

KIC 011922283

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})
011922283-01	OBS	No	1.054299	131.790731	30.0	4.185	7.8	8.2	11.11	7120	6.12	0.00
011922283-02	OBS	No	1.437893	131.542321	45.4	5.941	8.8	8.9	11.11	7120	7.52	0.00
011922283-04	OBS	No	0.878715	132.314087	111.1	8.534	9.7	11.7	11.11	7120	23.34	0.00

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
011922283-01	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT
011922283-02	OBS	FP	0.00	1	0	0	0	TRANS_GAPPED—SWEET_NTL—LPP_DV
011922283-04	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_SKYE_ZUMA—TRANS_GAPPED—LPP_DV—CENT_FEW_DIFFS

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

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

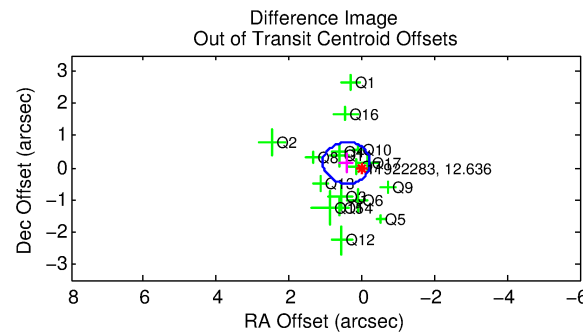
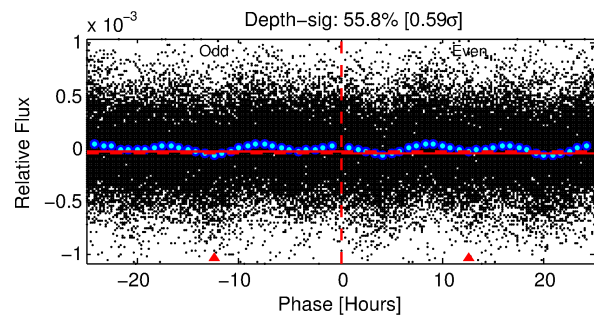
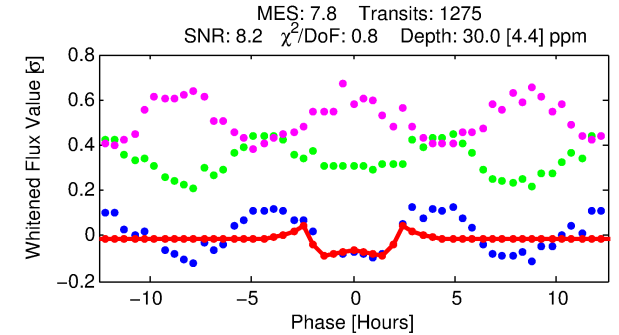
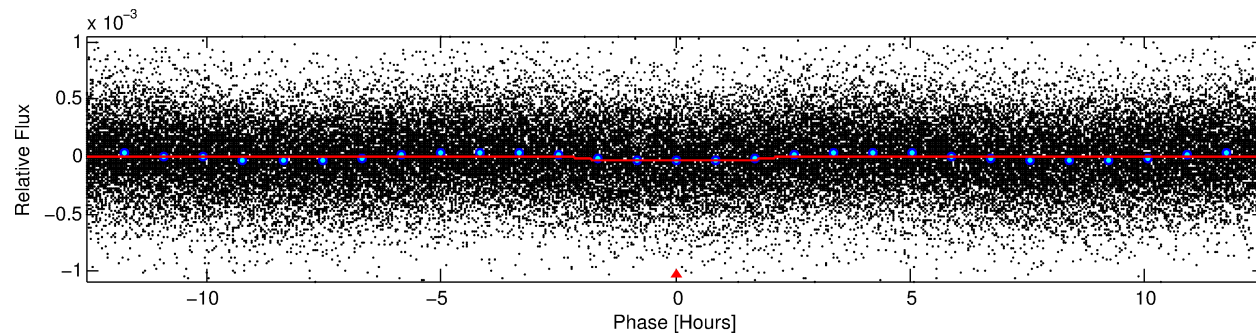
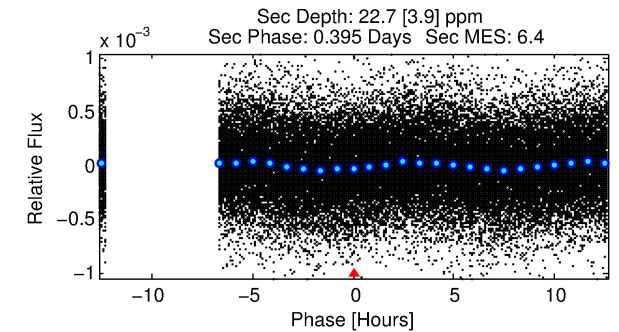
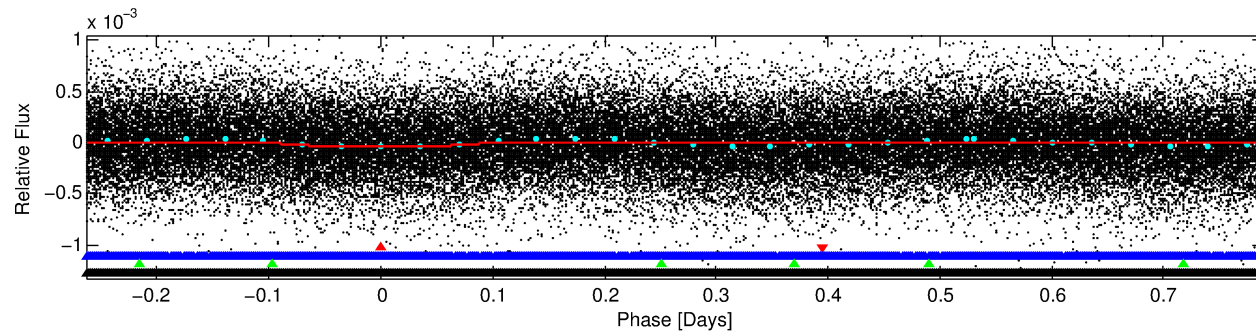
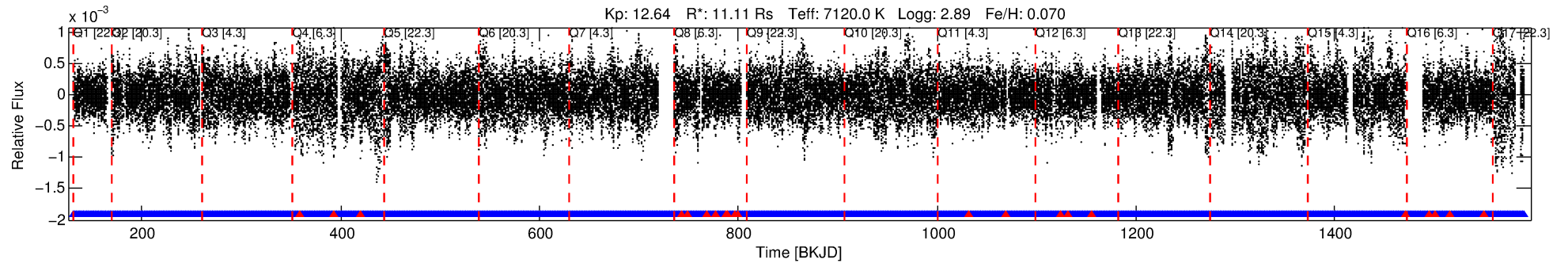
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 011922283-01

No Significant Match Found

DV One-Page Summary

KIC: 11922283 Candidate: 1 of 4 Period: 1.054 d



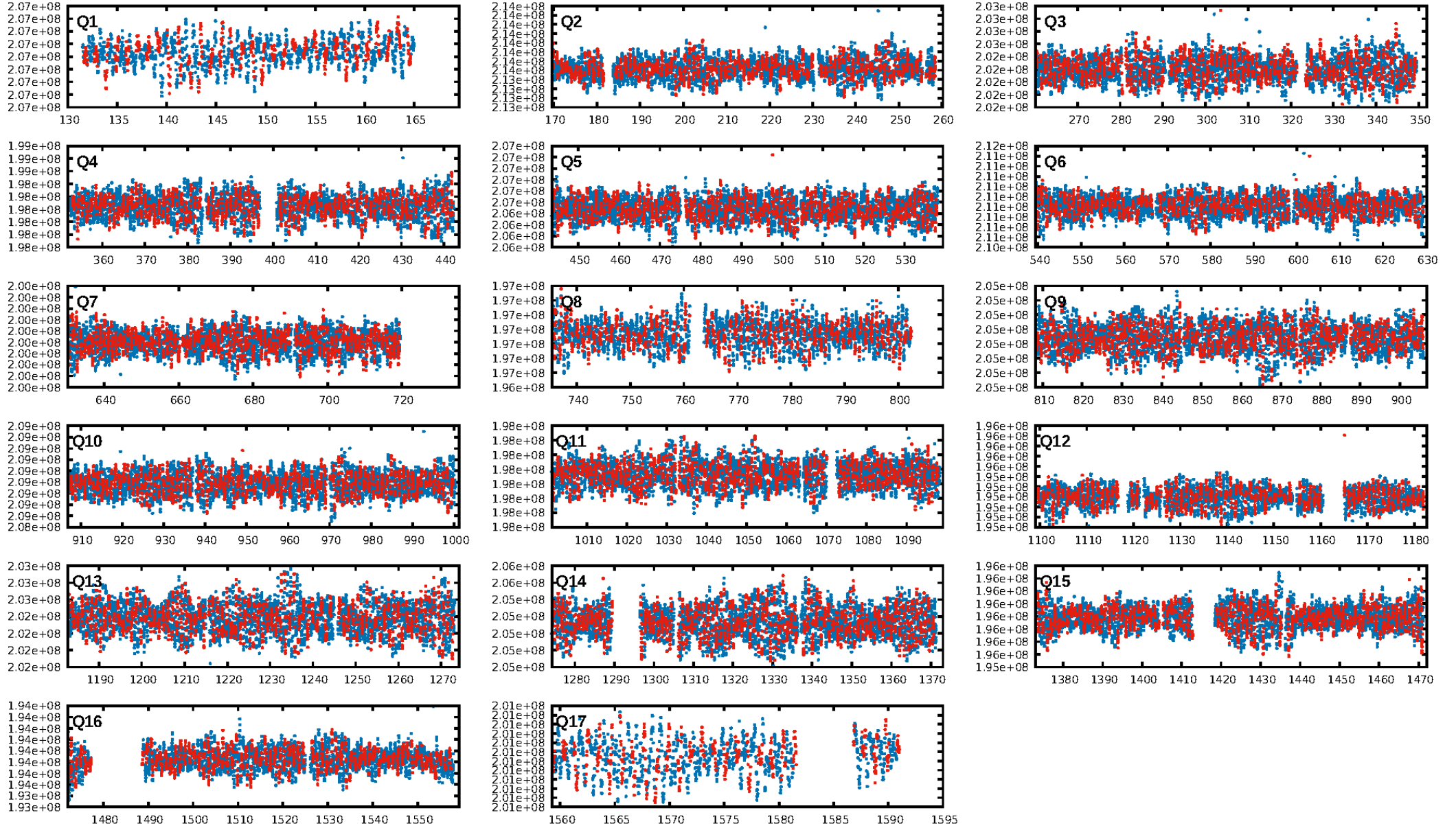
DV Fit Results:

Period = 1.05430 [0.00001] d
Epoch = 131.7907 [0.0027] BKJD
Rp/R* = 0.0051 [0.0029]
a/R* = 2.02 [4.57]
b = 0.11 [28.36]
Seff = N/A
Teq = N/A
Rp = 6.12 [4.20] Re
a = N/A
Ag = N/A
Teffp = N/A

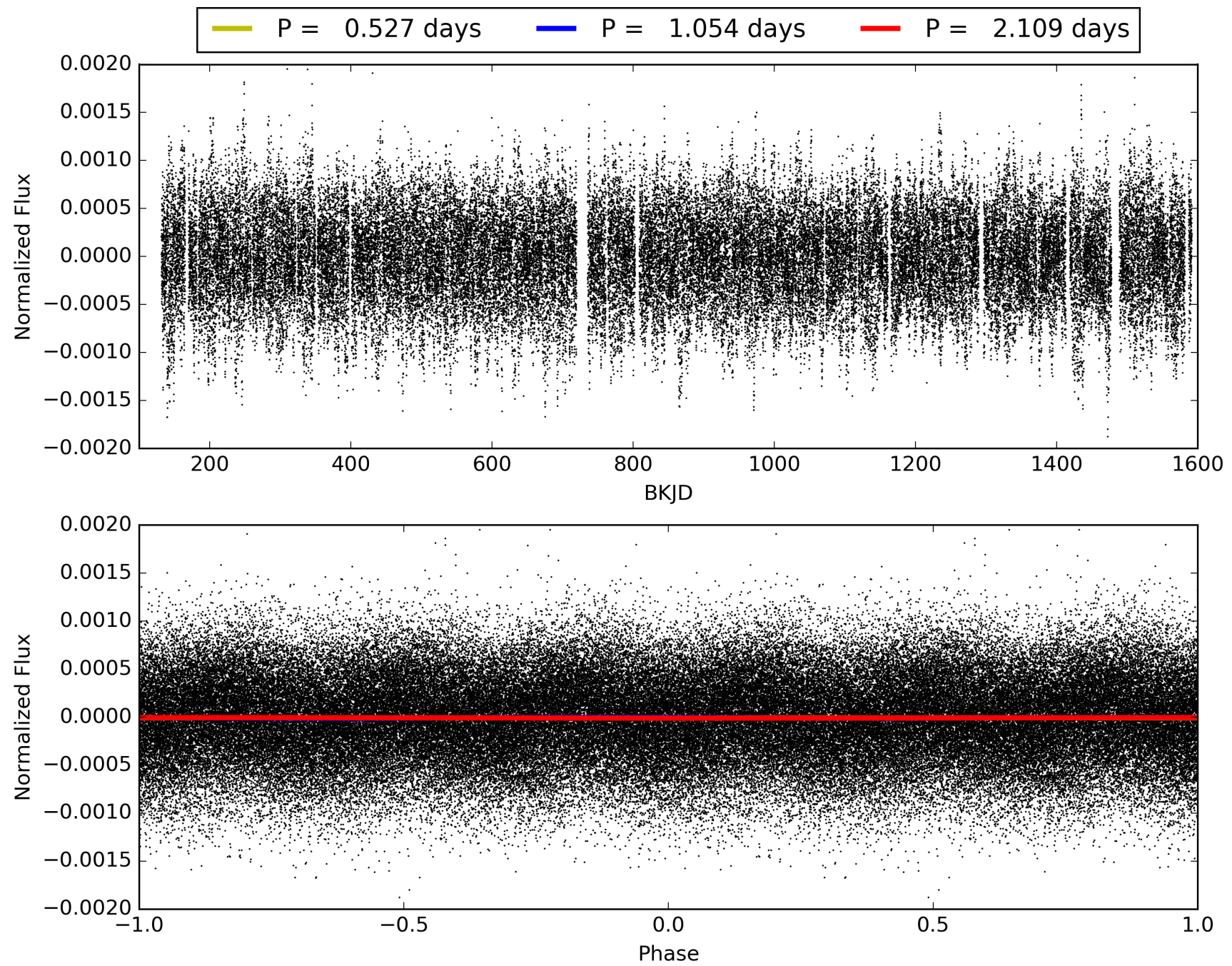
DV Diagnostic Results:

ShortPeriod-sig: 34.3% [0.44σ]
LongPeriod-sig: 79.5% [1.27σ]
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: N/A
RollingBand-fgt: 0.98 [1196/1217]
GhostDiagnostic-chr: 4.84
Centroid-sig: 39.1%
Centroid-so: 0.502 arcsec [0.96σ]
OotOffset-rm: 0.447 arcsec [2.07σ]
KicOffset-rm: 0.431 arcsec [1.86σ]
OotOffset-st: 4/4/4/5 [17]
KicOffset-st: 4/4/4/5 [17]
DiffImageQuality-fgm: 0.82 [14/17]
DiffImageOverlap-fno: 0.00 [0/17]

TCE 011922283-01, PDC Light Curves

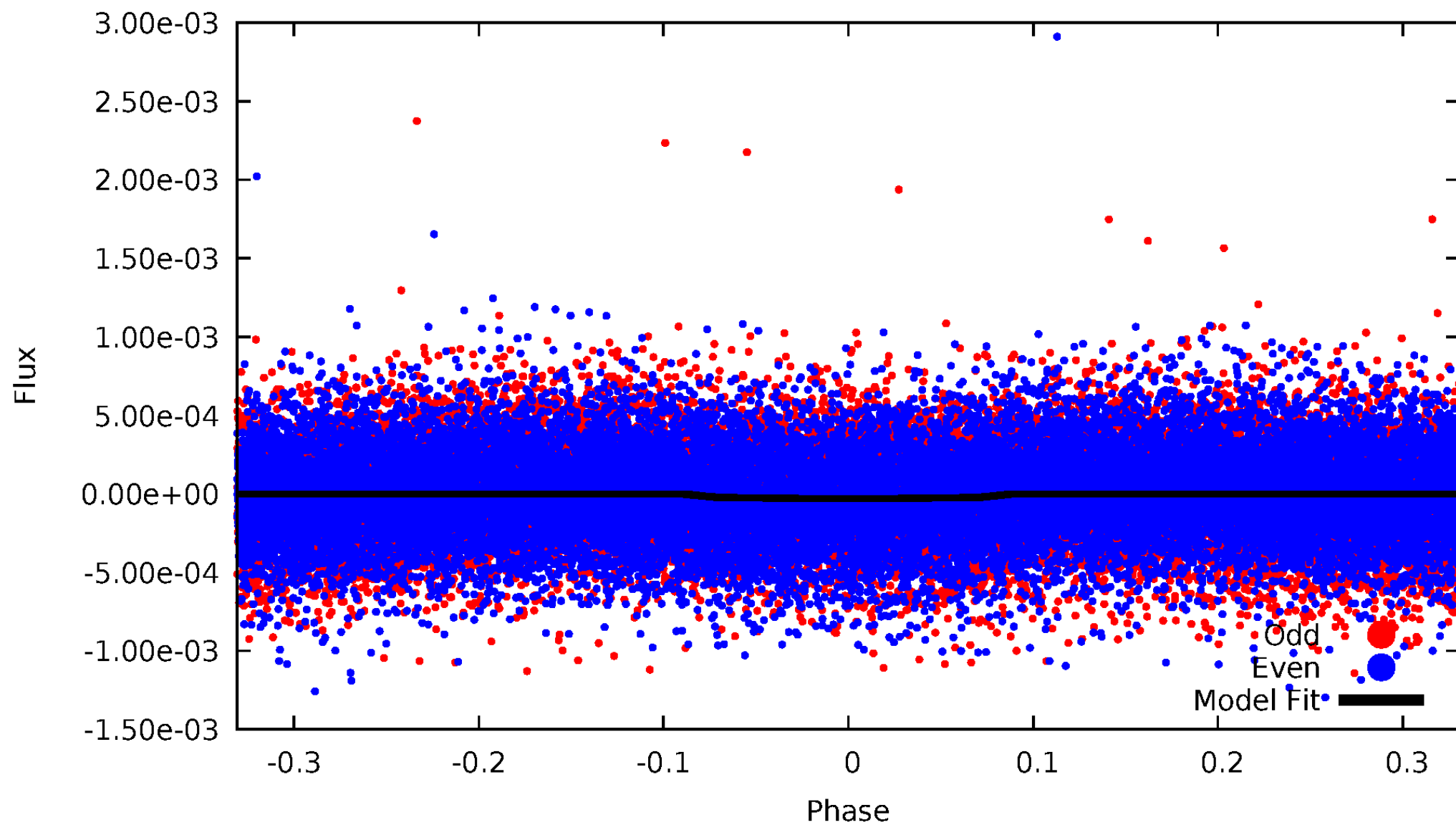


TCE 011922283-01



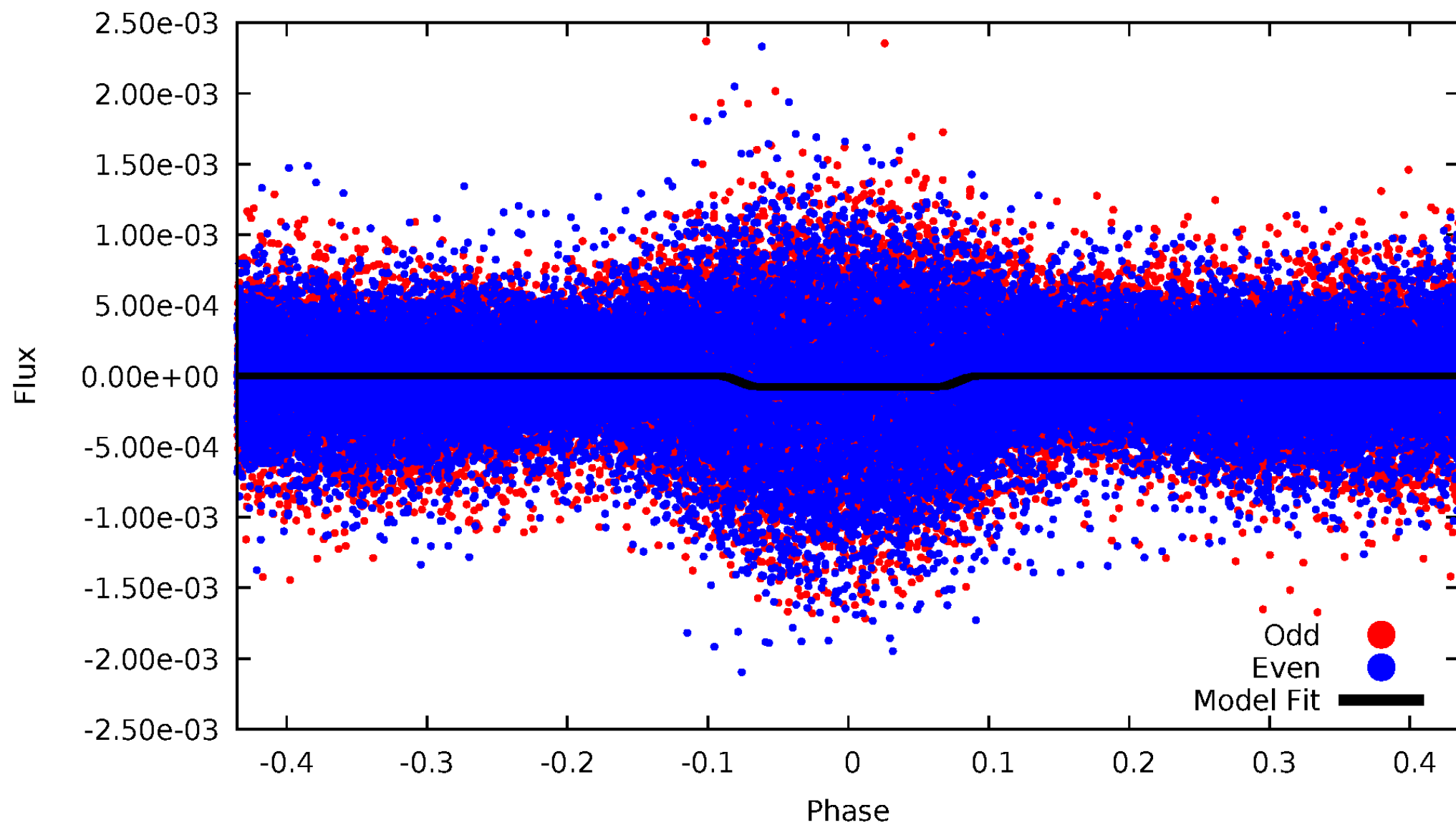
DV Odd/Even

TCE 011922283-01



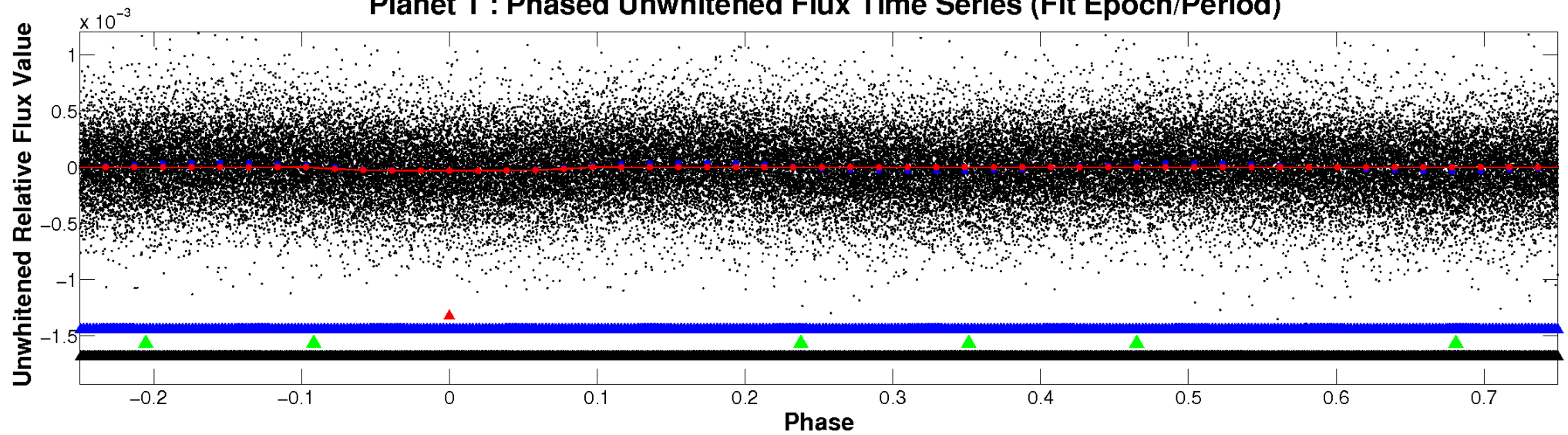
ALT Odd/Even

TCE 011922283-01

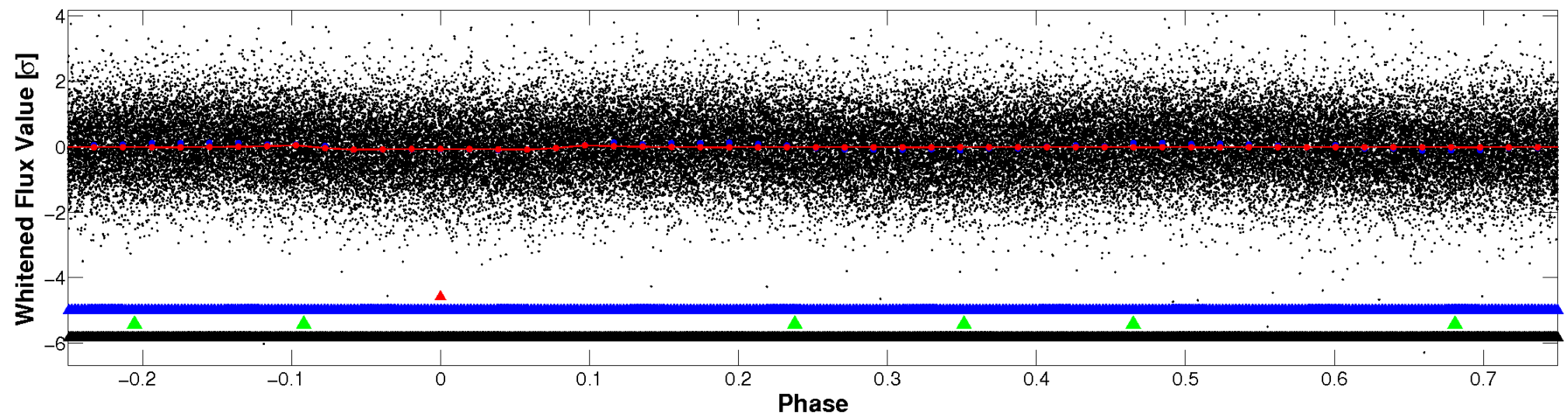


Non-Whitened Vs. Whitened Light Curve

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

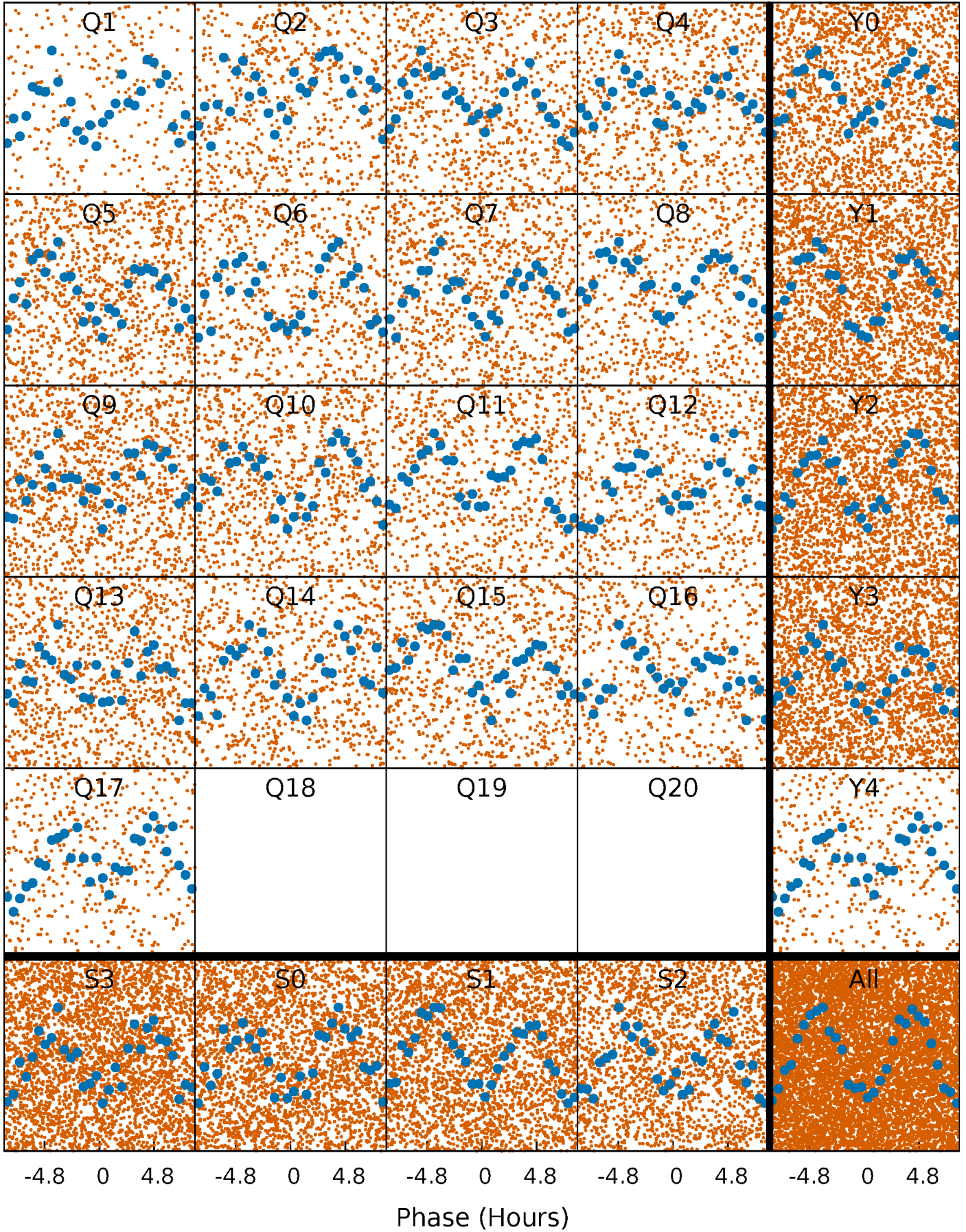


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



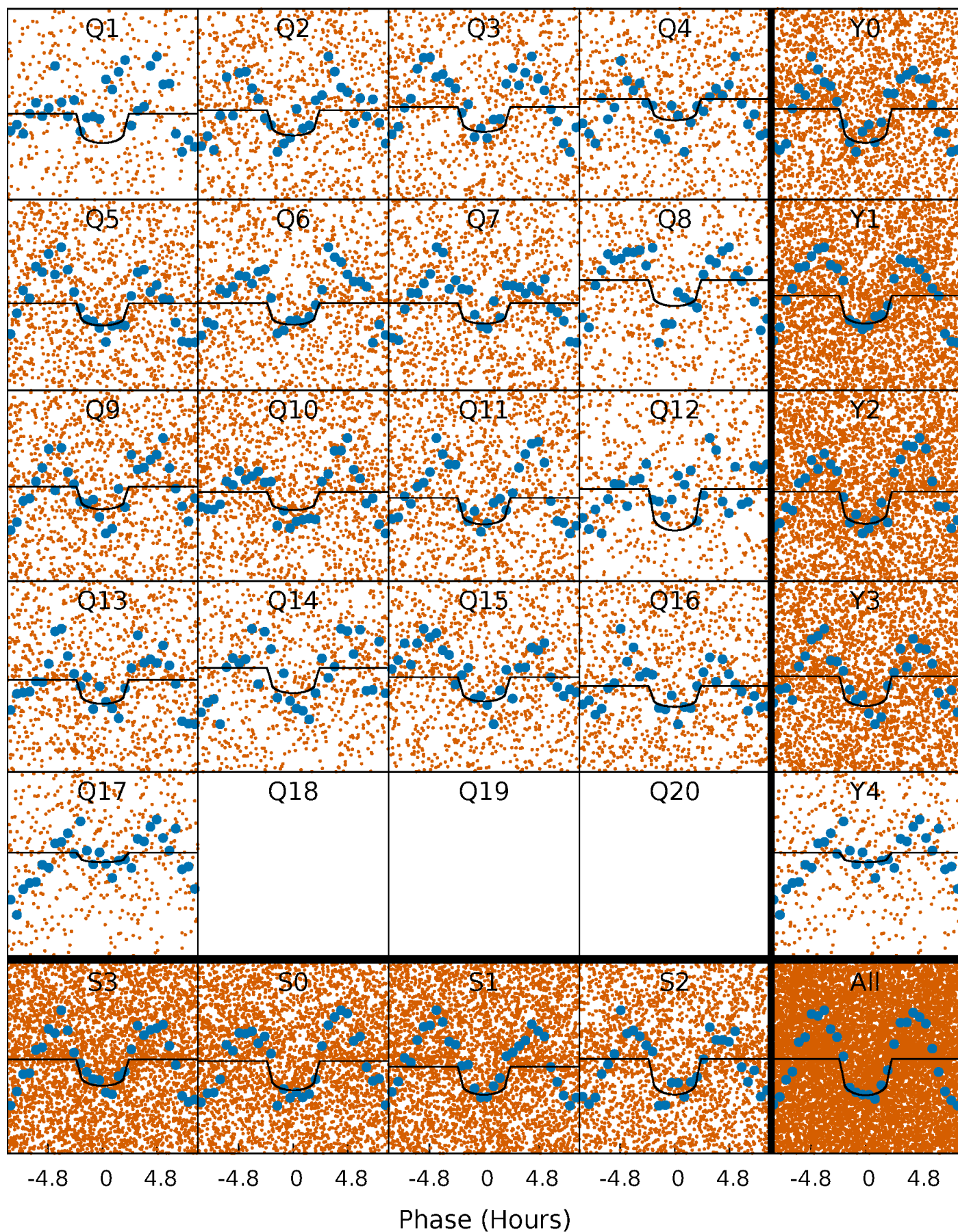
PDC Quarter-Phased Transit Curves

TCE 011922283-01 P= 1.054299 Days $T_0=131.790731$ (BKJD)



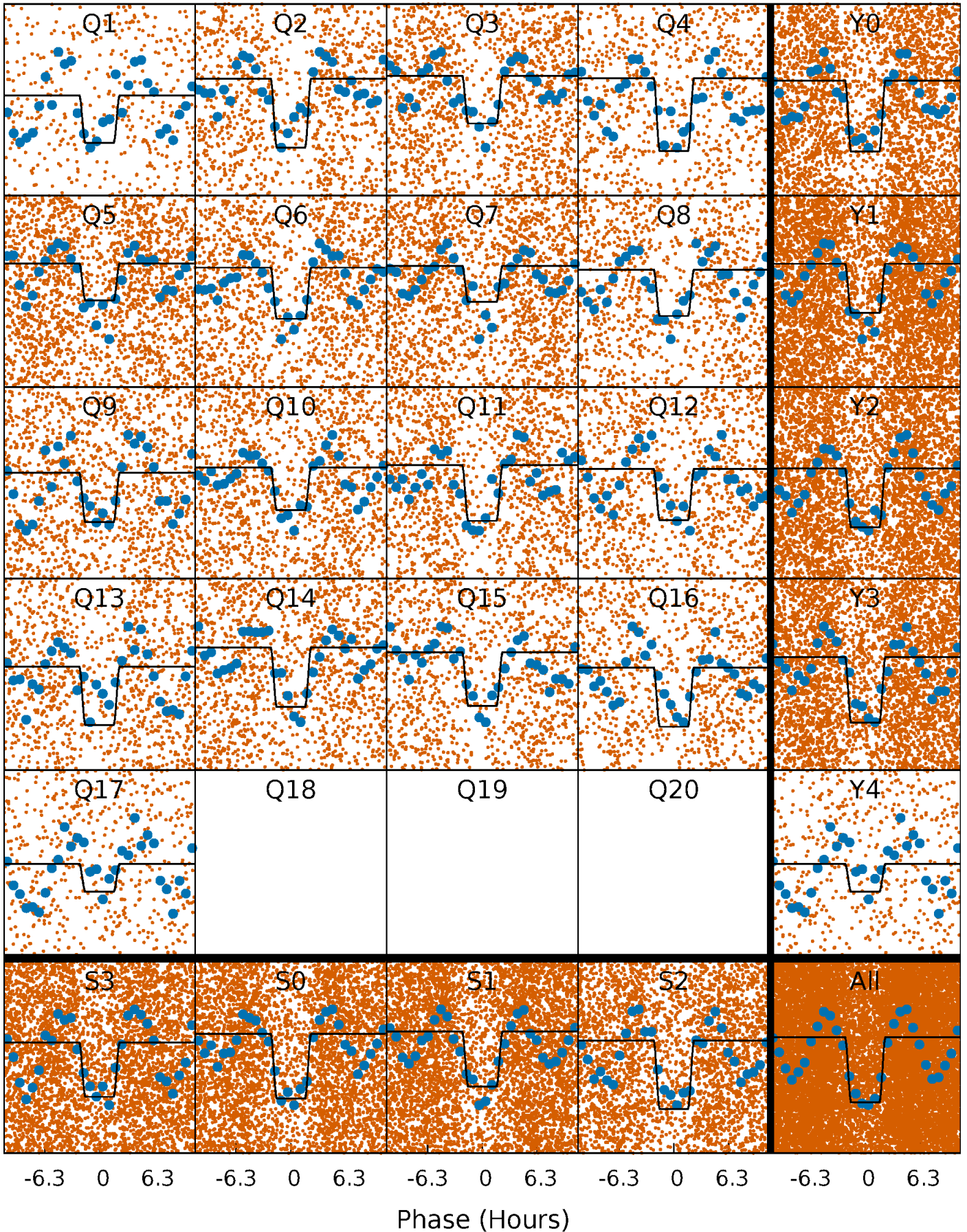
DV Quarter-Phased Transit Curves

TCE 011922283-01 P= 1.054299 Days $T_0=131.790731$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

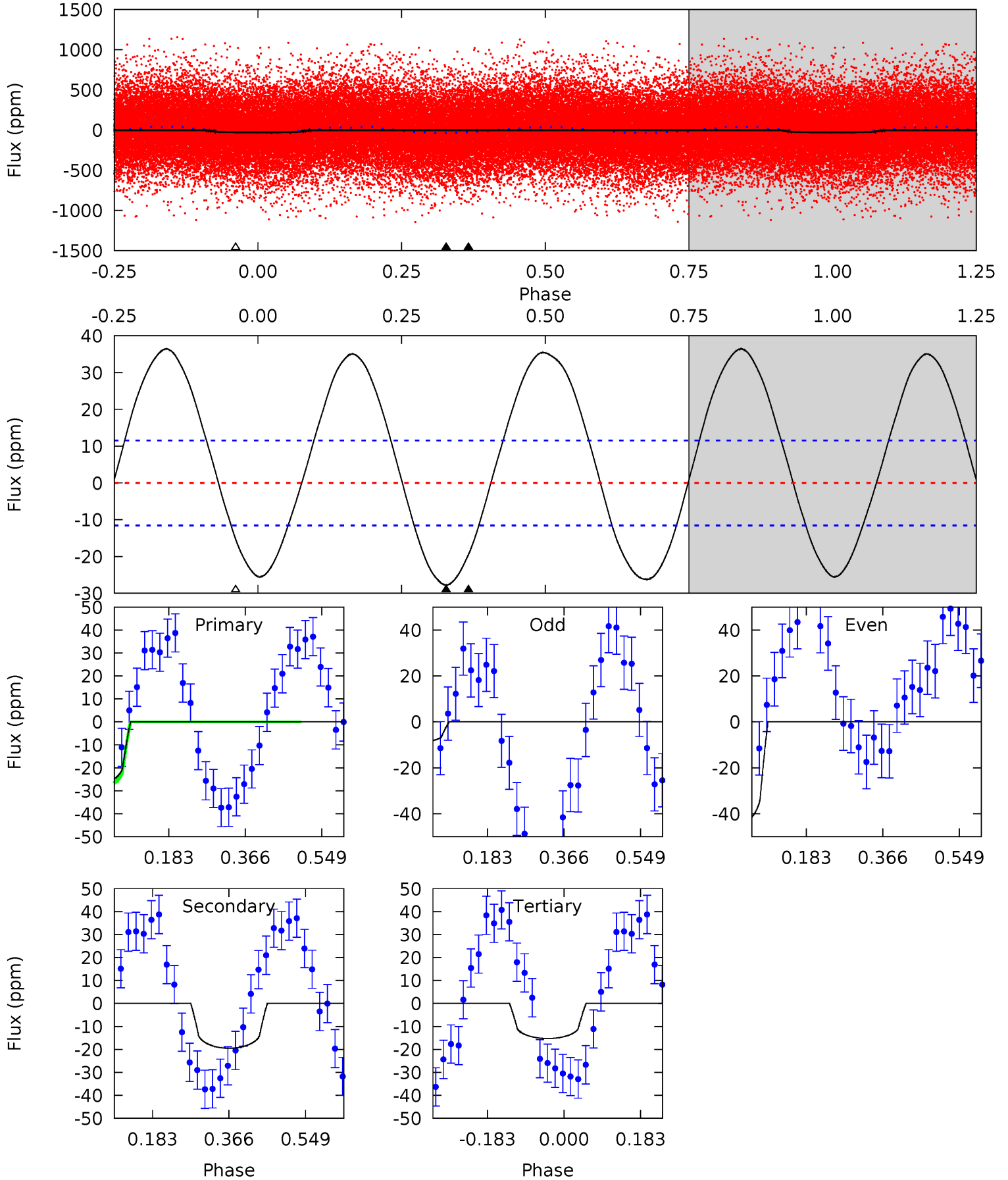
TCE 011922283-01 P= 1.054306 Days $T_0=131.789665$ (BKJD)



DV Model-Shift Uniqueness Test

011922283-01, P = 1.054299 Days, E = 130.736432 Days

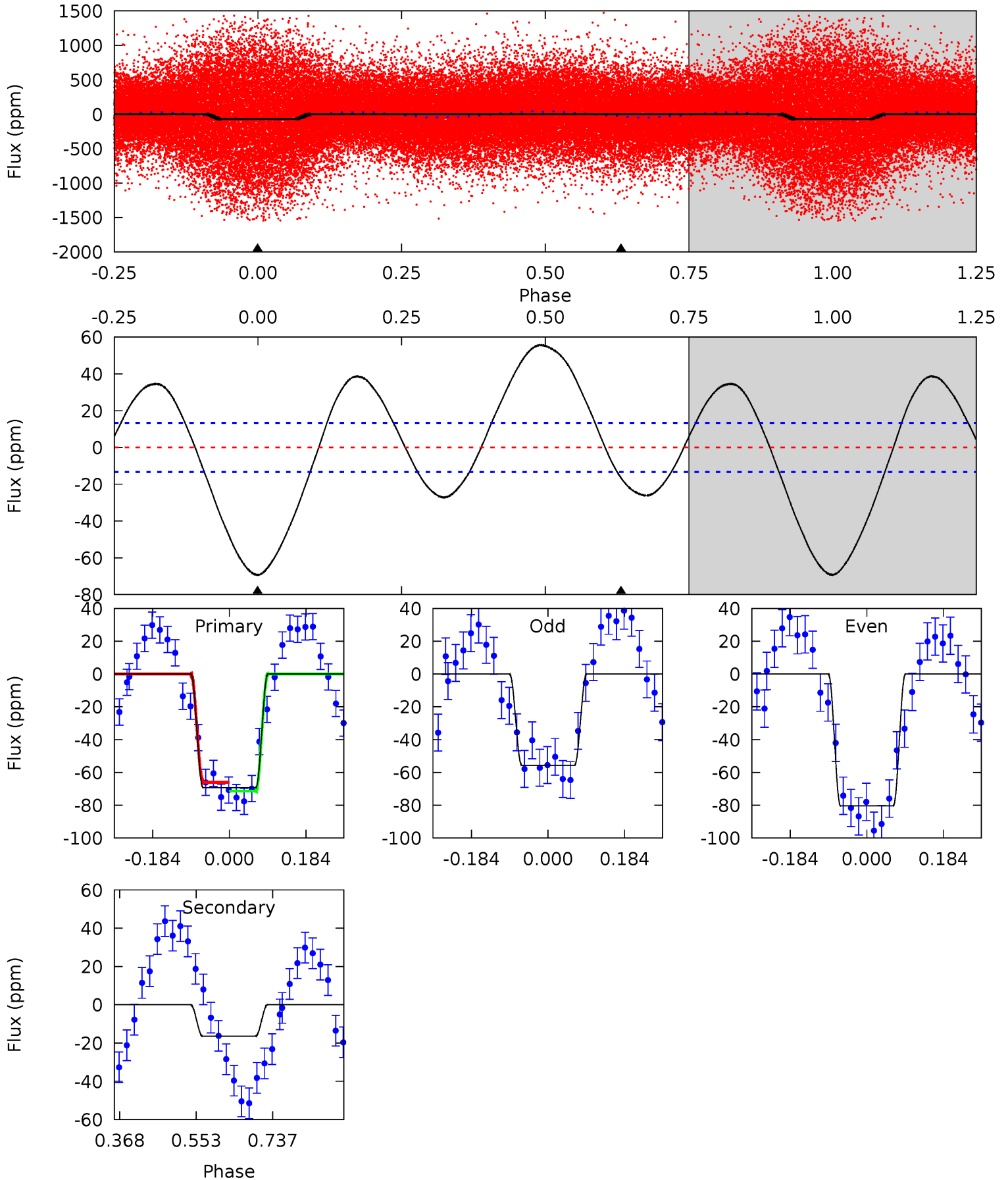
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
10.7	7.51	5.87	0	4.44	1.33	7.93	4.83	10.7	1.64	7.51	7.24	1.07	0.57	0.65



Alt Model-Shift Uniqueness Test

011922283-01, P = 1.054306 Days, E = 130.735359 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
23.0	5.47	0	0	4.43	1.33	7.24	23.0	23.0	5.47	5.47	4.10	1.15	0.45	0.94



Stellar Parameters For KIC 011922283

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	M (M_{\odot})	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	7120^{+174}_{-274}	$2.888^{+0.297}_{-0.033}$	$0.070^{+0.250}_{-0.350}$	$11.106^{+0.469}_{-4.219}$	$3.479^{+0.070}_{-0.794}$	$0.004^{+0.008}_{-0.000}$
	+2%/-4%	+10%/-1%	+357%/-500%	+4%/-38%	+2%/-23%	+212%/-12%
Source	PHO1	FLK73	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 011922283-01 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-20 ± 3	$5.62^{+3.59}_{-2.87}$	8136^{+377}_{-719}	3158^{+5856}_{-9058}	$0.308^{+0.909}_{-0.190}$
Alt.	-16 ± 3	$9.78^{+3.59}_{-3.39}$	8088^{+422}_{-700}	-5927^{+1133}_{-575}	$0.086^{+0.120}_{-0.040}$

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 $A_{obs} \gg 1.0$

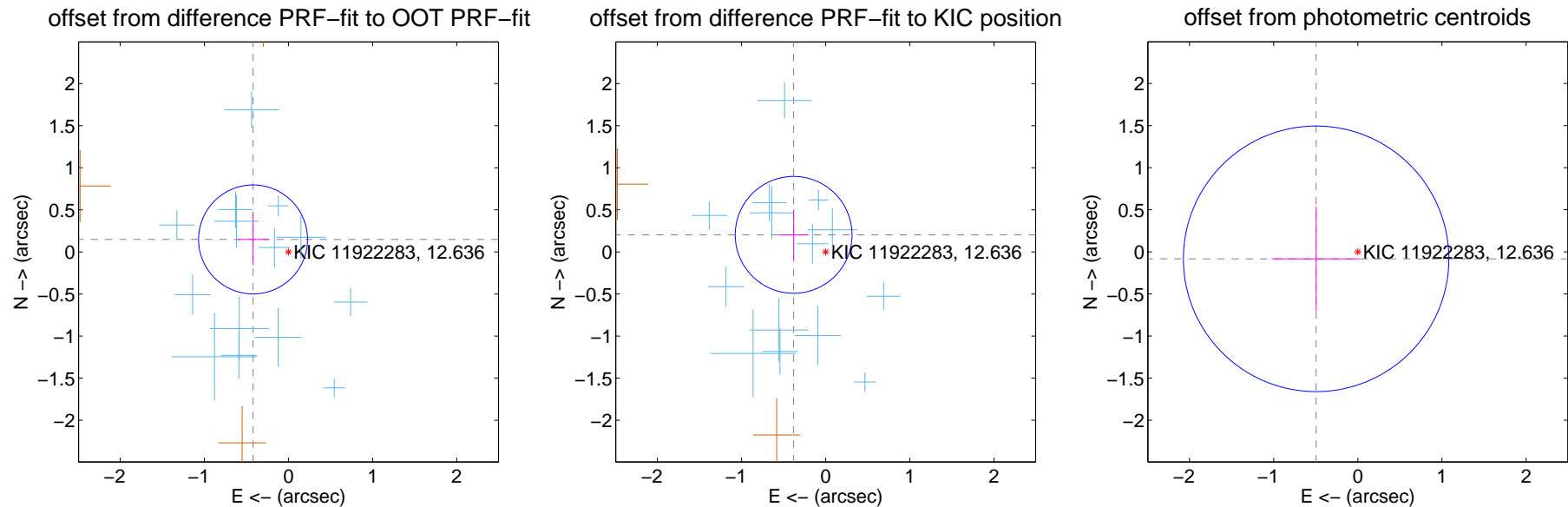
DV Centroid Data

Supplemental centroid analysis for 011922283-01. Kepler magnitude: 12.64. Transit SNR 8.20

There are 14 quarters with good PRF difference image offsets

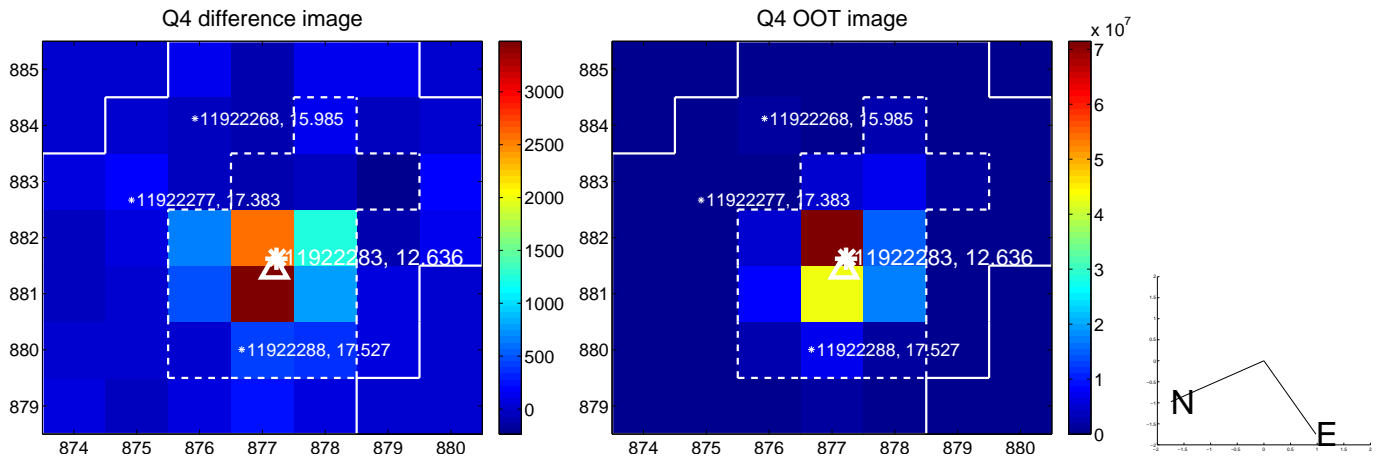
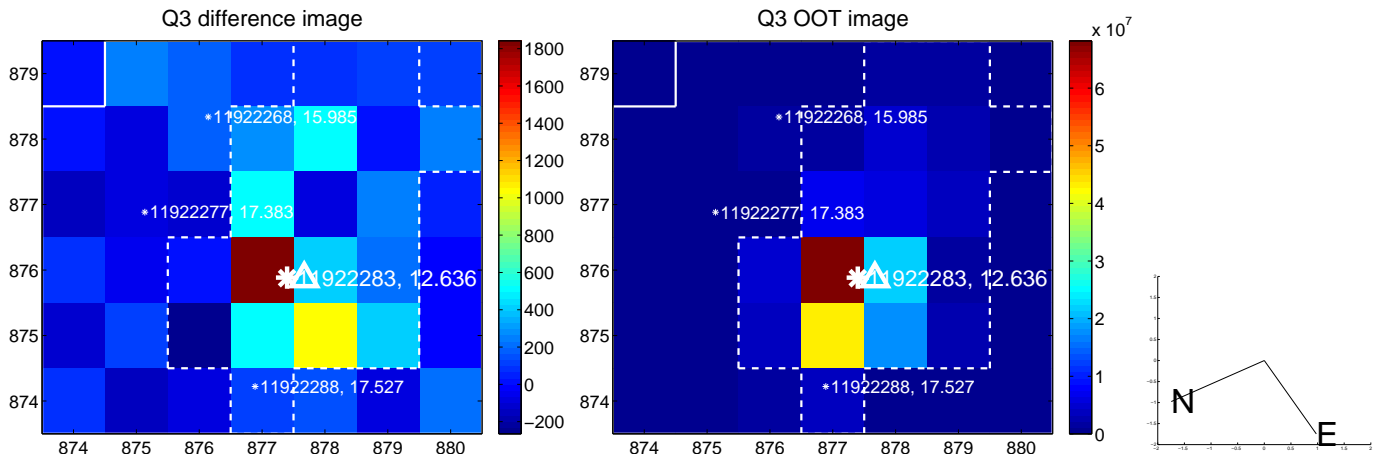
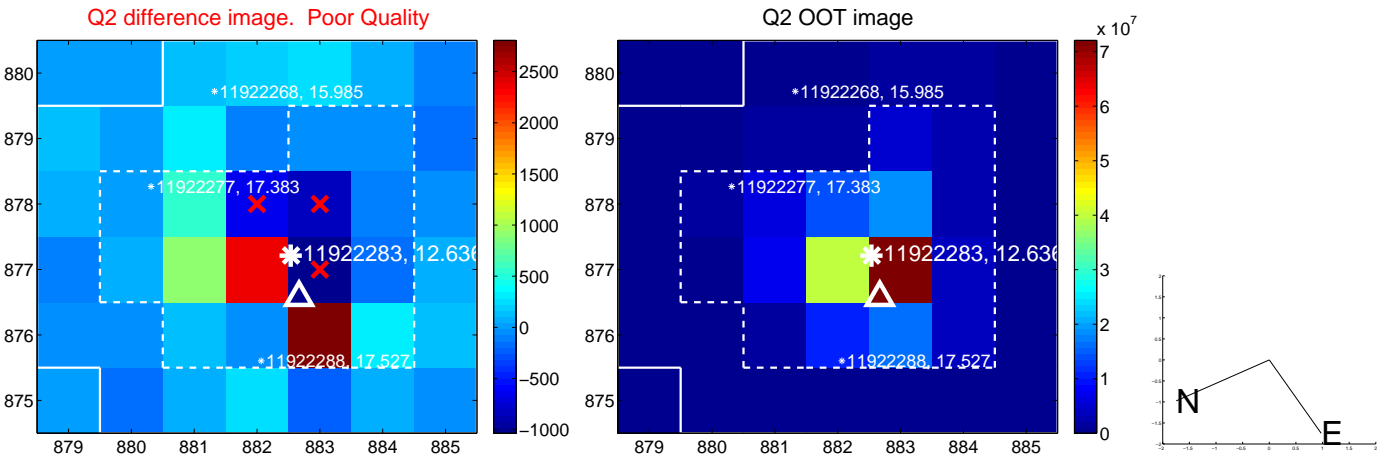
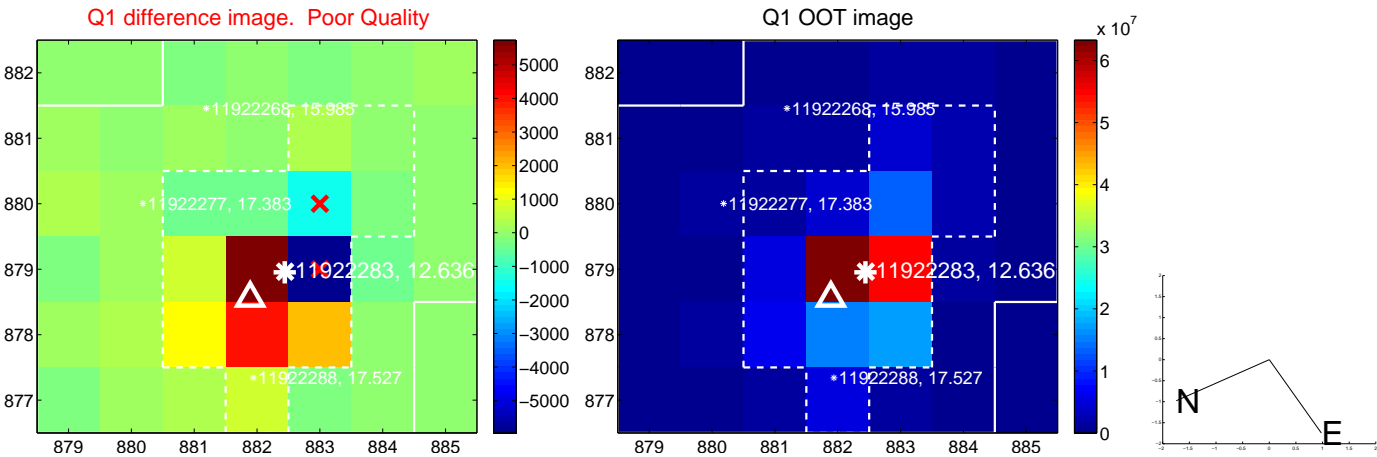
The direct PRF centroid is offset from the target star catalog position by about 0.11 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.447 ± 0.216	2.07	0.421 ± 0.184	0.148 ± 0.306
PRF-fit source offset from KIC position	0.431 ± 0.231	1.86	0.381 ± 0.178	0.203 ± 0.297
photometric centroid source offset	0.50 ± 0.53	0.96	0.50 ± 0.52	-0.08 ± 0.62

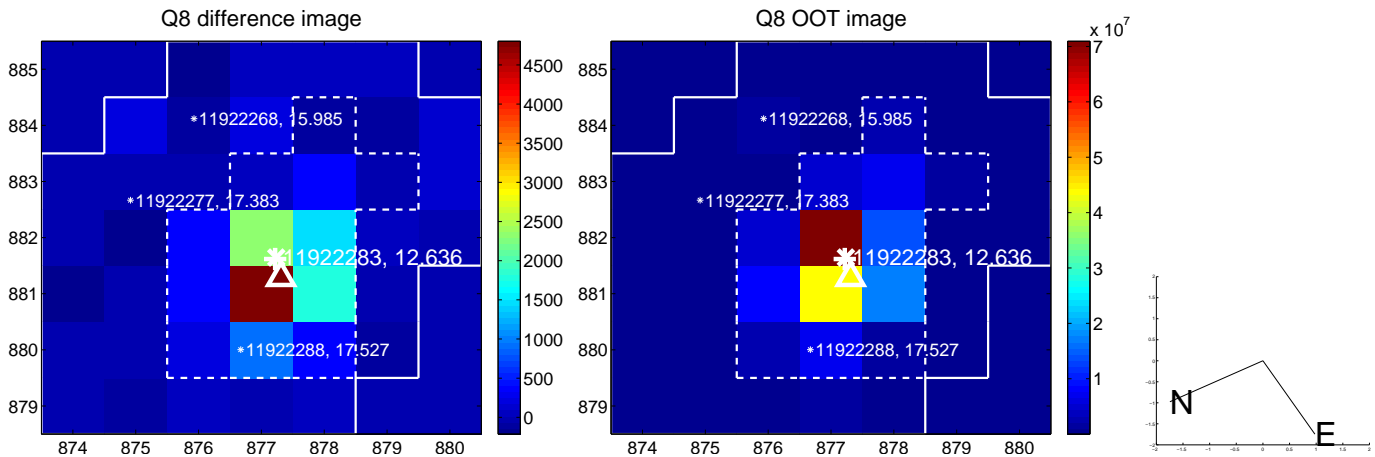
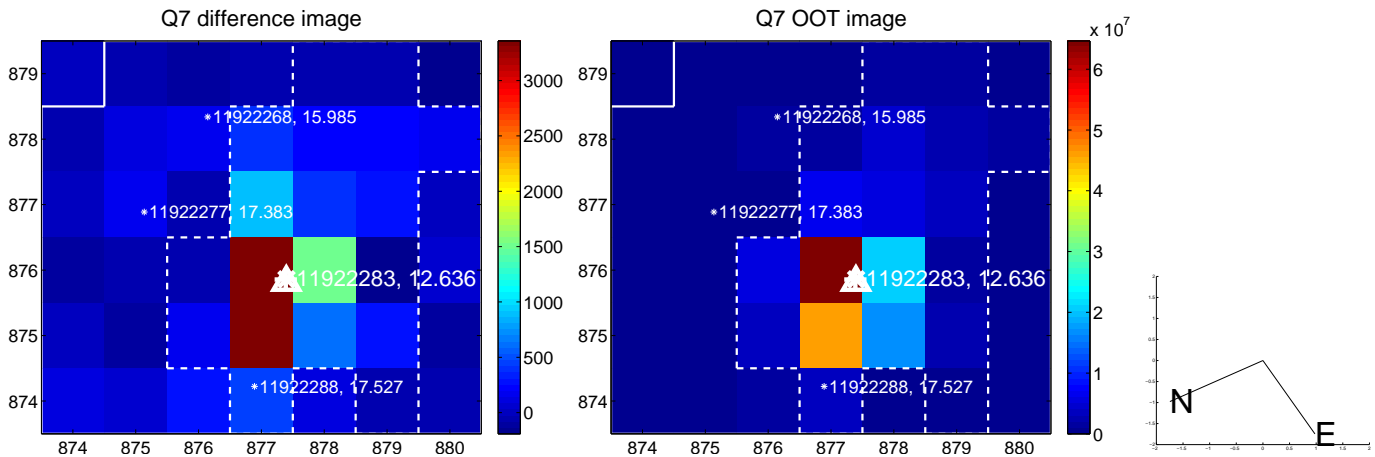
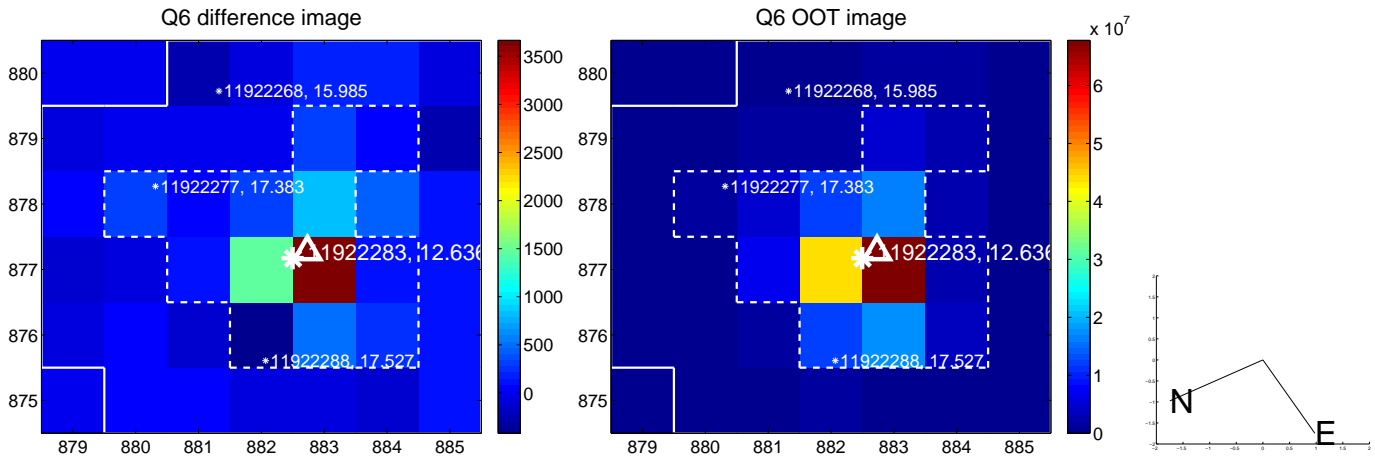
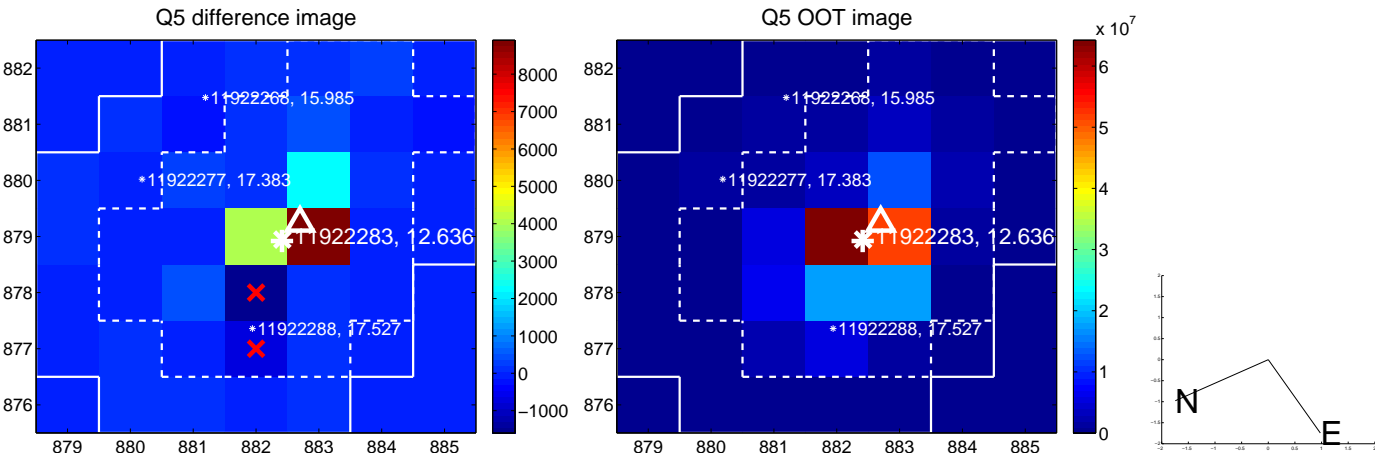


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses:** good quarterly centroid offsets; **Vermillion crosses:** bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

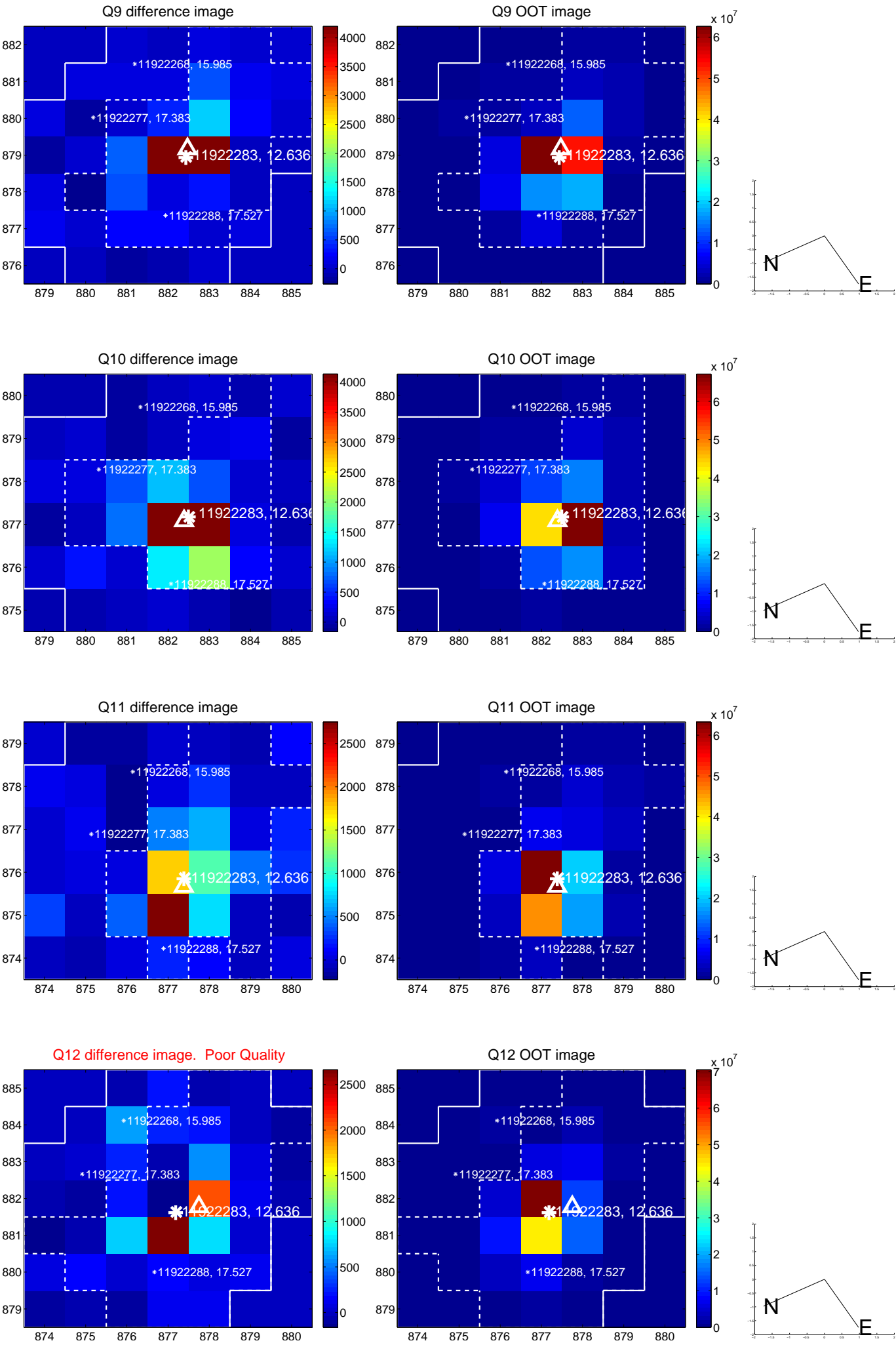
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



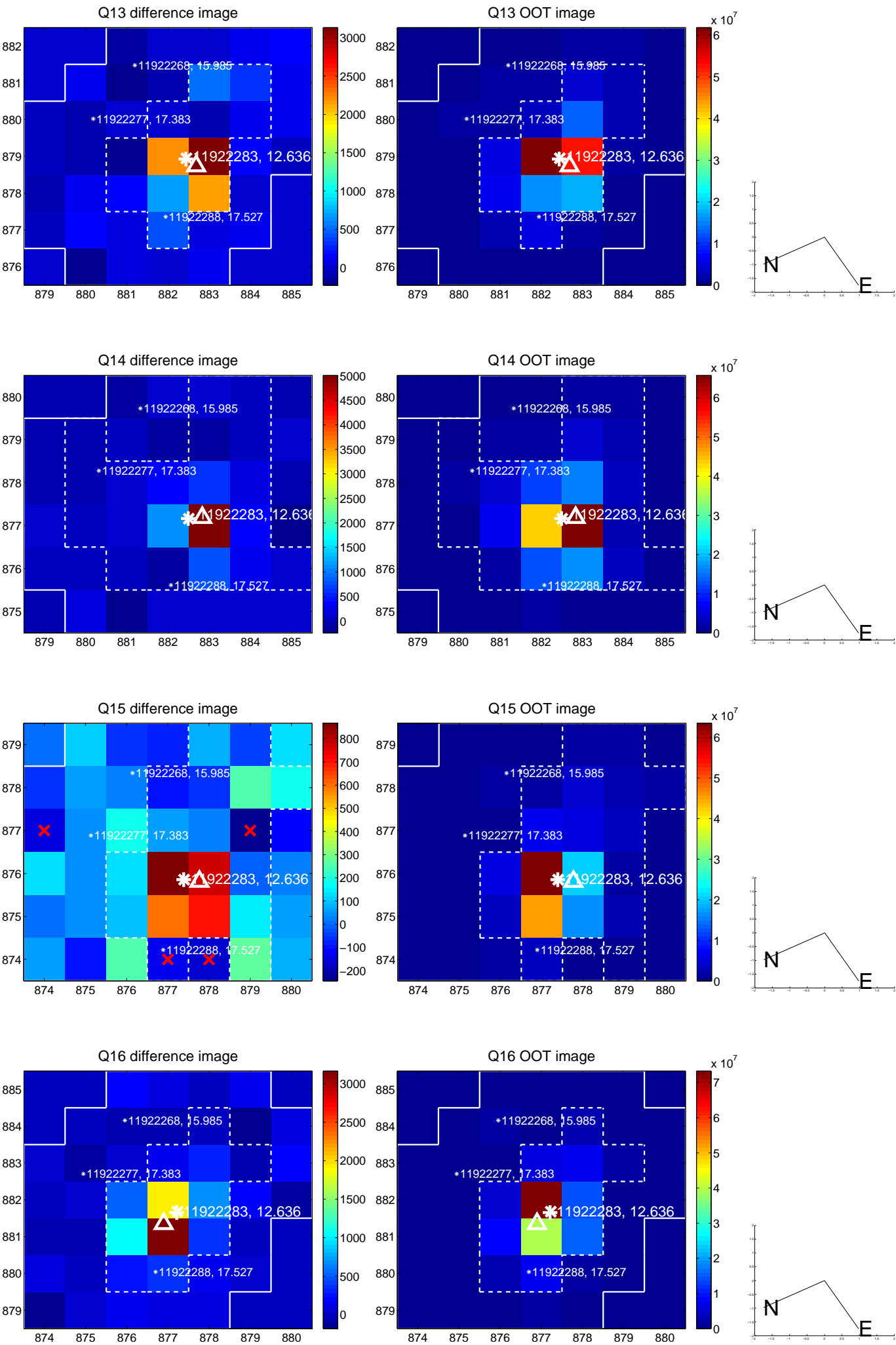
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



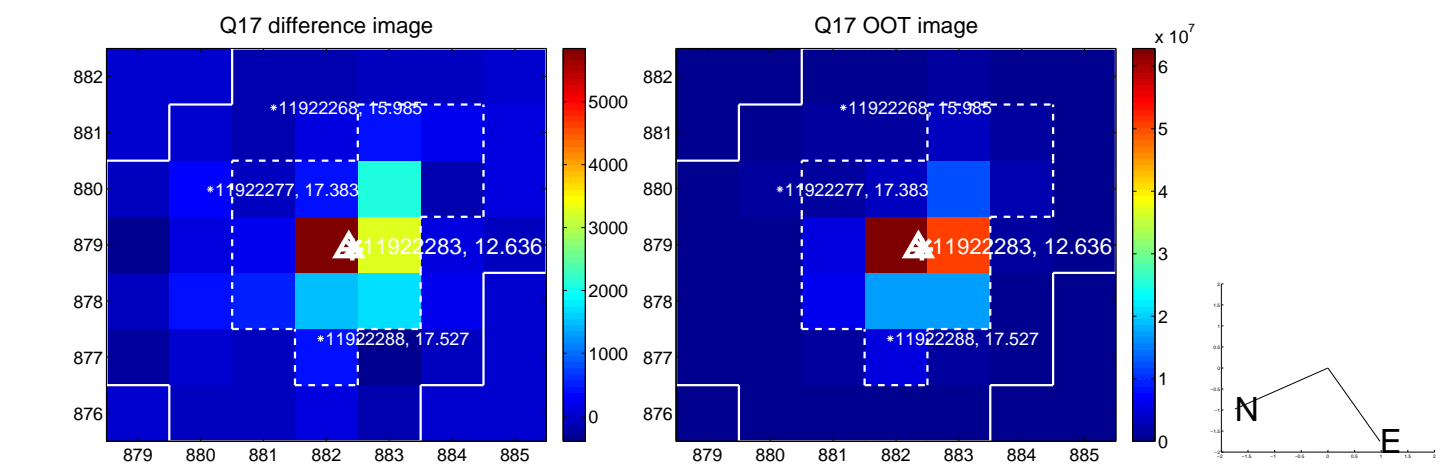
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



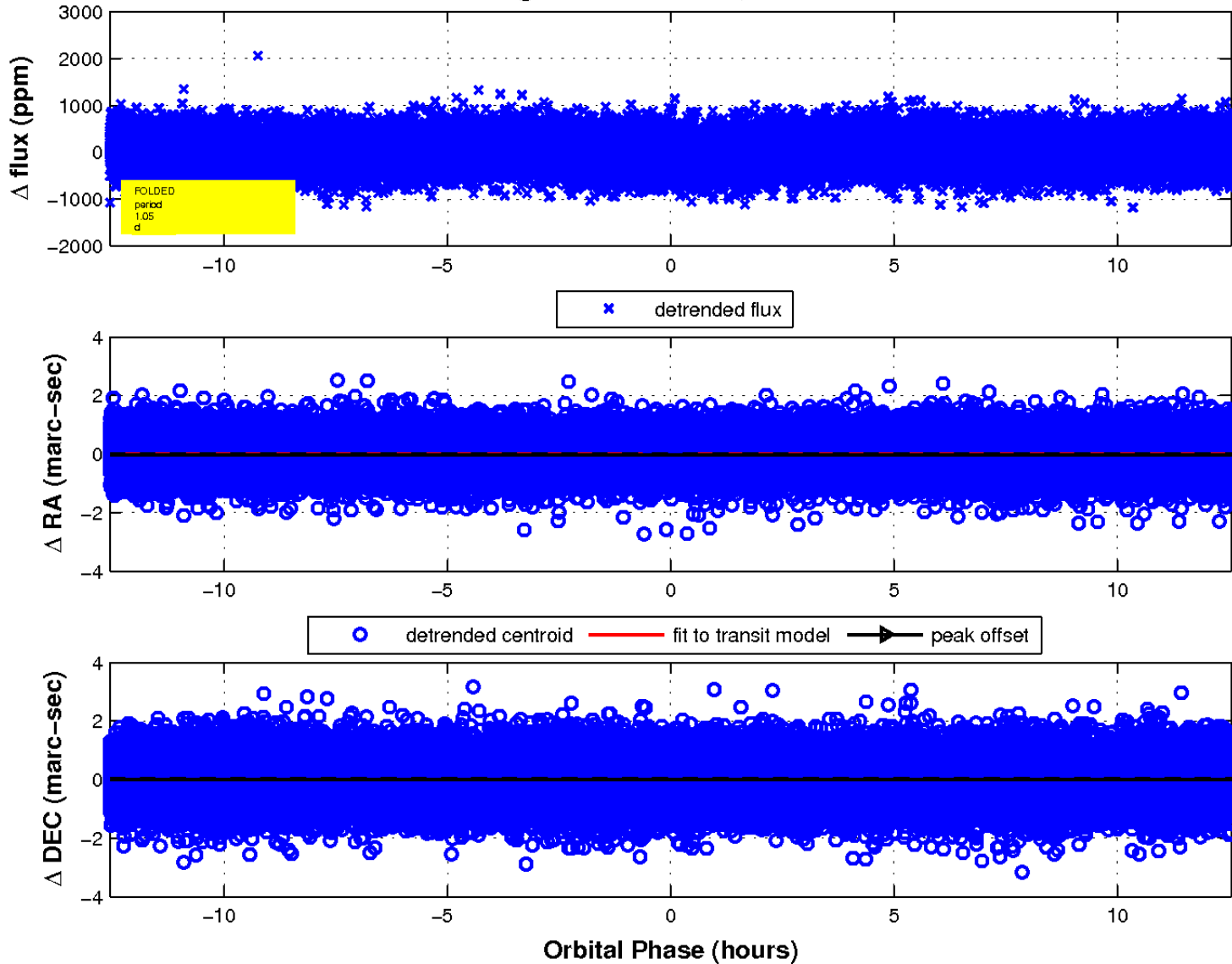
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

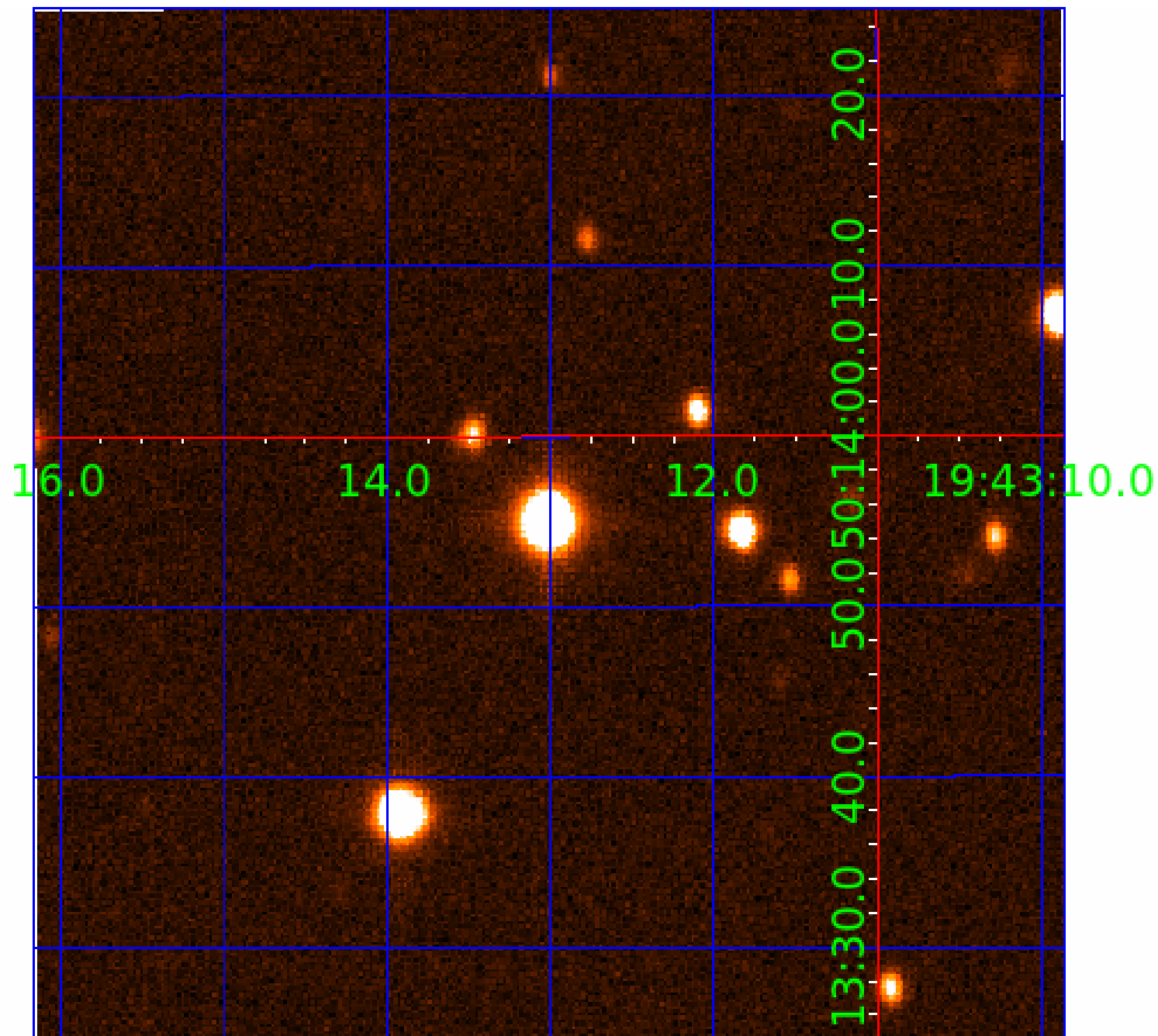


fluxWeightedCentroids, Planet 1 of 4



UKIRT Image

Declination



KIC 011922283

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})
011922283-01	OBS	No	1.054299	131.790731	30.0	4.185	7.8	8.2	11.11	7120	6.12	0.00
011922283-02	OBS	No	1.437893	131.542321	45.4	5.941	8.8	8.9	11.11	7120	7.52	0.00
011922283-04	OBS	No	0.878715	132.314087	111.1	8.534	9.7	11.7	11.11	7120	23.34	0.00

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
011922283-01	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT
011922283-02	OBS	FP	0.00	1	0	0	0	TRANS_GAPPED—SWEET_NTL—LPP_DV
011922283-04	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_SKYE_ZUMA—TRANS_GAPPED—LPP_DV—CENT_FEW_DIFFS

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

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

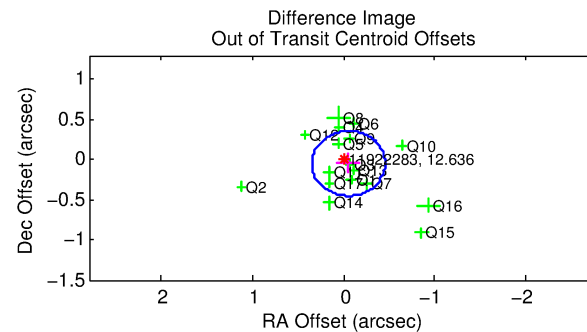
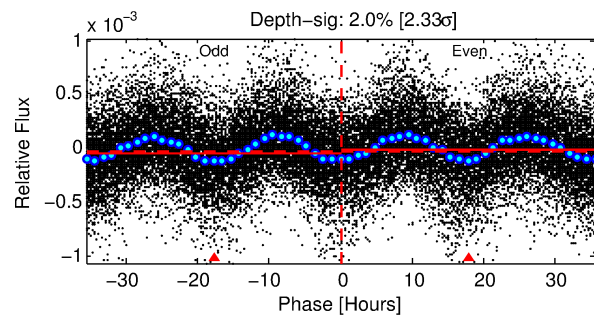
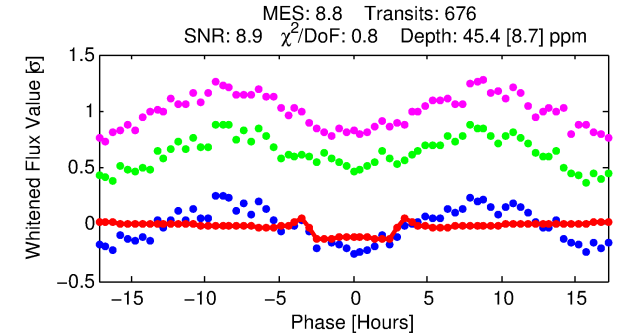
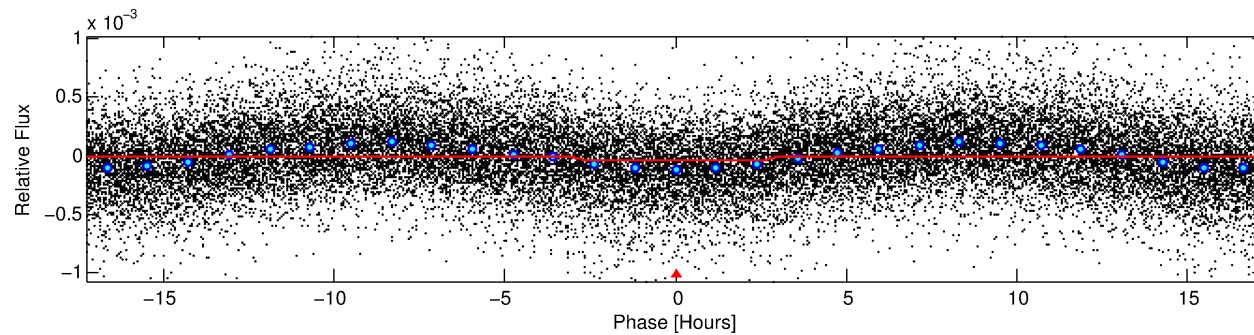
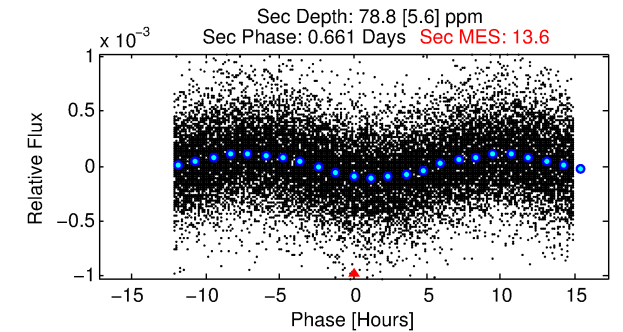
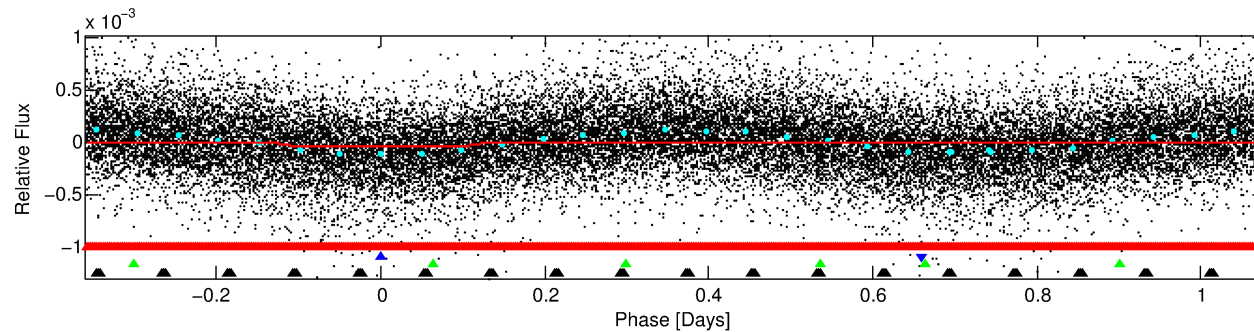
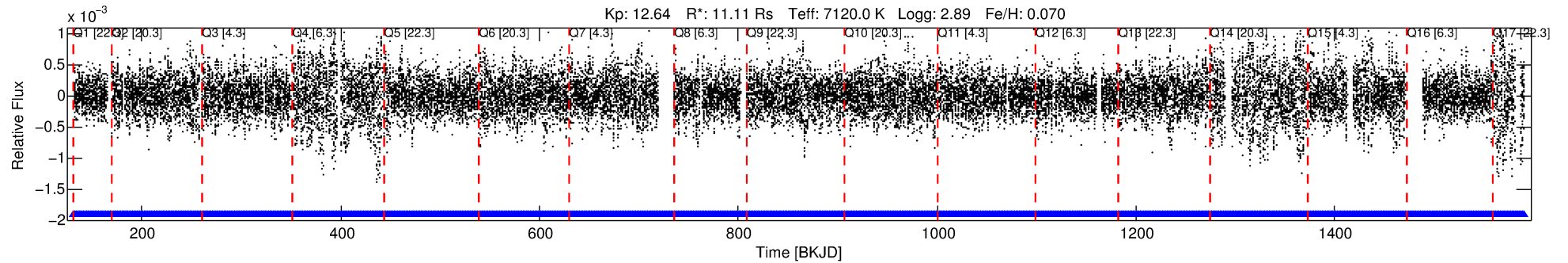
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 011922283-02

No Significant Match Found

DV One-Page Summary

KIC: 11922283 Candidate: 2 of 4 Period: 1.438 d



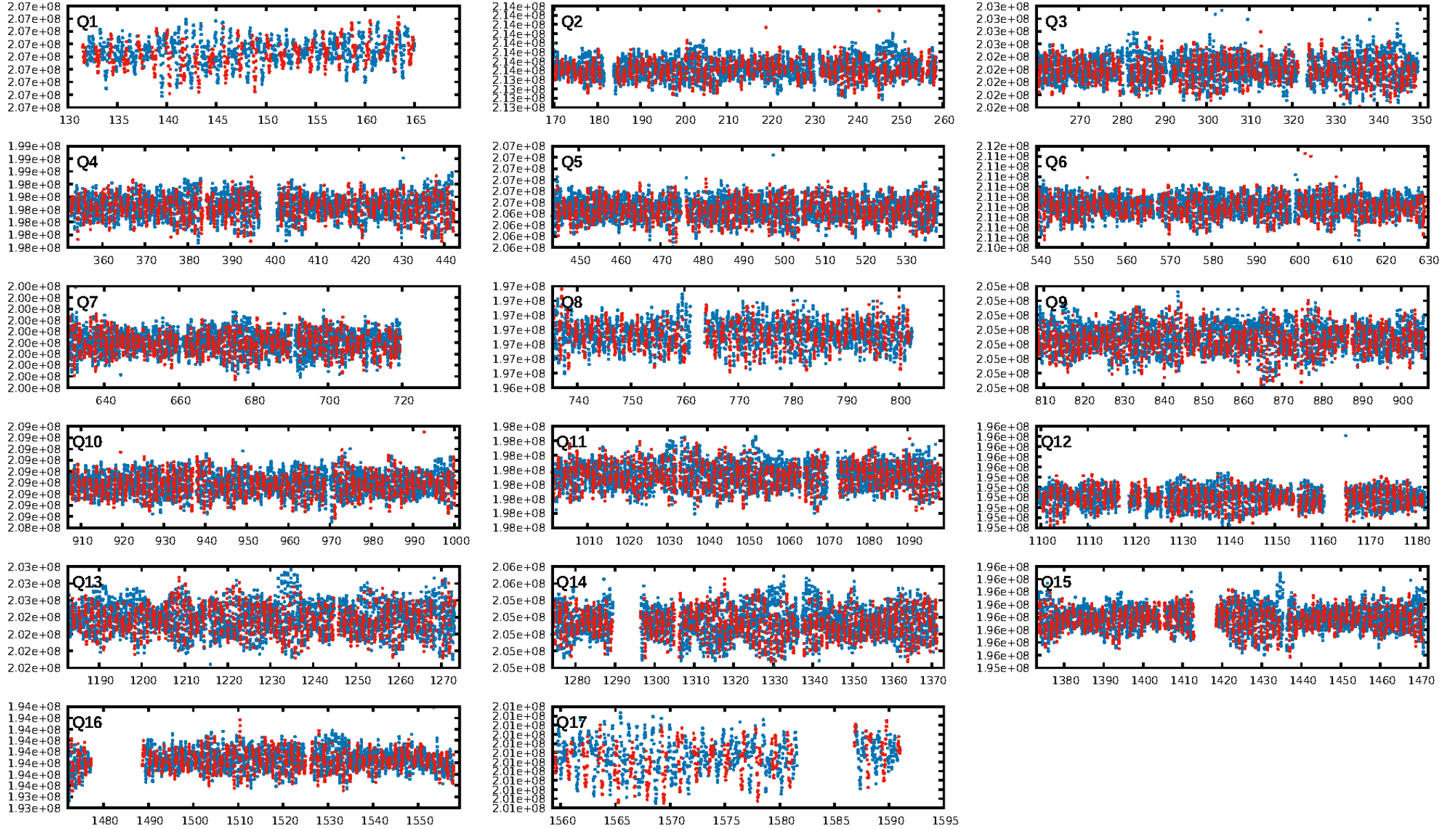
DV Fit Results:

Period = 1.43789 [0.00002] d
Epoch = 131.5423 [0.0035] BKJD
Rp/R* = 0.0062 [0.0009]
a/R* = 1.95 [1.06]
b = 0.01 [33.01]
Seff = N/A
Teq = N/A
Rp = 7.52 [3.08] Re
a = N/A
Ag = N/A
Teffp = N/A

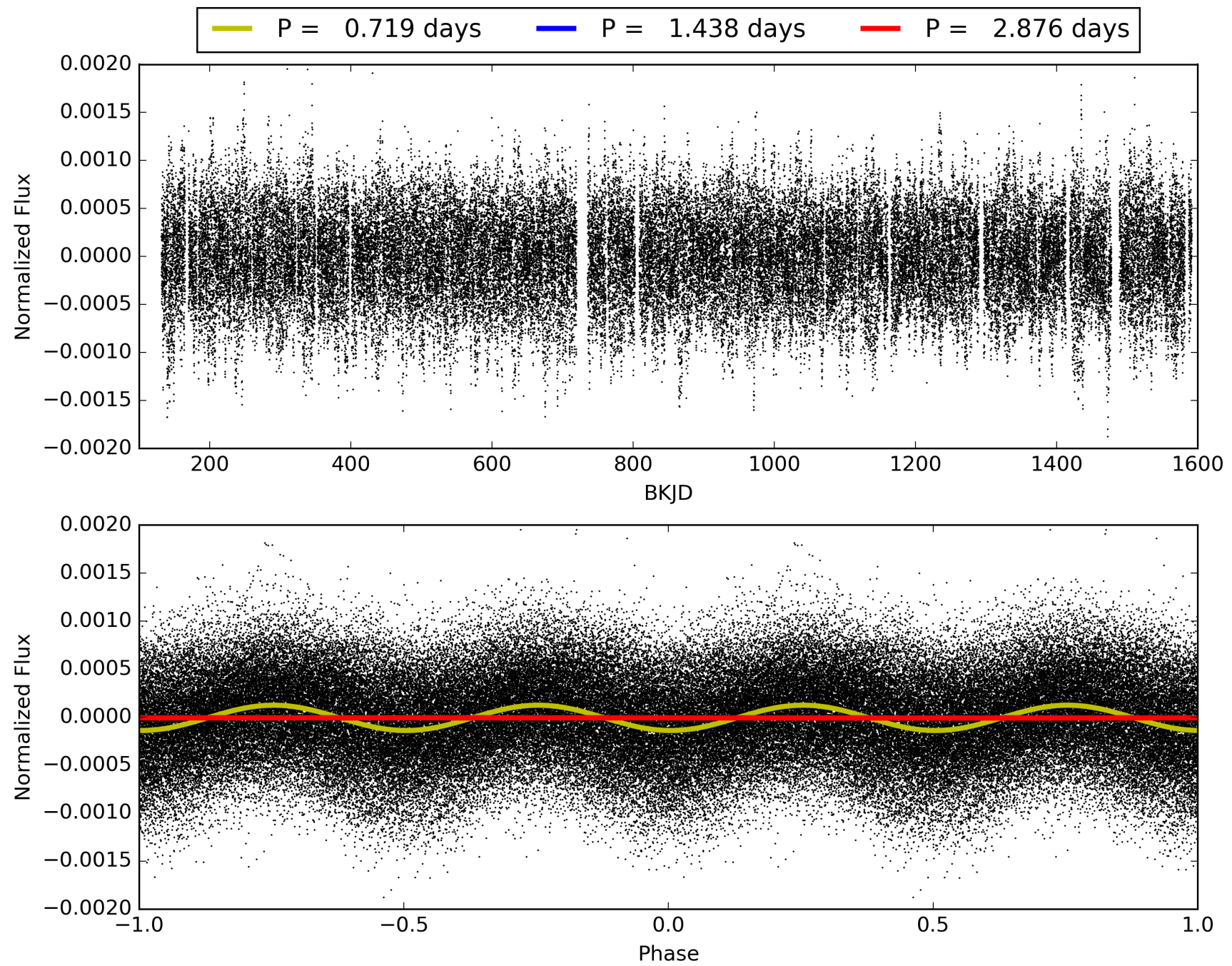
DV Diagnostic Results:

ShortPeriod-sig: 79.5% [1.27 σ]
LongPeriod-sig: 100.0% [520.69 σ]
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [647/647]
GhostDiagnostic-chr: 2.93
Centroid-sig: 2.4%
Centroid-so: 0.786 arcsec [2.22 σ]
OotOffset-rm: 0.072 arcsec [0.54 σ]
KicOffset-rm: 0.025 arcsec [0.23 σ]
OotOffset-st: 4/4/4/5 [17]
KicOffset-st: 4/4/4/5 [17]
DiffImageQuality-fgm: 1.00 [17/17]
DiffImageOverlap-fno: 0.00 [0/17]

TCE 011922283-02, PDC Light Curves

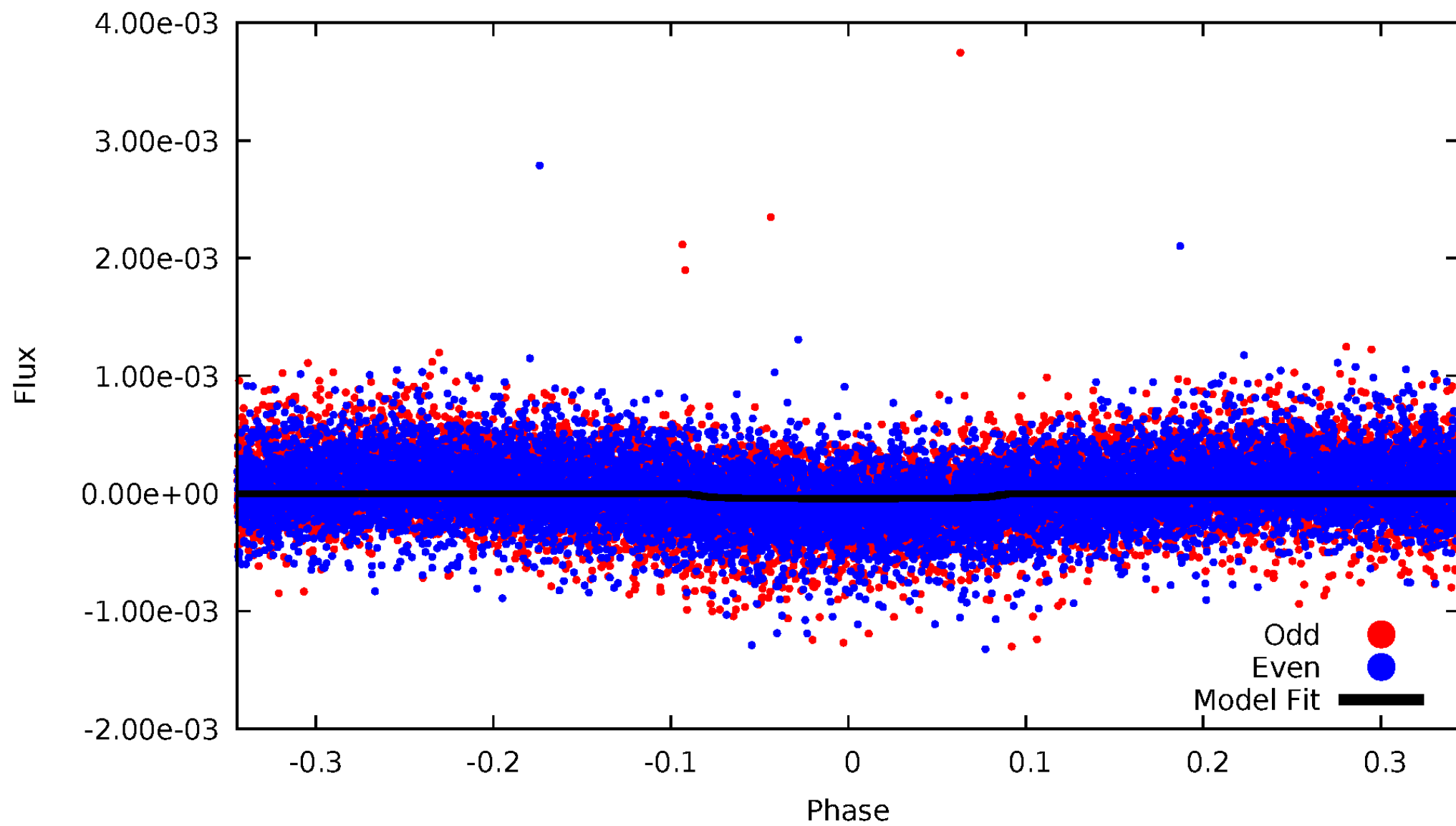


TCE 011922283-02



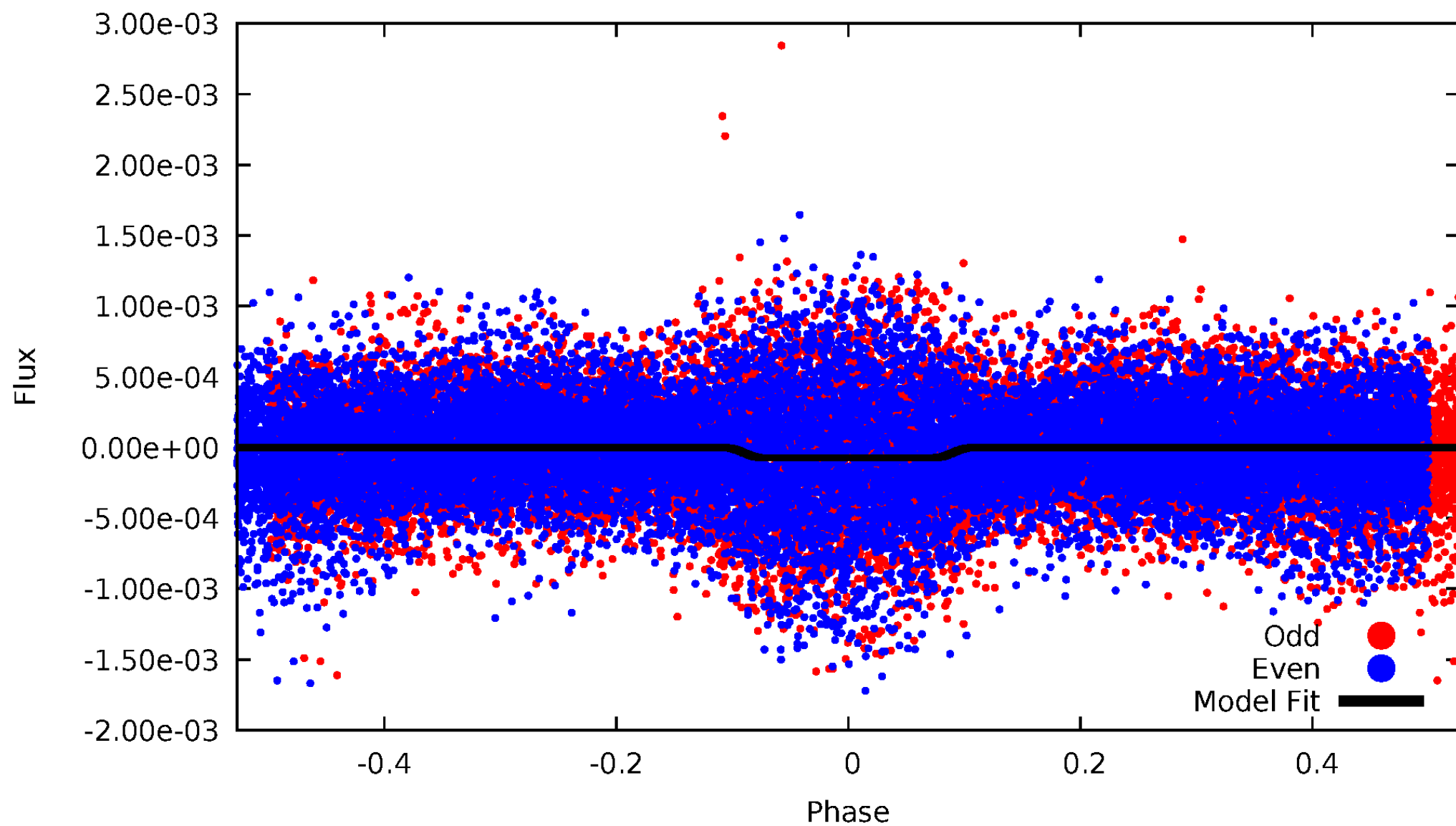
DV Odd/Even

TCE 011922283-02



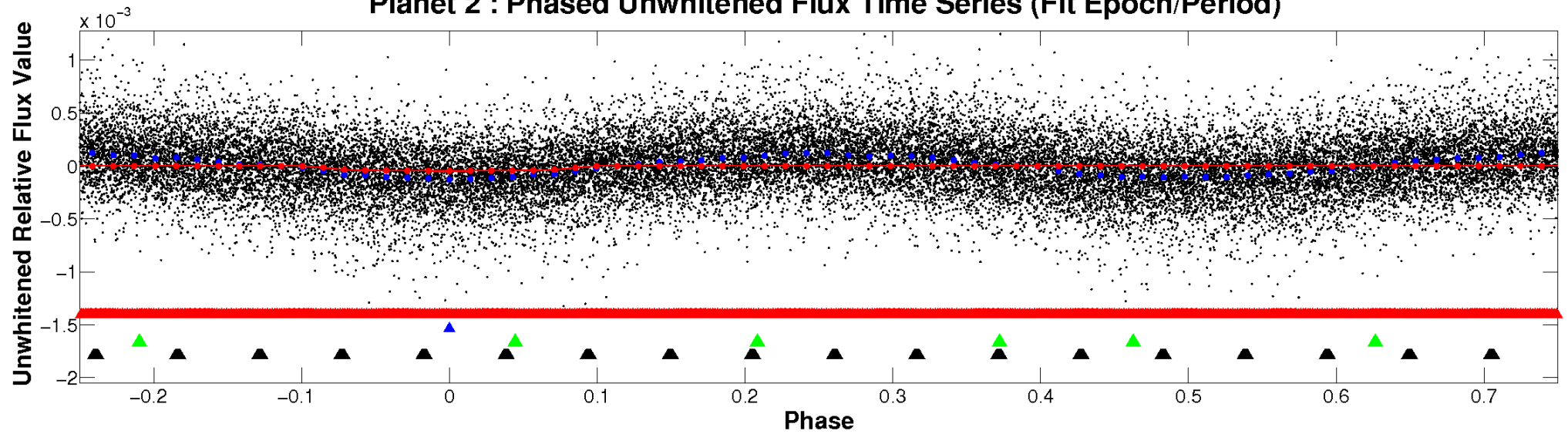
ALT Odd/Even

TCE 011922283-02

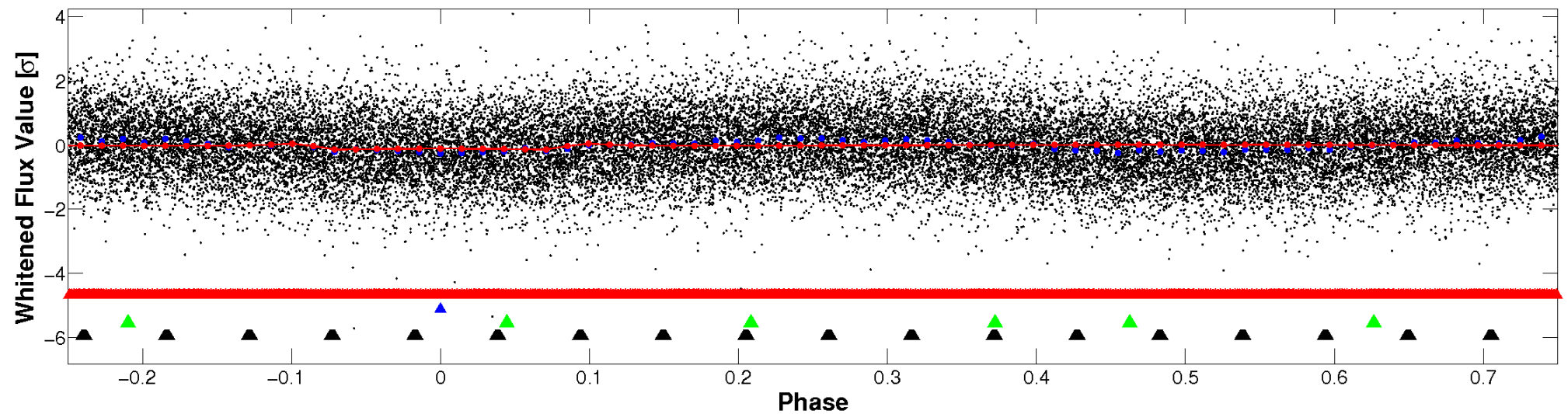


Non-Whitened Vs. Whitened Light Curve

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

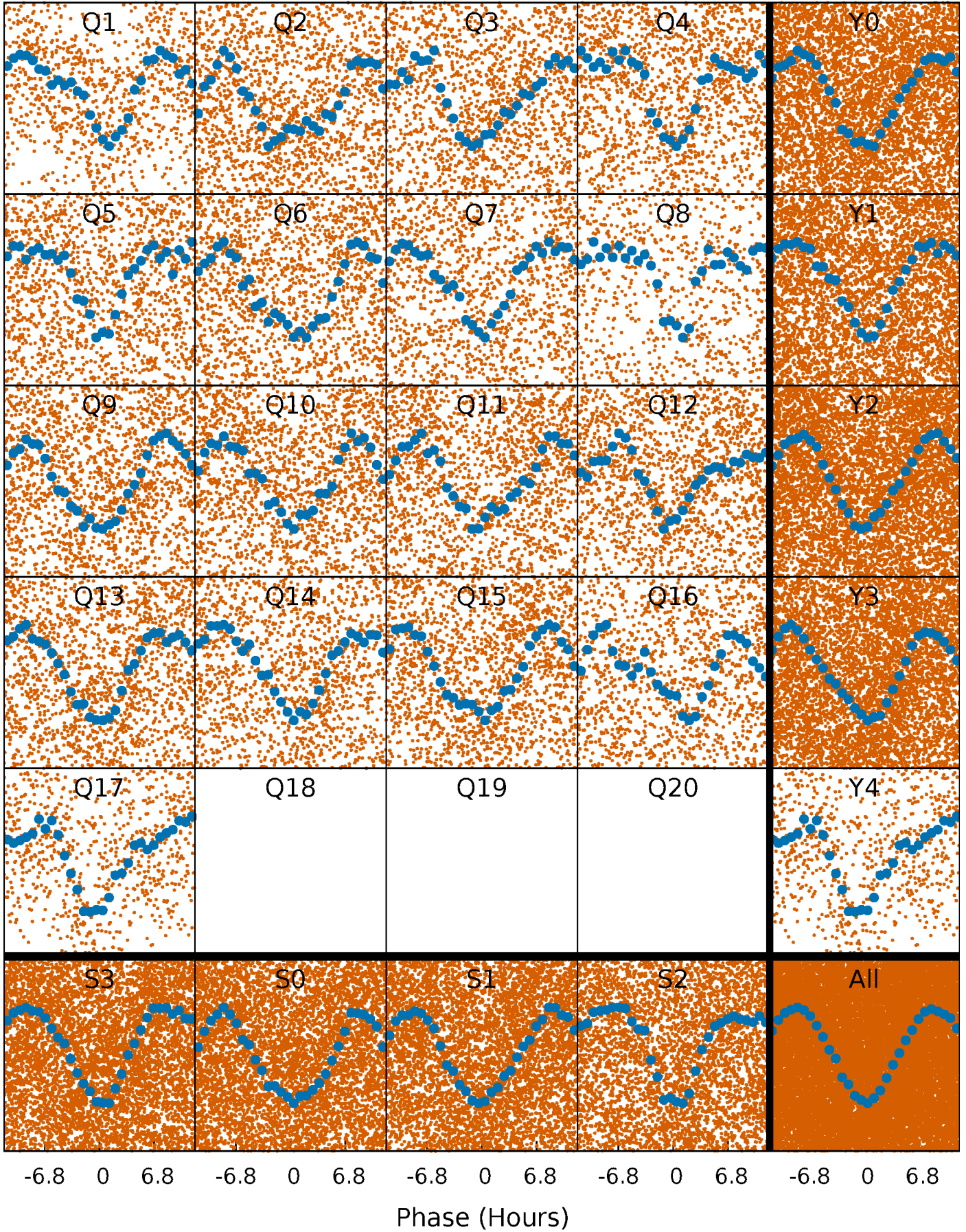


Planet 2 : Phased Whitened Flux Time Series (Fit Epoch/Period)



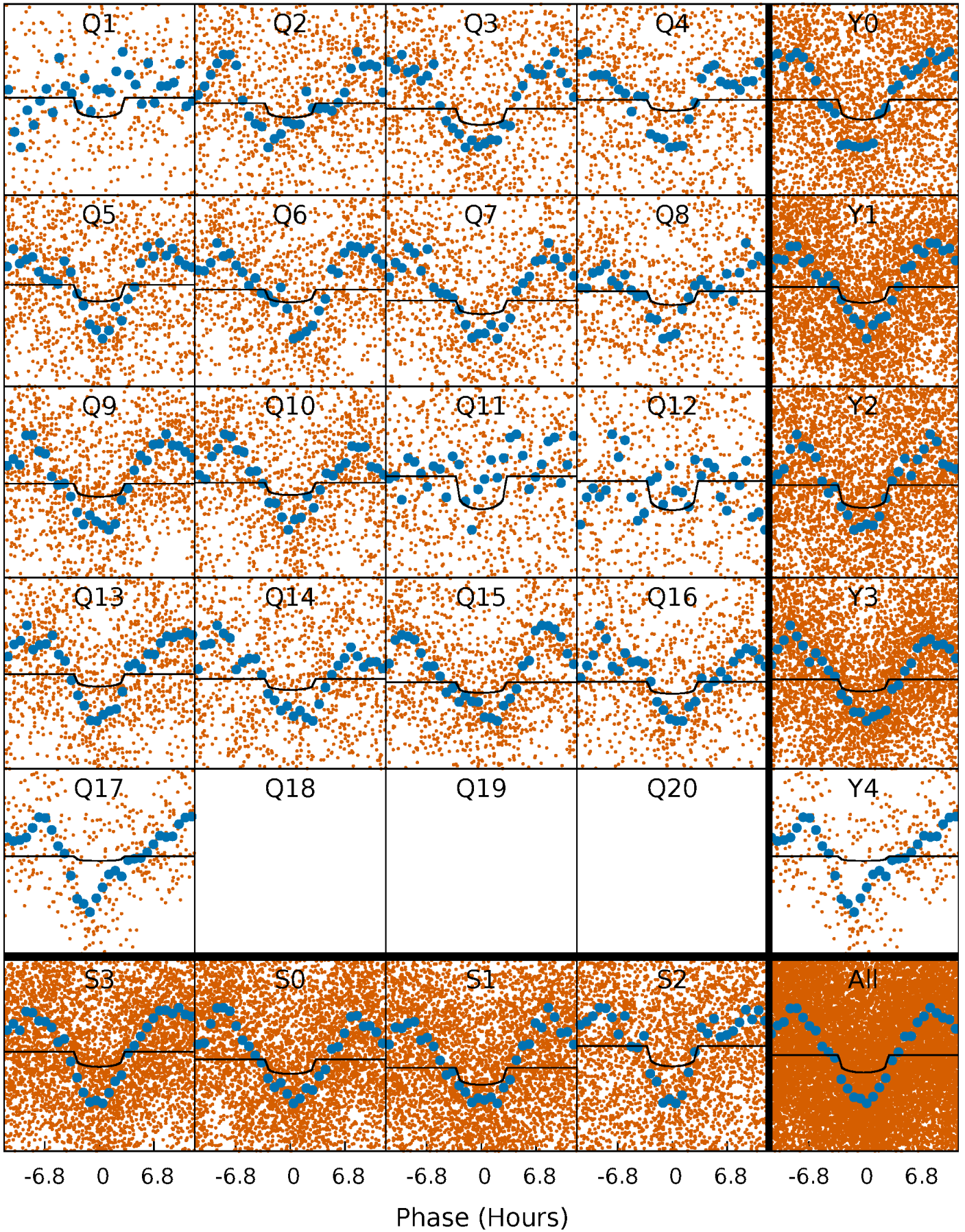
PDC Quarter-Phased Transit Curves

TCE 011922283-02 P= 1.437893 Days $T_0=131.542321$ (BKJD)



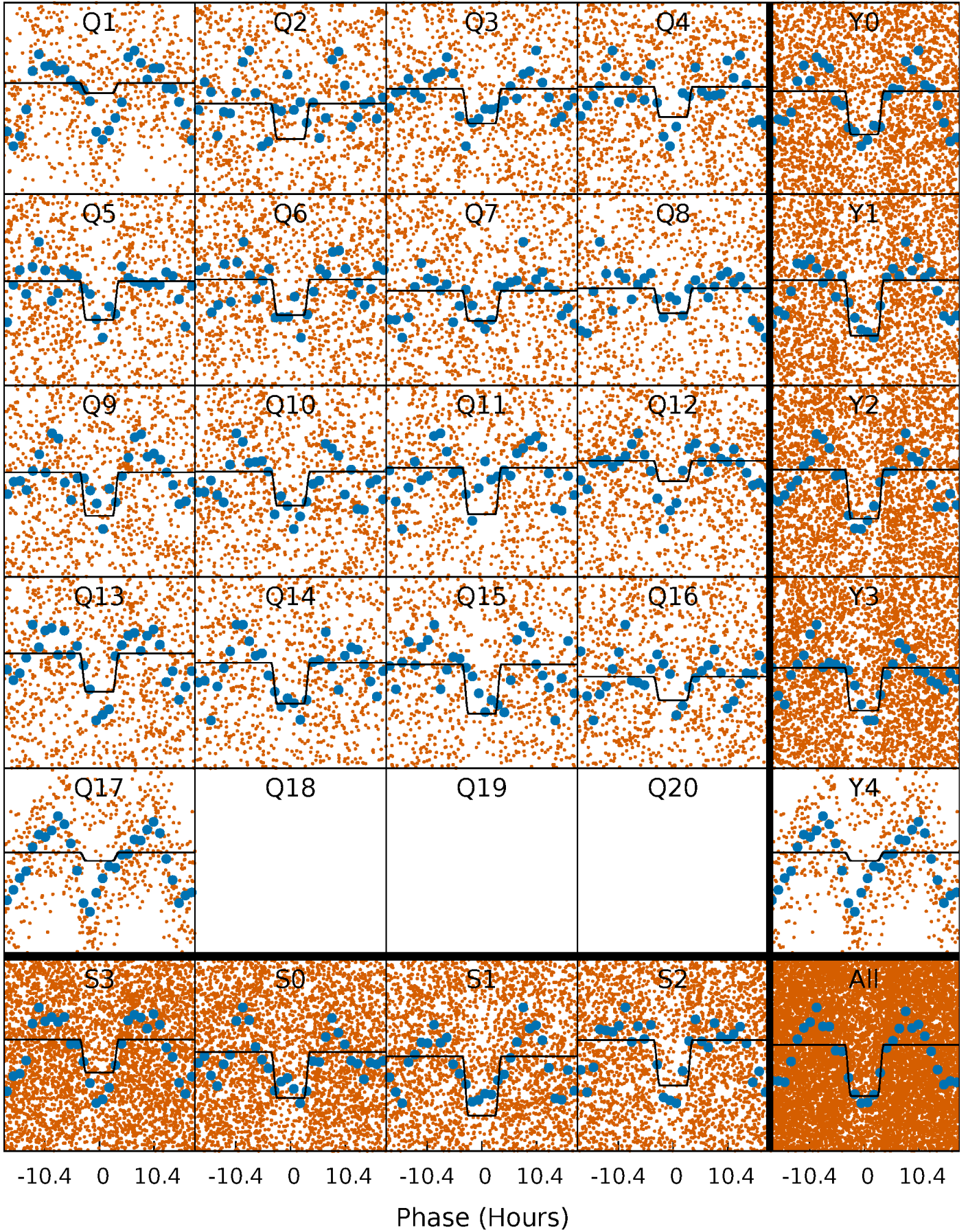
DV Quarter-Phased Transit Curves

TCE 011922283-02 P= 1.437893 Days $T_0=131.542321$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

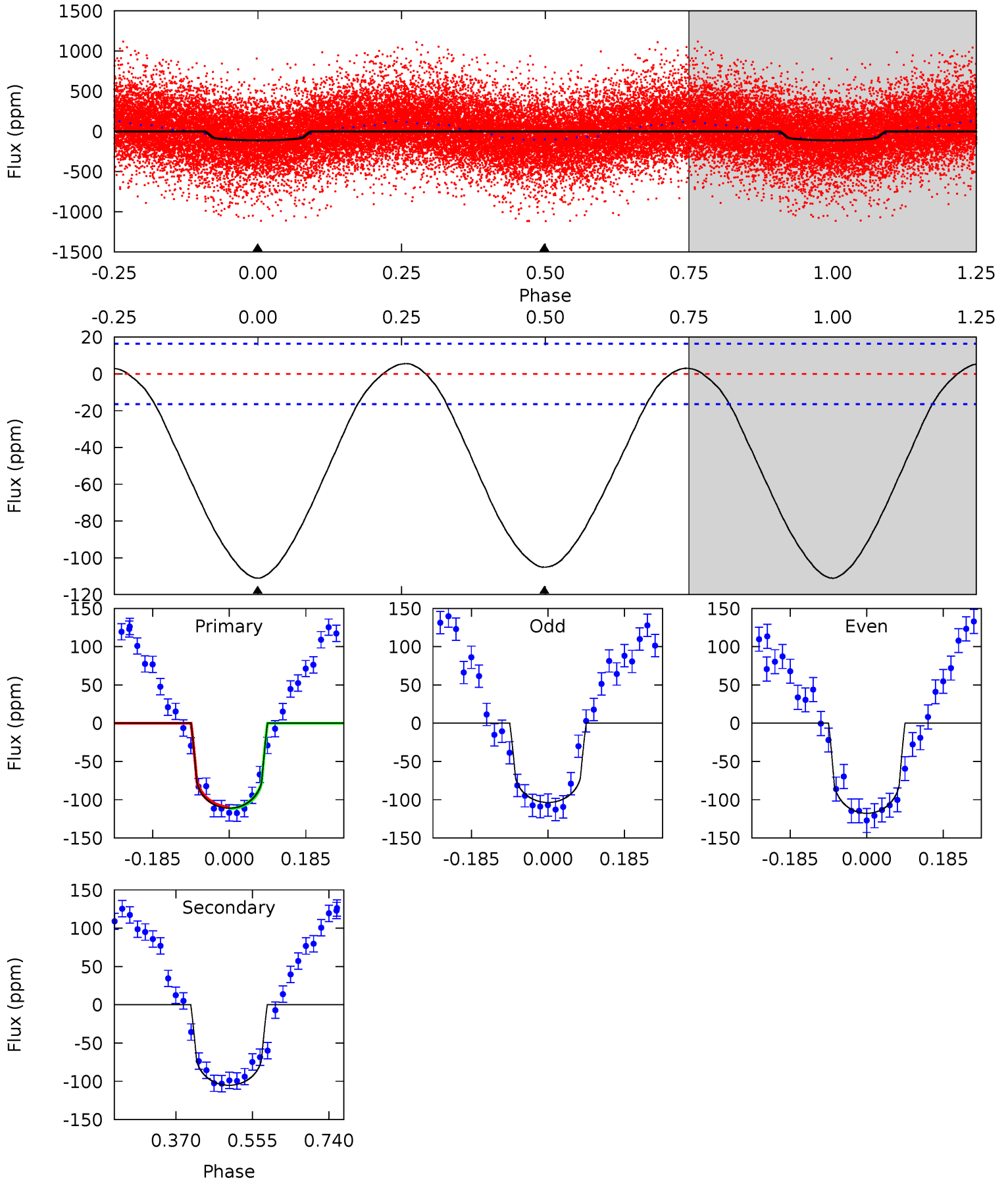
TCE 011922283-02 P= 1.437895 Days $T_0=131.561583$ (BKJD)



DV Model-Shift Uniqueness Test

011922283-02, P = 1.437893 Days, E = 130.104428 Days

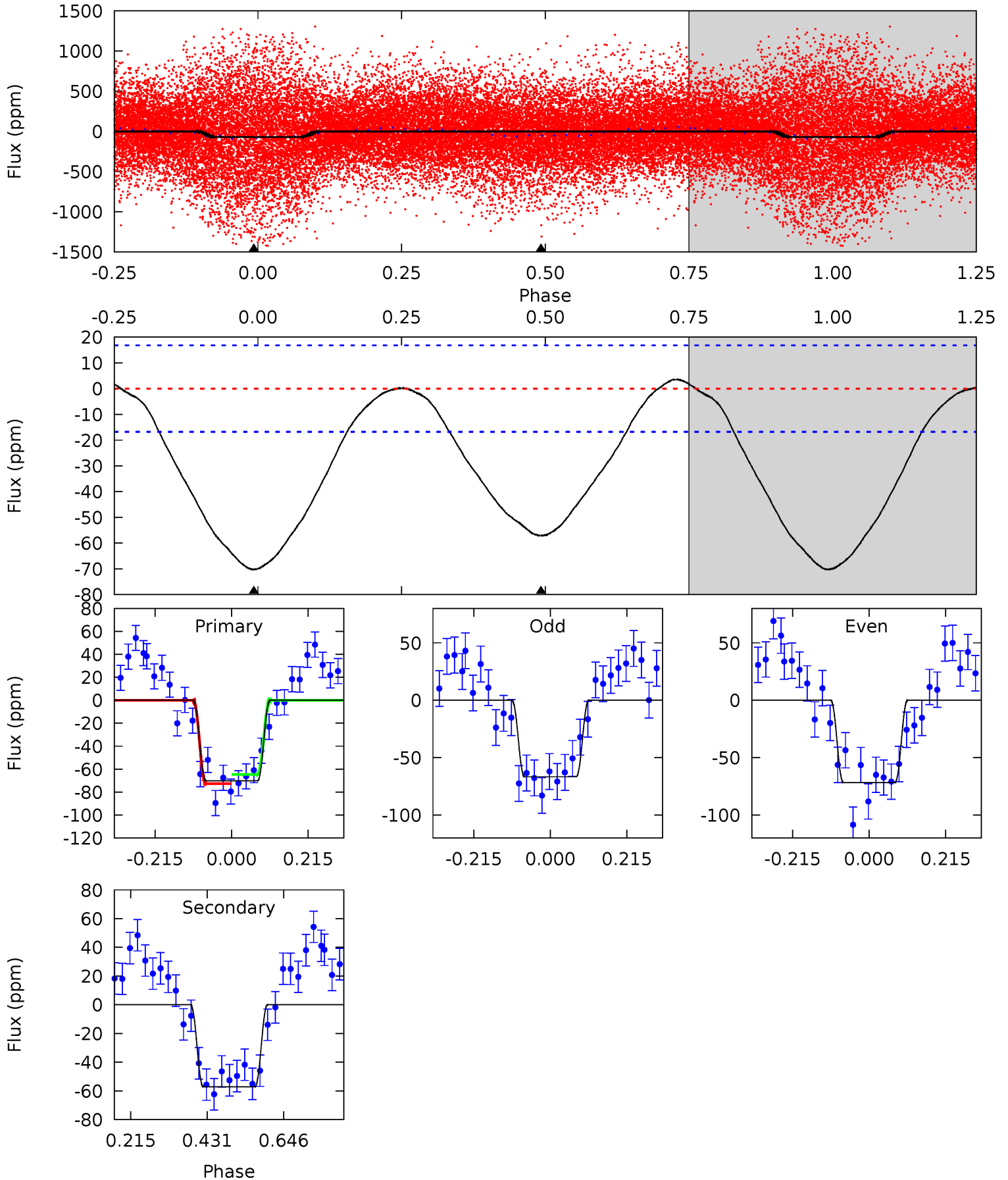
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
30.0	28.4	0	0	4.43	1.33	1.31	30.0	30.0	28.4	28.4	1.92	1.05	0.05	0.28



Alt Model-Shift Uniqueness Test

011922283-02, P = 1.437895 Days, E = 130.123688 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
18.4	15.0	0	0	4.40	1.24	0.49	18.4	18.4	15.0	15.0	0.66	1.17	0.05	1.05



Stellar Parameters For KIC 011922283

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	M (M_{\odot})	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	7120^{+174}_{-274}	$2.888^{+0.297}_{-0.033}$	$0.070^{+0.250}_{-0.350}$	$11.106^{+0.469}_{-4.219}$	$3.479^{+0.070}_{-0.794}$	$0.004^{+0.008}_{-0.000}$
	+2%/-4%	+10%/-1%	+357%/-500%	+4%/-38%	+2%/-23%	+212%/-12%
Source	PHO1	FLK73	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 011922283-02 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-105 ± 4	$6.86^{+1.56}_{-1.43}$	7292^{+388}_{-614}	9146^{+1479}_{-1179}	$1.731^{+1.030}_{-0.565}$
Alt.	-57 ± 4	$9.54^{+1.53}_{-1.77}$	7303^{+374}_{-590}	5285^{+797}_{-931}	$0.488^{+0.220}_{-0.123}$

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

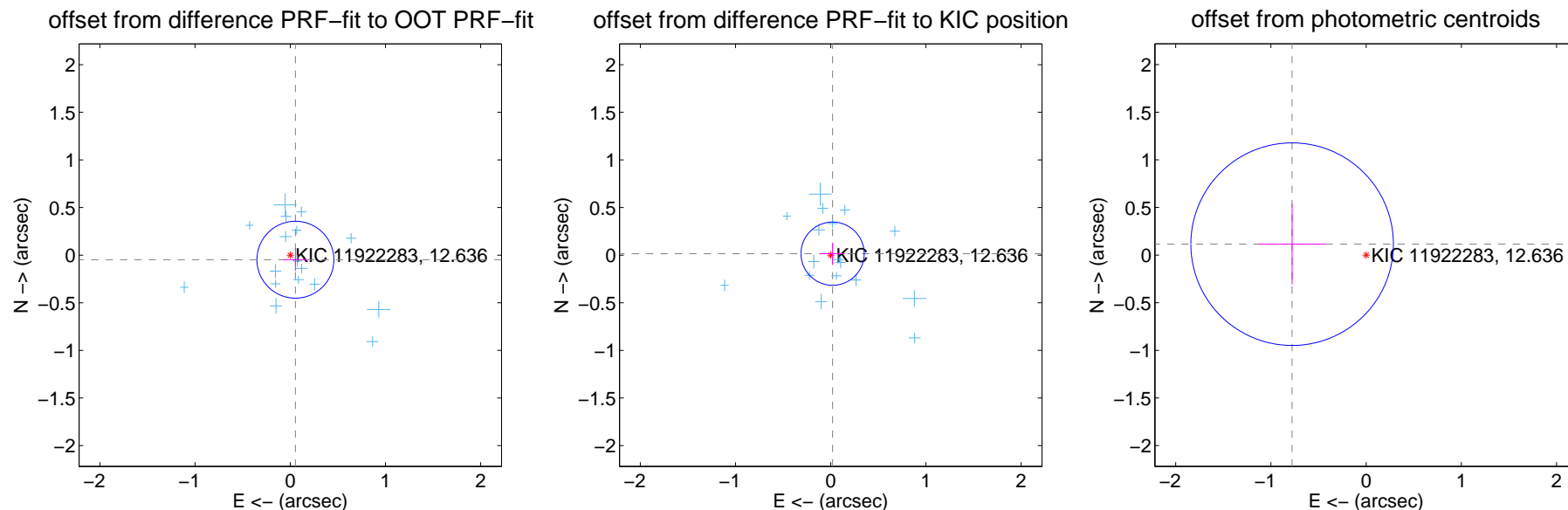
DV Centroid Data

Supplemental centroid analysis for 011922283-02. Kepler magnitude: 12.64. Transit SNR 8.87

There are 17 quarters with good PRF difference image offsets

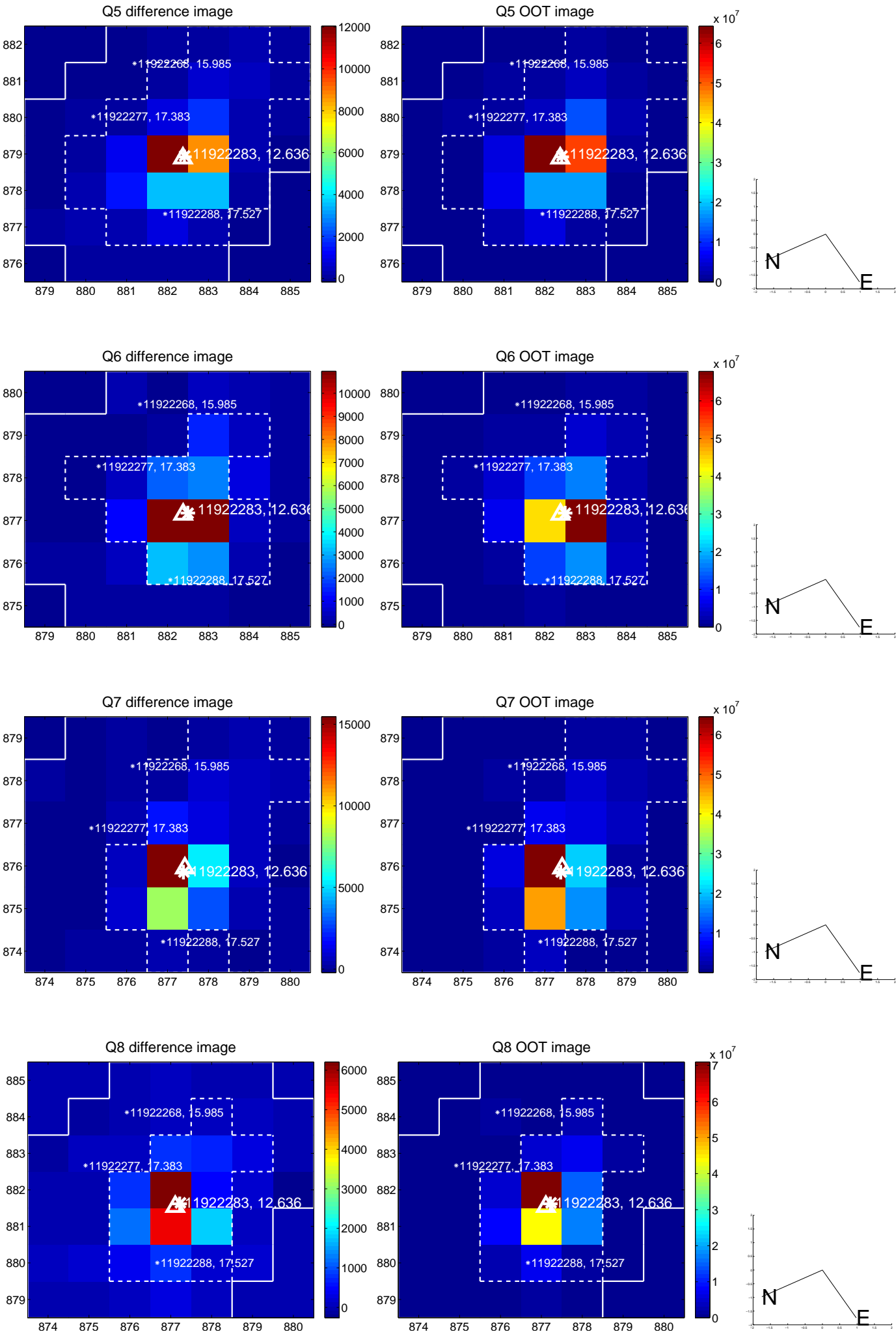
The direct PRF centroid is offset from the target star catalog position by about 0.11 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.072 ± 0.135	0.54	-0.054 ± 0.126	-0.048 ± 0.118
PRF-fit source offset from KIC position	0.025 ± 0.111	0.23	-0.020 ± 0.129	0.015 ± 0.115
photometric centroid source offset	0.79 ± 0.35	2.22	0.78 ± 0.35	0.11 ± 0.42

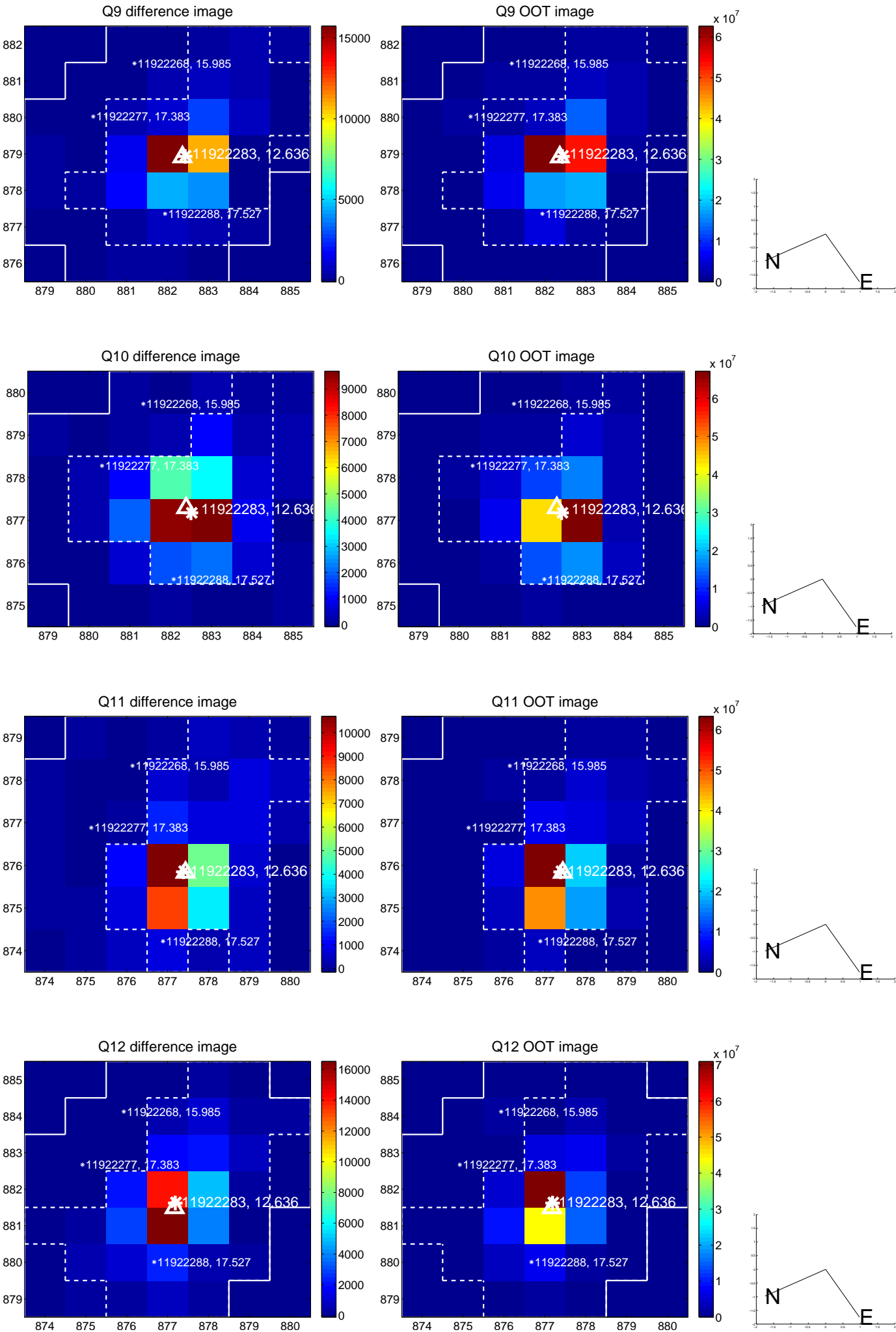


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses:** good quarterly centroid offsets; **Vermillion crosses:** bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

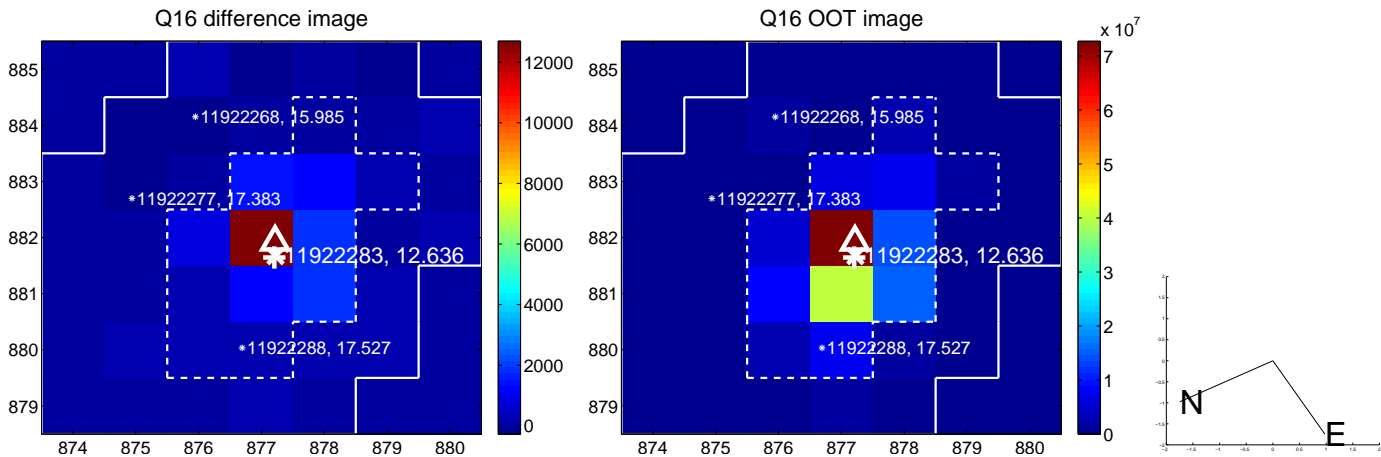
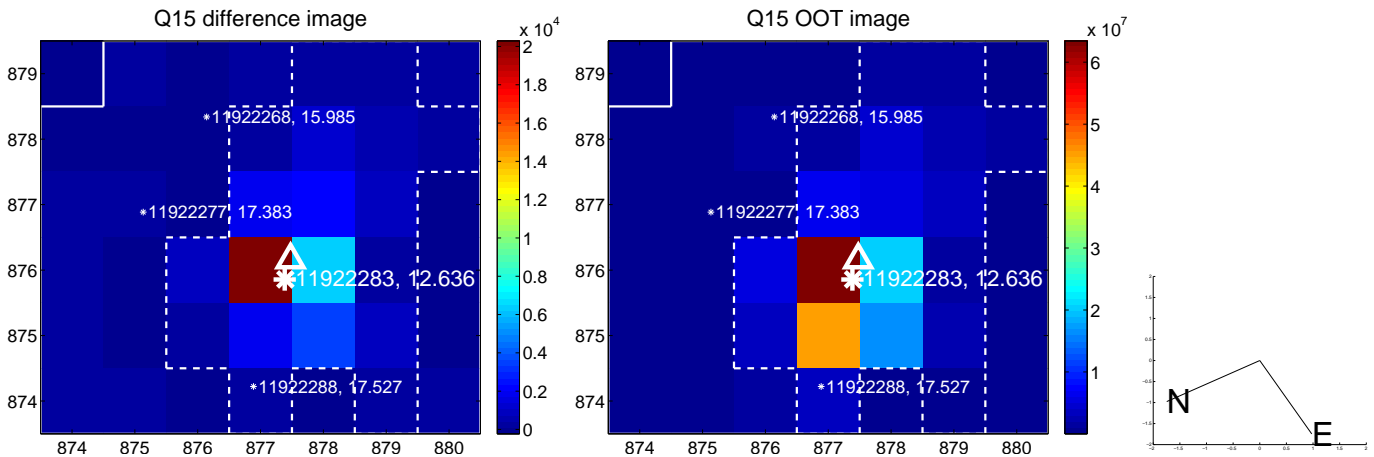
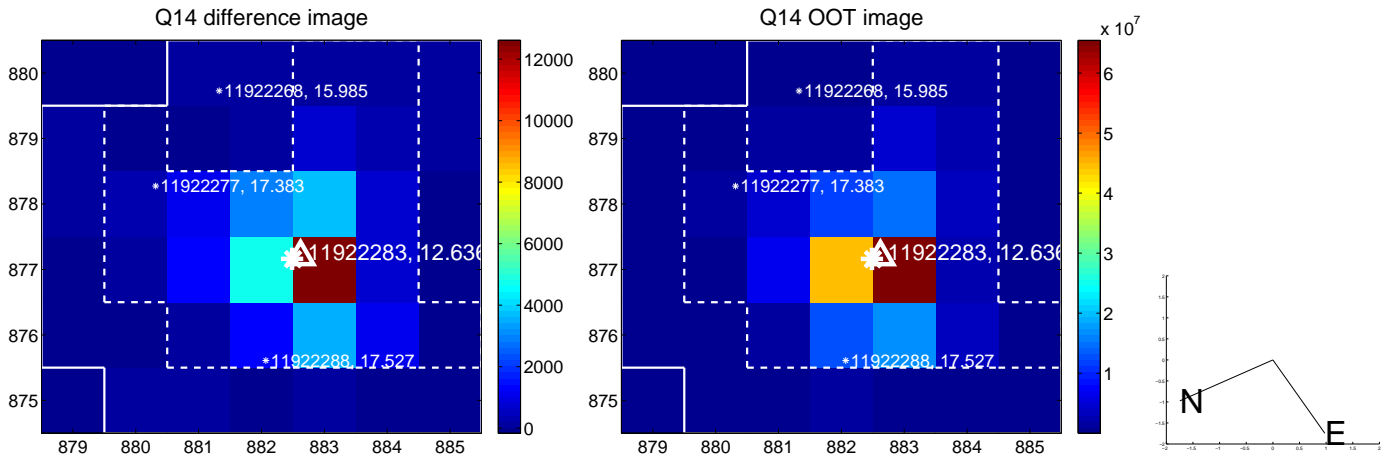
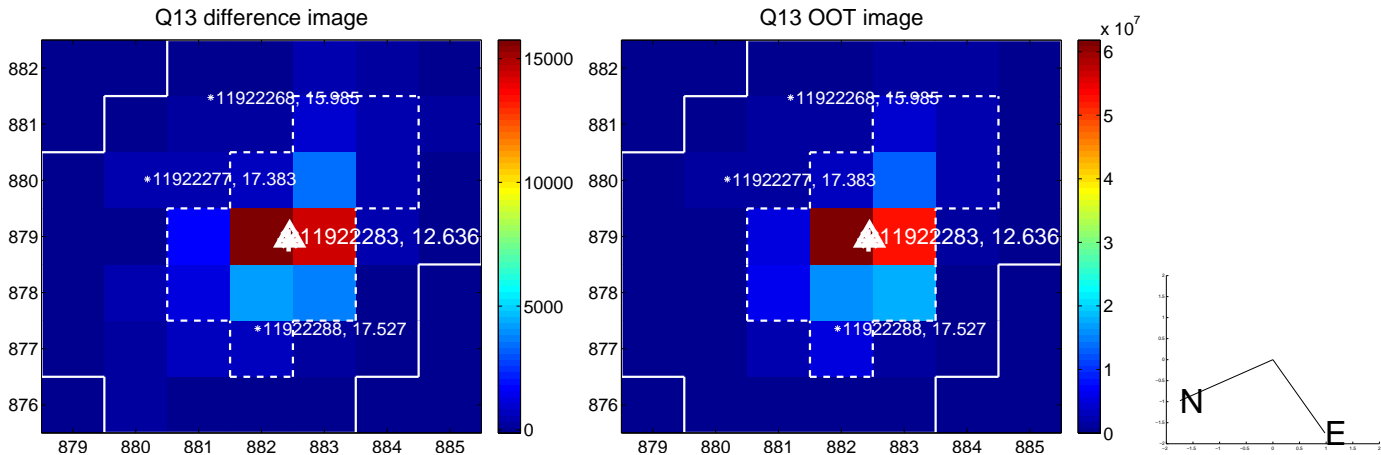
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



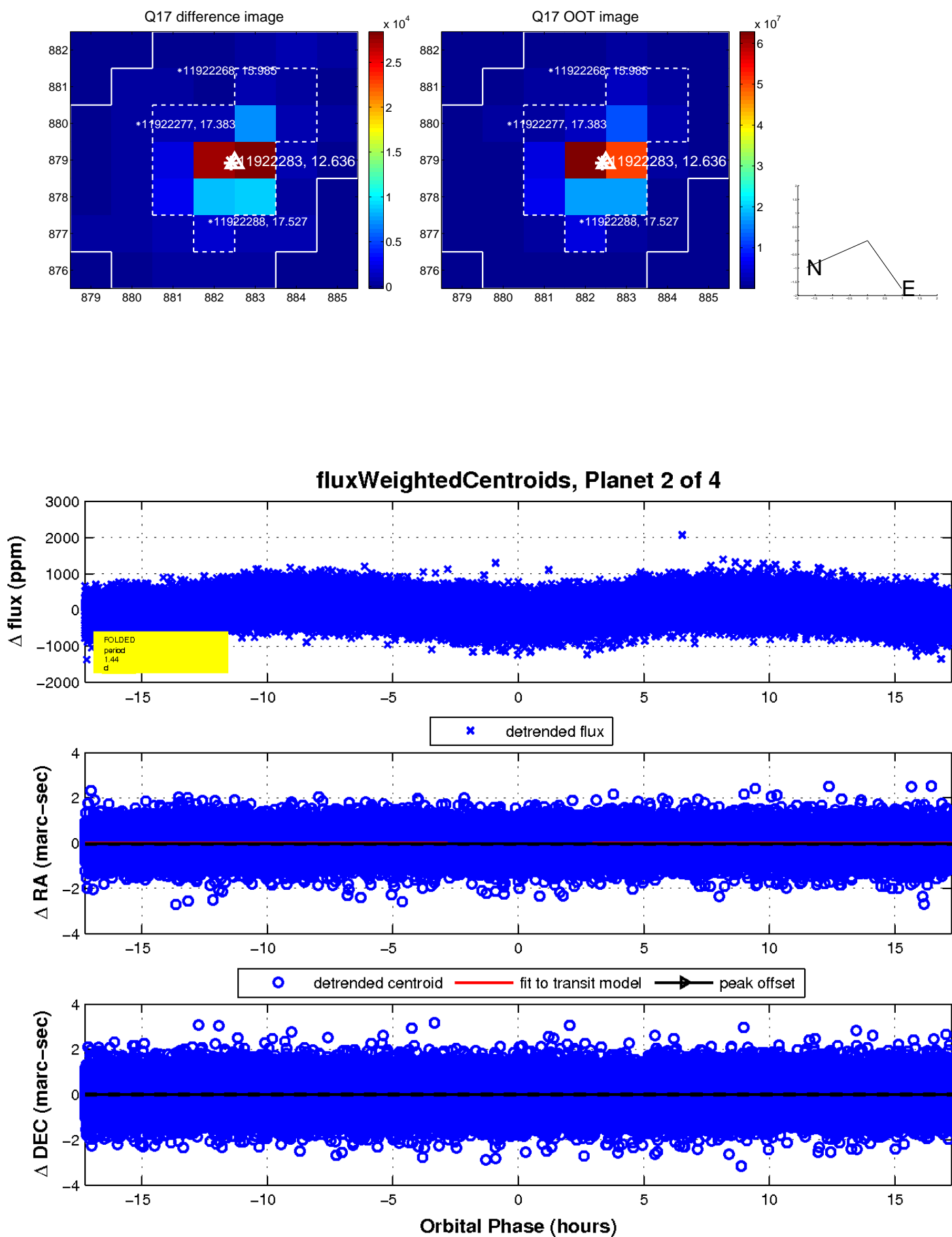
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

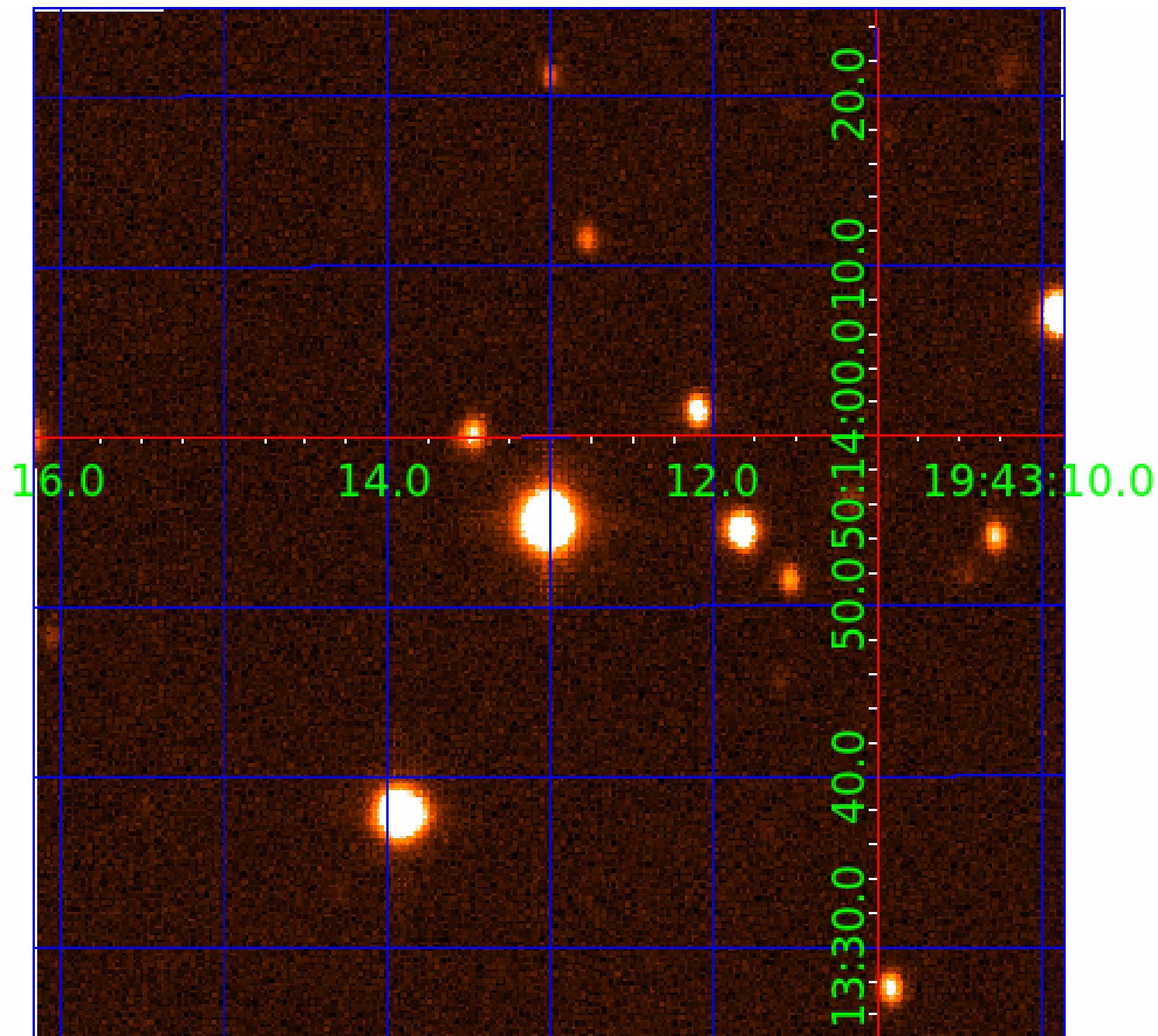


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 011922283

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})
011922283-01	OBS	No	1.054299	131.790731	30.0	4.185	7.8	8.2	11.11	7120	6.12	0.00
011922283-02	OBS	No	1.437893	131.542321	45.4	5.941	8.8	8.9	11.11	7120	7.52	0.00
011922283-04	OBS	No	0.878715	132.314087	111.1	8.534	9.7	11.7	11.11	7120	23.34	0.00

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
011922283-01	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT
011922283-02	OBS	FP	0.00	1	0	0	0	TRANS_GAPPED—SWEET_NTL—LPP_DV
011922283-04	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_SKYE_ZUMA—TRANS_GAPPED—LPP_DV—CENT_FEW_DIFFS

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

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

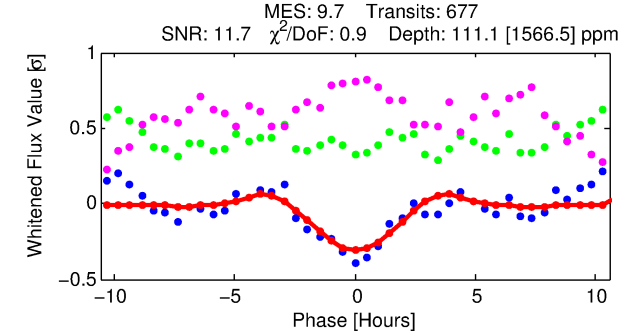
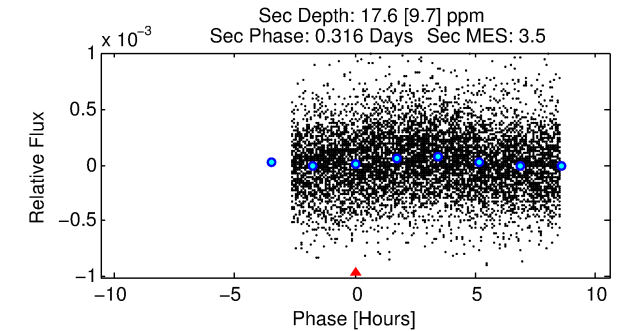
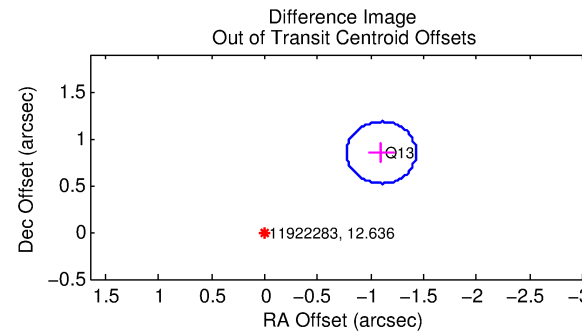
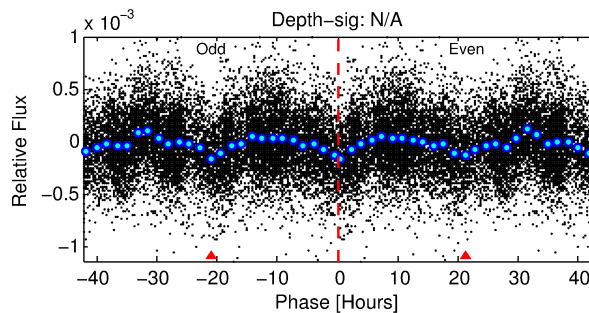
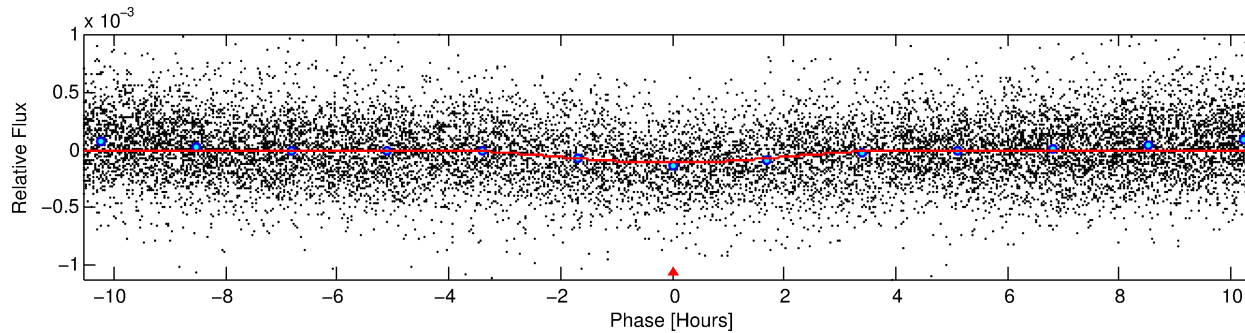
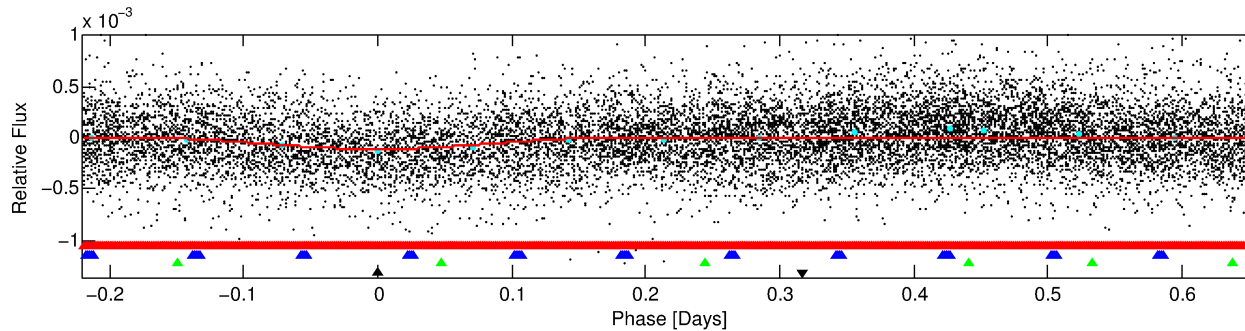
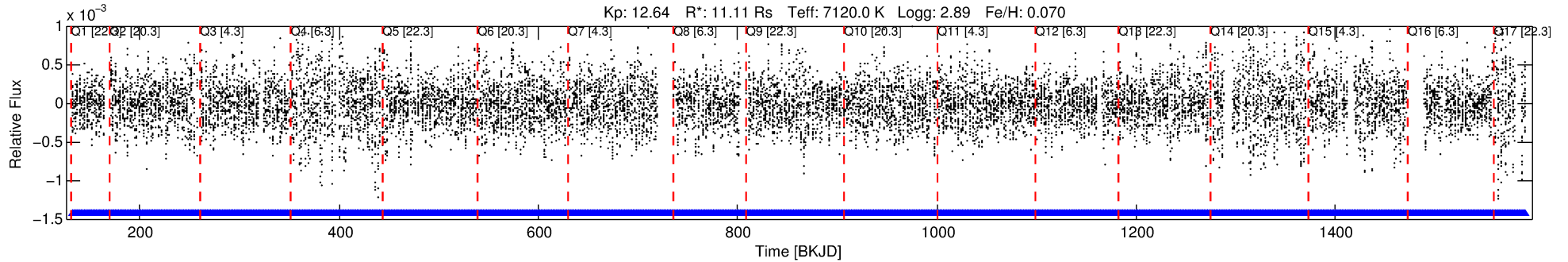
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 011922283-04

No Significant Match Found

DV One-Page Summary

KIC: 11922283 Candidate: 4 of 4 Period: 0.879 d



DV Fit Results:

Period = 0.87872 [0.00001] d
Epoch = 132.3141 [0.0073] BKJD
Rp/R* = 0.0193 [0.0231]
a/R* = 1.02 [0.02]
b = 1.00 [0.16]
Seff = N/A
Teq = N/A
Rp = 23.35 [29.37] Re
a = N/A
Ag = N/A
Teffp = N/A

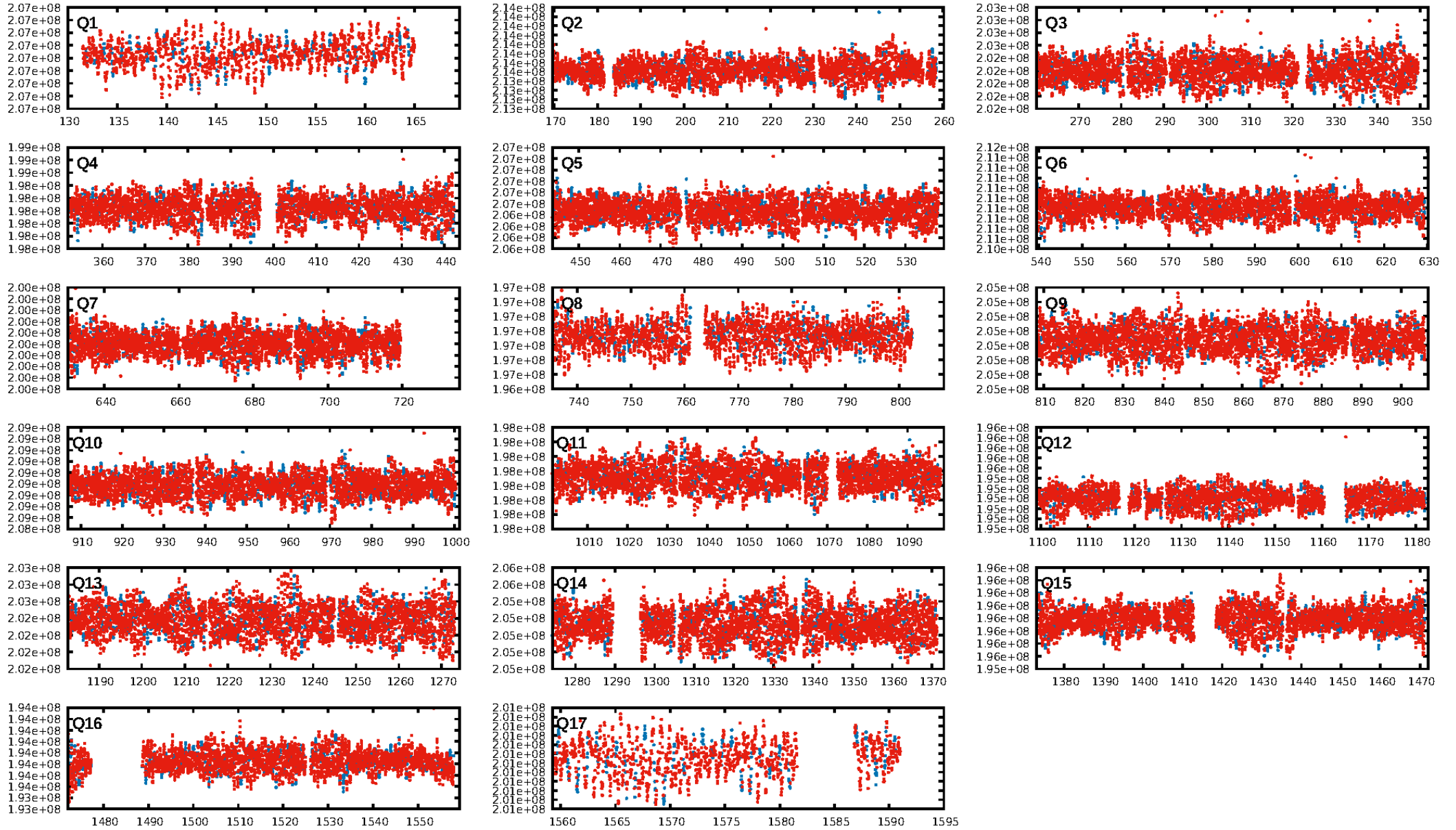
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: 34.3% [0.44σ]
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [645/645]
GhostDiagnostic-chr: 4.552
Centroid-sig: 0.0%
Centroid-so: 0.248 arcsec [1.61σ]
OotOffset-rm: 1.390 arcsec [12.63σ]
KicOffset-rm: 1.417 arcsec [13.02σ]
OotOffset-st: 0/0/0/1 [1]
KicOffset-st: 0/0/0/1 [1]
DiffImageQuality-fgm: 1.00 [1/1]
DiffImageOverlap-fno: 0.00 [0/17]

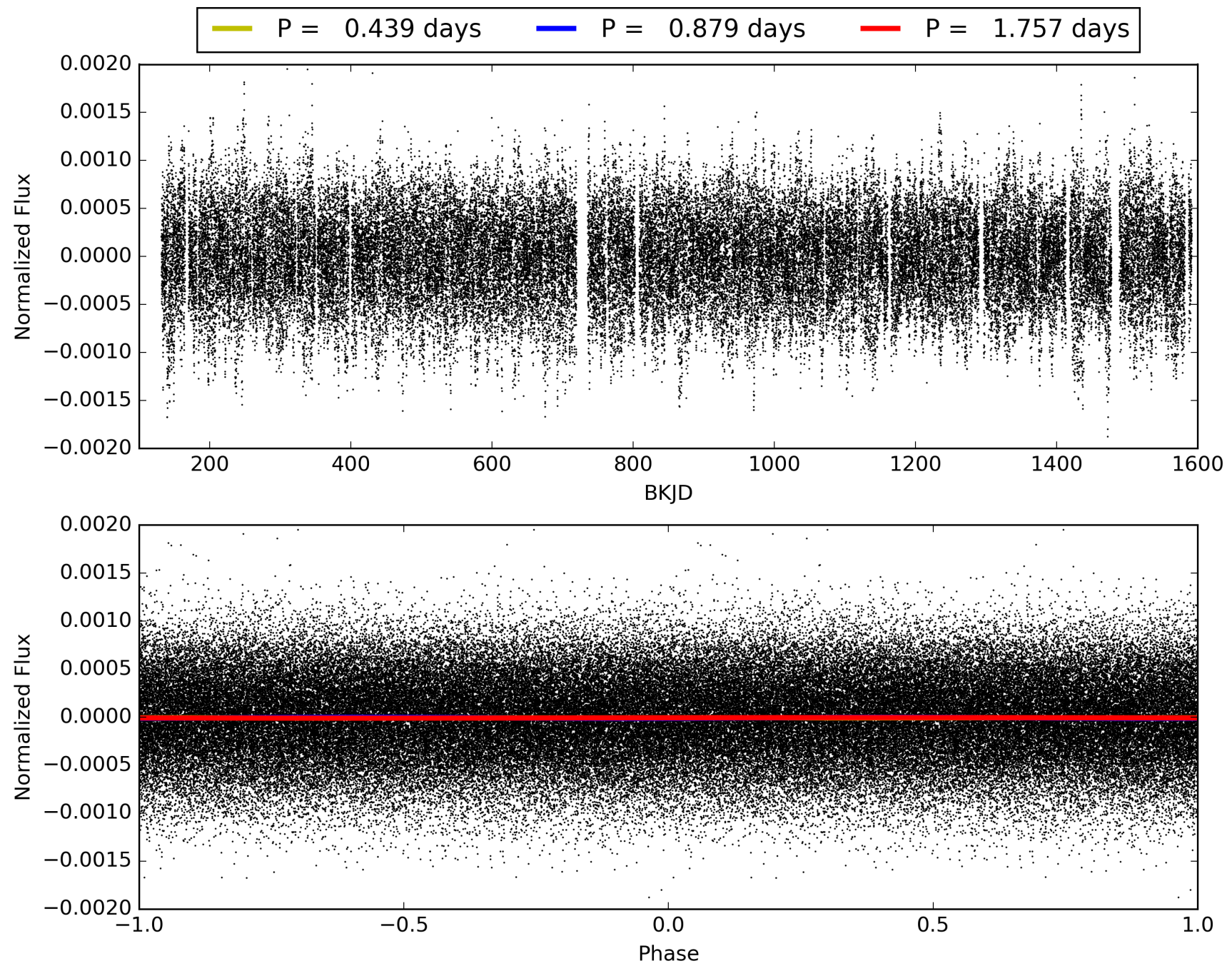
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 05:59:37 Z

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

TCE 011922283-04, PDC Light Curves

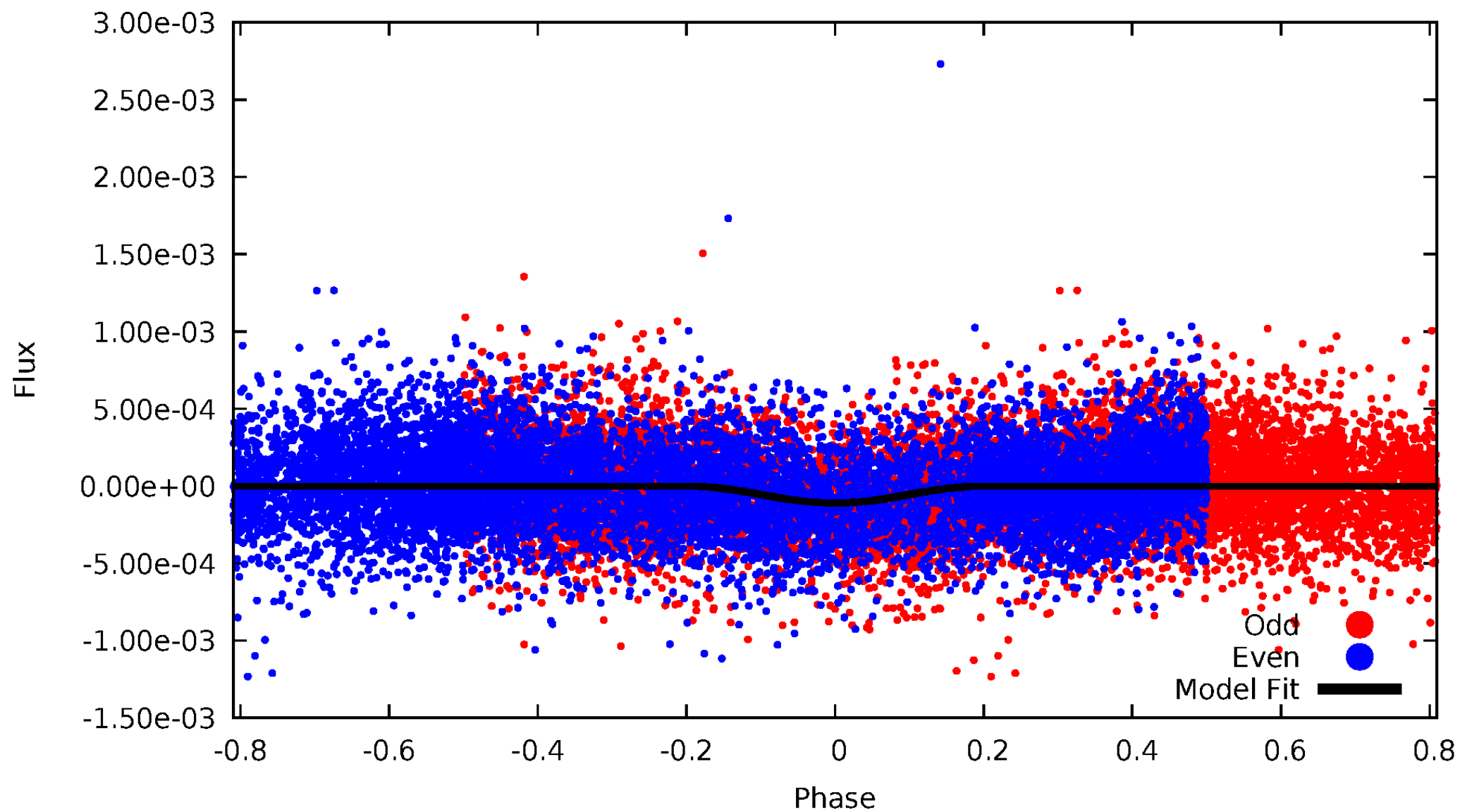


TCE 011922283-04



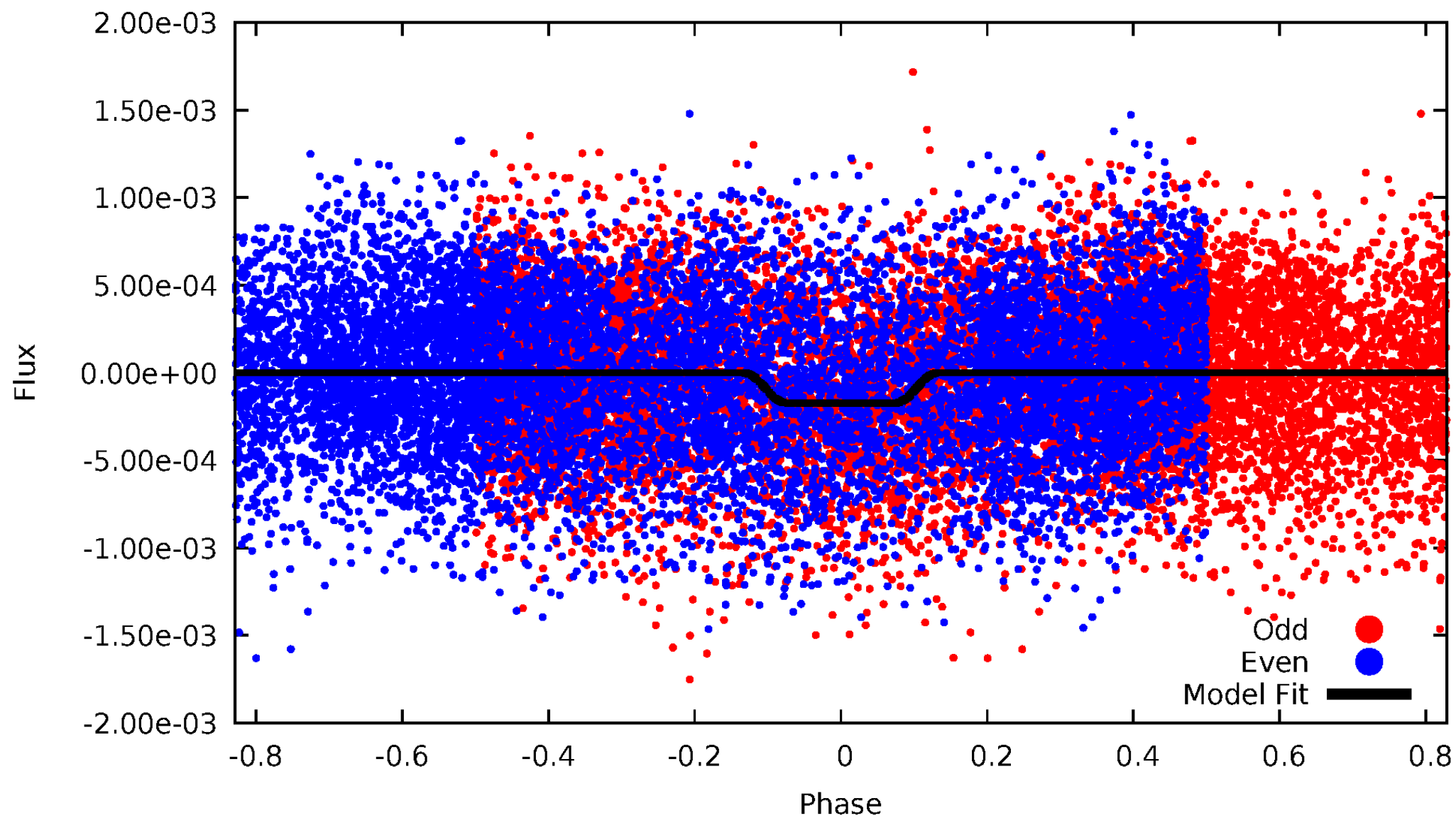
DV Odd/Even

TCE 011922283-04



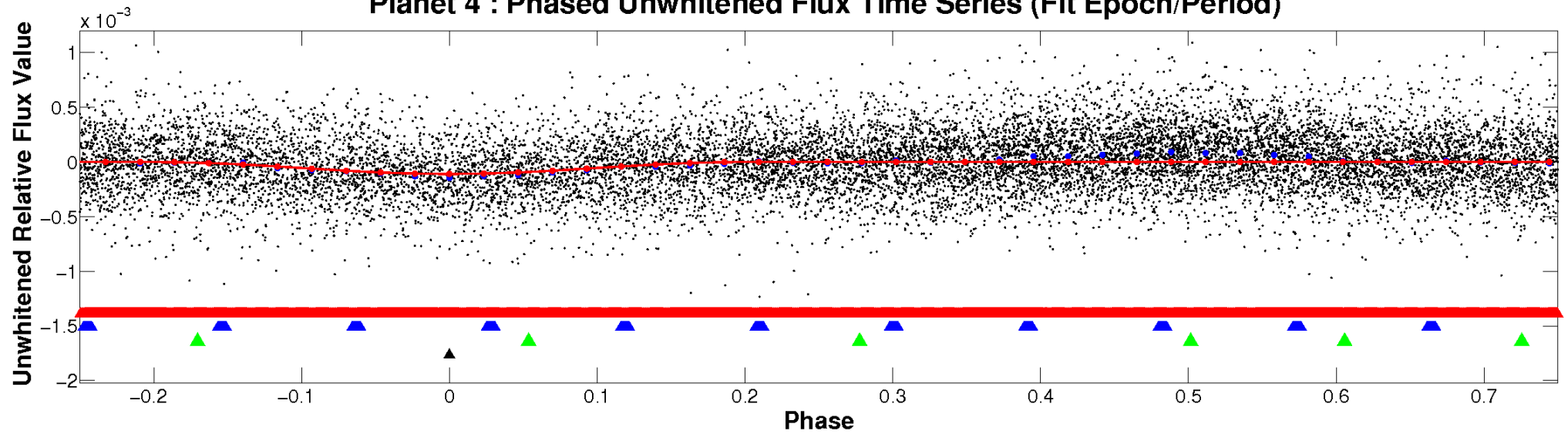
ALT Odd/Even

TCE 011922283-04

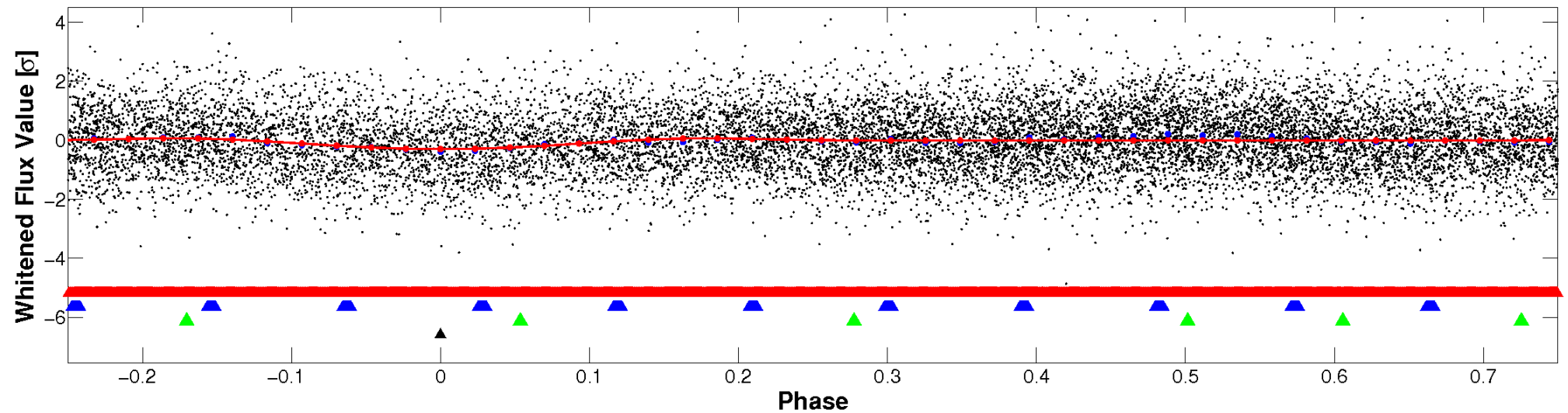


Non-Whitened Vs. Whitened Light Curve

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

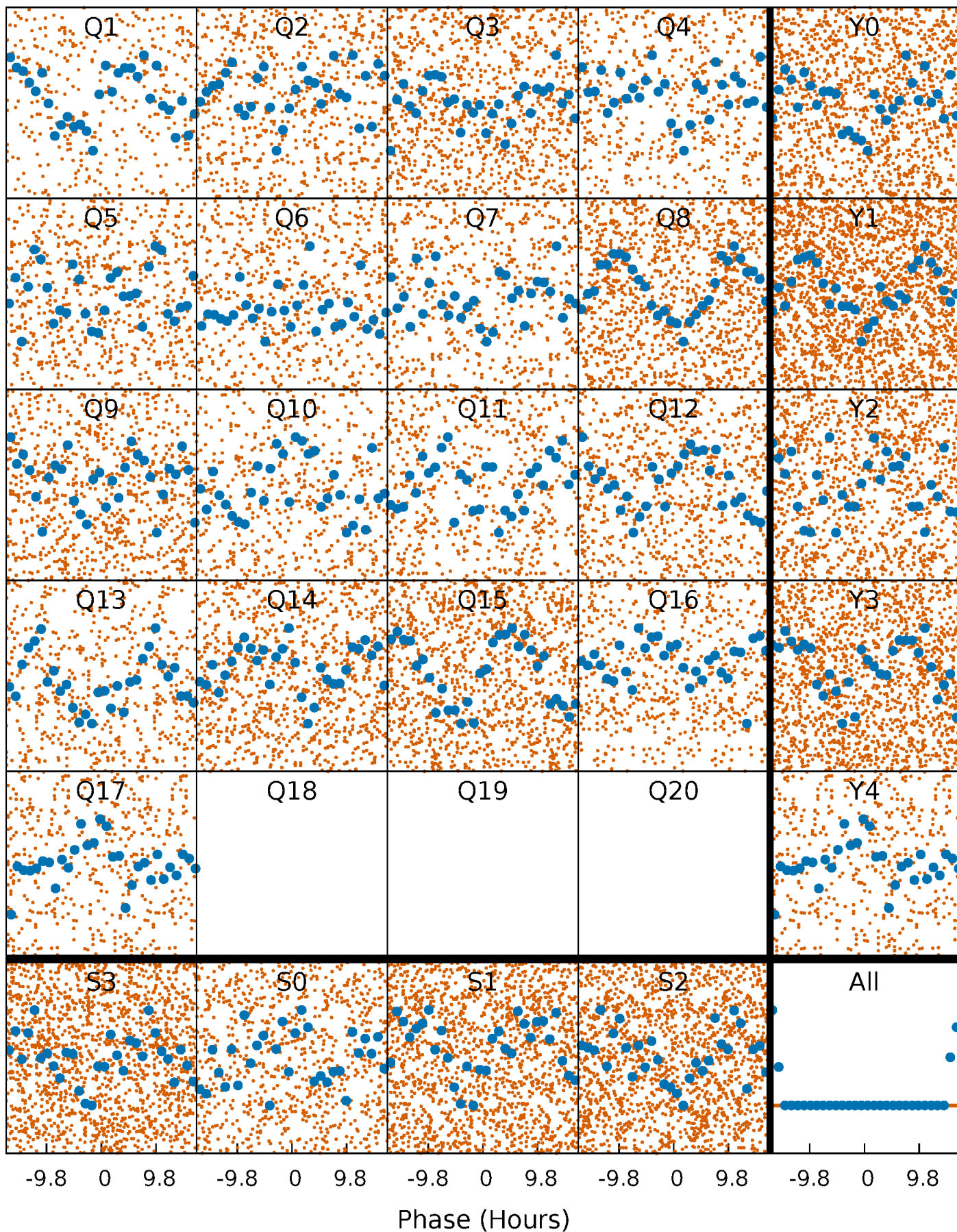


Planet 4 : Phased Whitened Flux Time Series (Fit Epoch/Period)



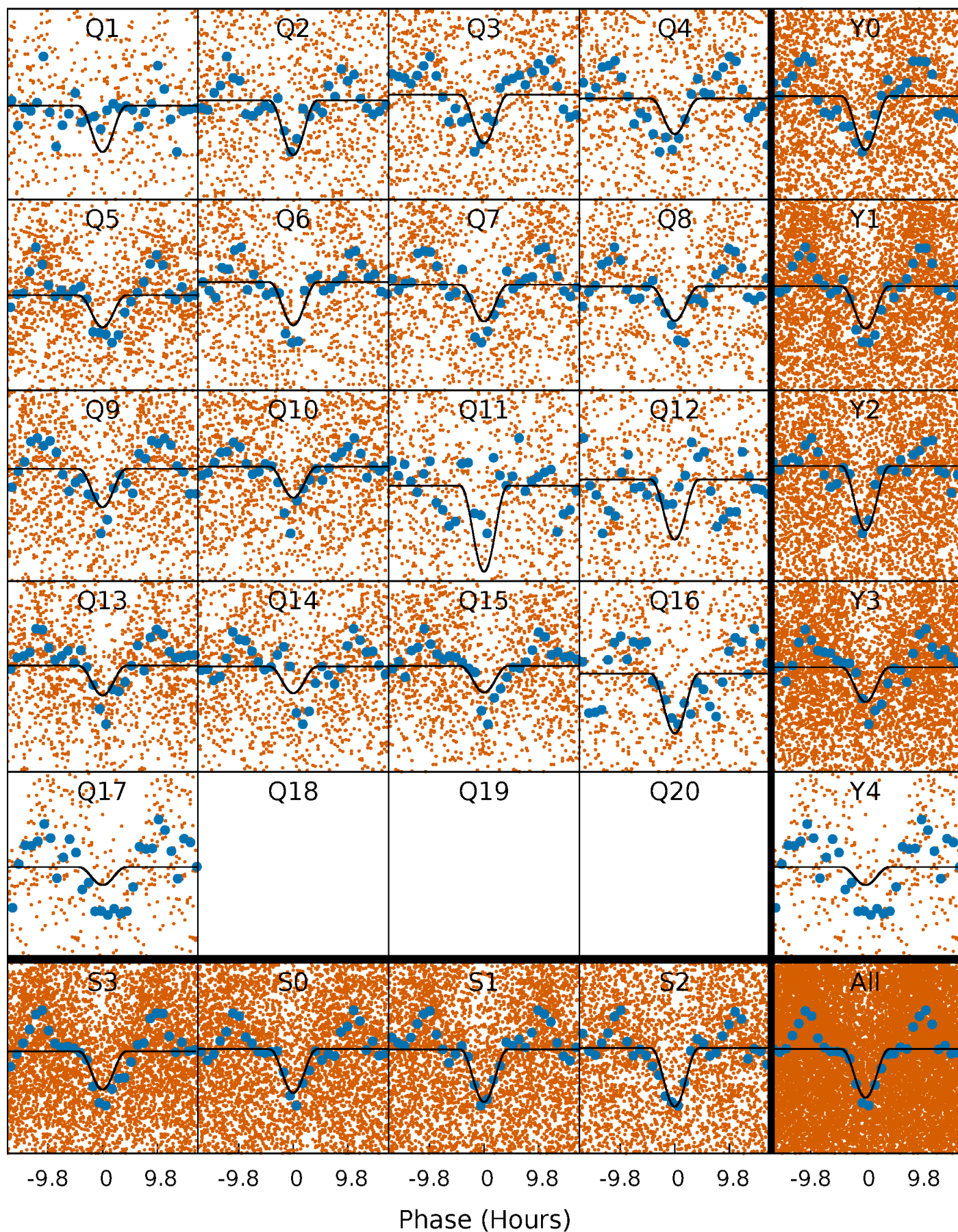
PDC Quarter-Phased Transit Curves

TCE 011922283-04 P= 0.878715 Days $T_0=132.314087$ (BKJD)



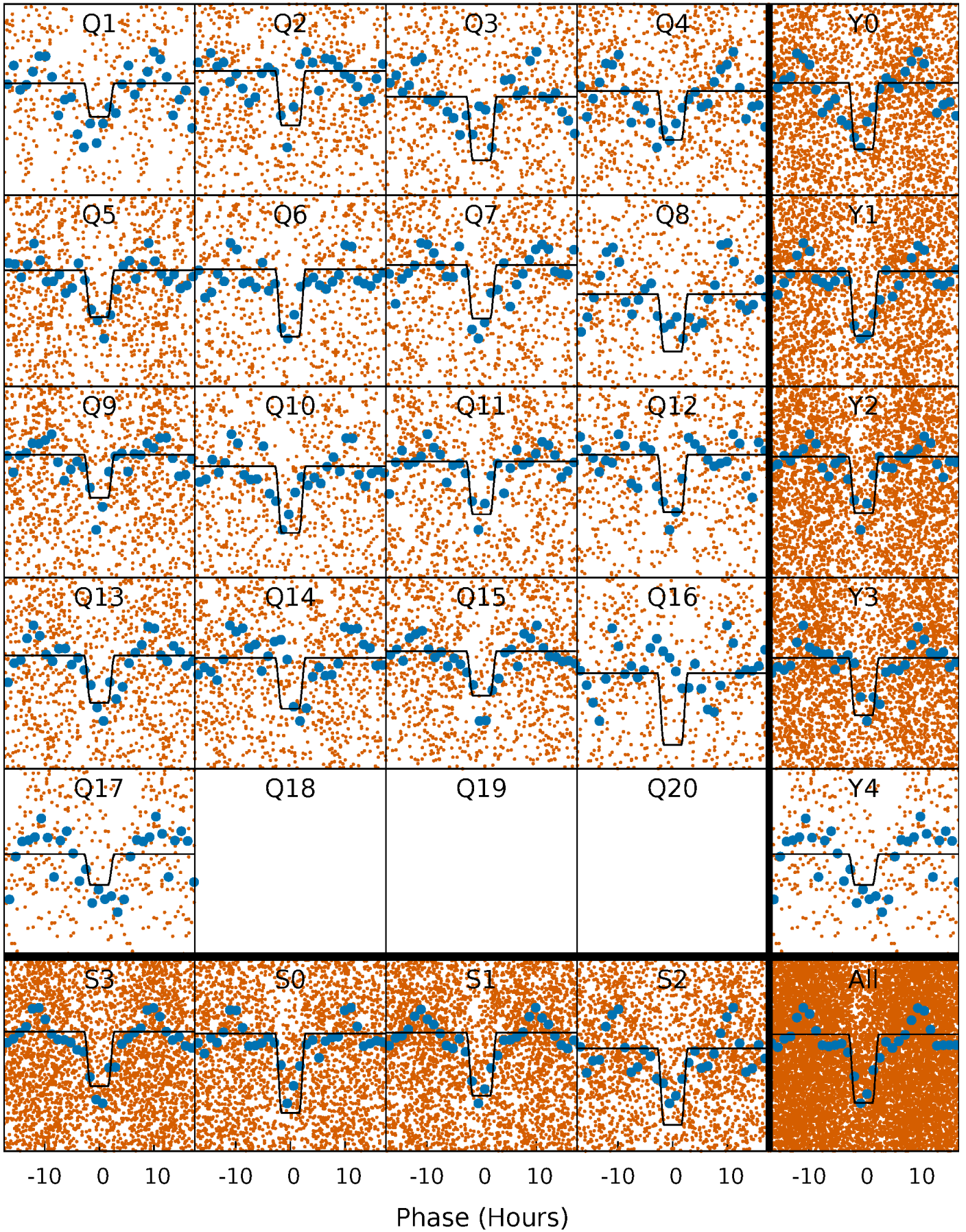
DV Quarter-Phased Transit Curves

TCE 011922283-04 P= 0.878715 Days $T_0=132.314087$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

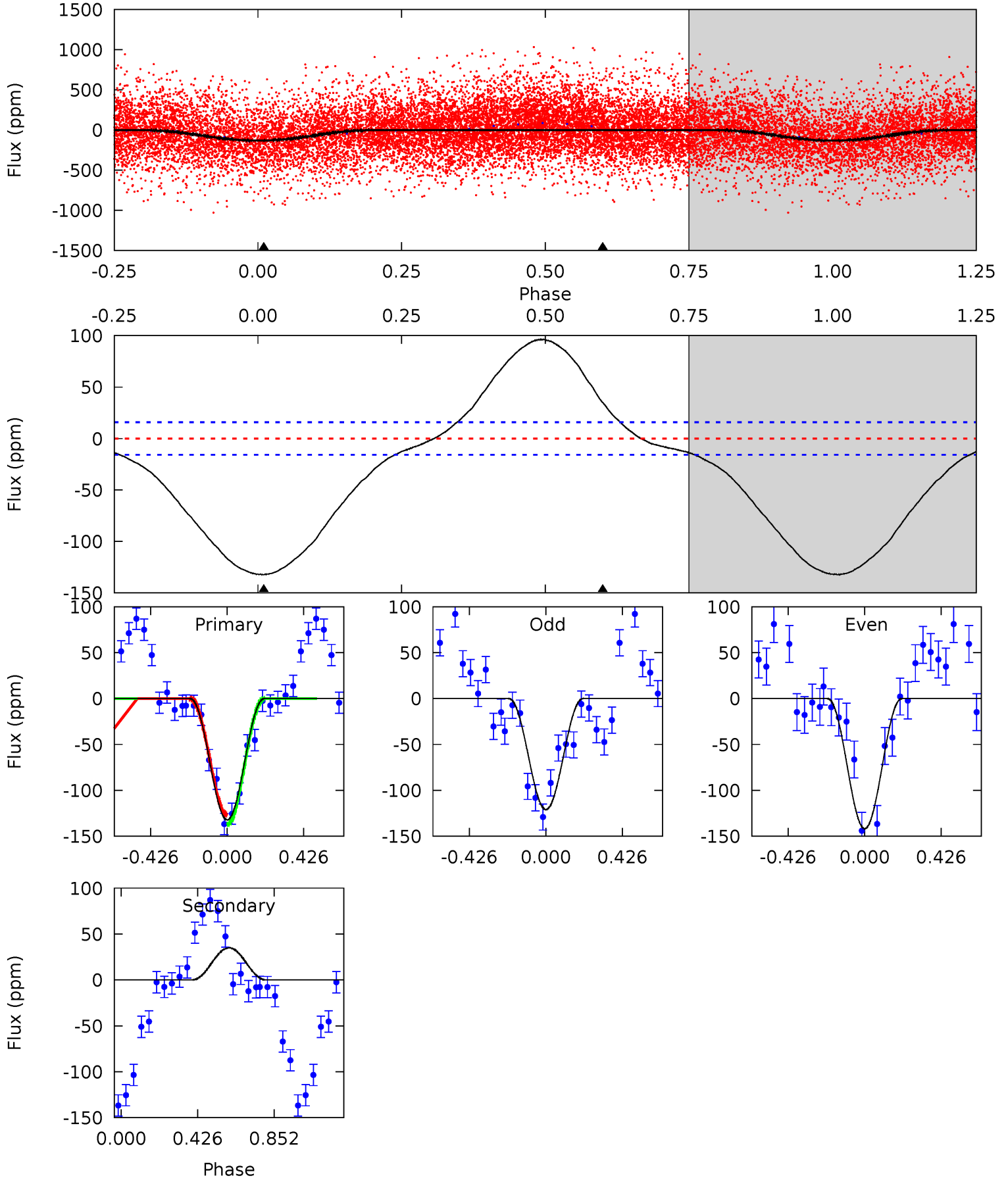
TCE 011922283-04 P= 0.878722 Days $T_0=132.316005$ (BKJD)



DV Model-Shift Uniqueness Test

011922283-04, P = 0.878715 Days, E = 131.435372 Days

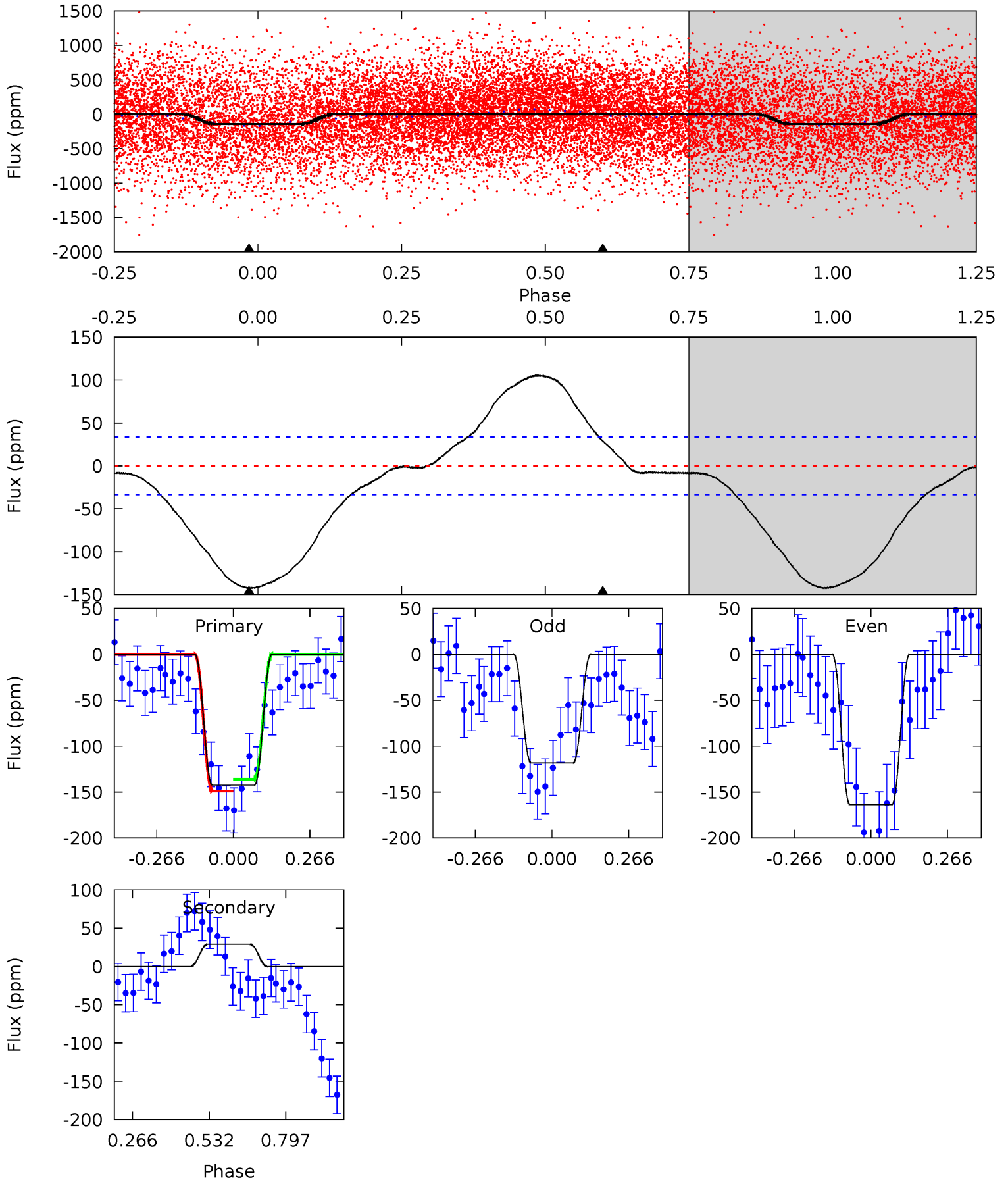
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
35.4	-9.36	0	0	4.25	0.80	2.25	35.4	35.4	-9.36	-9.36	2.78	0.15	0.42	1.45



Alt Model-Shift Uniqueness Test

011922283-04, P = 0.878722 Days, E = 131.437283 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
18.6	-3.77	0	0	4.36	1.11	0.98	18.6	18.6	-3.77	-3.77	2.95	0.81	0.42	0.80



Stellar Parameters For KIC 011922283

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	M (M_{\odot})	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	7120^{+174}_{-274}	$2.888^{+0.297}_{-0.033}$	$0.070^{+0.250}_{-0.350}$	$11.106^{+0.469}_{-4.219}$	$3.479^{+0.070}_{-0.794}$	$0.004^{+0.008}_{-0.000}$
	+2%/-4%	+10%/-1%	+357%/-500%	+4%/-38%	+2%/-23%	+212%/-12%
Source	PHO1	FLK73	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 011922283-04 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	35 ± 4	$28.26^{+24.33}_{-18.40}$	8625^{+406}_{-755}	-7295^{+658}_{-720}	$-0.017^{+0.012}_{-0.122}$
Alt.	29 ± 8	$23.60^{+23.69}_{-15.61}$	8602^{+444}_{-694}	-7310^{+645}_{-668}	$-0.021^{+0.016}_{-0.130}$

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

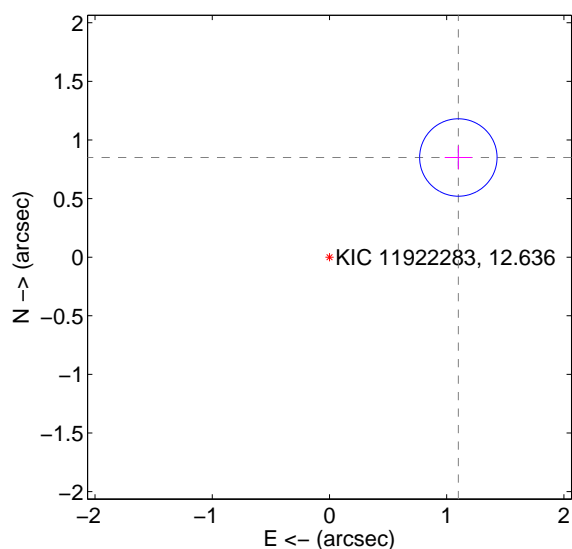
Supplemental centroid analysis for 011922283-04. Kepler magnitude: 12.64. Transit SNR 11.71

There are 1 quarters with good PRF difference image offsets

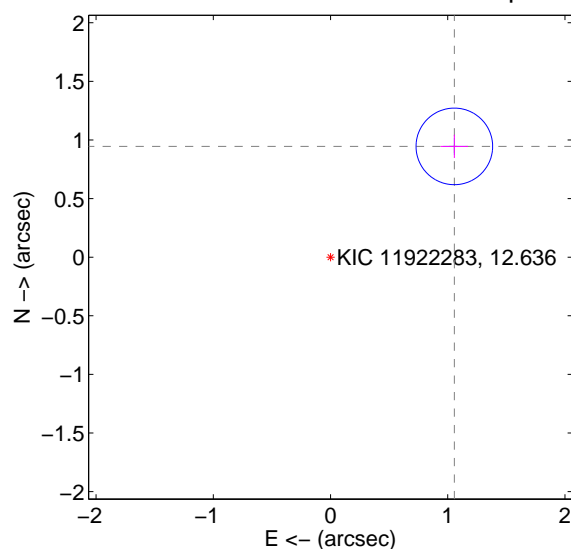
The direct PRF centroid is offset from the target star catalog position by about 0.10 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	1.390 ± 0.110	12.63	-1.099 ± 0.116	0.850 ± 0.099
PRF-fit source offset from KIC position	1.417 ± 0.109	13.02	-1.056 ± 0.116	0.945 ± 0.099
photometric centroid source offset	0.25 ± 0.15	1.61	-0.13 ± 0.14	-0.21 ± 0.16

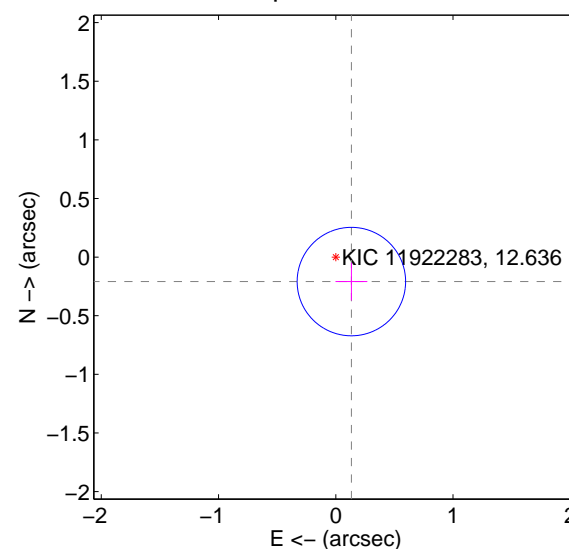
offset from difference PRF-fit to OOT PRF-fit



offset from difference PRF-fit to KIC position

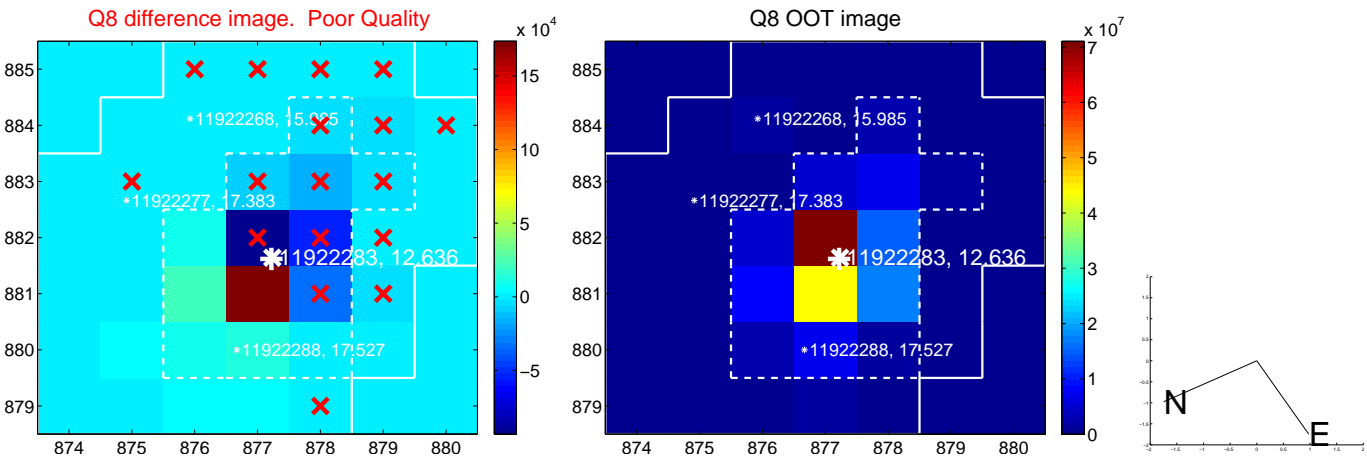
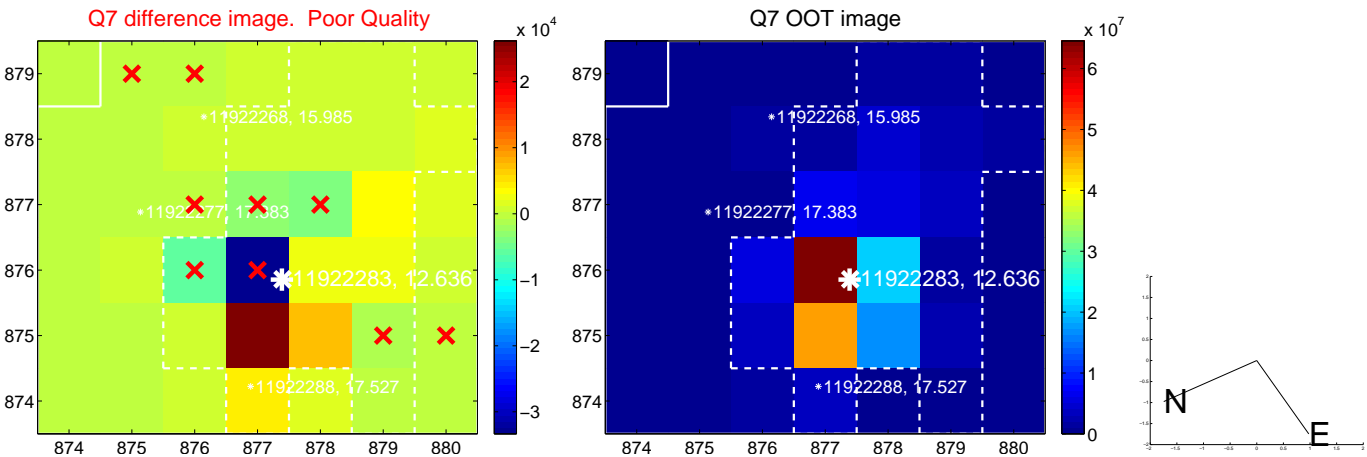
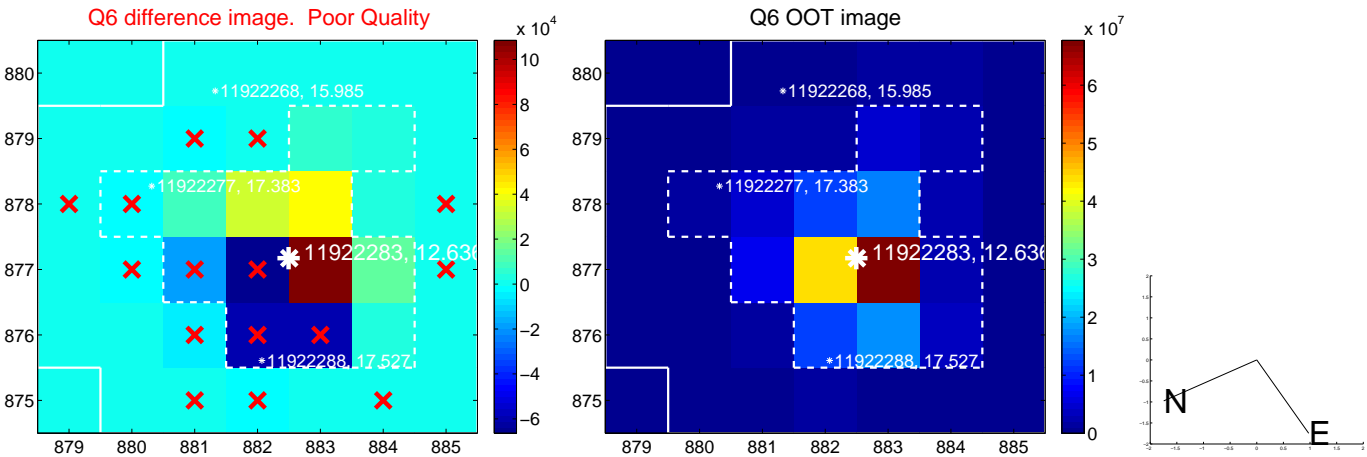
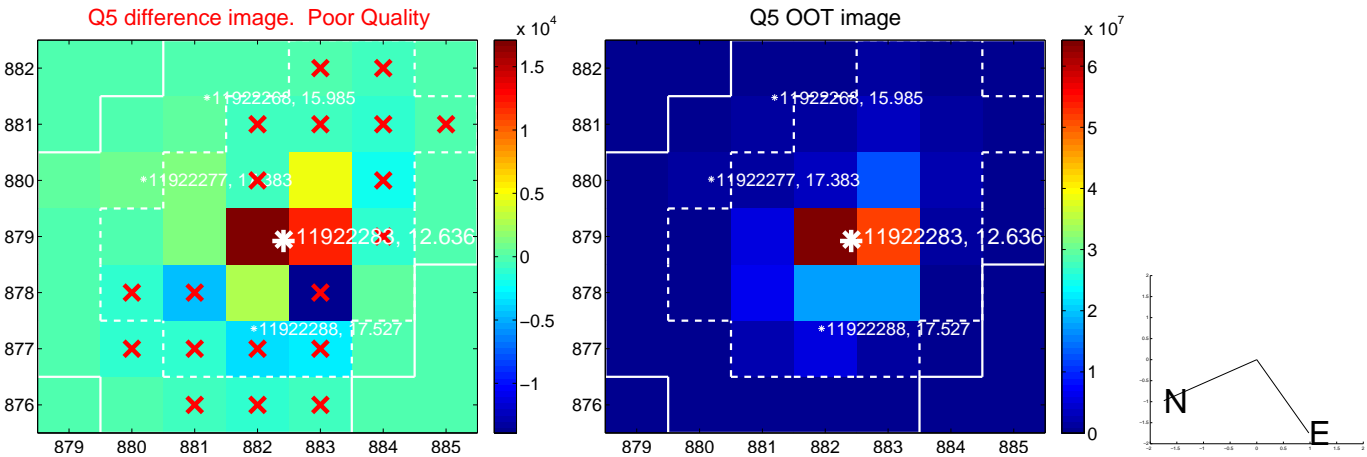


offset from photometric centroids

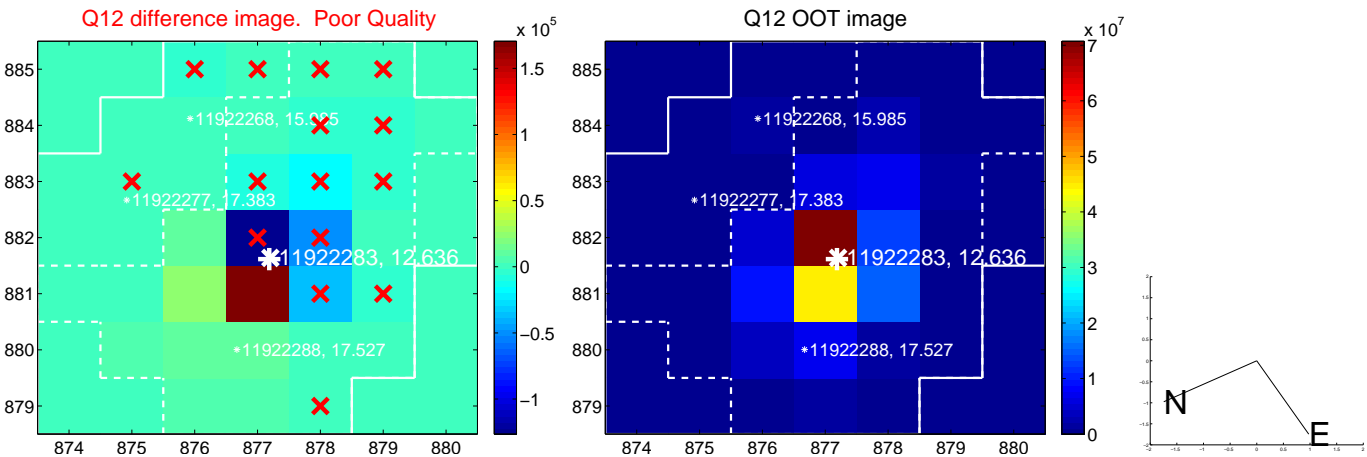
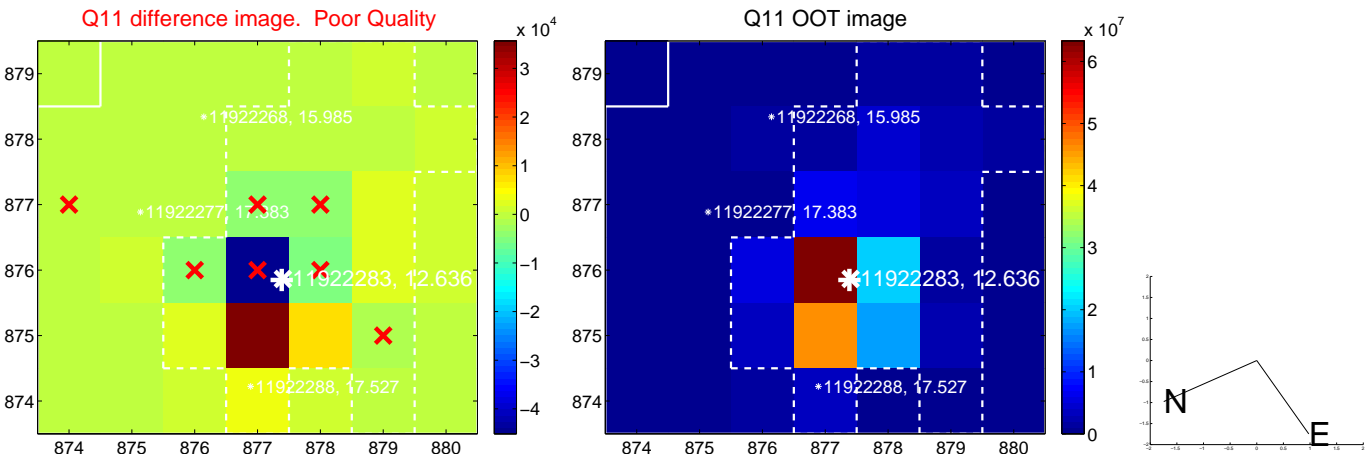
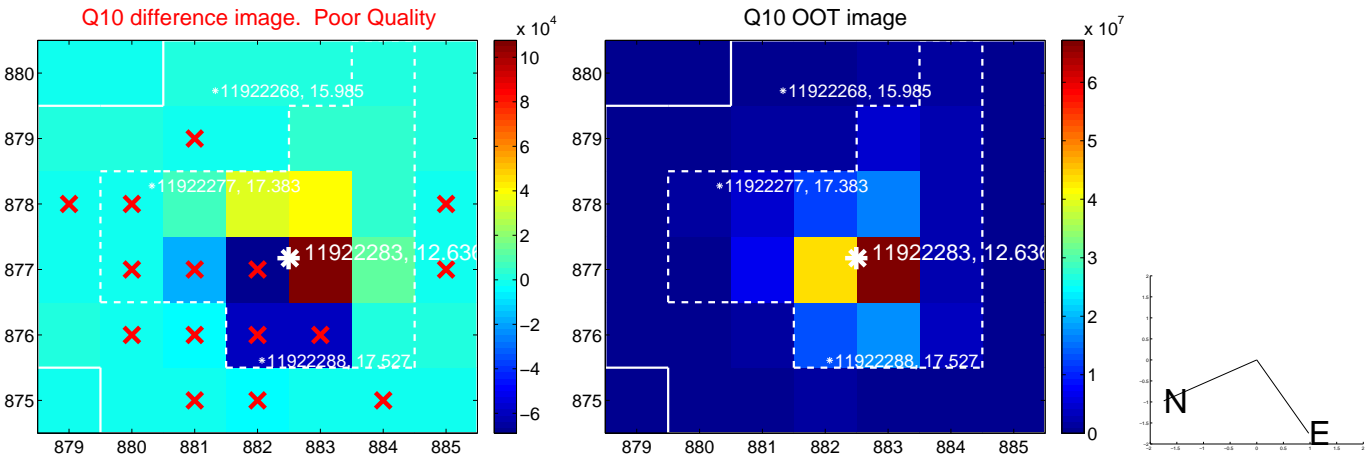
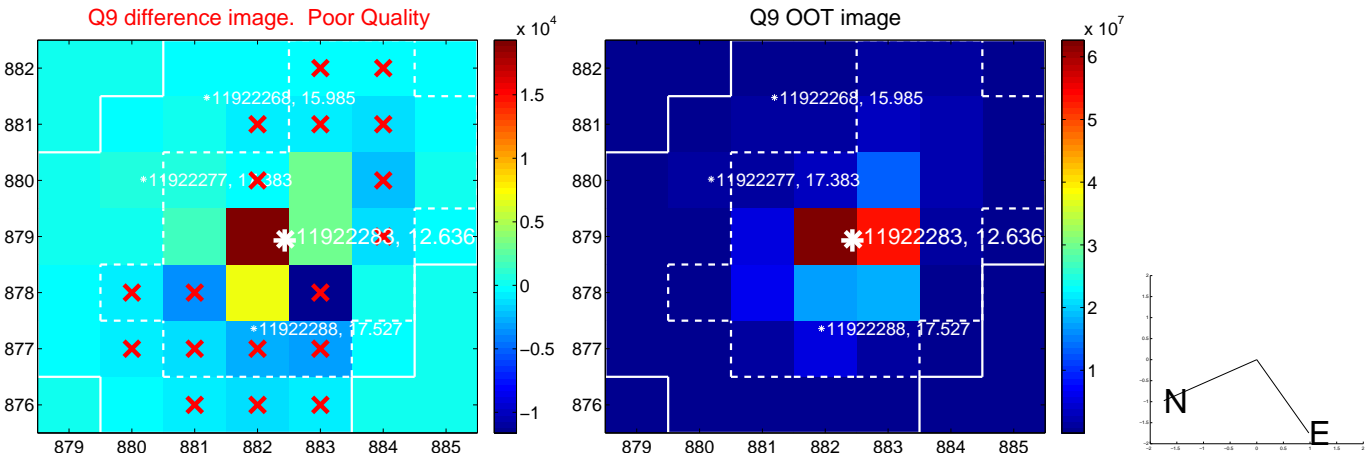


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

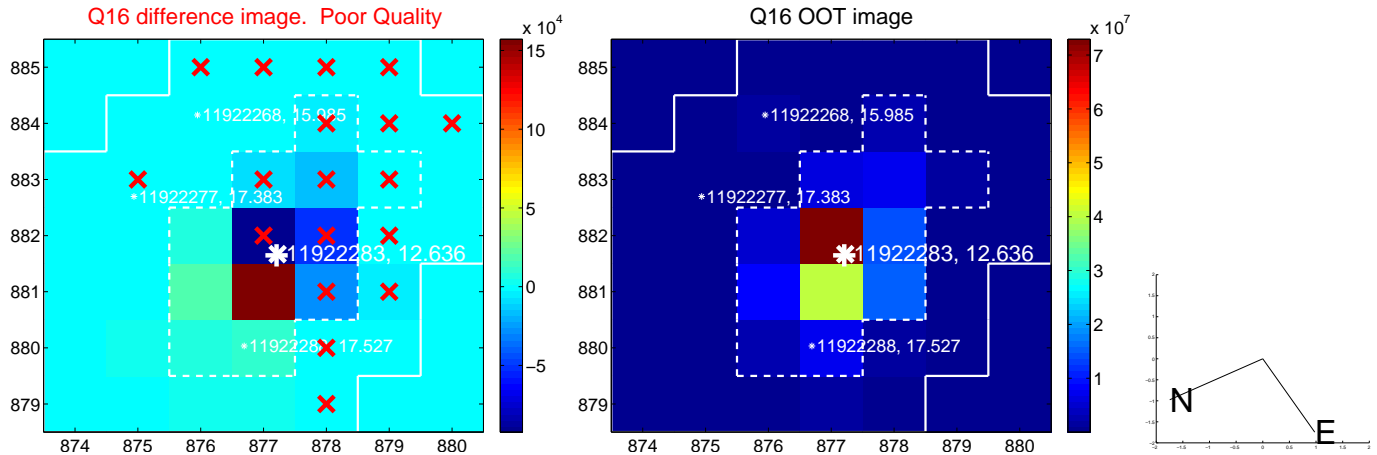
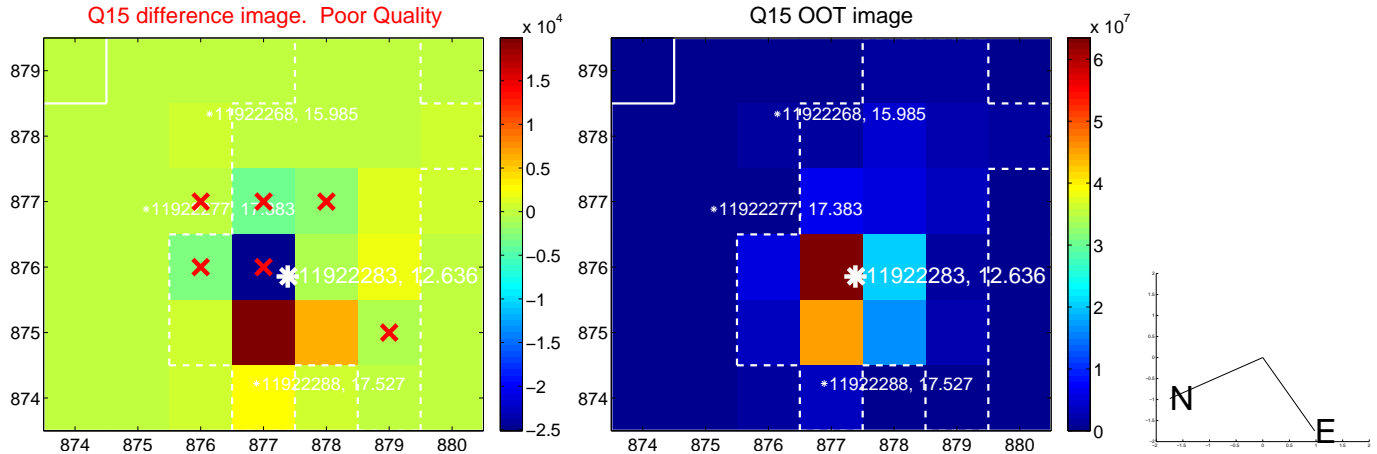
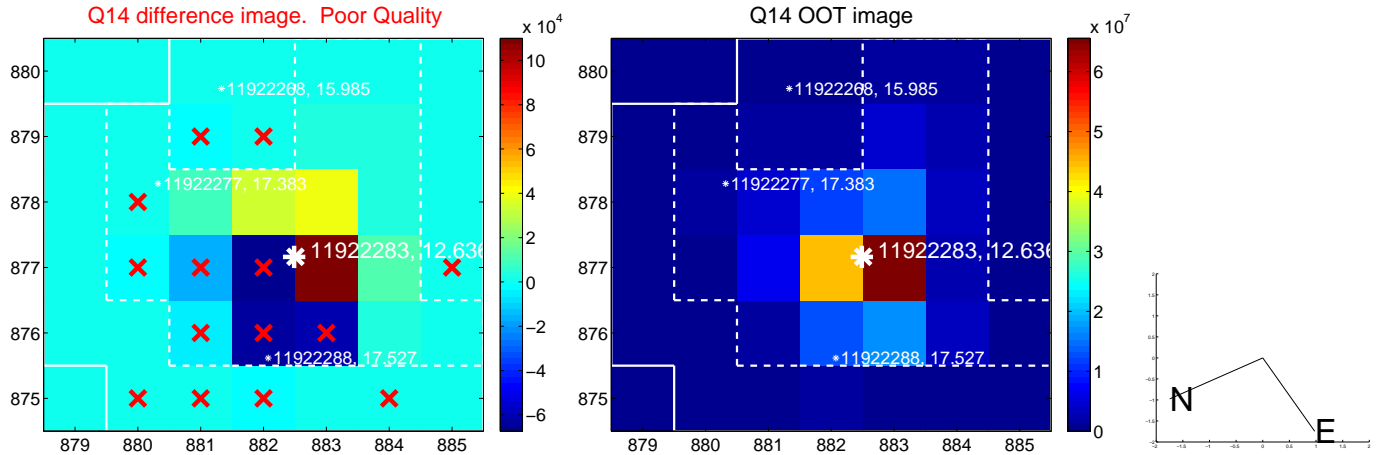
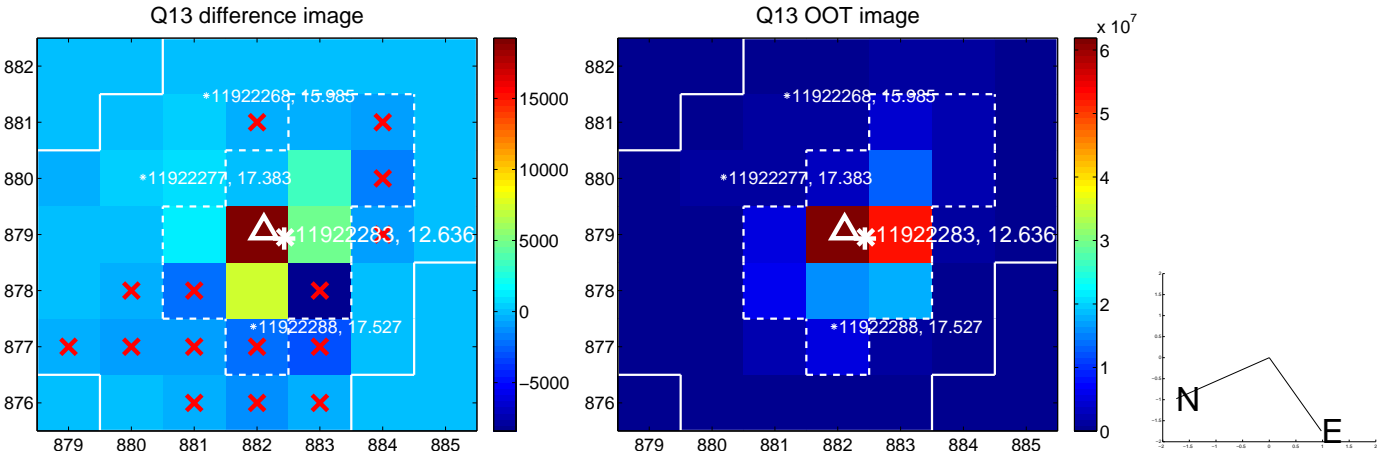
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



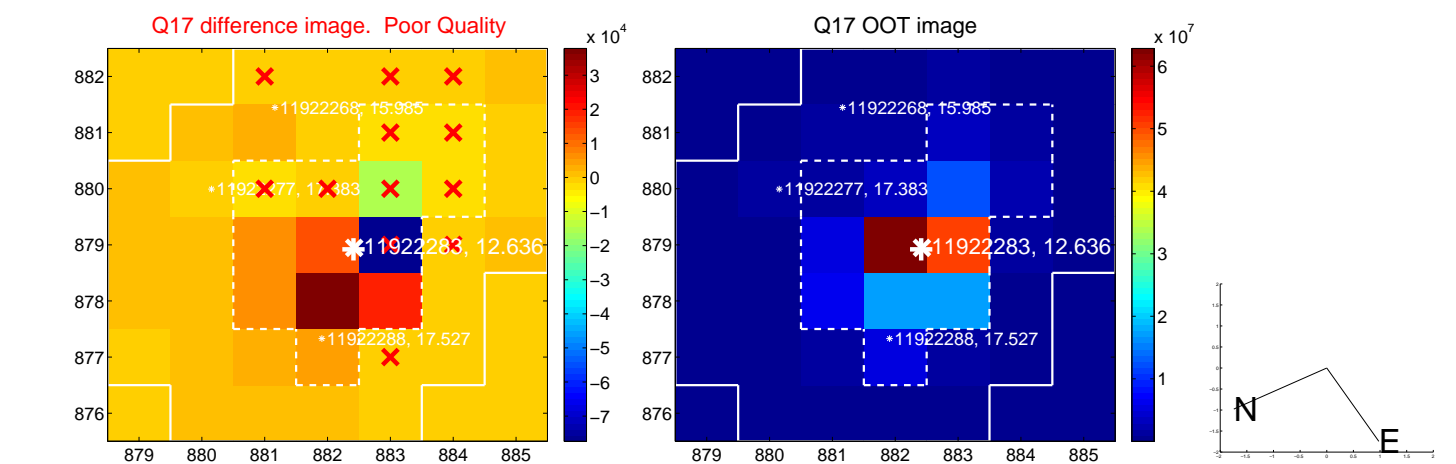
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



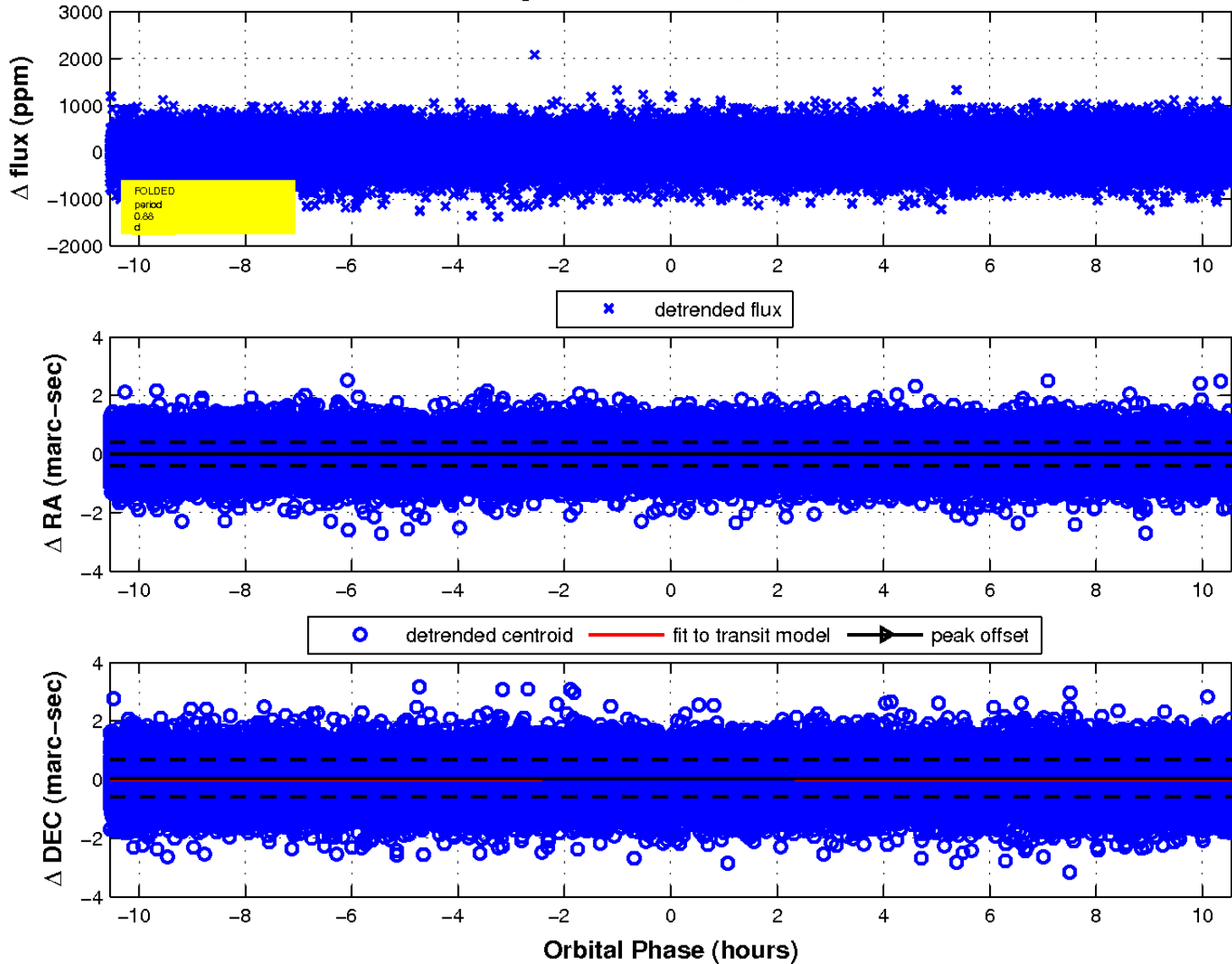
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



fluxWeightedCentroids, Planet 4 of 4



UKIRT Image

Declination

