

KIC 006032730

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})
006032730-01	OBS	No	2.262923	132.987678	28.1	12.829	10.0	8.8	2.96	7343	1.61	13526.97
006032730-02	OBS	No	2.262725	131.879279	58.9	2.945	12.6	13.9	2.96	7343	2.73	13528.55
006032730-03	OBS	No	53.618666	135.347292	412.9	2.004	8.3	7.7	2.96	7343	6.35	198.76

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
006032730-01	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—CENT_SATURATED
006032730-02	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—SAME_NTL_PERIOD—CENT_SATURATED
006032730-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_ALT—ALL_TRANS_CHASES—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 006032730-01

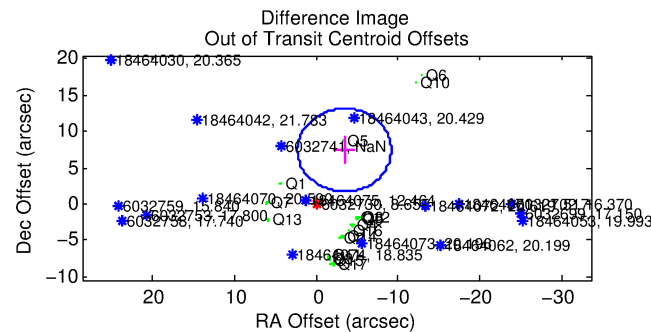
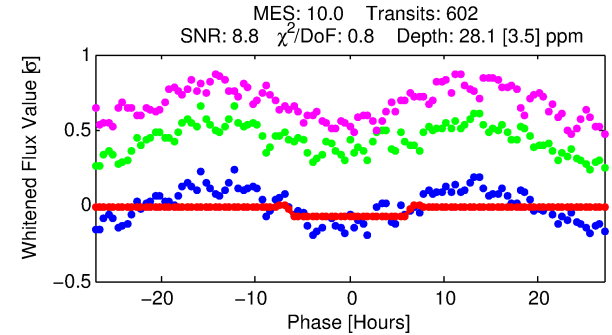
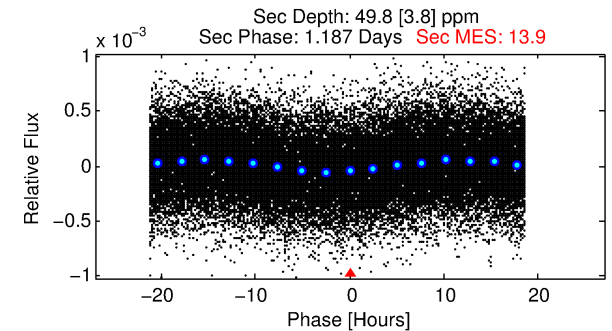
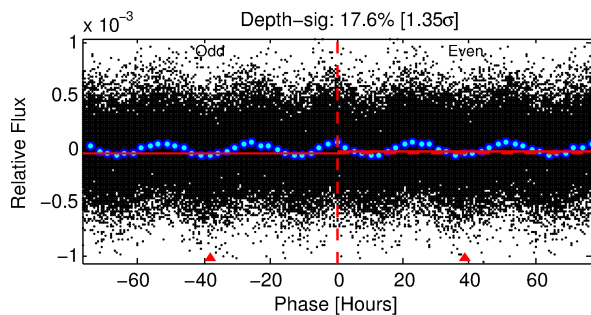
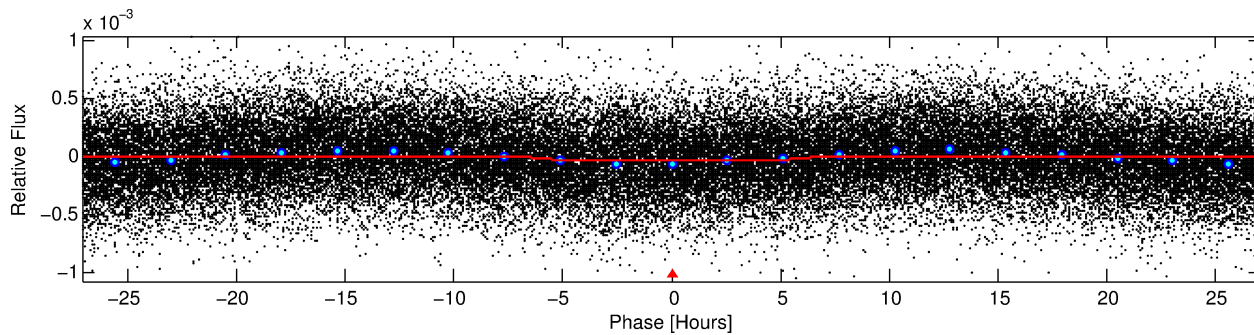
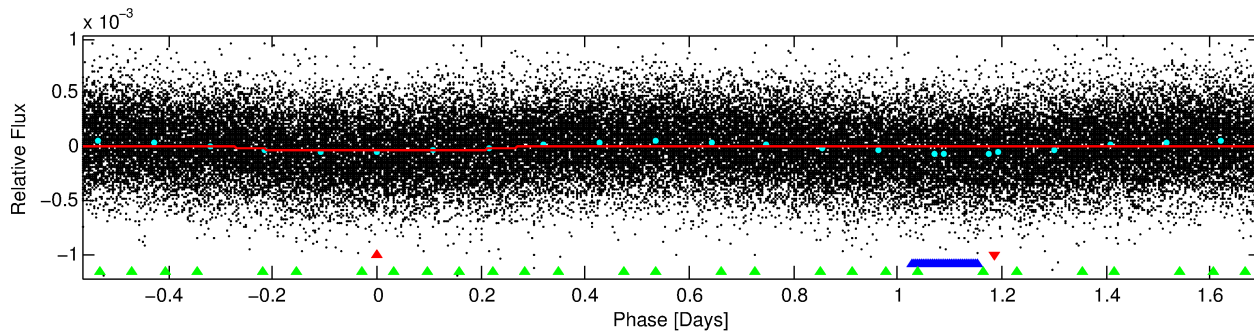
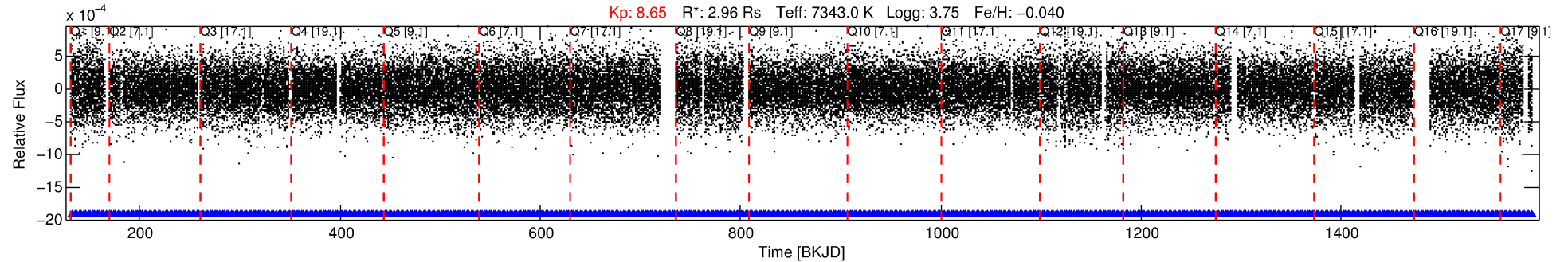
No Significant Match Found

DV One-Page Summary

KIC: 6032730 Candidate: 1 of 3 Period: 2.263 d

KOI: K06141 Corr: No Ephemeris Match

Kp: 8.65 R*: 2.96 Rs Teff: 7343.0 K Logg: 3.75 Fe/H: -0.040



DV Fit Results:

Period = 2.26292 [0.00004] d
Epoch = 132.9877 [0.0091] BKJD
Rp/R* = 0.0050 [0.0038]
a/R* = 1.41 [3.24]
b = 0.44 [8.57]
Seff = 13526.97 [9732.83]
Teff = 2750 [495] K
Rp = 1.62 [1.40] Re
a = 0.0410 [0.0173] AU
Ag = 17.67 [29.76] [0.56σ]
Teffp = 8717 [3365] K [1.75σ]

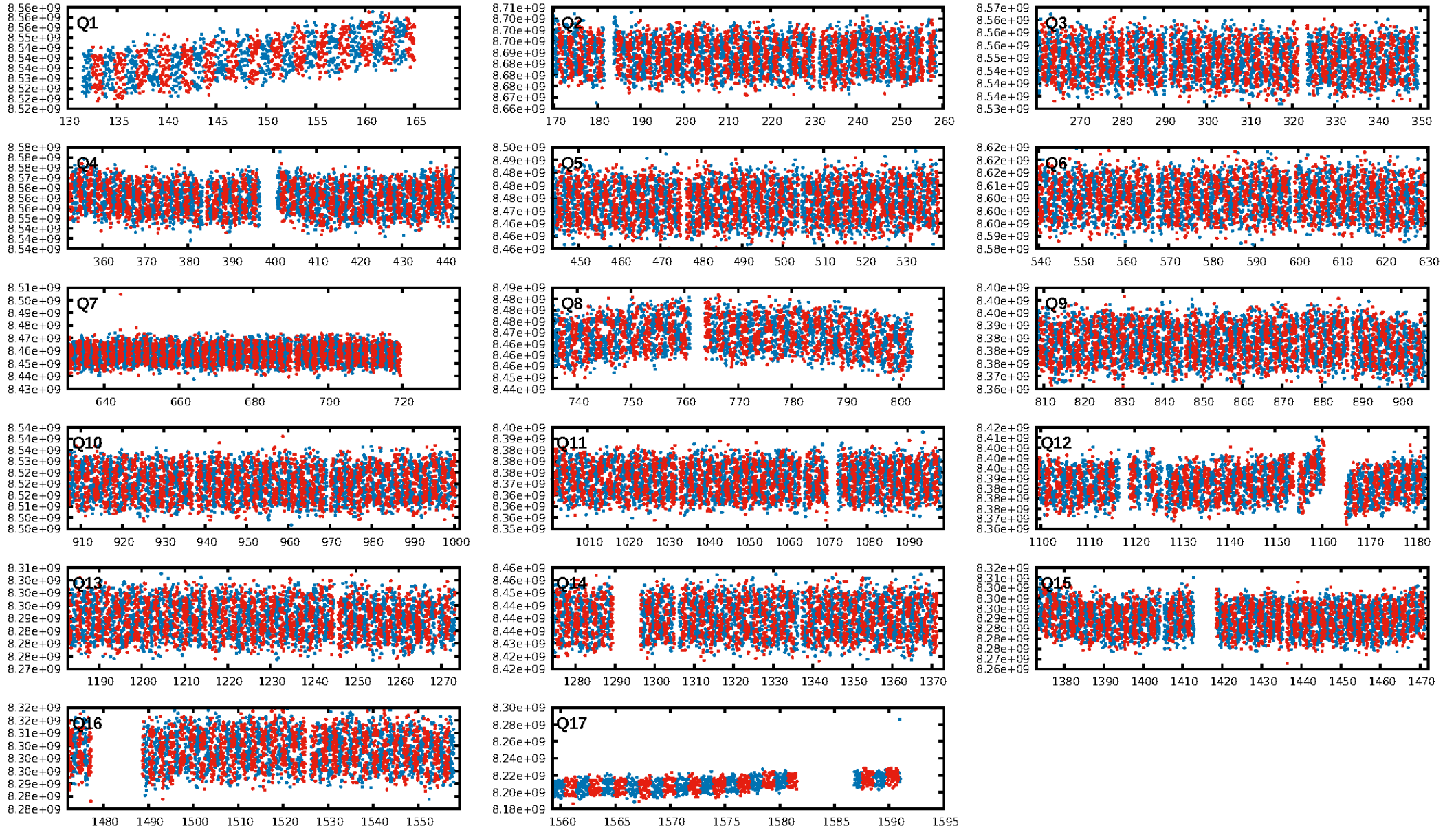
DV Diagnostic Results:

ShortPeriod-sig: 0.0% [0.00σ]
LongPeriod-sig: 100.0% [94.92σ]
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 2.12e-35
RollingBand-fgt: 1.00 [575/575]
GhostDiagnostic-chr: N/A
Centroid-sig: N/A
Centroid-so: 0.672 arcsec [0.58σ]
OotOffset-rm: 8.173 arcsec [4.28σ]
KicOffset-rm: 10.769 arcsec [5.26σ]
OotOffset-st: 4/4/4/5 [17]
KicOffset-st: 4/4/4/5 [17]
DiffImageQuality-fgm: 0.00 [0/17]
DiffImageOverlap-fno: 1.00 [17/17]

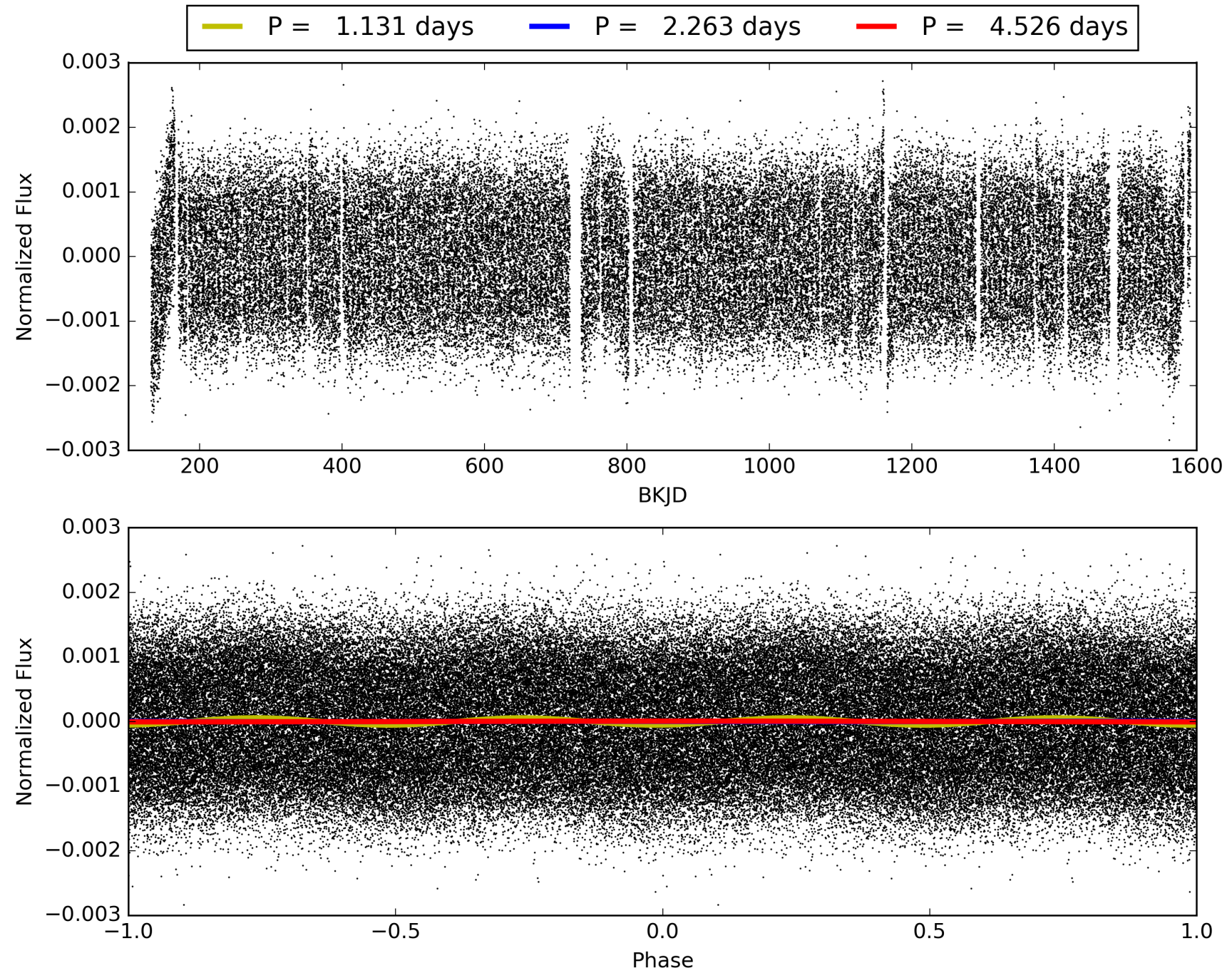
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 01-Feb-2016 07:33:33 Z

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

TCE 006032730-01, PDC Light Curves

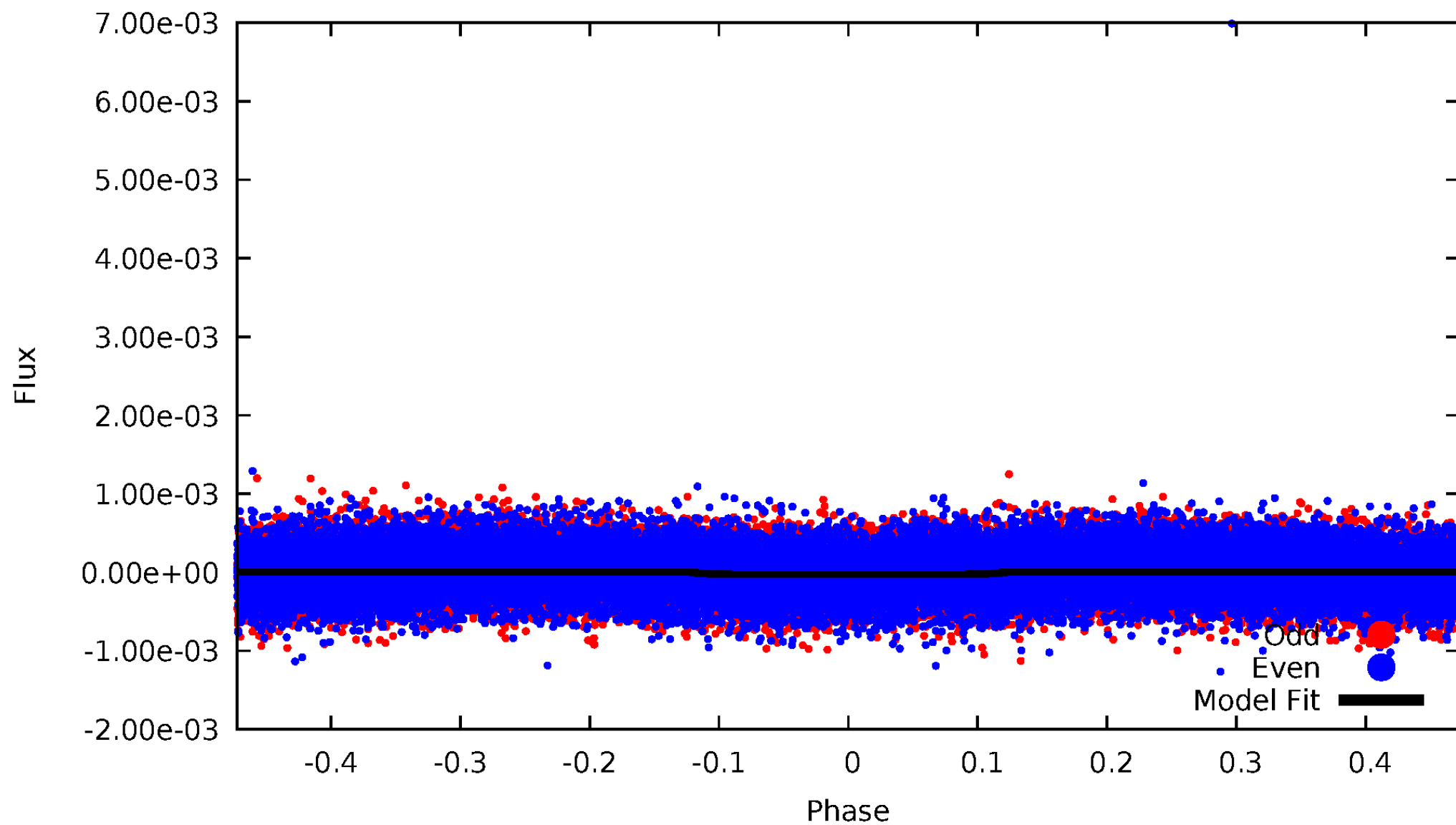


TCE 006032730-01



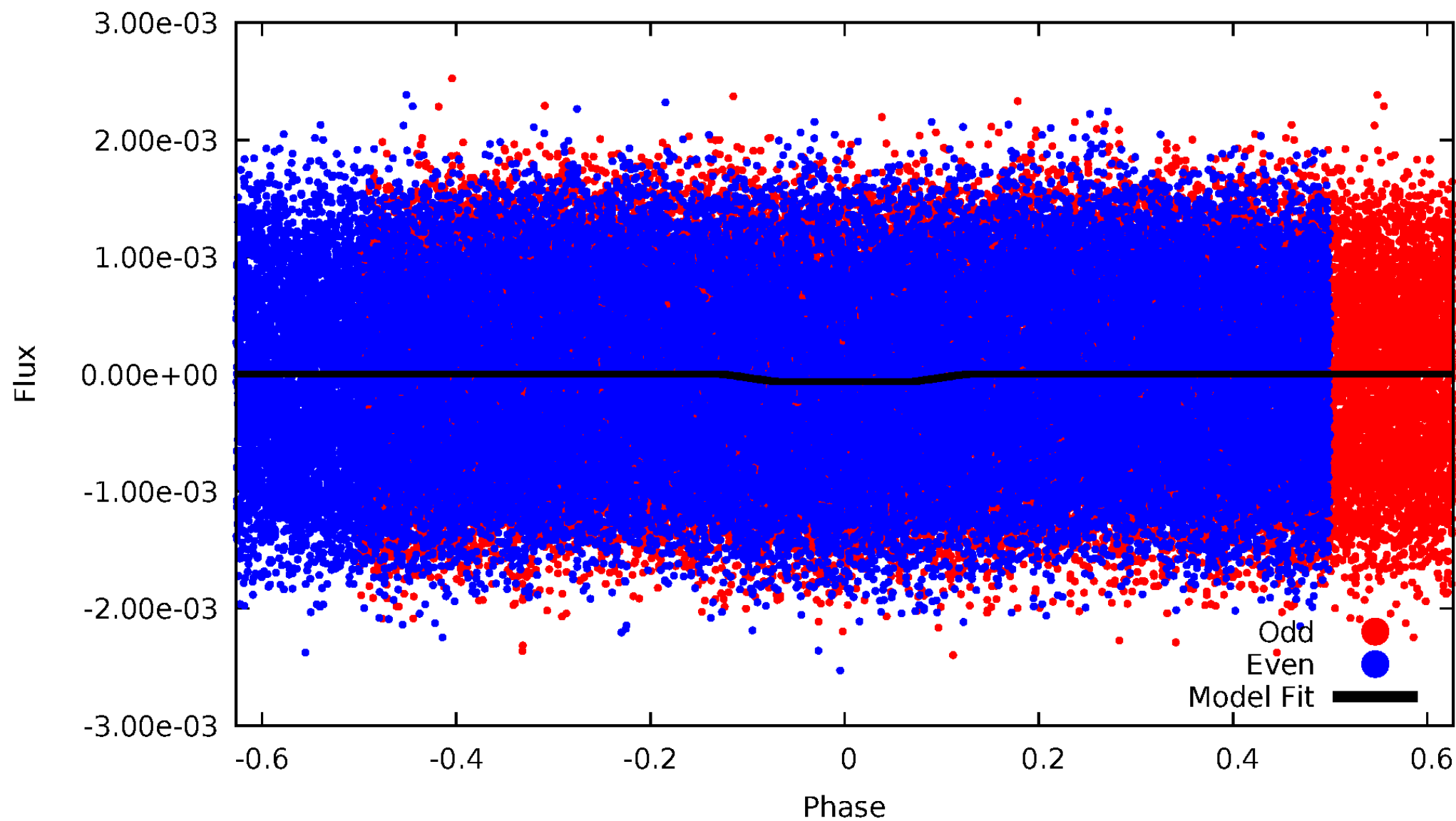
DV Odd/Even

TCE 006032730-01



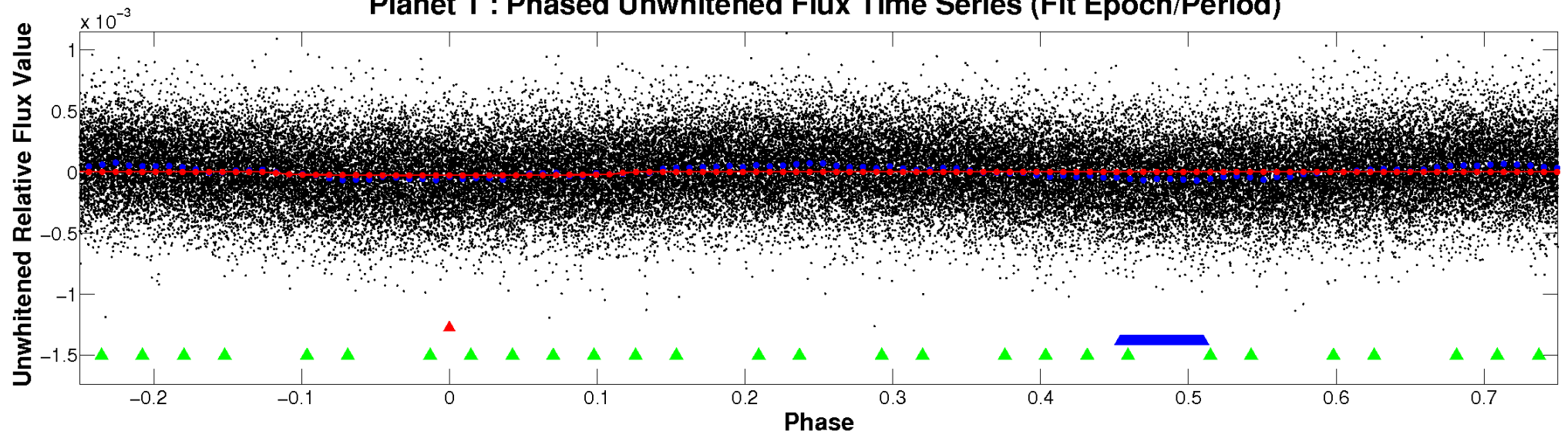
ALT Odd/Even

TCE 006032730-01

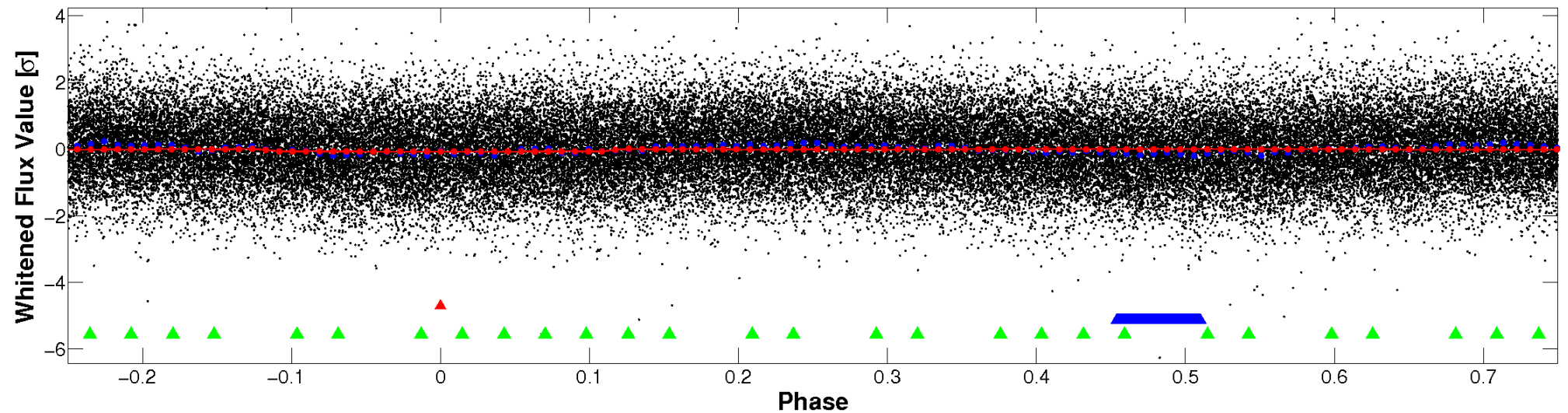


Non-Whitened Vs. Whitened Light Curve

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

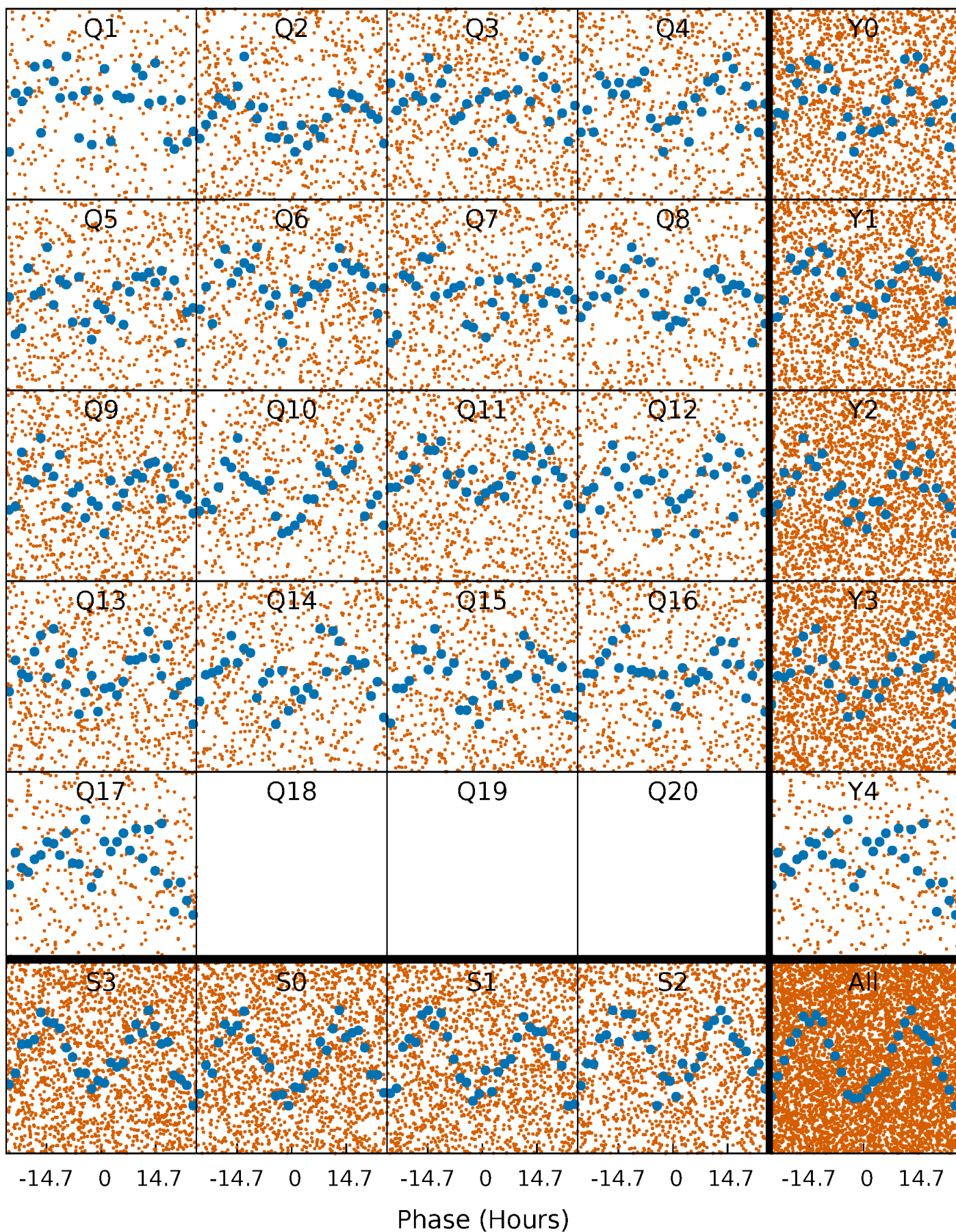


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



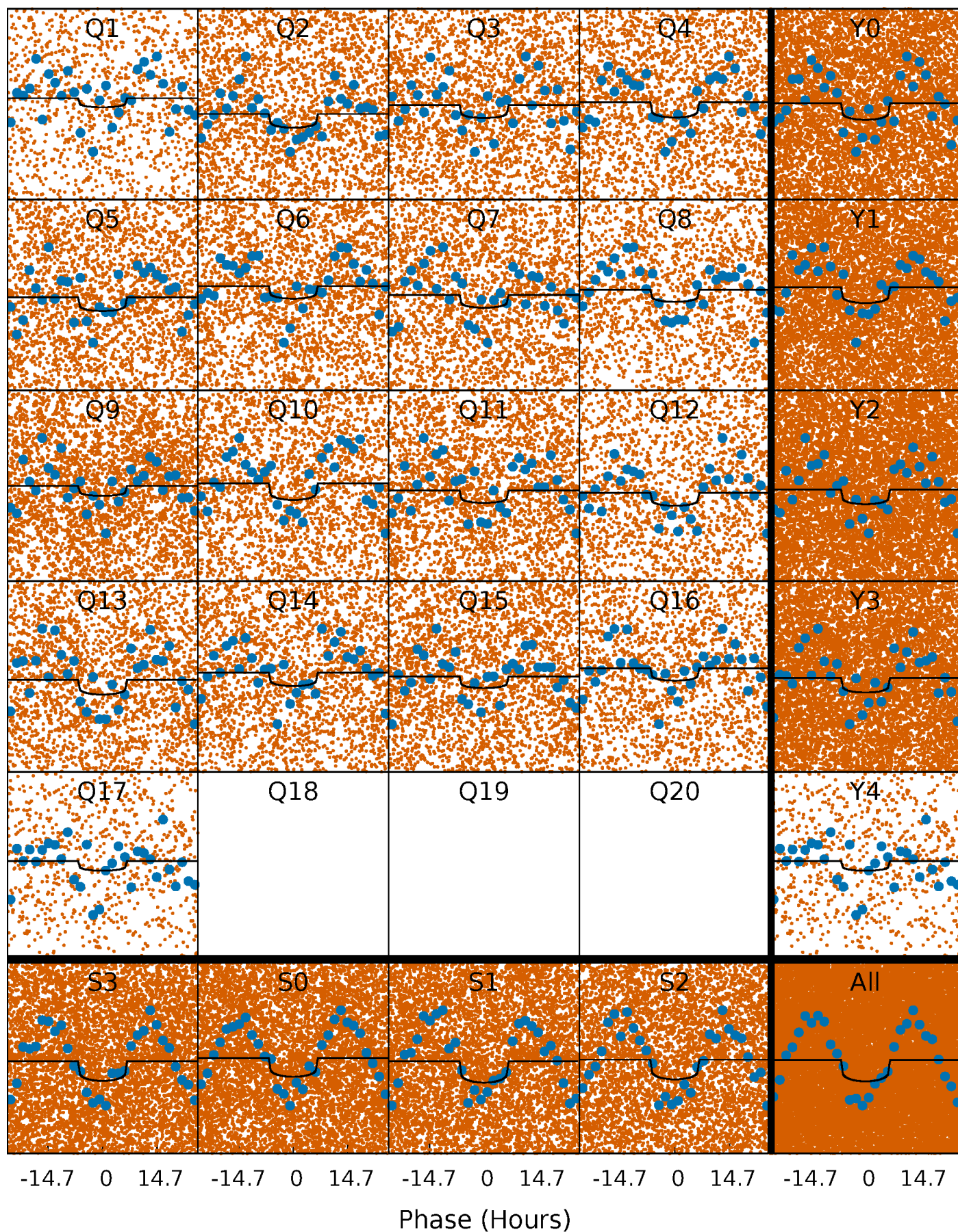
PDC Quarter-Phased Transit Curves

TCE 006032730-01 P= 2.262923 Days $T_0=132.987678$ (BKJD)



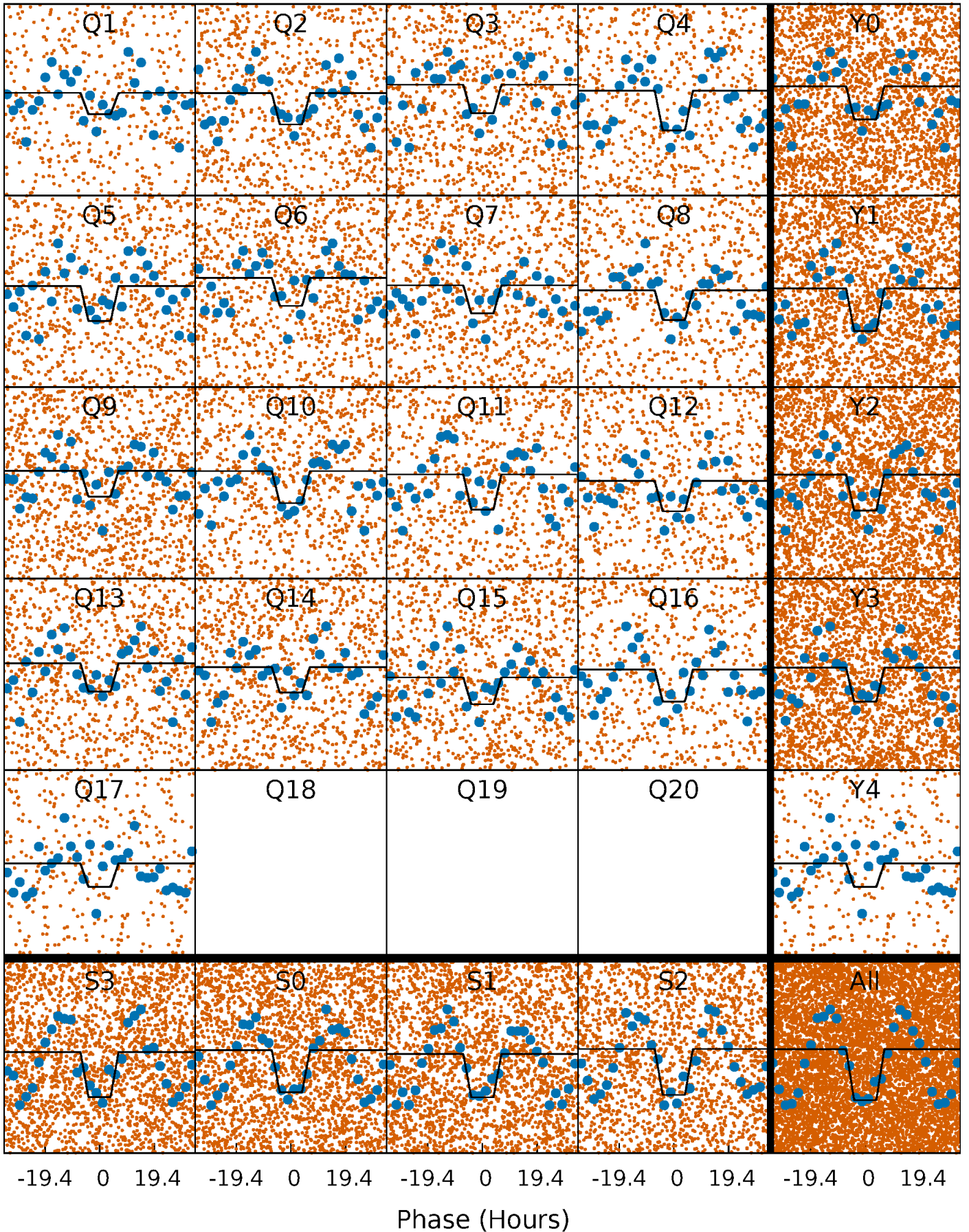
DV Quarter-Phased Transit Curves

TCE 006032730-01 P= 2.262923 Days $T_0=132.987678$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

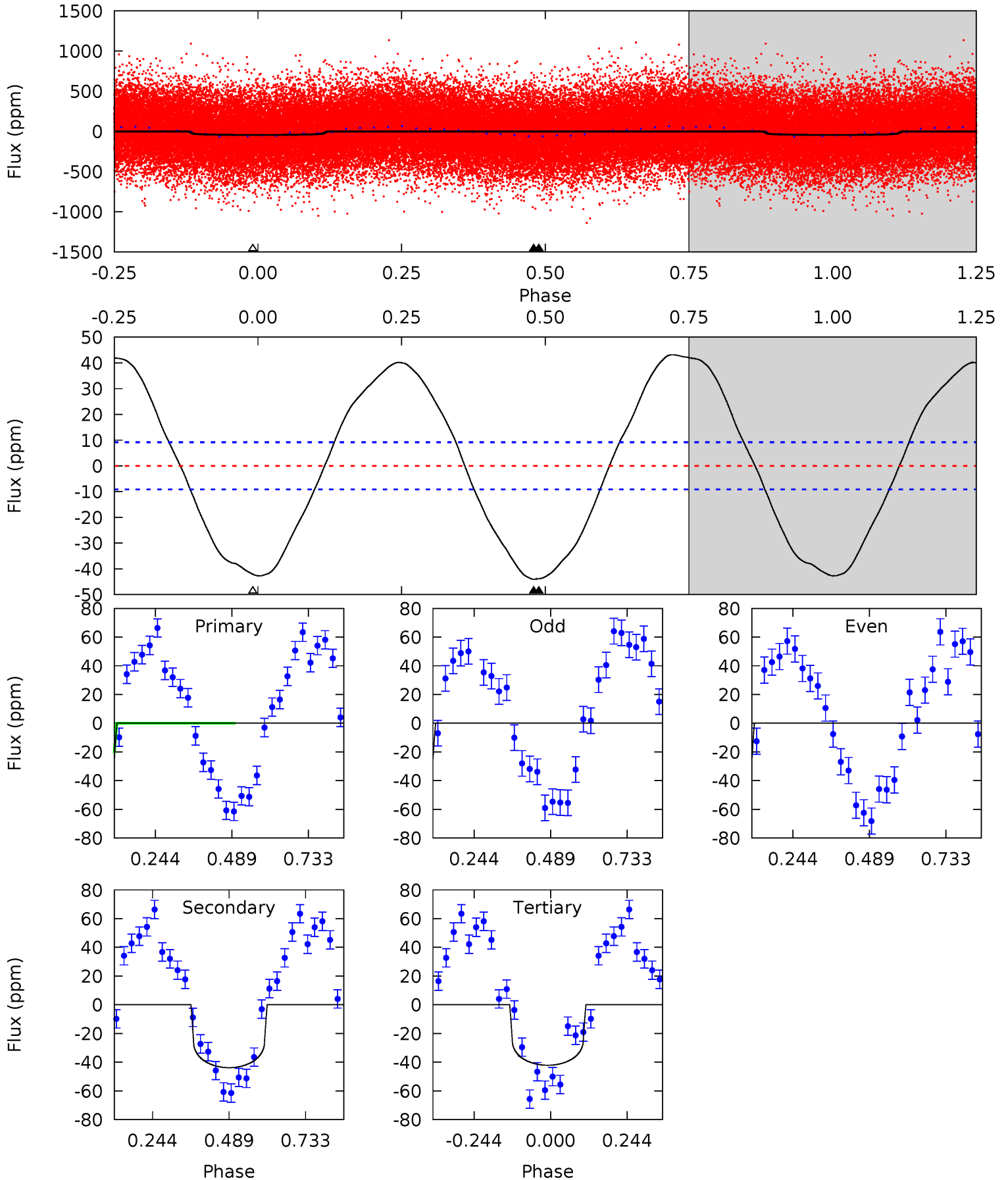
TCE 006032730-01 P= 2.262960 Days $T_0=132.945657$ (BKJD)



DV Model-Shift Uniqueness Test

006032730-01, P = 2.262923 Days, E = 130.724755 Days

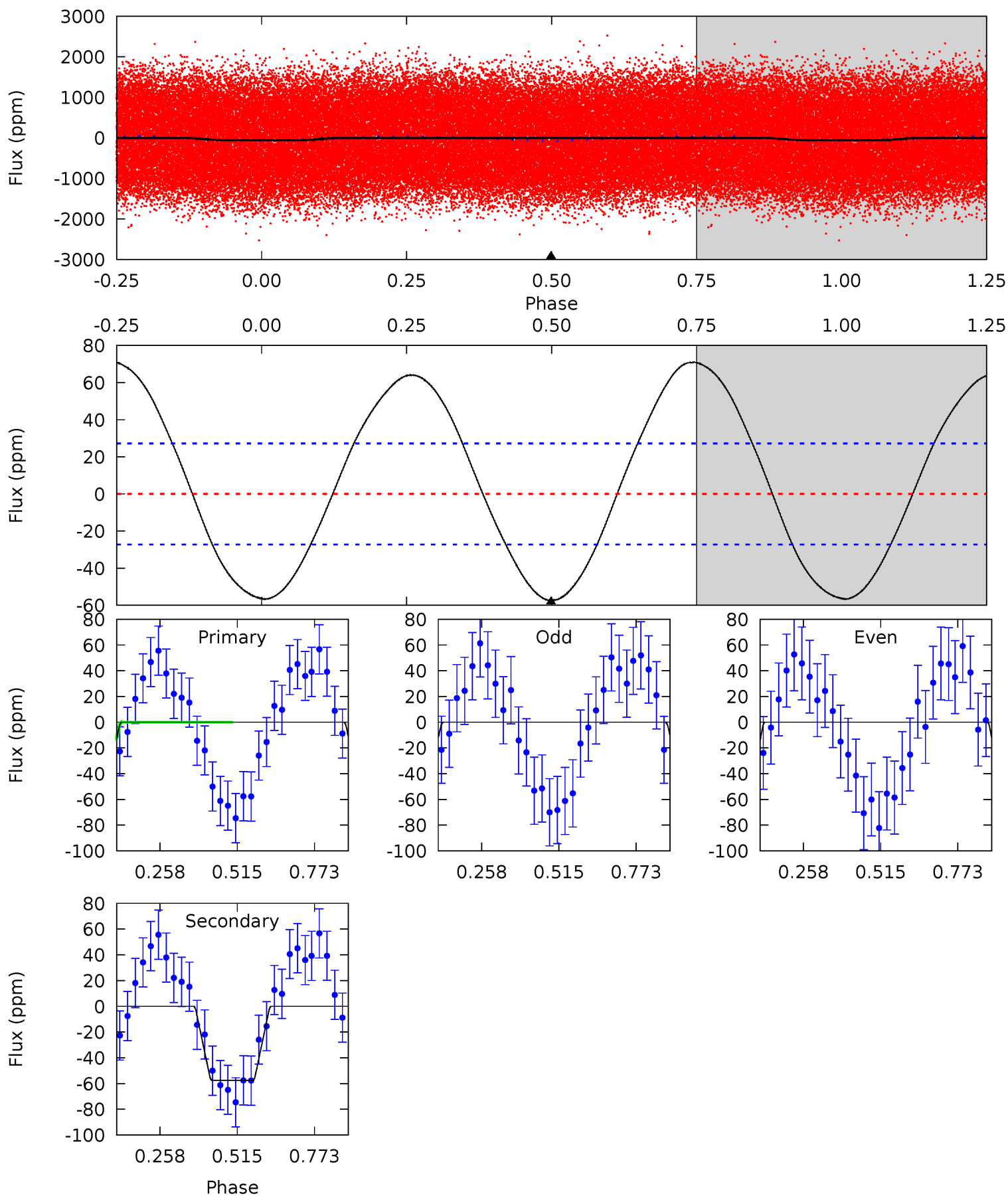
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
21.1	21.0	20.2	0	4.37	1.16	14.3	0.91	21.1	0.81	21.0	0.98	1.04	0.50	4.35



Alt Model-Shift Uniqueness Test

006032730-01, P = 2.262960 Days, E = 130.682697 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	9.20	0	0	4.36	1.13	6.85	9.20	9.20	9.20	9.20	1.00	0.95	0.55	0.66



Stellar Parameters For KIC 006032730

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	7343^{+203}_{-330}	$3.751^{+0.417}_{-0.098}$	$-0.040^{+0.250}_{-0.300}$	$2.955^{+0.435}_{-1.219}$	$1.793^{+0.194}_{-0.389}$	$0.098^{+0.342}_{-0.031}$
	+3%/-4%	+11%/-3%	+625%/-750%	+15%/-41%	+11%/-22%	+349%/-32%
Source	KIC0	KIC0	KIC0	DSEP		

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

Secondary Eclipse Parameters for KIC 006032730-01 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-44 ± 2	$1.59^{+1.19}_{-0.91}$	3746^{+264}_{-430}	8223^{+7377}_{-2167}	16^{+67}_{-11}
Alt.	-57 ± 6	$2.31^{+1.30}_{-1.03}$	3719^{+268}_{-421}	7065^{+3546}_{-1460}	10^{+23}_{-6}

T_{max} = Theoretical Maximum Planetary Temperature
 T_{obs} = Observed Planetary Temperature (Assuming $A=0.3$)
 A_{obs} = Observed Albedo (Assuming $T=0$)

If a secondary eclipse is present, the system is likely an EB if $T_{obs} \gg T_{max}$ AND $A_{obs} \gg 1.0$

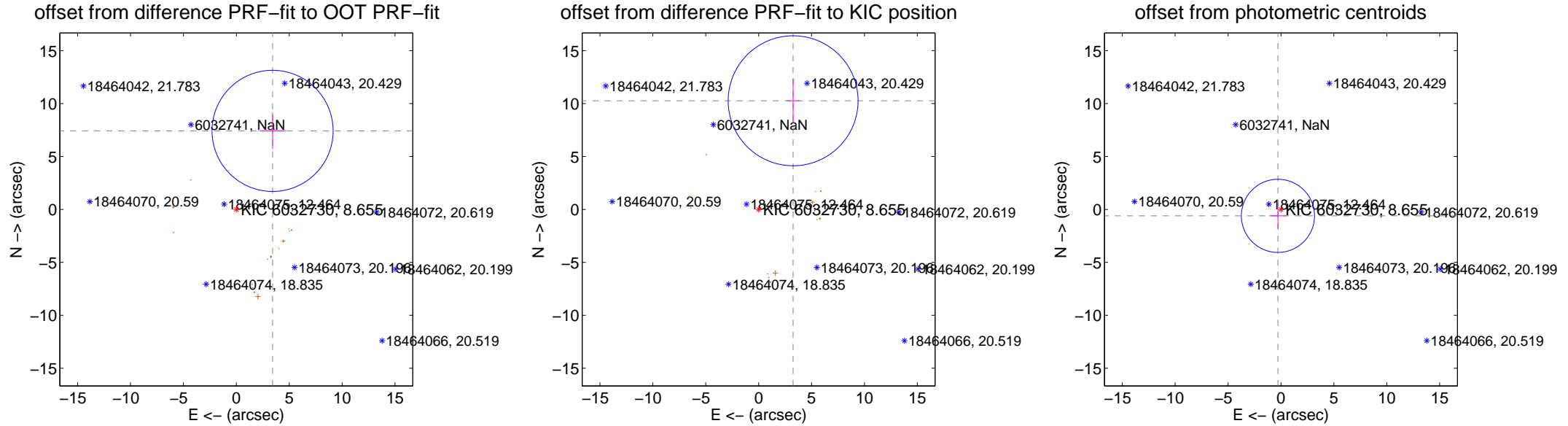
DV Centroid Data

Supplemental centroid analysis for 006032730-01. **Kepler magnitude: 8.65.** Transit SNR 8.77

There are 0 quarters with good PRF difference image offsets

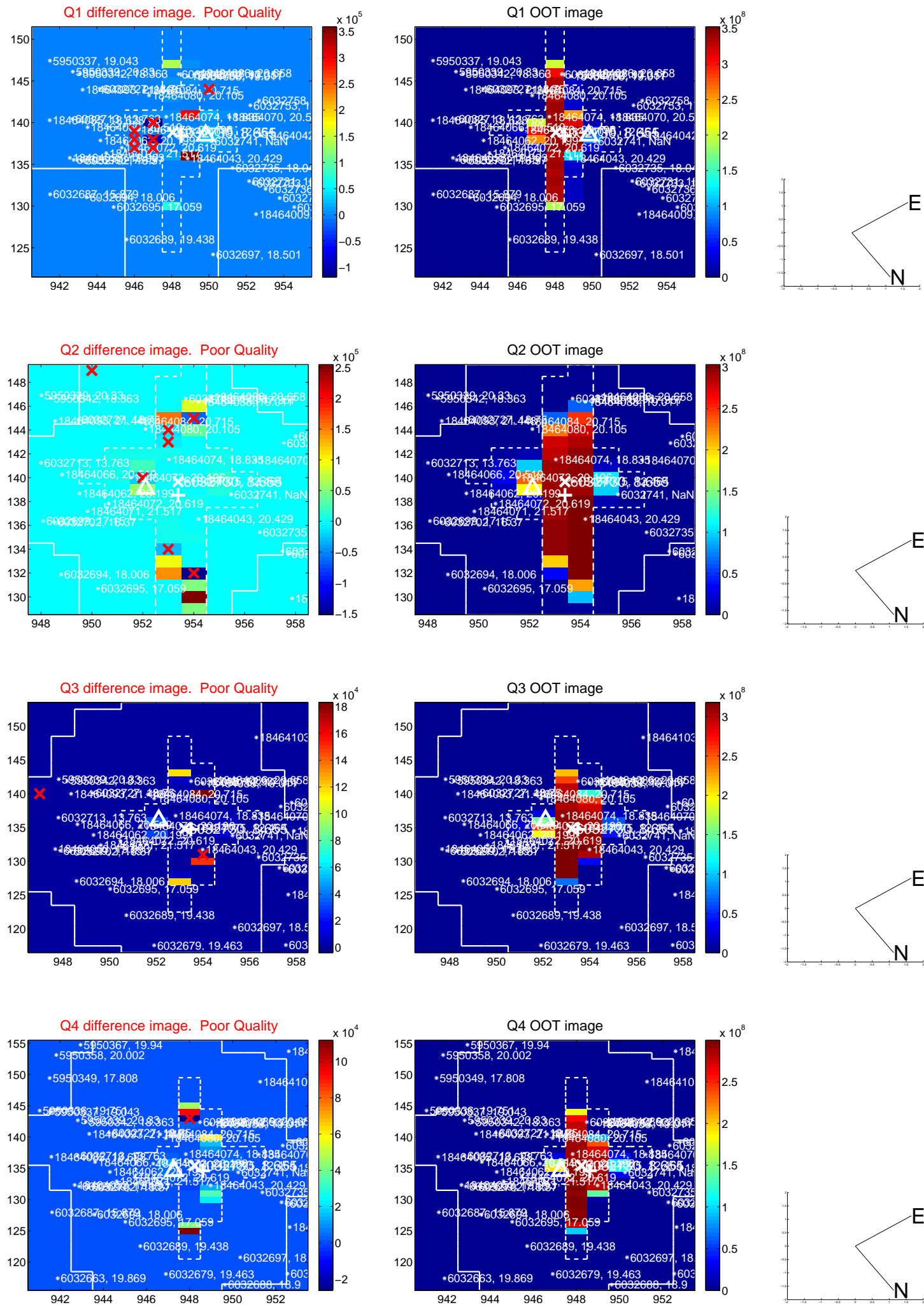
The OOT PRF centroid is offset from the target star catalog position by about 2.26 arcsec so the offset from difference PRF-fit to OOT-fit may be invalid.

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	8.173 ± 1.908	4.28	-3.426 ± 1.233	7.421 ± 1.737
PRF-fit source offset from KIC position	10.769 ± 2.046	5.26	-3.258 ± 0.602	10.264 ± 2.138
photometric centroid source offset	0.67 ± 1.15	0.58	0.29 ± 0.81	-0.61 ± 1.22

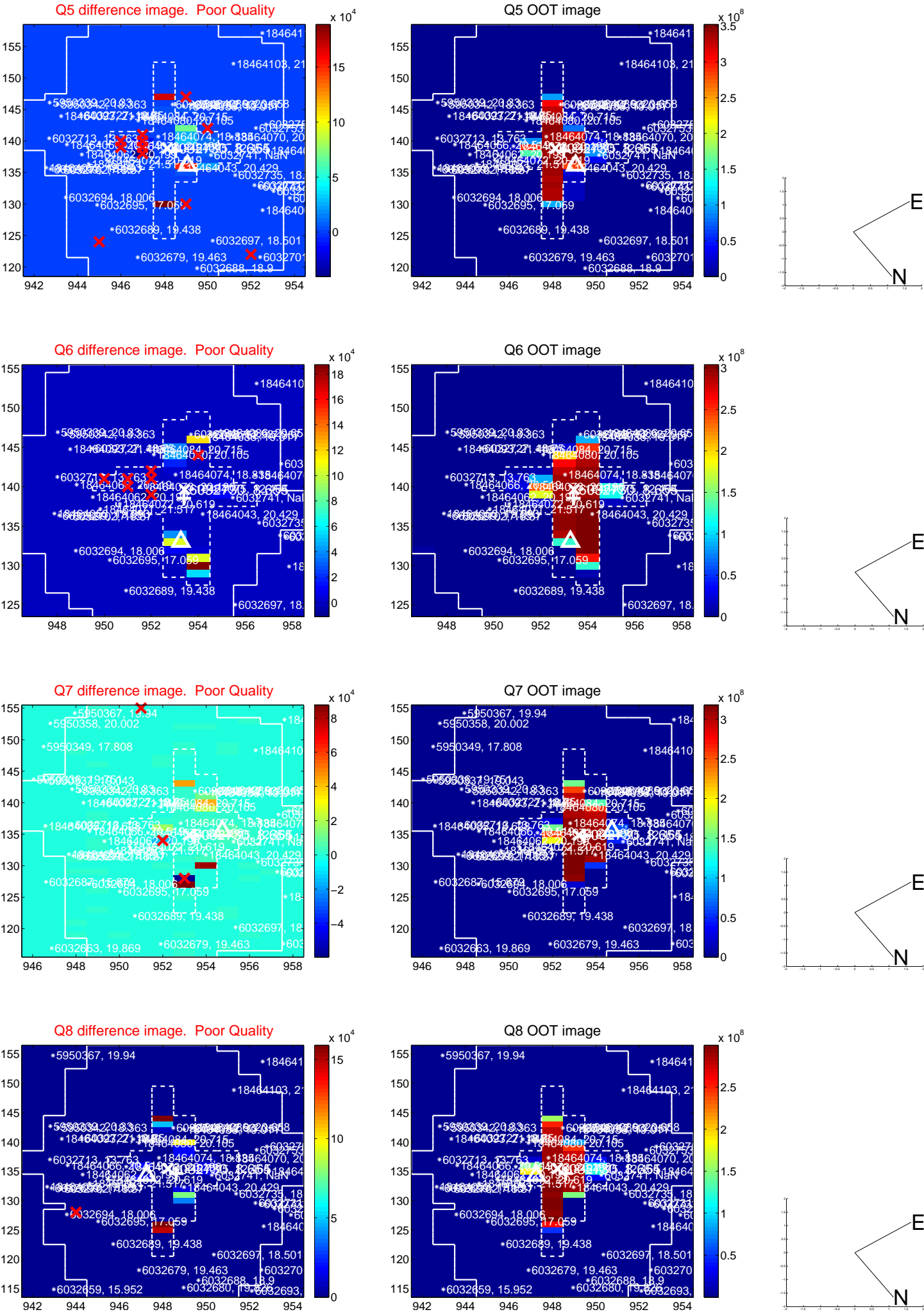


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets;** magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

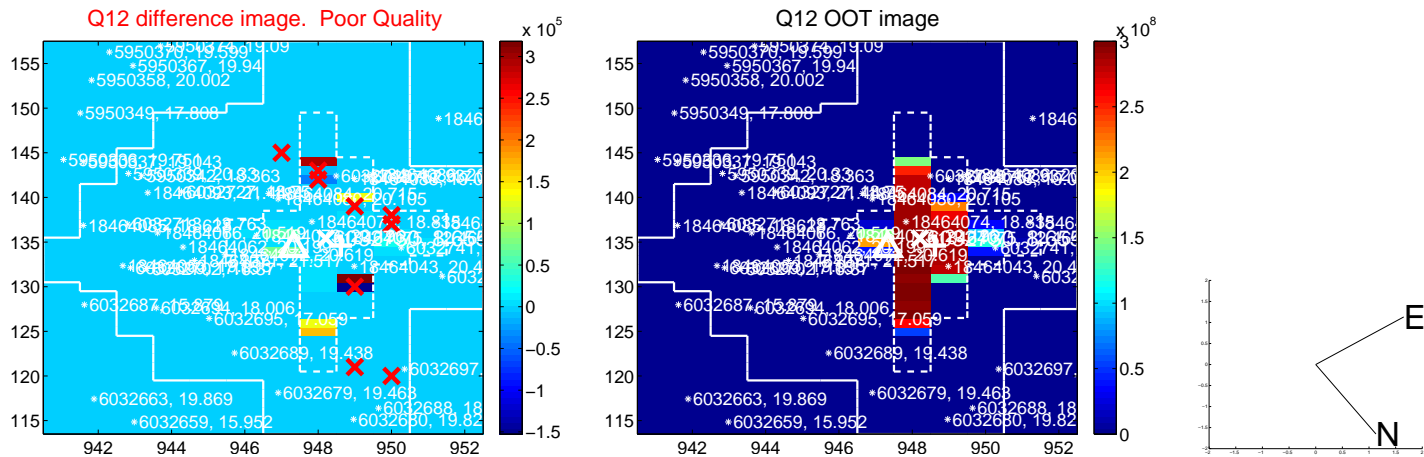
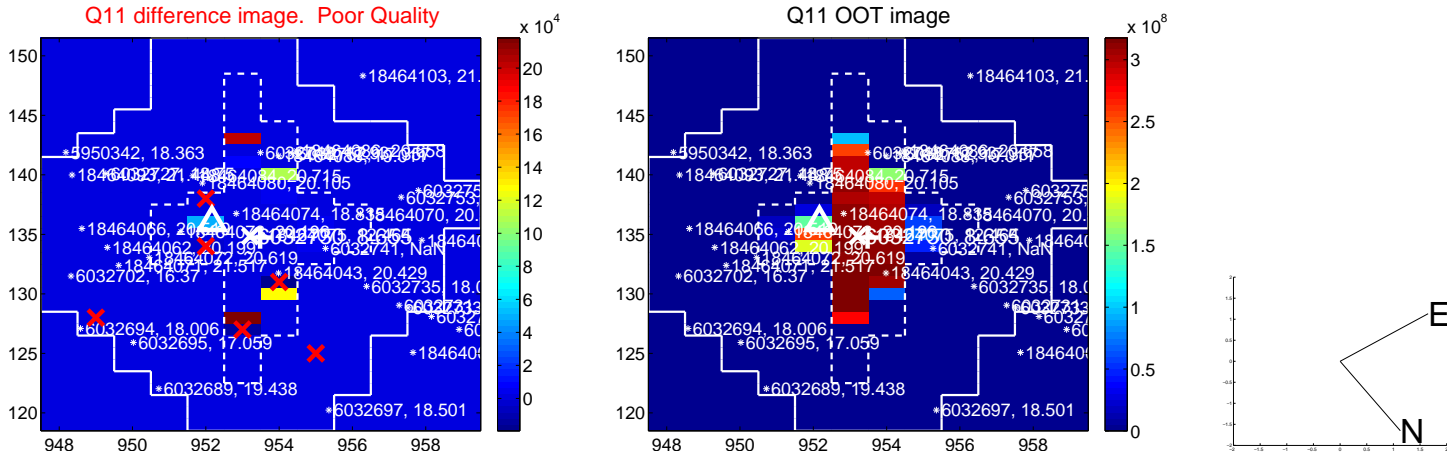
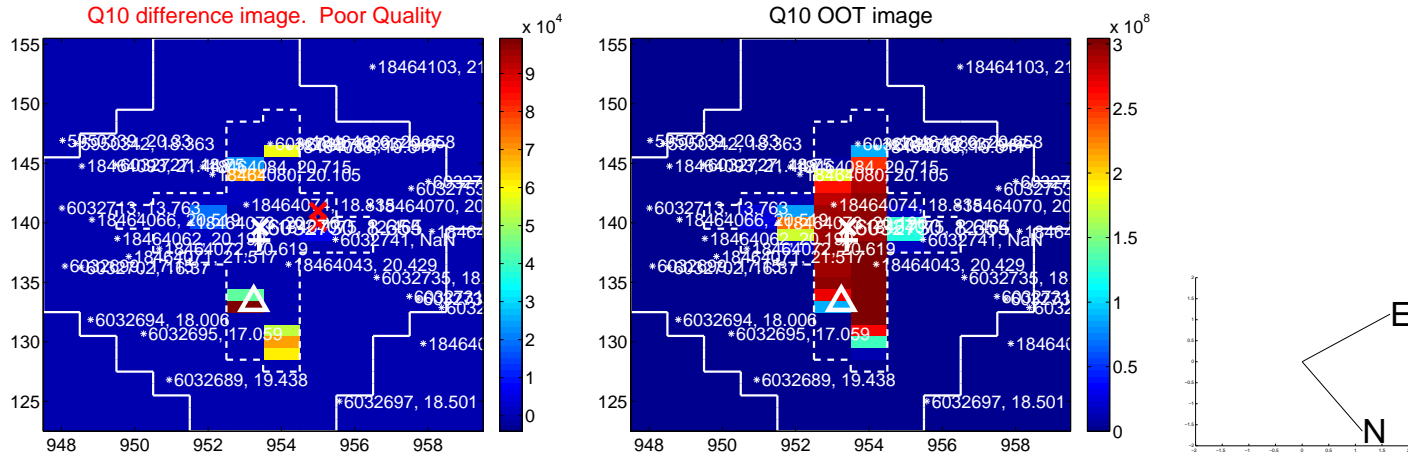
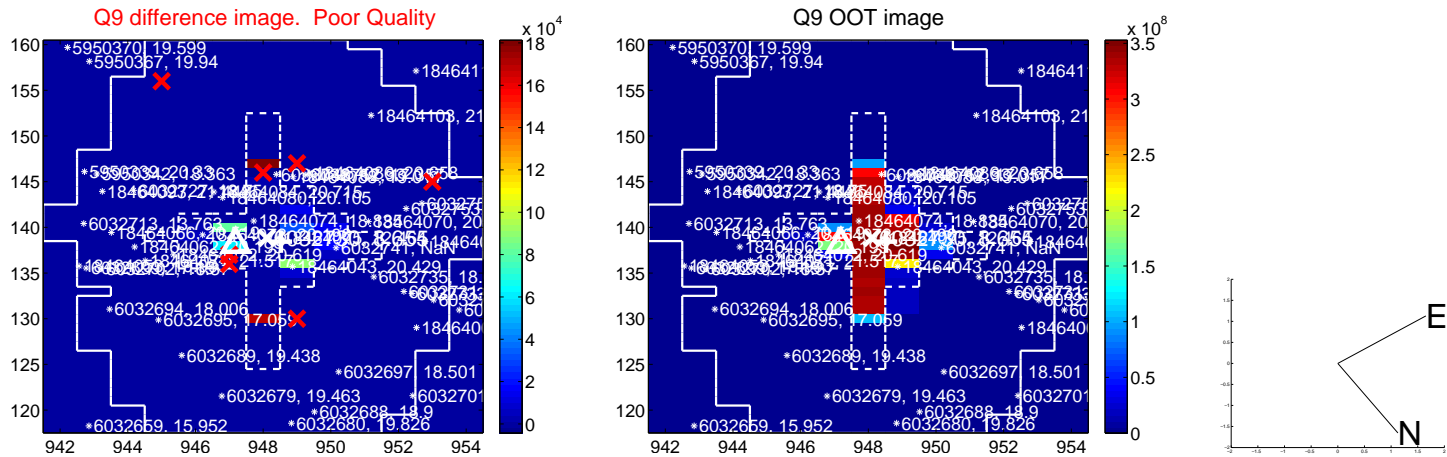
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



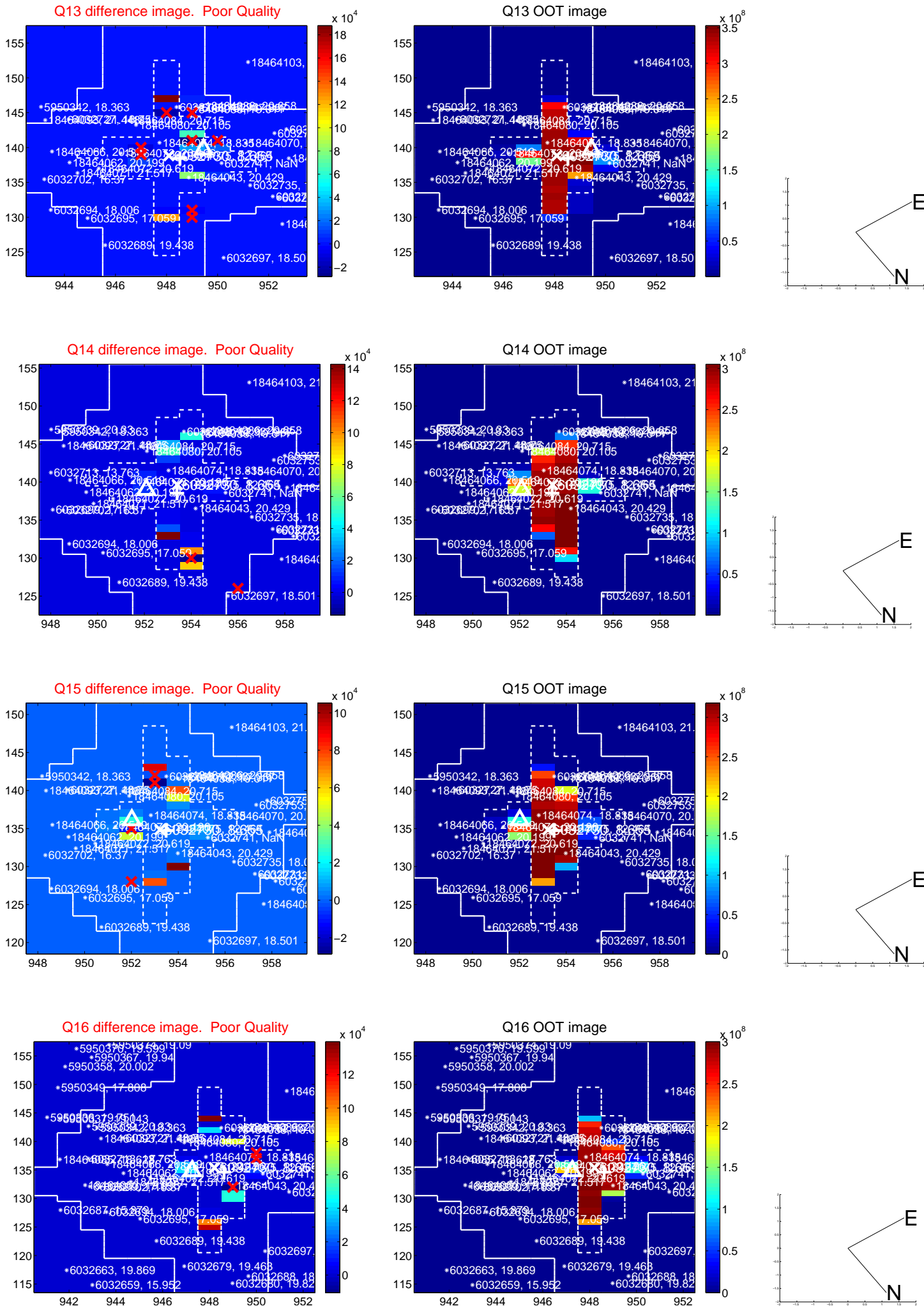
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



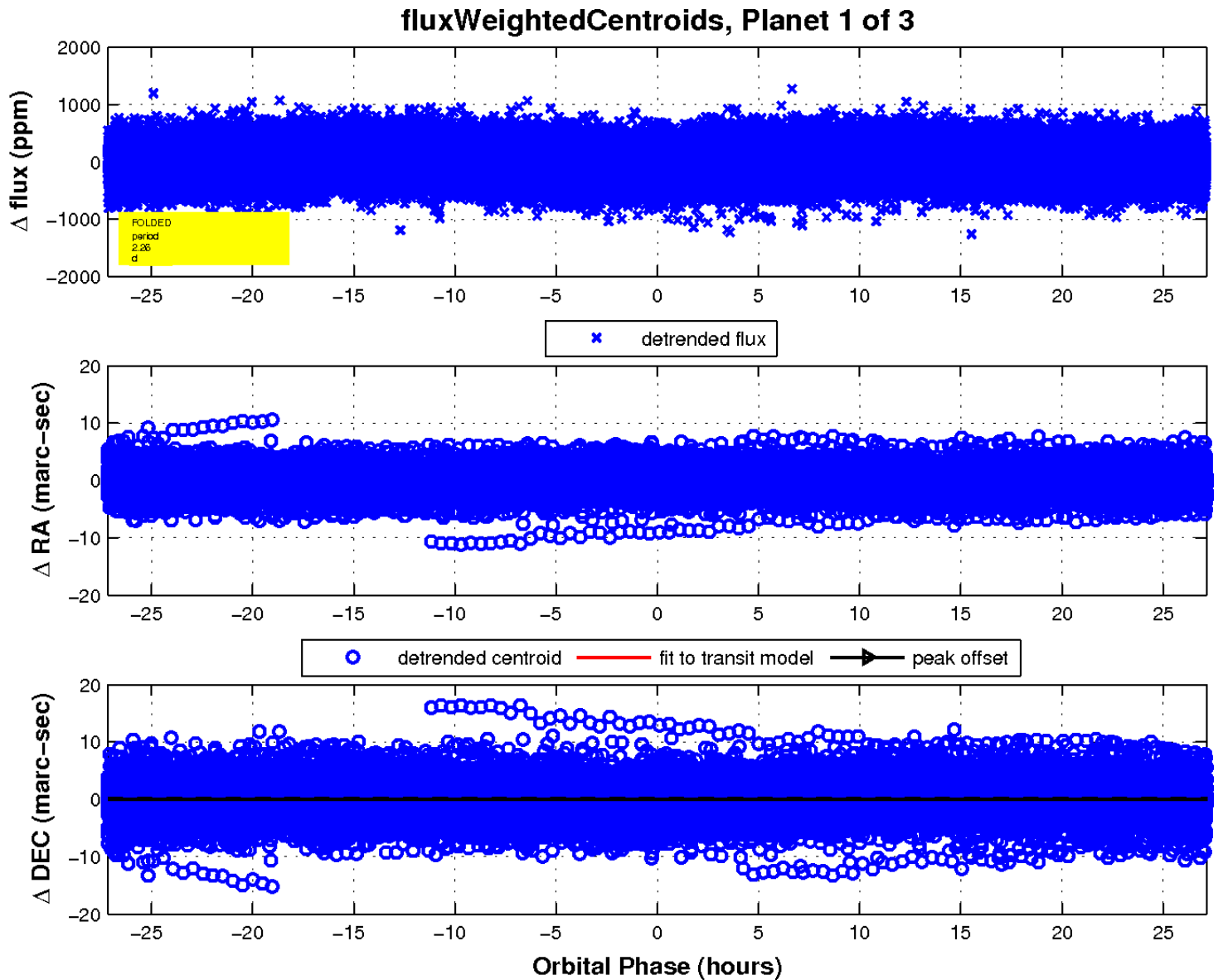
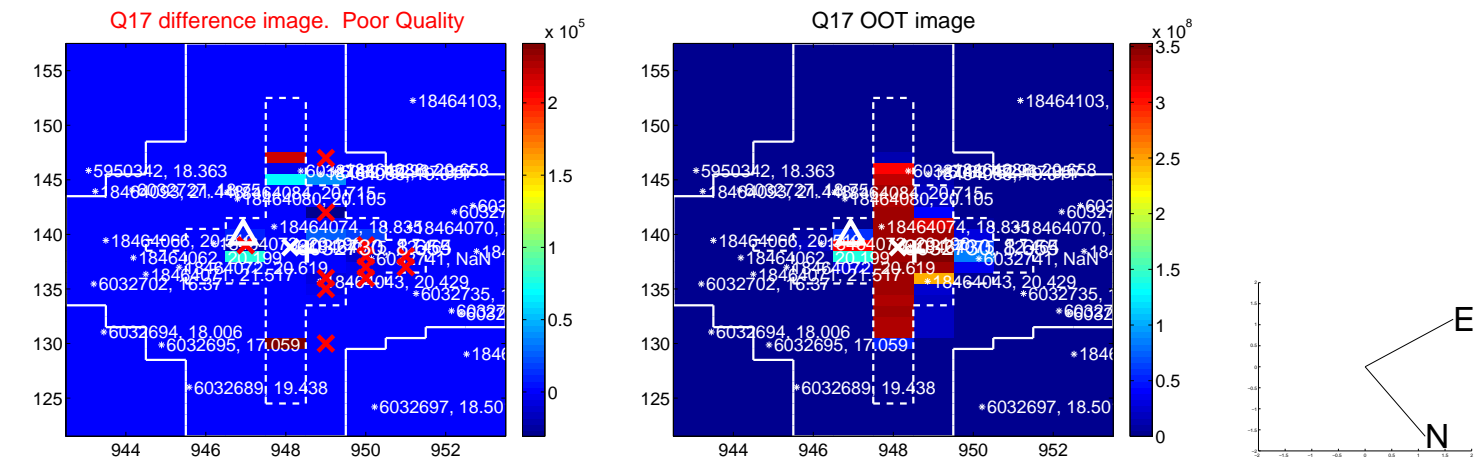
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



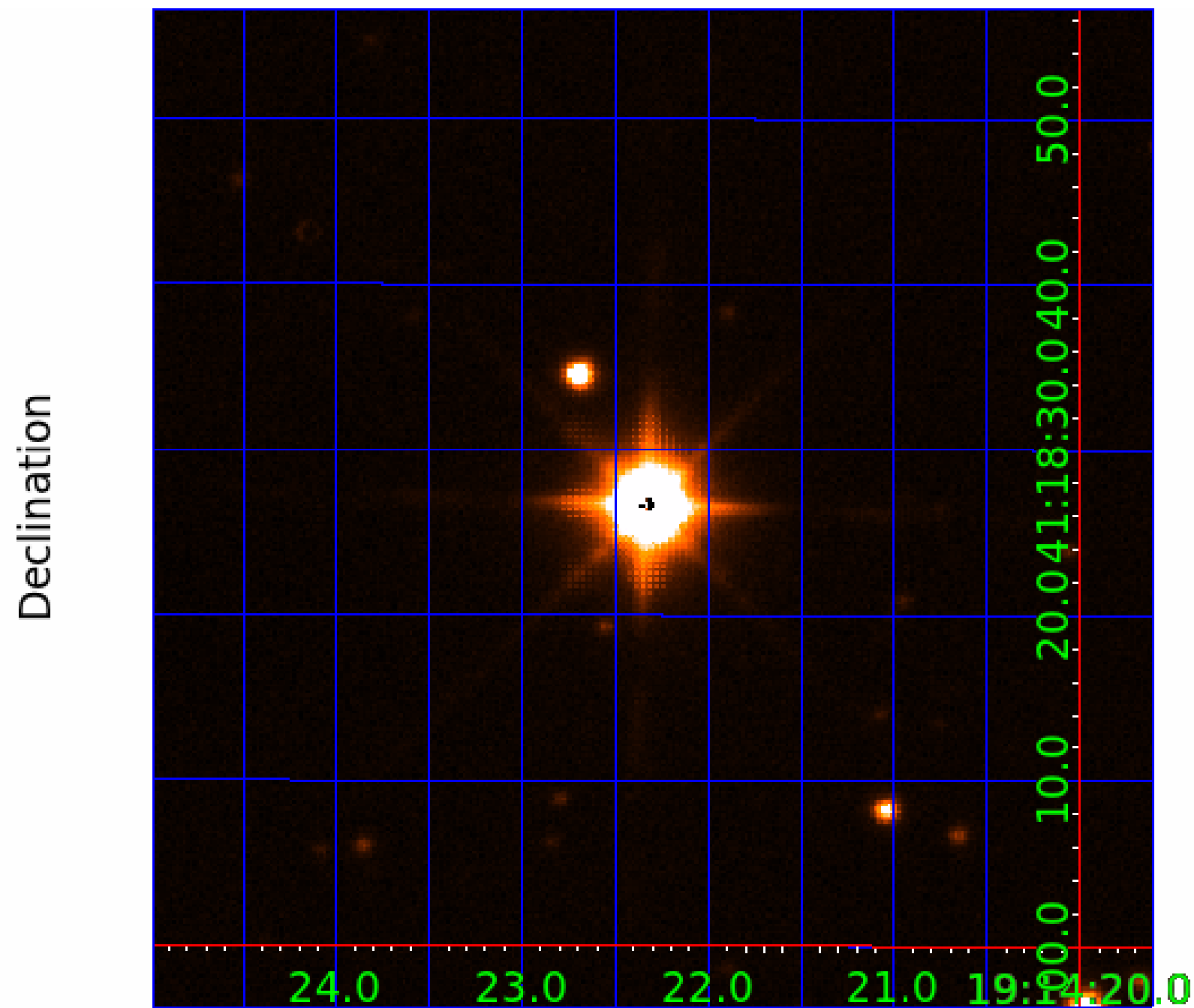
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



UKIRT Image



KIC 006032730

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})
006032730-01	OBS	No	2.262923	132.987678	28.1	12.829	10.0	8.8	2.96	7343	1.61	13526.97
006032730-02	OBS	No	2.262725	131.879279	58.9	2.945	12.6	13.9	2.96	7343	2.73	13528.55
006032730-03	OBS	No	53.618666	135.347292	412.9	2.004	8.3	7.7	2.96	7343	6.35	198.76

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
006032730-01	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—CENT_SATURATED
006032730-02	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—SAME_NTL_PERIOD—CENT_SATURATED
006032730-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_ALT—ALL_TRANS_CHASES—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 006032730-02

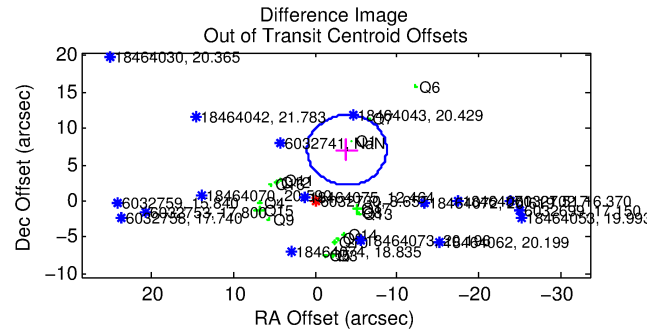
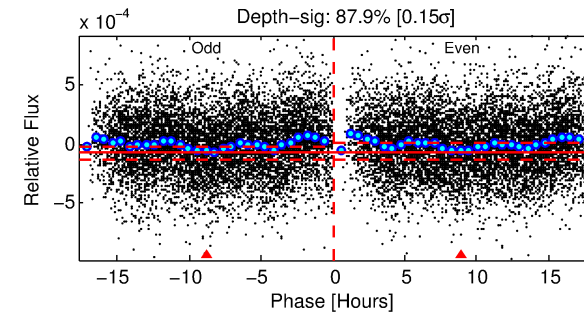
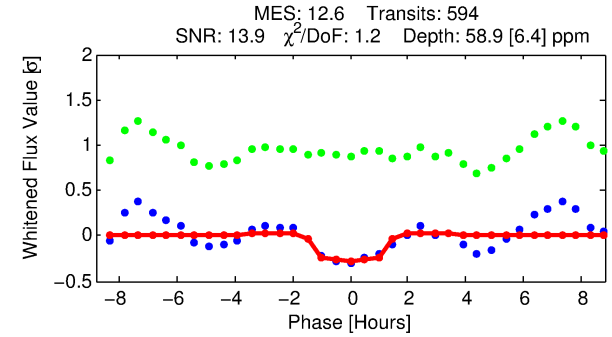
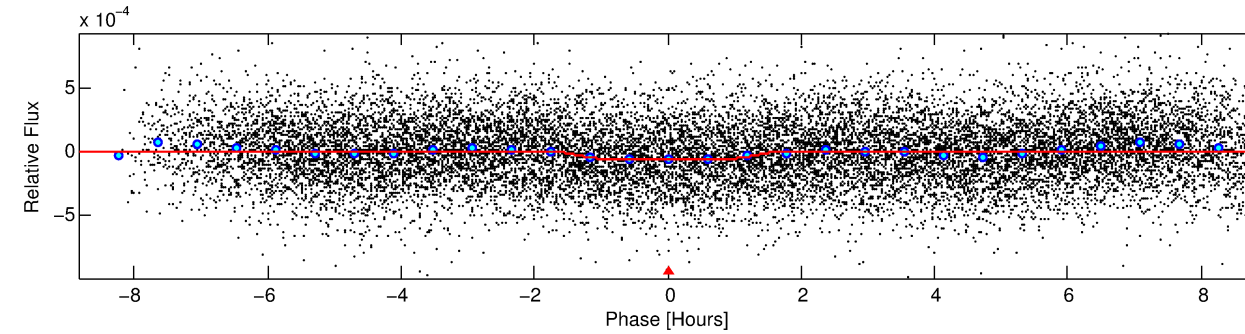
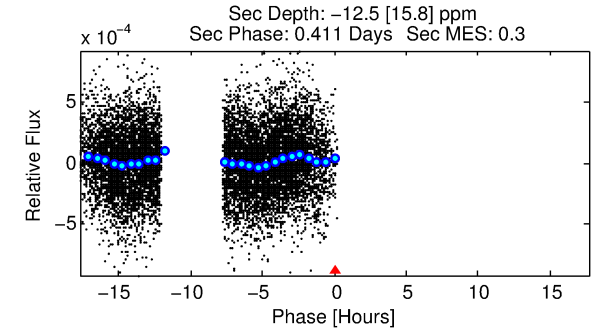
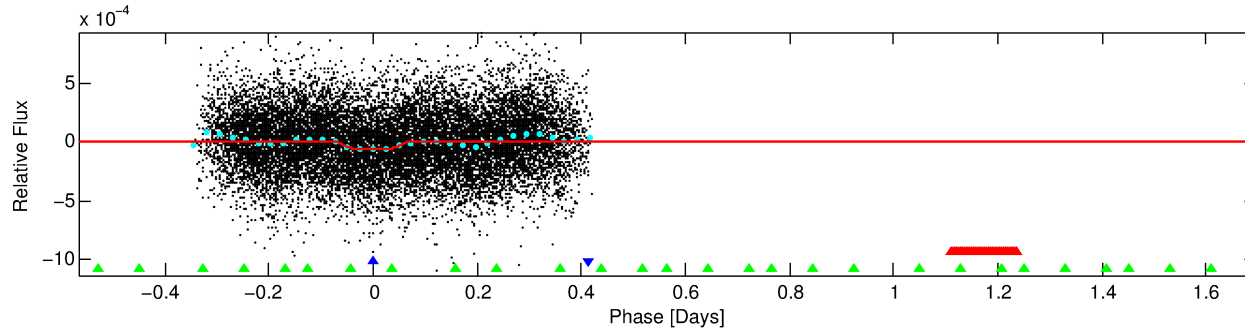
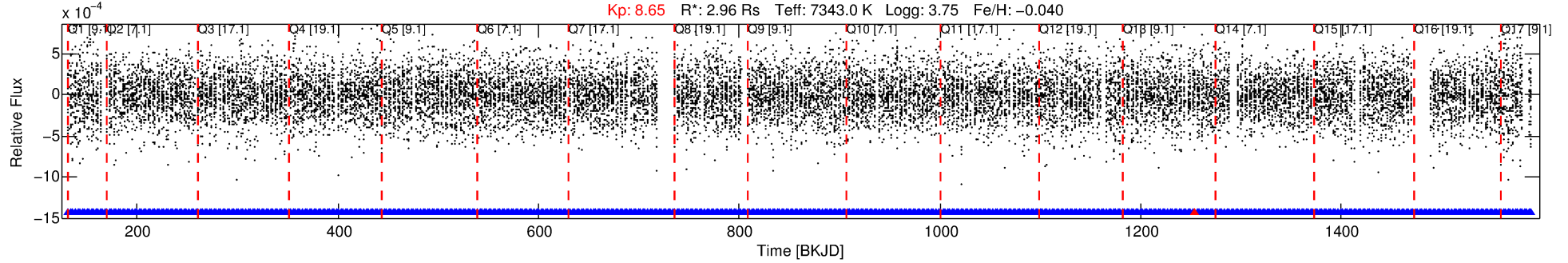
No Significant Match Found

DV One-Page Summary

KIC: 6032730 Candidate: 2 of 3 Period: 2.263 d

KOI: K06141 Corr: No Ephemeris Match

Kp: 8.65 R*: 2.96 Rs Teff: 7343.0 K Logg: 3.75 Fe/H: -0.040



DV Fit Results:

Period = 2.26272 [0.00002] d
Epoch = 131.8793 [0.0036] BKJD
Rp/R* = 0.0085 [0.0026]
a/R* = 2.34 [3.81]
b = 0.94 [0.25]
Seff = 13528.55 [9733.97]
Teq = 2750 [495] K
Rp = 2.73 [1.40] Re
a = 0.0410 [0.0173] AU
Ag = N/A
Teffp = N/A

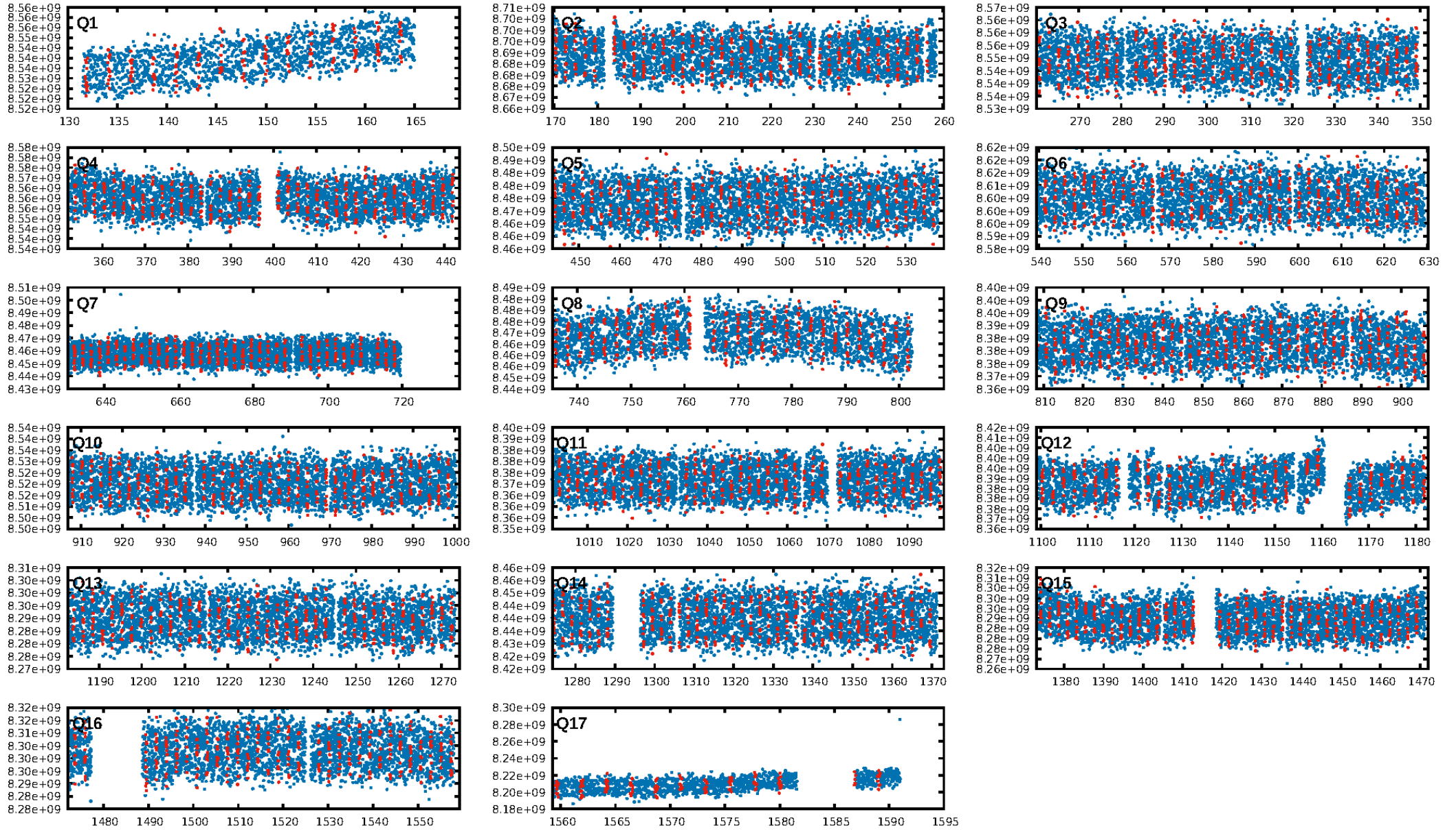
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: 0.0% [0.00σ]
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 1.17e-32
RollingBand-fgt: 1.00 [566/567]
GhostDiagnostic-chr: N/A
Centroid-sig: N/A
Centroid-so: 2.086 arcsec [3.06σ]
OotOffset-rm: 8.030 arcsec [4.98σ]
KicOffset-rm: 9.916 arcsec [5.42σ]
OotOffset-st: 4/4/4/5 [17]
KicOffset-st: 4/4/4/5 [17]
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DiffImageOverlap-fno: 1.00 [17/17]

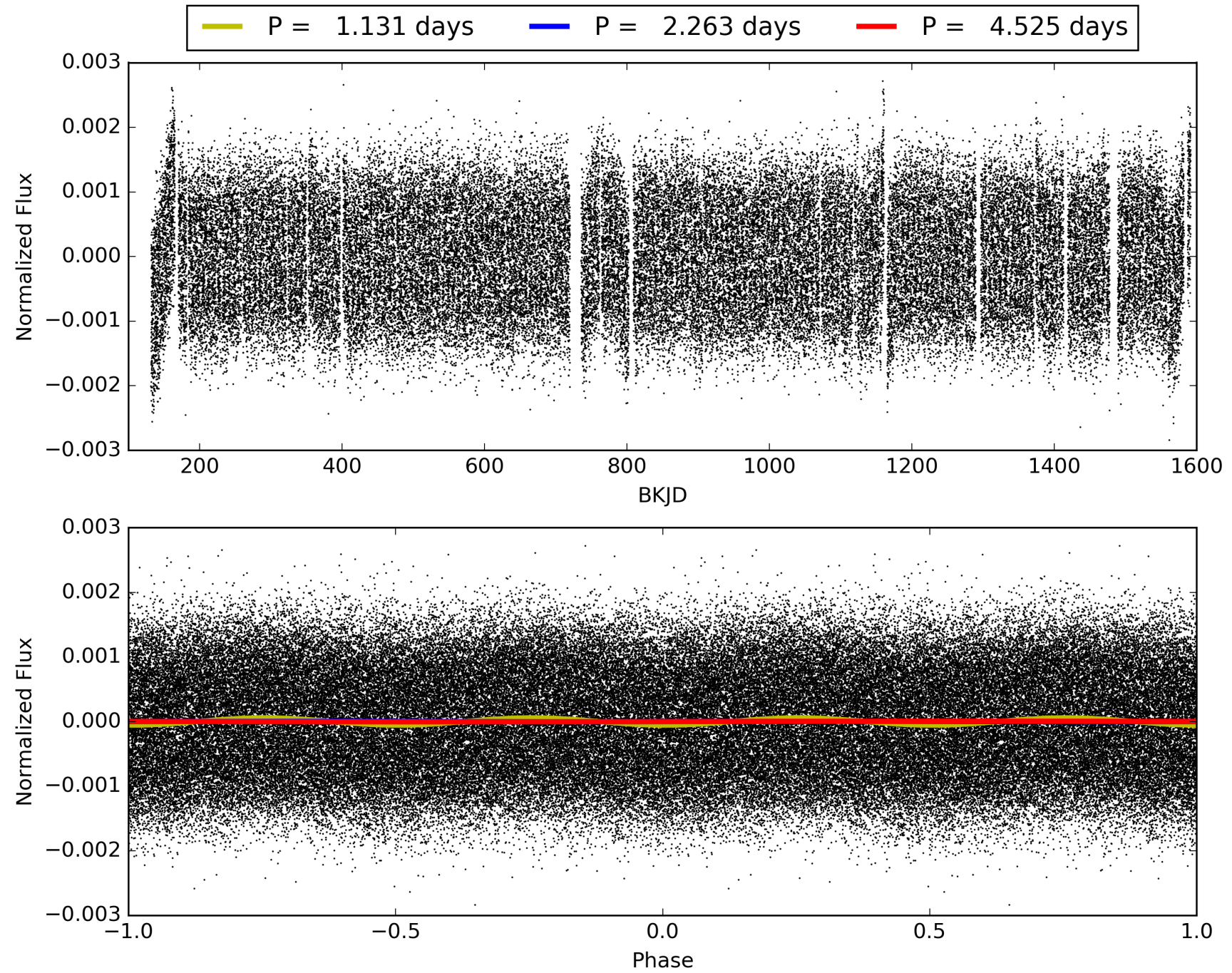
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 01-Feb-2016 07:33:45 Z

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

TCE 006032730-02, PDC Light Curves

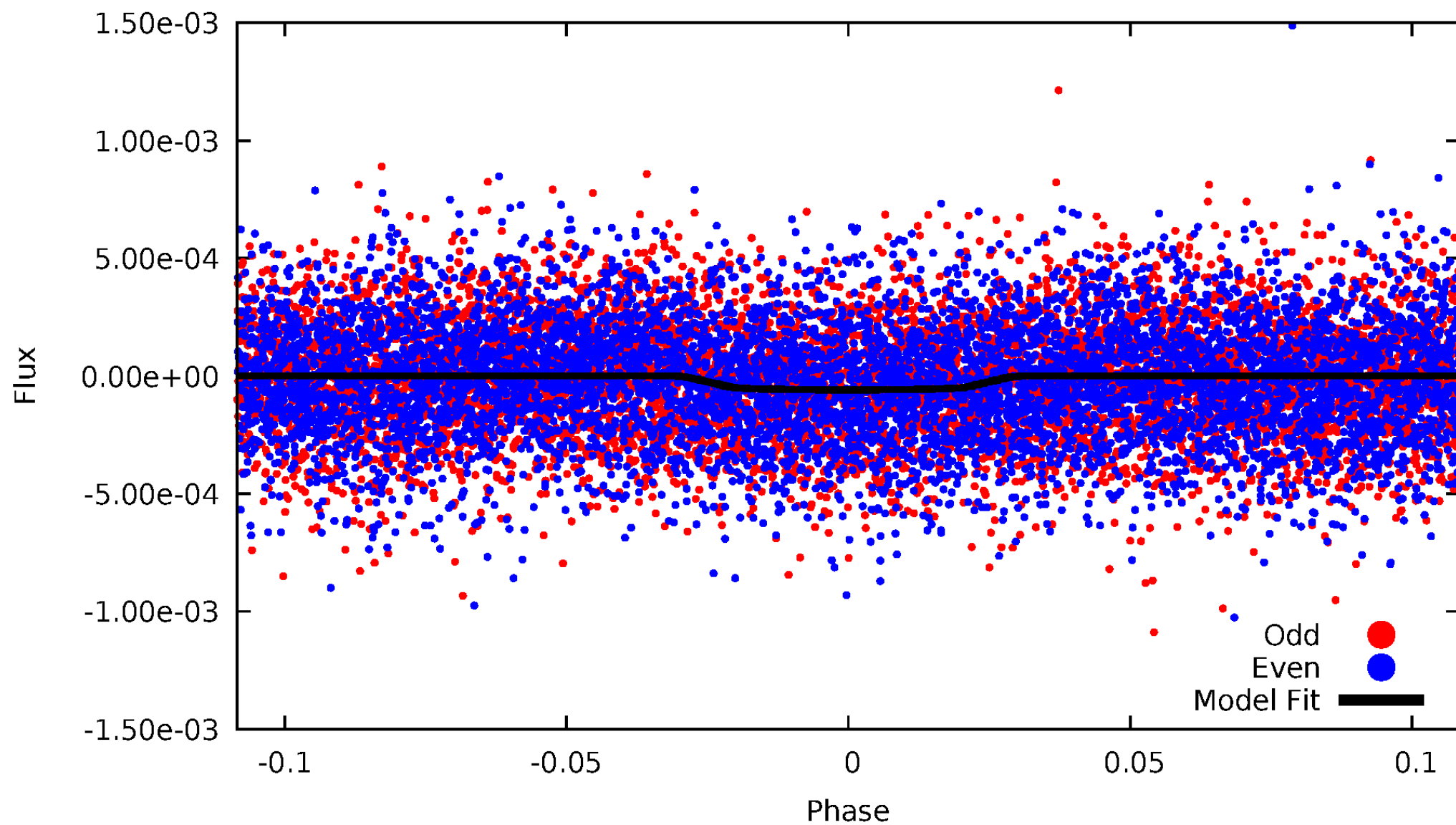


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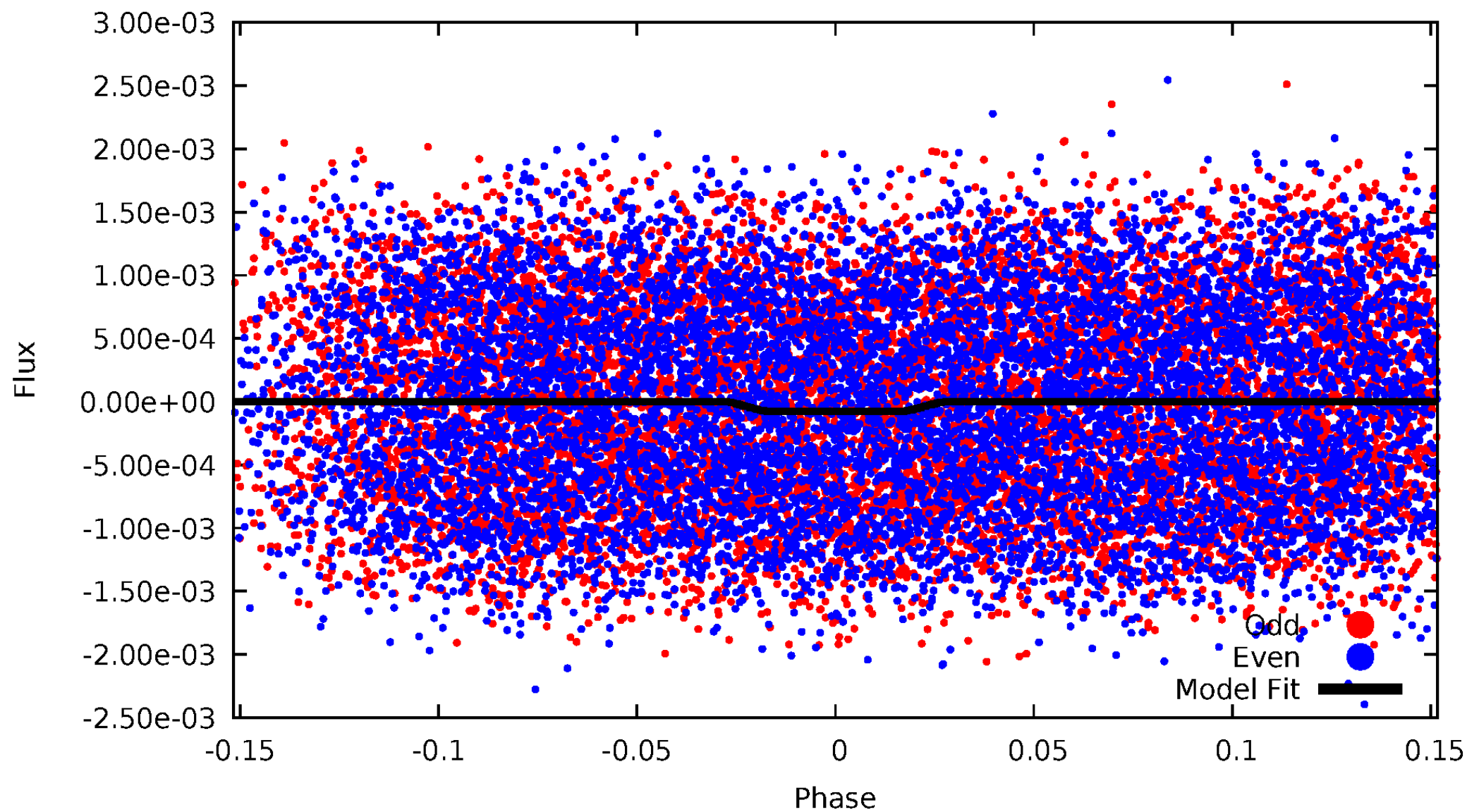
DV Odd/Even

TCE 006032730-02



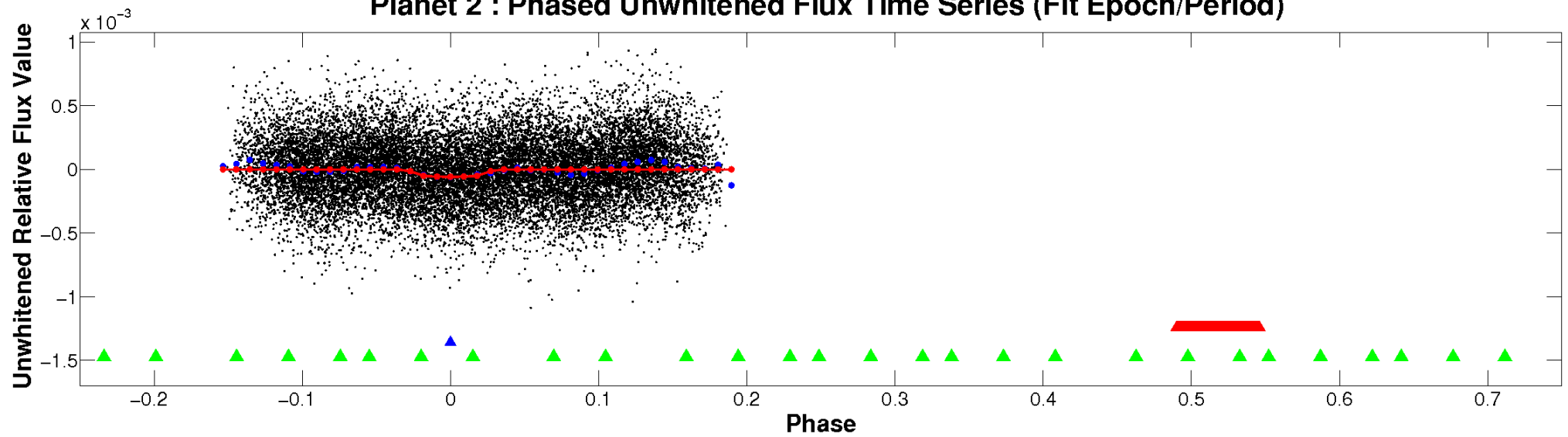
ALT Odd/Even

TCE 006032730-02

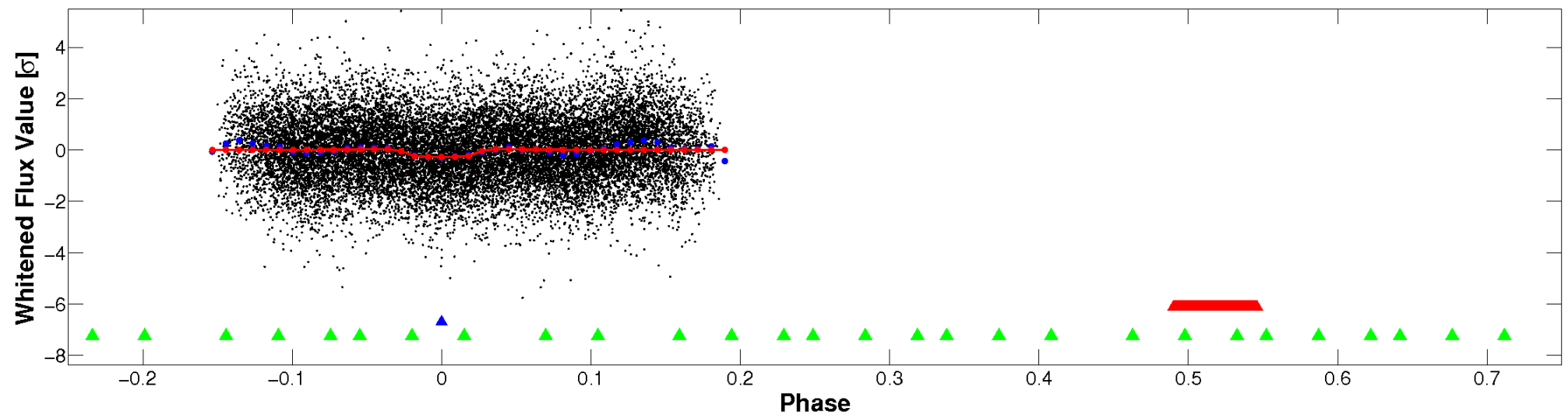


Non-Whitened Vs. Whitened Light Curve

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

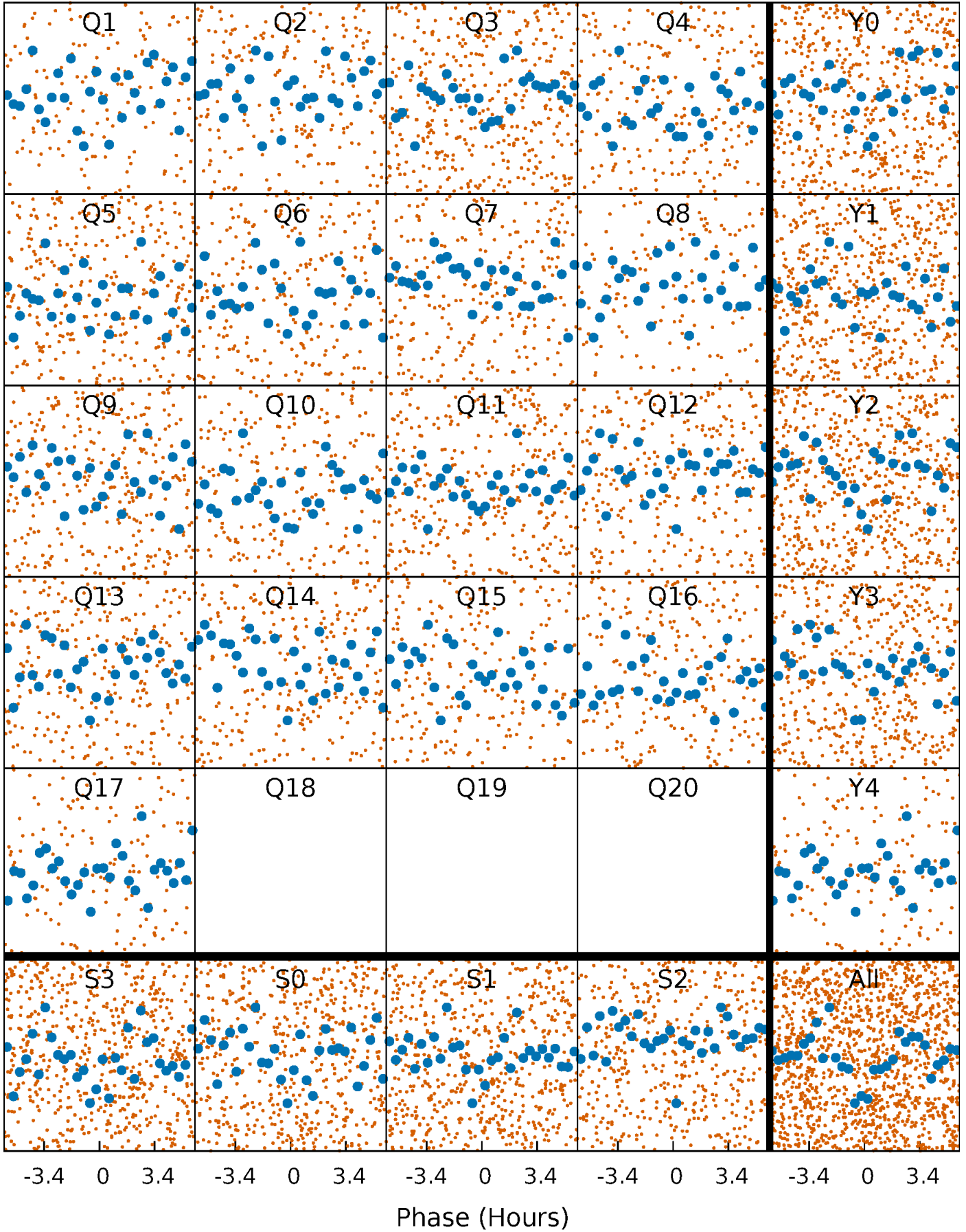


Planet 2 : Phased Whitened Flux Time Series (Fit Epoch/Period)



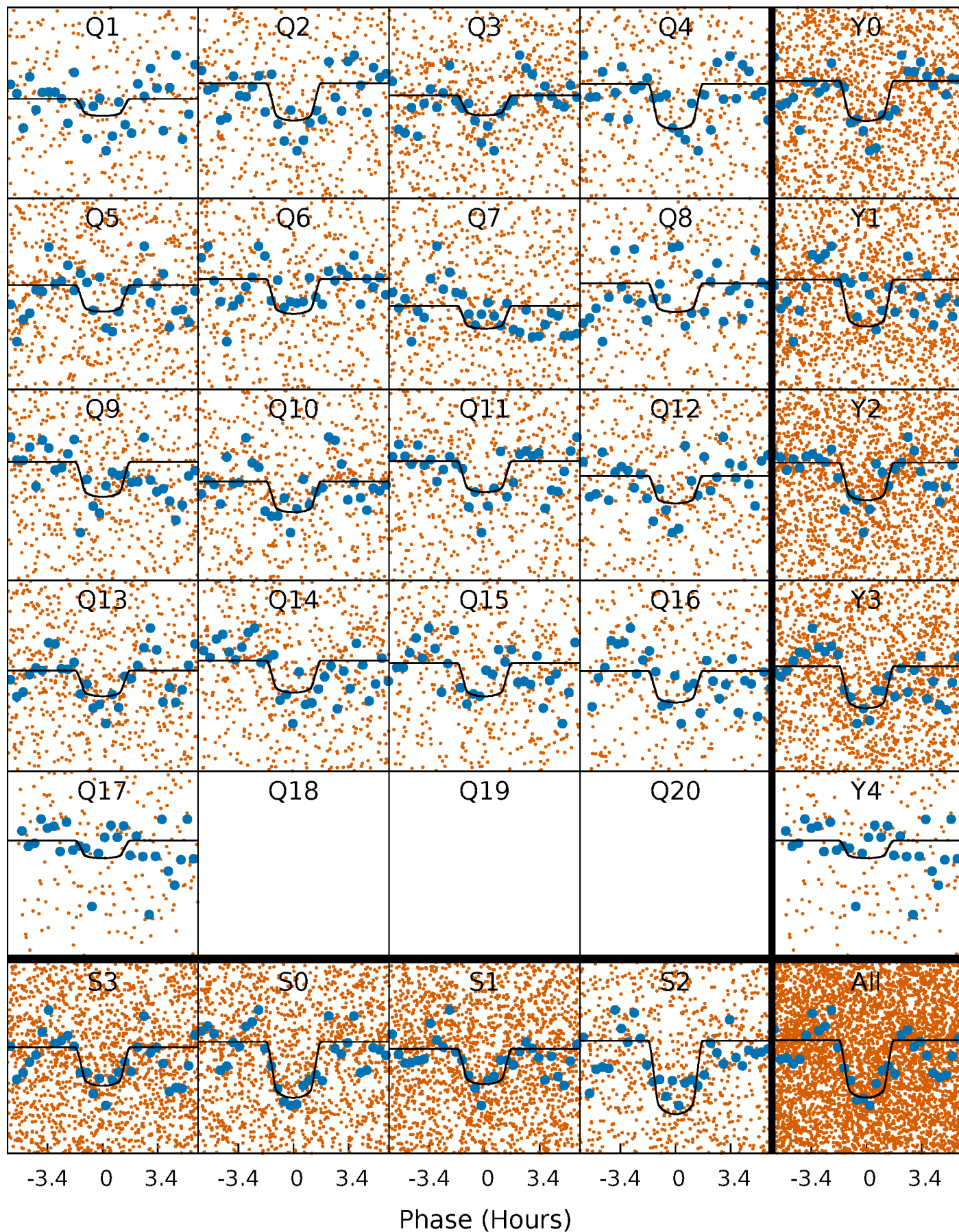
PDC Quarter-Phased Transit Curves

TCE 006032730-02 P= 2.262725 Days $T_0=131.879279$ (BKJD)



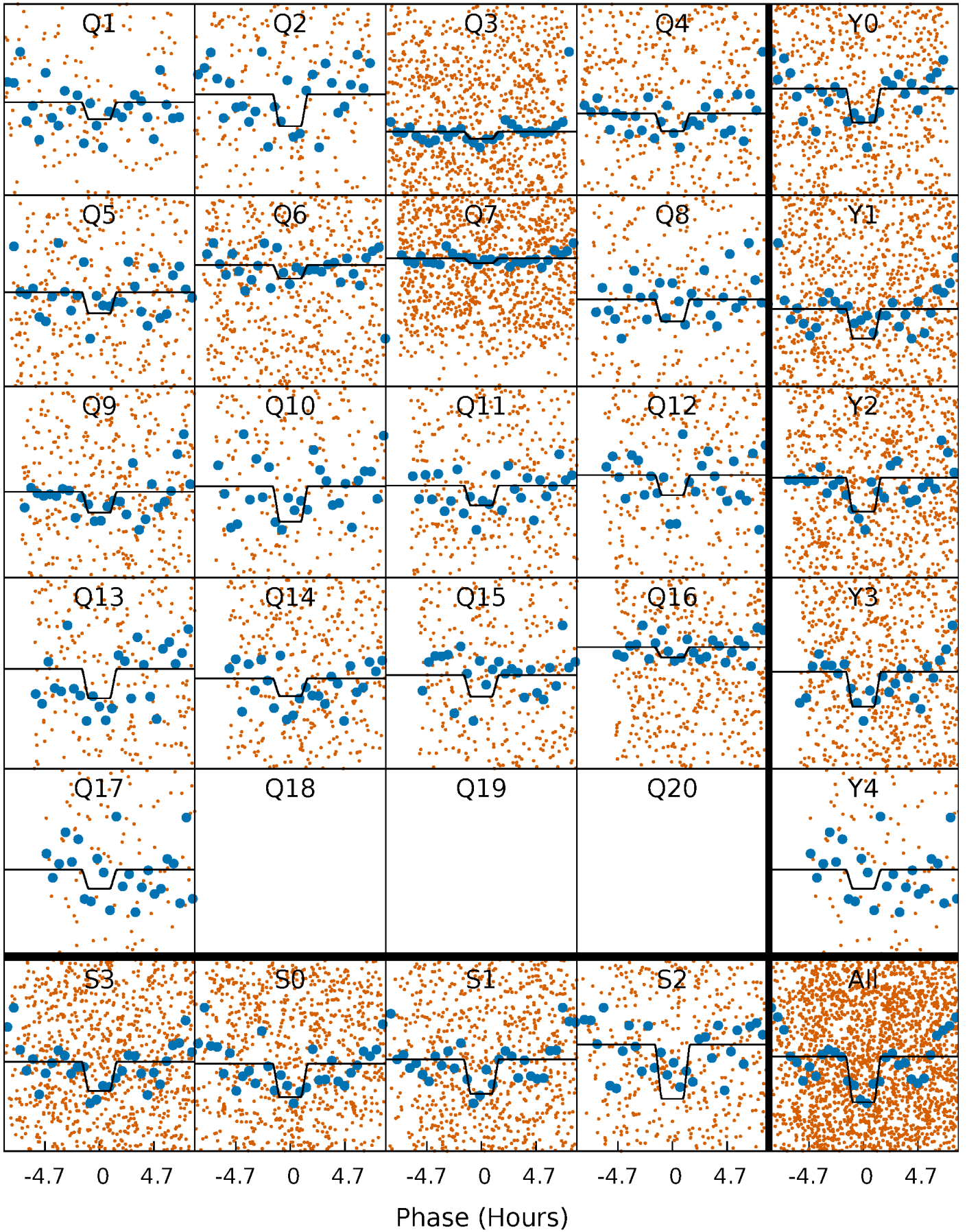
DV Quarter-Phased Transit Curves

TCE 006032730-02 P= 2.262725 Days $T_0=131.879279$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

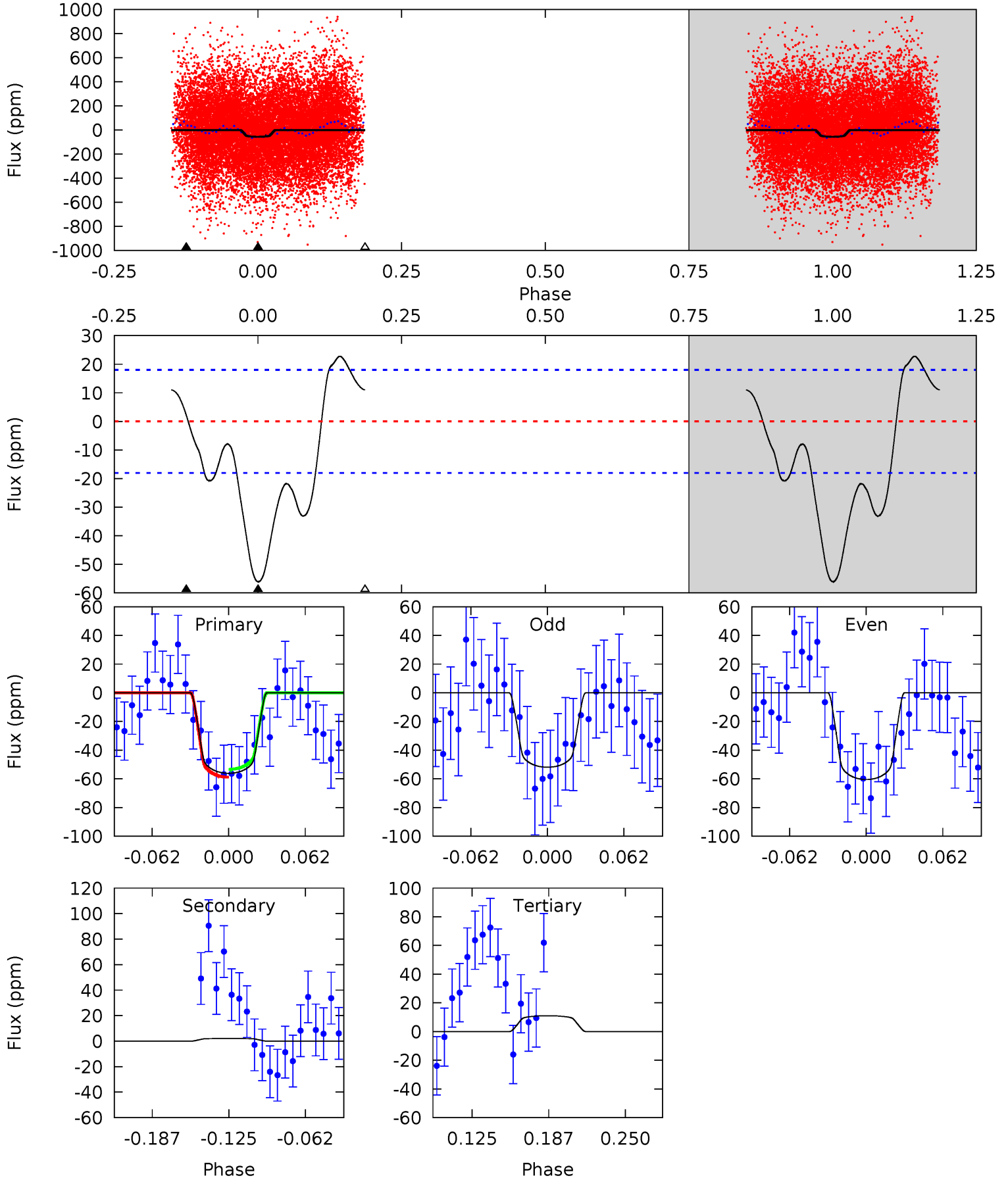
TCE 006032730-02 $P = 2.262685$ Days $T_0 = 131.890838$ (BKJD)



DV Model-Shift Uniqueness Test

006032730-02, P = 2.262725 Days, E = 129.616554 Days

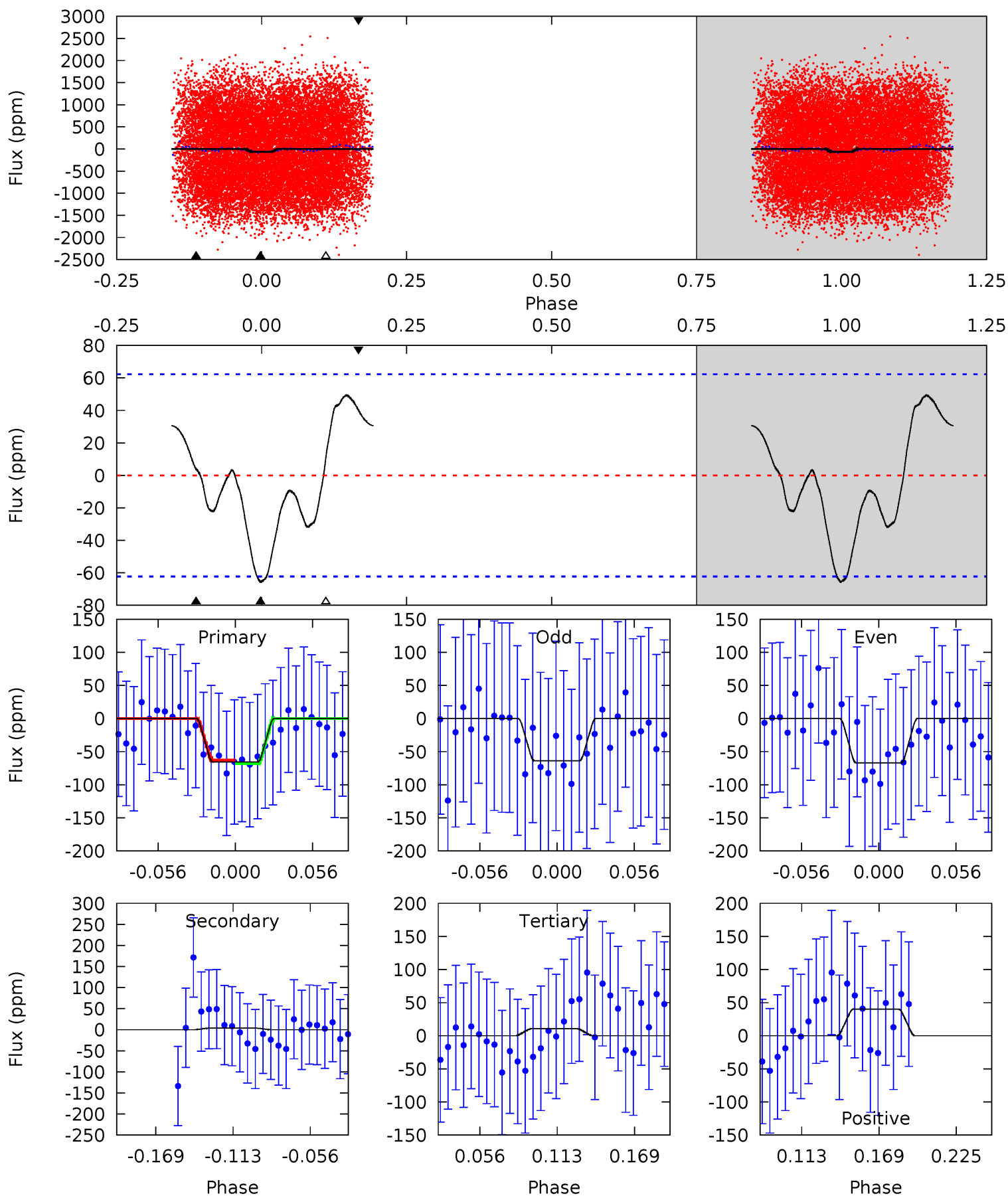
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
14.5	-0.56	-2.85	0	4.66	1.86	5.78	17.4	14.5	2.30	-0.56	1.11	0.92	0.29	0.73



Alt Model-Shift Uniqueness Test

006032730-02, P = 2.262685 Days, E = 129.628153 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
4.93	-0.29	-0.80	3.02	4.68	1.91	2.33	5.73	1.90	0.51	-3.32	0.11	1.02	0.43	0.20



Stellar Parameters For KIC 006032730

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	ρ_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	7343^{+203}_{-330}	$3.751^{+0.417}_{-0.098}$	$-0.040^{+0.250}_{-0.300}$	$2.955^{+0.435}_{-1.219}$	$1.793^{+0.194}_{-0.389}$	$0.098^{+0.342}_{-0.031}$
	+3%/-4%	+11%/-3%	+625%/-750%	+15%/-41%	+11%/-22%	+349%/-32%
Source	KIC0	KIC0	KIC0	DSEP		

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

Secondary Eclipse Parameters for KIC 006032730-02 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	2 ± 4	$2.52^{+0.96}_{-0.93}$	3725^{+264}_{-403}	-3920^{+1125}_{-619}	$-0.313^{+0.530}_{-0.876}$
Alt.	4 ± 13	$2.59^{+0.95}_{-0.92}$	3709^{+284}_{-373}	-4084^{+8311}_{-1255}	$-0.484^{+1.763}_{-2.412}$

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

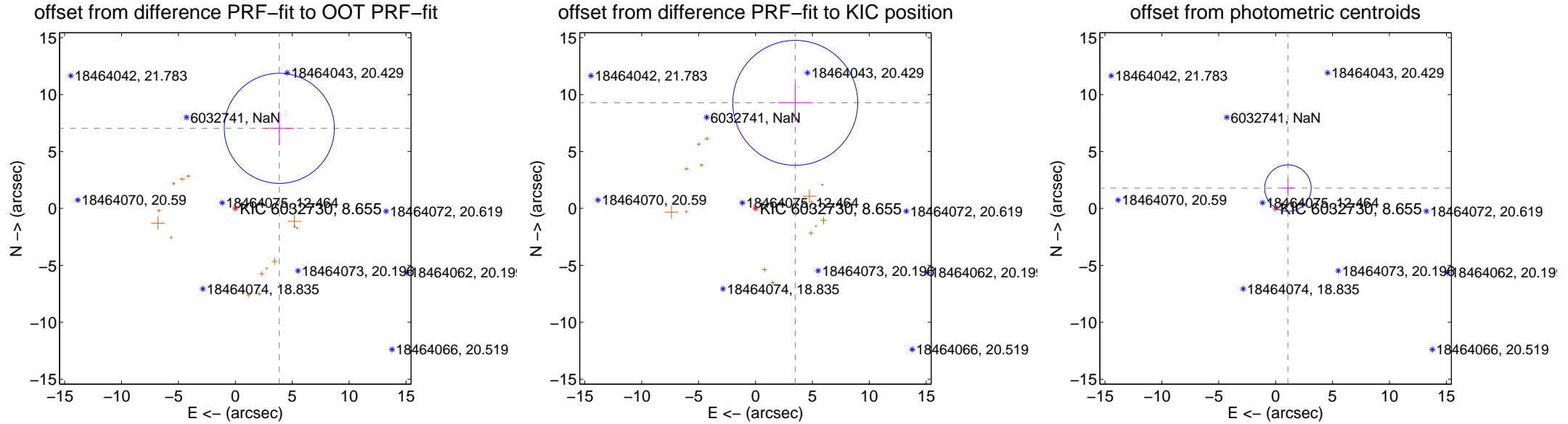
DV Centroid Data

Supplemental centroid analysis for 006032730-02. **Kepler magnitude: 8.65.** Transit SNR 13.89

There are 0 quarters with good PRF difference image offsets

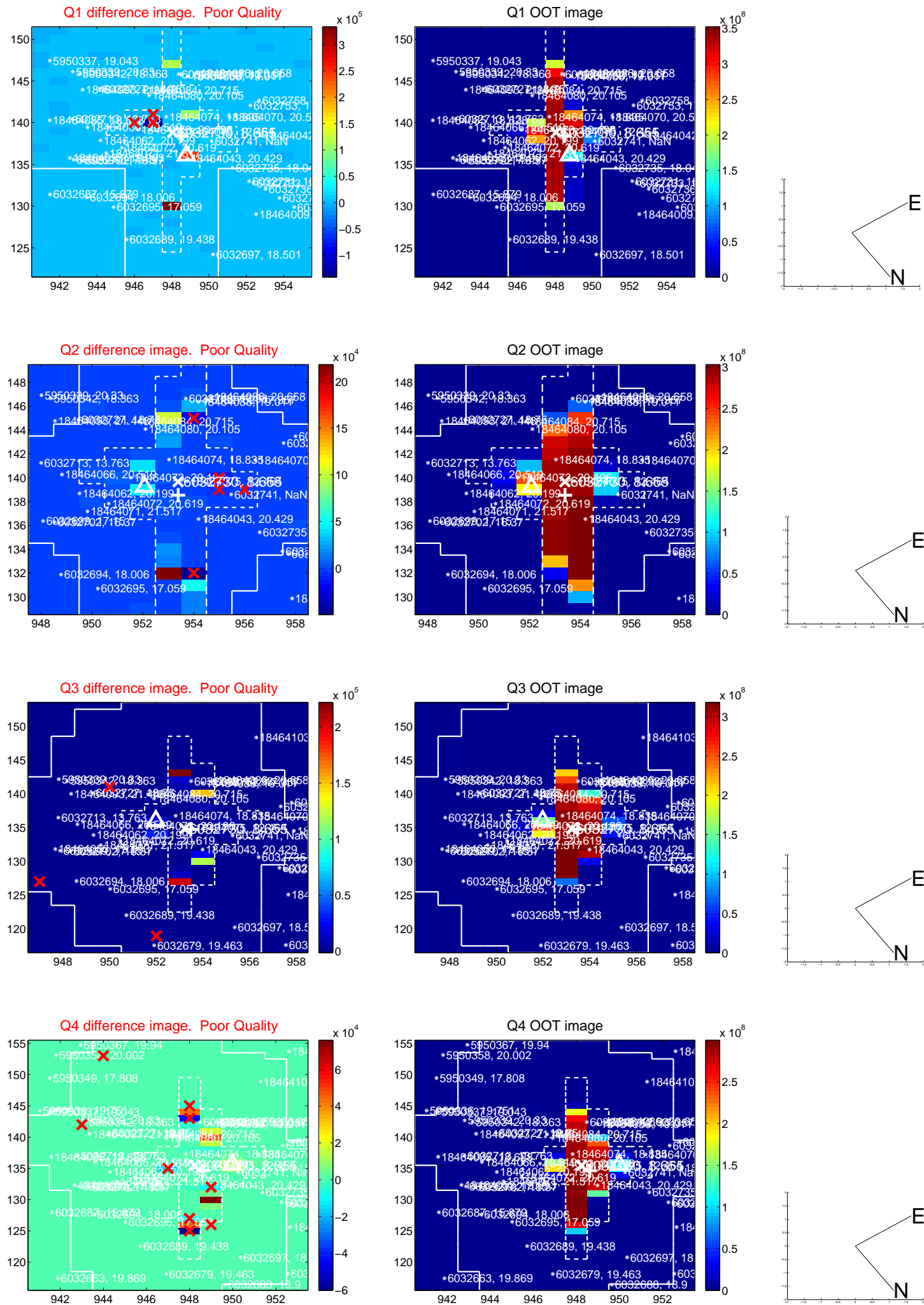
The OOT PRF centroid is offset from the target star catalog position by about 2.26 arcsec so the offset from difference PRF-fit to OOT-fit may be invalid.

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	8.030 ± 1.612	4.98	-3.865 ± 1.297	7.039 ± 1.496
PRF-fit source offset from KIC position	9.916 ± 1.829	5.42	-3.496 ± 1.508	9.280 ± 1.661
photometric centroid source offset	2.09 ± 0.68	3.06	-1.08 ± 0.51	1.79 ± 0.73

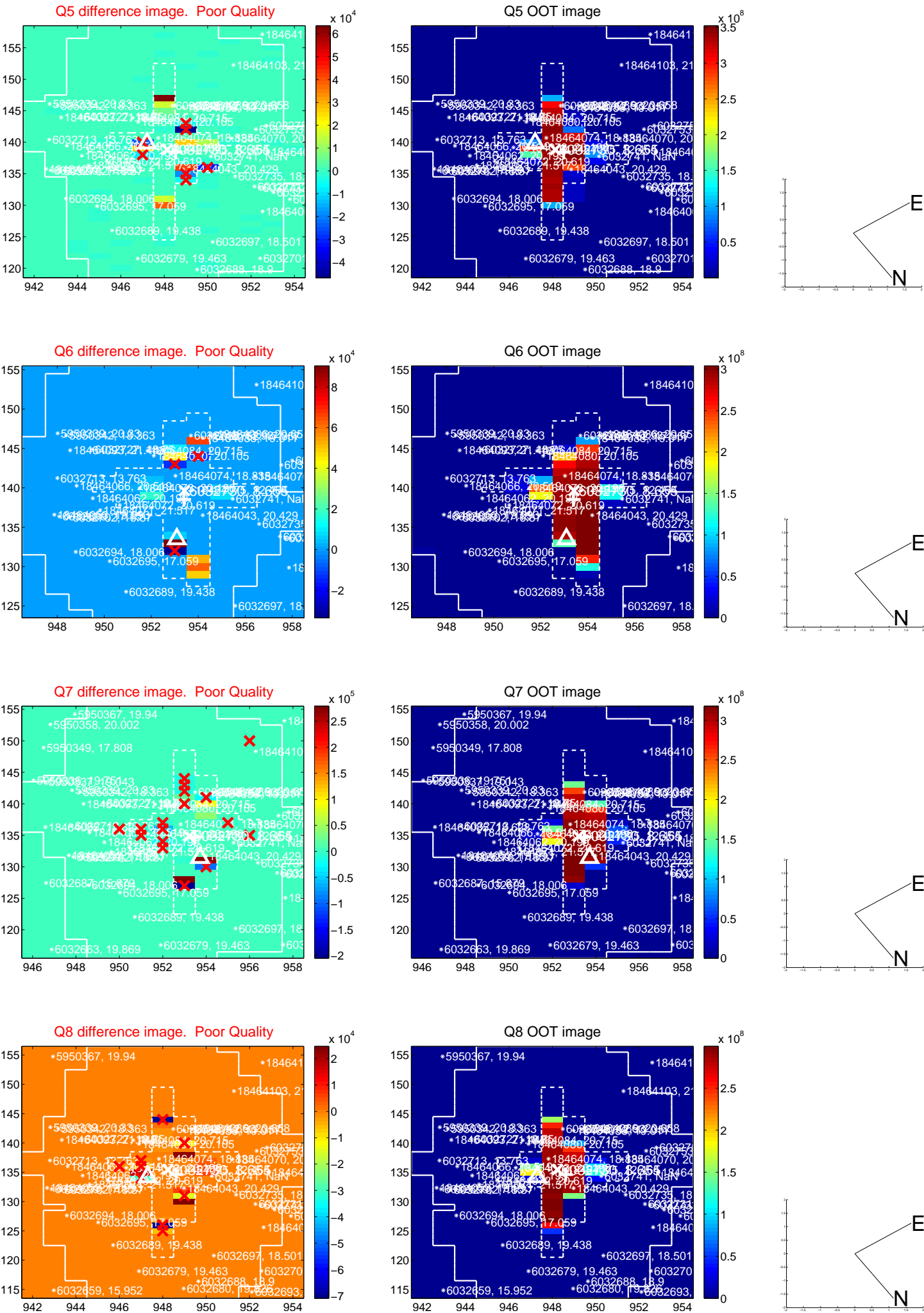


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets;** magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

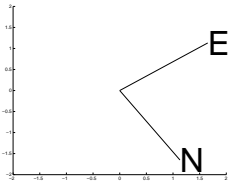
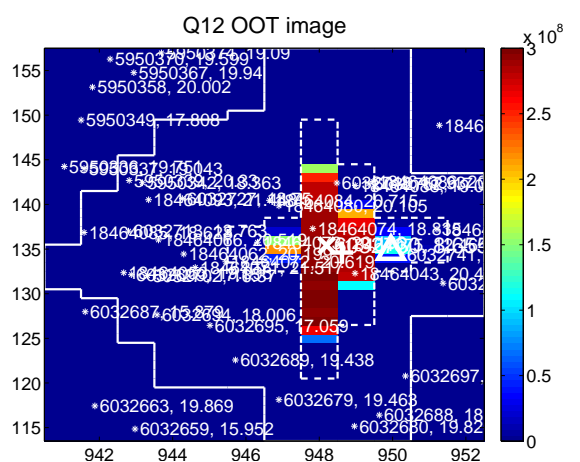
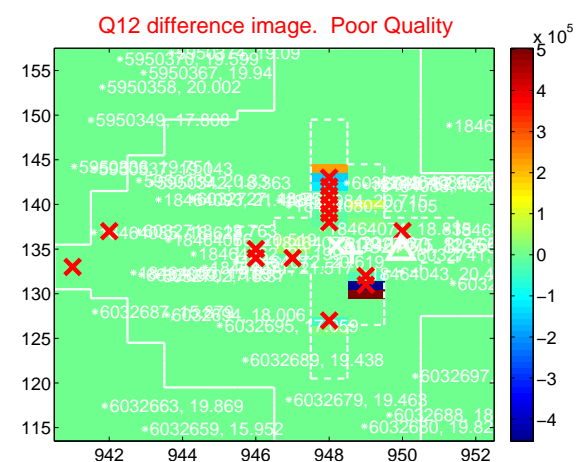
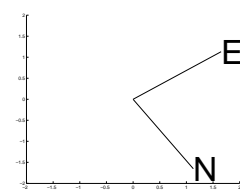
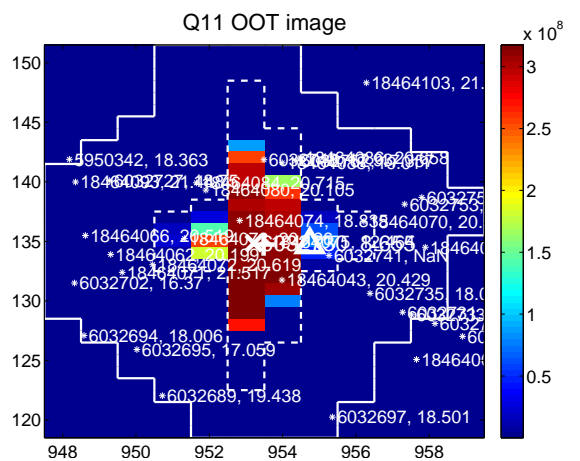
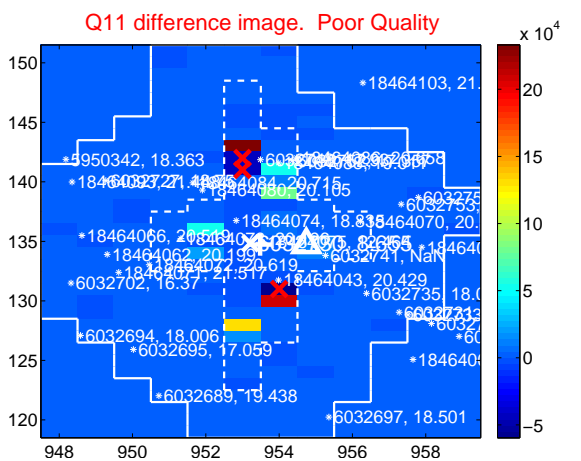
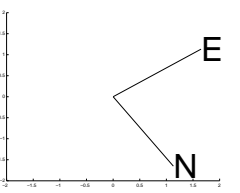
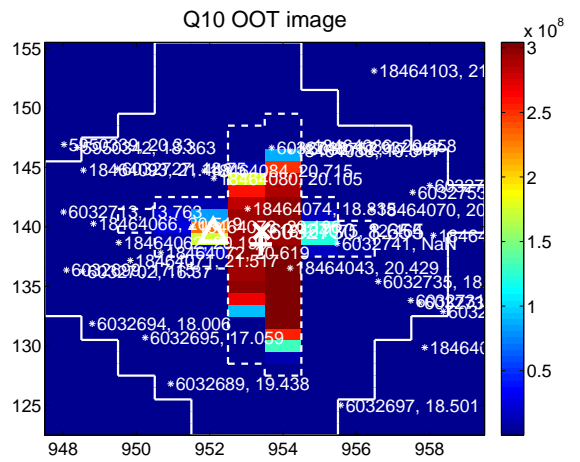
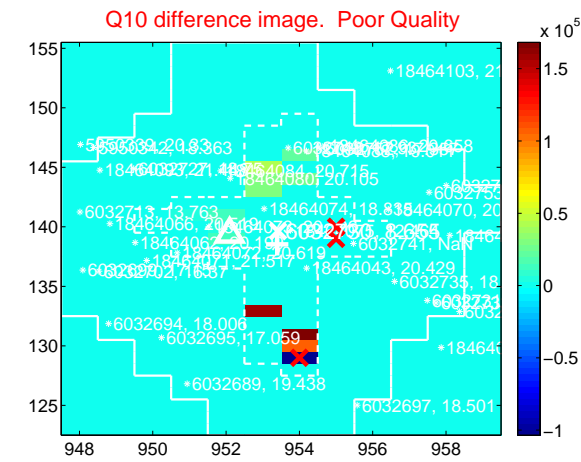
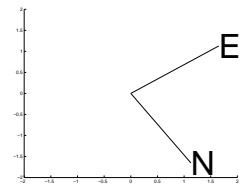
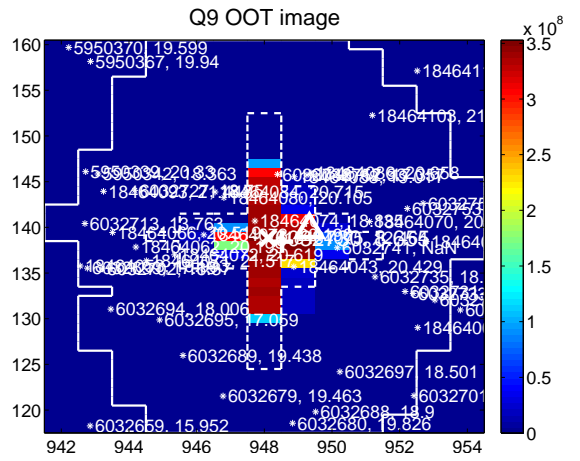
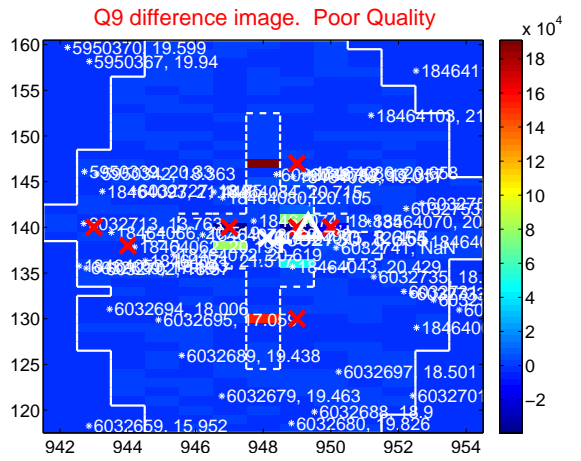
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



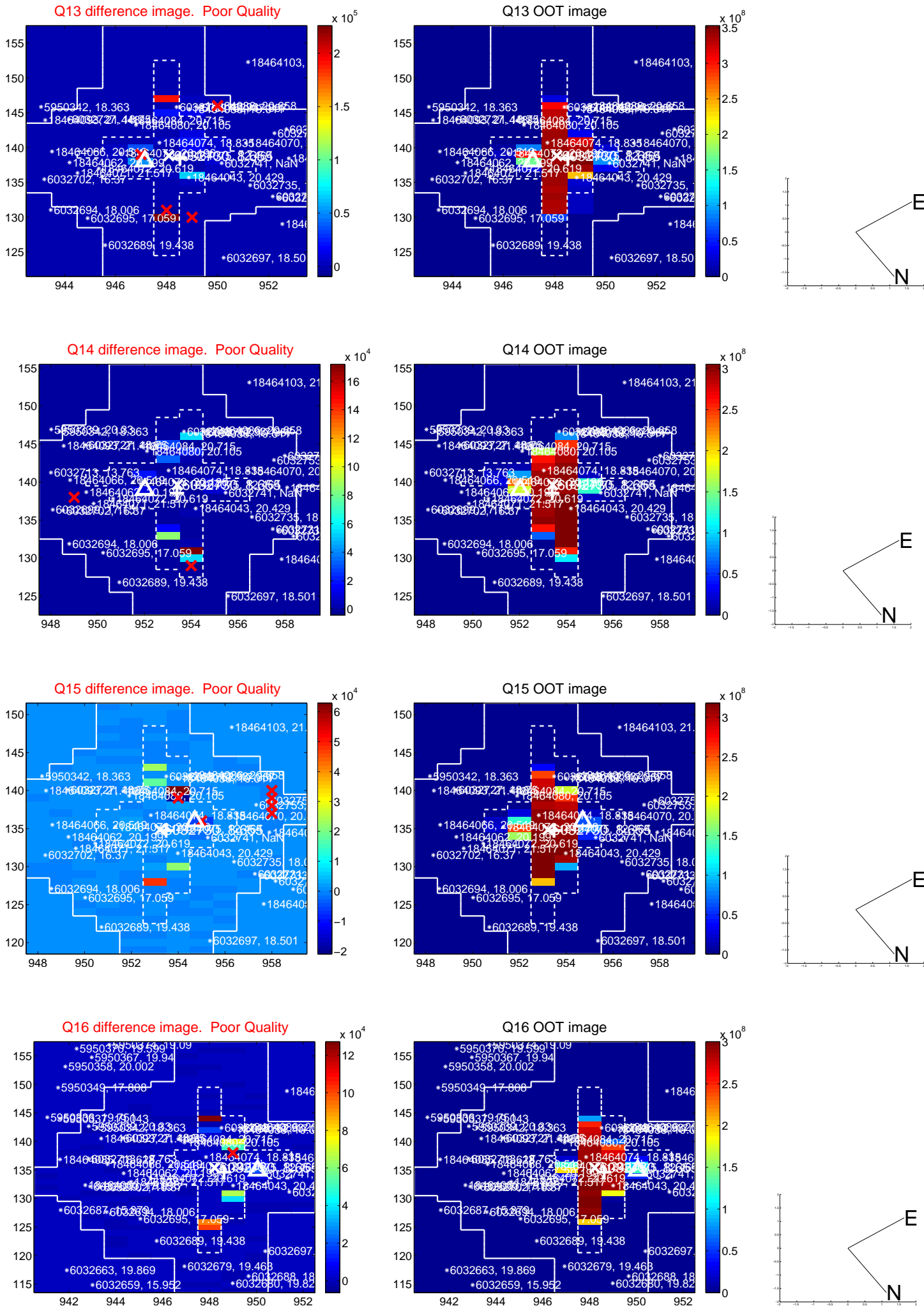
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



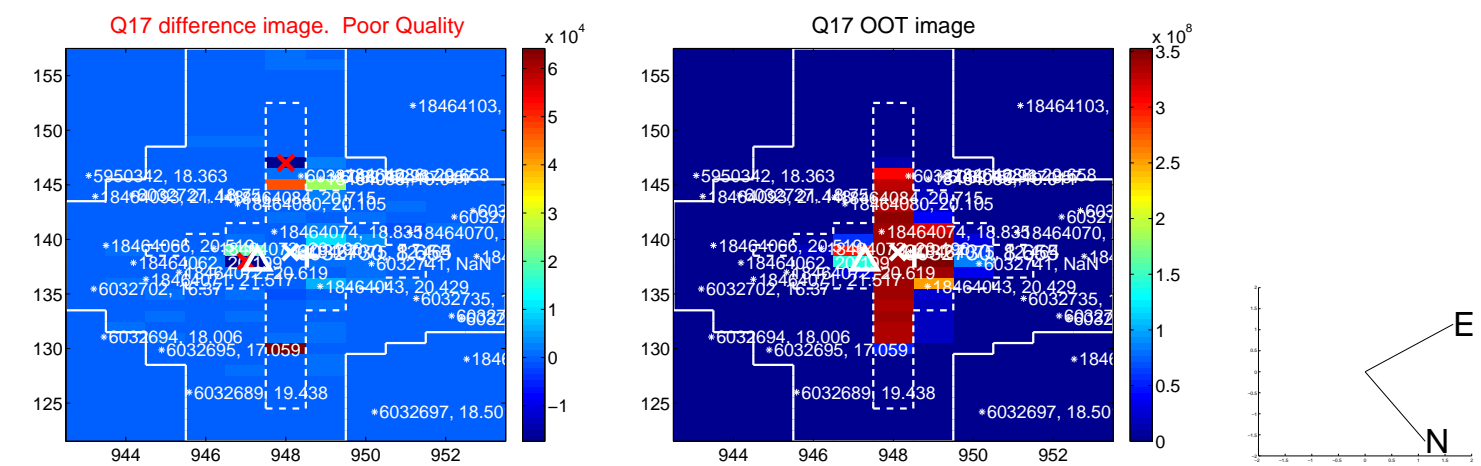
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



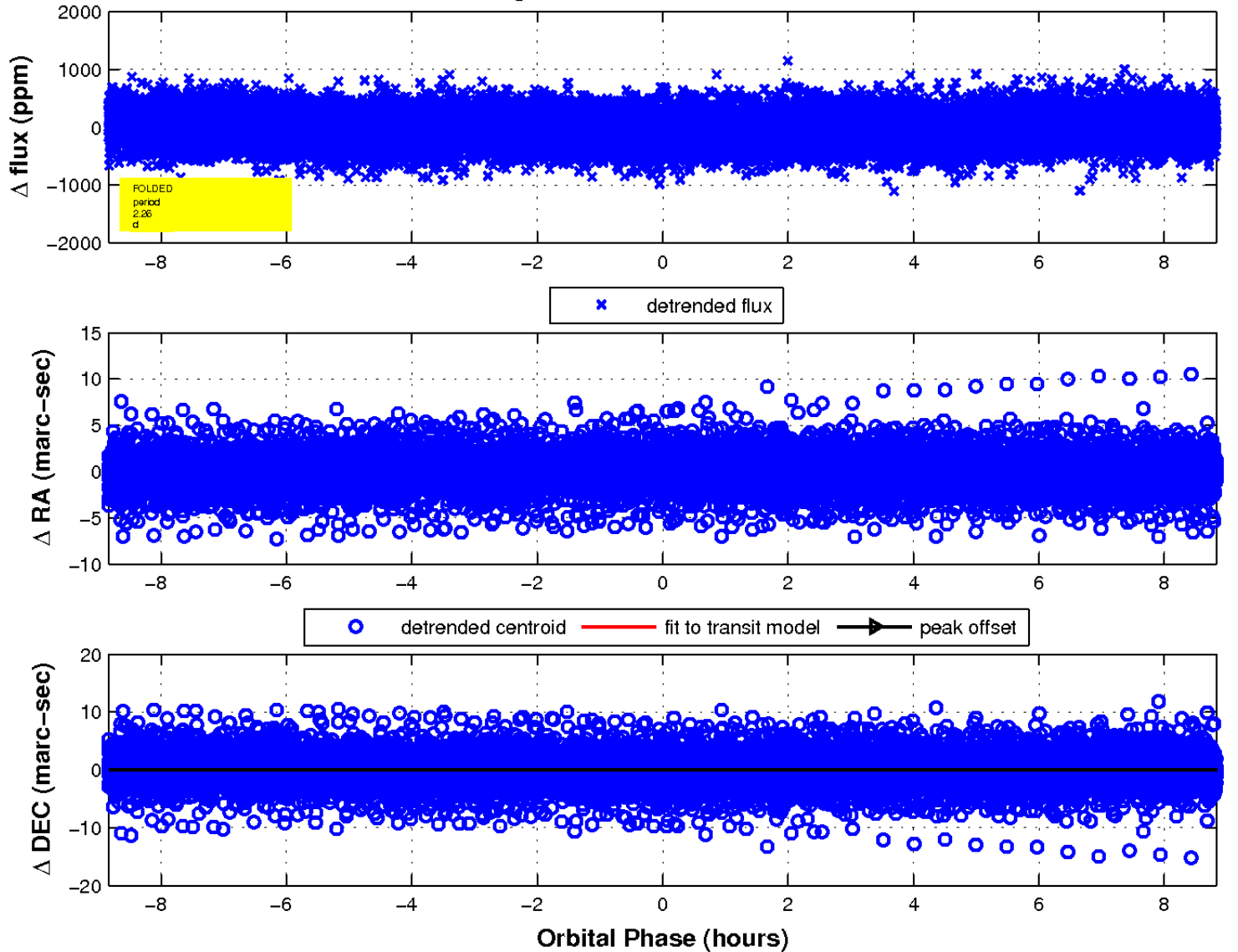
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



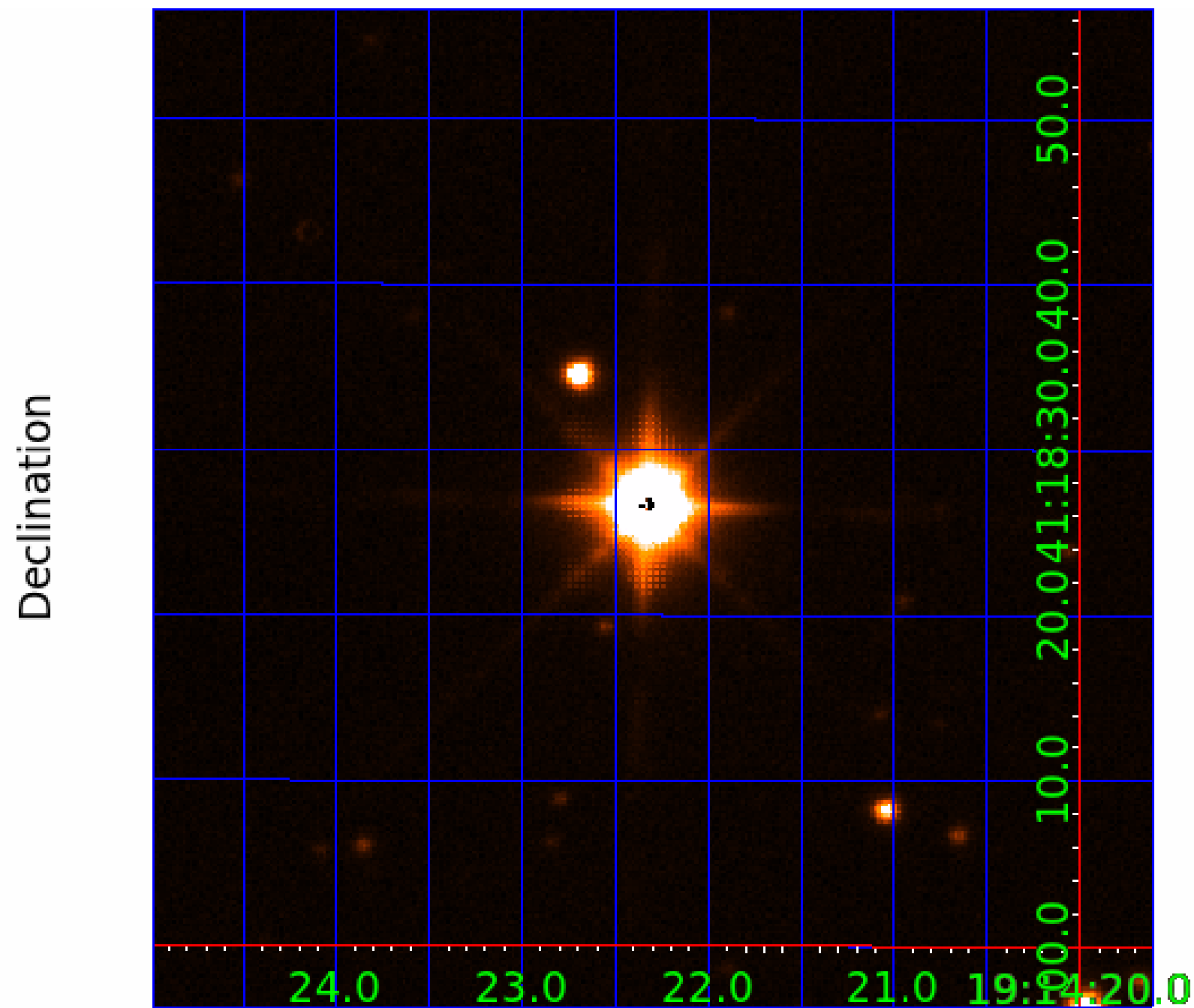
white \times : KIC target position; $+$: OOT centroid; Δ : difference centroid. red \times : large negative pixel value.



fluxWeightedCentroids, Planet 2 of 3



UKIRT Image



KIC 006032730

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})
006032730-01	OBS	No	2.262923	132.987678	28.1	12.829	10.0	8.8	2.96	7343	1.61	13526.97
006032730-02	OBS	No	2.262725	131.879279	58.9	2.945	12.6	13.9	2.96	7343	2.73	13528.55
006032730-03	OBS	No	53.618666	135.347292	412.9	2.004	8.3	7.7	2.96	7343	6.35	198.76

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
006032730-01	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—CENT_SATURATED
006032730-02	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—SAME_NTL_PERIOD—CENT_SATURATED
006032730-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_ALT—ALL_TRANS_CHASES—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 006032730-03

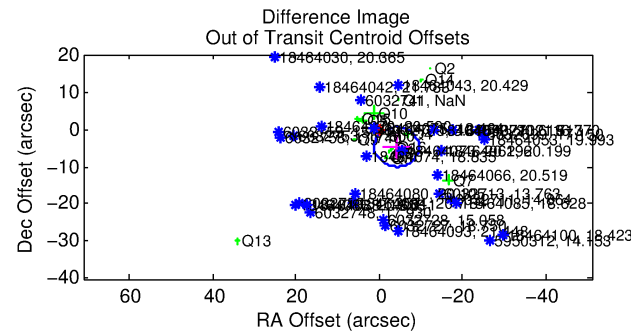
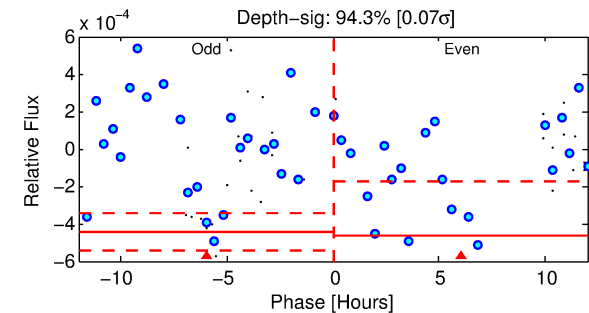
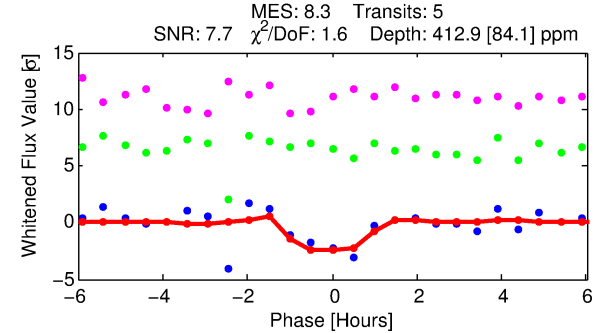
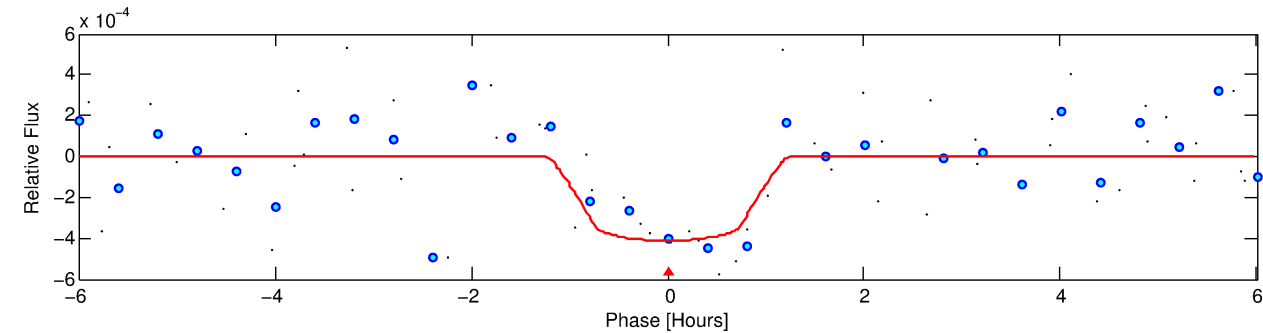
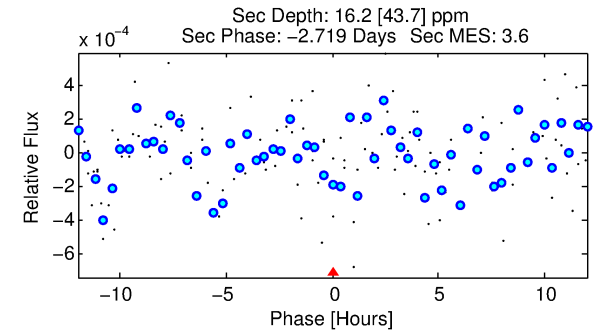
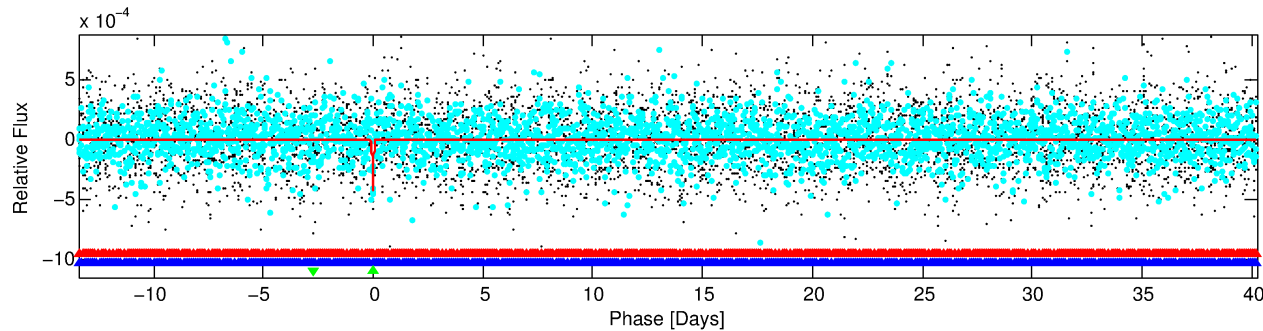
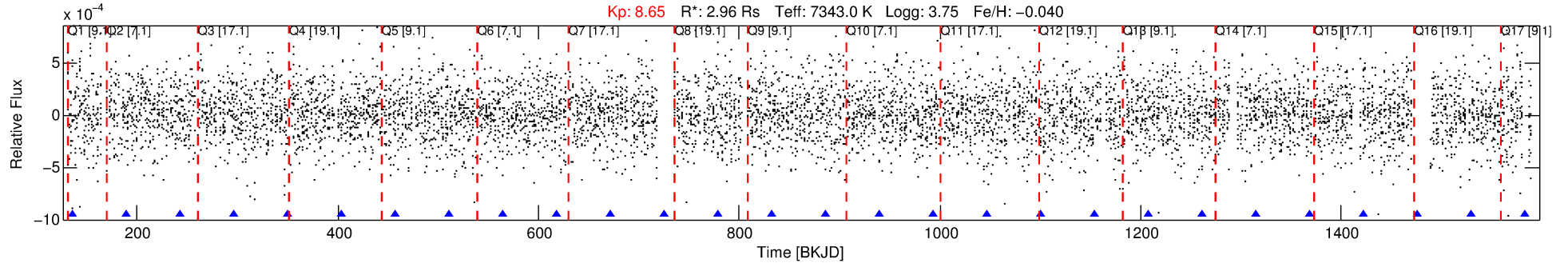
No Significant Match Found

DV One-Page Summary

KIC: 6032730 Candidate: 3 of 3 Period: 53.619 d

KOI: K06141 Corr: No Ephemeris Match

Kp: 8.65 R*: 2.96 Rs Teff: 7343.0 K Logg: 3.75 Fe/H: -0.040



DV Fit Results:

Period = 53.61867 [0.00068] d
Epoch = 135.3473 [0.0103] BKJD
Rp/R* = 0.0197 [0.0618]
a/R* = 165.36 [3169.20]
b = 0.62 [19.13]
Seff = 198.76 [143.01]
Teff = 957 [172] K
Rp = 6.35 [20.09] Re
a = 0.3383 [0.1427] AU
Ag = 25.29 [173.63] [0.14σ]
Teffp = 3320 [5670] K [0.42σ]

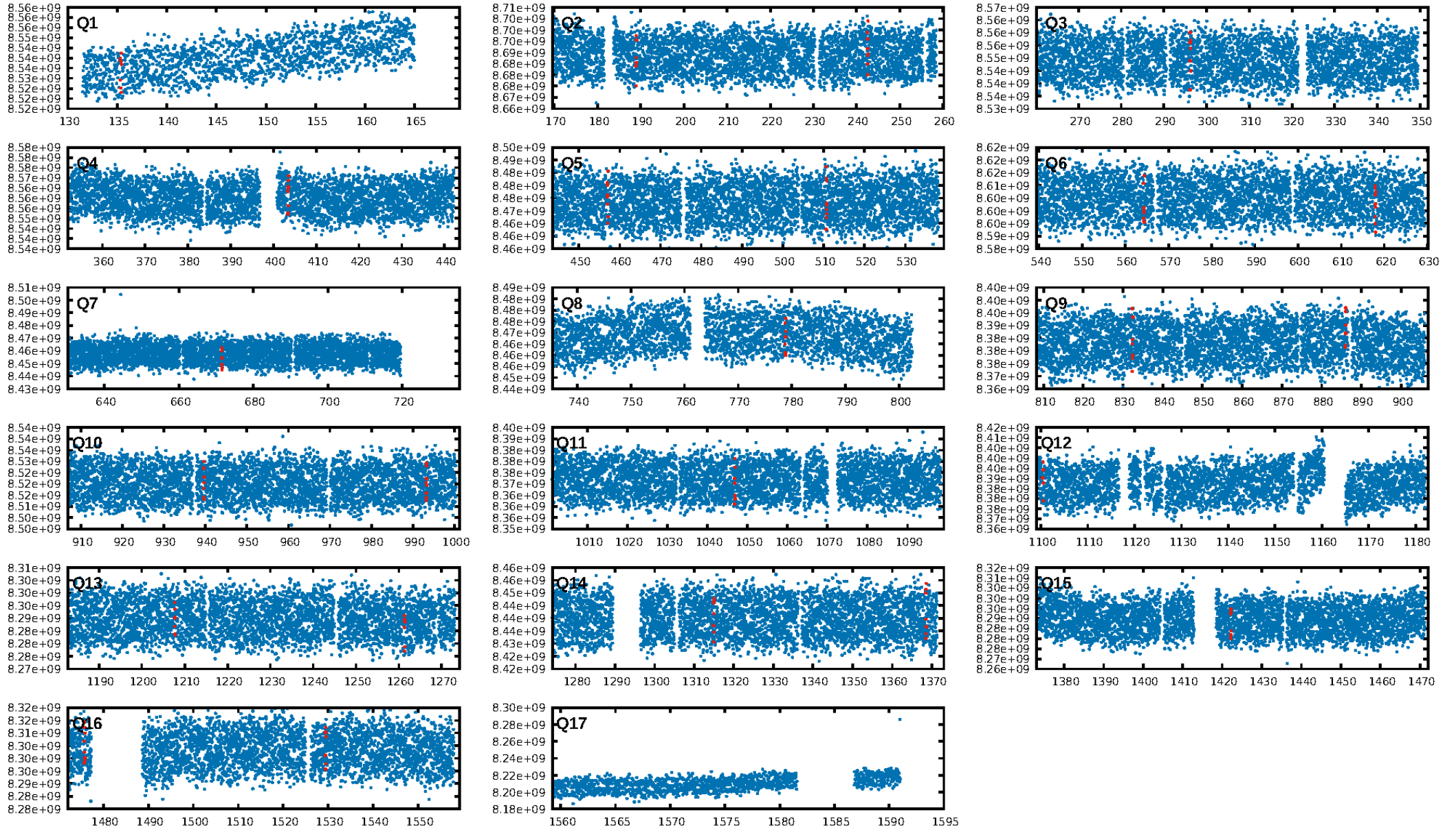
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [94.92σ]
LongPeriod-sig: N/A
ModelChiSquare2-sig: 15.0%
ModelChiSquareGof-sig: 99.3%
Bootstrap-pfa: 3.83e-10
RollingBand-fgt: 1.00 [5/5]
GhostDiagnostic-chr: N/A
Centroid-sig: N/A
Centroid-so: 1.827 arcsec [2.94σ]
OotOffset-rm: 6.196 arcsec [3.47σ]
KicOffset-rm: 4.258 arcsec [2.23σ]
OotOffset-st: 4/4/3/4 [15]
KicOffset-st: 4/4/3/4 [15]
DiffImageQuality-fgm: 0.00 [0/15]
DiffImageOverlap-fno: 0.40 [6/15]

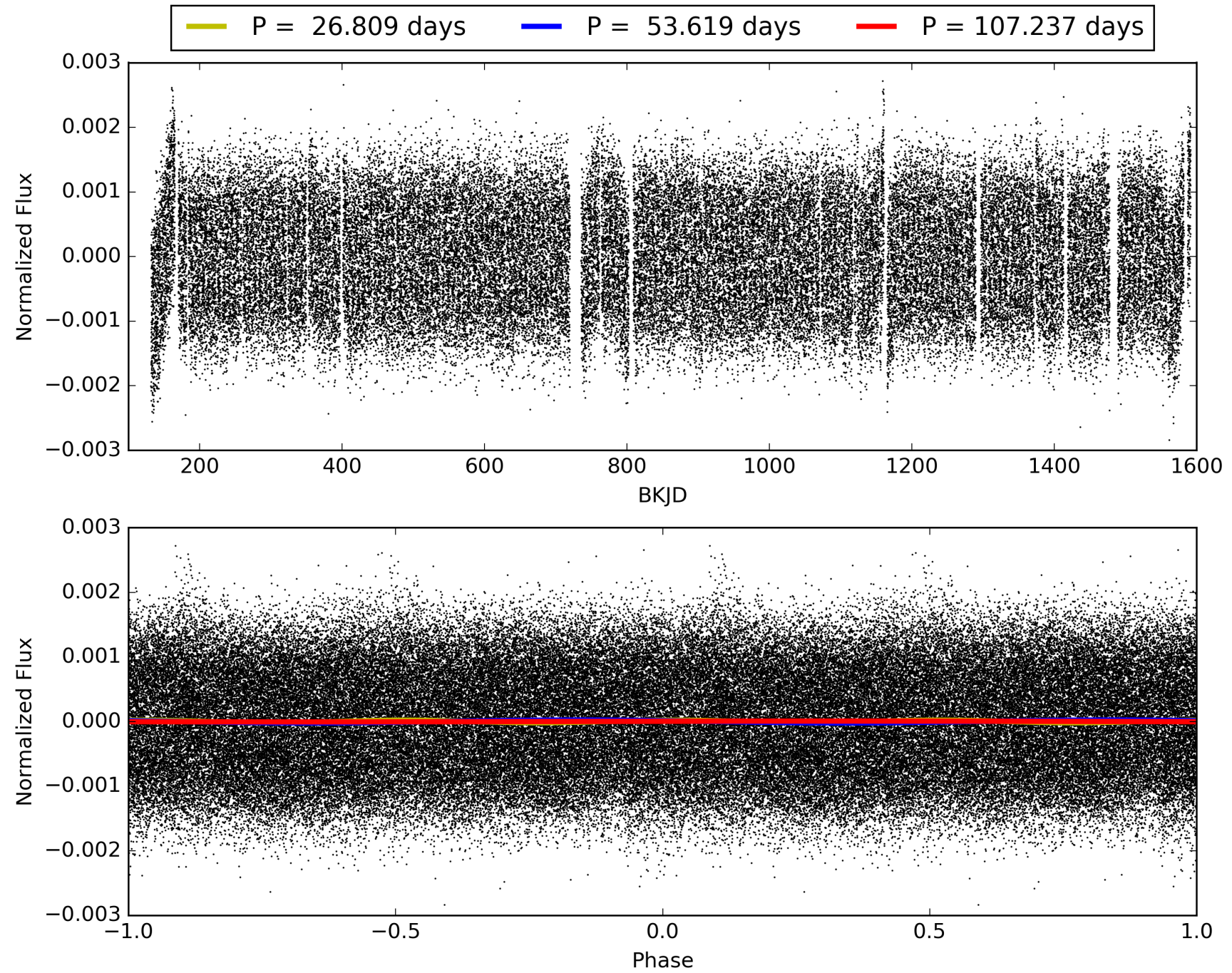
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 01-Feb-2016 07:33:50 Z

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

TCE 006032730-03, PDC Light Curves

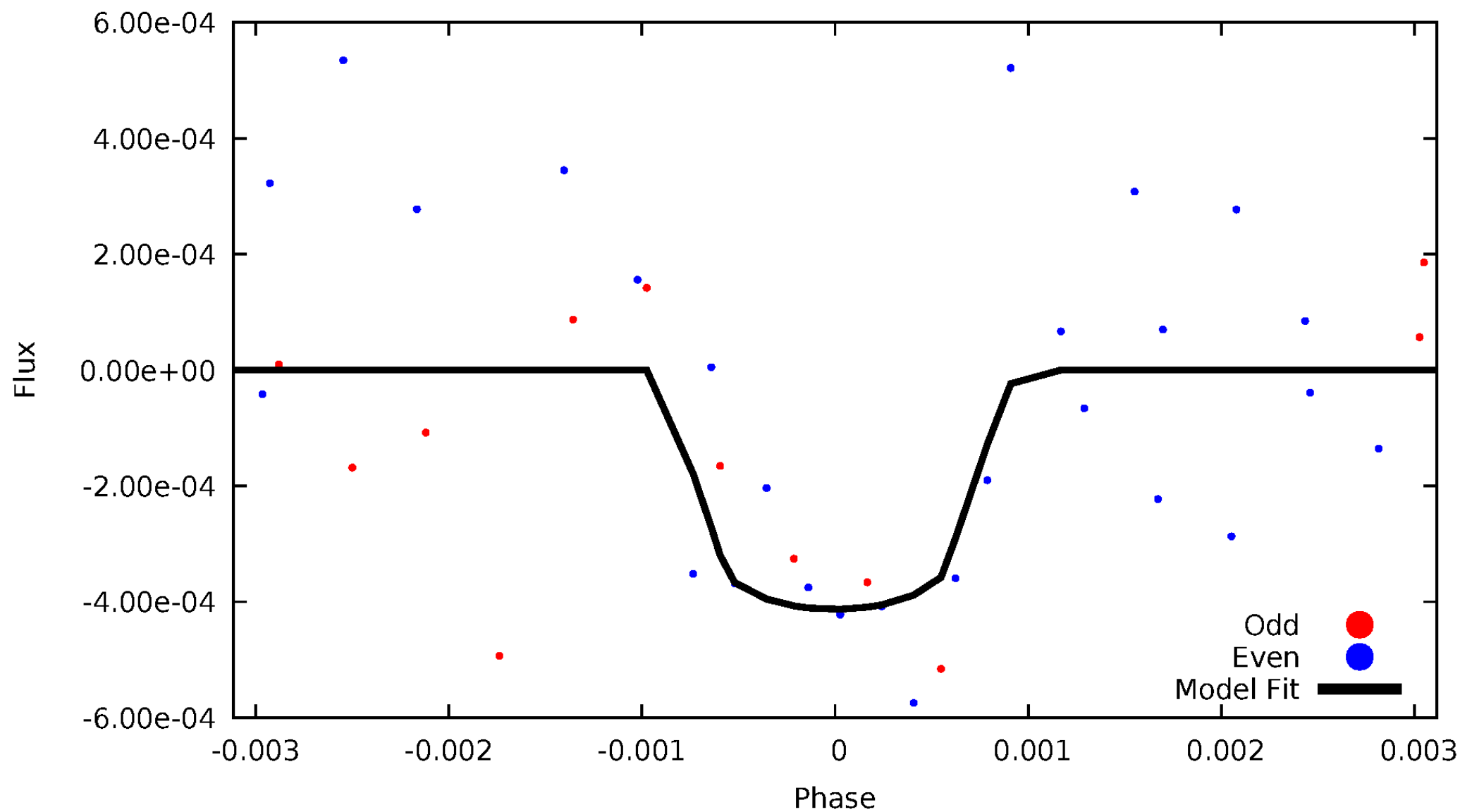


TCE 006032730-03



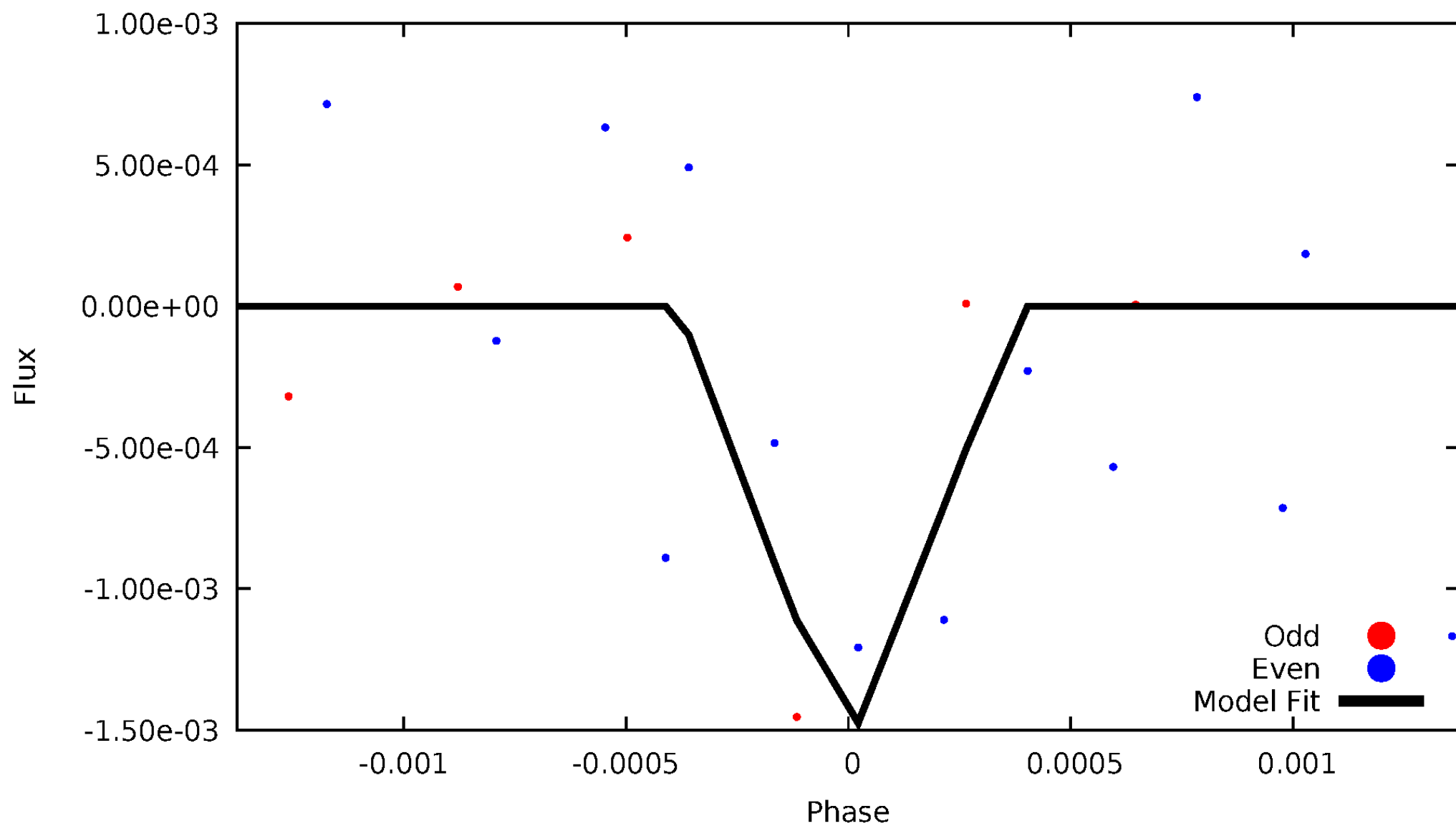
DV Odd/Even

TCE 006032730-03

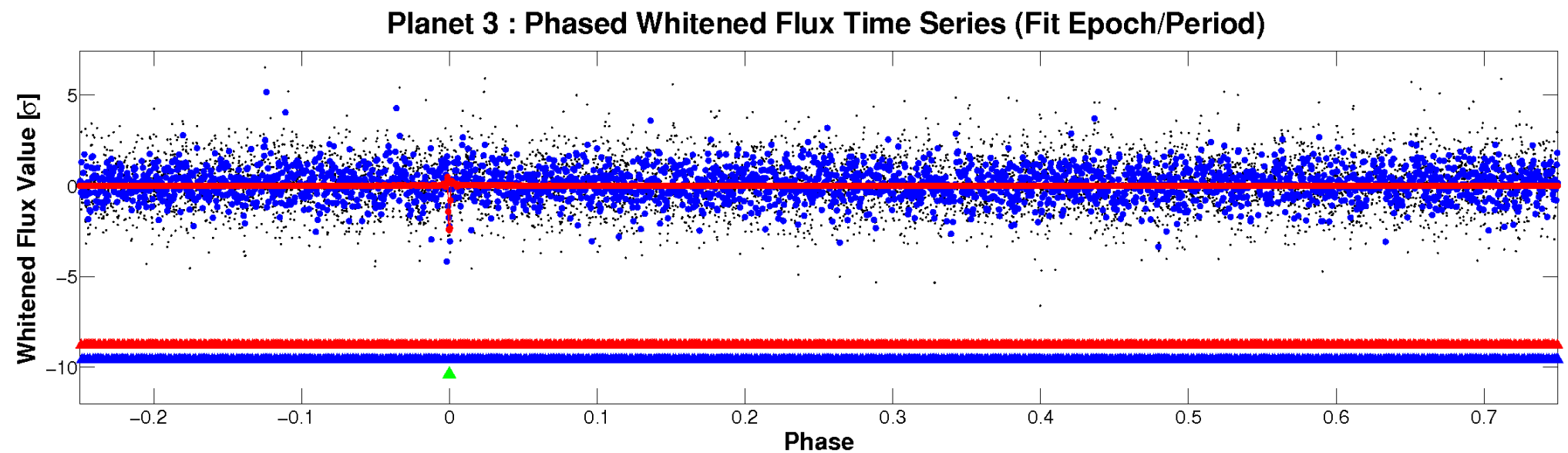
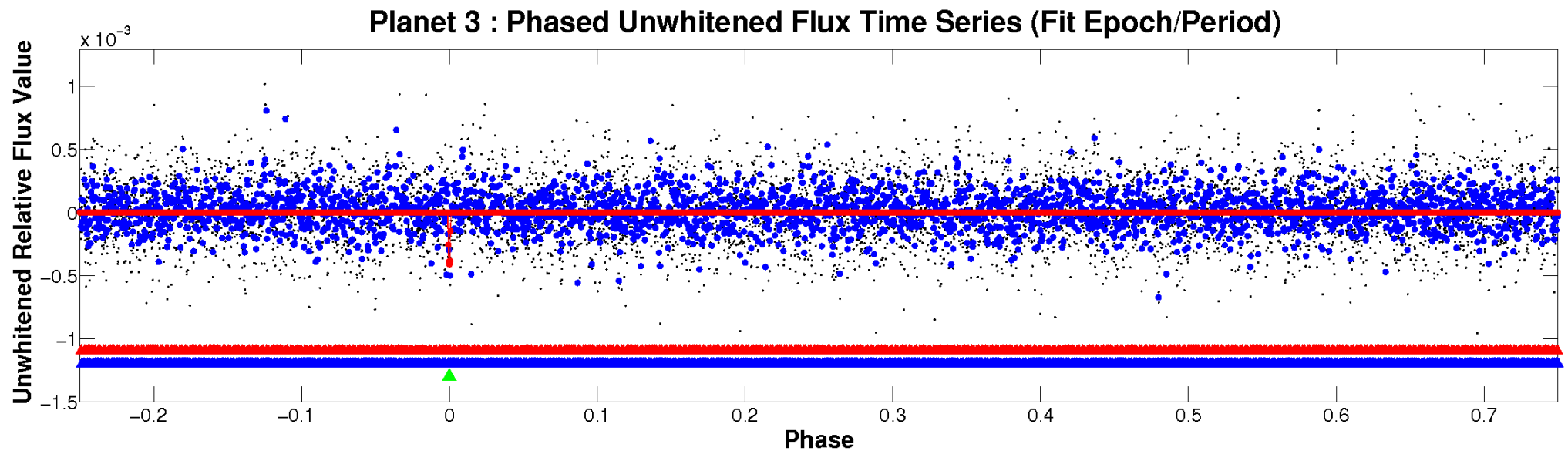


ALT Odd/Even

TCE 006032730-03

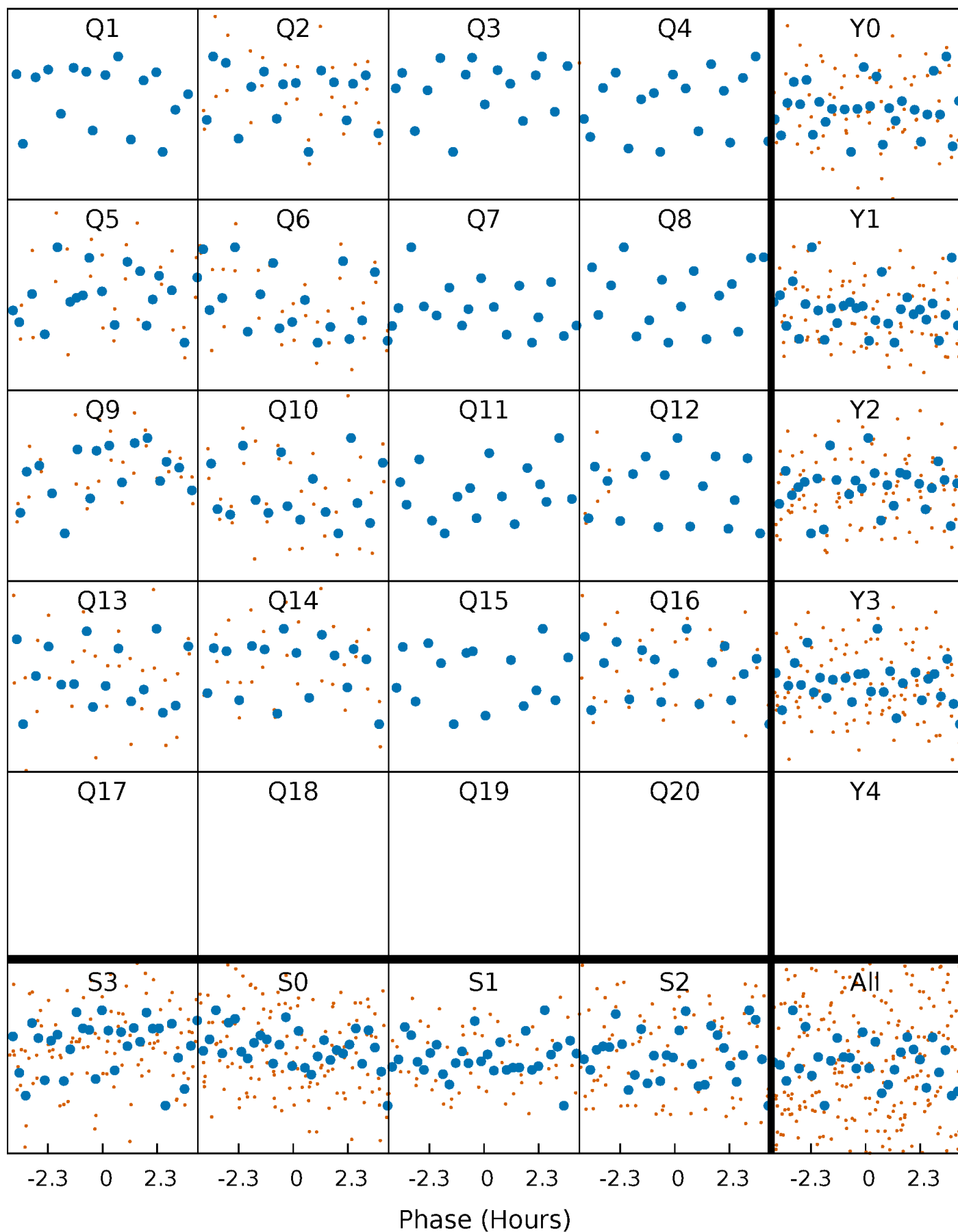


Non-Whitened Vs. Whitened Light Curve



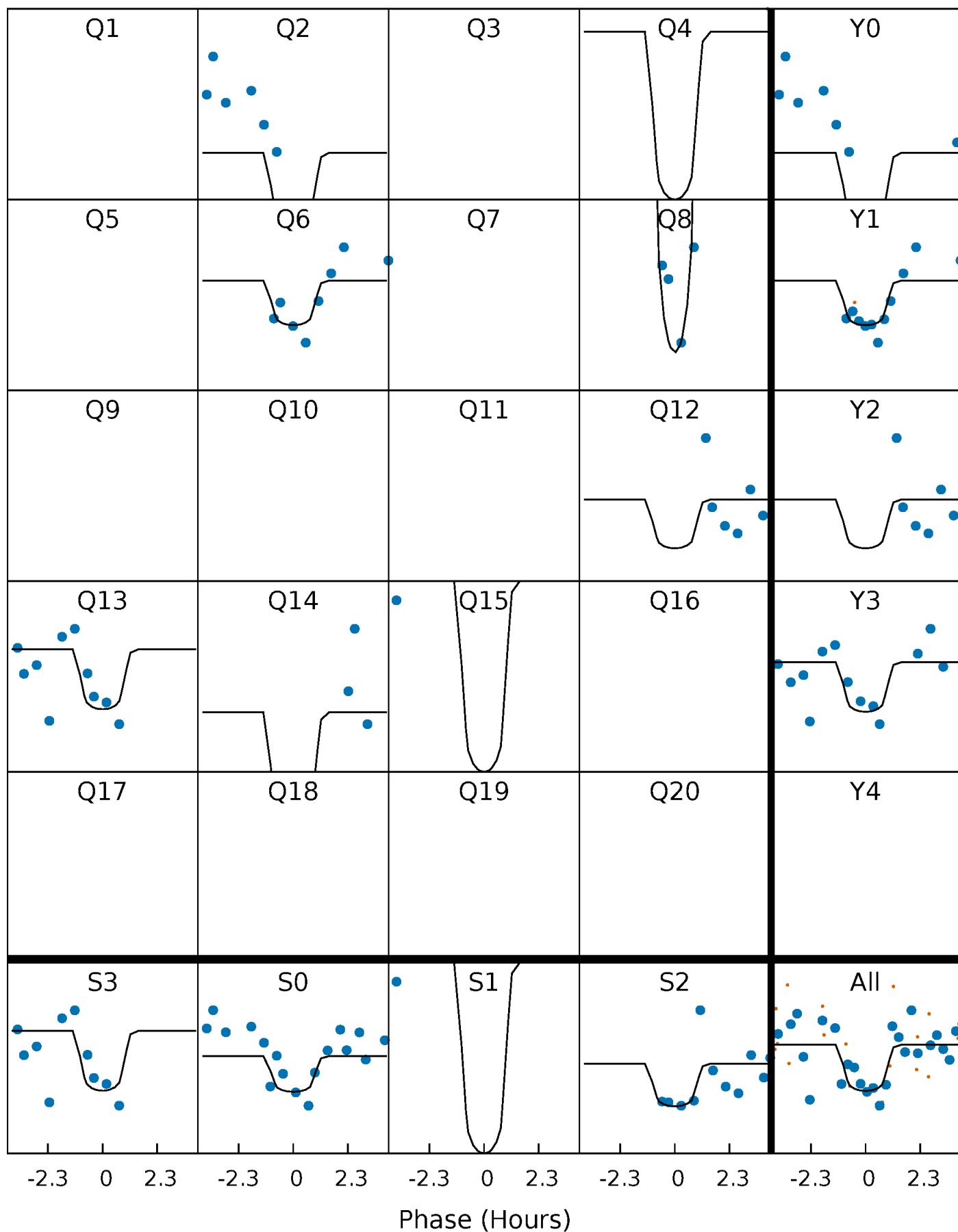
PDC Quarter-Phased Transit Curves

TCE 006032730-03 P= 53.618666 Days $T_0=135.347292$ (BKJD)



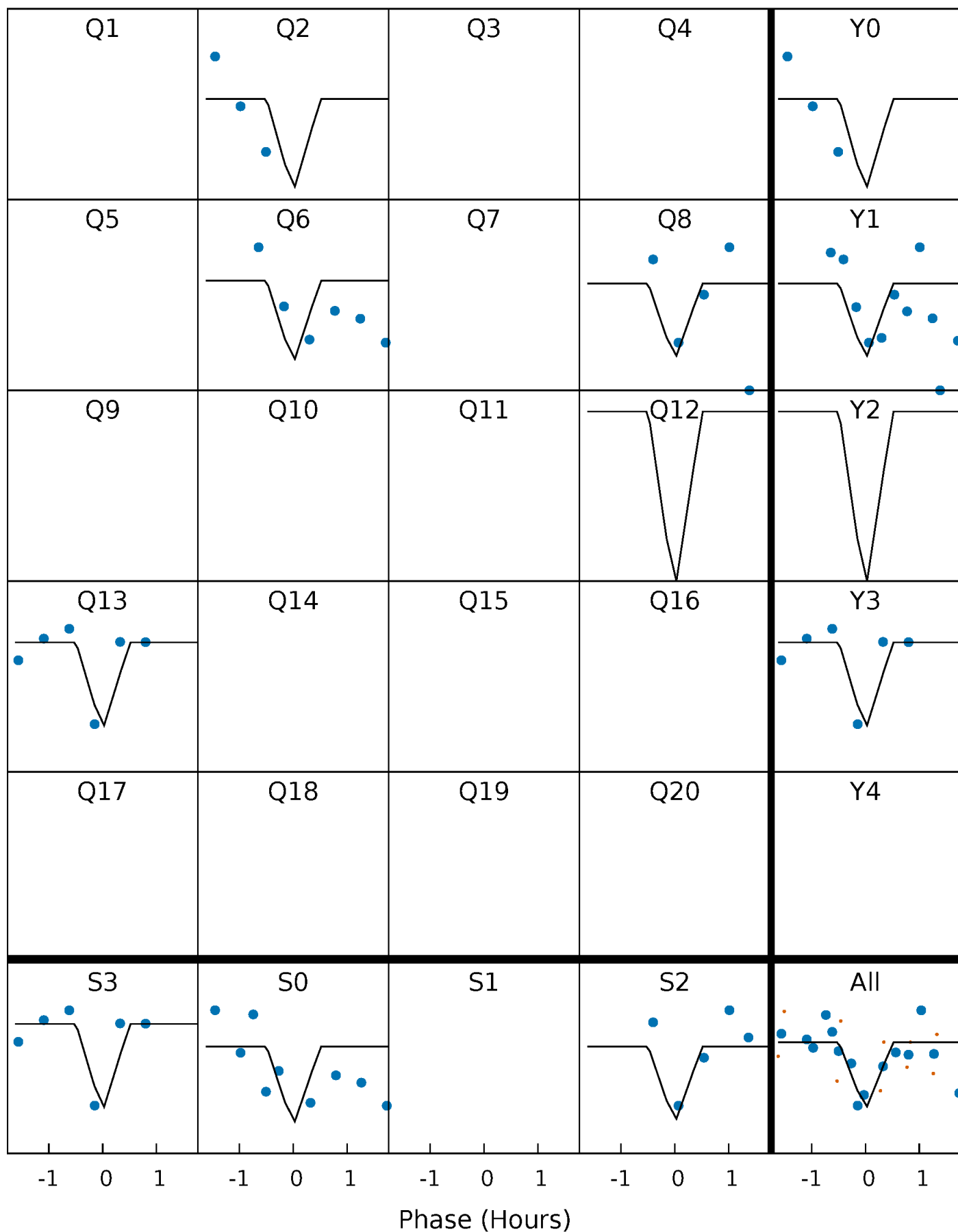
DV Quarter-Phased Transit Curves

TCE 006032730-03 P= 53.618666 Days $T_0=135.347292$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

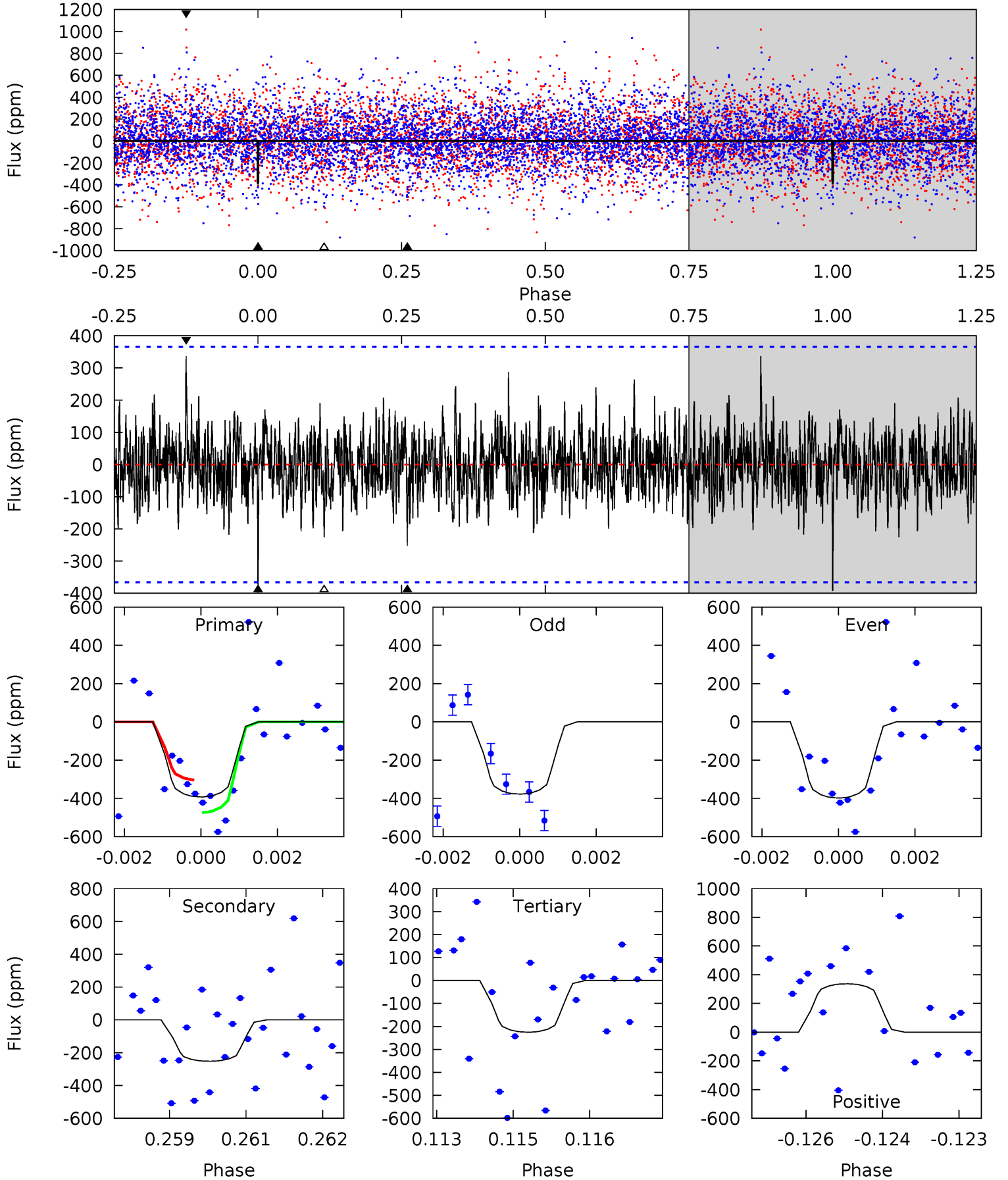
TCE 006032730-03 P= 53.619041 Days $T_0=135.334186$ (BKJD)



DV Model-Shift Uniqueness Test

006032730-03, P = 53.618666 Days, E = 81.728626 Days

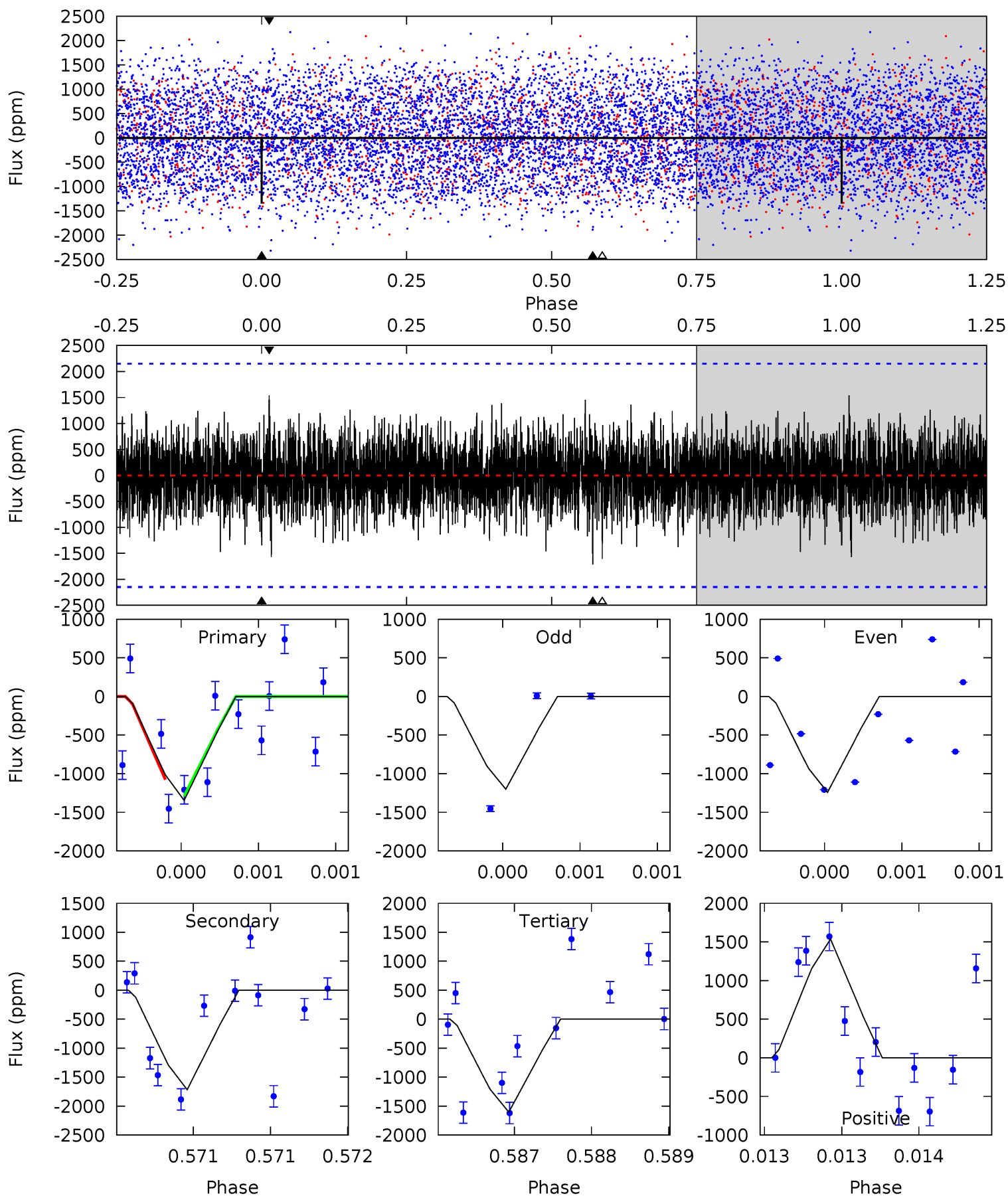
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
5.76	3.71	3.31	4.95	5.37	3.16	1.15	2.45	0.81	0.40	-1.25	0.14	0.99	0.46	1.24



Alt Model-Shift Uniqueness Test

006032730-03, P = 53.619041 Days, E = 81.715145 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
3.48	4.43	4.14	3.97	5.55	3.45	1.17	-0.66	-0.49	0.29	0.46	0.05	1.01	0.47	0.24



Stellar Parameters For KIC 006032730

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	7343^{+203}_{-330}	$3.751^{+0.417}_{-0.098}$	$-0.040^{+0.250}_{-0.300}$	$2.955^{+0.435}_{-1.219}$	$1.793^{+0.194}_{-0.389}$	$0.098^{+0.342}_{-0.031}$
	+3%/-4%	+11%/-3%	+625%/-750%	+15%/-41%	+11%/-22%	+349%/-32%
Source	KIC0	KIC0	KIC0	DSEP		

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

Secondary Eclipse Parameters for KIC 006032730-03 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-252 ± 68	$14.82^{+14.93}_{-10.59}$	1306^{+87}_{-145}	4285^{+3559}_{-908}	76^{+819}_{-59}
Alt.	-1716 ± 387	$17.26^{+15.96}_{-11.91}$	1293^{+96}_{-130}	6009^{+6820}_{-1453}	362^{+3250}_{-264}

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

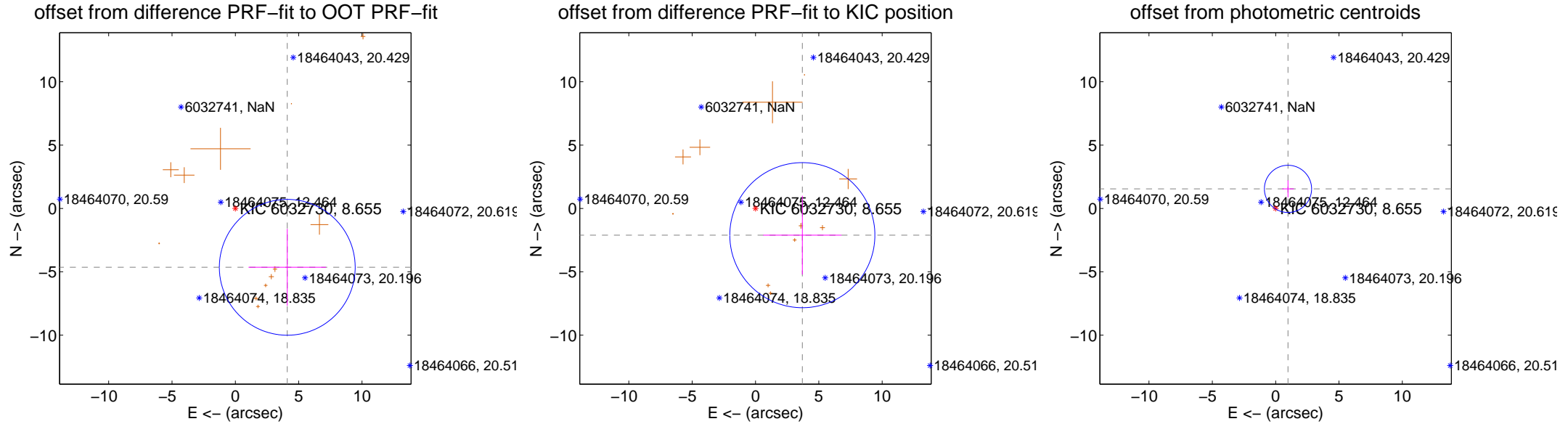
DV Centroid Data

Supplemental centroid analysis for 006032730-03. **Kepler magnitude: 8.65.** Transit SNR 7.71

There are 0 quarters with good PRF difference image offsets

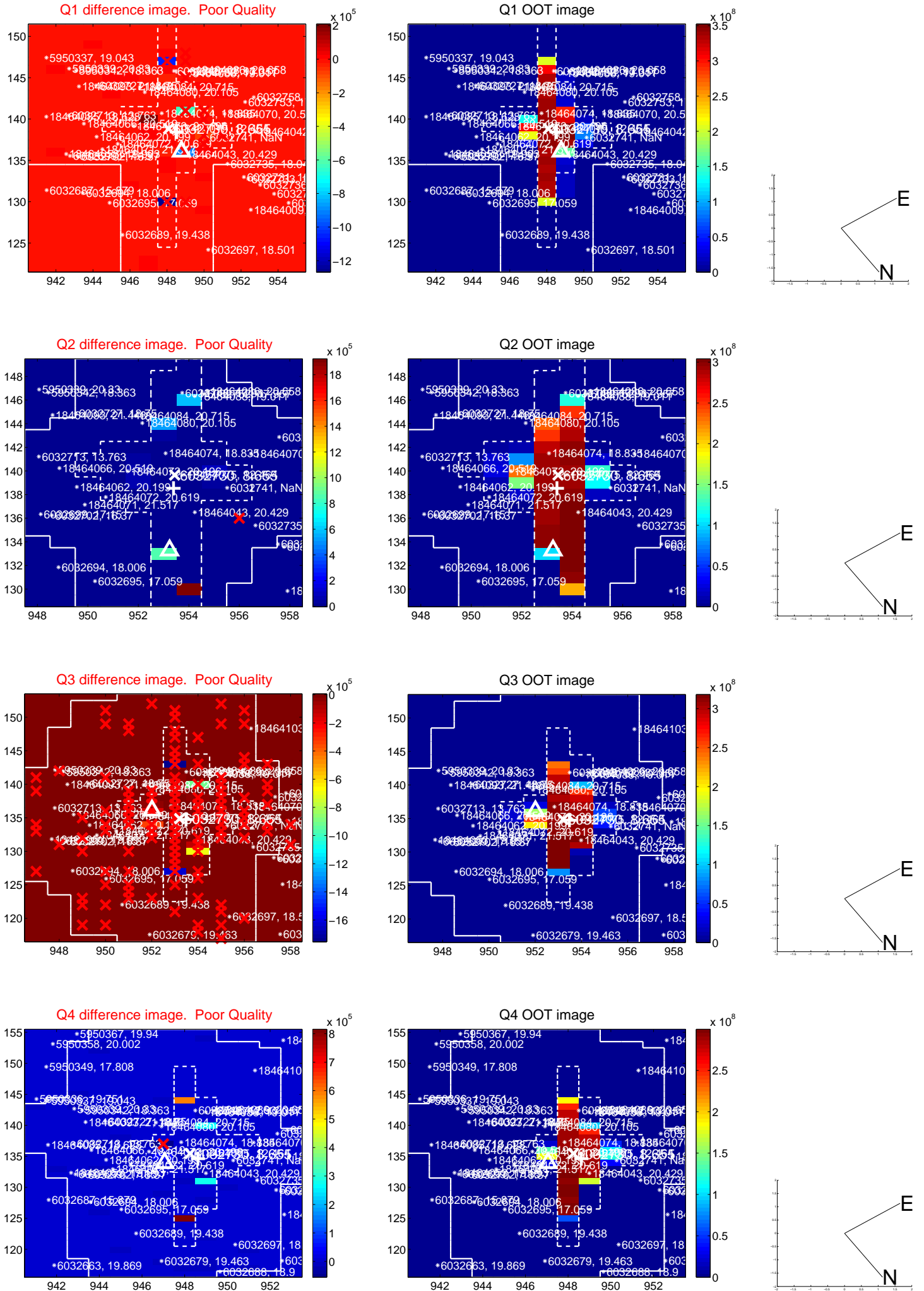
The OOT PRF centroid is offset from the target star catalog position by about 3.45 arcsec so the offset from difference PRF-fit to OOT-fit may be invalid.

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	6.196 ± 1.787	3.47	-4.099 ± 3.056	-4.646 ± 3.034
PRF-fit source offset from KIC position	4.258 ± 1.909	2.23	-3.699 ± 3.088	-2.109 ± 3.108
photometric centroid source offset	1.83 ± 0.62	2.94	-0.98 ± 0.46	1.54 ± 0.68

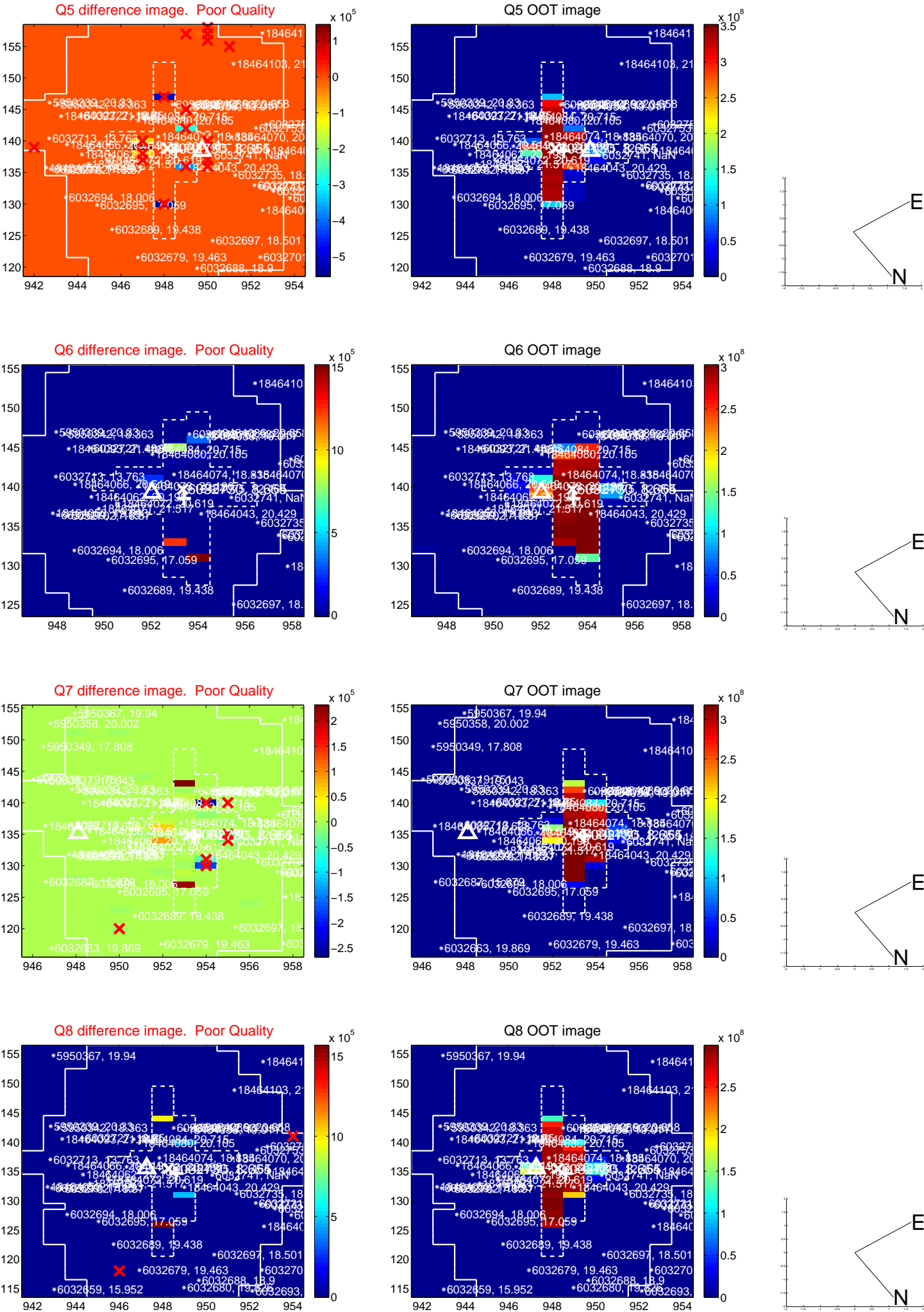


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets;** magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

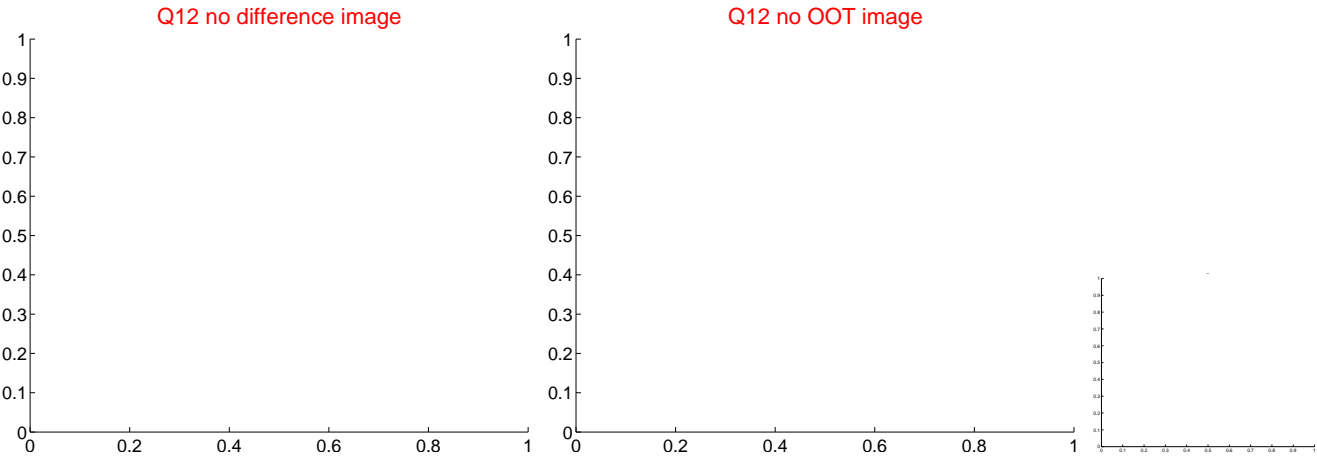
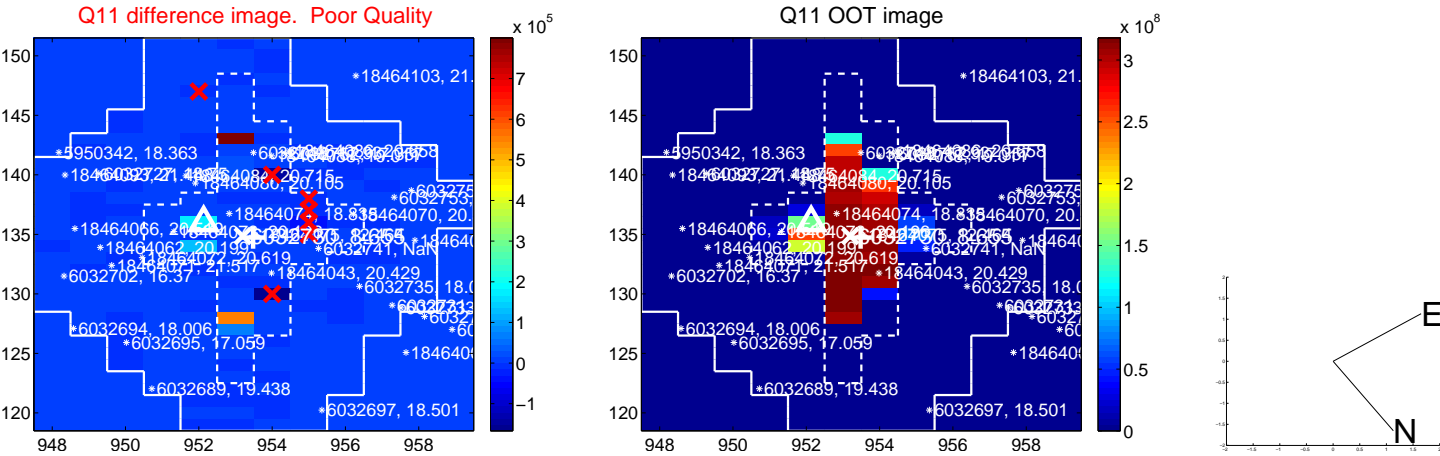
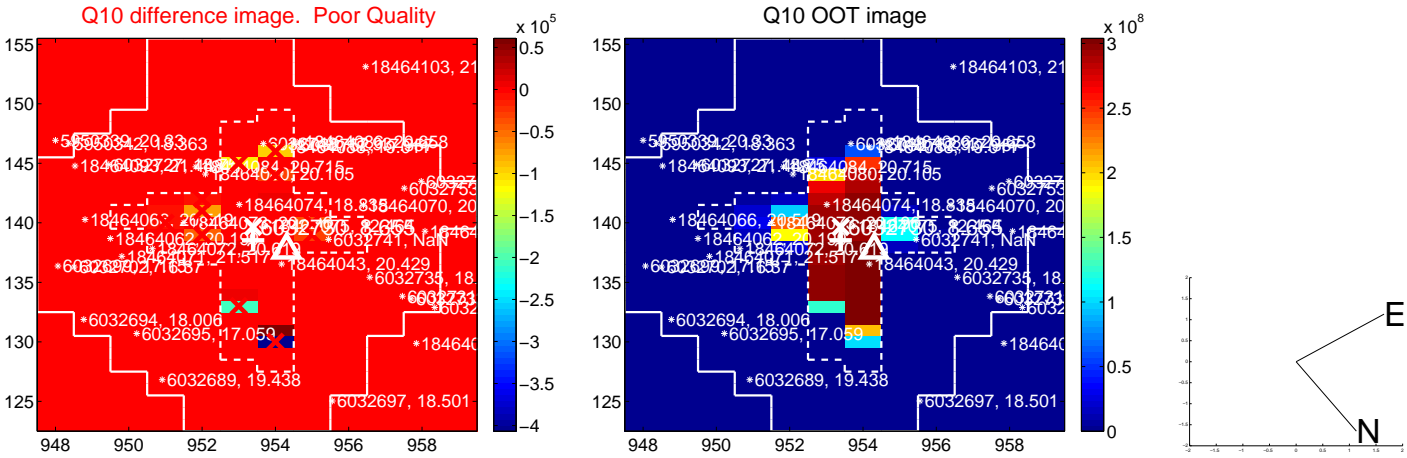
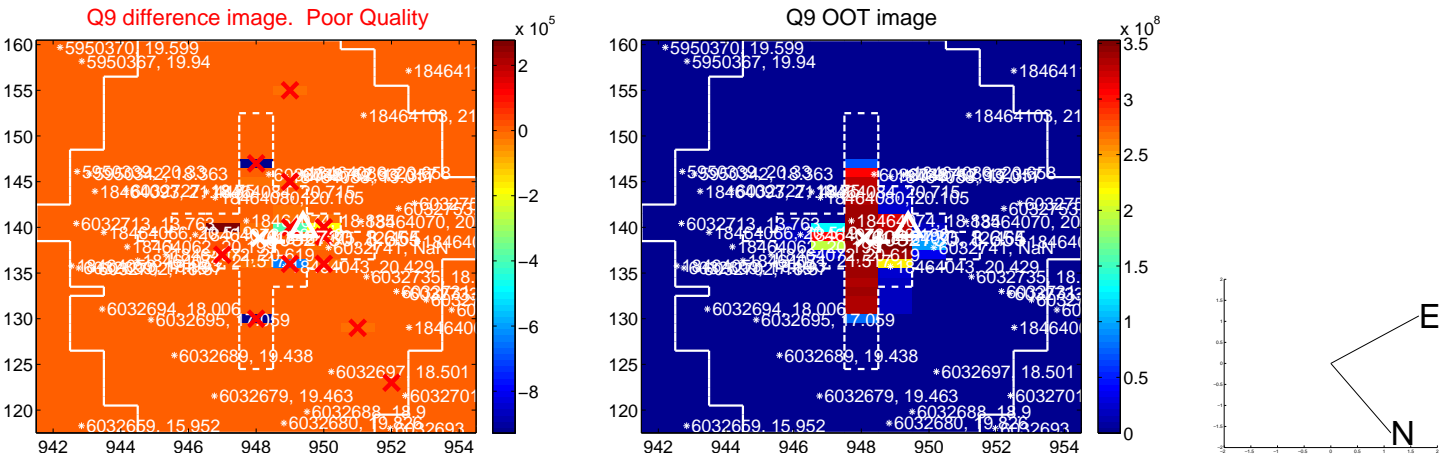
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



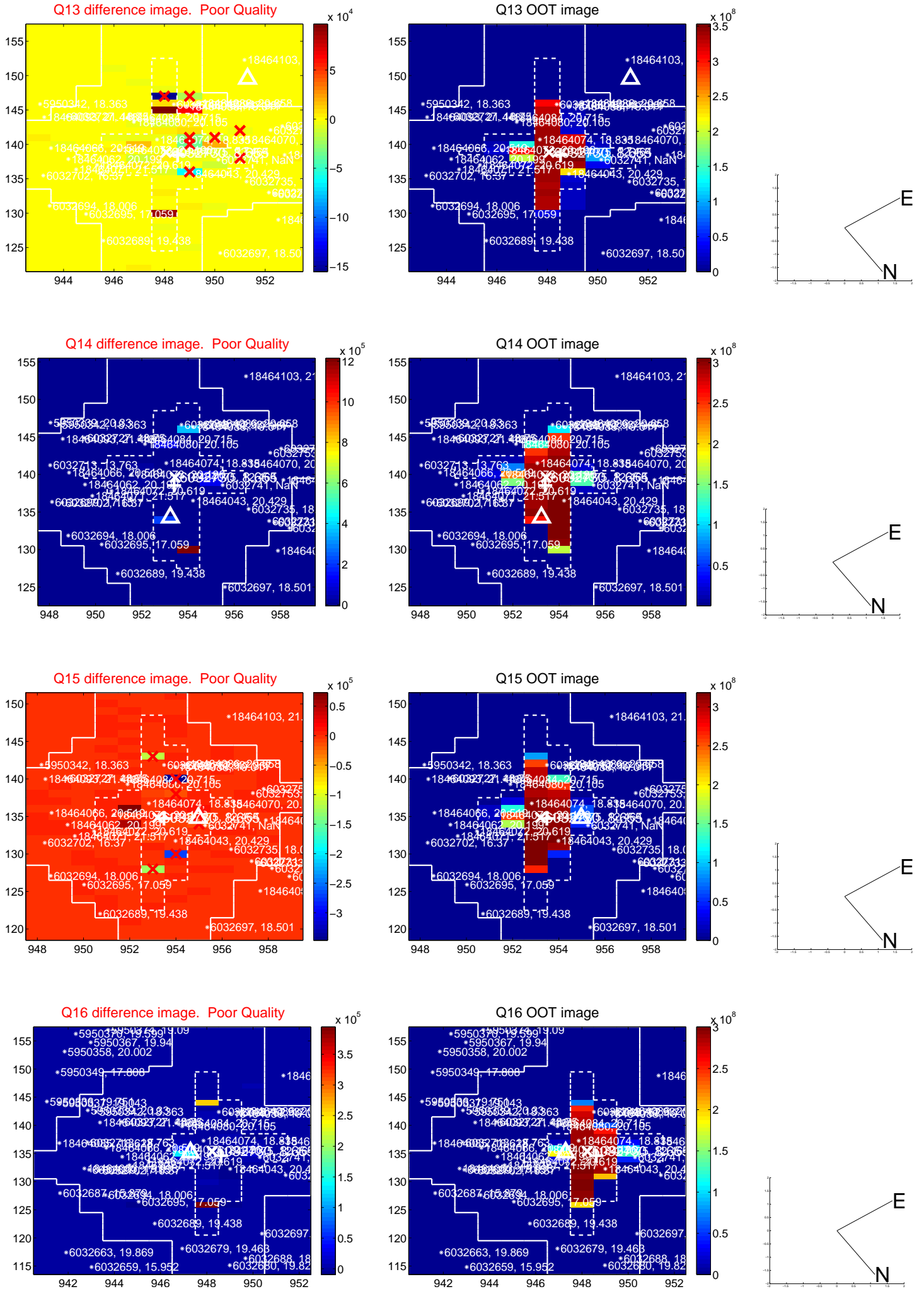
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



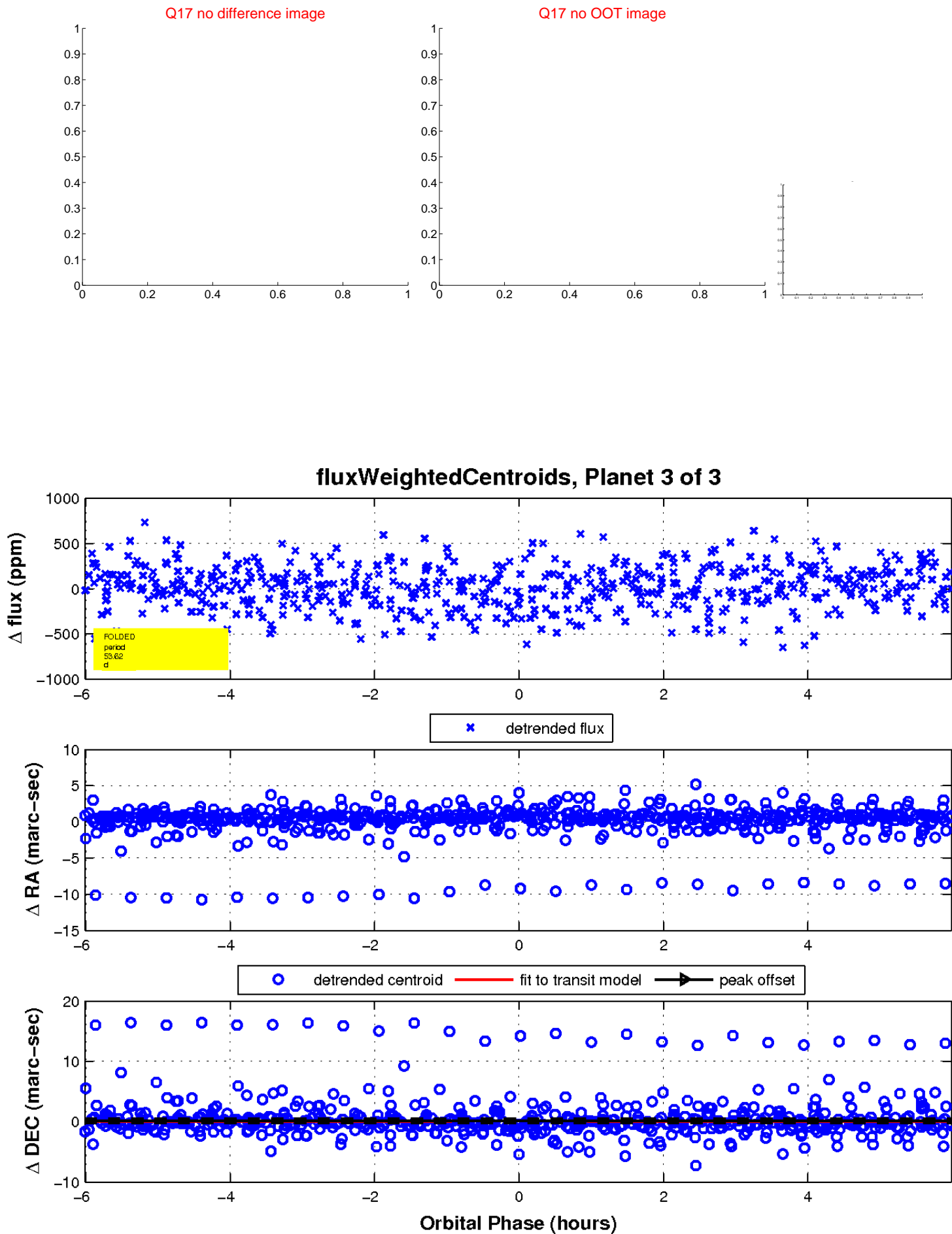
white ×: KIC target position; +: OOT centroid; △: difference centroid. red ×: large negative pixel value.



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



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



UKIRT Image

