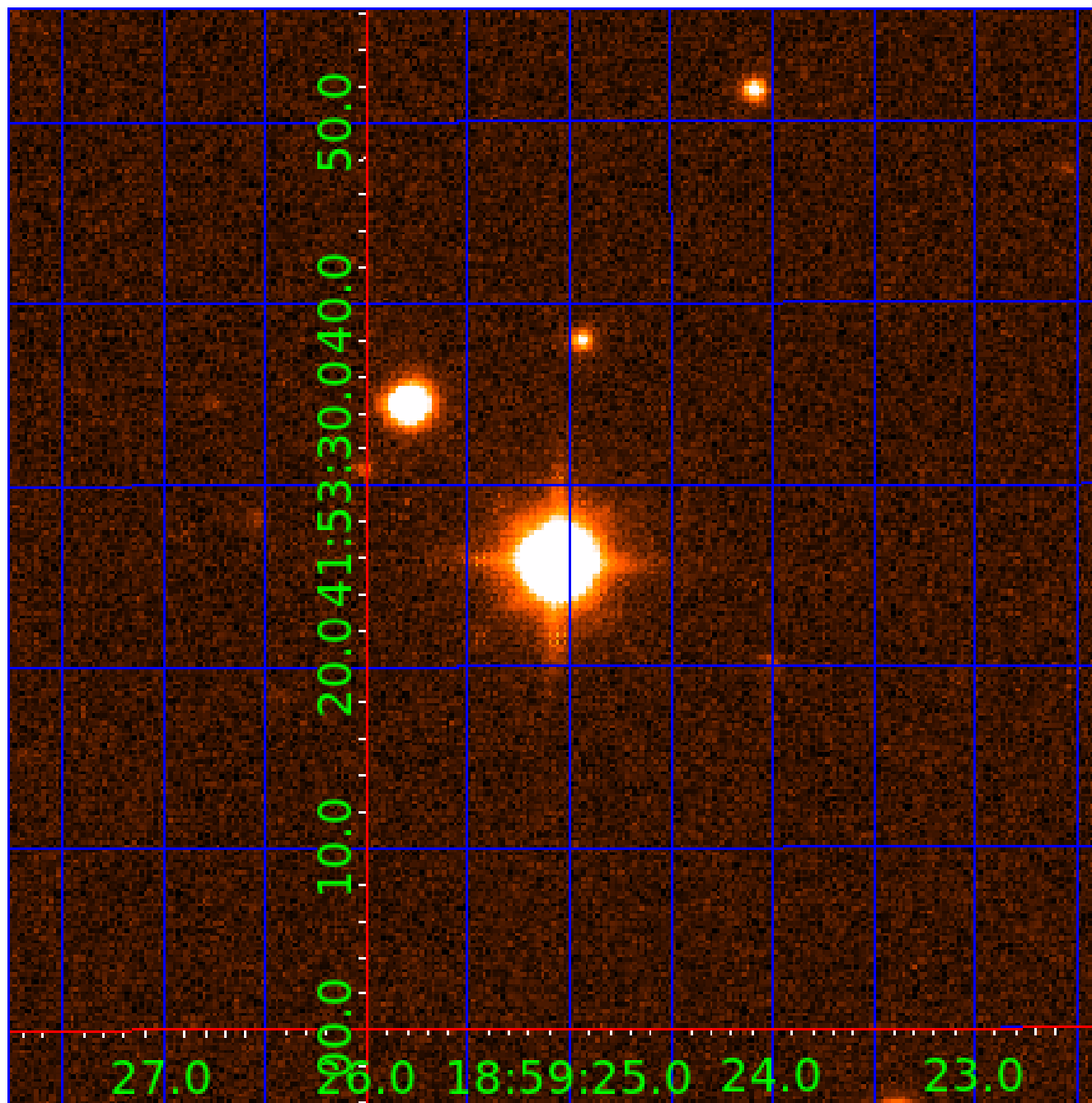


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 006425135

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})
006425135-01	OBS	No	2.030884	132.971373	13.1	14.392	7.5	7.8	2.55	5198	0.98	4070.86
006425135-02	OBS	No	62.864355	188.522928	1011.0	10.785	29.6	22.3	2.55	5198	16.15	41.88
006425135-03	OBS	No	28.998564	135.651150	465.8	20.532	27.9	14.0	2.55	5198	11.27	117.52
006425135-05	OBS	No	38.275026	158.526009	203.7	51.894	17.6	5.5	2.55	5198	4.16	81.17
006425135-06	OBS	No	30.498761	135.443758	258.5	9.979	12.0	6.6	2.55	5198	5.14	109.87
006425135-07	OBS	No	24.616981	140.066812	179.2	7.588	9.4	8.2	2.55	5198	3.50	146.20

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
006425135-01	OBS	FP	0.00	1	0	1	0	LPP_DV—CENT_RESOLVED_OFFSET
006425135-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—ALL_TRANS_CHASES—MOD_TER_ALT—MOD_POS_ALT—CENT_FEW_DIFFS
006425135-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—CENT_FEW_DIFFS
006425135-05	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_ALT
006425135-06	OBS	FP	0.00	1	0	1	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—LPP_ALT—CENT_RESOLVED_OFFSET
006425135-07	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_ZUMA—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_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.

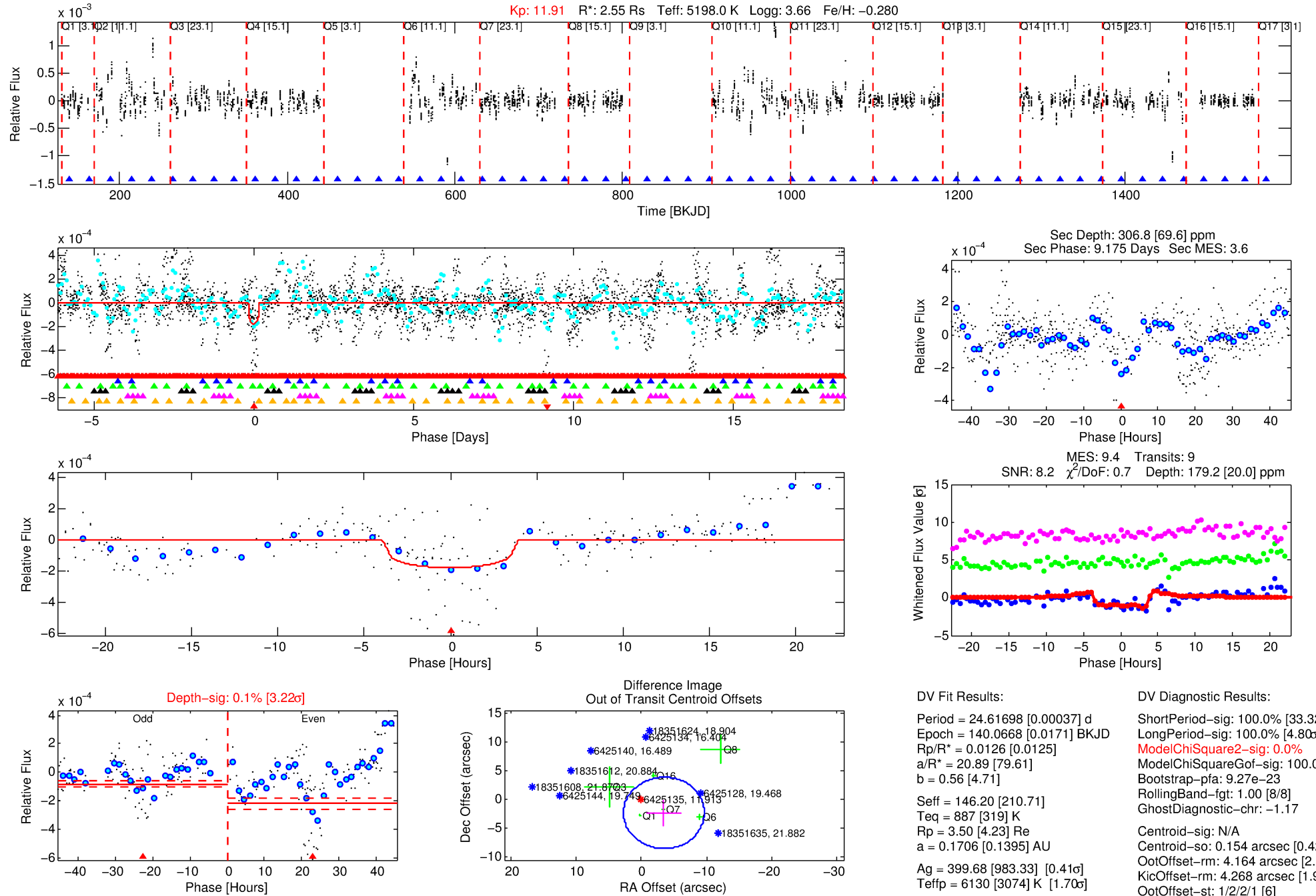
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 006425135-07

No Significant Match Found

DV One-Page Summary

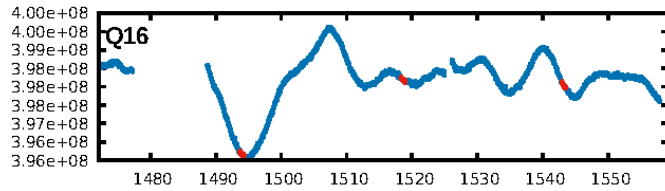
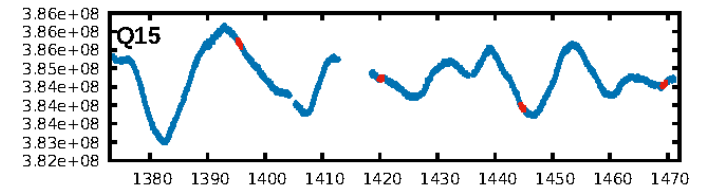
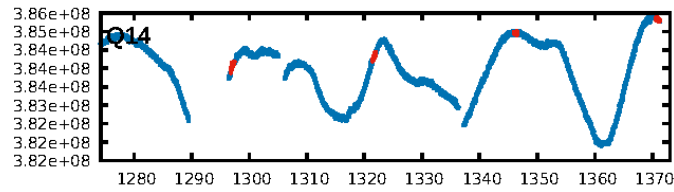
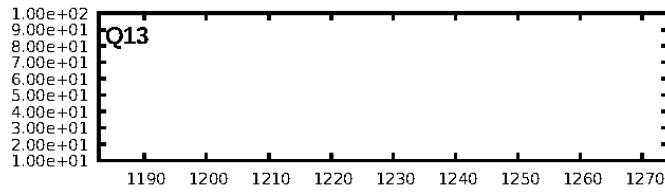
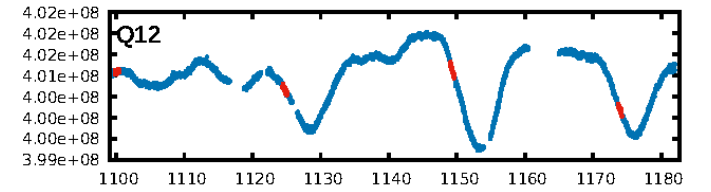
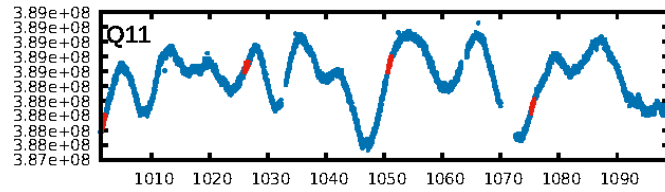
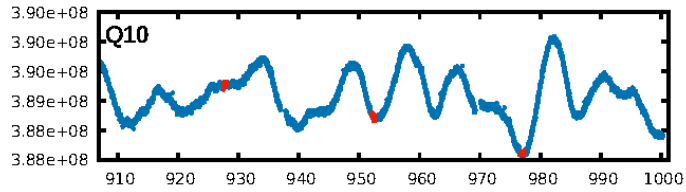
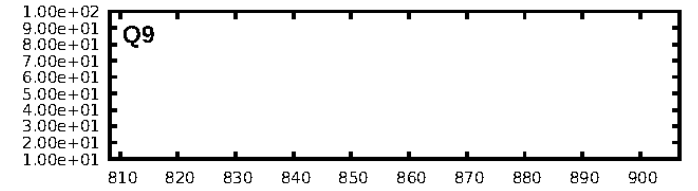
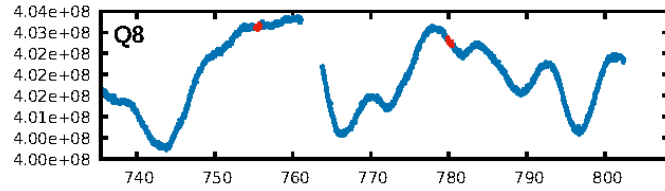
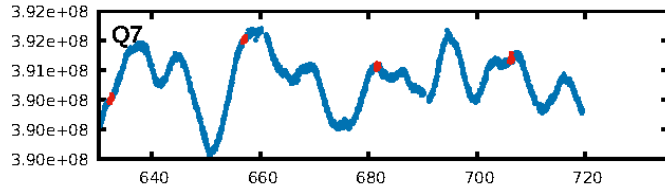
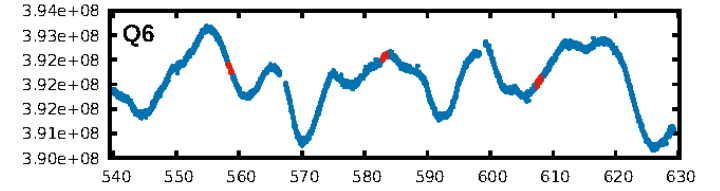
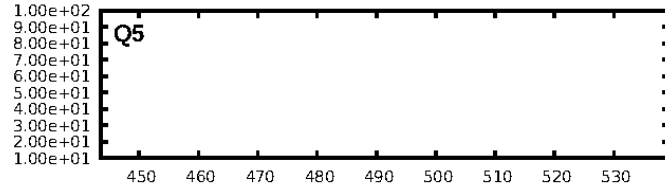
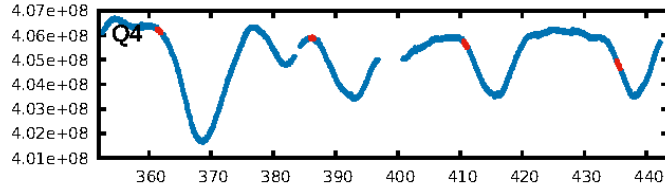
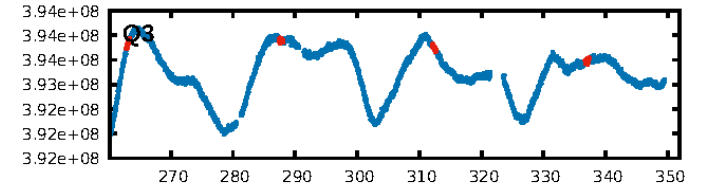
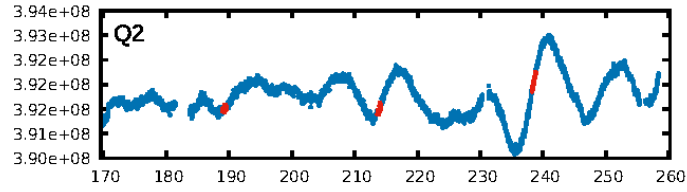
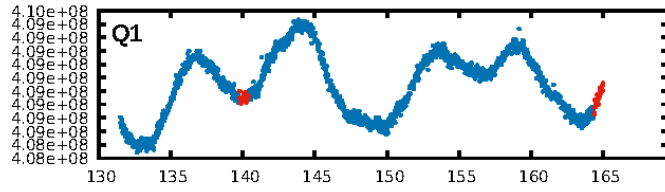
KIC: 6425135 Candidate: 7 of 7 Period: 24.617 d



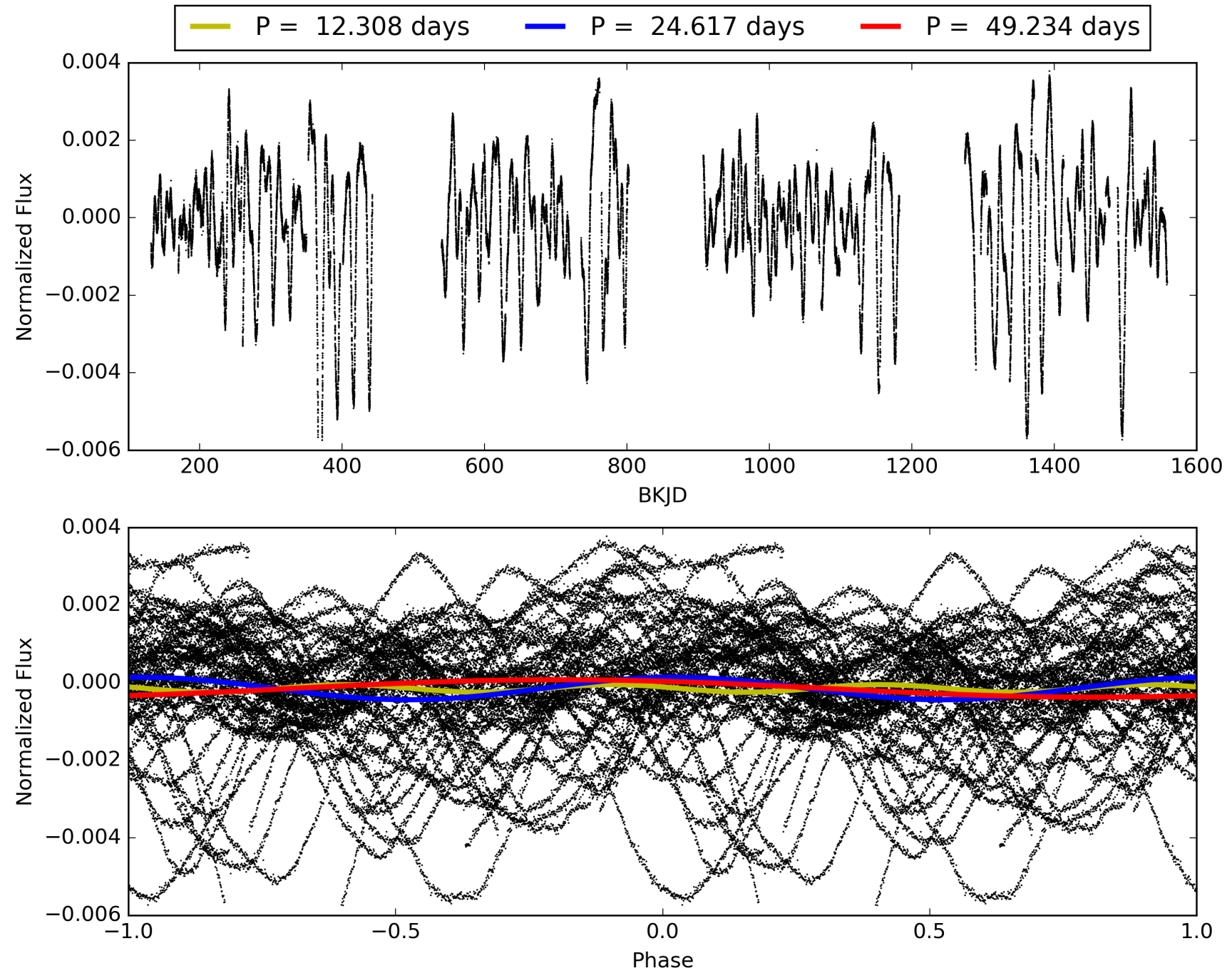
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 01-Feb-2016 23:59:46 Z

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

TCE 006425135-07, PDC Light Curves

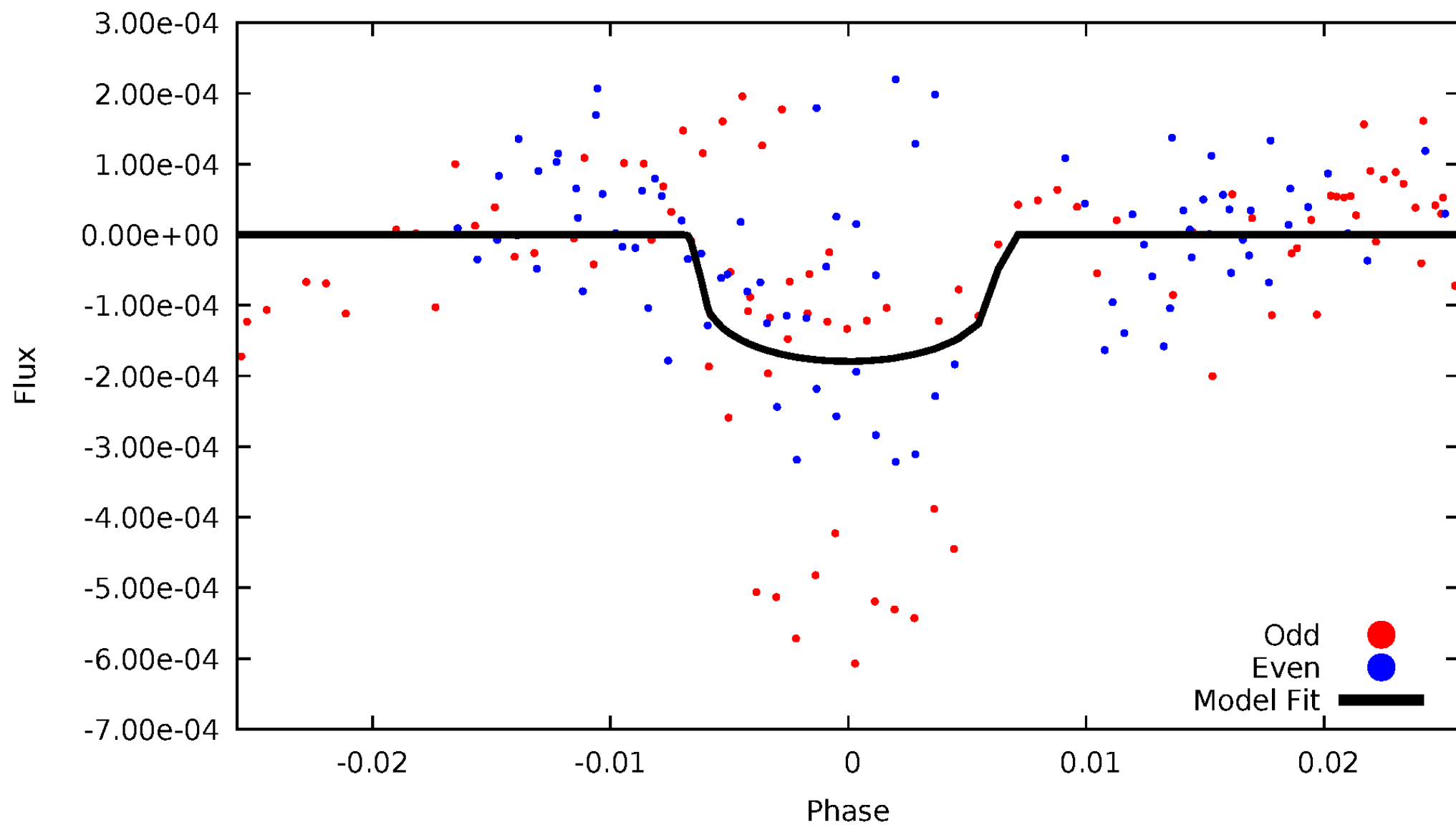


TCE 006425135-07



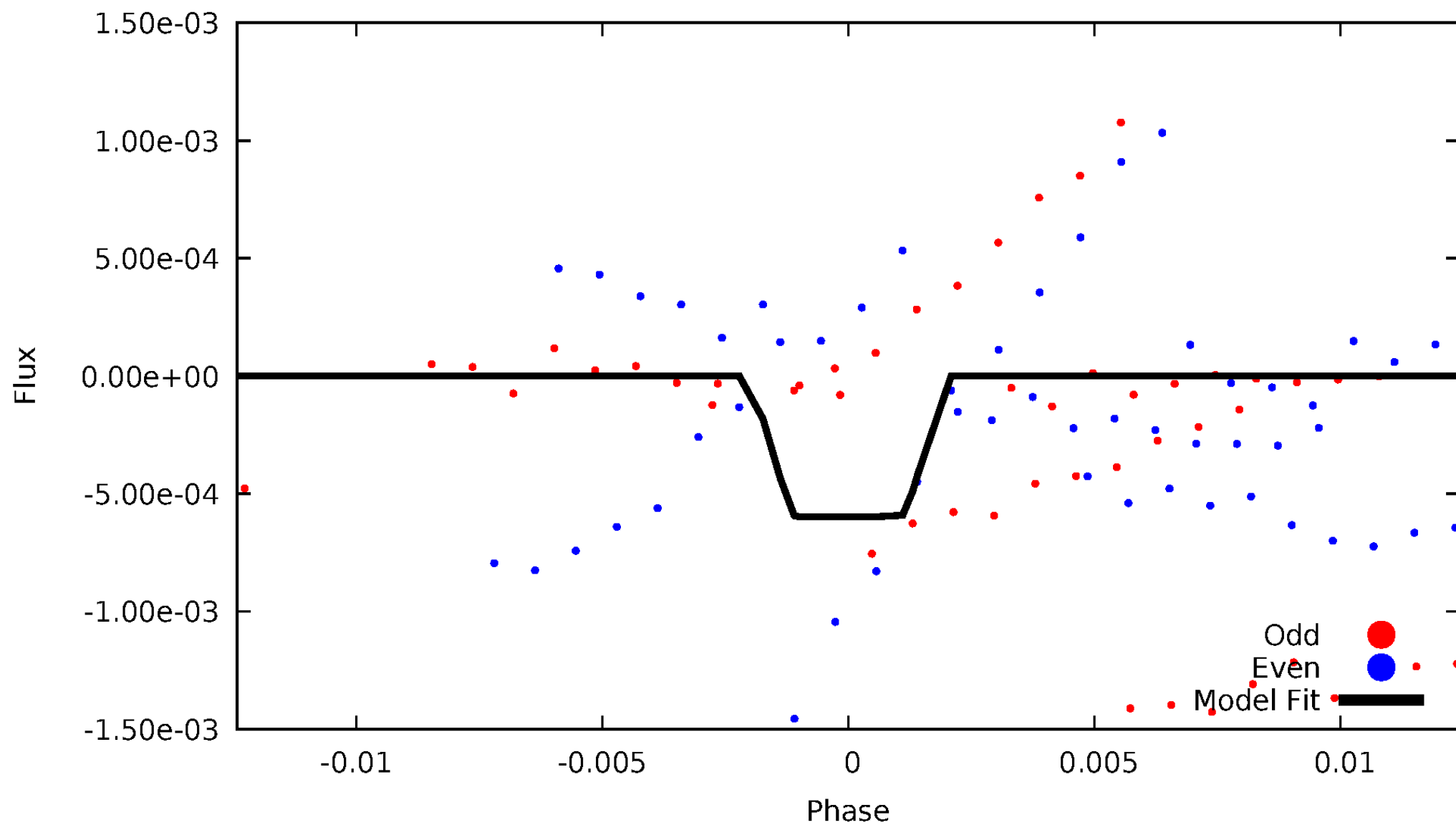
DV Odd/Even

TCE 006425135-07



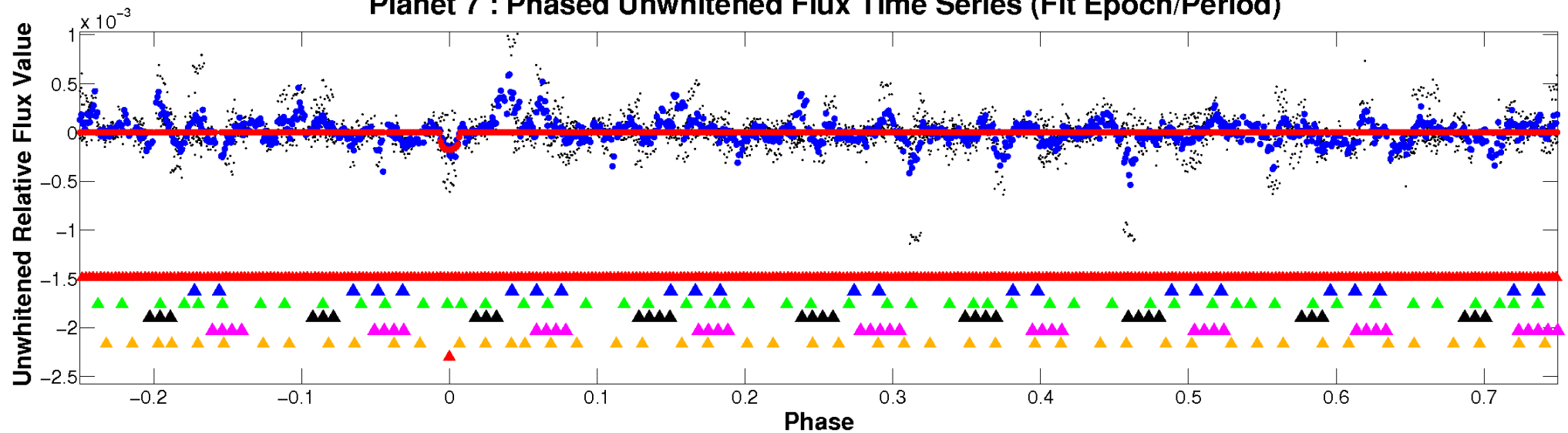
ALT Odd/Even

TCE 006425135-07

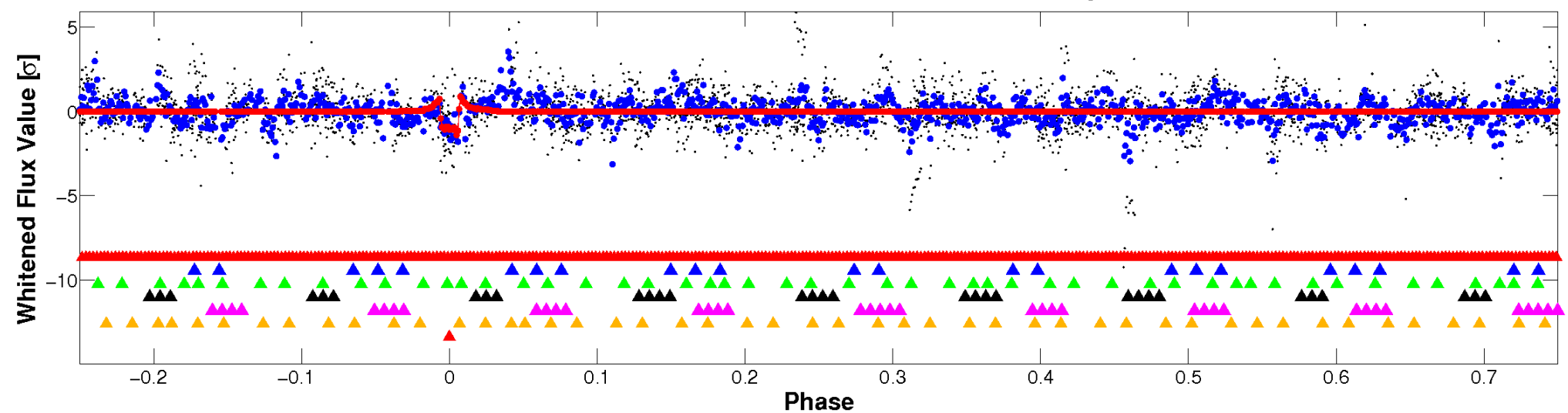


Non-Whitened Vs. Whitened Light Curve

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

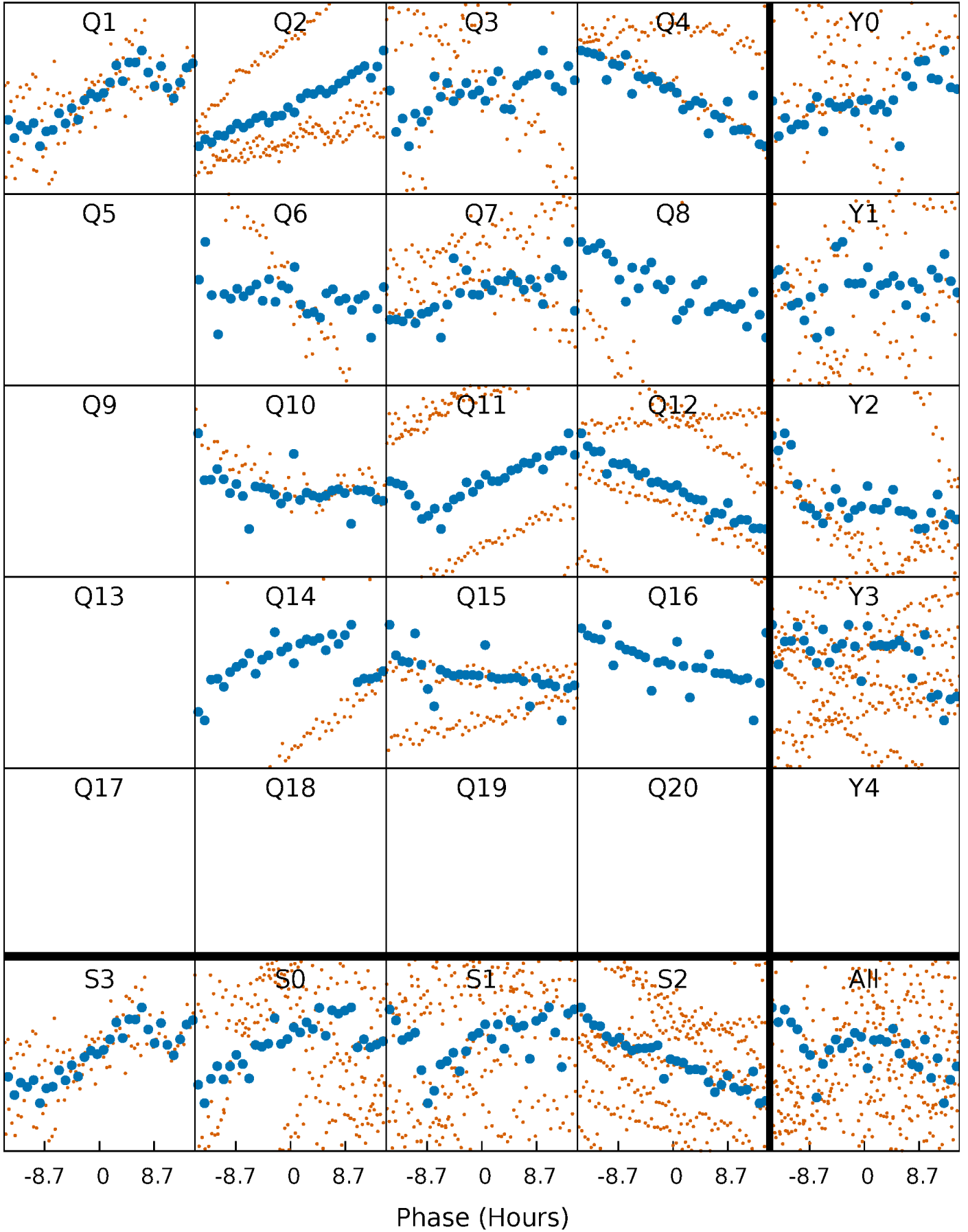


Planet 7 : Phased Whitened Flux Time Series (Fit Epoch/Period)



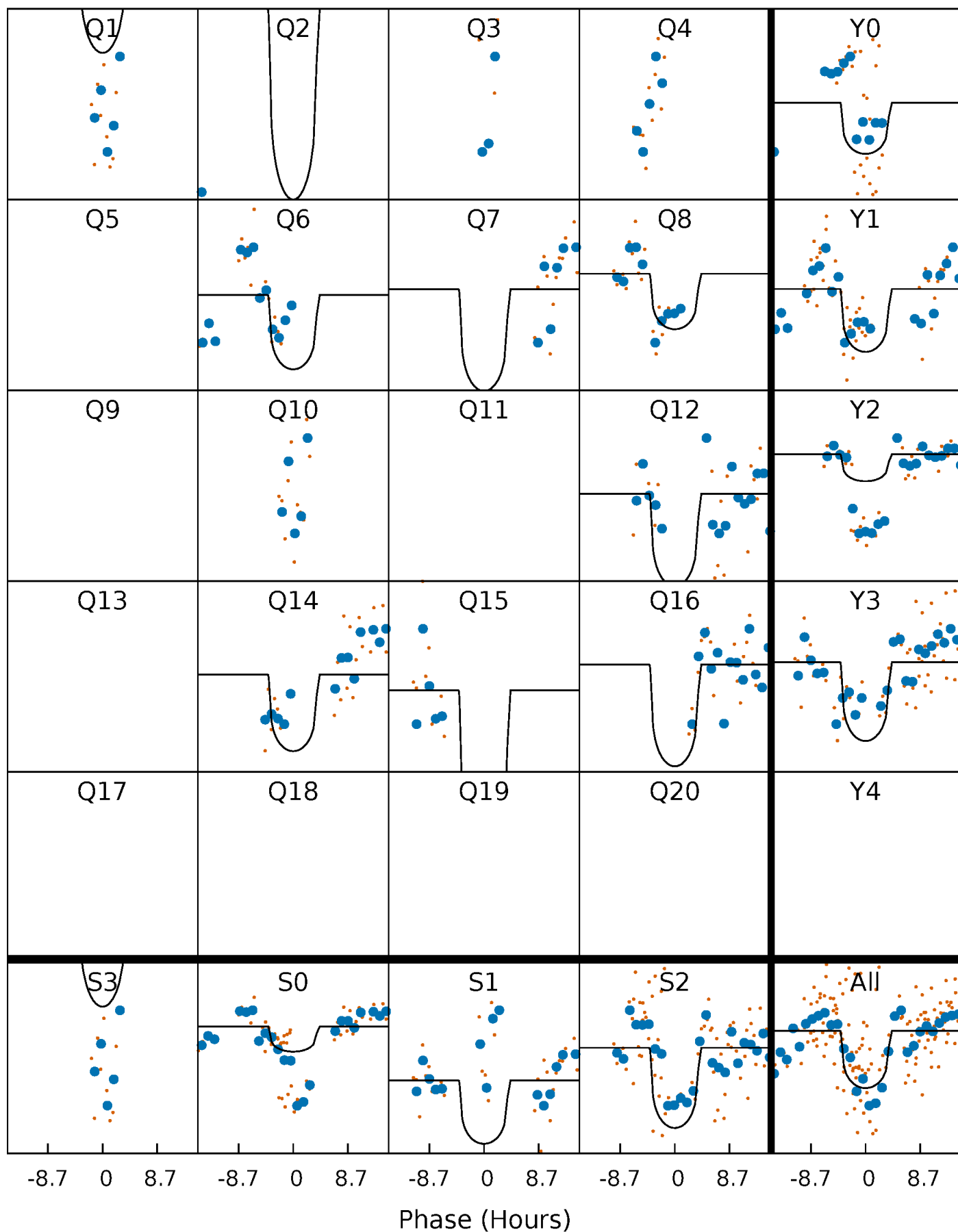
PDC Quarter-Phased Transit Curves

TCE 006425135-07 P= 24.616981 Days $T_0=140.066812$ (BKJD)



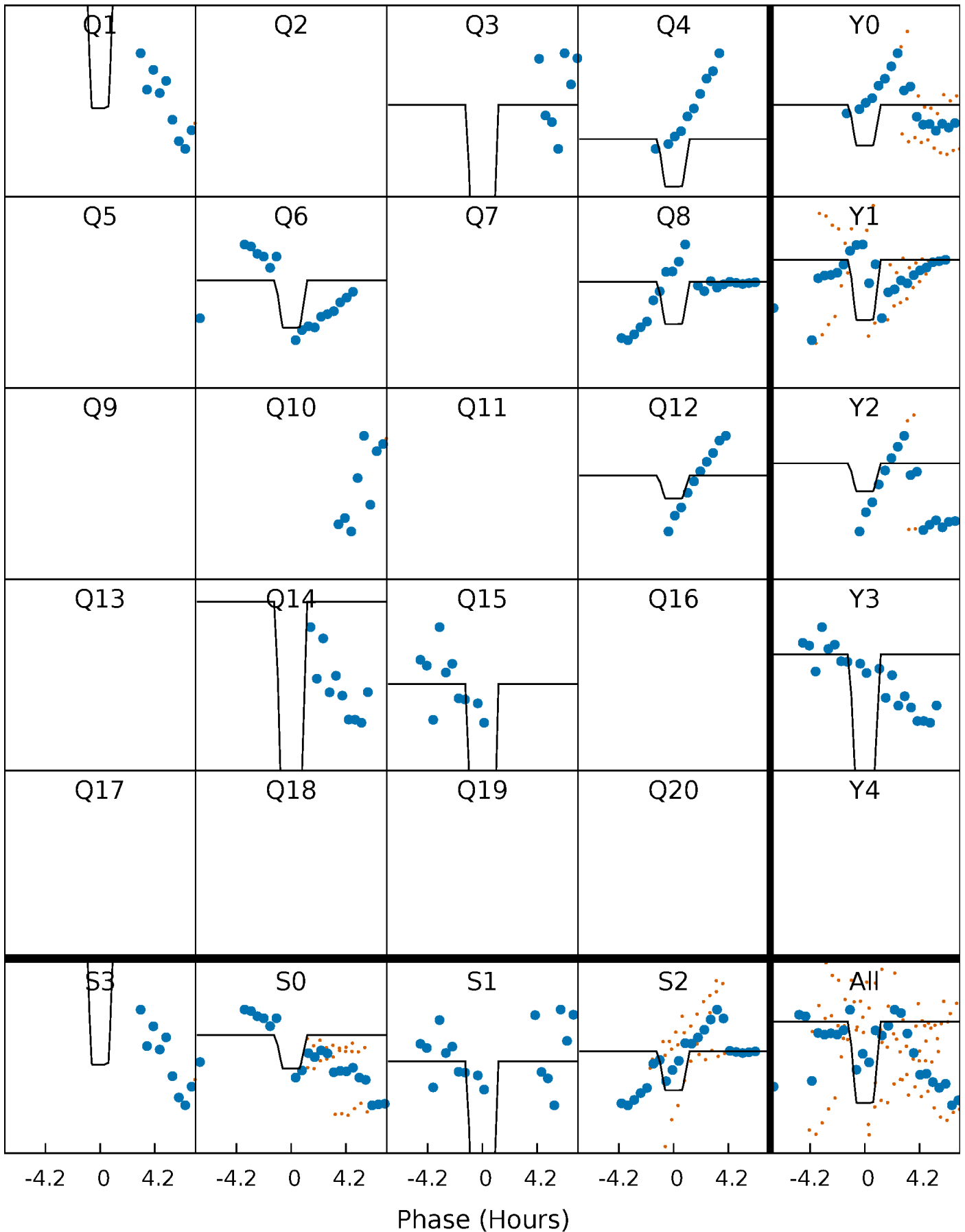
DV Quarter-Phased Transit Curves

TCE 006425135-07 P= 24.616981 Days $T_0=140.066812$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

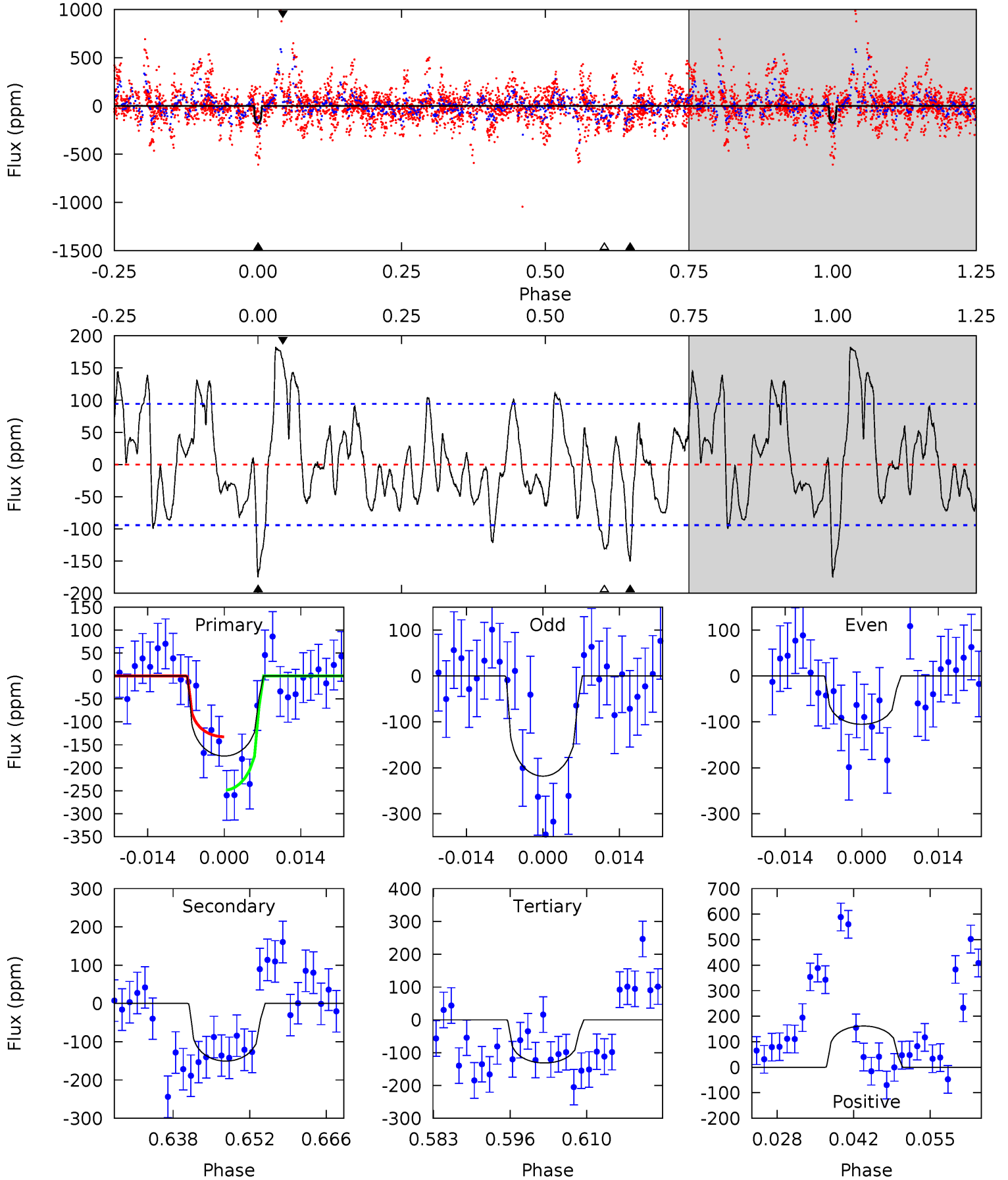
TCE 006425135-07 P= 24.615685 Days $T_0=139.873386$ (BKJD)



DV Model-Shift Uniqueness Test

006425135-07, P = 24.616981 Days, E = 115.449831 Days

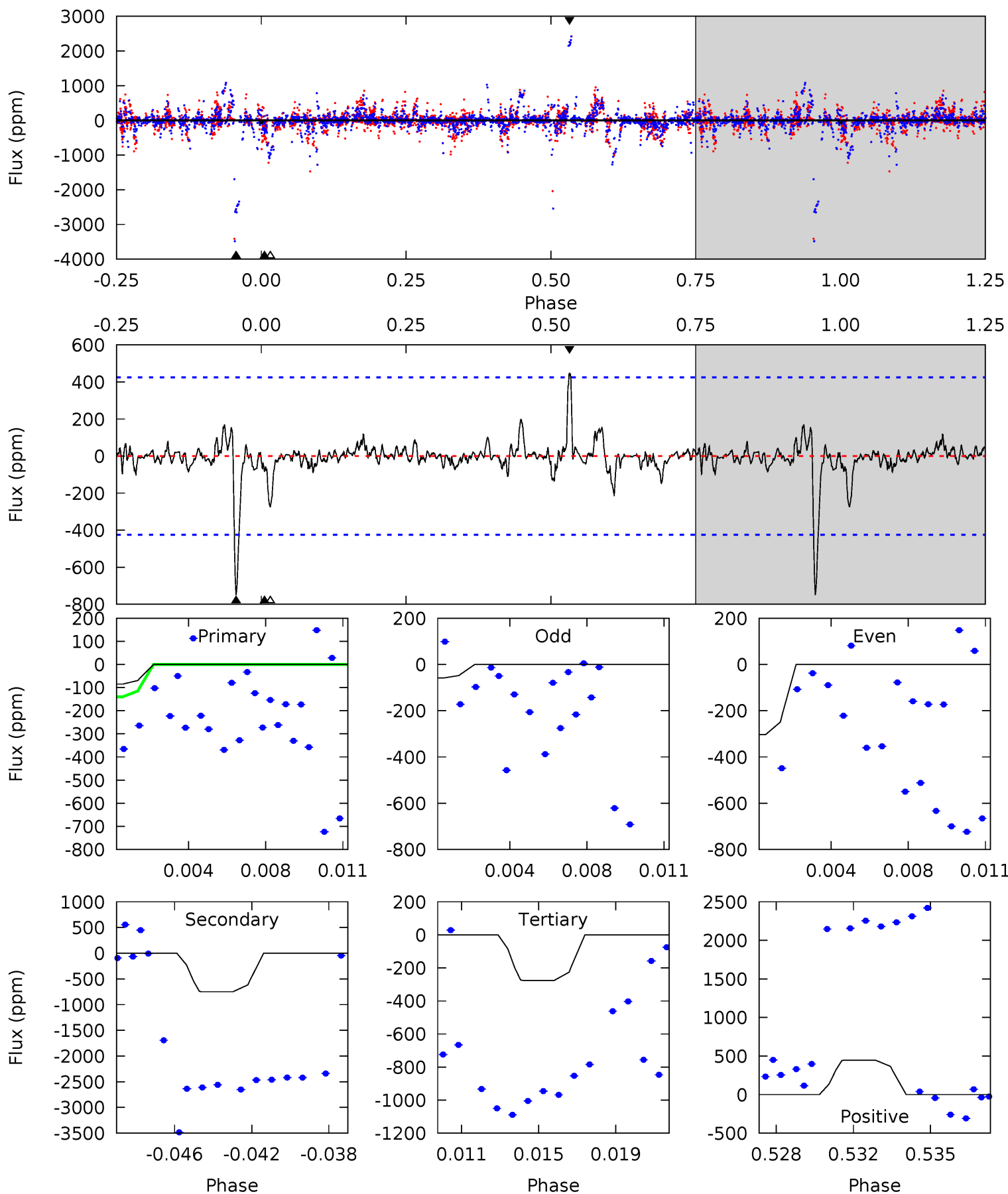
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
9.20	7.94	6.93	8.52	4.96	2.46	3.18	2.27	0.68	1.01	-0.58	2.78	1.06	0.51	2.91



Alt Model-Shift Uniqueness Test

006425135-07, P = 24.615685 Days, E = 115.257701 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
1.04	9.20	3.38	5.47	5.21	2.89	0.67	-2.34	-4.44	5.82	3.72	1.22	4.92	0.37	0.56



Stellar Parameters For KIC 006425135

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	ρ_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	5198^{+201}_{-165}	$3.663^{+0.885}_{-0.295}$	$-0.280^{+0.300}_{-0.250}$	$2.550^{+1.162}_{-1.743}$	$1.091^{+0.191}_{-0.286}$	$0.093^{+2.317}_{-0.065}$
	+4%/-3%	+24%/-8%	+107%/-89%	+46%/-68%	+18%/-26%	+2498%/-70%
Source	PHO54	PHO54	PHO54	DSEP		

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

Secondary Eclipse Parameters for KIC 006425135-07 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-151 ± 19	$3.57^{+3.61}_{-2.50}$	1223^{+161}_{-247}	4861^{+3876}_{-1014}	181^{+1816}_{-134}
Alt.	-750 ± 82	$6.00^{+4.16}_{-3.28}$	1216^{+183}_{-238}	5488^{+2181}_{-888}	337^{+1256}_{-223}

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

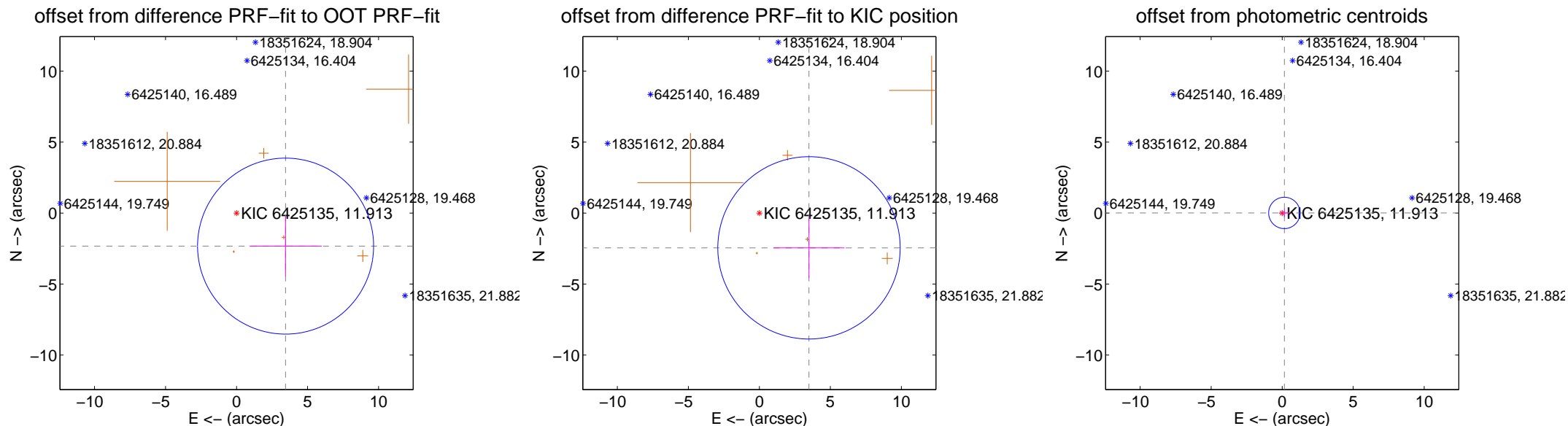
DV Centroid Data

Supplemental centroid analysis for 006425135-07. **Kepler magnitude: 11.91.** Transit SNR 8.21

There are 0 quarters with good PRF difference image offsets

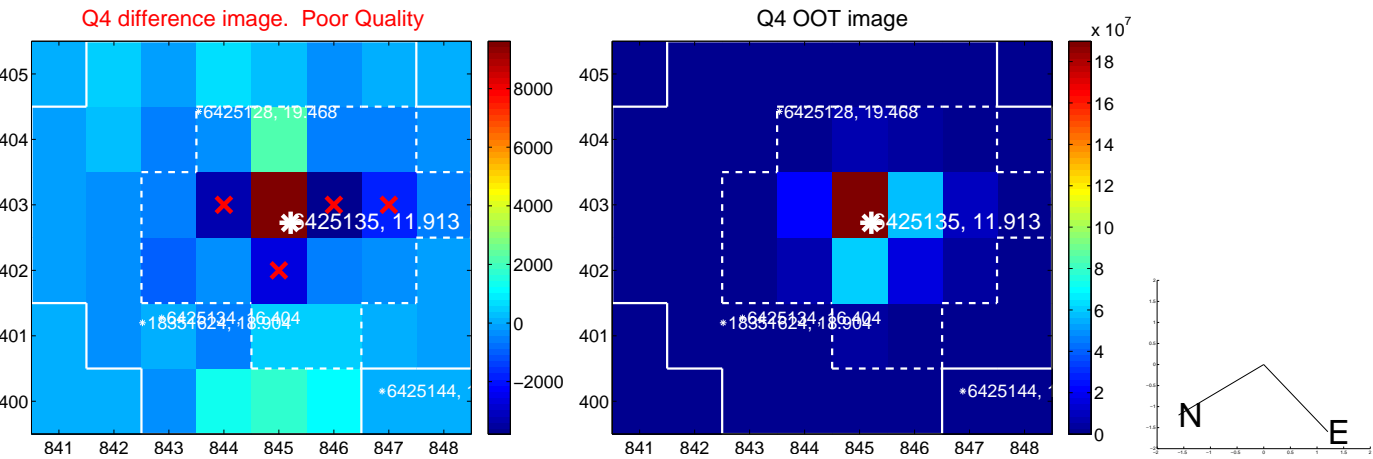
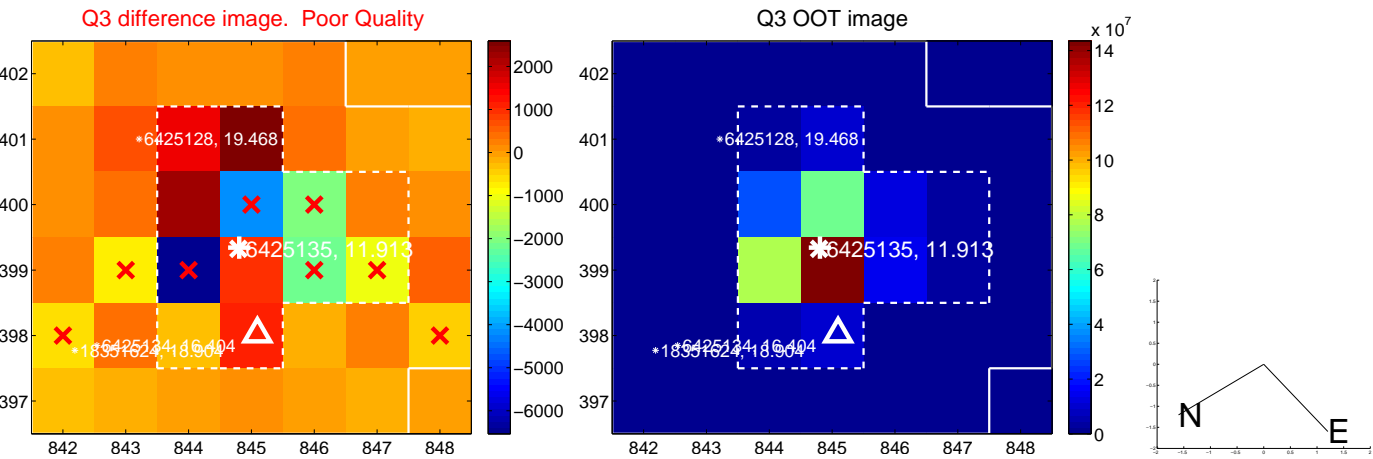
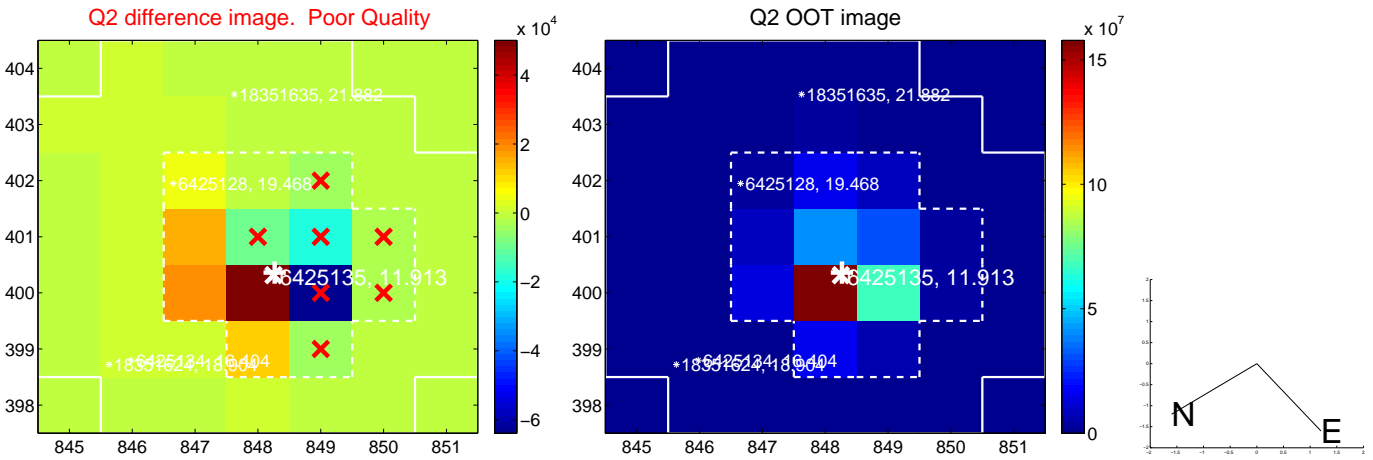
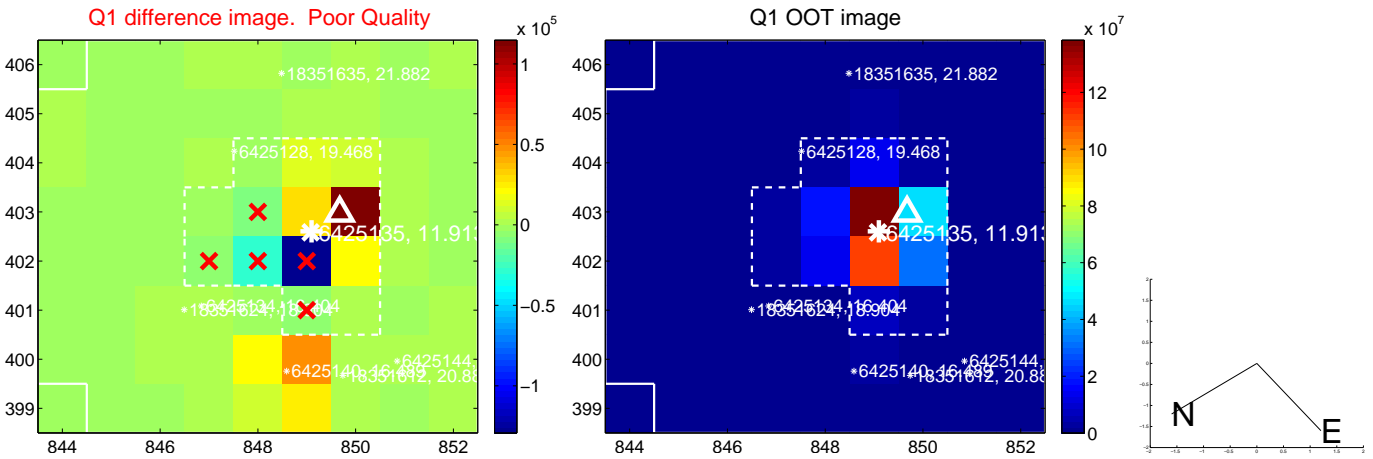
The direct PRF centroid is offset from the target star catalog position by about 0.16 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	4.164 ± 2.066	2.02	-3.453 ± 2.543	-2.327 ± 2.120
PRF-fit source offset from KIC position	4.268 ± 2.140	1.99	-3.495 ± 2.499	-2.450 ± 2.126
photometric centroid source offset	0.15 ± 0.37	0.42	-0.15 ± 0.37	0.01 ± 0.30

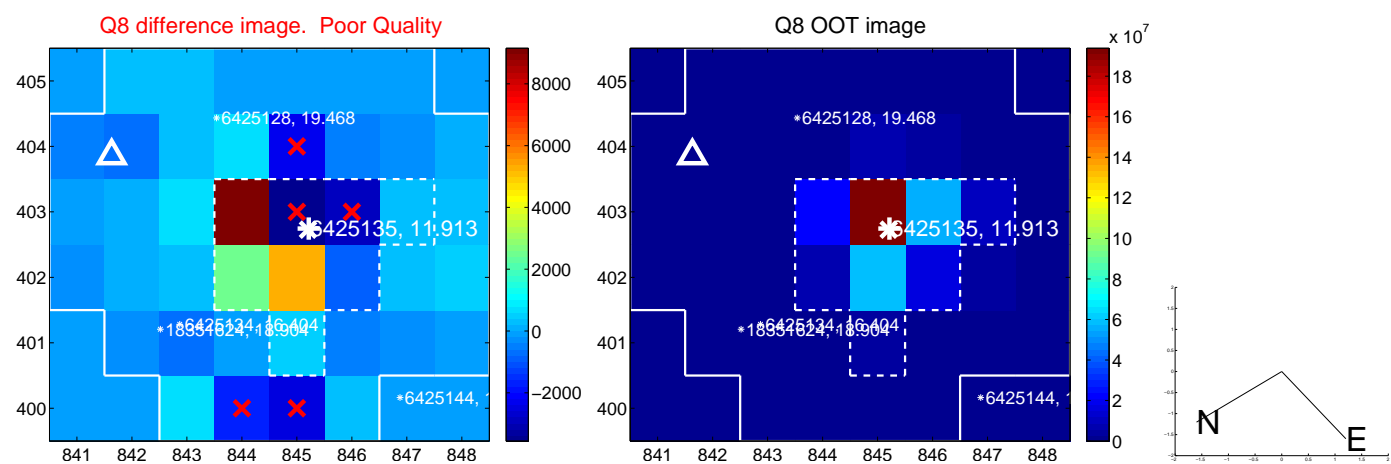
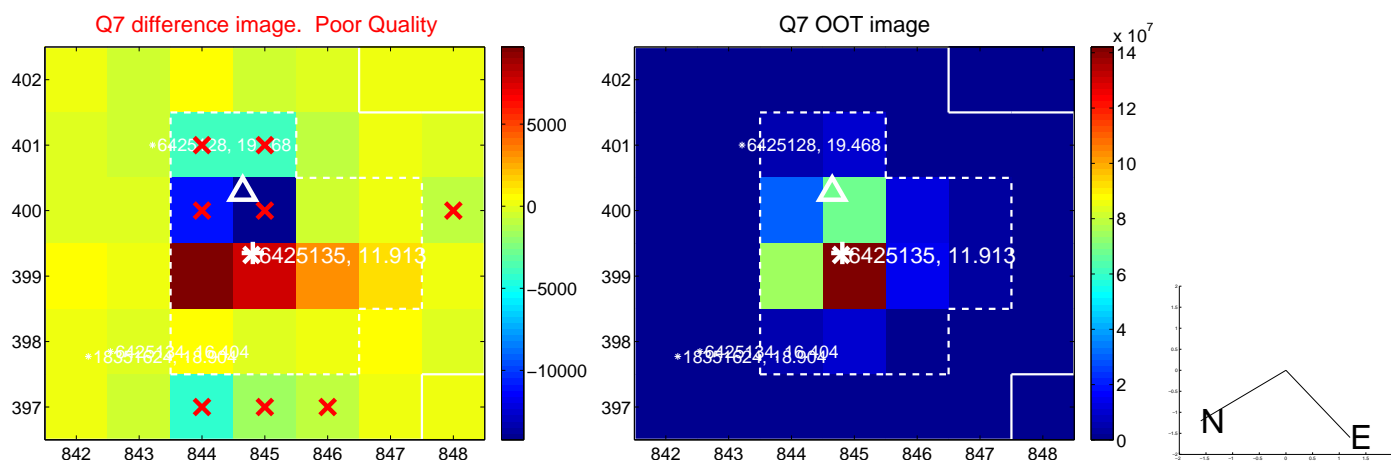
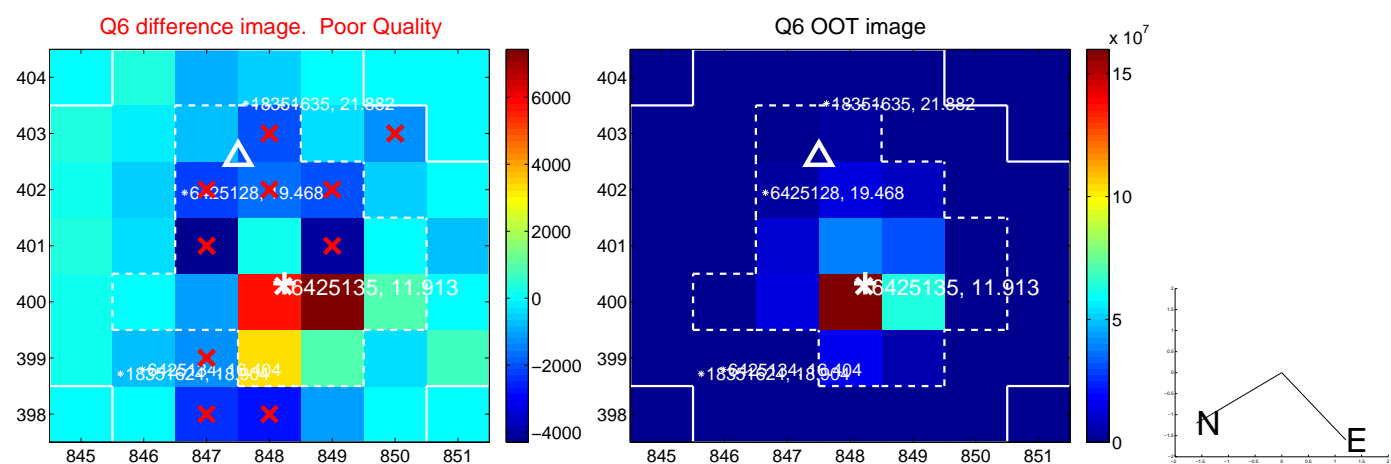
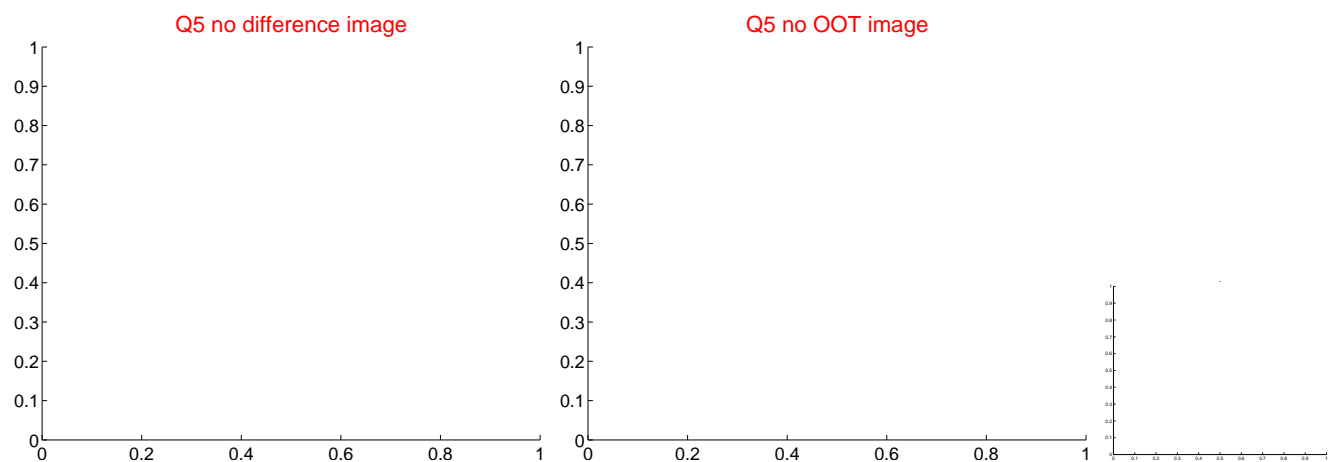


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets;** magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

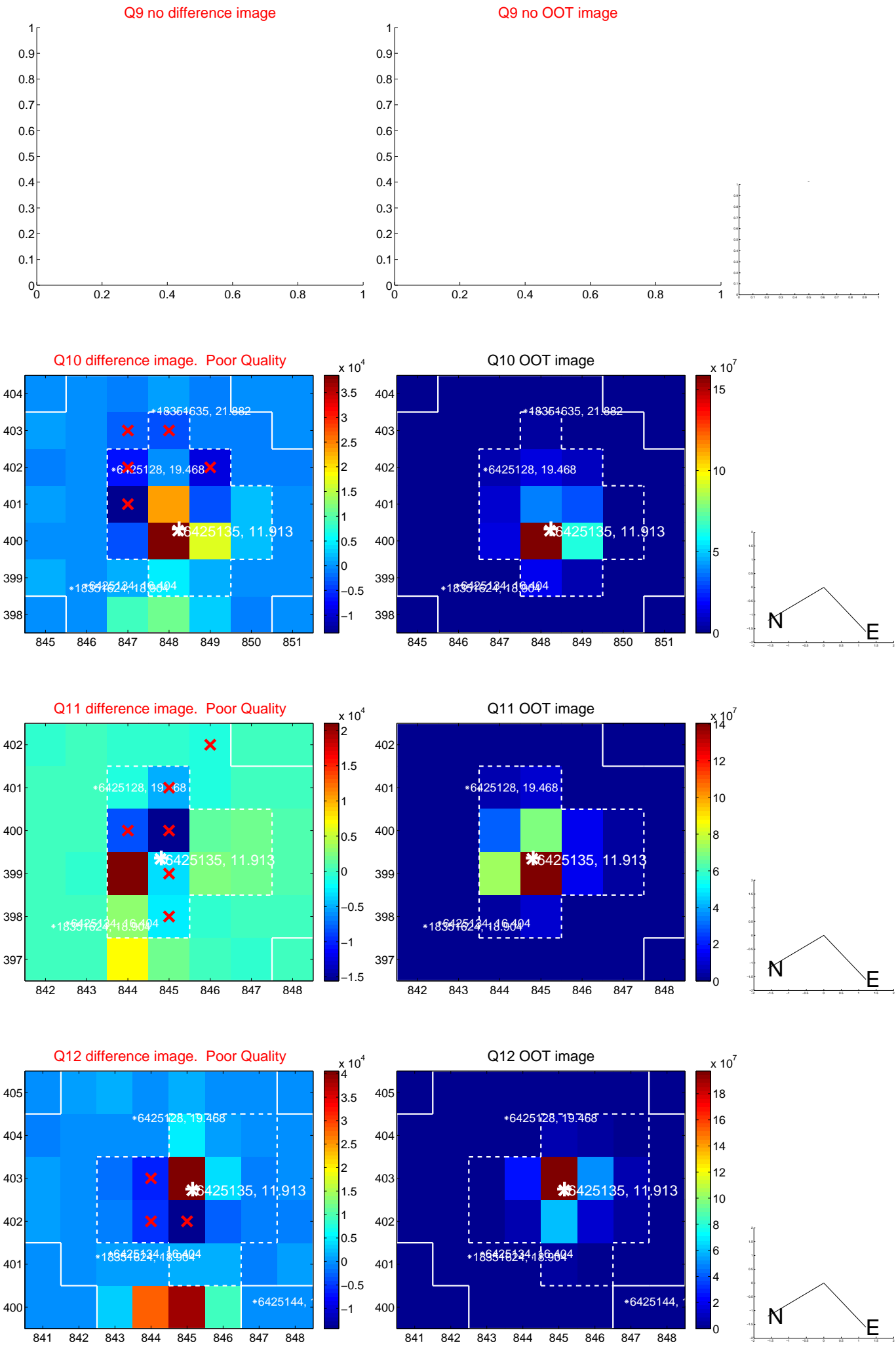
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



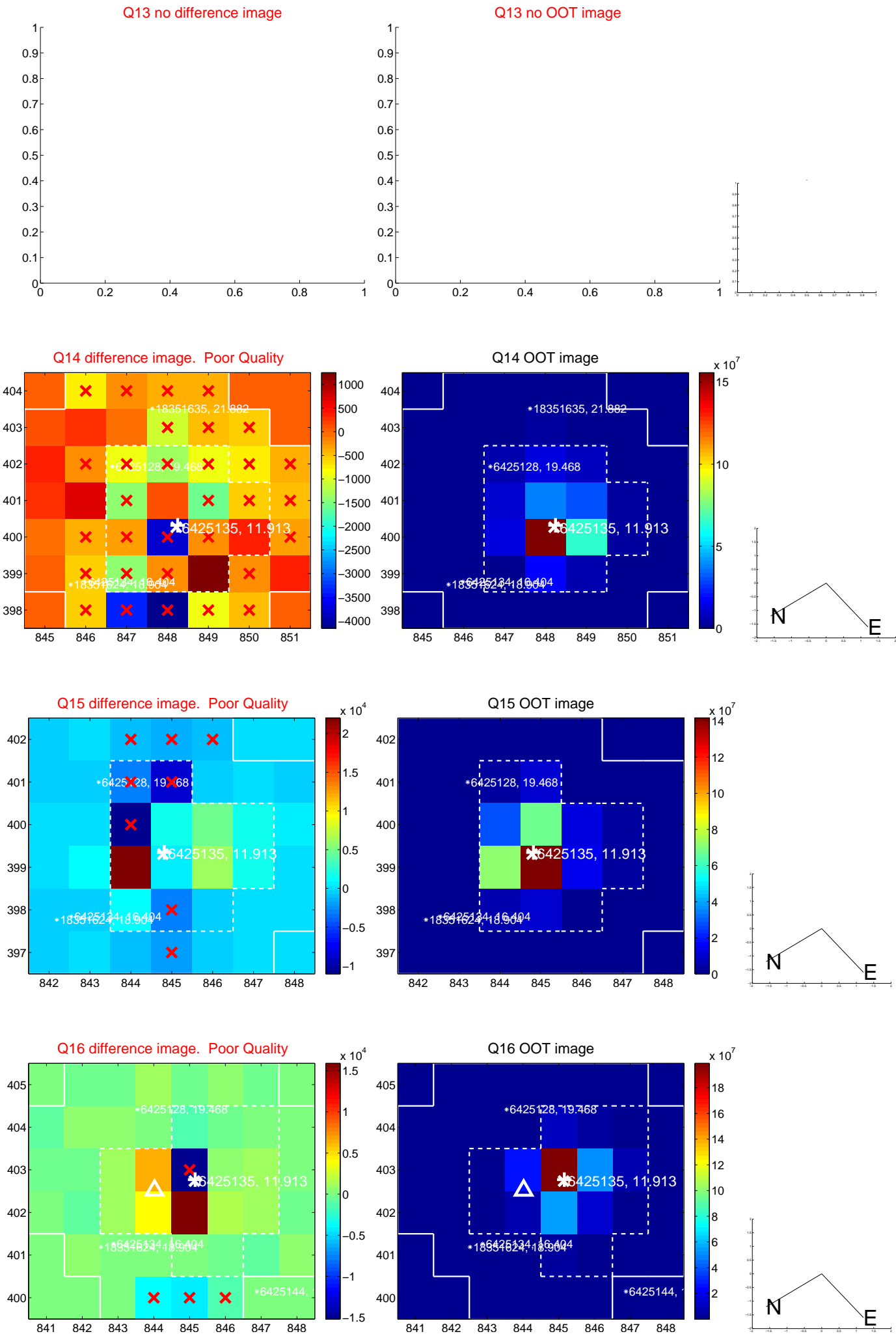
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



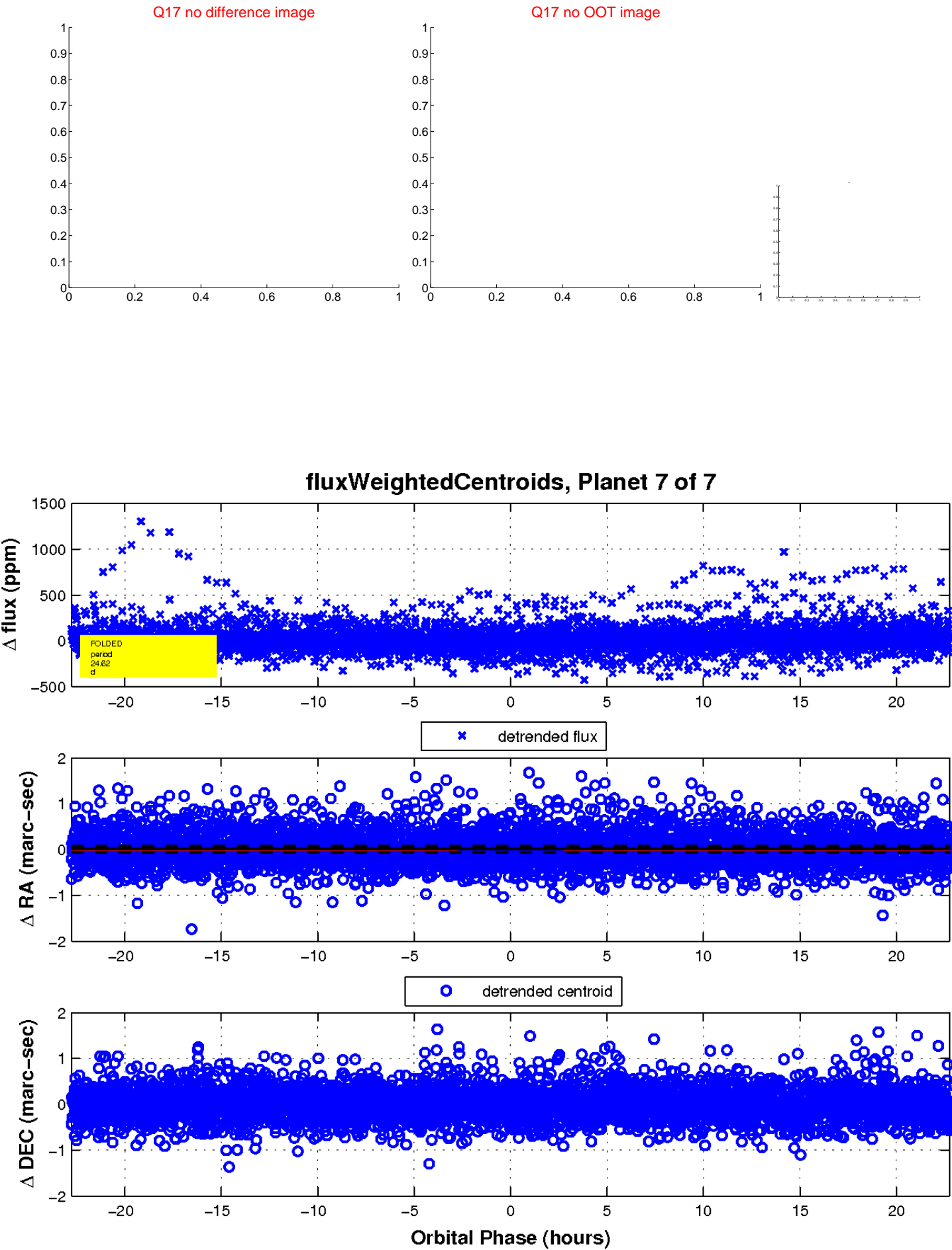
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

