

KIC 011152625

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})
011152625-01	OBS	No	0.659923	131.676243	41.2	0.945	11.0	9.4	1.88	7606	1.39	34911.39
011152625-02	OBS	No	0.659928	131.832199	31.6	1.548	9.8	8.5	1.88	7606	1.23	34911.07
011152625-03	OBS	No	0.660577	131.854682	45.4	2.231	9.5	10.1	1.88	7606	1.47	34865.29
011152625-04	OBS	No	4.610766	135.583996	81.3	12.117	7.8	10.2	1.88	7606	1.89	2613.73
011152625-05	OBS	No	5.265034	135.495765	158.7	2.061	7.3	7.0	1.88	7606	2.74	2189.89
011152625-06	OBS	No	27.901738	156.827464	345.1	2.533	7.6	8.3	1.88	7606	4.01	237.02

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
011152625-01	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT
011152625-02	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—SAME_NTL_PERIOD
011152625-03	OBS	FP	0.00	1	0	0	0	TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT
011152625-04	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_SKYE_ZUMA—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_ALT
011152625-05	OBS	FP	0.00	1	0	1	0	INDIV_TRANS_RUBBLE_ZUMA—TRANS_GAPPED—MOD_NONUNIQ_ALT—MOD_TER_ALT—HALO_GHOST
011152625-06	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_SKYE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_FEW_DIFFS

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

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

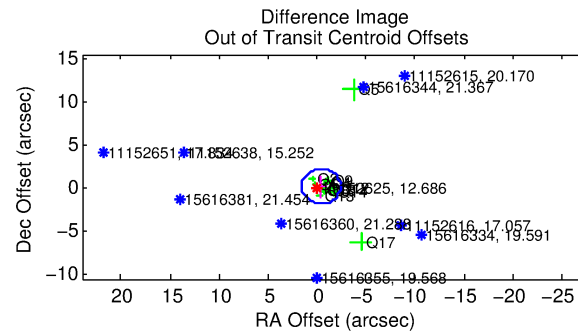
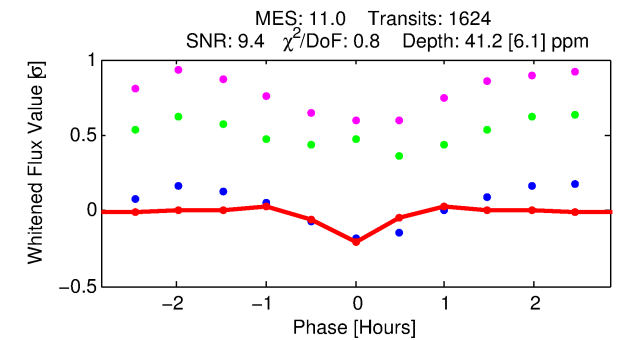
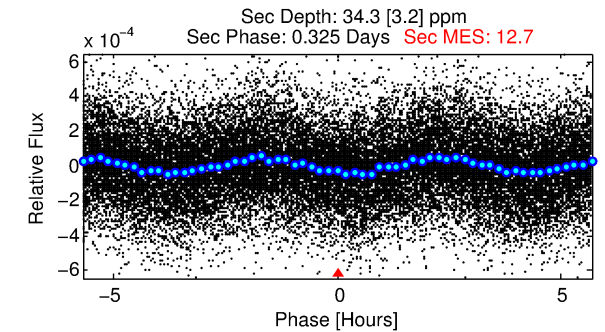
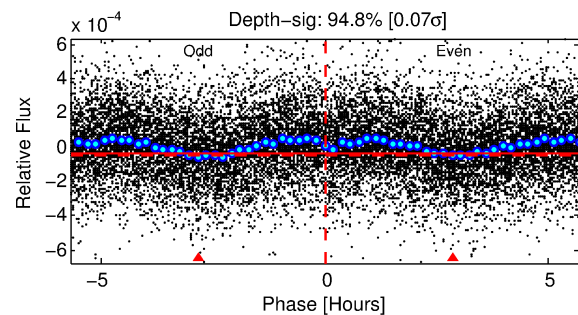
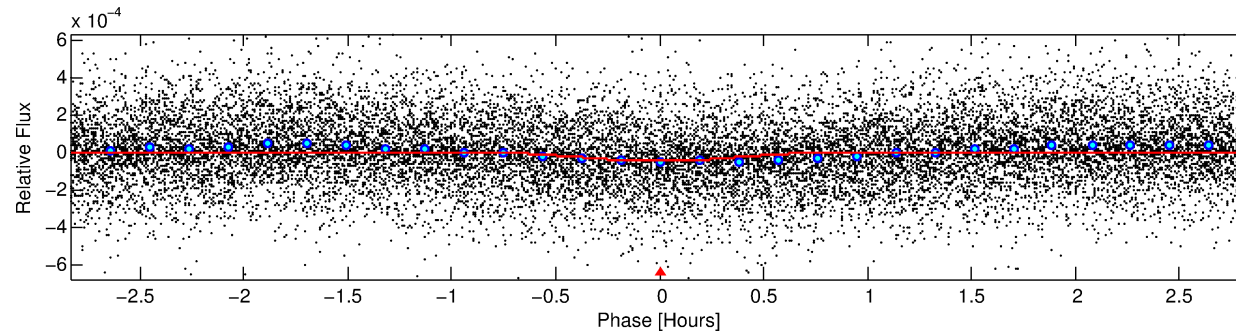
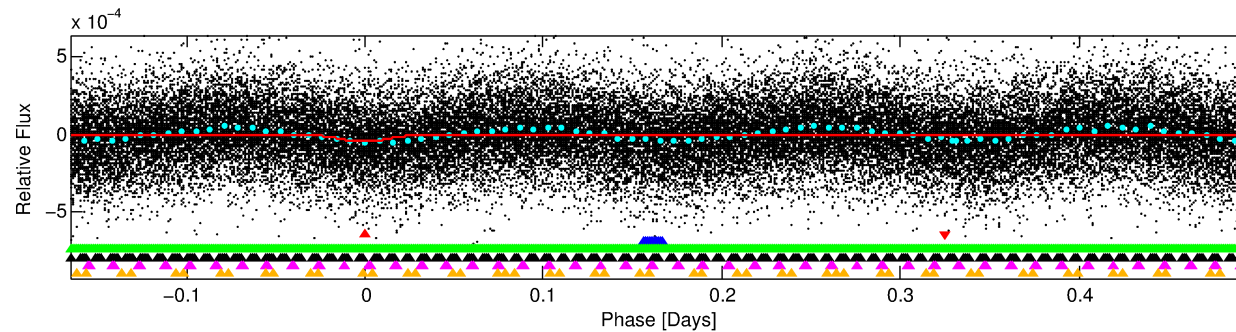
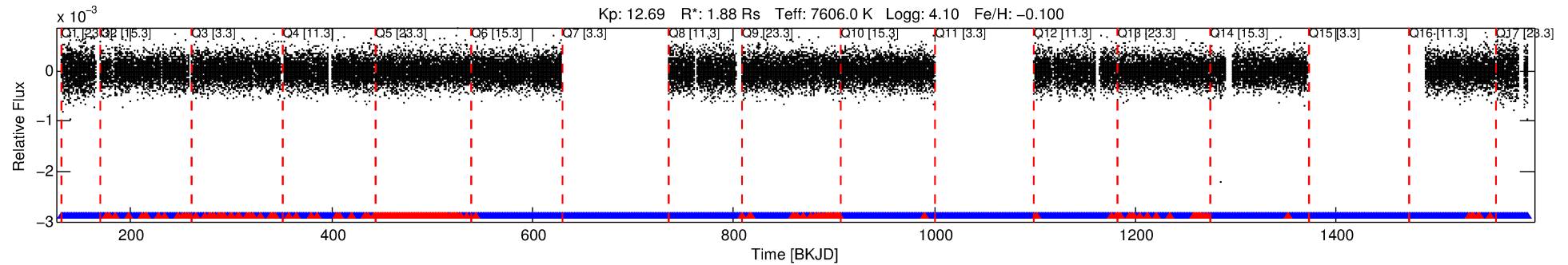
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 011152625-01

No Significant Match Found

DV One-Page Summary

KIC: 11152625 Candidate: 1 of 6 Period: 0.660 d



DV Fit Results:

Period = 0.65992 [0.00001] d
Epoch = 131.6762 [0.0015] BKJD
Rp/R* = 0.0068 [0.0014]
a/R* = 2.76 [3.13]
b = 0.88 [0.33]
Seff = 34911.39 [12827.50]
Teq = 3486 [320] K
Rp = 1.39 [0.49] Re
a = 0.0174 [0.0040] AU
Ag = 2.97 [1.62] [1.22 σ]
Teffp = 7075 [823] K [4.06 σ]

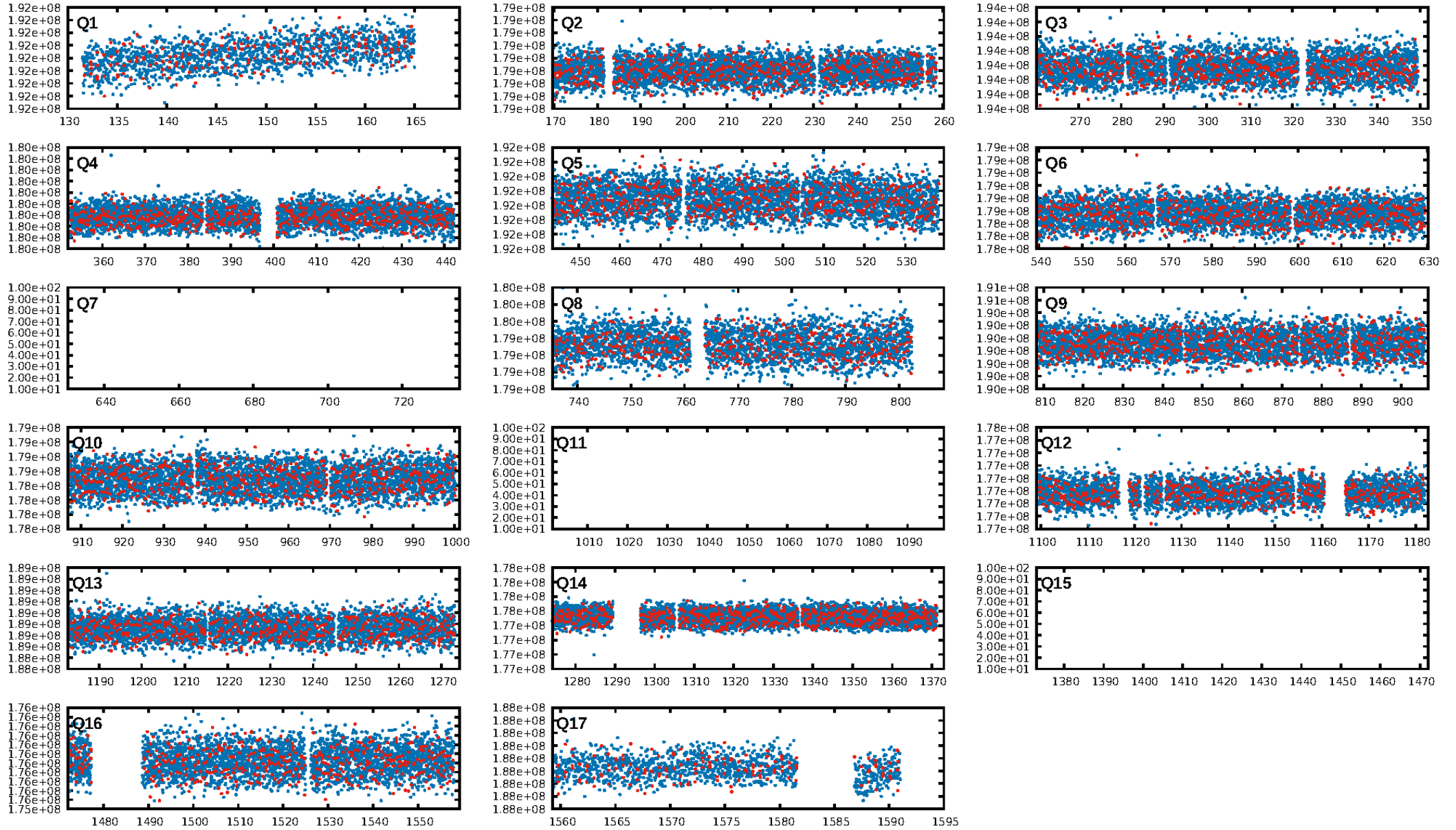
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: 0.0% [0.00 σ]
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 2.75e-16
RollingBand-fgt: 0.85 [1309/1532]
GhostDiagnostic-chr: 1.397
Centroid-sig: 87.5%
Centroid-so: 0.388 arcsec [0.52 σ]
OotOffset-rm: 0.464 arcsec [0.70 σ]
OotOffset-st: 3/0/4/4 [11]
KicOffset-rm: 0.474 arcsec [0.58 σ]
KicOffset-st: 3/0/4/4 [11]
DiffImageQuality-fgm: 0.82 [9/11]
DiffImageOverlap-fno: 0.00 [0/14]

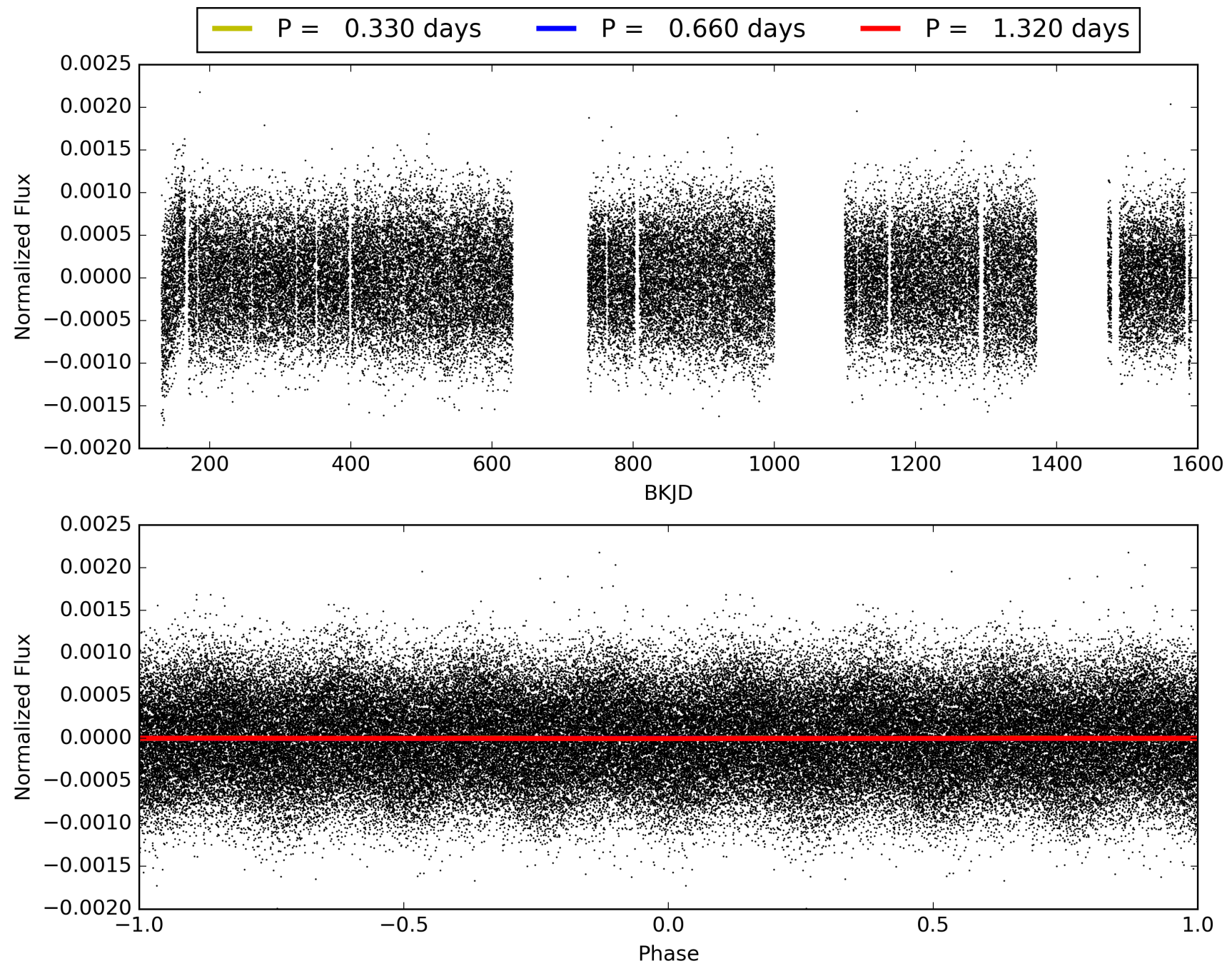
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 01-Feb-2016 07:09:59 Z

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

TCE 011152625-01, PDC Light Curves

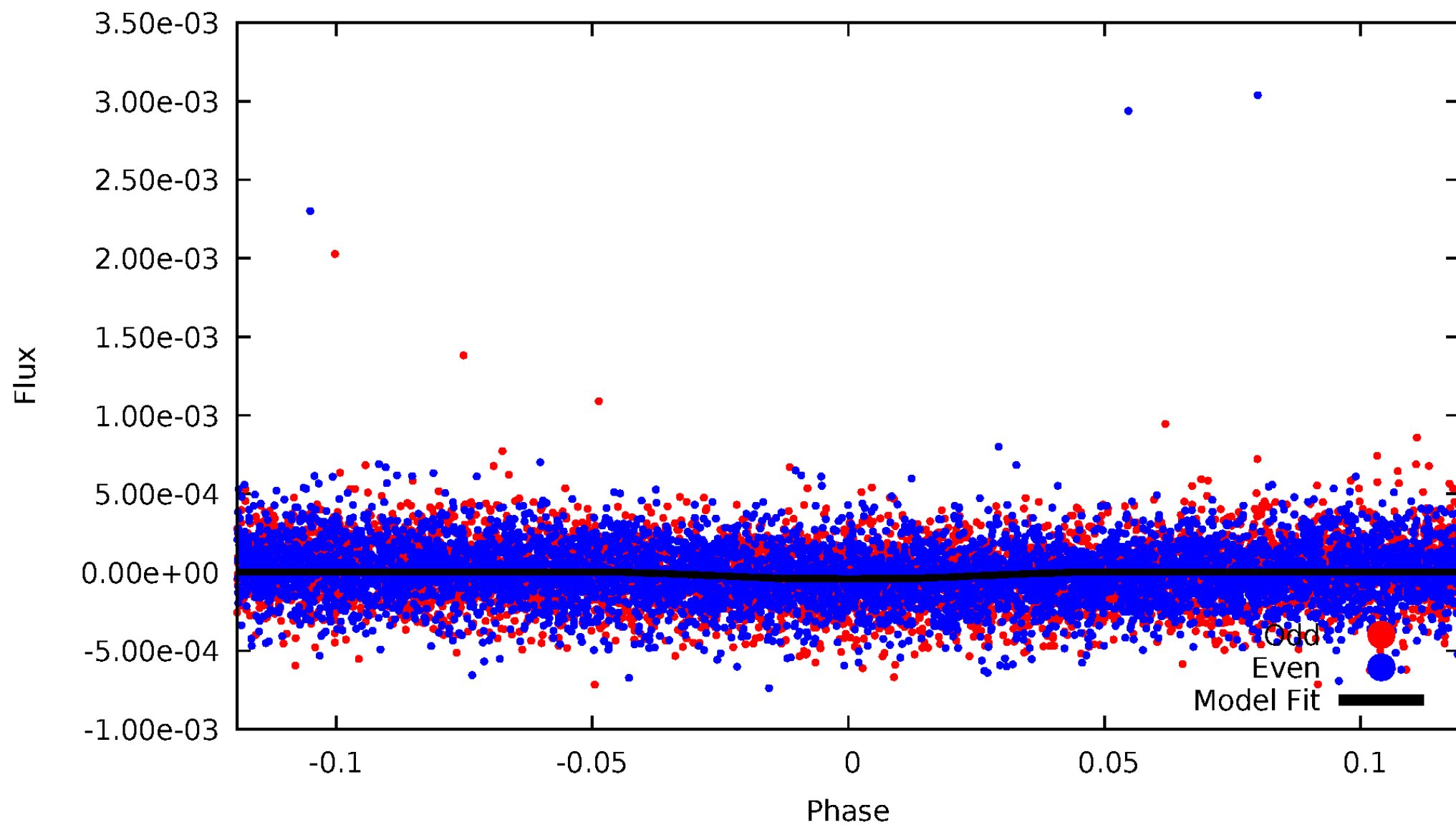


TCE 011152625-01



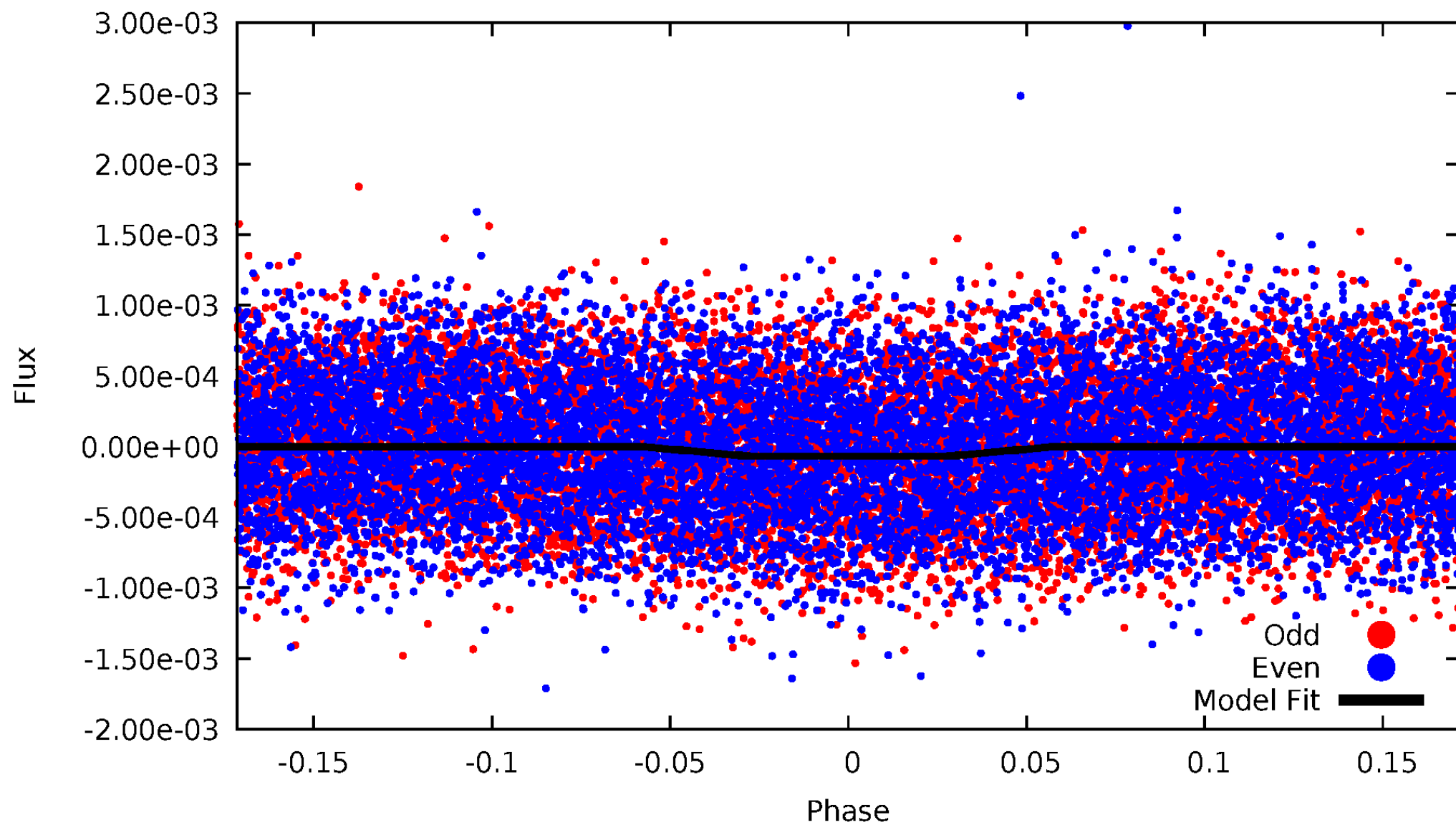
DV Odd/Even

TCE 011152625-01

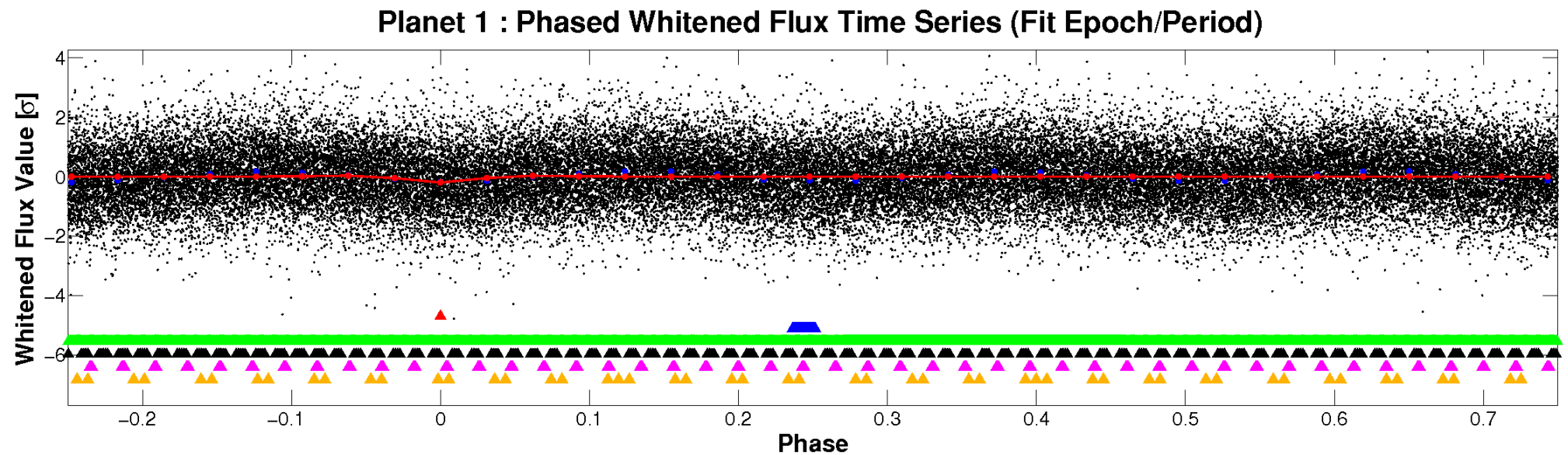
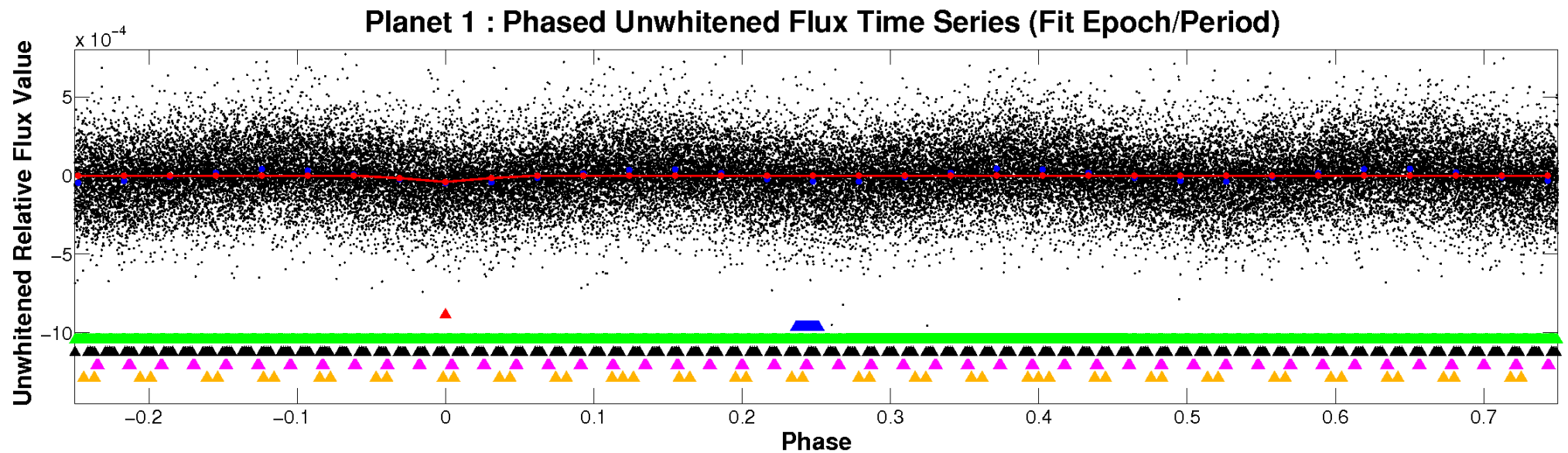


ALT Odd/Even

TCE 011152625-01

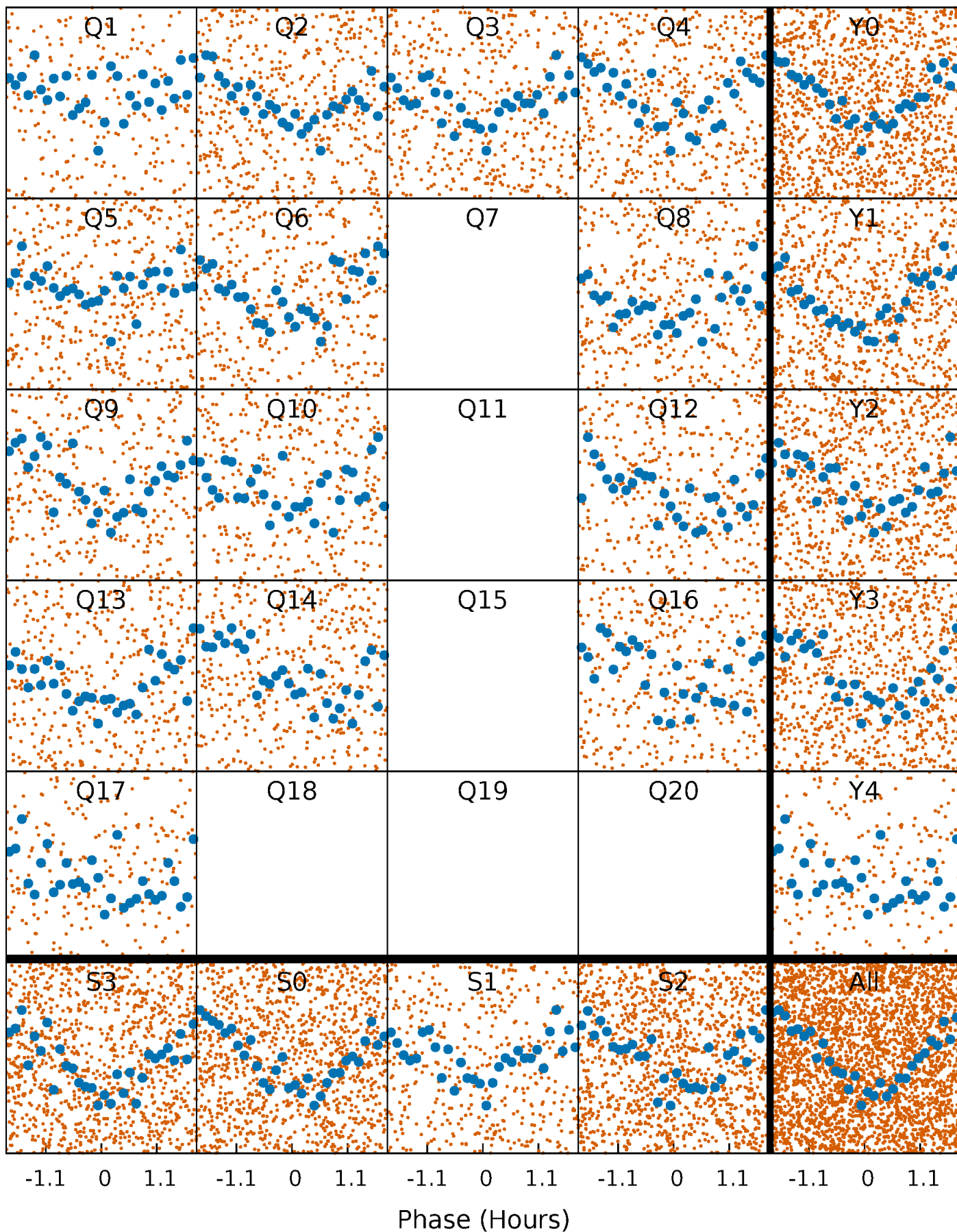


Non-Whitened Vs. Whitened Light Curve



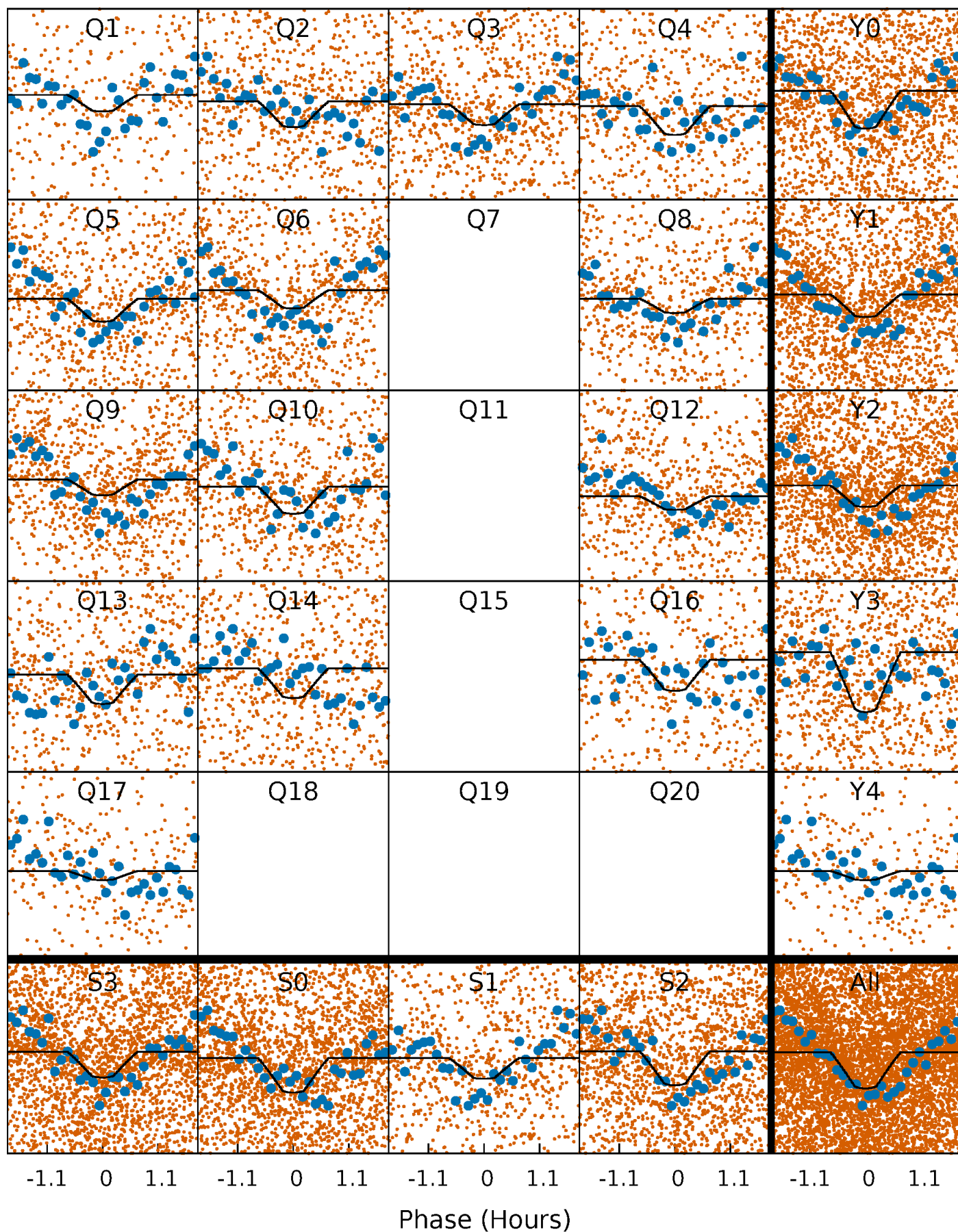
PDC Quarter-Phased Transit Curves

TCE 011152625-01 P= 0.659923 Days $T_0=131.676243$ (BKJD)



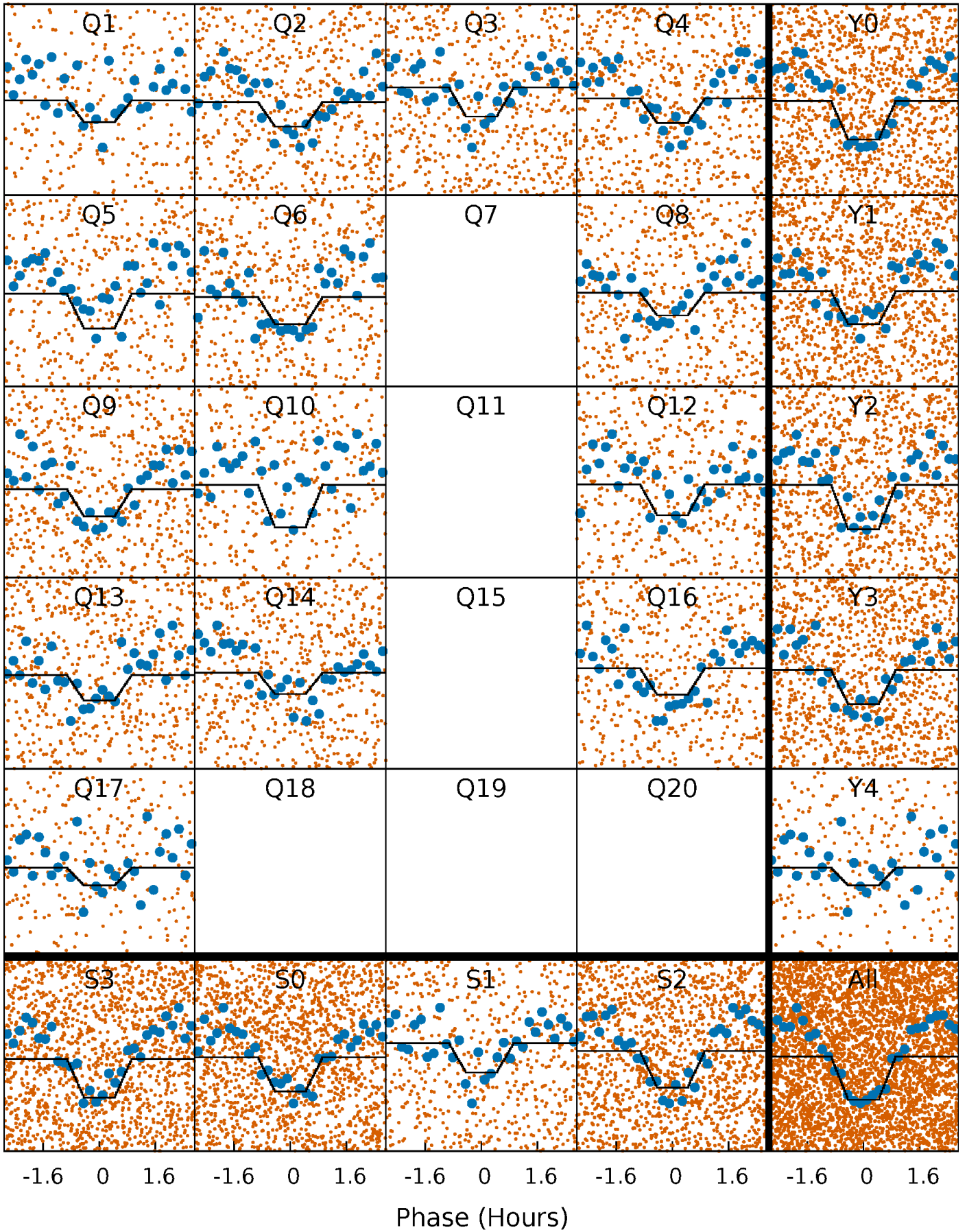
DV Quarter-Phased Transit Curves

TCE 011152625-01 P= 0.659923 Days $T_0=131.676243$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

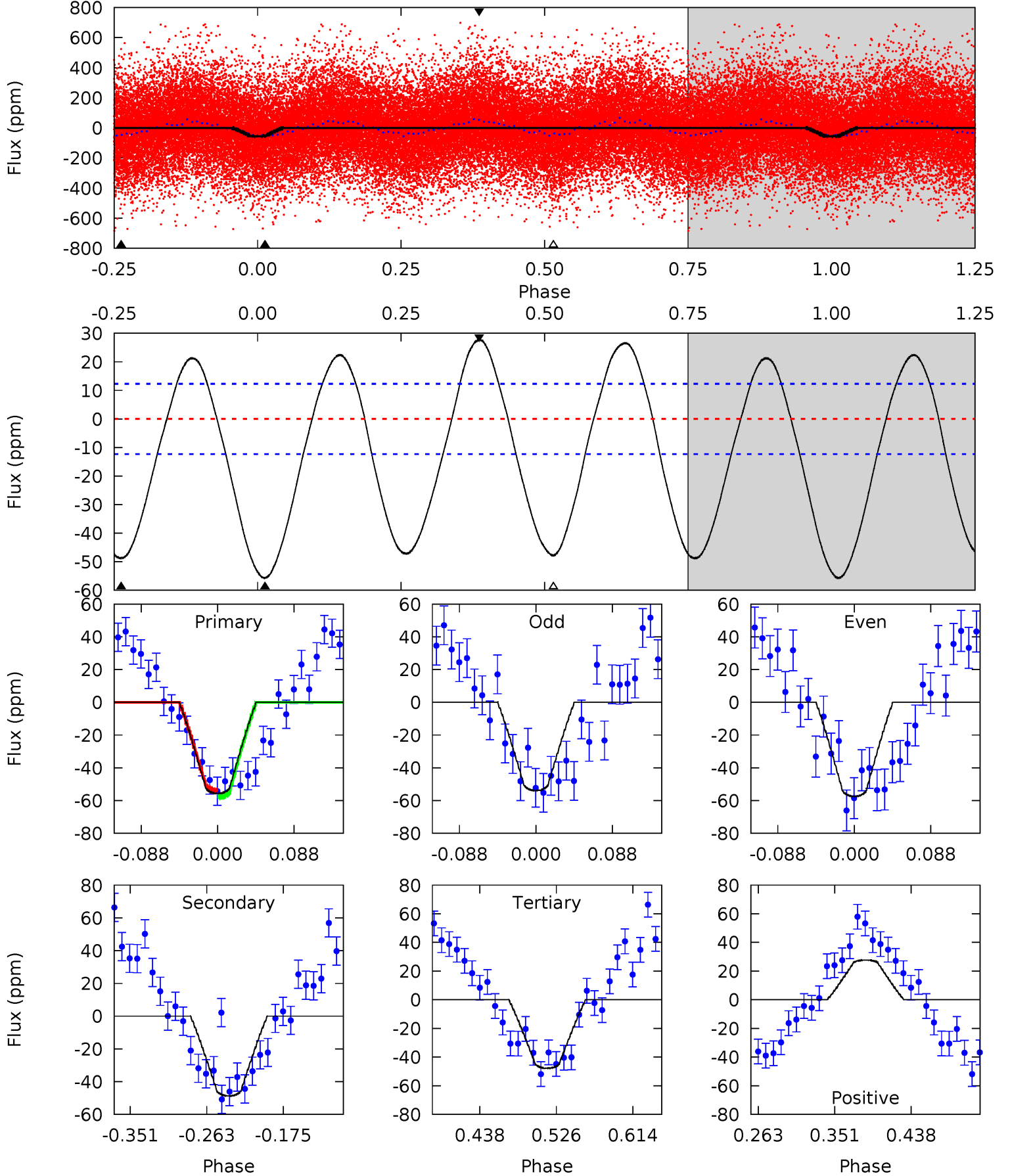
TCE 011152625-01 P= 0.659933 Days $T_0=131.673614$ (BKJD)



DV Model-Shift Uniqueness Test

011152625-01, P = 0.659923 Days, E = 131.016320 Days

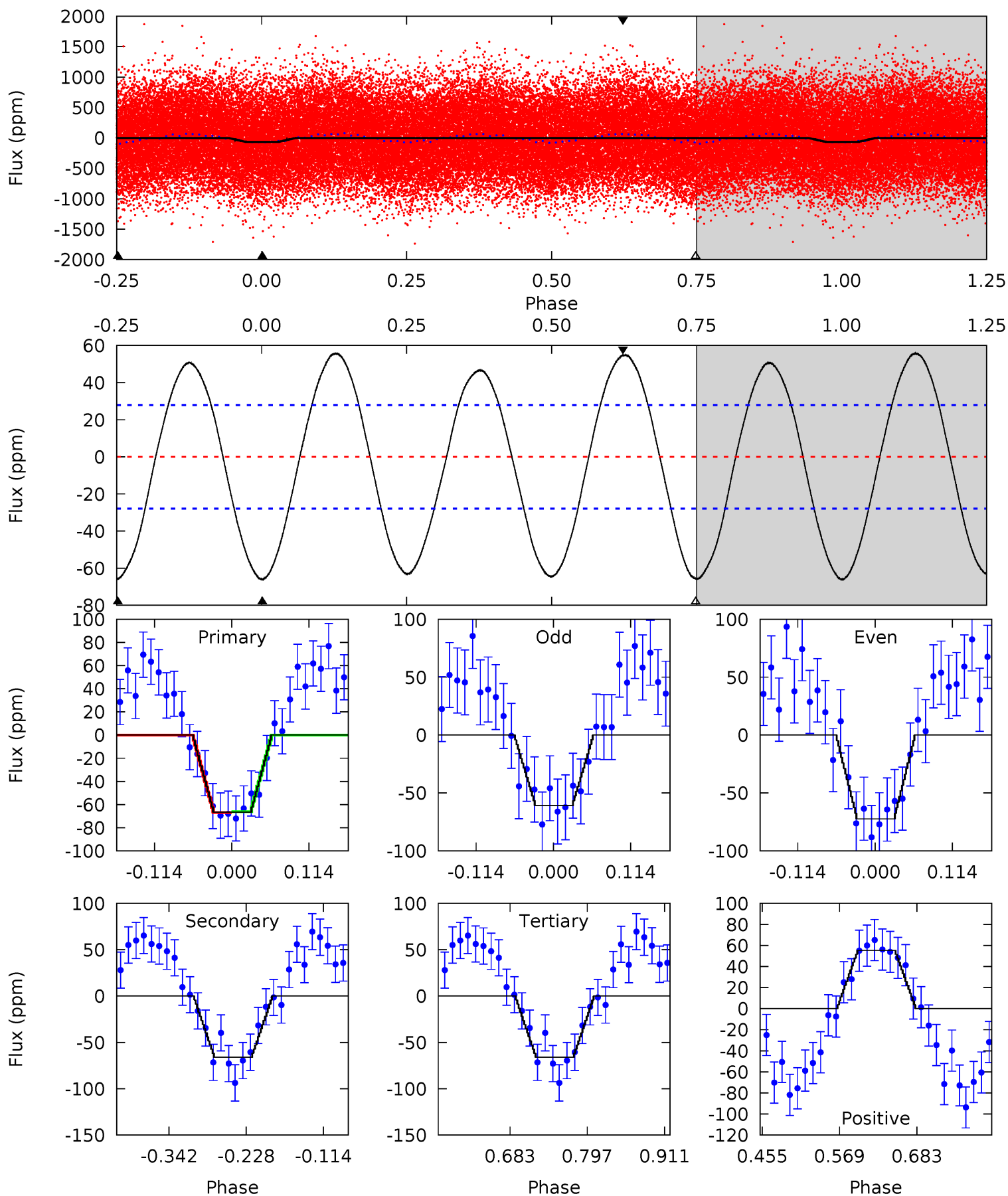
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
20.8	18.2	17.8	10.3	4.59	1.71	9.44	2.95	10.4	0.35	7.85	0.66	0.99	0.33	0.72



Alt Model-Shift Uniqueness Test

011152625-01, P = 0.659933 Days, E = 131.013681 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
10.8	10.7	10.7	8.97	4.54	1.58	6.80	0.07	1.83	0.01	1.77	0.94	0.86	0.46	0.06



Stellar Parameters For KIC 011152625

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	7606^{+211}_{-316}	$4.099^{+0.144}_{-0.176}$	$-0.100^{+0.200}_{-0.350}$	$1.880^{+0.523}_{-0.428}$	$1.617^{+0.197}_{-0.263}$	$0.343^{+0.287}_{-0.156}$
	+3%/-4%	+4%/-4%	+200%/-350%	+28%/-23%	+12%/-16%	+84%/-45%
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 011152625-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-49 ± 3	$1.41^{+0.39}_{-0.35}$	4902^{+360}_{-375}	7484^{+1327}_{-895}	$4.036^{+3.062}_{-1.586}$
Alt.	-66 ± 6	$1.68^{+0.42}_{-0.35}$	4856^{+349}_{-326}	7281^{+935}_{-753}	$3.804^{+2.137}_{-1.284}$

T_{max} = Theoretical Maximum Planetary Temperature

T_{obs} = Observed Planetary Temperature (Assuming $A=0.3$)

A_{obs} = Observed Albedo (Assuming $T=0$)

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

DV Centroid Data

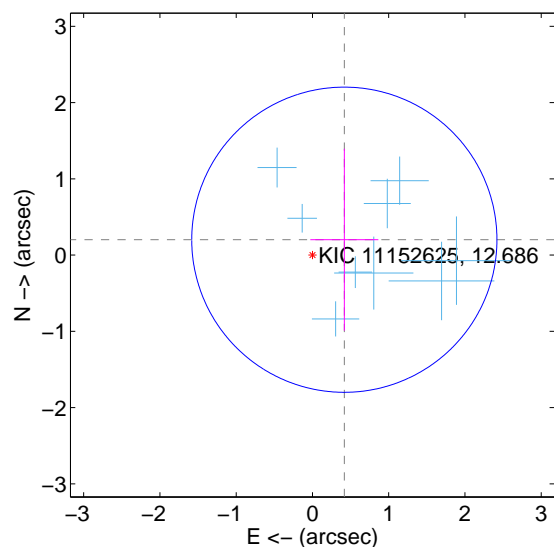
Supplemental centroid analysis for 011152625-01. Kepler magnitude: 12.69. Transit SNR 9.38

There are 9 quarters with good PRF difference image offsets

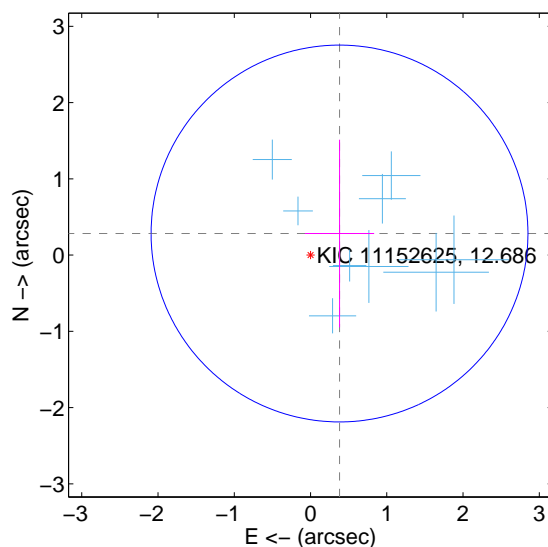
The direct PRF centroid is offset from the target star catalog position by about 0.07 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.464 ± 0.667	0.70	-0.418 ± 0.446	0.202 ± 1.193
PRF-fit source offset from KIC position	0.474 ± 0.824	0.58	-0.380 ± 0.454	0.283 ± 1.230
photometric centroid source offset	0.39 ± 0.75	0.52	0.36 ± 0.75	-0.15 ± 0.77

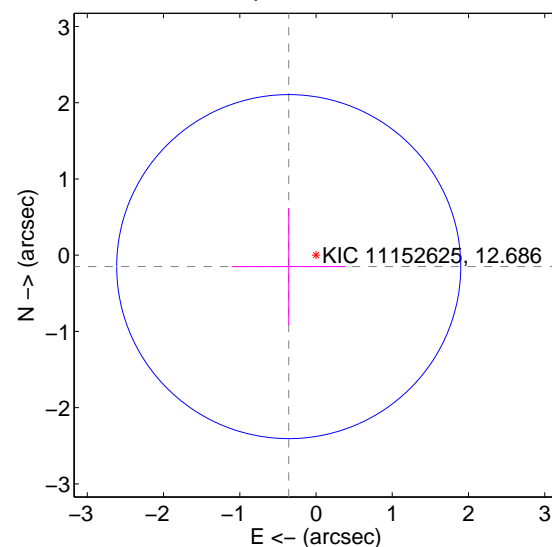
offset from difference PRF-fit to OOT PRF-fit



offset from difference PRF-fit to KIC position

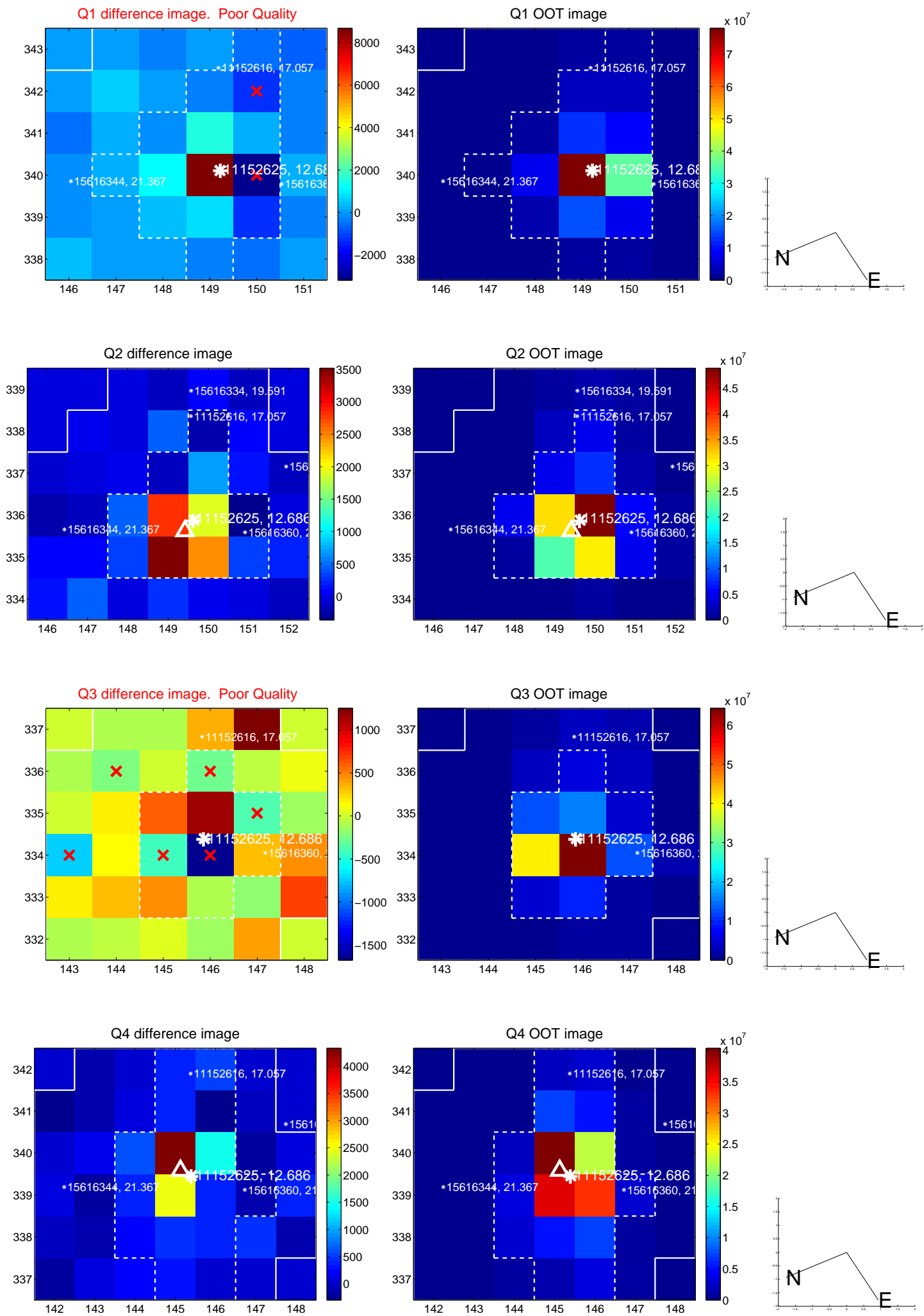


offset from photometric centroids

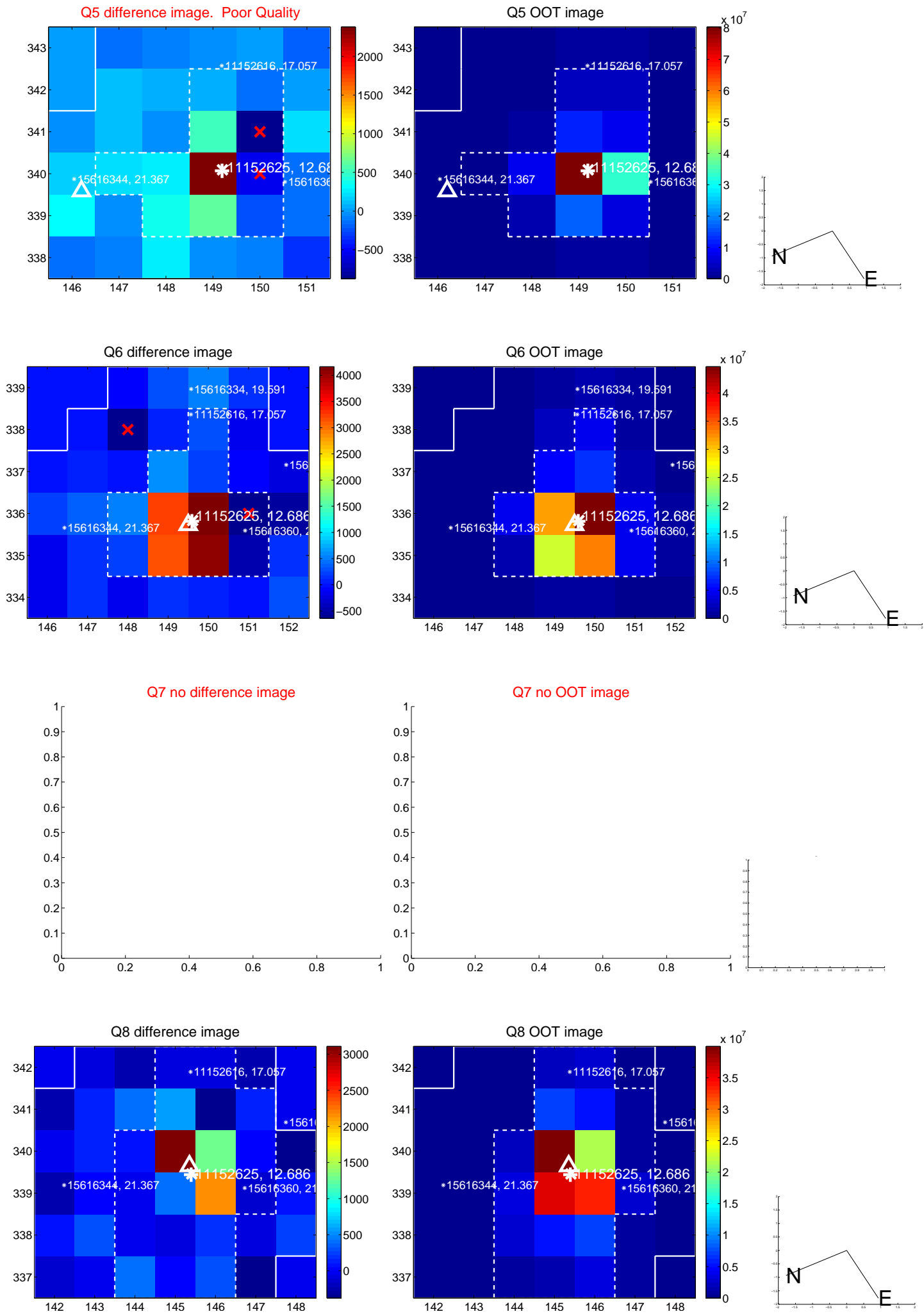


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses:** good quarterly centroid offsets; **Vermillion crosses:** bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

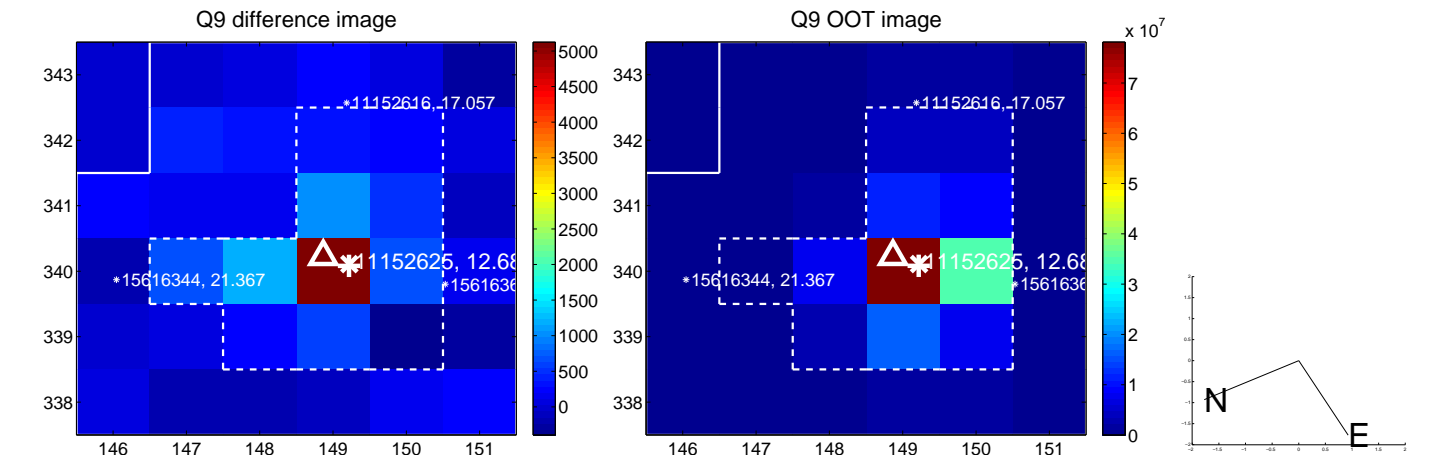
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



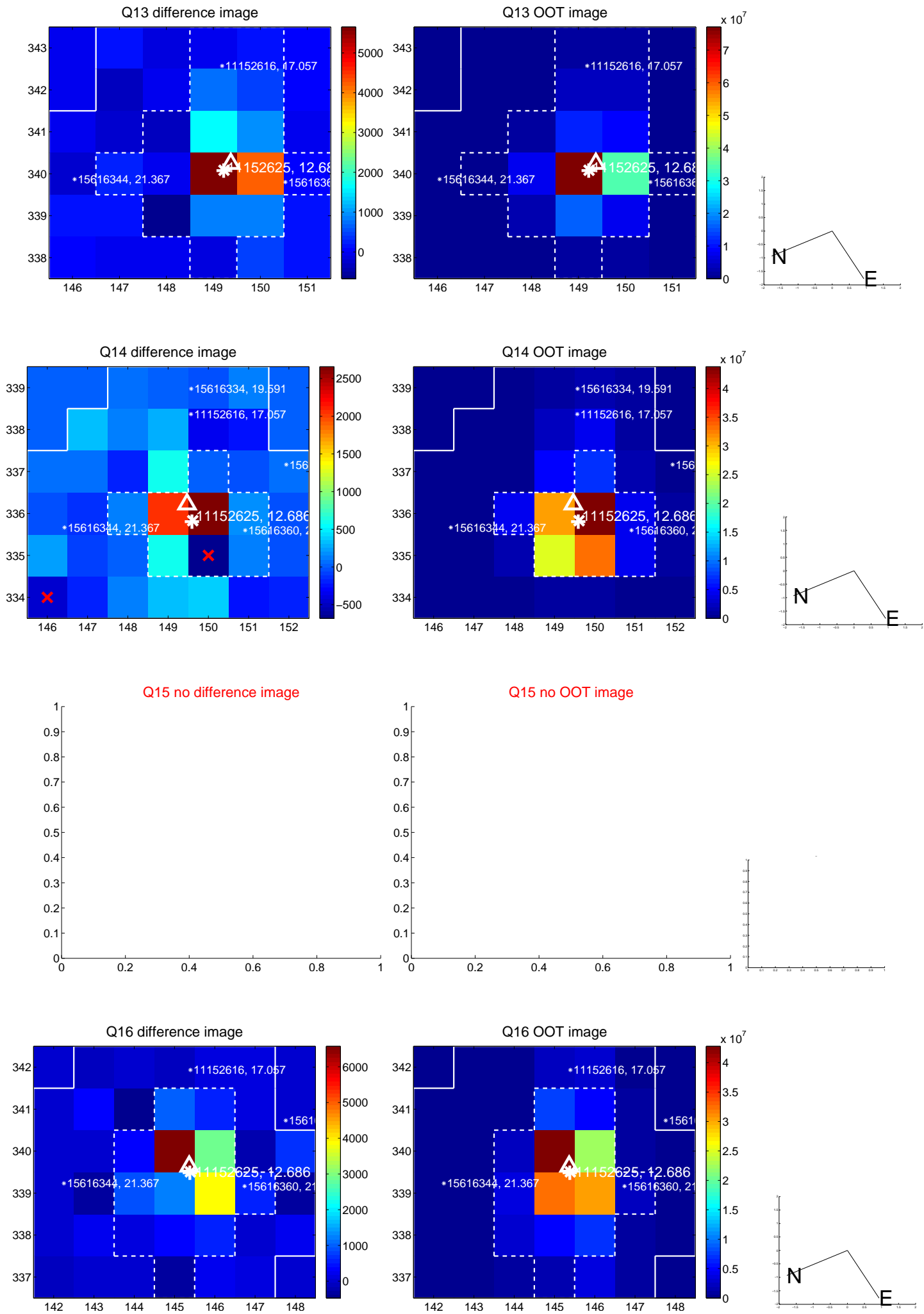
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



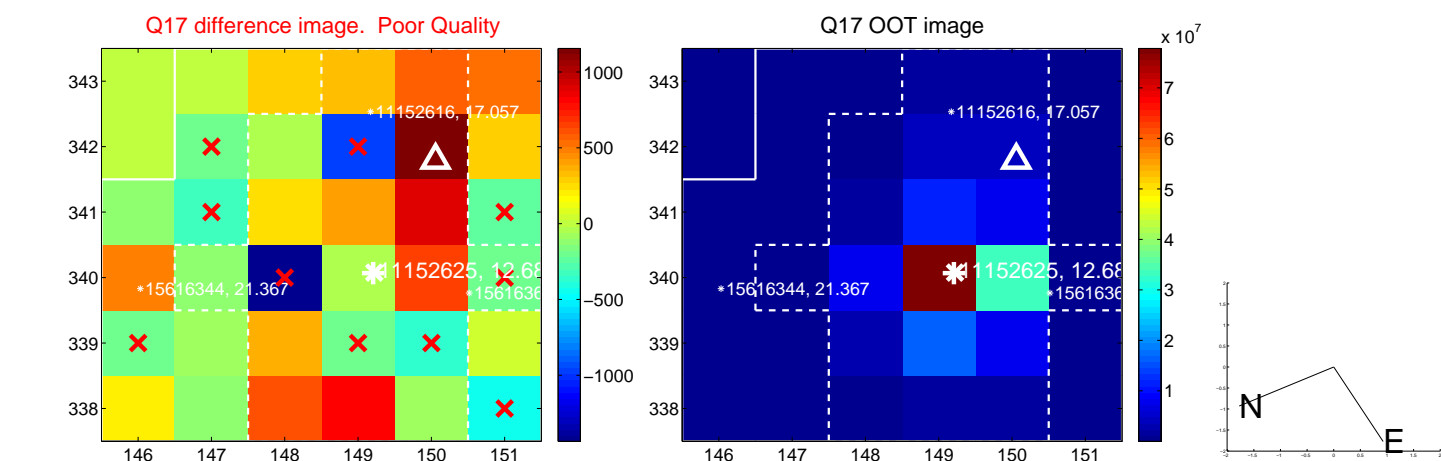
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



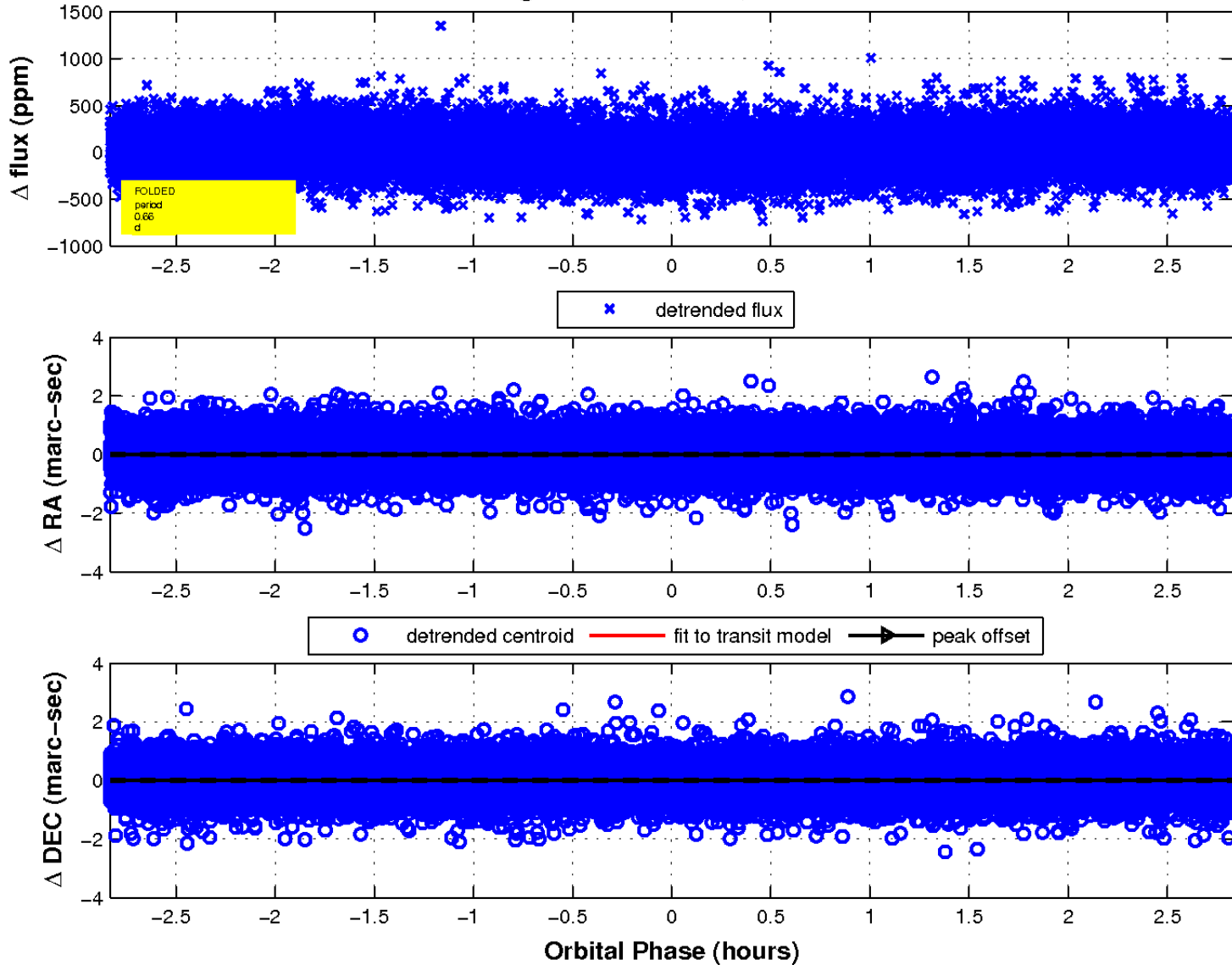
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

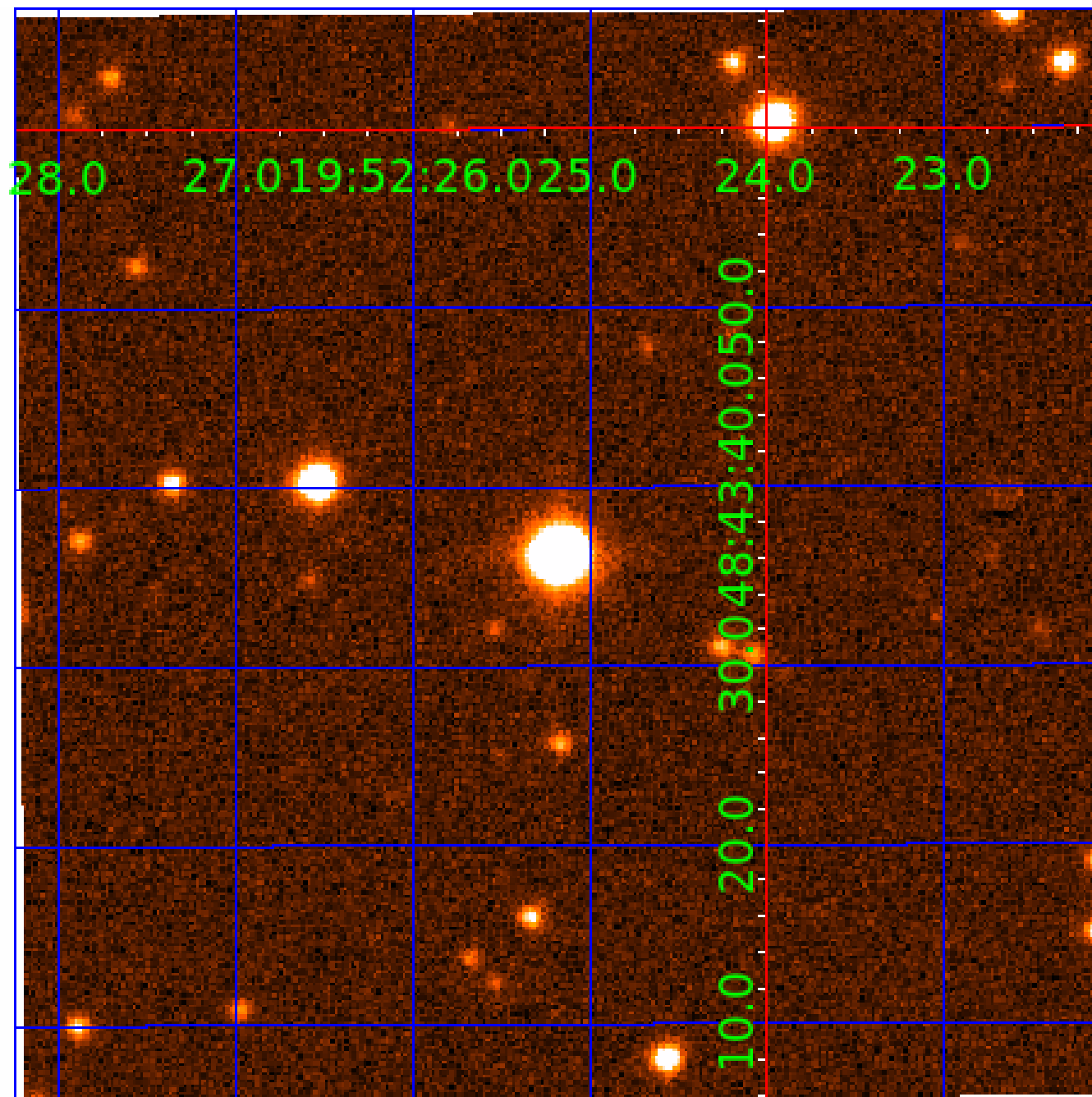


fluxWeightedCentroids, Planet 1 of 6



UKIRT Image

Declination



KIC 011152625

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})
011152625-01	OBS	No	0.659923	131.676243	41.2	0.945	11.0	9.4	1.88	7606	1.39	34911.39
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Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
011152625-01	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT
011152625-02	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—SAME_NTL_PERIOD
011152625-03	OBS	FP	0.00	1	0	0	0	TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT
011152625-04	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_SKYE_ZUMA—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_ALT
011152625-05	OBS	FP	0.00	1	0	1	0	INDIV_TRANS_RUBBLE_ZUMA—TRANS_GAPPED—MOD_NONUNIQ_ALT—MOD_TER_ALT—HALO_GHOST
011152625-06	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_SKYE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_FEW_DIFFS

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

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

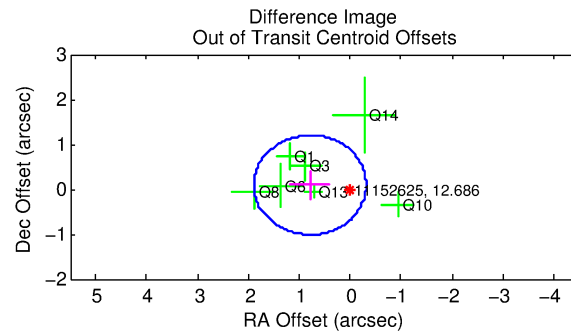
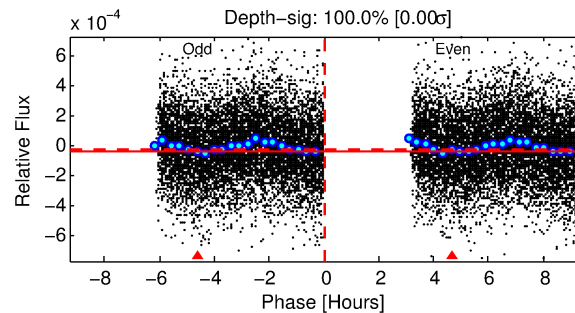
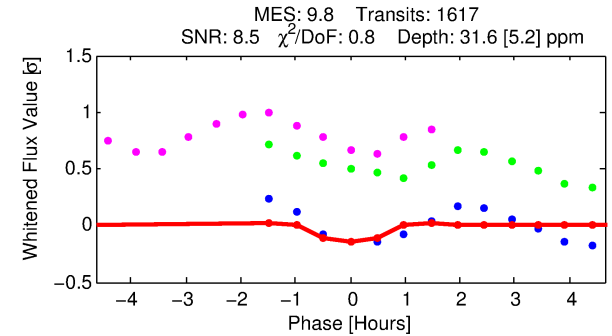
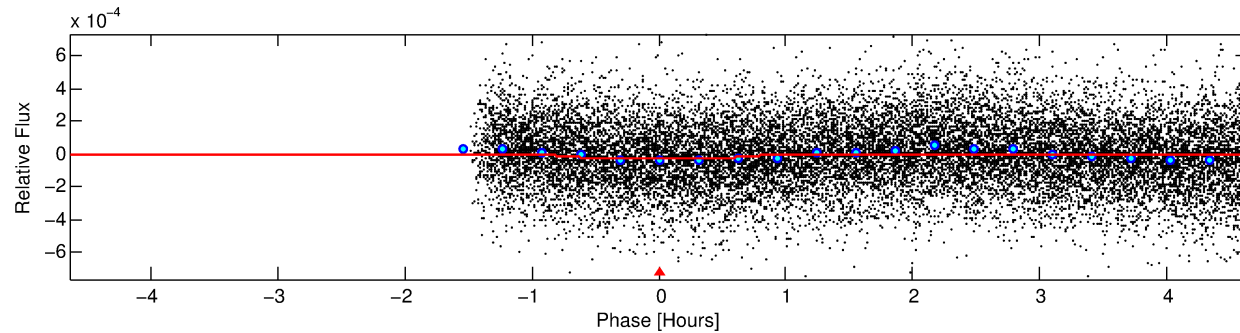
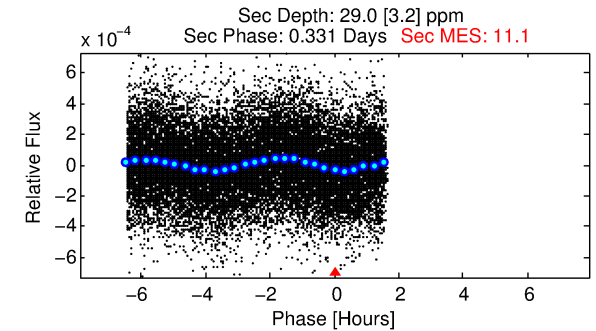
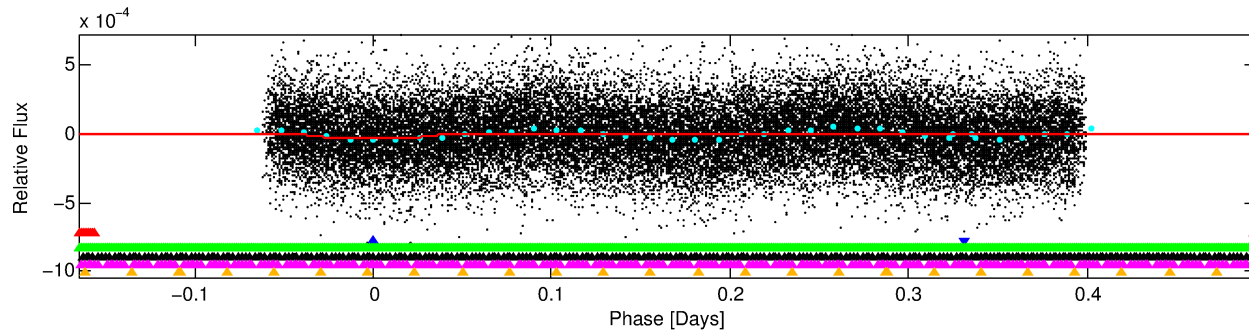
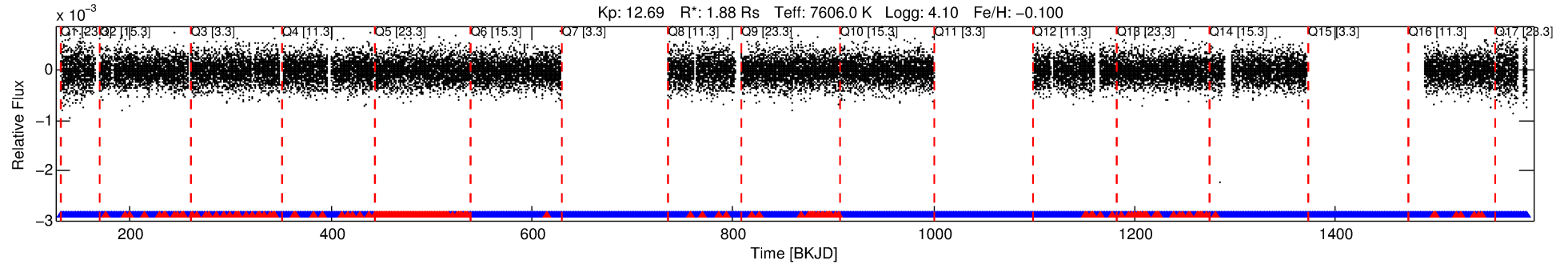
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 011152625-02

No Significant Match Found

DV One-Page Summary

KIC: 11152625 Candidate: 2 of 6 Period: 0.660 d



DV Fit Results:

Period = 0.65993 [0.00001] d
Epoch = 131.8322 [0.0023] BKJD
Rp/R* = 0.0060 [0.0018]
a/R* = 1.74 [2.27]
b = 0.90 [0.42]
Seff = 34911.06 [12827.38]
Teq = 3486 [320] K
Rp = 1.23 [0.50] Re
a = 0.0174 [0.0040] AU
Ag = 3.23 [2.25] [0.99σ]
Teffp = 7225 [1152] K [3.13σ]

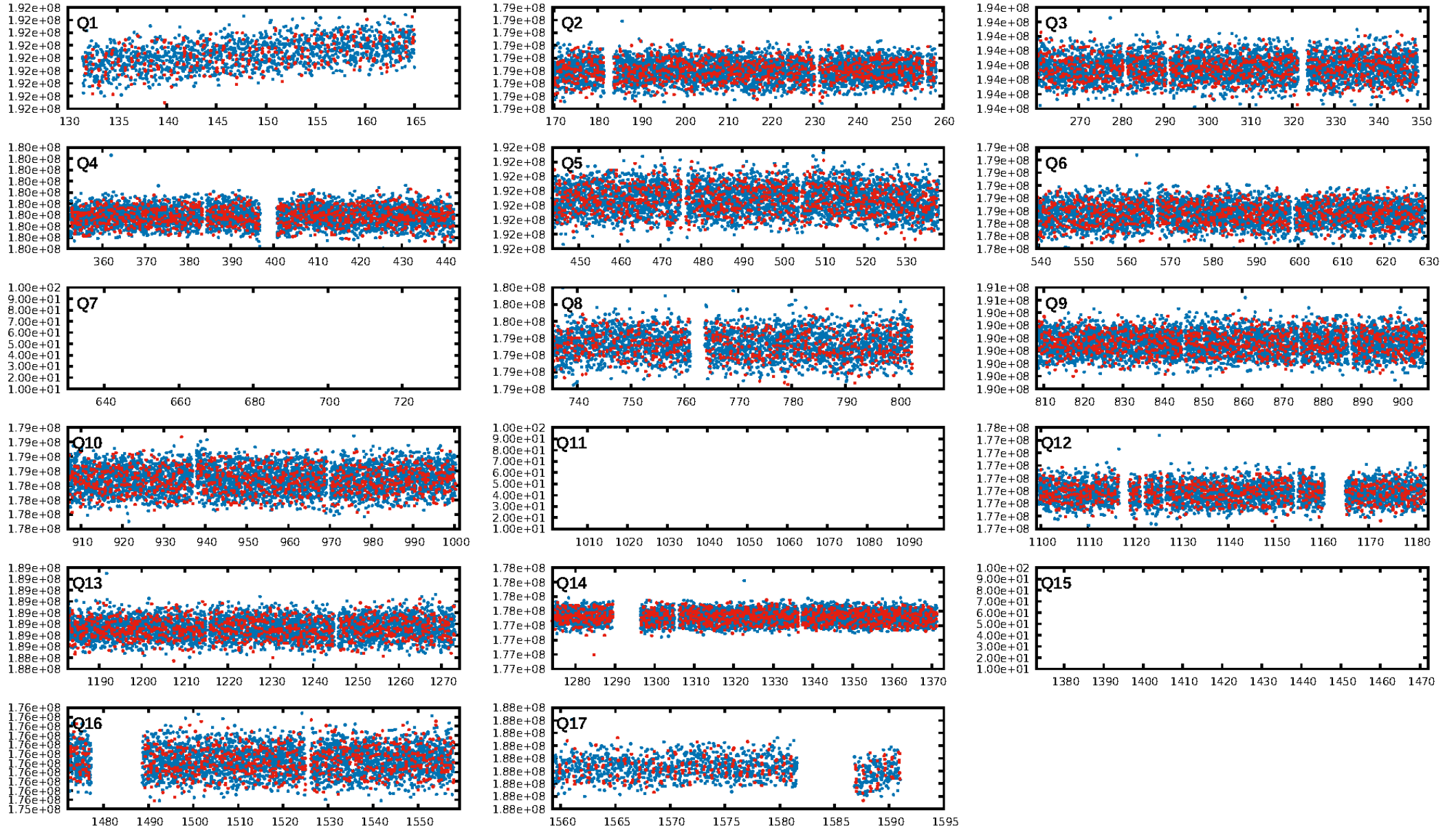
DV Diagnostic Results:

ShortPeriod-sig: 0.0% [0.00σ]
LongPeriod-sig: 0.5% [0.01σ]
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 5.37e-13
RollingBand-fgt: 0.85 [1298/1525]
GhostDiagnostic-chr: 0.816
Centroid-sig: 24.2%
Centroid-so: 0.920 arcsec [1.22σ]
OotOffset-rm: 0.795 arcsec [2.16σ]
OotOffset-st: 3/1/1/2 [7]
KicOffset-rm: 0.824 arcsec [2.40σ]
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DiffImageOverlap-fno: 0.00 [0/14]

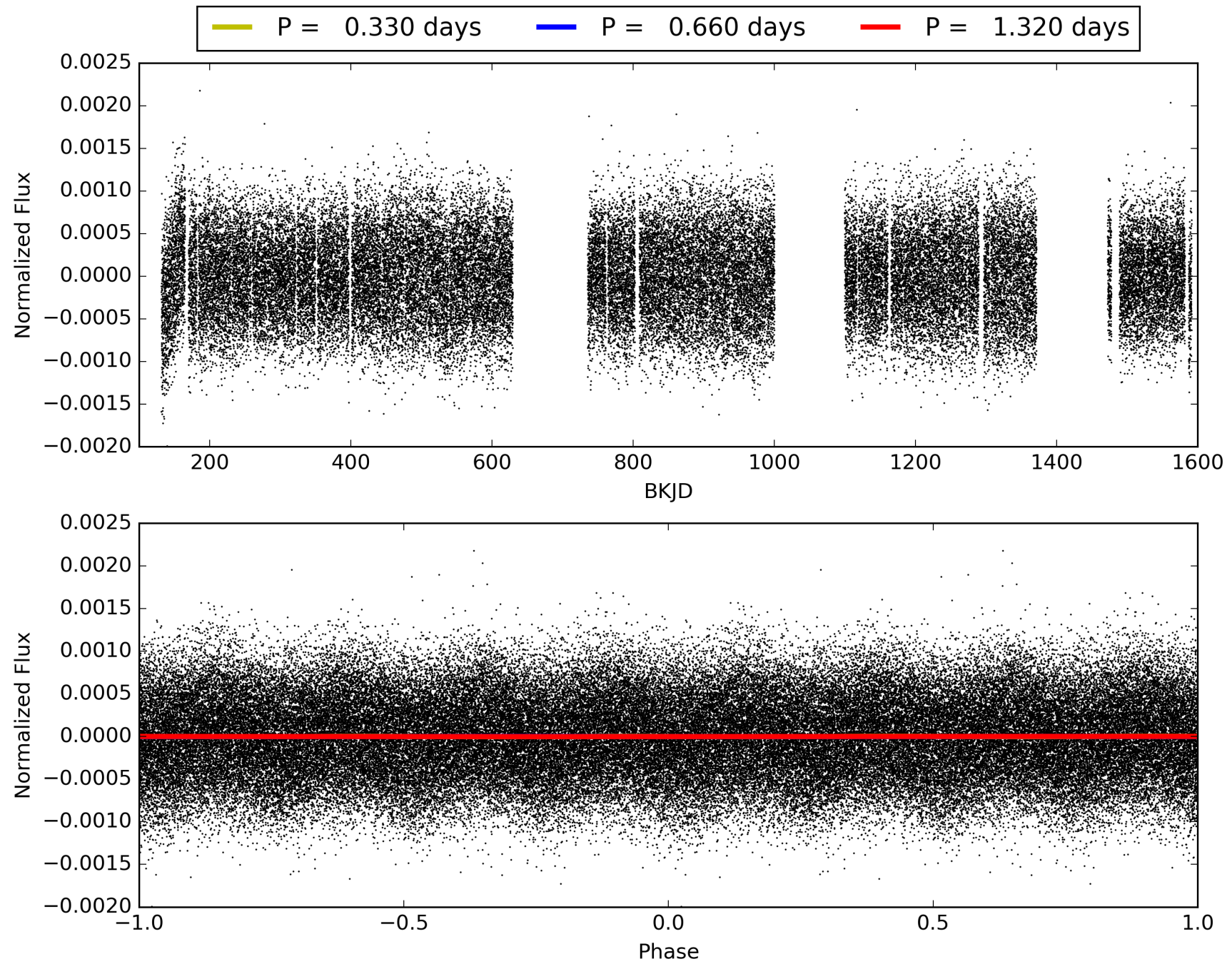
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 01-Feb-2016 07:10:08 Z

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

TCE 011152625-02, PDC Light Curves

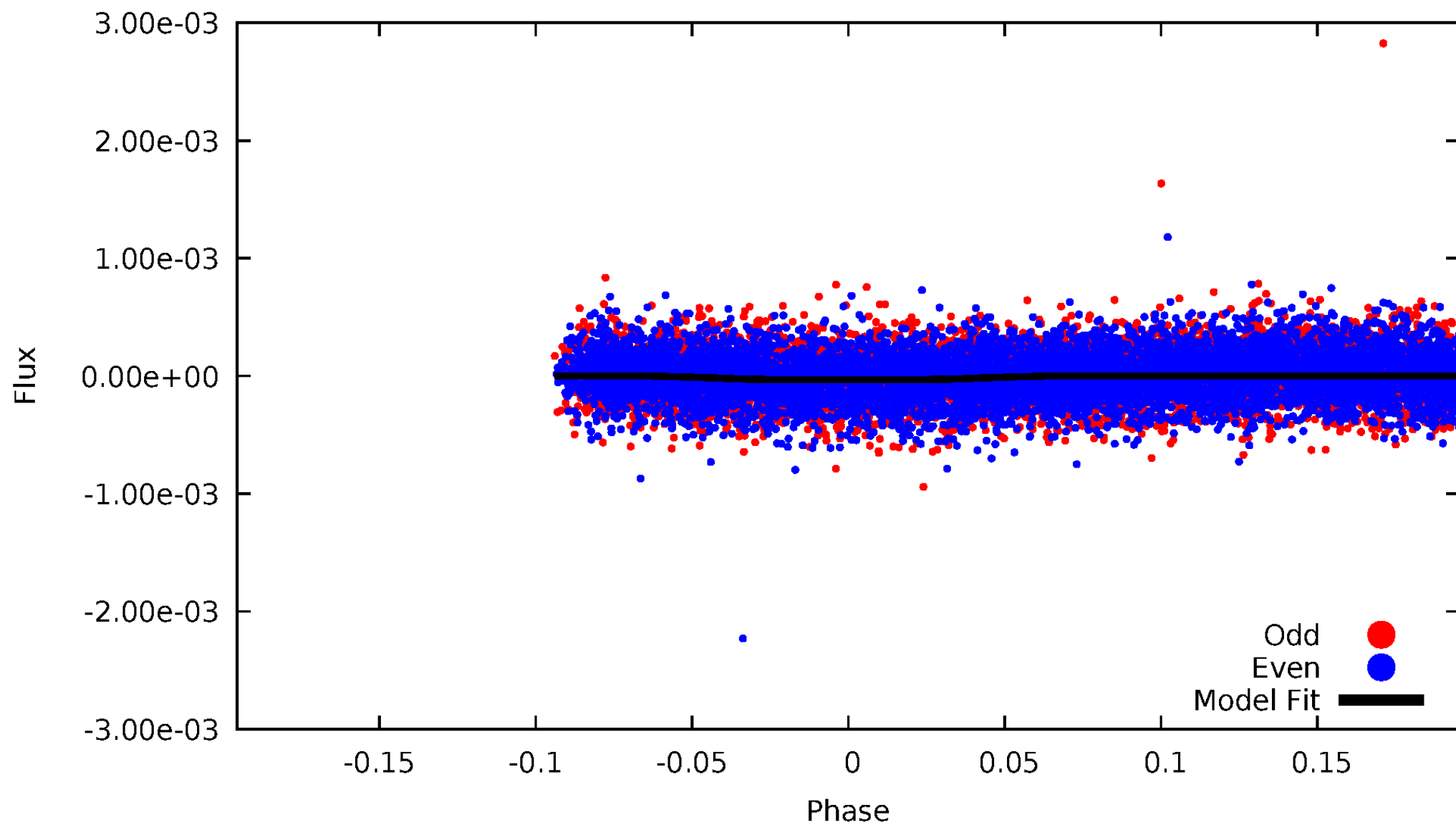


TCE 011152625-02



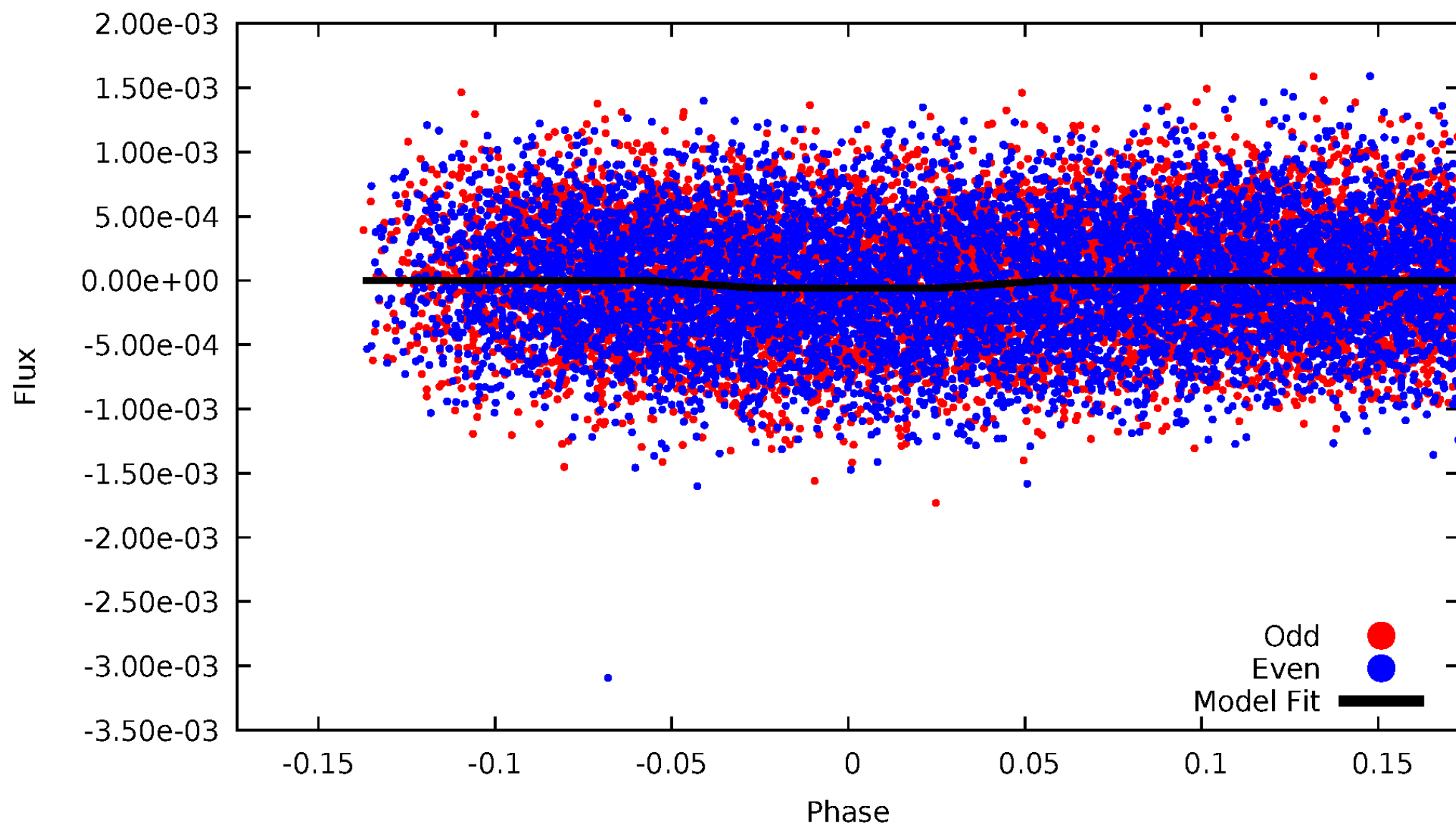
DV Odd/Even

TCE 011152625-02



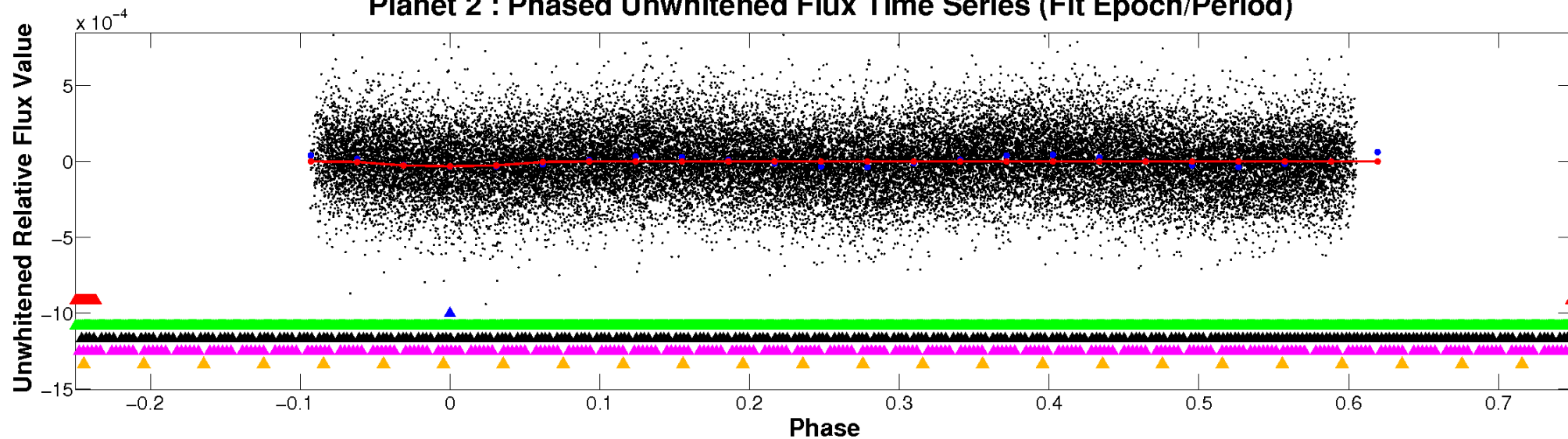
ALT Odd/Even

TCE 011152625-02

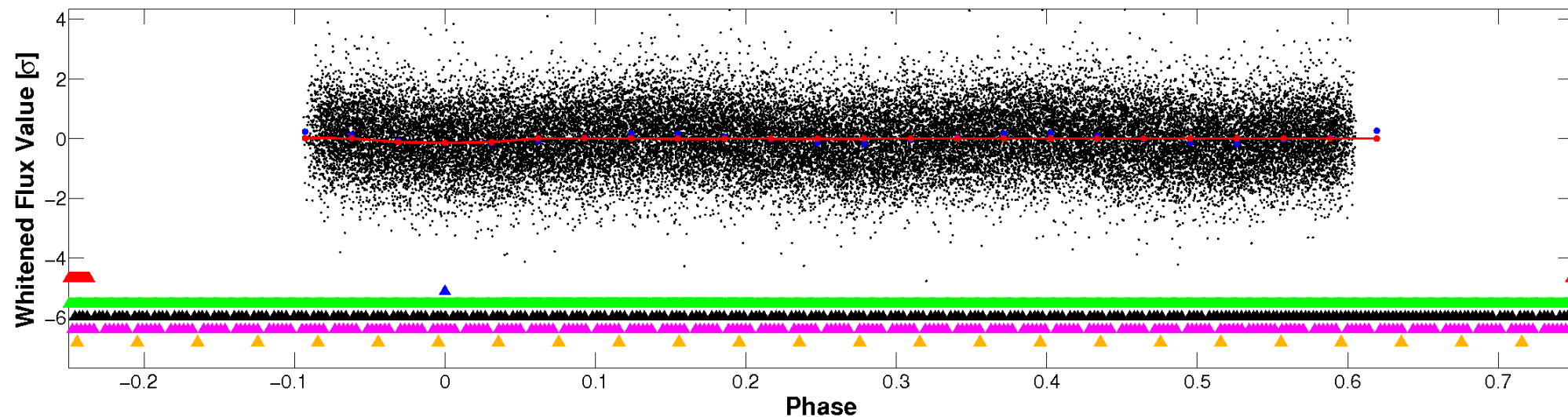


Non-Whitened Vs. Whitened Light Curve

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

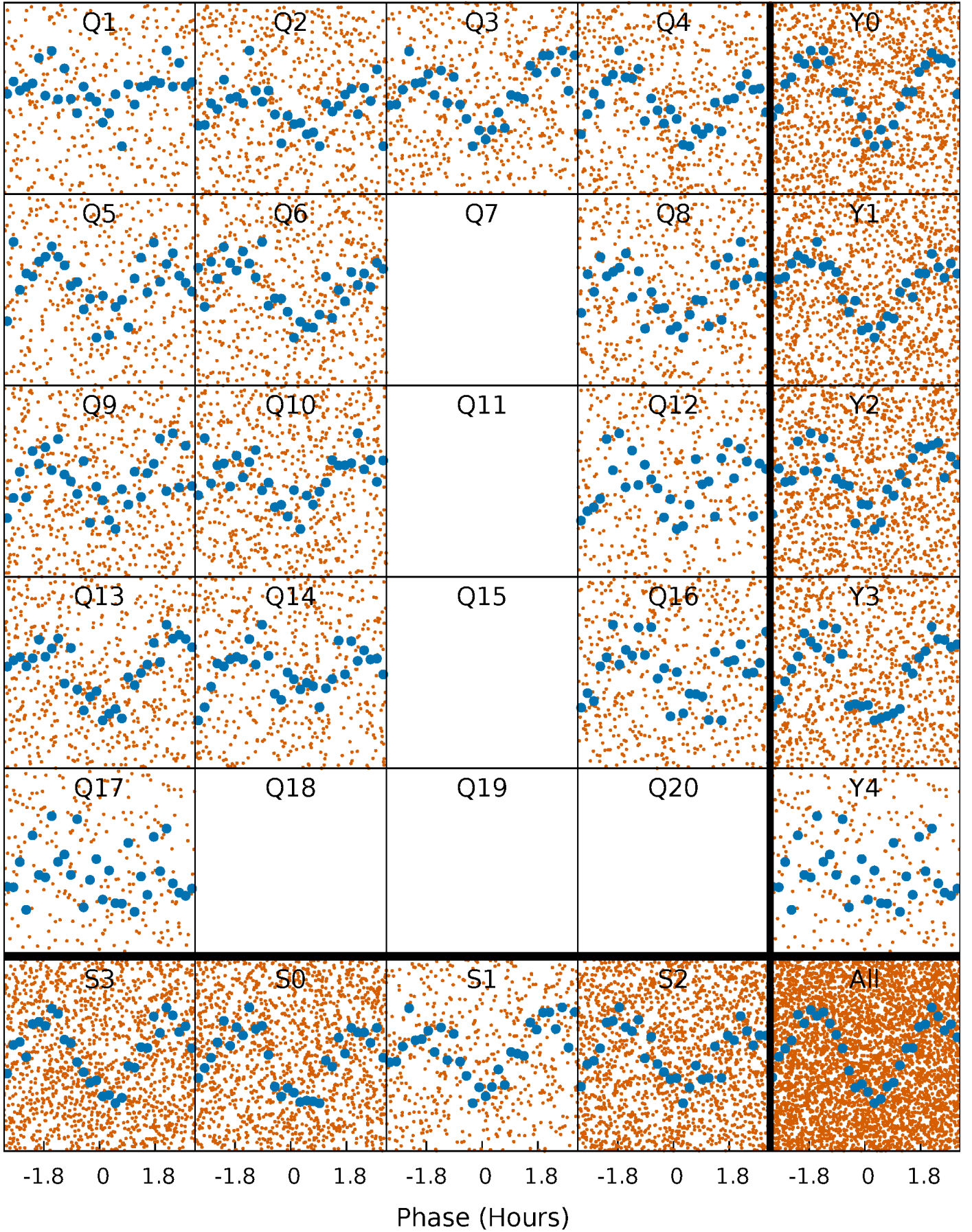


Planet 2 : Phased Whitened Flux Time Series (Fit Epoch/Period)



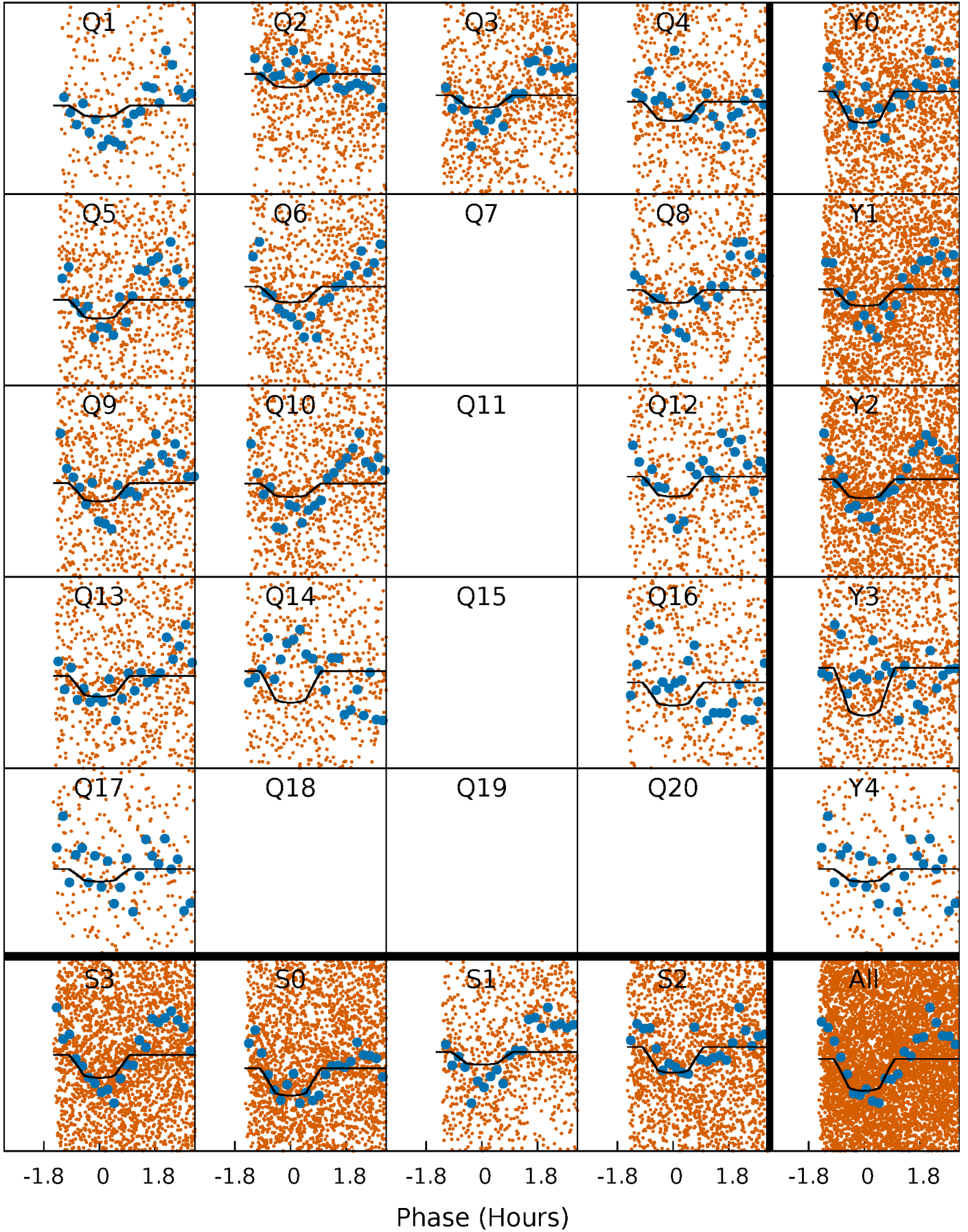
PDC Quarter-Phased Transit Curves

TCE 011152625-02 P= 0.659928 Days $T_0=131.832199$ (BKJD)



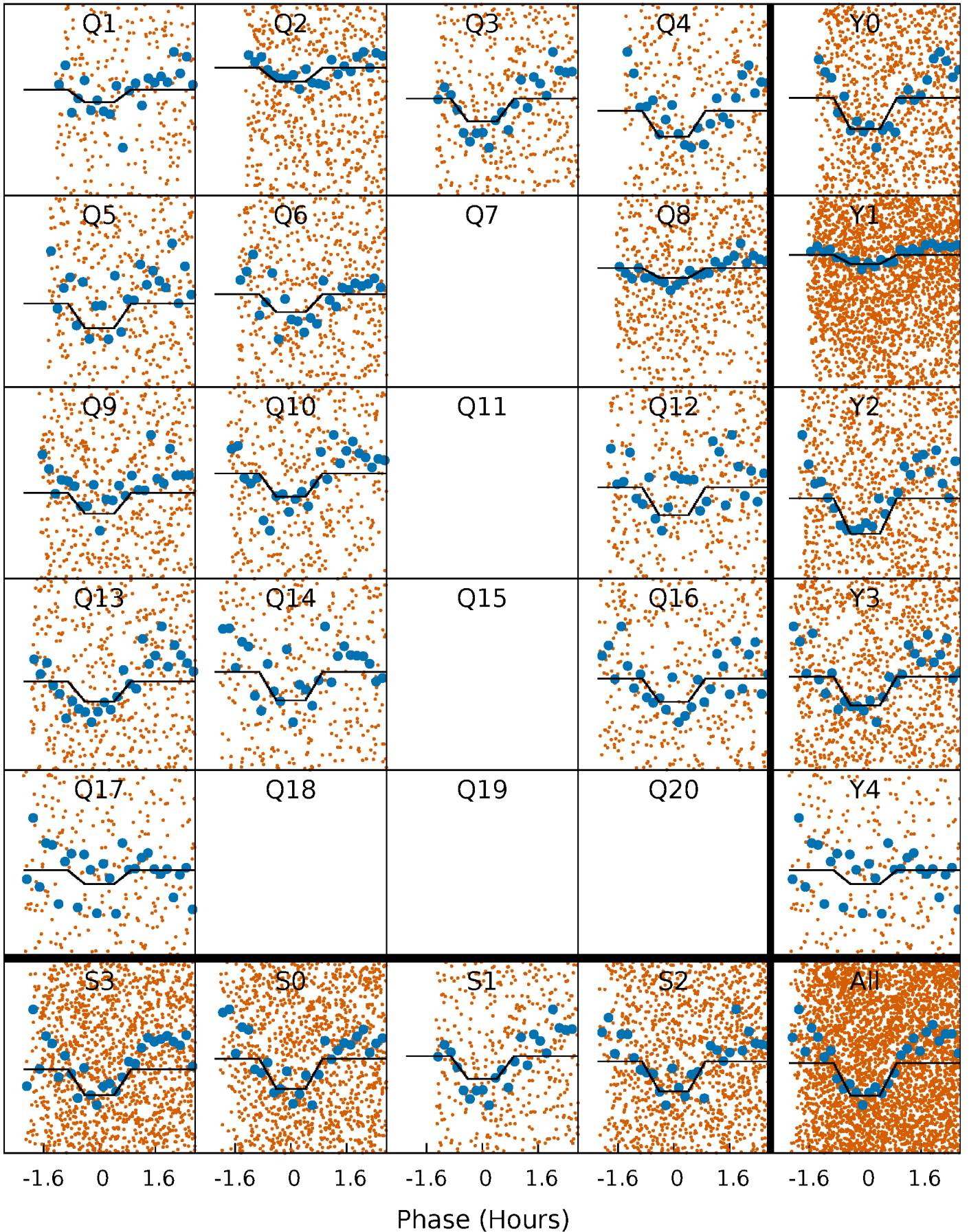
DV Quarter-Phased Transit Curves

TCE 011152625-02 P= 0.659928 Days $T_0=131.832199$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

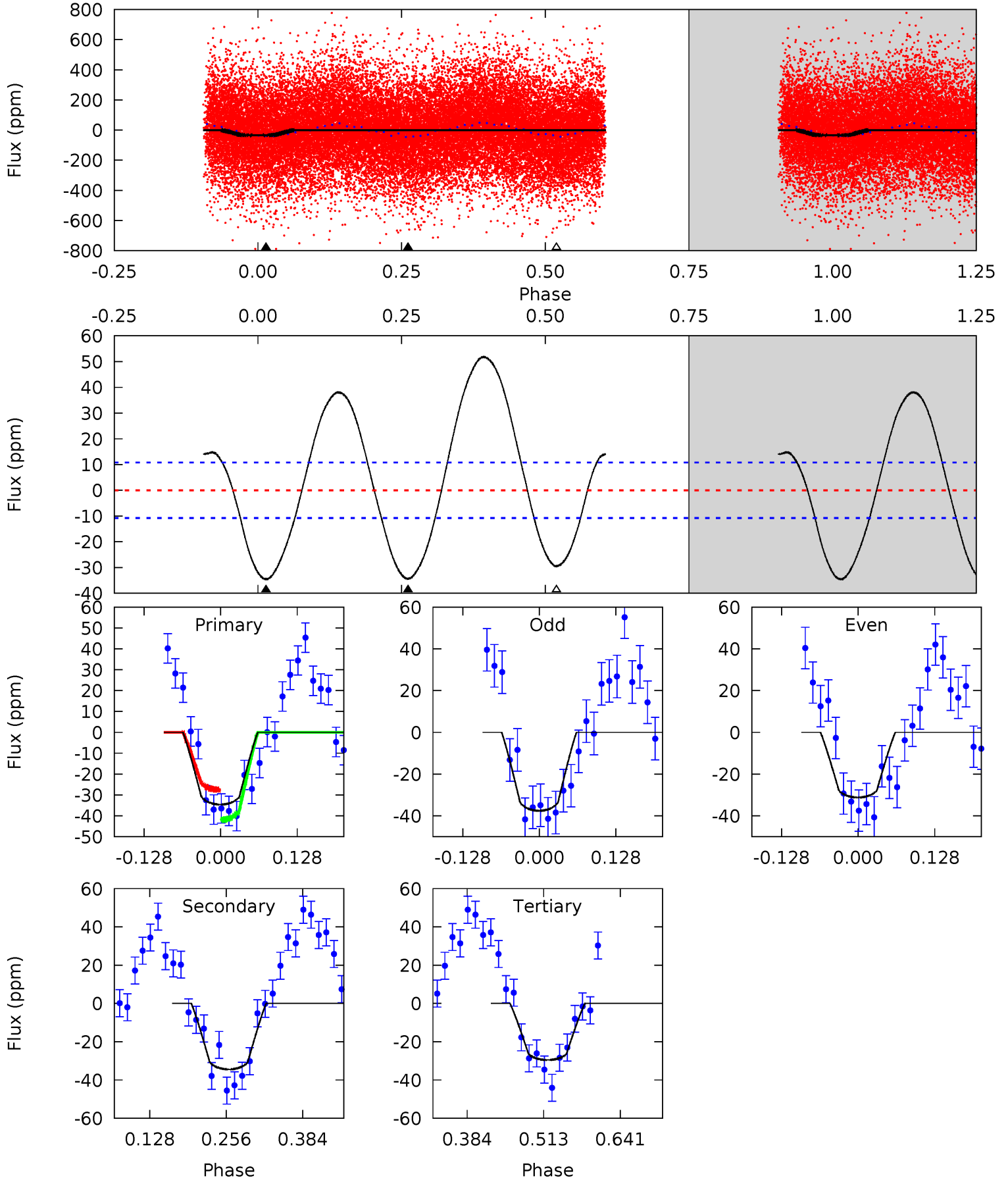
TCE 011152625-02 P= 0.659941 Days $T_0=131.831518$ (BKJD)



DV Model-Shift Uniqueness Test

011152625-02, P = 0.659928 Days, E = 131.172271 Days

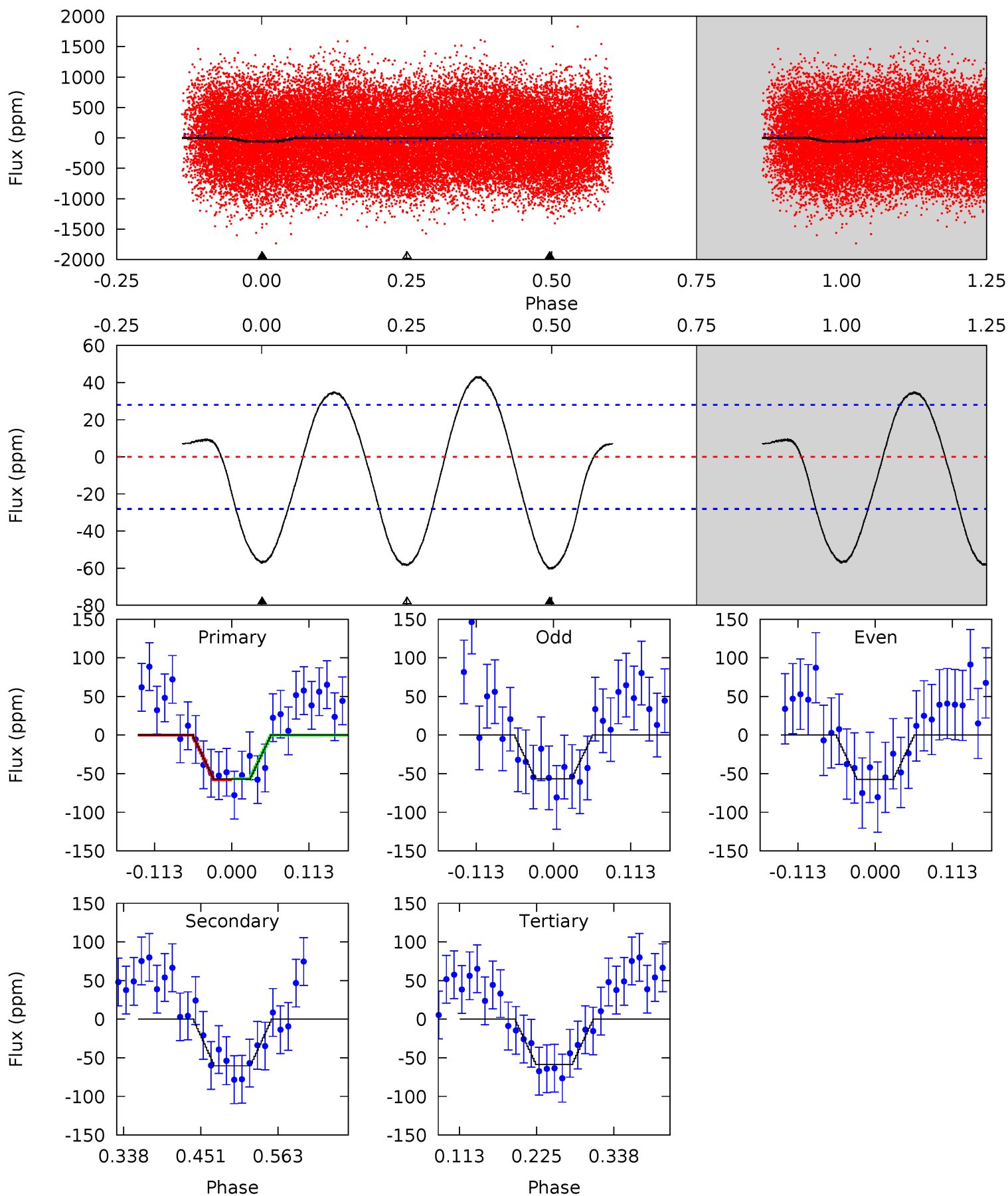
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
14.5	14.4	12.4	0	4.51	1.52	11.4	2.12	14.5	2.04	14.4	1.34	1.02	0.60	3.07



Alt Model-Shift Uniqueness Test

011152625-02, P = 0.659941 Days, E = 131.171577 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
9.25	9.76	9.47	0	4.54	1.59	5.71	-0.21	9.25	0.30	9.76	0.05	1.06	0.42	0.11



Stellar Parameters For KIC 011152625

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	7606^{+211}_{-316}	$4.099^{+0.144}_{-0.176}$	$-0.100^{+0.200}_{-0.350}$	$1.880^{+0.523}_{-0.428}$	$1.617^{+0.197}_{-0.263}$	$0.343^{+0.287}_{-0.156}$
	+3%/-4%	+4%/-4%	+200%/-350%	+28%/-23%	+12%/-16%	+84%/-45%
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 011152625-02 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-34 ± 2	$1.24^{+0.43}_{-0.42}$	4862^{+349}_{-325}	7204^{+2171}_{-1114}	$3.645^{+4.590}_{-1.630}$
Alt.	-60 ± 6	$1.59^{+0.43}_{-0.43}$	4867^{+370}_{-316}	7446^{+1515}_{-960}	$3.929^{+3.424}_{-1.540}$

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

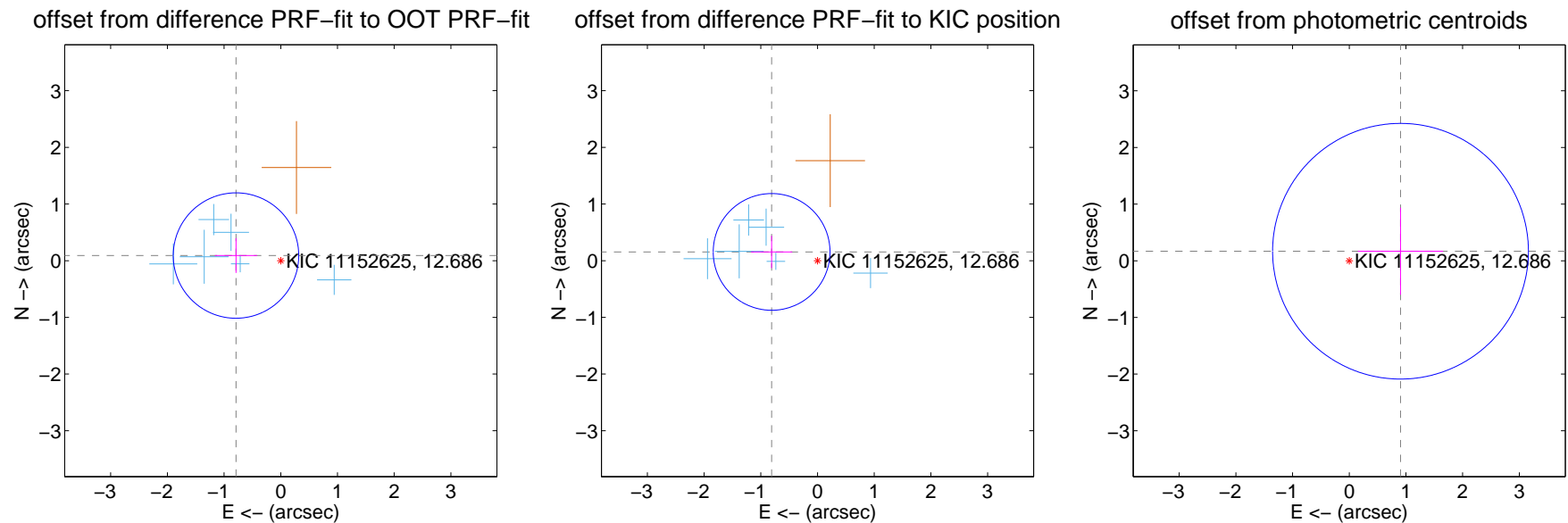
DV Centroid Data

Supplemental centroid analysis for 011152625-02. Kepler magnitude: 12.69. Transit SNR 8.52

There are 6 quarters with good PRF difference image offsets

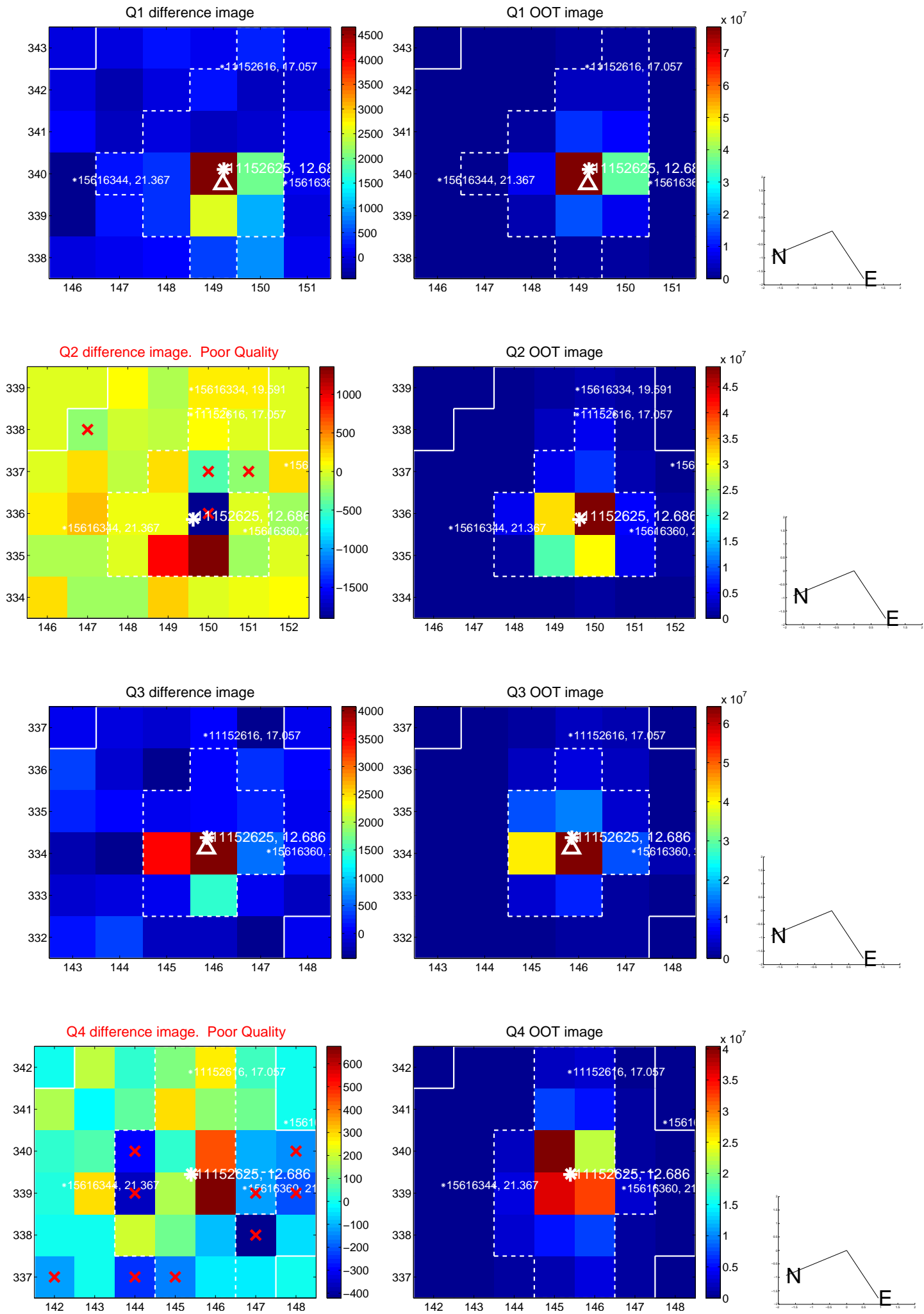
The direct PRF centroid is offset from the target star catalog position by about 0.13 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.795 ± 0.369	2.16	0.790 ± 0.373	0.091 ± 0.307
PRF-fit source offset from KIC position	0.824 ± 0.343	2.40	0.809 ± 0.362	0.155 ± 0.285
photometric centroid source offset	0.92 ± 0.75	1.22	-0.90 ± 0.75	0.17 ± 0.77

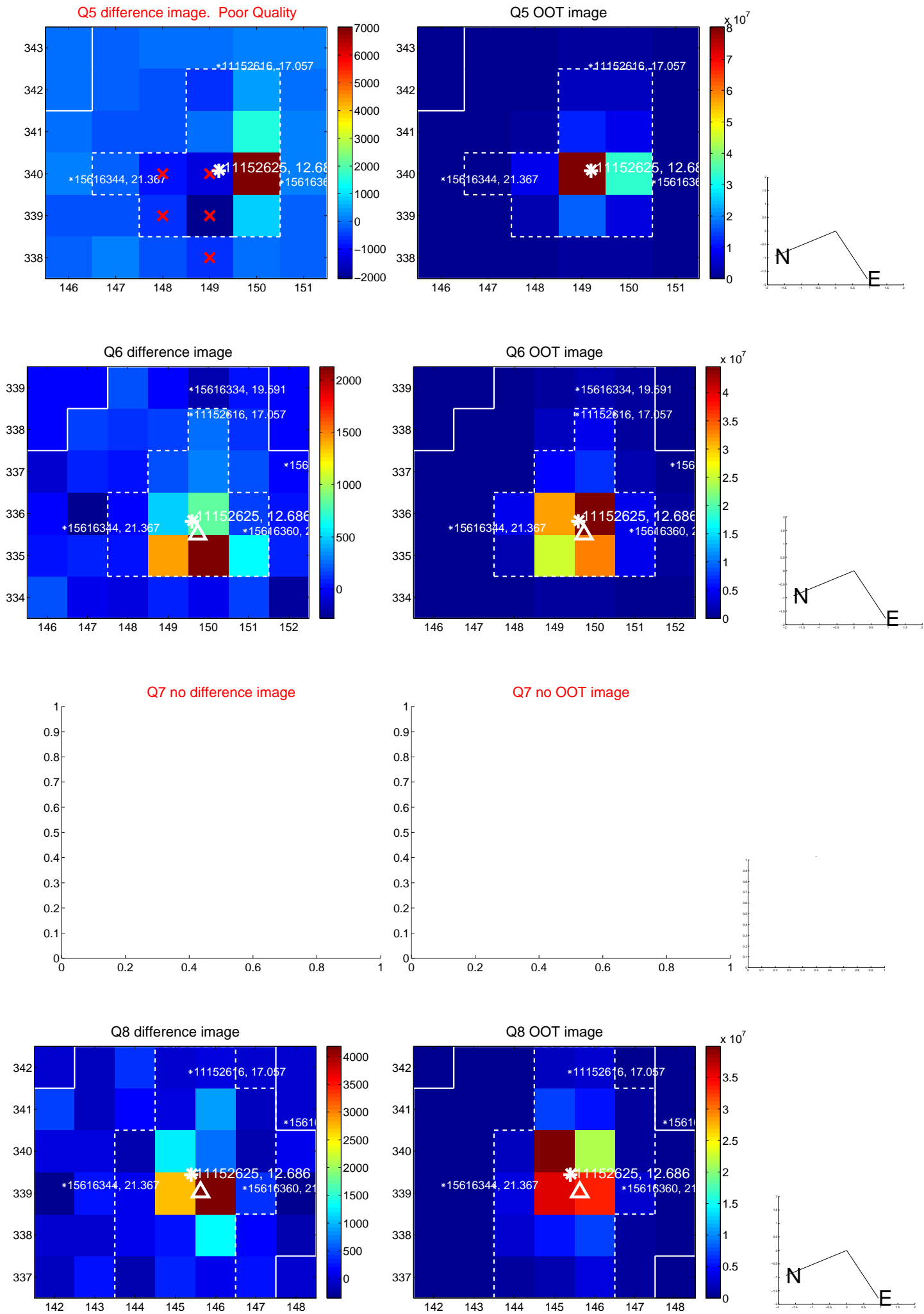


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets**; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

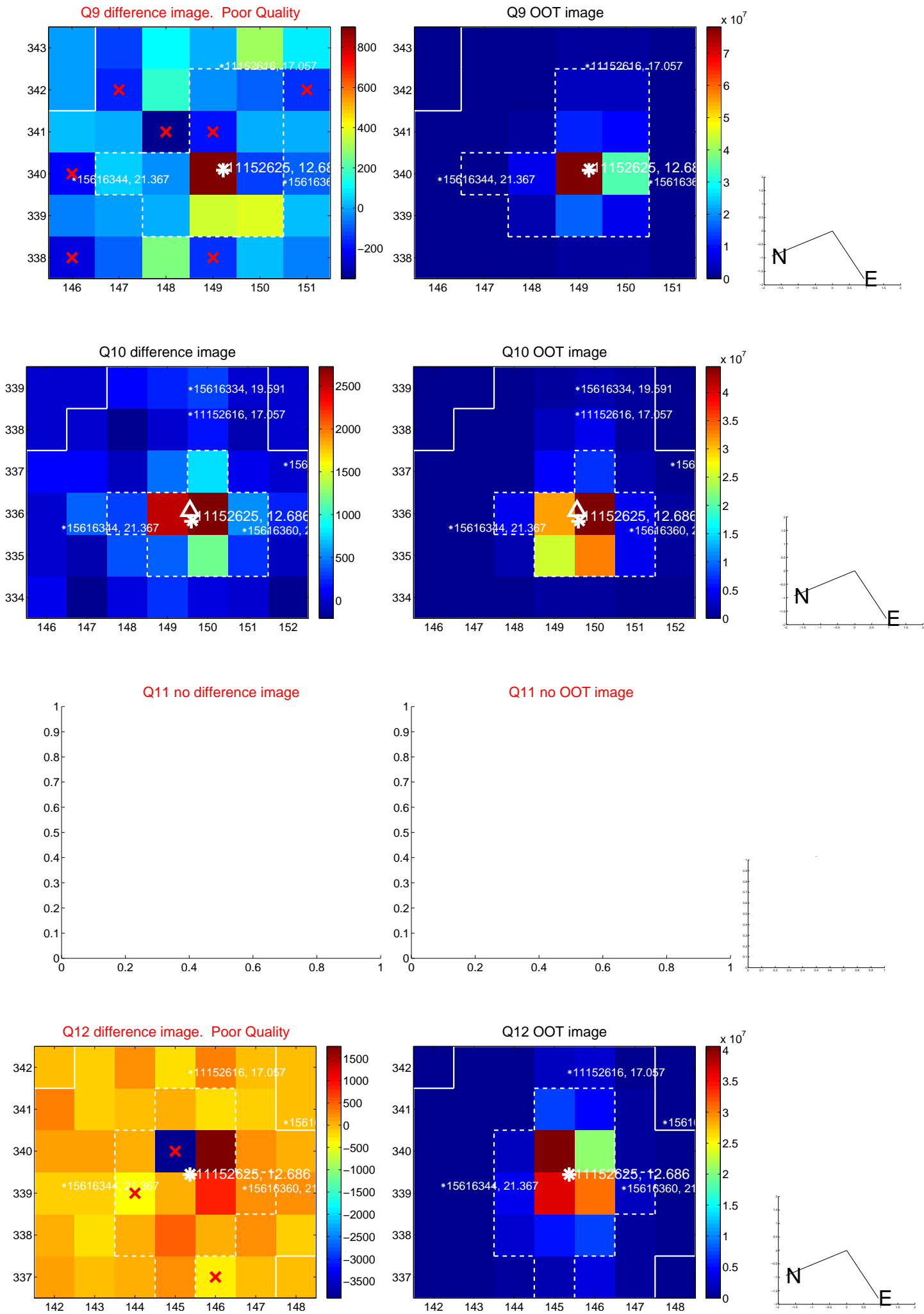
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



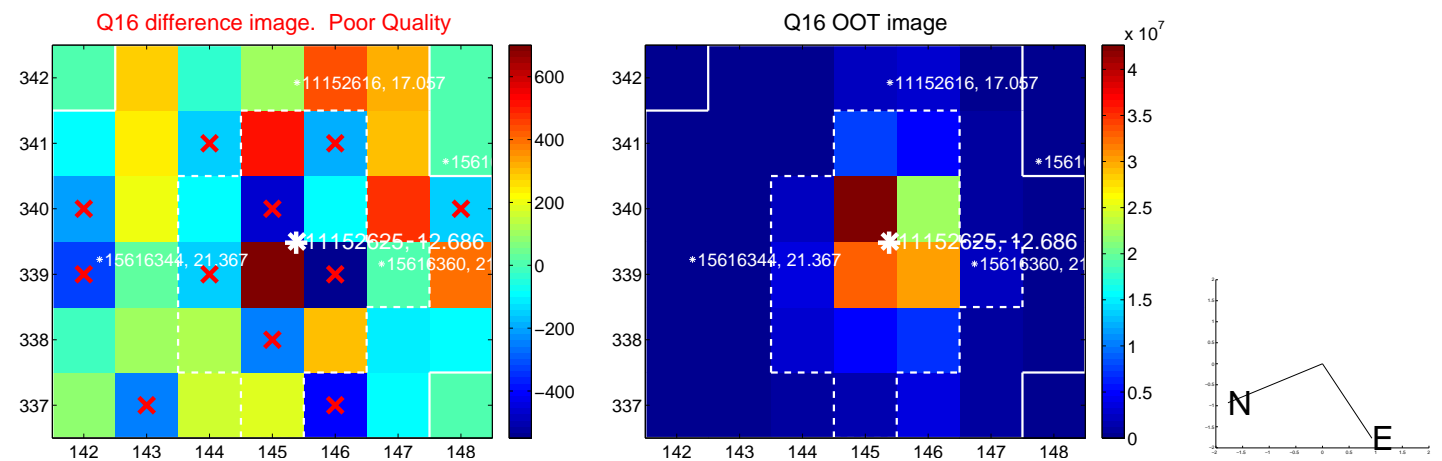
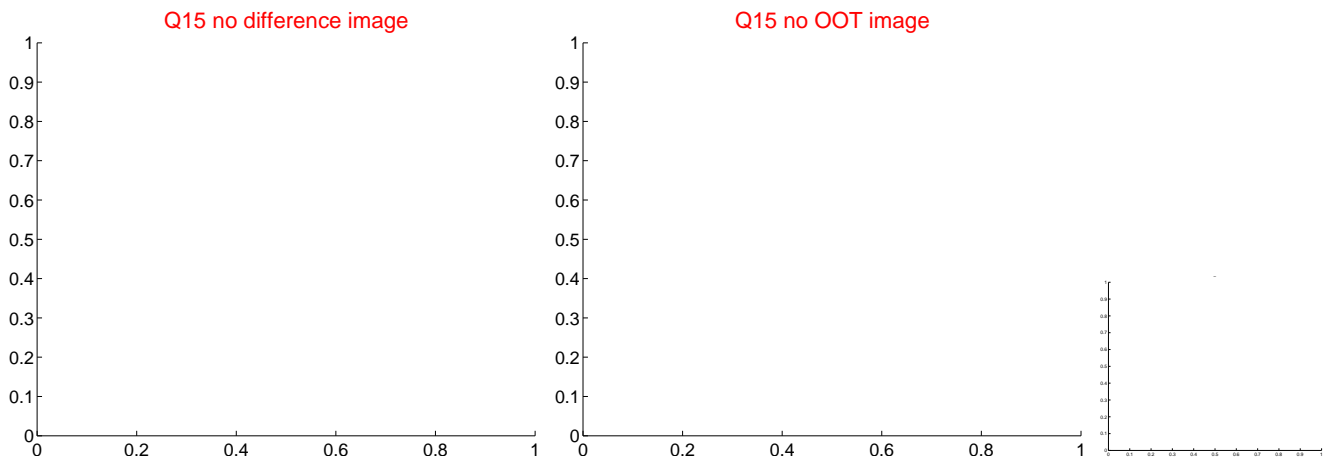
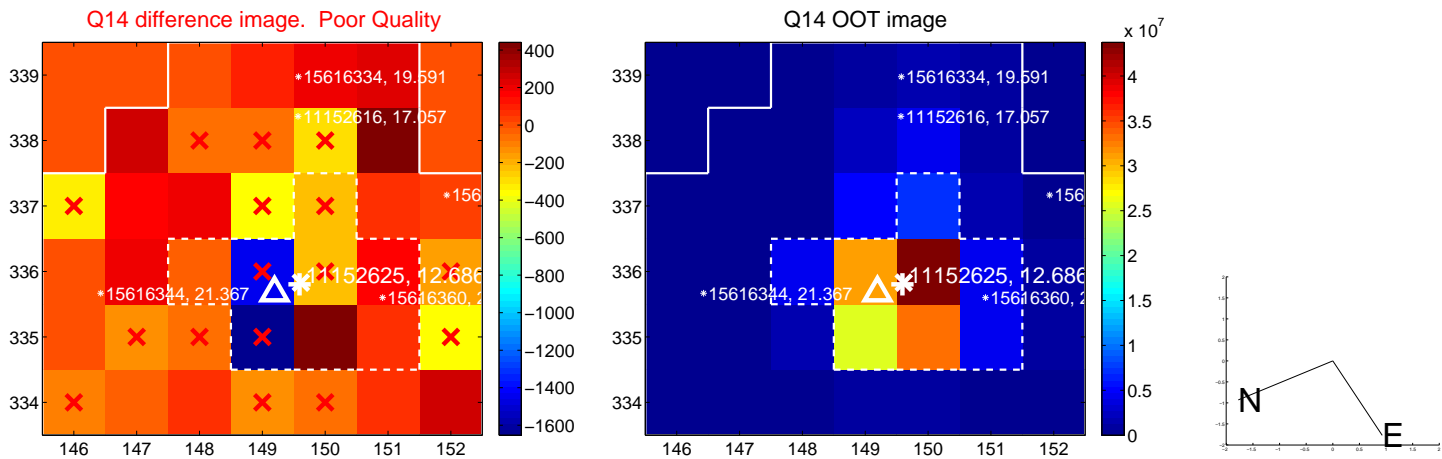
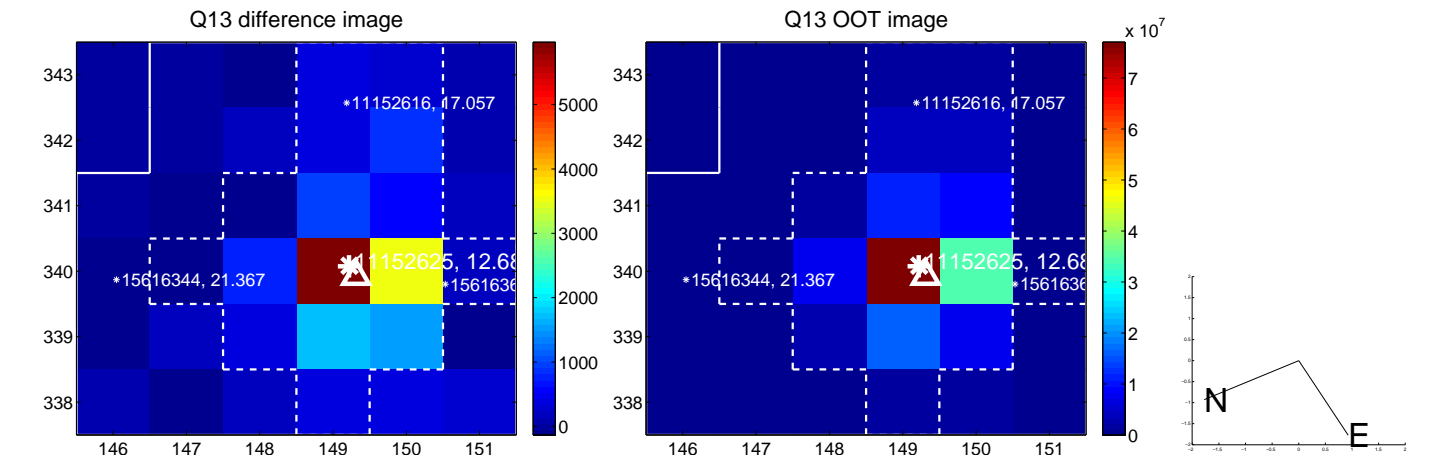
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



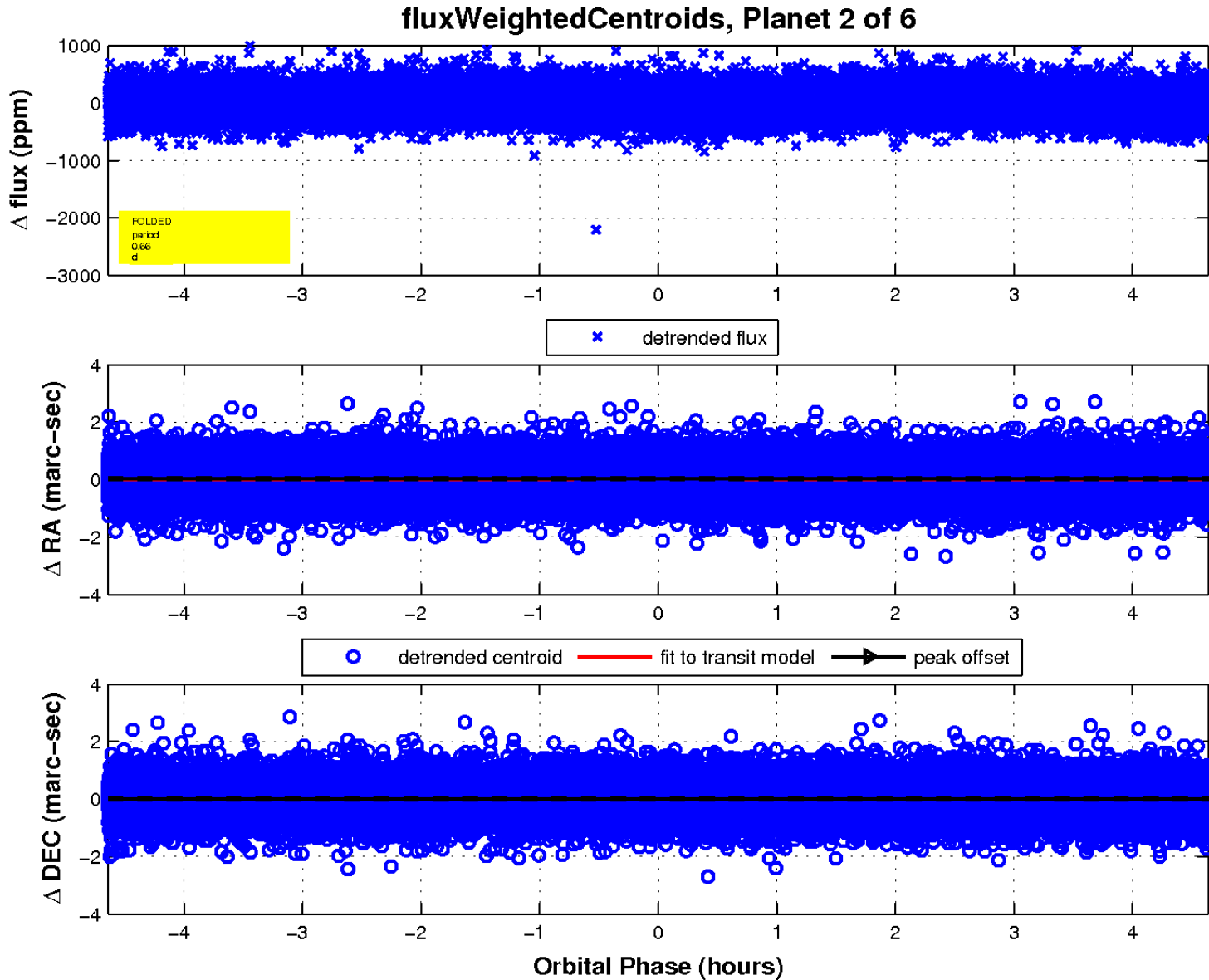
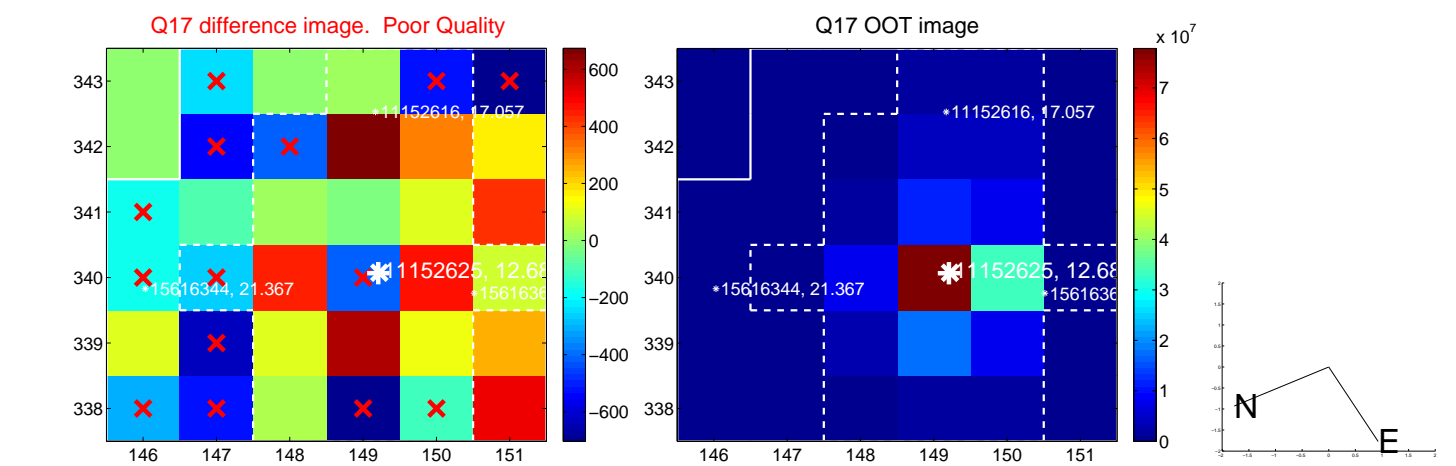
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

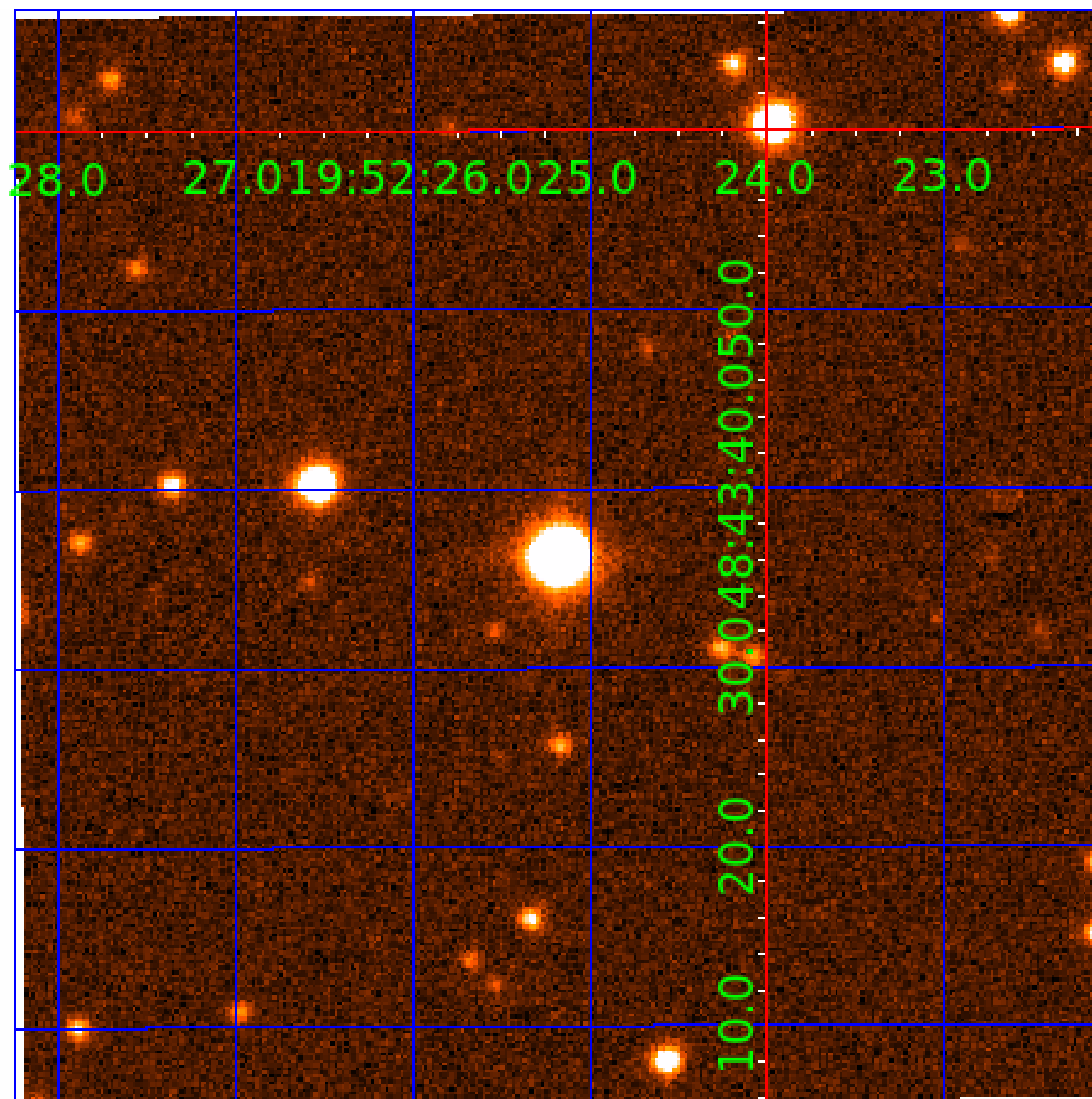


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 011152625

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})
011152625-01	OBS	No	0.659923	131.676243	41.2	0.945	11.0	9.4	1.88	7606	1.39	34911.39
011152625-02	OBS	No	0.659928	131.832199	31.6	1.548	9.8	8.5	1.88	7606	1.23	34911.07
011152625-03	OBS	No	0.660577	131.854682	45.4	2.231	9.5	10.1	1.88	7606	1.47	34865.29
011152625-04	OBS	No	4.610766	135.583996	81.3	12.117	7.8	10.2	1.88	7606	1.89	2613.73
011152625-05	OBS	No	5.265034	135.495765	158.7	2.061	7.3	7.0	1.88	7606	2.74	2189.89
011152625-06	OBS	No	27.901738	156.827464	345.1	2.533	7.6	8.3	1.88	7606	4.01	237.02

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
011152625-01	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT
011152625-02	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—SAME_NTL_PERIOD
011152625-03	OBS	FP	0.00	1	0	0	0	TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT
011152625-04	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_SKYE_ZUMA—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_ALT
011152625-05	OBS	FP	0.00	1	0	1	0	INDIV_TRANS_RUBBLE_ZUMA—TRANS_GAPPED—MOD_NONUNIQ_ALT—MOD_TER_ALT—HALO_GHOST
011152625-06	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_SKYE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_FEW_DIFFS

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

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

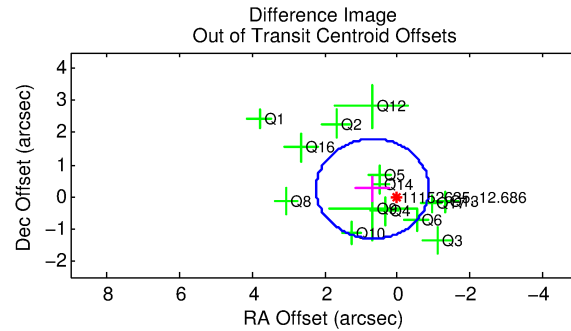
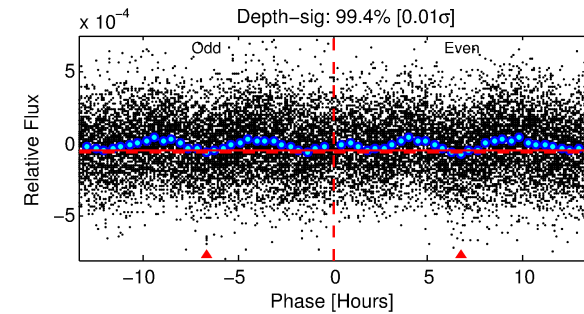
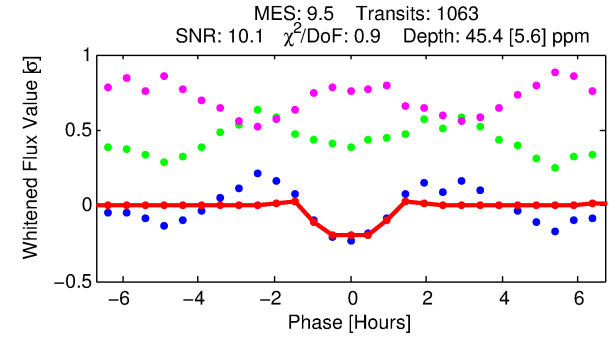
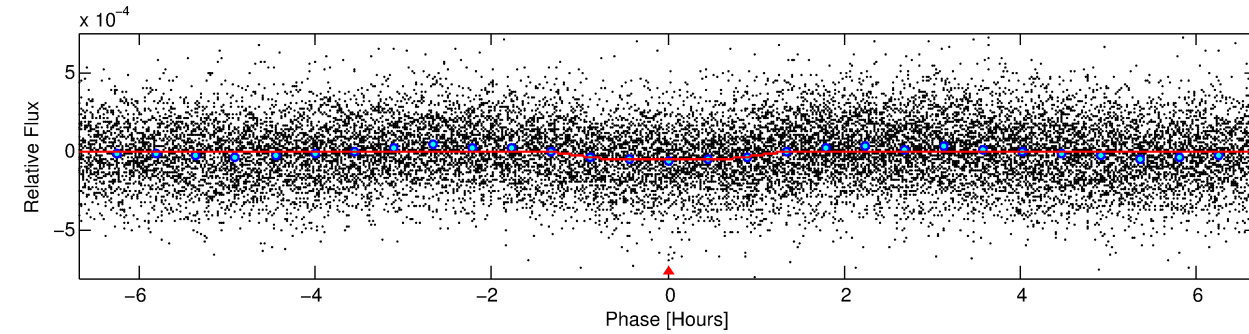
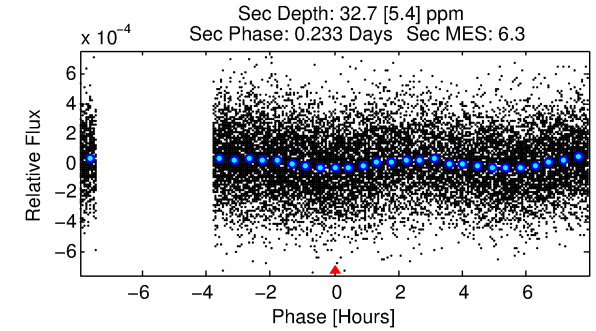
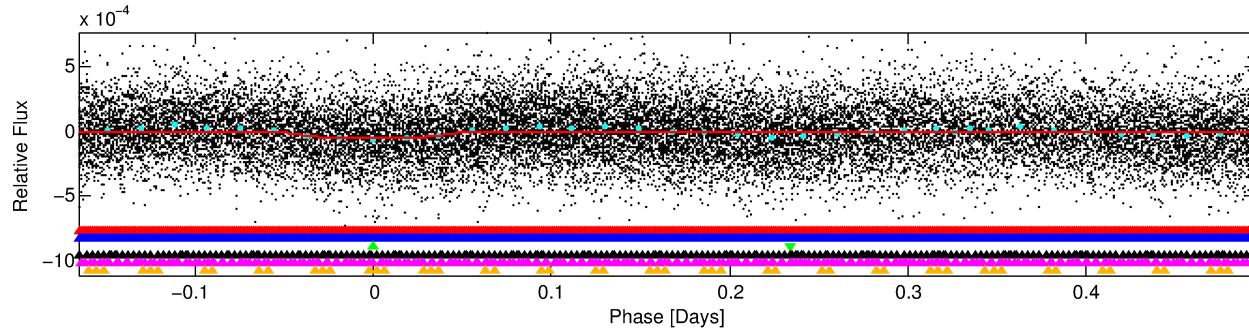
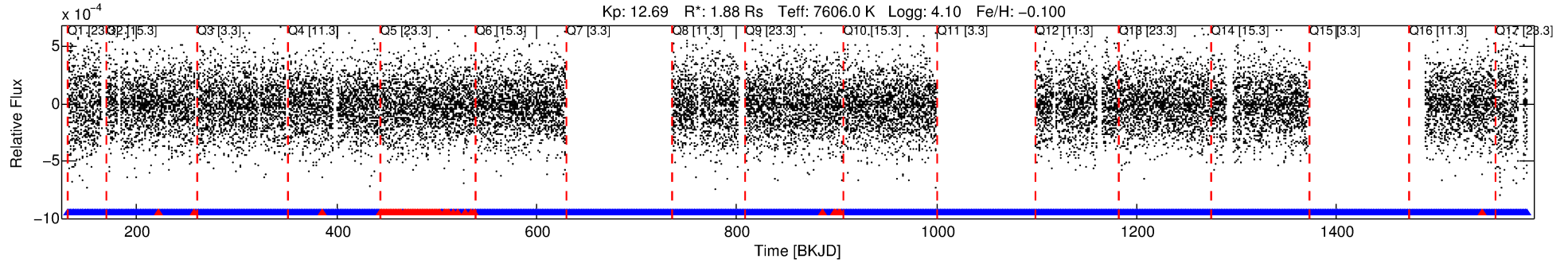
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 011152625-03

No Significant Match Found

DV One-Page Summary

KIC: 11152625 Candidate: 3 of 6 Period: 0.661 d



DV Fit Results:

Period = 0.66058 [0.00001] d
Epoch = 131.8547 [0.0025] BKJD
Rp/R* = 0.0071 [0.0024]
a/R* = 1.39 [1.44]
b = 0.90 [0.46]
Seff = 34865.29 [12810.56]
Teq = 3484 [320] K
Rp = 1.47 [0.63] Re
a = 0.0174 [0.0040] AU
Ag = 2.54 [1.93] [0.80σ]
Teffp = 6804 [1194] K [2.68σ]

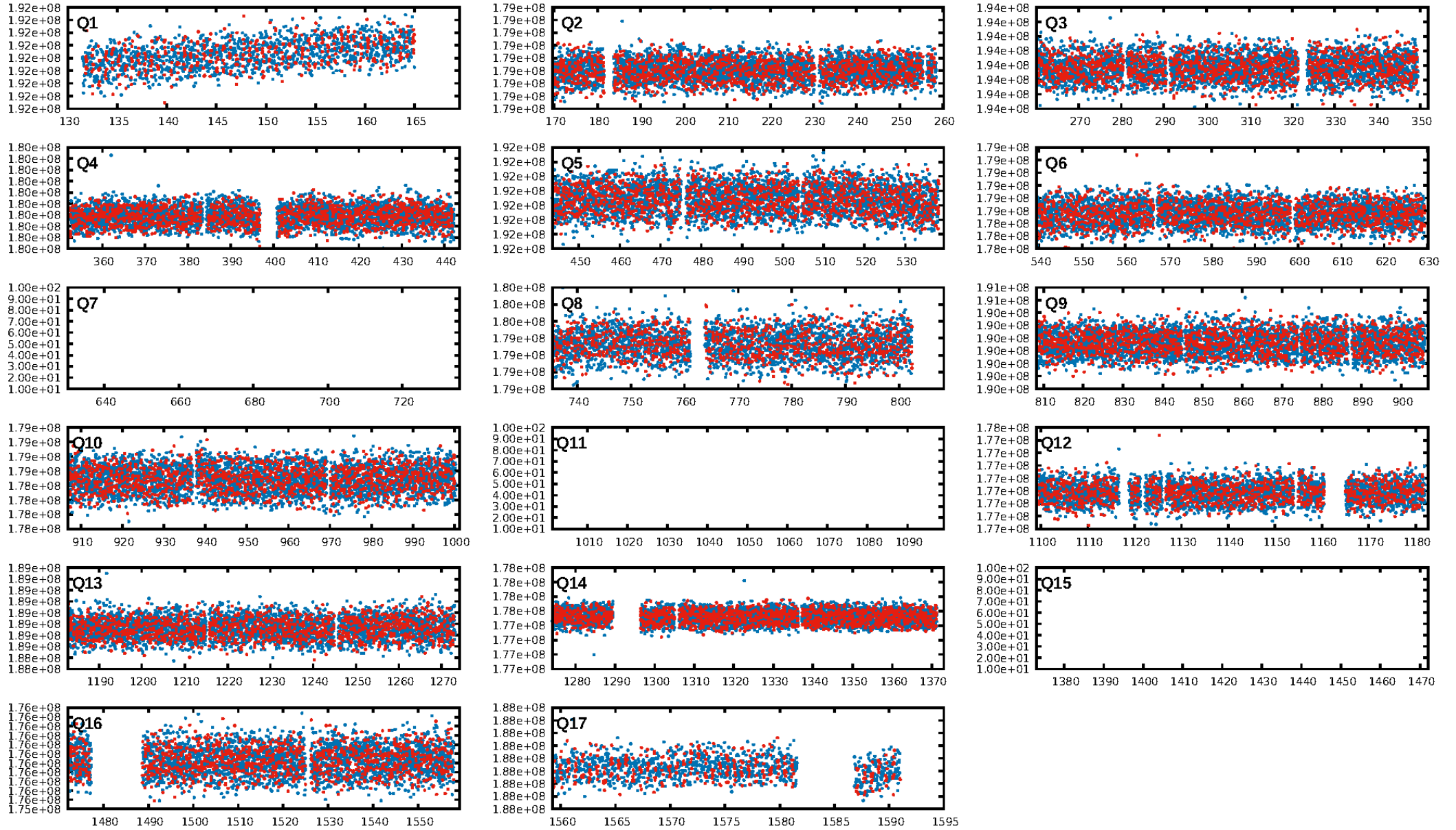
DV Diagnostic Results:

ShortPeriod-sig: 0.5% [0.01σ]
LongPeriod-sig: 100.0% [7.69σ]
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 3.19e-12
RollingBand-fgt: 0.90 [925/1023]
GhostDiagnostic-chr: 0.8015
Centroid-sig: 69.4%
Centroid-so: 0.187 arcsec [0.42σ]
OotOffset-rm: 0.725 arcsec [1.40σ]
OotOffset-st: 4/1/4/5 [14]
KicOffset-rm: 0.786 arcsec [1.63σ]
KicOffset-st: 4/1/4/5 [14]
DiffImageQuality-fgm: 0.79 [11/14]
DiffImageOverlap-fno: 0.00 [0/14]

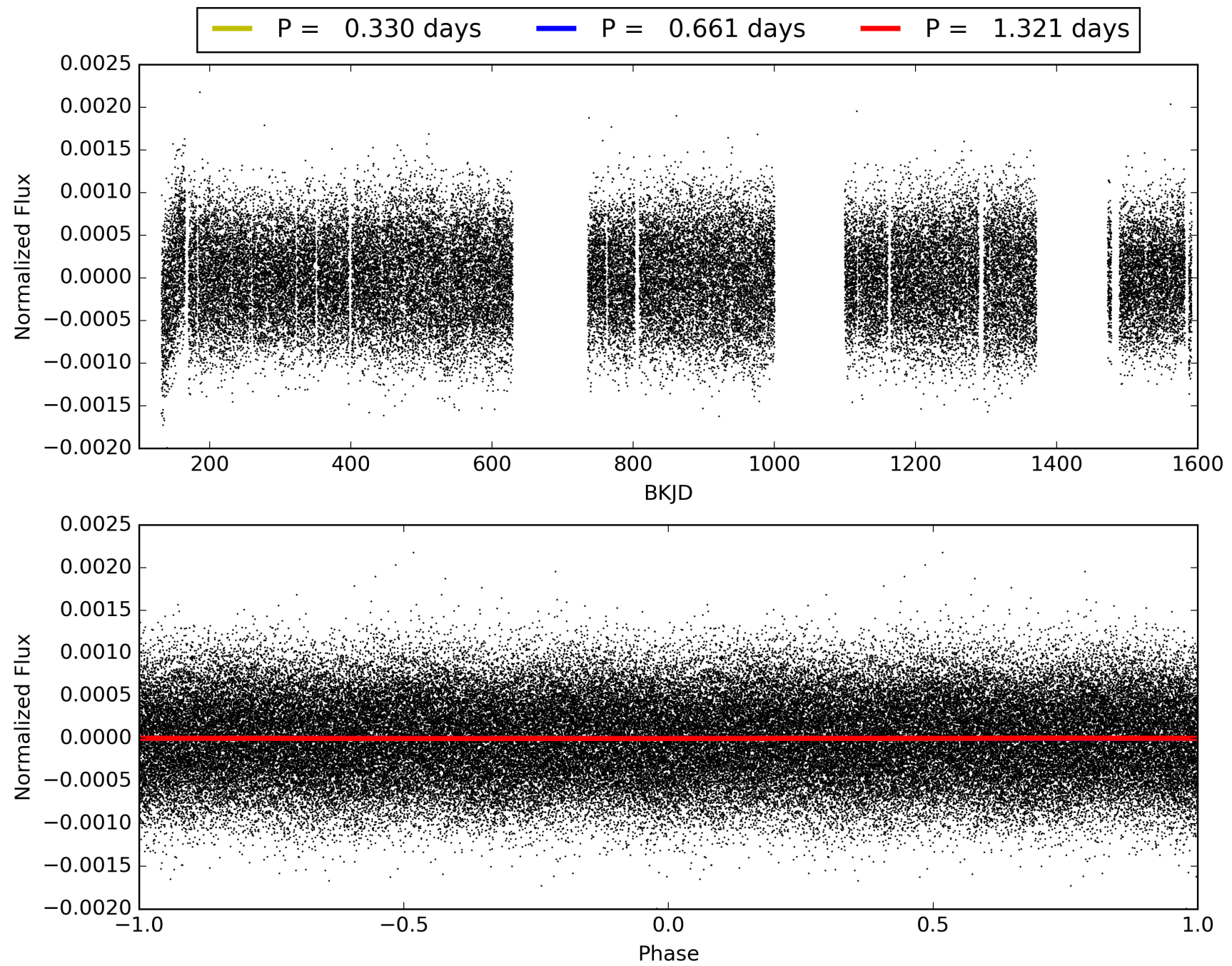
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 01-Feb-2016 07:10:16 Z

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

TCE 011152625-03, PDC Light Curves

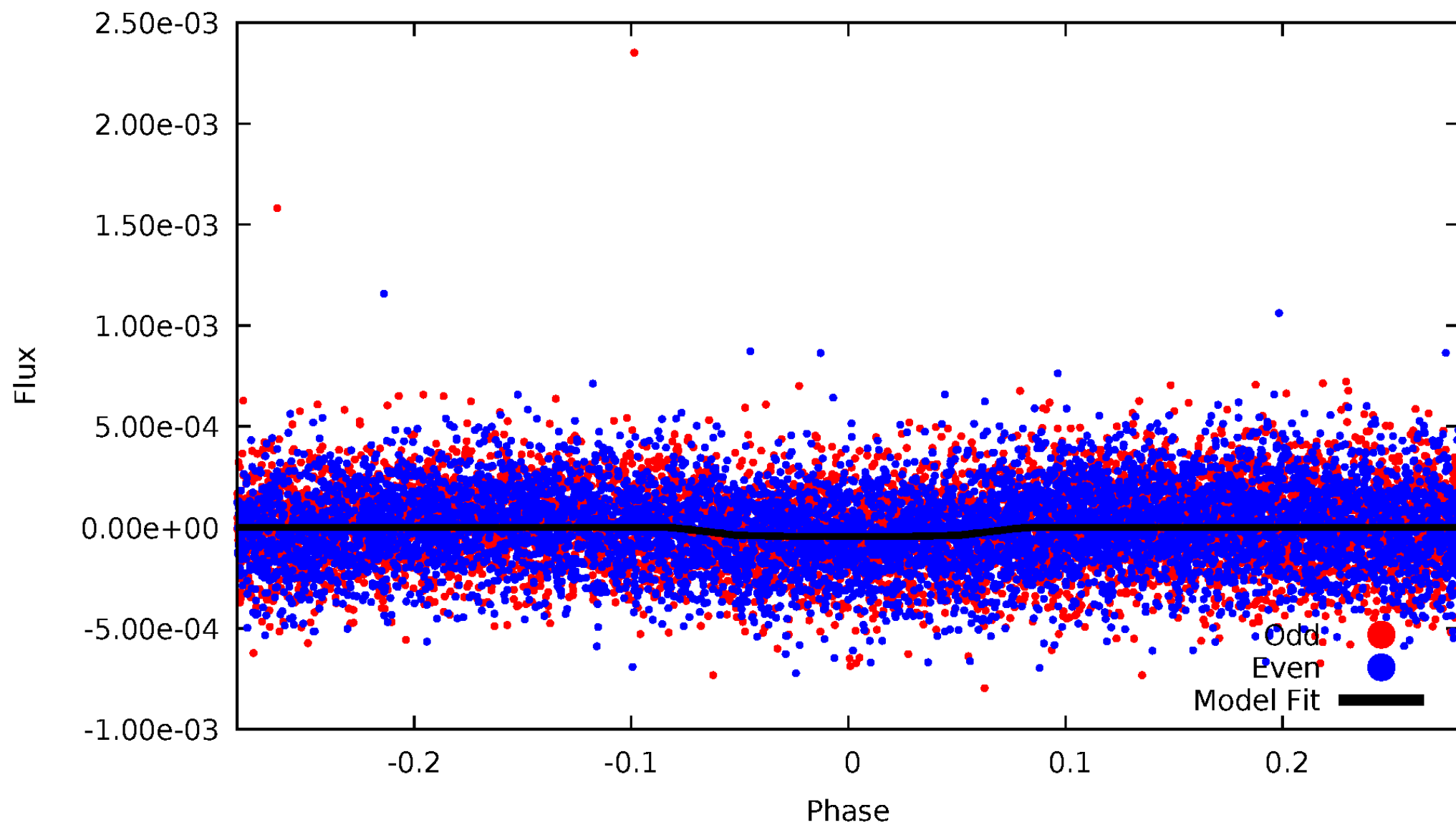


TCE 011152625-03



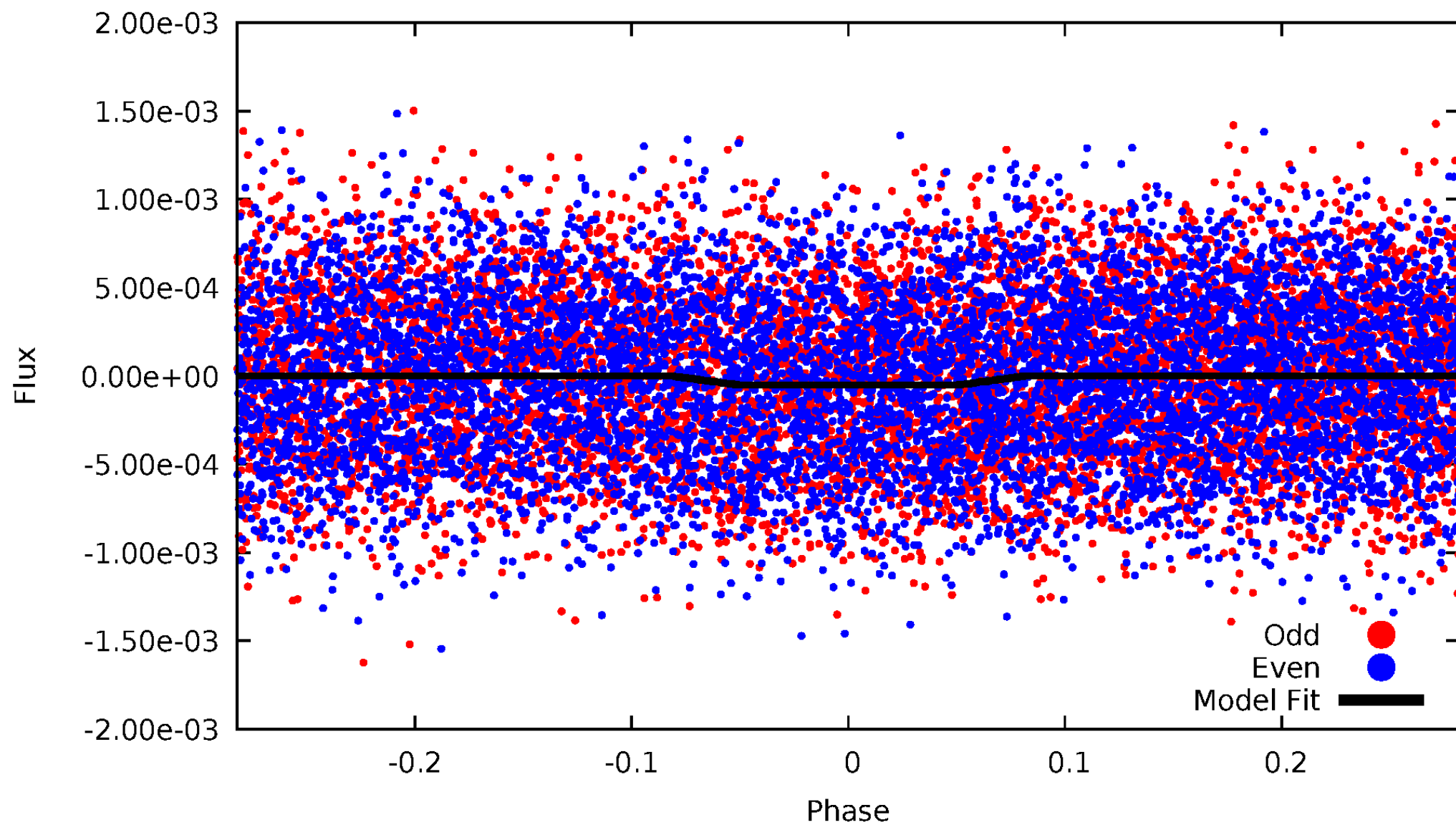
DV Odd/Even

TCE 011152625-03



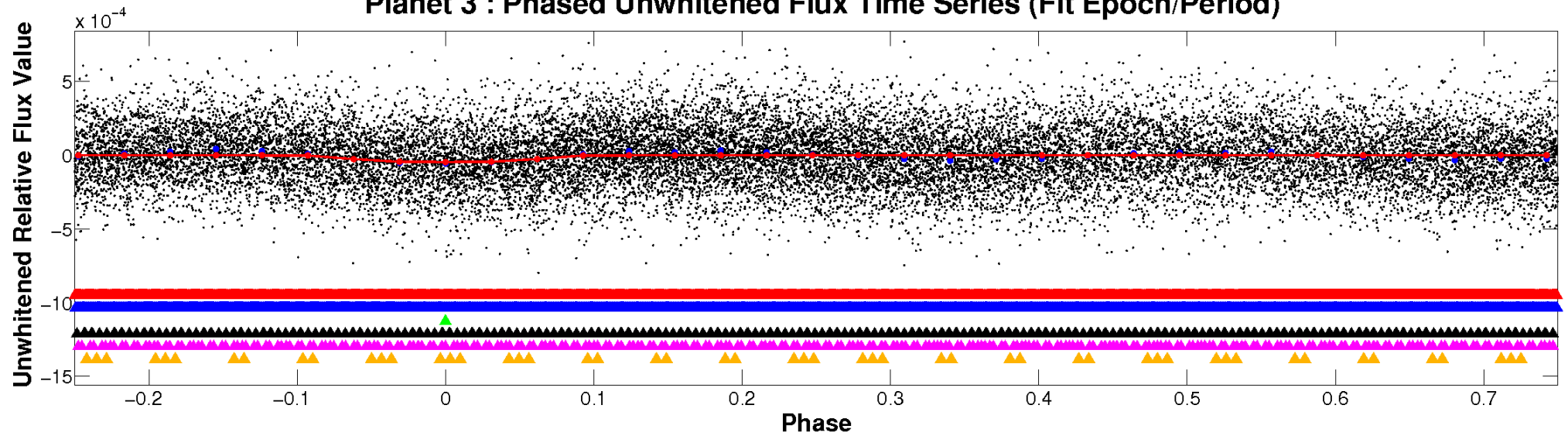
ALT Odd/Even

TCE 011152625-03

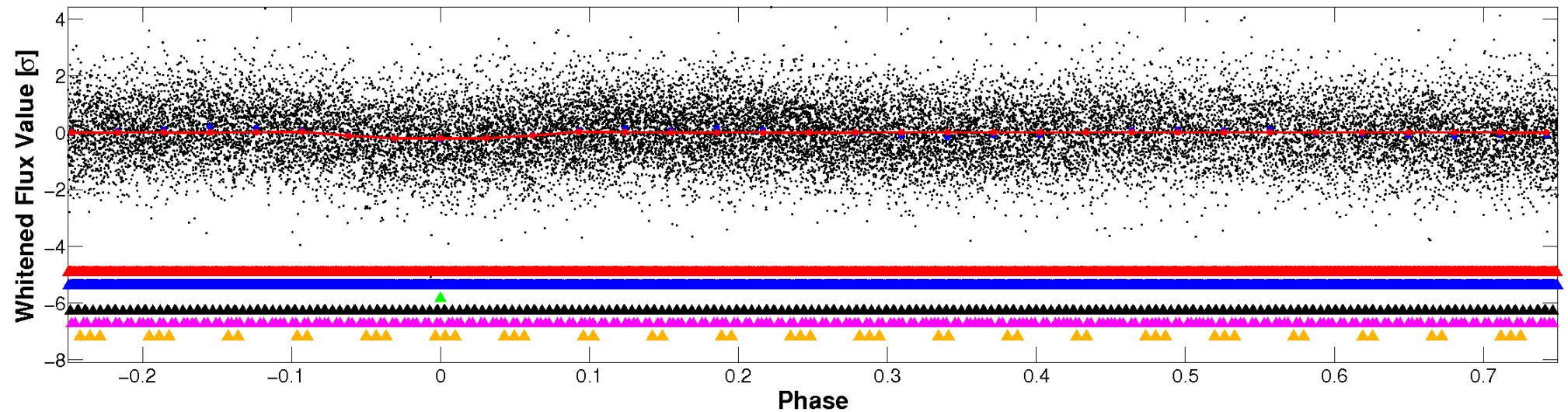


Non-Whitened Vs. Whitened Light Curve

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

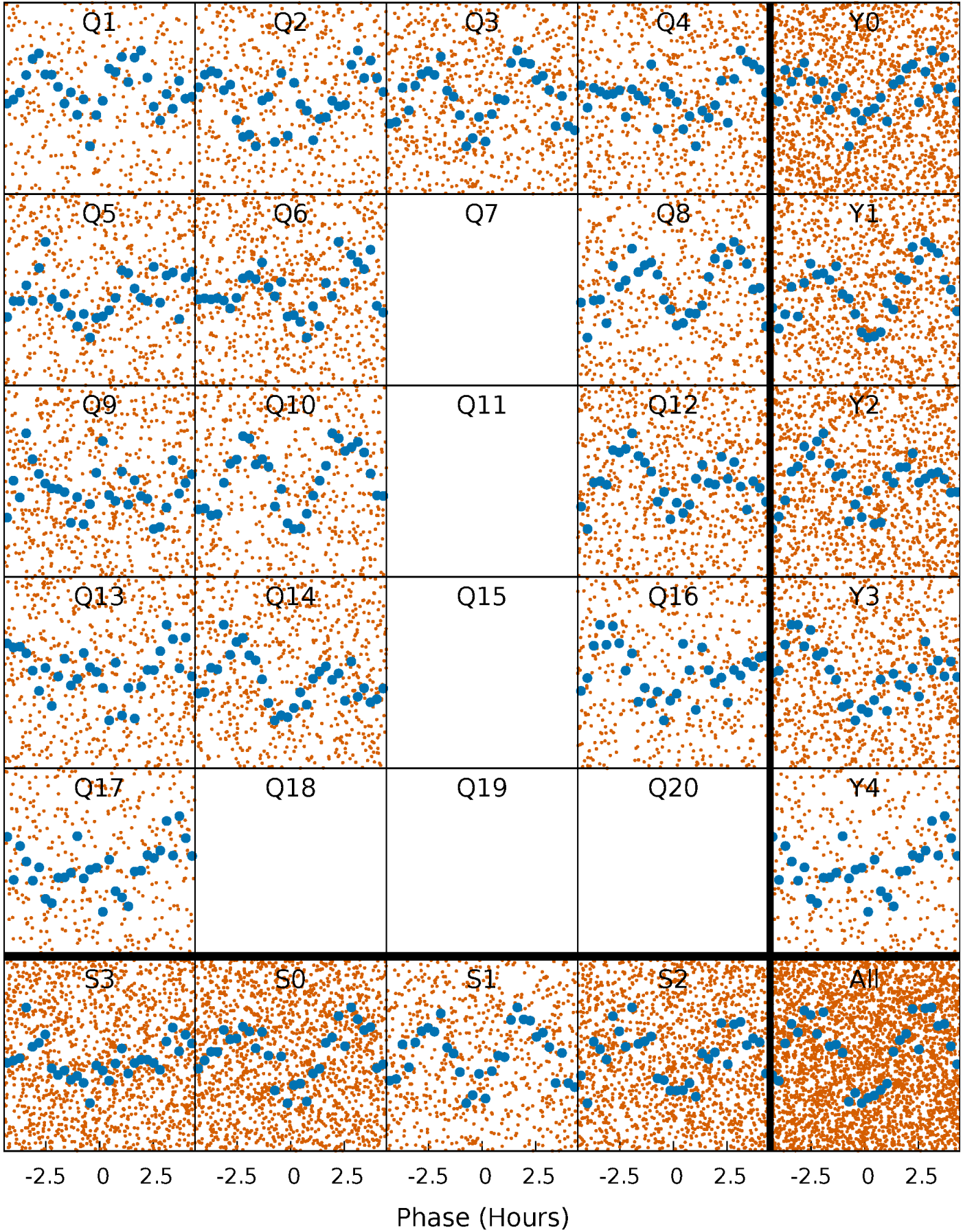


Planet 3 : Phased Whitened Flux Time Series (Fit Epoch/Period)



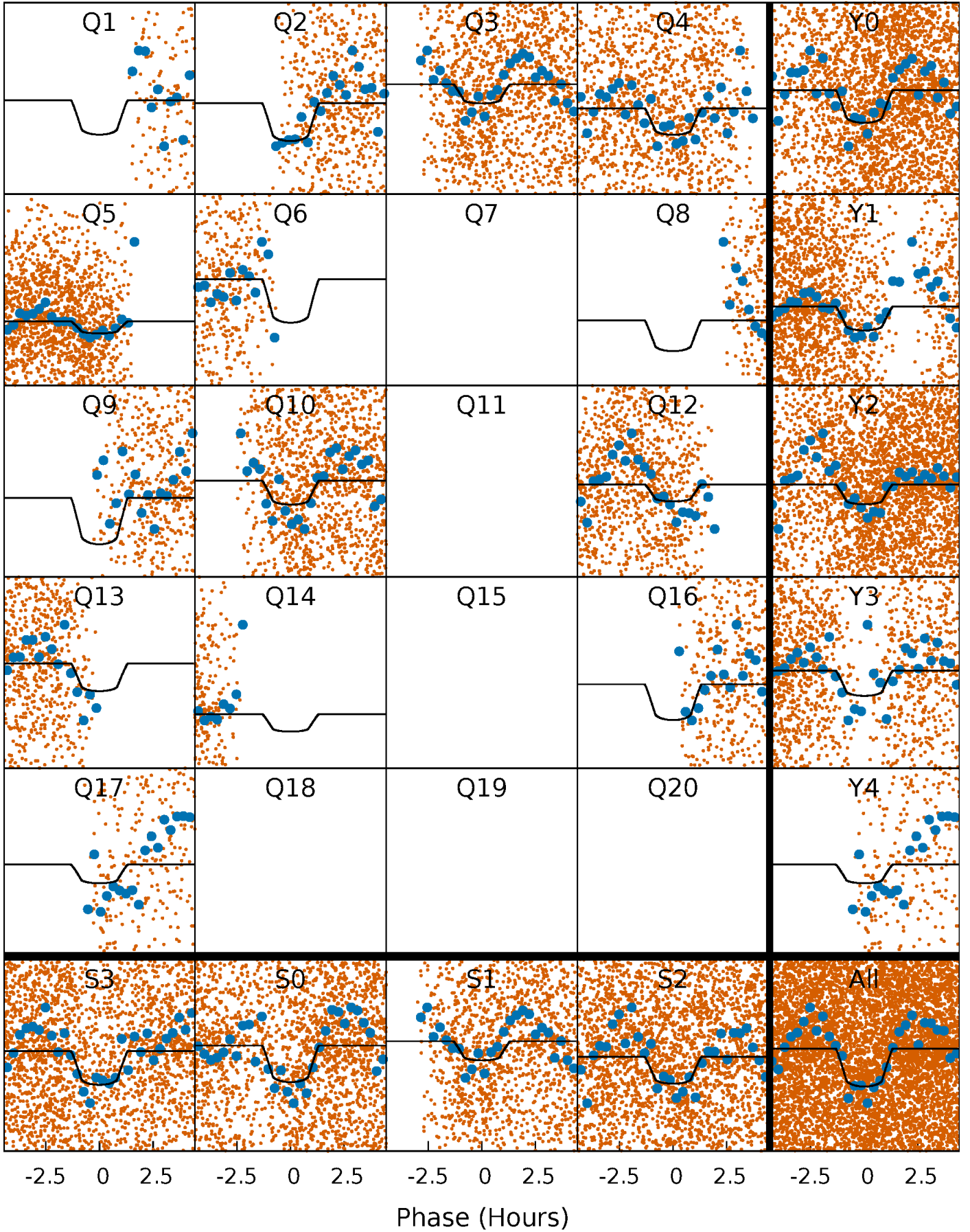
PDC Quarter-Phased Transit Curves

TCE 011152625-03 P= 0.660577 Days $T_0=131.854682$ (BKJD)



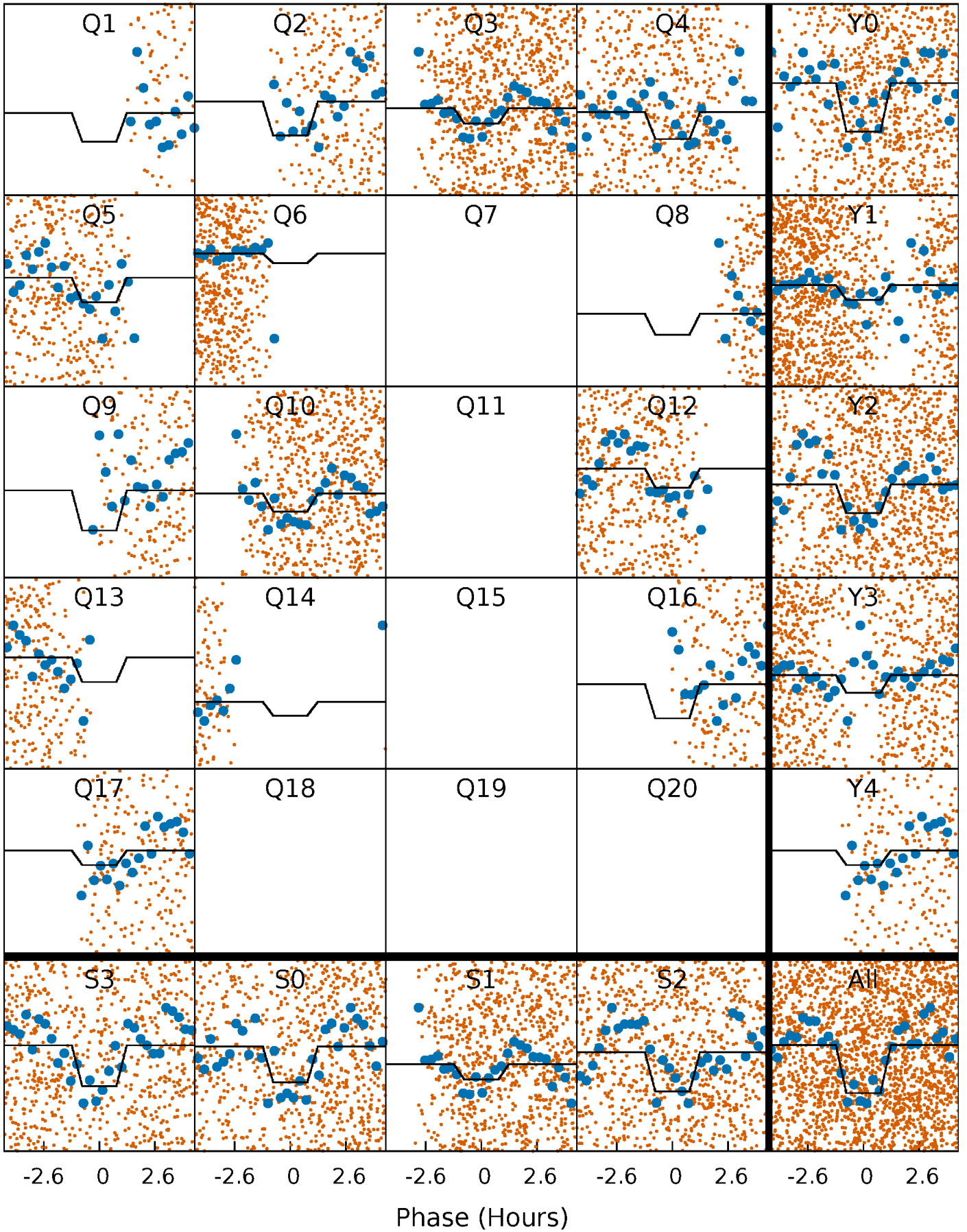
DV Quarter-Phased Transit Curves

TCE 011152625-03 P= 0.660577 Days $T_0=131.854682$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

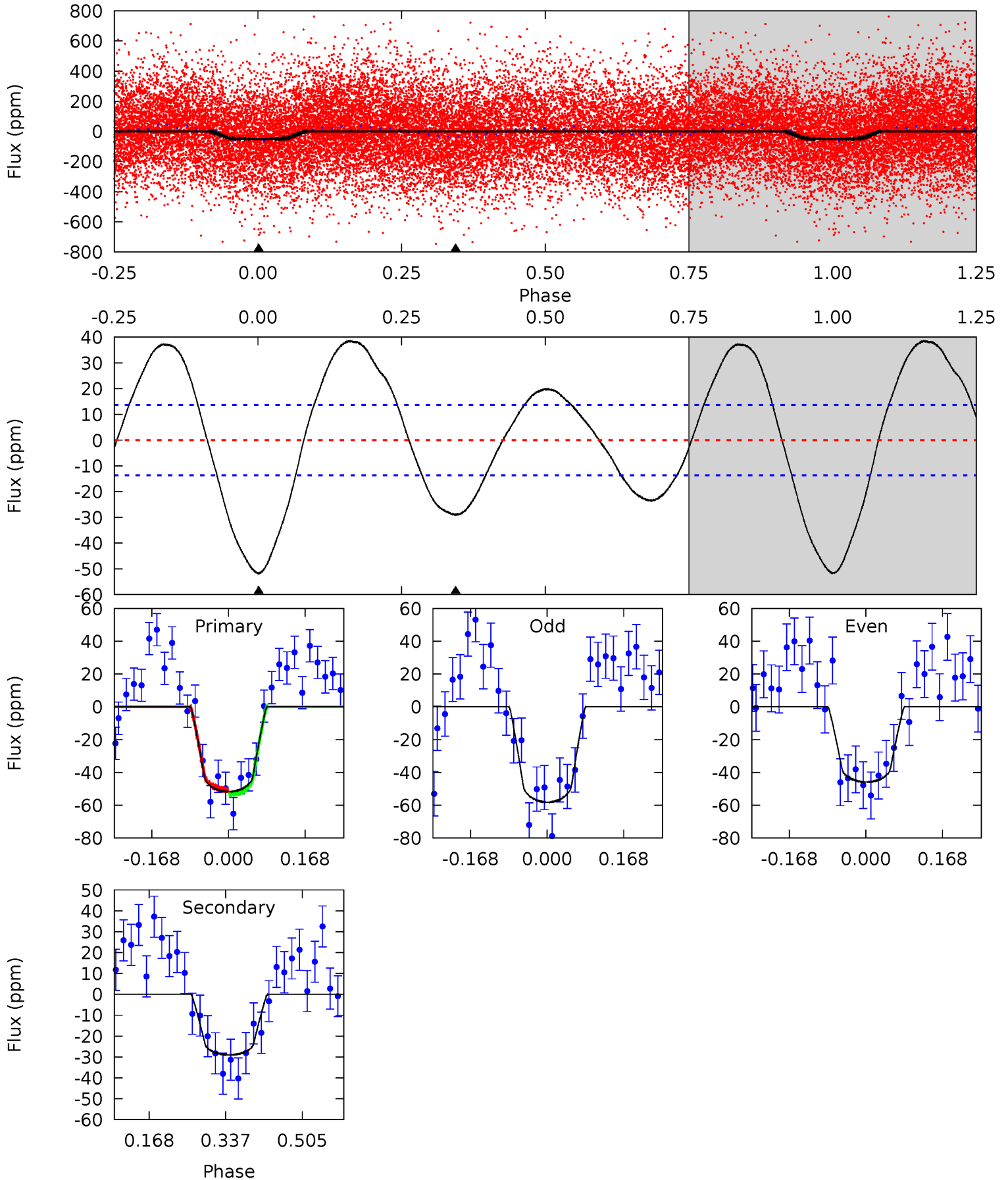
TCE 011152625-03 P= 0.660582 Days $T_0=131.857316$ (BKJD)



DV Model-Shift Uniqueness Test

011152625-03, P = 0.660577 Days, E = 131.194105 Days

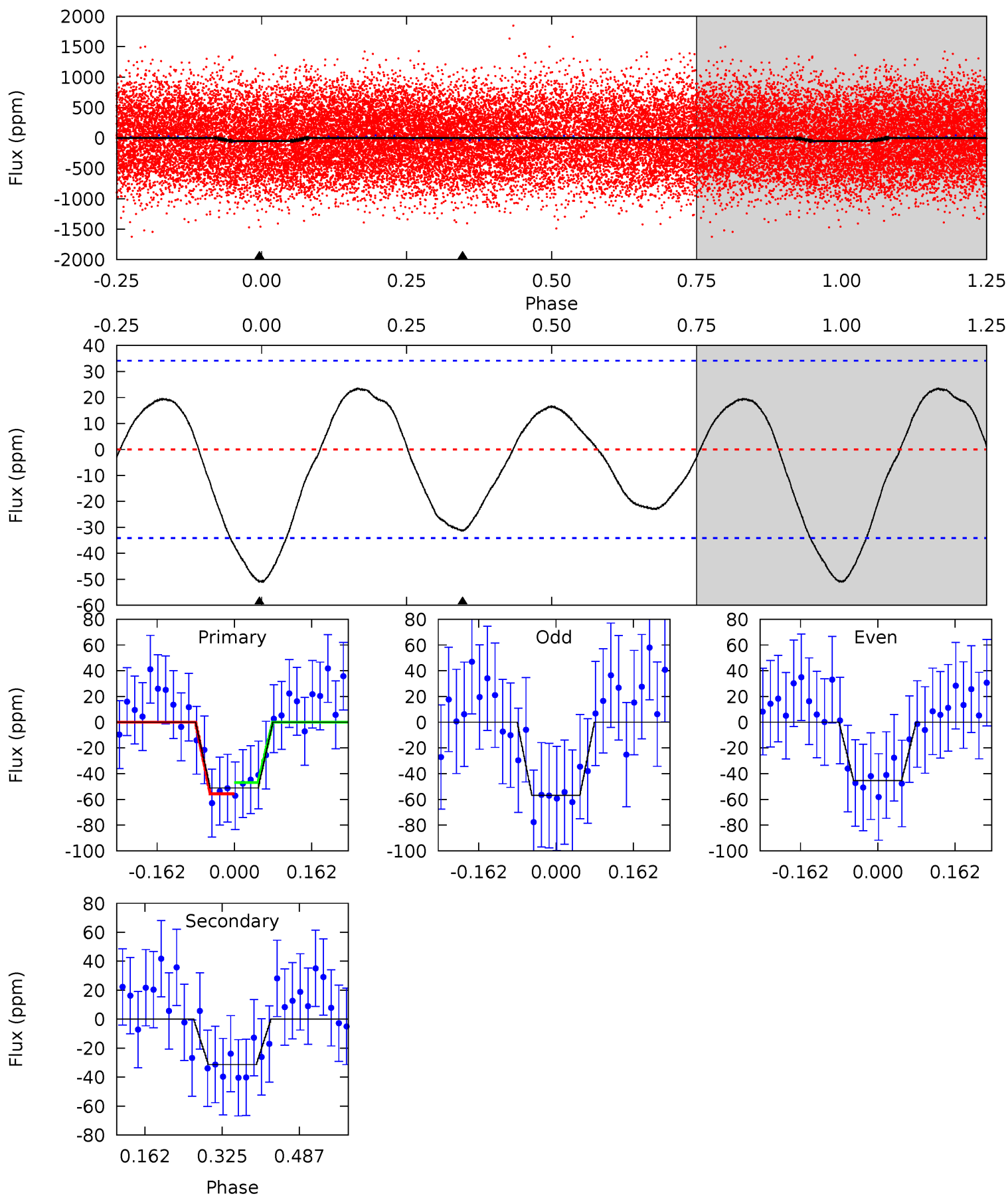
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
16.9	9.47	0	0	4.45	1.38	6.24	16.9	16.9	9.47	9.47	2.01	0.86	0.43	0.39



Alt Model-Shift Uniqueness Test

011152625-03, P = 0.660582 Days, E = 131.196734 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
6.67	4.10	0	0	4.46	1.40	2.06	6.67	6.67	4.10	4.10	0.74	0.91	0.32	0.58



Stellar Parameters For KIC 011152625

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	7606^{+211}_{-316}	$4.099^{+0.144}_{-0.176}$	$-0.100^{+0.200}_{-0.350}$	$1.880^{+0.523}_{-0.428}$	$1.617^{+0.197}_{-0.263}$	$0.343^{+0.287}_{-0.156}$
	+3%/-4%	+4%/-4%	+200%/-350%	+28%/-23%	+12%/-16%	+84%/-45%
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 011152625-03 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-29 ± 3	$1.46^{+0.56}_{-0.50}$	4876^{+351}_{-351}	6242^{+1659}_{-976}	$2.240^{+2.975}_{-1.031}$
Alt.	-31 ± 8	$1.51^{+0.55}_{-0.53}$	4894^{+387}_{-336}	6338^{+1884}_{-1123}	$2.278^{+3.109}_{-1.147}$

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 $A_{obs} \gg 1.0$

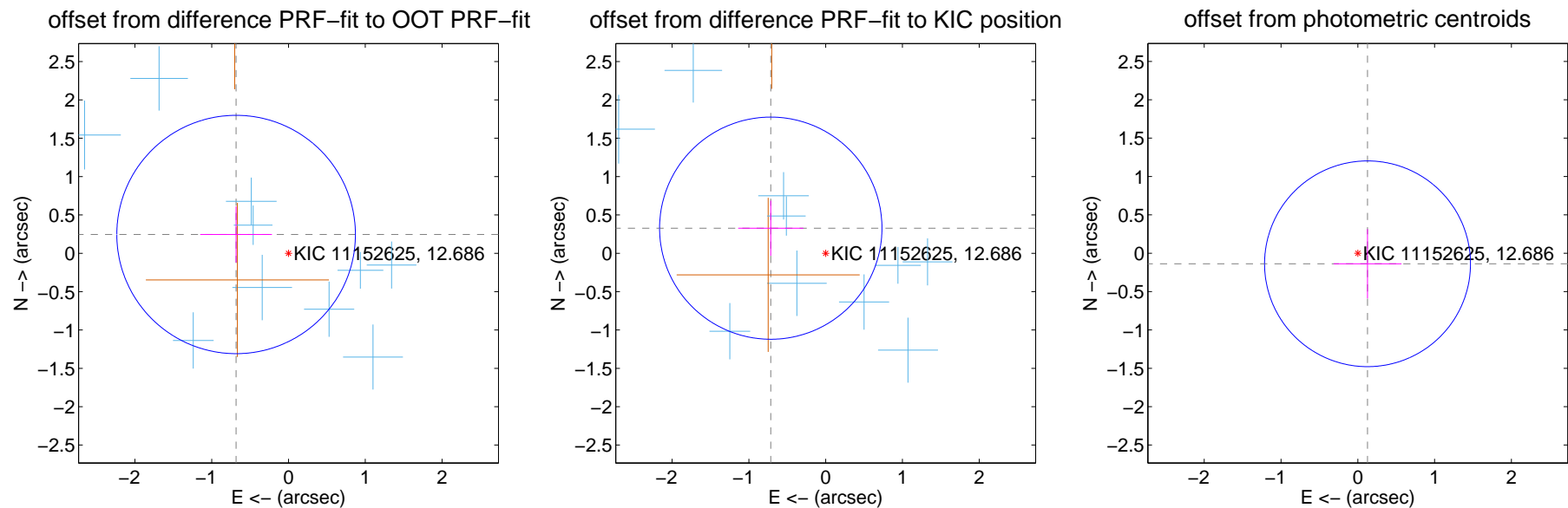
DV Centroid Data

Supplemental centroid analysis for 011152625-03. Kepler magnitude: 12.69. Transit SNR 10.05

There are 11 quarters with good PRF difference image offsets

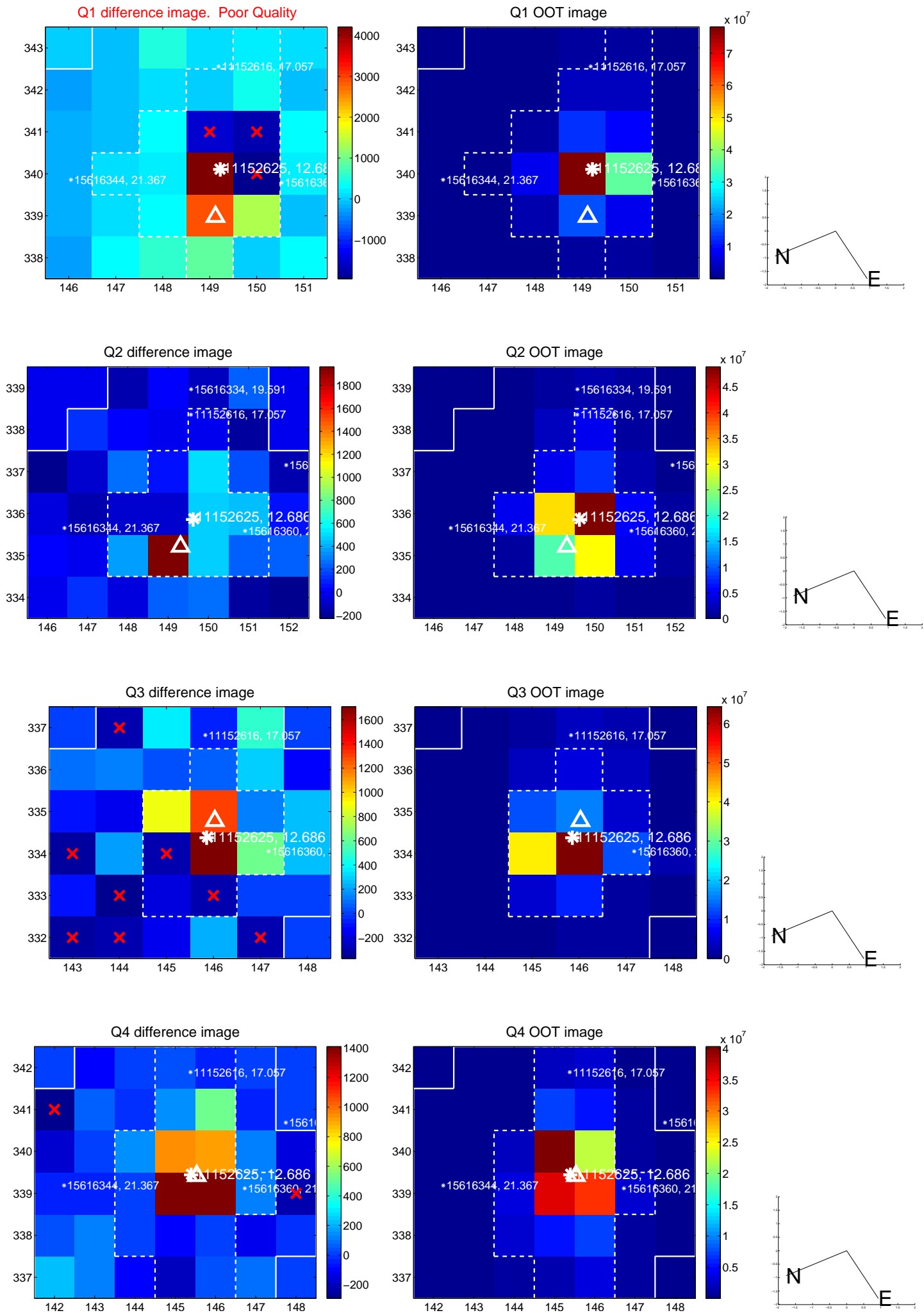
The direct PRF centroid is offset from the target star catalog position by about 0.06 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.725 ± 0.518	1.40	0.682 ± 0.467	0.245 ± 0.366
PRF-fit source offset from KIC position	0.786 ± 0.483	1.63	0.715 ± 0.425	0.327 ± 0.359
photometric centroid source offset	0.19 ± 0.45	0.42	-0.13 ± 0.44	-0.14 ± 0.45

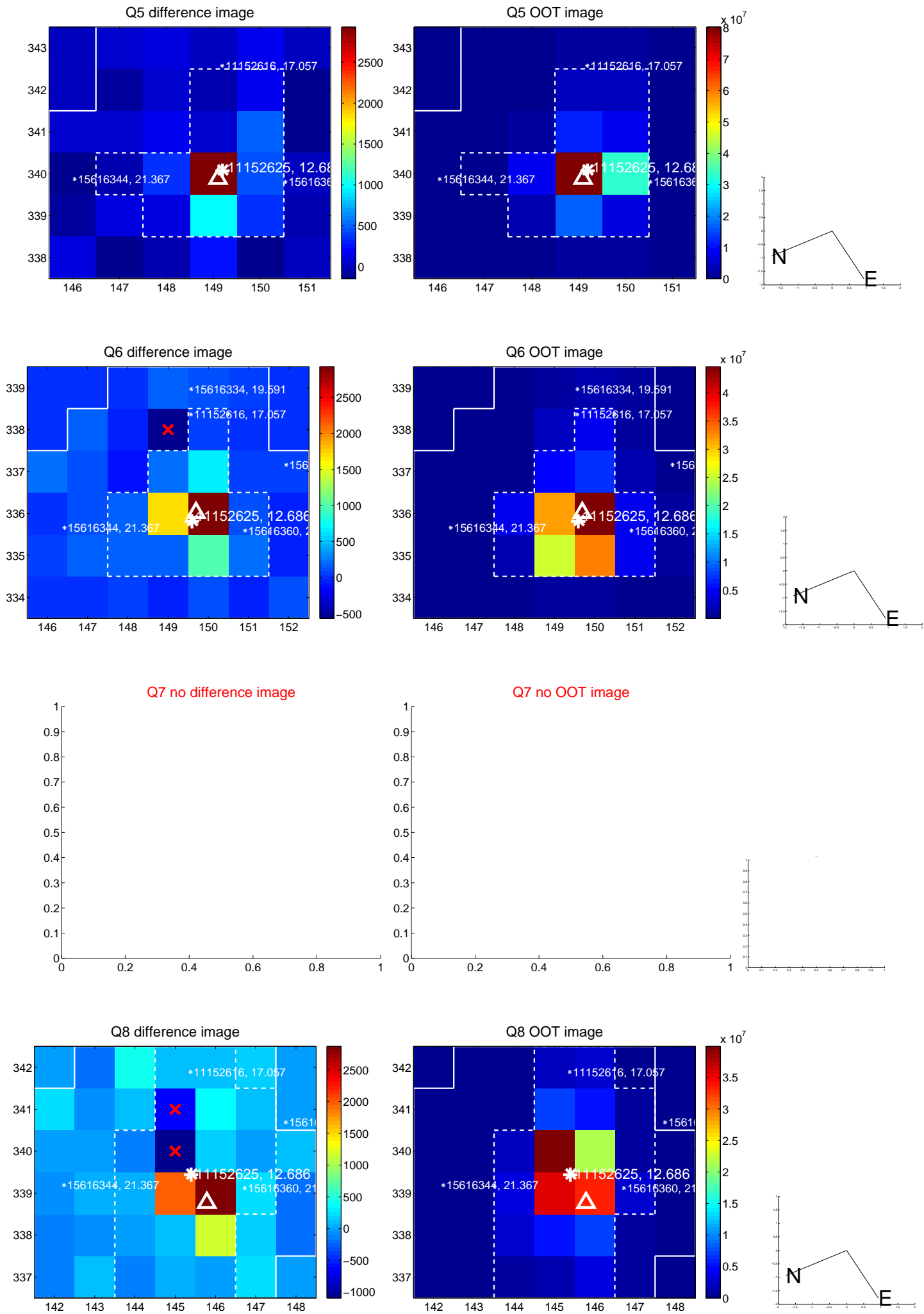


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses:** good quarterly centroid offsets; **Vermillion crosses:** bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

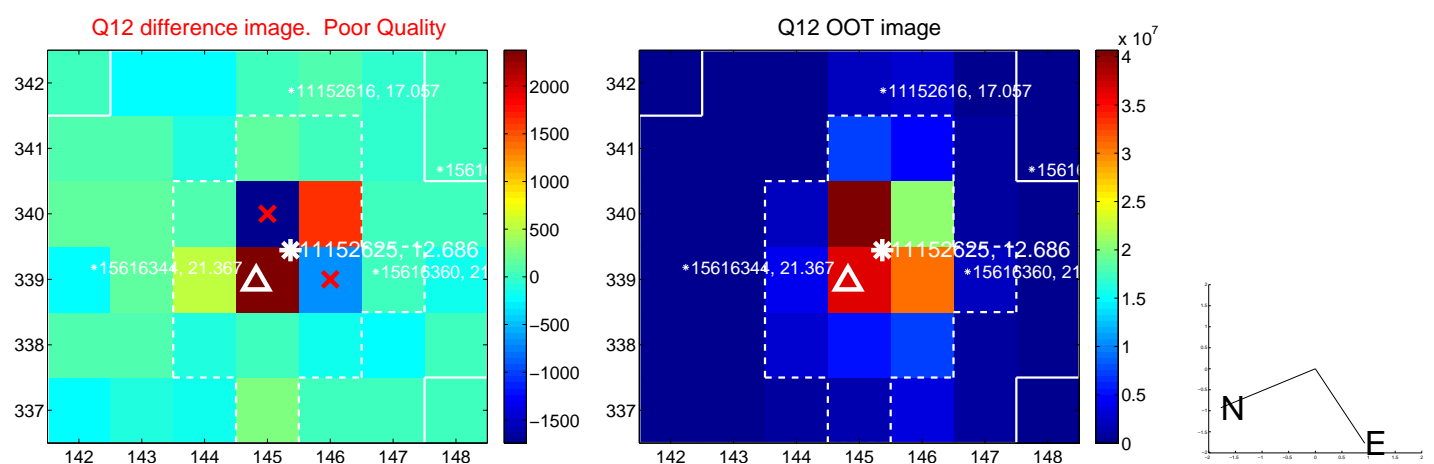
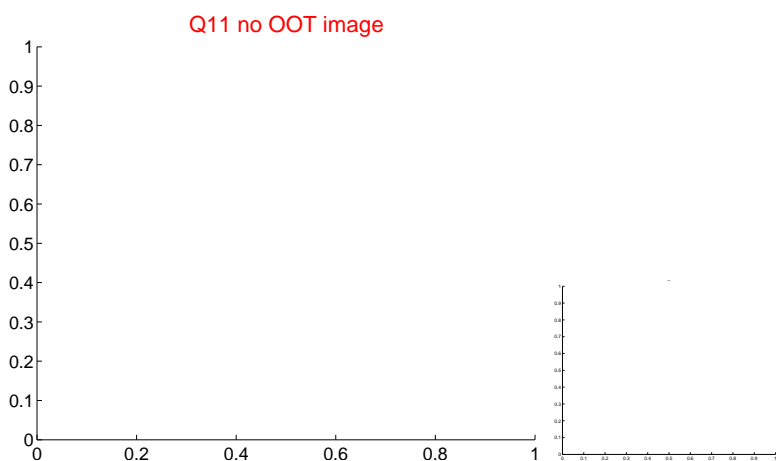
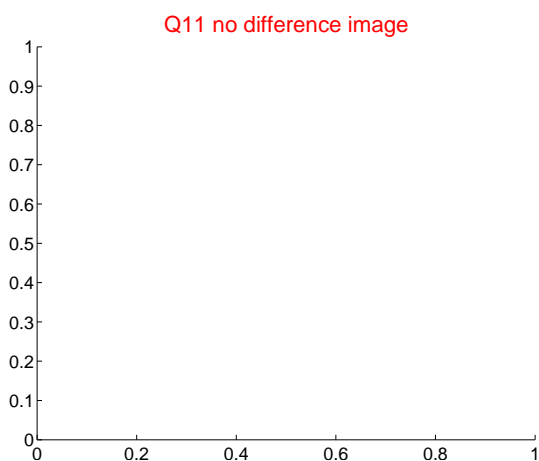
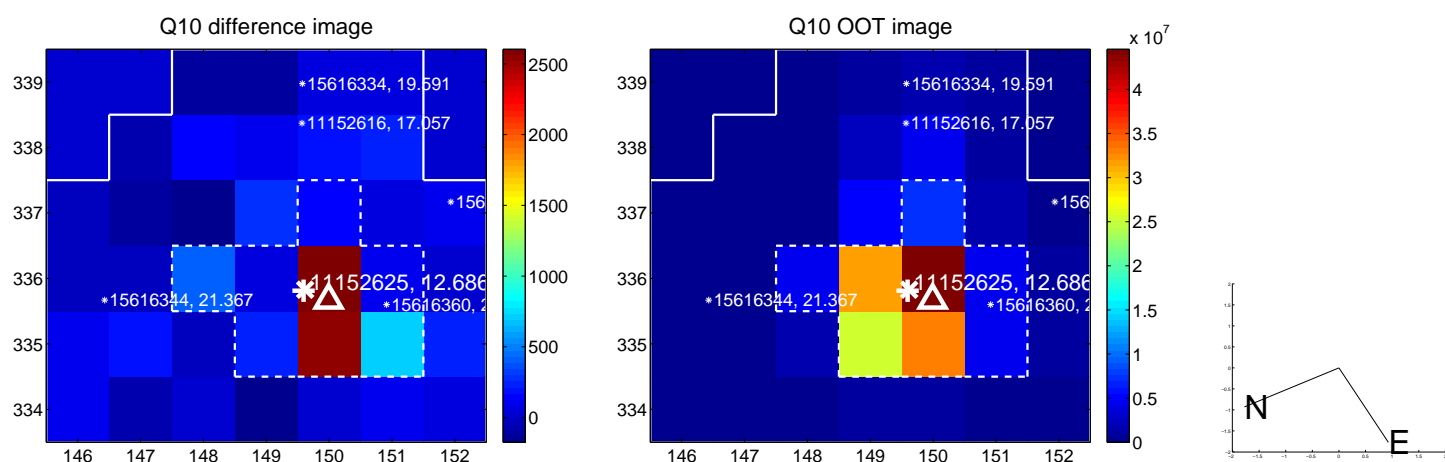
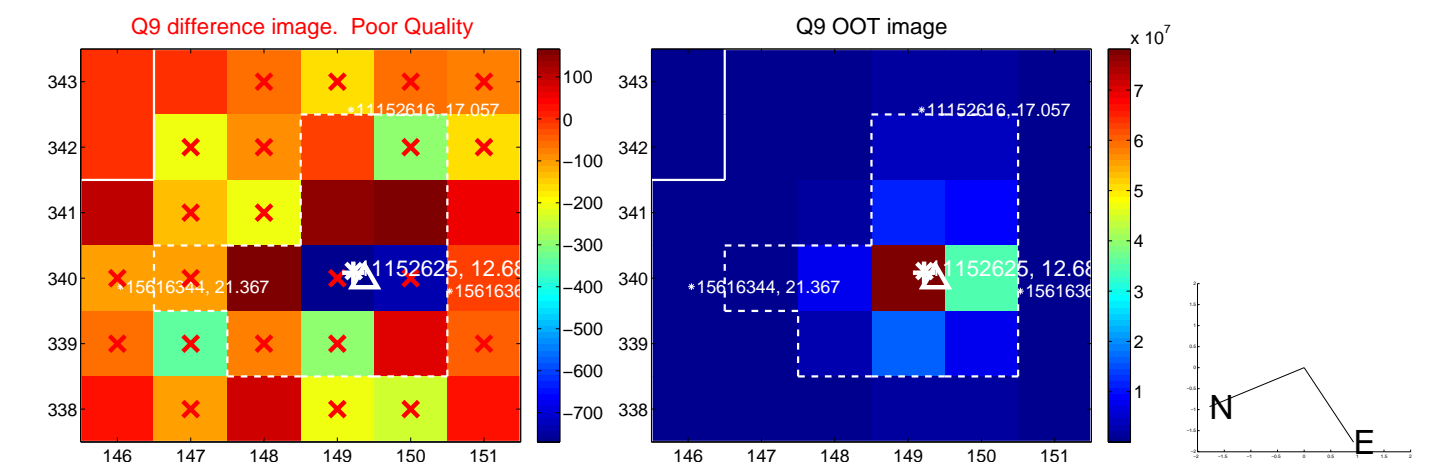
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



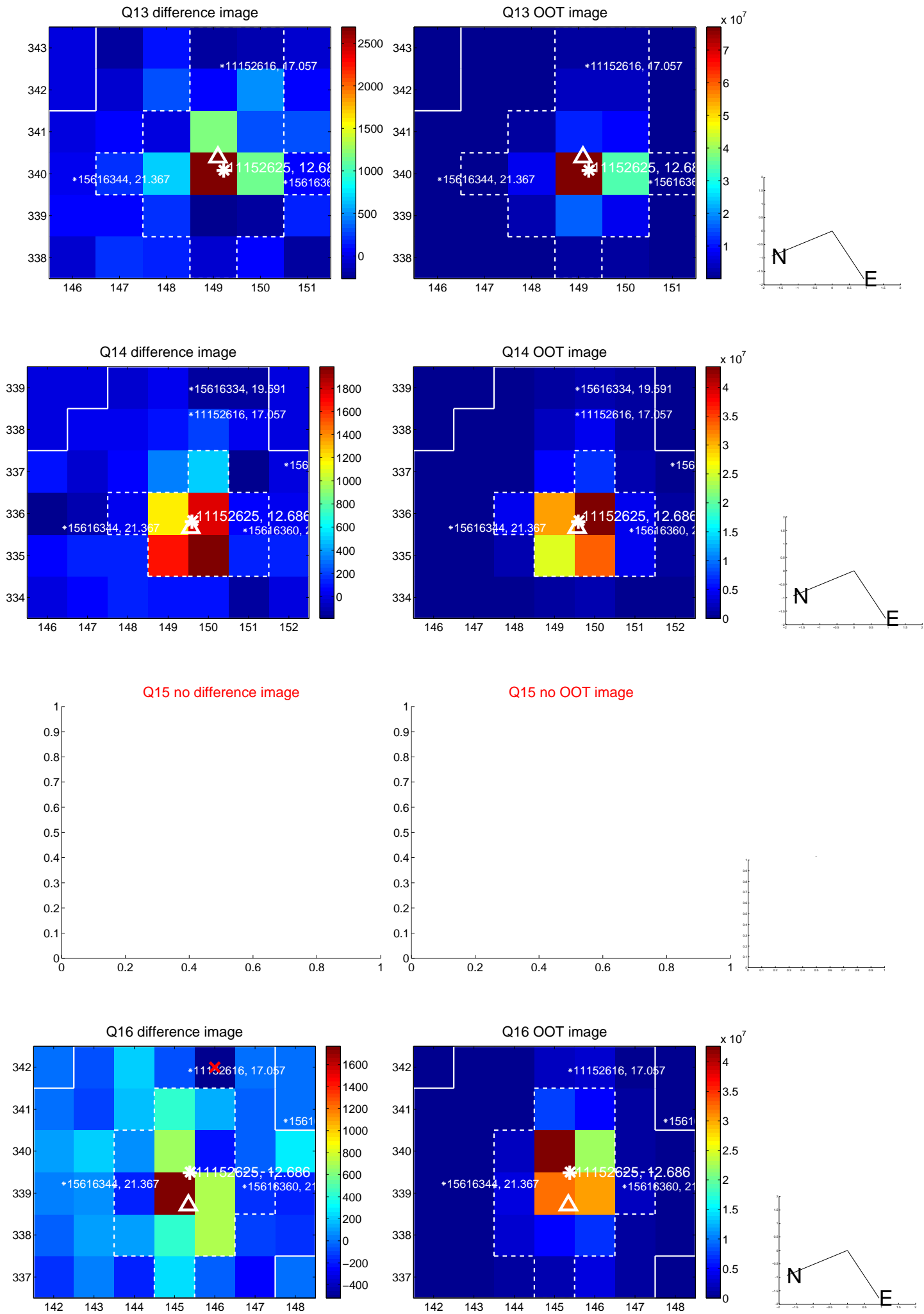
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



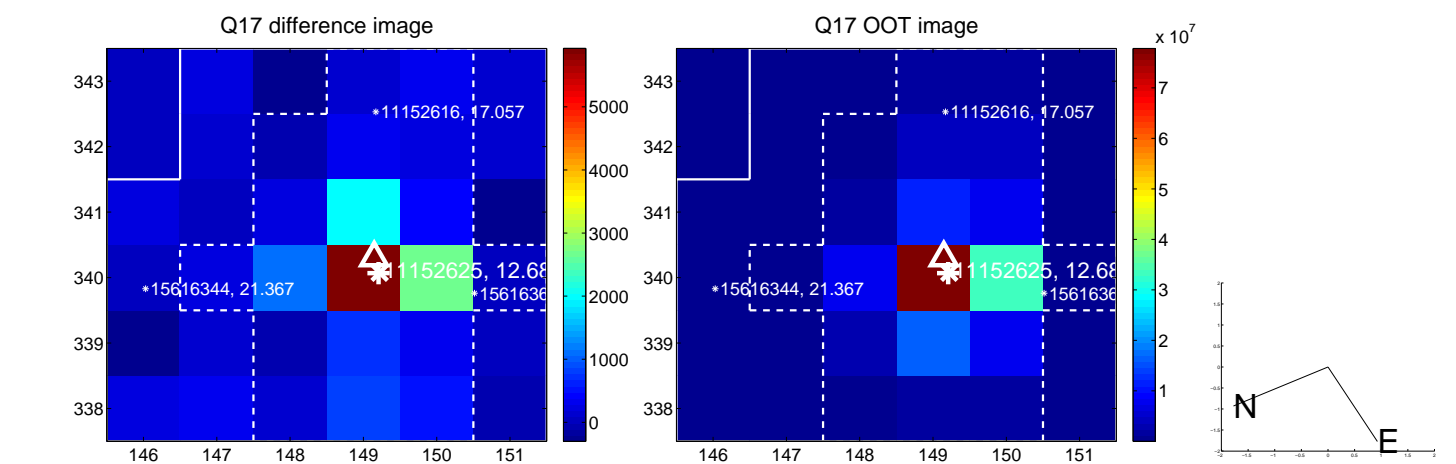
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



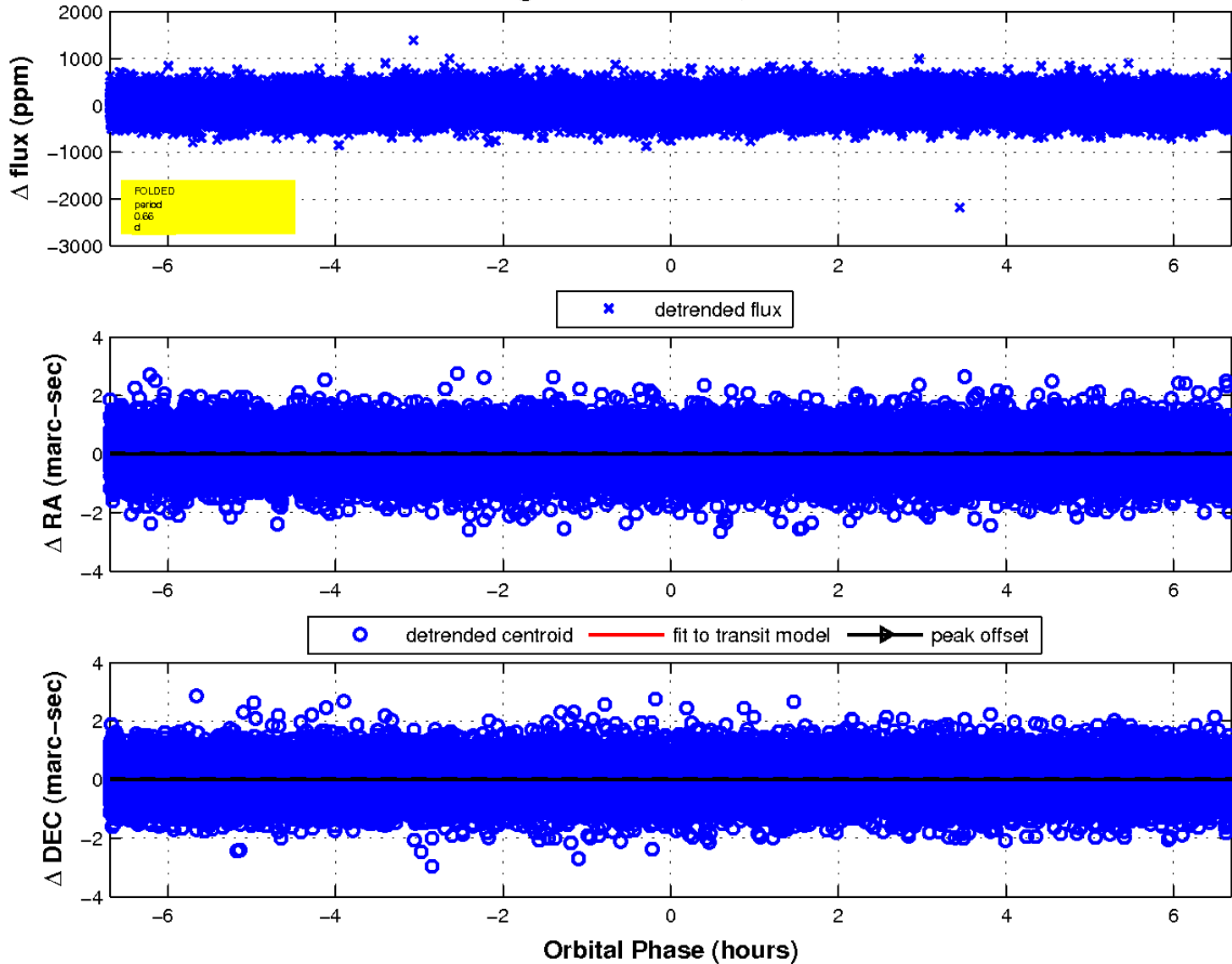
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

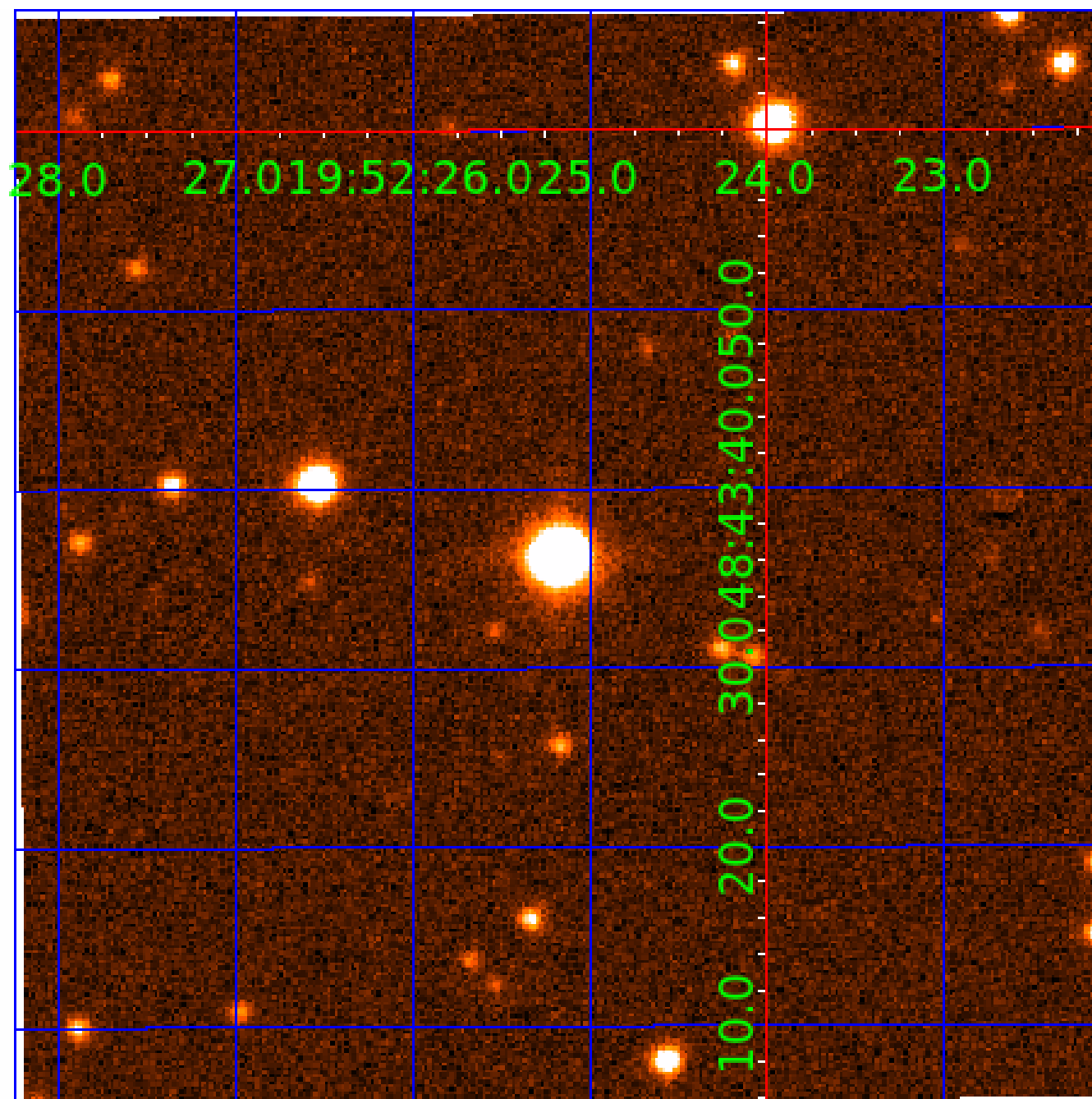


fluxWeightedCentroids, Planet 3 of 6



UKIRT Image

Declination



KIC 011152625

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})
011152625-01	OBS	No	0.659923	131.676243	41.2	0.945	11.0	9.4	1.88	7606	1.39	34911.39
011152625-02	OBS	No	0.659928	131.832199	31.6	1.548	9.8	8.5	1.88	7606	1.23	34911.07
011152625-03	OBS	No	0.660577	131.854682	45.4	2.231	9.5	10.1	1.88	7606	1.47	34865.29
011152625-04	OBS	No	4.610766	135.583996	81.3	12.117	7.8	10.2	1.88	7606	1.89	2613.73
011152625-05	OBS	No	5.265034	135.495765	158.7	2.061	7.3	7.0	1.88	7606	2.74	2189.89
011152625-06	OBS	No	27.901738	156.827464	345.1	2.533	7.6	8.3	1.88	7606	4.01	237.02

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
011152625-01	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT
011152625-02	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—SAME_NTL_PERIOD
011152625-03	OBS	FP	0.00	1	0	0	0	TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT
011152625-04	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_SKYE_ZUMA—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_ALT
011152625-05	OBS	FP	0.00	1	0	1	0	INDIV_TRANS_RUBBLE_ZUMA—TRANS_GAPPED—MOD_NONUNIQ_ALT—MOD_TER_ALT—HALO_GHOST
011152625-06	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_SKYE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_FEW_DIFFS

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

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

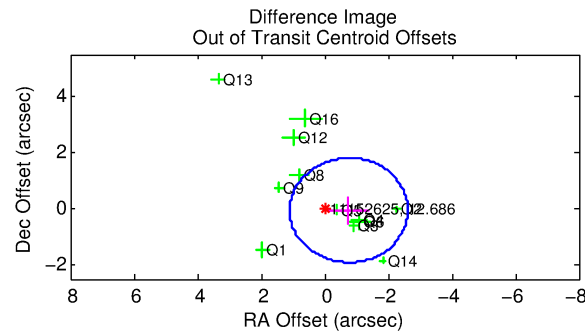
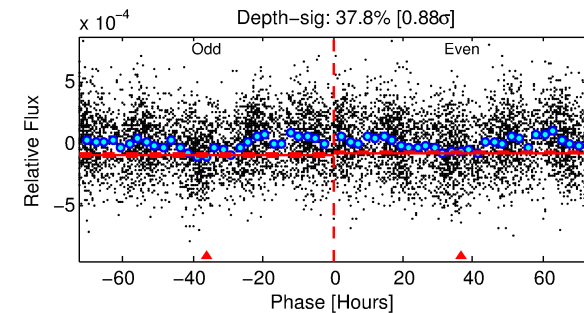
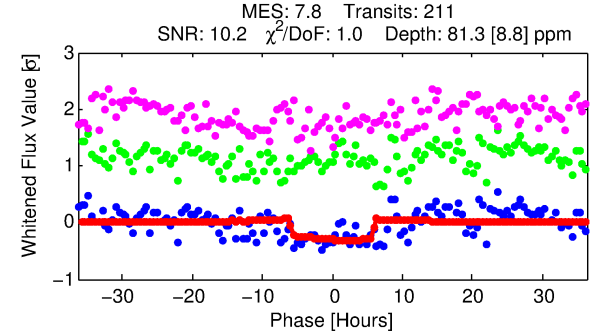
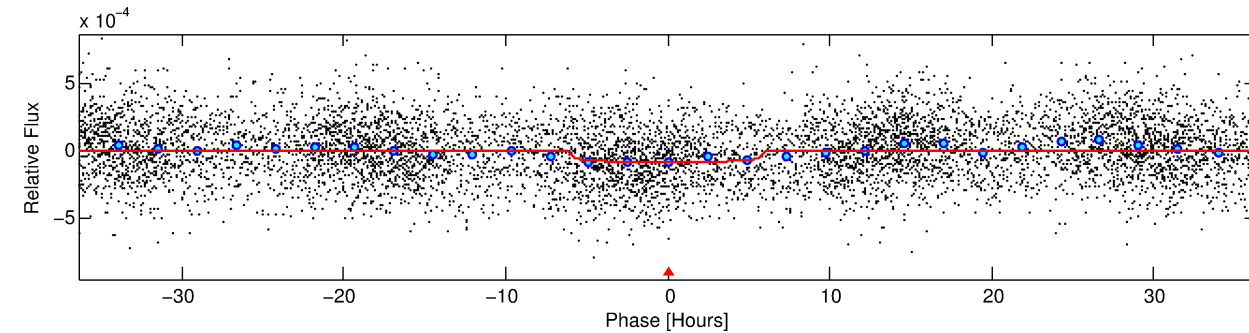
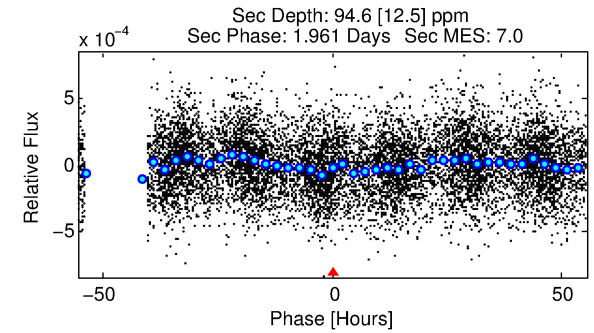
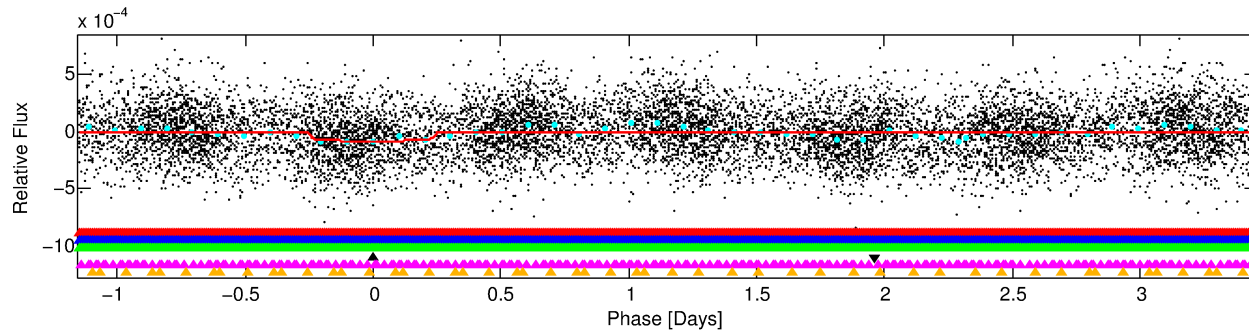
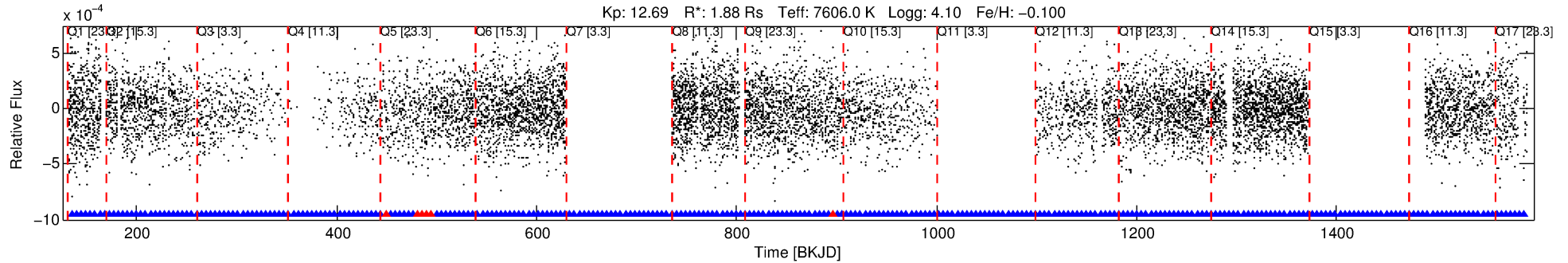
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 011152625-04

No Significant Match Found

DV One-Page Summary

KIC: 11152625 Candidate: 4 of 6 Period: 4.611 d



DV Fit Results:

Period = 4.61077 [0.00009] d
Epoch = 135.5840 [0.0128] BKJD
Rp/R* = 0.0092 [0.0022]
a/R* = 1.91 [2.07]
b = 0.83 [0.58]
Seff = 2613.73 [960.36]
Teq = 1823 [167] K
Rp = 1.88 [0.69] Re
a = 0.0637 [0.0146] AU
Ag = 59.43 [35.15] [1.66σ]
Teffp = 7827 [1017] K [5.83σ]

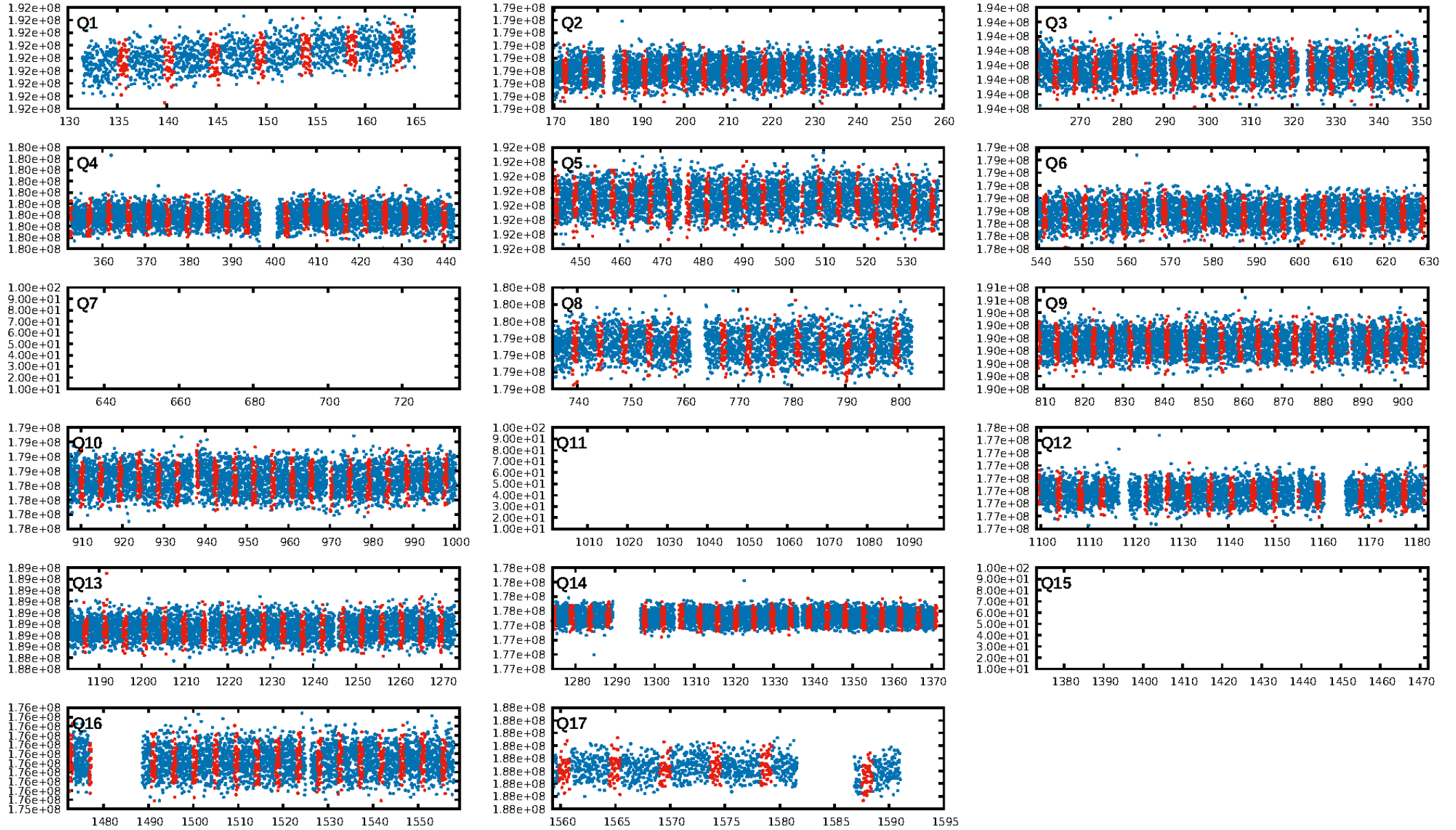
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [7.69σ]
LongPeriod-sig: 79.9% [1.28σ]
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 1.02e-10
RollingBand-fgt: 0.97 [192/198]
GhostDiagnostic-chr: -1.12
Centroid-sig: 46.1%
Centroid-so: 0.276 arcsec [0.81σ]
OotOffset-rm: 0.758 arcsec [1.22σ]
KicOffset-rm: 0.724 arcsec [1.16σ]
OotOffset-st: 3/1/4/4 [12]
KicOffset-st: 3/1/4/4 [12]
DiffImageQuality-fgm: 0.67 [8/12]
DiffImageOverlap-fno: 0.00 [0/14]

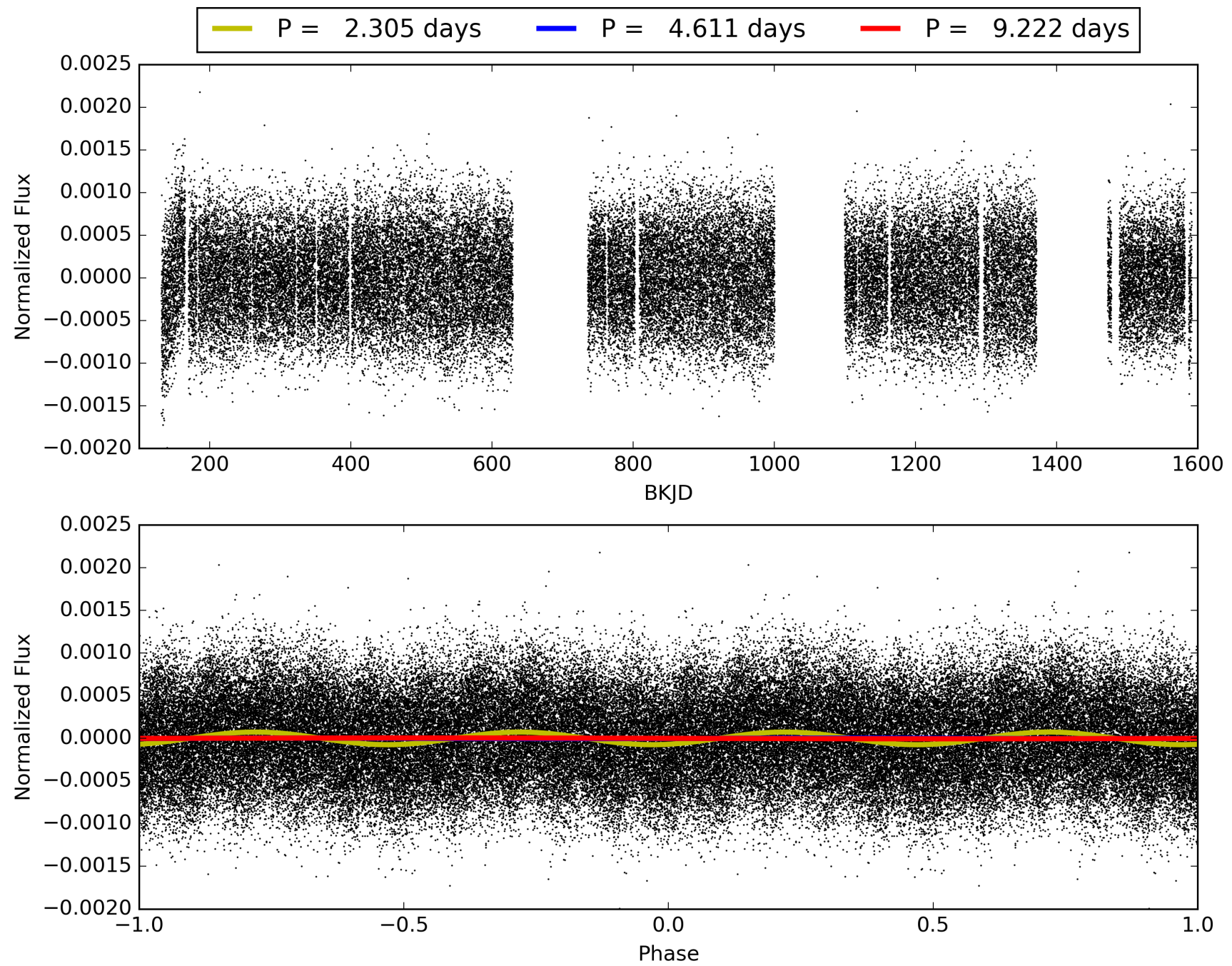
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 01-Feb-2016 07:10:24 Z

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

TCE 011152625-04, PDC Light Curves

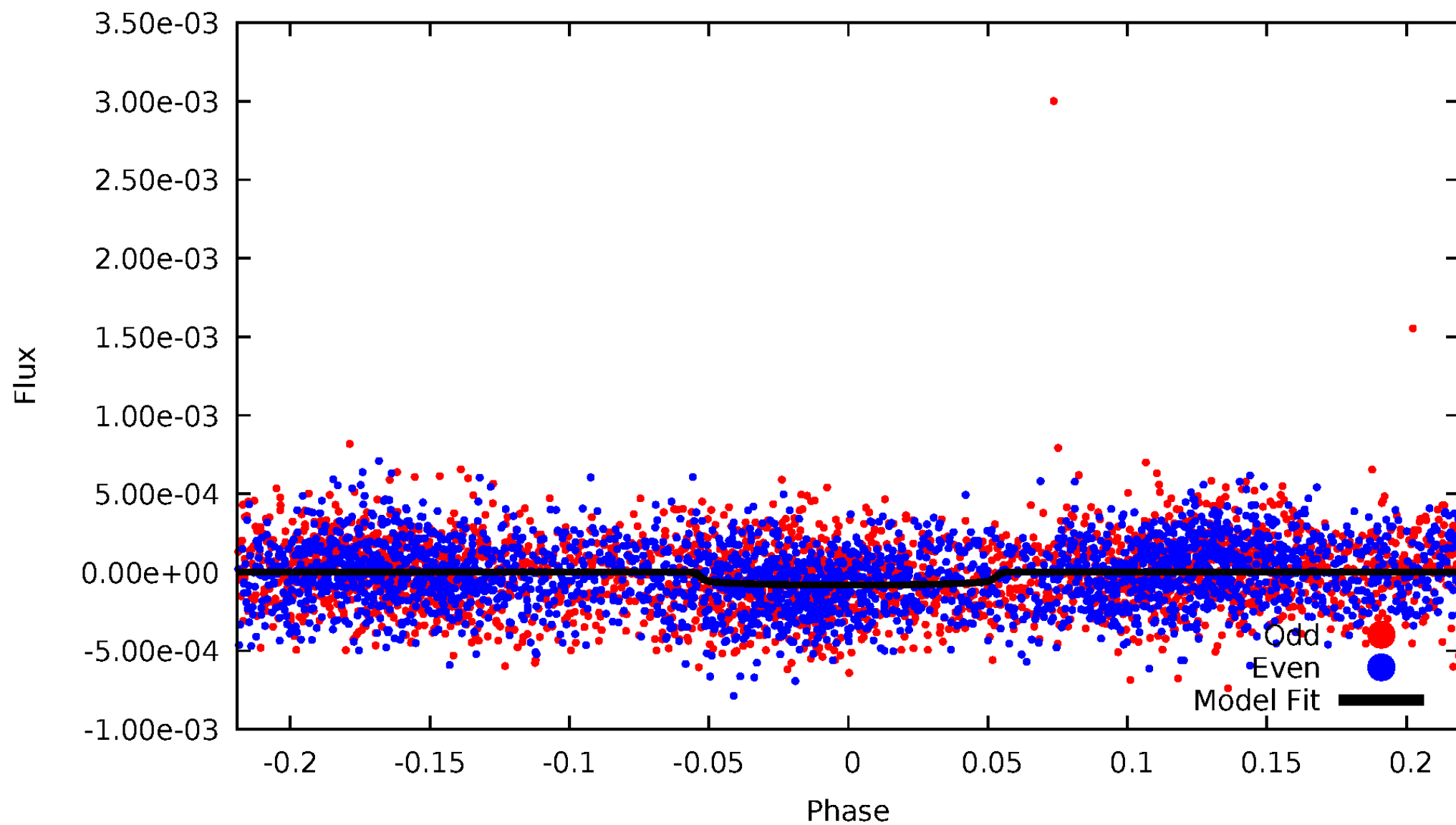


TCE 011152625-04



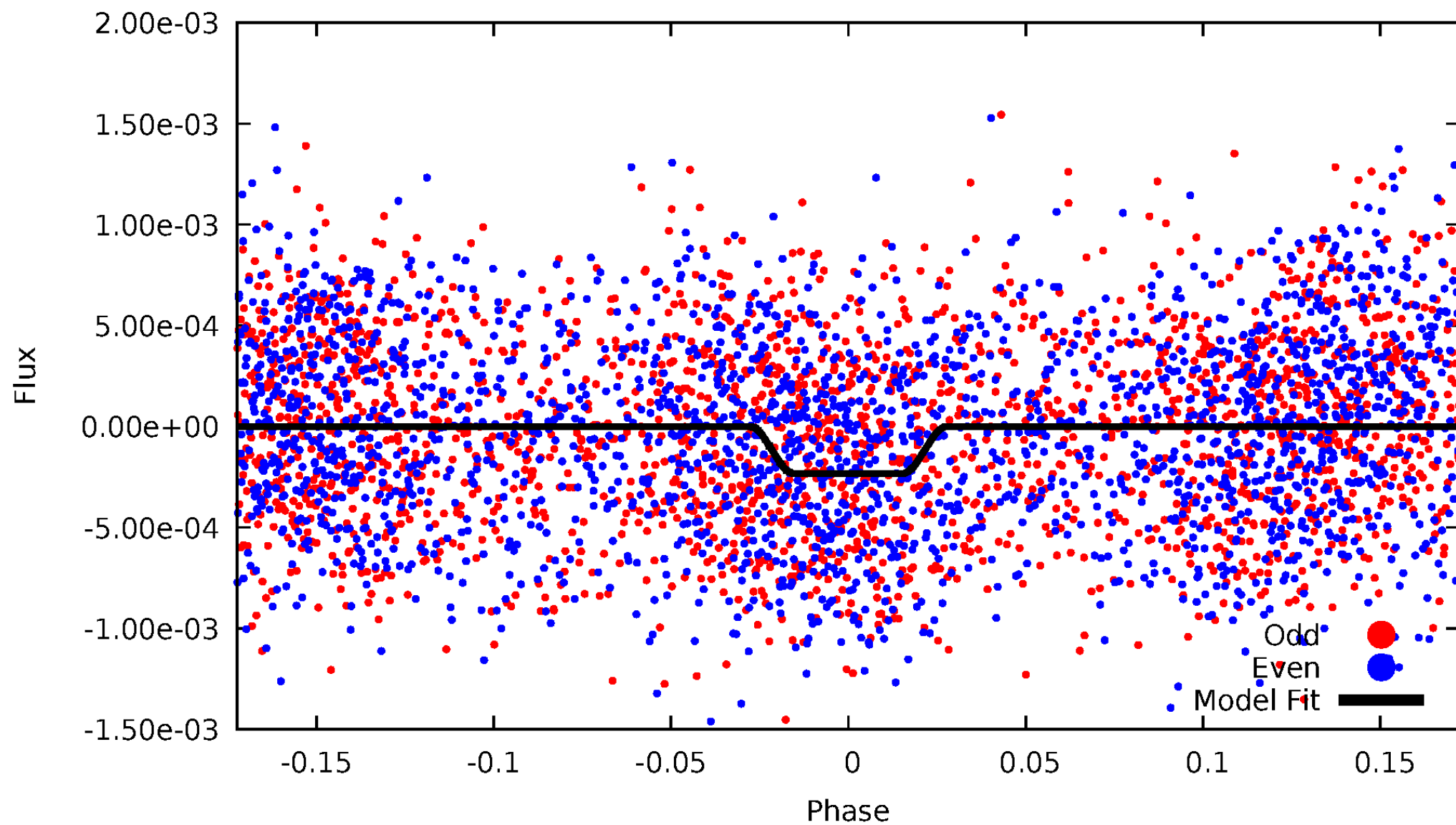
DV Odd/Even

TCE 011152625-04



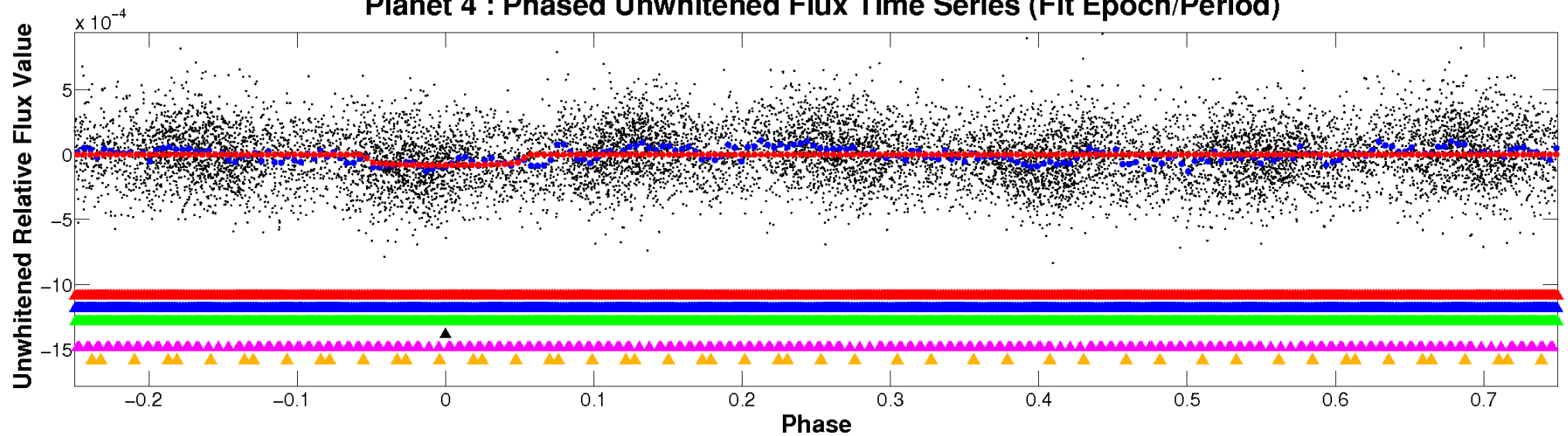
ALT Odd/Even

TCE 011152625-04

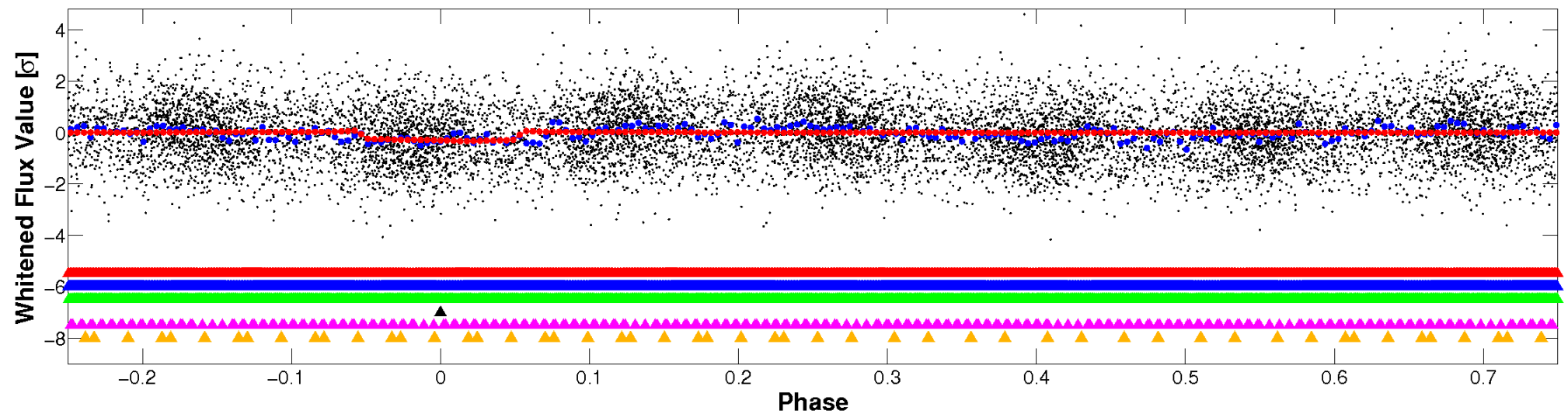


Non-Whitened Vs. Whitened Light Curve

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

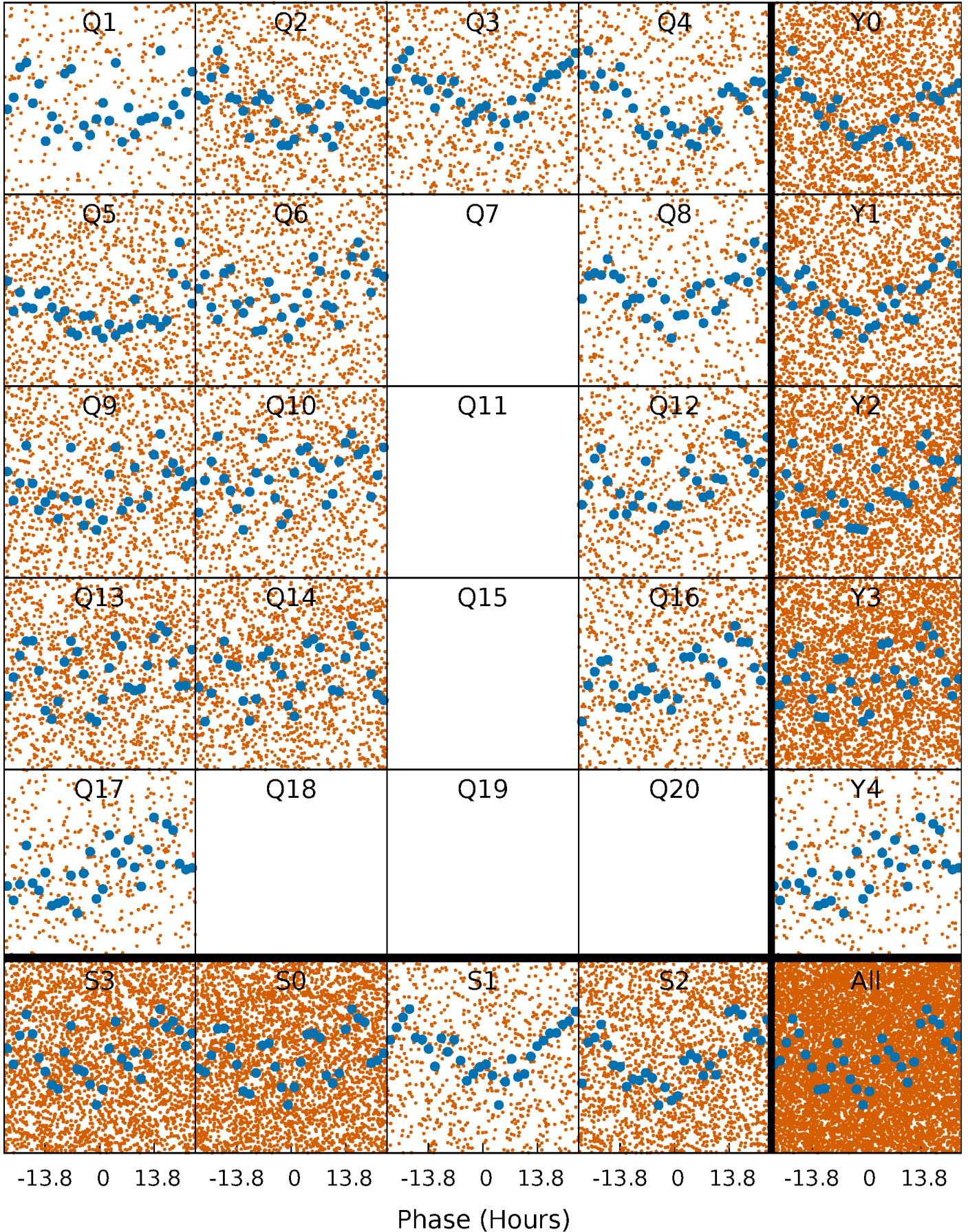


Planet 4 : Phased Whitened Flux Time Series (Fit Epoch/Period)



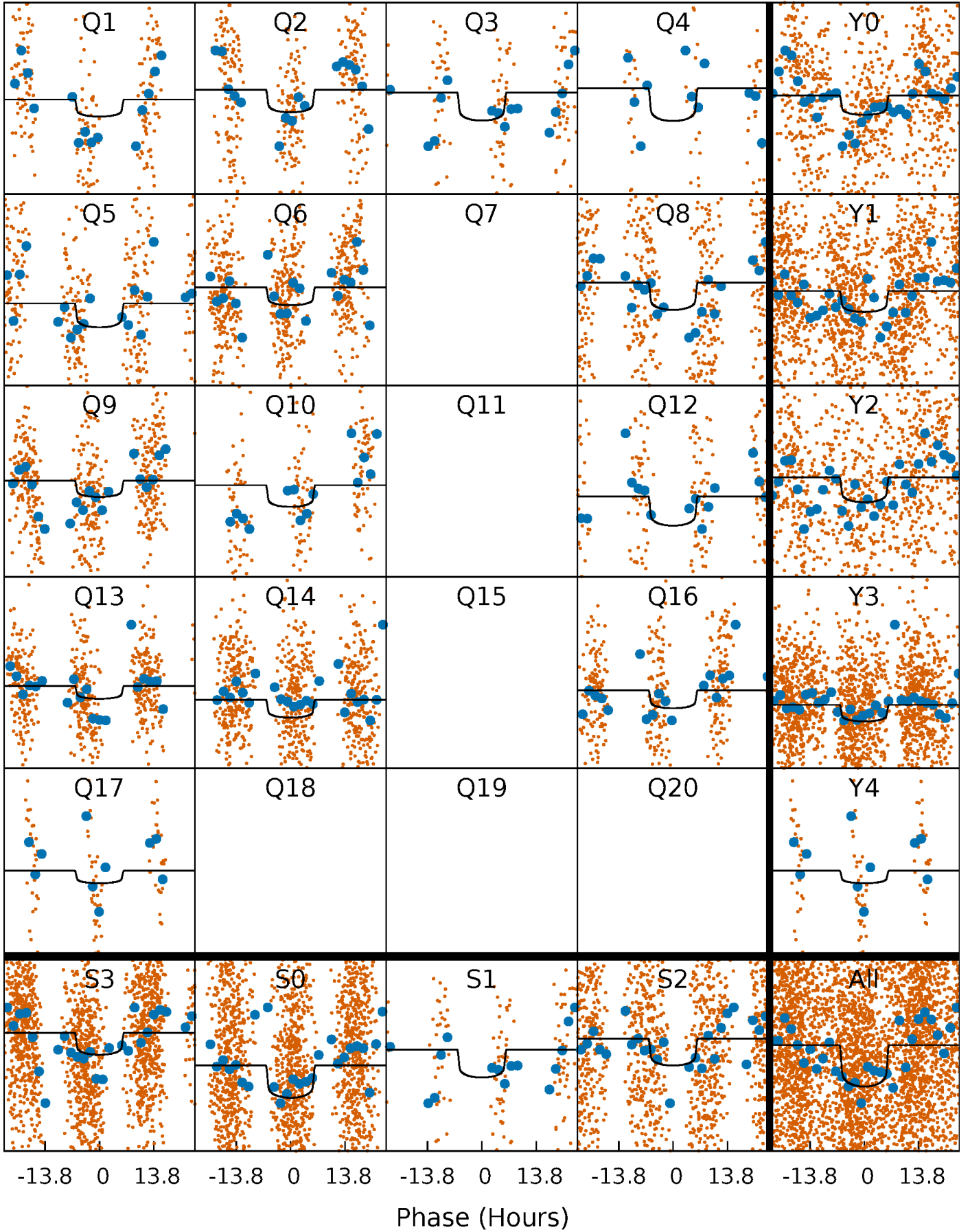
PDC Quarter-Phased Transit Curves

TCE 011152625-04 P= 4.610766 Days $T_0=135.583996$ (BKJD)



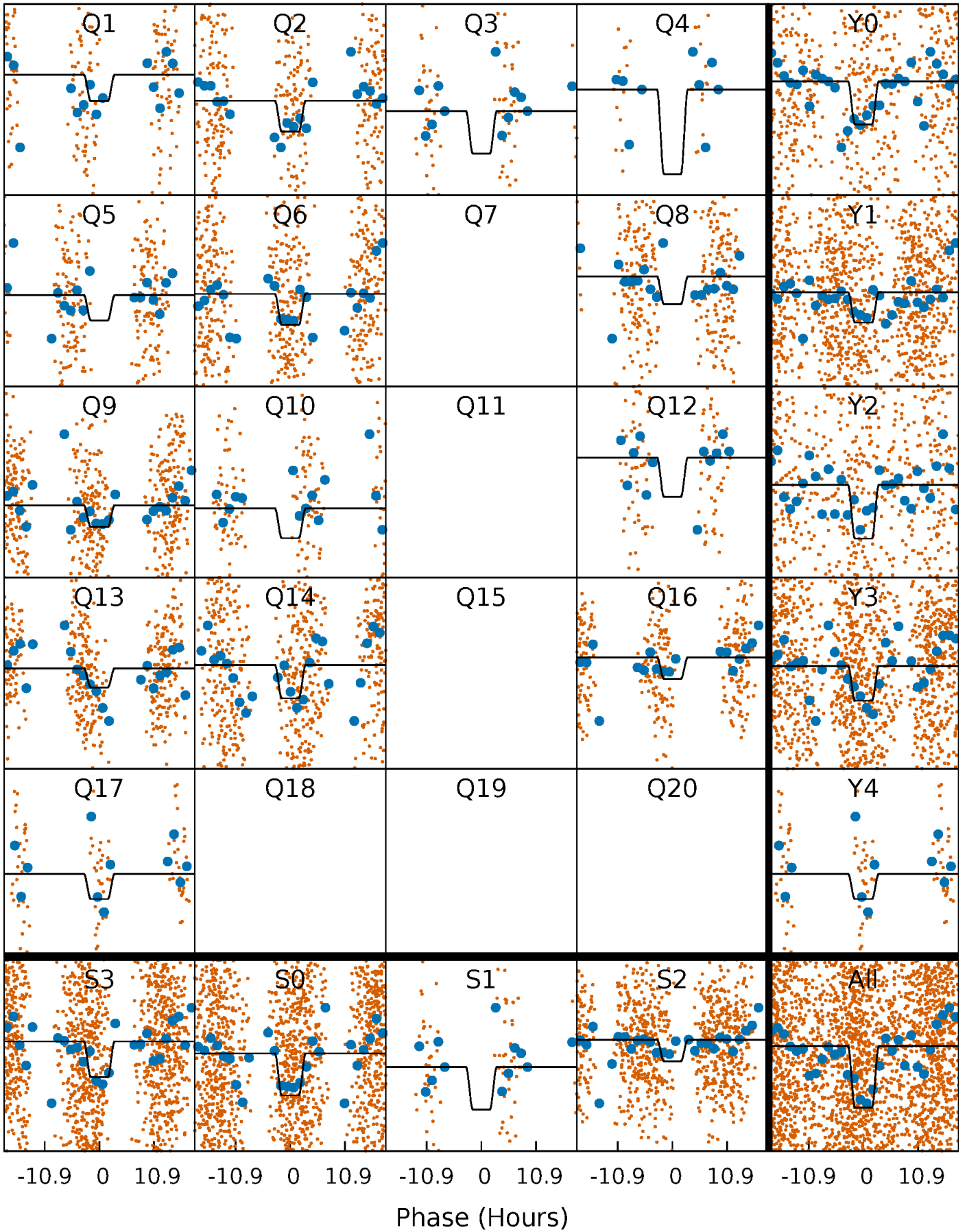
DV Quarter-Phased Transit Curves

TCE 011152625-04 P= 4.610766 Days $T_0=135.583996$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

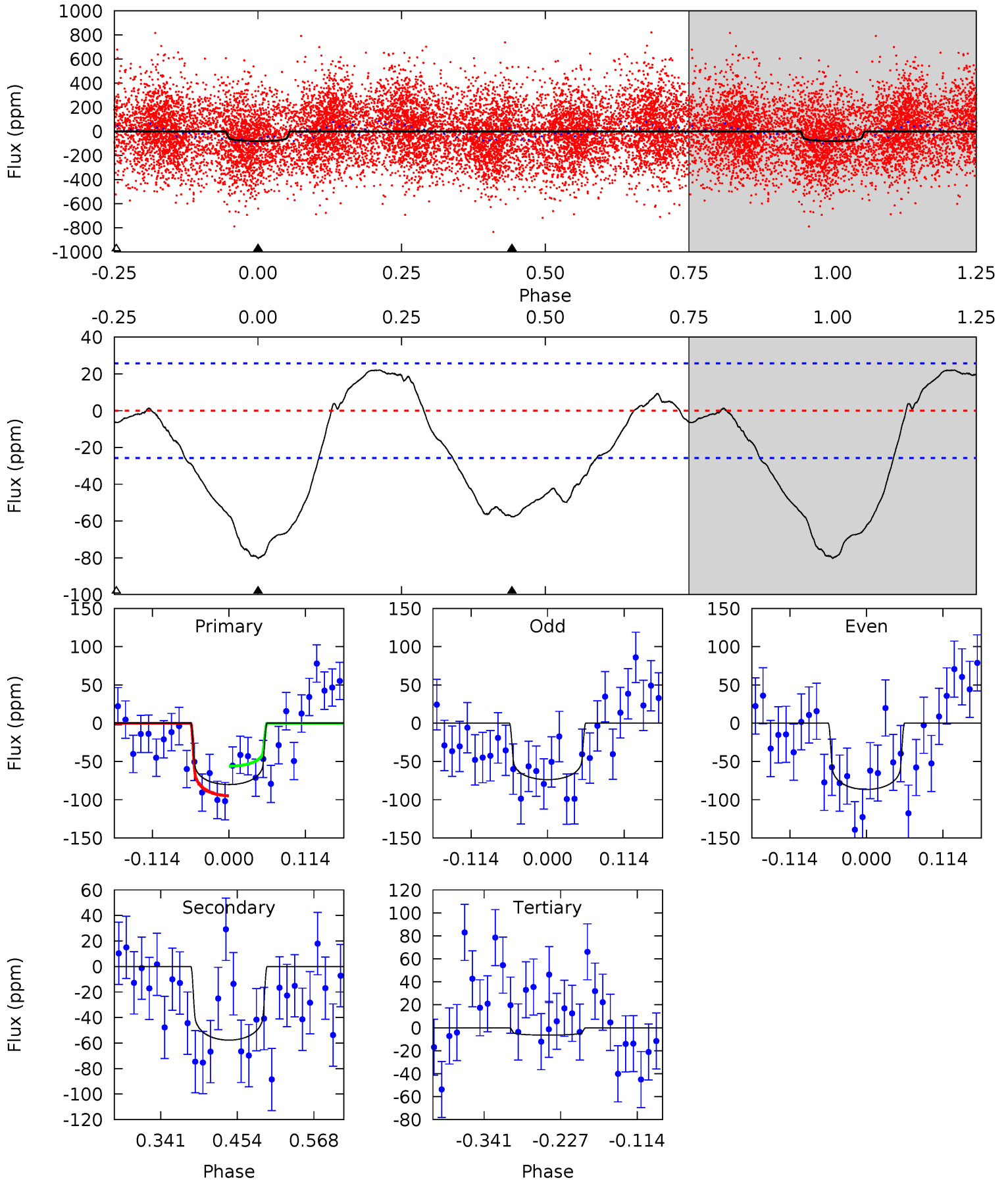
TCE 011152625-04 P= 4.610640 Days $T_0=135.572987$ (BKJD)



DV Model-Shift Uniqueness Test

011152625-04, P = 4.610766 Days, E = 130.973230 Days

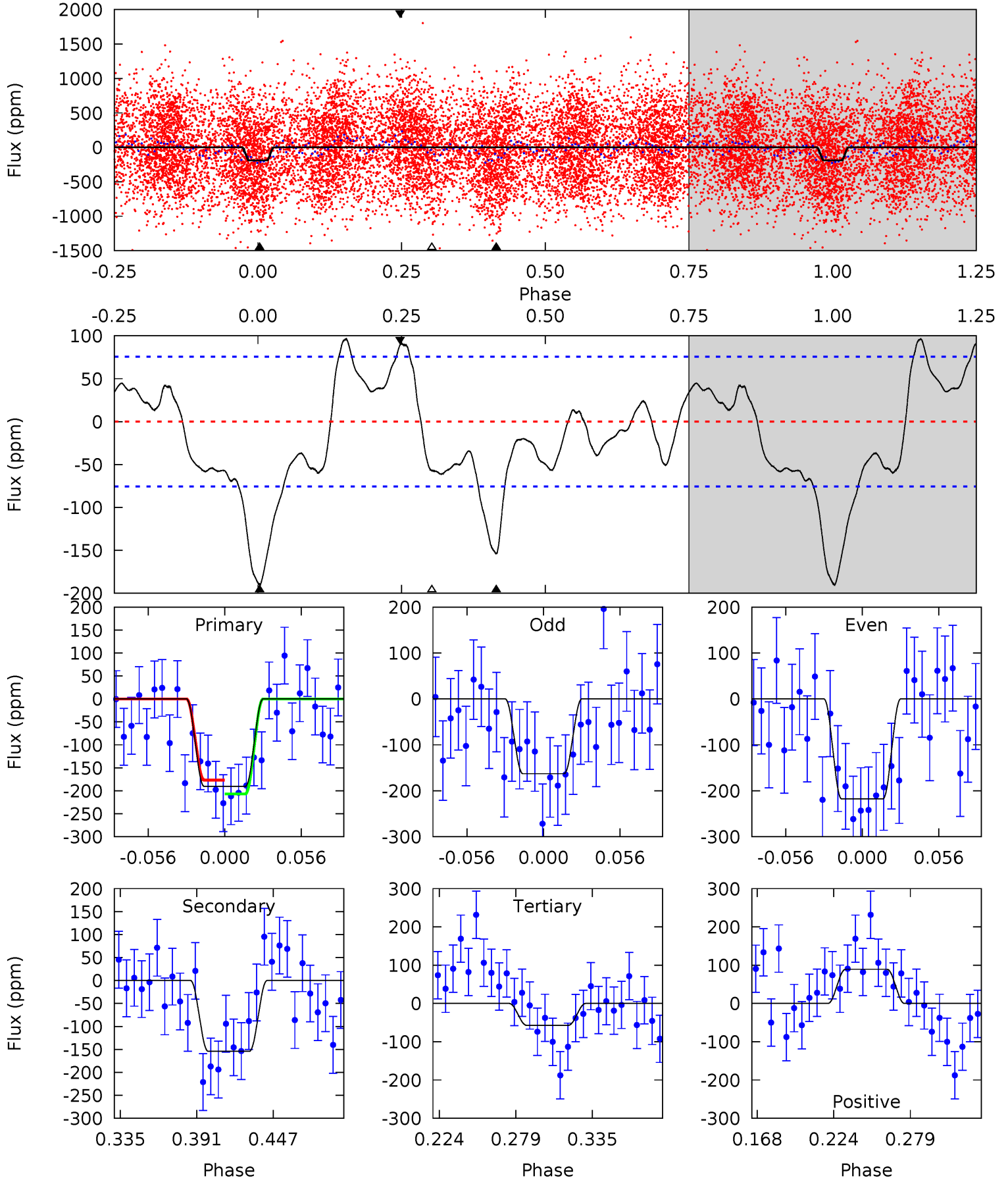
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
14.1	10.2	1.14	0	4.54	1.58	2.71	13.0	14.1	9.04	10.2	1.13	1.00	0.22	3.25



Alt Model-Shift Uniqueness Test

011152625-04, P = 4.610640 Days, E = 130.962347 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
11.8	9.54	3.54	5.53	4.69	1.91	2.75	8.24	6.25	5.99	4.00	1.70	0.86	0.34	0.92



Stellar Parameters For KIC 011152625

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	7606^{+211}_{-316}	$4.099^{+0.144}_{-0.176}$	$-0.100^{+0.200}_{-0.350}$	$1.880^{+0.523}_{-0.428}$	$1.617^{+0.197}_{-0.263}$	$0.343^{+0.287}_{-0.156}$
	+3%/-4%	+4%/-4%	+200%/-350%	+28%/-23%	+12%/-16%	+84%/-45%
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 011152625-04 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-58 ± 6	$1.93^{+0.57}_{-0.55}$	2553^{+196}_{-165}	6743^{+1223}_{-760}	34^{+32}_{-14}
Alt.	-154 ± 16	$3.15^{+0.64}_{-0.57}$	2561^{+178}_{-175}	6719^{+734}_{-538}	34^{+17}_{-11}

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

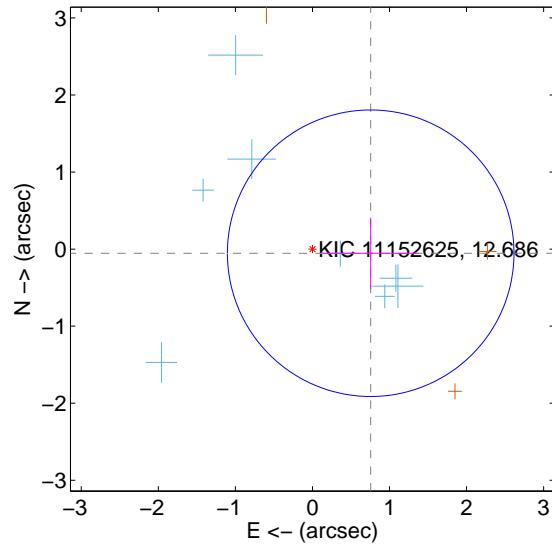
Supplemental centroid analysis for 011152625-04. Kepler magnitude: 12.69. Transit SNR 10.19

There are 8 quarters with good PRF difference image offsets

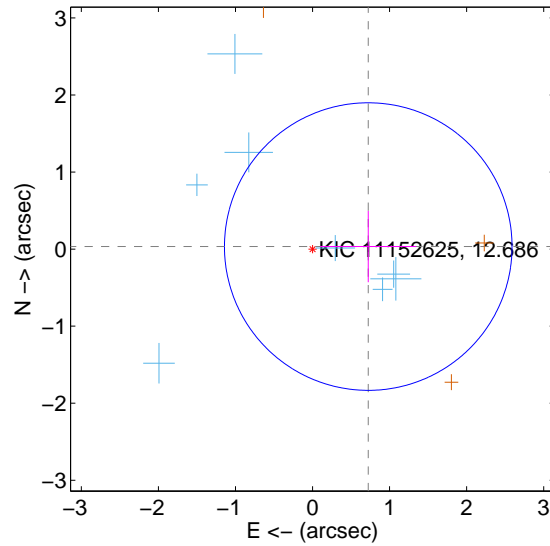
The direct PRF centroid is offset from the target star catalog position by about 0.09 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.758 ± 0.620	1.22	-0.756 ± 0.620	-0.054 ± 0.461
PRF-fit source offset from KIC position	0.724 ± 0.622	1.16	-0.723 ± 0.622	0.033 ± 0.463
photometric centroid source offset	0.28 ± 0.34	0.81	0.18 ± 0.35	0.21 ± 0.34

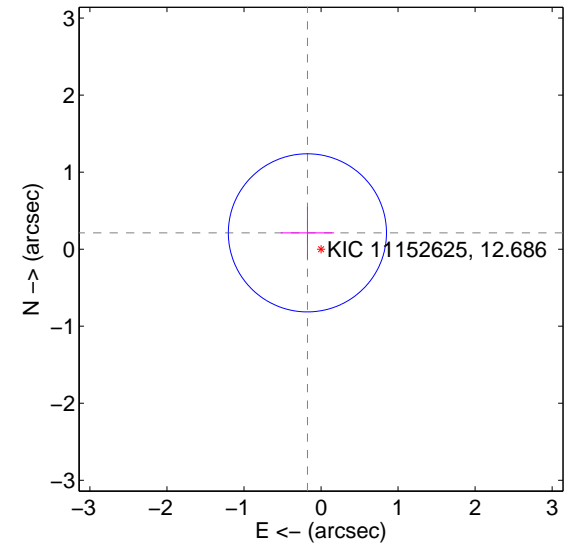
offset from difference PRF-fit to OOT PRF-fit



offset from difference PRF-fit to KIC position

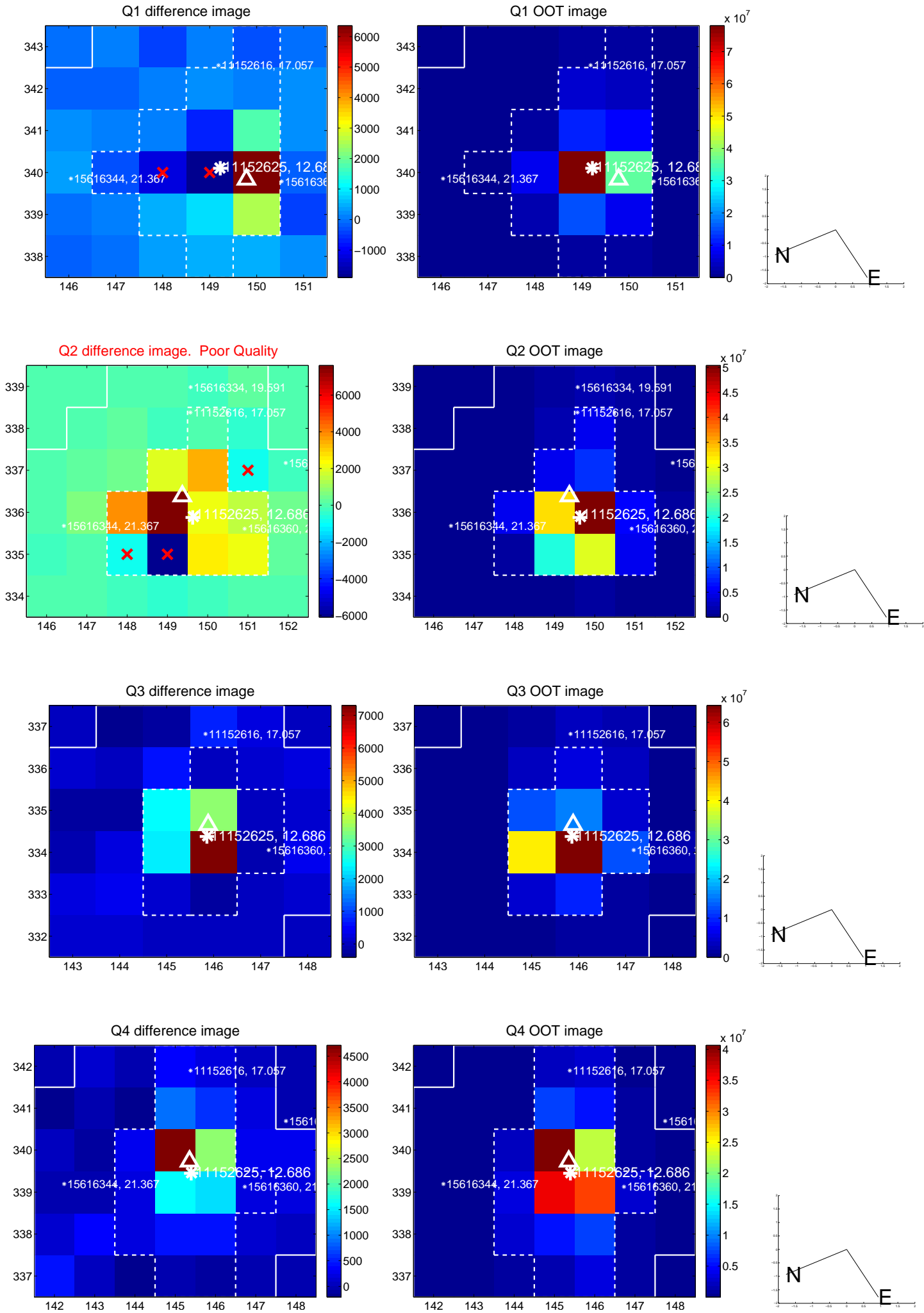


offset from photometric centroids

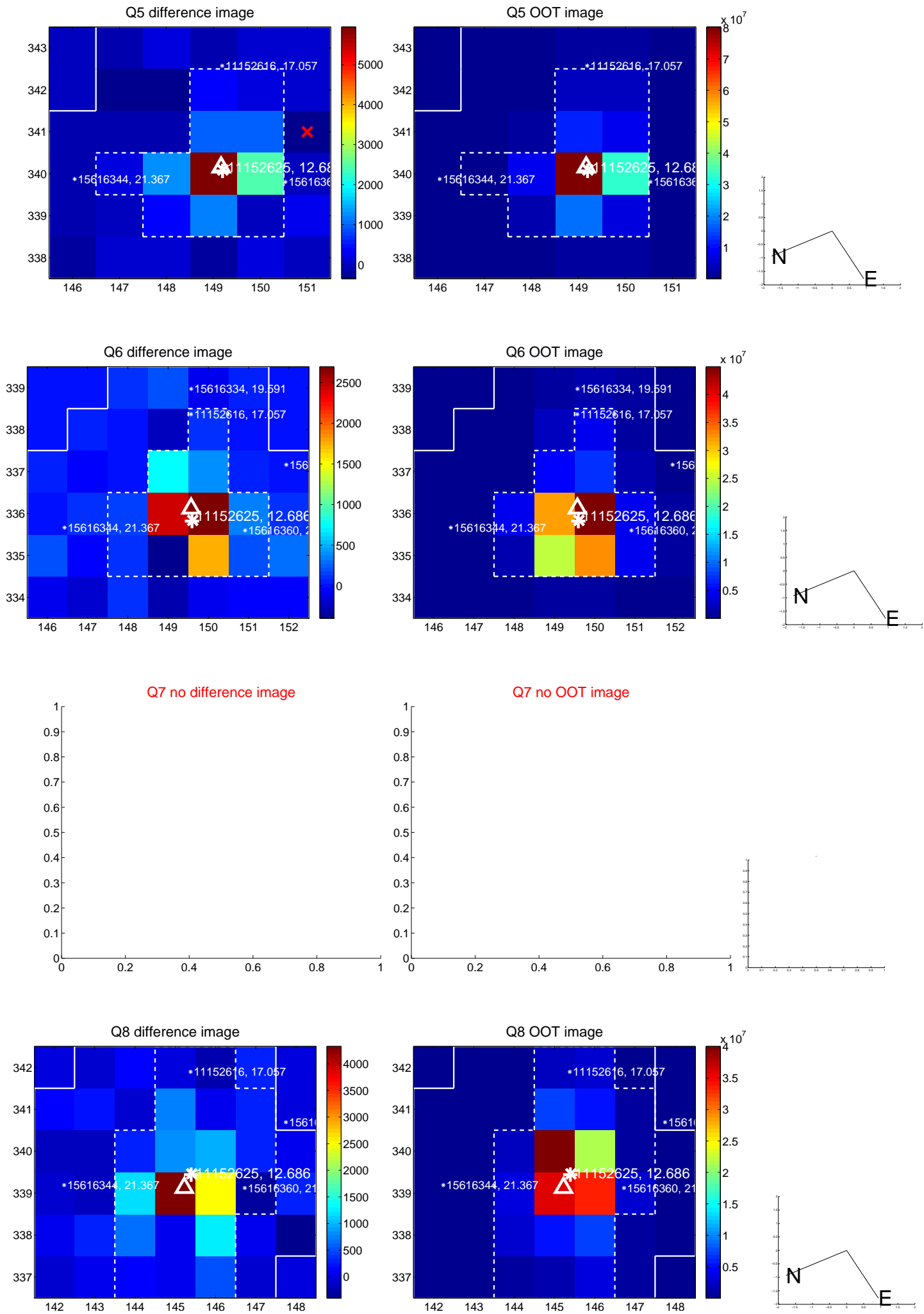


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses:** good quarterly centroid offsets; **Vermillion crosses:** bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

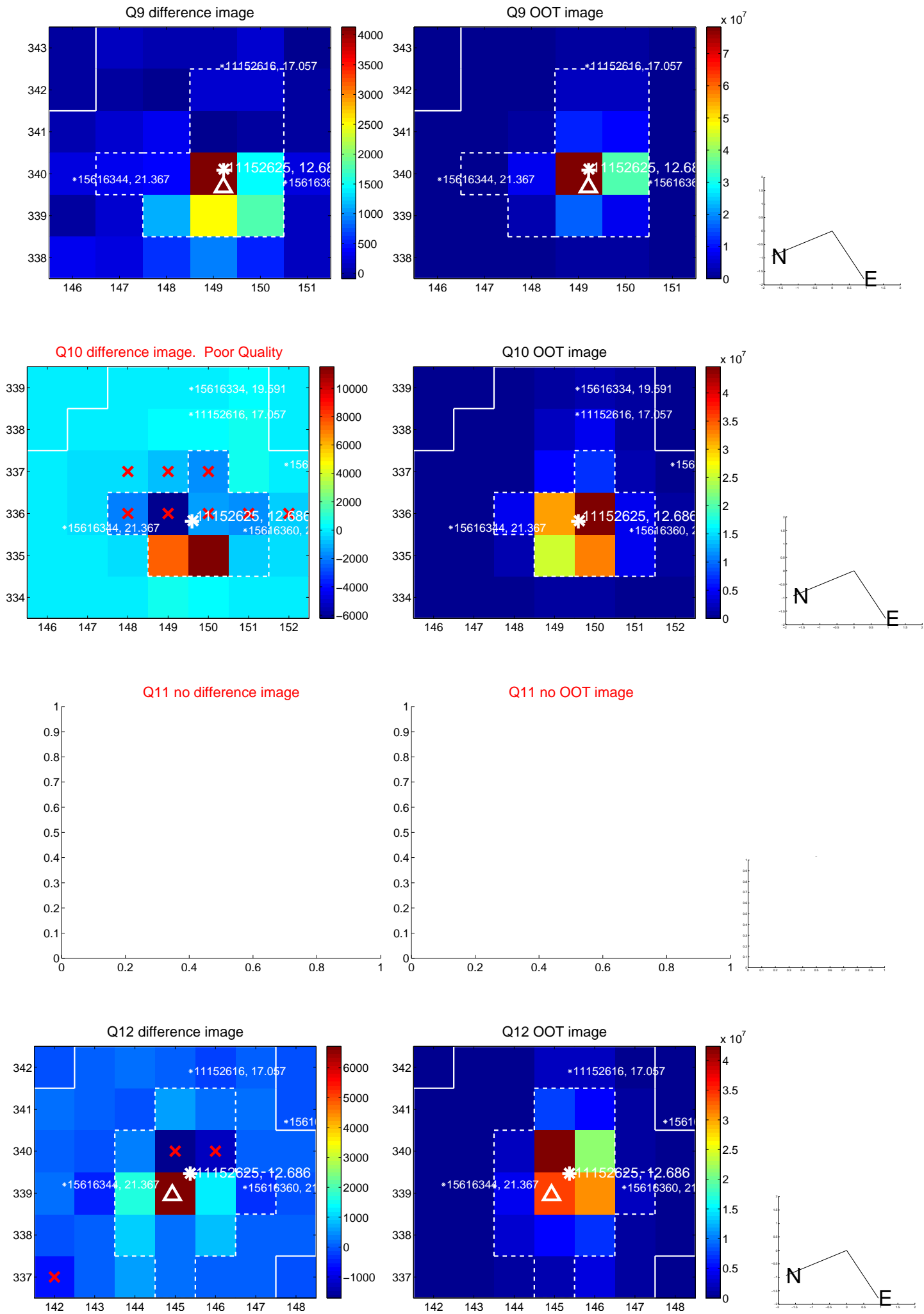
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



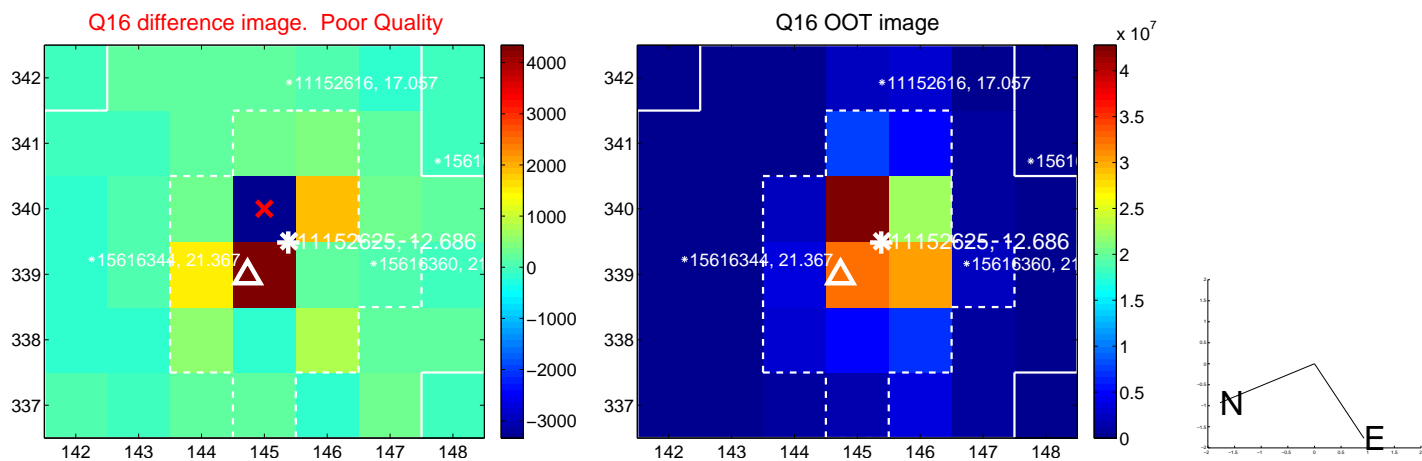
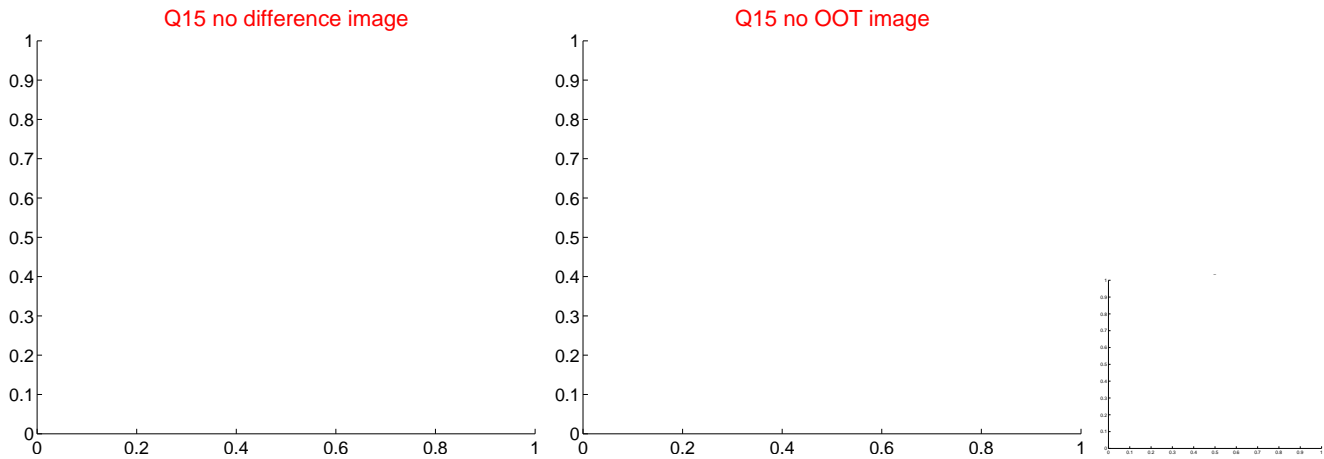
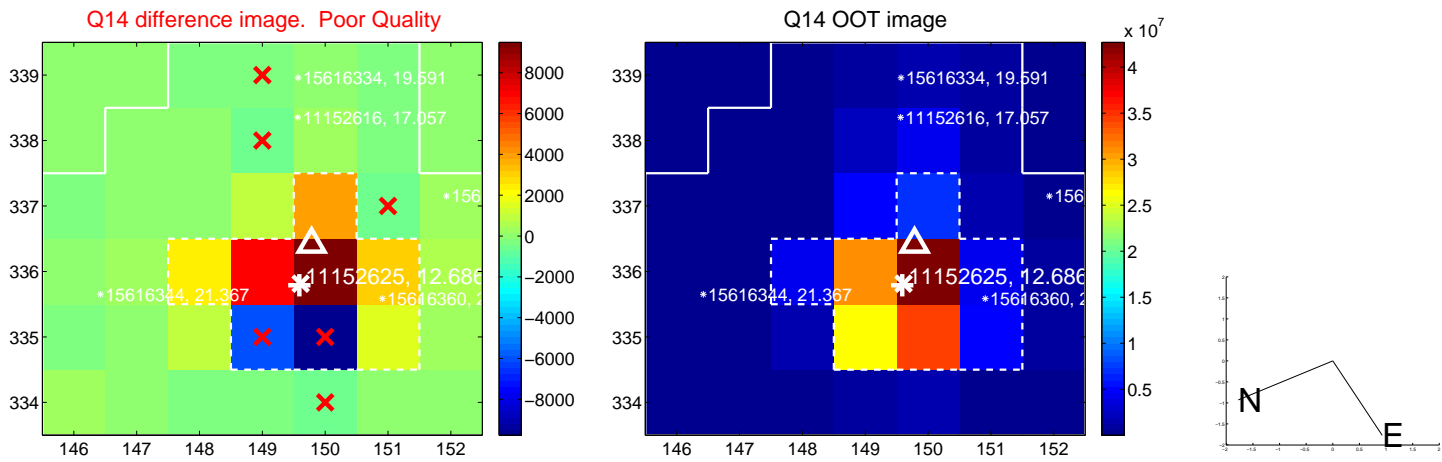
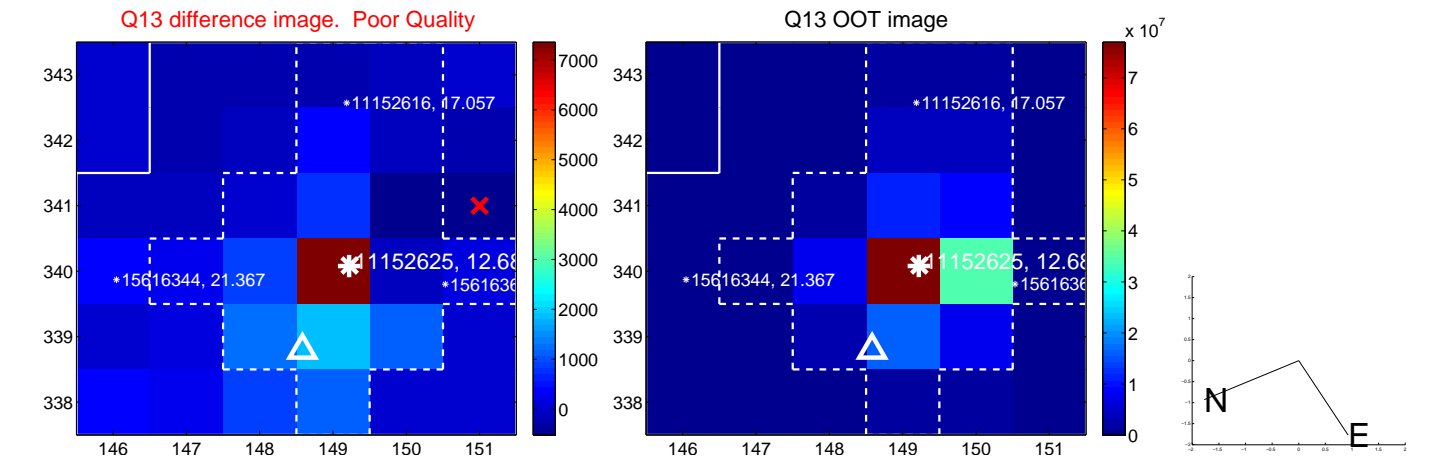
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



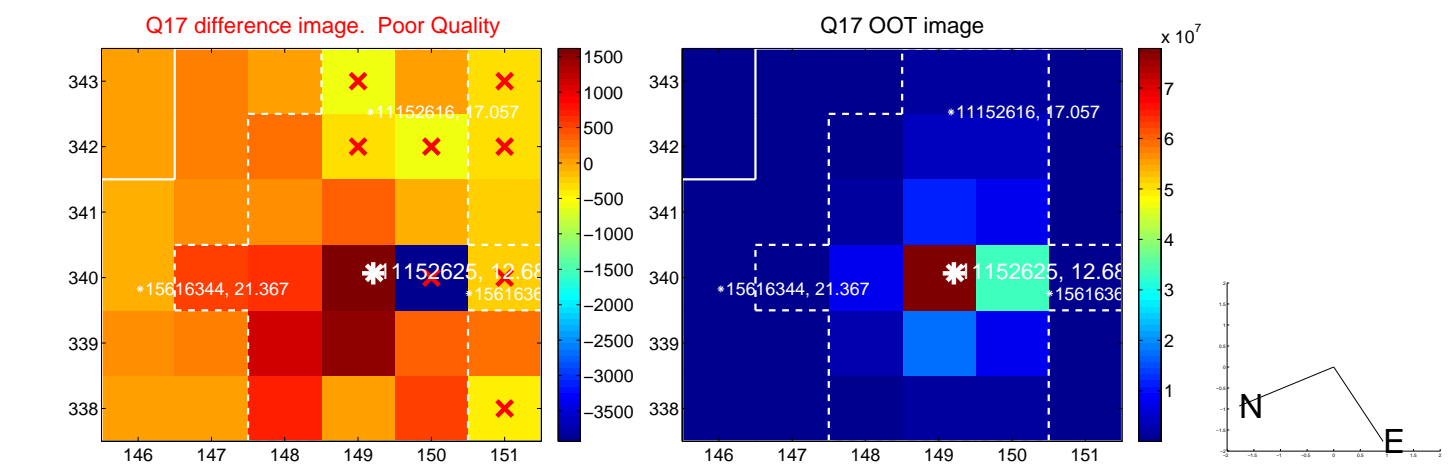
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



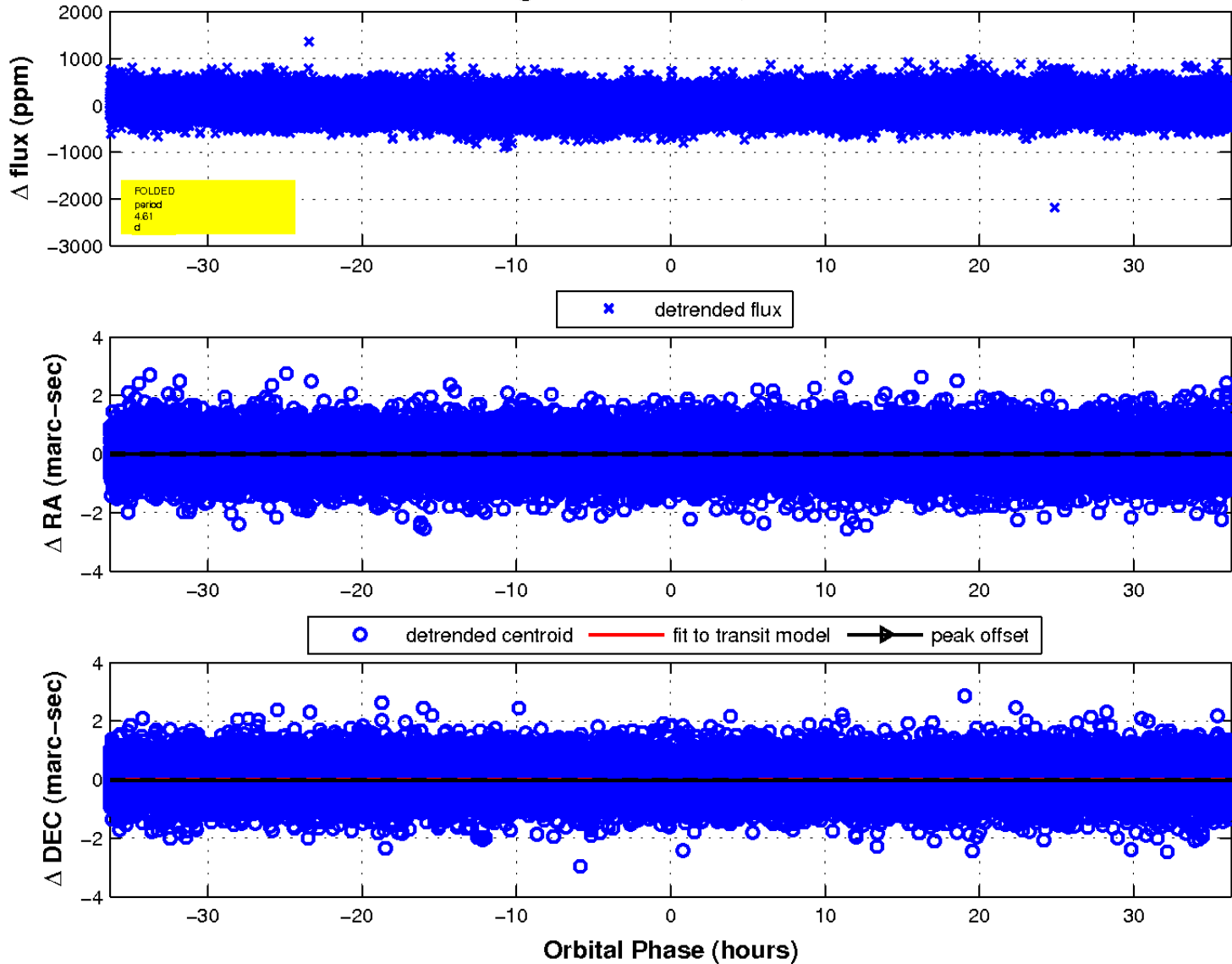
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

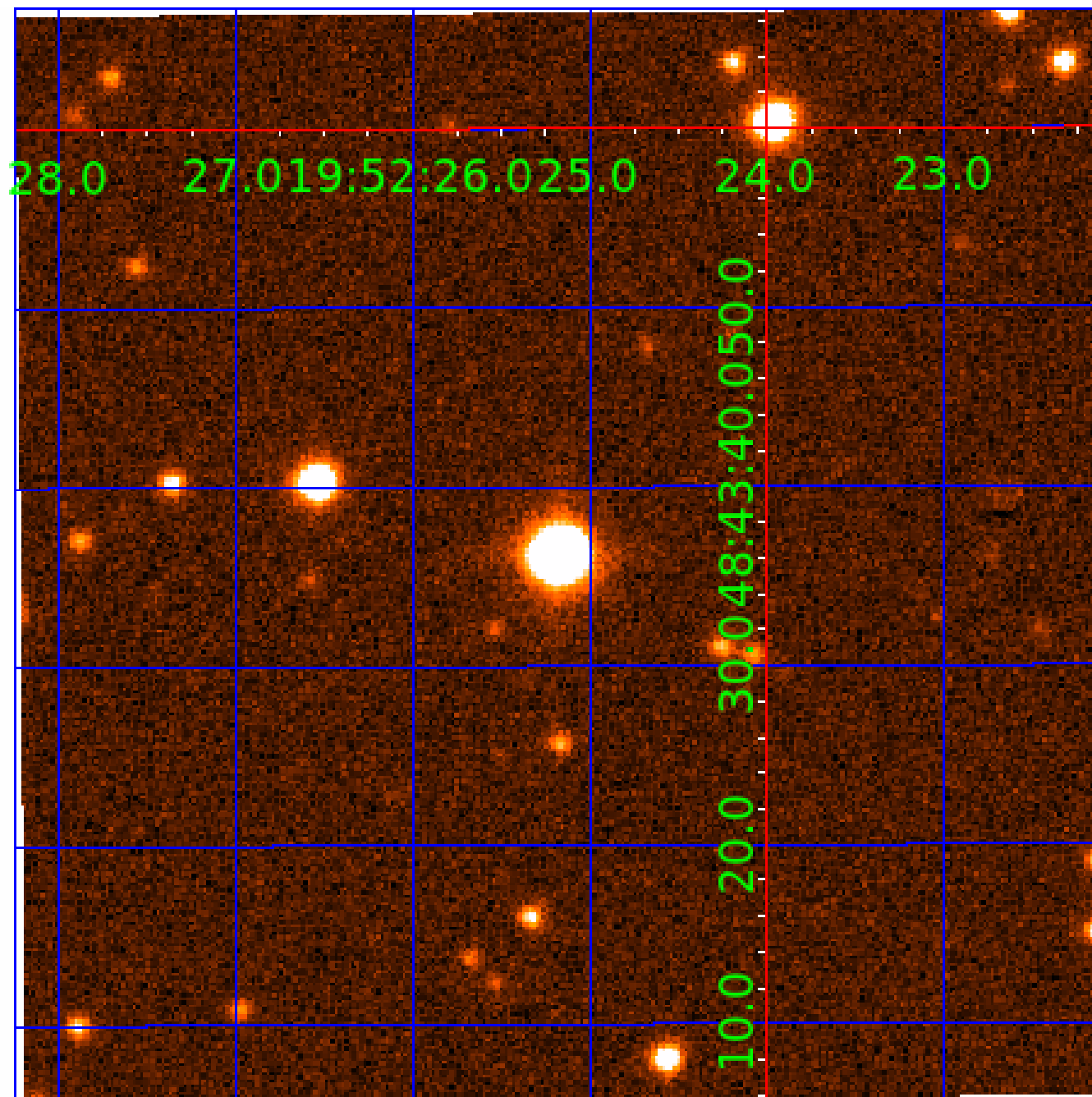


fluxWeightedCentroids, Planet 4 of 6



UKIRT Image

Declination



KIC 011152625

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})
011152625-01	OBS	No	0.659923	131.676243	41.2	0.945	11.0	9.4	1.88	7606	1.39	34911.39
011152625-02	OBS	No	0.659928	131.832199	31.6	1.548	9.8	8.5	1.88	7606	1.23	34911.07
011152625-03	OBS	No	0.660577	131.854682	45.4	2.231	9.5	10.1	1.88	7606	1.47	34865.29
011152625-04	OBS	No	4.610766	135.583996	81.3	12.117	7.8	10.2	1.88	7606	1.89	2613.73
011152625-05	OBS	No	5.265034	135.495765	158.7	2.061	7.3	7.0	1.88	7606	2.74	2189.89
011152625-06	OBS	No	27.901738	156.827464	345.1	2.533	7.6	8.3	1.88	7606	4.01	237.02

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
011152625-01	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT
011152625-02	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—SAME_NTL_PERIOD
011152625-03	OBS	FP	0.00	1	0	0	0	TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT
011152625-04	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_SKYE_ZUMA—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_ALT
011152625-05	OBS	FP	0.00	1	0	1	0	INDIV_TRANS_RUBBLE_ZUMA—TRANS_GAPPED—MOD_NONUNIQ_ALT—MOD_TER_ALT—HALO_GHOST
011152625-06	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_SKYE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_FEW_DIFFS

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

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

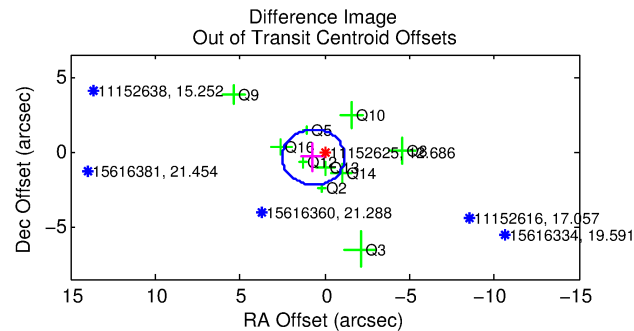
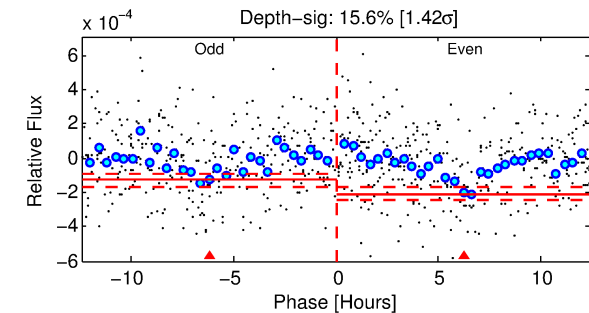
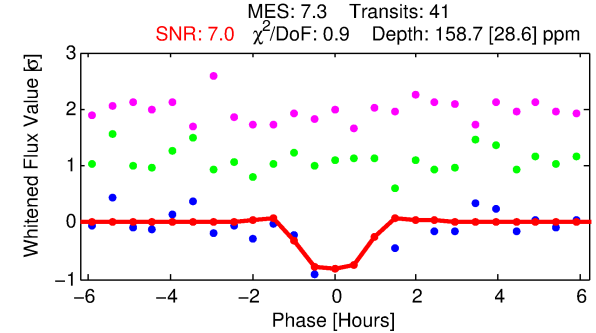
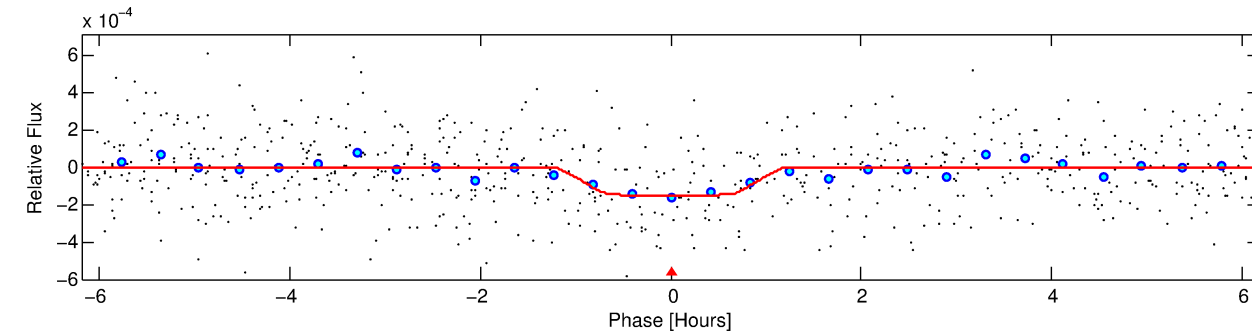
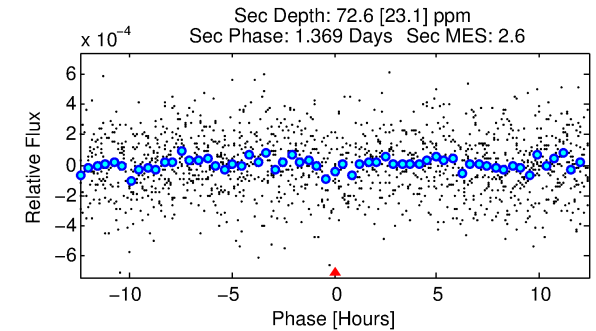
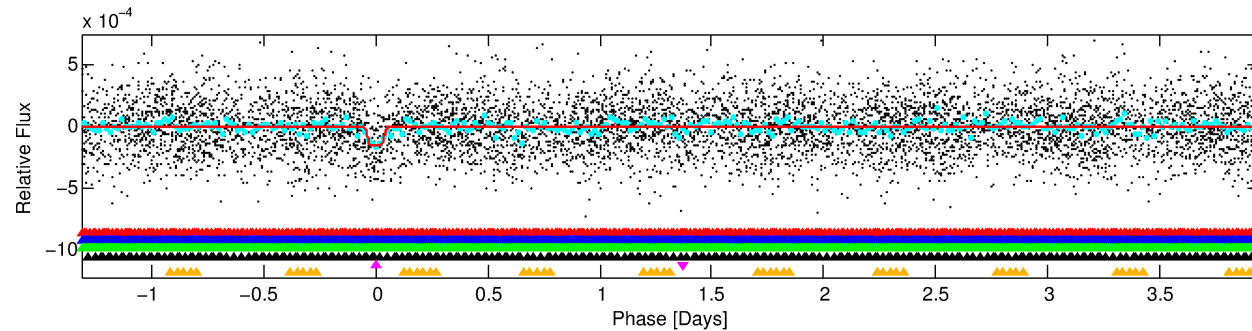
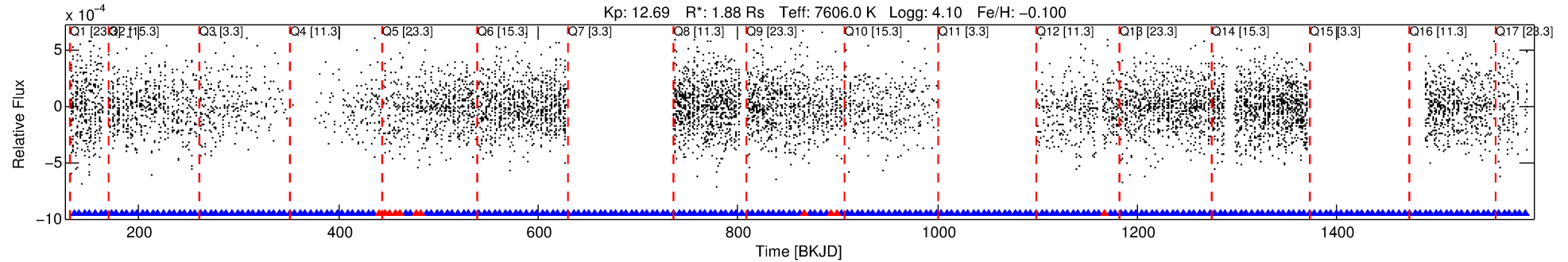
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 011152625-05

No Significant Match Found

DV One-Page Summary

KIC: 11152625 Candidate: 5 of 6 Period: 5.265 d



DV Fit Results:

Period = 5.26503 [0.00004] d
Epoch = 135.4958 [0.0058] BKJD
Rp/R* = 0.0134 [0.0095]
a/R* = 9.14 [41.63]
b = 0.90 [0.98]
Seff = 2189.89 [804.63]
Teq = 1744 [160] K
Rp = 2.74 [2.09] Re
a = 0.0696 [0.0160] AU
Ag = 25.72 [38.42] [0.64σ]
Teffp = 6074 [2227] K [1.94σ]

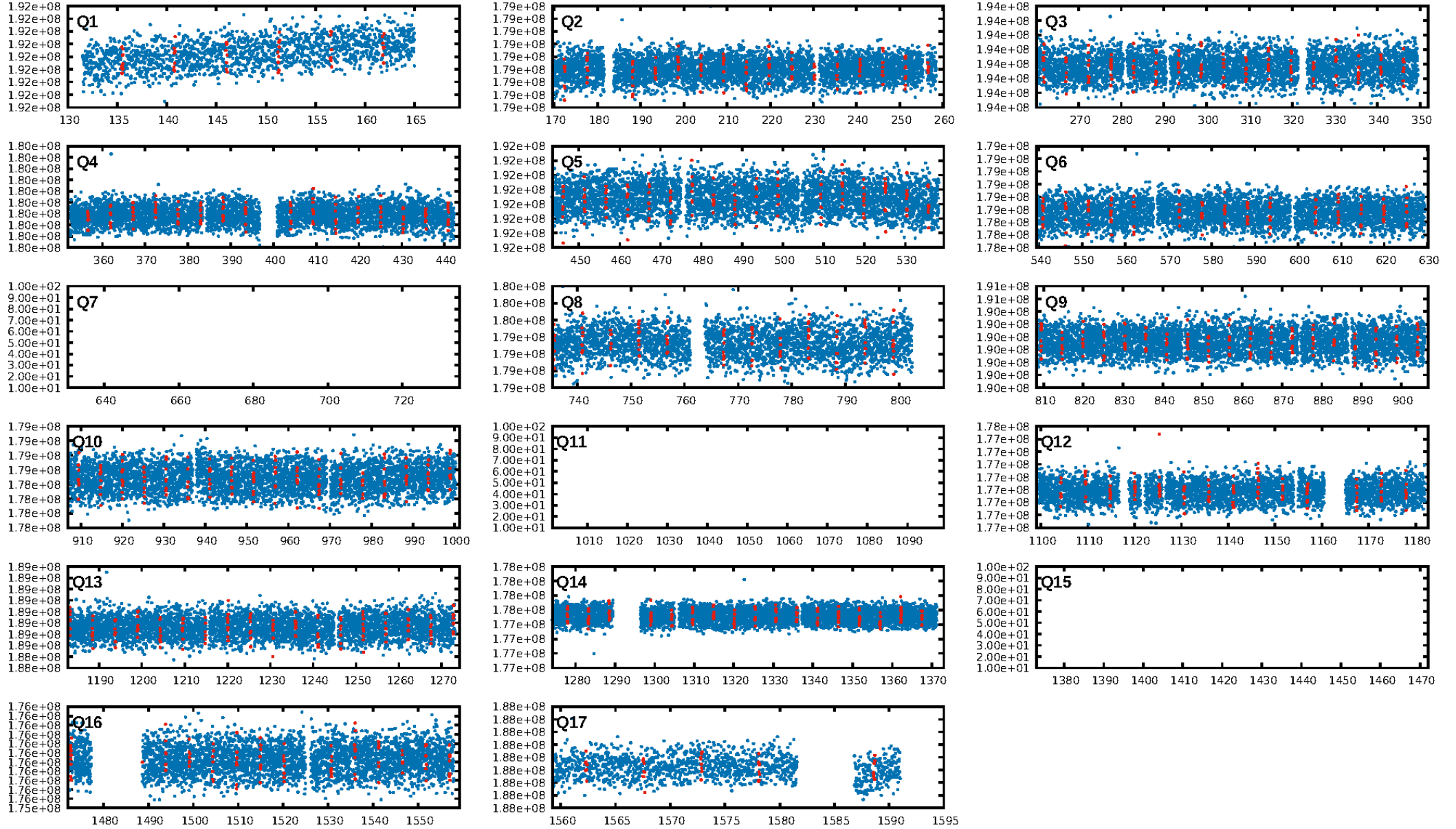
DV Diagnostic Results:

ShortPeriod-sig: 79.9% [1.28σ]
LongPeriod-sig: 100.0% [166.38σ]
ModelChiSquare2-sig: 70.0%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: 1.62e-08
RollingBand-fgt: 0.68 [23/34]
GhostDiagnostic-chr: 0.25
Centroid-sig: 1.9%
Centroid-so: 0.561 arcsec [1.46σ]
OotOffset-rm: 0.759 arcsec [1.23σ]
OotOffset-st: 3/1/3/3 [10]
KicOffset-rm: 0.785 arcsec [1.26σ]
KicOffset-st: 3/1/3/3 [10]
DiffImageQuality-fgm: 0.50 [5/10]
DiffImageOverlap-fno: 0.00 [0/14]

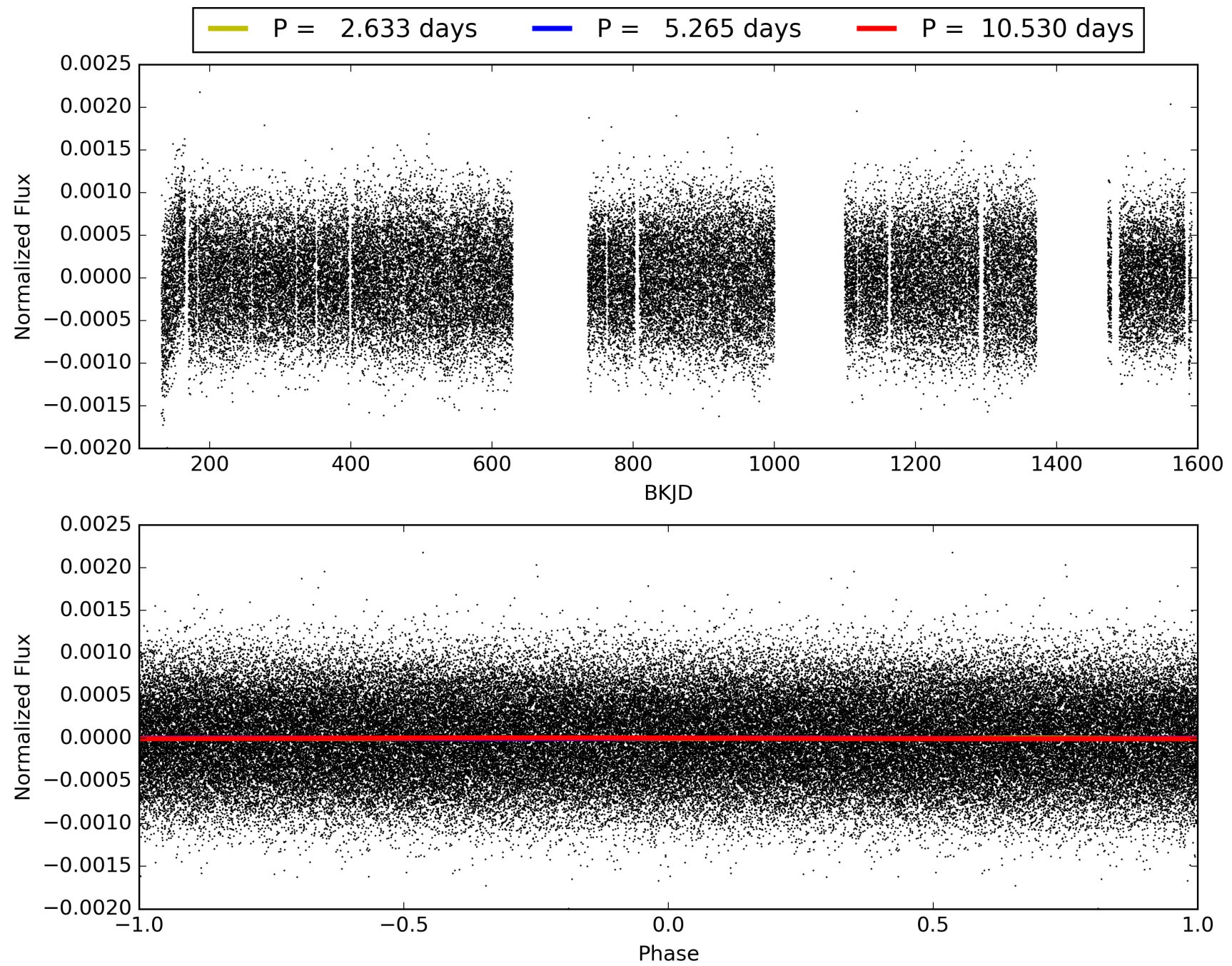
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 01-Feb-2016 07:10:28 Z

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

TCE 011152625-05, PDC Light Curves

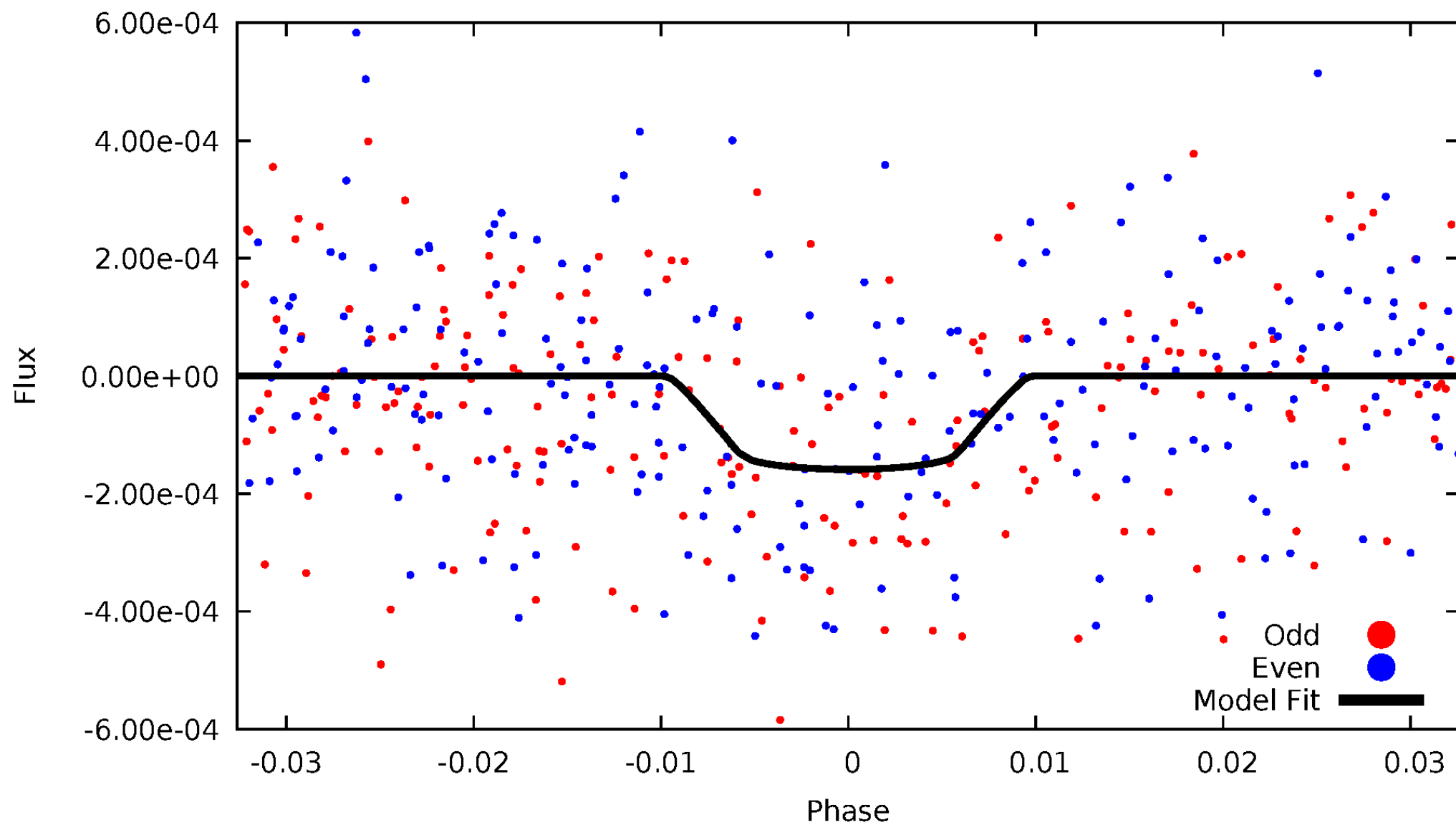


TCE 011152625-05



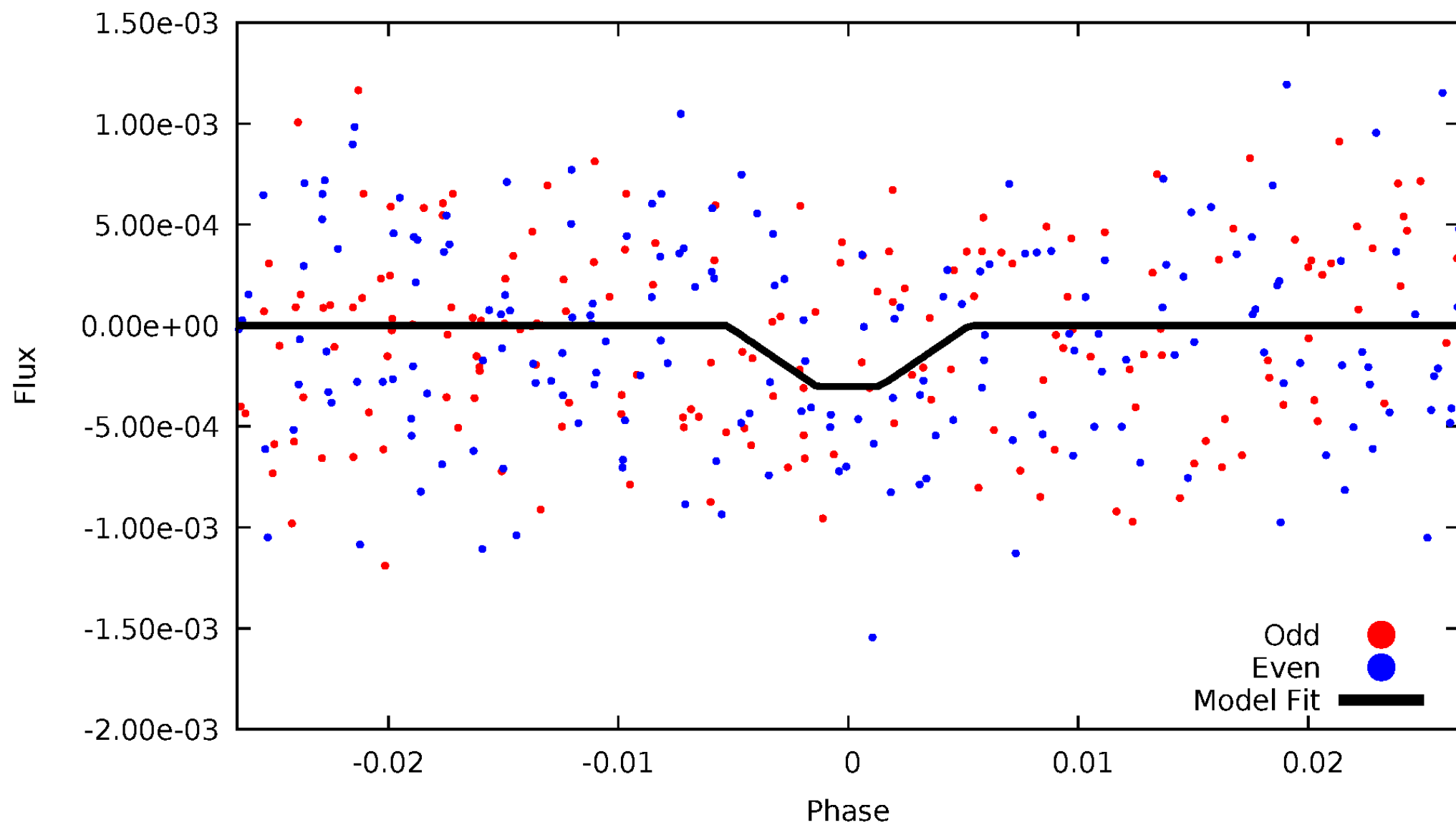
DV Odd/Even

TCE 011152625-05



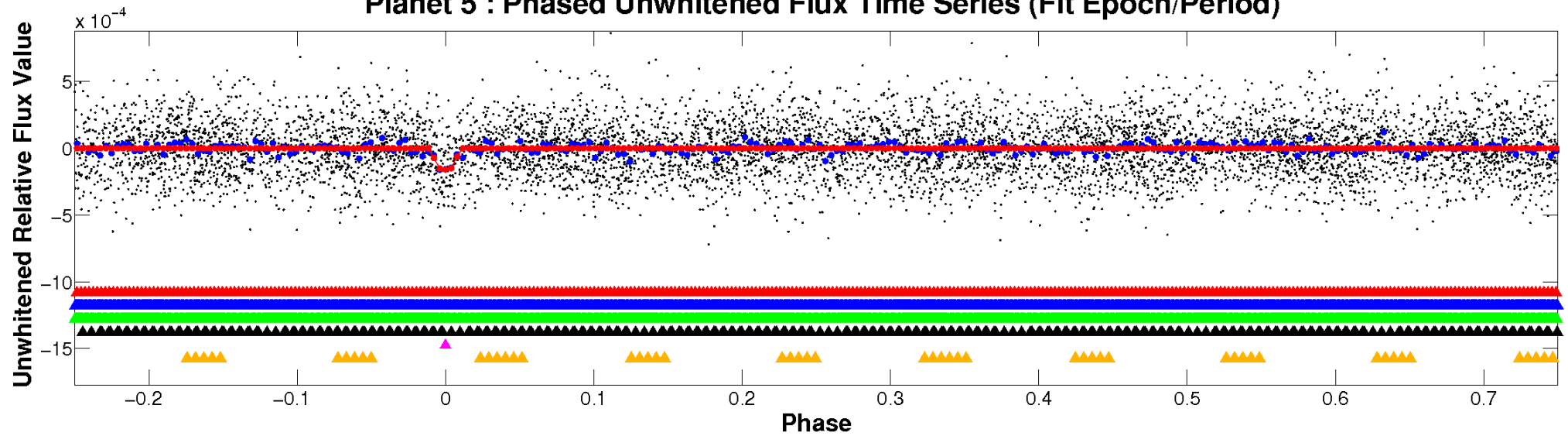
ALT Odd/Even

TCE 011152625-05

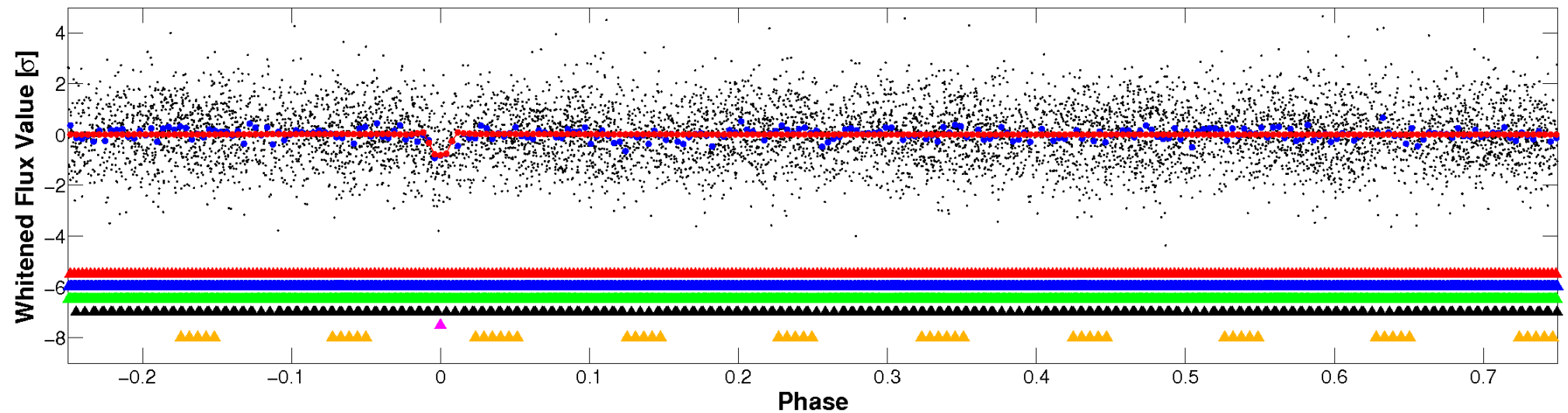


Non-Whitened Vs. Whitened Light Curve

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

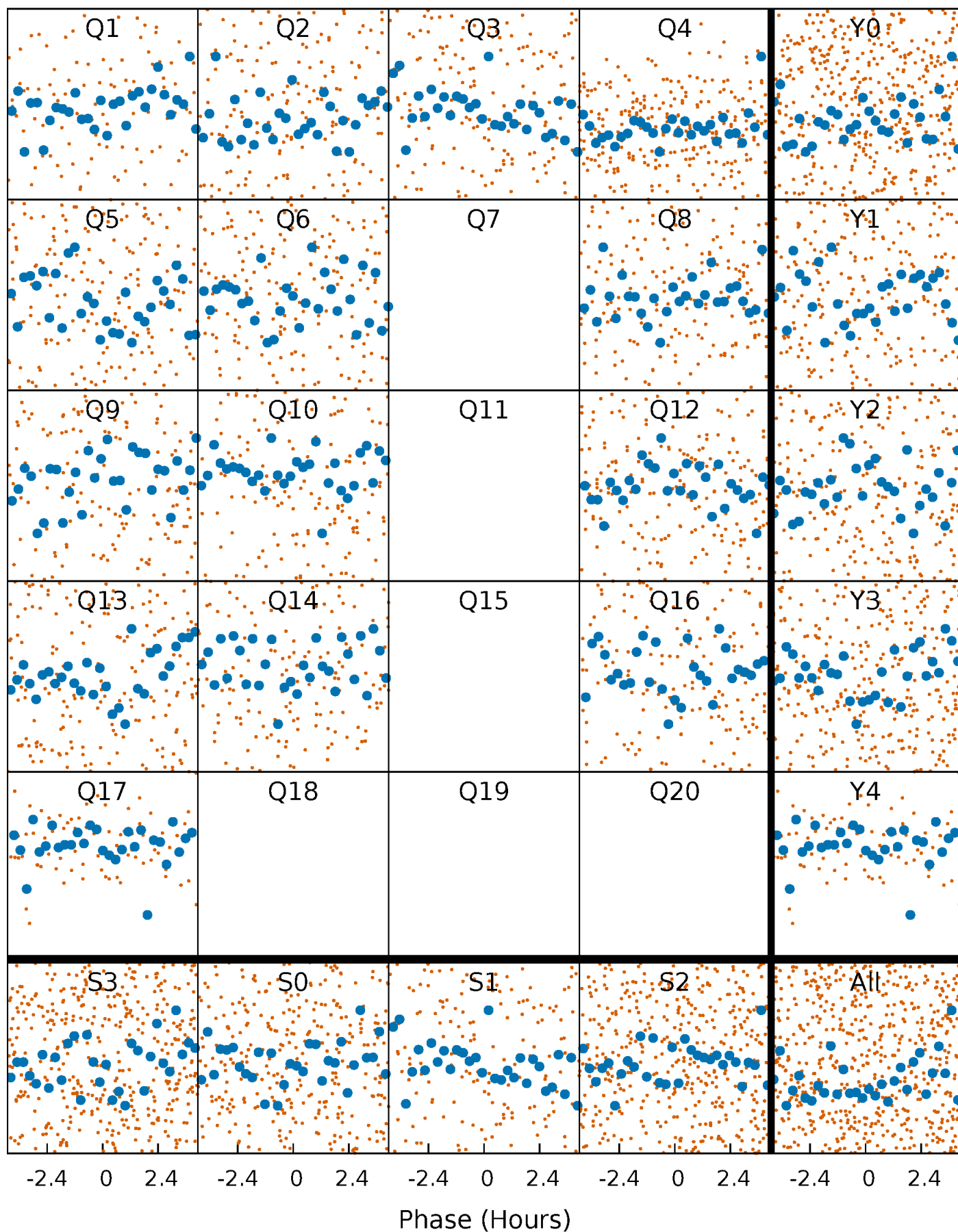


Planet 5 : Phased Whitened Flux Time Series (Fit Epoch/Period)



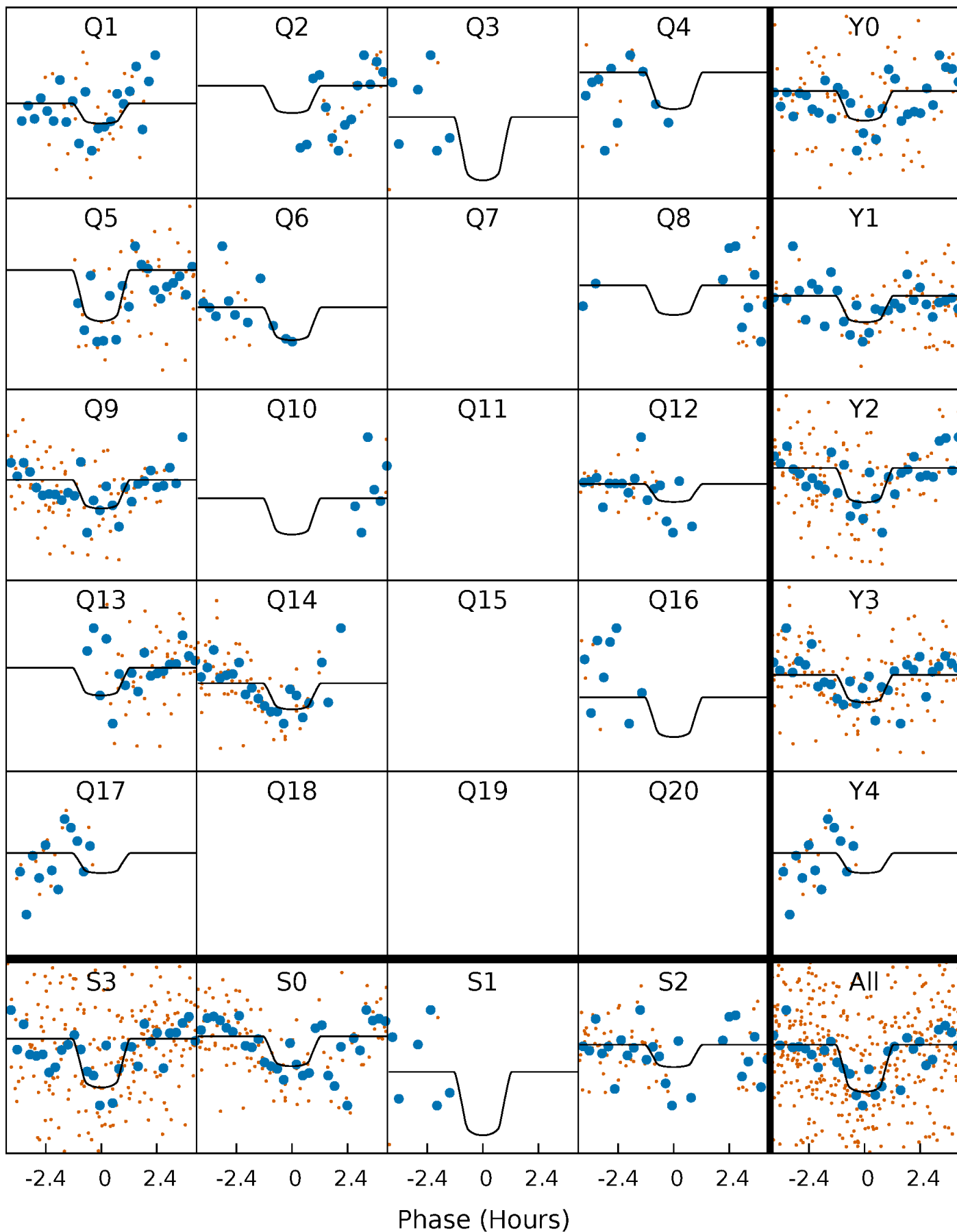
PDC Quarter-Phased Transit Curves

TCE 011152625-05 P= 5.265034 Days $T_0=135.495765$ (BKJD)



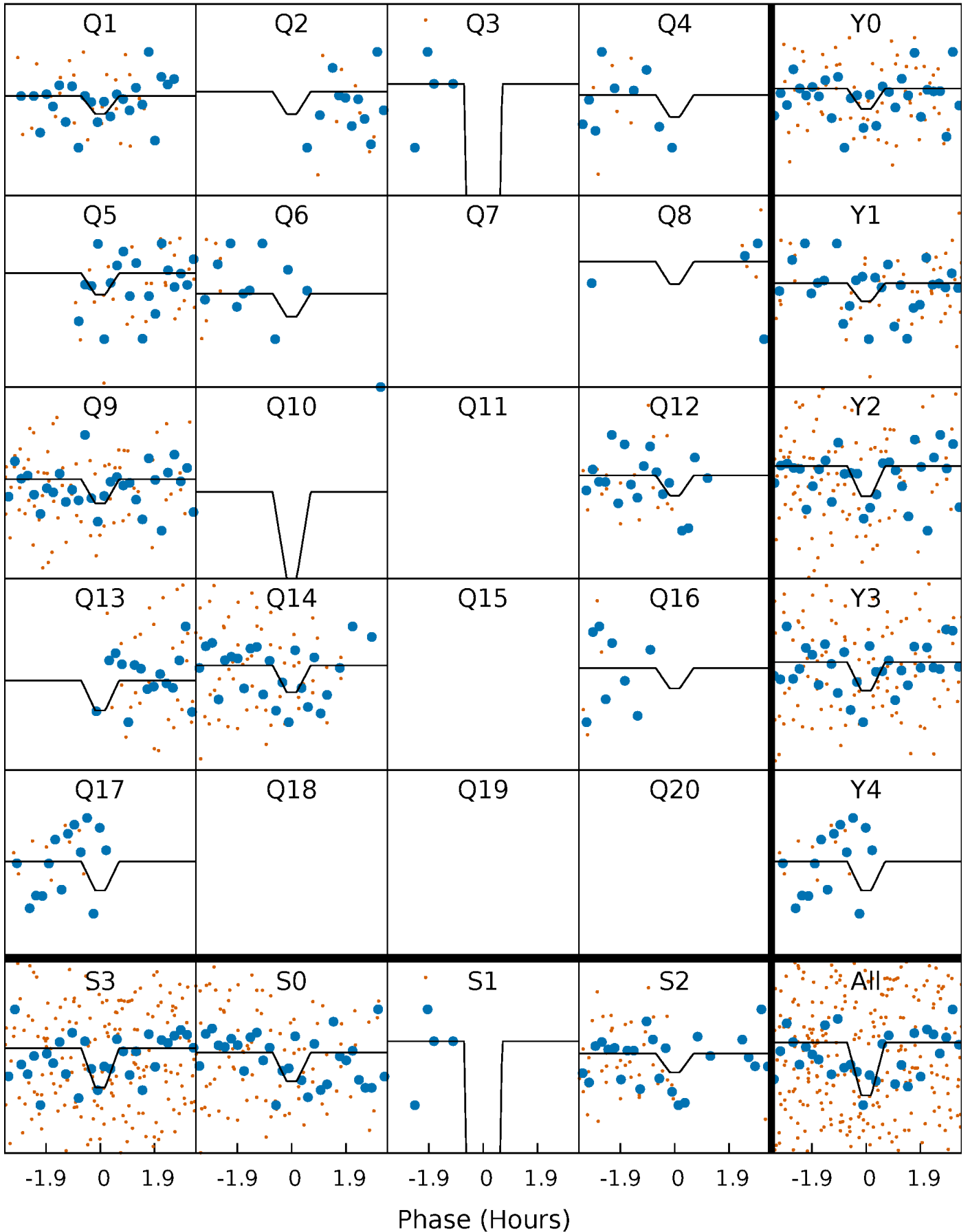
DV Quarter-Phased Transit Curves

TCE 011152625-05 P= 5.265034 Days $T_0=135.495765$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

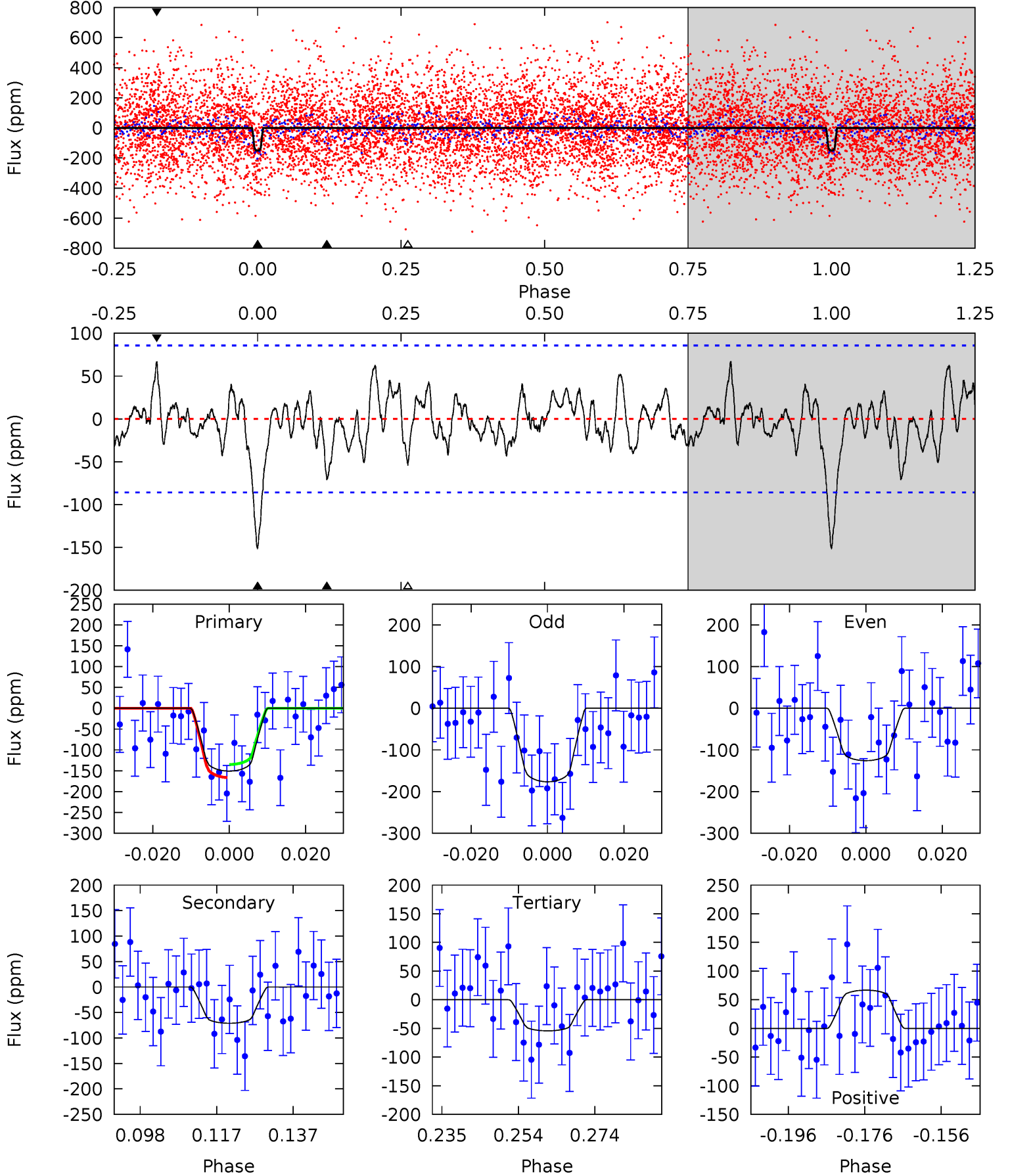
TCE 011152625-05 P= 5.264970 Days $T_0=135.487895$ (BKJD)



DV Model-Shift Uniqueness Test

011152625-05, P = 5.265034 Days, E = 130.230731 Days

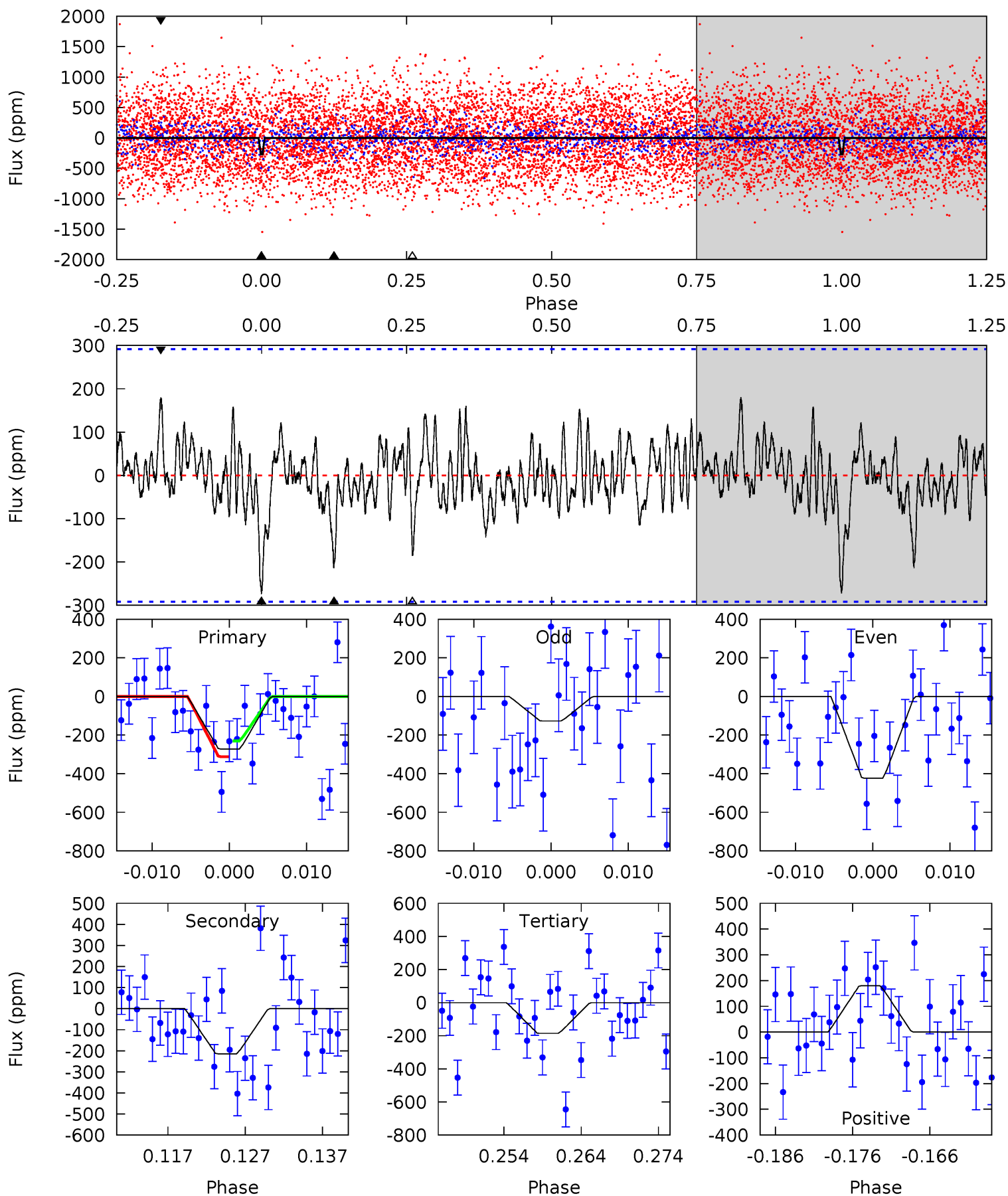
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
8.60	4.06	3.10	3.81	4.90	2.33	1.24	5.51	4.80	0.97	0.25	1.45	0.86	0.31	0.90



Alt Model-Shift Uniqueness Test

011152625-05, P = 5.264970 Days, E = 130.222925 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
4.69	3.70	3.20	3.10	5.03	2.58	1.00	1.49	1.59	0.50	0.60	2.58	1.42	0.40	0.71



Stellar Parameters For KIC 011152625

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	7606^{+211}_{-316}	$4.099^{+0.144}_{-0.176}$	$-0.100^{+0.200}_{-0.350}$	$1.880^{+0.523}_{-0.428}$	$1.617^{+0.197}_{-0.263}$	$0.343^{+0.287}_{-0.156}$
	+3%/-4%	+4%/-4%	+200%/-350%	+28%/-23%	+12%/-16%	+84%/-45%
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 011152625-05 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-71 ± 18	$2.99^{+1.91}_{-1.73}$	2449^{+177}_{-175}	5725^{+3266}_{-1229}	21^{+87}_{-14}
Alt.	-214 ± 58	$3.59^{+2.01}_{-1.83}$	2447^{+181}_{-166}	6812^{+3853}_{-1358}	43^{+139}_{-26}

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

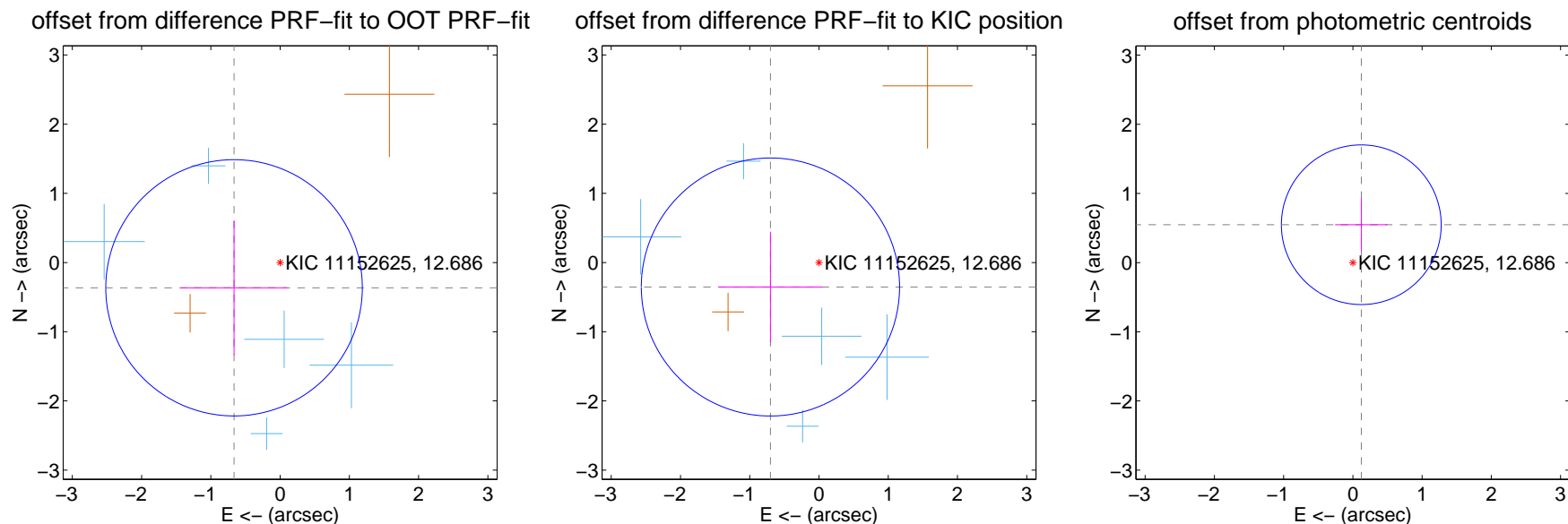
DV Centroid Data

Supplemental centroid analysis for 011152625-05. Kepler magnitude: 12.69. Transit SNR 7.01

There are 5 quarters with good PRF difference image offsets

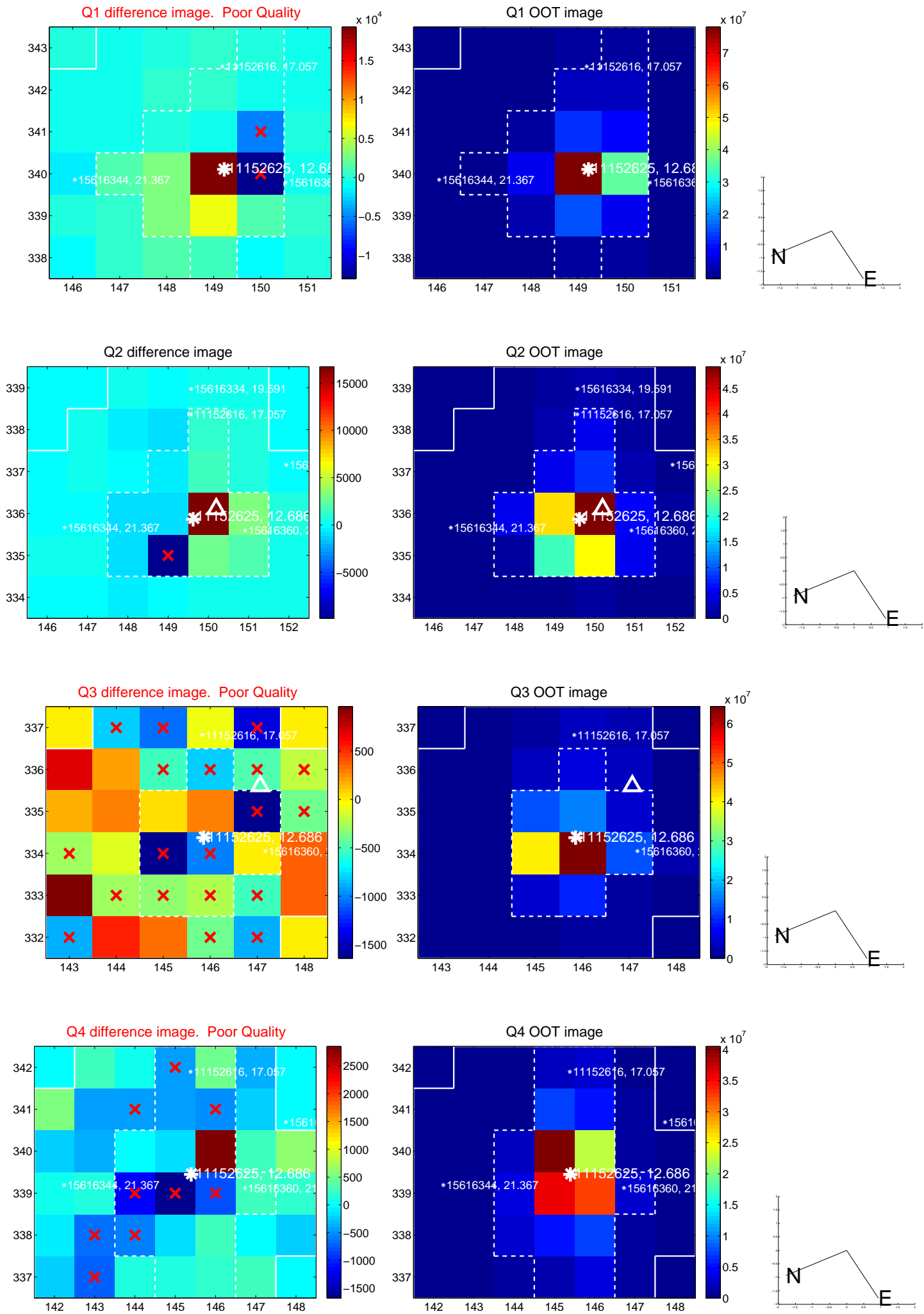
The direct PRF centroid is offset from the target star catalog position by about 0.08 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.759 ± 0.617	1.23	0.665 ± 0.769	-0.365 ± 0.971
PRF-fit source offset from KIC position	0.785 ± 0.621	1.26	0.701 ± 0.751	-0.354 ± 0.797
photometric centroid source offset	0.56 ± 0.38	1.46	-0.12 ± 0.38	0.55 ± 0.39

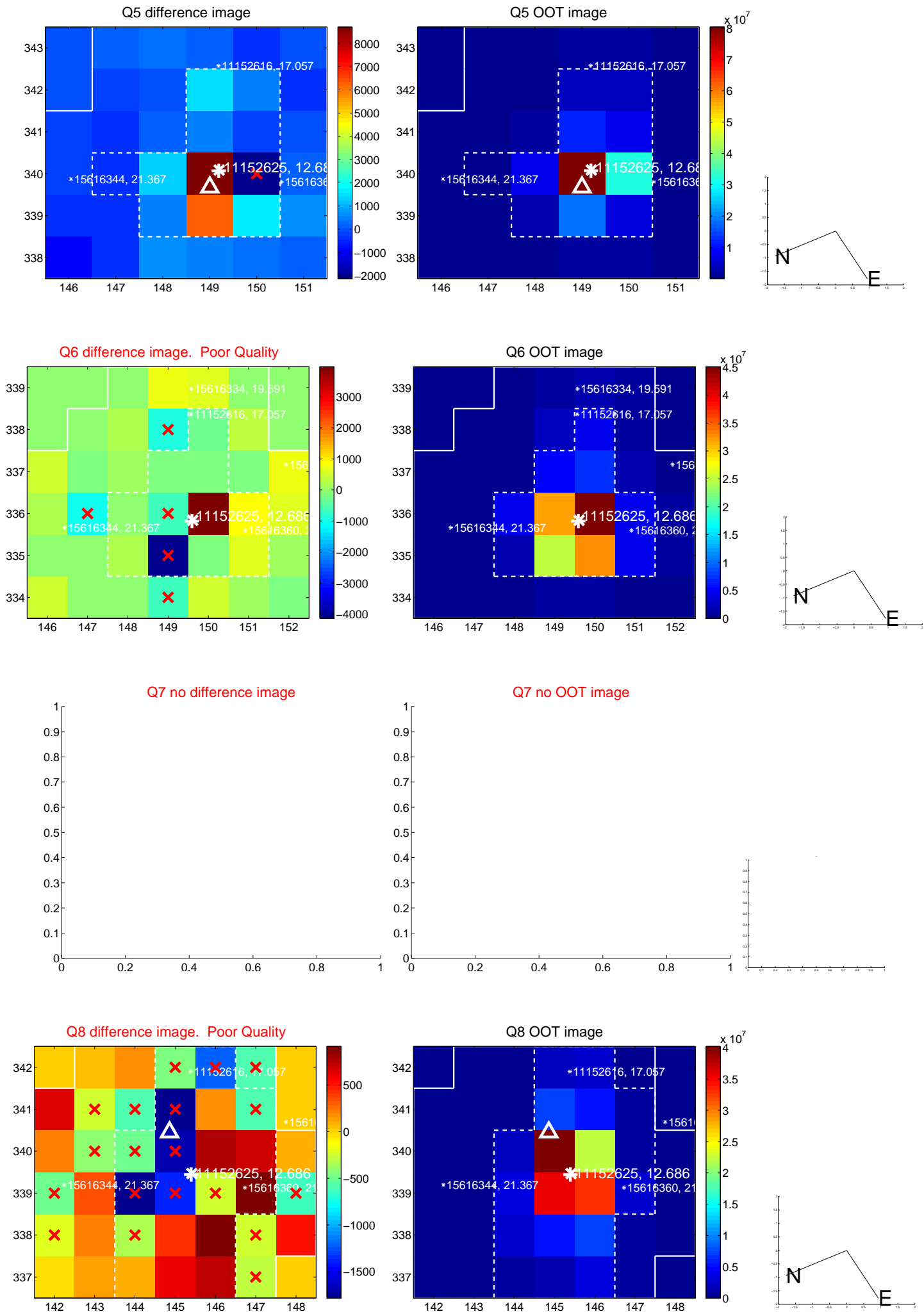


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets**; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

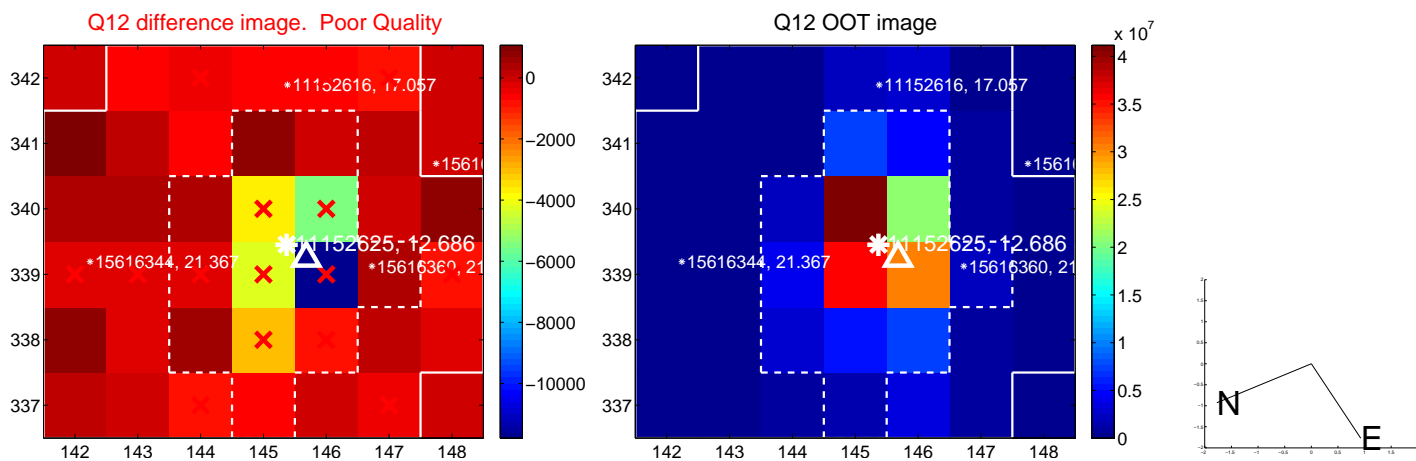
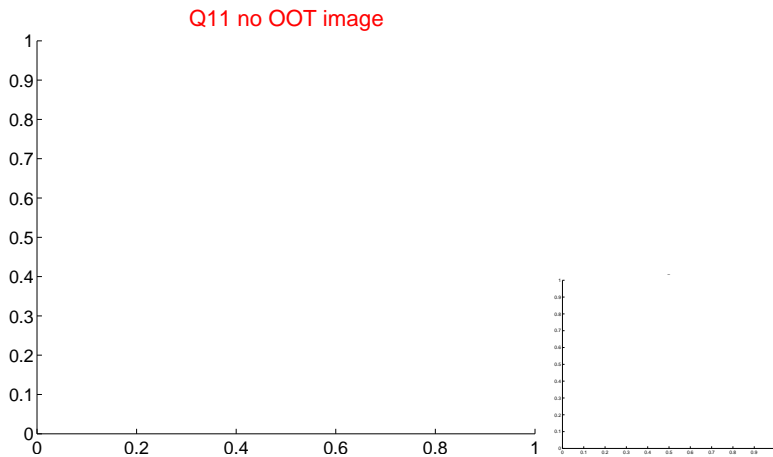
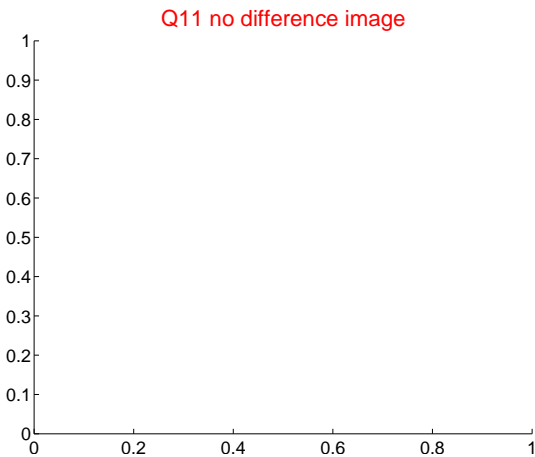
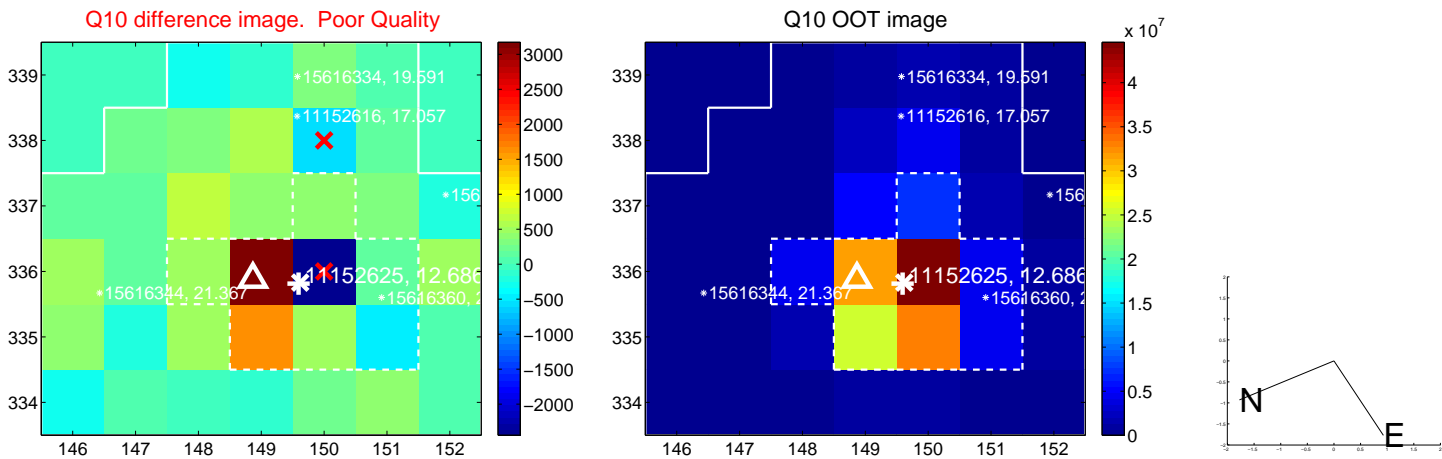
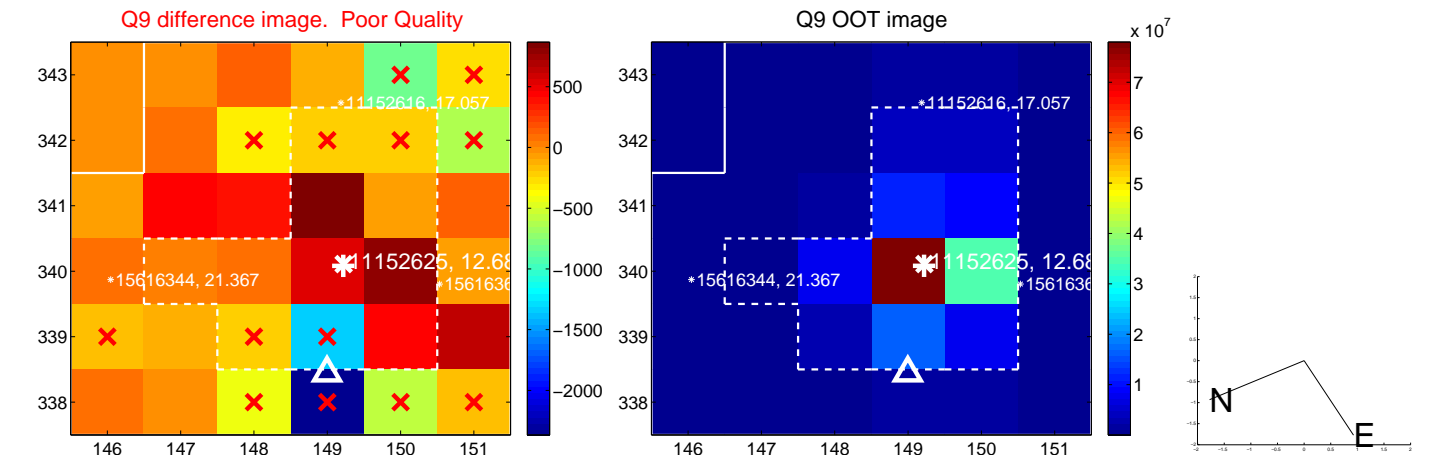
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



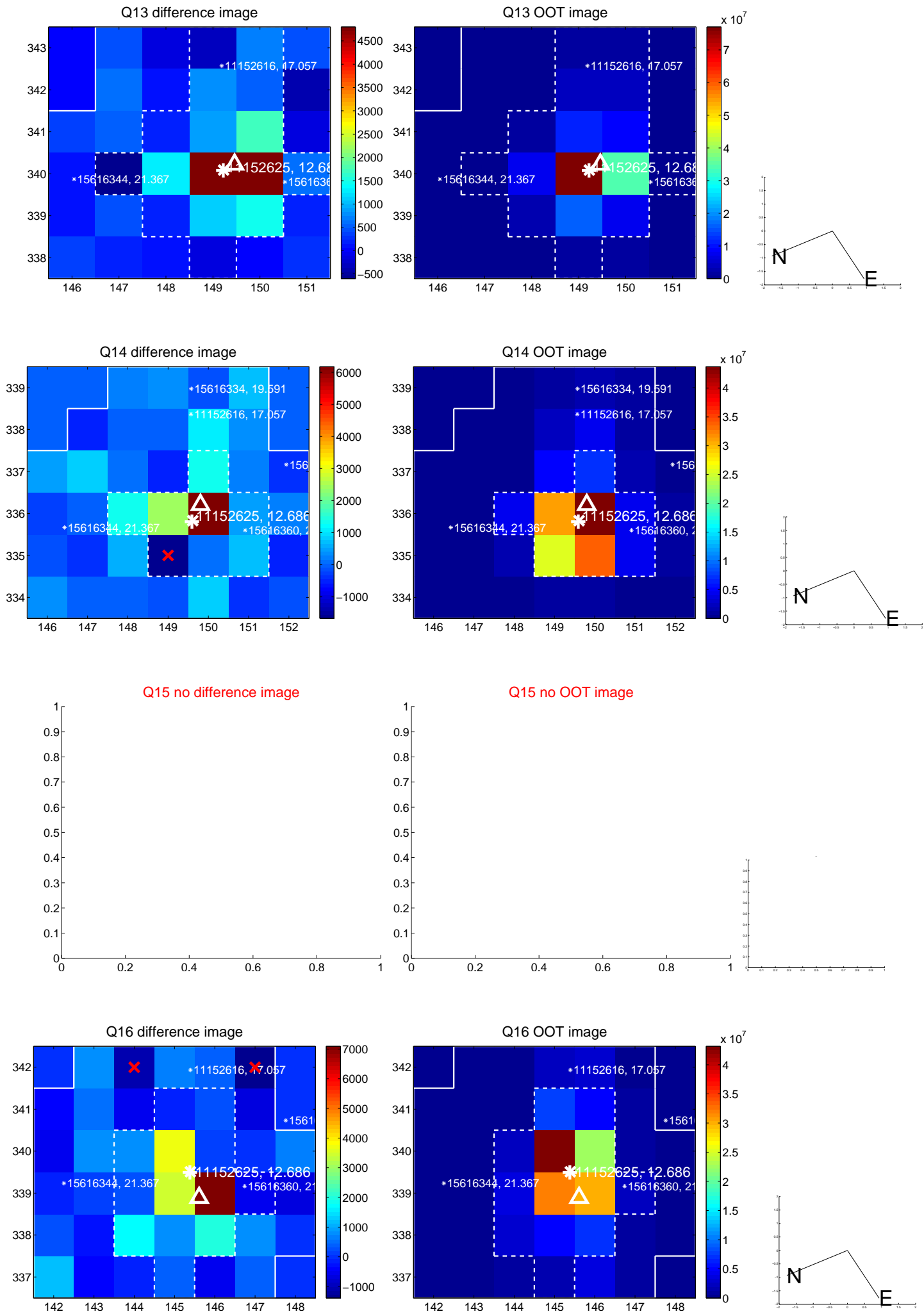
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



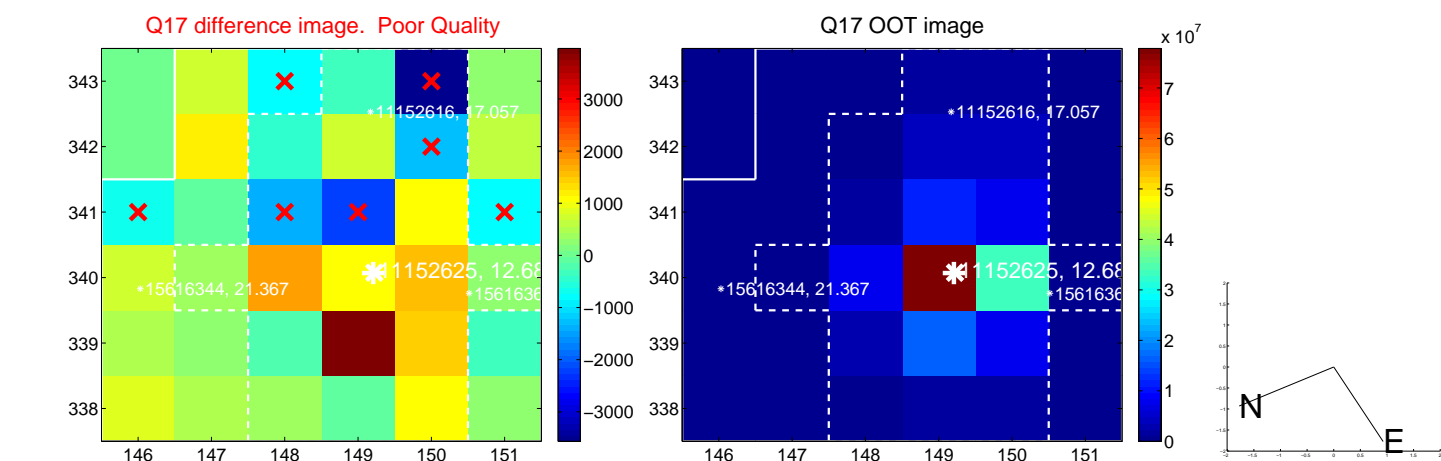
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



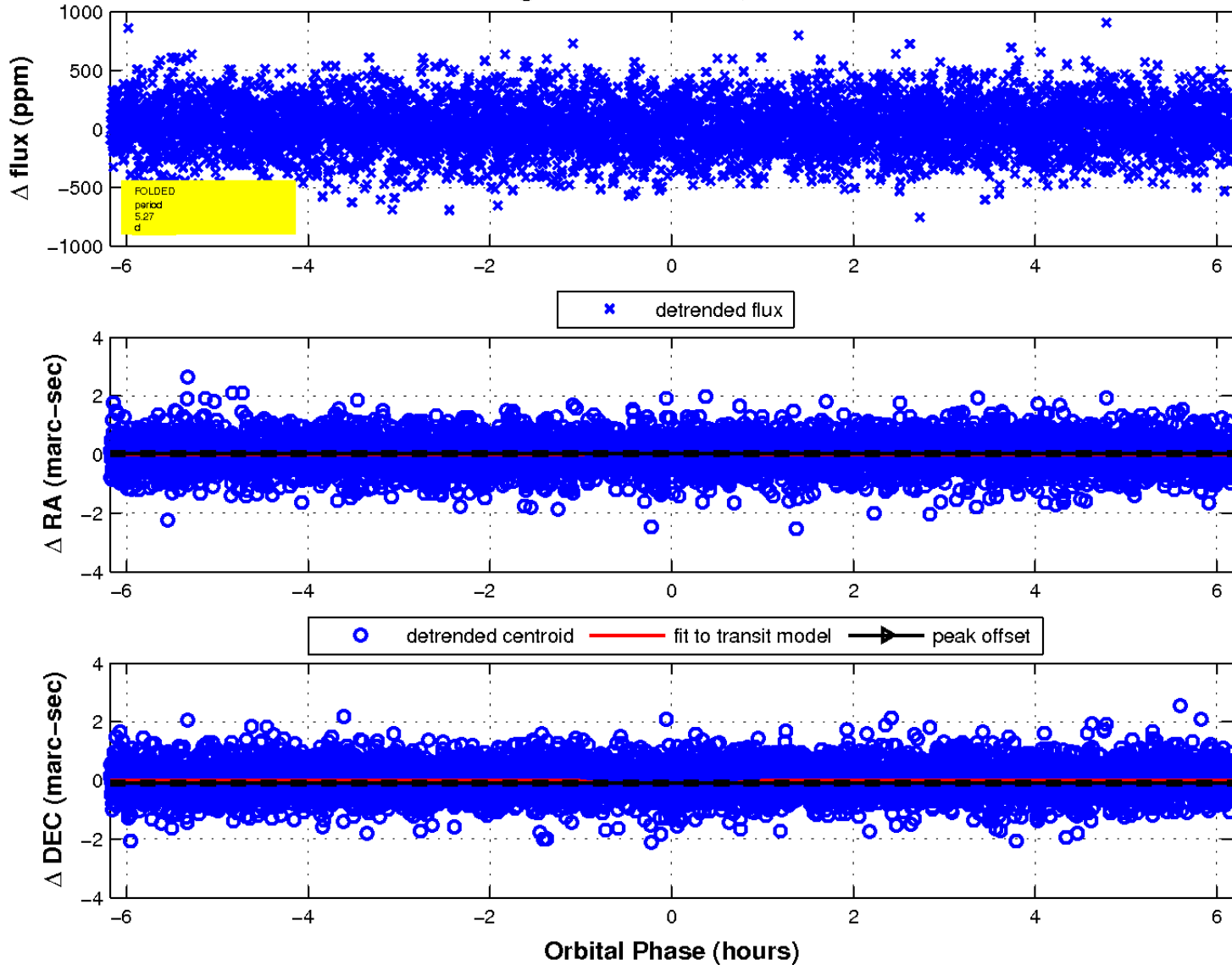
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

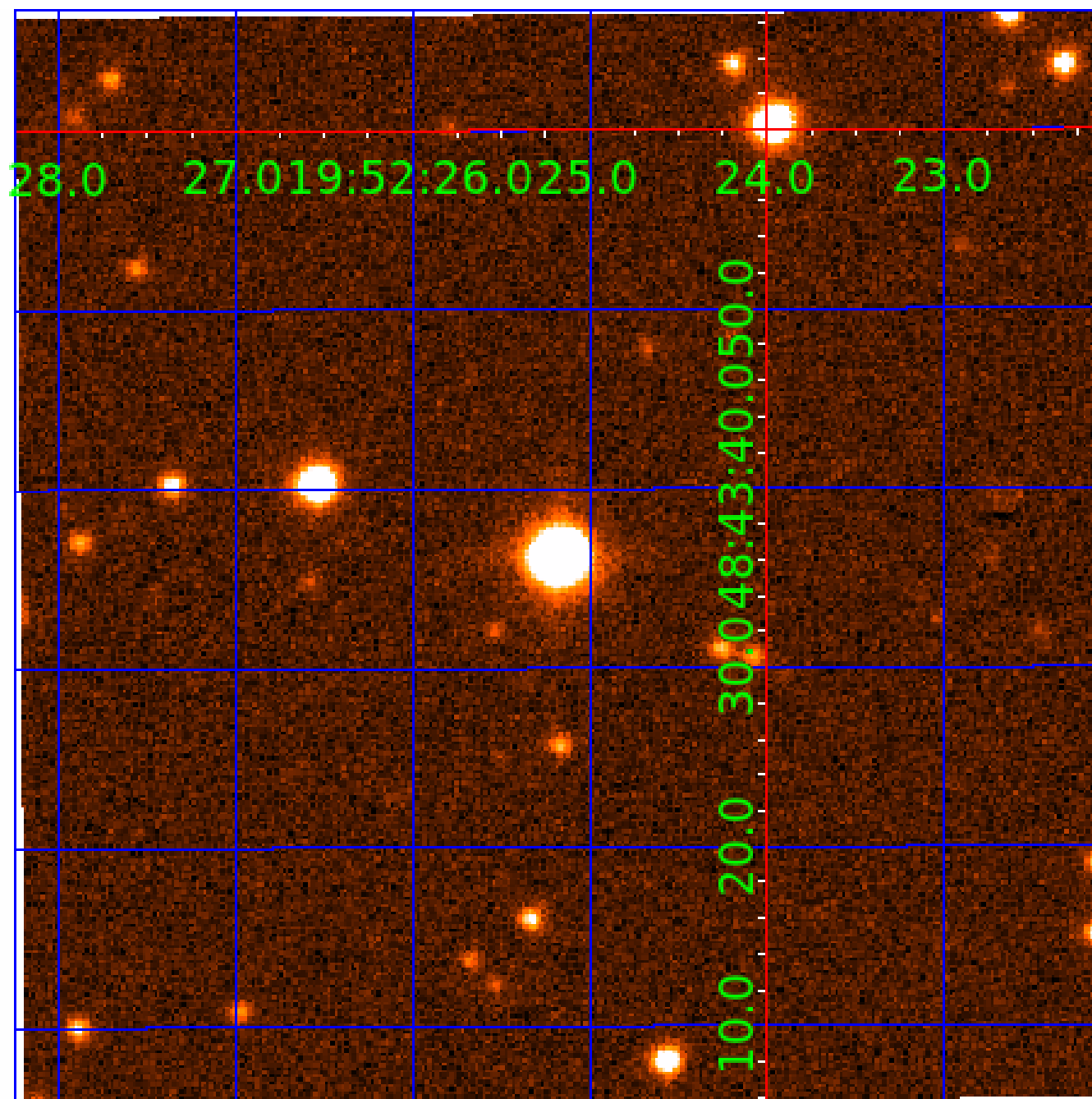


fluxWeightedCentroids, Planet 5 of 6



UKIRT Image

Declination



KIC 011152625

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})
011152625-01	OBS	No	0.659923	131.676243	41.2	0.945	11.0	9.4	1.88	7606	1.39	34911.39
011152625-02	OBS	No	0.659928	131.832199	31.6	1.548	9.8	8.5	1.88	7606	1.23	34911.07
011152625-03	OBS	No	0.660577	131.854682	45.4	2.231	9.5	10.1	1.88	7606	1.47	34865.29
011152625-04	OBS	No	4.610766	135.583996	81.3	12.117	7.8	10.2	1.88	7606	1.89	2613.73
011152625-05	OBS	No	5.265034	135.495765	158.7	2.061	7.3	7.0	1.88	7606	2.74	2189.89
011152625-06	OBS	No	27.901738	156.827464	345.1	2.533	7.6	8.3	1.88	7606	4.01	237.02

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
011152625-01	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT
011152625-02	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—SAME_NTL_PERIOD
011152625-03	OBS	FP	0.00	1	0	0	0	TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT
011152625-04	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_SKYE_ZUMA—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_ALT
011152625-05	OBS	FP	0.00	1	0	1	0	INDIV_TRANS_RUBBLE_ZUMA—TRANS_GAPPED—MOD_NONUNIQ_ALT—MOD_TER_ALT—HALO_GHOST
011152625-06	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_SKYE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_FEW_DIFFS

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

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

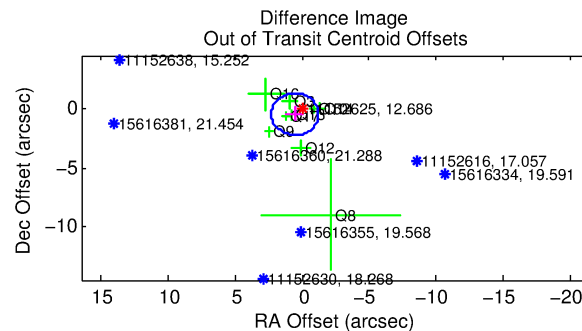
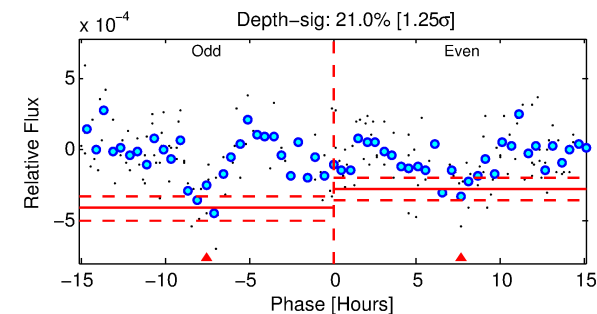
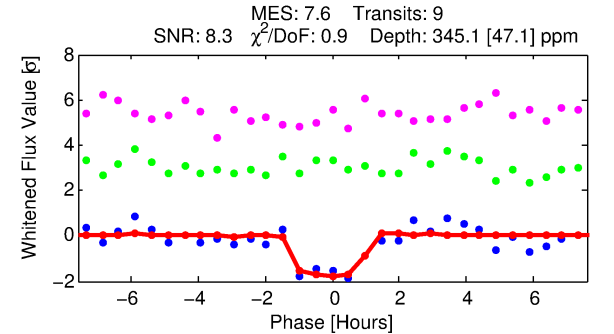
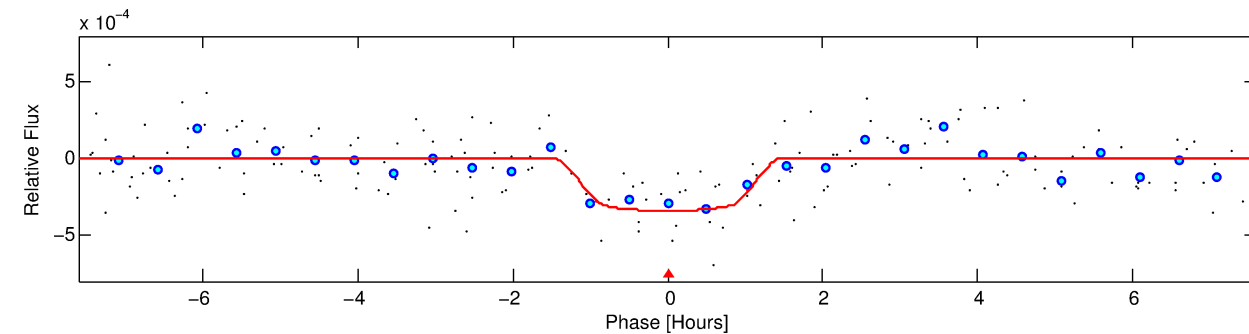
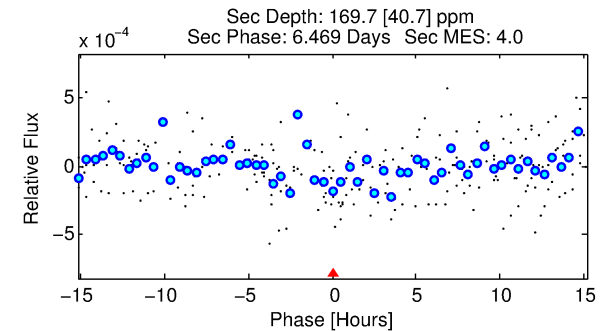
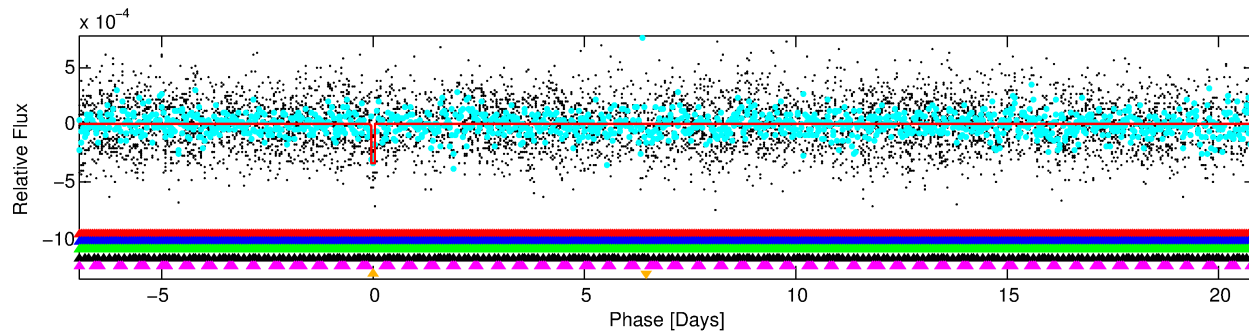
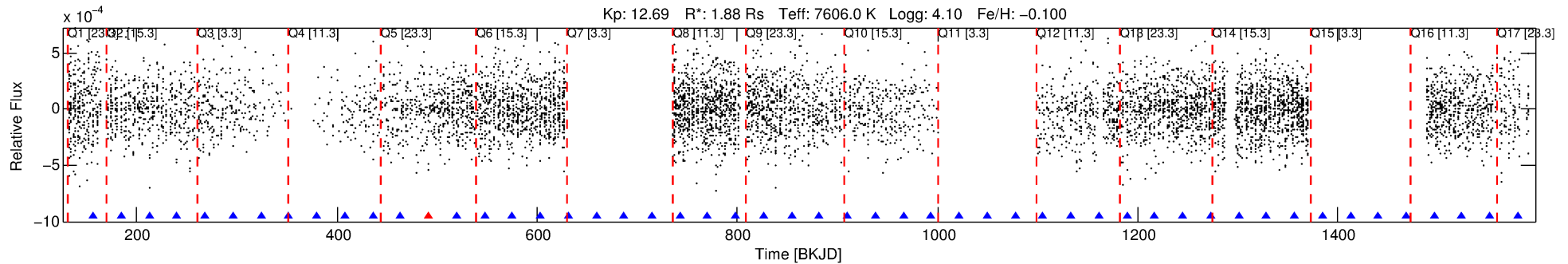
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 011152625-06

No Significant Match Found

DV One-Page Summary

KIC: 11152625 Candidate: 6 of 6 Period: 27.902 d



DV Fit Results:

Period = 27.90174 [0.00030] d
Epoch = 156.8275 [0.0087] BKJD
Rp/R* = 0.0195 [0.0108]
a/R* = 42.40 [151.14]
b = 0.89 [0.87]
Seff = 237.02 [87.09]
Teff = 1001 [92] K
Rp = 4.01 [2.48] Re
a = 0.2115 [0.0485] AU
Ag = 260.19 [306.04] [0.85σ]
Teffp = 6213 [1773] K [2.94σ]

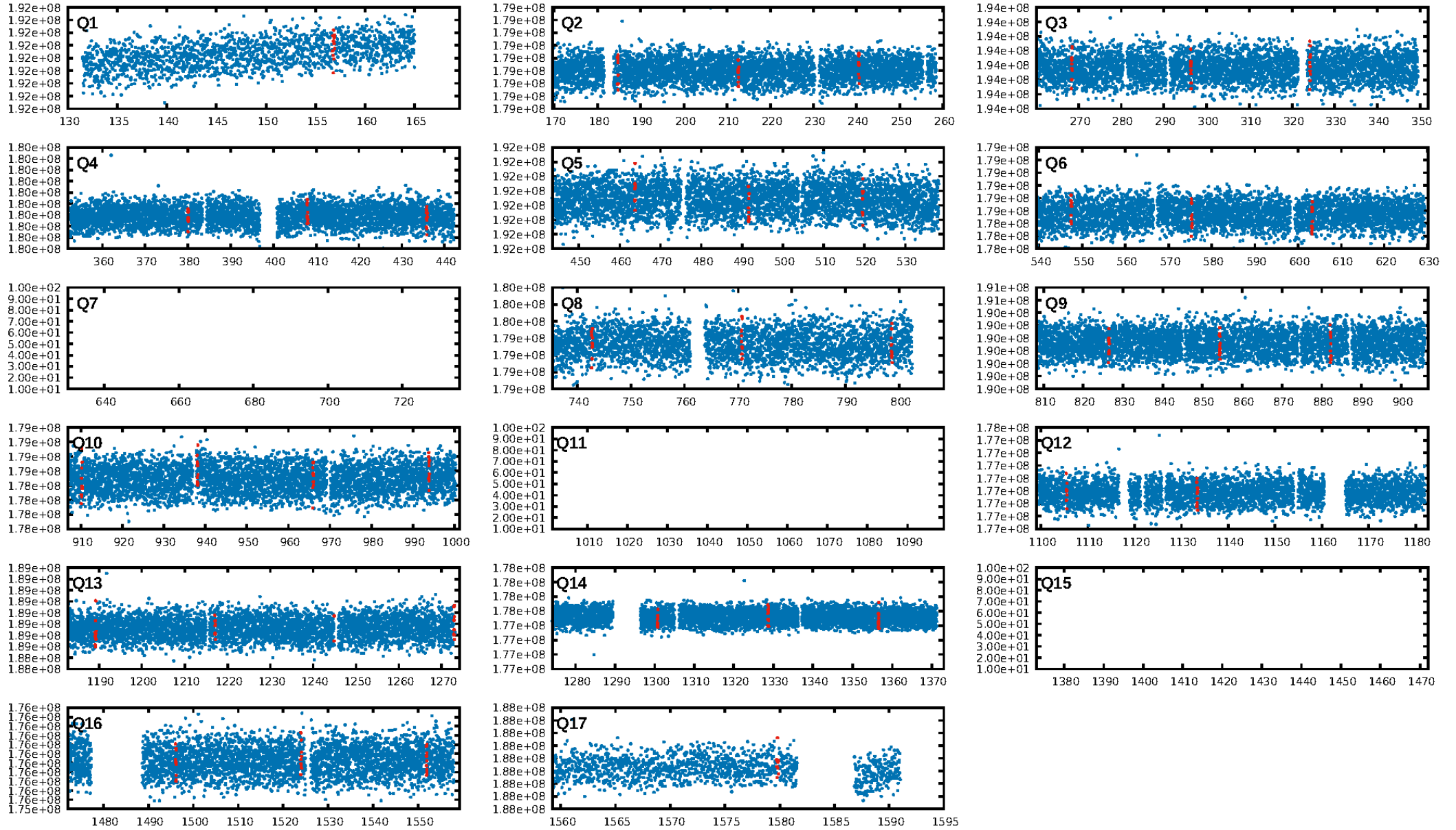
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [166.38σ]
LongPeriod-sig: N/A
ModelChiSquare2-sig: 29.1%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: 1.90e-08
RollingBand-fgt: 0.89 [8/9]
GhostDiagnostic-chr: -0.6634
Centroid-sig: 33.2%
Centroid-so: 0.583 arcsec [1.60σ]
OotOffset-rm: 0.728 arcsec [1.23σ]
OotOffset-st: 2/1/3/3 [9]
KicOffset-rm: 0.665 arcsec [1.12σ]
KicOffset-st: 2/1/3/3 [9]
DiffImageQuality-fgm: 0.33 [3/9]
DiffImageOverlap-fno: 0.00 [0/14]

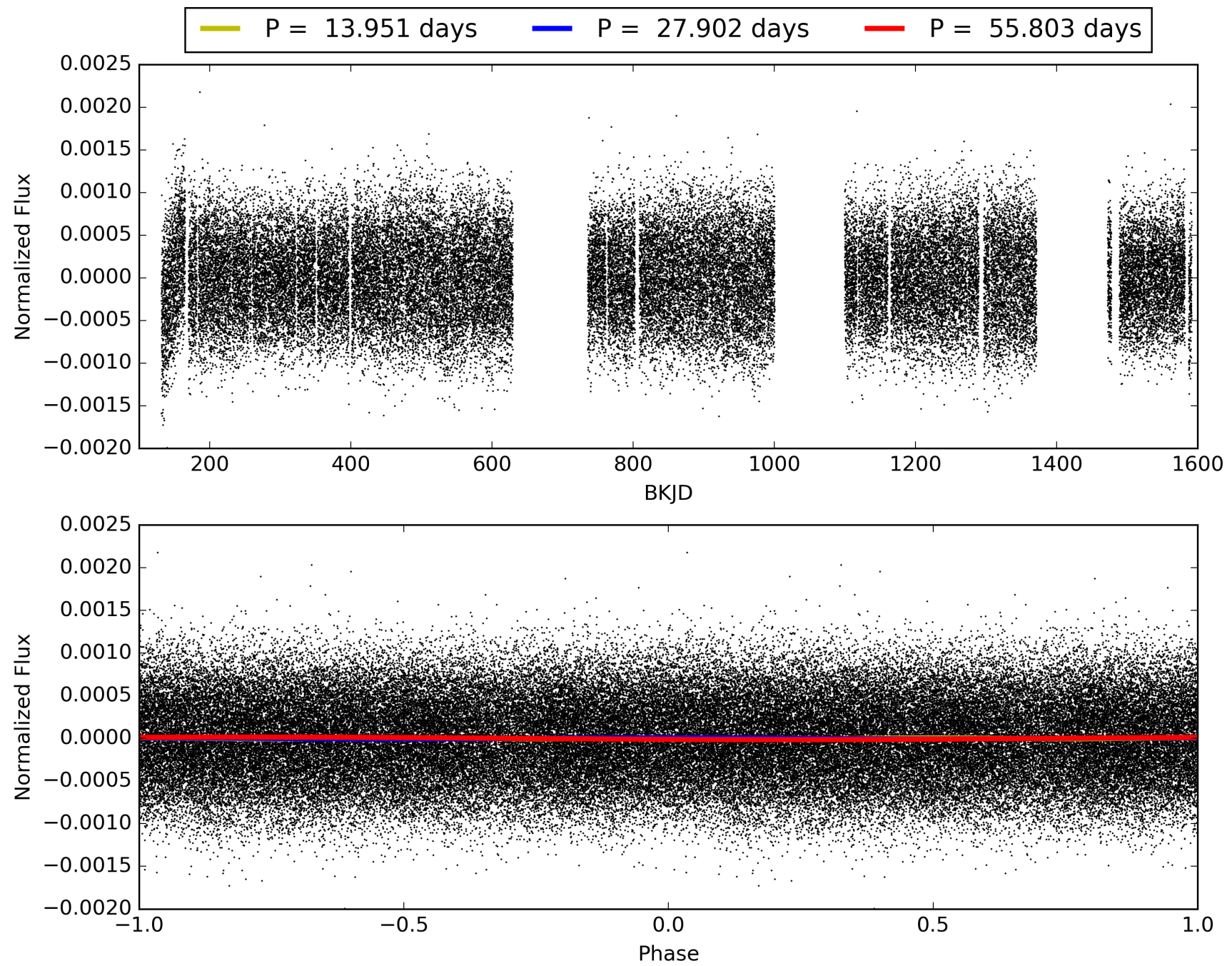
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 01-Feb-2016 07:10:32 Z

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

TCE 011152625-06, PDC Light Curves

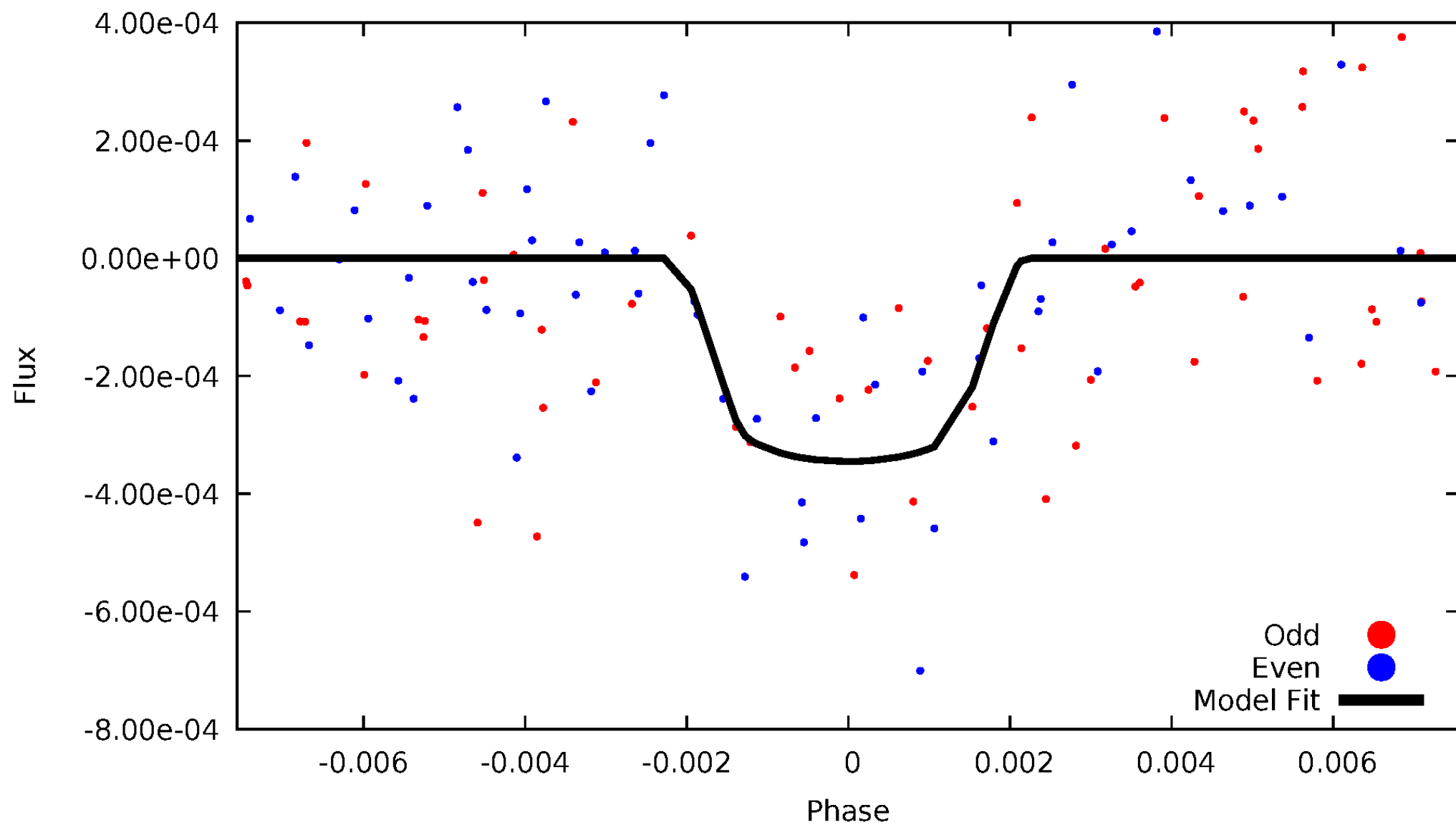


TCE 011152625-06



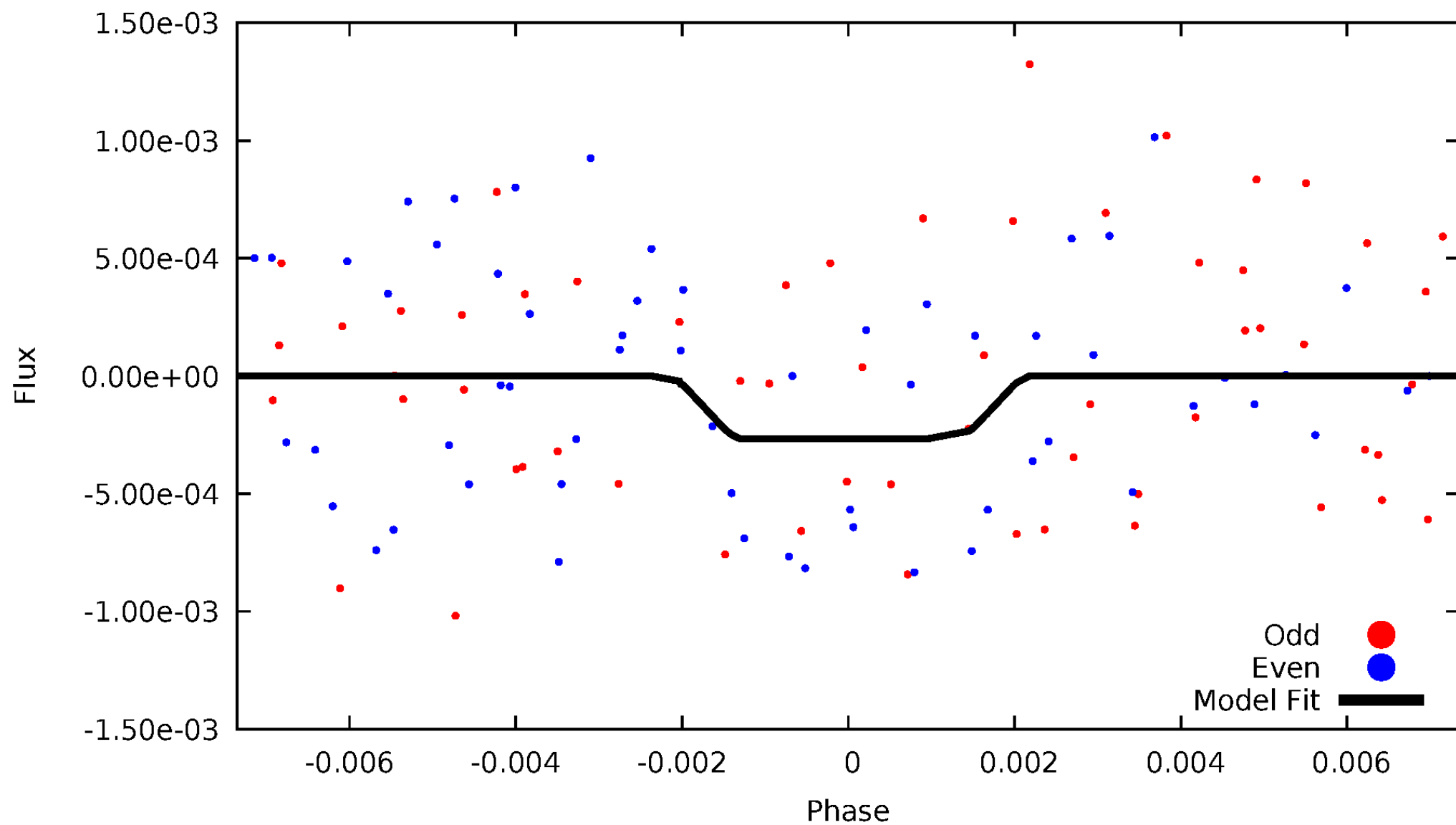
DV Odd/Even

TCE 011152625-06



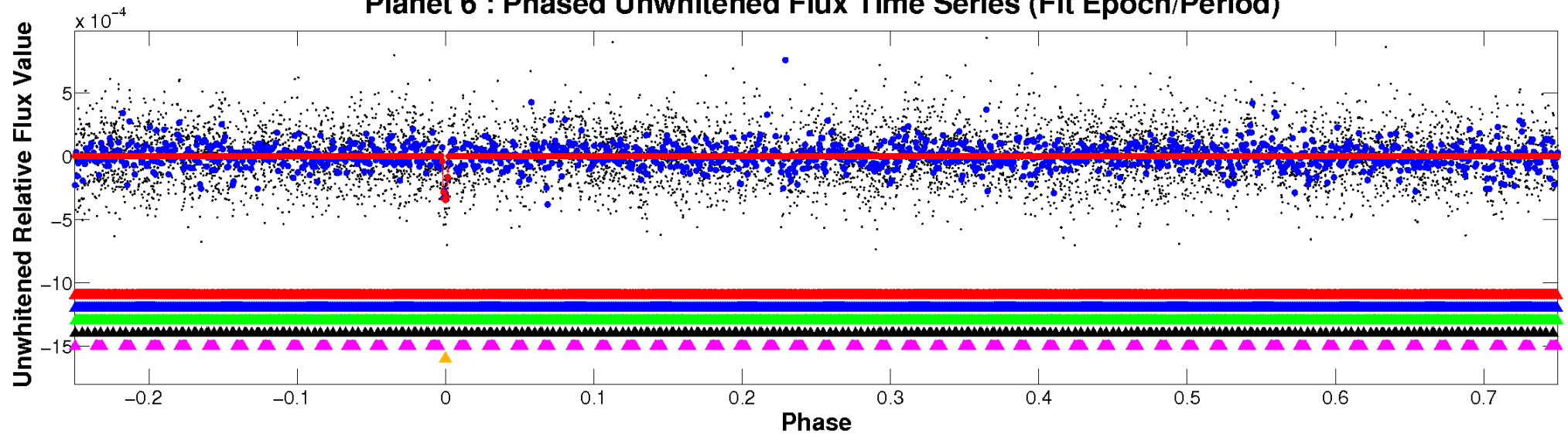
ALT Odd/Even

TCE 011152625-06

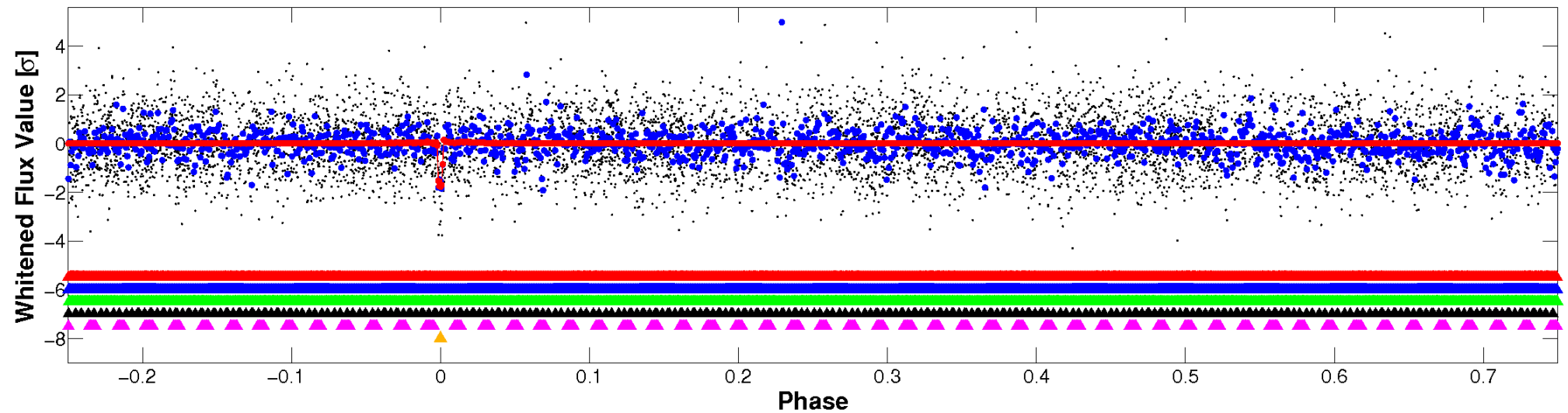


Non-Whitened Vs. Whitened Light Curve

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

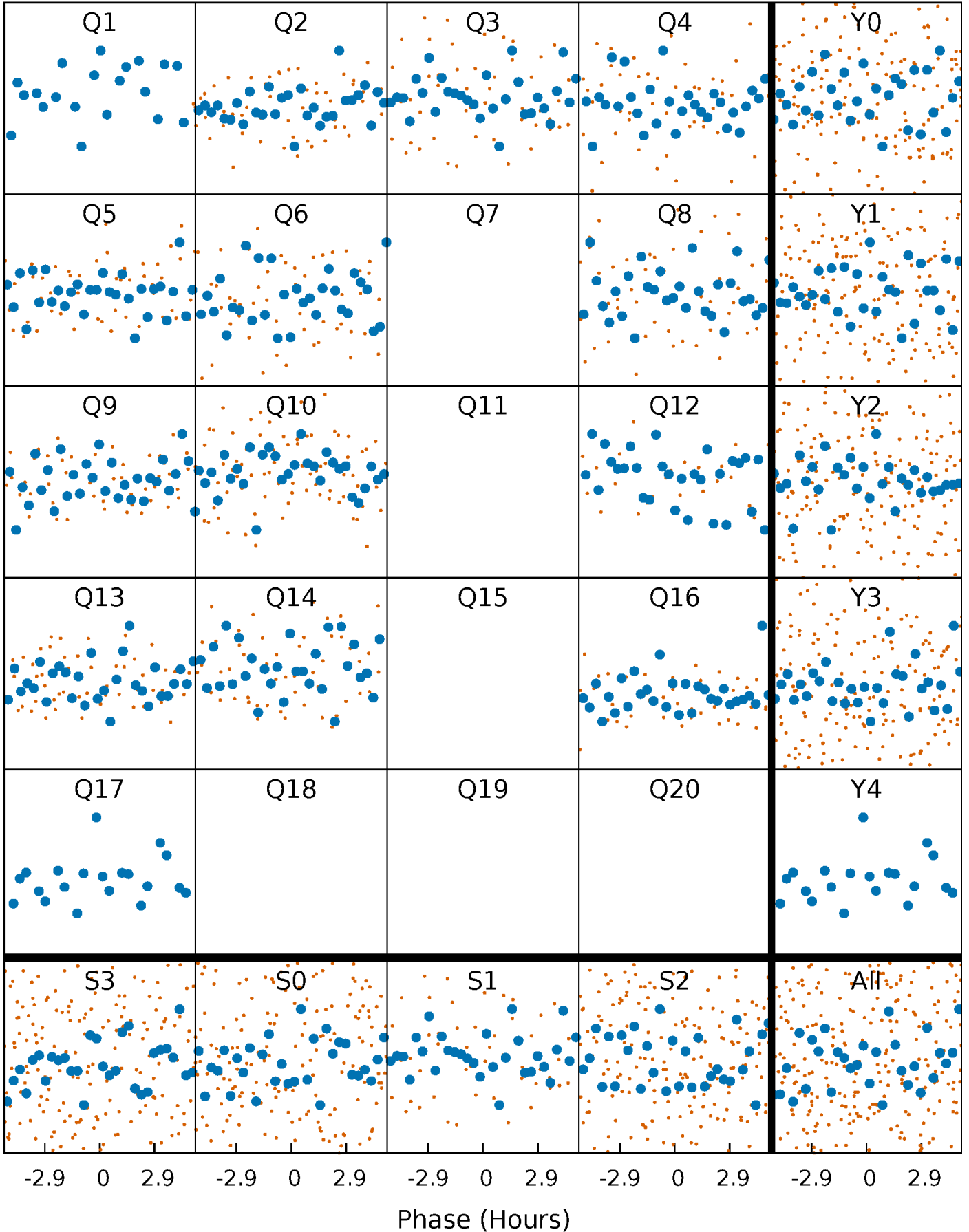


Planet 6 : Phased Whitened Flux Time Series (Fit Epoch/Period)



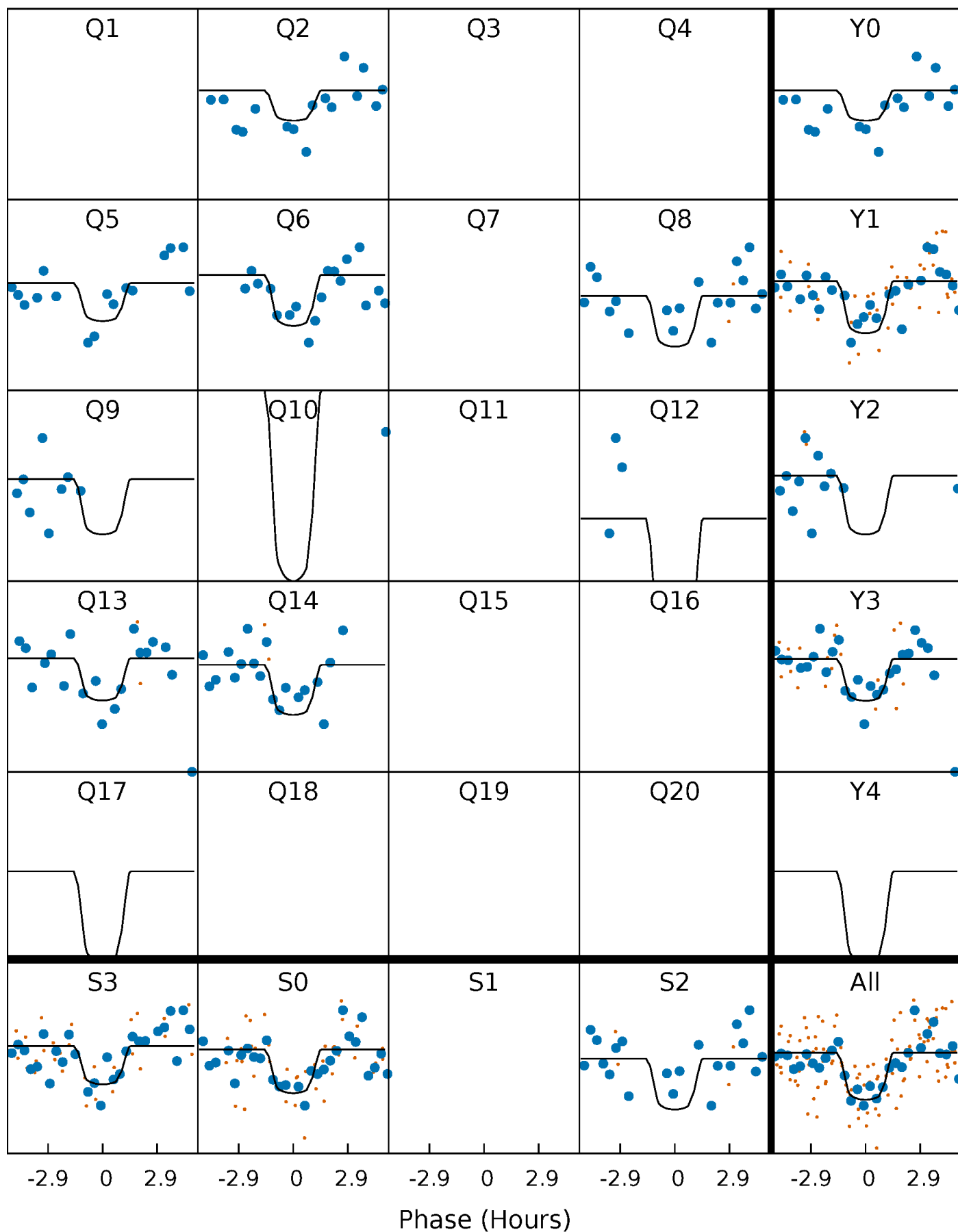
PDC Quarter-Phased Transit Curves

TCE 011152625-06 P= 27.901738 Days $T_0=156.827464$ (BKJD)



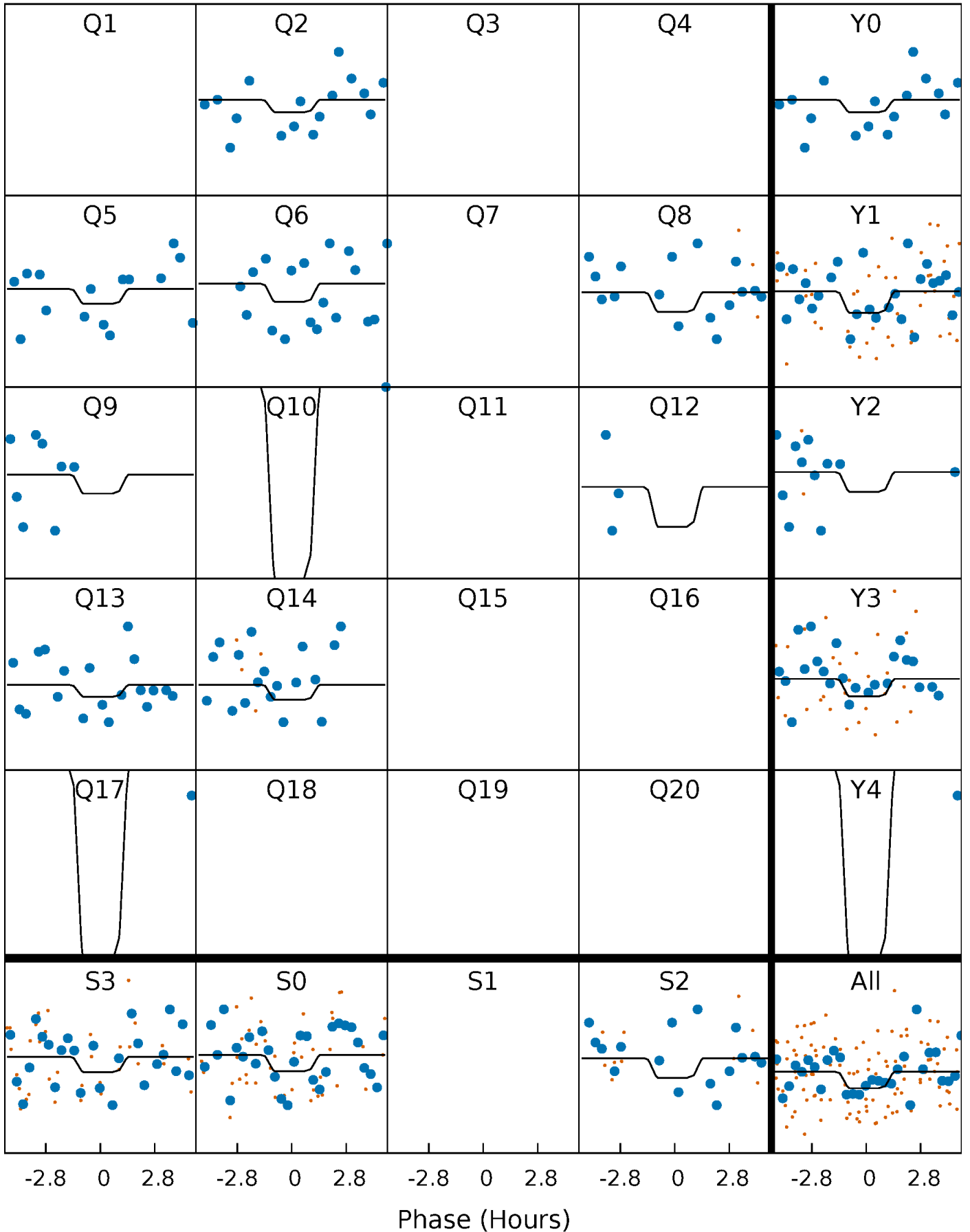
DV Quarter-Phased Transit Curves

TCE 011152625-06 P= 27.901738 Days $T_0=156.827464$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

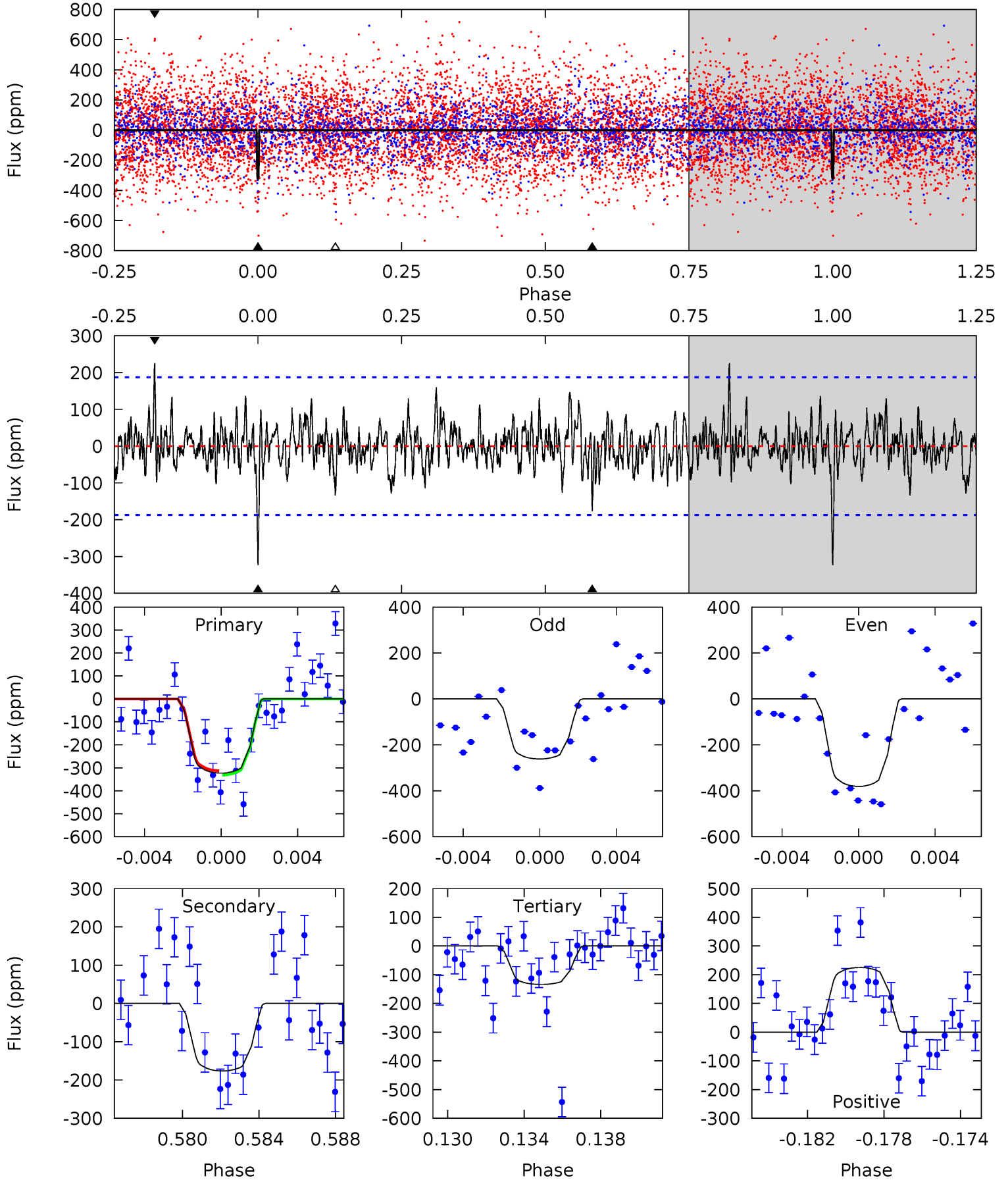
TCE 011152625-06 P= 27.901701 Days $T_0=156.831363$ (BKJD)



DV Model-Shift Uniqueness Test

011152625-06, $P = 27.901738$ Days, $E = 128.925726$ Days

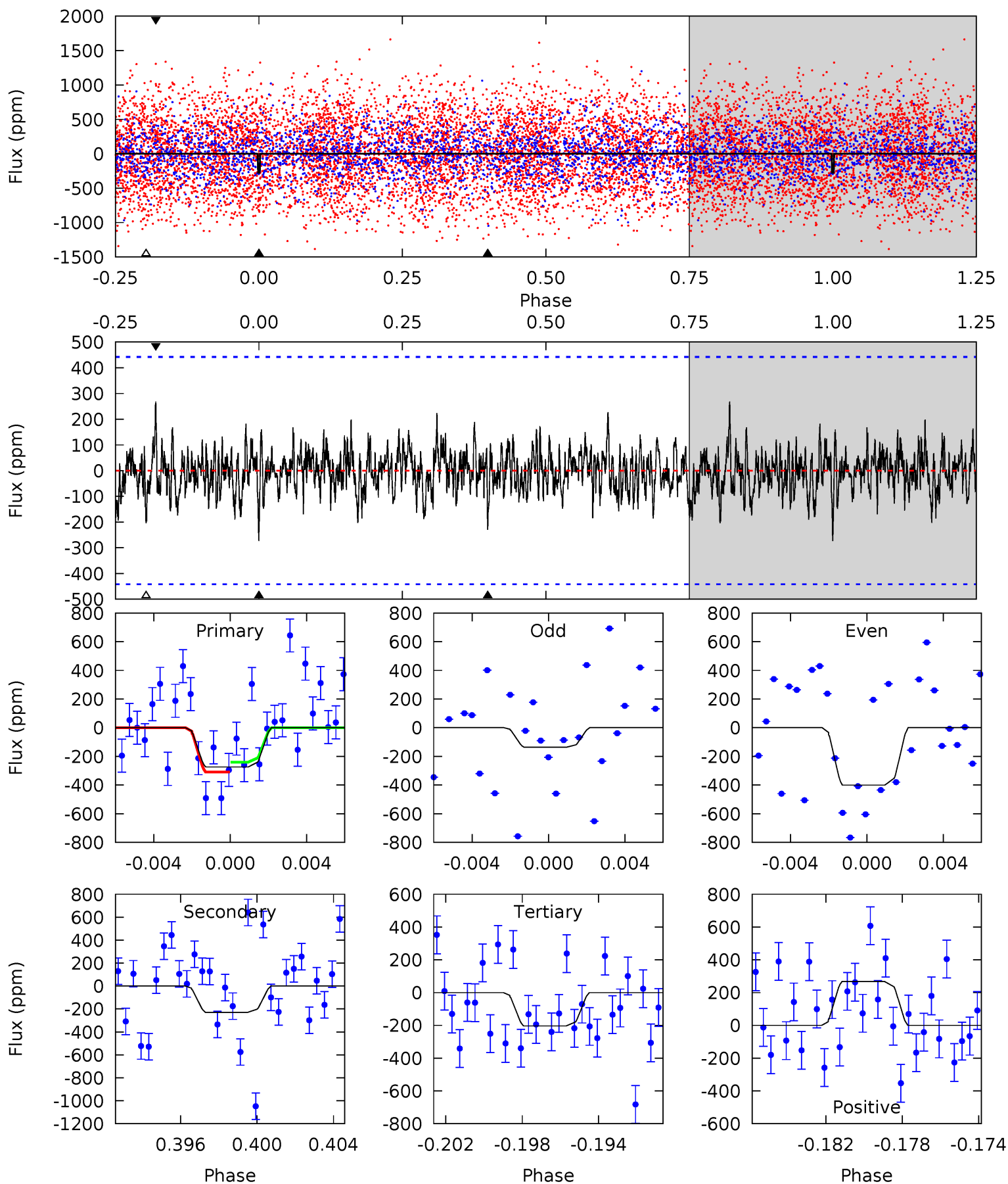
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
8.96	4.89	3.71	6.25	5.20	2.87	1.32	5.25	2.71	1.18	-1.36	1.66	0.97	0.41	0.25



Alt Model-Shift Uniqueness Test

011152625-06, $P = 27.901701$ Days, $E = 128.929662$ Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
3.22	2.70	2.40	3.15	5.20	2.87	0.83	0.82	0.07	0.30	-0.46	1.55	0.76	0.49	0.41



Stellar Parameters For KIC 011152625

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	7606^{+211}_{-316}	$4.099^{+0.144}_{-0.176}$	$-0.100^{+0.200}_{-0.350}$	$1.880^{+0.523}_{-0.428}$	$1.617^{+0.197}_{-0.263}$	$0.343^{+0.287}_{-0.156}$
	+3%/-4%	+4%/-4%	+200%/-350%	+28%/-23%	+12%/-16%	+84%/-45%
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 011152625-06 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-176 ± 36	$4.11^{+2.40}_{-2.01}$	1401^{+102}_{-95}	6066^{+3374}_{-1158}	252^{+765}_{-156}
Alt.	-229 ± 85	$3.43^{+2.28}_{-1.90}$	1395^{+111}_{-93}	7073^{+5078}_{-1706}	455^{+1745}_{-303}

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

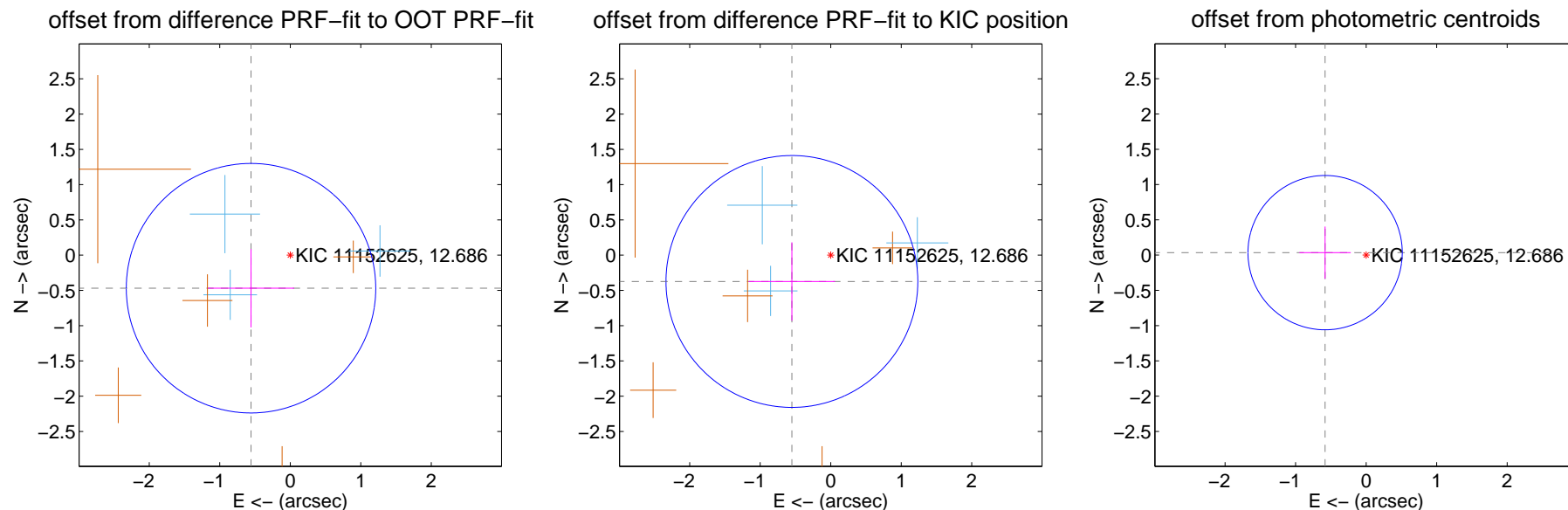
DV Centroid Data

Supplemental centroid analysis for 011152625-06. Kepler magnitude: 12.69. Transit SNR 8.27

There are 3 quarters with good PRF difference image offsets

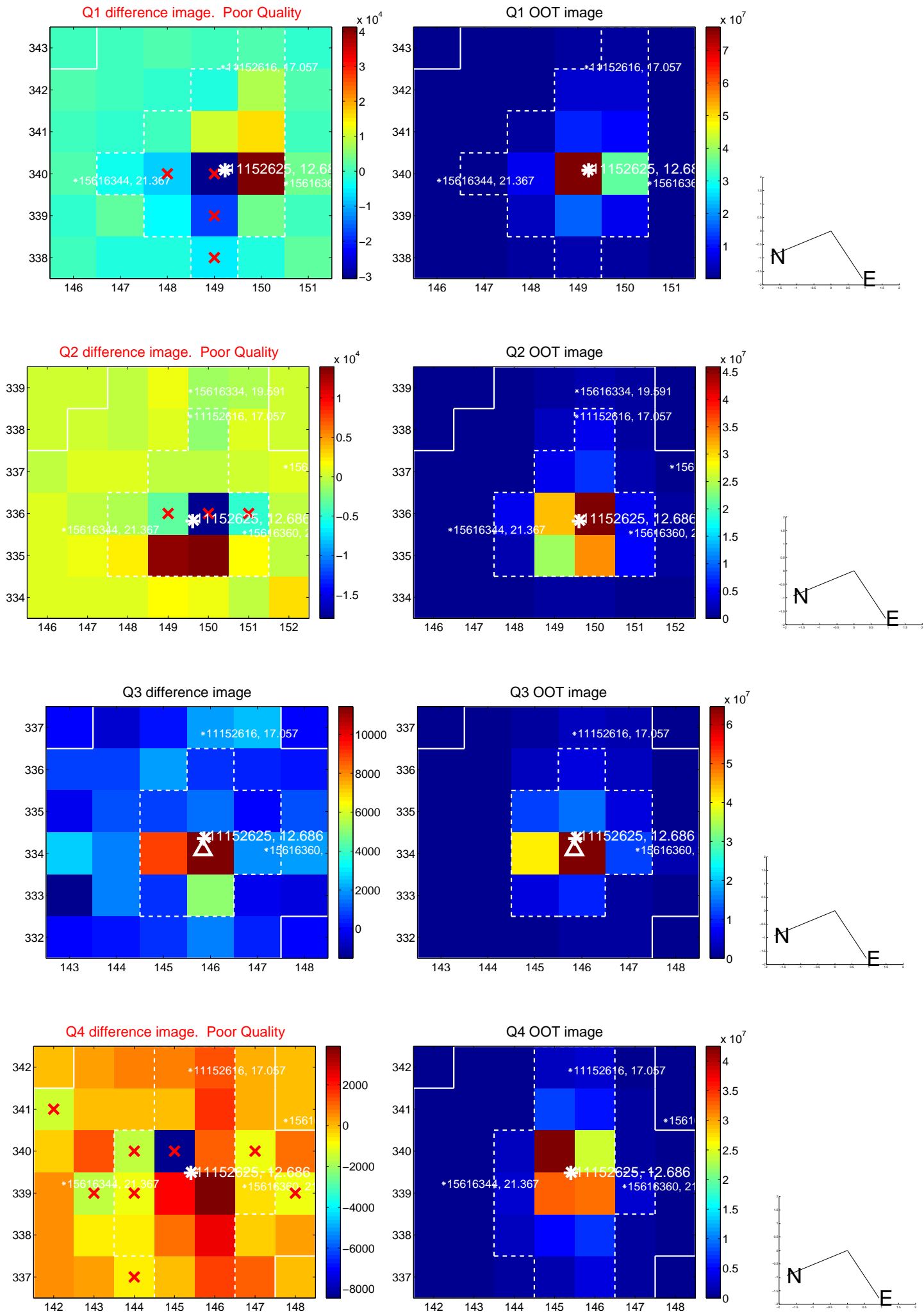
The direct PRF centroid is offset from the target star catalog position by about 0.06 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.728 ± 0.590	1.23	0.557 ± 0.612	-0.469 ± 0.556
PRF-fit source offset from KIC position	0.665 ± 0.595	1.12	0.551 ± 0.612	-0.373 ± 0.556
photometric centroid source offset	0.58 ± 0.36	1.60	0.58 ± 0.36	0.03 ± 0.37

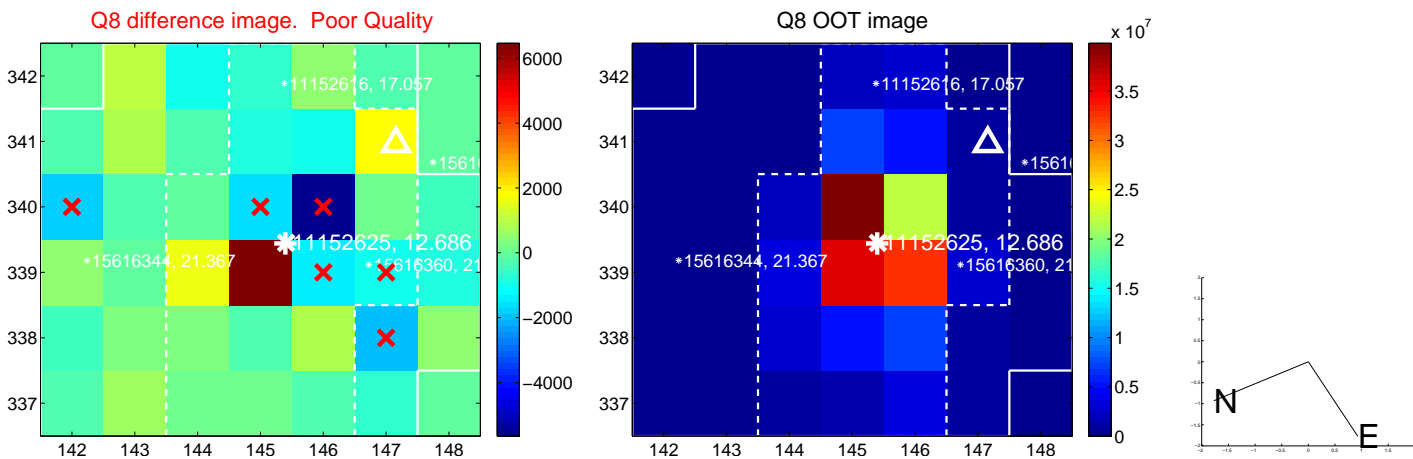
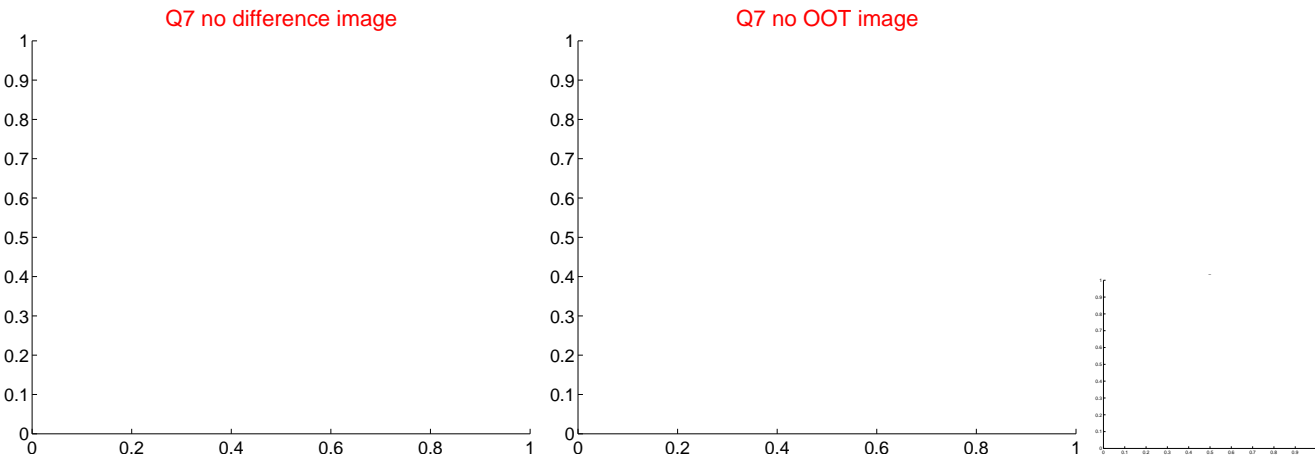
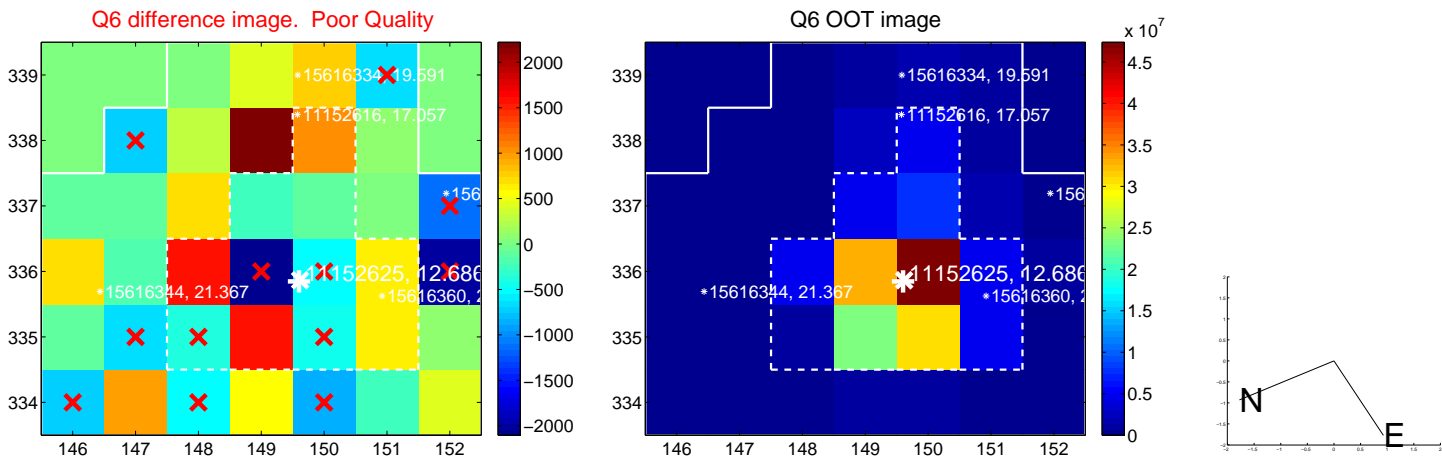
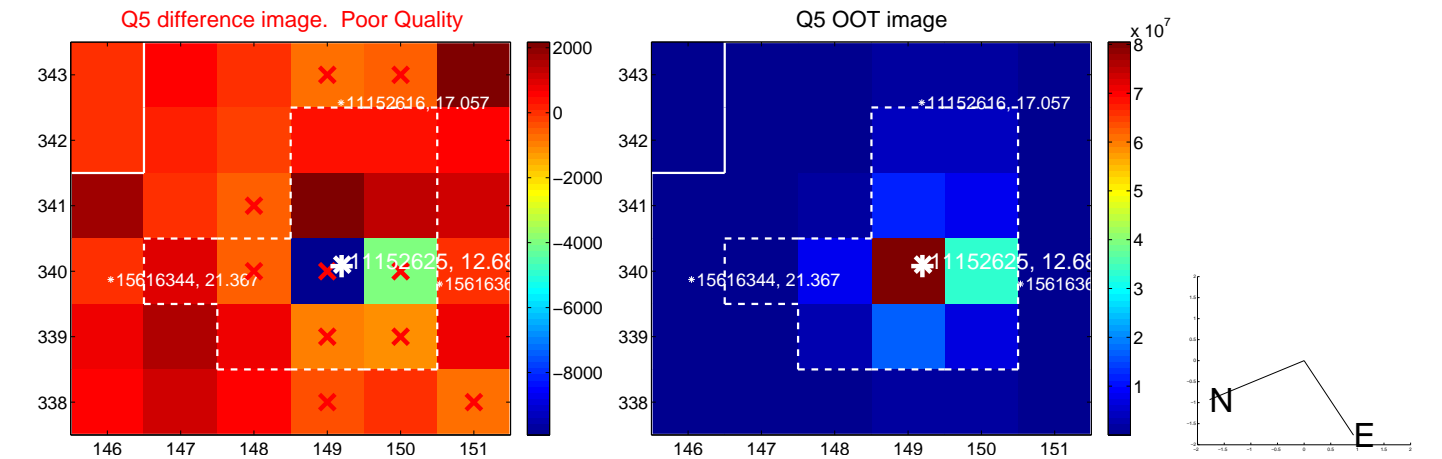


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses:** good quarterly centroid offsets; **Vermillion crosses:** bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

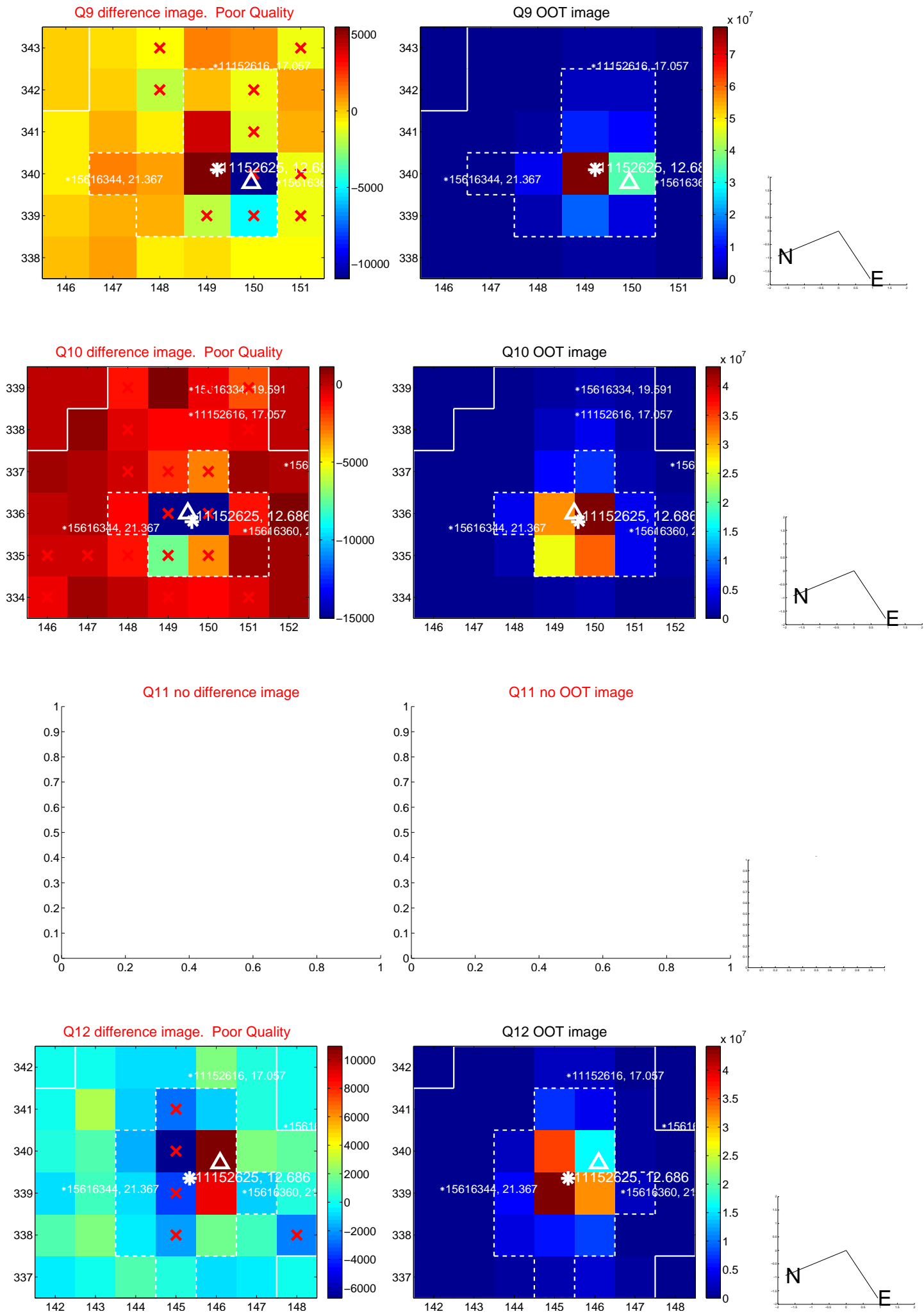
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



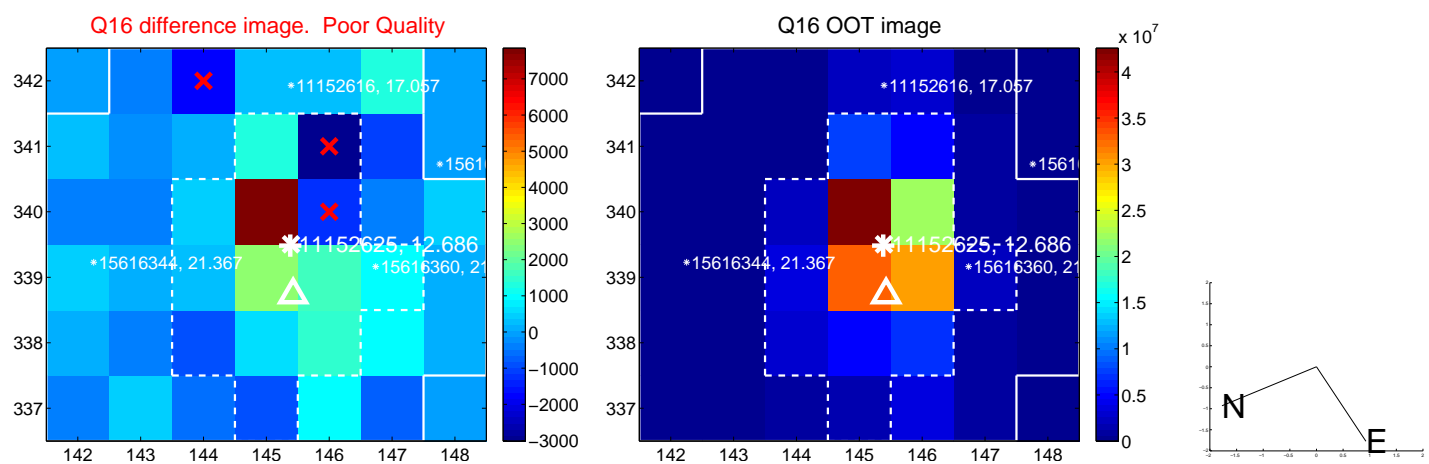
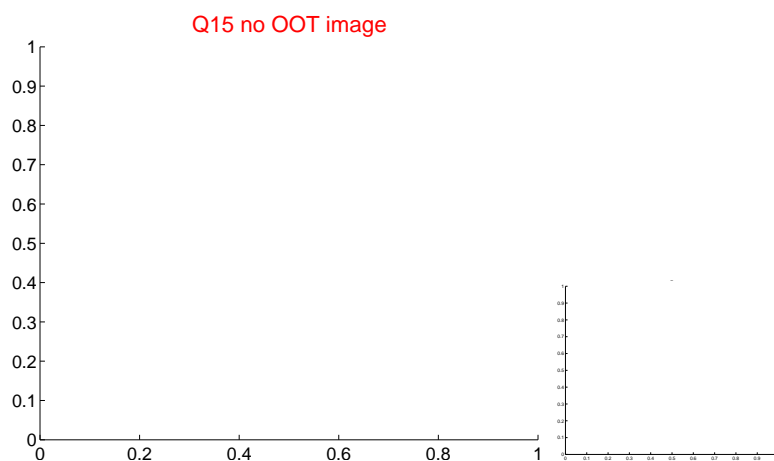
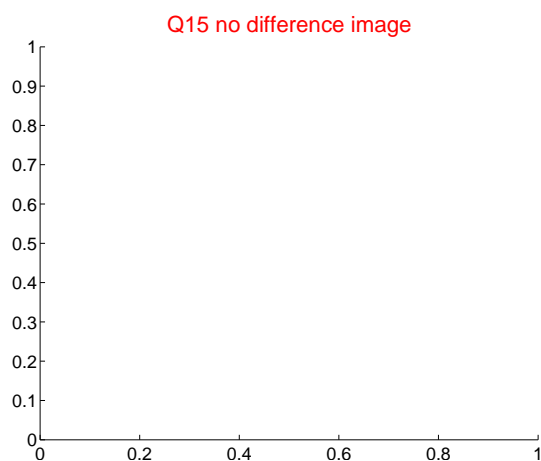
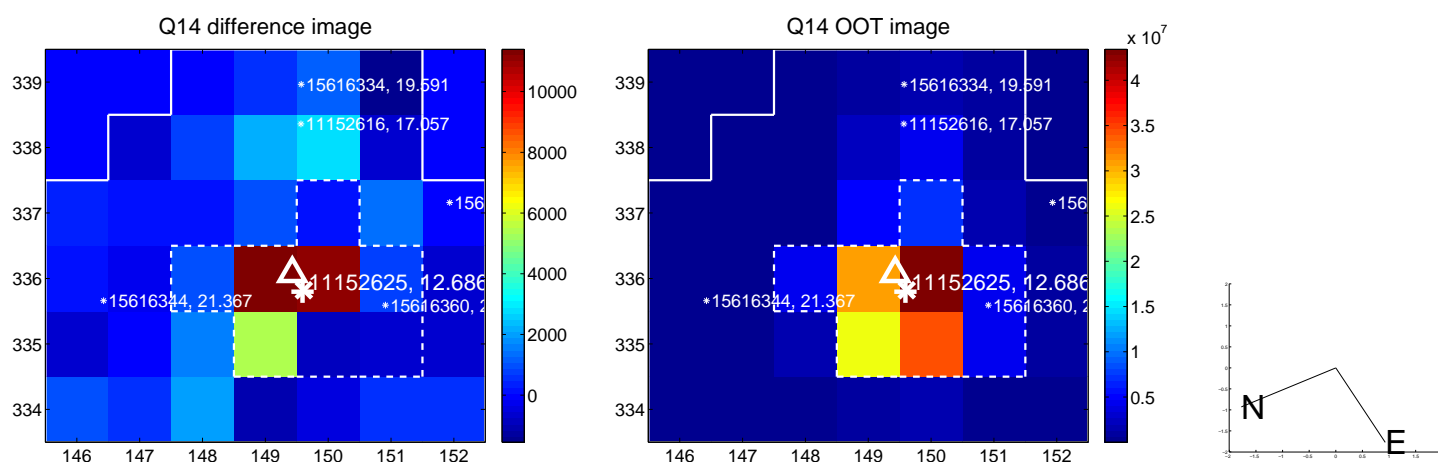
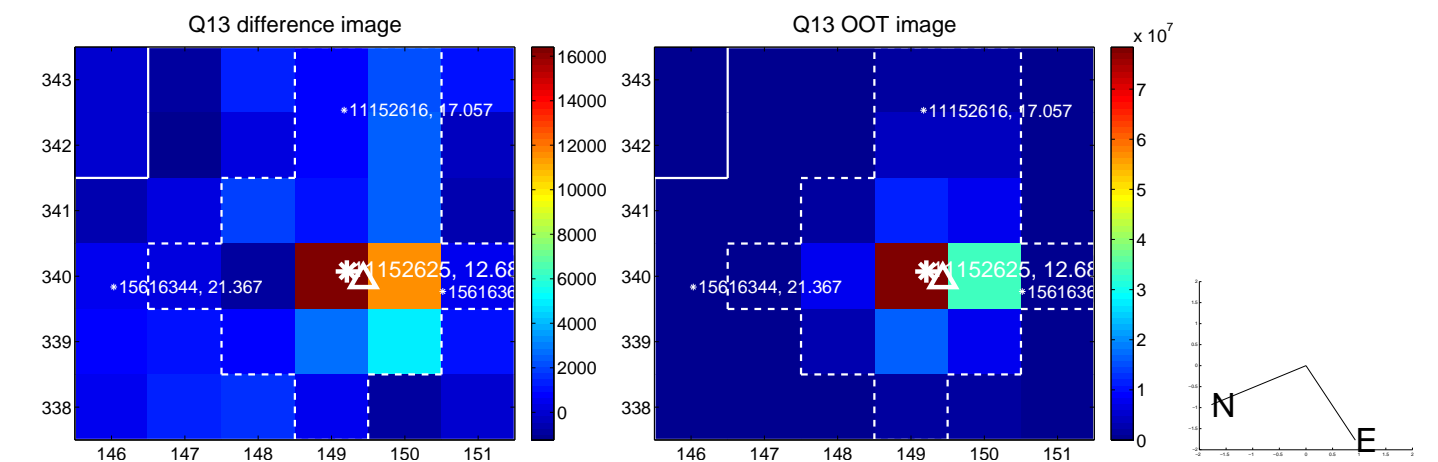
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



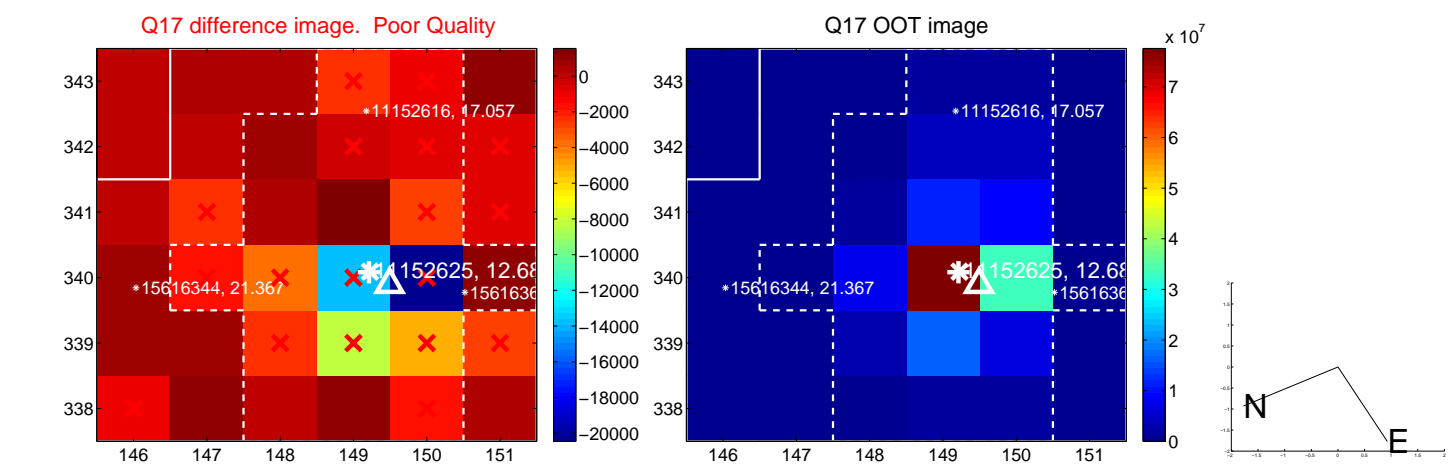
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



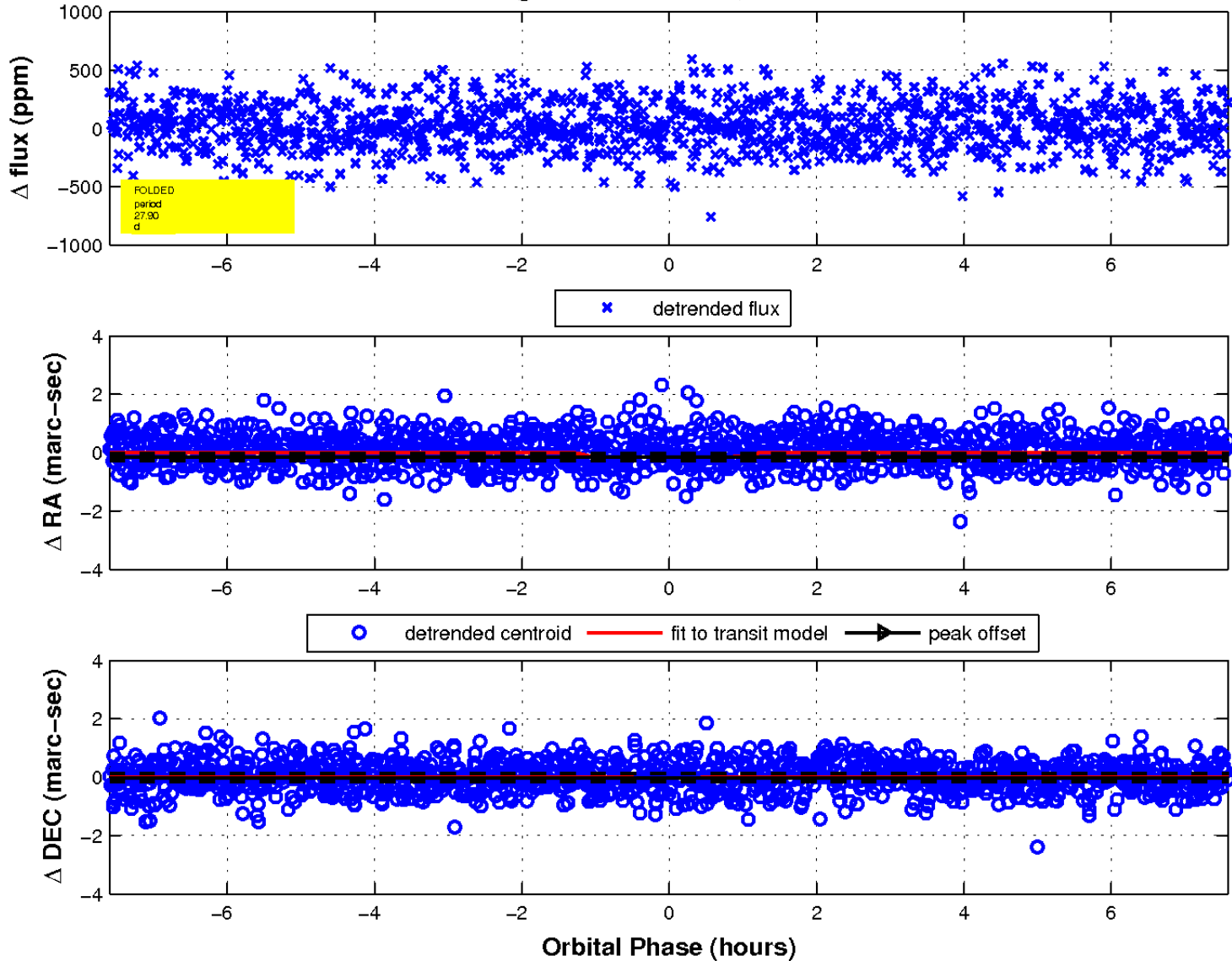
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



fluxWeightedCentroids, Planet 6 of 6



UKIRT Image

Declination

