

KIC 011351140

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})
011351140-01	OBS	No	169.091135	254.787206	64.3	1.954	221.3	2.7	17.46	5180	13.78	275.45
011351140-02	OBS	No	172.768694	251.227663	1292.7	1.526	55.7	16.9	17.46	5180	61.90	267.66
011351140-03	OBS	No	338.178180	254.450806	713.7	3.000	37.1	-1.0	17.46	5180	45.92	109.32

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
011351140-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_MARSHALL_SKYE_ZUMA—LPP_DV—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—INCONSISTENT_TRANS—CENT_SATURATED
011351140-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_MARSHALL_ZUMA—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—INCONSISTENT_TRANS—CENT_SATURATED
011351140-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_MARSHALL_ZUMA—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—INCONSISTENT_TRANS—SAME_NTL_PERIOD—CENT_SATURATED

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

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

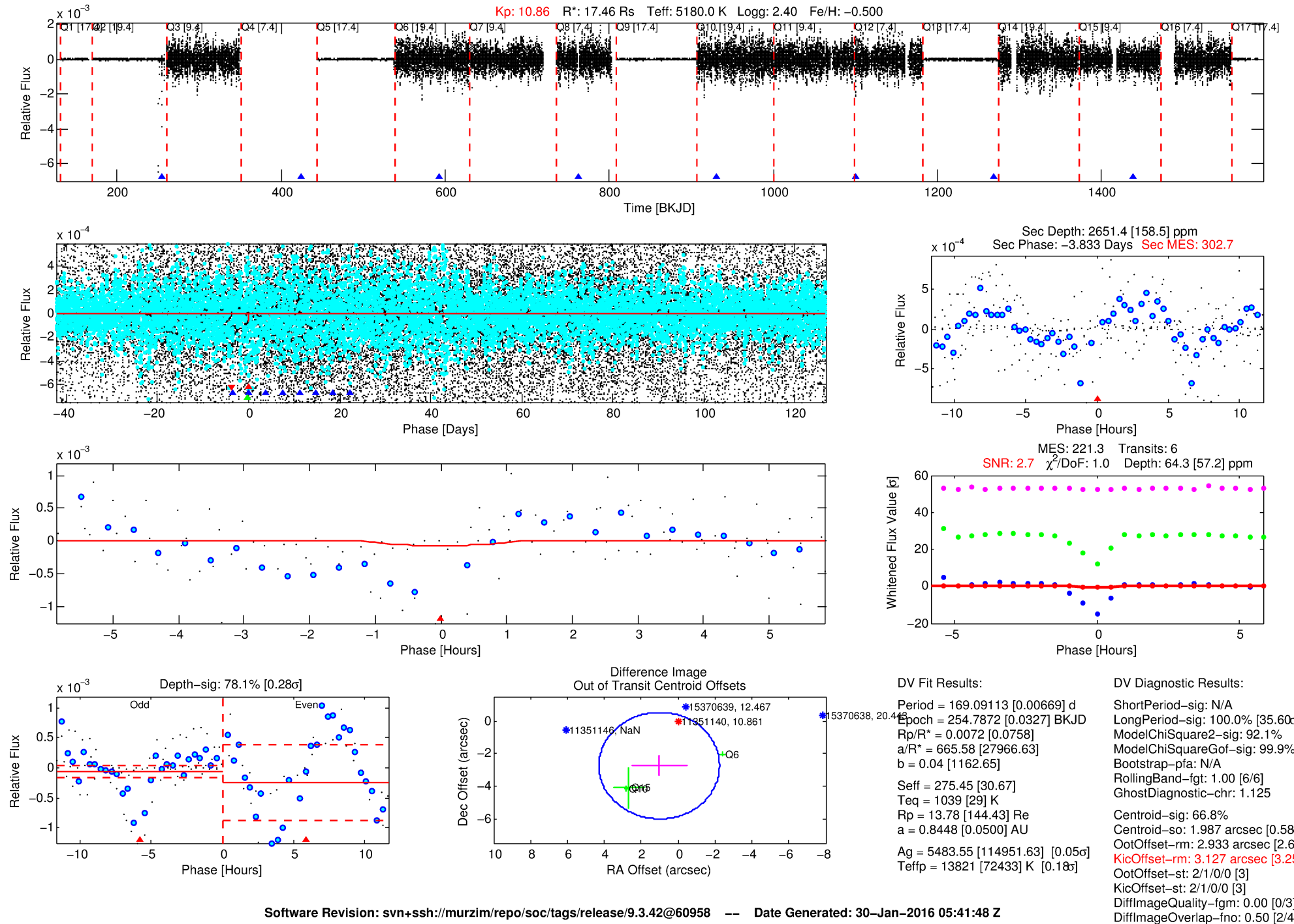
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 011351140-01

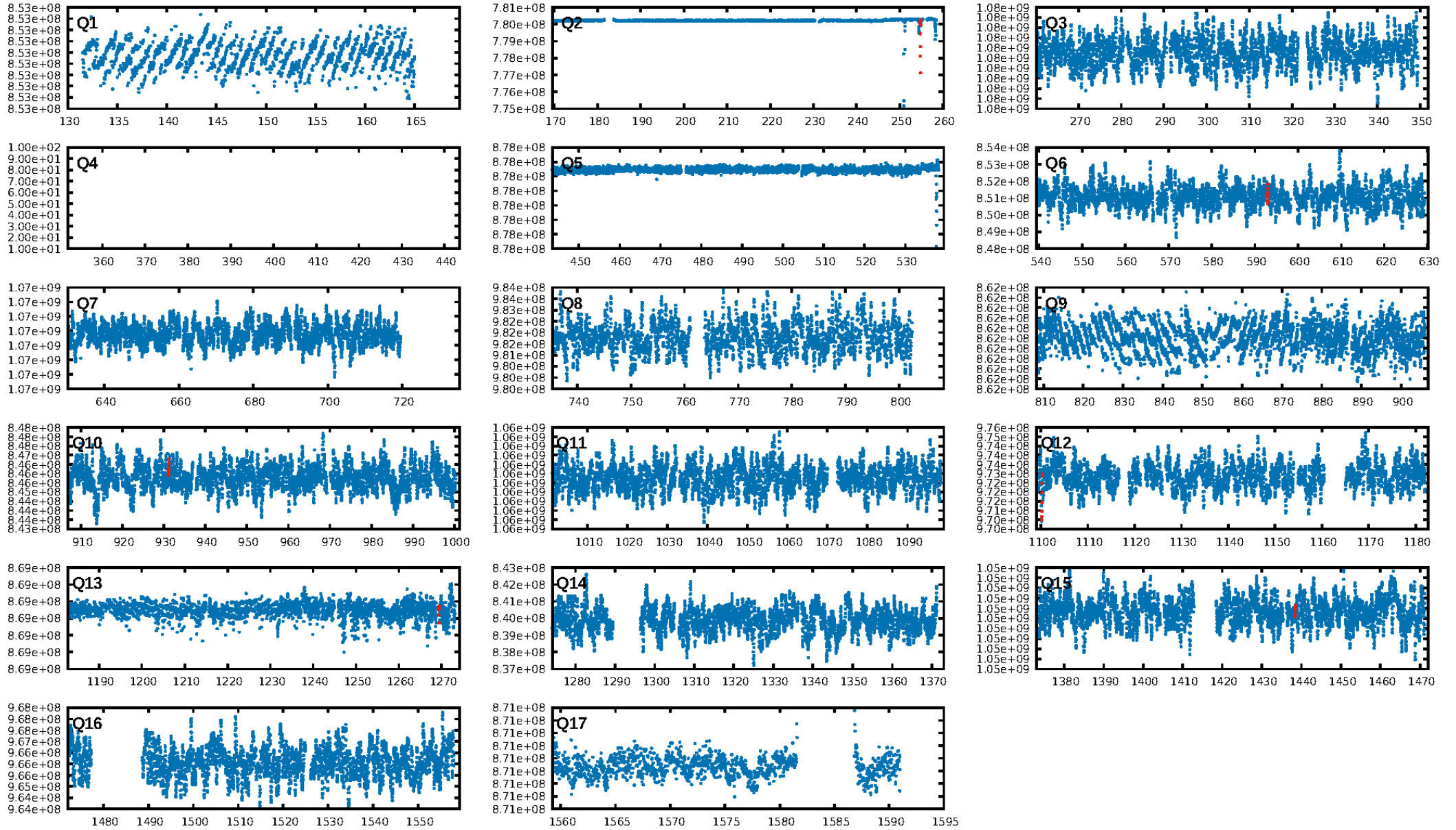
No Significant Match Found

DV One-Page Summary

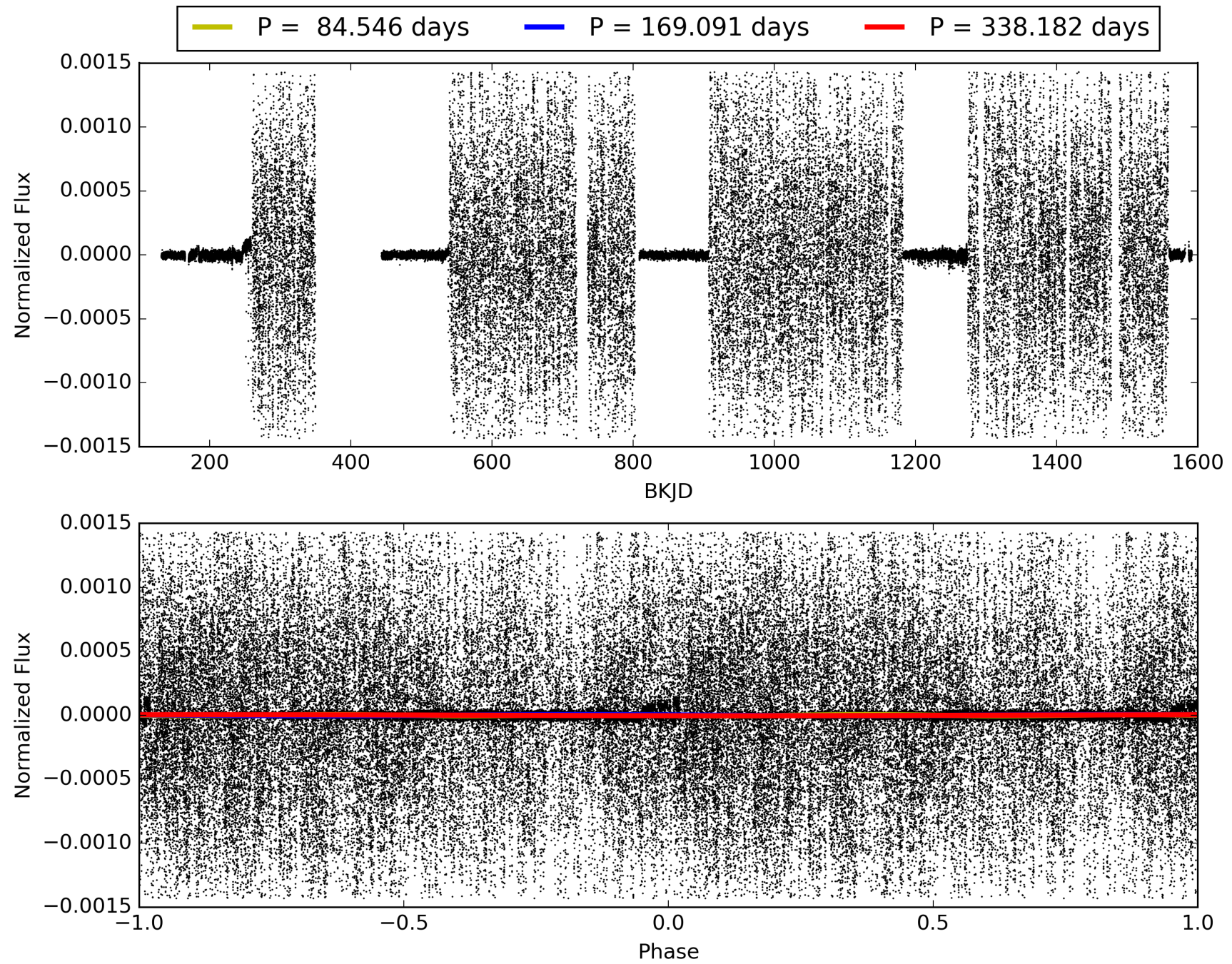
KIC: 11351140 Candidate: 1 of 3 Period: 169.091 d



TCE 011351140-01, PDC Light Curves

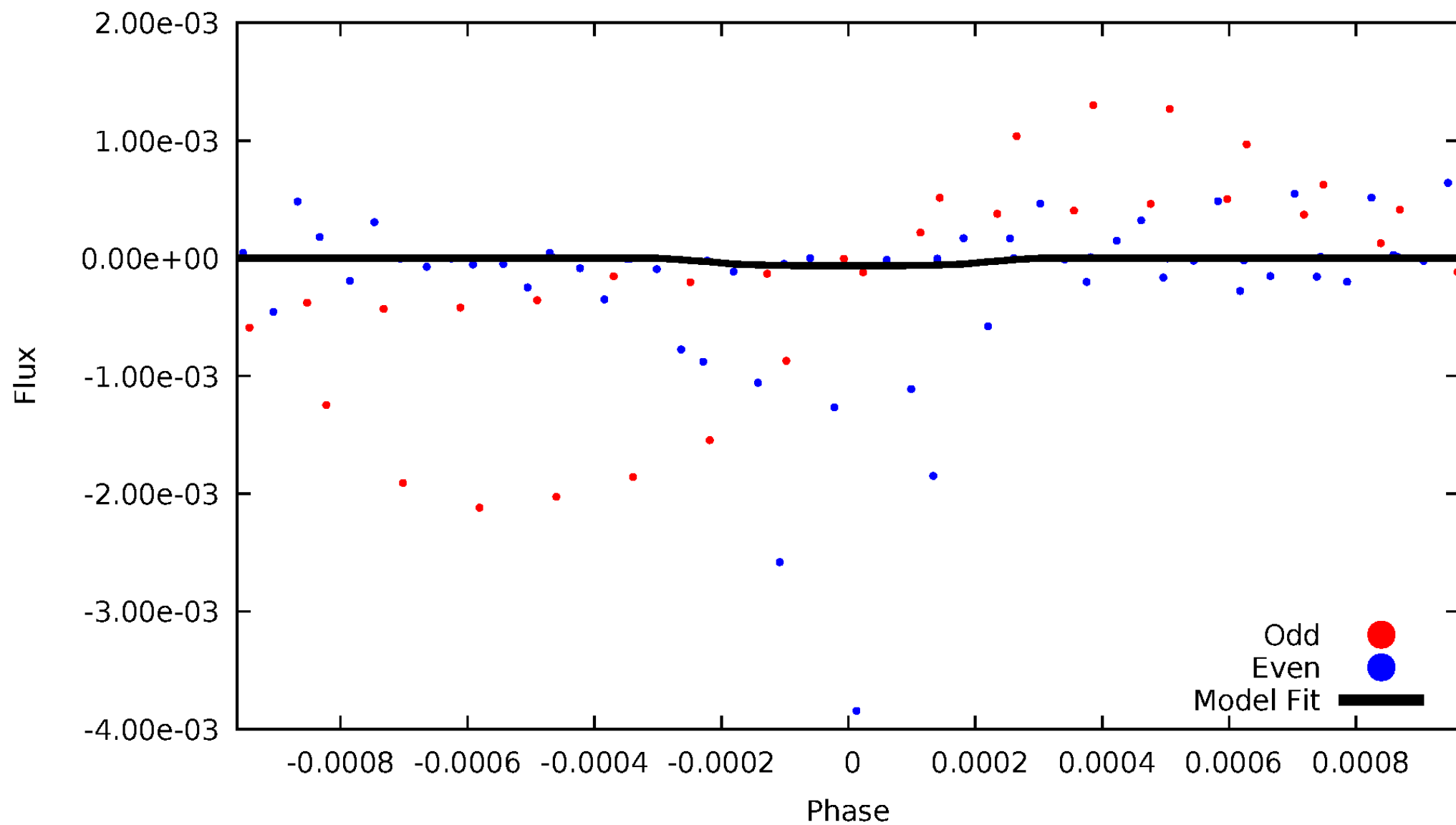


TCE 011351140-01



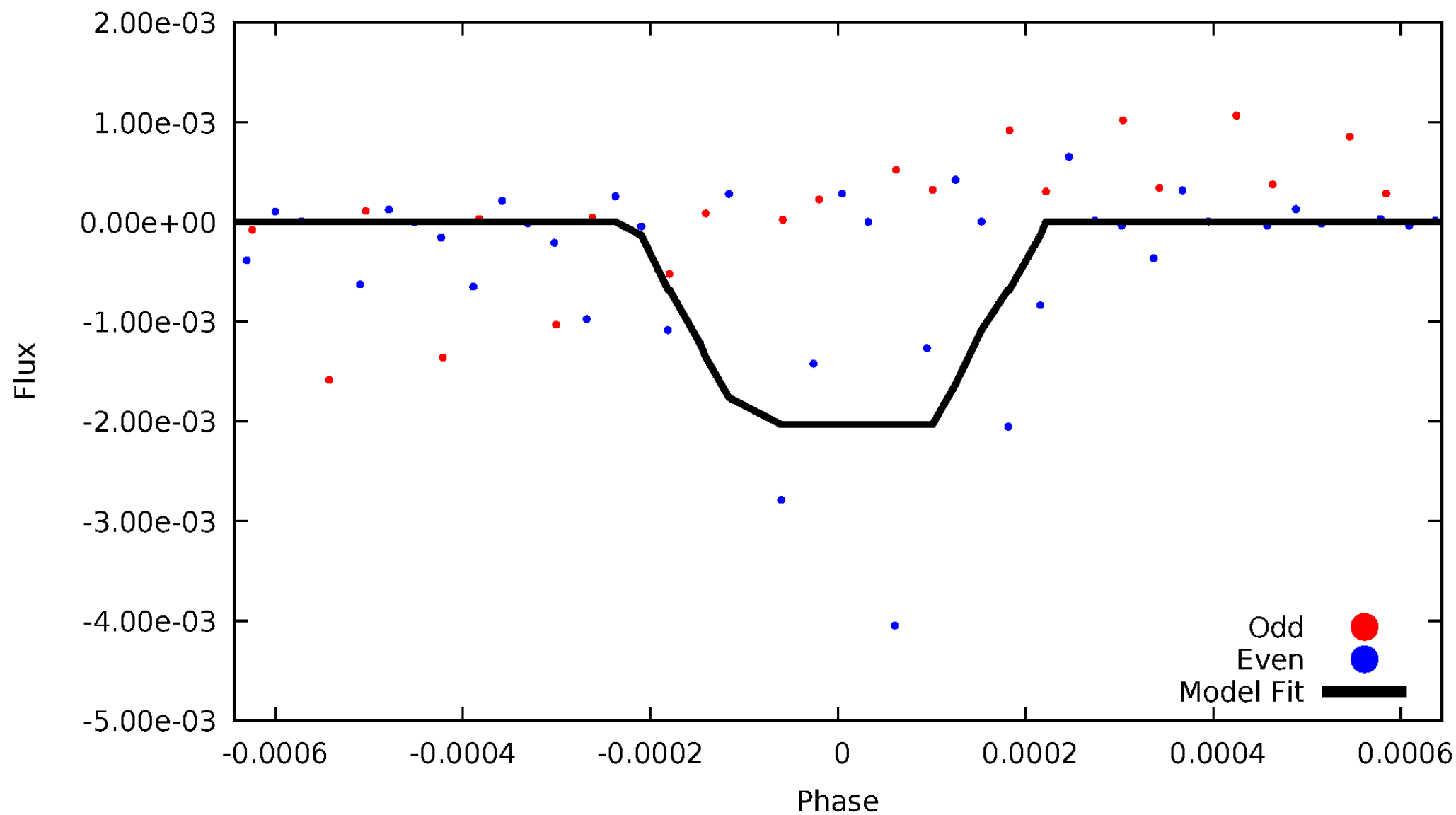
DV Odd/Even

TCE 011351140-01



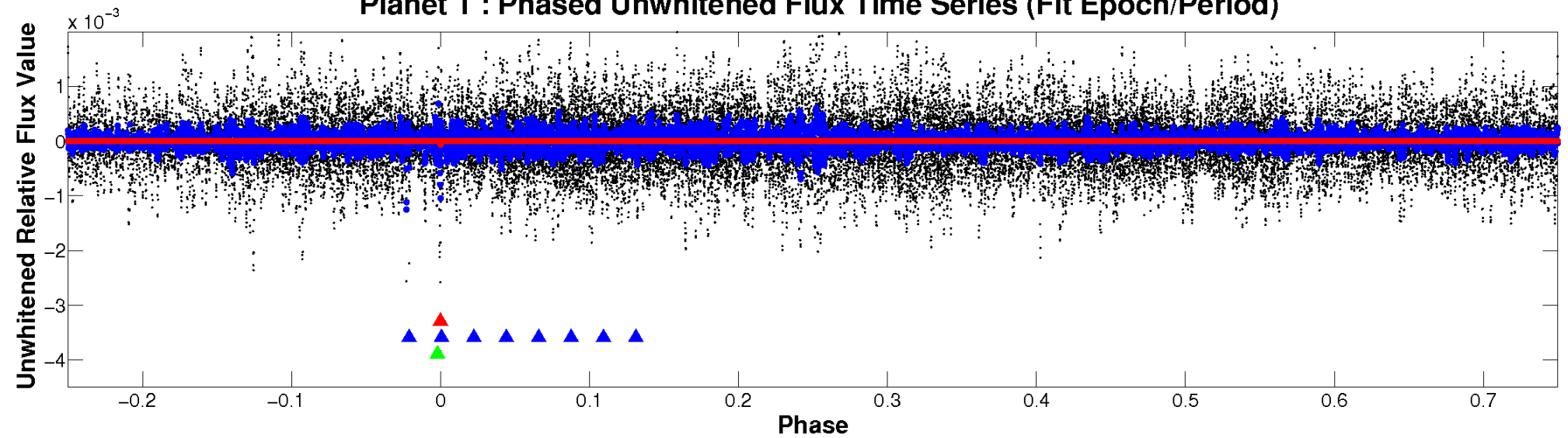
ALT Odd/Even

TCE 011351140-01

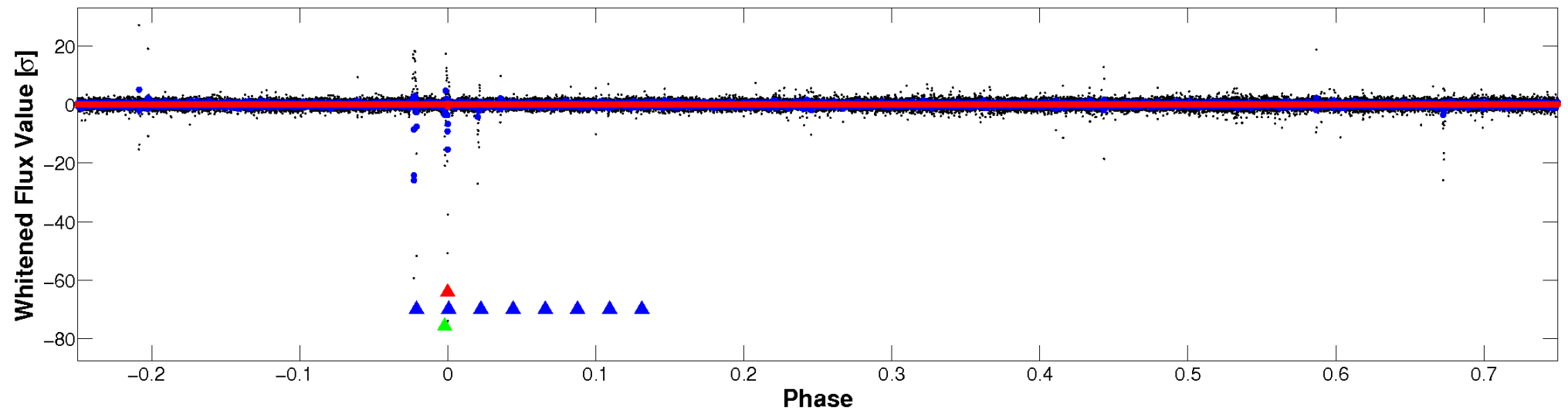


Non-Whitened Vs. Whitened Light Curve

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

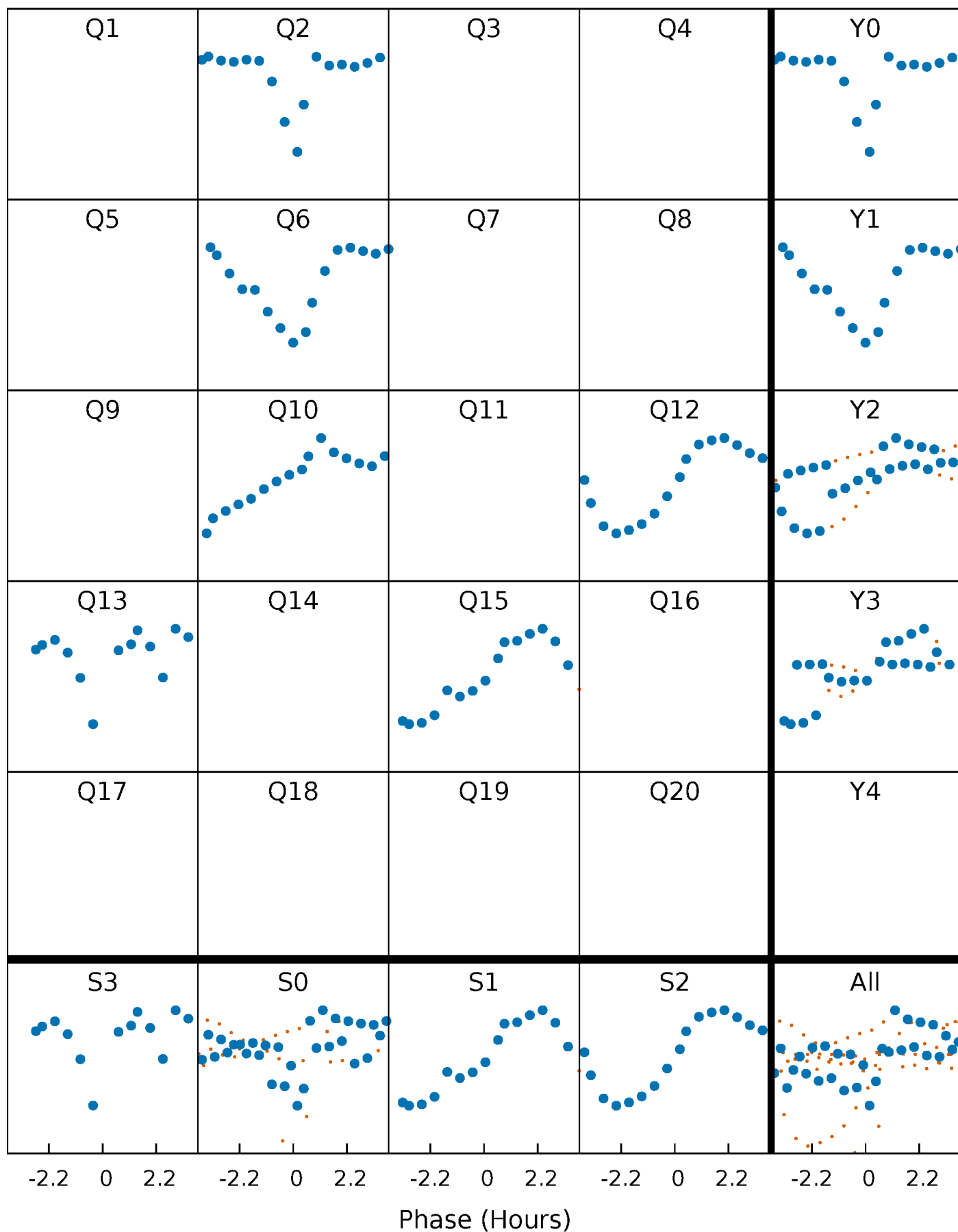


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



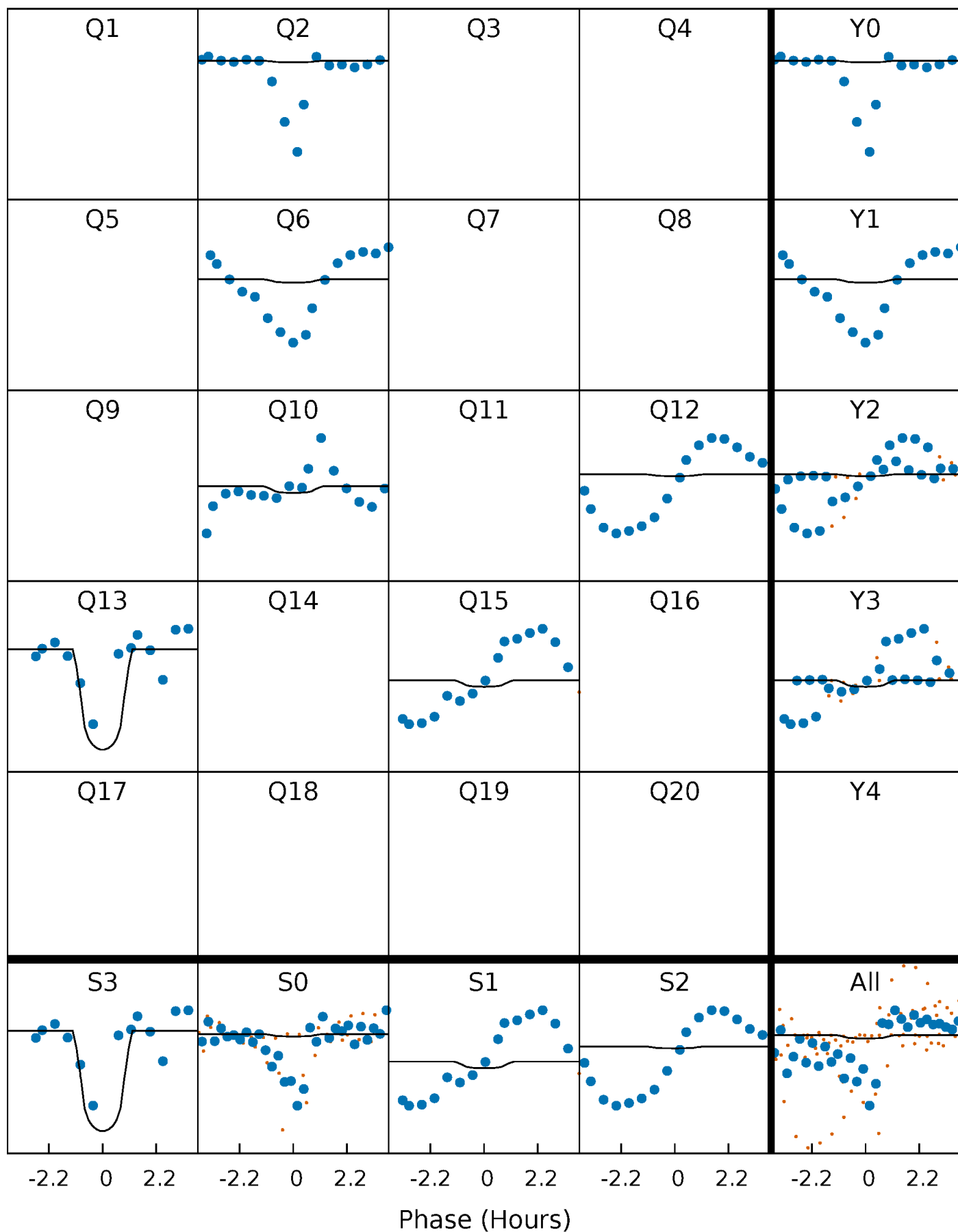
PDC Quarter-Phased Transit Curves

TCE 011351140-01 P=169.091135 Days $T_0=254.787206$ (BKJD)



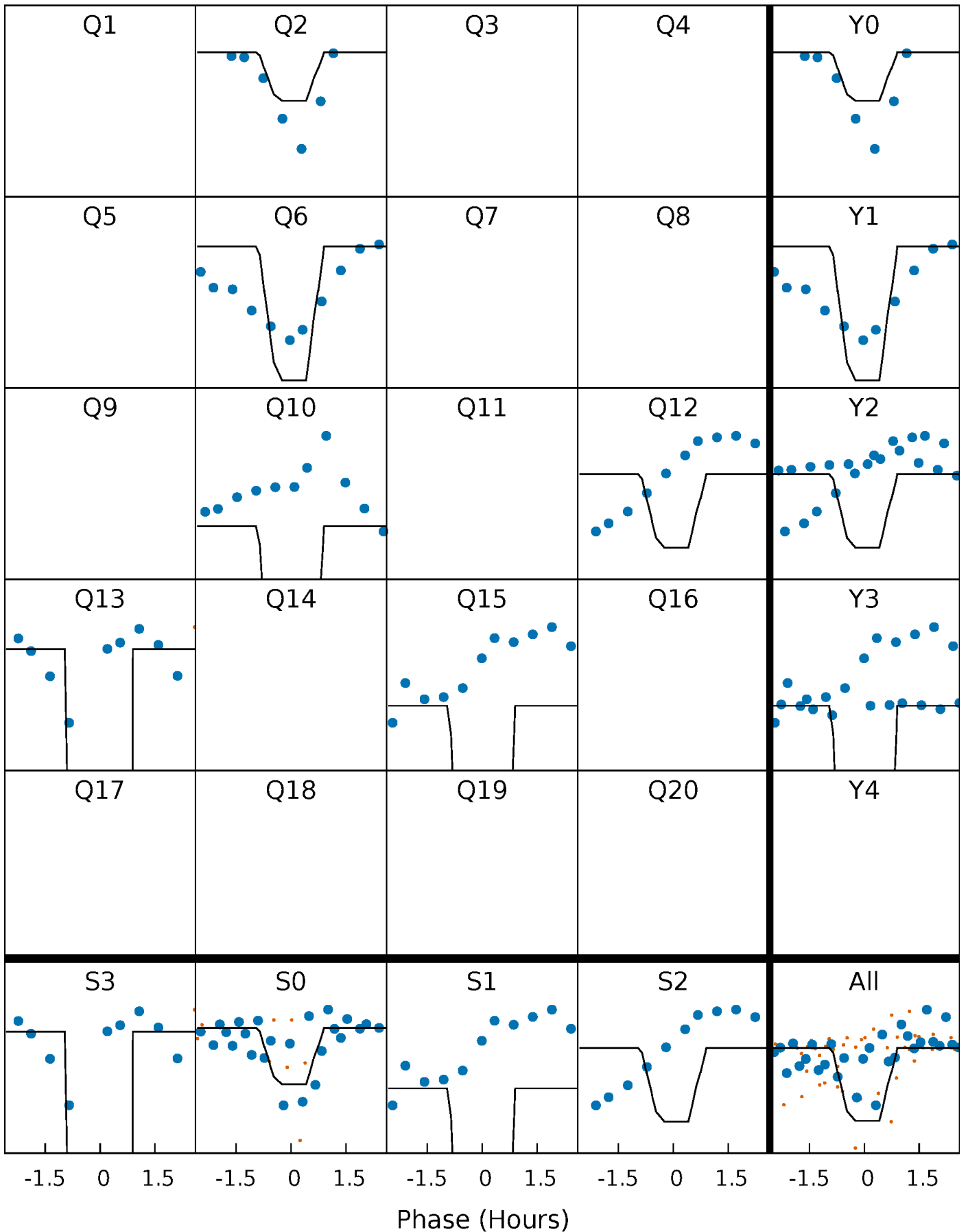
DV Quarter-Phased Transit Curves

TCE 011351140-01 P=169.091135 Days $T_0=254.787206$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

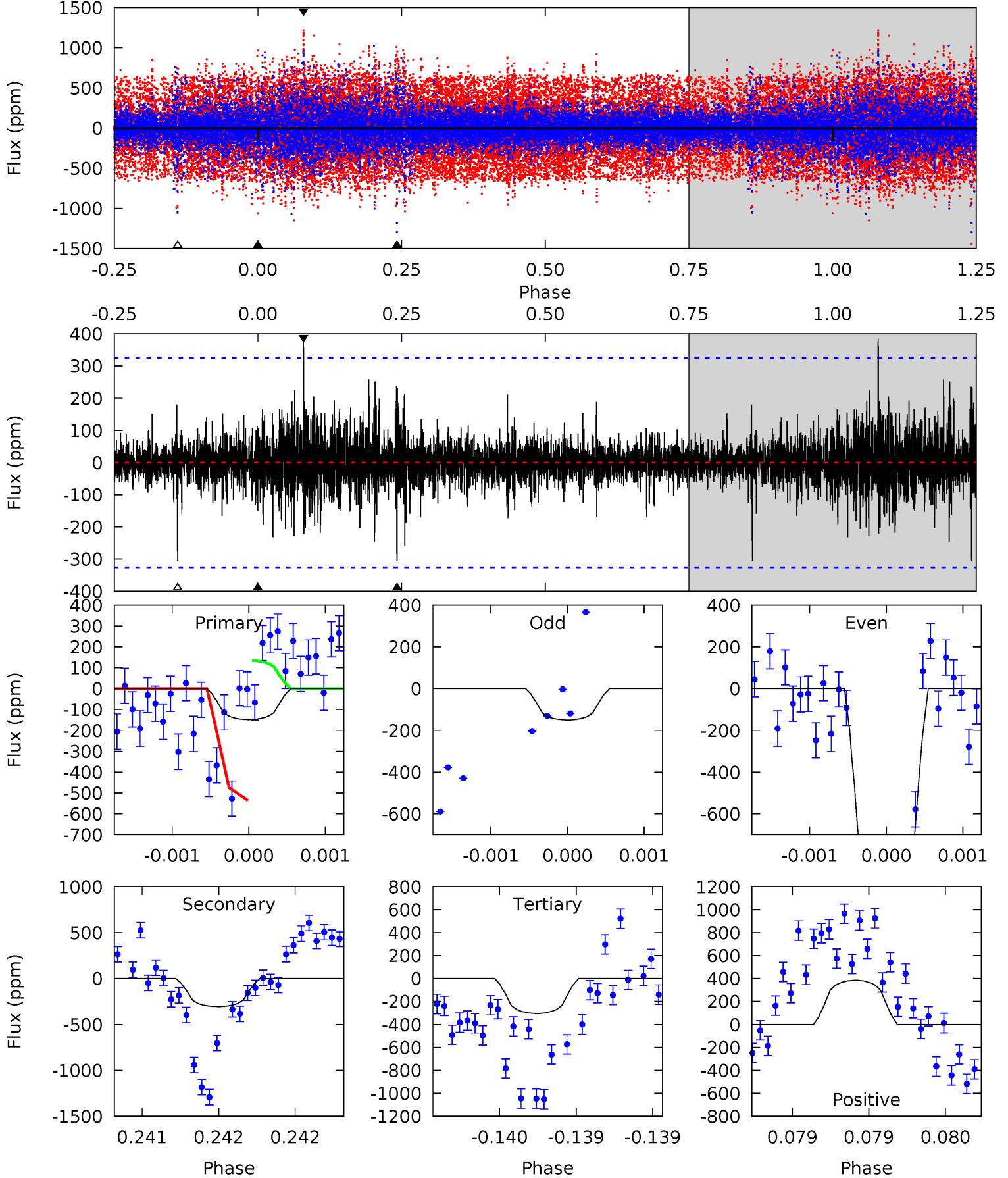
TCE 011351140-01 P=169.095514 Days $T_0=254.779186$ (BKJD)



DV Model-Shift Uniqueness Test

011351140-01, $P = 169.091135$ Days, $E = 85.696071$ Days

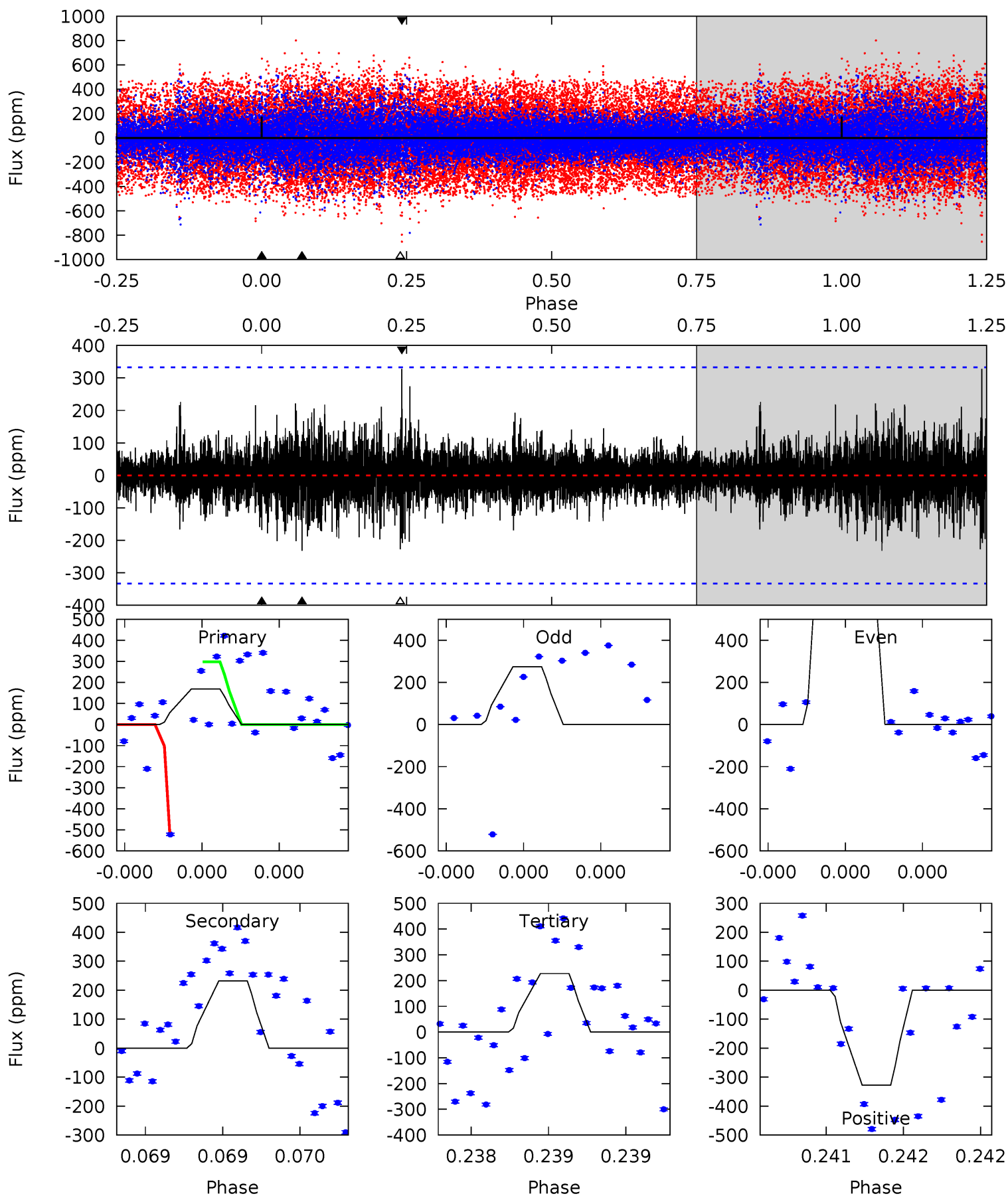
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
2.54	5.22	5.20	6.57	5.56	3.45	0.87	-2.66	-4.03	0.02	-1.35	6.86	3.79	0.56	3.17



Alt Model-Shift Uniqueness Test

011351140-01, P = 169.095514 Days, E = 85.683672 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
2.83	3.90	3.82	5.51	5.60	3.52	0.79	-0.99	-2.67	0.08	-1.61	11.6	-5.54	0.59	0



Stellar Parameters For KIC 011351140

	$T_{\text{eff}}(K)$	$\log(g)$	$[\text{Fe}/\text{H}]$	R (R_{\odot})	M (M_{\odot})	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	5180^{+102}_{-102}	$2.403^{+0.039}_{-0.032}$	$-0.500^{+0.050}_{-0.200}$	$17.458^{+1.029}_{-1.338}$	$2.810^{+0.095}_{-0.265}$	$0.001^{+0.000}_{-0.000}$
	+2%/-2%	+2%/-1%	+10%/-40%	+6%/-8%	+3%/-9%	+18%/-12%
Source	PHO55	AST55	SPE55	DSEP		

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

Secondary Eclipse Parameters for KIC 011351140-01 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-306 ± 59	$103.57^{+102.53}_{-71.05}$	1451^{+34}_{-37}	3384^{+1909}_{-636}	11^{+102}_{-8}
Alt.	-232 ± 59	$135.60^{+122.81}_{-89.62}$	1449^{+38}_{-36}	3001^{+1239}_{-565}	$4.900^{+34.711}_{-3.651}$

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

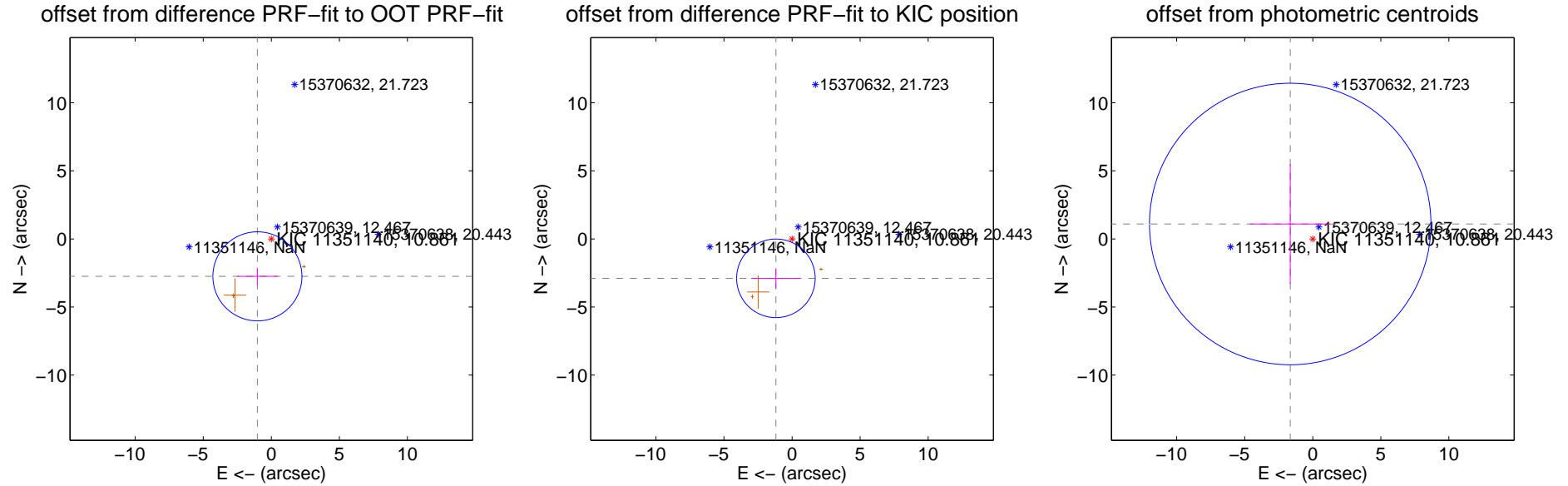
DV Centroid Data

Supplemental centroid analysis for 011351140-01. **Kepler magnitude: 10.86.** Transit SNR 2.75

There are 0 quarters with good PRF difference image offsets

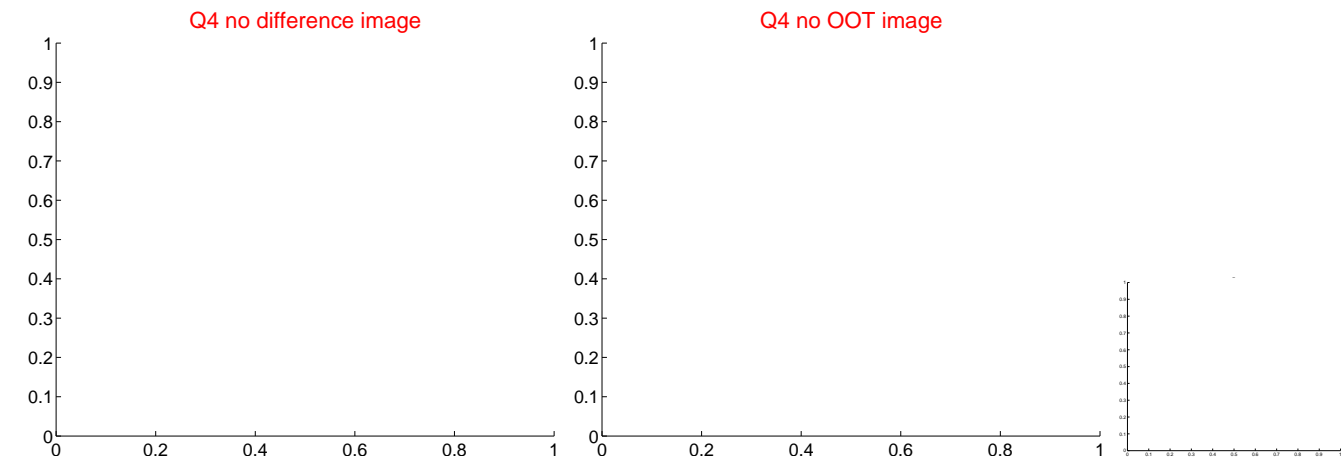
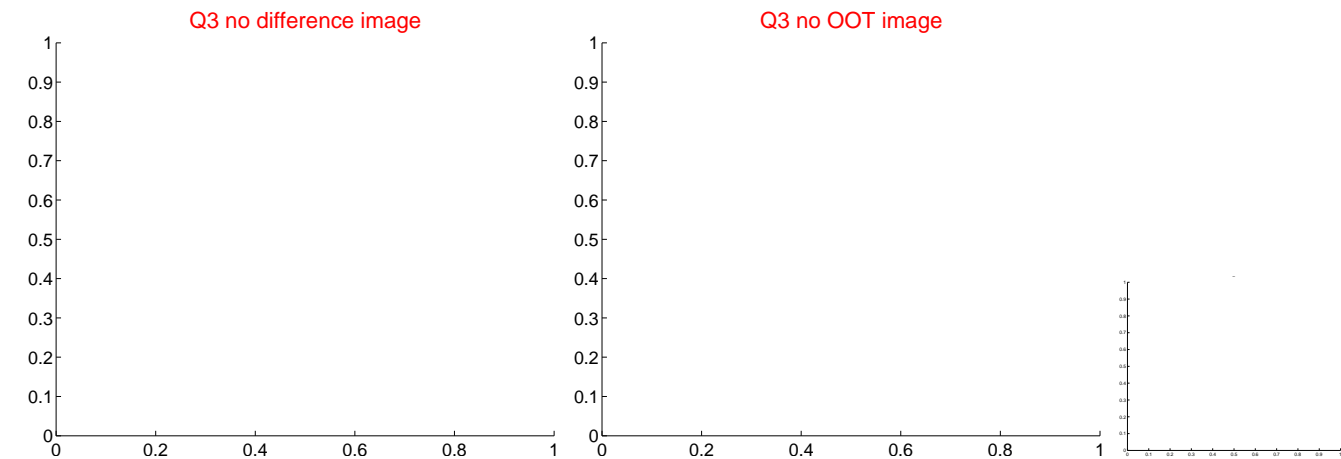
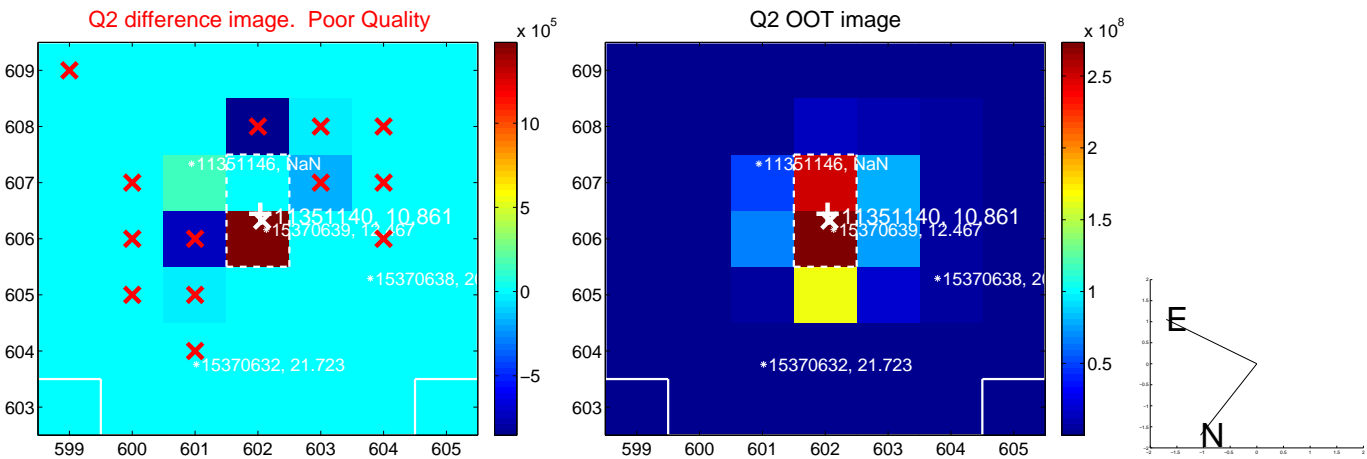
The direct PRF centroid is offset from the target star catalog position by about 0.29 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	2.933 ± 1.091	2.69	1.022 ± 1.484	-2.749 ± 0.614
PRF-fit source offset from KIC position	3.127 ± 0.962	3.25	1.186 ± 1.817	-2.893 ± 0.726
photometric centroid source offset	1.99 ± 3.45	0.58	1.66 ± 2.94	1.10 ± 4.40

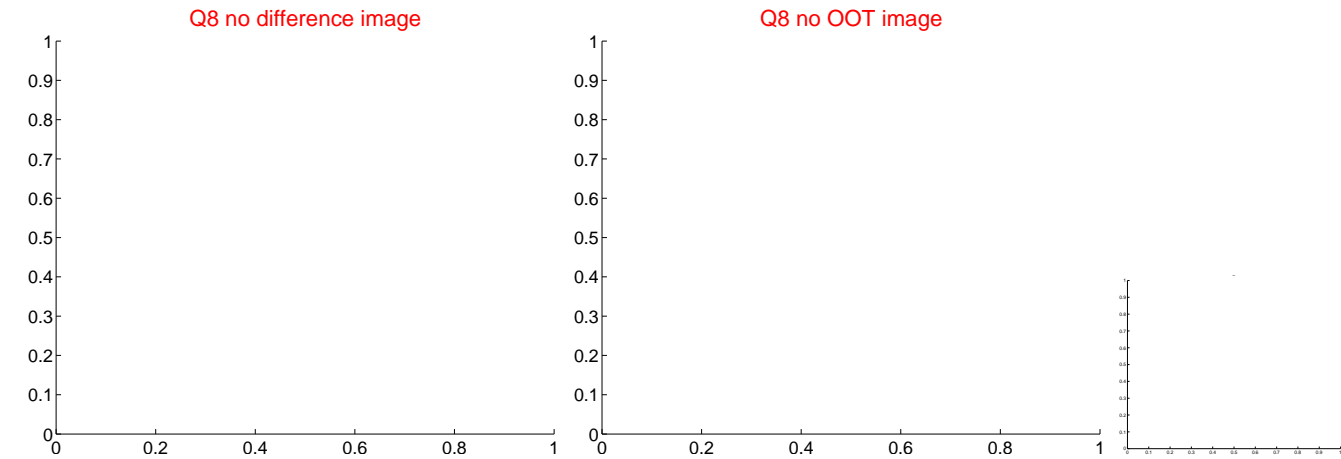
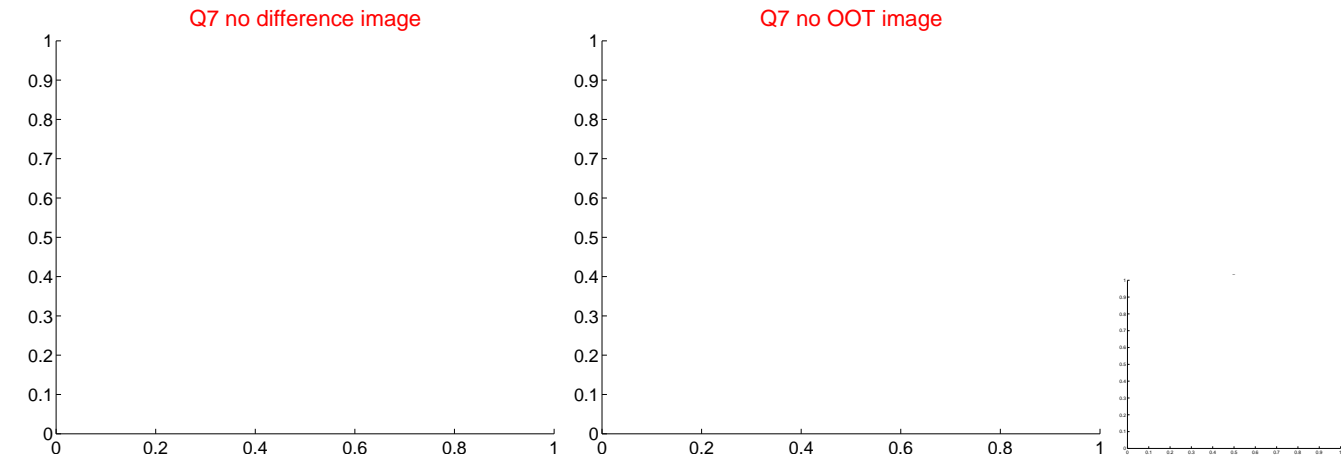
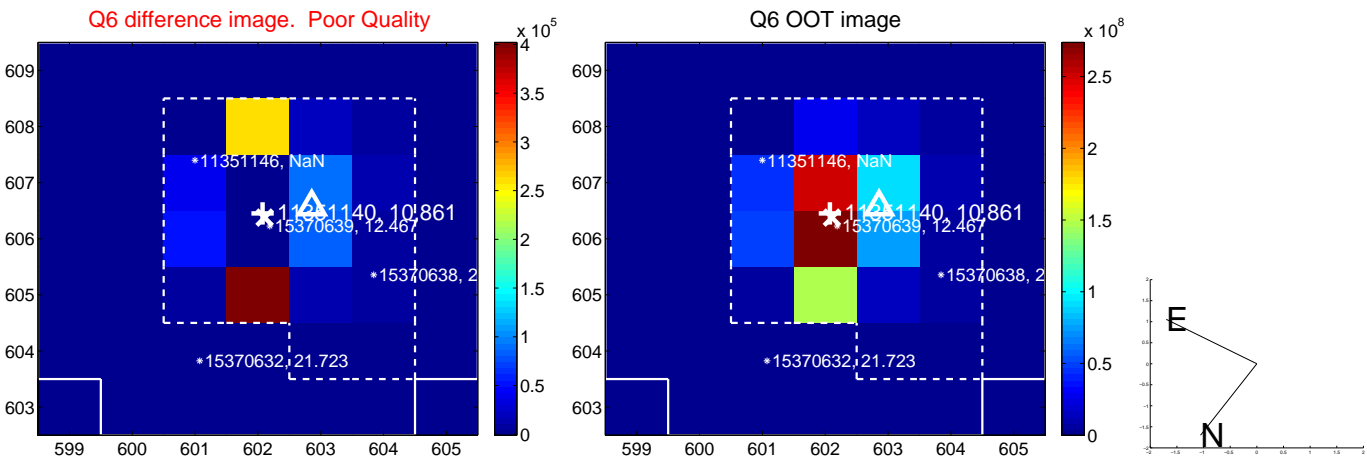


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets;** magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

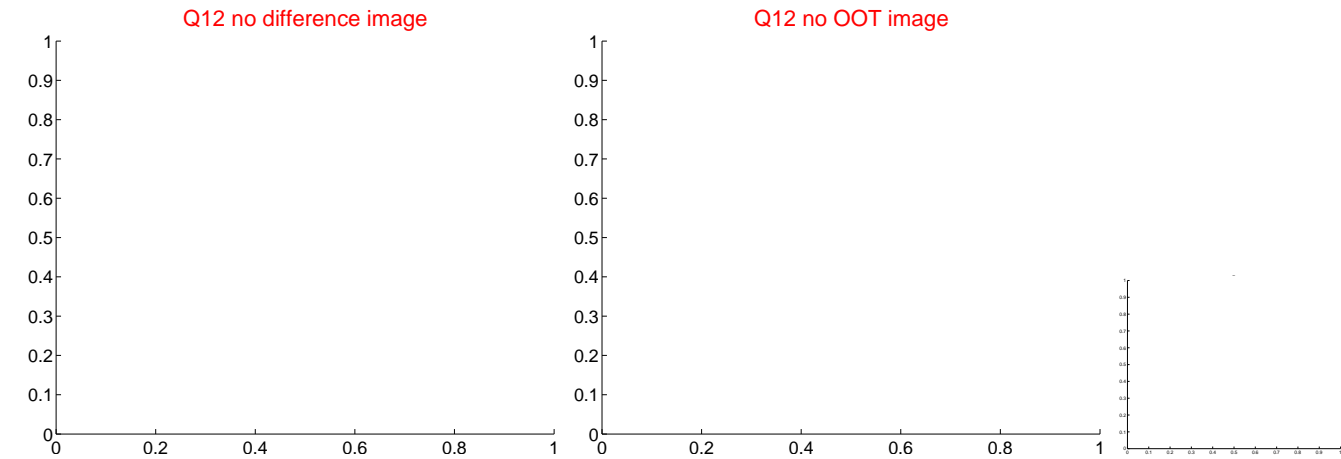
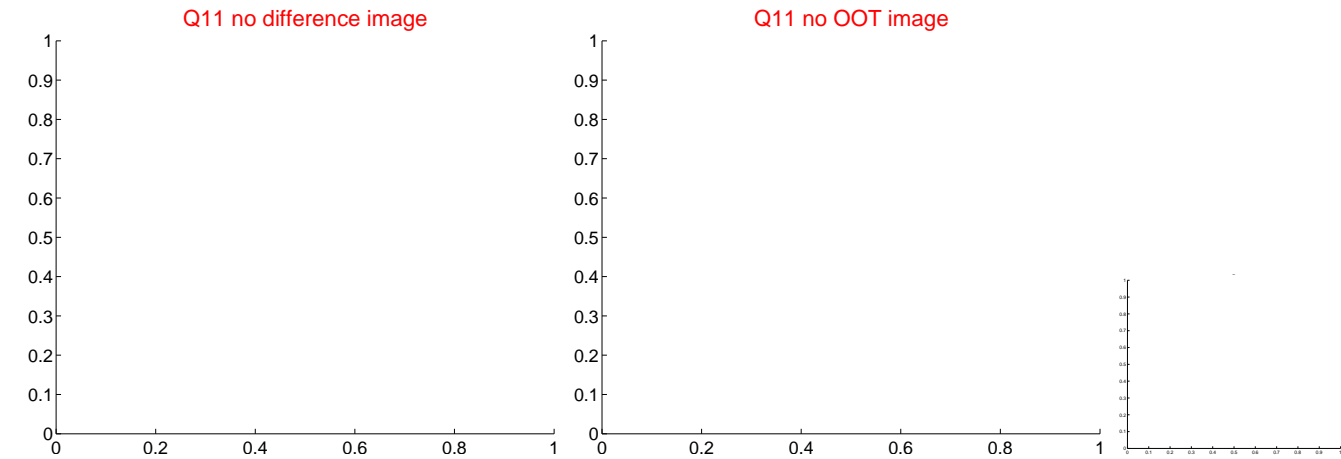
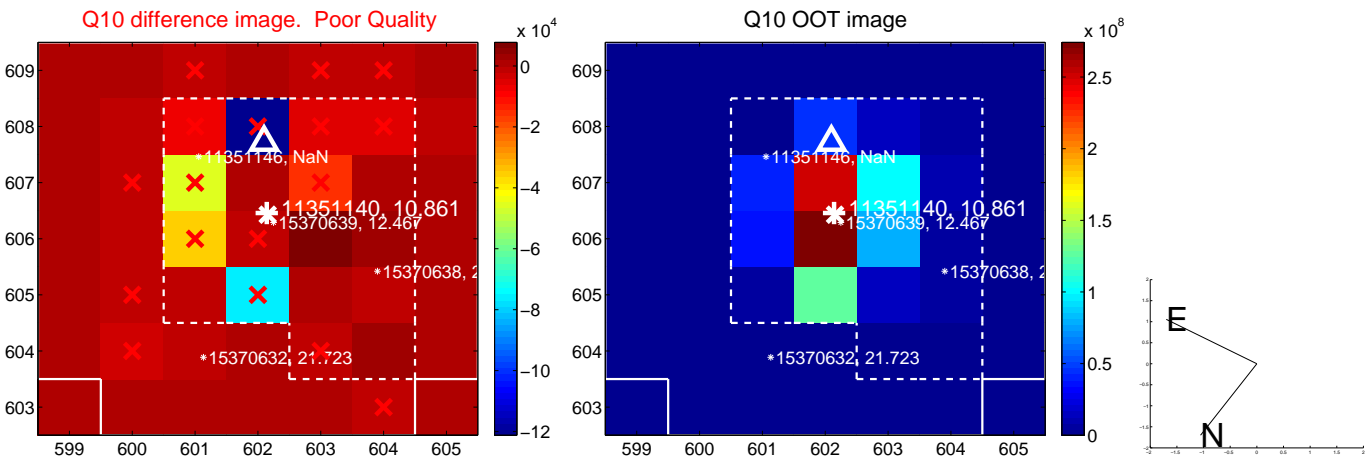
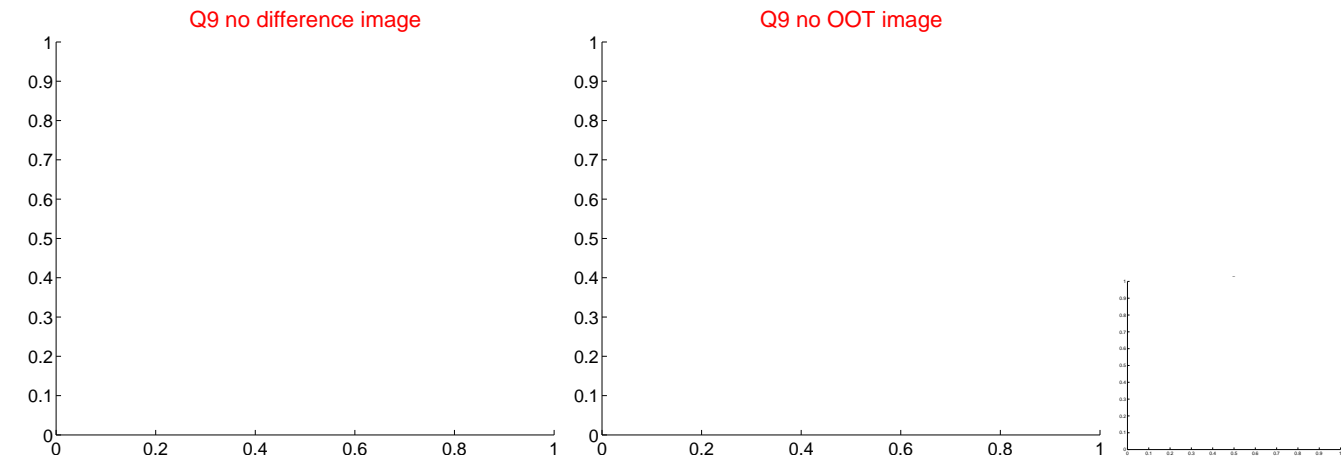
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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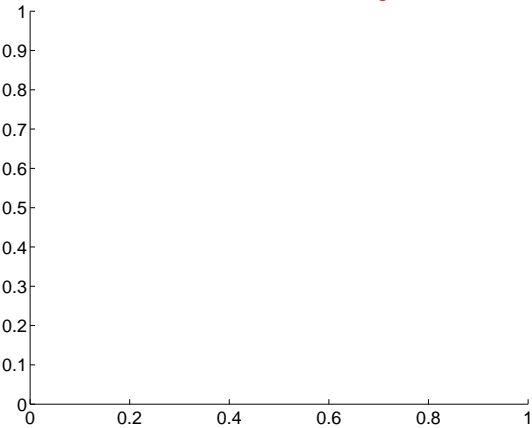
Q13 no difference image



Q13 no OOT image



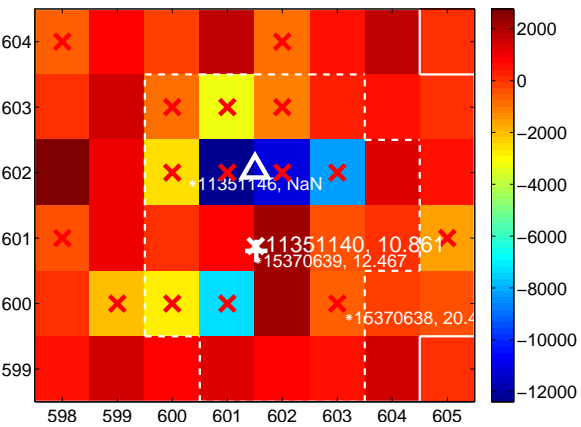
Q14 no difference image



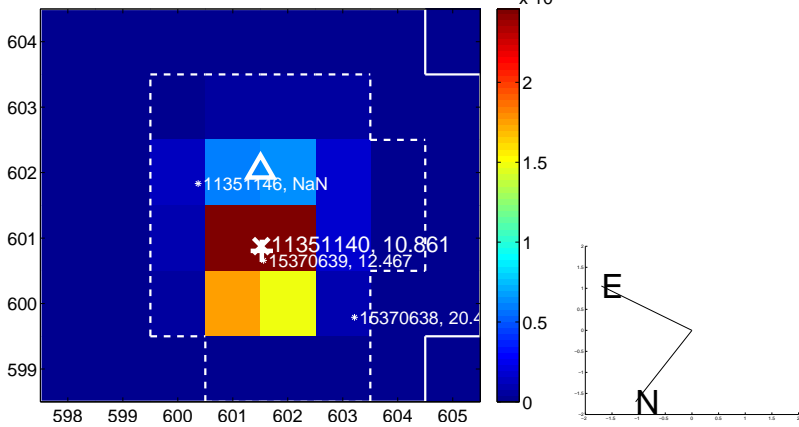
Q14 no OOT image



Q15 difference image. Poor Quality



Q15 OOT image



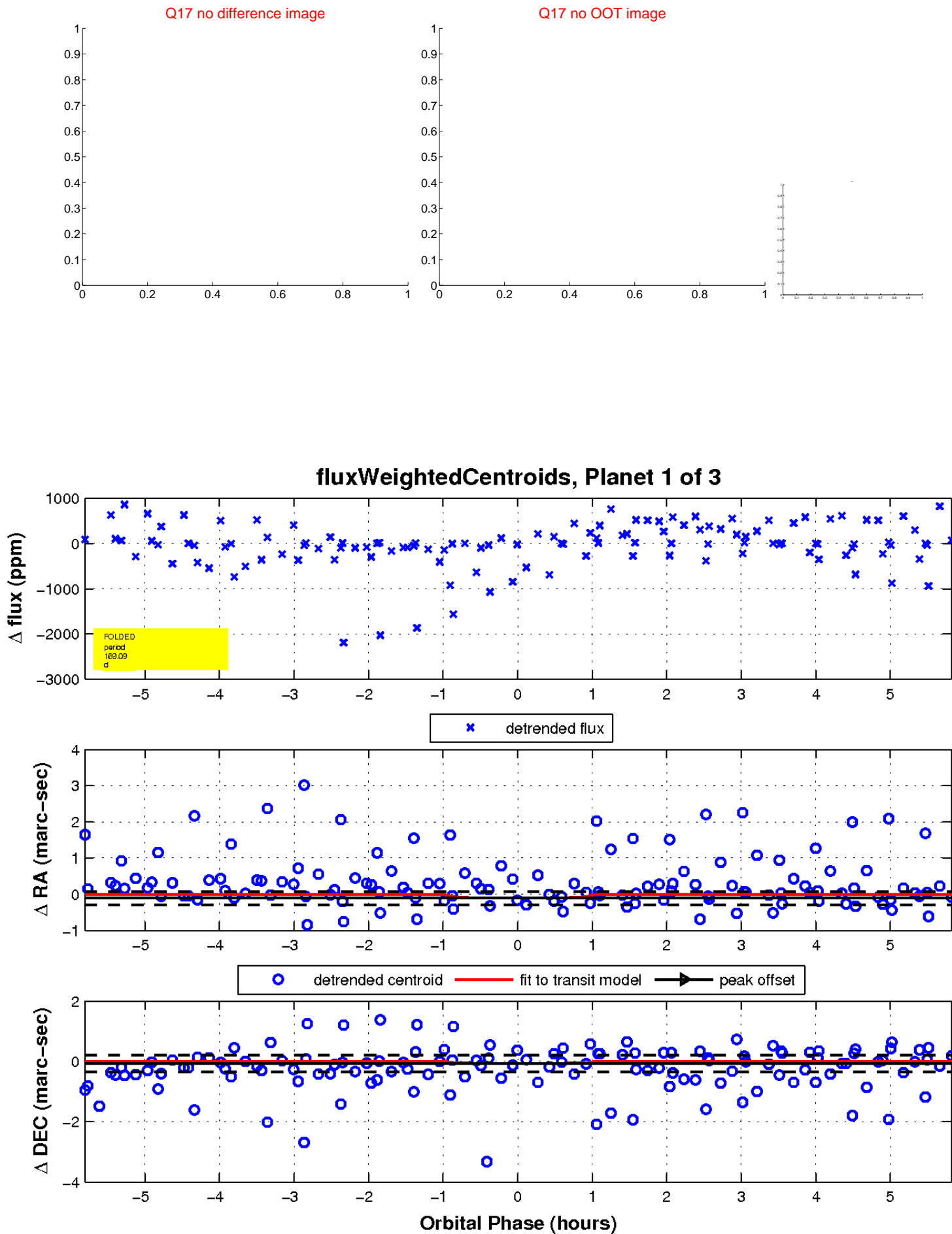
Q16 no difference image



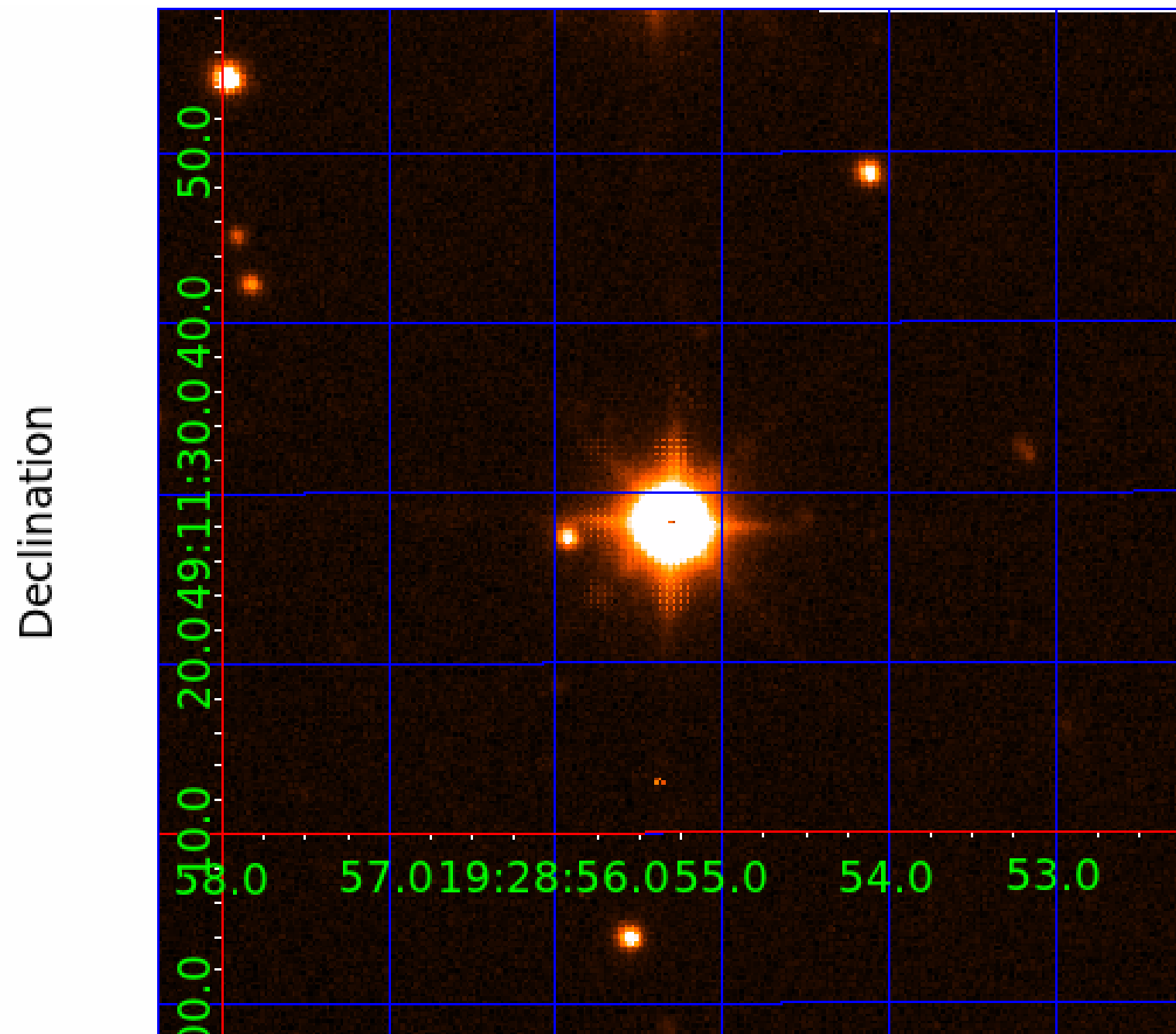
Q16 no OOT image



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



UKIRT Image



KIC 011351140

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})
011351140-01	OBS	No	169.091135	254.787206	64.3	1.954	221.3	2.7	17.46	5180	13.78	275.45
011351140-02	OBS	No	172.768694	251.227663	1292.7	1.526	55.7	16.9	17.46	5180	61.90	267.66
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Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
011351140-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_MARSHALL_SKYE_ZUMA—LPP_DV—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—INCONSISTENT_TRANS—CENT_SATURATED
011351140-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_MARSHALL_ZUMA—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—INCONSISTENT_TRANS—CENT_SATURATED
011351140-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_MARSHALL_ZUMA—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—INCONSISTENT_TRANS—SAME_NTL_PERIOD—CENT_SATURATED

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

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

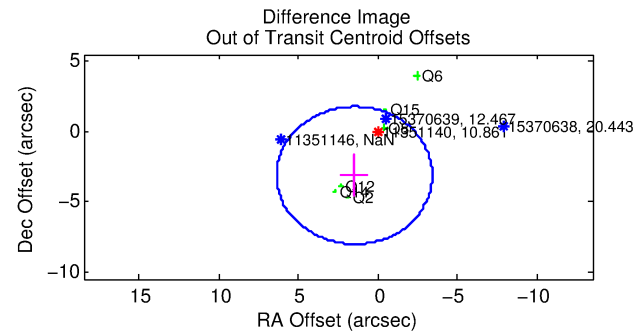
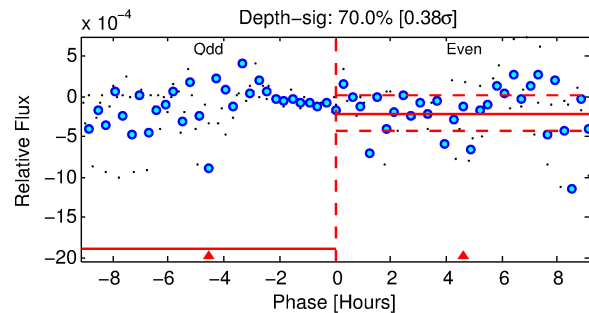
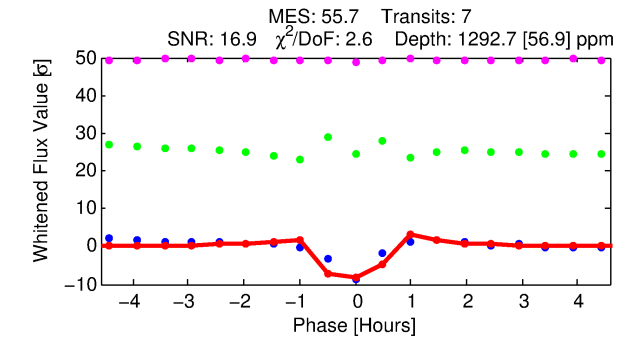
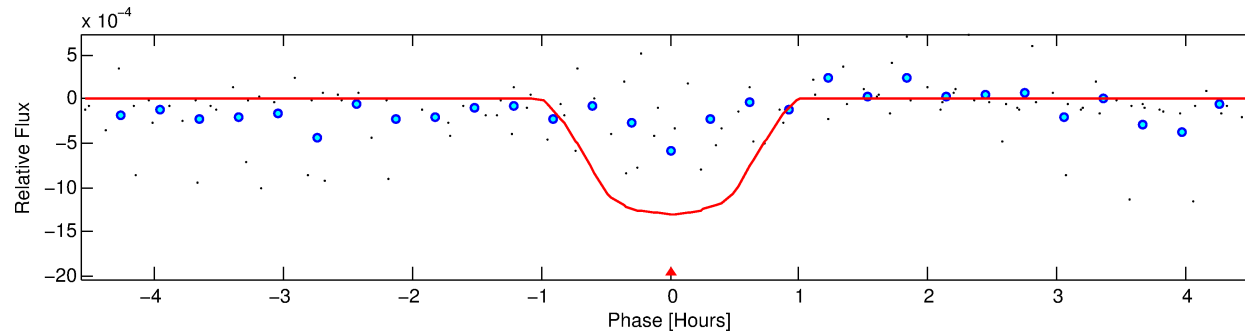
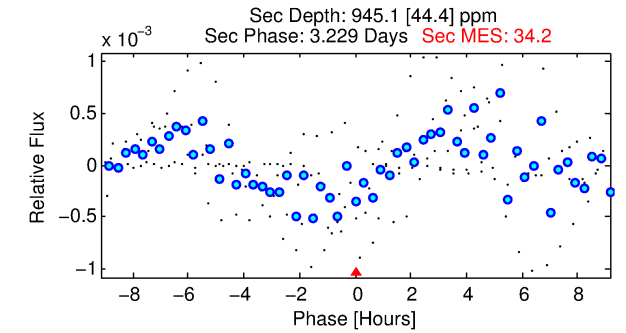
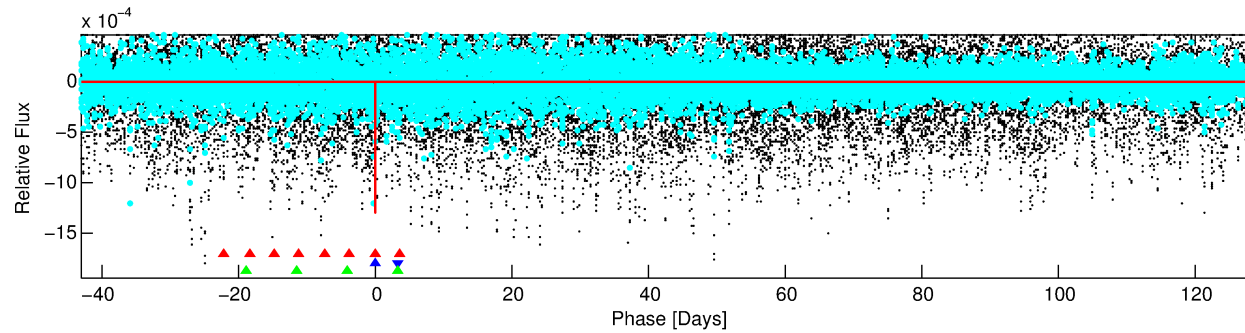
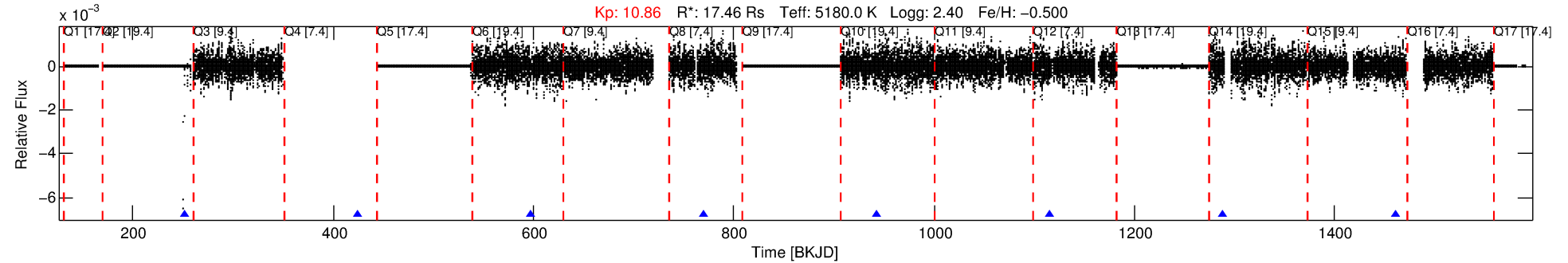
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 011351140-02

No Significant Match Found

DV One-Page Summary

KIC: 11351140 Candidate: 2 of 3 Period: 172.769 d



DV Fit Results:

Period = 172.76869 [0.00038] d
Epoch = 251.2277 [0.0012] BKJD
Rp/R* = 0.0325 [0.0223]
a/R* = 892.74 [2397.07]
b = 0.02 [148.77]
Seff = 267.66 [29.80]
Teq = 1031 [29] K
Rp = 61.90 [42.81] Re
a = 0.8570 [0.0508] AU
Ag = 99.67 [137.33] [0.72σ]
Teffp = 5039 [1736] K [2.31σ]

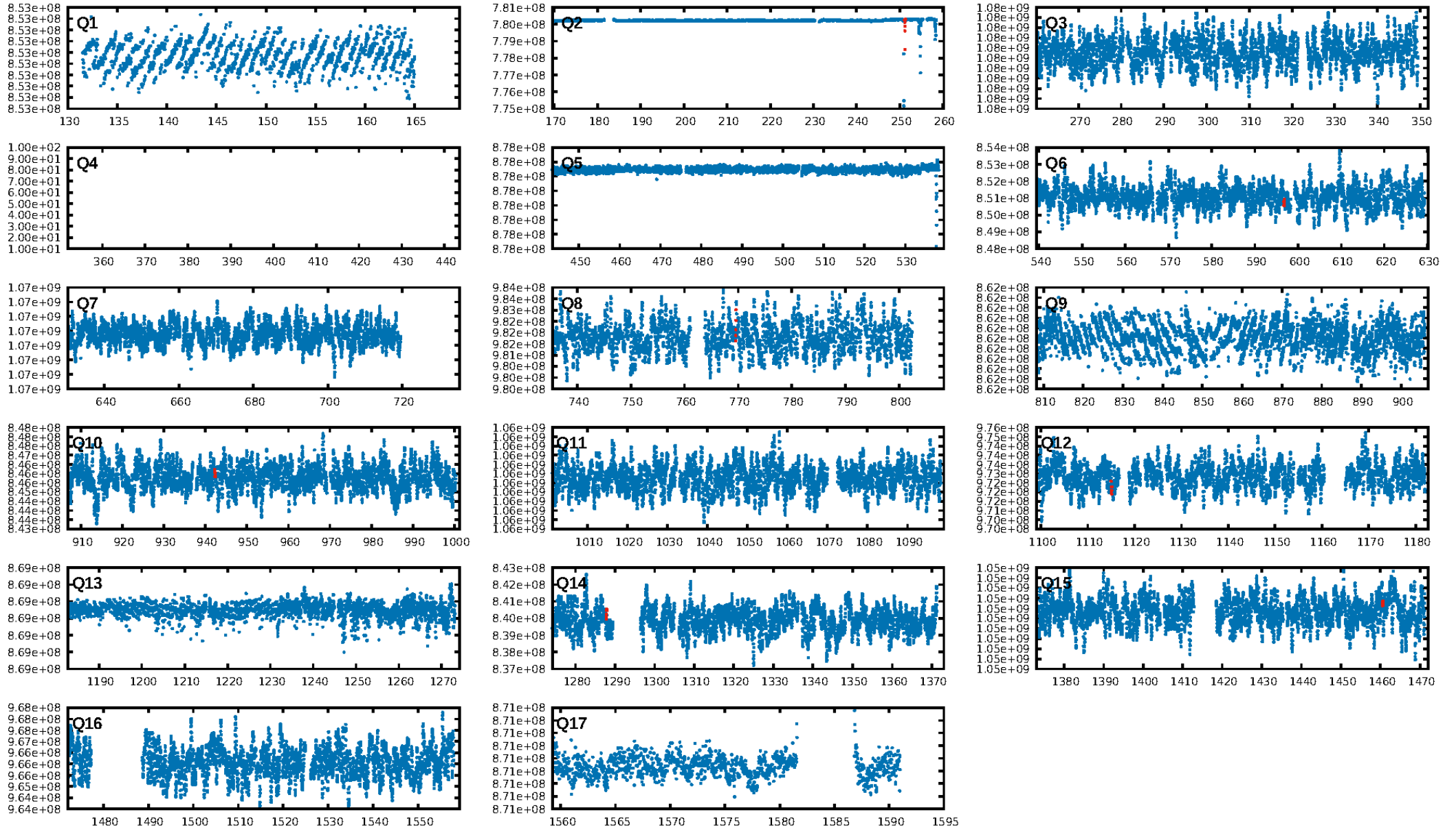
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [35.60σ]
LongPeriod-sig: 100.0% [1179.42σ]
ModelChiSquare2-sig: 84.3%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [7/7]
GhostDiagnostic-chr: 7.892
Centroid-sig: 2.5%
Centroid-so: 0.353 arcsec [1.65σ]
OotOffset-rm: 3.459 arcsec [2.12σ]
KicOffset-rm: 3.496 arcsec [1.98σ]
OotOffset-st: 3/1/2/0 [6]
KicOffset-st: 3/1/2/0 [6]
DiffImageQuality-fgm: 0.50 [3/6]
DiffImageOverlap-fno: 1.00 [7/7]

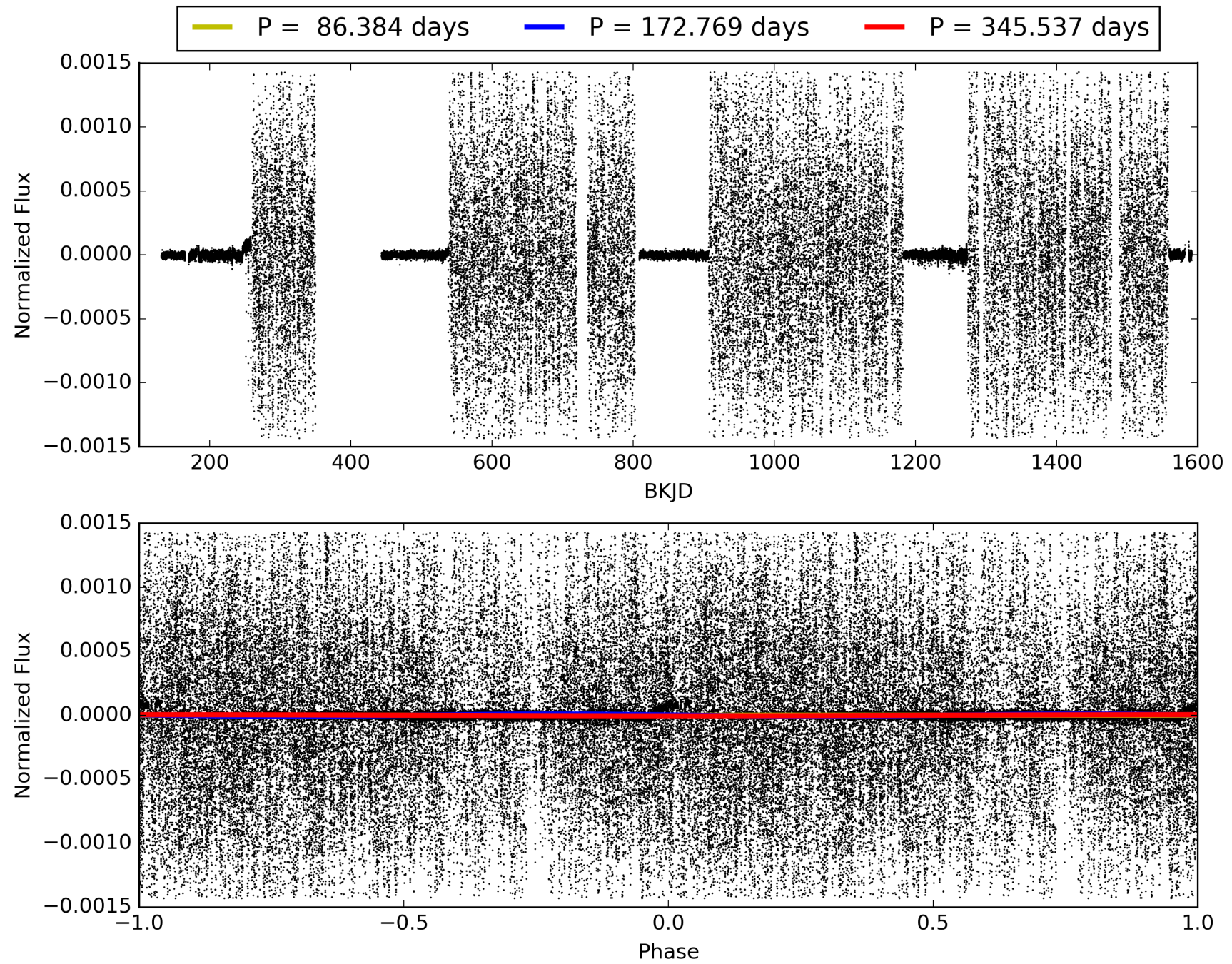
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 05:42:04 Z

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

TCE 011351140-02, PDC Light Curves

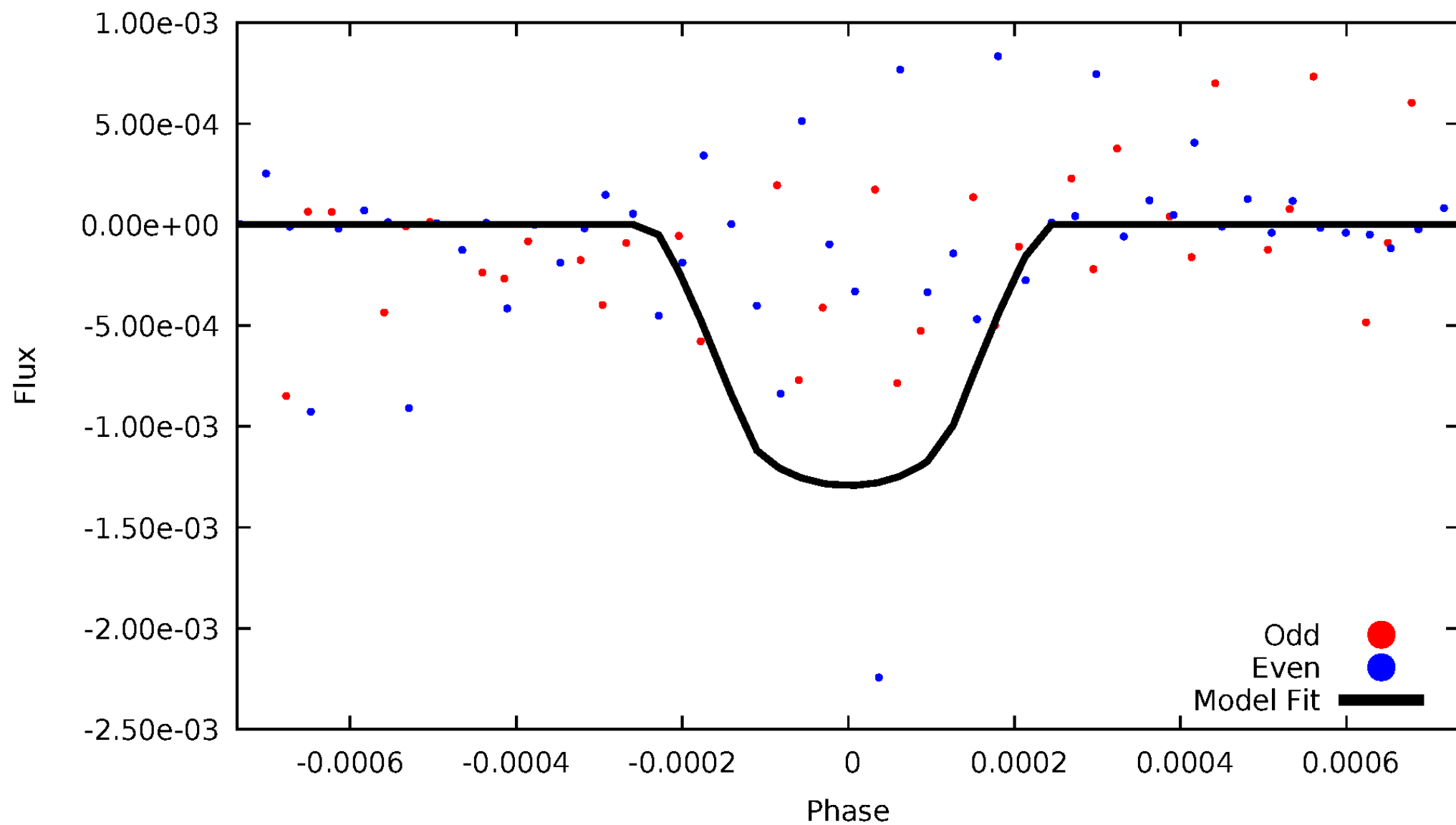


TCE 011351140-02



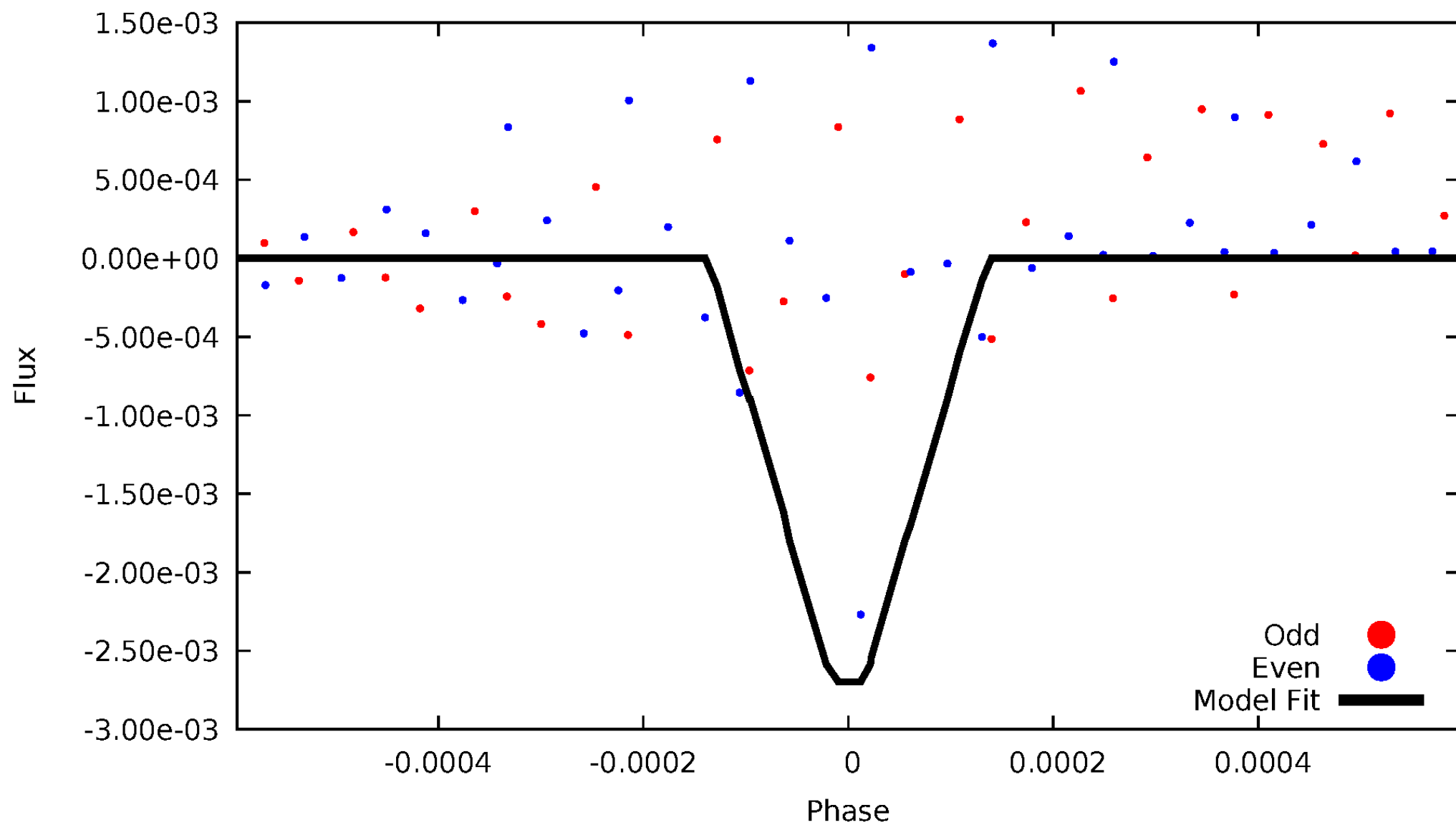
DV Odd/Even

TCE 011351140-02



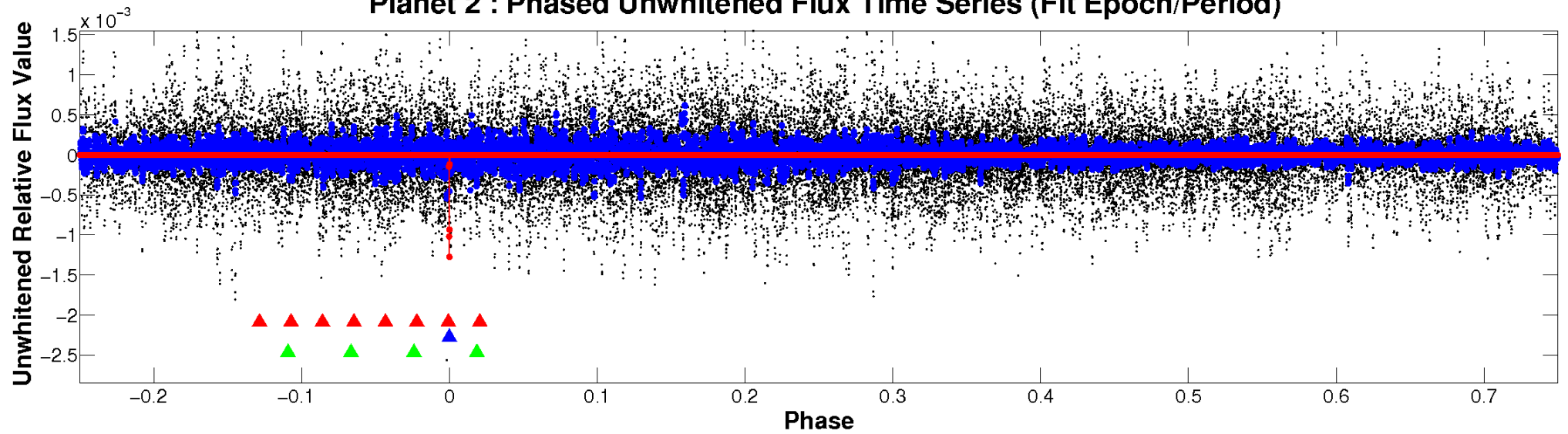
ALT Odd/Even

TCE 011351140-02

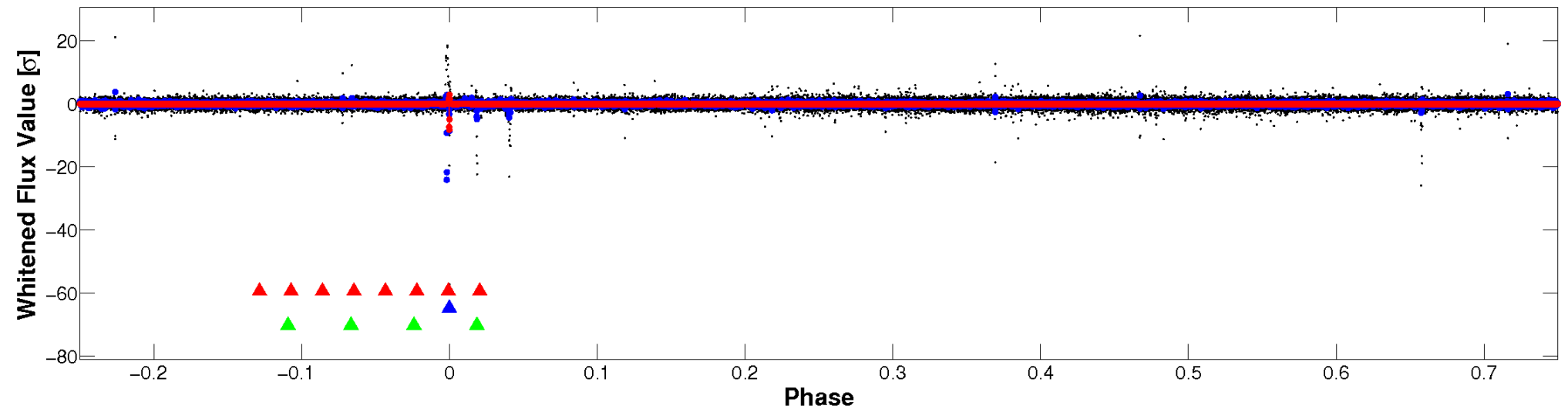


Non-Whitened Vs. Whitened Light Curve

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

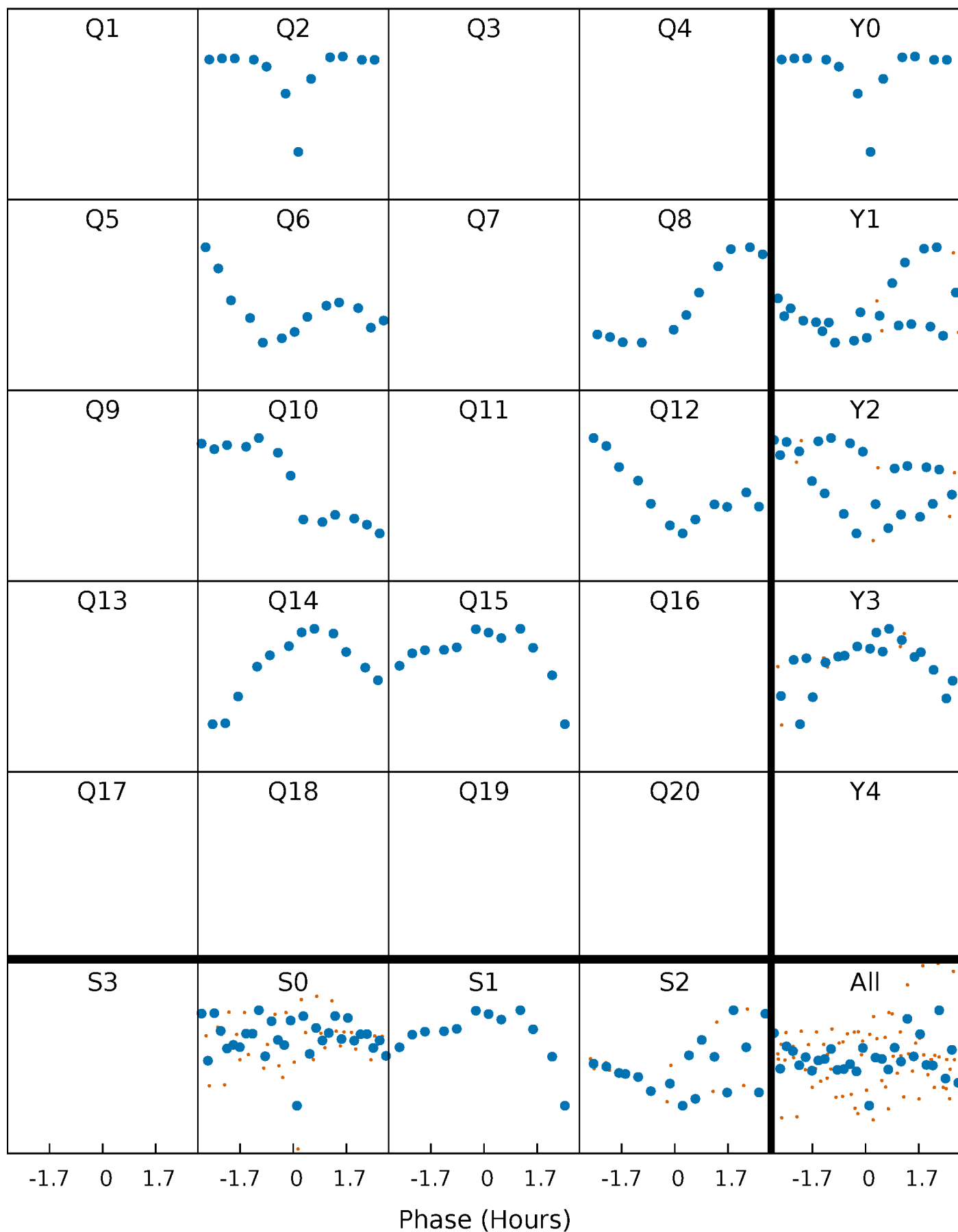


Planet 2 : Phased Whitened Flux Time Series (Fit Epoch/Period)



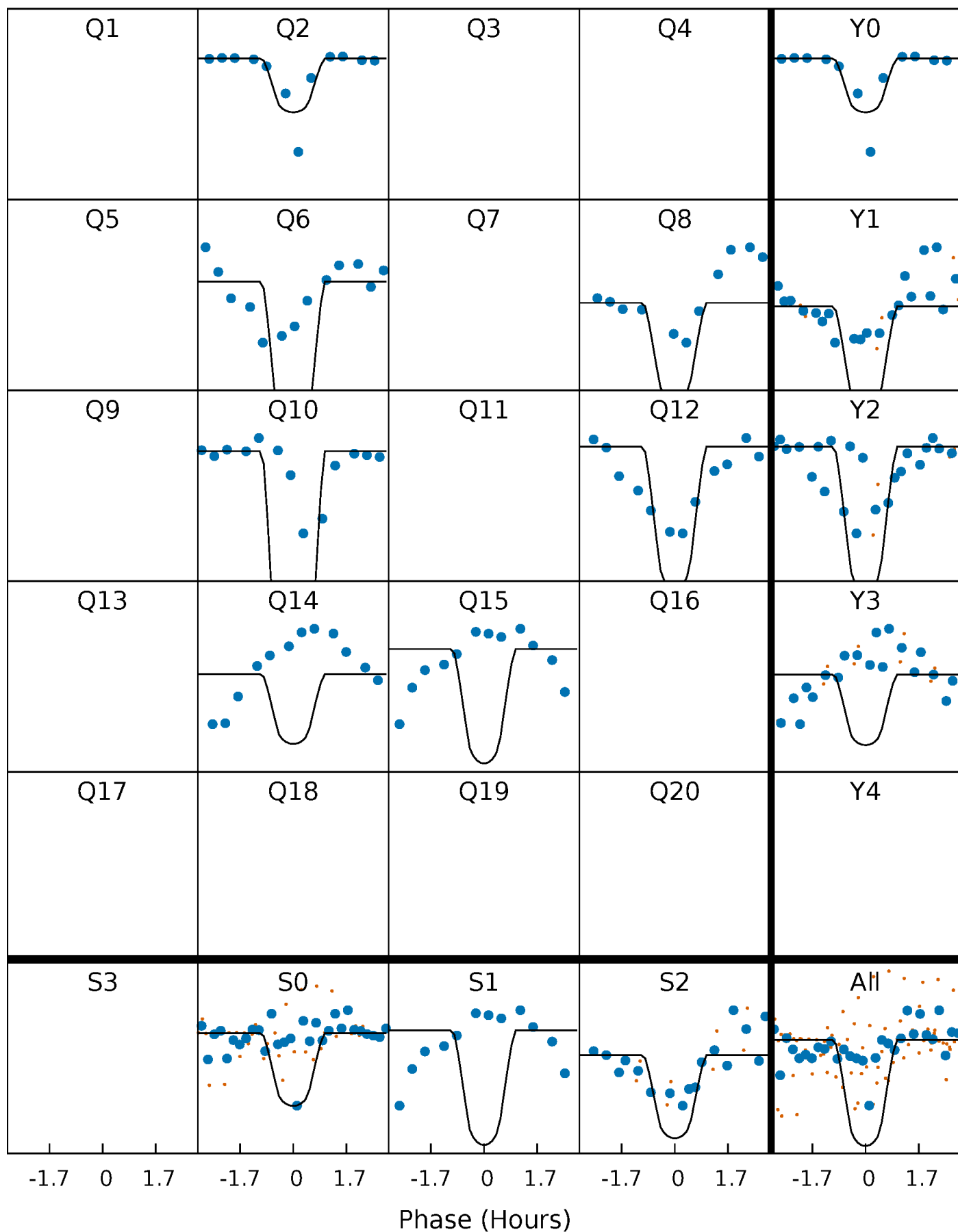
PDC Quarter-Phased Transit Curves

TCE 011351140-02 P=172.768694 Days $T_0=251.227663$ (BKJD)



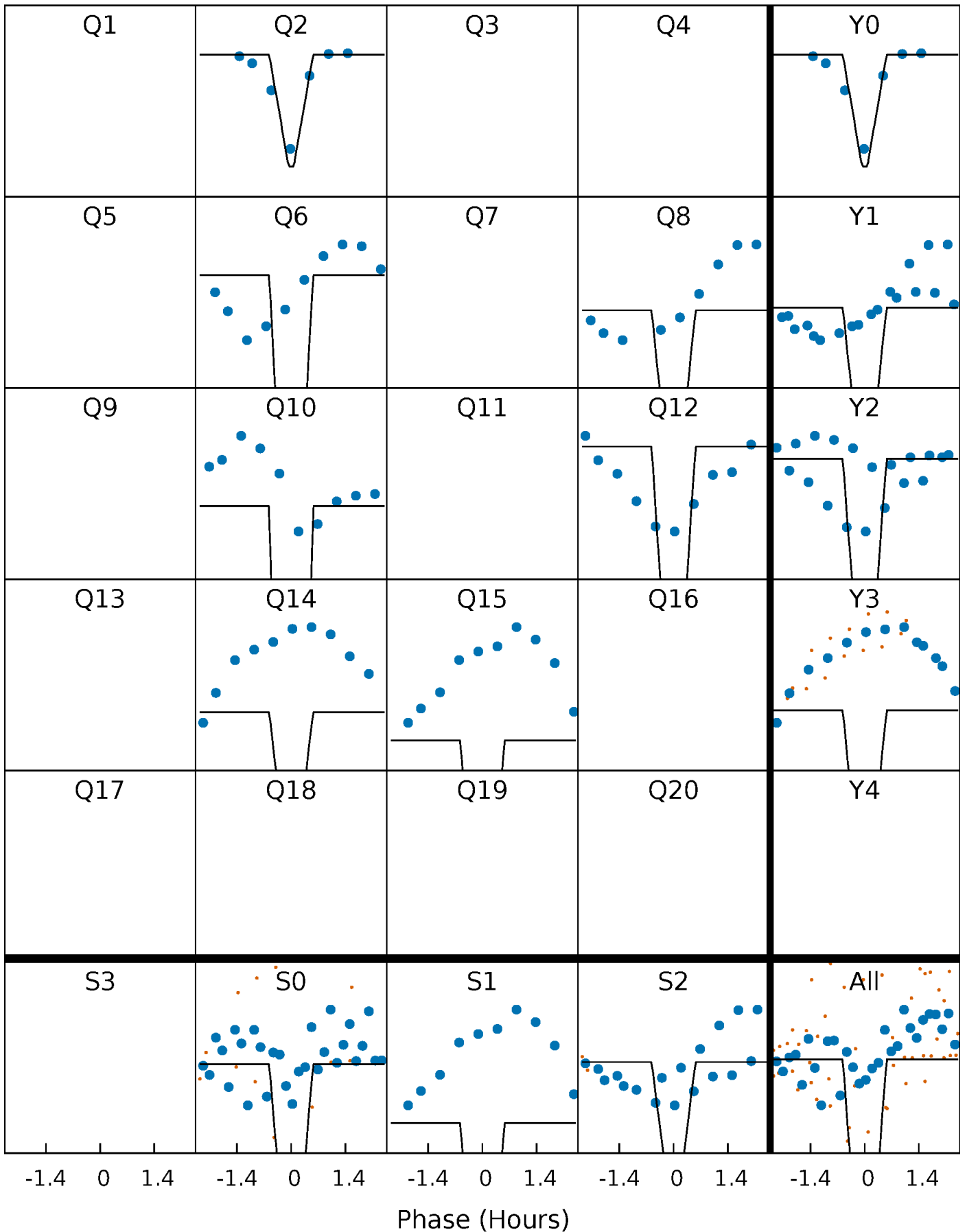
DV Quarter-Phased Transit Curves

TCE 011351140-02 P=172.768694 Days $T_0=251.227663$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

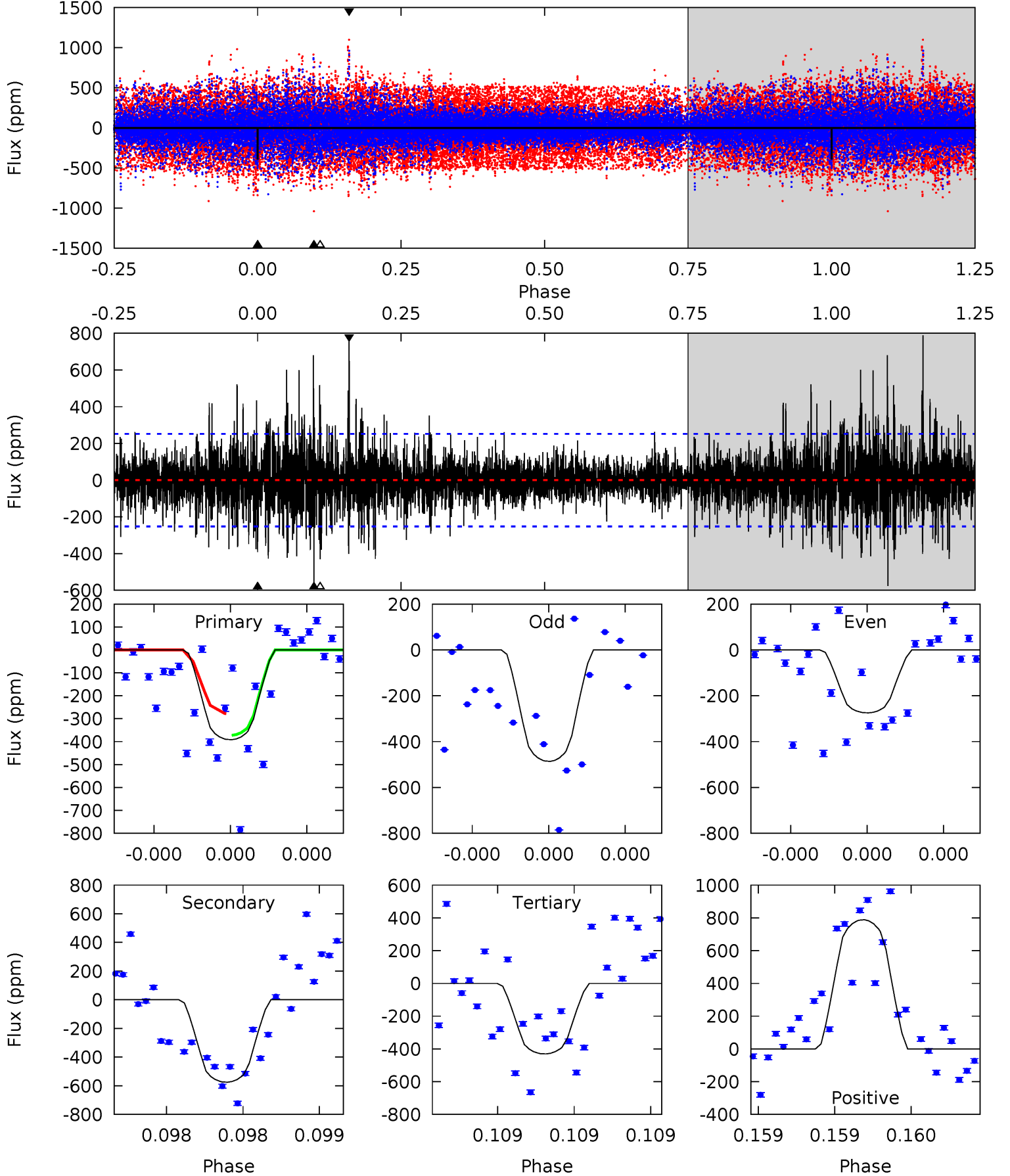
TCE 011351140-02 P=172.769126 Days $T_0=251.231912$ (BKJD)



DV Model-Shift Uniqueness Test

011351140-02, $P = 172.768694$ Days, $E = 78.458969$ Days

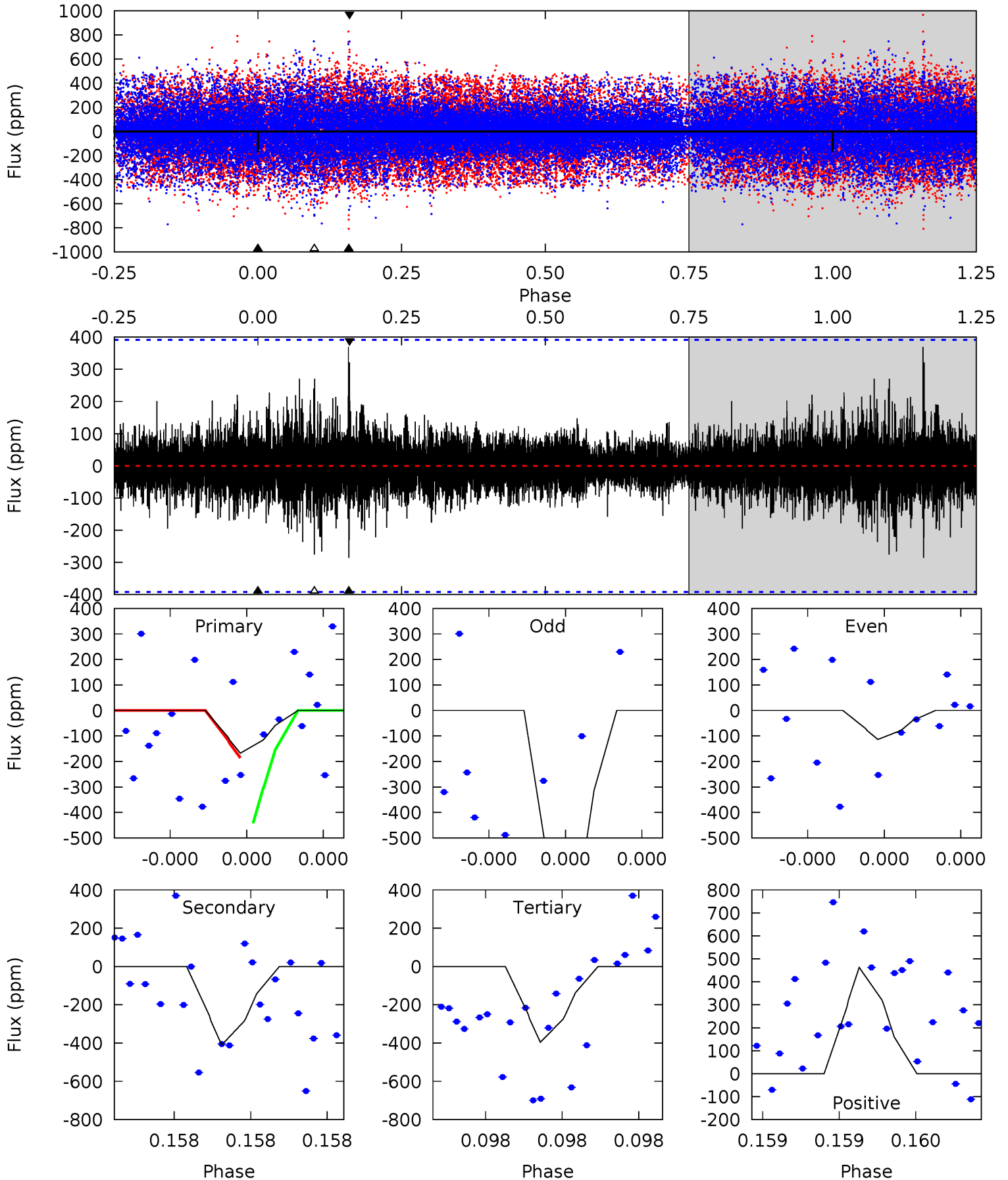
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
8.71	12.8	9.57	17.5	5.60	3.53	2.18	-0.86	-8.82	3.21	-4.75	1.93	1.02	0.58	1.00



Alt Model-Shift Uniqueness Test

011351140-02, $P = 172.769126$ Days, $E = 78.462786$ Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
1.69	4.14	4.00	4.67	5.69	3.65	0.72	-2.31	-2.98	0.14	-0.53	4.27	0.65	0.56	0



Stellar Parameters For KIC 011351140

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	M (M_{\odot})	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	5180^{+102}_{-102}	$2.403^{+0.039}_{-0.032}$	$-0.500^{+0.050}_{-0.200}$	$17.458^{+1.029}_{-1.338}$	$2.810^{+0.095}_{-0.265}$	$0.001^{+0.000}_{-0.000}$
	+2%/-2%	+2%/-1%	+10%/-40%	+6%/-8%	+3%/-9%	+18%/-12%
Source	PHO55	AST55	SPE55	DSEP		

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

Secondary Eclipse Parameters for KIC 011351140-02 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-575 ± 45	$63.28^{+42.88}_{-33.45}$	1441^{+36}_{-35}	4508^{+1845}_{-777}	58^{+207}_{-37}
Alt.	-285 ± 69	$99.41^{+41.41}_{-42.67}$	1439^{+31}_{-36}	3378^{+728}_{-347}	11^{+24}_{-6}

T_{max} = Theoretical Maximum Planetary Temperature

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

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

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

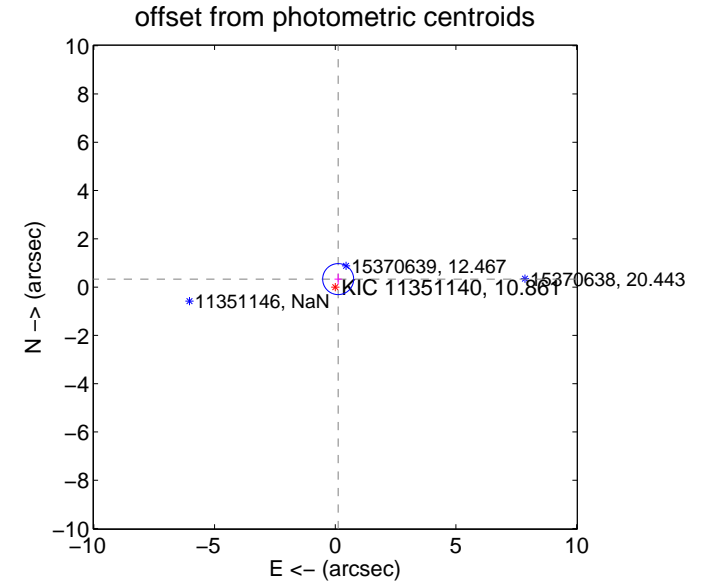
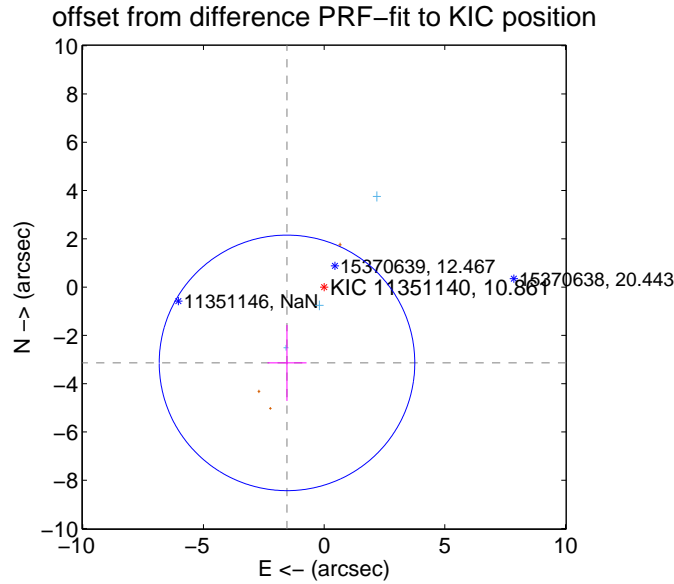
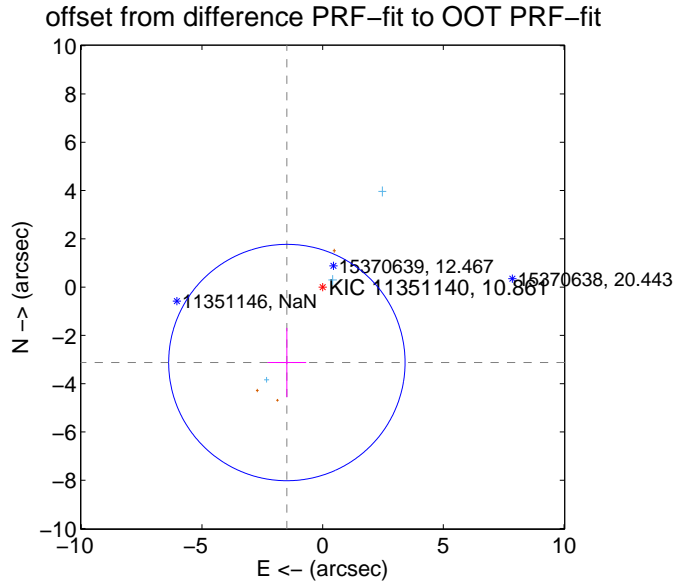
DV Centroid Data

Supplemental centroid analysis for 011351140-02. **Kepler magnitude: 10.86.** Transit SNR 16.88

There are 3 quarters with good PRF difference image offsets

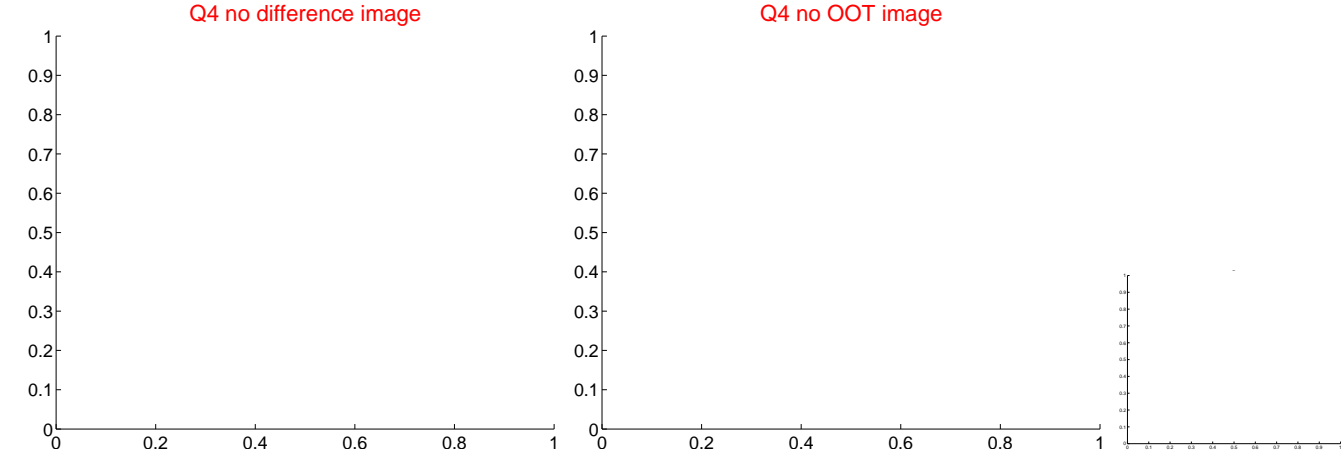
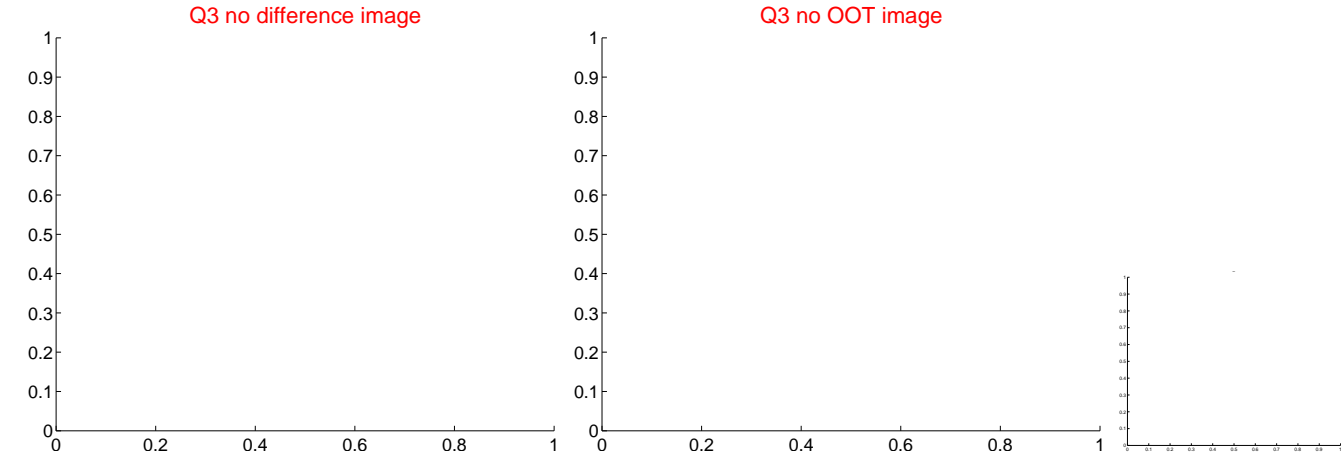
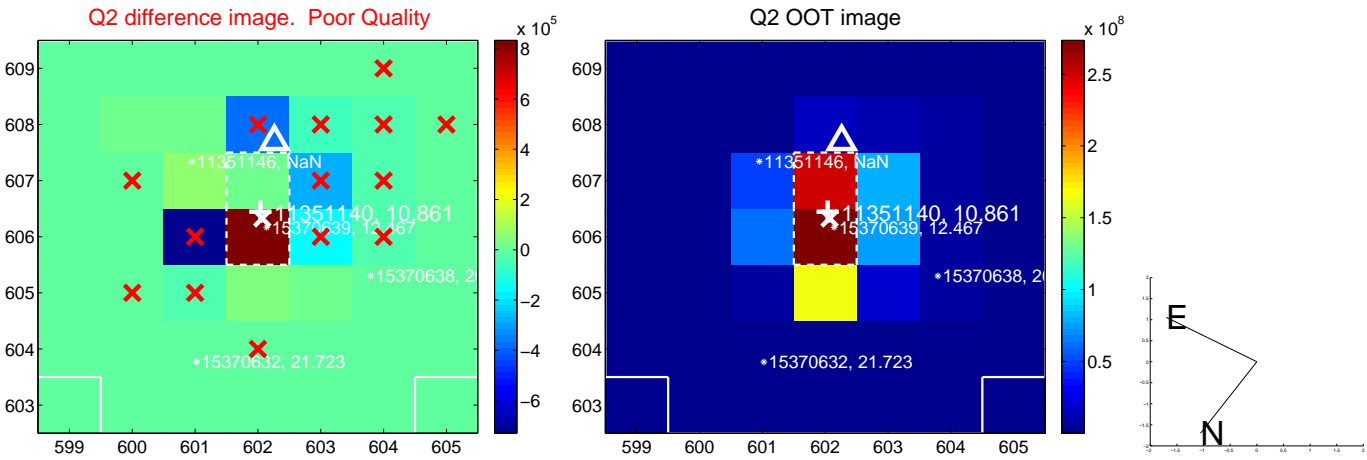
The direct PRF centroid is offset from the target star catalog position by about 0.31 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	3.459 ± 1.632	2.12	1.482 ± 0.799	-3.125 ± 1.433
PRF-fit source offset from KIC position	3.496 ± 1.764	1.98	1.538 ± 0.811	-3.140 ± 1.572
photometric centroid source offset	0.35 ± 0.21	1.65	-0.12 ± 0.15	0.33 ± 0.22

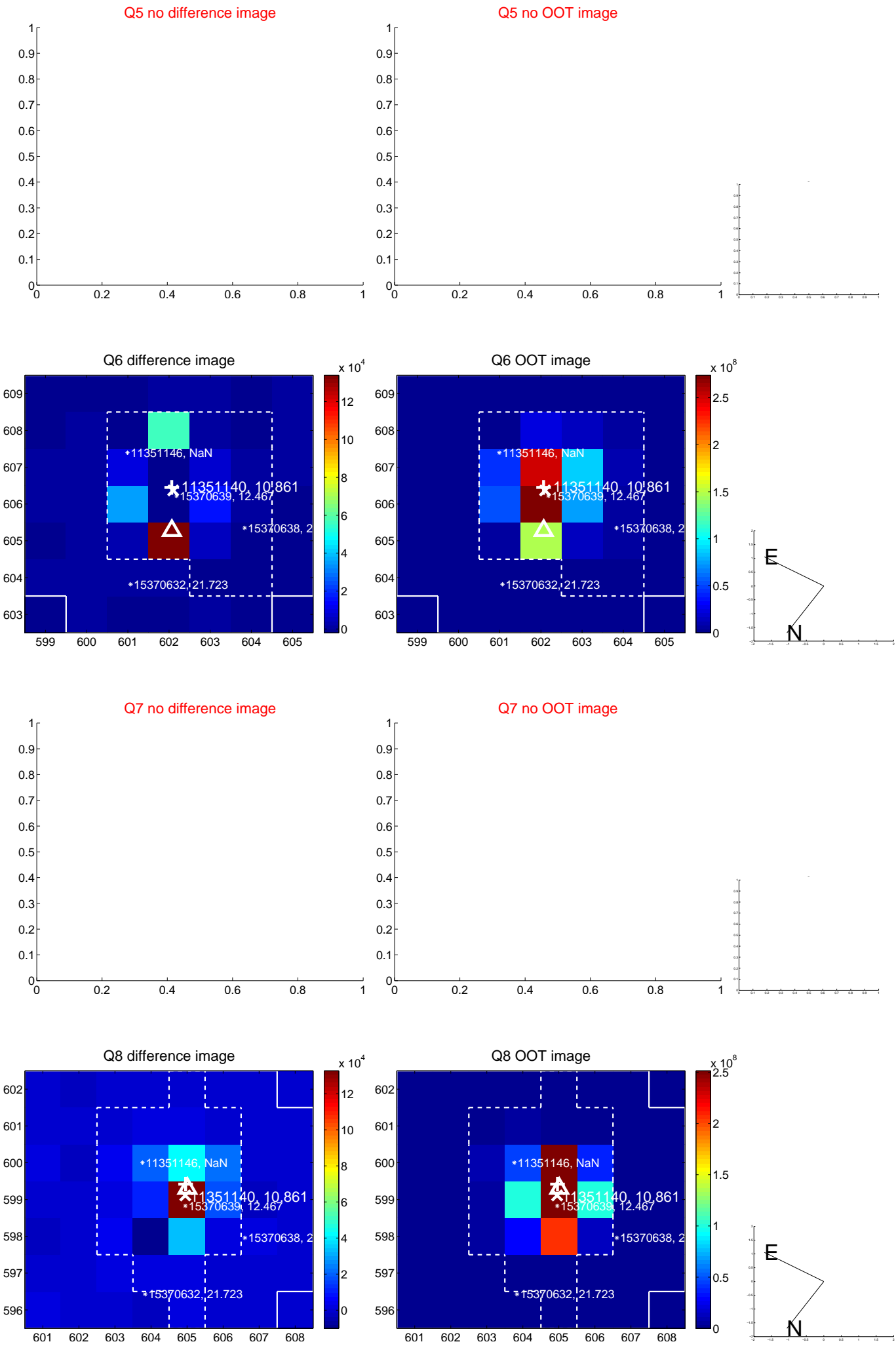


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets;** magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

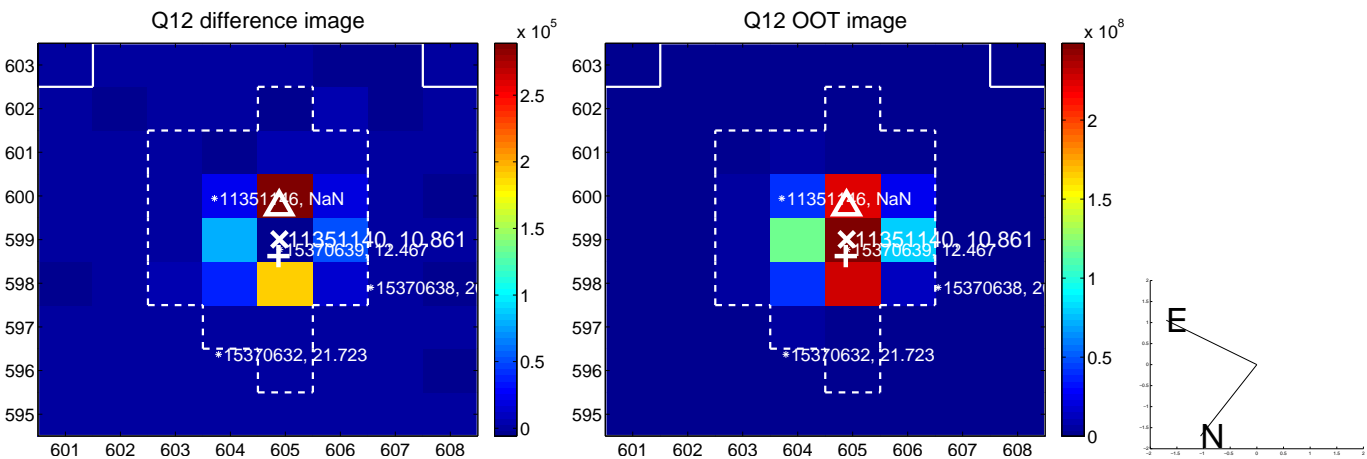
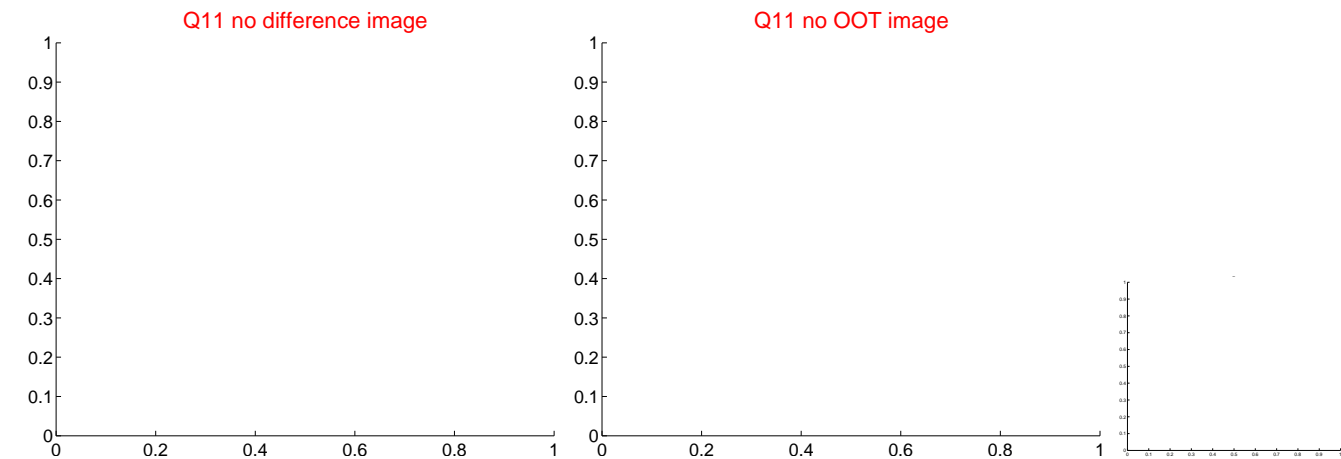
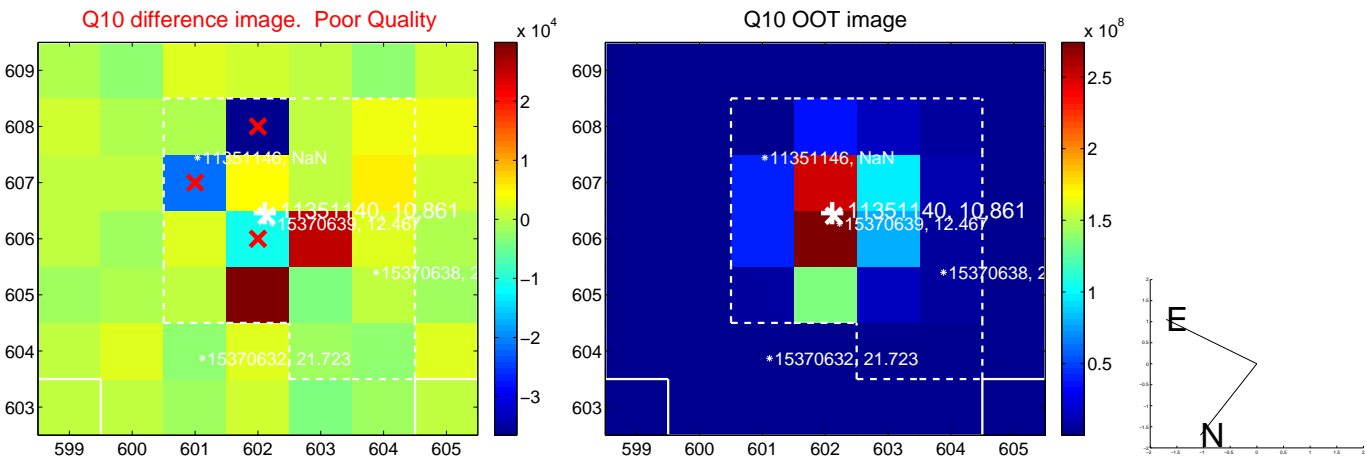
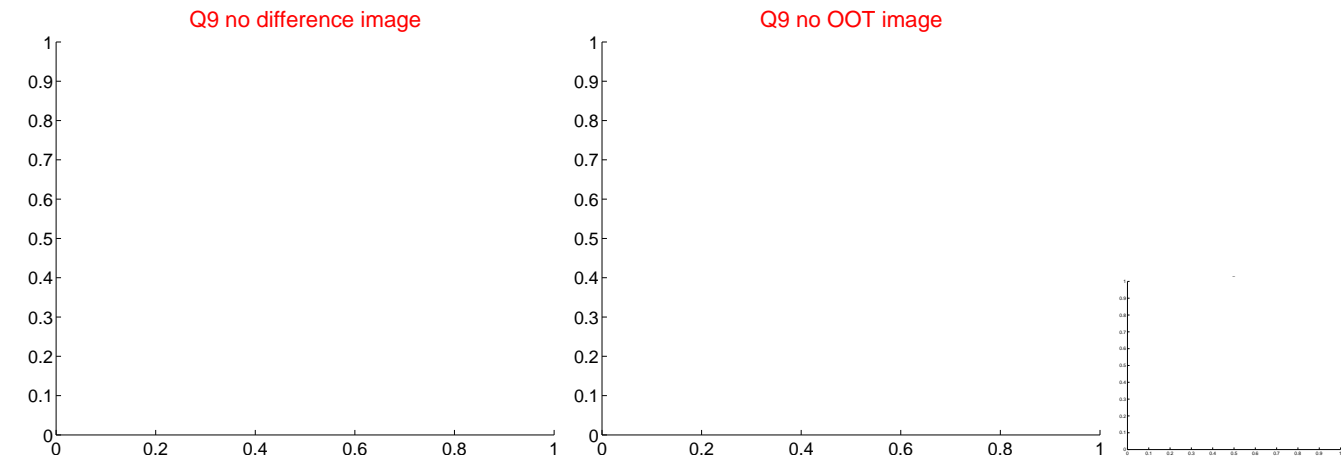
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



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



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

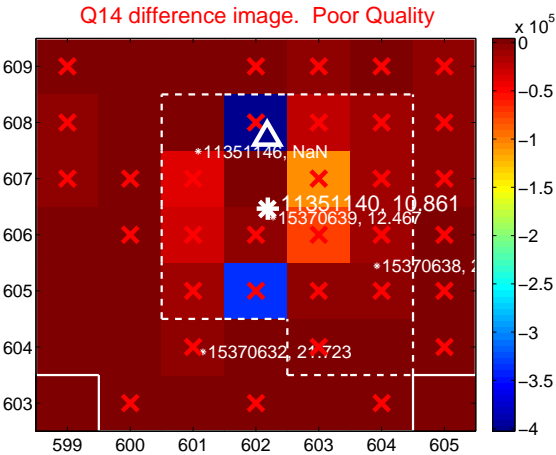
Q13 no difference image



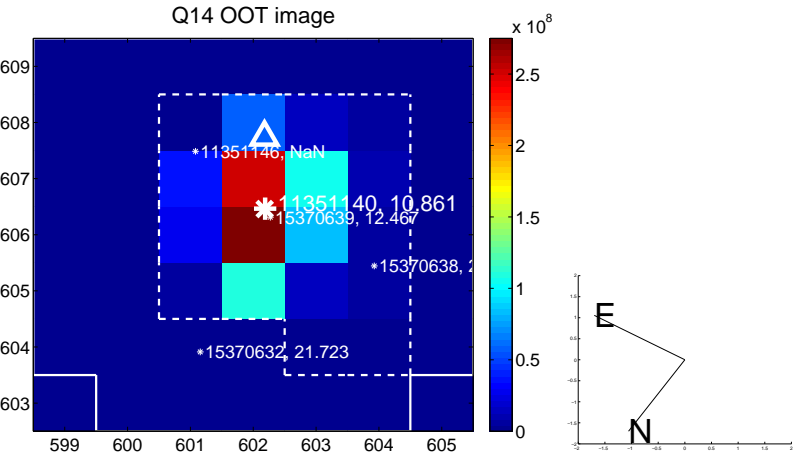
Q13 no OOT image



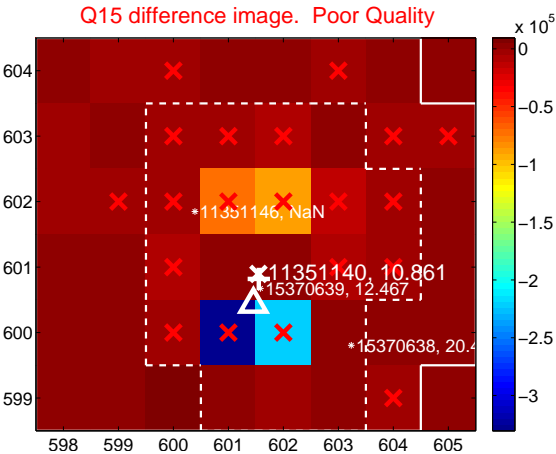
Q14 difference image. Poor Quality



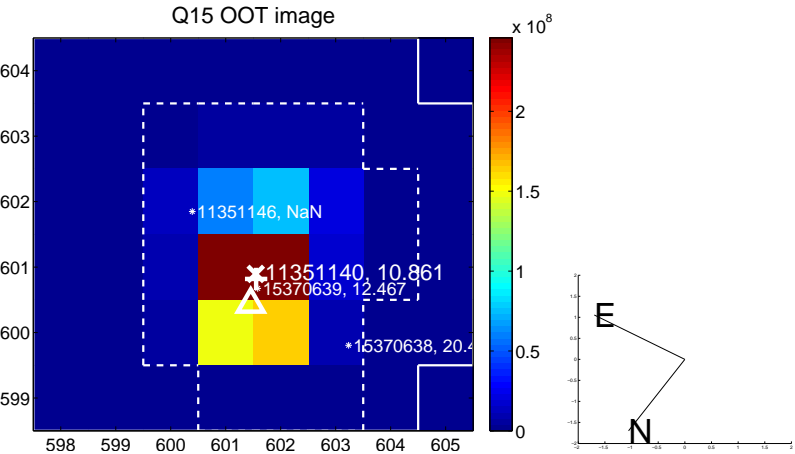
Q14 OOT image



Q15 difference image. Poor Quality



Q15 OOT image



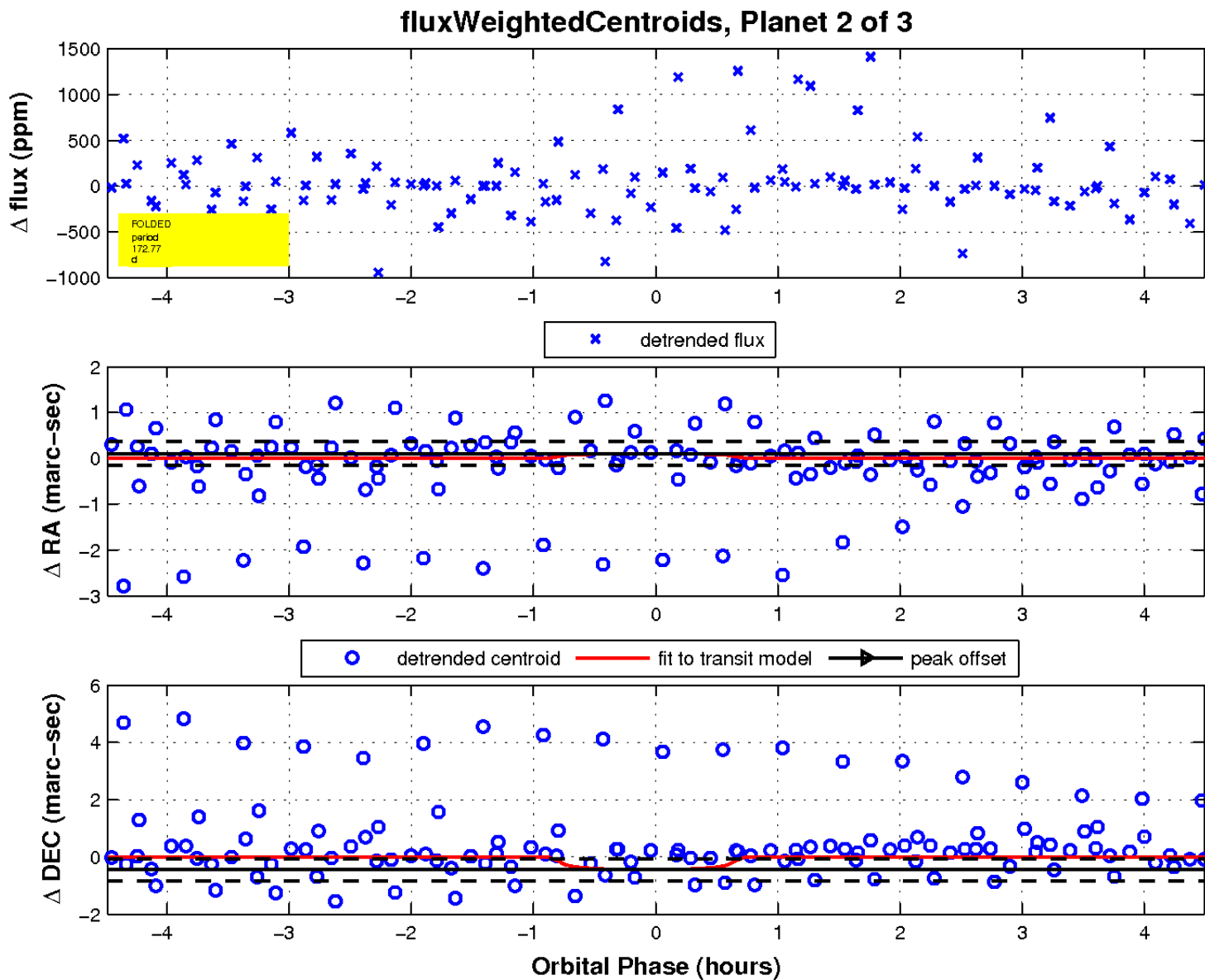
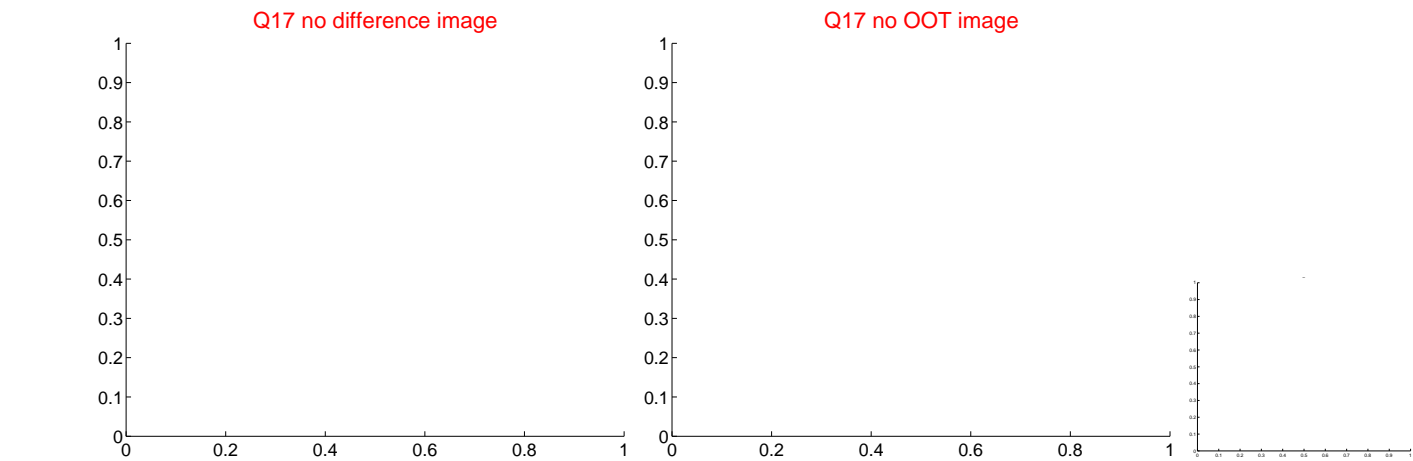
Q16 no difference image



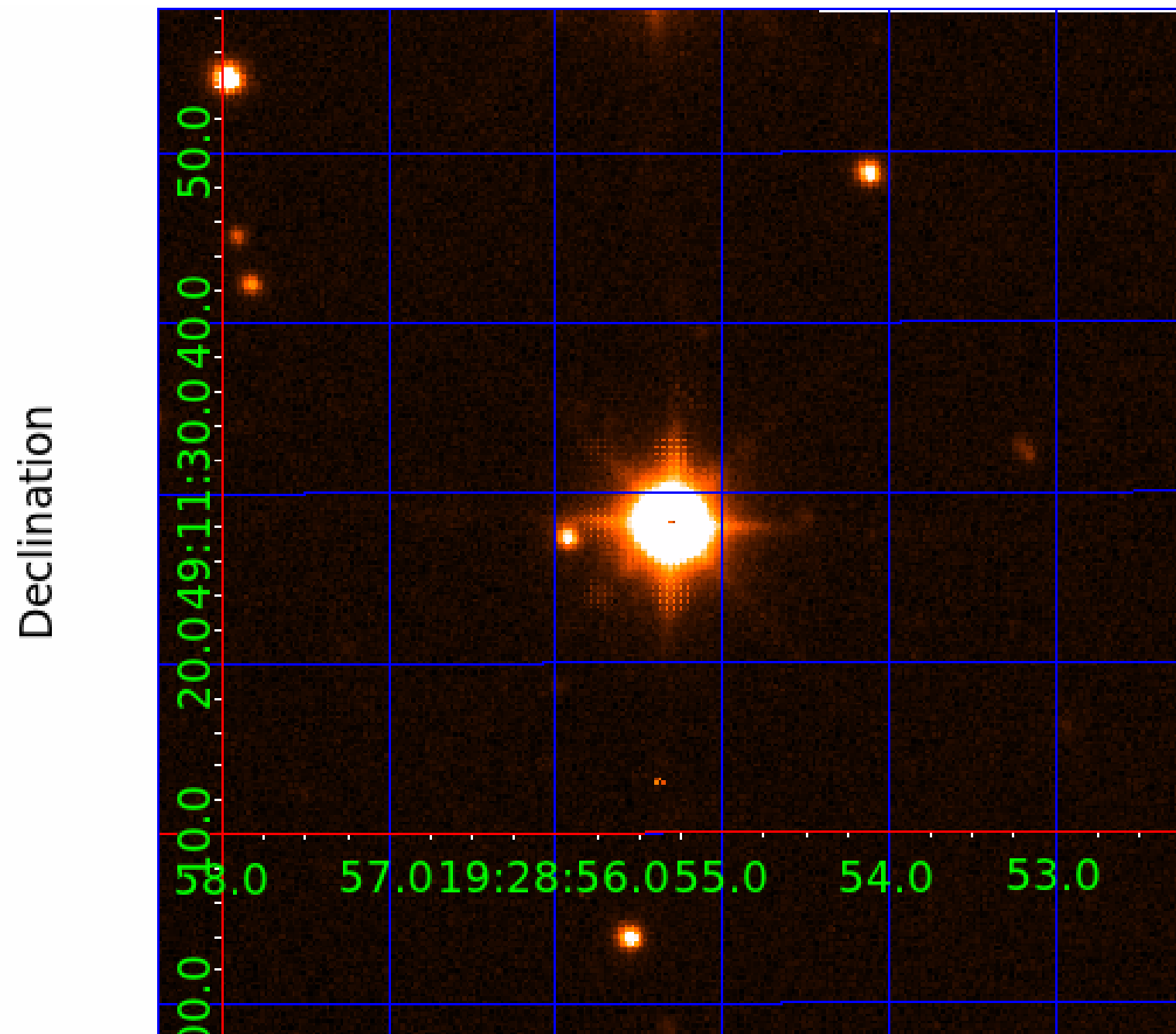
Q16 no OOT image



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



UKIRT Image



KIC 011351140

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})
011351140-01	OBS	No	169.091135	254.787206	64.3	1.954	221.3	2.7	17.46	5180	13.78	275.45
011351140-02	OBS	No	172.768694	251.227663	1292.7	1.526	55.7	16.9	17.46	5180	61.90	267.66
011351140-03	OBS	No	338.178180	254.450806	713.7	3.000	37.1	-1.0	17.46	5180	45.92	109.32

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
011351140-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_MARSHALL_SKYE_ZUMA—LPP_DV—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—INCONSISTENT_TRANS—CENT_SATURATED
011351140-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_MARSHALL_ZUMA—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—INCONSISTENT_TRANS—CENT_SATURATED
011351140-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_MARSHALL_ZUMA—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—INCONSISTENT_TRANS—SAME_NTL_PERIOD—CENT_SATURATED

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

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

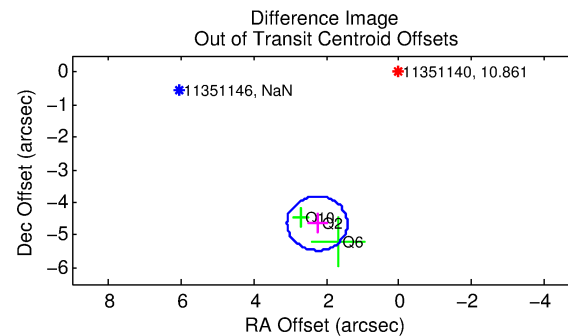
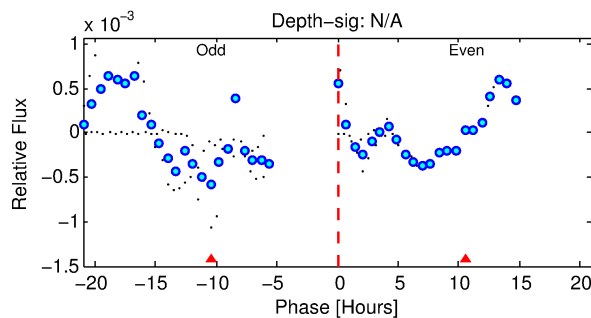
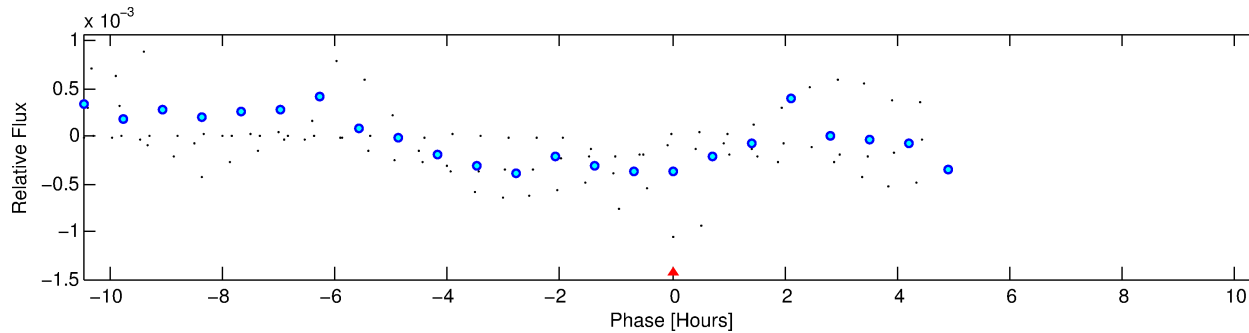
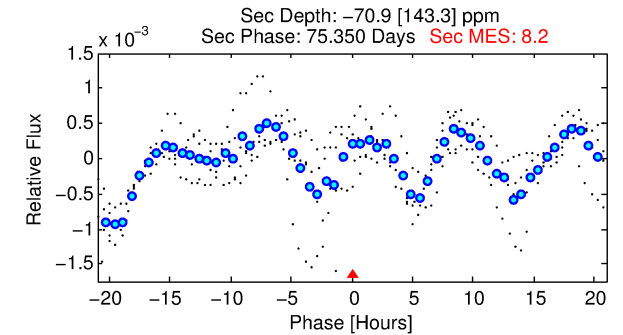
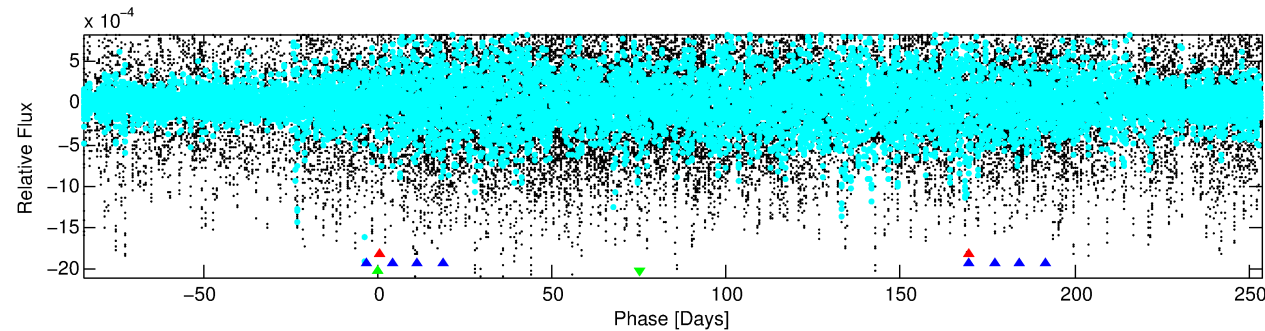
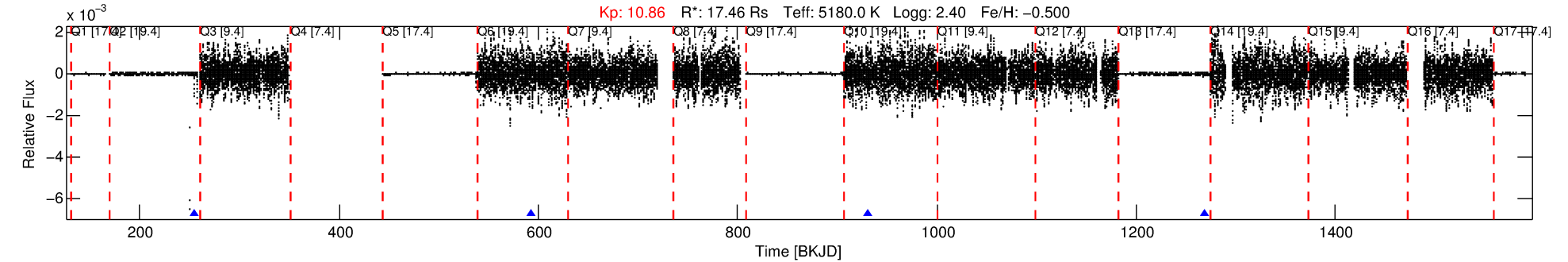
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 011351140-03

No Significant Match Found

DV One-Page Summary

KIC: 11351140 Candidate: 3 of 3 Period: 338.178 d



TPS TCE Results:

Period = 338.17818 d
Epoch = 254.4508 BKJD

DV fit results are unavailable

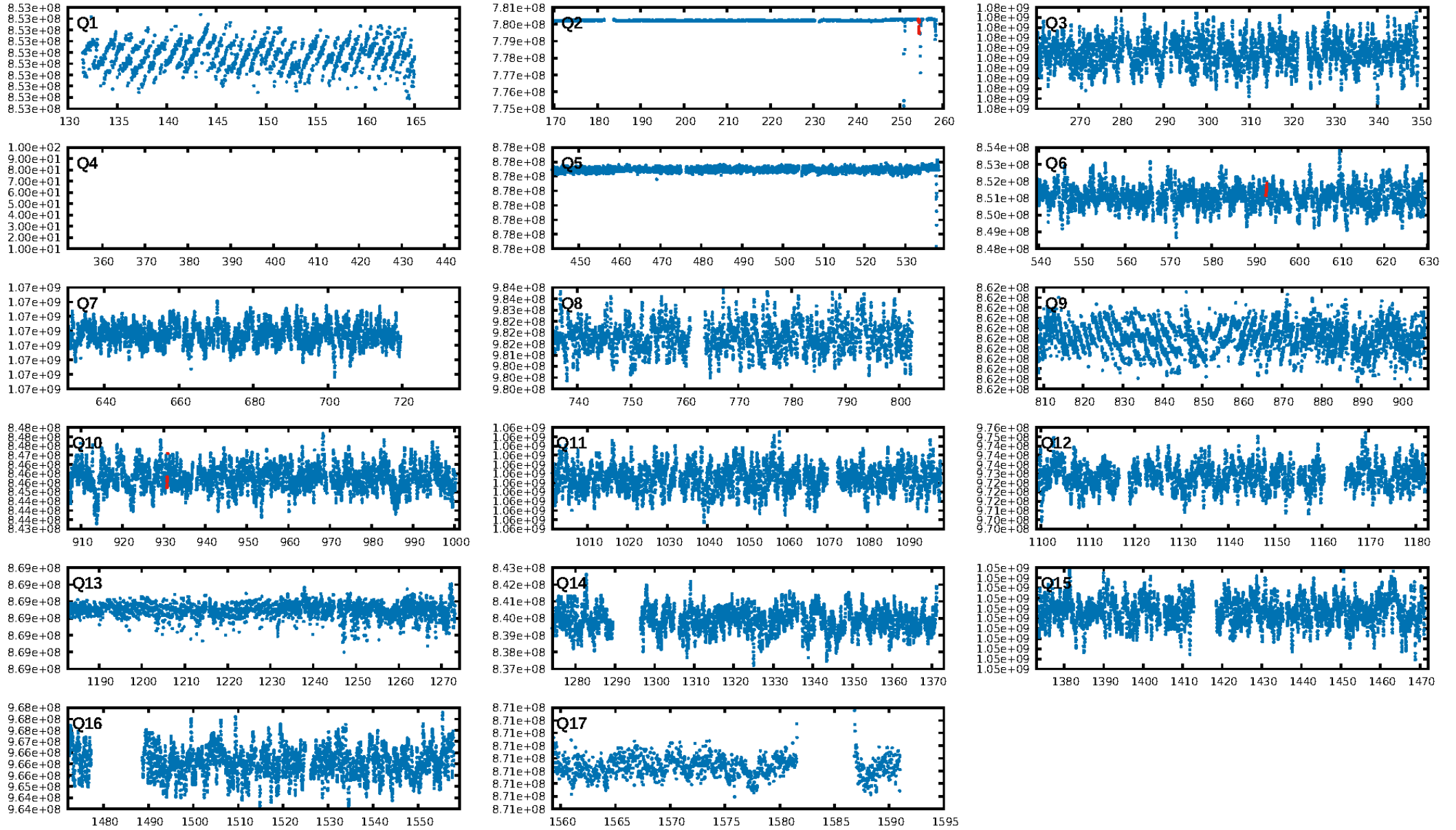
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [1179.42σ]
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [3/3]
GhostDiagnostic-chr: -2.71
Centroid-sig: 72.8%
Centroid-so: 0.139 arcsec [0.43σ]
OotOffset-rm: 5.161 arcsec [18.65σ]
KicOffset-rm: 5.626 arcsec [20.37σ]
OotOffset-st: 3/0/0/0 [3]
KicOffset-st: 3/0/0/0 [3]
DiffImageQuality-fgm: 0.33 [1/3]
DiffImageOverlap-fno: 0.00 [0/3]

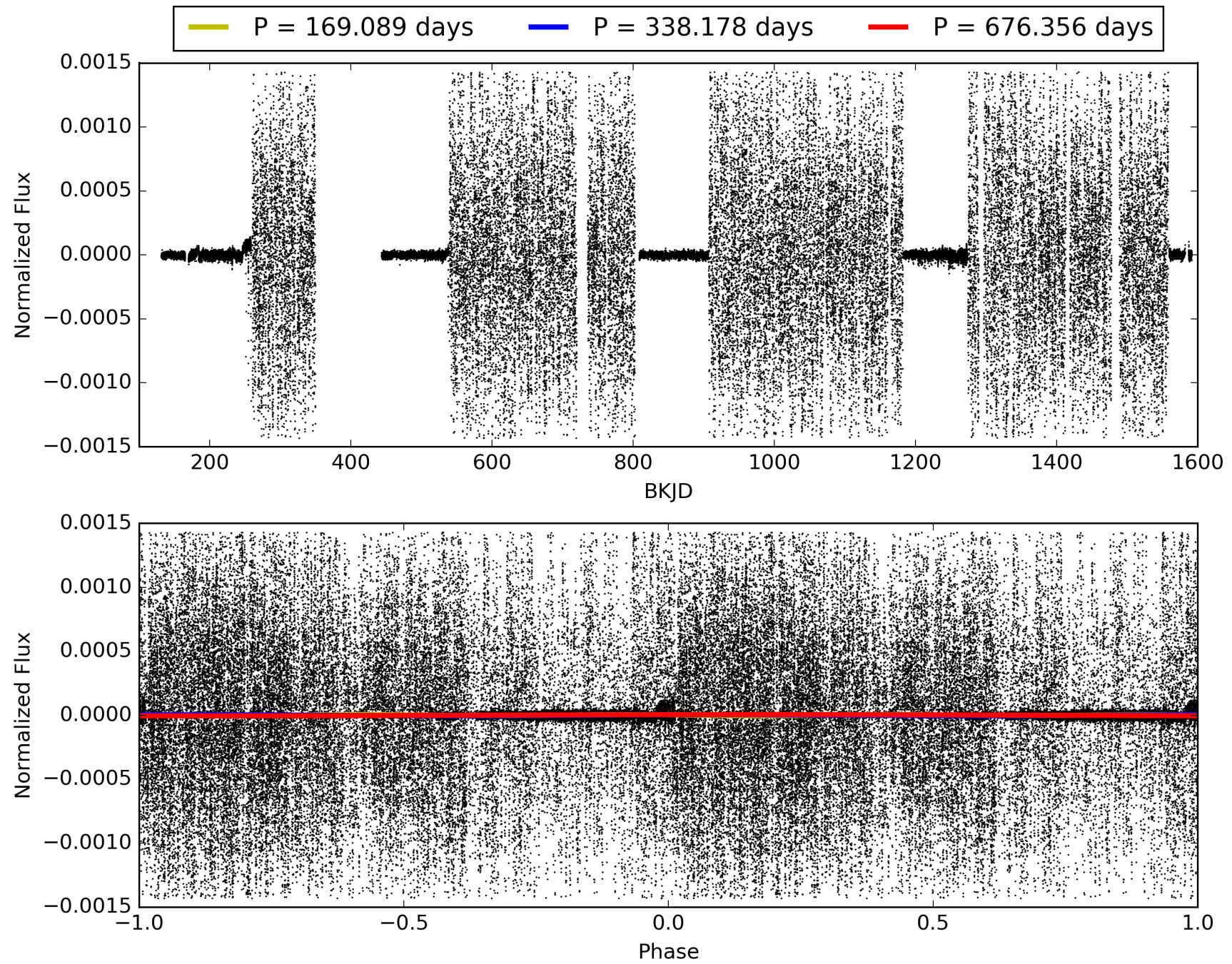
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 05:42:18 Z

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

TCE 011351140-03, PDC Light Curves

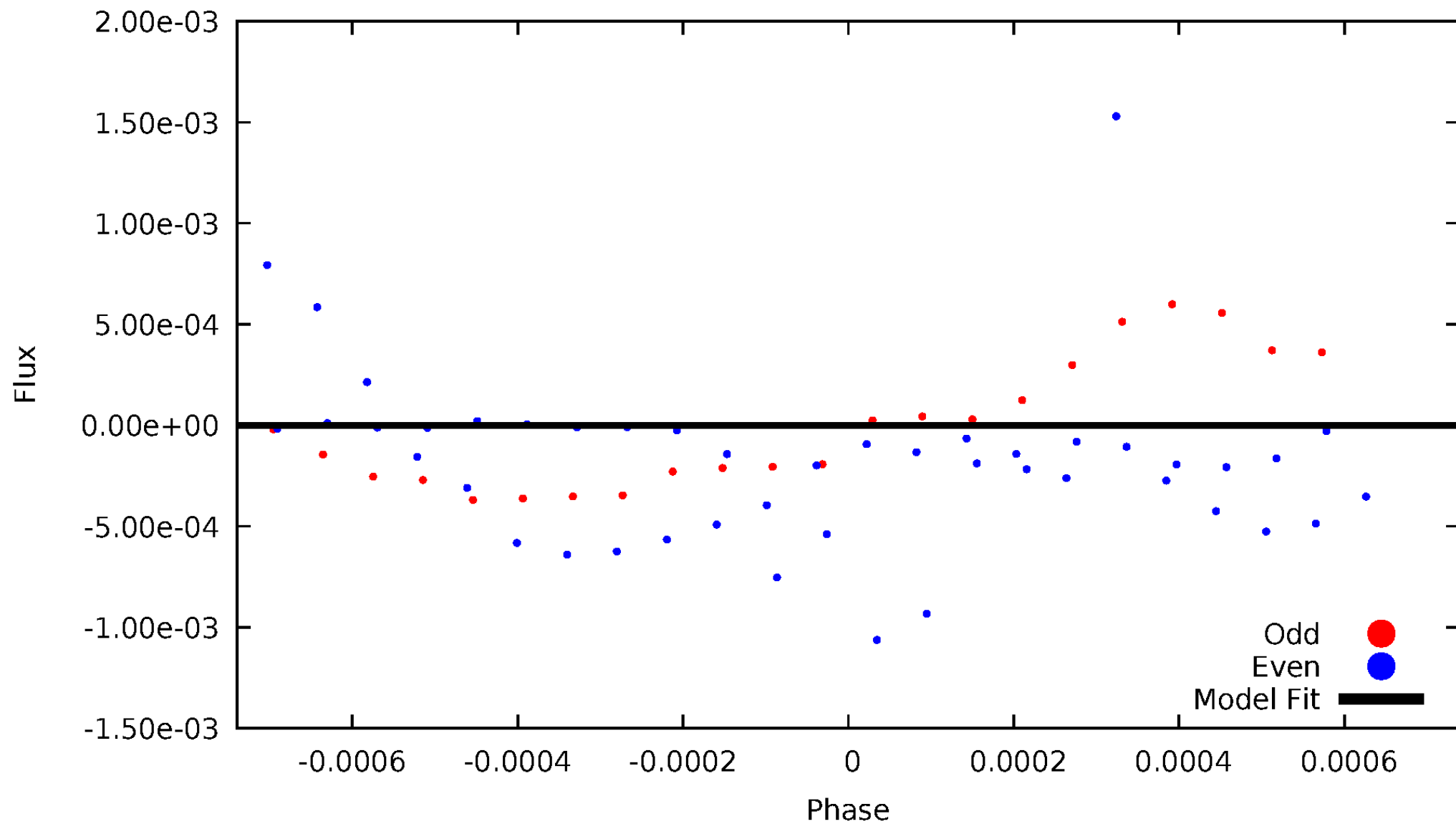


TCE 011351140-03



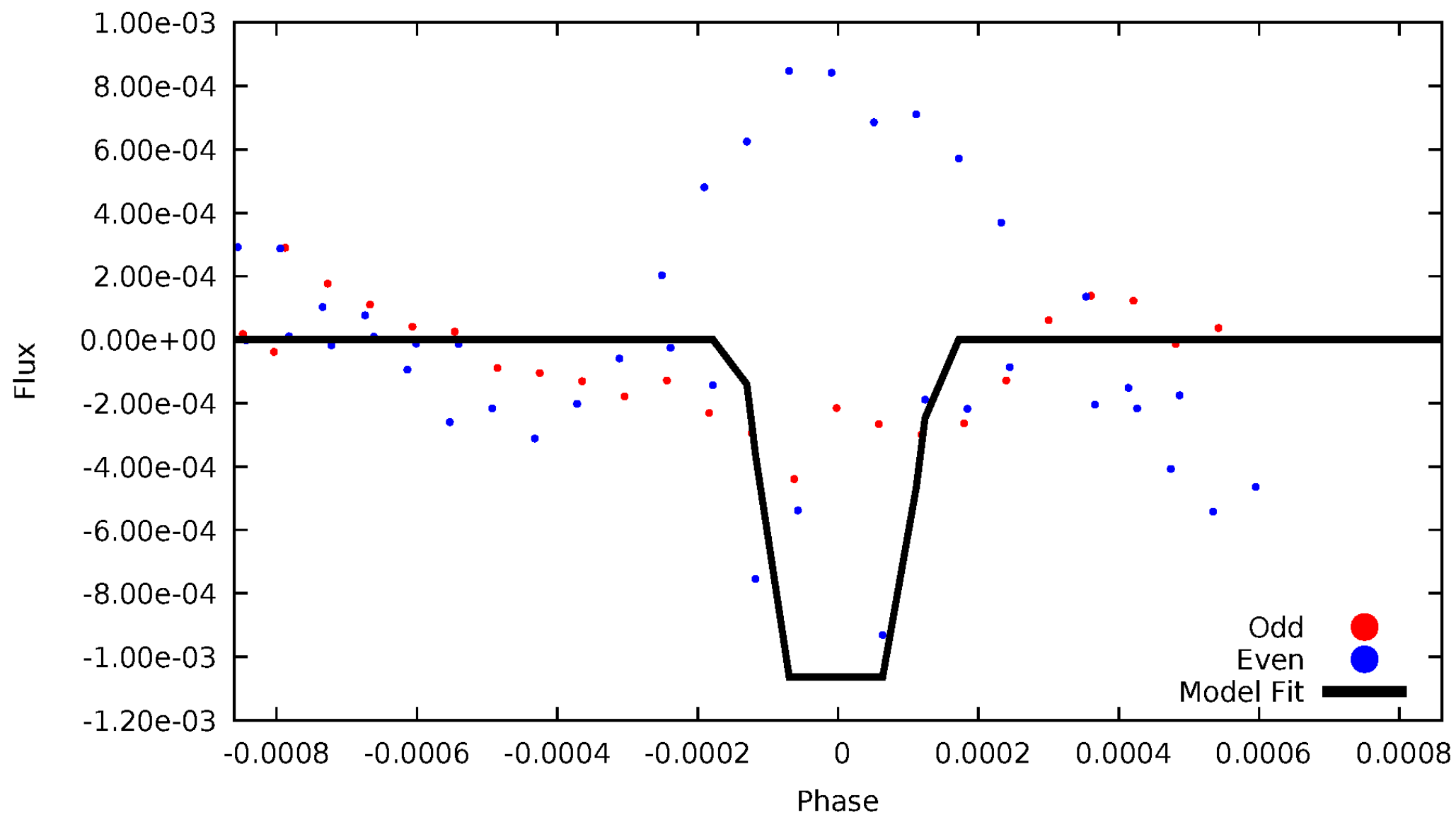
DV Odd/Even

TCE 011351140-03

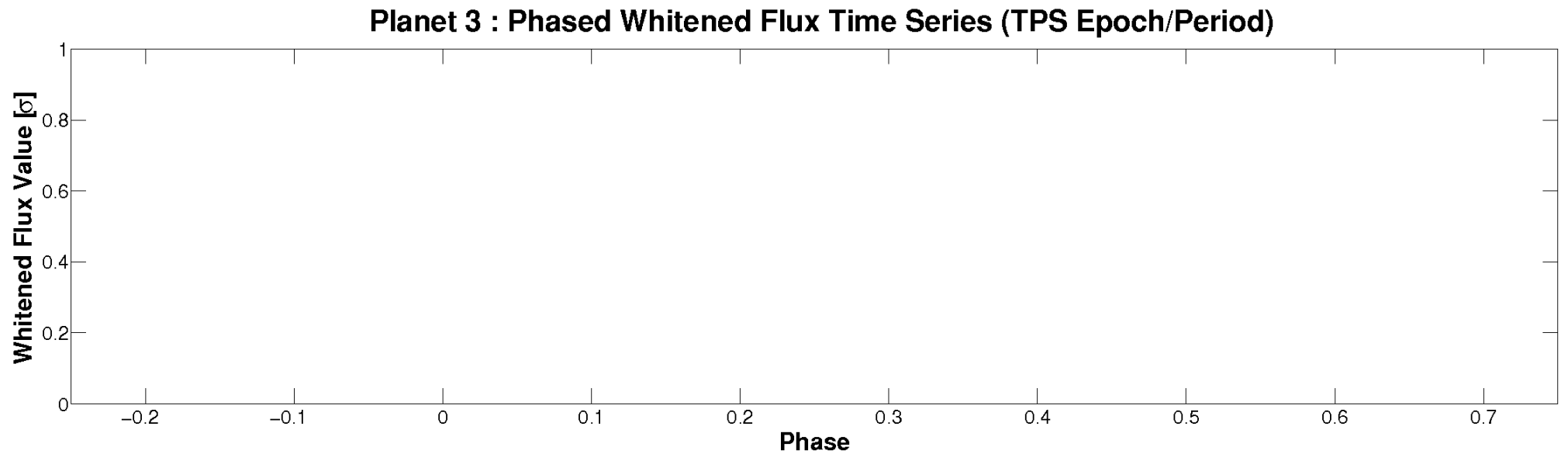
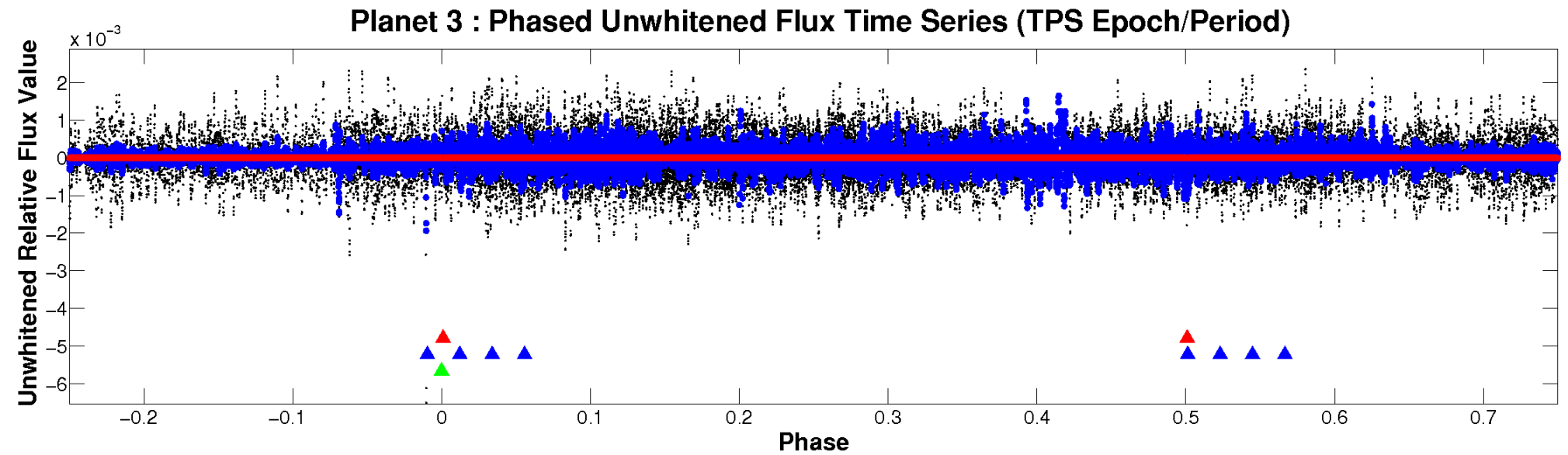


ALT Odd/Even

TCE 011351140-03

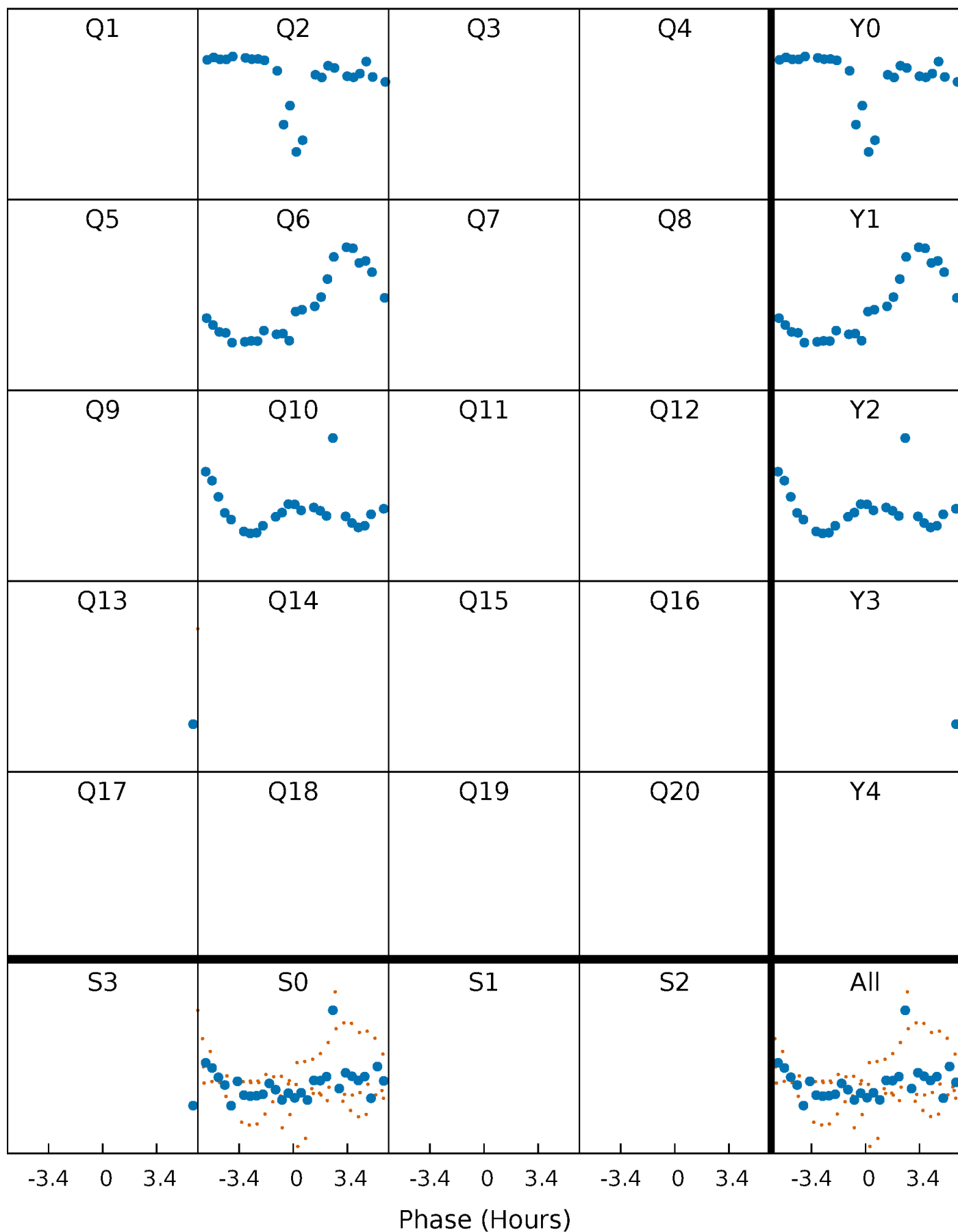


Non-Whitened Vs. Whitened Light Curve



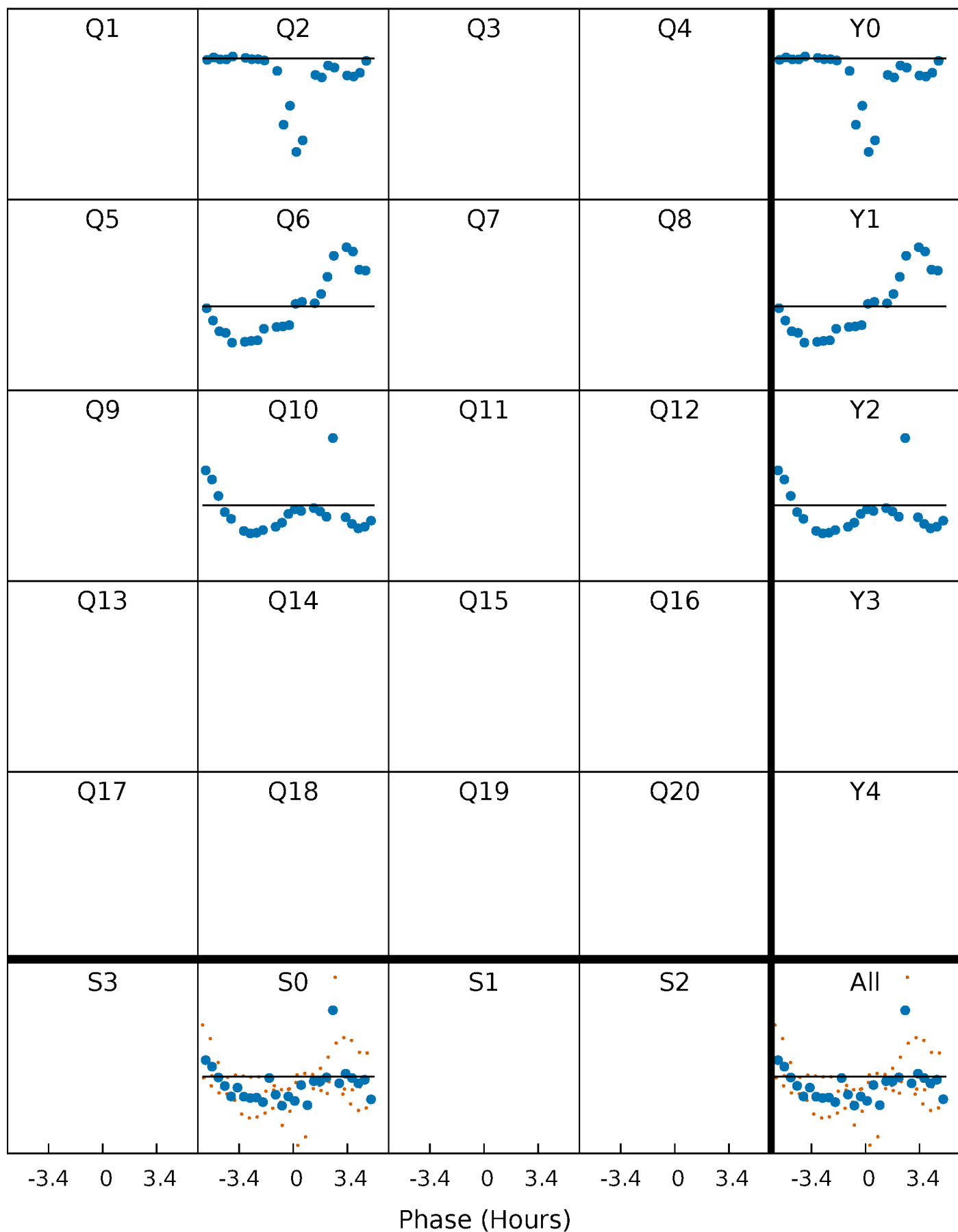
PDC Quarter-Phased Transit Curves

TCE 011351140-03 P=338.178180 Days $T_0=254.450806$ (BKJD)



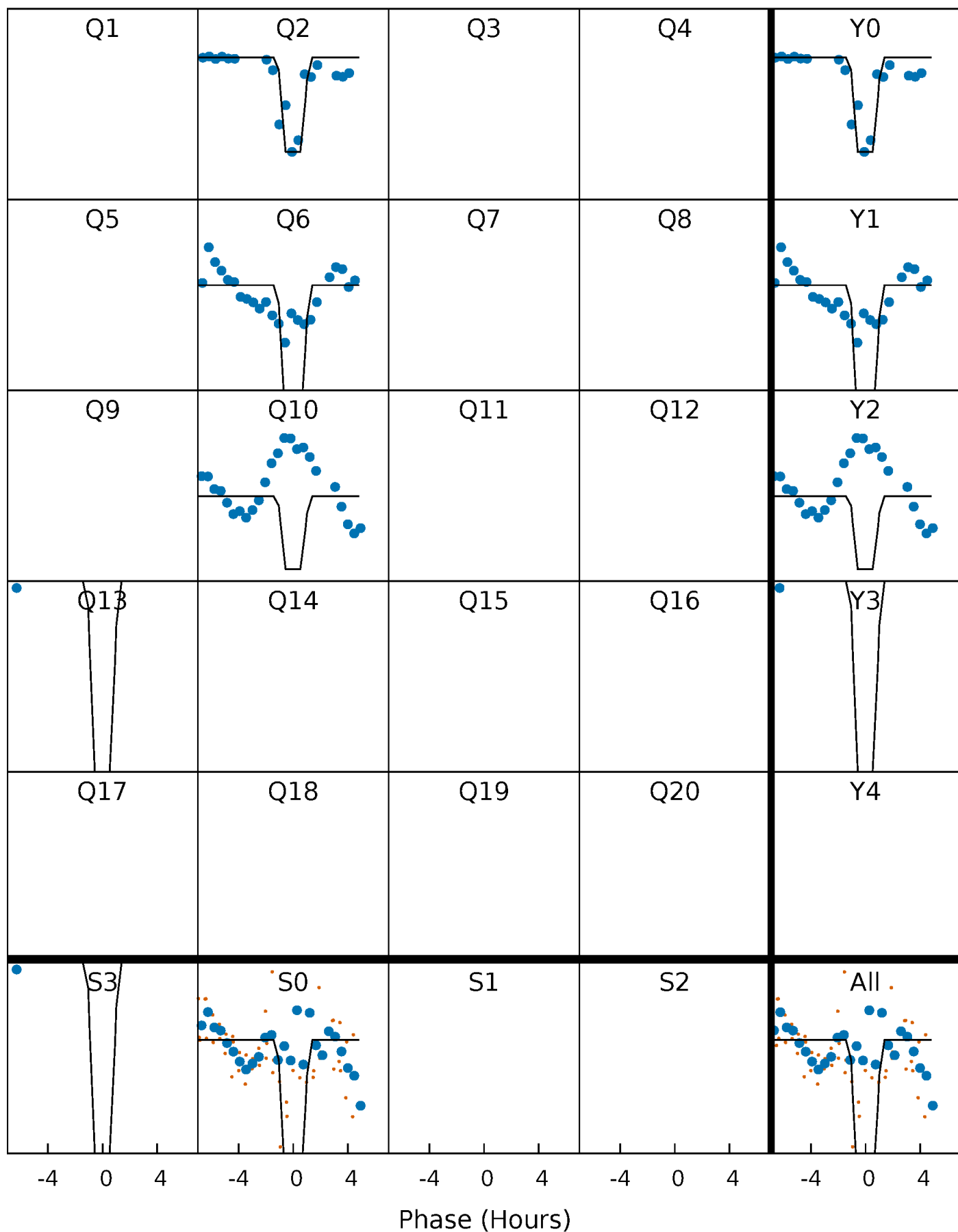
DV Quarter-Phased Transit Curves

TCE 011351140-03 P=338.178180 Days $T_0=254.450806$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

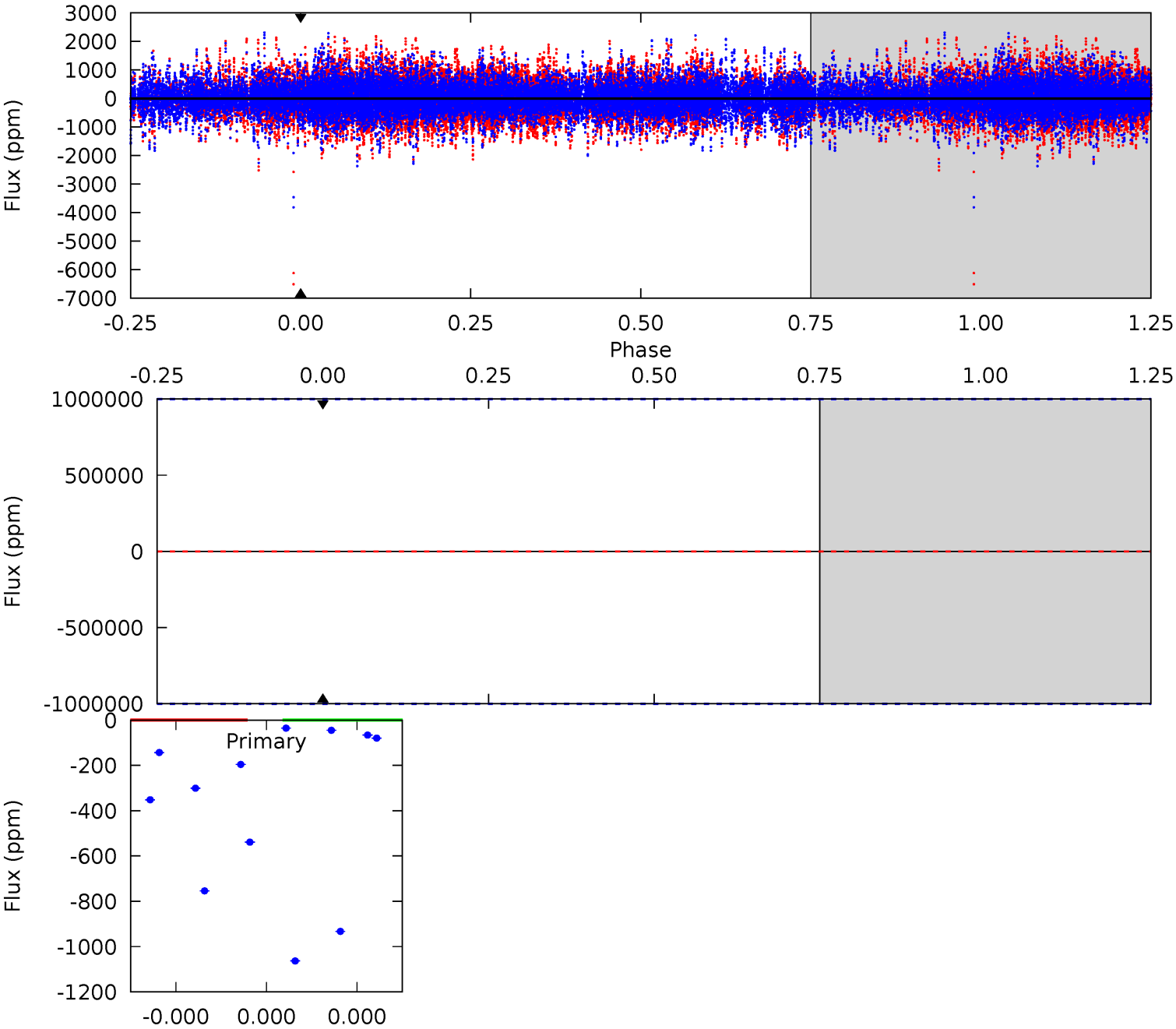
TCE 011351140-03 P=338.178180 Days $T_0=254.461384$ (BKJD)



DV Model-Shift Uniqueness Test

011351140-03, P = 338.178180 Days, E = 254.450806 Days

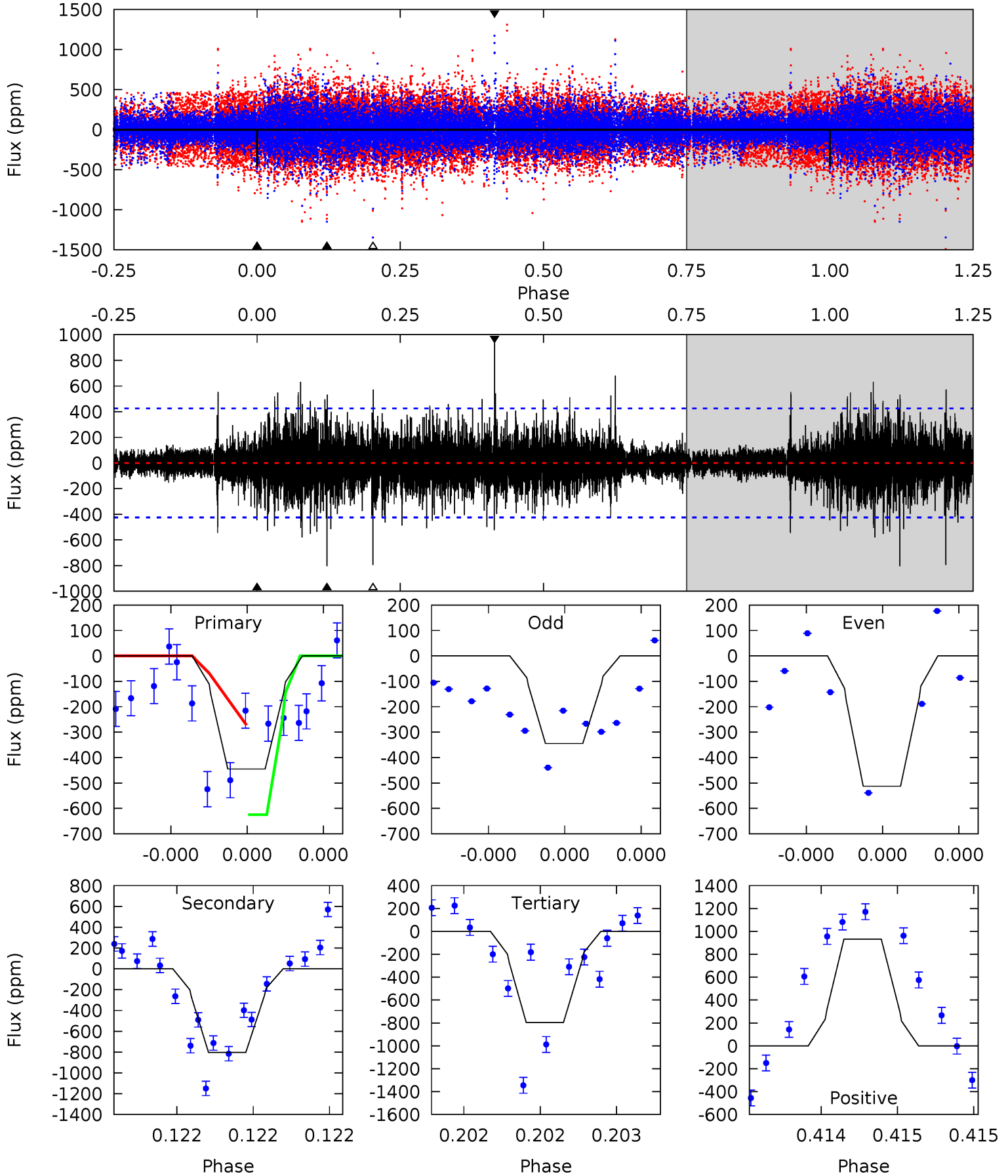
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
0	0	0	0	1.00	1.00	1.00	0	0	0	0	0	0	0	0



Alt Model-Shift Uniqueness Test

011351140-03, P = 338.178180 Days, E = 254.461384 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
5.96	10.8	10.7	12.5	5.69	3.67	1.43	-4.69	-6.53	0.10	-1.73	1.19	0.36	0.54	2.63



Stellar Parameters For KIC 011351140

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	M (M_{\odot})	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	5180^{+102}_{-102}	$2.403^{+0.039}_{-0.032}$	$-0.500^{+0.050}_{-0.200}$	$17.458^{+1.029}_{-1.338}$	$2.810^{+0.095}_{-0.265}$	$0.001^{+0.000}_{-0.000}$
	+2%/-2%	+2%/-1%	+10%/-40%	+6%/-8%	+3%/-9%	+18%/-12%
Source	PHO55	AST55	SPE55	DSEP		

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

Secondary Eclipse Parameters for KIC 011351140-03 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	0 ± 1000000	$135.29^{+153.51}_{-92.47}$	1150^{+29}_{-27}	-3821^{+19030}_{-12260}	$-52.415^{+7825.971}_{-8708.495}$
Alt.	-803 ± 75	$146.64^{+153.61}_{-102.15}$	1150^{+28}_{-27}	3569^{+2021}_{-720}	36^{+362}_{-28}

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

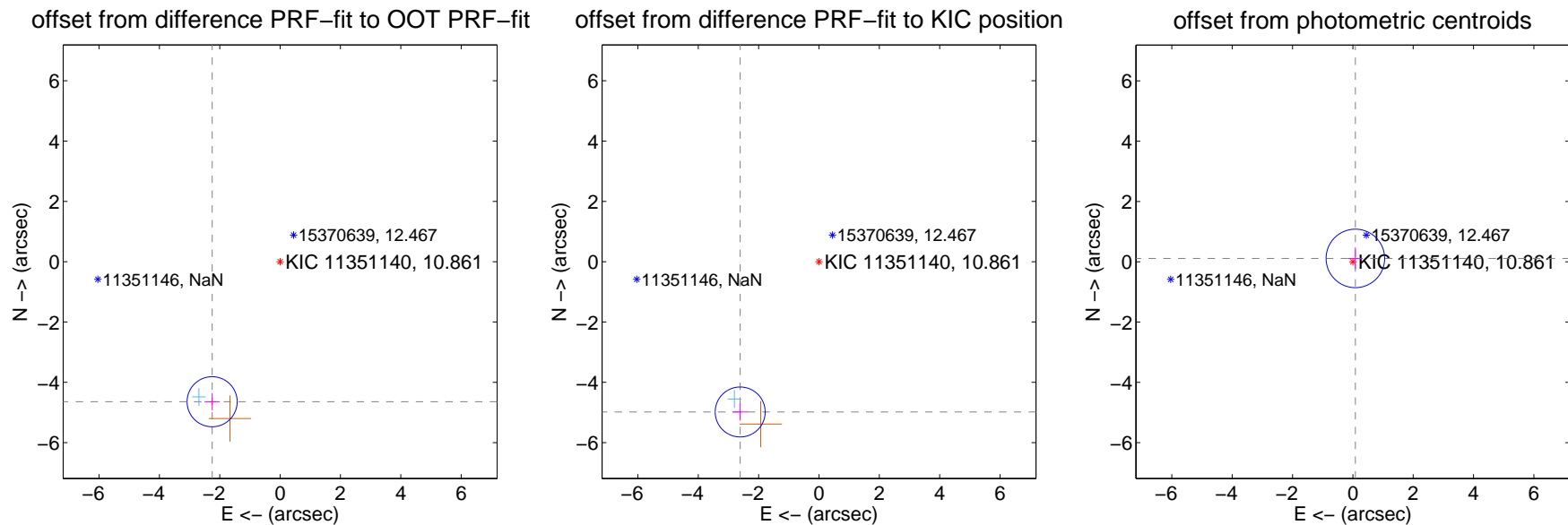
DV Centroid Data

Supplemental centroid analysis for 011351140-03. **Kepler magnitude: 10.86.** Transit SNR -1.00

There are 1 quarters with good PRF difference image offsets

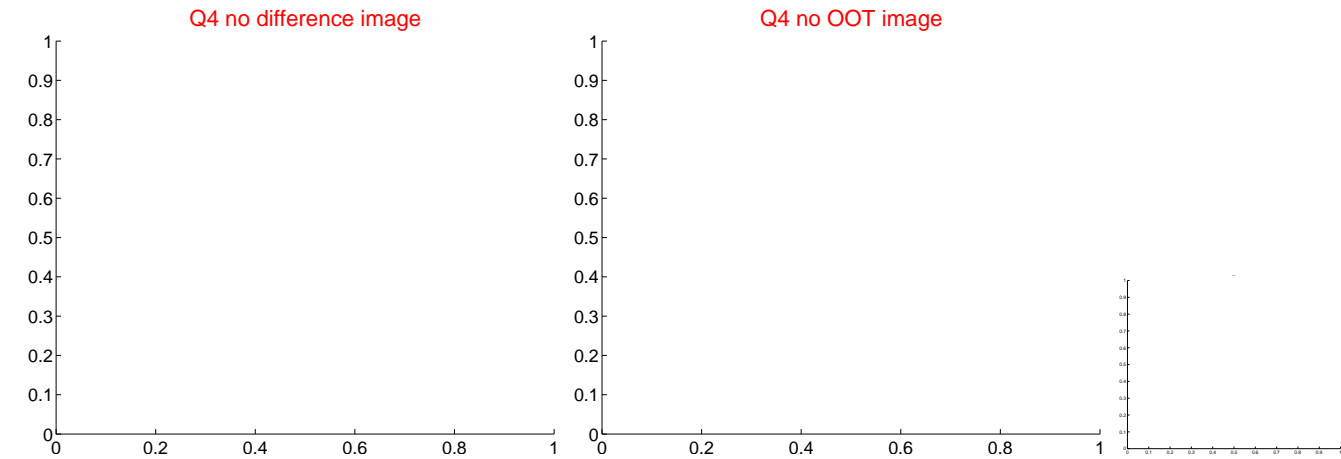
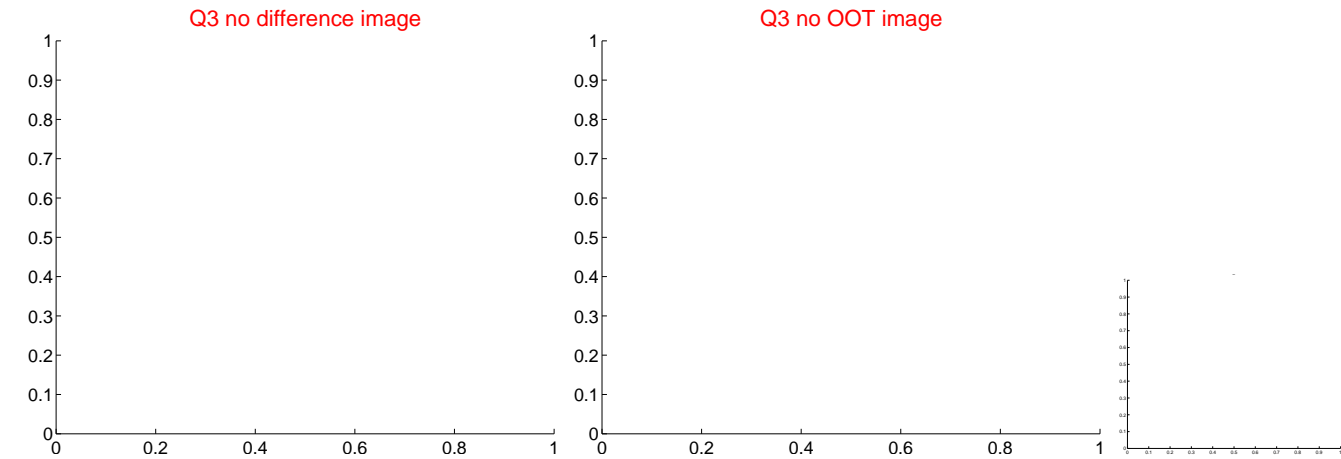
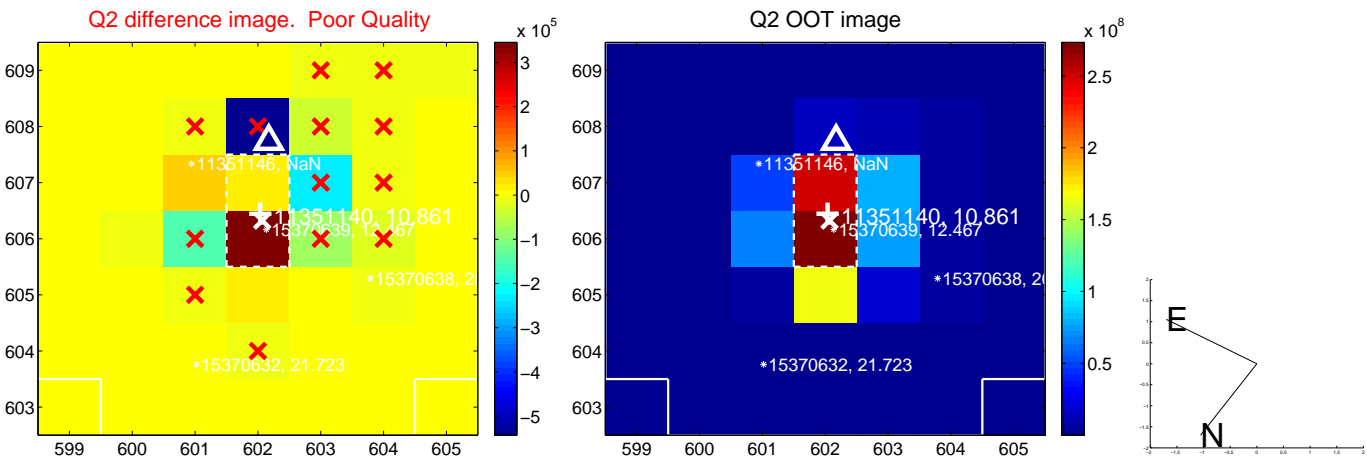
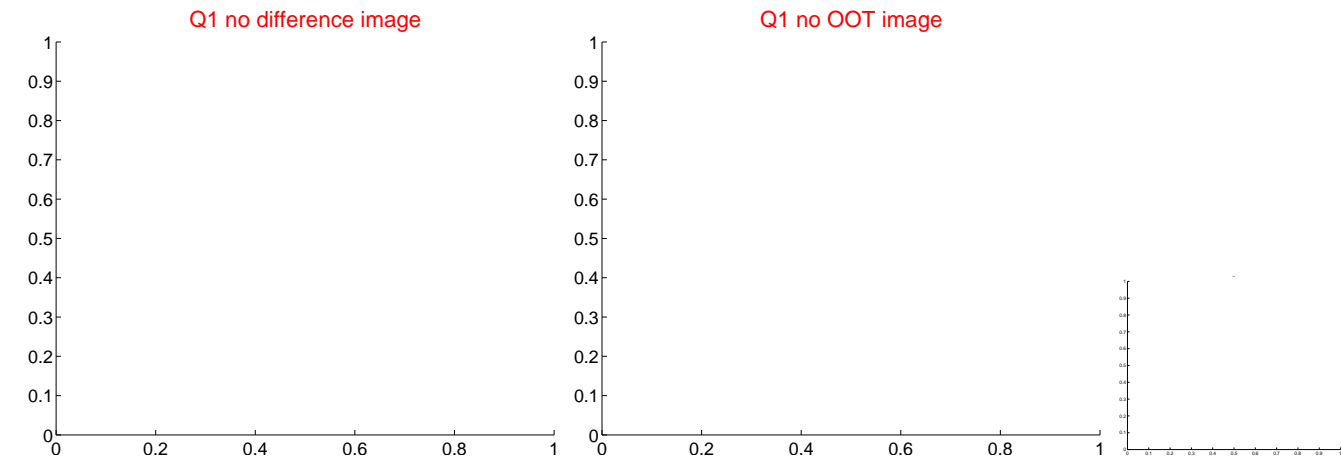
The direct PRF centroid is offset from the target star catalog position by about 0.13 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	5.161 \pm 0.277	18.65	2.252 \pm 0.255	-4.643 \pm 0.282
PRF-fit source offset from KIC position	5.626 \pm 0.276	20.37	2.611 \pm 0.255	-4.983 \pm 0.282
photometric centroid source offset	0.14 \pm 0.32	0.43	-0.08 \pm 0.24	0.11 \pm 0.36

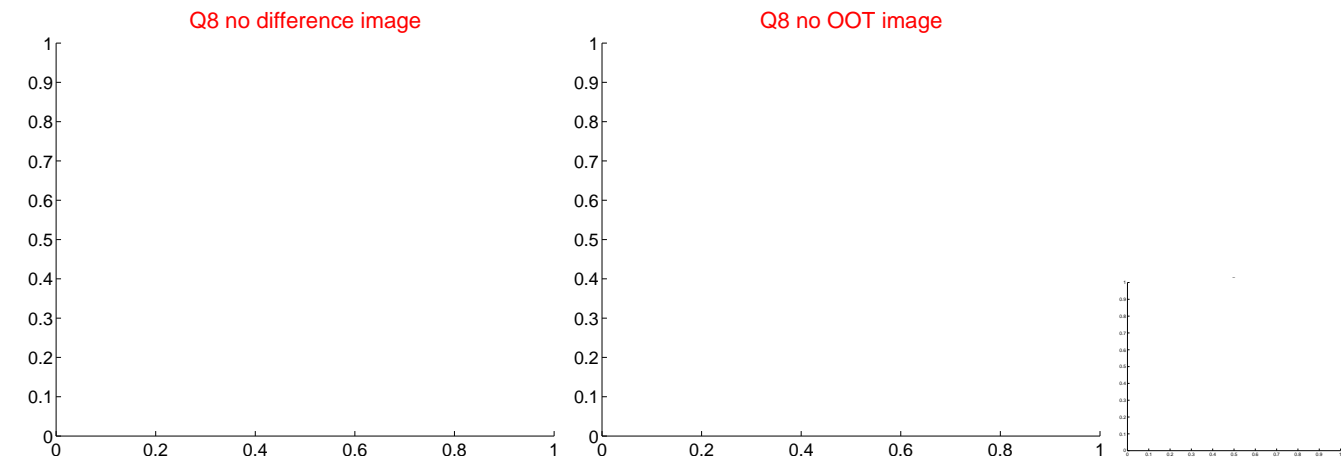
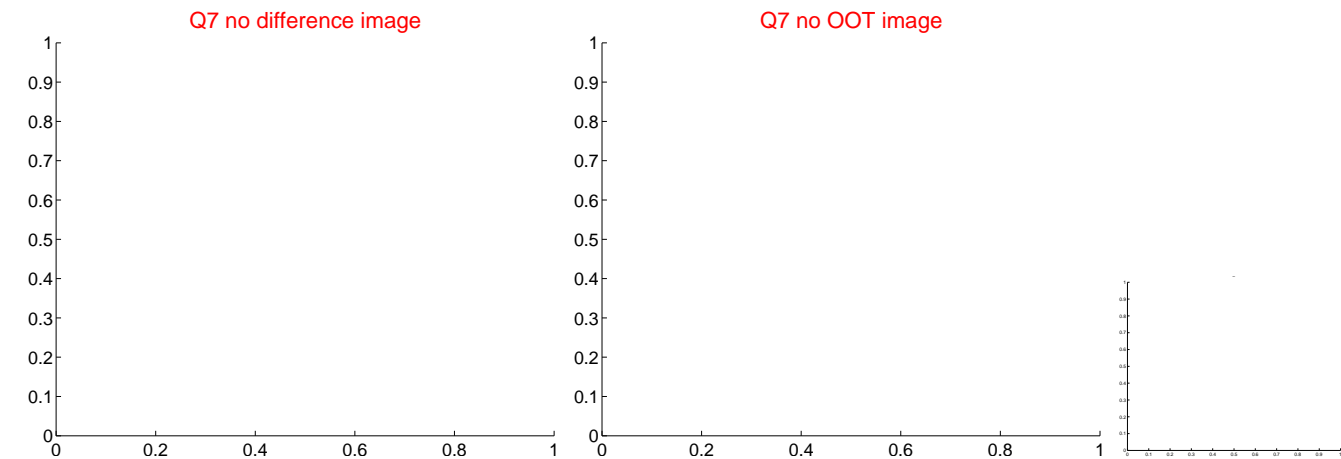
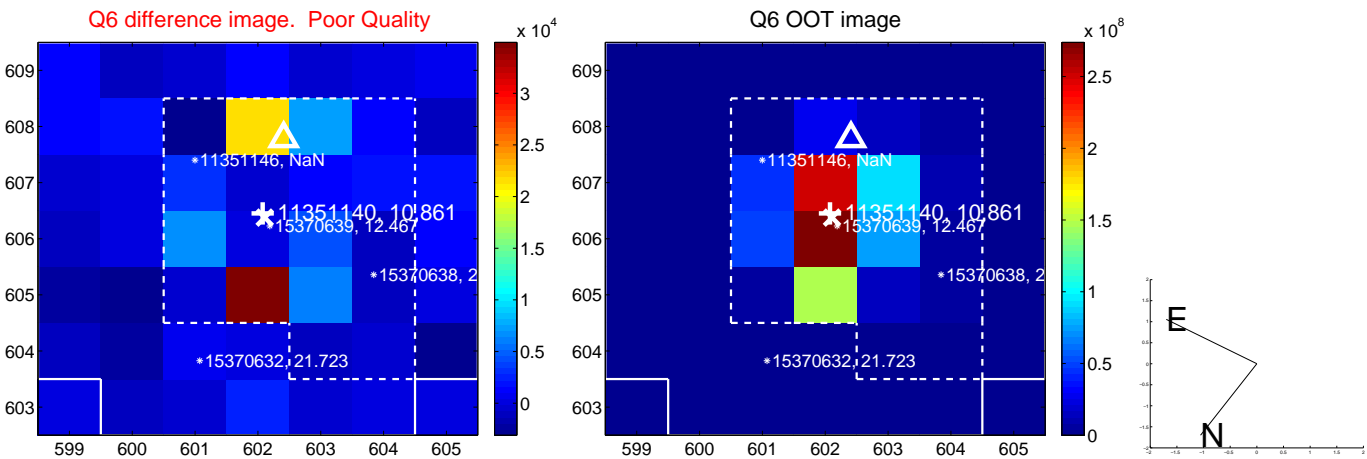
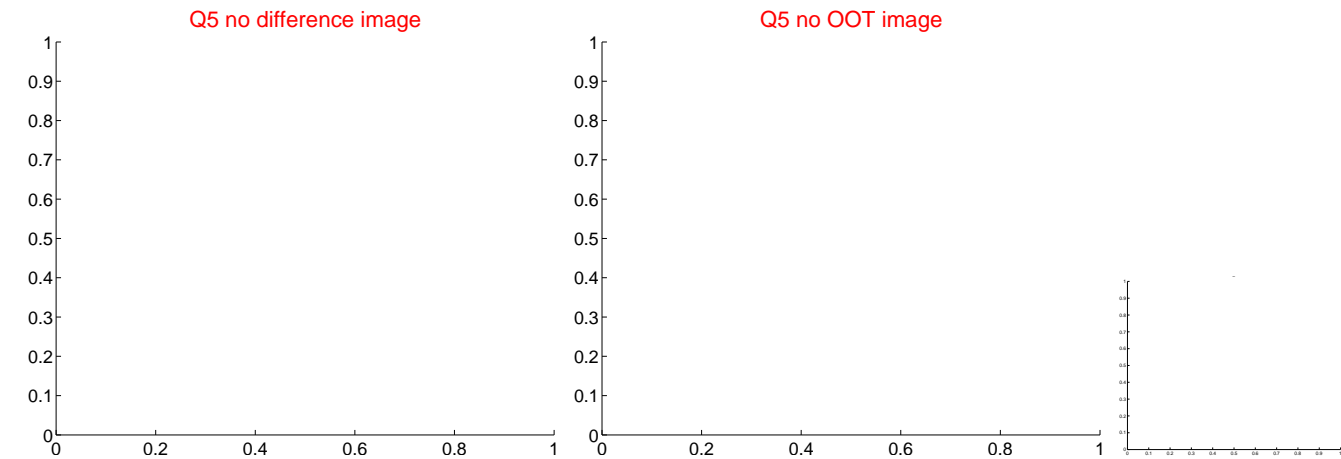


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets;** magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

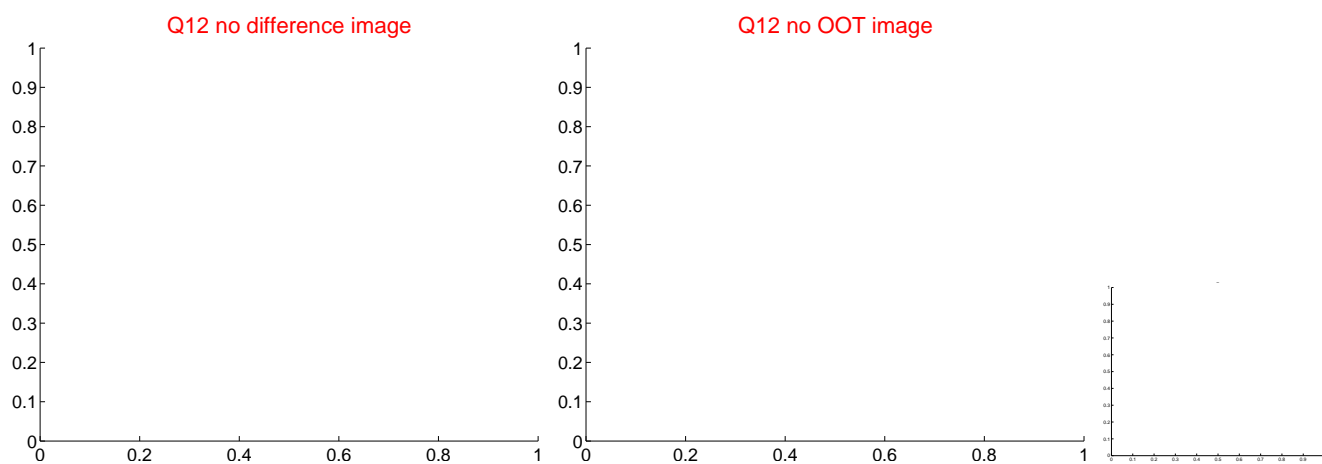
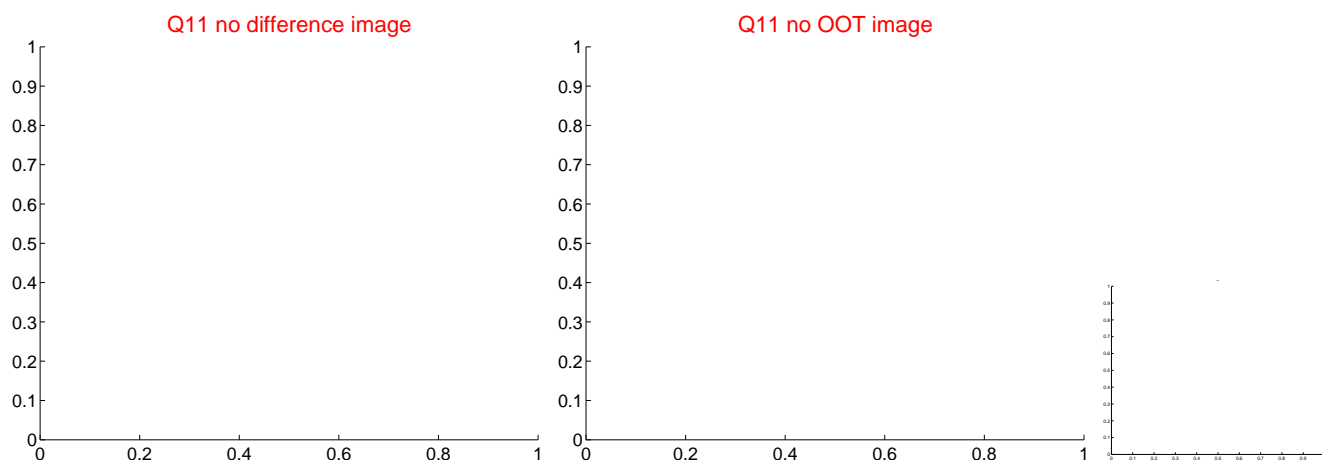
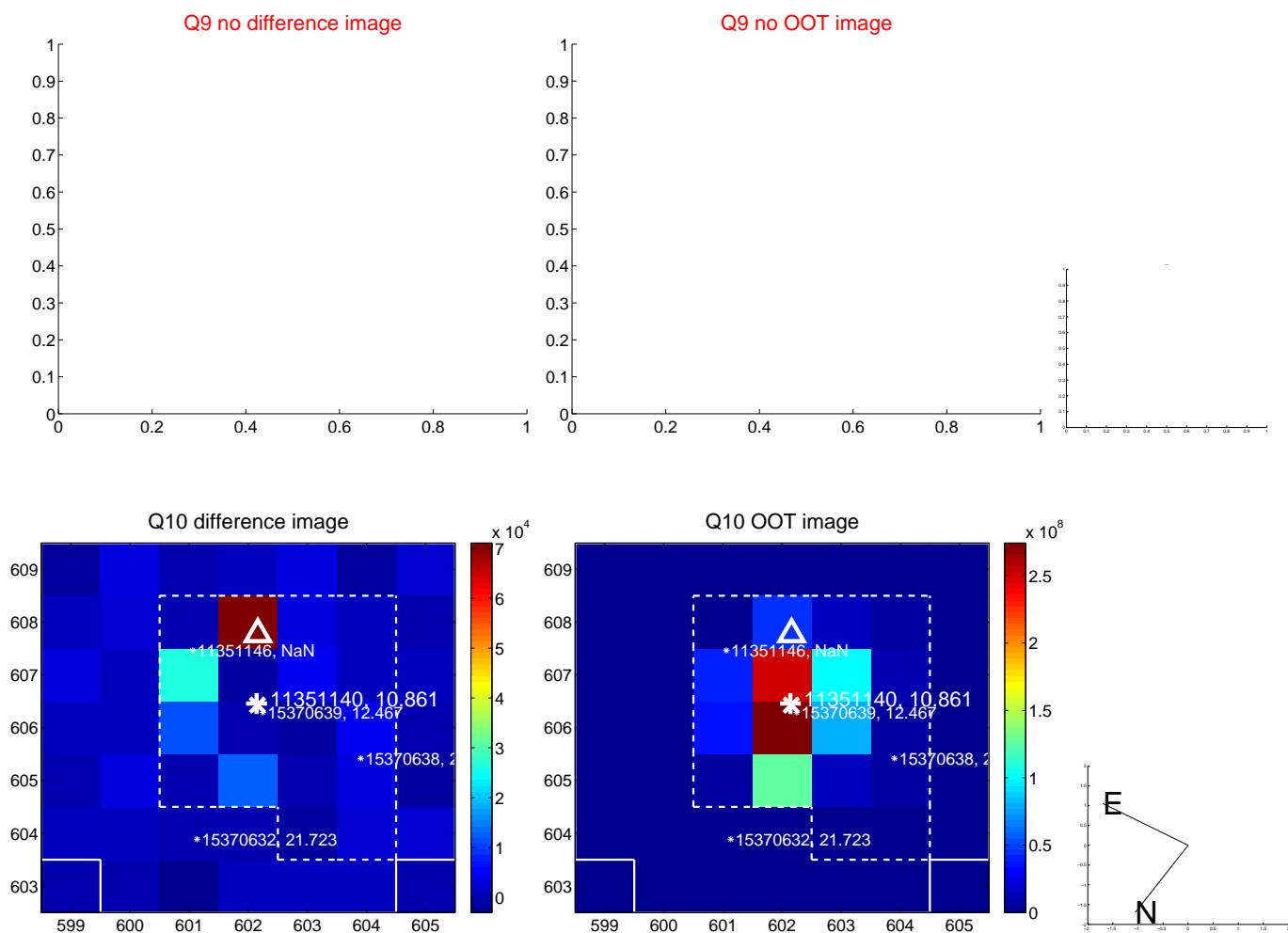
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



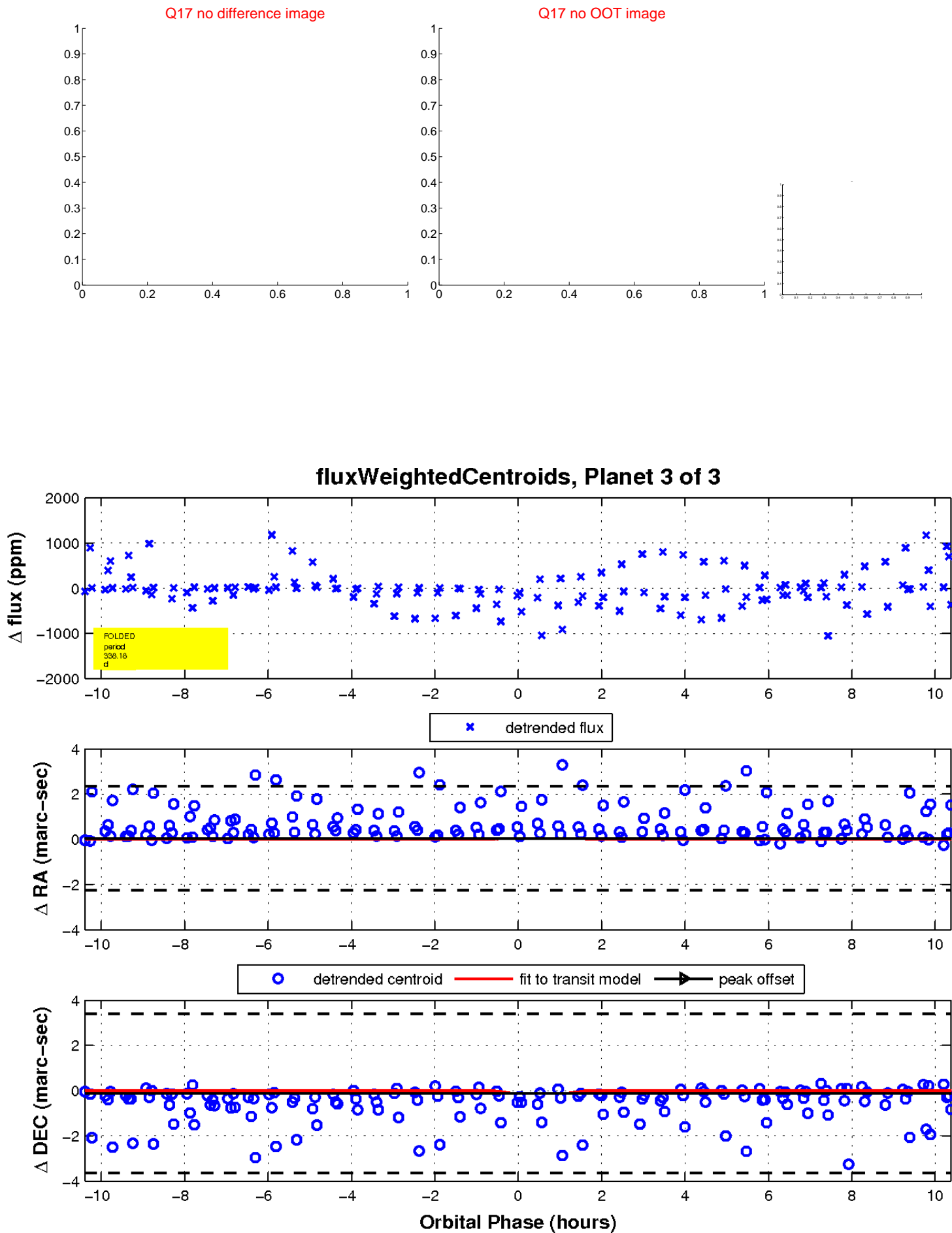
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value



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



UKIRT Image

