

KIC 011442353

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})
011442353-01	OBS	No	1.315513	131.870832	3.9	2.599	7.8	9.4	3.38	7857	0.74	43401.05
011442353-02	OBS	No	1.315675	132.301811	2.7	1.003	9.9	4.7	3.38	7857	0.64	43393.95
011442353-03	OBS	No	1.315185	132.264556	2.2	11.887	8.3	5.6	3.38	7857	0.51	43415.49

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
011442353-01	OBS	FP	0.00	1	0	0	0	SWEET_NTL—LPP_DV—MOD_NONUNIQ_DV—MOD_POS_DV—MOD_NONUNIQ_ALT—CENT_SATURATED
011442353-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_SKYE_ZUMA_TRACKER—SWEET_NTL—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—SAME_NTL_PERIOD—CENT_SATURATED
011442353-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_SKYE_ZUMA—SWEET_NTL—LPP_DV—MOD_NONUNIQ_ALT—SAME_NTL_PERIOD—CENT_SATURATED

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

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

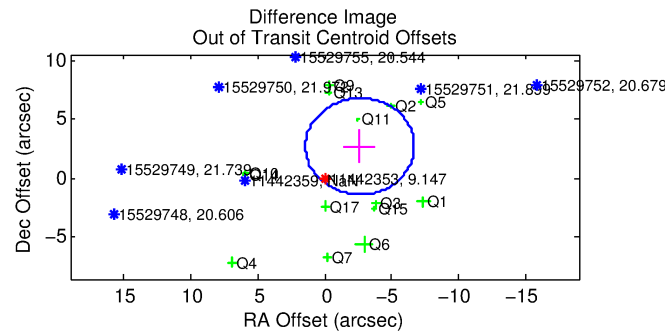
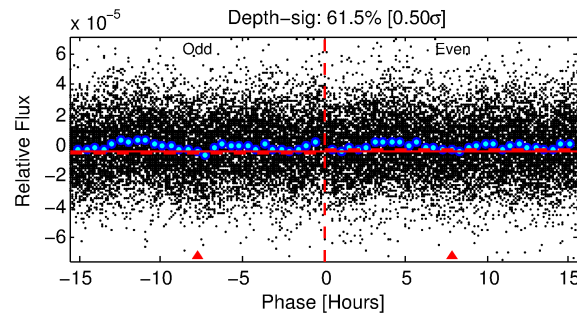
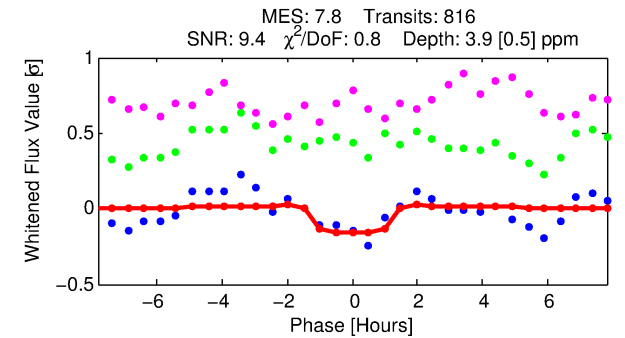
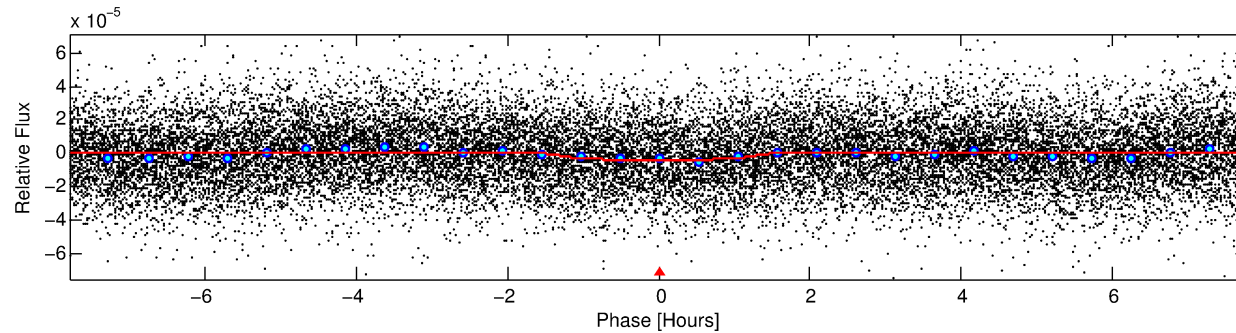
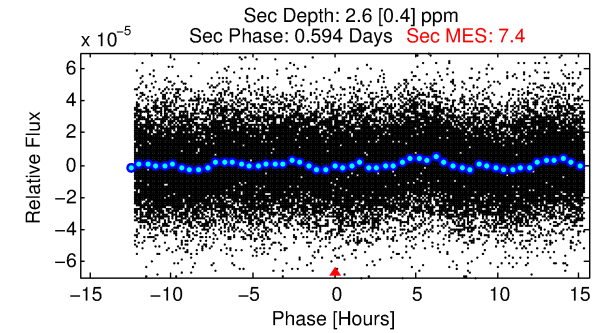
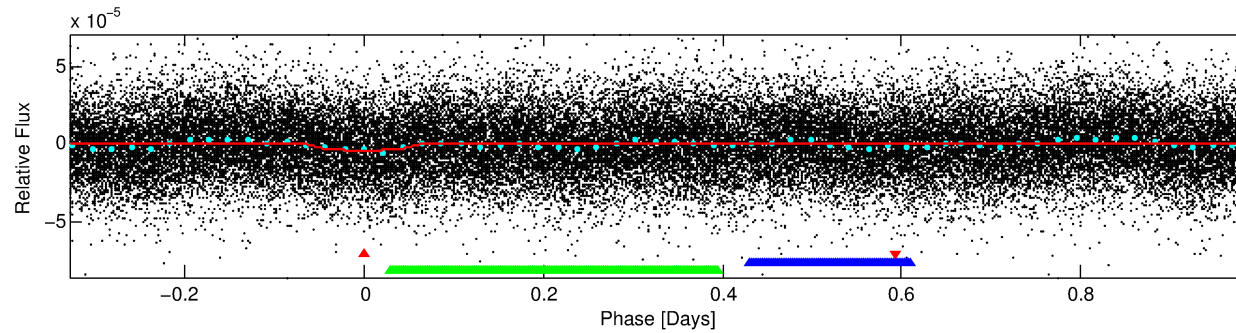
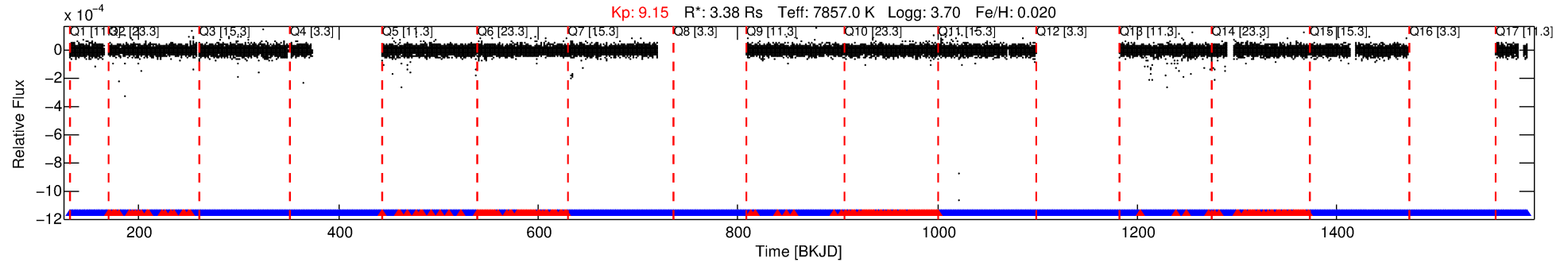
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 011442353-01

No Significant Match Found

DV One-Page Summary

KIC: 11442353 Candidate: 1 of 3 Period: 1.316 d



DV Fit Results:

Period = 1.31551 [0.00001] d
Epoch = 131.8708 [0.0032] BKJD
Rp/R* = 0.0020 [0.0002]
a/R* = 2.45 [0.64]
b = 0.81 [0.14]
Seff = 43401.05 [32280.00]
Teq = 3680 [684] K
Rp = 0.74 [0.35] Re
a = 0.0300 [0.0135] AU
Ag = 2.40 [1.81] [0.77 σ]
Teffp = 7082 [504] K [4.00 σ]

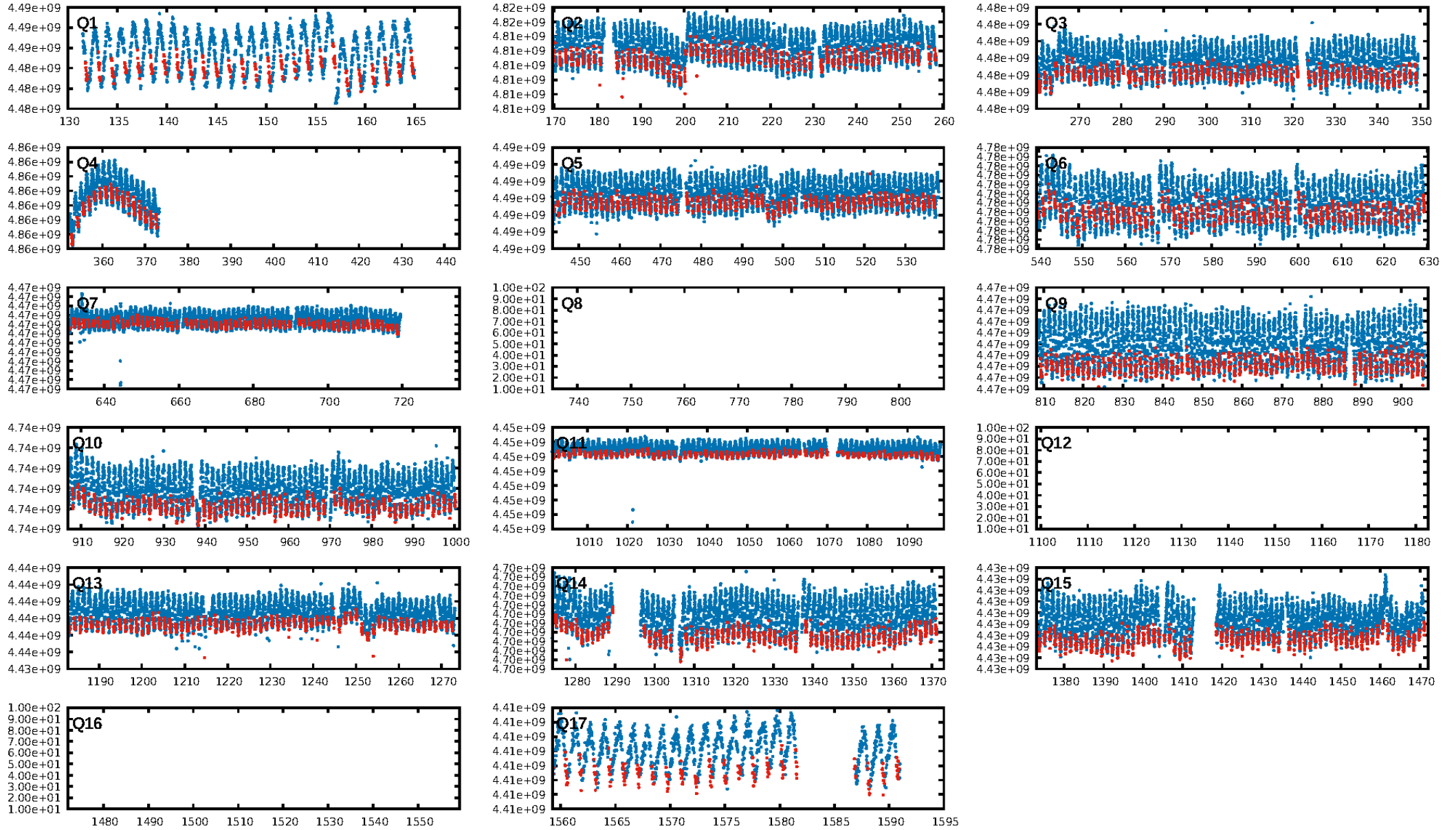
DV Diagnostic Results:

ShortPeriod-sig: 0.1% [0.00 σ]
LongPeriod-sig: 0.1% [0.00 σ]
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: N/A
RollingBand-fgt: 0.76 [570/752]
GhostDiagnostic-chr: N/A
Centroid-sig: N/A
Centroid-so: N/A
OotOffset-rm: 3.785 arcsec [2.79 σ]
KicOffset-rm: 2.889 arcsec [2.35 σ]
OotOffset-st: 4/4/1/5 [14]
KicOffset-st: 4/4/1/5 [14]
DiffImageQuality-fgm: 0.00 [0/14]
DiffImageOverlap-fno: 0.00 [0/14]

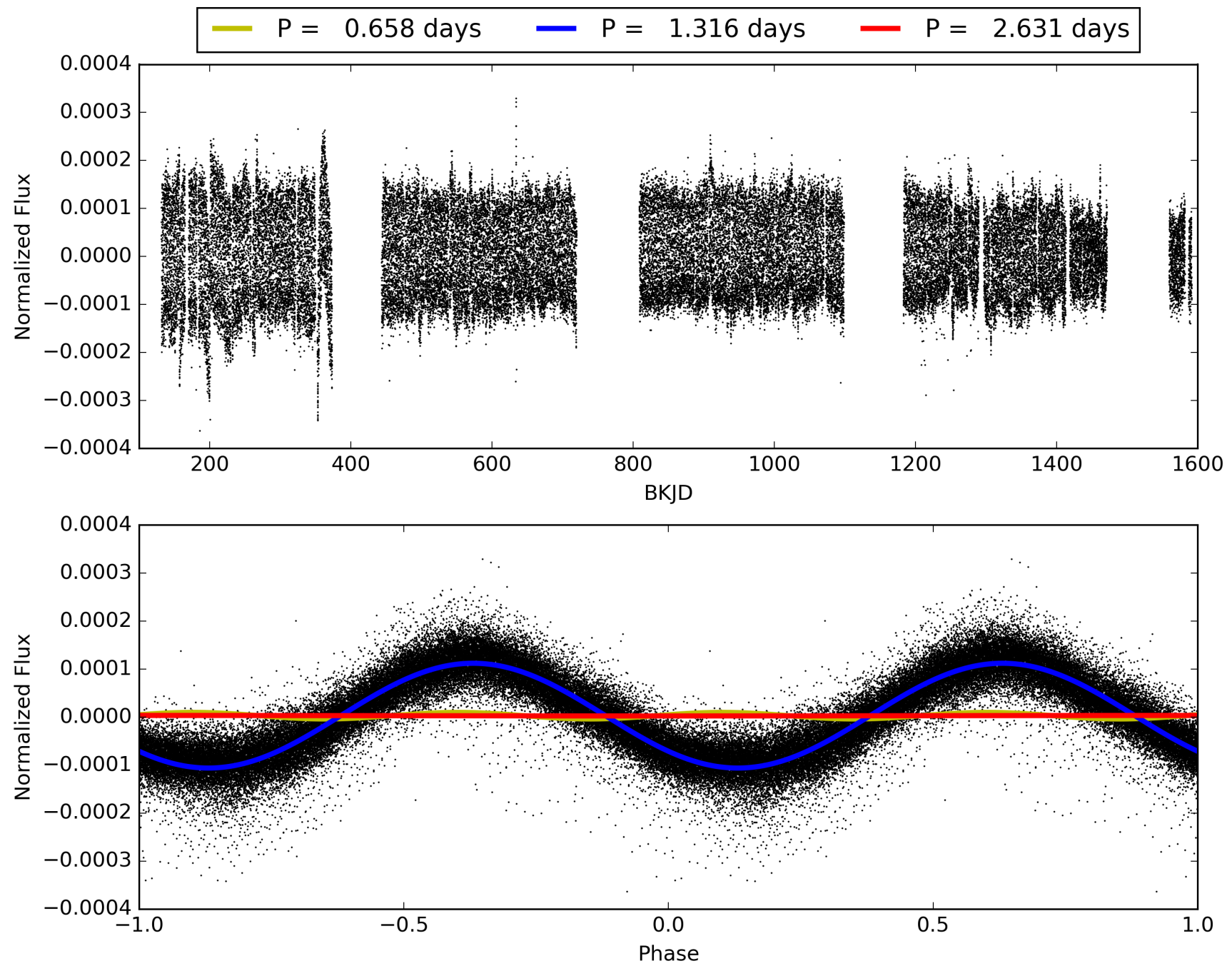
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This Data Validation Report Summary was produced in the Kepler Science Operations Center Pipeline at NASA Ames Research Center

TCE 011442353-01, PDC Light Curves

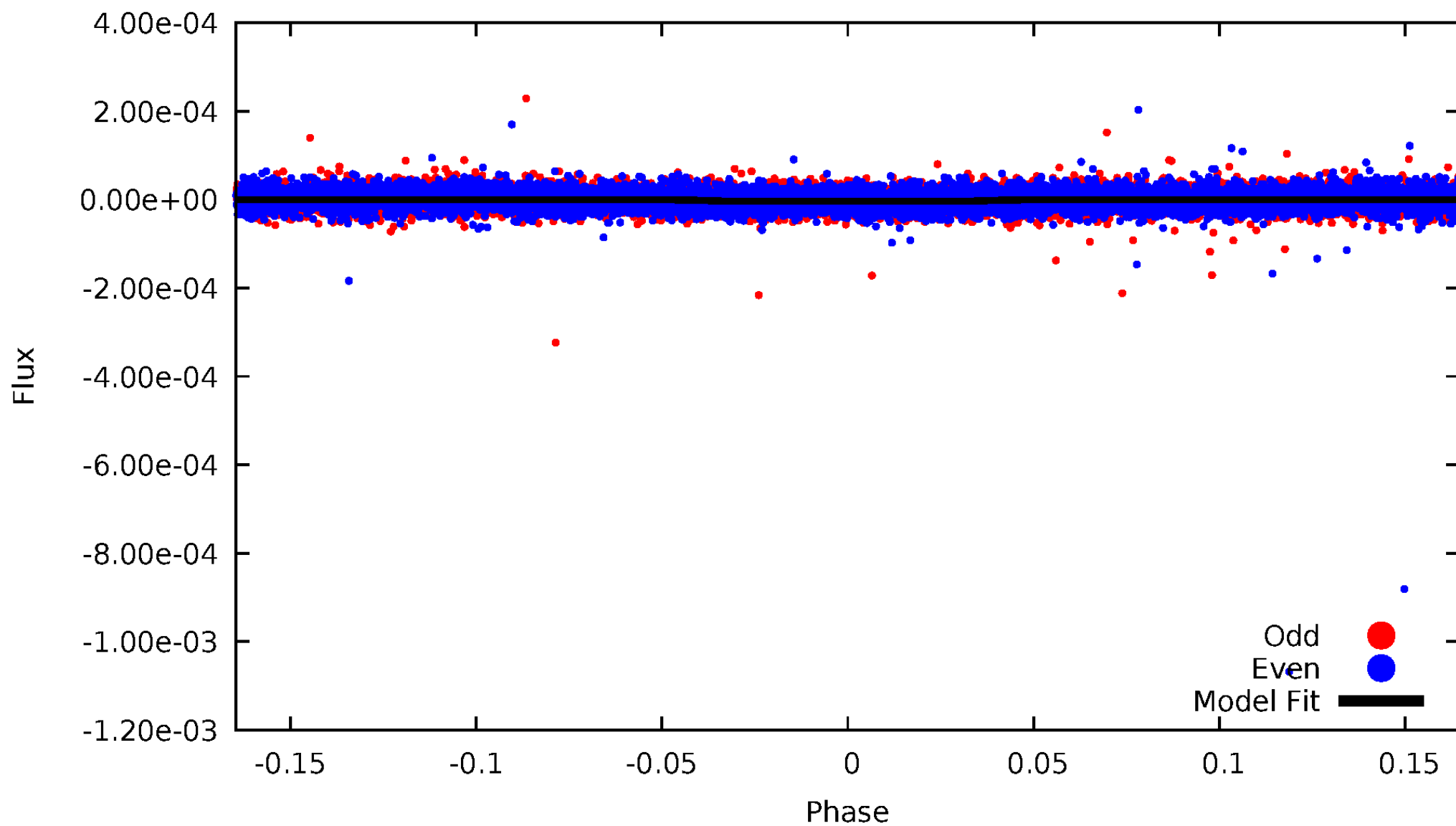


TCE 011442353-01



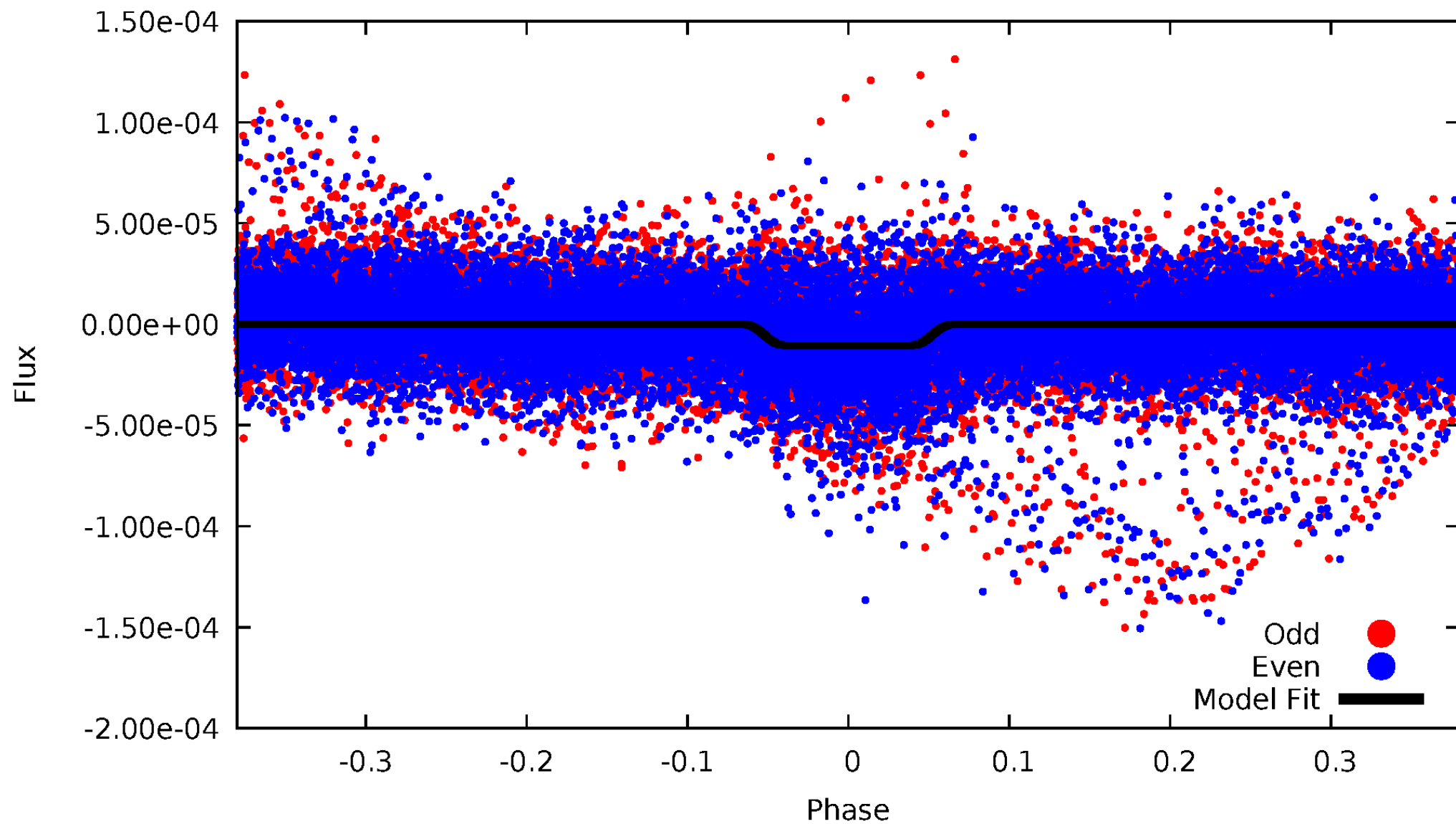
DV Odd/Even

TCE 011442353-01

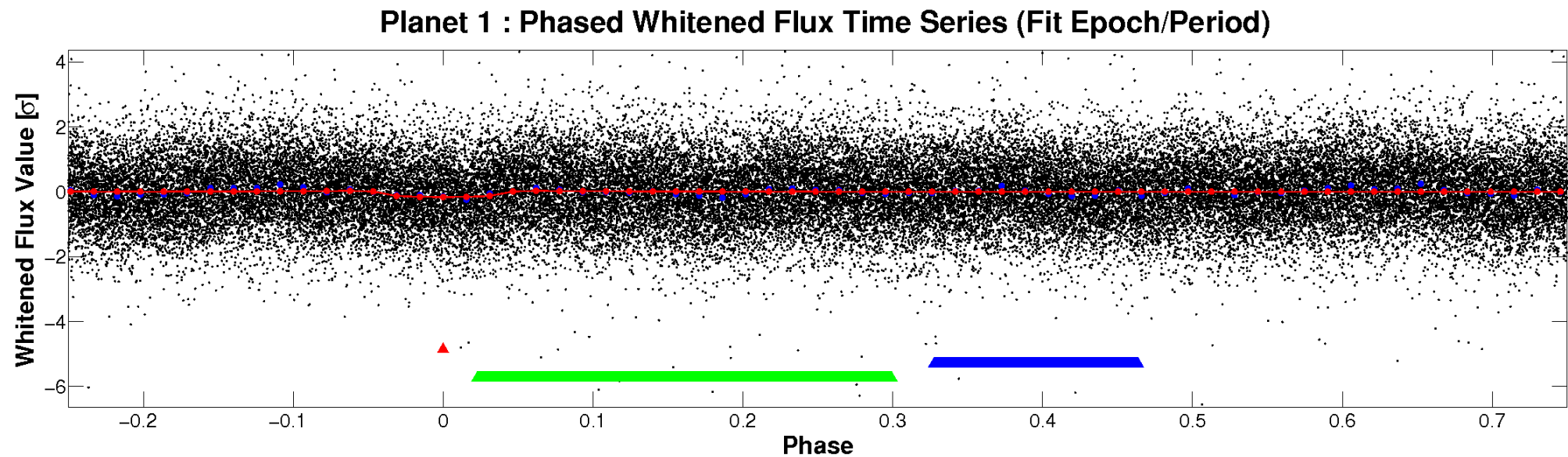
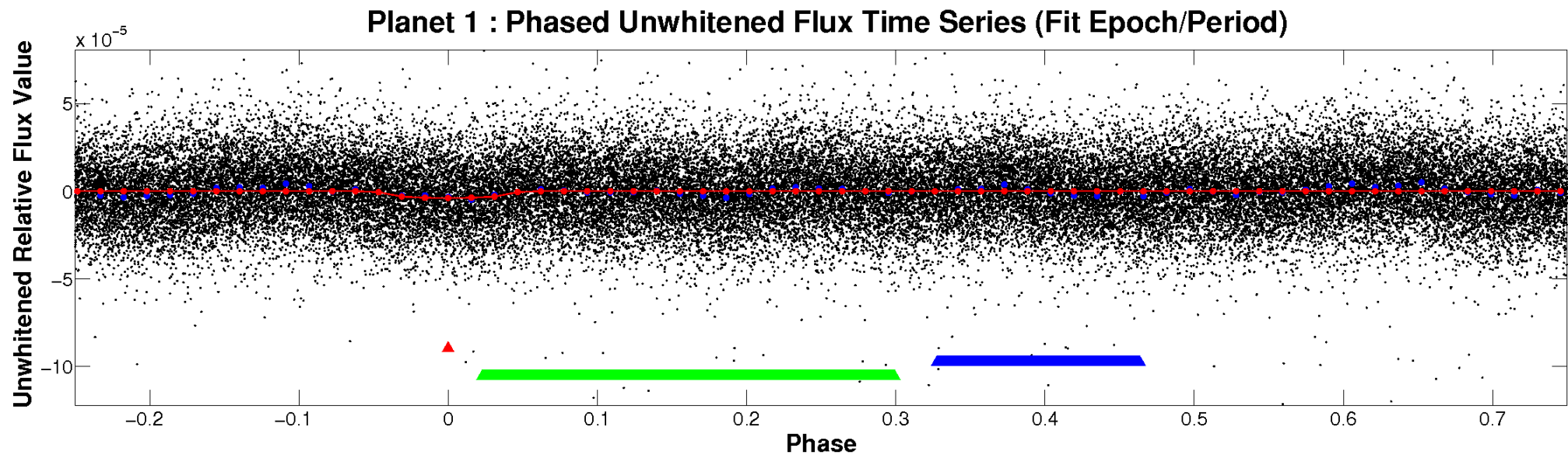


ALT Odd/Even

TCE 011442353-01

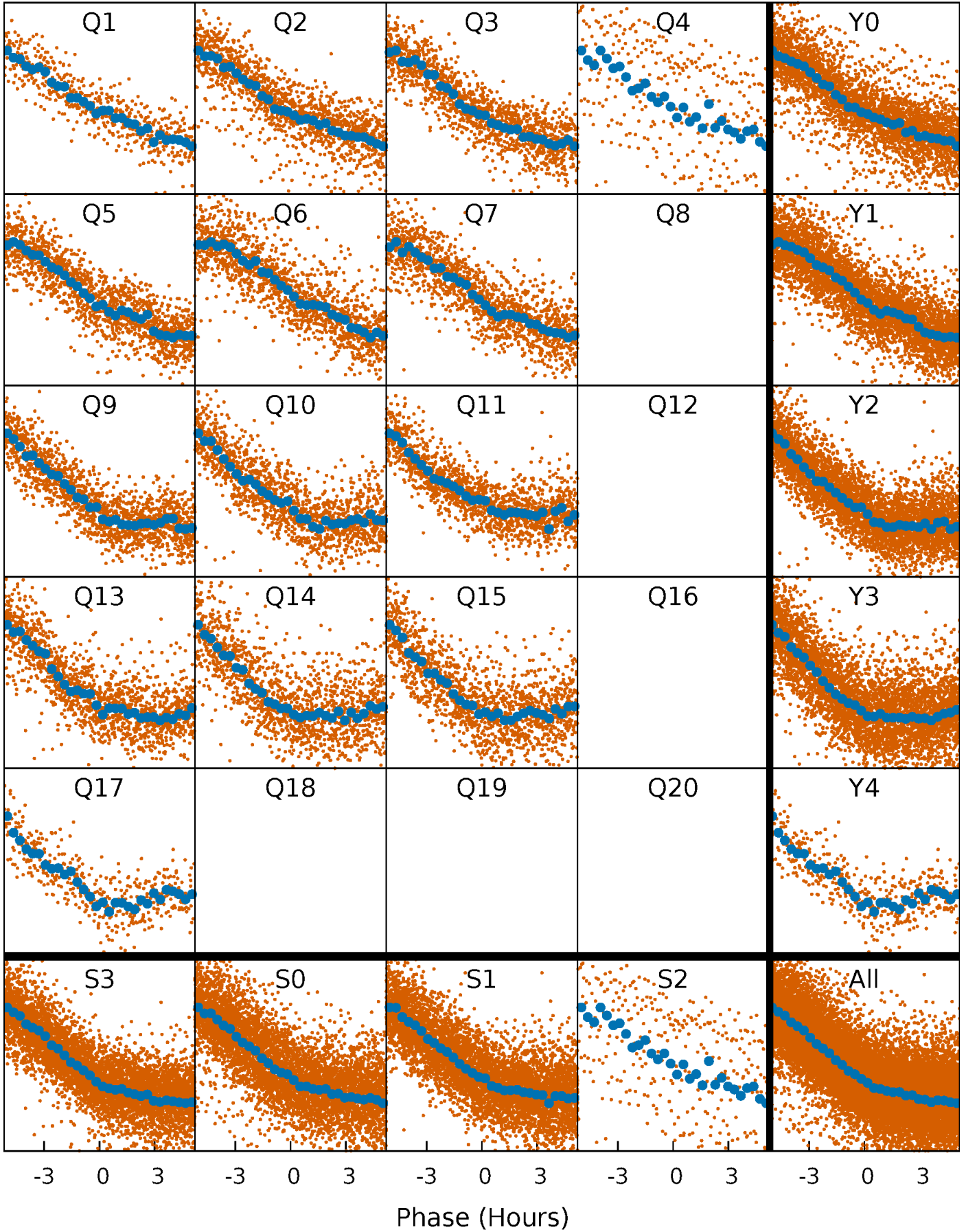


Non-Whitened Vs. Whitened Light Curve



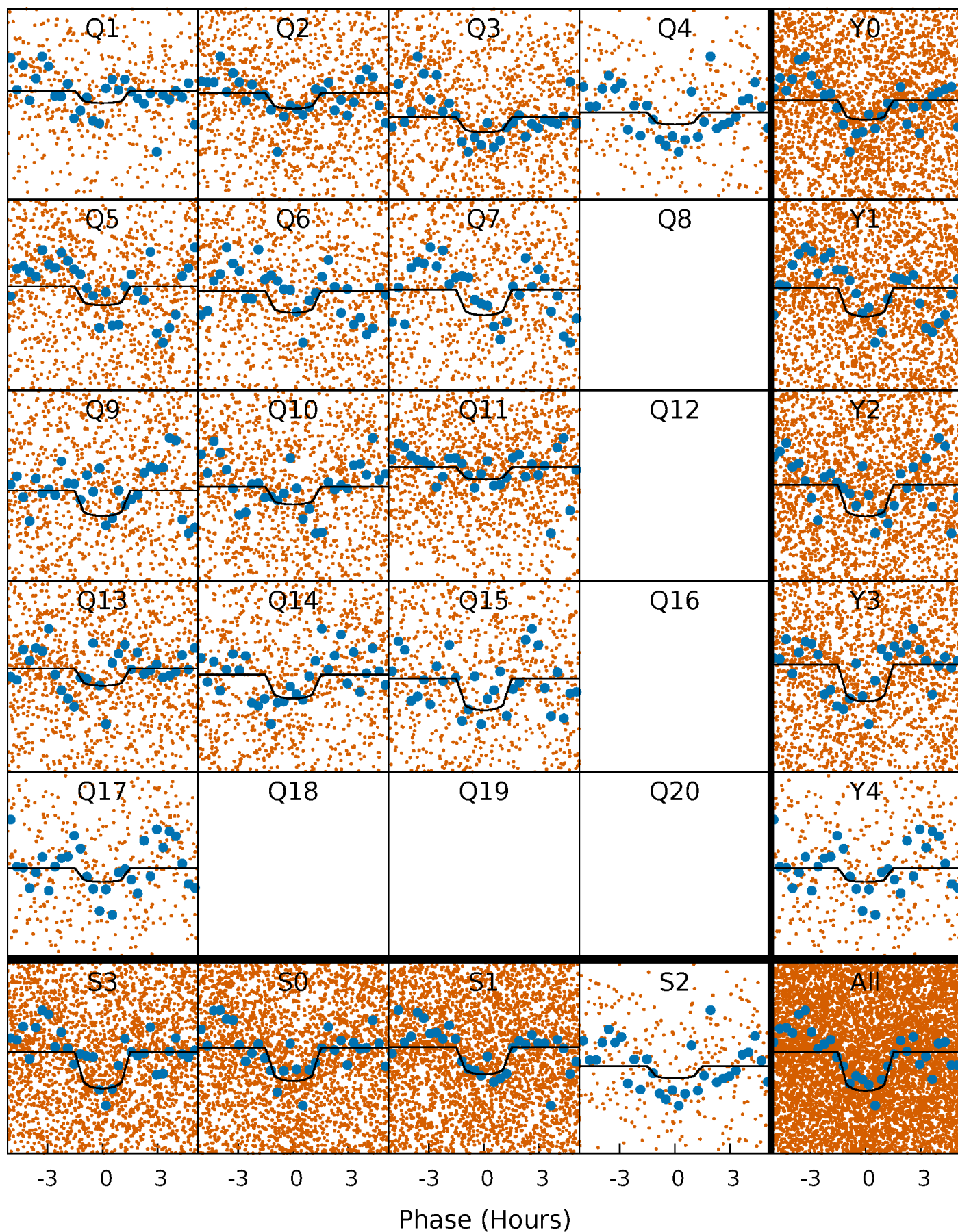
PDC Quarter-Phased Transit Curves

TCE 011442353-01 P= 1.315513 Days $T_0=131.870832$ (BKJD)



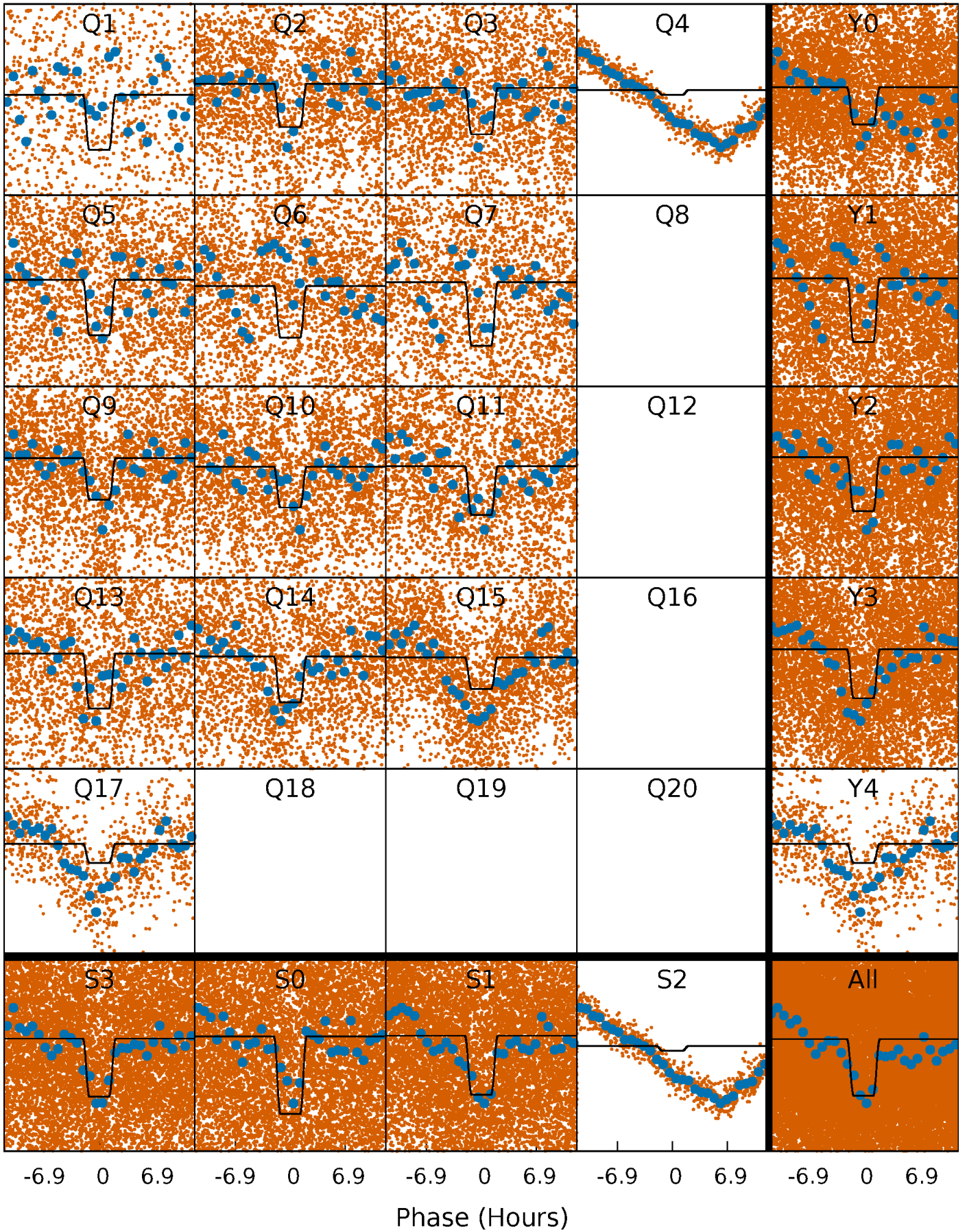
DV Quarter-Phased Transit Curves

TCE 011442353-01 P= 1.315513 Days $T_0=131.870832$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

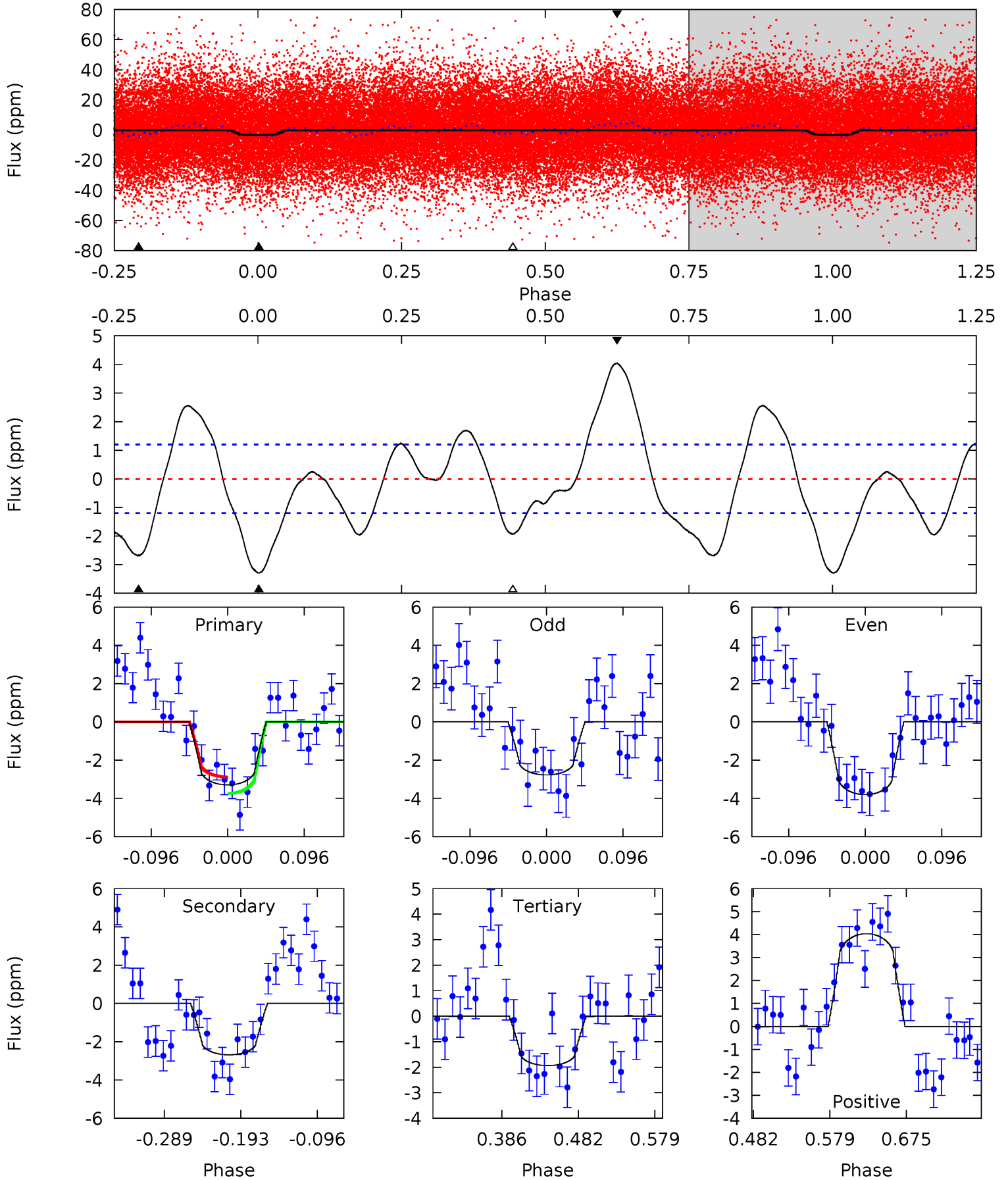
TCE 011442353-01 P= 1.315555 Days $T_0=131.849717$ (BKJD)



DV Model-Shift Uniqueness Test

011442353-01, P = 1.315513 Days, E = 130.555319 Days

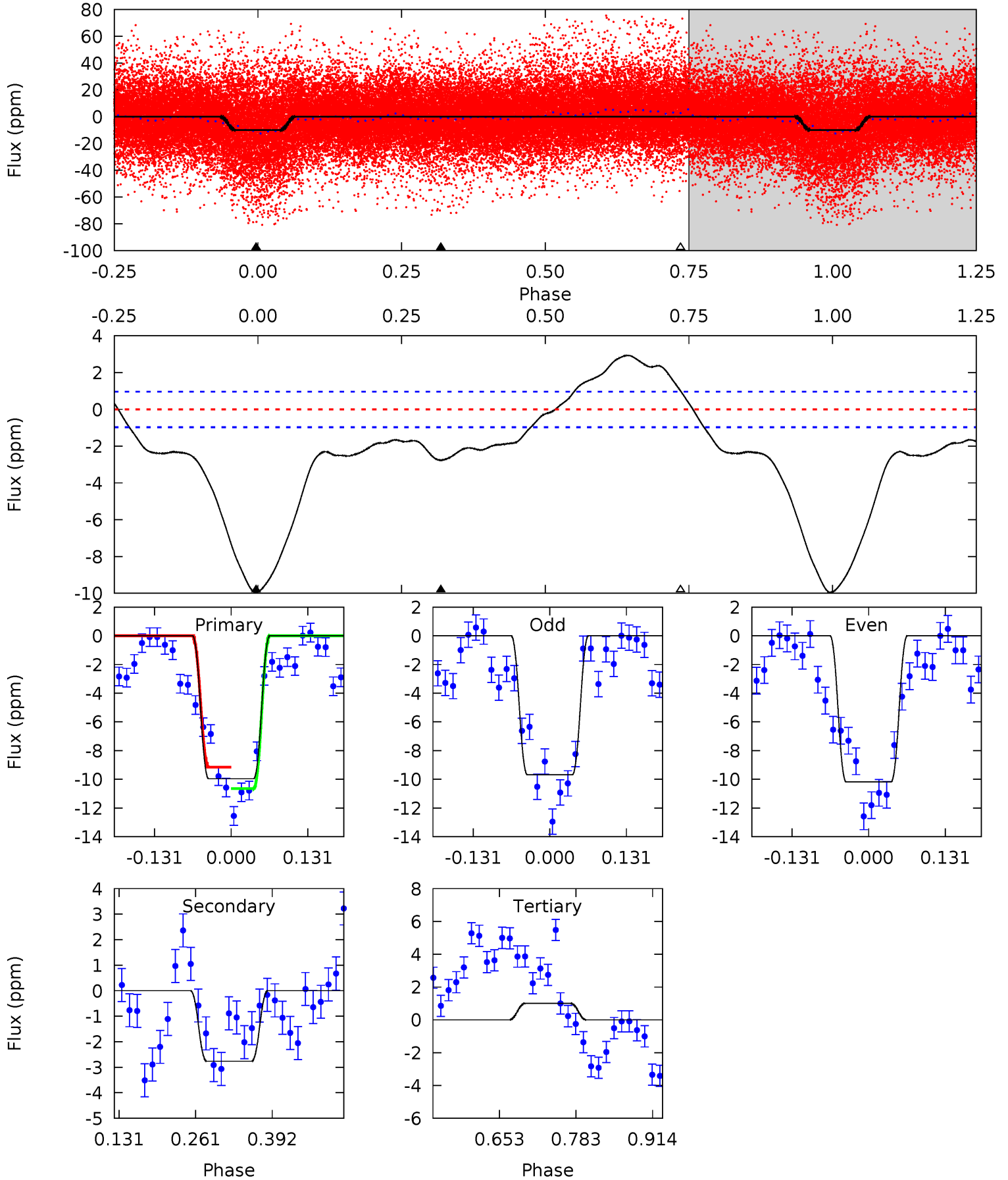
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
12.5	10.2	7.37	15.4	4.57	1.66	5.87	5.17	-2.83	2.85	-5.14	1.96	0.99	0.55	1.65



Alt Model-Shift Uniqueness Test

011442353-01, P = 1.315555 Days, E = 130.534162 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
46.4	12.9	-4.69	0	4.51	1.51	8.93	51.1	46.4	17.6	12.9	1.16	1.12	0.23	3.51



Stellar Parameters For KIC 011442353

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	7857^{+217}_{-354}	$3.698^{+0.424}_{-0.106}$	$0.020^{+0.200}_{-0.350}$	$3.385^{+0.678}_{-1.582}$	$2.086^{+0.326}_{-0.530}$	$0.076^{+0.289}_{-0.027}$
	+3%/-5%	+11%/-3%	+1000%/-1750%	+20%/-47%	+16%/-25%	+381%/-35%
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 011442353-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-3 ± 0	$0.69^{+0.14}_{-0.16}$	4971^{+373}_{-542}	6749^{+490}_{-470}	$2.733^{+1.826}_{-0.784}$
Alt.	-3 ± 0	$1.15^{+0.19}_{-0.27}$	4977^{+382}_{-583}	5091^{+288}_{-277}	$1.047^{+0.661}_{-0.254}$

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 $A_{obs} \gg 1.0$

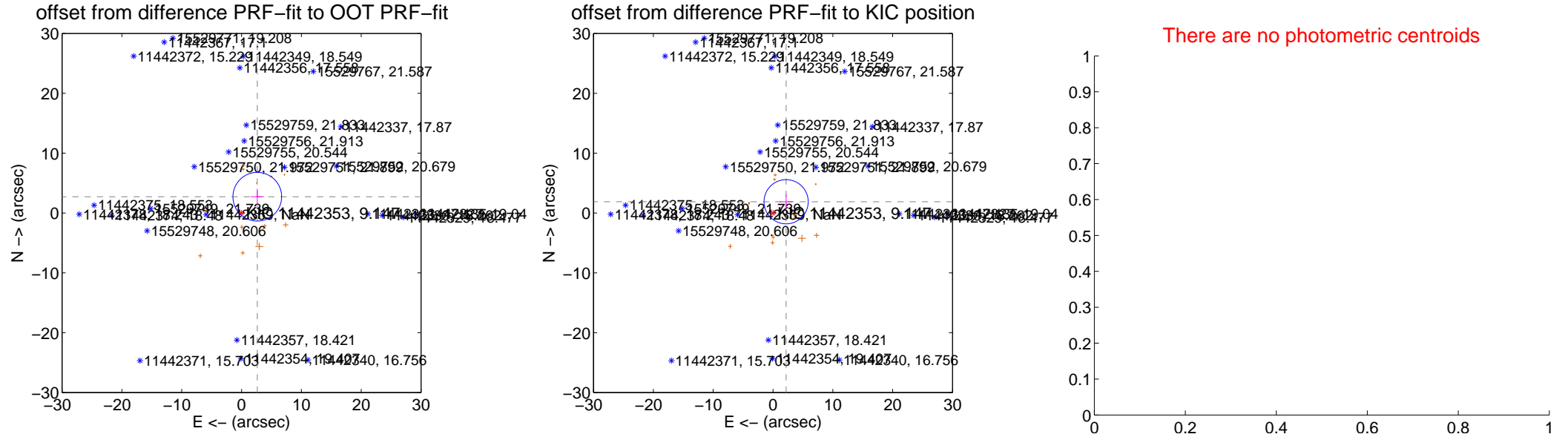
DV Centroid Data

Supplemental centroid analysis for 011442353-01. **Kepler magnitude: 9.15.** Transit SNR 9.42

There are 0 quarters with good PRF difference image offsets

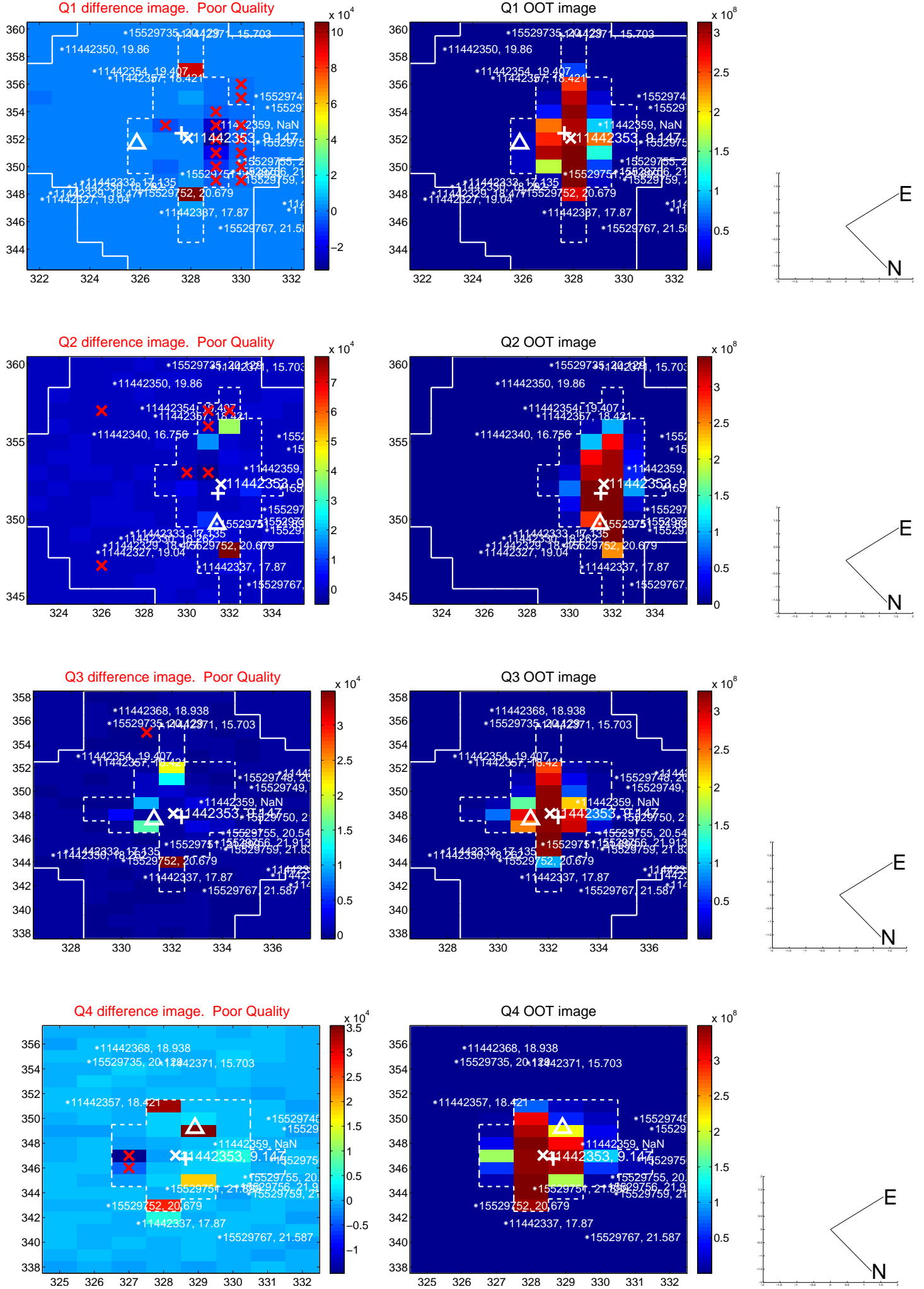
The direct PRF centroid is offset from the target star catalog position by about 1.65 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	3.785 ± 1.356	2.79	-2.631 ± 1.121	2.722 ± 1.335
PRF-fit source offset from KIC position	2.889 ± 1.231	2.35	-2.191 ± 1.096	1.883 ± 1.198
photometric centroid source offset	—	—	—	—

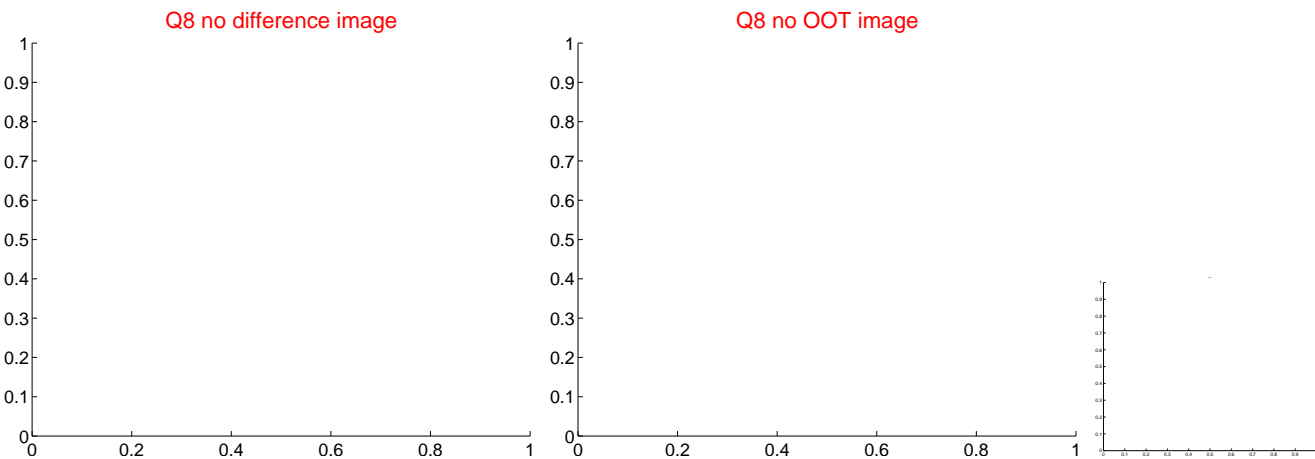
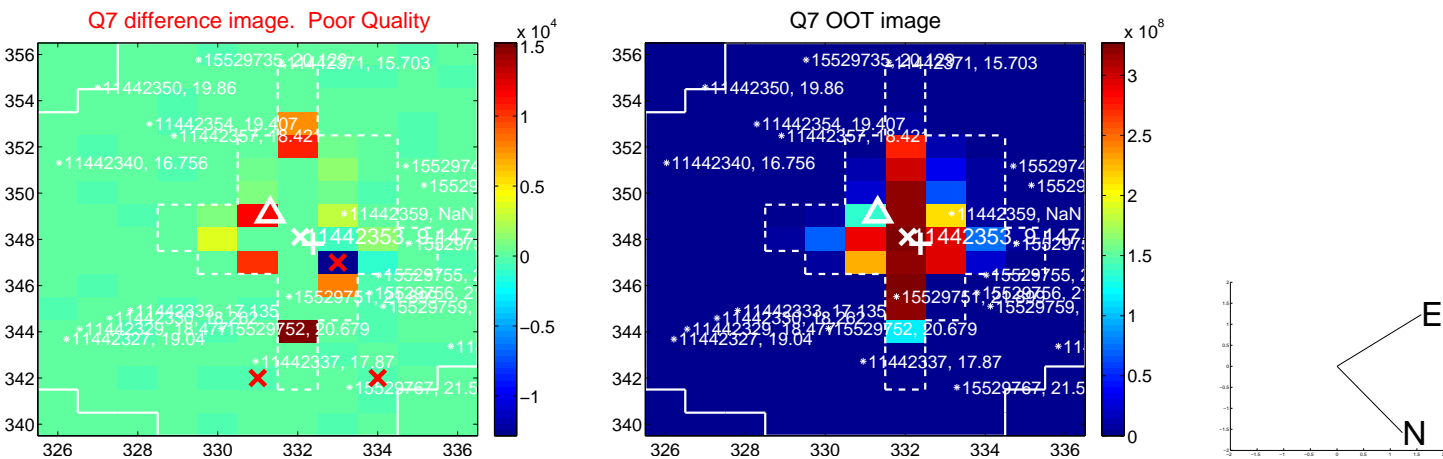
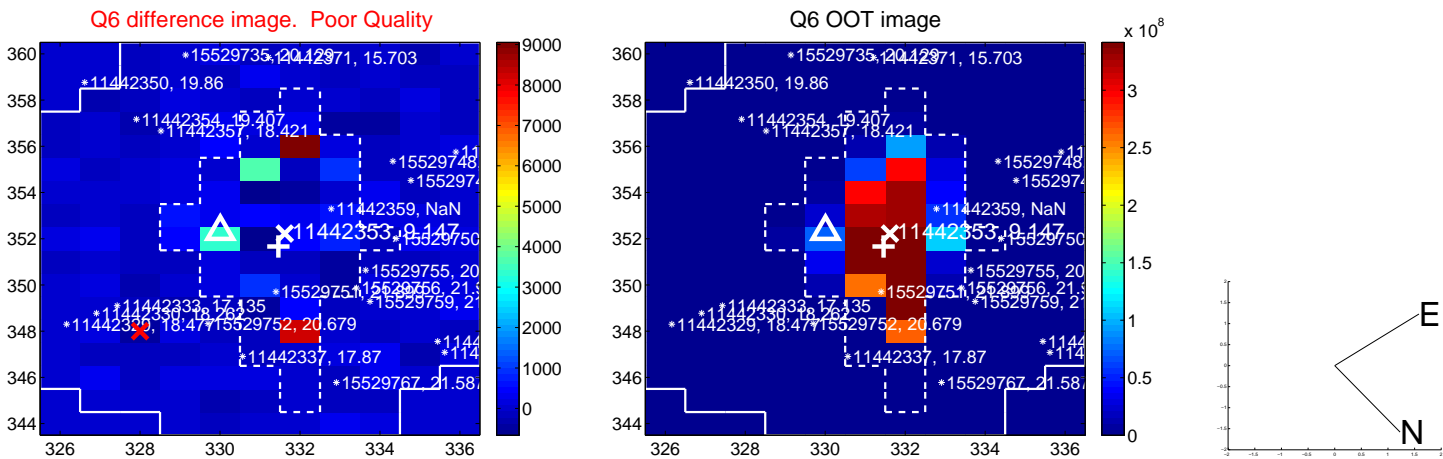
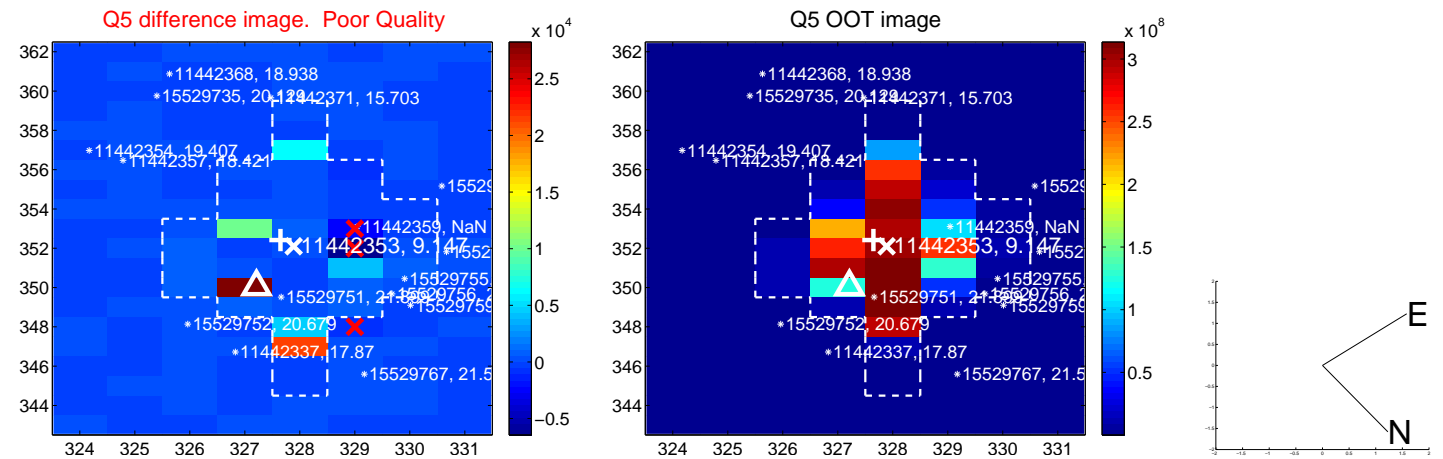


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets;** magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

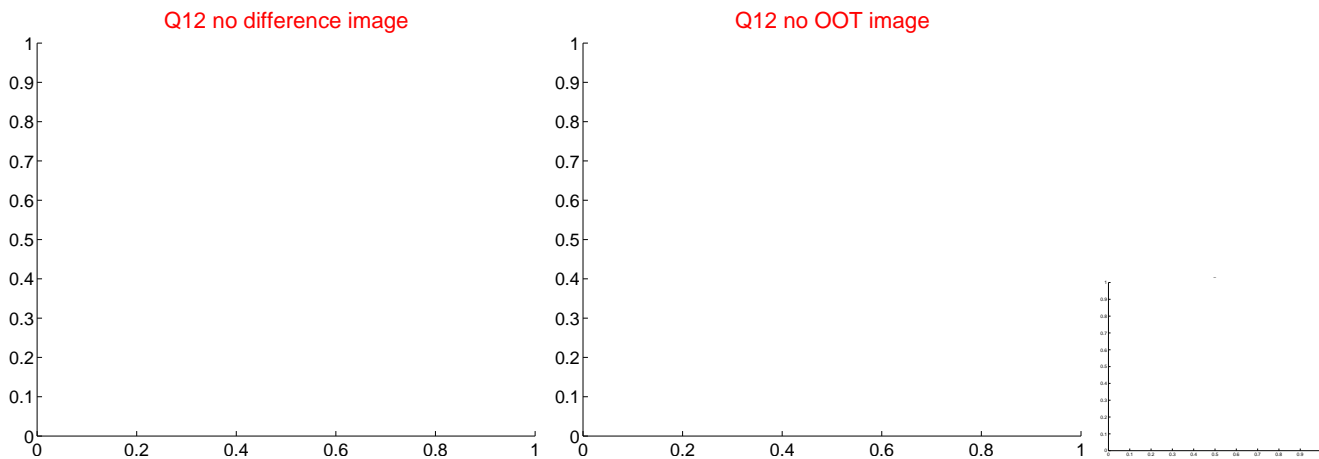
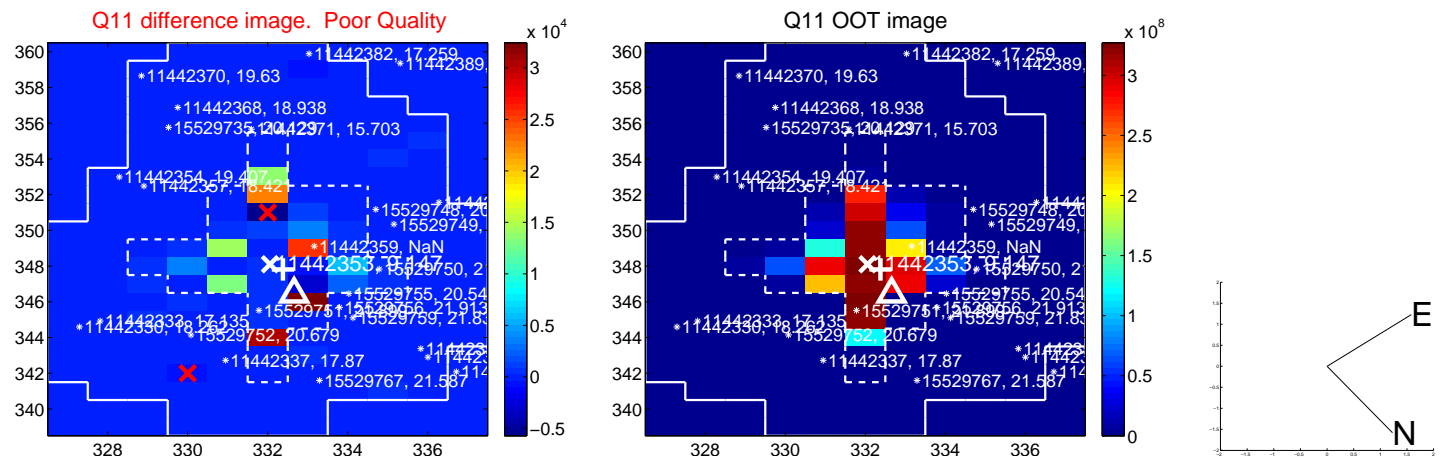
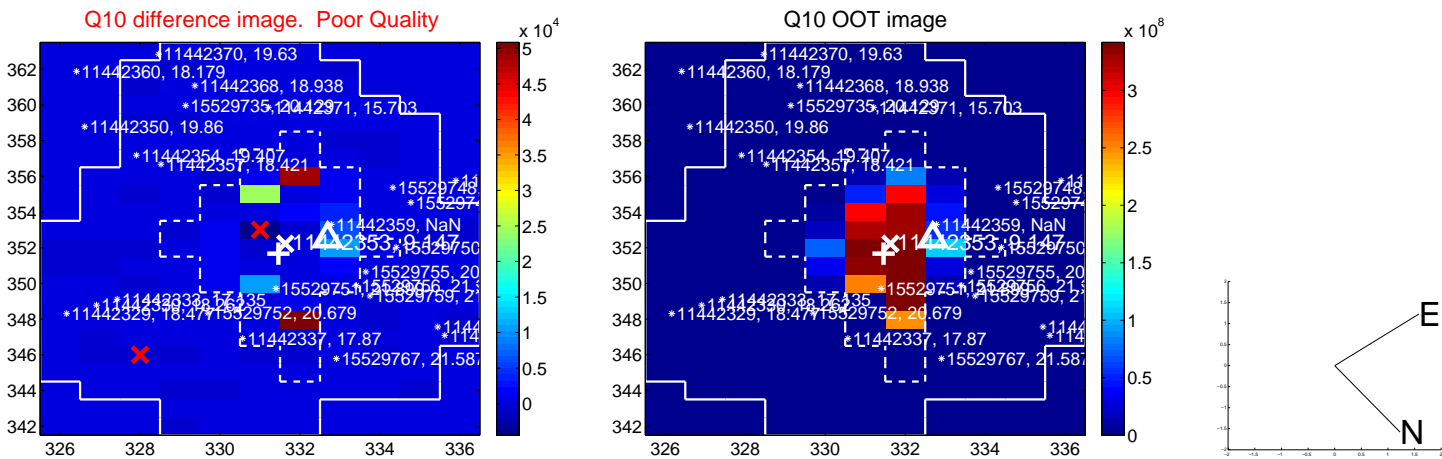
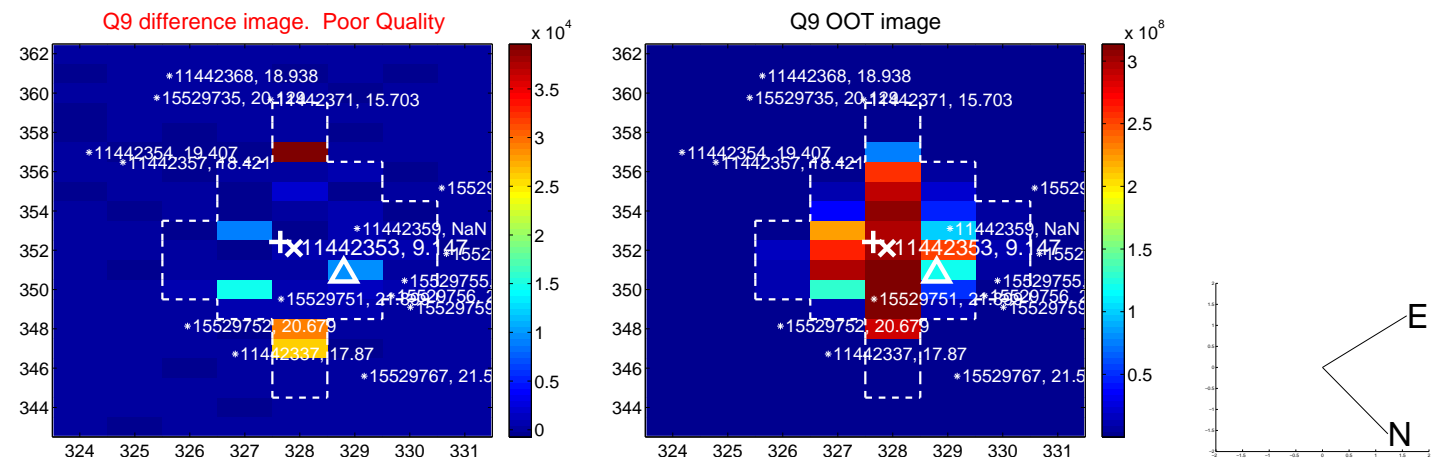
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



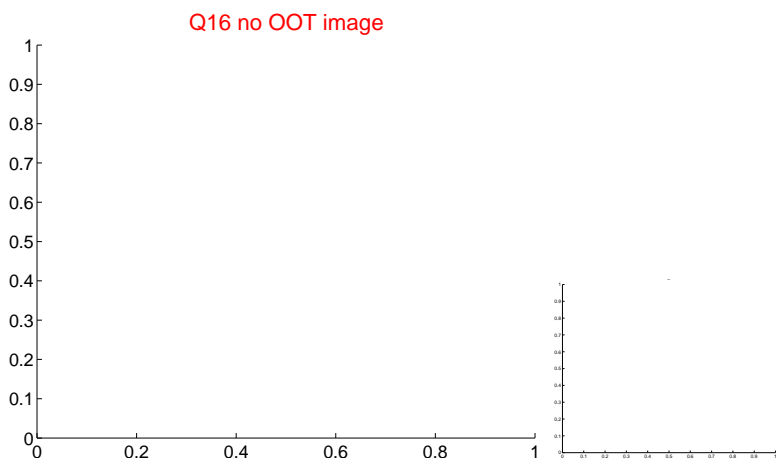
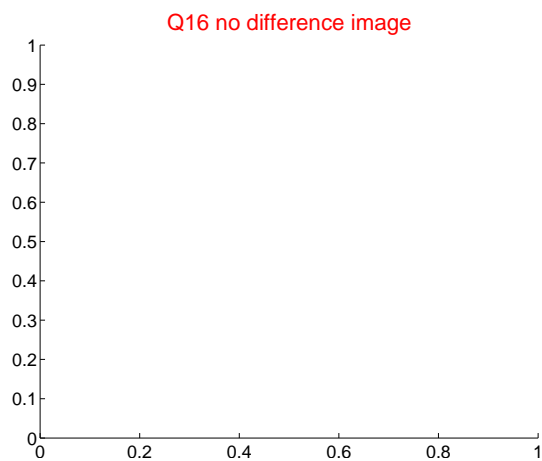
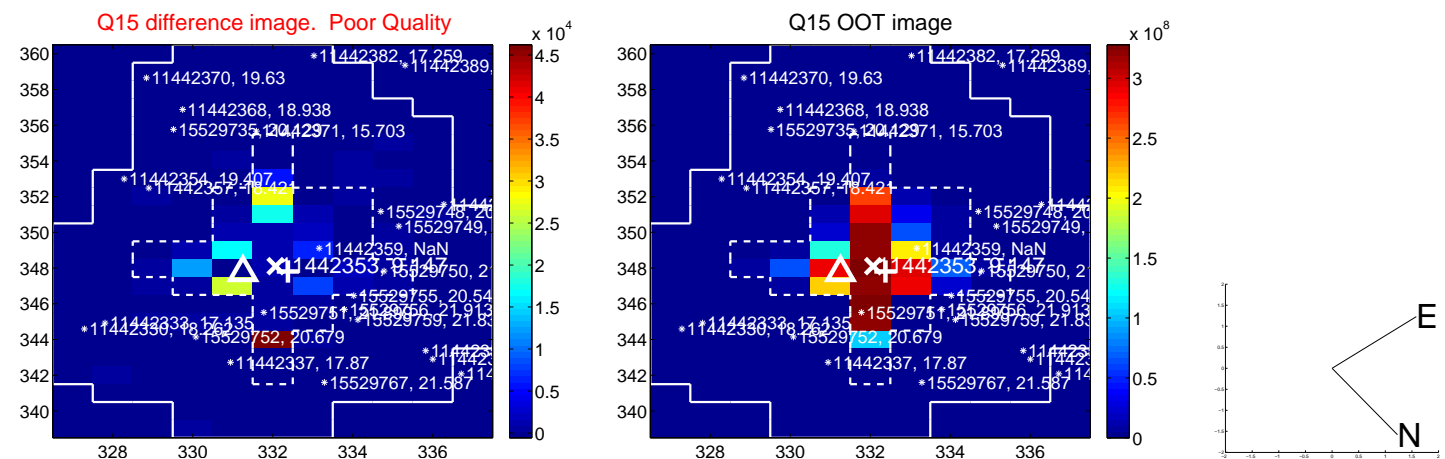
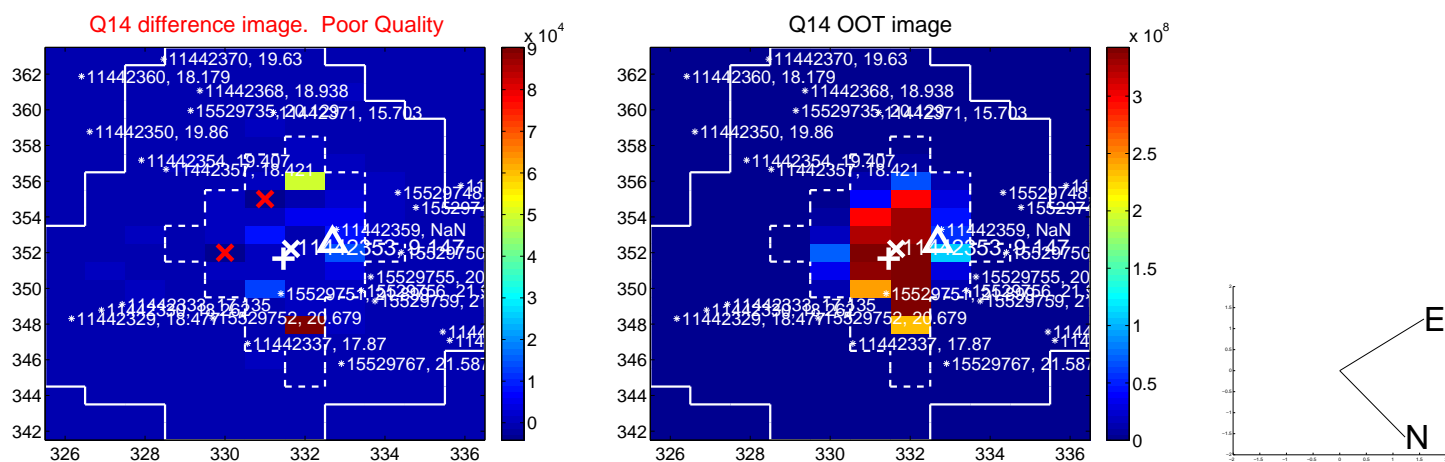
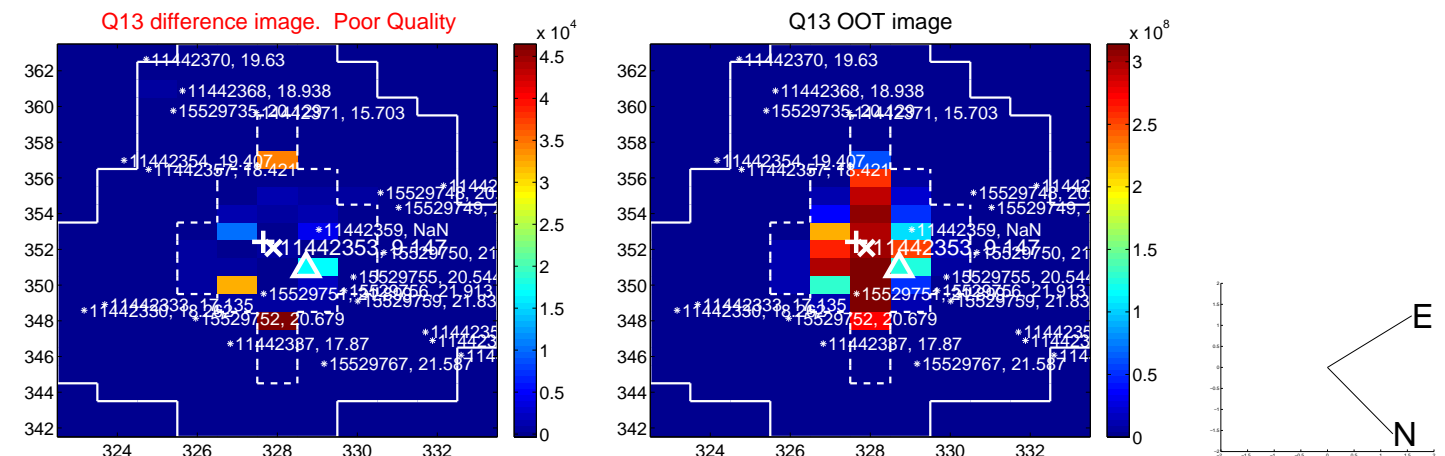
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



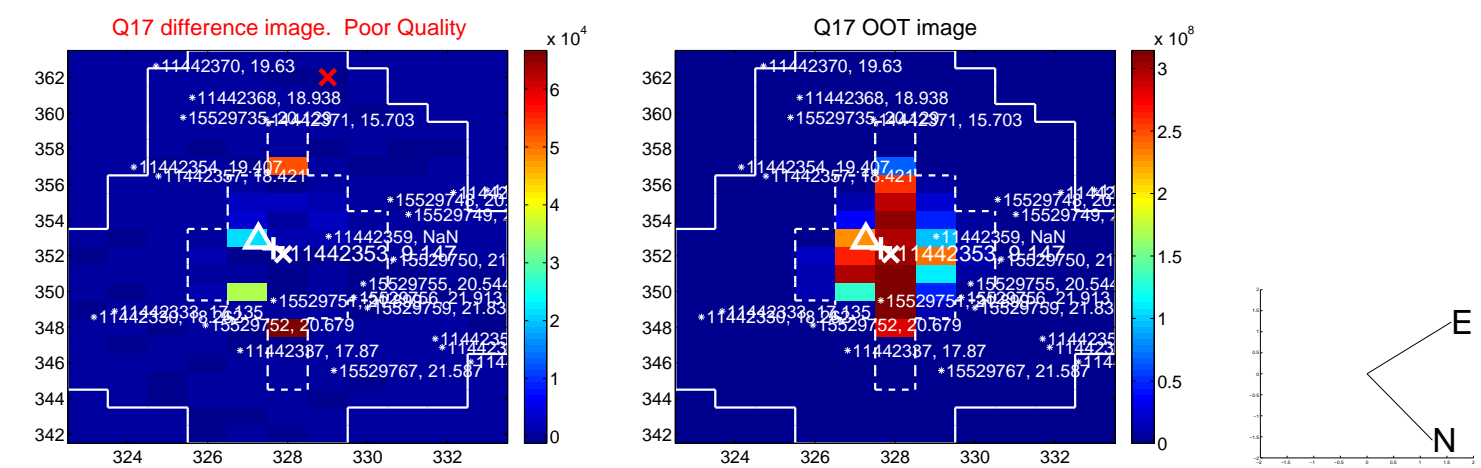
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

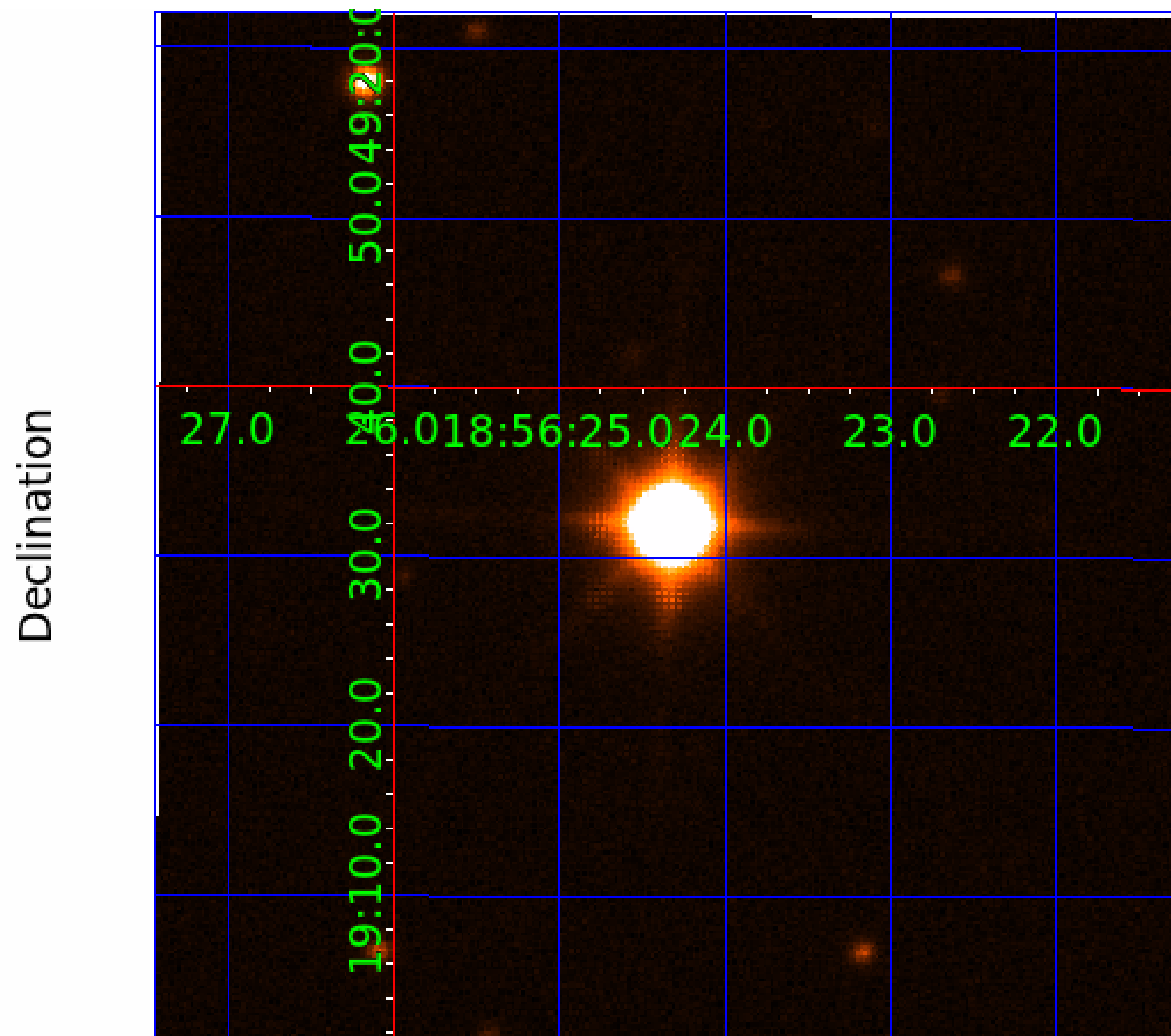


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



folded centroid time series figure for this object.

UKIRT Image



KIC 011442353

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})
011442353-01	OBS	No	1.315513	131.870832	3.9	2.599	7.8	9.4	3.38	7857	0.74	43401.05
011442353-02	OBS	No	1.315675	132.301811	2.7	1.003	9.9	4.7	3.38	7857	0.64	43393.95
011442353-03	OBS	No	1.315185	132.264556	2.2	11.887	8.3	5.6	3.38	7857	0.51	43415.49

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
011442353-01	OBS	FP	0.00	1	0	0	0	SWEET_NTL—LPP_DV—MOD_NONUNIQ_DV—MOD_POS_DV—MOD_NONUNIQ_ALT—CENT_SATURATED
011442353-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_SKYE_ZUMA_TRACKER—SWEET_NTL—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—SAME_NTL_PERIOD—CENT_SATURATED
011442353-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_SKYE_ZUMA—SWEET_NTL—LPP_DV—MOD_NONUNIQ_ALT—SAME_NTL_PERIOD—CENT_SATURATED

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

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

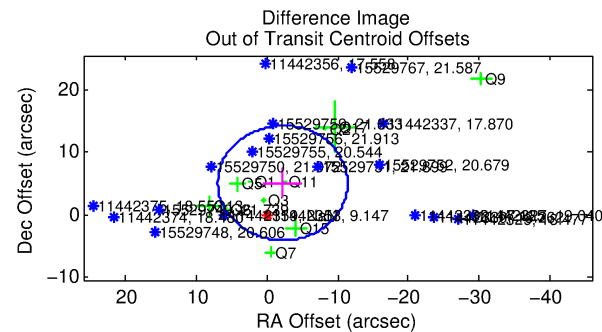
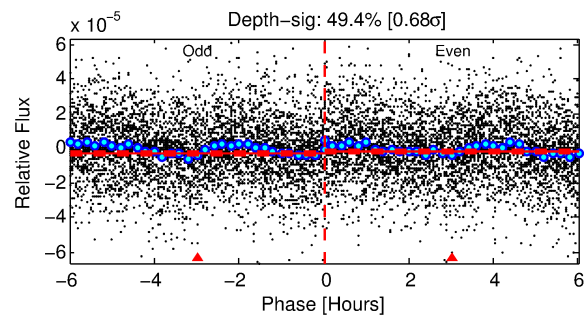
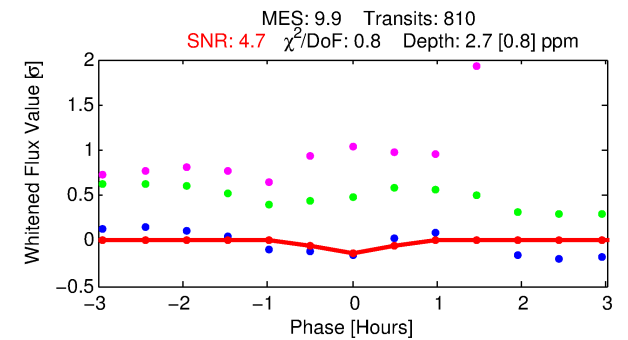
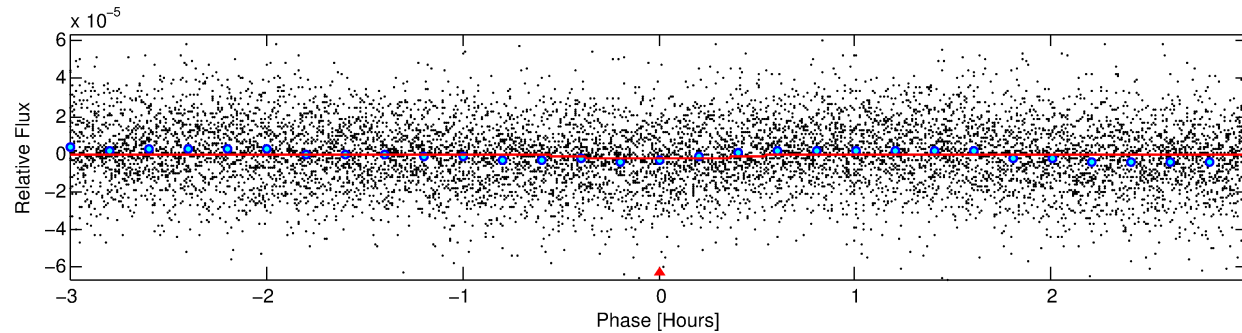
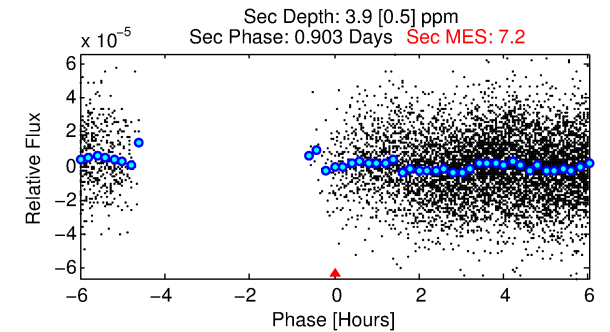
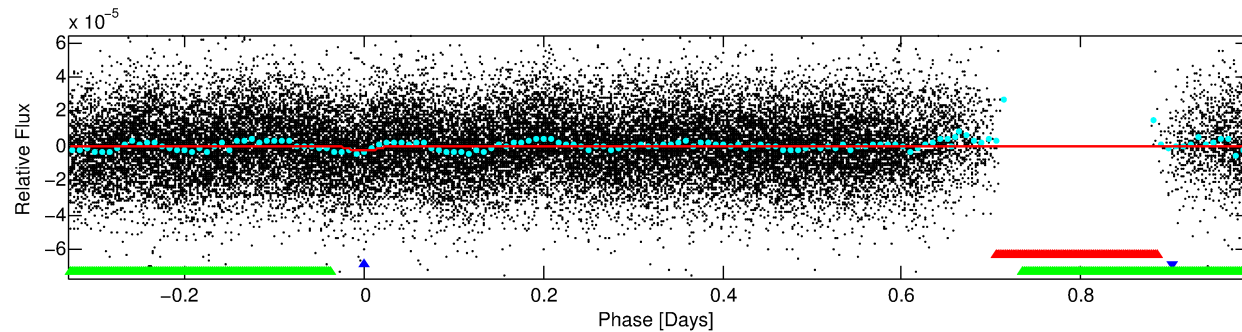
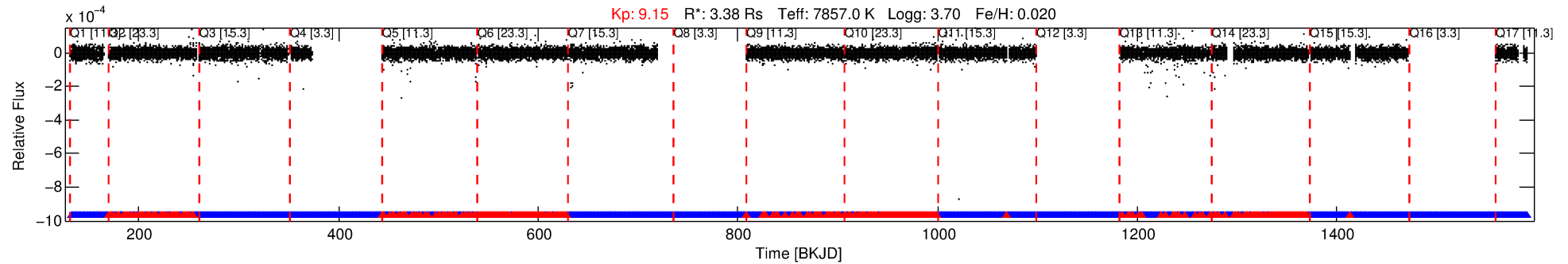
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 011442353-02

No Significant Match Found

DV One-Page Summary

KIC: 11442353 Candidate: 2 of 3 Period: 1.316 d



DV Fit Results:

Period = 1.31567 [0.00002] d
Epoch = 132.3018 [0.0037] BKJD
Rp/R* = 0.0017 [0.0003]
a/R* = 4.96 [2.98]
b = 0.88 [0.17]
Seff = 43393.95 [32274.72]
Teq = 3680 [684] K
Rp = 0.64 [0.32] Re
a = 0.0300 [0.0135] AU
Ag = 4.75 [3.88] [0.97σ]
Teffp = 8399 [887] K [4.21σ]

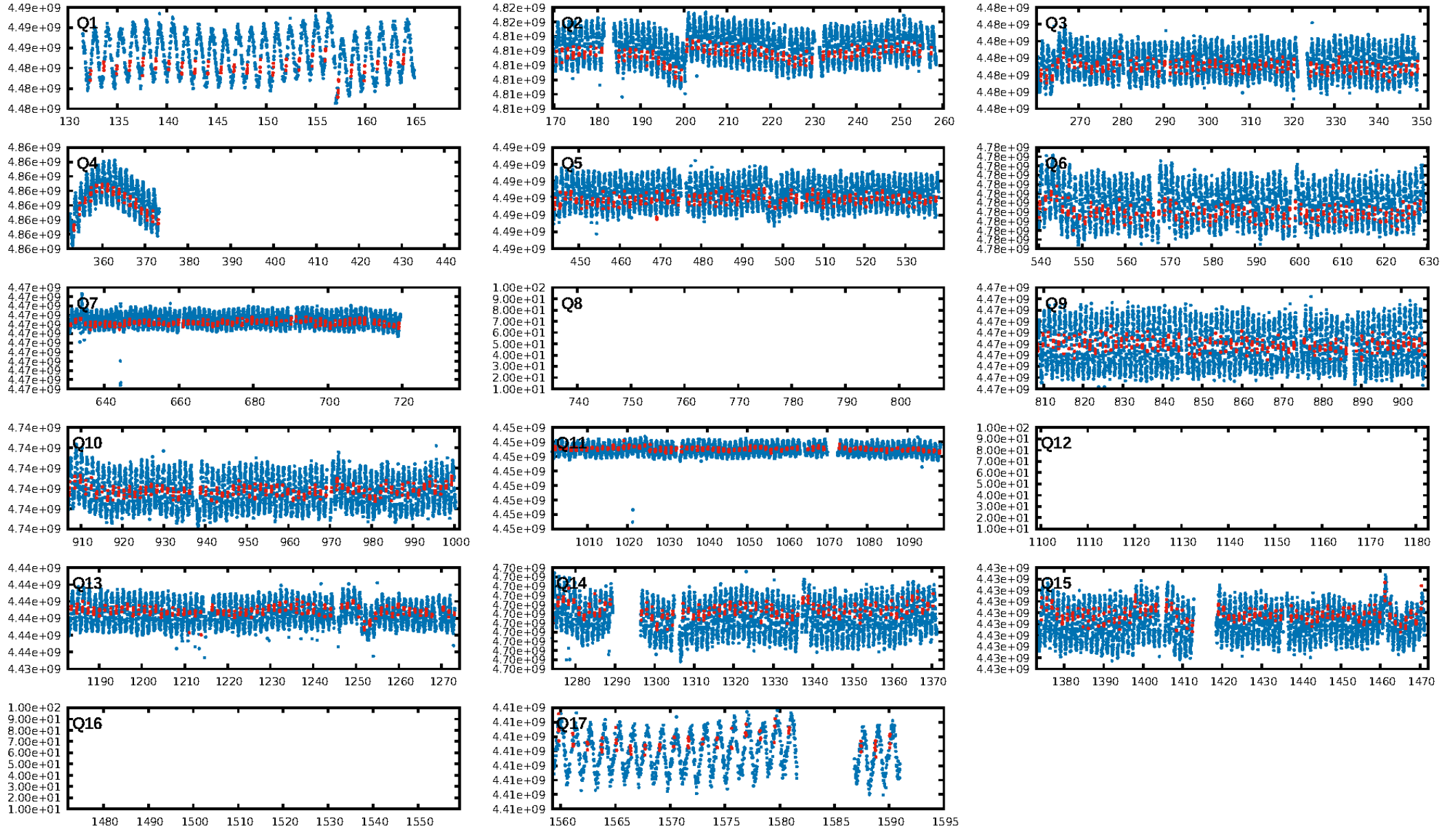
DV Diagnostic Results:

ShortPeriod-sig: 0.1% [0.00σ]
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: N/A
RollingBand-fgt: 0.59 [439/749]
GhostDiagnostic-chr: N/A
Centroid-sig: N/A
Centroid-so: N/A
OotOffset-rm: 5.516 arcsec [1.80σ]
OotOffset-st: 2/4/0/5 [11]
KicOffset-rm: 4.041 arcsec [4.04σ]
KicOffset-st: 2/4/0/5 [11]
DiffImageQuality-fgm: 0.00 [0/11]
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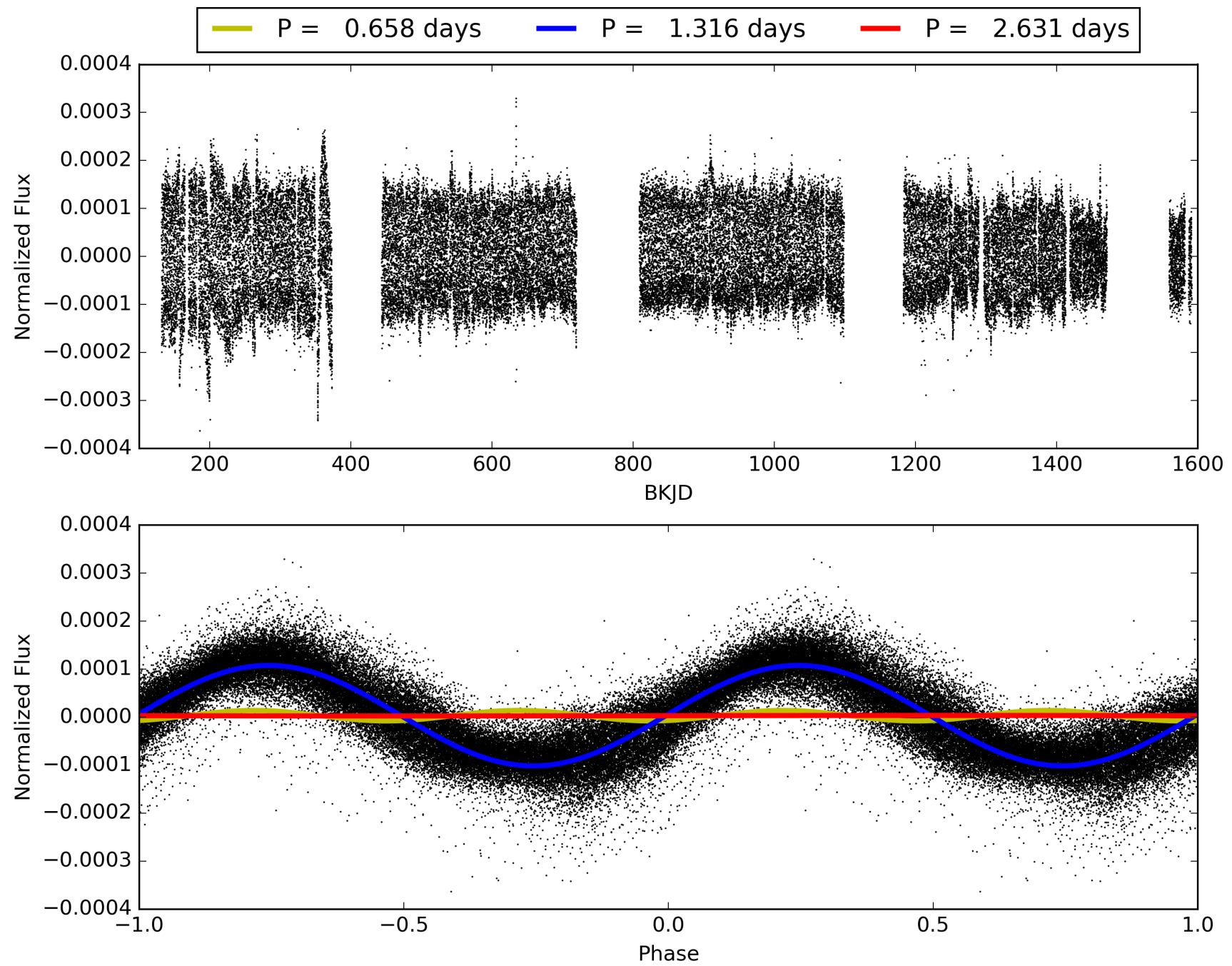
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 29-Jan-2016 18:06:31 Z

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

TCE 011442353-02, PDC Light Curves

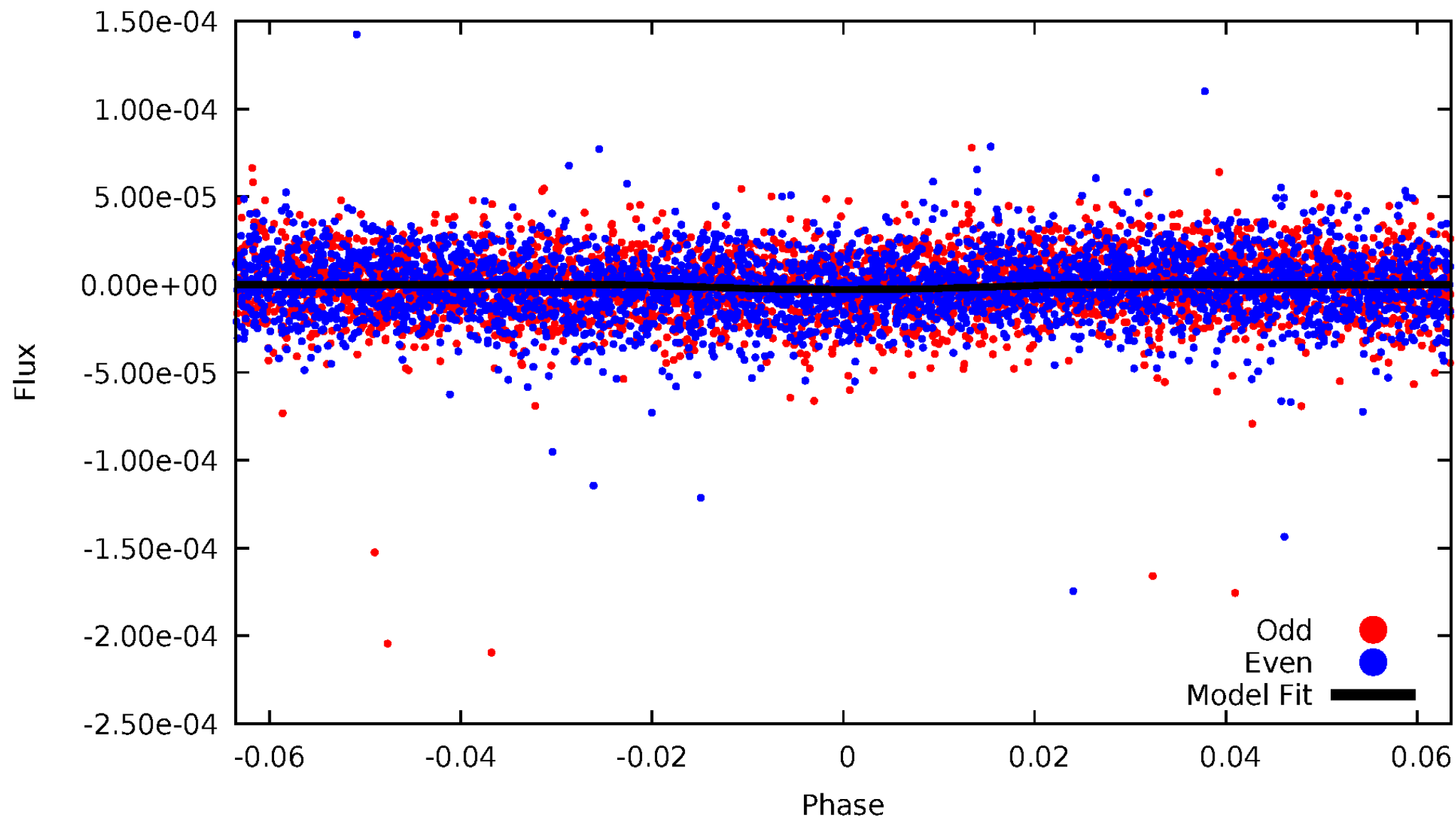


TCE 011442353-02



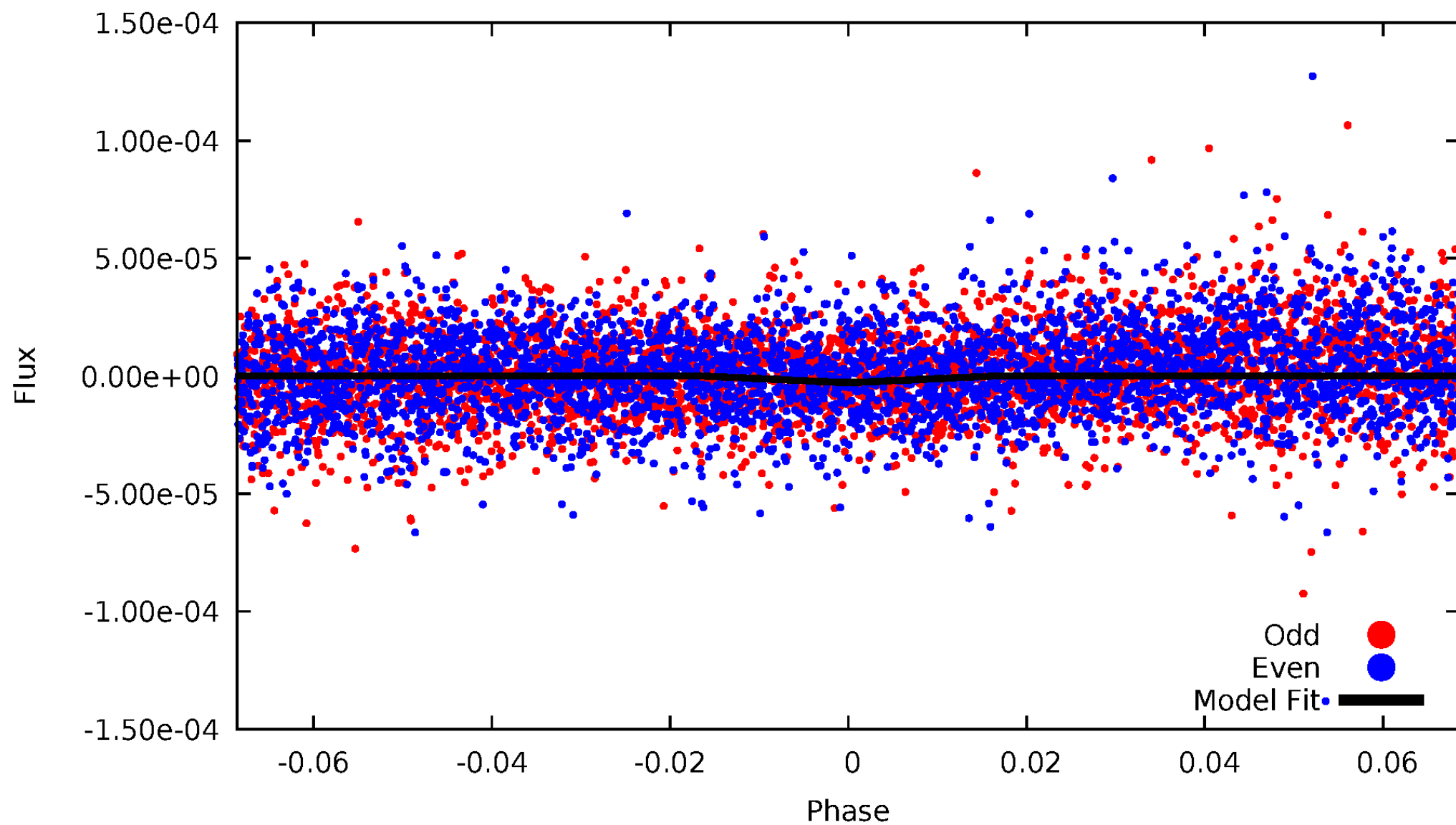
DV Odd/Even

TCE 011442353-02



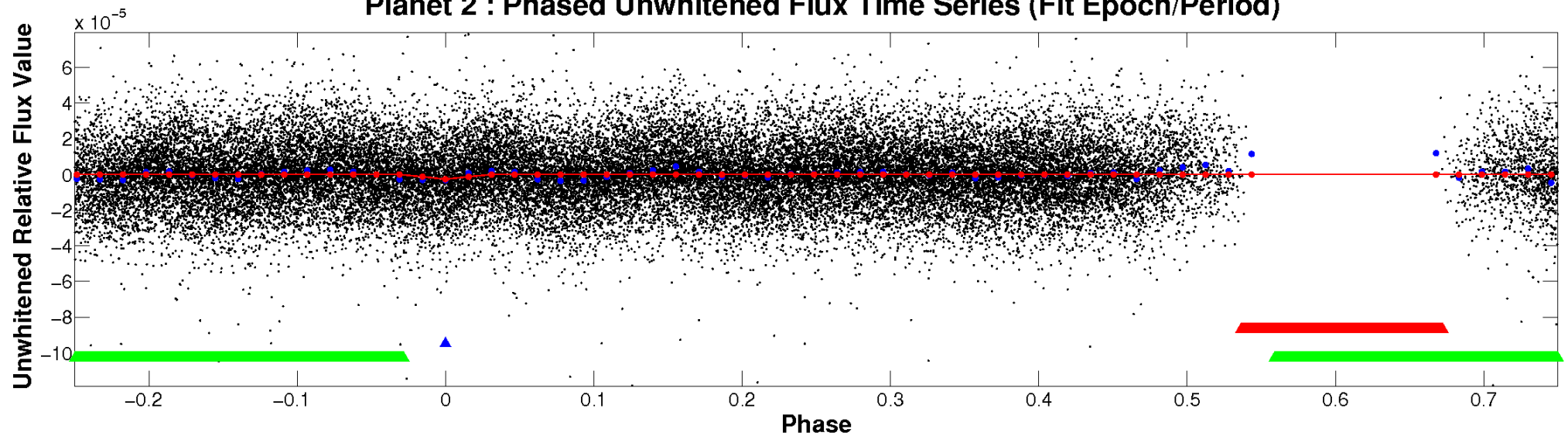
ALT Odd/Even

TCE 011442353-02

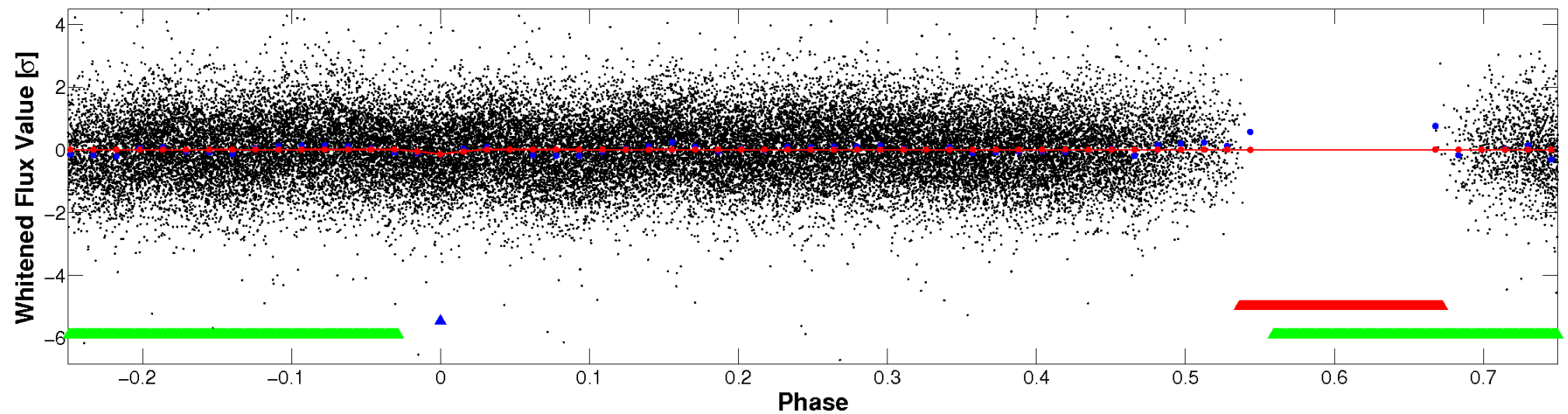


Non-Whitened Vs. Whitened Light Curve

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

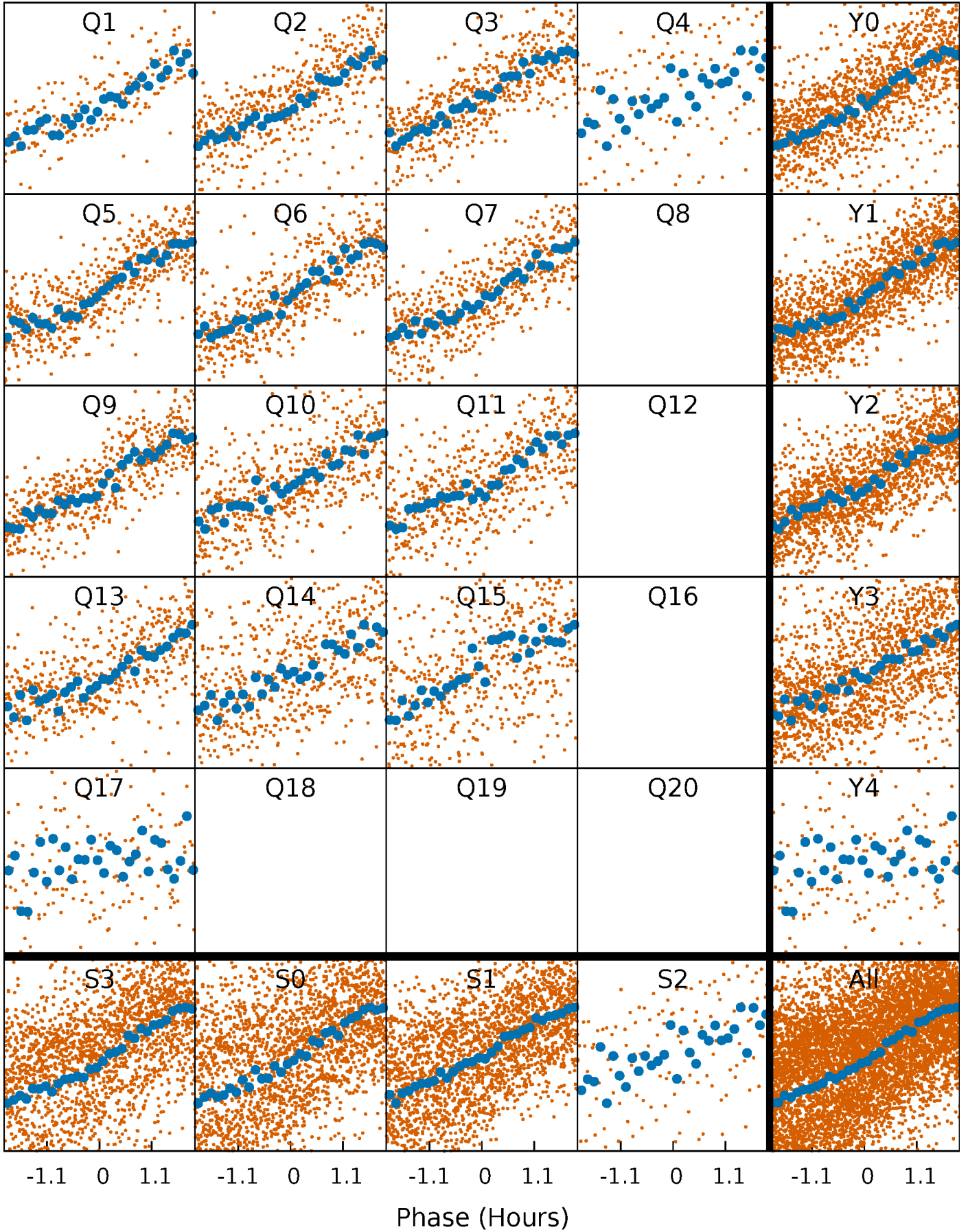


Planet 2 : Phased Whitened Flux Time Series (Fit Epoch/Period)



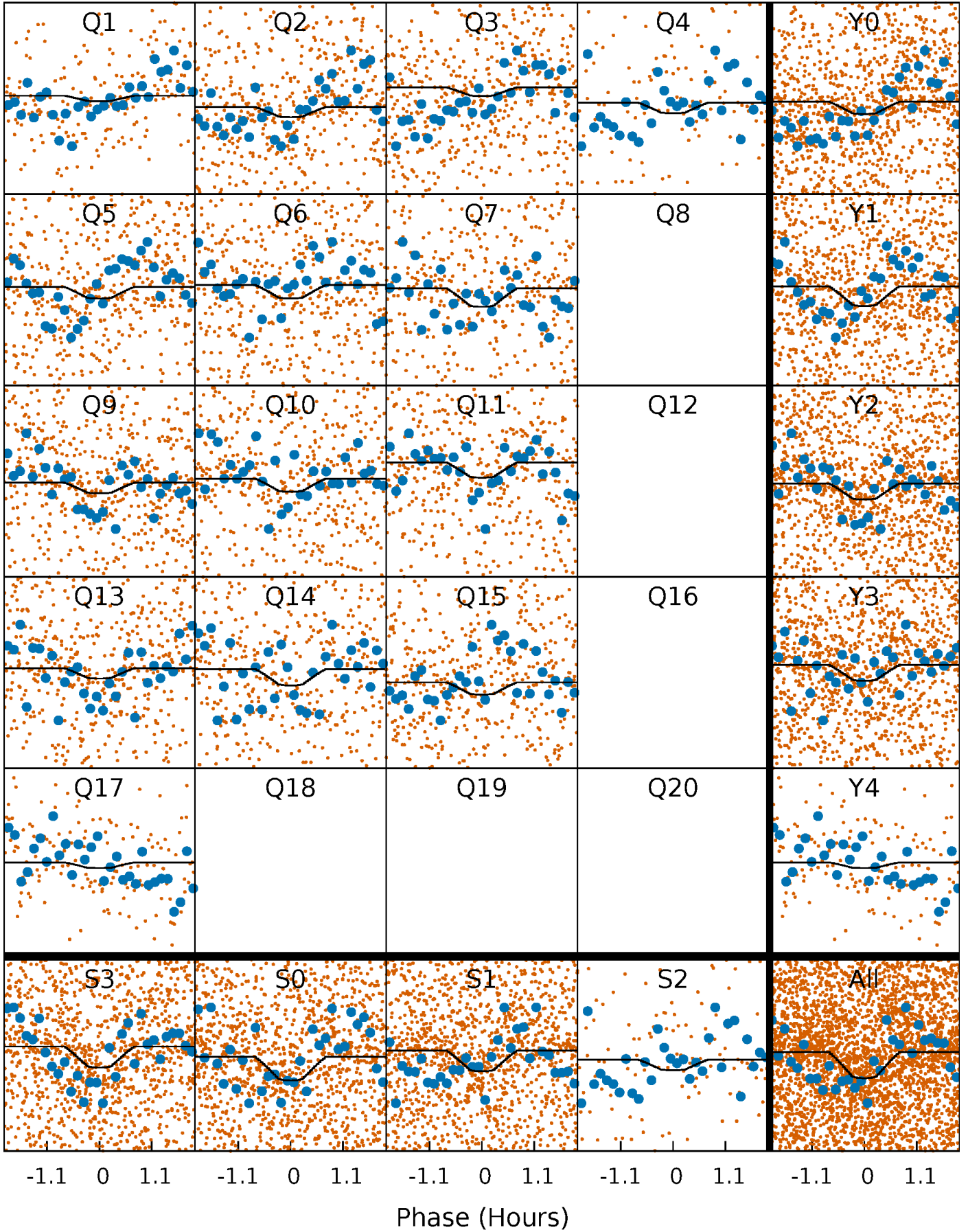
PDC Quarter-Phased Transit Curves

TCE 011442353-02 P= 1.315675 Days $T_0=132.301811$ (BKJD)



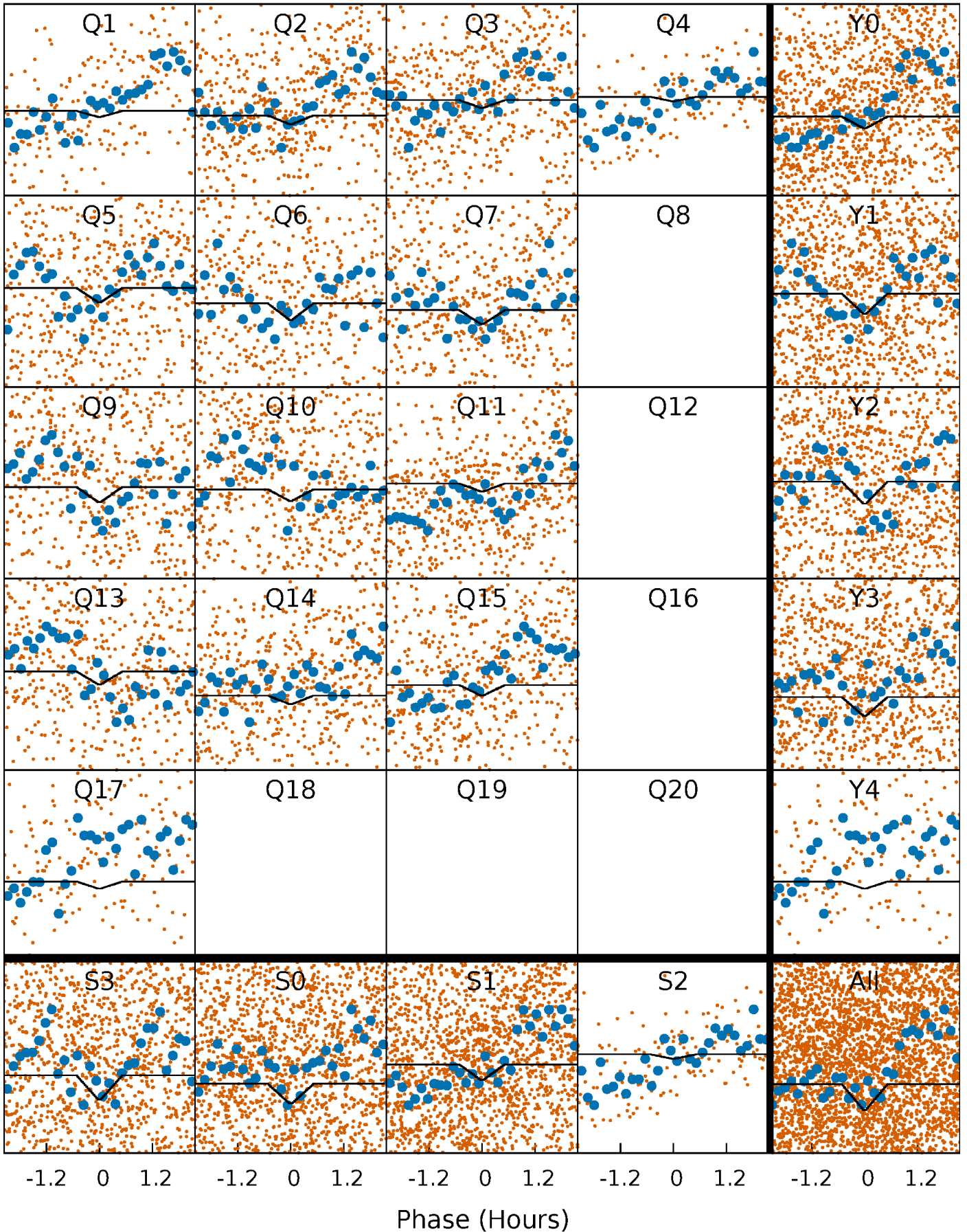
DV Quarter-Phased Transit Curves

TCE 011442353-02 P= 1.315675 Days $T_0=132.301811$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

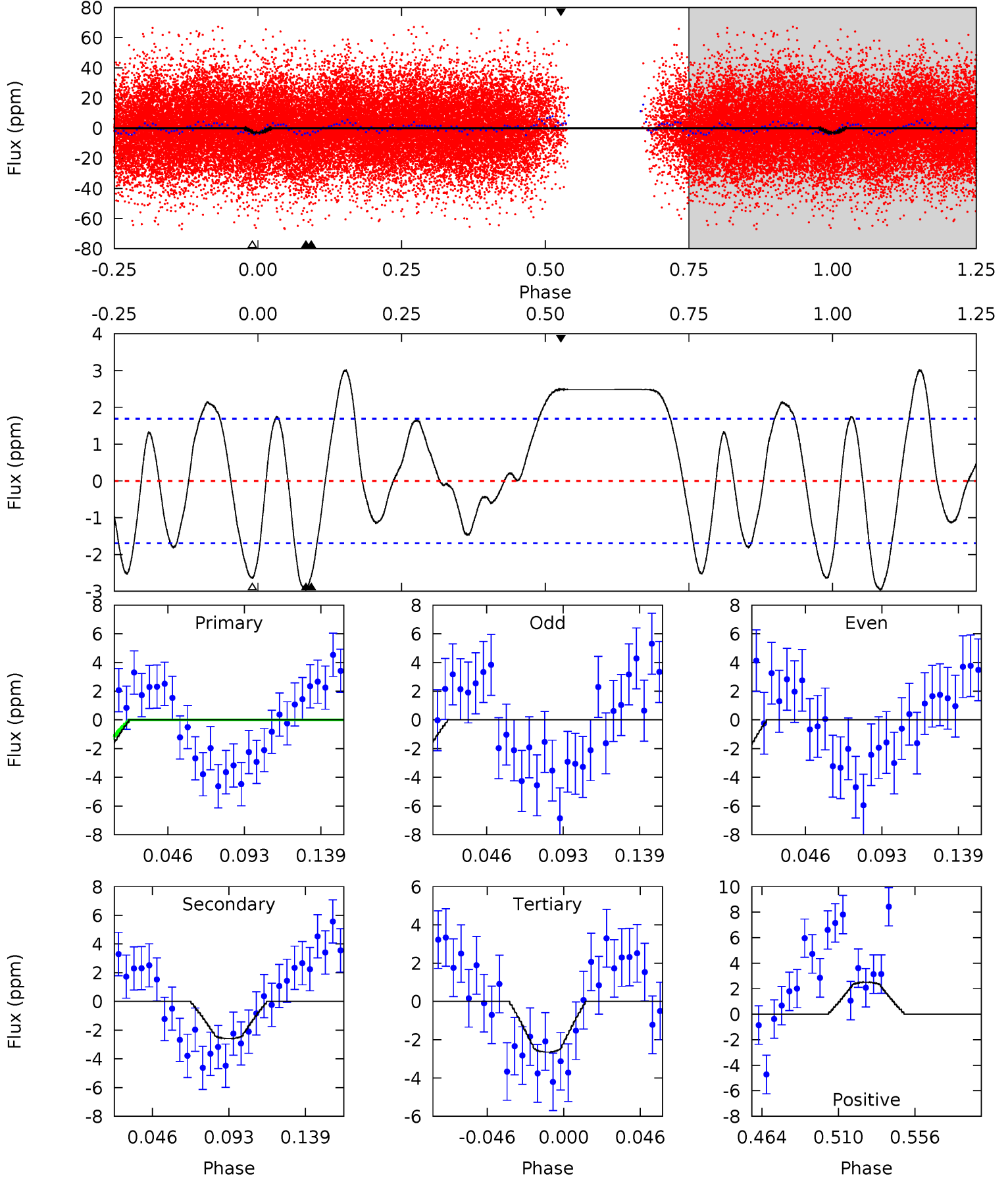
TCE 011442353-02 $P = 1.315650$ Days $T_0 = 132.299537$ (BKJD)



DV Model-Shift Uniqueness Test

011442353-02, P = 1.315675 Days, E = 130.986136 Days

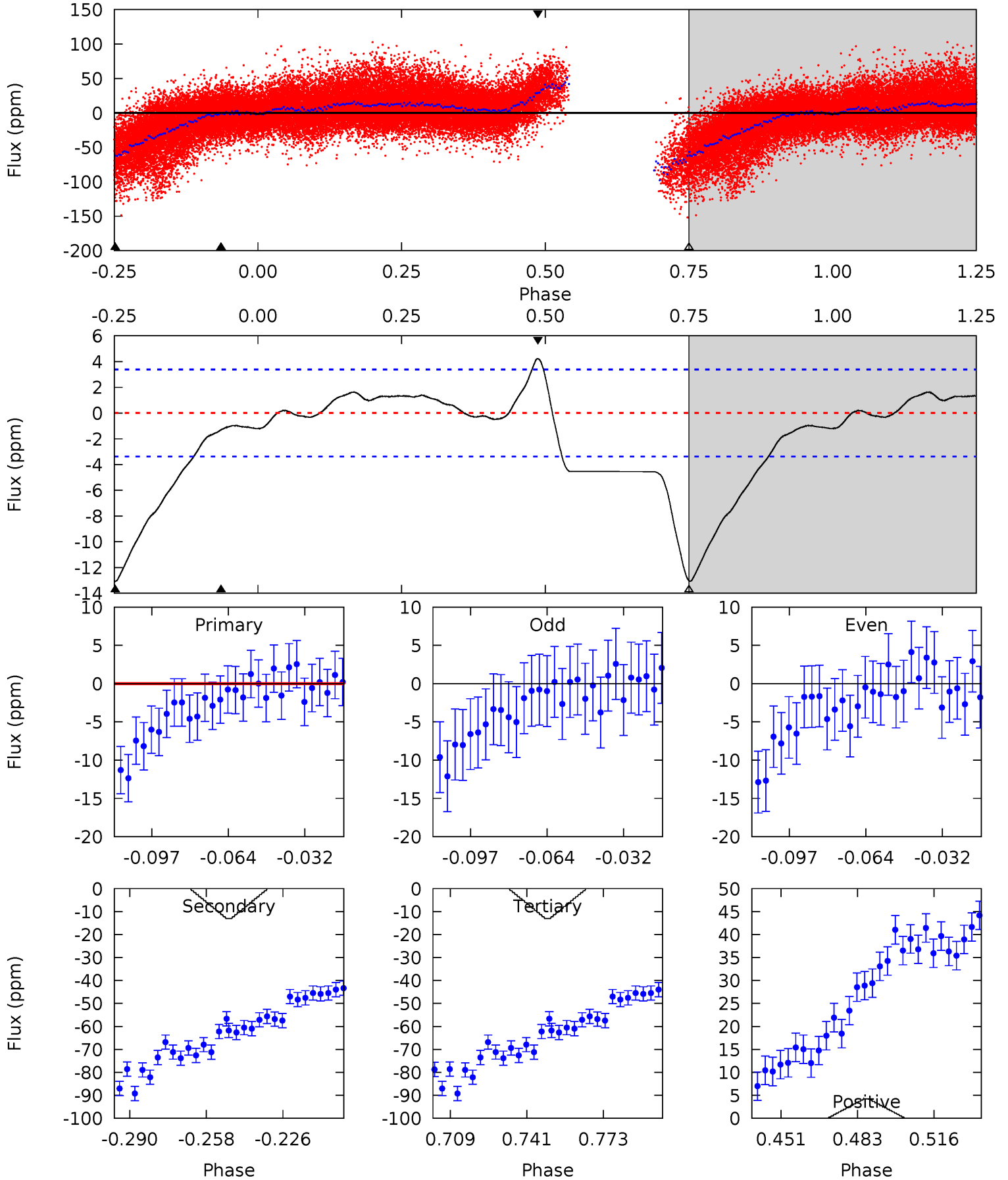
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
8.27	7.23	7.39	6.99	4.72	1.99	3.79	0.88	1.27	-0.16	0.24	0.45	0.88	0.50	2.46



Alt Model-Shift Uniqueness Test

011442353-02, P = 1.315650 Days, E = 130.983887 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
1.85	18.5	18.5	6.00	4.80	2.14	4.45	-16.6	-4.15	0.07	12.5	0.15	0.64	0.24	0.48



Stellar Parameters For KIC 011442353

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	7857^{+217}_{-354}	$3.698^{+0.424}_{-0.106}$	$0.020^{+0.200}_{-0.350}$	$3.385^{+0.678}_{-1.582}$	$2.086^{+0.326}_{-0.530}$	$0.076^{+0.289}_{-0.027}$
	+3%/-5%	+11%/-3%	+1000%/-1750%	+20%/-47%	+16%/-25%	+381%/-35%
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 011442353-02 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-3 ± 0	$0.59^{+0.17}_{-0.17}$	4976^{+399}_{-559}	7312^{+1188}_{-838}	$3.678^{+3.226}_{-1.408}$
Alt.	-13 ± 1	$0.56^{+0.16}_{-0.16}$	4957^{+385}_{-568}	13958^{+3323}_{-2146}	21^{+18}_{-8}

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 $A_{obs} \gg 1.0$

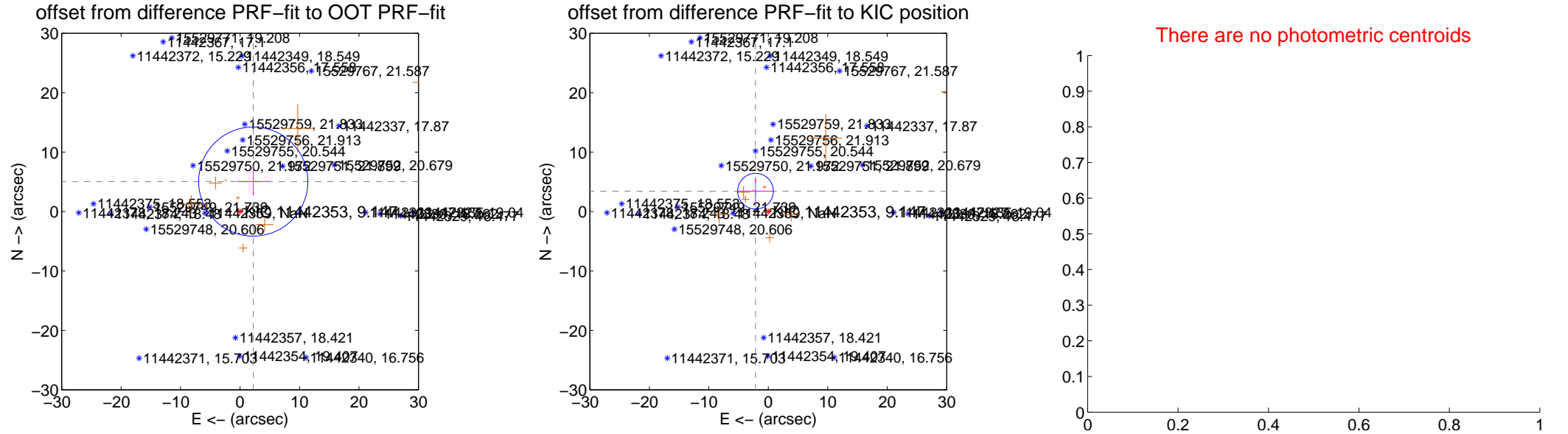
DV Centroid Data

Supplemental centroid analysis for 011442353-02. **Kepler magnitude: 9.15.** Transit SNR 4.70

There are 0 quarters with good PRF difference image offsets

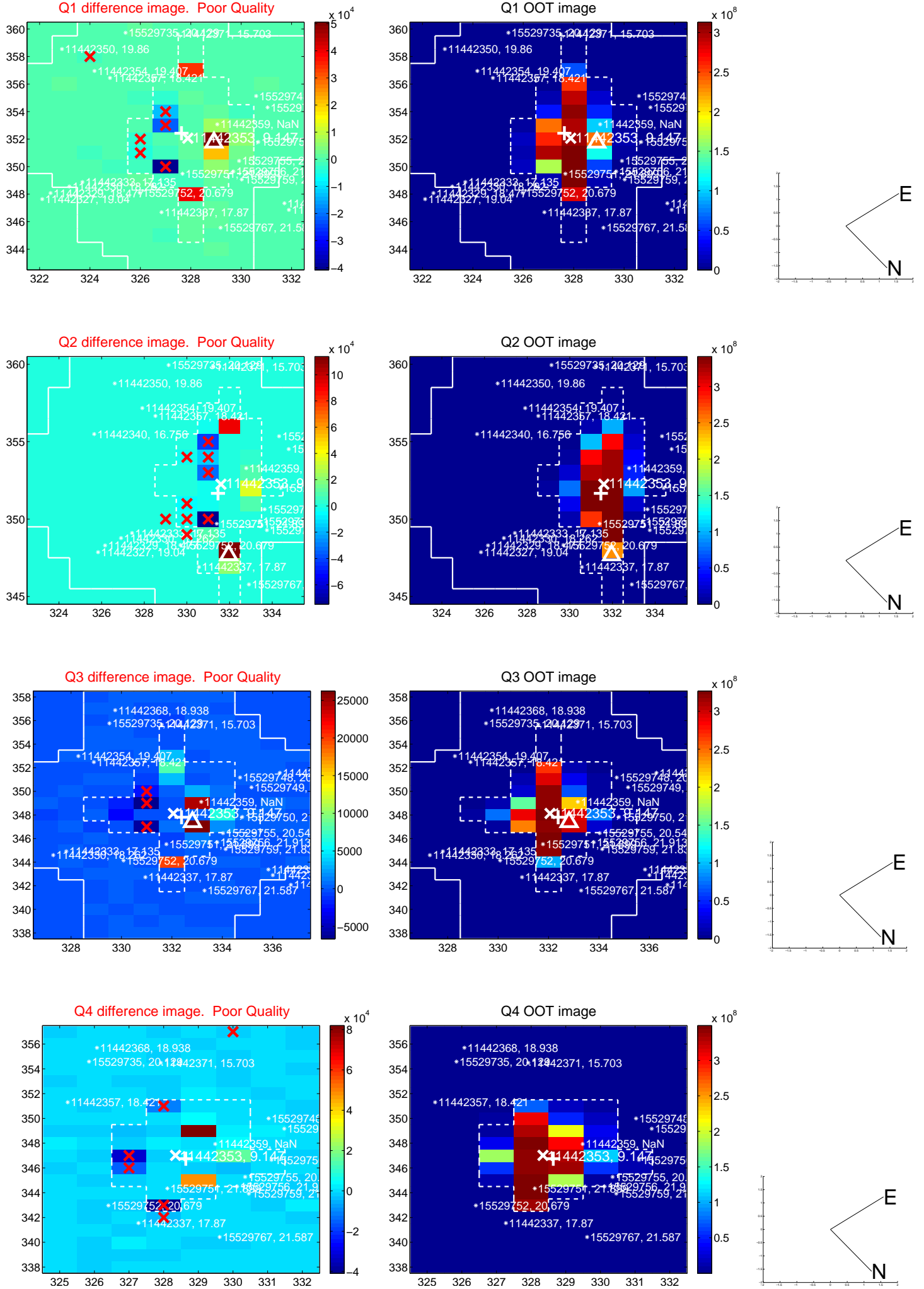
The direct PRF centroid is offset from the target star catalog position by about 1.64 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	5.516 ± 3.061	1.80	-2.220 ± 2.732	5.049 ± 2.317
PRF-fit source offset from KIC position	4.041 ± 0.999	4.04	2.144 ± 3.022	3.425 ± 2.218
photometric centroid source offset	—	—	—	—

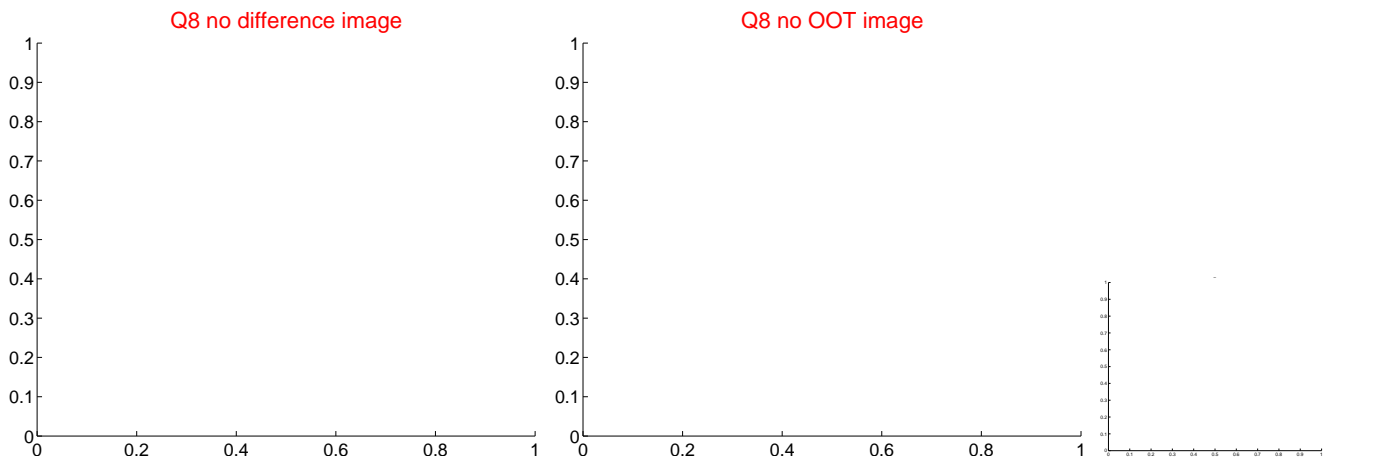
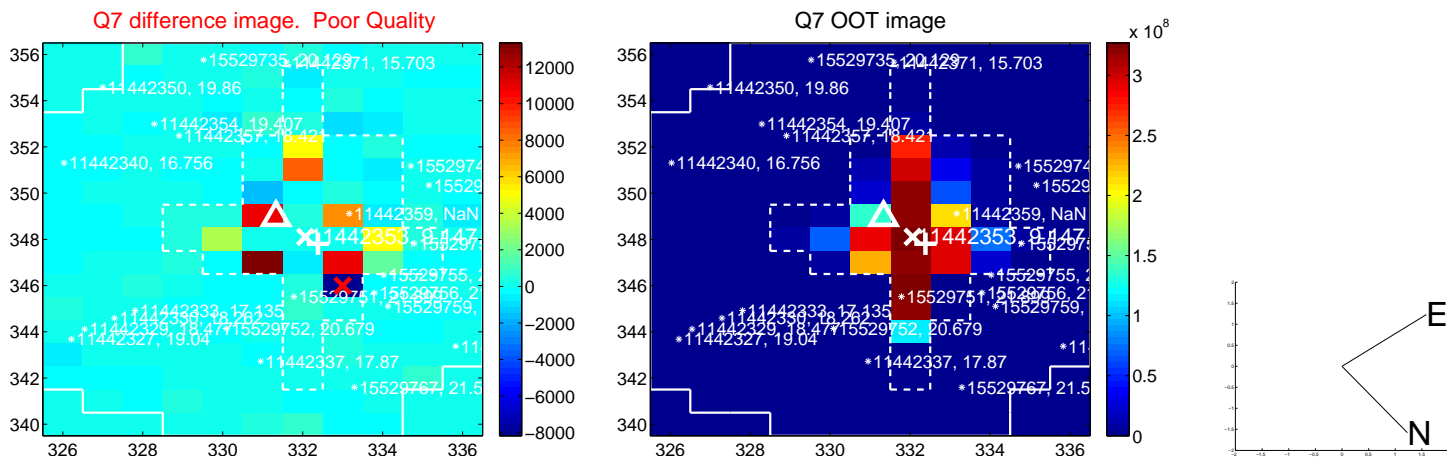
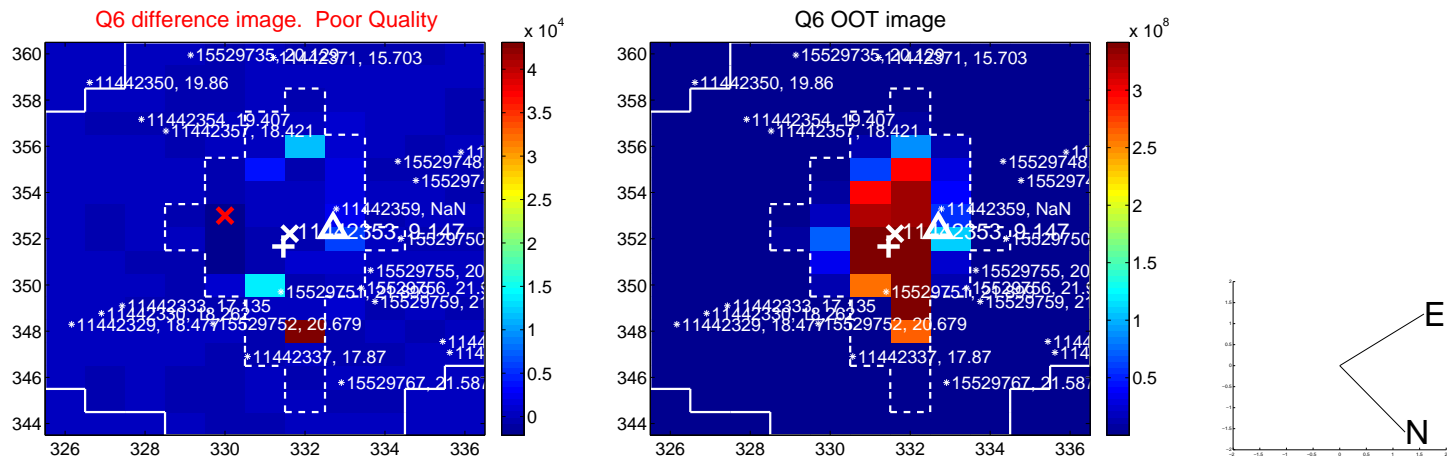
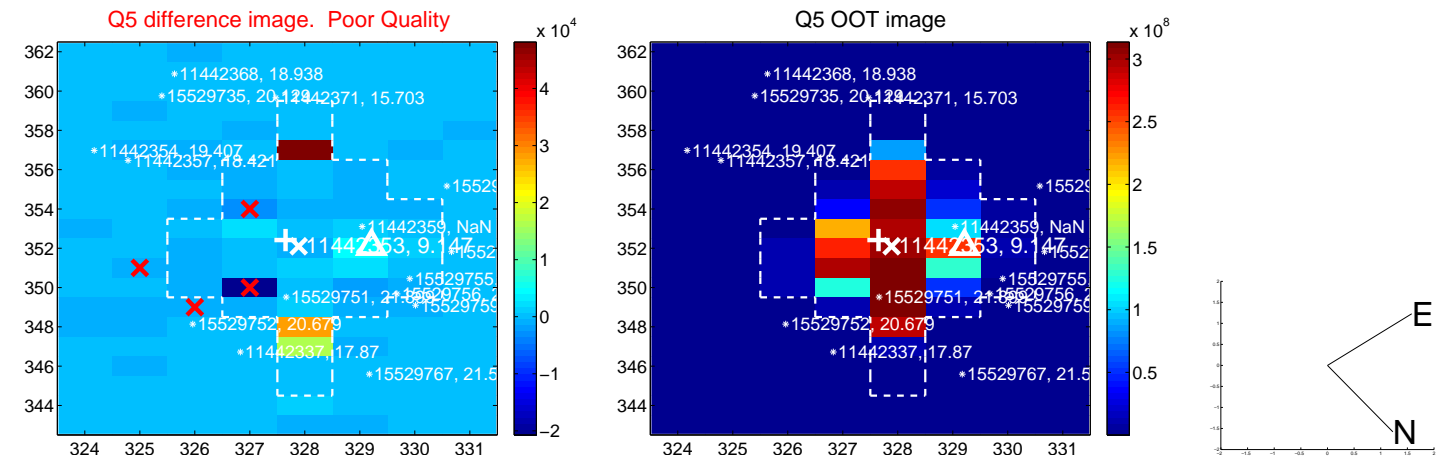


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets;** magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

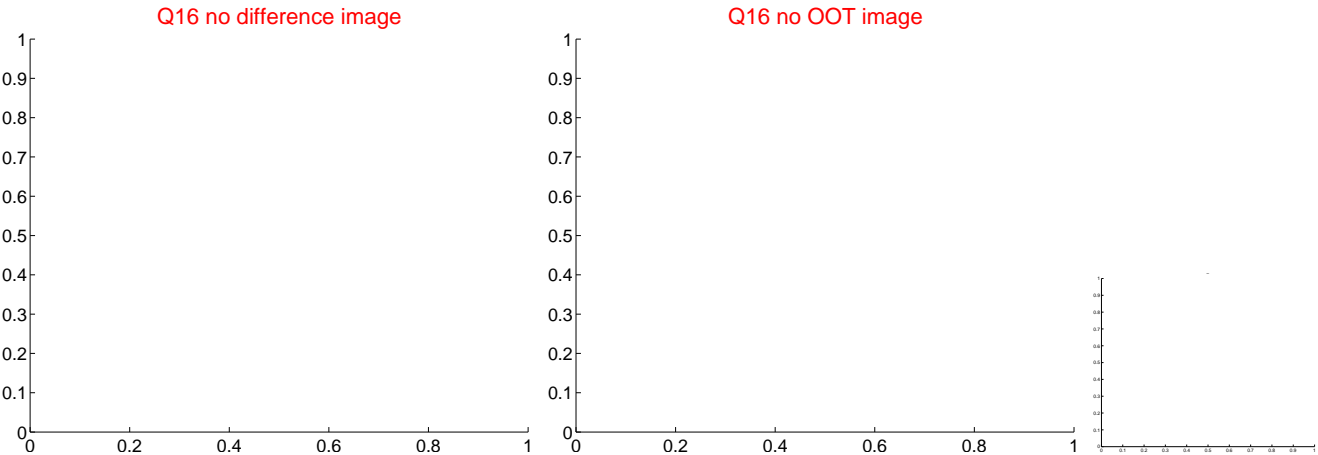
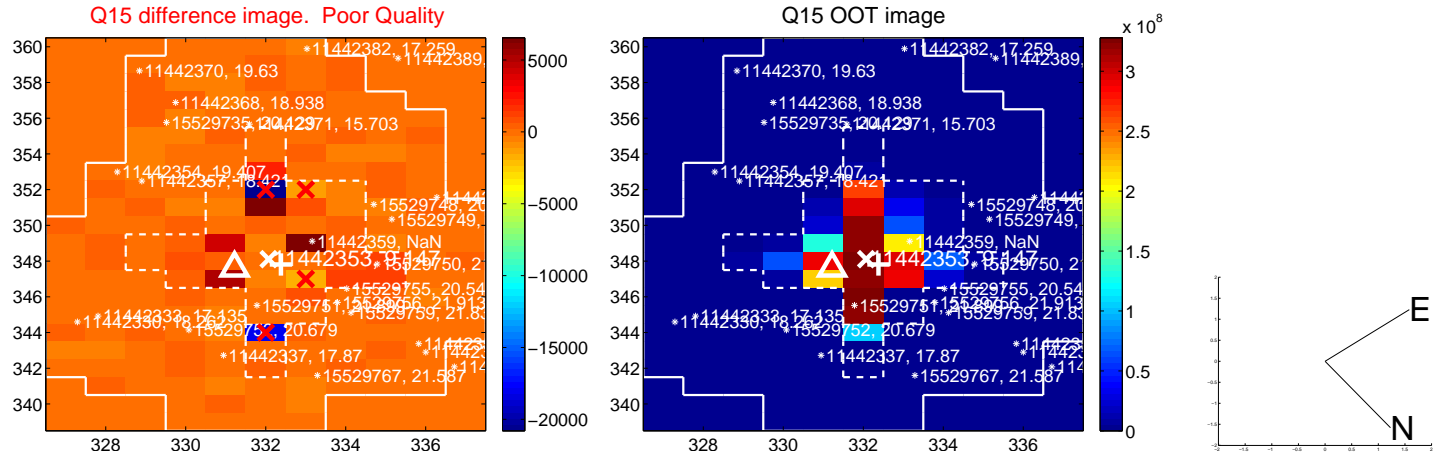
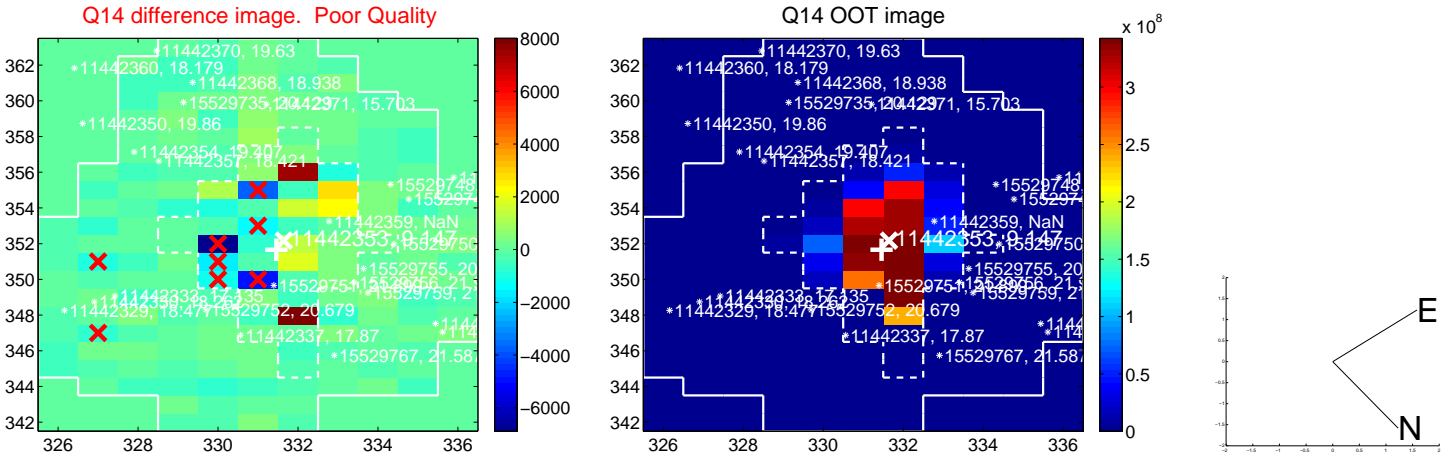
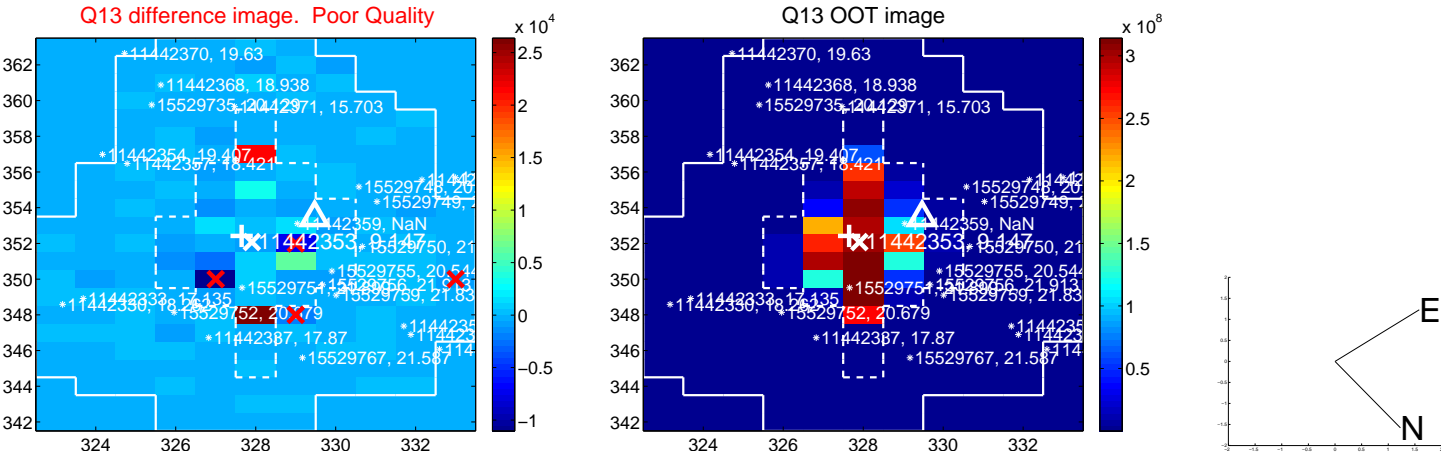
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



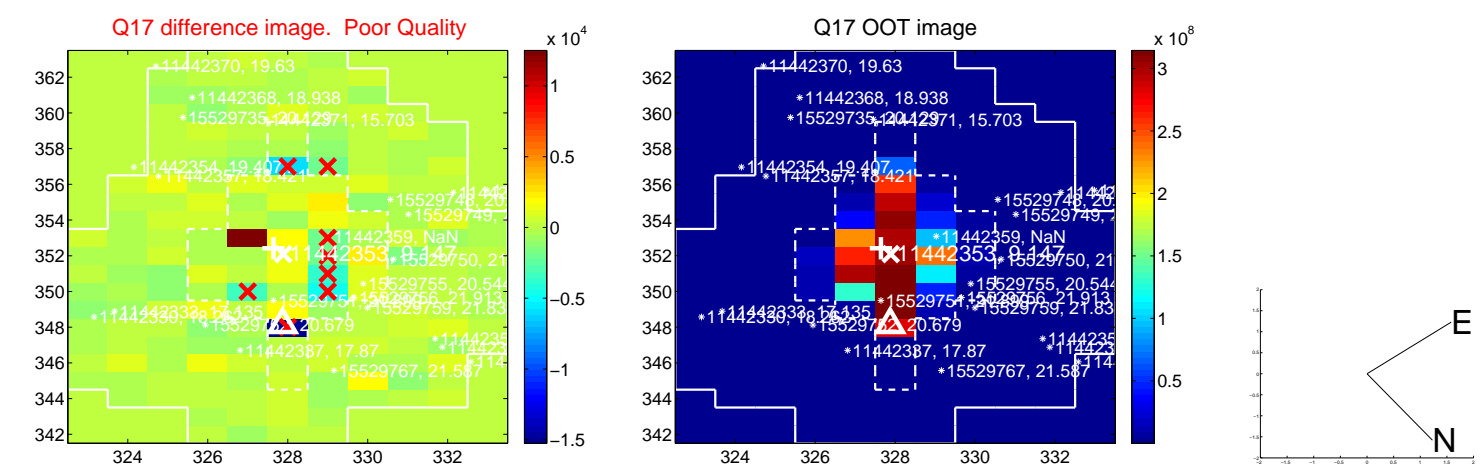
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

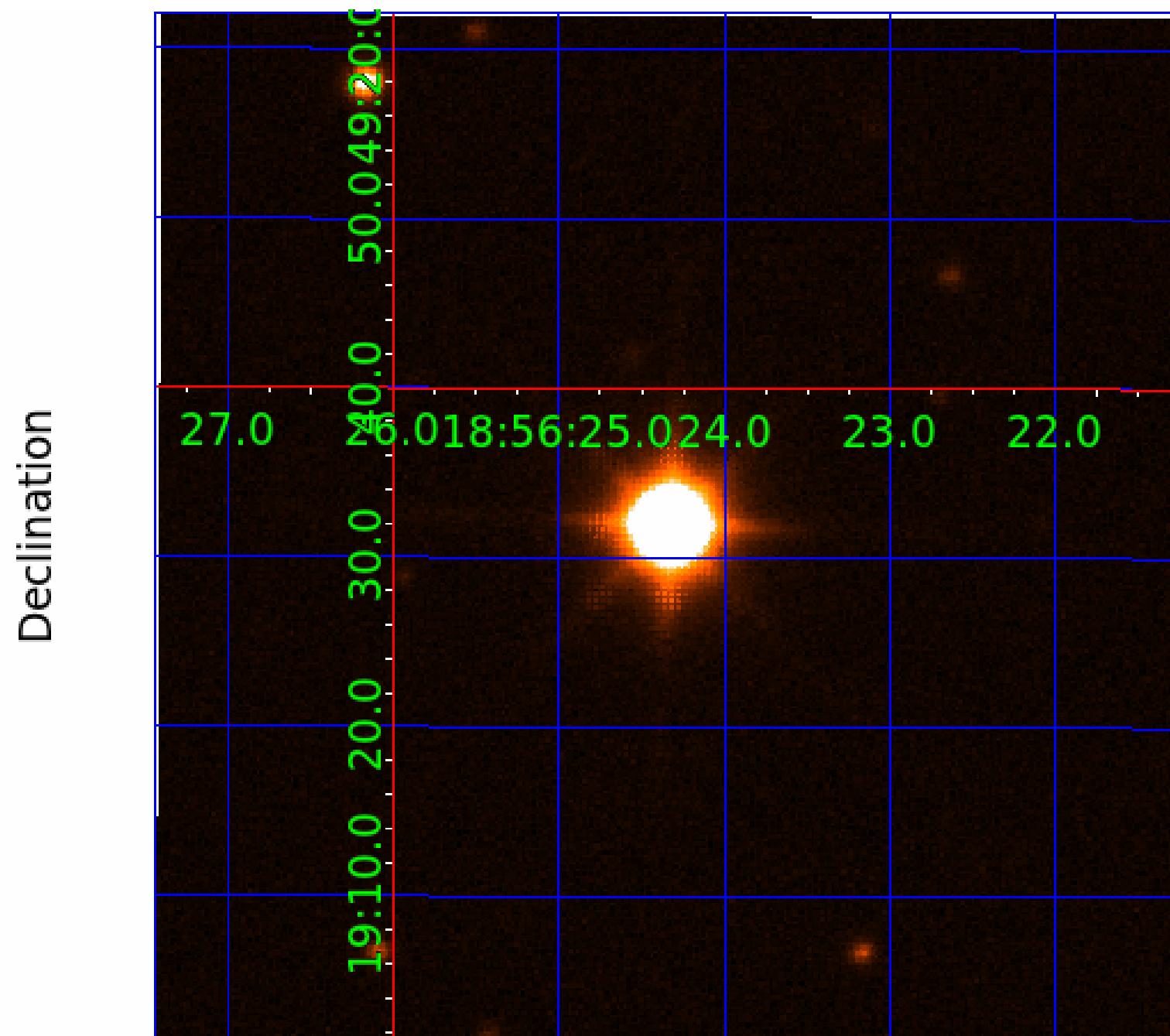


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



folded centroid time series figure for this object.

UKIRT Image



KIC 011442353

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})
011442353-01	OBS	No	1.315513	131.870832	3.9	2.599	7.8	9.4	3.38	7857	0.74	43401.05
011442353-02	OBS	No	1.315675	132.301811	2.7	1.003	9.9	4.7	3.38	7857	0.64	43393.95
011442353-03	OBS	No	1.315185	132.264556	2.2	11.887	8.3	5.6	3.38	7857	0.51	43415.49

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
011442353-01	OBS	FP	0.00	1	0	0	0	SWEET_NTL—LPP_DV—MOD_NONUNIQ_DV—MOD_POS_DV—MOD_NONUNIQ_ALT—CENT_SATURATED
011442353-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_SKYE_ZUMA_TRACKER—SWEET_NTL—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—SAME_NTL_PERIOD—CENT_SATURATED
011442353-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_SKYE_ZUMA—SWEET_NTL—LPP_DV—MOD_NONUNIQ_ALT—SAME_NTL_PERIOD—CENT_SATURATED

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

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

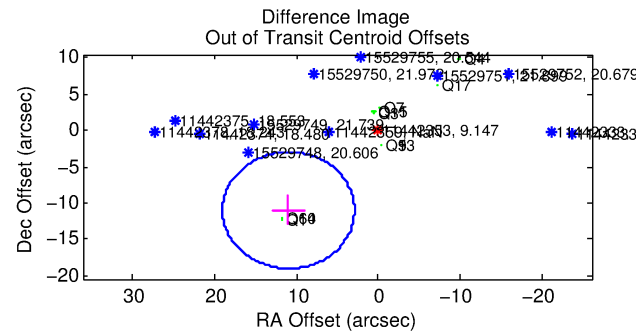
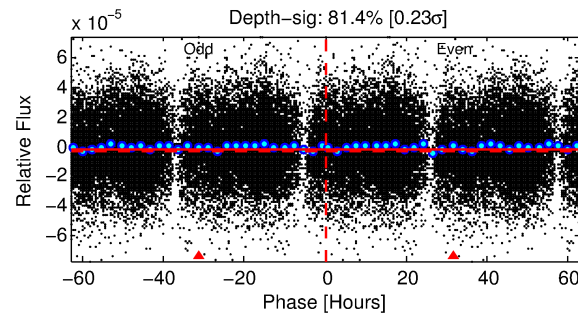
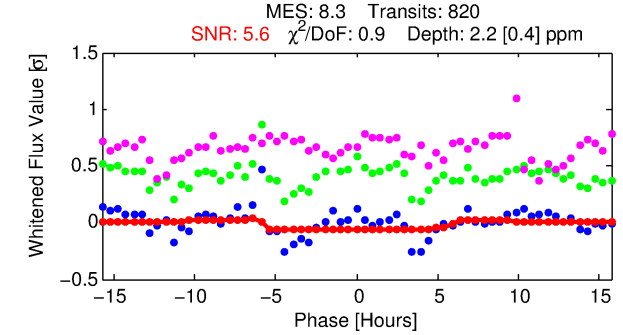
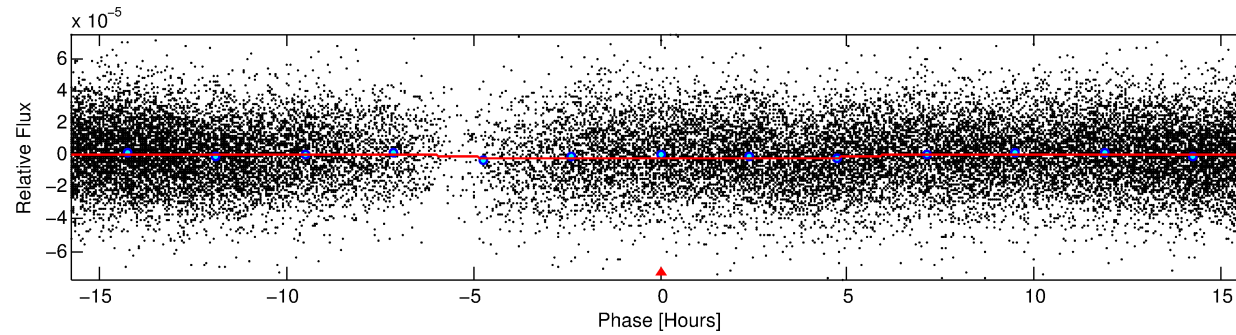
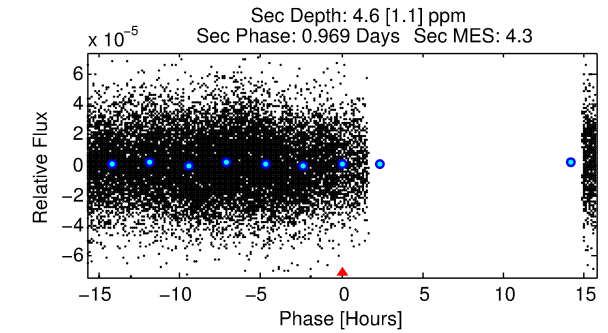
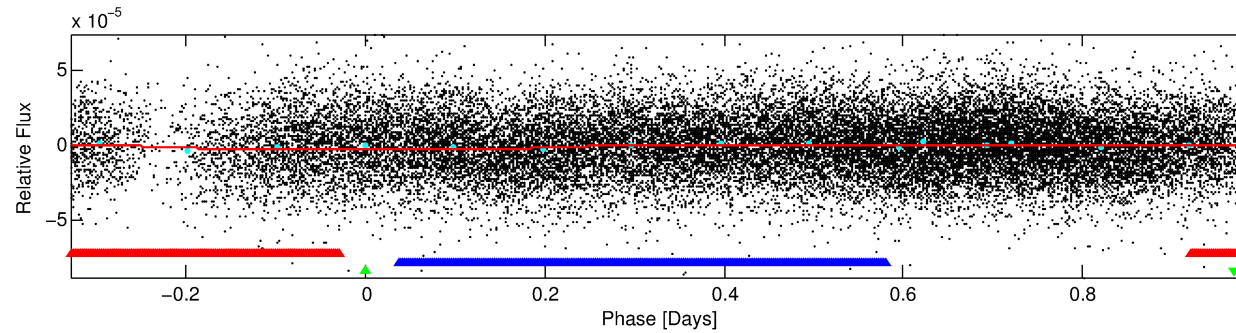
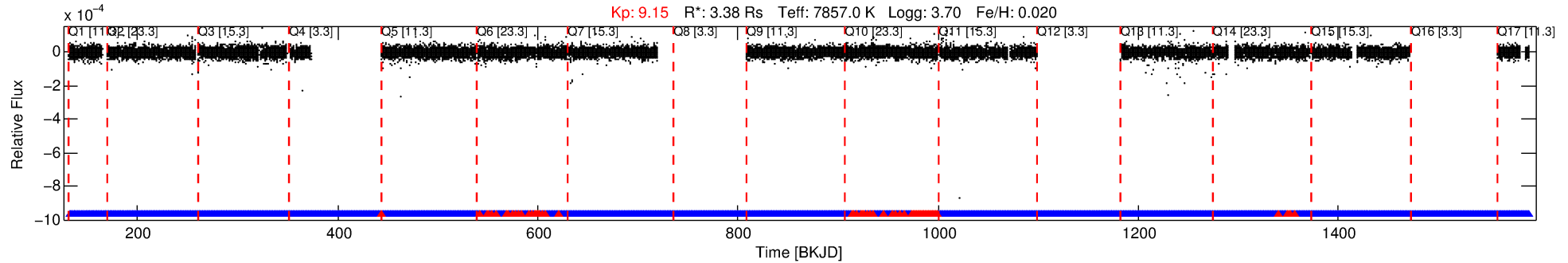
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 011442353-03

No Significant Match Found

DV One-Page Summary

KIC: 11442353 Candidate: 3 of 3 Period: 1.315 d



DV Fit Results:

Period = 1.31519 [0.00004] d
Epoch = 132.2646 [0.0178] BKJD
Rp/R* = 0.0014 [0.0017]
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: N/A
RollingBand-fgt: 0.92 [695/756]
GhostDiagnostic-chr: N/A
Centroid-sig: N/A
Centroid-so: N/A
OotOffset-rm: 15.539 arcsec [5.80σ]
KicOffset-rm: 14.152 arcsec [5.28σ]
OotOffset-st: 3/4/1/5 [13]
KicOffset-st: 3/4/1/5 [13]
DiffImageQuality-fgm: 0.31 [4/13]
DiffImageOverlap-fno: 0.00 [0/14]

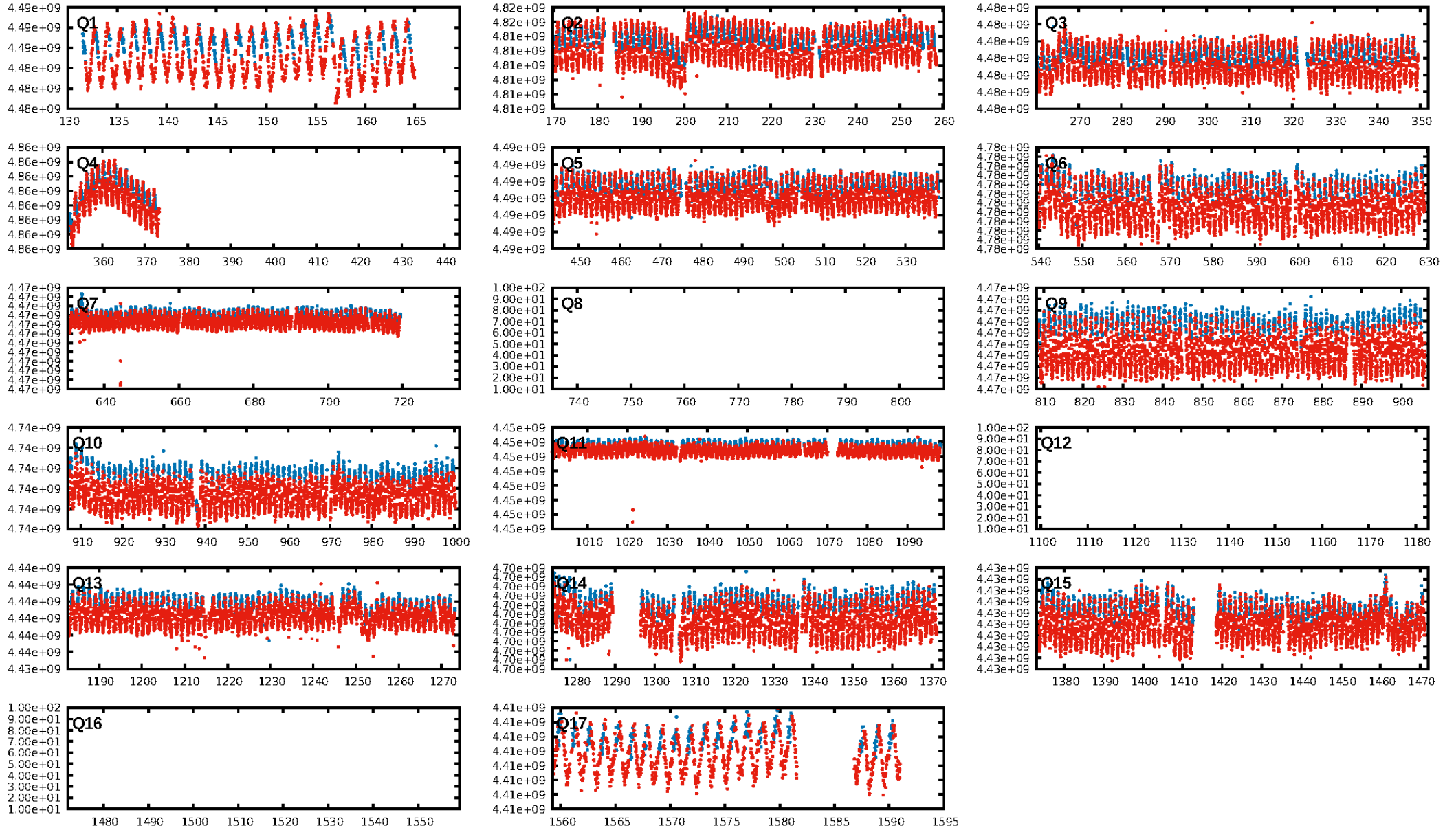
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: 0.1% [0.00σ]
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: N/A
RollingBand-fgt: 0.92 [695/756]
GhostDiagnostic-chr: N/A
Centroid-sig: N/A
Centroid-so: N/A
OotOffset-rm: 15.539 arcsec [5.80σ]
KicOffset-rm: 14.152 arcsec [5.28σ]
OotOffset-st: 3/4/1/5 [13]
KicOffset-st: 3/4/1/5 [13]
DiffImageQuality-fgm: 0.31 [4/13]
DiffImageOverlap-fno: 0.00 [0/14]

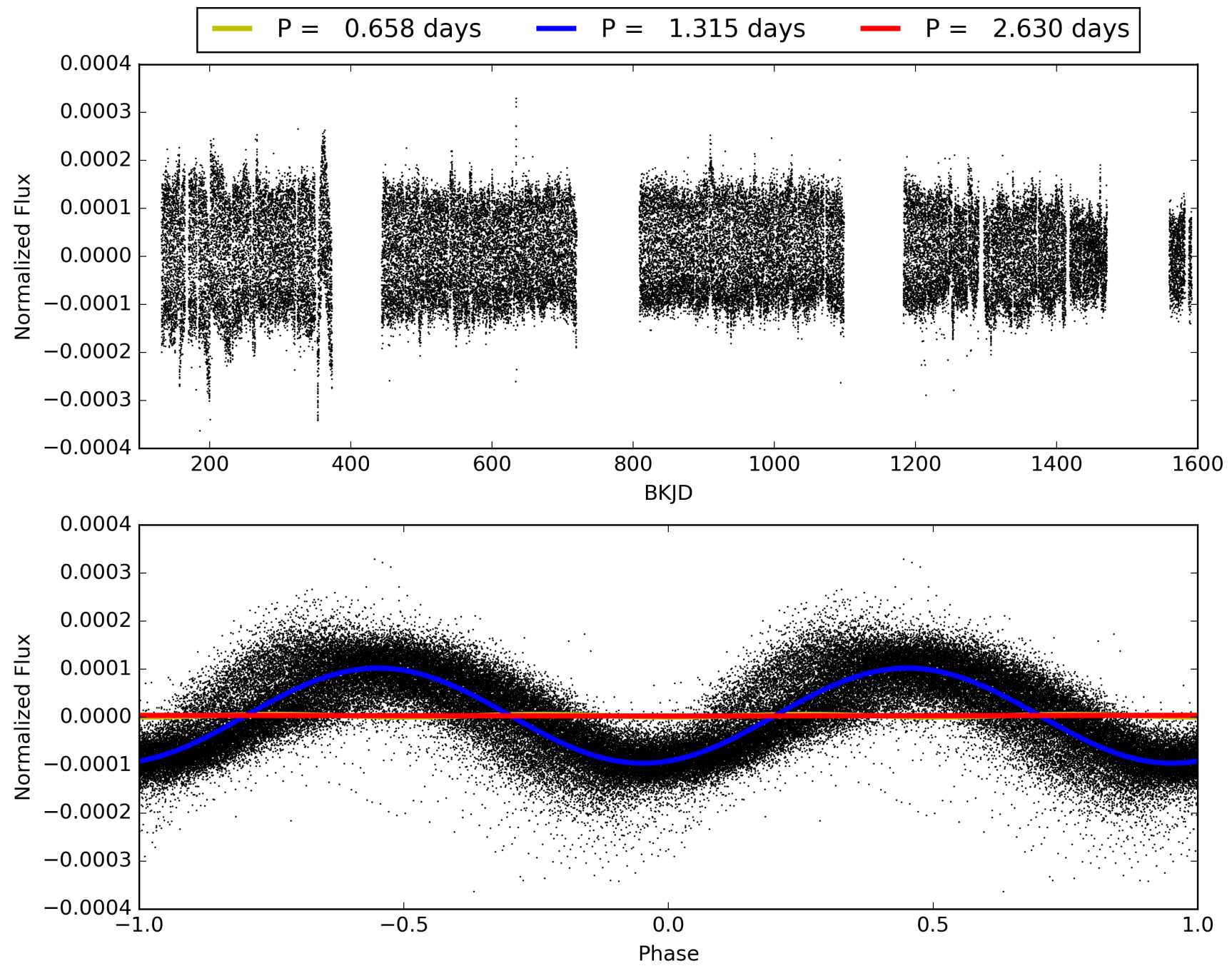
Software Revision: svn-ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 29-Jan-2016 18:06:41 Z

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

TCE 011442353-03, PDC Light Curves

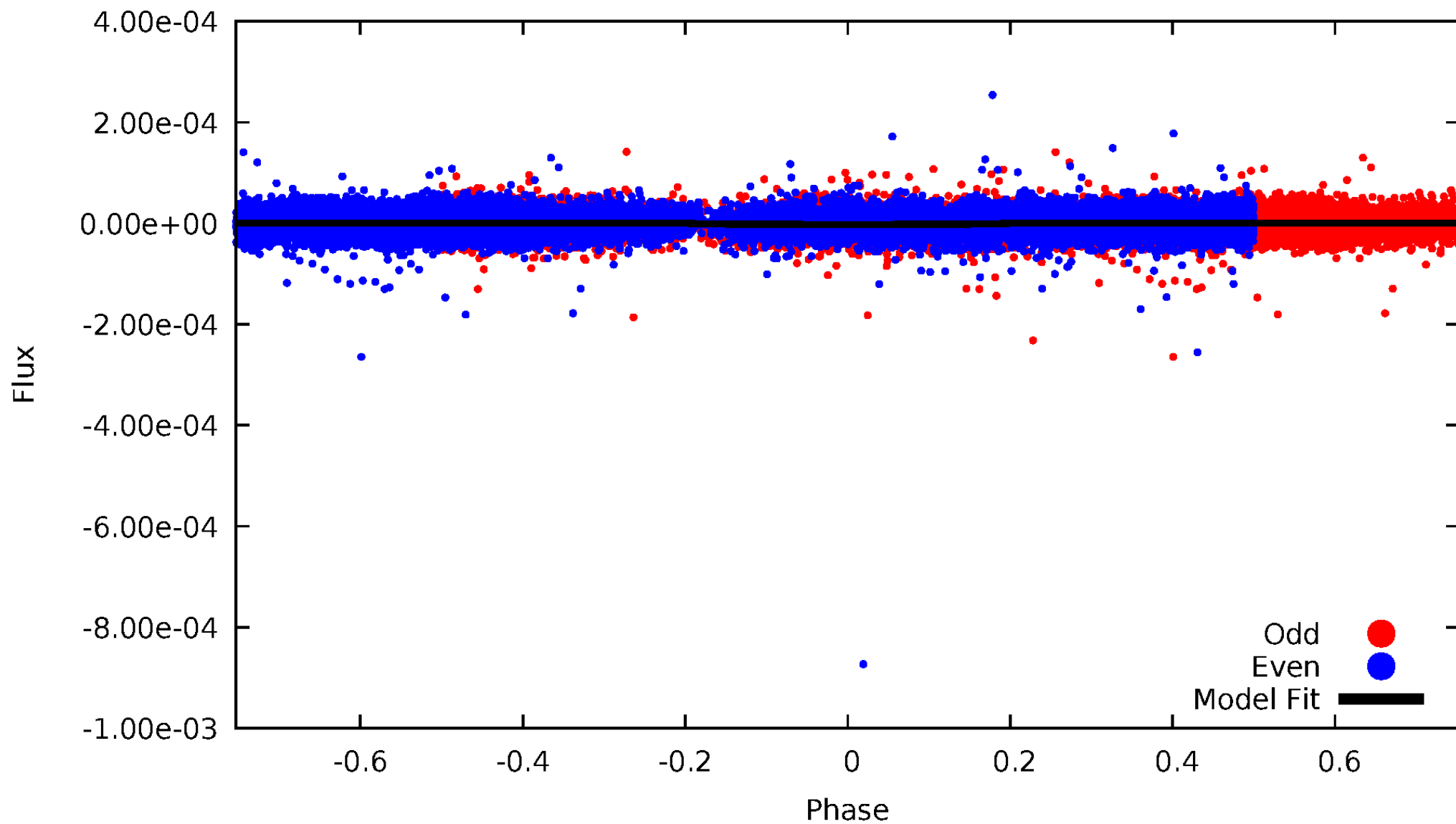


TCE 011442353-03



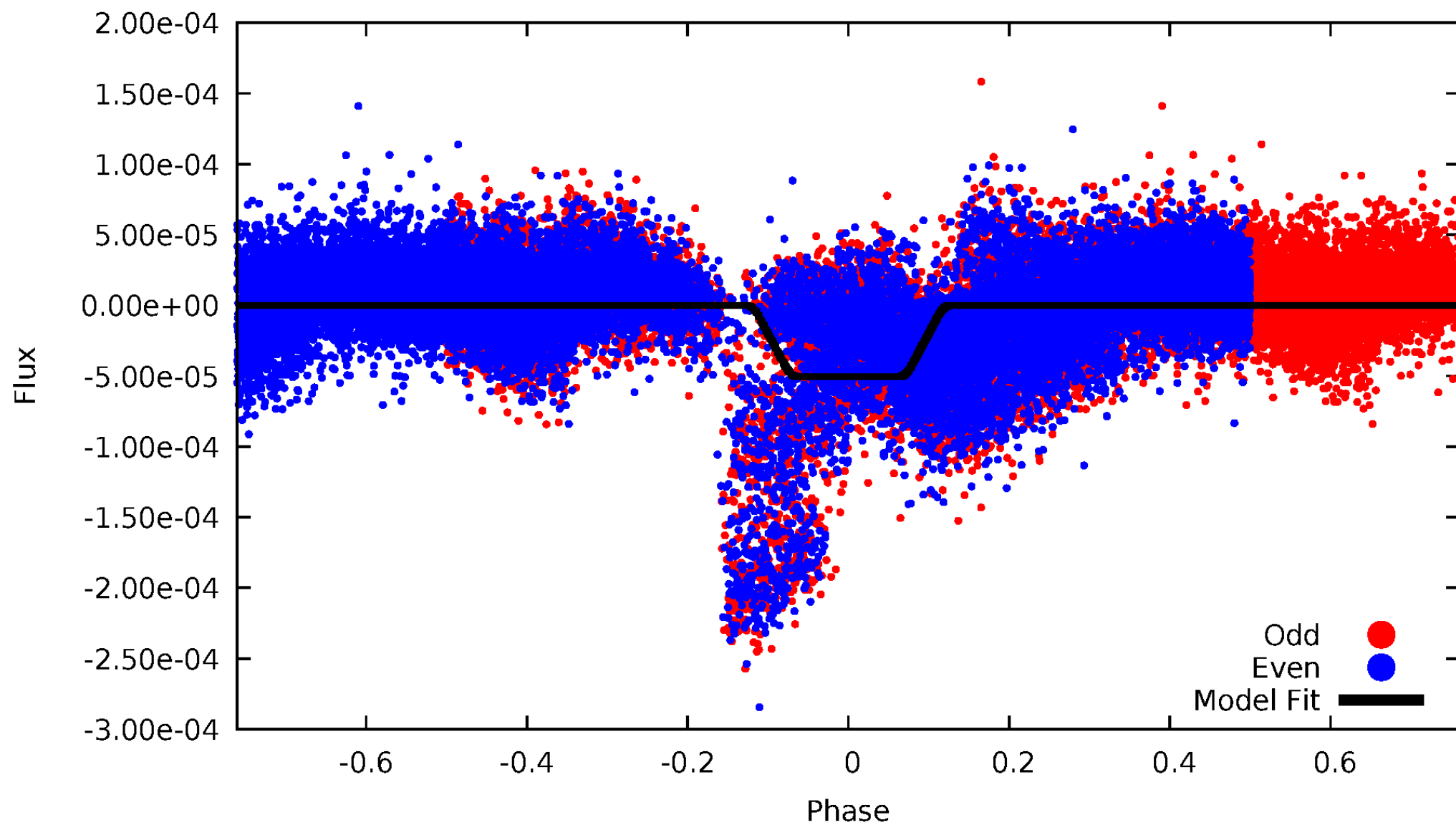
DV Odd/Even

TCE 011442353-03



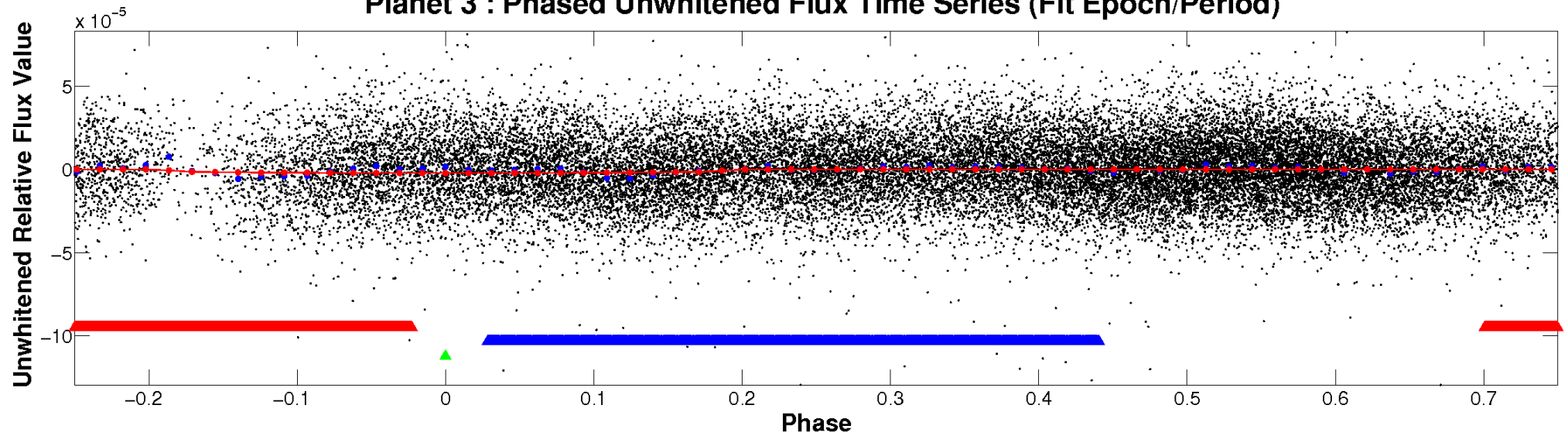
ALT Odd/Even

TCE 011442353-03

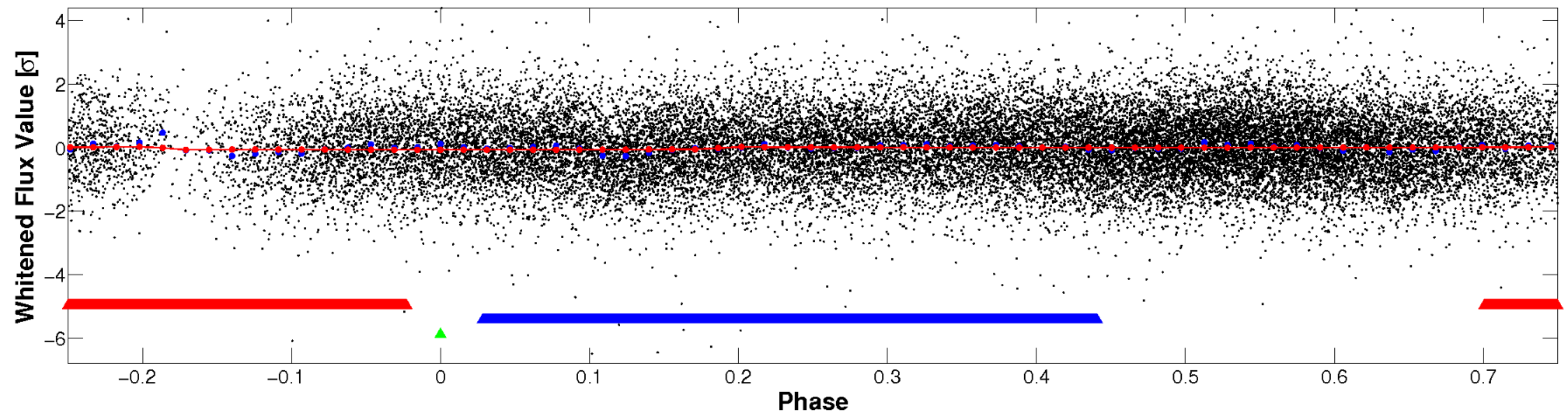


Non-Whitened Vs. Whitened Light Curve

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

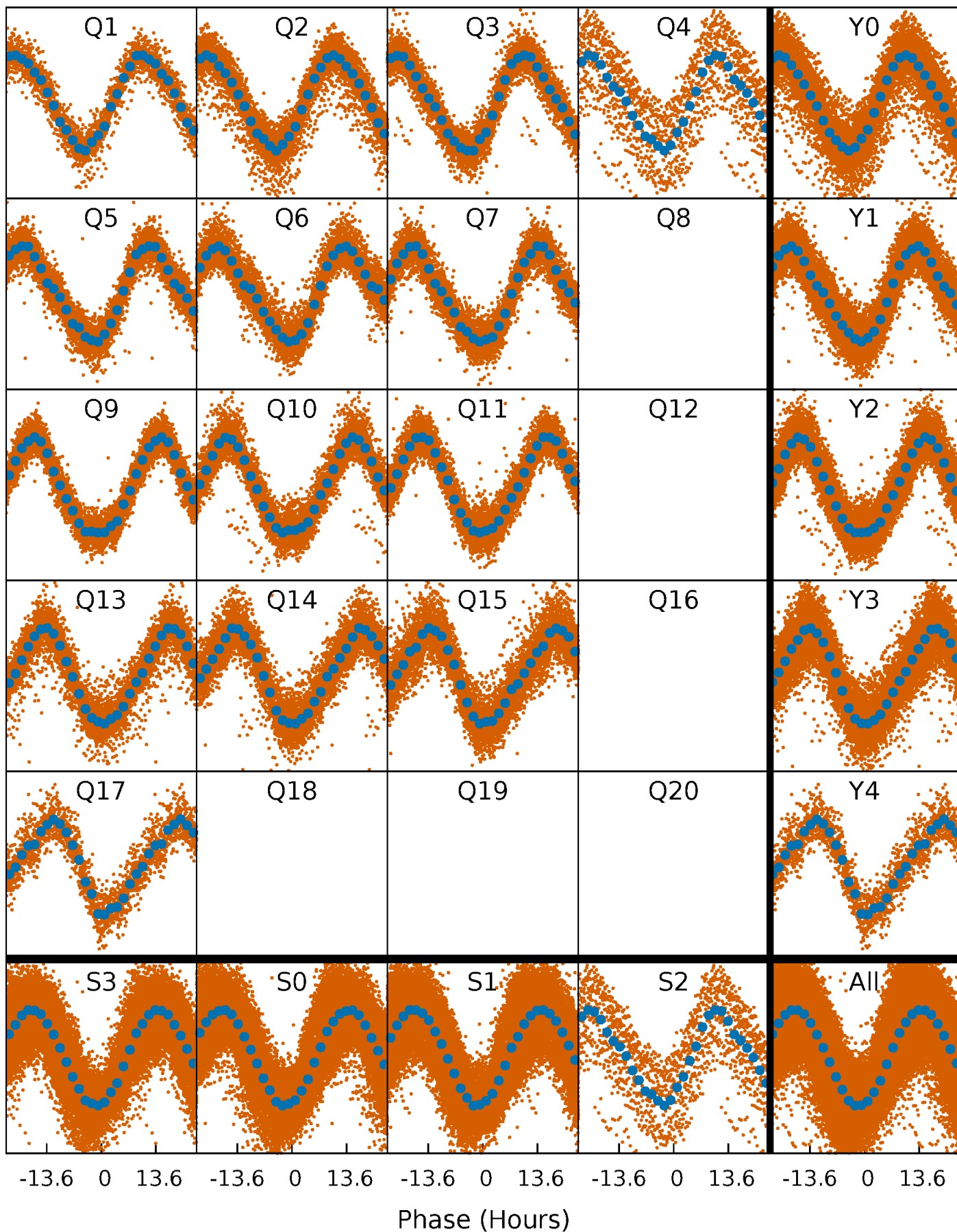


Planet 3 : Phased Whitened Flux Time Series (Fit Epoch/Period)



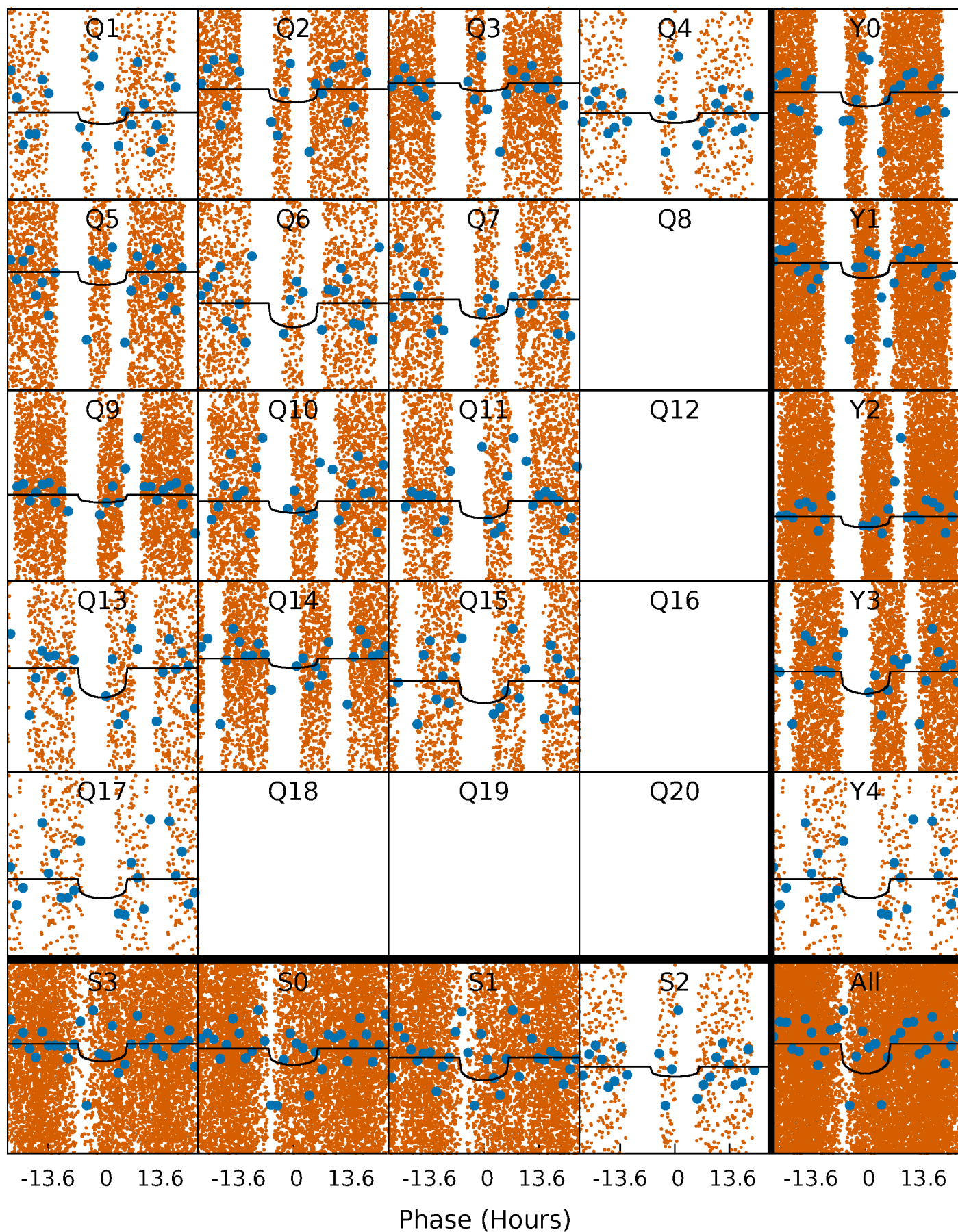
PDC Quarter-Phased Transit Curves

TCE 011442353-03 P= 1.315185 Days $T_0=132.264556$ (BKJD)



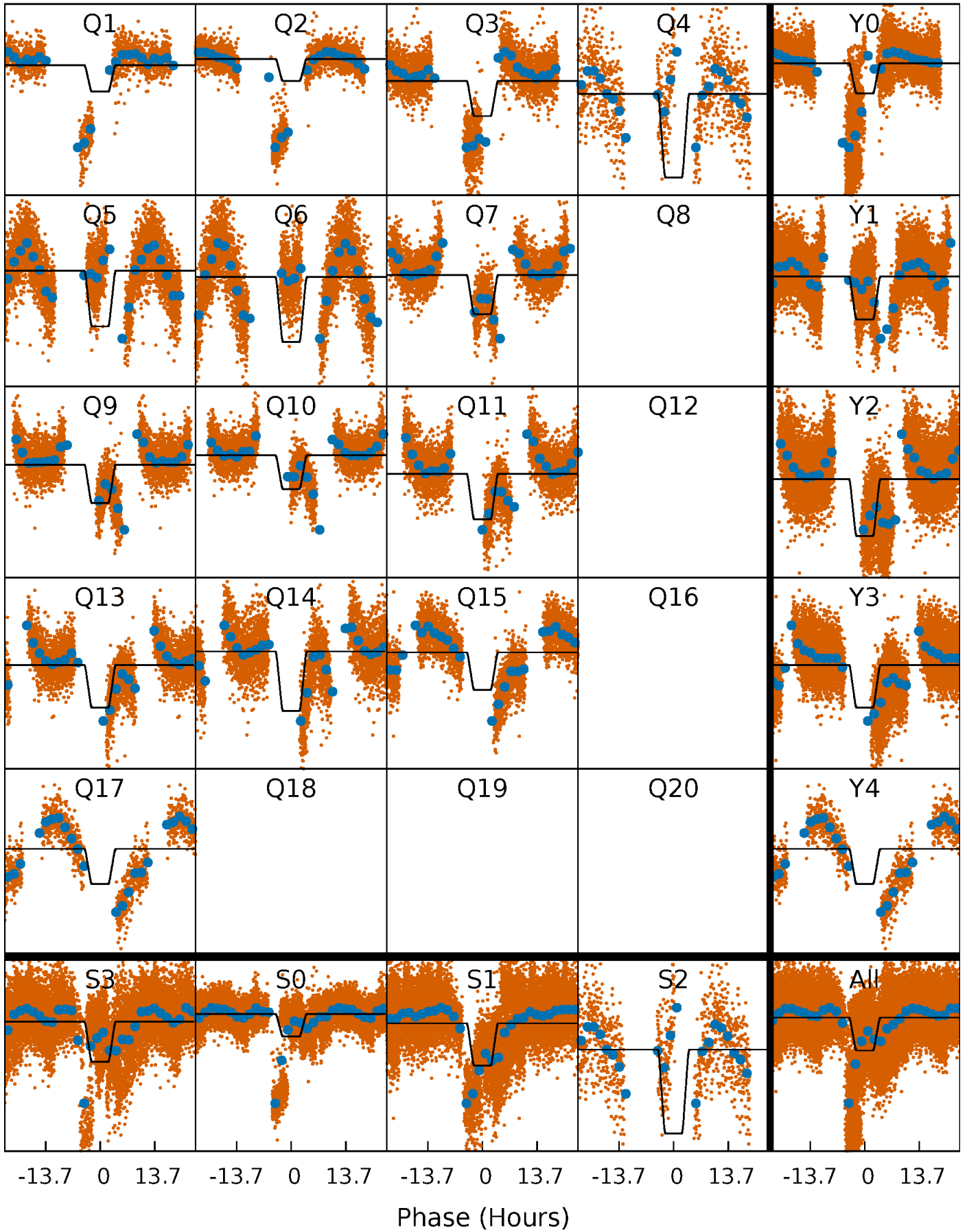
DV Quarter-Phased Transit Curves

TCE 011442353-03 P= 1.315185 Days $T_0=132.264556$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

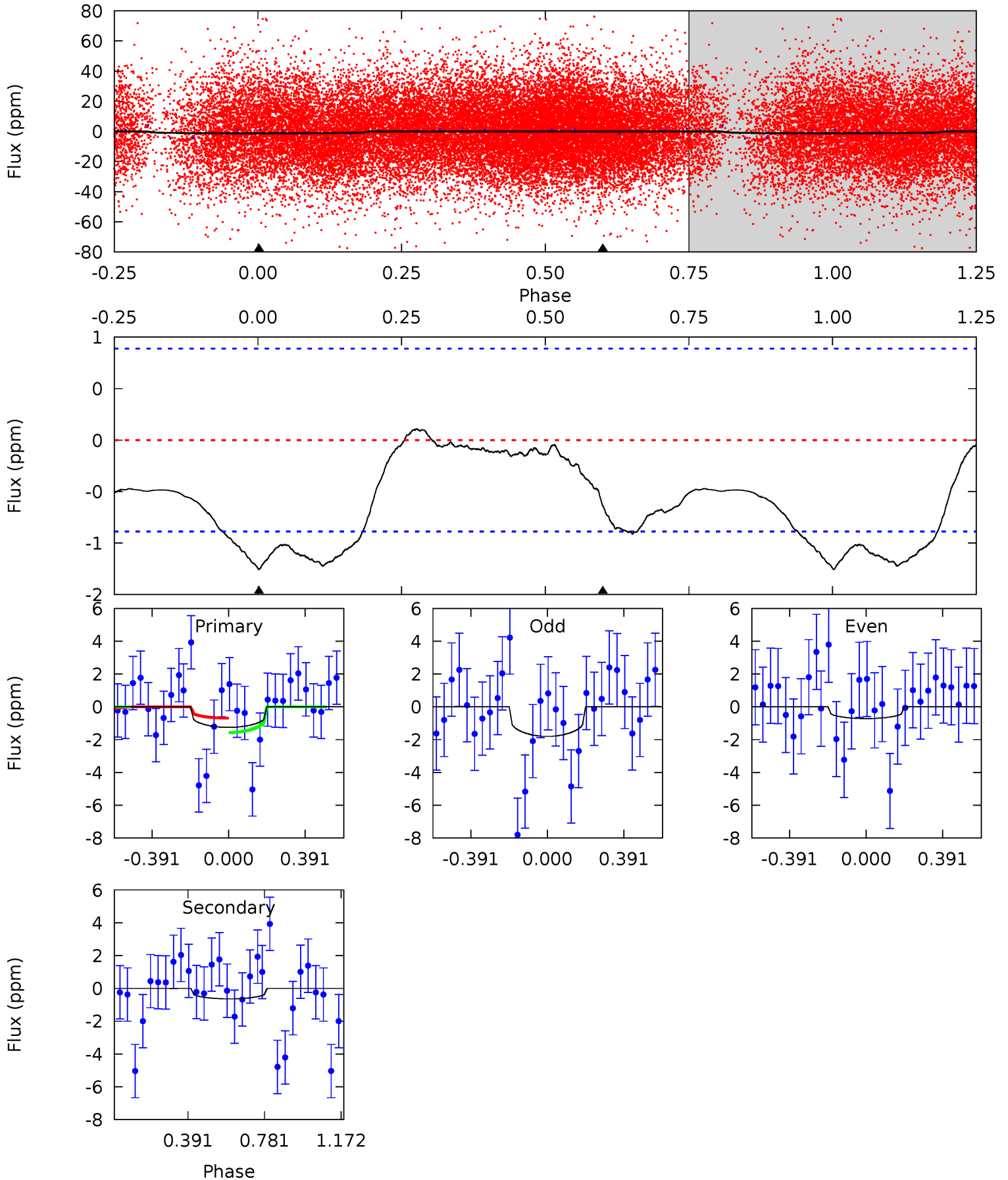
TCE 011442353-03 P= 1.315140 Days $T_0=132.280750$ (BKJD)



DV Model-Shift Uniqueness Test

011442353-03, P = 1.315185 Days, E = 130.949371 Days

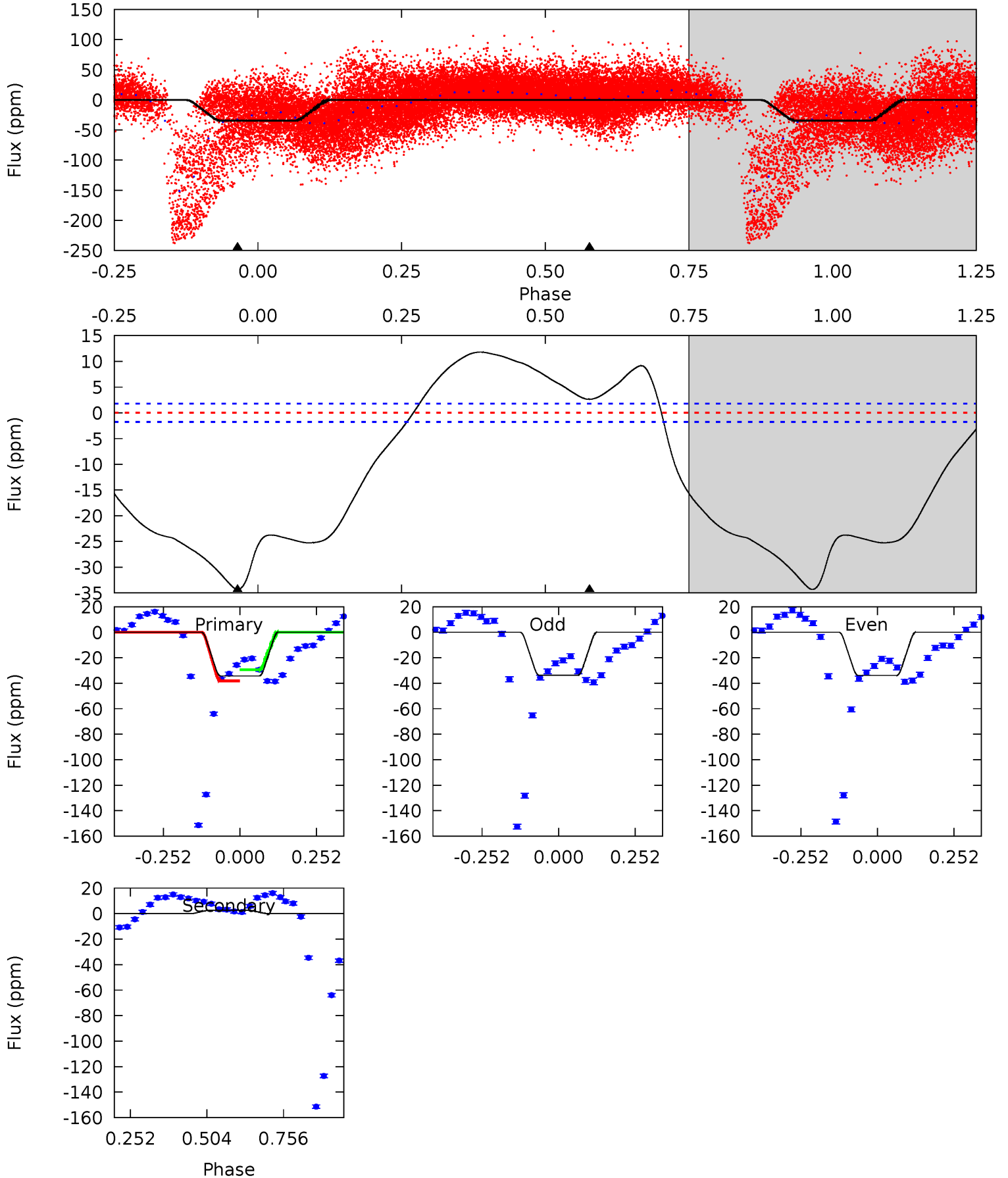
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
6.04	3.07	0	0	4.27	0.86	0.31	6.04	6.04	3.07	3.07	2.56	1.31	0.08	1.88



Alt Model-Shift Uniqueness Test

011442353-03, P = 1.315140 Days, E = 130.965610 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
84.6	-6.48	0	0	4.37	1.15	11.4	84.6	84.6	-6.48	-6.48	0.07	1.69	0.26	11.9



Stellar Parameters For KIC 011442353

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	7857^{+217}_{-354}	$3.698^{+0.424}_{-0.106}$	$0.020^{+0.200}_{-0.350}$	$3.385^{+0.678}_{-1.582}$	$2.086^{+0.326}_{-0.530}$	$0.076^{+0.289}_{-0.027}$
	+3%/-5%	+11%/-3%	+1000%/-1750%	+20%/-47%	+16%/-25%	+381%/-35%
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 011442353-03 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-1 ± 0	$0.64^{+0.55}_{-0.38}$	4949^{+412}_{-555}	4506^{+3281}_{-7937}	$0.758^{+3.814}_{-0.556}$
Alt.	3 ± 0	$2.44^{+0.81}_{-0.76}$	5016^{+365}_{-558}	-4726^{+270}_{-314}	$-0.221^{+0.094}_{-0.218}$

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 $A_{obs} \gg 1.0$

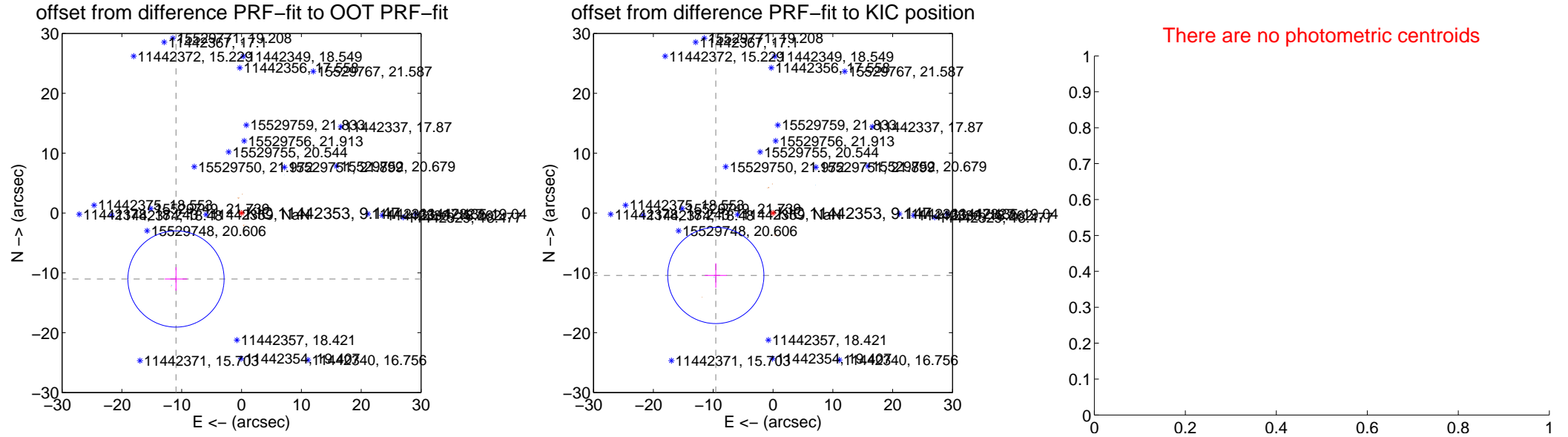
DV Centroid Data

Supplemental centroid analysis for 011442353-03. **Kepler magnitude: 9.15.** Transit SNR 5.58

There are 4 quarters with good PRF difference image offsets

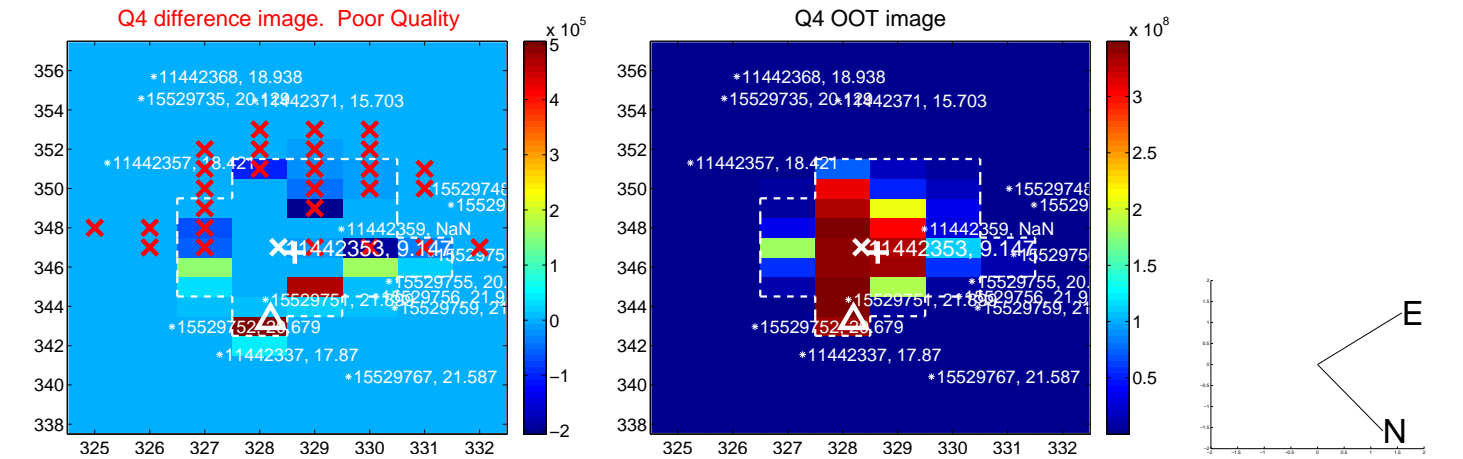
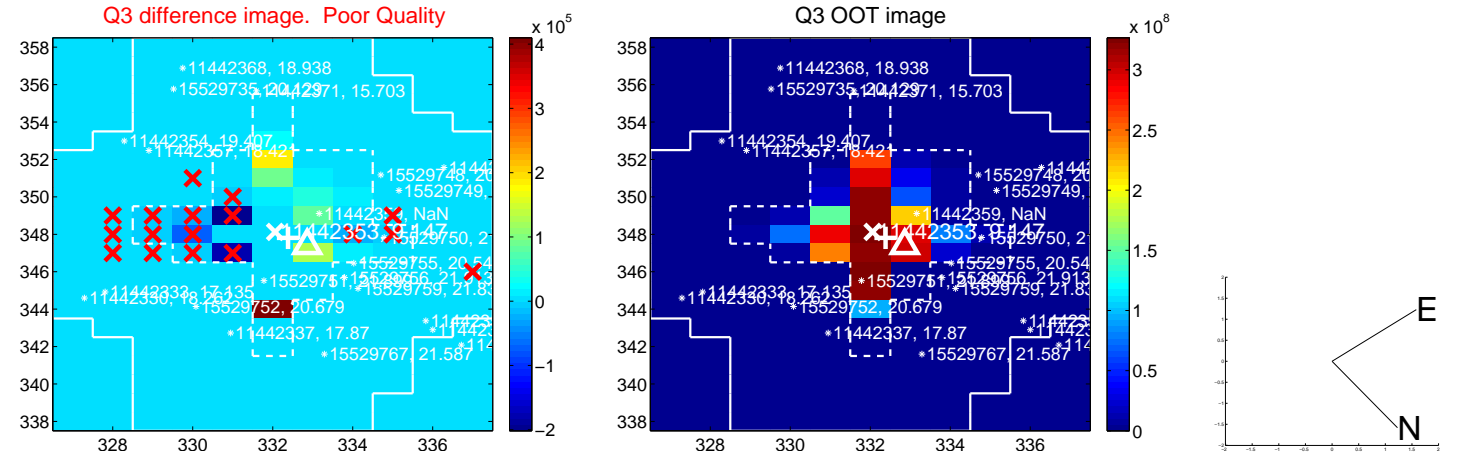
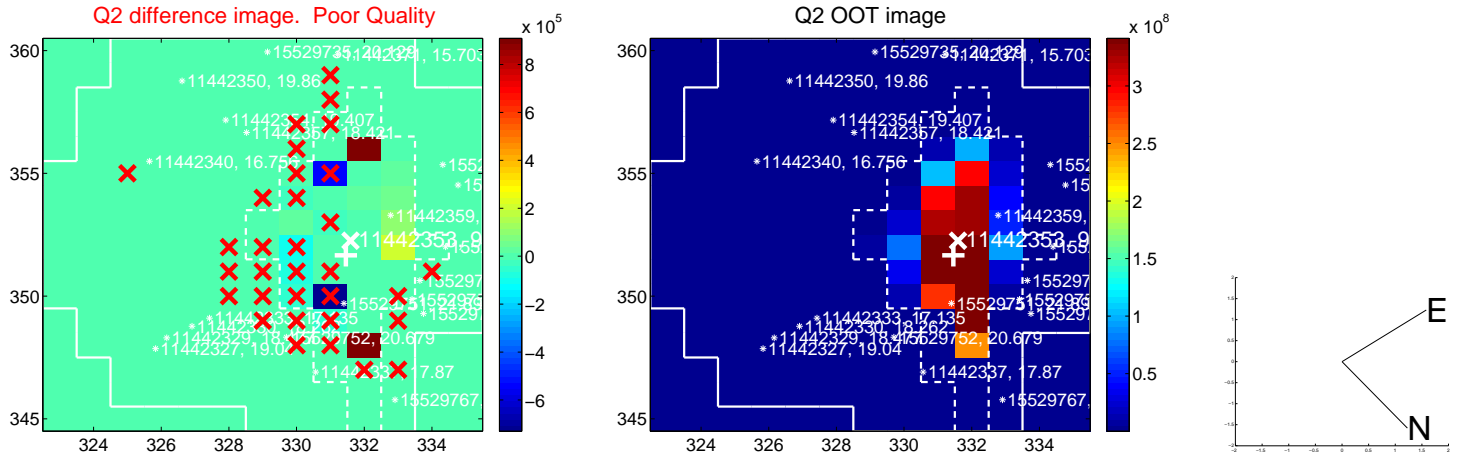
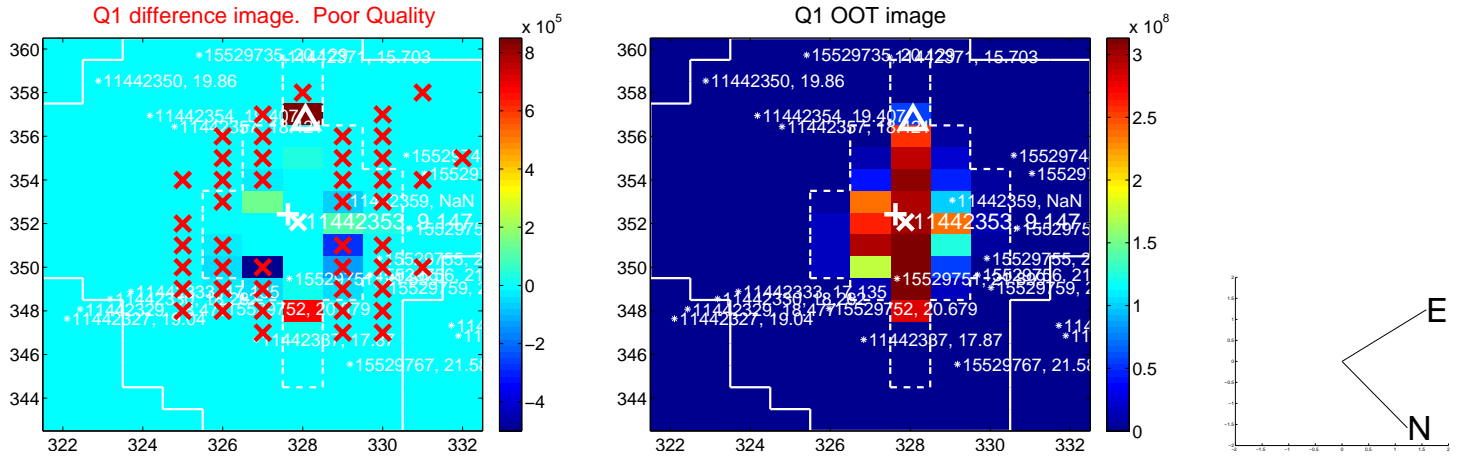
The direct PRF centroid is offset from the target star catalog position by about 1.65 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	15.539 \pm 2.680	5.80	10.953 \pm 1.866	-11.023 \pm 1.960
PRF-fit source offset from KIC position	14.152 \pm 2.679	5.28	9.560 \pm 1.833	-10.435 \pm 2.054
photometric centroid source offset	—	—	—	—

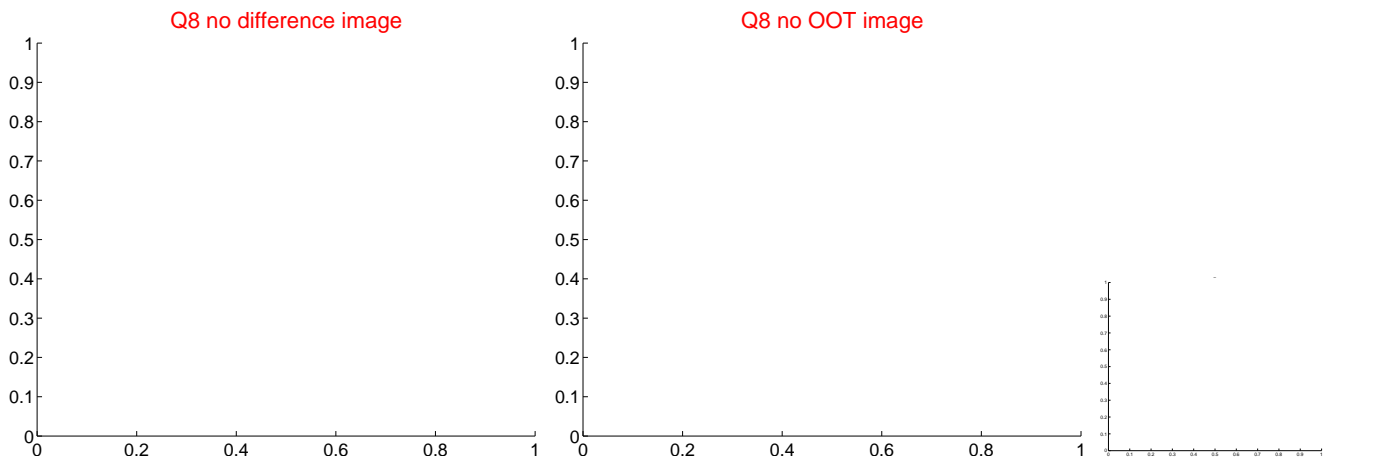
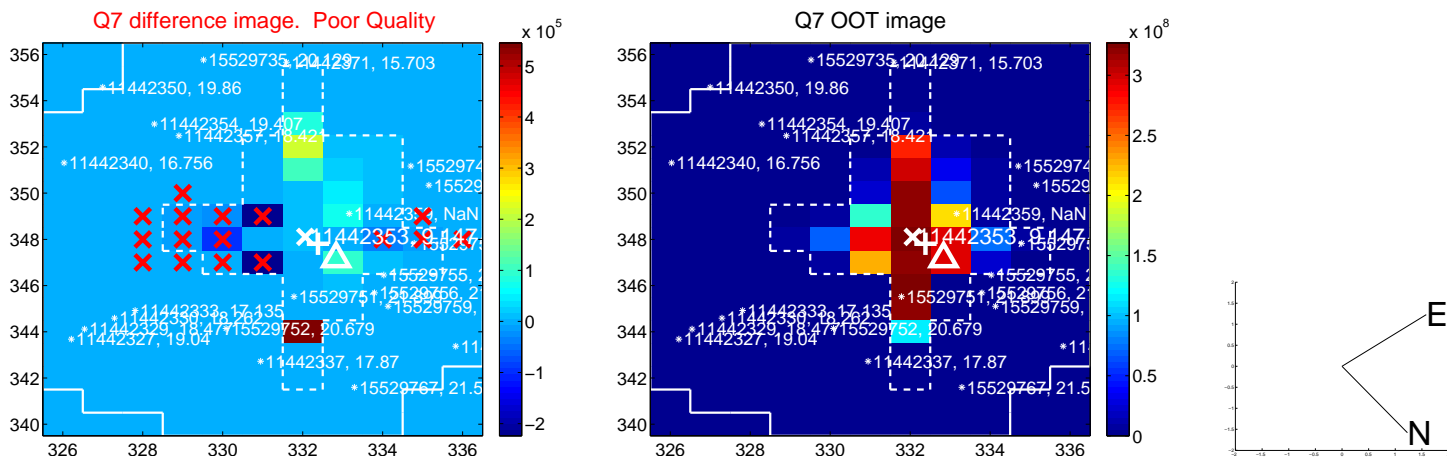
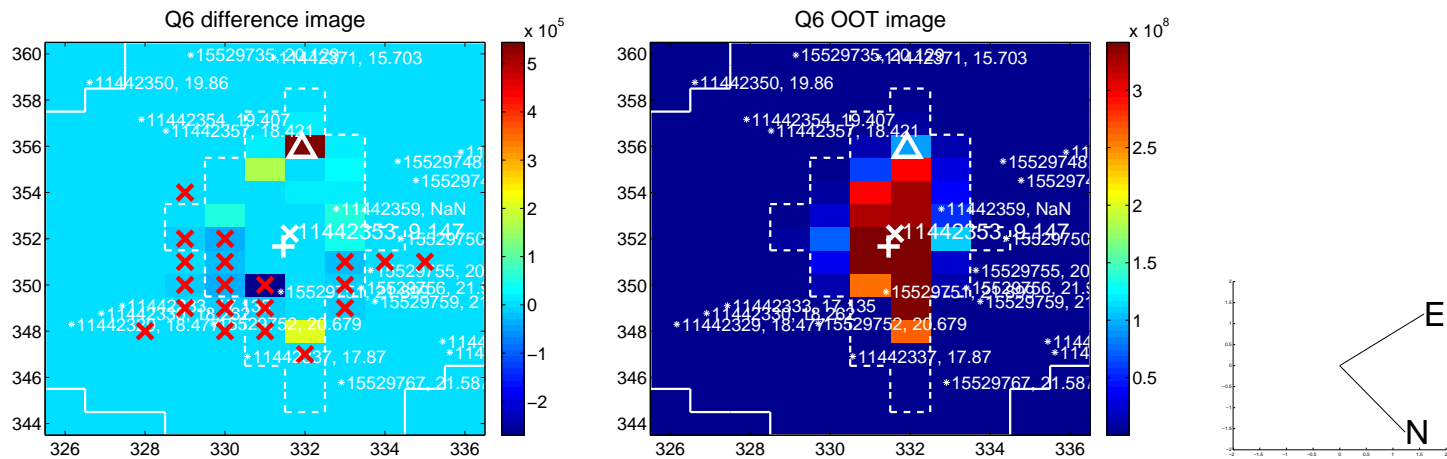
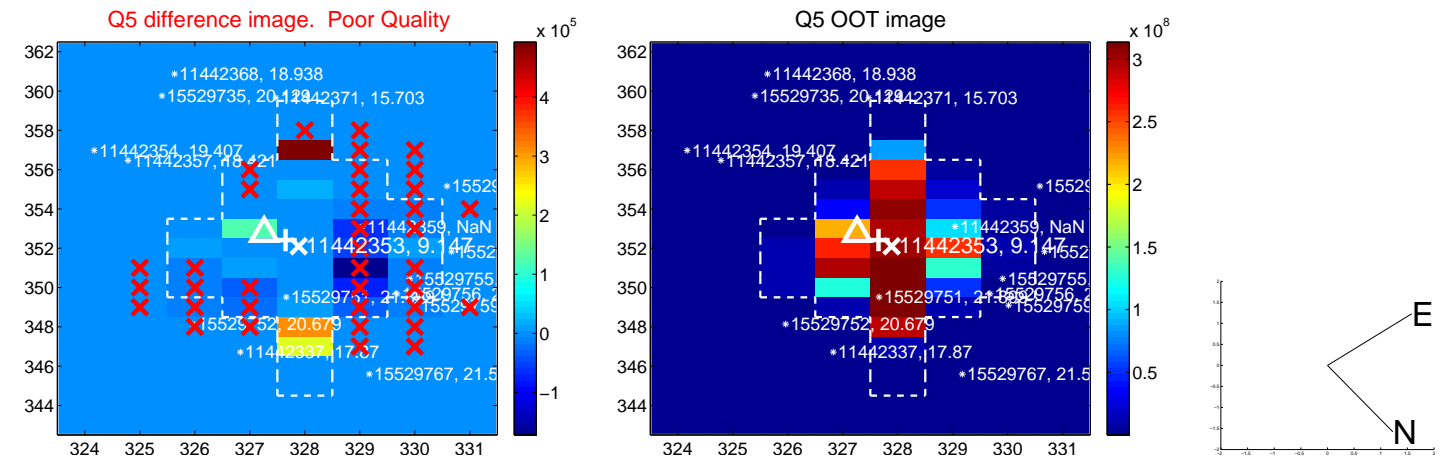


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets;** magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

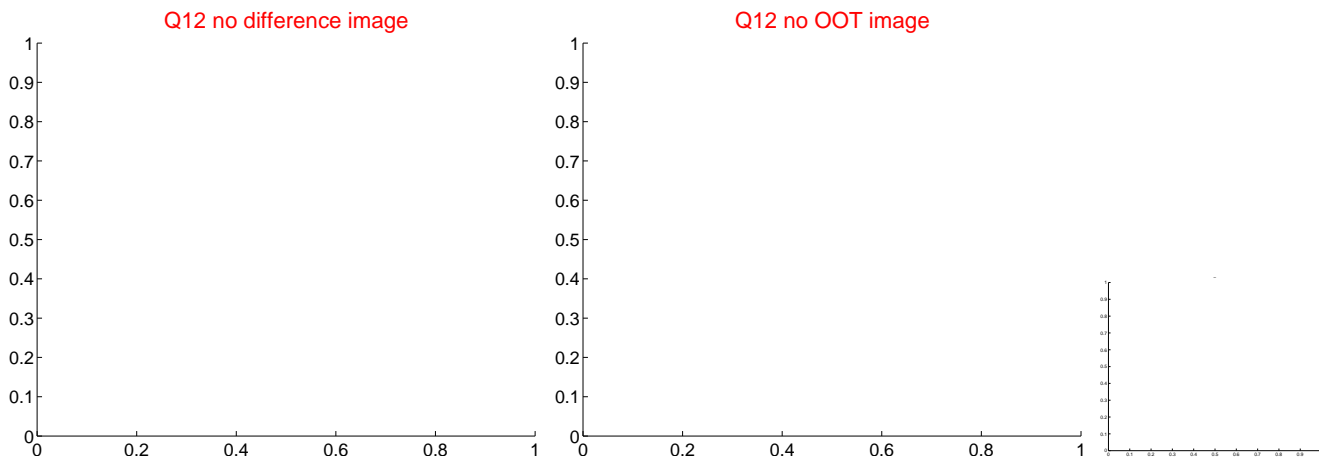
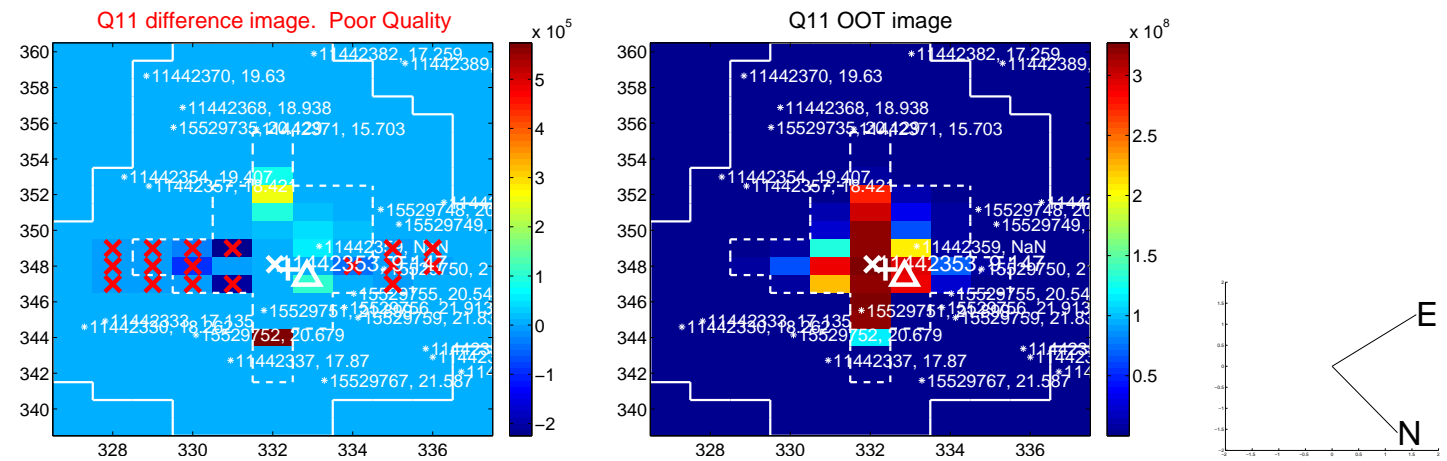
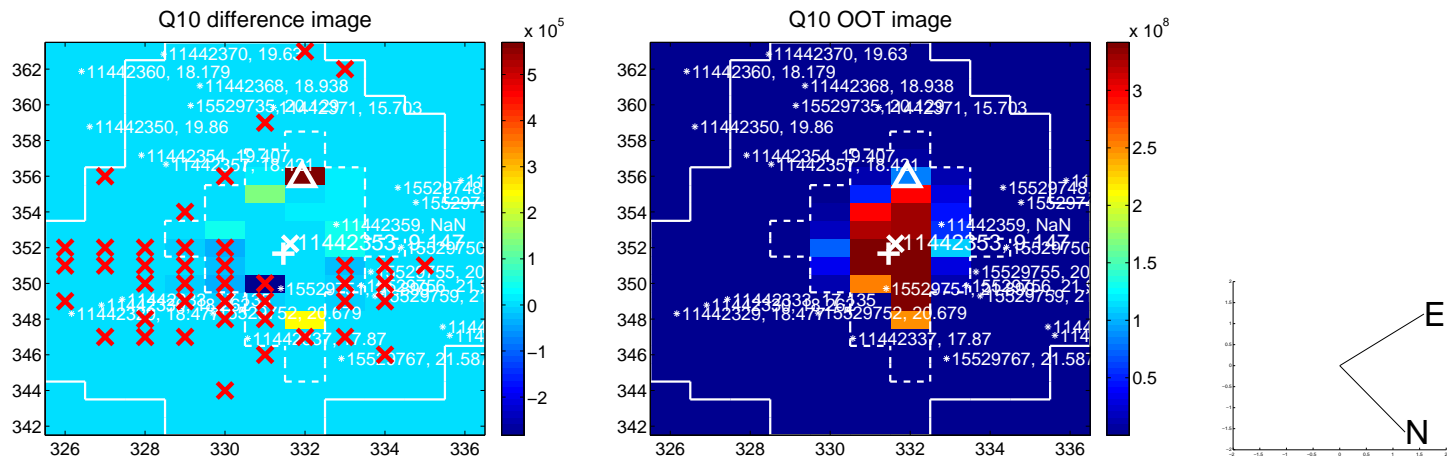
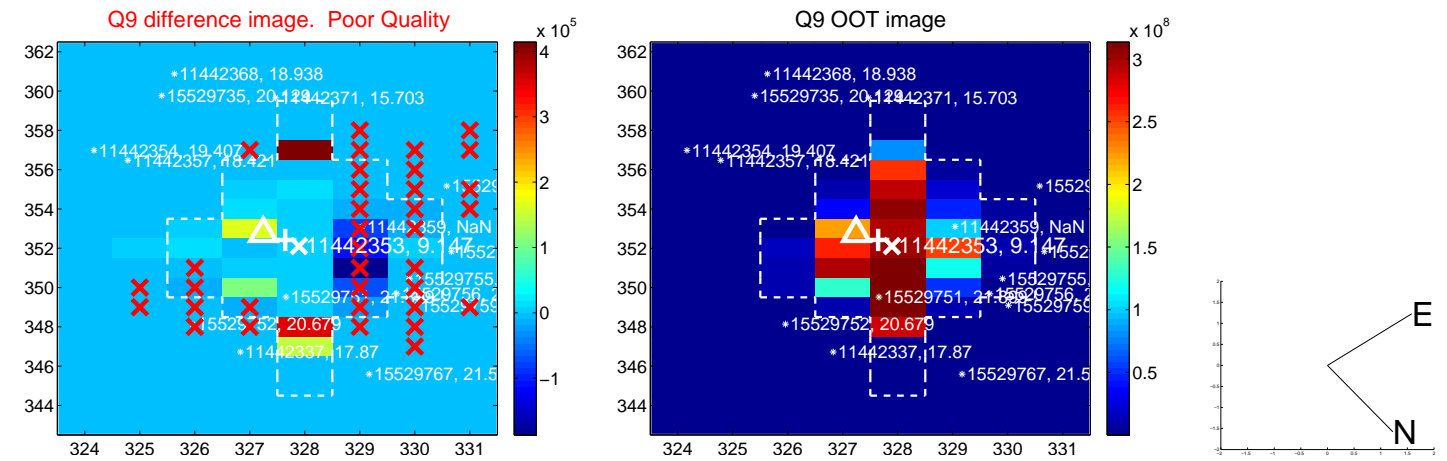
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



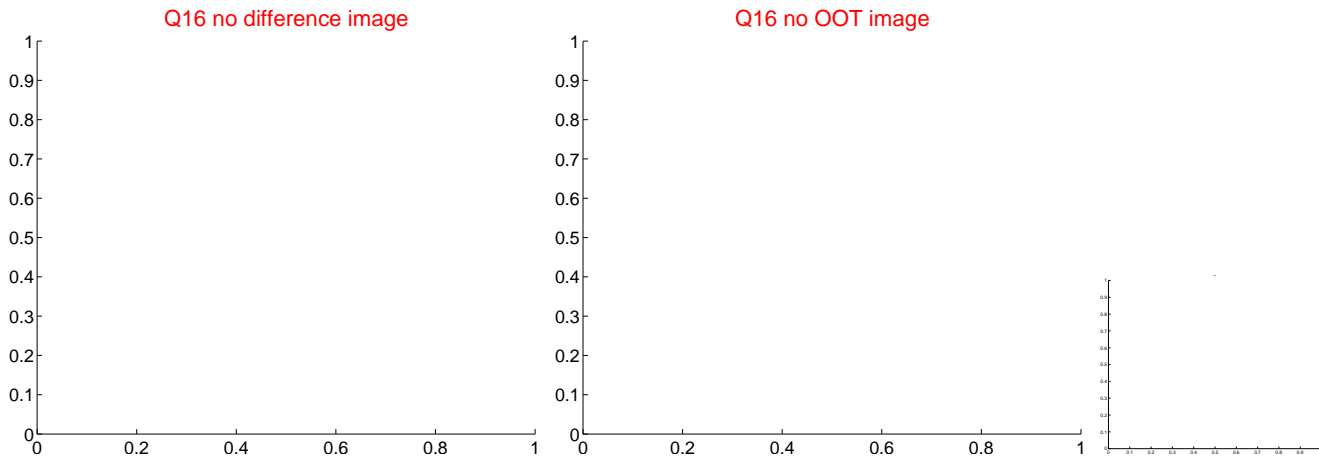
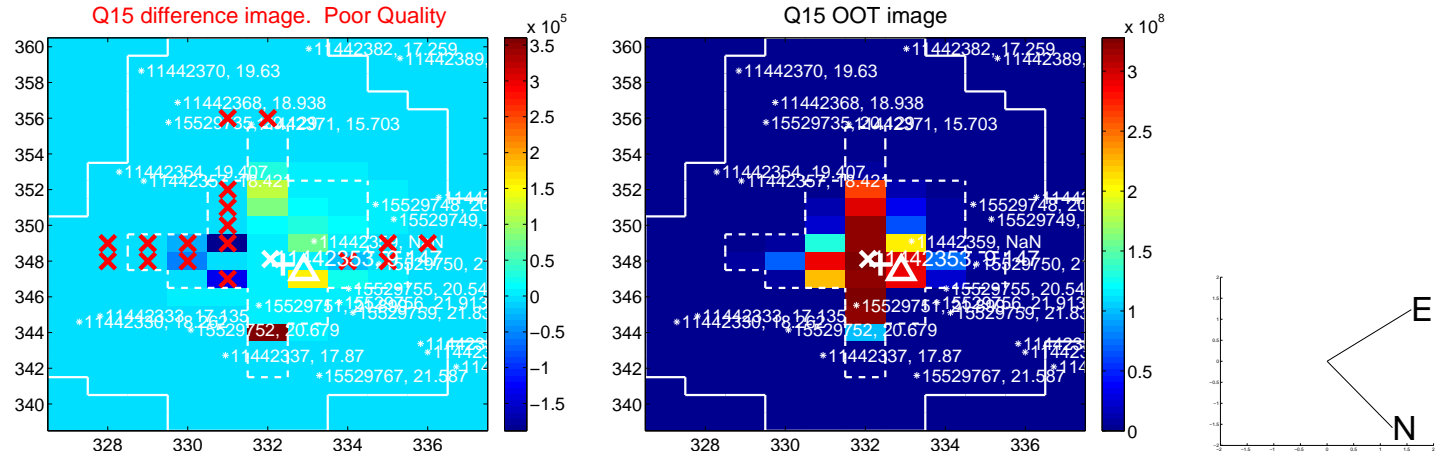
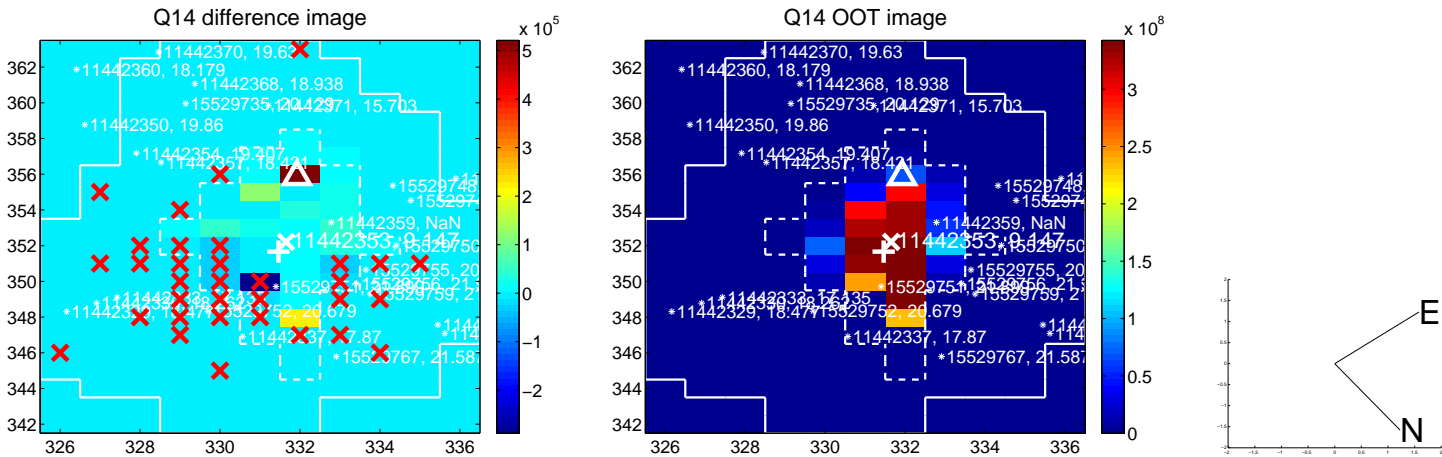
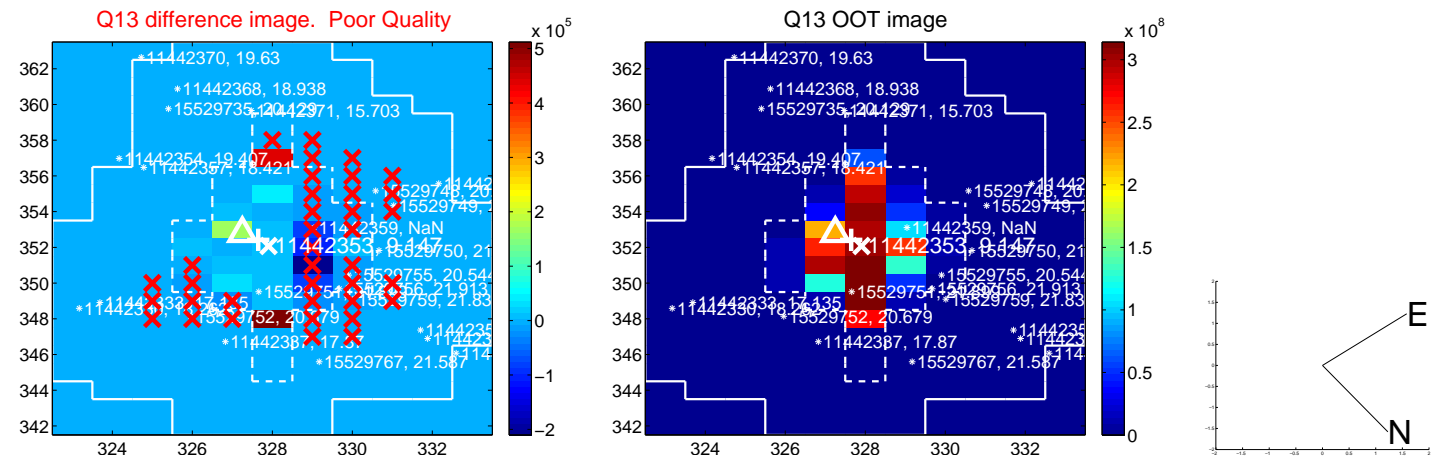
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



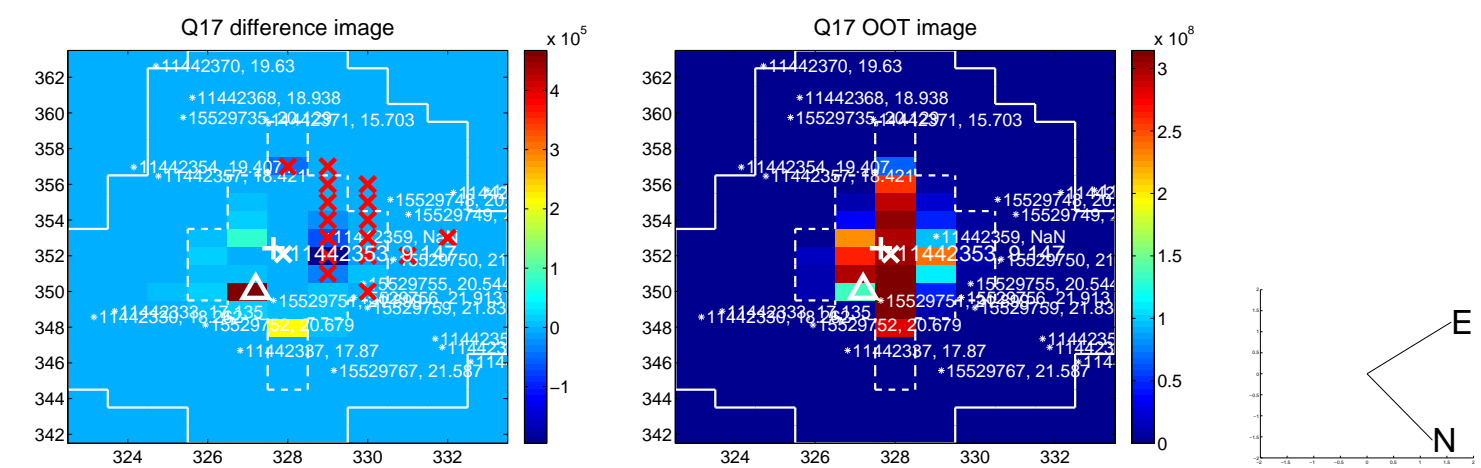
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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folded centroid time series figure for this object.

UKIRT Image

