

KIC 007532973

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})
007532973-01	OBS	1450.01	2.144633	131.840122	14582.4	3.910	1522.3	1521.8	1.30	6296	17.10	2149.92
007532973-02	OBS	No	2.144625	132.912343	376.9	3.639	42.3	45.4	1.30	6296	2.97	2149.93
007532973-03	OBS	No	431.448938	147.605667	2184.1	10.802	8.5	7.8	1.30	6296	11.31	1.82

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
007532973-01	OBS	FP	0.04	0	1	0	0	HAS_SEC_TCE
007532973-02	OBS	FP	0.00	1	1	0	0	IS_SEC_TCE
007532973-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_CHASES—LPP_DV—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—MOD_TER_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.

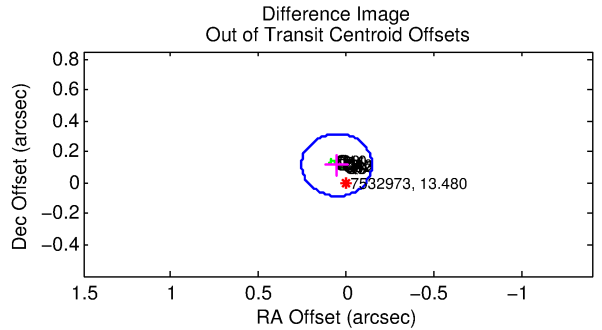
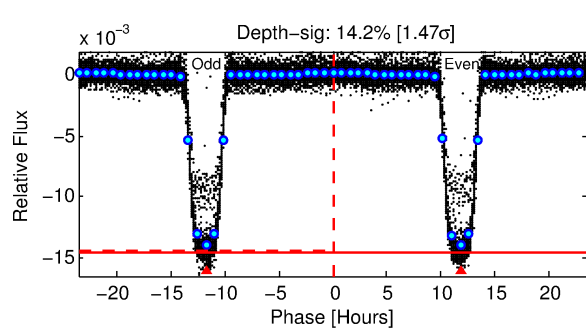
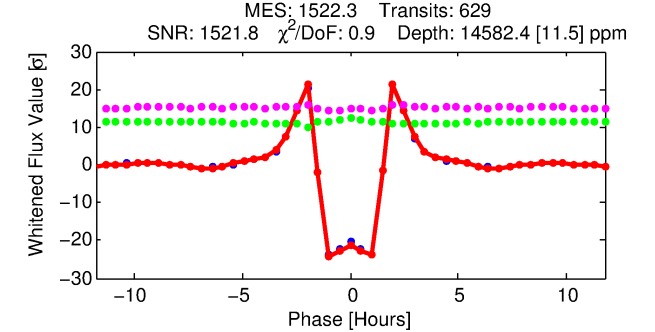
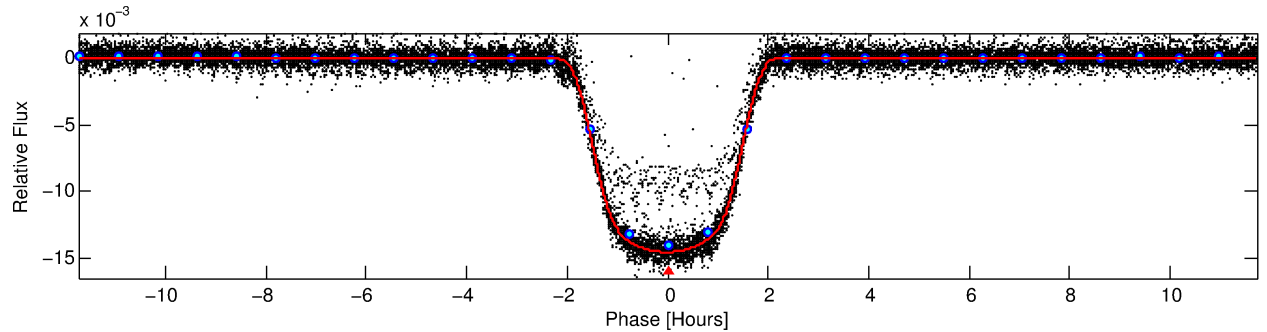
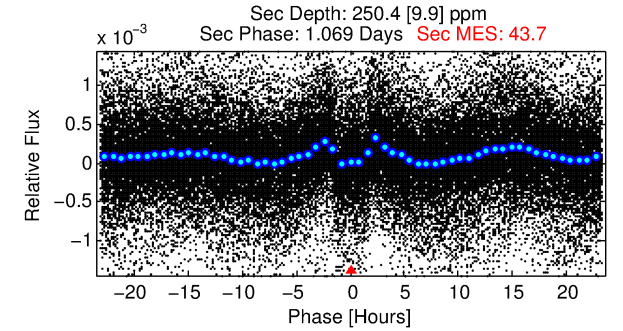
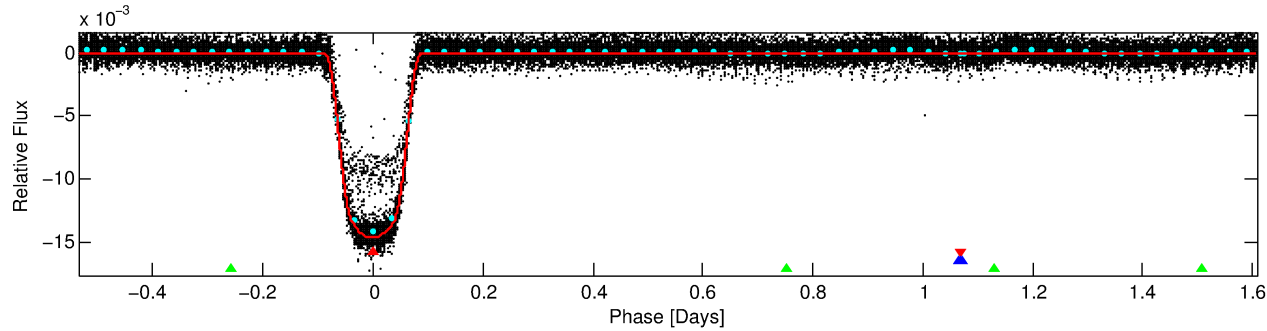
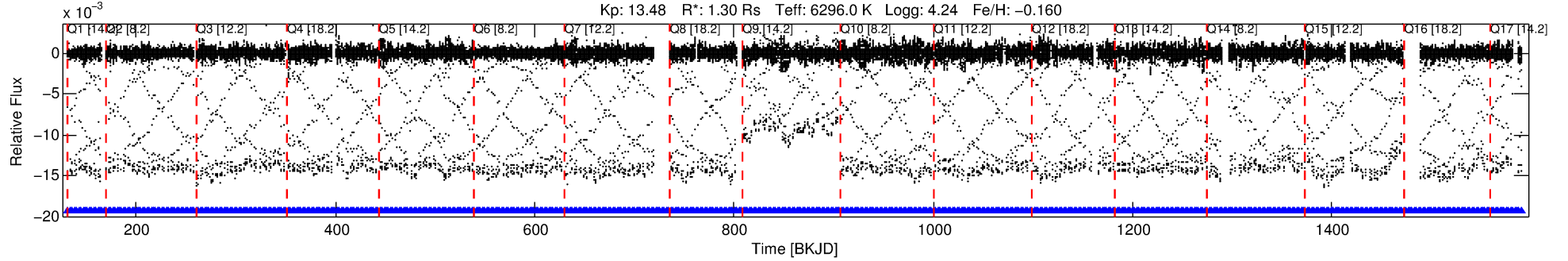
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 007532973-01

No Significant Match Found

DV One-Page Summary

KIC: 7532973 Candidate: 1 of 3 Period: 2.145 d
KOI: K01450.01 Corr: 0.997



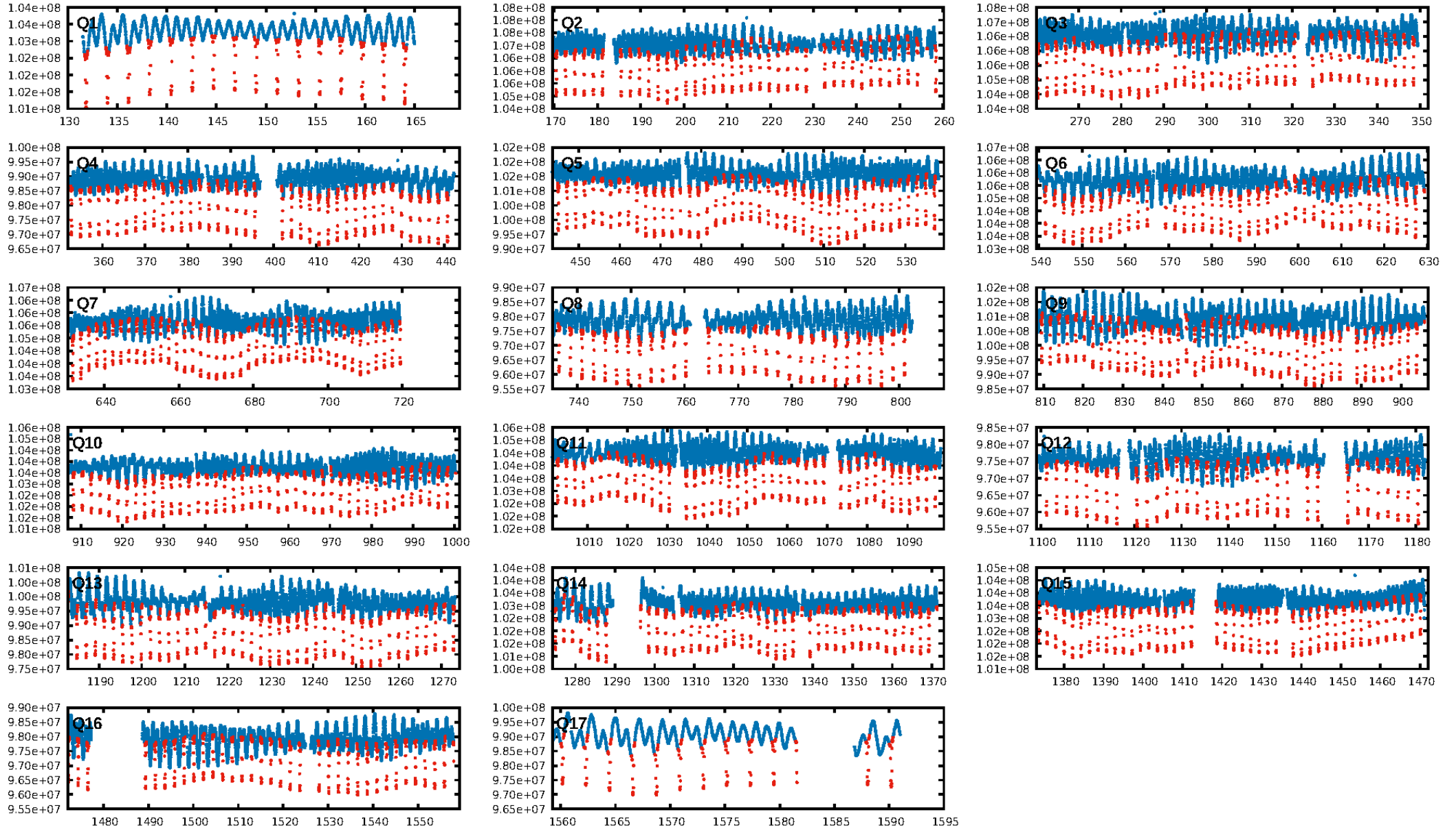
DV Fit Results:

Period = 2.14463 [0.00000] d
Epoch = 131.8401 [0.0000] BKJD
Rp/R* = 0.1201 [0.0001]
a/R* = 3.64 [0.00]
b = 0.74 [0.00]
Seff = 2149.92 [794.69]
Teq = 1736 [160] K
Rp = 17.10 [5.19] Re
a = 0.0334 [0.0082] AU
Ag = 0.53 [0.18] [-2.62 σ]
Teffp = 2286 [83] K [3.04 σ]

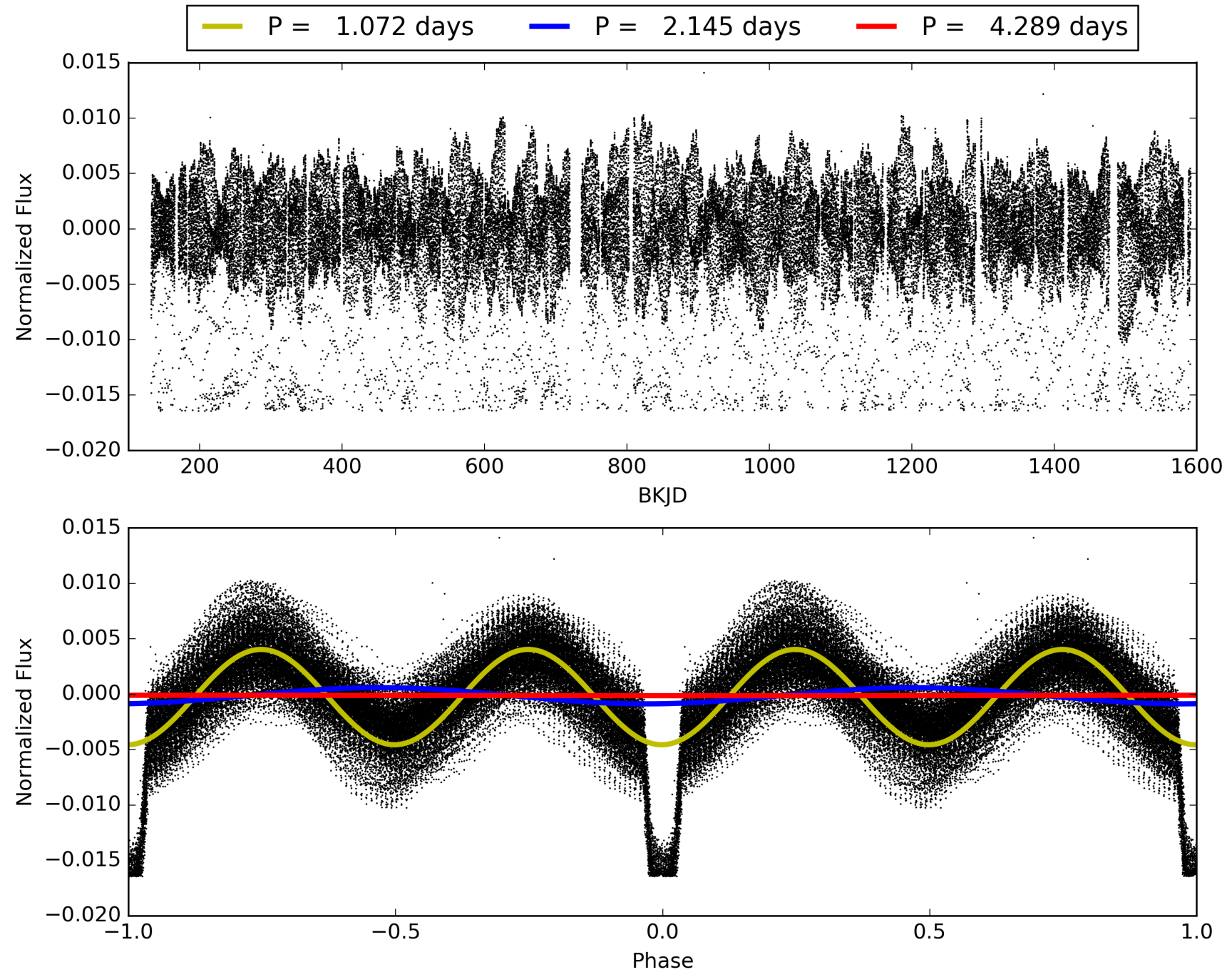
DV Diagnostic Results:

ShortPeriod-sig: 0.0% [0.00 σ]
LongPeriod-sig: 100.0% [896.88 σ]
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [600/600]
GhostDiagnostic-chr: 2.487
Centroid-sig: 0.0%
Centroid-so: 0.111 arcsec [42.11 σ]
OotOffset-rm: 0.128 arcsec [1.92 σ]
OotOffset-st: 4/4/4/5 [17]
KicOffset-rm: 0.070 arcsec [1.03 σ]
KicOffset-st: 4/4/4/5 [17]
DiffImageQuality-fgm: 1.00 [17/17]
DiffImageOverlap-fno: 1.00 [17/17]

TCE 007532973-01, PDC Light Curves

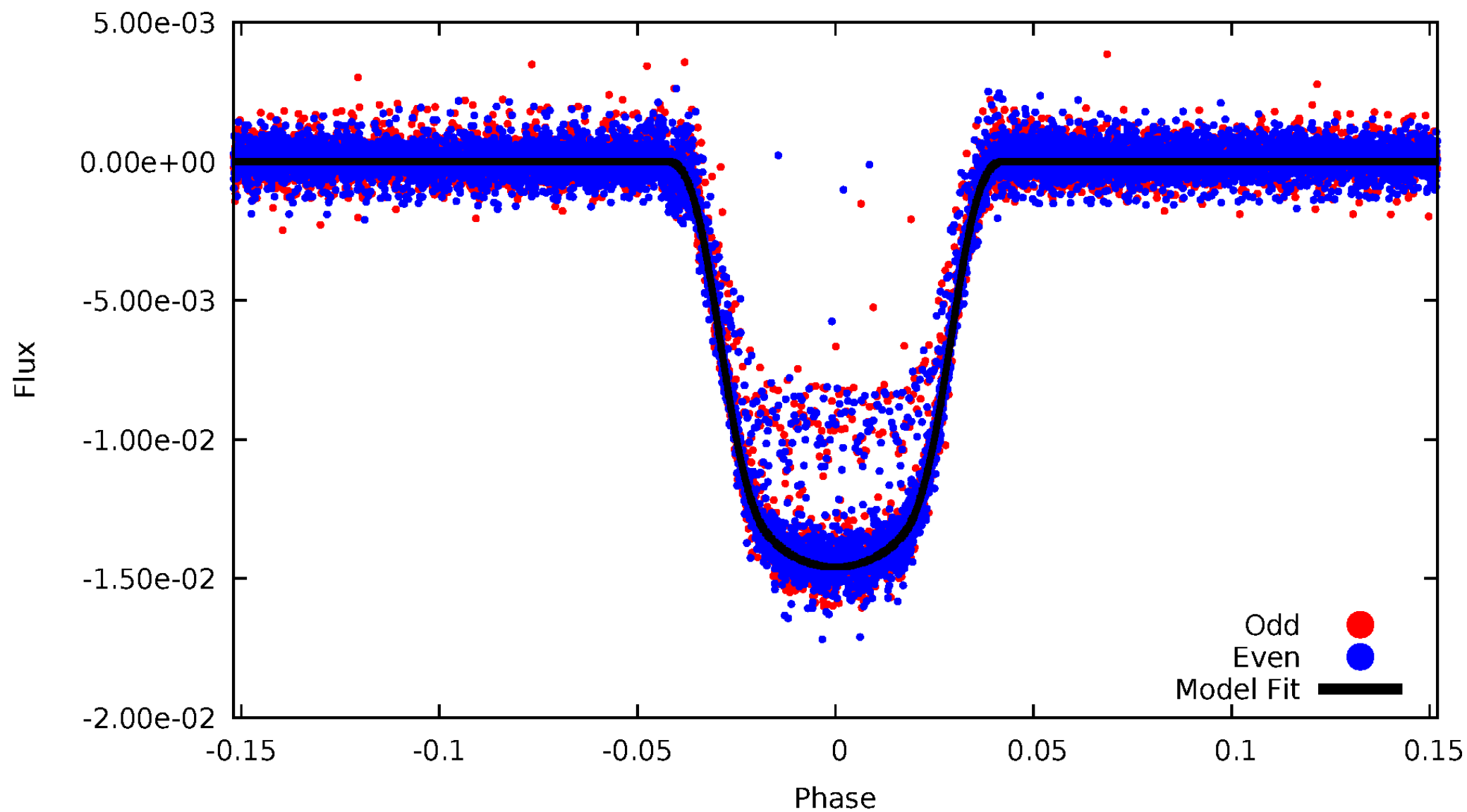


TCE 007532973-01



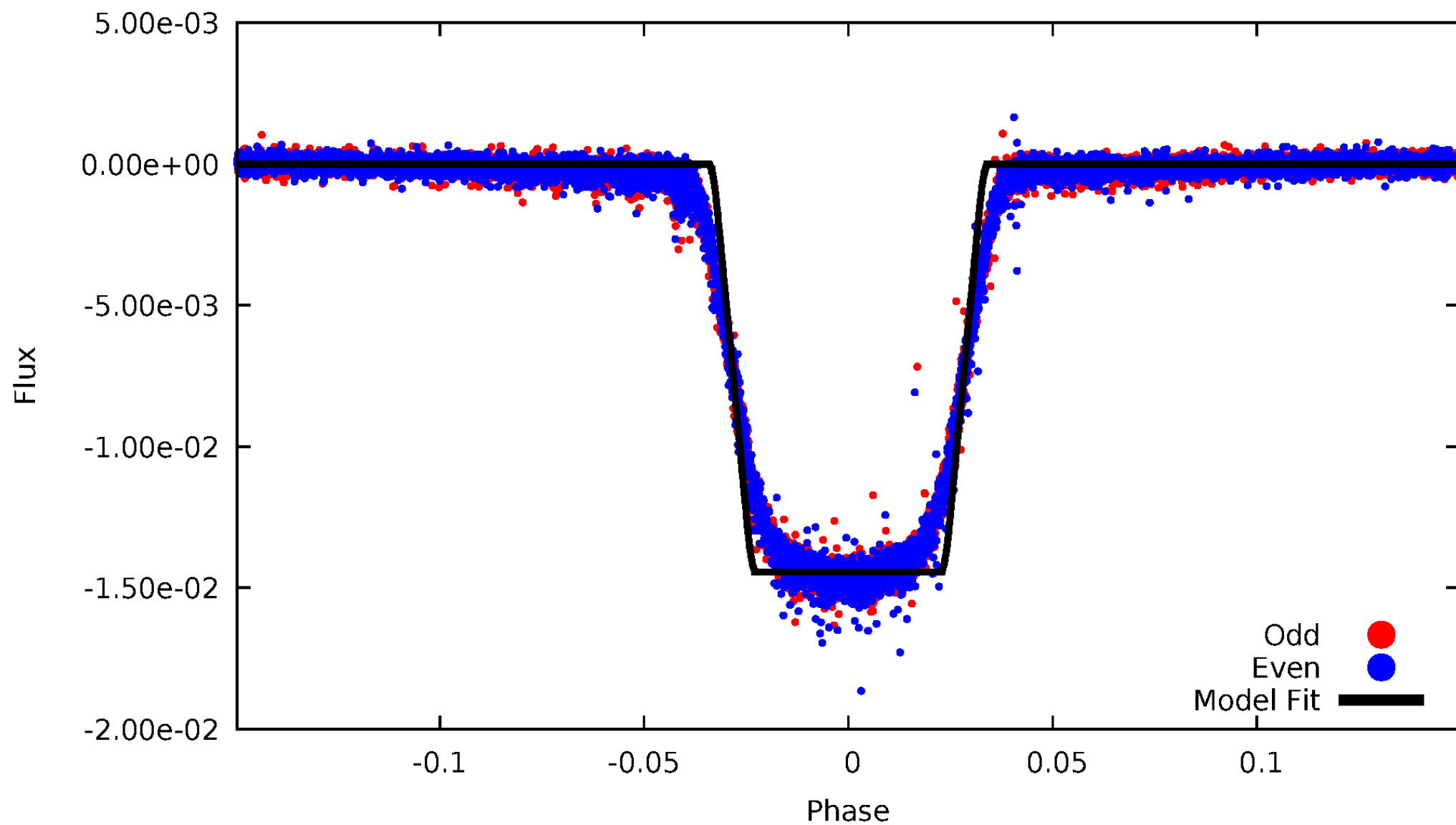
DV Odd/Even

TCE 007532973-01



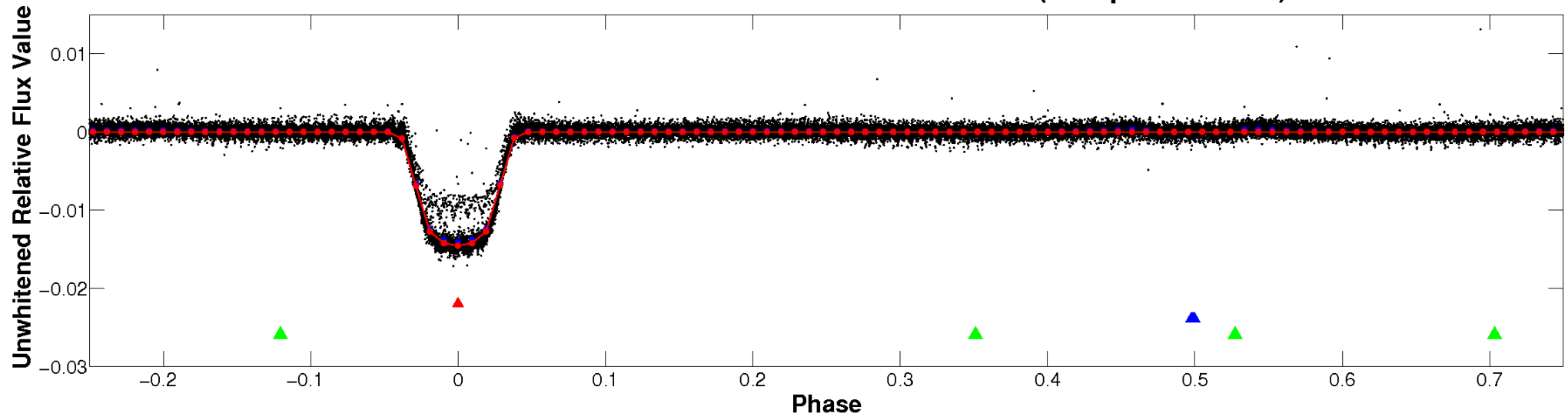
ALT Odd/Even

TCE 007532973-01

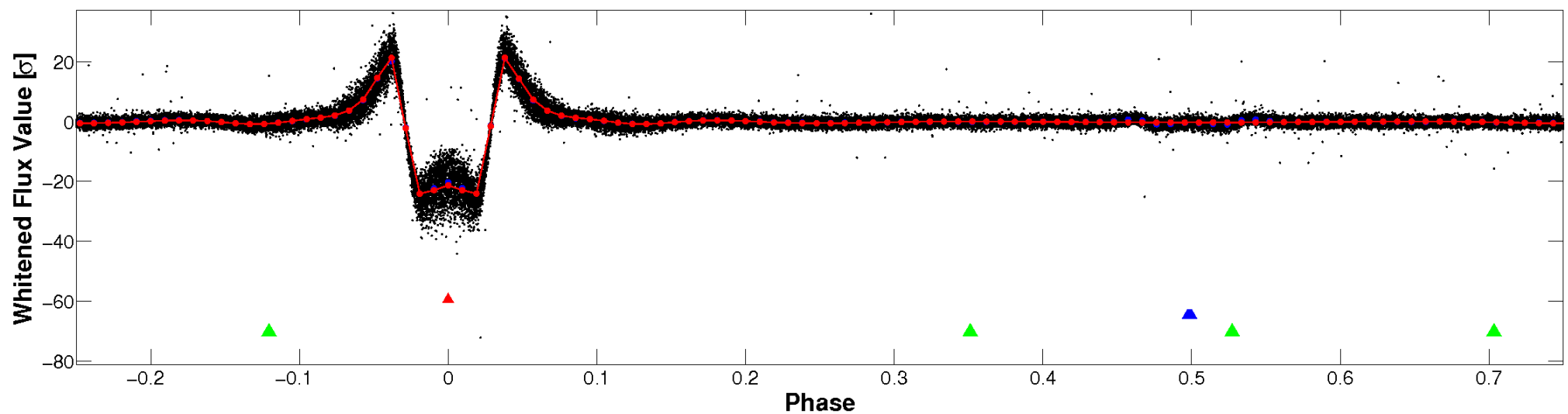


Non-Whitened Vs. Whitened Light Curve

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

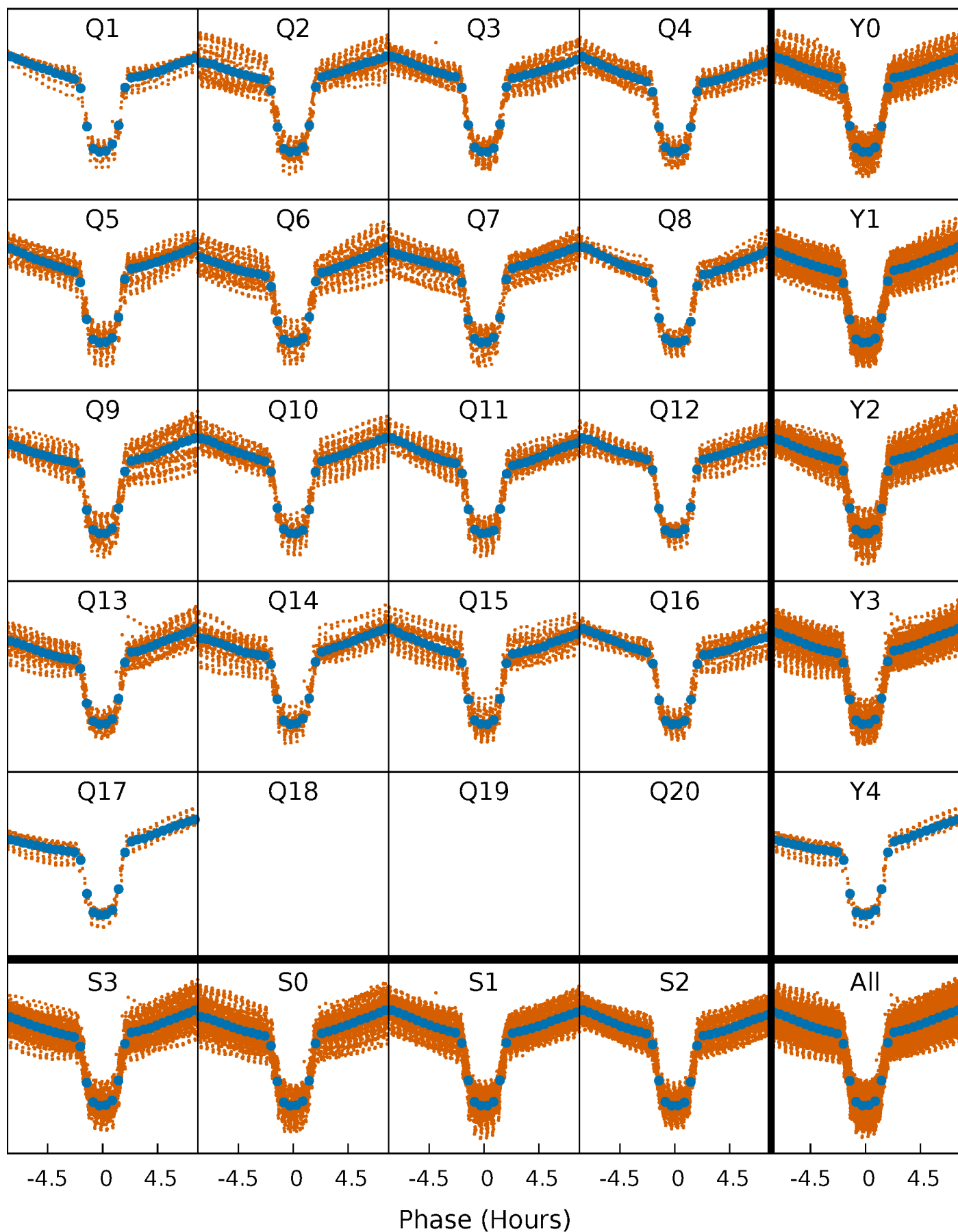


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



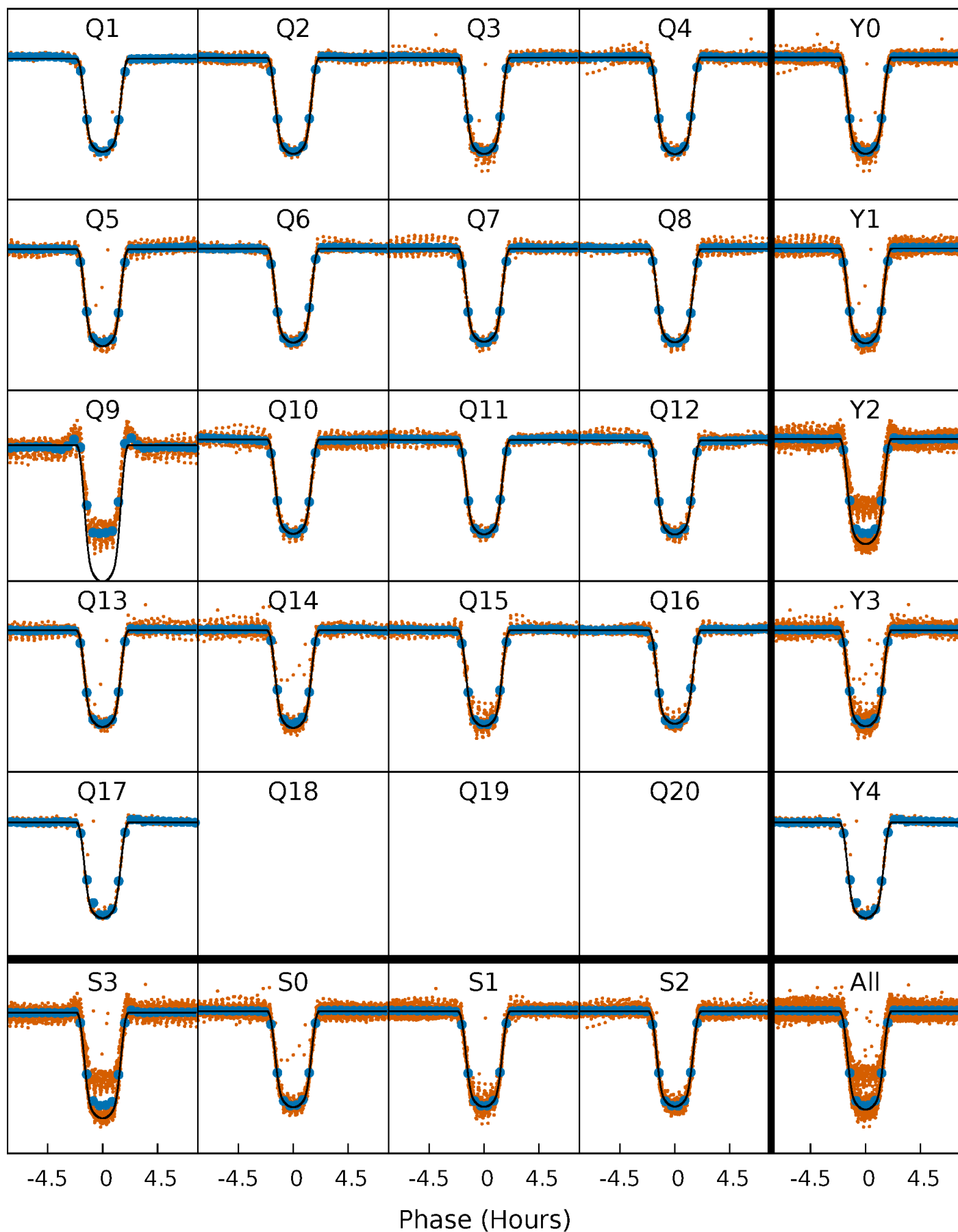
PDC Quarter-Phased Transit Curves

TCE 007532973-01 P= 2.144633 Days $T_0=131.840122$ (BKJD)



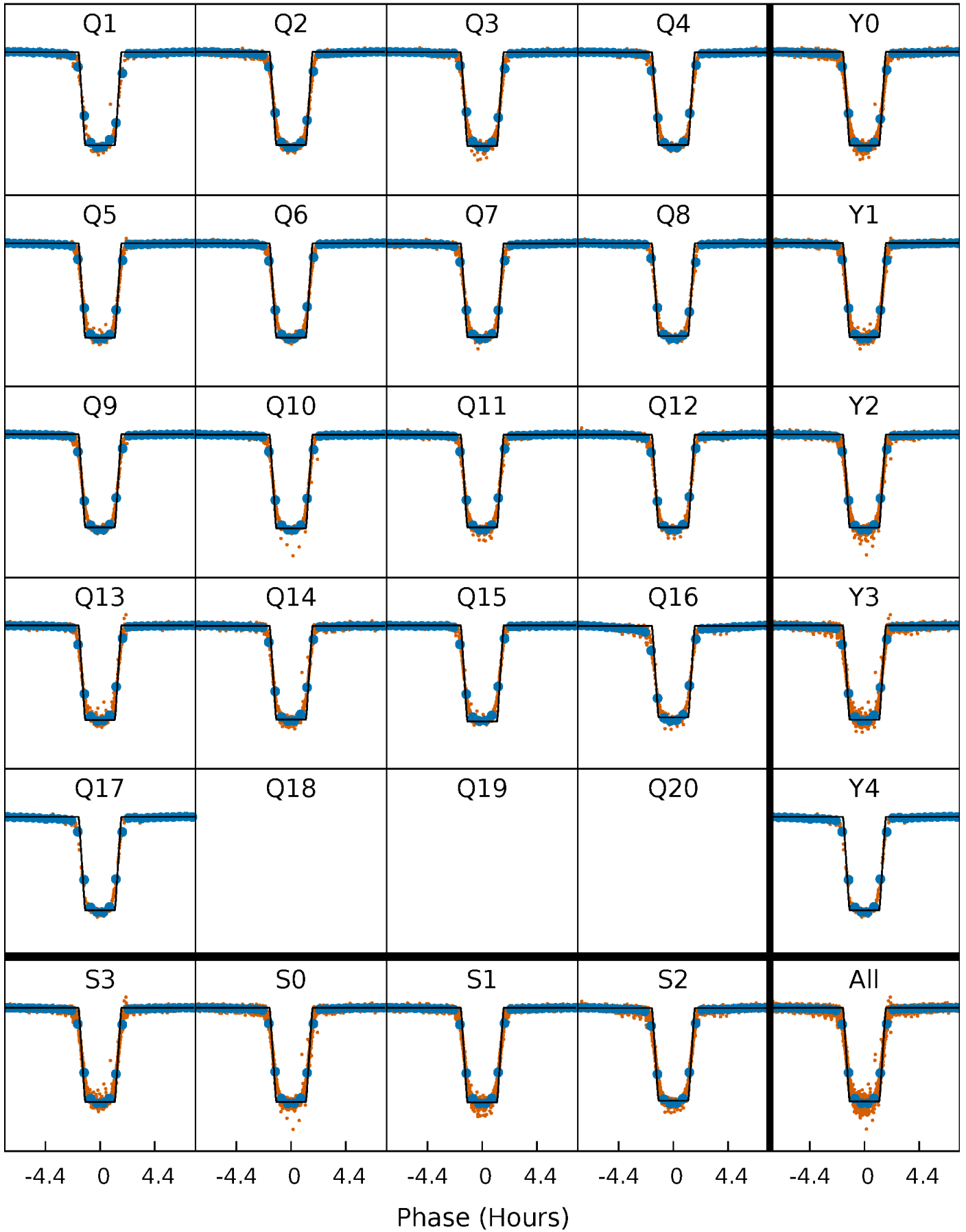
DV Quarter-Phased Transit Curves

TCE 007532973-01 P= 2.144633 Days $T_0=131.840122$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

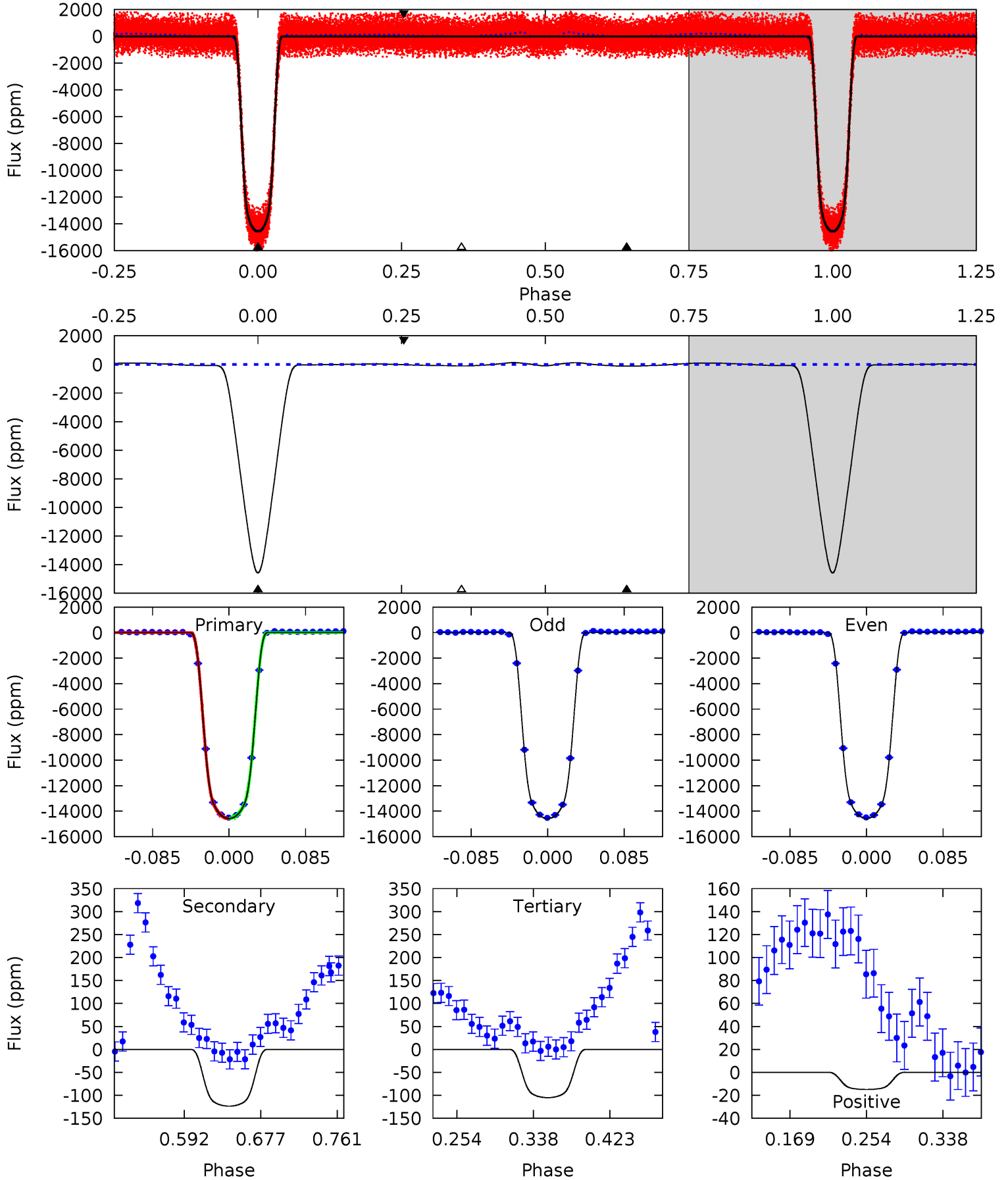
TCE 007532973-01 P= 2.144638 Days $T_0=131.838425$ (BKJD)



DV Model-Shift Uniqueness Test

007532973-01, P = 2.144633 Days, E = 129.695489 Days

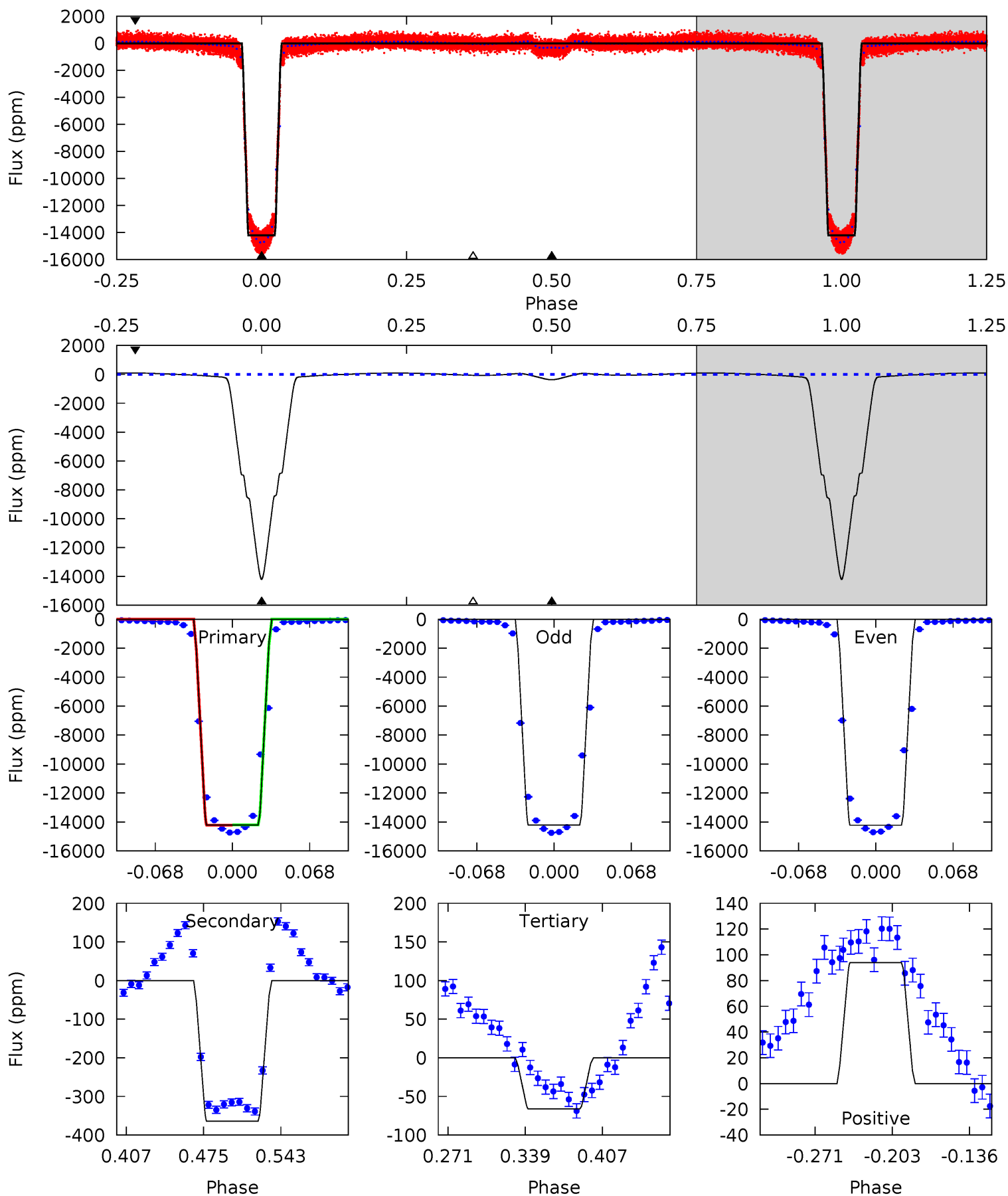
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
2171	18.4	15.7	-2.22	4.60	1.72	9.64	2155	2173	2.75	20.6	0.76	0.97	0.01	0



Alt Model-Shift Uniqueness Test

007532973-01, P = 2.144638 Days, E = 129.693787 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
4146	106.2	19.3	27.4	4.65	1.83	19.4	4127	4119	86.9	78.8	1.58	1.00	0.01	2.27



Stellar Parameters For KIC 007532973

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6296^{+175}_{-219}	$4.240^{+0.180}_{-0.180}$	$-0.160^{+0.250}_{-0.300}$	$1.305^{+0.396}_{-0.264}$	$1.076^{+0.181}_{-0.131}$	$0.683^{+0.627}_{-0.322}$
	+3%/-3%	+4%/-4%	+156%/-188%	+30%/-20%	+17%/-12%	+92%/-47%
Source	PHO1	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 007532973-01 / KOI 1450.01

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-124 ± 7	$17.07^{+2.71}_{-2.06}$	2422^{+173}_{-168}	-2165^{+4233}_{-311}	$0.259^{+0.076}_{-0.062}$
Alt.	-364 ± 3	$16.94^{+2.67}_{-1.93}$	2418^{+180}_{-163}	2912^{+73}_{-91}	$0.769^{+0.208}_{-0.177}$

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 $A_{obs} \gg 1.0$

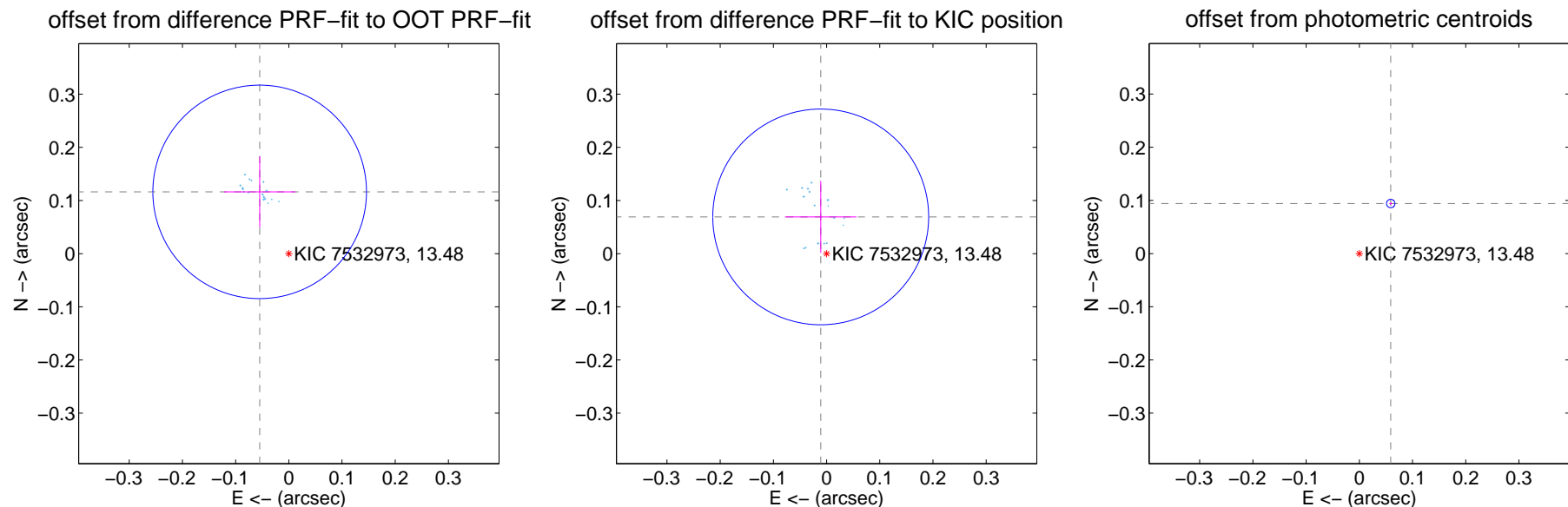
DV Centroid Data

Supplemental centroid analysis for 007532973-01. Kepler magnitude: 13.48. Transit SNR 1521.81

There are 17 quarters with good PRF difference image offsets

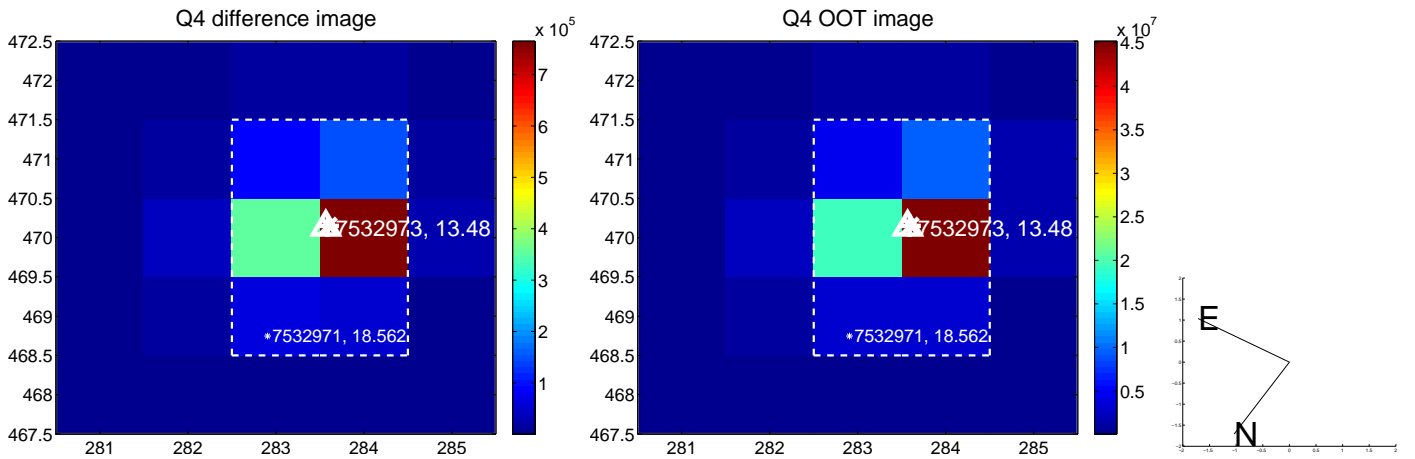
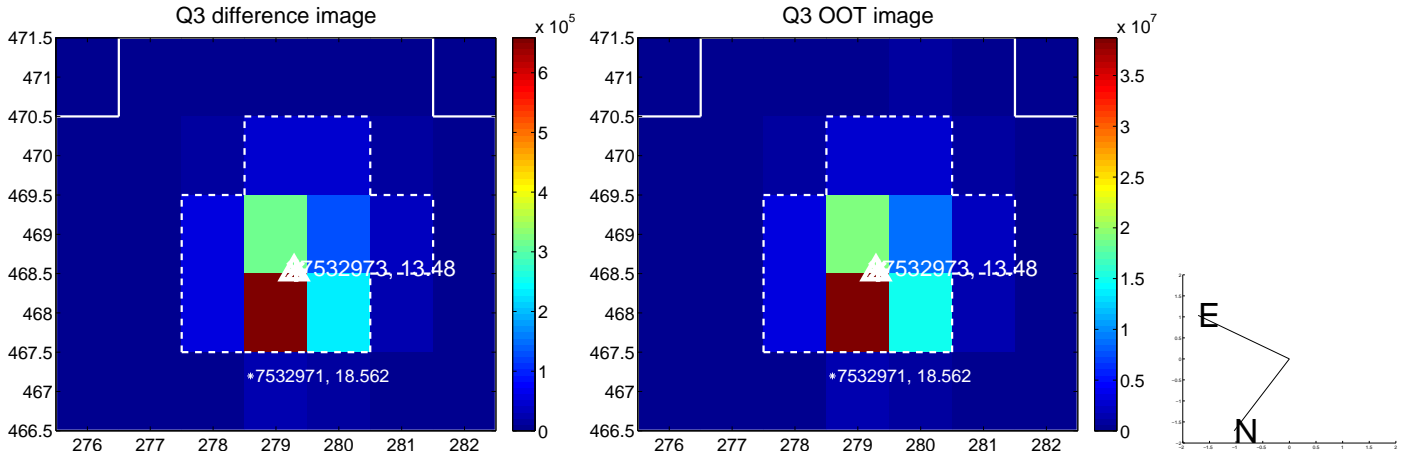
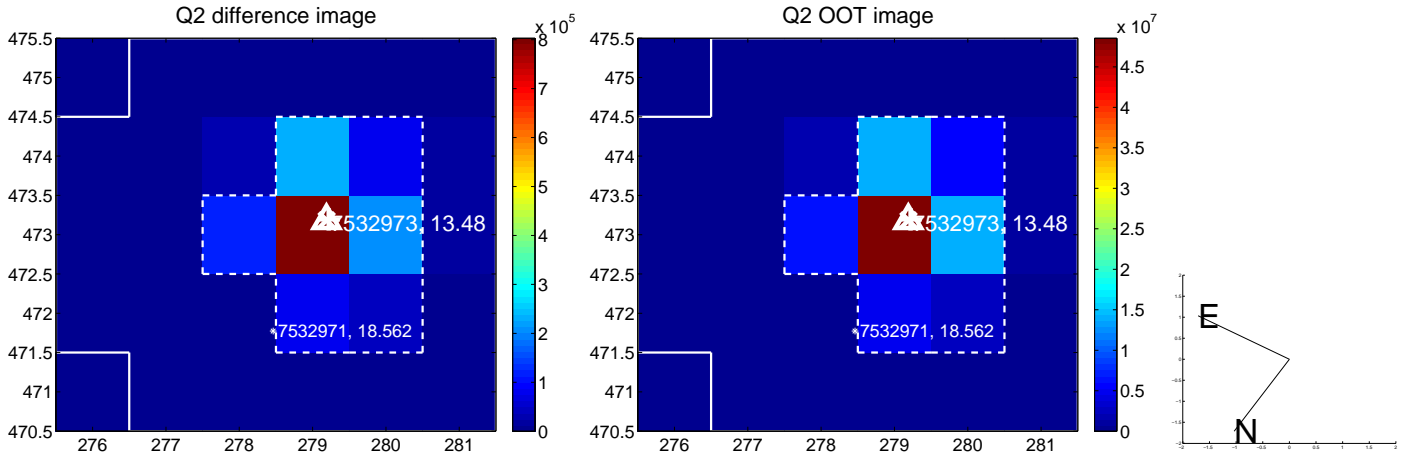
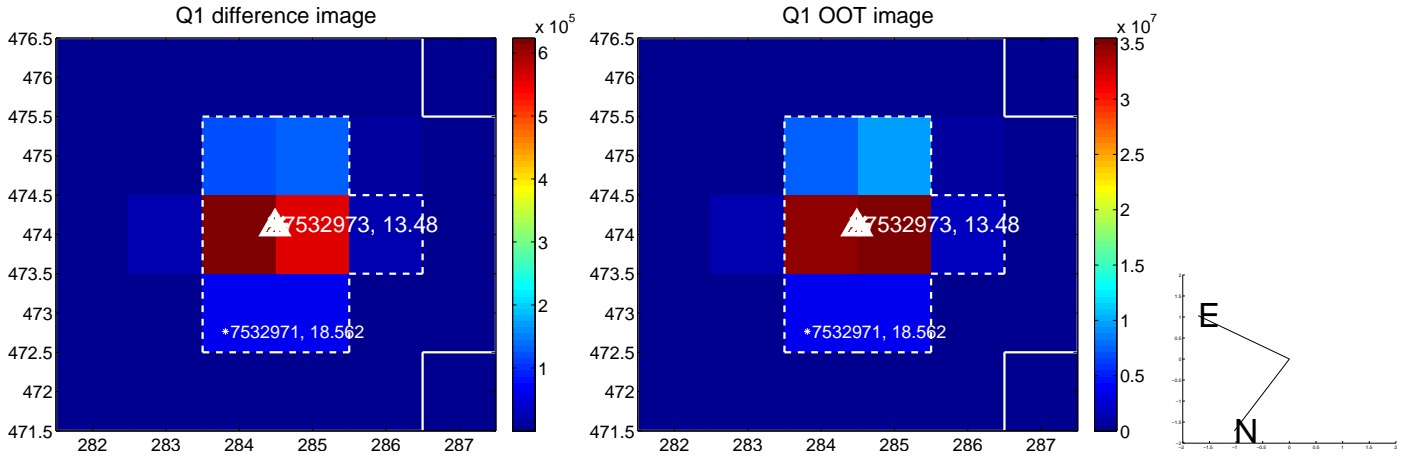
The direct PRF centroid is offset from the target star catalog position by about 0.05 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.128 ± 0.067	1.92	0.055 ± 0.067	0.116 ± 0.067
PRF-fit source offset from KIC position	0.070 ± 0.068	1.03	0.011 ± 0.067	0.069 ± 0.068
photometric centroid source offset	0.11 ± 0.00	42.11	-0.06 ± 0.00	0.09 ± 0.00

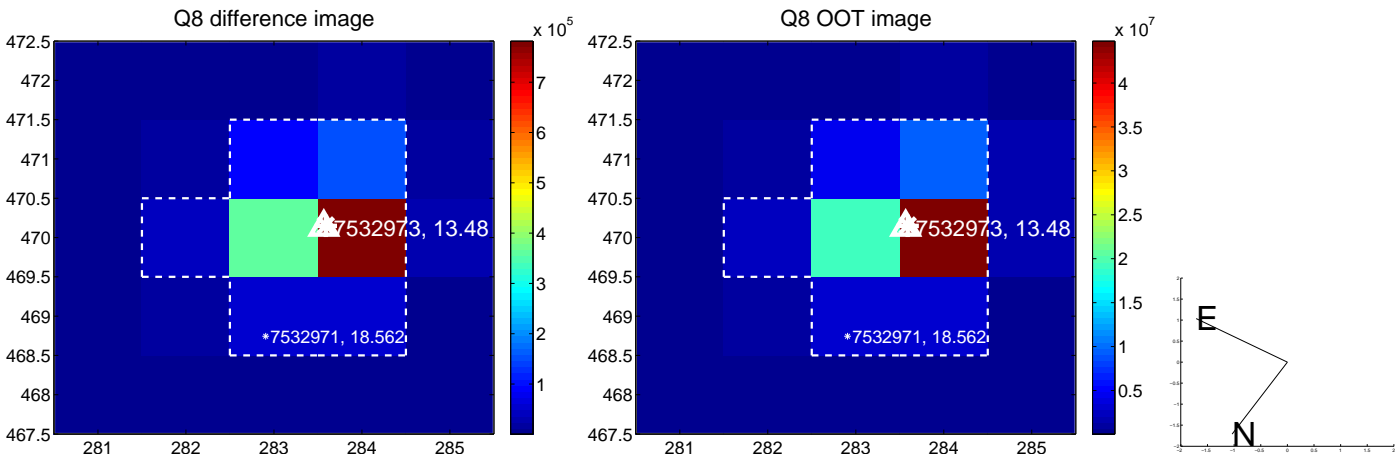
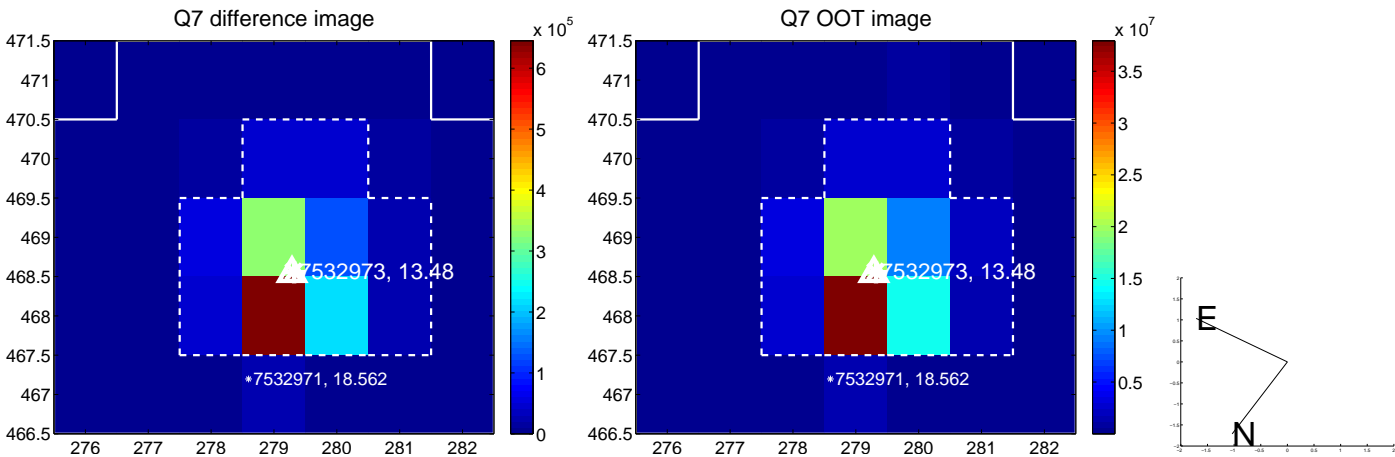
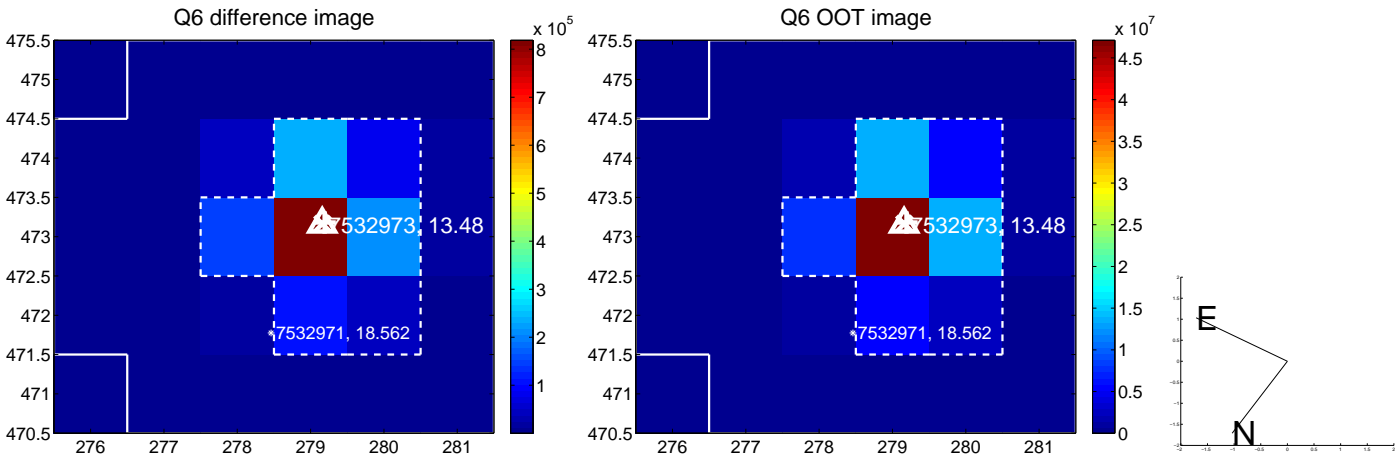
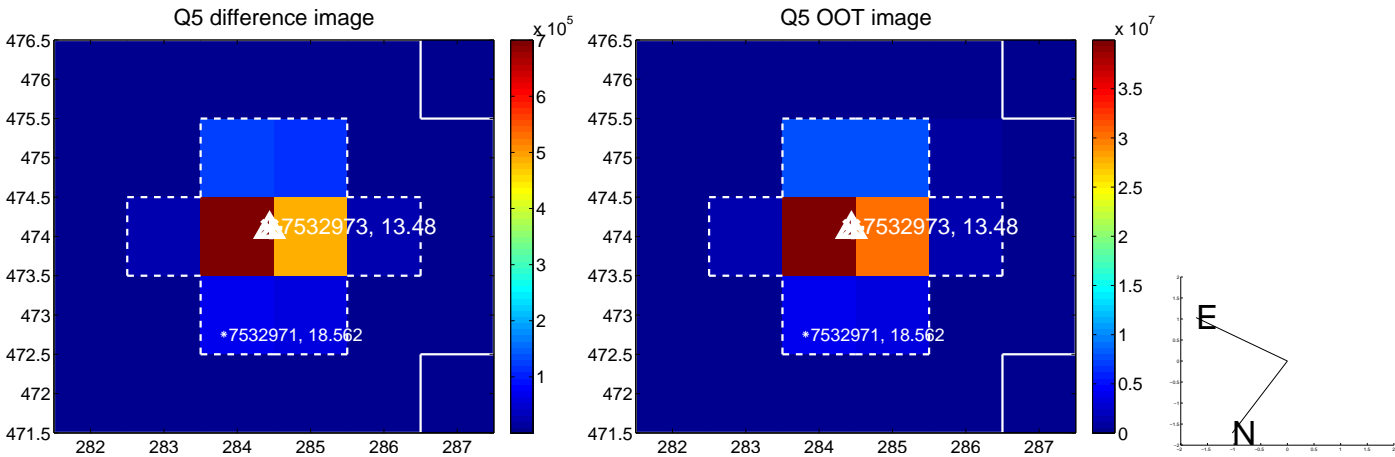


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses:** good quarterly centroid offsets; **Vermillion crosses:** bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

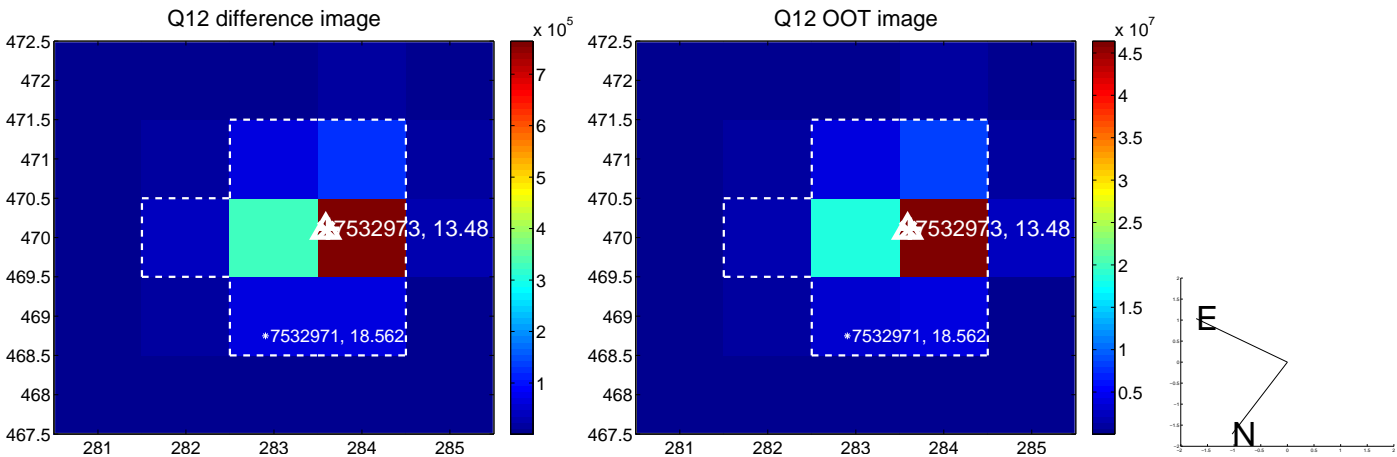
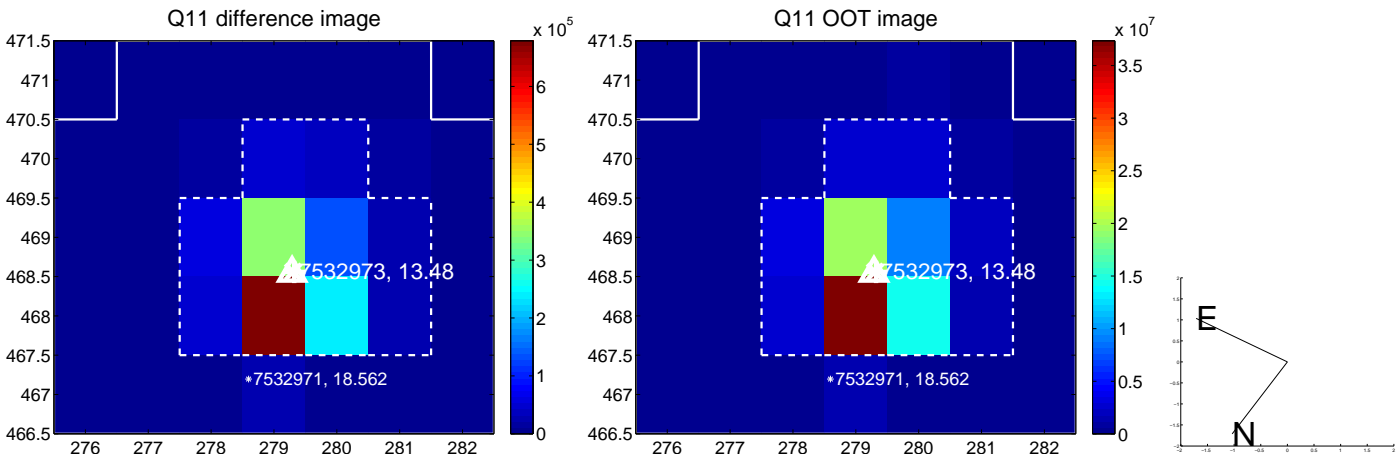
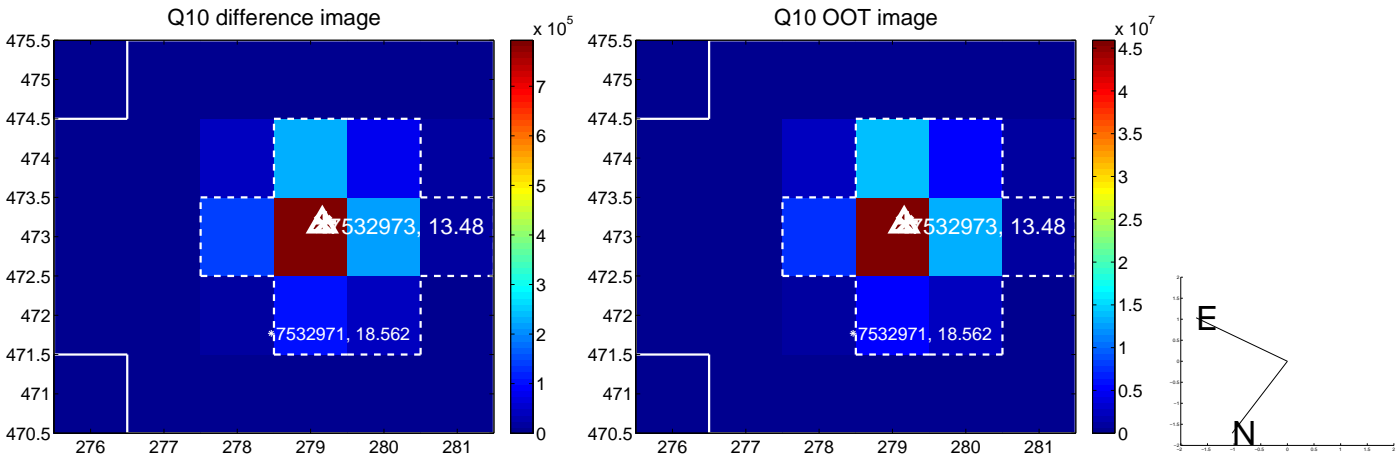
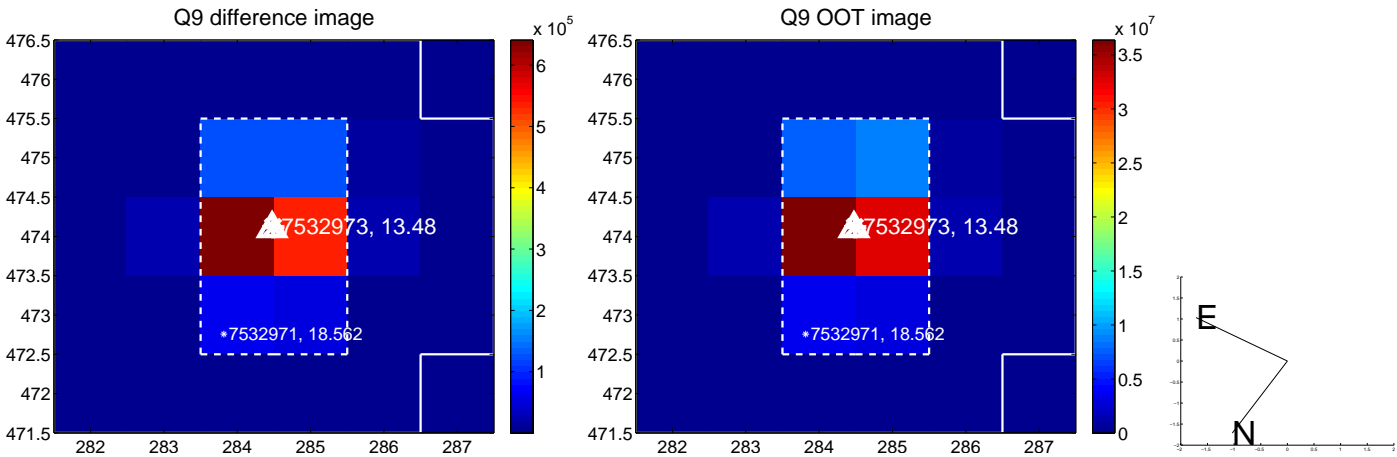
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



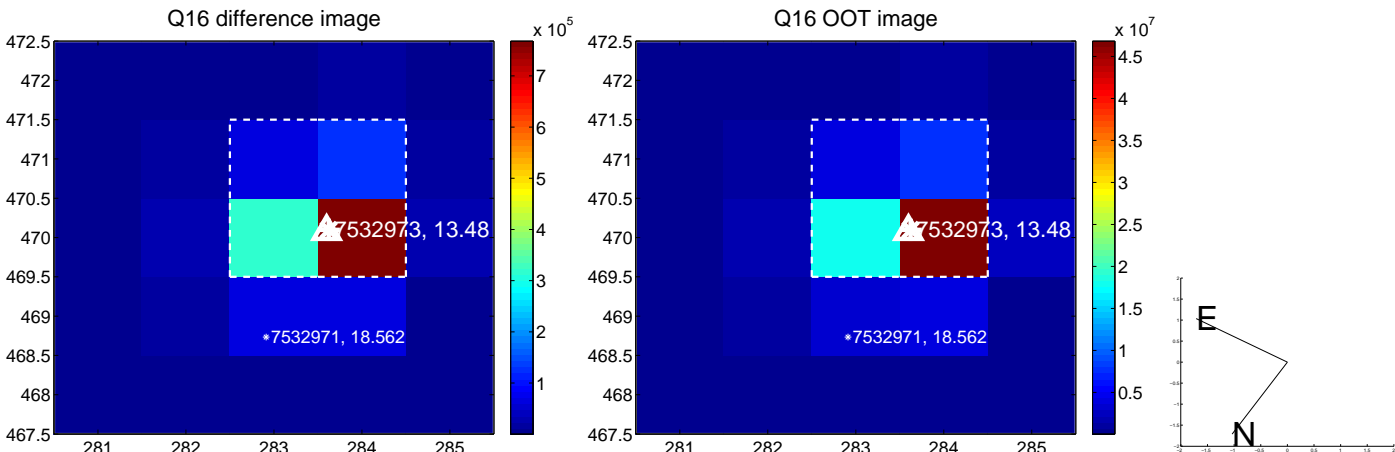
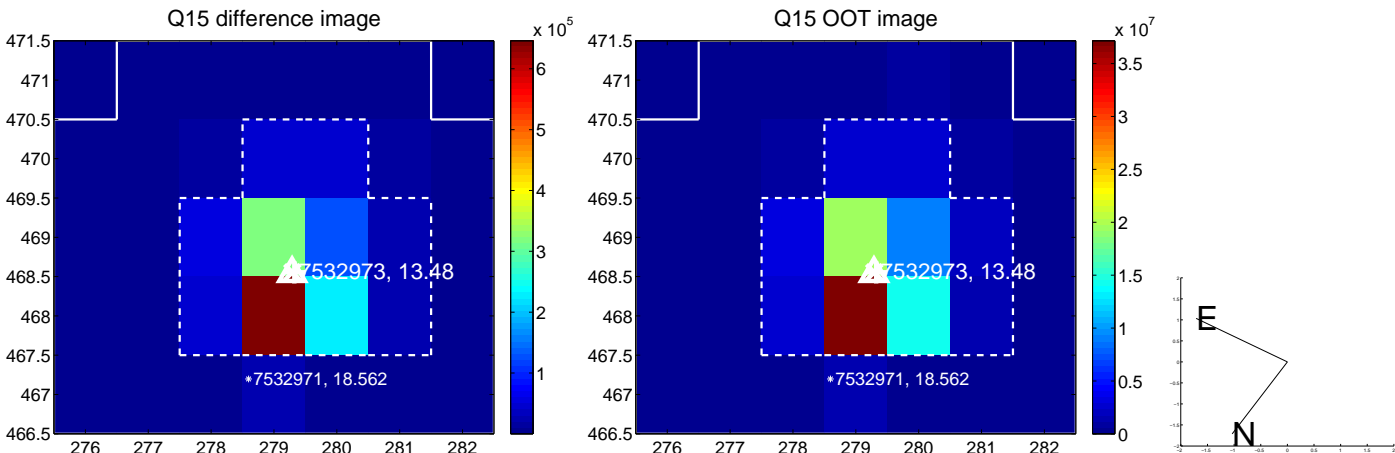
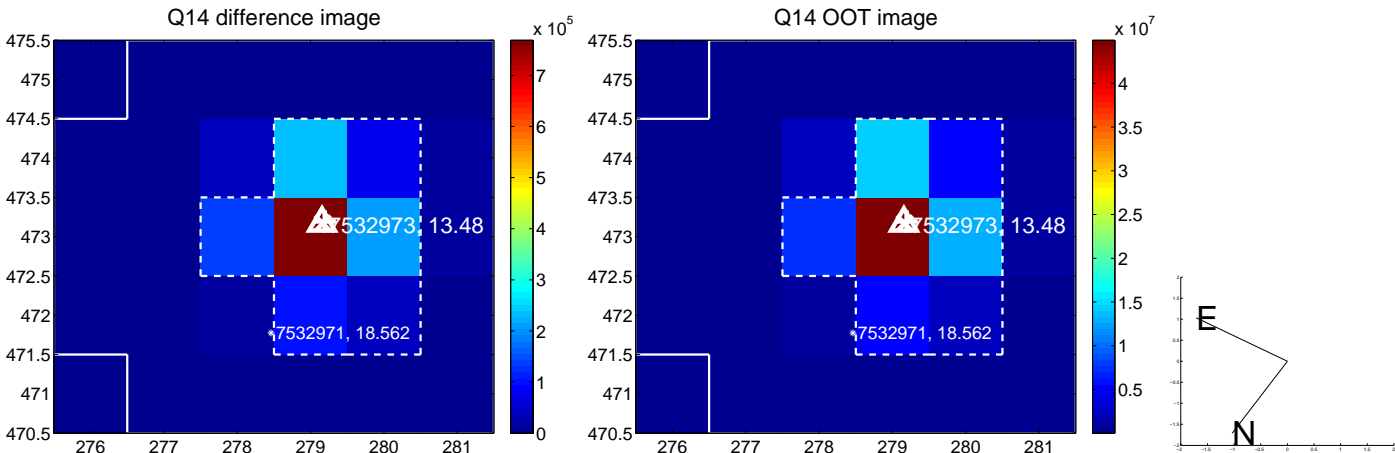
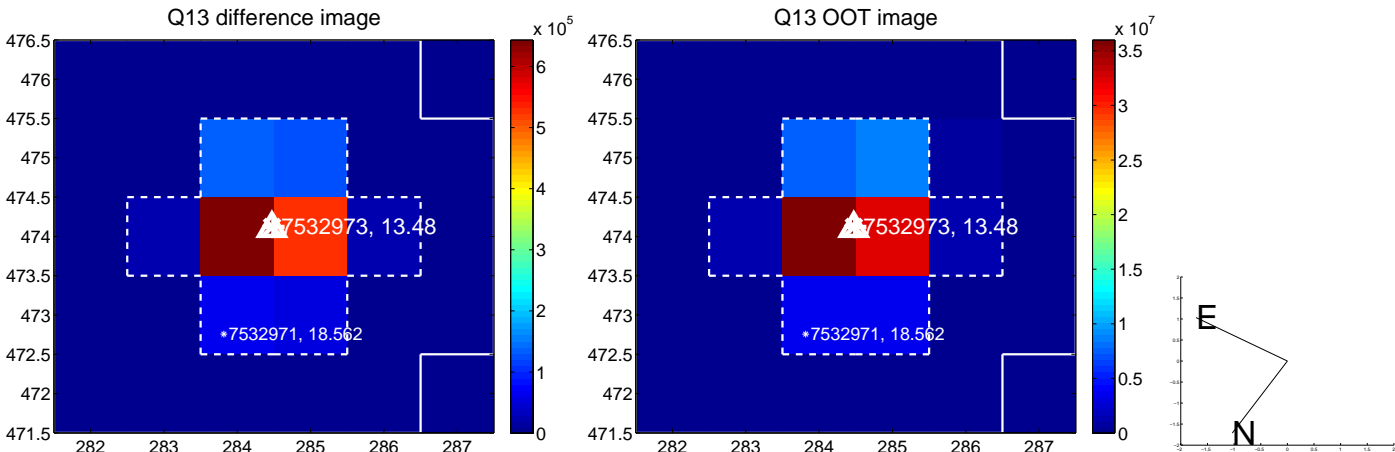
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



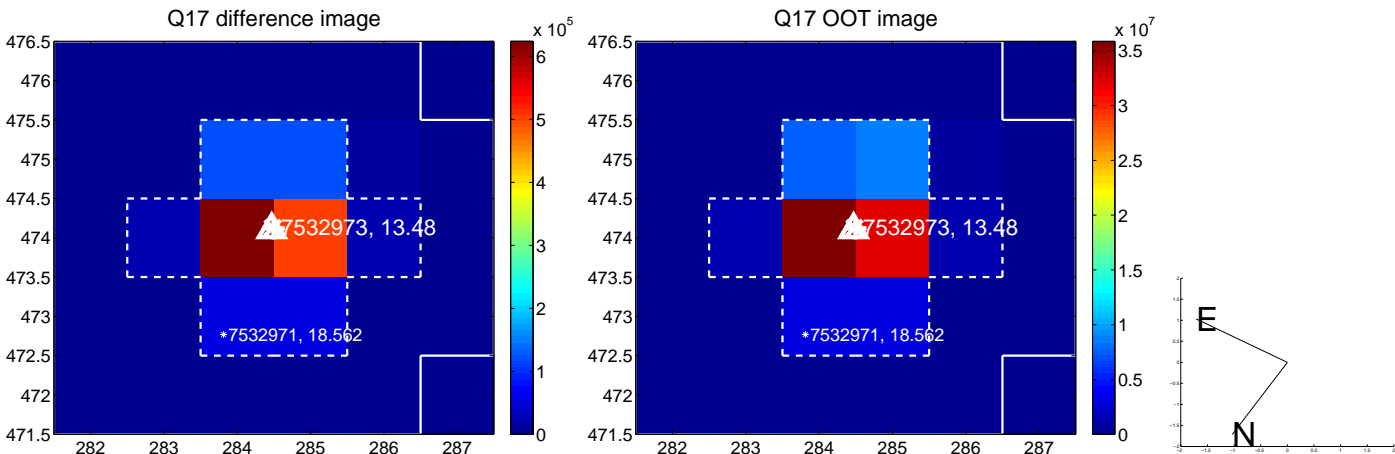
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



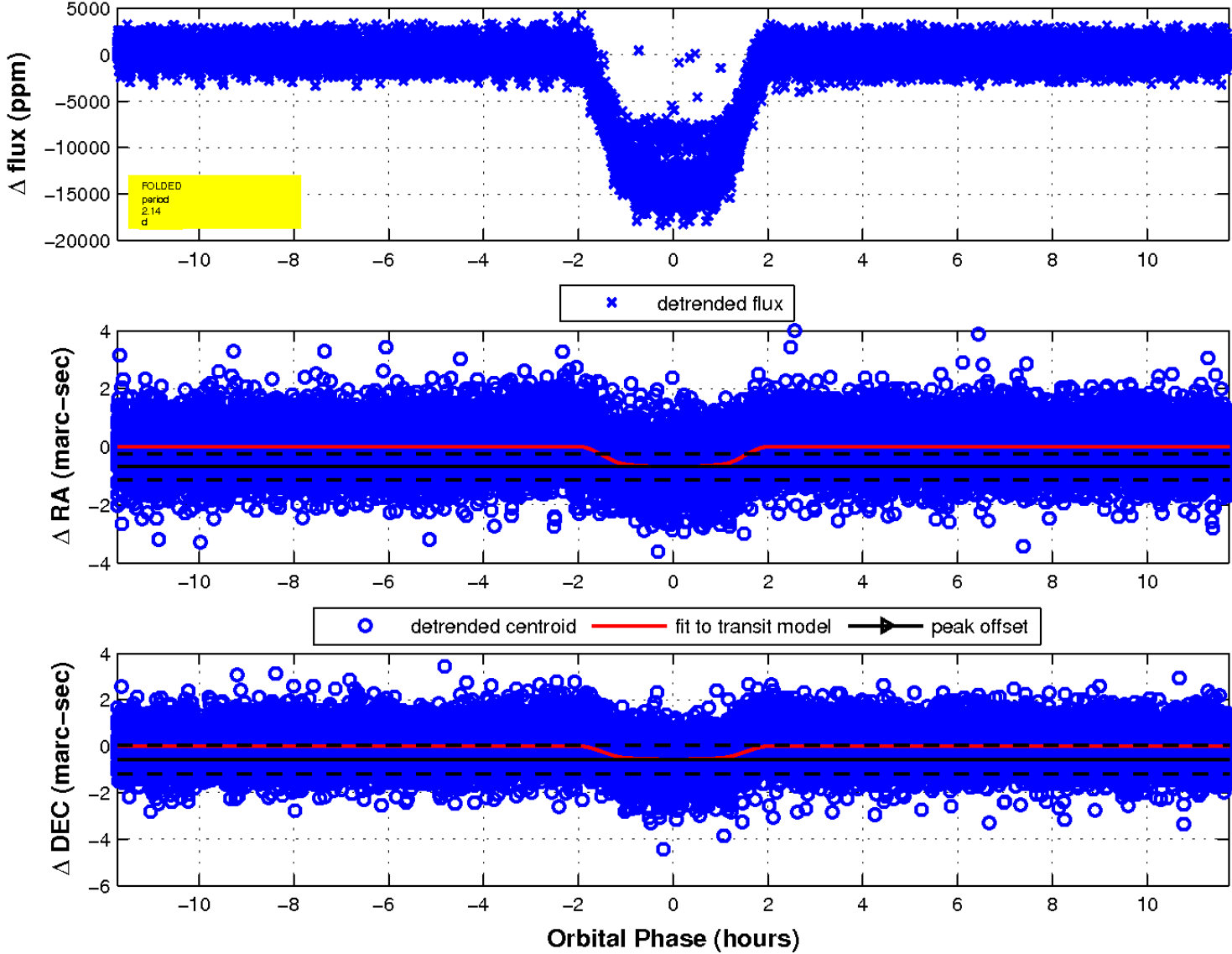
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

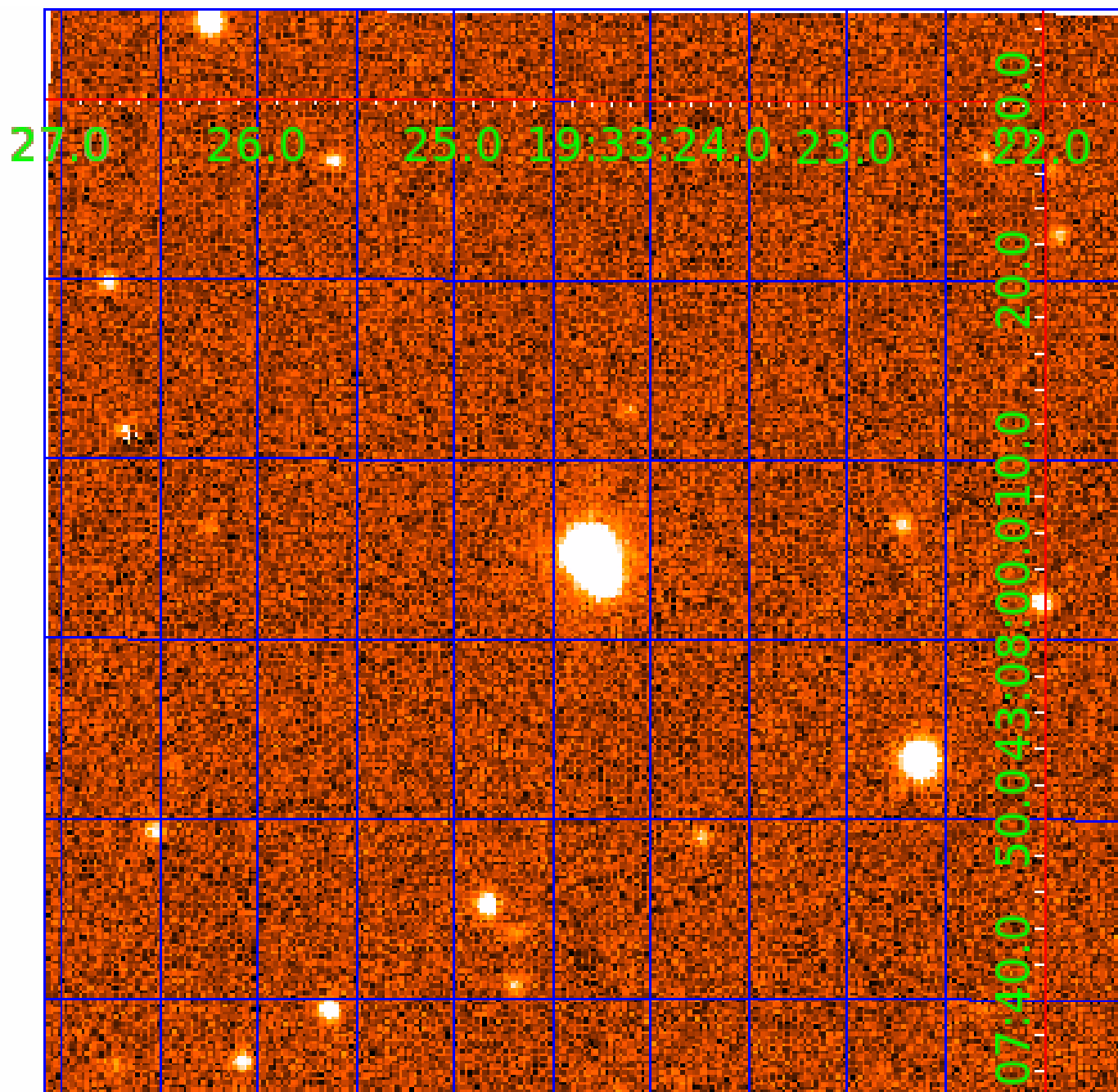


fluxWeightedCentroids, Planet 1 of 3



UKIRT Image

Declination



KIC 007532973

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})
007532973-01	OBS	1450.01	2.144633	131.840122	14582.4	3.910	1522.3	1521.8	1.30	6296	17.10	2149.92
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Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
007532973-01	OBS	FP	0.04	0	1	0	0	HAS_SEC_TCE
007532973-02	OBS	FP	0.00	1	1	0	0	IS_SEC_TCE
007532973-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_CHASES—LPP_DV—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—MOD_TER_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 007532973-02

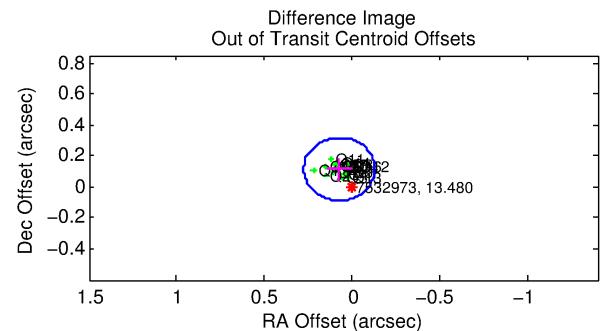
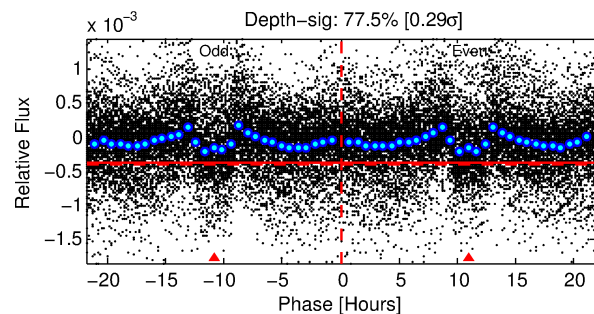
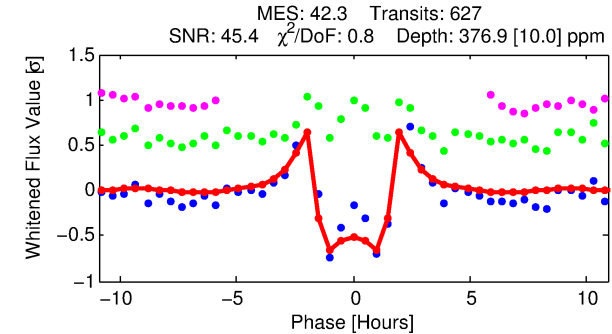
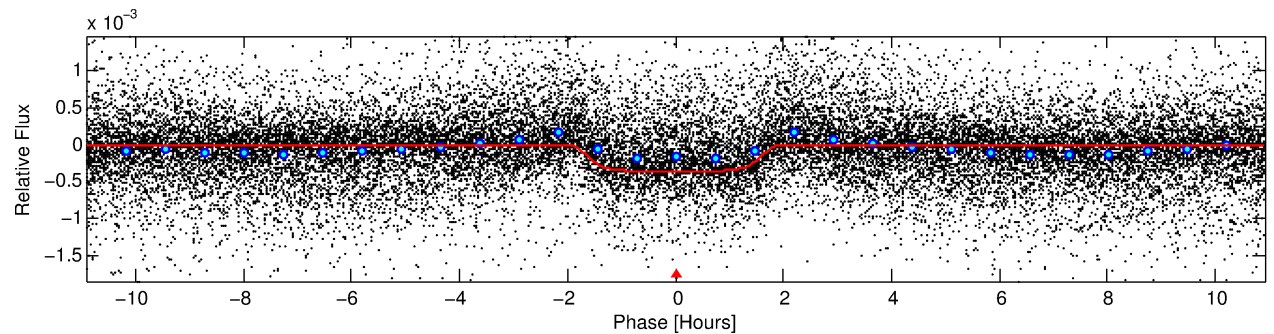
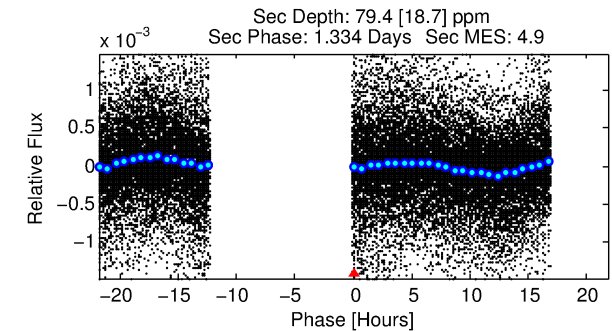
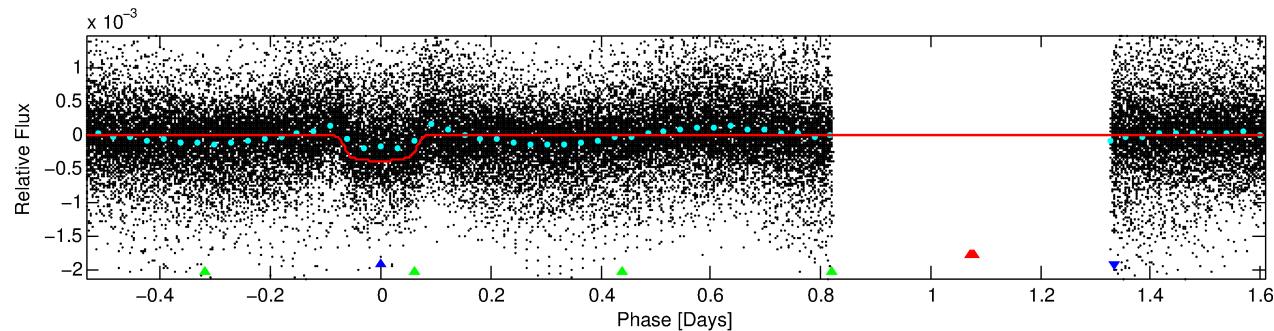
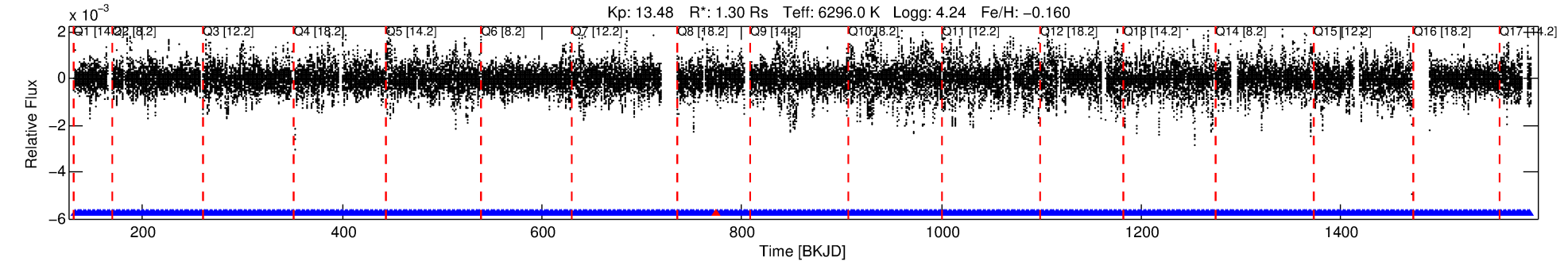
No Significant Match Found

DV One-Page Summary

KIC: 7532973 Candidate: 2 of 3 Period: 2.145 d

KOI: K01450 Corr: No Ephemeris Match

Kp: 13.48 R*: 1.30 Rs Teff: 6296.0 K Logg: 4.24 Fe/H: -0.160



DV Fit Results:

Period = 2.14462 [0.00000] d
Epoch = 132.9123 [0.0005] BKJD
Rp/R* = 0.0209 [0.0006]
a/R* = 2.36 [0.23]
b = 0.90 [0.03]
Seff = 2149.93 [794.69]
Teff = 1736 [160] K
Rp = 2.97 [0.91] Re
a = 0.0334 [0.0082] AU
Ag = 5.50 [2.31] [1.95σ]
Teffp = 4112 [287] K [7.23σ]

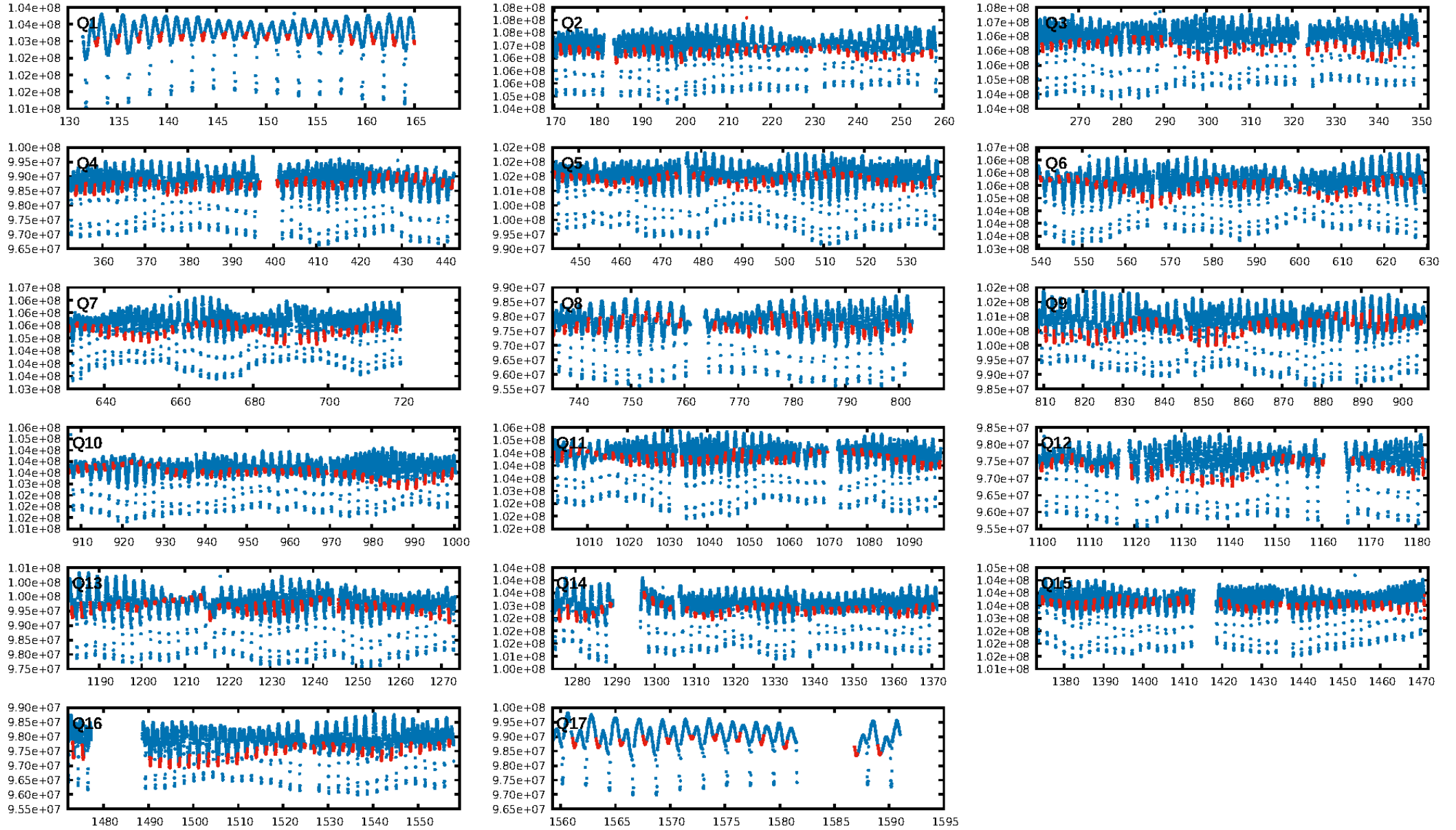
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: 0.0% [0.00σ]
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [599/600]
GhostDiagnostic-chr: 1.162
Centroid-sig: 0.0%
Centroid-so: 0.451 arcsec [4.56σ]
OotOffset-rm: 0.137 arcsec [2.03σ]
KicOffset-rm: 0.071 arcsec [1.04σ]
OotOffset-st: 4/4/4/5 [17]
KicOffset-st: 4/4/4/5 [17]
DiffImageQuality-fgm: 1.00 [17/17]
DiffImageOverlap-fno: 1.00 [17/17]

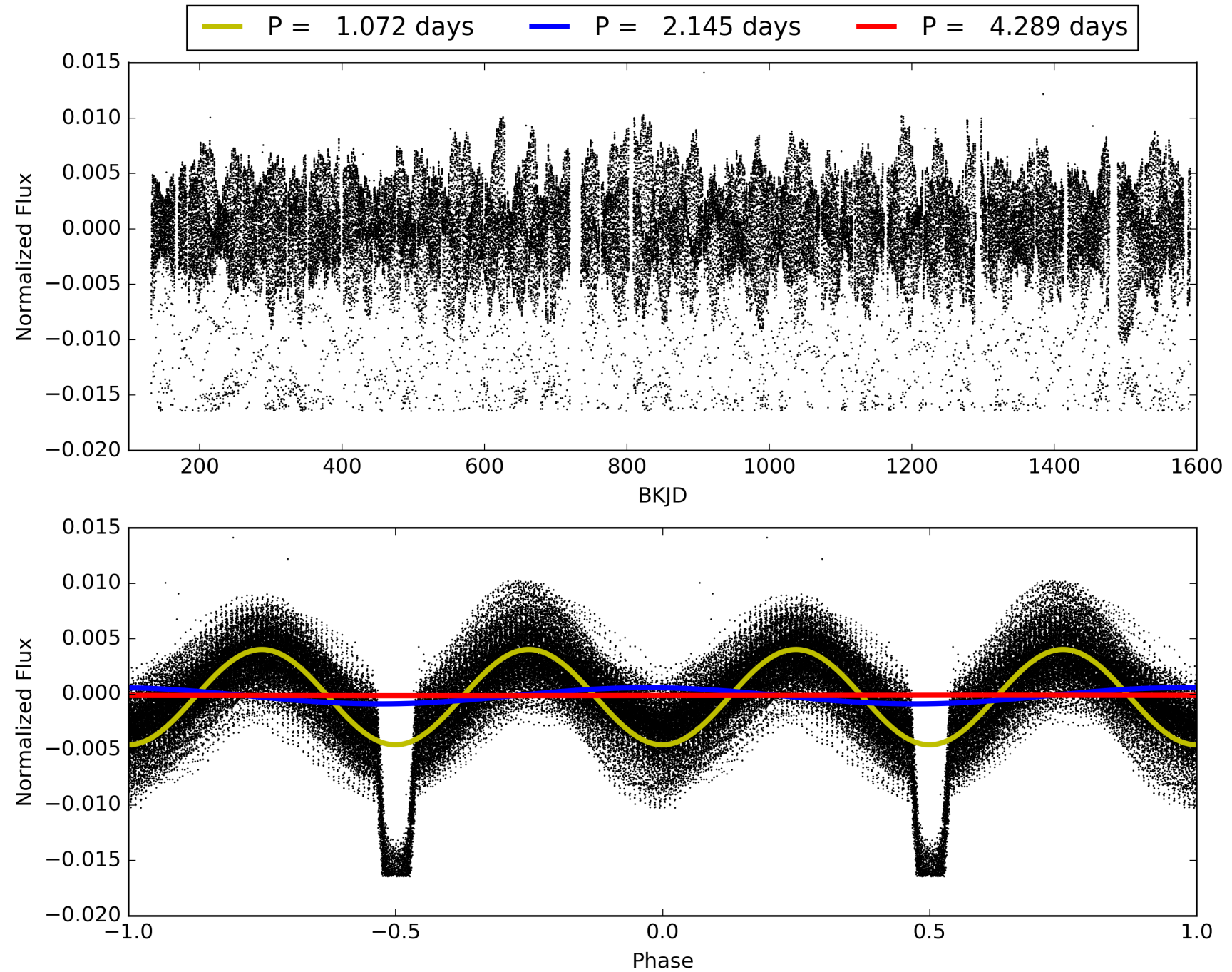
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 01-Feb-2016 12:50:27 Z

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

TCE 007532973-02, PDC Light Curves

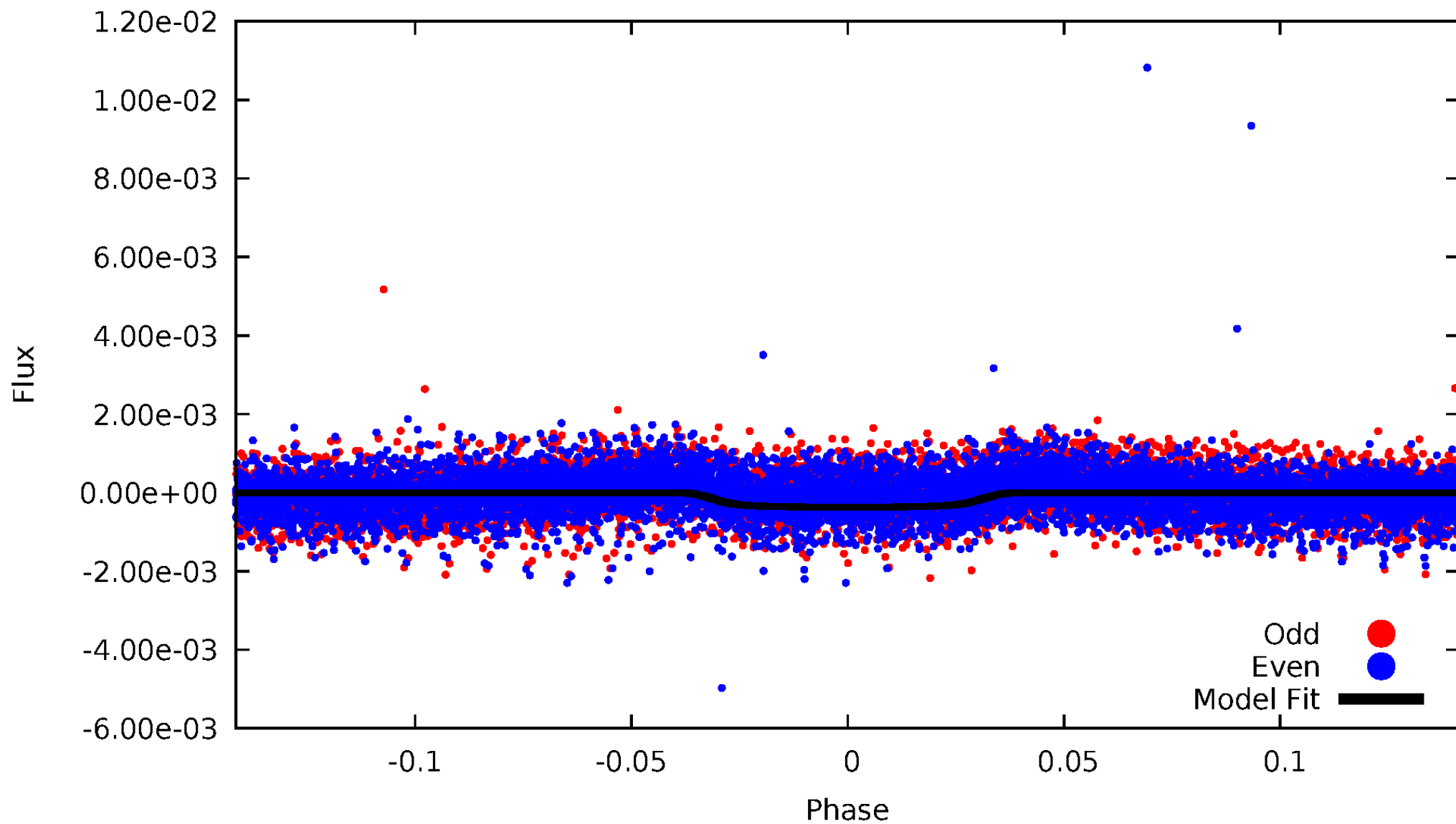


TCE 007532973-02



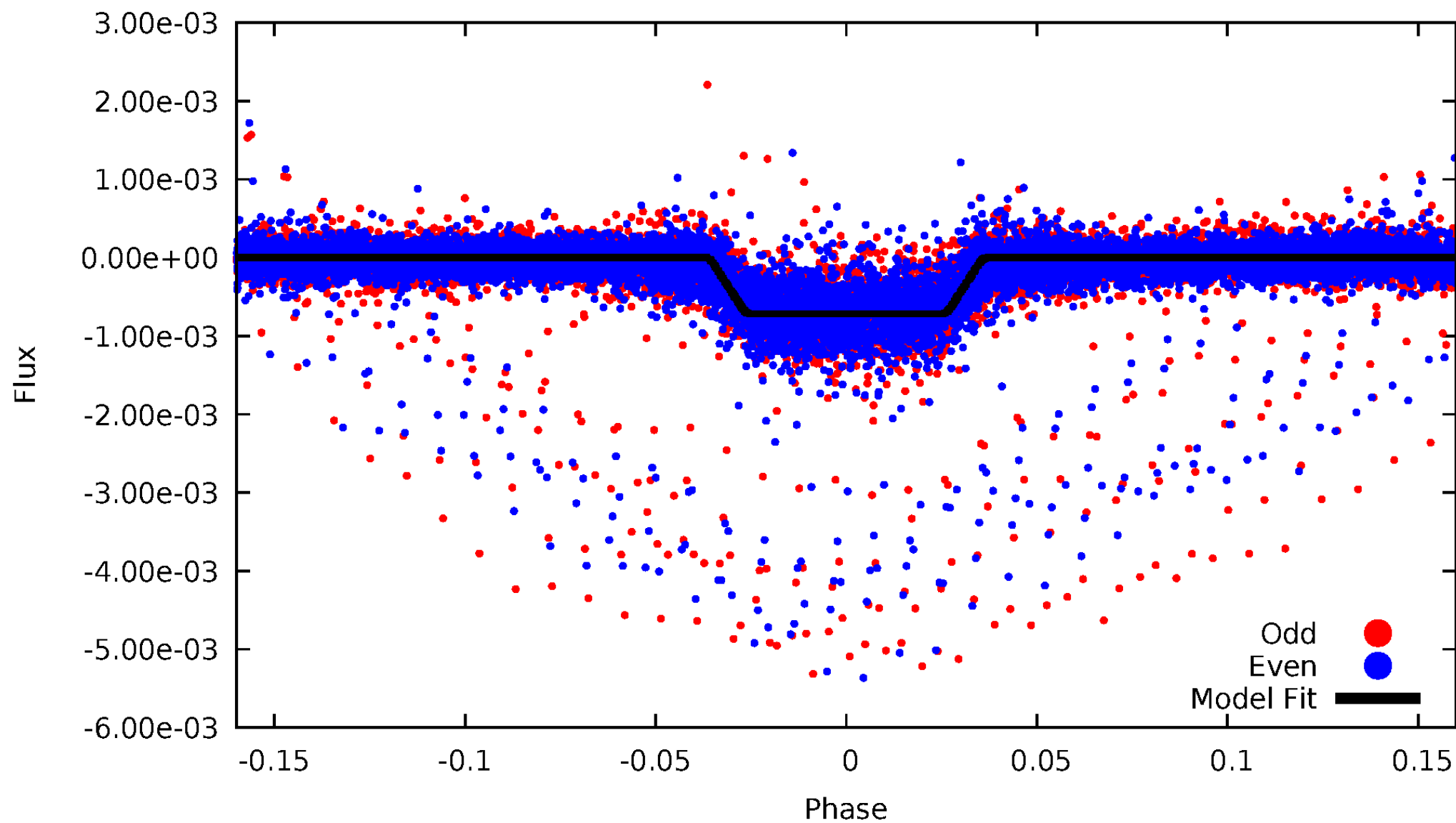
DV Odd/Even

TCE 007532973-02



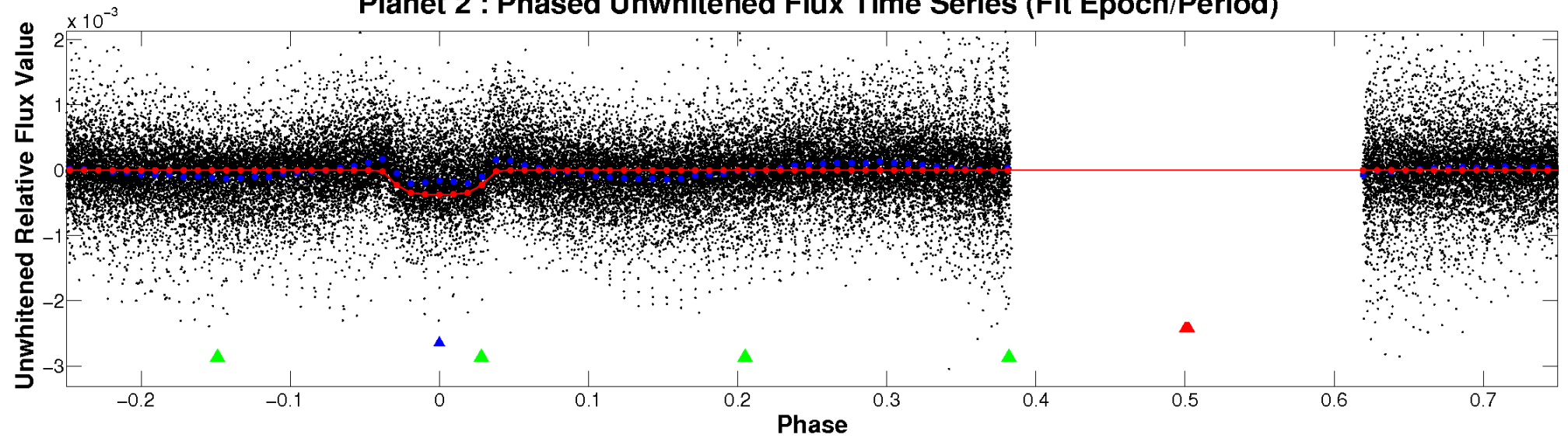
ALT Odd/Even

TCE 007532973-02

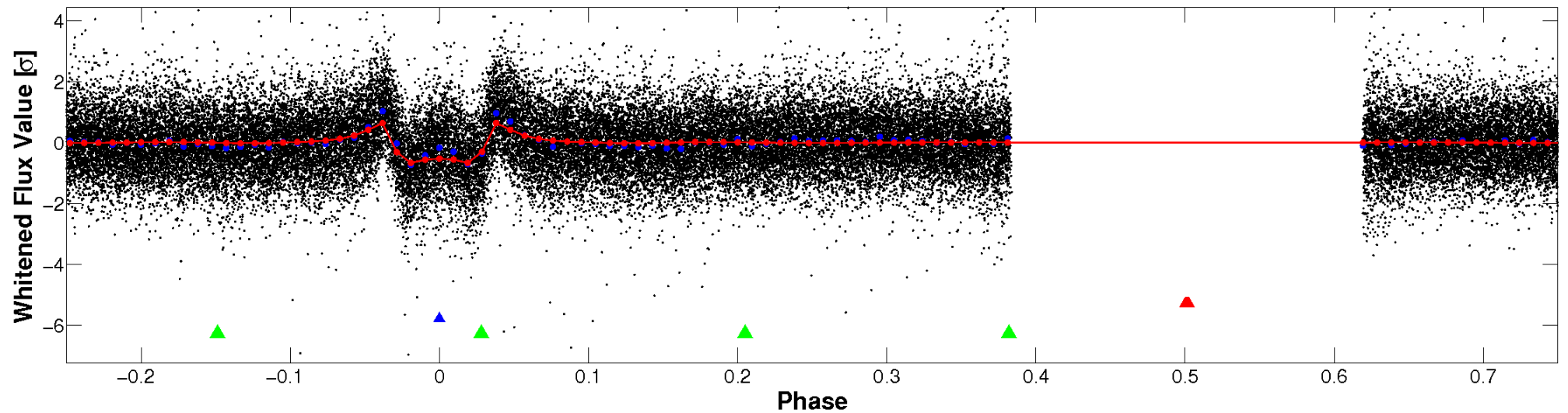


Non-Whitened Vs. Whitened Light Curve

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

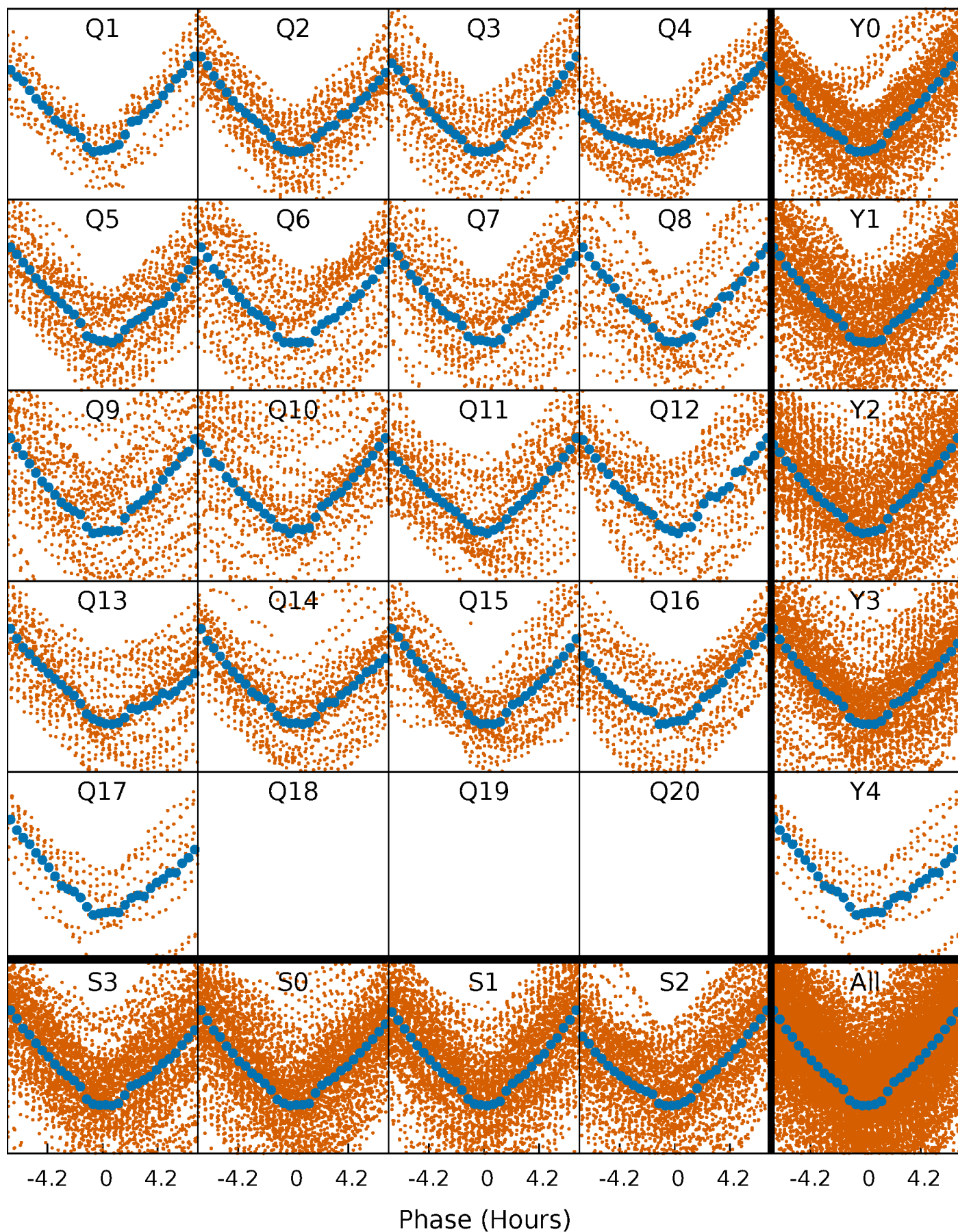


Planet 2 : Phased Whitened Flux Time Series (Fit Epoch/Period)



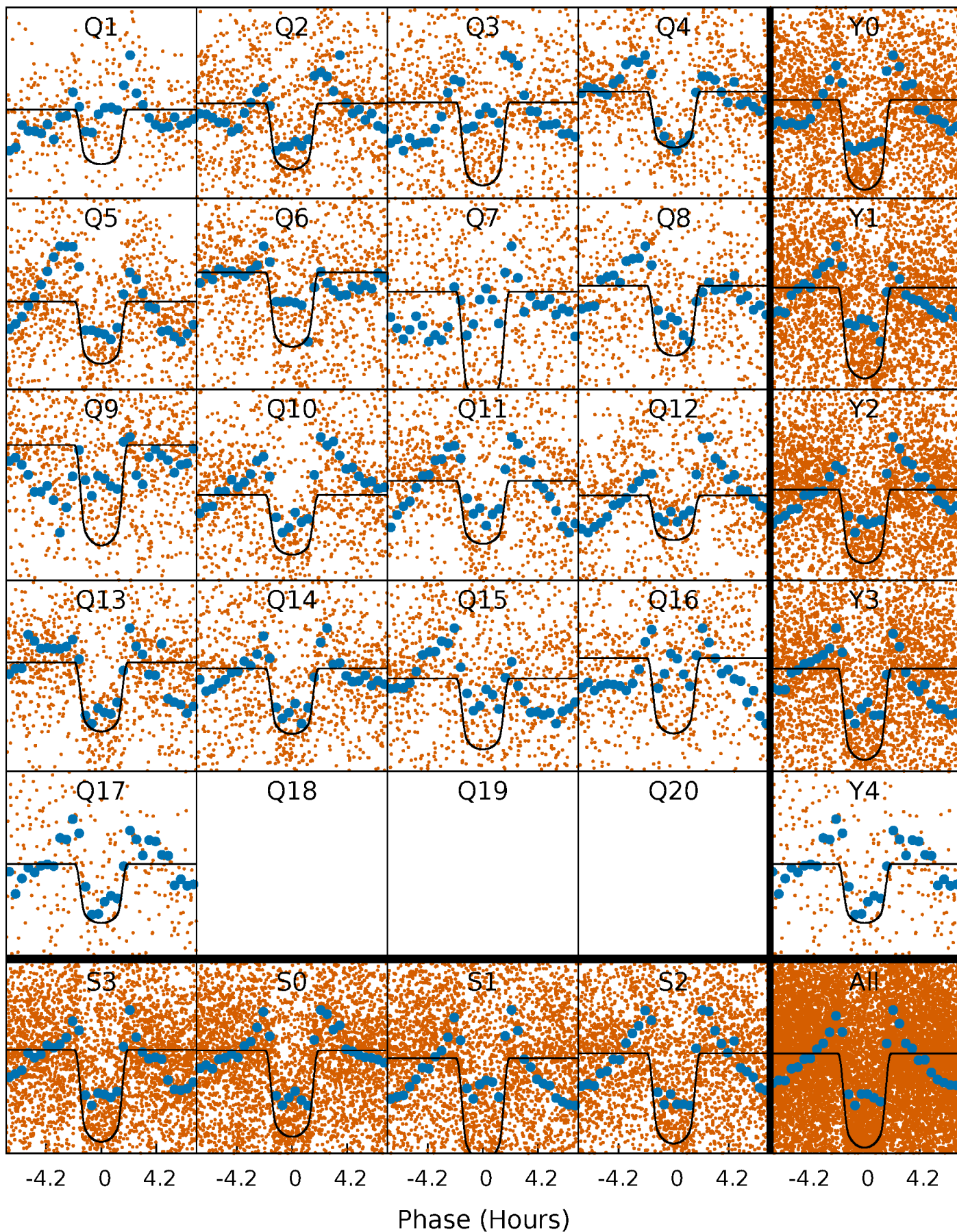
PDC Quarter-Phased Transit Curves

TCE 007532973-02 P= 2.144625 Days $T_0=132.912343$ (BKJD)



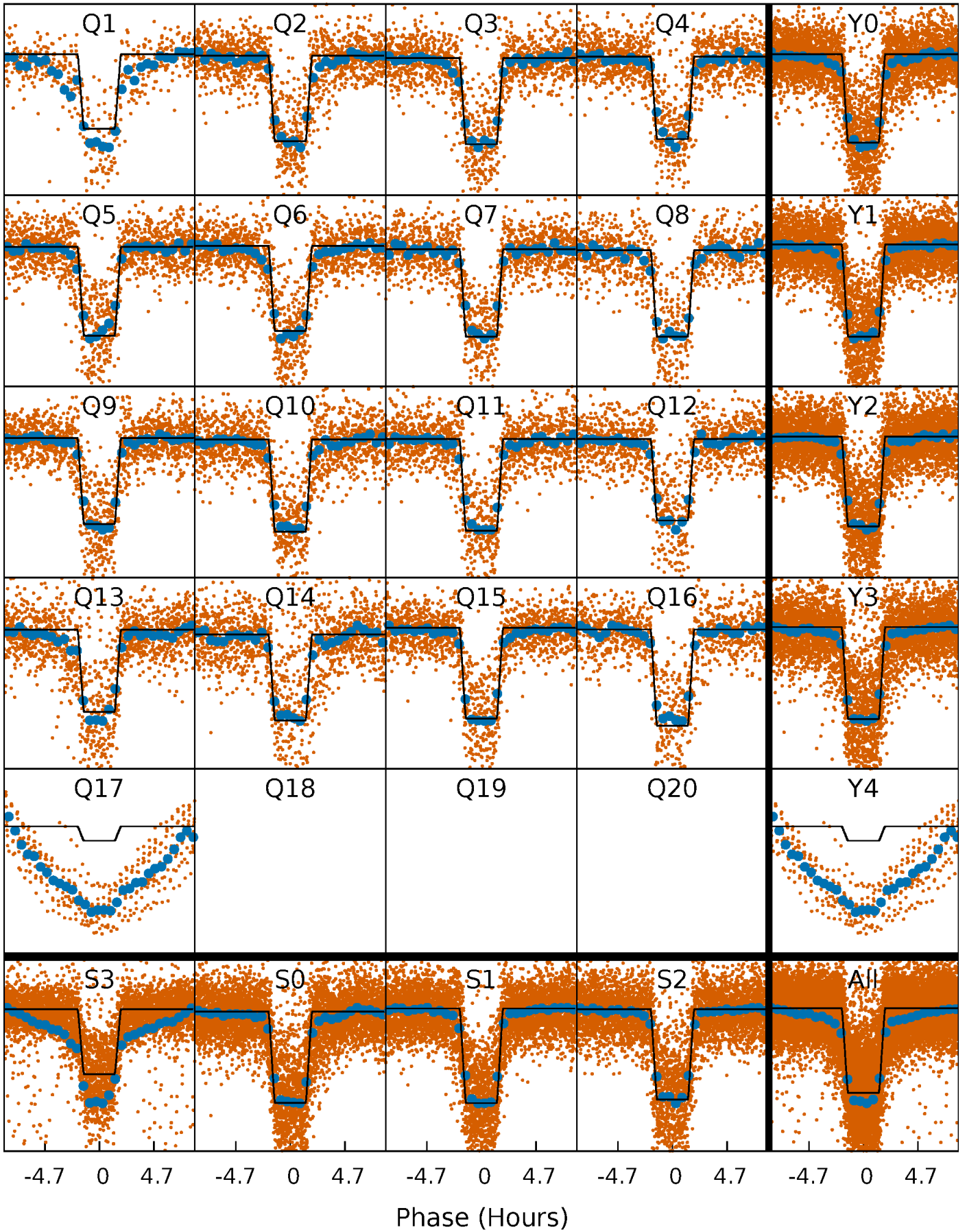
DV Quarter-Phased Transit Curves

TCE 007532973-02 P= 2.144625 Days $T_0=132.912343$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

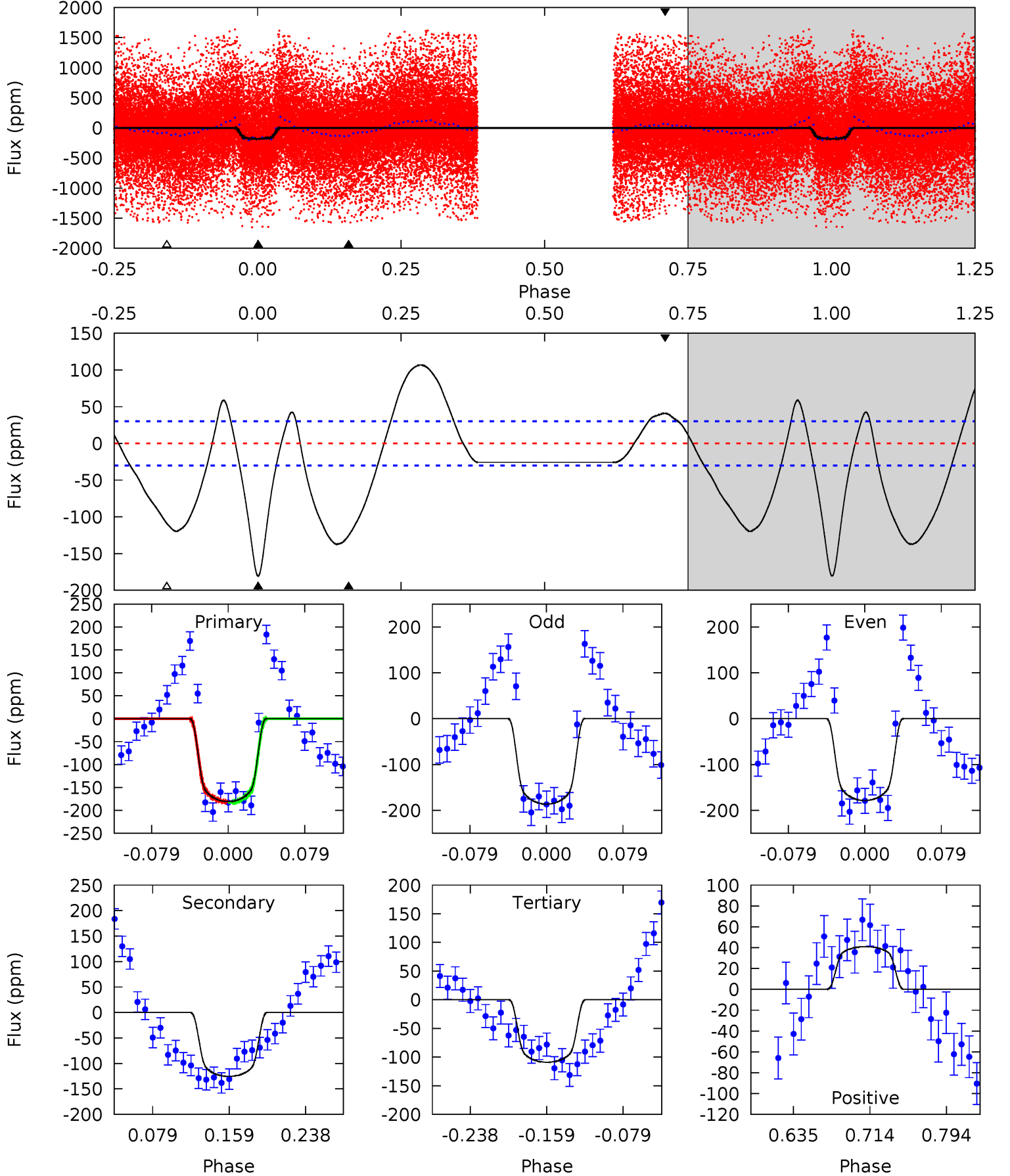
TCE 007532973-02 P= 2.144637 Days $T_0=132.911153$ (BKJD)



DV Model-Shift Uniqueness Test

007532973-02, P = 2.144625 Days, E = 130.767718 Days

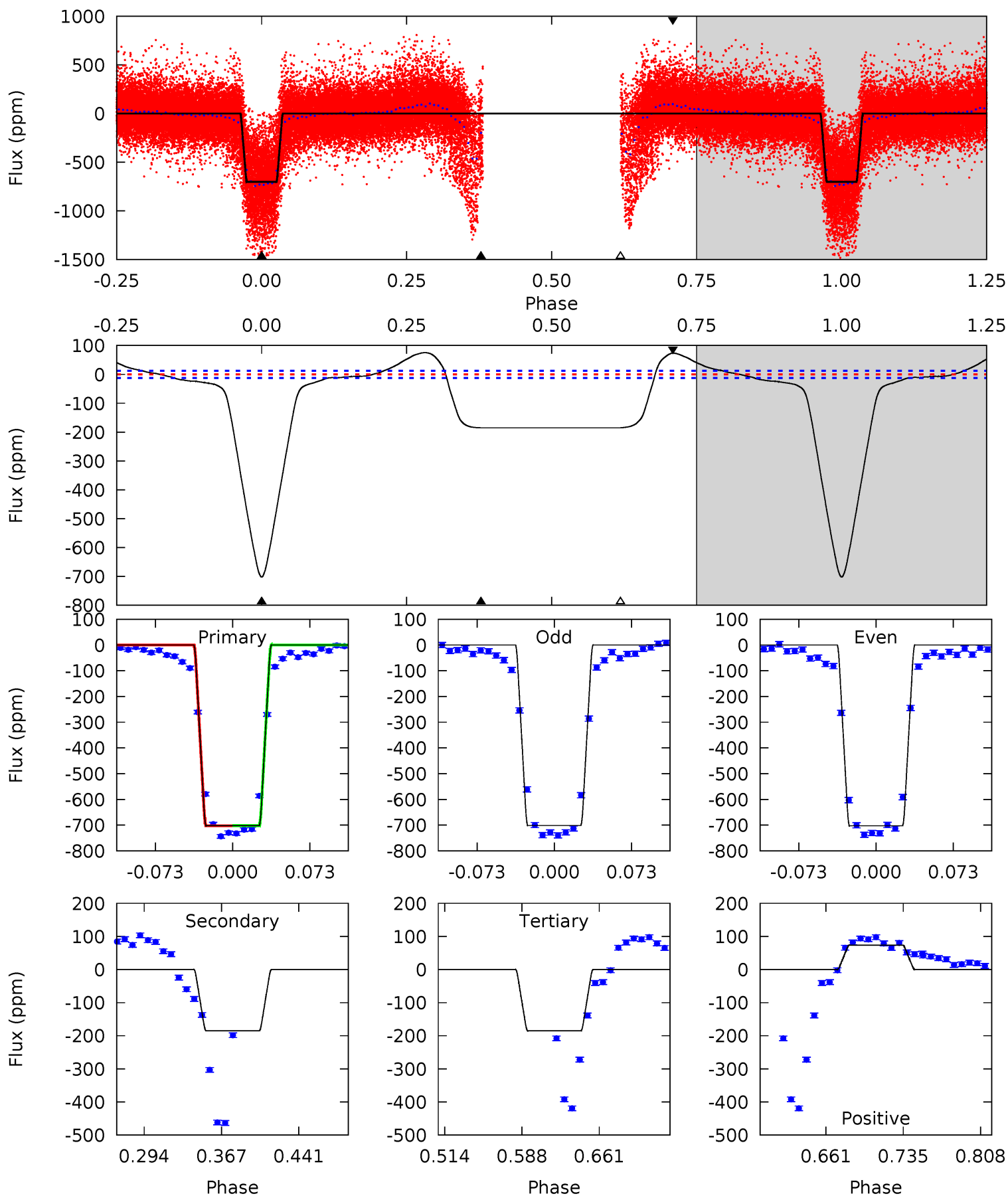
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
27.6	19.1	16.6	6.25	4.61	1.75	10.0	10.9	21.3	2.51	12.9	0.61	0.75	0.37	0.14



Alt Model-Shift Uniqueness Test

007532973-02, P = 2.144637 Days, E = 130.766516 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
254.0	67.0	67.0	26.6	4.63	1.79	18.3	187.0	227.4	0.03	40.4	0.25	1.09	0.10	0.18



Stellar Parameters For KIC 007532973

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6296^{+175}_{-219}	$4.240^{+0.180}_{-0.180}$	$-0.160^{+0.250}_{-0.300}$	$1.305^{+0.396}_{-0.264}$	$1.076^{+0.181}_{-0.131}$	$0.683^{+0.627}_{-0.322}$
	+3%/-3%	+4%/-4%	+156%/-188%	+30%/-20%	+17%/-12%	+92%/-47%
Source	PHO1	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 007532973-02 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-125 ± 7	$2.96^{+0.52}_{-0.35}$	2417^{+190}_{-150}	4712^{+132}_{-147}	$8.724^{+2.519}_{-2.232}$
Alt.	-185 ± 3	$3.79^{+0.62}_{-0.45}$	2416^{+185}_{-164}	4607^{+104}_{-138}	$7.874^{+2.209}_{-1.836}$

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

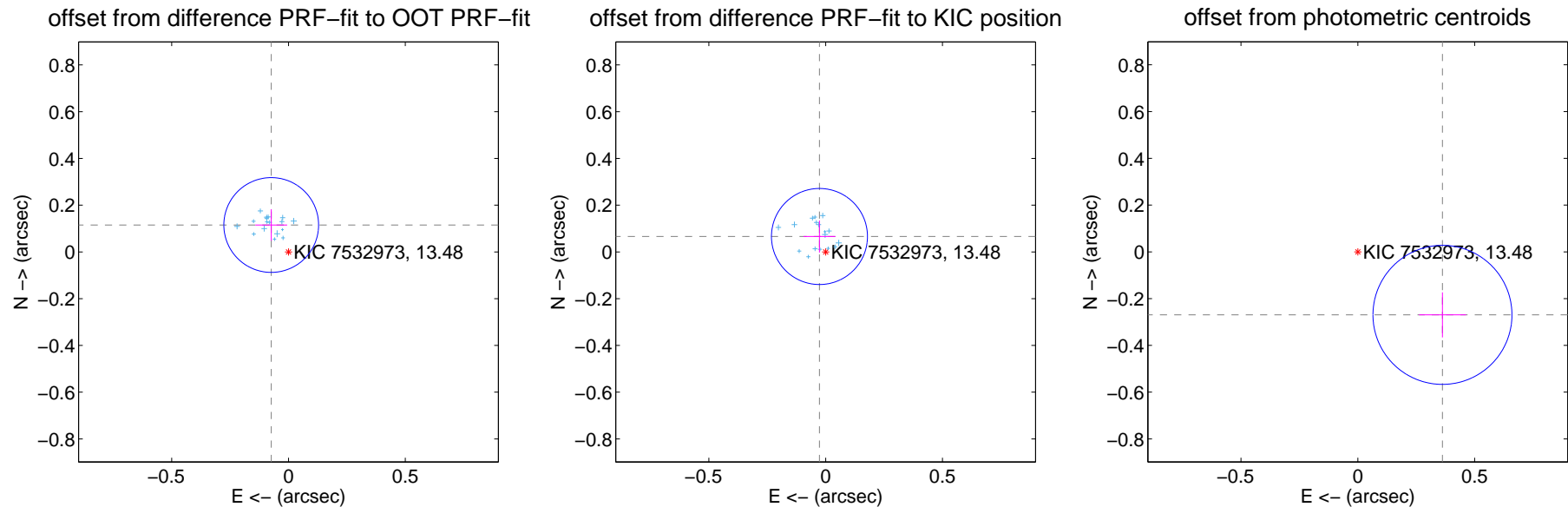
DV Centroid Data

Supplemental centroid analysis for 007532973-02. Kepler magnitude: 13.48. Transit SNR 45.36

There are 17 quarters with good PRF difference image offsets

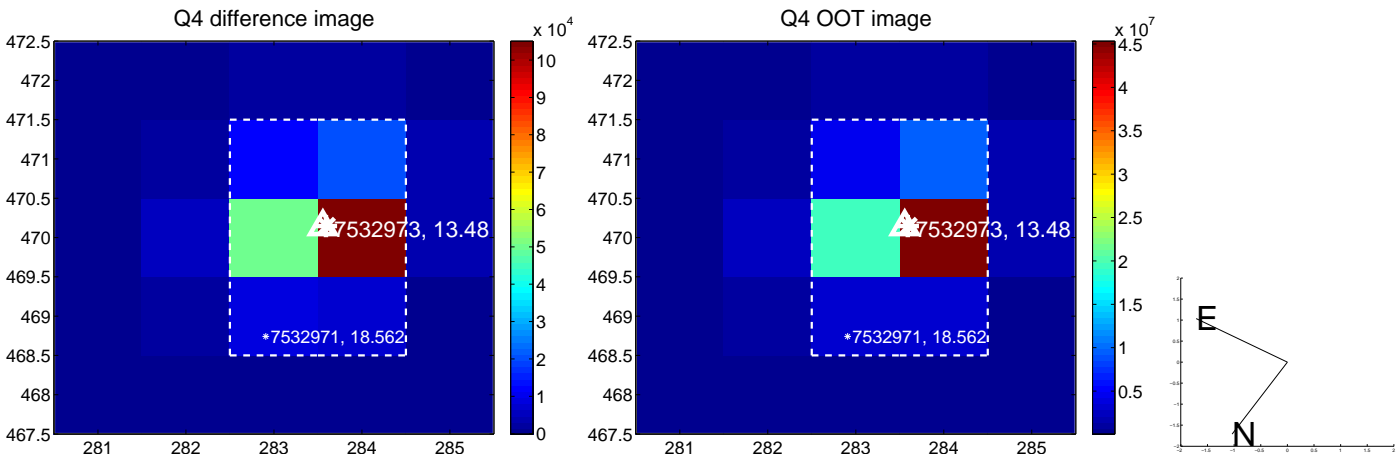
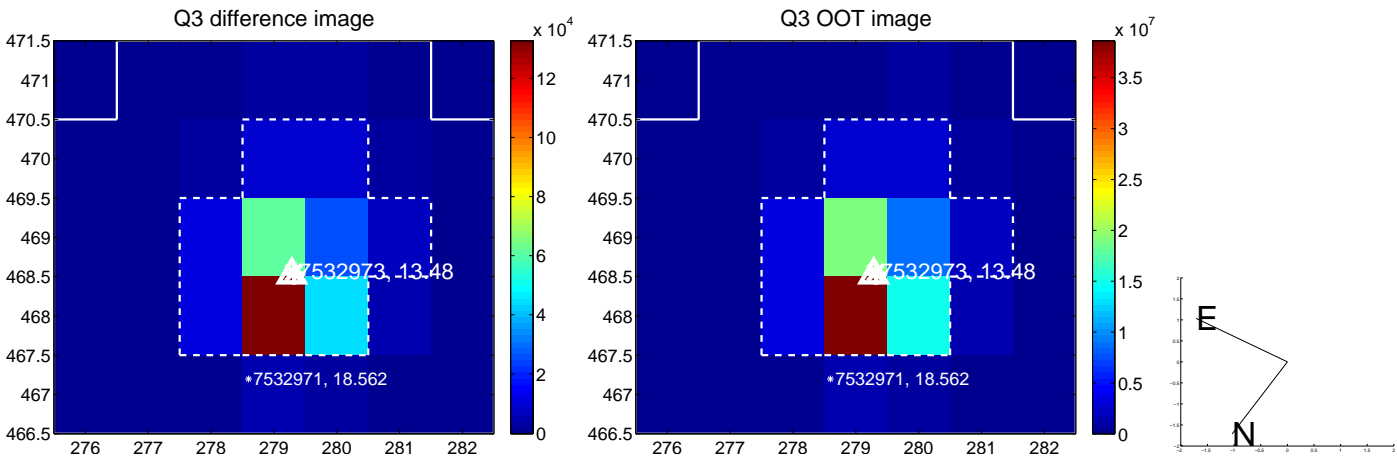
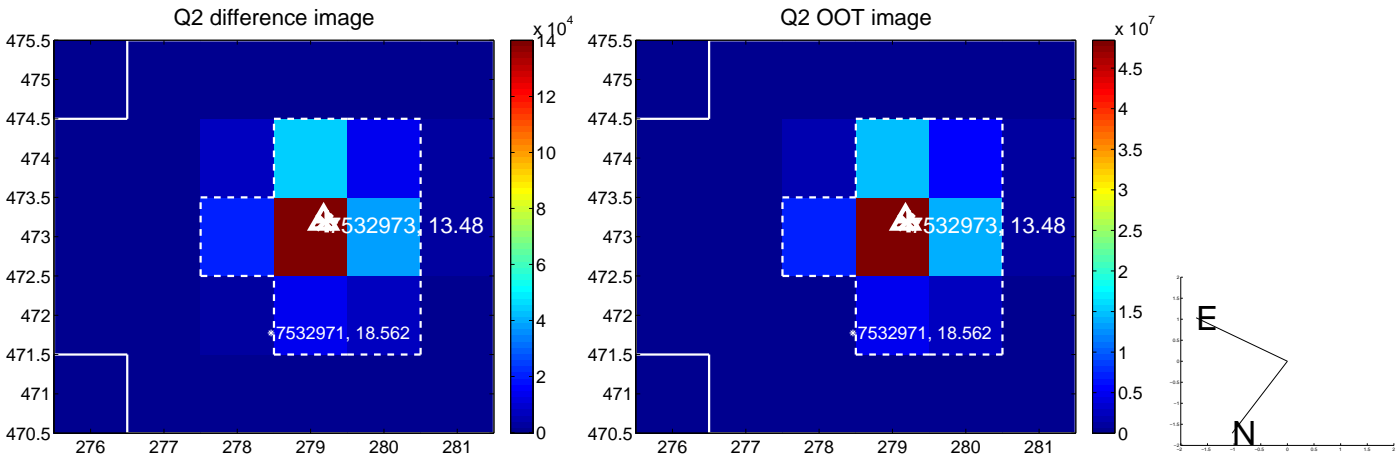
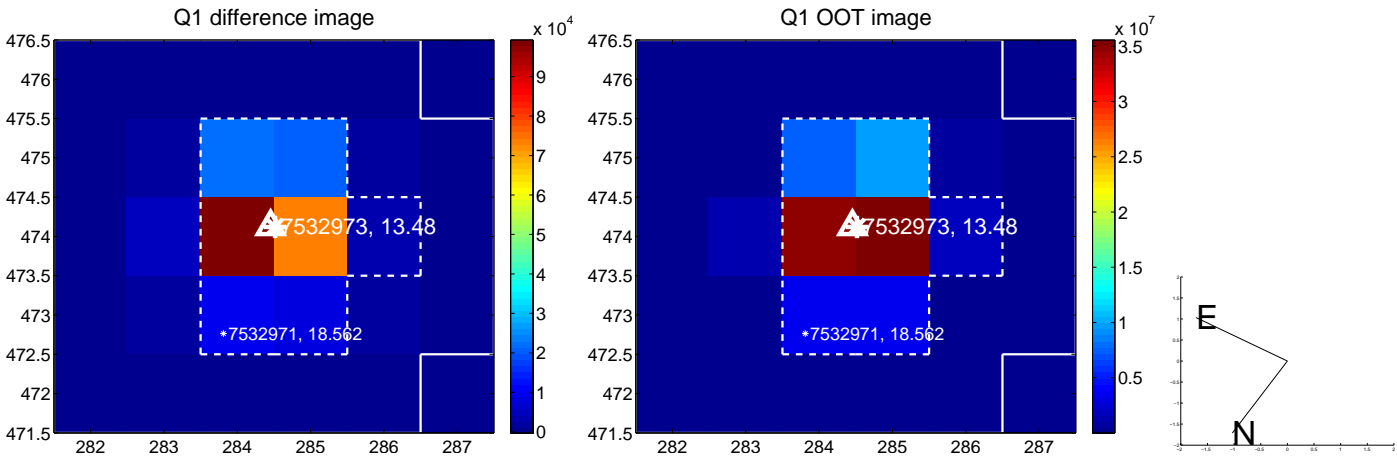
The direct PRF centroid is offset from the target star catalog position by about 0.05 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.137 ± 0.068	2.03	0.074 ± 0.068	0.115 ± 0.067
PRF-fit source offset from KIC position	0.071 ± 0.068	1.04	0.027 ± 0.068	0.066 ± 0.069
photometric centroid source offset	0.45 ± 0.10	4.56	-0.36 ± 0.10	-0.27 ± 0.10

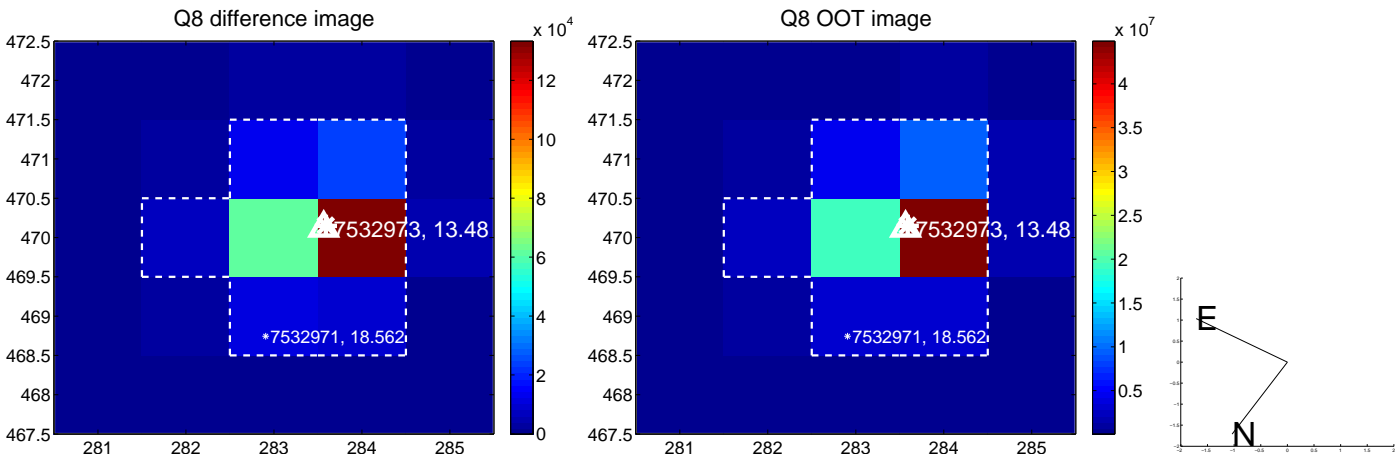
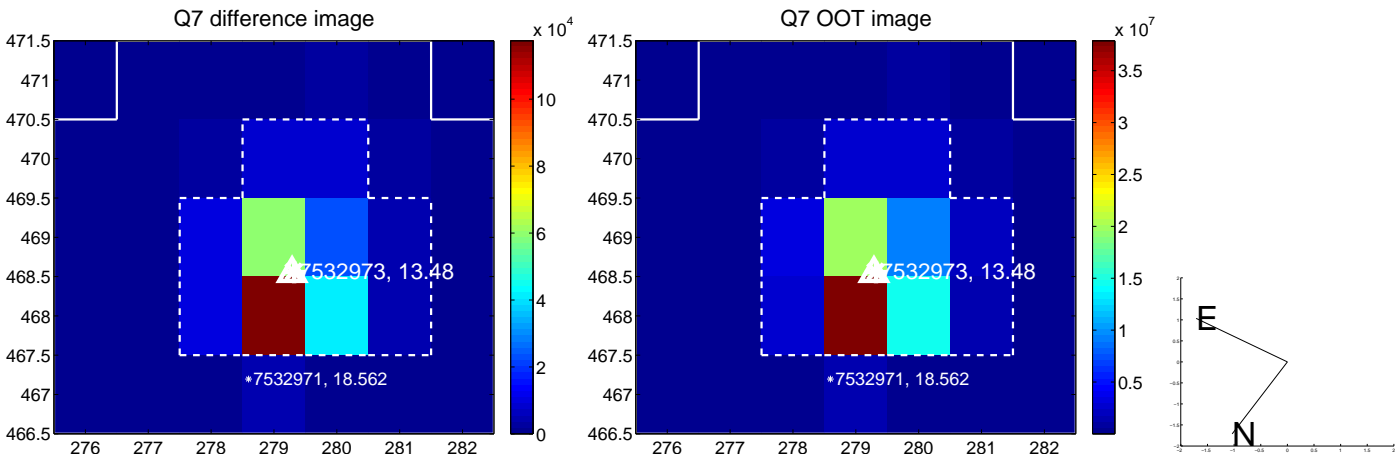
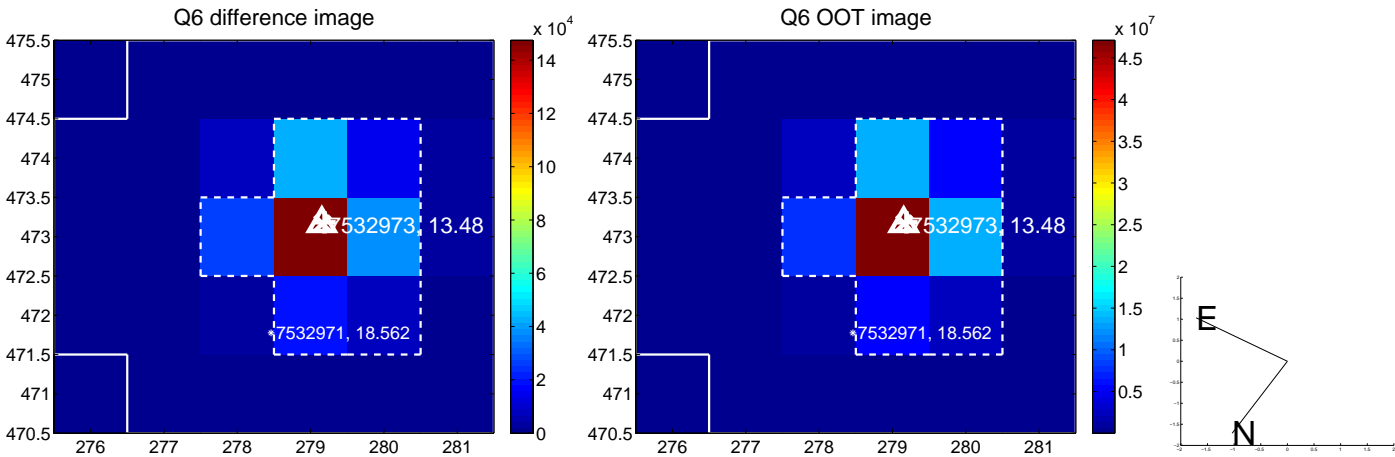
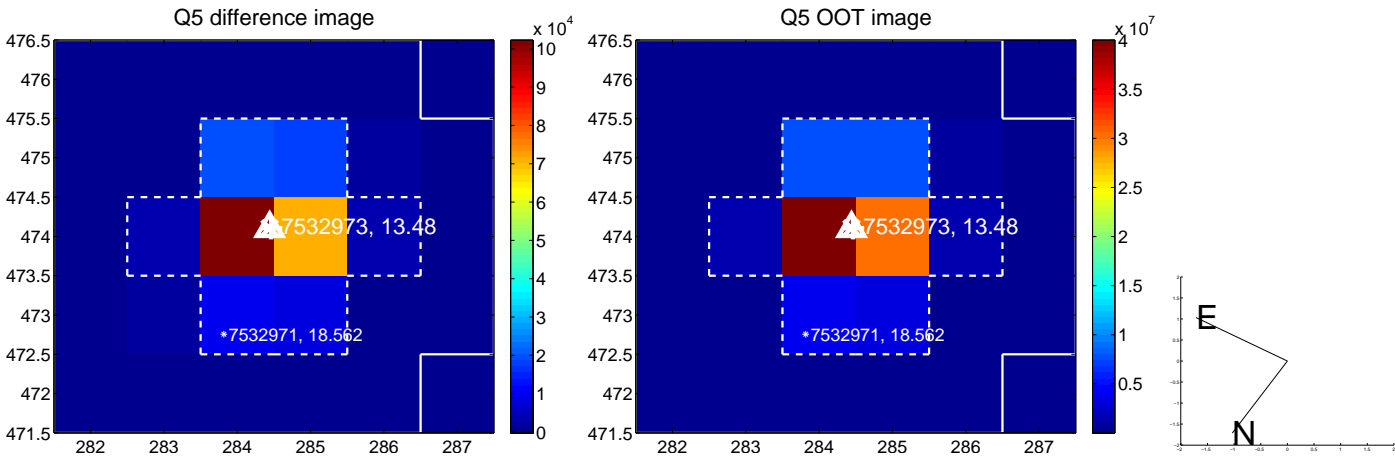


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses:** good quarterly centroid offsets; **Vermillion crosses:** bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

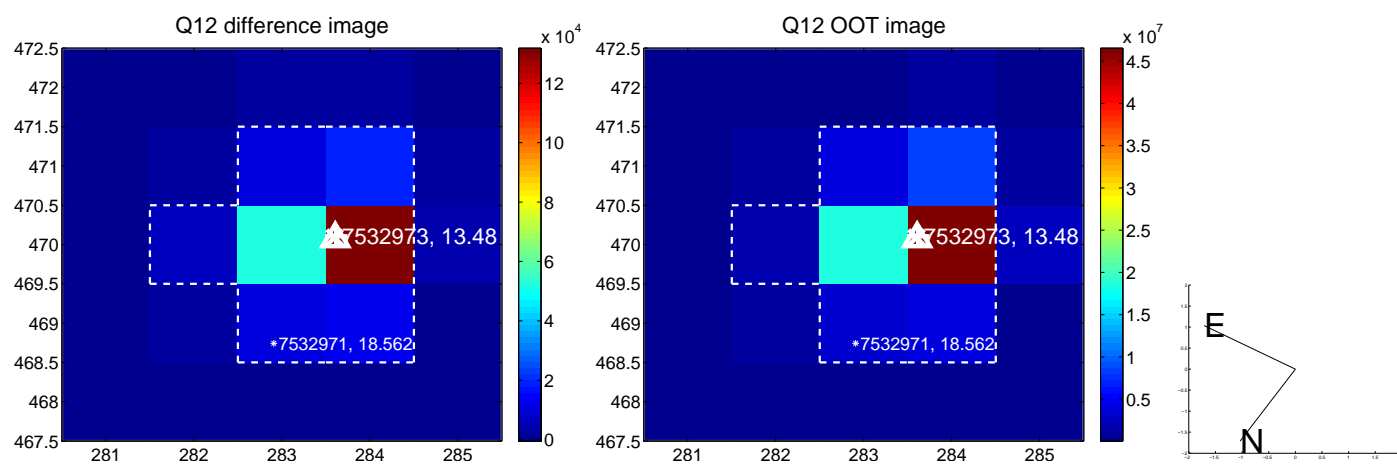
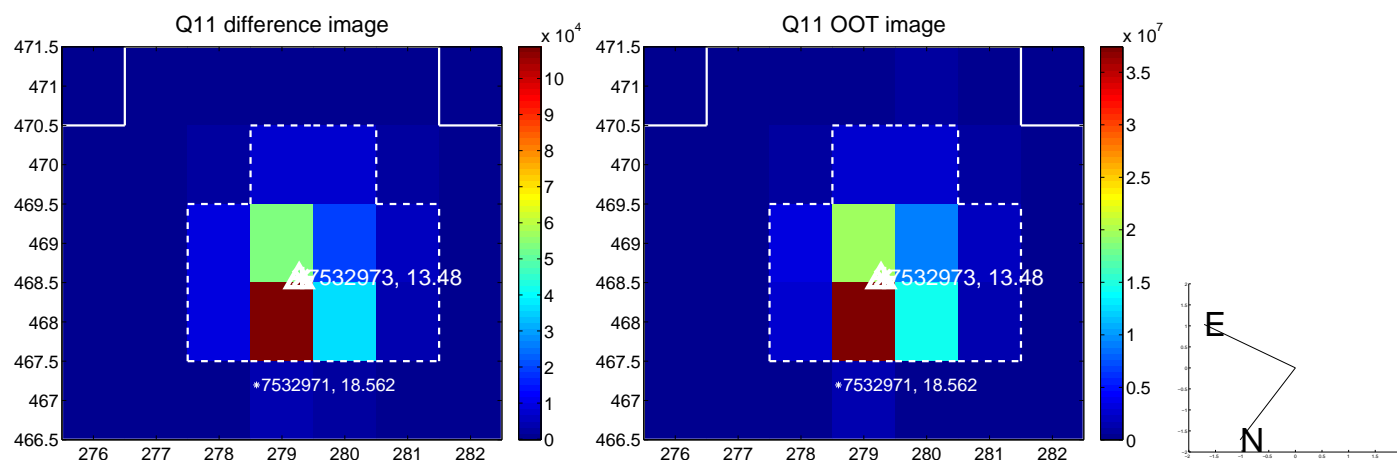
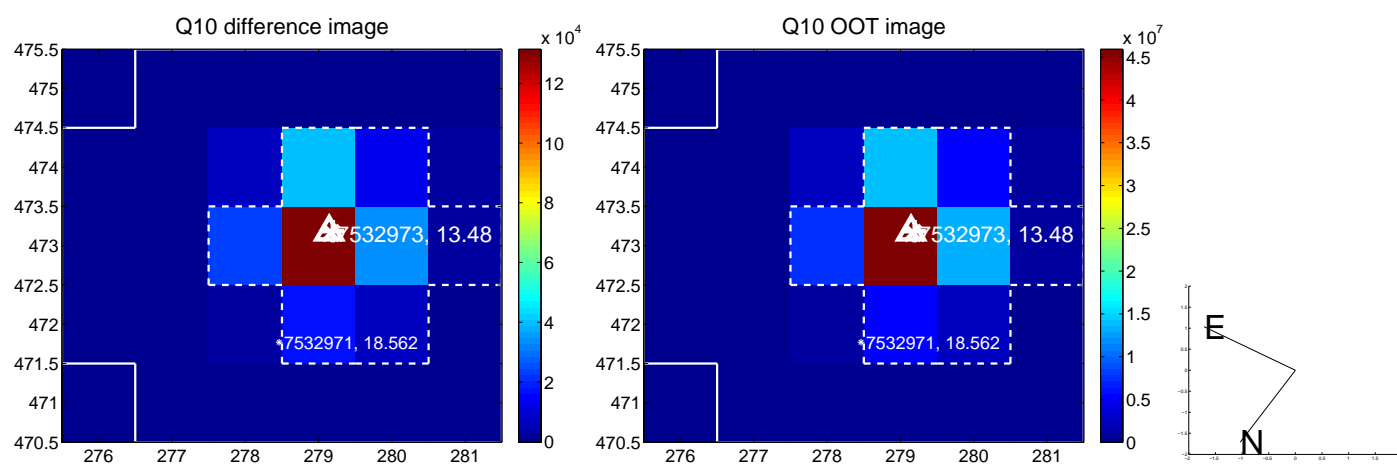
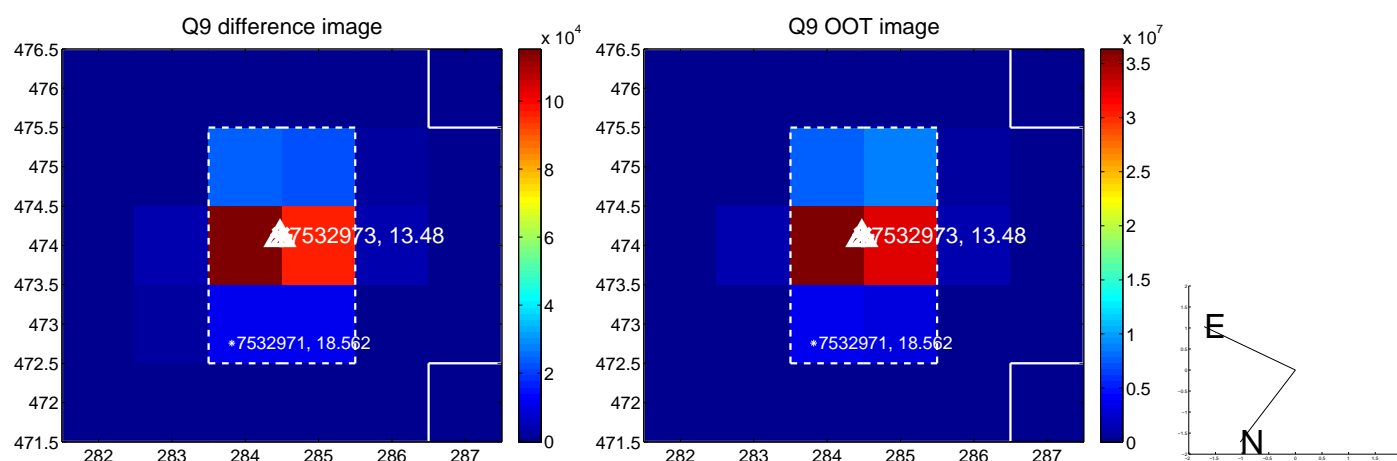
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



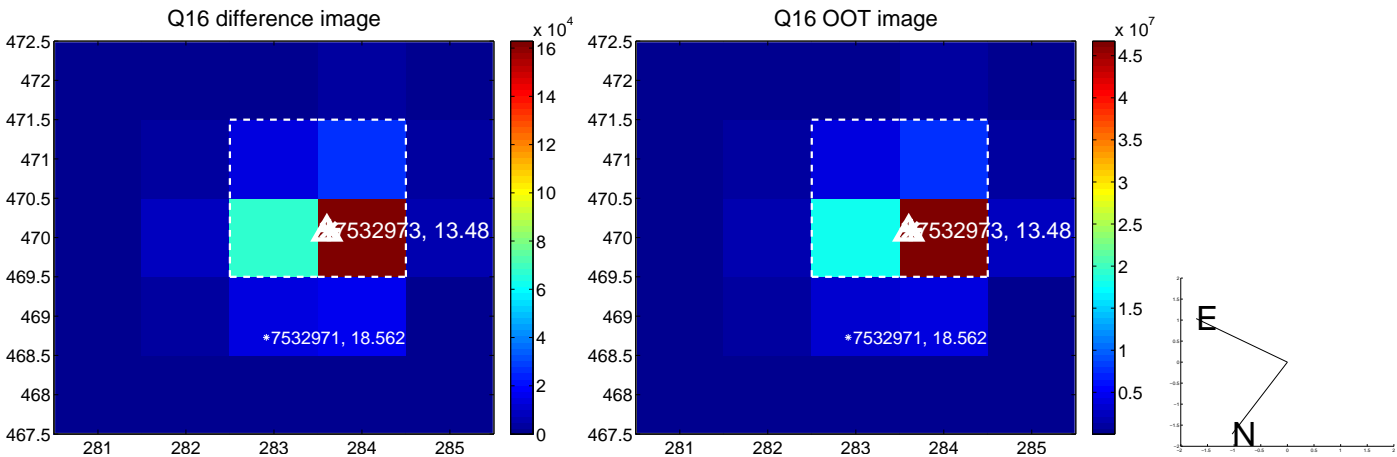
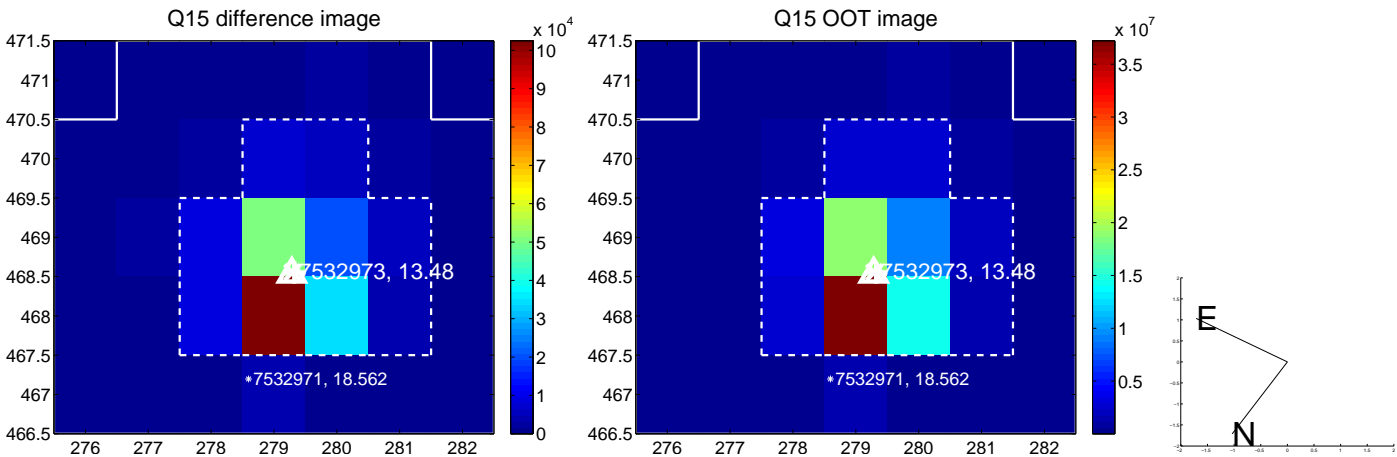
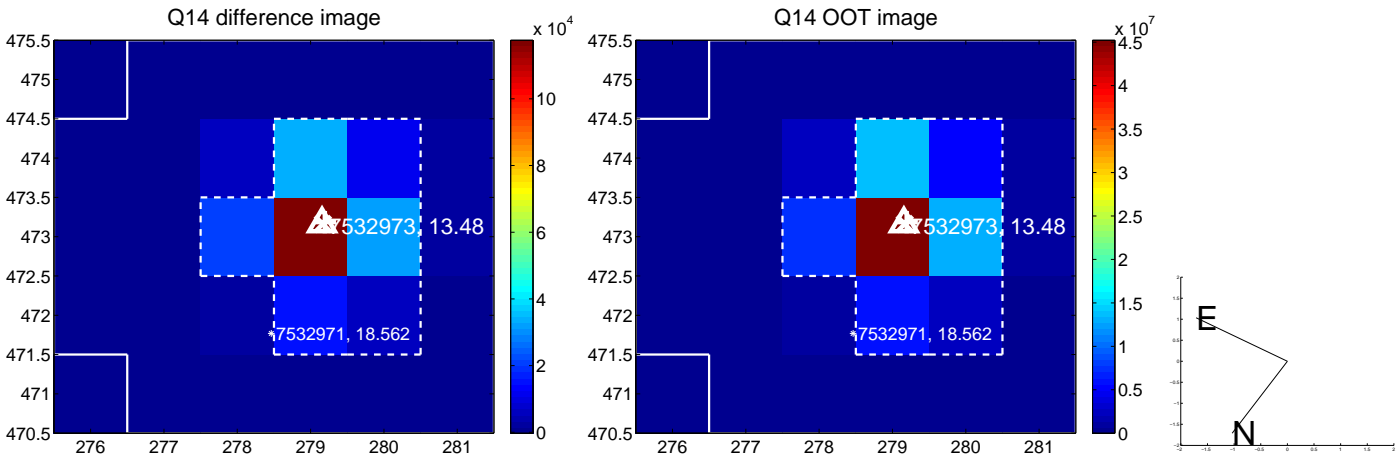
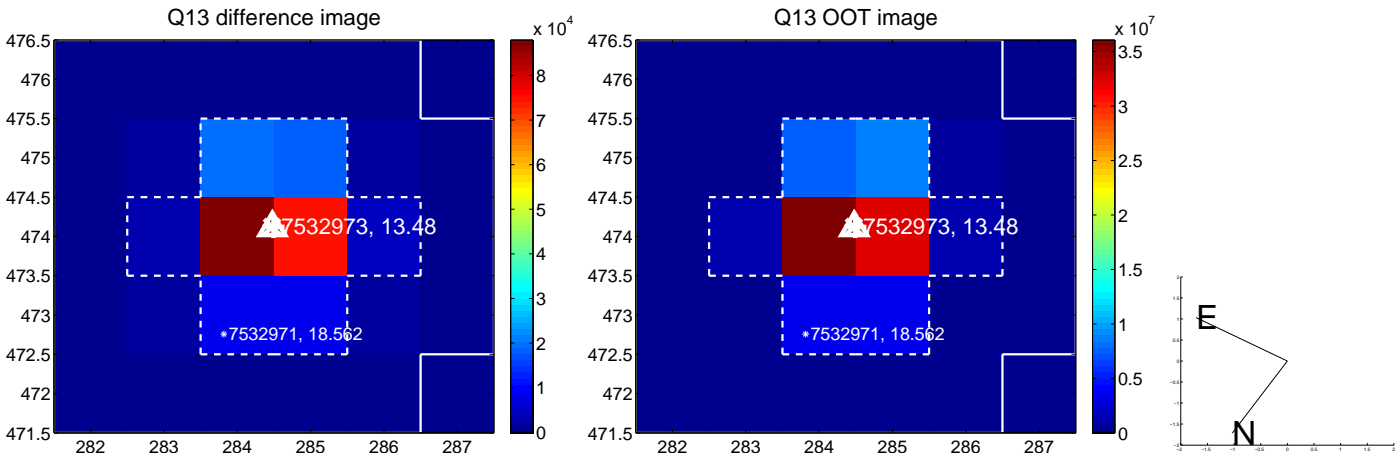
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

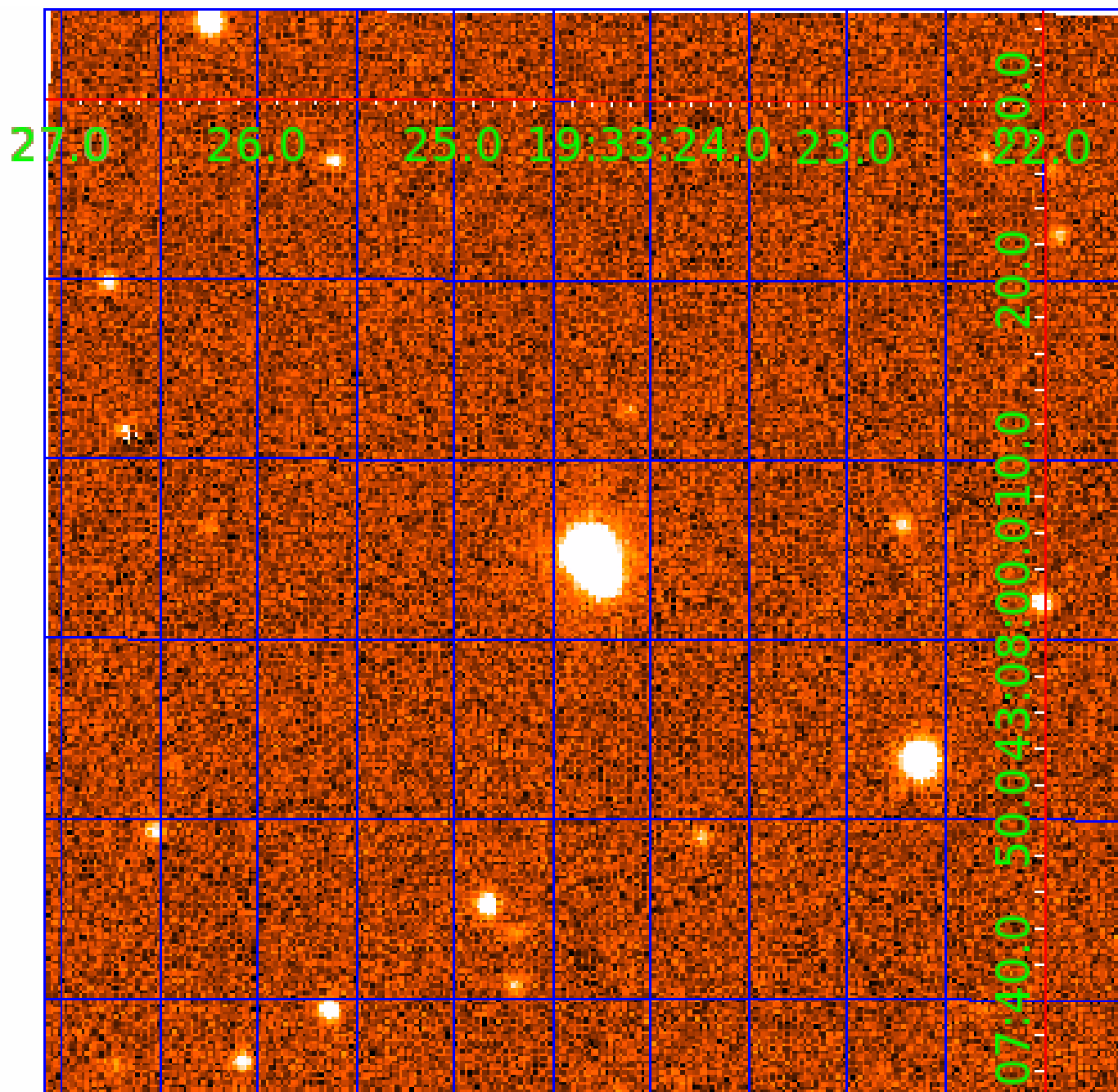


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 007532973

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})
007532973-01	OBS	1450.01	2.144633	131.840122	14582.4	3.910	1522.3	1521.8	1.30	6296	17.10	2149.92
007532973-02	OBS	No	2.144625	132.912343	376.9	3.639	42.3	45.4	1.30	6296	2.97	2149.93
007532973-03	OBS	No	431.448938	147.605667	2184.1	10.802	8.5	7.8	1.30	6296	11.31	1.82

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
007532973-01	OBS	FP	0.04	0	1	0	0	HAS_SEC_TCE
007532973-02	OBS	FP	0.00	1	1	0	0	IS_SEC_TCE
007532973-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_CHASES—LPP_DV—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—MOD_TER_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 007532973-03

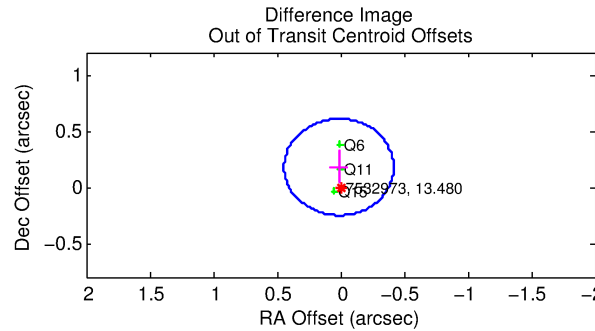
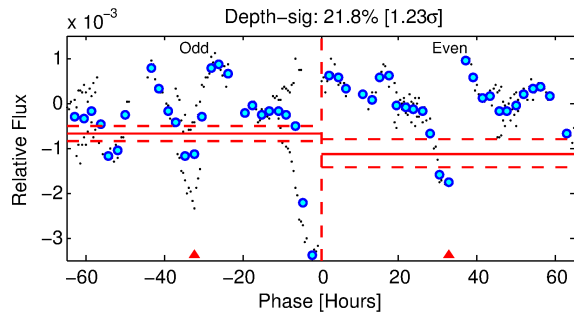
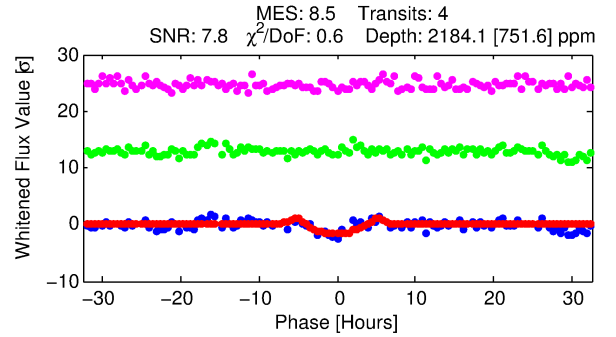
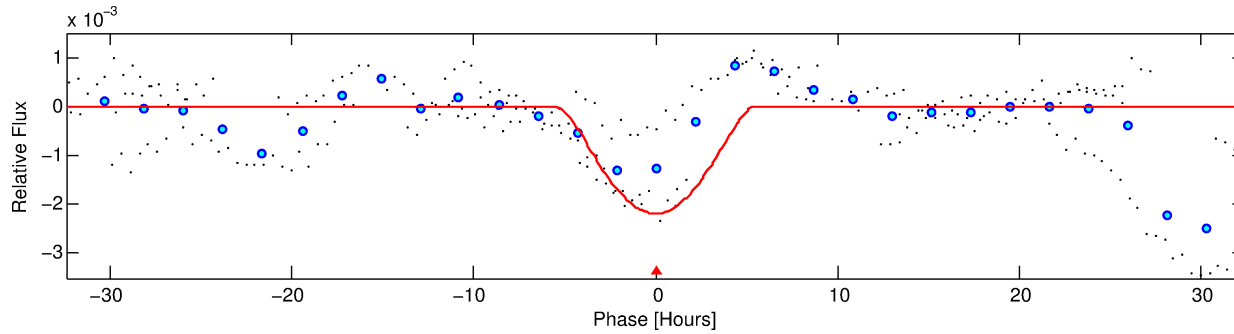
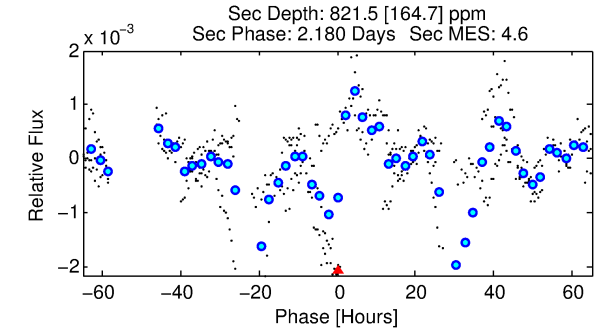
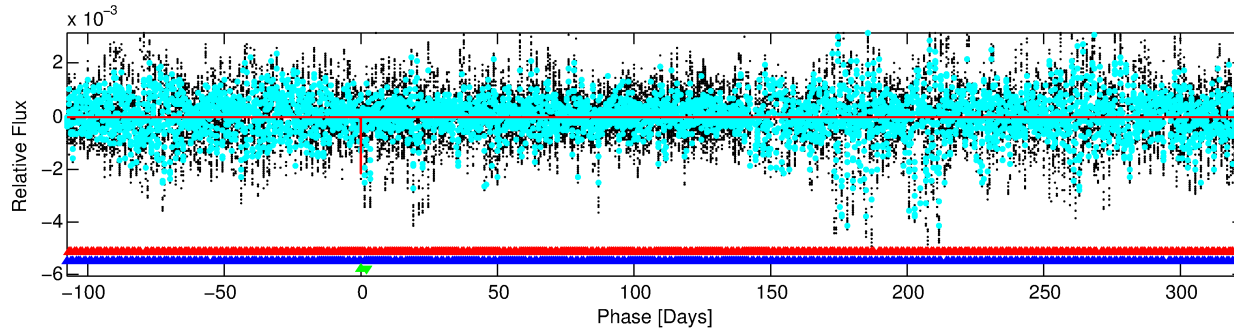
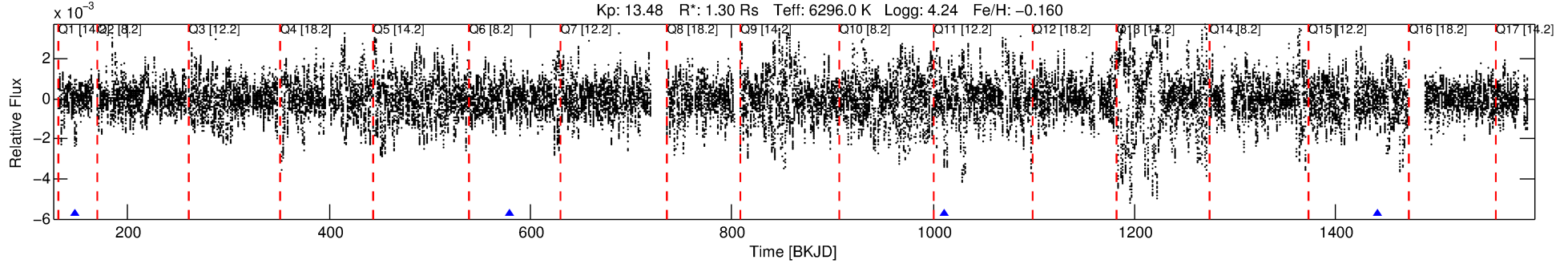
No Significant Match Found

DV One-Page Summary

KIC: 7532973 Candidate: 3 of 3 Period: 431.449 d

KOI: K01450 Corr: No Ephemeris Match

Kp: 13.48 R*: 1.30 Rs Teff: 6296.0 K Logg: 4.24 Fe/H: -0.160



DV Fit Results:

Period = 431.44894 [0.00649] d
Epoch = 147.6057 [0.0129] BKJD
Rp/R* = 0.0795 [0.0808]
a/R* = 124.05 [26.40]
b = 1.00 [0.13]
Seff = 1.82 [0.67]
Teq = 296 [27] K
Rp = 11.31 [12.01] Re
a = 1.1465 [0.2809] AU
Ag = 4640.47 [9618.41] [0.48σ]
Teff = 3781 [1937] K [1.80σ]

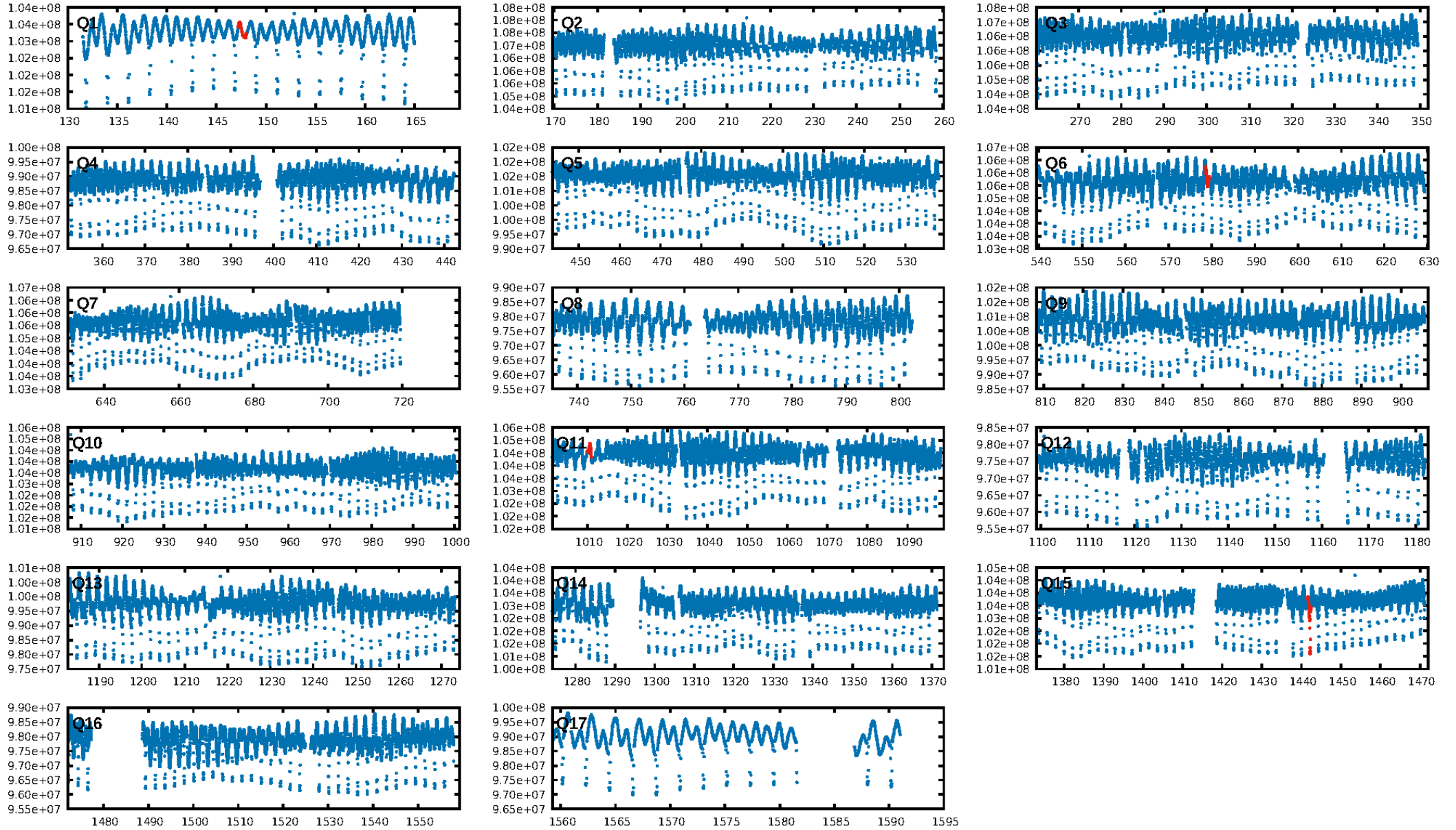
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [896.88σ]
LongPeriod-sig: N/A
ModelChiSquare2-sig: 29.8%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [3/3]
GhostDiagnostic-chr: -1.753
Centroid-sig: 24.9%
Centroid-so: 0.187 arcsec [1.10σ]
OotOffset-rm: 0.178 arcsec [1.24σ]
KicOffset-rm: 0.131 arcsec [1.15σ]
OotOffset-st: 1/2/0/0 [3]
KicOffset-st: 1/2/0/0 [3]
DiffImageQuality-fgm: 0.67 [2/3]
DiffImageOverlap-fno: 0.00 [0/4]

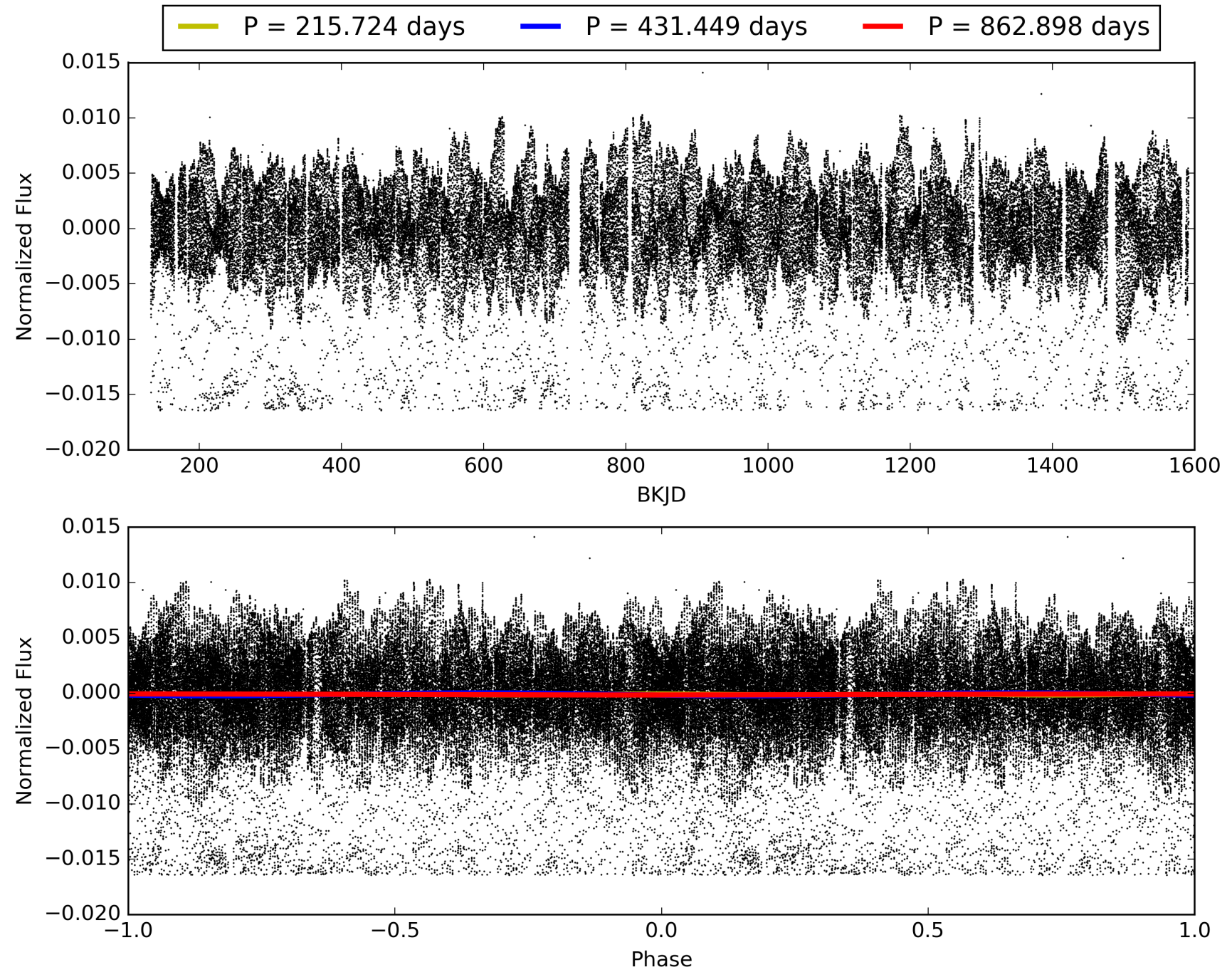
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 01-Feb-2016 12:50:37 Z

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

TCE 007532973-03, PDC Light Curves

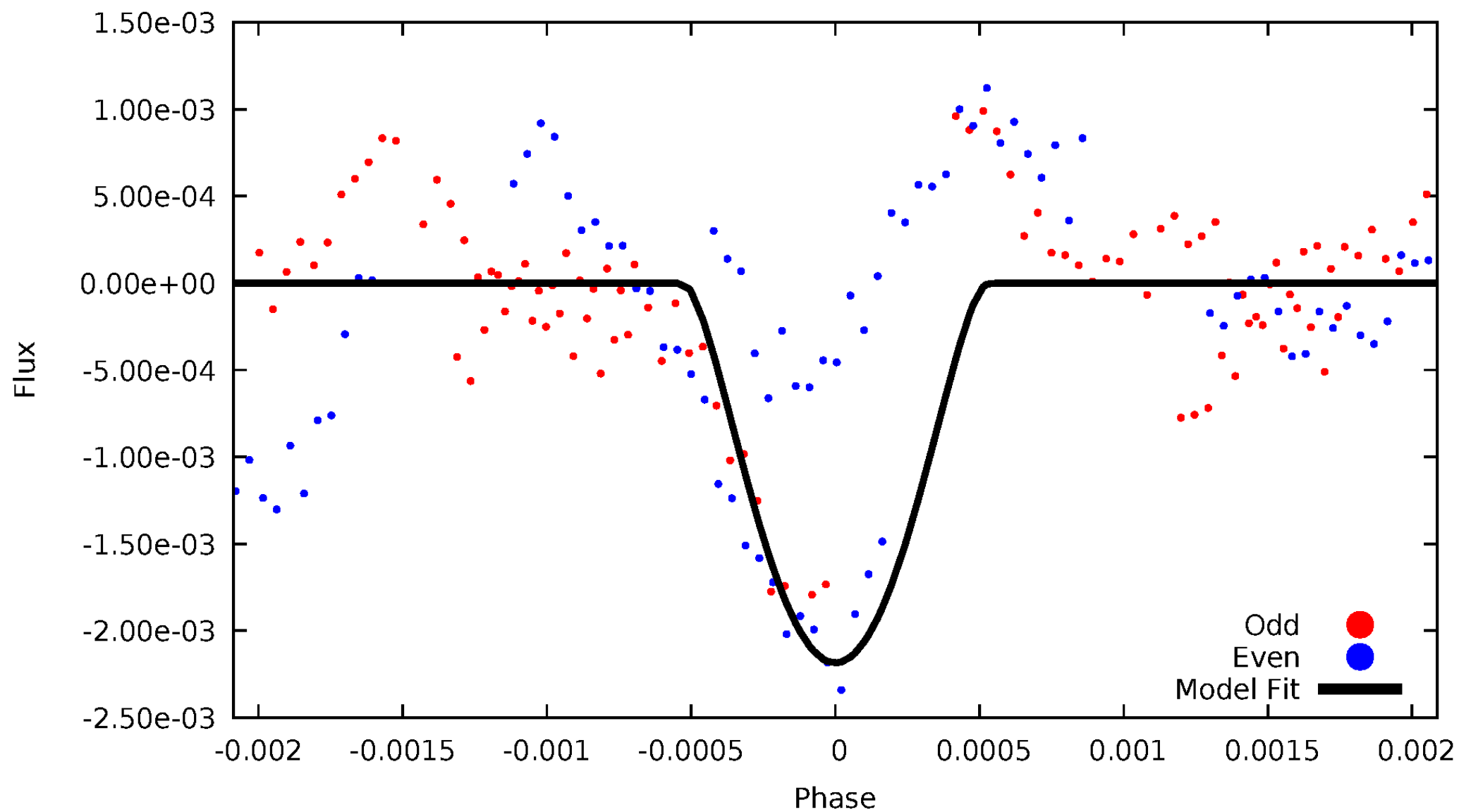


TCE 007532973-03



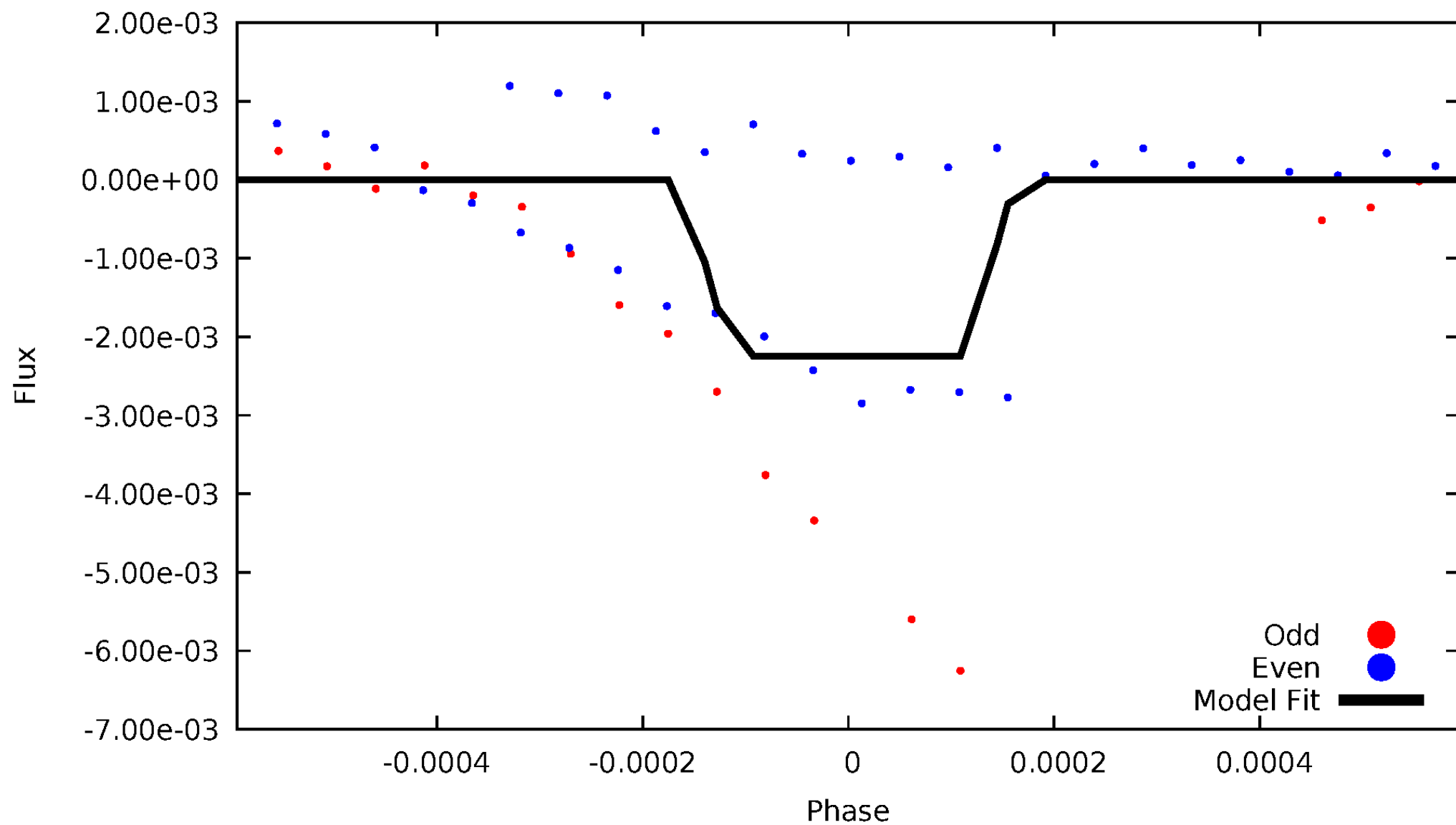
DV Odd/Even

TCE 007532973-03



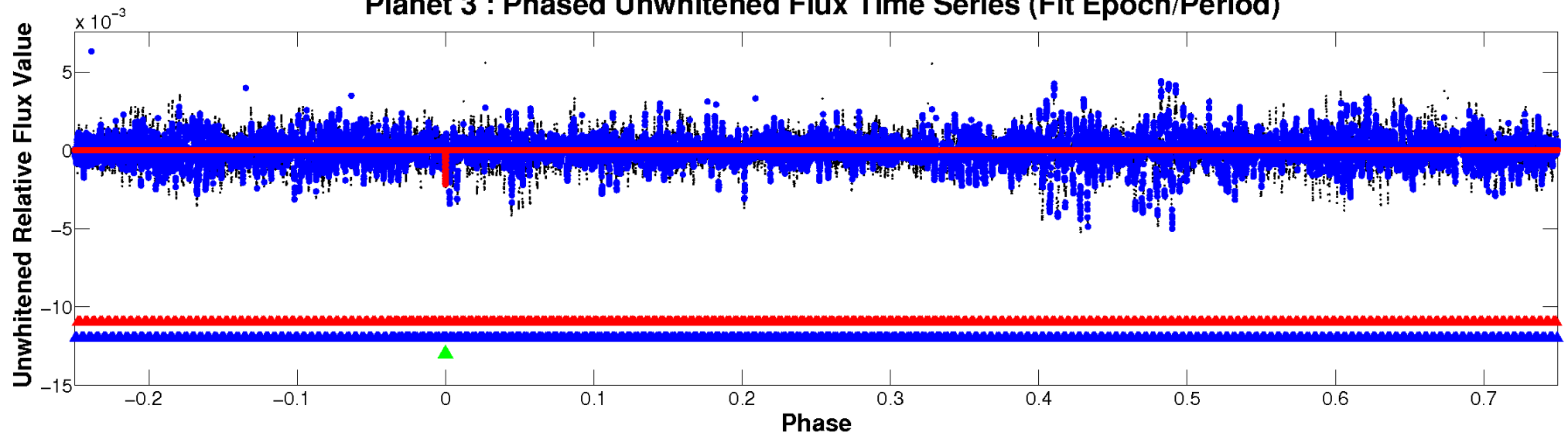
ALT Odd/Even

TCE 007532973-03

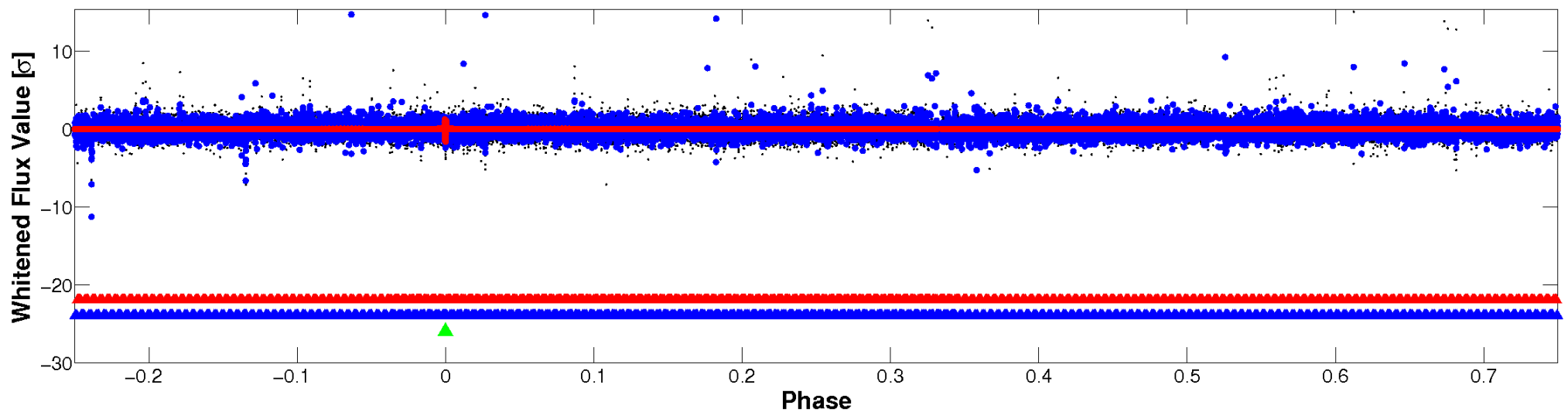


Non-Whitened Vs. Whitened Light Curve

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

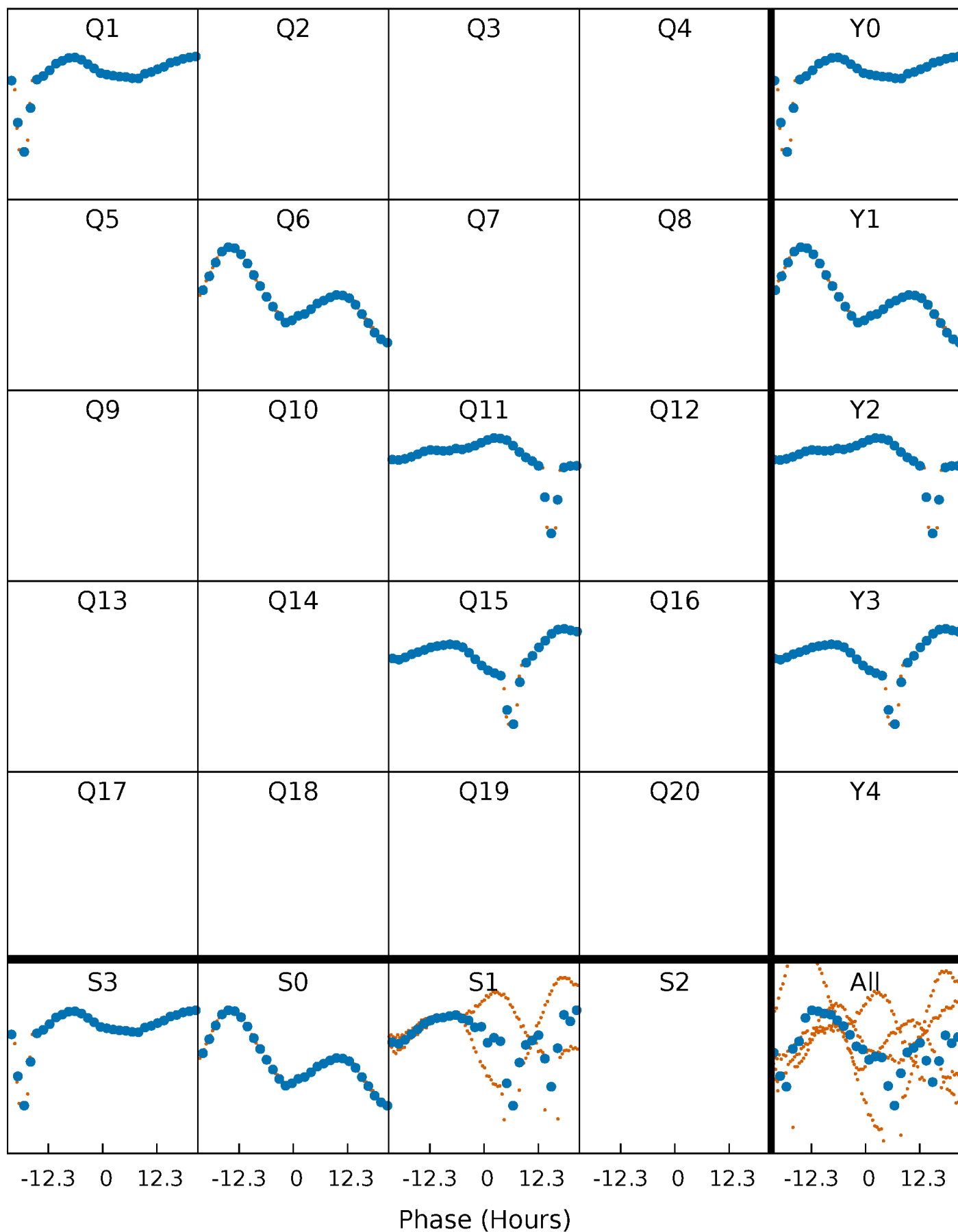


Planet 3 : Phased Whitened Flux Time Series (Fit Epoch/Period)



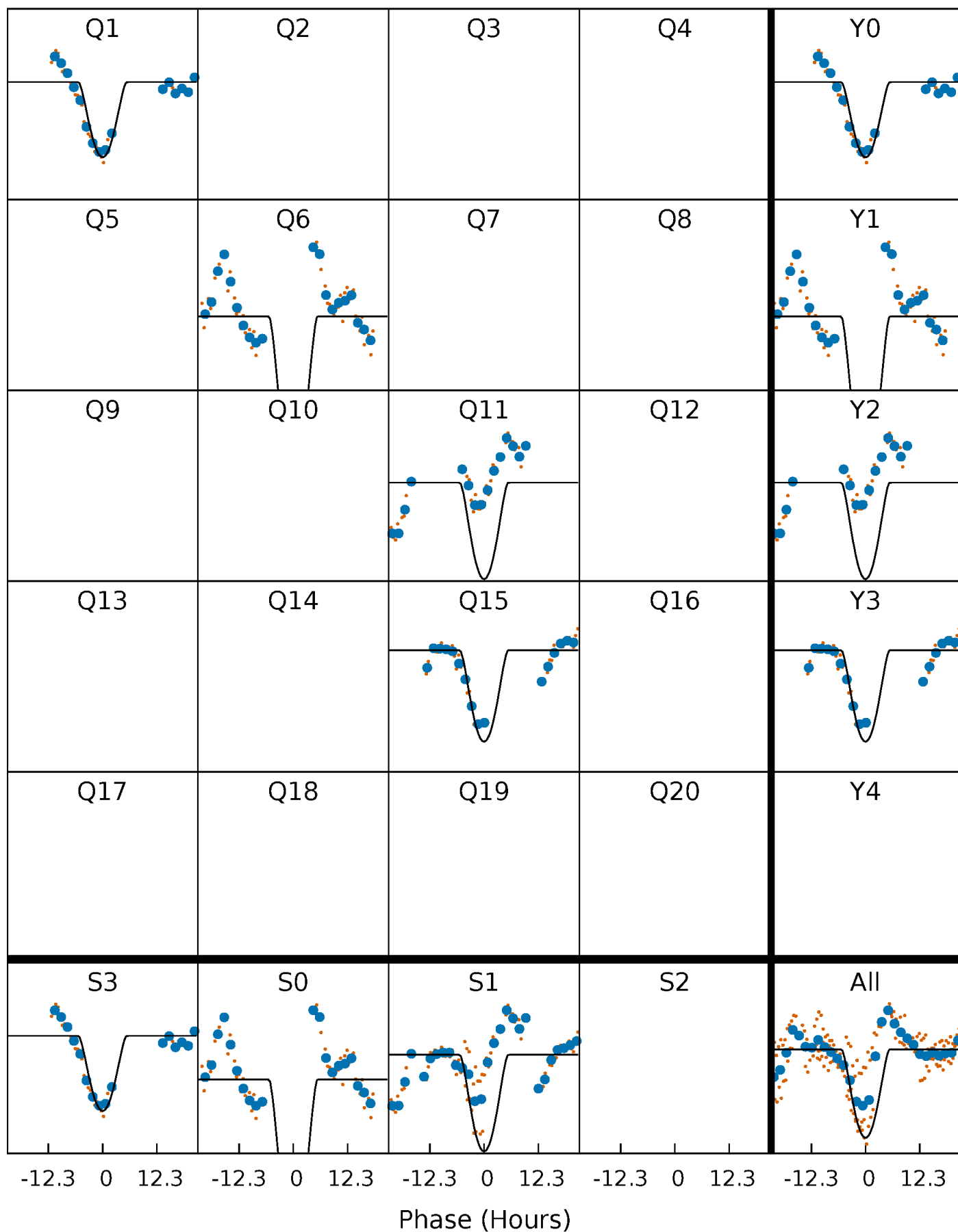
PDC Quarter-Phased Transit Curves

TCE 007532973-03 $P=431.448938$ Days $T_0=147.605667$ (BKJD)



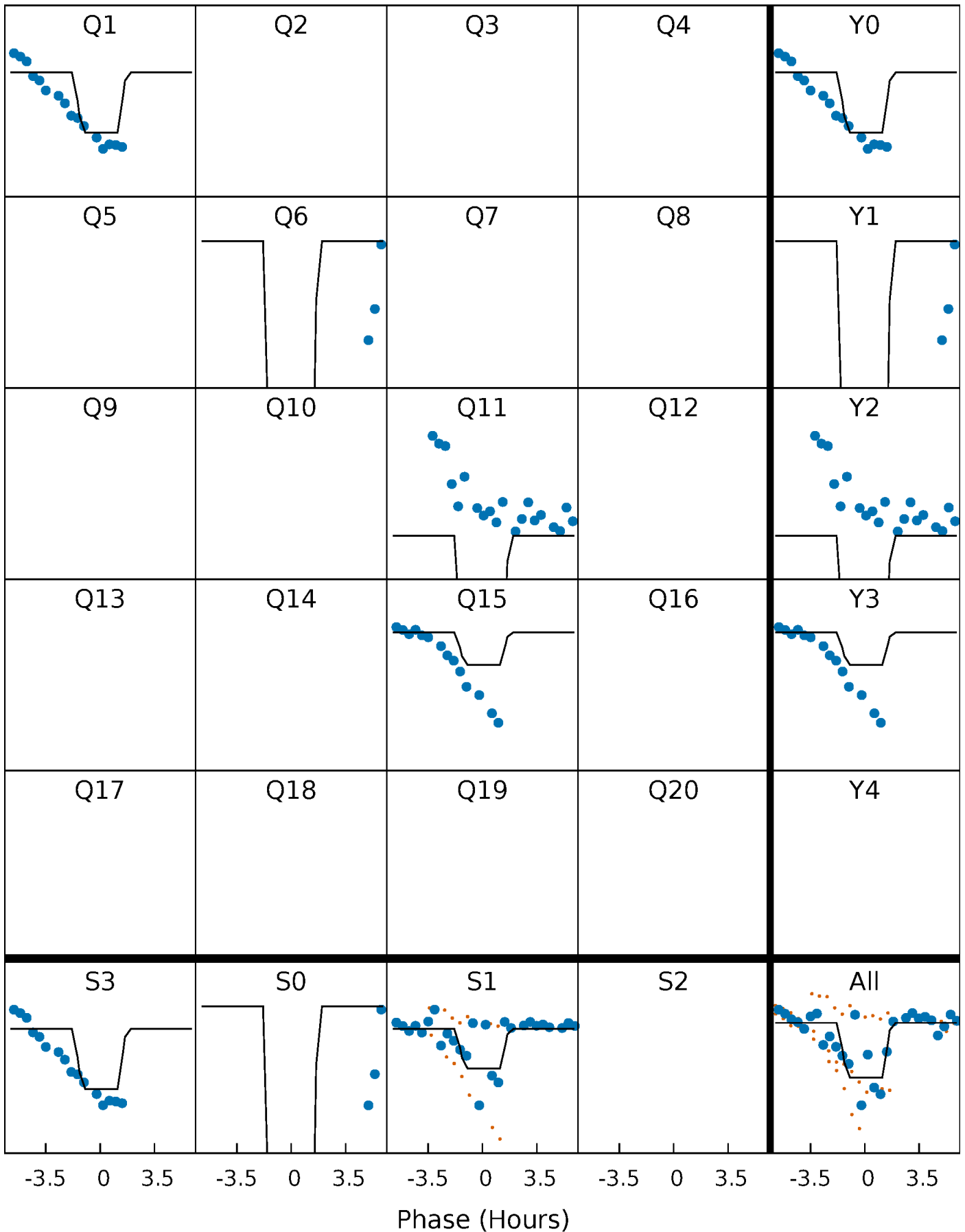
DV Quarter-Phased Transit Curves

TCE 007532973-03 $P=431.448938$ Days $T_0=147.605667$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

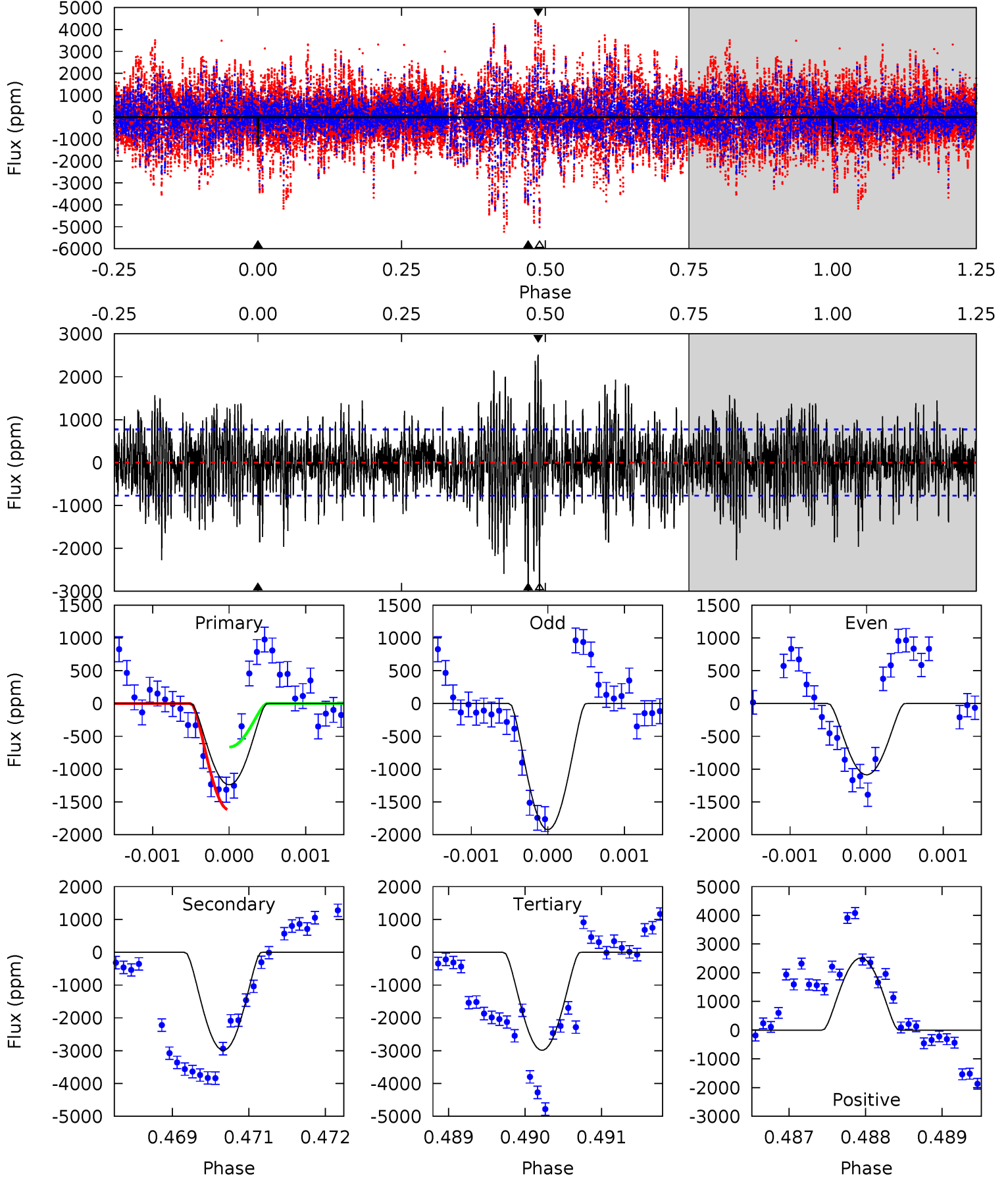
TCE 007532973-03 $P=431.427375$ Days $T_0=147.608988$ (BKJD)



DV Model-Shift Uniqueness Test

007532973-03, P = 431.448938 Days, E = 147.605667 Days

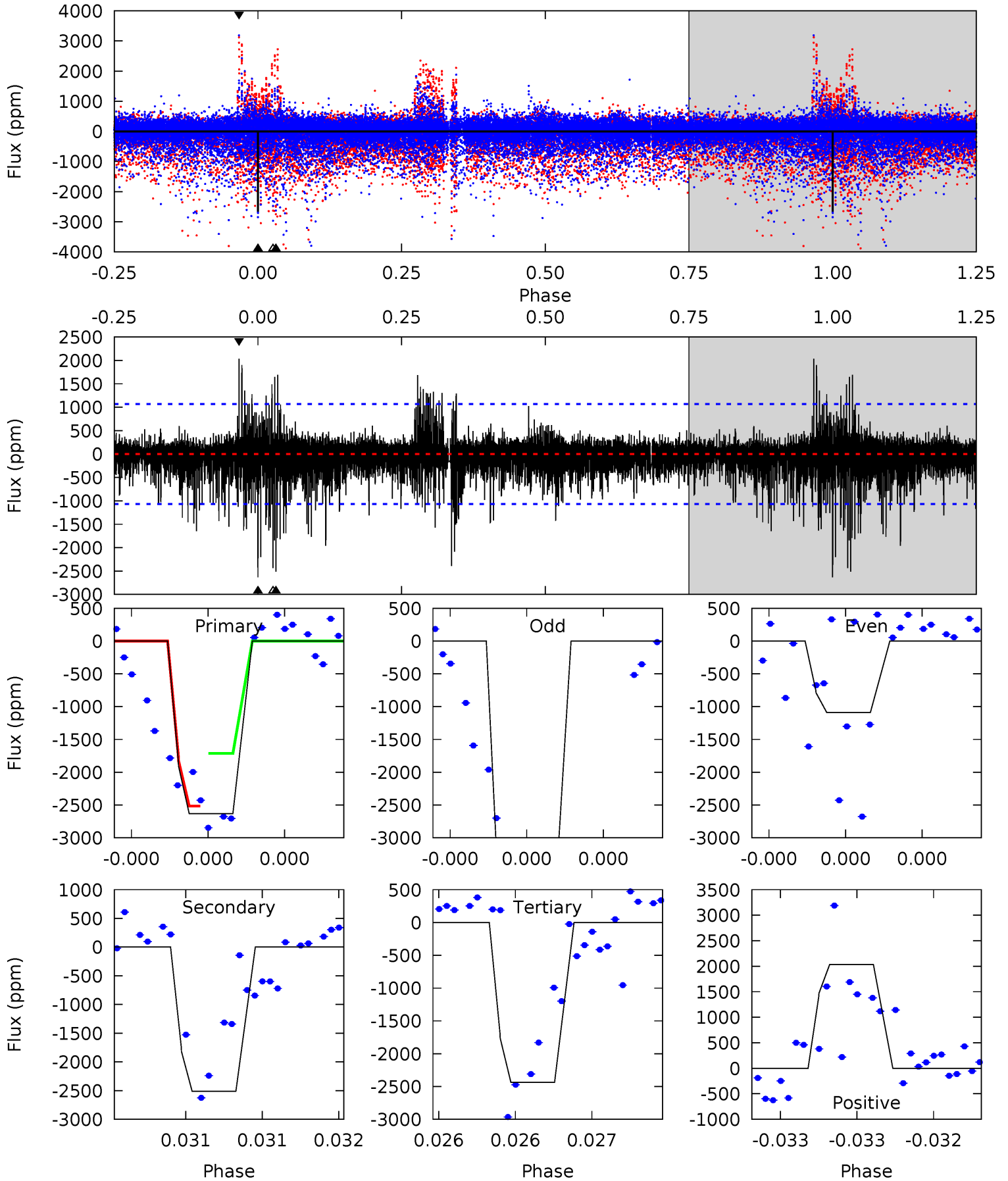
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
8.75	21.1	21.1	17.8	5.44	3.27	4.27	-12.4	-9.01	0.01	3.36	2.68	-0.34	0.46	3.31



Alt Model-Shift Uniqueness Test

007532973-03, P = 431.427375 Days, E = 147.608988 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
13.9	13.3	12.9	10.7	5.64	3.59	1.55	1.03	3.15	0.41	2.53	12.5	0.91	0.44	0



Stellar Parameters For KIC 007532973

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6296^{+175}_{-219}	$4.240^{+0.180}_{-0.180}$	$-0.160^{+0.250}_{-0.300}$	$1.305^{+0.396}_{-0.264}$	$1.076^{+0.181}_{-0.131}$	$0.683^{+0.627}_{-0.322}$
	+3%/-3%	+4%/-4%	+156%/-188%	+30%/-20%	+17%/-12%	+92%/-47%
Source	PHO1	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 007532973-03 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-2990 ± 142	$13.86^{+10.33}_{-8.65}$	412^{+32}_{-27}	4799^{+3036}_{-881}	11302^{+68282}_{-7628}
Alt.	-2513 ± 189	$10.43^{+11.01}_{-6.83}$	411^{+32}_{-29}	5226^{+3914}_{-1229}	$17149^{+123350}_{-13263}$

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 $A_{obs} \gg 1.0$

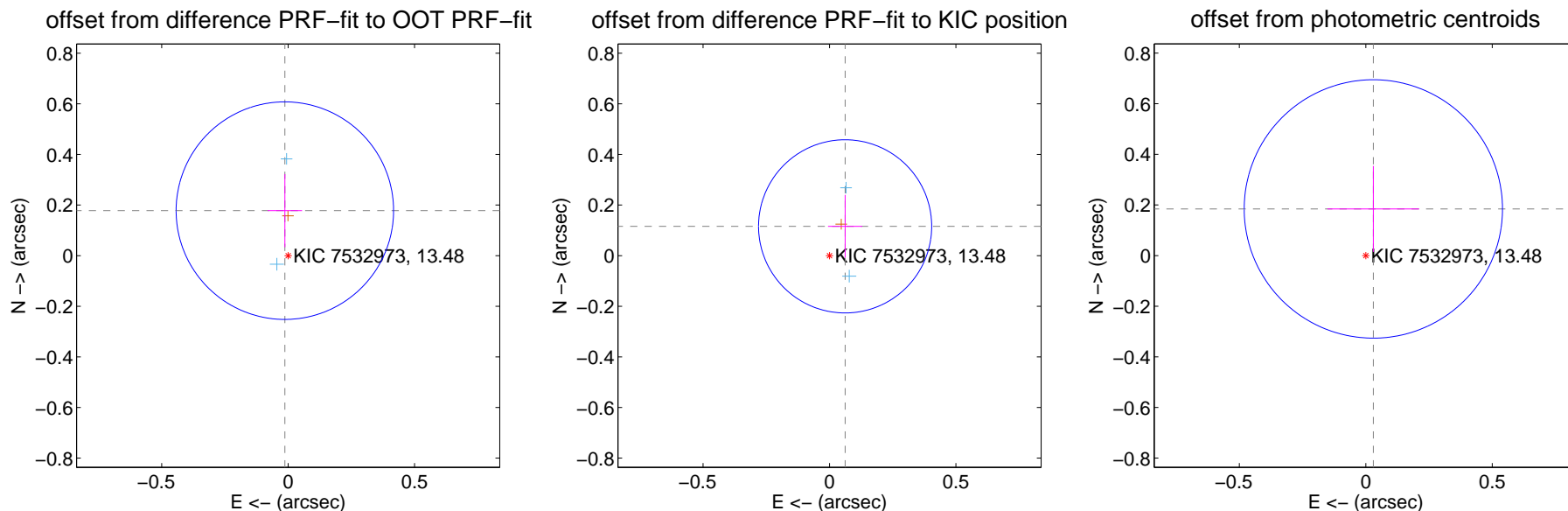
DV Centroid Data

Supplemental centroid analysis for 007532973-03. Kepler magnitude: 13.48. Transit SNR 7.80

There are 2 quarters with good PRF difference image offsets

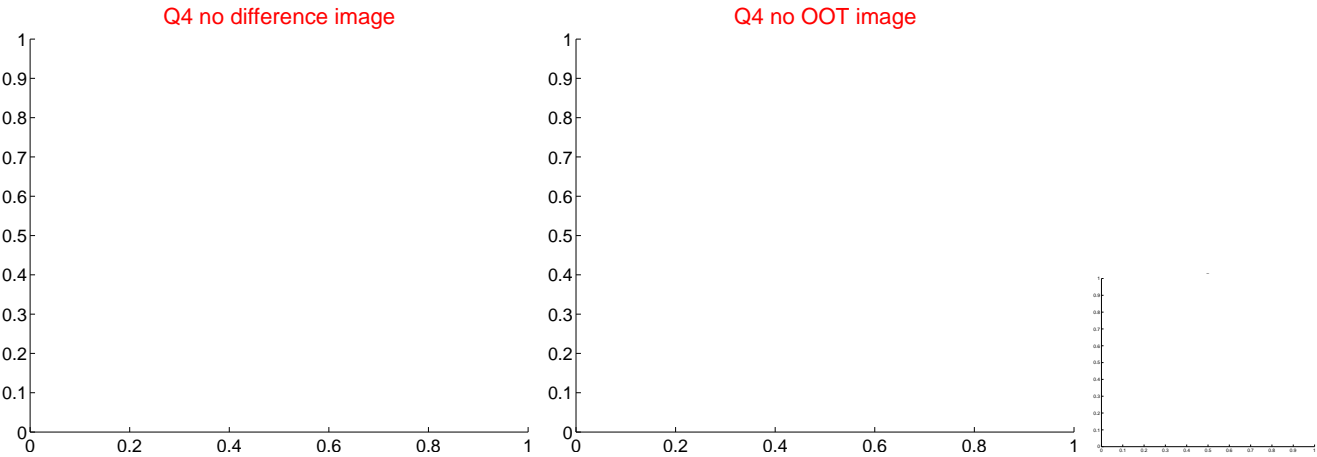
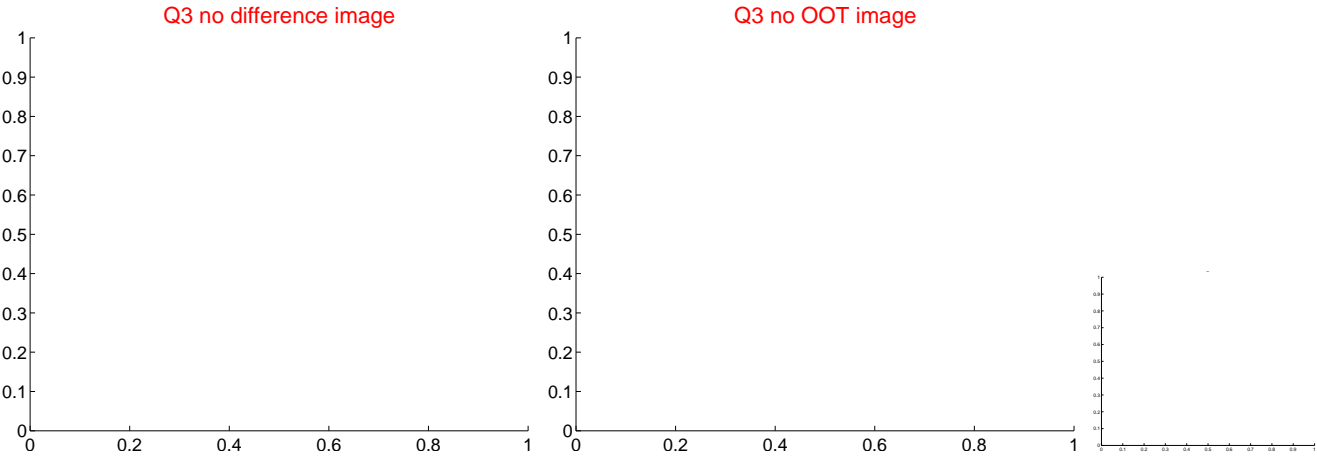
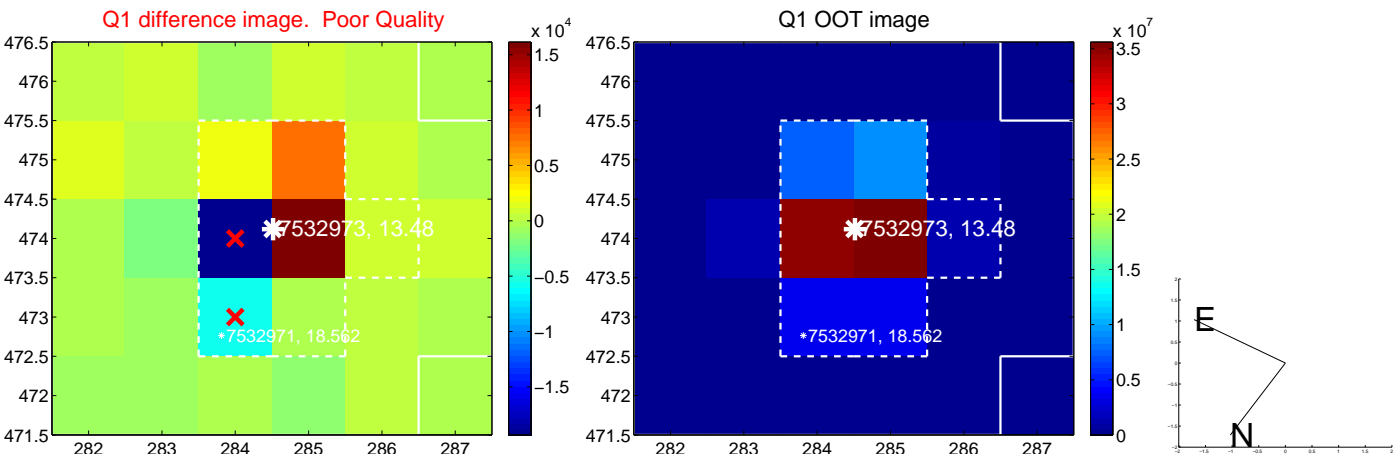
The direct PRF centroid is offset from the target star catalog position by about 0.13 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.178 ± 0.143	1.24	0.013 ± 0.068	0.178 ± 0.144
PRF-fit source offset from KIC position	0.131 ± 0.114	1.15	-0.062 ± 0.067	0.116 ± 0.124
photometric centroid source offset	0.19 ± 0.17	1.10	-0.03 ± 0.18	0.18 ± 0.17

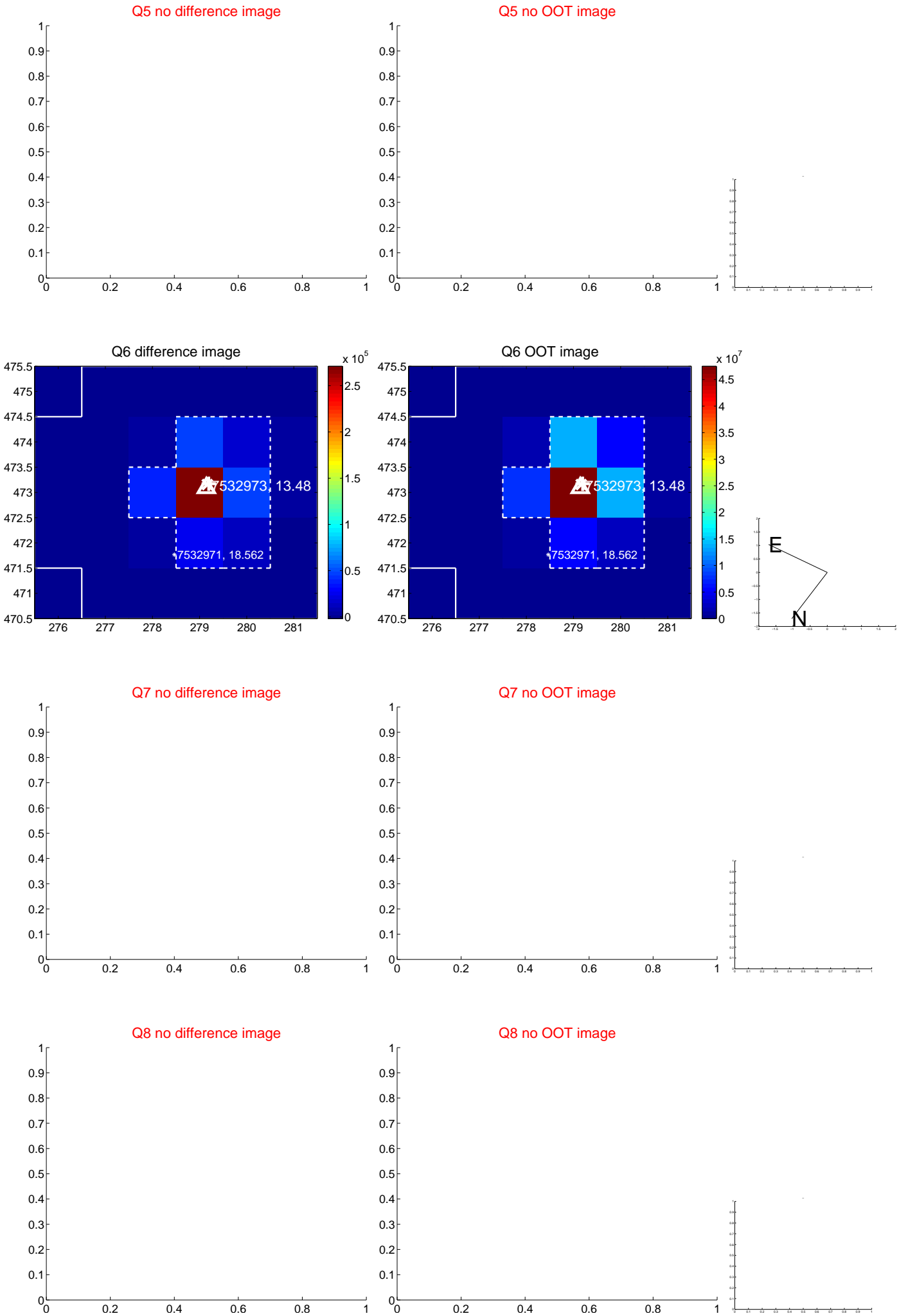


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

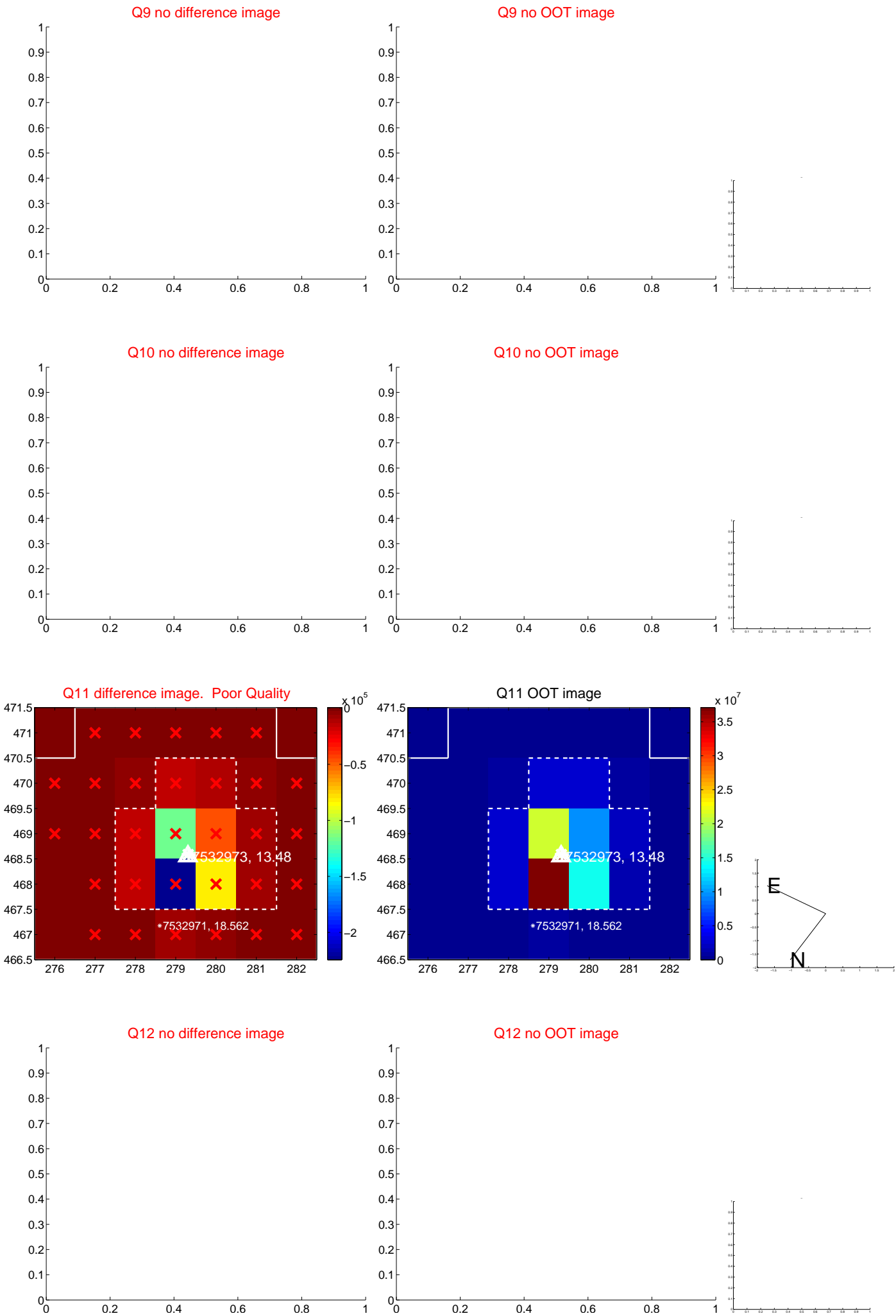
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



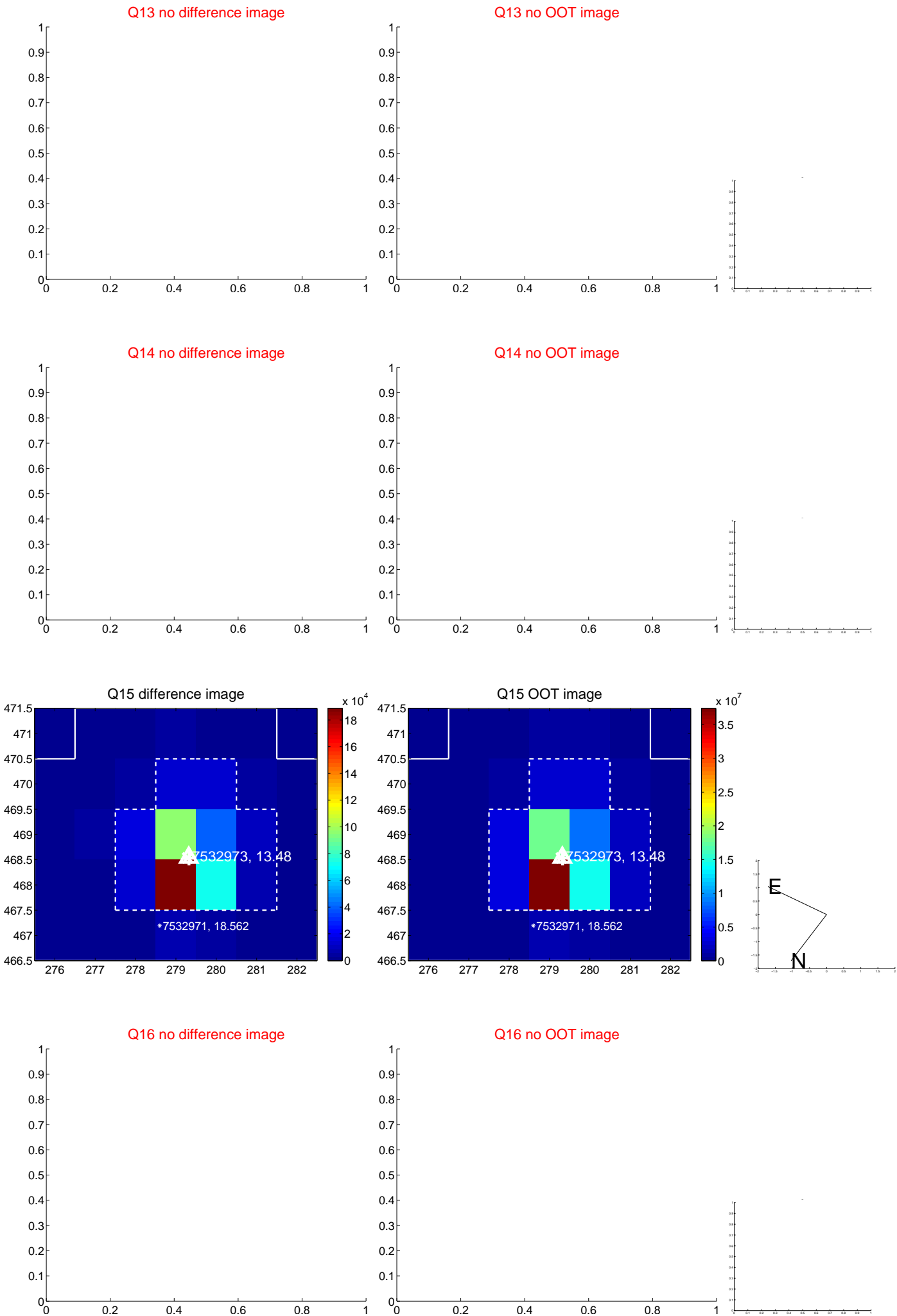
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



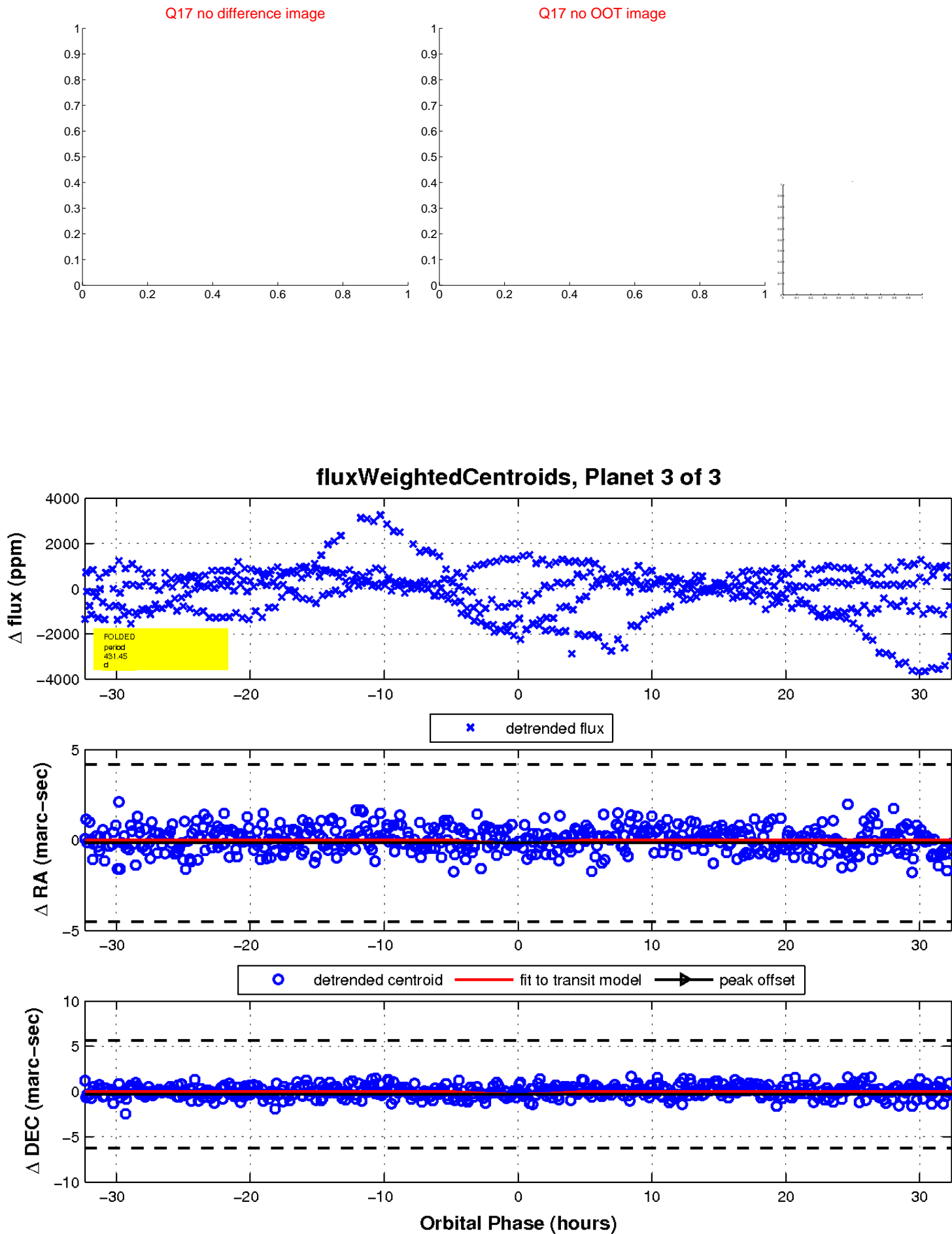
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

