

KIC 005113557

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})
005113557-01	OBS	No	0.568241	131.748790	29.0	4.166	10.6	11.2	1.56	7077	0.86	26805.29
005113557-02	OBS	No	15.539387	143.162348	552.9	1.082	11.5	12.9	1.56	7077	4.05	325.35
005113557-03	OBS	No	13.755348	139.620365	17.2	1.506	11.0	0.4	1.56	7077	0.66	382.80

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
005113557-01	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—CENT_SATURATED
005113557-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV—MOD_TER_DV—CENT_SATURATED
005113557-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV—MOD_TER_DV—CENT_SATURATED

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

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

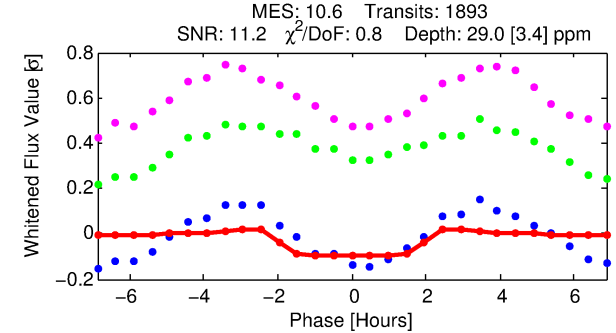
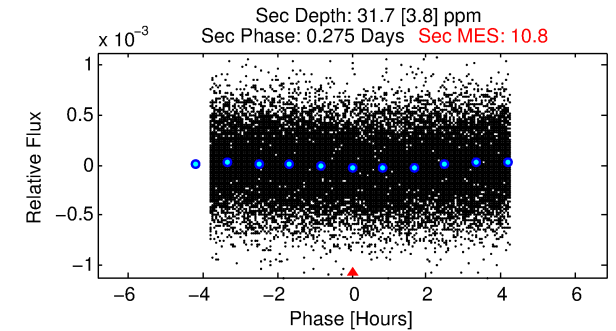
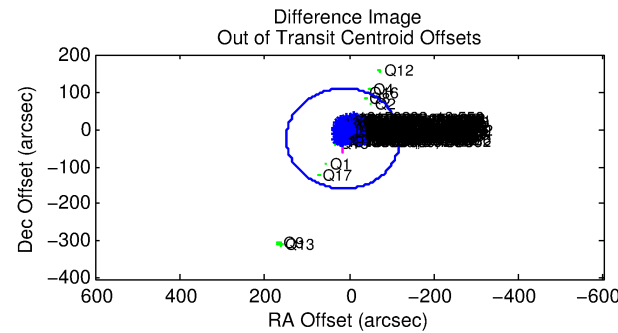
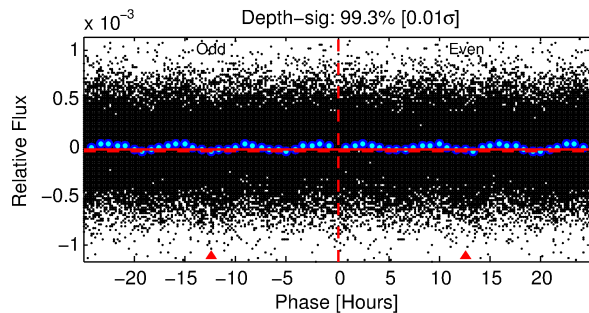
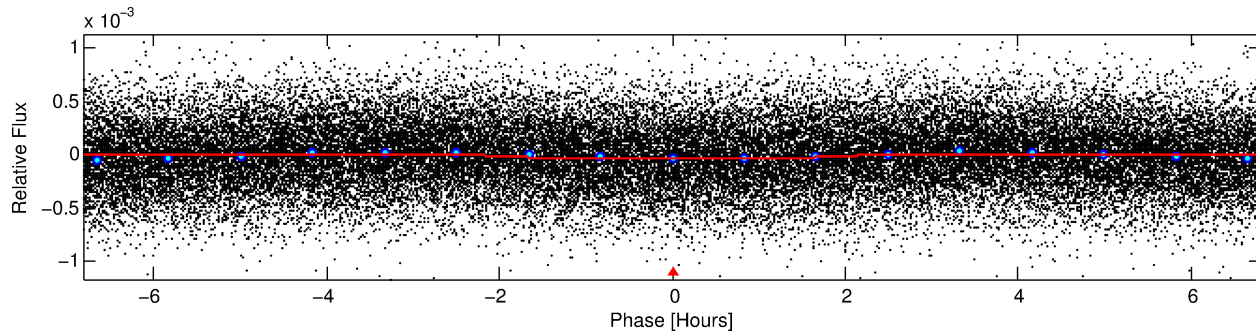
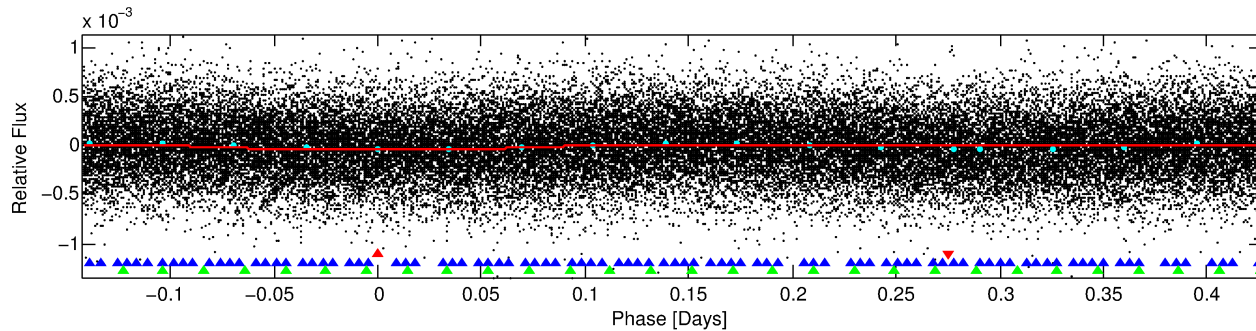
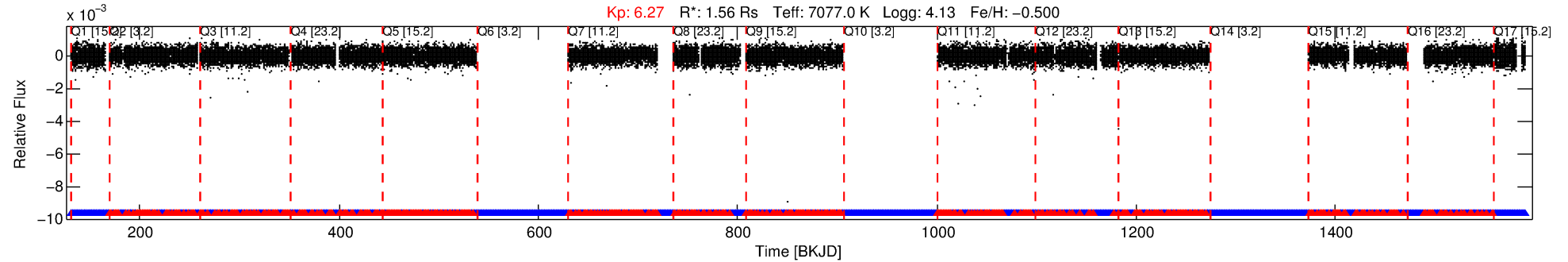
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 005113557-01

No Significant Match Found

DV One-Page Summary

KIC: 5113557 Candidate: 1 of 3 Period: 0.568 d



DV Fit Results:

Period = 0.56824 [0.00001] d
Epoch = 131.7488 [0.0038] BKJD
Rp/R* = 0.0051 [0.0038]
a/R* = 1.20 [1.63]
b = 0.35 [11.28]
Seff = 26805.29 [10690.60]
Teff = 3263 [325] K
Rp = 0.86 [0.70] Re
a = 0.0143 [0.0034] AU
Ag = 4.80 [7.53] [0.51 σ]
Teffp = 7468 [2865] K [1.46 σ]

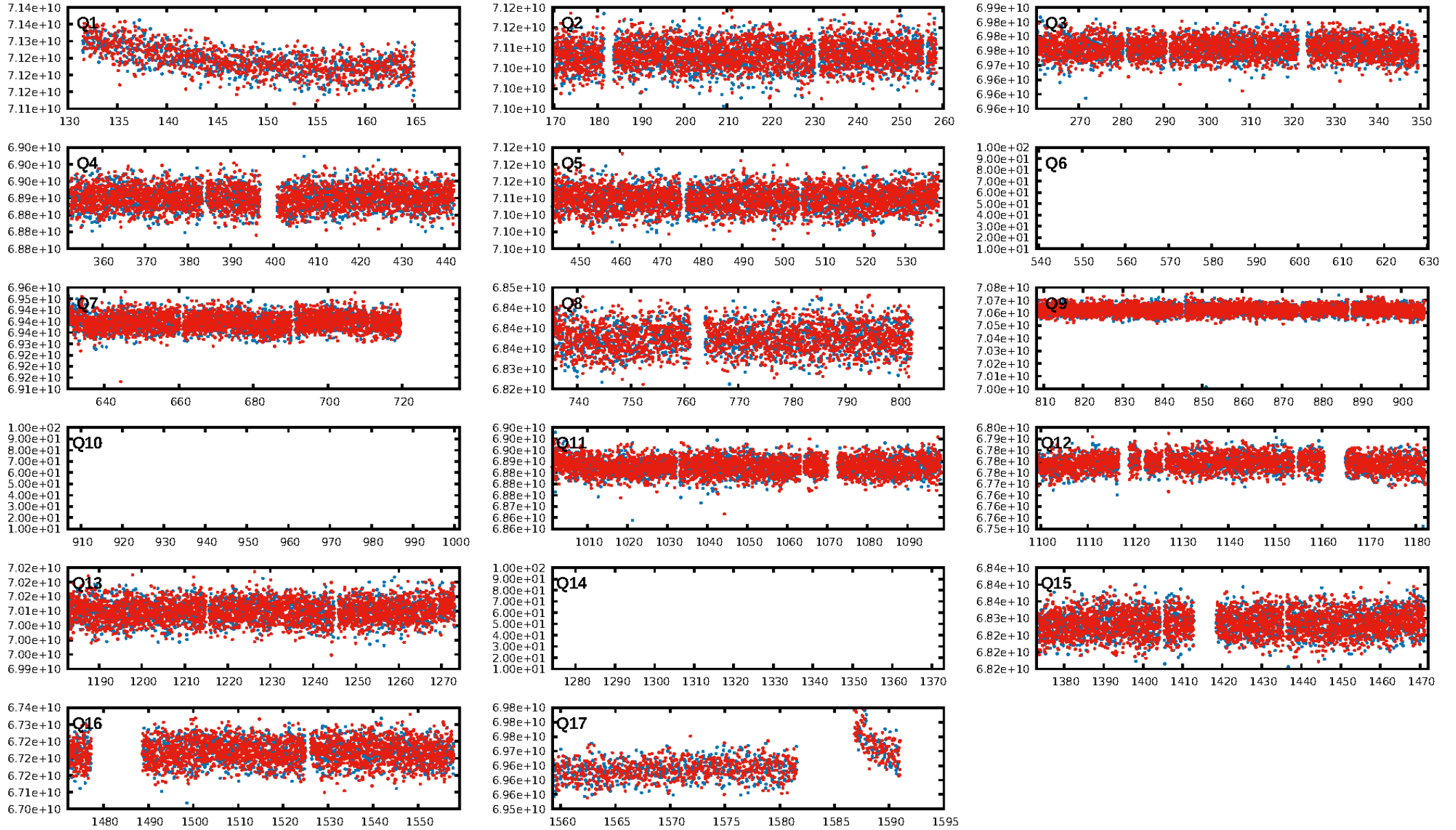
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: 100.0% [71.45 σ]
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 3.51e-11
RollingBand-fgt: 0.72 [1281/1786]
GhostDiagnostic-chr: N/A
Centroid-sig: 0.0%
Centroid-so: 31.763 arcsec [7.06 σ]
OotOffset-rm: 28.420 arcsec [0.64 σ]
KicOffset-rm: 16.469 arcsec [0.55 σ]
OotOffset-st: 1/4/4/4 [13]
KicOffset-st: 1/4/4/4 [13]
DiffImageQuality-fgm: 0.00 [0/13]
DiffImageOverlap-fno: 1.00 [14/14]

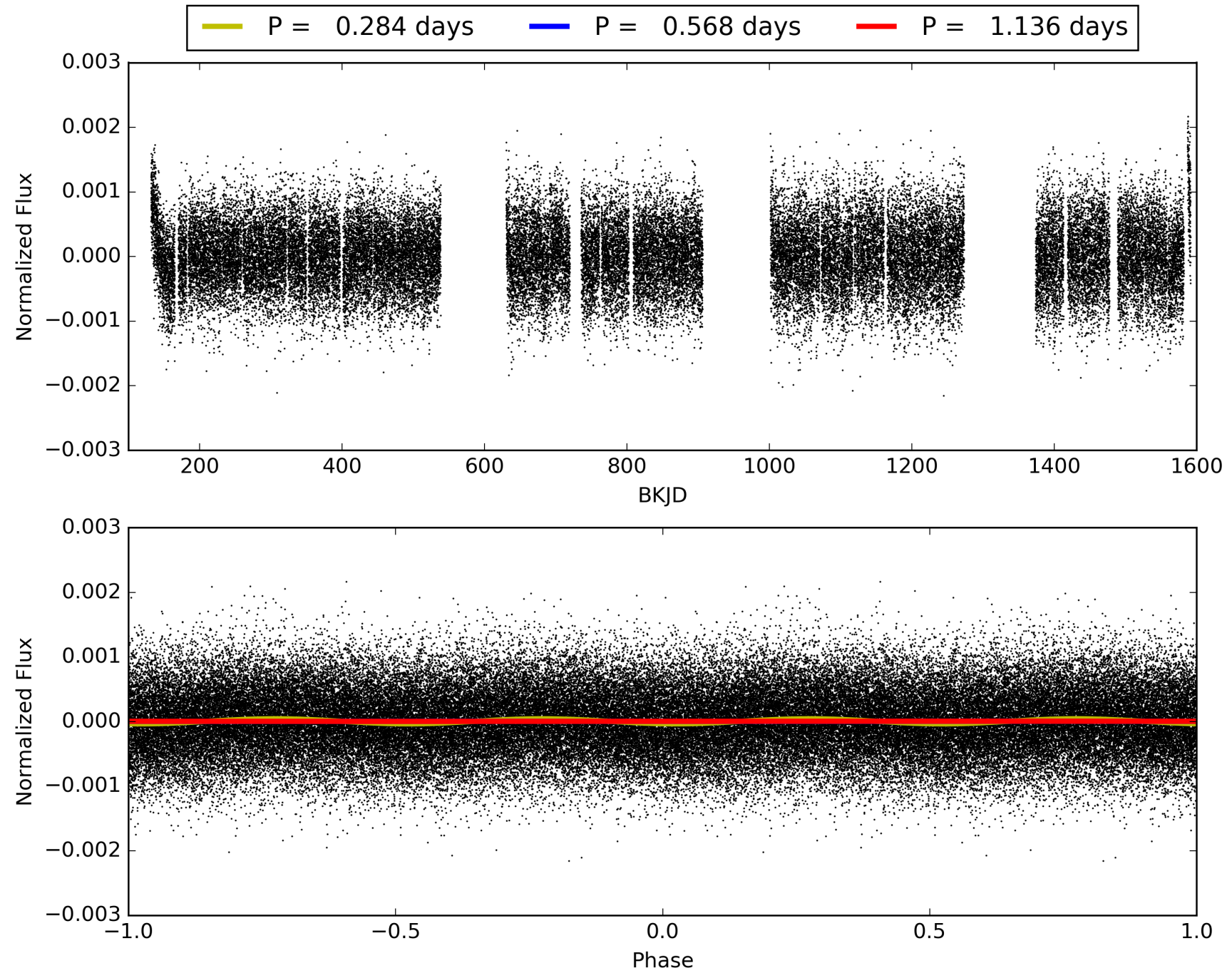
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 09:54:05 Z

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

TCE 005113557-01, PDC Light Curves

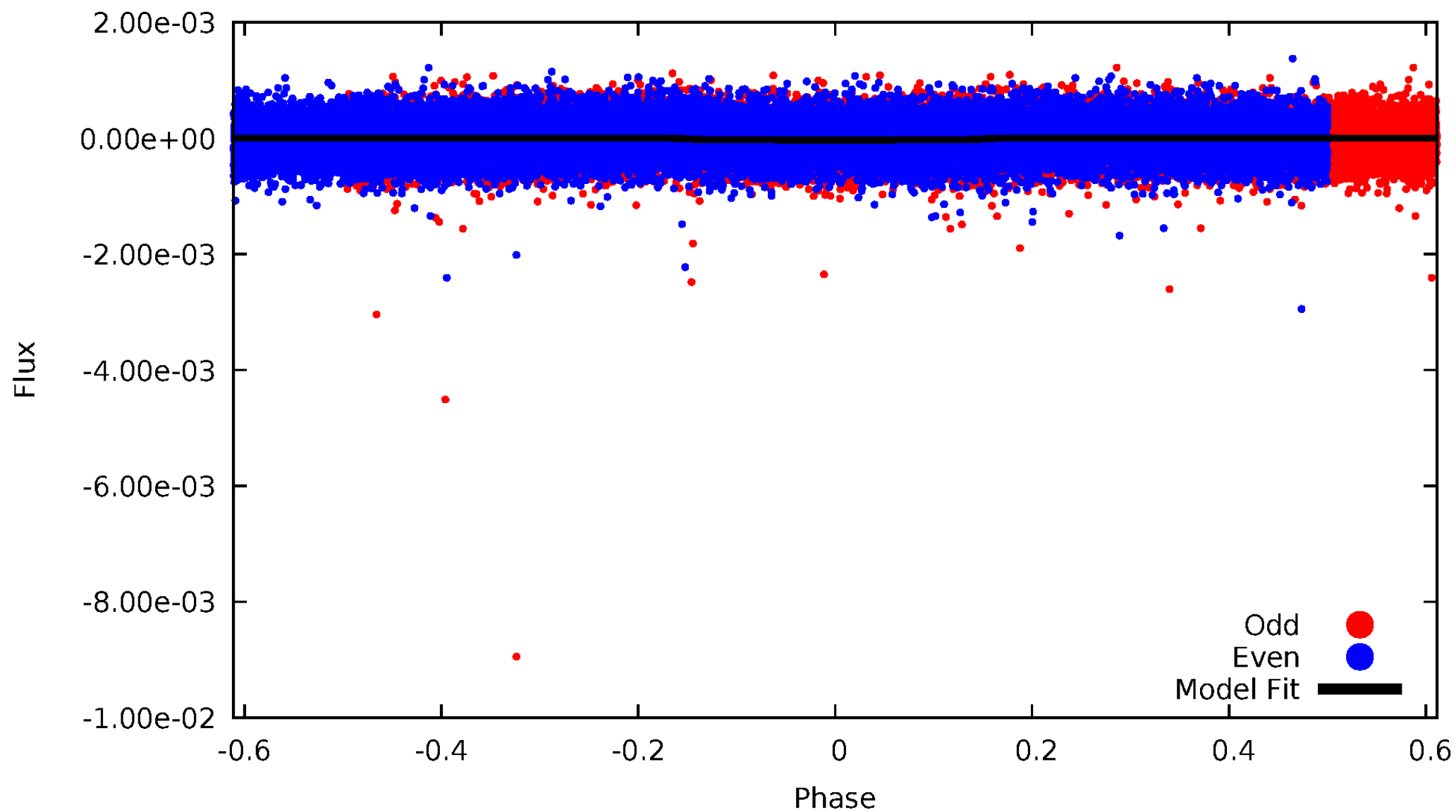


TCE 005113557-01



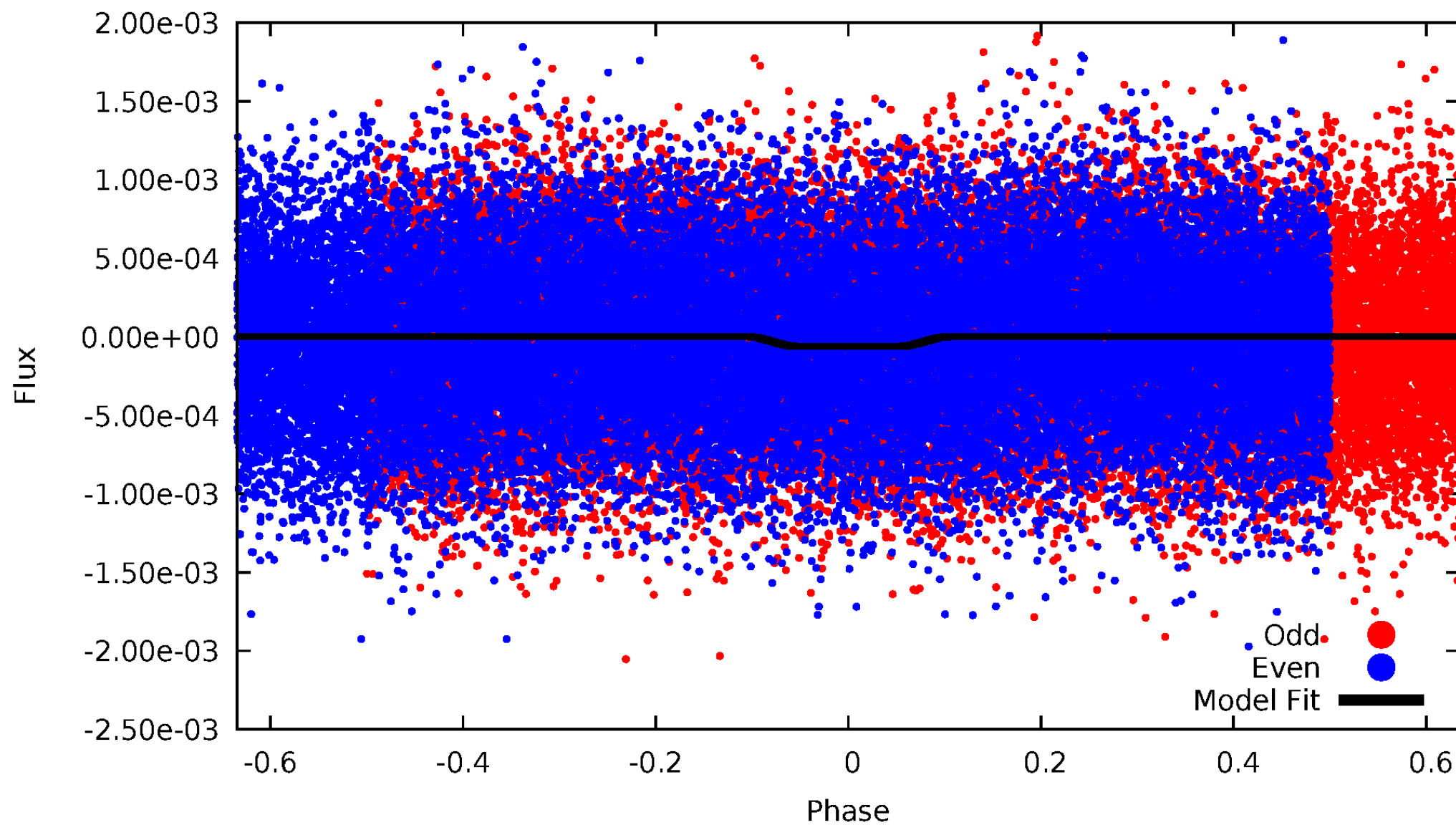
DV Odd/Even

TCE 005113557-01



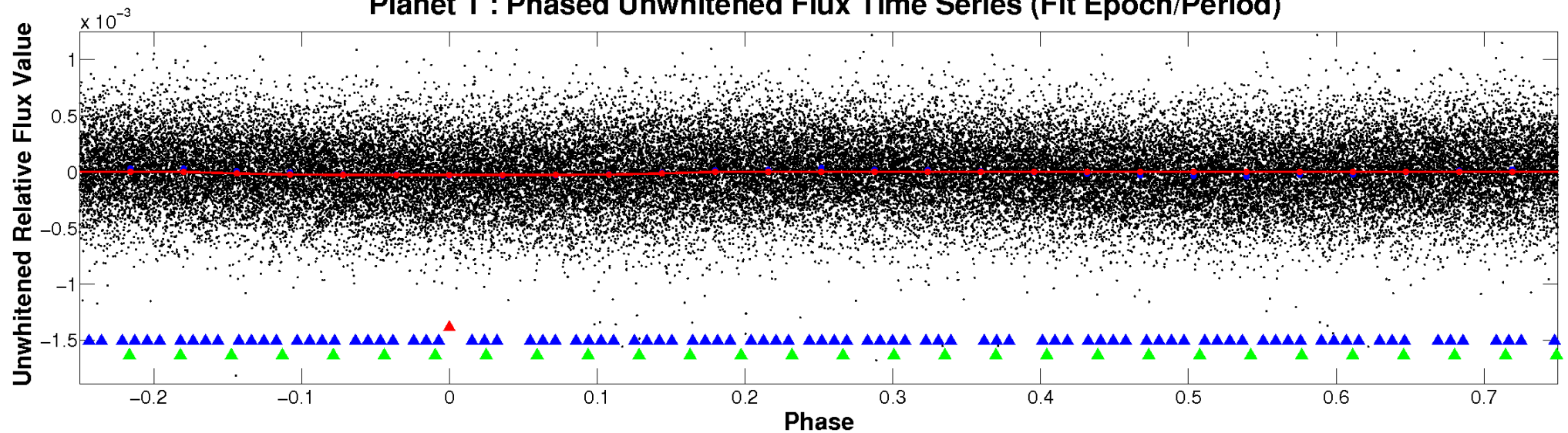
ALT Odd/Even

TCE 005113557-01

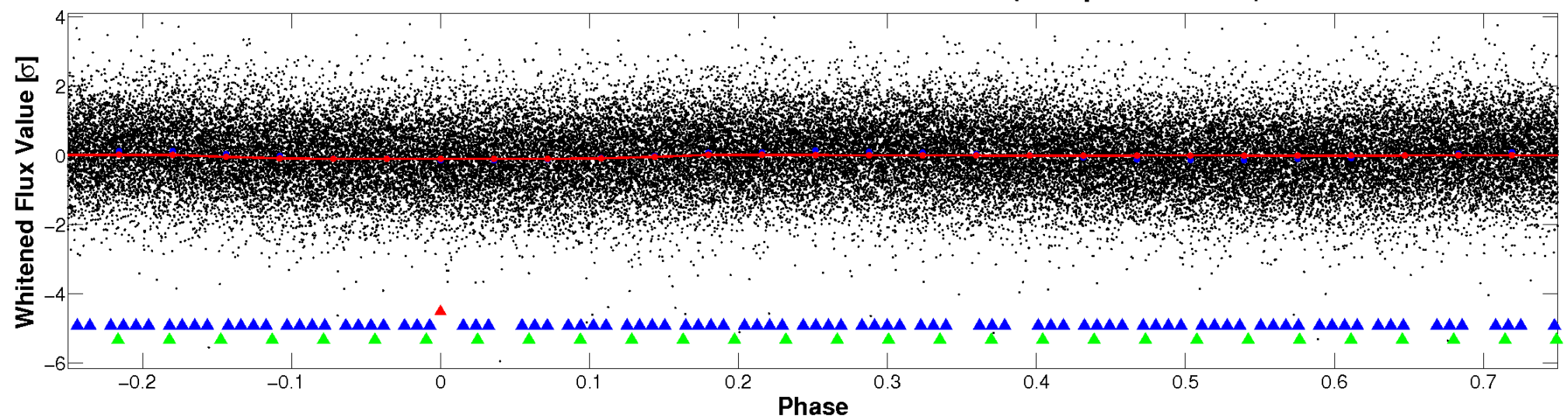


Non-Whitened Vs. Whitened Light Curve

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

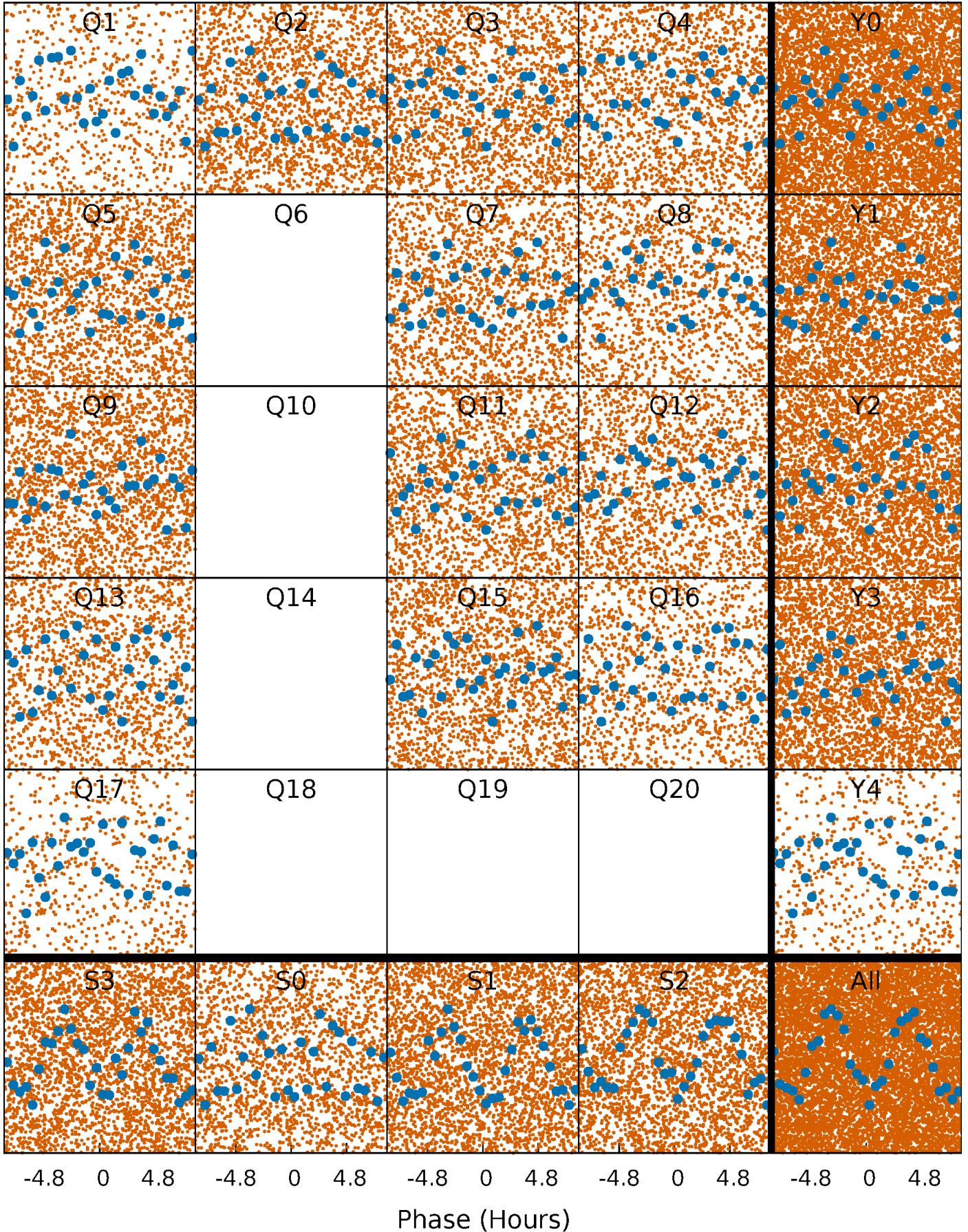


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



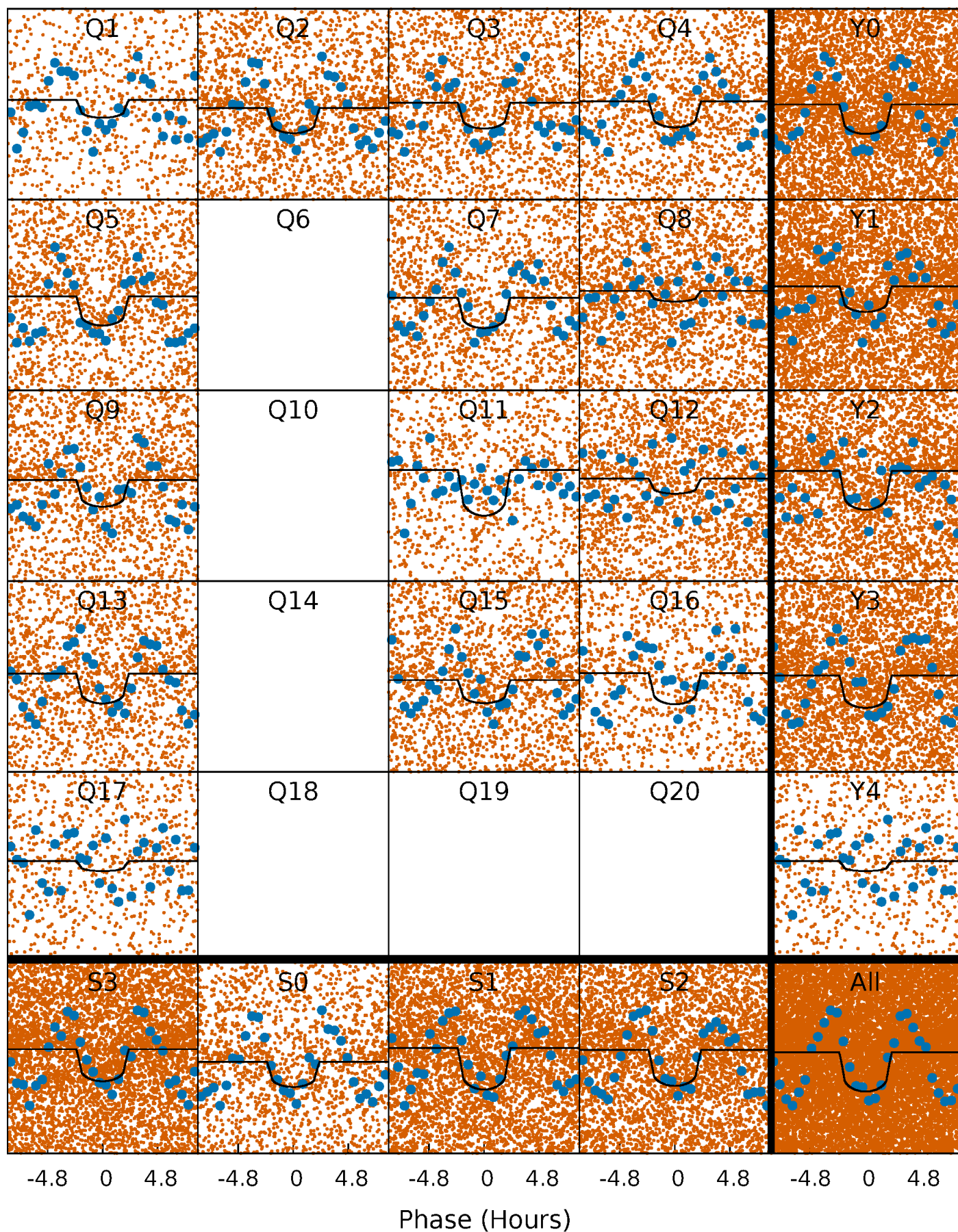
PDC Quarter-Phased Transit Curves

TCE 005113557-01 P= 0.568241 Days $T_0=131.748790$ (BKJD)



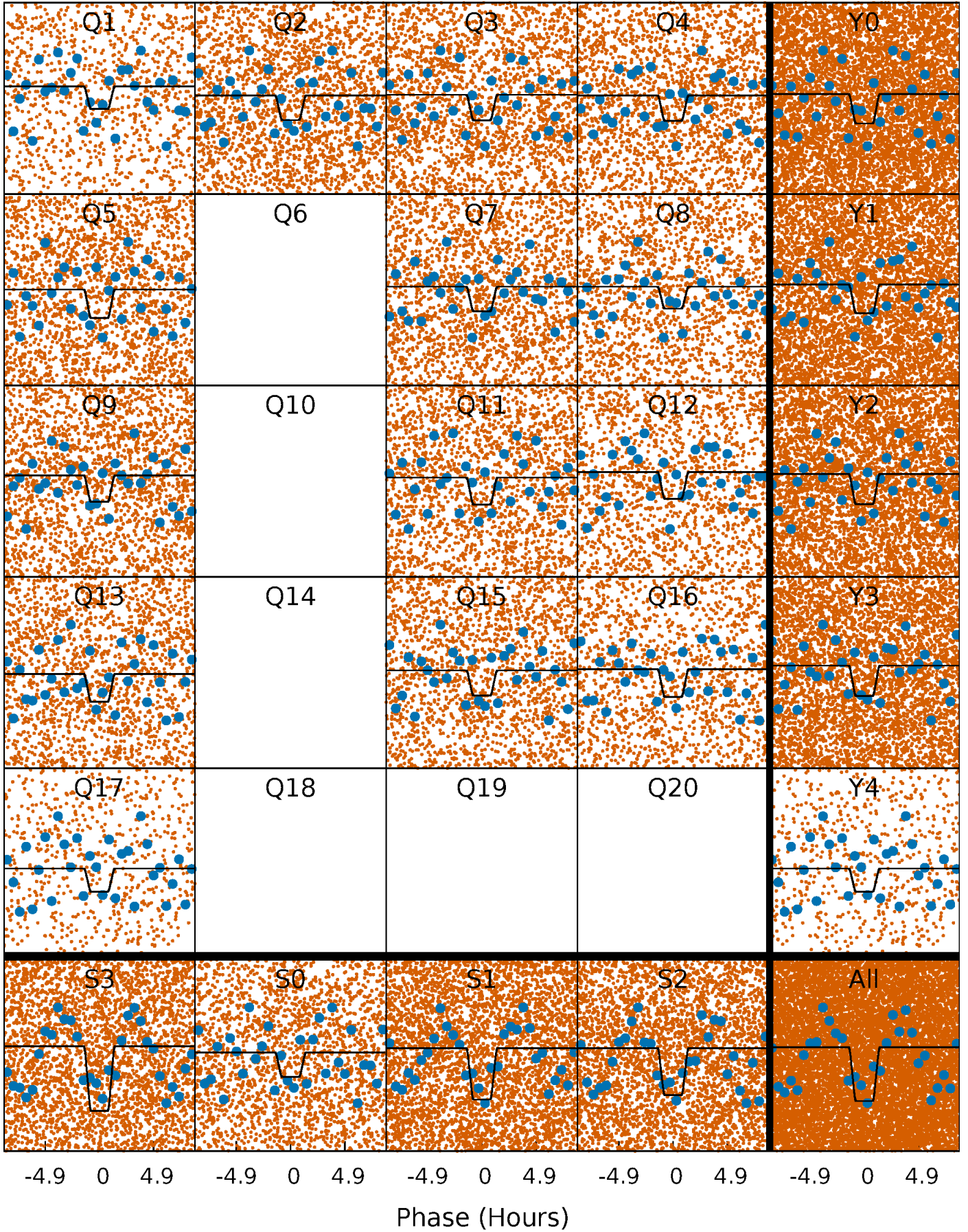
DV Quarter-Phased Transit Curves

TCE 005113557-01 P= 0.568241 Days $T_0=131.748790$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

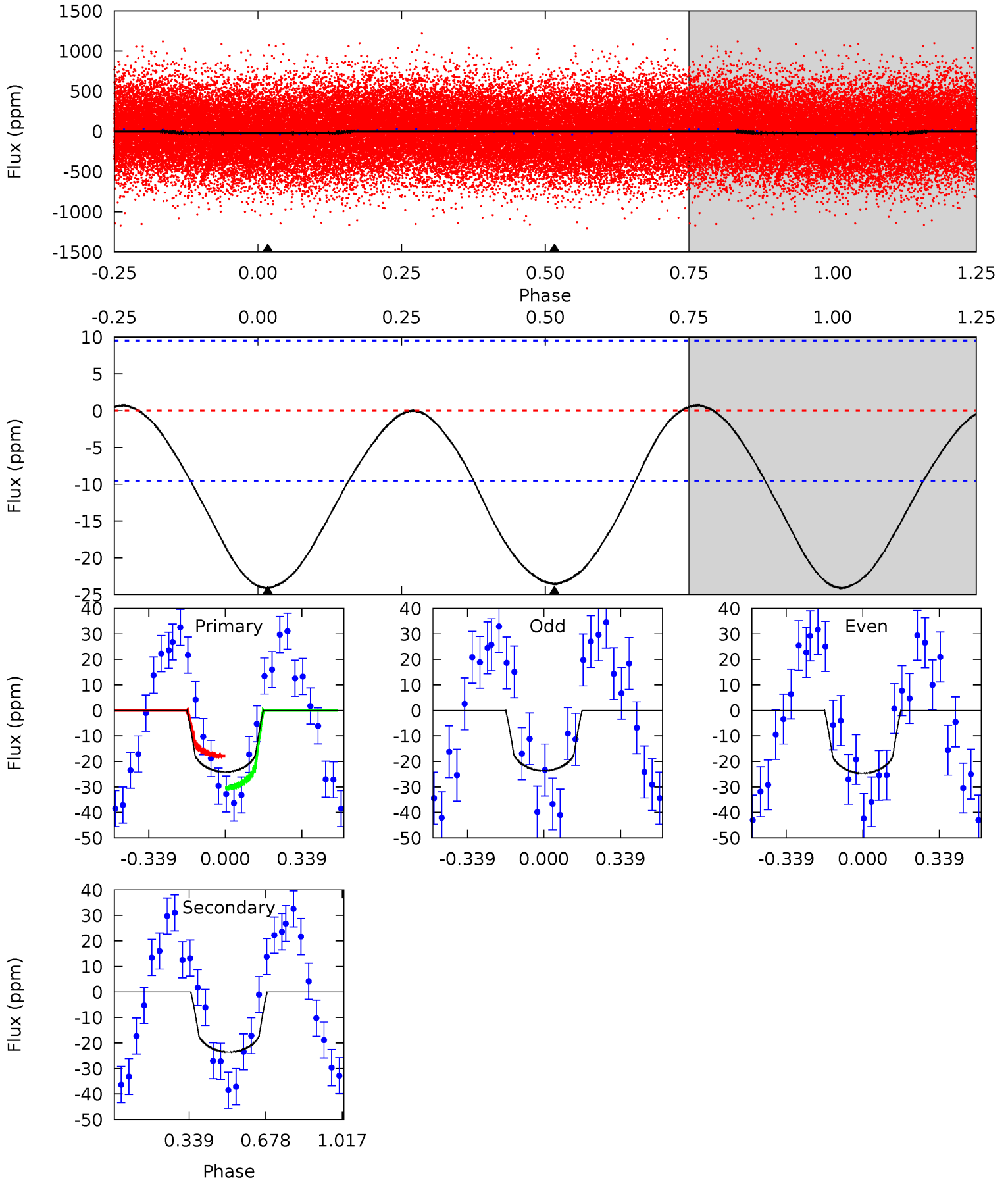
TCE 005113557-01 P= 0.568259 Days $T_0=131.744517$ (BKJD)



DV Model-Shift Uniqueness Test

005113557-01, P = 0.568241 Days, E = 131.180549 Days

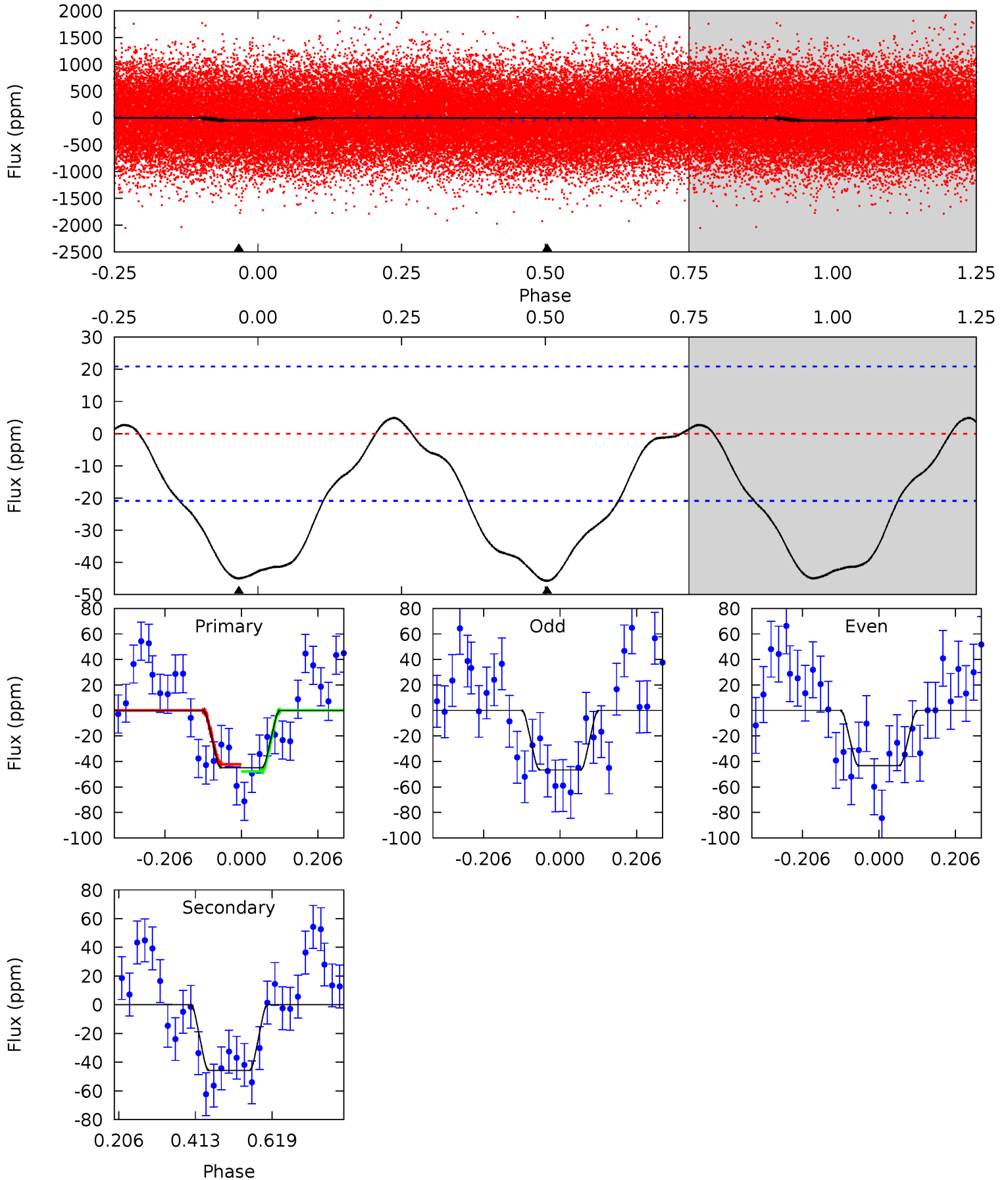
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
10.9	10.6	0	0	4.30	0.96	0.20	10.9	10.9	10.6	10.6	0.22	1.03	0.03	2.78



Alt Model-Shift Uniqueness Test

005113557-01, P = 0.568259 Days, E = 131.176258 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
9.50	9.65	0	0	4.41	1.26	0.73	9.50	9.50	9.65	9.65	0.35	0.90	0.10	0.59



Stellar Parameters For KIC 005113557

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	ρ_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	7077^{+225}_{-300}	$4.133^{+0.204}_{-0.167}$	$-0.500^{+0.250}_{-0.300}$	$1.563^{+0.421}_{-0.379}$	$1.209^{+0.192}_{-0.157}$	$0.446^{+0.520}_{-0.209}$
	+3%/-4%	+5%/-4%	+50%/-60%	+27%/-24%	+16%/-13%	+117%/-47%
Source	PHO54	PHO54	PHO54	DSEP		

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

Secondary Eclipse Parameters for KIC 005113557-01 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-24 ± 2	$0.93^{+0.65}_{-0.53}$	4543^{+331}_{-345}	6480^{+4510}_{-1689}	$3.019^{+12.324}_{-1.971}$
Alt.	-46 ± 5	$1.34^{+0.75}_{-0.60}$	4531^{+370}_{-372}	6251^{+2706}_{-1254}	$2.783^{+6.740}_{-1.588}$

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

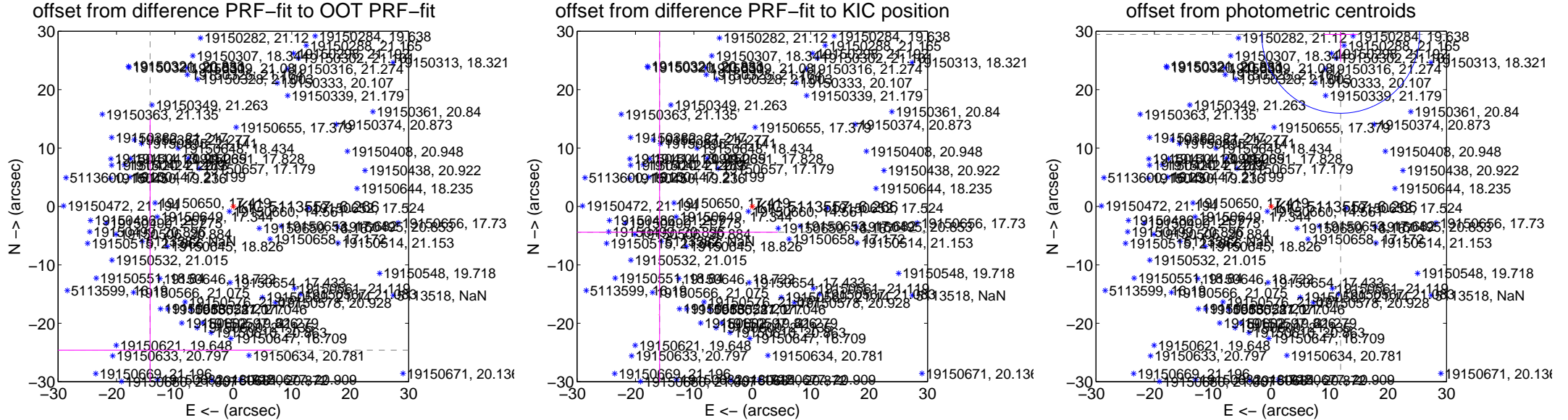
DV Centroid Data

Supplemental centroid analysis for 005113557-01. **Kepler magnitude: 6.27.** Transit SNR 11.18

There are 0 quarters with good PRF difference image offsets

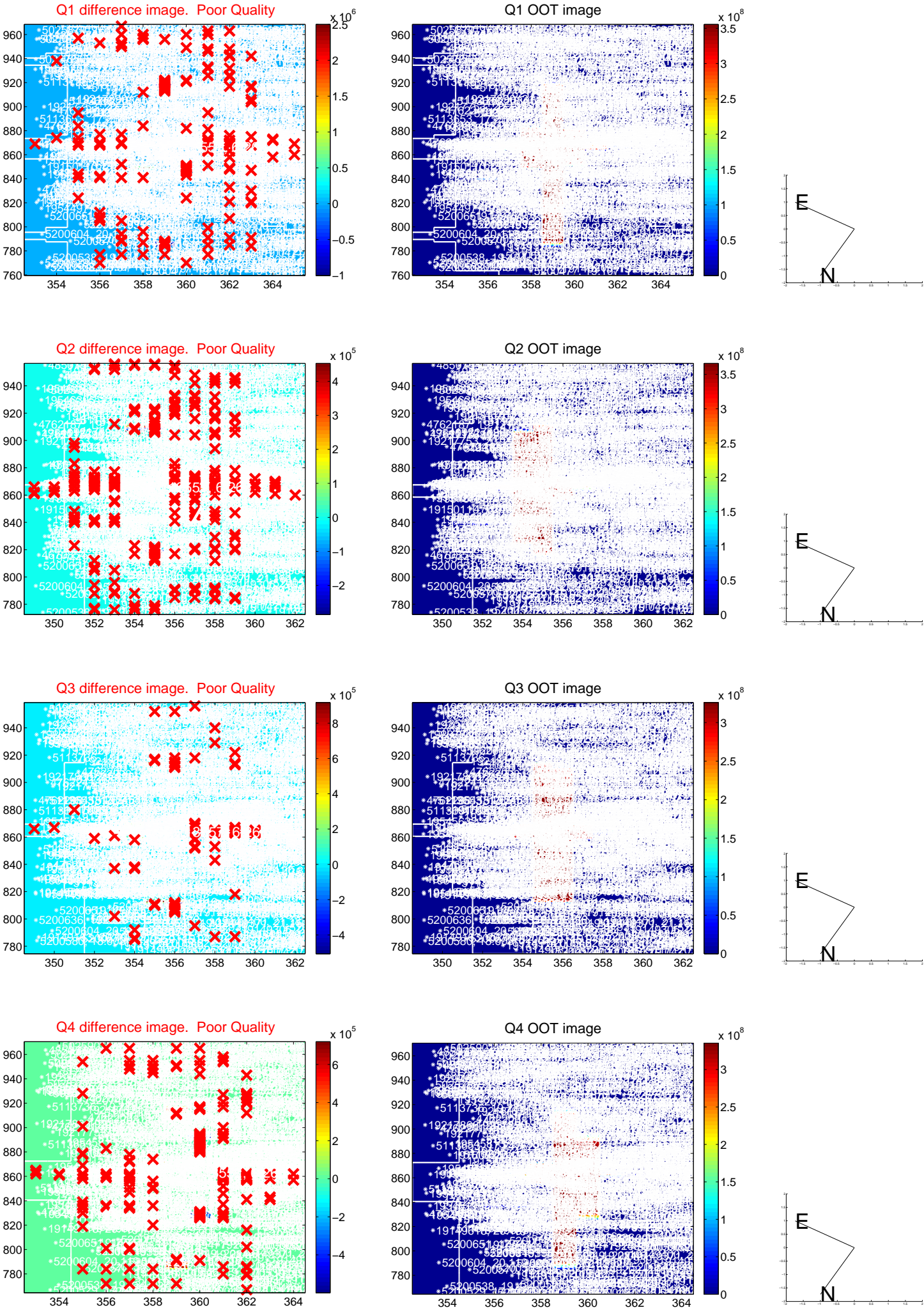
The OOT PRF centroid is offset from the target star catalog position by about 31.74 arcsec so the offset from difference PRF-fit to OOT-fit may be invalid.

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	28.420 ± 44.667	0.64	14.243 ± 20.798	-24.593 ± 39.618
PRF-fit source offset from KIC position	16.469 ± 30.010	0.55	15.866 ± 20.236	-4.413 ± 39.318
photometric centroid source offset	31.76 ± 4.50	7.06	-11.88 ± 2.89	29.46 ± 4.71

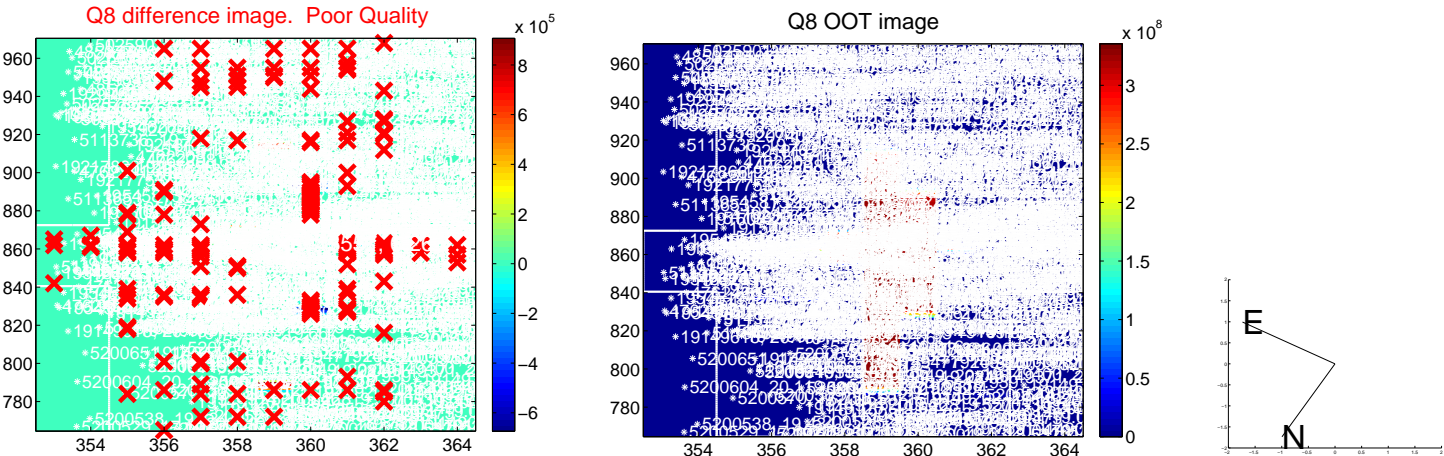
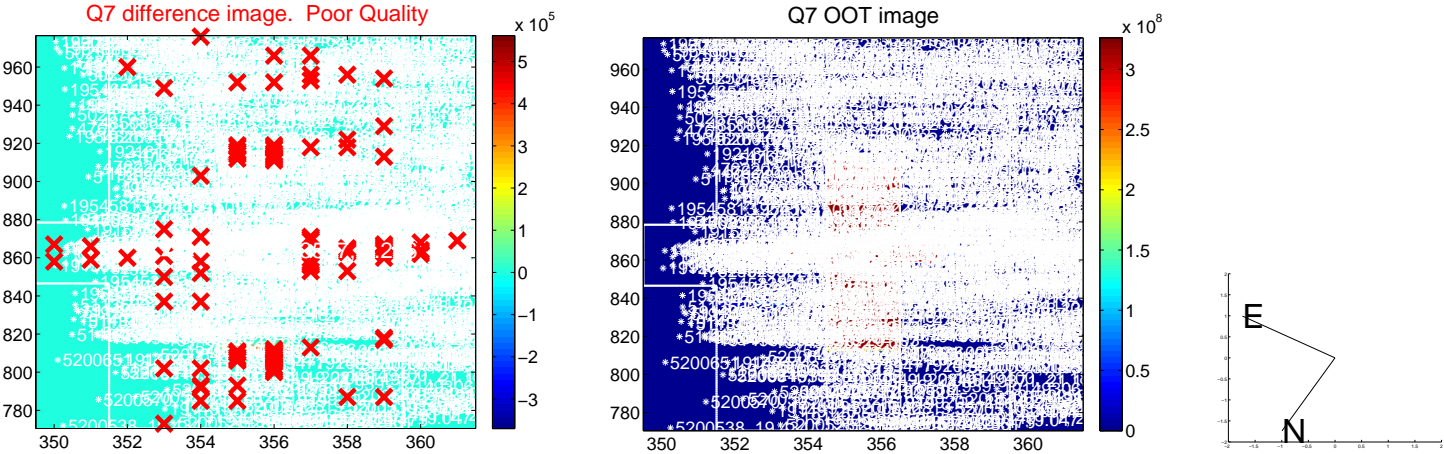
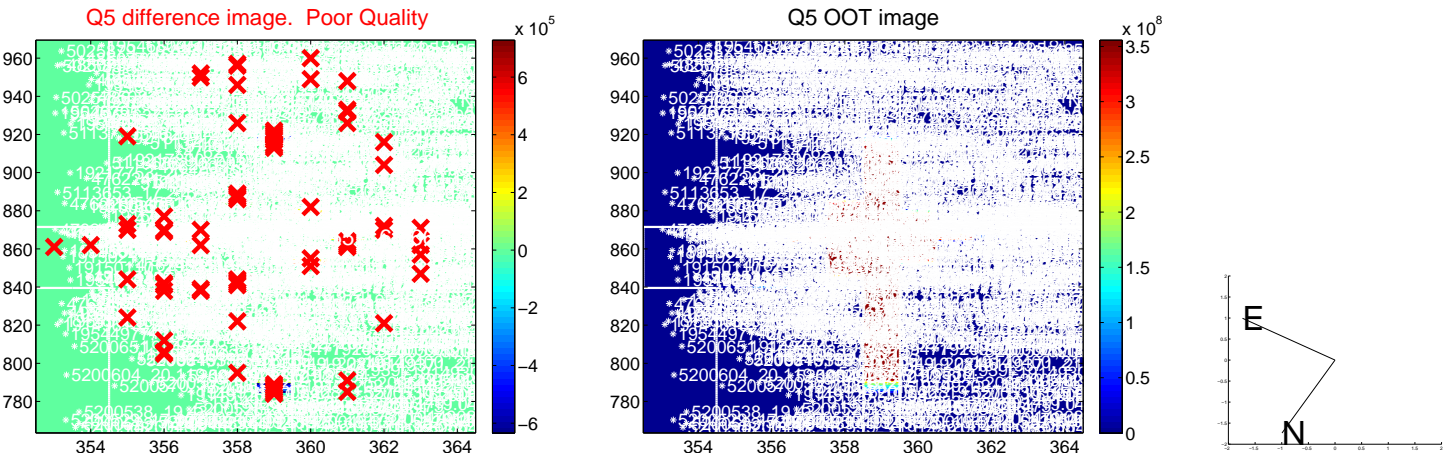


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets;** magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

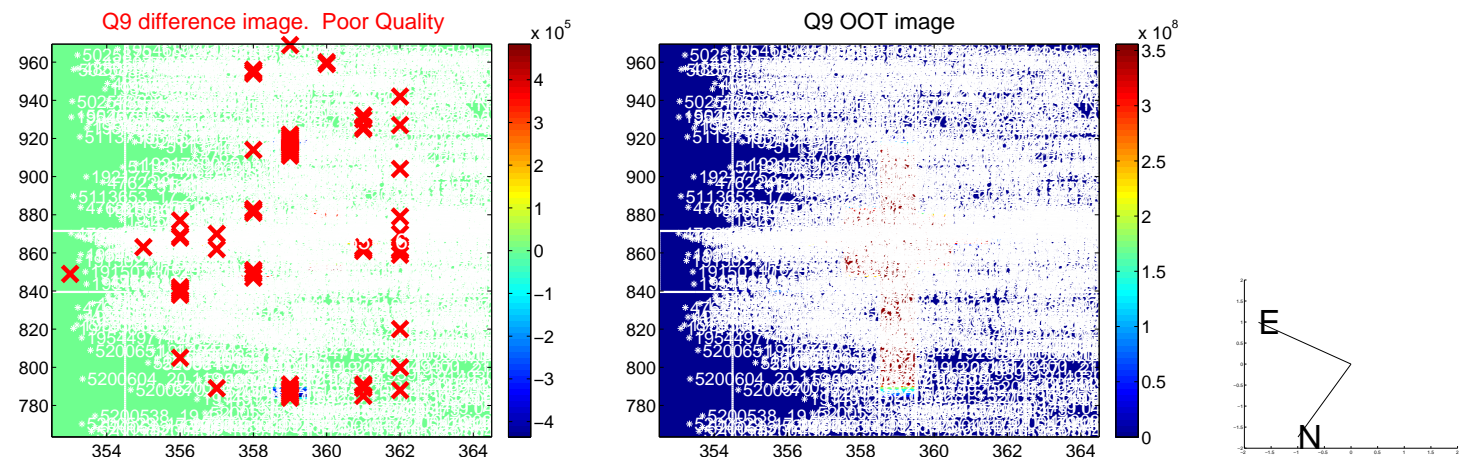
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



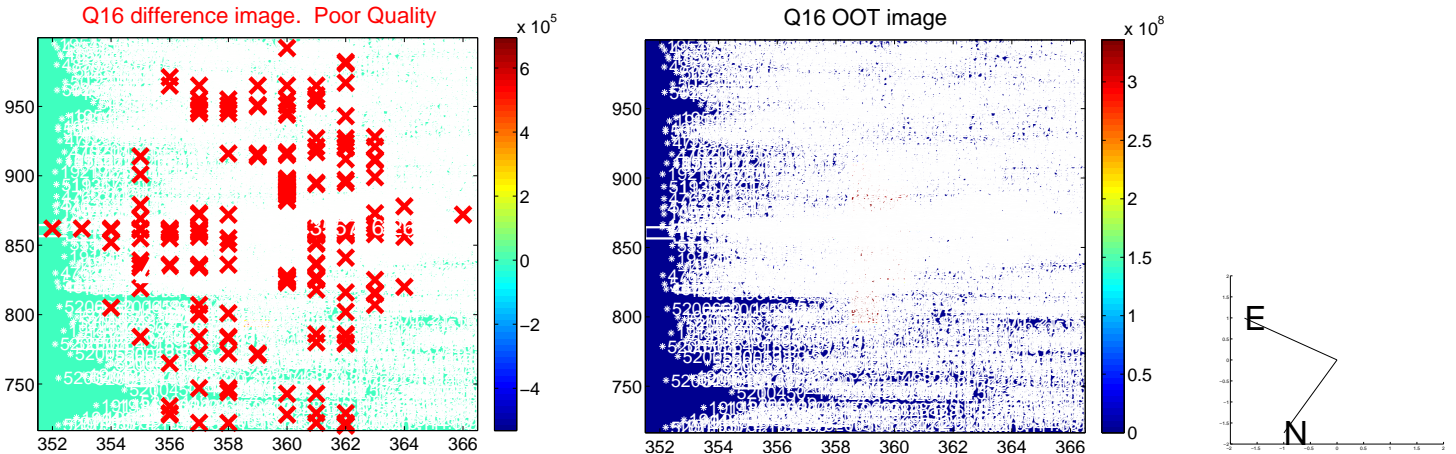
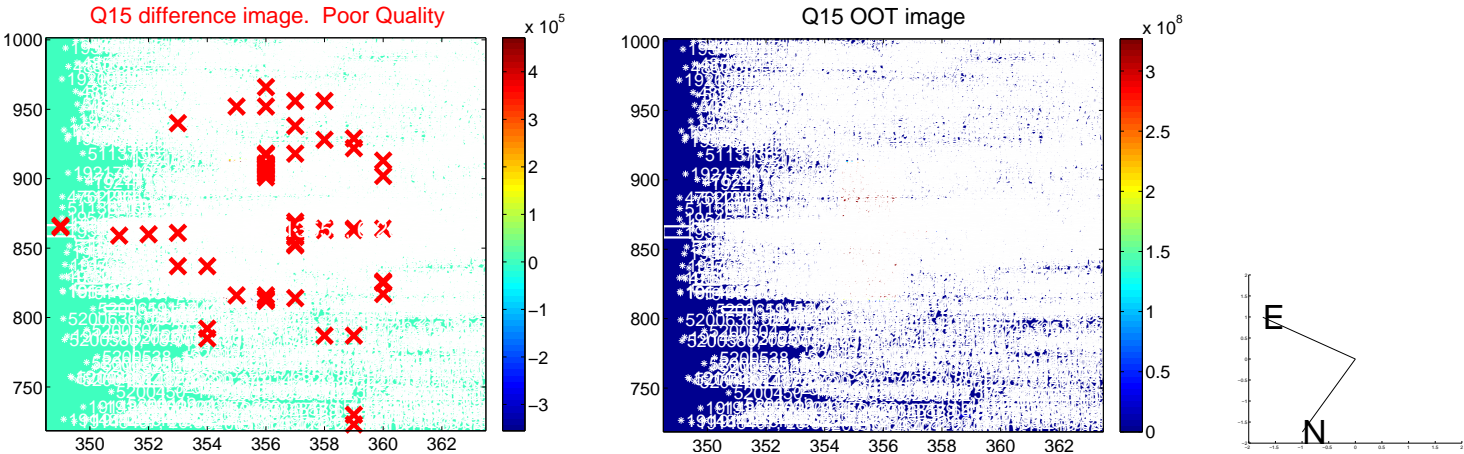
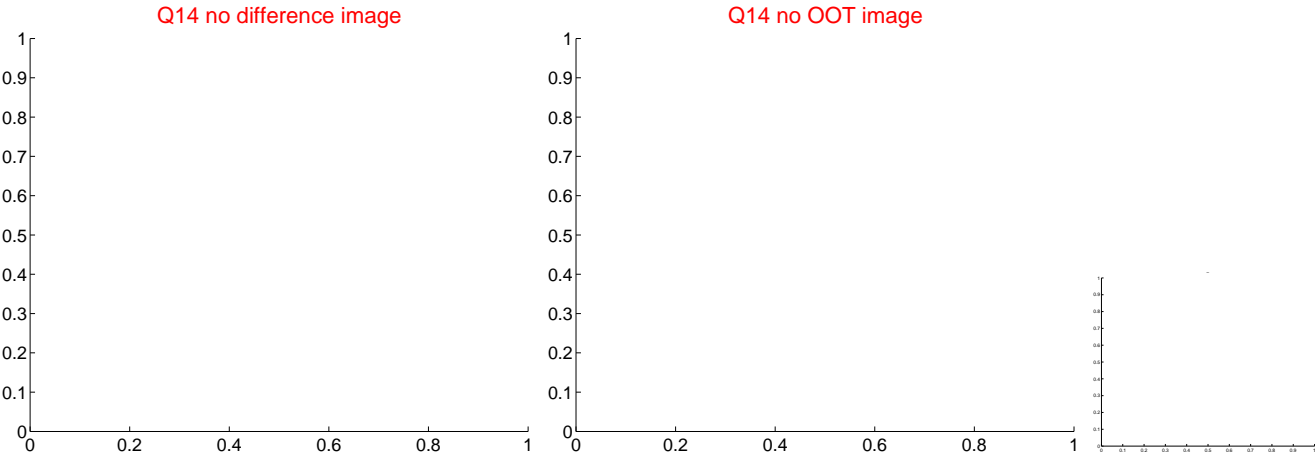
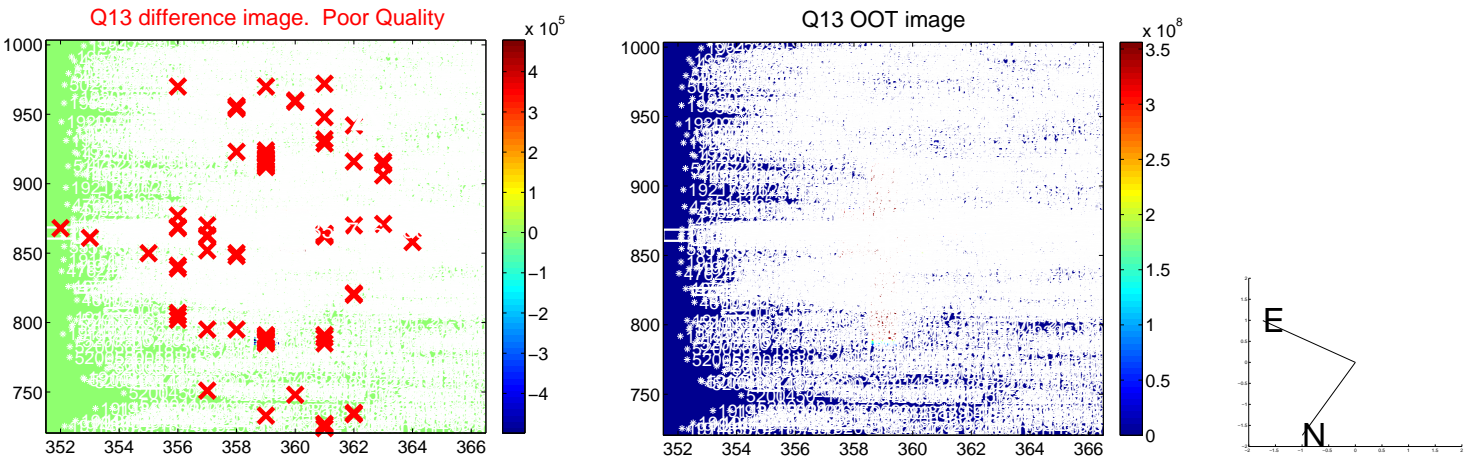
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



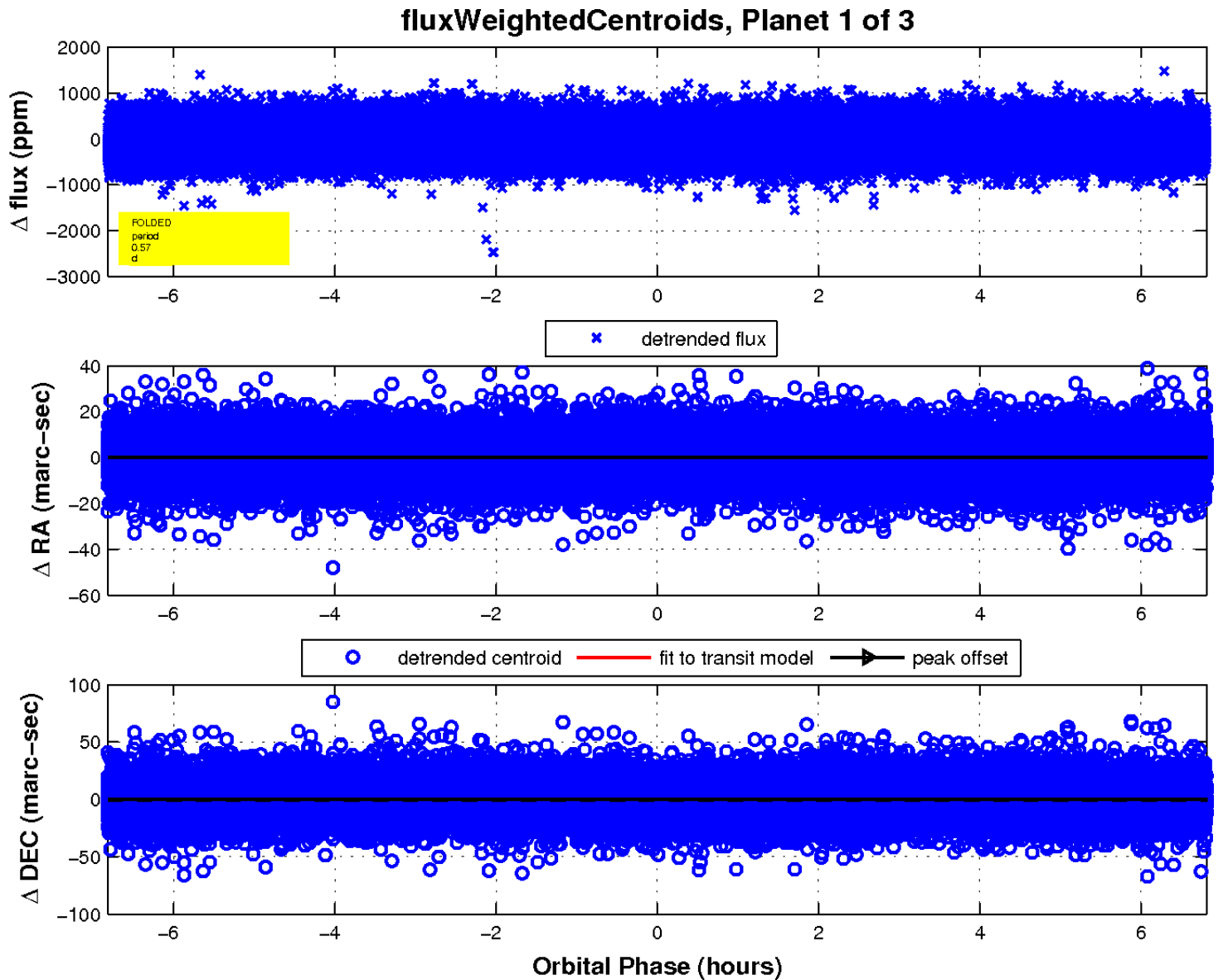
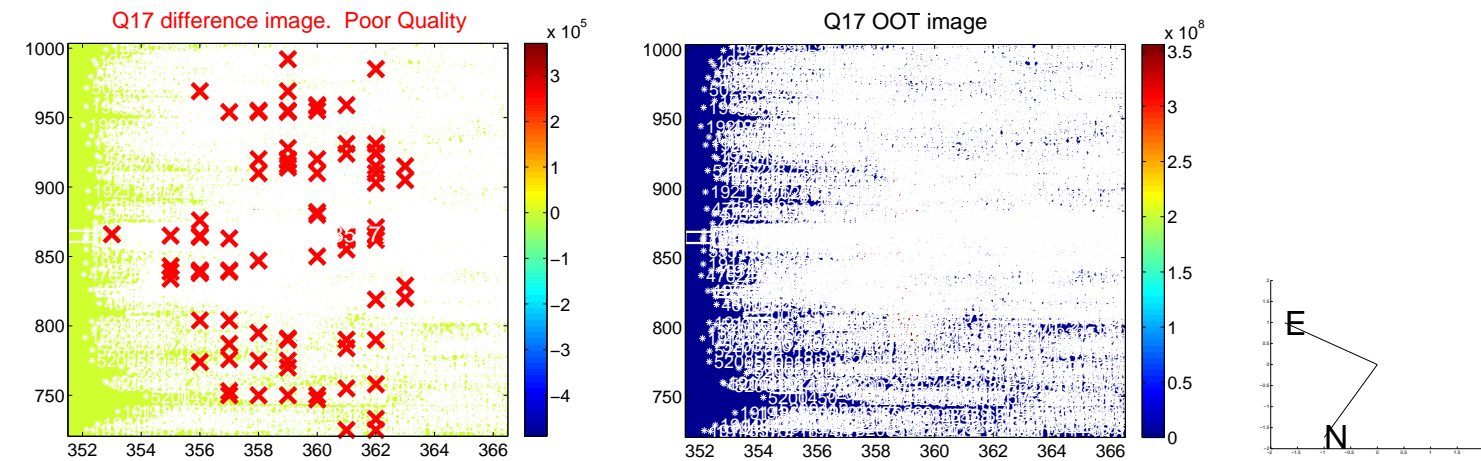
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



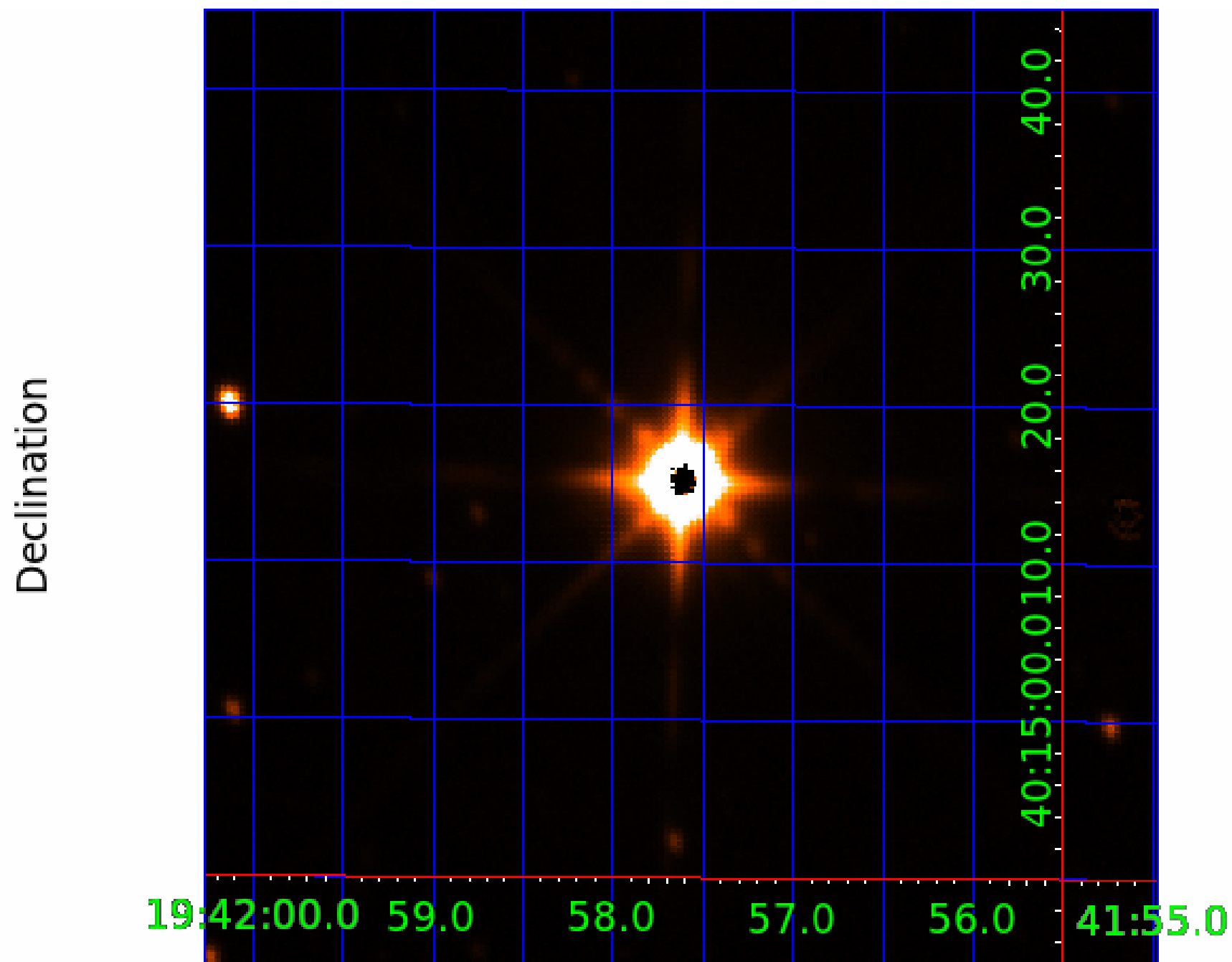
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



UKIRT Image



KIC 005113557

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})
005113557-01	OBS	No	0.568241	131.748790	29.0	4.166	10.6	11.2	1.56	7077	0.86	26805.29
005113557-02	OBS	No	15.539387	143.162348	552.9	1.082	11.5	12.9	1.56	7077	4.05	325.35
005113557-03	OBS	No	13.755348	139.620365	17.2	1.506	11.0	0.4	1.56	7077	0.66	382.80

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
005113557-01	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—CENT_SATURATED
005113557-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV—MOD_TER_DV—CENT_SATURATED
005113557-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV—MOD_TER_DV—CENT_SATURATED

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

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

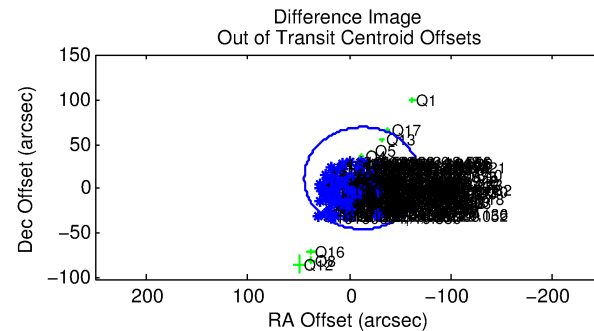
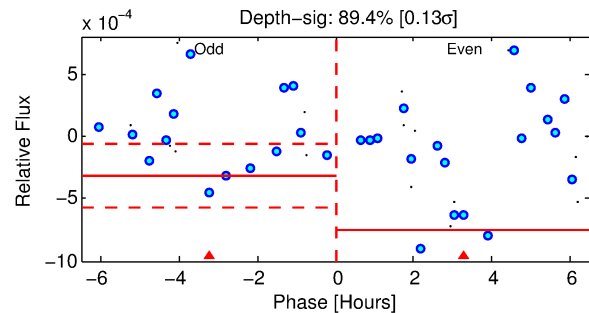
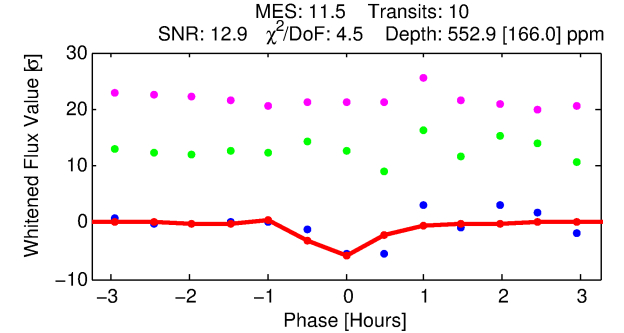
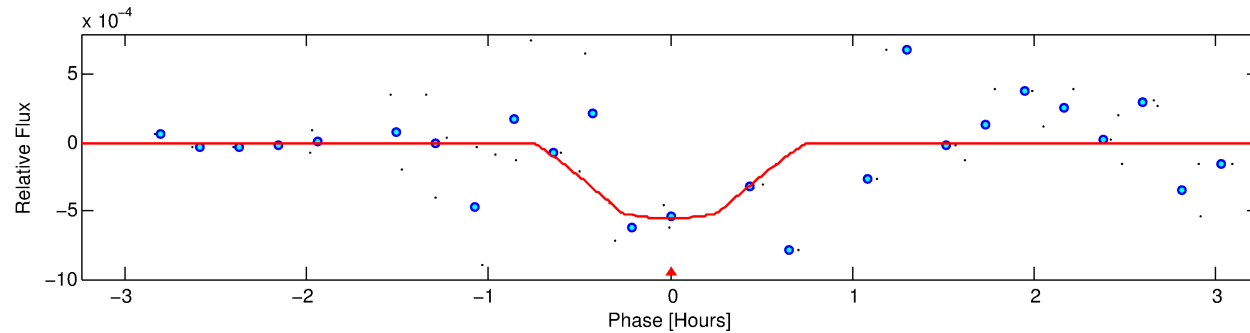
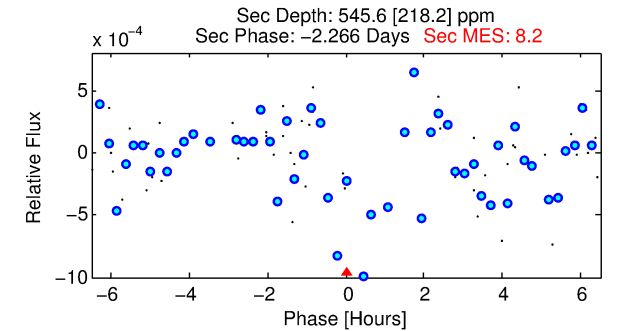
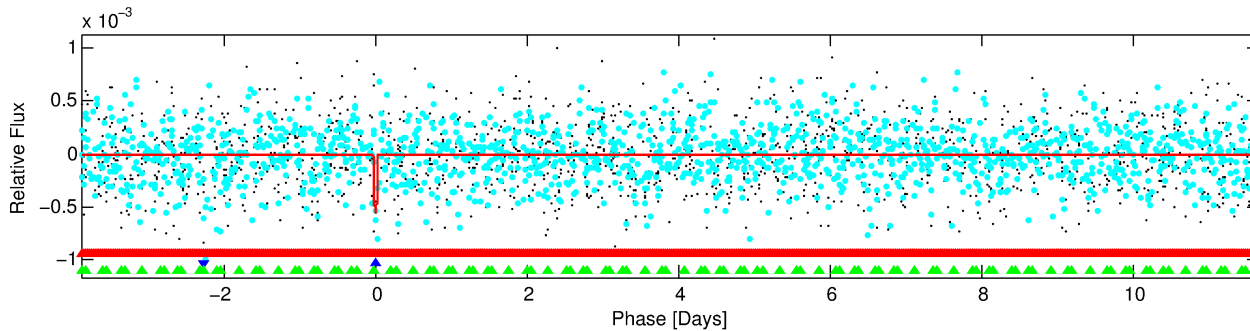
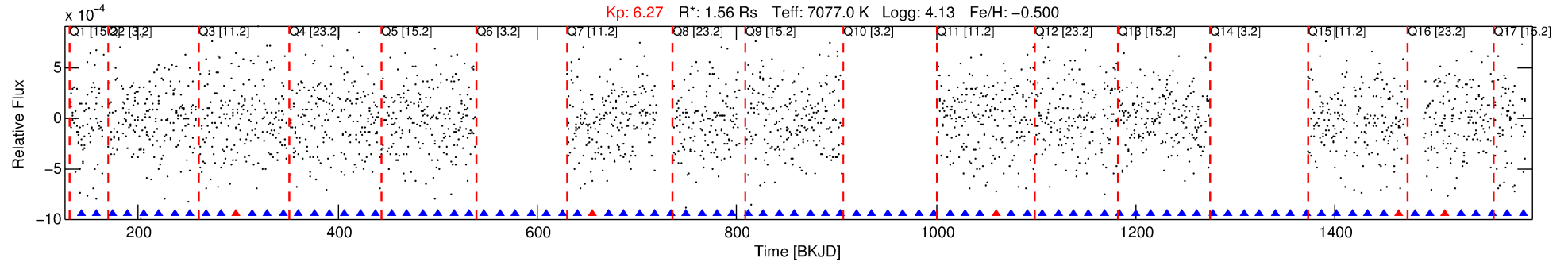
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 005113557-02

No Significant Match Found

DV One-Page Summary

KIC: 5113557 Candidate: 2 of 3 Period: 15.539 d



DV Fit Results:

Period = 15.53939 [0.00021] d
Epoch = 143.1623 [0.0075] BKJD
 $R_p/R^* = 0.0237$ [0.0442]
 $a/R^* = 73.24$ [814.84]
 $b = 0.78$ [5.75]
 $S_{\text{eff}} = 325.35$ [129.76]
 $T_{\text{eq}} = 1083$ [108] K
 $R_p = 4.05$ [7.62] R_{e}
 $a = 0.1299$ [0.0309] AU
 $A_g = 309.42$ [1165.42] [0.26σ]
 $T_{\text{eff}} = 7022$ [6589] K [0.90σ]

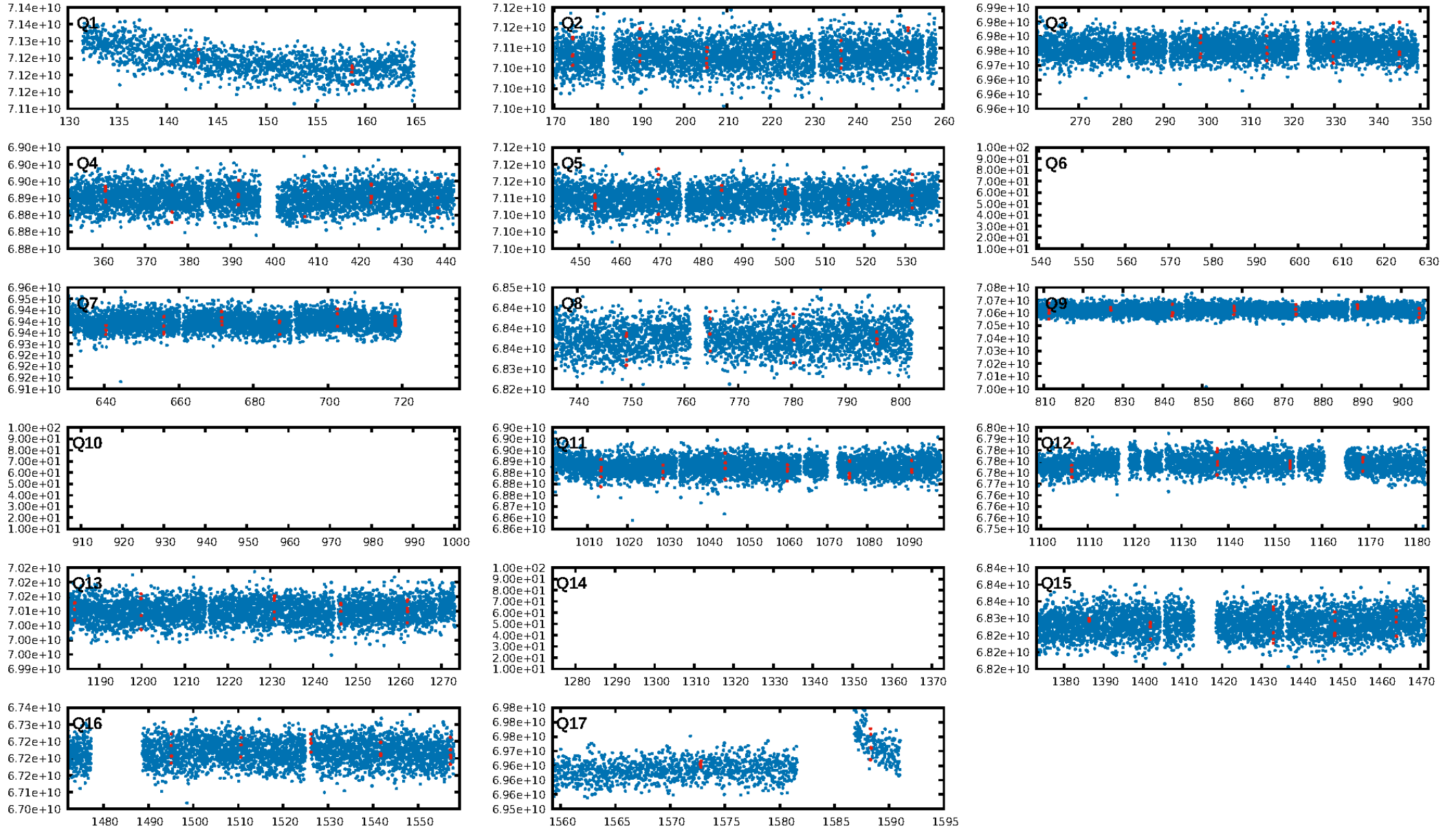
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [23.09σ]
LongPeriod-sig: N/A
ModelChiSquare2-sig: 11.2%
ModelChiSquareGof-sig: 99.8%
Bootstrap-pfa: 3.25e-12
RollingBand-fgt: 0.44 [4/9]
GhostDiagnostic-chr: N/A
Centroid-sig: 49.3%
Centroid-so: 24.014 arcsec [12.86σ]
OotOffset-rm: 17.475 arcsec [0.92σ]
KicOffset-rm: 73.604 arcsec [3.81σ]
OotOffset-st: 1/3/4/4 [12]
KicOffset-st: 1/3/4/4 [12]
DiffImageQuality-fgm: 0.00 [0/12]
DiffImageOverlap-fno: 0.00 [0/14]

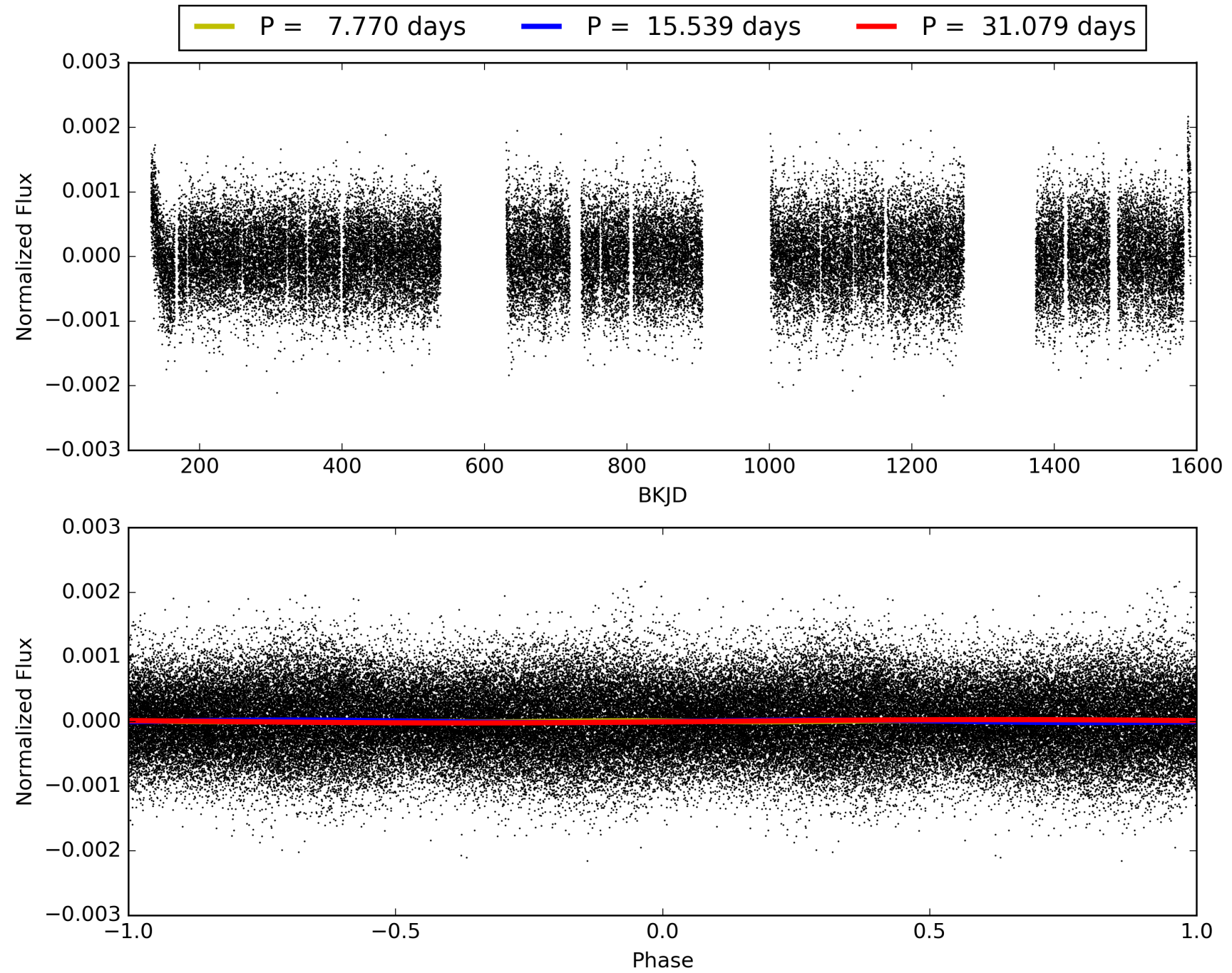
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 09:54:16 Z

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

TCE 005113557-02, PDC Light Curves

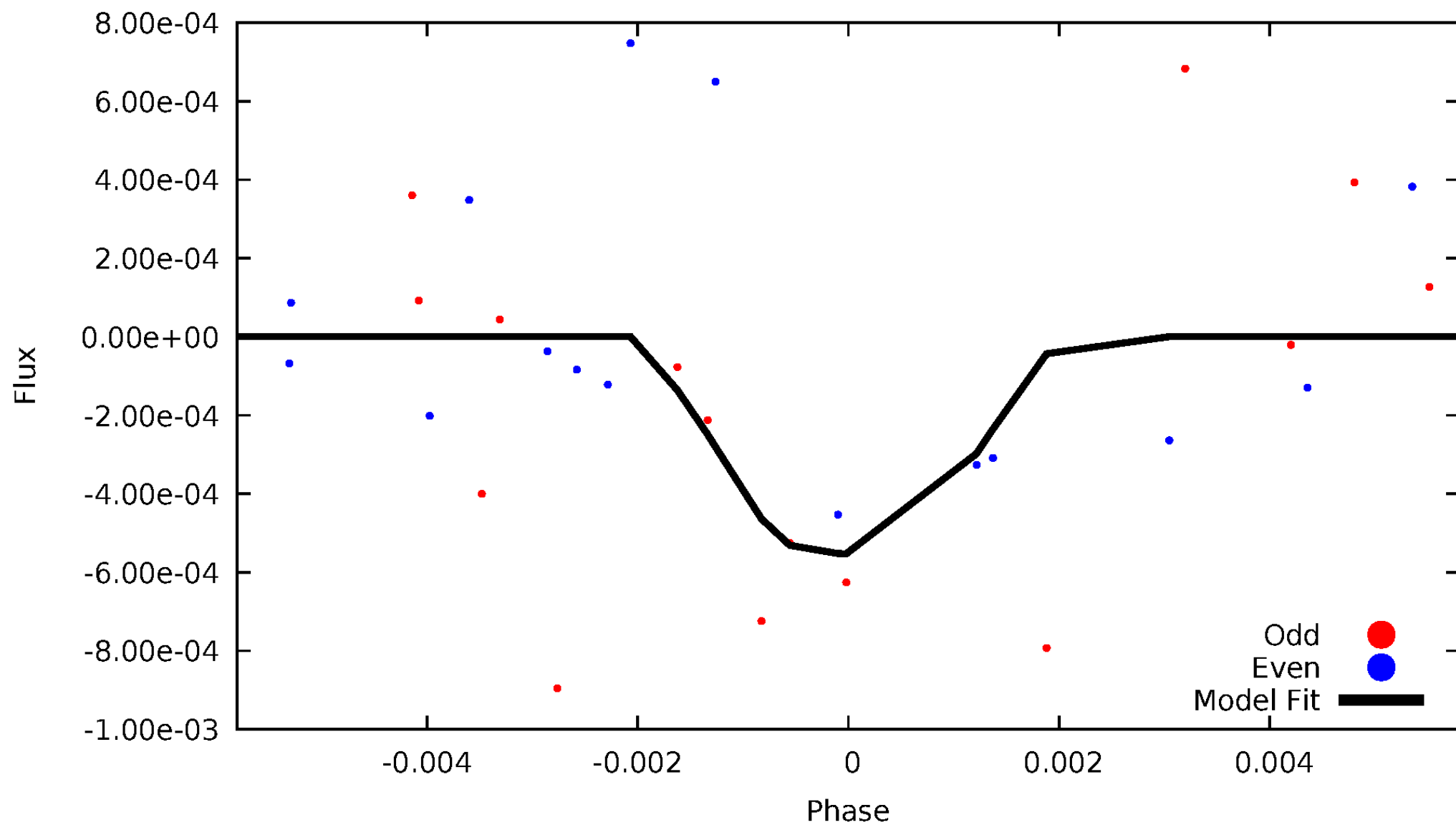


TCE 005113557-02



DV Odd/Even

TCE 005113557-02

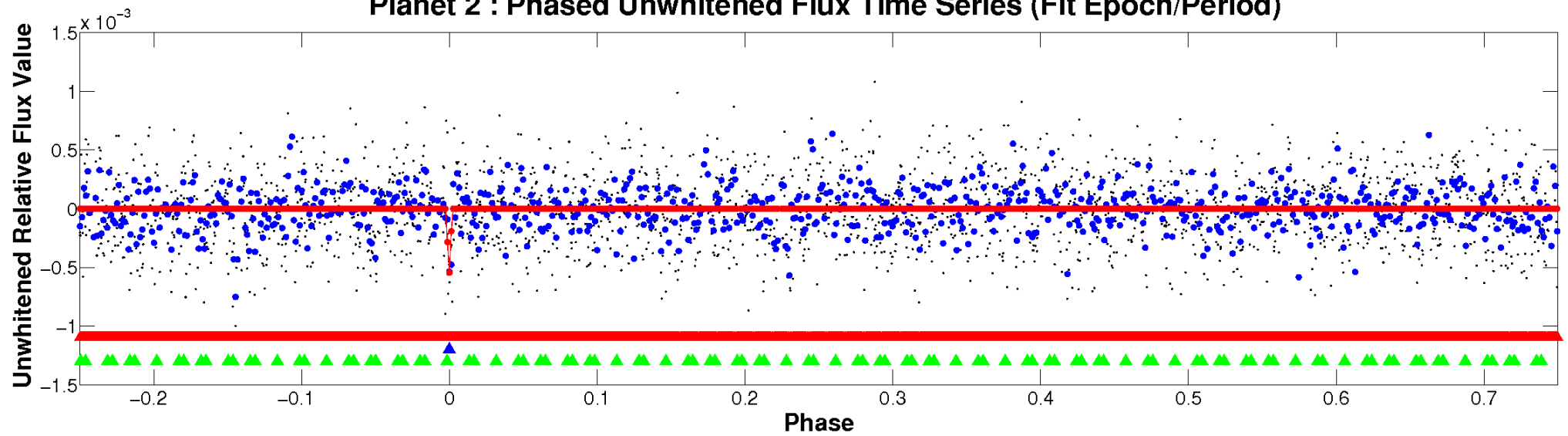


ALT Odd/Even

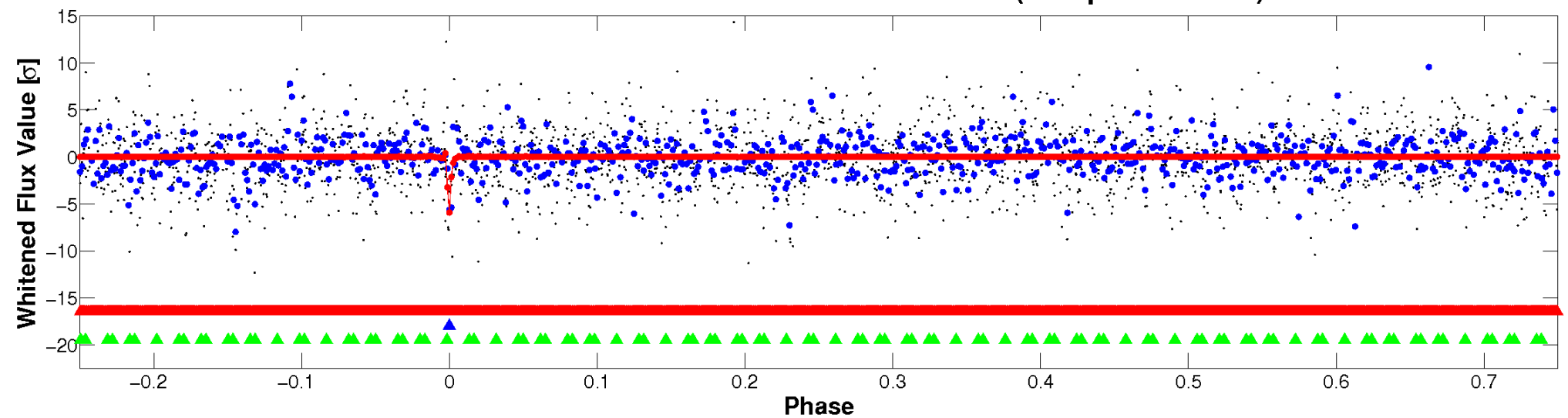
This plot does not exist for this TCE.

Non-Whitened Vs. Whitened Light Curve

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

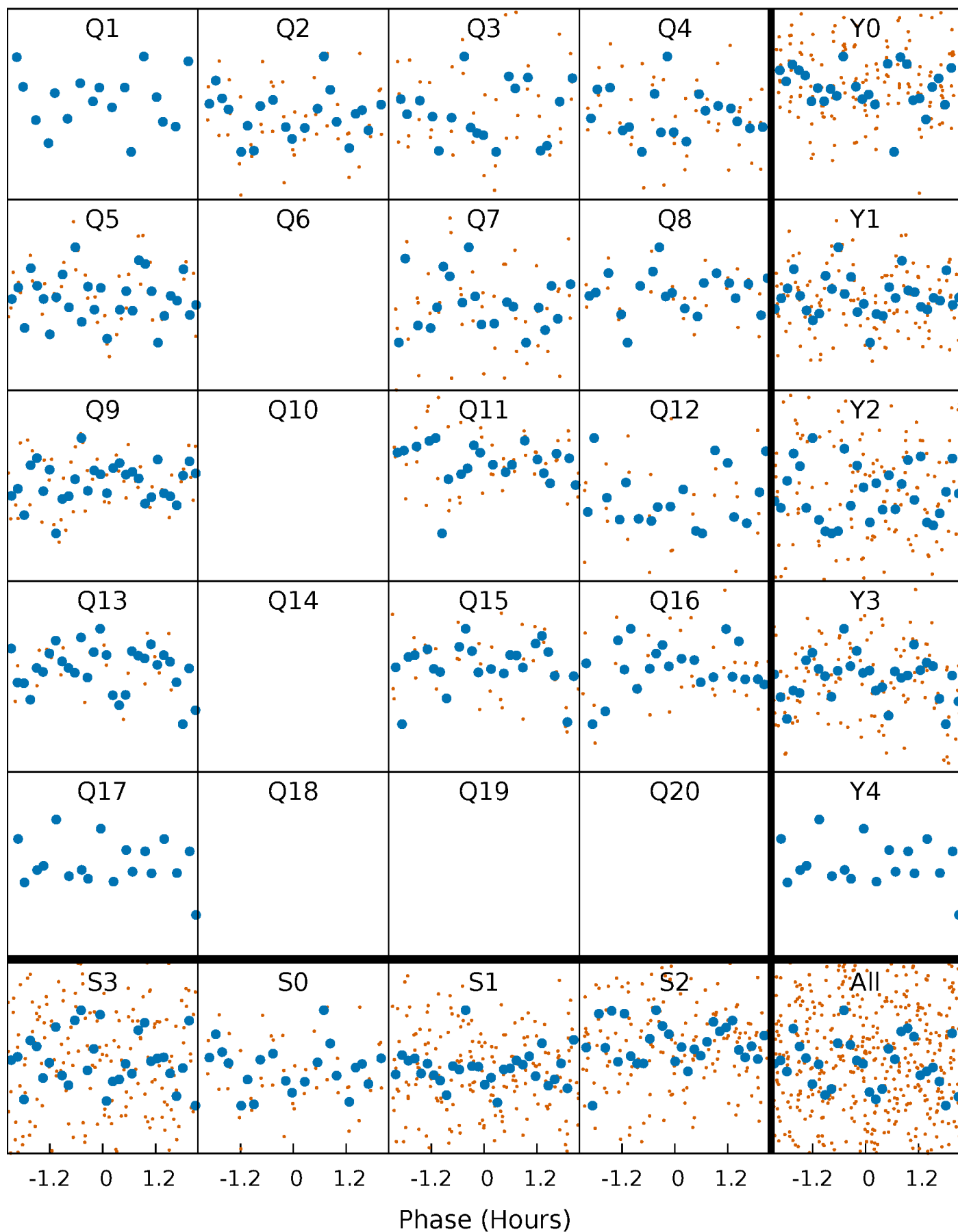


Planet 2 : Phased Whitened Flux Time Series (Fit Epoch/Period)



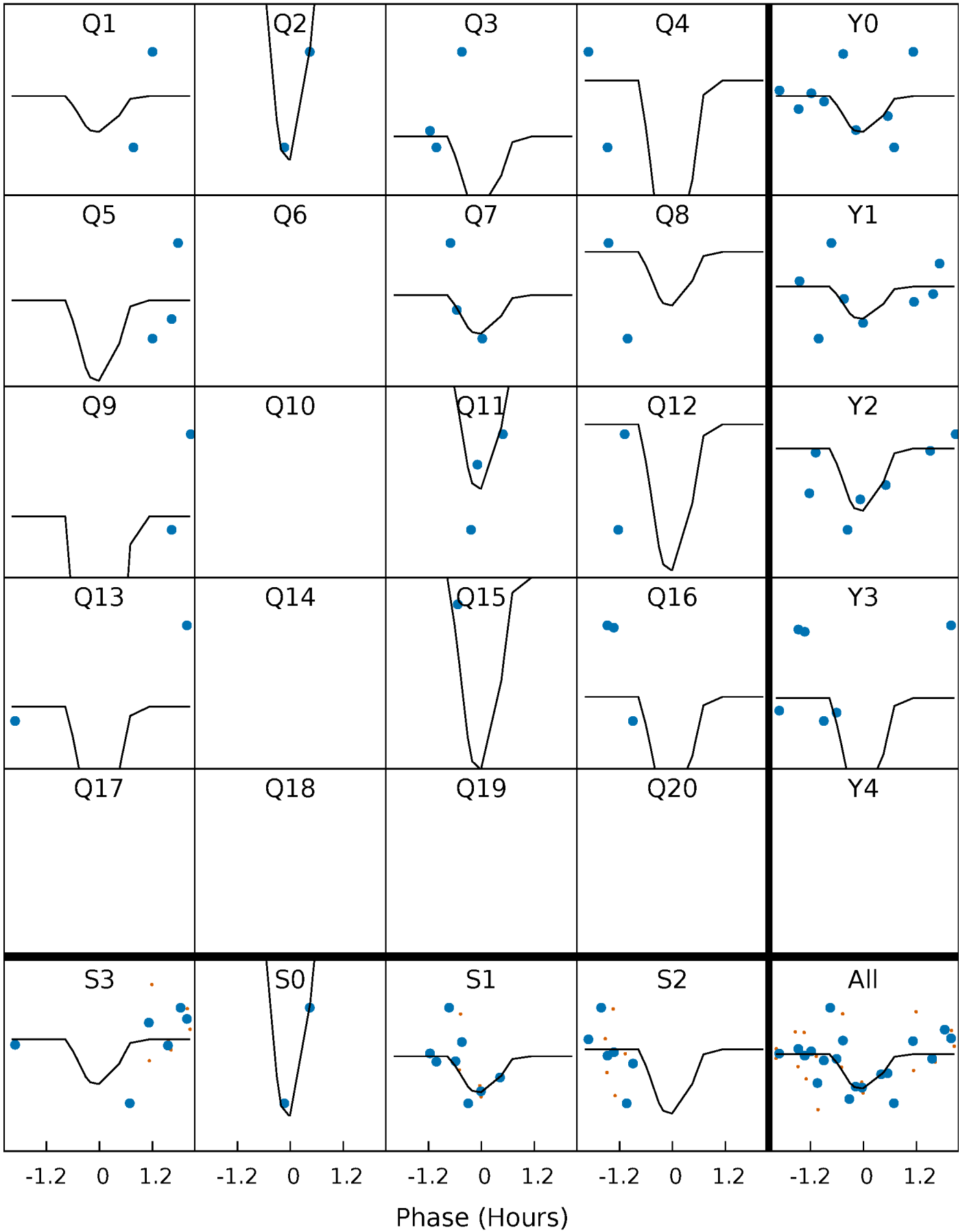
PDC Quarter-Phased Transit Curves

TCE 005113557-02 P= 15.539387 Days $T_0=143.162349$ (BKJD)



DV Quarter-Phased Transit Curves

TCE 005113557-02 P= 15.539387 Days $T_0=143.162349$ (BKJD)

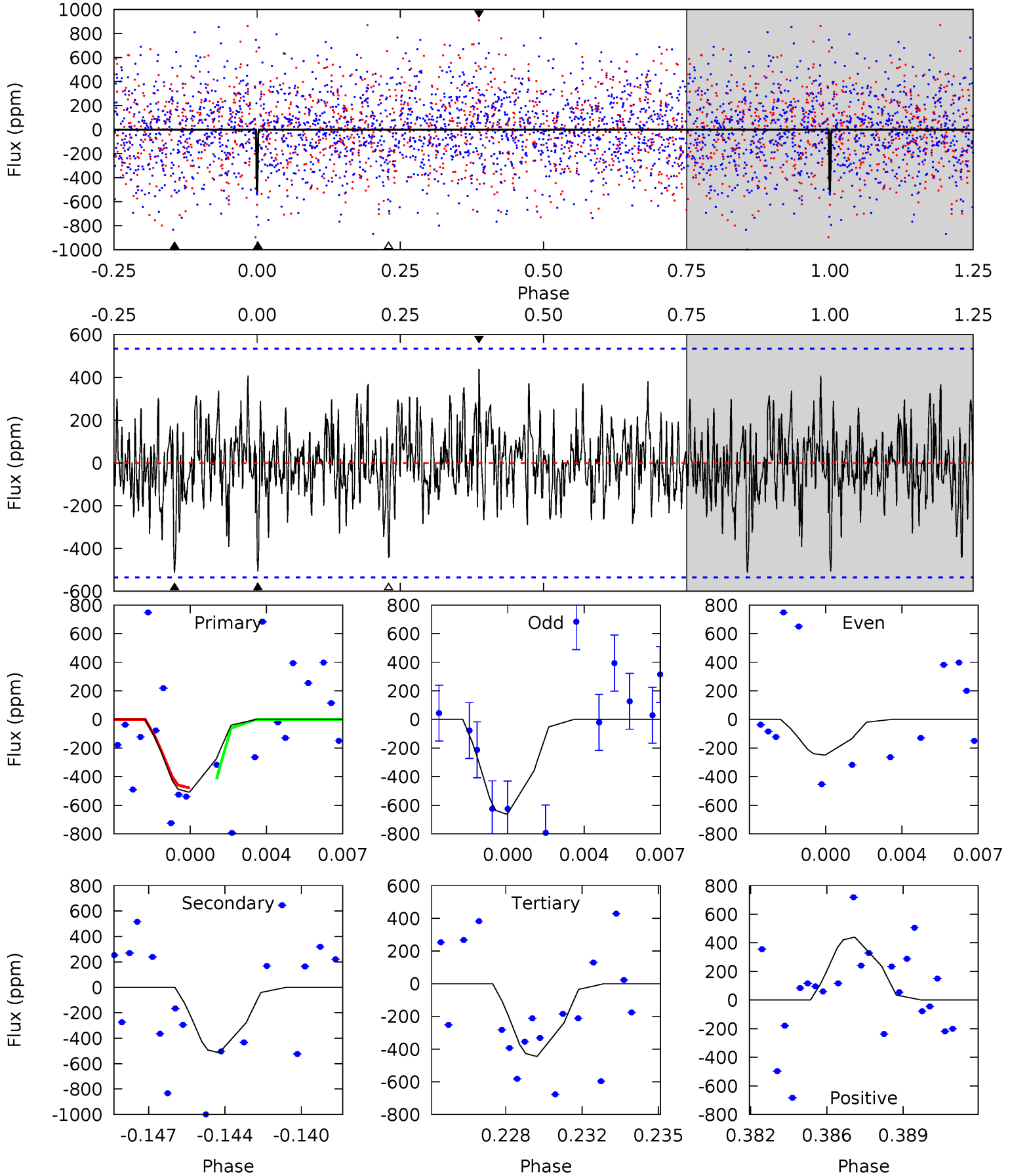


This plot does not exist for this TCE.

DV Model-Shift Uniqueness Test

005113557-02, $P = 15.539387$ Days, $E = 127.622962$ Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
4.96	5.00	4.33	4.28	5.22	2.92	1.32	0.62	0.68	0.67	0.73	2.02	1.00	0.46	0.25



Alt Model-Shift Uniqueness Test

This plot does not exist for this TCE.

Stellar Parameters For KIC 005113557

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	7077^{+225}_{-300}	$4.133^{+0.204}_{-0.167}$	$-0.500^{+0.250}_{-0.300}$	$1.563^{+0.421}_{-0.379}$	$1.209^{+0.192}_{-0.157}$	$0.446^{+0.520}_{-0.209}$
	+3%/-4%	+5%/-4%	+50%/-60%	+27%/-24%	+16%/-13%	+117%/-47%
Source	PHO54	PHO54	PHO54	DSEP		

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

Secondary Eclipse Parameters for KIC 005113557-02 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-512 ± 102	$6.67^{+5.90}_{-4.39}$	1515^{+115}_{-120}	5284^{+4332}_{-1131}	102^{+751}_{-73}
Alt.	N/A	N/A	N/A	N/A	N/A

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 $A_{obs} \gg 1.0$

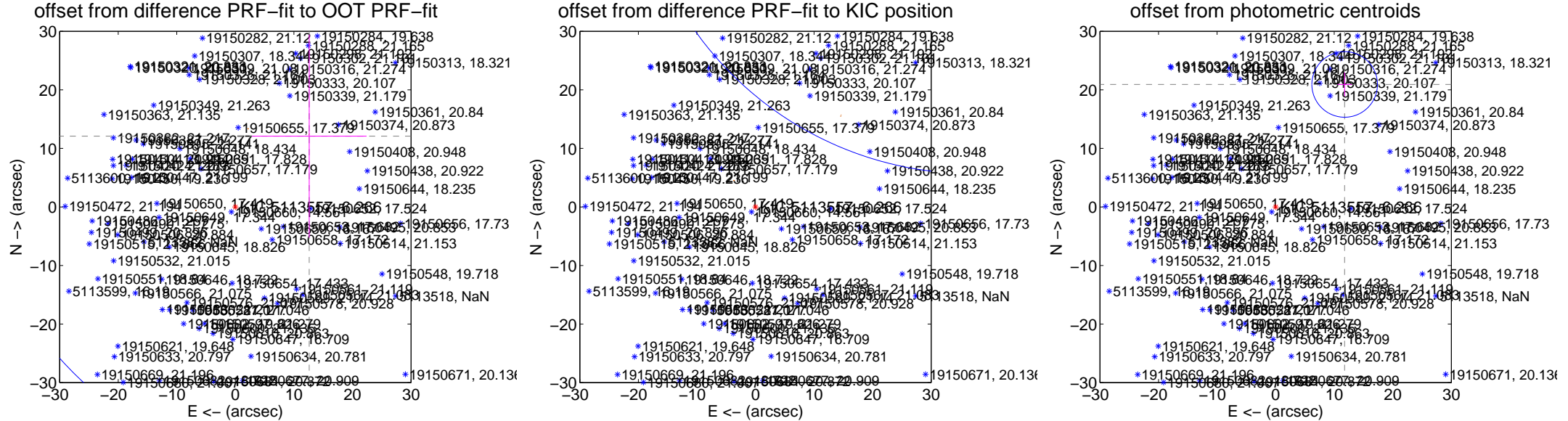
DV Centroid Data

Supplemental centroid analysis for 005113557-02. **Kepler magnitude: 6.27.** Transit SNR 12.92

There are 0 quarters with good PRF difference image offsets

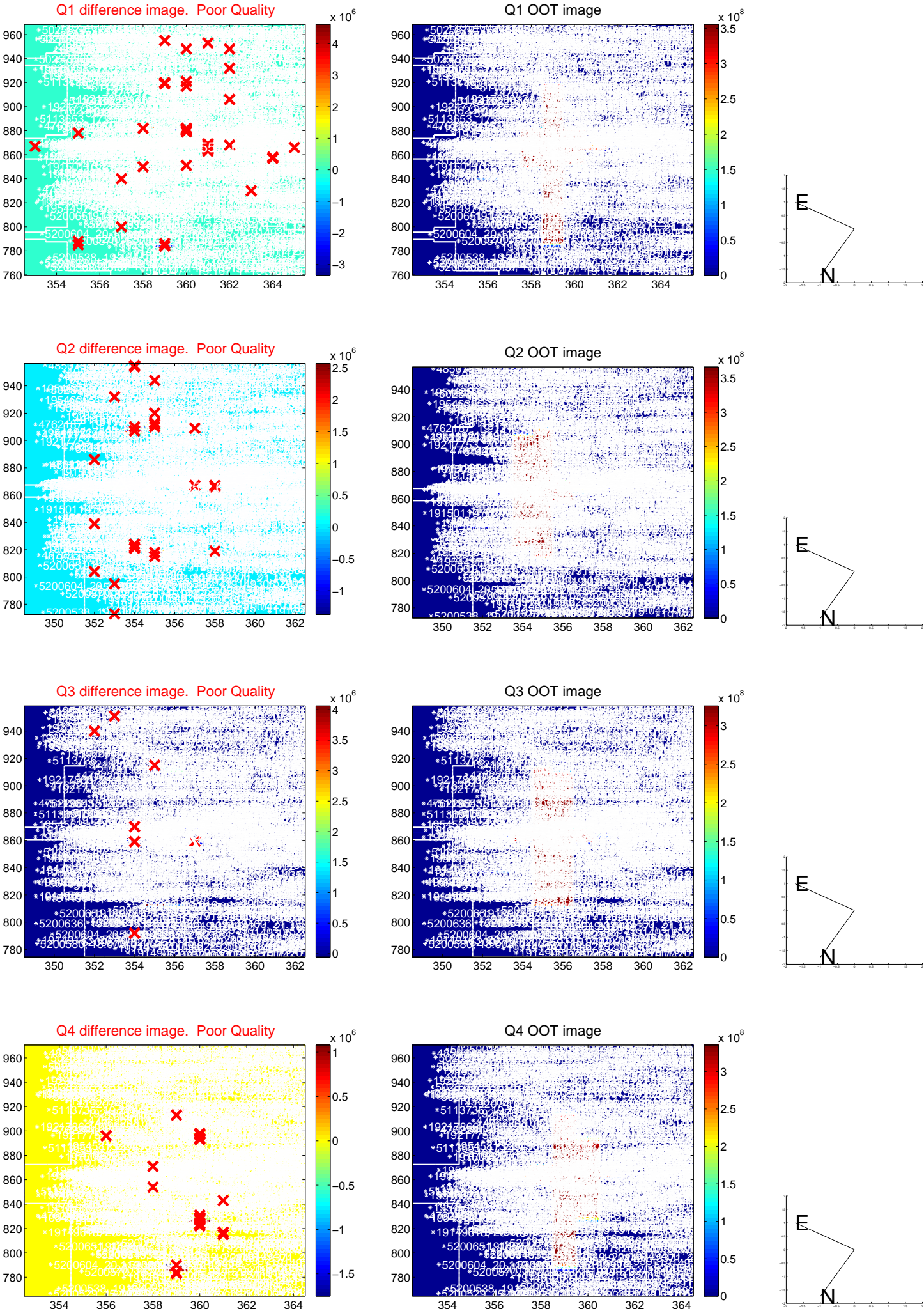
The OOT PRF centroid is offset from the target star catalog position by about 31.70 arcsec so the offset from difference PRF-fit to OOT-fit may be invalid.

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	17.475 ± 19.016	0.92	-12.619 ± 9.789	12.089 ± 17.336
PRF-fit source offset from KIC position	73.604 ± 19.323	3.81	-36.935 ± 9.539	63.667 ± 16.855
photometric centroid source offset	24.01 ± 1.87	12.86	-11.78 ± 1.23	20.92 ± 2.03

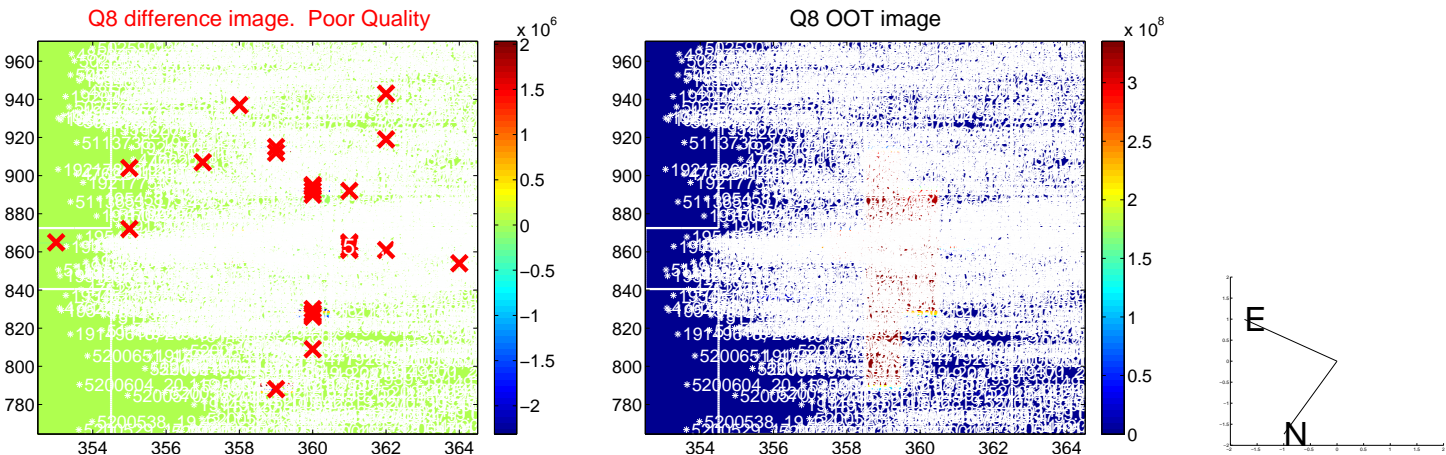
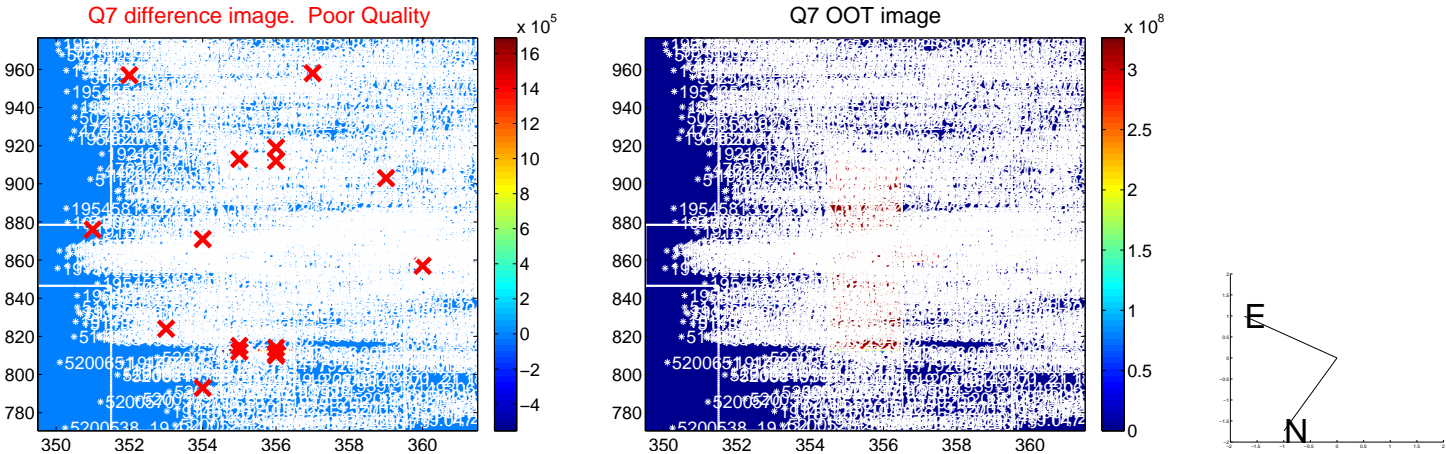
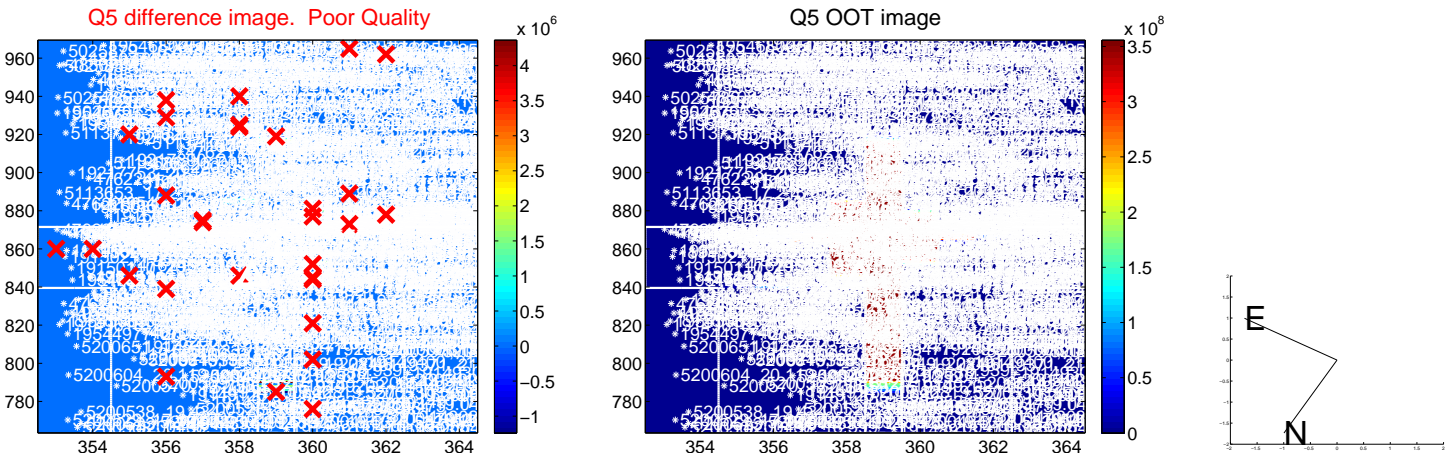


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets;** magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

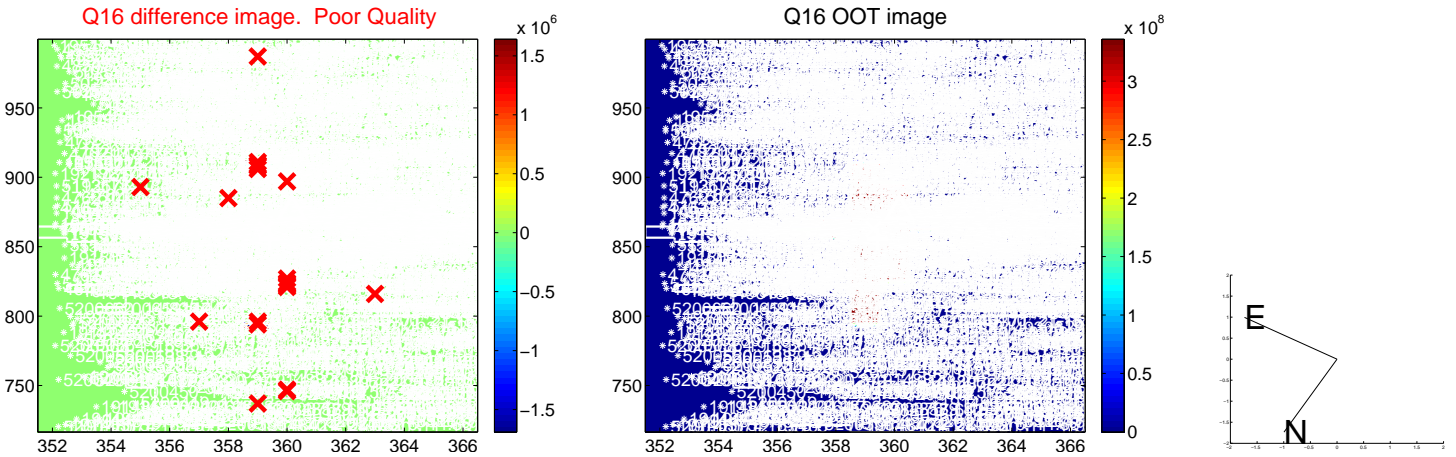
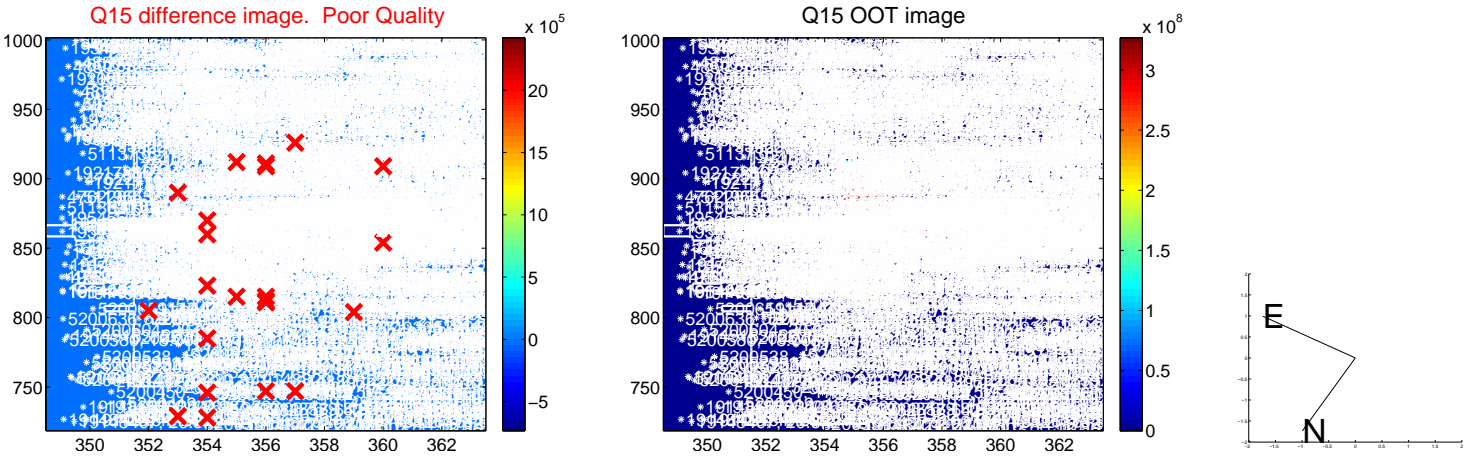
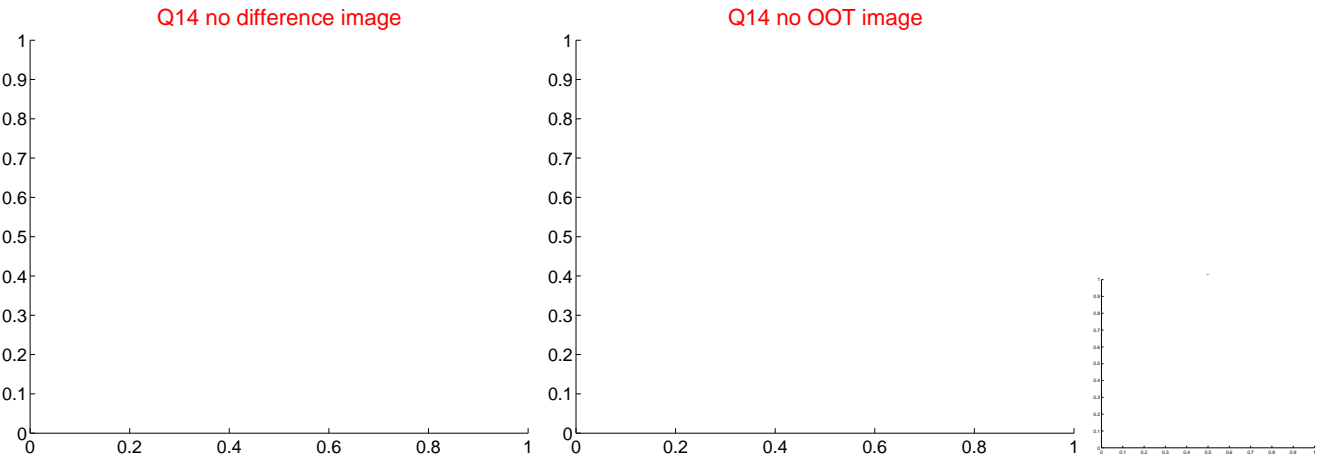
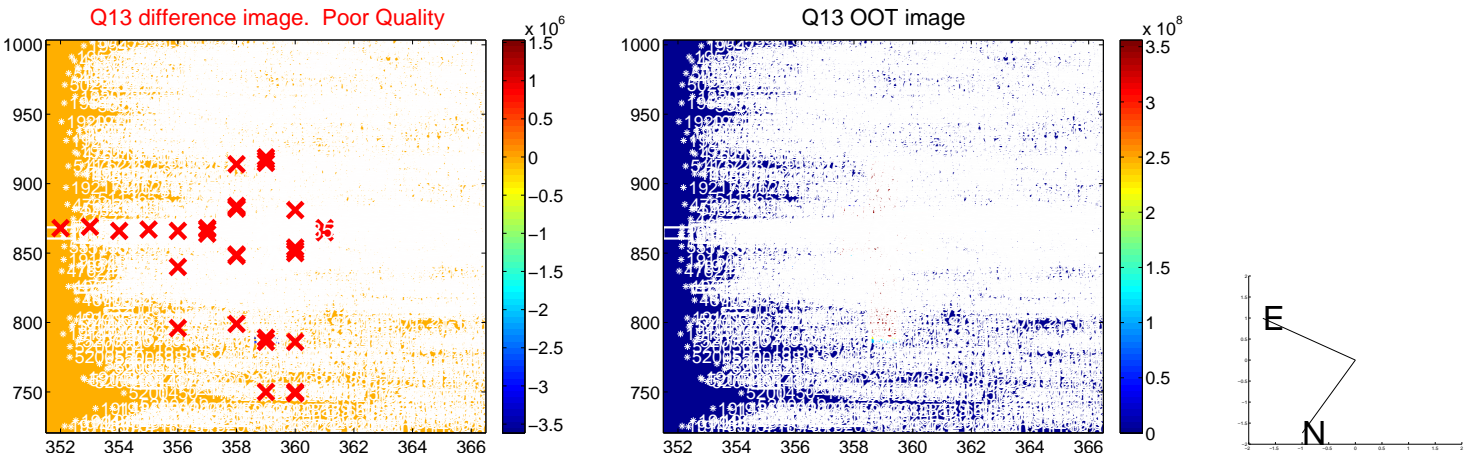
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



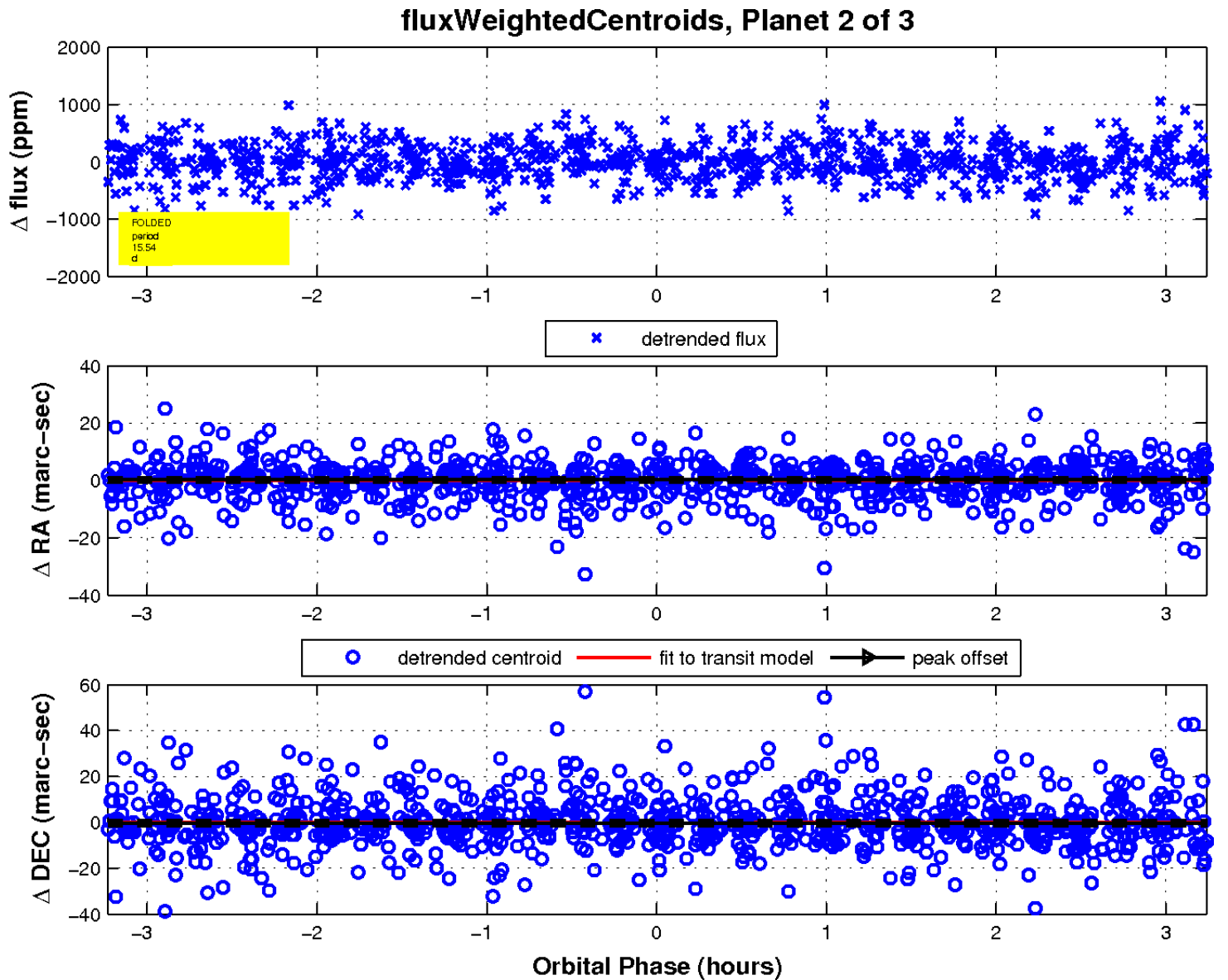
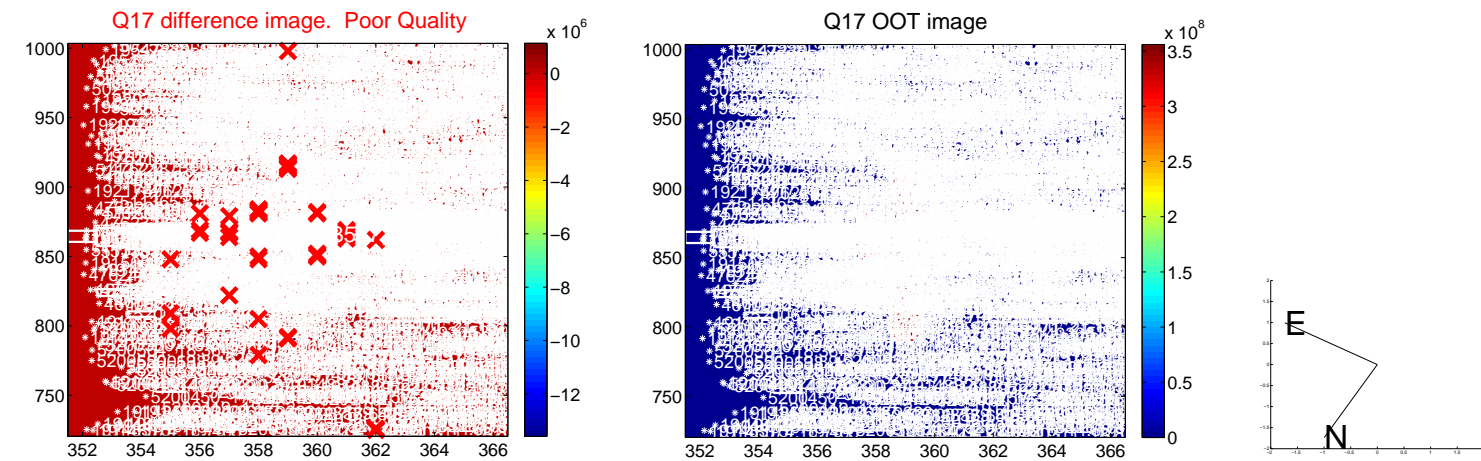
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



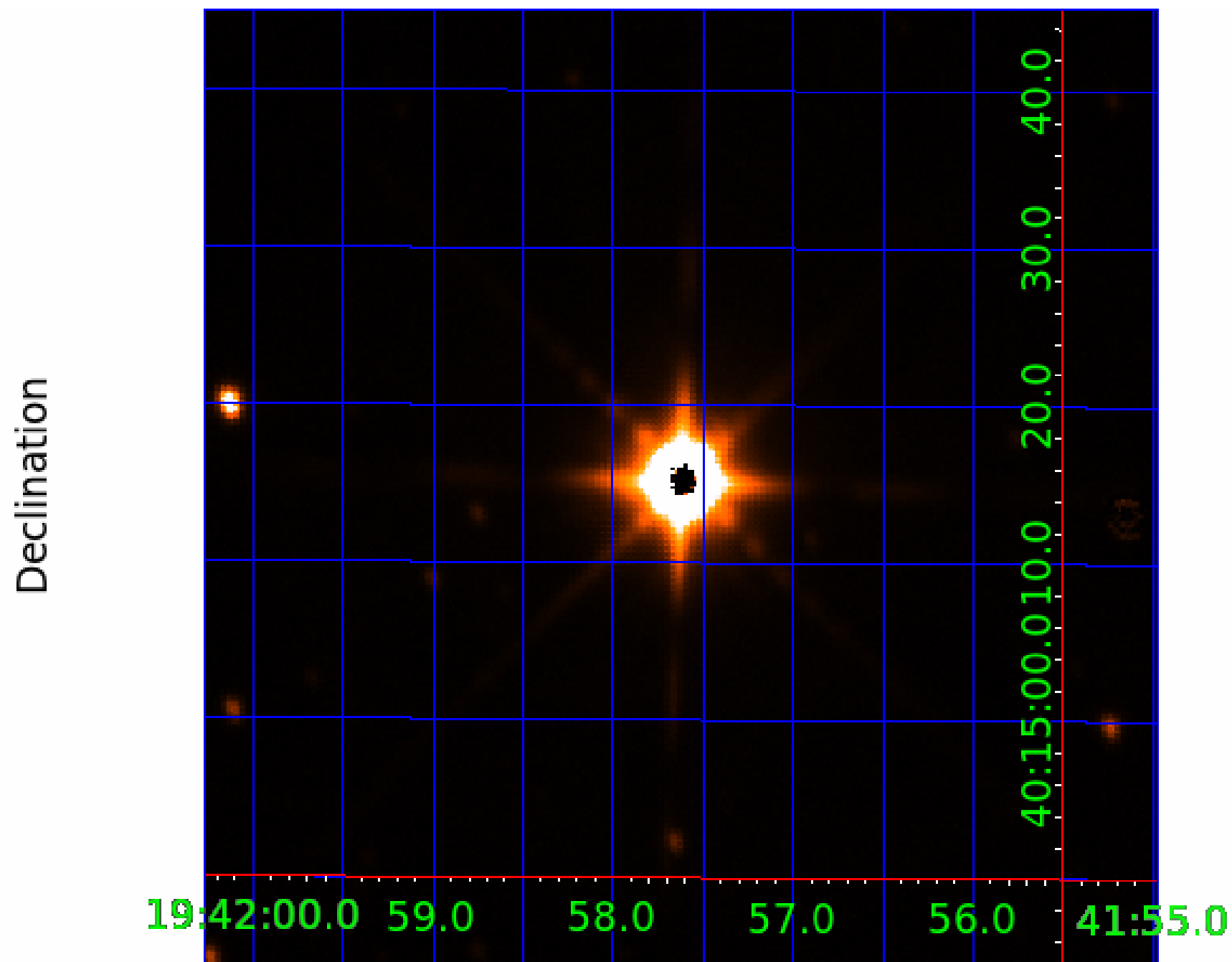
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



UKIRT Image



KIC 005113557

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})
005113557-01	OBS	No	0.568241	131.748790	29.0	4.166	10.6	11.2	1.56	7077	0.86	26805.29
005113557-02	OBS	No	15.539387	143.162348	552.9	1.082	11.5	12.9	1.56	7077	4.05	325.35
005113557-03	OBS	No	13.755348	139.620365	17.2	1.506	11.0	0.4	1.56	7077	0.66	382.80

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
005113557-01	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—CENT_SATURATED
005113557-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV—MOD_TER_DV—CENT_SATURATED
005113557-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV—MOD_TER_DV—CENT_SATURATED

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

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

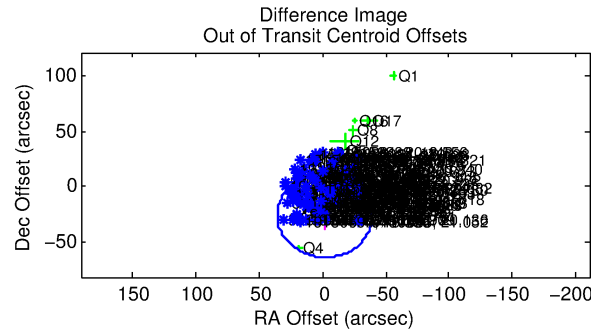
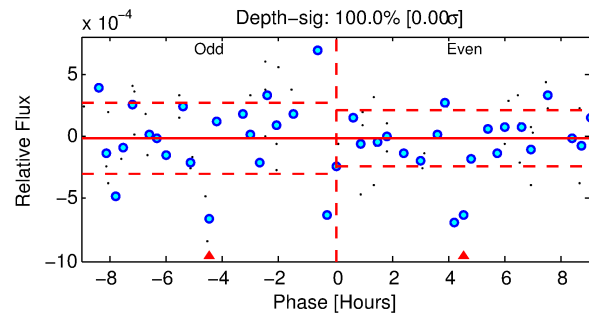
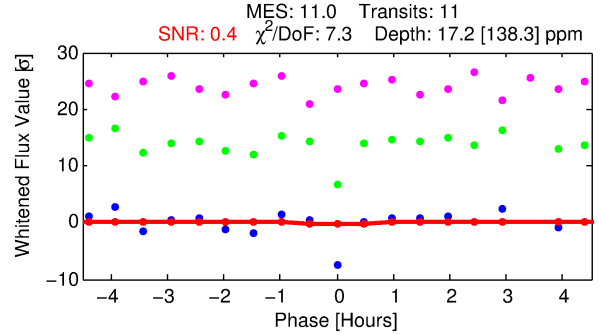
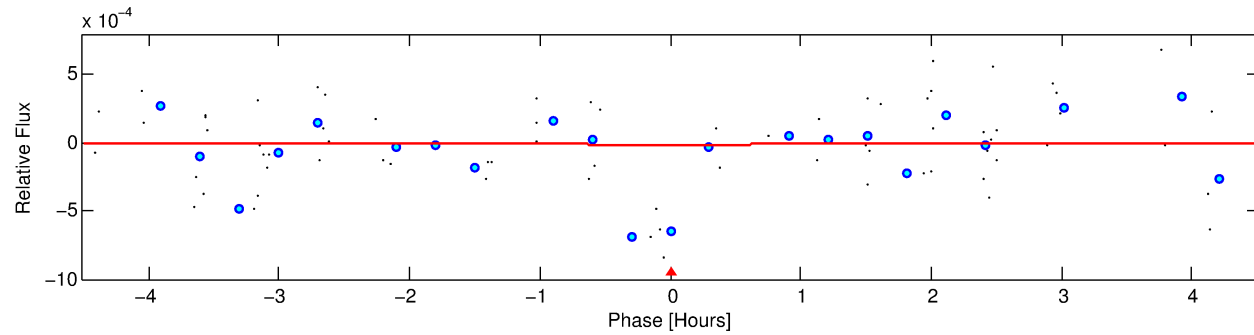
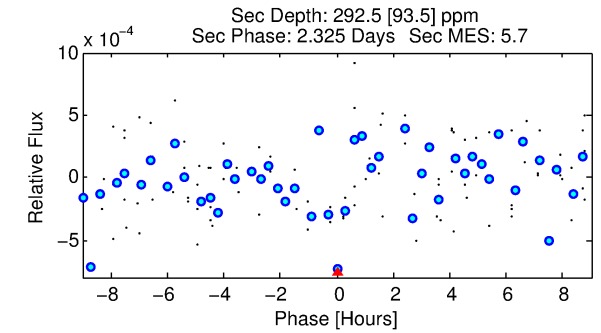
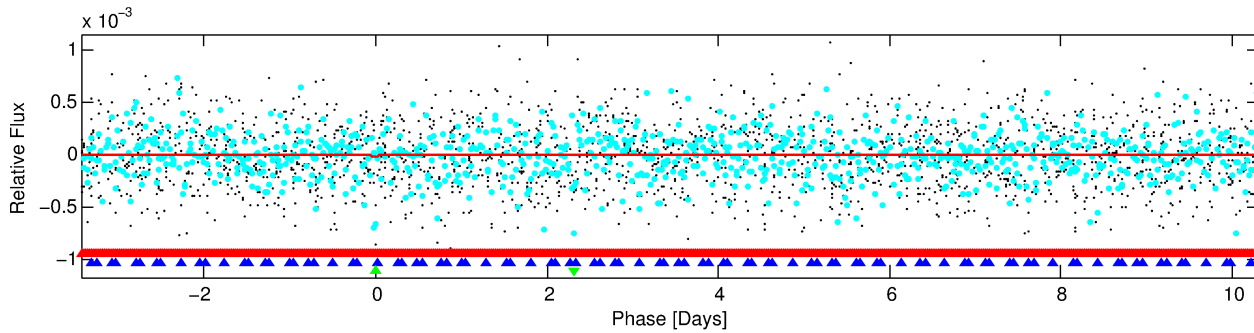
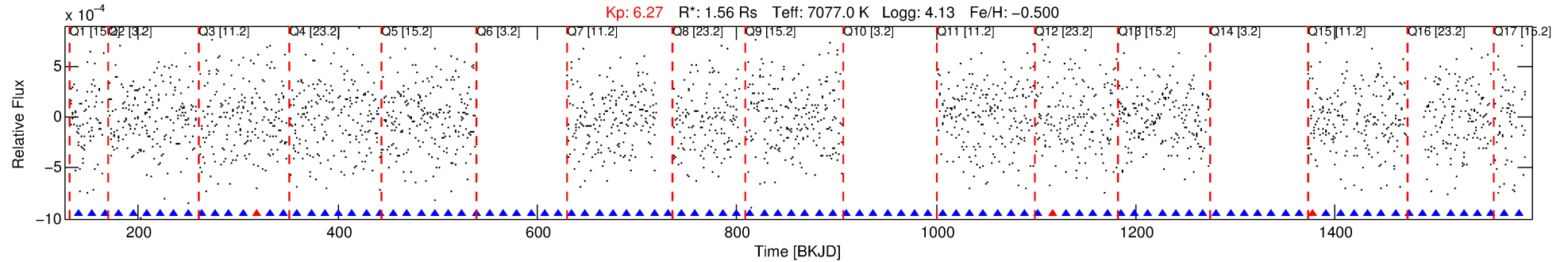
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 005113557-03

No Significant Match Found

DV One-Page Summary

KIC: 5113557 Candidate: 3 of 3 Period: 13.755 d



DV Fit Results:

Period = 13.75535 [0.00590] d
Epoch = 139.6204 [0.3221] BKJD
Rp/R* = 0.0039 [0.5860]
a/R* = 69.89 [59648.02]
b = 0.06 [13552.84]
Seff = 382.80 [152.67]
Teq = 1128 [112] K
Rp = 0.66 [99.95] Re
a = 0.1198 [0.0285] AU
Ag = 5340.05 [1623663.22] [0.00σ]
Teffp = 14907 [1133145] K [0.01σ]

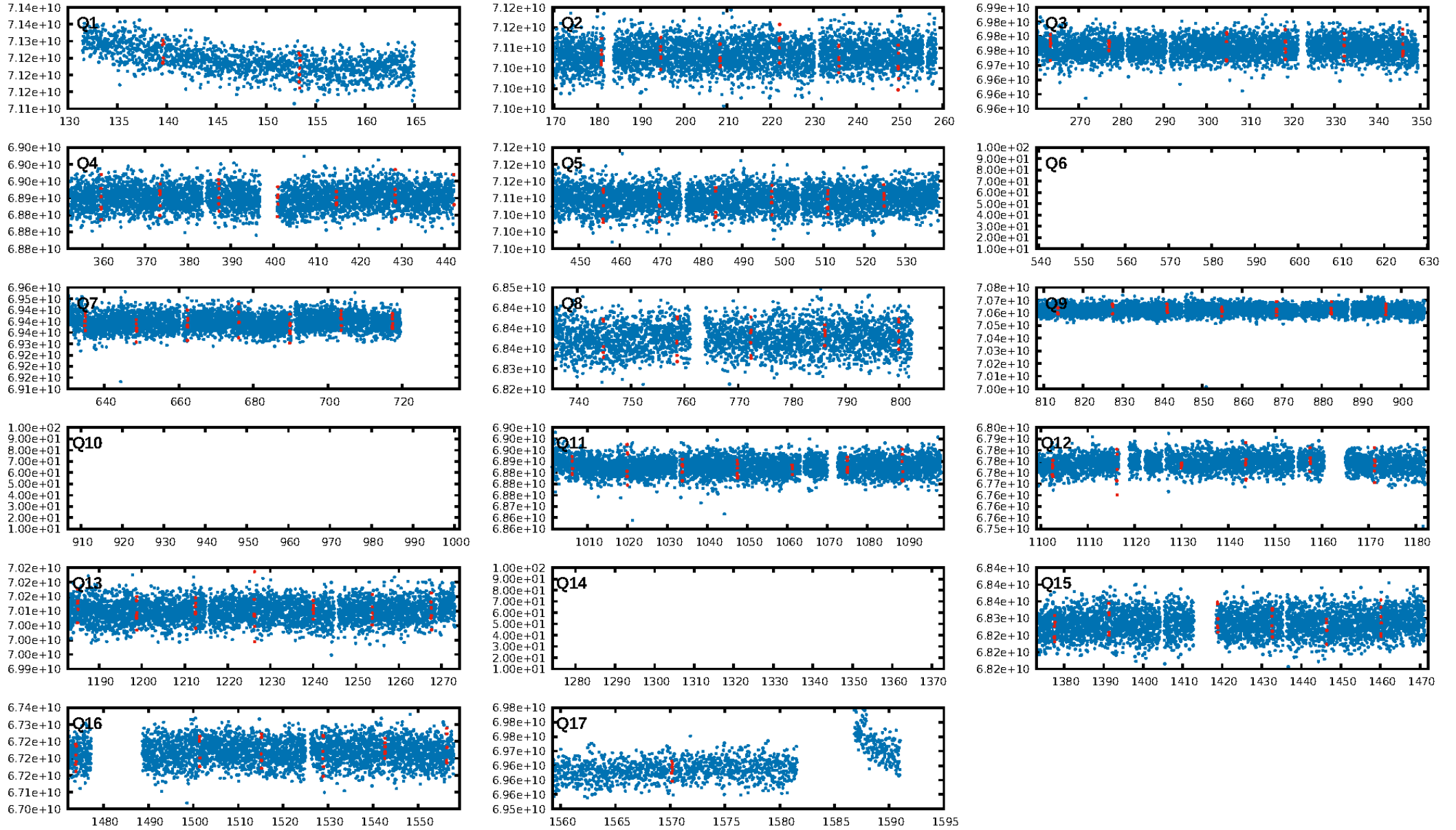
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [71.45σ]
LongPeriod-sig: 100.0% [23.09σ]
ModelChiSquare2-sig: 0.0%
ModelChiSquareGof-sig: 25.0%
Bootstrap-pfa: 2.40e-11
RollingBand-fgt: 0.73 [8/11]
GhostDiagnostic-chr: N/A
Centroid-sig: 94.7%
Centroid-so: 15.184 arcsec [0.34σ]
OotOffset-rm: 25.469 arcsec [2.03σ]
OotOffset-st: 1/4/4/4 [13]
KicOffset-rm: 10.943 arcsec [4.33σ]
KicOffset-st: 1/4/4/4 [13]
DiffImageQuality-fgm: 0.00 [0/13]
DiffImageOverlap-fno: 0.00 [0/14]

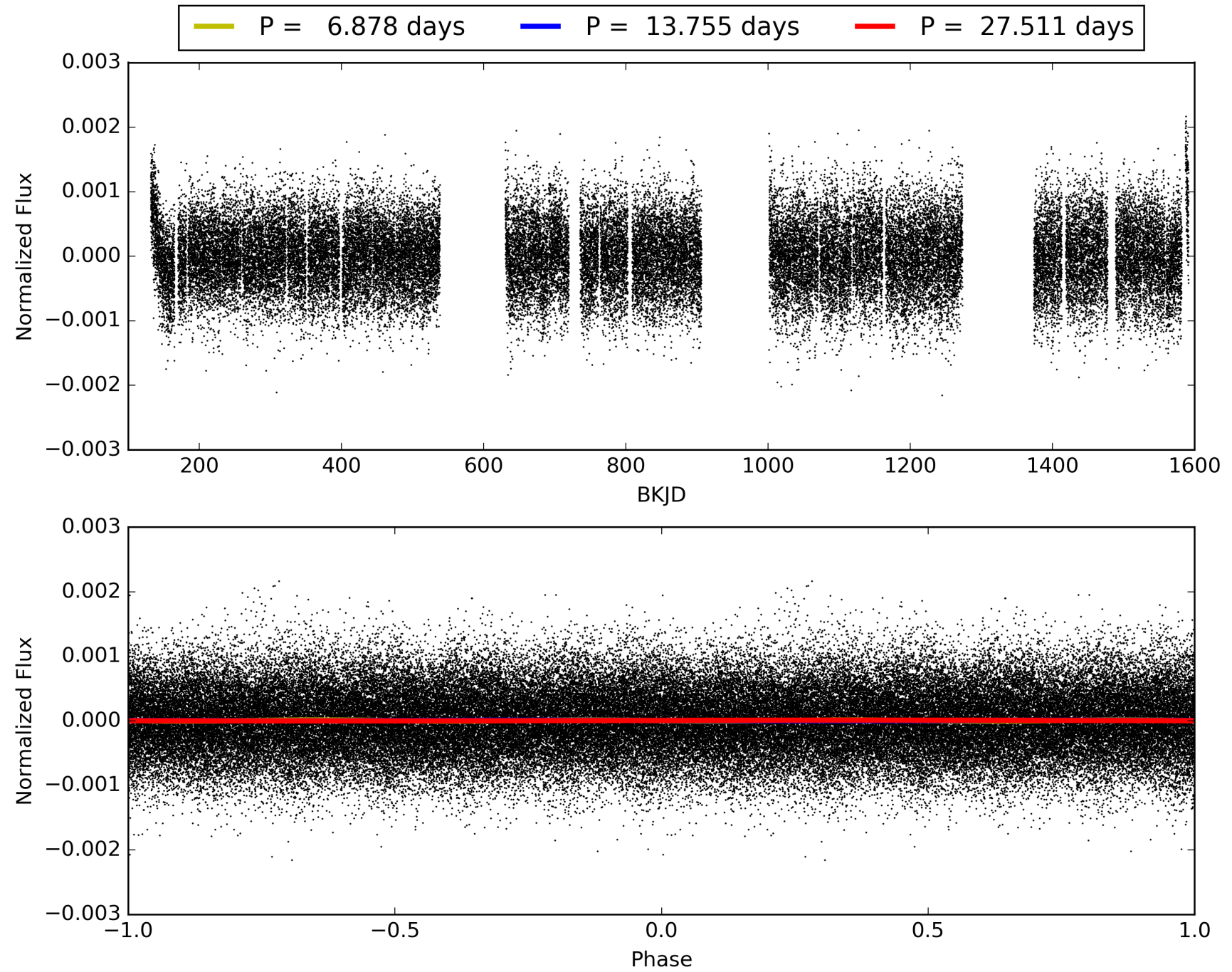
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 09:54:20 Z

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

TCE 005113557-03, PDC Light Curves

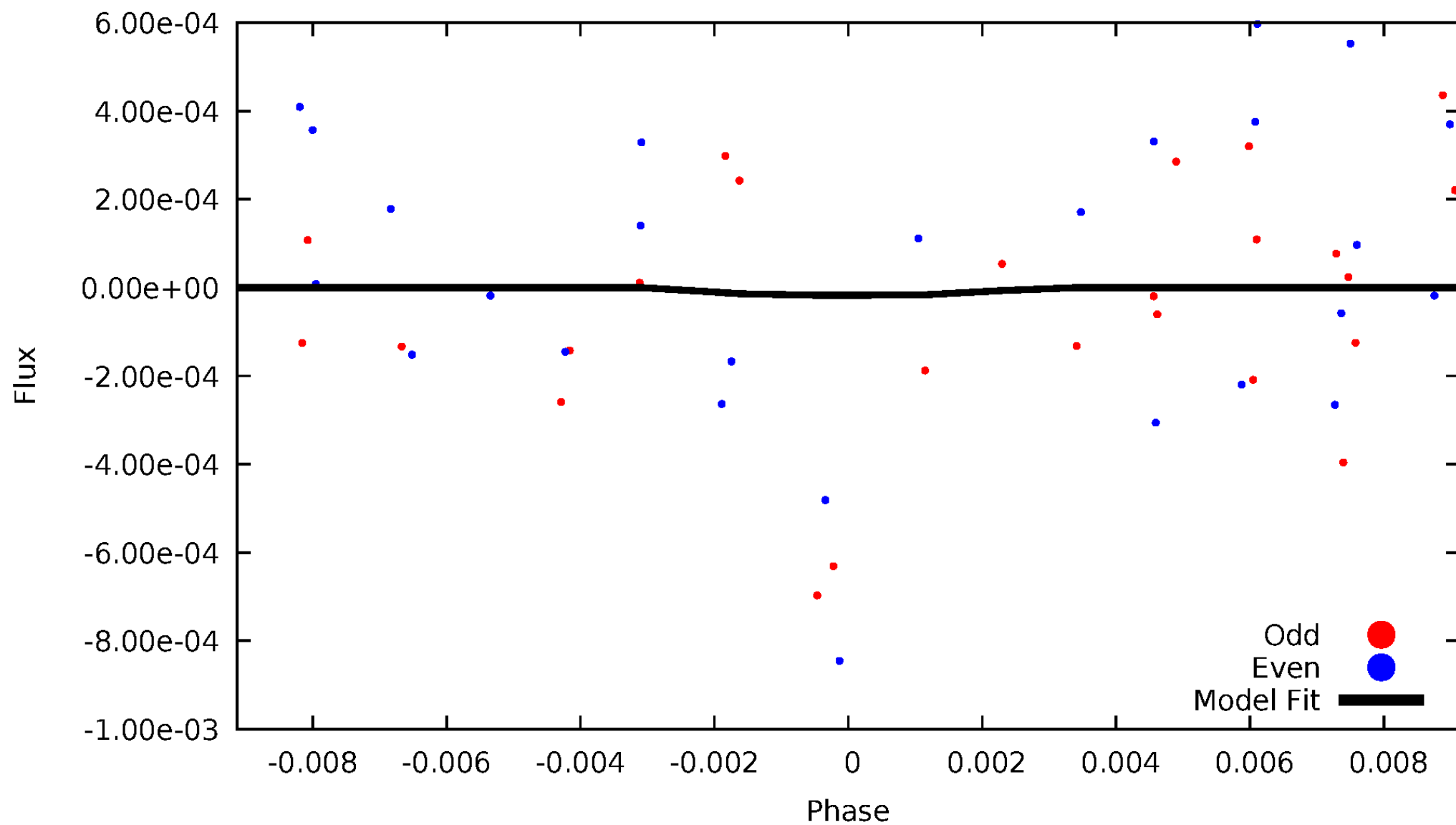


TCE 005113557-03



DV Odd/Even

TCE 005113557-03

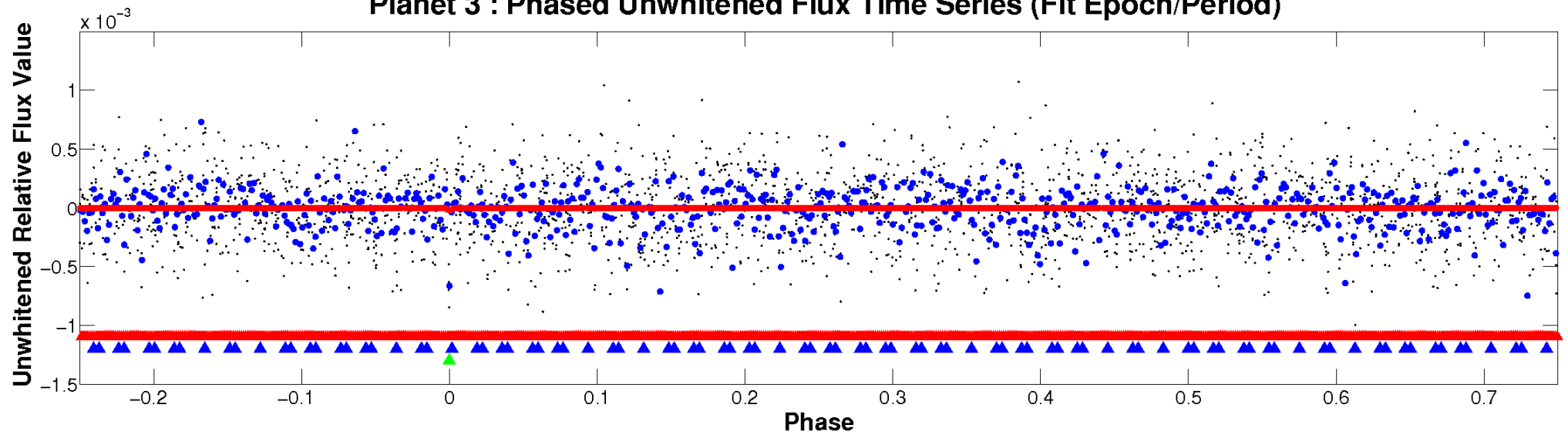


ALT Odd/Even

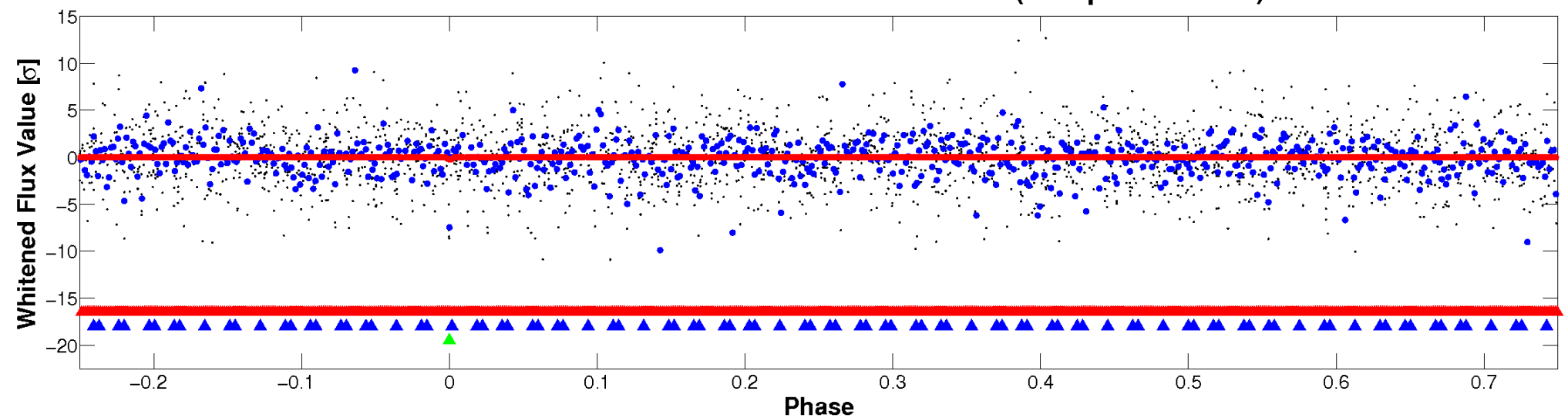
This plot does not exist for this TCE.

Non-Whitened Vs. Whitened Light Curve

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

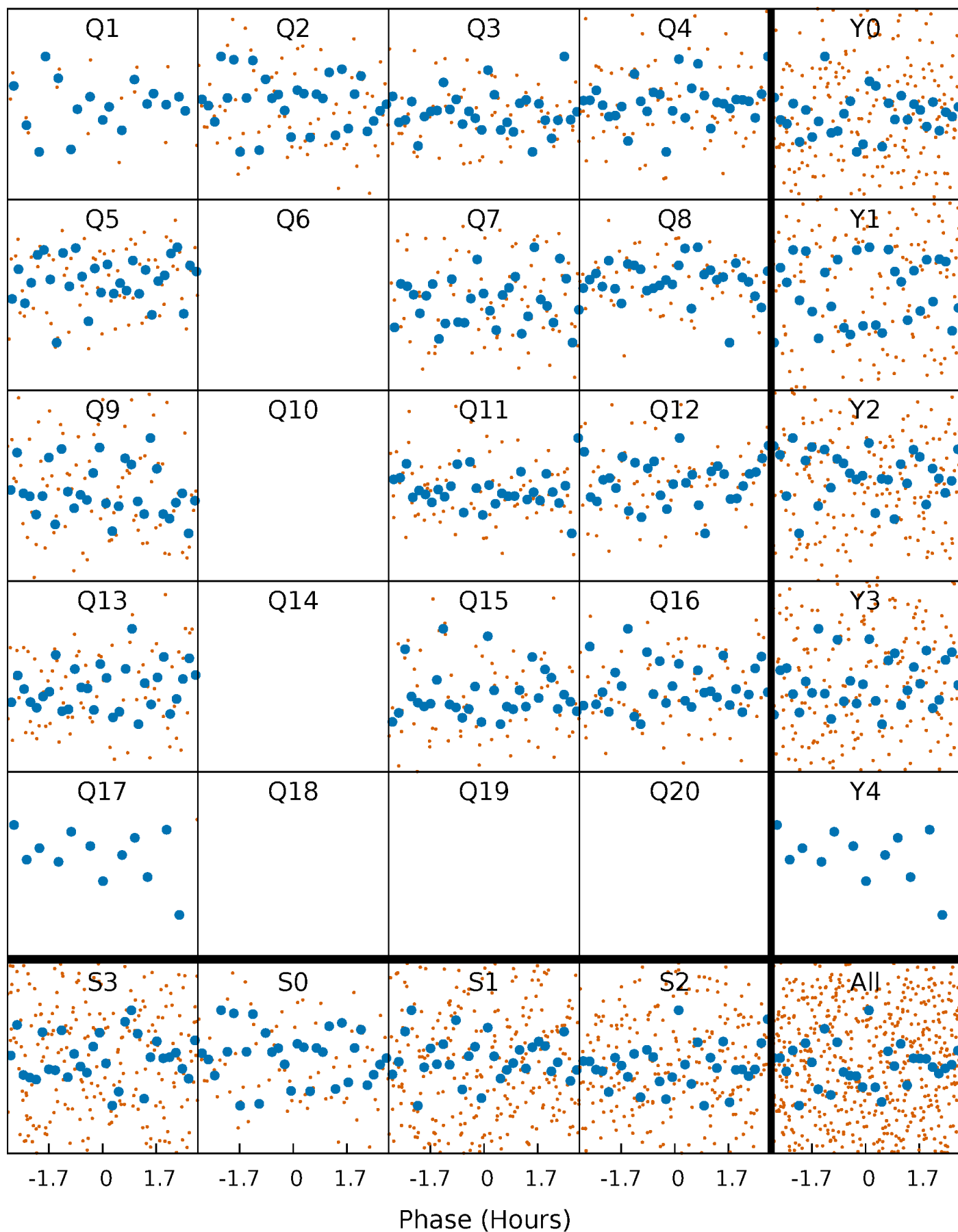


Planet 3 : Phased Whitened Flux Time Series (Fit Epoch/Period)



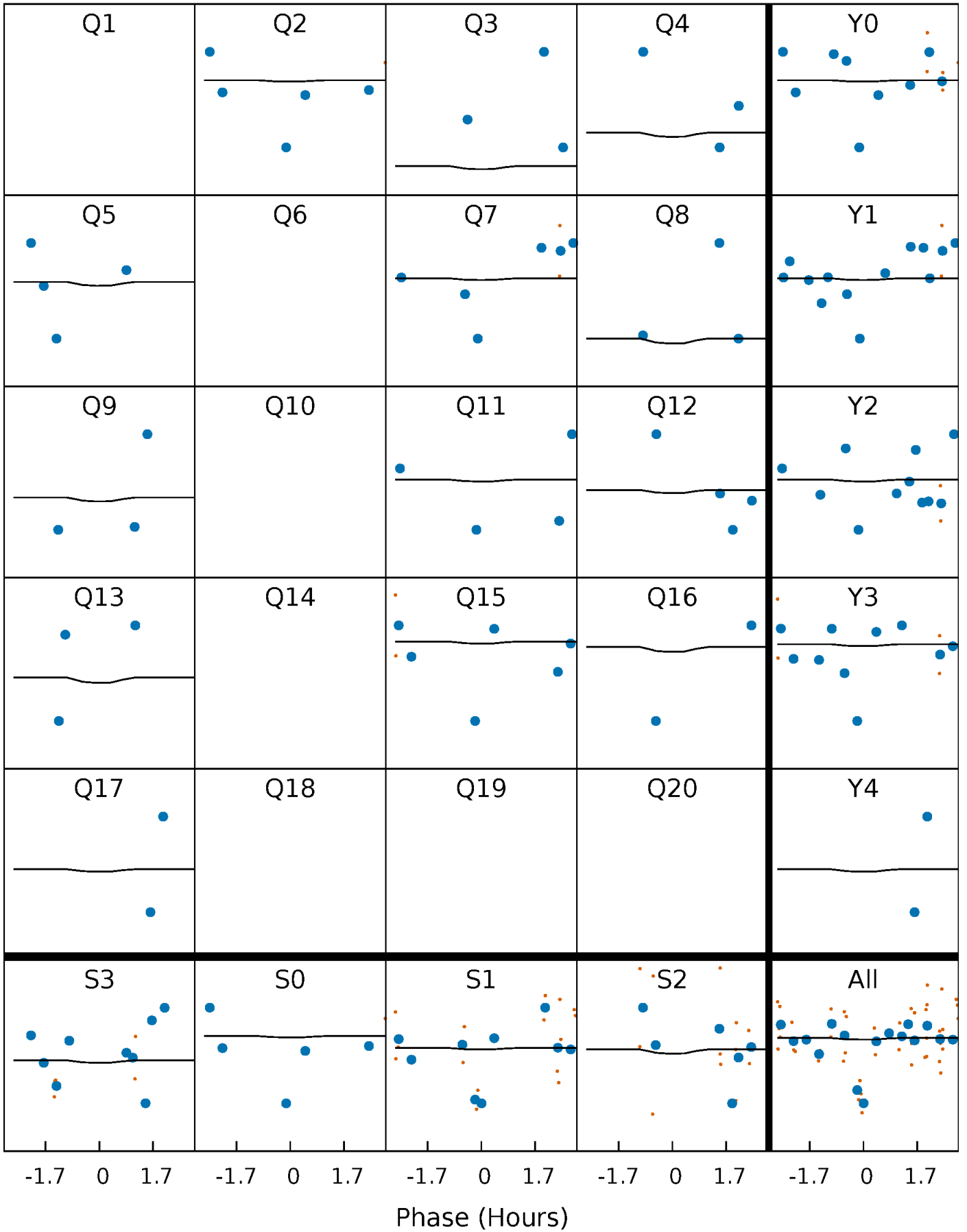
PDC Quarter-Phased Transit Curves

TCE 005113557-03 P= 13.755348 Days $T_0=139.620365$ (BKJD)



DV Quarter-Phased Transit Curves

TCE 005113557-03 P= 13.755348 Days $T_0=139.620365$ (BKJD)

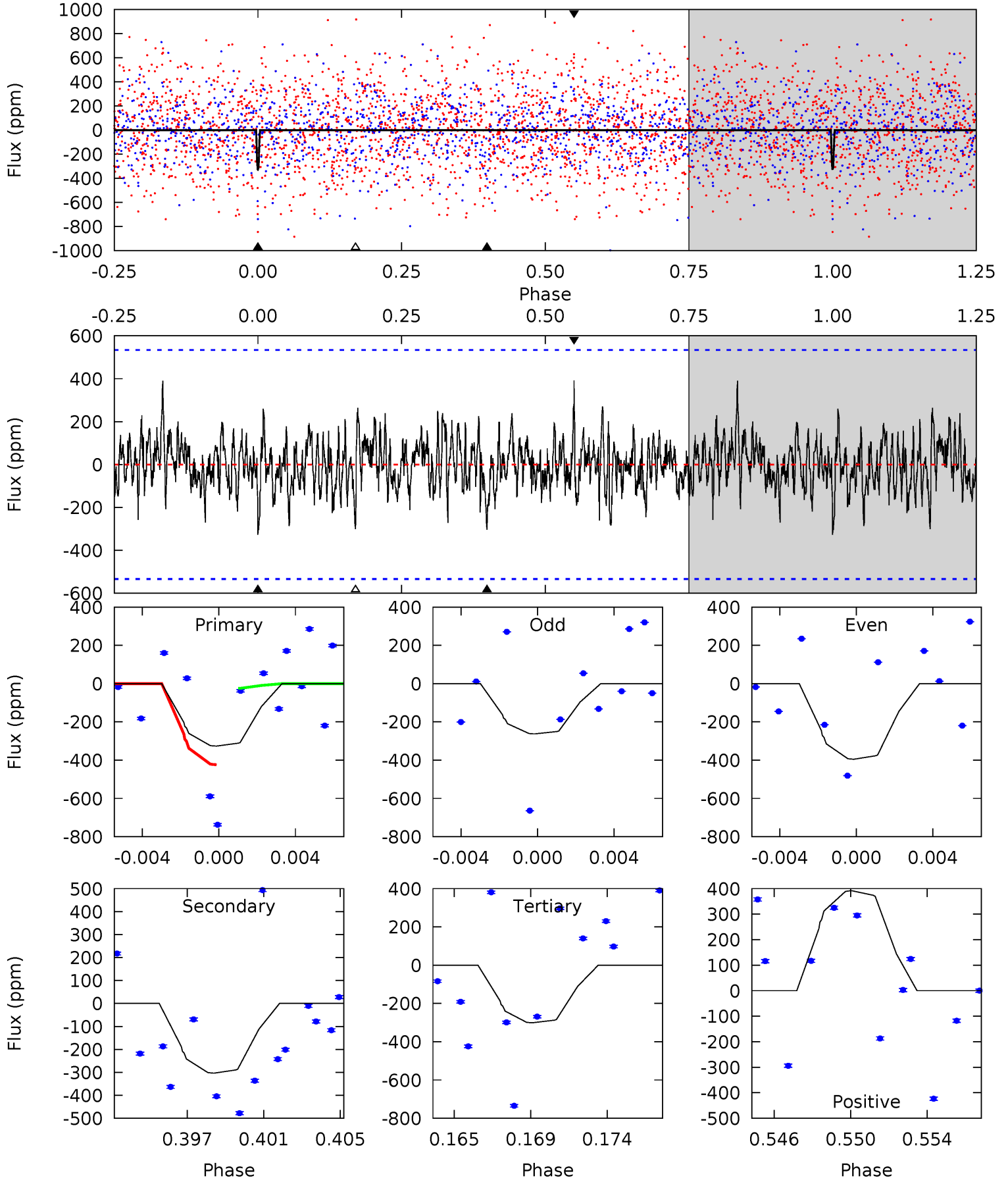


This plot does not exist for this TCE.

DV Model-Shift Uniqueness Test

005113557-03, P = 13.755348 Days, E = 125.865017 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
3.18	2.95	2.93	3.81	5.19	2.87	0.96	0.25	-0.64	0.02	-0.86	0.65	0	0.55	1.69



Alt Model-Shift Uniqueness Test

This plot does not exist for this TCE.

Stellar Parameters For KIC 005113557

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	7077^{+225}_{-300}	$4.133^{+0.204}_{-0.167}$	$-0.500^{+0.250}_{-0.300}$	$1.563^{+0.421}_{-0.379}$	$1.209^{+0.192}_{-0.157}$	$0.446^{+0.520}_{-0.209}$
	+3%/-4%	+5%/-4%	+50%/-60%	+27%/-24%	+16%/-13%	+117%/-47%
Source	PHO54	PHO54	PHO54	DSEP		

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

Secondary Eclipse Parameters for KIC 005113557-03 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-303 ± 103	$68.98^{+75.33}_{-49.82}$	1566^{+125}_{-122}	2112^{+1109}_{-4229}	$0.484^{+6.074}_{-0.382}$
Alt.	N/A	N/A	N/A	N/A	N/A

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 $A_{obs} \gg 1.0$

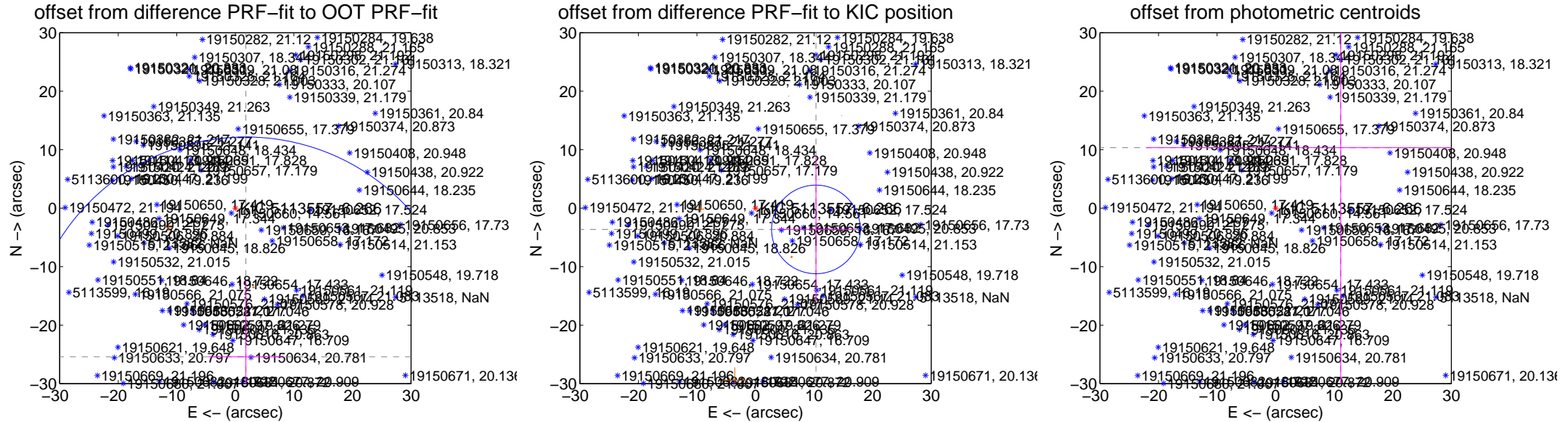
DV Centroid Data

Supplemental centroid analysis for 005113557-03. **Kepler magnitude: 6.27.** Transit SNR 0.43

There are 0 quarters with good PRF difference image offsets

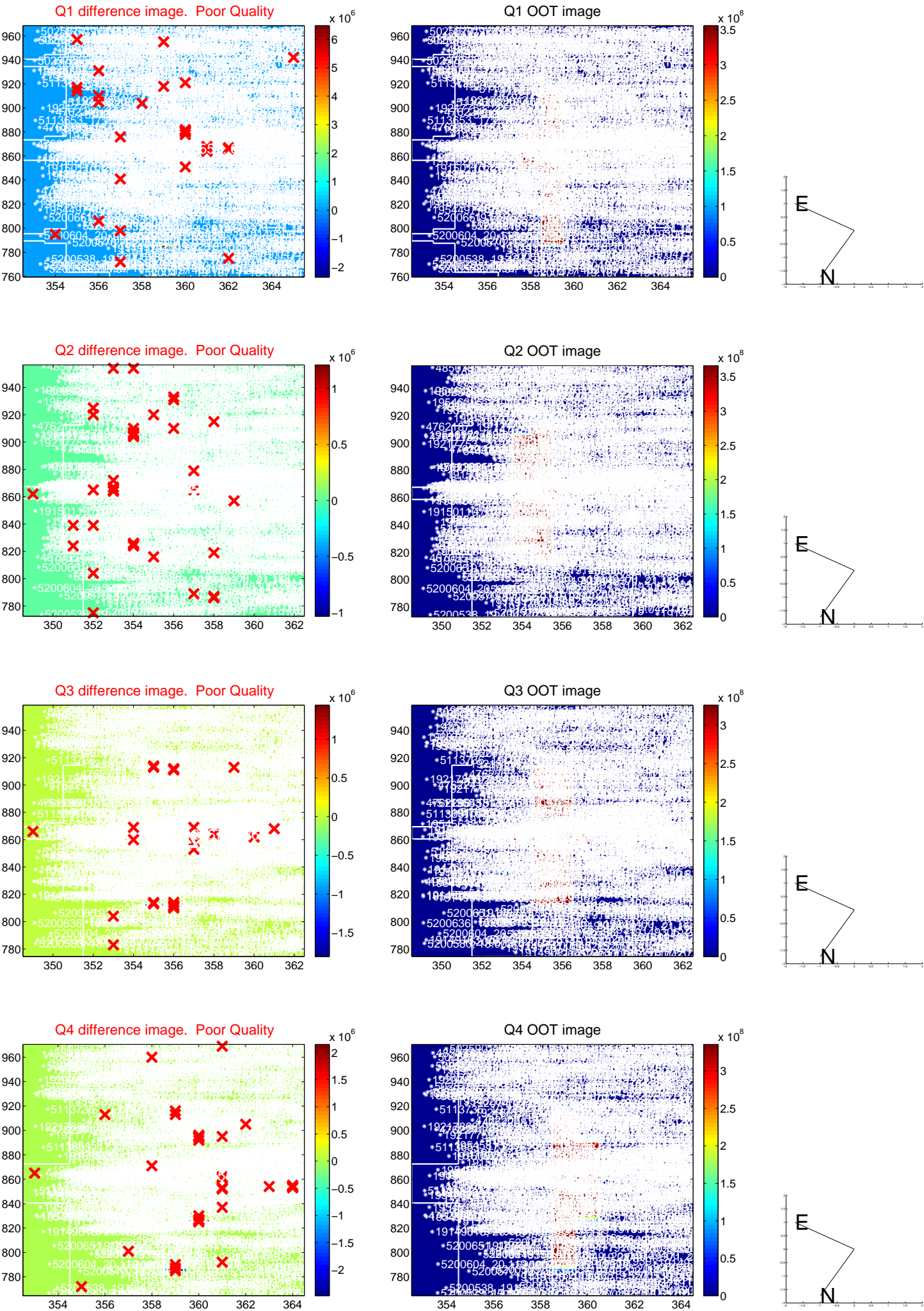
The OOT PRF centroid is offset from the target star catalog position by about 31.76 arcsec so the offset from difference PRF-fit to OOT-fit may be invalid.

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	25.469 ± 12.525	2.03	-1.797 ± 6.507	-25.406 ± 12.999
PRF-fit source offset from KIC position	10.943 ± 2.525	4.33	-10.323 ± 6.617	-3.629 ± 12.431
photometric centroid source offset	15.18 ± 44.58	0.34	-11.12 ± 33.26	10.34 ± 54.81

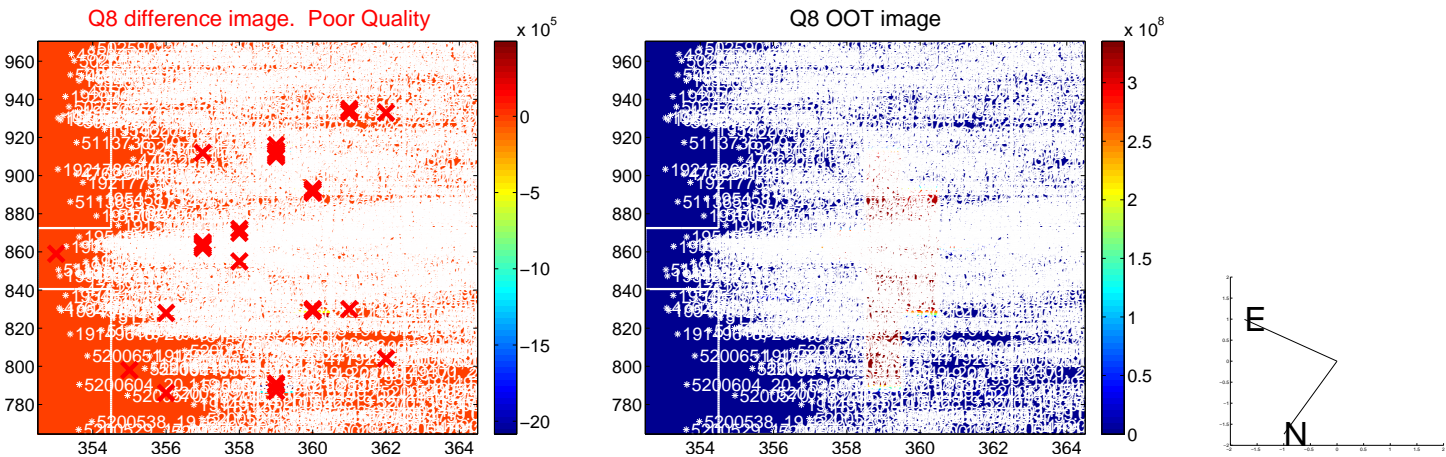
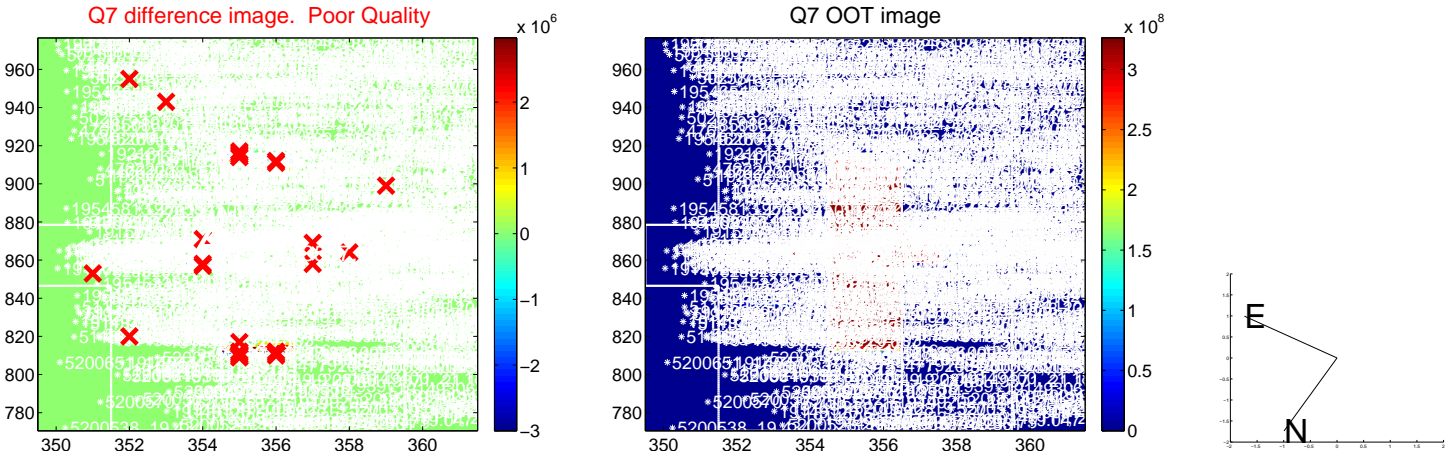
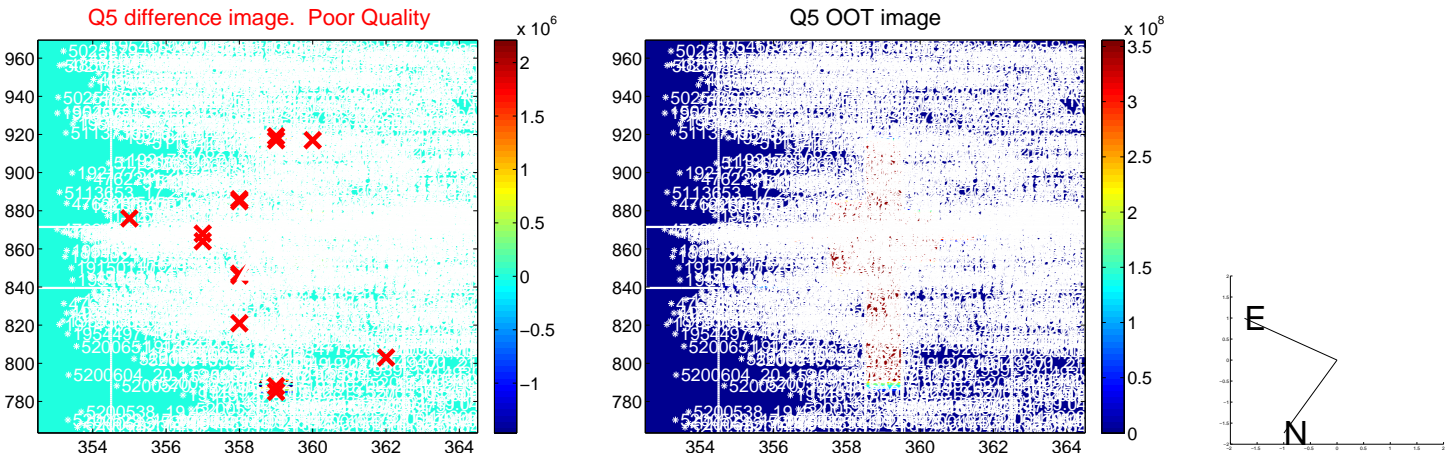


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets;** magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

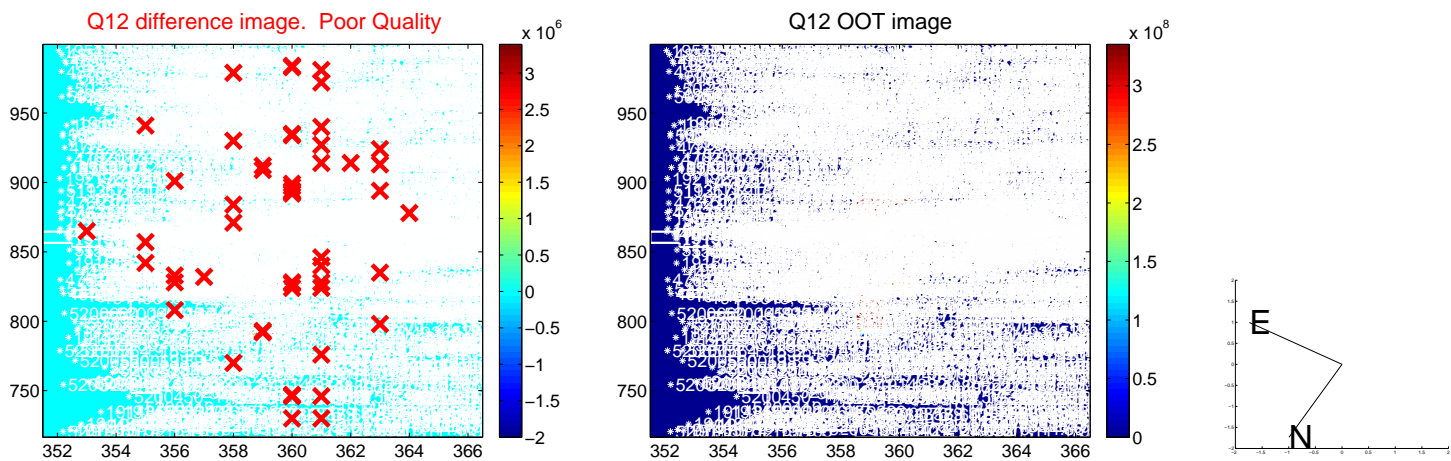
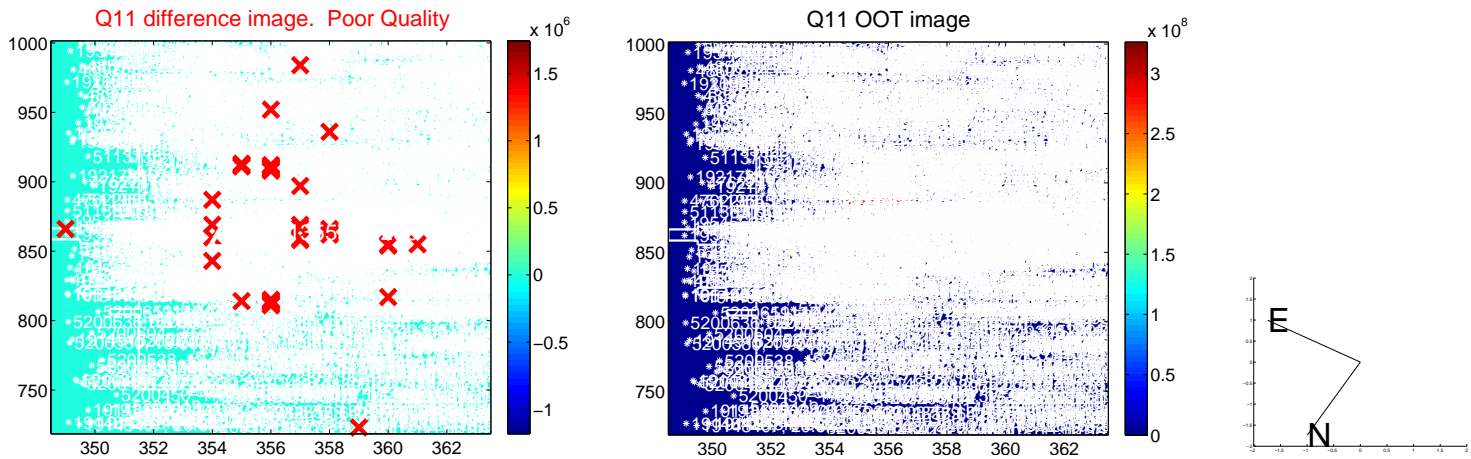
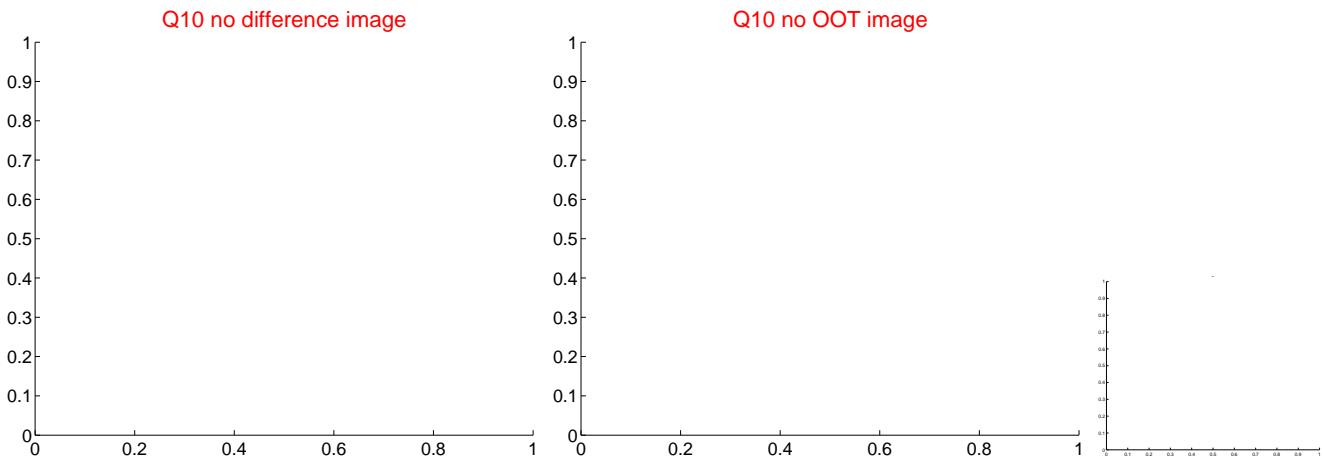
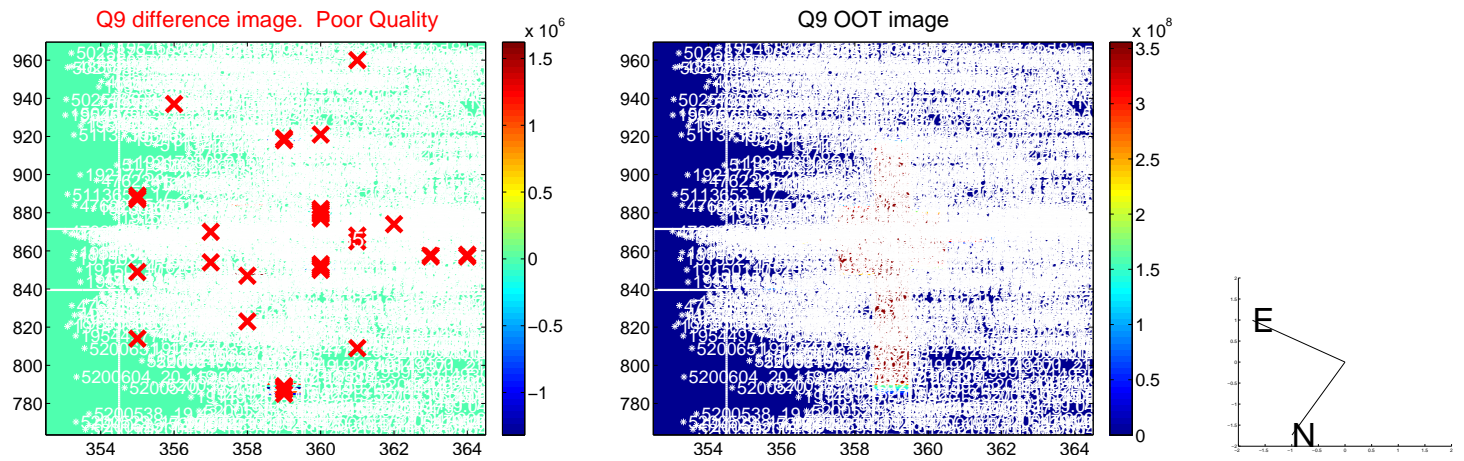
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



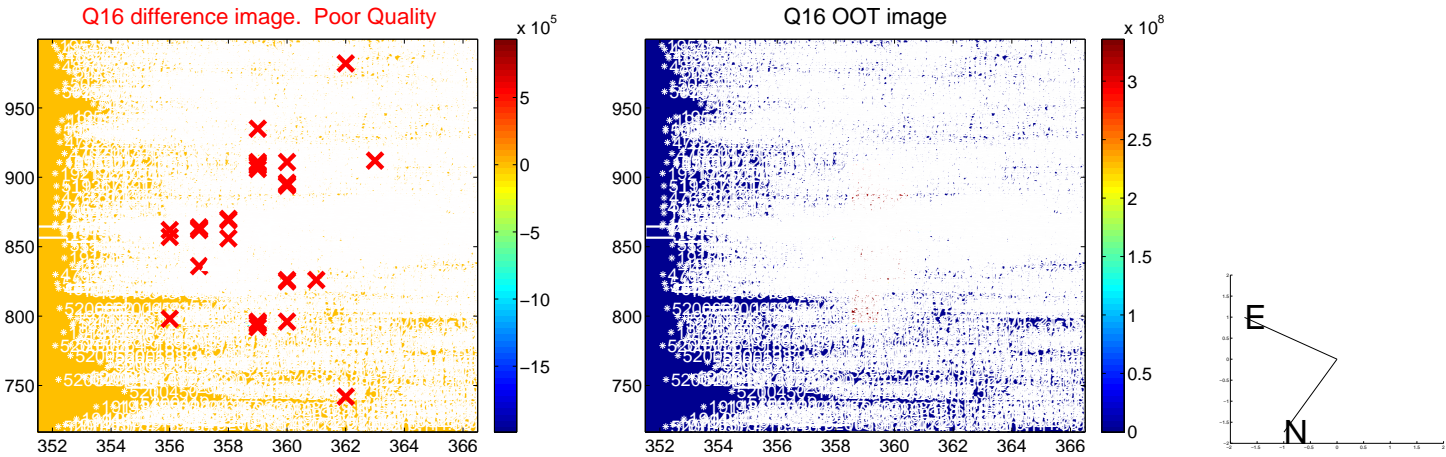
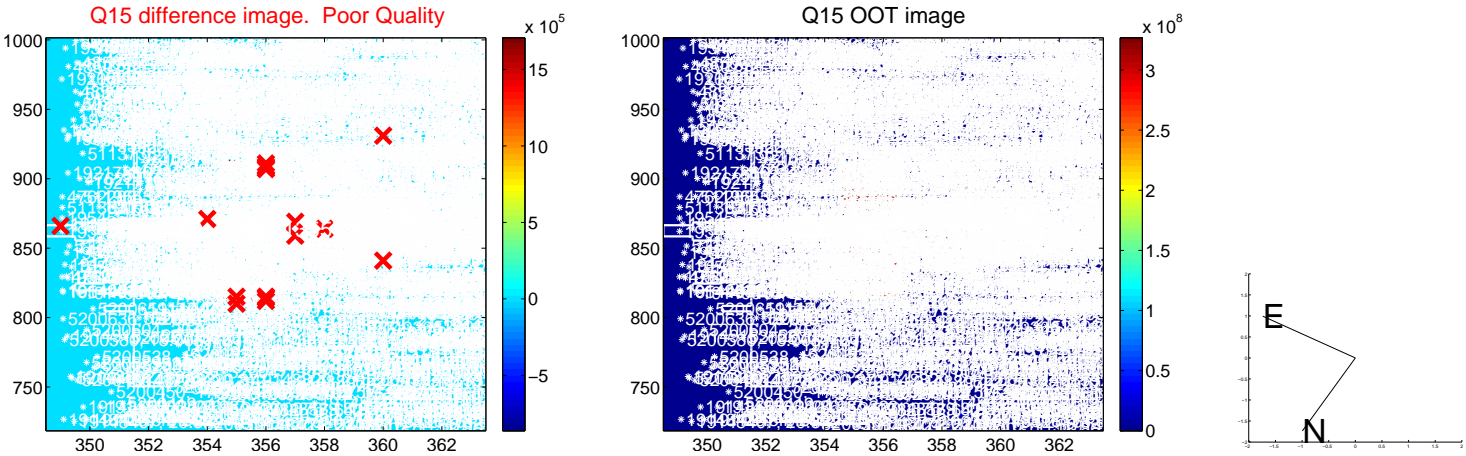
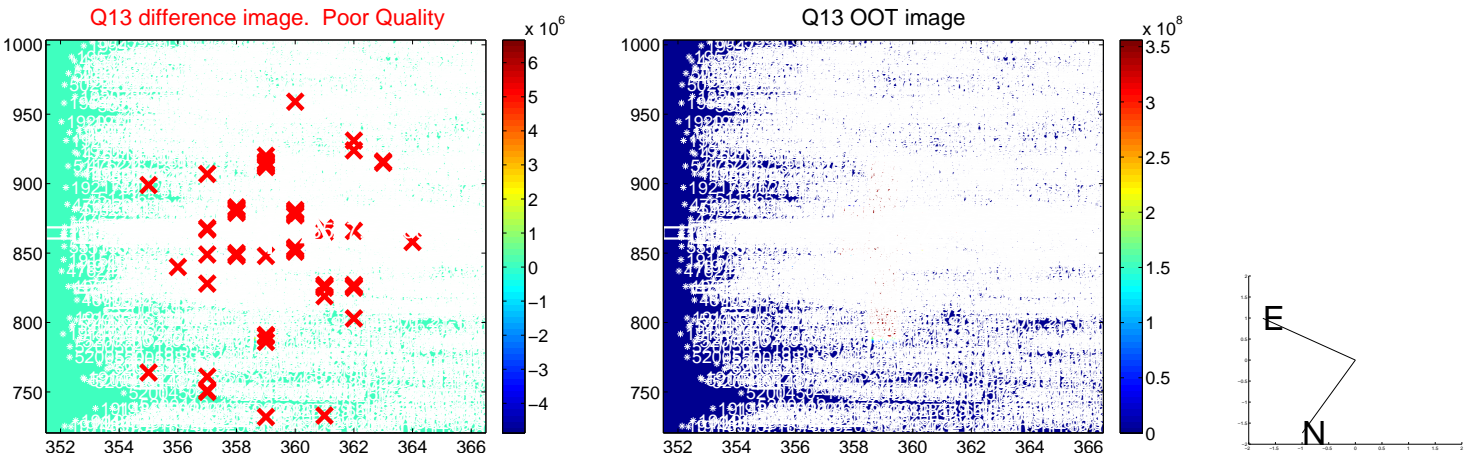
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



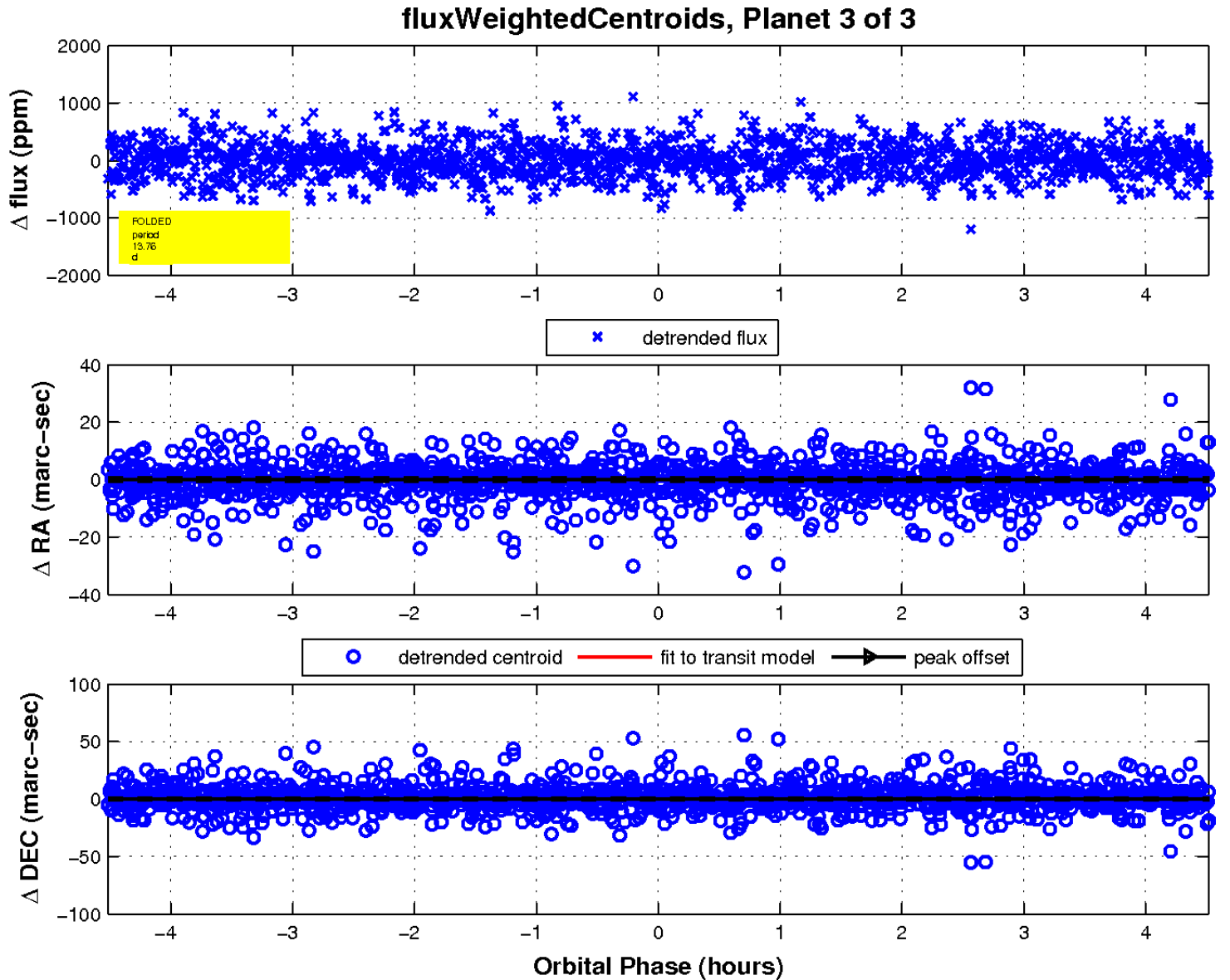
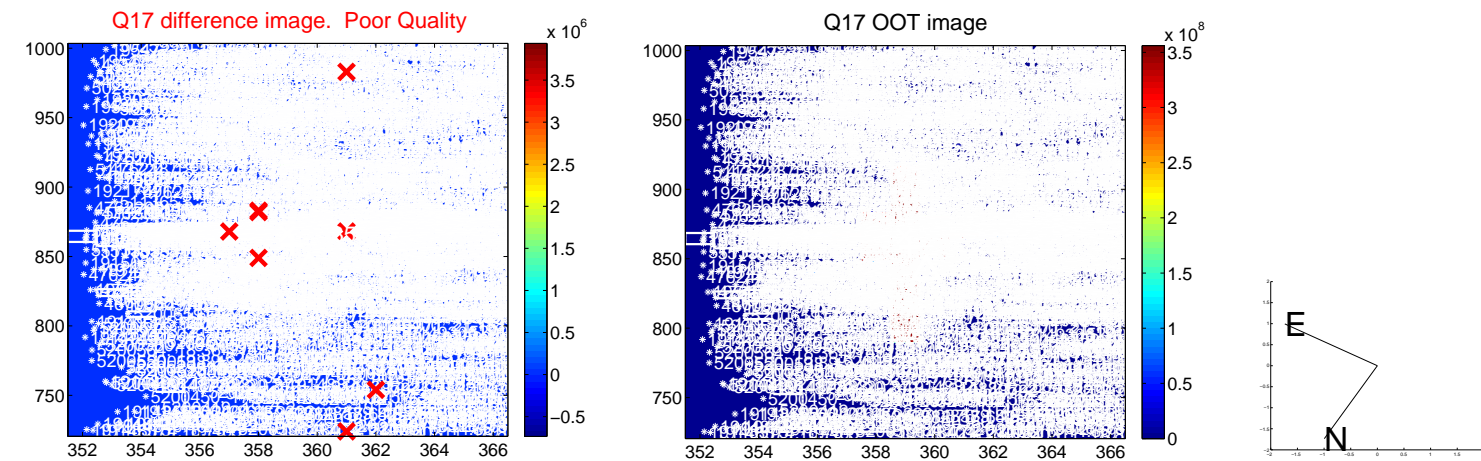
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

