

KIC 003356799

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})
003356799-01	OBS	No	0.882678	131.711139	9.3	5.705	7.3	5.8	3.46	7854	1.09	78296.03
003356799-02	OBS	No	41.688520	157.339455	325.4	2.191	8.9	9.1	3.46	7854	12.05	458.62
003356799-03	OBS	No	37.614487	159.133583	156.4	6.537	9.1	7.3	3.46	7854	4.88	526.02
003356799-04	OBS	No	26.058035	140.155469	215.1	1.449	8.6	8.5	3.46	7854	5.19	858.13
003356799-05	OBS	No	15.237902	137.578100	160.6	1.320	8.3	9.0	3.46	7854	4.72	1754.86

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
003356799-01	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT
003356799-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT
003356799-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_NONUNIQ_ALT
003356799-04	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_FEW_DIFFS
003356799-05	OBS	FP	0.00	1	0	0	0	TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT

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

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

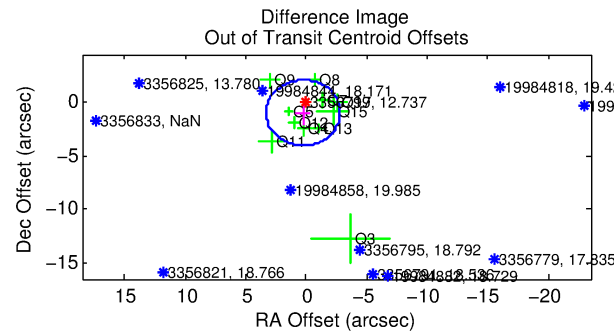
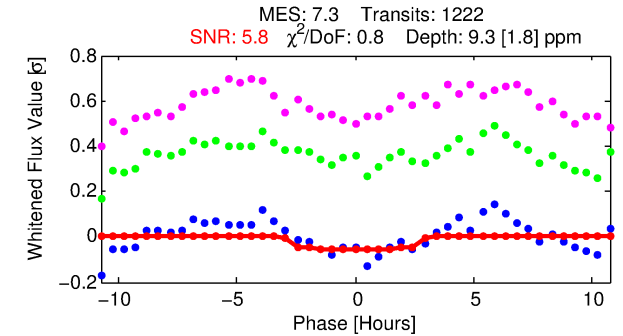
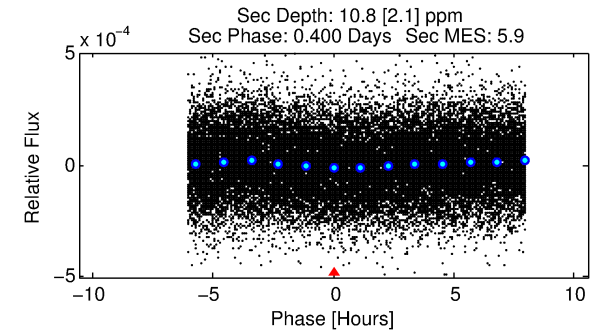
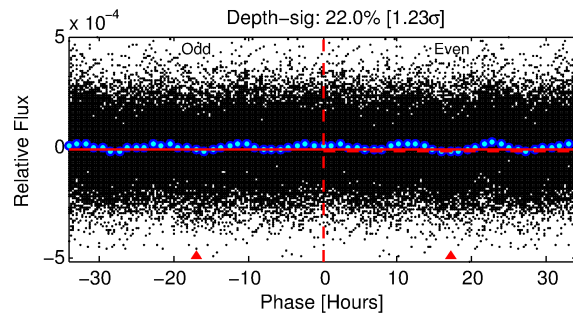
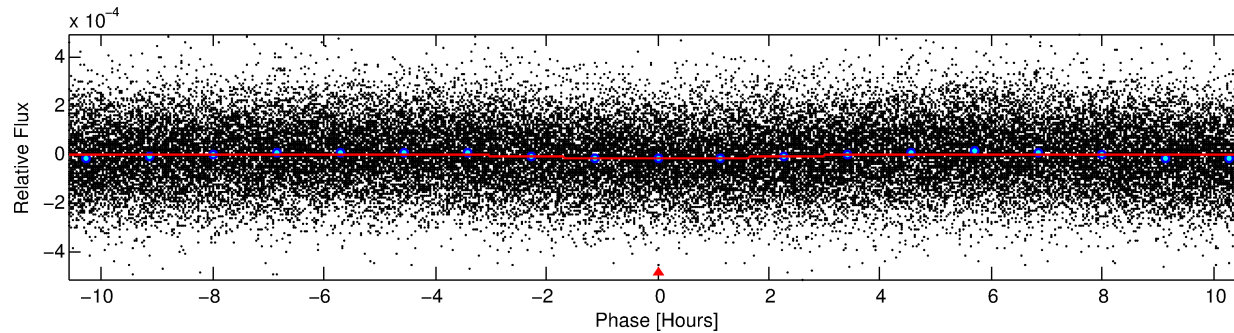
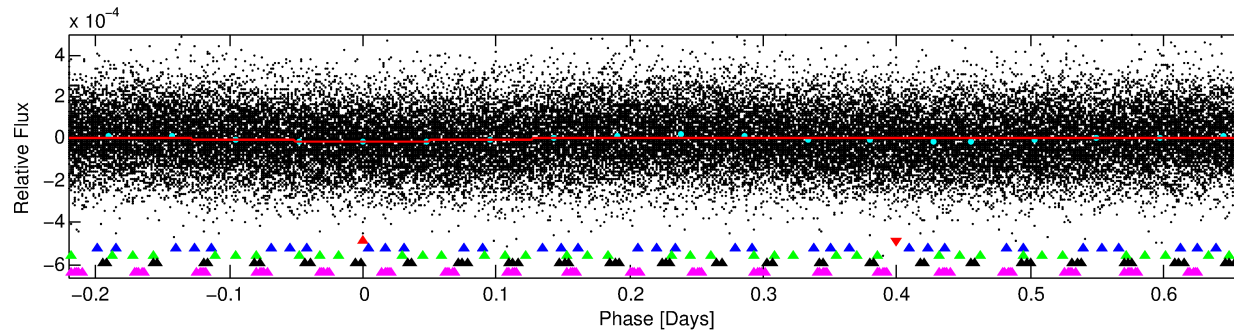
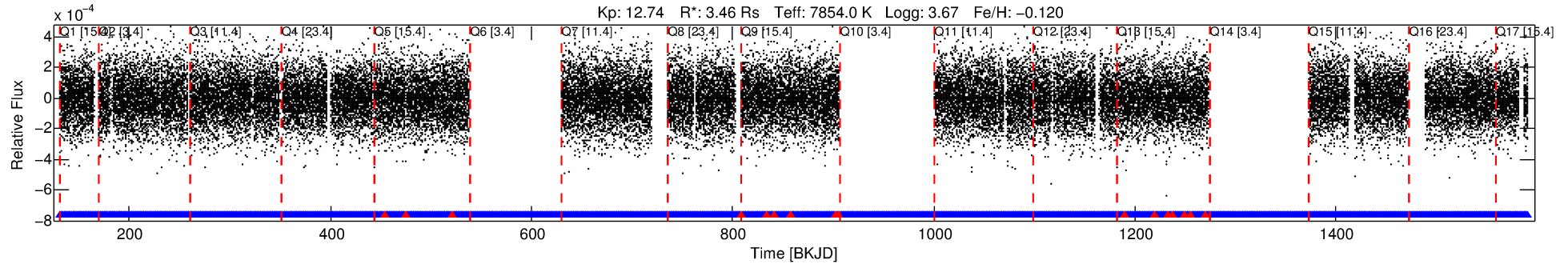
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 003356799-01

No Significant Match Found

DV One-Page Summary

KIC: 3356799 Candidate: 1 of 5 Period: 0.883 d



DV Fit Results:

Period = 0.88268 [0.00002] d
Epoch = 131.7111 [0.0085] BKJD
Rp/R* = 0.0029 [0.0019]
a/R* = 1.27 [1.80]
b = 0.48 [5.98]
Seff = 78296.03 [60914.60]
Teq = 4265 [830] K
Rp = 1.09 [0.90] Re
a = 0.0228 [0.0108] AU
Ag = 2.60 [4.02] [0.40 σ]
Teffp = 8376 [2833] K [1.39 σ]

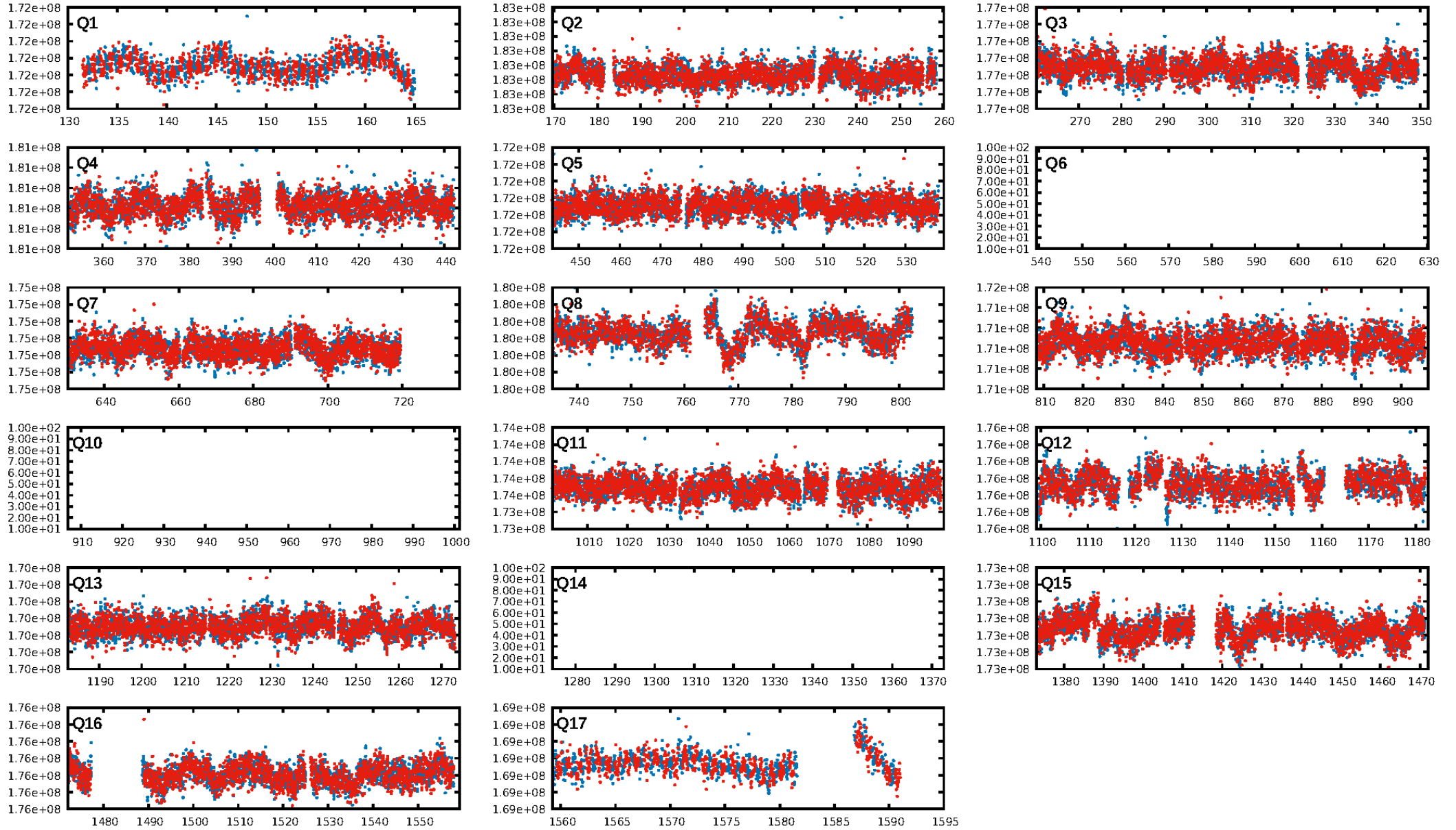
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: 100.0% [58.83 σ]
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 2.01e-07
RollingBand-fgt: 0.99 [1138/1154]
GhostDiagnostic-chr: 1.954
Centroid-sig: 0.4%
Centroid-so: 3.149 arcsec [1.97 σ]
OotOffset-rm: 0.993 arcsec [0.98 σ]
OotOffset-st: 0/4/3/4 [11]
KicOffset-rm: 0.839 arcsec [0.94 σ]
KicOffset-st: 0/4/3/4 [11]
DiffImageQuality-fgm: 0.45 [5/11]
DiffImageOverlap-fno: 1.00 [14/14]

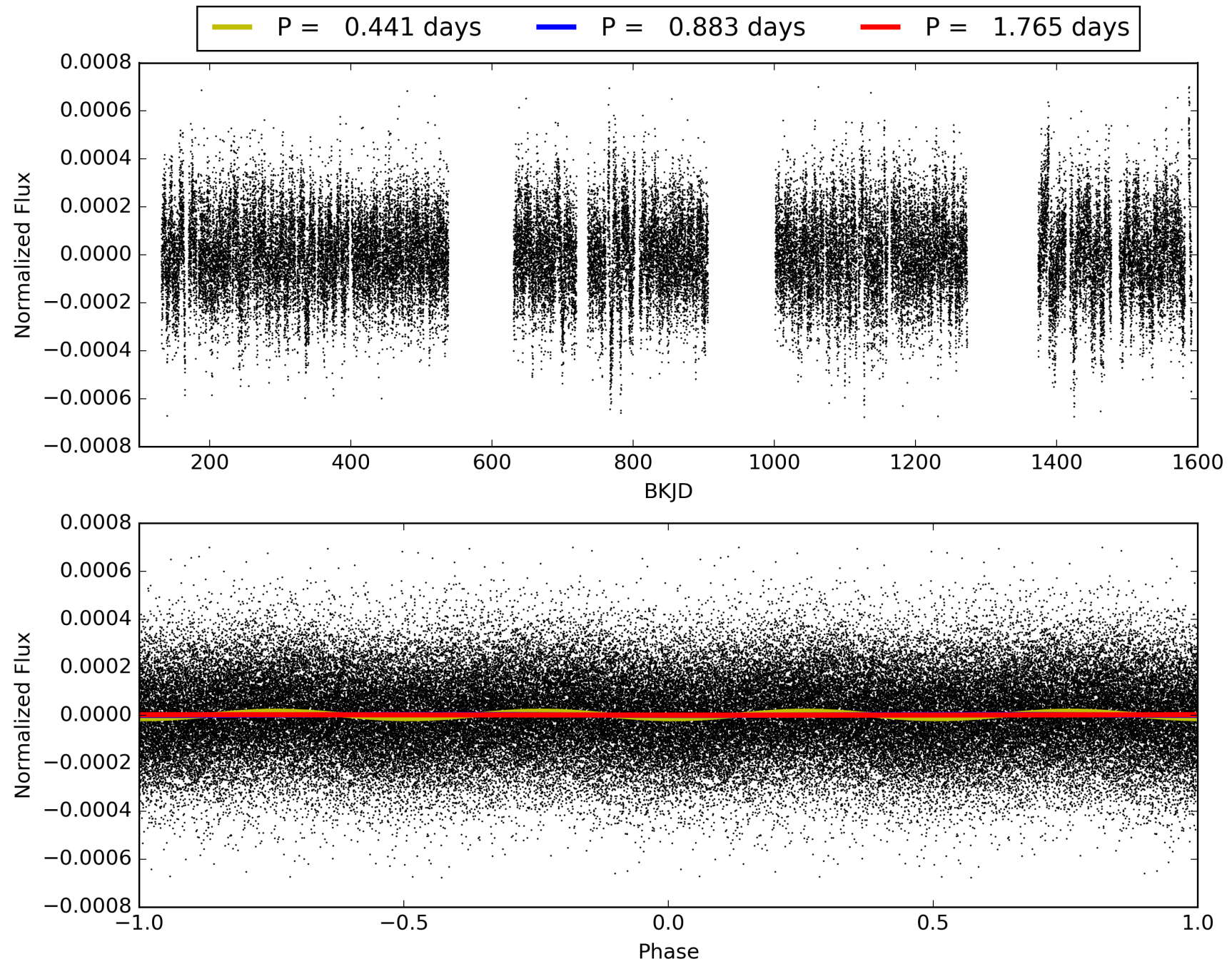
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 31-Jan-2016 10:16:54 Z

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

TCE 003356799-01, PDC Light Curves

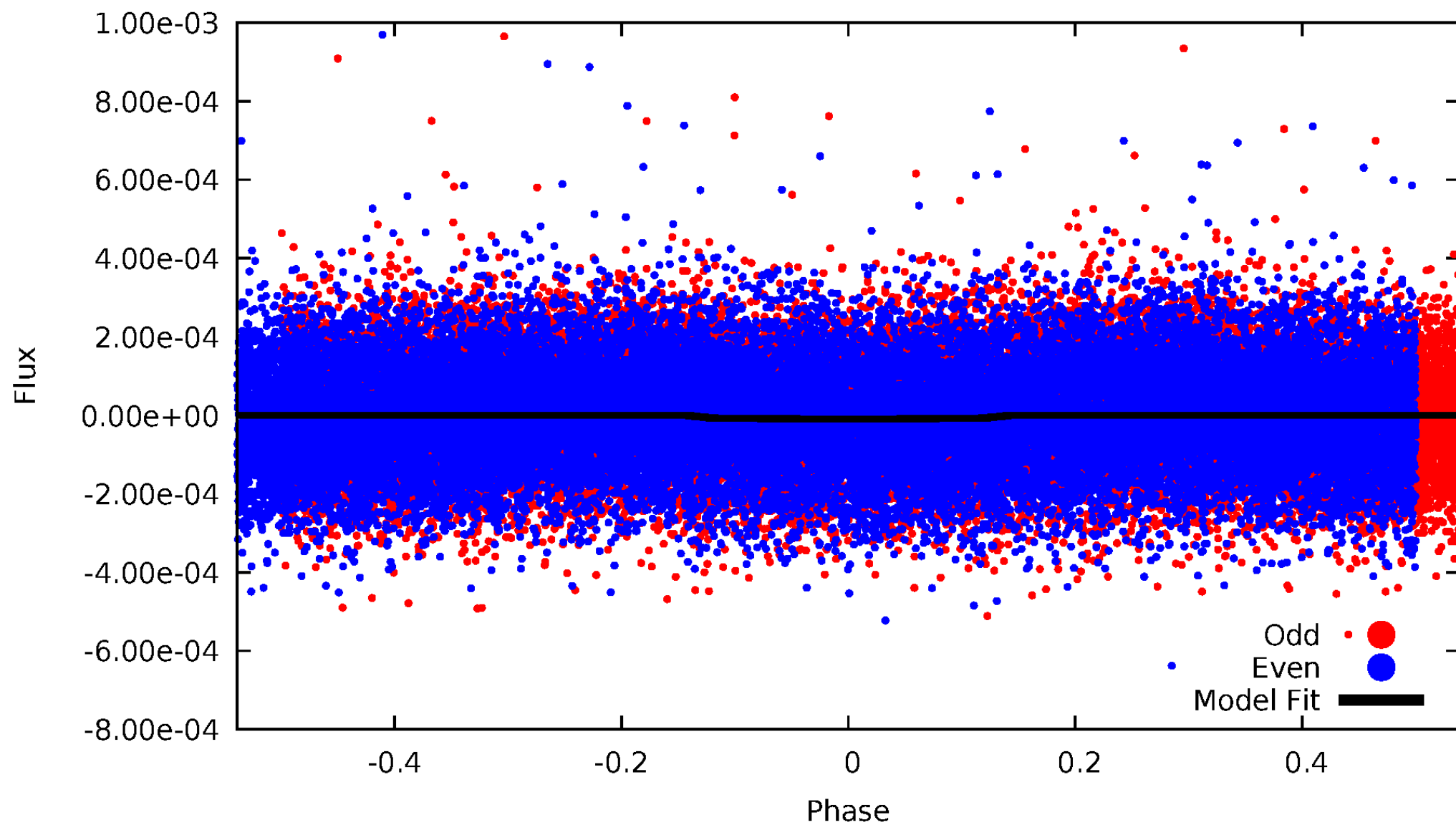


TCE 003356799-01



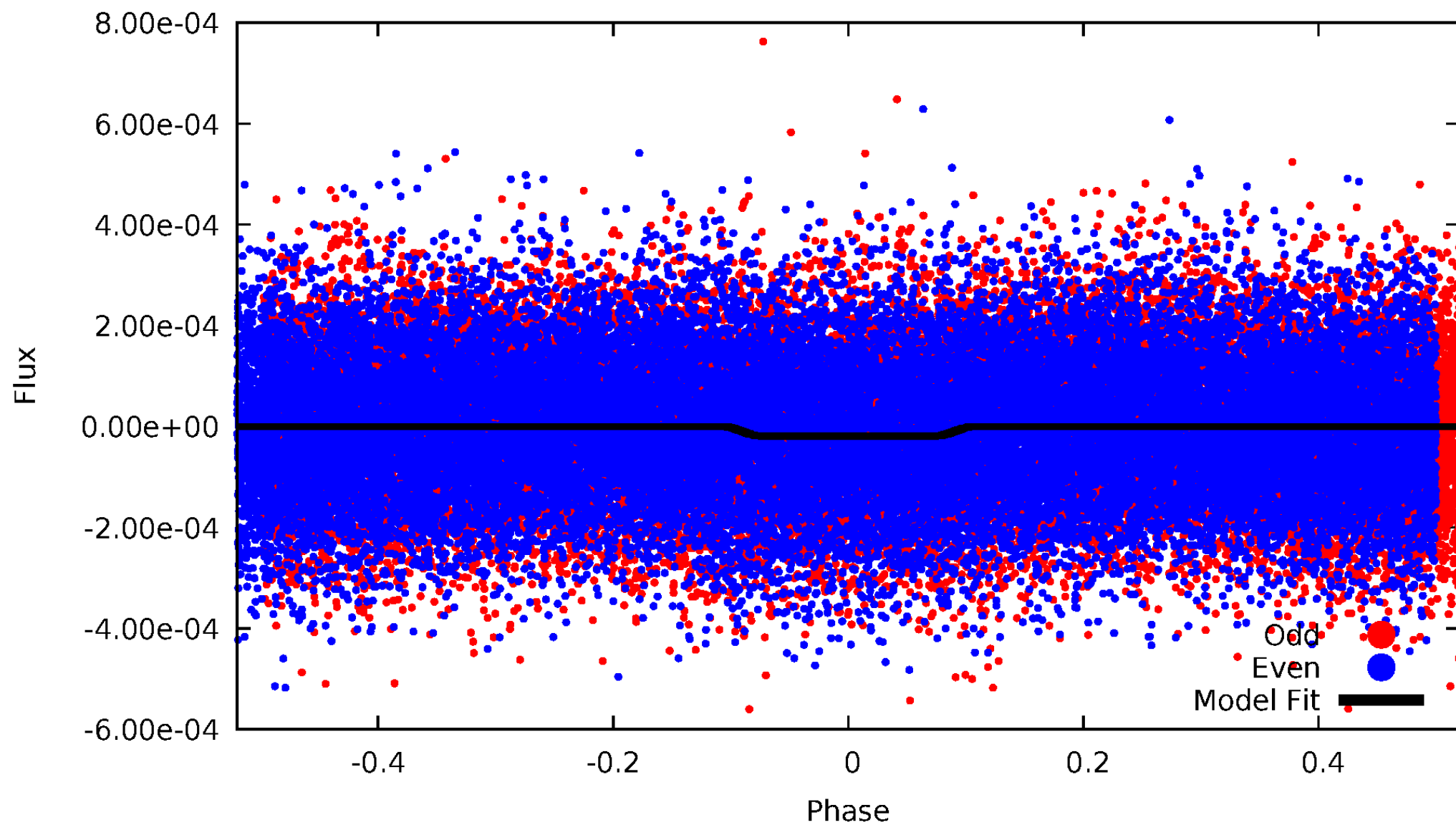
DV Odd/Even

TCE 003356799-01

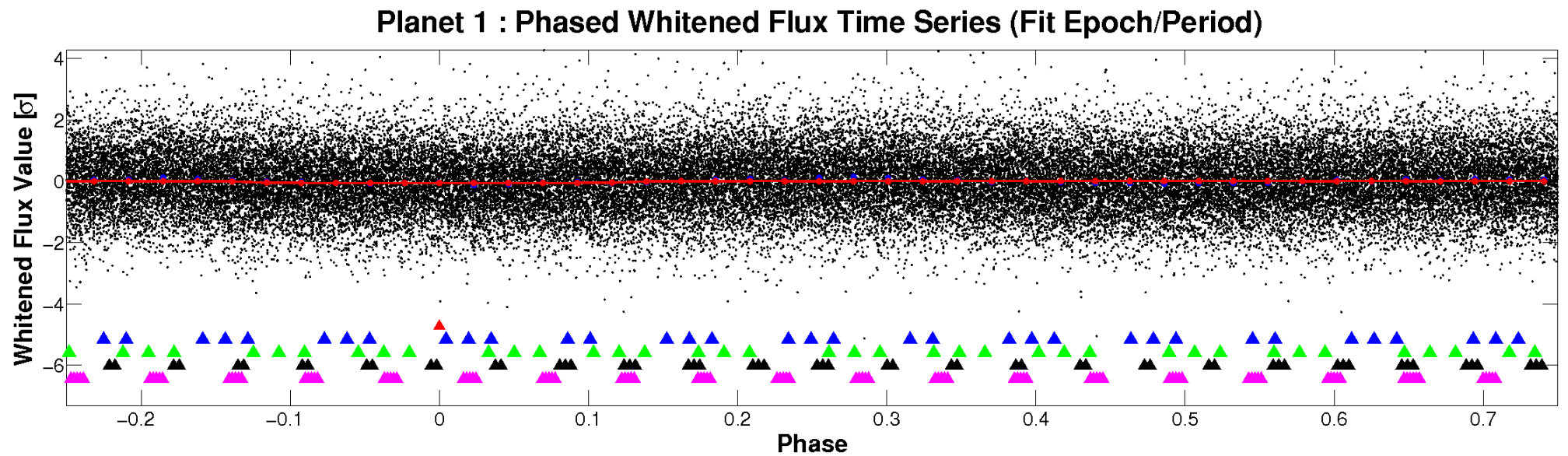
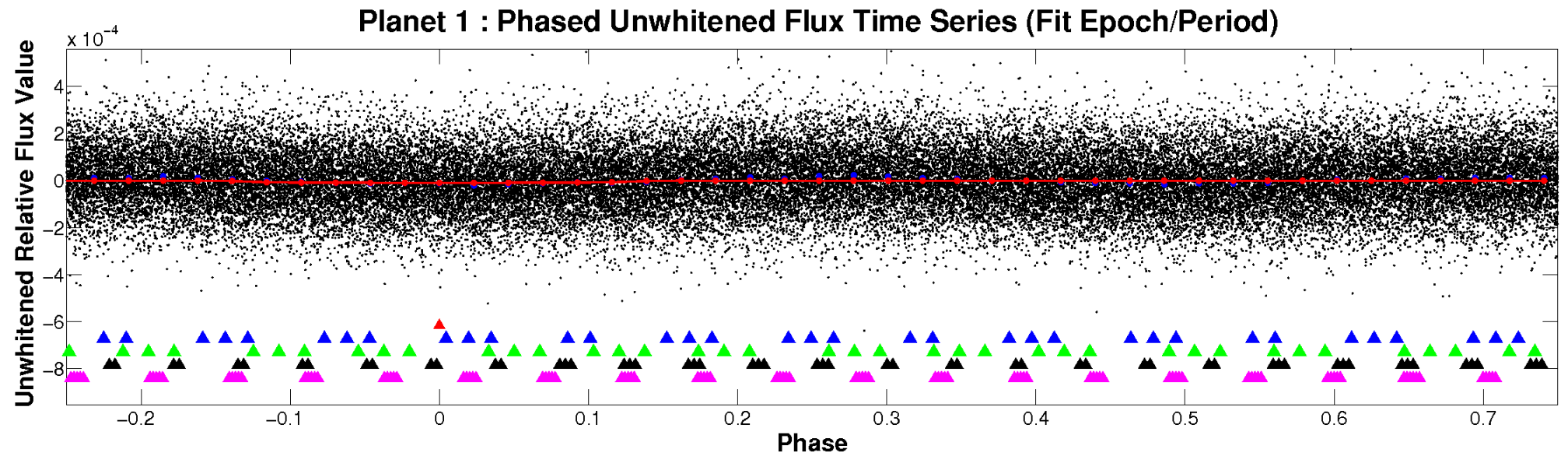


ALT Odd/Even

TCE 003356799-01

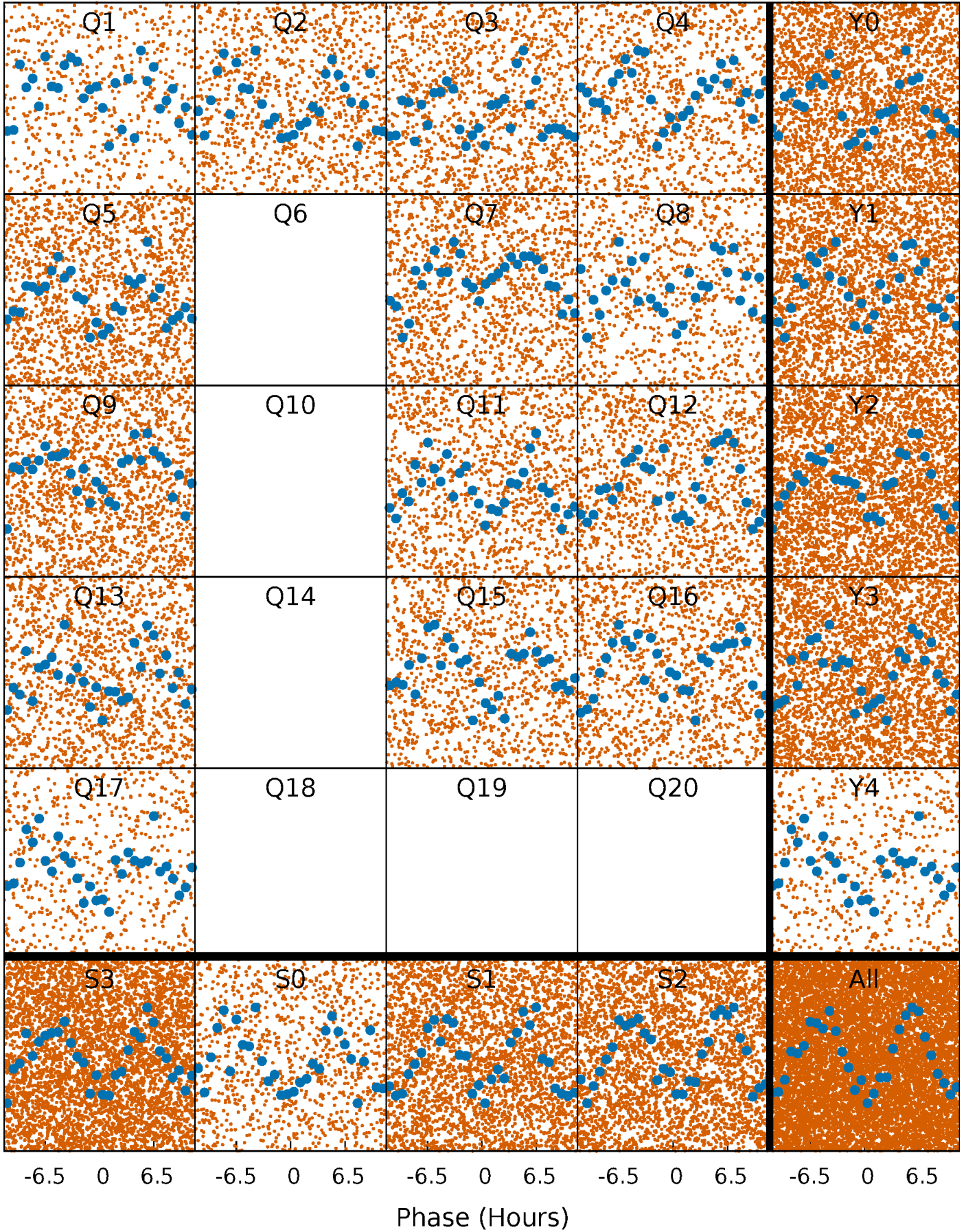


Non-Whitened Vs. Whitened Light Curve



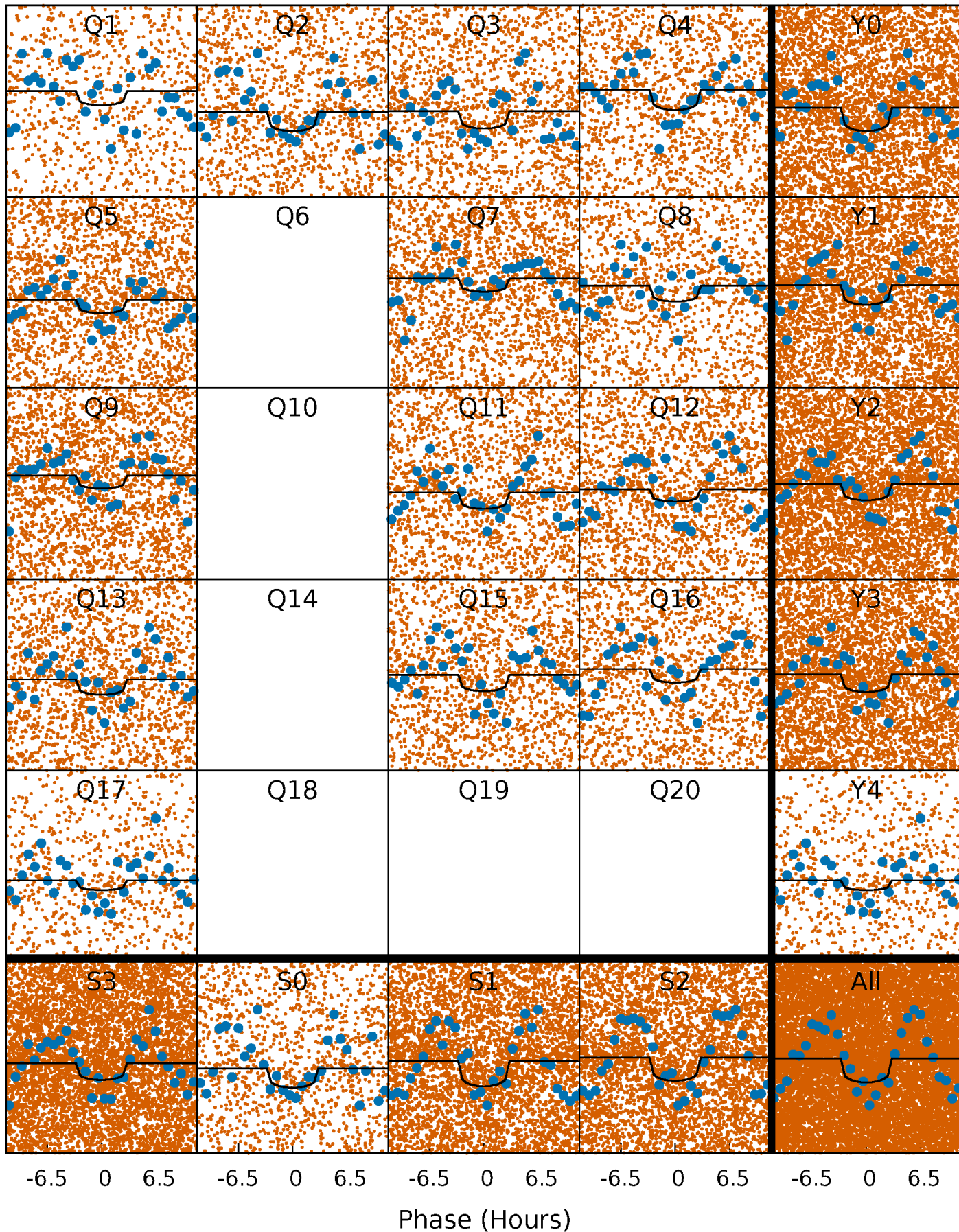
PDC Quarter-Phased Transit Curves

TCE 003356799-01 P= 0.882678 Days $T_0=131.711139$ (BKJD)



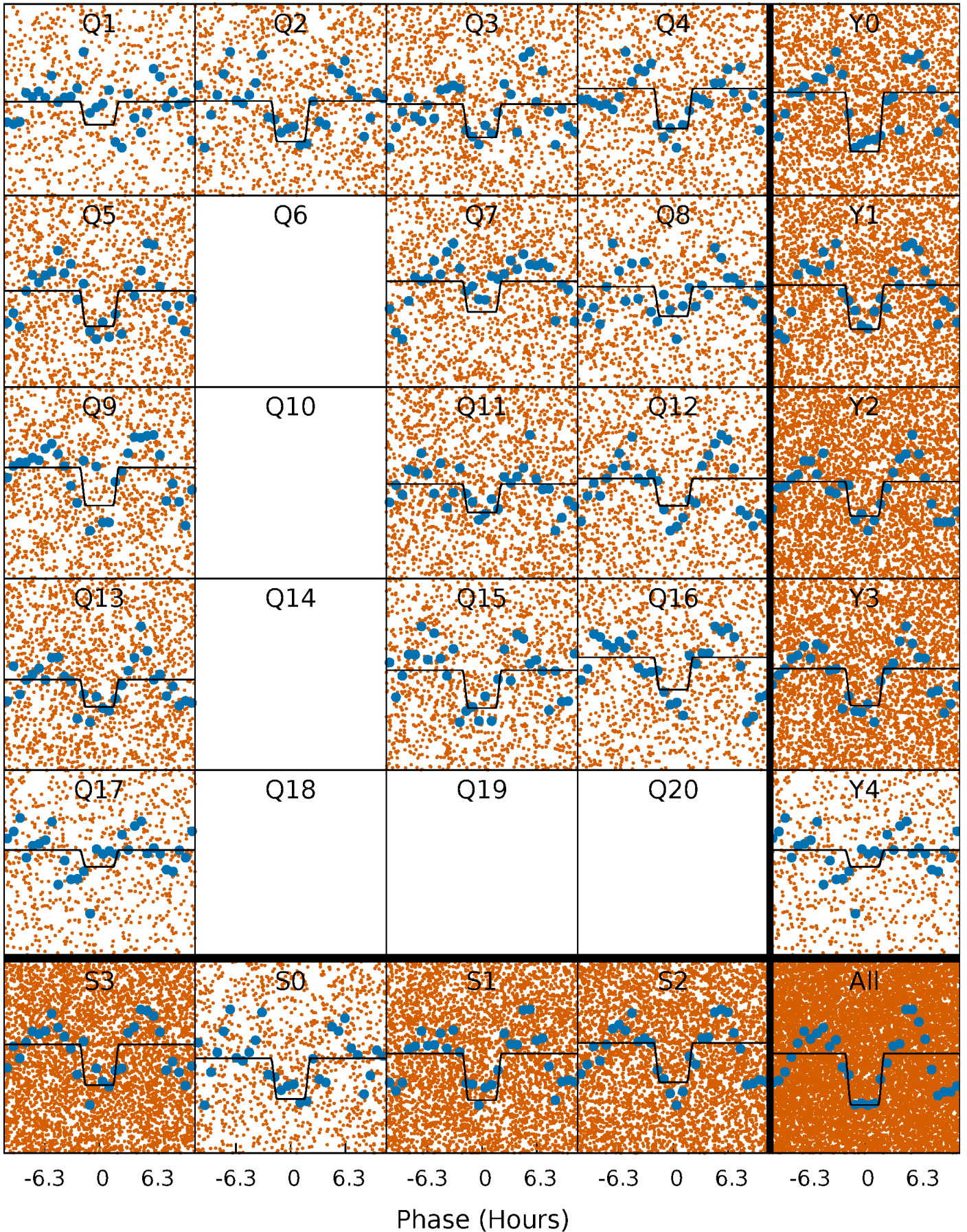
DV Quarter-Phased Transit Curves

TCE 003356799-01 P= 0.882678 Days $T_0=131.711139$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

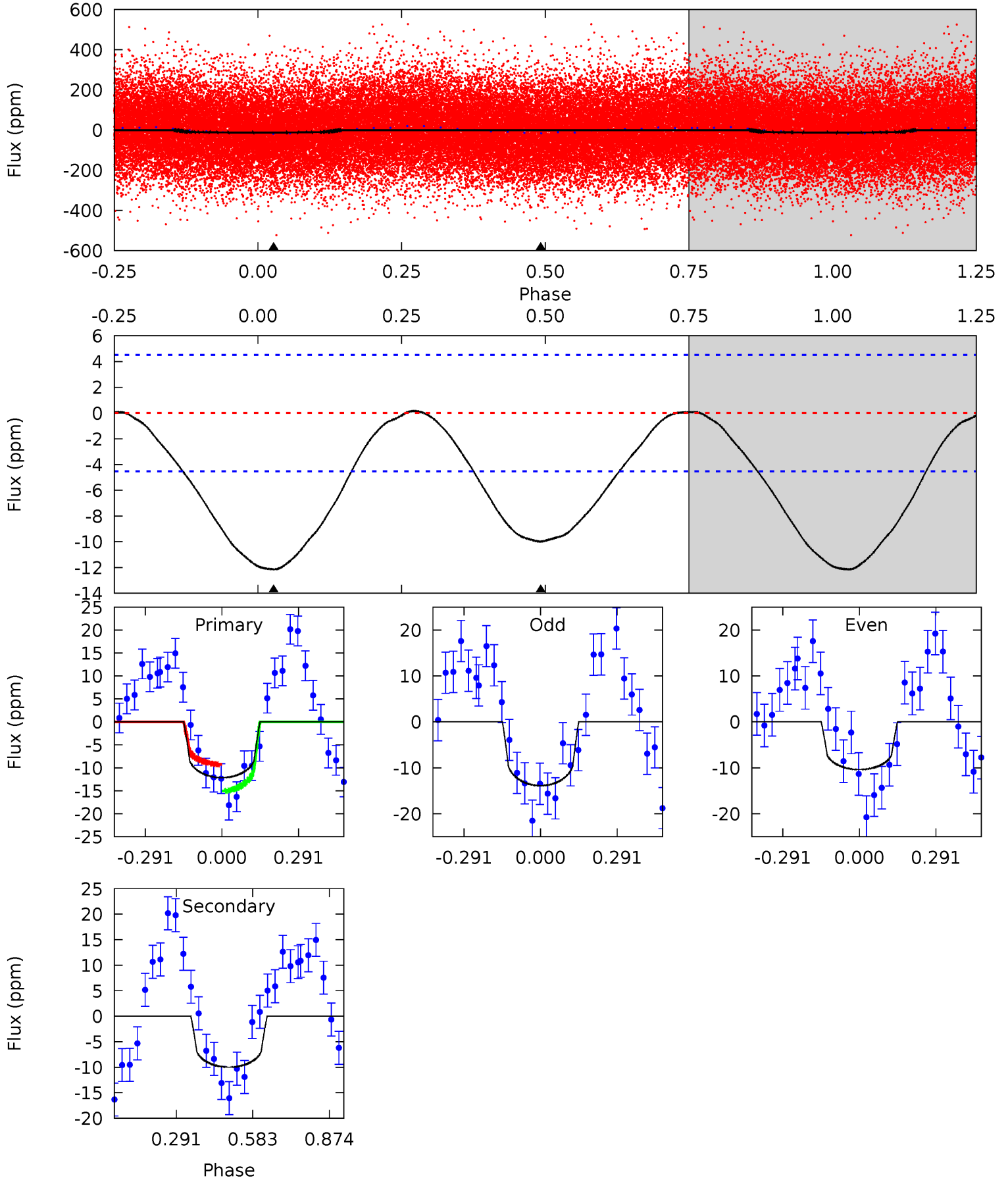
TCE 003356799-01 P= 0.882749 Days $T_0=131.668808$ (BKJD)



DV Model-Shift Uniqueness Test

003356799-01, P = 0.882678 Days, E = 130.828461 Days

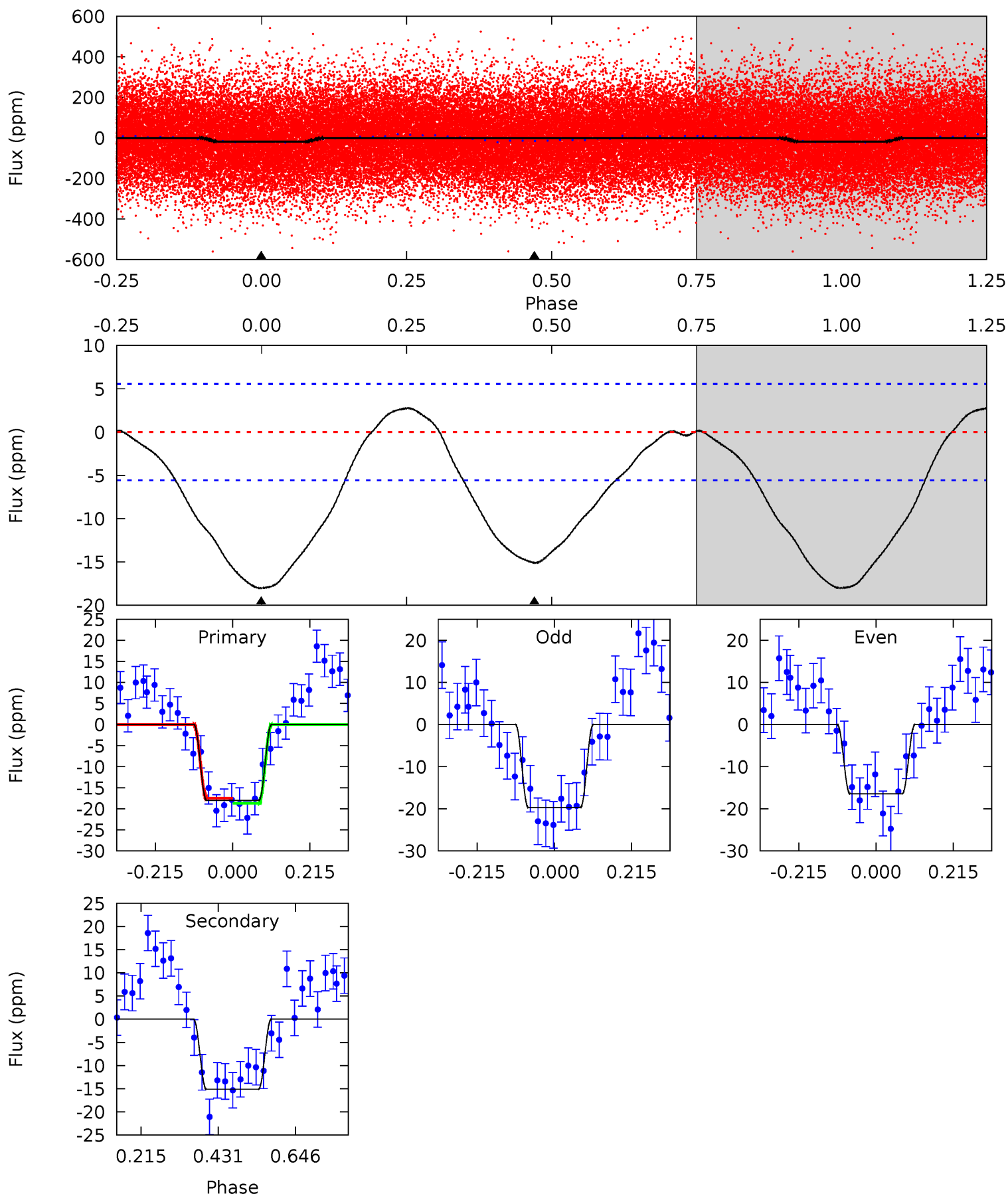
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
11.7	9.59	0	0	4.34	1.06	0.26	11.7	11.7	9.59	9.59	1.68	0.98	0.01	2.79



Alt Model-Shift Uniqueness Test

003356799-01, P = 0.882749 Days, E = 130.786059 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
14.3	12.0	0	0	4.40	1.24	1.00	14.3	14.3	12.0	12.0	1.29	0.97	0.13	0.49



Stellar Parameters For KIC 003356799

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	7854^{+217}_{-326}	$3.669^{+0.448}_{-0.084}$	$-0.120^{+0.200}_{-0.300}$	$3.462^{+0.720}_{-1.681}$	$2.039^{+0.343}_{-0.514}$	$0.069^{+0.321}_{-0.025}$
	+3%/-4%	+12%/-2%	+167%/-250%	+21%/-49%	+17%/-25%	+464%/-36%
Source	KIC0	KIC0	KIC0	DSEP		

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

Secondary Eclipse Parameters for KIC 003356799-01 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-10 ± 1	$1.01^{+0.75}_{-0.55}$	5693^{+463}_{-666}	7659^{+6219}_{-2152}	$2.776^{+10.807}_{-1.848}$
Alt.	-15 ± 1	$1.52^{+0.79}_{-0.70}$	5759^{+392}_{-666}	6731^{+3618}_{-1344}	$1.823^{+4.563}_{-0.959}$

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

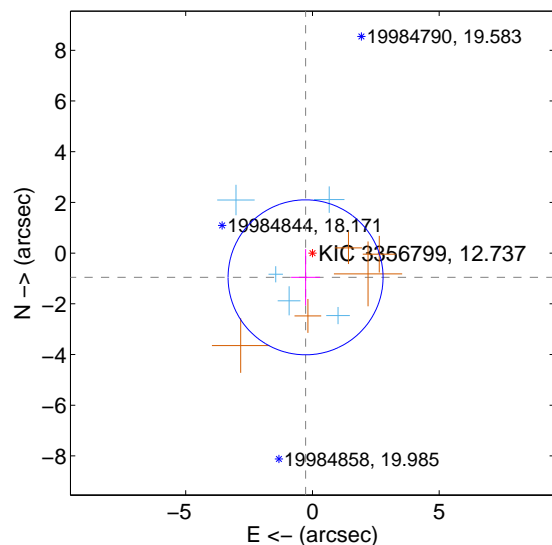
Supplemental centroid analysis for 003356799-01. Kepler magnitude: 12.74. Transit SNR 5.80

There are 5 quarters with good PRF difference image offsets

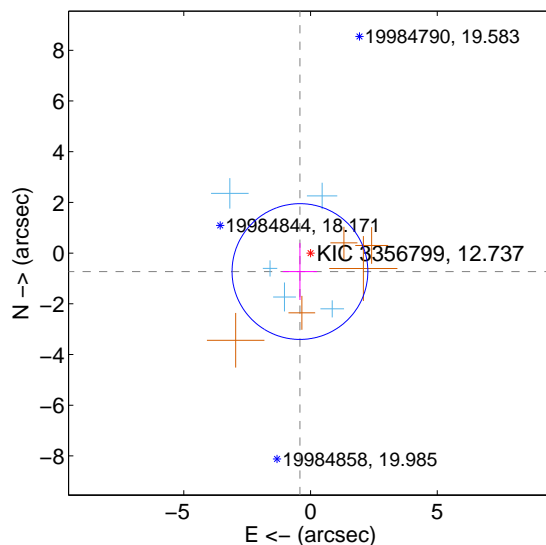
The direct PRF centroid is offset from the target star catalog position by about 0.41 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.993 ± 1.019	0.98	0.271 ± 0.573	-0.956 ± 1.113
PRF-fit source offset from KIC position	0.839 ± 0.893	0.94	0.417 ± 0.679	-0.728 ± 1.121
photometric centroid source offset	3.15 ± 1.60	1.97	-2.11 ± 1.67	2.33 ± 1.55

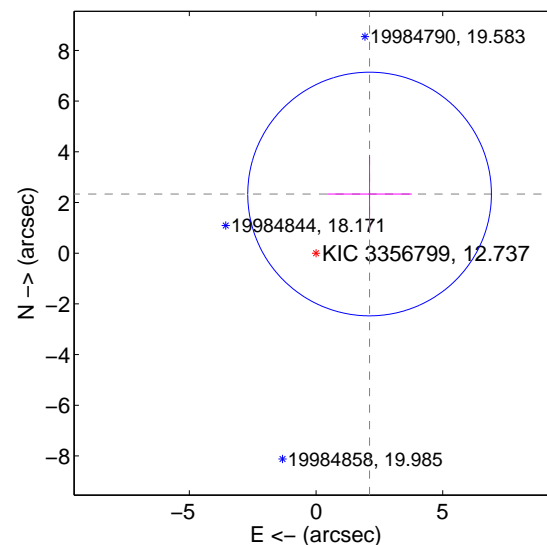
offset from difference PRF-fit to OOT PRF-fit



offset from difference PRF-fit to KIC position

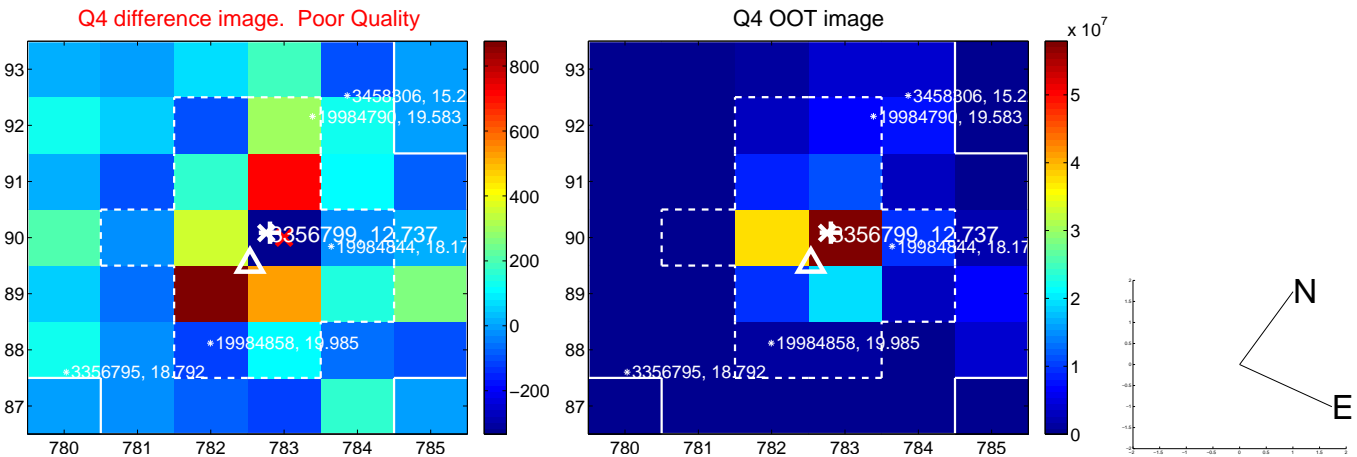
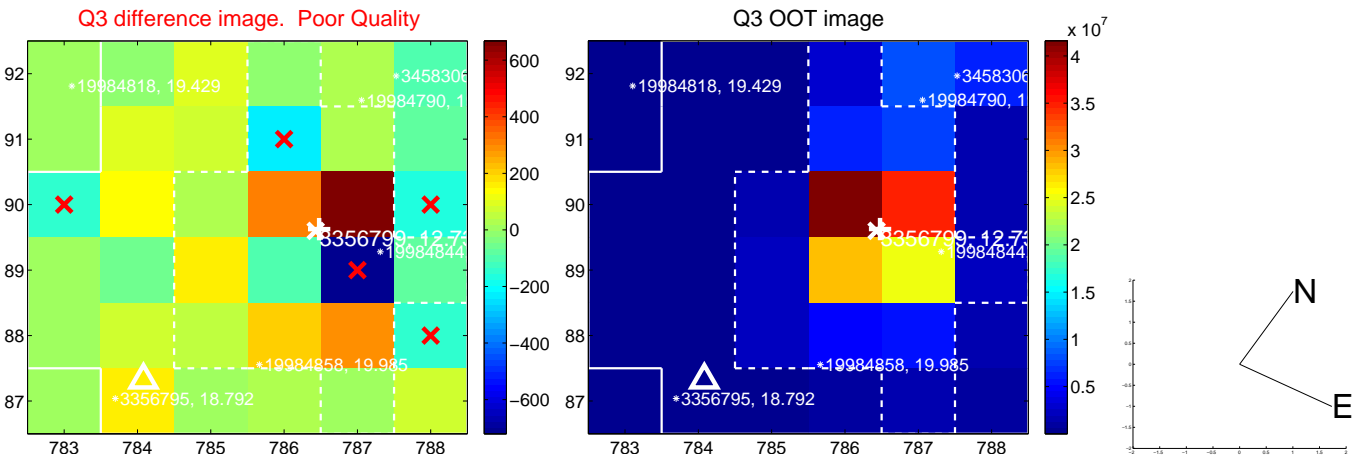
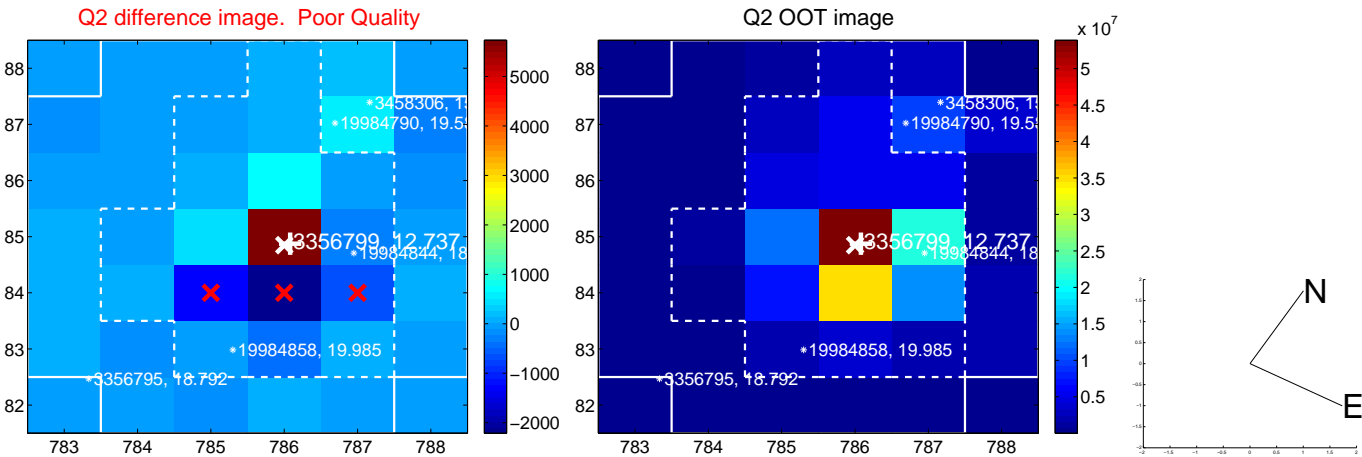
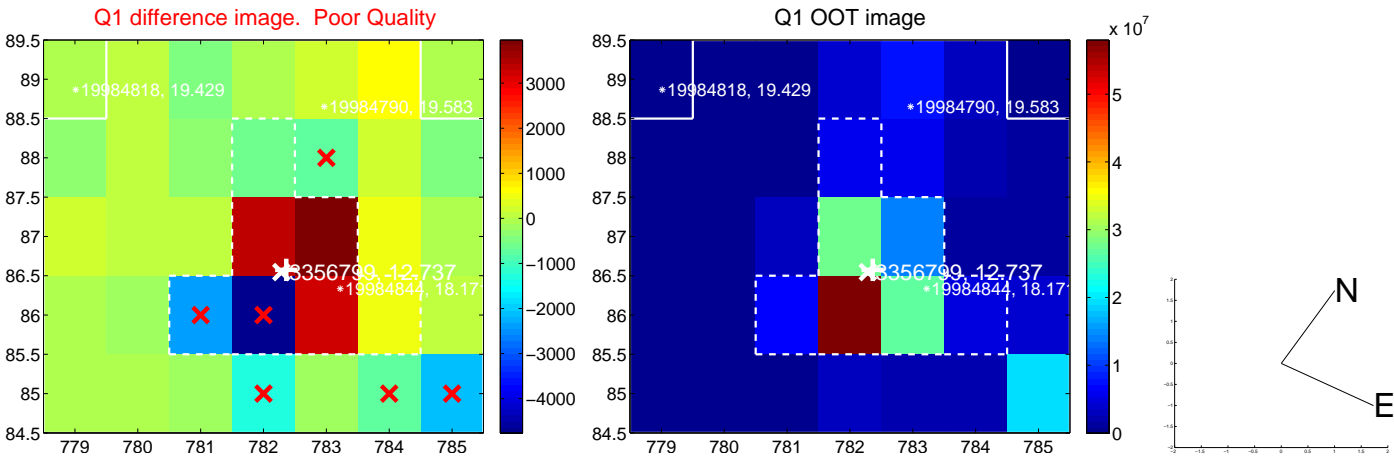


offset from photometric centroids

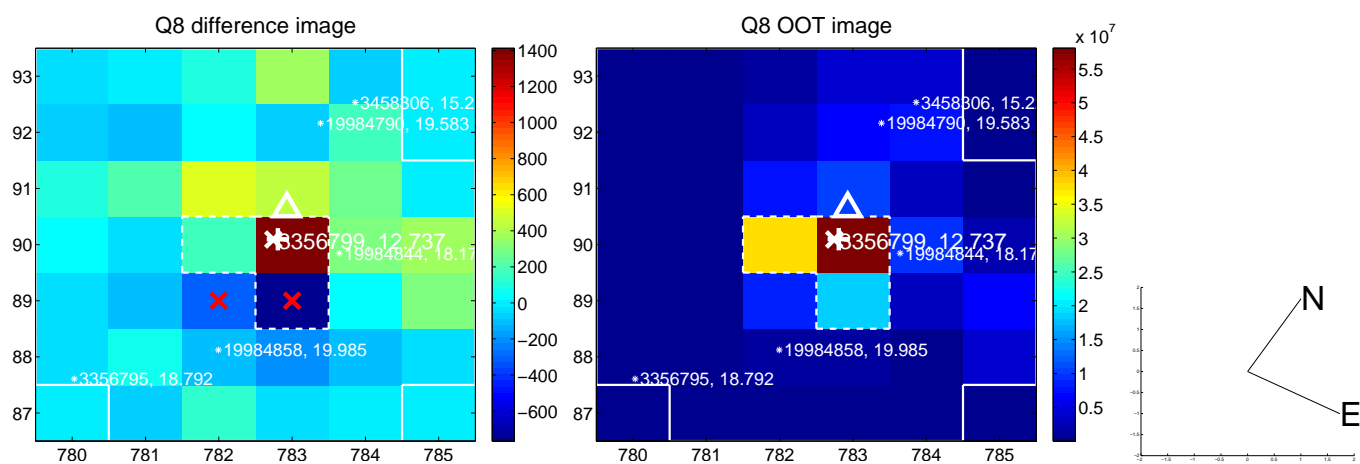
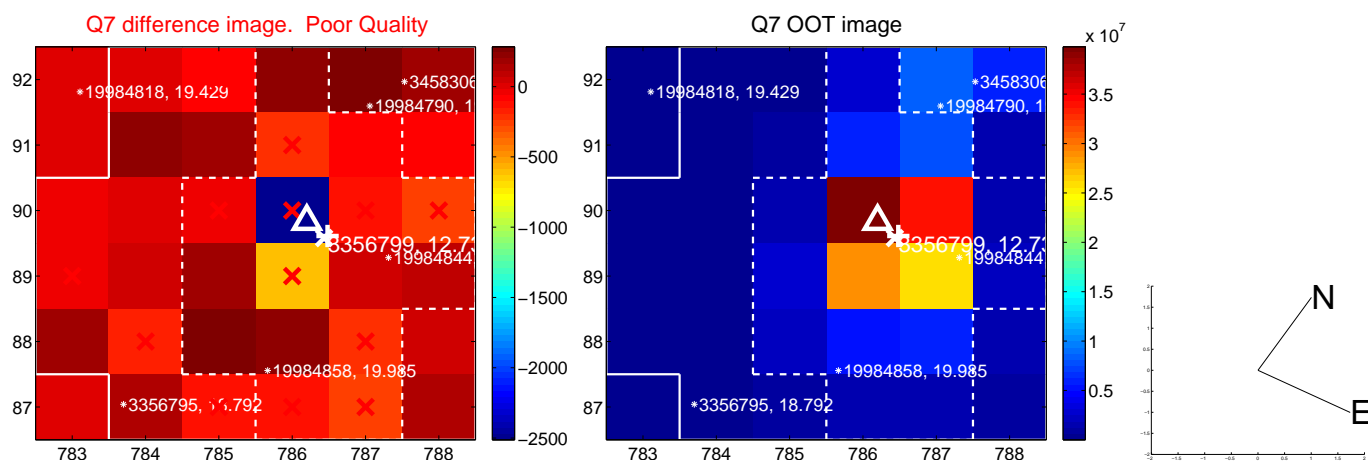
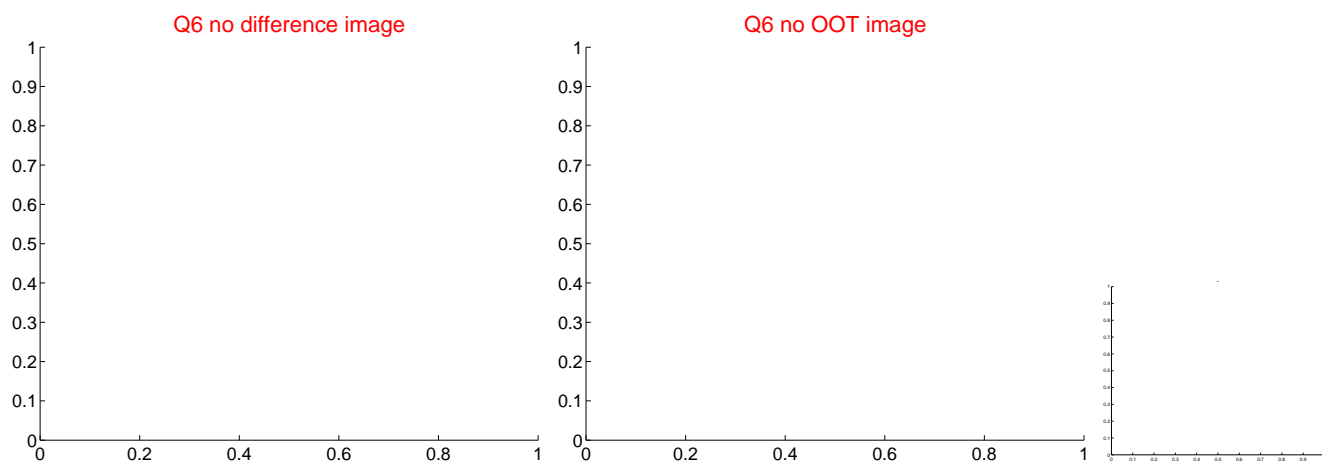
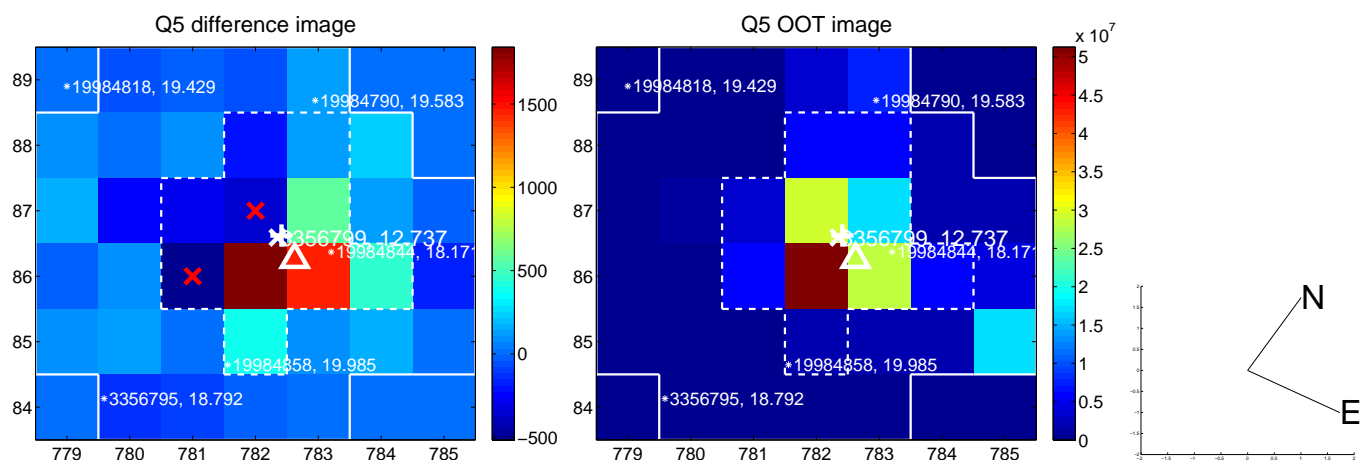


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets**; **Vermillion crosses: bad quarterly centroid offsets**; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

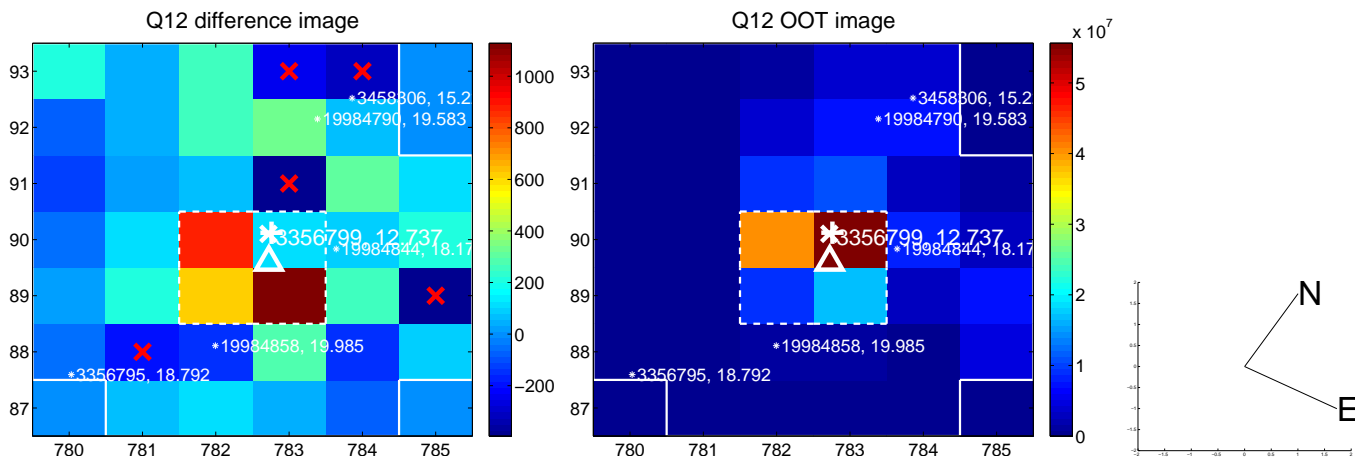
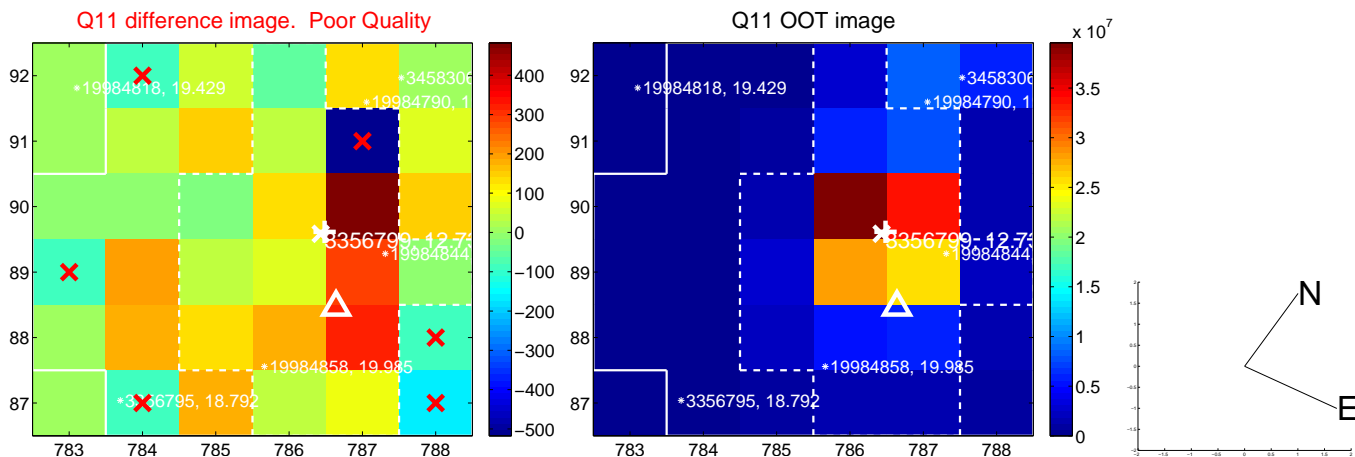
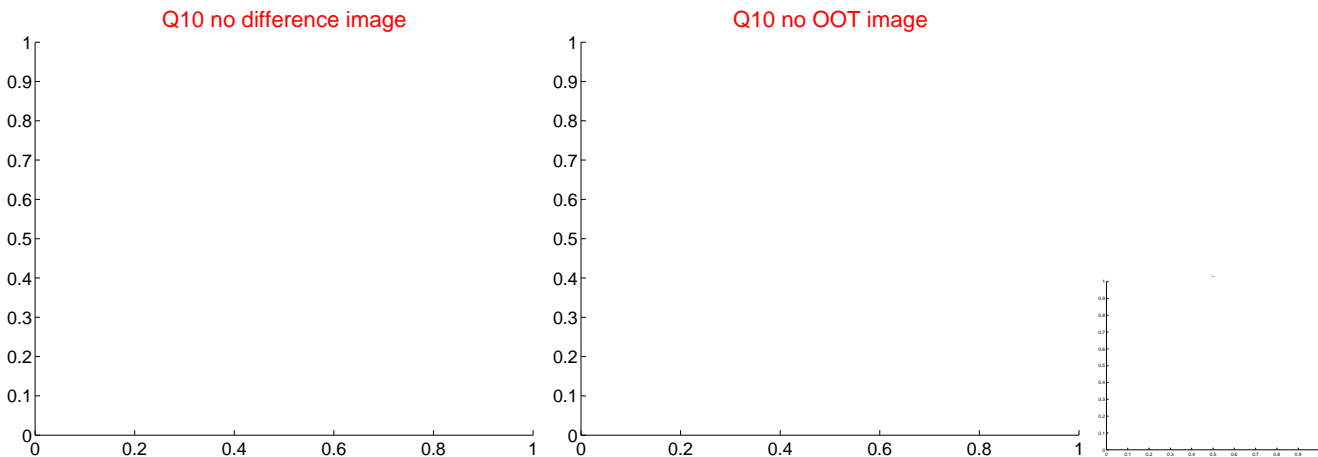
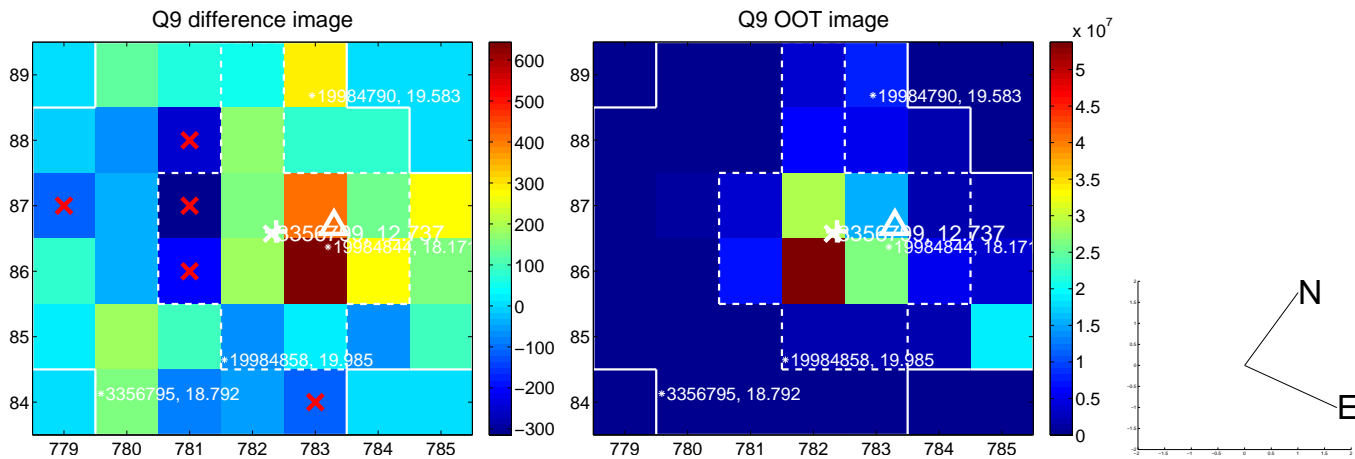
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



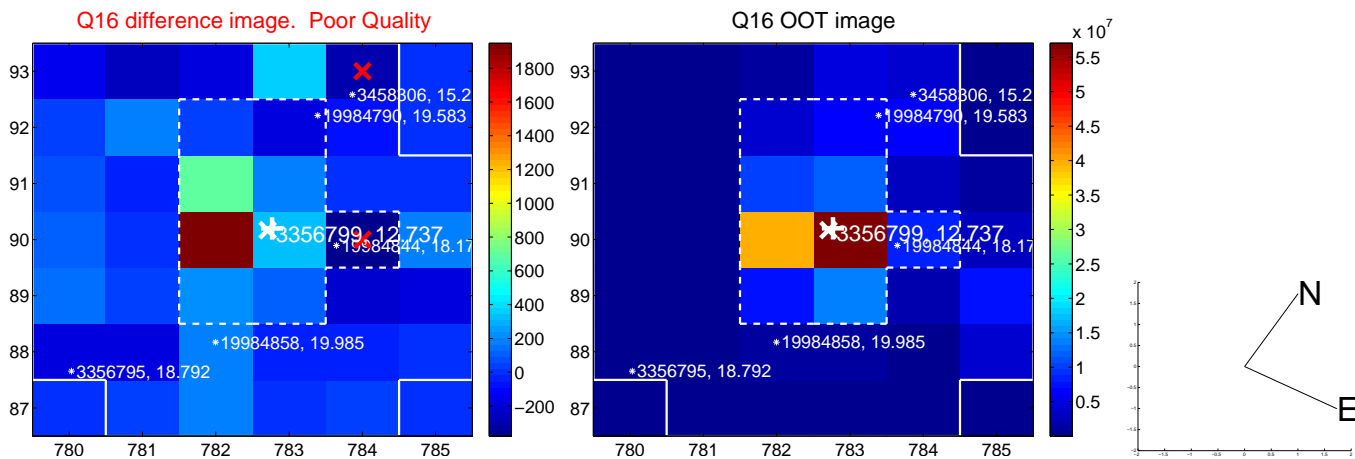
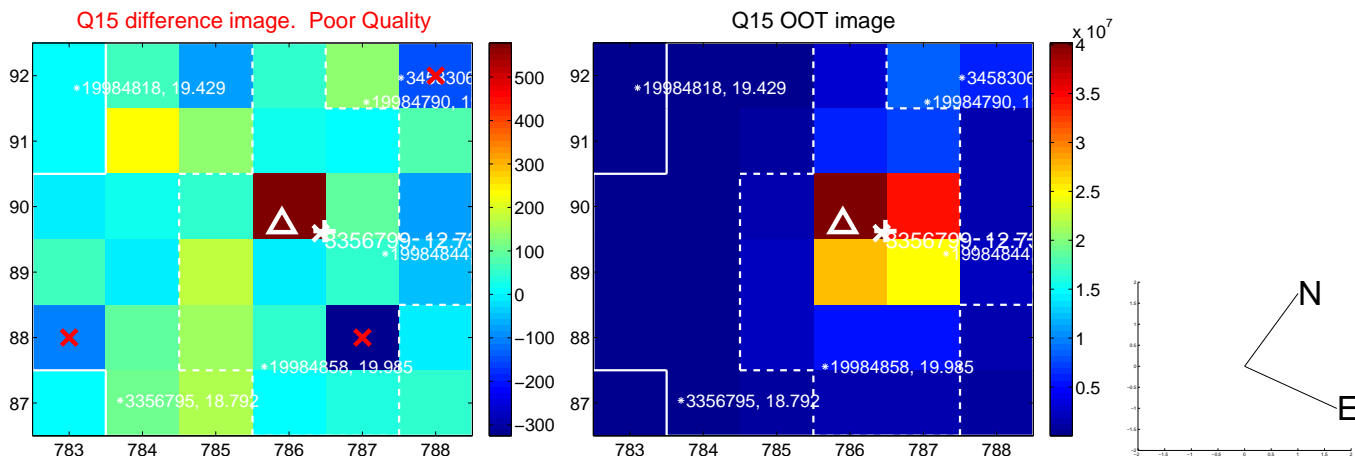
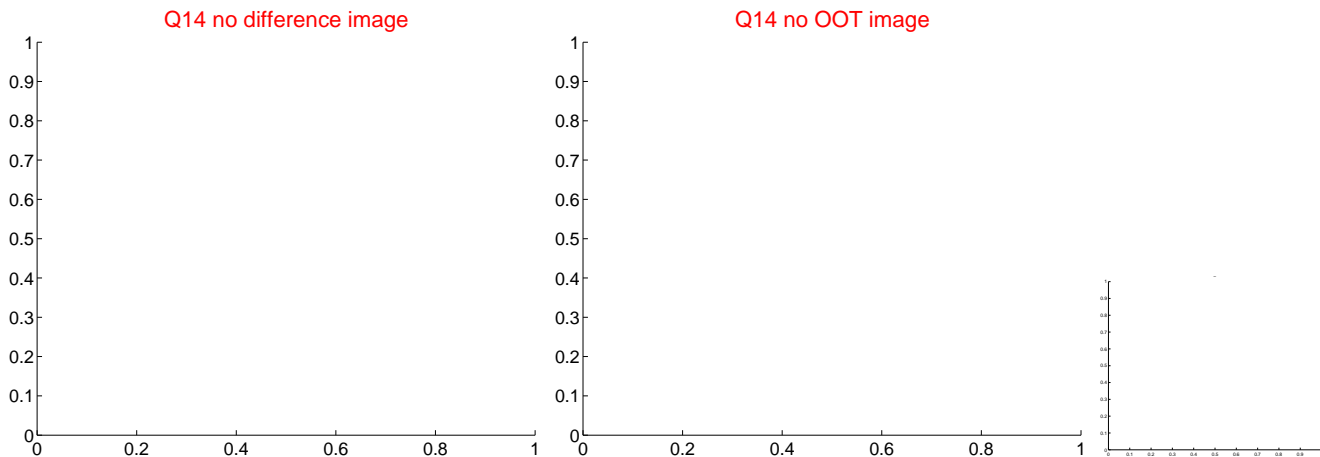
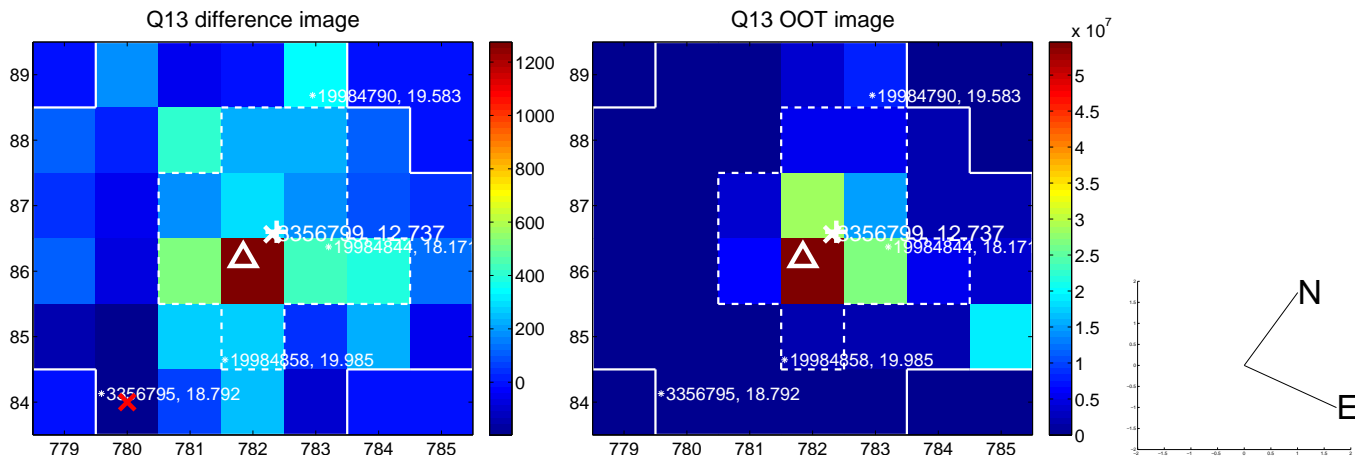
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



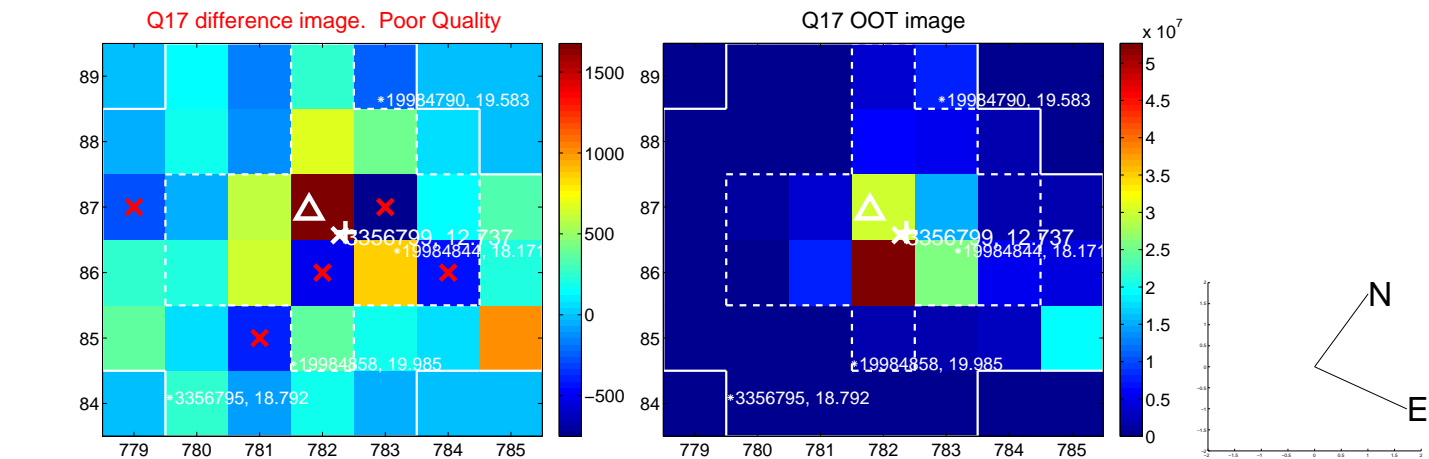
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



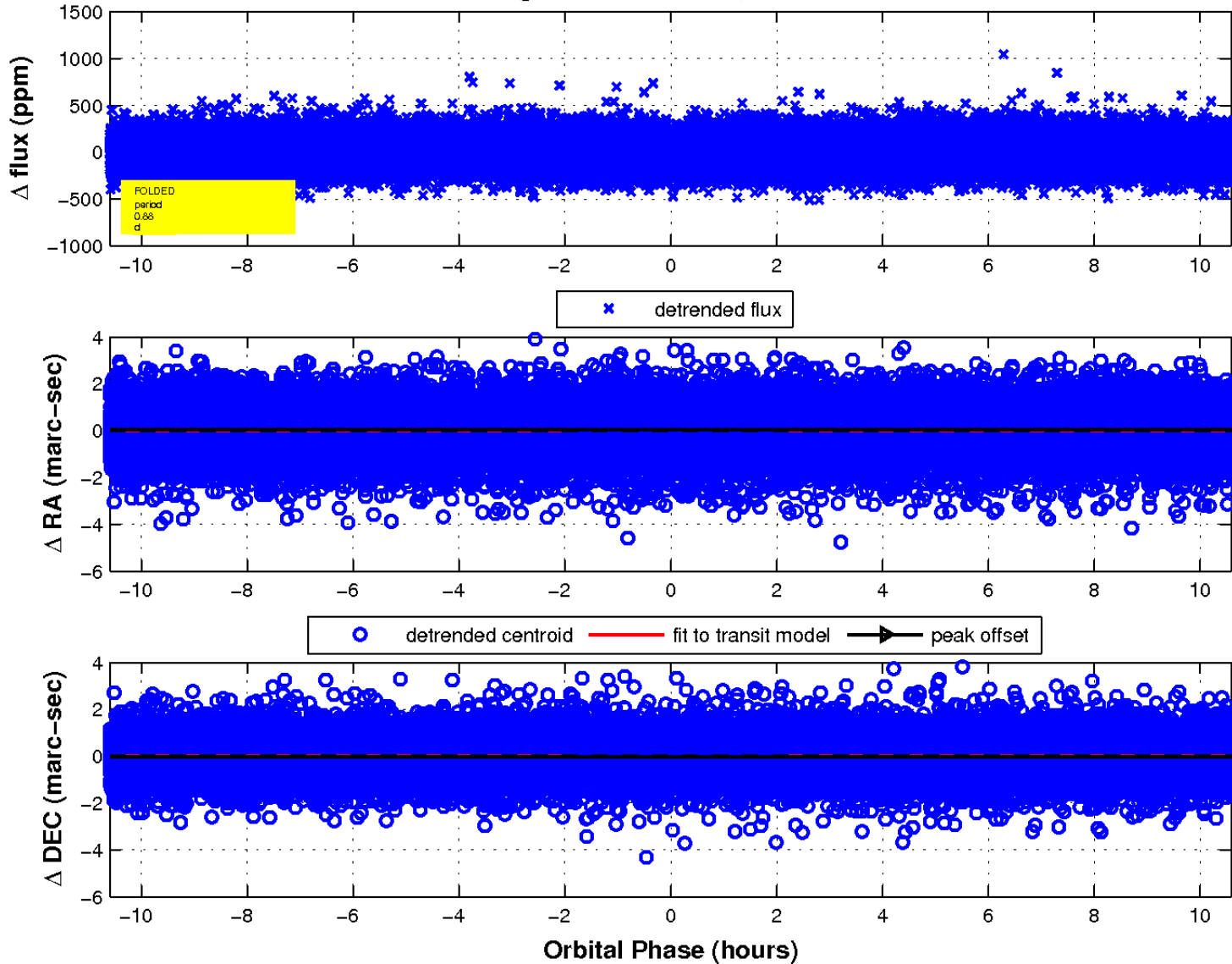
white ×: KIC target position; +: OOT centroid; △: difference centroid. red ×: large negative pixel value.



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

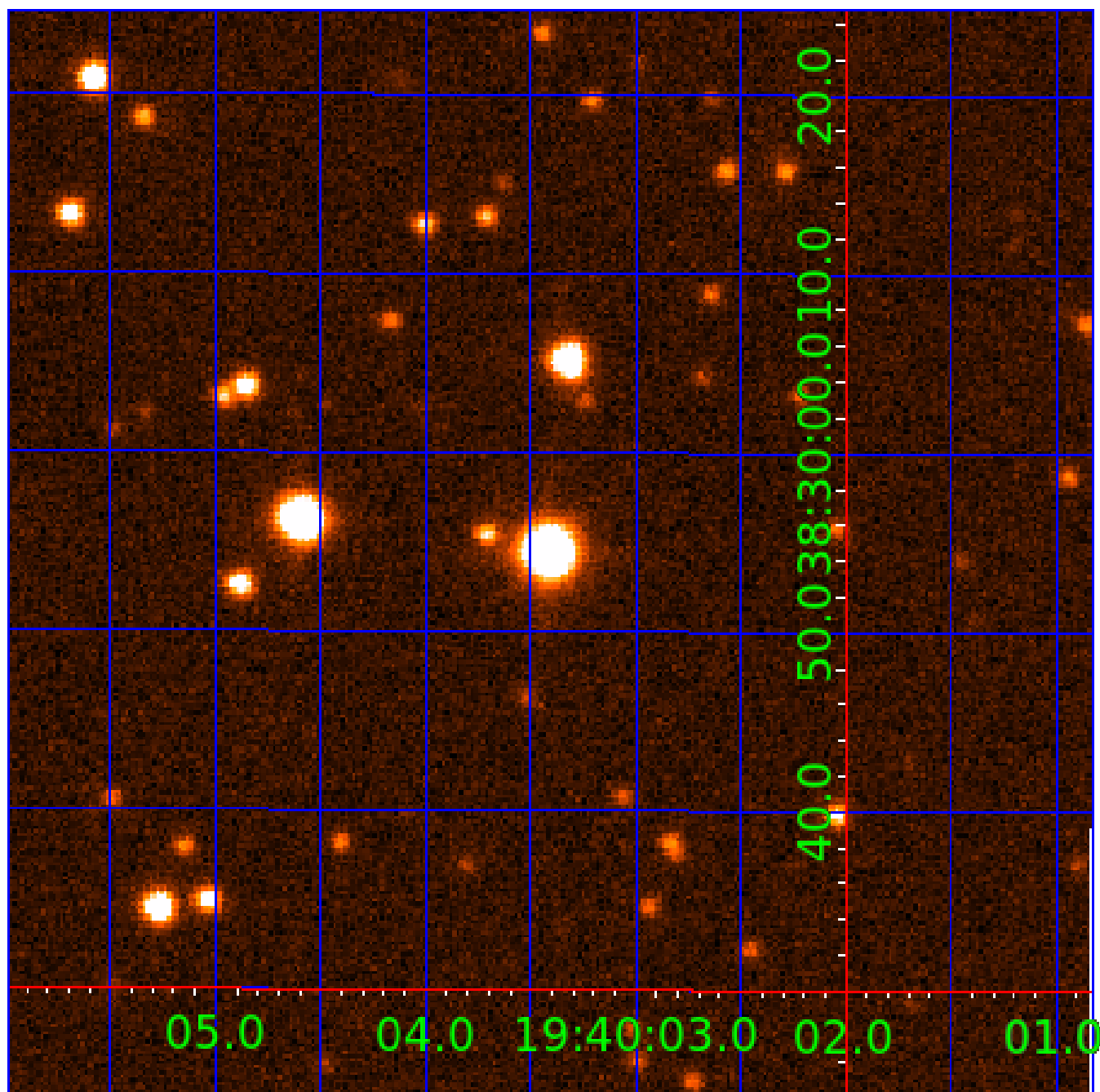


fluxWeightedCentroids, Planet 1 of 5



UKIRT Image

Declination



KIC 003356799

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})
003356799-01	OBS	No	0.882678	131.711139	9.3	5.705	7.3	5.8	3.46	7854	1.09	78296.03
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003356799-04	OBS	No	26.058035	140.155469	215.1	1.449	8.6	8.5	3.46	7854	5.19	858.13
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Robovetter Results

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003356799-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT
003356799-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_NONUNIQ_ALT
003356799-04	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_FEW_DIFFS
003356799-05	OBS	FP	0.00	1	0	0	0	TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT

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

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

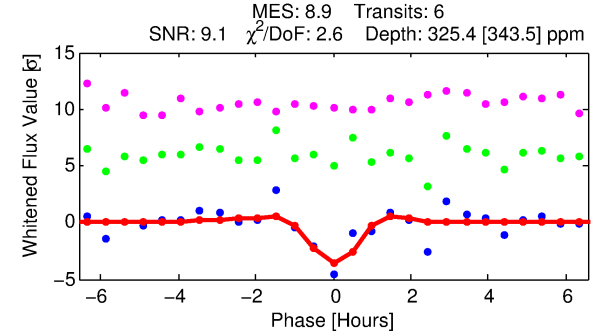
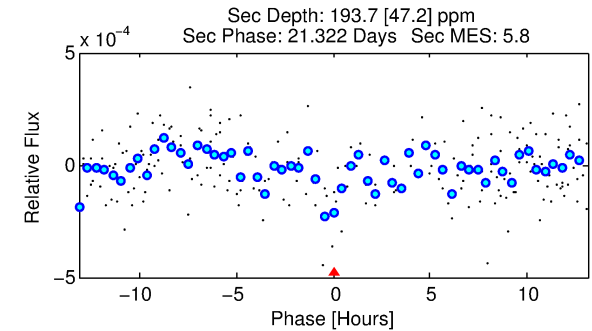
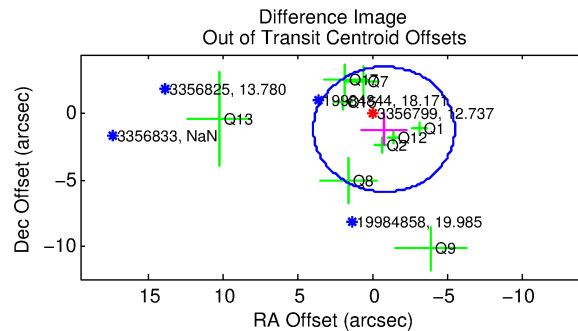
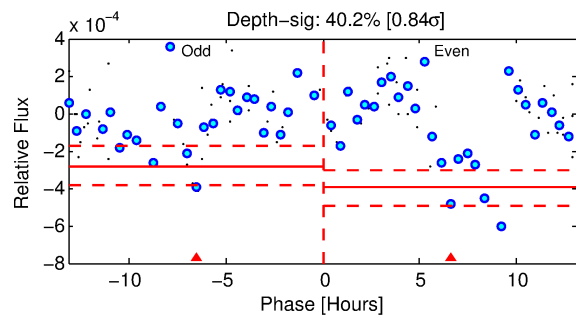
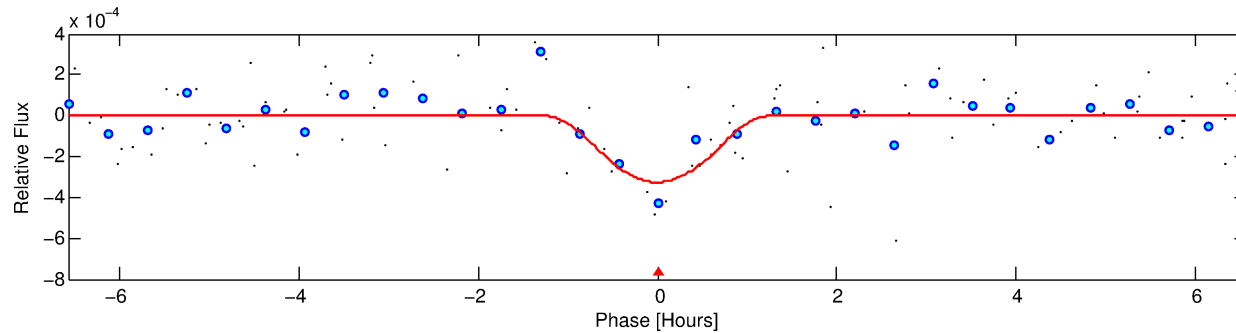
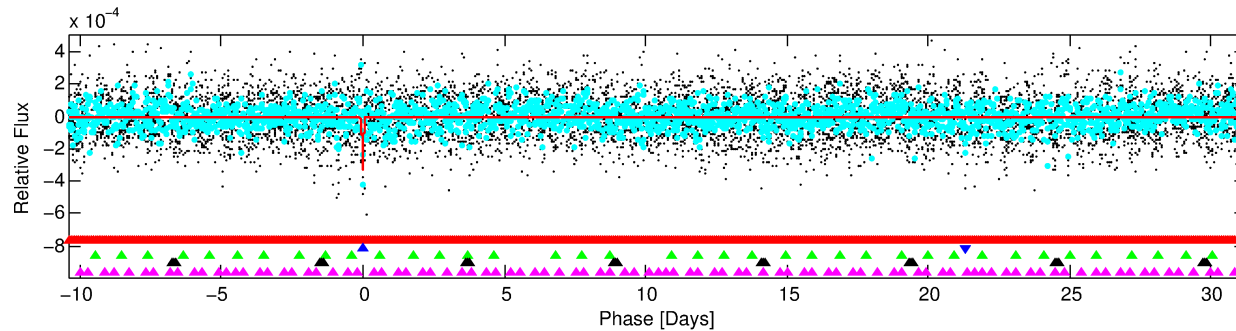
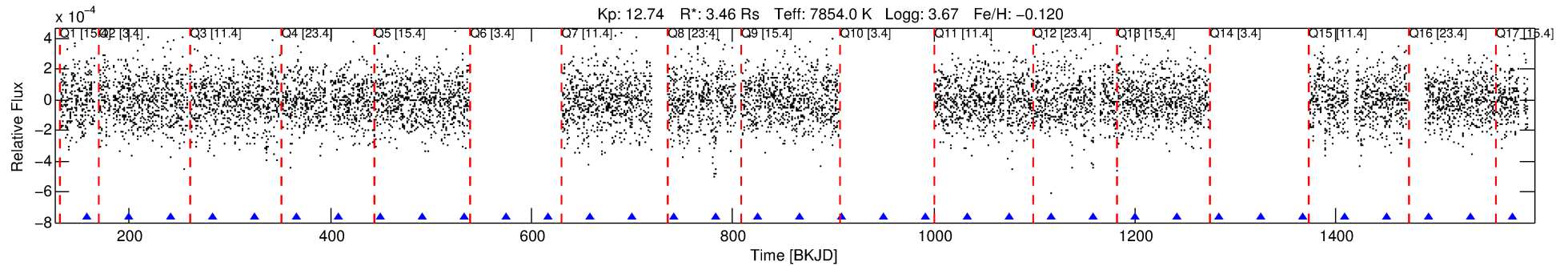
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 003356799-02

No Significant Match Found

DV One-Page Summary

KIC: 3356799 Candidate: 2 of 5 Period: 41.689 d



DV Fit Results:

Period = 41.68852 [0.00040] d
Epoch = 157.3395 [0.0078] BKJD
Rp/R* = 0.0319 [0.3258]
a/R* = 37.17 [101.30]
b = 1.00 [0.50]
Seff = 458.62 [356.81]
Teq = 1180 [230] K
Rp = 12.05 [123.20] Re
a = 0.2985 [0.1410] AU
Ag = 65.38 [1336.24] [0.05 σ]
Teffp = 5188 [26490] K [0.15 σ]

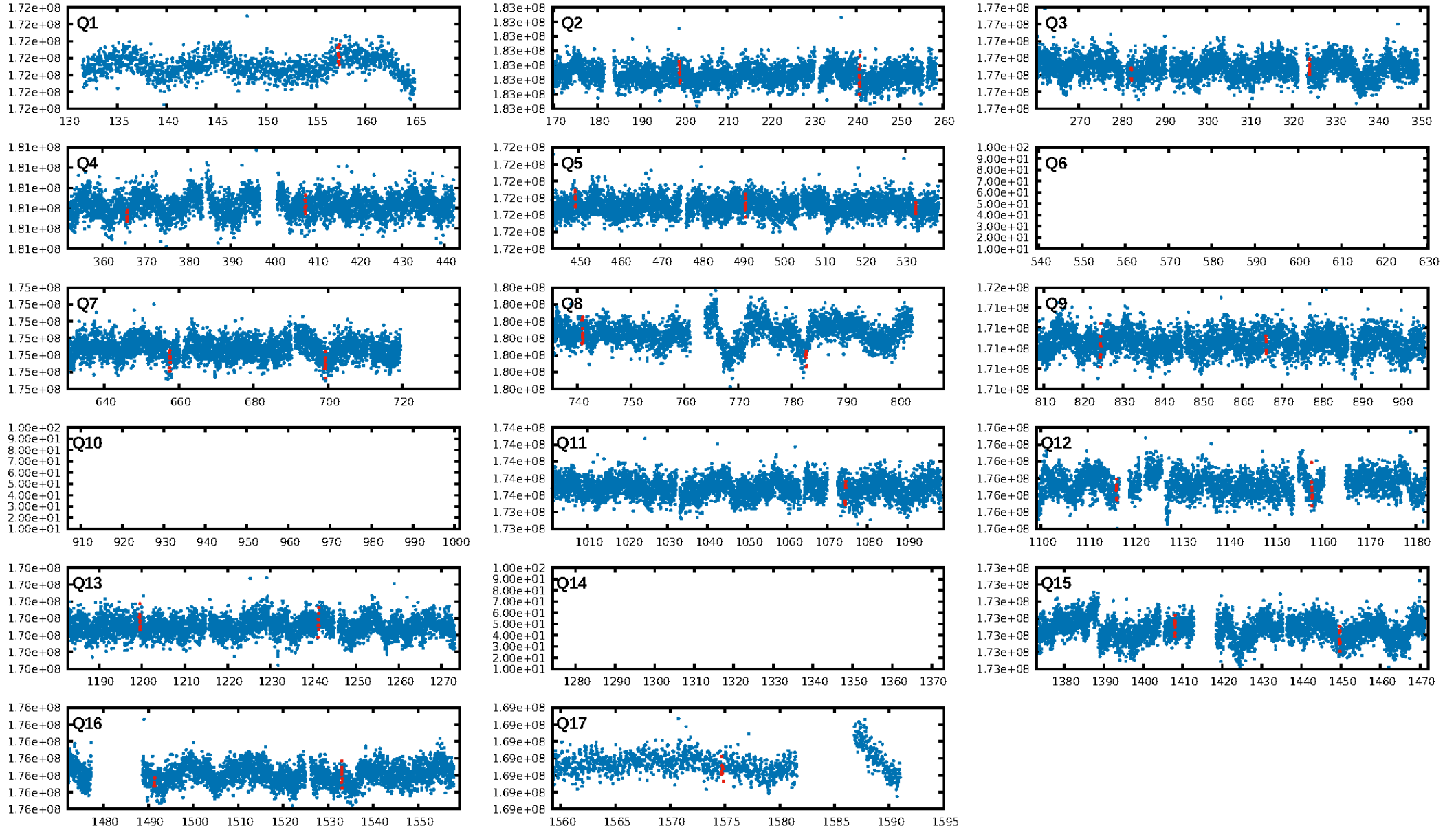
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [14.18 σ]
LongPeriod-sig: N/A
ModelChiSquare2-sig: 8.1%
ModelChiSquareGof-sig: 91.8%
Bootstrap-pfa: 1.44e-09
RollingBand-fgt: 1.00 [6/6]
GhostDiagnostic-chr: -4.162
Centroid-sig: 56.1%
Centroid-so: 0.514 arcsec [0.81 σ]
OotOffset-rm: 1.419 arcsec [0.90 σ]
KicOffset-rm: 1.127 arcsec [0.70 σ]
OotOffset-st: 1/2/2/4 [9]
KicOffset-st: 1/2/2/4 [9]
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DiffImageOverlap-fno: 0.21 [3/14]

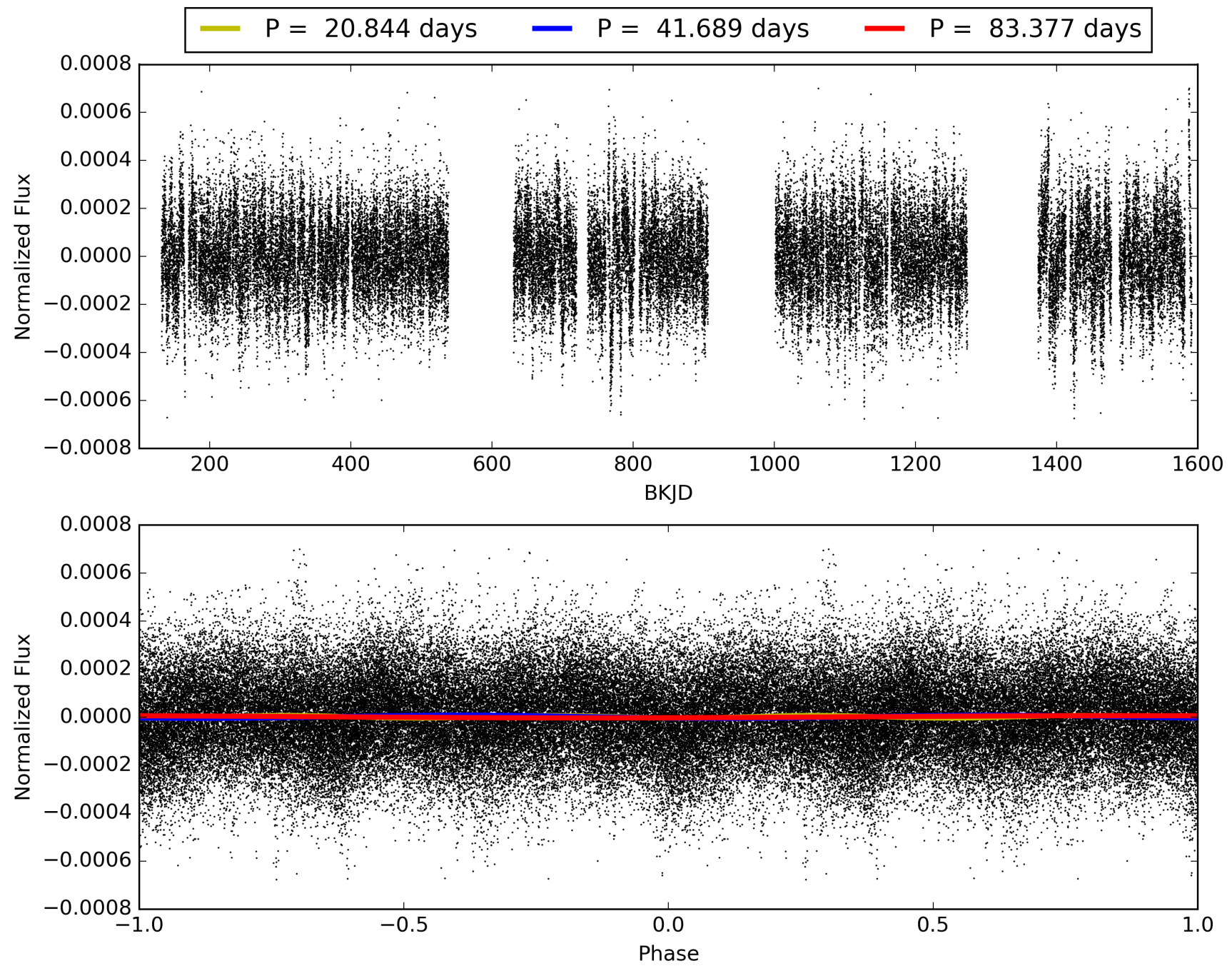
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 31-Jan-2016 10:17:04 Z

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

TCE 003356799-02, PDC Light Curves

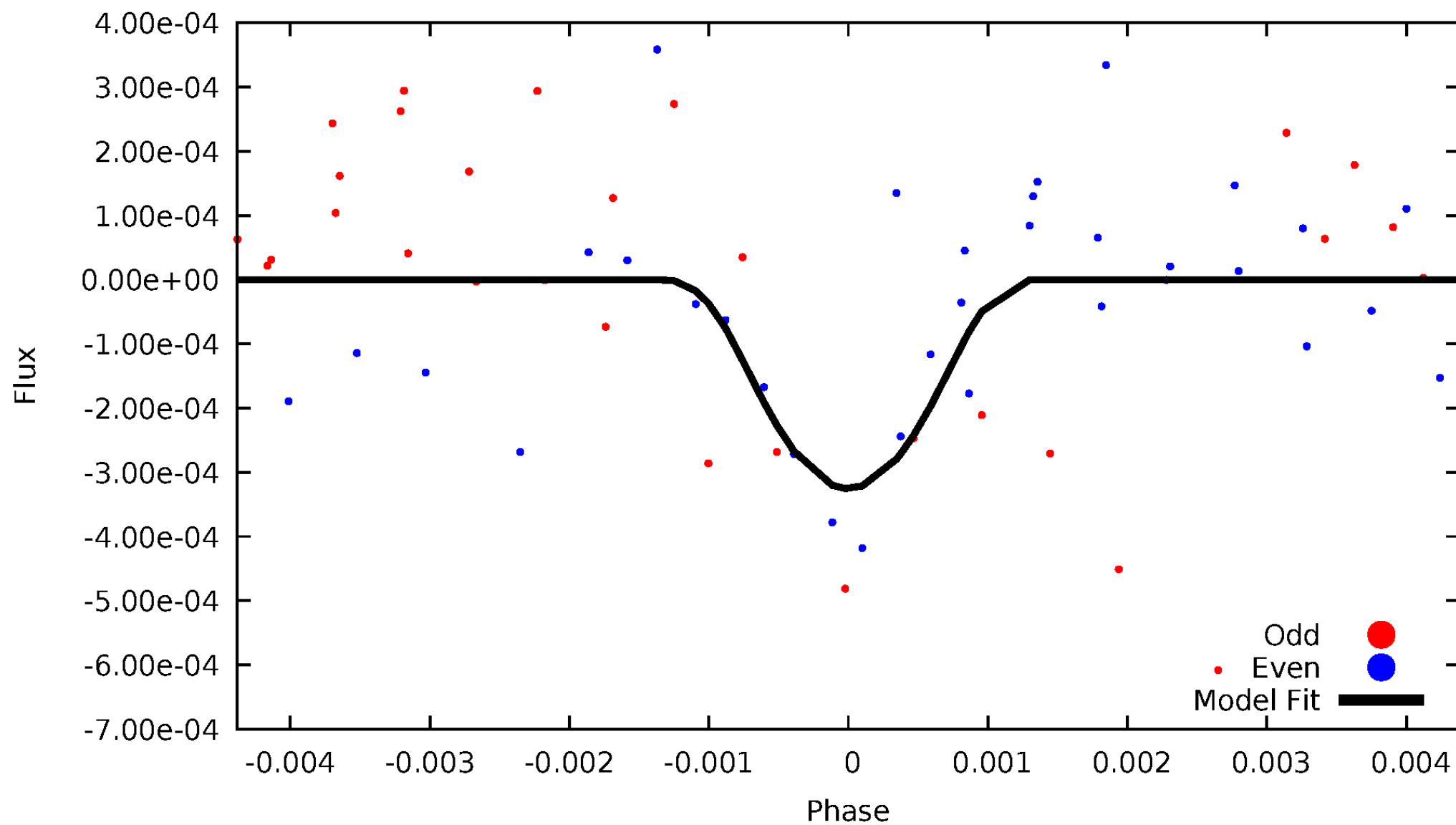


TCE 003356799-02



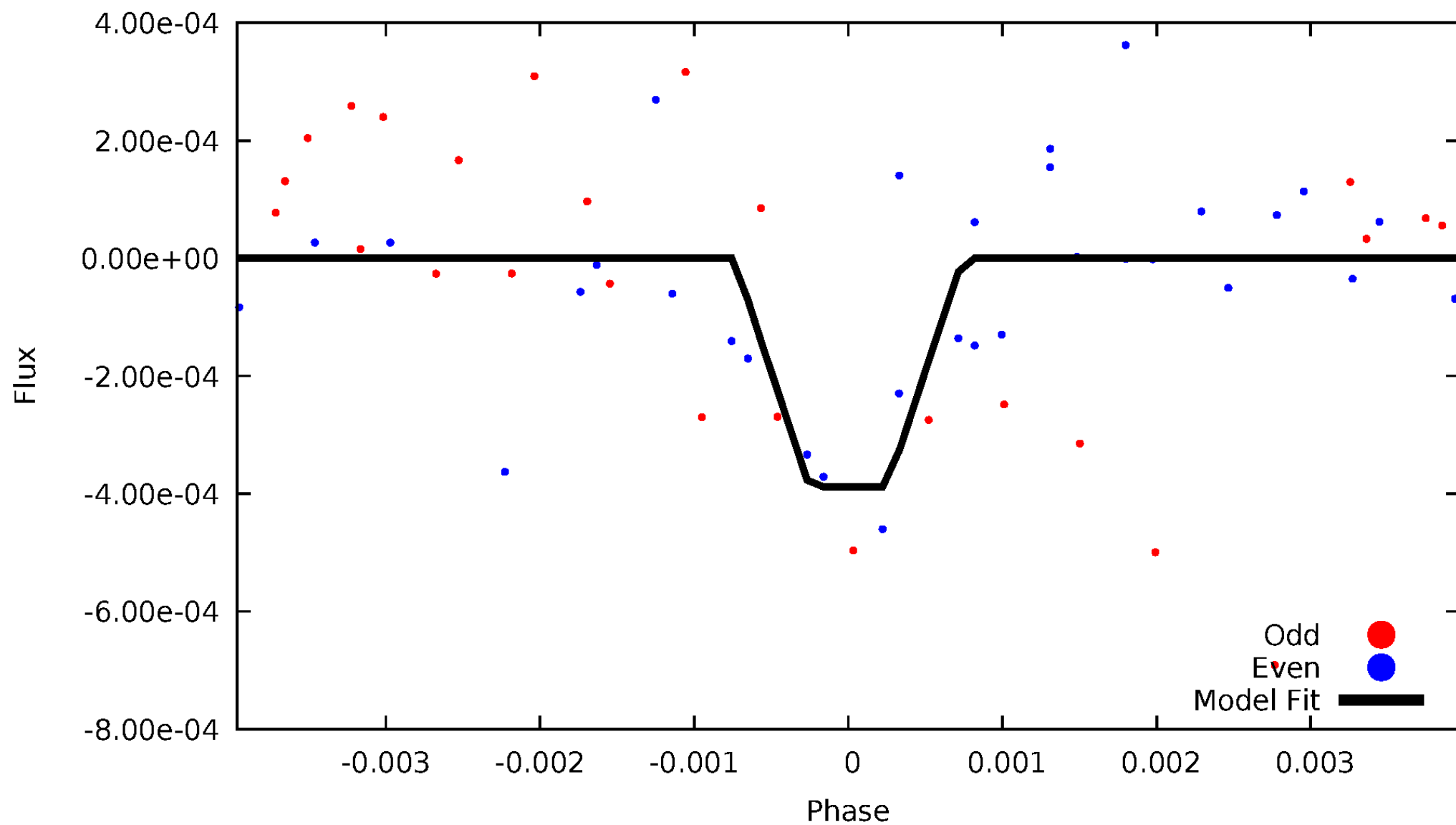
DV Odd/Even

TCE 003356799-02



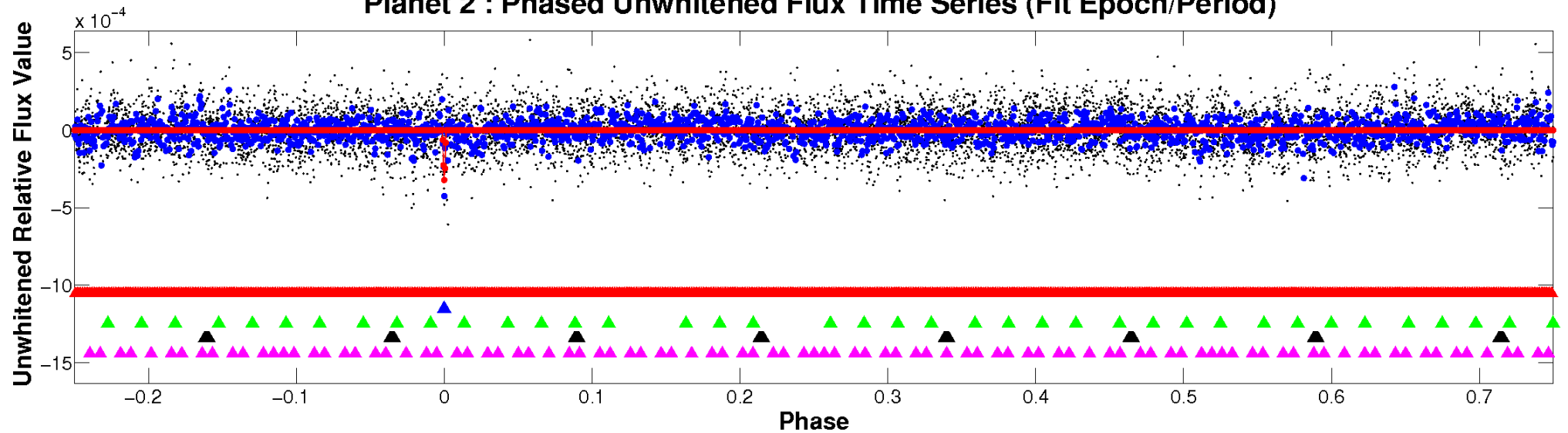
ALT Odd/Even

TCE 003356799-02

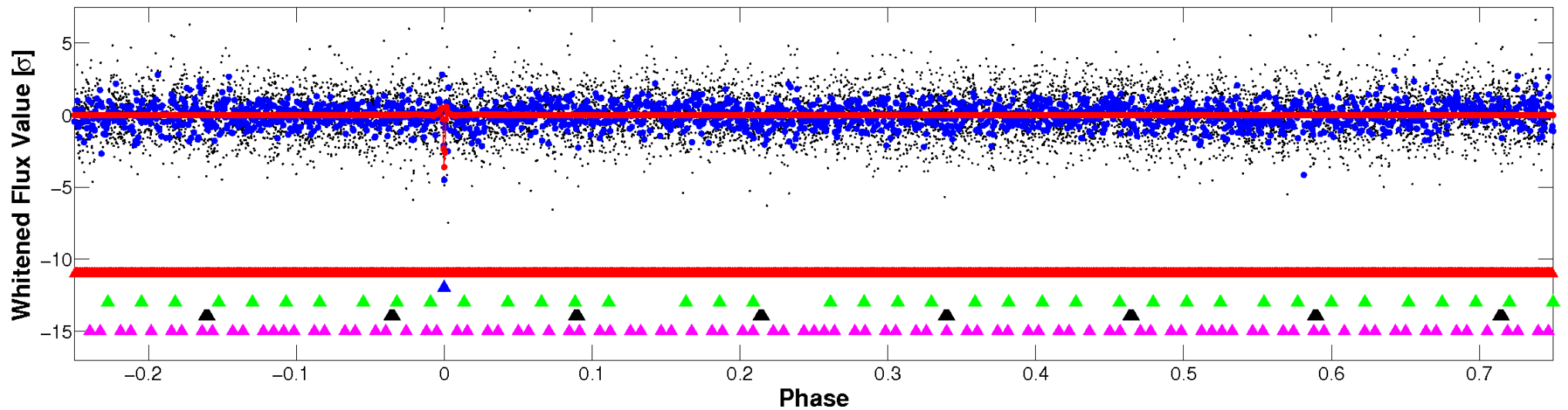


Non-Whitened Vs. Whitened Light Curve

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

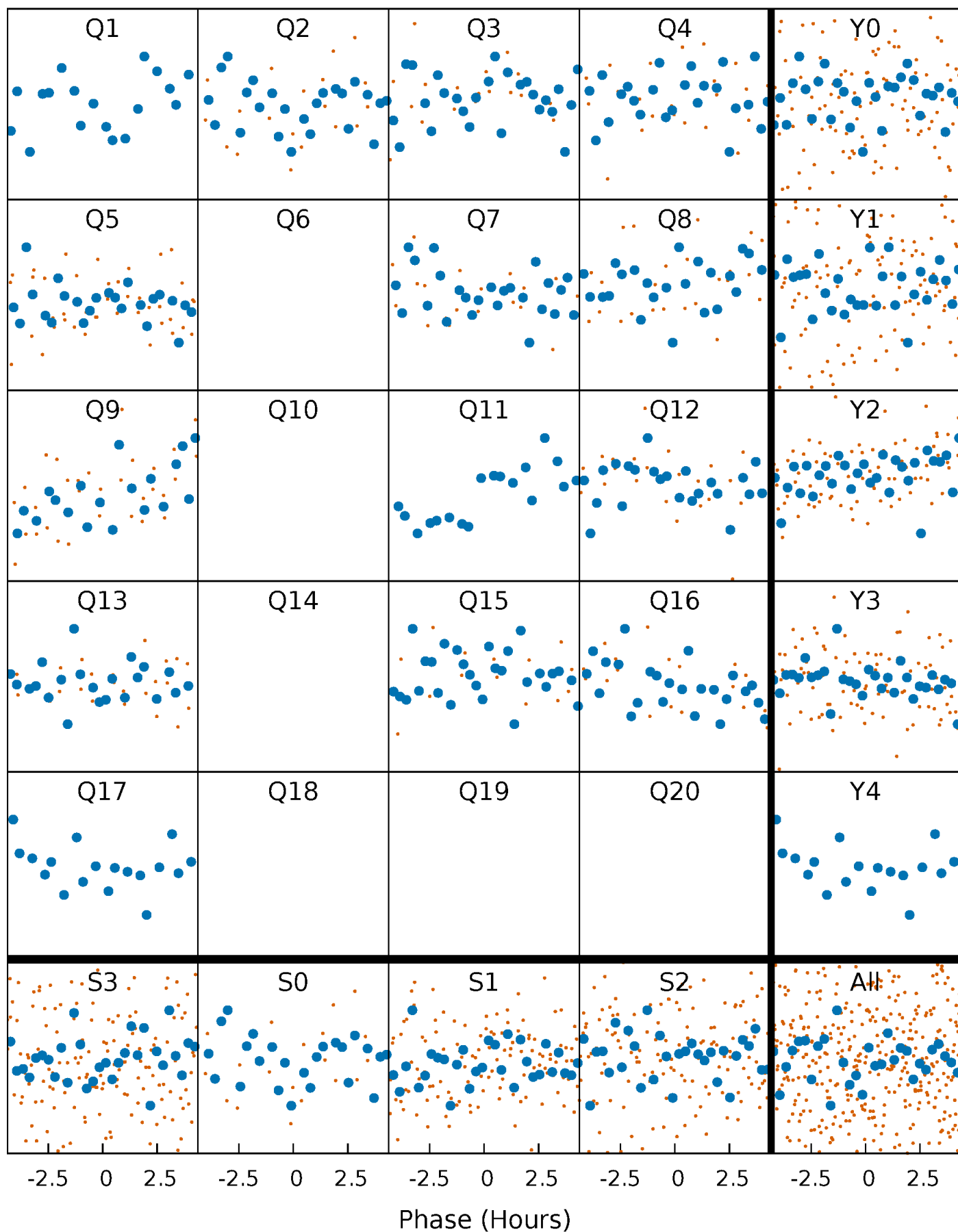


Planet 2 : Phased Whitened Flux Time Series (Fit Epoch/Period)



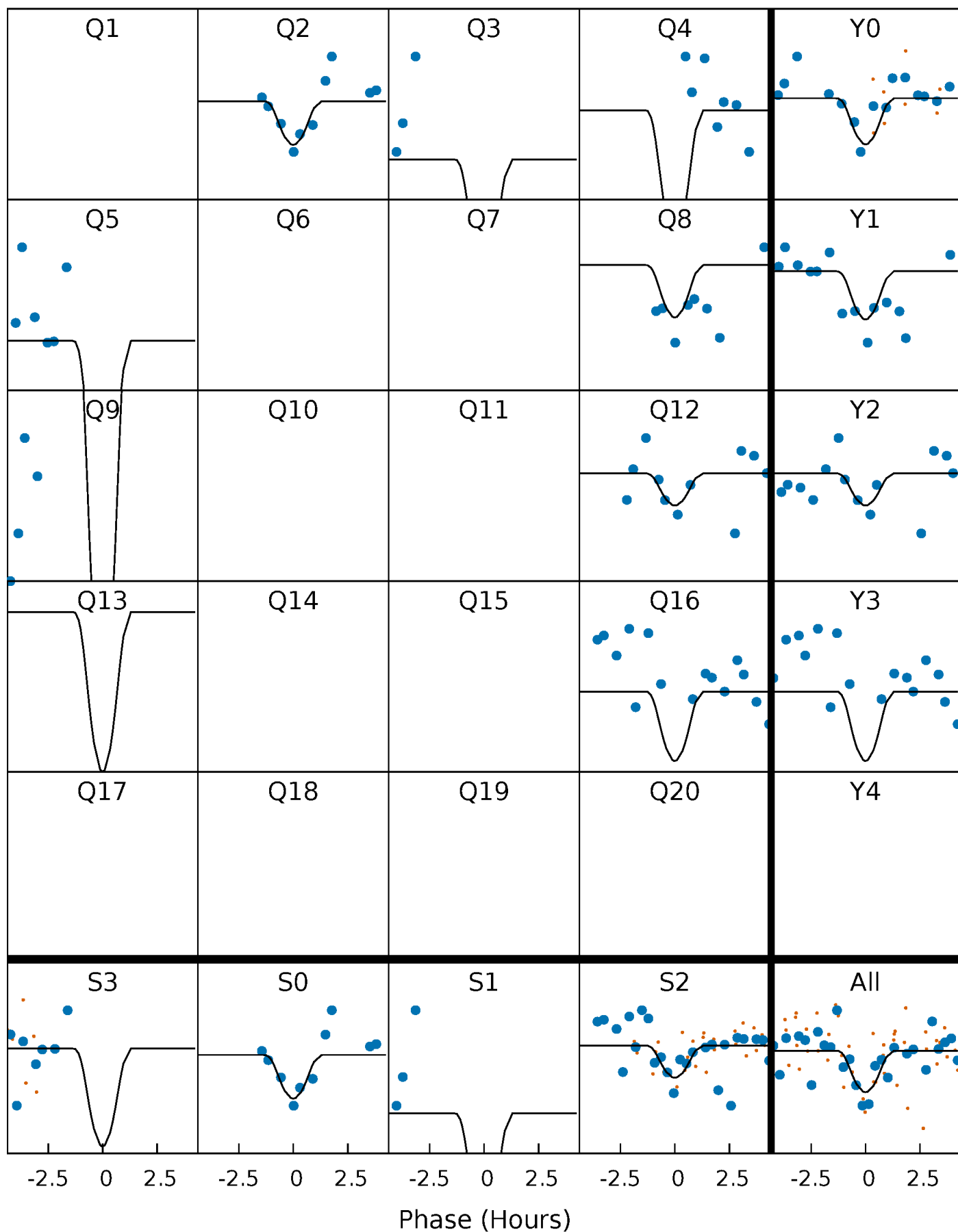
PDC Quarter-Phased Transit Curves

TCE 003356799-02 P= 41.688520 Days $T_0=157.339455$ (BKJD)



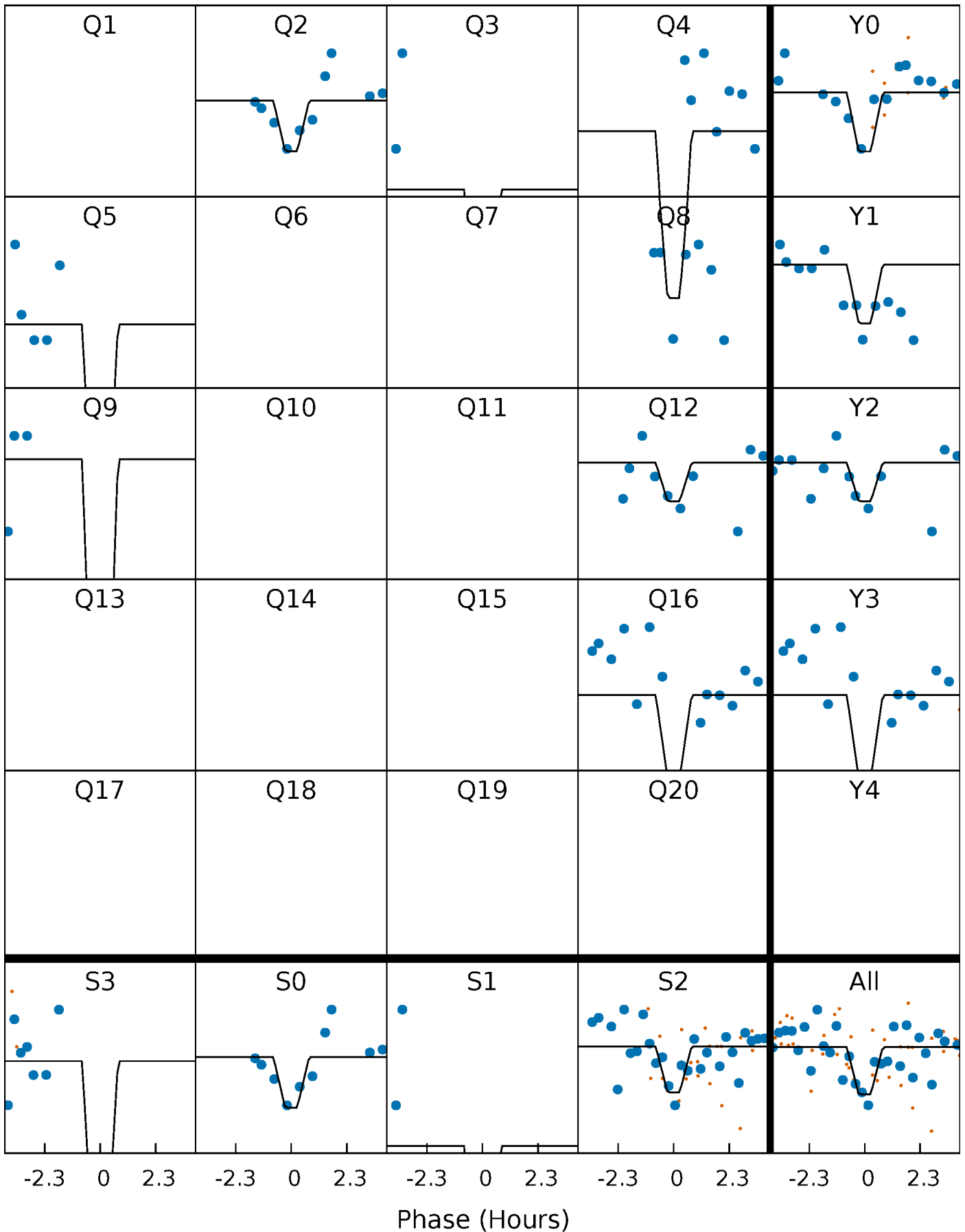
DV Quarter-Phased Transit Curves

TCE 003356799-02 $P = 41.688520$ Days $T_0 = 157.339455$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

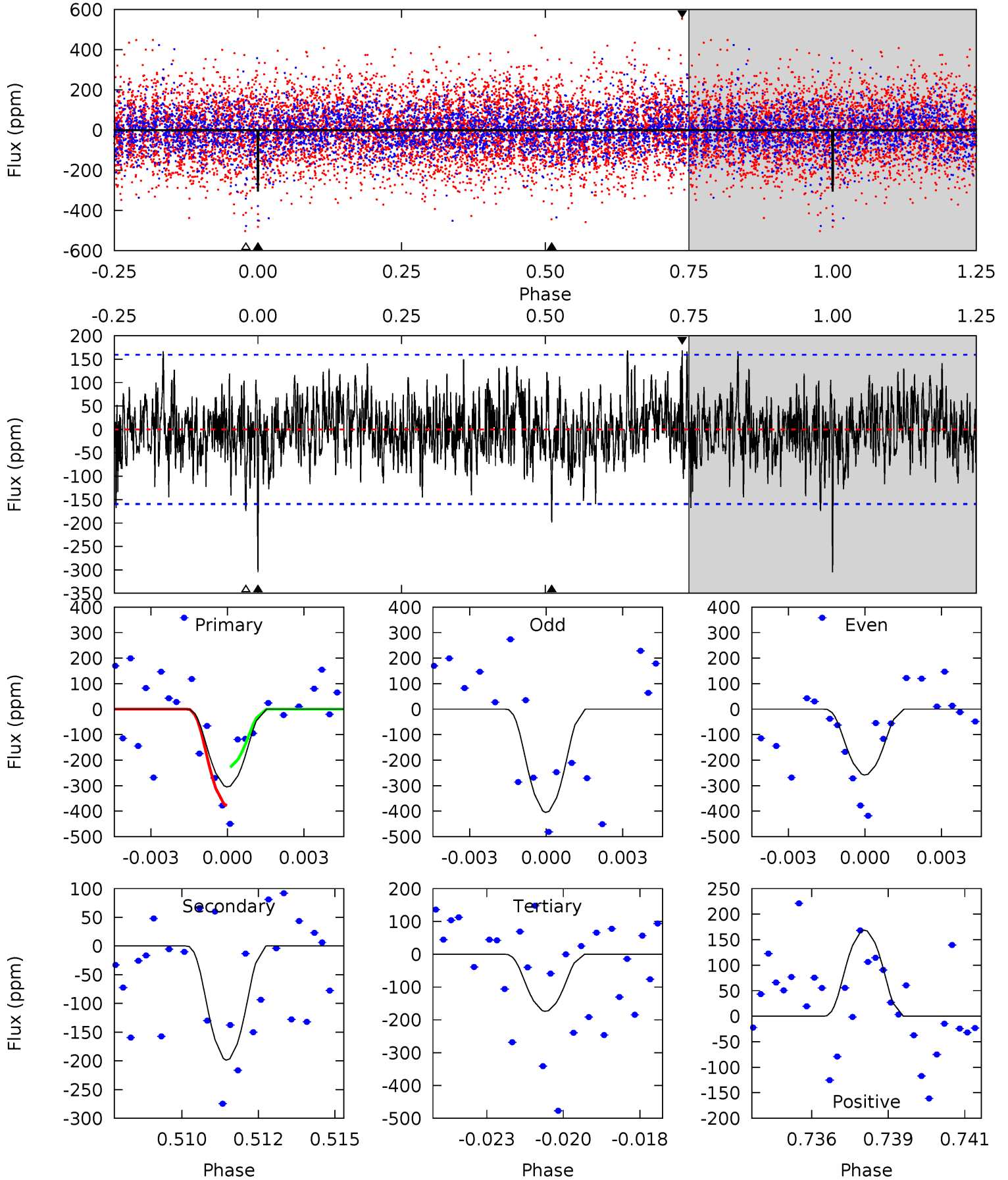
TCE 003356799-02 P= 41.688199 Days $T_0=157.342032$ (BKJD)



DV Model-Shift Uniqueness Test

003356799-02, P = 41.688520 Days, E = 115.650935 Days

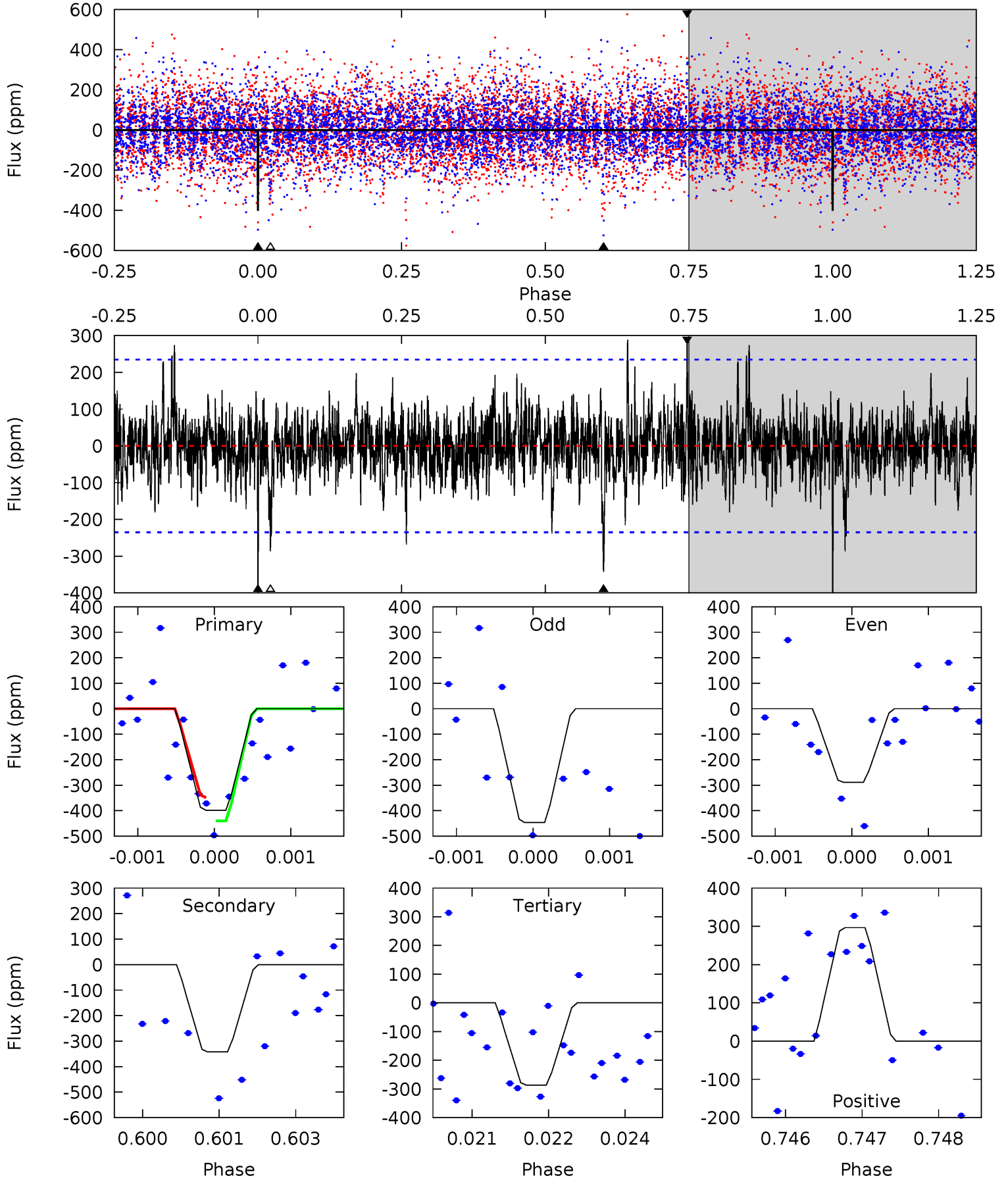
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
10.1	6.58	5.77	5.59	5.28	3.02	1.68	4.34	4.51	0.82	0.99	2.34	0.72	0.36	2.49



Alt Model-Shift Uniqueness Test

003356799-02, P = 41.688199 Days, E = 115.653833 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
9.12	7.84	6.57	6.79	5.38	3.18	1.42	2.55	2.33	1.27	1.05	1.86	1.03	0.43	1.04



Stellar Parameters For KIC 003356799

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	7854^{+217}_{-326}	$3.669^{+0.448}_{-0.084}$	$-0.120^{+0.200}_{-0.300}$	$3.462^{+0.720}_{-1.681}$	$2.039^{+0.343}_{-0.514}$	$0.069^{+0.321}_{-0.025}$
	+3%/-4%	+12%/-2%	+167%/-250%	+21%/-49%	+17%/-25%	+464%/-36%
Source	KIC0	KIC0	KIC0	DSEP		

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

Secondary Eclipse Parameters for KIC 003356799-02 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-199 ± 30	$79.04^{+93.11}_{-58.27}$	1583^{+118}_{-184}	2599^{+1304}_{-760}	$1.527^{+22.052}_{-1.181}$
Alt.	-342 ± 44	$75.74^{+88.46}_{-53.12}$	1579^{+118}_{-188}	2826^{+1362}_{-616}	$2.943^{+26.998}_{-2.336}$

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

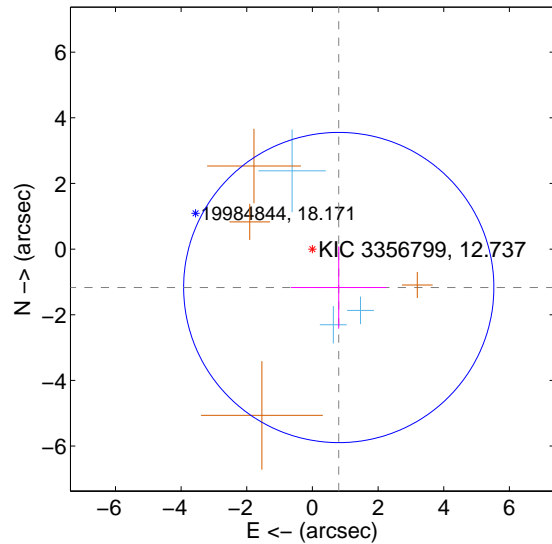
Supplemental centroid analysis for 003356799-02. Kepler magnitude: 12.74. Transit SNR 9.11

There are 3 quarters with good PRF difference image offsets

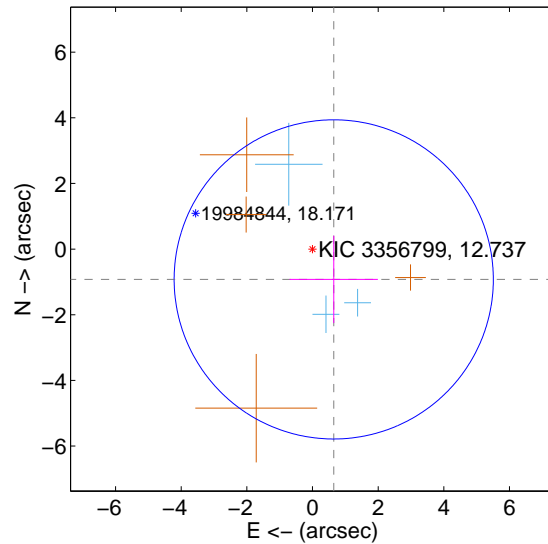
The direct PRF centroid is offset from the target star catalog position by about 0.41 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	1.419 ± 1.576	0.90	-0.802 ± 1.452	-1.171 ± 1.254
PRF-fit source offset from KIC position	1.127 ± 1.621	0.70	-0.647 ± 1.346	-0.924 ± 1.330
photometric centroid source offset	0.51 ± 0.64	0.81	0.51 ± 0.64	0.08 ± 0.60

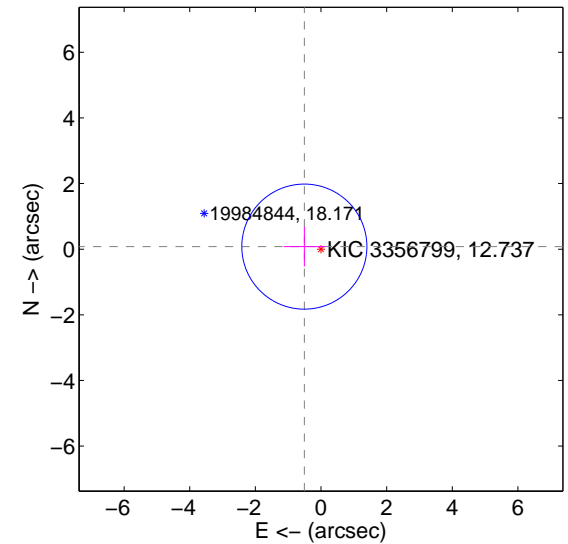
offset from difference PRF-fit to OOT PRF-fit



offset from difference PRF-fit to KIC position

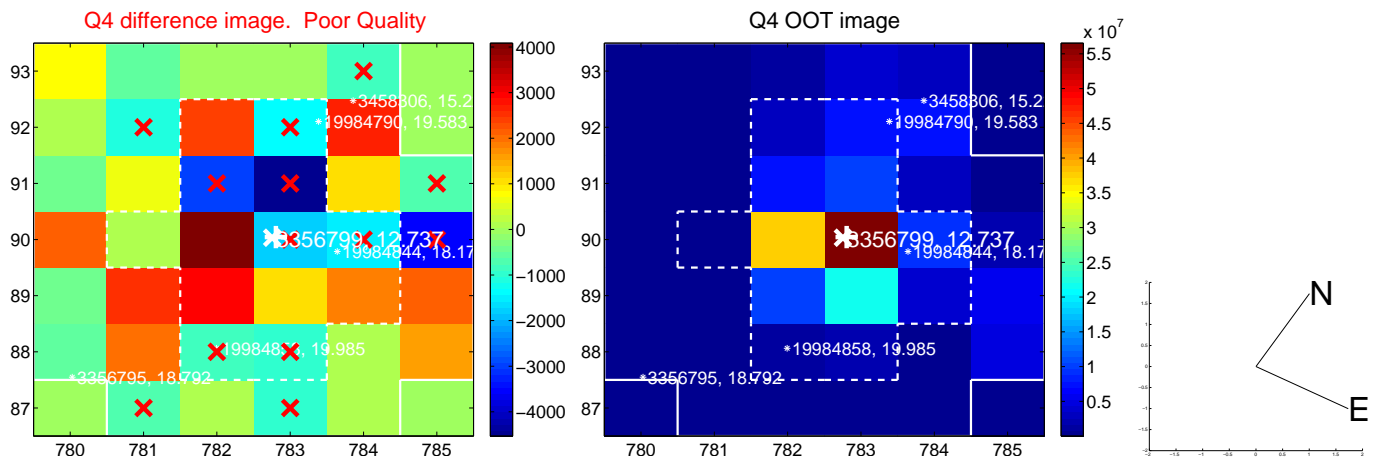
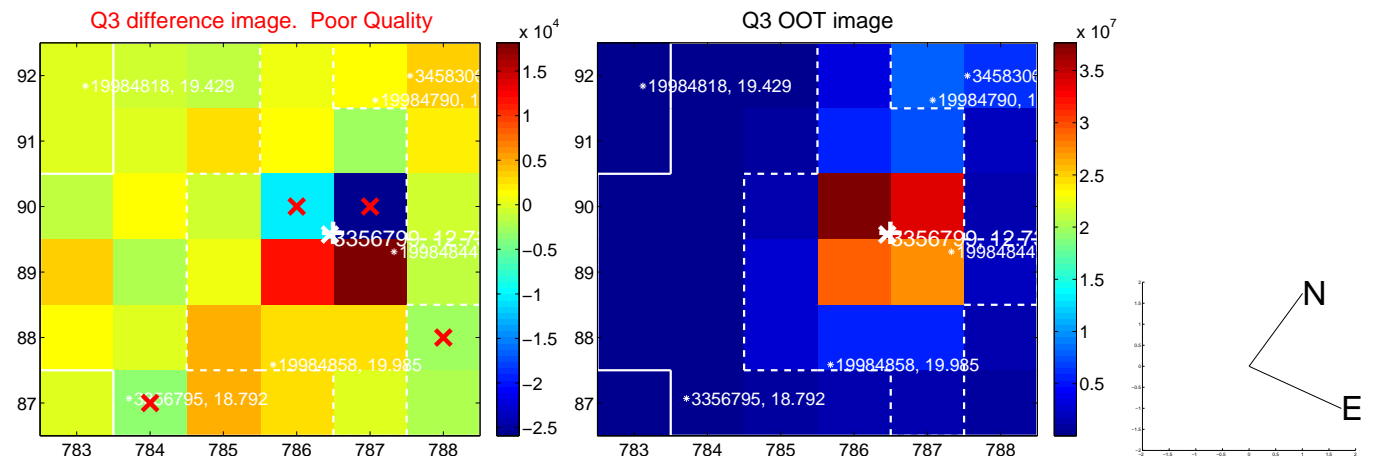
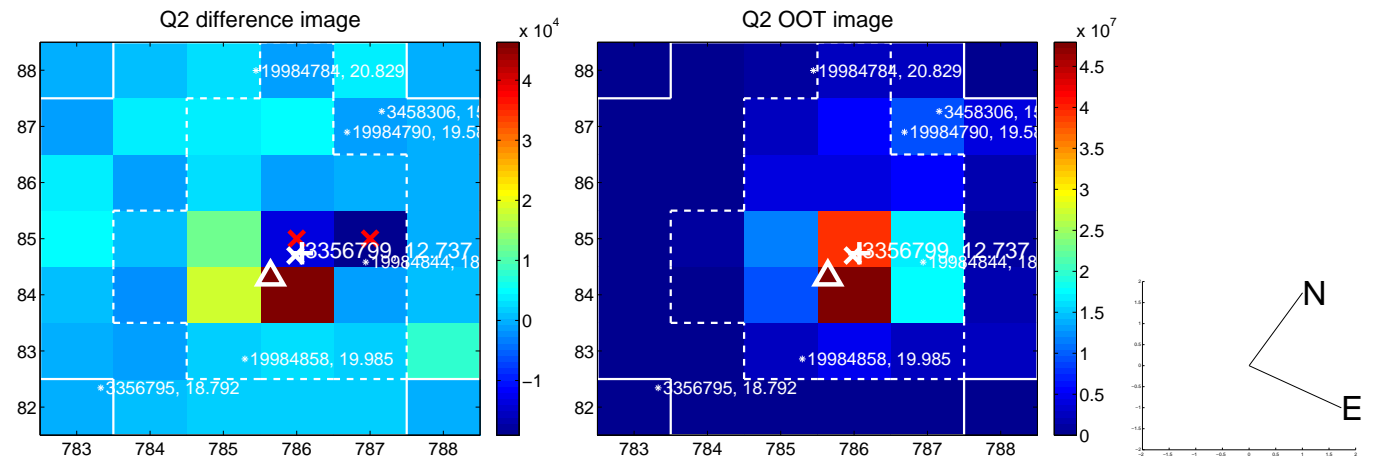
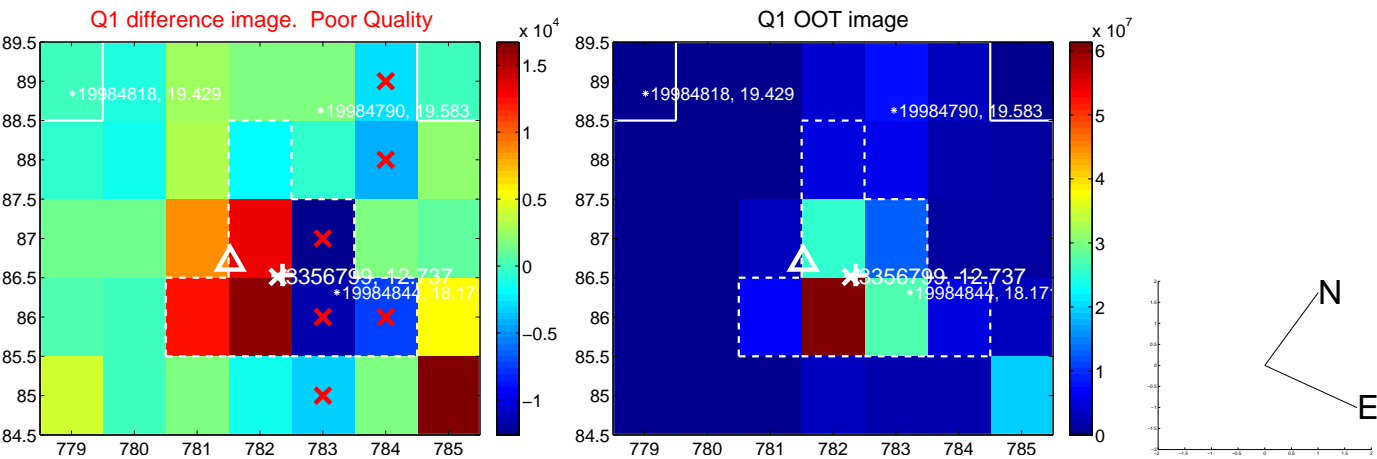


offset from photometric centroids

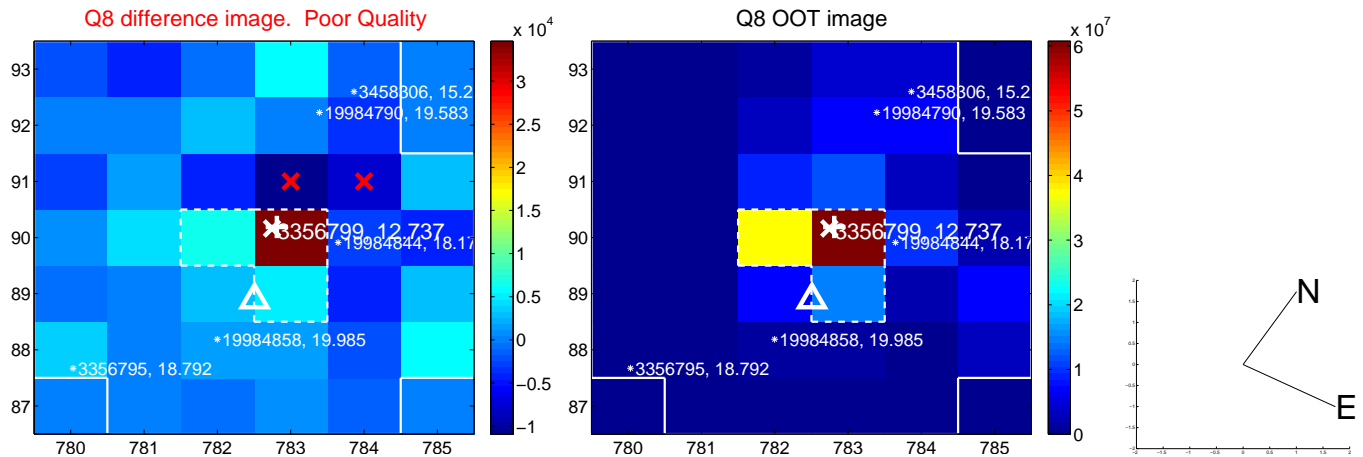
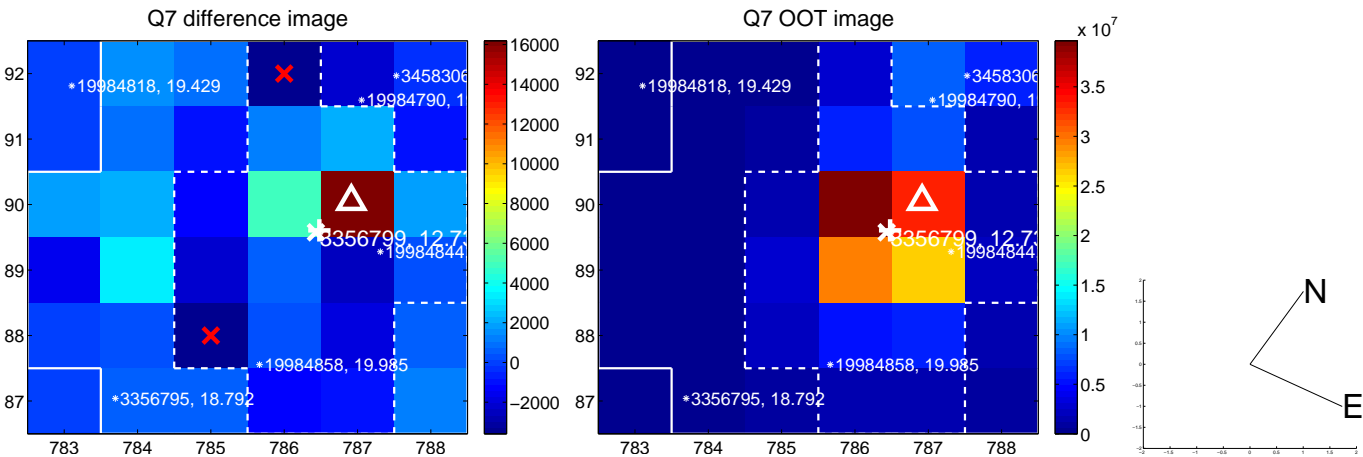
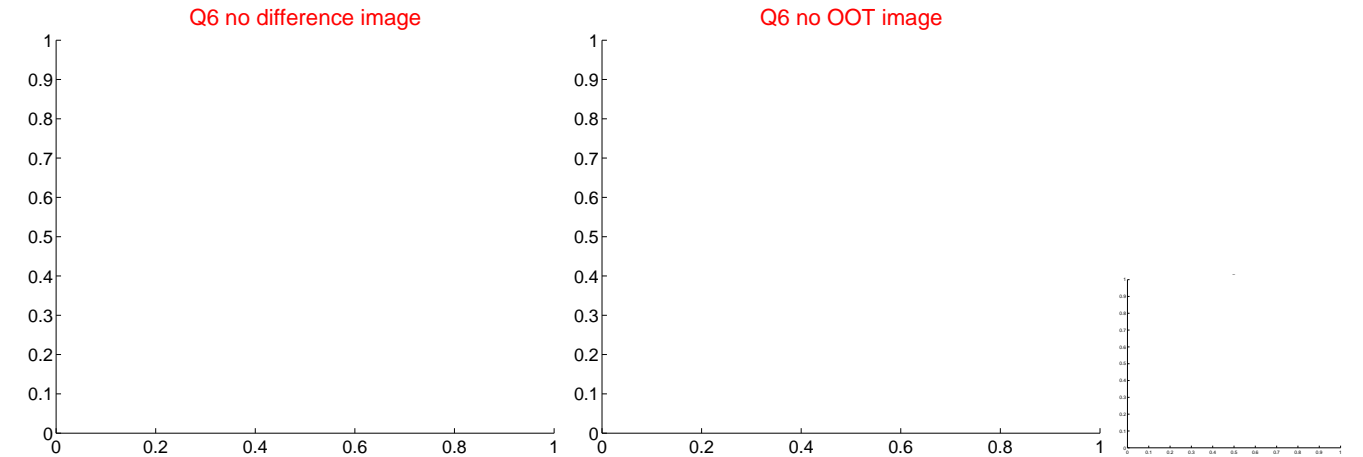
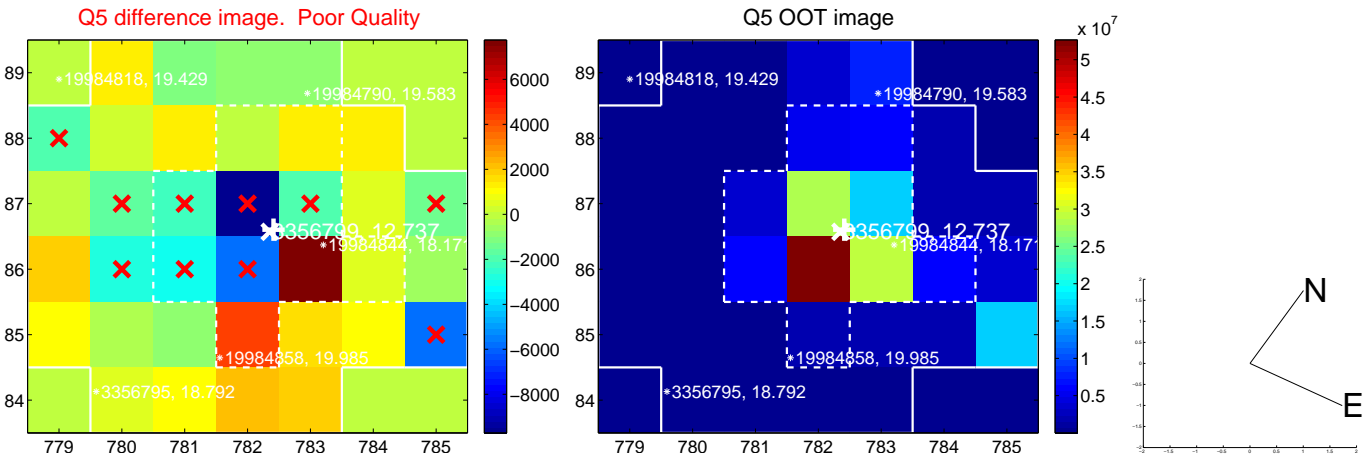


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

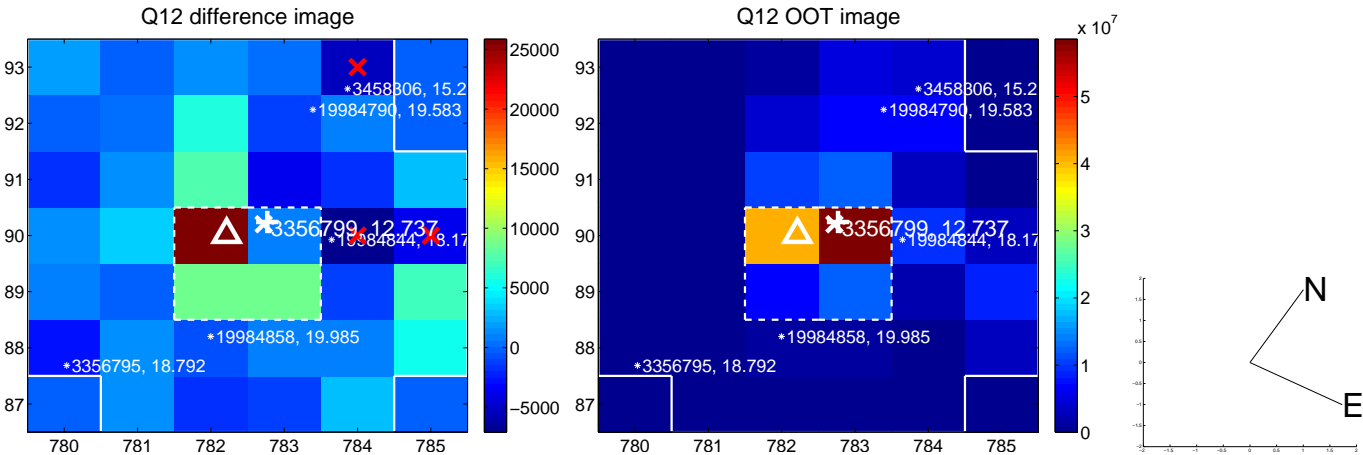
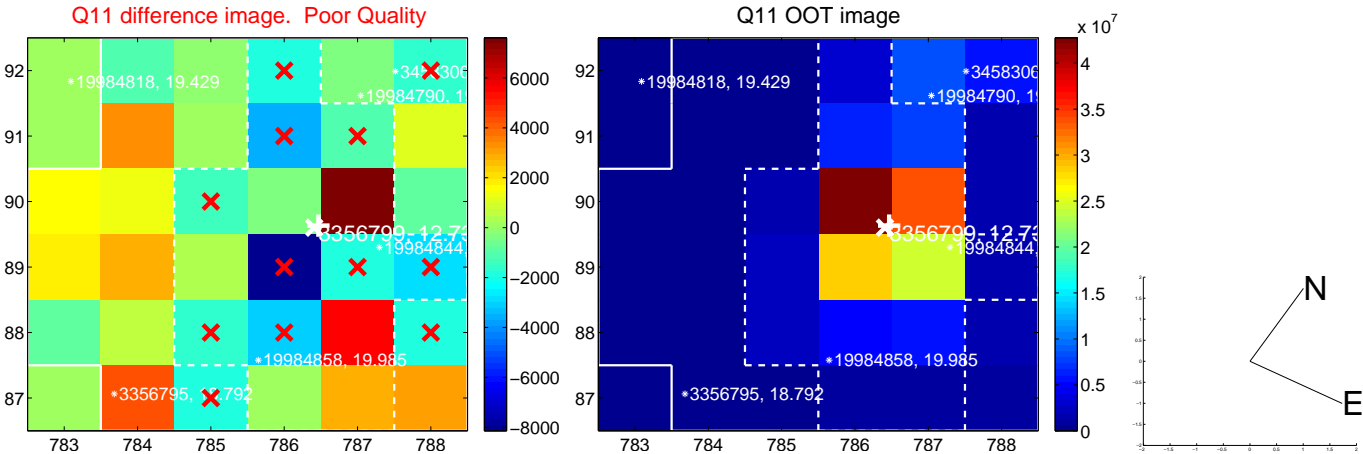
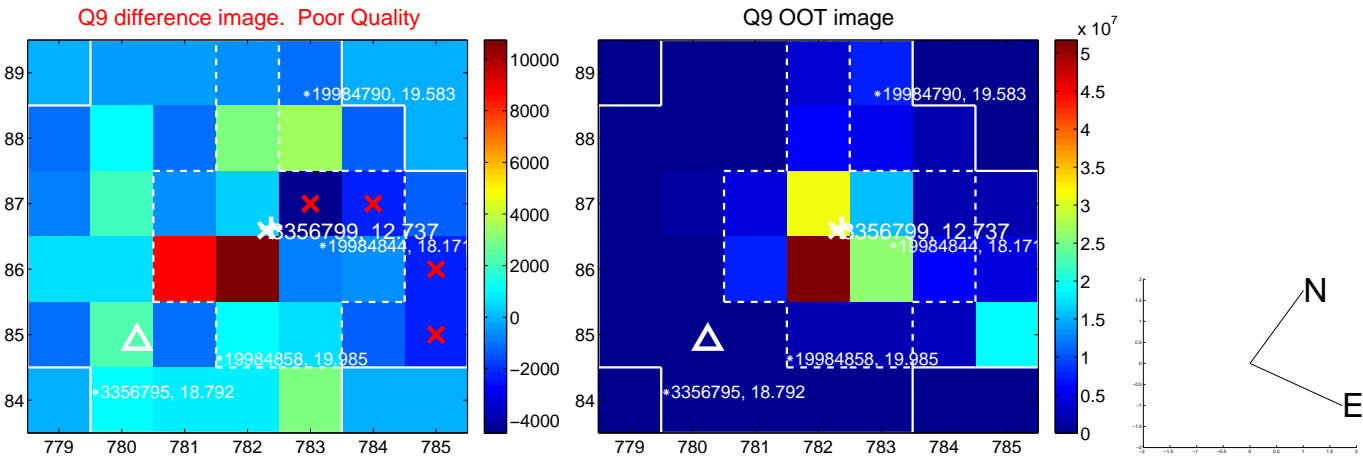
white ×: KIC target position; +: OOT centroid; △: difference centroid. red ×: large negative pixel value.



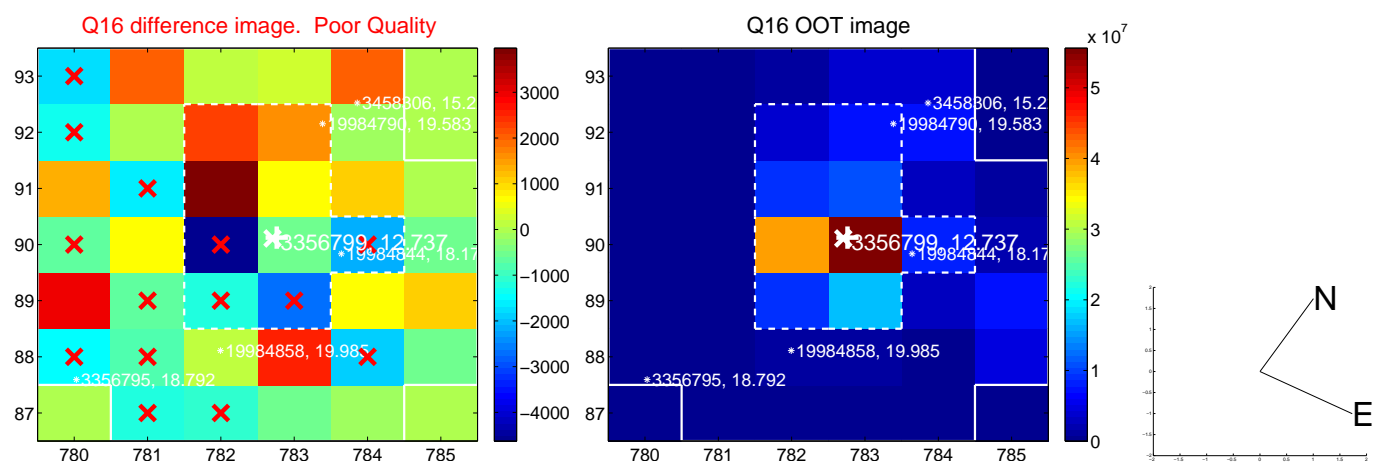
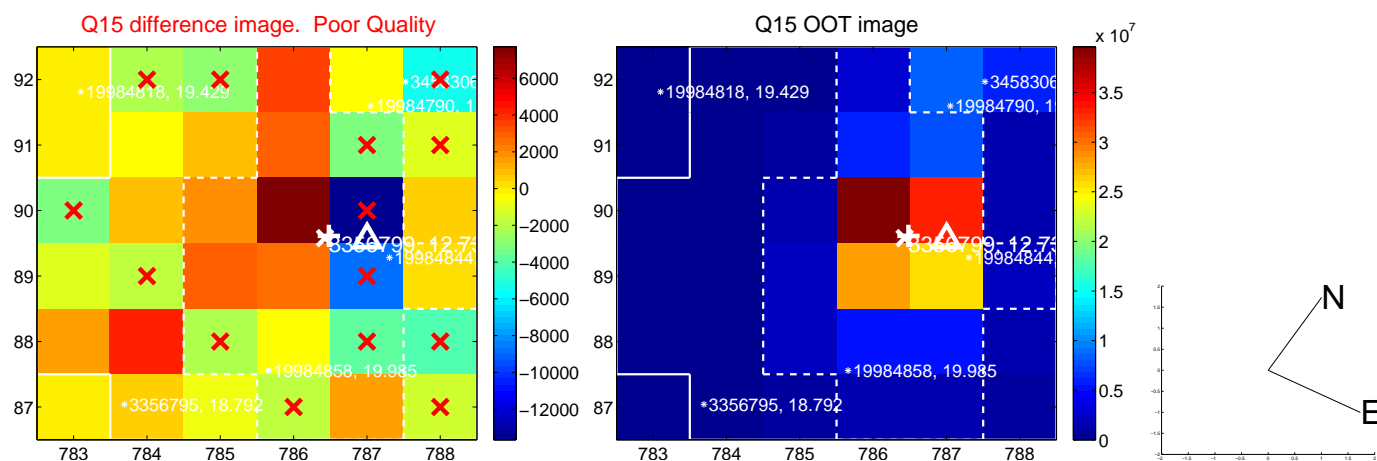
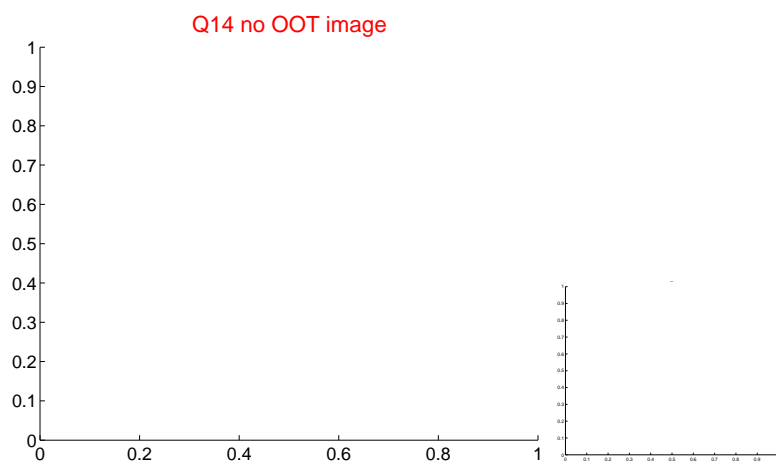
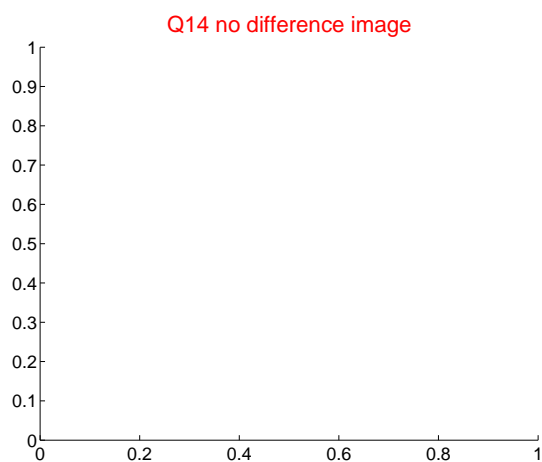
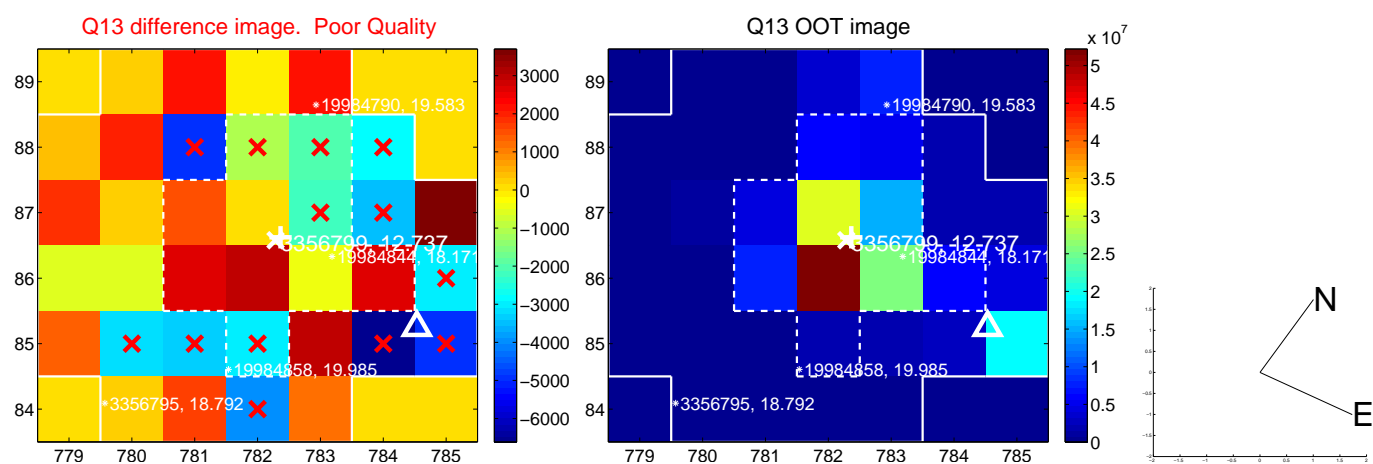
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



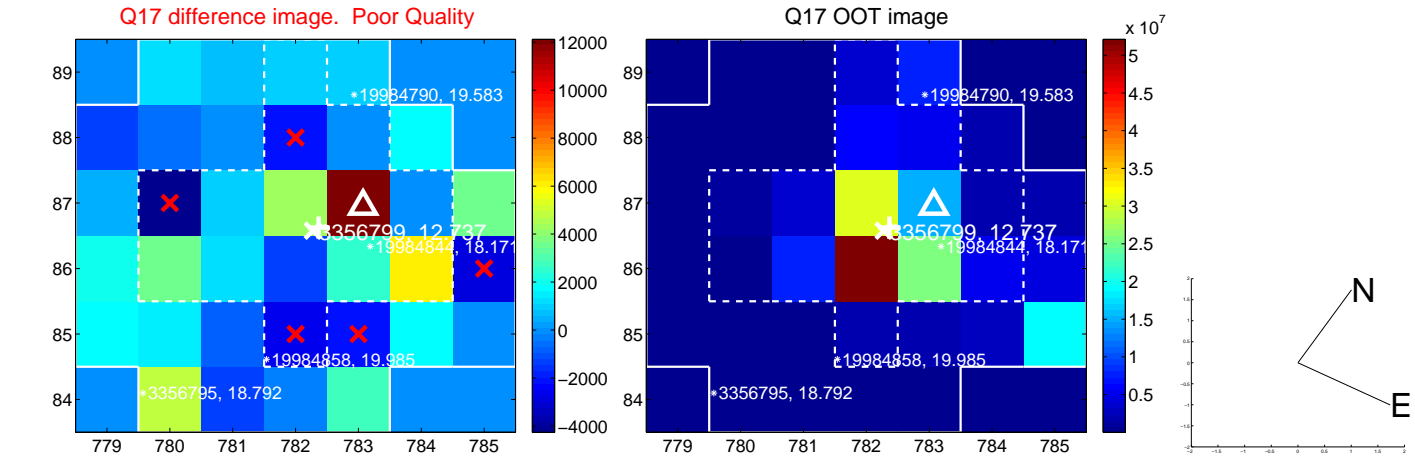
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



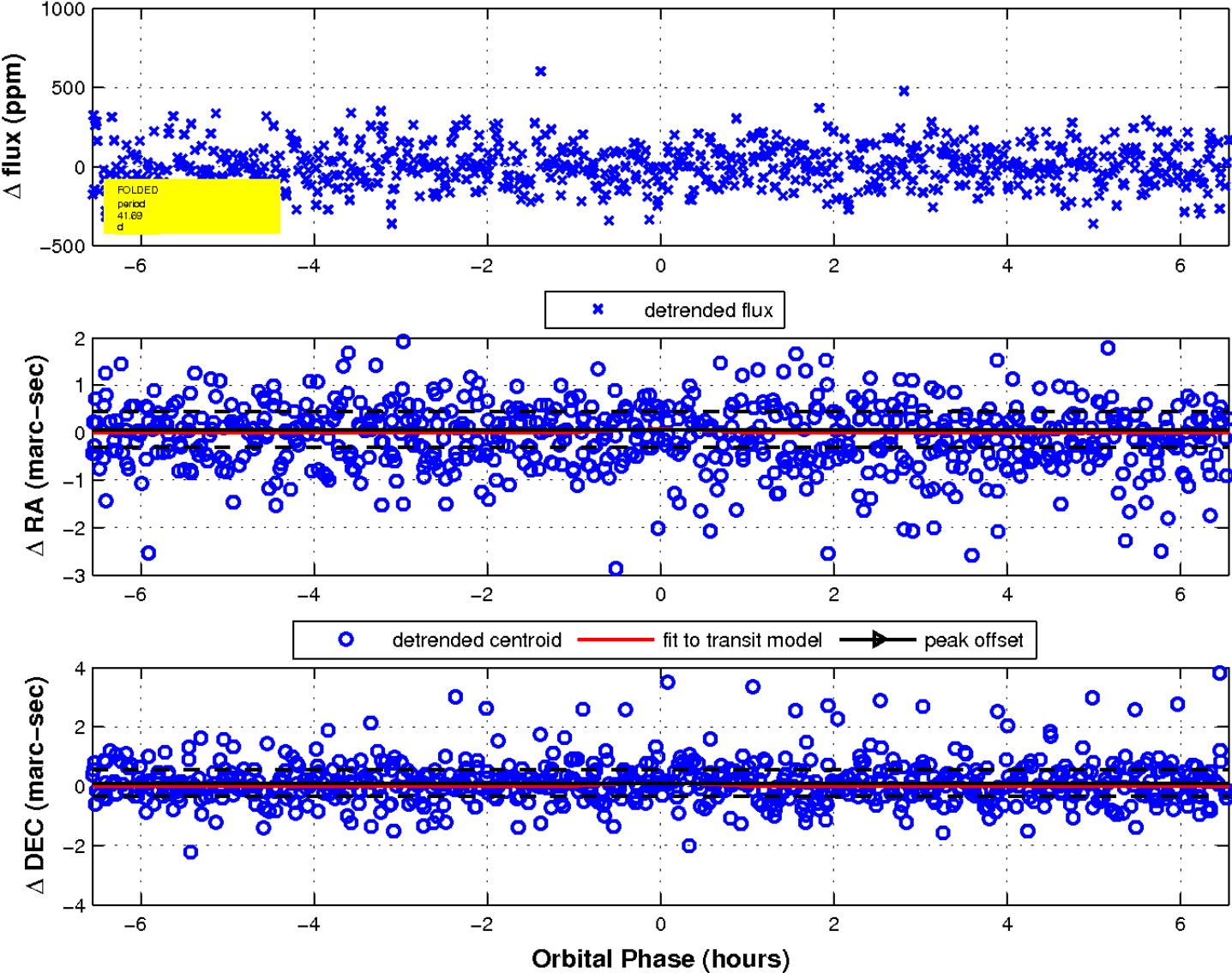
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

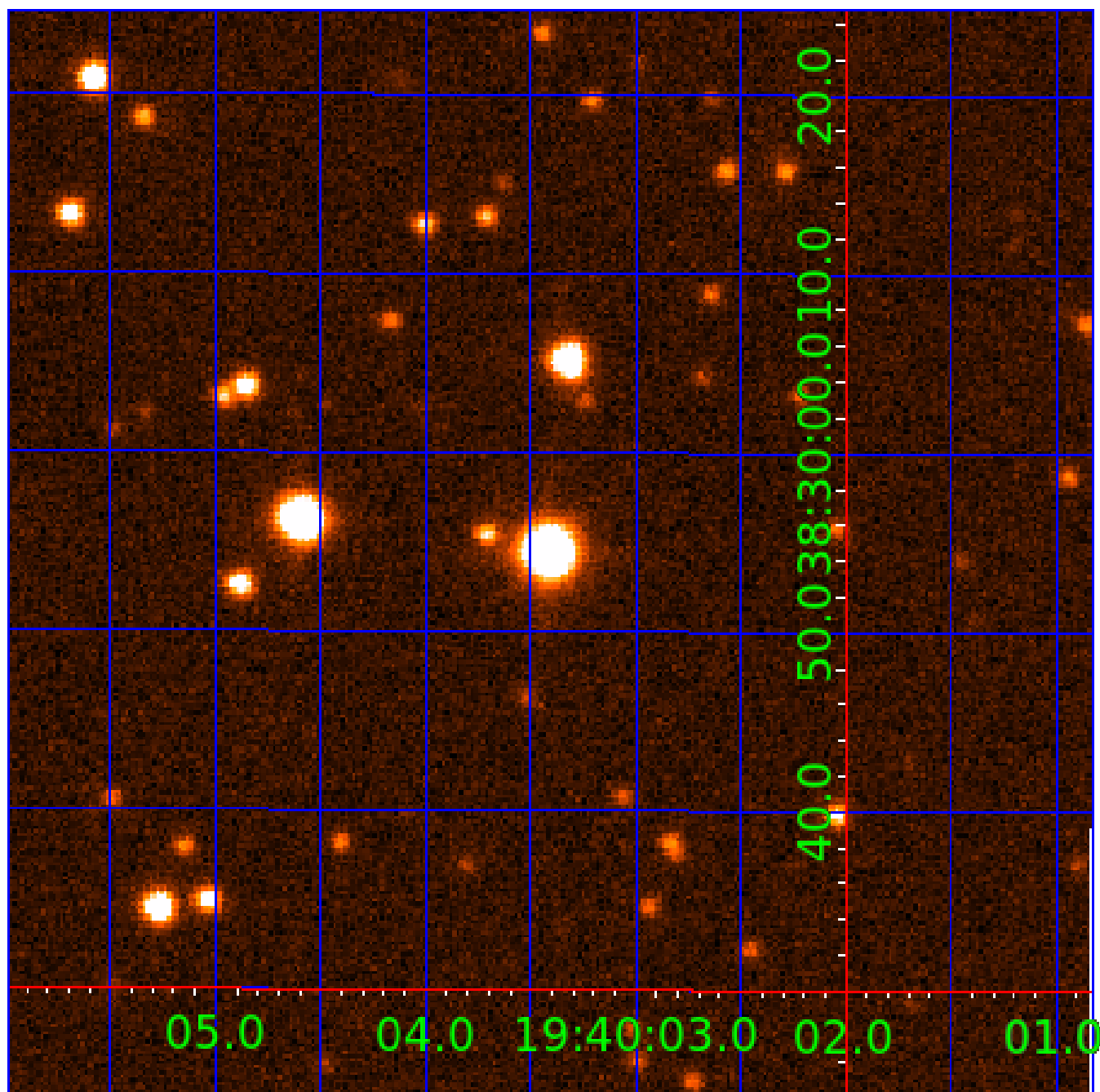


fluxWeightedCentroids, Planet 2 of 5



UKIRT Image

Declination



KIC 003356799

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})
003356799-01	OBS	No	0.882678	131.711139	9.3	5.705	7.3	5.8	3.46	7854	1.09	78296.03
003356799-02	OBS	No	41.688520	157.339455	325.4	2.191	8.9	9.1	3.46	7854	12.05	458.62
003356799-03	OBS	No	37.614487	159.133583	156.4	6.537	9.1	7.3	3.46	7854	4.88	526.02
003356799-04	OBS	No	26.058035	140.155469	215.1	1.449	8.6	8.5	3.46	7854	5.19	858.13
003356799-05	OBS	No	15.237902	137.578100	160.6	1.320	8.3	9.0	3.46	7854	4.72	1754.86

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
003356799-01	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT
003356799-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT
003356799-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_NONUNIQ_ALT
003356799-04	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_FEW_DIFFS
003356799-05	OBS	FP	0.00	1	0	0	0	TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT

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

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

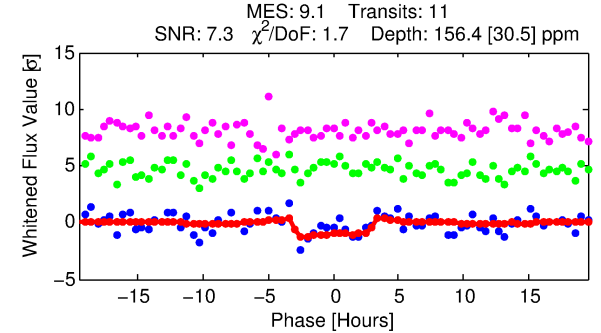
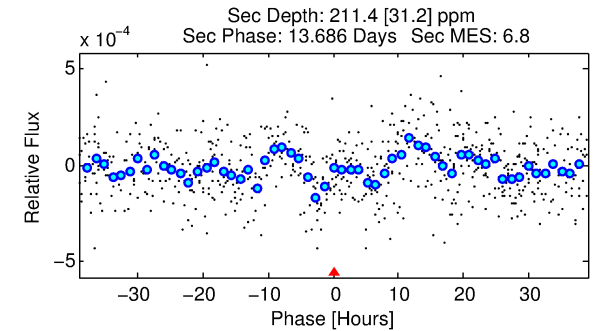
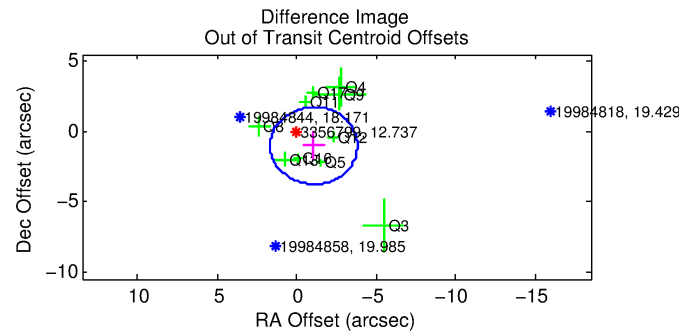
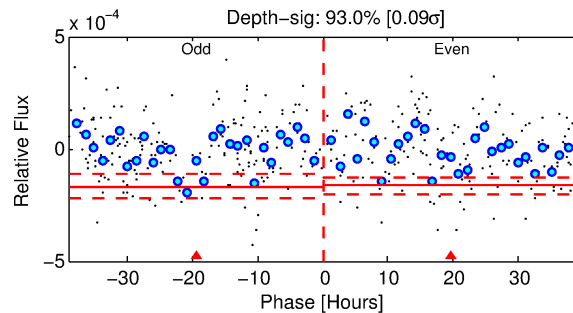
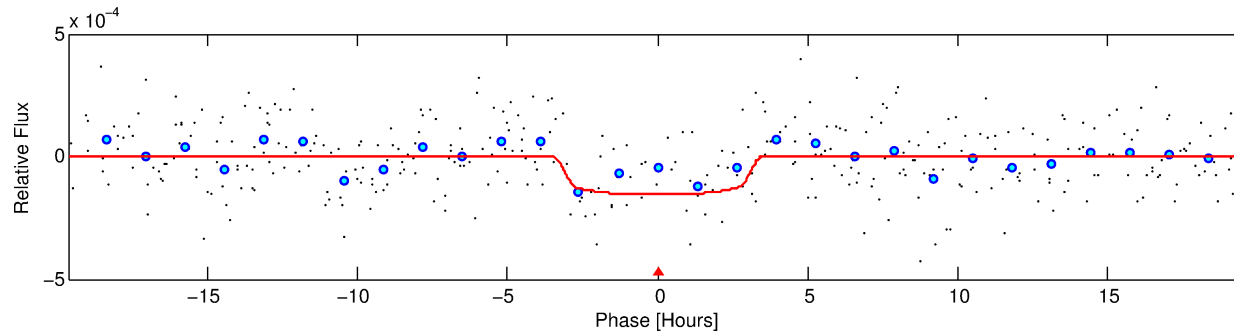
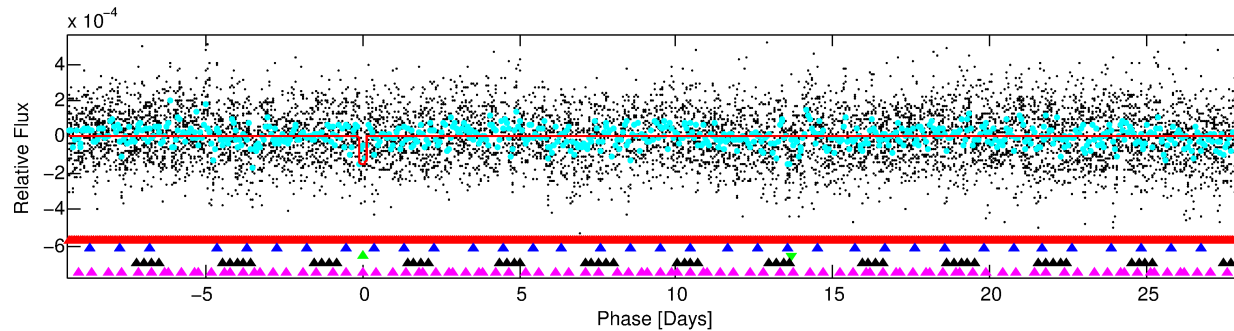
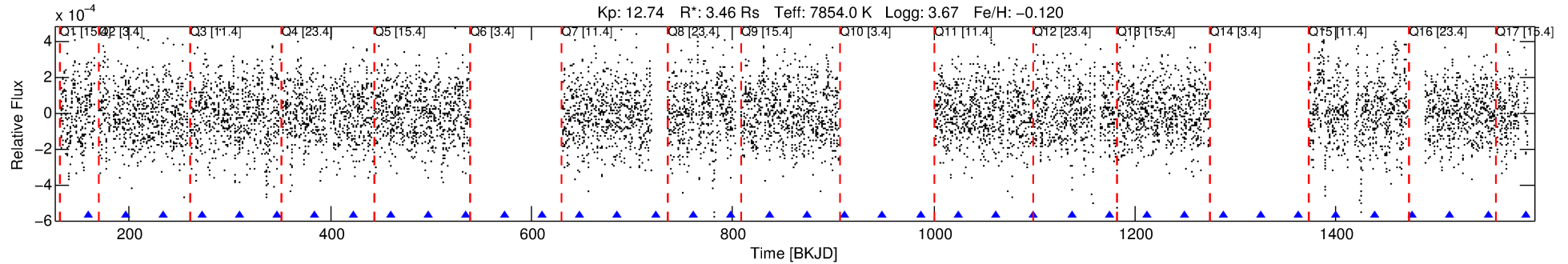
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 003356799-03

No Significant Match Found

DV One-Page Summary

KIC: 3356799 Candidate: 3 of 5 Period: 37.614 d



DV Fit Results:

Period = 37.61449 [0.00062] d
Epoch = 159.1336 [0.0135] BKJD
Rp/R* = 0.0129 [0.0055]
a/R* = 24.53 [60.21]
b = 0.85 [0.83]
Seff = 526.02 [409.25]
Teq = 1221 [238] K
Rp = 4.88 [3.16] Re
a = 0.2787 [0.1316] AU
Ag = 380.18 [439.08] [0.86 σ]
Teffp = 8337 [1845] K [3.82 σ]

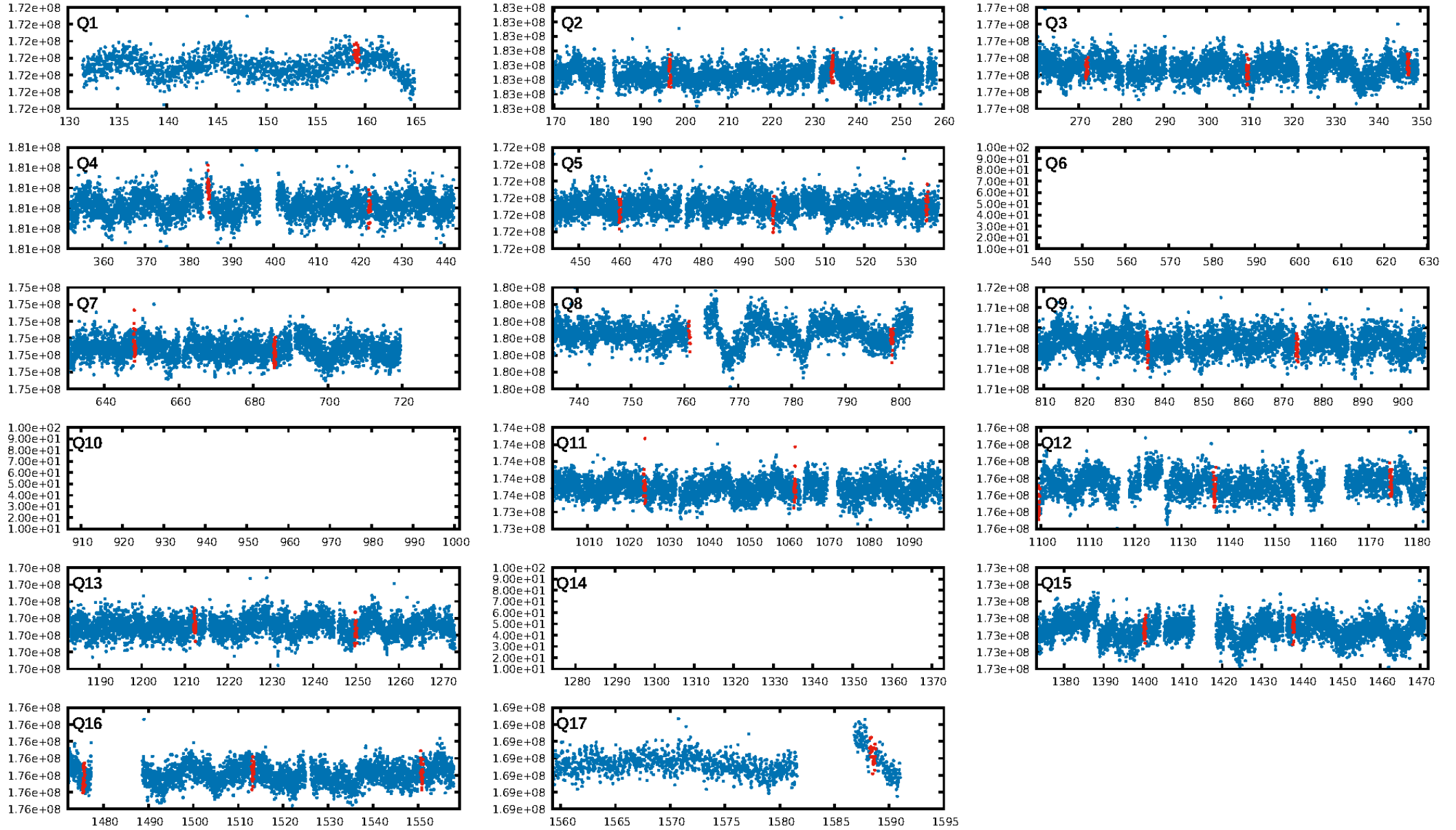
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [41.42 σ]
LongPeriod-sig: 100.0% [14.18 σ]
ModelChiSquare2-sig: 43.6%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: 2.16e-09
RollingBand-fgt: 1.00 [10/10]
GhostDiagnostic-chr: 0.8253
Centroid-sig: 1.9%
Centroid-so: 1.004 arcsec [1.63 σ]
OotOffset-rm: 1.472 arcsec [1.61 σ]
OotOffset-st: 0/2/4/4 [10]
KicOffset-rm: 1.203 arcsec [1.35 σ]
KicOffset-st: 0/2/4/4 [10]
DiffImageQuality-fgm: 0.30 [3/10]
DiffImageOverlap-fno: 0.00 [0/14]

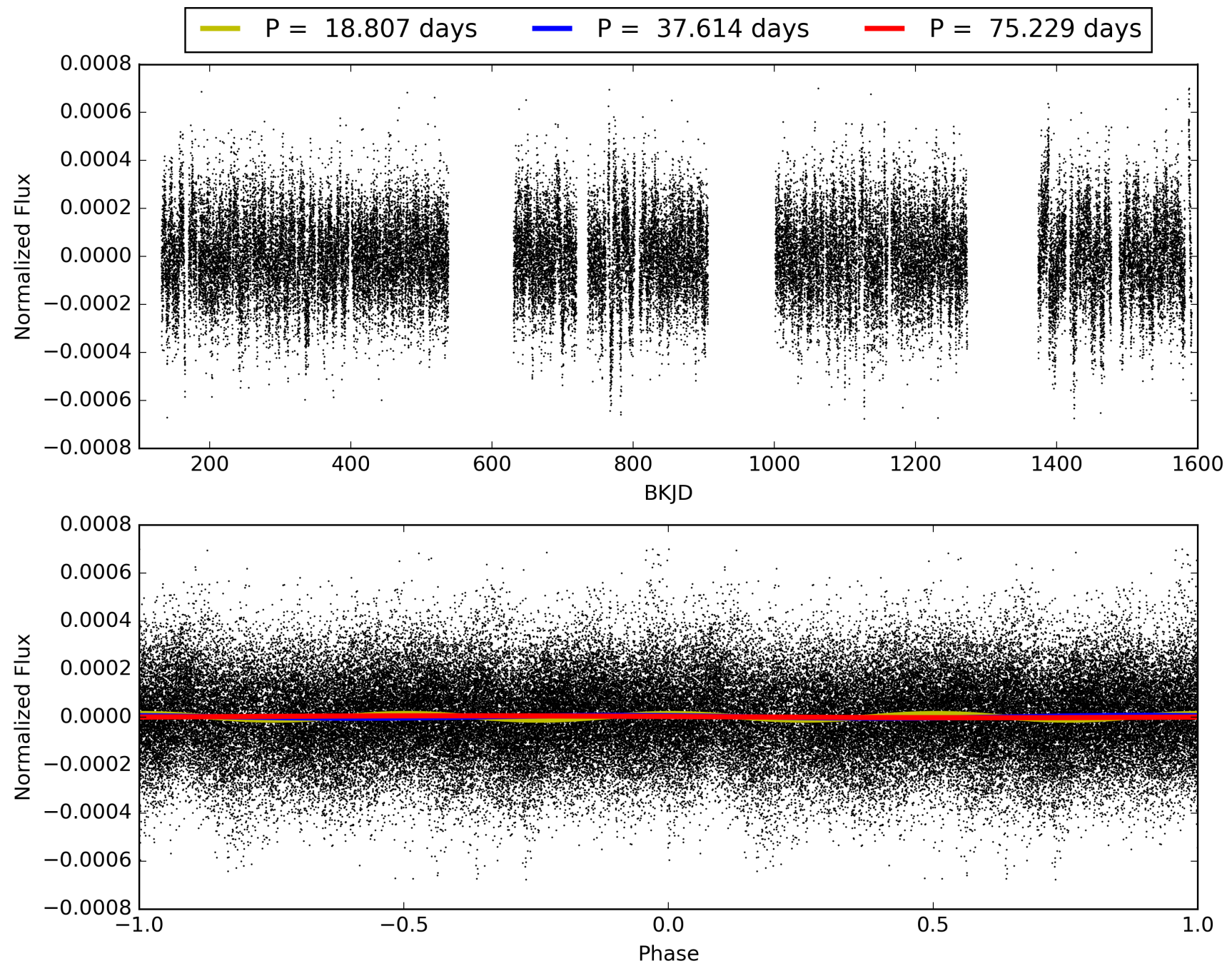
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 31-Jan-2016 10:17:08 Z

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

TCE 003356799-03, PDC Light Curves

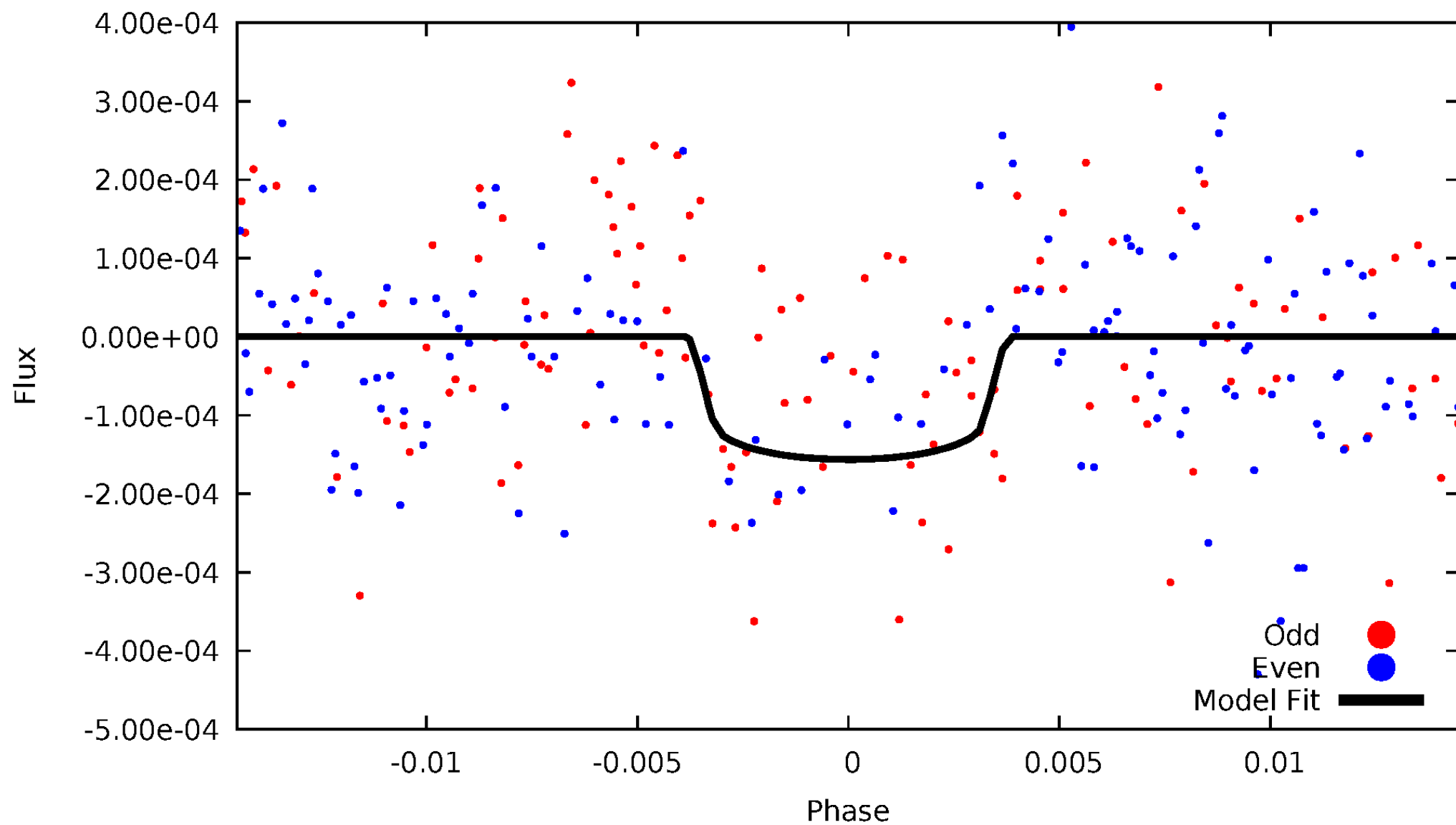


TCE 003356799-03



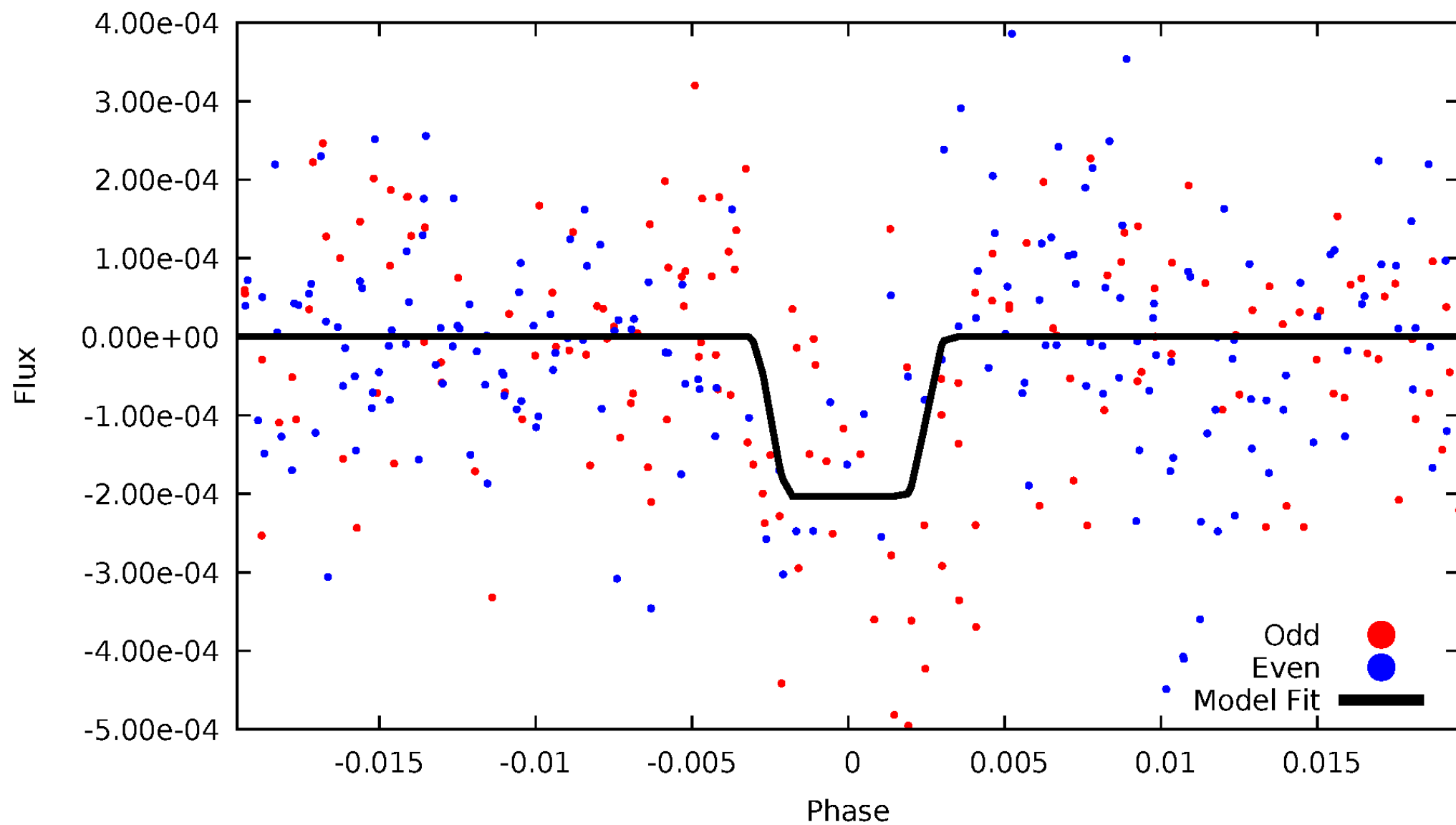
DV Odd/Even

TCE 003356799-03



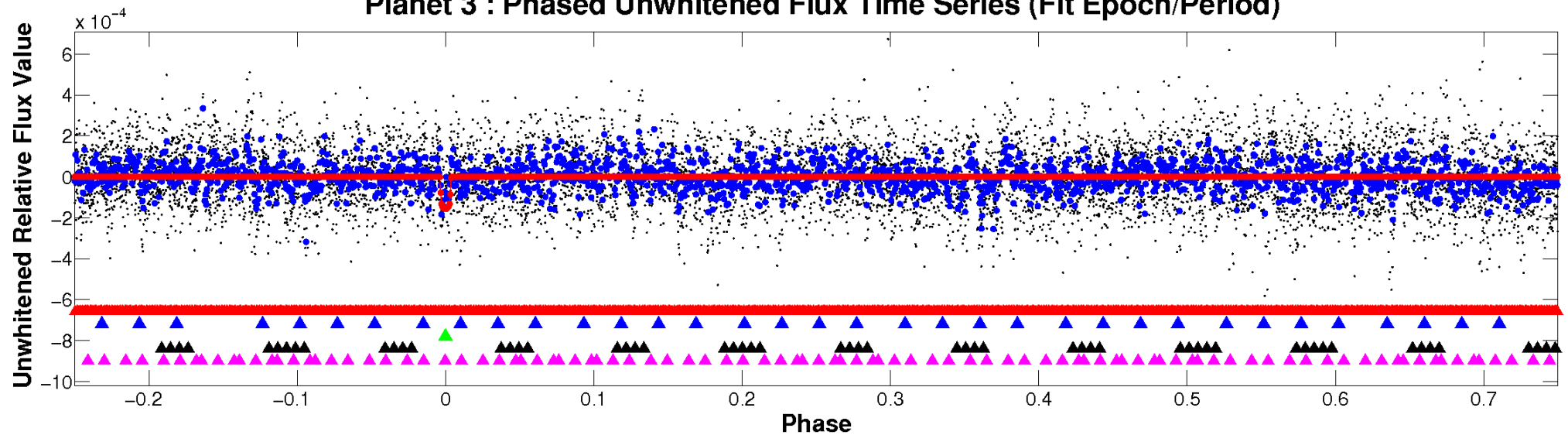
ALT Odd/Even

TCE 003356799-03

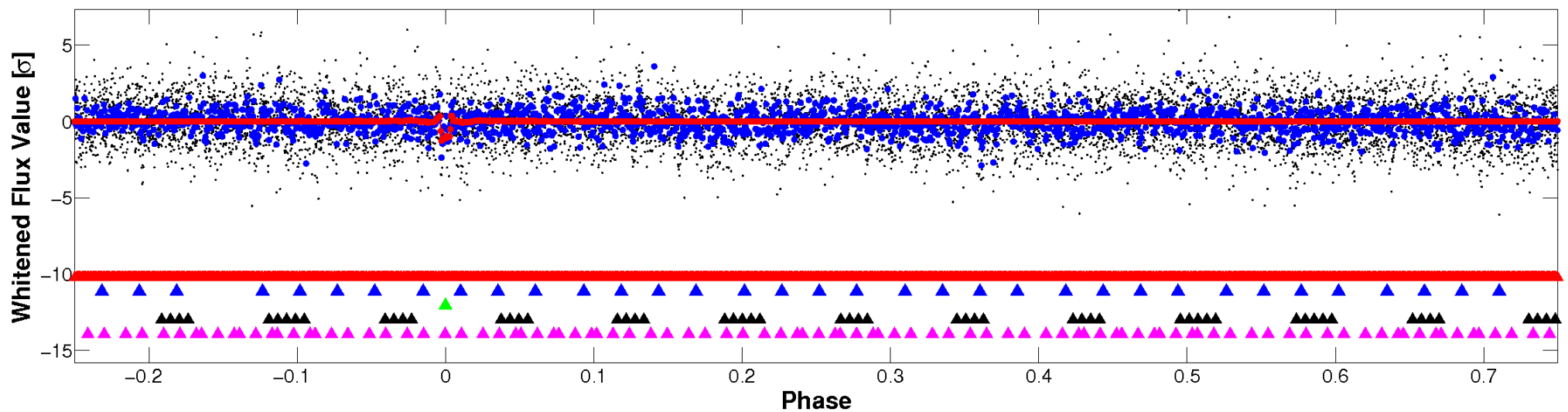


Non-Whitened Vs. Whitened Light Curve

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

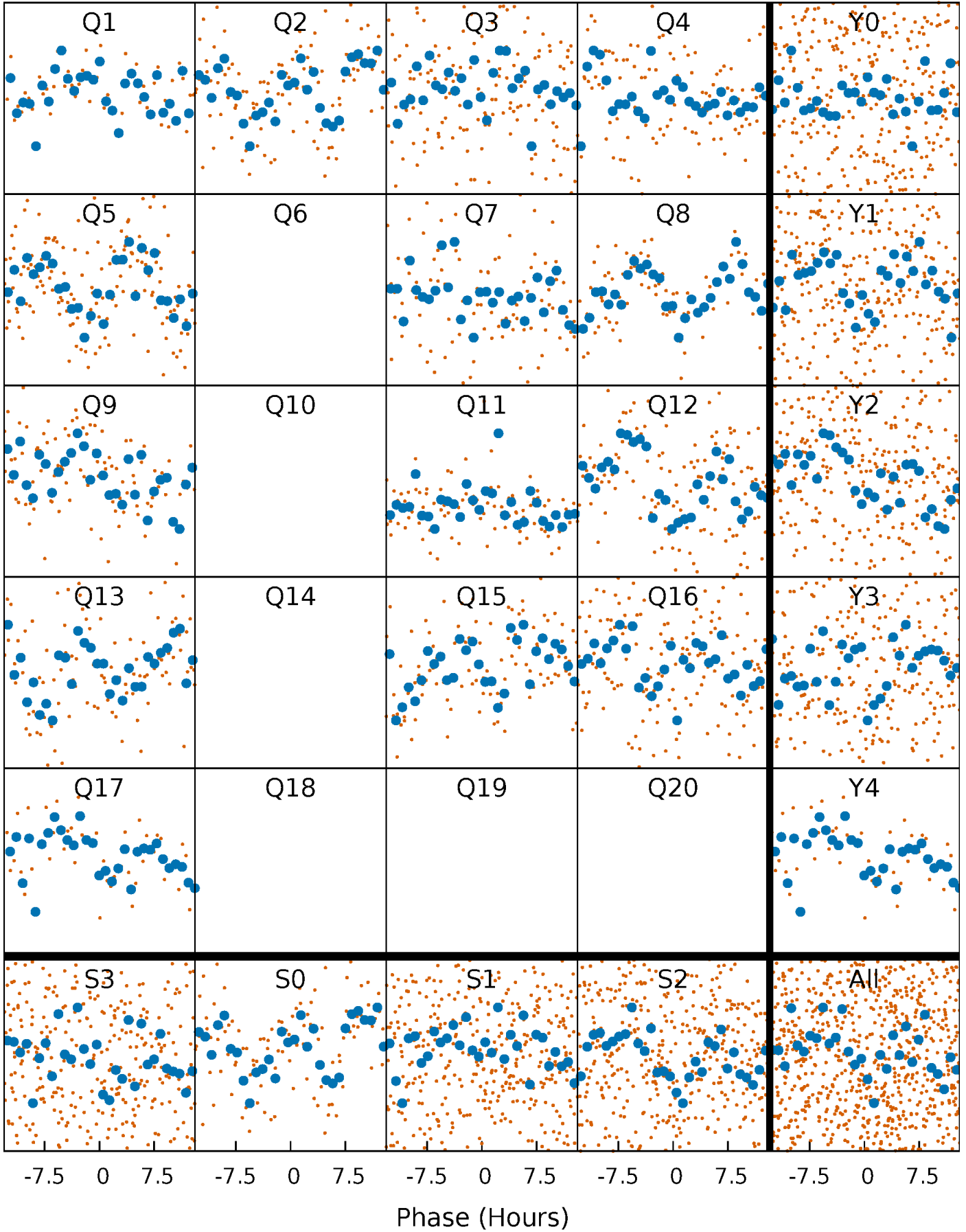


Planet 3 : Phased Whitened Flux Time Series (Fit Epoch/Period)



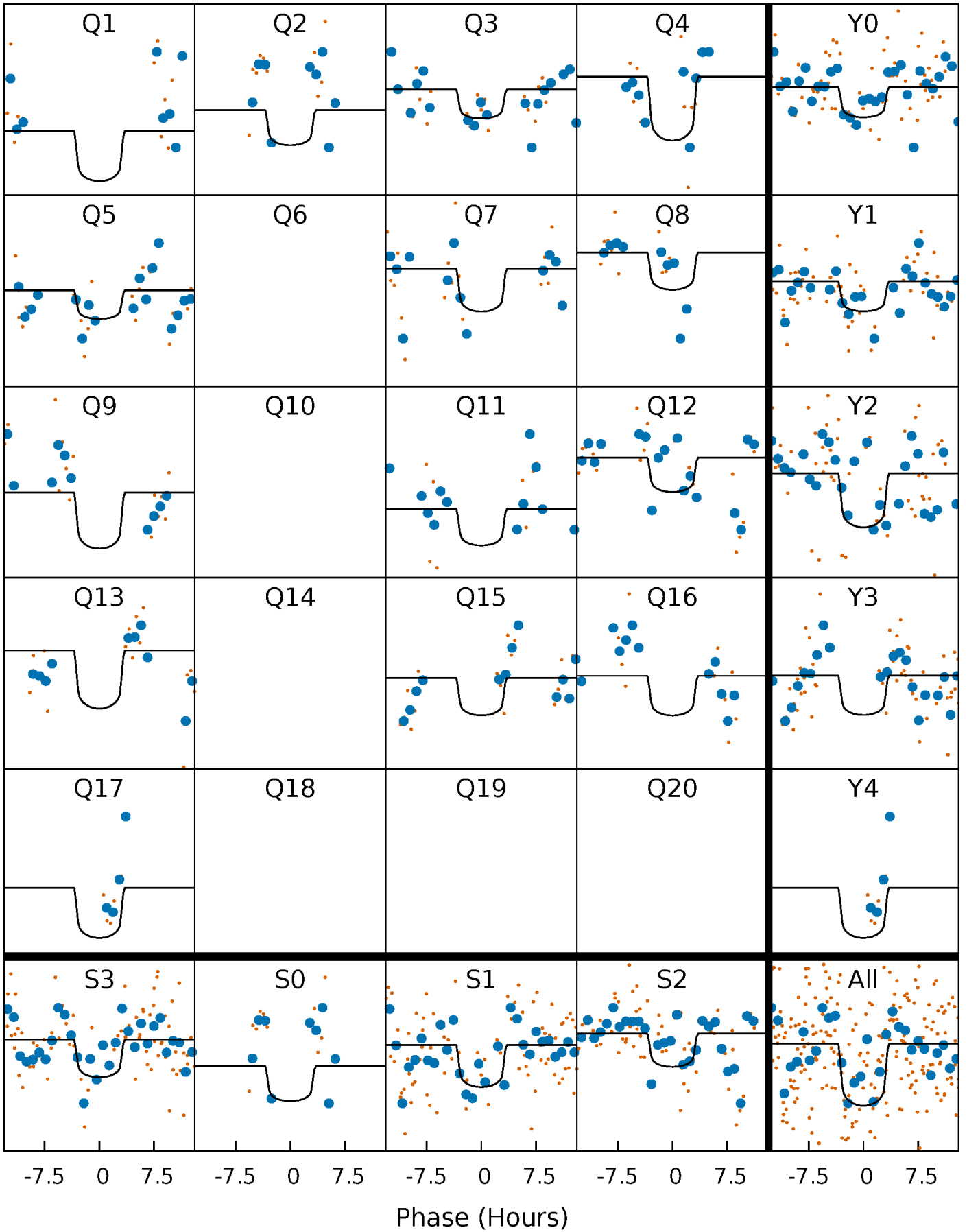
PDC Quarter-Phased Transit Curves

TCE 003356799-03 $P = 37.614487$ Days $T_0 = 159.133583$ (BKJD)



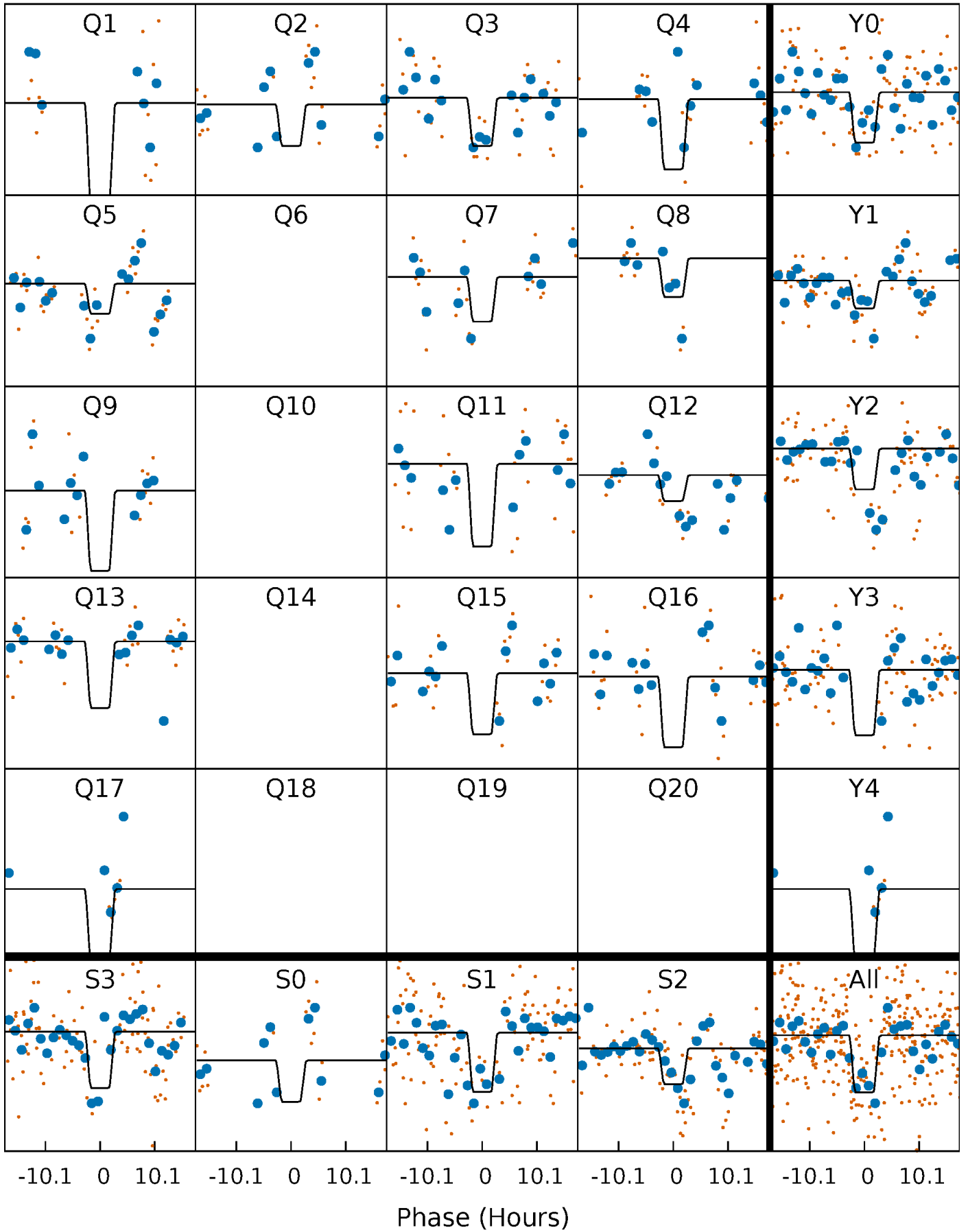
DV Quarter-Phased Transit Curves

TCE 003356799-03 P= 37.614487 Days $T_0=159.133583$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

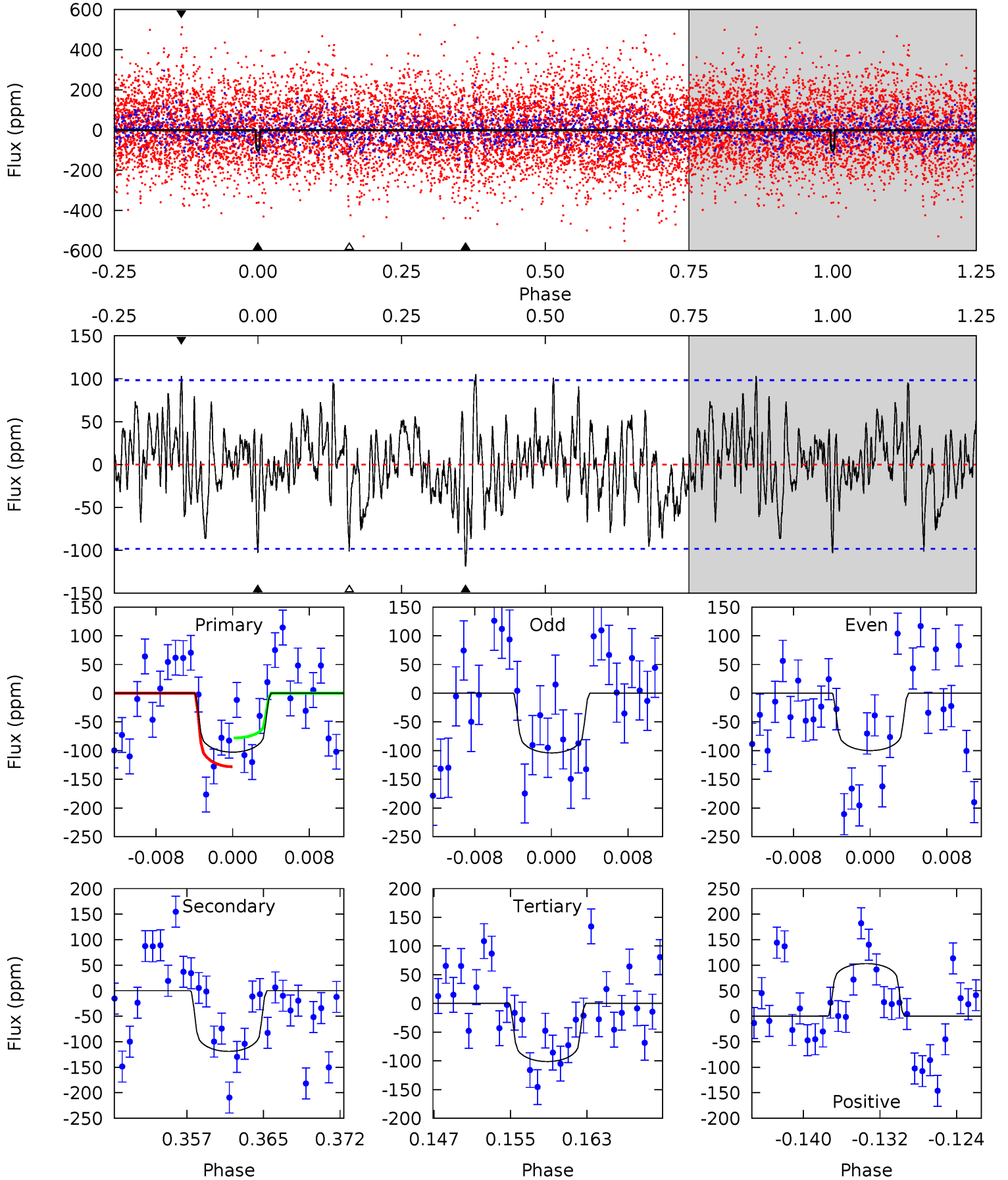
TCE 003356799-03 P= 37.613680 Days $T_0=159.137254$ (BKJD)



DV Model-Shift Uniqueness Test

003356799-03, P = 37.614487 Days, E = 121.519096 Days

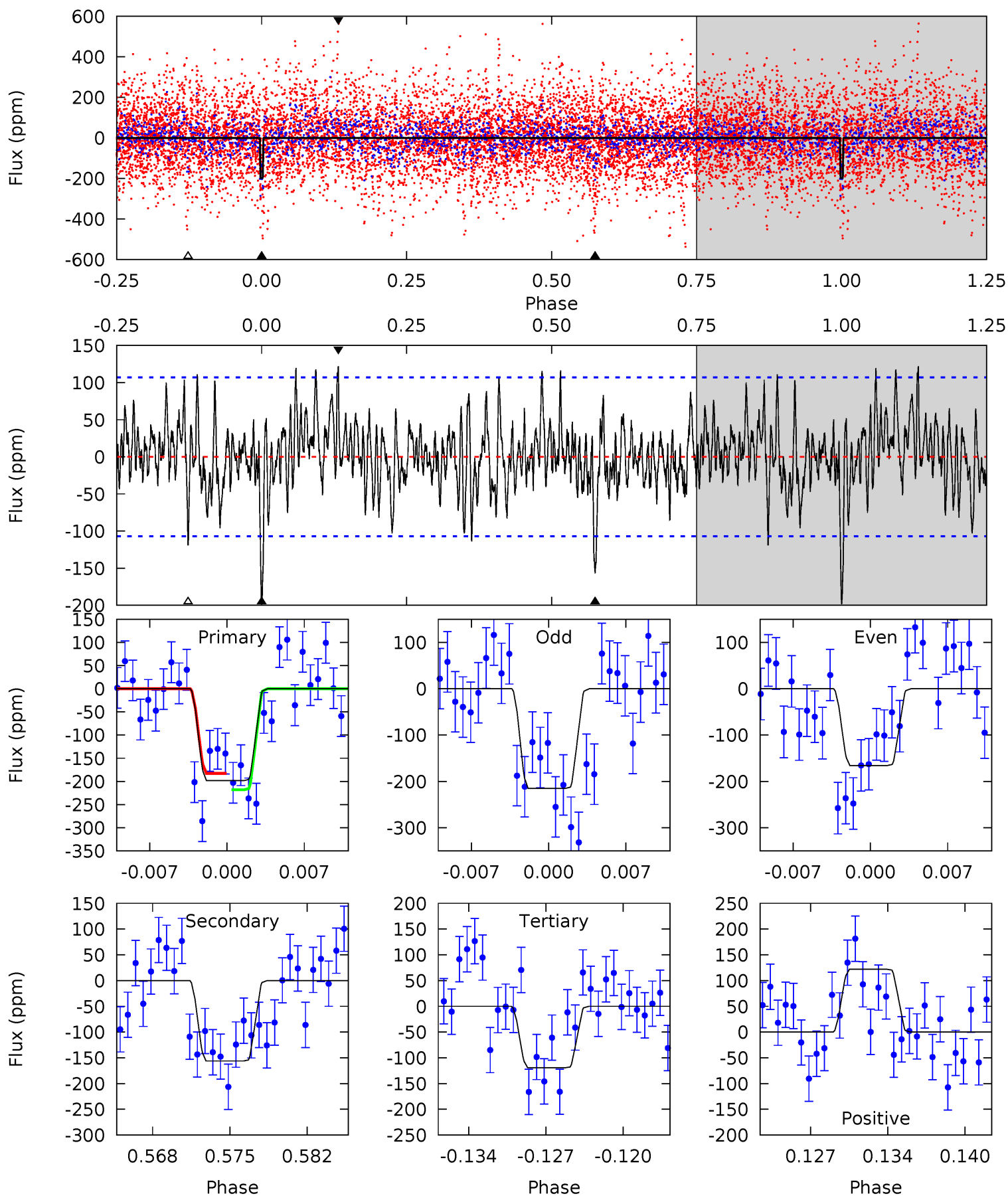
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
5.30	6.14	5.23	5.33	5.07	2.66	1.80	0.08	-0.02	0.91	0.81	0.10	0.68	0.47	1.29



Alt Model-Shift Uniqueness Test

003356799-03, P = 37.613680 Days, E = 121.523574 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
9.46	7.45	5.69	5.82	5.10	2.71	1.76	3.77	3.64	1.76	1.63	1.12	1.08	0.38	0.85



Stellar Parameters For KIC 003356799

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	7854^{+217}_{-326}	$3.669^{+0.448}_{-0.084}$	$-0.120^{+0.200}_{-0.300}$	$3.462^{+0.720}_{-1.681}$	$2.039^{+0.343}_{-0.514}$	$0.069^{+0.321}_{-0.025}$
	+3%/-4%	+12%/-2%	+167%/-250%	+21%/-49%	+17%/-25%	+464%/-36%
Source	KIC0	KIC0	KIC0	DSEP		

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

Secondary Eclipse Parameters for KIC 003356799-03 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-119 ± 19	$4.29^{+2.39}_{-1.86}$	1639^{+118}_{-174}	7049^{+2785}_{-1219}	272^{+555}_{-156}
Alt.	-156 ± 21	$4.57^{+2.35}_{-1.93}$	1631^{+129}_{-209}	7310^{+2642}_{-1240}	306^{+589}_{-163}

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

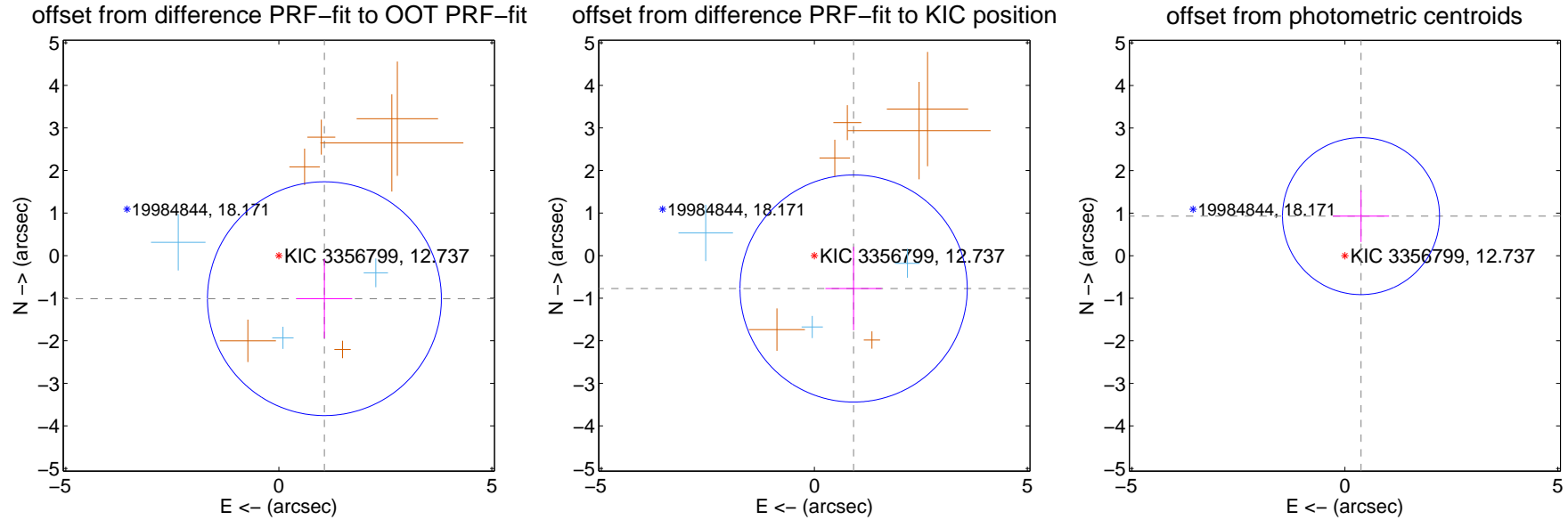
DV Centroid Data

Supplemental centroid analysis for 003356799-03. Kepler magnitude: 12.74. Transit SNR 7.34

There are 3 quarters with good PRF difference image offsets

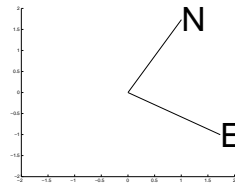
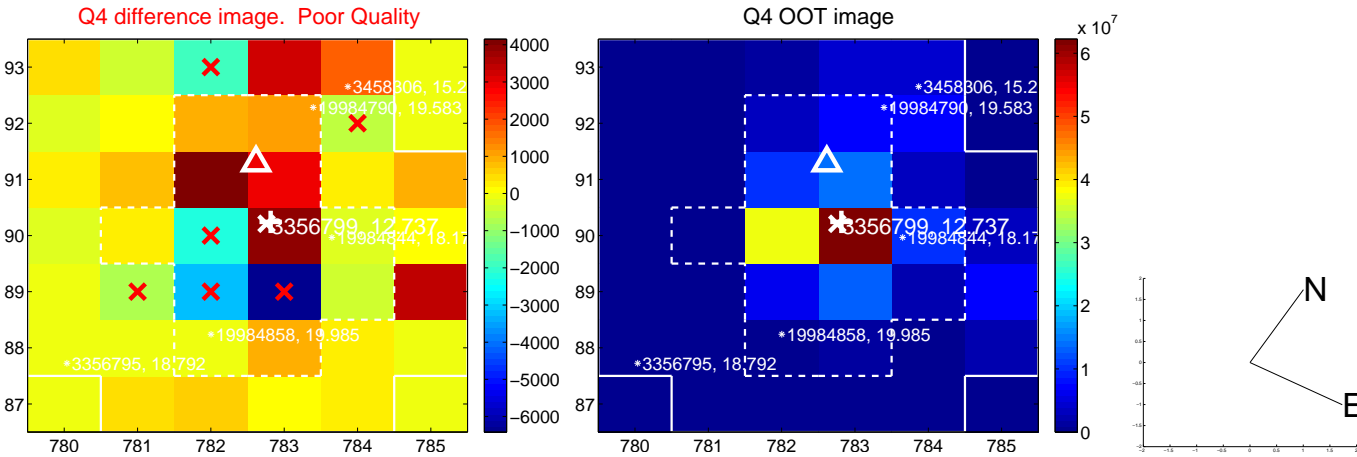
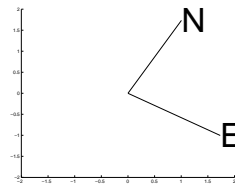
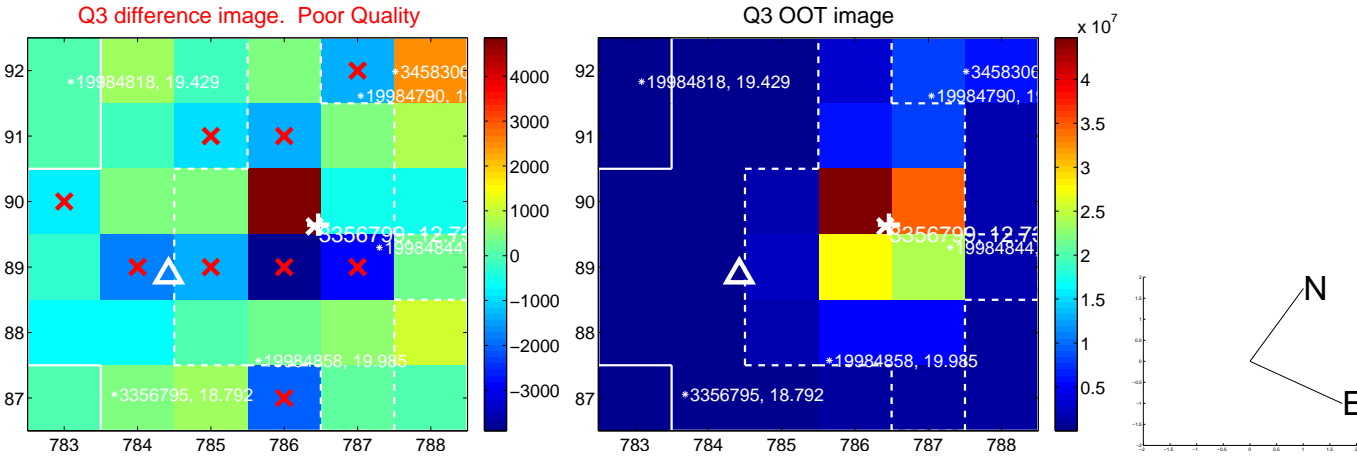
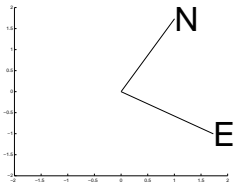
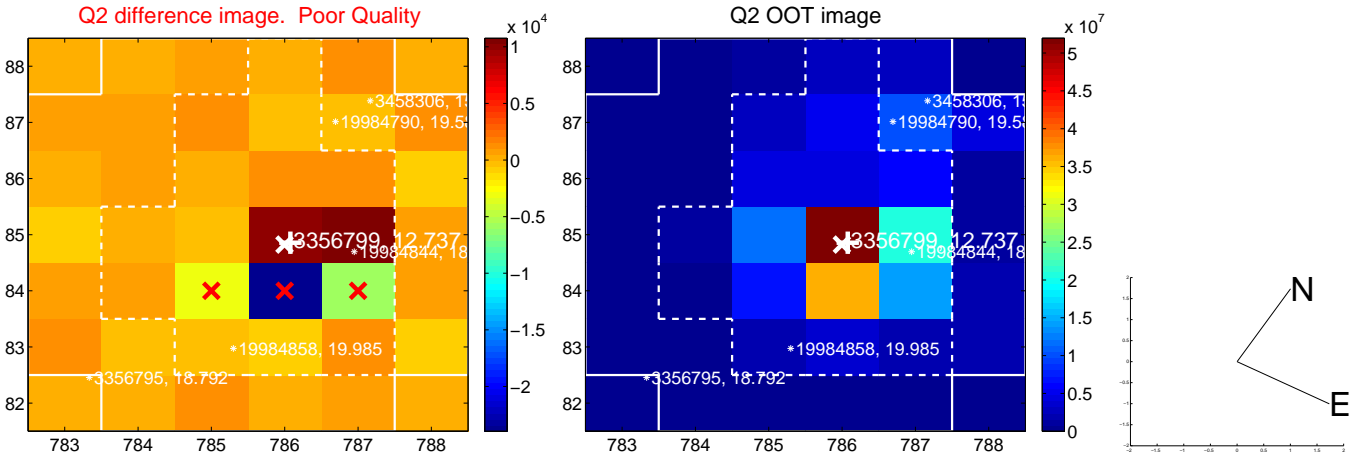
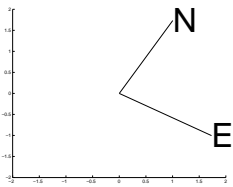
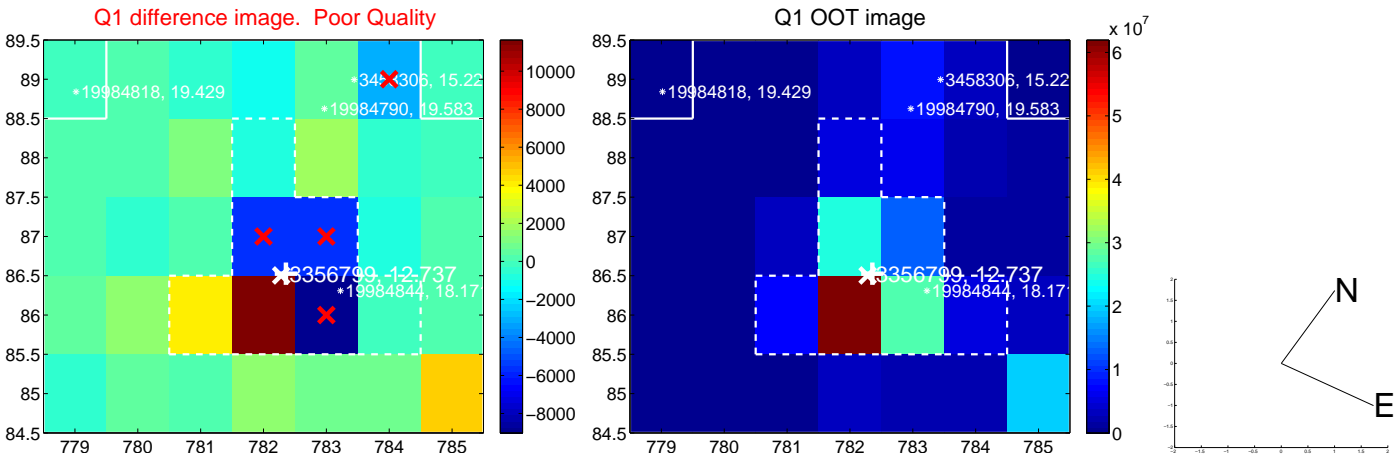
The direct PRF centroid is offset from the target star catalog position by about 0.41 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	1.472 ± 0.915	1.61	-1.070 ± 0.654	-1.011 ± 0.930
PRF-fit source offset from KIC position	1.203 ± 0.889	1.35	-0.922 ± 0.661	-0.772 ± 0.979
photometric centroid source offset	1.00 ± 0.61	1.63	-0.38 ± 0.66	0.93 ± 0.61

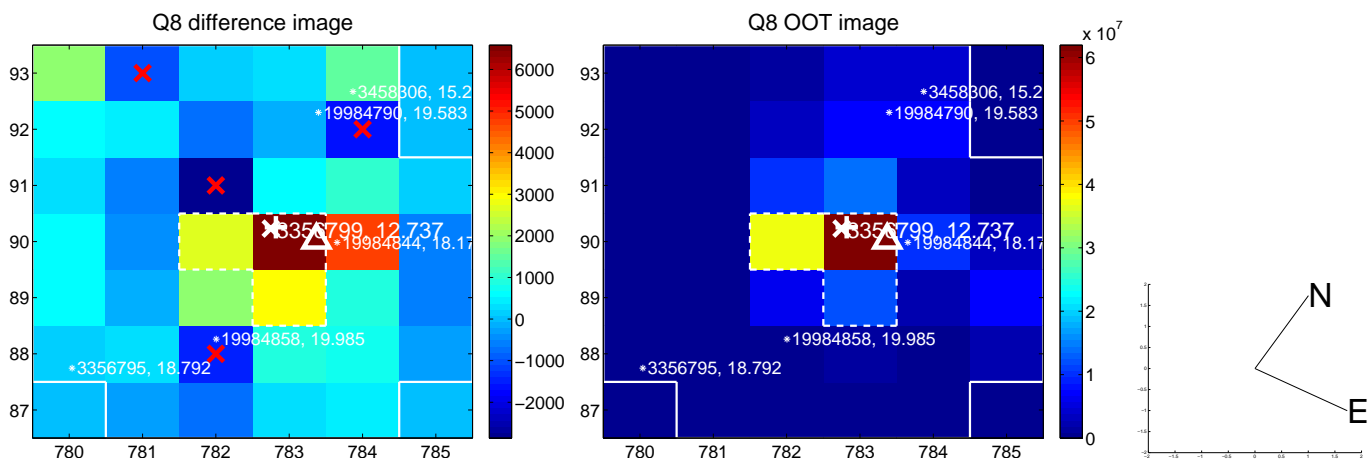
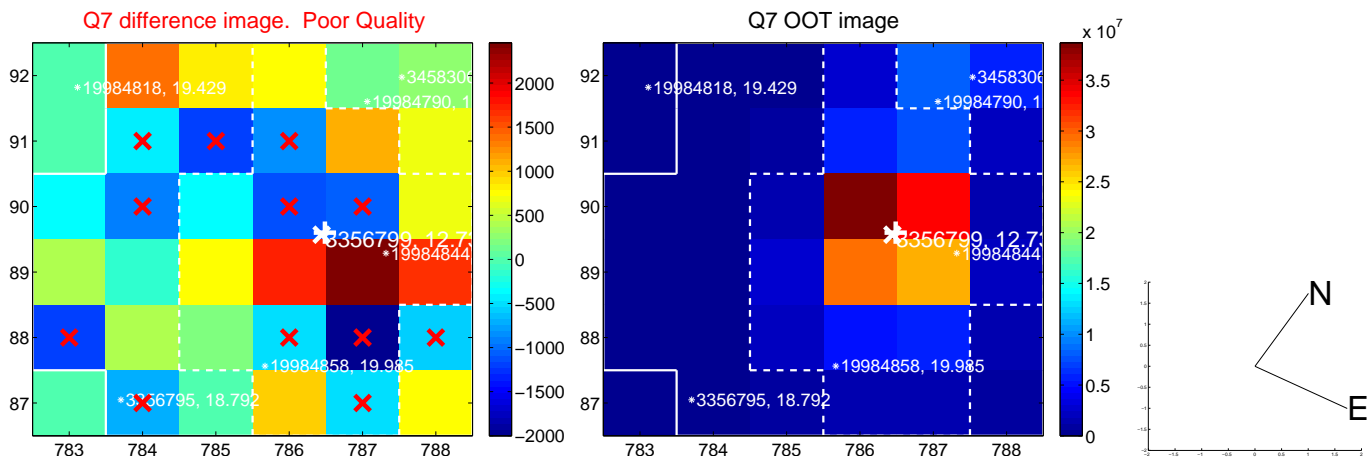
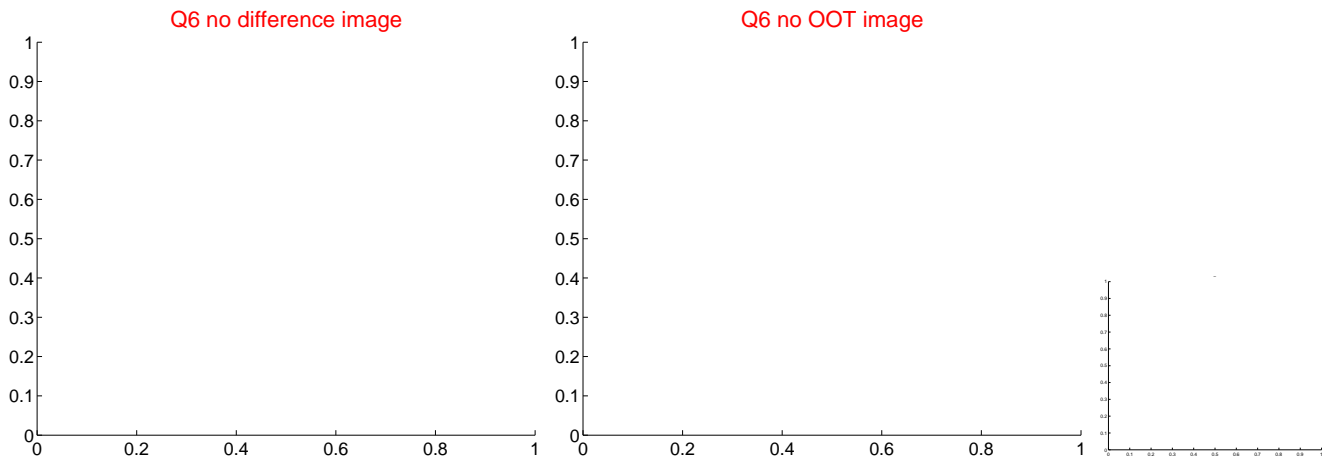
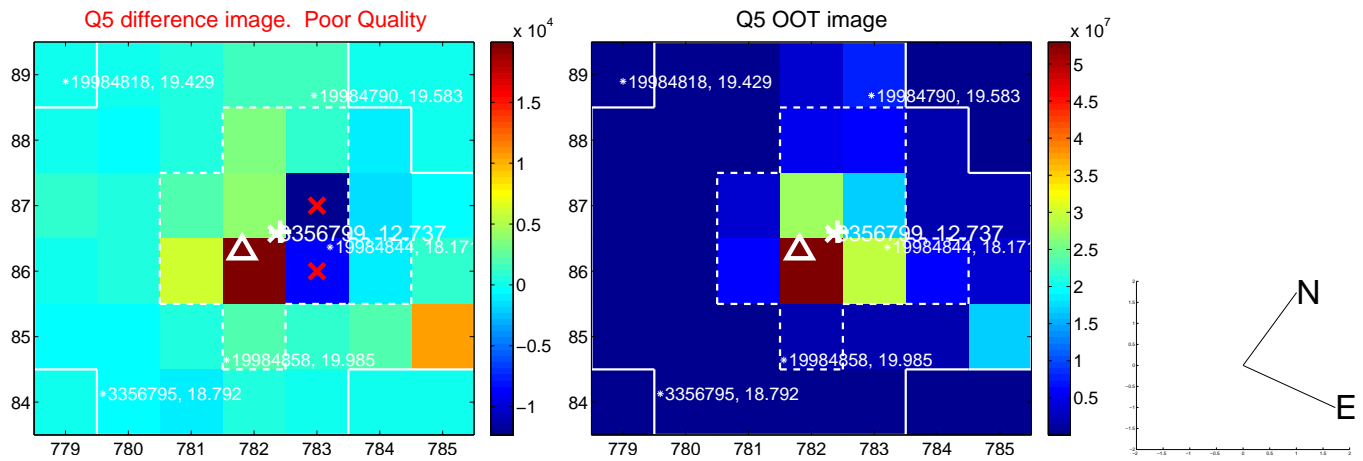


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

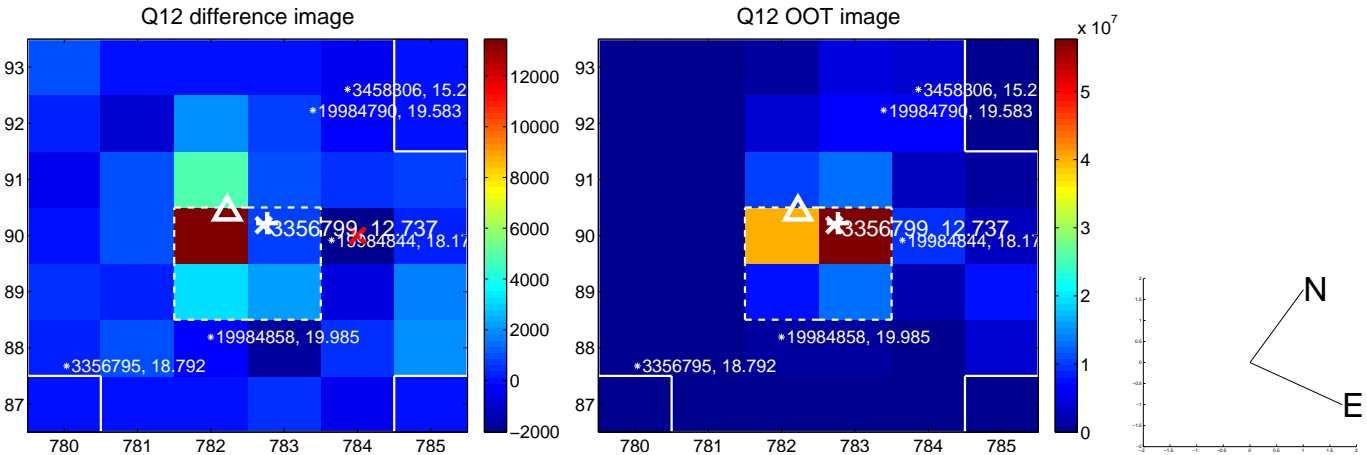
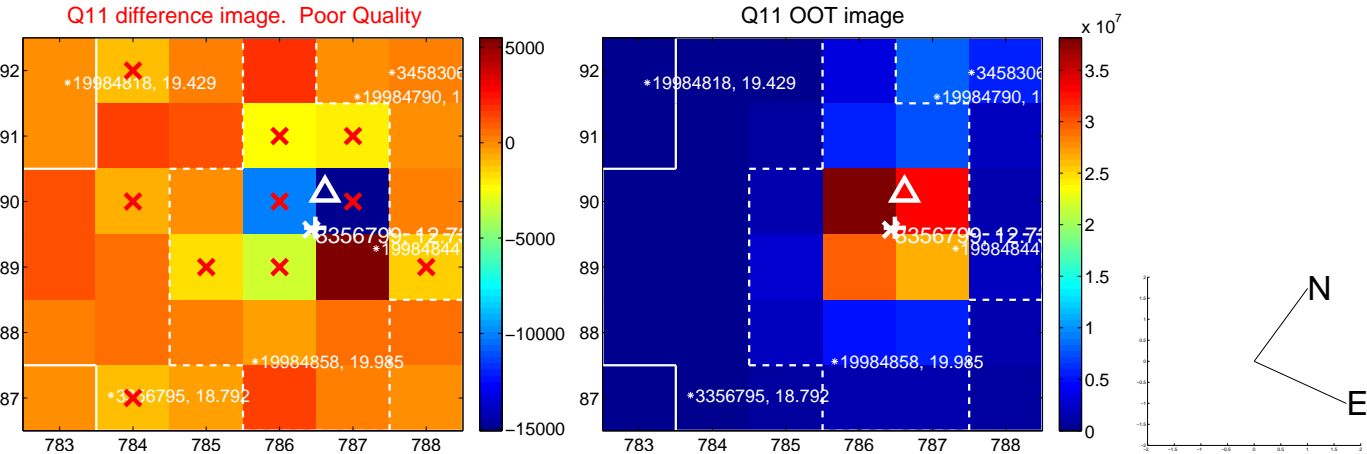
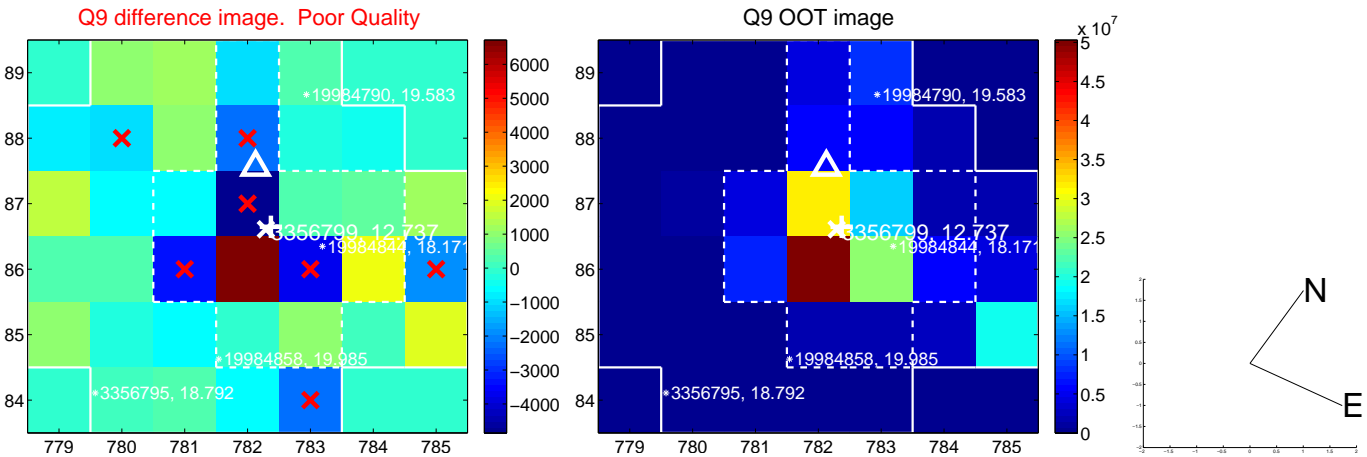
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



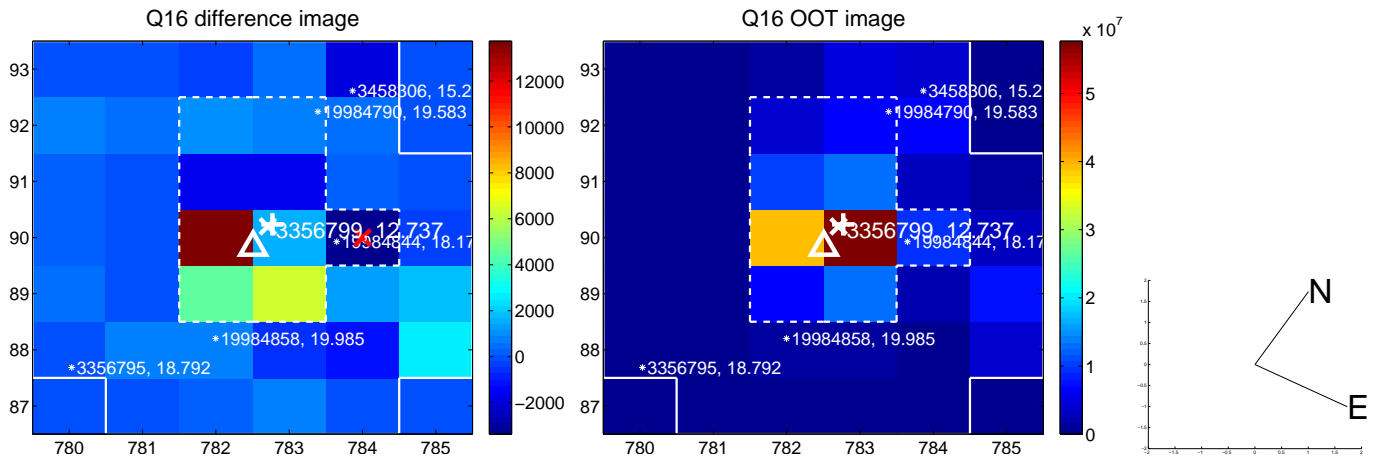
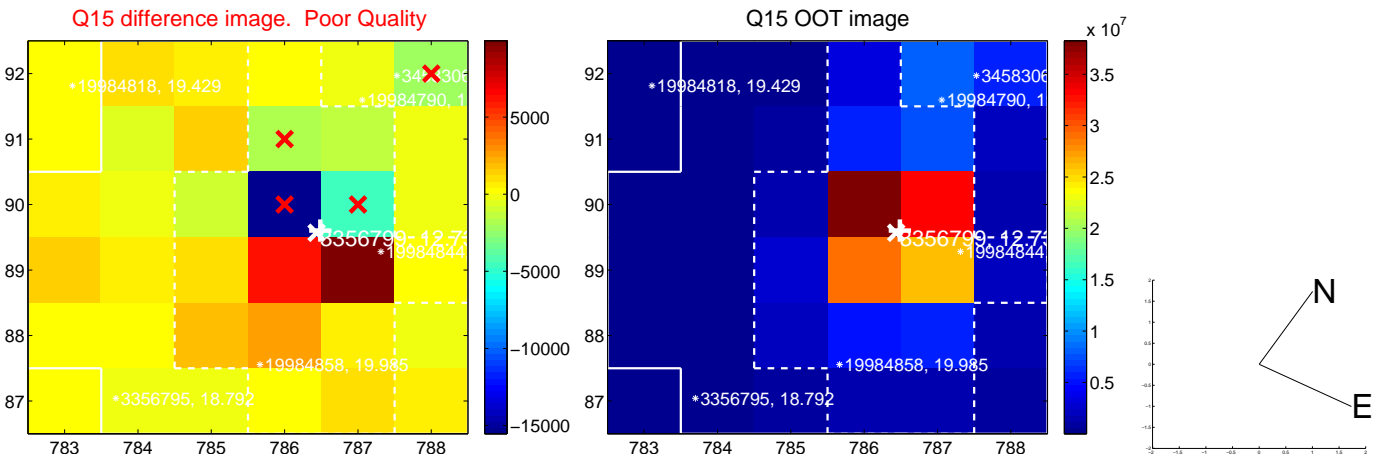
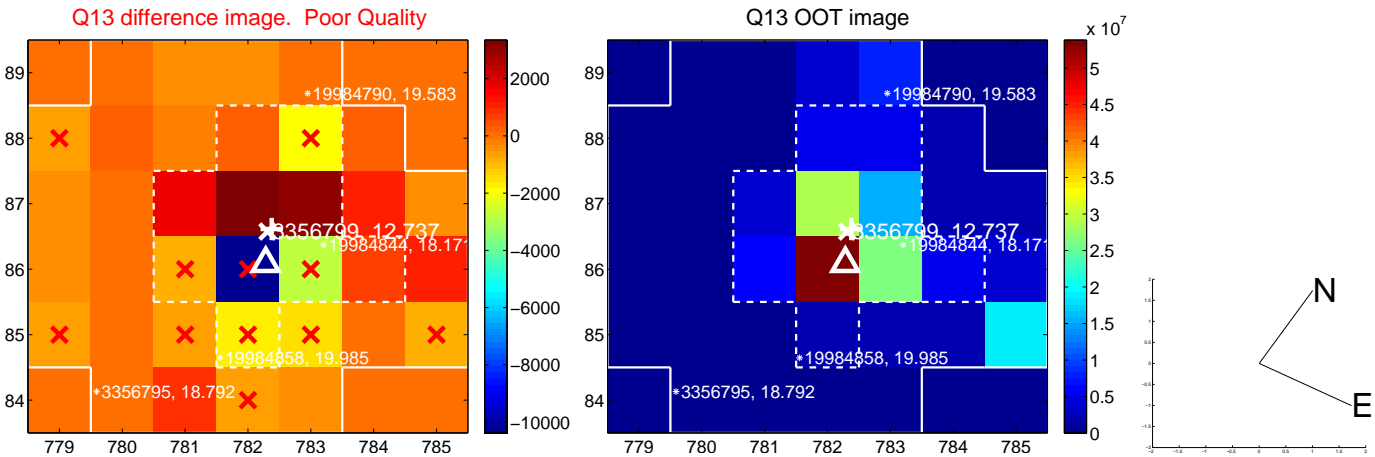
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



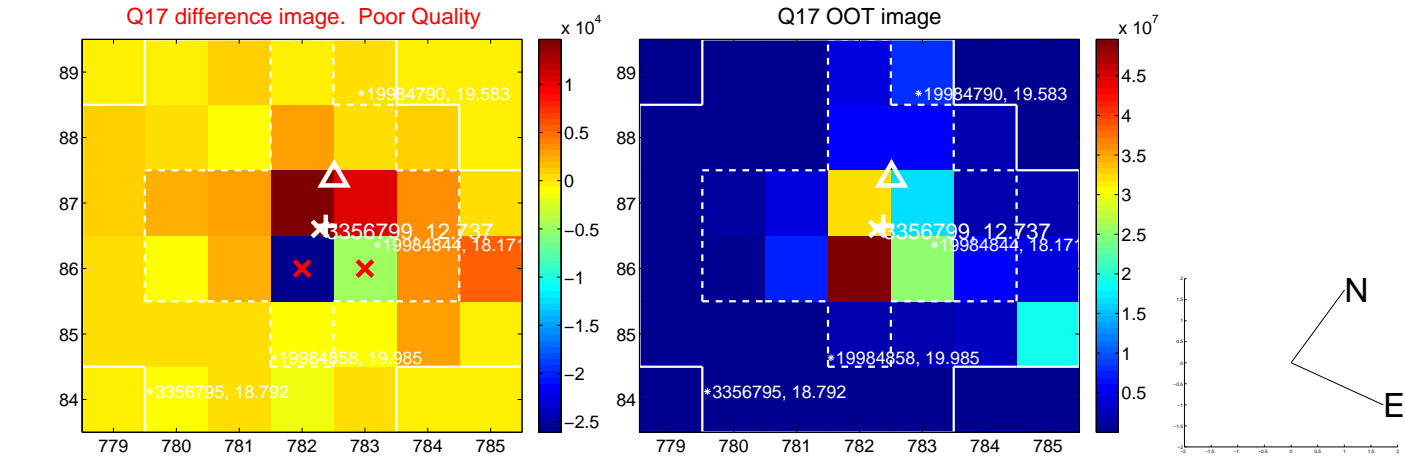
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



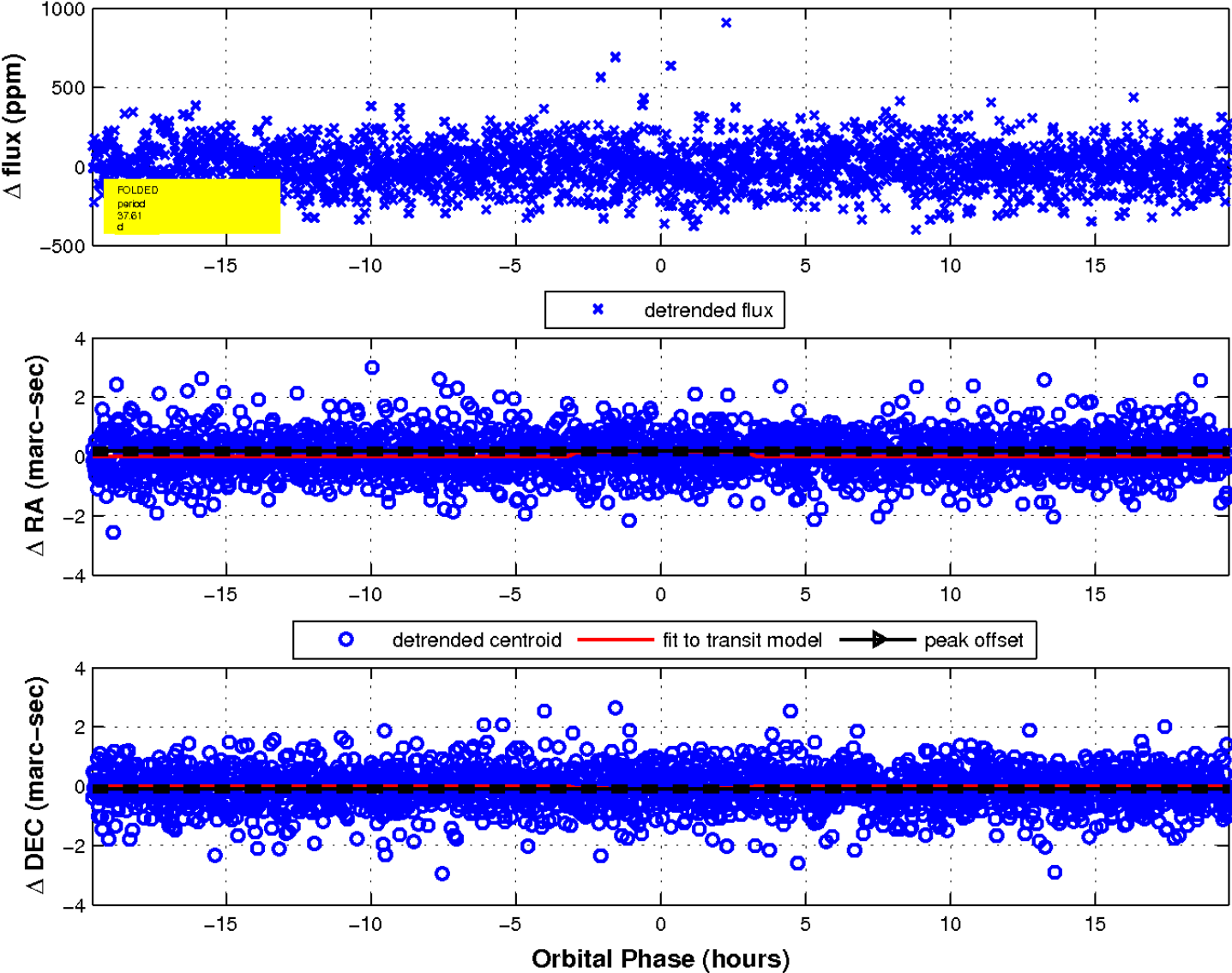
white ×: KIC target position; +: OOT centroid; △: difference centroid. red ×: large negative pixel value.



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

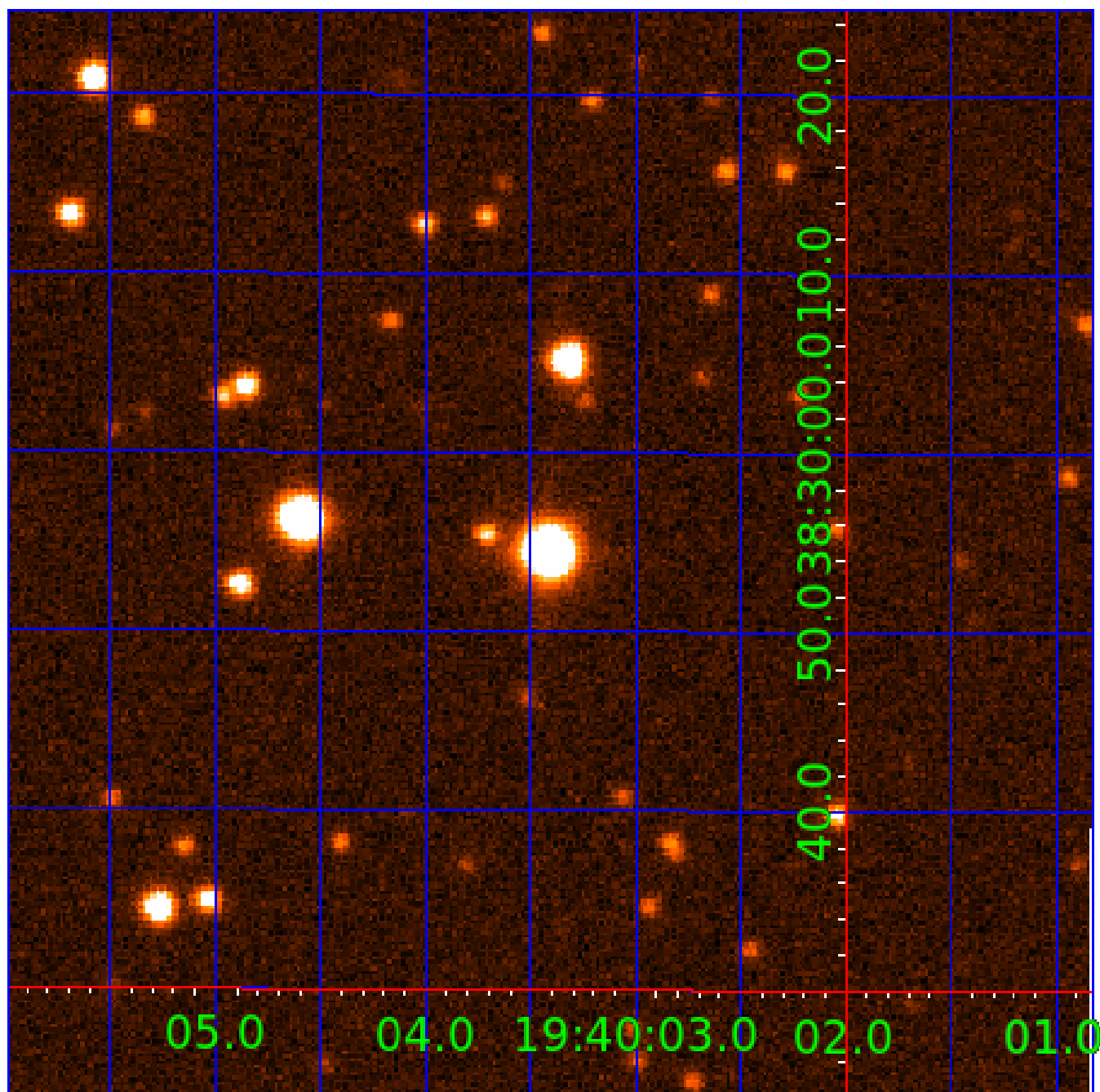


fluxWeightedCentroids, Planet 3 of 5



UKIRT Image

Declination



KIC 003356799

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})
003356799-01	OBS	No	0.882678	131.711139	9.3	5.705	7.3	5.8	3.46	7854	1.09	78296.03
003356799-02	OBS	No	41.688520	157.339455	325.4	2.191	8.9	9.1	3.46	7854	12.05	458.62
003356799-03	OBS	No	37.614487	159.133583	156.4	6.537	9.1	7.3	3.46	7854	4.88	526.02
003356799-04	OBS	No	26.058035	140.155469	215.1	1.449	8.6	8.5	3.46	7854	5.19	858.13
003356799-05	OBS	No	15.237902	137.578100	160.6	1.320	8.3	9.0	3.46	7854	4.72	1754.86

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
003356799-01	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT
003356799-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT
003356799-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_NONUNIQ_ALT
003356799-04	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_FEW_DIFFS
003356799-05	OBS	FP	0.00	1	0	0	0	TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT

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

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

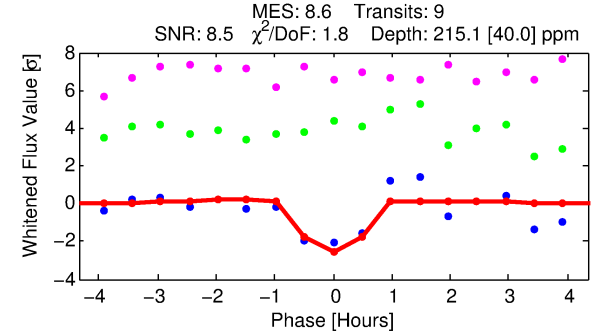
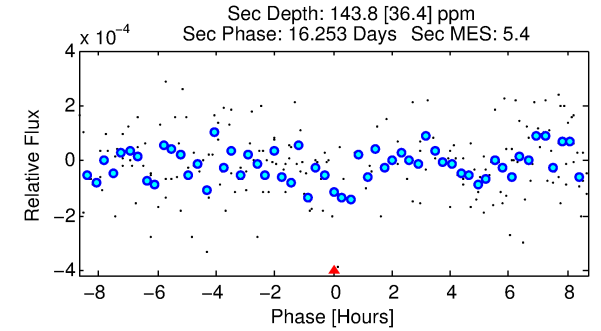
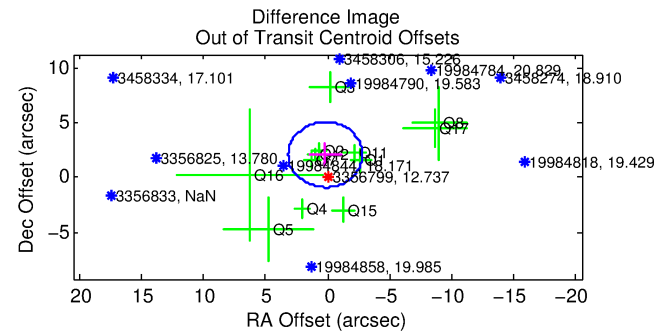
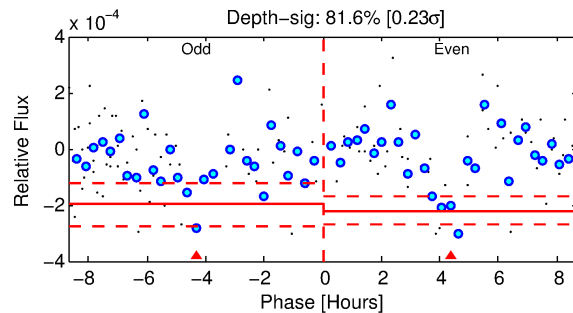
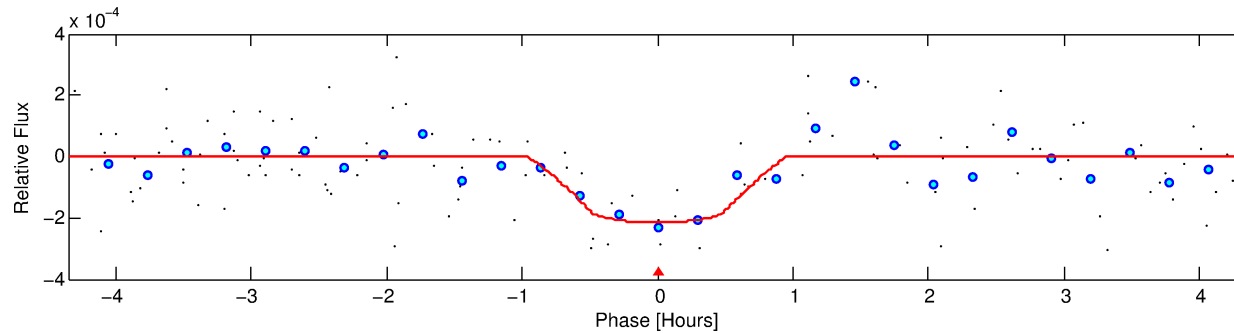
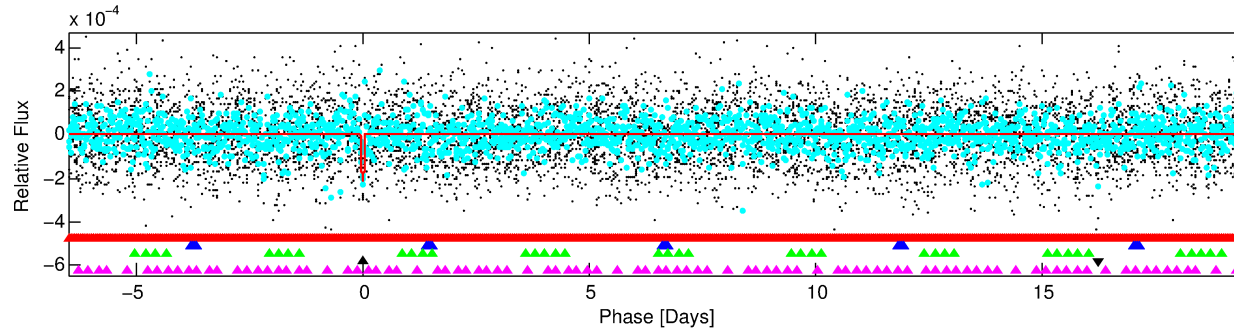
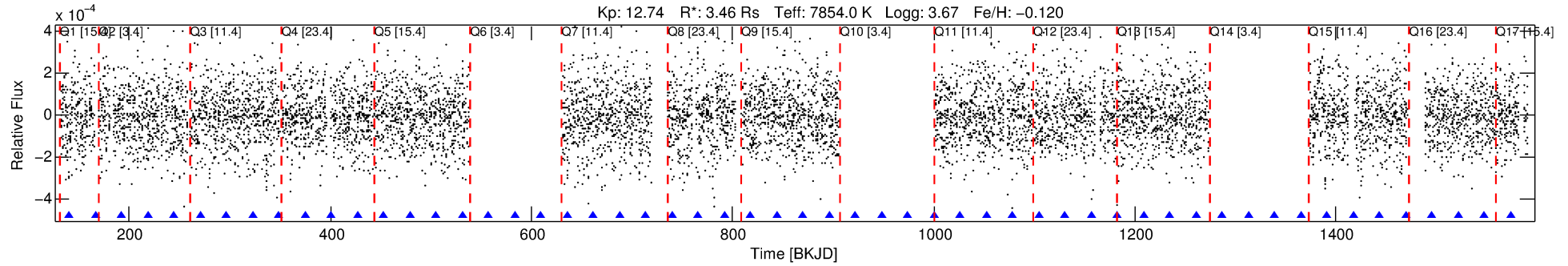
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 003356799-04

No Significant Match Found

DV One-Page Summary

KIC: 3356799 Candidate: 4 of 5 Period: 26.058 d



DV Fit Results:

Period = 26.05804 [0.00025] d
Epoch = 140.1555 [0.0080] BKJD
Rp/R* = 0.0137 [0.0249]
a/R* = 132.23 [1327.96]
b = 0.32 [28.37]
Seff = 858.13 [667.63]
Teq = 1380 [268] K
Rp = 5.19 [9.75] Re
a = 0.2182 [0.1030] AU
Ag = 139.88 [519.90] [0.27σ]
Teffp = 7338 [6681] K [0.89σ]

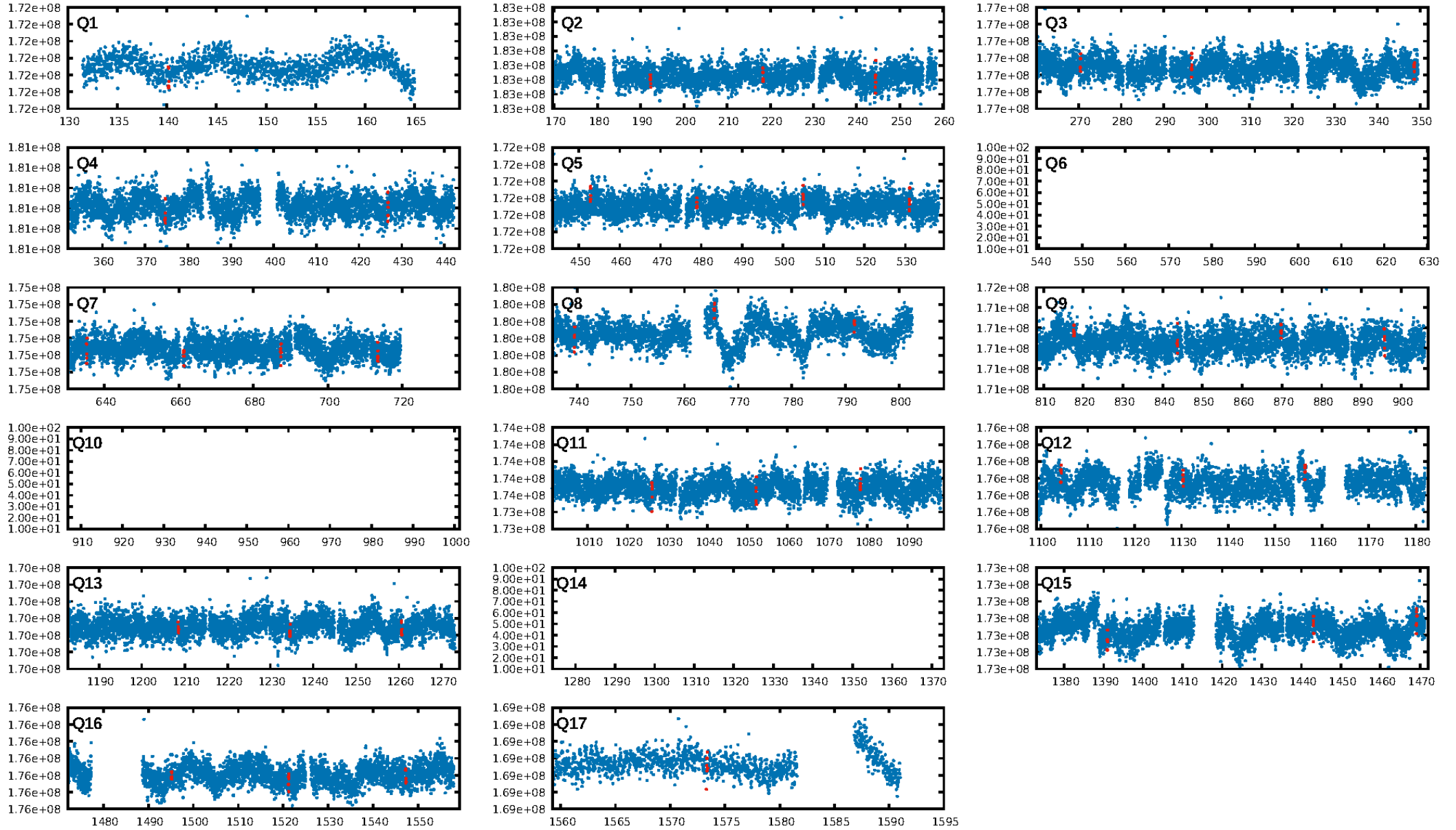
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [132.48σ]
LongPeriod-sig: 100.0% [41.42σ]
ModelChiSquare2-sig: 17.3%
ModelChiSquareGof-sig: 99.1%
Bootstrap-pfa: 1.39e-08
RollingBand-fgt: 1.00 [8/8]
GhostDiagnostic-chr: -0.5307
Centroid-sig: 58.6%
Centroid-so: 0.468 arcsec [0.66σ]
OotOffset-rm: 2.107 arcsec [2.12σ]
OotOffset-st: 1/4/4/3 [12]
KicOffset-rm: 2.327 arcsec [2.46σ]
KicOffset-st: 1/4/4/3 [12]
DiffImageQuality-fgm: 0.17 [2/12]
DiffImageOverlap-fno: 0.29 [4/14]

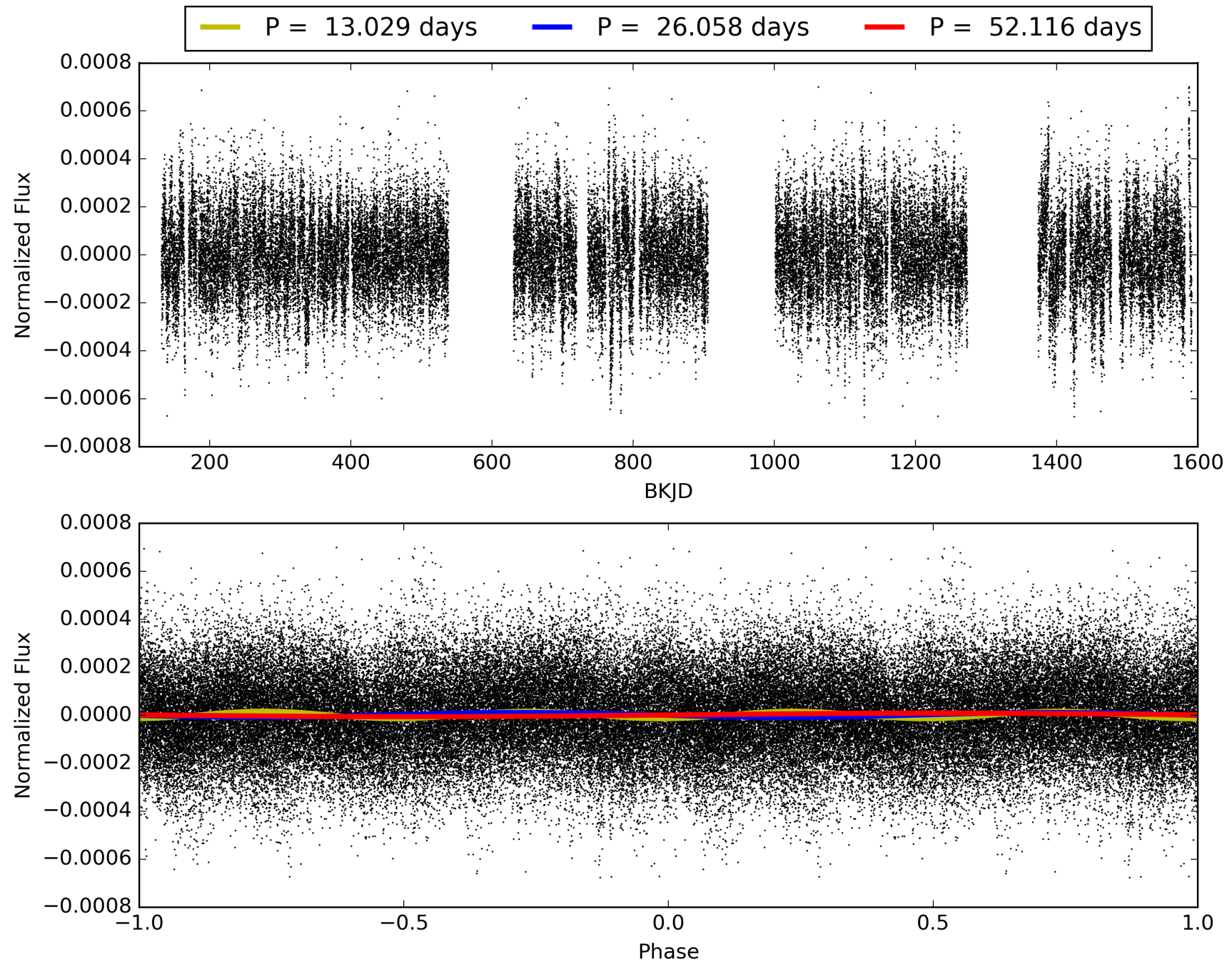
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 31-Jan-2016 10:17:11 Z

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

TCE 003356799-04, PDC Light Curves

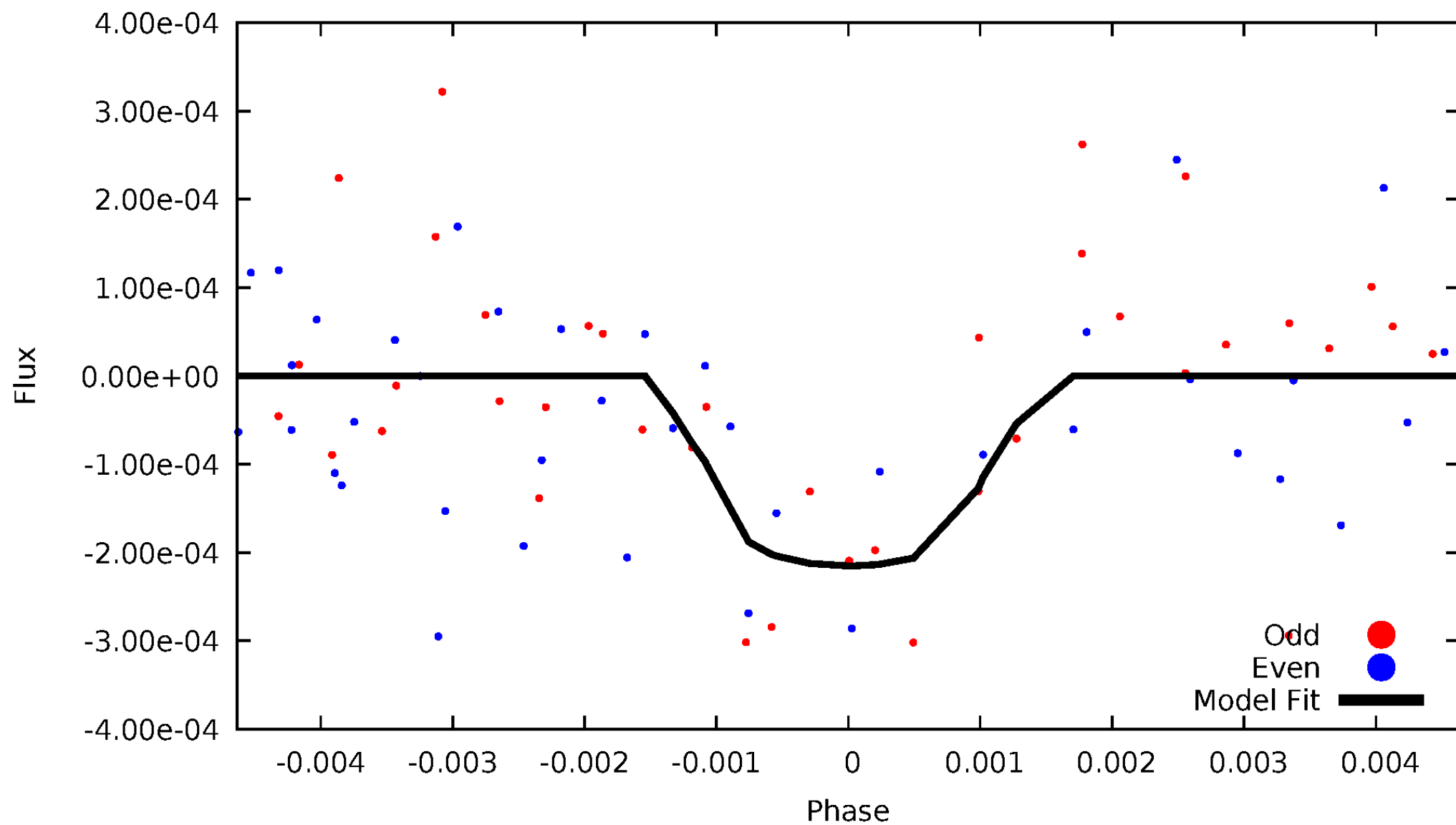


TCE 003356799-04



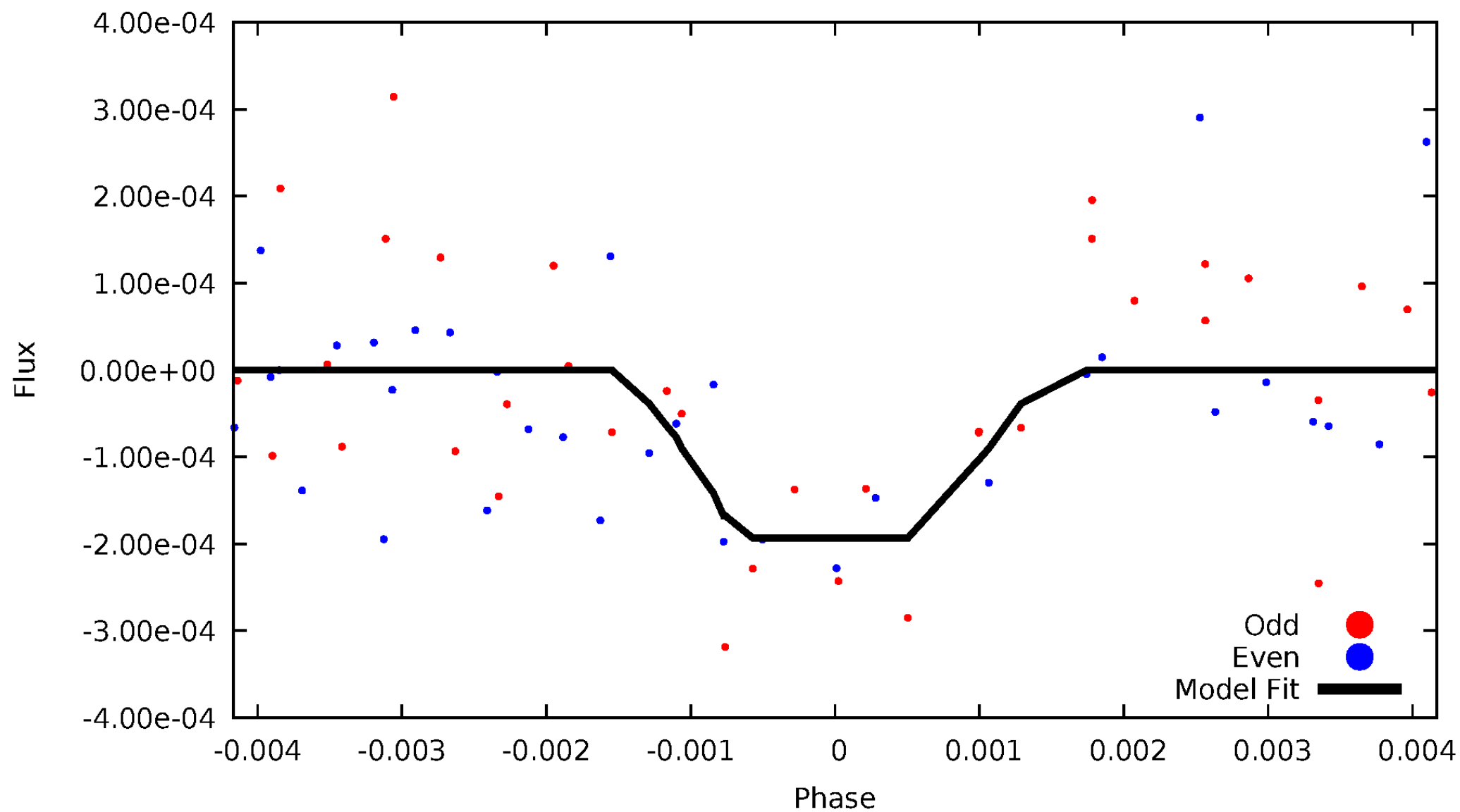
DV Odd/Even

TCE 003356799-04



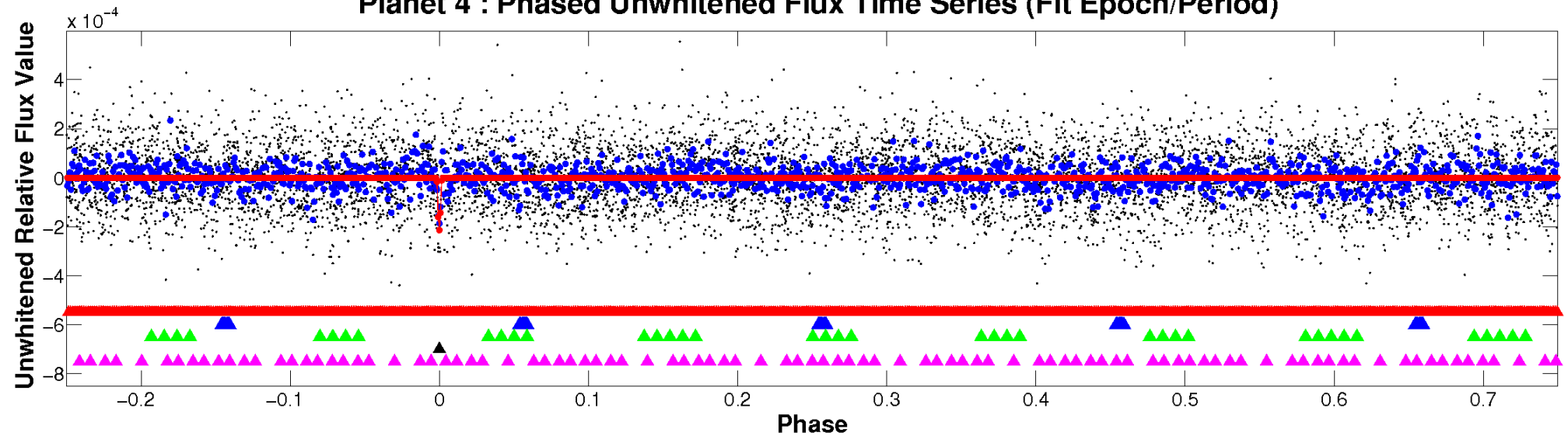
ALT Odd/Even

TCE 003356799-04

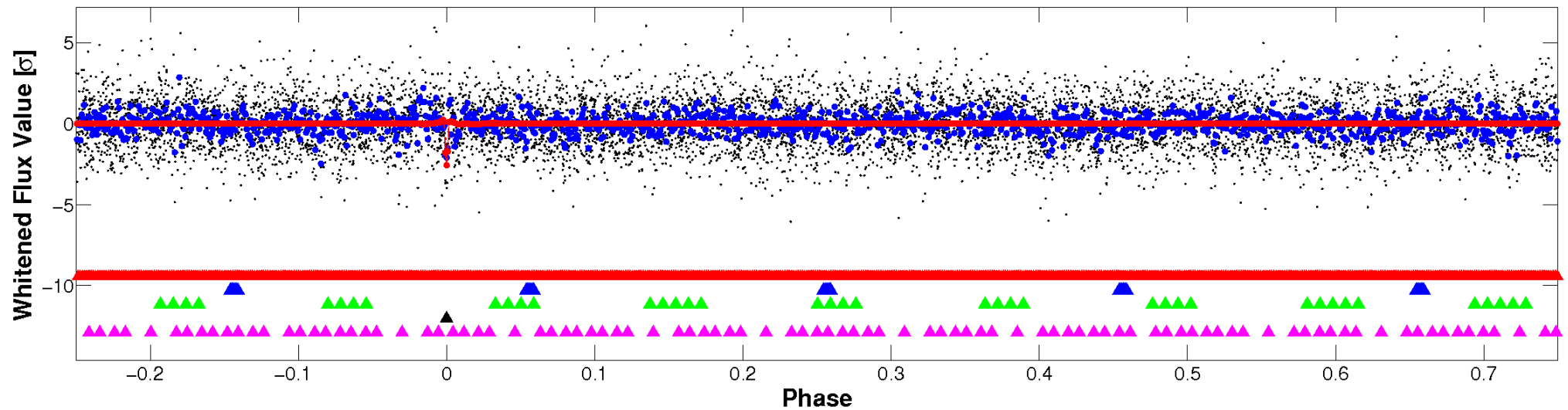


Non-Whitened Vs. Whitened Light Curve

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

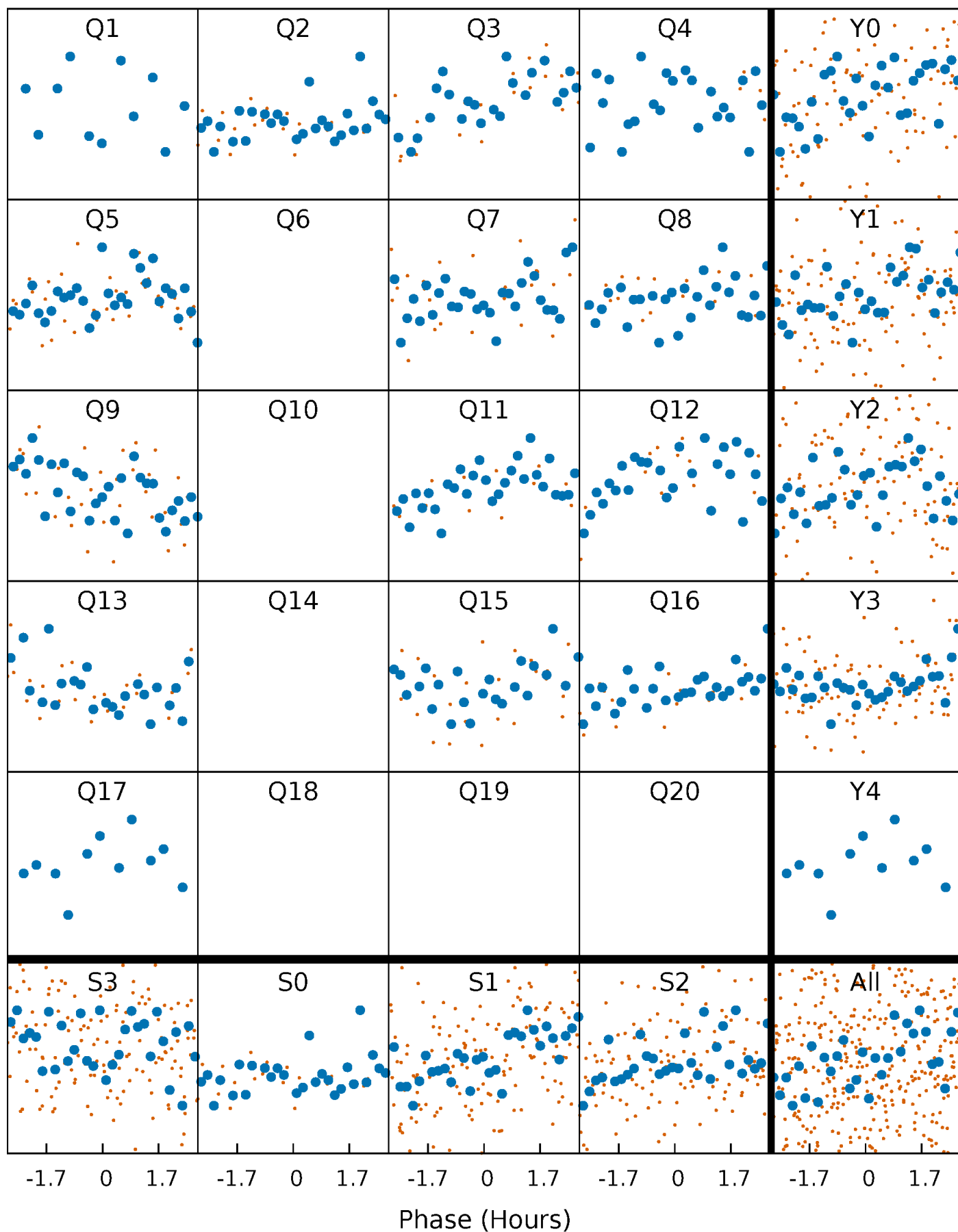


Planet 4 : Phased Whitened Flux Time Series (Fit Epoch/Period)



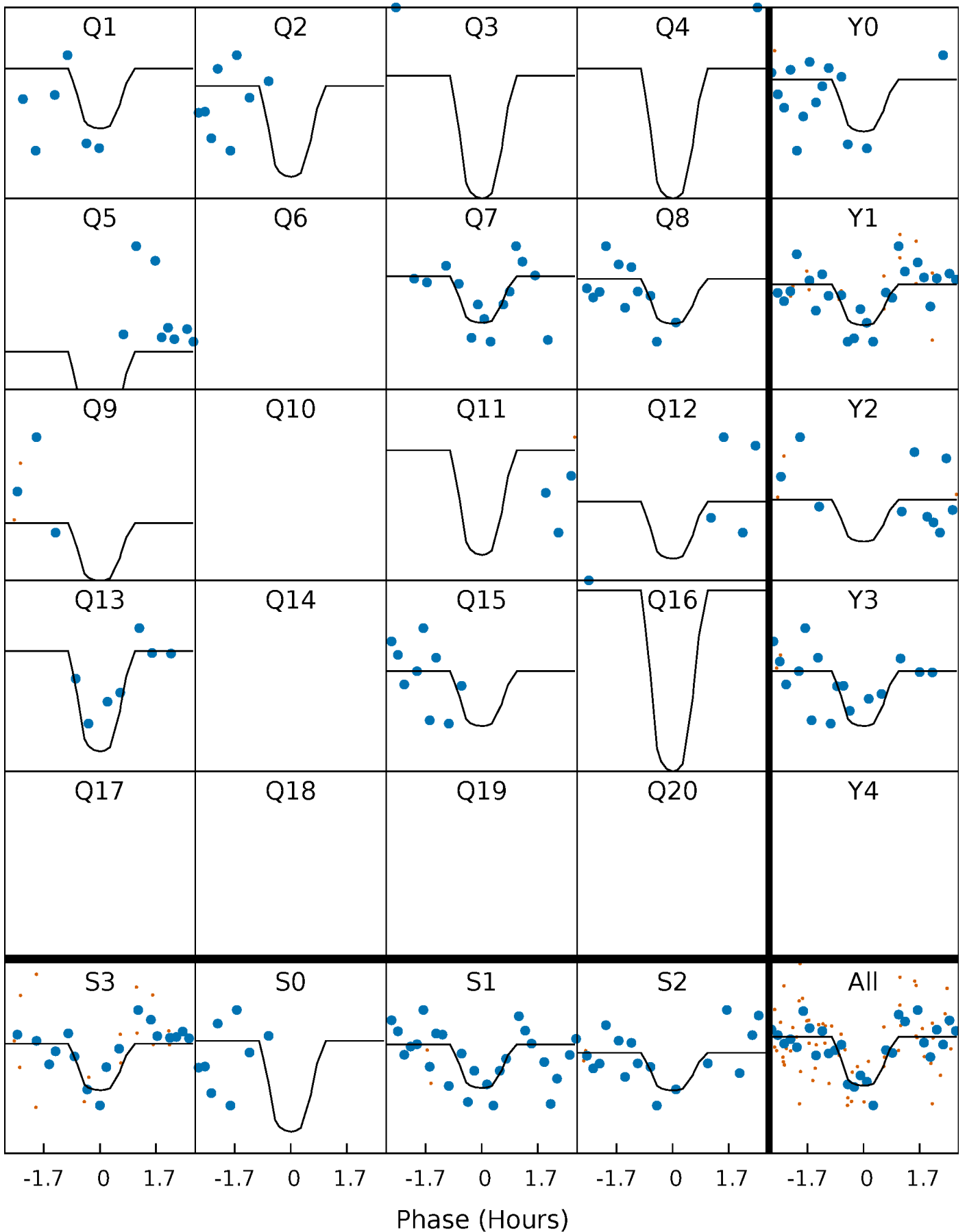
PDC Quarter-Phased Transit Curves

TCE 003356799-04 P= 26.058035 Days $T_0=140.155469$ (BKJD)



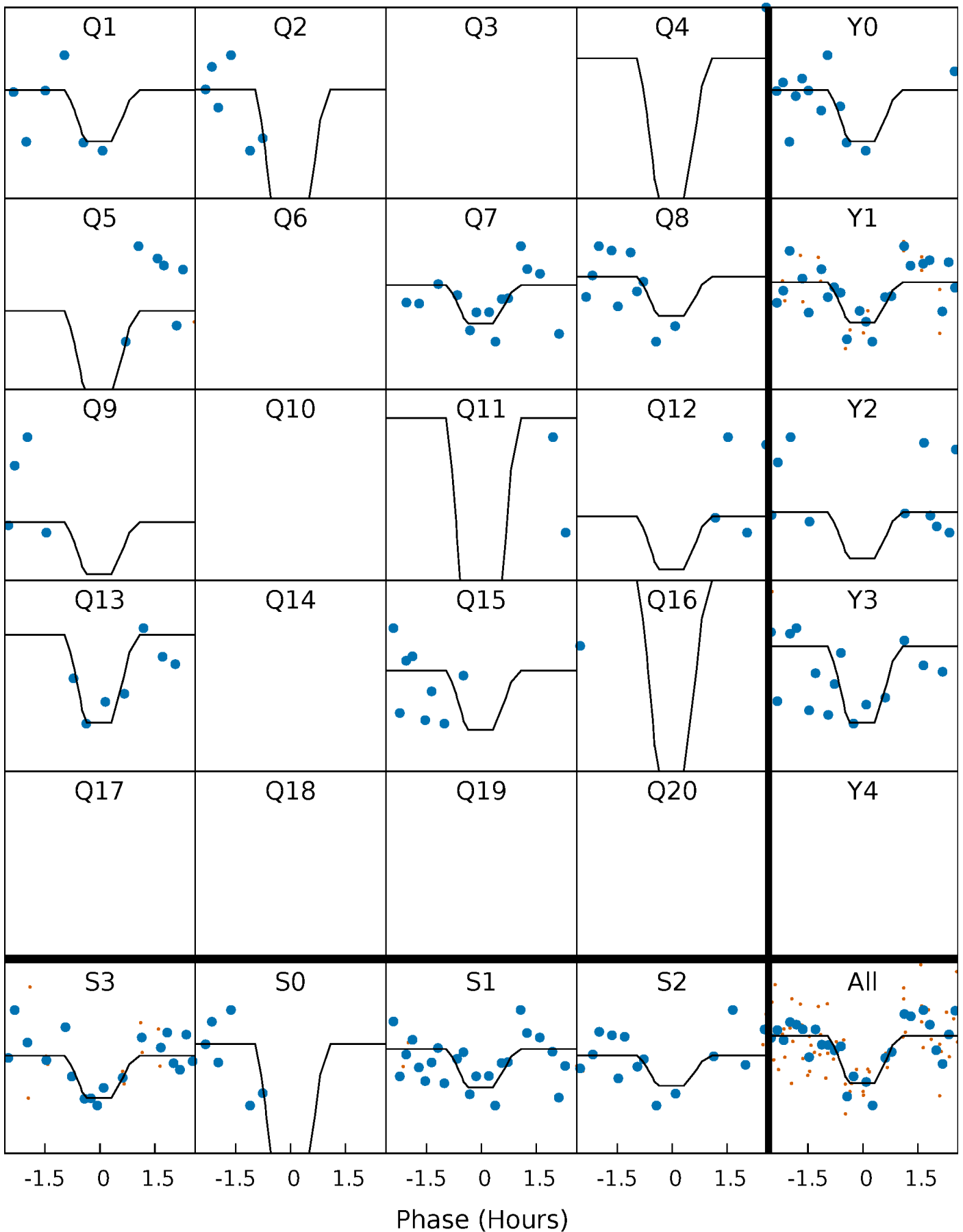
DV Quarter-Phased Transit Curves

TCE 003356799-04 P= 26.058035 Days $T_0=140.155469$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

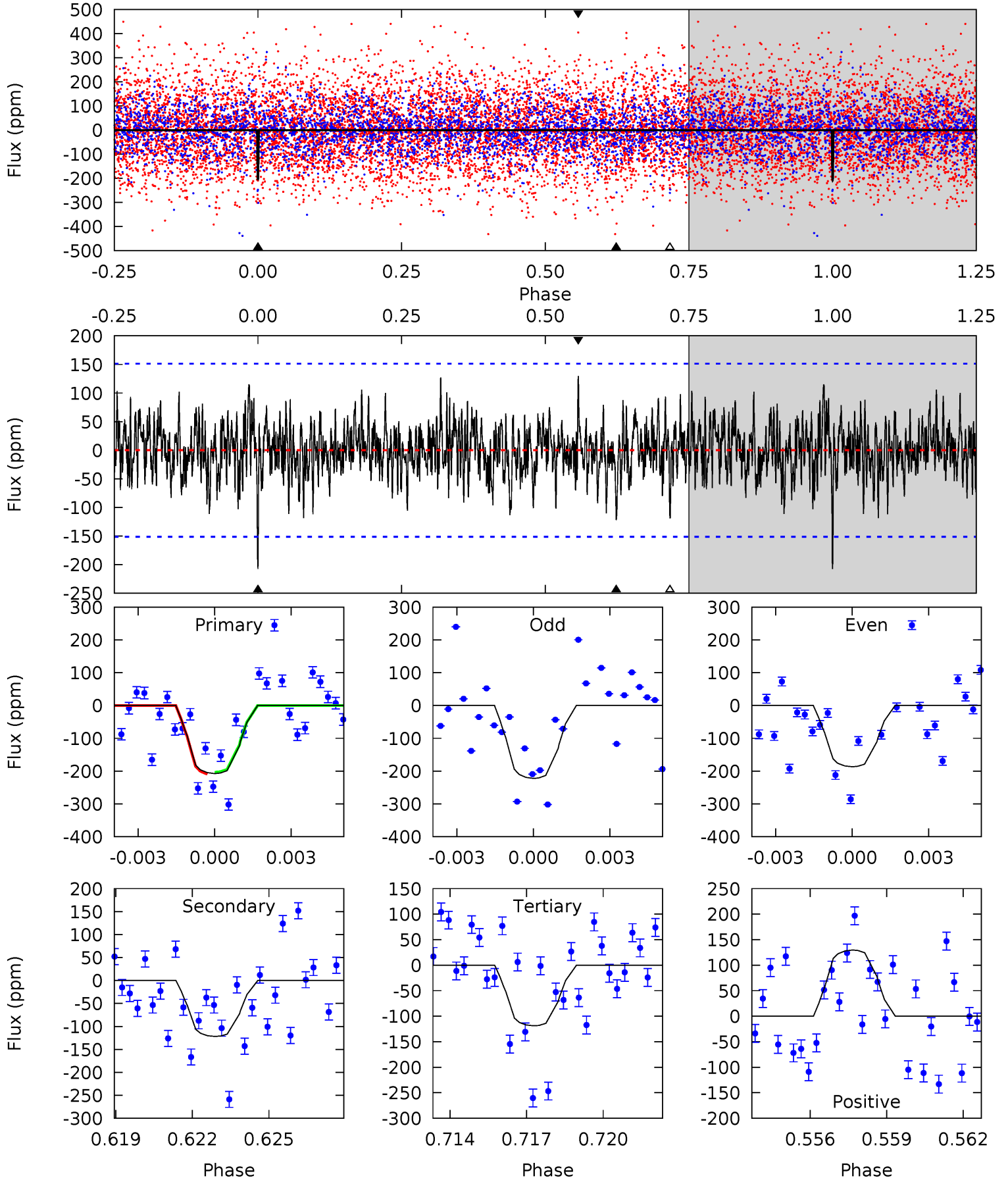
TCE 003356799-04 P= 26.057998 Days $T_0=140.155903$ (BKJD)



DV Model-Shift Uniqueness Test

003356799-04, P = 26.058035 Days, E = 114.097434 Days

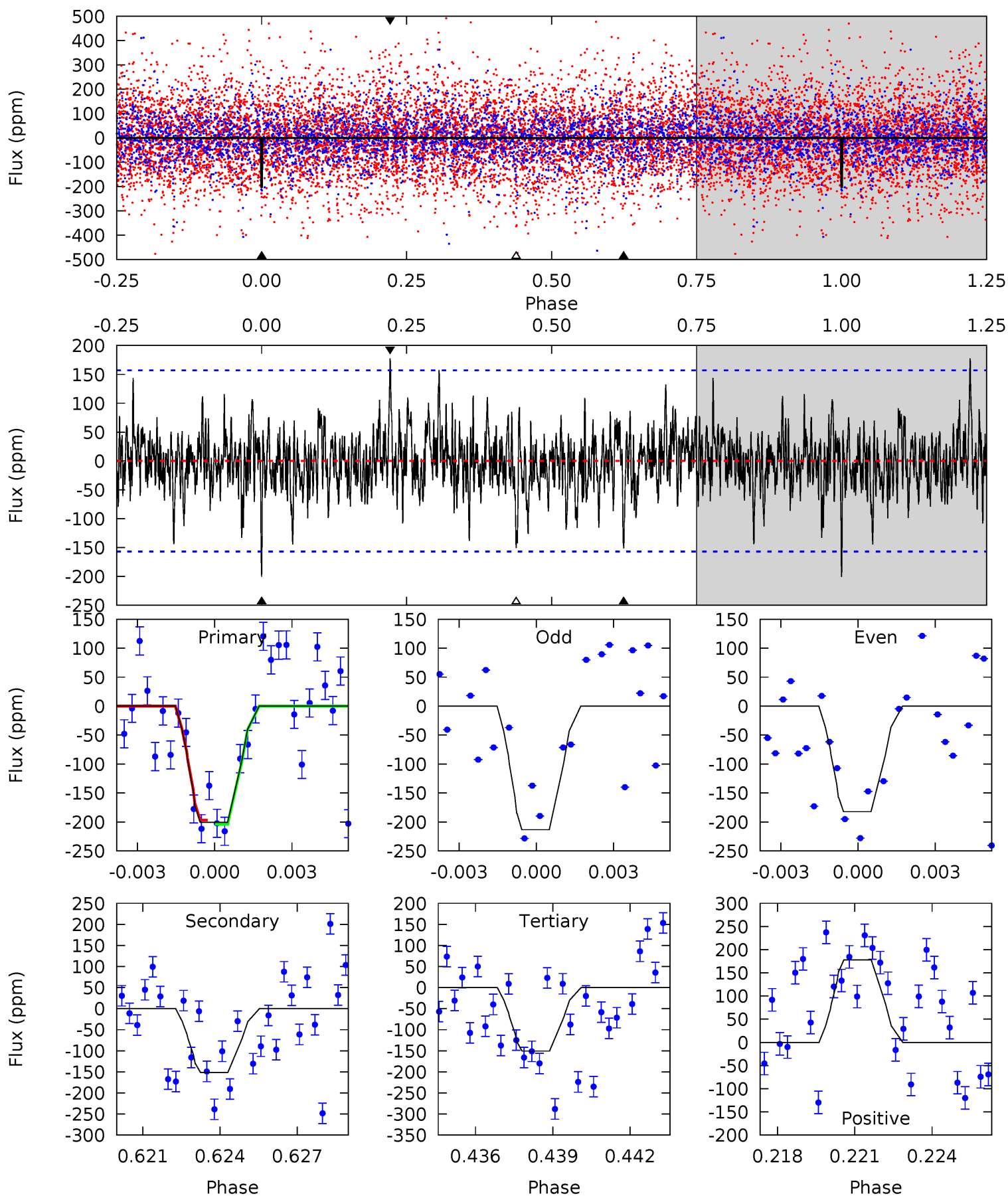
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
7.20	4.22	4.12	4.50	5.25	2.96	1.31	3.08	2.70	0.10	-0.27	0.61	0.95	0.38	0.10



Alt Model-Shift Uniqueness Test

003356799-04, P = 26.057998 Days, E = 114.097905 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
6.71	5.06	5.04	5.95	5.25	2.96	1.39	1.67	0.76	0.02	-0.89	0.53	1.07	0.47	0.12



Stellar Parameters For KIC 003356799

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	7854^{+217}_{-326}	$3.669^{+0.448}_{-0.084}$	$-0.120^{+0.200}_{-0.300}$	$3.462^{+0.720}_{-1.681}$	$2.039^{+0.343}_{-0.514}$	$0.069^{+0.321}_{-0.025}$
	+3%/-4%	+12%/-2%	+167%/-250%	+21%/-49%	+17%/-25%	+464%/-36%
Source	KIC0	KIC0	KIC0	DSEP		

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

Secondary Eclipse Parameters for KIC 003356799-04 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-122 ± 29	$7.42^{+7.06}_{-4.89}$	1837^{+155}_{-227}	5331^{+4526}_{-1191}	55^{+480}_{-40}
Alt.	-151 ± 30	$7.78^{+8.15}_{-4.93}$	1847^{+138}_{-205}	5455^{+5009}_{-1290}	63^{+443}_{-47}

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

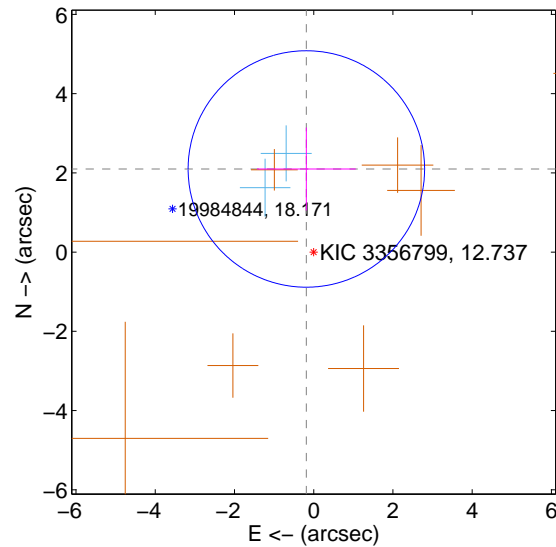
Supplemental centroid analysis for 003356799-04. Kepler magnitude: 12.74. Transit SNR 8.48

There are 2 quarters with good PRF difference image offsets

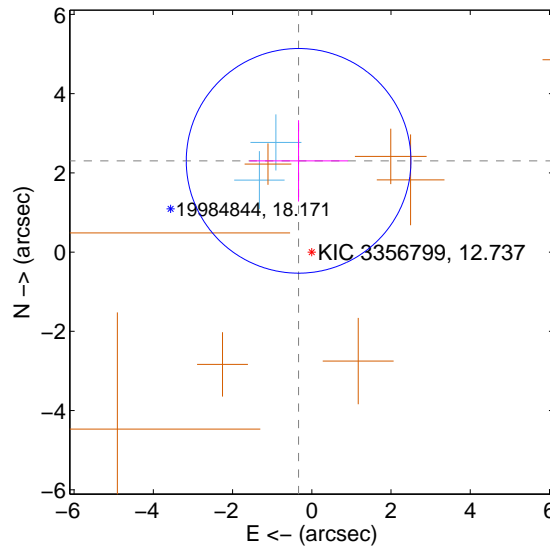
The direct PRF centroid is offset from the target star catalog position by about 0.41 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	2.107 ± 0.995	2.12	0.185 ± 1.247	2.098 ± 1.047
PRF-fit source offset from KIC position	2.327 ± 0.945	2.46	0.333 ± 1.245	2.303 ± 1.027
photometric centroid source offset	0.47 ± 0.71	0.66	0.20 ± 0.72	0.42 ± 0.71

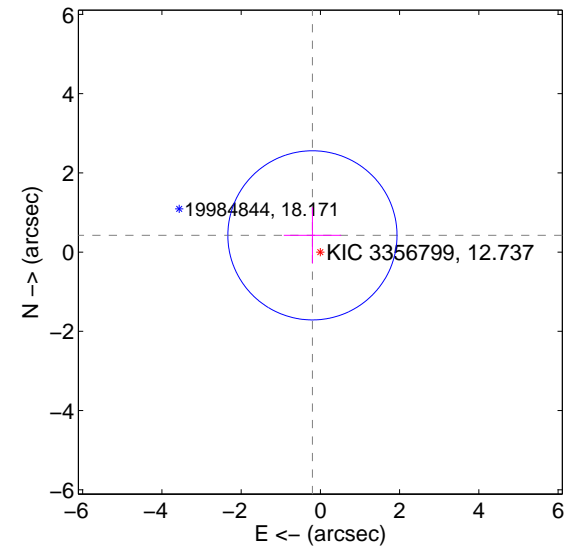
offset from difference PRF-fit to OOT PRF-fit



offset from difference PRF-fit to KIC position

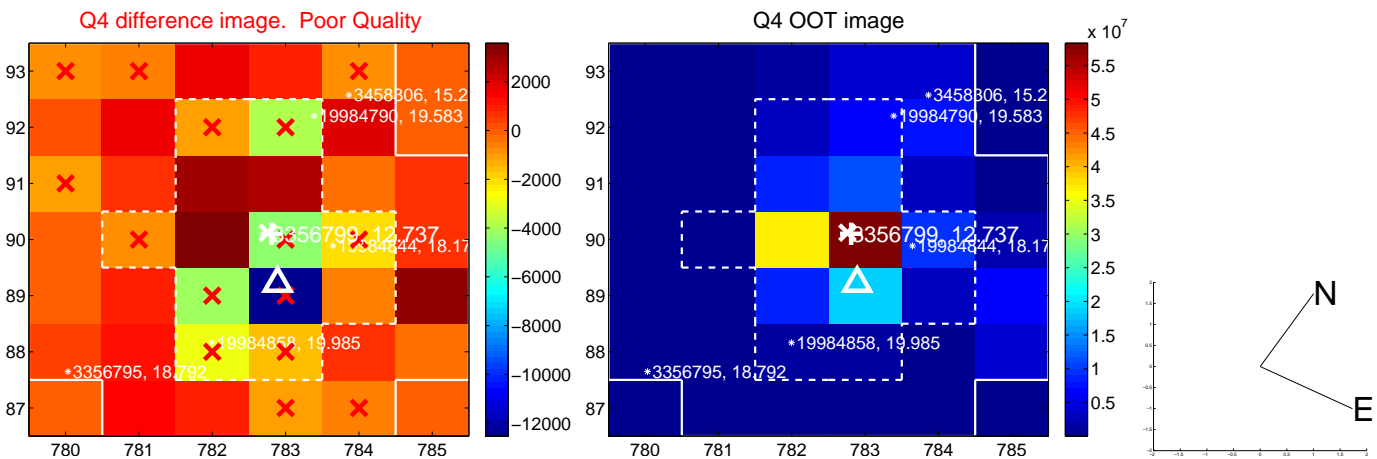
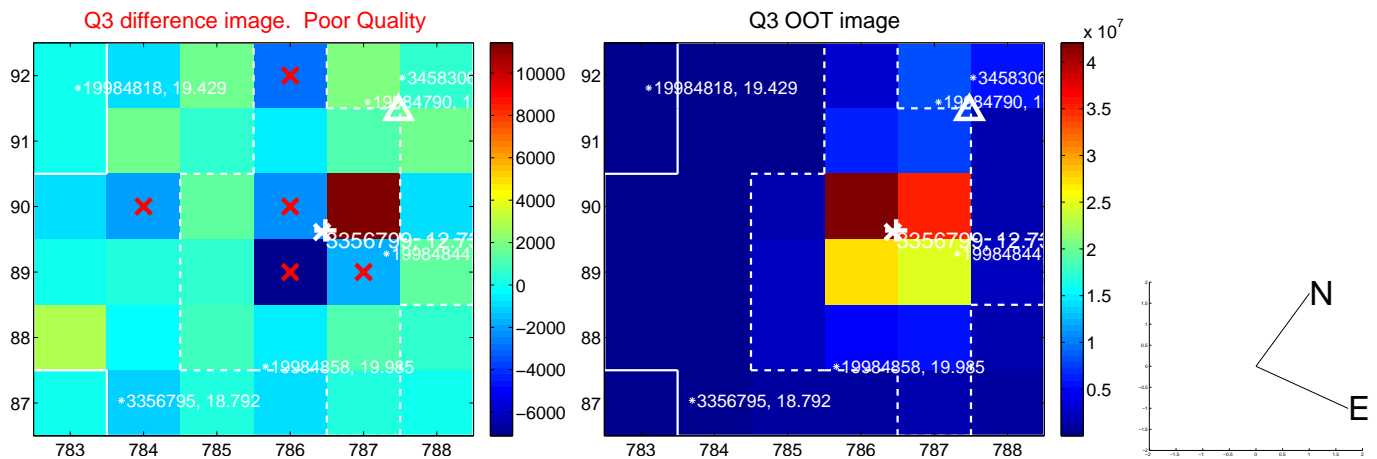
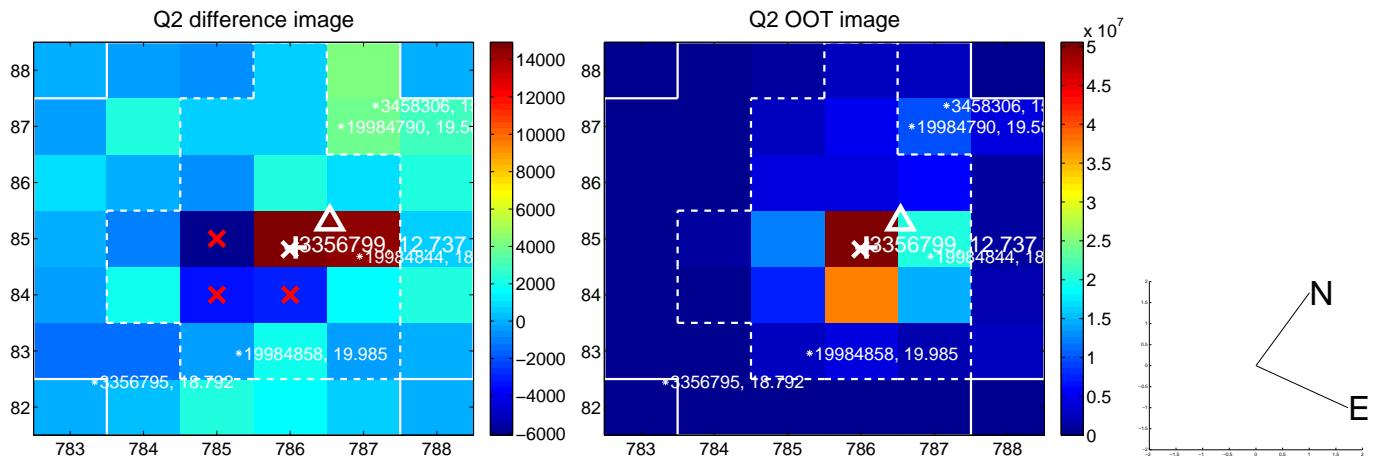
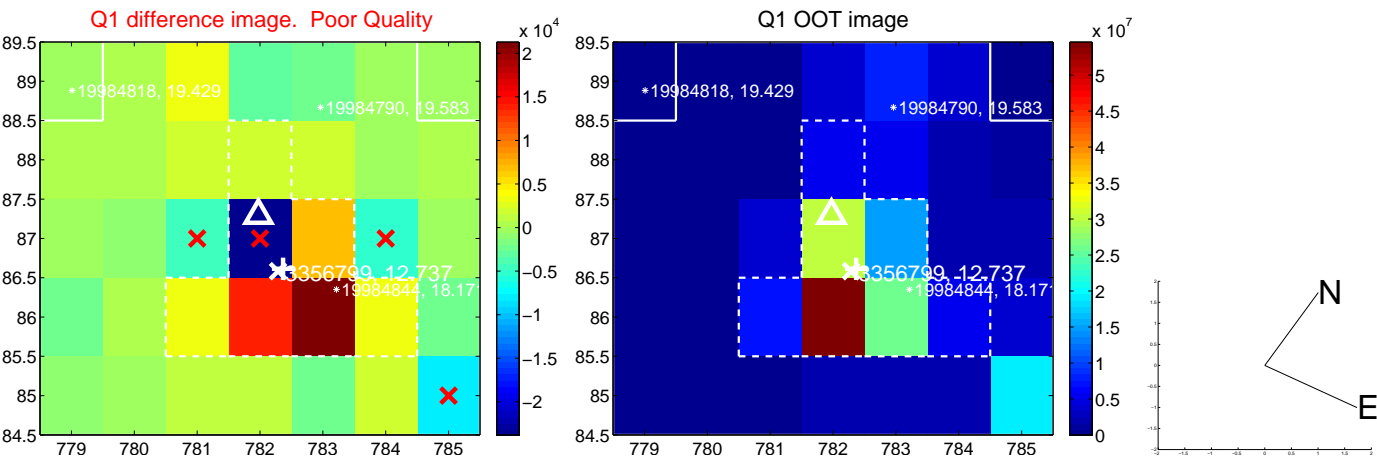


offset from photometric centroids

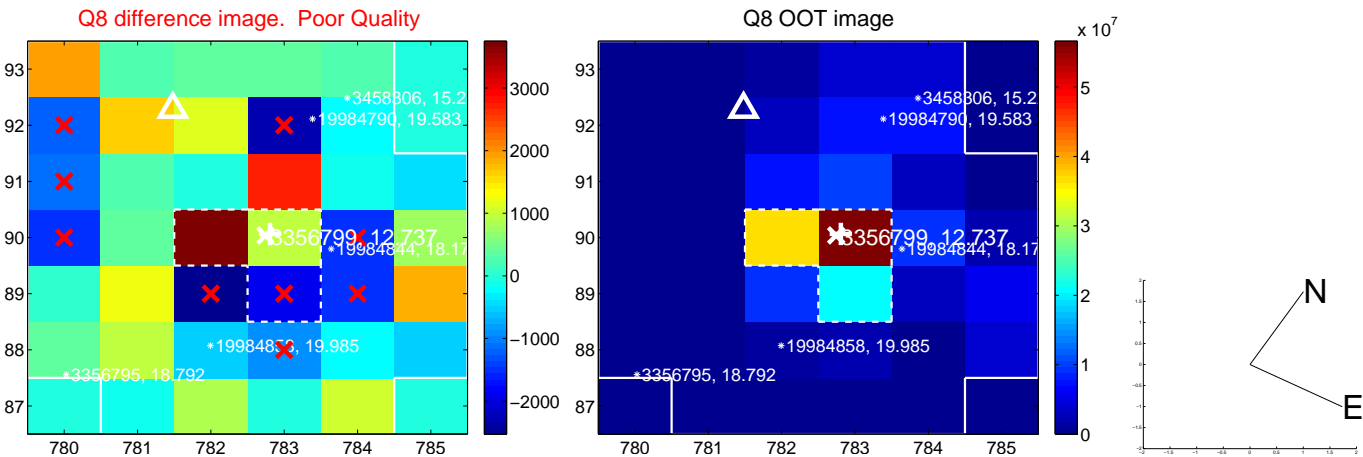
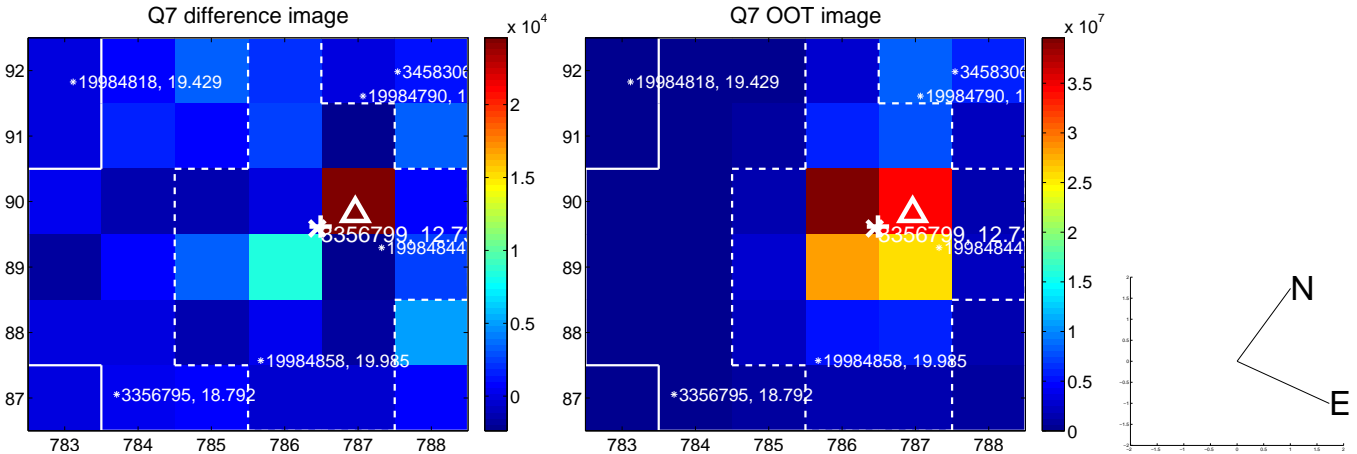
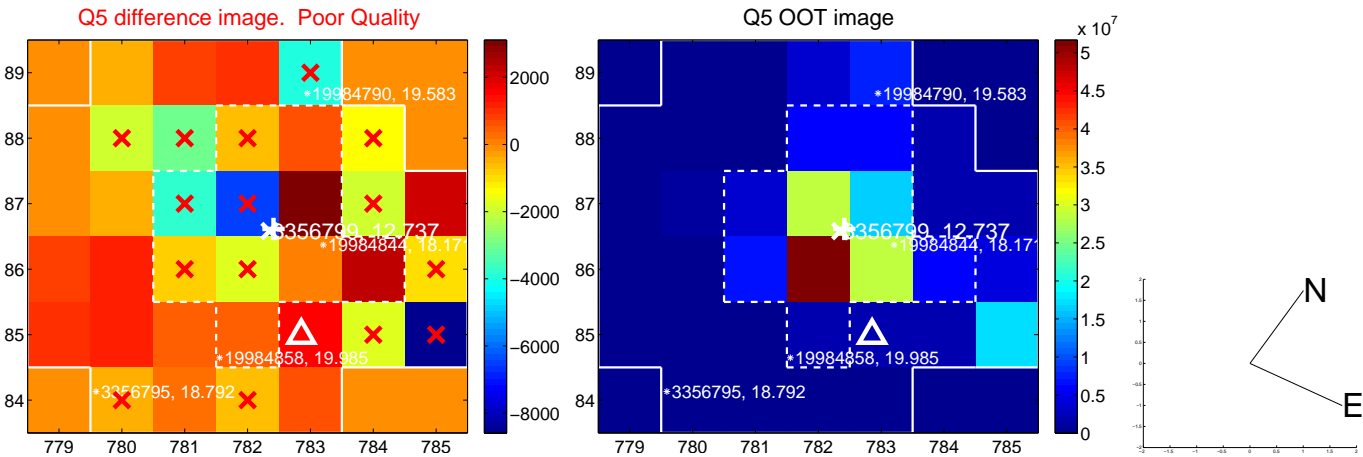


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

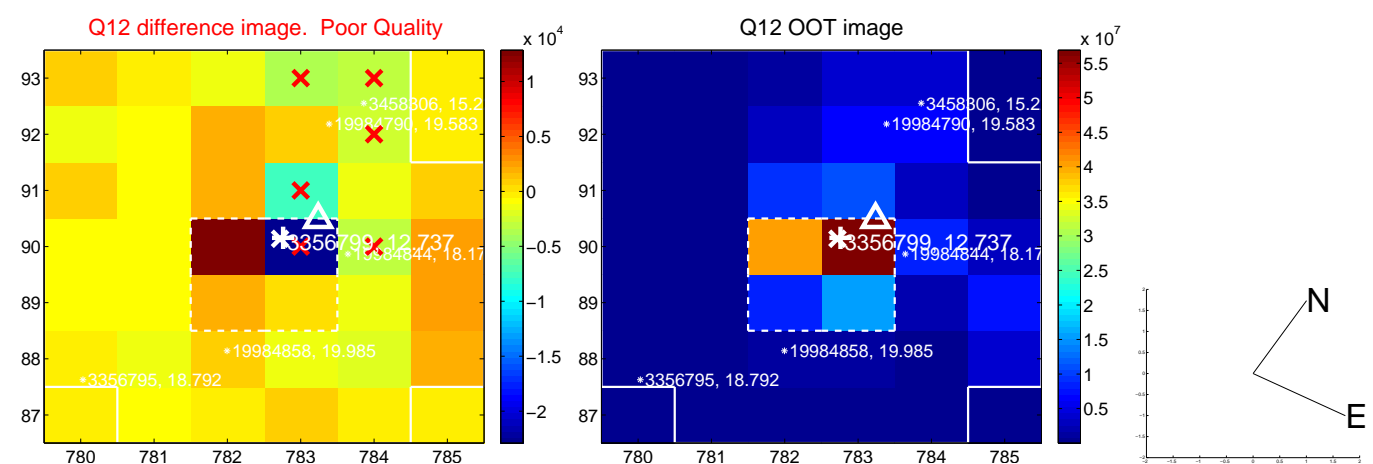
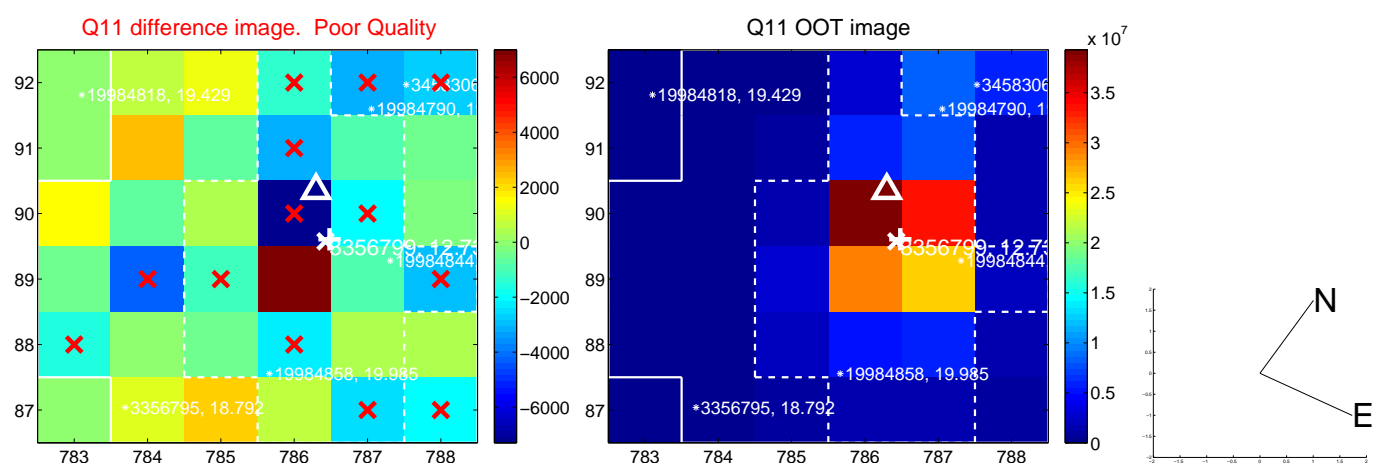
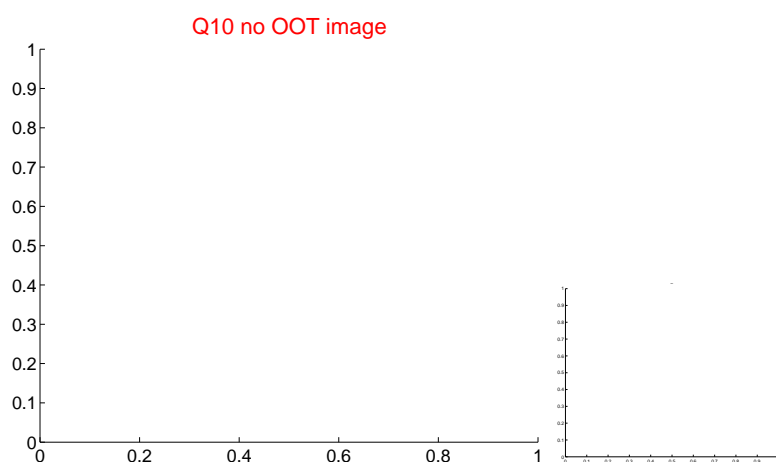
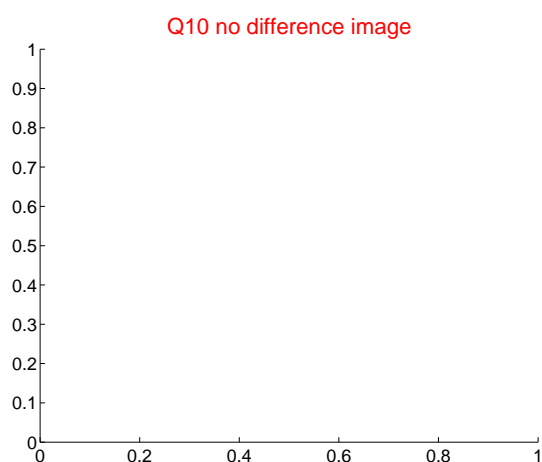
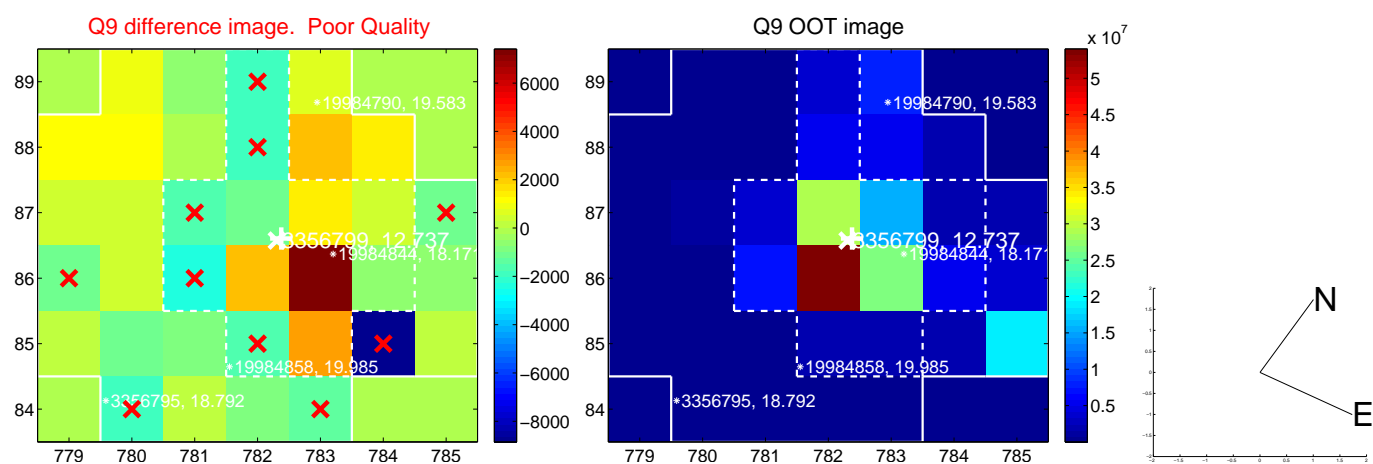
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



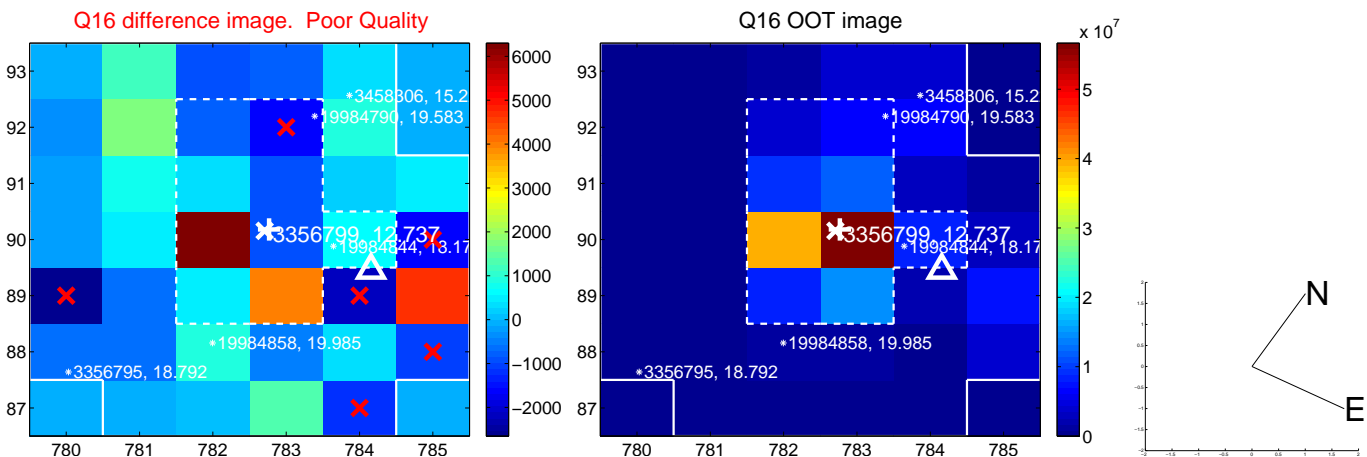
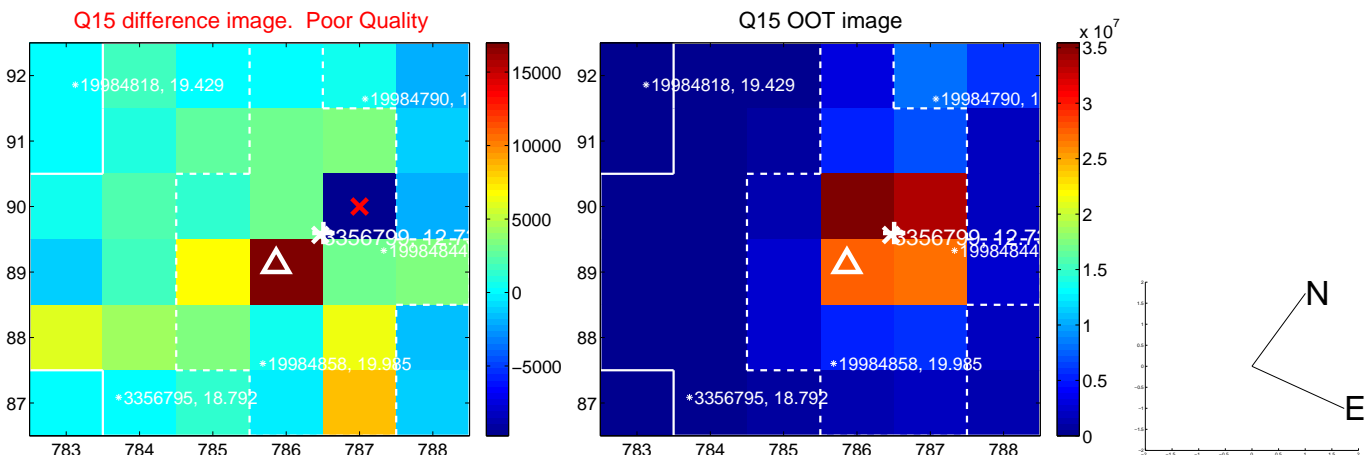
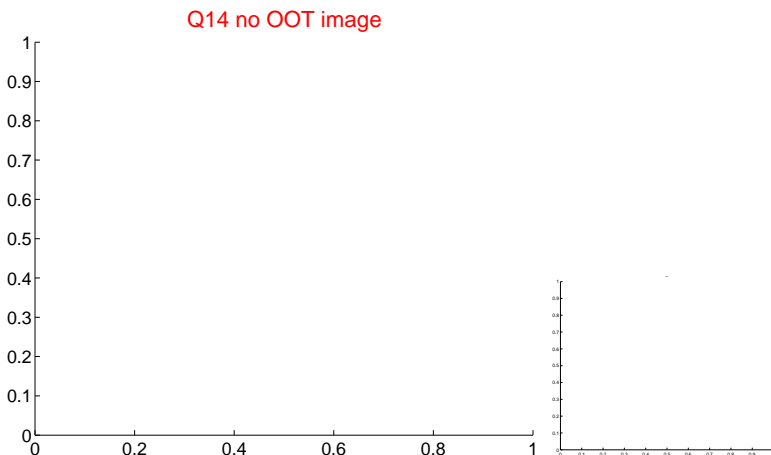
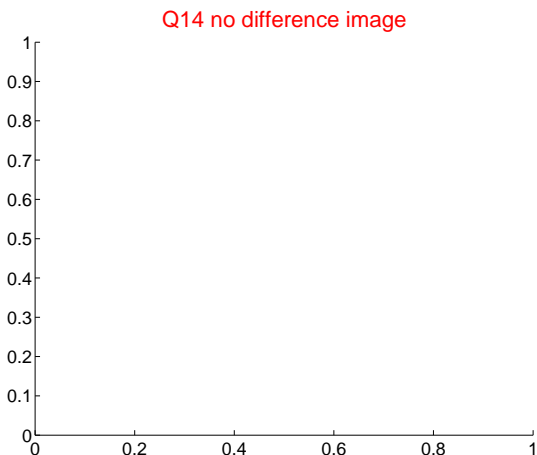
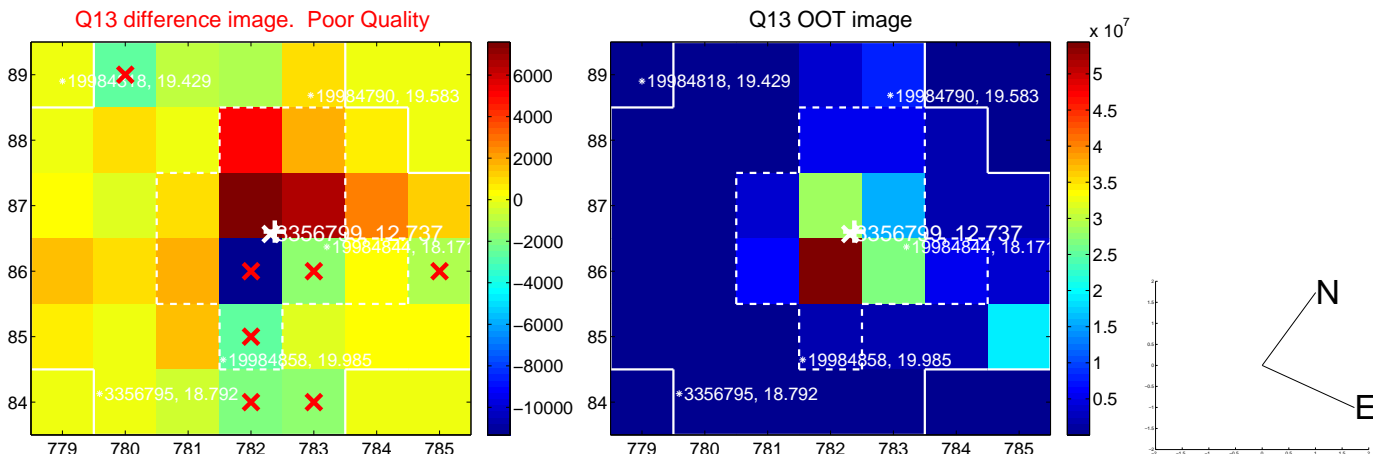
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



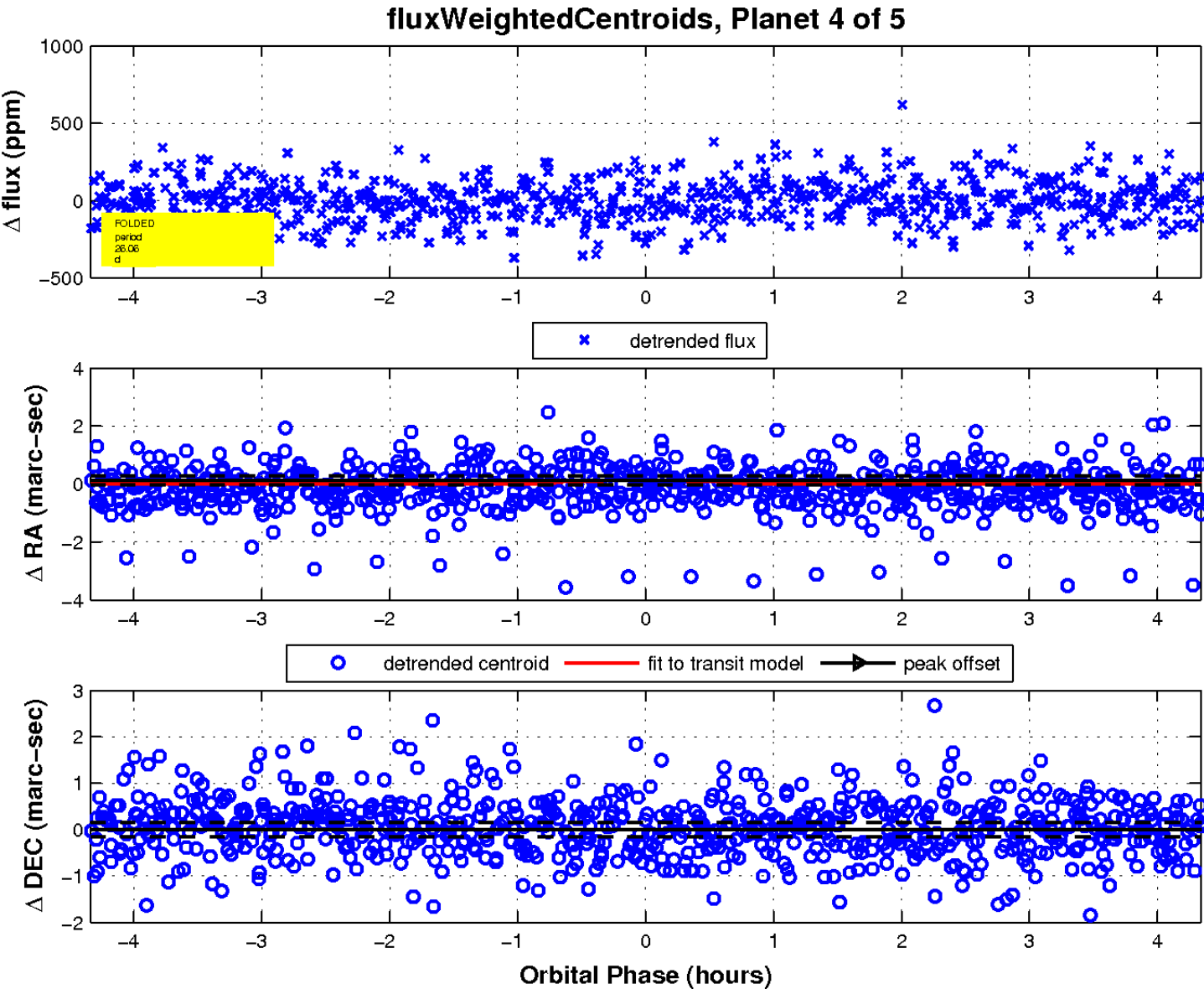
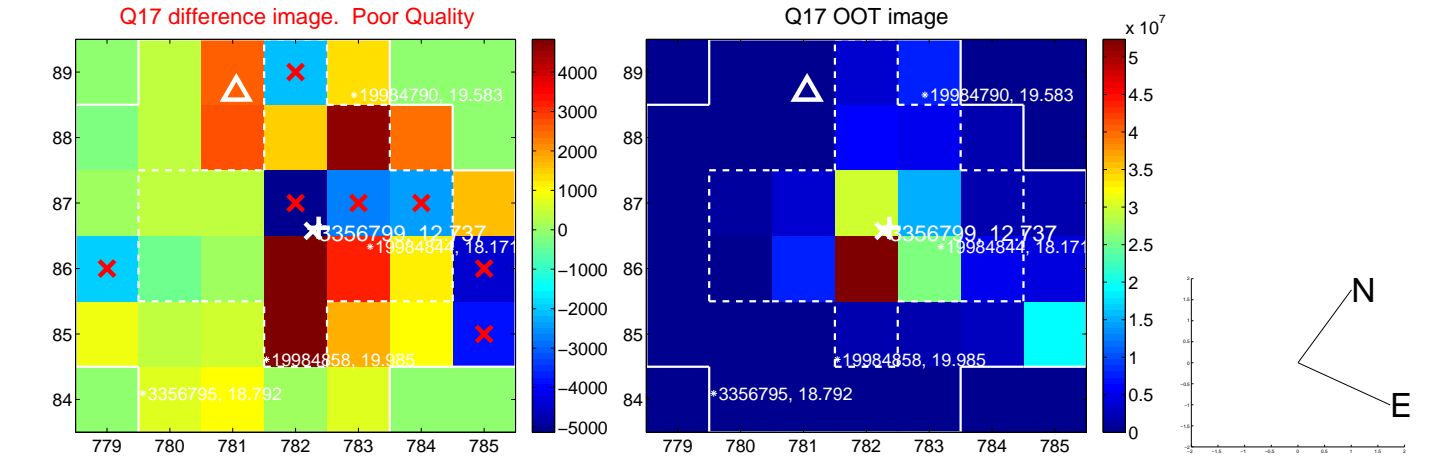
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

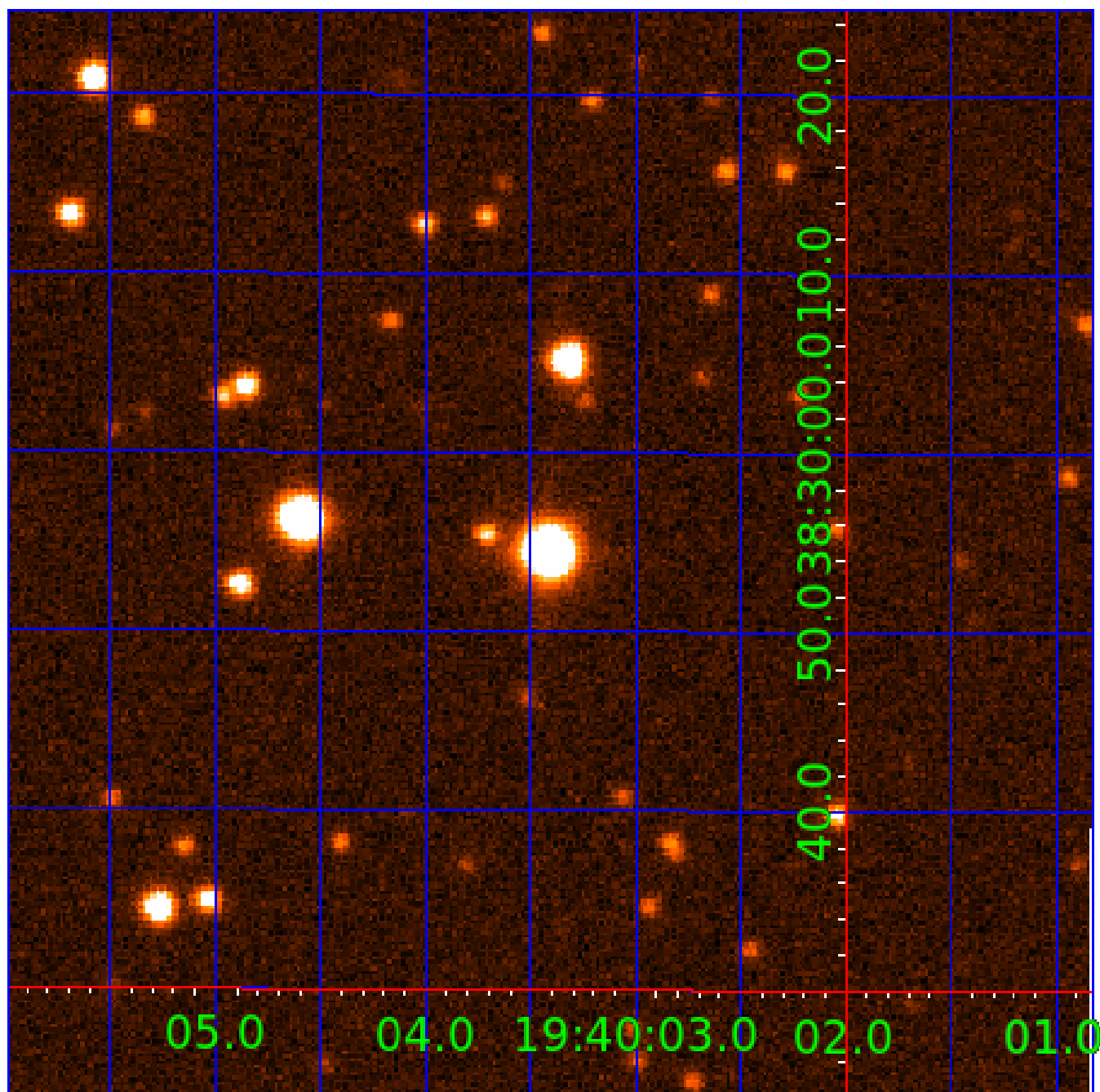


white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 003356799

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})
003356799-01	OBS	No	0.882678	131.711139	9.3	5.705	7.3	5.8	3.46	7854	1.09	78296.03
003356799-02	OBS	No	41.688520	157.339455	325.4	2.191	8.9	9.1	3.46	7854	12.05	458.62
003356799-03	OBS	No	37.614487	159.133583	156.4	6.537	9.1	7.3	3.46	7854	4.88	526.02
003356799-04	OBS	No	26.058035	140.155469	215.1	1.449	8.6	8.5	3.46	7854	5.19	858.13
003356799-05	OBS	No	15.237902	137.578100	160.6	1.320	8.3	9.0	3.46	7854	4.72	1754.86

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
003356799-01	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT
003356799-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT
003356799-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_NONUNIQ_ALT
003356799-04	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_FEW_DIFFS
003356799-05	OBS	FP	0.00	1	0	0	0	TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT

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

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

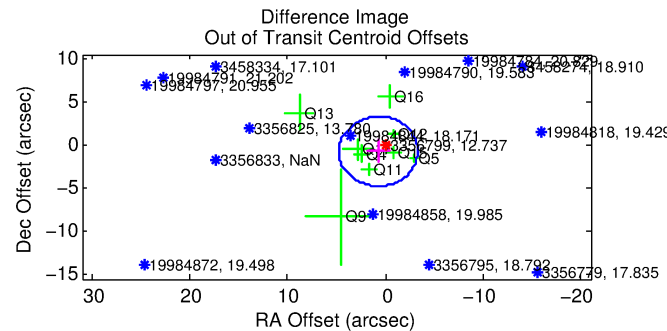
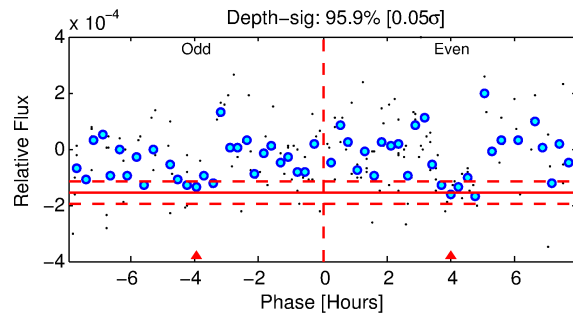
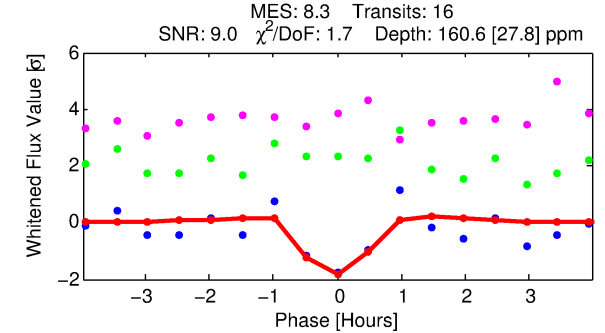
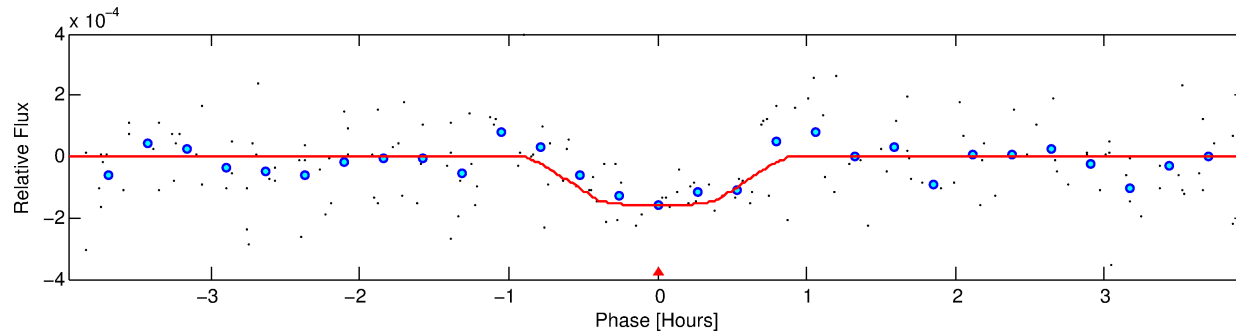
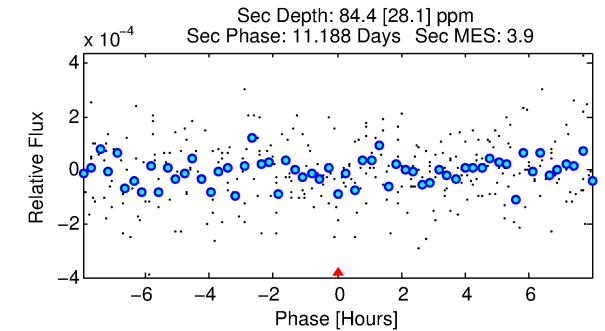
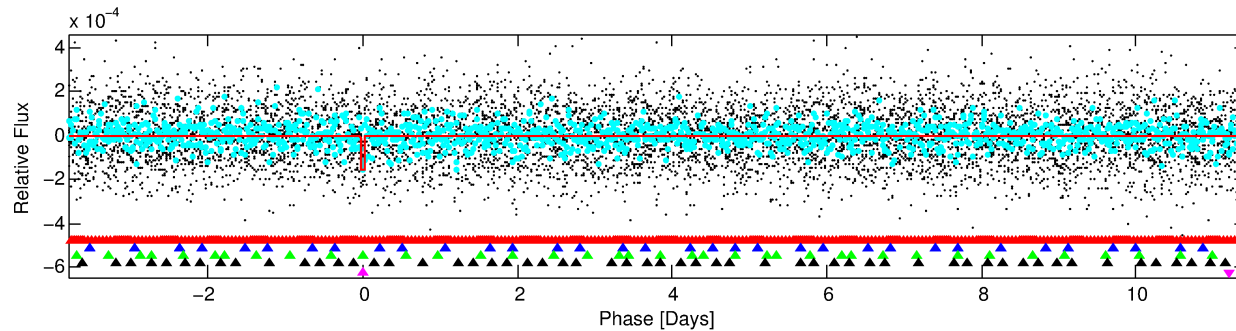
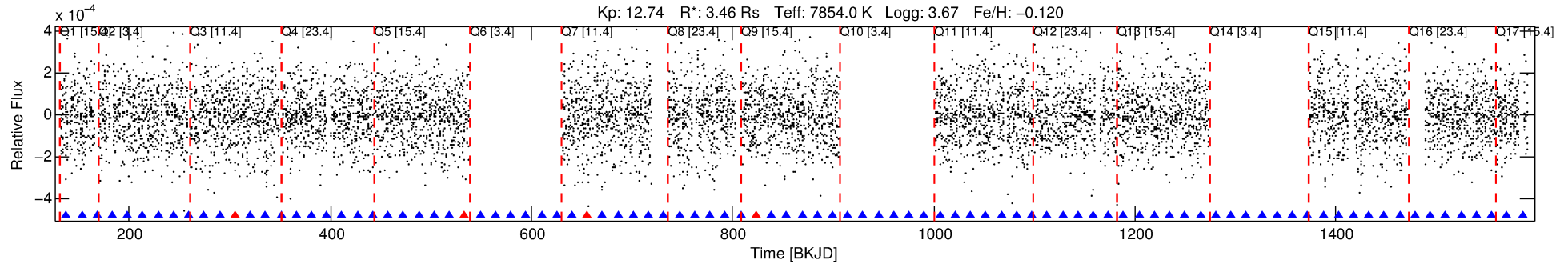
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 003356799-05

No Significant Match Found

DV One-Page Summary

KIC: 3356799 Candidate: 5 of 5 Period: 15.238 d



DV Fit Results:

Period = 15.23790 [0.00011] d
Epoch = 137.5781 [0.0055] BKJD
Rp/R* = 0.0125 [0.0082]
a/R* = 64.30 [237.63]
b = 0.70 [2.70]
Seff = 1754.86 [1365.29]
Teff = 1650 [321] K
Rp = 4.72 [3.86] Re
a = 0.1526 [0.0721] AU
Ag = 48.50 [75.44] [0.63σ]
Teffp = 6734 [2302] K [2.19σ]

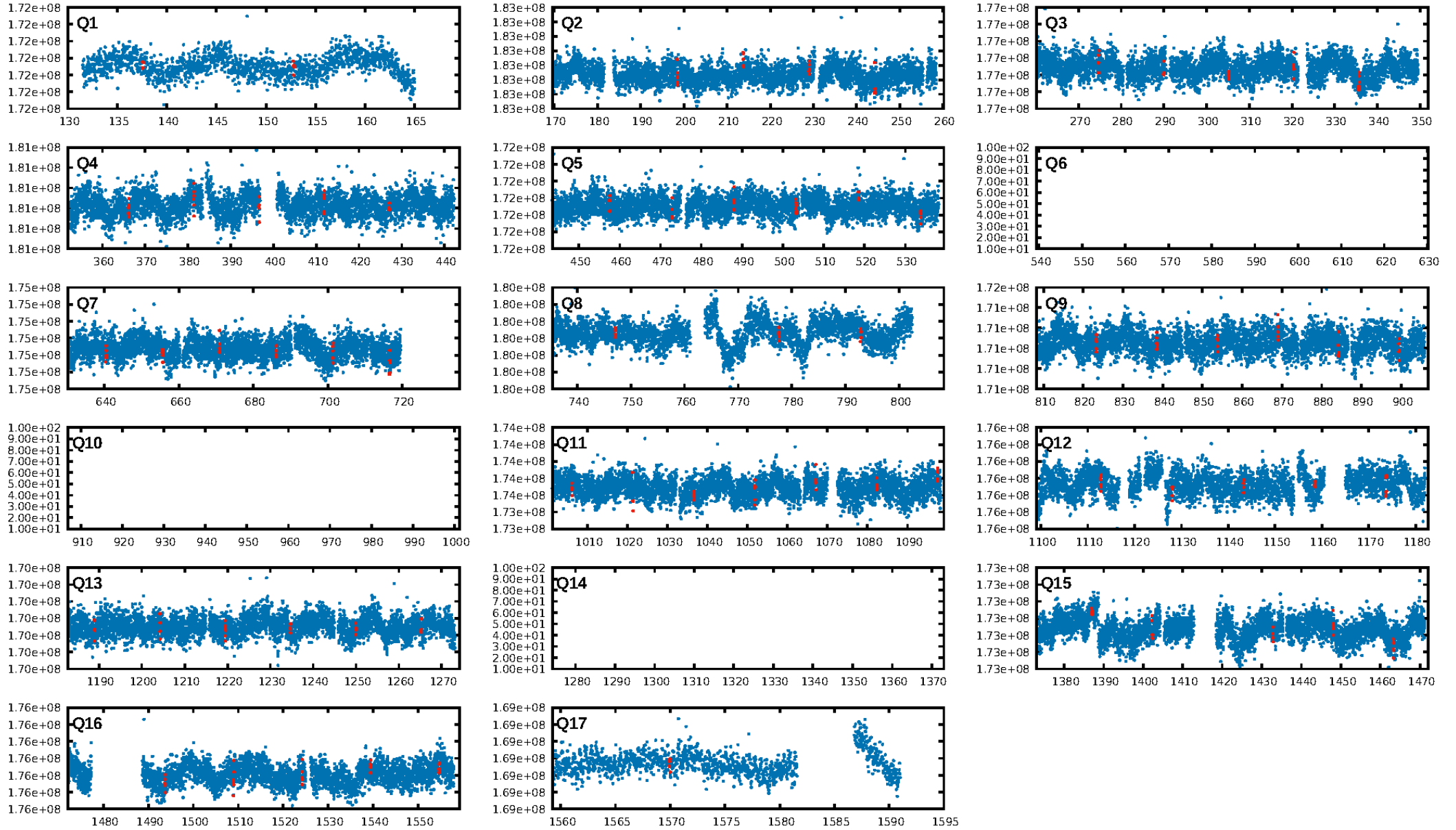
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [58.83σ]
LongPeriod-sig: 100.0% [132.48σ]
ModelChiSquare2-sig: 25.5%
ModelChiSquareGof-sig: 97.6%
Bootstrap-pfa: 3.43e-08
RollingBand-fgt: 0.73 [11/15]
GhostDiagnostic-chr: -1.994
Centroid-sig: 18.2%
Centroid-so: 1.475 arcsec [1.83σ]
OotOffset-rm: 1.047 arcsec [0.78σ]
OotOffset-st: 0/2/3/4 [9]
KicOffset-rm: 1.009 arcsec [0.86σ]
KicOffset-st: 0/2/3/4 [9]
DiffImageQuality-fgm: 0.22 [2/9]
DiffImageOverlap-fno: 0.71 [10/14]

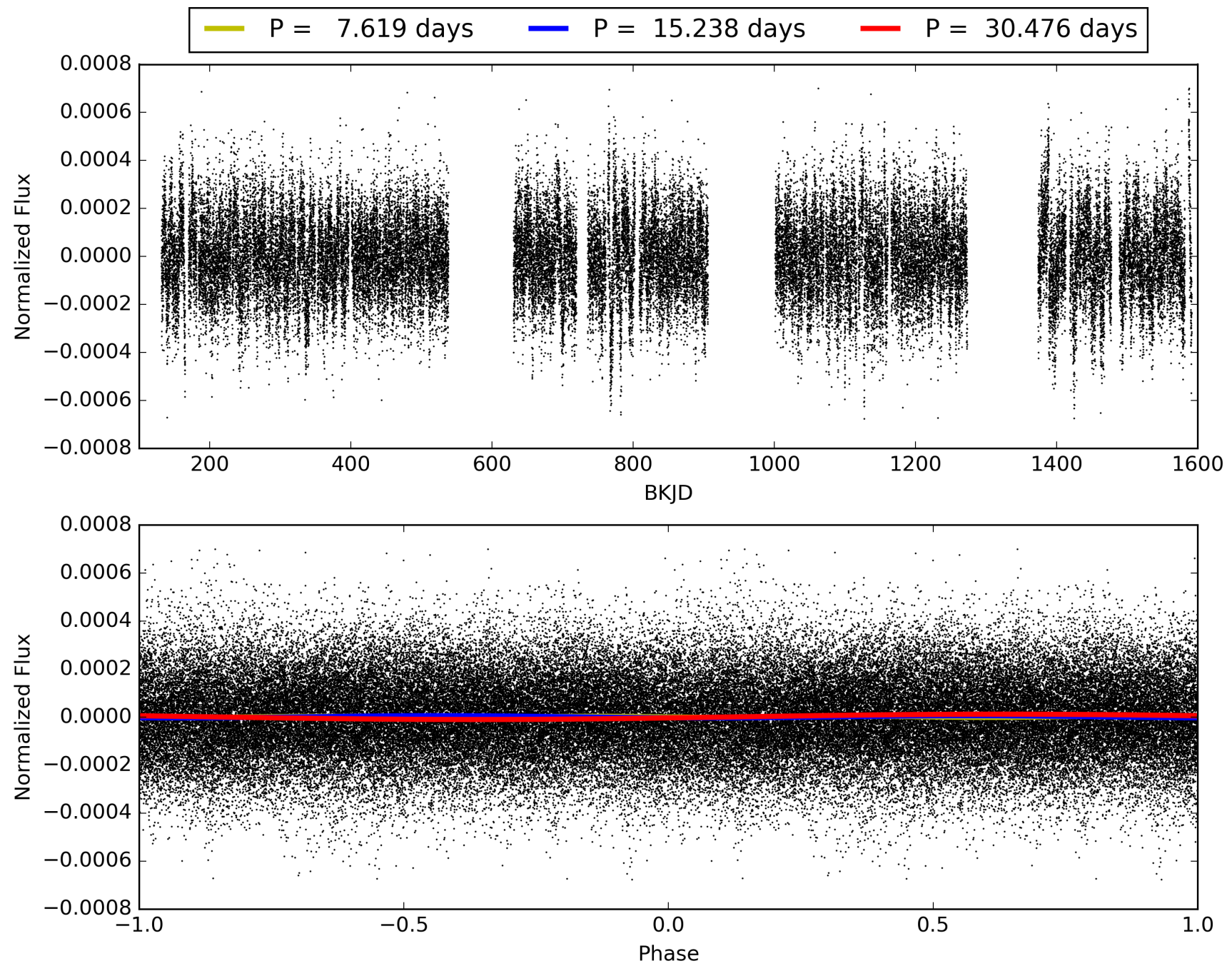
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 31-Jan-2016 10:17:15 Z

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

TCE 003356799-05, PDC Light Curves

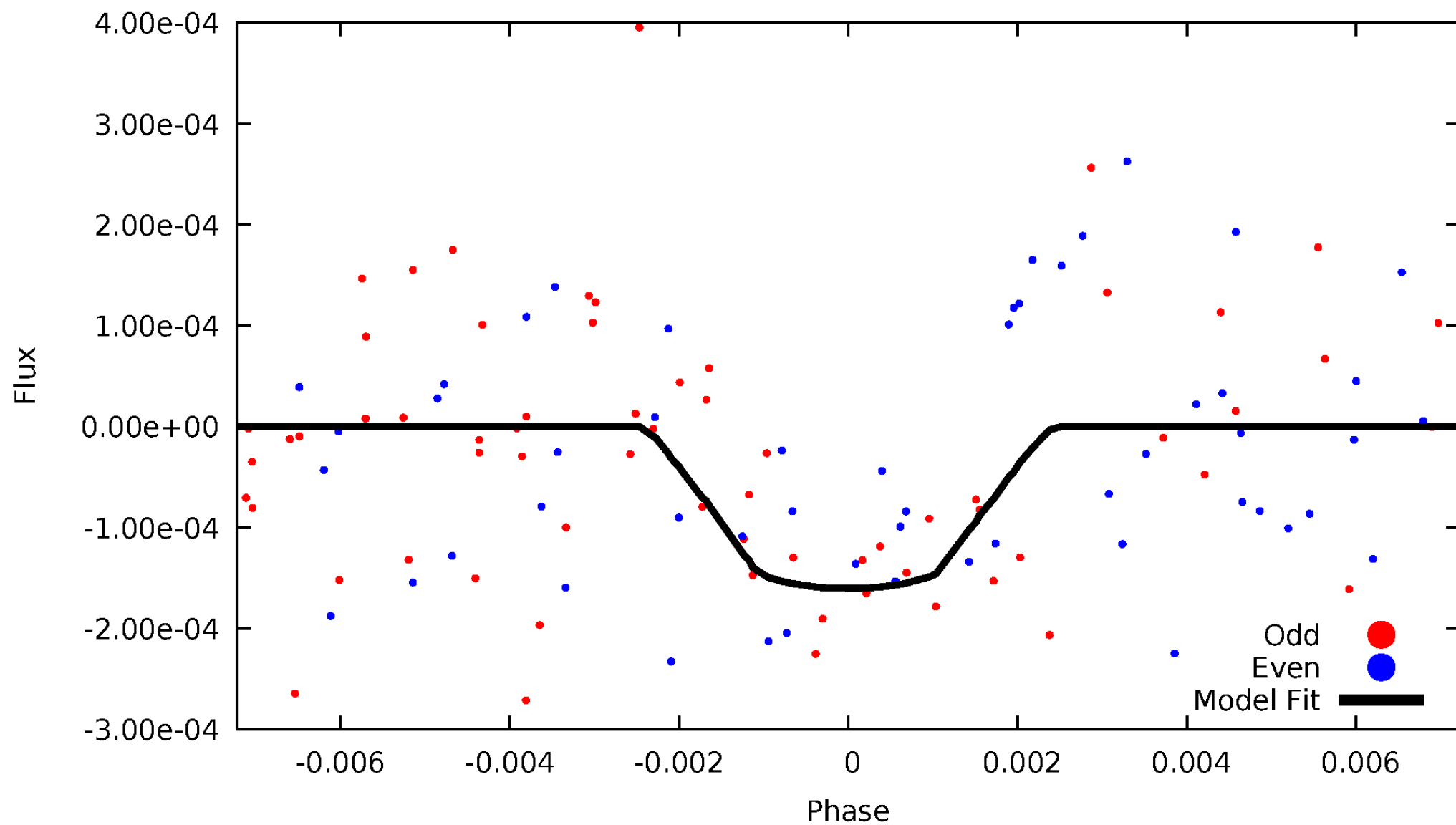


TCE 003356799-05



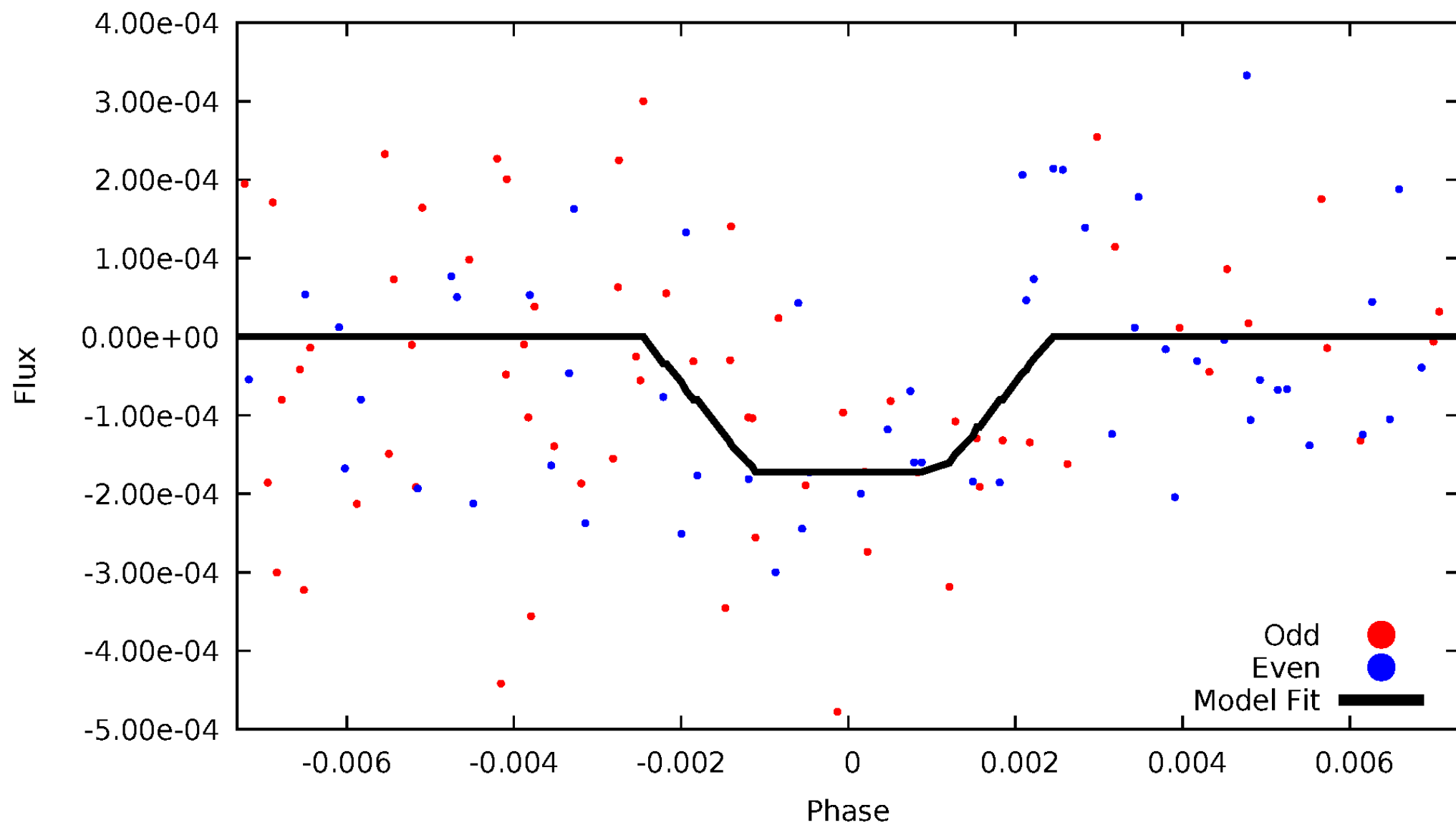
DV Odd/Even

TCE 003356799-05



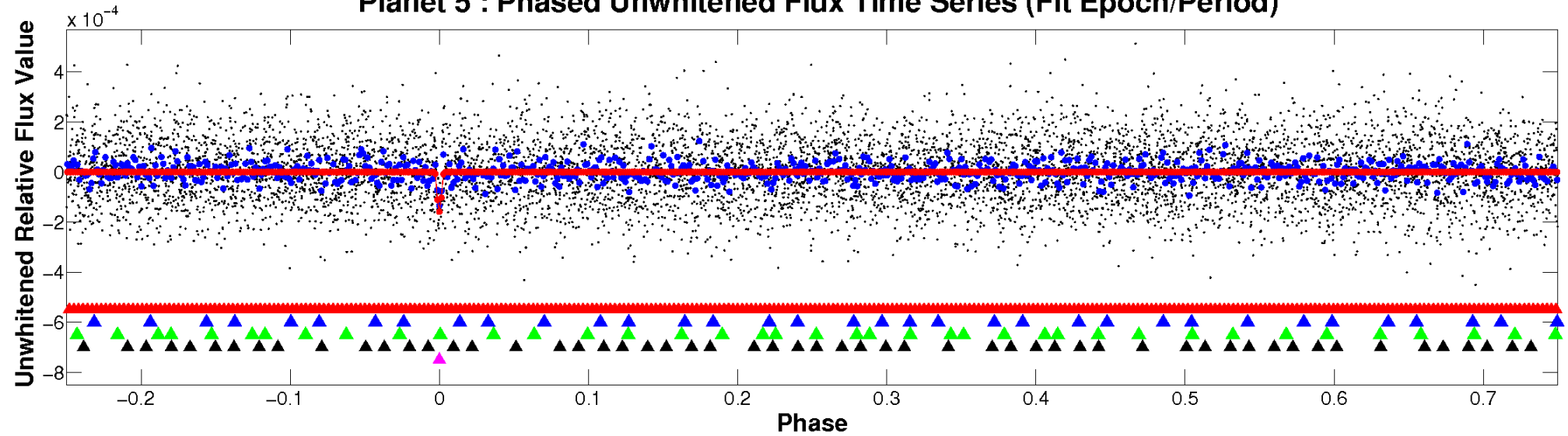
ALT Odd/Even

TCE 003356799-05

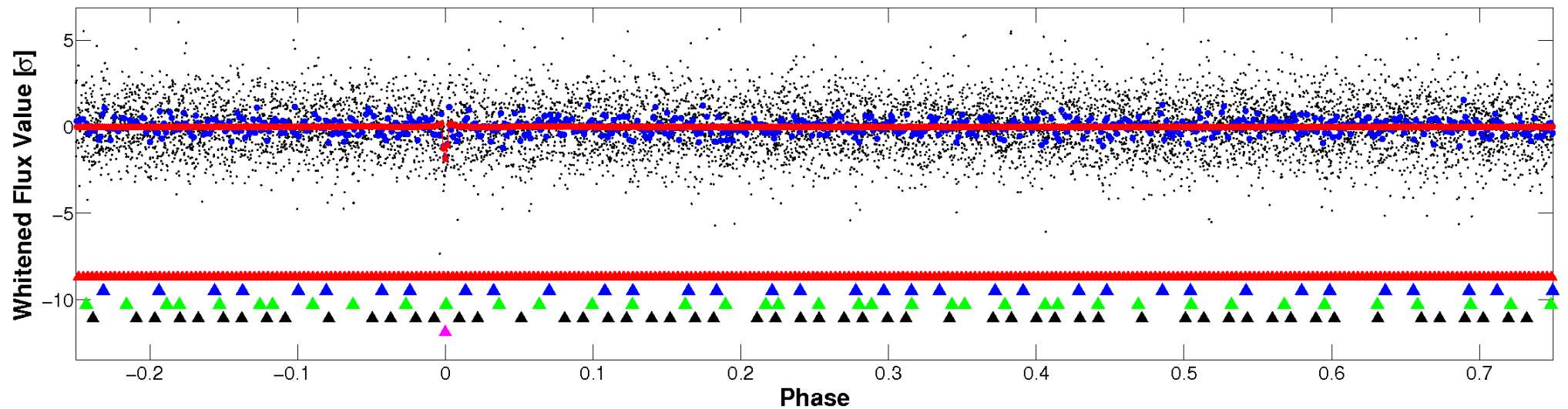


Non-Whitened Vs. Whitened Light Curve

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

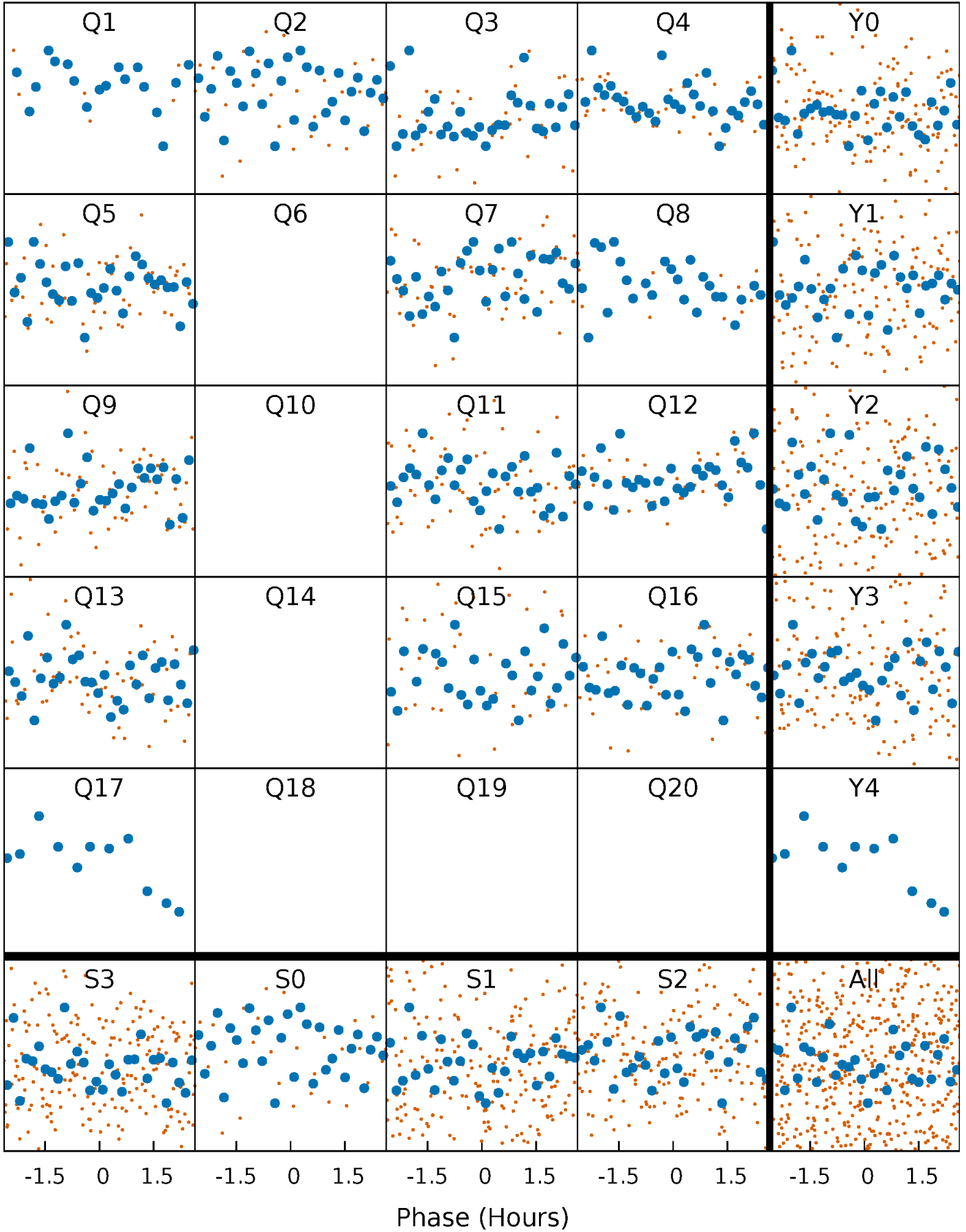


Planet 5 : Phased Whitened Flux Time Series (Fit Epoch/Period)



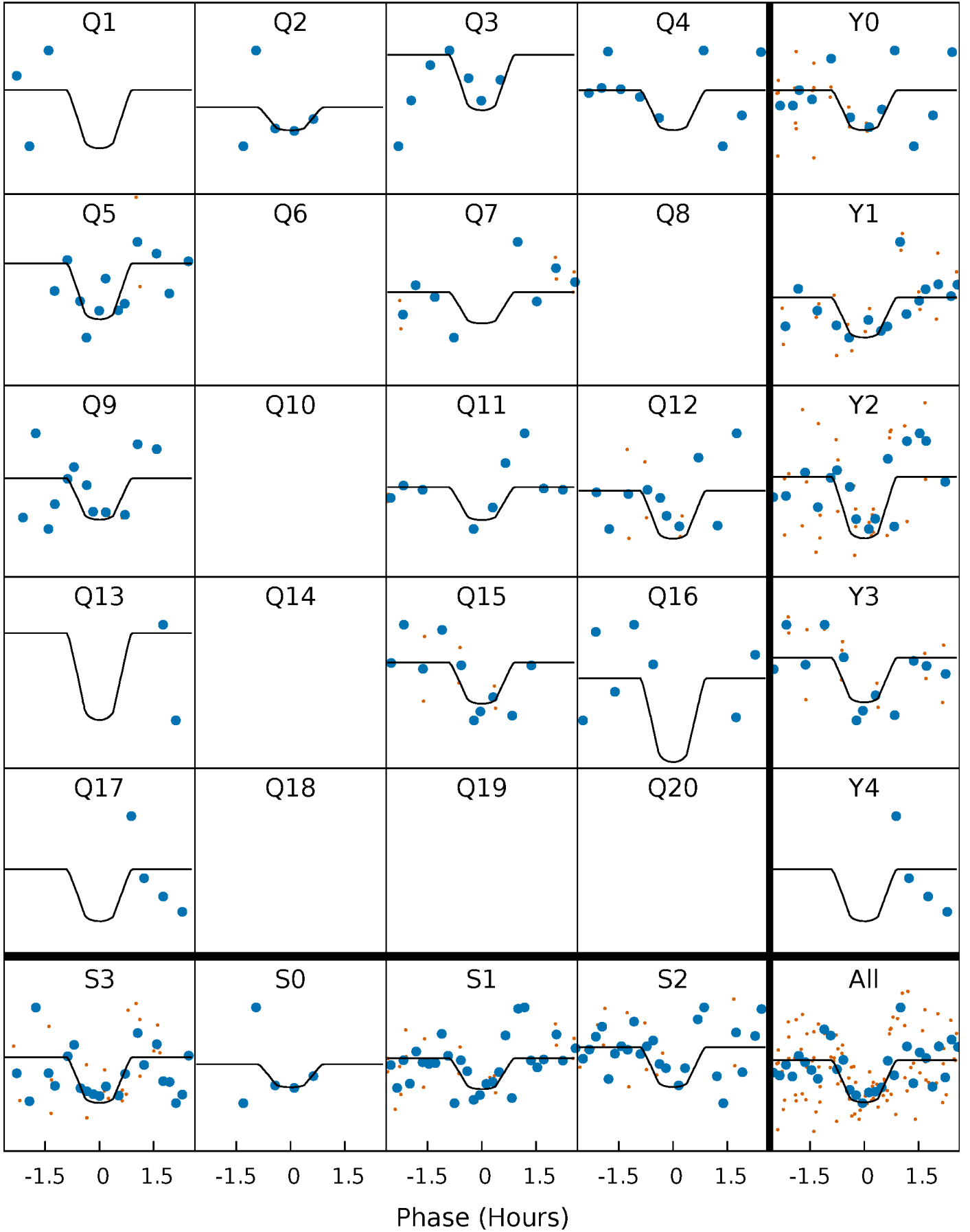
PDC Quarter-Phased Transit Curves

TCE 003356799-05 P= 15.237902 Days $T_0=137.578101$ (BKJD)



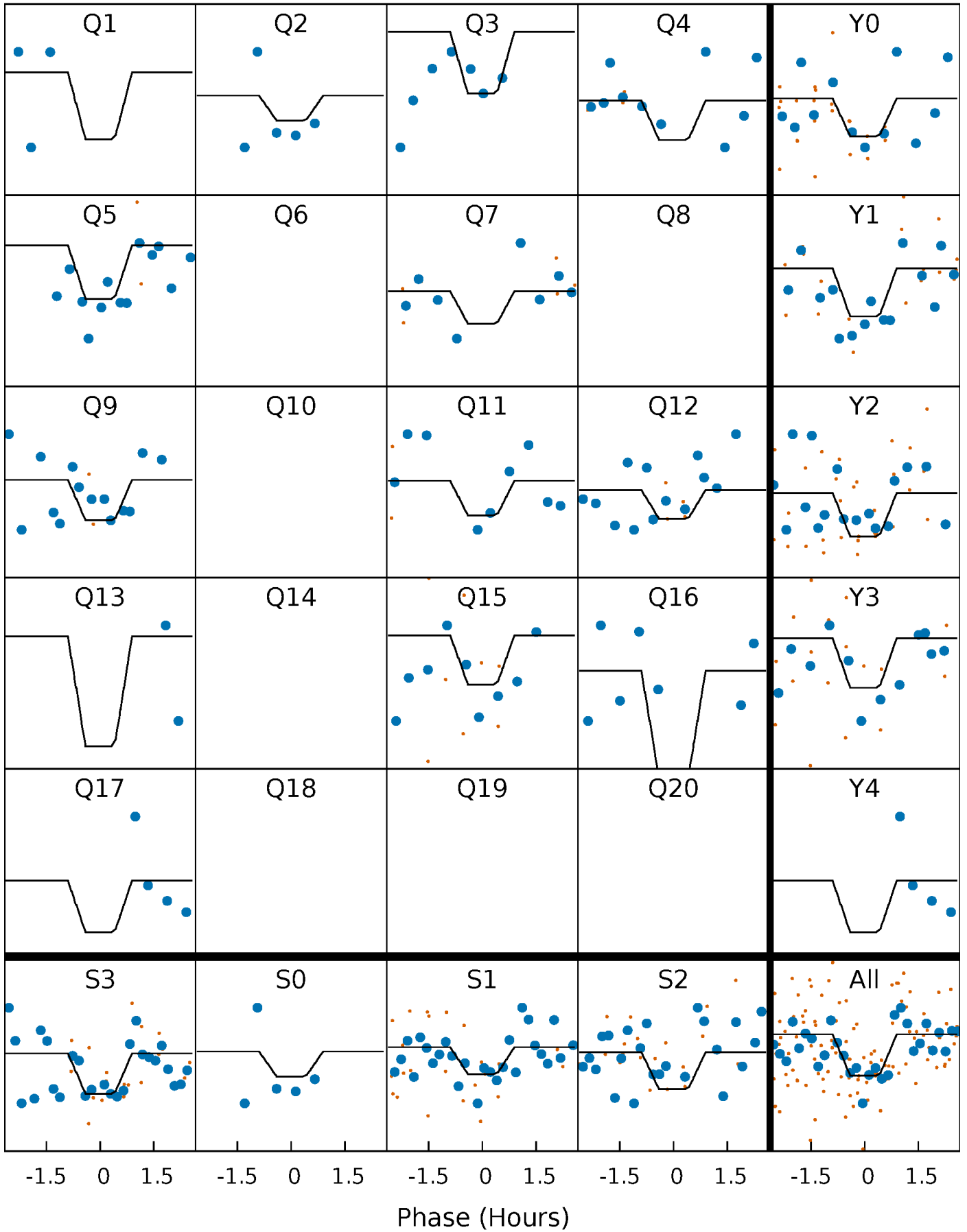
DV Quarter-Phased Transit Curves

TCE 003356799-05 P= 15.237902 Days $T_0=137.578101$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

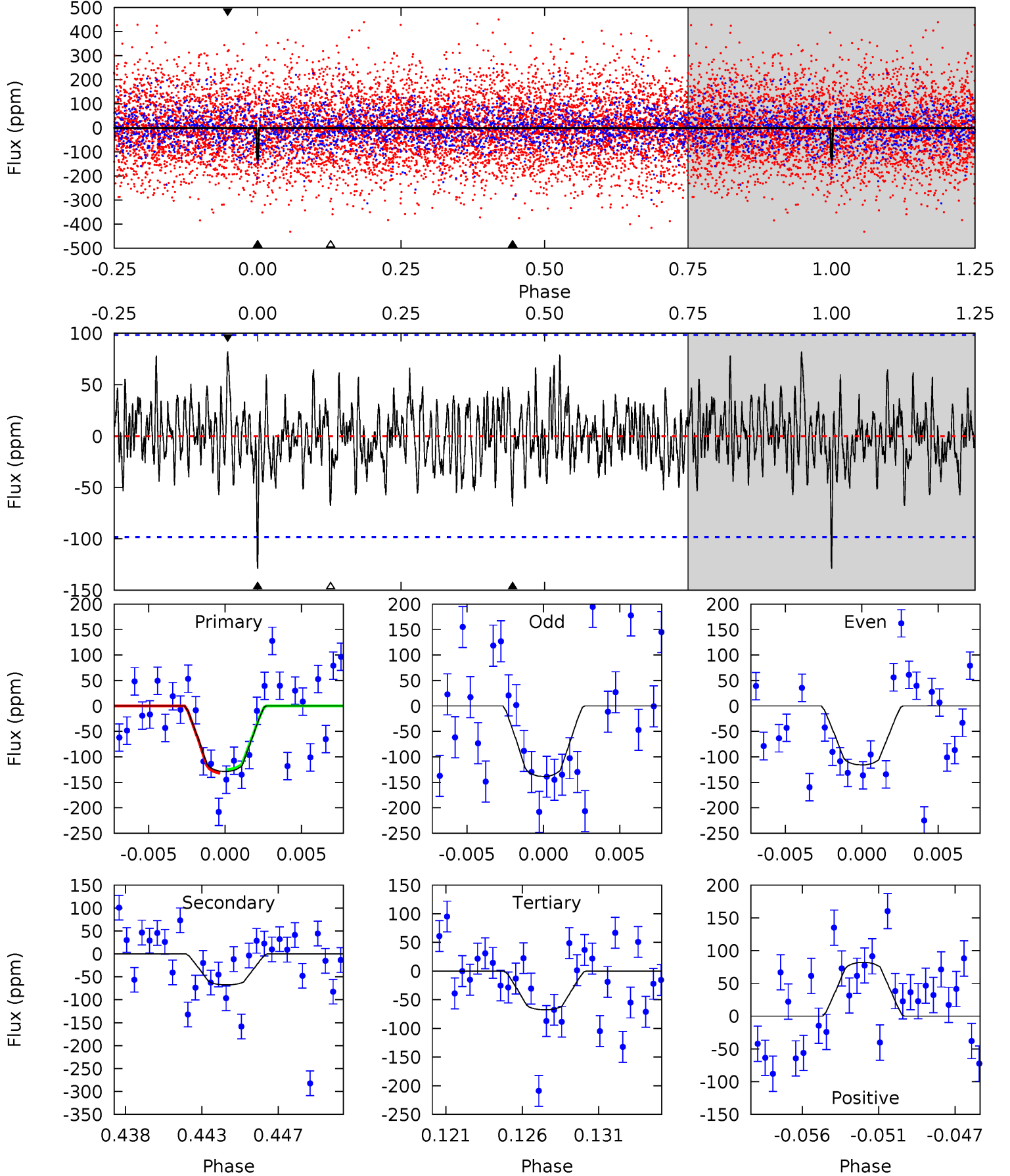
TCE 003356799-05 $P = 15.237856$ Days $T_0 = 137.578170$ (BKJD)



DV Model-Shift Uniqueness Test

003356799-05, P = 15.237902 Days, E = 122.340199 Days

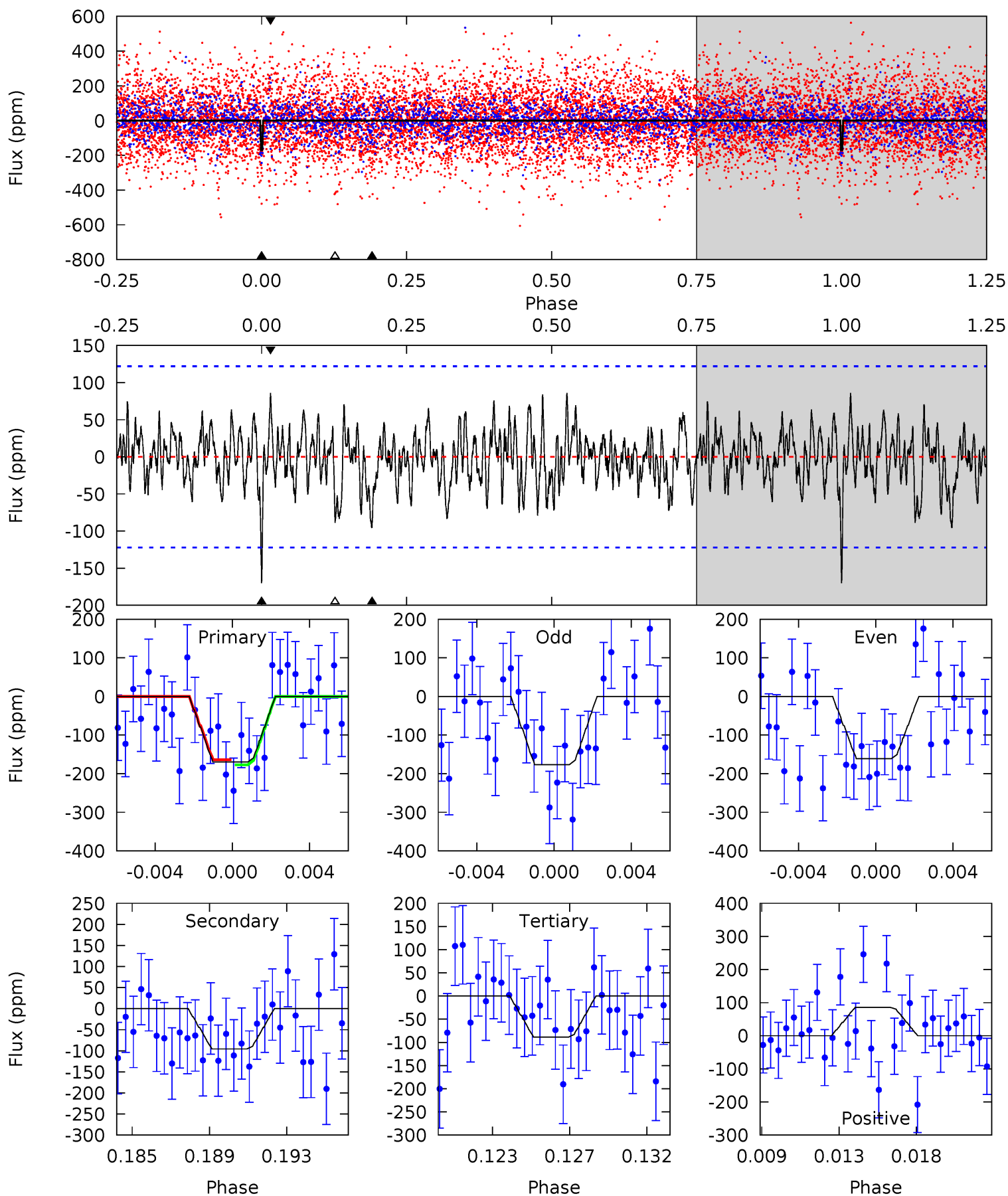
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
6.77	3.55	3.55	4.32	5.17	2.83	1.28	3.22	2.45	0.00	-0.77	0.60	0.91	0.39	0.19



Alt Model-Shift Uniqueness Test

003356799-05, P = 15.237856 Days, E = 122.340314 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
7.21	4.06	3.76	3.64	5.18	2.85	1.34	3.45	3.57	0.30	0.41	0.33	0.95	0.34	0.28



Stellar Parameters For KIC 003356799

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	7854^{+217}_{-326}	$3.669^{+0.448}_{-0.084}$	$-0.120^{+0.200}_{-0.300}$	$3.462^{+0.720}_{-1.681}$	$2.039^{+0.343}_{-0.514}$	$0.069^{+0.321}_{-0.025}$
	+3%/-4%	+12%/-2%	+167%/-250%	+21%/-49%	+17%/-25%	+464%/-36%
Source	KIC0	KIC0	KIC0	DSEP		

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

Secondary Eclipse Parameters for KIC 003356799-05 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-68 ± 19	$4.54^{+2.92}_{-2.60}$	2211^{+176}_{-284}	5920^{+3447}_{-1200}	42^{+191}_{-27}
Alt.	-96 ± 24	$4.52^{+3.30}_{-2.53}$	2214^{+164}_{-269}	6421^{+3988}_{-1341}	59^{+228}_{-40}

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

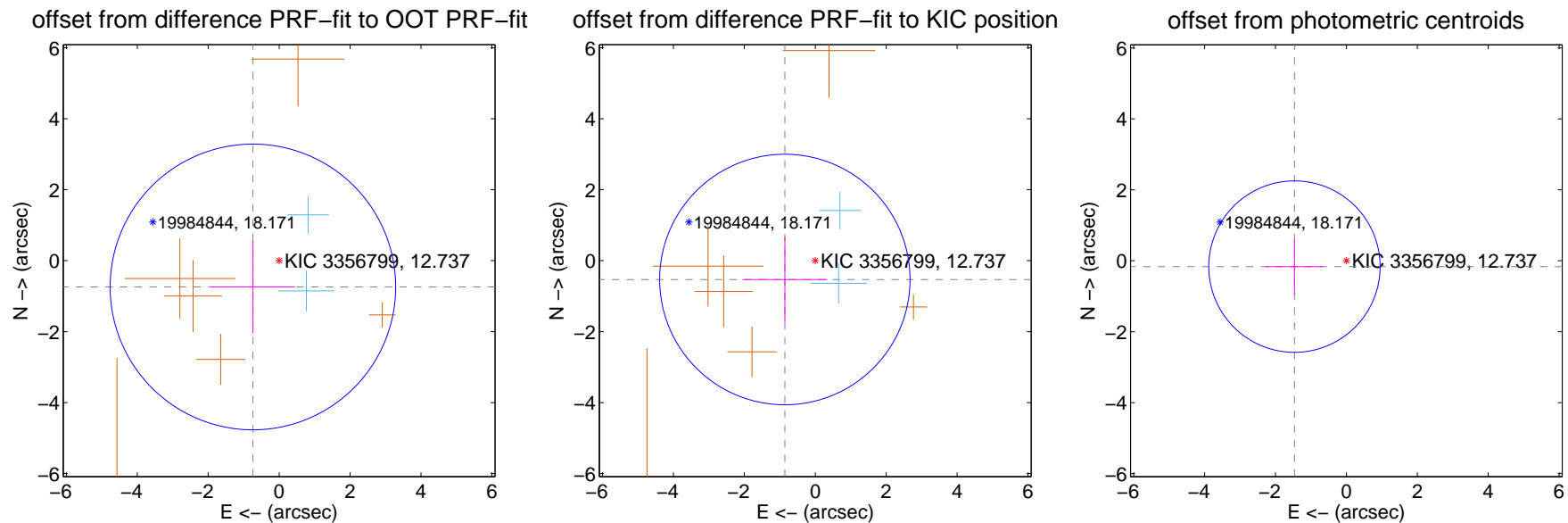
DV Centroid Data

Supplemental centroid analysis for 003356799-05. Kepler magnitude: 12.74. Transit SNR 8.99

There are 2 quarters with good PRF difference image offsets

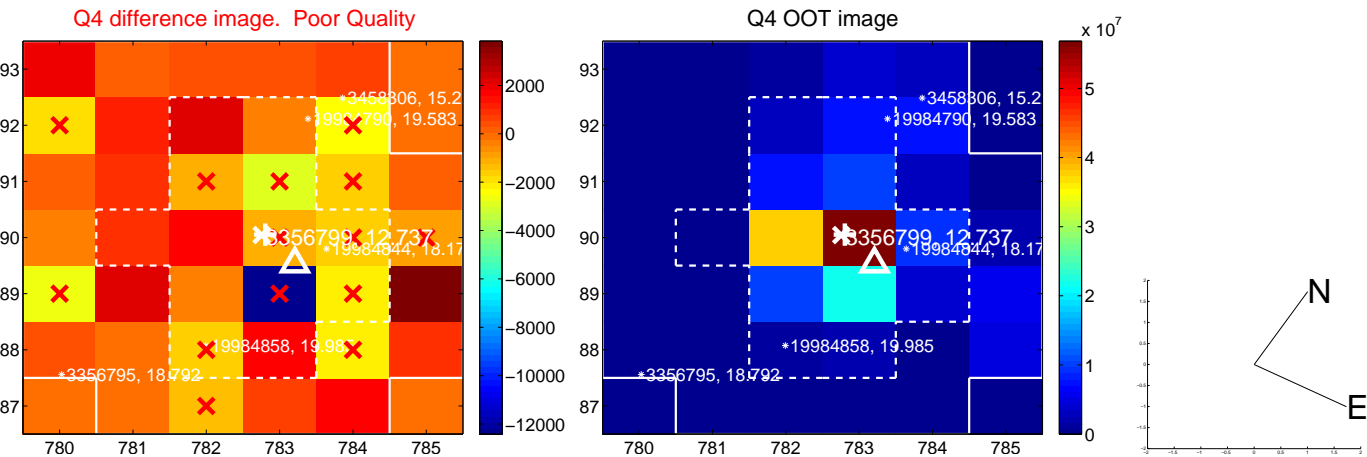
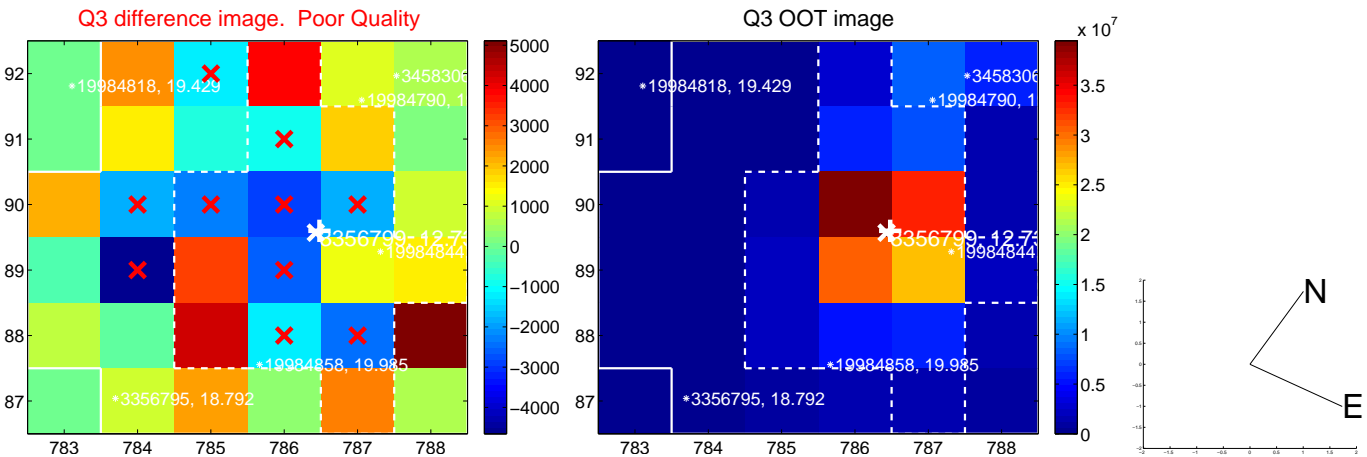
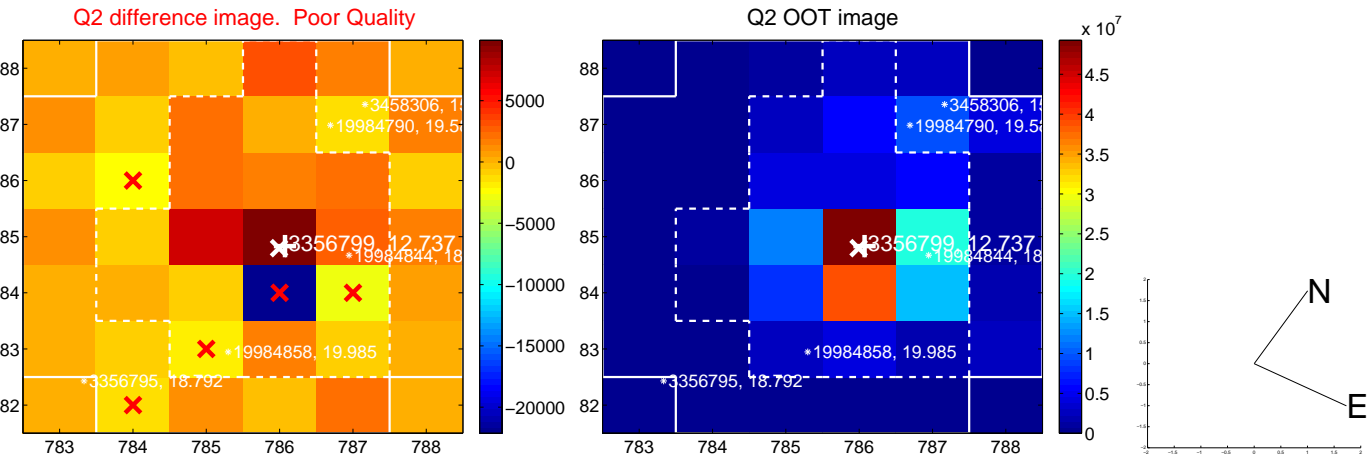
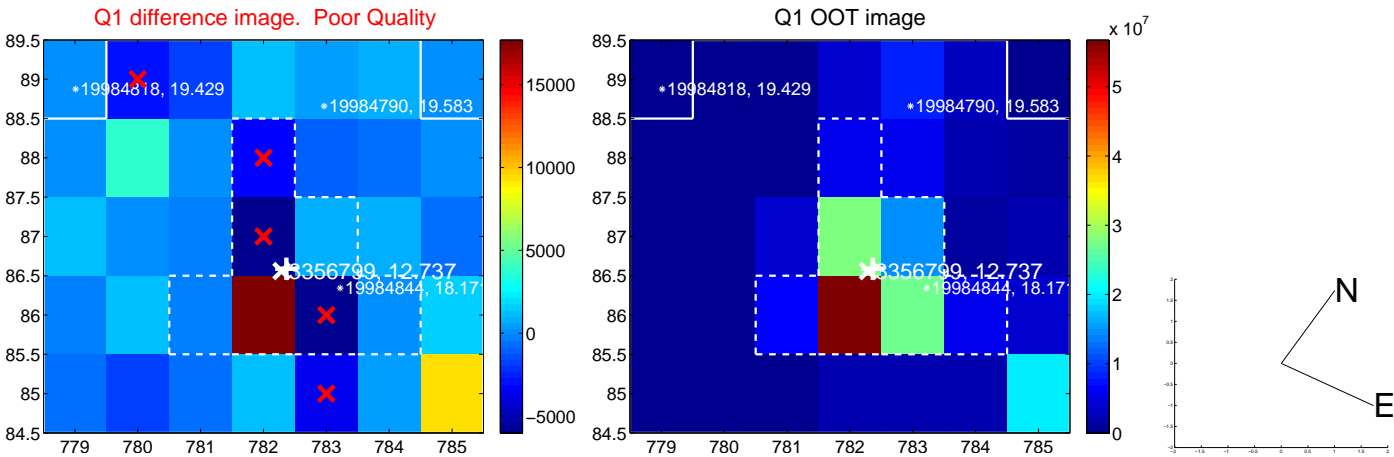
The direct PRF centroid is offset from the target star catalog position by about 0.41 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	1.047 ± 1.342	0.78	0.740 ± 1.188	-0.740 ± 1.314
PRF-fit source offset from KIC position	1.009 ± 1.177	0.86	0.858 ± 1.187	-0.530 ± 1.197
photometric centroid source offset	1.47 ± 0.81	1.83	1.47 ± 0.81	-0.16 ± 0.79

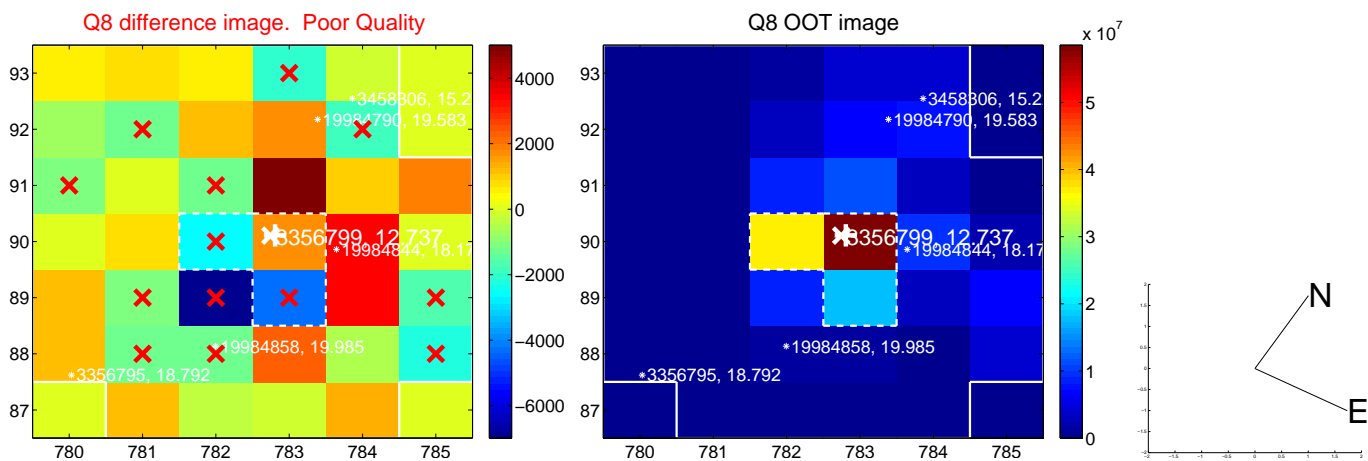
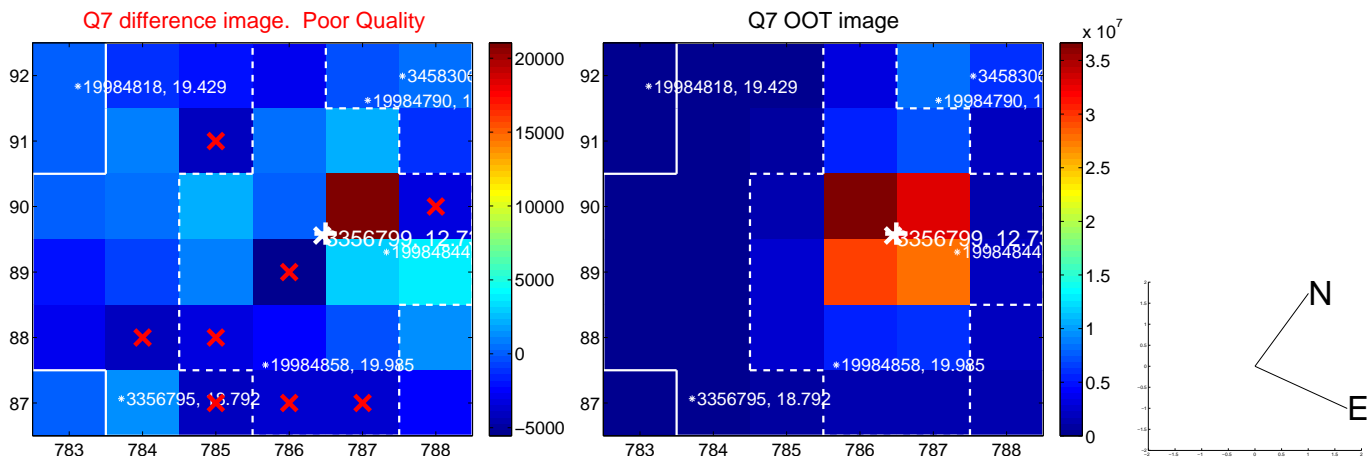
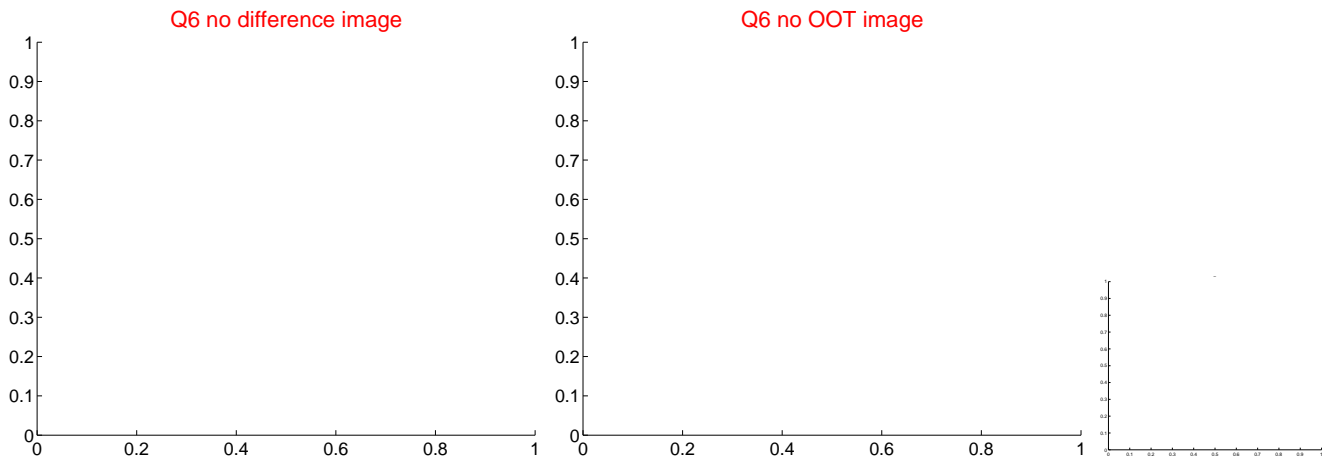
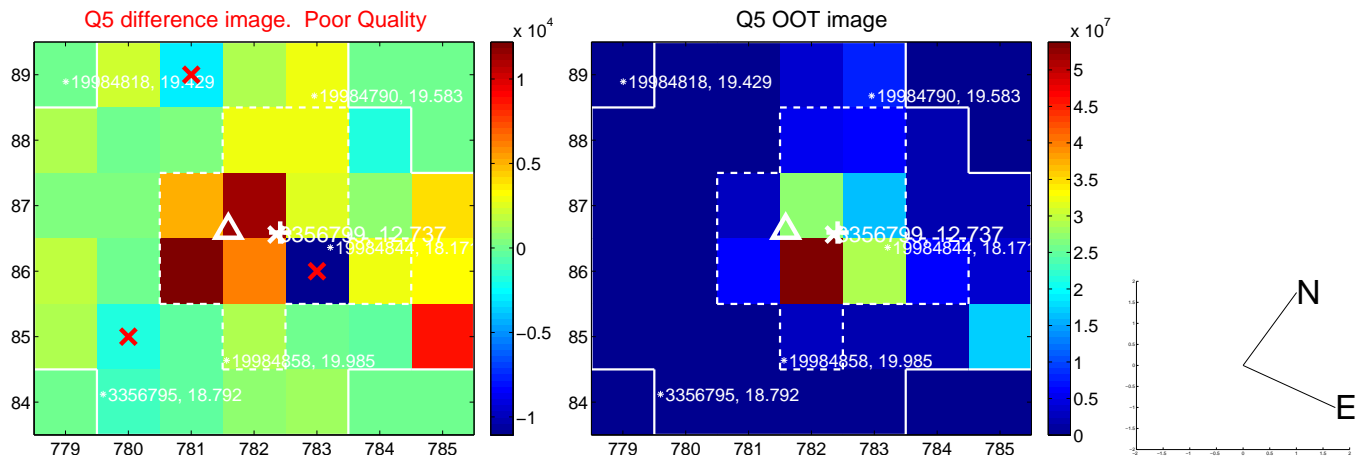


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

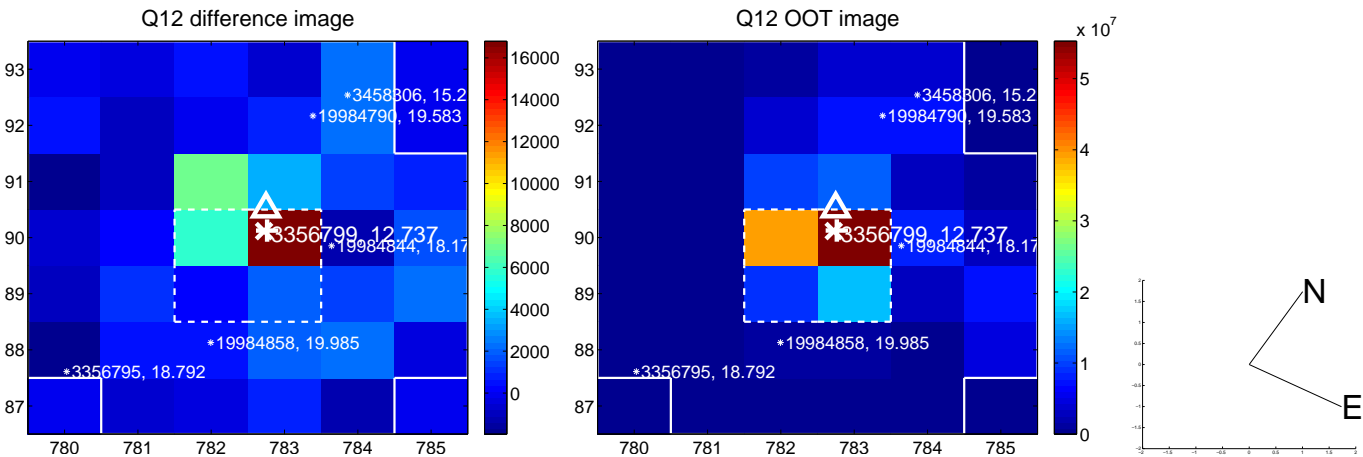
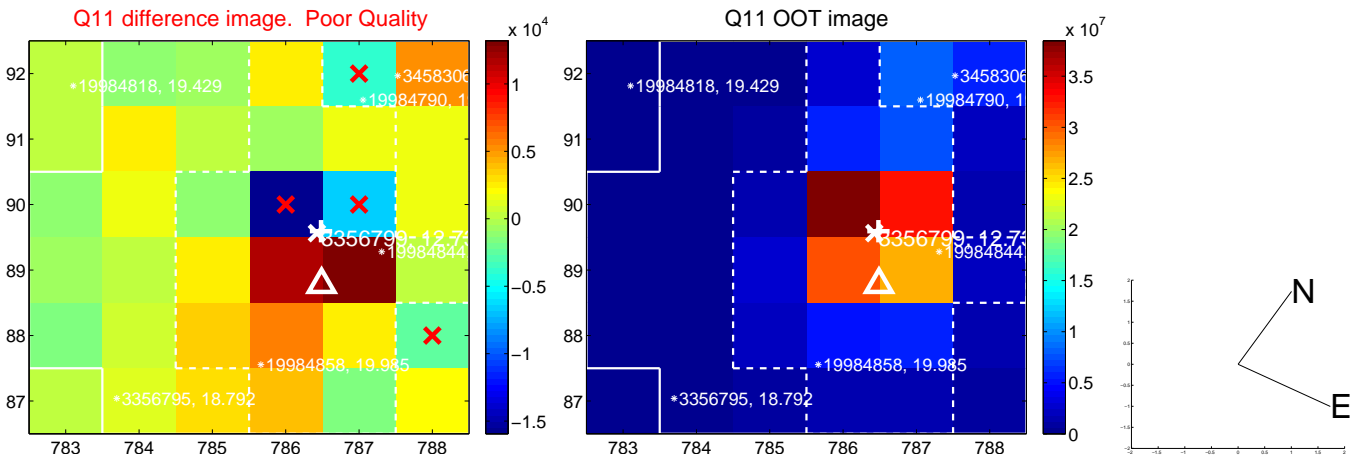
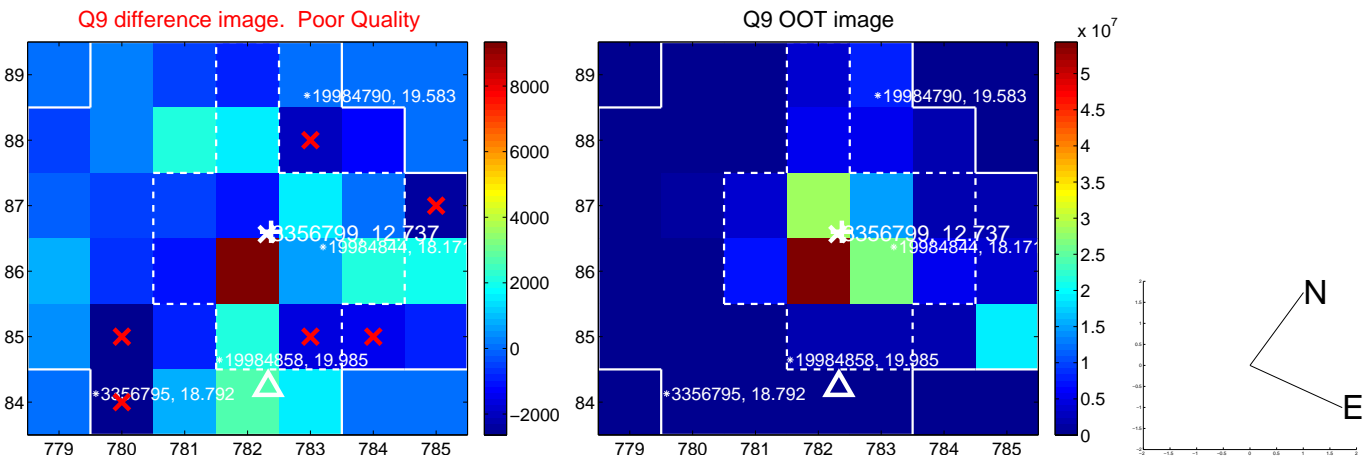
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



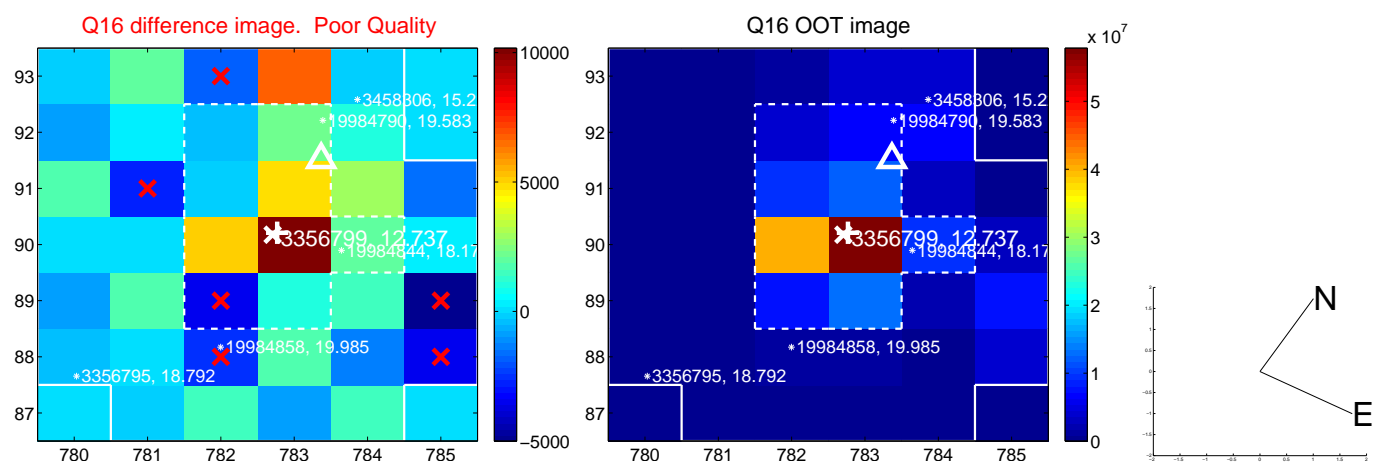
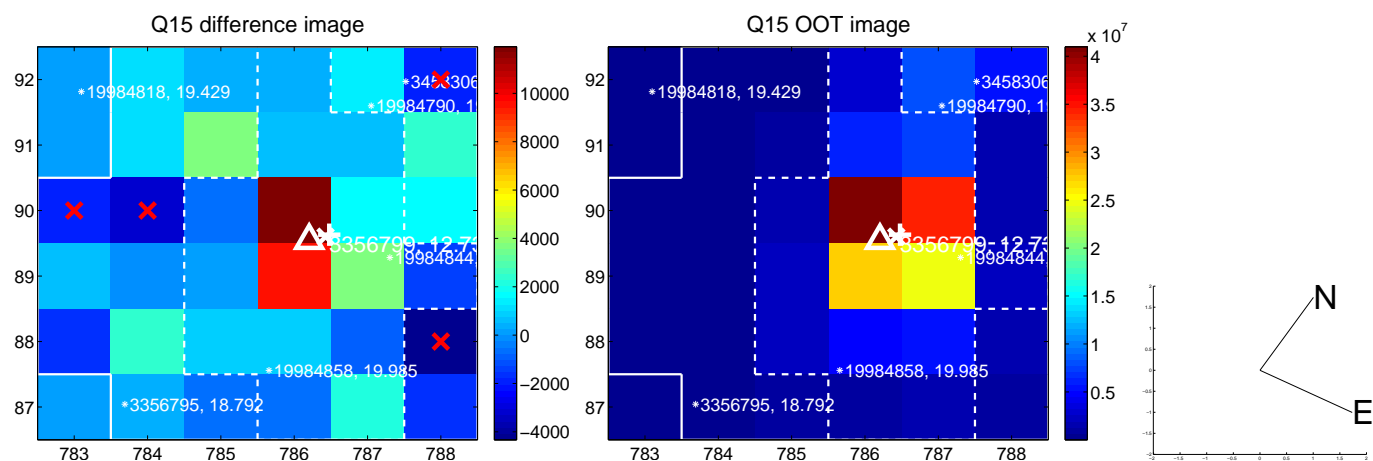
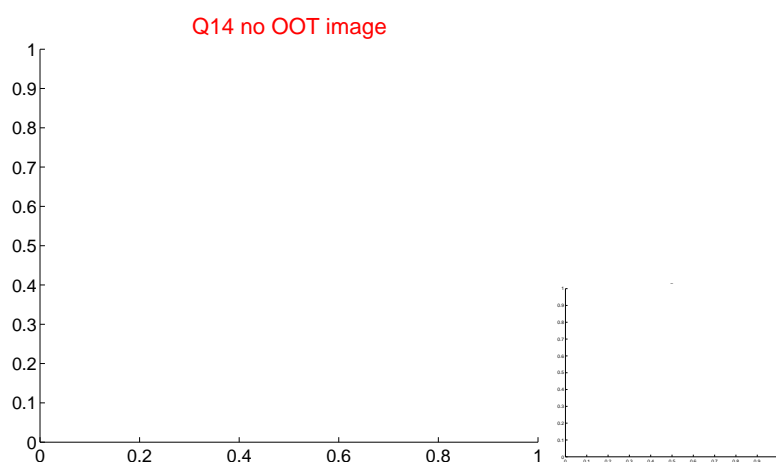
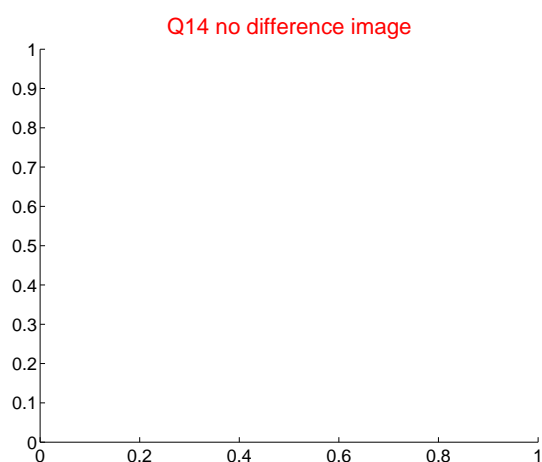
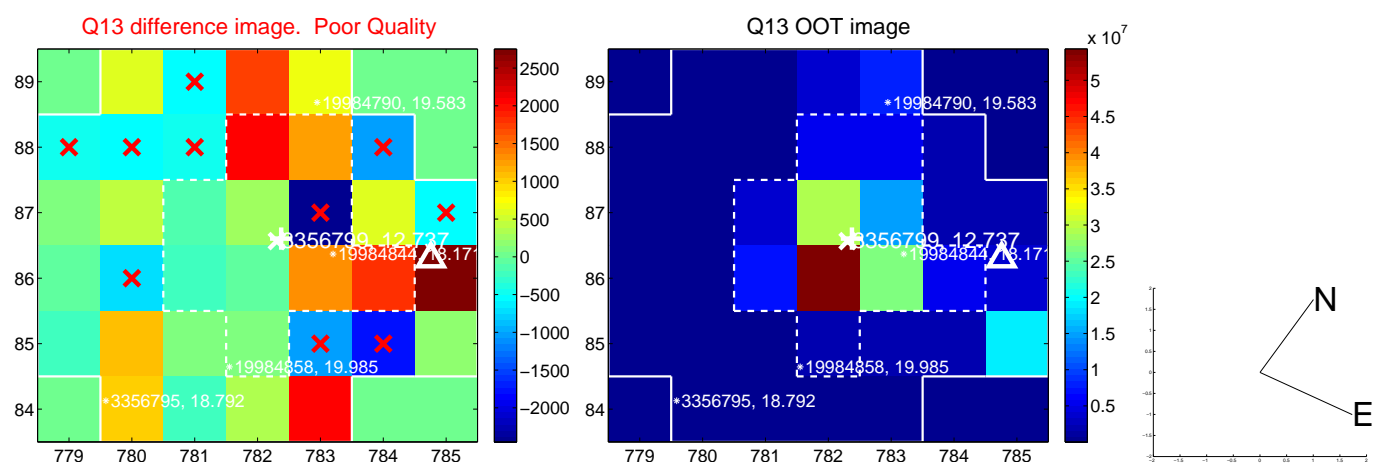
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



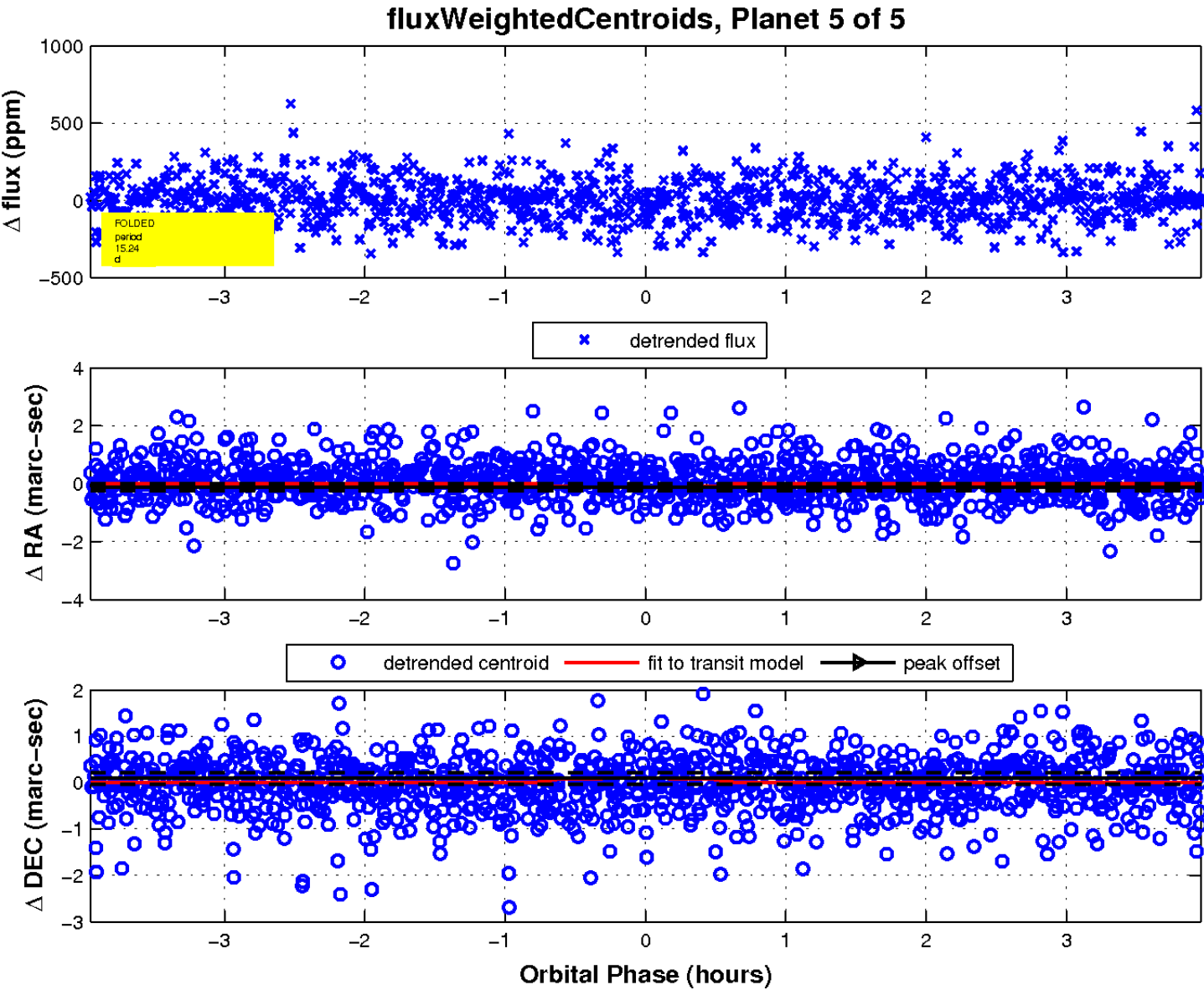
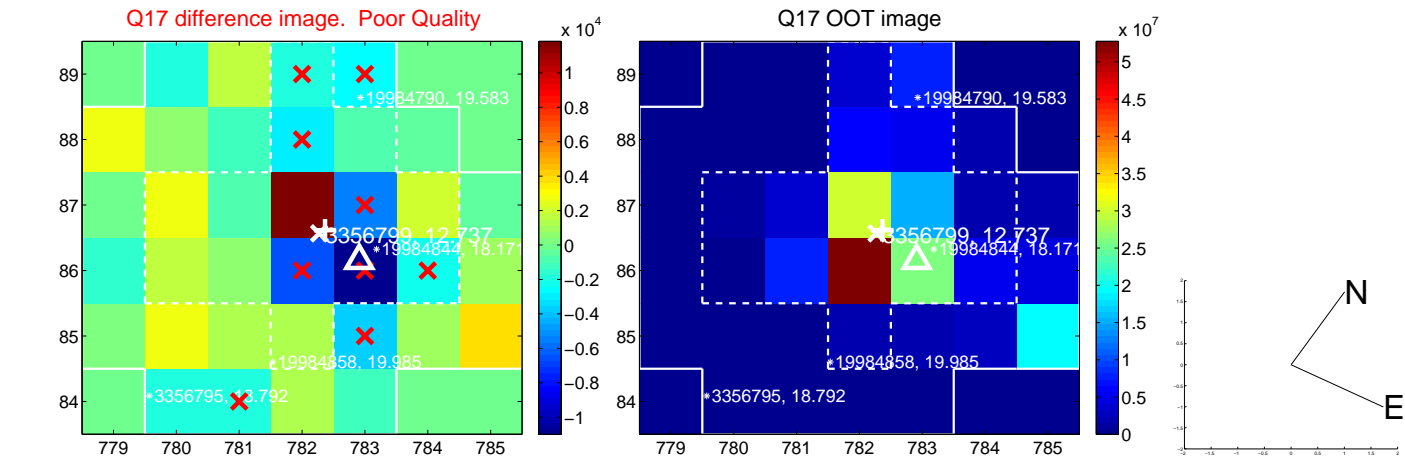
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

