

KIC 006965789

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})
006965789-01	OBS	No	0.840615	131.563232	131.1	3.474	14.1	12.8	4.27	7897	5.70	144975.25
006965789-02	OBS	No	4.544619	131.579106	15.2	15.000	8.5	-1.0	4.27	7897	1.68	15278.95
006965789-03	OBS	No	67.172470	183.271228	1474.3	13.674	12.1	7.5	4.27	7897	30.26	421.21

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
006965789-01	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—CENT_SATURATED
006965789-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_ZUMA—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_ALT—CENT_SATURATED
006965789-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—LPP_ALT—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.

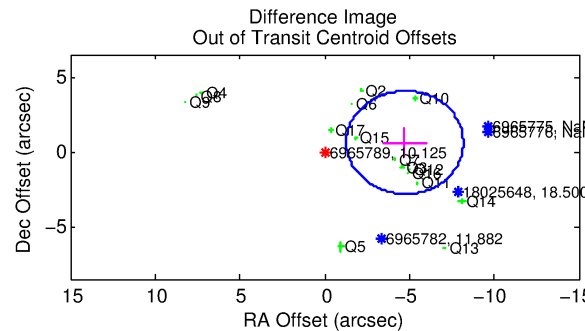
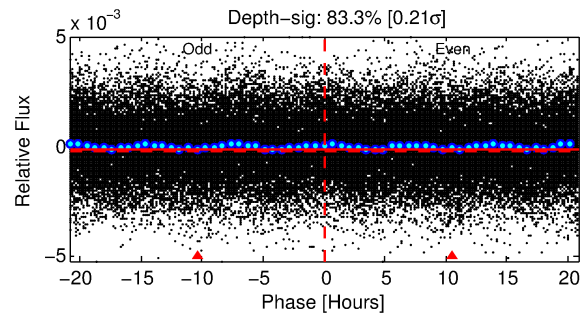
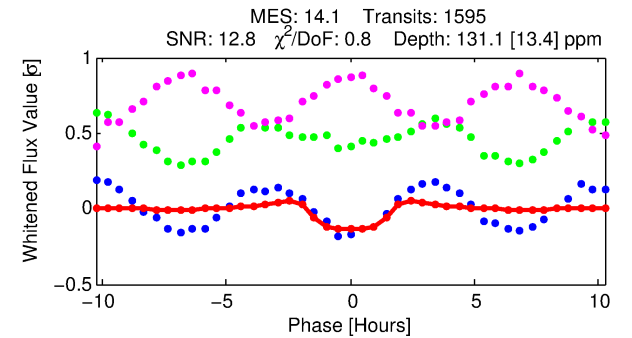
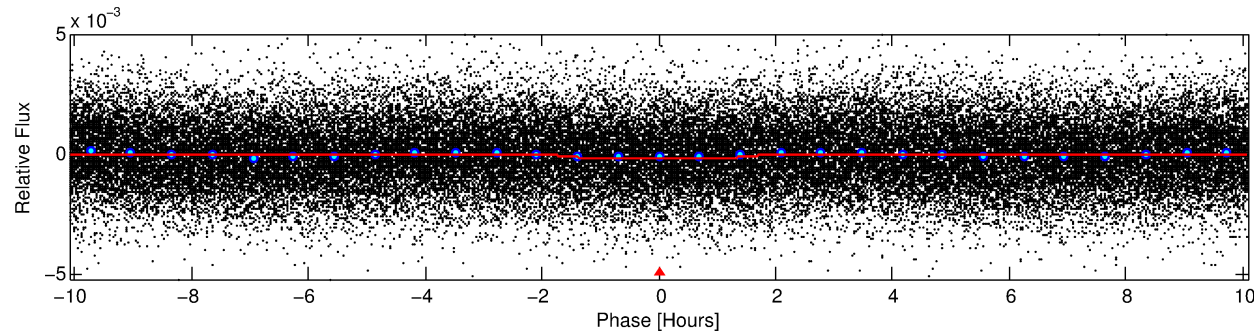
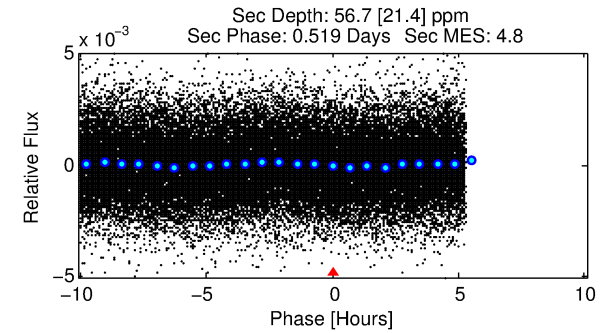
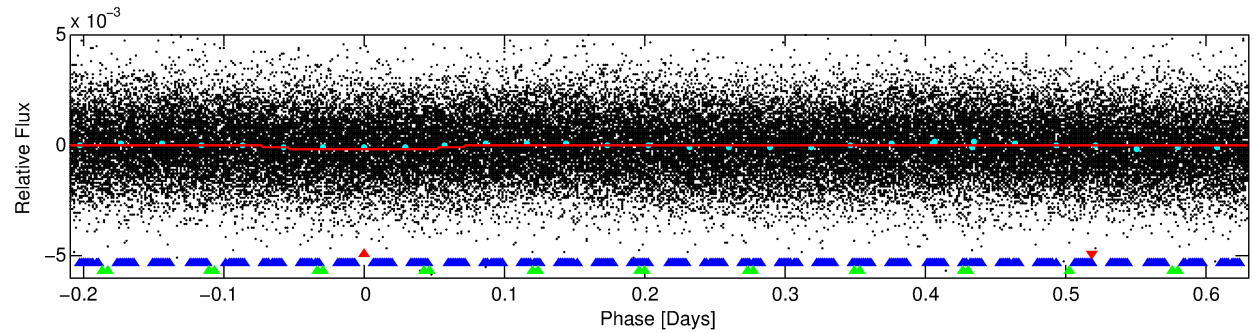
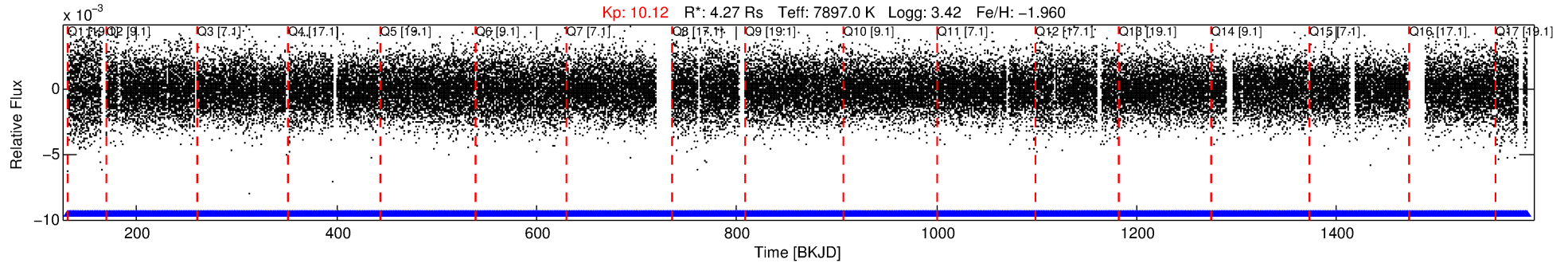
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 006965789-01

No Significant Match Found

DV One-Page Summary

KIC: 6965789 Candidate: 1 of 3 Period: 0.841 d



DV Fit Results:

Period = 0.84062 [0.00001] d
Epoch = 131.5632 [0.0029] BKJD
Rp/R* = 0.0122 [0.0056]
a/R* = 1.27 [1.33]
b = 0.90 [0.59]
Seff = 144975.25 [222990.31]
Teq = 4976 [1913] K
Rp = 5.70 [5.05] Re
a = 0.0209 [0.0184] AU
Ag = 0.42 [0.77] [-0.76σ]
Teffp = 6193 [1560] K [0.49σ]

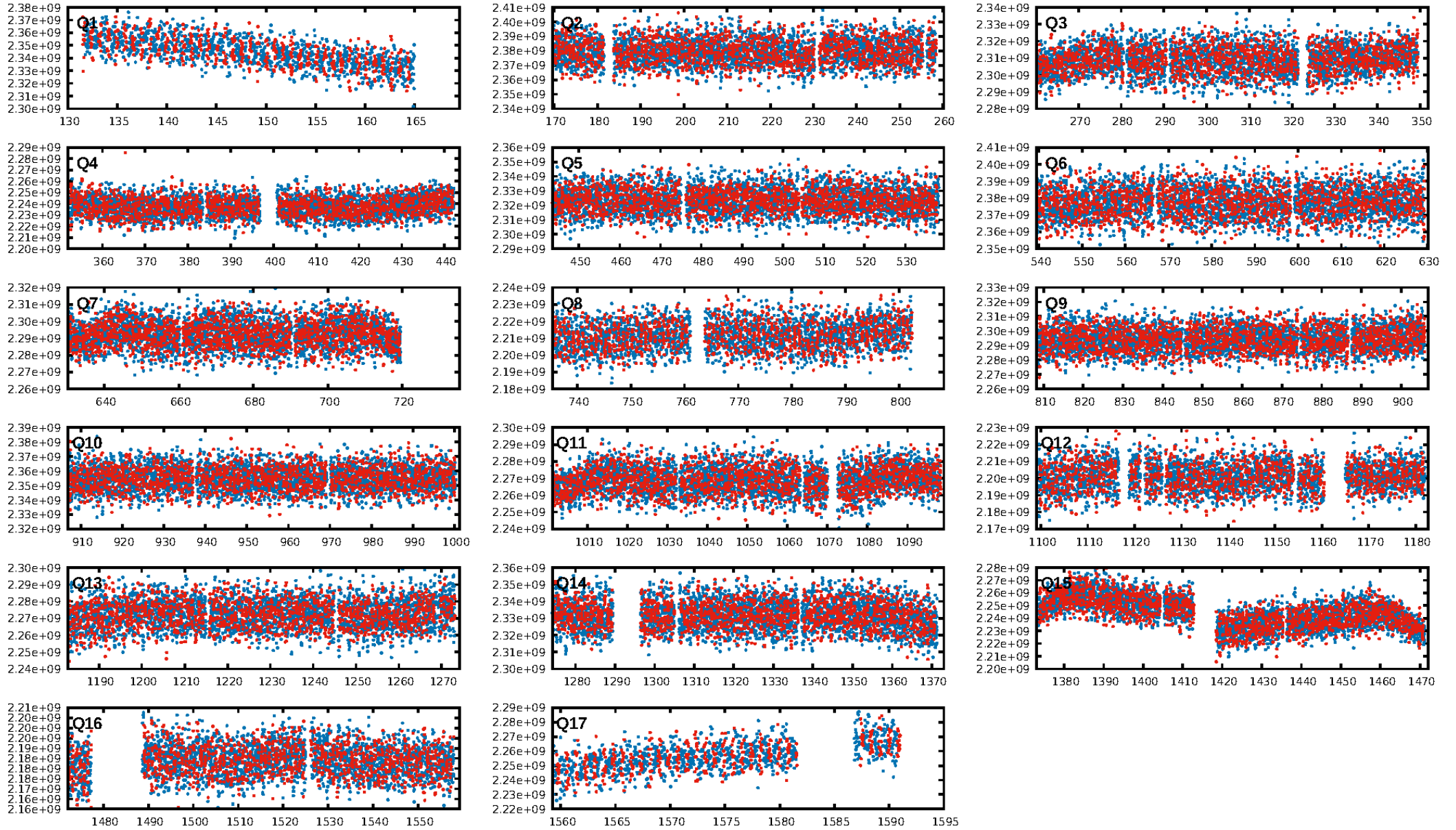
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: 100.0% [5.77σ]
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 1.23e-52
RollingBand-fgt: 1.00 [1523/1523]
GhostDiagnostic-chr: N/A
Centroid-sig: 0.0%
Centroid-so: 1.002 arcsec [7.87σ]
OotOffset-rm: 4.772 arcsec [4.15σ]
KicOffset-rm: 5.189 arcsec [3.90σ]
OotOffset-st: 4/4/4/4 [16]
KicOffset-st: 4/4/4/4 [16]
DiffImageQuality-fgm: 0.00 [0/16]
DiffImageOverlap-fno: 1.00 [17/17]

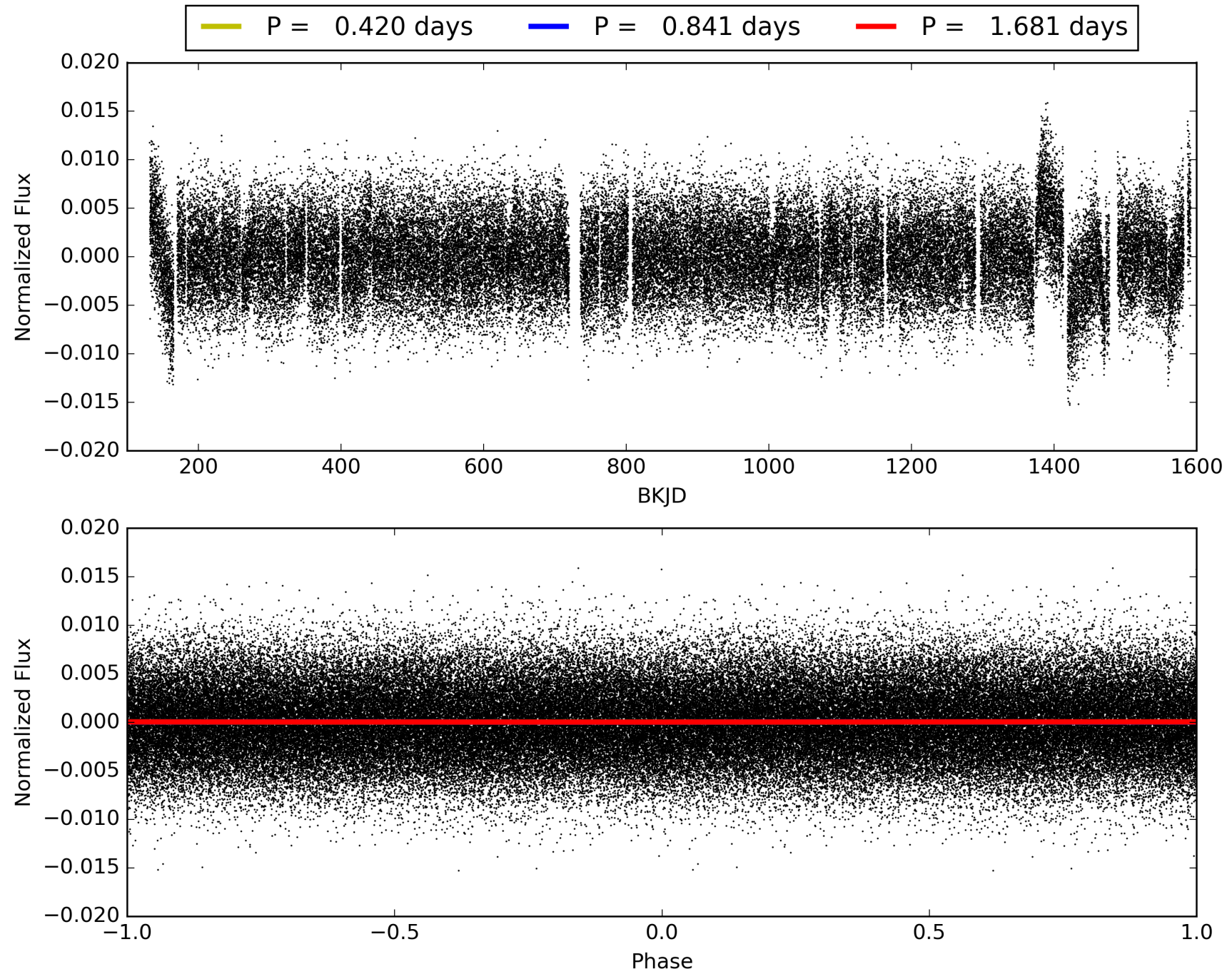
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 31-Jan-2016 02:23:34 Z

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

TCE 006965789-01, PDC Light Curves

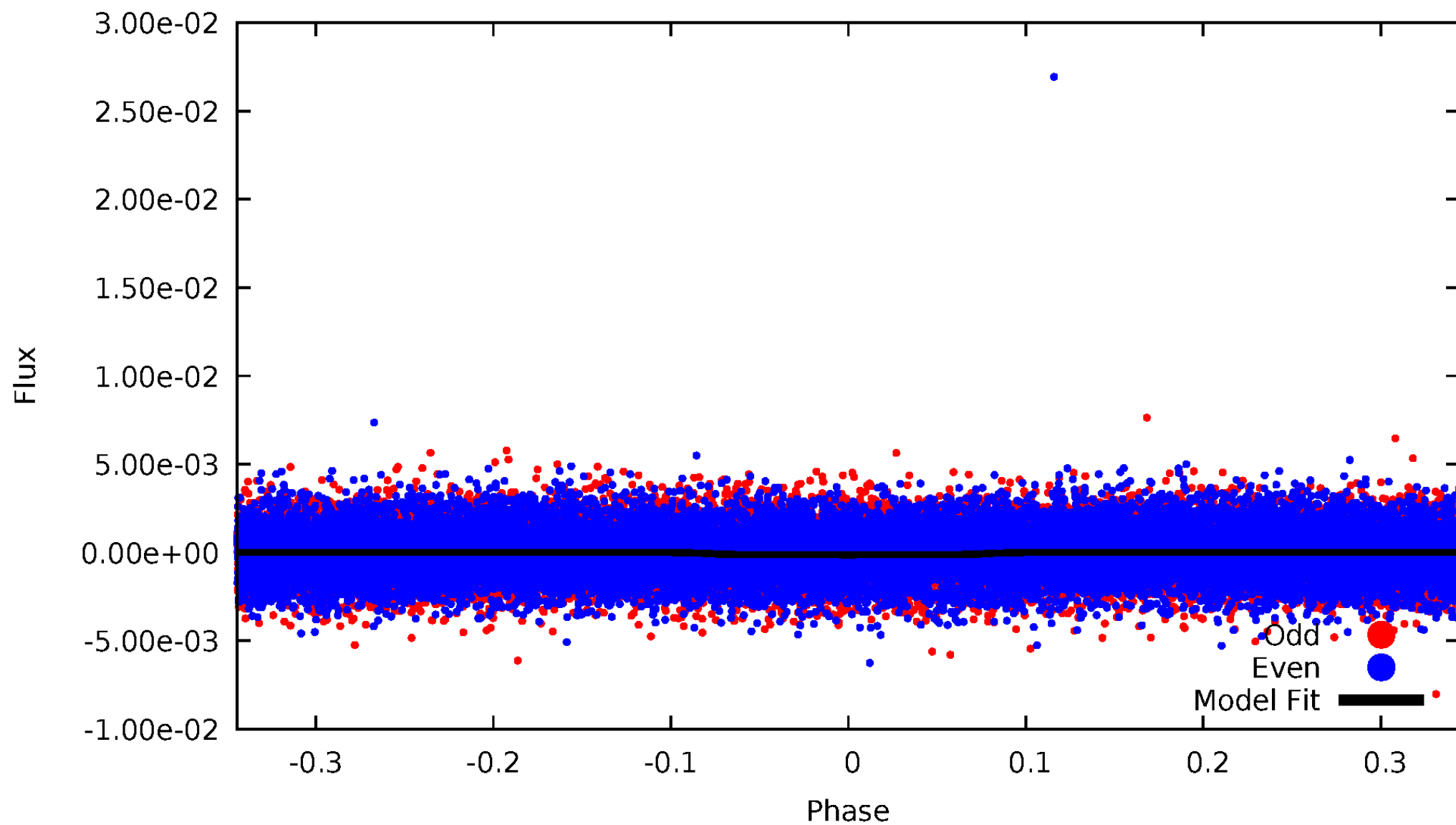


TCE 006965789-01



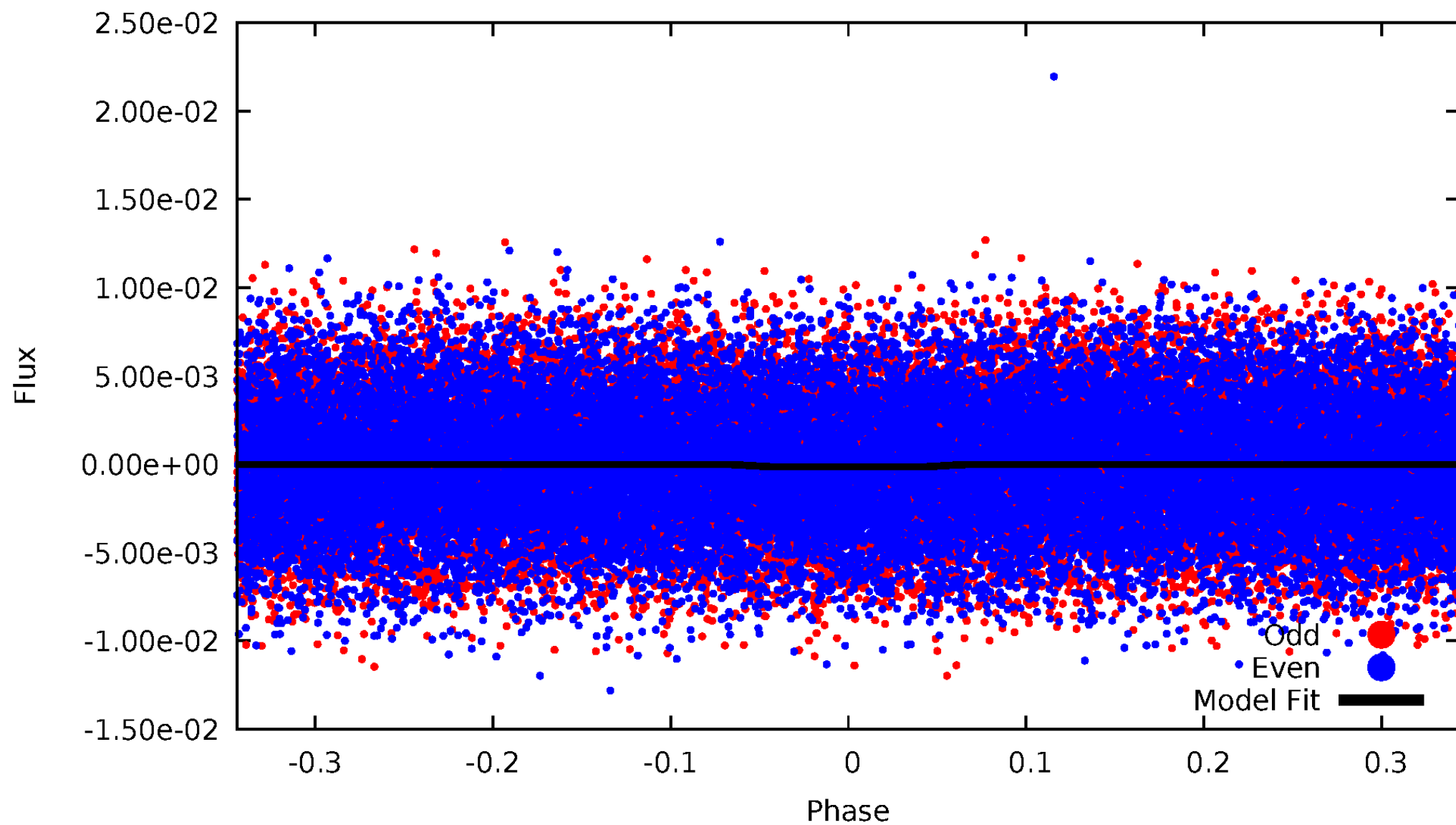
DV Odd/Even

TCE 006965789-01

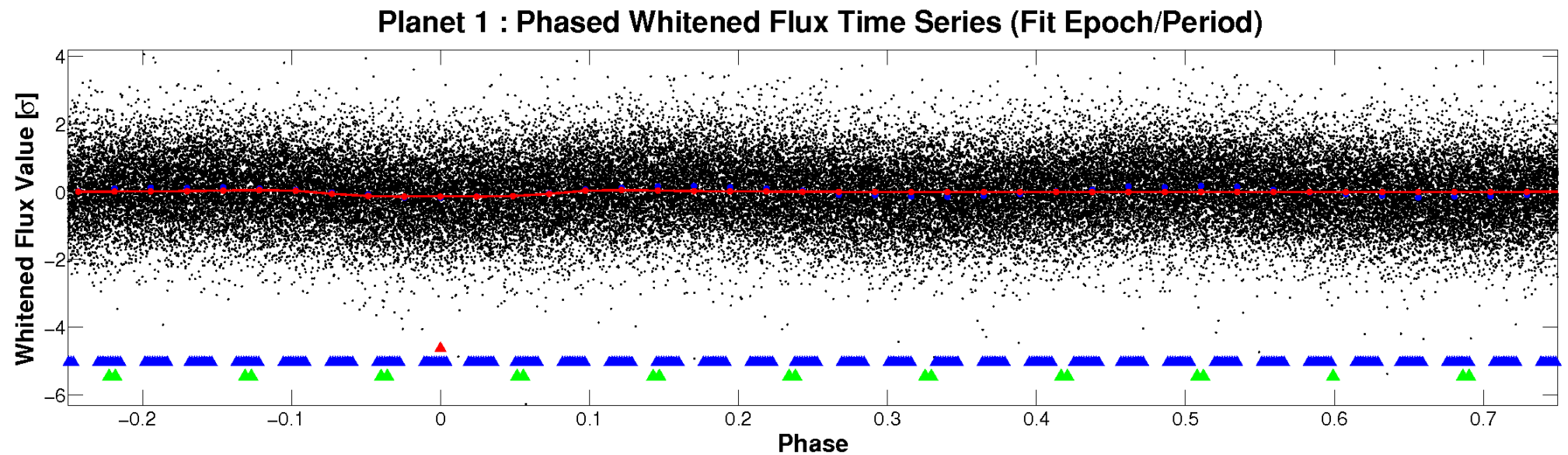
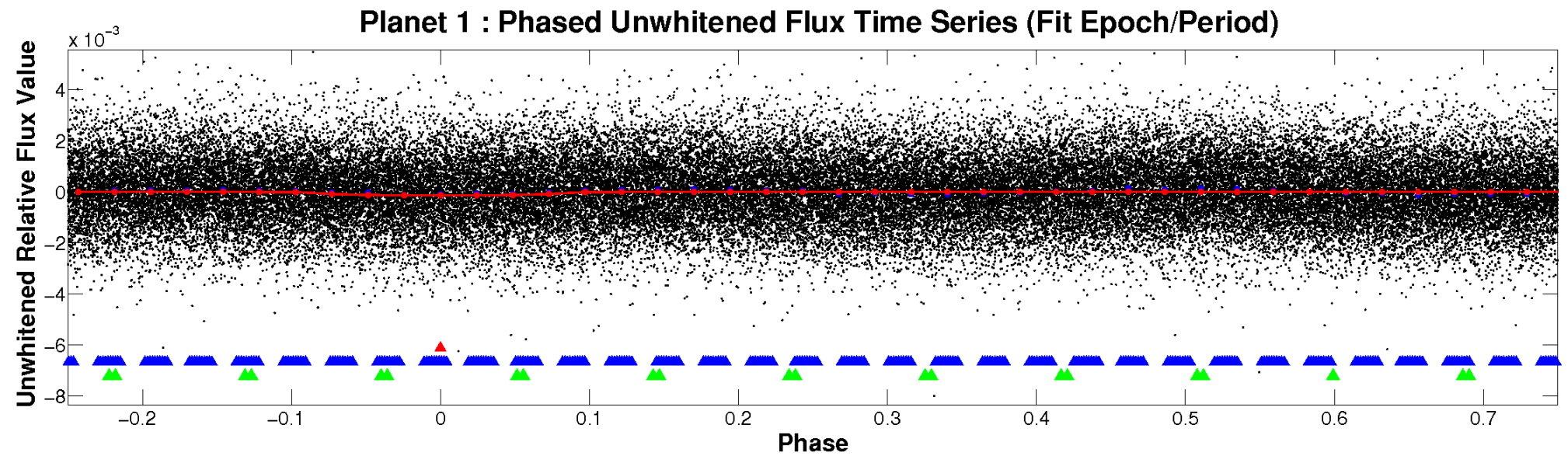


ALT Odd/Even

TCE 006965789-01

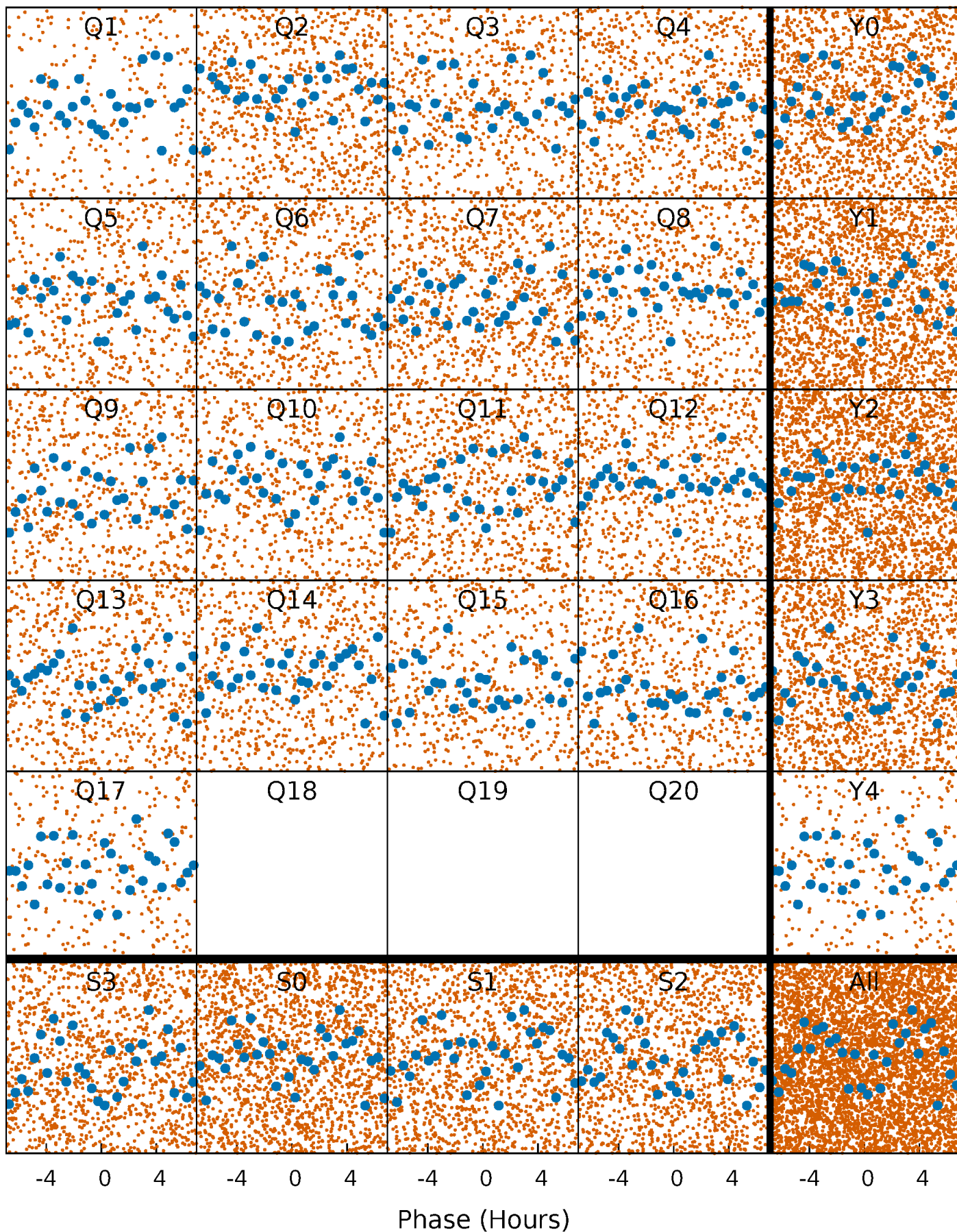


Non-Whitened Vs. Whitened Light Curve



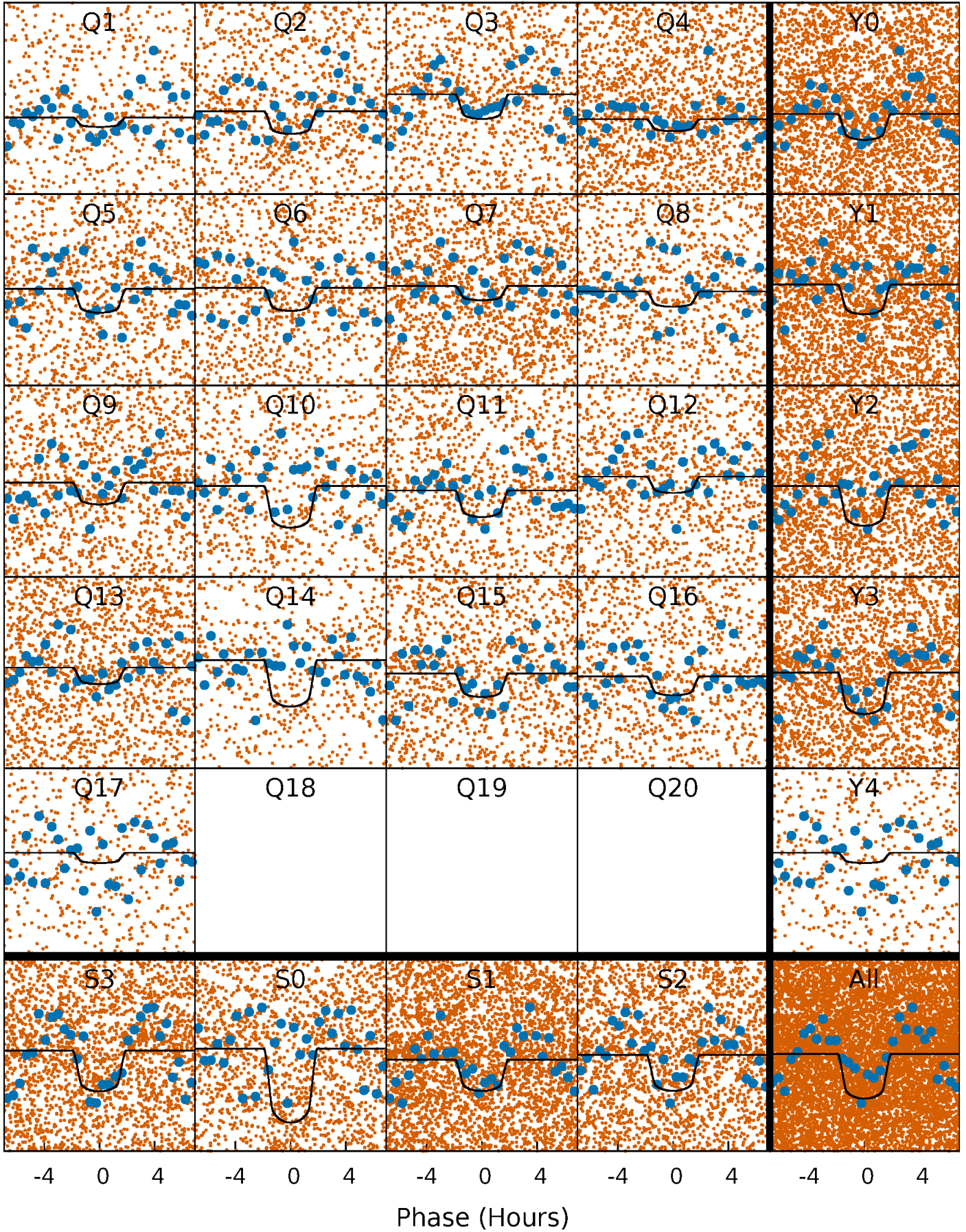
PDC Quarter-Phased Transit Curves

TCE 006965789-01 P= 0.840615 Days $T_0=131.563232$ (BKJD)



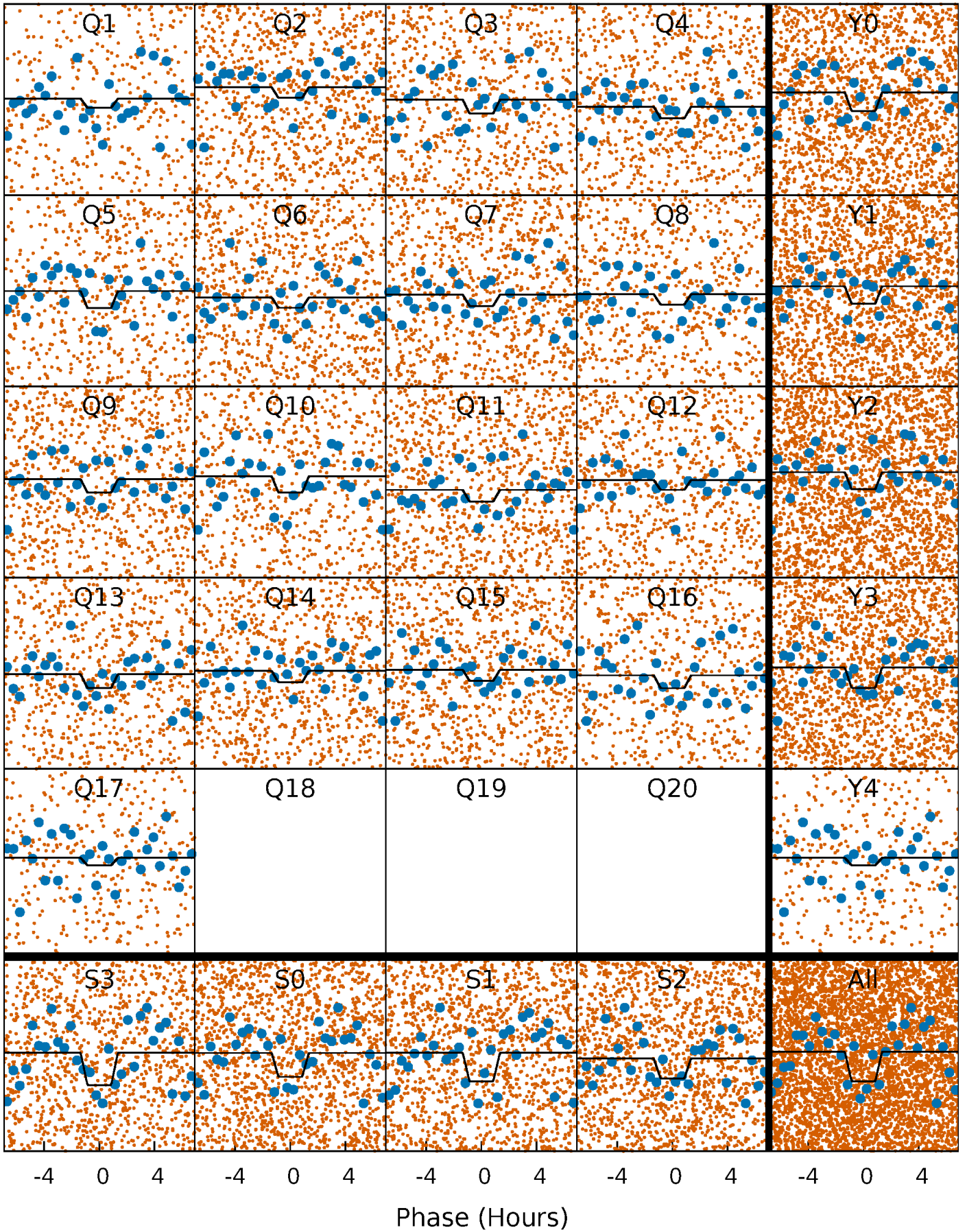
DV Quarter-Phased Transit Curves

TCE 006965789-01 P= 0.840615 Days $T_0=131.563232$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

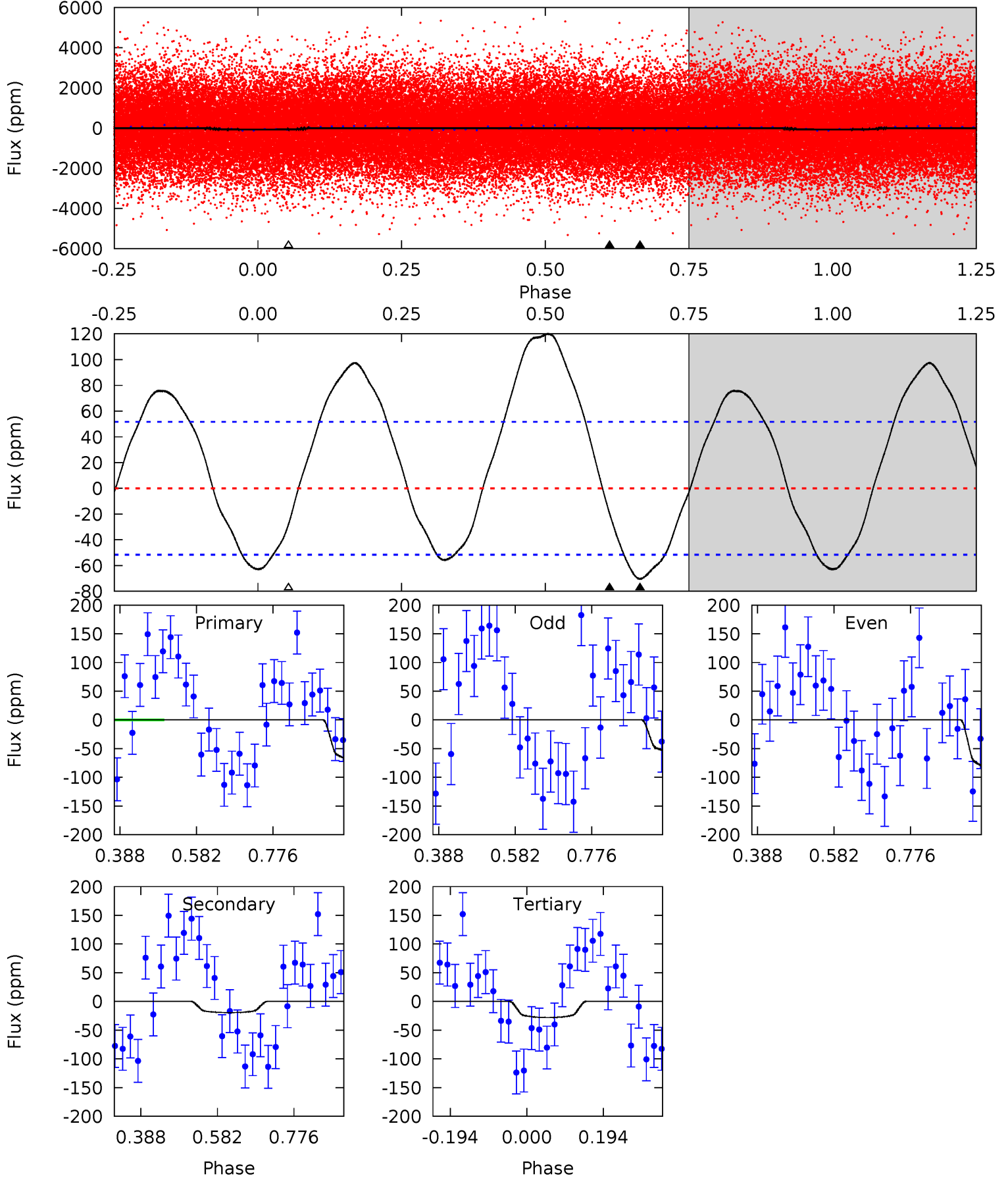
TCE 006965789-01 P= 0.840616 Days $T_0=131.563168$ (BKJD)



DV Model-Shift Uniqueness Test

006965789-01, P = 0.840615 Days, E = 130.722617 Days

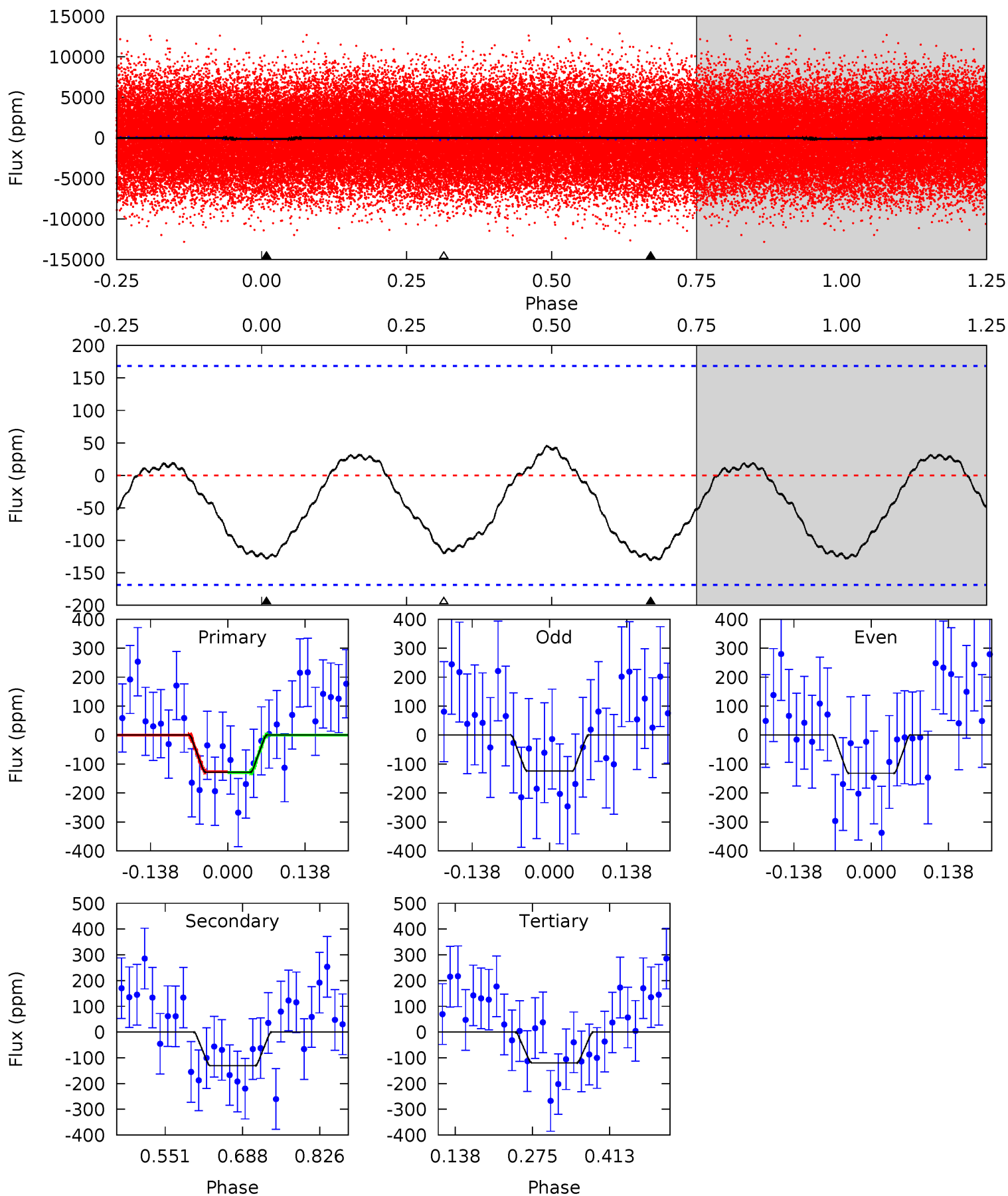
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
6.03	1.67	2.40	0	4.42	1.30	4.36	3.63	6.03	-0.74	1.67	1.21	1.01	0.63	0.63



Alt Model-Shift Uniqueness Test

006965789-01, P = 0.840616 Days, E = 130.722552 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
3.41	3.48	3.20	0	4.50	1.48	1.41	0.22	3.41	0.28	3.48	0.10	1.00	0.26	0.03



Stellar Parameters For KIC 006965789

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	7897^{+248}_{-310}	$3.415^{+0.941}_{-0.099}$	$-1.960^{+0.250}_{-0.050}$	$4.266^{+0.538}_{-3.229}$	$1.727^{+0.037}_{-0.695}$	$0.031^{+1.026}_{-0.010}$
	+3%/-4%	+28%/-3%	+13%/-3%	+13%/-76%	+2%/-40%	+3274%/-30%
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 006965789-01 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-19 ± 12	$4.55^{+2.80}_{-2.54}$	6701^{+521}_{-1335}	-4095^{+9842}_{-1261}	$0.203^{+0.852}_{-0.153}$
Alt.	-130 ± 37	$4.45^{+2.86}_{-2.42}$	6686^{+587}_{-1395}	7095^{+4938}_{-2011}	$1.435^{+5.773}_{-0.922}$

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 $A_{obs} \gg 1.0$

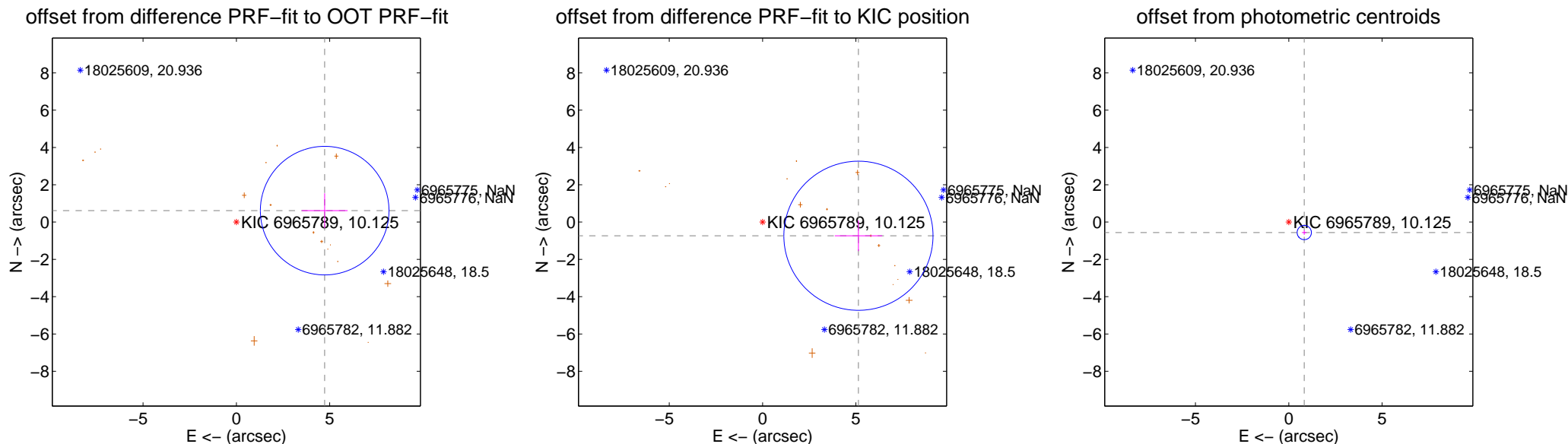
DV Centroid Data

Supplemental centroid analysis for 006965789-01. **Kepler magnitude: 10.12.** Transit SNR 12.77

There are 0 quarters with good PRF difference image offsets

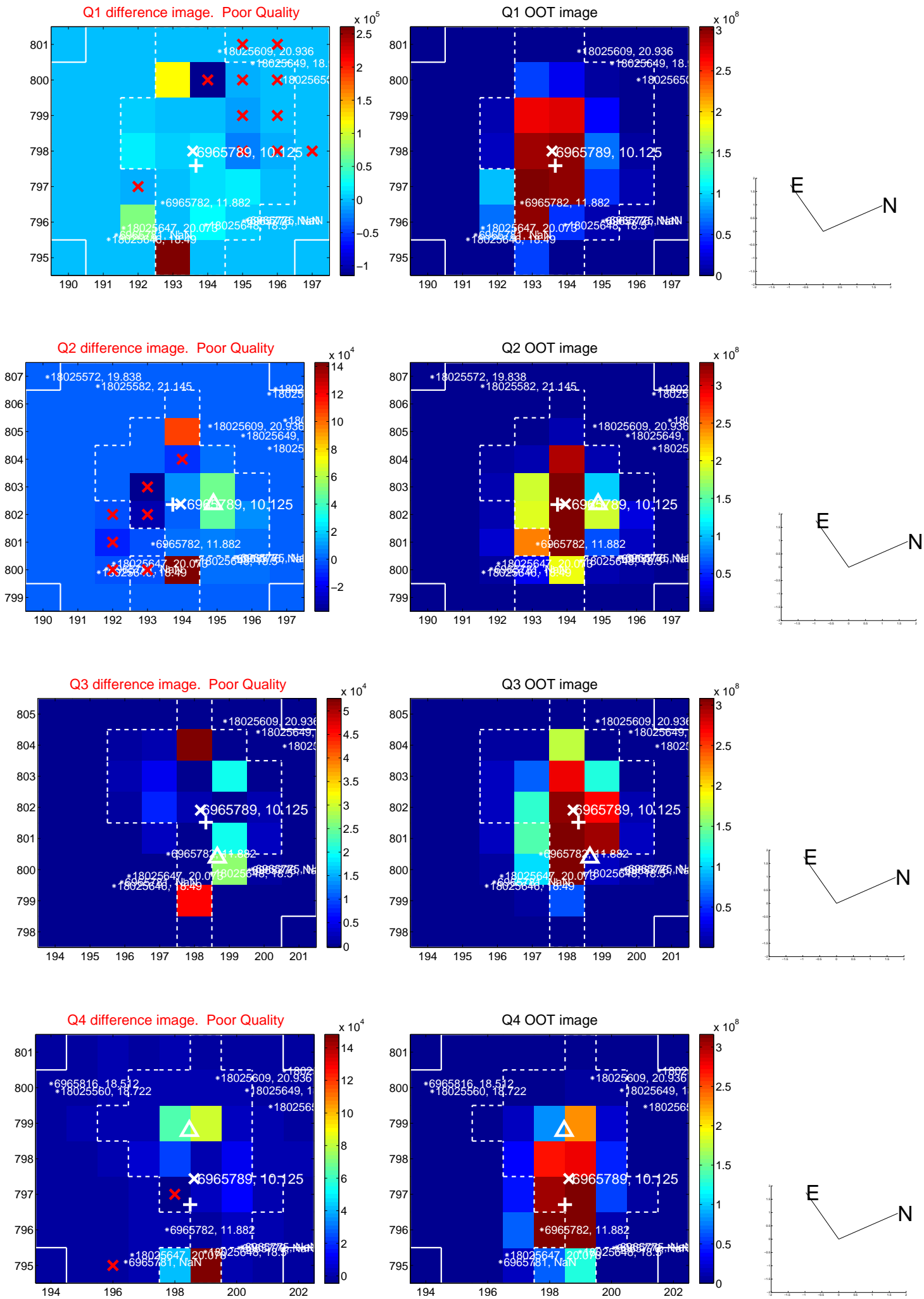
The direct PRF centroid is offset from the target star catalog position by about 1.68 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	4.772 ± 1.149	4.15	-4.733 ± 1.231	0.614 ± 0.929
PRF-fit source offset from KIC position	5.189 ± 1.332	3.90	-5.137 ± 1.268	-0.733 ± 0.824
photometric centroid source offset	1.00 ± 0.13	7.87	-0.83 ± 0.13	-0.56 ± 0.12

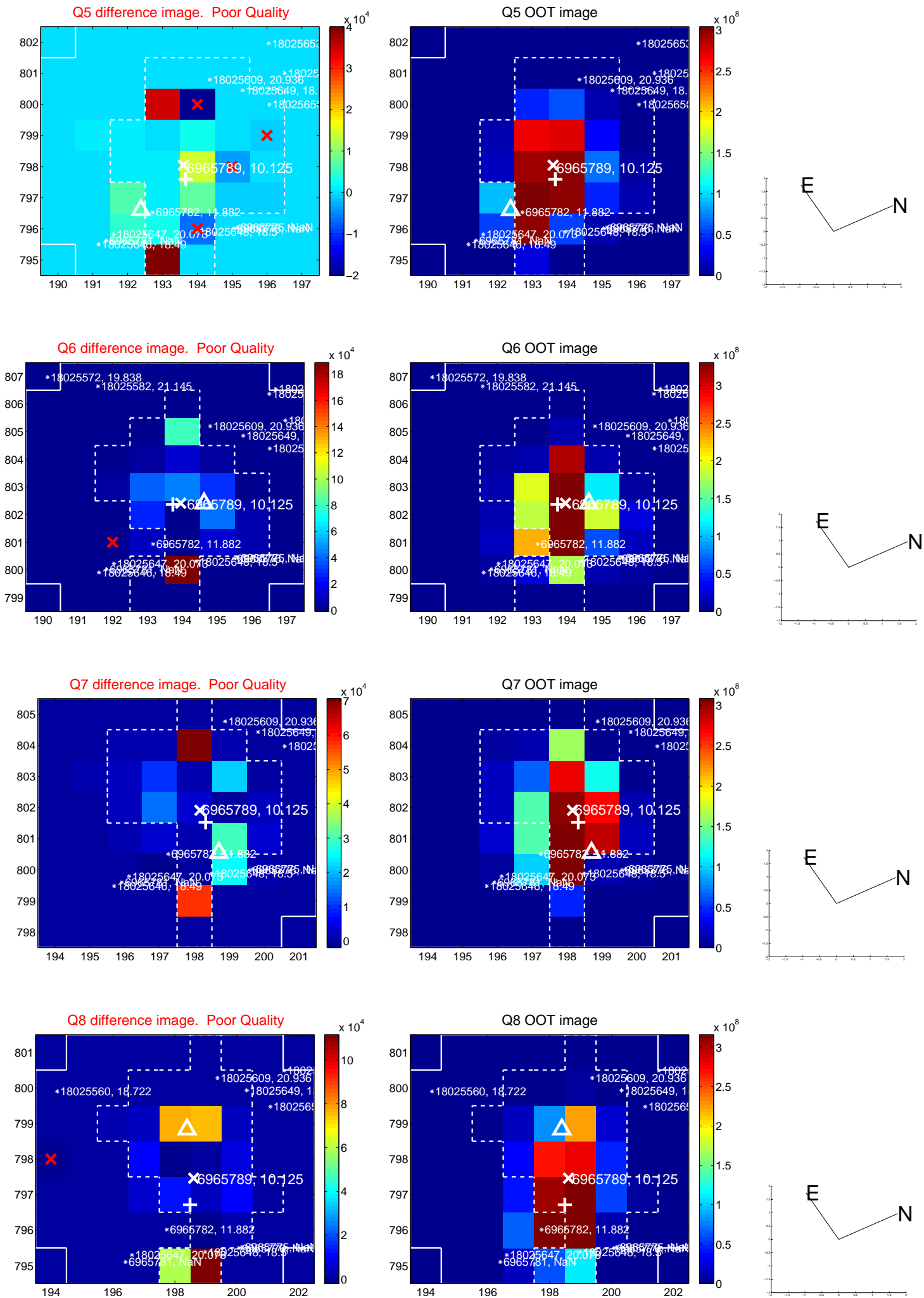


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets;** magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

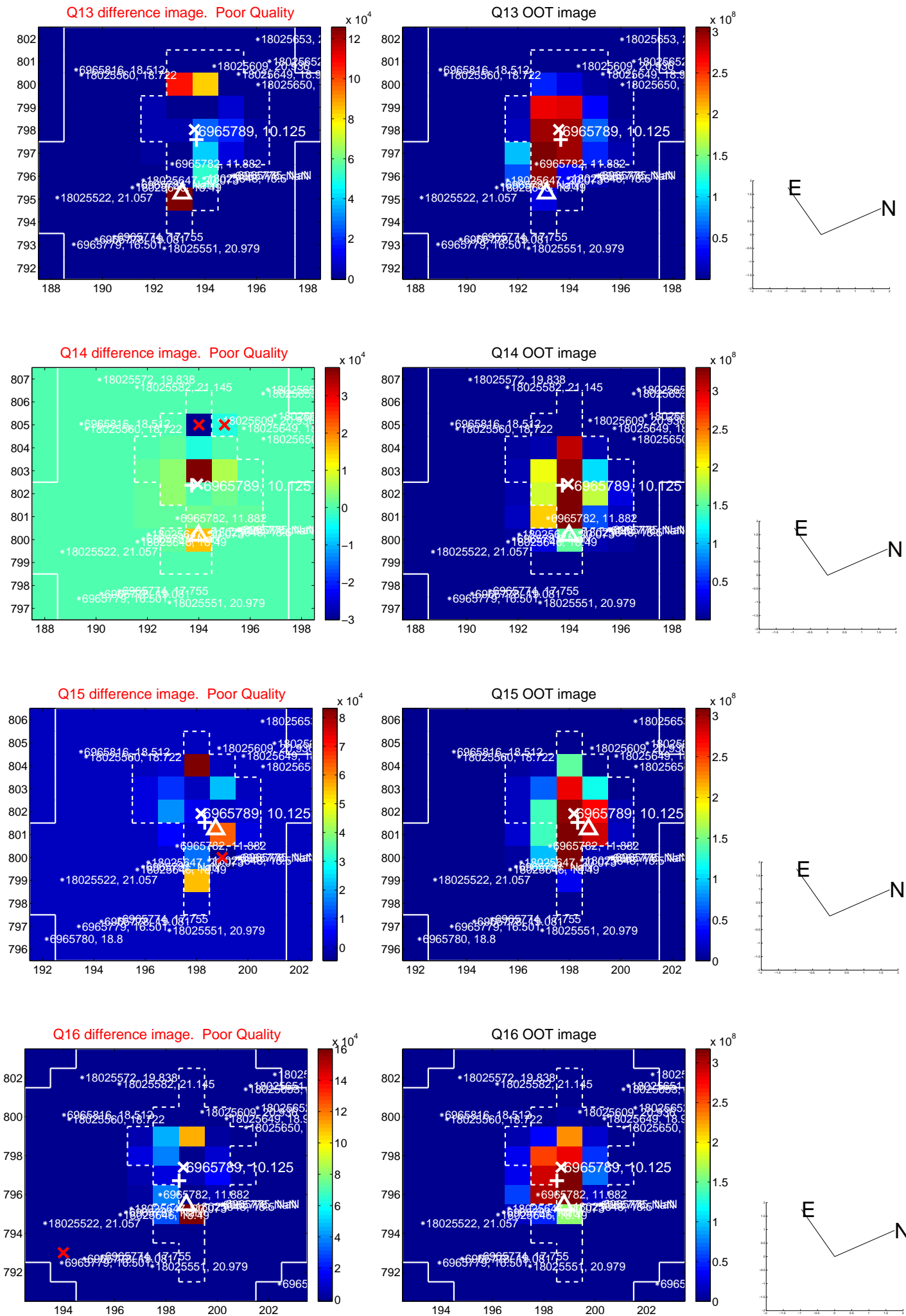
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



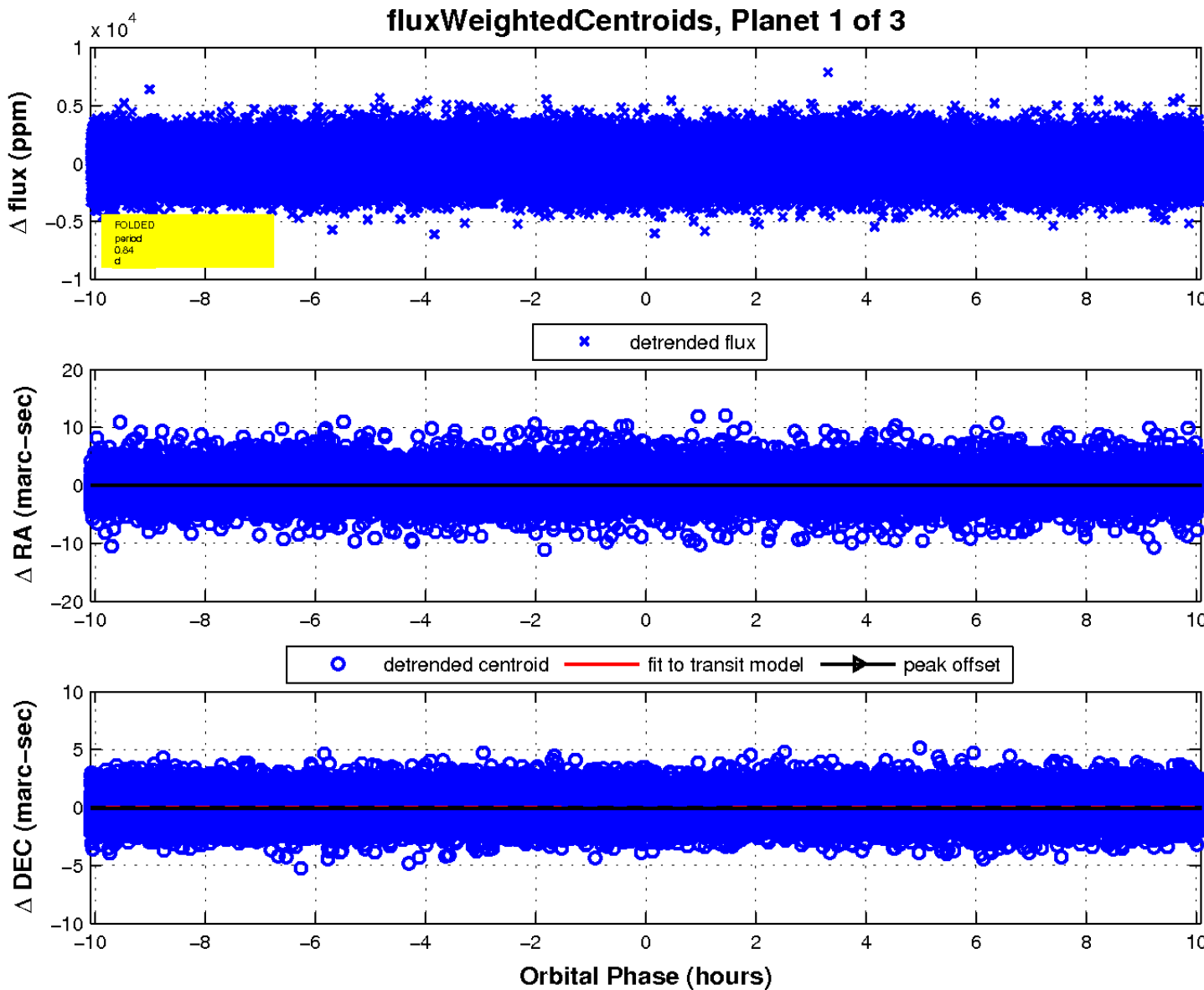
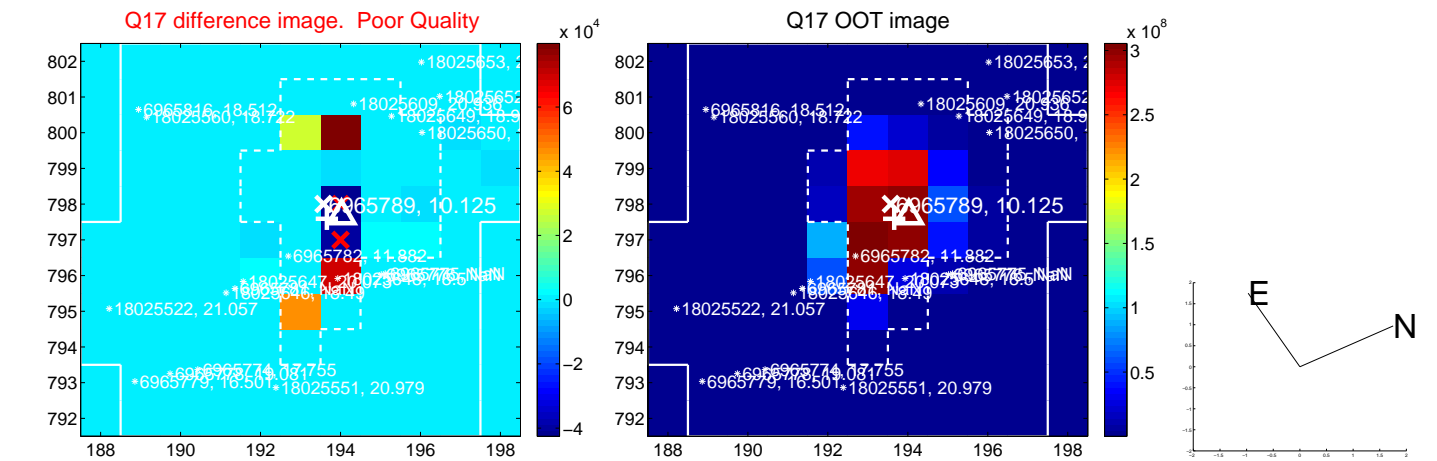
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



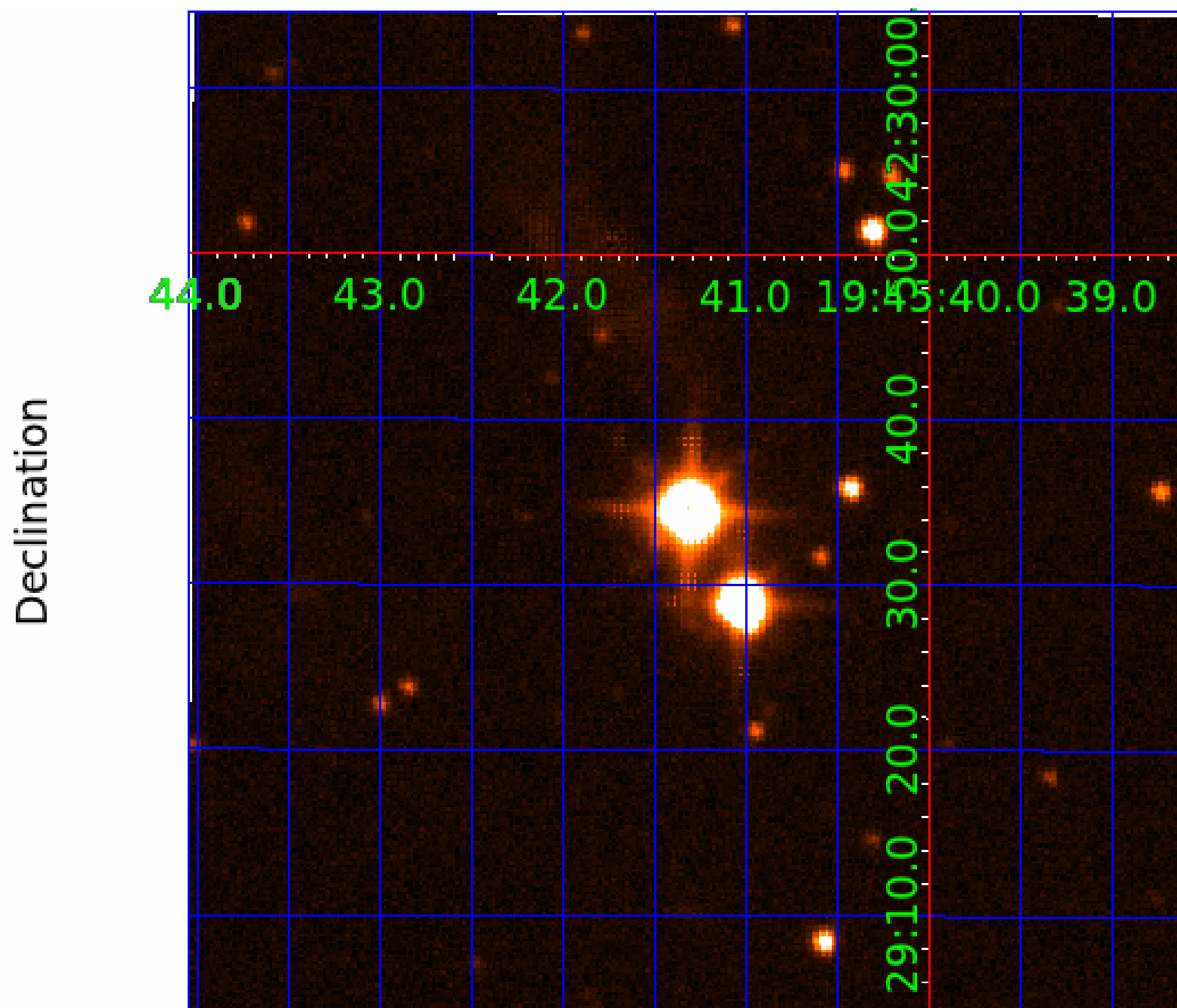
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



UKIRT Image



KIC 006965789

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})
006965789-01	OBS	No	0.840615	131.563232	131.1	3.474	14.1	12.8	4.27	7897	5.70	144975.25
006965789-02	OBS	No	4.544619	131.579106	15.2	15.000	8.5	-1.0	4.27	7897	1.68	15278.95
006965789-03	OBS	No	67.172470	183.271228	1474.3	13.674	12.1	7.5	4.27	7897	30.26	421.21

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
006965789-01	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—CENT_SATURATED
006965789-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_ZUMA—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_ALT—CENT_SATURATED
006965789-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—LPP_ALT—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.

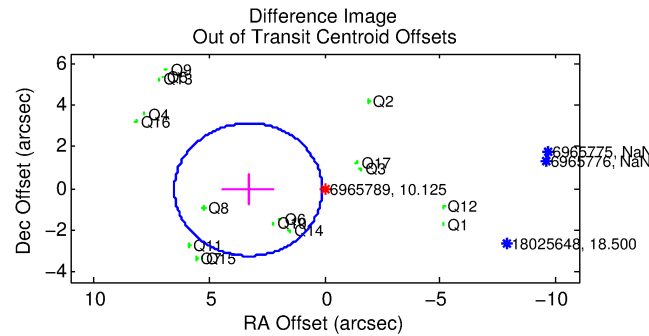
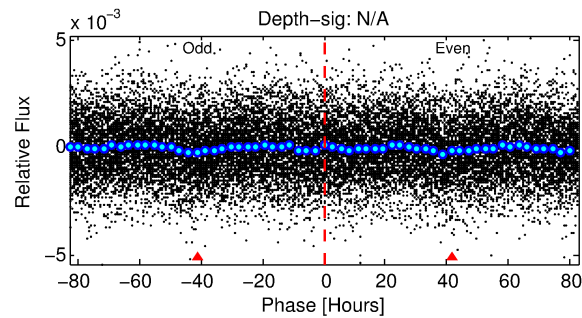
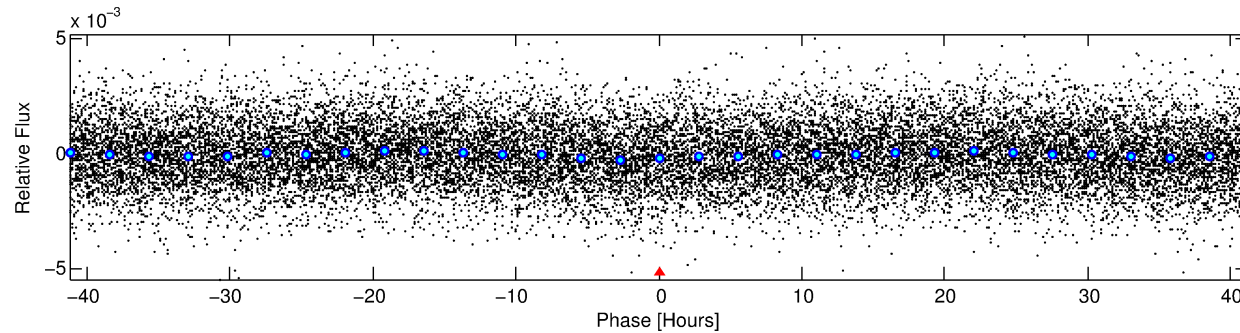
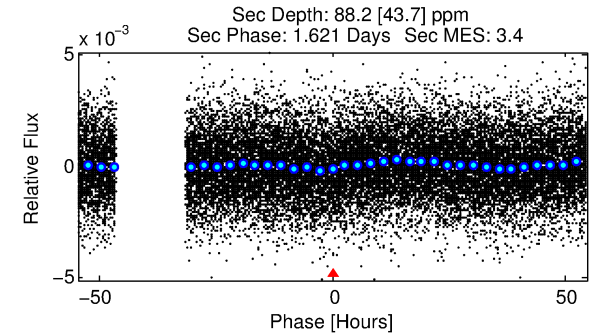
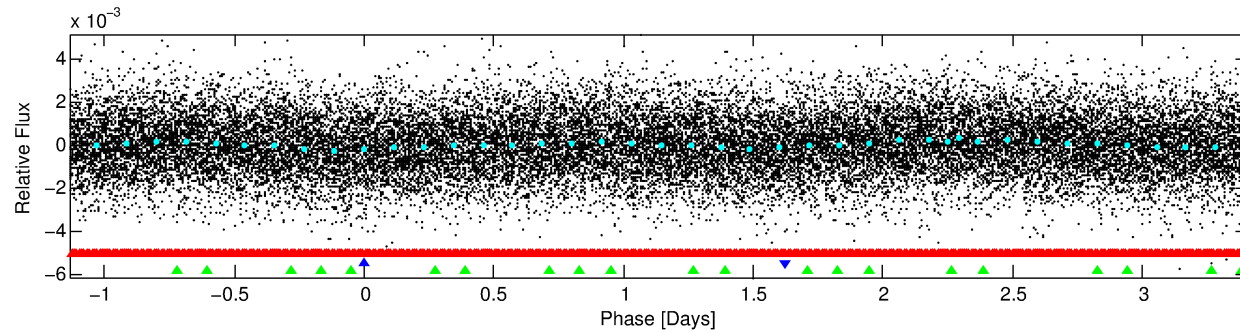
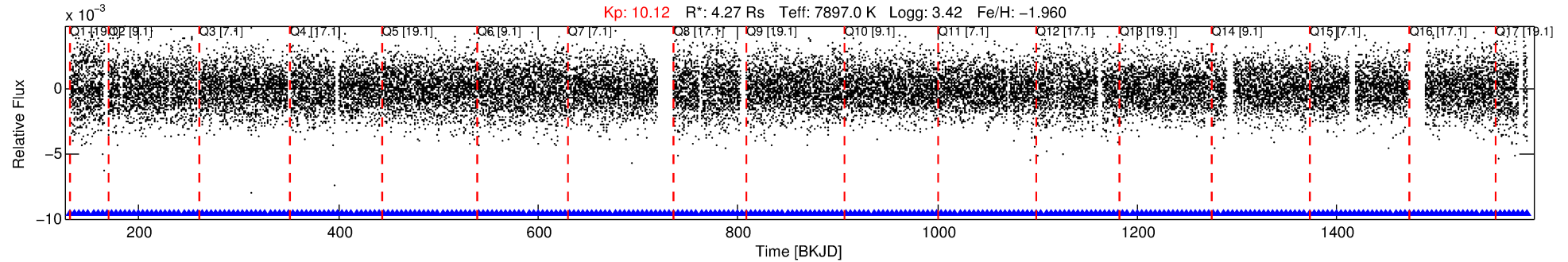
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 006965789-02

No Significant Match Found

DV One-Page Summary

KIC: 6965789 Candidate: 2 of 3 Period: 4.545 d



TPS TCE Results:

Period = 4.54462 d
Epoch = 131.5791 BKJD

DV fit results are unavailable

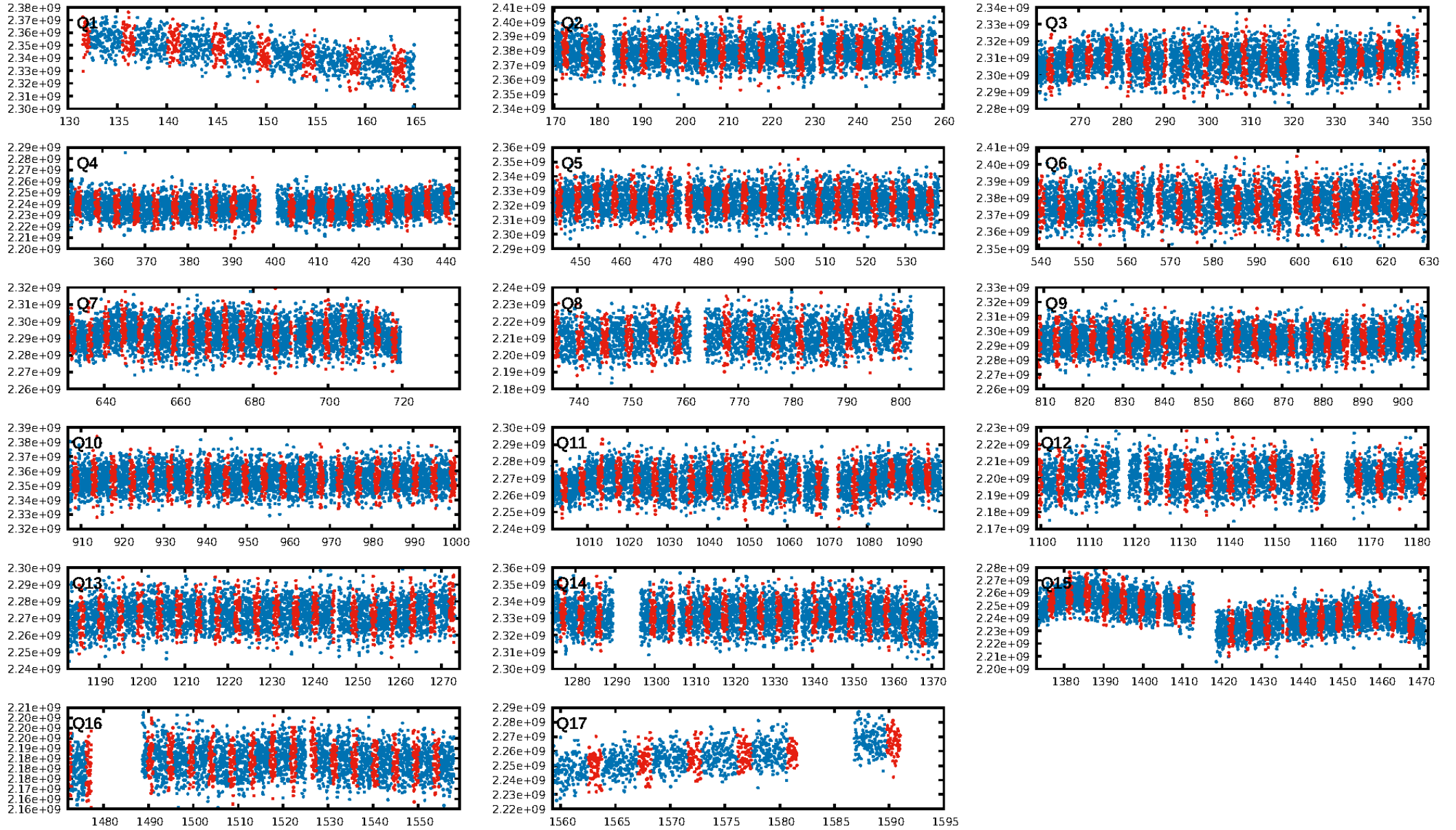
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [5.77 σ]
LongPeriod-sig: 100.0% [74.05 σ]
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 1.30e-20
RollingBand-fgt: 1.00 [281/281]
GhostDiagnostic-chr: N/A
Centroid-sig: 1.5%
Centroid-so: 1.544 arcsec [10.73 σ]
OotOffset-rm: 3.304 arcsec [3.10 σ]
KicOffset-rm: 3.373 arcsec [4.12 σ]
OotOffset-st: 4/4/4/5 [17]
KicOffset-st: 4/4/4/5 [17]
DiffImageQuality-fgm: 0.12 [2/17]
DiffImageOverlap-fno: 0.00 [0/17]

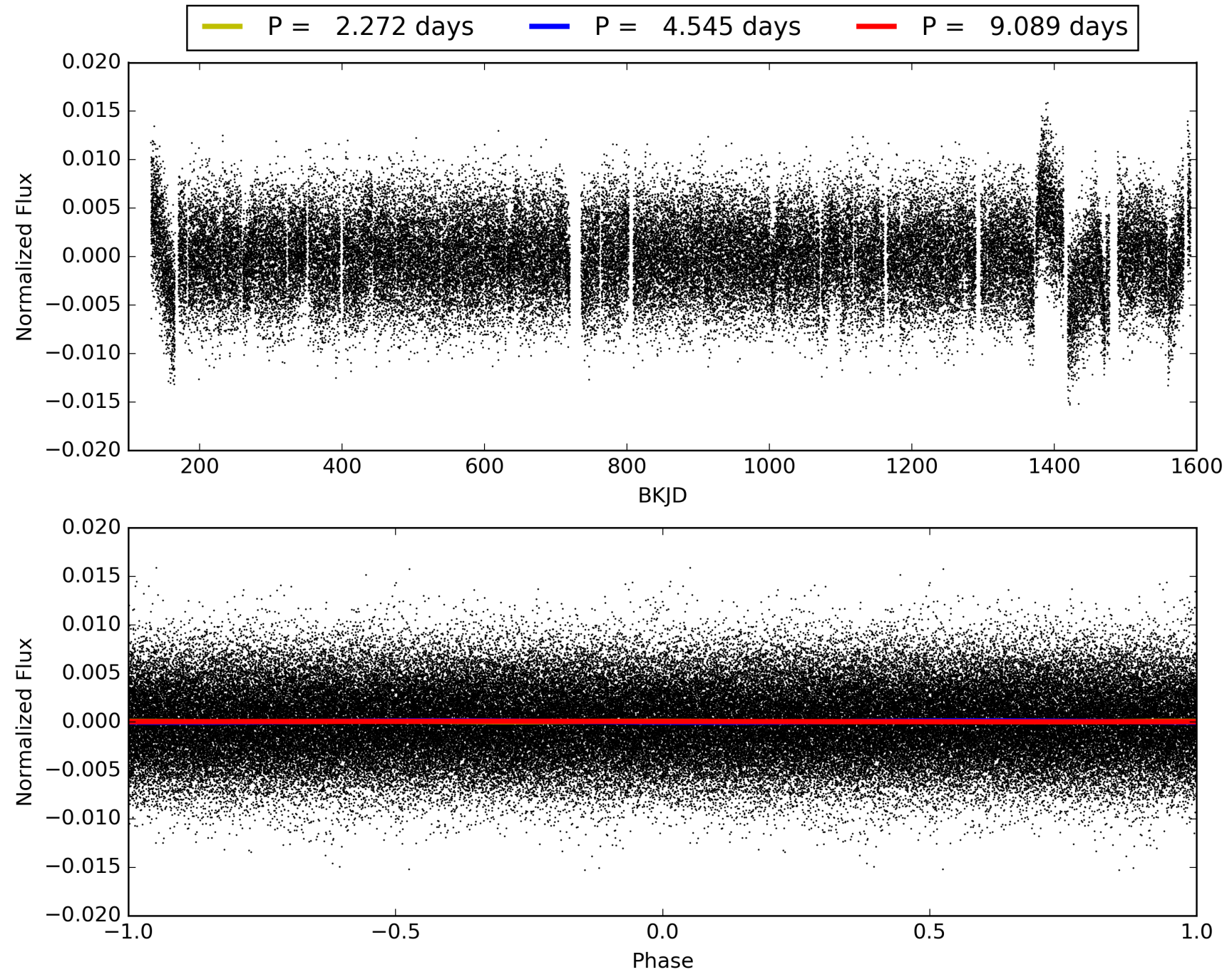
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 31-Jan-2016 02:23:46 Z

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

TCE 006965789-02, PDC Light Curves

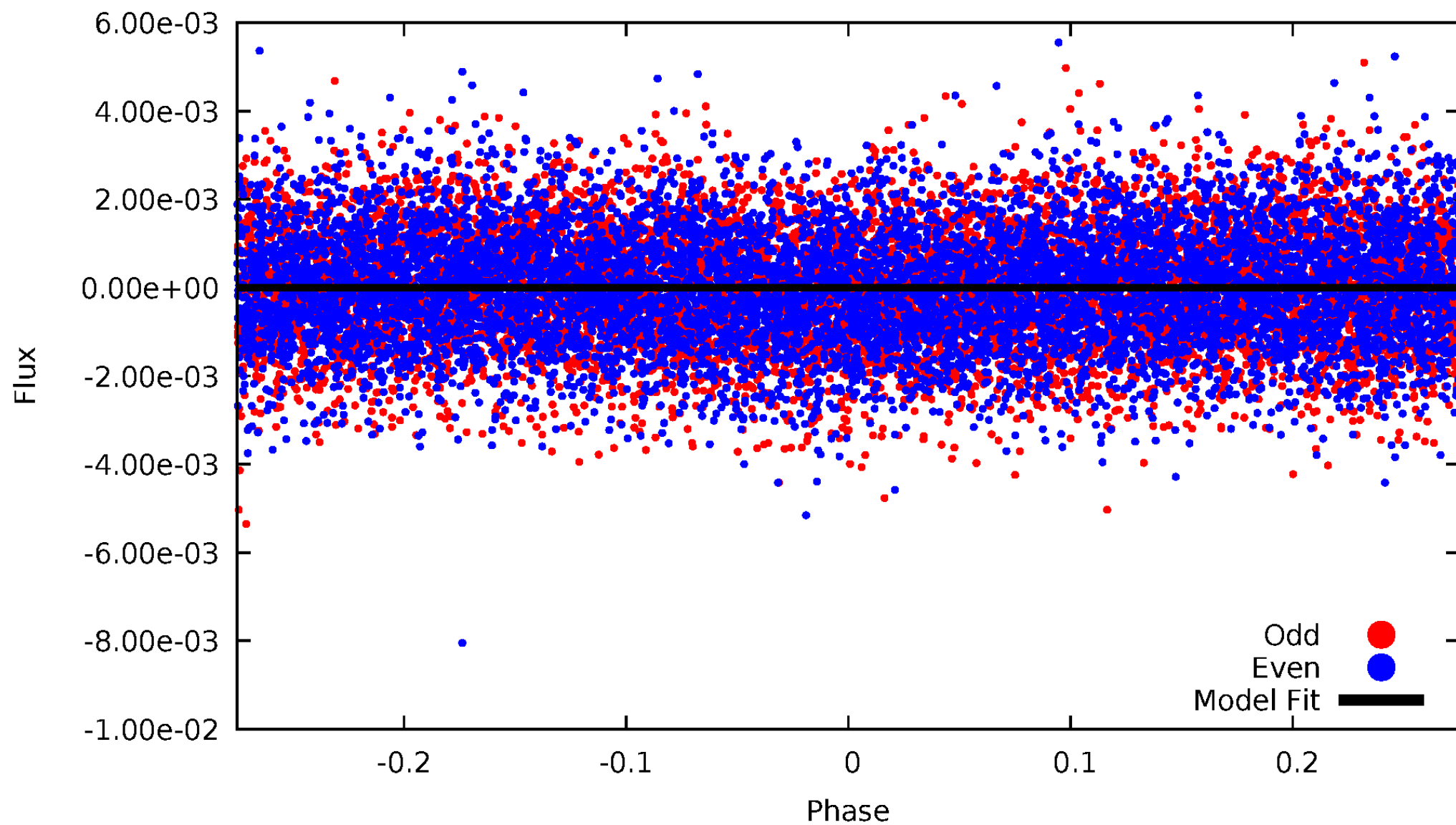


TCE 006965789-02



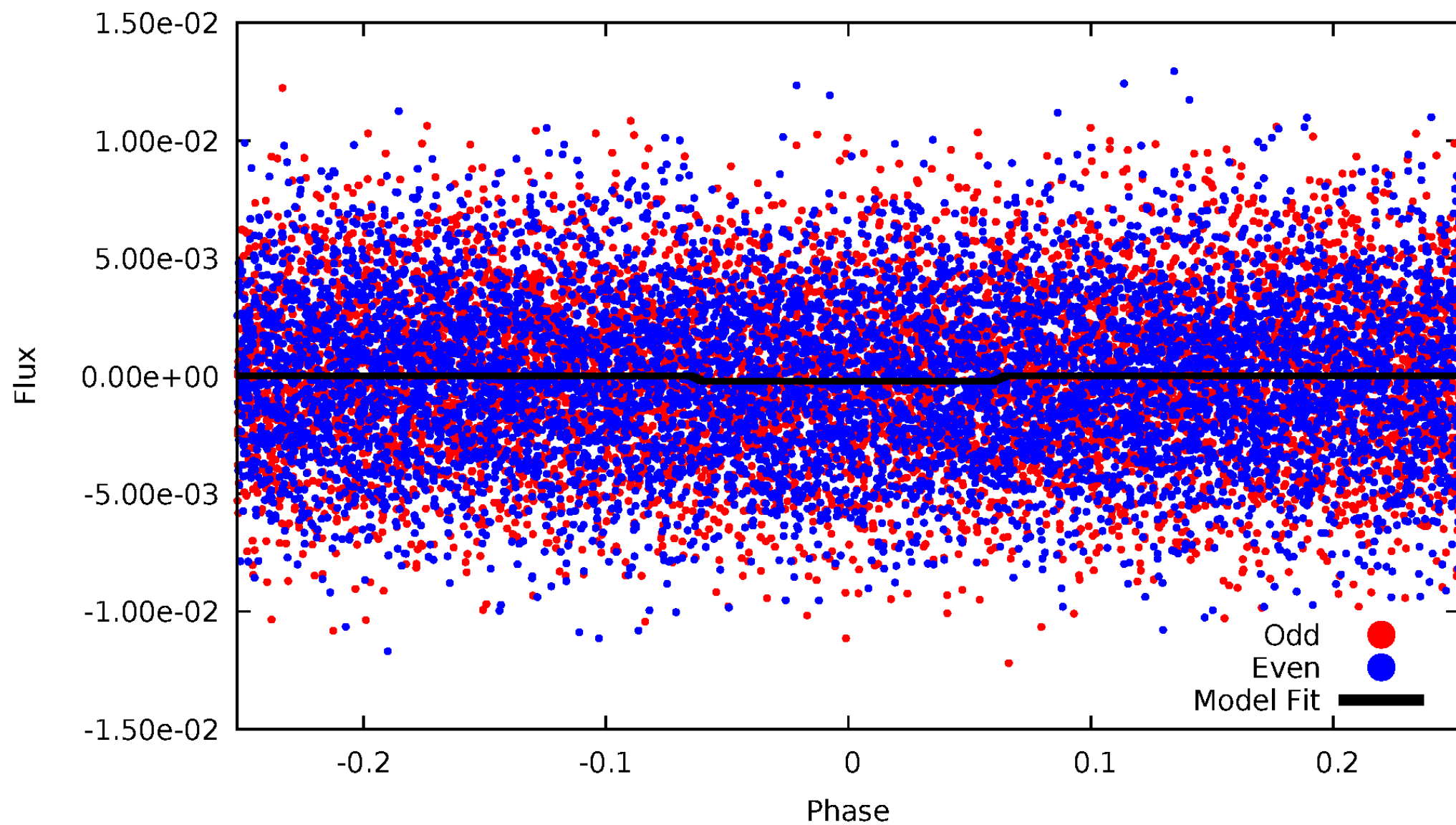
DV Odd/Even

TCE 006965789-02



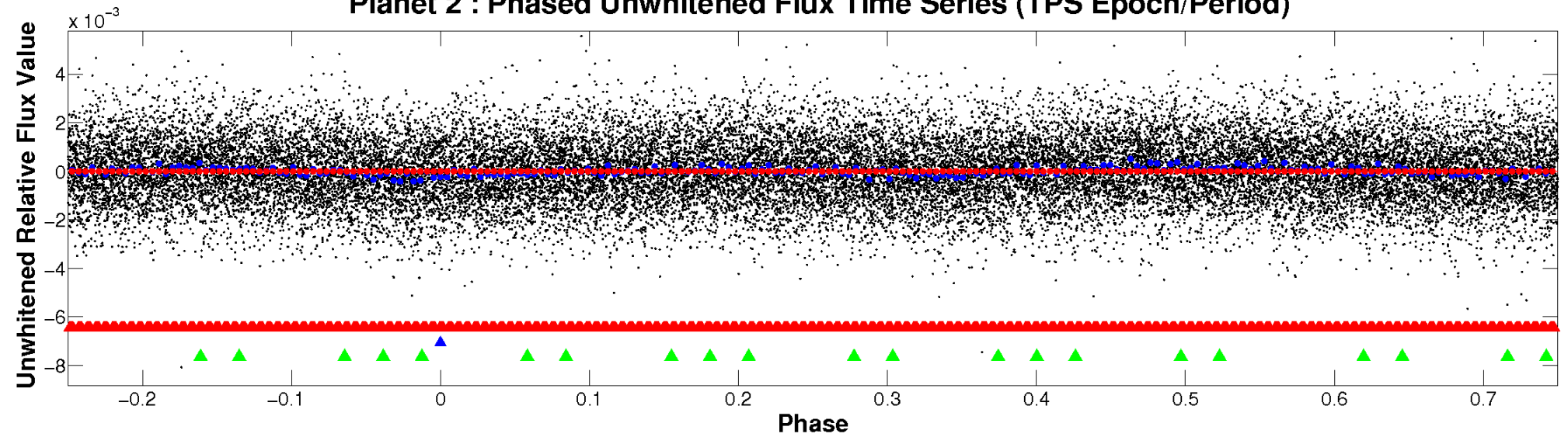
ALT Odd/Even

TCE 006965789-02



Non-Whitened Vs. Whitened Light Curve

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

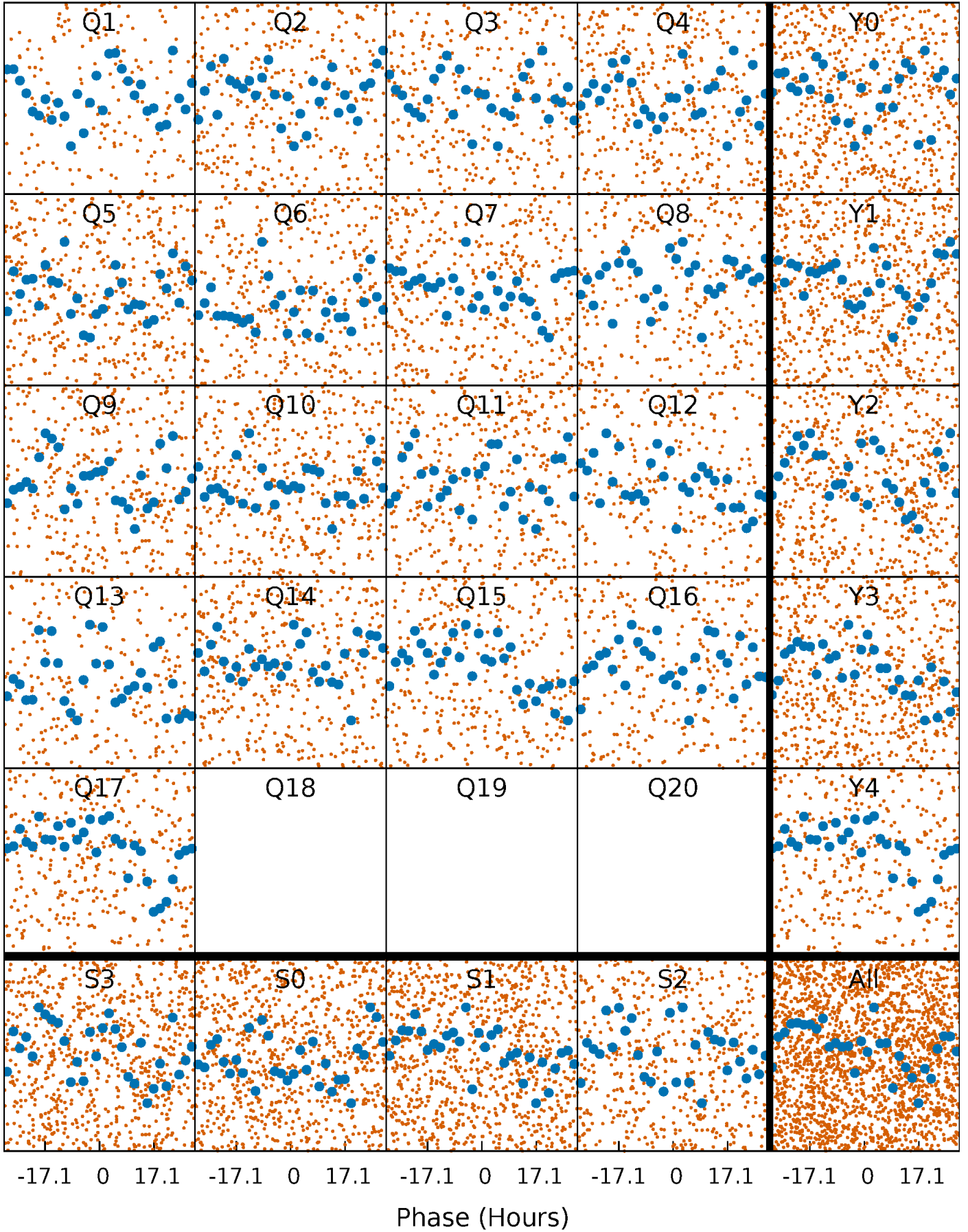


Planet 2 : Phased Whitened Flux Time Series (TPS Epoch/Period)



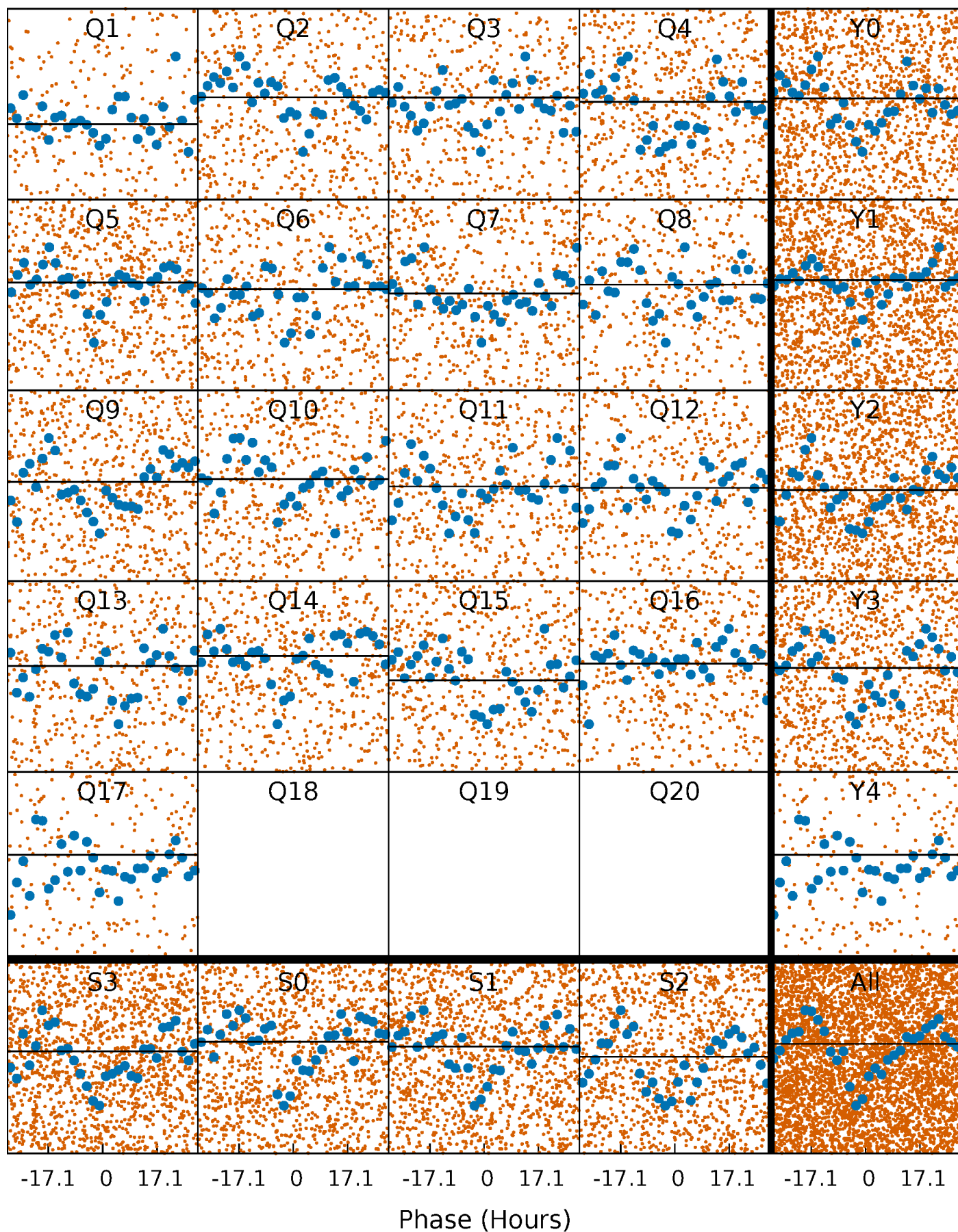
PDC Quarter-Phased Transit Curves

TCE 006965789-02 P= 4.544619 Days $T_0=131.579106$ (BKJD)



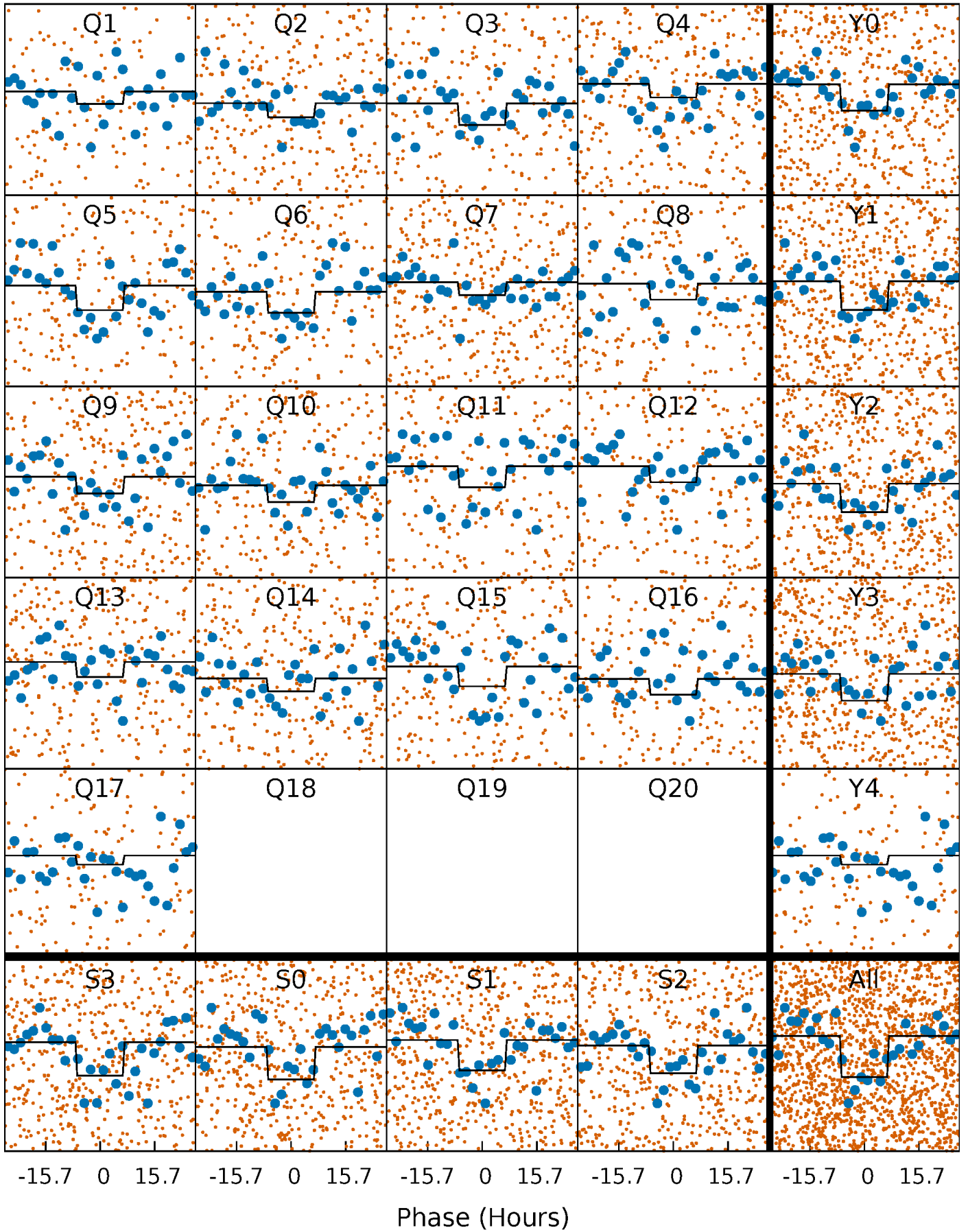
DV Quarter-Phased Transit Curves

TCE 006965789-02 P= 4.544619 Days $T_0=131.579106$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

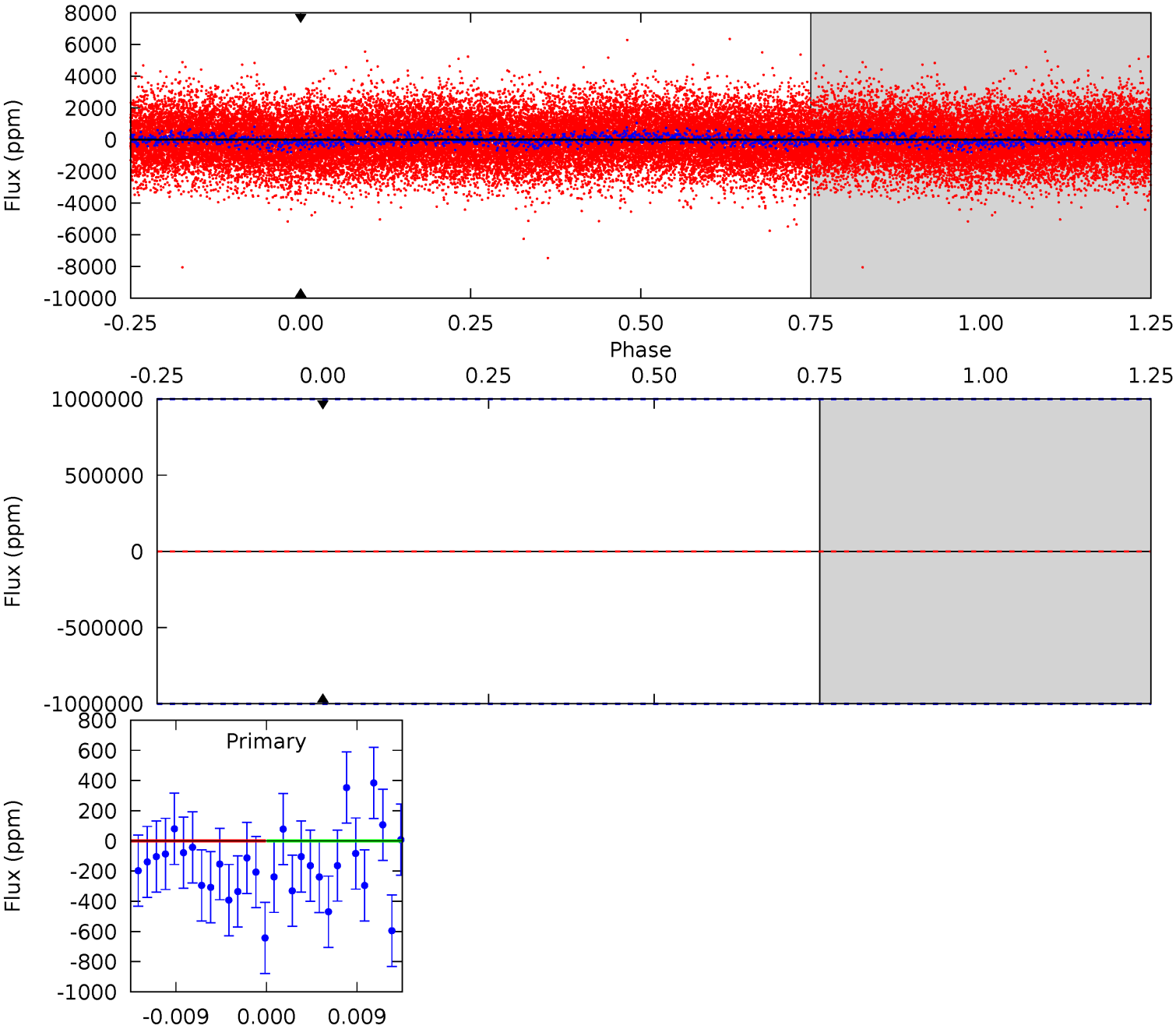
TCE 006965789-02 P= 4.544619 Days $T_0=131.569677$ (BKJD)



DV Model-Shift Uniqueness Test

006965789-02, P = 4.544619 Days, E = 131.579106 Days

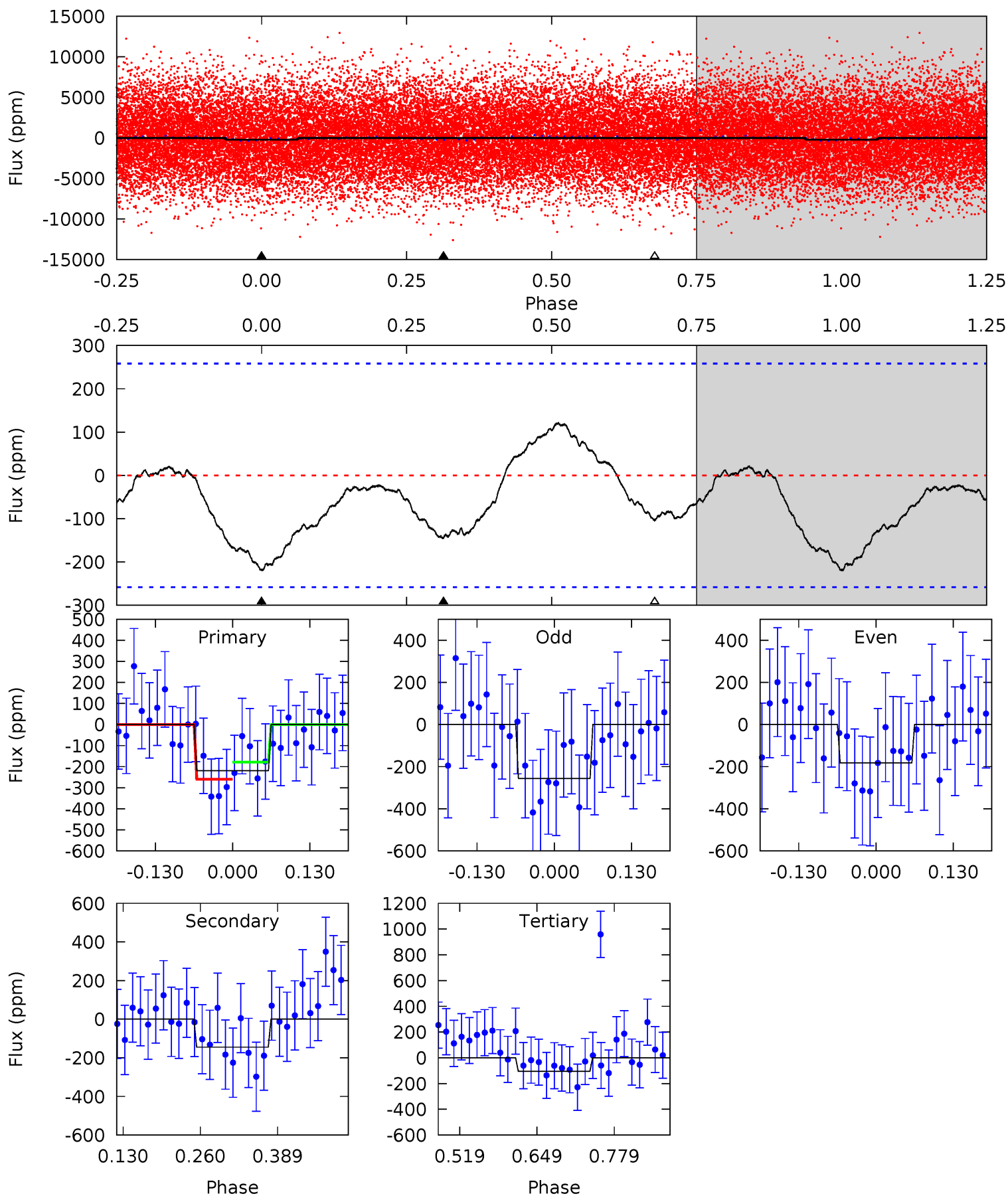
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
0	0	0	0	1.00	1.00	1.00	0	0	0	0	0	0	0	0



Alt Model-Shift Uniqueness Test

006965789-02, P = 4.544619 Days, E = 131.569677 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
3.83	2.53	1.83	0	4.51	1.52	1.13	2.00	3.83	0.71	2.53	0.65	0.82	0.36	0.71



Stellar Parameters For KIC 006965789

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	7897^{+248}_{-310}	$3.415^{+0.941}_{-0.099}$	$-1.960^{+0.250}_{-0.050}$	$4.266^{+0.538}_{-3.229}$	$1.727^{+0.037}_{-0.695}$	$0.031^{+1.026}_{-0.010}$
	+3%/-4%	+28%/-3%	+13%/-3%	+13%/-76%	+2%/-40%	+3274%/-30%
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 006965789-02 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	0 ± 1000000	$26.72^{+33.65}_{-19.61}$	3802^{+326}_{-793}	5645^{+57683}_{-44783}	$4.909^{+710.312}_{-492.244}$
Alt.	-145 ± 57	$26.81^{+32.81}_{-19.25}$	3802^{+324}_{-767}	2644^{+2944}_{-6047}	$0.366^{+4.743}_{-0.290}$

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

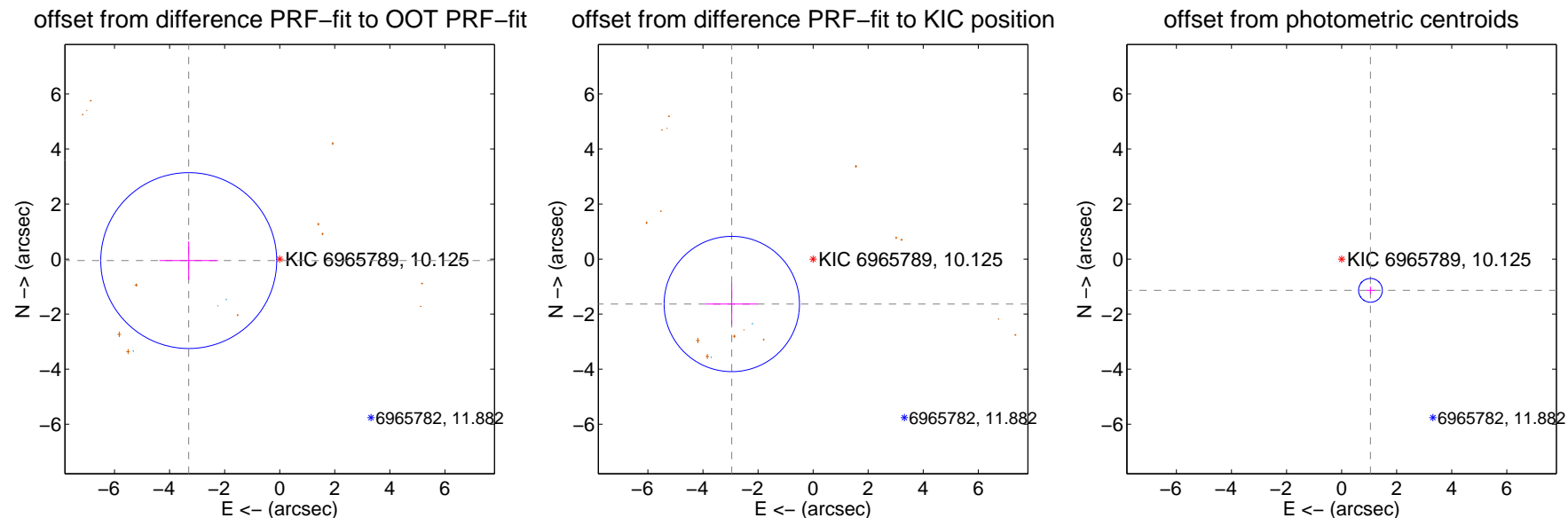
DV Centroid Data

Supplemental centroid analysis for 006965789-02. **Kepler magnitude: 10.12.** Transit SNR -1.00

There are 2 quarters with good PRF difference image offsets

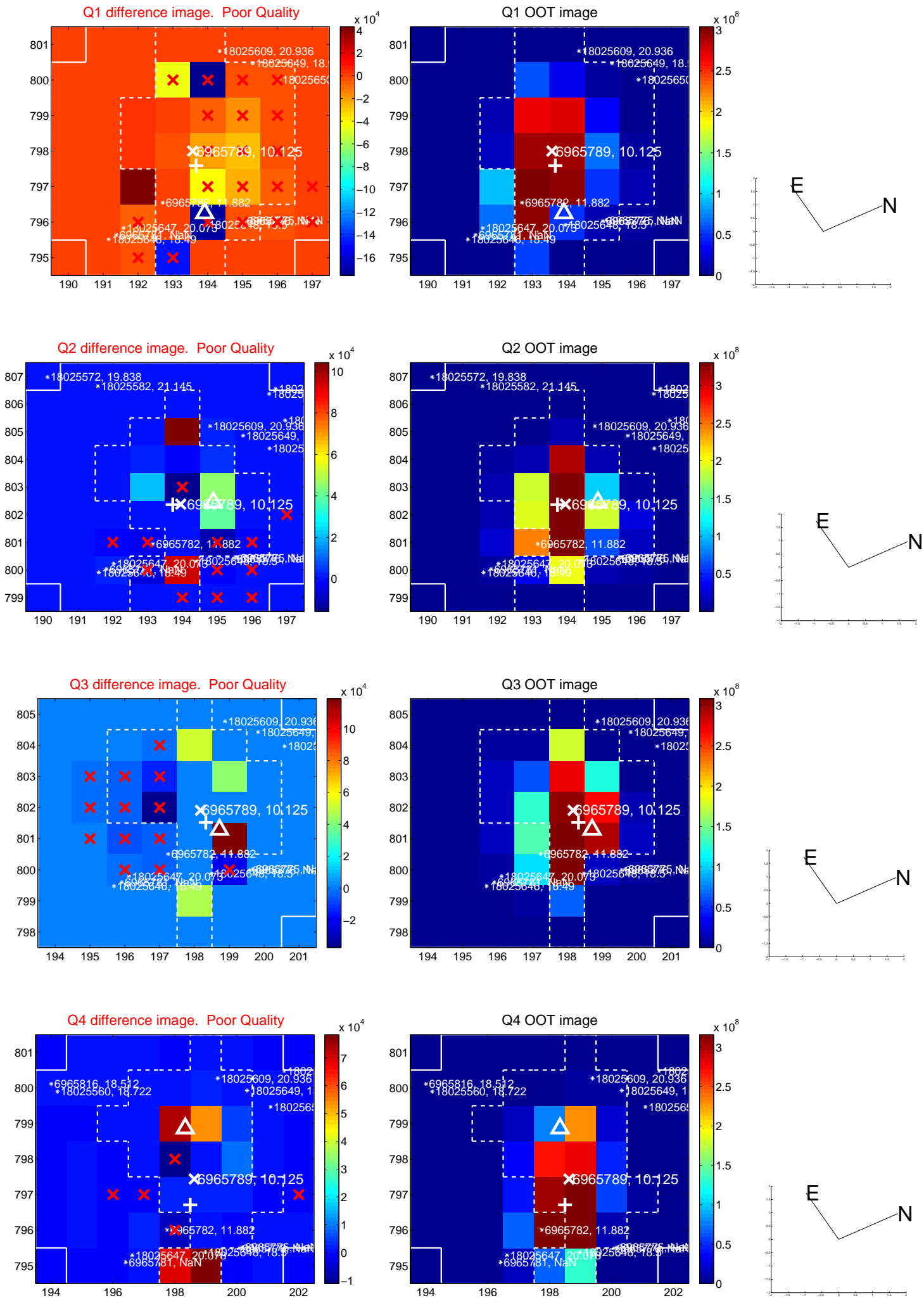
The direct PRF centroid is offset from the target star catalog position by about 1.69 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	3.304 ± 1.065	3.10	3.303 ± 1.065	-0.054 ± 0.696
PRF-fit source offset from KIC position	3.373 ± 0.819	4.12	2.952 ± 0.939	-1.631 ± 0.755
photometric centroid source offset	1.54 ± 0.14	10.73	-1.05 ± 0.16	-1.14 ± 0.13

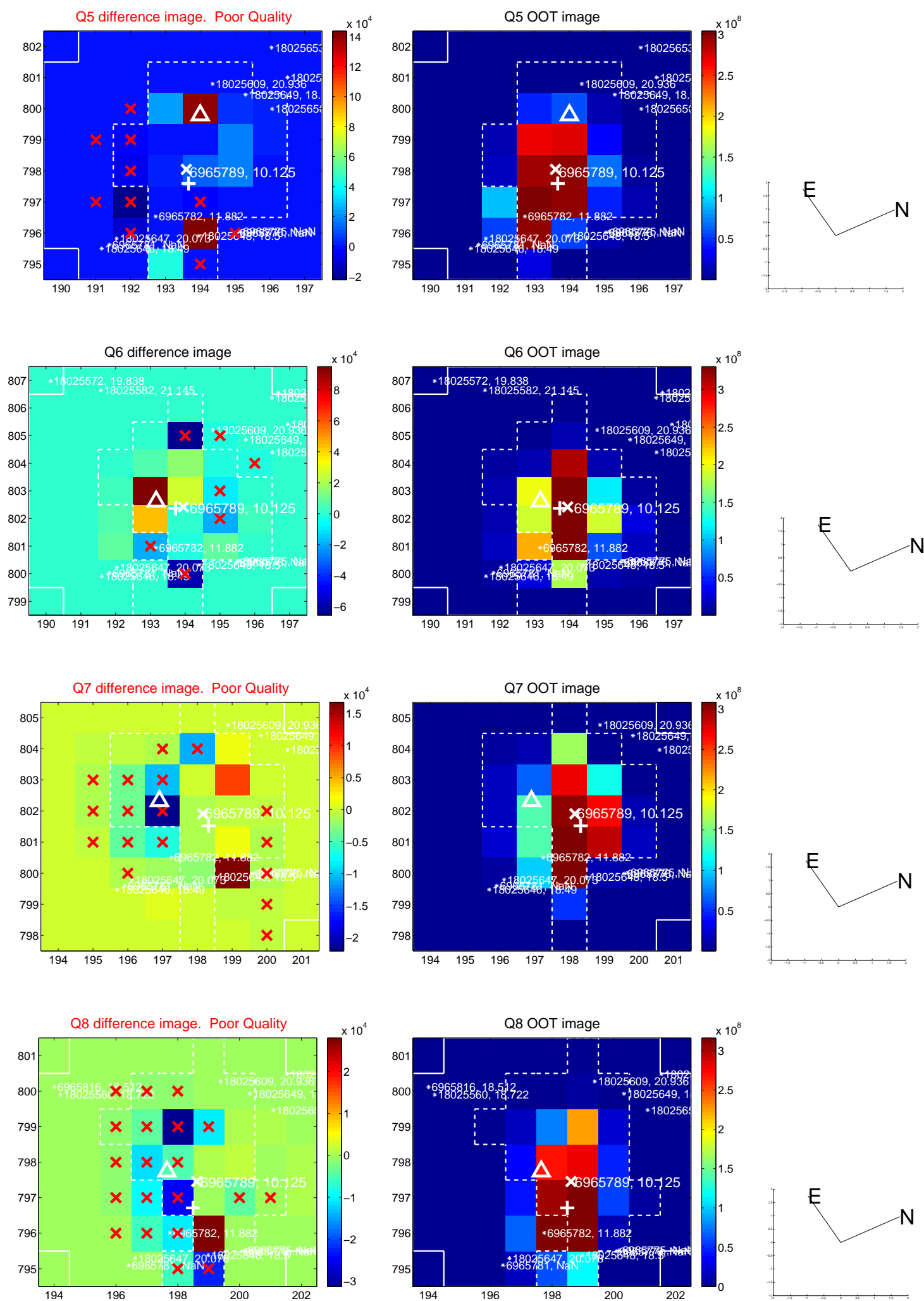


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets;** magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

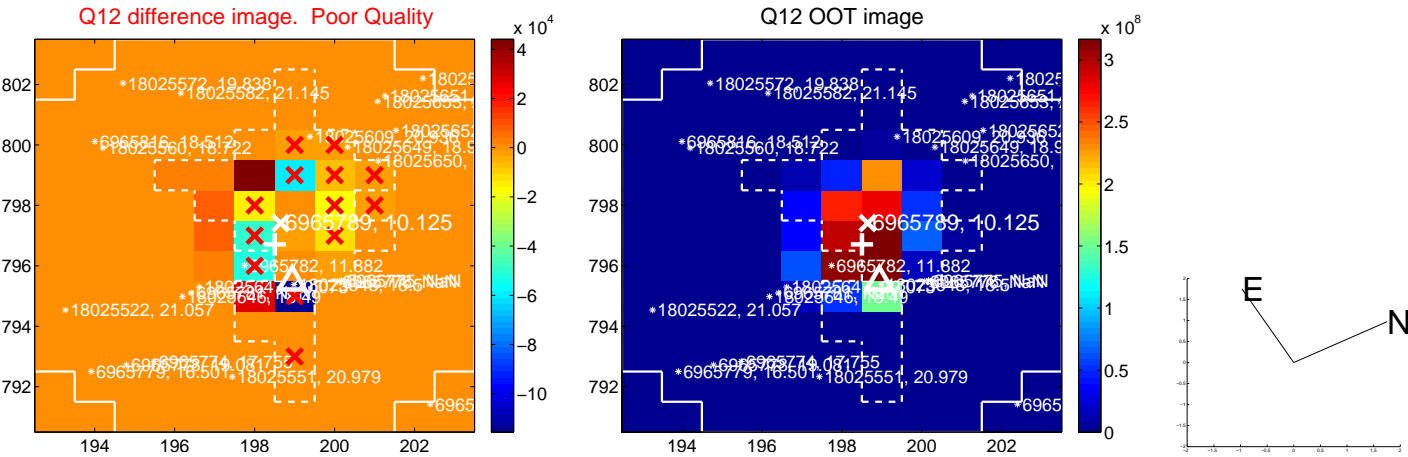
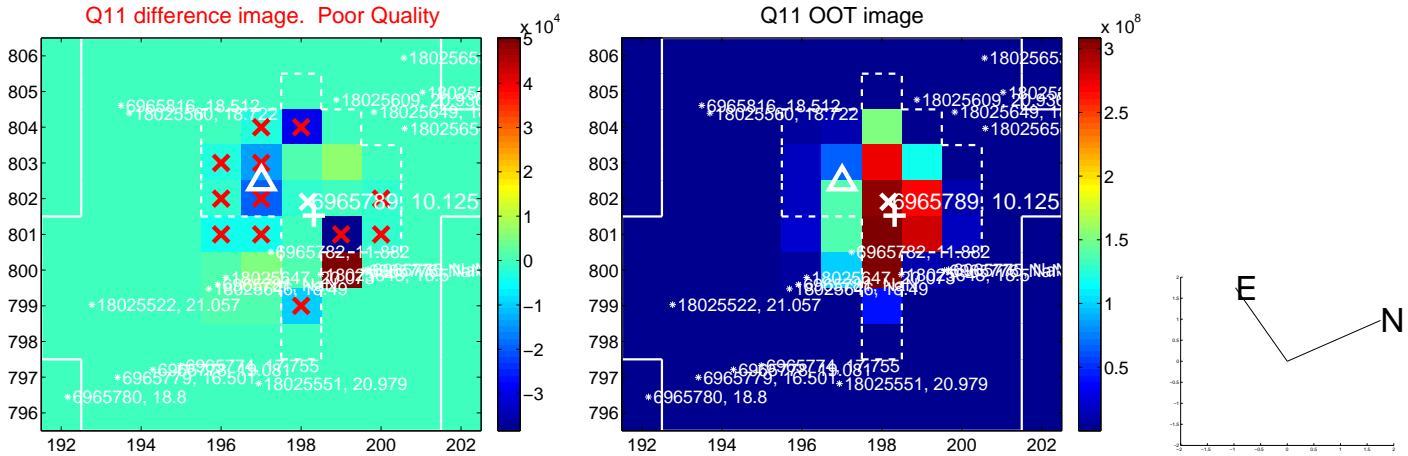
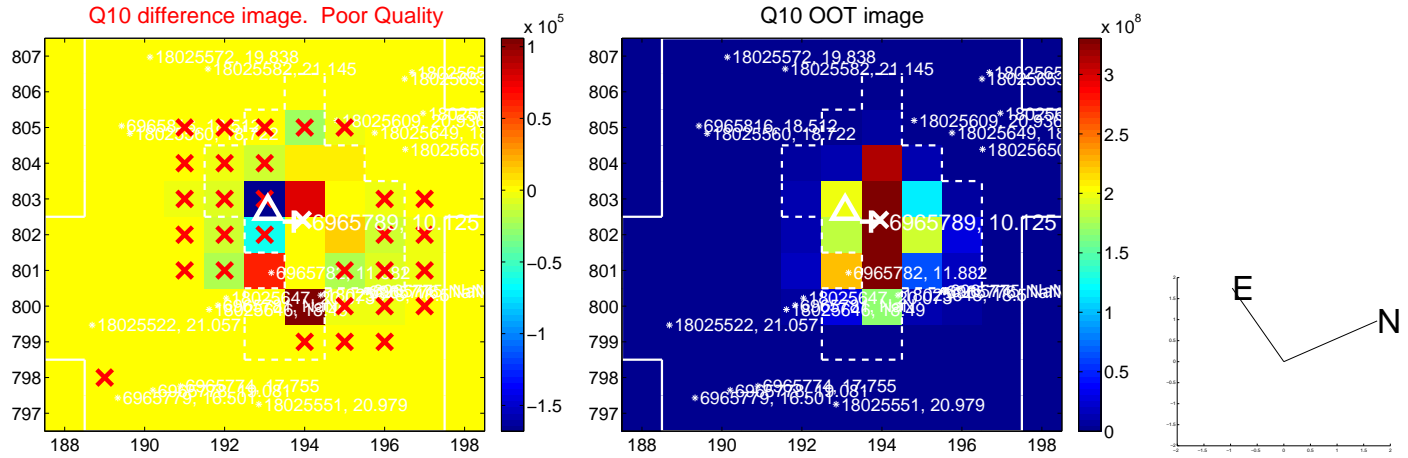
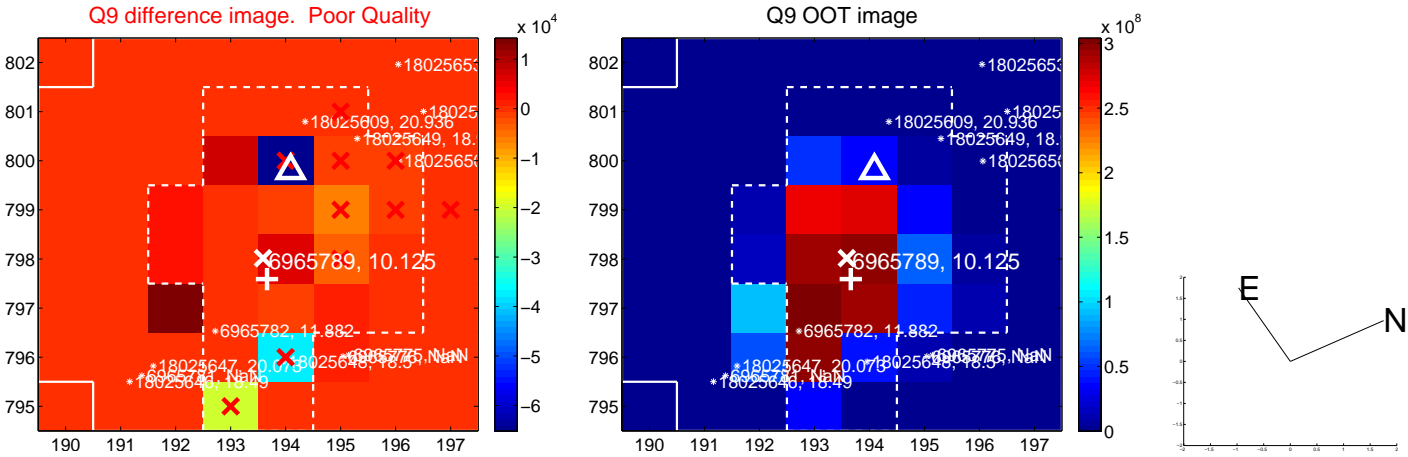
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



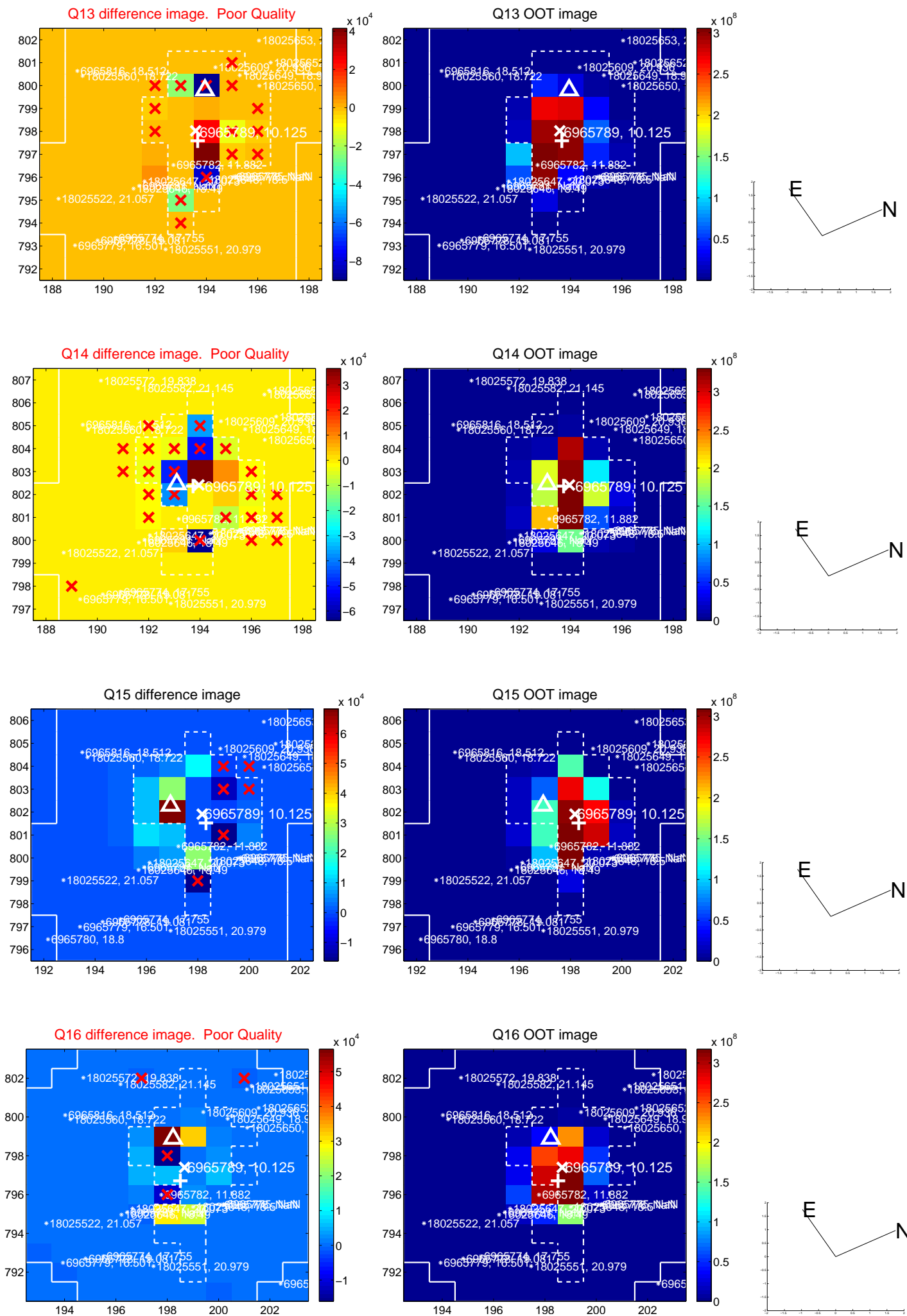
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



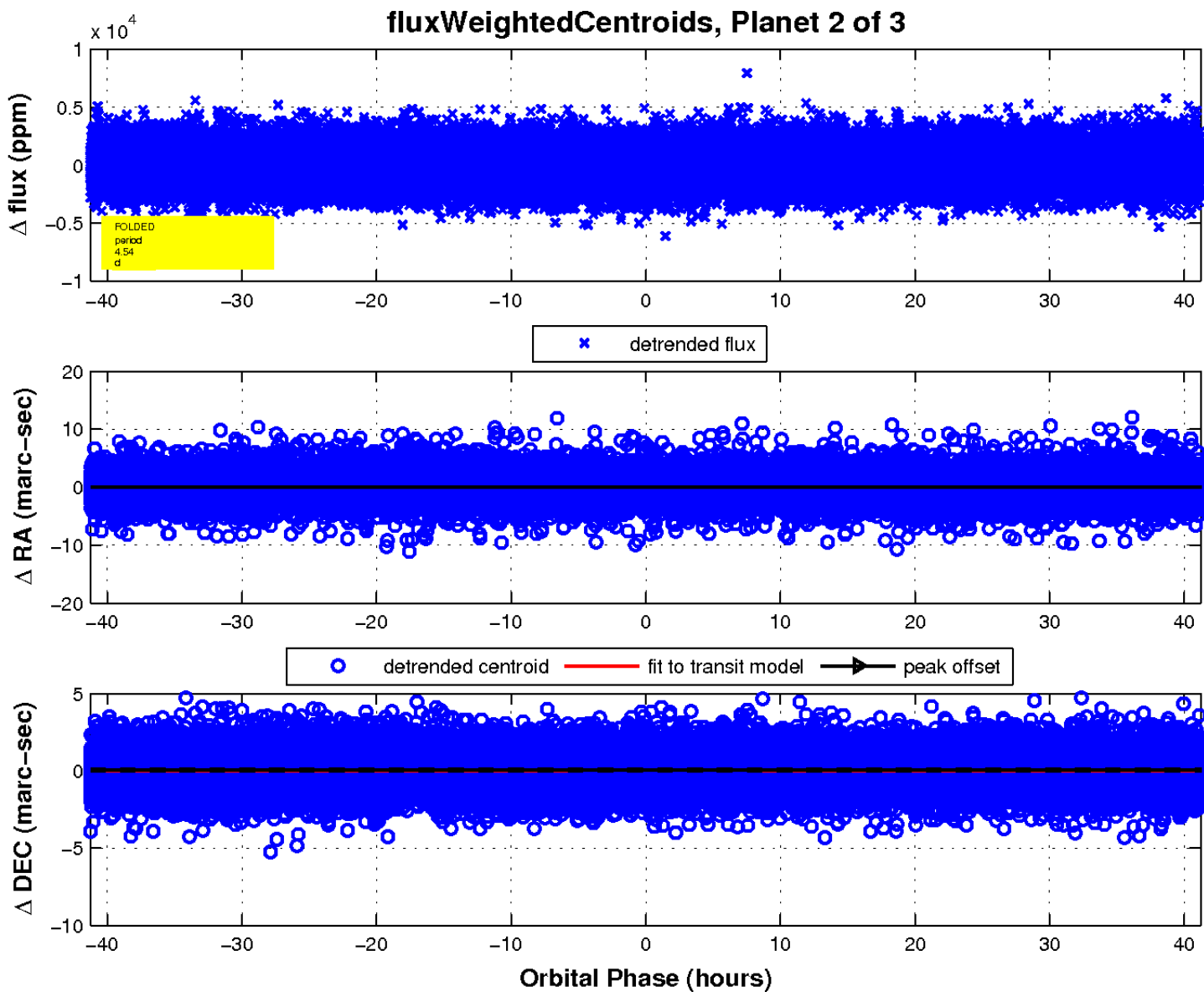
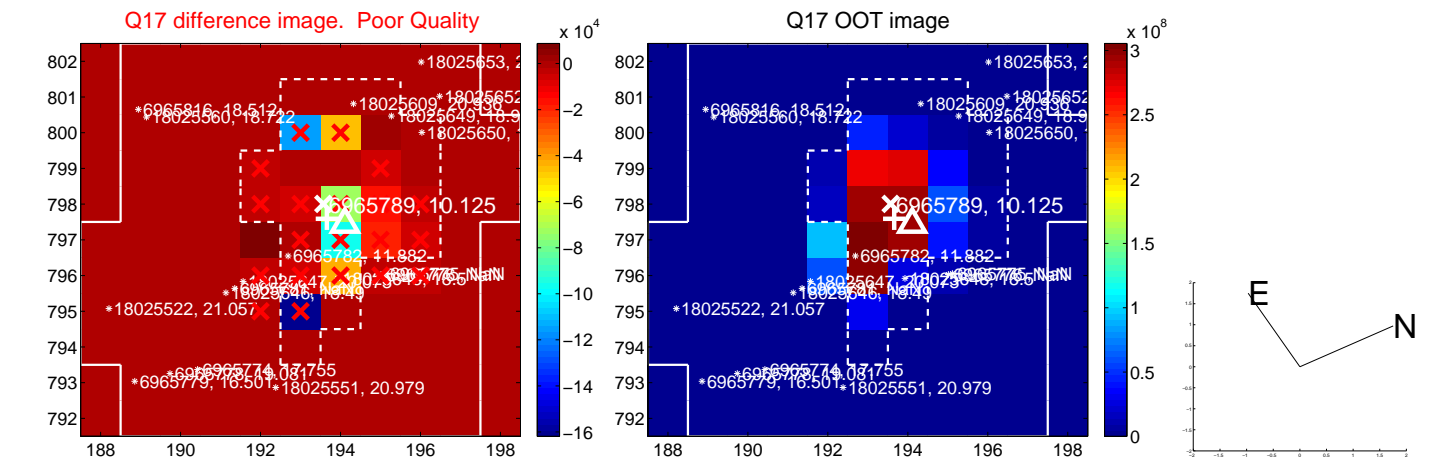
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



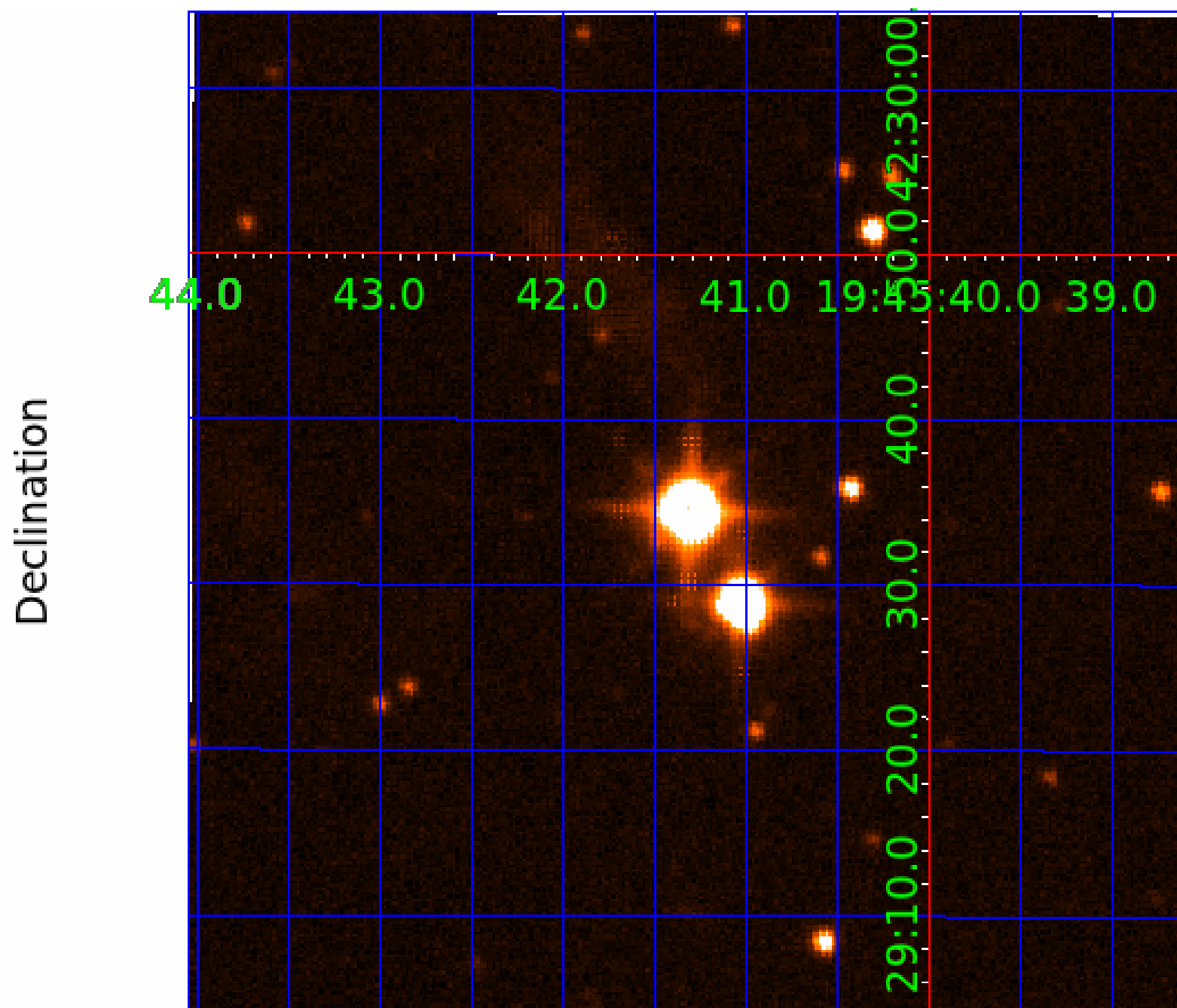
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



UKIRT Image



KIC 006965789

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})
006965789-01	OBS	No	0.840615	131.563232	131.1	3.474	14.1	12.8	4.27	7897	5.70	144975.25
006965789-02	OBS	No	4.544619	131.579106	15.2	15.000	8.5	-1.0	4.27	7897	1.68	15278.95
006965789-03	OBS	No	67.172470	183.271228	1474.3	13.674	12.1	7.5	4.27	7897	30.26	421.21

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
006965789-01	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—CENT_SATURATED
006965789-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_ZUMA—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_ALT—CENT_SATURATED
006965789-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—LPP_ALT—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.

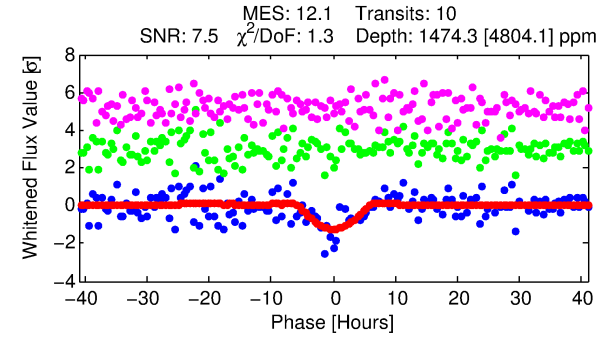
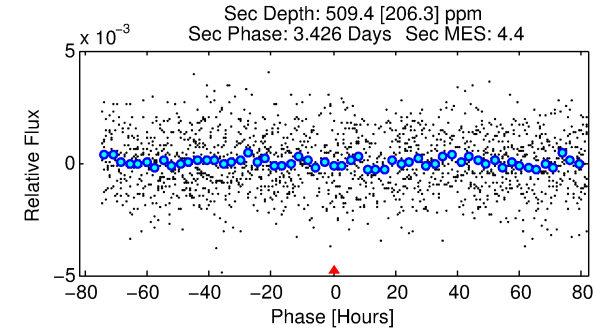
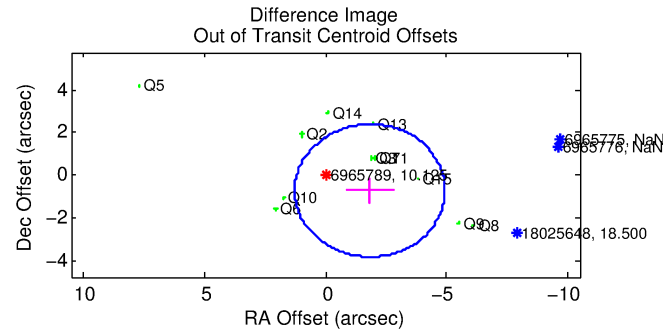
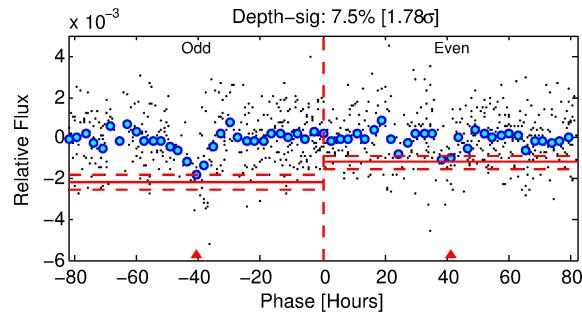
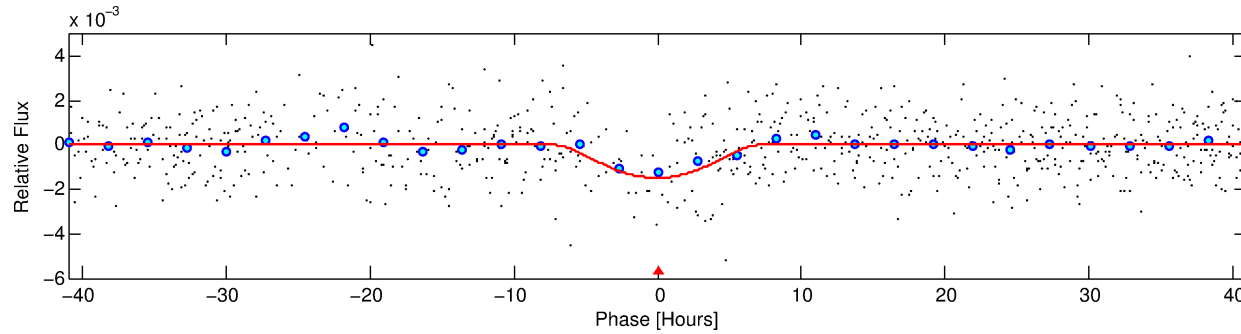
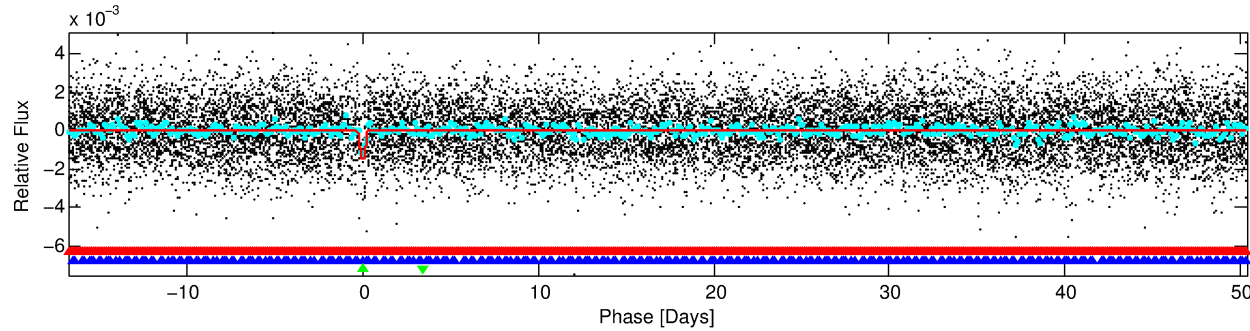
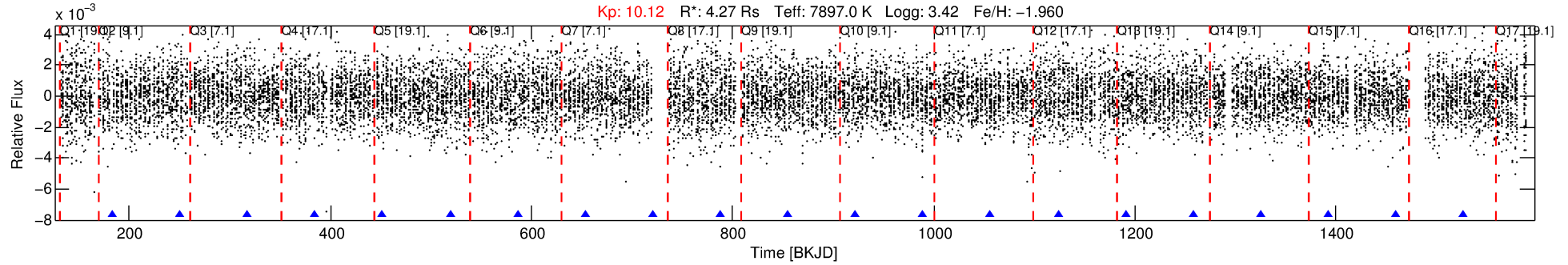
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 006965789-03

No Significant Match Found

DV One-Page Summary

KIC: 6965789 Candidate: 3 of 3 Period: 67.172 d



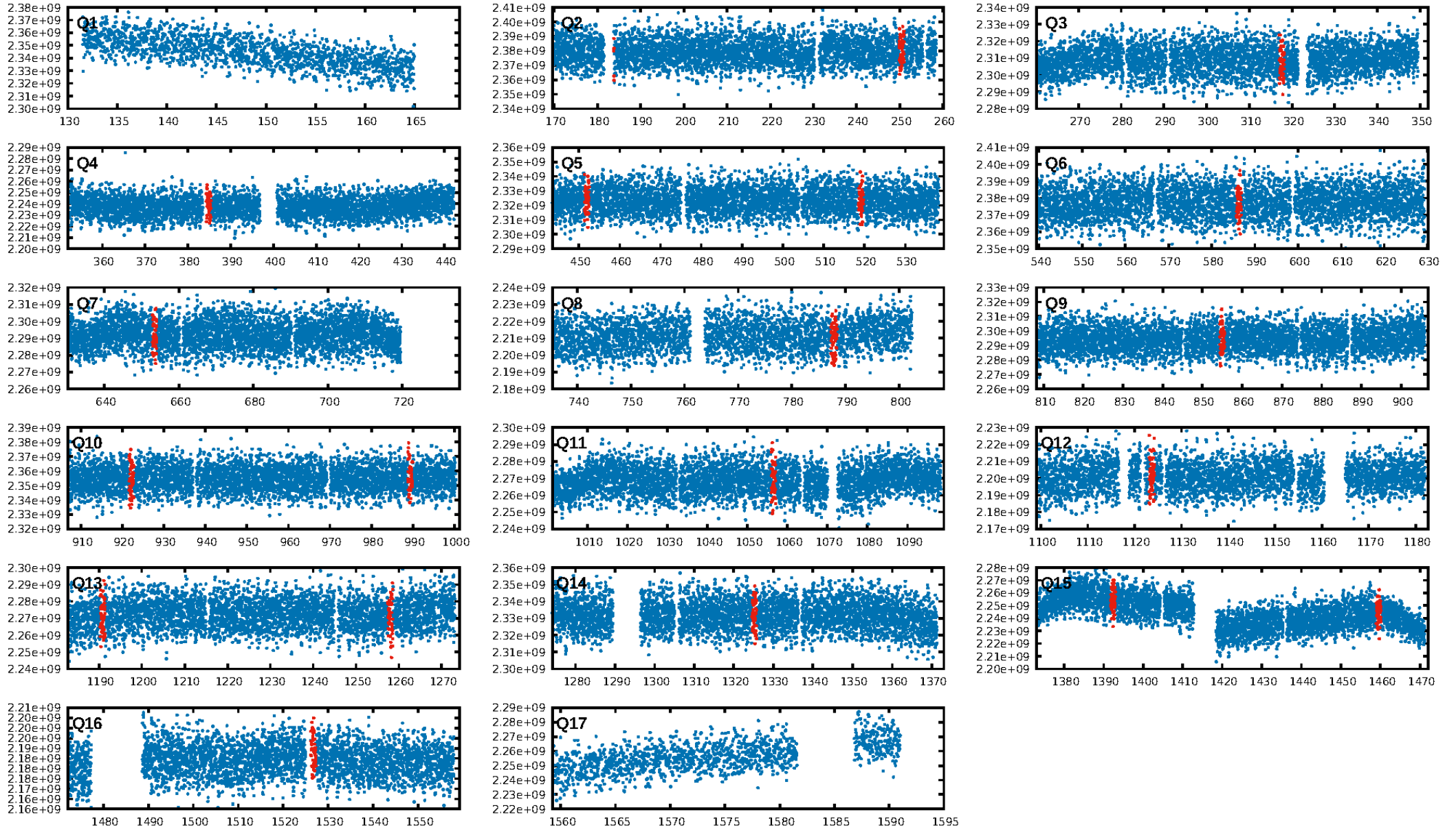
DV Fit Results:

Period = 67.17247 [0.00488] d
Epoch = 183.2712 [0.0580] BKJD
Rp/R* = 0.0650 [0.3029]
a/R* = 13.79 [14.69]
b = 1.00 [0.29]
Seff = 421.21 [647.88]
Teq = 1155 [444] K
Rp = 30.26 [142.86] Re
a = 0.3880 [0.3419] AU
Ag = 46.09 [435.79] [0.10σ]
Teffp = 4654 [10857] K [0.32σ]

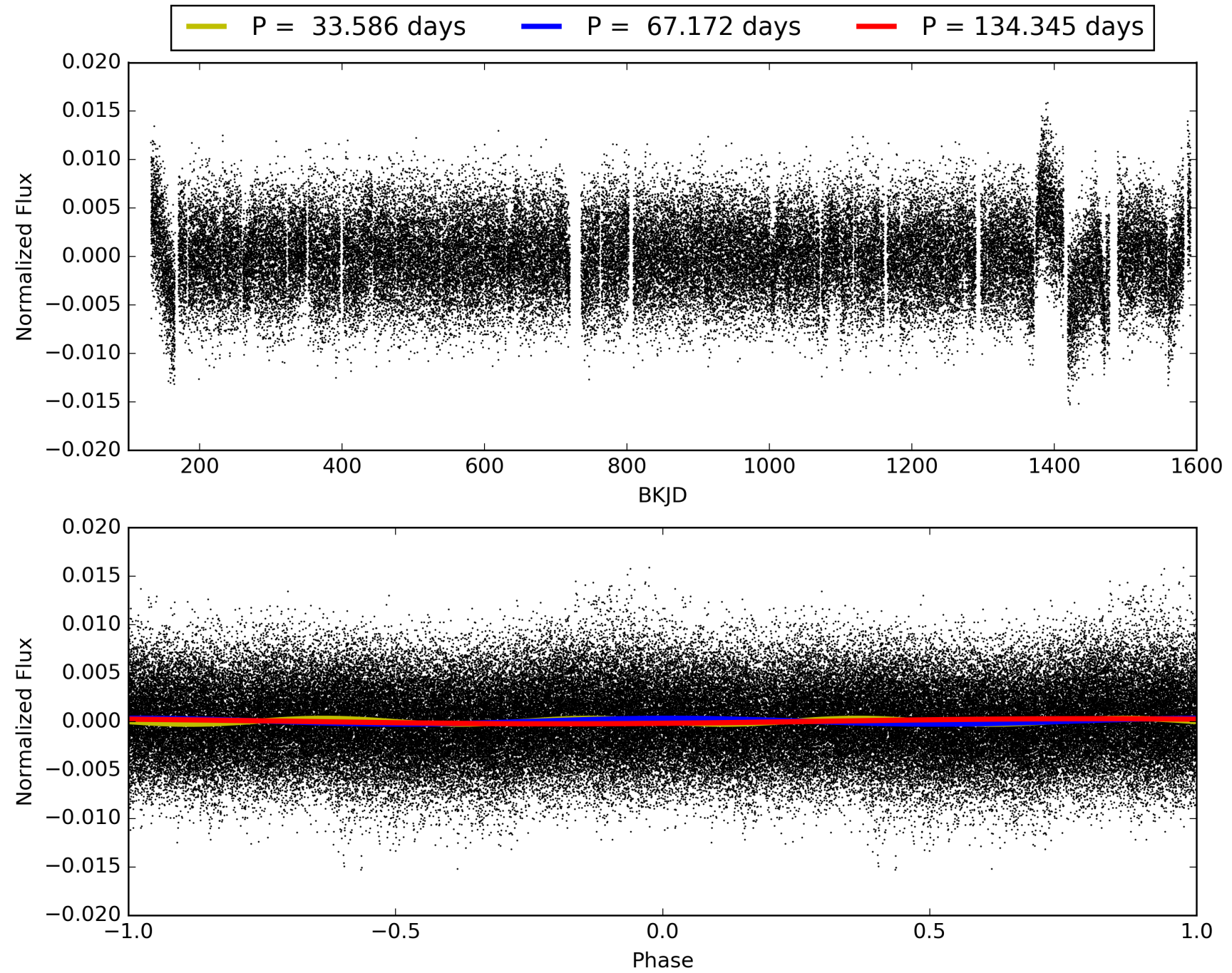
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [74.05σ]
LongPeriod-sig: N/A
ModelChiSquare2-sig: 0.0%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: 1.60e-21
RollingBand-fgt: 1.00 [10/10]
GhostDiagnostic-chr: N/A
Centroid-sig: 23.9%
Centroid-so: 1.294 arcsec [10.53σ]
OotOffset-rm: 1.965 arcsec [1.90σ]
KicOffset-rm: 2.992 arcsec [2.28σ]
OotOffset-st: 4/4/1/3 [12]
KicOffset-st: 4/4/1/3 [12]
DiffImageQuality-fgm: 0.17 [2/12]
DiffImageOverlap-fno: 0.00 [0/12]

TCE 006965789-03, PDC Light Curves

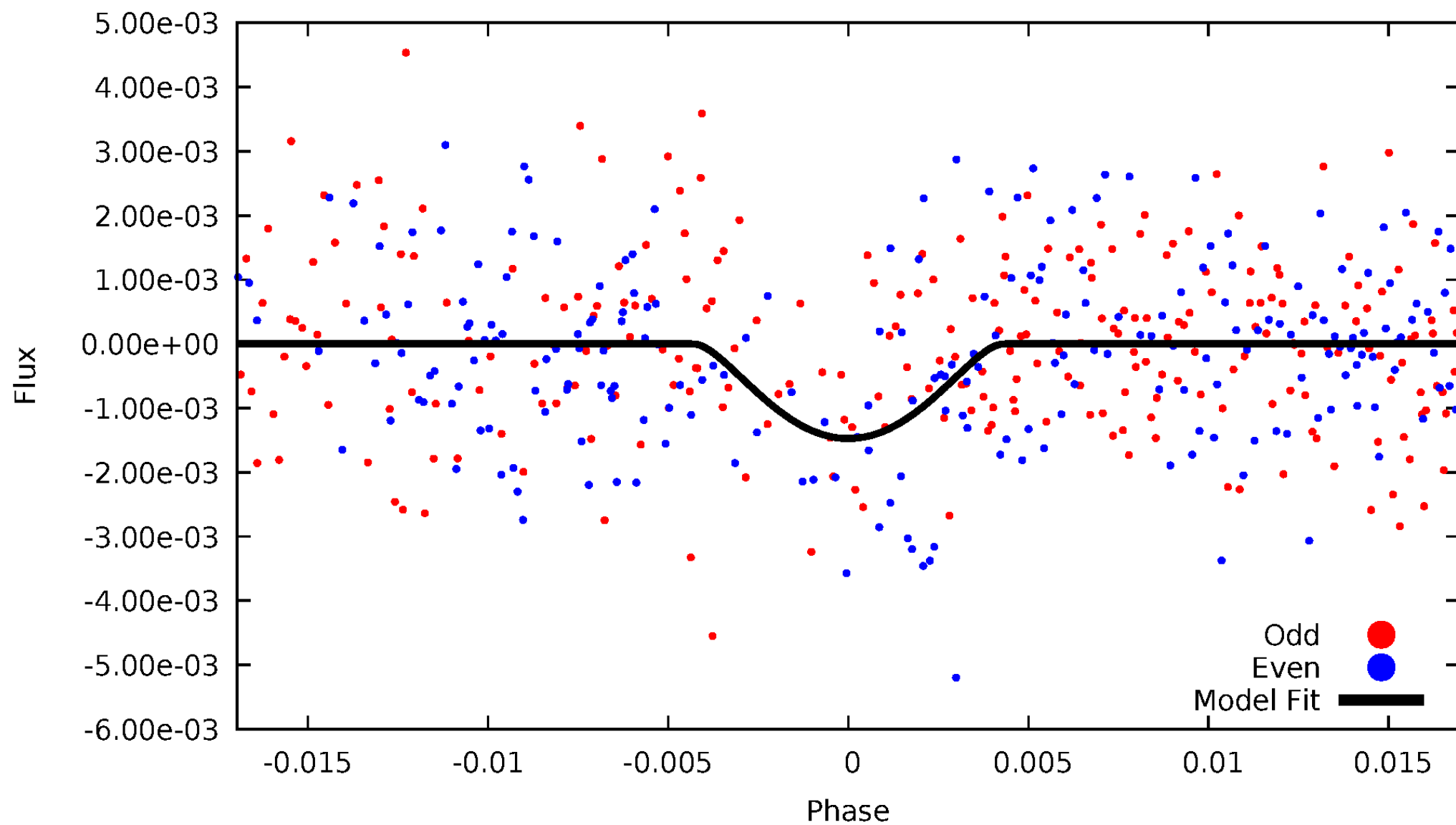


TCE 006965789-03



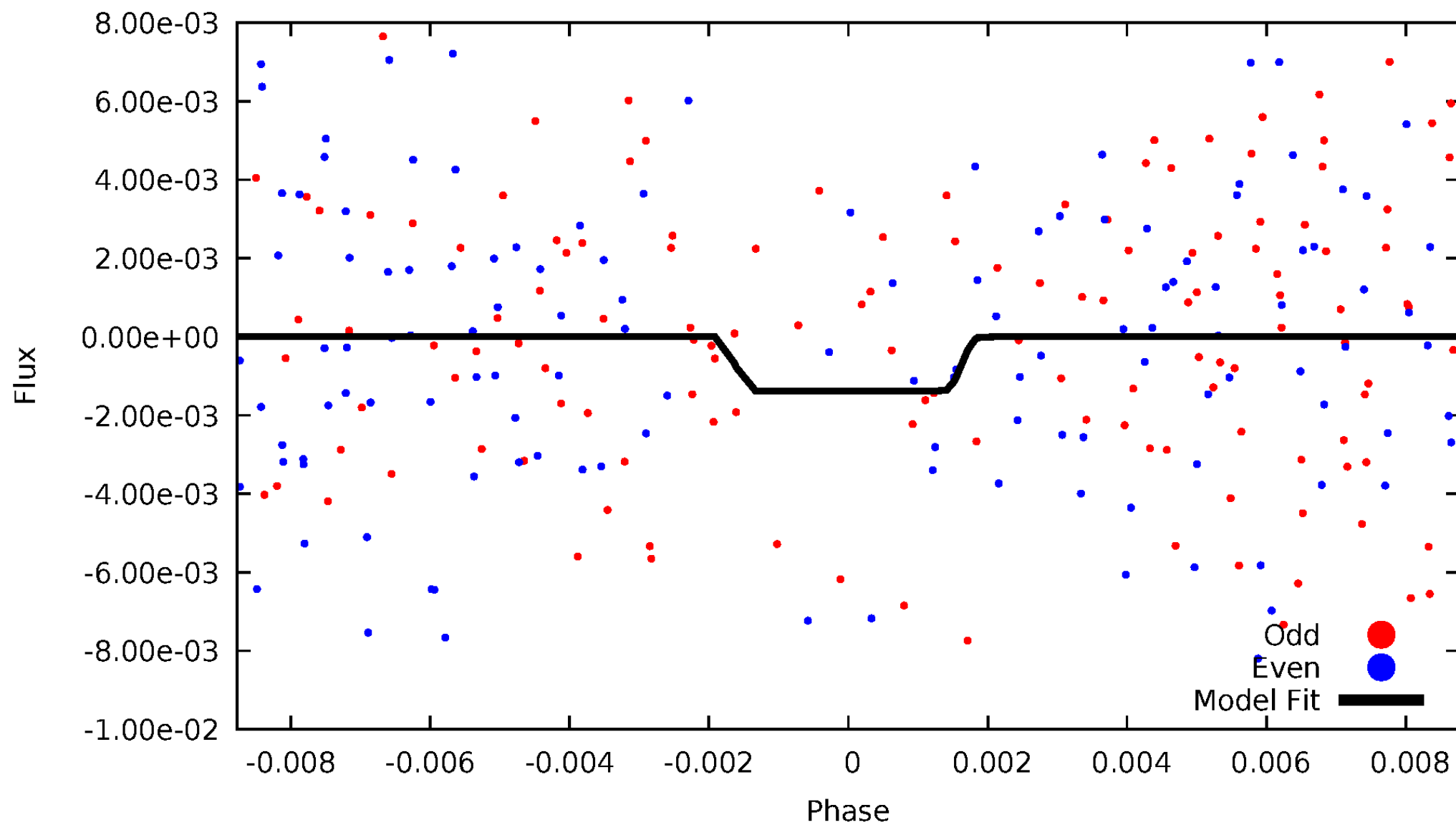
DV Odd/Even

TCE 006965789-03

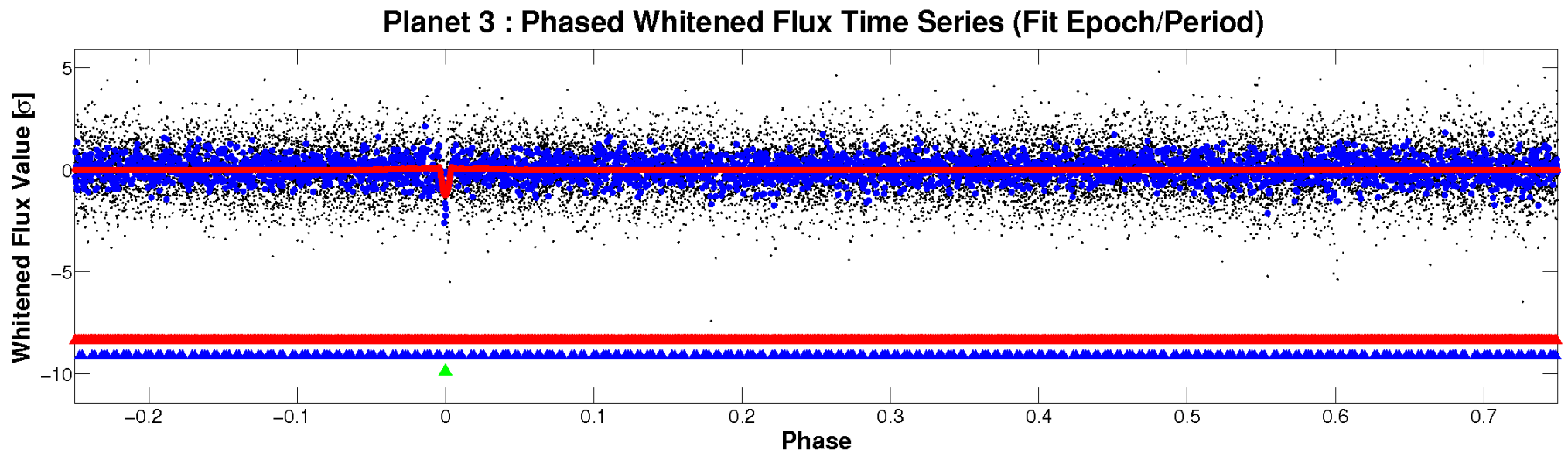
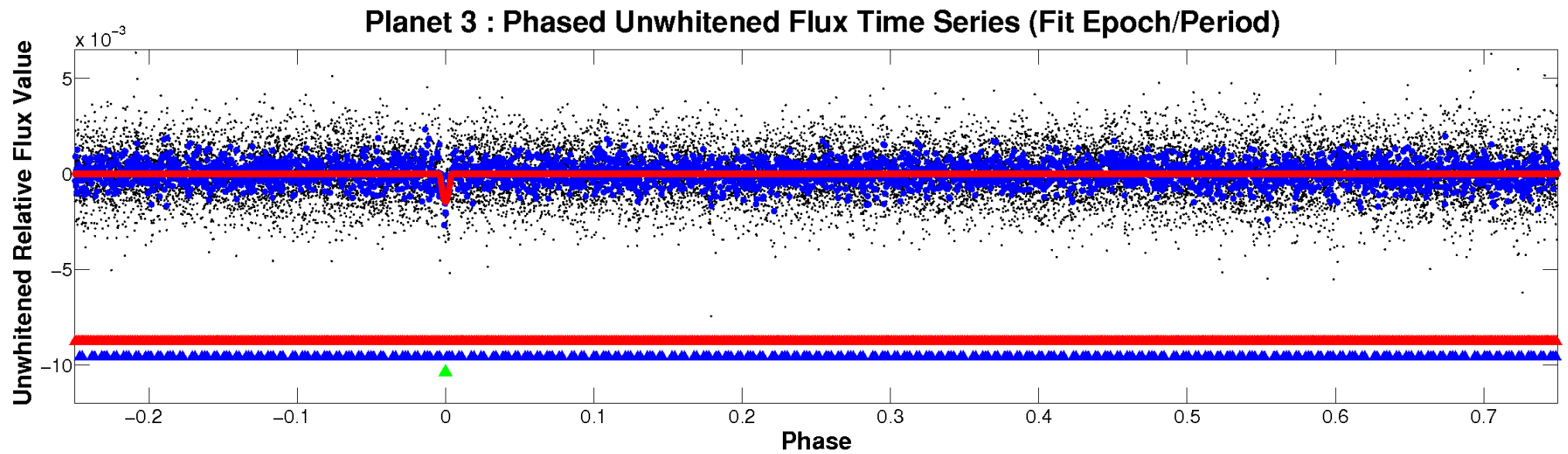


ALT Odd/Even

TCE 006965789-03

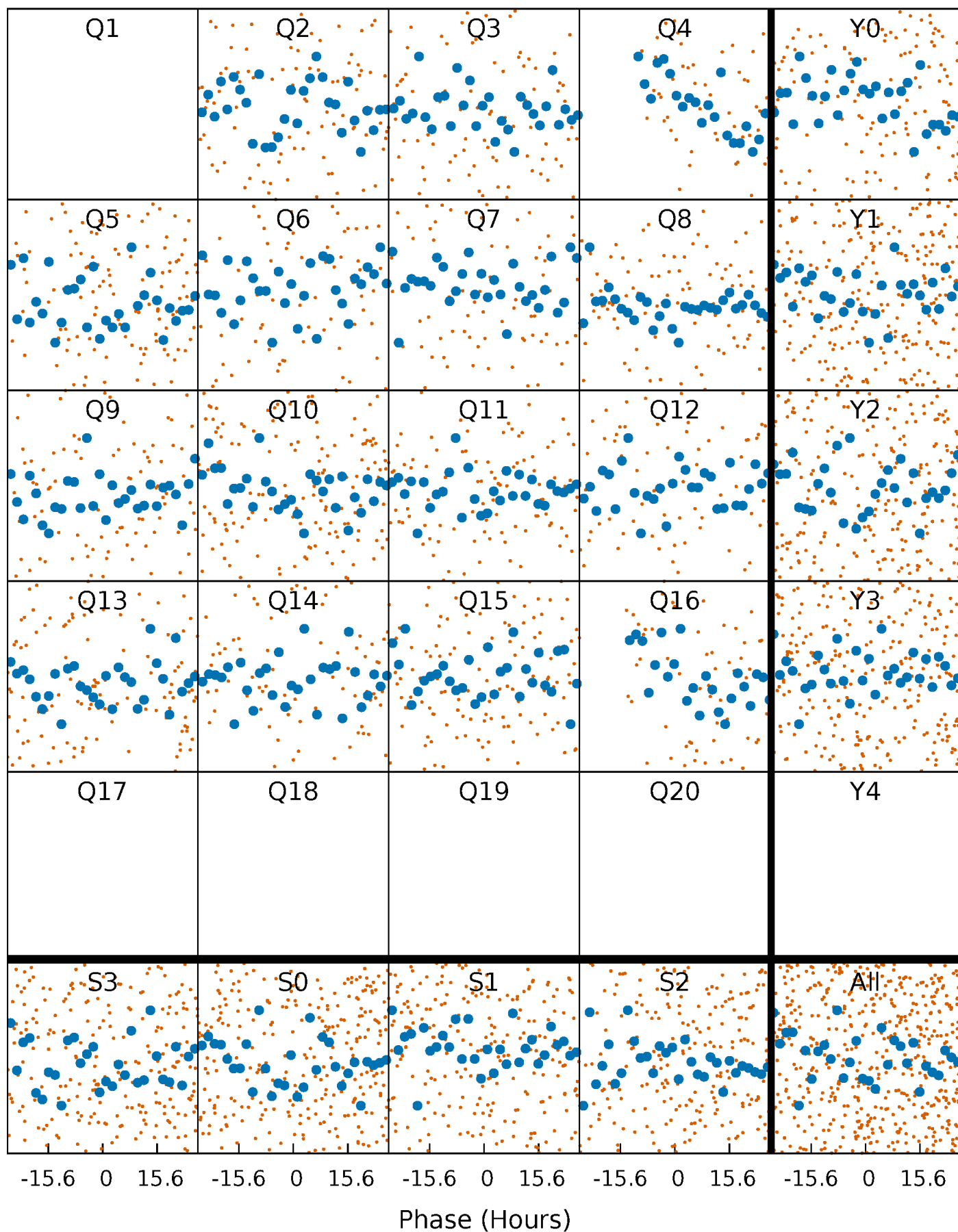


Non-Whitened Vs. Whitened Light Curve



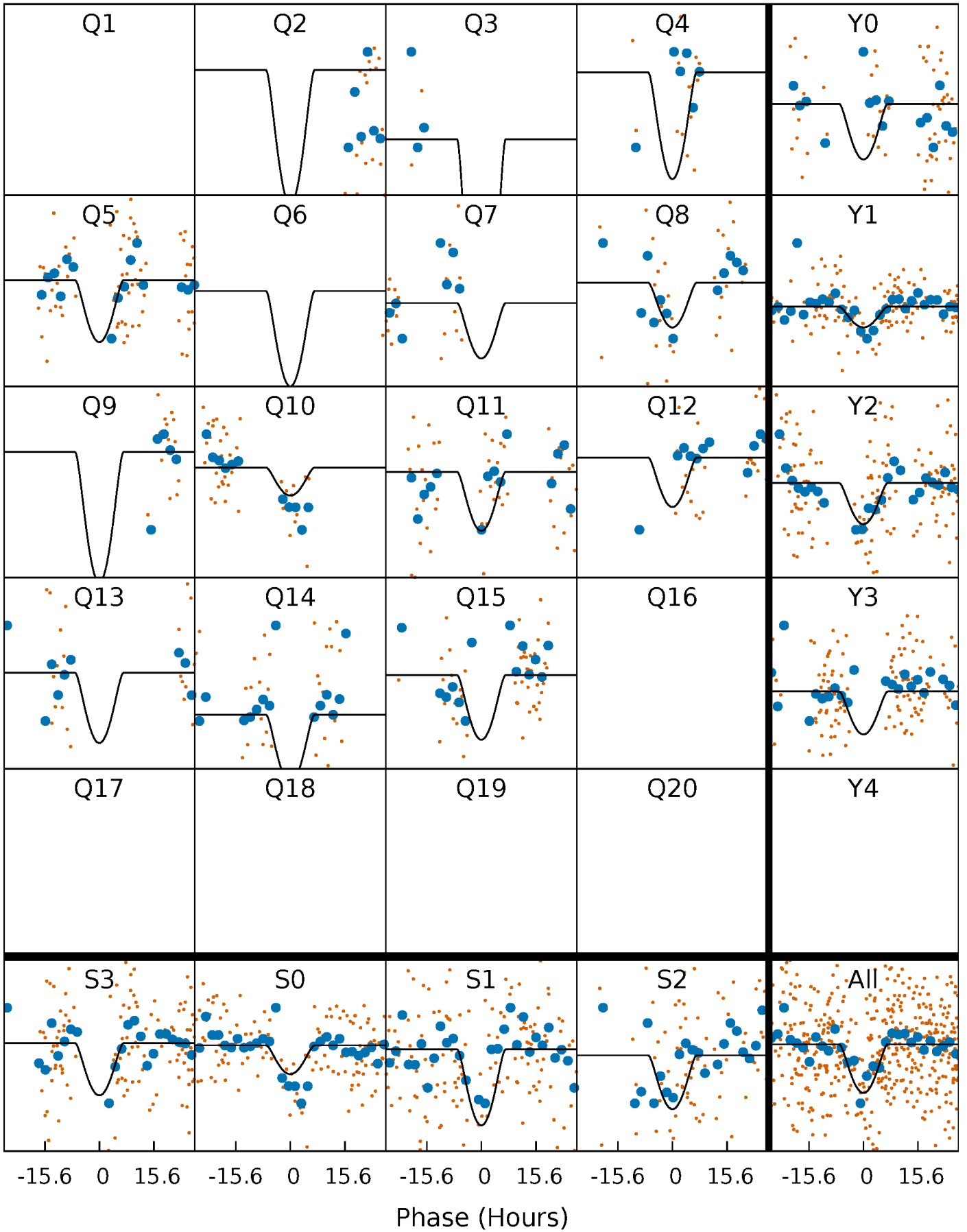
PDC Quarter-Phased Transit Curves

TCE 006965789-03 P= 67.172470 Days $T_0=183.271228$ (BKJD)



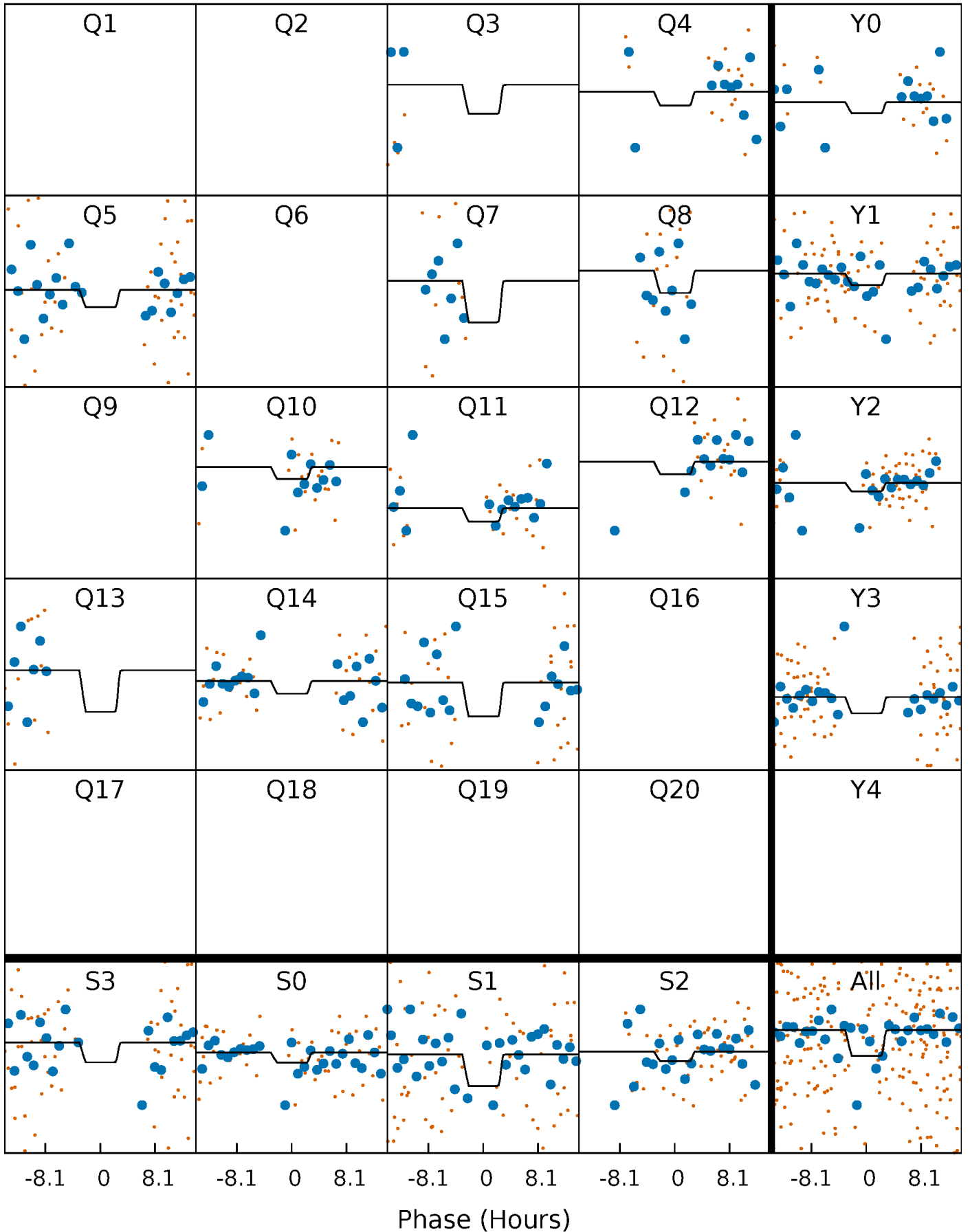
DV Quarter-Phased Transit Curves

TCE 006965789-03 P= 67.172470 Days $T_0=183.271228$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

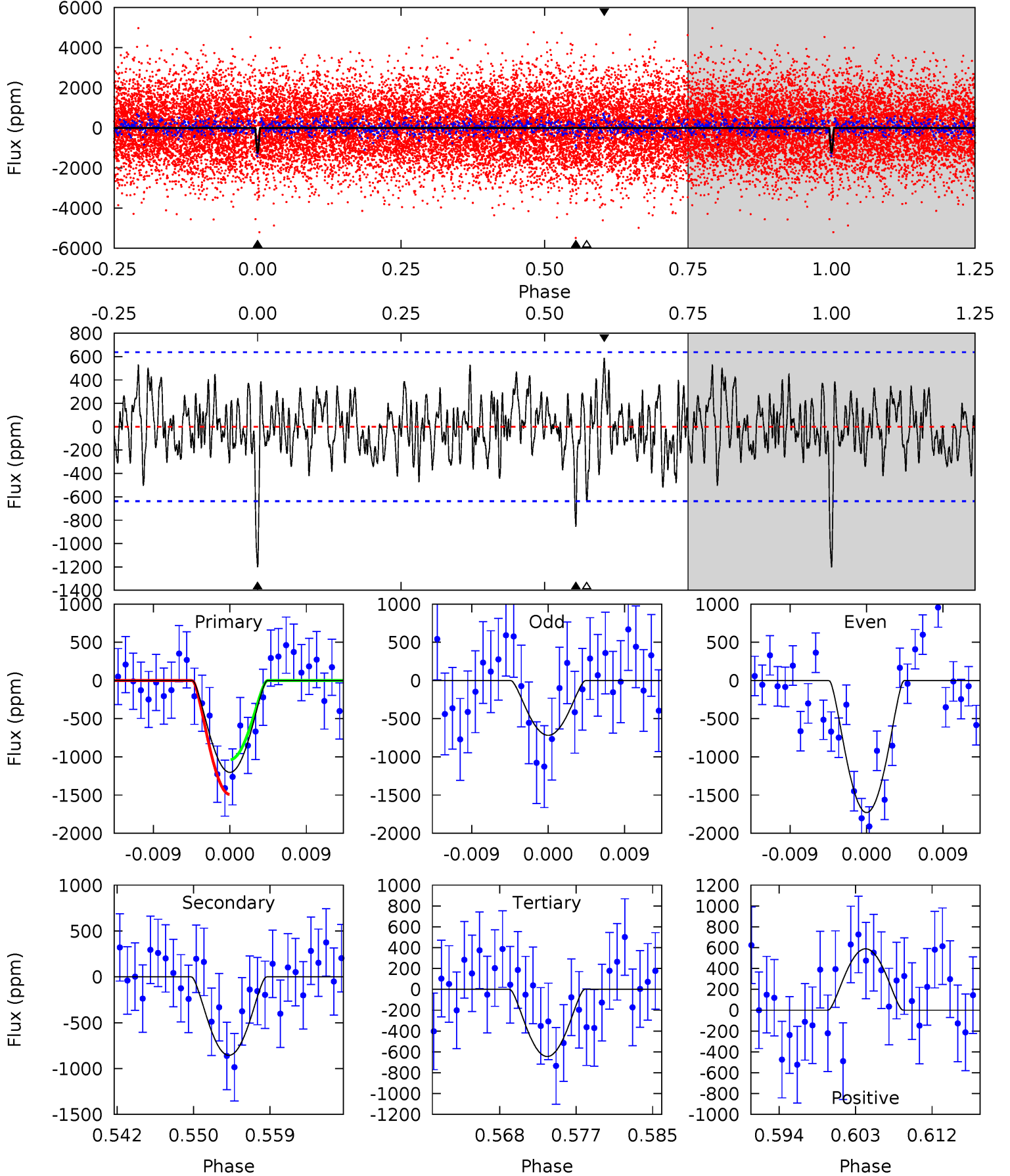
TCE 006965789-03 P= 67.184287 Days $T_0=183.062561$ (BKJD)



DV Model-Shift Uniqueness Test

006965789-03, P = 67.172470 Days, E = 116.098758 Days

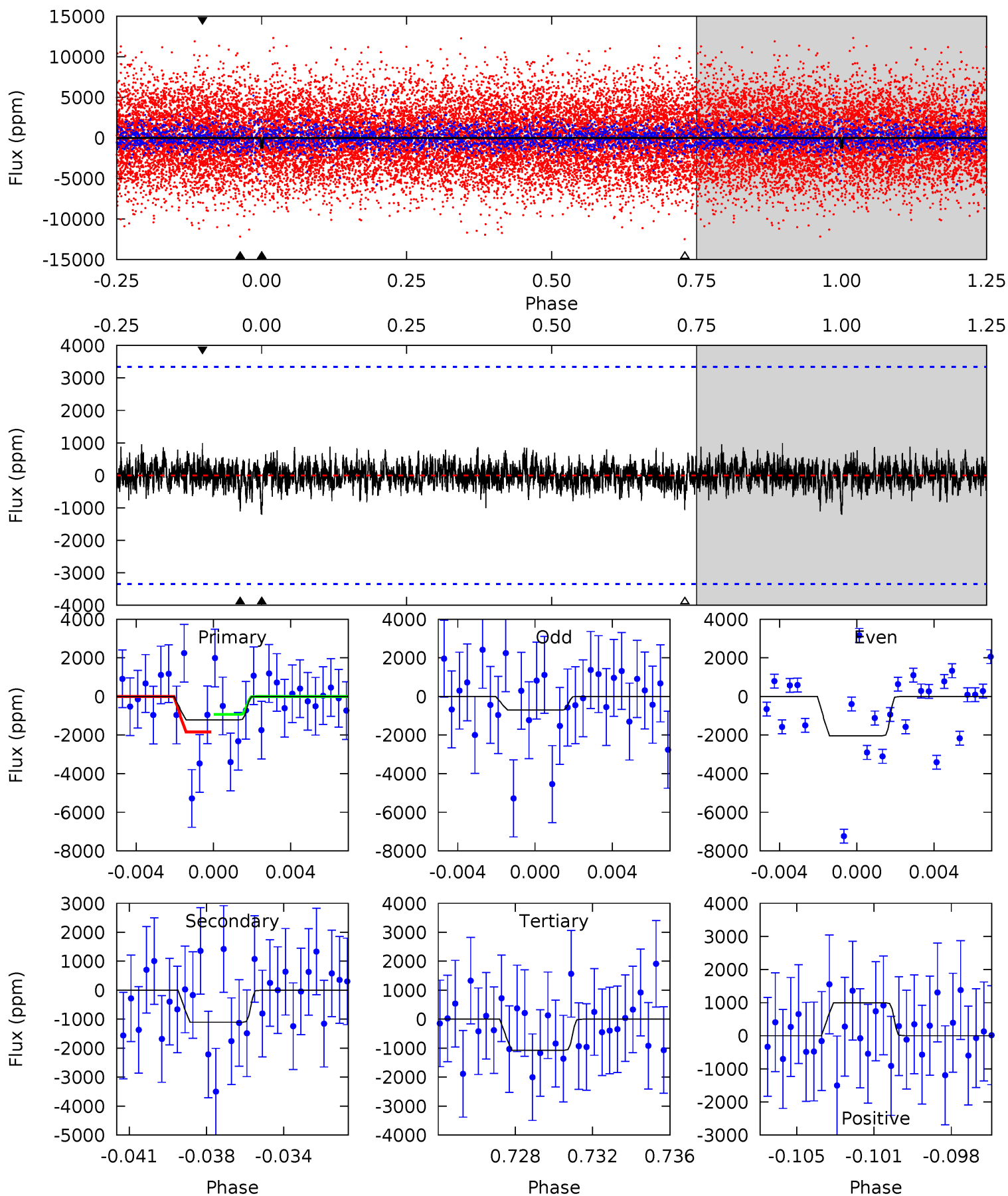
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
9.53	6.79	5.11	4.67	5.05	2.62	1.56	4.42	4.87	1.68	2.12	3.98	0.72	0.33	1.71



Alt Model-Shift Uniqueness Test

006965789-03, P = 67.184287 Days, E = 115.878274 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
1.89	1.72	1.67	1.55	5.21	2.90	0.41	0.22	0.34	0.05	0.17	1.02	0.97	0.45	0.62



Stellar Parameters For KIC 006965789

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (g \cdot \text{cm}^{-3})$
	7897^{+248}_{-310}	$3.415^{+0.941}_{-0.099}$	$-1.960^{+0.250}_{-0.050}$	$4.266^{+0.538}_{-3.229}$	$1.727^{+0.037}_{-0.695}$	$0.031^{+1.026}_{-0.010}$
	+3%/-4%	+28%/-3%	+13%/-3%	+13%/-76%	+2%/-40%	+3274%/-30%
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 006965789-03 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-856 ± 126	$84.53^{+106.54}_{-61.95}$	1551^{+135}_{-291}	3316^{+2027}_{-697}	$9.658^{+120.871}_{-7.863}$
Alt.	-1103 ± 641	$78.22^{+102.77}_{-54.81}$	1543^{+142}_{-339}	3390^{+1916}_{-791}	11^{+133}_{-10}

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 $A_{obs} \gg 1.0$

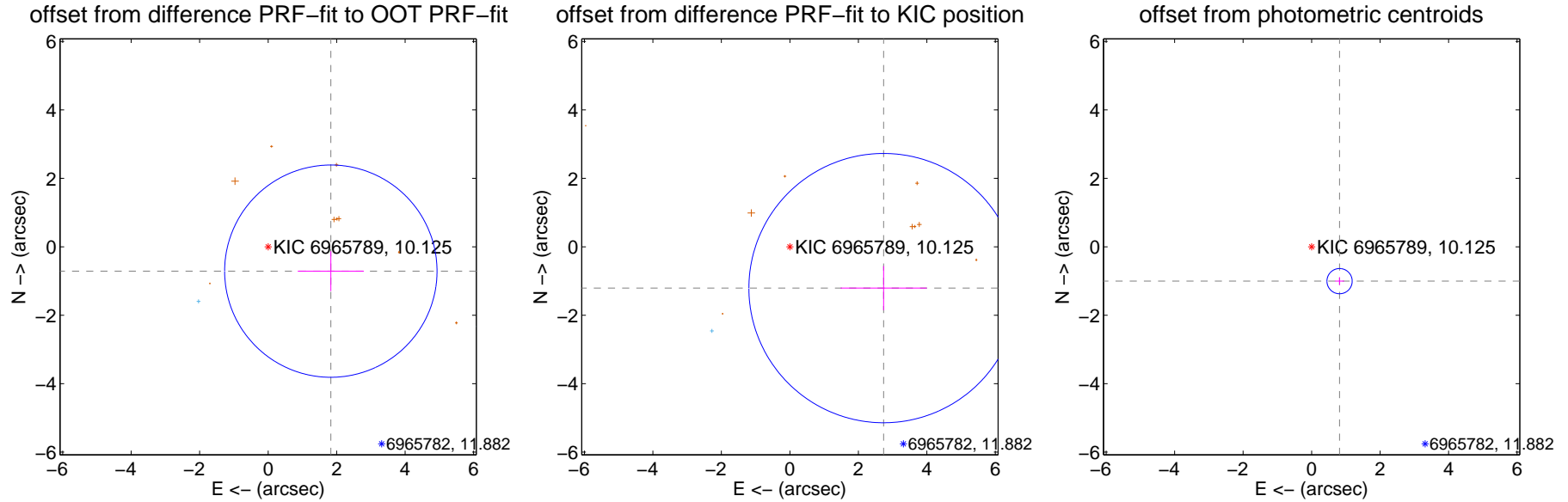
DV Centroid Data

Supplemental centroid analysis for 006965789-03. **Kepler magnitude: 10.12.** Transit SNR 7.49

There are 2 quarters with good PRF difference image offsets

The direct PRF centroid is offset from the target star catalog position by about 1.64 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	1.965 ± 1.034	1.90	-1.831 ± 0.965	-0.712 ± 0.584
PRF-fit source offset from KIC position	2.992 ± 1.312	2.28	-2.738 ± 1.259	-1.208 ± 0.644
photometric centroid source offset	1.29 ± 0.12	10.53	-0.82 ± 0.13	-1.00 ± 0.12



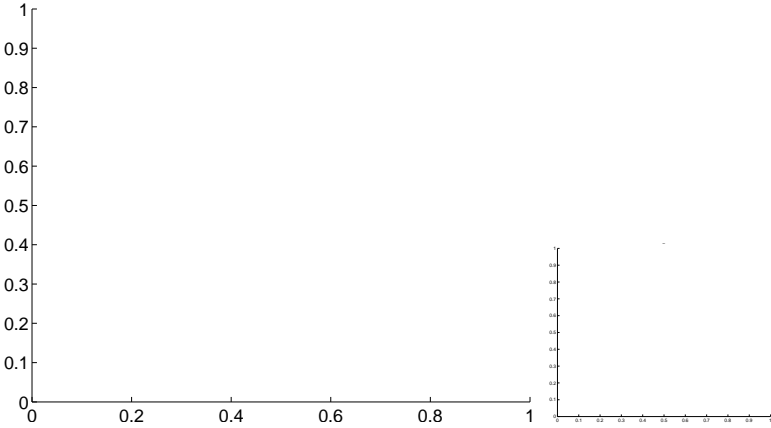
Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets;** magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

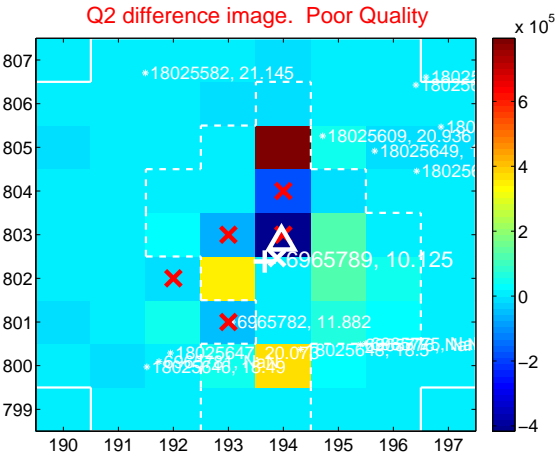
Q1 no difference image



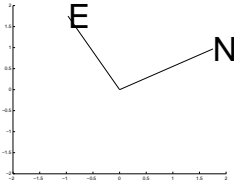
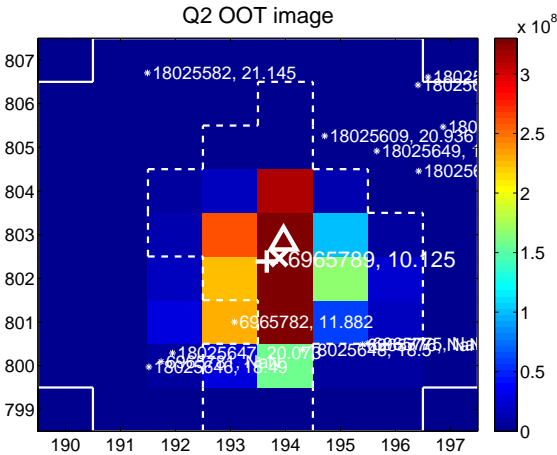
Q1 no OOT image



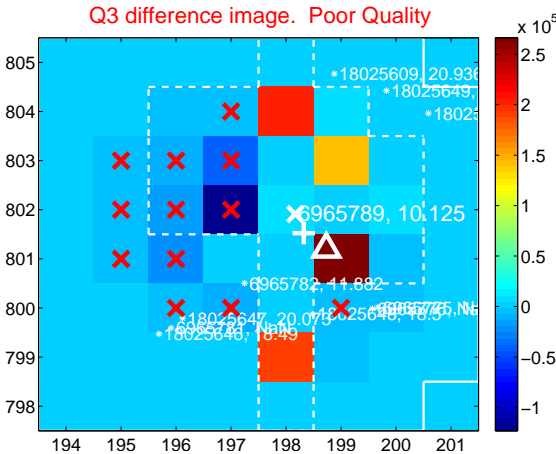
Q2 difference image. Poor Quality



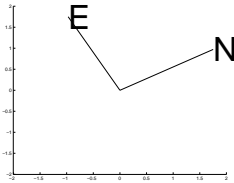
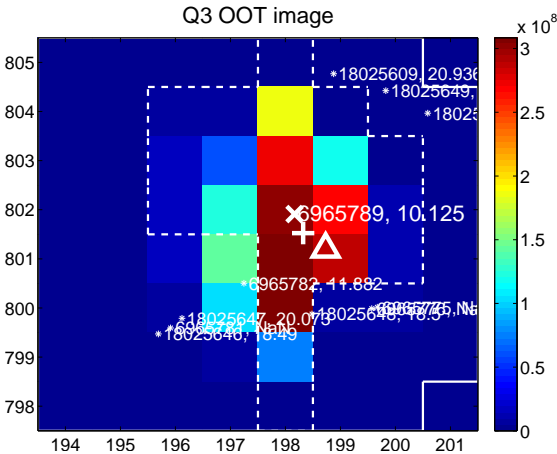
Q2 OOT image



Q3 difference image. Poor Quality



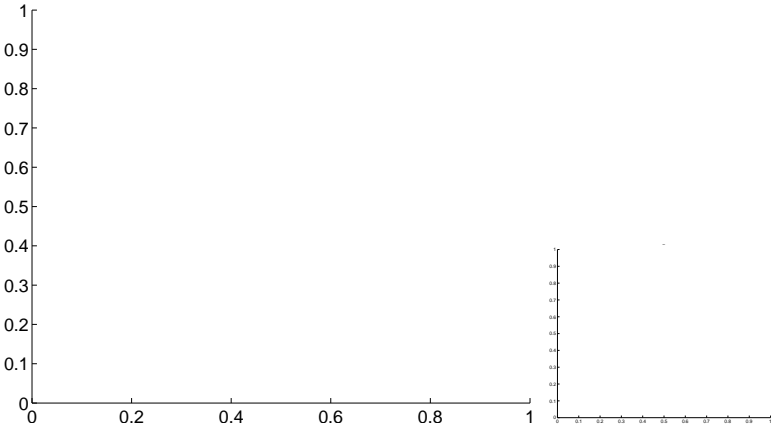
Q3 OOT image



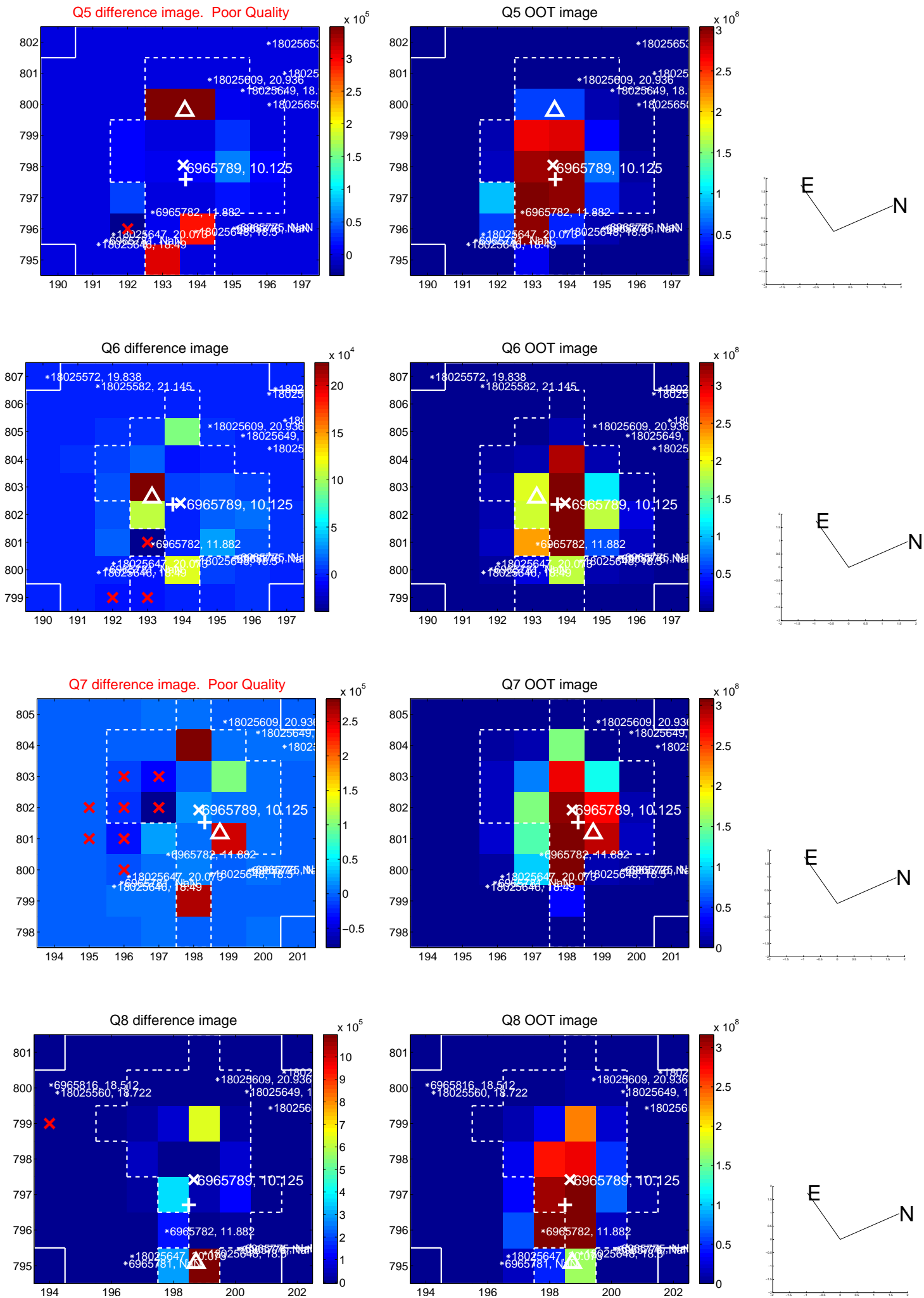
Q4 no difference image



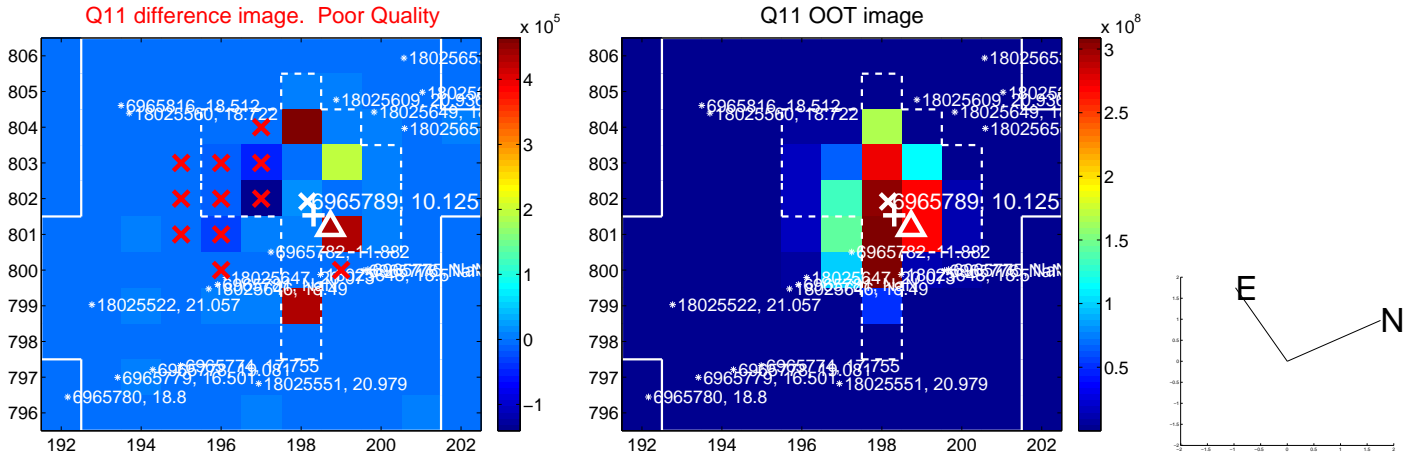
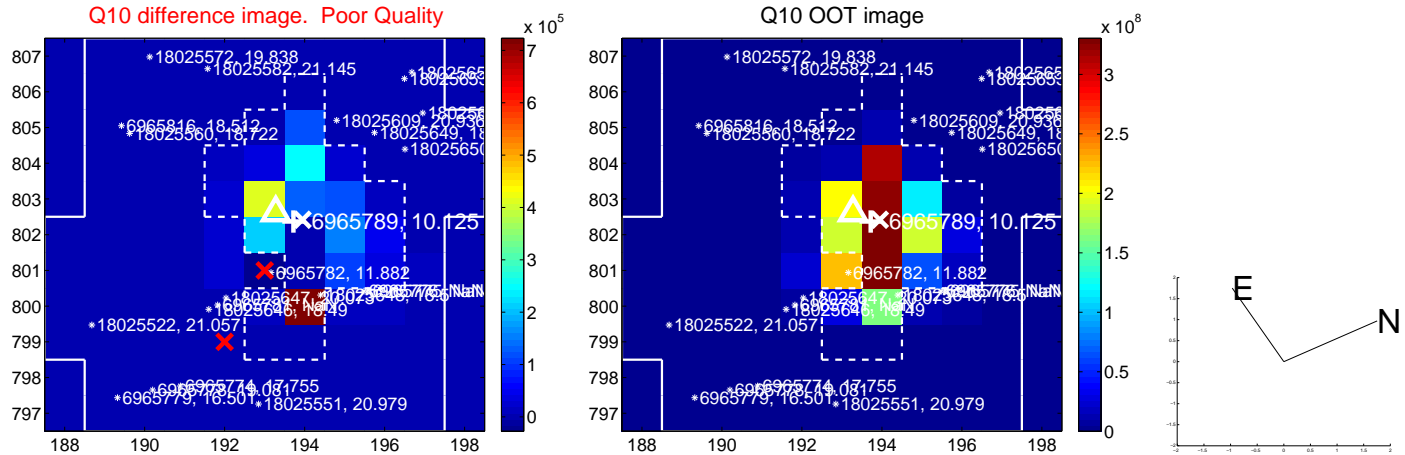
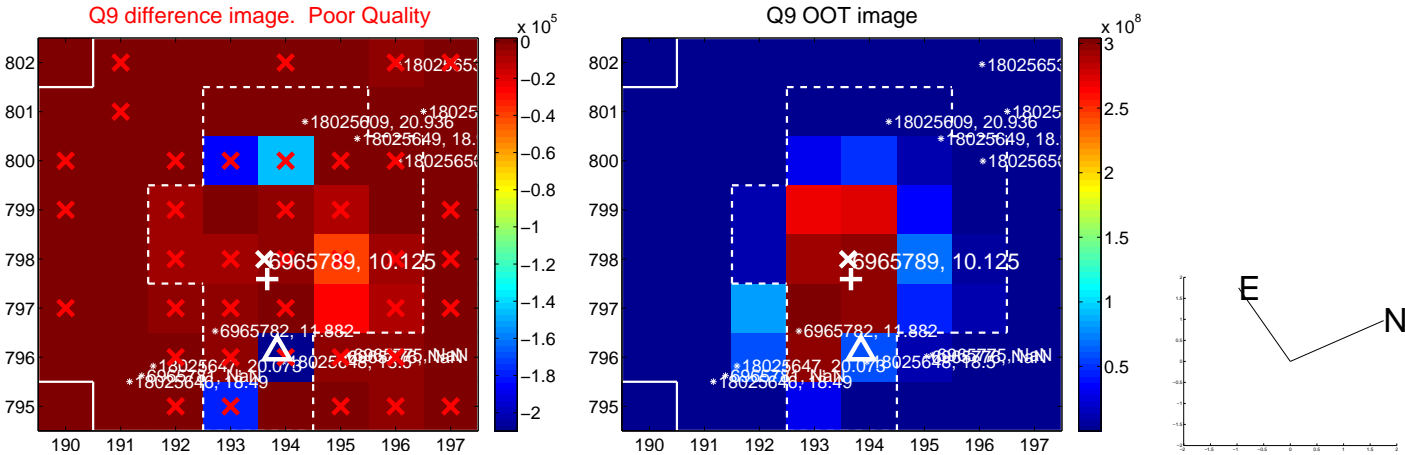
Q4 no OOT image



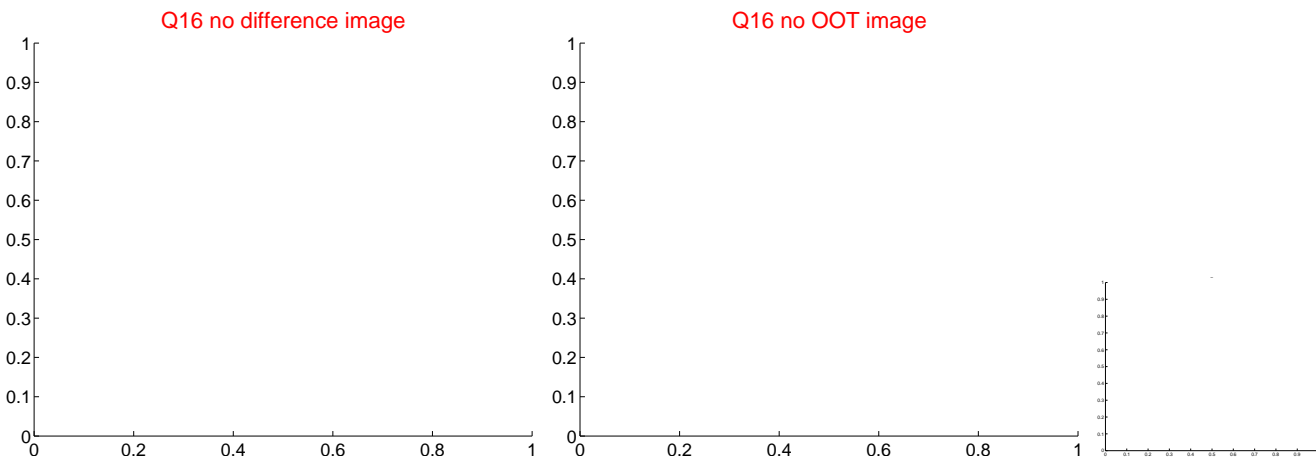
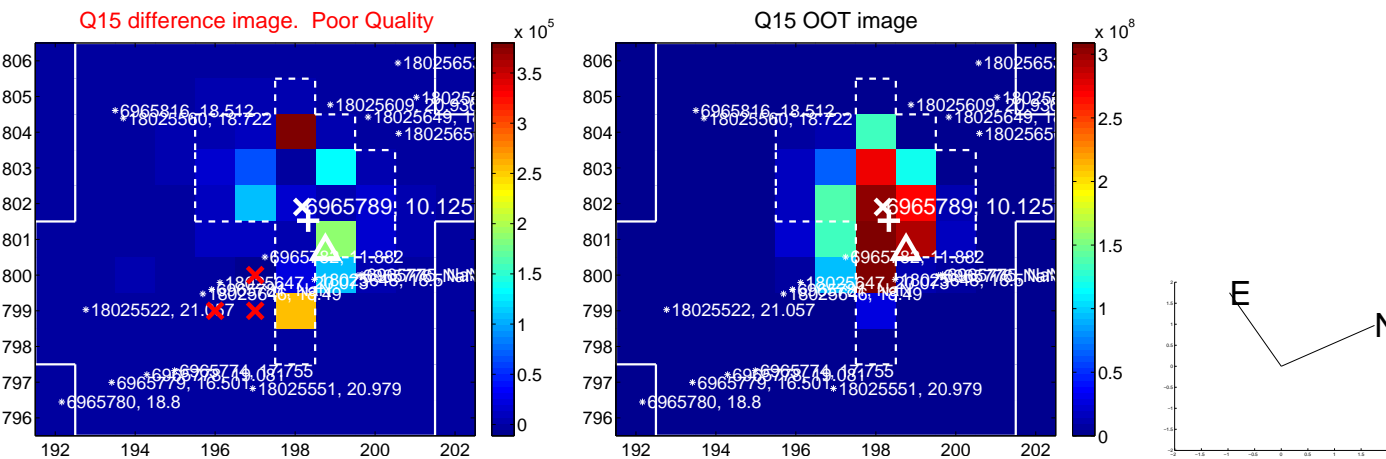
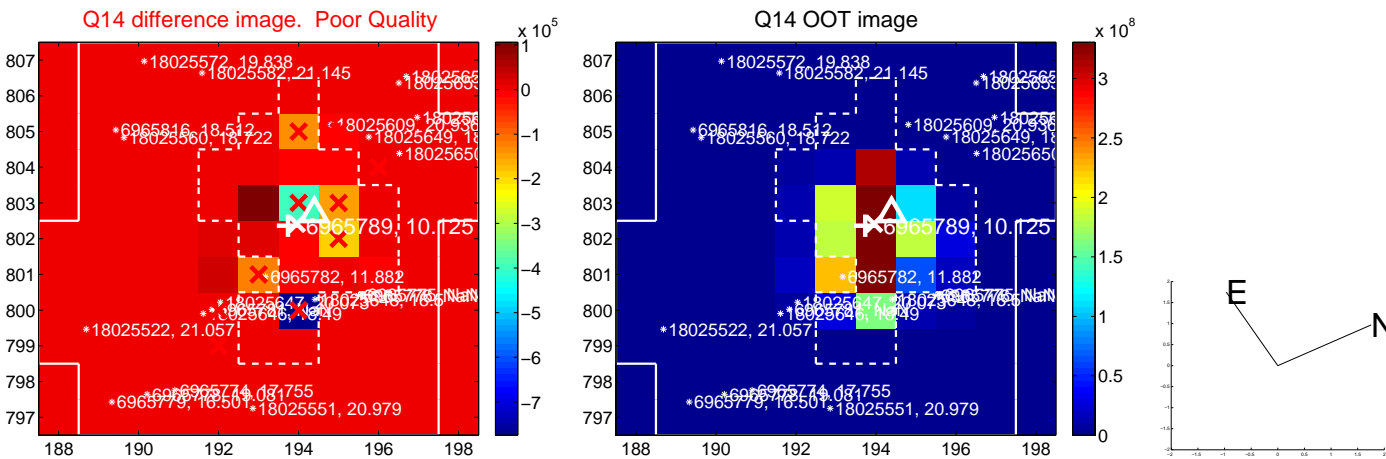
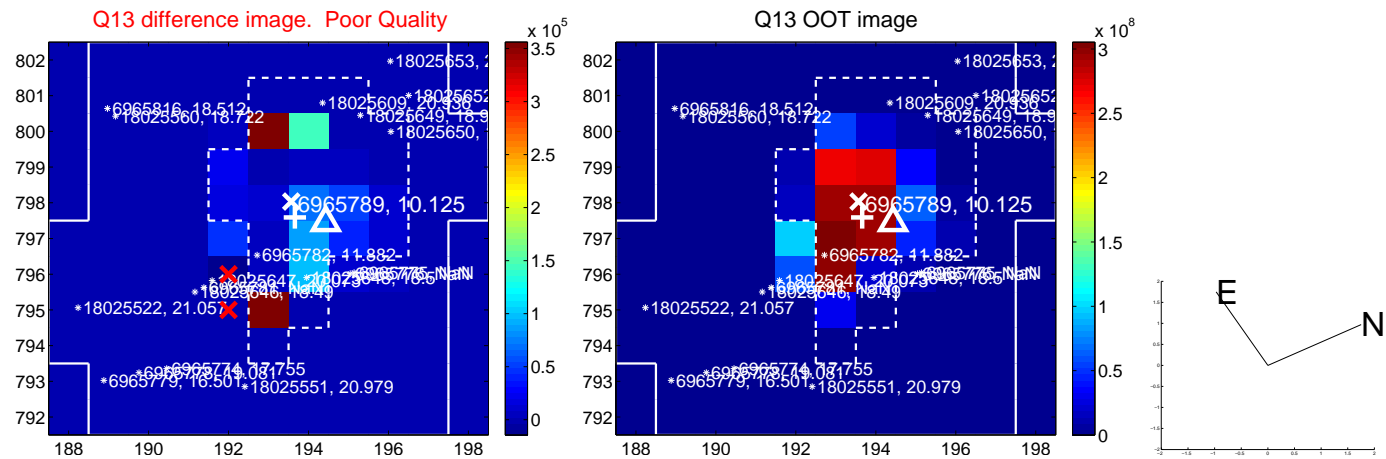
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



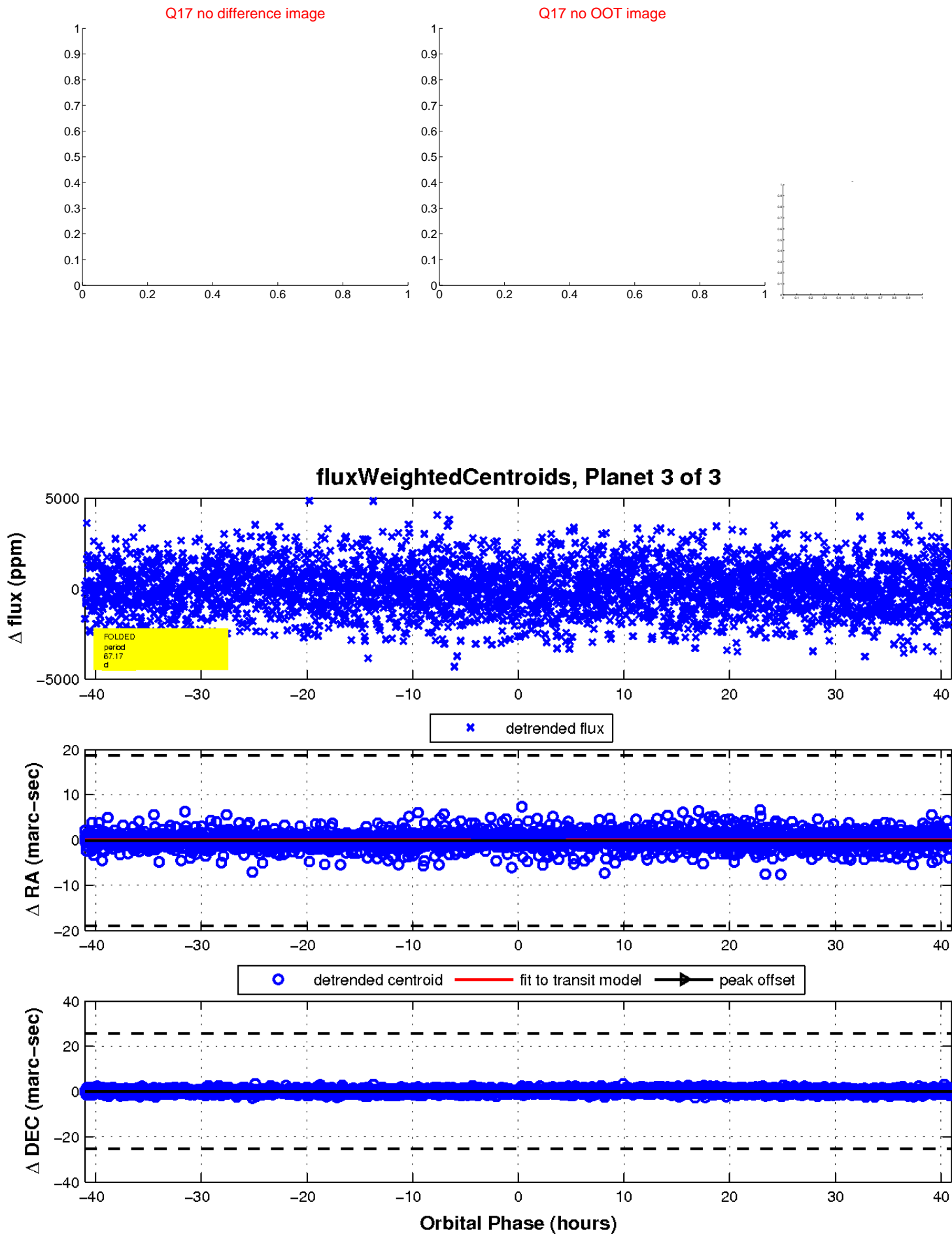
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

