

KIC 011100532

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})
011100532-01	OBS	No	0.743985	131.987531	35.9	1.383	9.7	9.2	2.41	7575	1.69	45700.86
011100532-02	OBS	No	0.949443	132.488671	21.6	5.846	8.6	6.8	2.41	7575	1.13	33015.51
011100532-03	OBS	No	40.787800	151.972423	116.5	4.550	10.1	5.1	2.41	7575	3.18	219.43
011100532-04	OBS	No	44.858115	149.422270	213.7	4.493	8.7	8.0	2.41	7575	4.20	193.30
011100532-05	OBS	No	69.928123	175.645448	354.3	2.513	9.2	9.2	2.41	7575	5.18	106.94
011100532-06	OBS	No	45.311601	144.582448	220.4	5.021	8.6	7.6	2.41	7575	4.13	190.72
011100532-07	OBS	No	32.325793	159.899688	223.7	4.350	8.1	7.8	2.41	7575	3.97	299.19
011100532-08	OBS	No	23.155985	146.735798	378.5	1.755	8.4	9.2	2.41	7575	4.86	466.79
011100532-09	OBS	No	42.033118	164.656835	317.5	2.500	8.1	-1.0	2.41	7575	4.33	210.81

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
011100532-01	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT
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011100532-05	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT
011100532-06	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT
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011100532-08	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—MOD_NONUNIQ_DV
011100532-09	OBS	FP	0.00	1	0	1	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_NOFITS—HALO_GHOST

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

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

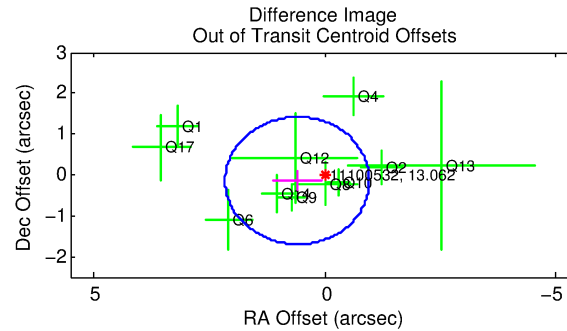
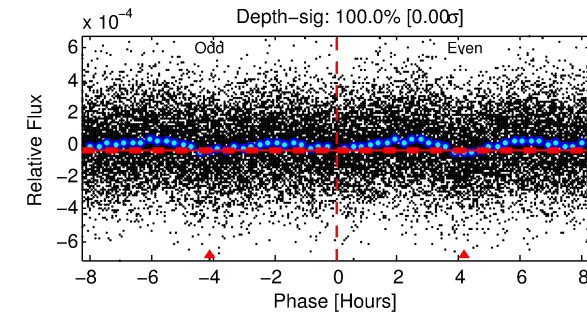
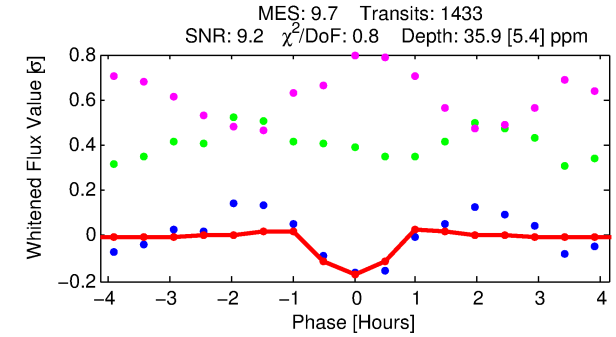
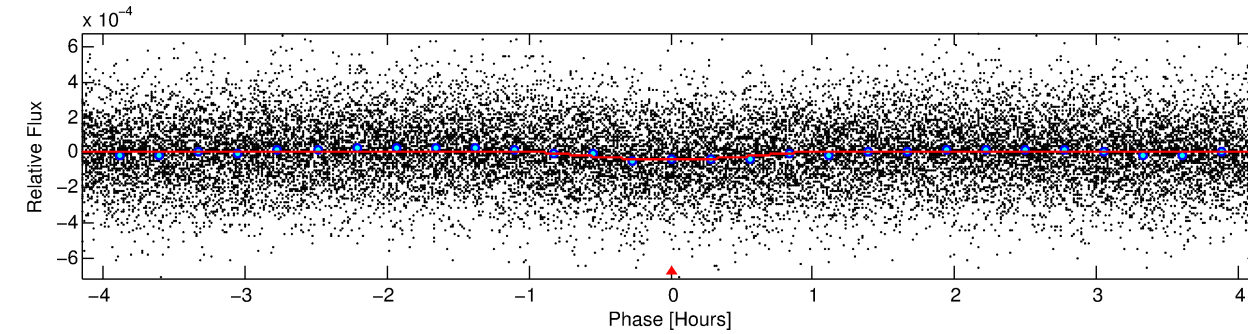
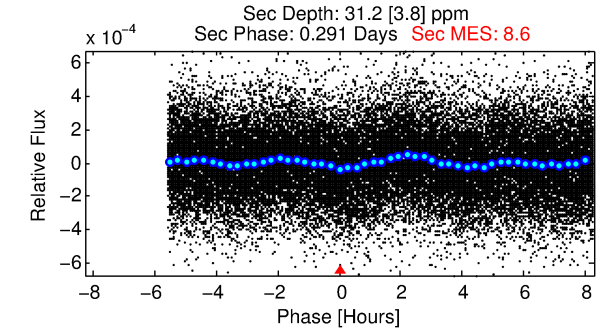
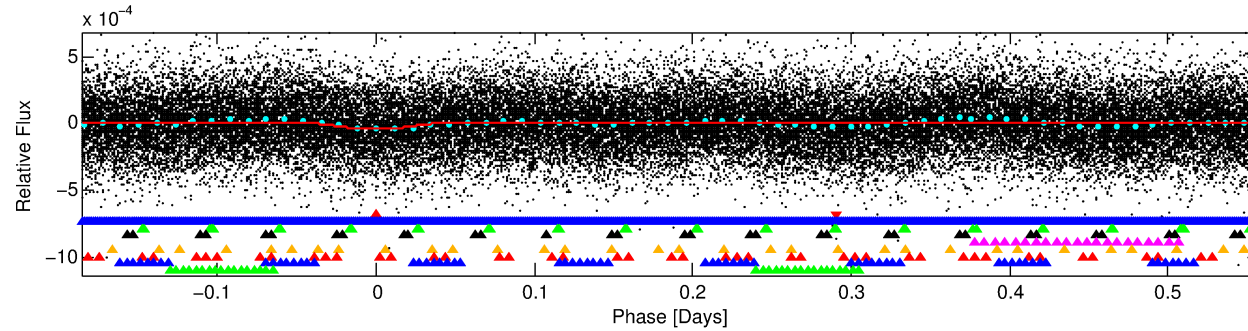
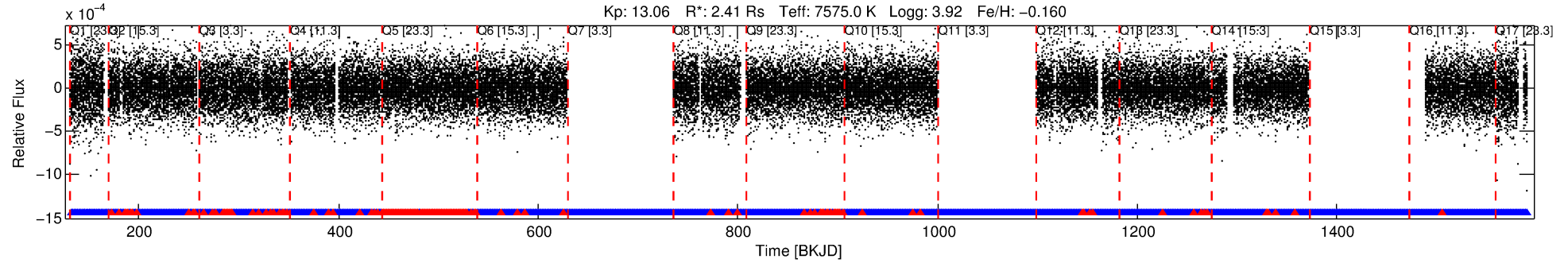
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 011100532-01

No Significant Match Found

DV One-Page Summary

KIC: 11100532 Candidate: 1 of 9 Period: 0.744 d



DV Fit Results:

Period = 0.74398 [0.00001] d
Epoch = 131.9875 [0.0020] BKJD
Rp/R* = 0.0064 [0.0018]
a/R* = 2.08 [2.58]
b = 0.90 [0.35]
Seff = 45700.85 [13707.84]
Teq = 3728 [280] K
Rp = 1.69 [0.61] Re
a = 0.0194 [0.0038] AU
Ag = 2.25 [1.46] [0.86σ]
Teffp = 7058 [1019] K [3.15σ]

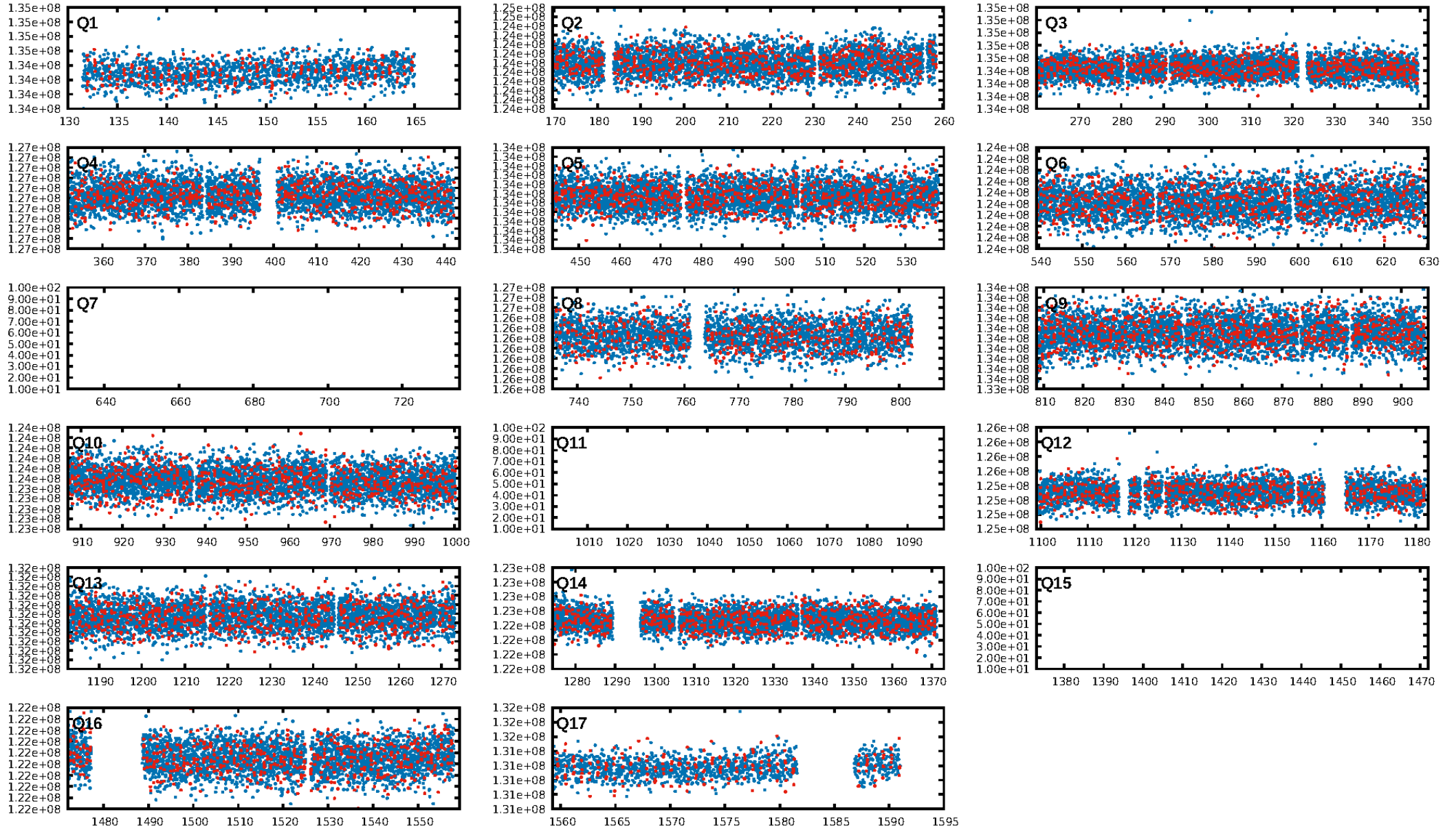
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: 58.8% [0.82σ]
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: N/A
RollingBand-fgt: 0.86 [1165/1352]
GhostDiagnostic-chr: 2.363
Centroid-sig: 12.3%
Centroid-so: 1.273 arcsec [1.13σ]
OotOffset-rm: 0.609 arcsec [1.17σ]
OotOffset-st: 4/0/3/4 [11]
KicOffset-rm: 0.506 arcsec [0.88σ]
KicOffset-st: 4/0/3/4 [11]
DiffImageQuality-fgm: 0.82 [9/11]
DiffImageOverlap-fno: 1.00 [14/14]

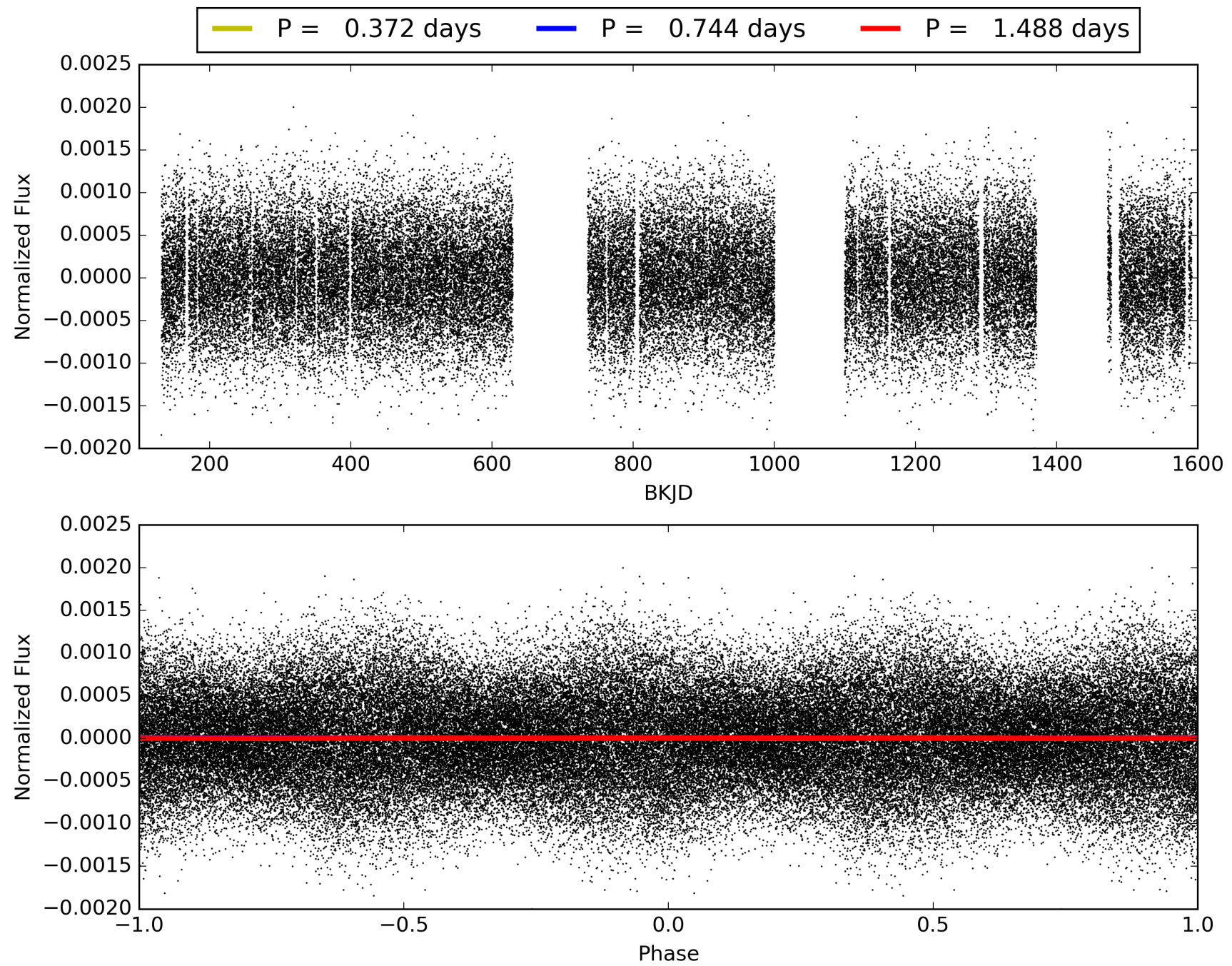
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 01-Feb-2016 10:50:05 Z

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

TCE 011100532-01, PDC Light Curves

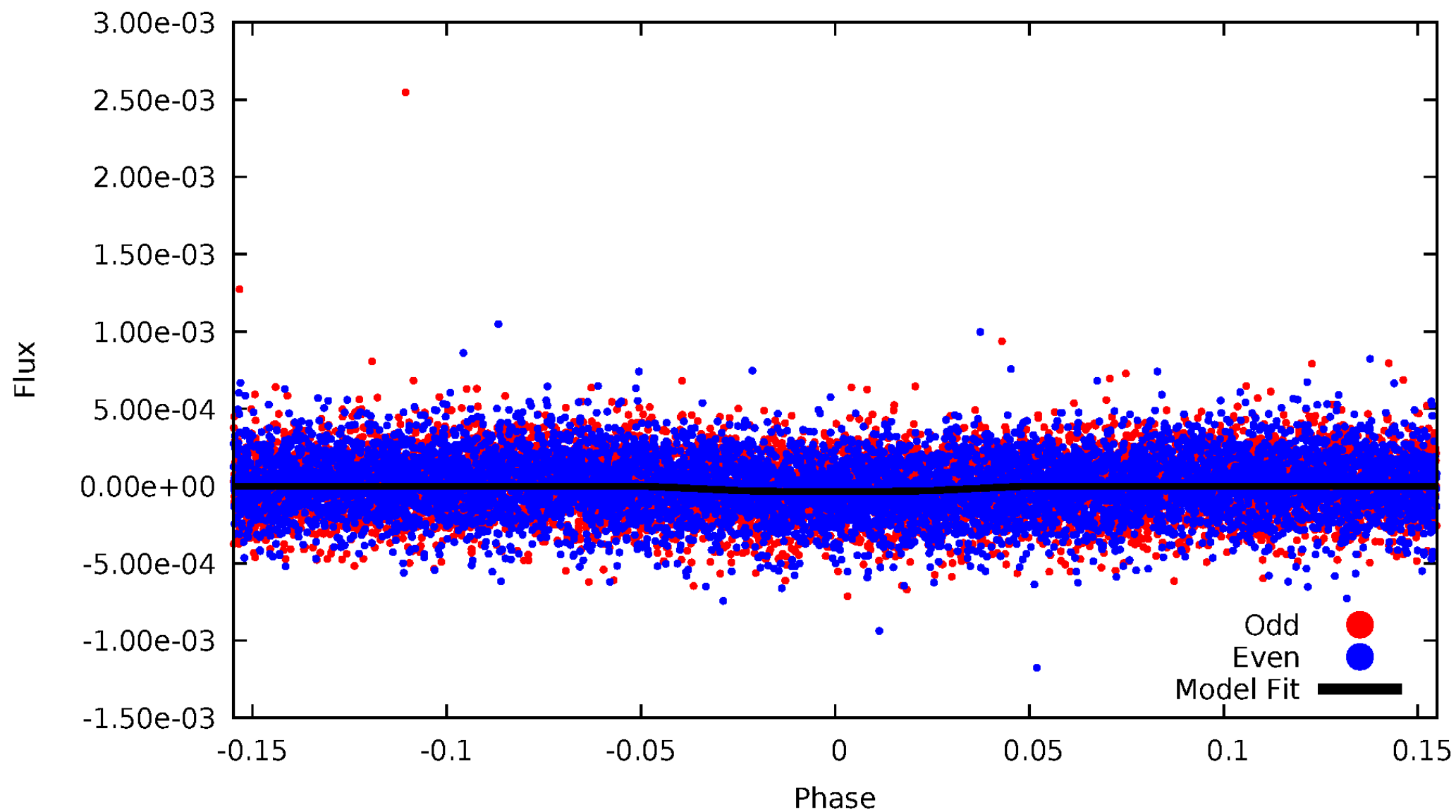


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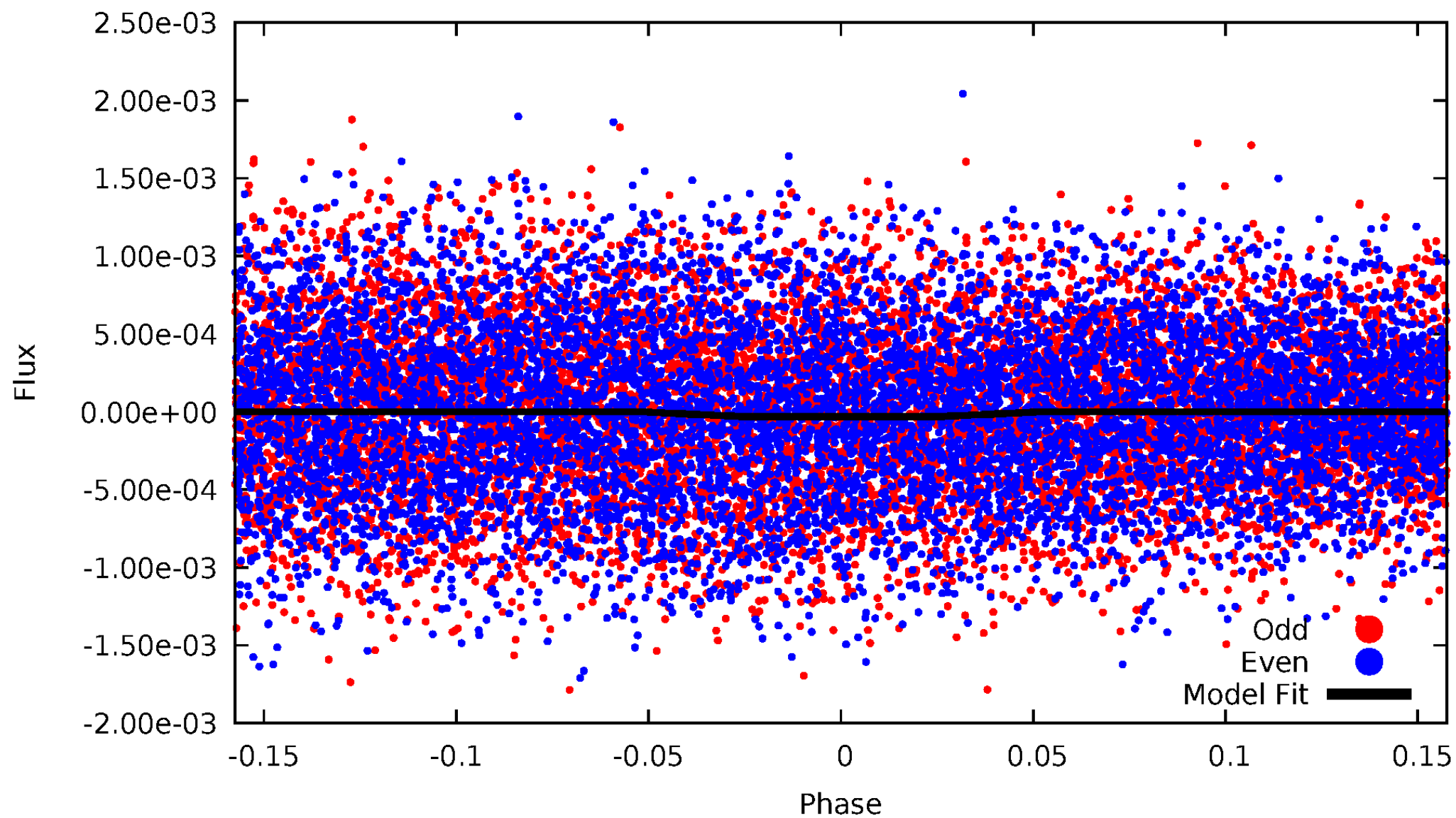
DV Odd/Even

TCE 011100532-01

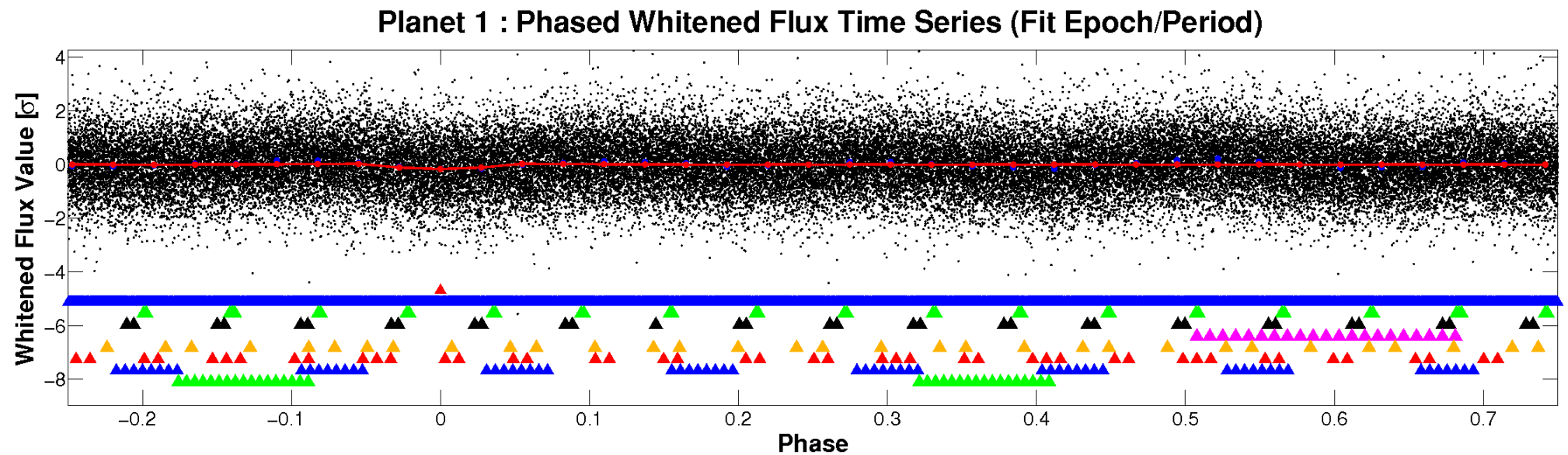
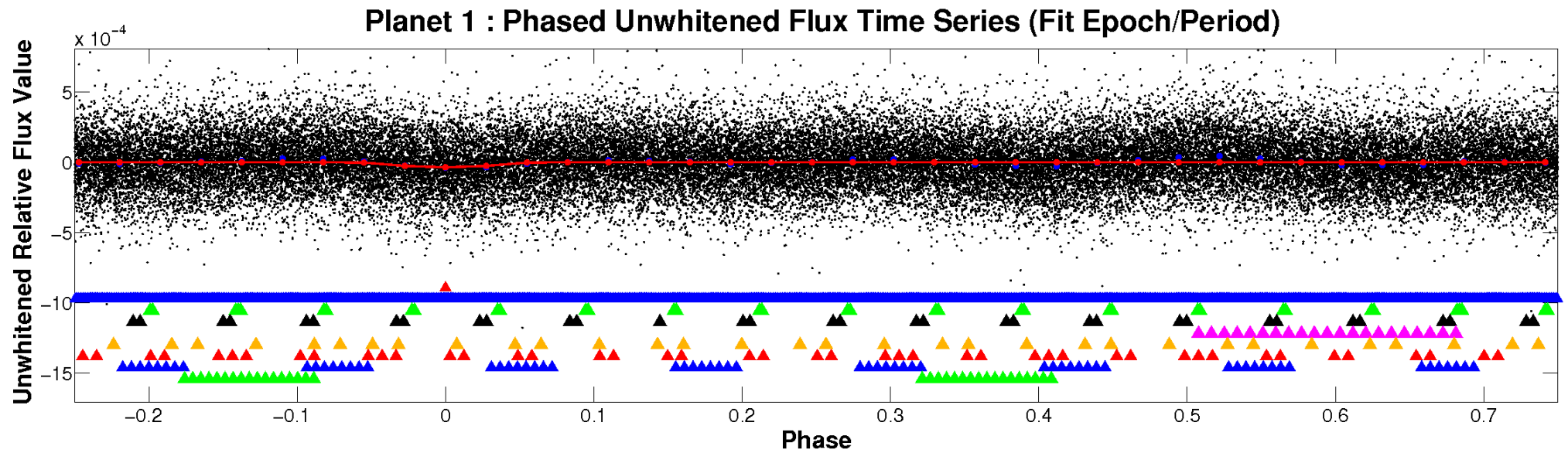


ALT Odd/Even

TCE 011100532-01

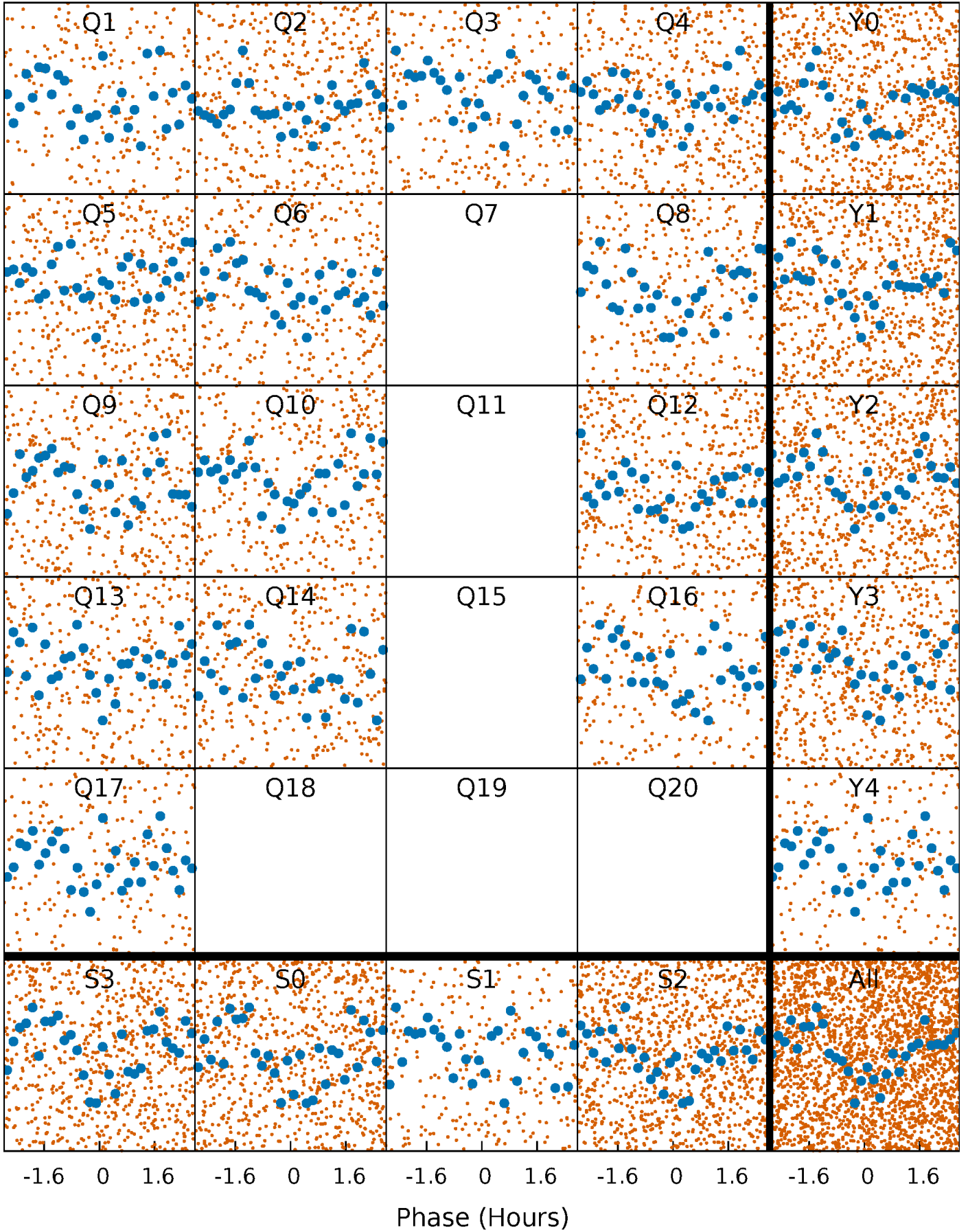


Non-Whitened Vs. Whitened Light Curve



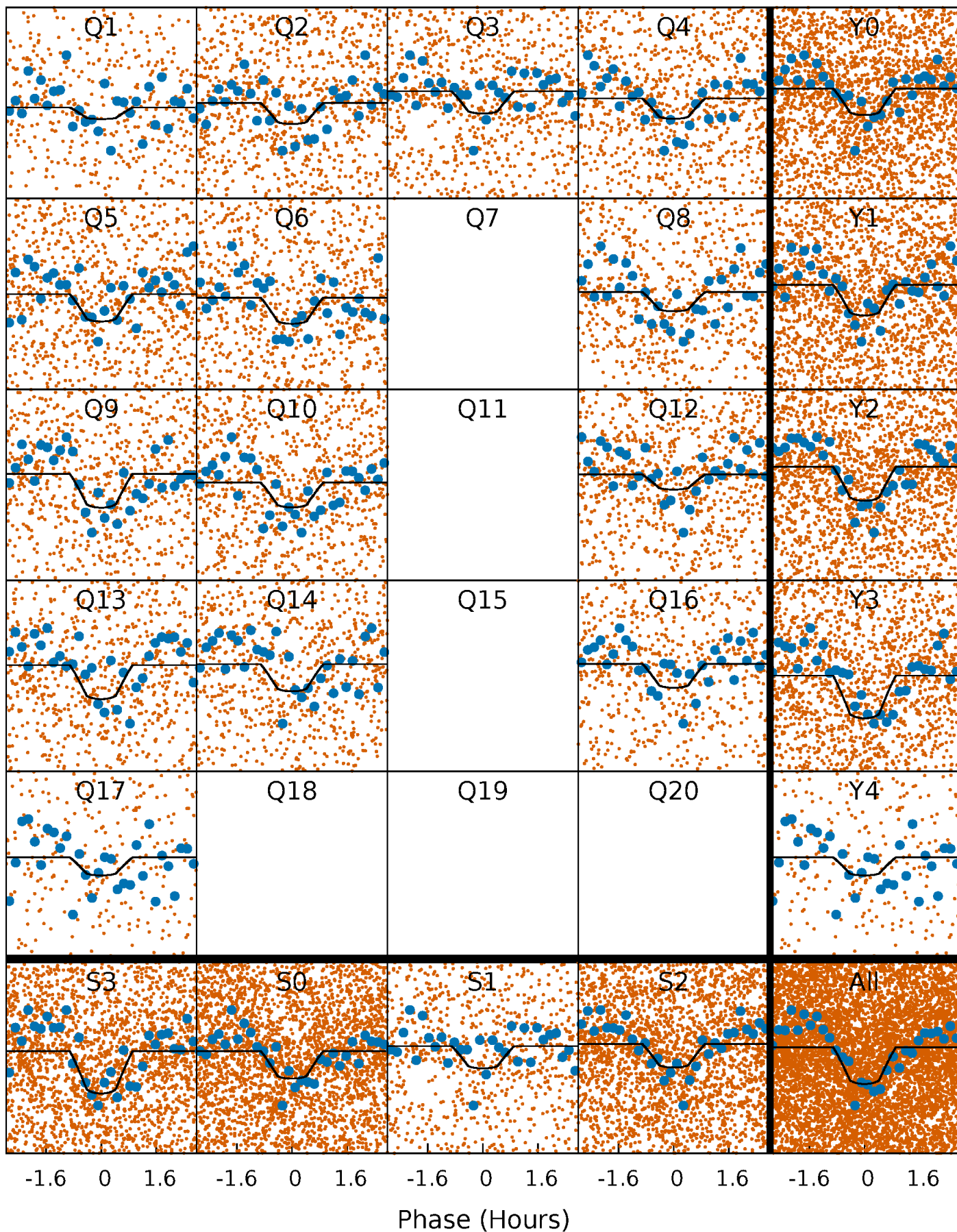
PDC Quarter-Phased Transit Curves

TCE 011100532-01 P= 0.743985 Days $T_0=131.987531$ (BKJD)



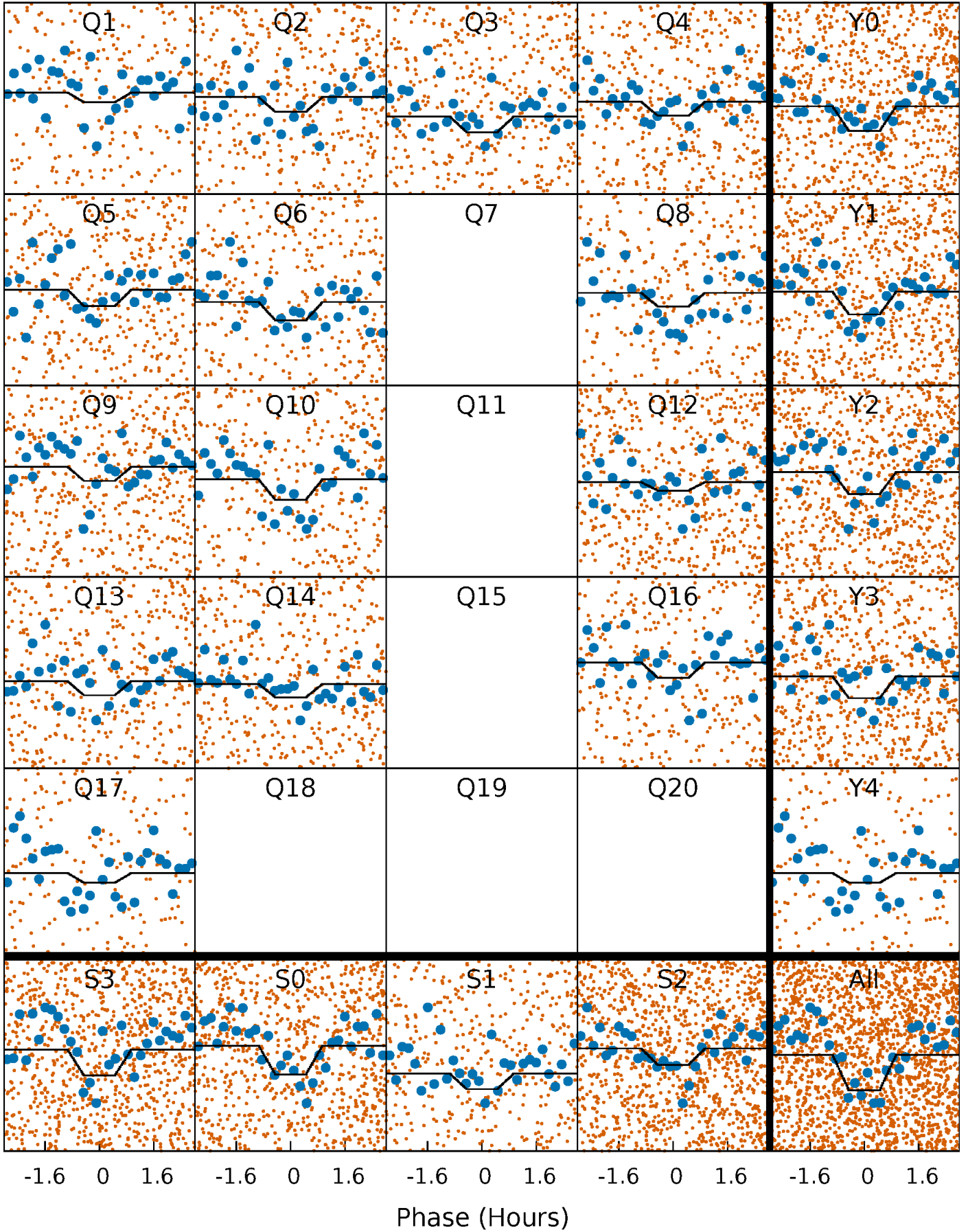
DV Quarter-Phased Transit Curves

TCE 011100532-01 P= 0.743985 Days $T_0=131.987531$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

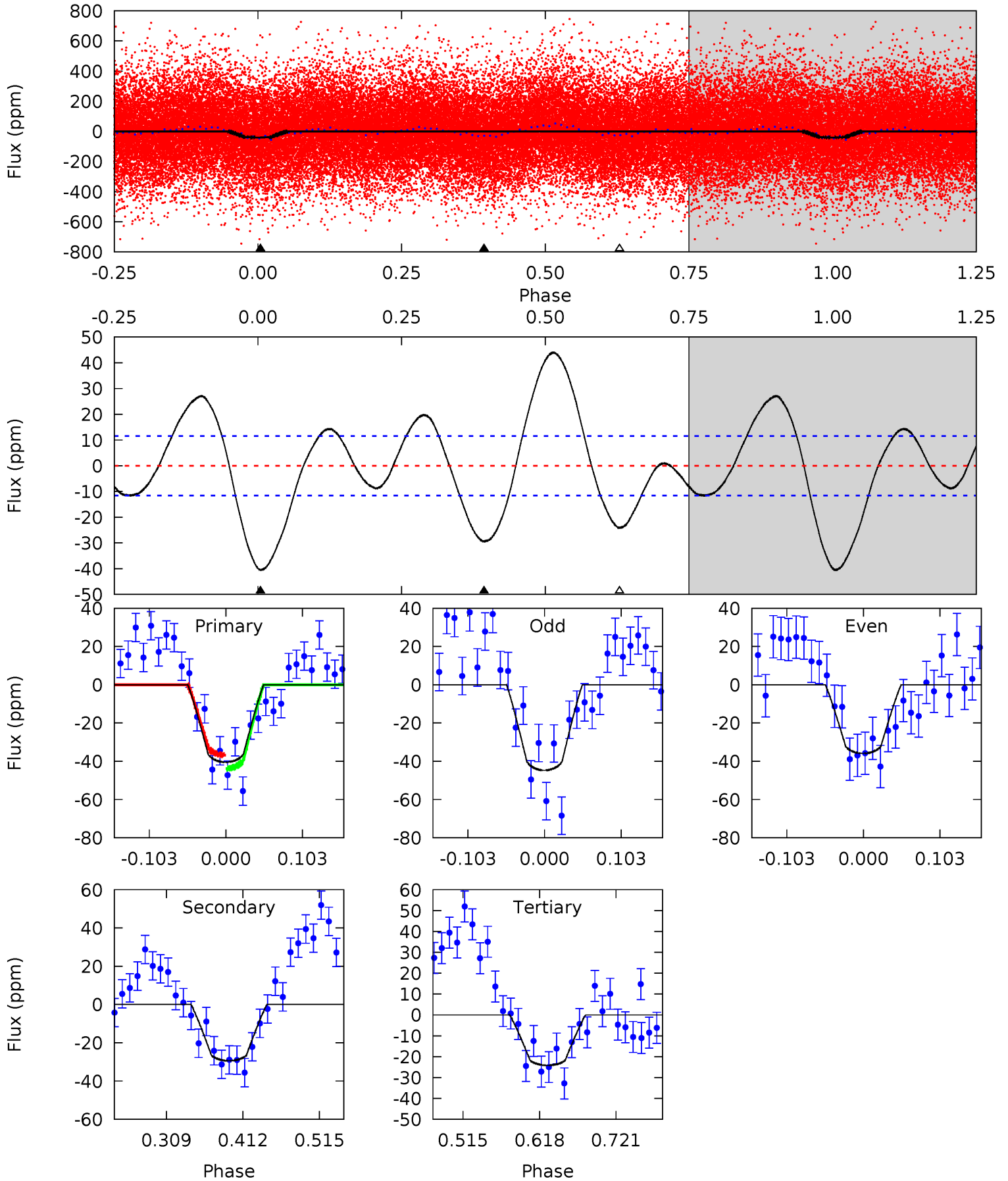
TCE 011100532-01 P= 0.743991 Days $T_0=131.984001$ (BKJD)



DV Model-Shift Uniqueness Test

011100532-01, P = 0.743985 Days, E = 131.243546 Days

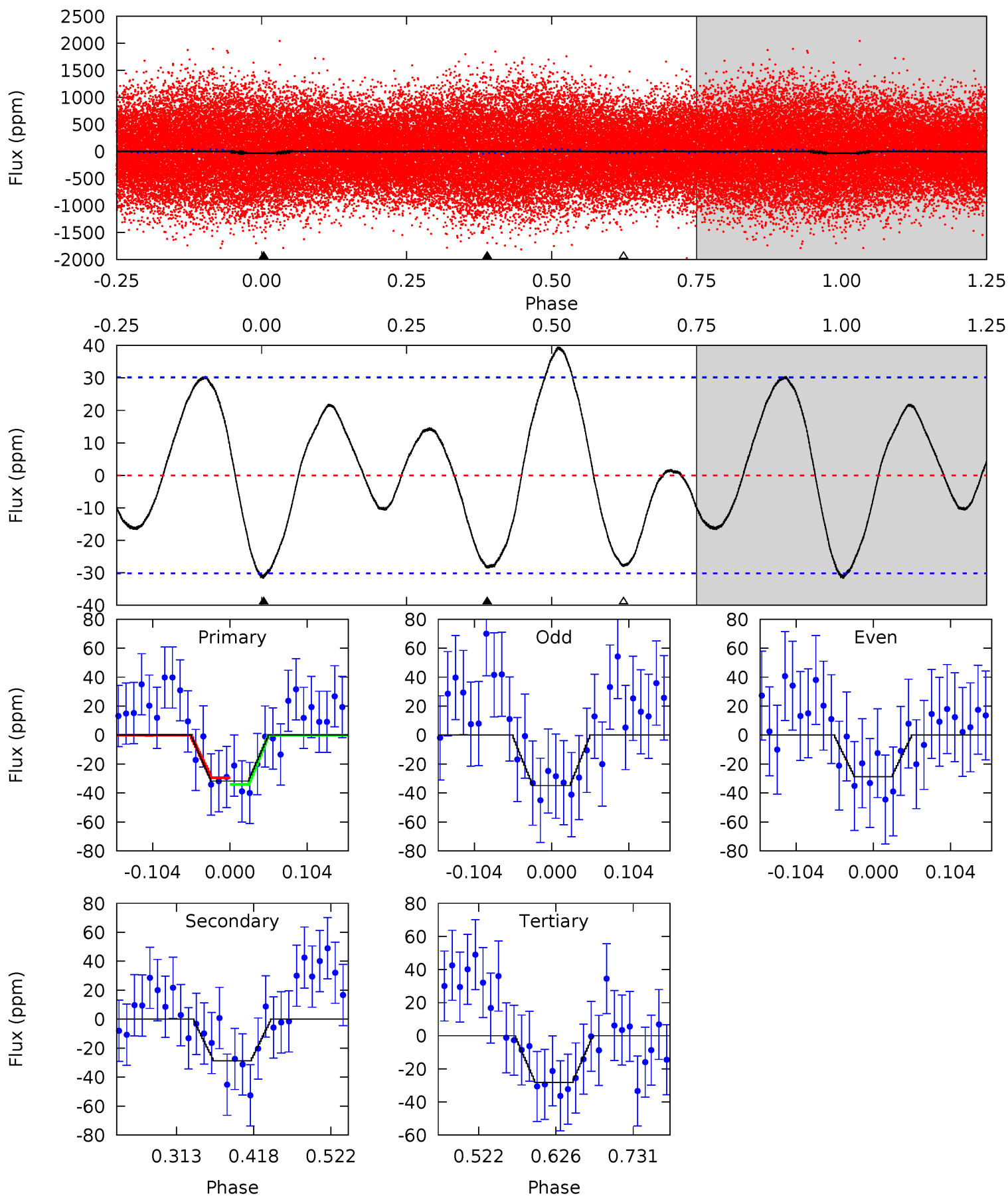
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
16.0	11.6	9.52	0	4.56	1.63	6.63	6.45	16.0	2.08	11.6	1.75	1.15	0.52	1.39



Alt Model-Shift Uniqueness Test

011100532-01, P = 0.743991 Days, E = 131.240010 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
4.80	4.33	4.25	0	4.56	1.62	2.60	0.55	4.80	0.08	4.33	0.45	0.98	0.56	0.34



Stellar Parameters For KIC 011100532

	$T_{\text{eff}} (K)$	$\log(g)$	$[\text{Fe}/\text{H}]$	$R (R_{\odot})$	$M (M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	7575^{+83}_{-75}	$3.917^{+0.168}_{-0.112}$	$-0.160^{+0.150}_{-0.150}$	$2.412^{+0.434}_{-0.531}$	$1.752^{+0.191}_{-0.172}$	$0.176^{+0.152}_{-0.060}$
	+1%/-1%	+4%/-3%	+94%/-94%	+18%/-22%	+11%/-10%	+87%/-34%
Source	SPE68	SPE68	SPE68	DSEP		

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

Secondary Eclipse Parameters for KIC 011100532-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-29 ± 3	$1.67^{+0.52}_{-0.52}$	5186^{+255}_{-268}	6570^{+1707}_{-928}	$2.177^{+2.338}_{-0.938}$
Alt.	-29 ± 7	$1.44^{+0.48}_{-0.51}$	5202^{+242}_{-298}	7197^{+2388}_{-1288}	$2.887^{+3.850}_{-1.400}$

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

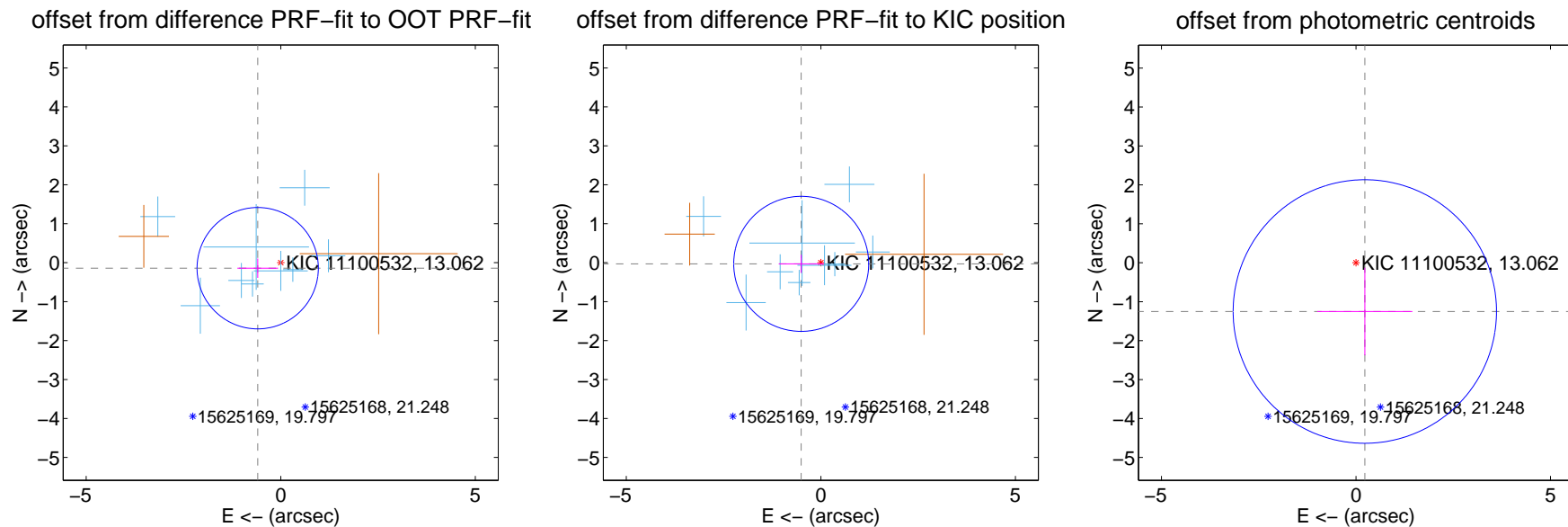
DV Centroid Data

Supplemental centroid analysis for 011100532-01. Kepler magnitude: 13.06. Transit SNR 9.16

There are 9 quarters with good PRF difference image offsets

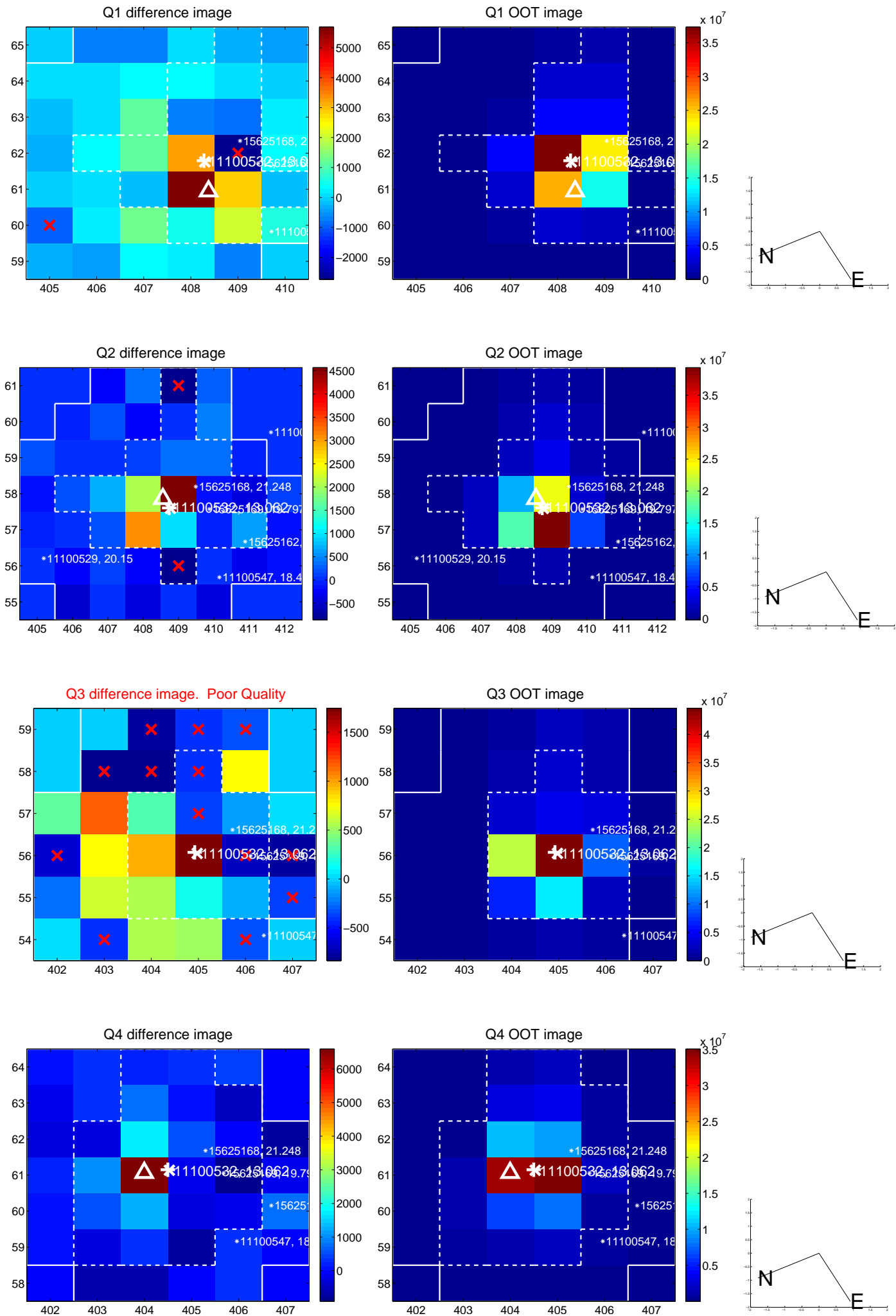
The direct PRF centroid is offset from the target star catalog position by about 0.16 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.609 ± 0.520	1.17	0.592 ± 0.523	-0.141 ± 0.248
PRF-fit source offset from KIC position	0.506 ± 0.578	0.88	0.505 ± 0.578	-0.030 ± 0.231
photometric centroid source offset	1.27 ± 1.13	1.13	-0.23 ± 1.22	-1.25 ± 1.13

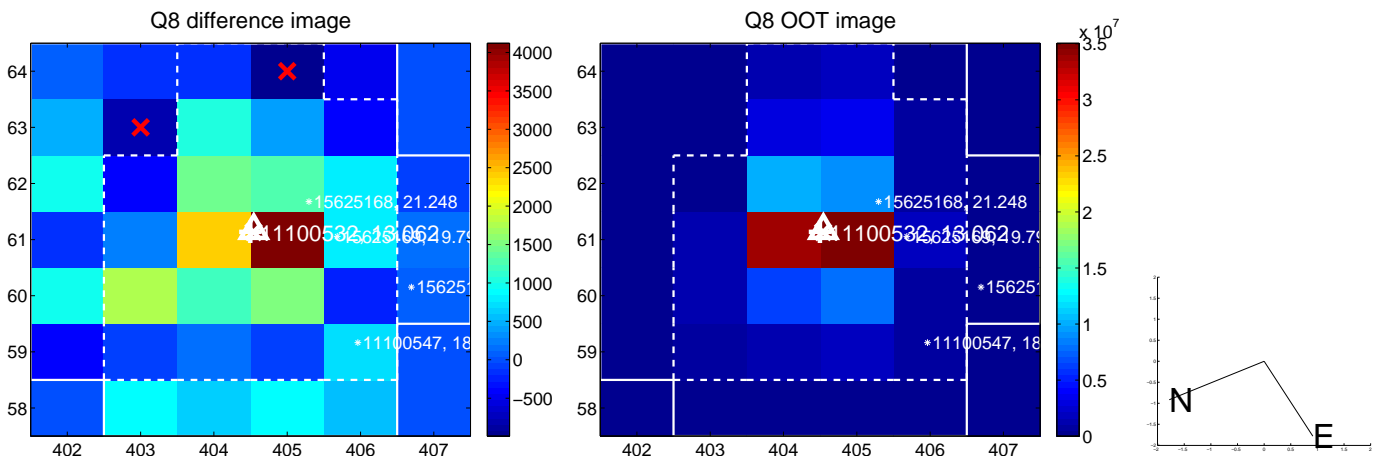
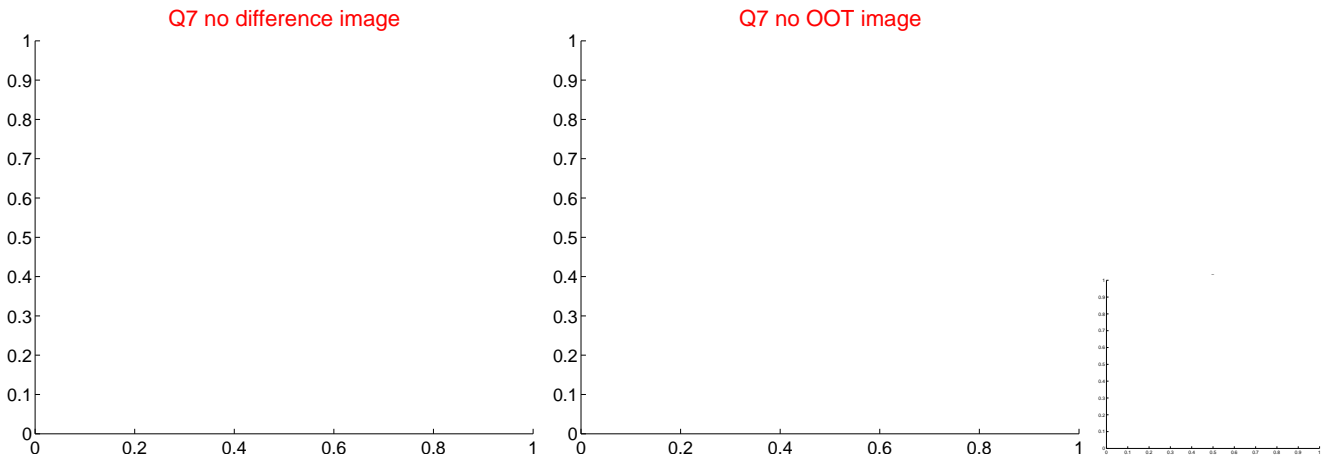
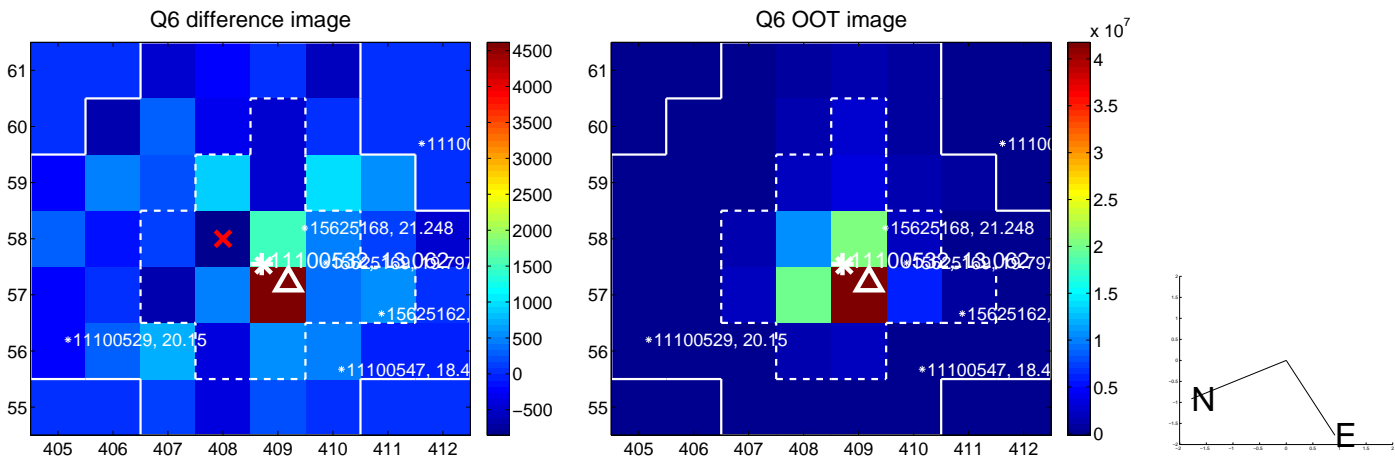
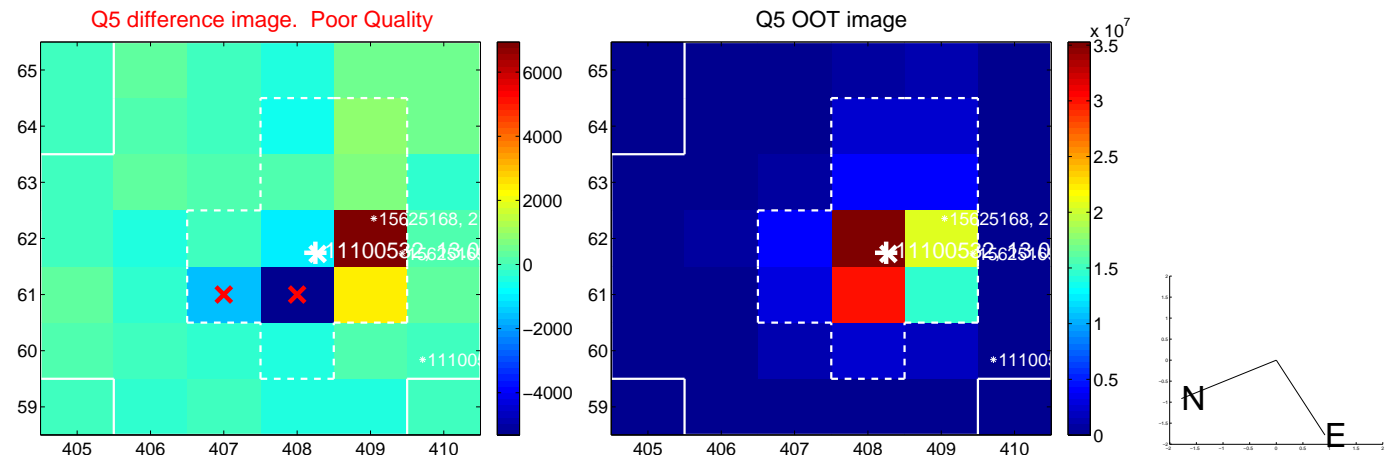


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets**; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

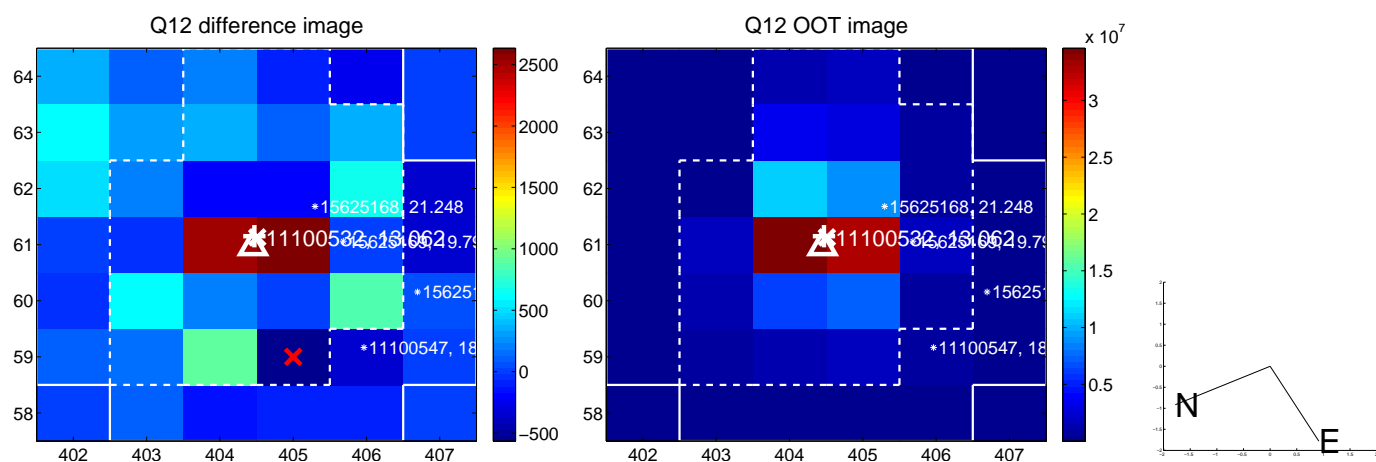
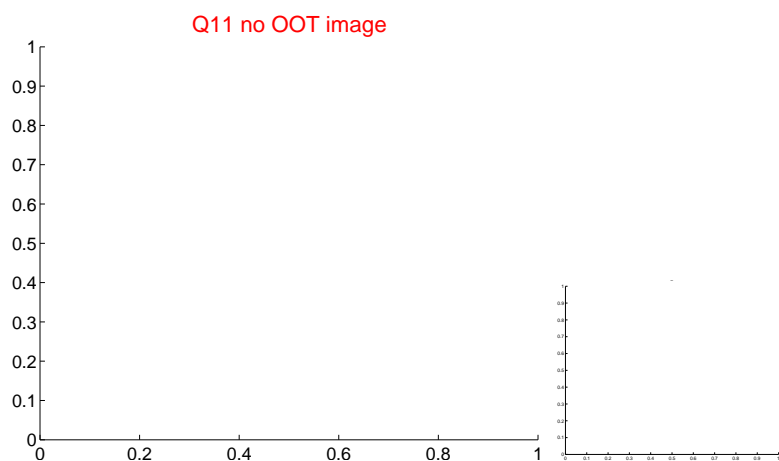
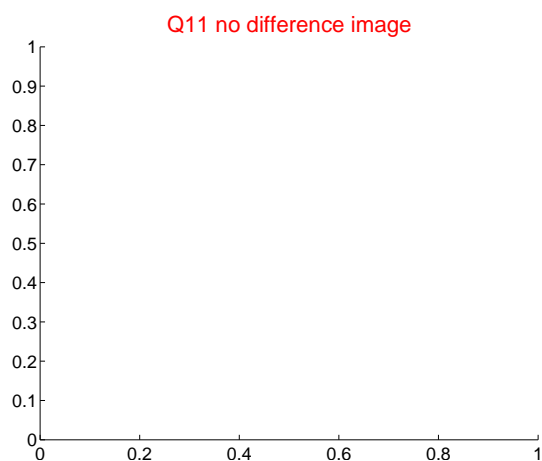
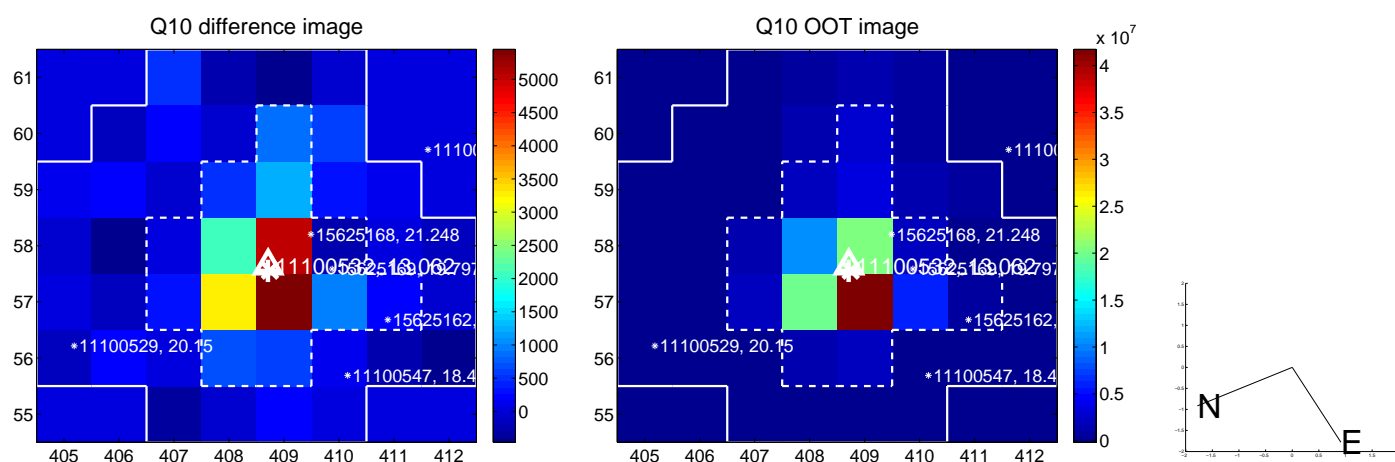
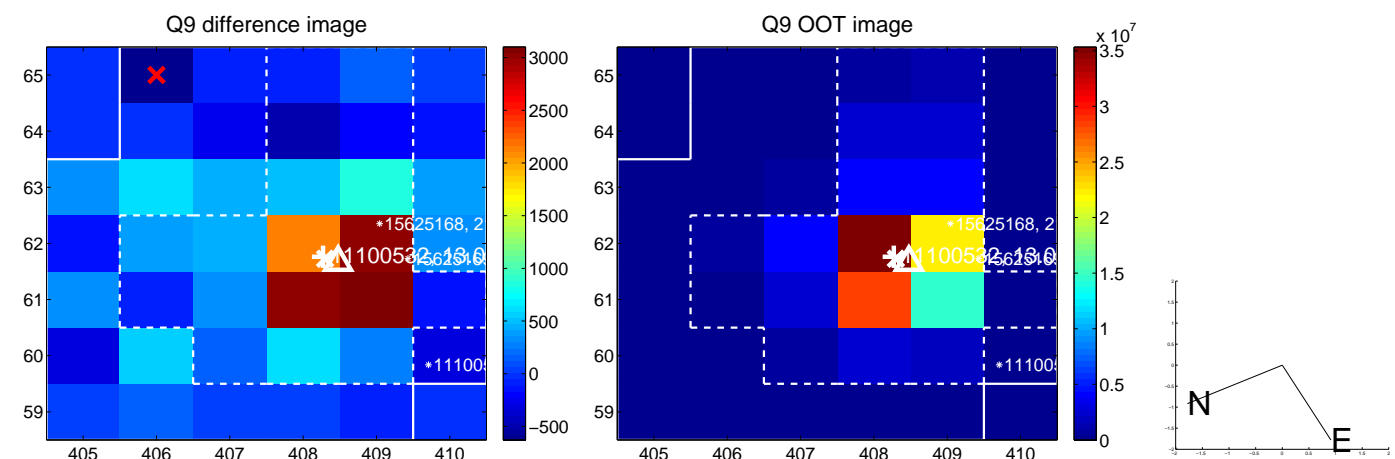
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



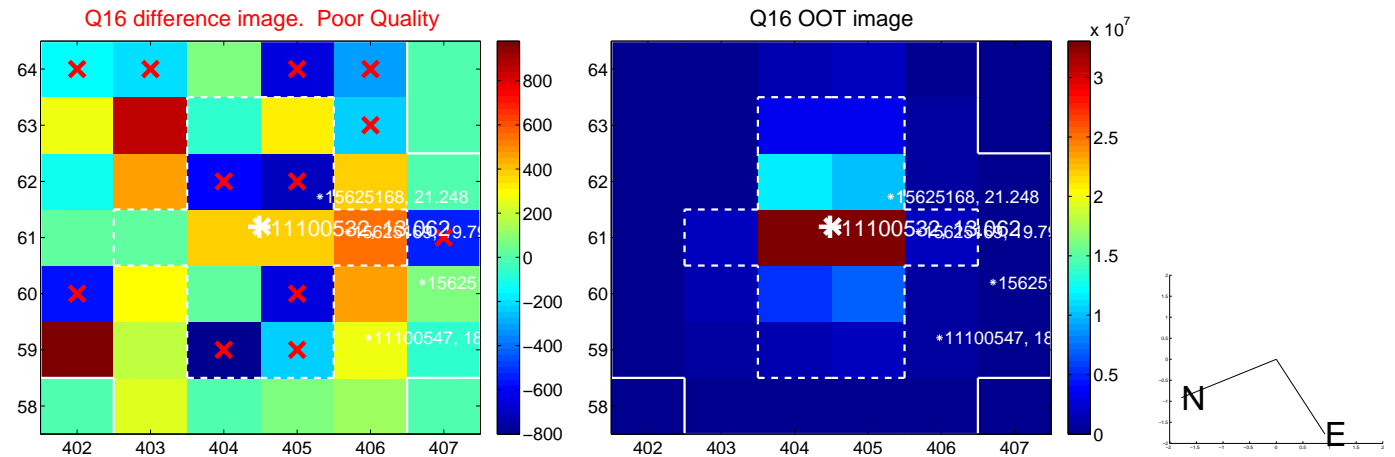
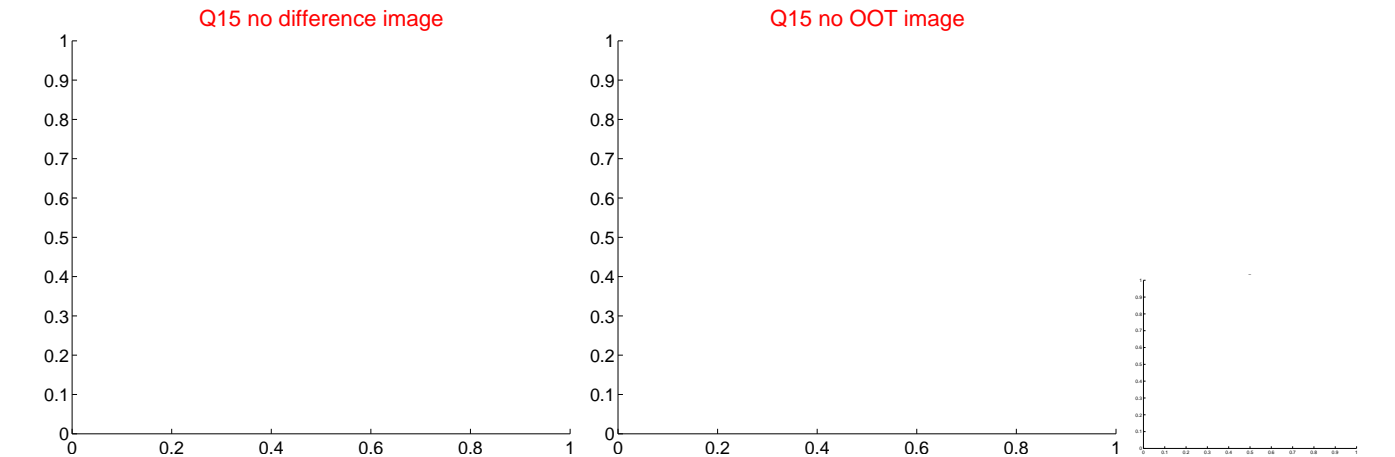
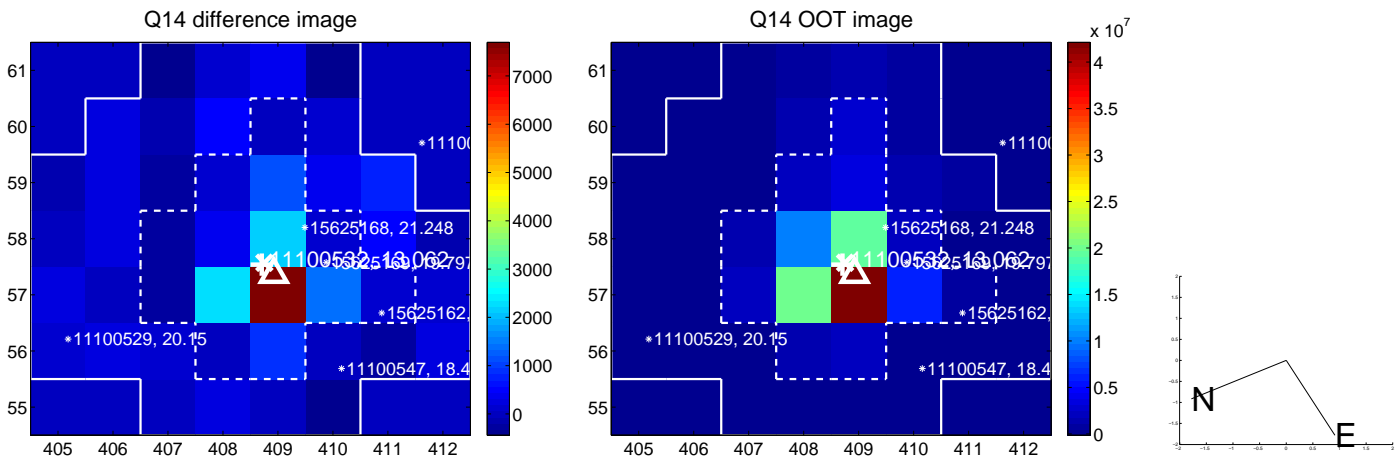
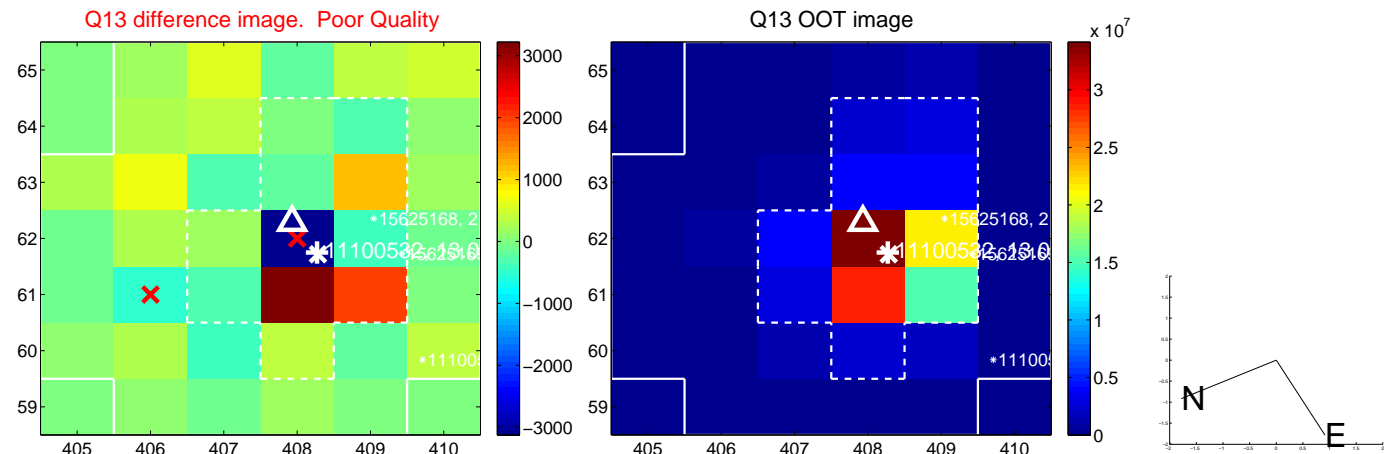
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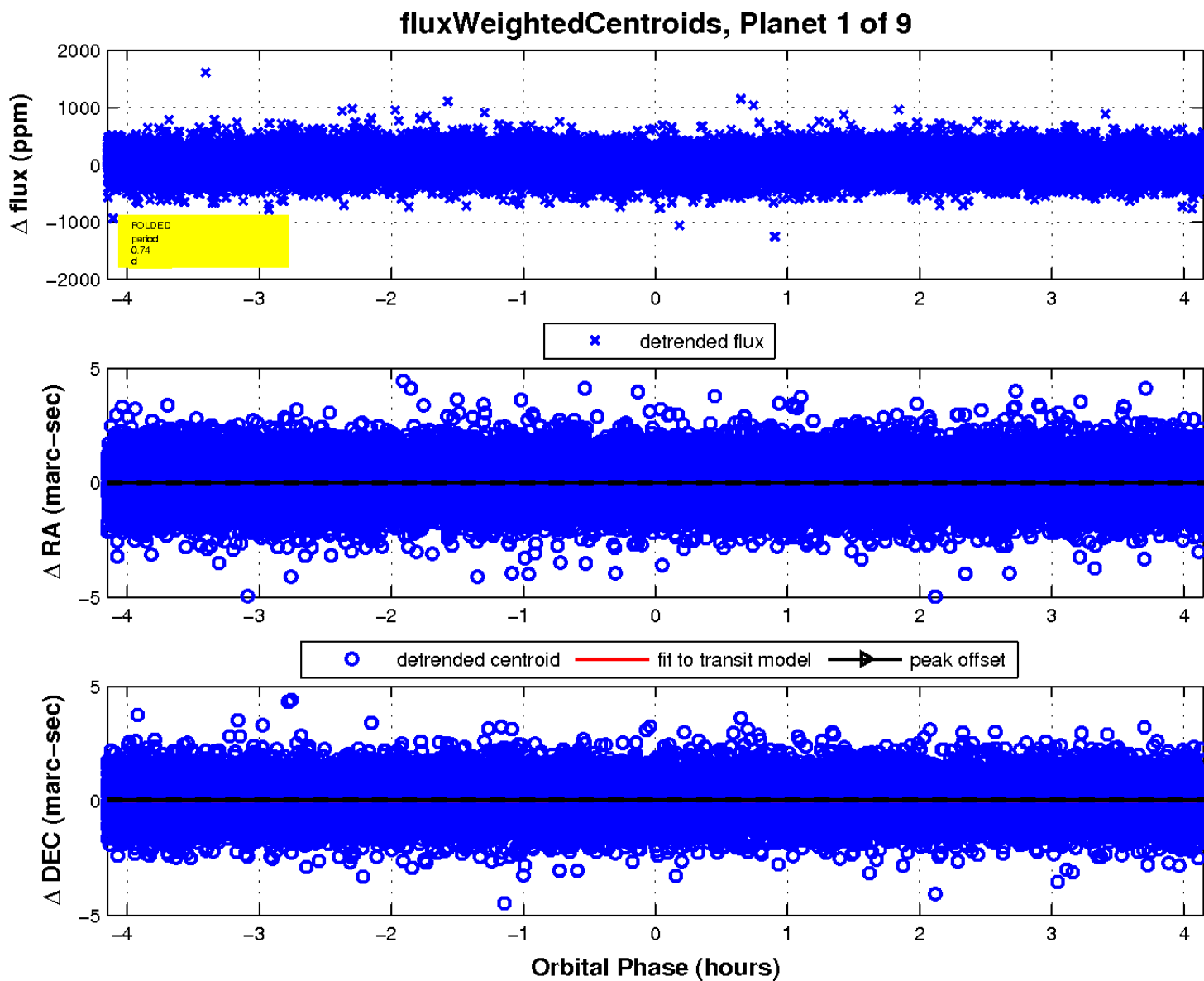
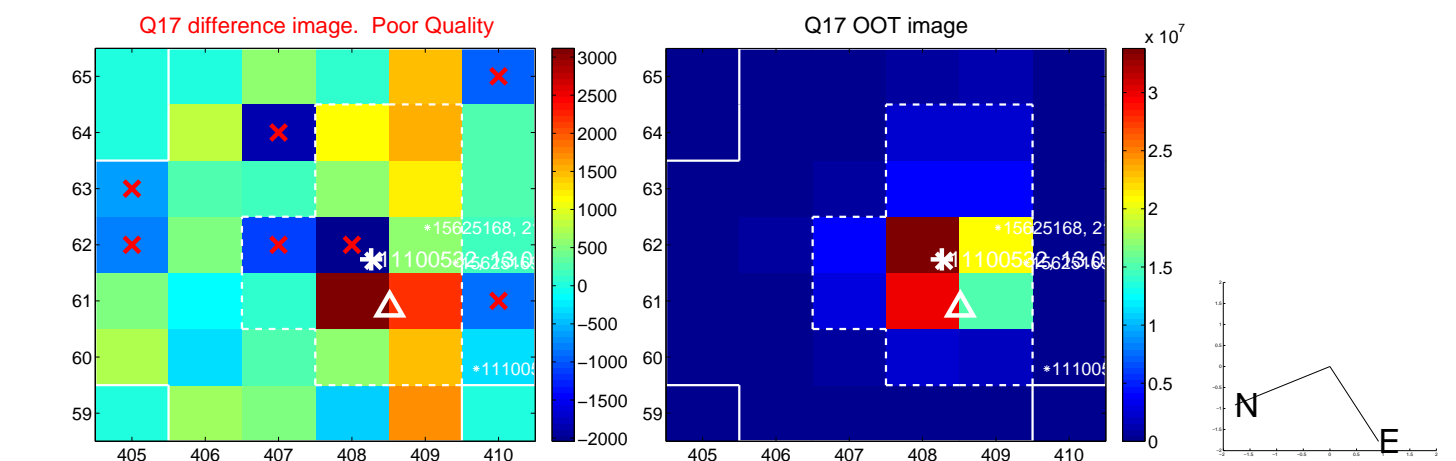
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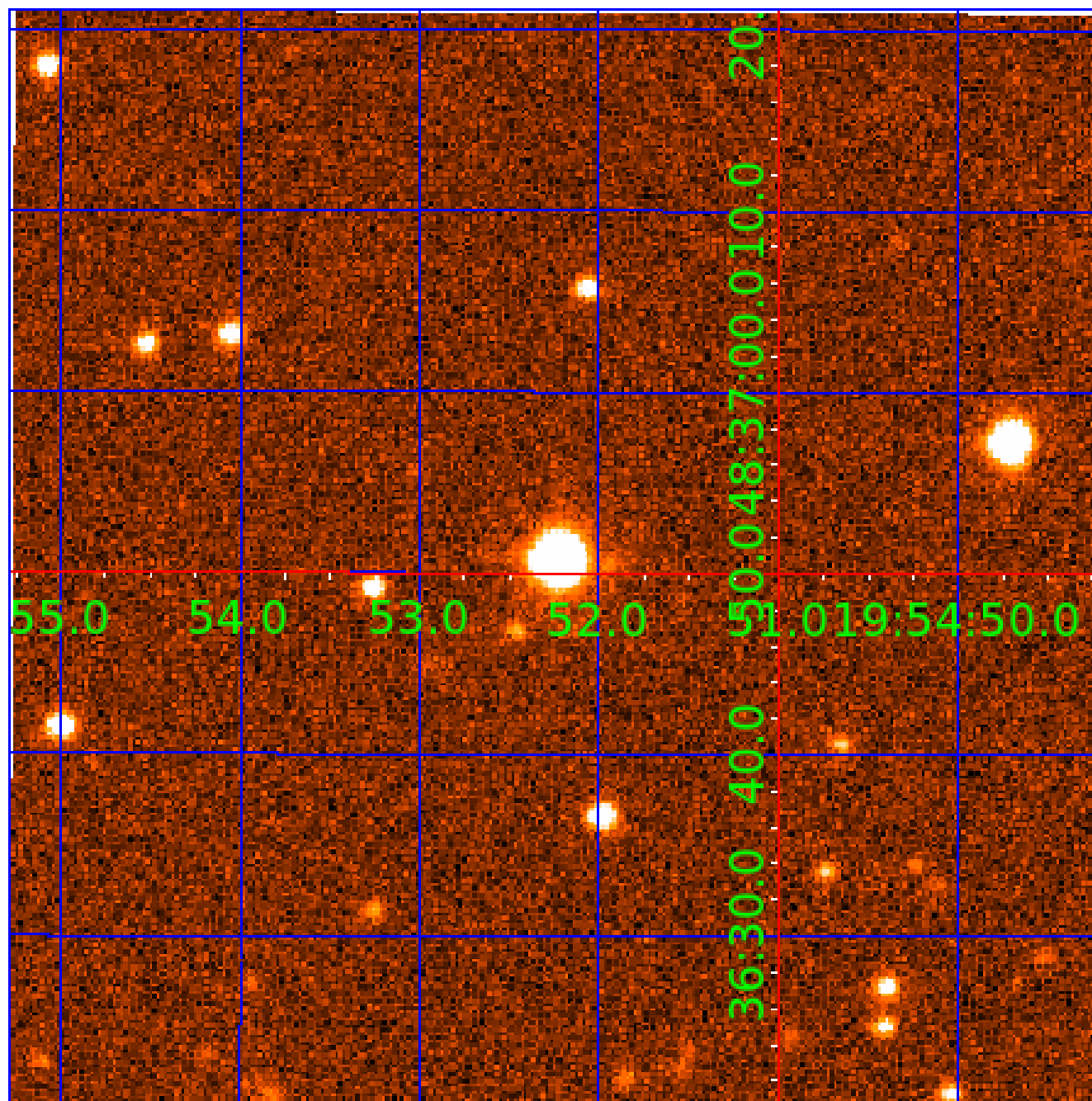


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UKIRT Image

Declination



KIC 011100532

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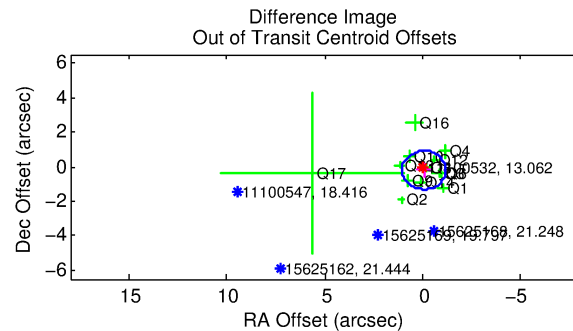
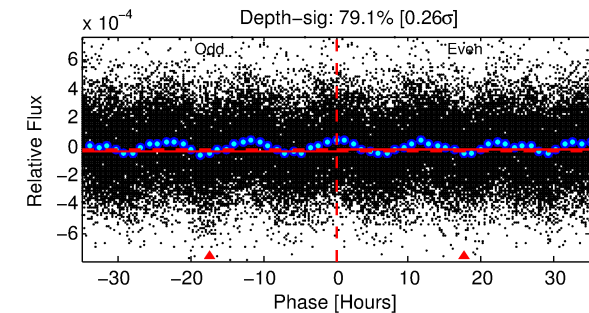
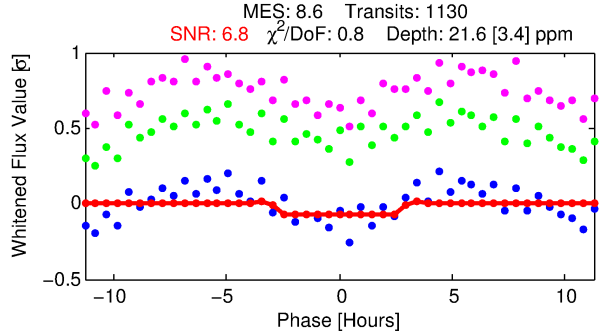
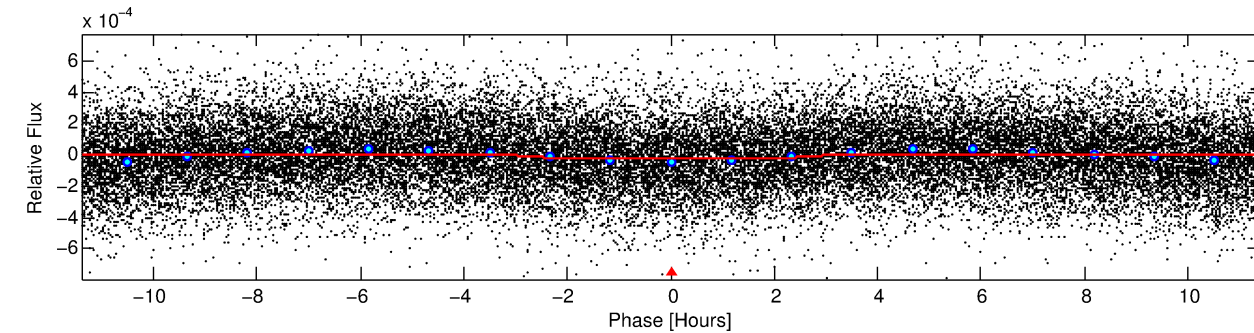
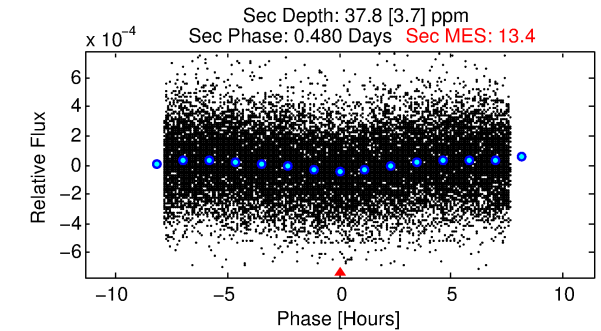
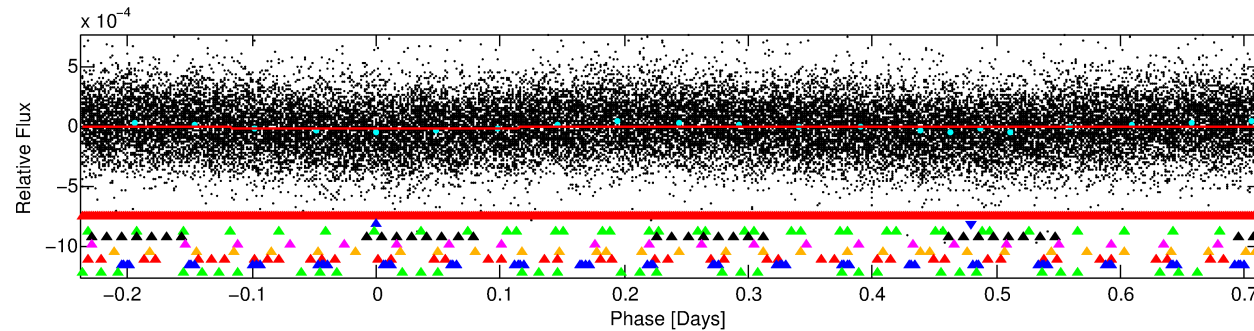
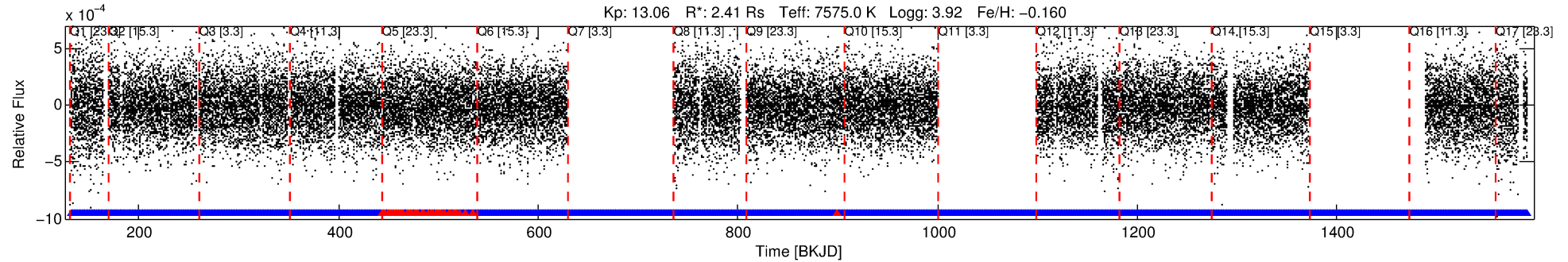
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 011100532-02

No Significant Match Found

DV One-Page Summary

KIC: 11100532 Candidate: 2 of 9 Period: 0.949 d



DV Fit Results:

Period = 0.94944 [0.00002] d
Epoch = 132.4887 [0.0068] BKJD
Rp/R* = 0.0043 [0.0066]
a/R* = 1.39 [5.62]
b = 0.05 [186.60]
Seff = 33015.51 [9902.91]
Teq = 3437 [258] K
Rp = 1.13 [1.75] Re
a = 0.0228 [0.0045] AU
Ag = 8.48 [26.09] [0.29σ]
Teffp = 9069 [6944] K [0.81σ]

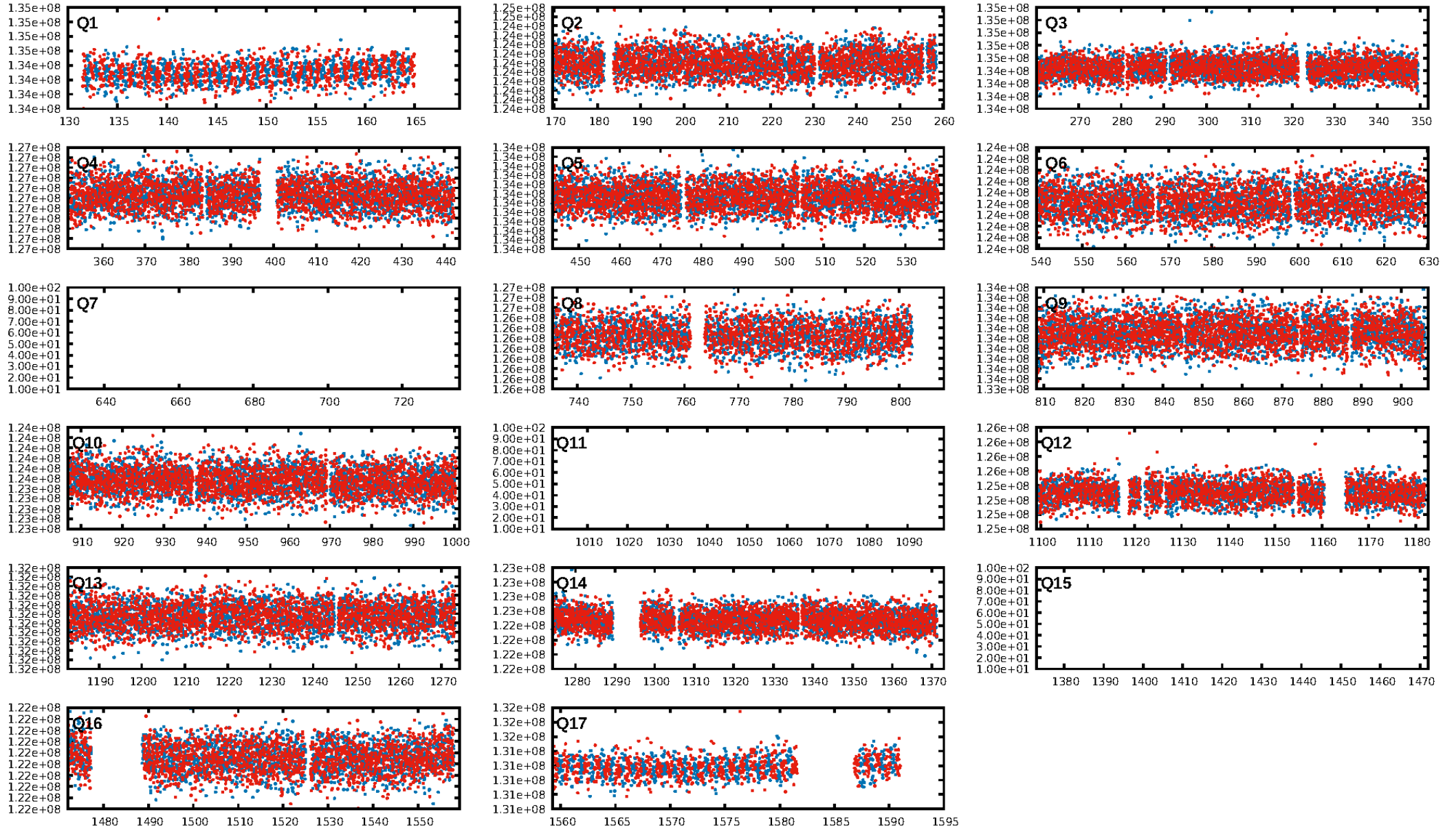
DV Diagnostic Results:

ShortPeriod-sig: 58.8% [0.82σ]
LongPeriod-sig: 100.0% [87.31σ]
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: N/A
RollingBand-fgt: 0.95 [1015/1065]
GhostDiagnostic-chr: 11.55
Centroid-sig: 88.2%
Centroid-so: 0.364 arcsec [0.34σ]
OotOffset-rm: 0.212 arcsec [0.57σ]
OotOffset-st: 4/1/4/4 [13]
KicOffset-rm: 0.187 arcsec [0.44σ]
KicOffset-st: 4/1/4/4 [13]
DiffImageQuality-fgm: 0.92 [12/13]
DiffImageOverlap-fno: 0.00 [0/14]

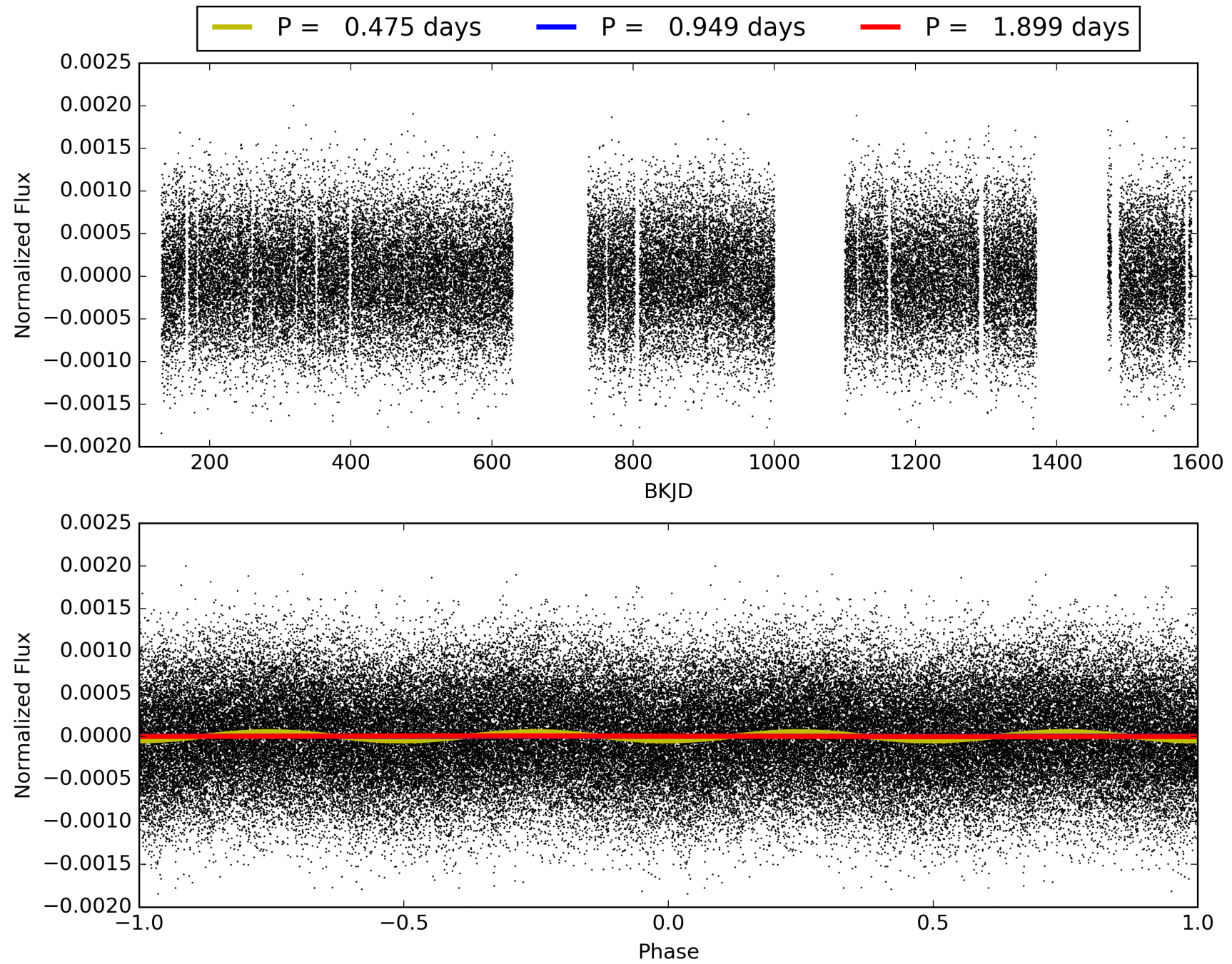
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 01-Feb-2016 10:50:17 Z

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

TCE 011100532-02, PDC Light Curves

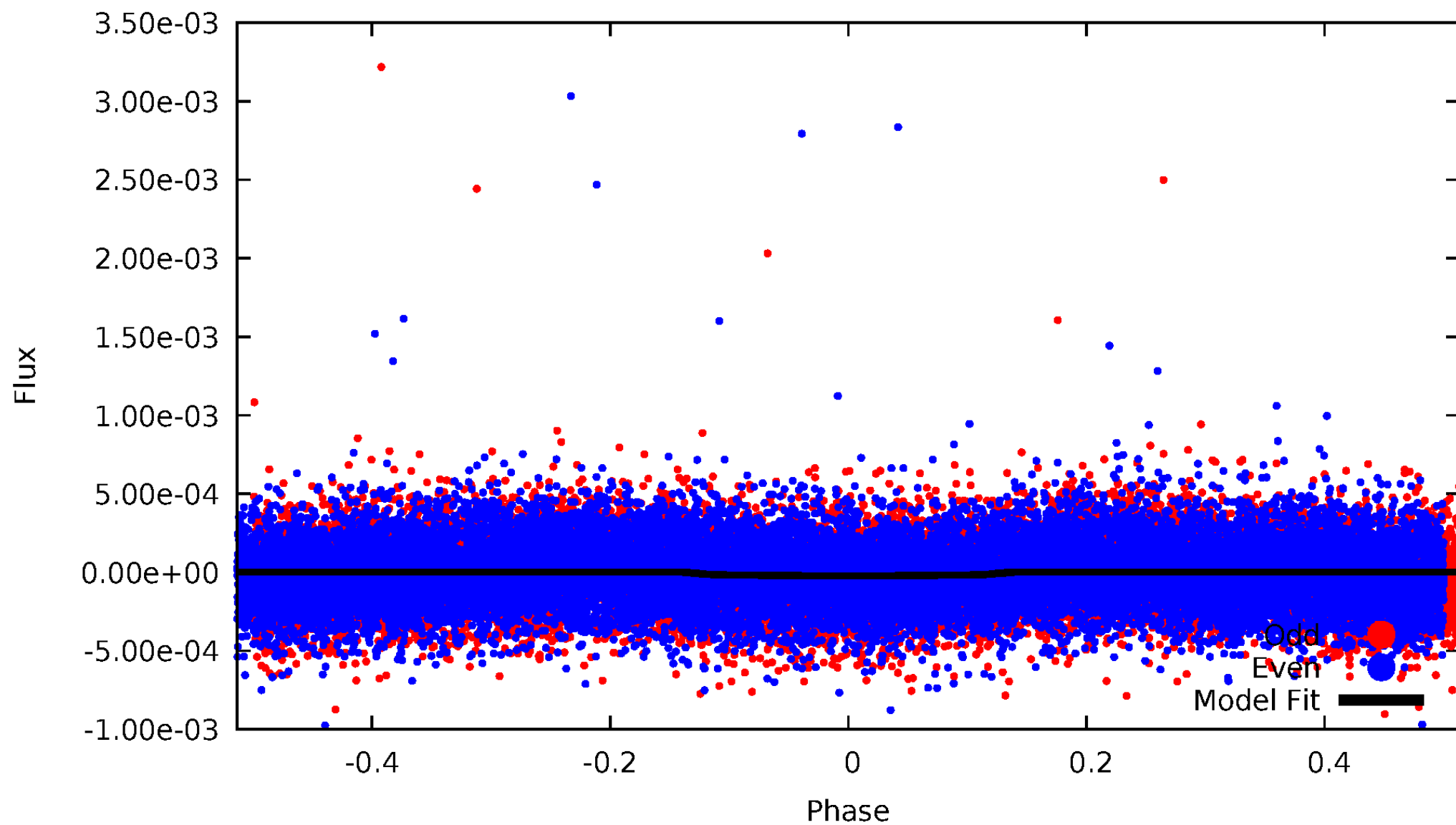


TCE 011100532-02



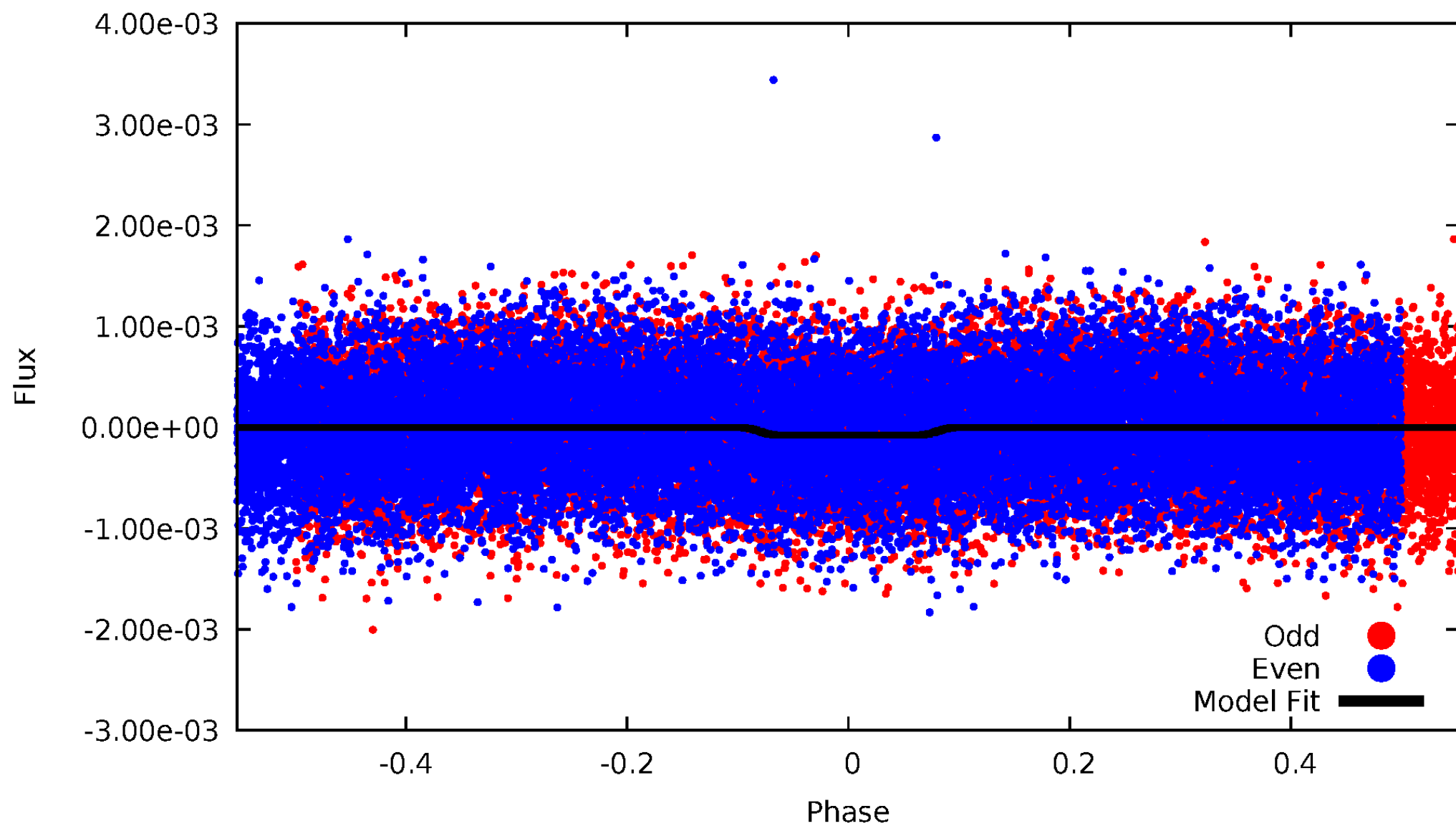
DV Odd/Even

TCE 011100532-02



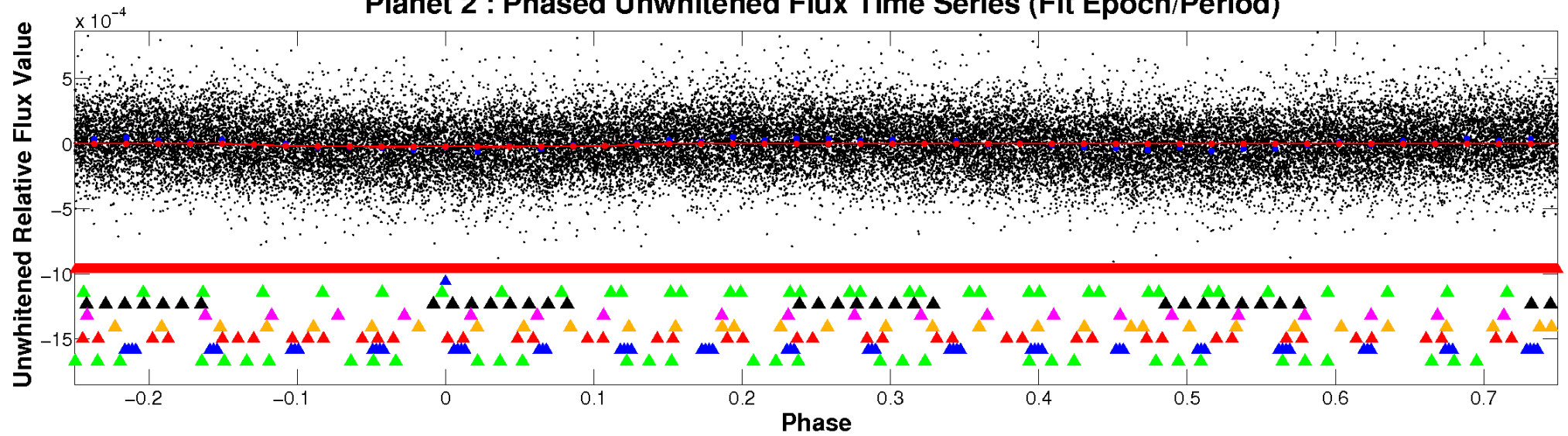
ALT Odd/Even

TCE 011100532-02

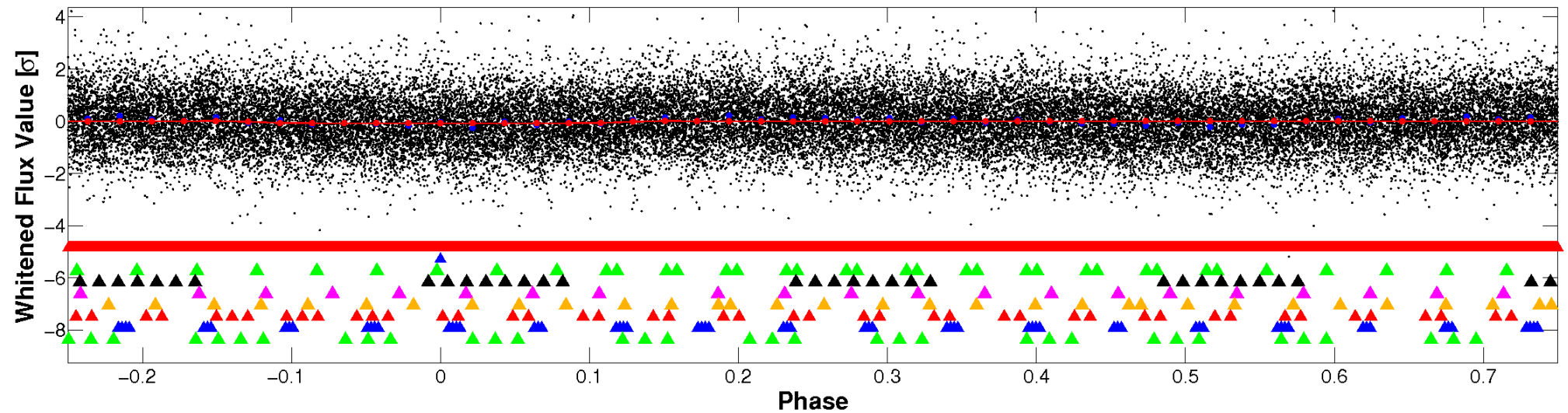


Non-Whitened Vs. Whitened Light Curve

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

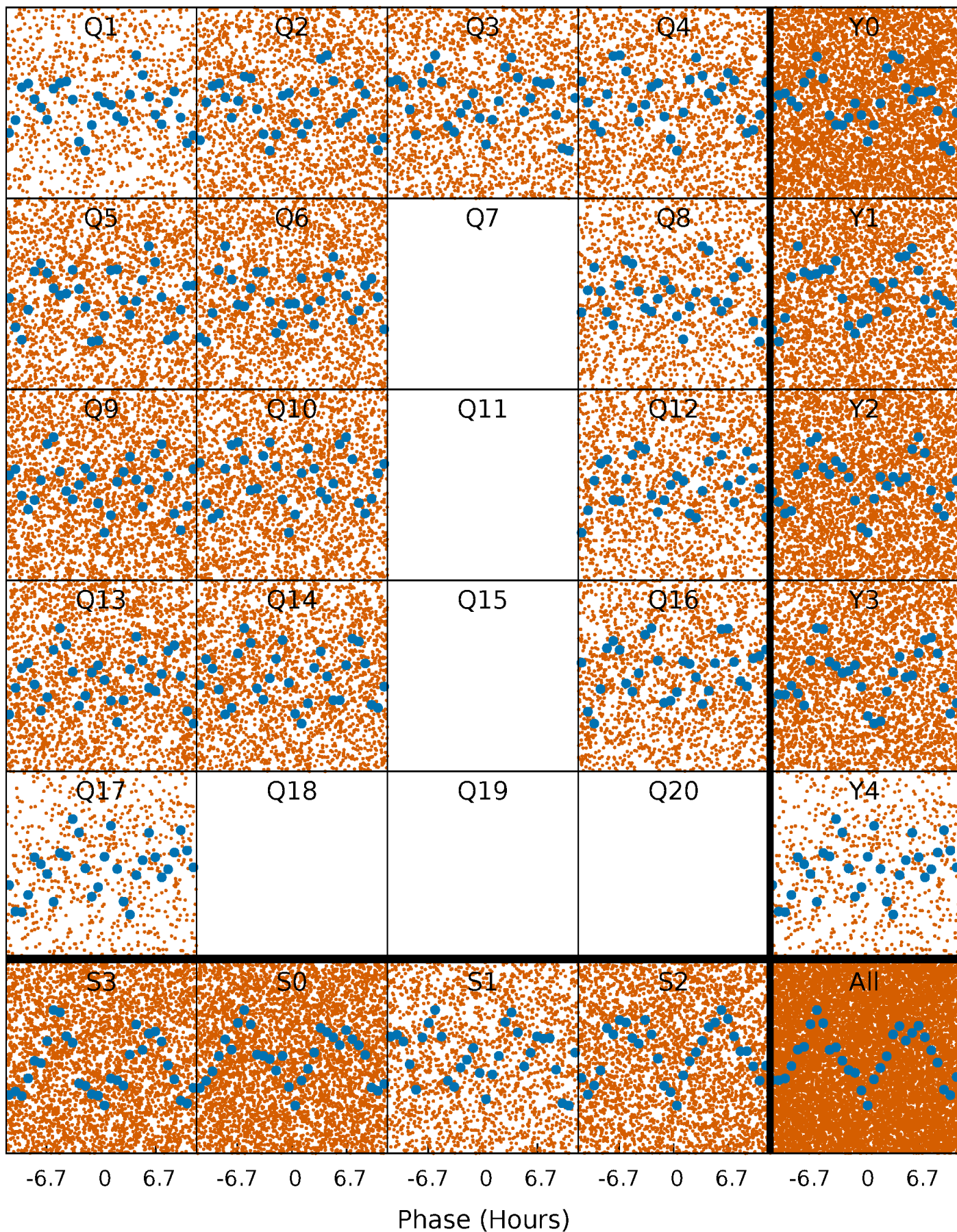


Planet 2 : Phased Whitened Flux Time Series (Fit Epoch/Period)



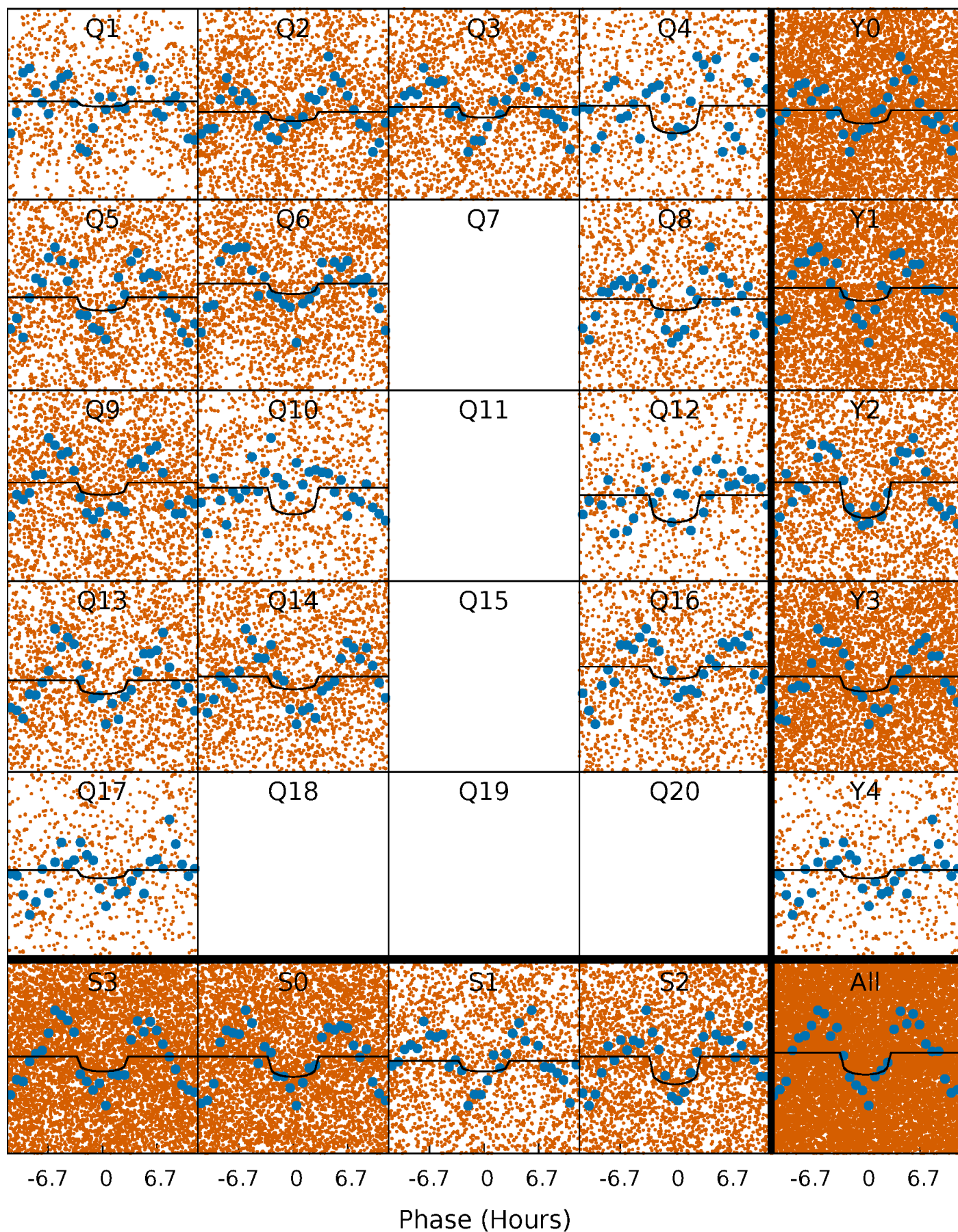
PDC Quarter-Phased Transit Curves

TCE 011100532-02 P= 0.949443 Days $T_0=132.488671$ (BKJD)



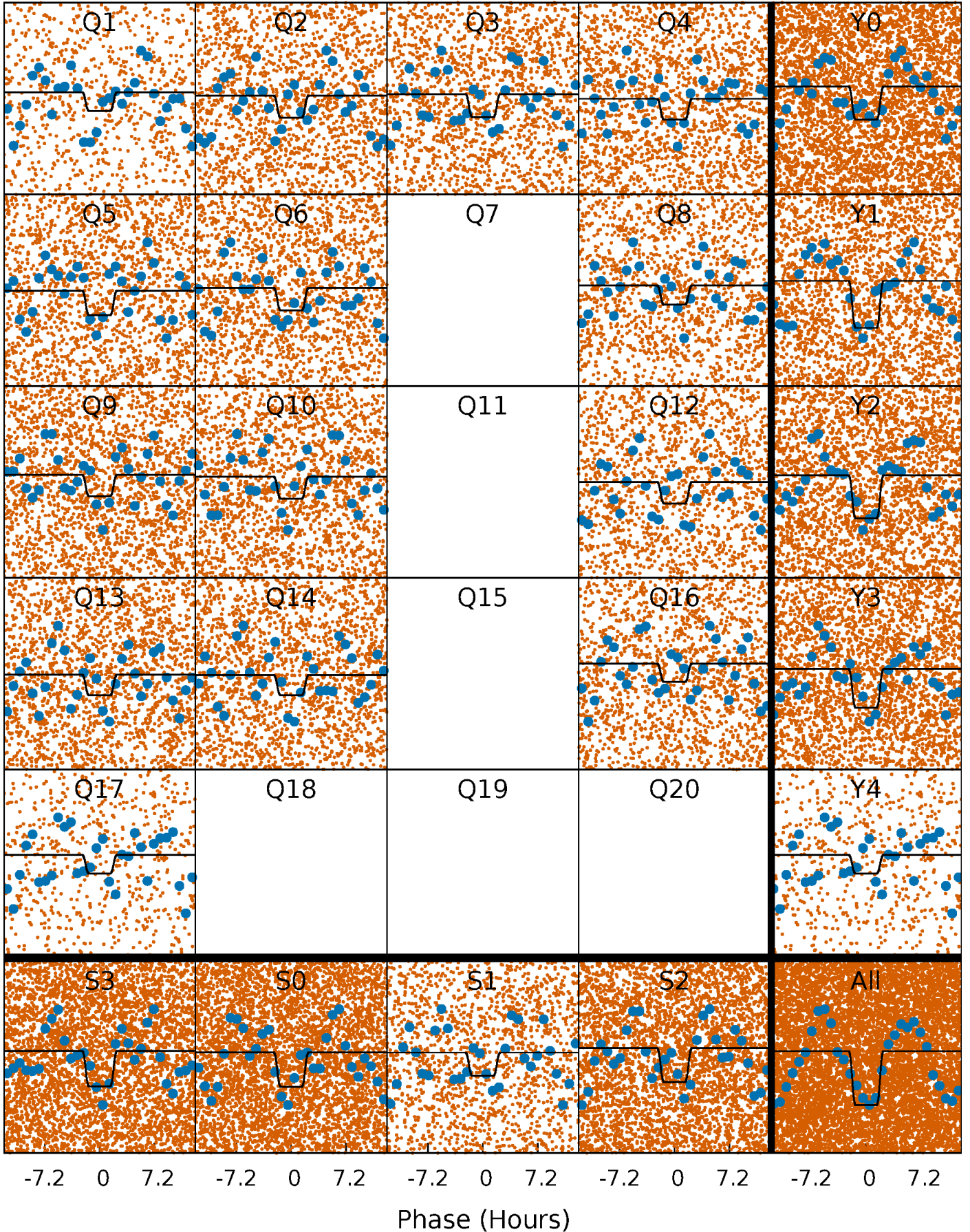
DV Quarter-Phased Transit Curves

TCE 011100532-02 P= 0.949443 Days $T_0=132.488671$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

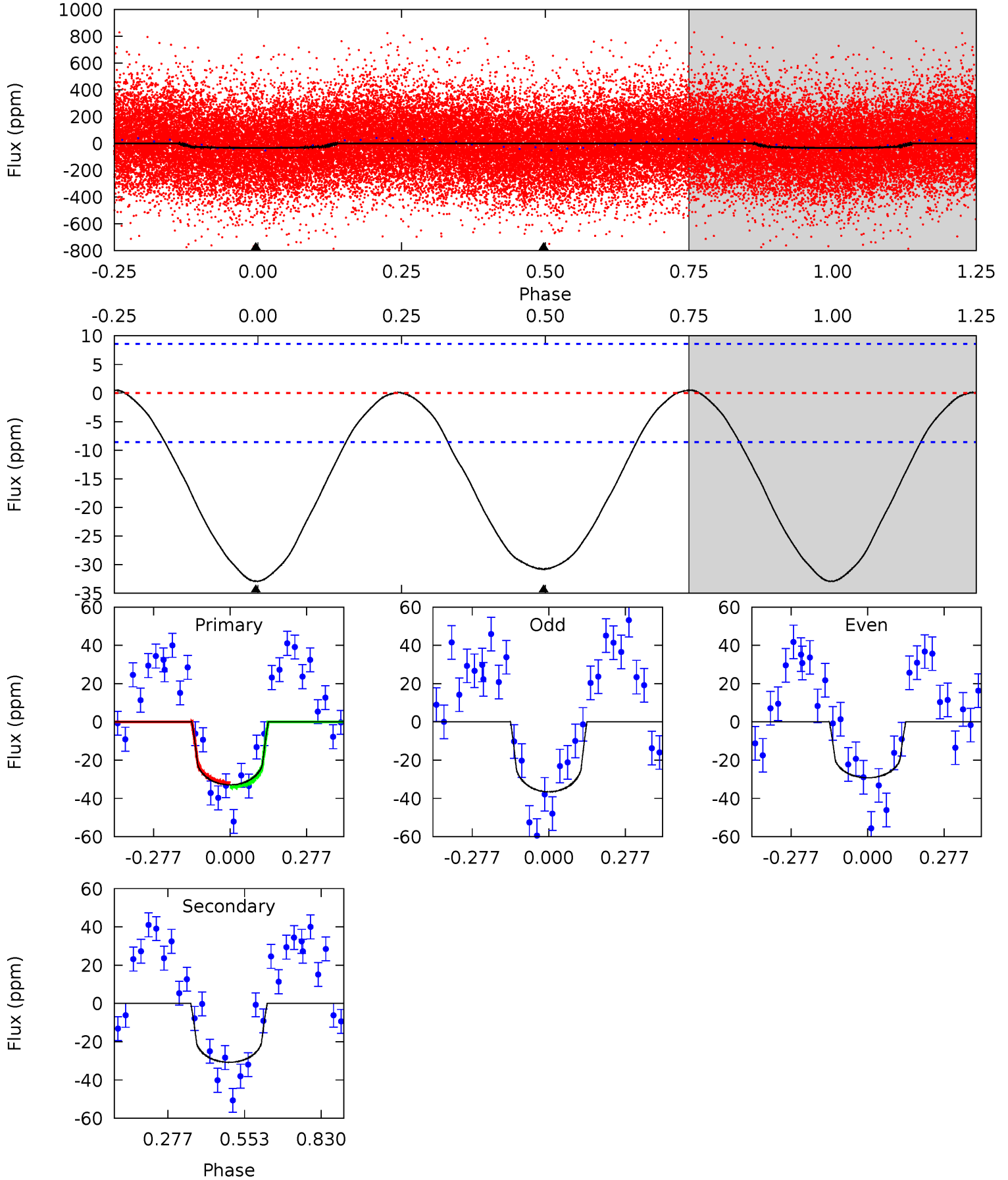
TCE 011100532-02 P= 0.949504 Days $T_0=132.452542$ (BKJD)



DV Model-Shift Uniqueness Test

011100532-02, $P = 0.949443$ Days, $E = 130.589785$ Days

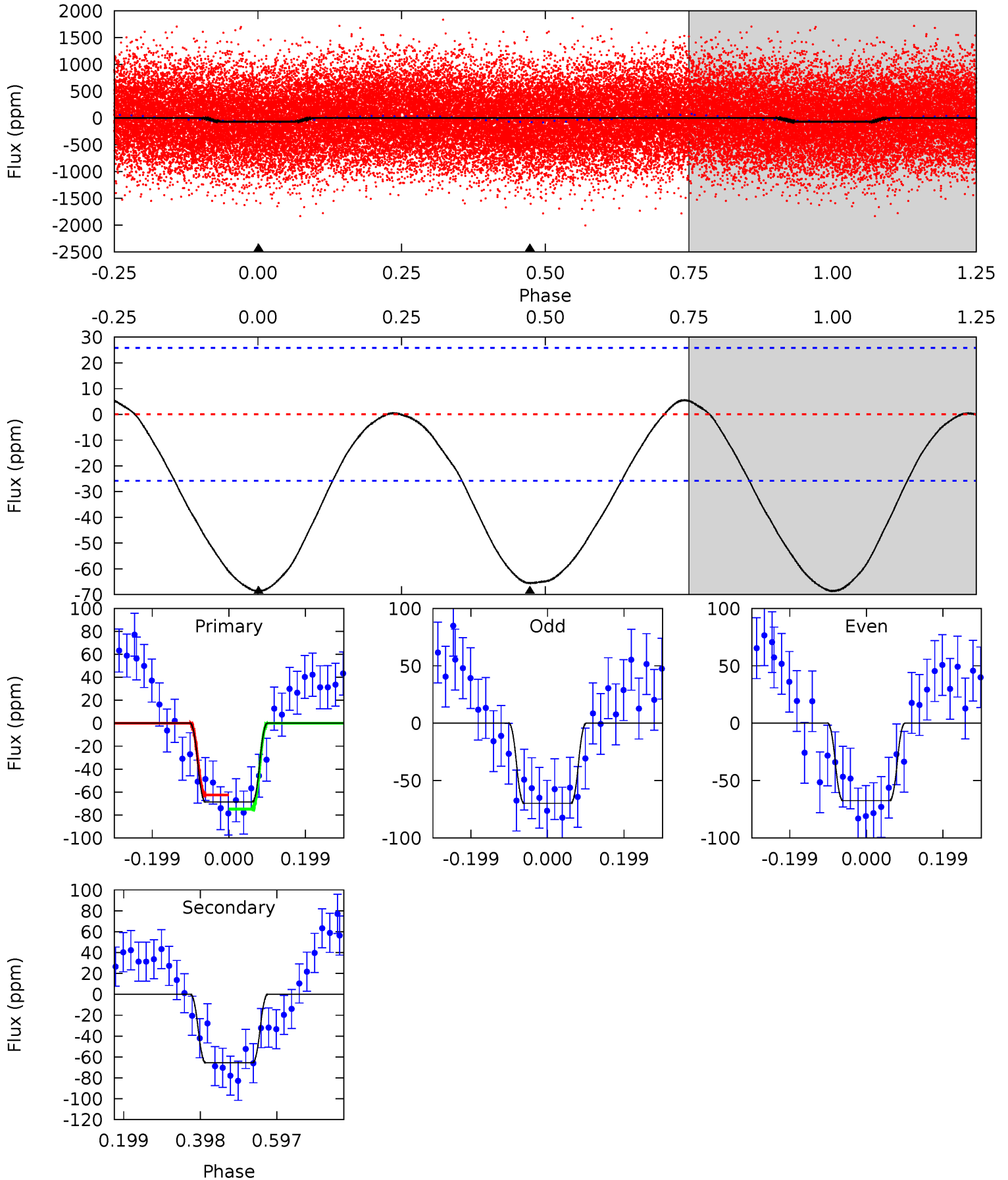
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
16.7	15.6	0	0	4.35	1.09	0.18	16.7	16.7	15.6	15.6	1.88	0.84	0.01	0.59



Alt Model-Shift Uniqueness Test

011100532-02, P = 0.949504 Days, E = 131.503038 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
11.8	11.2	0	0	4.42	1.28	0.61	11.8	11.8	11.2	11.2	0.20	1.11	0.07	1.07



Stellar Parameters For KIC 011100532

	$T_{\text{eff}} (K)$	$\log(g)$	$[\text{Fe}/\text{H}]$	$R (R_{\odot})$	$M (M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	7575^{+83}_{-75}	$3.917^{+0.168}_{-0.112}$	$-0.160^{+0.150}_{-0.150}$	$2.412^{+0.434}_{-0.531}$	$1.752^{+0.191}_{-0.172}$	$0.176^{+0.152}_{-0.060}$
	+1%/-1%	+4%/-3%	+94%/-94%	+18%/-22%	+11%/-10%	+87%/-34%
Source	SPE68	SPE68	SPE68	DSEP		

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

Secondary Eclipse Parameters for KIC 011100532-02 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-31 ± 2	$1.68^{+1.44}_{-1.13}$	4794^{+242}_{-294}	6790^{+8869}_{-2103}	$3.113^{+26.569}_{-2.213}$
Alt.	-66 ± 6	$2.43^{+1.69}_{-1.34}$	4786^{+220}_{-238}	6764^{+5340}_{-1673}	$3.164^{+13.527}_{-2.069}$

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

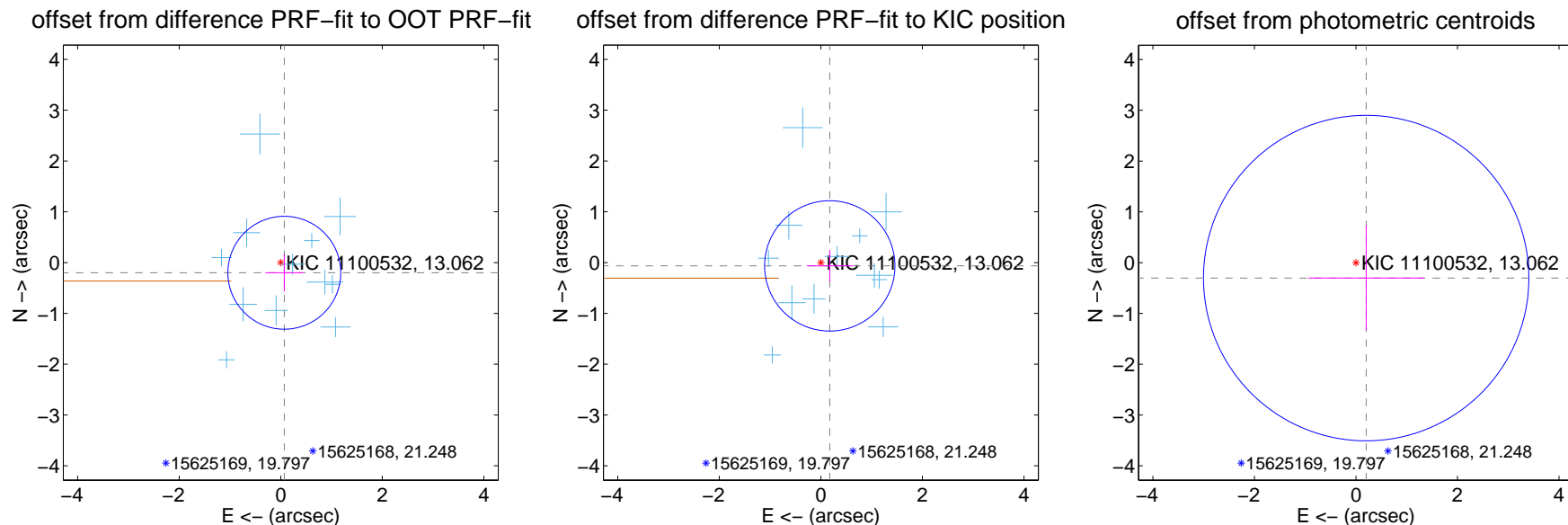
DV Centroid Data

Supplemental centroid analysis for 011100532-02. Kepler magnitude: 13.06. Transit SNR 6.78

There are 12 quarters with good PRF difference image offsets

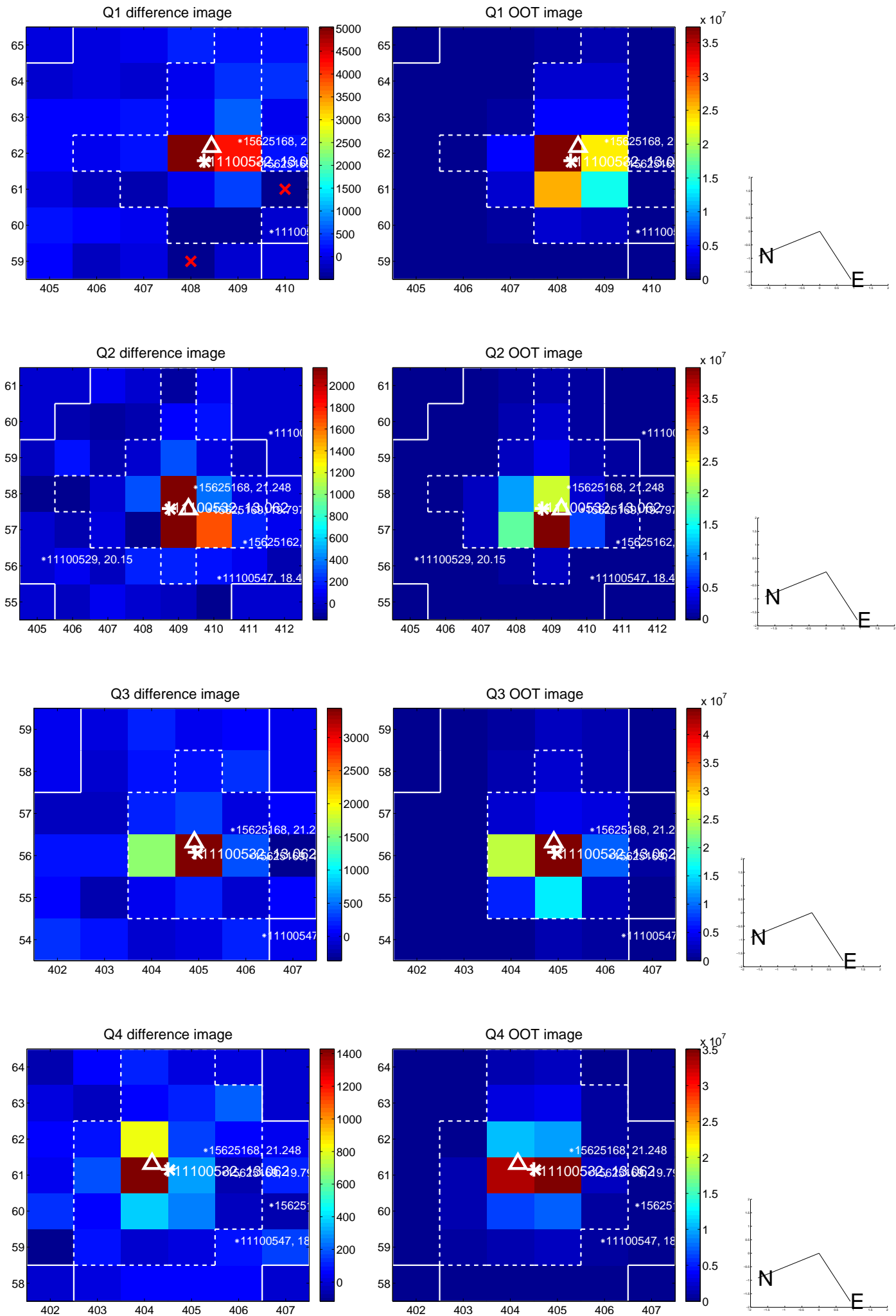
The direct PRF centroid is offset from the target star catalog position by about 0.16 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.212 ± 0.370	0.57	-0.070 ± 0.373	-0.200 ± 0.370
PRF-fit source offset from KIC position	0.187 ± 0.428	0.44	-0.175 ± 0.455	-0.065 ± 0.311
photometric centroid source offset	0.36 ± 1.07	0.34	-0.20 ± 1.14	-0.30 ± 1.03

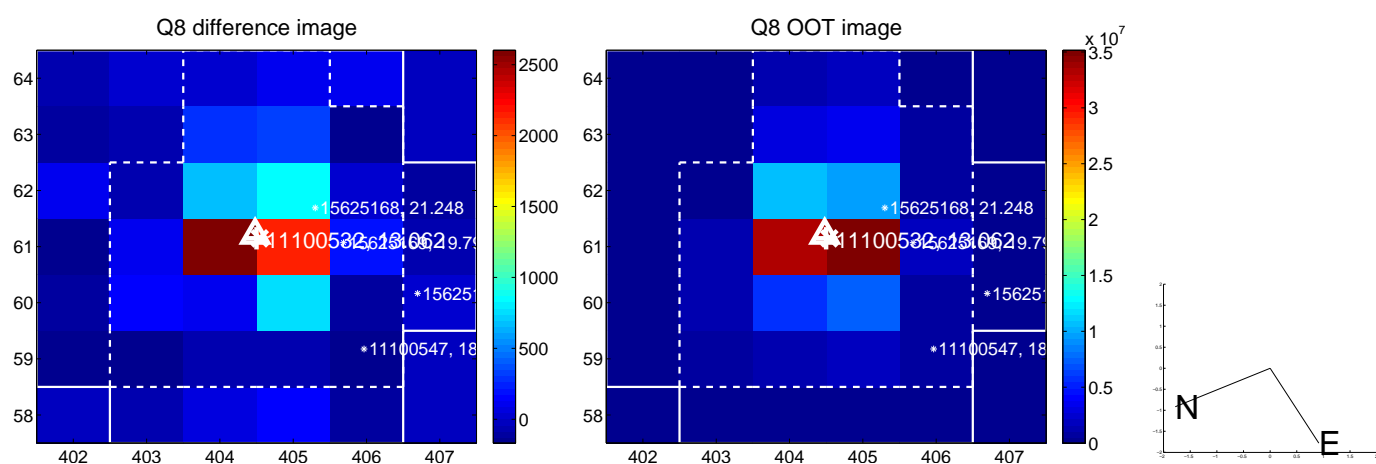
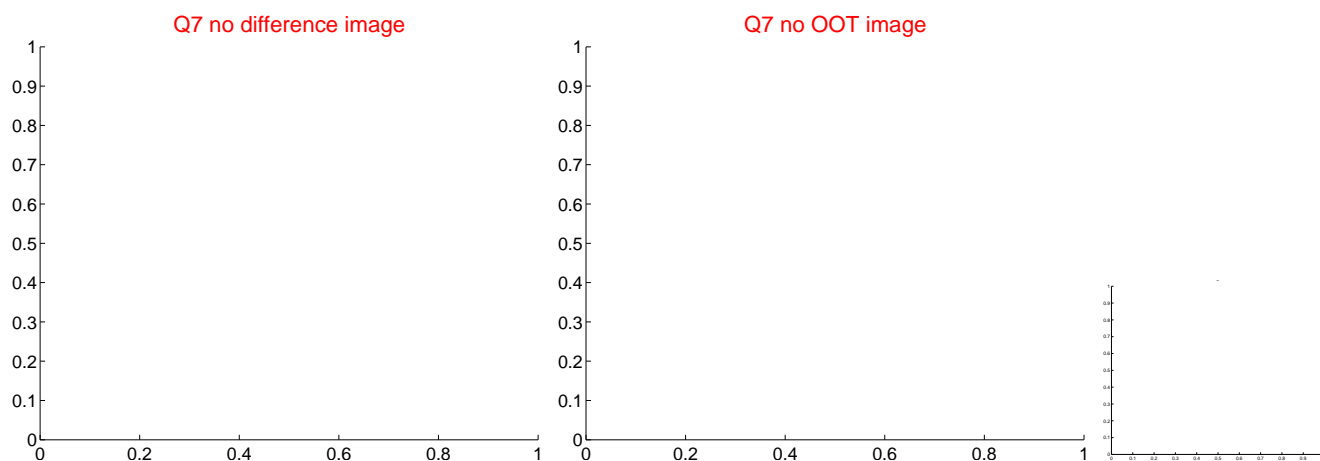
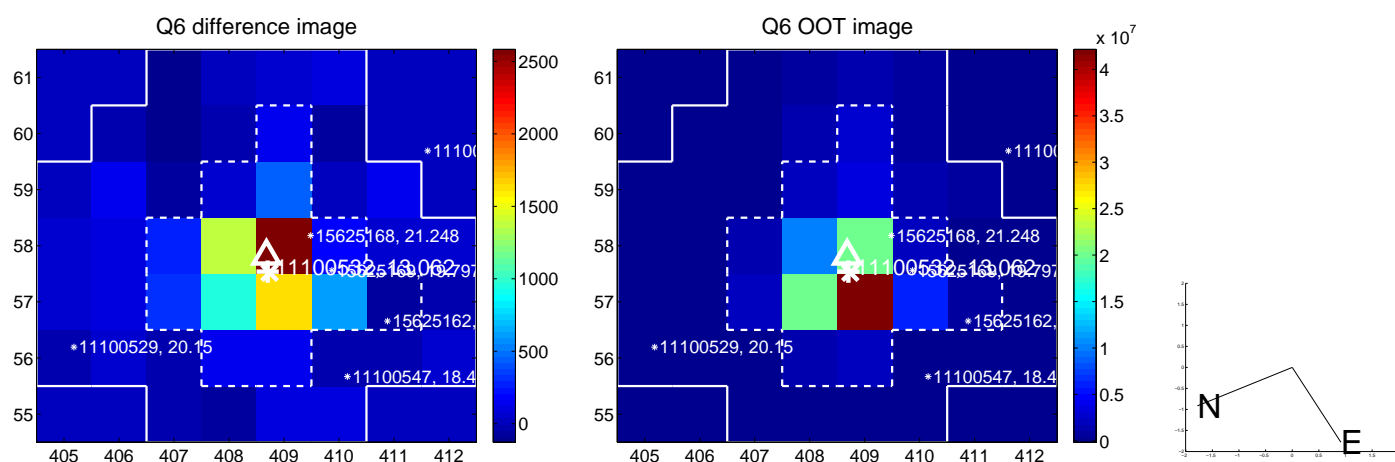
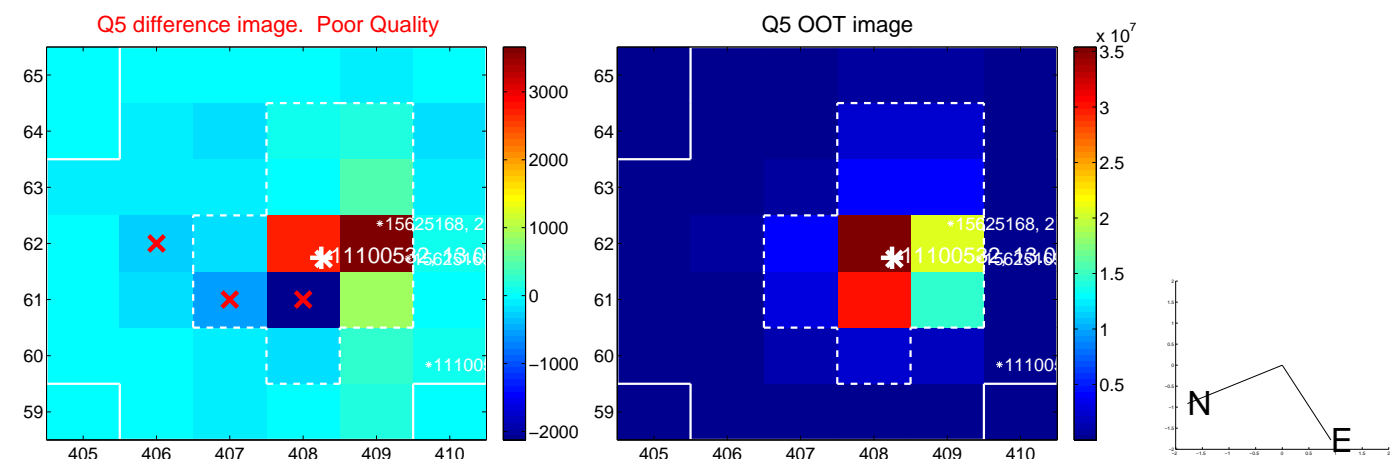


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets**; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

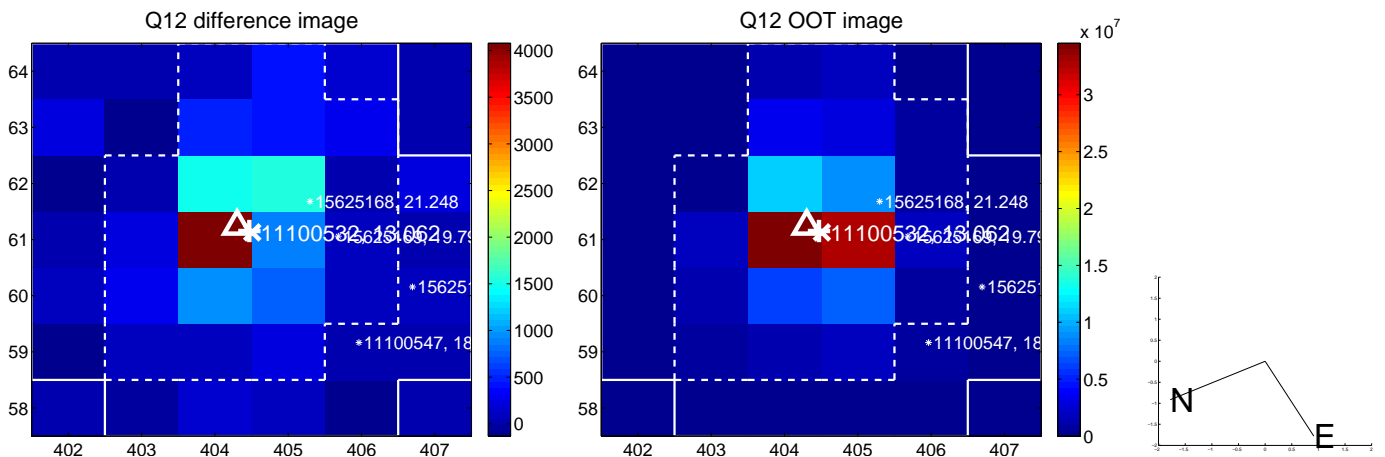
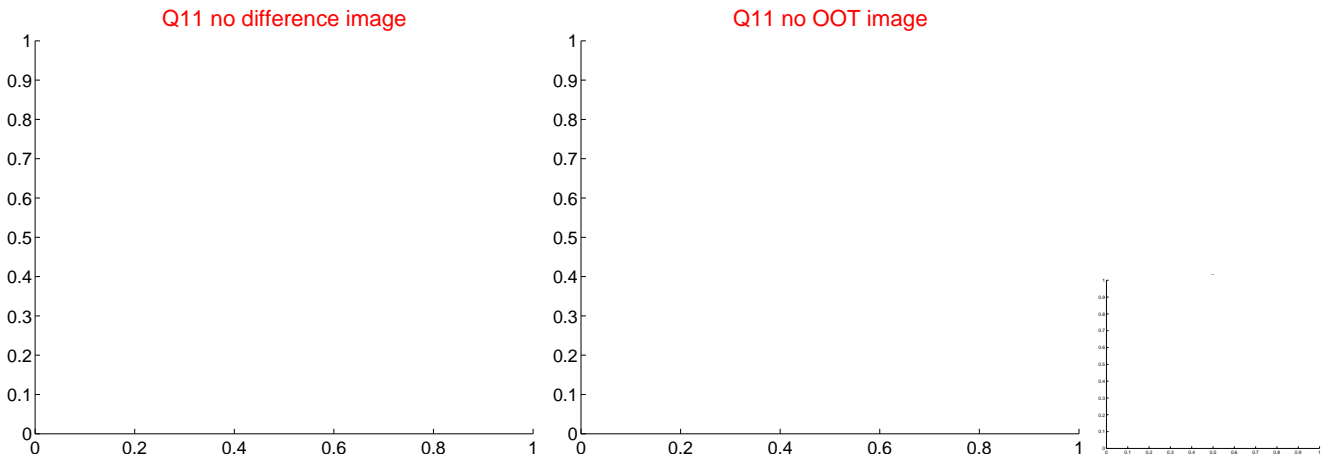
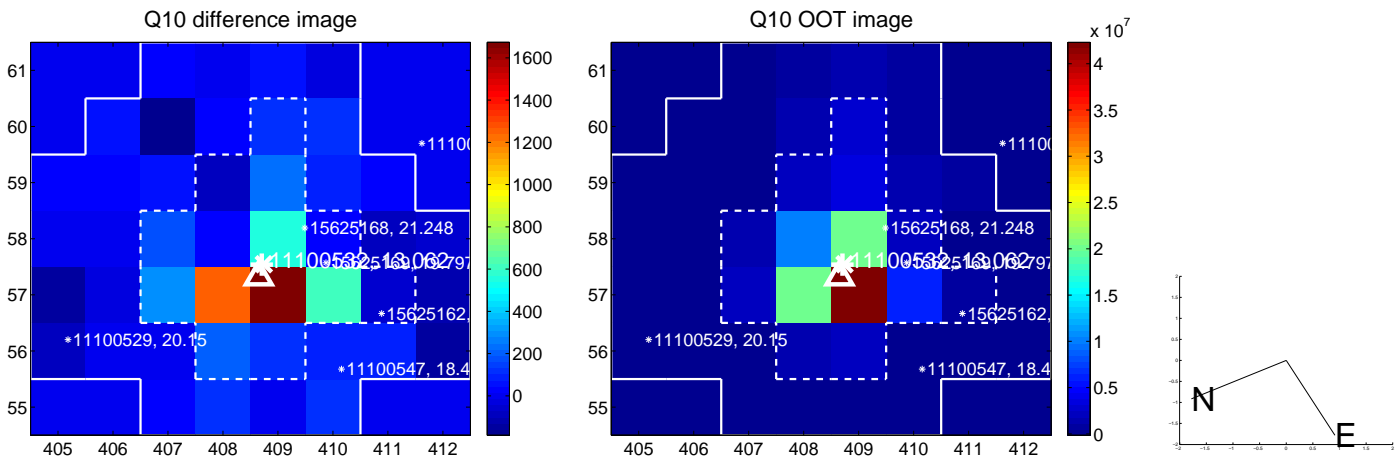
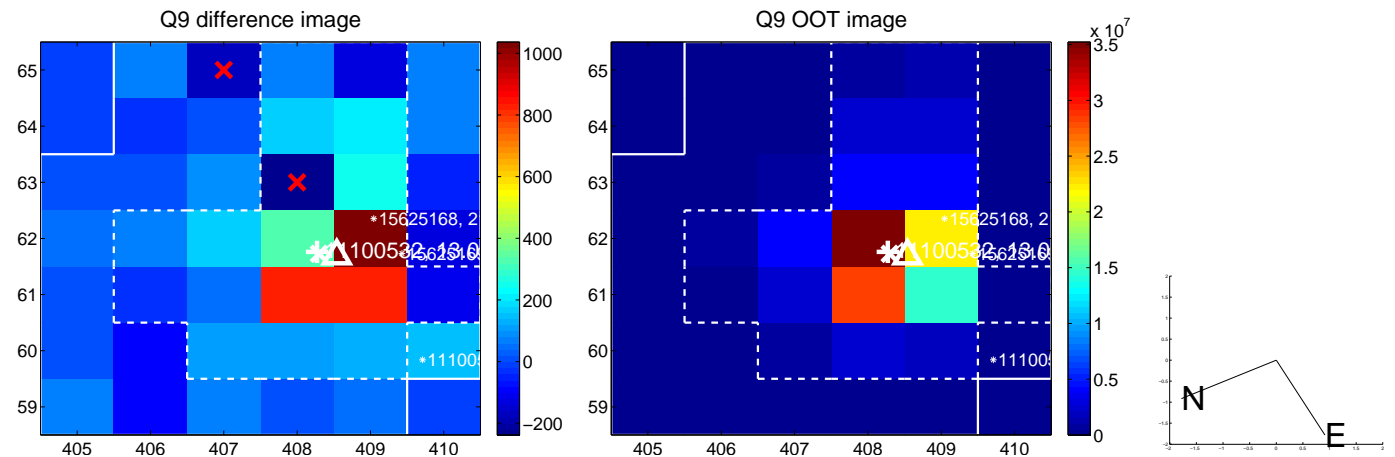
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



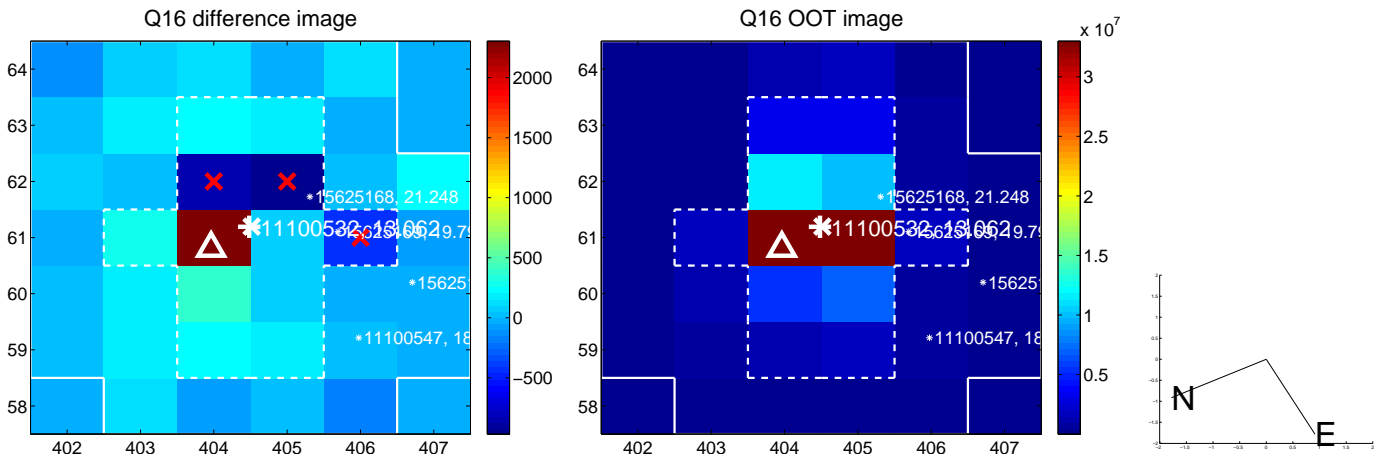
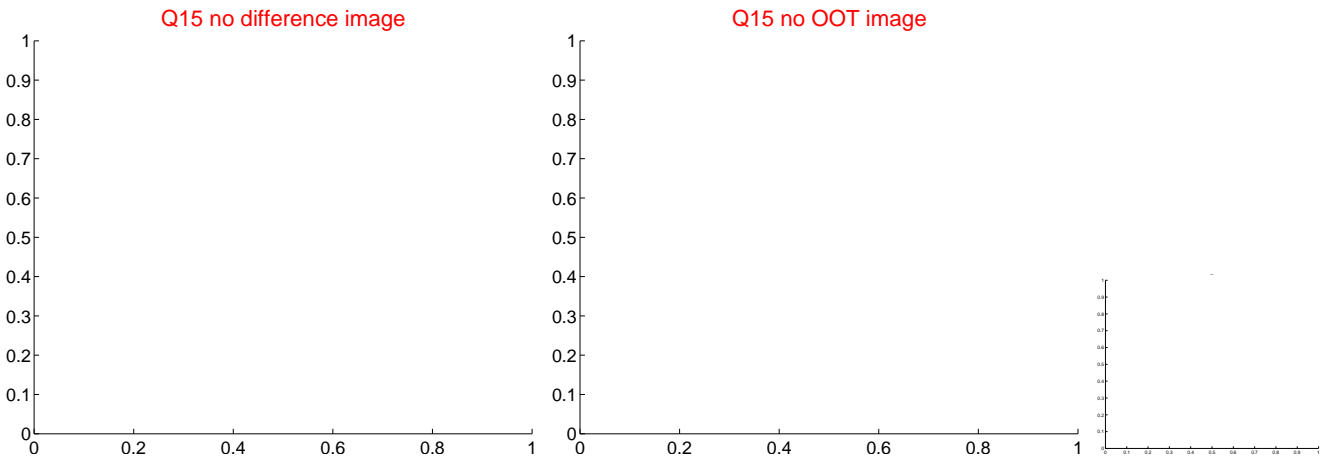
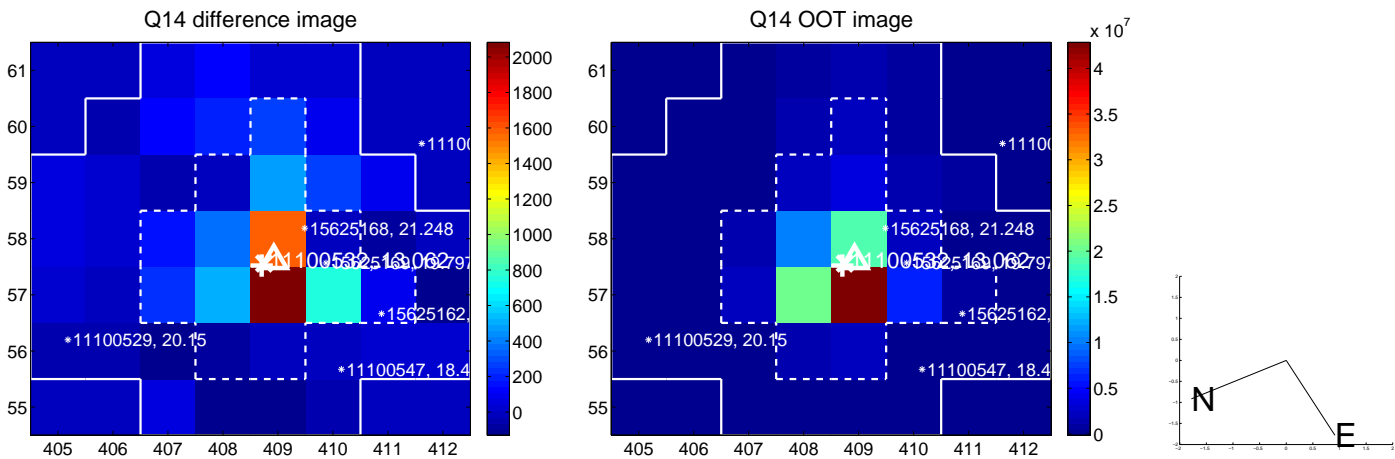
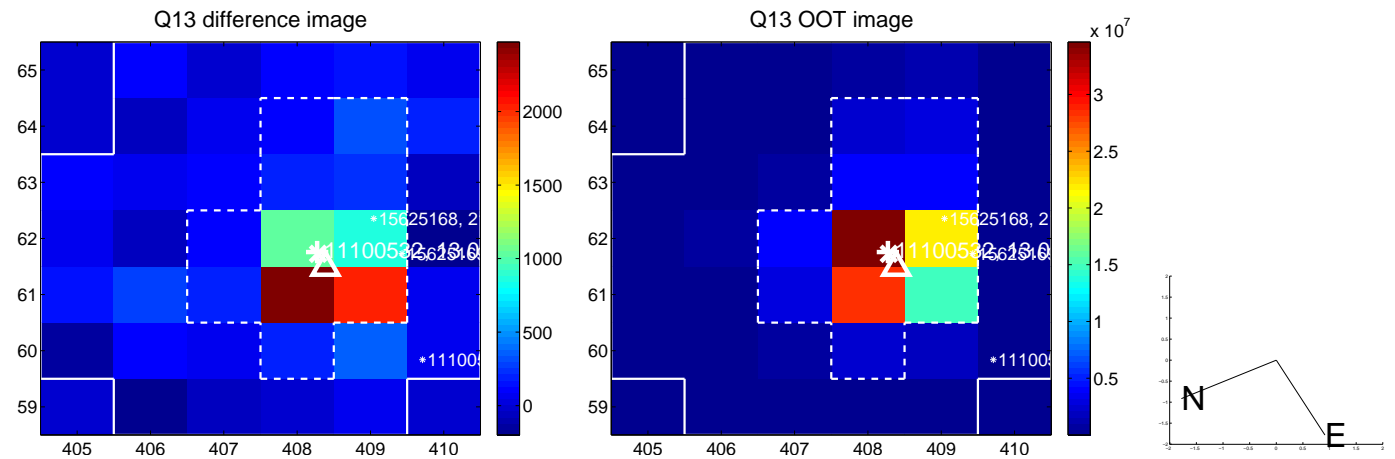
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



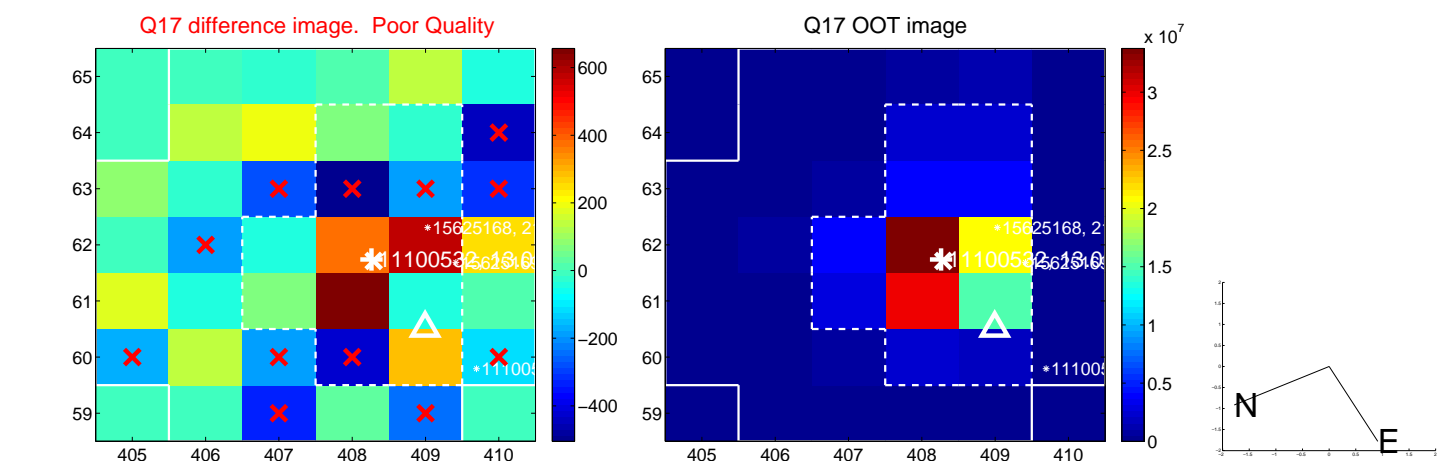
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



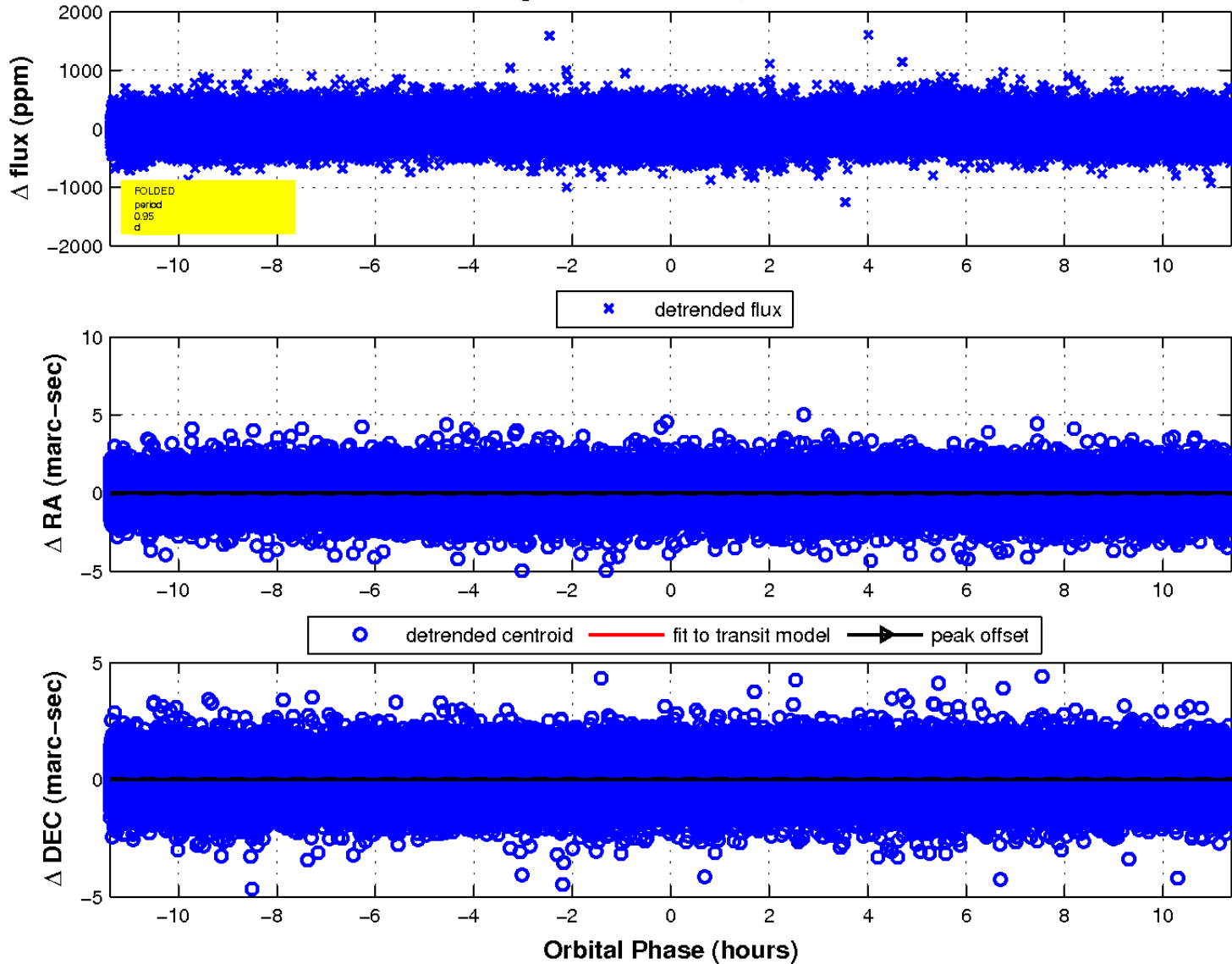
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

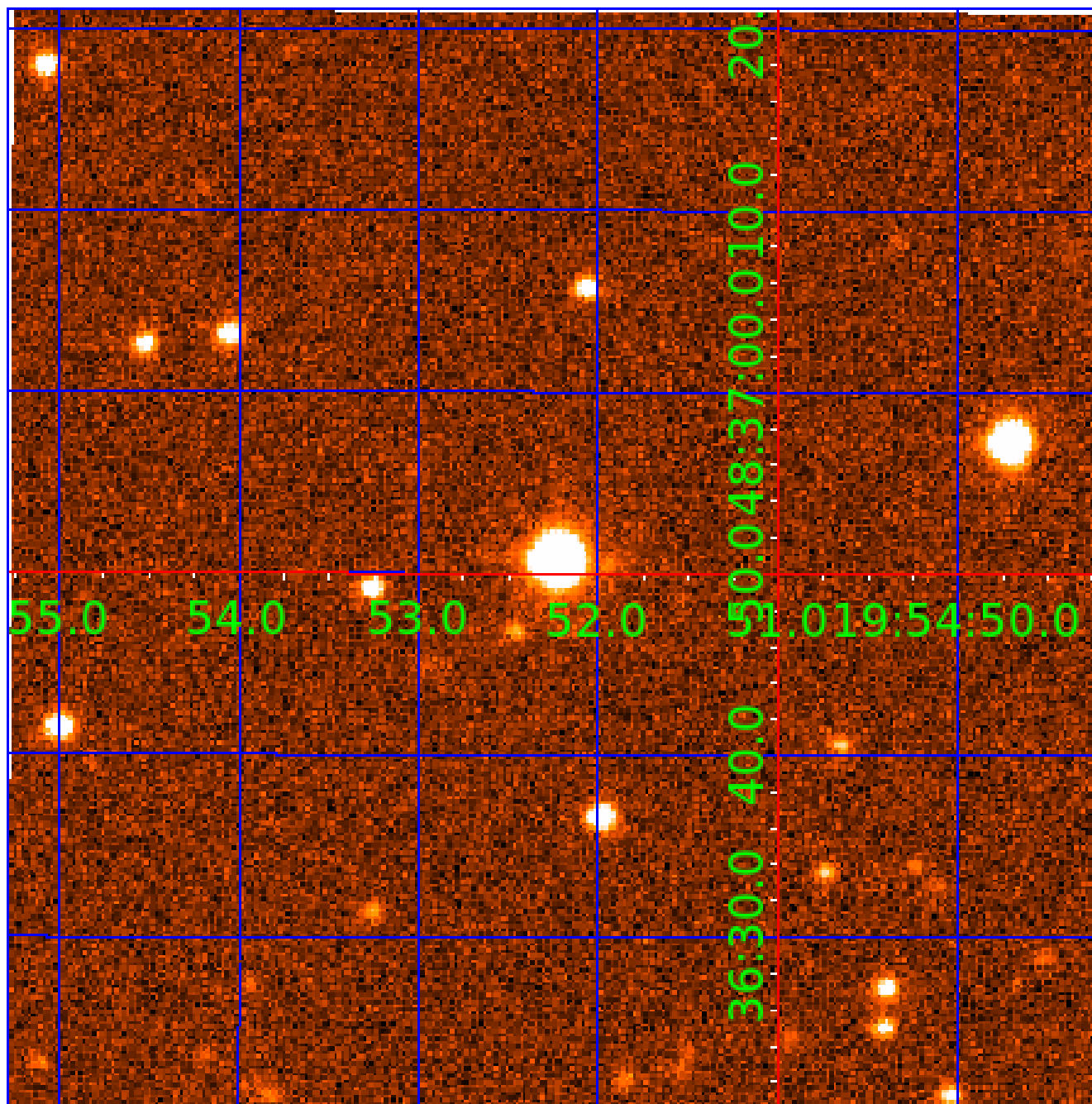


fluxWeightedCentroids, Planet 2 of 9



UKIRT Image

Declination



KIC 011100532

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})
011100532-01	OBS	No	0.743985	131.987531	35.9	1.383	9.7	9.2	2.41	7575	1.69	45700.86
011100532-02	OBS	No	0.949443	132.488671	21.6	5.846	8.6	6.8	2.41	7575	1.13	33015.51
011100532-03	OBS	No	40.787800	151.972423	116.5	4.550	10.1	5.1	2.41	7575	3.18	219.43
011100532-04	OBS	No	44.858115	149.422270	213.7	4.493	8.7	8.0	2.41	7575	4.20	193.30
011100532-05	OBS	No	69.928123	175.645448	354.3	2.513	9.2	9.2	2.41	7575	5.18	106.94
011100532-06	OBS	No	45.311601	144.582448	220.4	5.021	8.6	7.6	2.41	7575	4.13	190.72
011100532-07	OBS	No	32.325793	159.899688	223.7	4.350	8.1	7.8	2.41	7575	3.97	299.19
011100532-08	OBS	No	23.155985	146.735798	378.5	1.755	8.4	9.2	2.41	7575	4.86	466.79
011100532-09	OBS	No	42.033118	164.656835	317.5	2.500	8.1	-1.0	2.41	7575	4.33	210.81

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
011100532-01	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT
011100532-02	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT
011100532-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT
011100532-04	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT
011100532-05	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT
011100532-06	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT
011100532-07	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT
011100532-08	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—MOD_NONUNIQ_DV
011100532-09	OBS	FP	0.00	1	0	1	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_NOFITS—HALO_GHOST

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

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

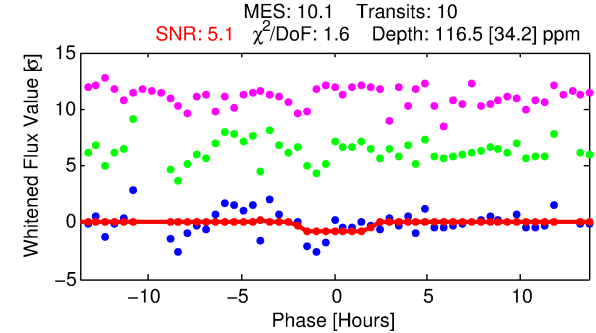
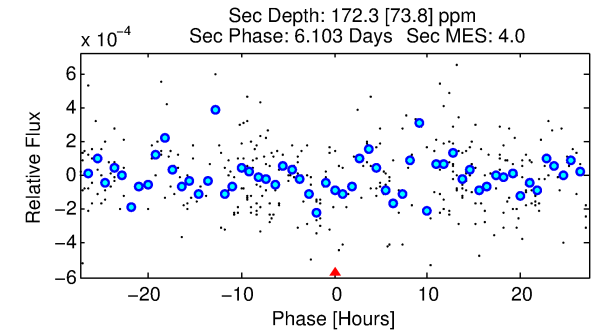
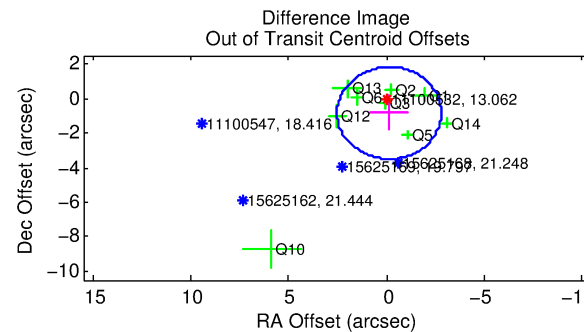
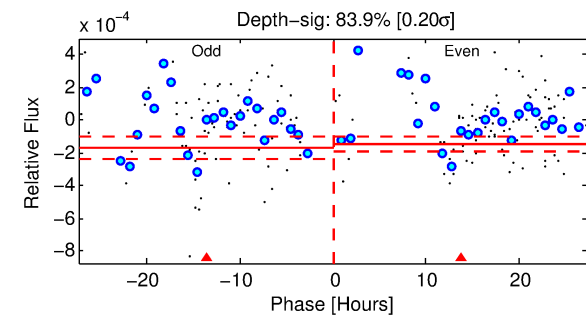
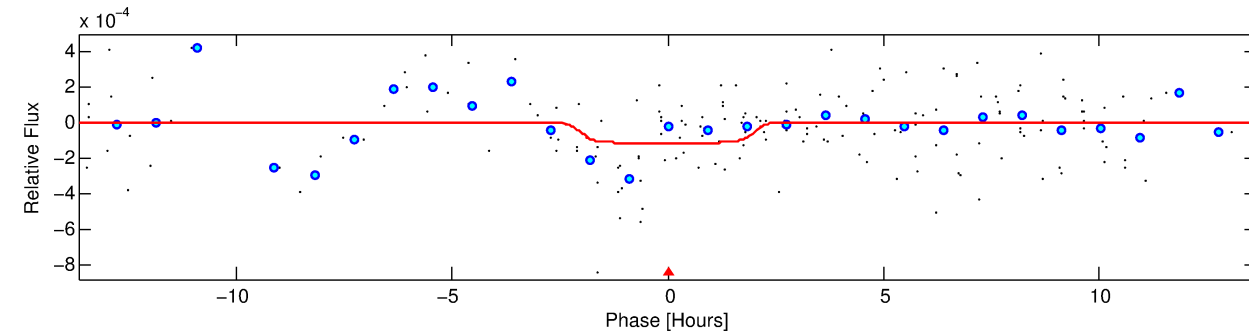
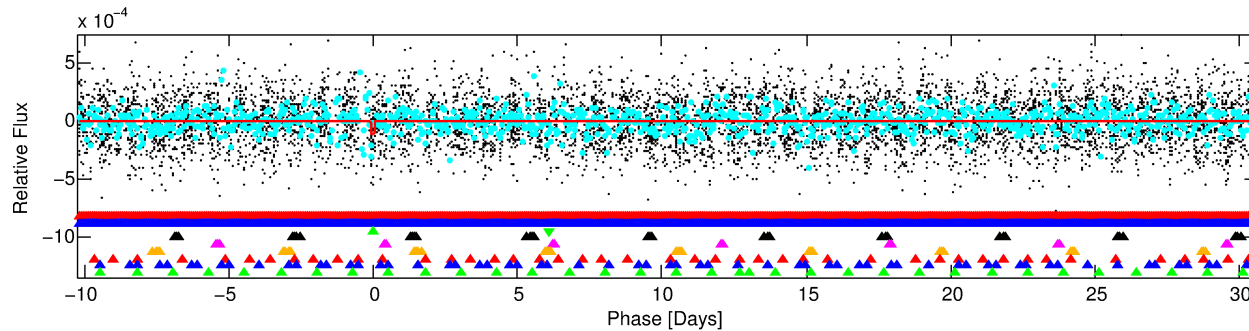
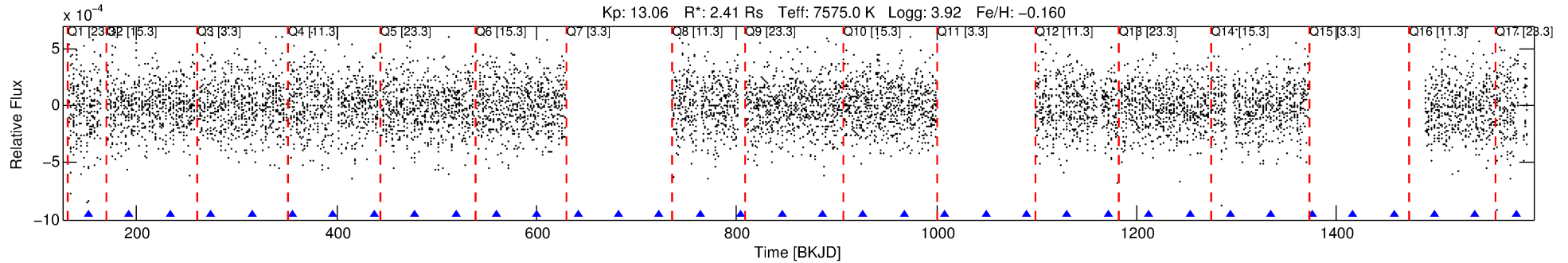
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 011100532-03

No Significant Match Found

DV One-Page Summary

KIC: 11100532 Candidate: 3 of 9 Period: 40.788 d



DV Fit Results:

Period = 40.78780 [0.00124] d
Epoch = 151.9724 [0.0226] BKJD
Rp/R* = 0.0121 [0.0055]
a/R* = 24.94 [64.52]
b = 0.94 [0.30]
Seff = 219.43 [65.82]
Teq = 981 [74] K
Rp = 3.18 [1.62] Re
a = 0.2797 [0.0546] AU
Ag = 731.49 [770.83] [0.95 σ]
Teffp = 7891 [1997] K [3.46 σ]

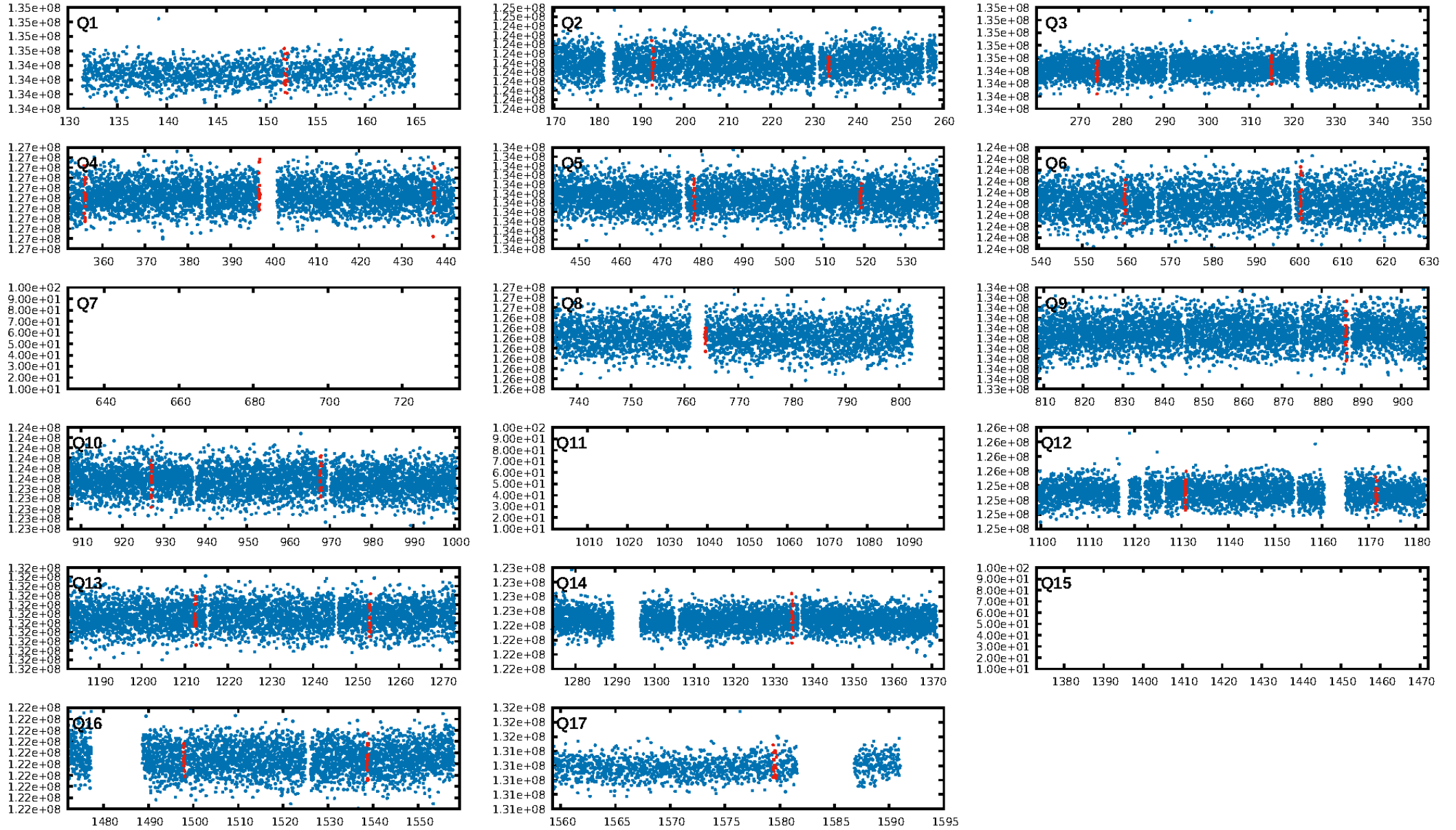
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [32.27 σ]
LongPeriod-sig: 100.0% [5.76 σ]
ModelChiSquare2-sig: 1.5%
ModelChiSquareGof-sig: 99.5%
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [9/9]
GhostDiagnostic-chr: -1.215
Centroid-sig: 71.7%
Centroid-so: 0.918 arcsec [0.55 σ]
OotOffset-rm: 0.845 arcsec [0.95 σ]
OotOffset-st: 4/1/1/3 [9]
KicOffset-rm: 0.702 arcsec [1.02 σ]
KicOffset-st: 4/1/1/3 [9]
DiffImageQuality-fgm: 0.44 [4/9]
DiffImageOverlap-fno: 0.00 [0/13]

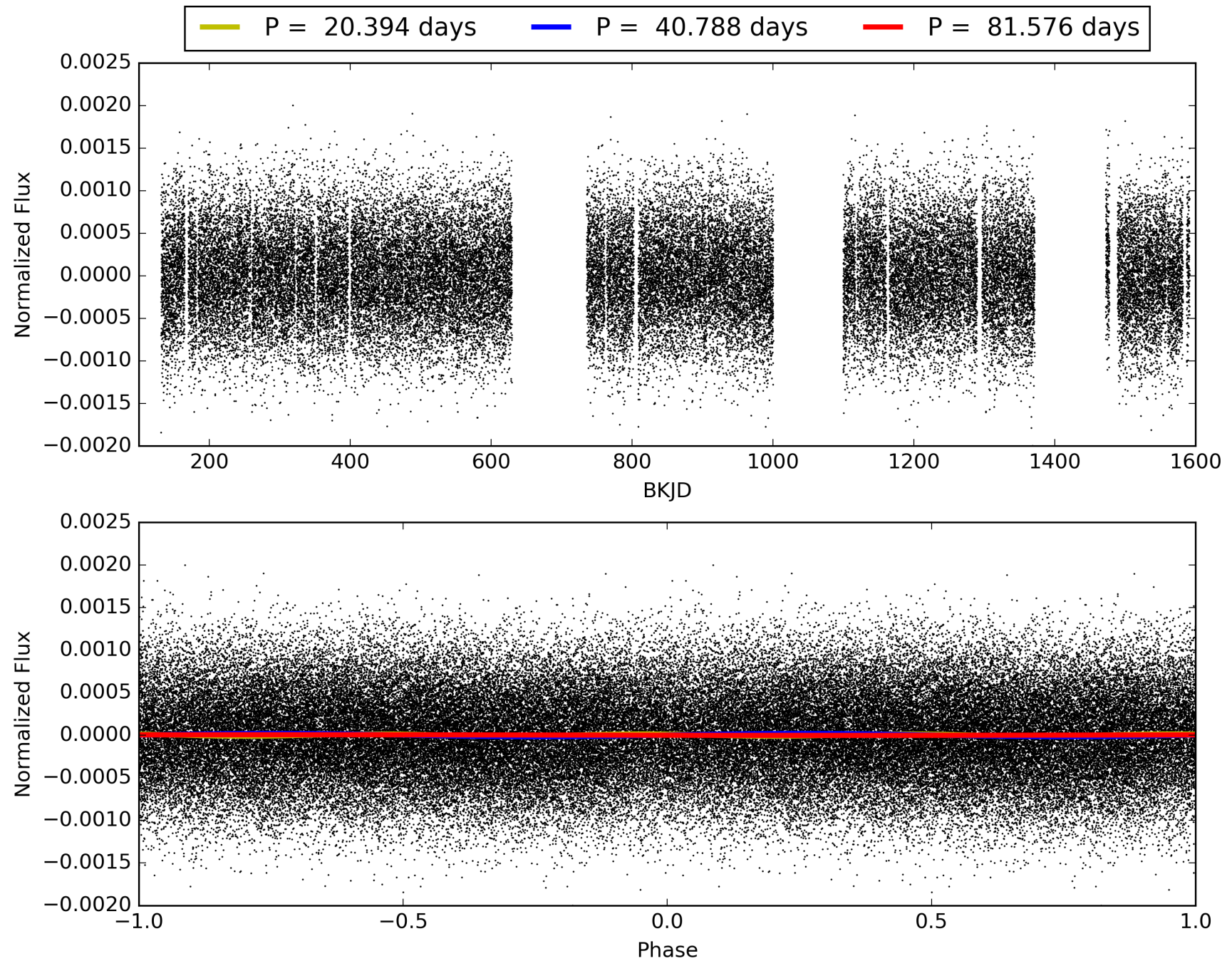
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 01-Feb-2016 10:50:25 Z

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

TCE 011100532-03, PDC Light Curves

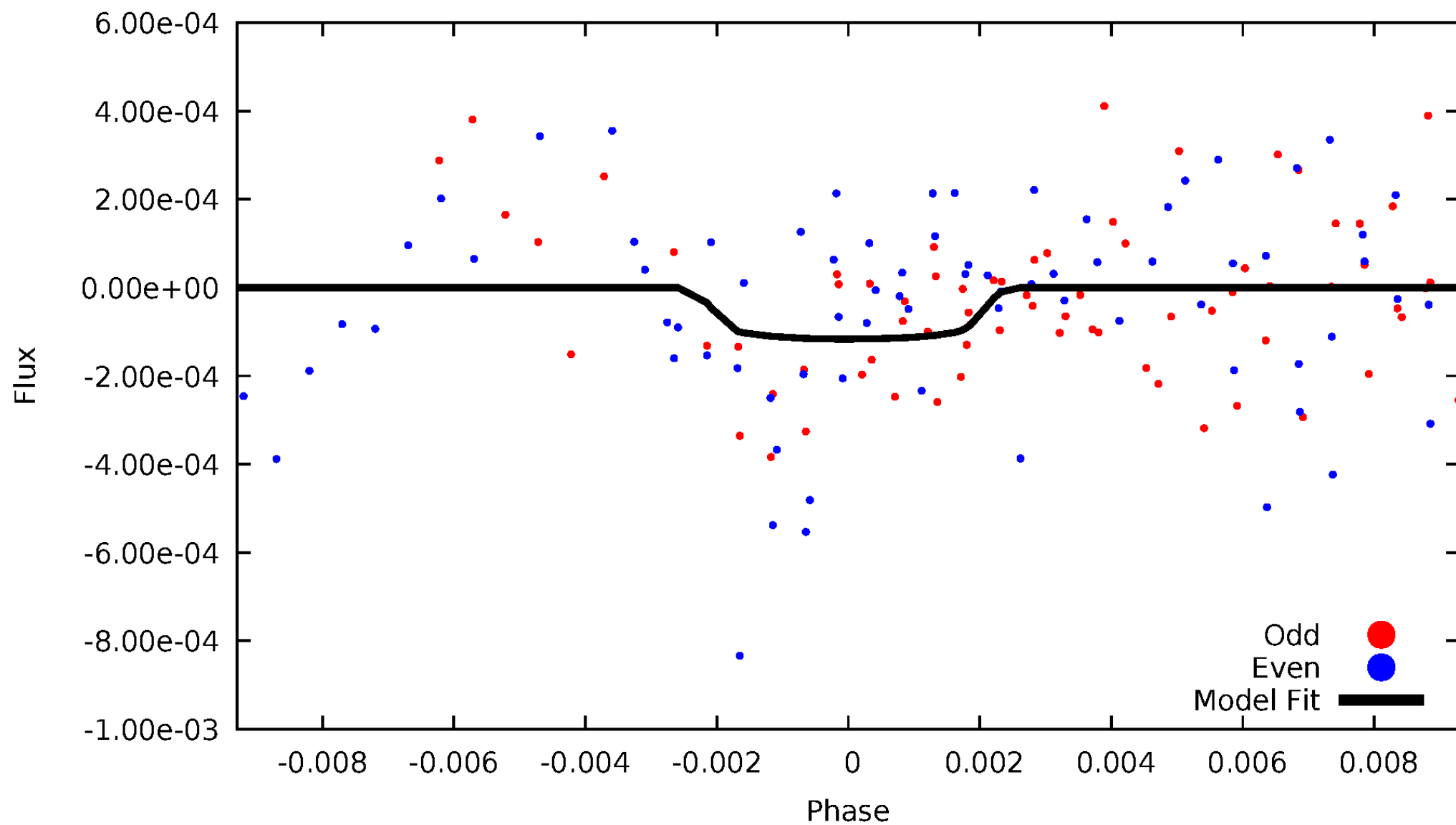


TCE 011100532-03



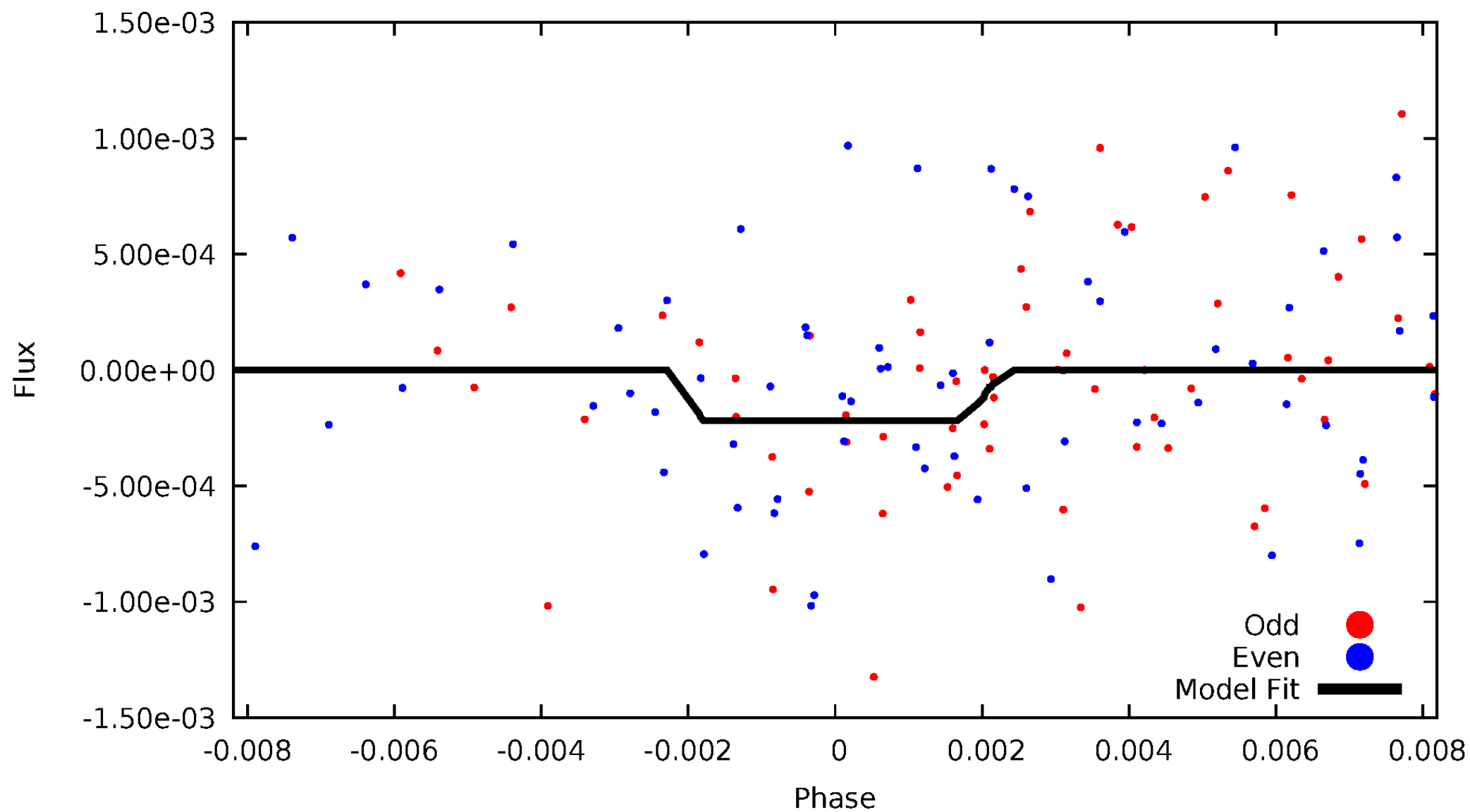
DV Odd/Even

TCE 011100532-03



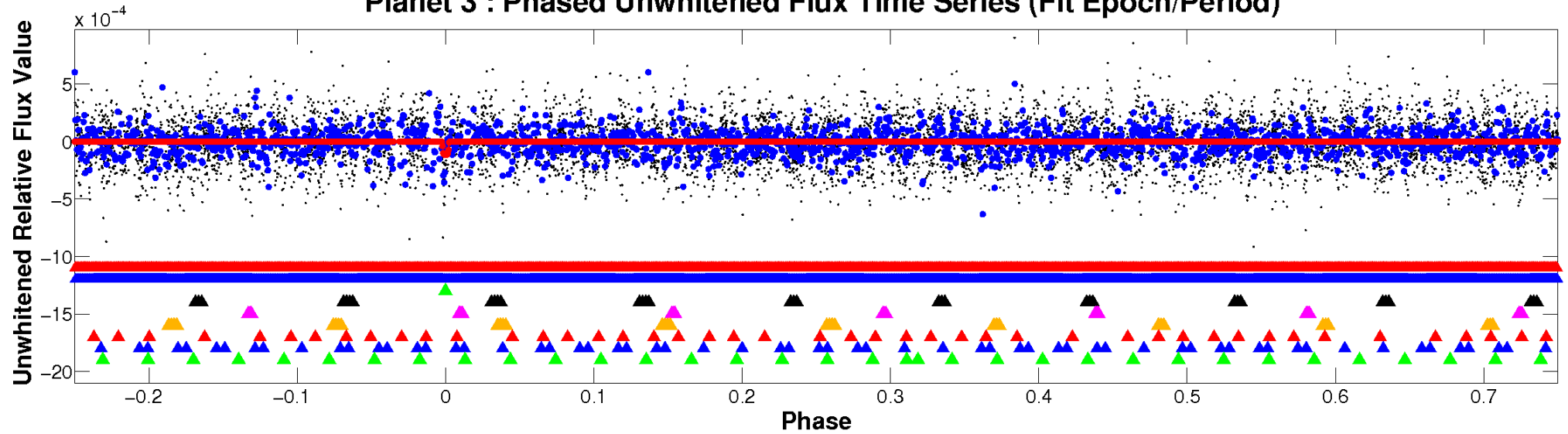
ALT Odd/Even

TCE 011100532-03

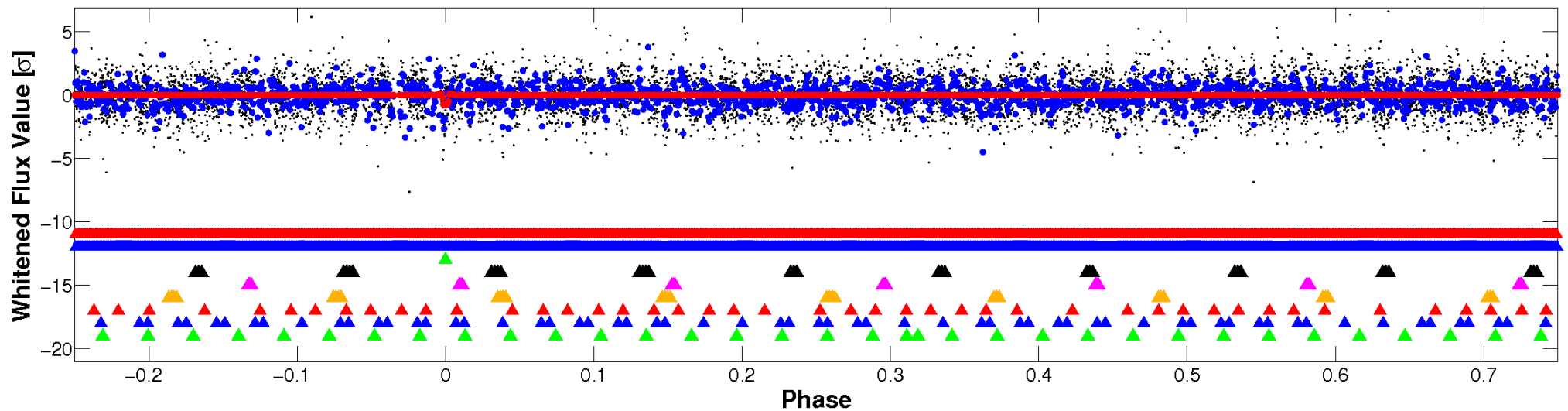


Non-Whitened Vs. Whitened Light Curve

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

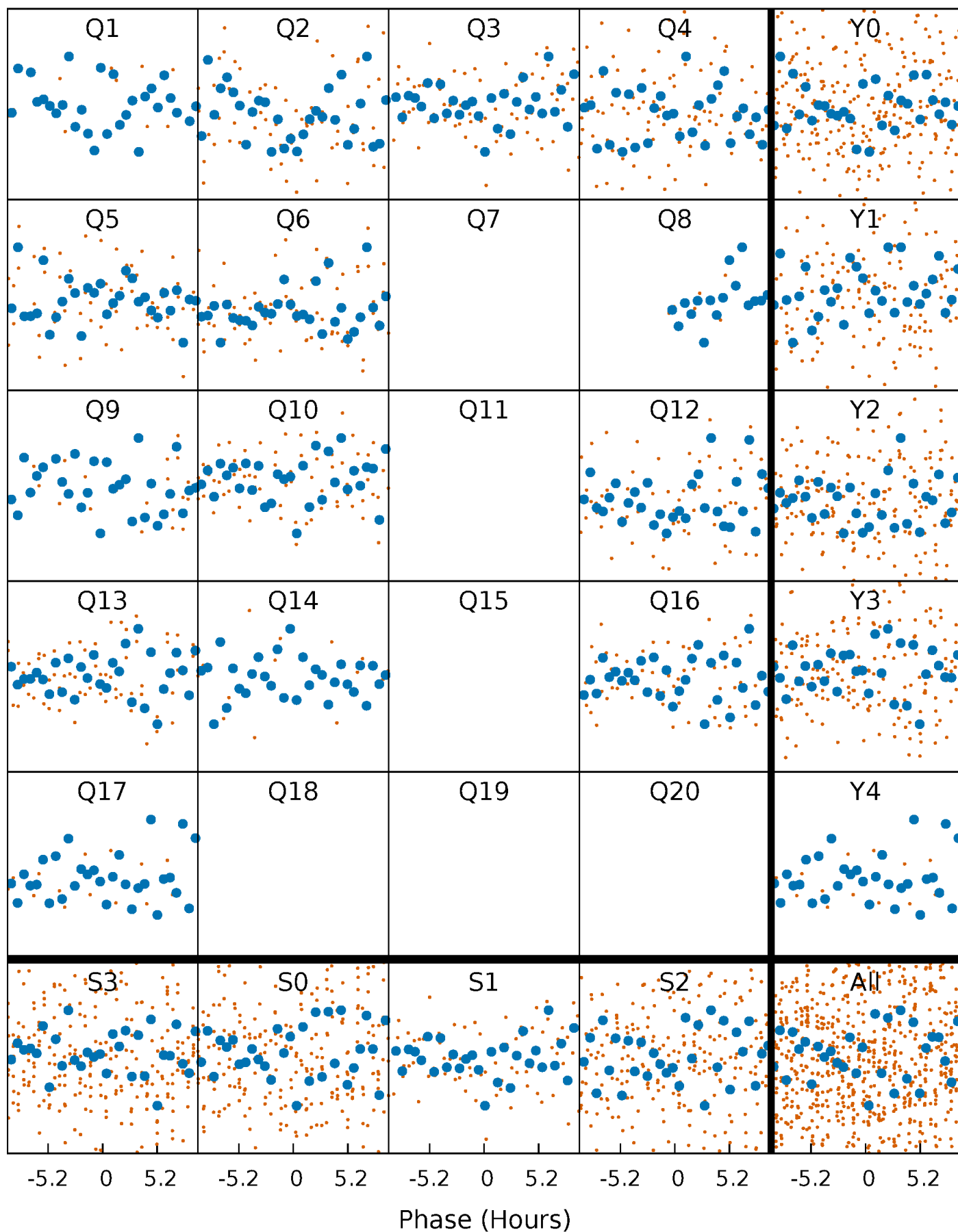


Planet 3 : Phased Whitened Flux Time Series (Fit Epoch/Period)



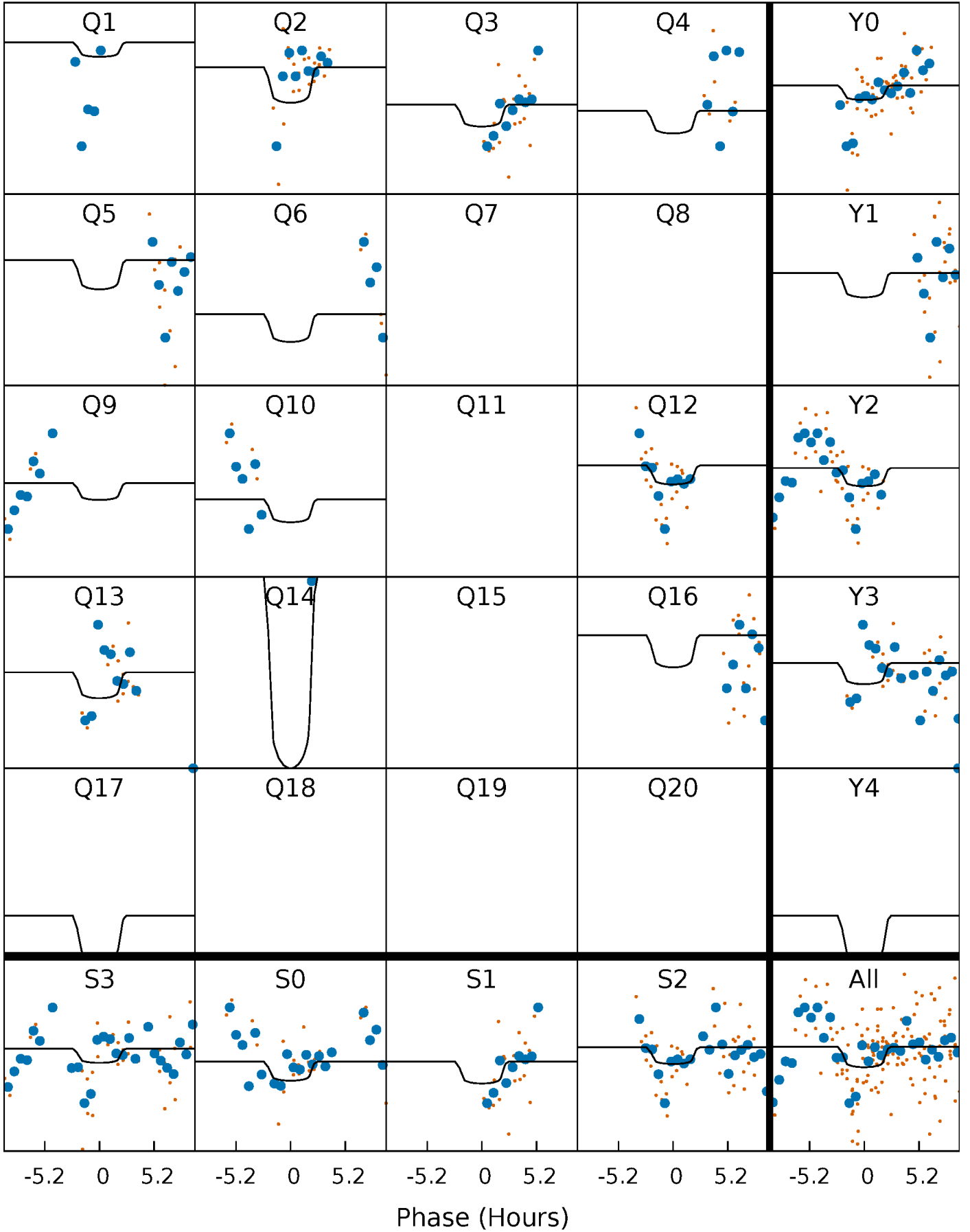
PDC Quarter-Phased Transit Curves

TCE 011100532-03 $P = 40.787800$ Days $T_0 = 151.972423$ (BKJD)



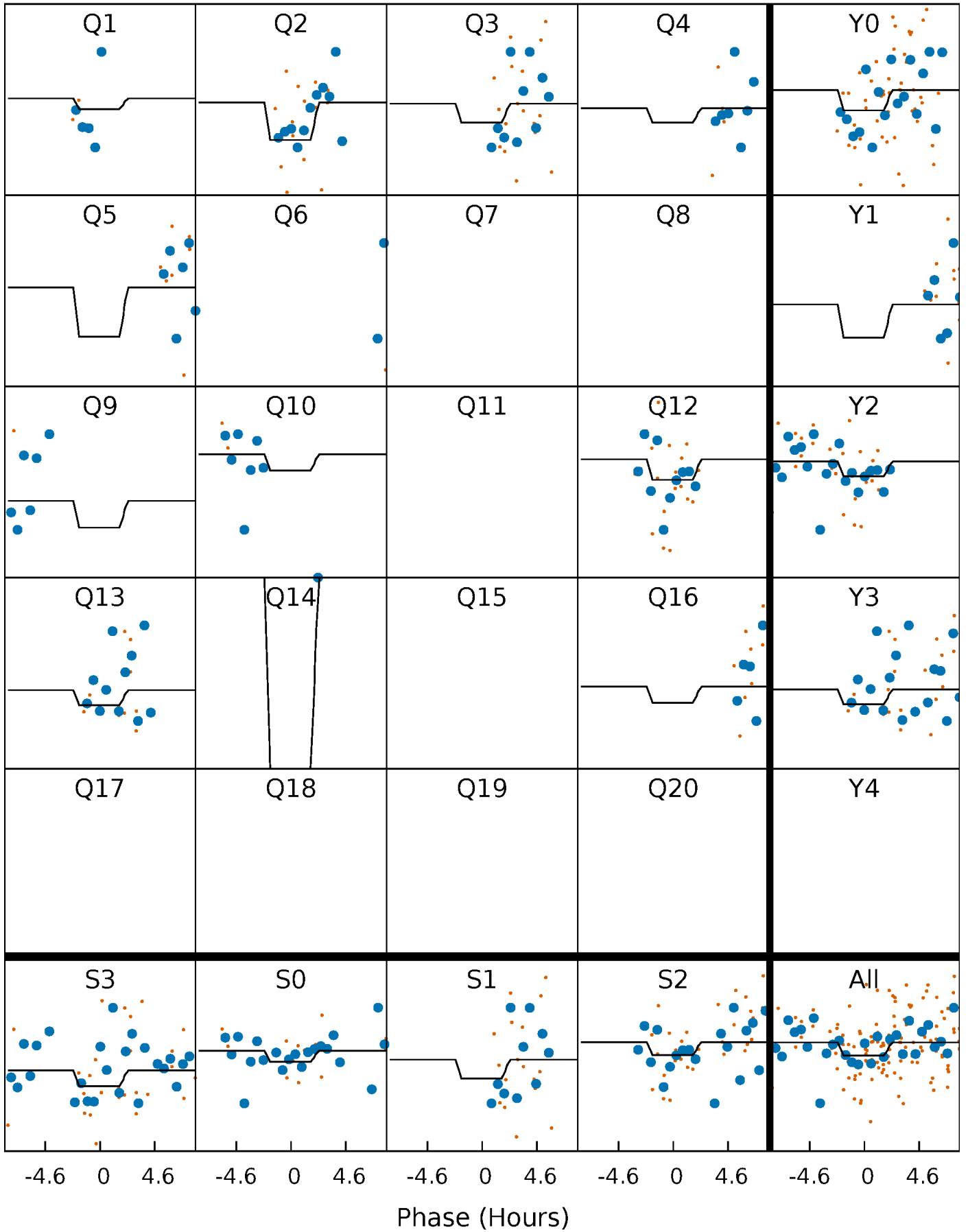
DV Quarter-Phased Transit Curves

TCE 011100532-03 $P = 40.787800$ Days $T_0 = 151.972423$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

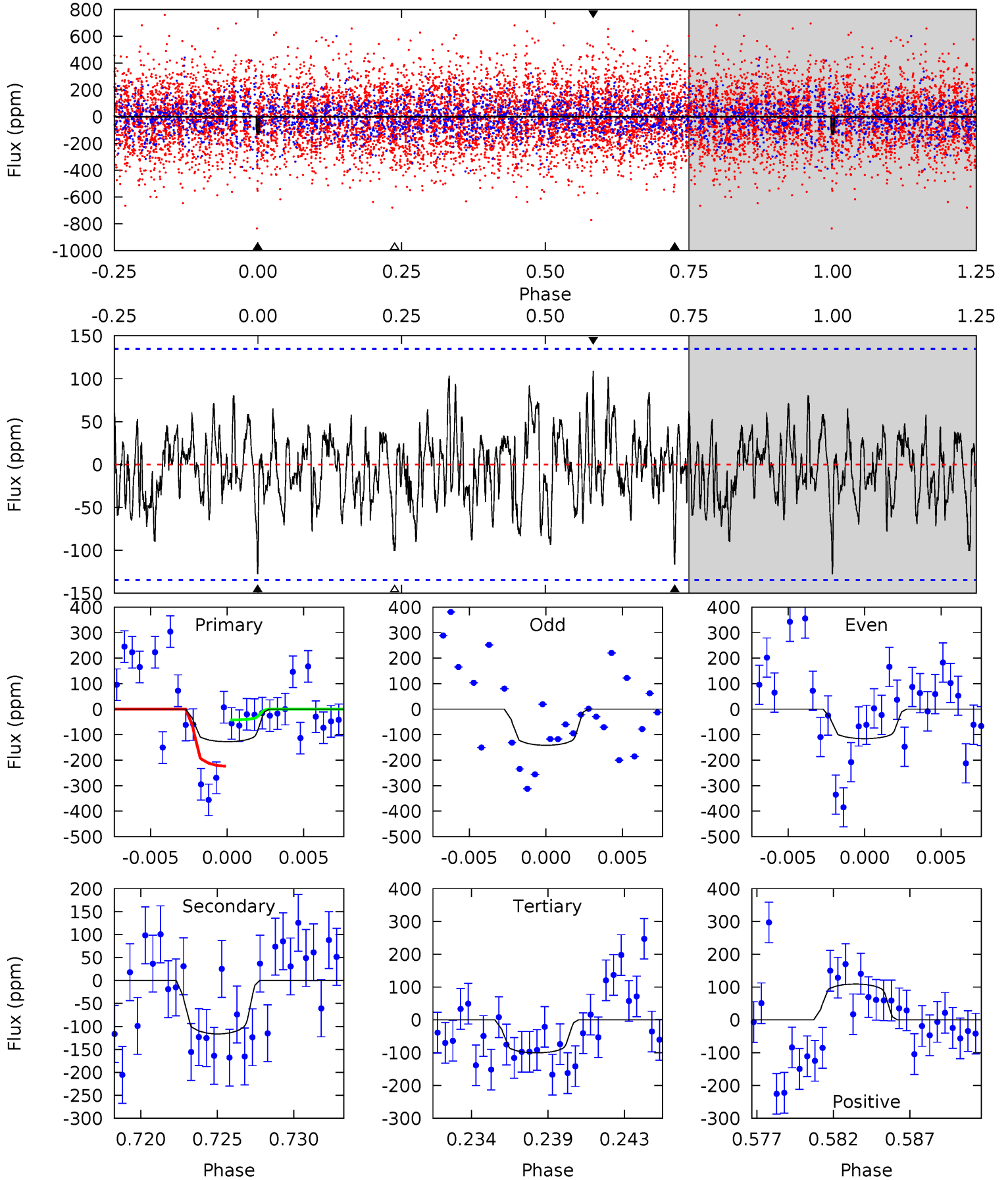
TCE 011100532-03 P= 40.787831 Days $T_0=151.959316$ (BKJD)



DV Model-Shift Uniqueness Test

011100532-03, $P = 40.787800$ Days, $E = 111.184623$ Days

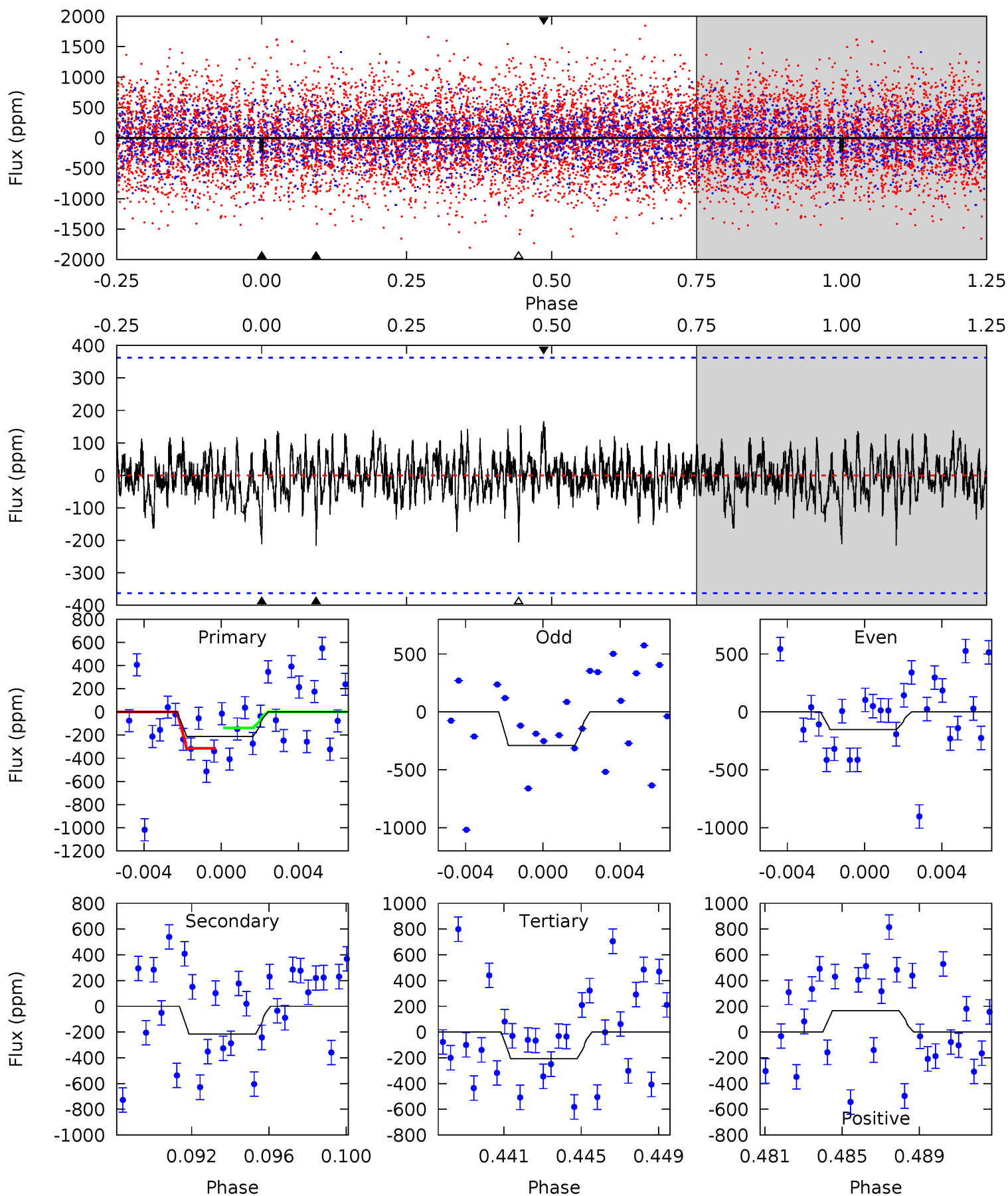
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
4.90	4.47	3.86	4.19	5.17	2.82	1.38	1.04	0.71	0.61	0.28	0.50	1.27	0.46	3.43



Alt Model-Shift Uniqueness Test

011100532-03, P = 40.787831 Days, E = 111.171485 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
3.03	3.10	2.96	2.39	5.20	2.88	0.74	0.07	0.63	0.14	0.71	0.98	0.92	0.44	1.22



Stellar Parameters For KIC 011100532

	$T_{\text{eff}} (K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M (M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	7575^{+83}_{-75}	$3.917^{+0.168}_{-0.112}$	$-0.160^{+0.150}_{-0.150}$	$2.412^{+0.434}_{-0.531}$	$1.752^{+0.191}_{-0.172}$	$0.176^{+0.152}_{-0.060}$
	+1%/-1%	+4%/-3%	+94%/-94%	+18%/-22%	+11%/-10%	+87%/-34%
Source	SPE68	SPE68	SPE68	DSEP		

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

Secondary Eclipse Parameters for KIC 011100532-03 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-116 ± 26	$3.23^{+1.42}_{-1.34}$	1365^{+70}_{-71}	6949^{+2811}_{-1199}	479^{+989}_{-259}
Alt.	-216 ± 70	$3.91^{+1.35}_{-1.44}$	1368^{+66}_{-77}	7432^{+2760}_{-1368}	591^{+1016}_{-317}

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

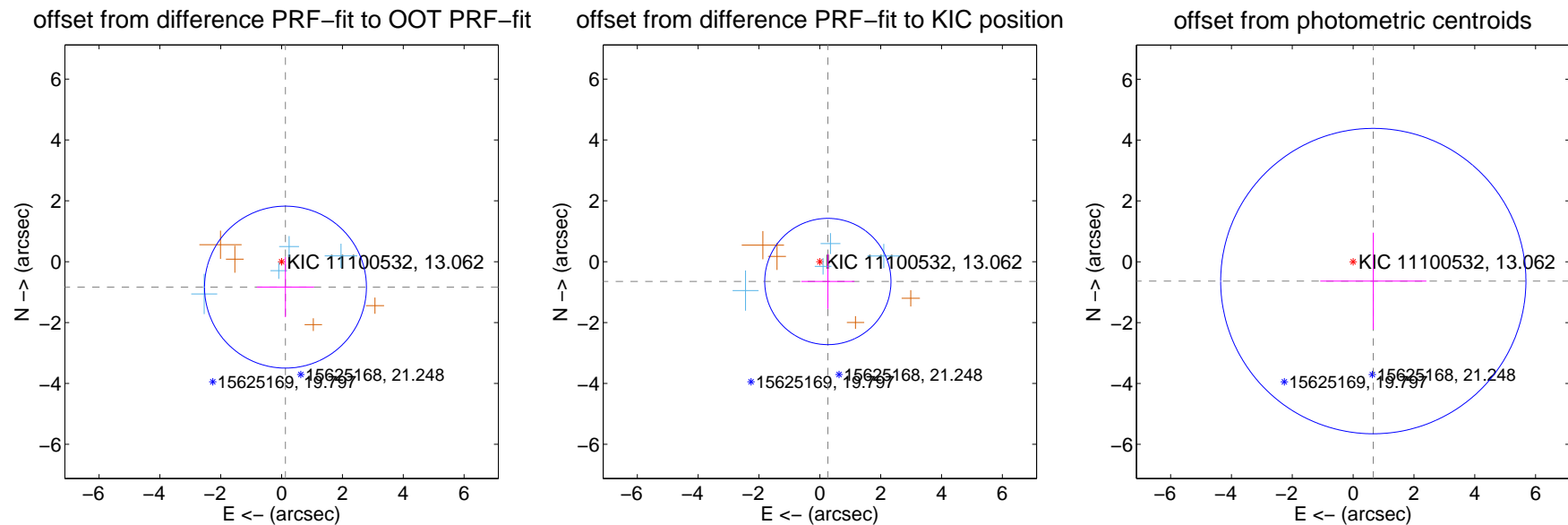
DV Centroid Data

Supplemental centroid analysis for 011100532-03. Kepler magnitude: 13.06. Transit SNR 5.11

There are 4 quarters with good PRF difference image offsets

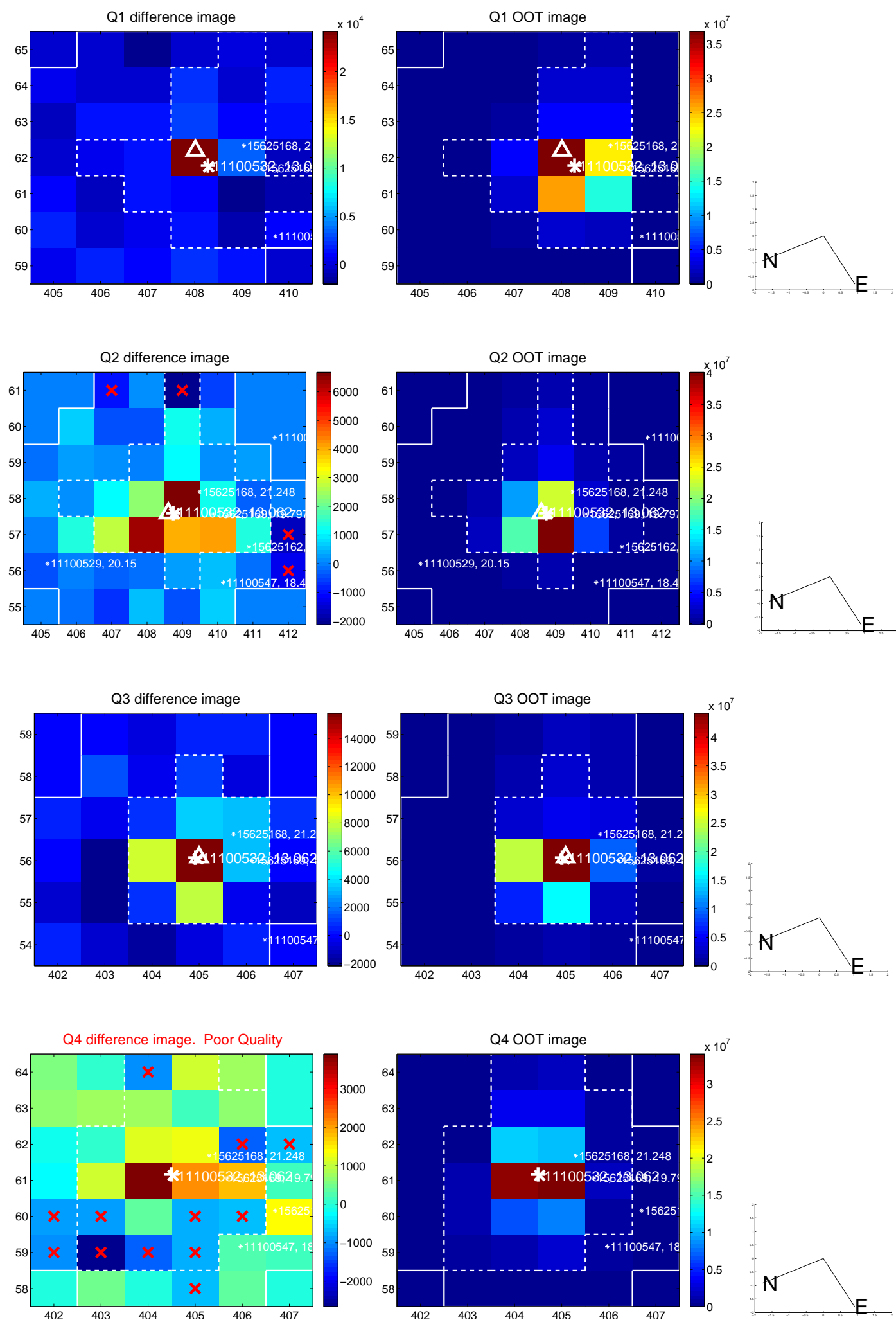
The direct PRF centroid is offset from the target star catalog position by about 0.26 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.845 ± 0.887	0.95	-0.128 ± 0.938	-0.836 ± 0.987
PRF-fit source offset from KIC position	0.702 ± 0.692	1.02	-0.263 ± 0.873	-0.651 ± 0.900
photometric centroid source offset	0.92 ± 1.67	0.55	-0.66 ± 1.74	-0.63 ± 1.59

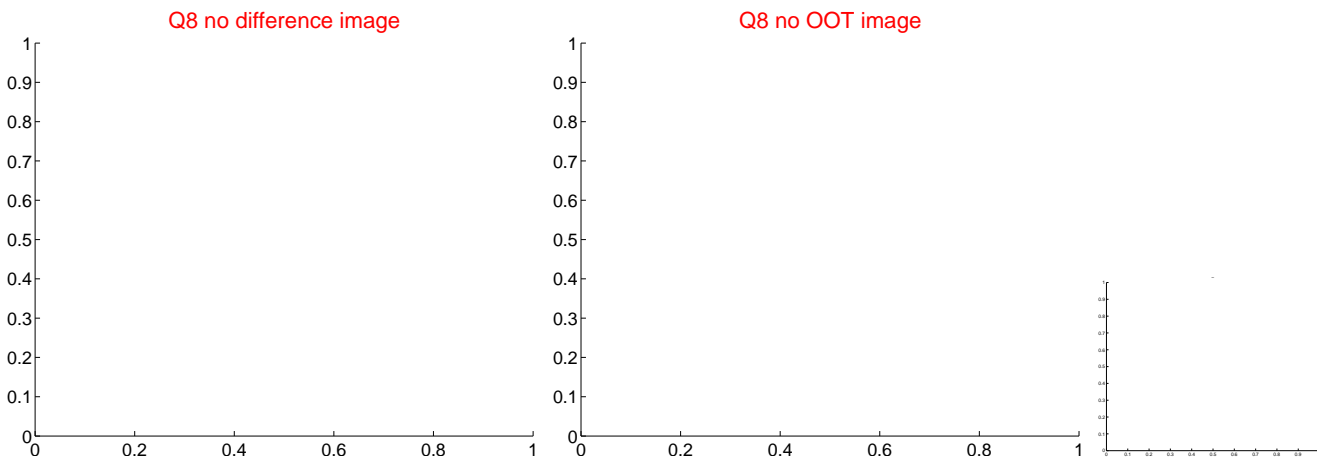
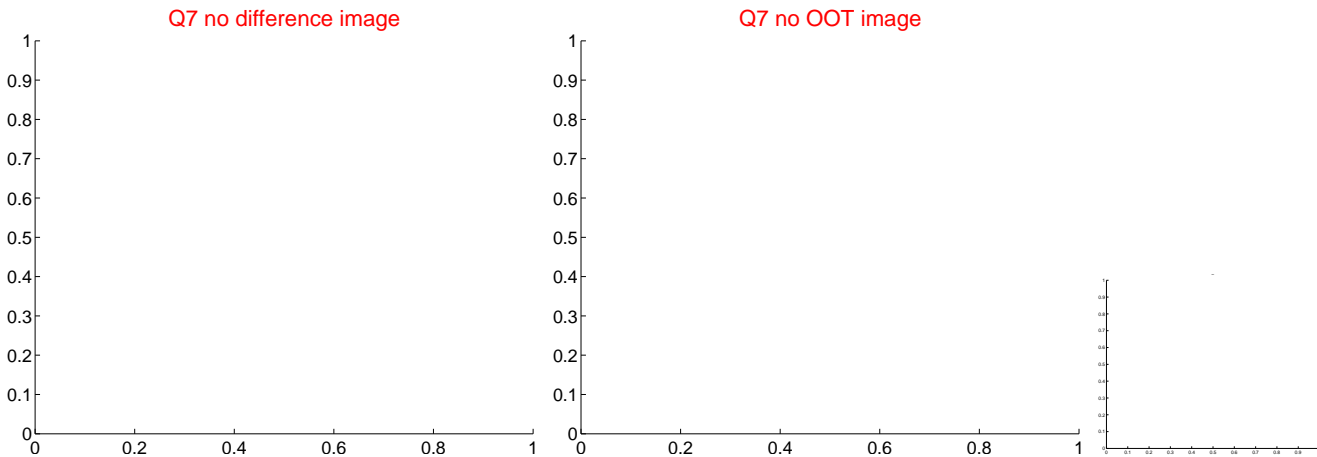
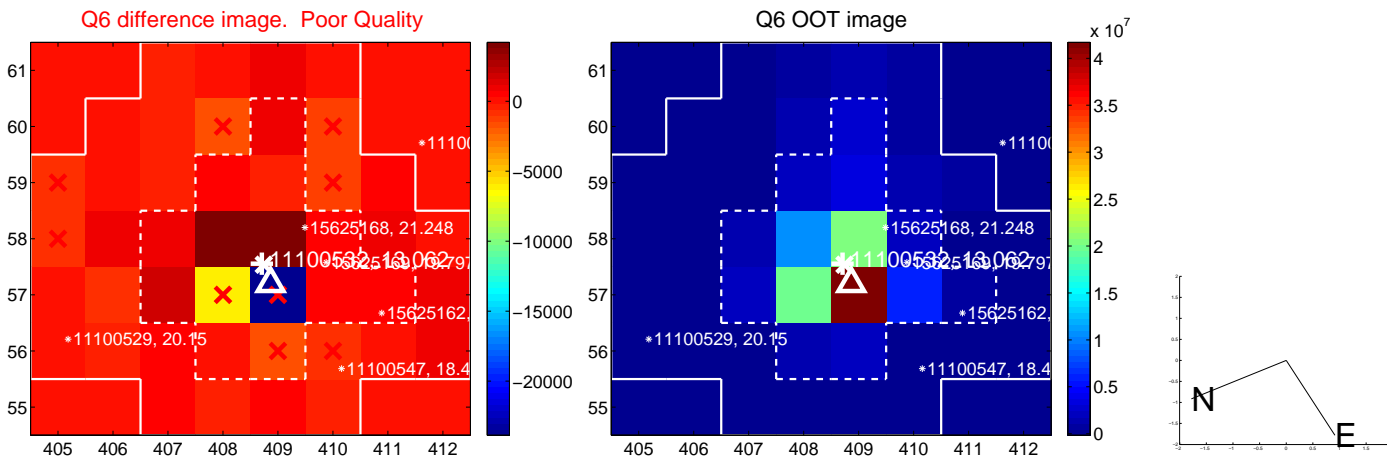
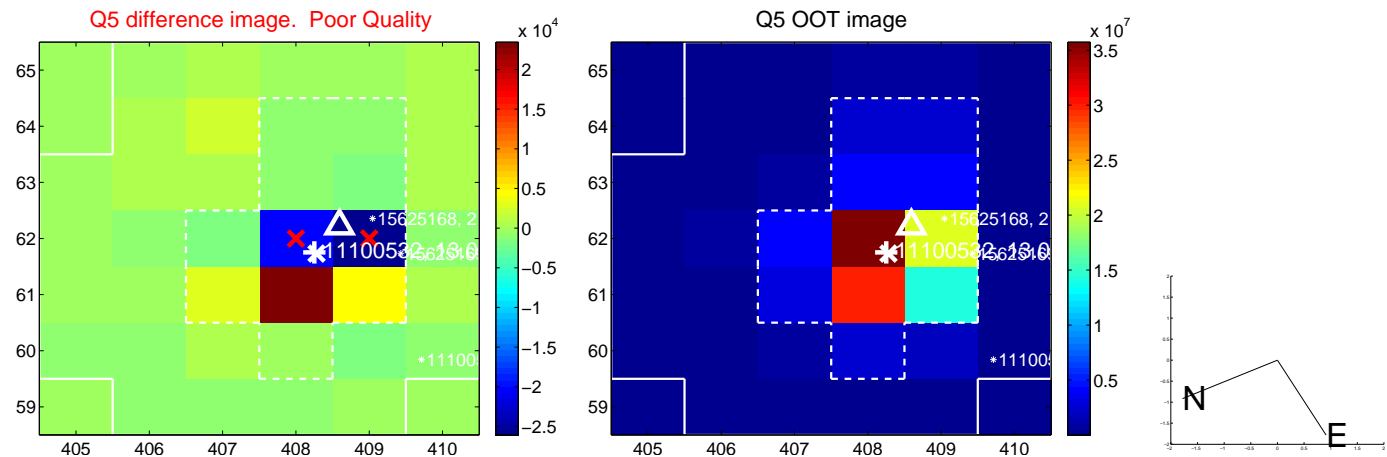


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets**; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

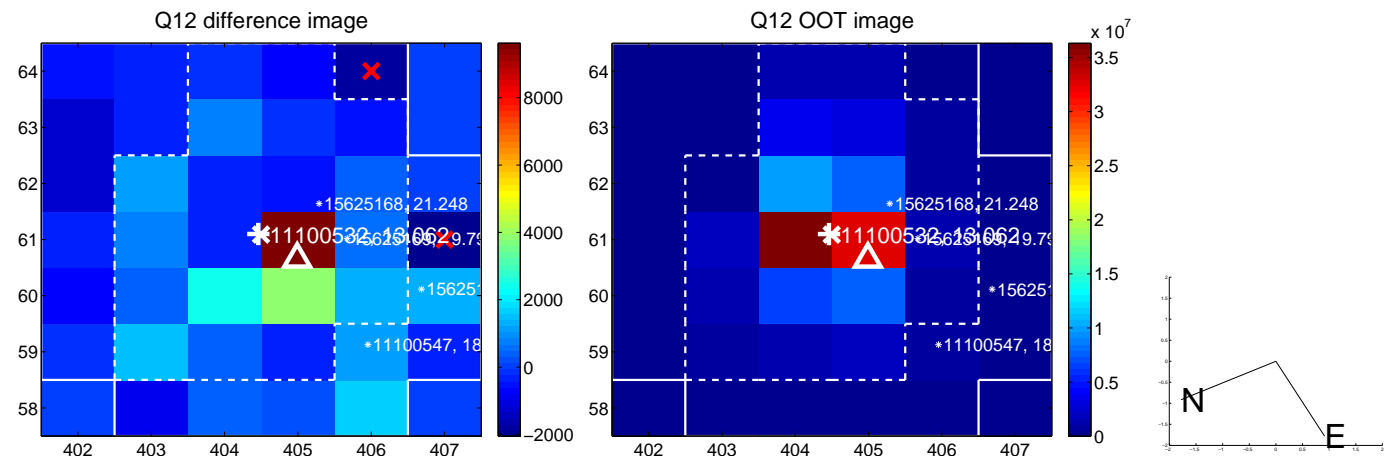
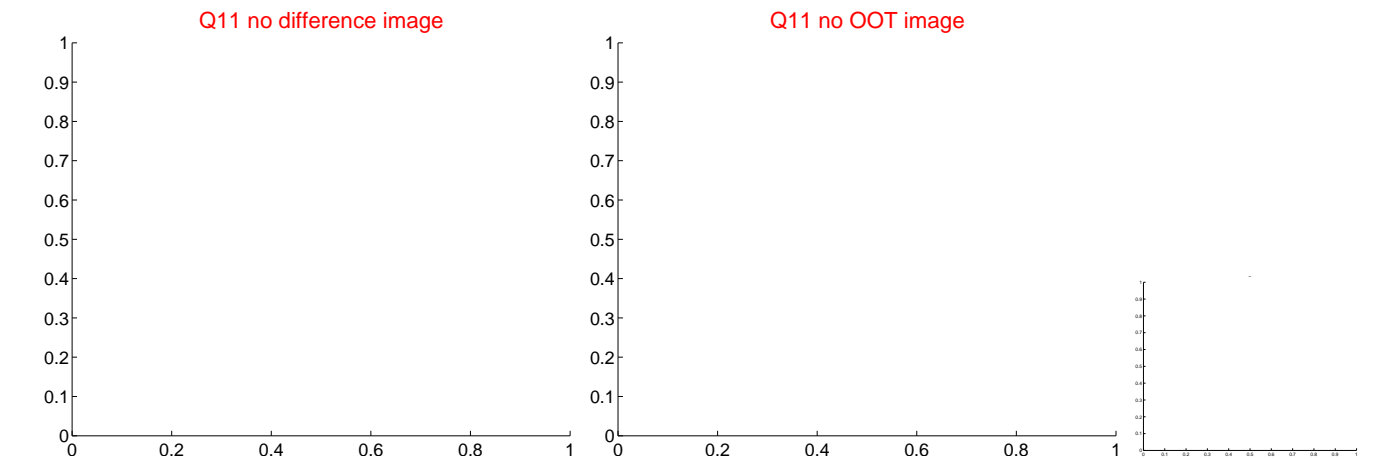
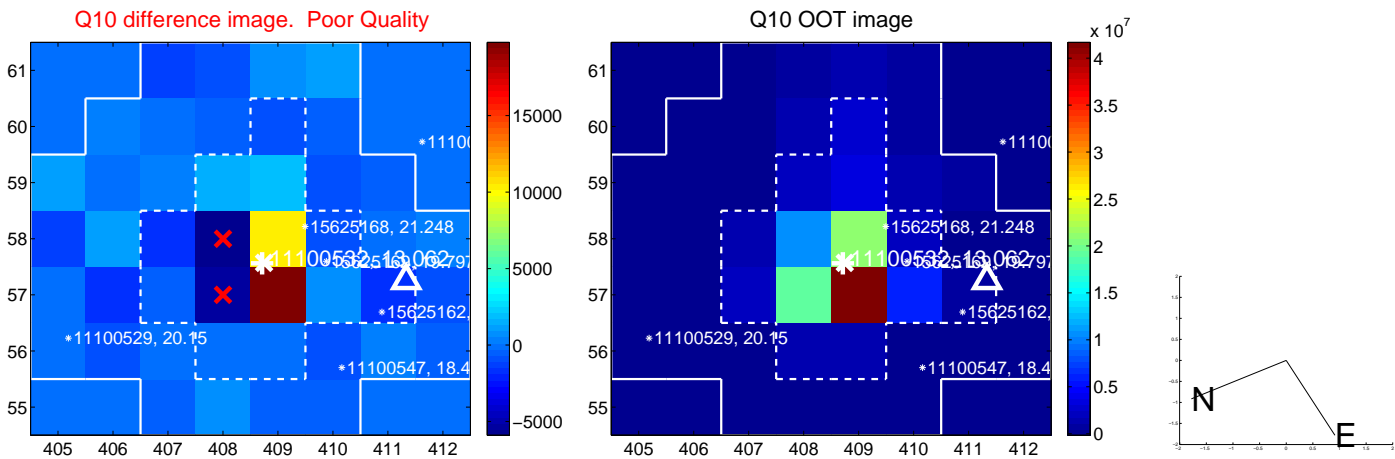
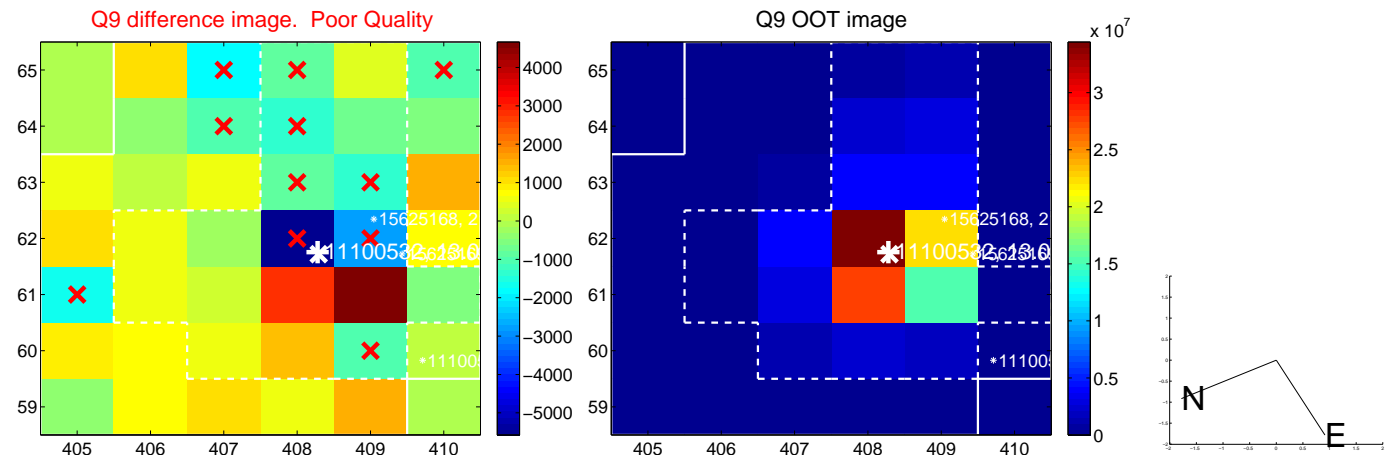
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



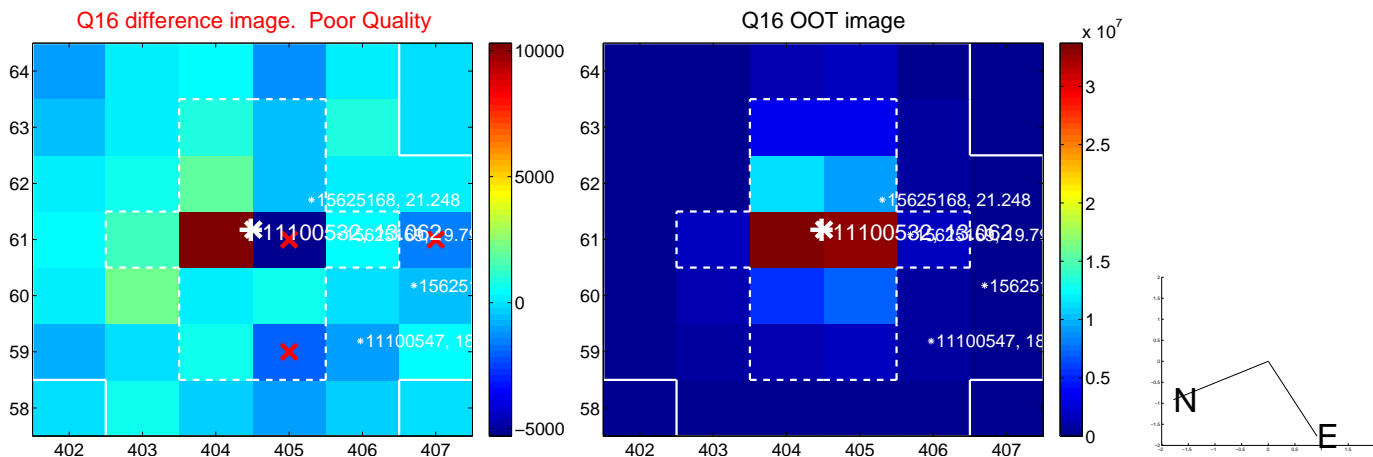
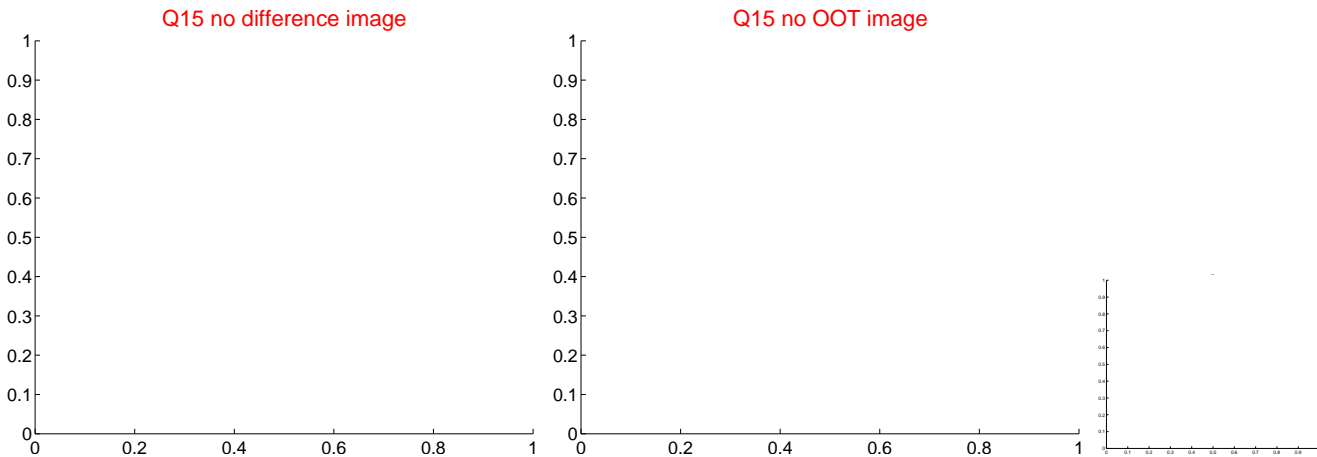
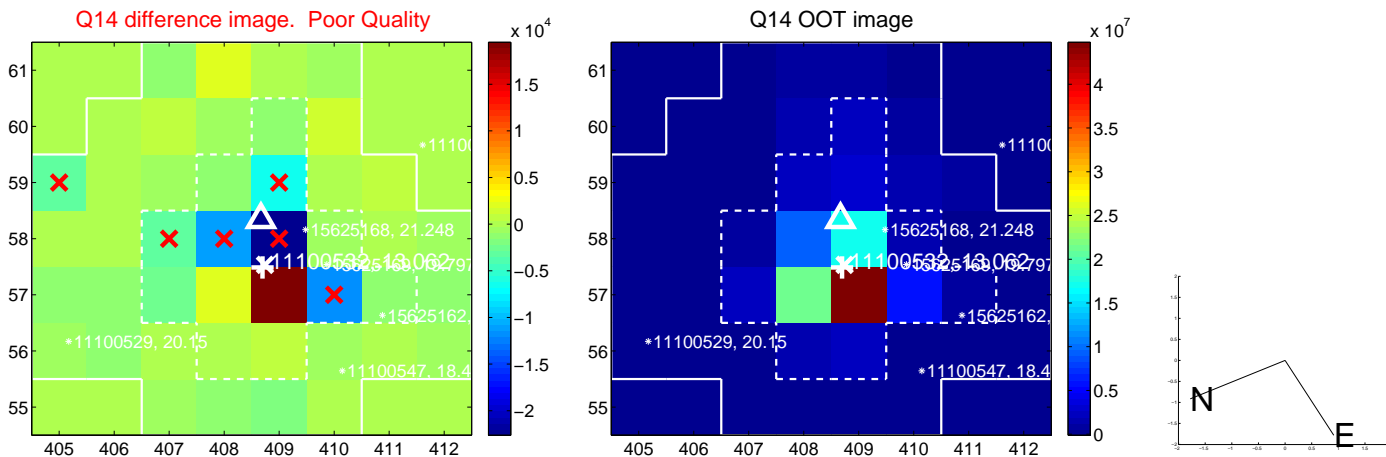
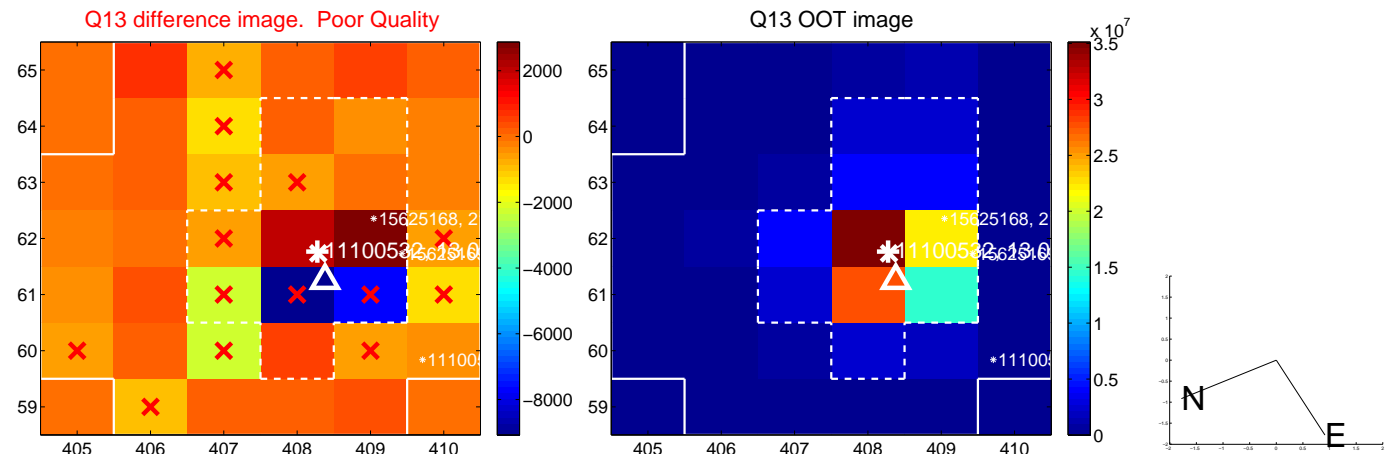
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



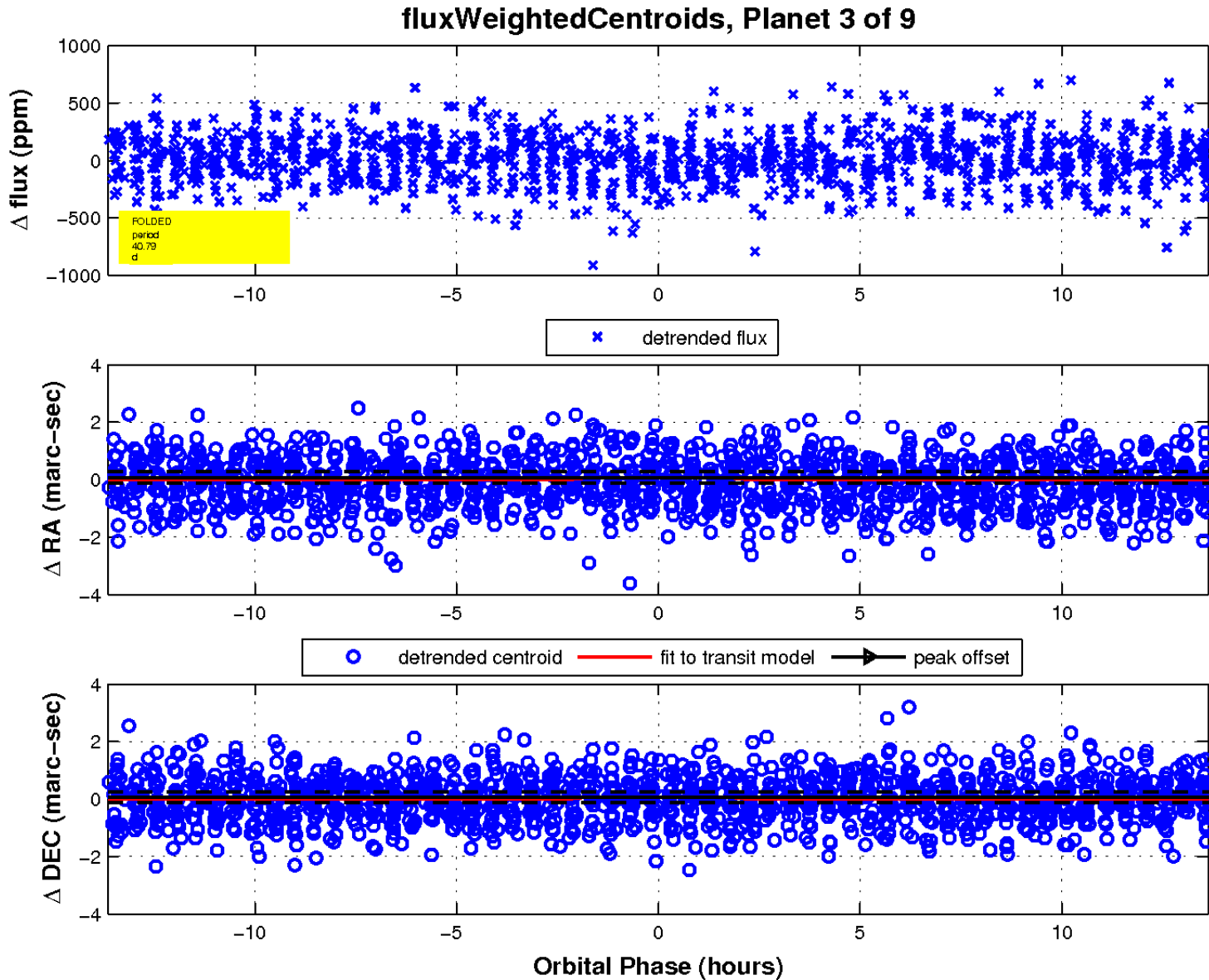
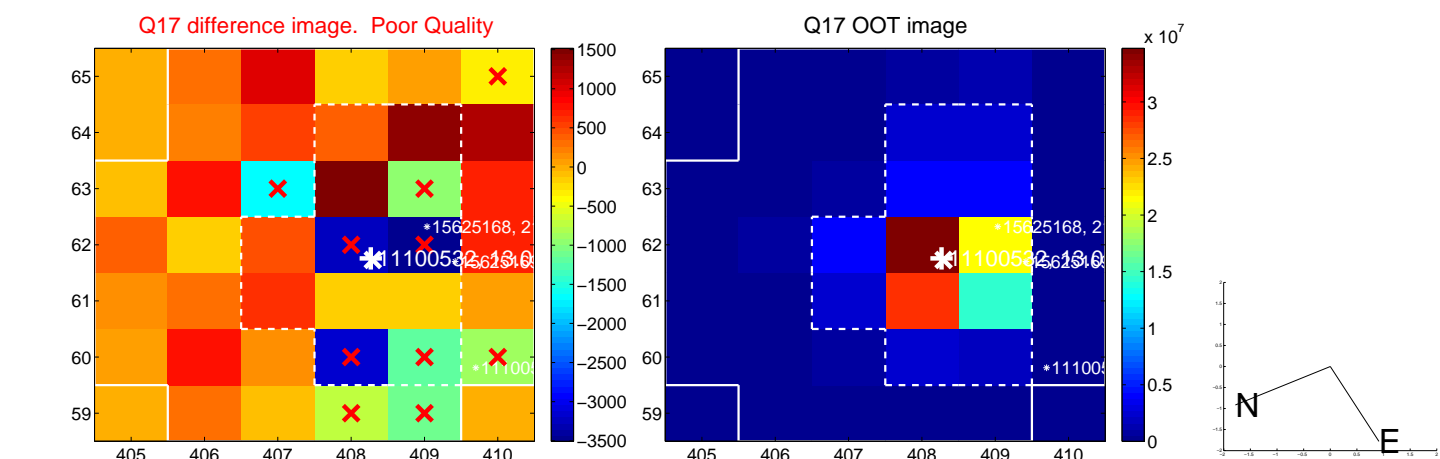
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

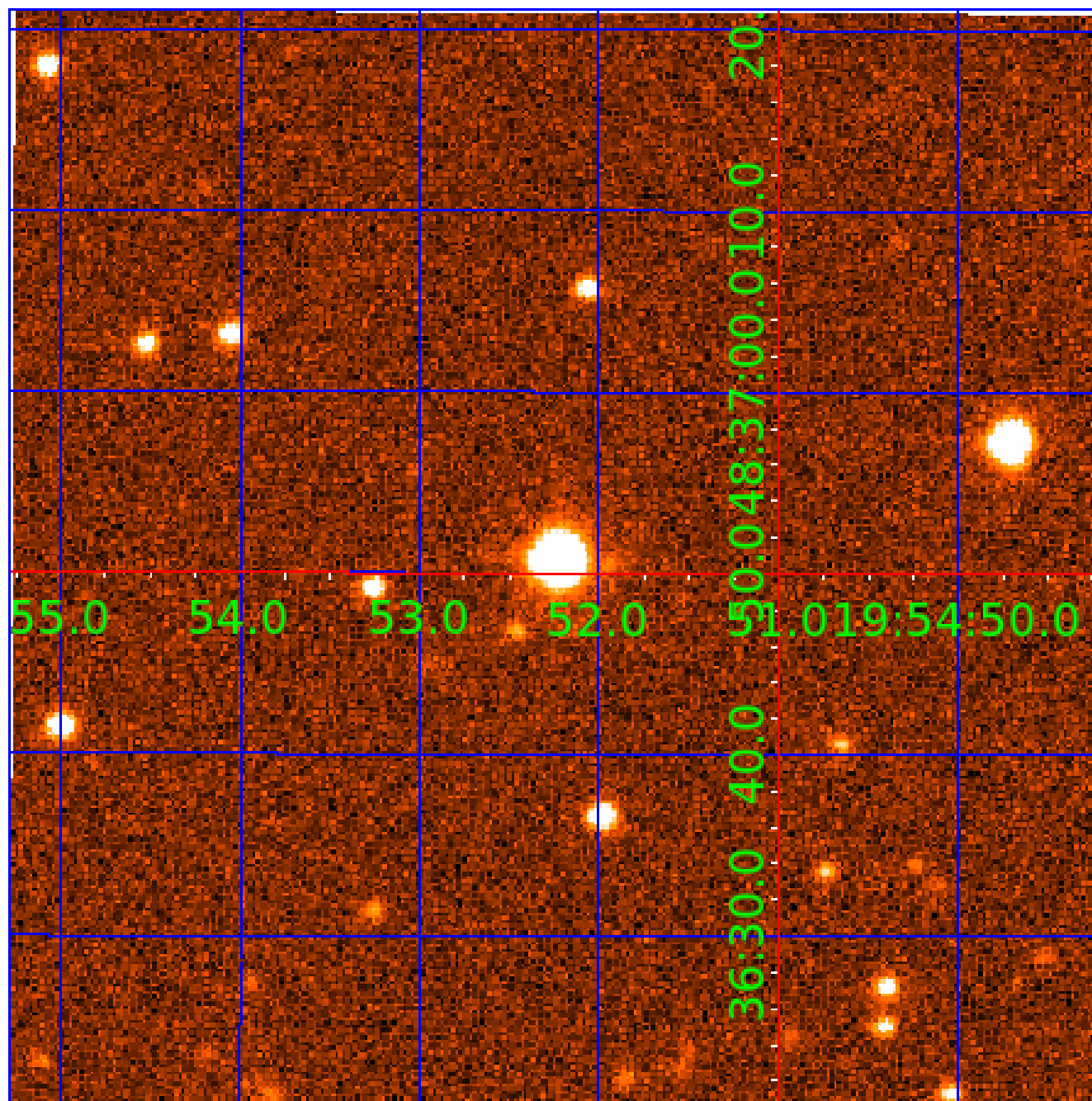


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 011100532

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})
011100532-01	OBS	No	0.743985	131.987531	35.9	1.383	9.7	9.2	2.41	7575	1.69	45700.86
011100532-02	OBS	No	0.949443	132.488671	21.6	5.846	8.6	6.8	2.41	7575	1.13	33015.51
011100532-03	OBS	No	40.787800	151.972423	116.5	4.550	10.1	5.1	2.41	7575	3.18	219.43
011100532-04	OBS	No	44.858115	149.422270	213.7	4.493	8.7	8.0	2.41	7575	4.20	193.30
011100532-05	OBS	No	69.928123	175.645448	354.3	2.513	9.2	9.2	2.41	7575	5.18	106.94
011100532-06	OBS	No	45.311601	144.582448	220.4	5.021	8.6	7.6	2.41	7575	4.13	190.72
011100532-07	OBS	No	32.325793	159.899688	223.7	4.350	8.1	7.8	2.41	7575	3.97	299.19
011100532-08	OBS	No	23.155985	146.735798	378.5	1.755	8.4	9.2	2.41	7575	4.86	466.79
011100532-09	OBS	No	42.033118	164.656835	317.5	2.500	8.1	-1.0	2.41	7575	4.33	210.81

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
011100532-01	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT
011100532-02	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT
011100532-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT
011100532-04	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT
011100532-05	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT
011100532-06	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT
011100532-07	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT
011100532-08	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—MOD_NONUNIQ_DV
011100532-09	OBS	FP	0.00	1	0	1	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_NOFITS—HALO_GHOST

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

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

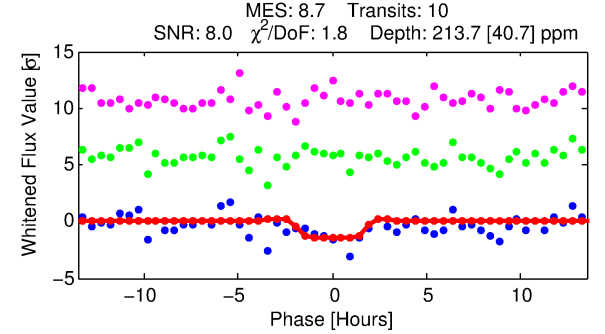
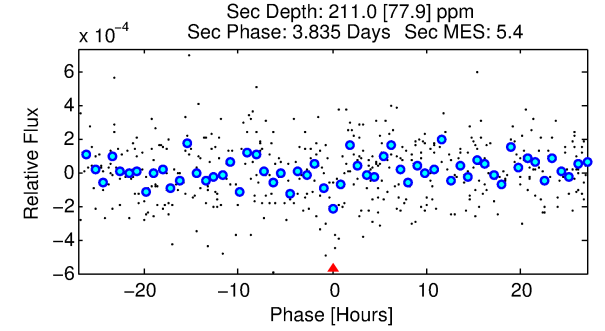
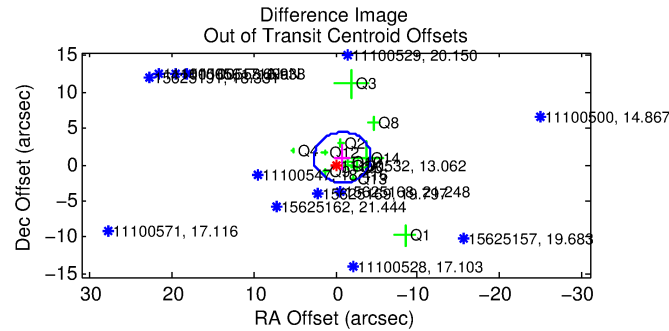
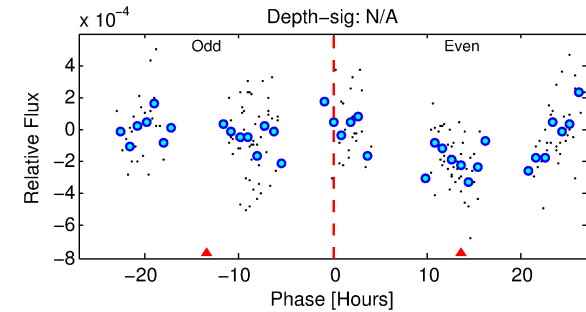
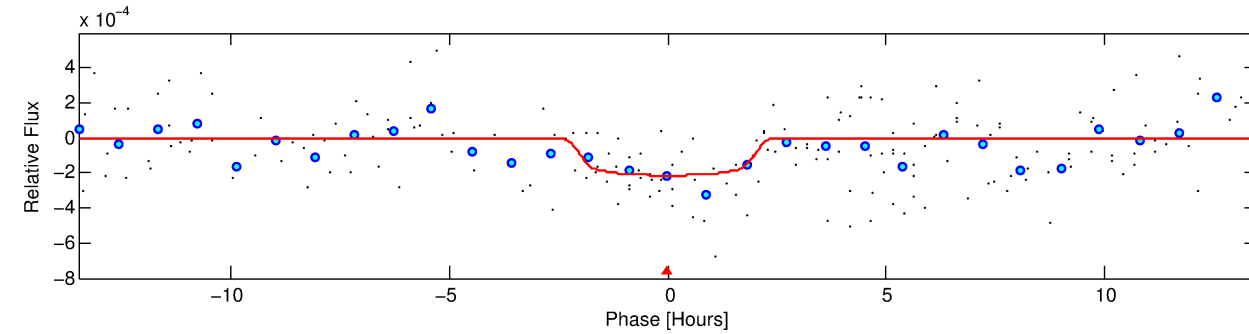
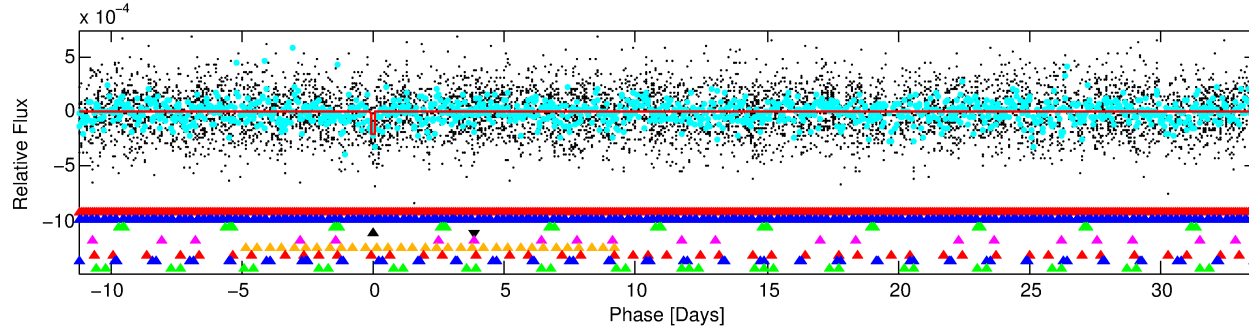
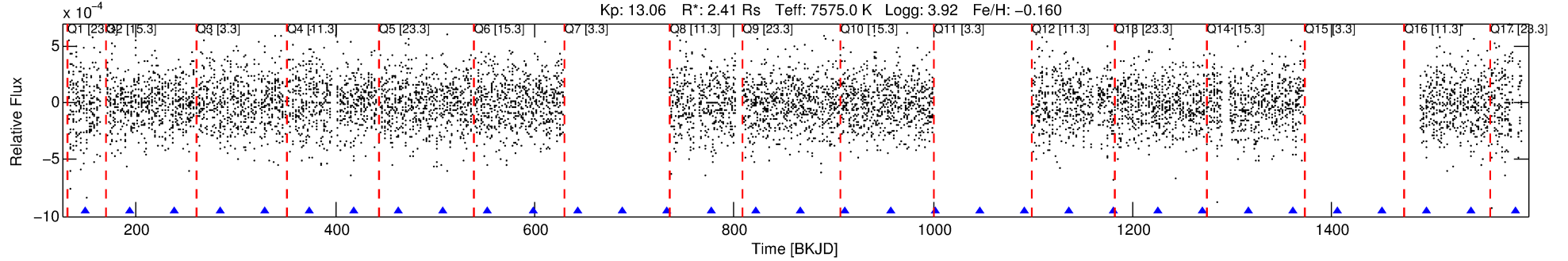
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 011100532-04

No Significant Match Found

DV One-Page Summary

KIC: 11100532 Candidate: 4 of 9 Period: 44.858 d



DV Fit Results:

Period = 44.85811 [0.00086] d
Epoch = 149.4223 [0.0188] BKJD
Rp/R* = 0.0160 [0.0068]
a/R* = 32.52 [80.77]
b = 0.92 [0.41]
Seff = 193.30 [57.98]
Teq = 951 [71] K
Rp = 4.20 [2.03] Re
a = 0.2980 [0.0582] AU
Ag = 583.61 [571.78] [1.02σ]
Teffp = 7225 [1688] K [3.71σ]

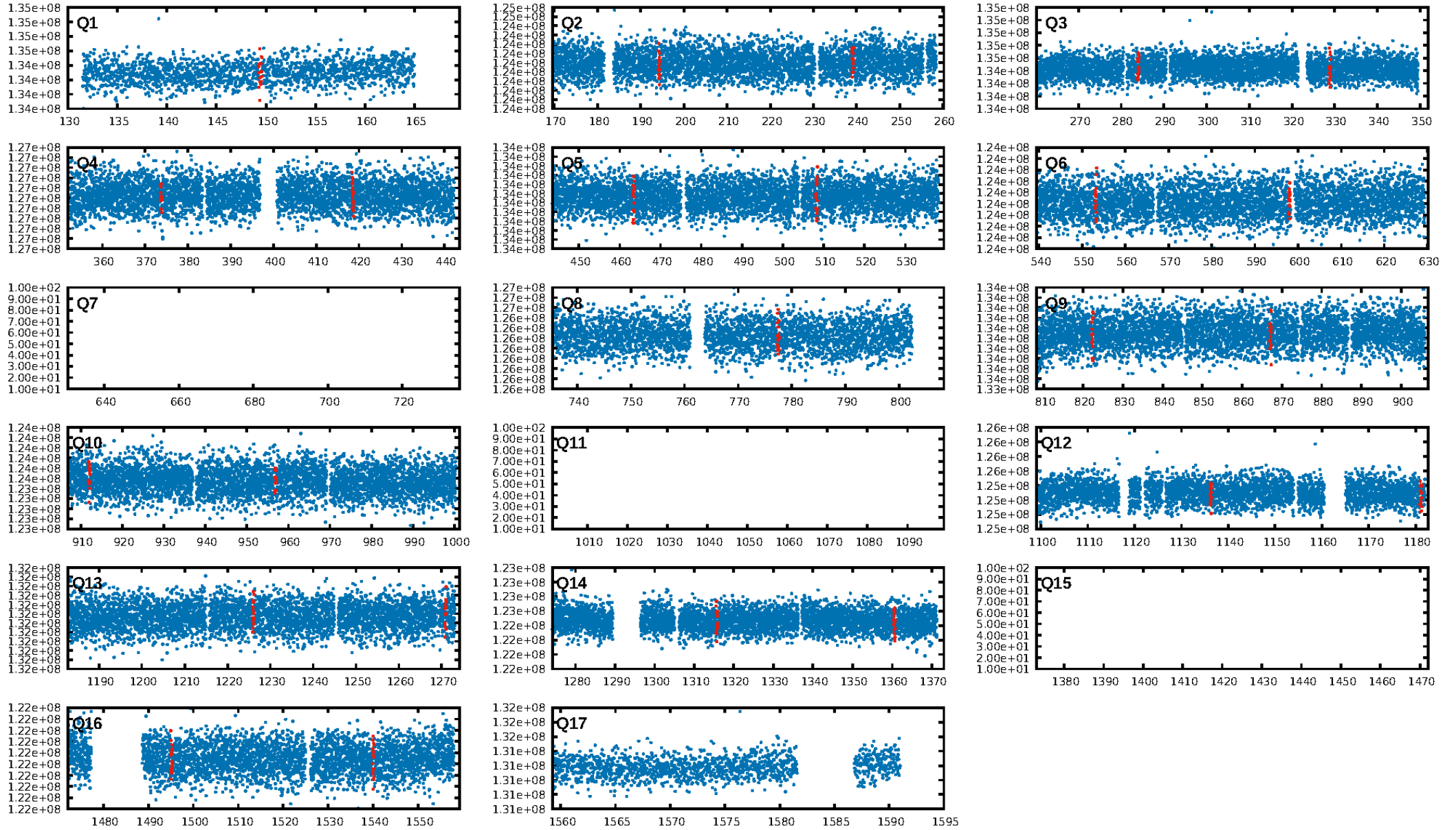
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [13.19σ]
LongPeriod-sig: 89.4% [1.62σ]
ModelChiSquare2-sig: 13.0%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [10/10]
GhostDiagnostic-chr: -0.7827
Centroid-sig: 53.8%
Centroid-so: 0.554 arcsec [0.63σ]
OotOffset-rm: 1.286 arcsec [1.11σ]
KicOffset-rm: 1.430 arcsec [1.68σ]
OotOffset-st: 4/1/3/4 [12]
KicOffset-st: 4/1/3/4 [12]
DiffImageQuality-fgm: 0.33 [4/12]
DiffImageOverlap-fno: 0.00 [0/13]

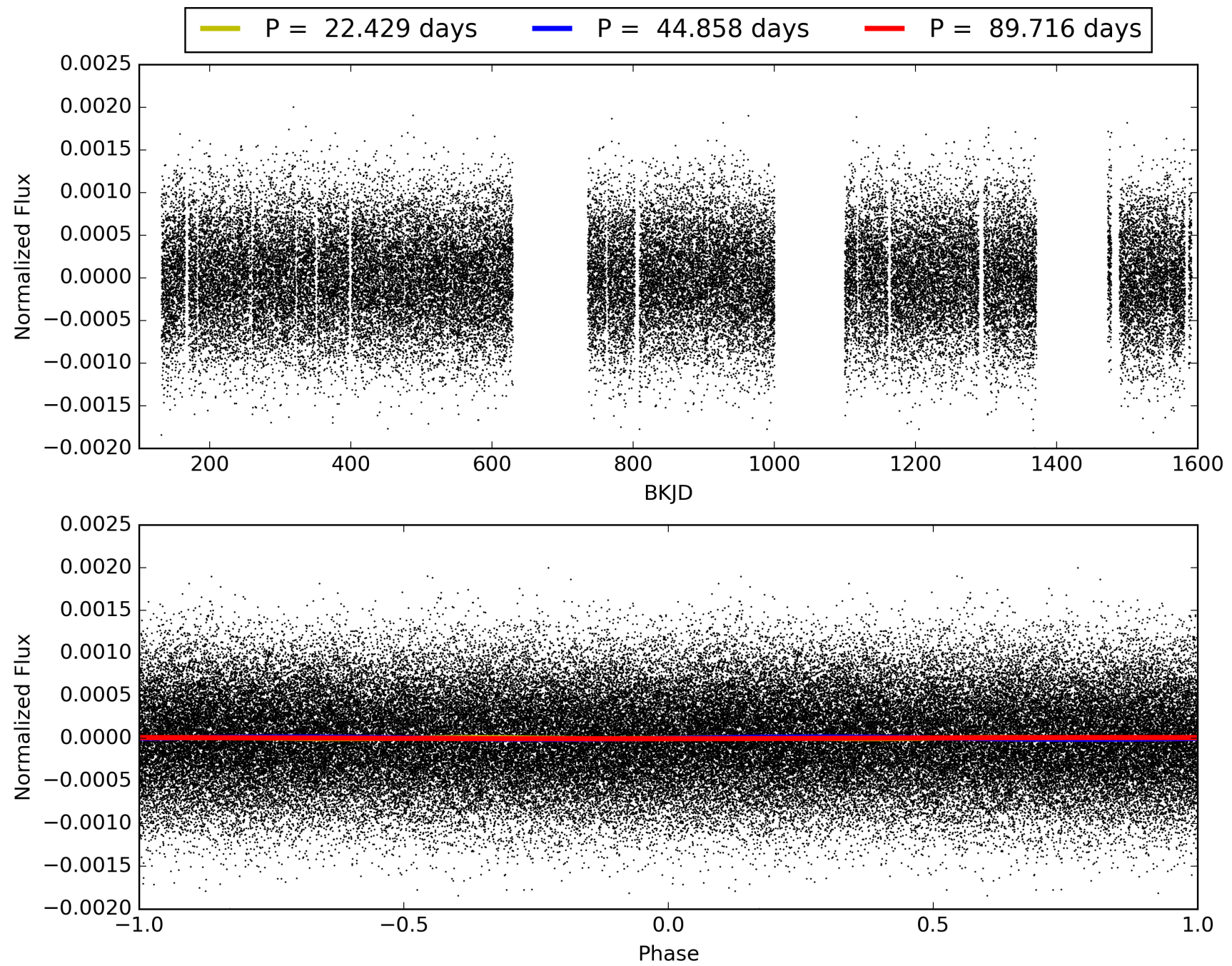
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 01-Feb-2016 10:50:28 Z

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

TCE 011100532-04, PDC Light Curves

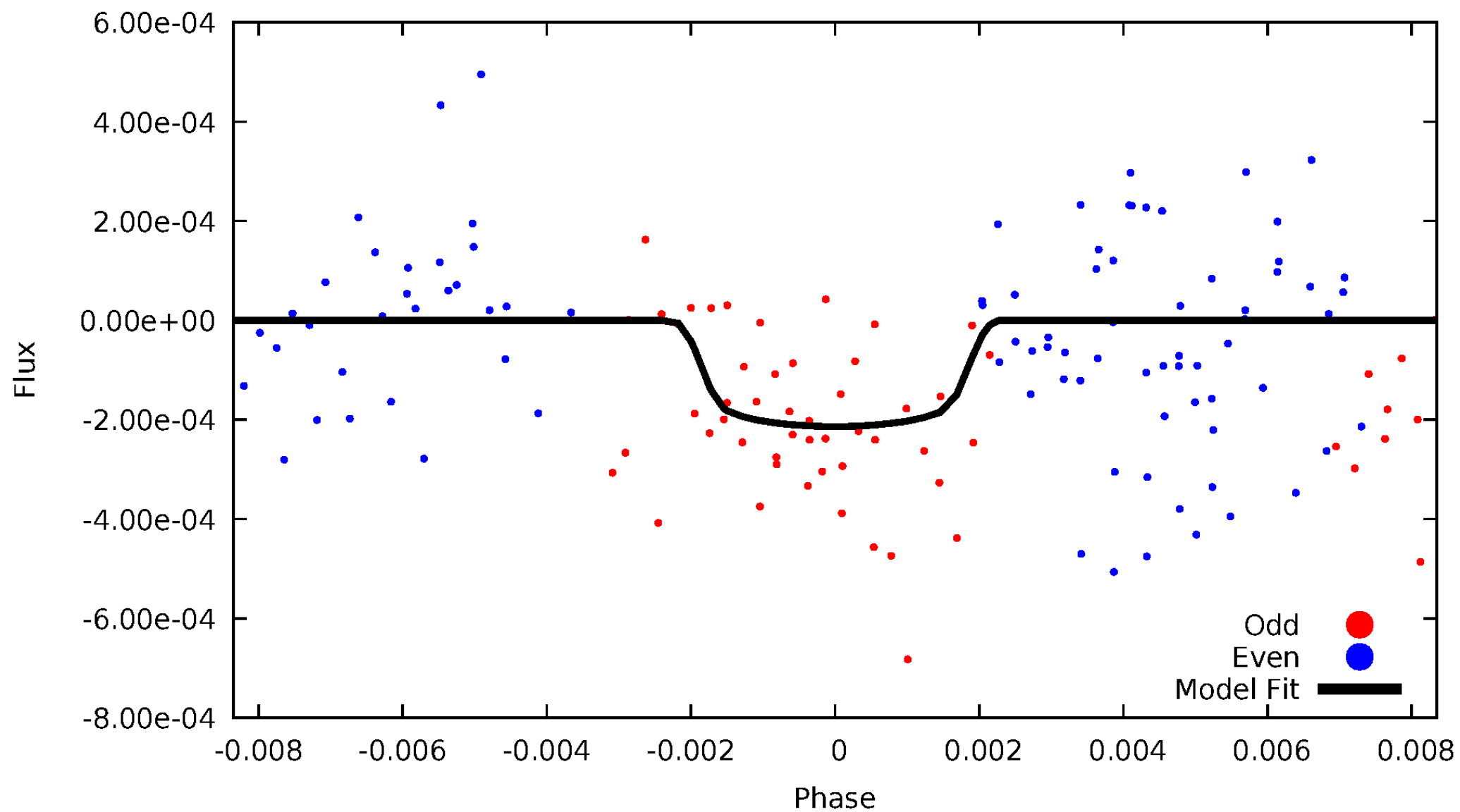


TCE 011100532-04



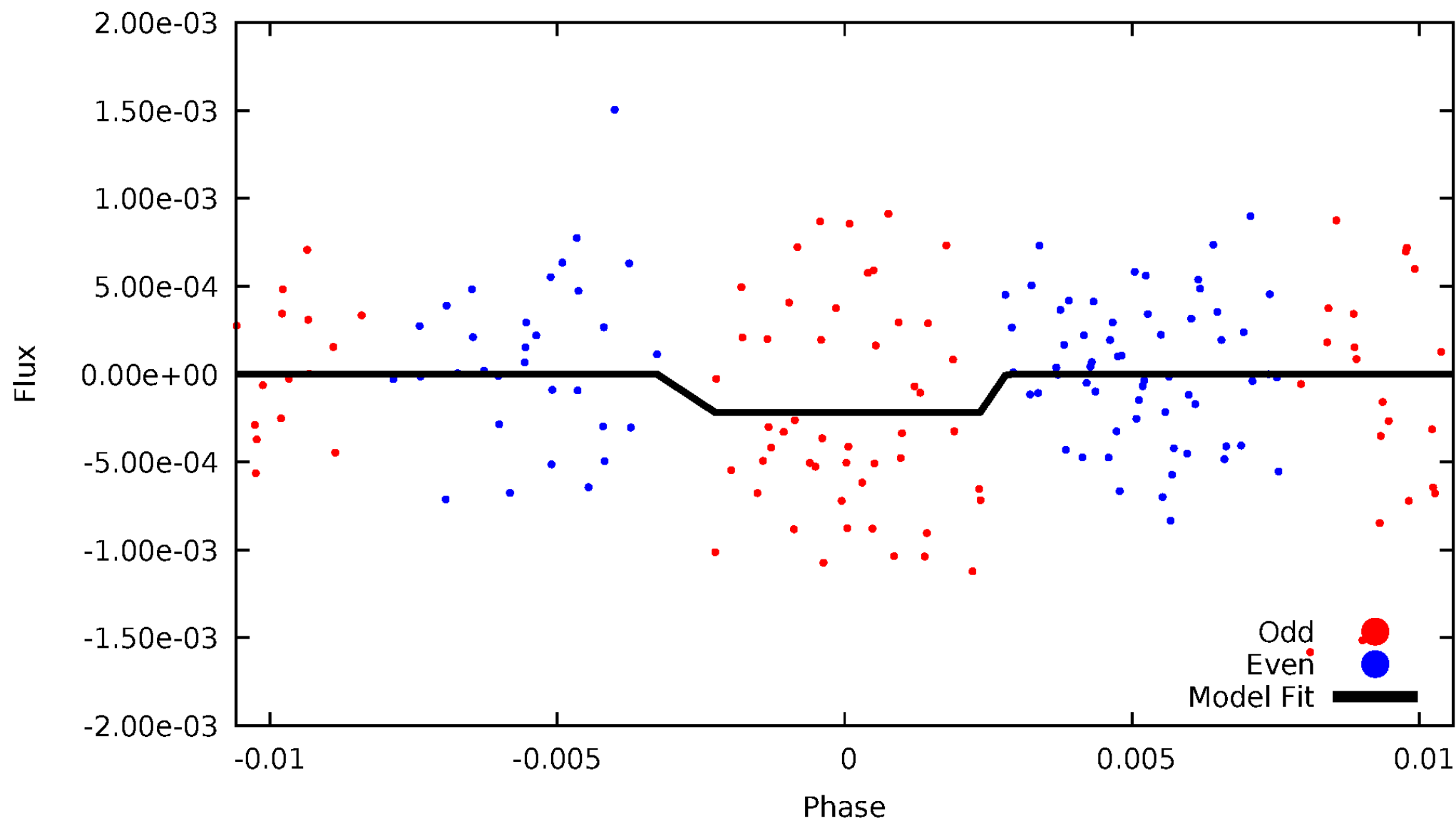
DV Odd/Even

TCE 011100532-04



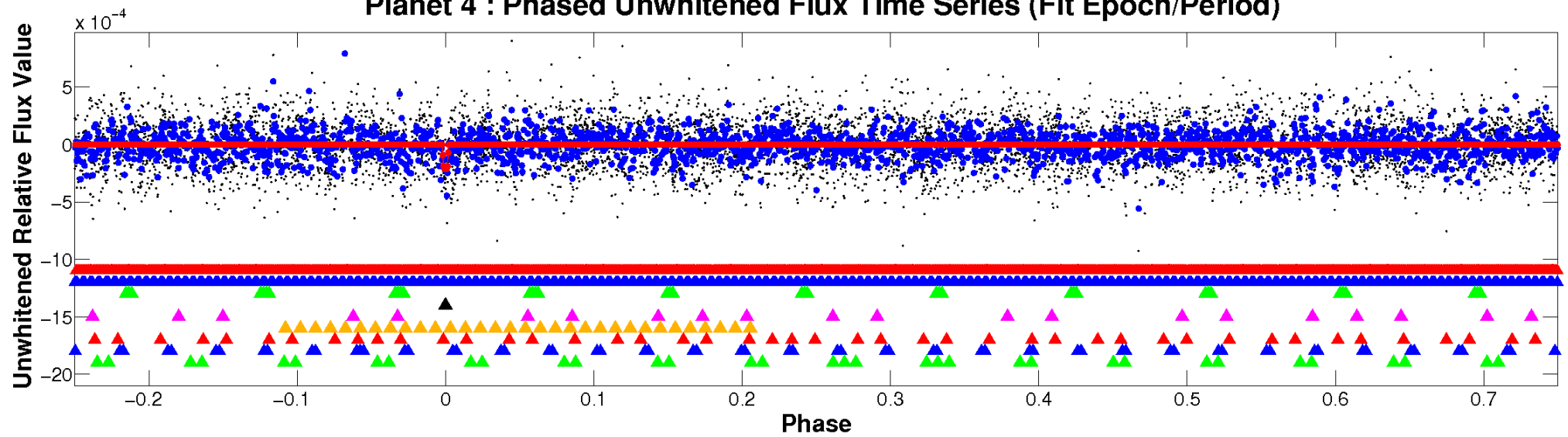
ALT Odd/Even

TCE 011100532-04

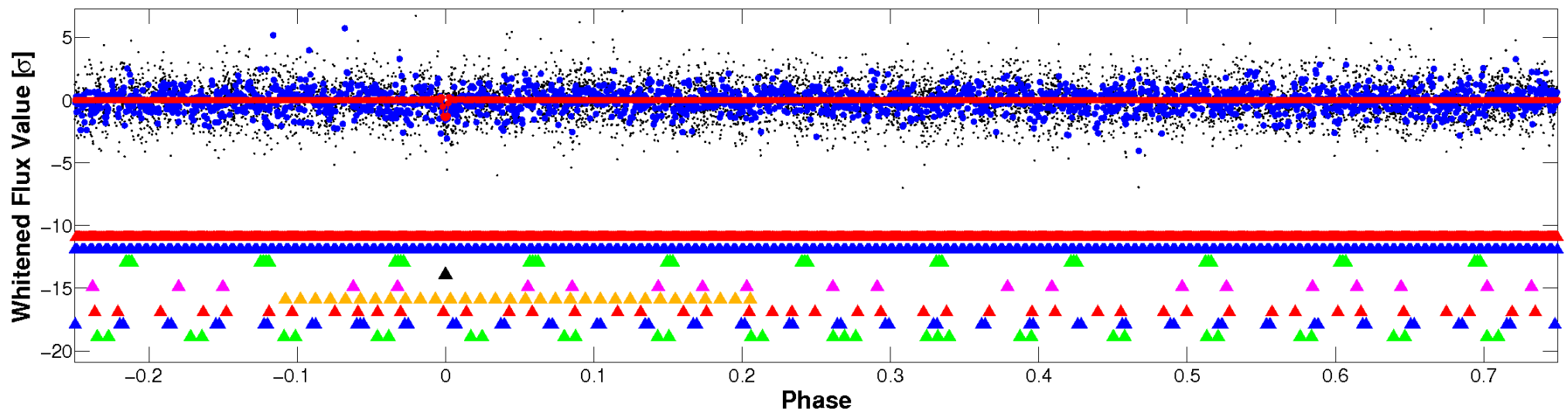


Non-Whitened Vs. Whitened Light Curve

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

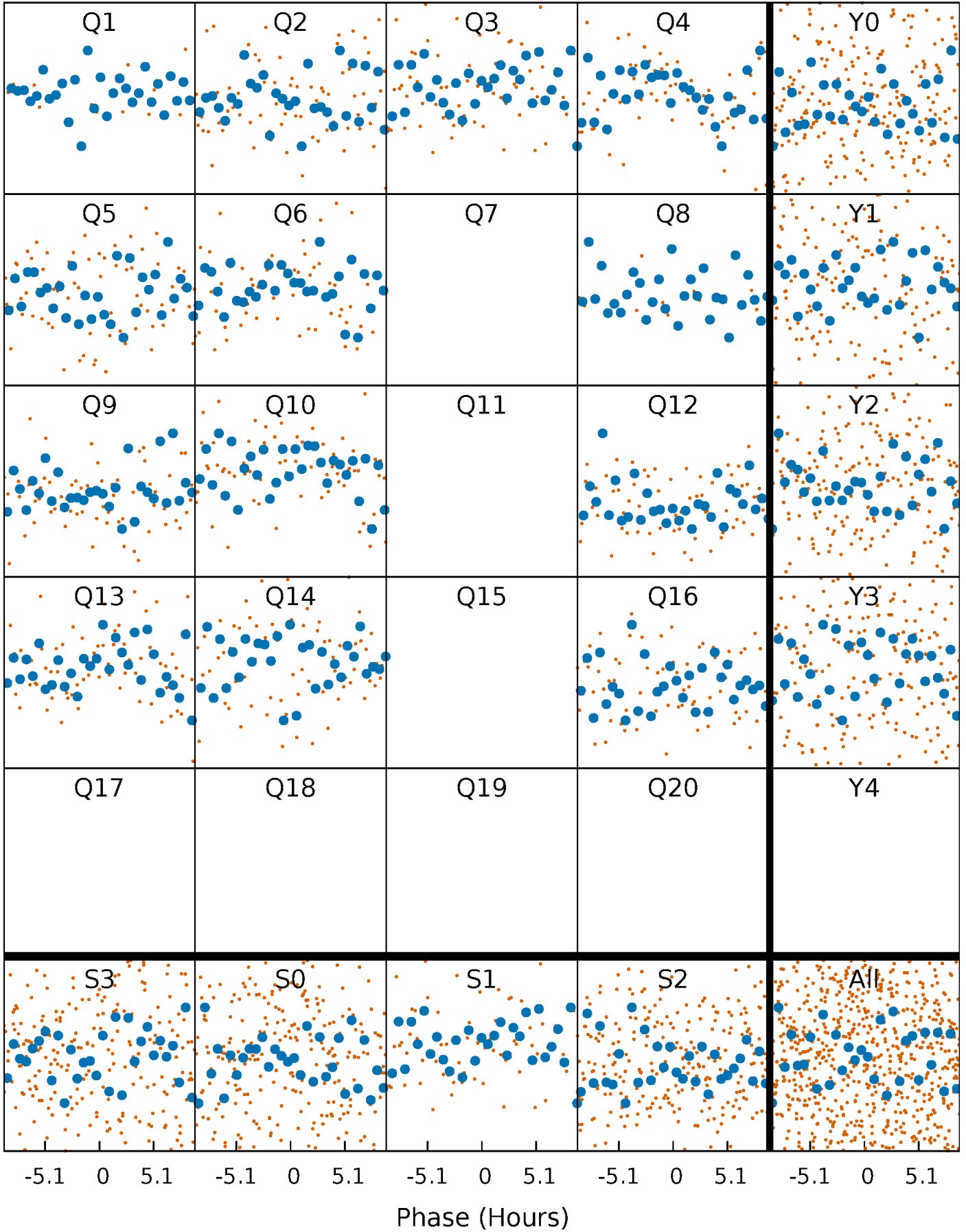


Planet 4 : Phased Whitened Flux Time Series (Fit Epoch/Period)



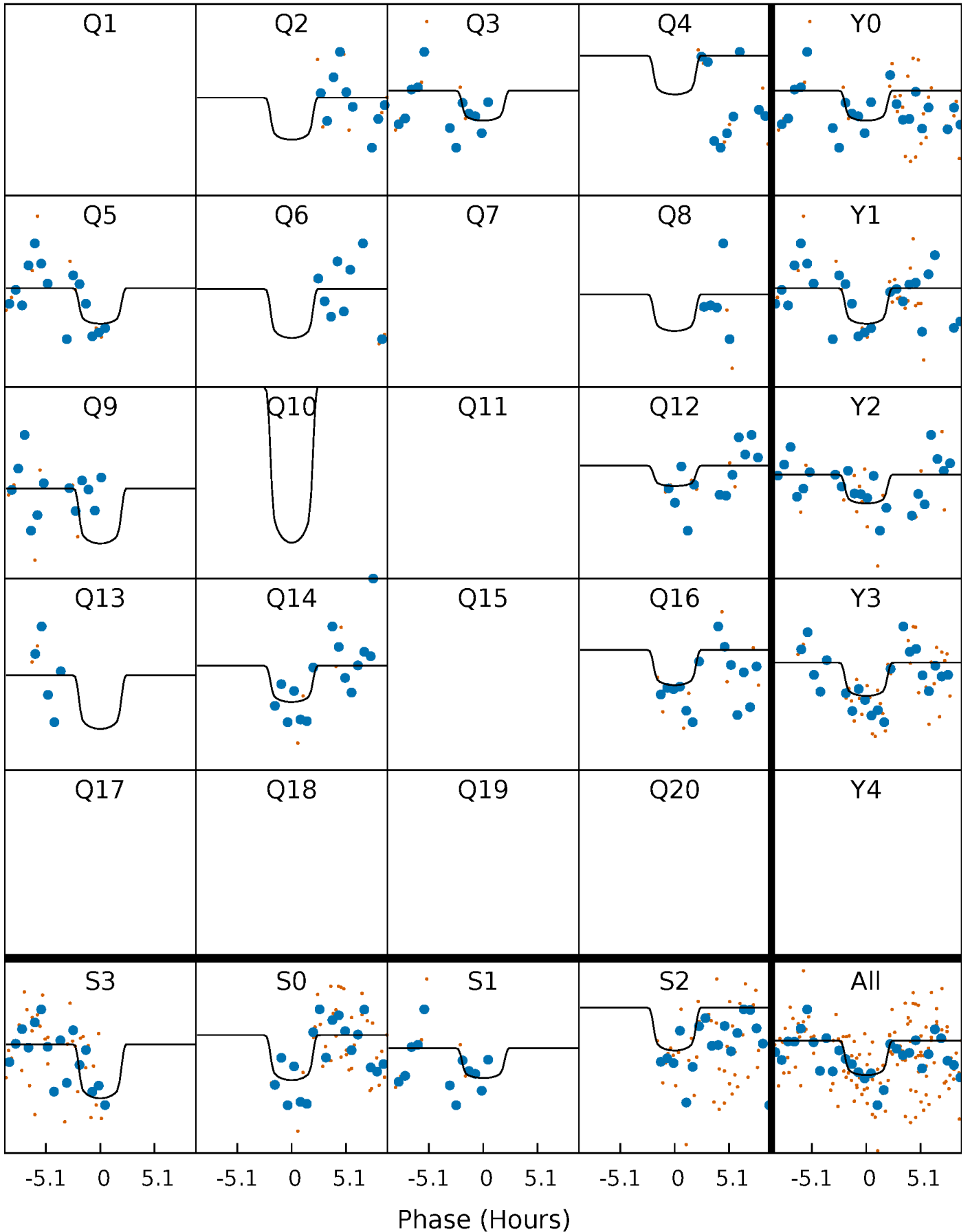
PDC Quarter-Phased Transit Curves

TCE 011100532-04 P= 44.858115 Days $T_0=149.422270$ (BKJD)



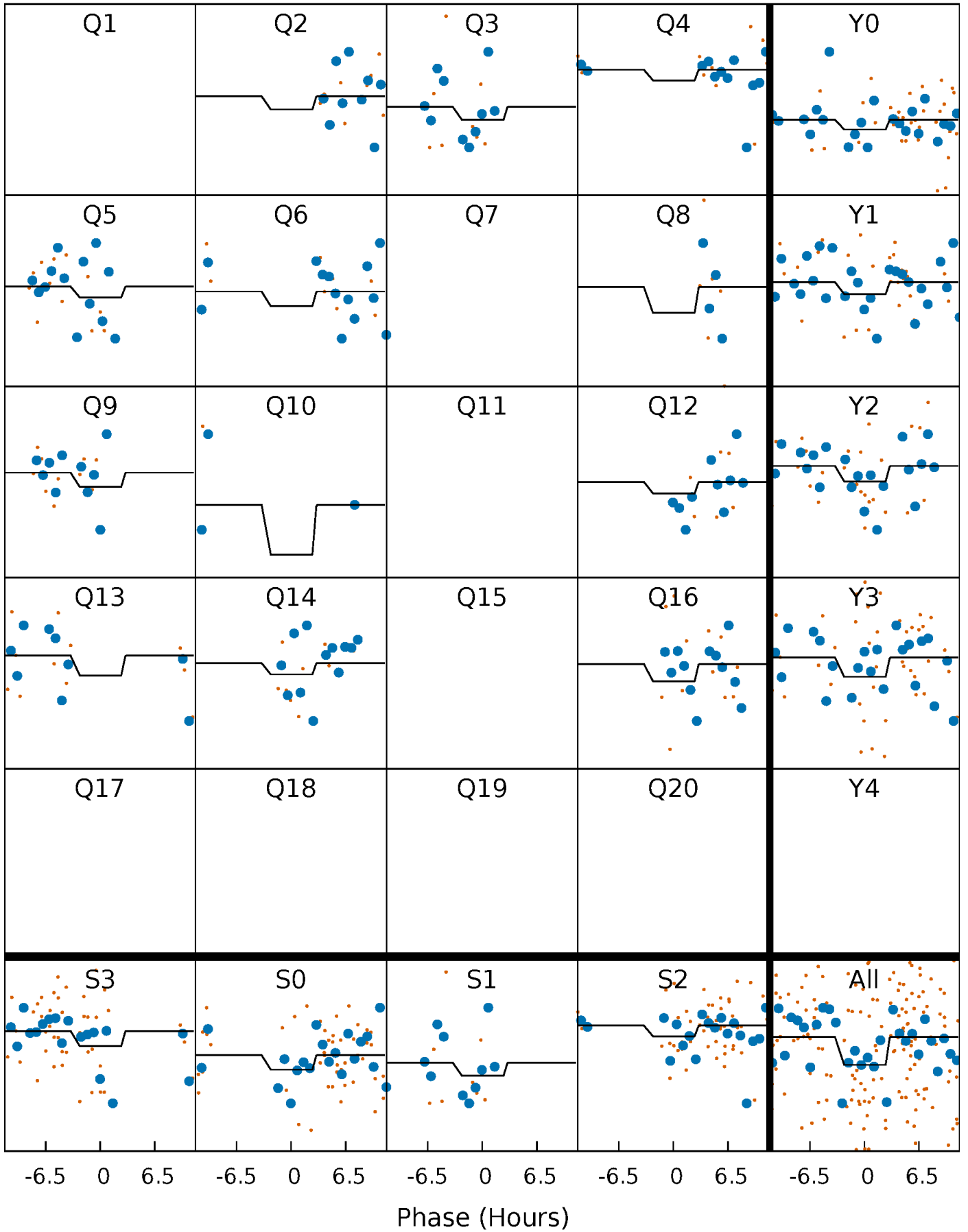
DV Quarter-Phased Transit Curves

TCE 011100532-04 P= 44.858115 Days $T_0=149.422270$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

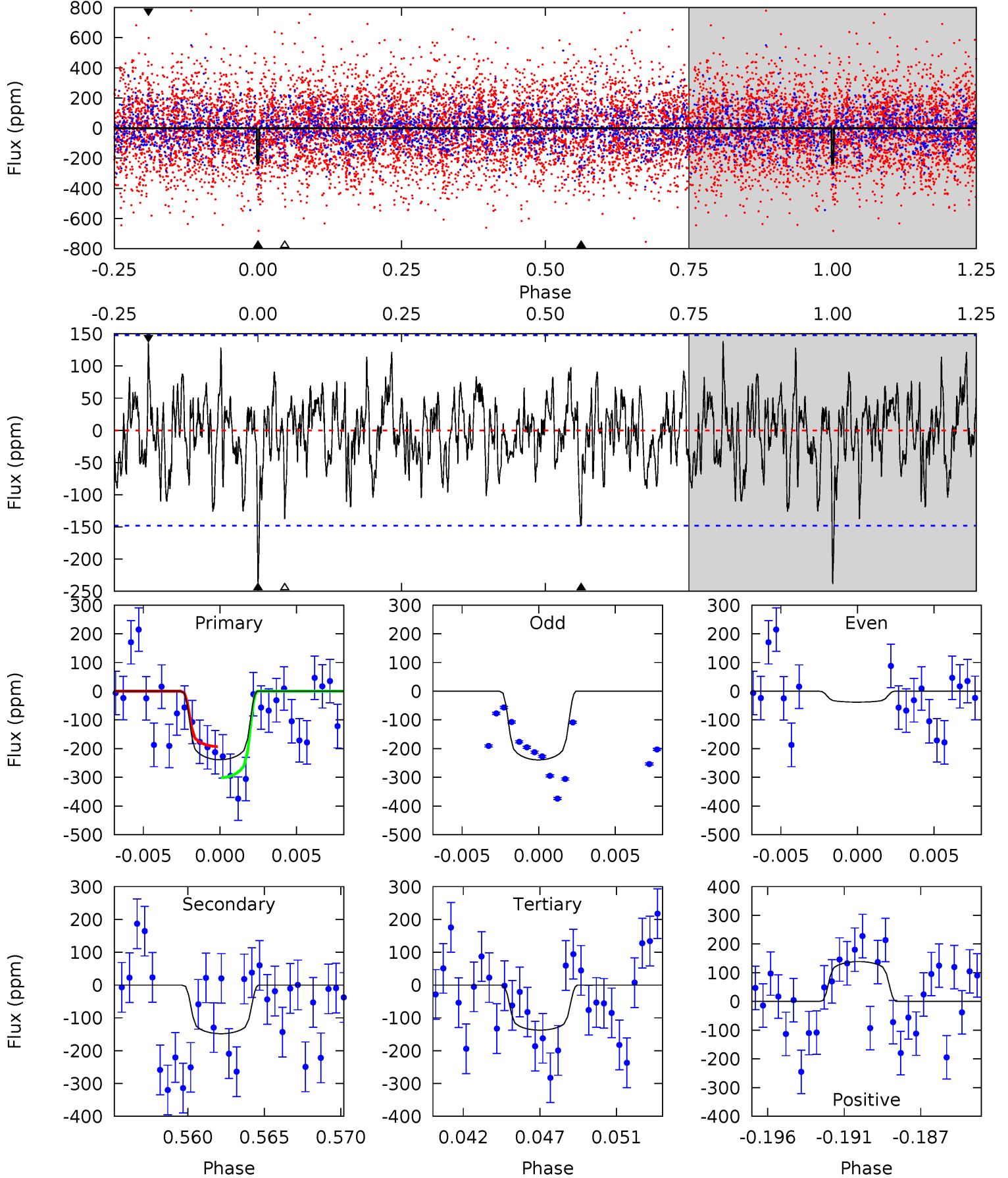
TCE 011100532-04 P= 44.859267 Days $T_0=149.376671$ (BKJD)



DV Model-Shift Uniqueness Test

011100532-04, P = 44.858115 Days, E = 104.564155 Days

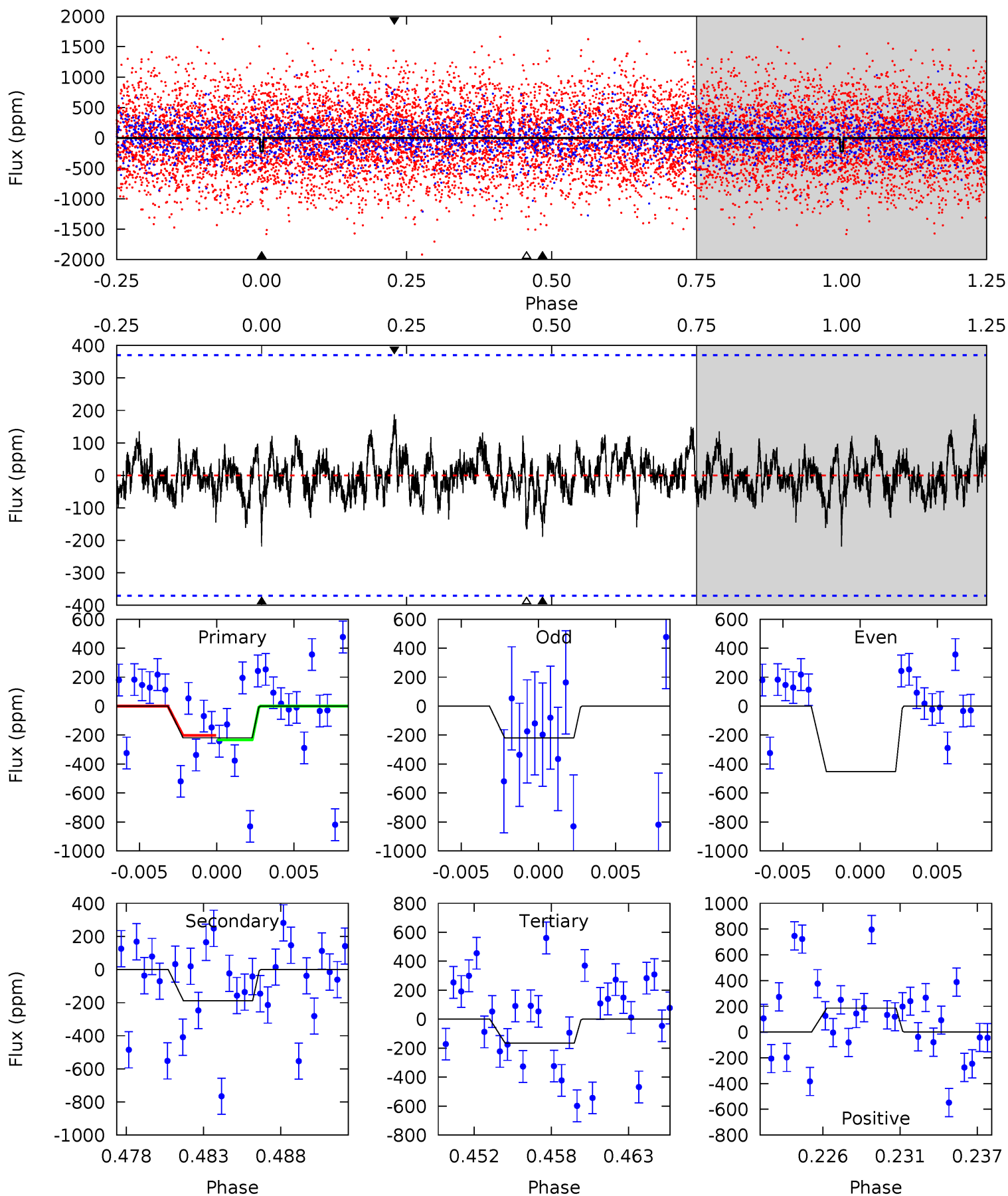
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
8.34	5.18	4.80	4.85	5.17	2.83	1.54	3.54	3.48	0.38	0.32	1.98	0.91	0.37	1.89



Alt Model-Shift Uniqueness Test

011100532-04, P = 44.859267 Days, E = 104.517404 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
3.04	2.63	2.29	2.59	5.15	2.80	0.70	0.75	0.46	0.34	0.04	0.46	1.02	0.46	0.21



Stellar Parameters For KIC 011100532

	$T_{\text{eff}} (K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M (M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	7575^{+83}_{-75}	$3.917^{+0.168}_{-0.112}$	$-0.160^{+0.150}_{-0.150}$	$2.412^{+0.434}_{-0.531}$	$1.752^{+0.191}_{-0.172}$	$0.176^{+0.152}_{-0.060}$
	+1%/-1%	+4%/-3%	+94%/-94%	+18%/-22%	+11%/-10%	+87%/-34%
Source	SPE68	SPE68	SPE68	DSEP		

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

Secondary Eclipse Parameters for KIC 011100532-04 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-148 ± 29	$4.26^{+1.87}_{-1.80}$	1324^{+64}_{-71}	6408^{+2475}_{-1046}	404^{+806}_{-216}
Alt.	-189 ± 72	$3.82^{+1.78}_{-1.69}$	1323^{+58}_{-68}	7309^{+3642}_{-1558}	648^{+1501}_{-397}

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

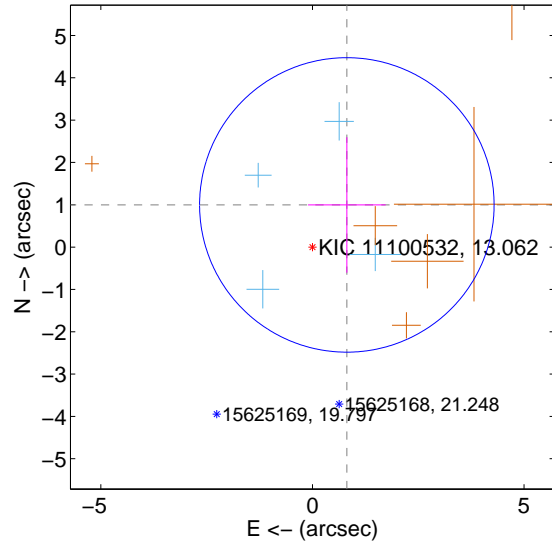
Supplemental centroid analysis for 011100532-04. Kepler magnitude: 13.06. Transit SNR 8.00

There are 4 quarters with good PRF difference image offsets

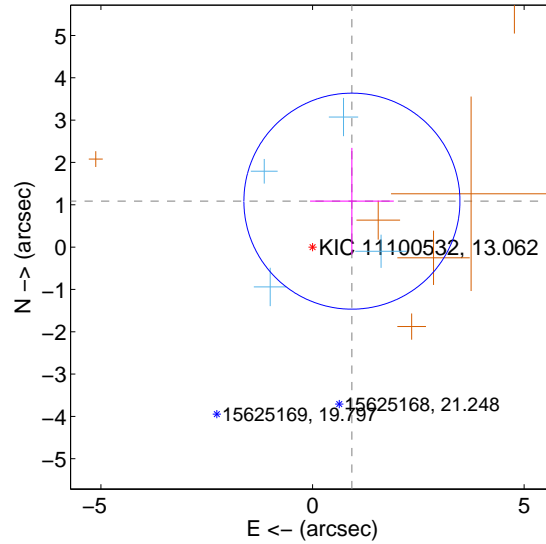
The direct PRF centroid is offset from the target star catalog position by about 0.26 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	1.286 ± 1.160	1.11	-0.813 ± 0.917	0.996 ± 1.601
PRF-fit source offset from KIC position	1.430 ± 0.851	1.68	-0.931 ± 0.990	1.085 ± 1.260
photometric centroid source offset	0.55 ± 0.88	0.63	0.03 ± 0.98	-0.55 ± 0.87

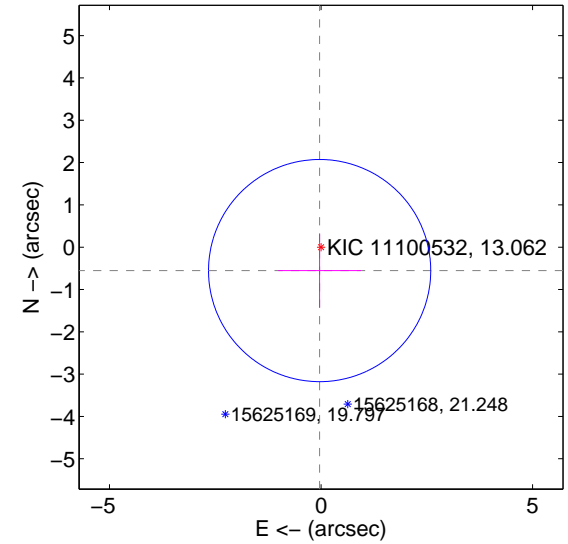
offset from difference PRF-fit to OOT PRF-fit



offset from difference PRF-fit to KIC position

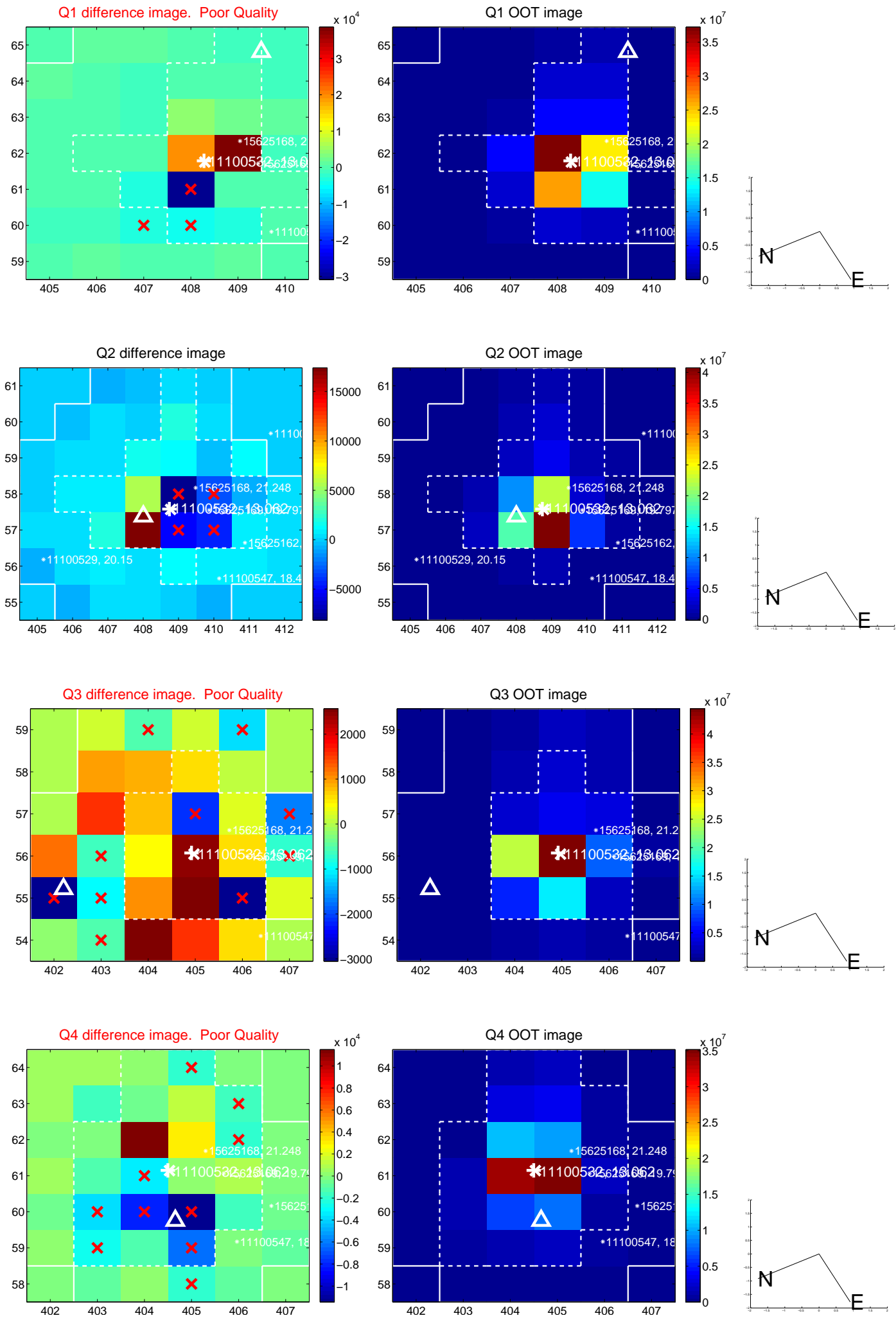


offset from photometric centroids

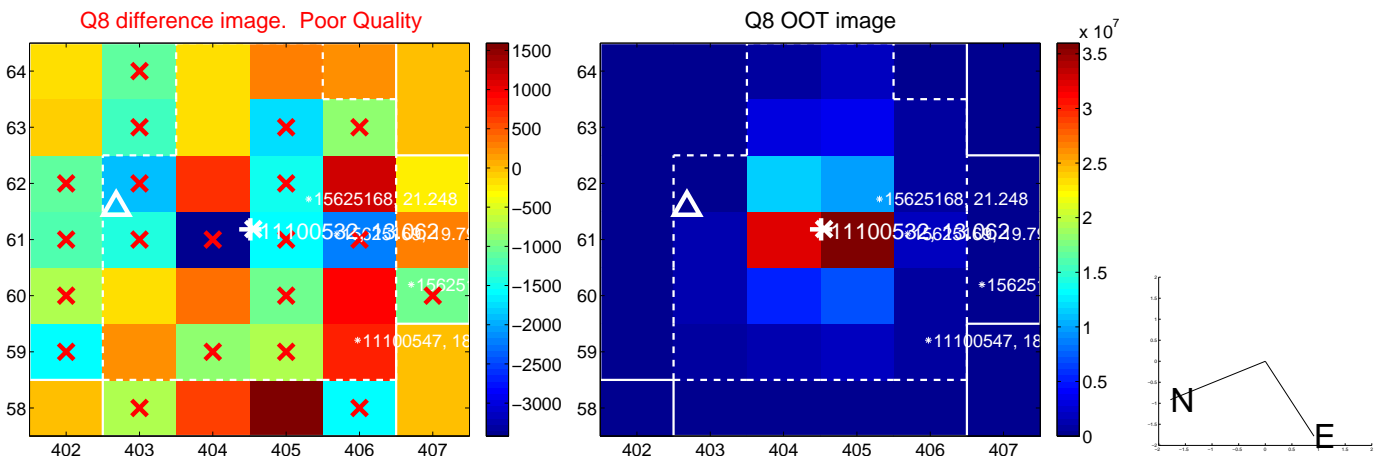
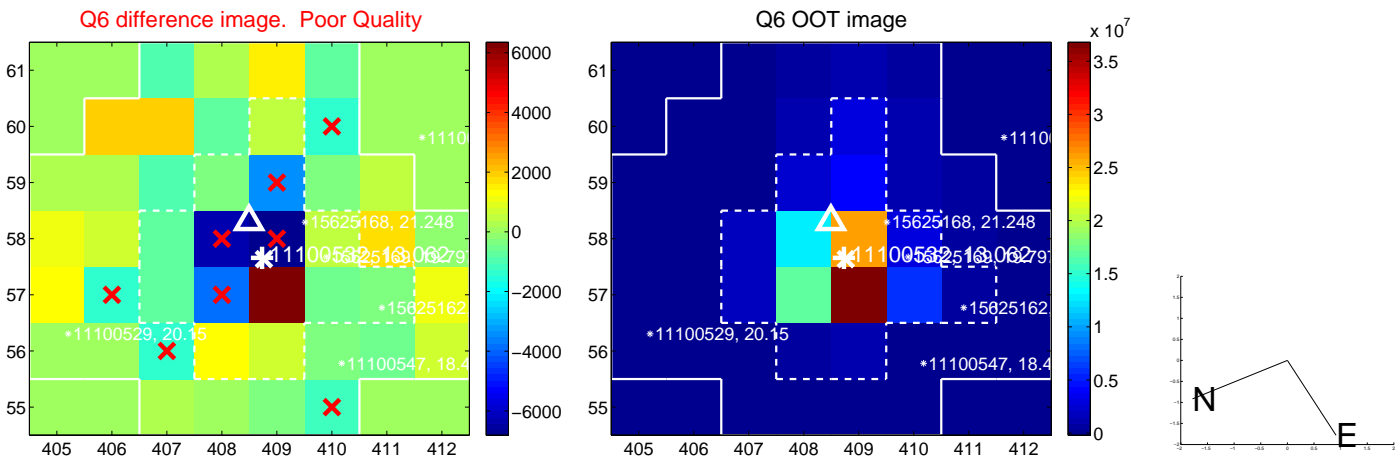
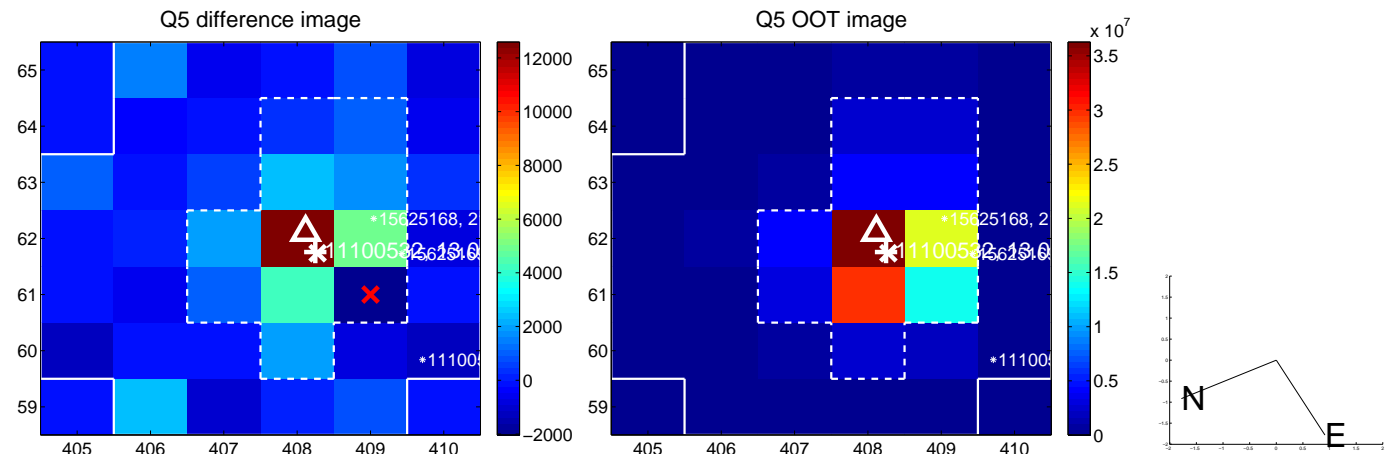


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets**; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

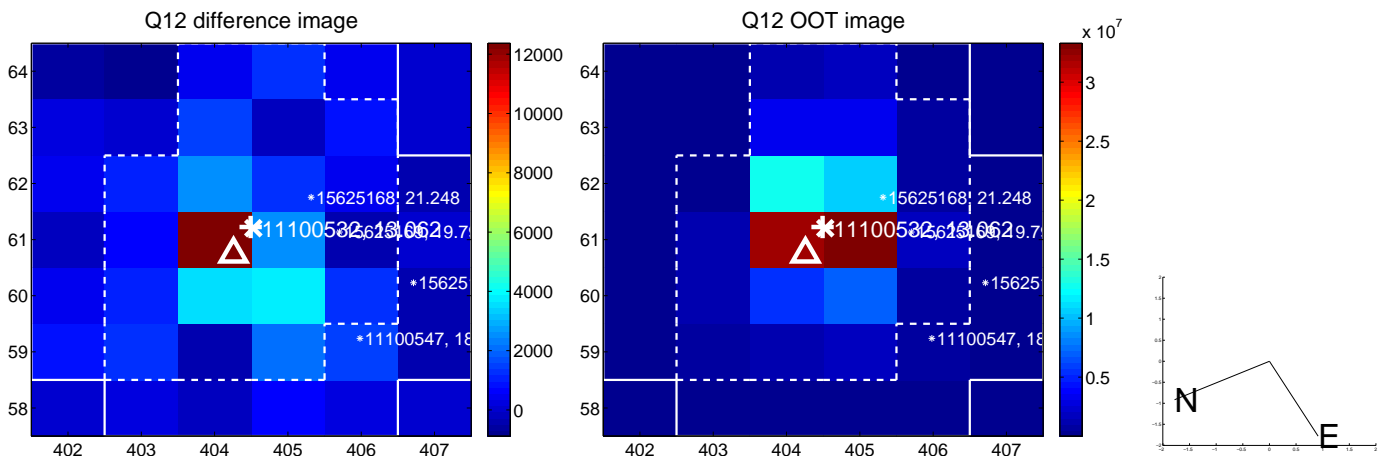
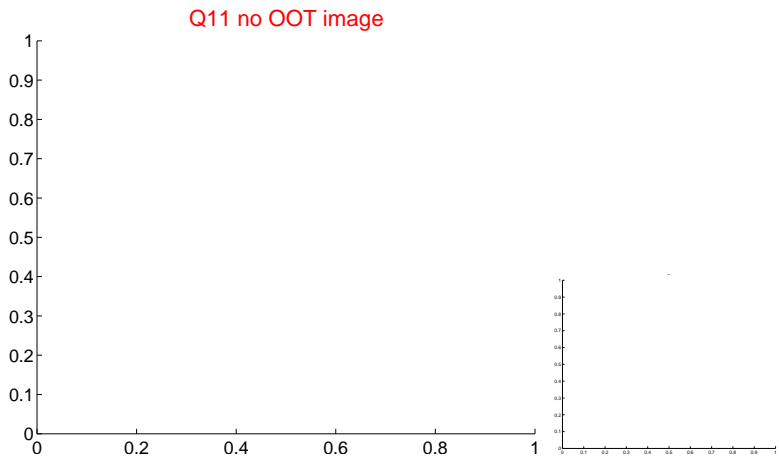
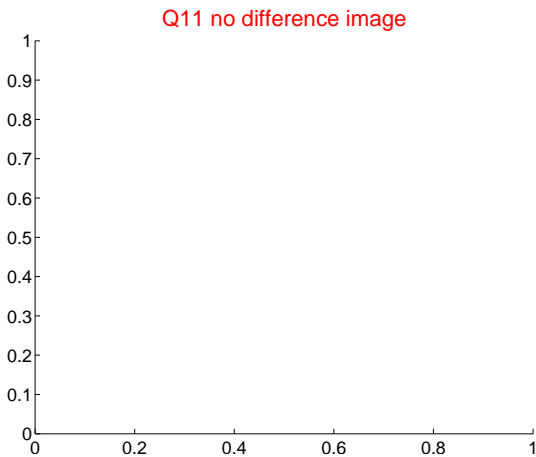
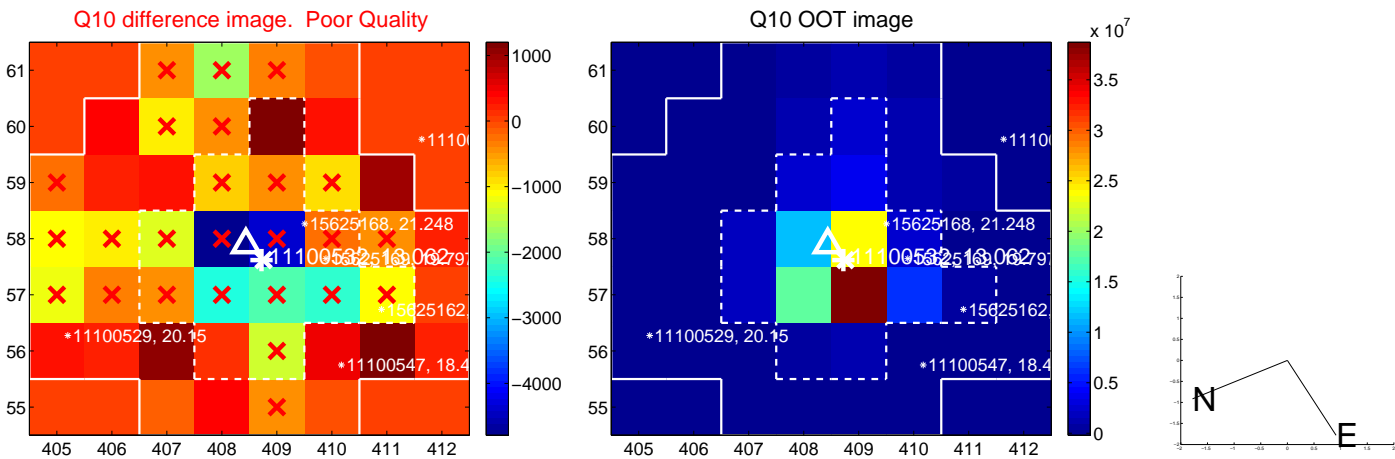
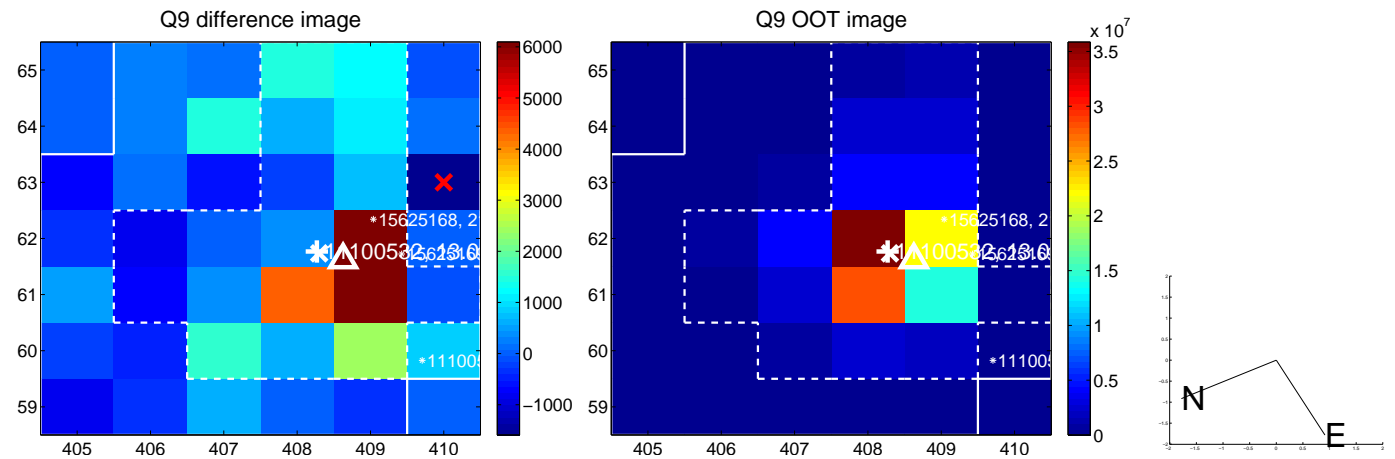
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



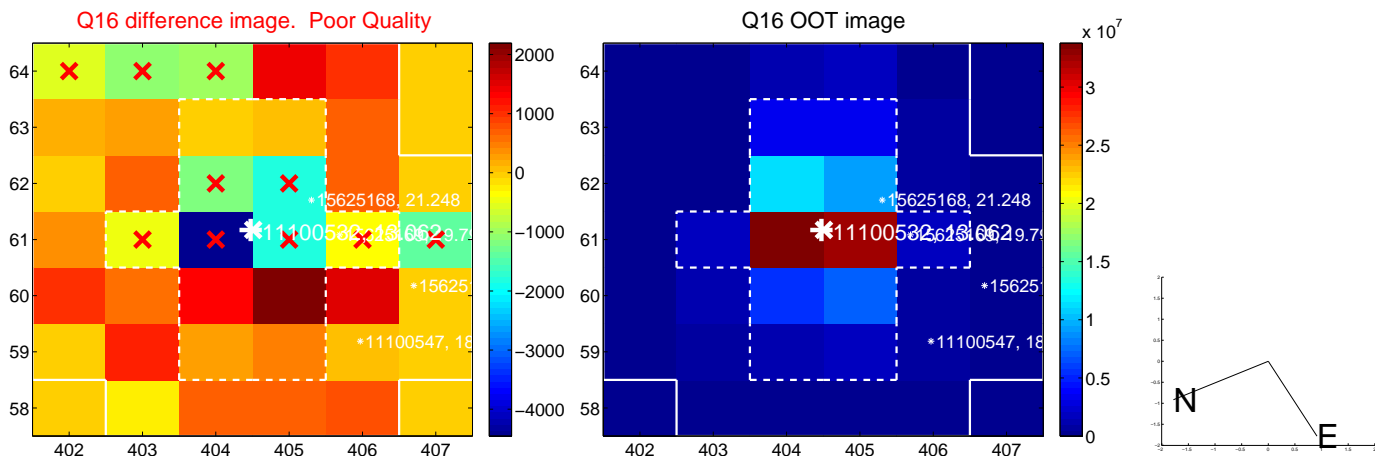
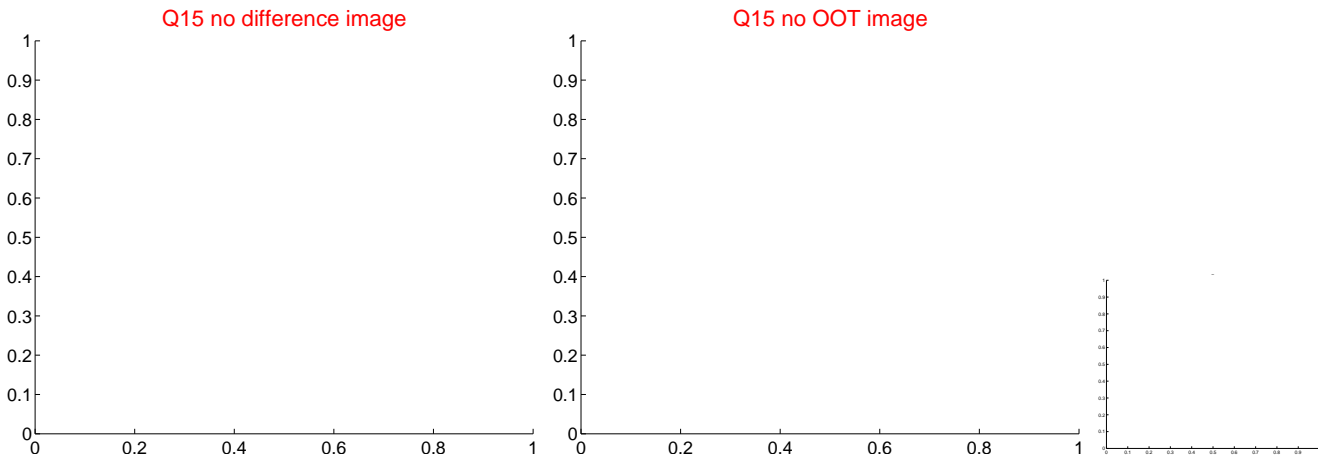
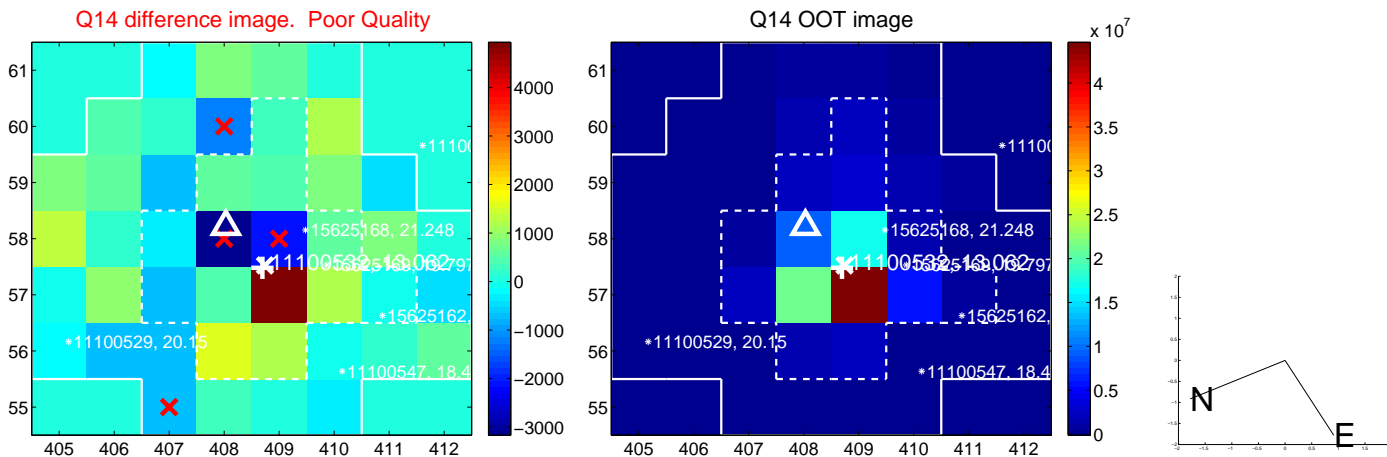
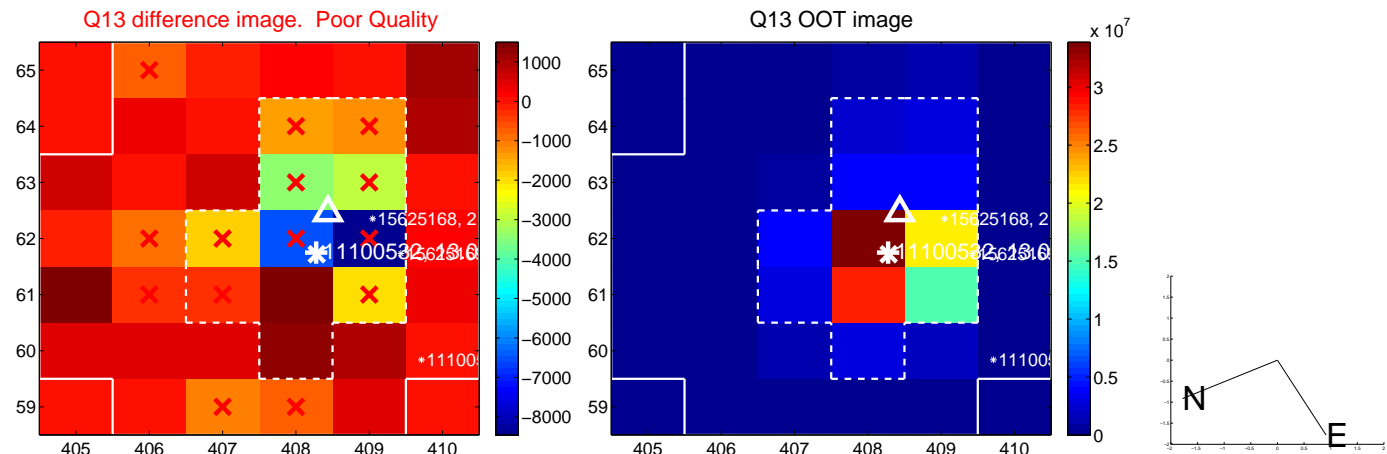
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



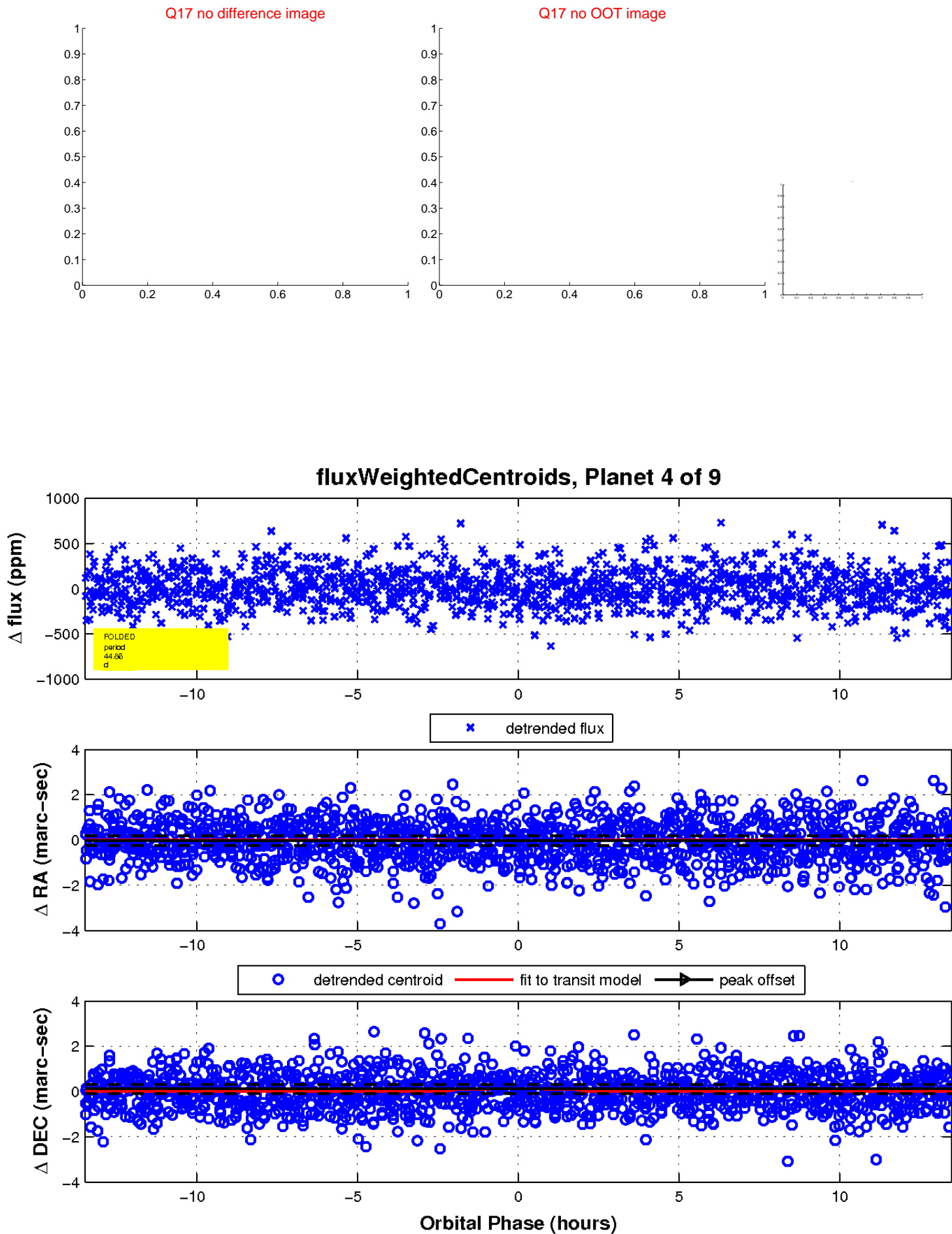
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

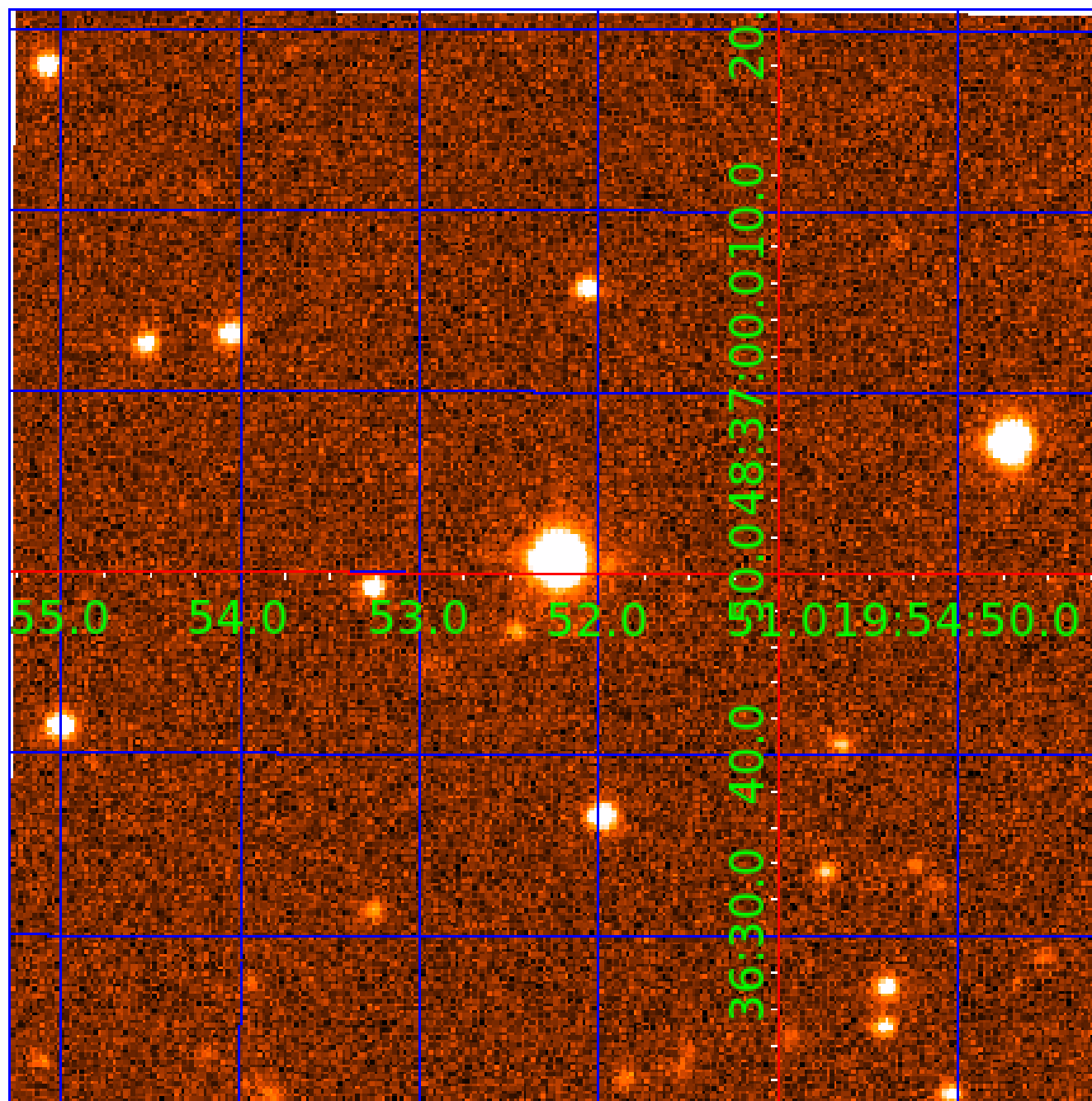


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 011100532

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})
011100532-01	OBS	No	0.743985	131.987531	35.9	1.383	9.7	9.2	2.41	7575	1.69	45700.86
011100532-02	OBS	No	0.949443	132.488671	21.6	5.846	8.6	6.8	2.41	7575	1.13	33015.51
011100532-03	OBS	No	40.787800	151.972423	116.5	4.550	10.1	5.1	2.41	7575	3.18	219.43
011100532-04	OBS	No	44.858115	149.422270	213.7	4.493	8.7	8.0	2.41	7575	4.20	193.30
011100532-05	OBS	No	69.928123	175.645448	354.3	2.513	9.2	9.2	2.41	7575	5.18	106.94
011100532-06	OBS	No	45.311601	144.582448	220.4	5.021	8.6	7.6	2.41	7575	4.13	190.72
011100532-07	OBS	No	32.325793	159.899688	223.7	4.350	8.1	7.8	2.41	7575	3.97	299.19
011100532-08	OBS	No	23.155985	146.735798	378.5	1.755	8.4	9.2	2.41	7575	4.86	466.79
011100532-09	OBS	No	42.033118	164.656835	317.5	2.500	8.1	-1.0	2.41	7575	4.33	210.81

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
011100532-01	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT
011100532-02	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT
011100532-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT
011100532-04	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT
011100532-05	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT
011100532-06	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT
011100532-07	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT
011100532-08	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—MOD_NONUNIQ_DV
011100532-09	OBS	FP	0.00	1	0	1	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_NOFITS—HALO_GHOST

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

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

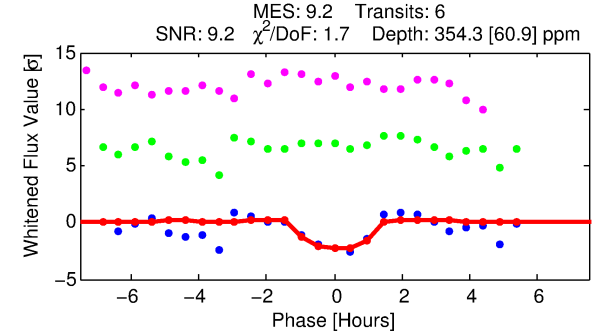
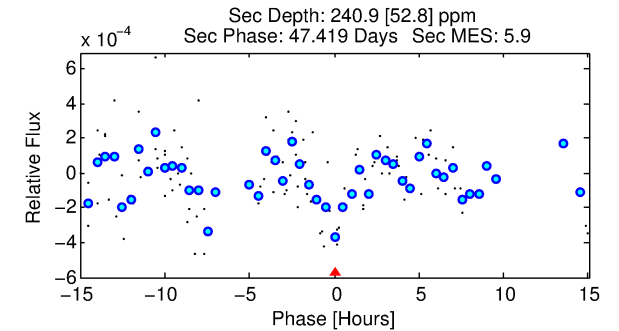
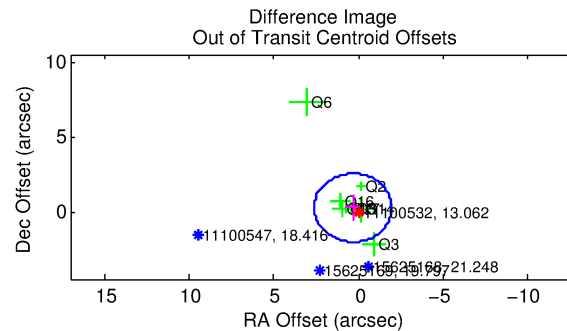
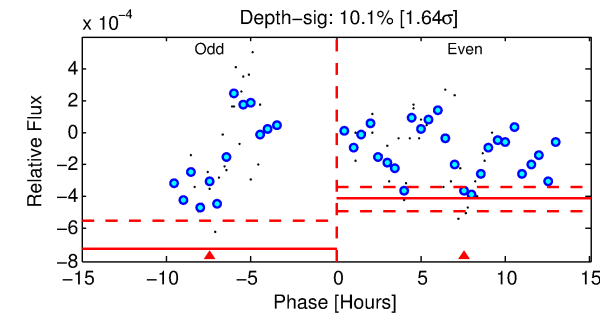
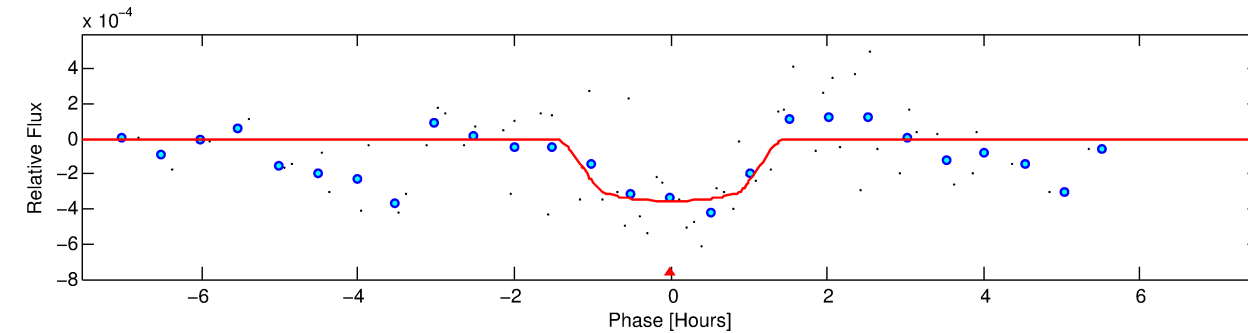
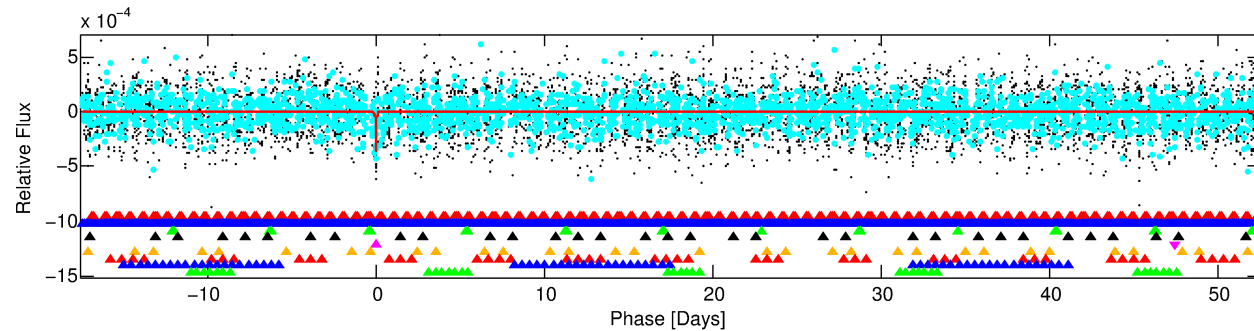
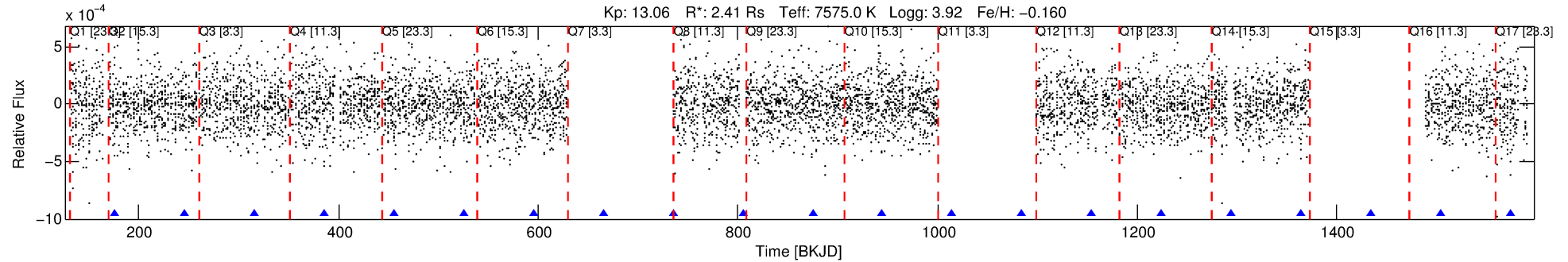
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 011100532-05

No Significant Match Found

DV One-Page Summary

KIC: 11100532 Candidate: 5 of 9 Period: 69.928 d



DV Fit Results:

Period = 69.92812 [0.00072] d
Epoch = 175.6454 [0.0096] BKJD
Rp/R* = 0.0197 [0.0237]
a/R* = 114.88 [780.54]
b = 0.86 [2.02]
Seff = 106.94 [32.08]
Teq = 820 [61] K
Rp = 5.18 [6.34] Re
a = 0.4006 [0.0783] AU
Ag = 791.92 [1927.64] [0.41 σ]
Teffp = 6725 [4063] K [1.45 σ]

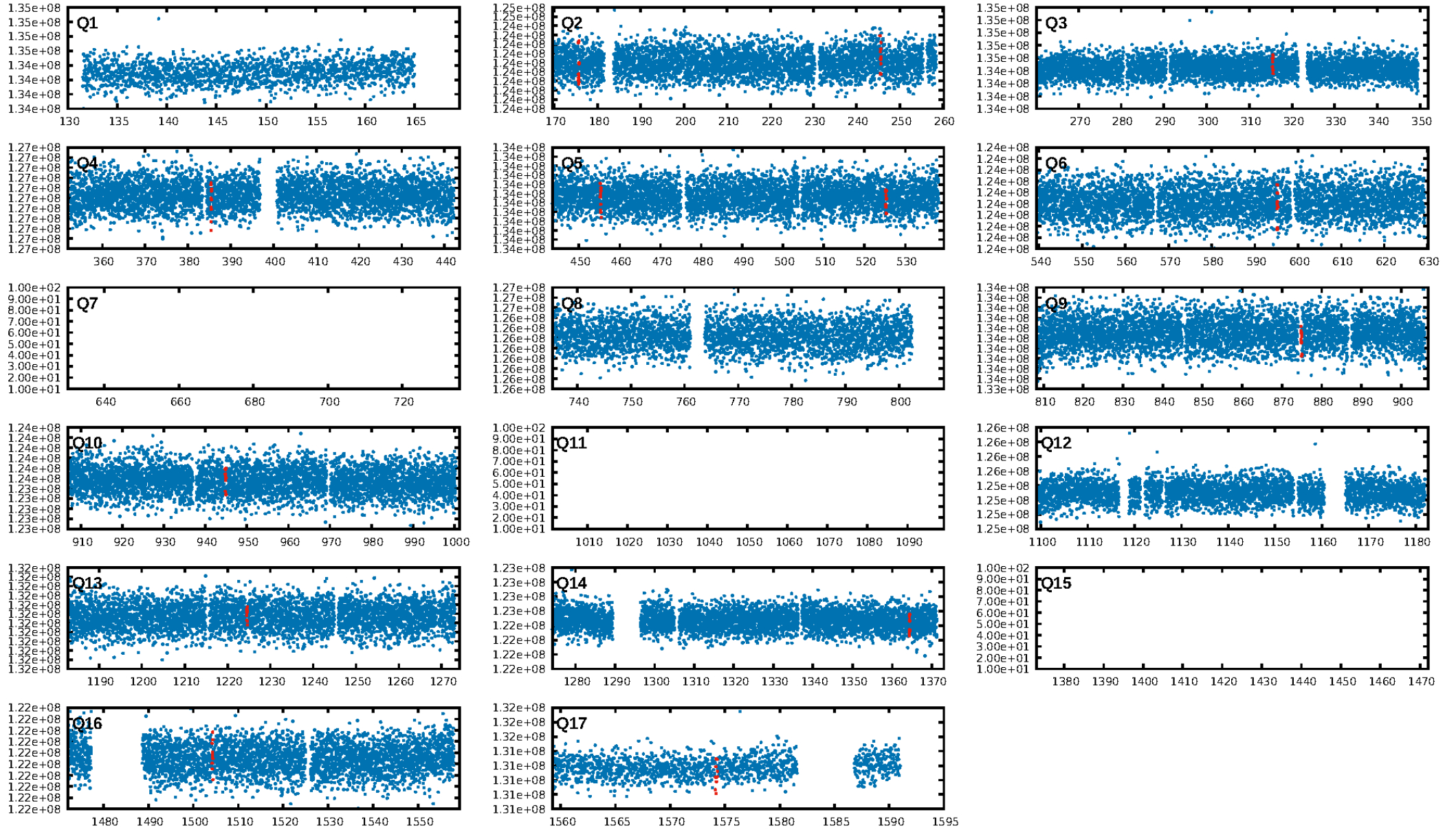
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [105.22 σ]
LongPeriod-sig: N/A
ModelChiSquare2-sig: 2.5%
ModelChiSquareGof-sig: 98.8%
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [5/5]
GhostDiagnostic-chr: 1.598
Centroid-sig: 93.9%
Centroid-so: 0.311 arcsec [0.33 σ]
OotOffset-rm: 0.423 arcsec [0.56 σ]
KicOffset-rm: 0.383 arcsec [0.48 σ]
OotOffset-st: 3/1/1/3 [8]
KicOffset-st: 3/1/1/3 [8]
DiffImageQuality-fgm: 0.50 [4/8]
DiffImageOverlap-fno: 0.22 [2/9]

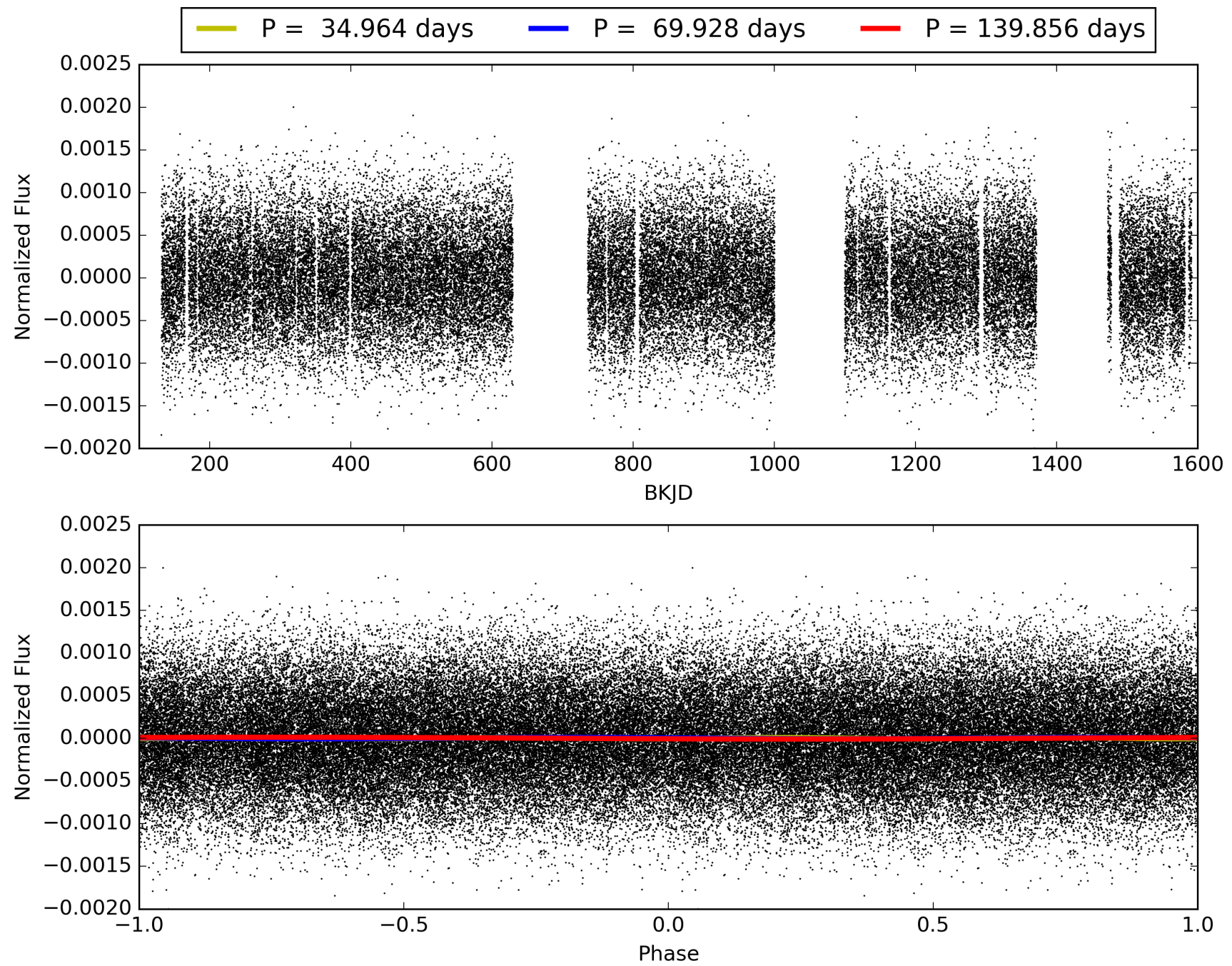
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 01-Feb-2016 10:50:32 Z

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

TCE 011100532-05, PDC Light Curves

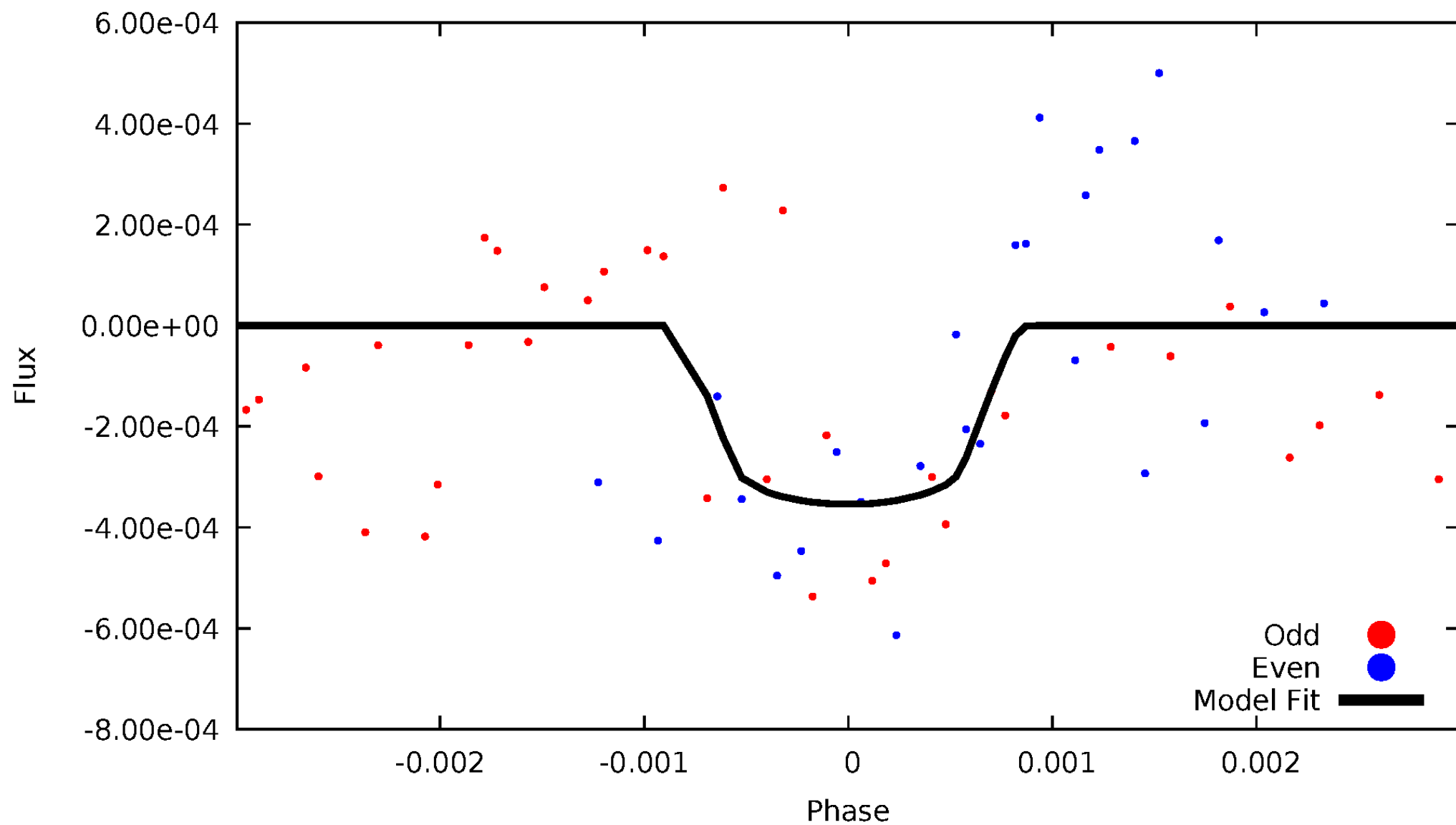


TCE 011100532-05



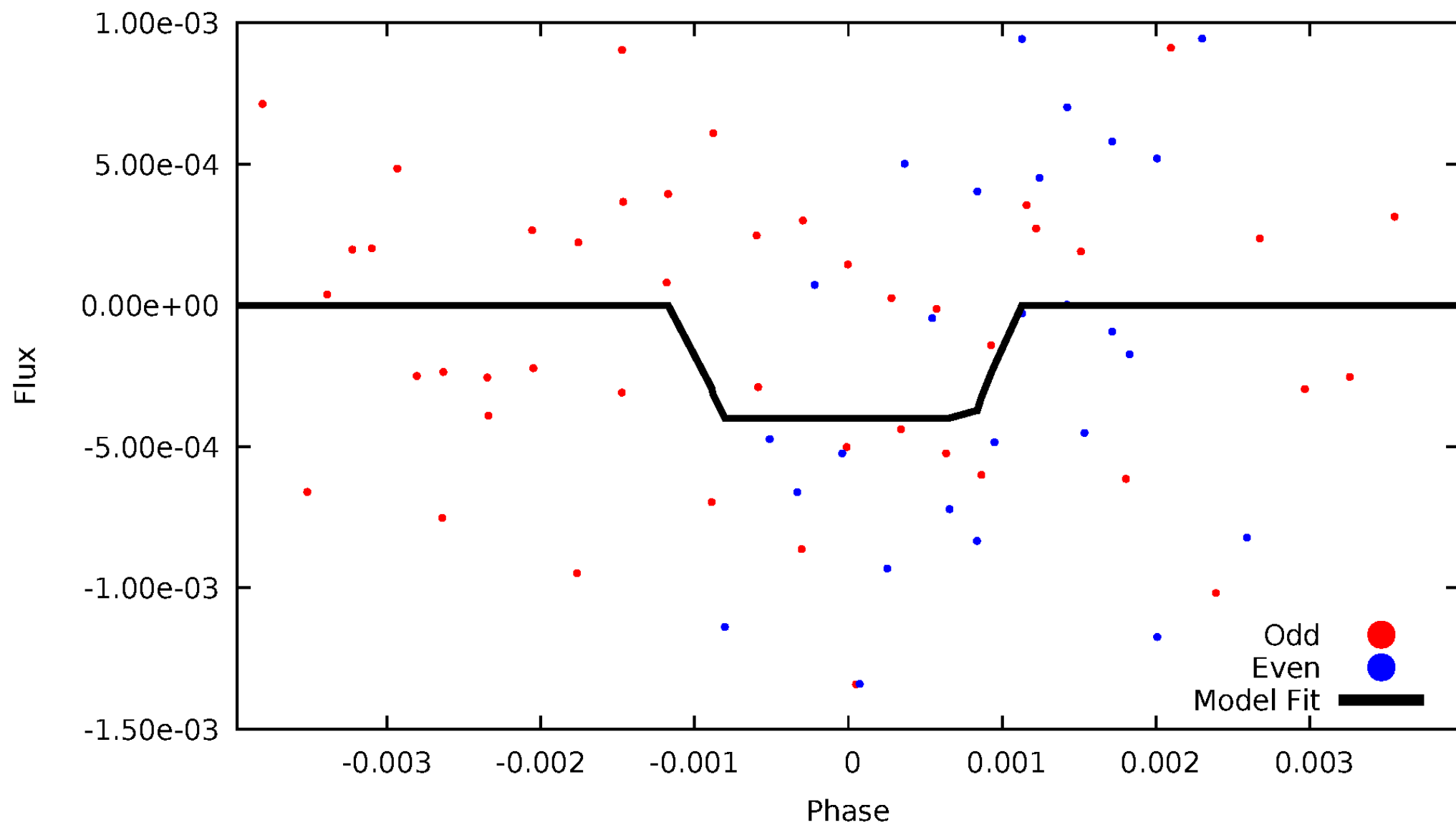
DV Odd/Even

TCE 011100532-05

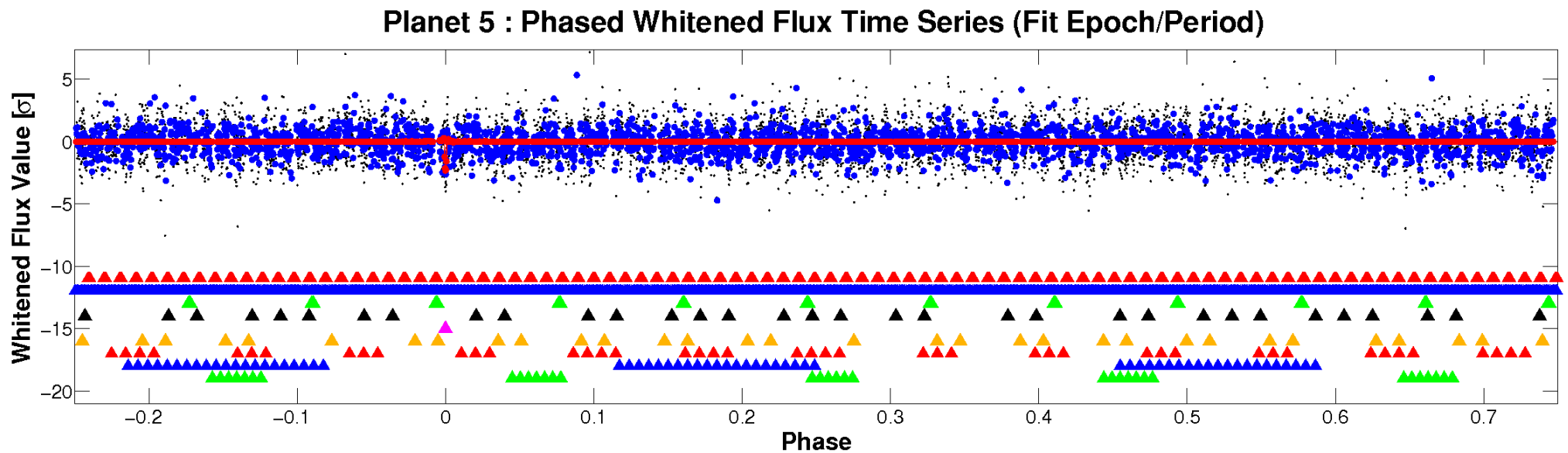
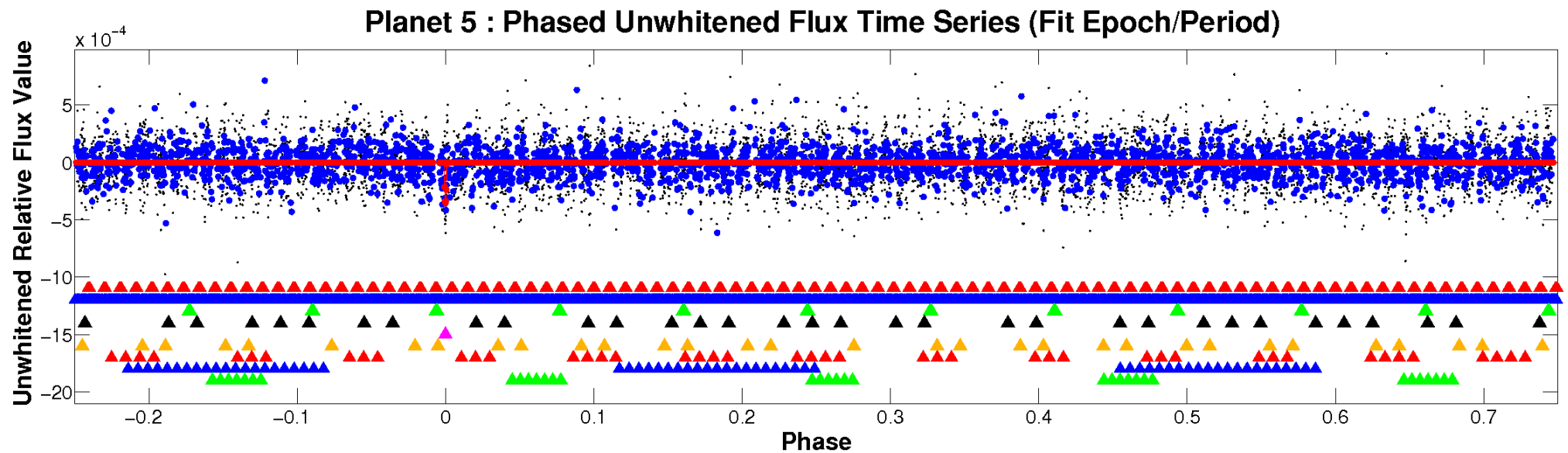


ALT Odd/Even

TCE 011100532-05

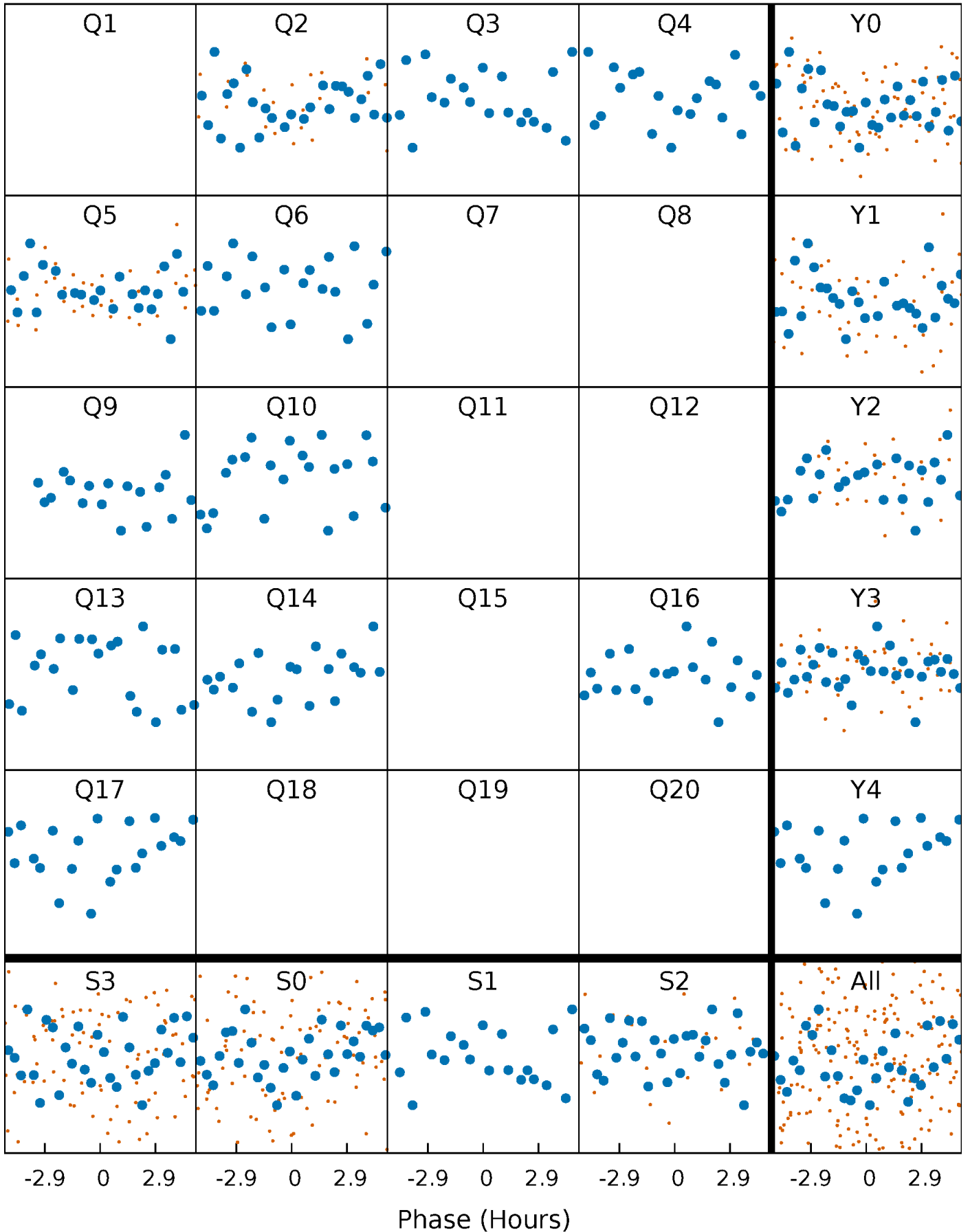


Non-Whitened Vs. Whitened Light Curve



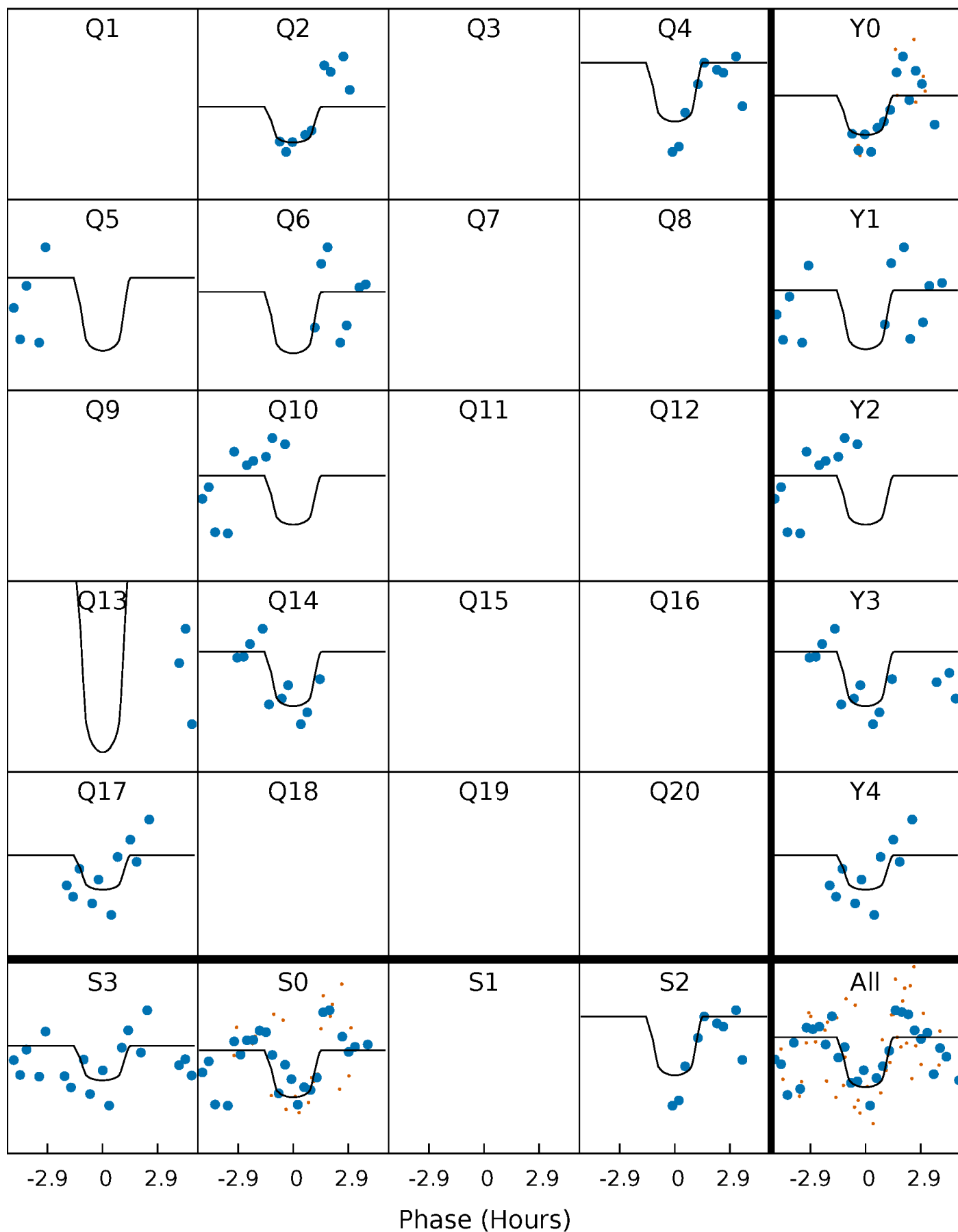
PDC Quarter-Phased Transit Curves

TCE 011100532-05 P= 69.928123 Days $T_0=175.645448$ (BKJD)



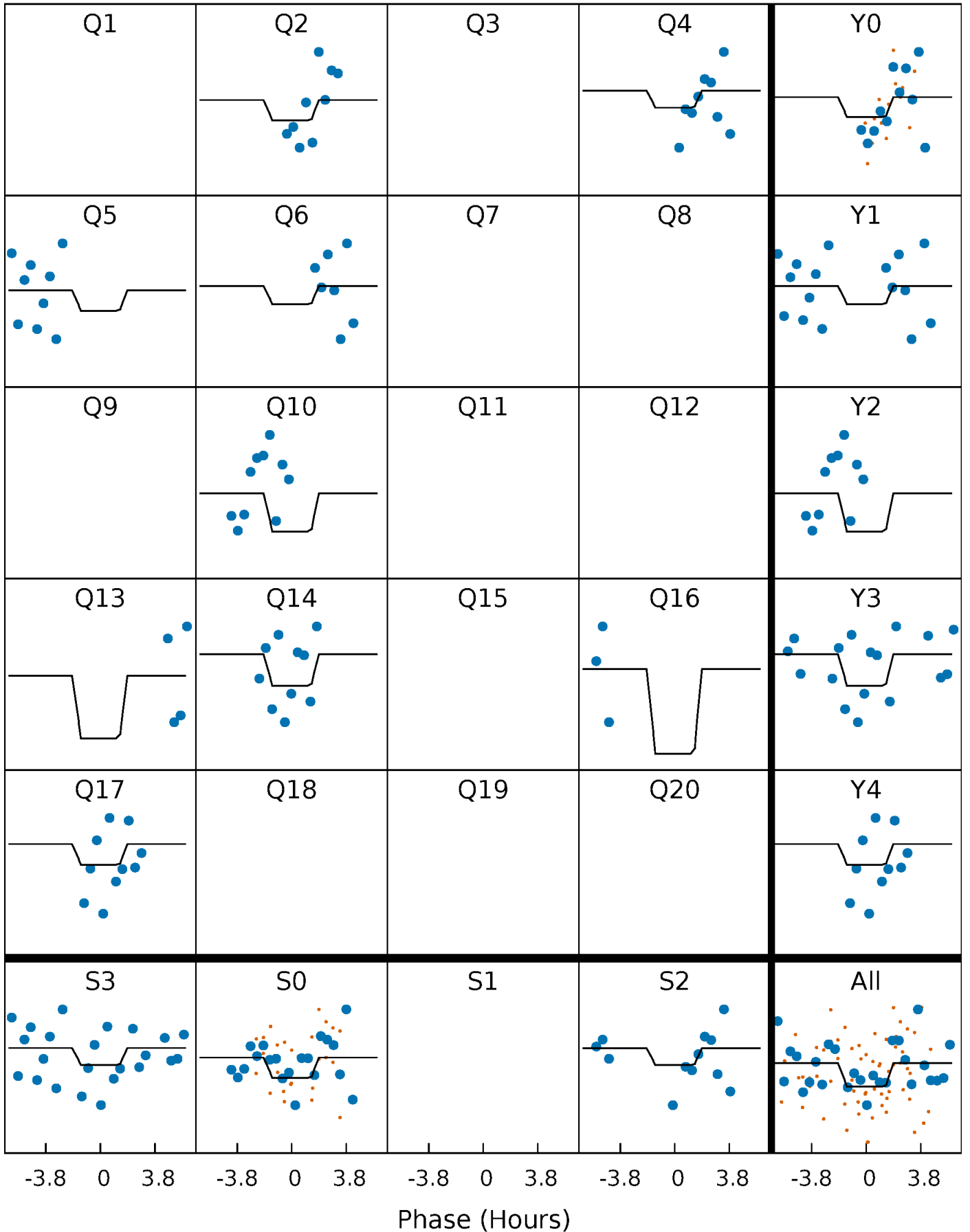
DV Quarter-Phased Transit Curves

TCE 011100532-05 P= 69.928123 Days $T_0=175.645448$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

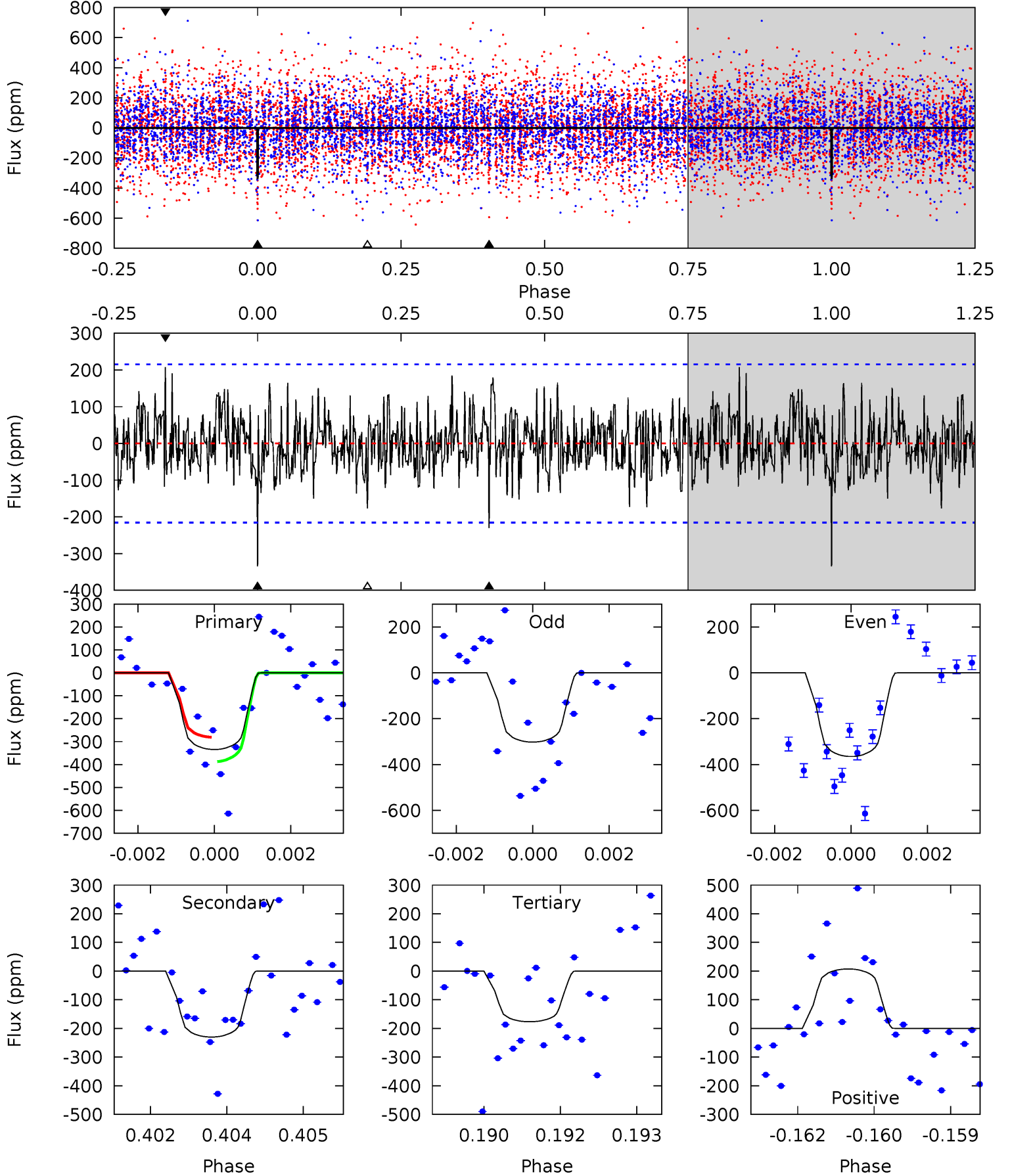
TCE 011100532-05 P= 69.927312 Days $T_0=175.632077$ (BKJD)



DV Model-Shift Uniqueness Test

011100532-05, P = 69.928123 Days, E = 105.717325 Days

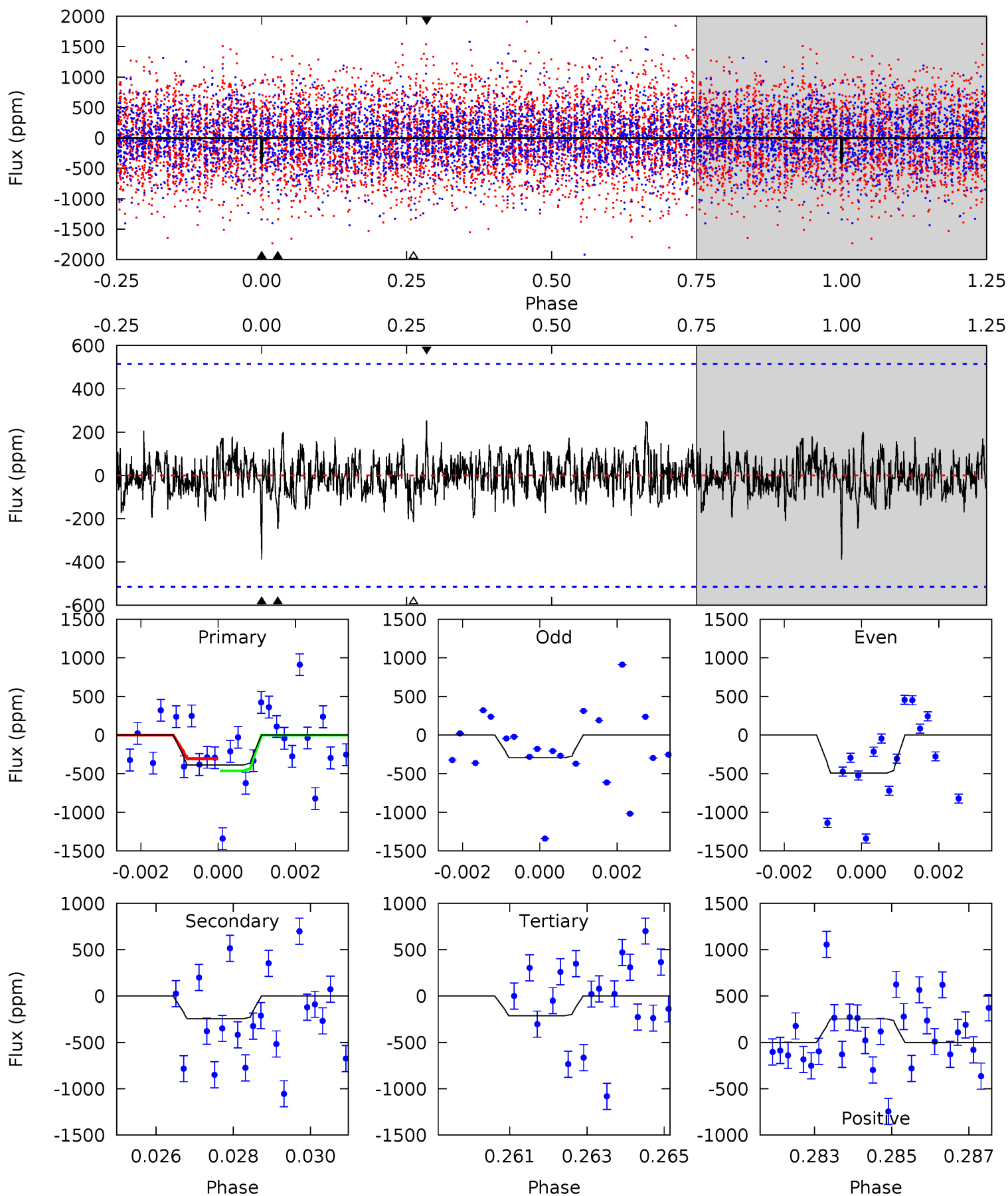
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
8.34	5.74	4.41	5.17	5.38	3.17	1.50	3.93	3.17	1.33	0.56	0.79	0.71	0.38	1.31



Alt Model-Shift Uniqueness Test

011100532-05, P = 69.927312 Days, E = 105.704765 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
4.02	2.54	2.20	2.61	5.33	3.09	0.67	1.81	1.40	0.34	-0.08	1.04	0.75	0.39	0.82



Stellar Parameters For KIC 011100532

	$T_{\text{eff}} (K)$	$\log(g)$	$[\text{Fe}/\text{H}]$	$R (R_{\odot})$	$M (M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	7575^{+83}_{-75}	$3.917^{+0.168}_{-0.112}$	$-0.160^{+0.150}_{-0.150}$	$2.412^{+0.434}_{-0.531}$	$1.752^{+0.191}_{-0.172}$	$0.176^{+0.152}_{-0.060}$
	+1%/-1%	+4%/-3%	+94%/-94%	+18%/-22%	+11%/-10%	+87%/-34%
Source	SPE68	SPE68	SPE68	DSEP		

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

Secondary Eclipse Parameters for KIC 011100532-05 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-230 ± 40	$6.87^{+5.21}_{-4.53}$	1139^{+53}_{-68}	5720^{+4801}_{-1298}	450^{+3353}_{-318}
Alt.	-245 ± 97	$6.62^{+5.55}_{-4.42}$	1144^{+56}_{-64}	5874^{+5799}_{-1515}	490^{+4165}_{-366}

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

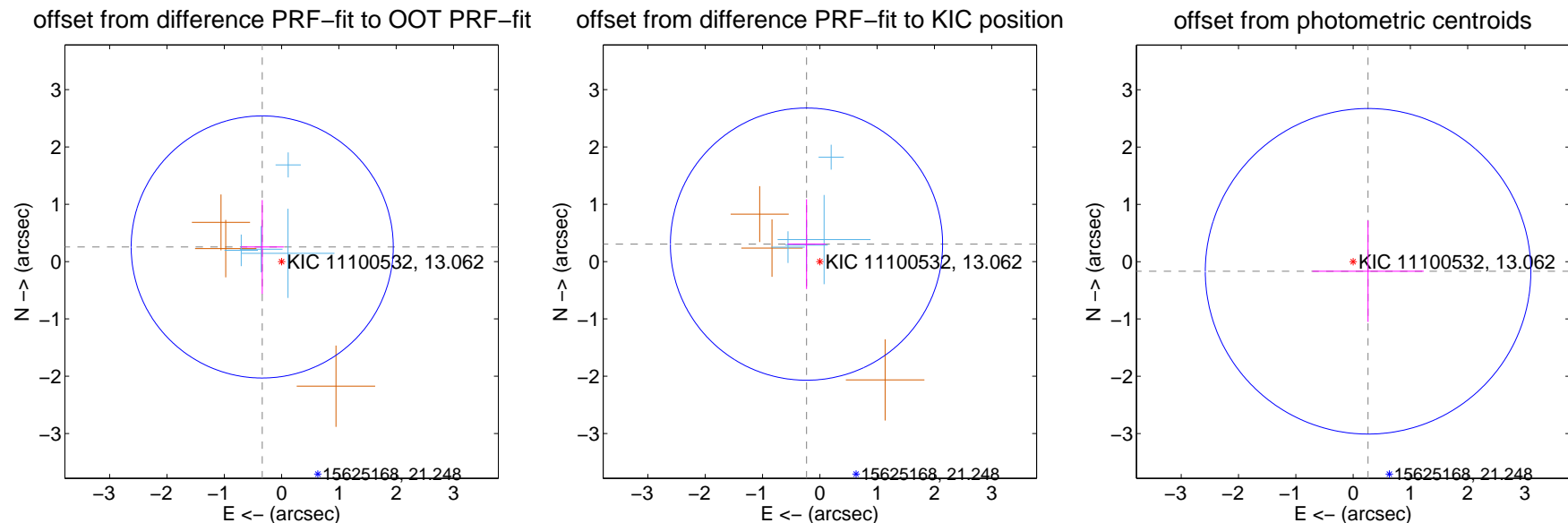
DV Centroid Data

Supplemental centroid analysis for 011100532-05. Kepler magnitude: 13.06. Transit SNR 9.24

There are 4 quarters with good PRF difference image offsets

The direct PRF centroid is offset from the target star catalog position by about 0.16 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.423 ± 0.762	0.56	0.338 ± 0.376	0.255 ± 0.818
PRF-fit source offset from KIC position	0.383 ± 0.792	0.48	0.233 ± 0.332	0.305 ± 0.783
photometric centroid source offset	0.31 ± 0.95	0.33	-0.26 ± 0.97	-0.17 ± 0.88



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.

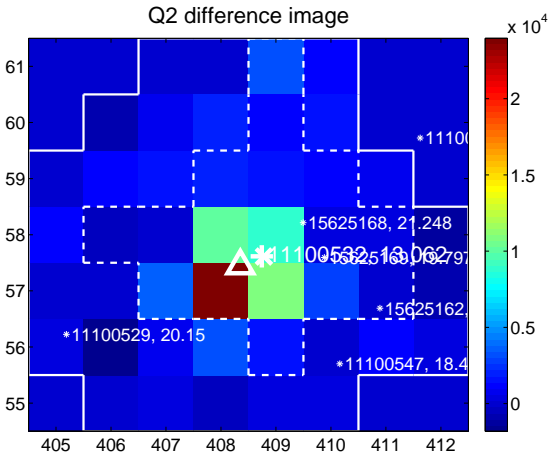
Q1 no difference image



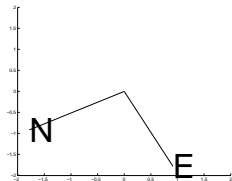
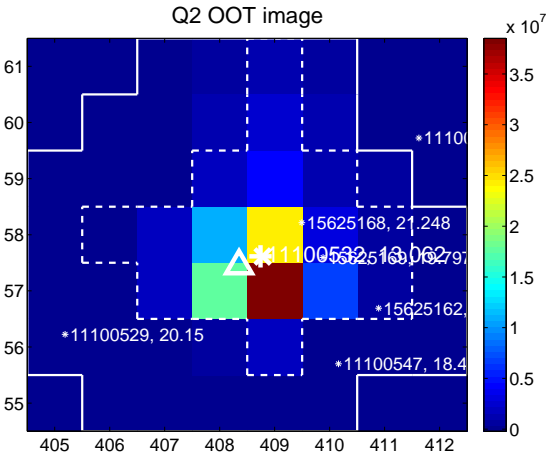
Q1 no OOT image



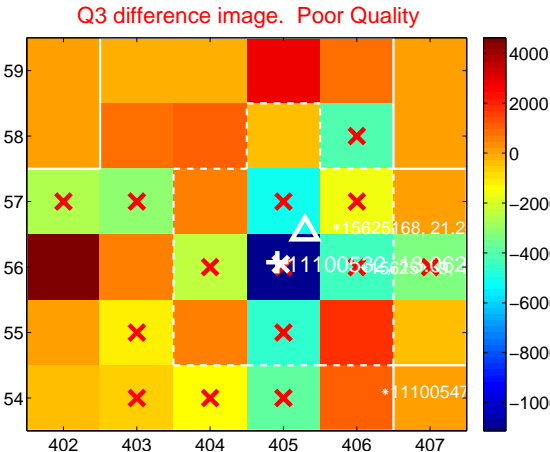
Q2 difference image



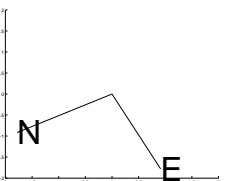
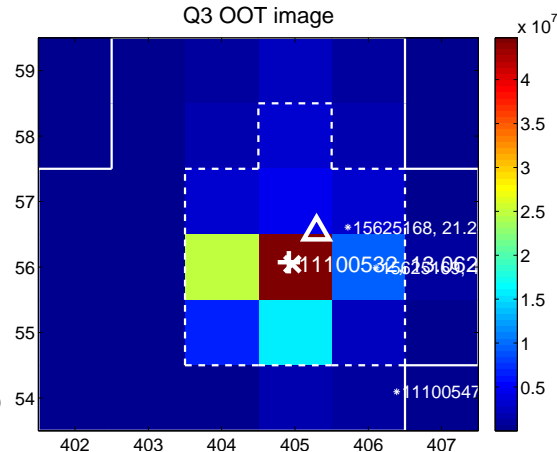
Q2 OOT image



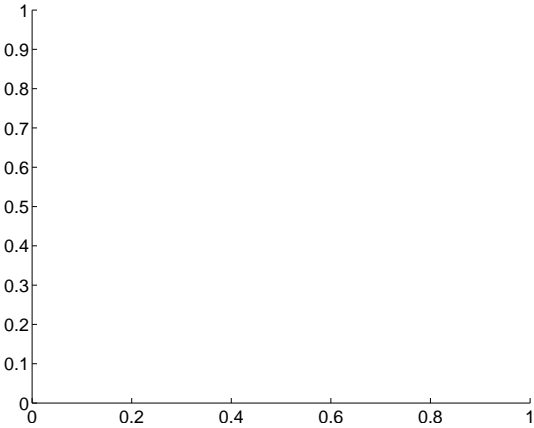
Q3 difference image. Poor Quality



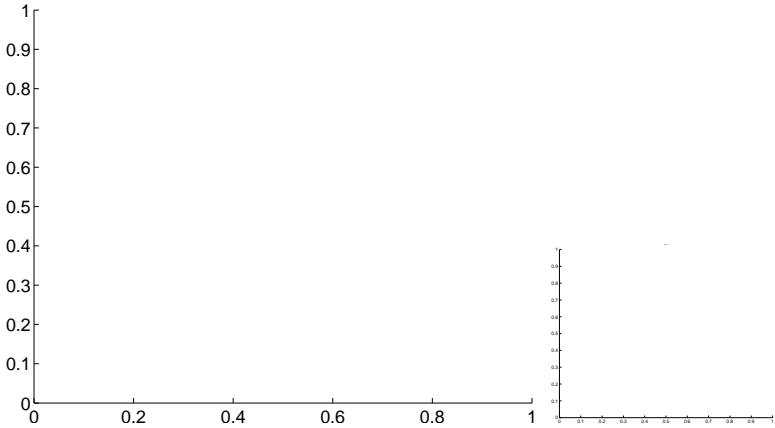
Q3 OOT image



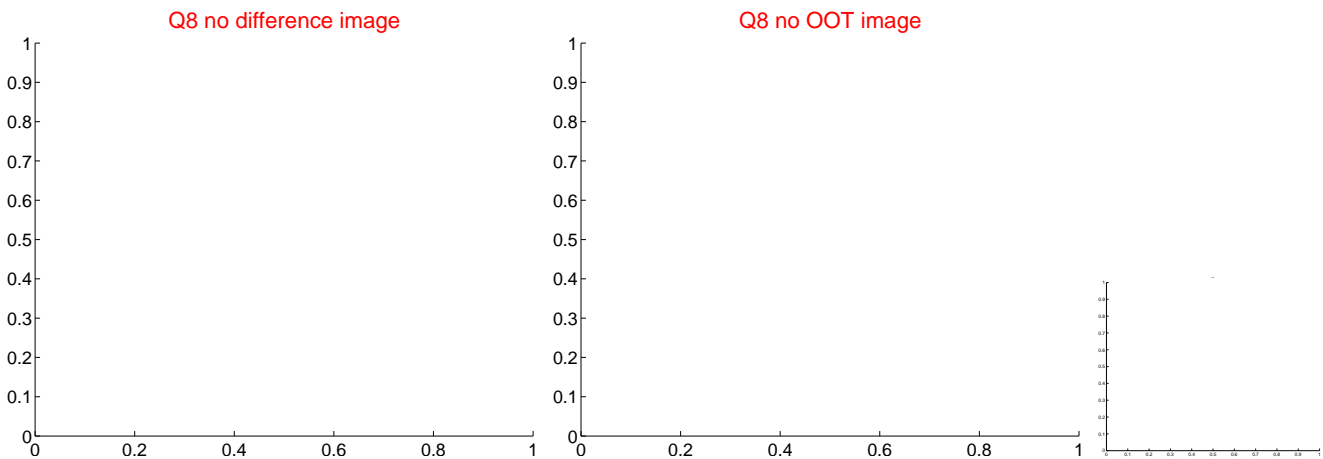
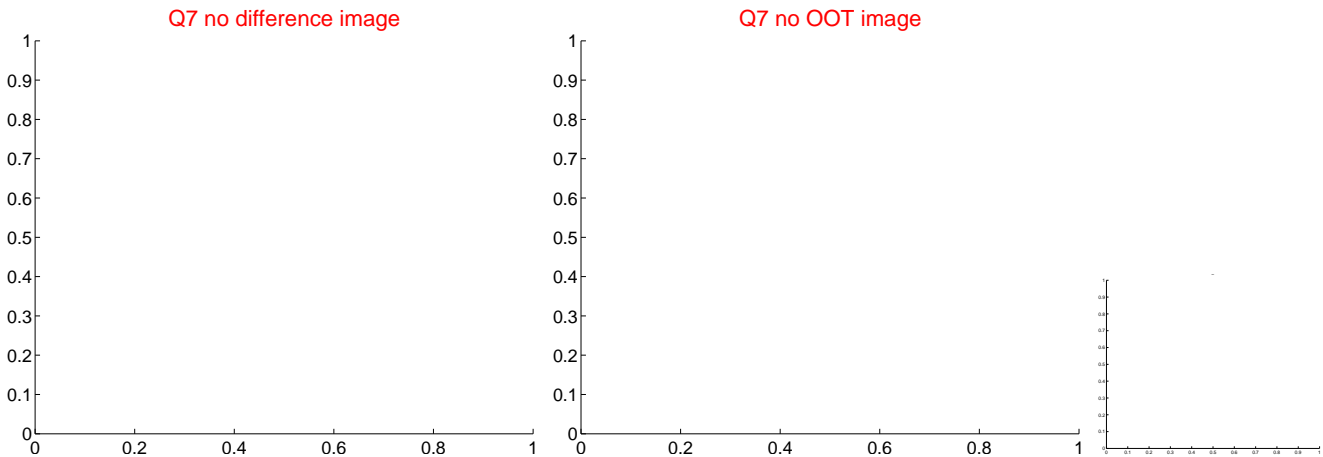
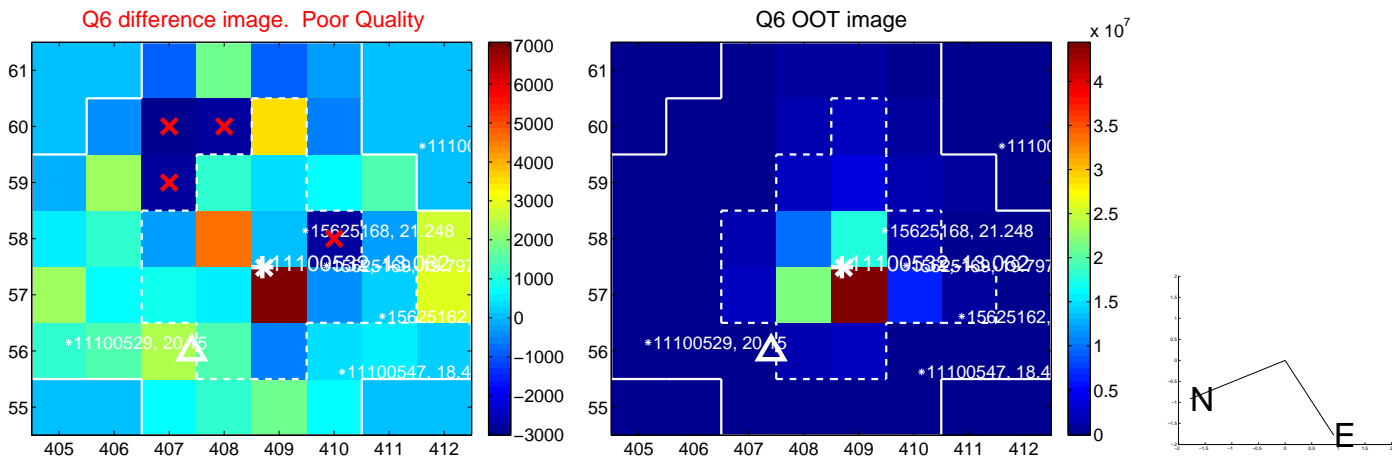
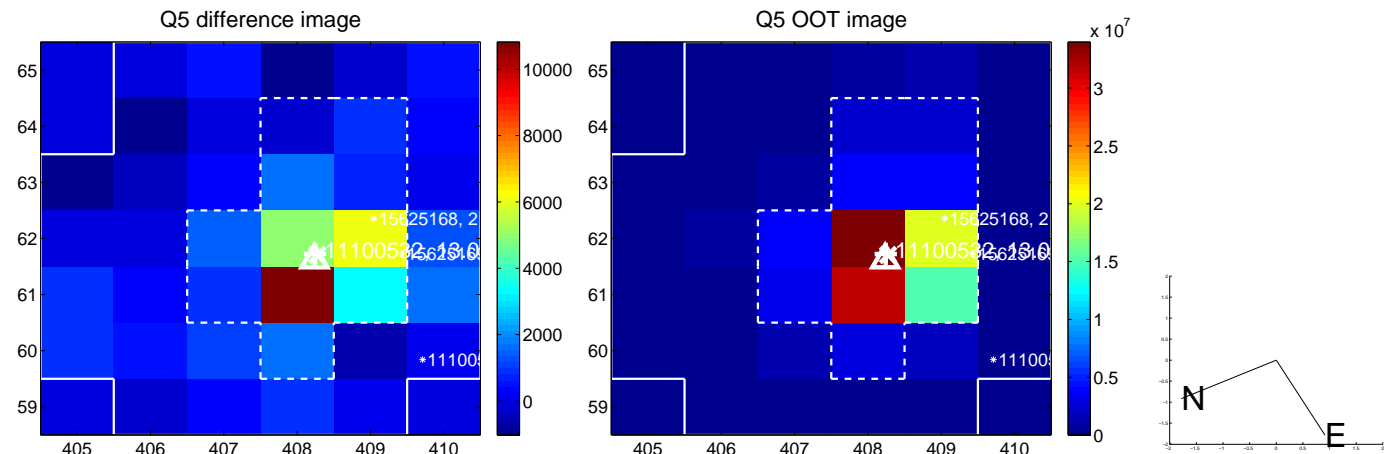
Q4 no difference image



Q4 no OOT image



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.

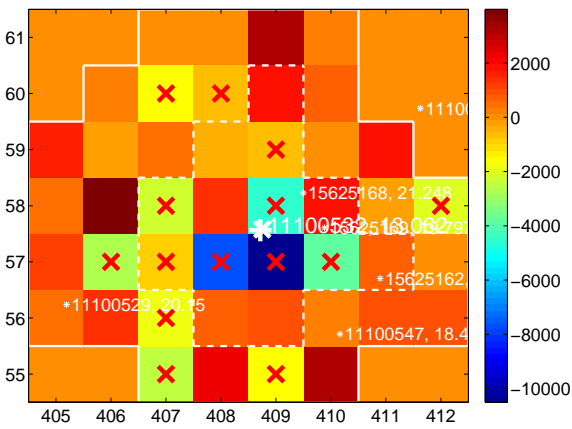
Q9 no difference image



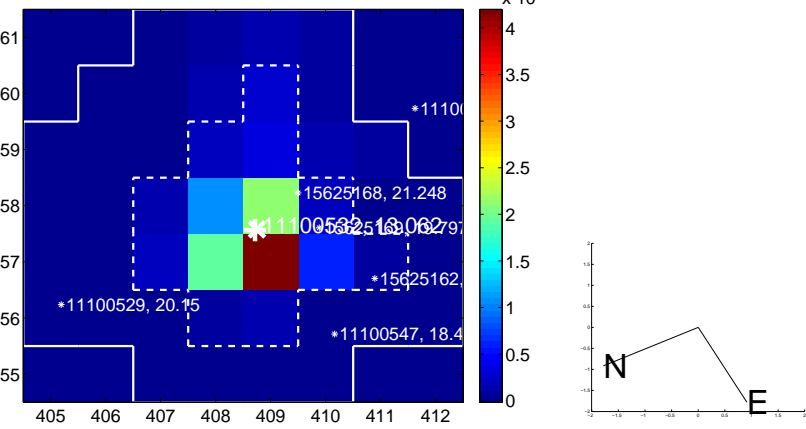
Q9 no OOT image



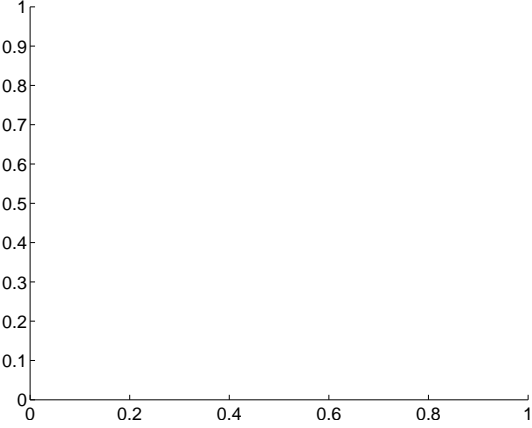
Q10 difference image. Poor Quality



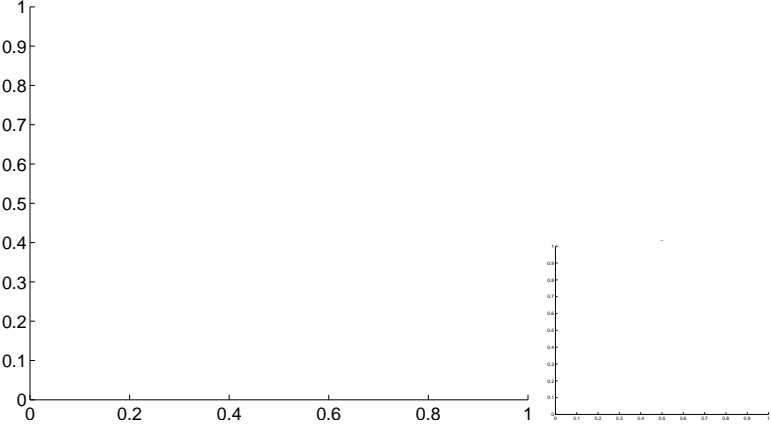
Q10 OOT image



Q11 no difference image



Q11 no OOT image



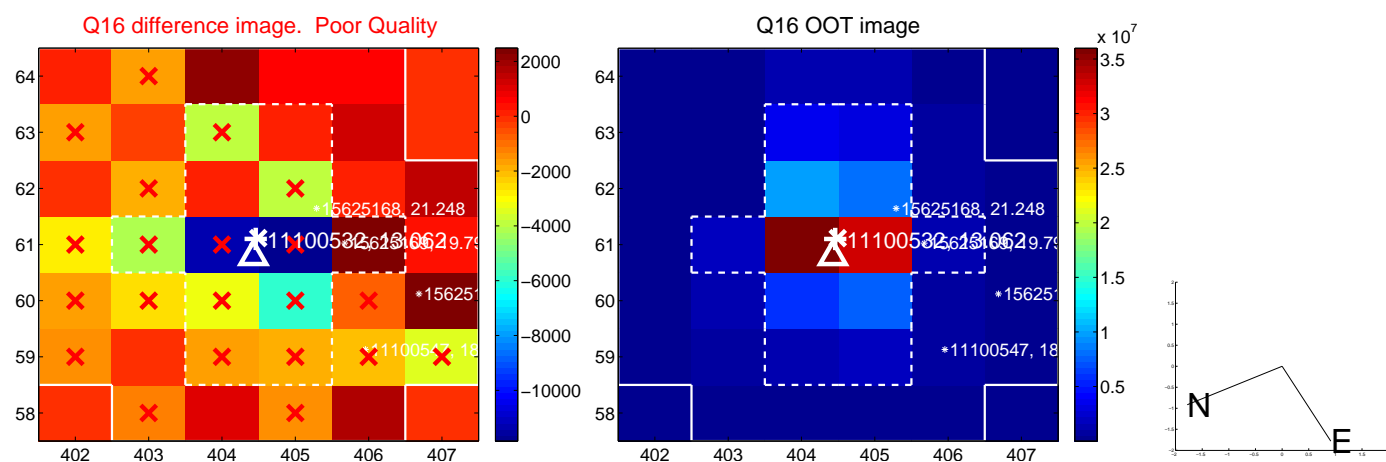
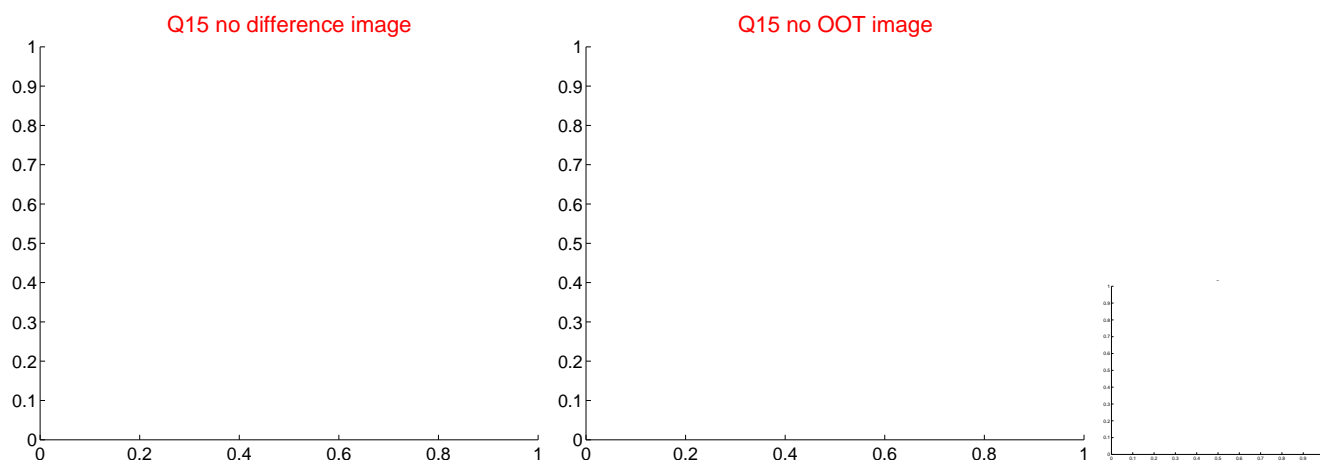
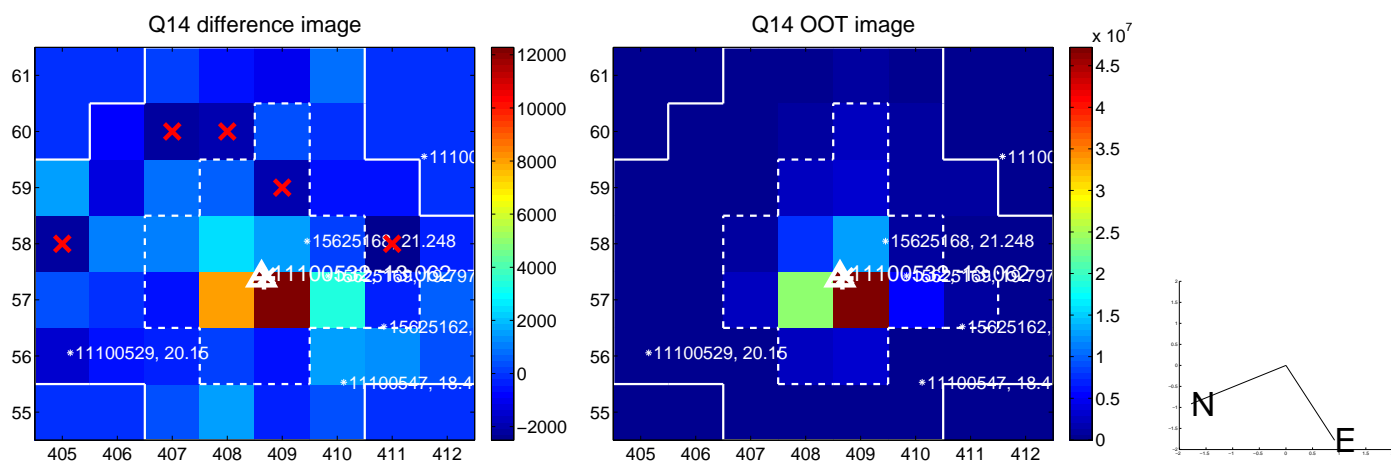
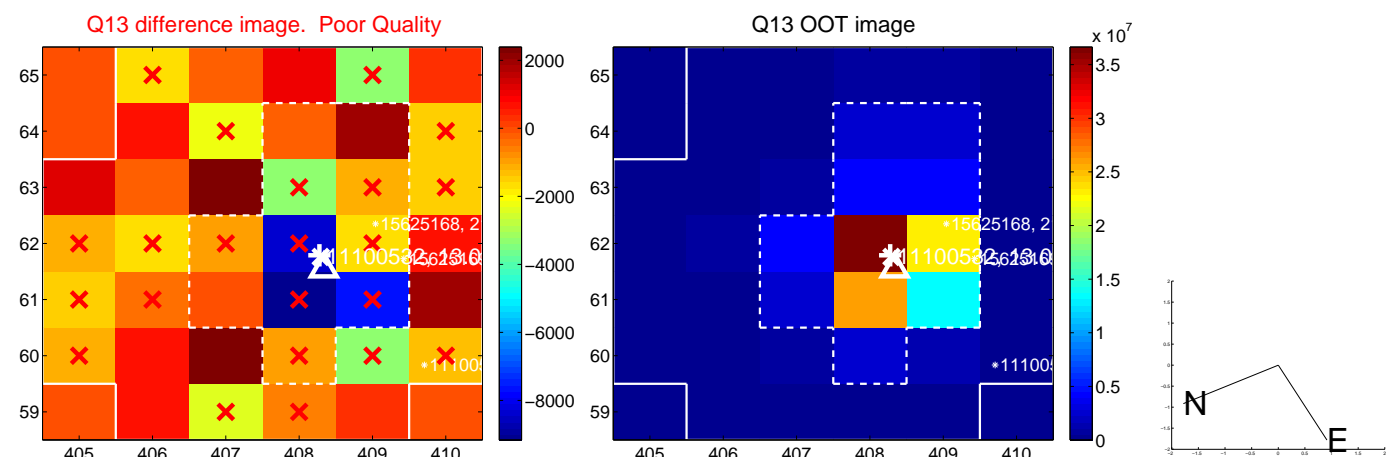
Q12 no difference image



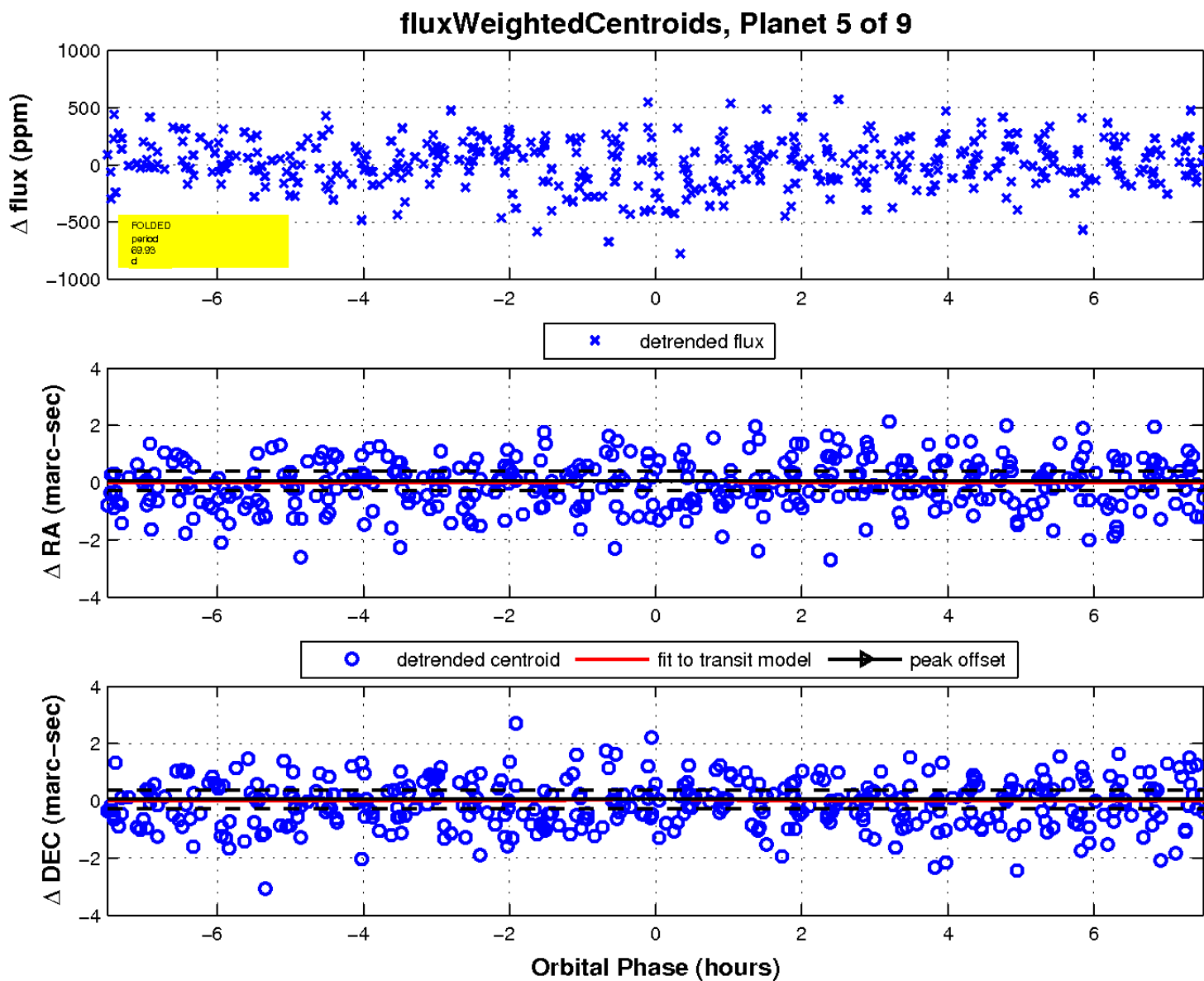
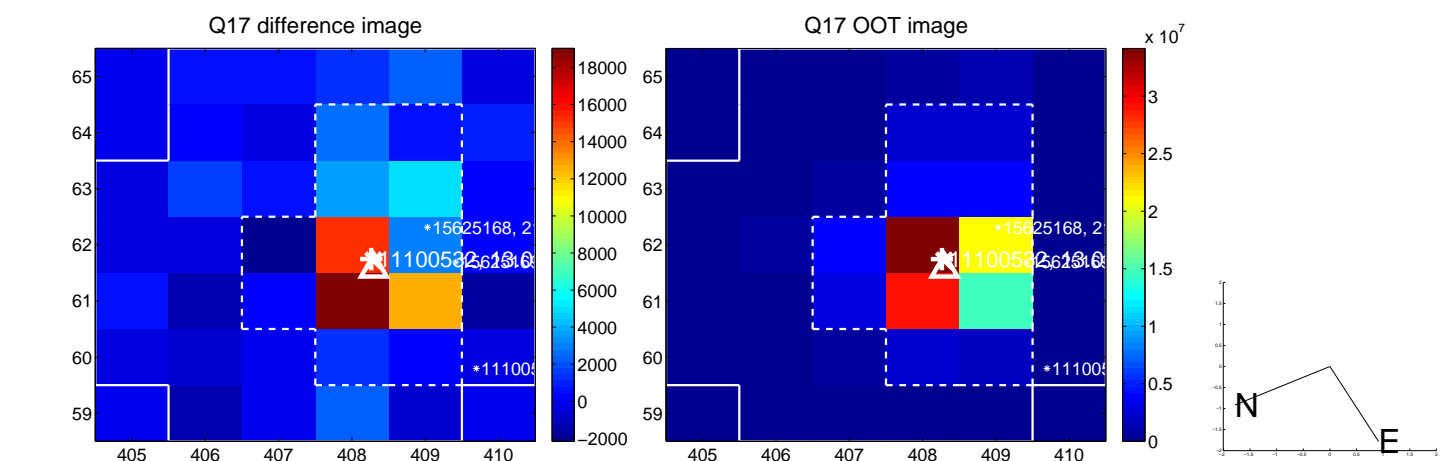
Q12 no OOT image



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

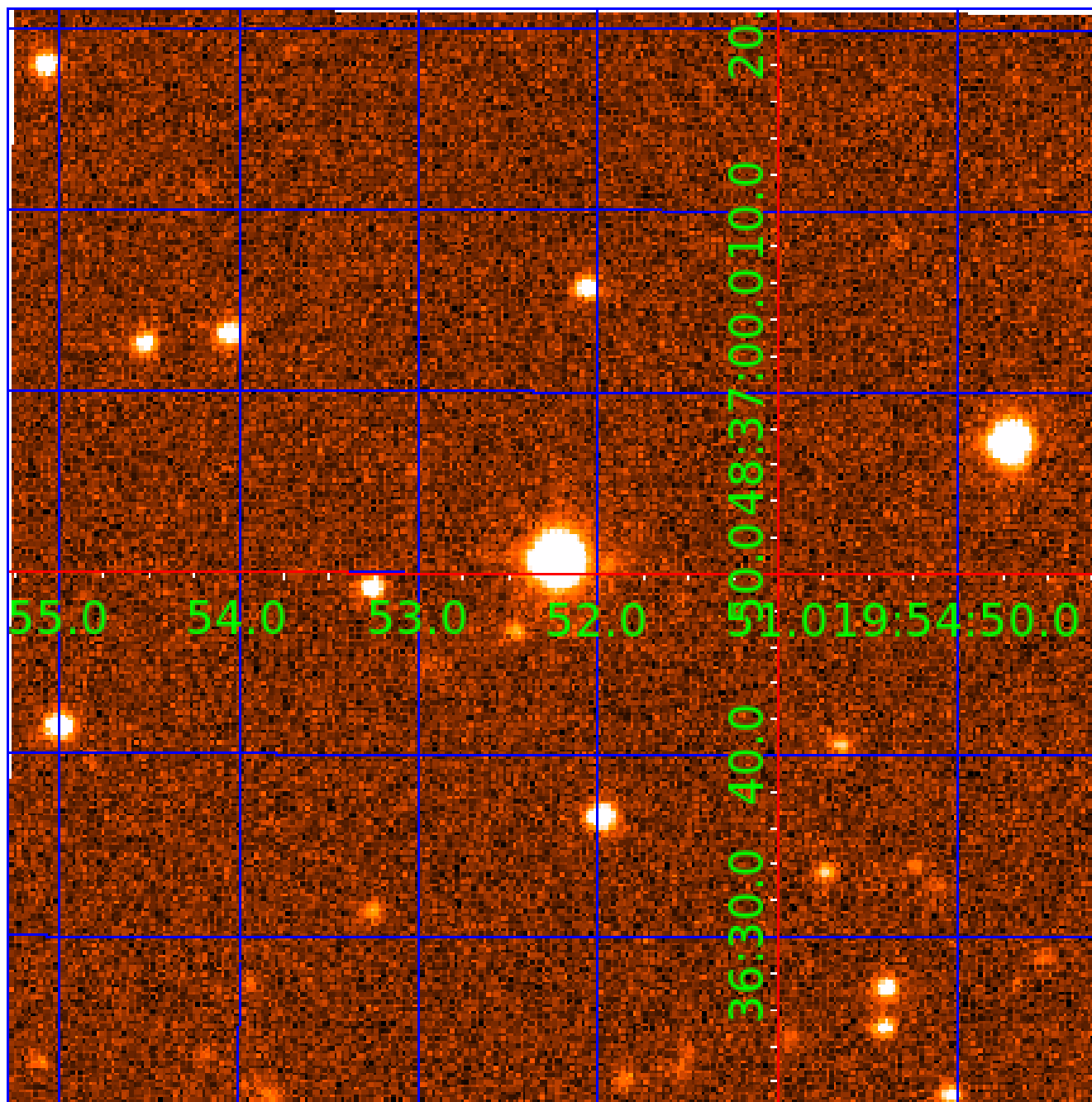


white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 011100532

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})
011100532-01	OBS	No	0.743985	131.987531	35.9	1.383	9.7	9.2	2.41	7575	1.69	45700.86
011100532-02	OBS	No	0.949443	132.488671	21.6	5.846	8.6	6.8	2.41	7575	1.13	33015.51
011100532-03	OBS	No	40.787800	151.972423	116.5	4.550	10.1	5.1	2.41	7575	3.18	219.43
011100532-04	OBS	No	44.858115	149.422270	213.7	4.493	8.7	8.0	2.41	7575	4.20	193.30
011100532-05	OBS	No	69.928123	175.645448	354.3	2.513	9.2	9.2	2.41	7575	5.18	106.94
011100532-06	OBS	No	45.311601	144.582448	220.4	5.021	8.6	7.6	2.41	7575	4.13	190.72
011100532-07	OBS	No	32.325793	159.899688	223.7	4.350	8.1	7.8	2.41	7575	3.97	299.19
011100532-08	OBS	No	23.155985	146.735798	378.5	1.755	8.4	9.2	2.41	7575	4.86	466.79
011100532-09	OBS	No	42.033118	164.656835	317.5	2.500	8.1	-1.0	2.41	7575	4.33	210.81

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
011100532-01	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT
011100532-02	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT
011100532-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT
011100532-04	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT
011100532-05	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT
011100532-06	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT
011100532-07	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT
011100532-08	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—MOD_NONUNIQ_DV
011100532-09	OBS	FP	0.00	1	0	1	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_NOFITS—HALO_GHOST

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

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

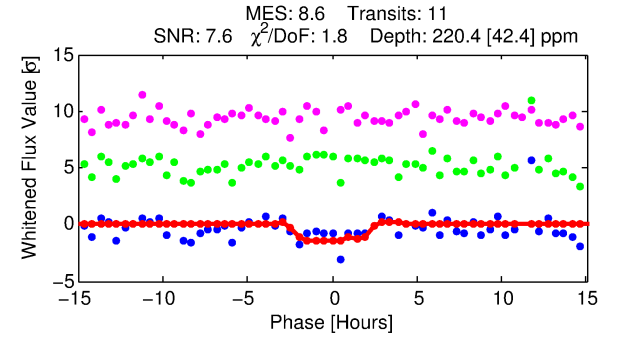
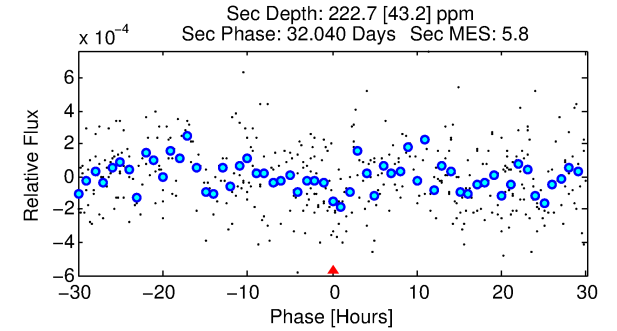
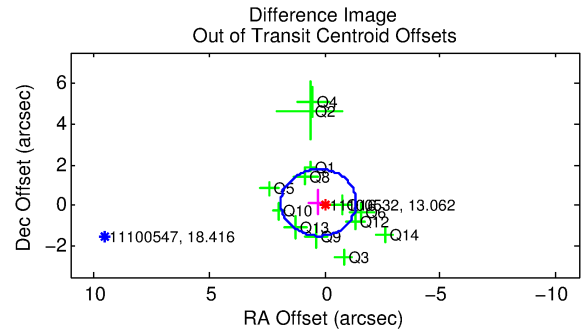
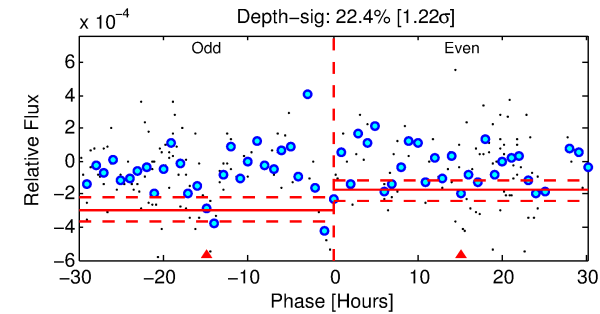
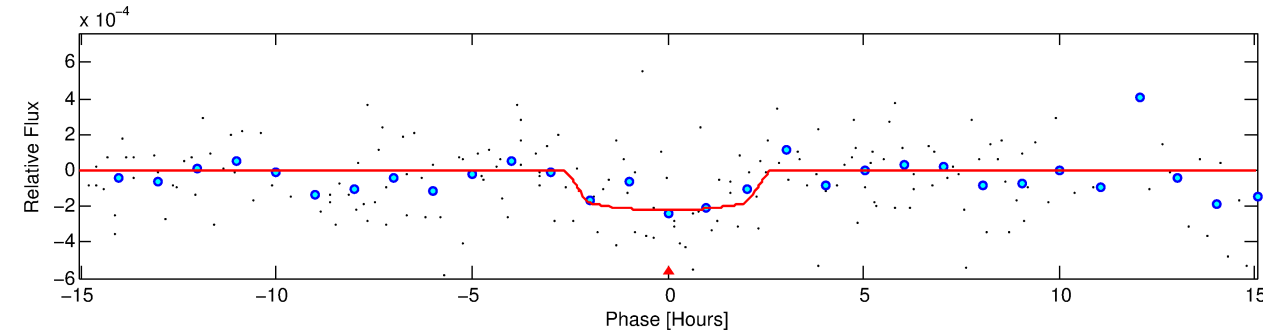
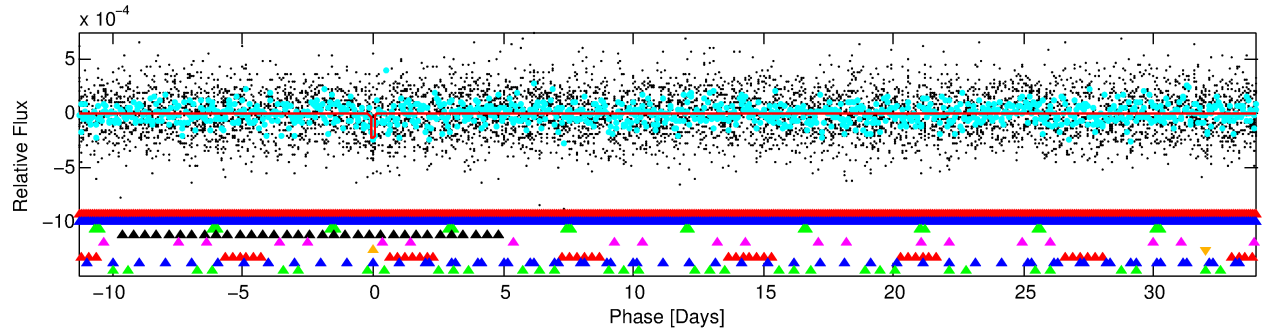
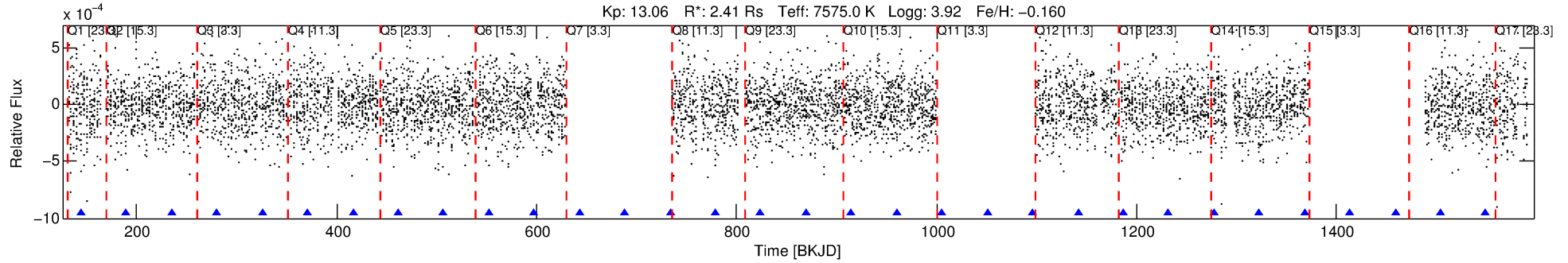
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 011100532-06

No Significant Match Found

DV One-Page Summary

KIC: 11100532 Candidate: 6 of 9 Period: 45.312 d



DV Fit Results:

Period = 45.31160 [0.00095] d
Epoch = 144.5824 [0.0205] BKJD
Rp/R* = 0.0157 [0.0093]
a/R* = 34.81 [118.03]
b = 0.88 [0.87]
Seff = 190.72 [57.21]
Teq = 948 [71] K
Rp = 4.13 [2.62] Re
a = 0.3000 [0.0586] AU
Ag = 647.29 [804.80] [0.80 σ]
Teffp = 7390 [2232] K [2.88 σ]

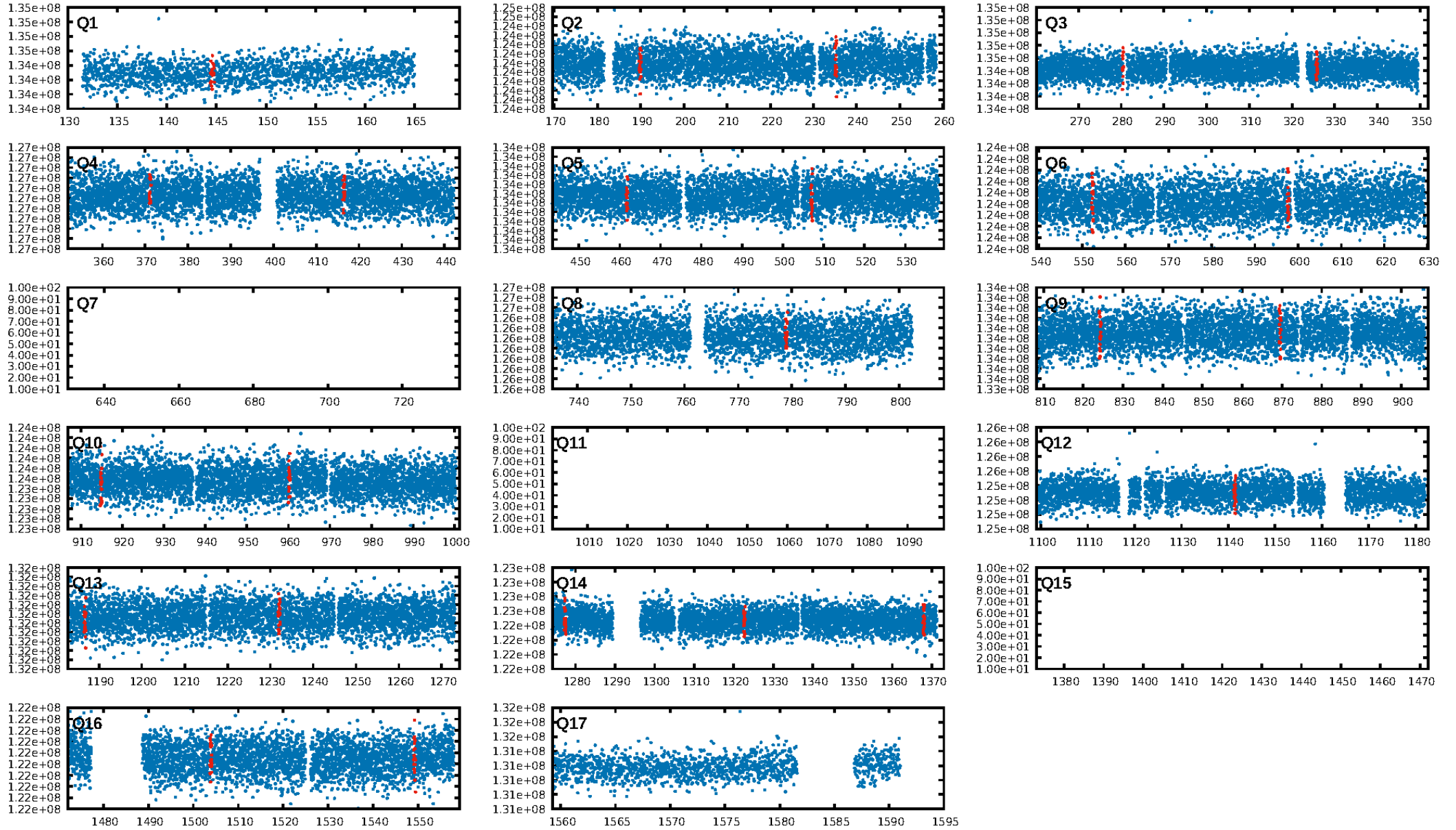
DV Diagnostic Results:

ShortPeriod-sig: 89.4% [1.62 σ]
LongPeriod-sig: 100.0% [105.22 σ]
ModelChiSquare2-sig: 0.6%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [11/11]
GhostDiagnostic-chr: 0.4313
Centroid-sig: 42.3%
Centroid-so: 0.898 arcsec [1.00 σ]
OotOffset-rm: 0.299 arcsec [0.55 σ]
KicOffset-rm: 0.277 arcsec [0.42 σ]
OotOffset-st: 4/1/4/4 [13]
KicOffset-st: 4/1/4/4 [13]
DiffImageQuality-fgm: 0.46 [6/13]
DiffImageOverlap-fno: 0.00 [0/13]

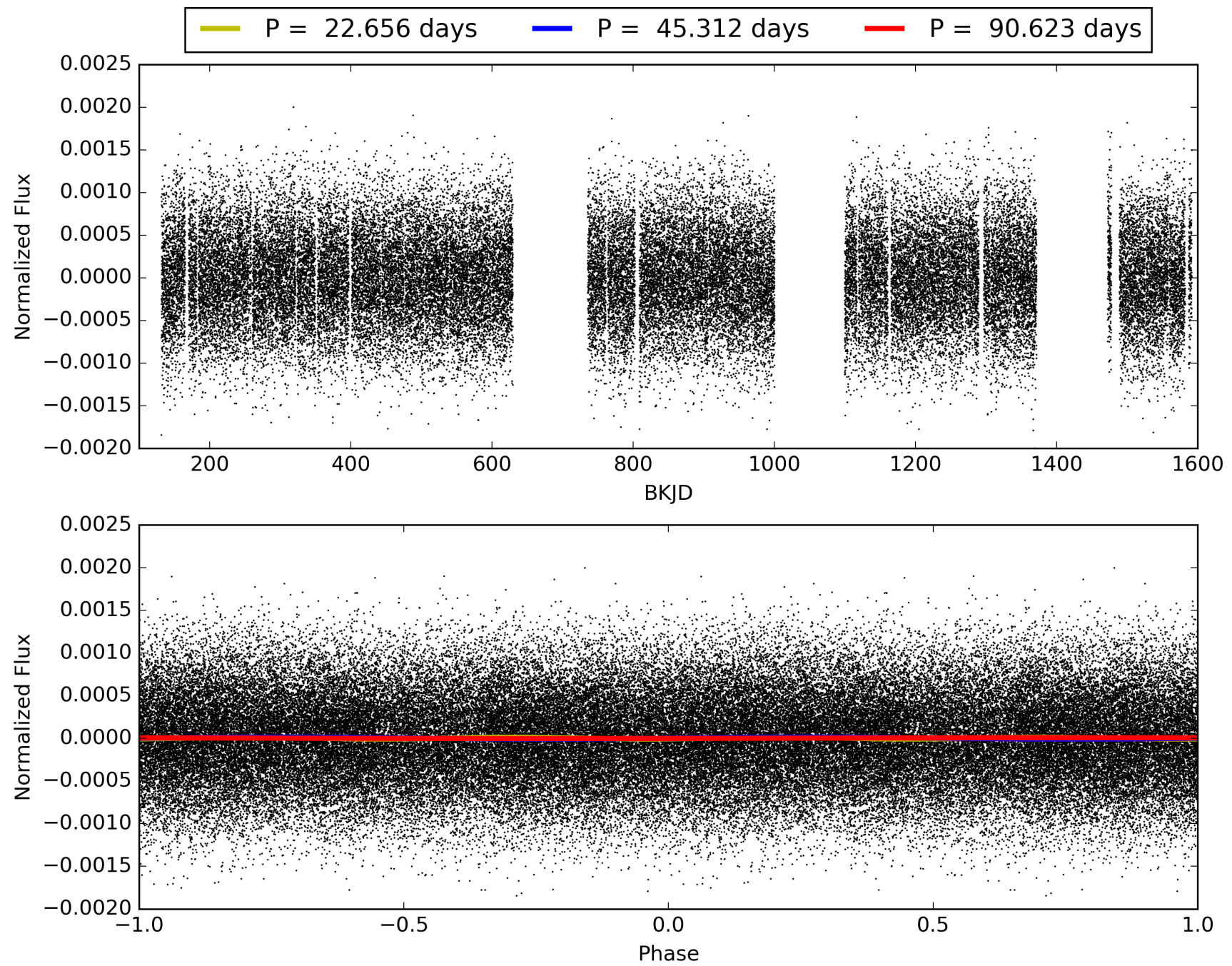
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 01-Feb-2016 10:50:35 Z

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

TCE 011100532-06, PDC Light Curves

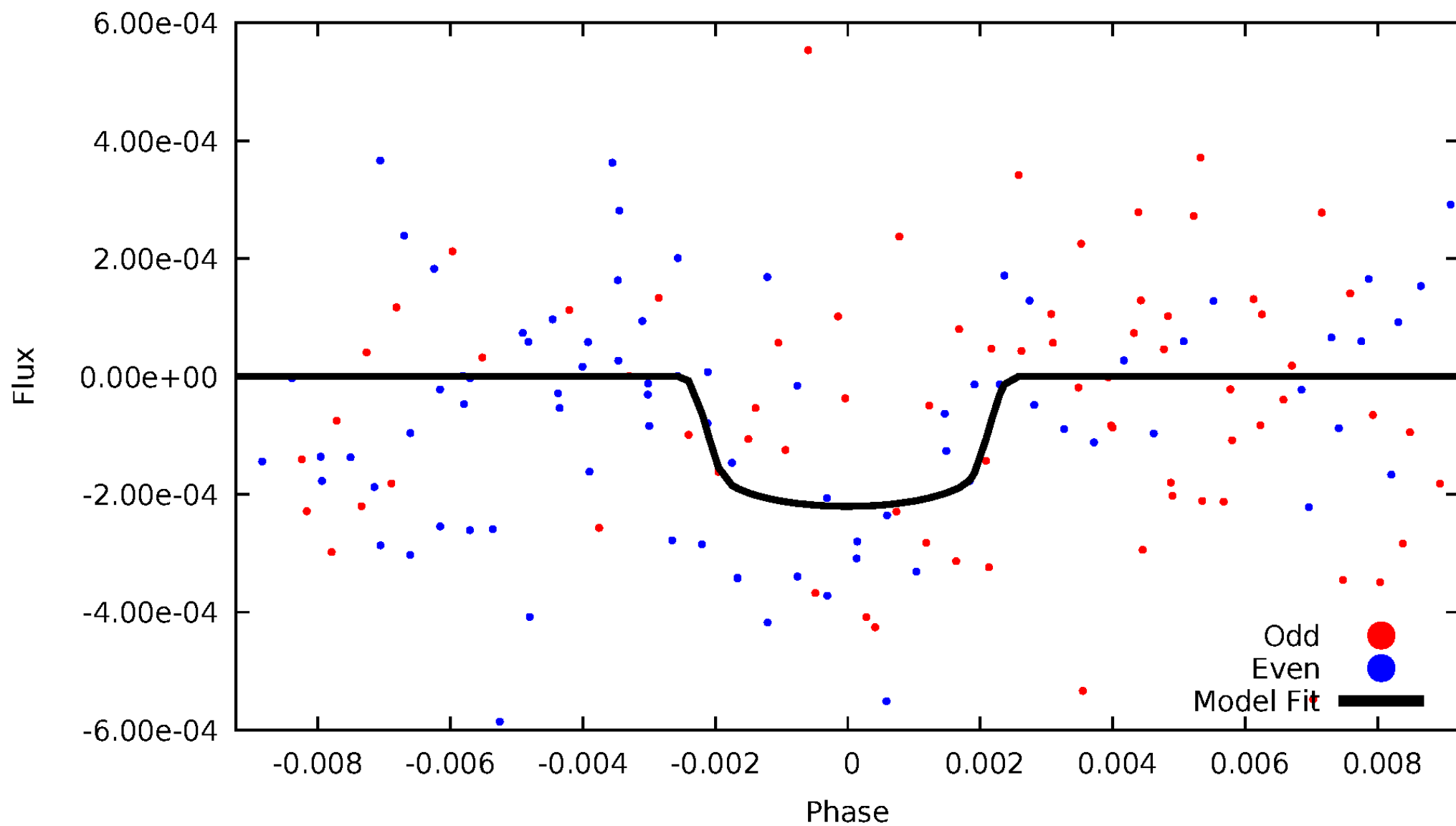


TCE 011100532-06



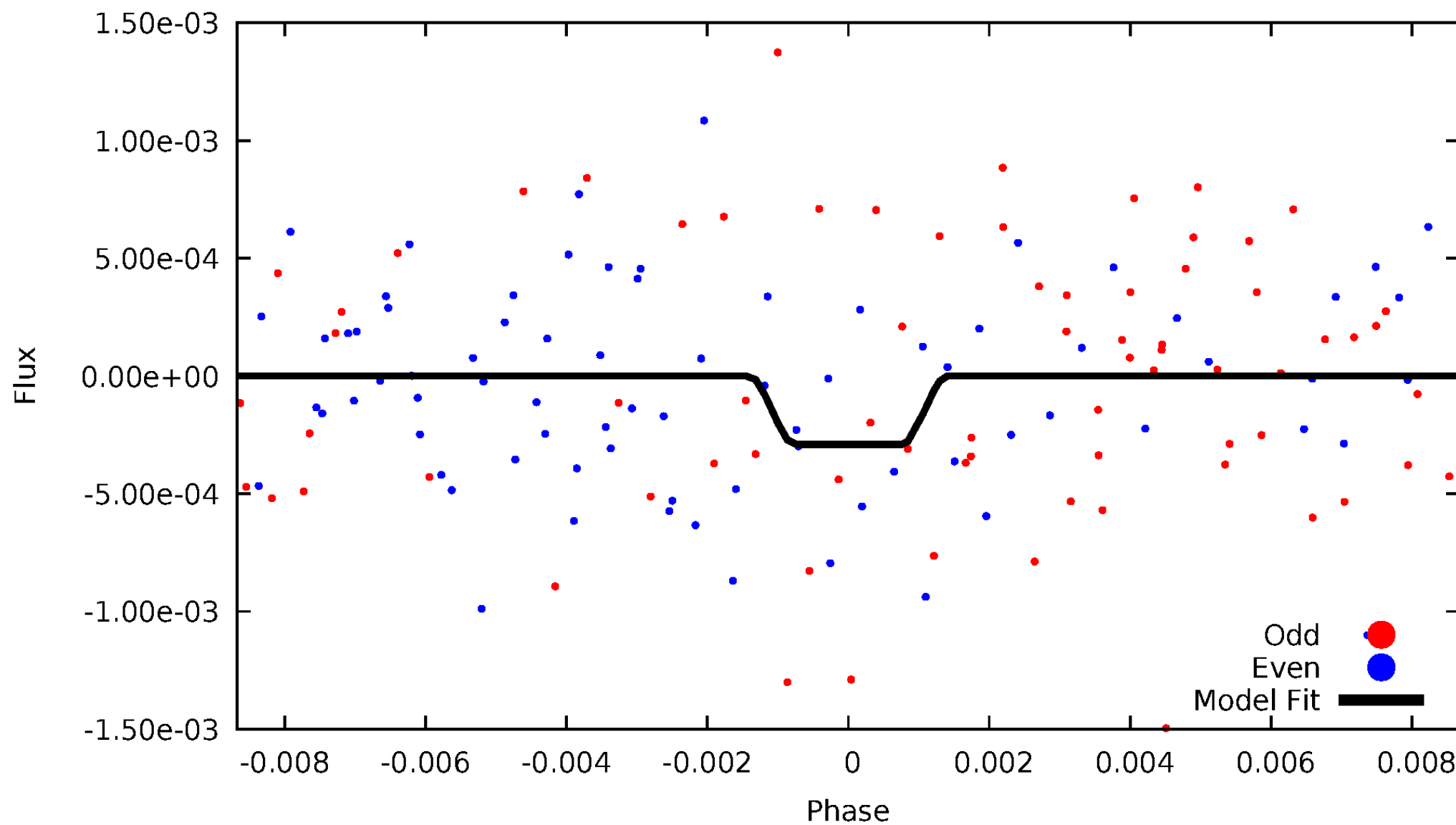
DV Odd/Even

TCE 011100532-06



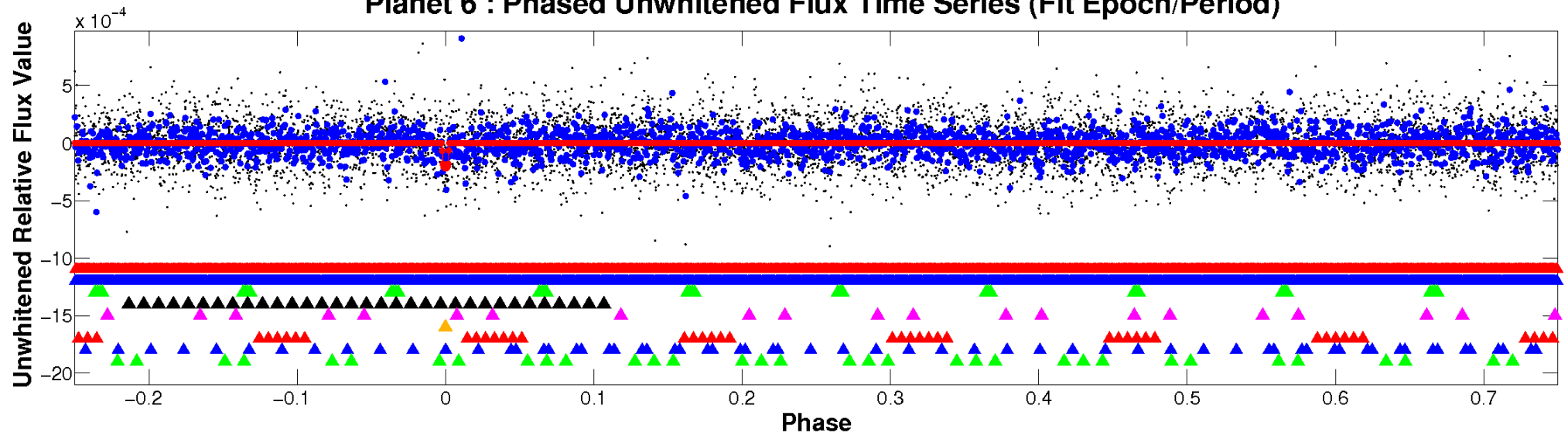
ALT Odd/Even

TCE 011100532-06

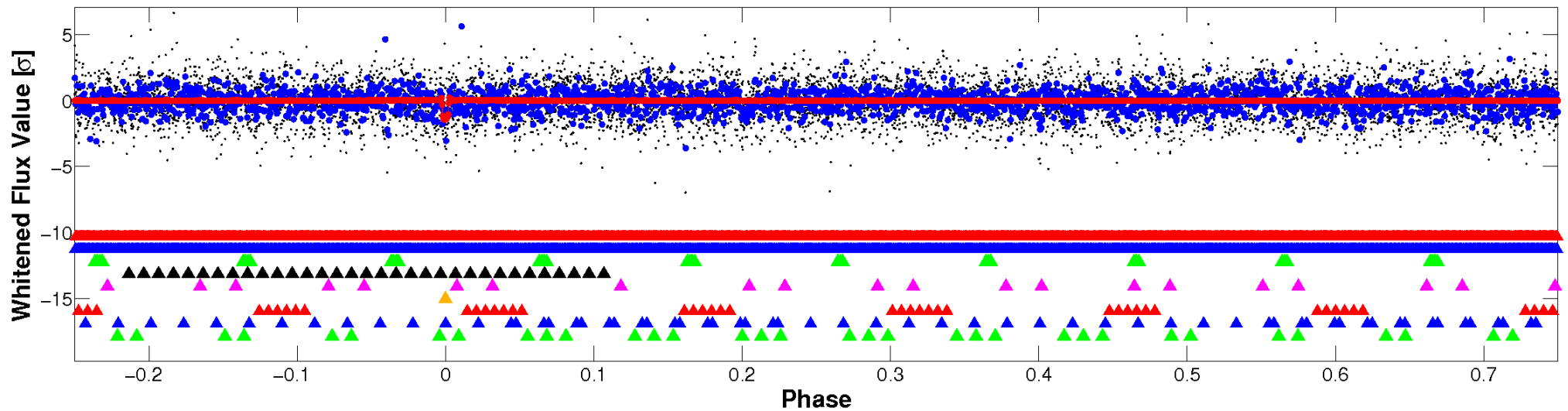


Non-Whitened Vs. Whitened Light Curve

Planet 6 : Phased Unwhitened Flux Time Series (Fit Epoch/Period)

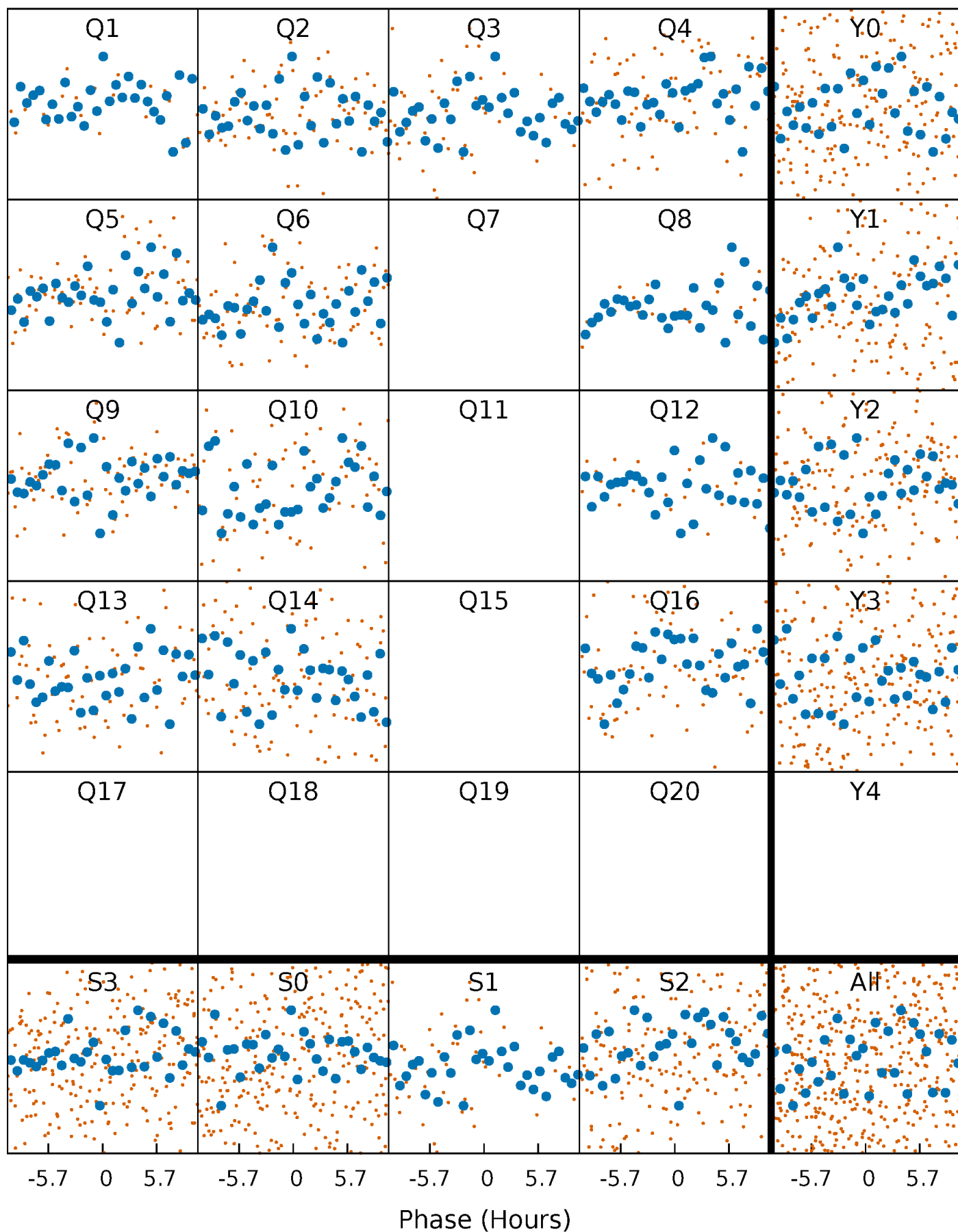


Planet 6 : Phased Whitened Flux Time Series (Fit Epoch/Period)



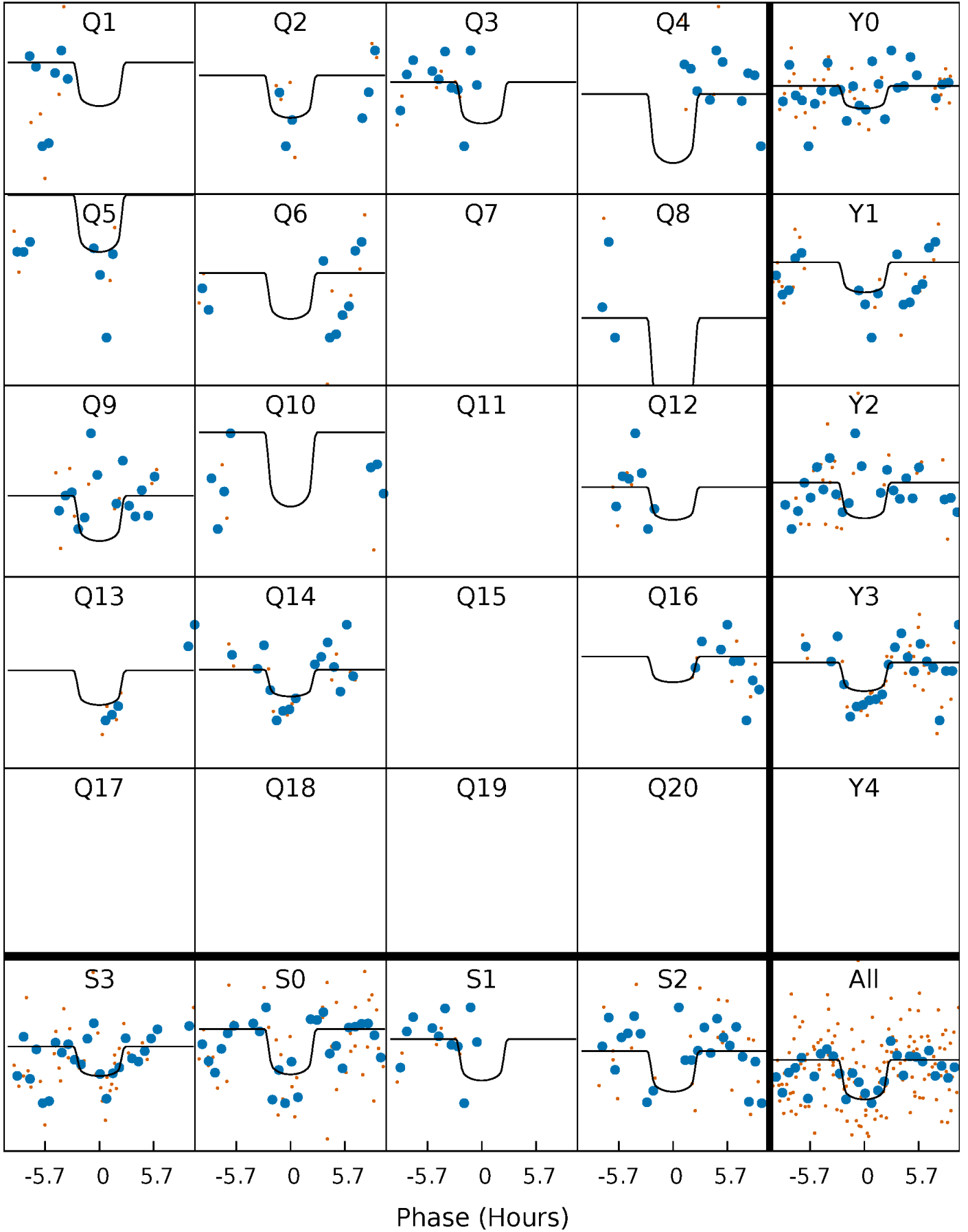
PDC Quarter-Phased Transit Curves

TCE 011100532-06 P= 45.311601 Days $T_0=144.582448$ (BKJD)



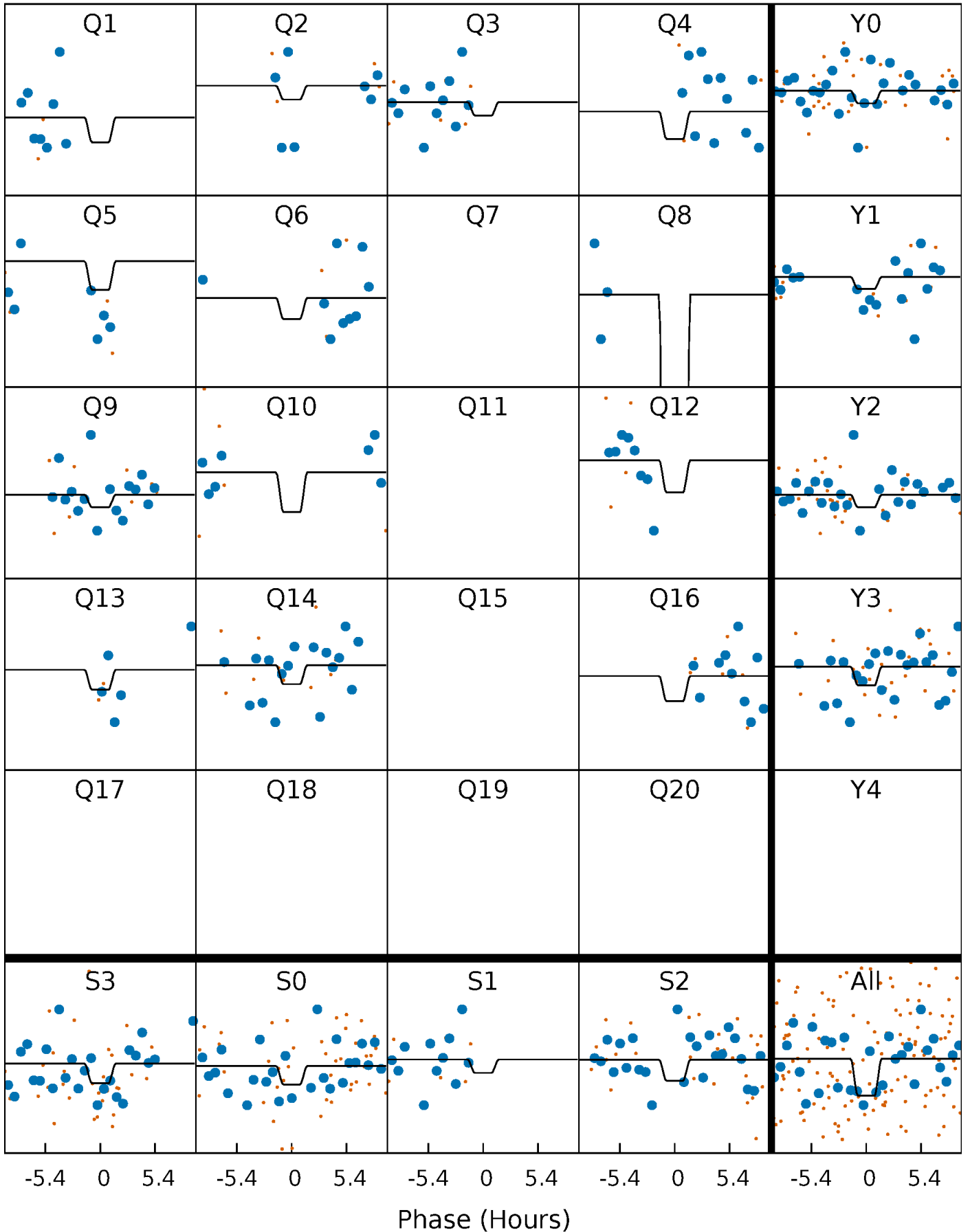
DV Quarter-Phased Transit Curves

TCE 011100532-06 P= 45.311601 Days $T_0=144.582448$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

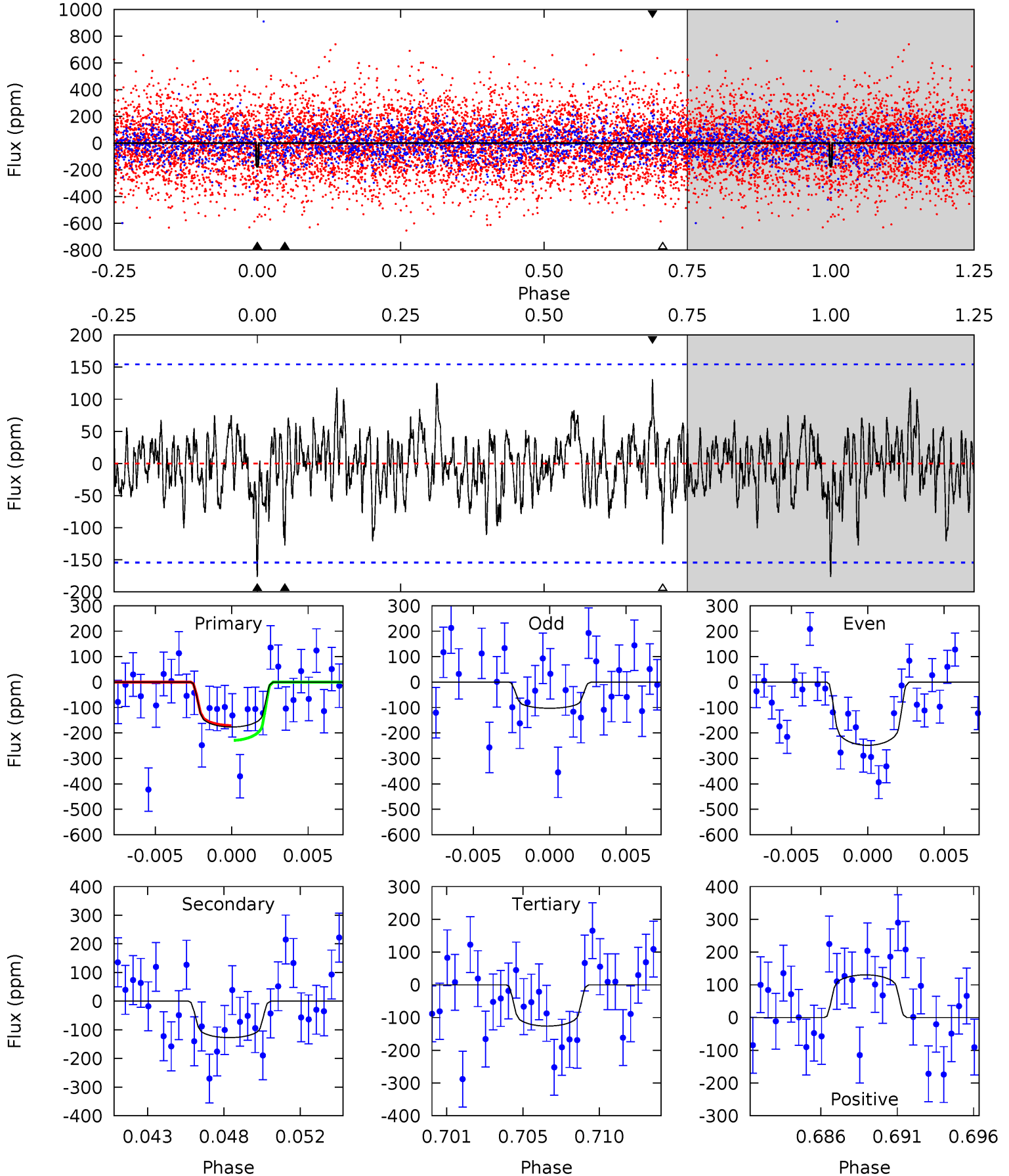
TCE 011100532-06 P= 45.311695 Days $T_0=144.599394$ (BKJD)



DV Model-Shift Uniqueness Test

011100532-06, P = 45.311601 Days, E = 99.270847 Days

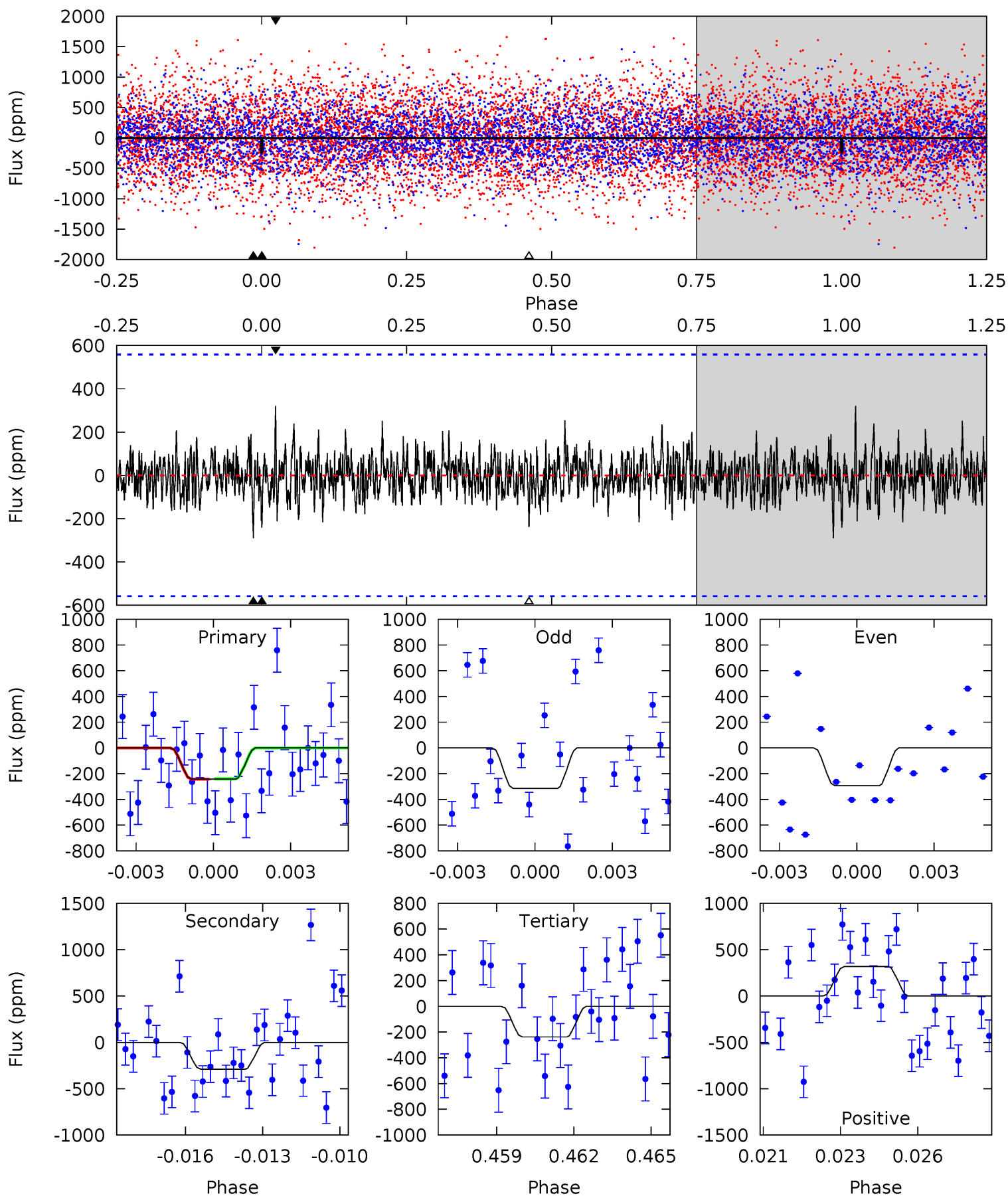
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
5.92	4.26	4.23	4.36	5.17	2.82	1.29	1.69	1.56	0.04	-0.10	2.43	0.75	0.42	0.97



Alt Model-Shift Uniqueness Test

011100532-06, P = 45.311695 Days, E = 99.287699 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
2.28	2.74	2.25	3.00	5.28	3.01	0.70	0.03	-0.71	0.49	-0.26	0.10	1.99	0.52	0.02



Stellar Parameters For KIC 011100532

	$T_{\text{eff}} (K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M (M_{\odot})$	$p_{\star} (g \cdot \text{cm}^{-3})$
	7575^{+83}_{-75}	$3.917^{+0.168}_{-0.112}$	$-0.160^{+0.150}_{-0.150}$	$2.412^{+0.434}_{-0.531}$	$1.752^{+0.191}_{-0.172}$	$0.176^{+0.152}_{-0.060}$
	+1%/-1%	+4%/-3%	+94%/-94%	+18%/-22%	+11%/-10%	+87%/-34%
Source	SPE68	SPE68	SPE68	DSEP		

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

Secondary Eclipse Parameters for KIC 011100532-06 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-127 ± 30	$4.24^{+2.46}_{-2.19}$	1326^{+57}_{-73}	6196^{+3333}_{-1177}	349^{+1138}_{-212}
Alt.	-289 ± 106	$4.49^{+2.35}_{-2.27}$	1323^{+67}_{-69}	7325^{+4977}_{-1560}	659^{+2098}_{-392}

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

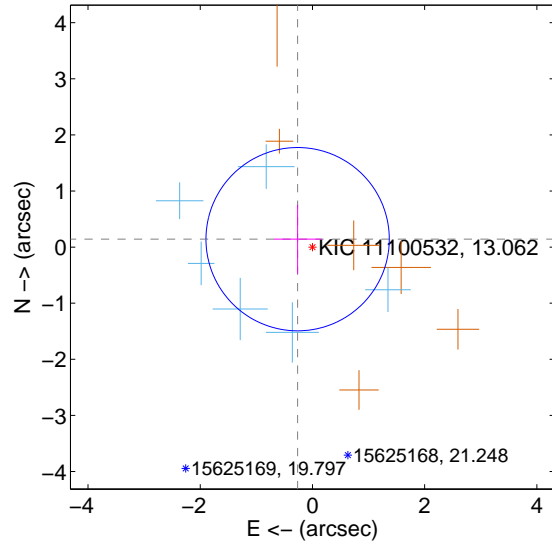
Supplemental centroid analysis for 011100532-06. Kepler magnitude: 13.06. Transit SNR 7.58

There are 6 quarters with good PRF difference image offsets

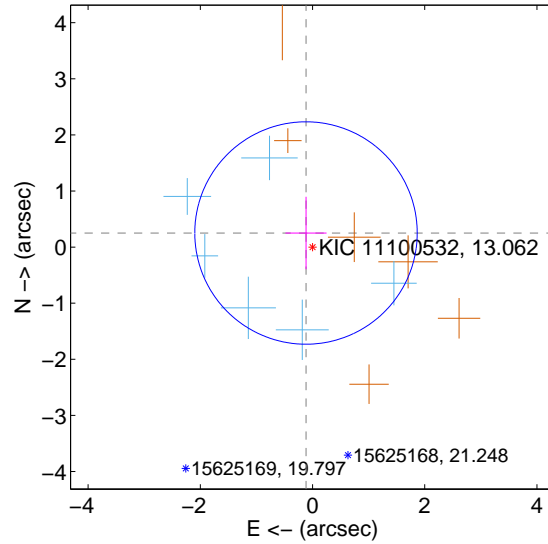
The direct PRF centroid is offset from the target star catalog position by about 0.14 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.299 ± 0.545	0.55	0.264 ± 0.423	0.141 ± 0.614
PRF-fit source offset from KIC position	0.277 ± 0.661	0.42	0.116 ± 0.366	0.251 ± 0.646
photometric centroid source offset	0.90 ± 0.90	1.00	0.90 ± 0.90	-0.00 ± 0.81

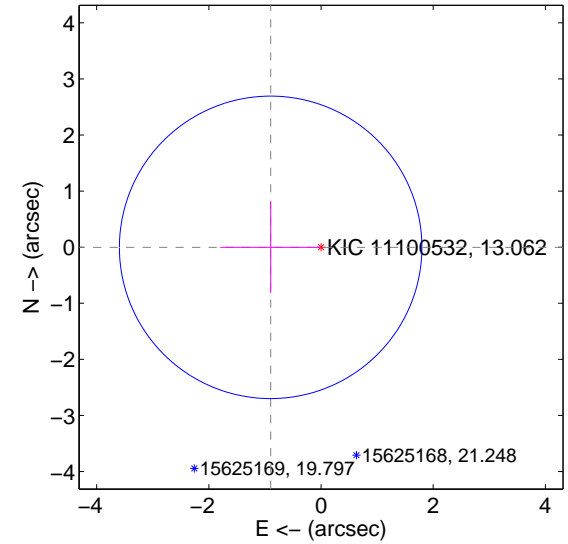
offset from difference PRF-fit to OOT PRF-fit



offset from difference PRF-fit to KIC position

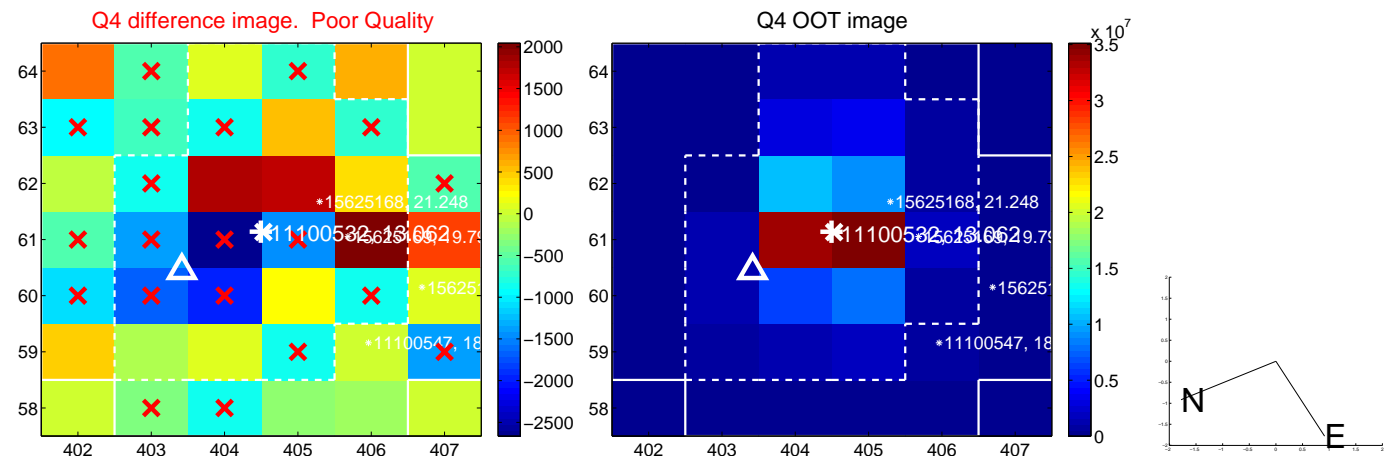
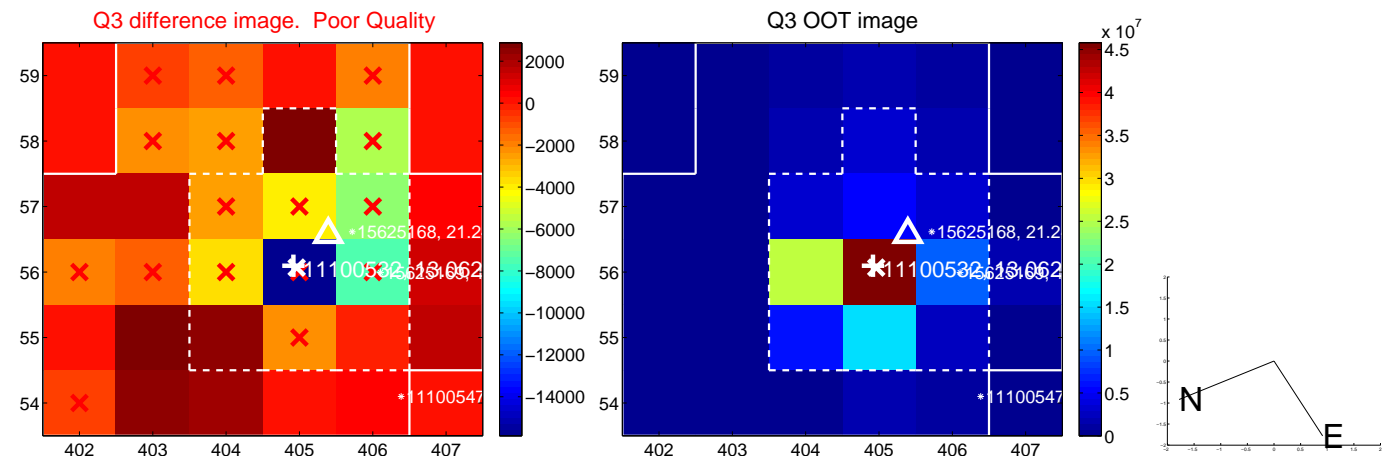
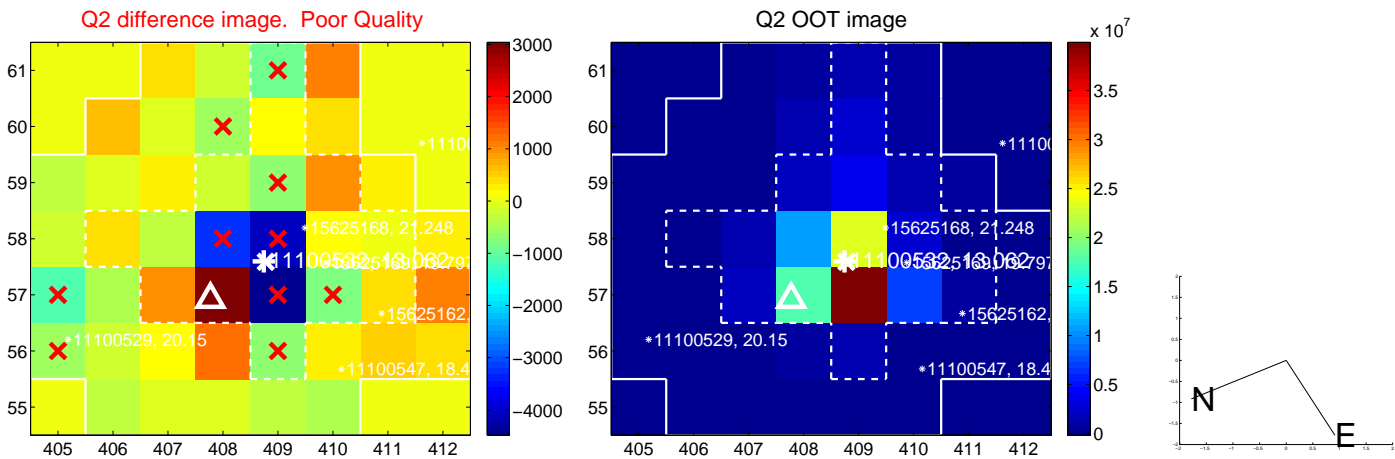
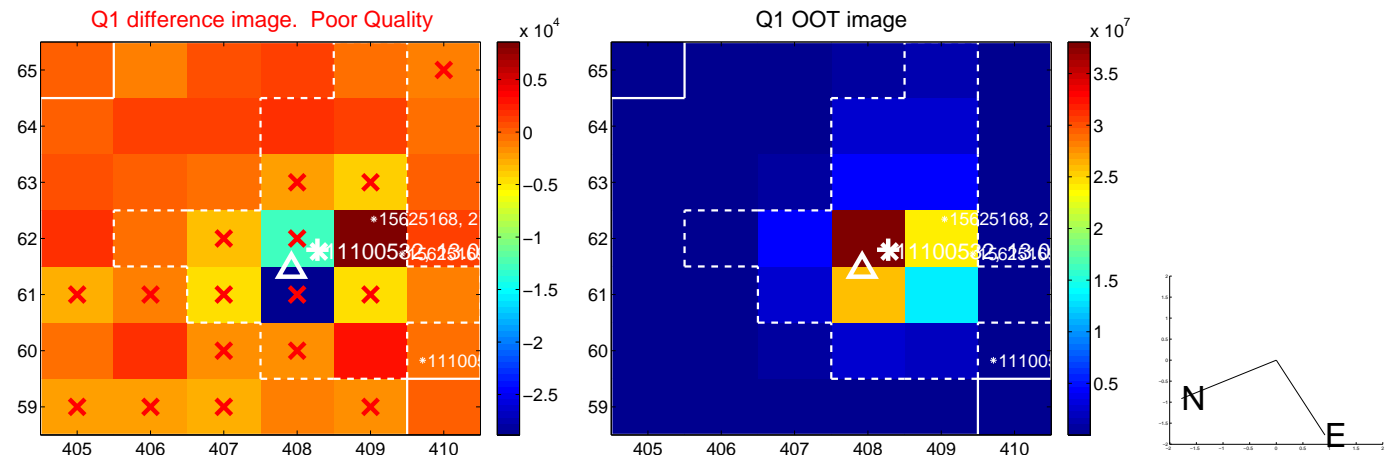


offset from photometric centroids

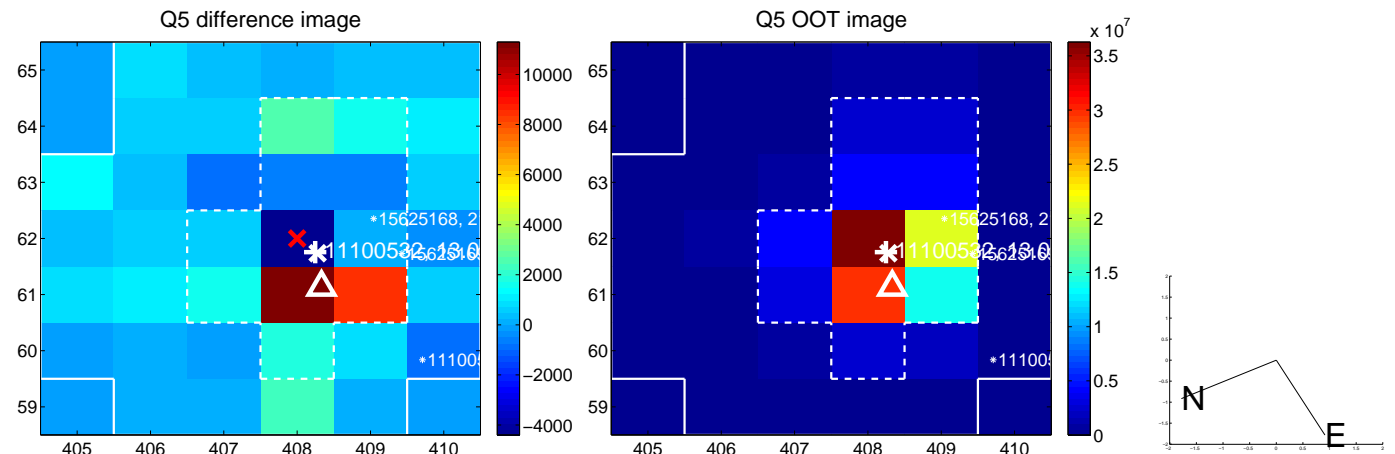


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets**; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

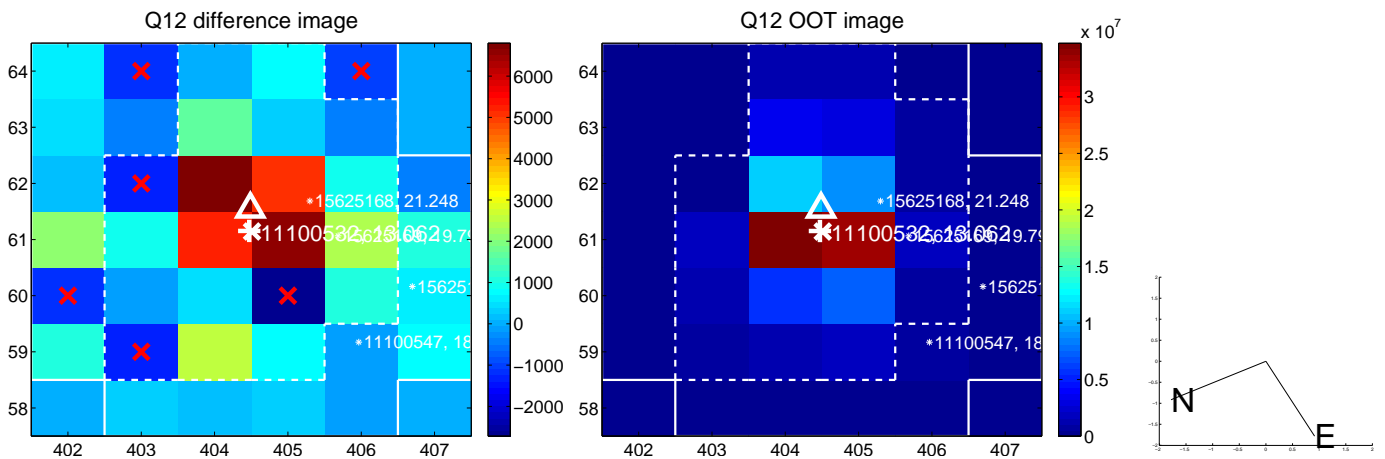
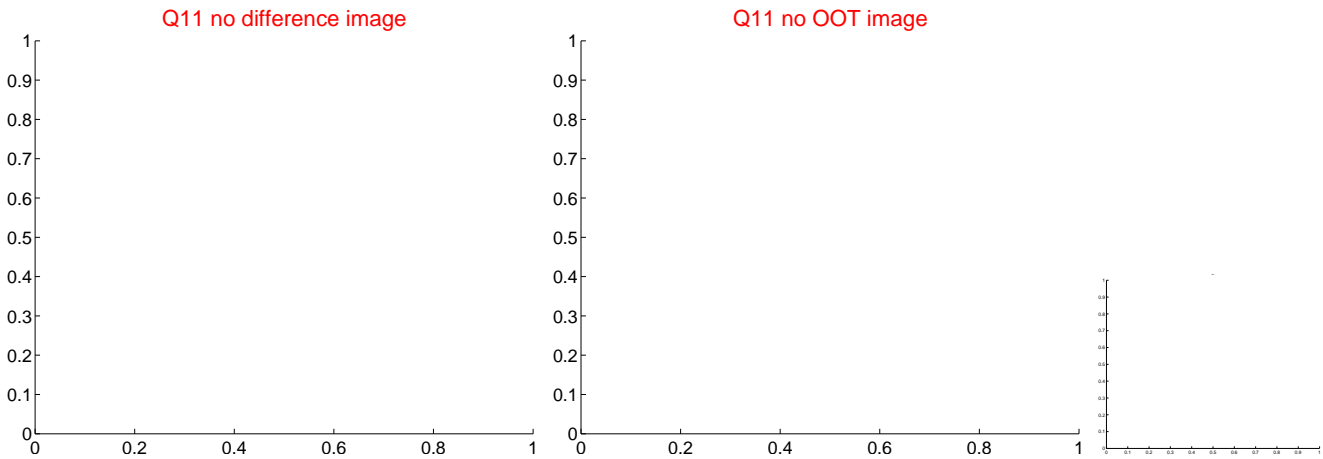
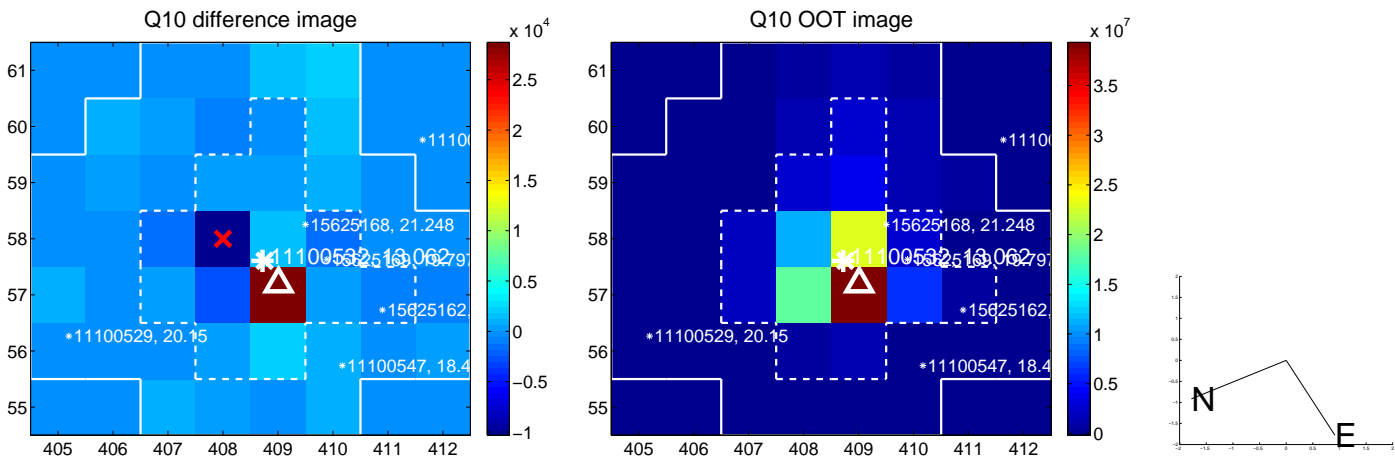
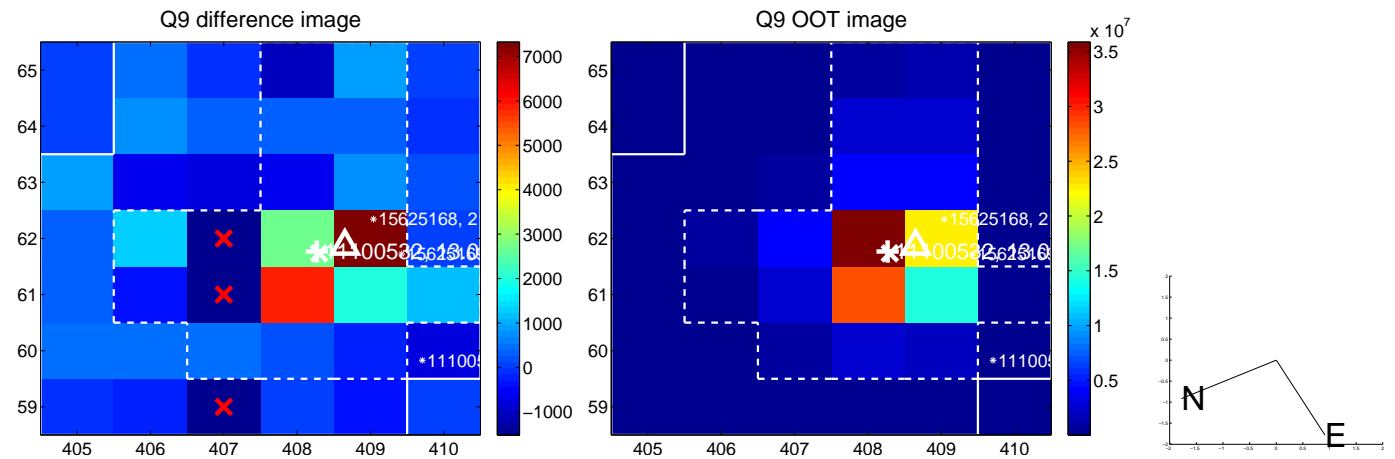
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



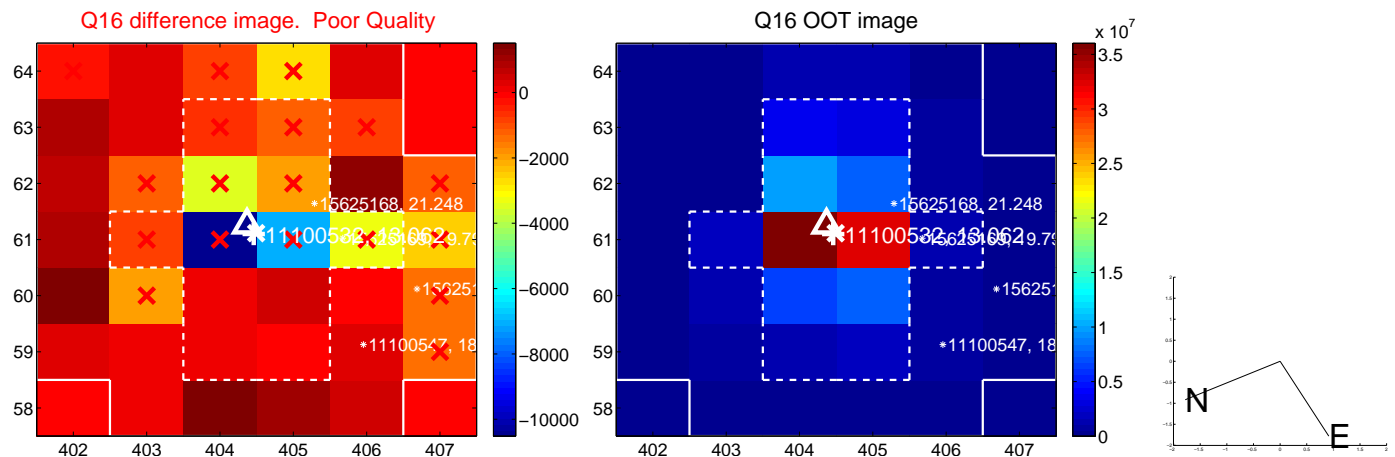
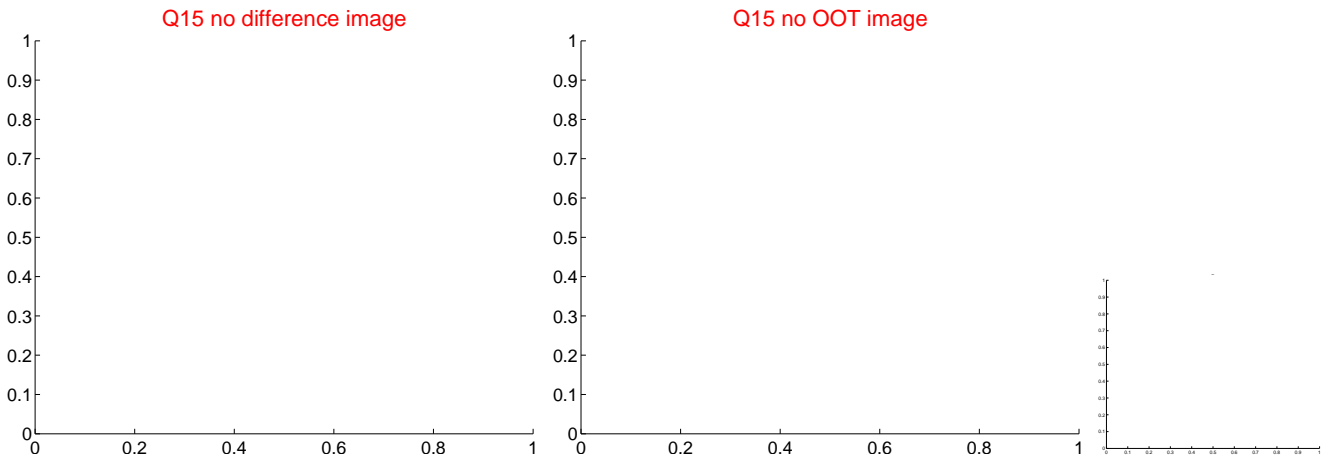
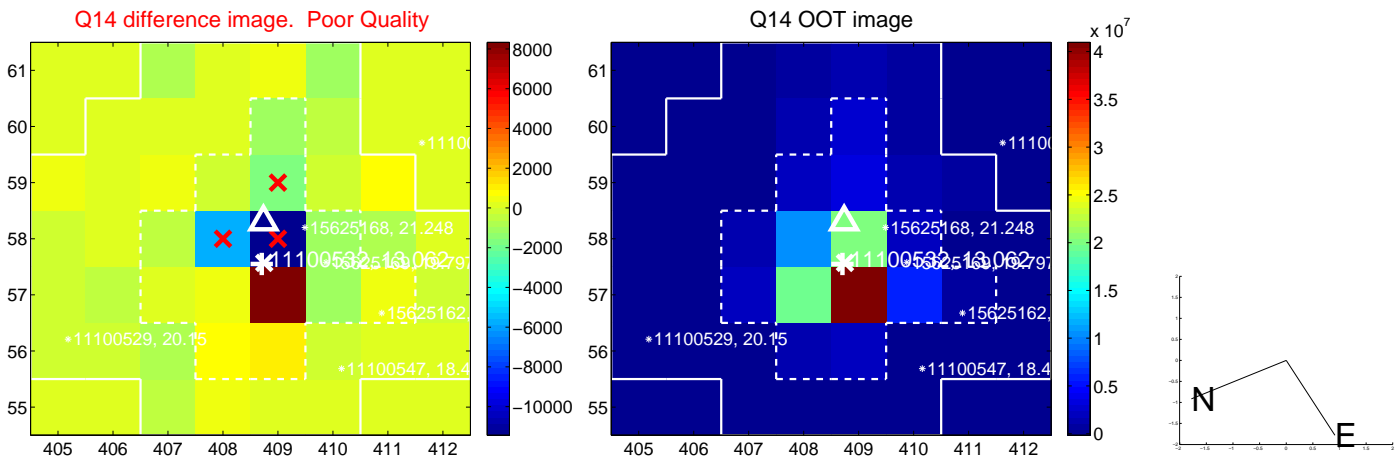
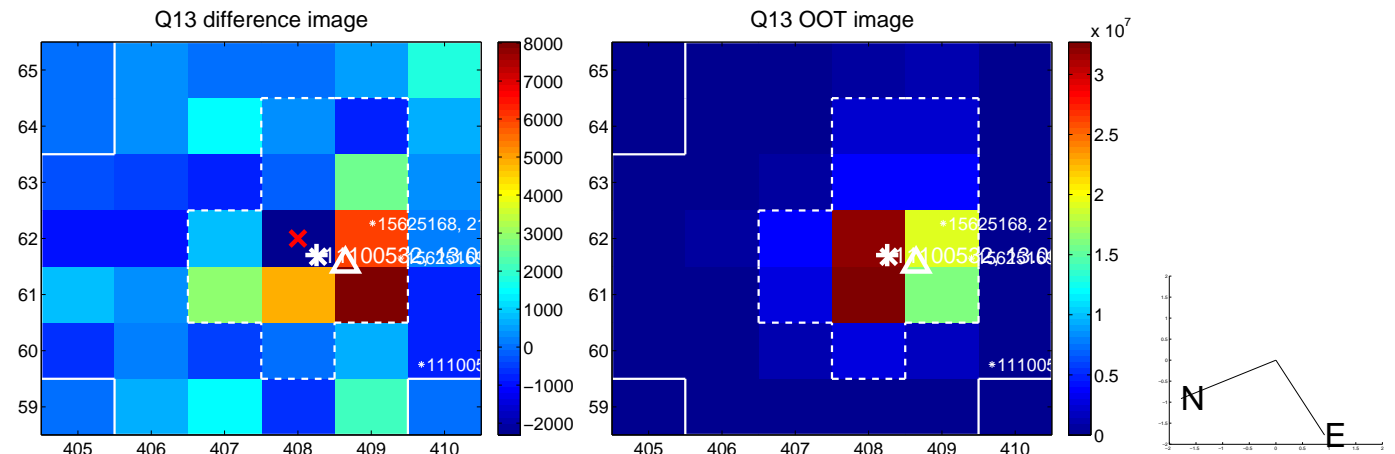
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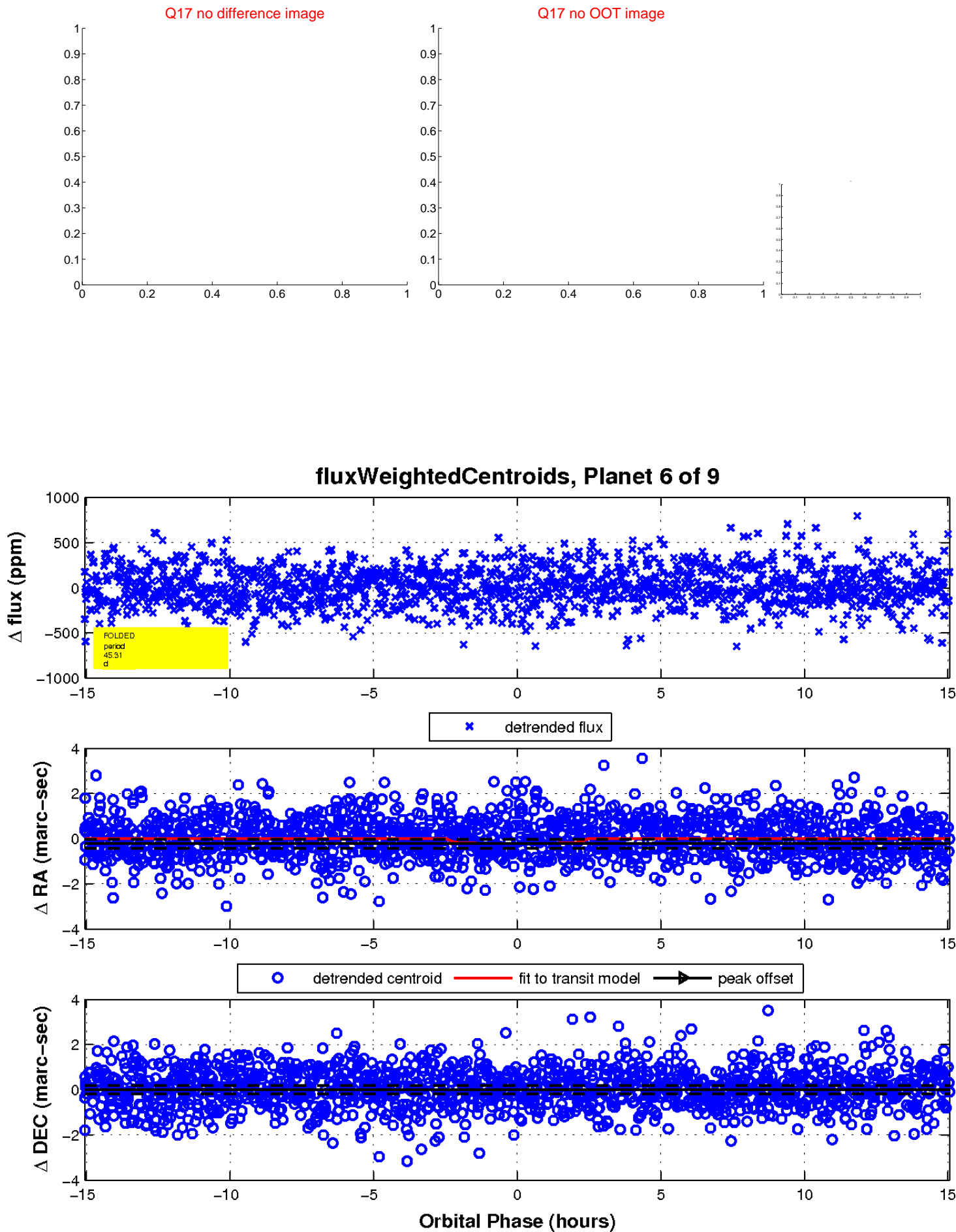
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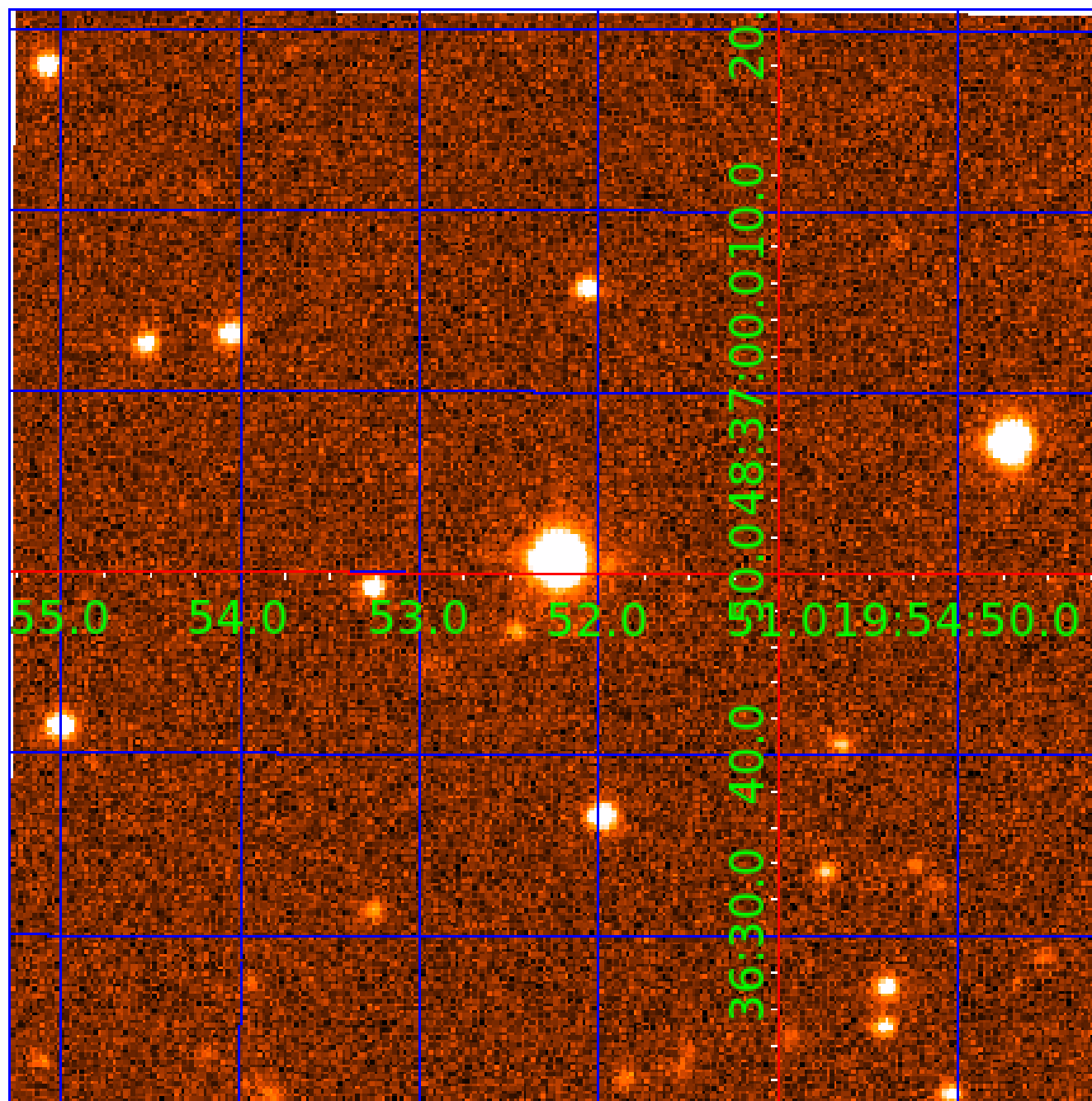


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 011100532

Q1-17 DR25 TCE Parameters

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Robovetter Results

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011100532-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT
011100532-04	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT
011100532-05	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT
011100532-06	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT
011100532-07	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT
011100532-08	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—MOD_NONUNIQ_DV
011100532-09	OBS	FP	0.00	1	0	1	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_NOFITS—HALO_GHOST

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

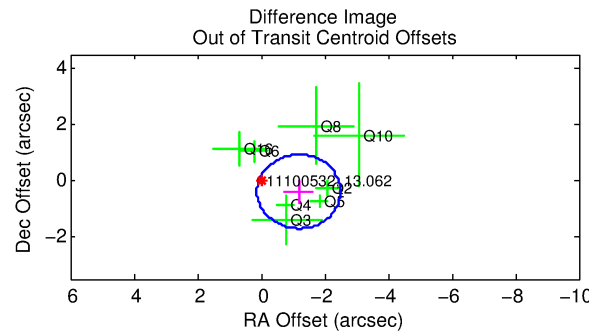
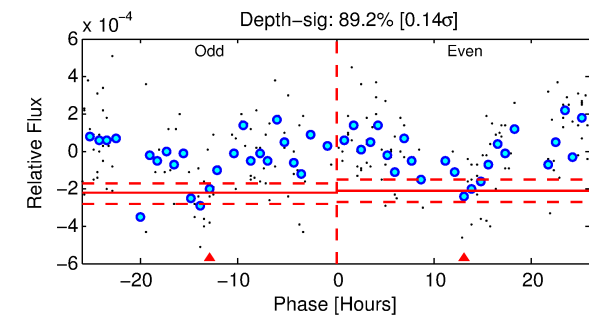
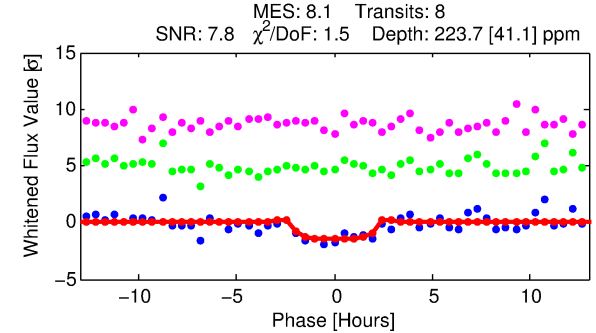
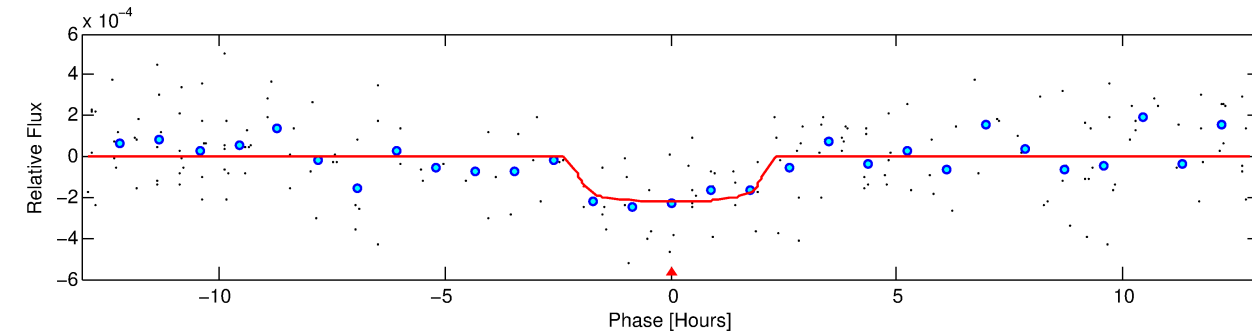
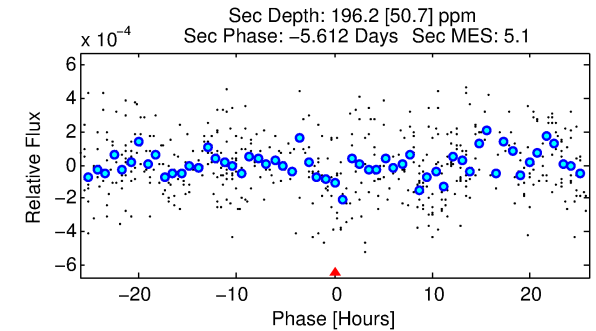
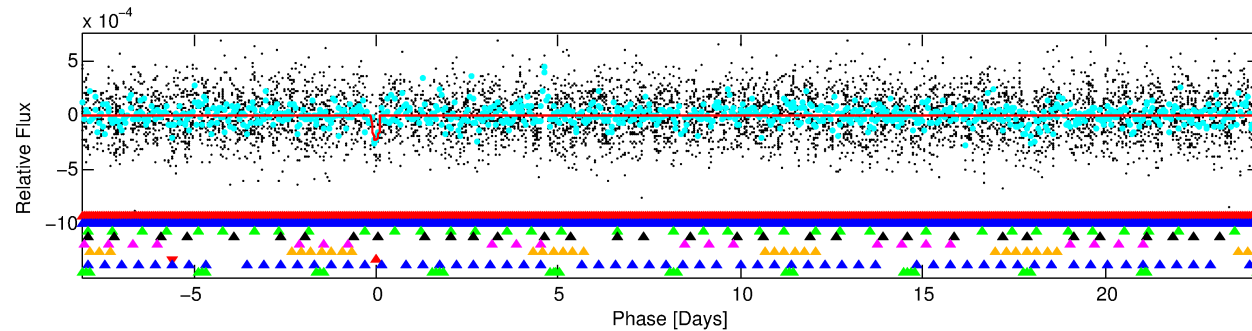
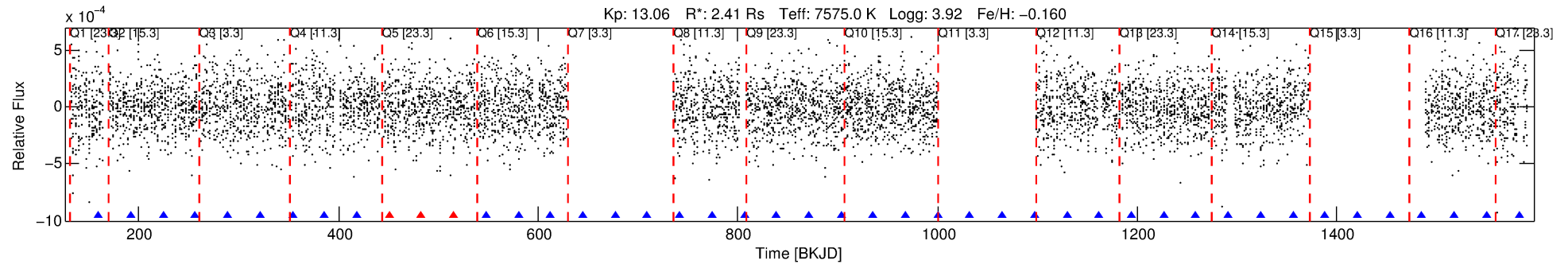
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 011100532-07

No Significant Match Found

DV One-Page Summary

KIC: 11100532 Candidate: 7 of 9 Period: 32.326 d



DV Fit Results:

Period = 32.32579 [0.00077] d
Epoch = 159.8997 [0.0201] BKJD
Rp/R* = 0.0151 [0.0144]
a/R* = 36.20 [189.34]
b = 0.79 [2.53]
Seff = 299.19 [89.74]
Teq = 1061 [80] K
Rp = 3.97 [3.89] Re
a = 0.2395 [0.0468] AU
Ag = 392.68 [765.43] [0.51σ]
Teffp = 7299 [3516] K [1.77σ]

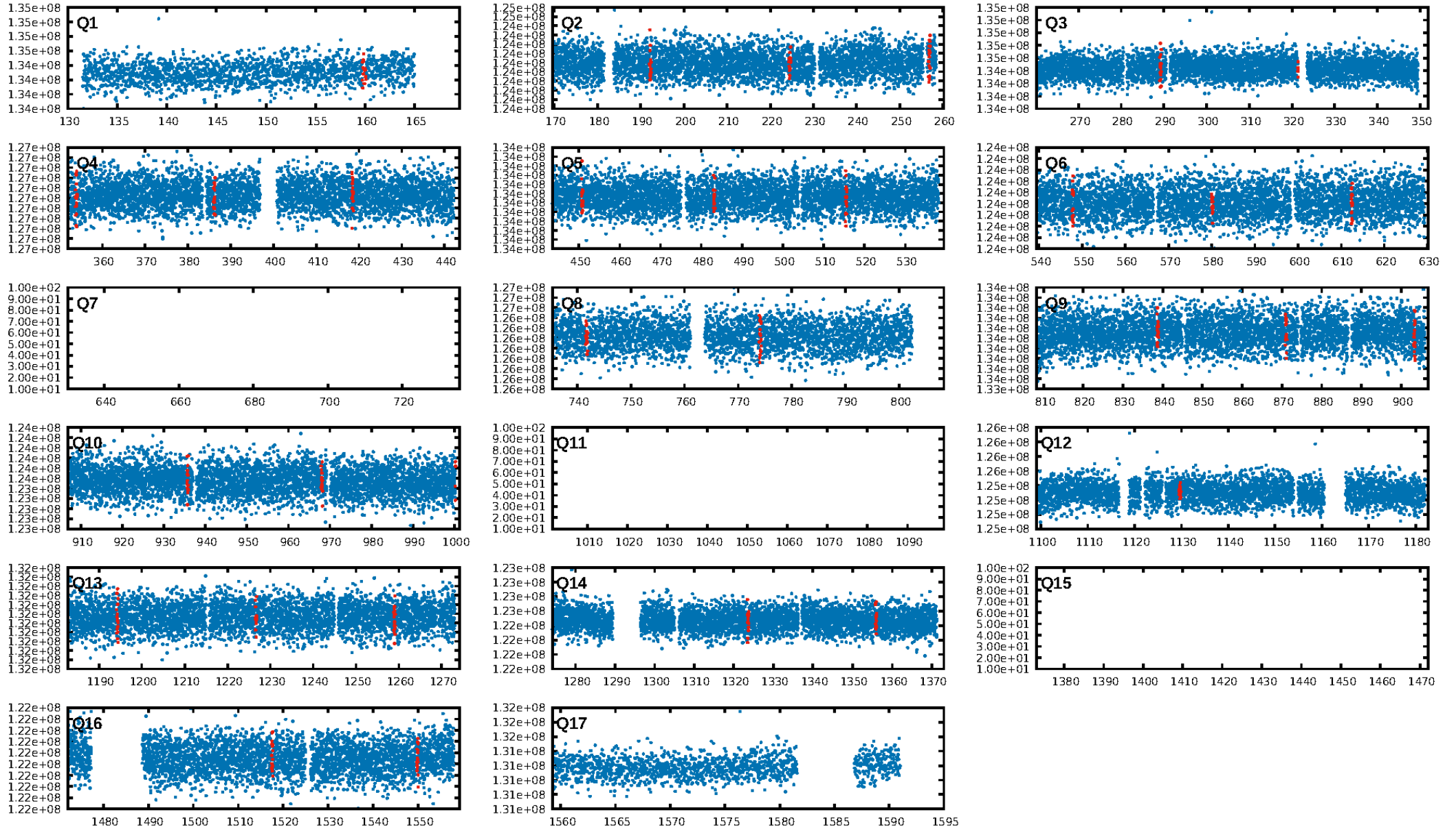
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [46.92σ]
LongPeriod-sig: 100.0% [32.27σ]
ModelChiSquare2-sig: 44.9%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: N/A
RollingBand-fgt: 0.62 [5/8]
GhostDiagnostic-chr: -0.7261
Centroid-sig: 37.9%
Centroid-so: 0.612 arcsec [0.80σ]
OotOffset-rm: 1.244 arcsec [2.84σ]
OotOffset-st: 3/1/3/1 [8]
KicOffset-rm: 1.318 arcsec [3.27σ]
KicOffset-st: 3/1/3/1 [8]
DiffImageQuality-fgm: 0.38 [3/8]
DiffImageOverlap-fno: 0.00 [0/13]

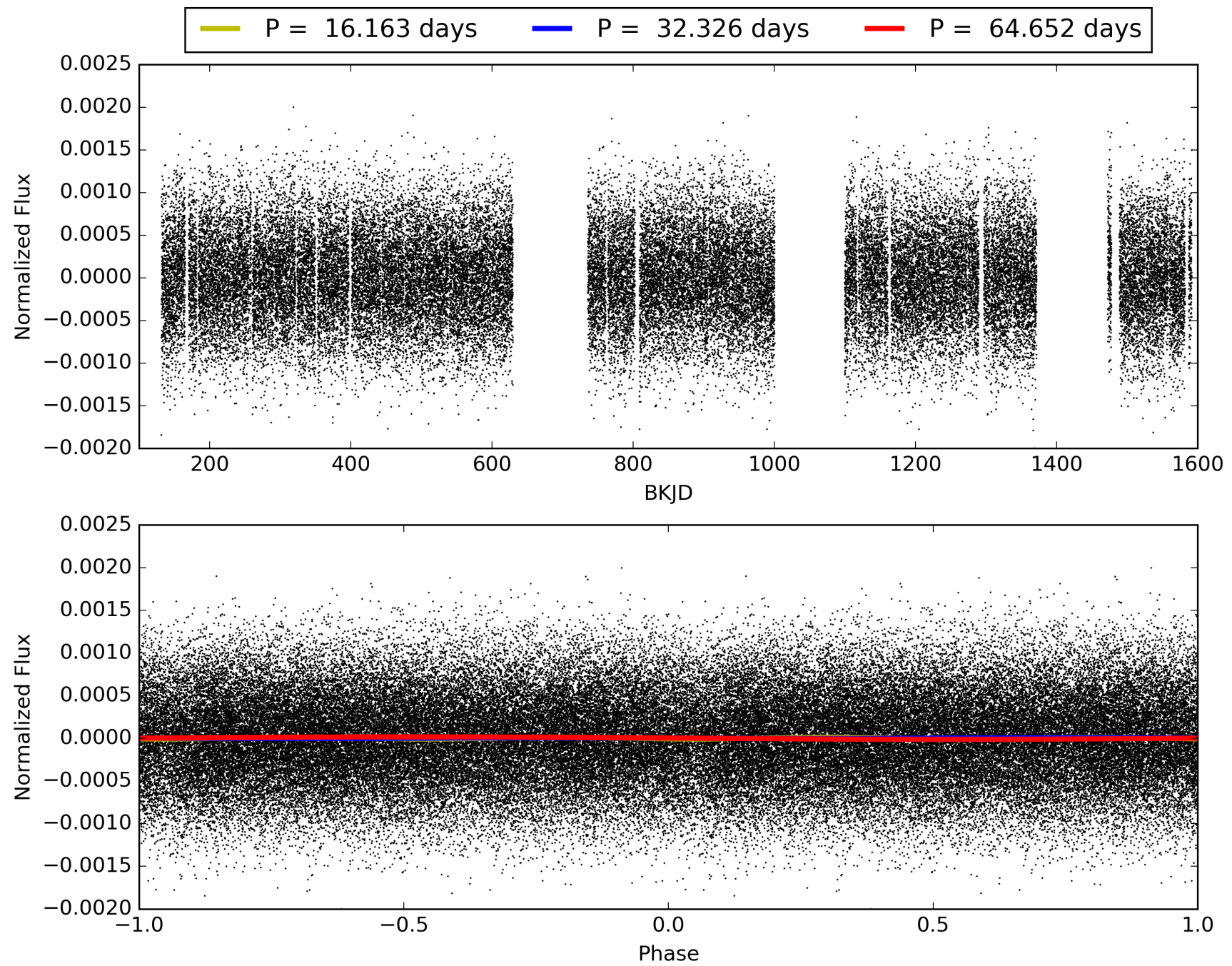
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 01-Feb-2016 10:50:38 Z

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

TCE 011100532-07, PDC Light Curves

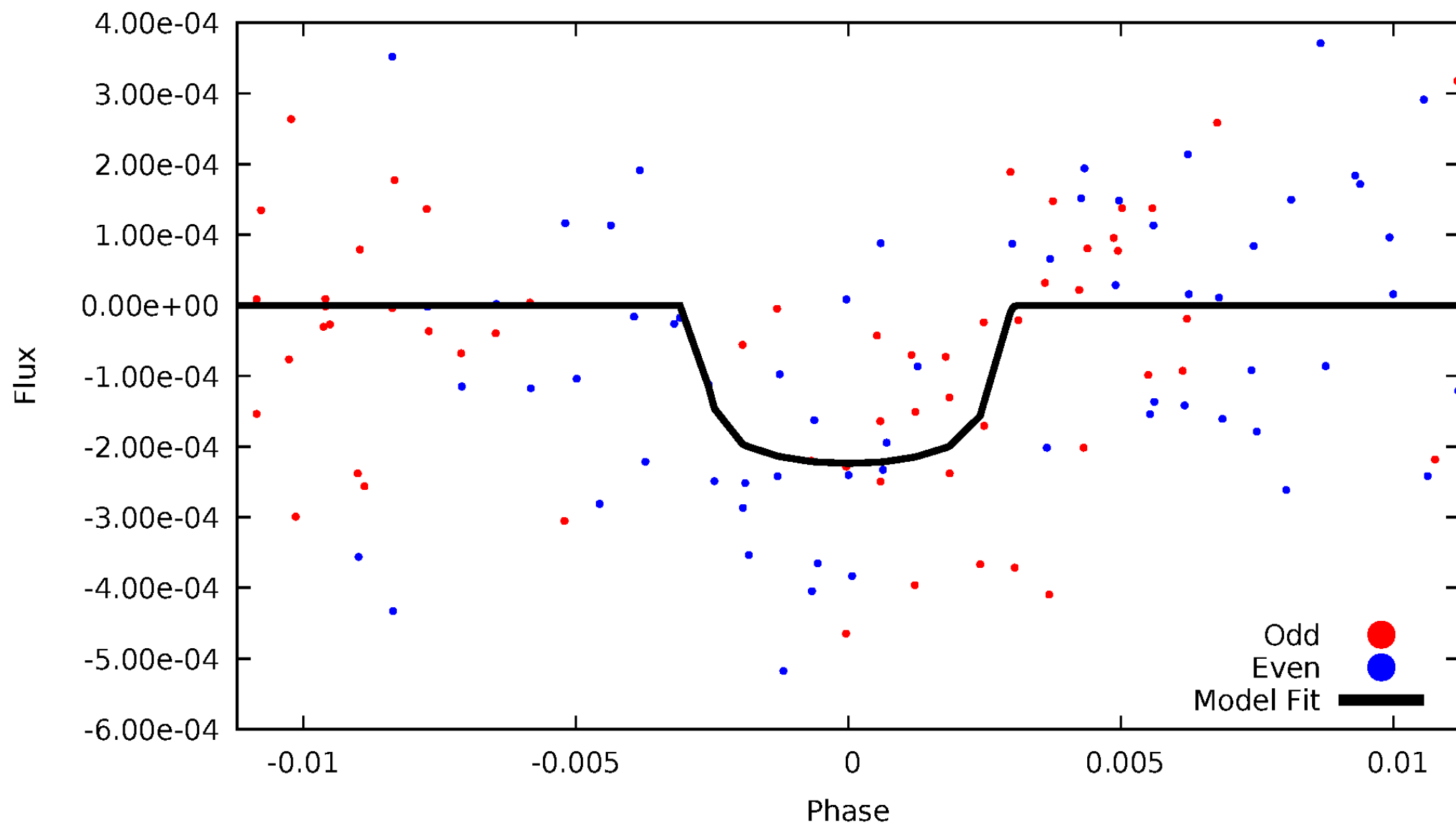


TCE 011100532-07



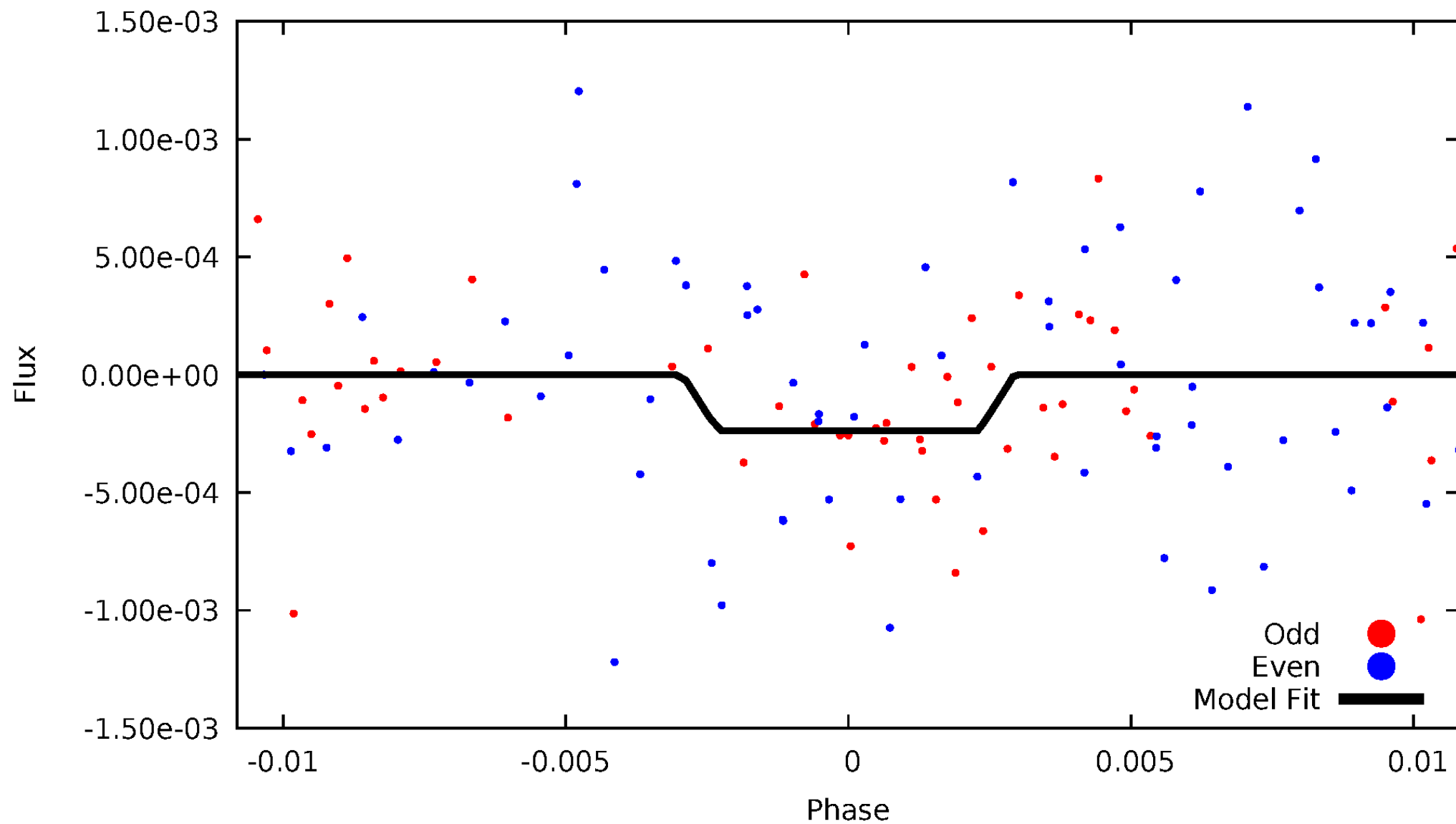
DV Odd/Even

TCE 011100532-07



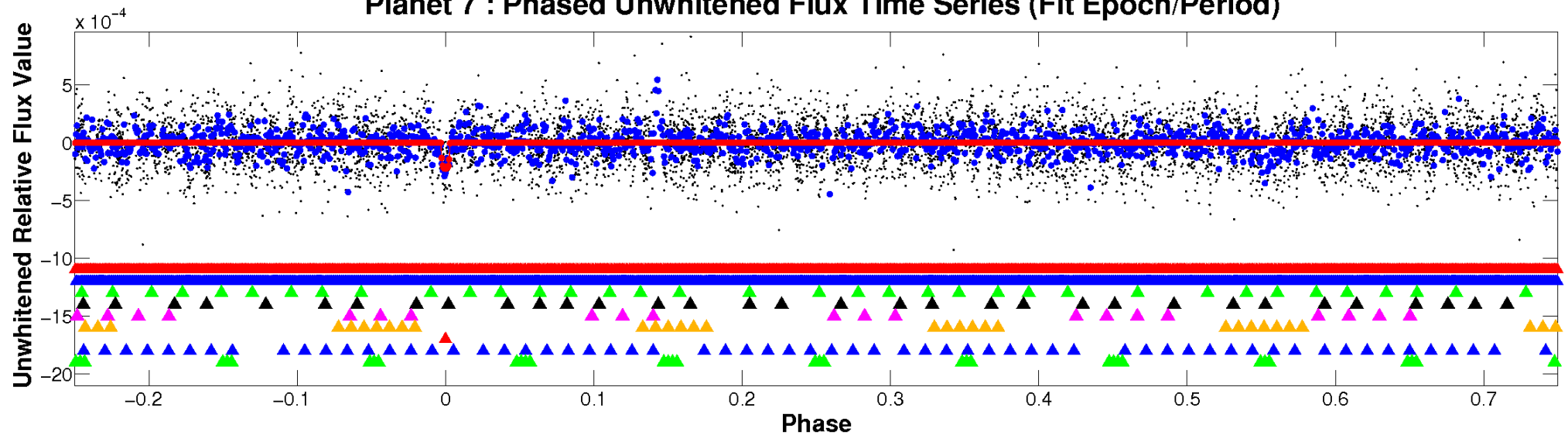
ALT Odd/Even

TCE 011100532-07

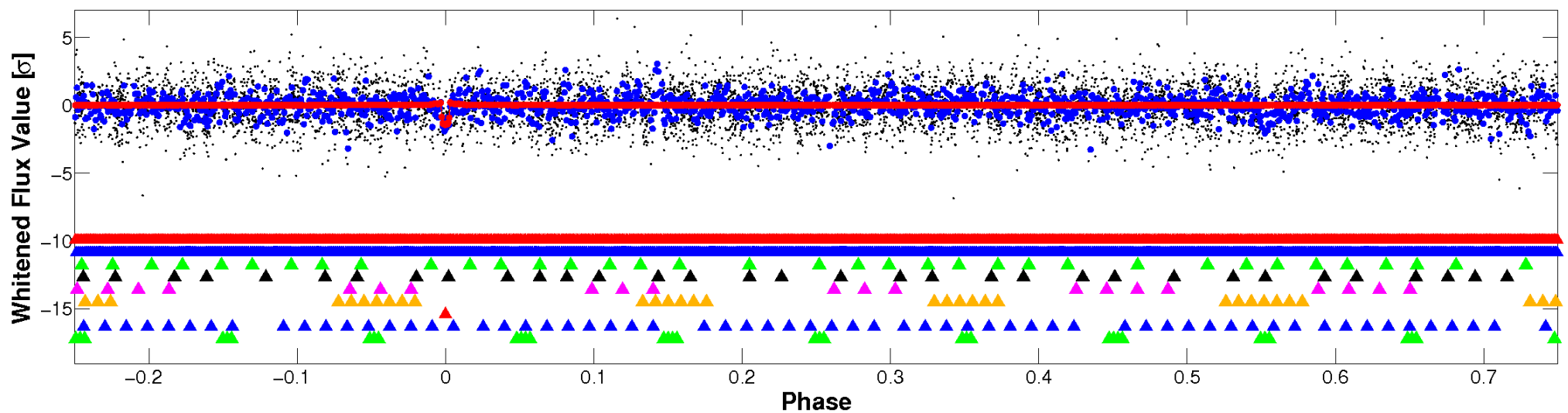


Non-Whitened Vs. Whitened Light Curve

Planet 7 : Phased Unwhitened Flux Time Series (Fit Epoch/Period)

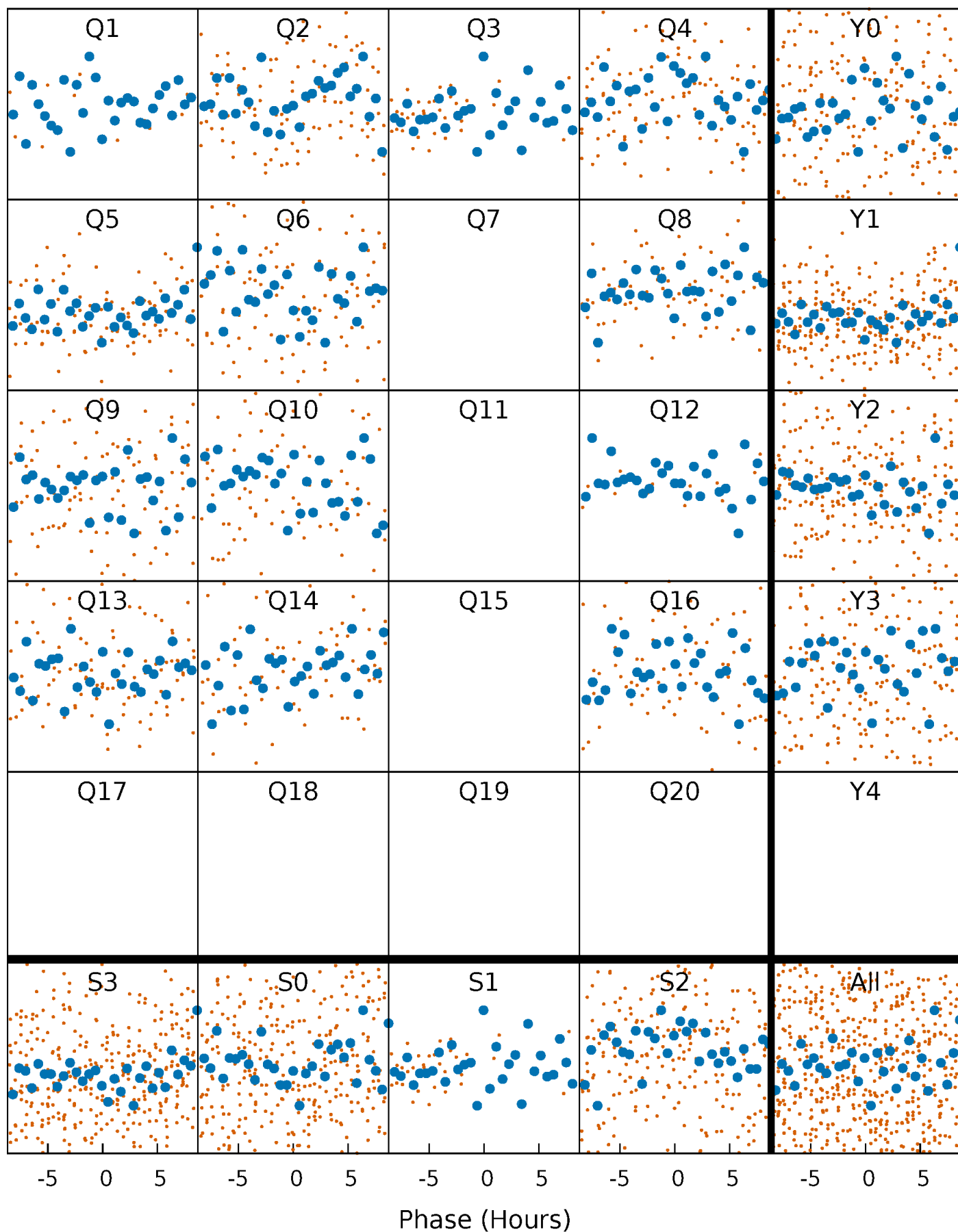


Planet 7 : Phased Whitened Flux Time Series (Fit Epoch/Period)



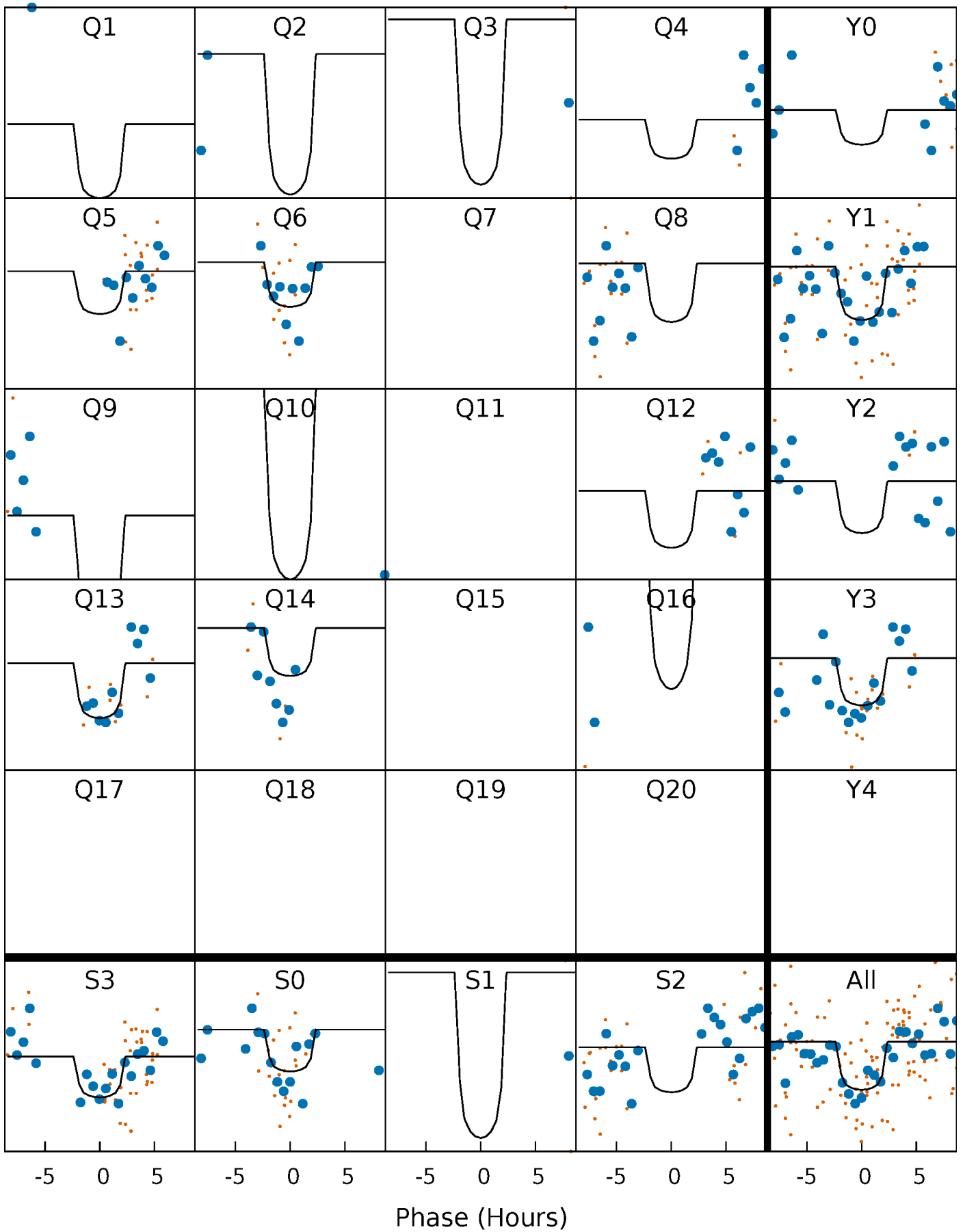
PDC Quarter-Phased Transit Curves

TCE 011100532-07 P= 32.325793 Days $T_0=159.899688$ (BKJD)



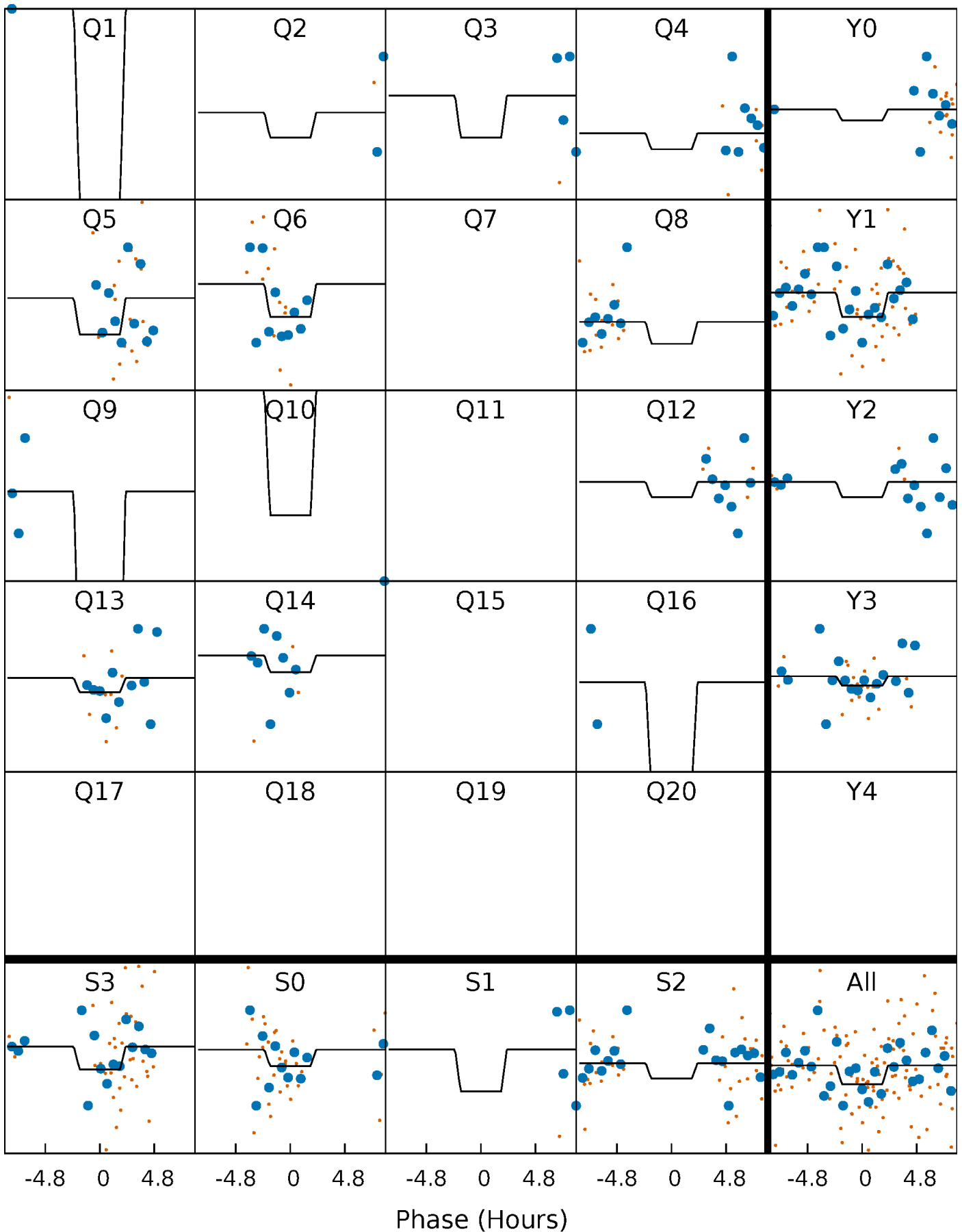
DV Quarter-Phased Transit Curves

TCE 011100532-07 P= 32.325793 Days $T_0=159.899688$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

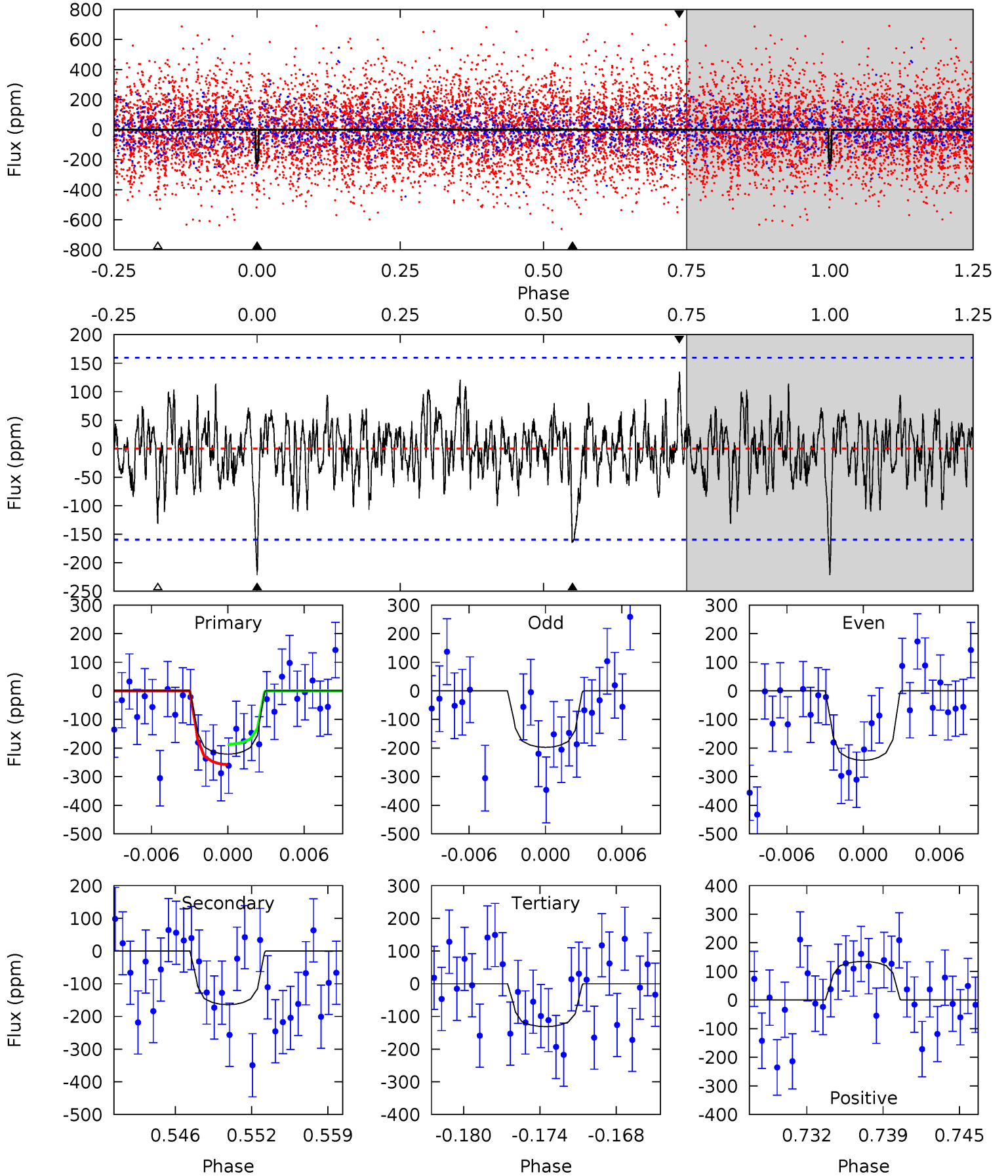
TCE 011100532-07 P= 32.323829 Days $T_0=159.963315$ (BKJD)



DV Model-Shift Uniqueness Test

011100532-07, $P = 32.325793$ Days, $E = 127.573895$ Days

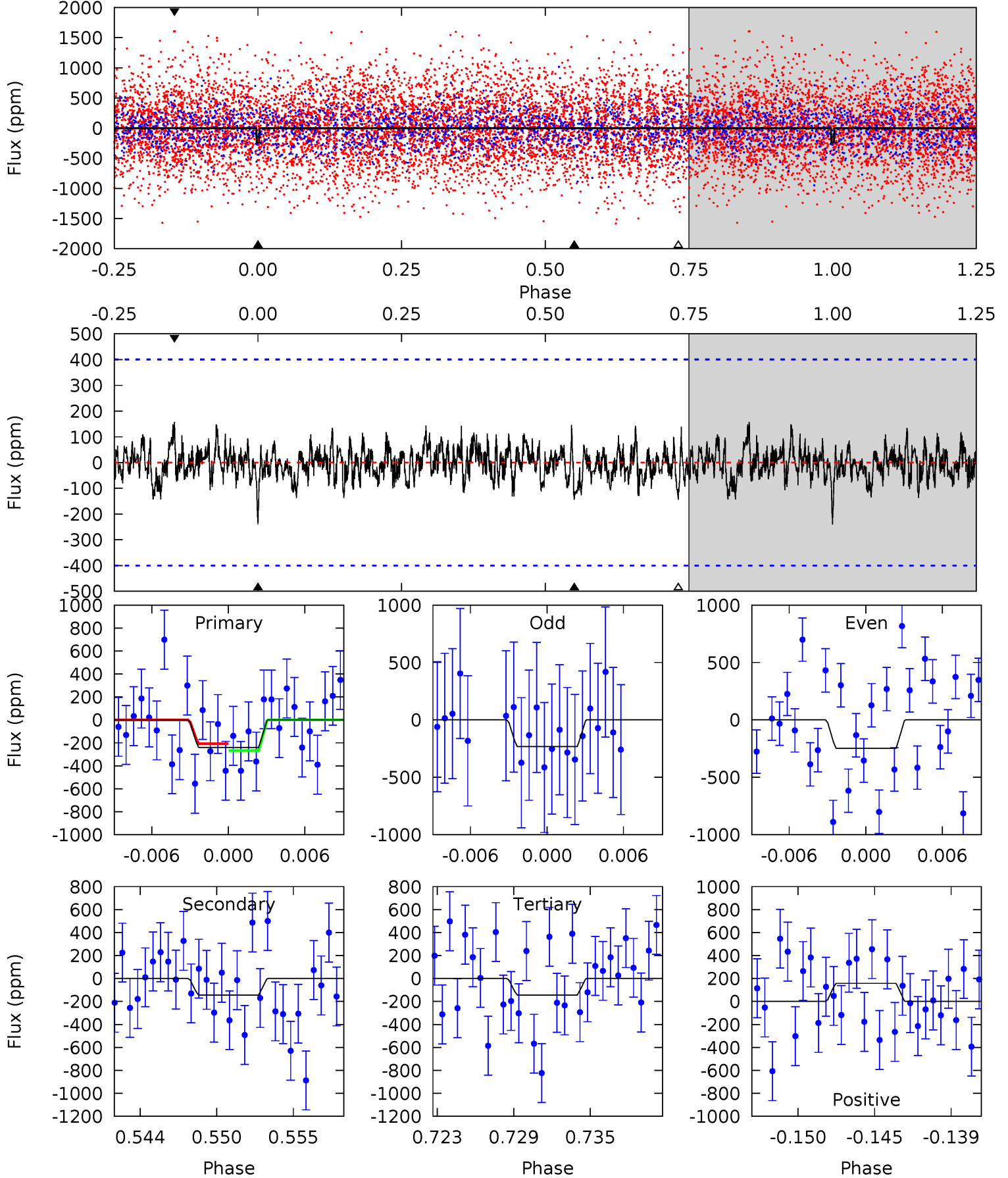
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
7.10	5.27	4.21	4.32	5.12	2.74	1.32	2.89	2.78	1.06	0.94	0.73	1.10	0.38	1.13



Alt Model-Shift Uniqueness Test

011100532-07, P = 32.323829 Days, E = 127.639486 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
3.07	1.85	1.85	2.02	5.13	2.76	0.64	1.22	1.05	0.00	-0.17	0.09	0.99	0.40	0.38



Stellar Parameters For KIC 011100532

	$T_{\text{eff}} (K)$	$\log(g)$	$[\text{Fe}/\text{H}]$	$R (R_{\odot})$	$M (M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	7575^{+83}_{-75}	$3.917^{+0.168}_{-0.112}$	$-0.160^{+0.150}_{-0.150}$	$2.412^{+0.434}_{-0.531}$	$1.752^{+0.191}_{-0.172}$	$0.176^{+0.152}_{-0.060}$
	+1%/-1%	+4%/-3%	+94%/-94%	+18%/-22%	+11%/-10%	+87%/-34%
Source	SPE68	SPE68	SPE68	DSEP		

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

Secondary Eclipse Parameters for KIC 011100532-07 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-164 ± 31	$4.59^{+3.53}_{-2.71}$	1482^{+64}_{-88}	6295^{+5052}_{-1445}	240^{+1322}_{-162}
Alt.	-144 ± 78	$4.59^{+3.64}_{-2.79}$	1475^{+72}_{-85}	5861^{+4711}_{-1517}	184^{+1071}_{-140}

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

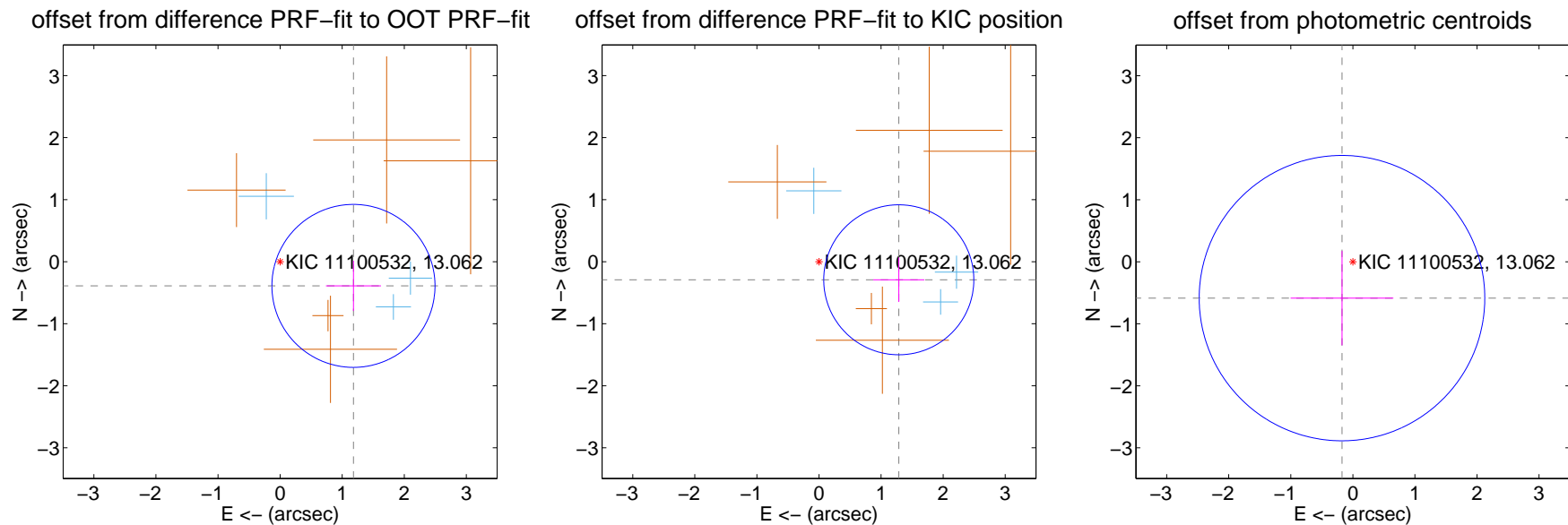
DV Centroid Data

Supplemental centroid analysis for 011100532-07. Kepler magnitude: 13.06. Transit SNR 7.76

There are 3 quarters with good PRF difference image offsets

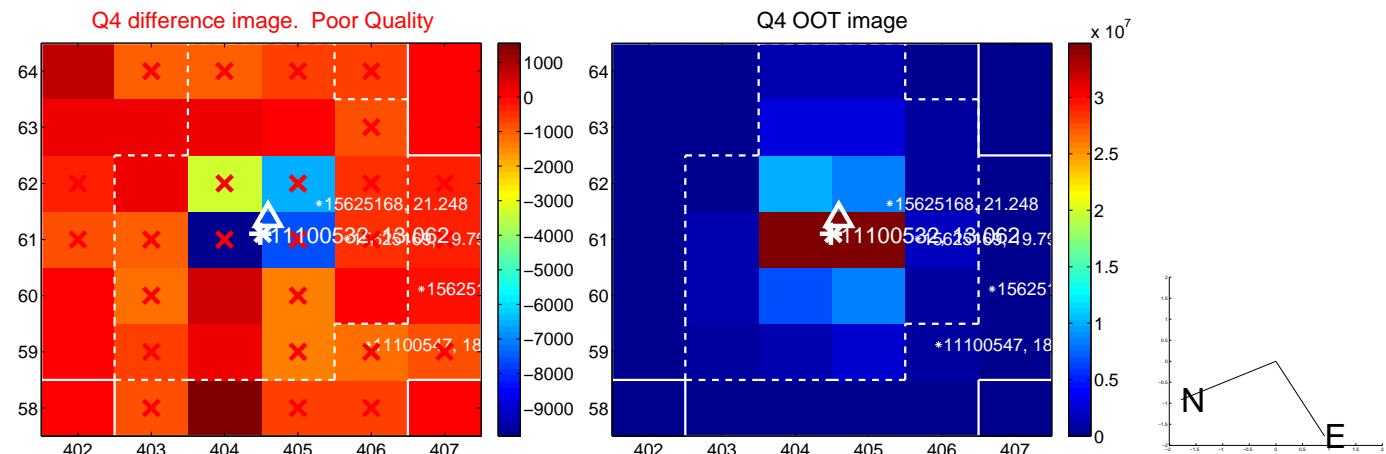
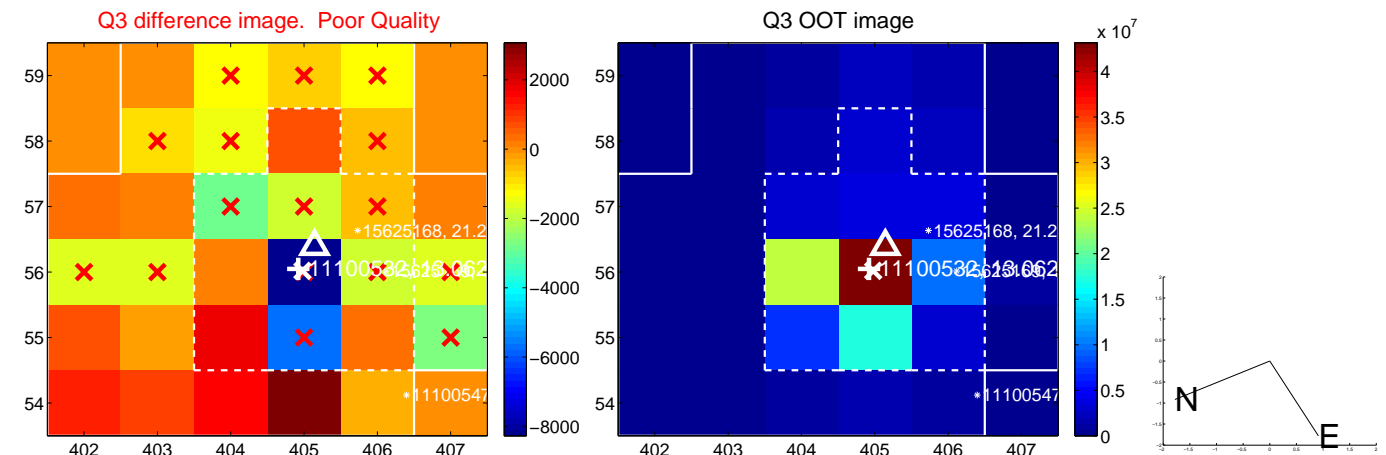
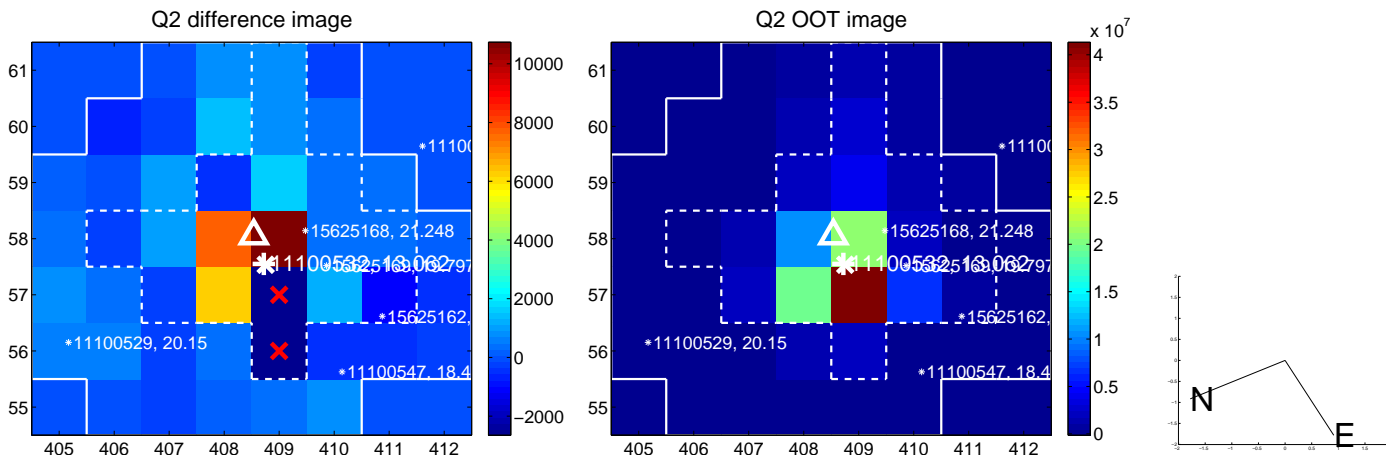
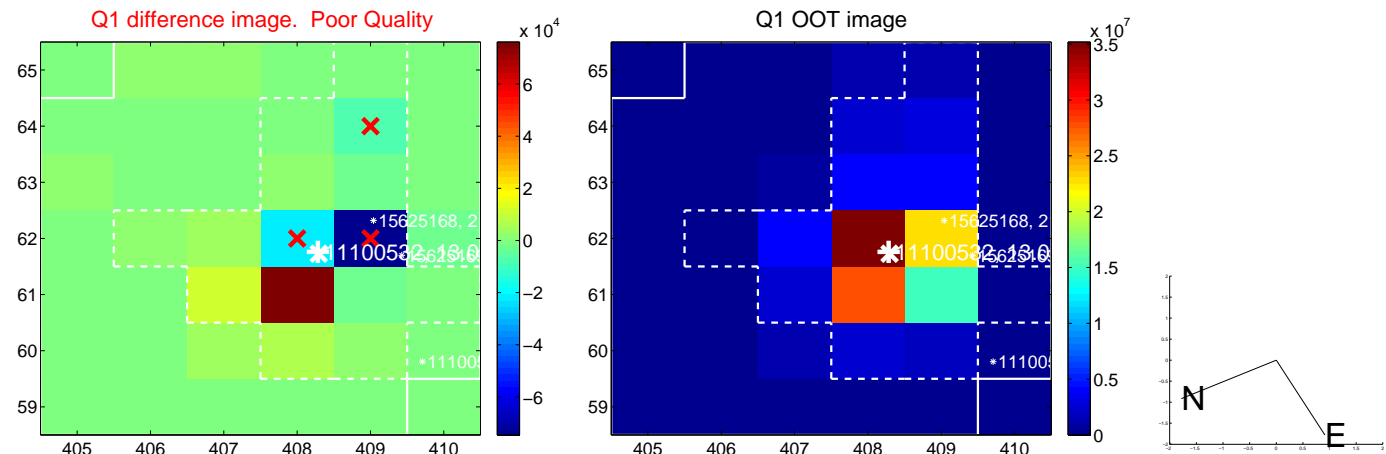
The direct PRF centroid is offset from the target star catalog position by about 0.14 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	1.244 ± 0.438	2.84	-1.182 ± 0.443	-0.390 ± 0.405
PRF-fit source offset from KIC position	1.318 ± 0.403	3.27	-1.285 ± 0.412	-0.292 ± 0.358
photometric centroid source offset	0.61 ± 0.77	0.80	0.18 ± 0.83	-0.59 ± 0.76

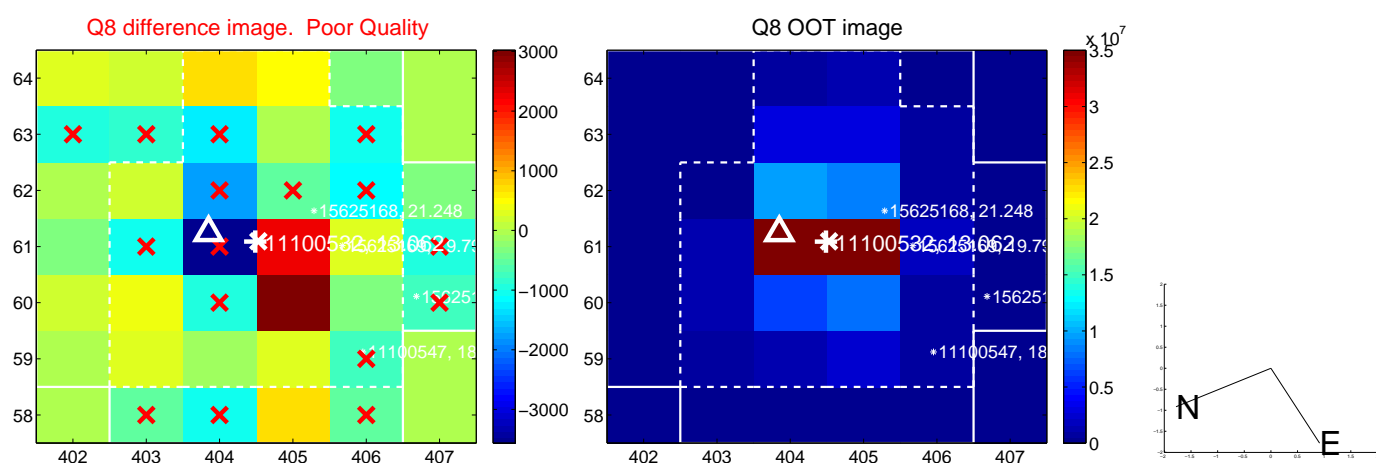
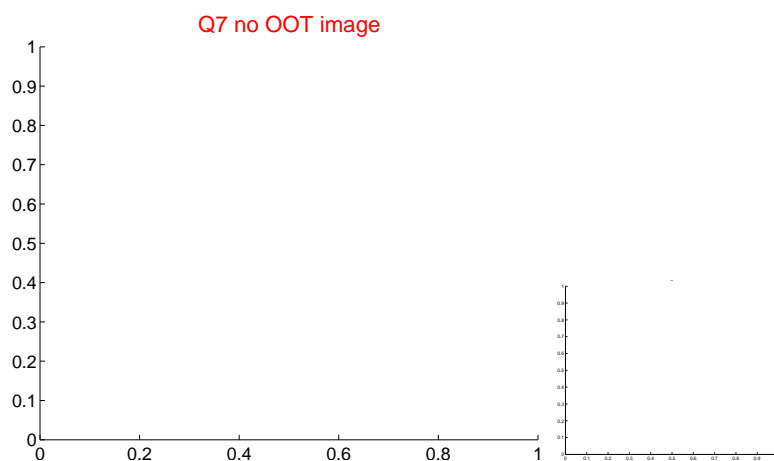
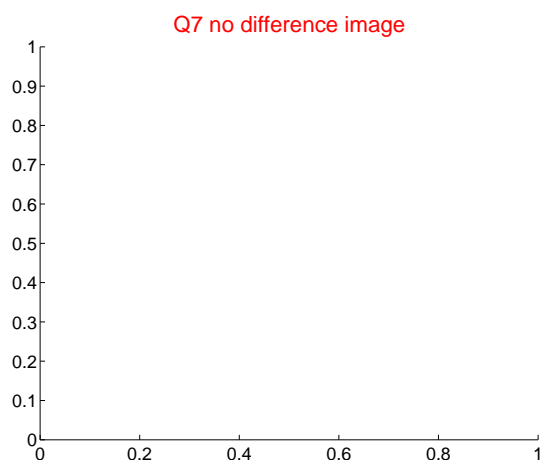
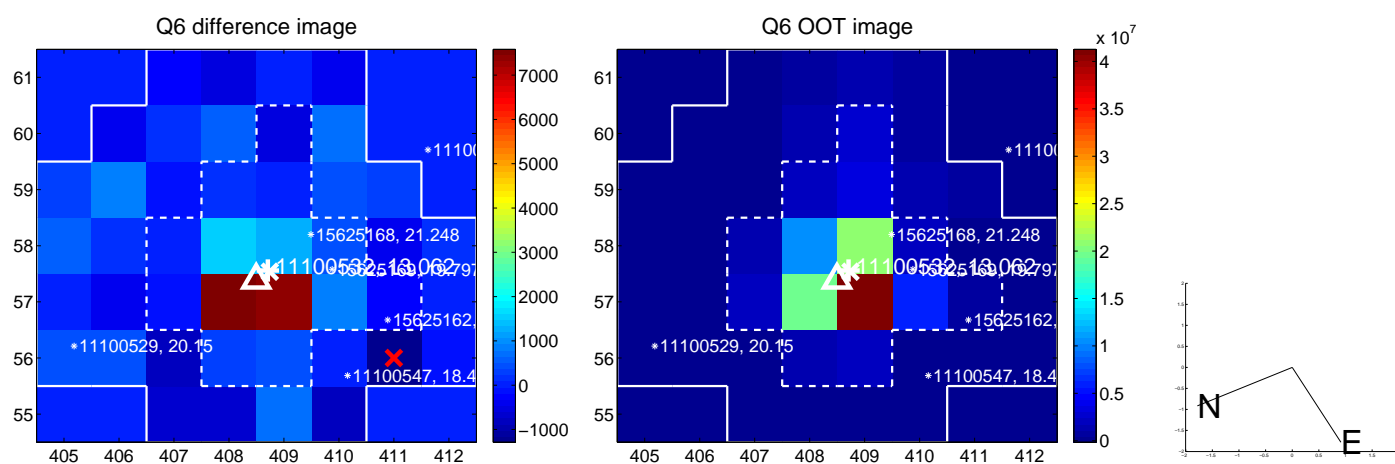
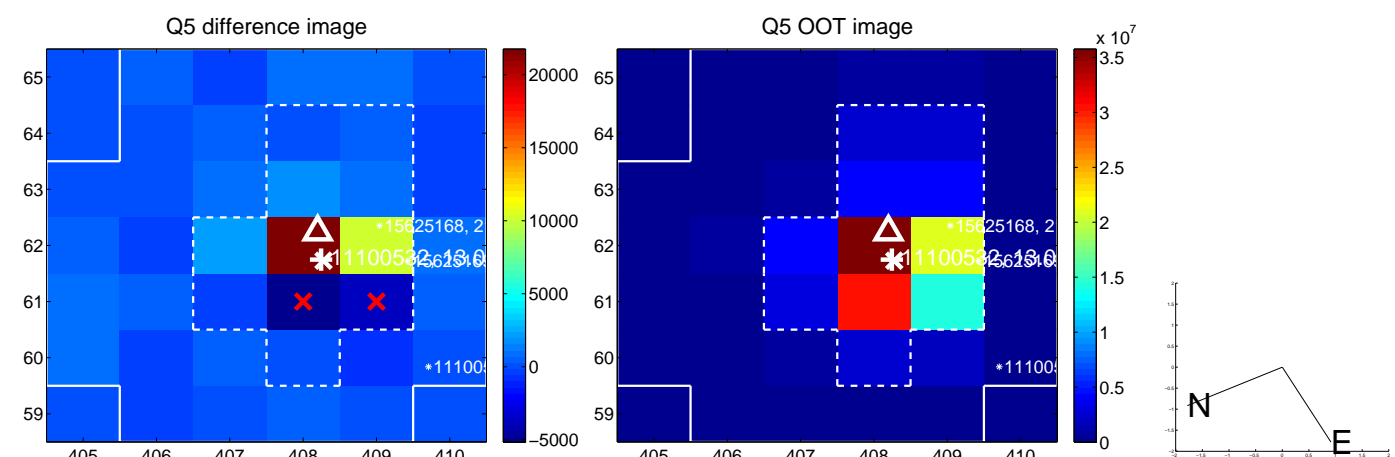


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

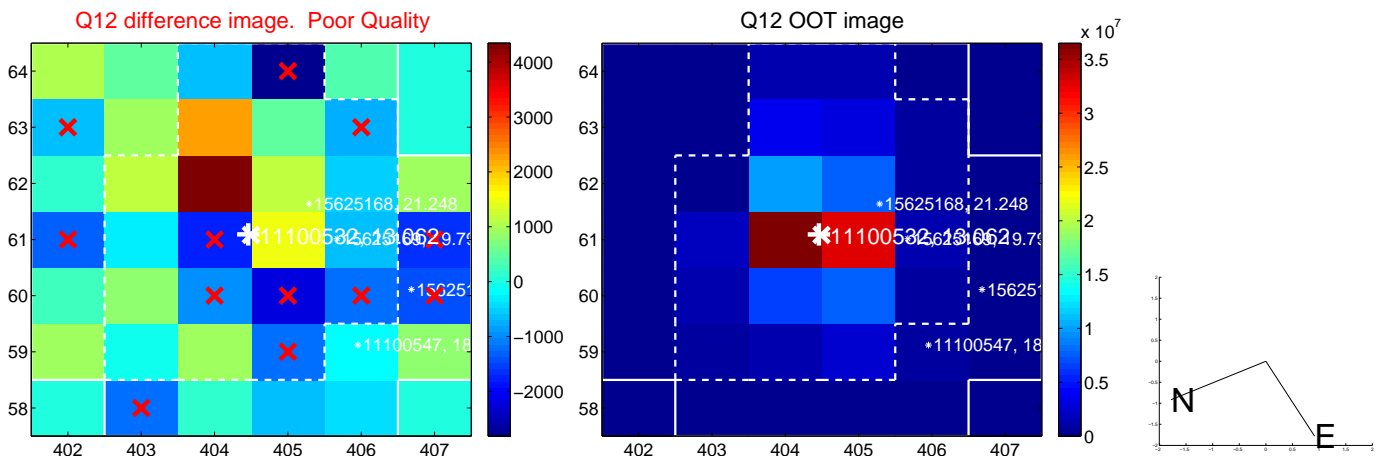
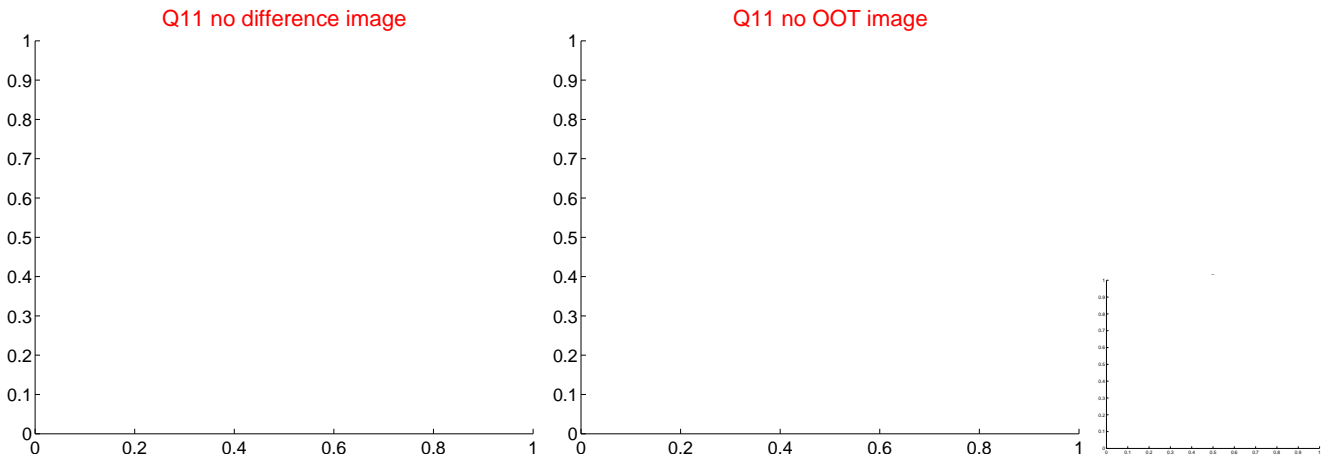
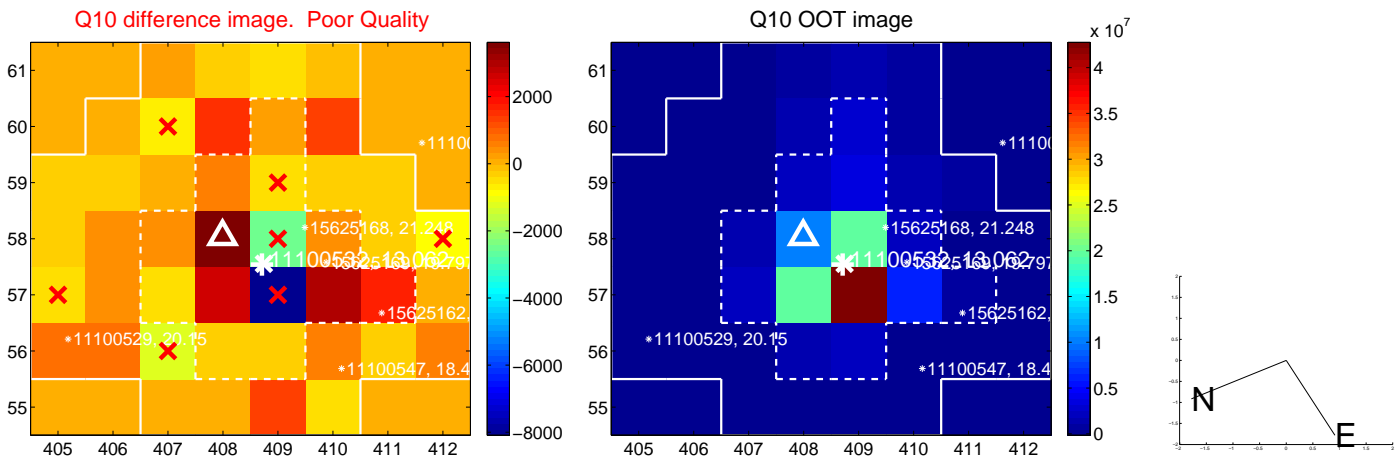
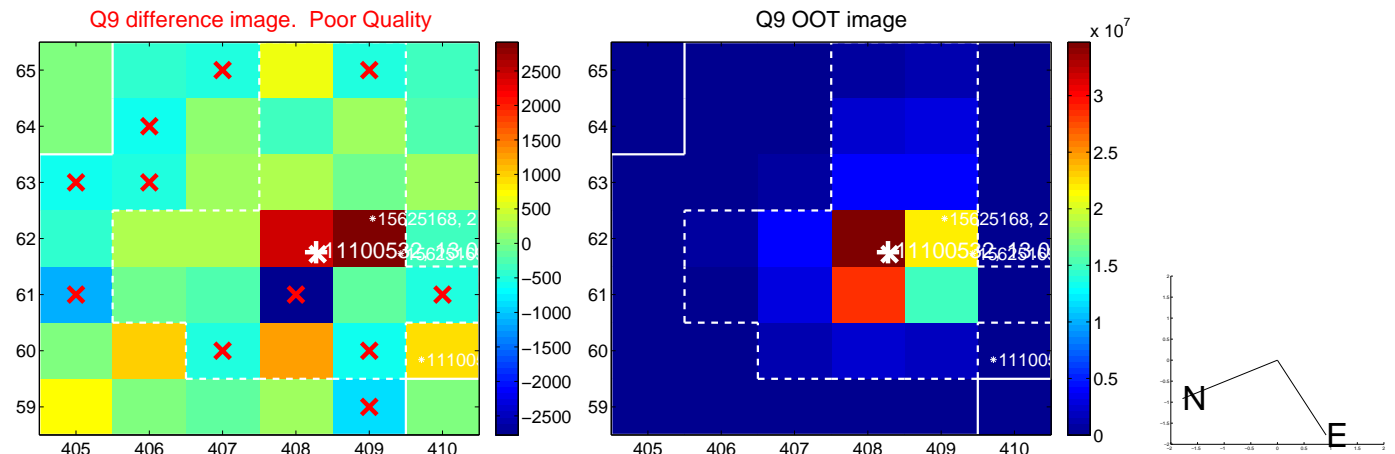
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



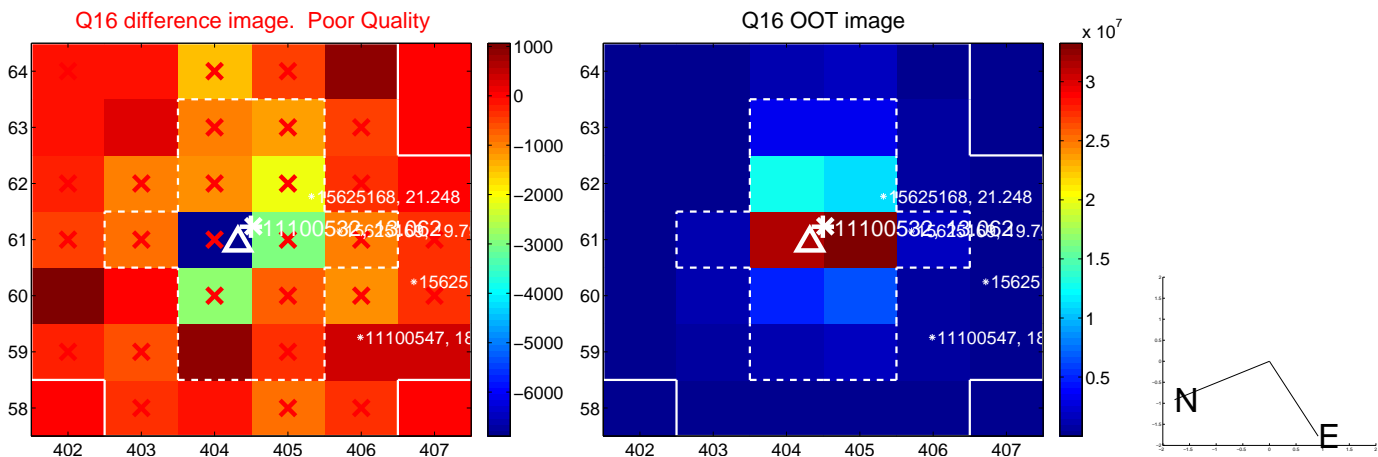
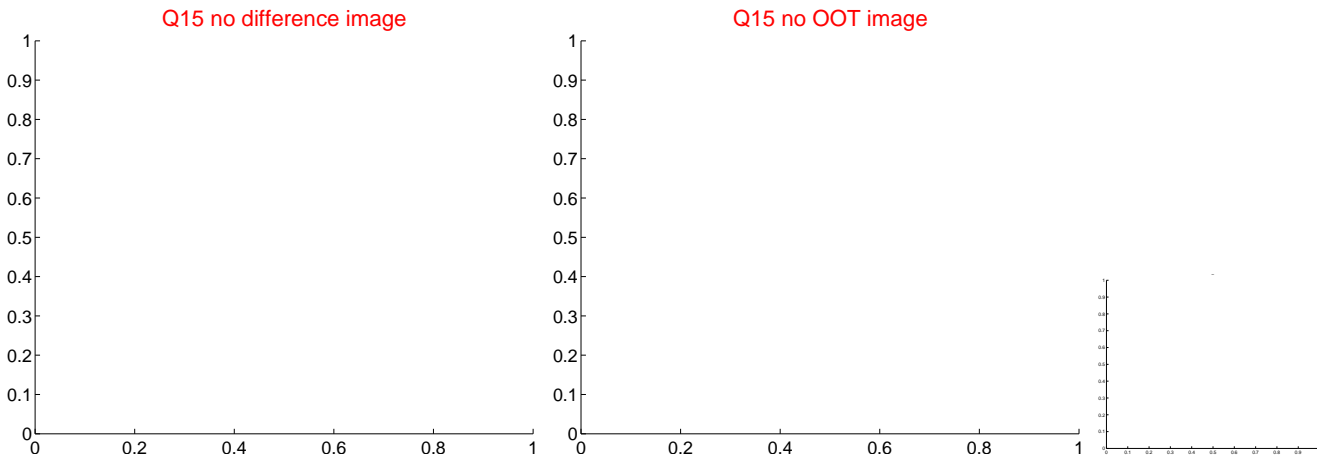
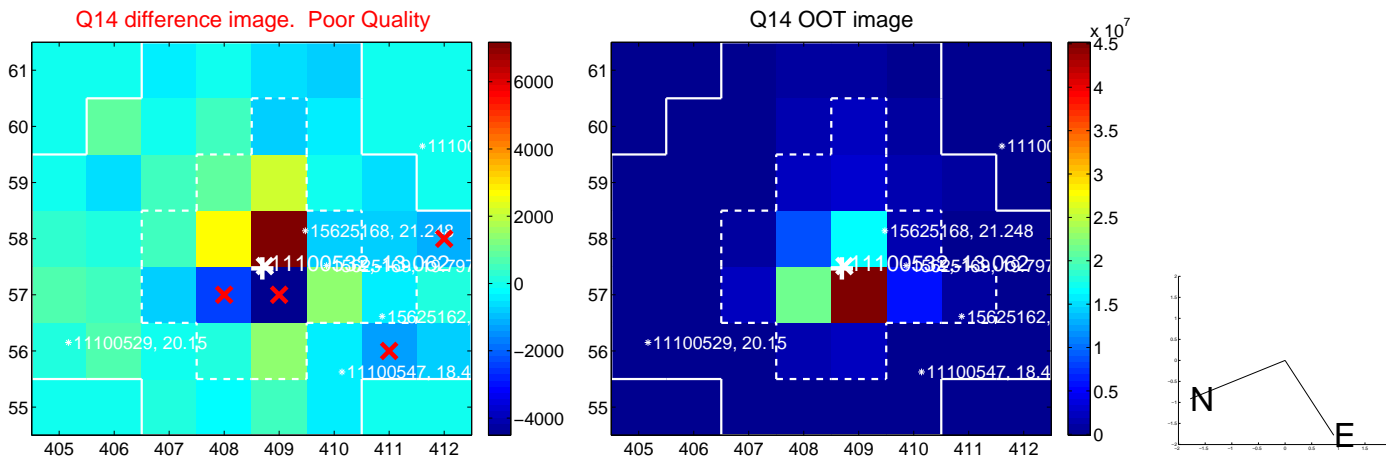
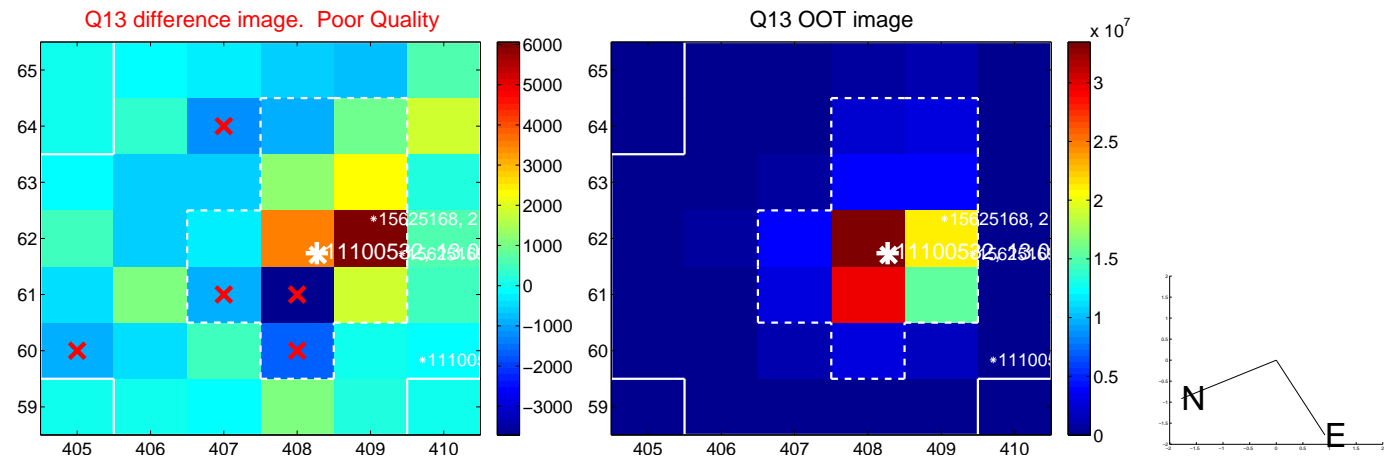
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



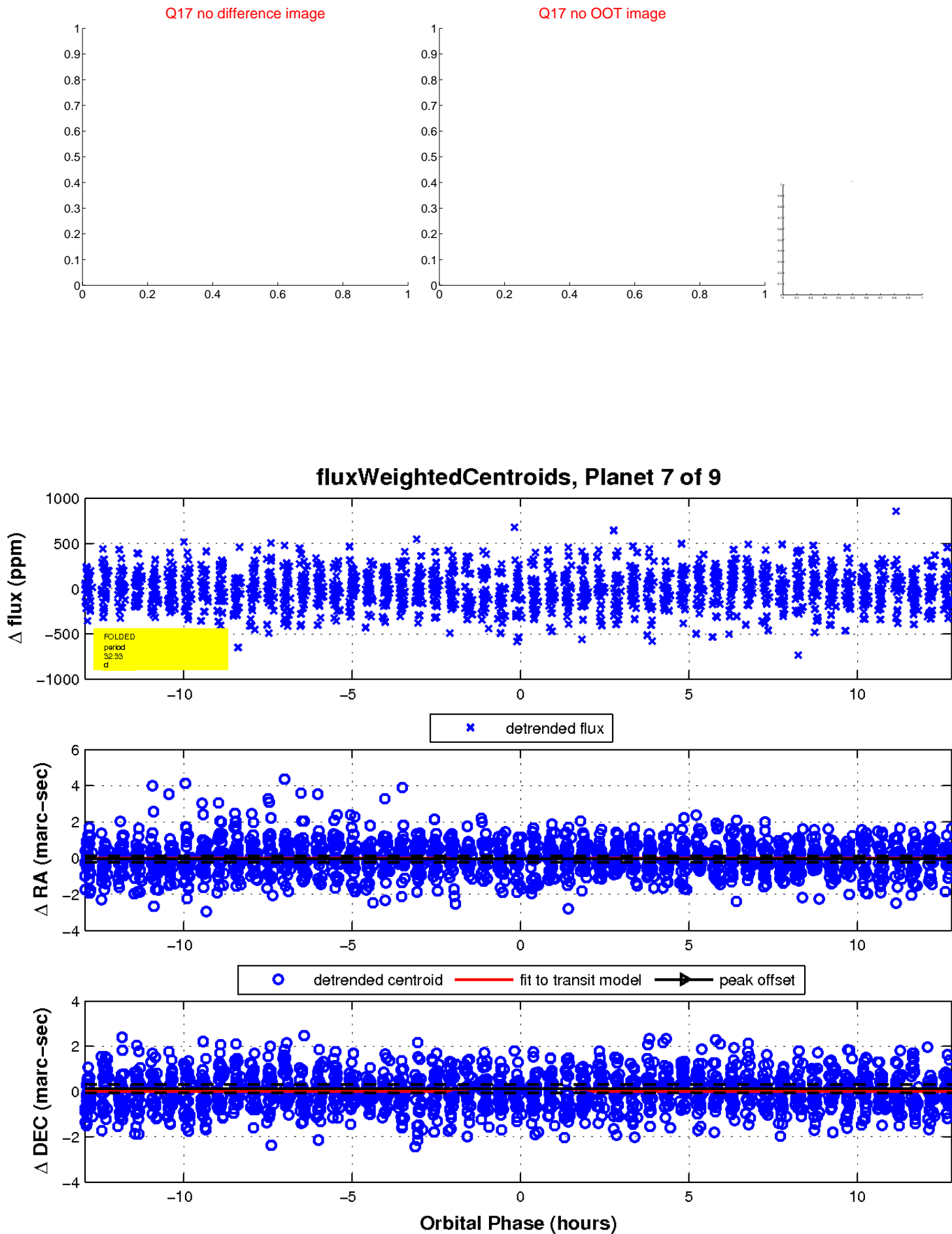
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

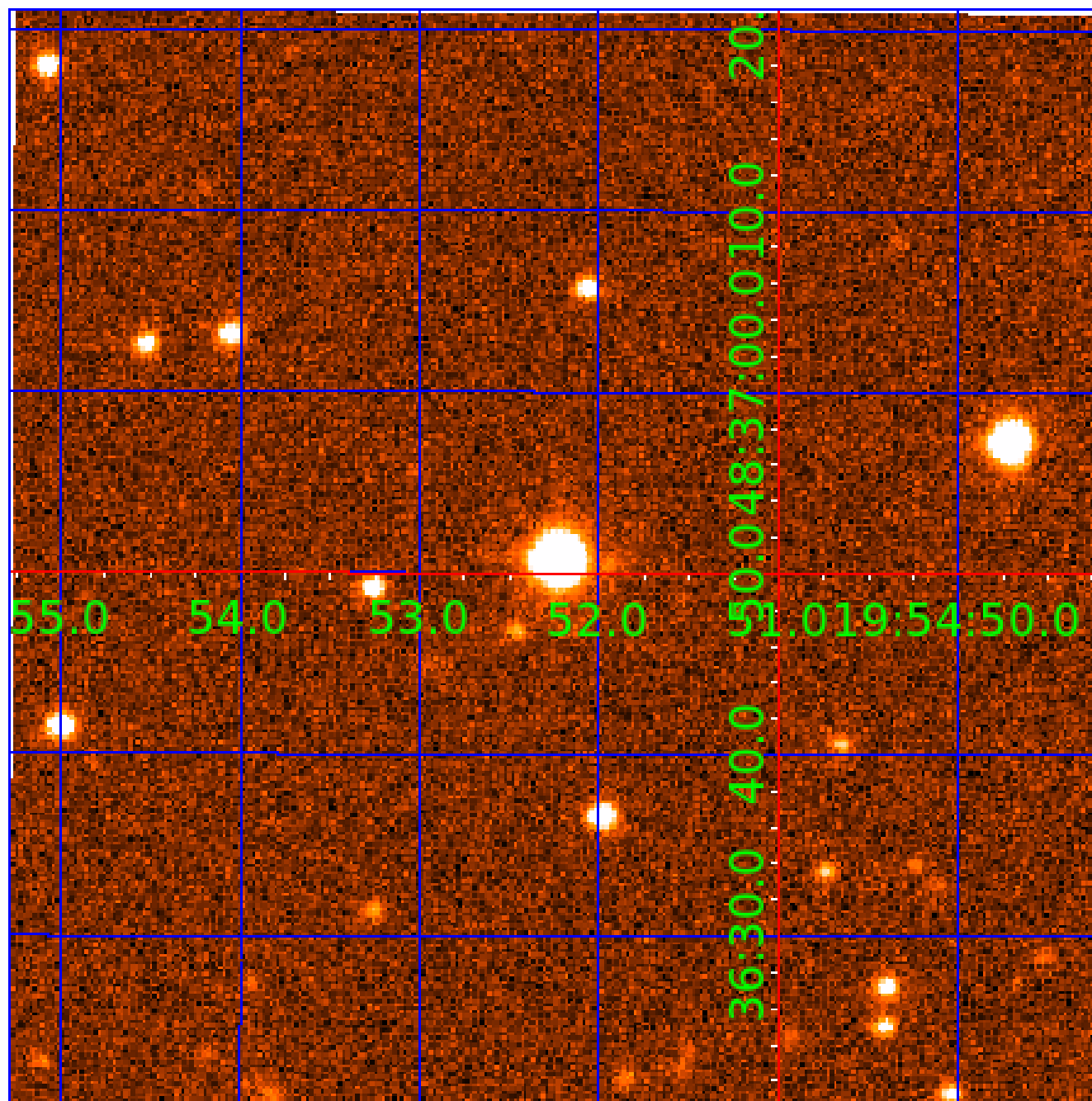


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 011100532

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})
011100532-01	OBS	No	0.743985	131.987531	35.9	1.383	9.7	9.2	2.41	7575	1.69	45700.86
011100532-02	OBS	No	0.949443	132.488671	21.6	5.846	8.6	6.8	2.41	7575	1.13	33015.51
011100532-03	OBS	No	40.787800	151.972423	116.5	4.550	10.1	5.1	2.41	7575	3.18	219.43
011100532-04	OBS	No	44.858115	149.422270	213.7	4.493	8.7	8.0	2.41	7575	4.20	193.30
011100532-05	OBS	No	69.928123	175.645448	354.3	2.513	9.2	9.2	2.41	7575	5.18	106.94
011100532-06	OBS	No	45.311601	144.582448	220.4	5.021	8.6	7.6	2.41	7575	4.13	190.72
011100532-07	OBS	No	32.325793	159.899688	223.7	4.350	8.1	7.8	2.41	7575	3.97	299.19
011100532-08	OBS	No	23.155985	146.735798	378.5	1.755	8.4	9.2	2.41	7575	4.86	466.79
011100532-09	OBS	No	42.033118	164.656835	317.5	2.500	8.1	-1.0	2.41	7575	4.33	210.81

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
011100532-01	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT
011100532-02	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT
011100532-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT
011100532-04	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT
011100532-05	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT
011100532-06	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT
011100532-07	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT
011100532-08	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—MOD_NONUNIQ_DV
011100532-09	OBS	FP	0.00	1	0	1	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_NOFITS—HALO_GHOST

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

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

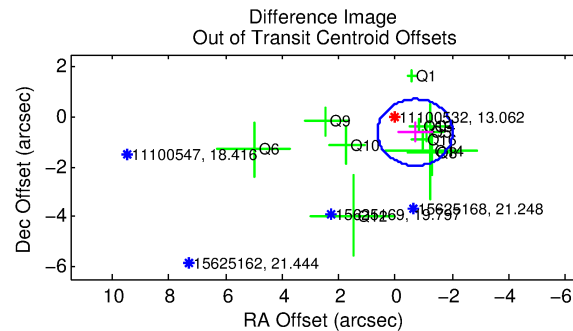
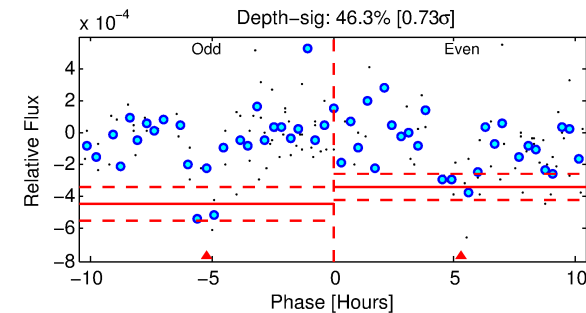
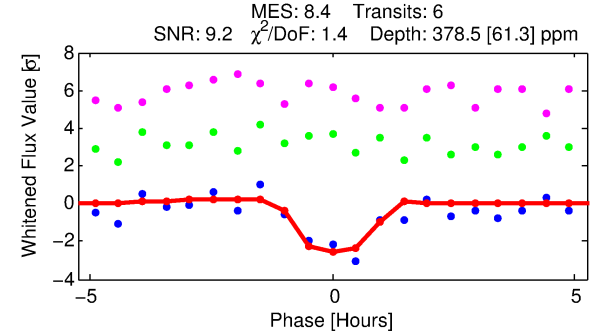
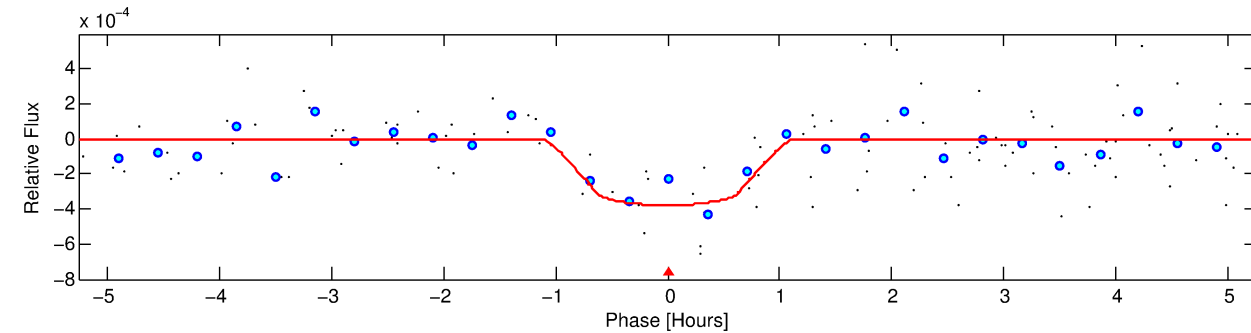
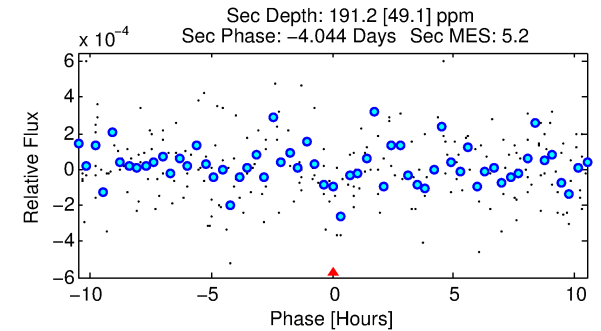
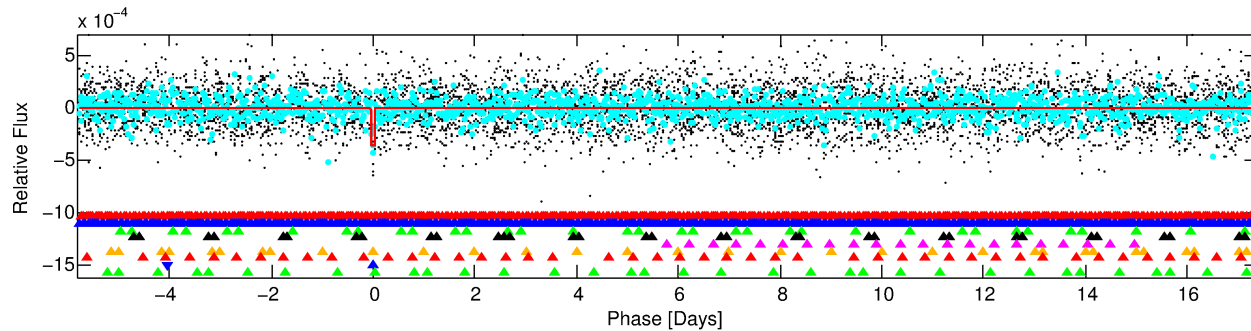
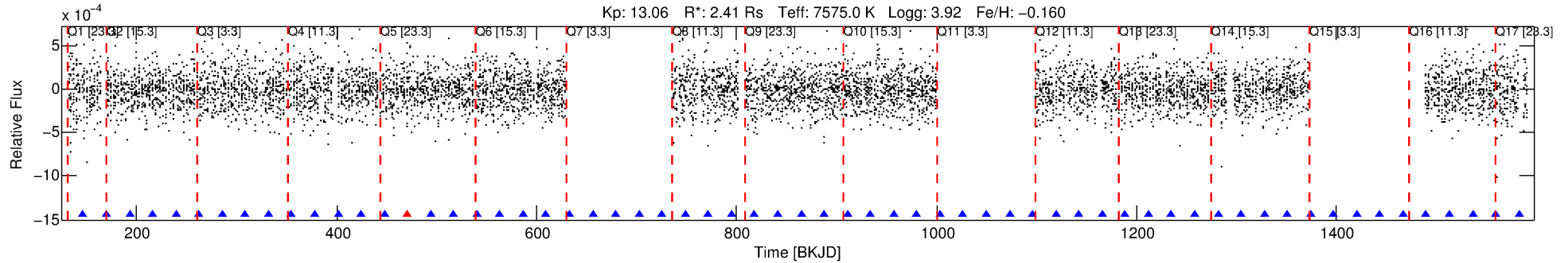
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 011100532-08

No Significant Match Found

DV One-Page Summary

KIC: 11100532 Candidate: 8 of 9 Period: 23.156 d



DV Fit Results:

Period = 23.15598 [0.00030] d
Epoch = 146.7358 [0.0100] BKJD
Rp/R* = 0.0185 [0.0171]
a/R* = 89.54 [452.18]
b = 0.50 [7.70]
Seff = 466.79 [140.01]
Teq = 1185 [89] K
Rp = 4.86 [4.63] Re
a = 0.1917 [0.0375] AU
Ag = 163.78 [310.54] [0.52σ]
Teffp = 6556 [3070] K [1.75σ]

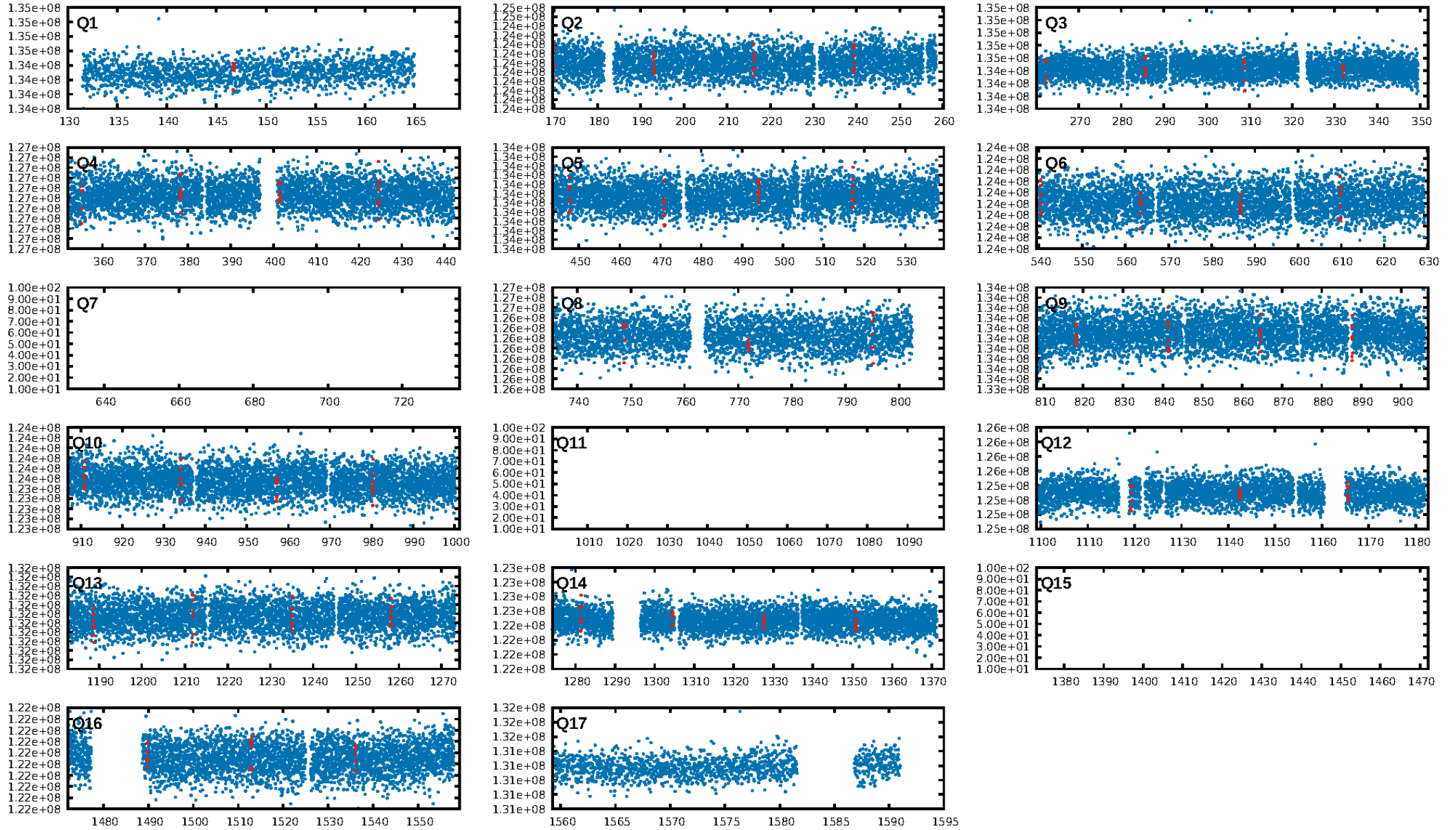
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [87.31σ]
LongPeriod-sig: 100.0% [46.92σ]
ModelChiSquare2-sig: 63.1%
ModelChiSquareGof-sig: 92.1%
Bootstrap-pfa: N/A
RollingBand-fgt: 0.83 [5/6]
GhostDiagnostic-chr: 2.359
Centroid-sig: 21.1%
Centroid-so: 0.774 arcsec [1.35σ]
OotOffset-rm: 0.935 arcsec [2.11σ]
KicOffset-rm: 1.015 arcsec [2.08σ]
OotOffset-st: 3/0/4/4 [11]
KicOffset-st: 3/0/4/4 [11]
DiffImageQuality-fgm: 0.36 [4/11]
DiffImageOverlap-fno: 0.15 [2/13]

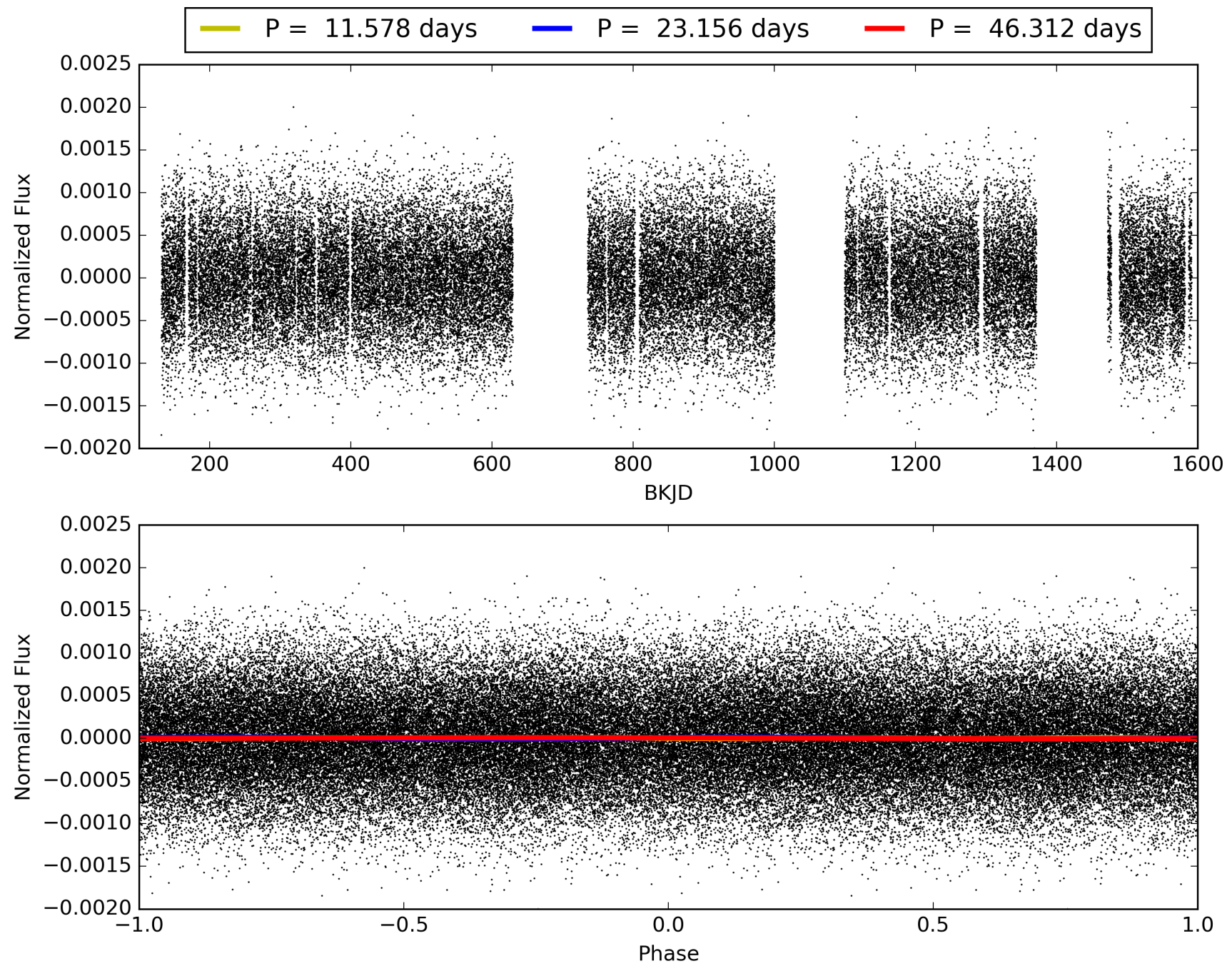
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 01-Feb-2016 10:50:42 Z

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

TCE 011100532-08, PDC Light Curves

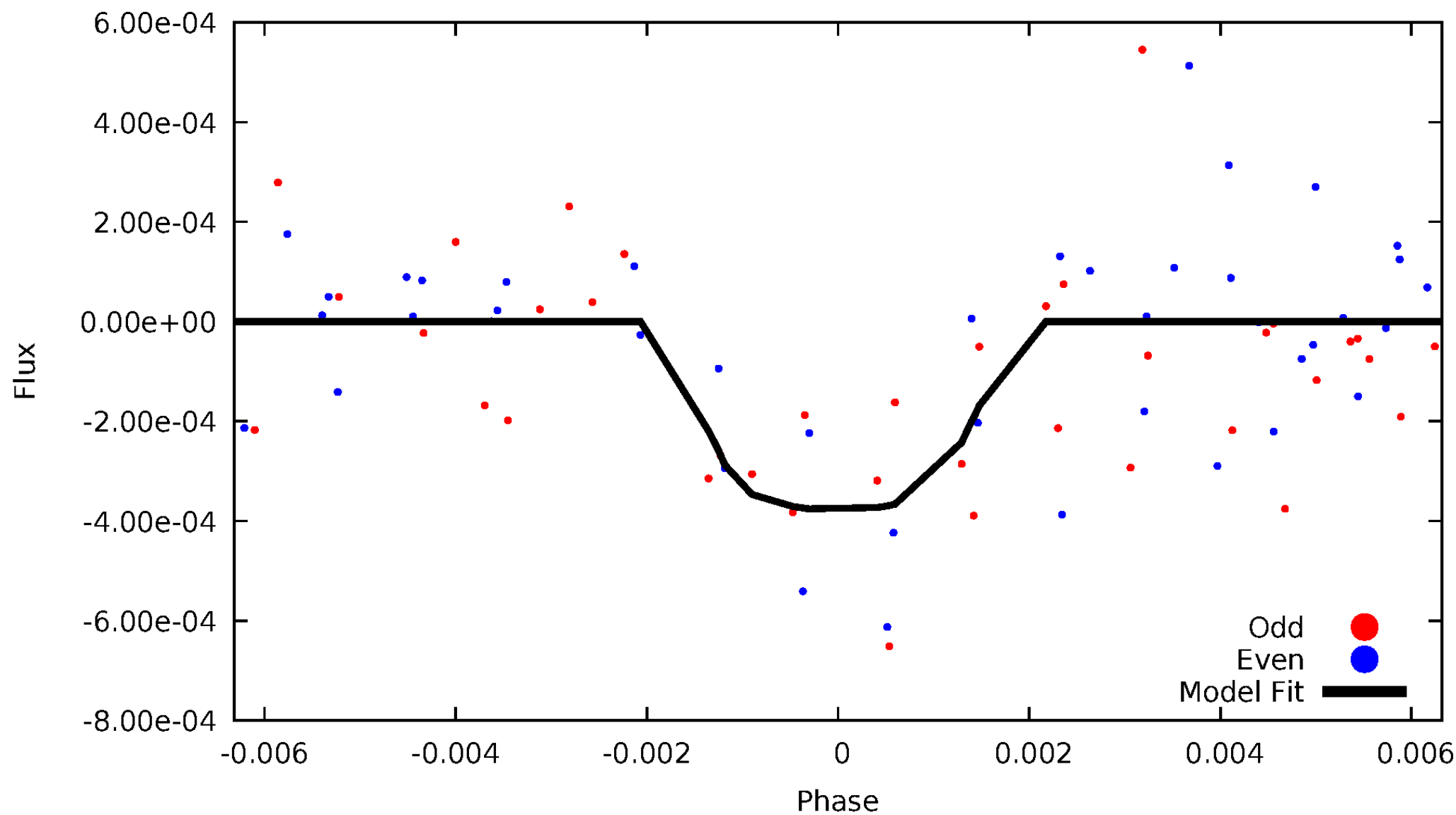


TCE 011100532-08



DV Odd/Even

TCE 011100532-08

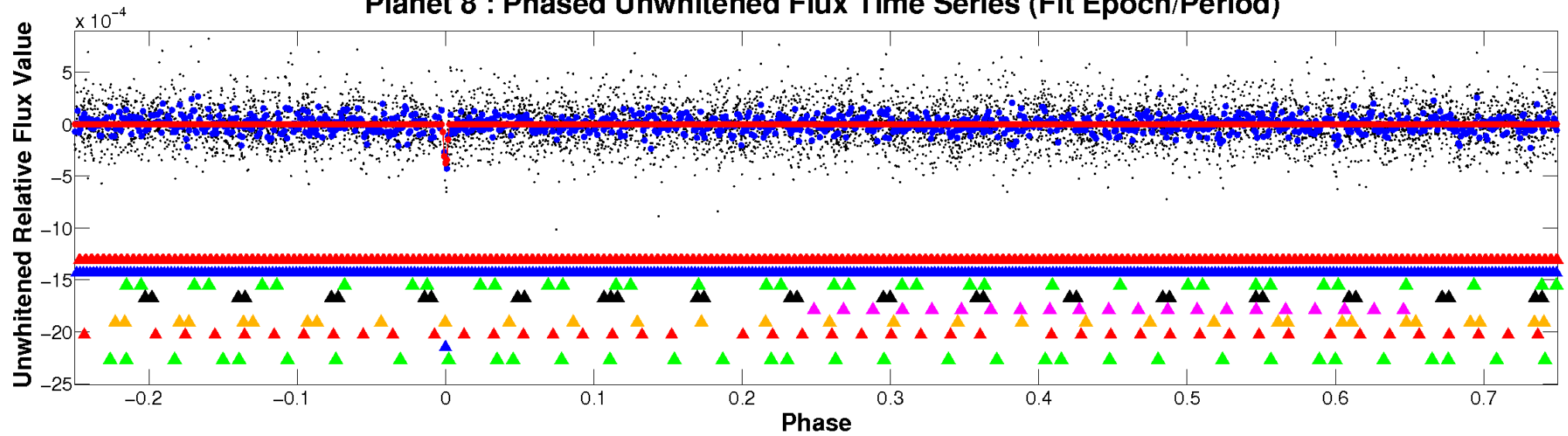


ALT Odd/Even

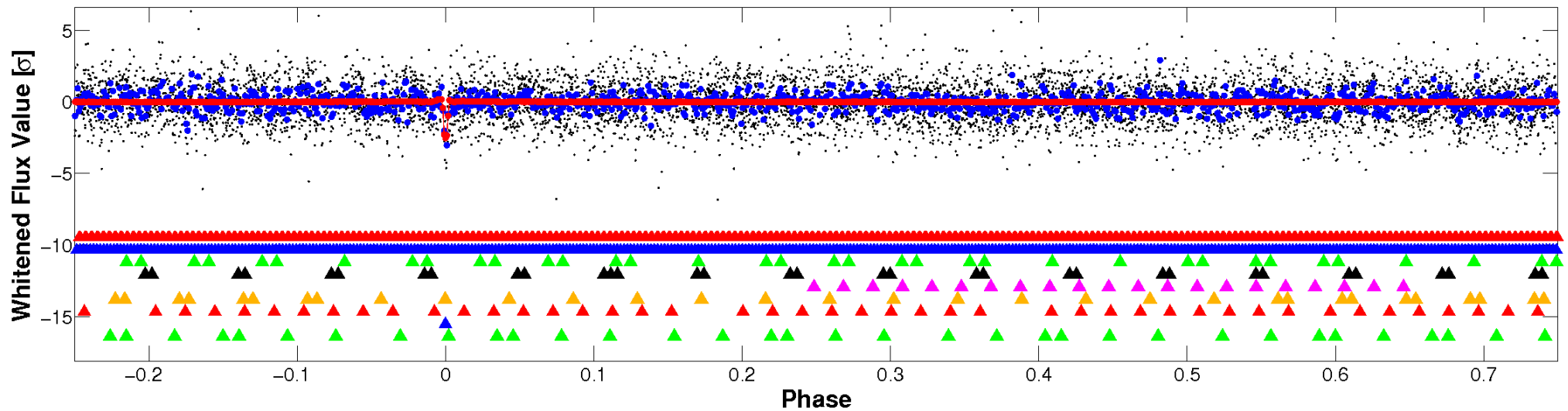
This plot does not exist for this TCE.

Non-Whitened Vs. Whitened Light Curve

Planet 8 : Phased Unwhitened Flux Time Series (Fit Epoch/Period)

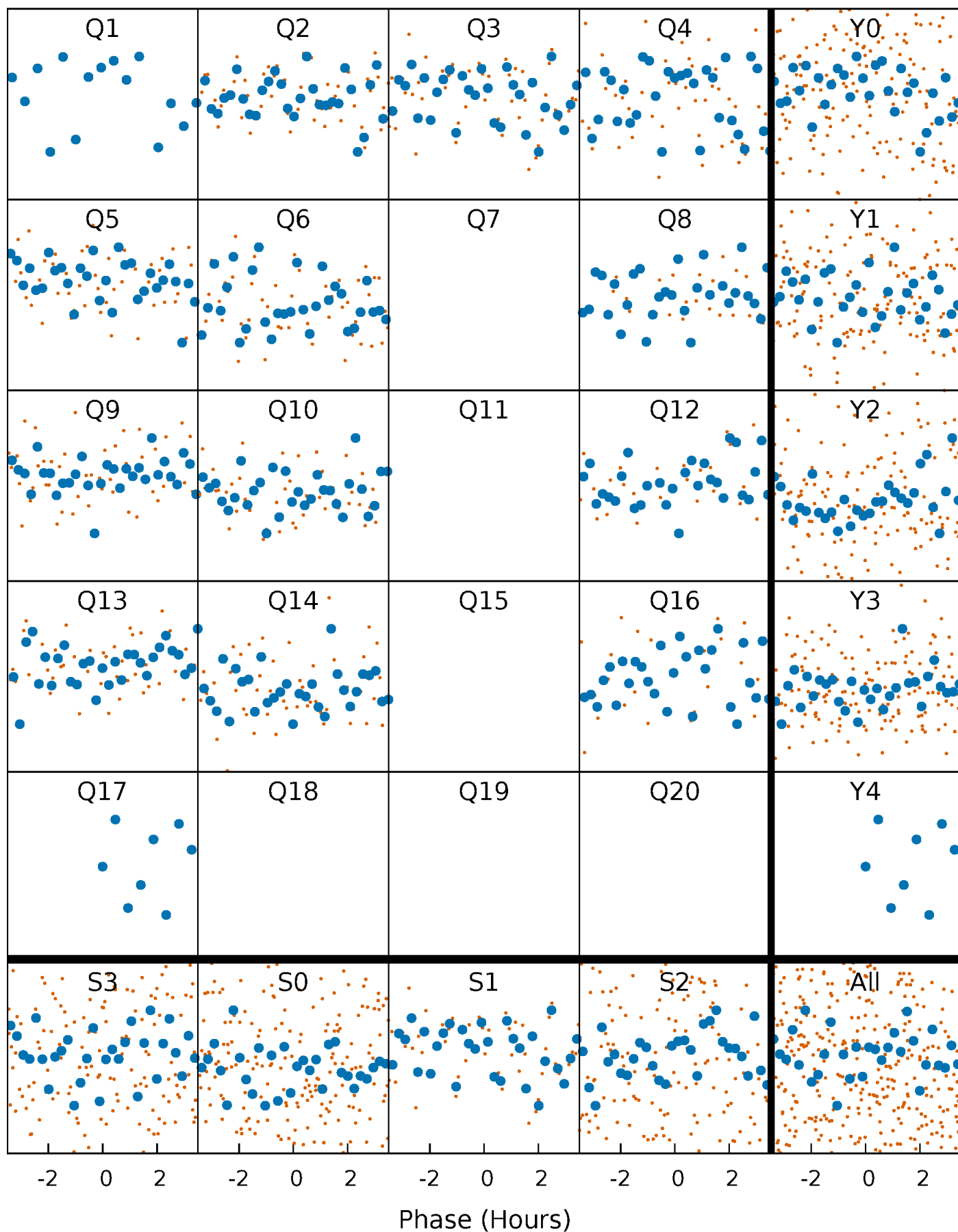


Planet 8 : Phased Whitened Flux Time Series (Fit Epoch/Period)



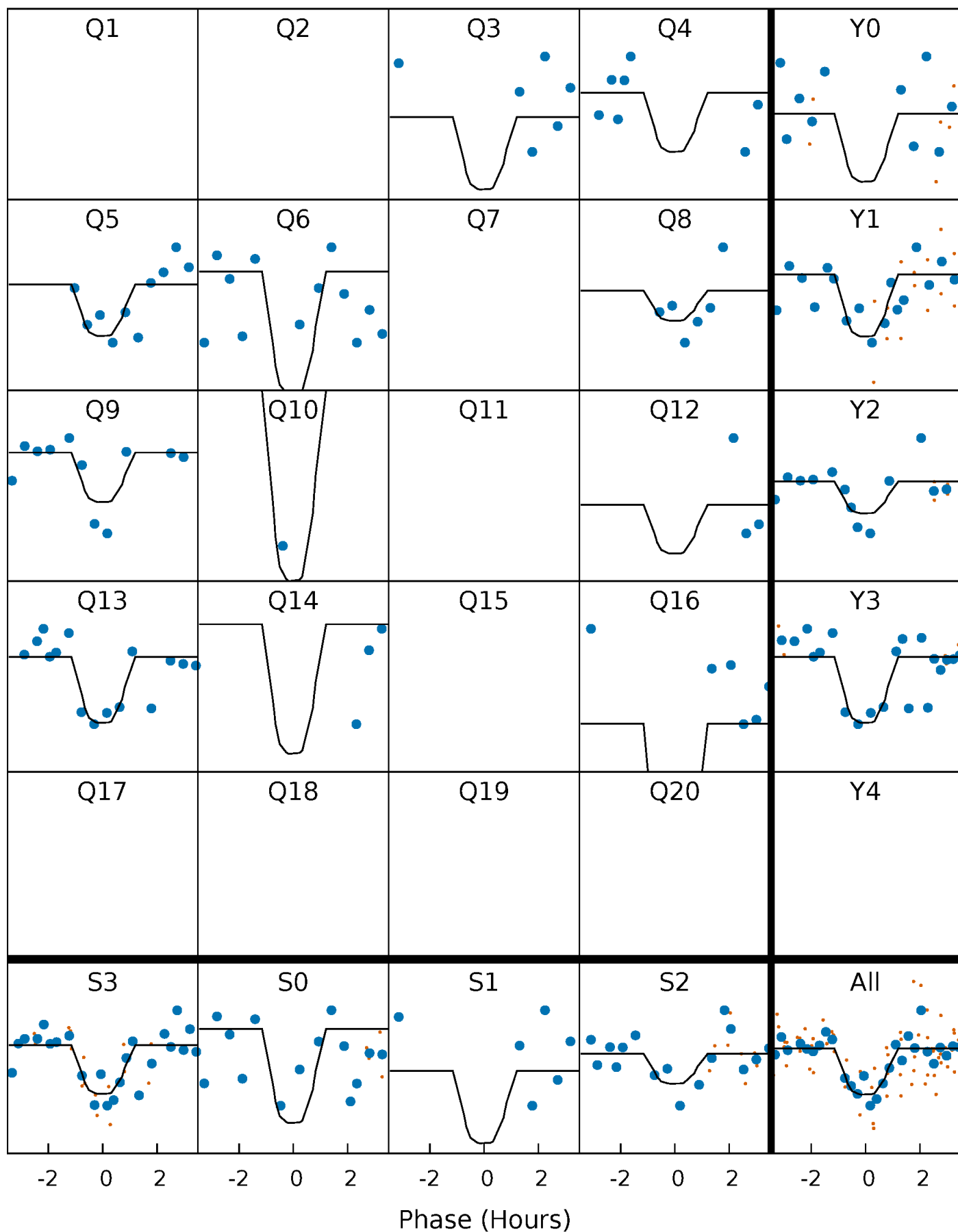
PDC Quarter-Phased Transit Curves

TCE 011100532-08 P= 23.155985 Days $T_0=146.735798$ (BKJD)



DV Quarter-Phased Transit Curves

TCE 011100532-08 P= 23.155985 Days $T_0=146.735798$ (BKJD)

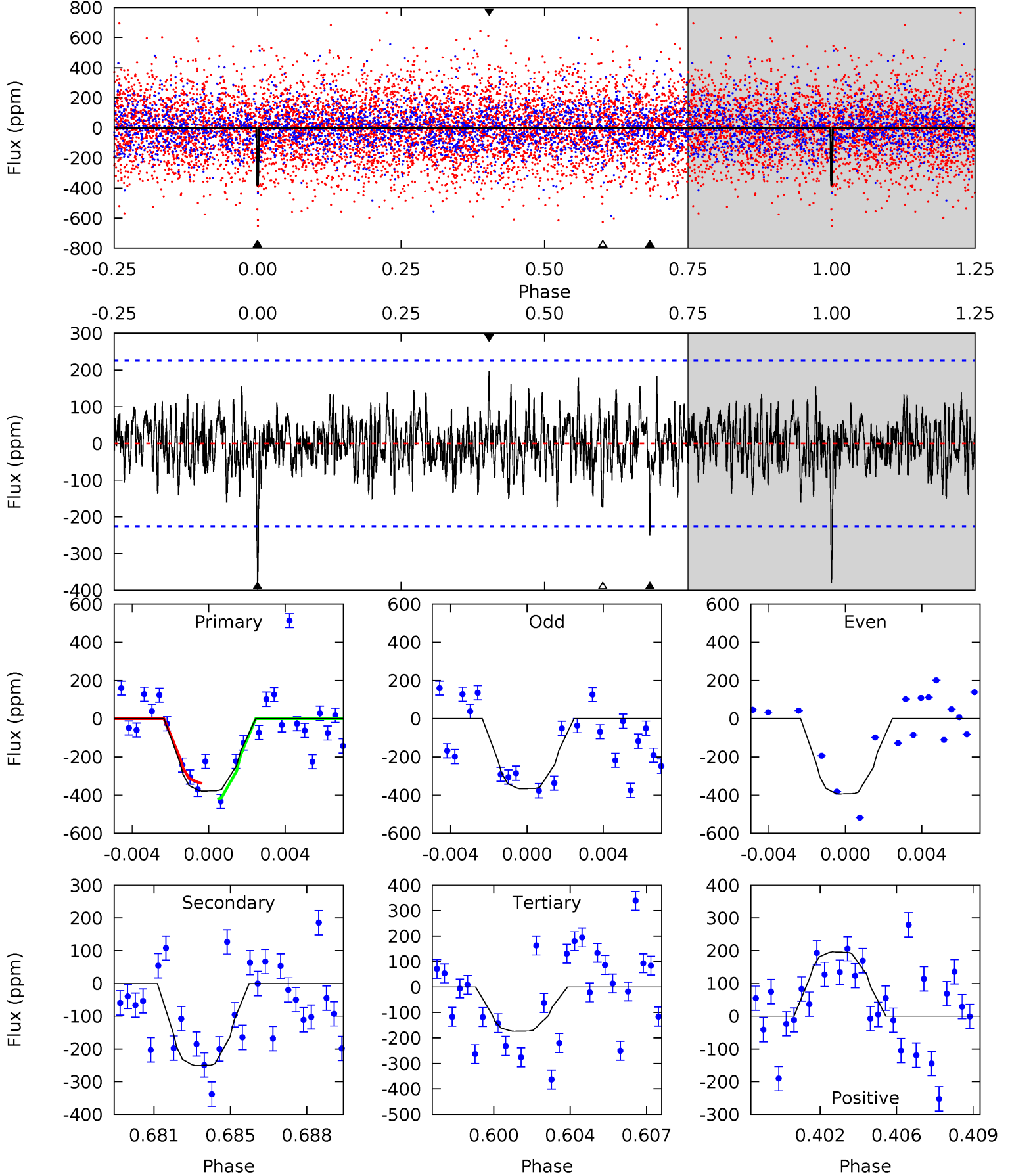


This plot does not exist for this TCE.

DV Model-Shift Uniqueness Test

011100532-08, P = 23.155985 Days, E = 123.579813 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
8.79	5.82	4.02	4.54	5.22	2.92	1.32	4.76	4.24	1.80	1.28	0.31	0.91	0.34	0.95



Alt Model-Shift Uniqueness Test

This plot does not exist for this TCE.

Stellar Parameters For KIC 011100532

	$T_{\text{eff}} (K)$	$\log(g)$	$[\text{Fe}/\text{H}]$	$R (R_{\odot})$	$M (M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	7575^{+83}_{-75}	$3.917^{+0.168}_{-0.112}$	$-0.160^{+0.150}_{-0.150}$	$2.412^{+0.434}_{-0.531}$	$1.752^{+0.191}_{-0.172}$	$0.176^{+0.152}_{-0.060}$
	+1%/-1%	+4%/-3%	+94%/-94%	+18%/-22%	+11%/-10%	+87%/-34%
Source	SPE68	SPE68	SPE68	DSEP		

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

Secondary Eclipse Parameters for KIC 011100532-08 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-251 ± 43	$5.70^{+4.20}_{-3.55}$	1656^{+78}_{-93}	6397^{+5449}_{-1477}	161^{+887}_{-109}
Alt.	N/A	N/A	N/A	N/A	N/A

T_{max} = Theoretical Maximum Planetary Temperature

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

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

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

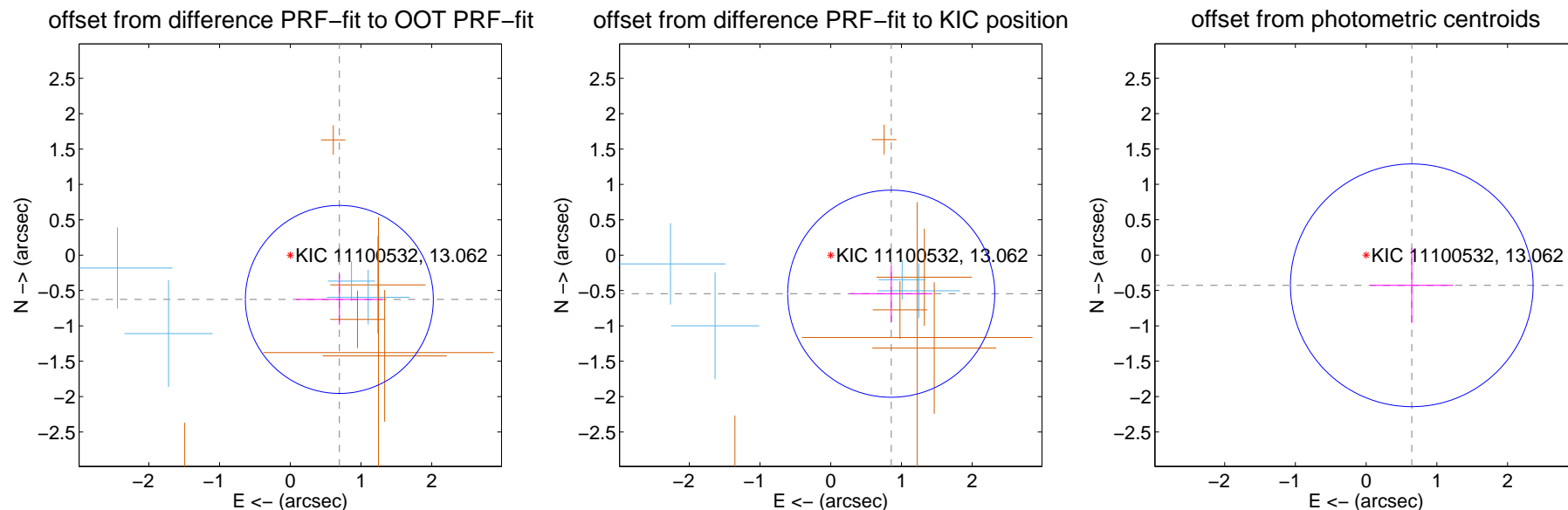
DV Centroid Data

Supplemental centroid analysis for 011100532-08. Kepler magnitude: 13.06. Transit SNR 9.17

There are 4 quarters with good PRF difference image offsets

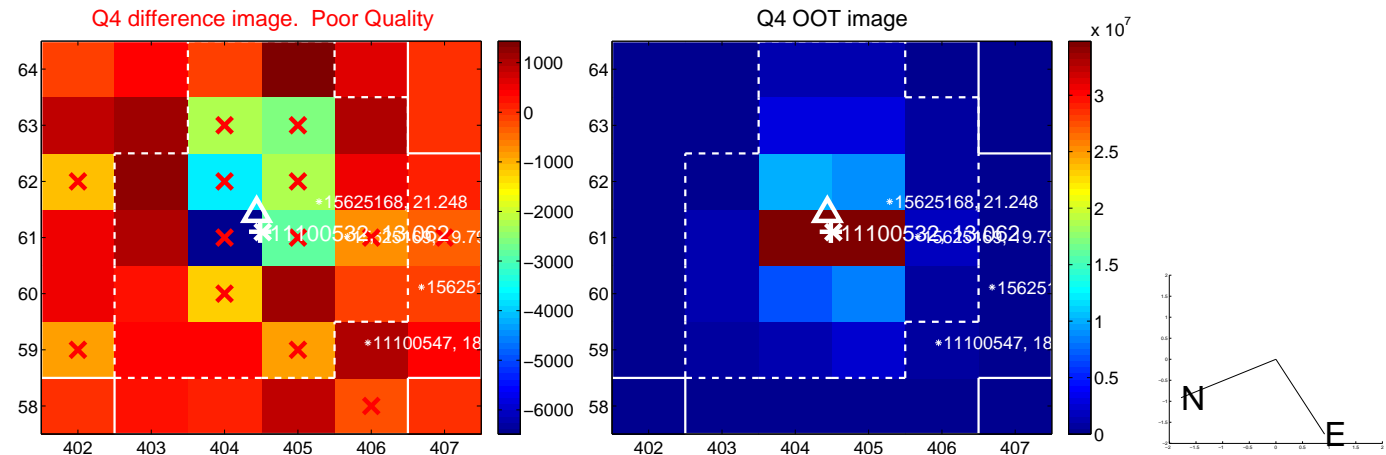
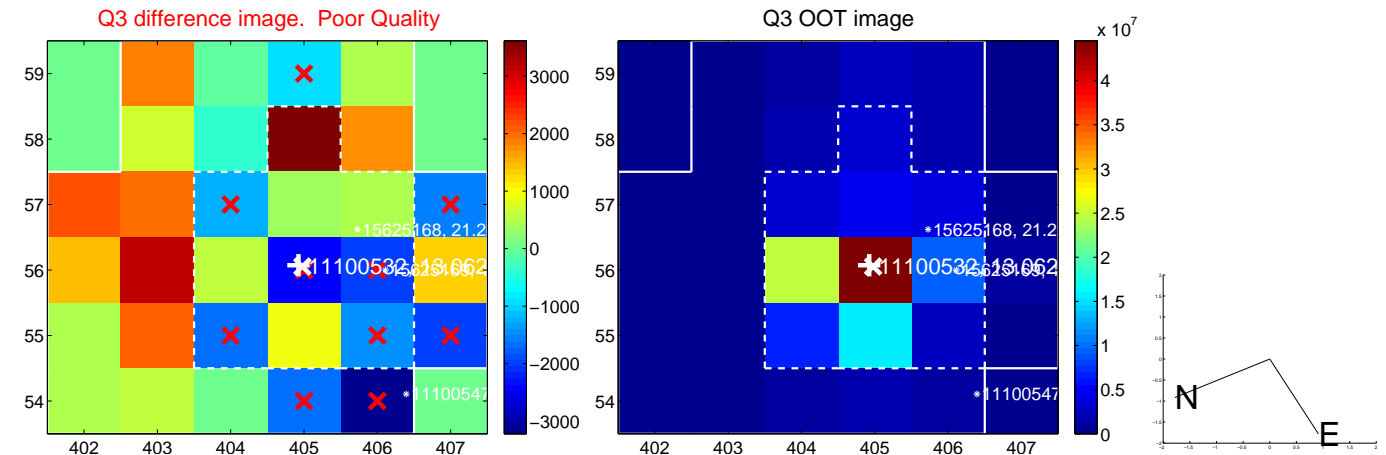
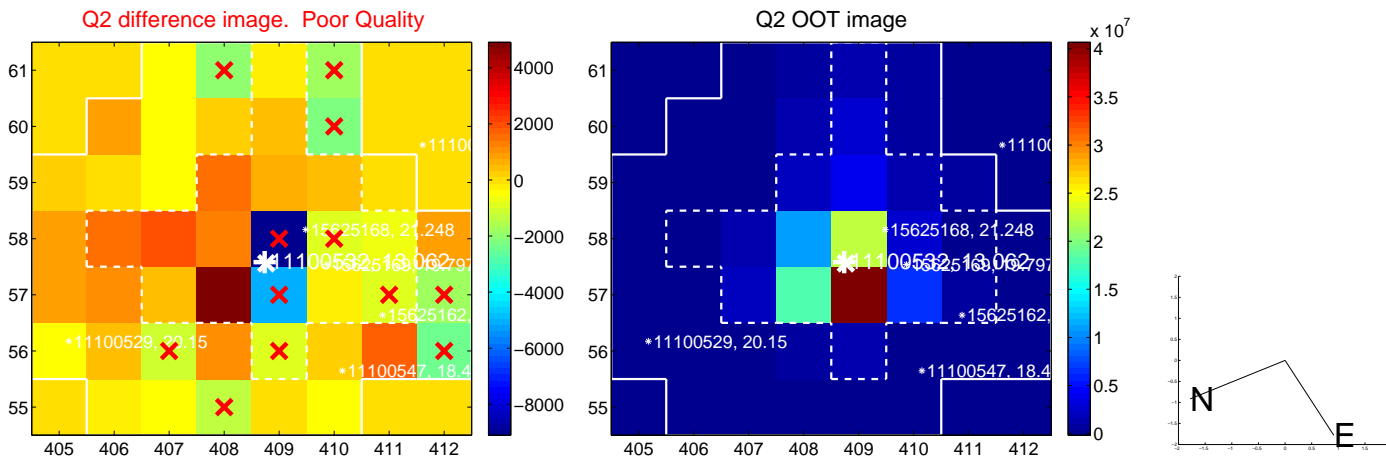
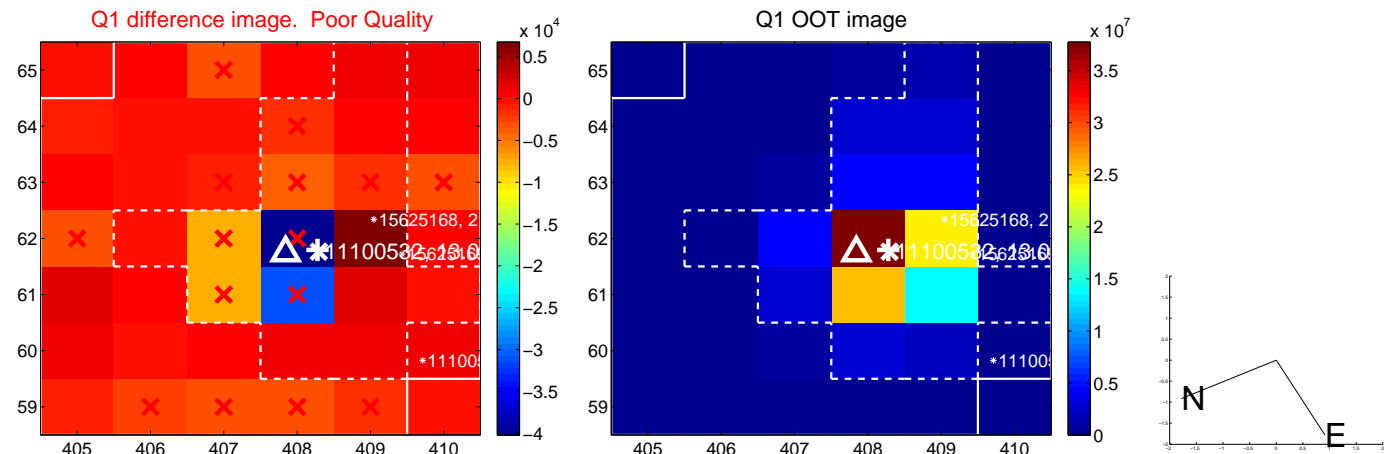
The direct PRF centroid is offset from the target star catalog position by about 0.14 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.935 ± 0.443	2.11	-0.694 ± 0.612	-0.626 ± 0.358
PRF-fit source offset from KIC position	1.015 ± 0.488	2.08	-0.856 ± 0.583	-0.545 ± 0.402
photometric centroid source offset	0.77 ± 0.57	1.35	-0.65 ± 0.59	-0.43 ± 0.53

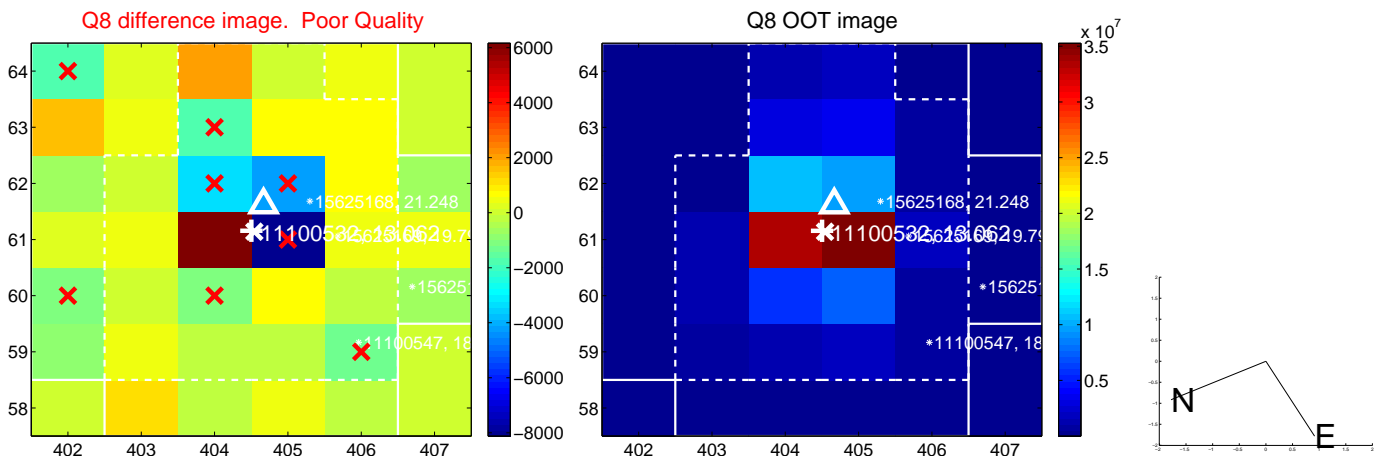
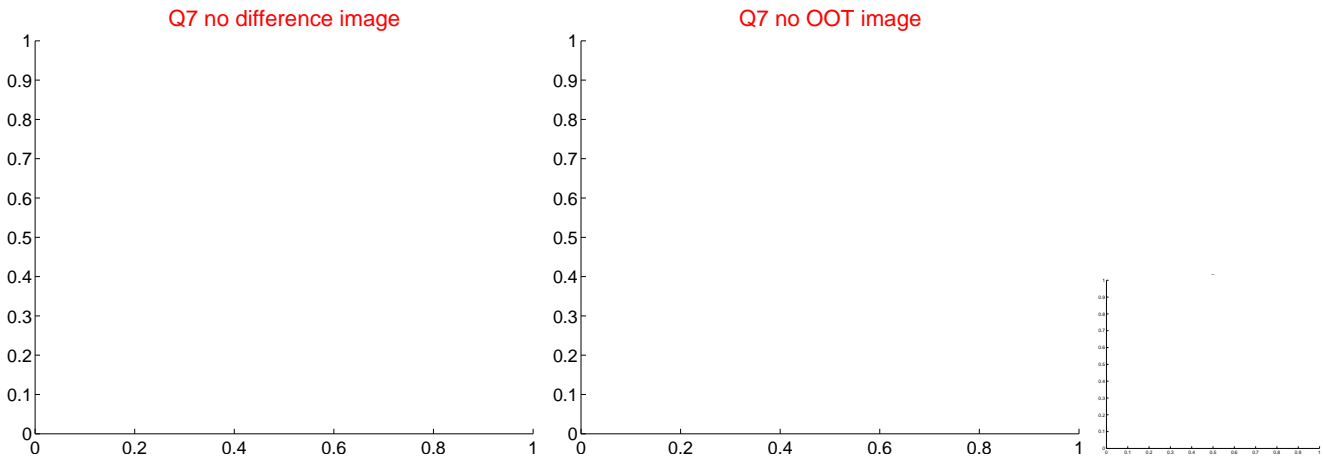
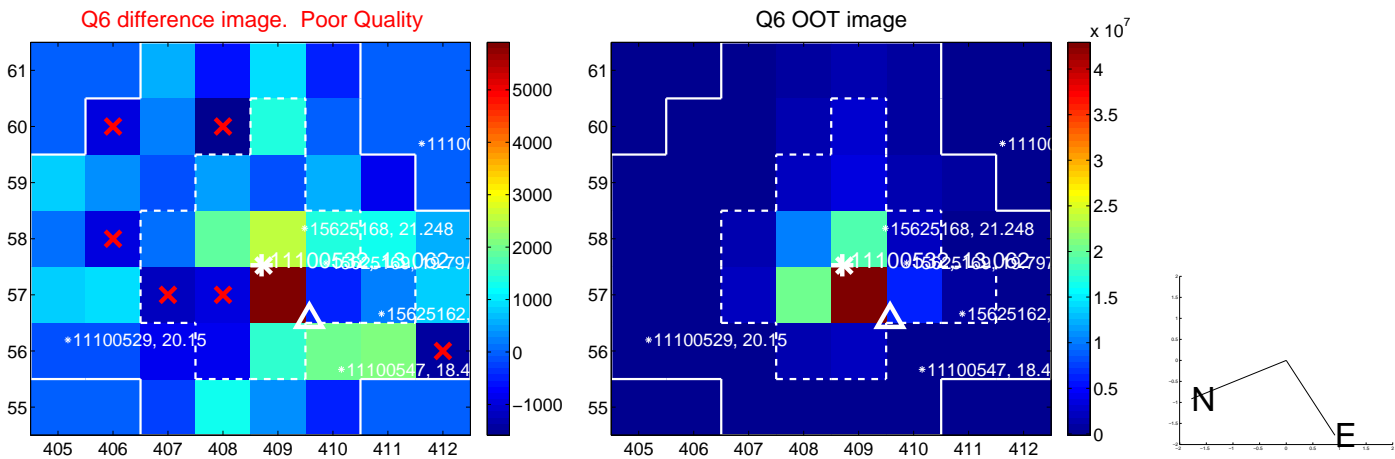
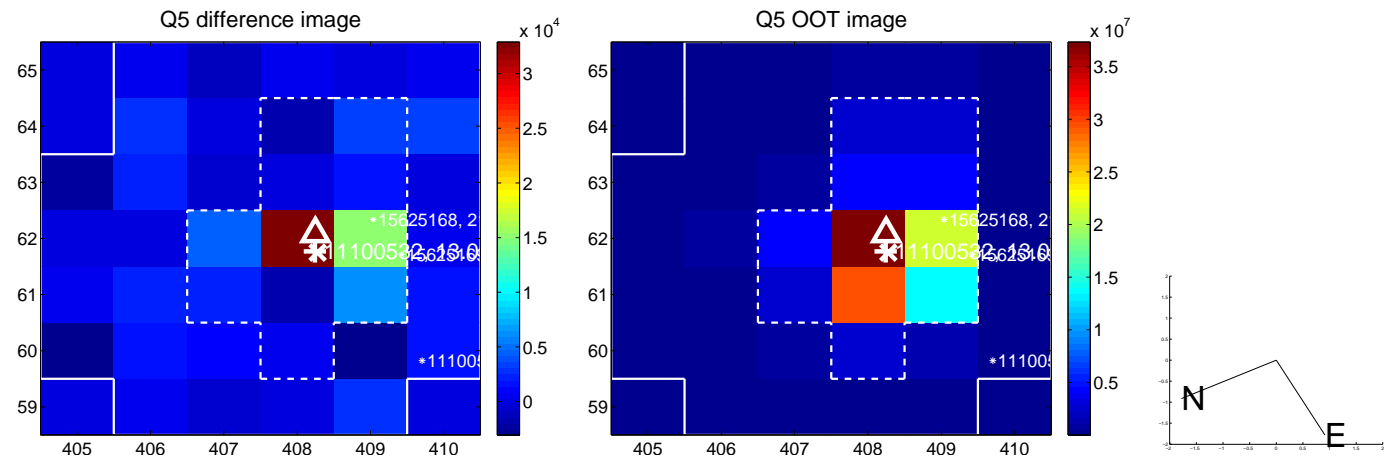


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses:** good quarterly centroid offsets; **Vermillion crosses:** bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

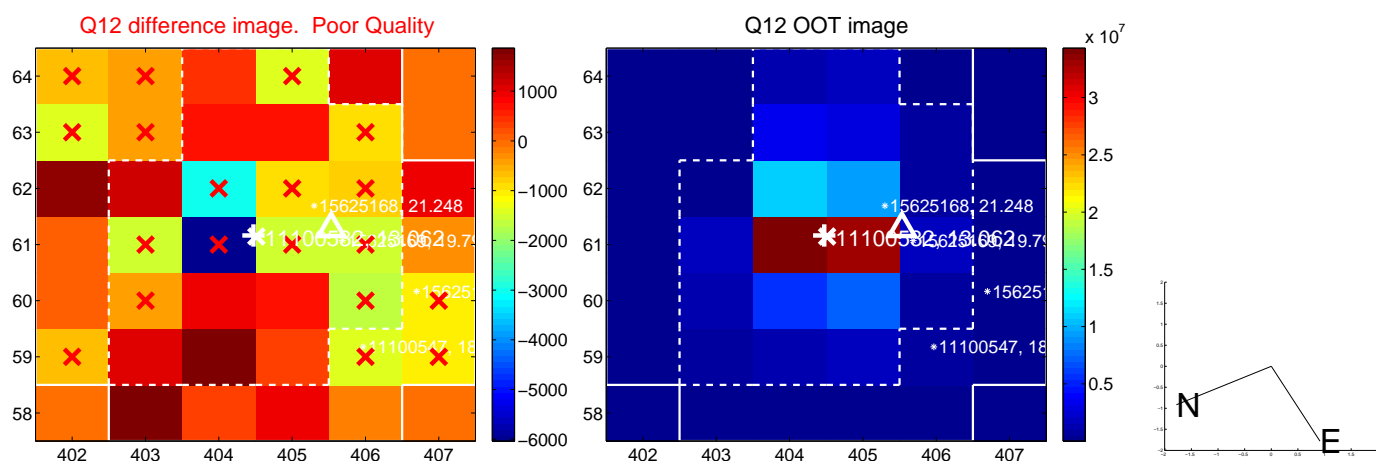
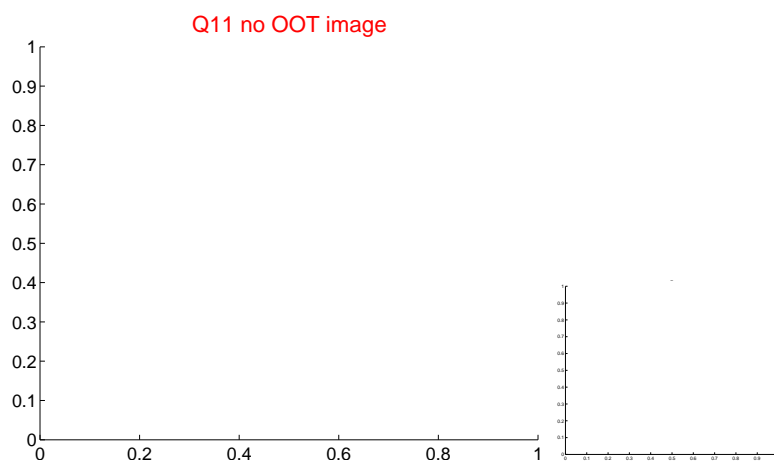
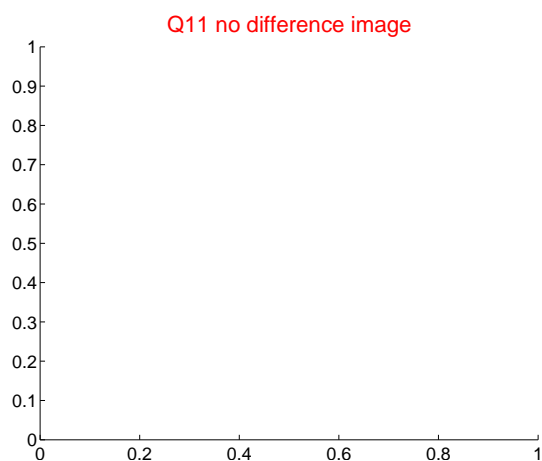
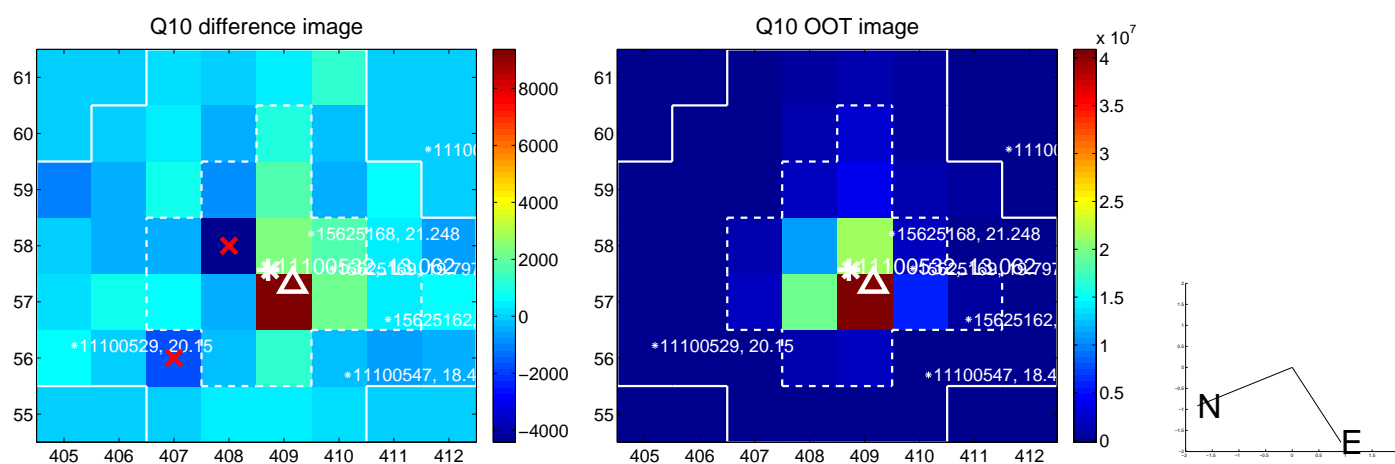
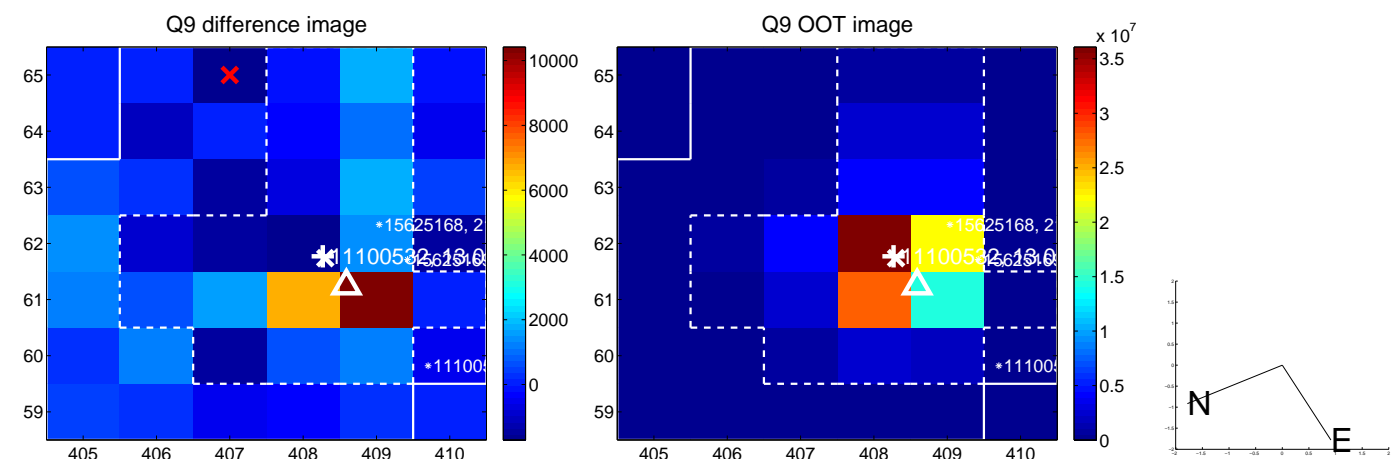
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



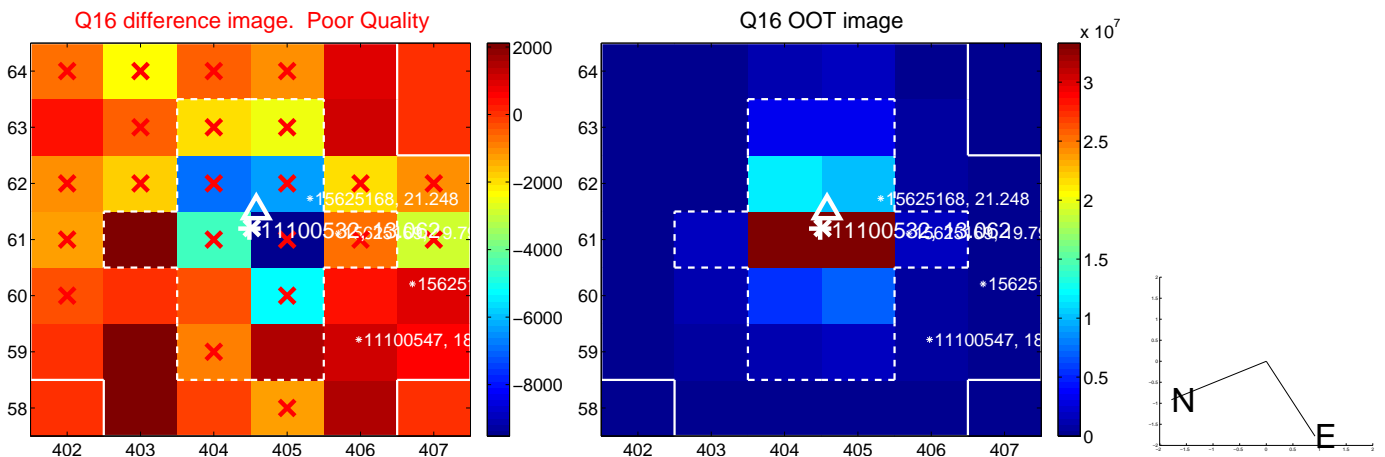
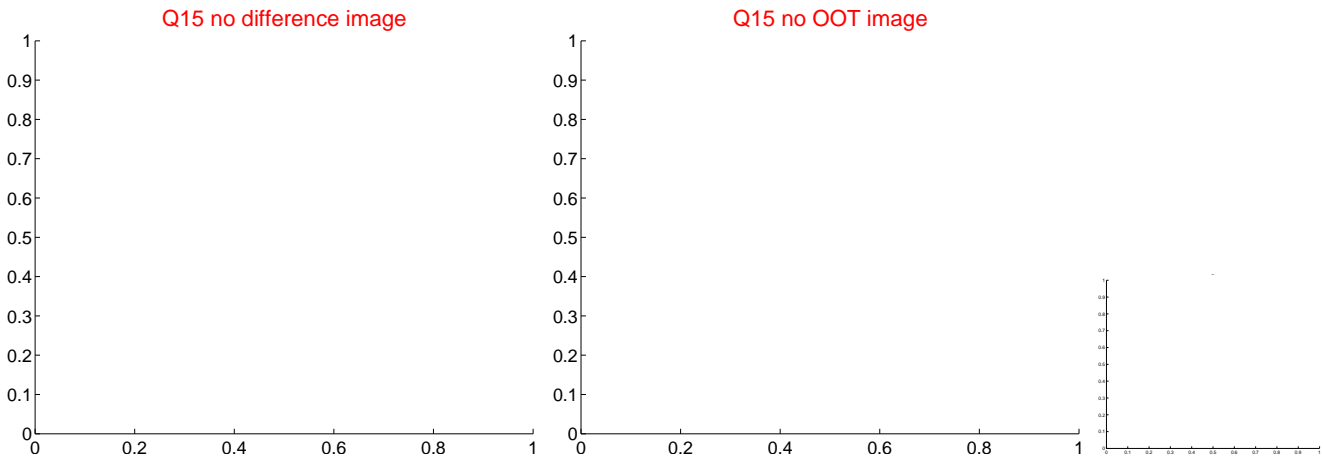
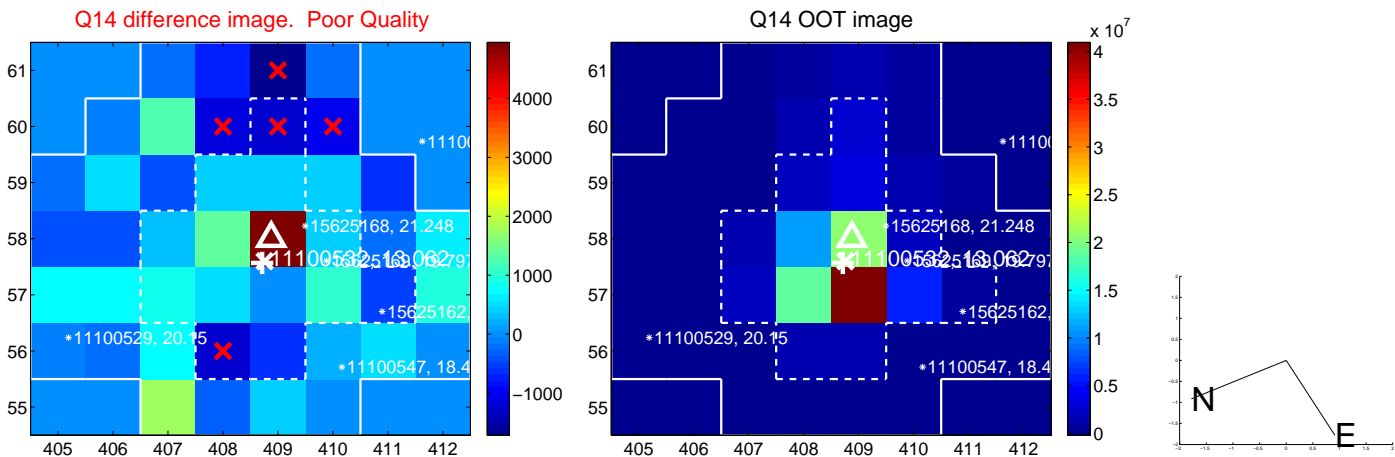
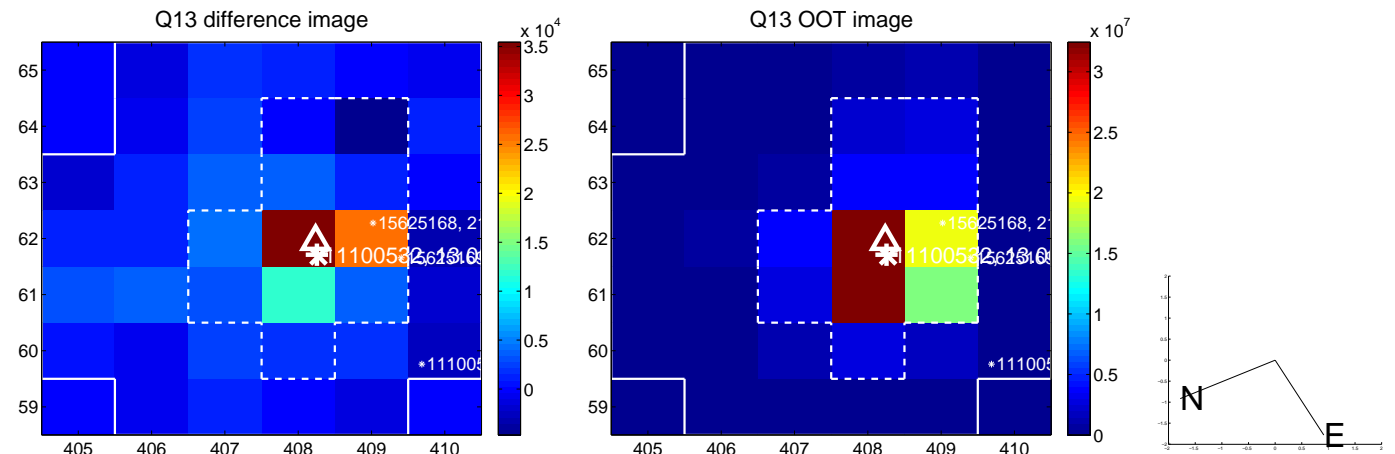
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



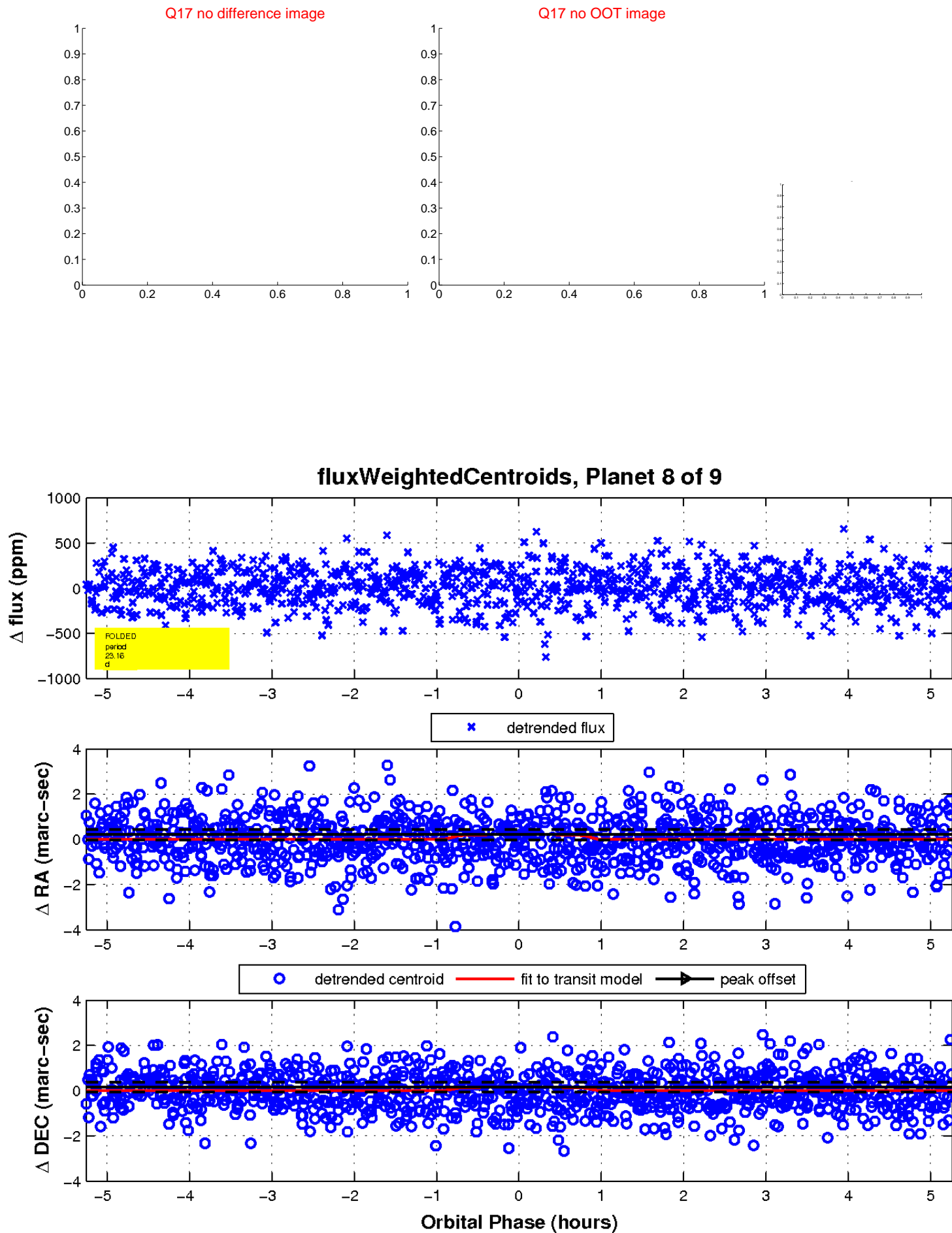
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

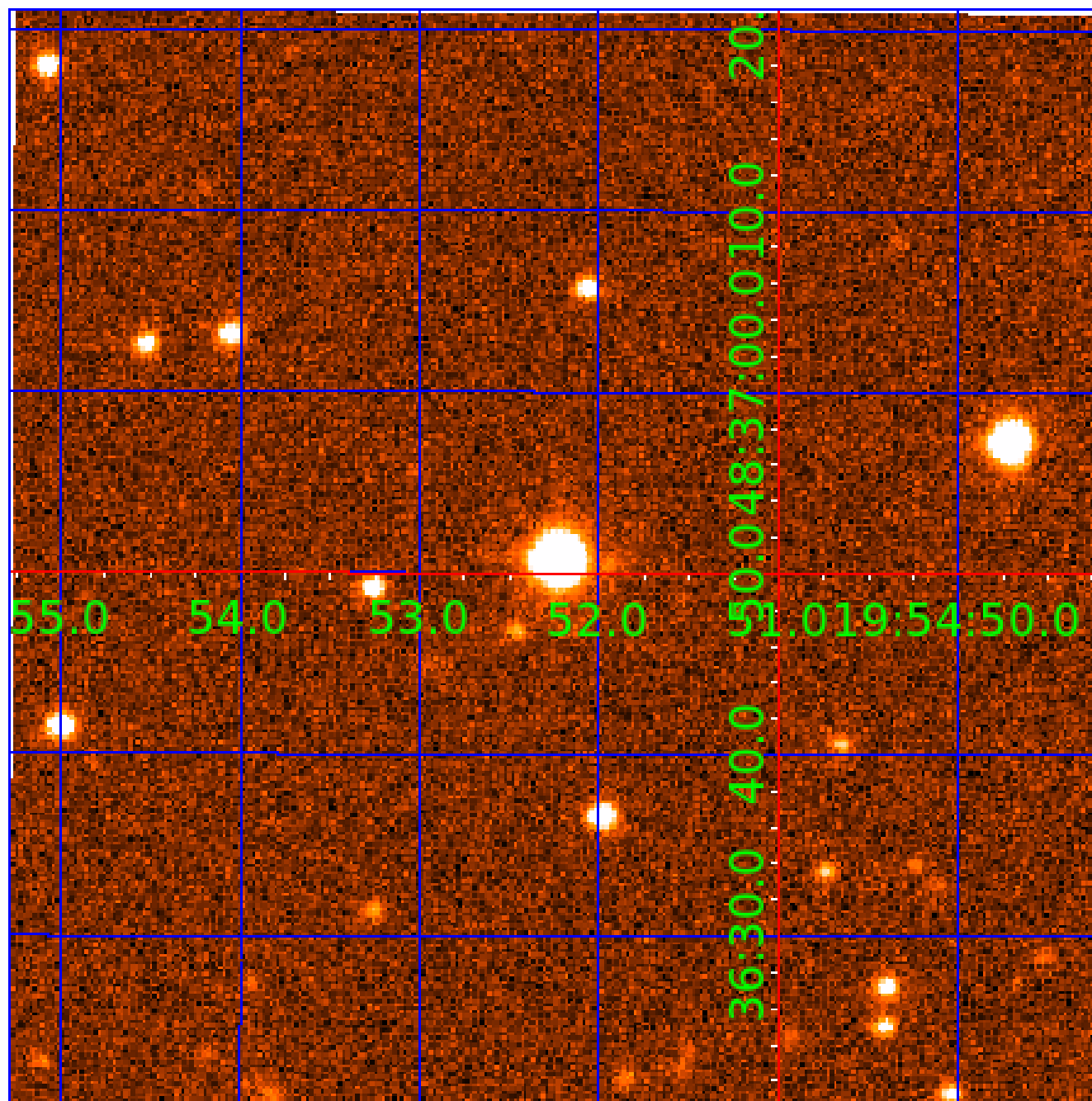


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 011100532

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})
011100532-01	OBS	No	0.743985	131.987531	35.9	1.383	9.7	9.2	2.41	7575	1.69	45700.86
011100532-02	OBS	No	0.949443	132.488671	21.6	5.846	8.6	6.8	2.41	7575	1.13	33015.51
011100532-03	OBS	No	40.787800	151.972423	116.5	4.550	10.1	5.1	2.41	7575	3.18	219.43
011100532-04	OBS	No	44.858115	149.422270	213.7	4.493	8.7	8.0	2.41	7575	4.20	193.30
011100532-05	OBS	No	69.928123	175.645448	354.3	2.513	9.2	9.2	2.41	7575	5.18	106.94
011100532-06	OBS	No	45.311601	144.582448	220.4	5.021	8.6	7.6	2.41	7575	4.13	190.72
011100532-07	OBS	No	32.325793	159.899688	223.7	4.350	8.1	7.8	2.41	7575	3.97	299.19
011100532-08	OBS	No	23.155985	146.735798	378.5	1.755	8.4	9.2	2.41	7575	4.86	466.79
011100532-09	OBS	No	42.033118	164.656835	317.5	2.500	8.1	-1.0	2.41	7575	4.33	210.81

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
011100532-01	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT
011100532-02	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT
011100532-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT
011100532-04	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT
011100532-05	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT
011100532-06	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT
011100532-07	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT
011100532-08	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—MOD_NONUNIQ_DV
011100532-09	OBS	FP	0.00	1	0	1	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_NOFITS—HALO_GHOST

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

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

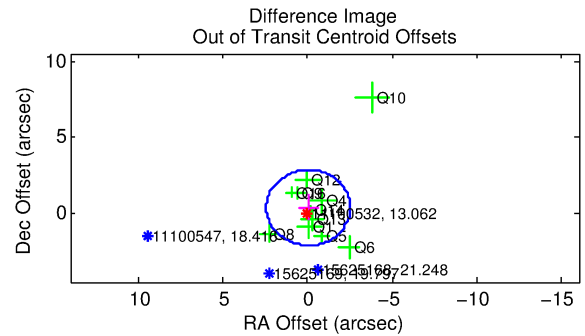
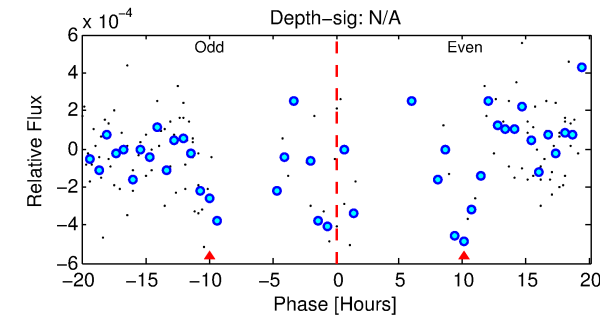
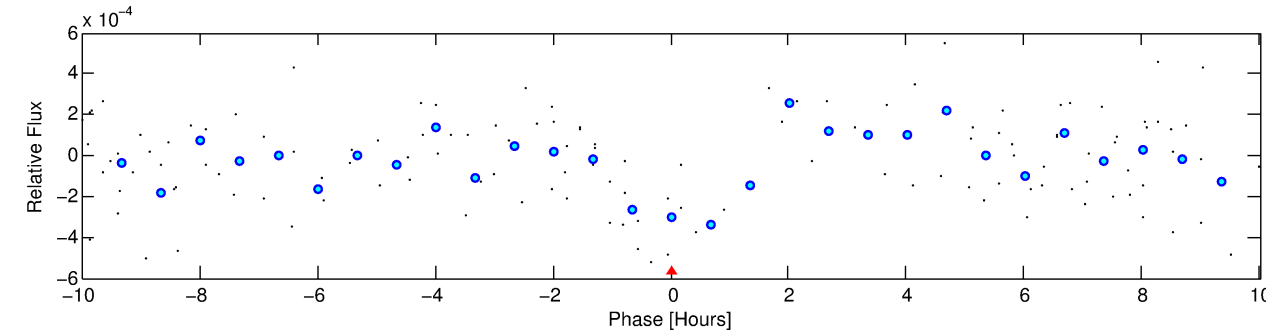
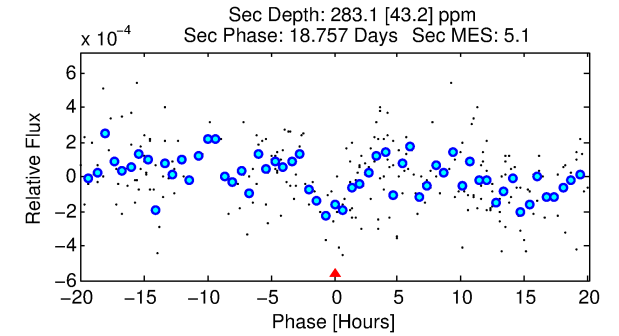
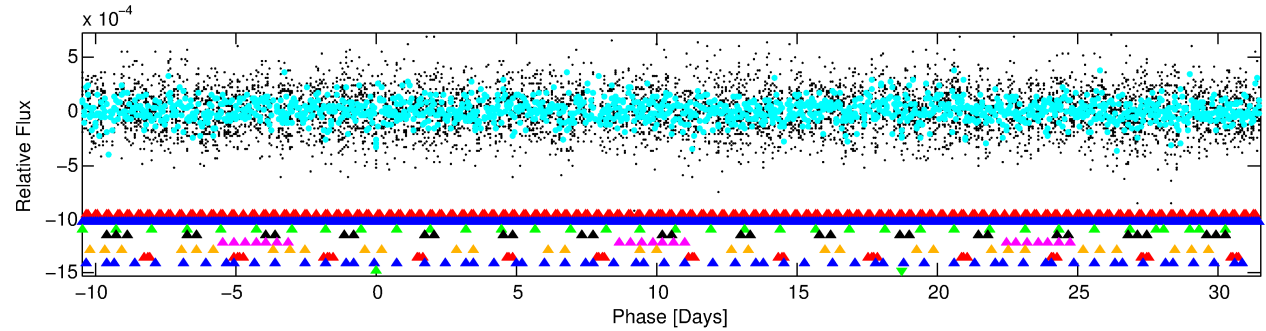
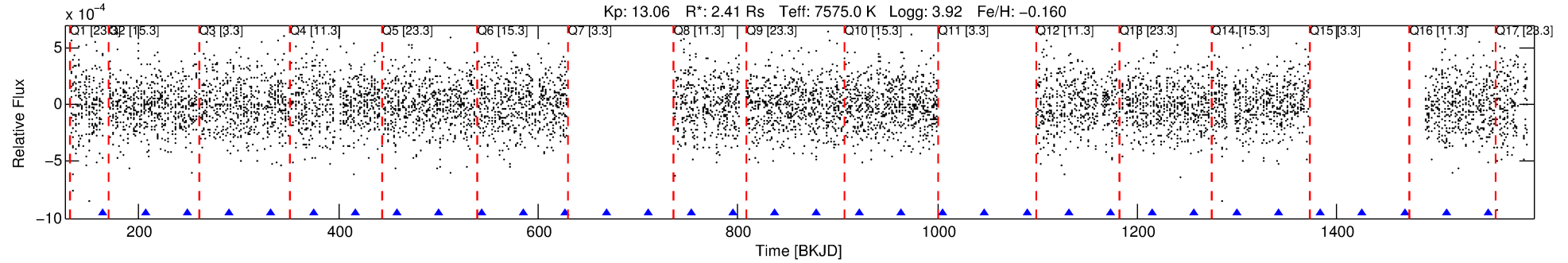
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 011100532-09

No Significant Match Found

DV One-Page Summary

KIC: 11100532 Candidate: 9 of 9 Period: 42.033 d



TPS TCE Results:

Period = 42.03312 d
Epoch = 164.6568 BKJD

DV fit results are unavailable

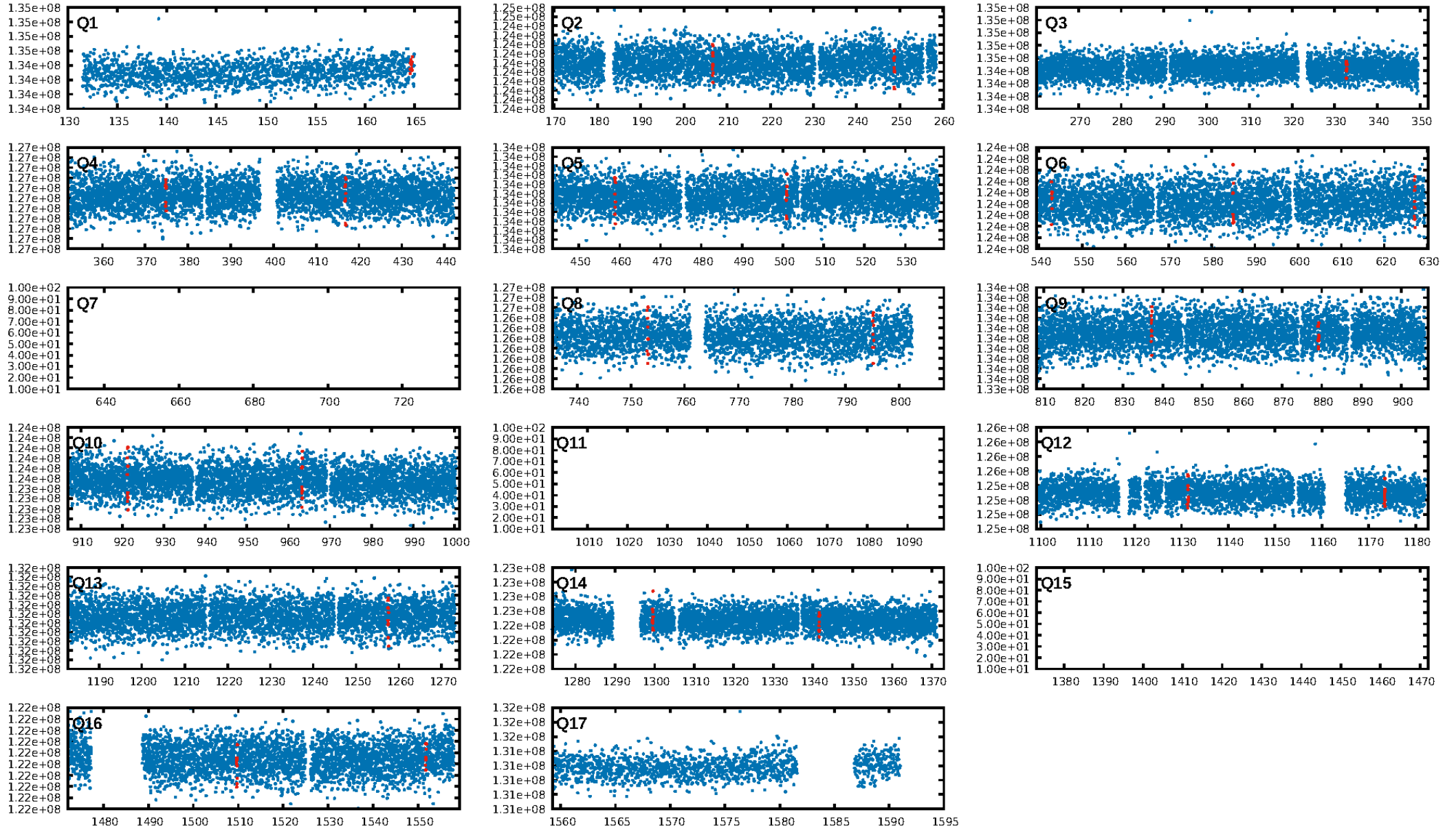
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [5.76σ]
LongPeriod-sig: 100.0% [13.19σ]
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [7/7]
GhostDiagnostic-chr: -0.05855
Centroid-sig: 0.0%
Centroid-so: 1.247 arcsec [2.78σ]
OotOffset-rm: 0.378 arcsec [0.46σ]
KicOffset-rm: 0.510 arcsec [0.57σ]
OotOffset-st: 3/0/4/4 [11]
KicOffset-st: 3/0/4/4 [11]
DiffImageQuality-fgm: 0.55 [6/11]
DiffImageOverlap-fno: 0.00 [0/13]

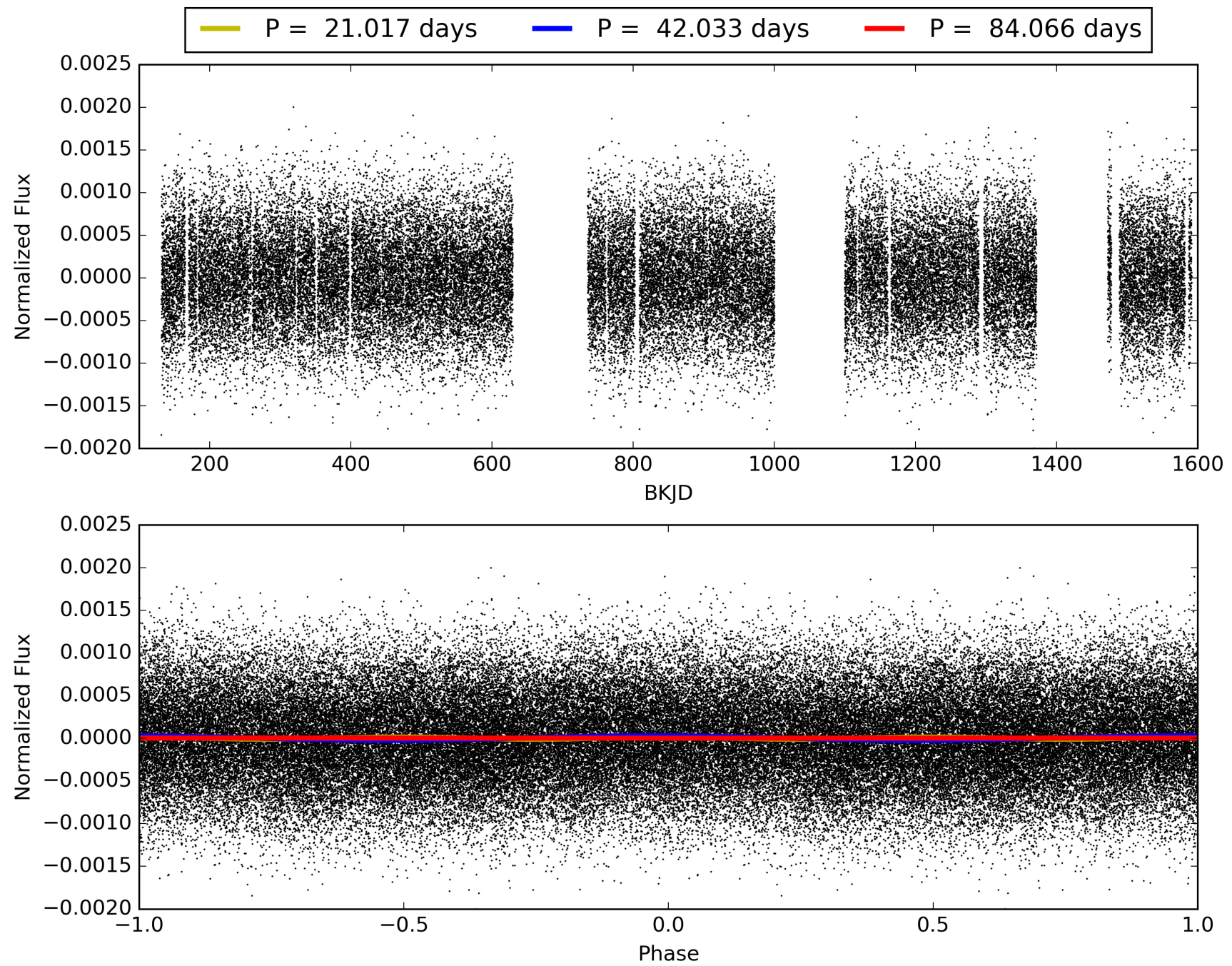
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 01-Feb-2016 10:50:45 Z

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

TCE 011100532-09, PDC Light Curves

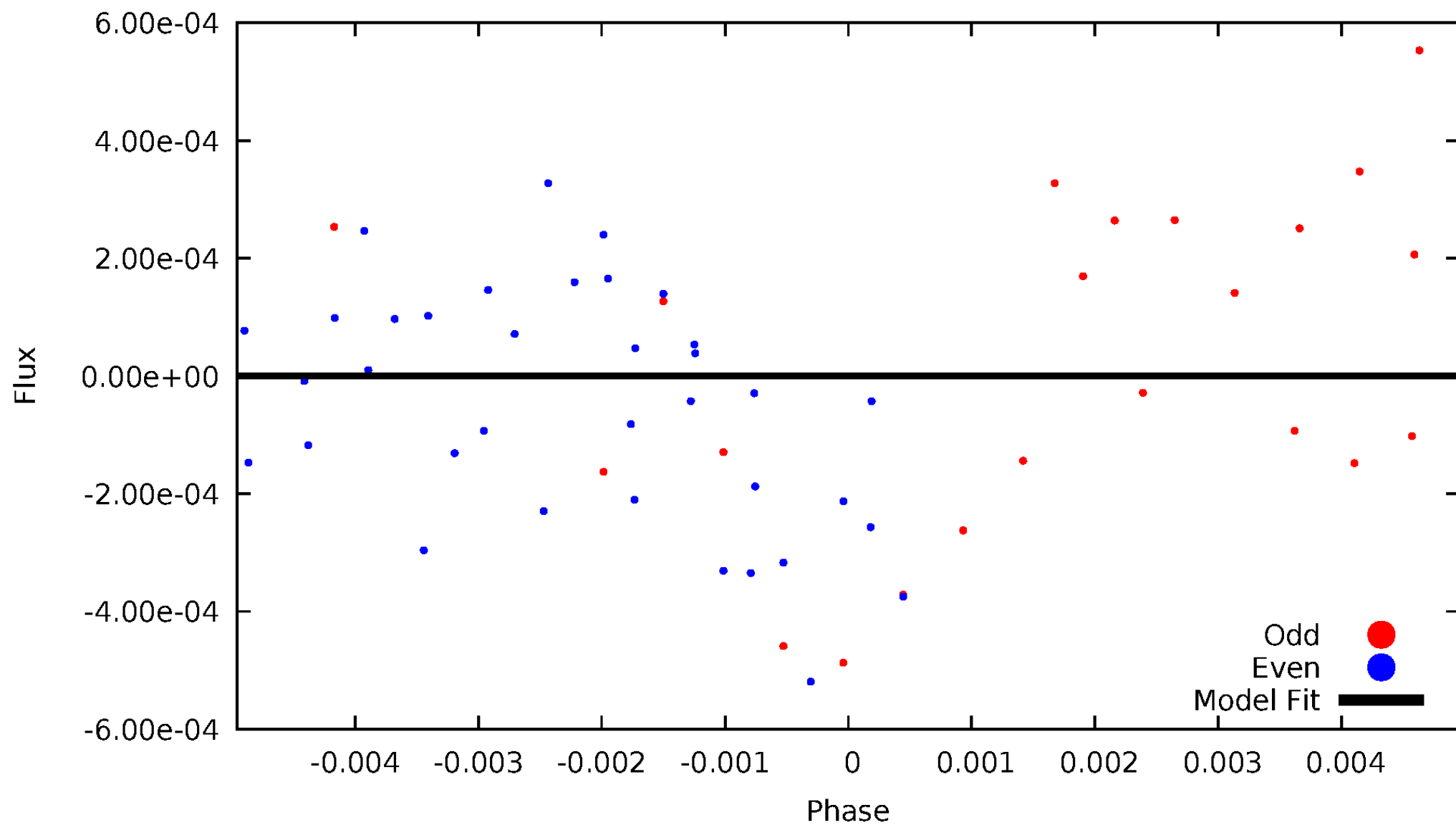


TCE 011100532-09



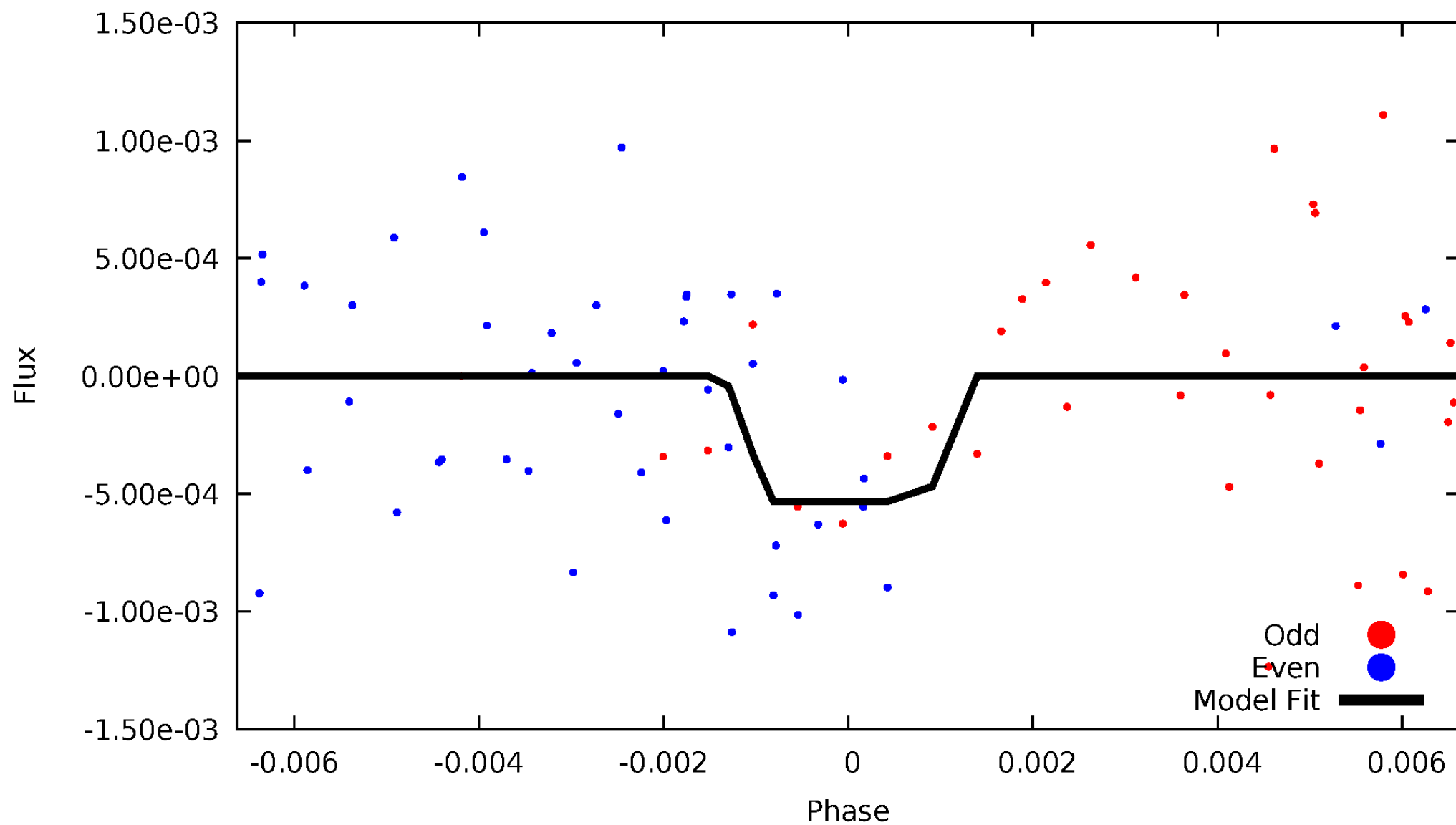
DV Odd/Even

TCE 011100532-09

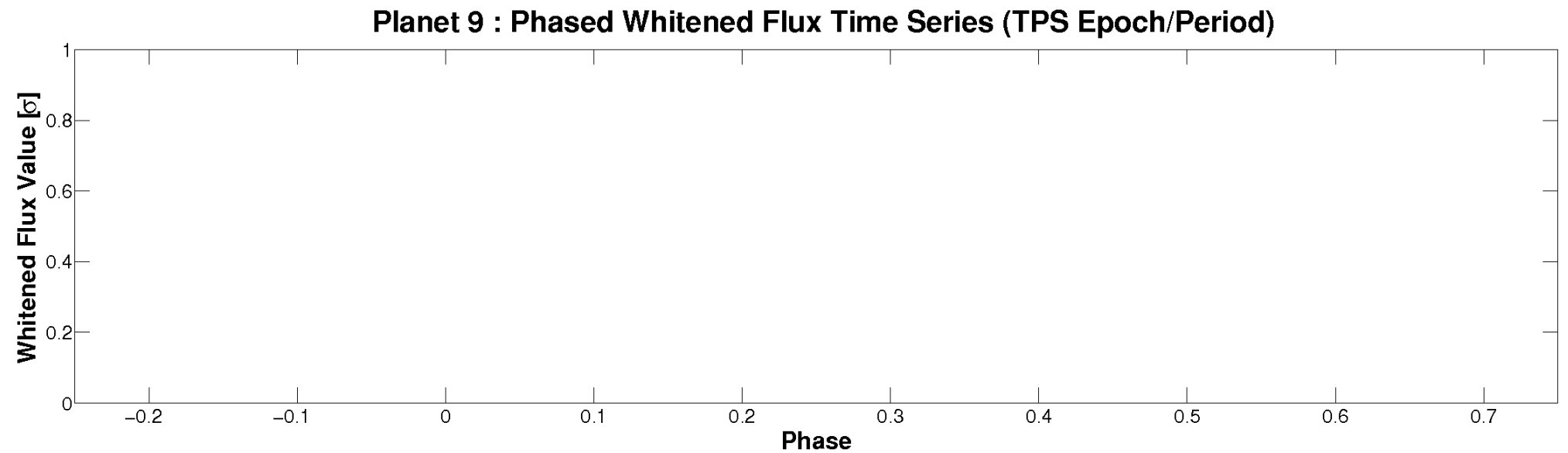
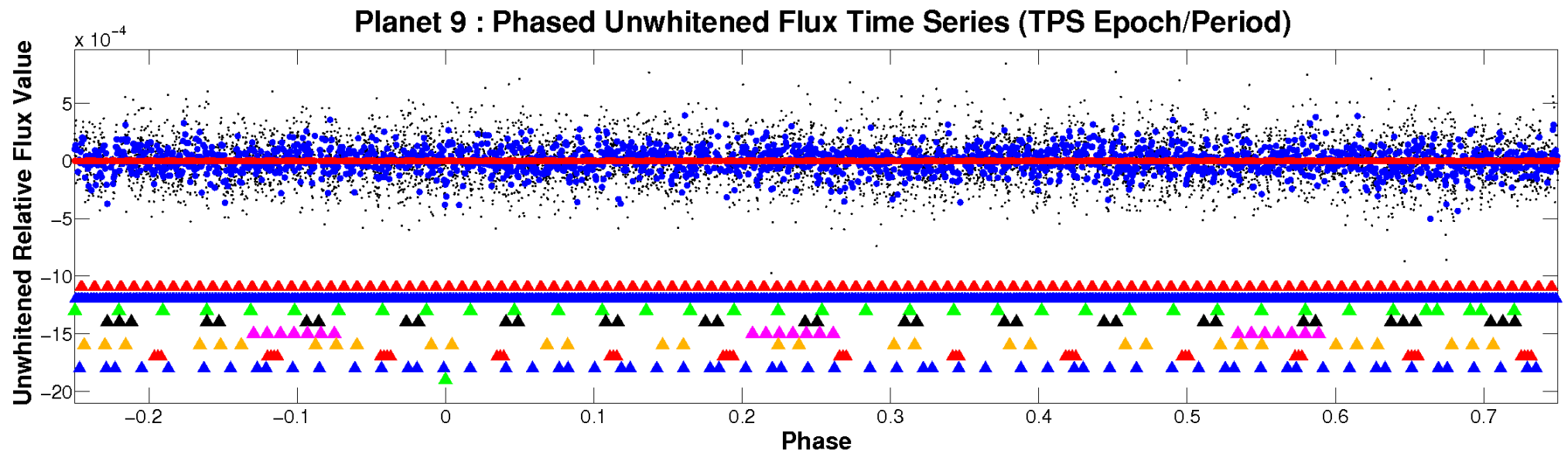


ALT Odd/Even

TCE 011100532-09

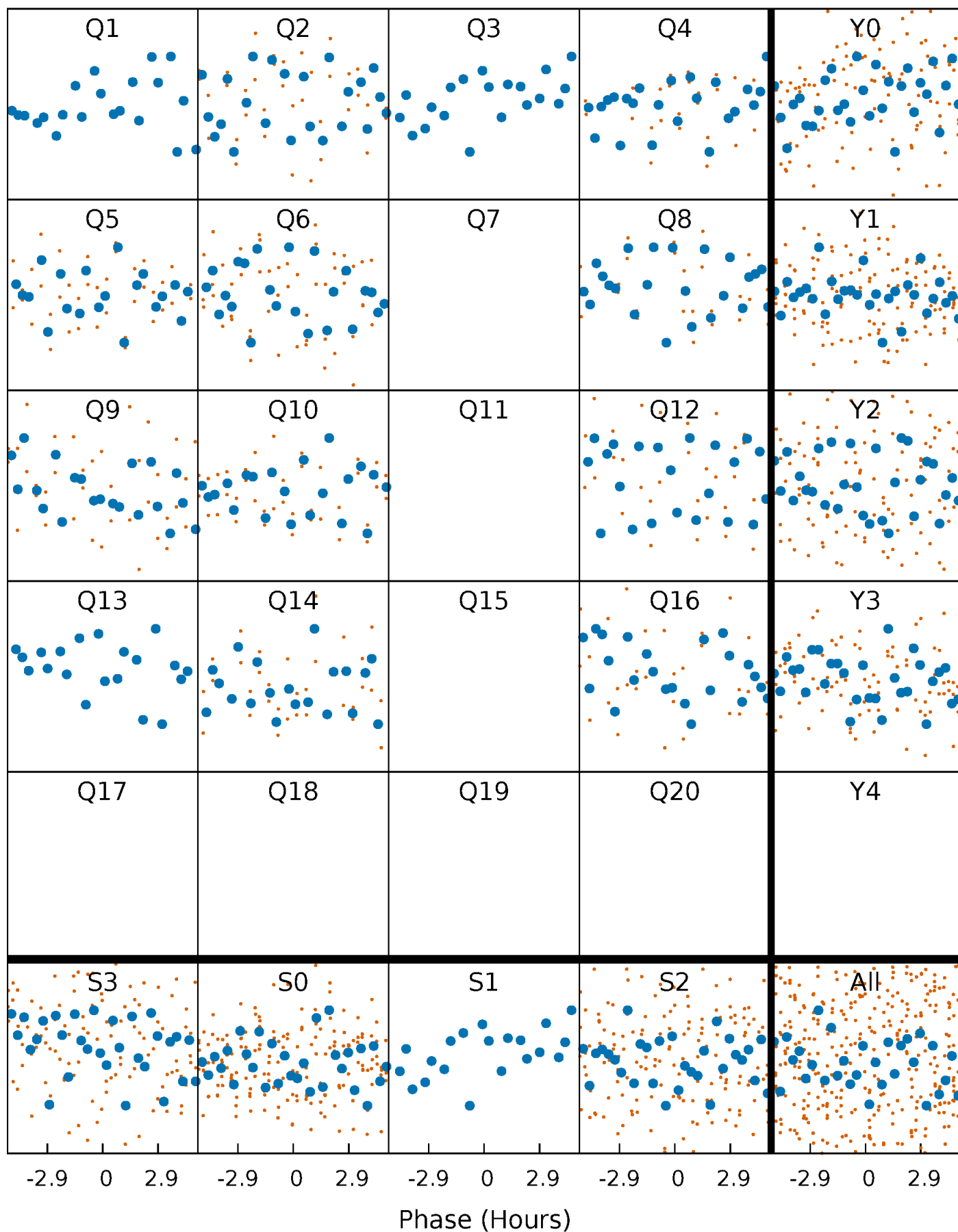


Non-Whitened Vs. Whitened Light Curve



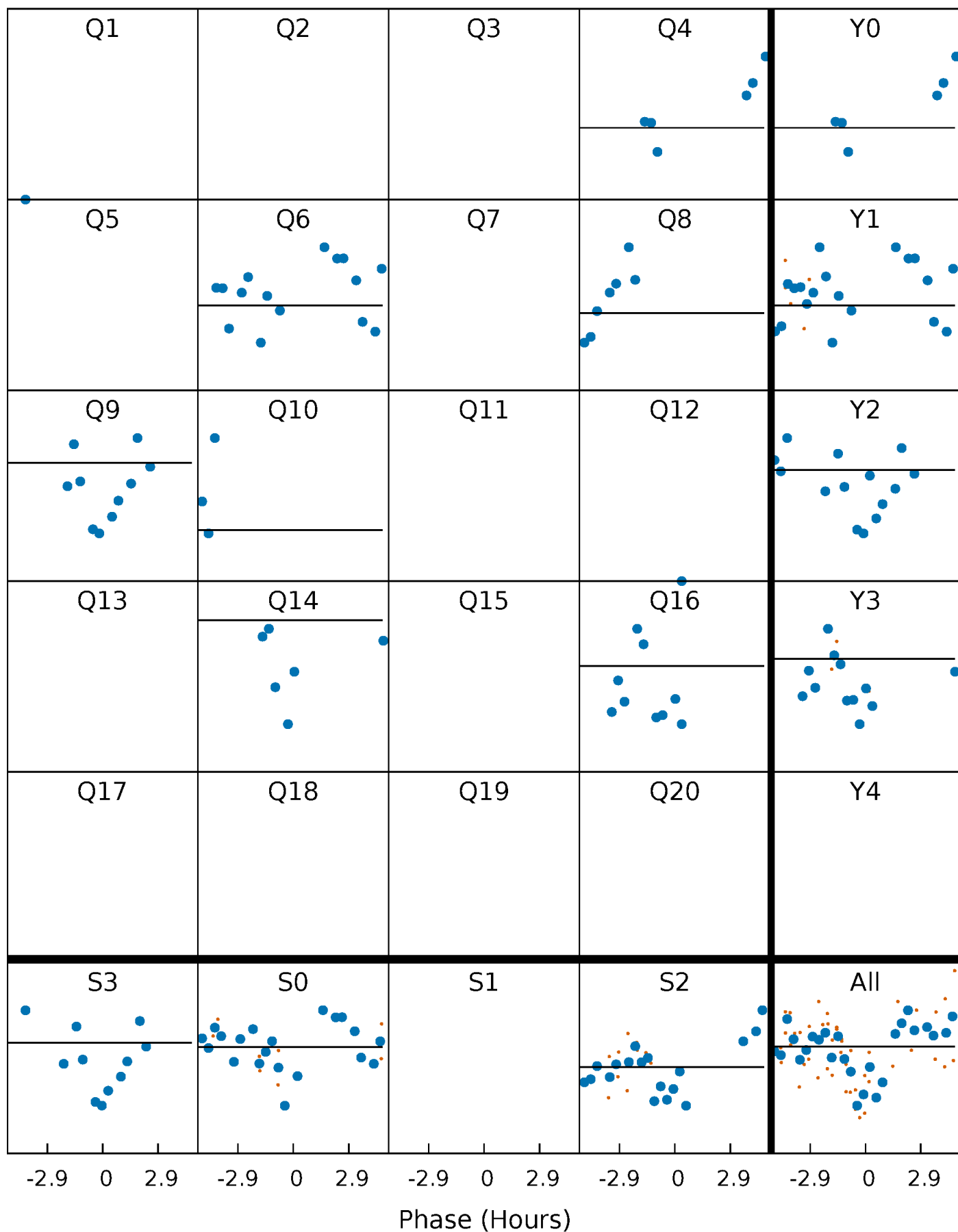
PDC Quarter-Phased Transit Curves

TCE 011100532-09 P= 42.033118 Days $T_0=164.656835$ (BKJD)



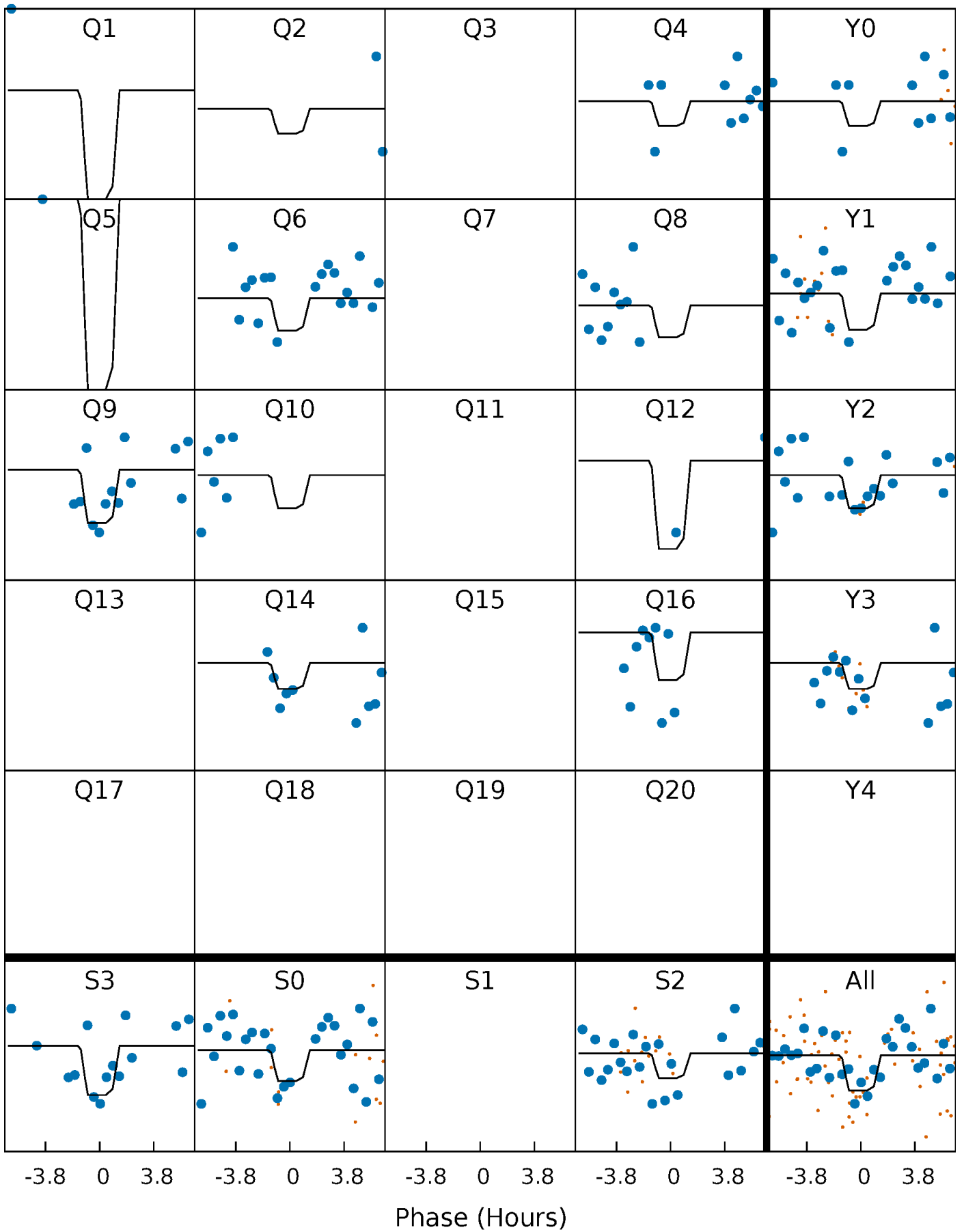
DV Quarter-Phased Transit Curves

TCE 011100532-09 $P = 42.033118$ Days $T_0 = 164.656835$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

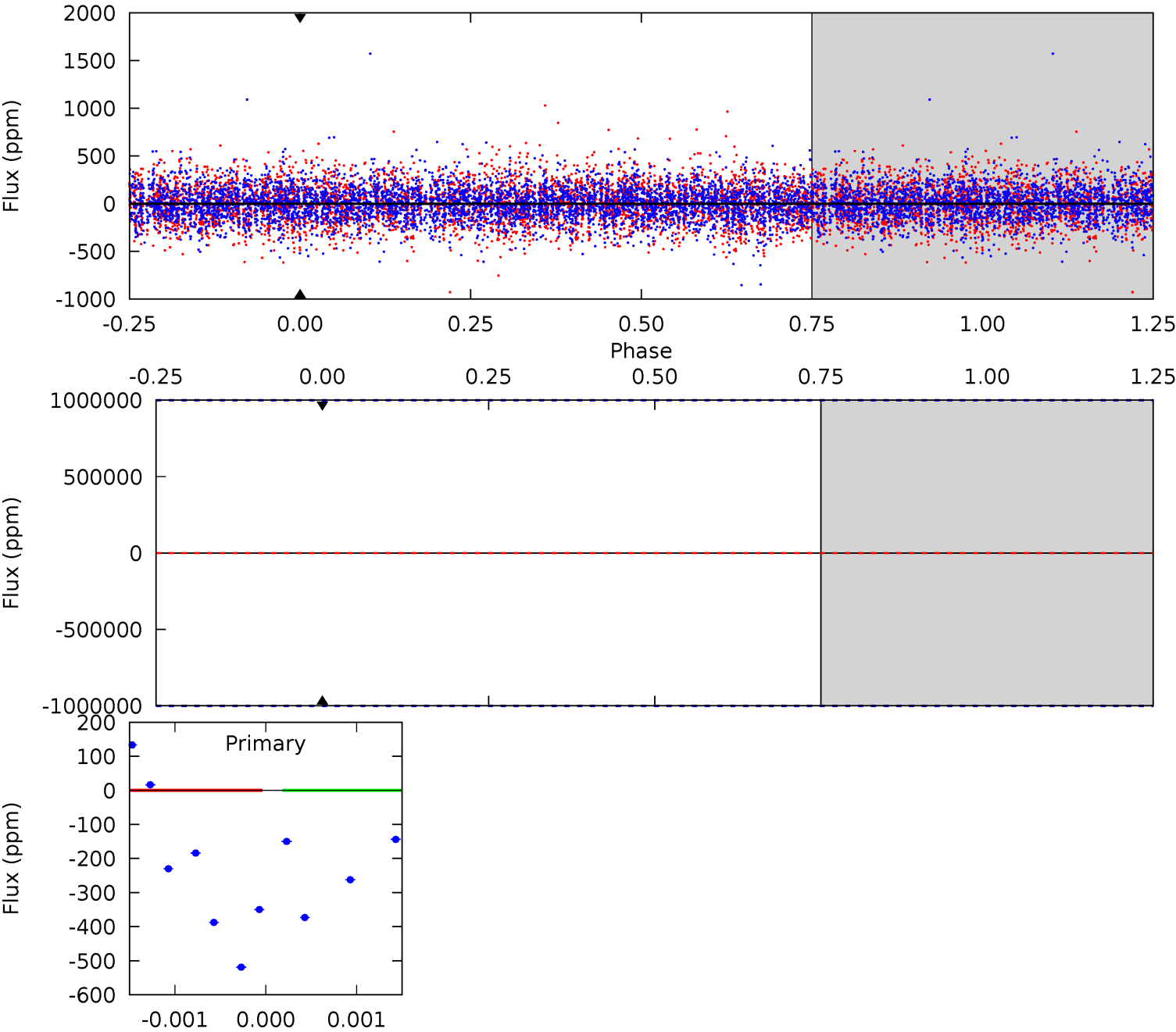
TCE 011100532-09 P= 42.033118 Days $T_0=164.657711$ (BKJD)



DV Model-Shift Uniqueness Test

011100532-09, P = 42.033118 Days, E = 122.623717 Days

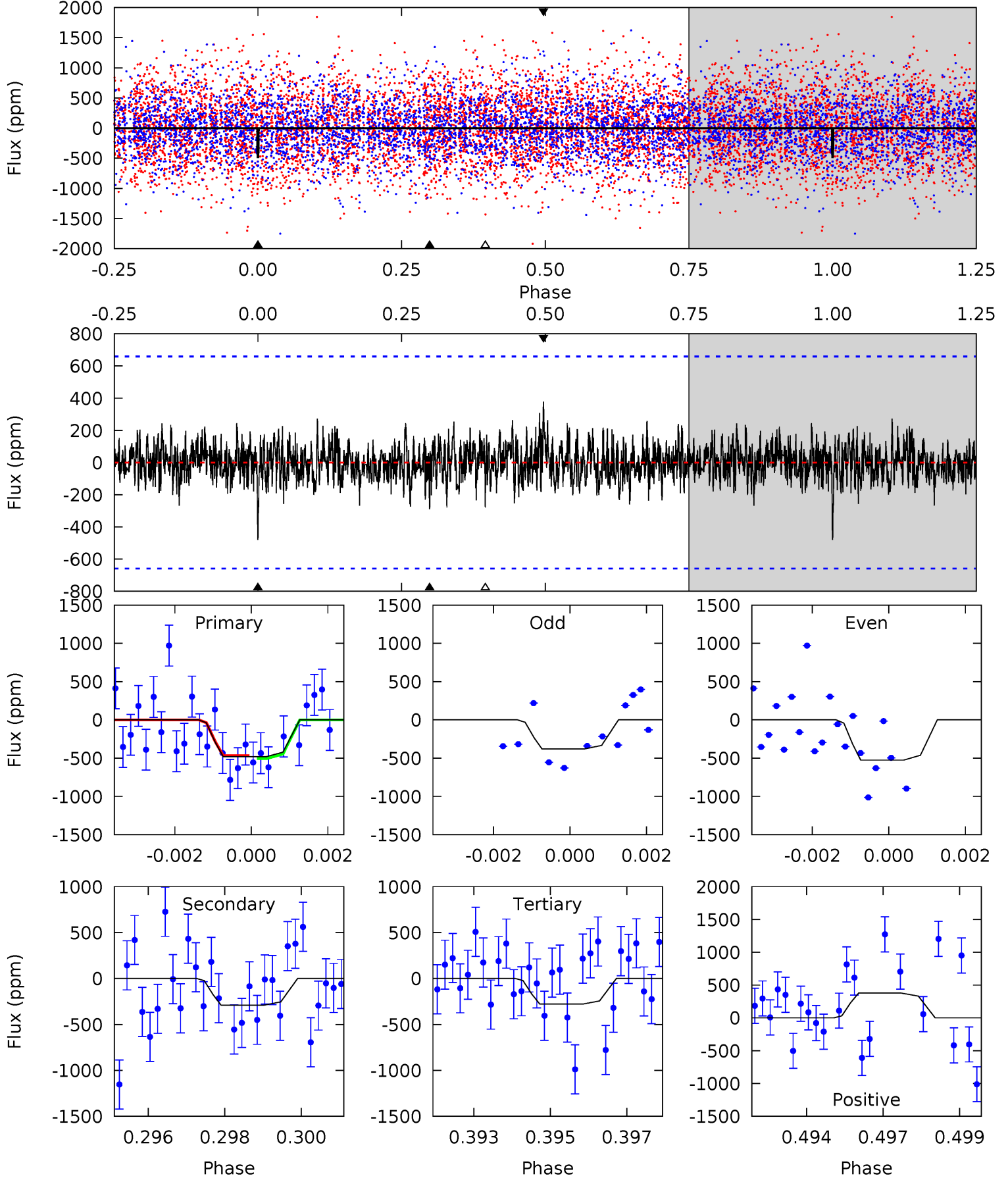
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
0	0	0	0	1.00	1.00	1.00	0	0	0	0	0	0	0	0



Alt Model-Shift Uniqueness Test

011100532-09, P = 42.033118 Days, E = 122.624593 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
3.87	2.34	2.25	3.04	5.31	3.06	0.72	1.63	0.83	0.09	-0.71	0.52	0.76	0.44	0.14



Stellar Parameters For KIC 011100532

	$T_{\text{eff}} (K)$	$\log(g)$	$[\text{Fe}/\text{H}]$	$R (R_{\odot})$	$M (M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	7575^{+83}_{-75}	$3.917^{+0.168}_{-0.112}$	$-0.160^{+0.150}_{-0.150}$	$2.412^{+0.434}_{-0.531}$	$1.752^{+0.191}_{-0.172}$	$0.176^{+0.152}_{-0.060}$
	+1%/-1%	+4%/-3%	+94%/-94%	+18%/-22%	+11%/-10%	+87%/-34%
Source	SPE68	SPE68	SPE68	DSEP		

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

Secondary Eclipse Parameters for KIC 011100532-09 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	0 ± 1000000	$18.48^{+21.66}_{-13.03}$	1352^{+68}_{-74}	5247^{+46093}_{-41855}	160^{+27670}_{-18989}
Alt.	-290 ± 124	$20.24^{+20.29}_{-13.81}$	1352^{+61}_{-70}	3815^{+2433}_{-827}	30^{+299}_{-23}

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

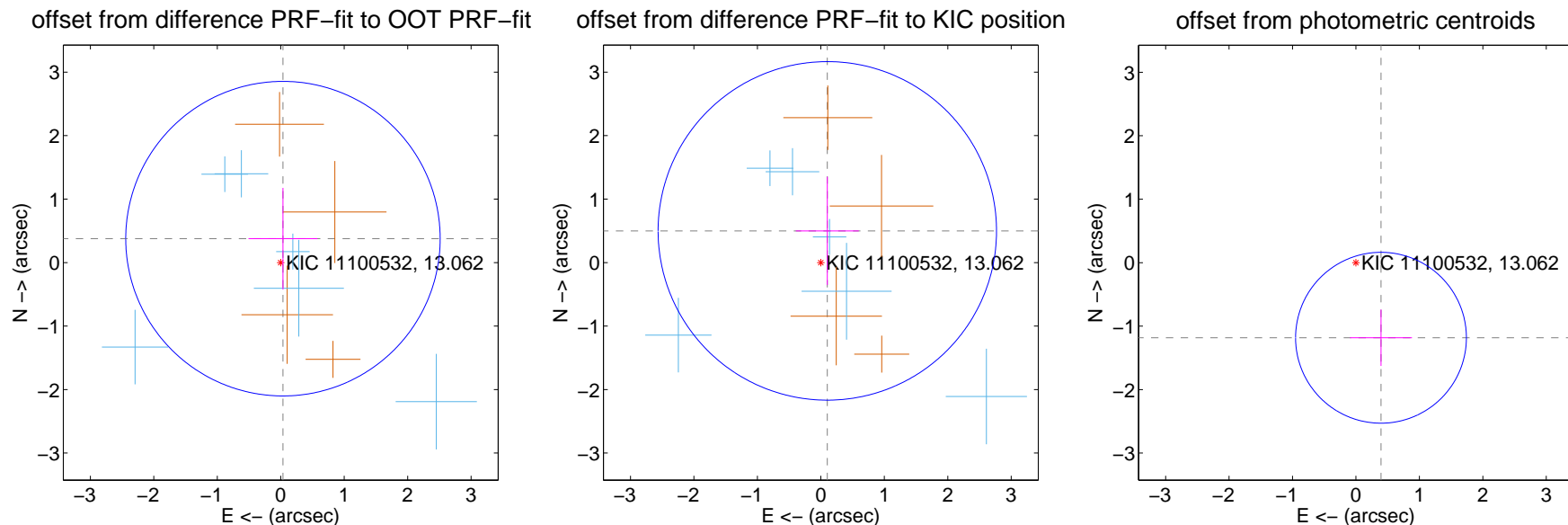
DV Centroid Data

Supplemental centroid analysis for 011100532-09. Kepler magnitude: 13.06. Transit SNR -1.00

There are 6 quarters with good PRF difference image offsets

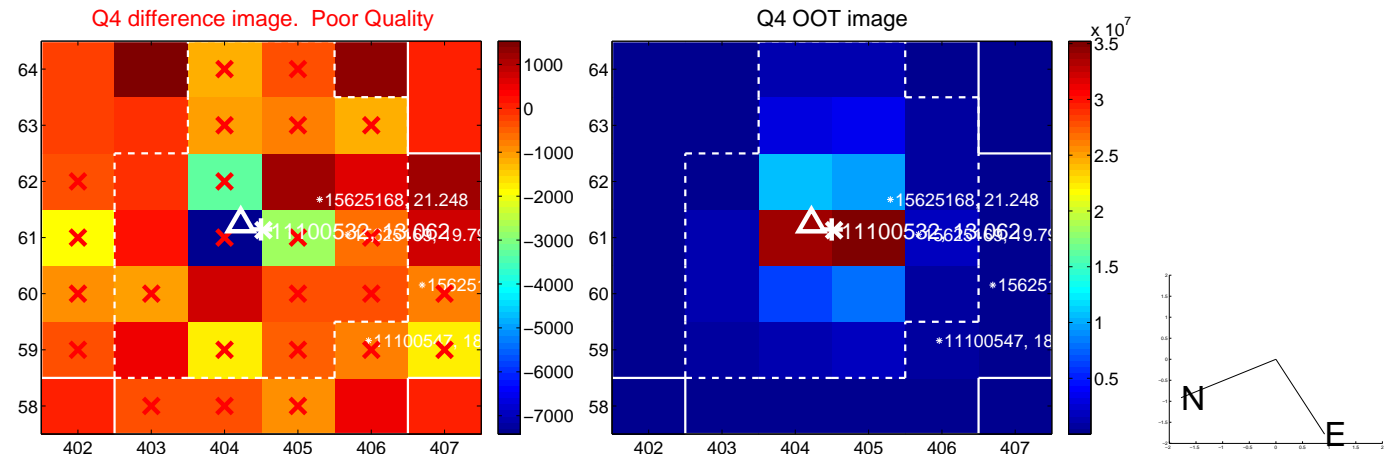
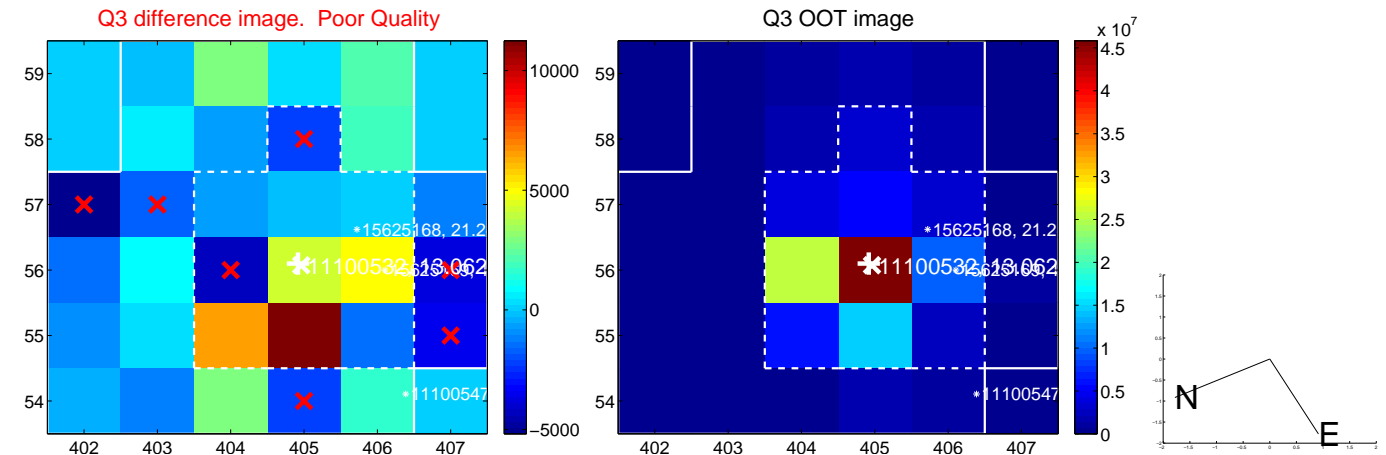
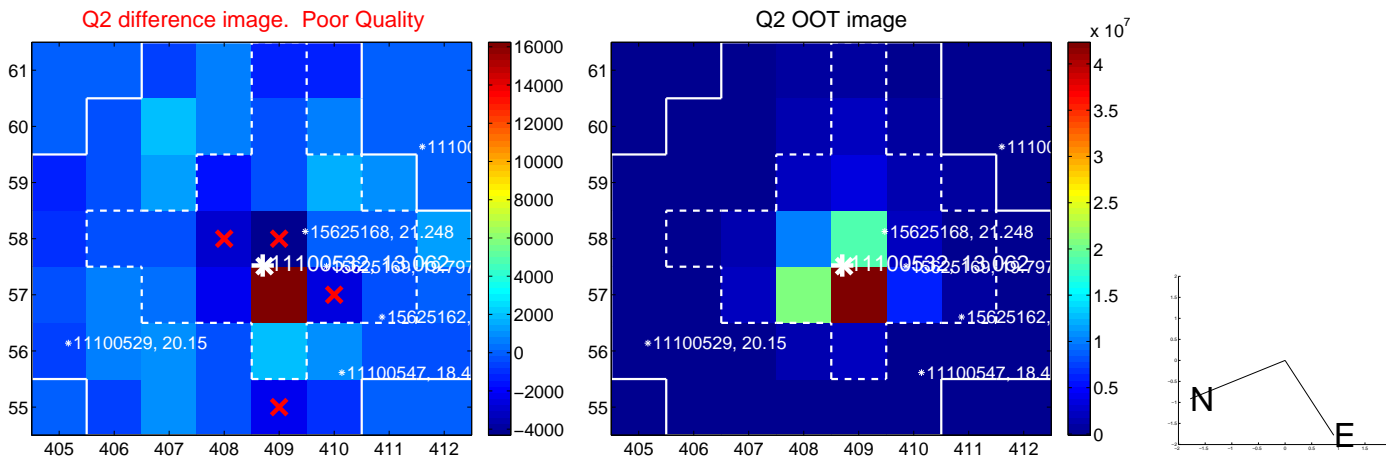
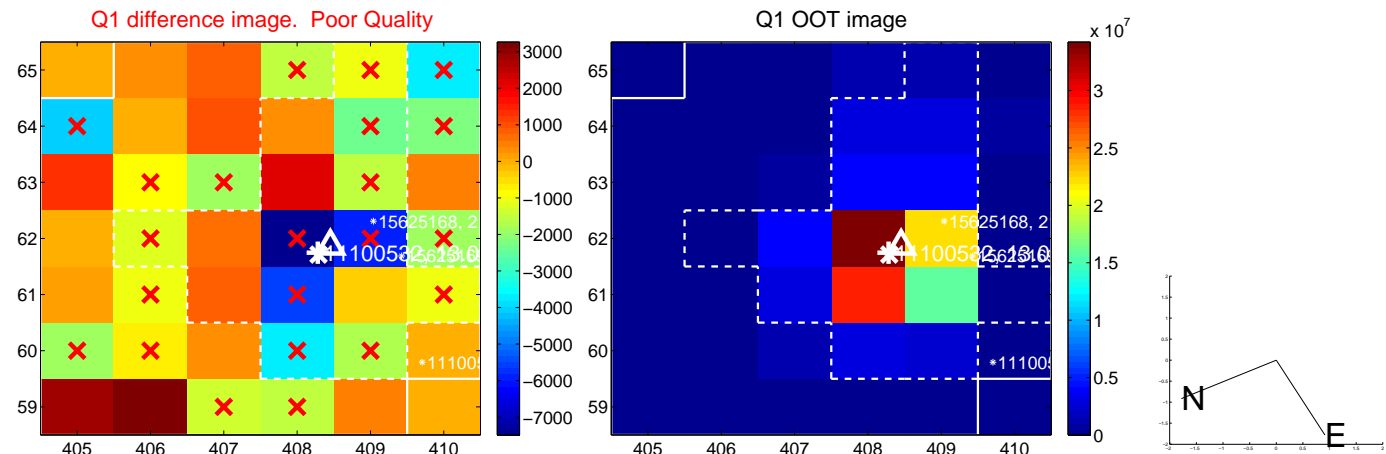
The direct PRF centroid is offset from the target star catalog position by about 0.12 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.378 ± 0.826	0.46	-0.035 ± 0.544	0.377 ± 0.800
PRF-fit source offset from KIC position	0.510 ± 0.889	0.57	-0.102 ± 0.496	0.499 ± 0.852
photometric centroid source offset	1.25 ± 0.45	2.78	-0.39 ± 0.49	-1.18 ± 0.44

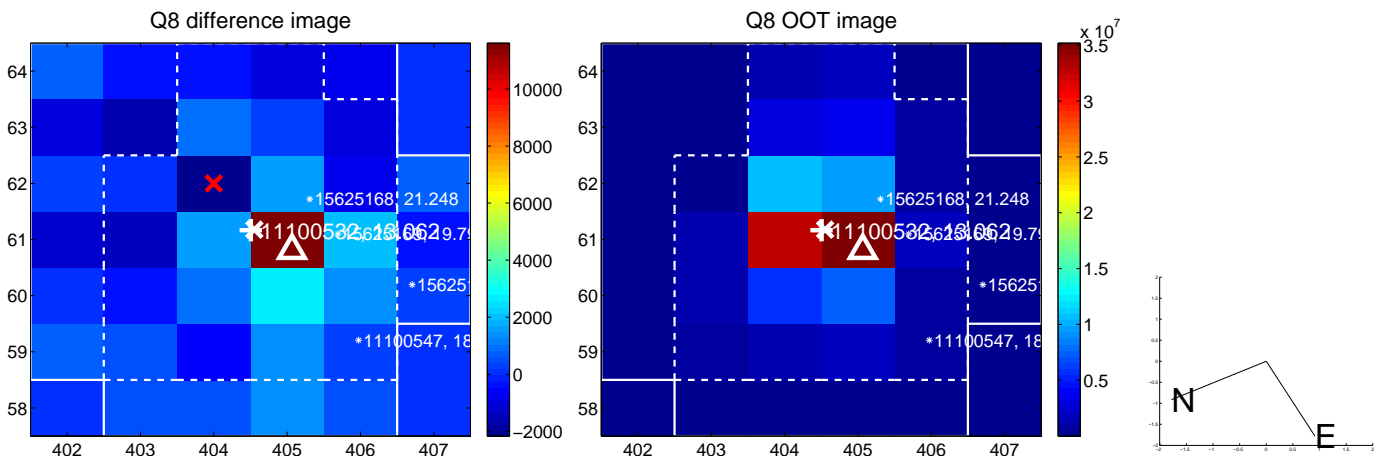
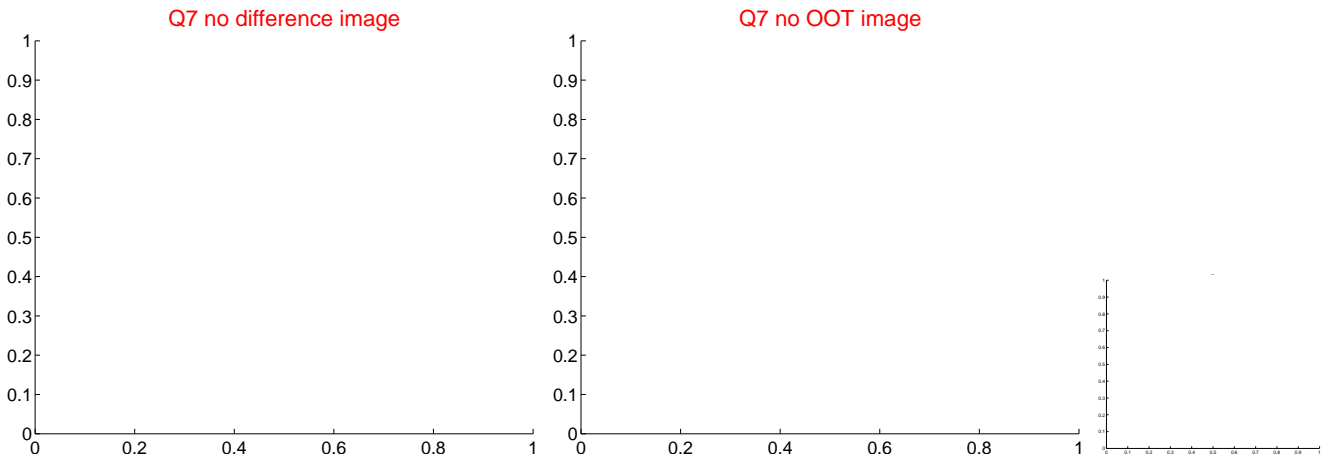
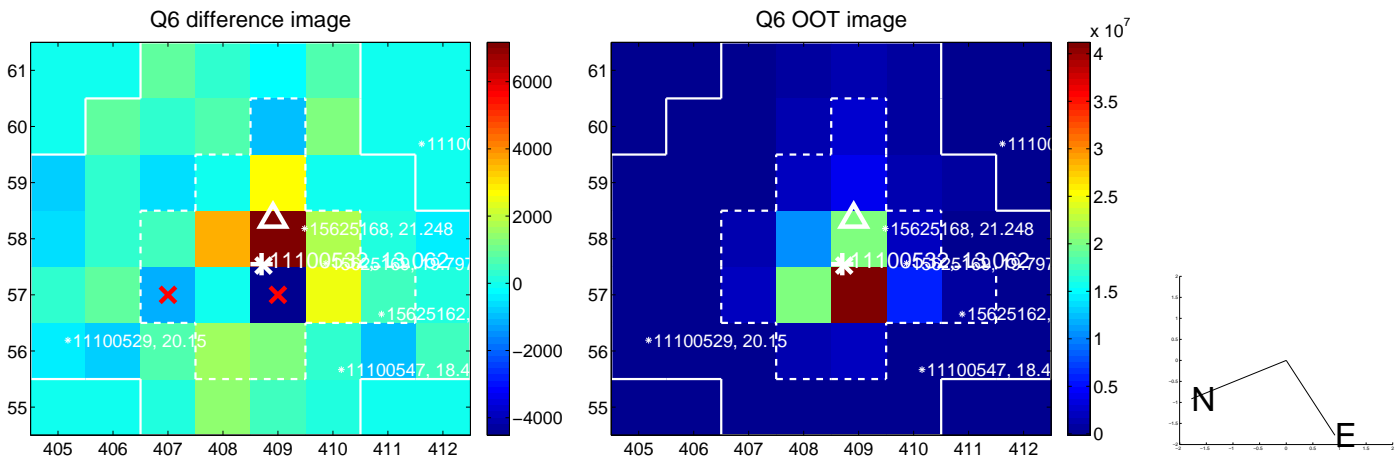
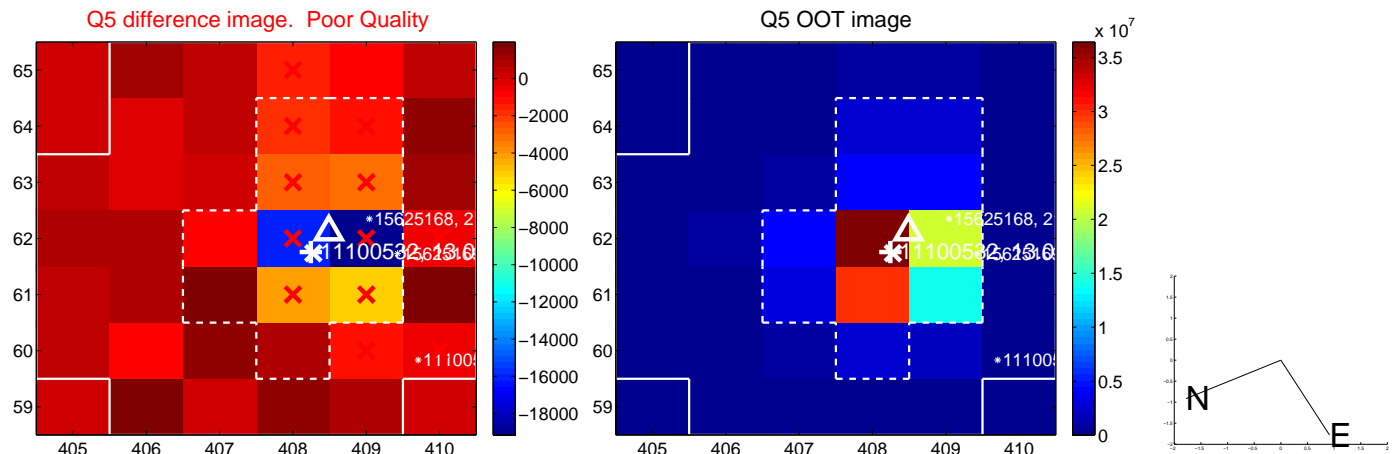


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses:** good quarterly centroid offsets; **Vermillion crosses:** bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

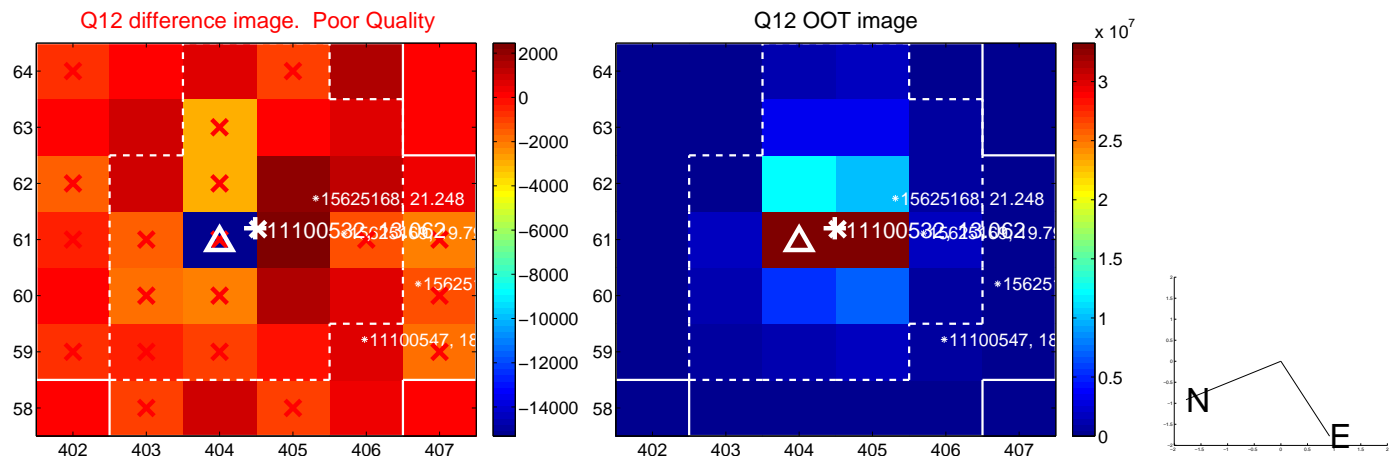
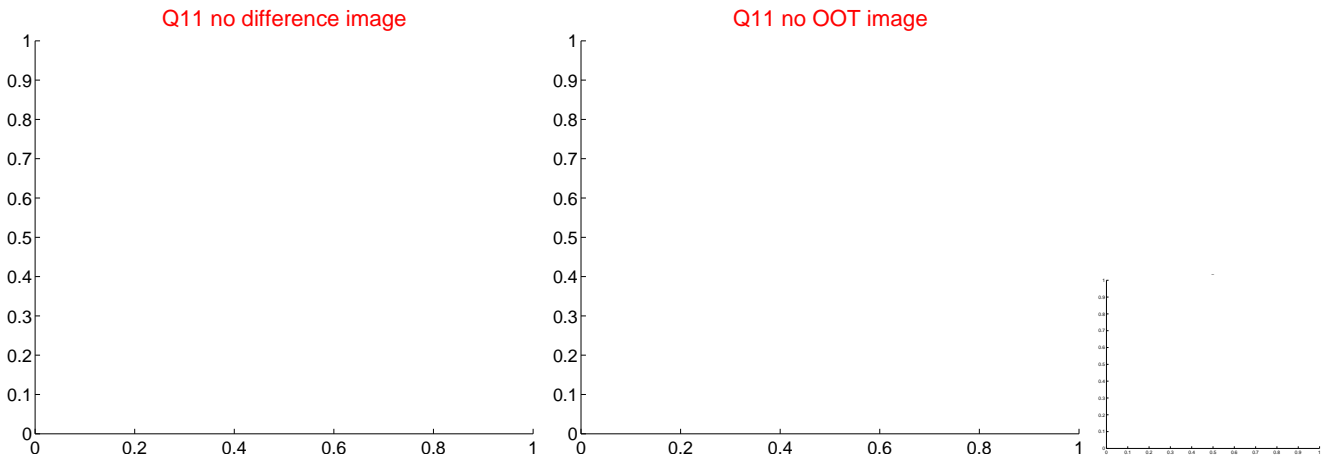
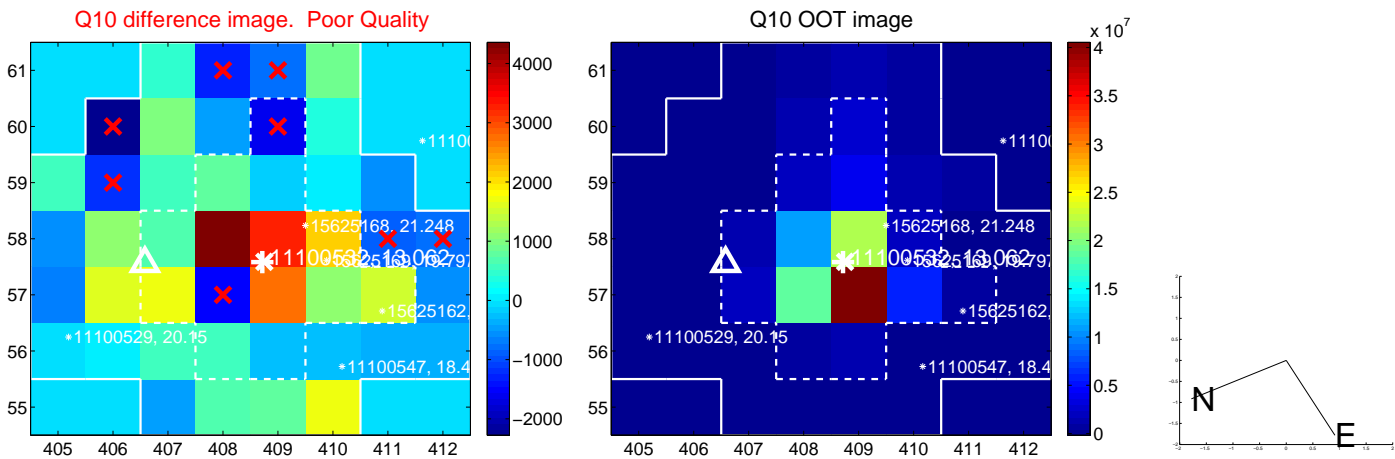
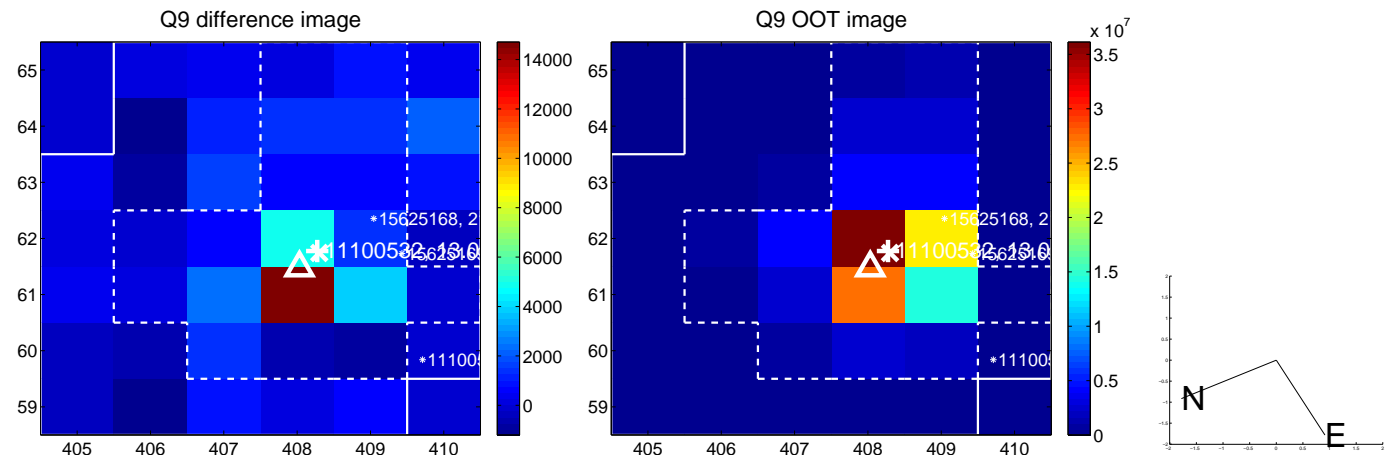
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



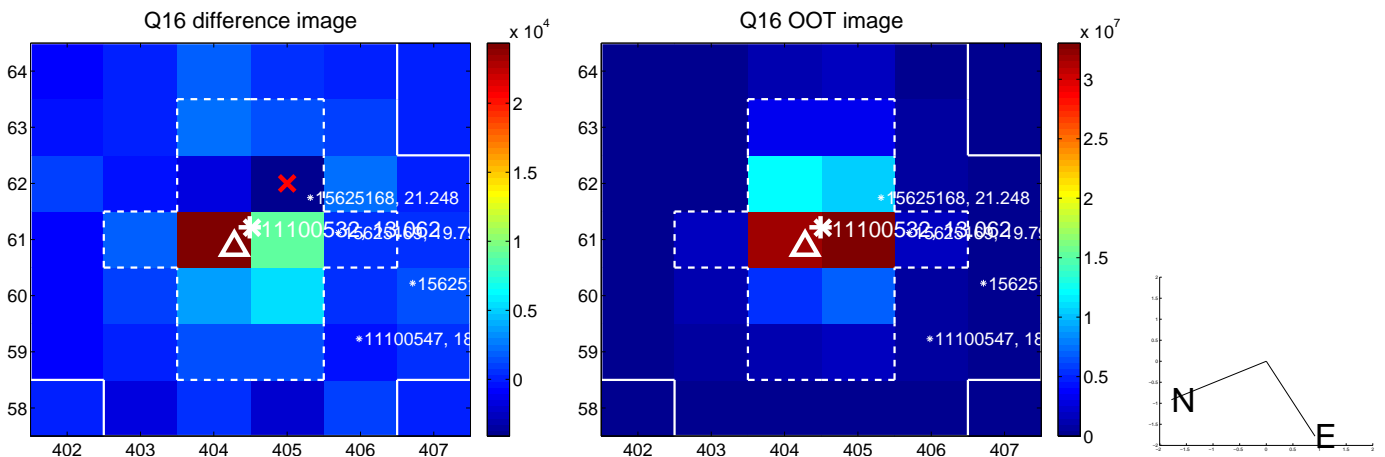
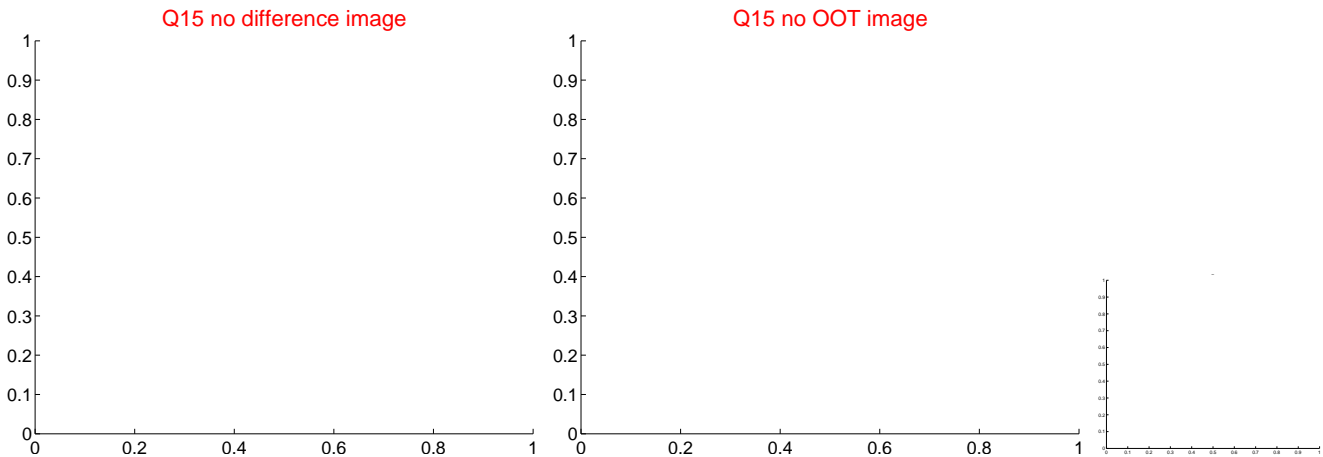
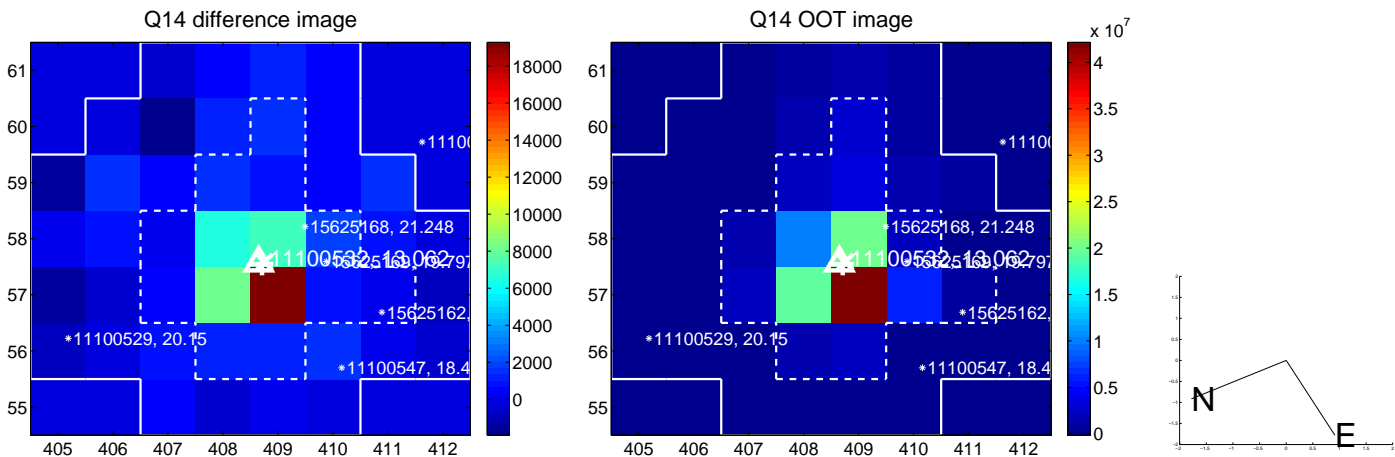
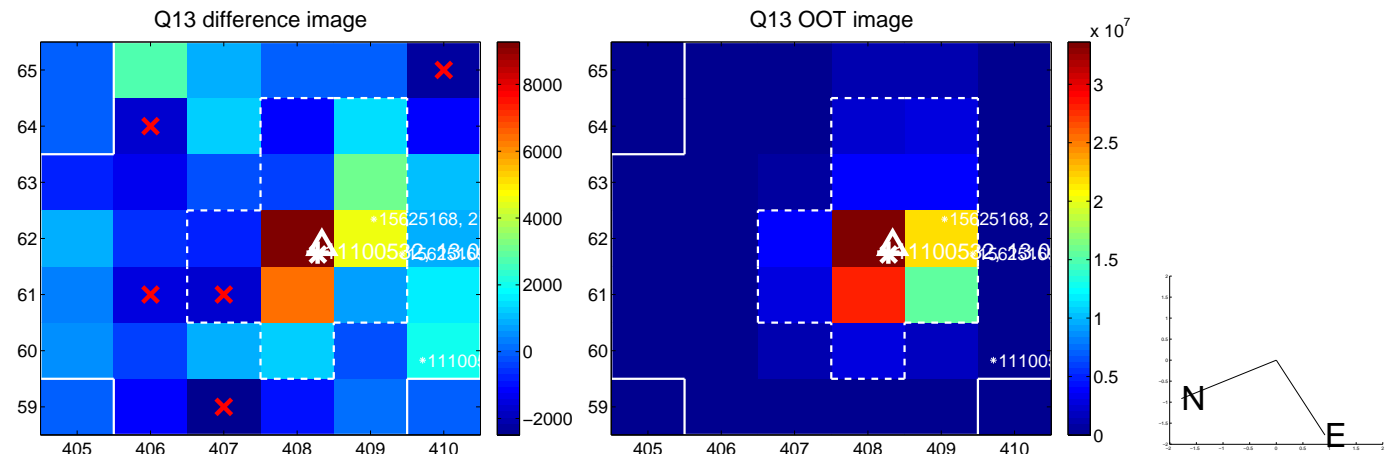
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



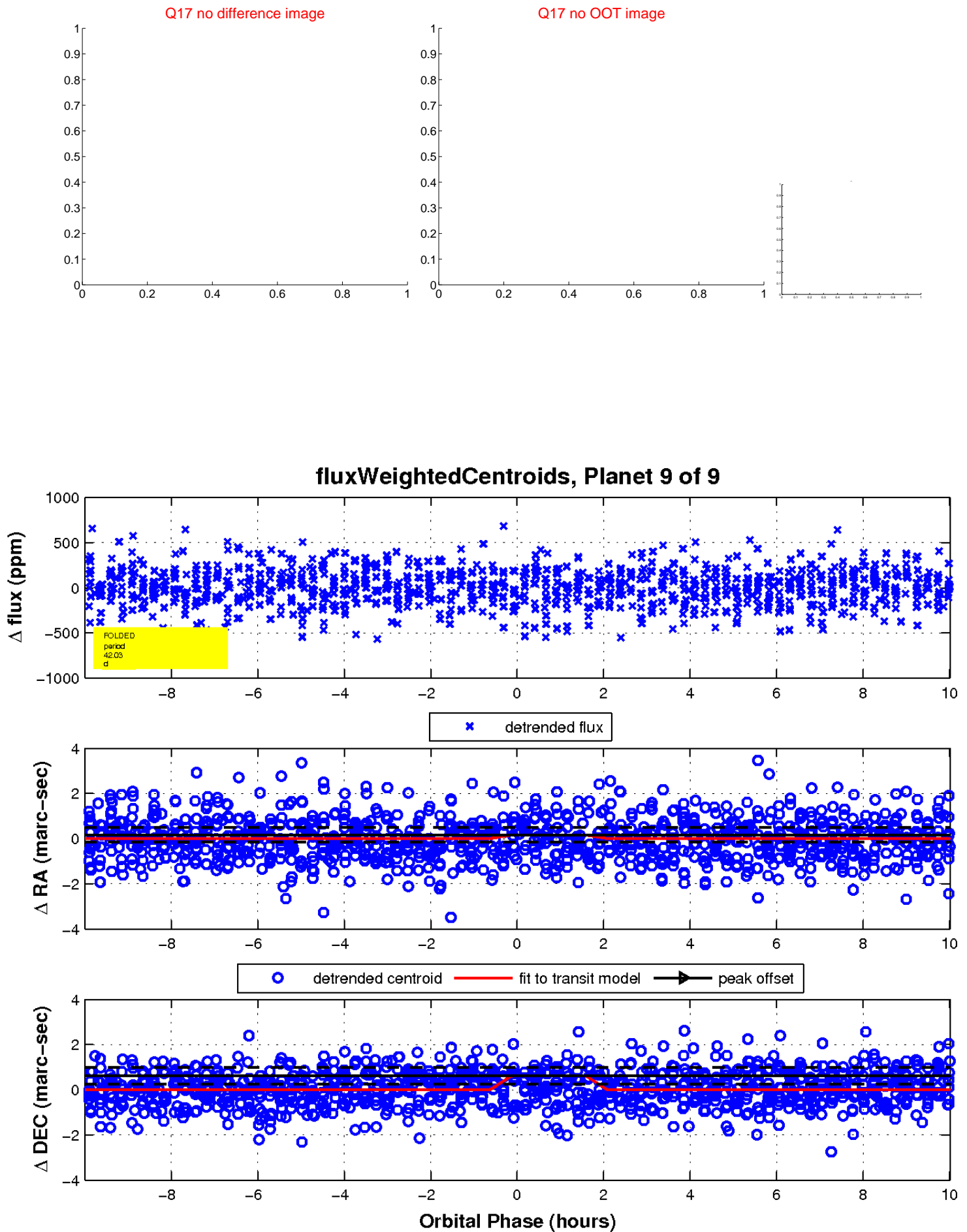
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

