

KIC 005641294

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})
005641294-01	OBS	No	6.539597	137.443103	90.1	14.050	14.1	16.2	1.35	6651	1.83	594.75
005641294-02	OBS	No	6.539327	133.948165	60.7	16.398	11.3	12.8	1.35	6651	1.45	594.78
005641294-03	OBS	No	1.868016	133.527144	0.1	21.105	9.0	0.0	1.35	6651	0.03	3161.51

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
005641294-01	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT
005641294-02	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—SAME_NTL_PERIOD—CENT_FEW_DIFFS
005641294-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_SKYE_ZUMA—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_ALT—CENT_FEW_DIFFS

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

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

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

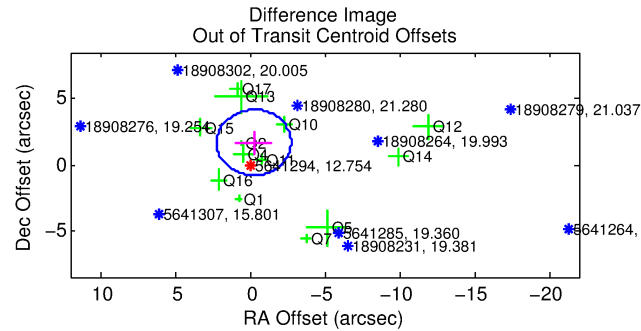
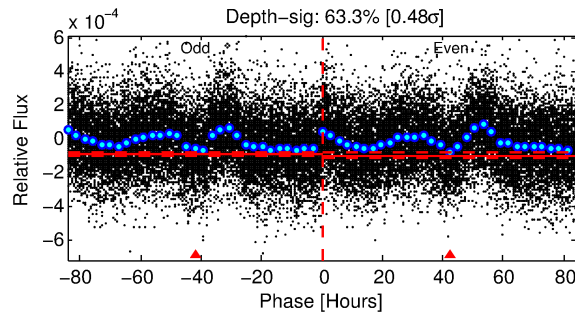
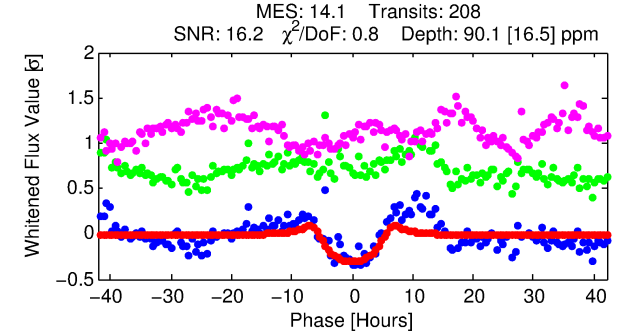
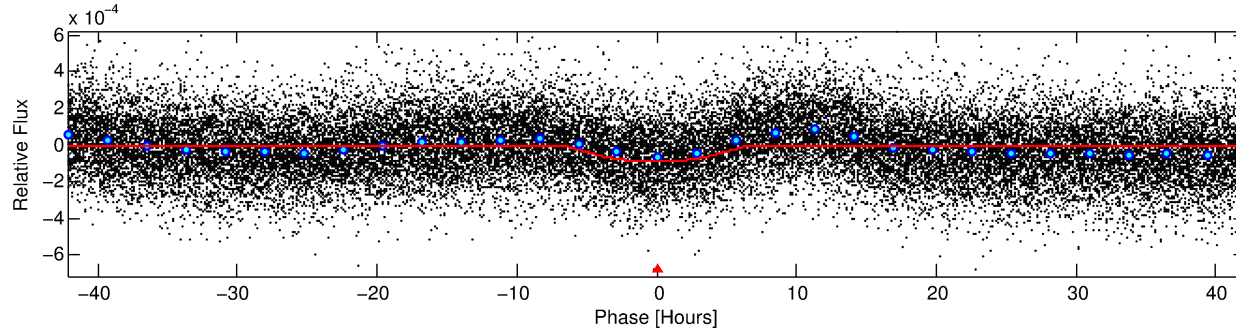
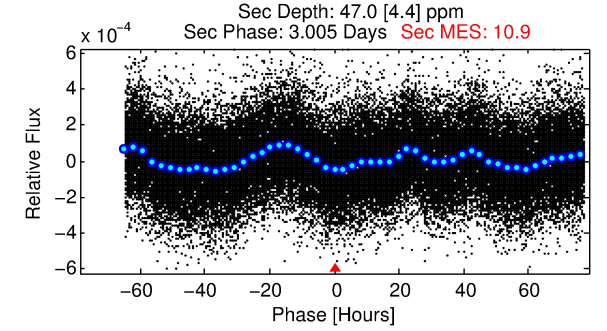
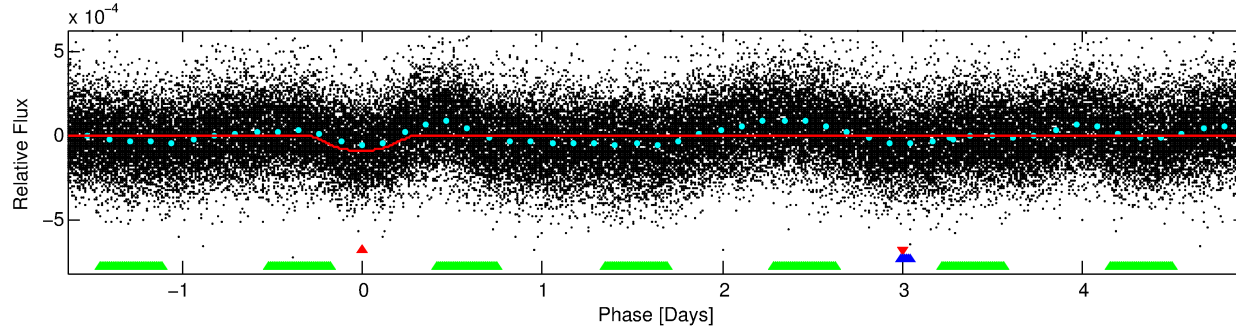
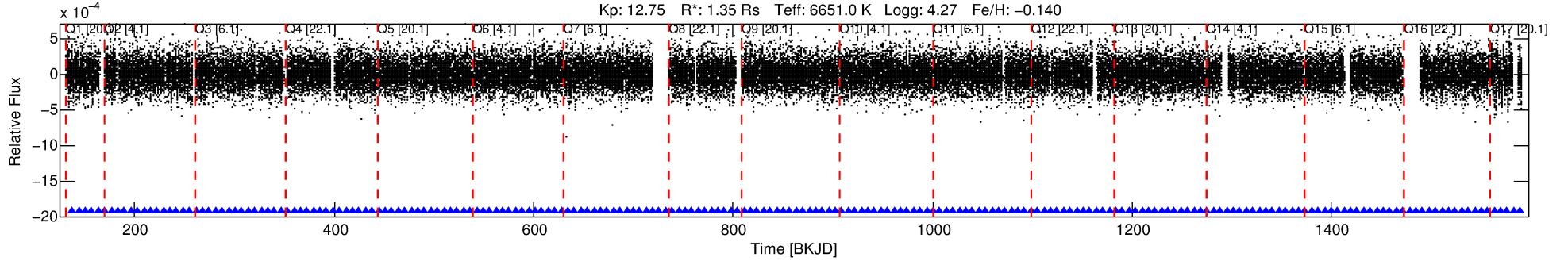
Ephemeris Match Information For 005641294-01

No Significant Match Found

DV One-Page Summary

KIC: 5641294 Candidate: 1 of 3 Period: 6.540 d
KOI: K06133 Corr: No Ephemeris Match

Kp: 12.75 R*: 1.35 Rs Teff: 6651.0 K Logg: 4.27 Fe/H: -0.140



DV Fit Results:

Period = 6.53960 [0.00012] d
Epoch = 137.4431 [0.0155] BKJD
Rp/R* = 0.0124 [0.0019]
a/R* = 1.25 [0.05]
b = 0.99 [0.01]
Seff = 594.75 [238.30]
Teq = 1259 [126] K
Rp = 1.83 [0.66] Re
a = 0.0736 [0.0194] AU
Ag = 41.89 [20.65] [1.98σ]
Teffp = 4953 [448] K [7.94σ]

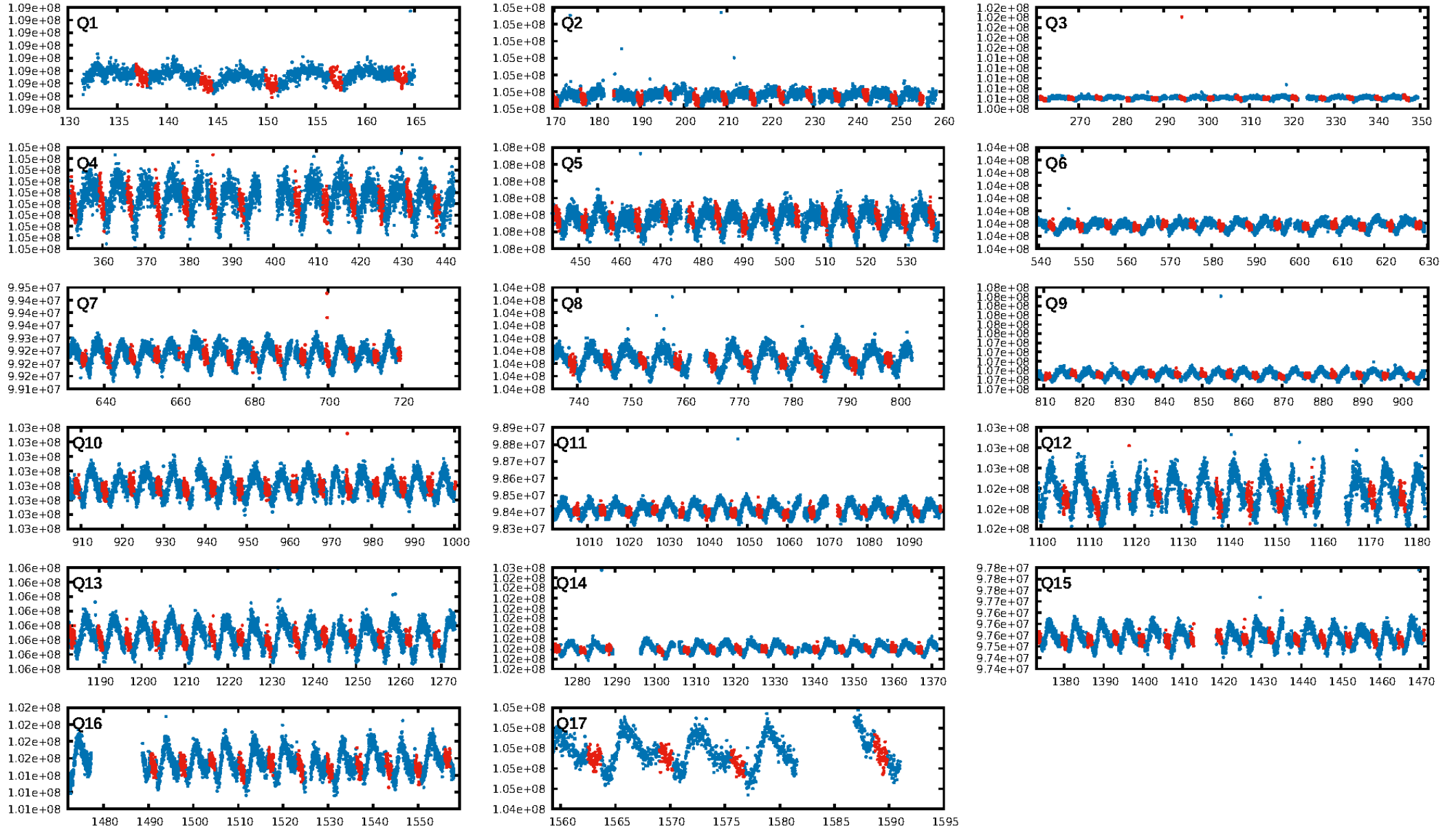
DV Diagnostic Results:

ShortPeriod-sig: 0.0% [0.00σ]
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [199/199]
GhostDiagnostic-chr: 21.4
Centroid-sig: 96.4%
Centroid-so: 0.342 arcsec [0.71σ]
OotOffset-rm: 1.693 arcsec [2.04σ]
KicOffset-rm: 1.716 arcsec [1.84σ]
OotOffset-st: 3/3/3/4 [13]
KicOffset-st: 3/3/3/4 [13]
DiffImageQuality-fgm: 0.38 [5/13]
DiffImageOverlap-fno: 0.00 [0/17]

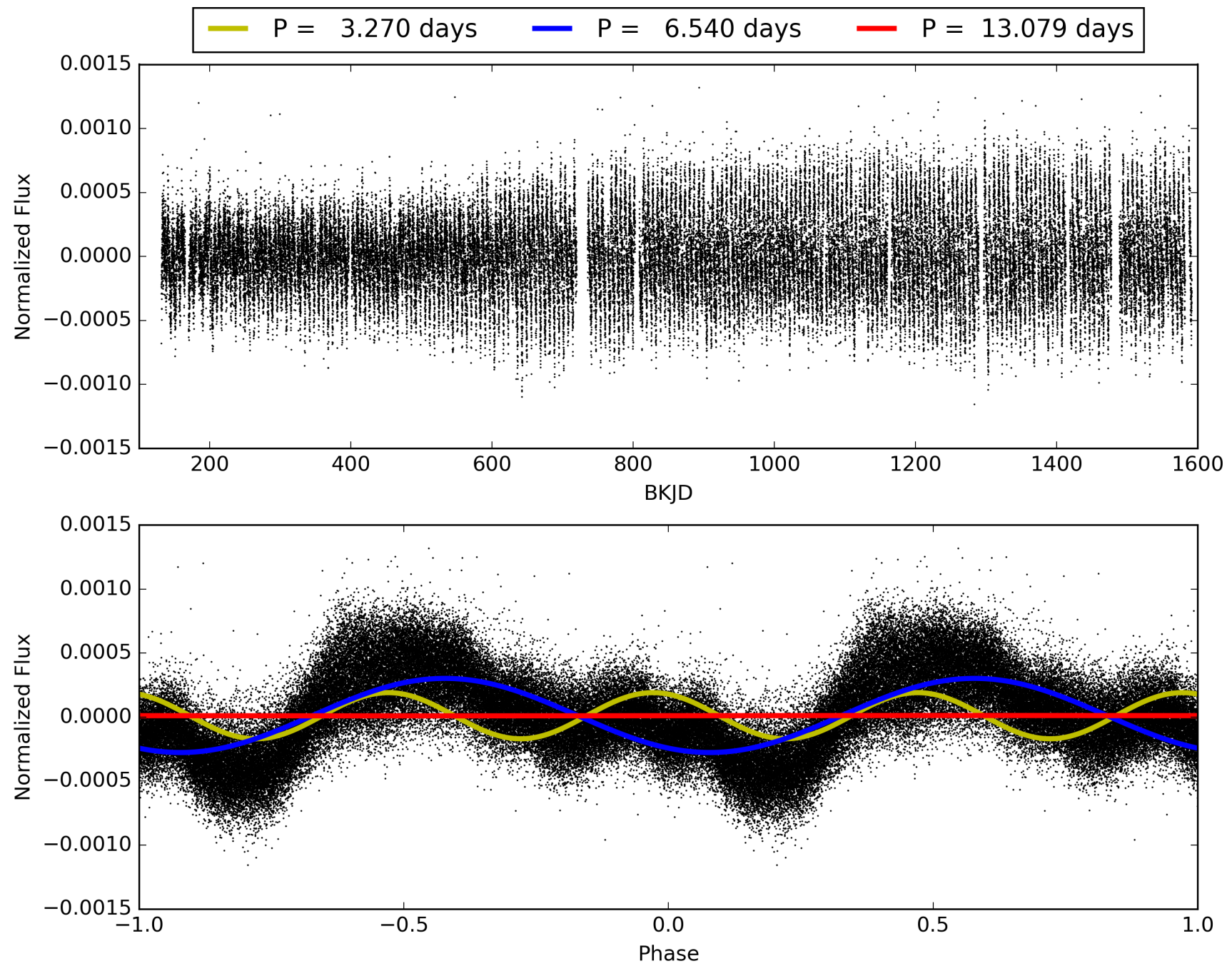
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This Data Validation Report Summary was produced in the Kepler Science Operations Center Pipeline at NASA Ames Research Center

TCE 005641294-01, PDC Light Curves

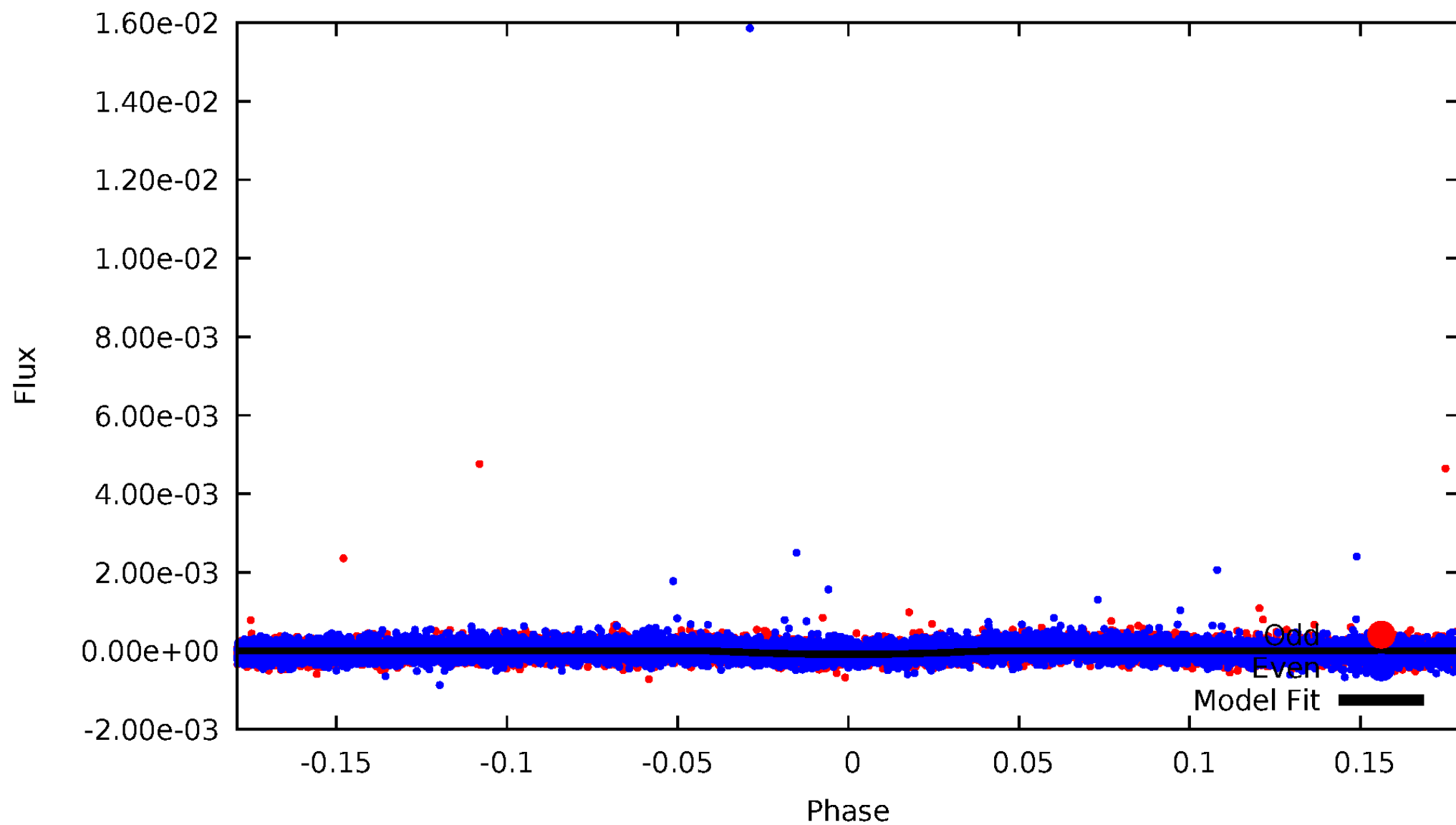


TCE 005641294-01



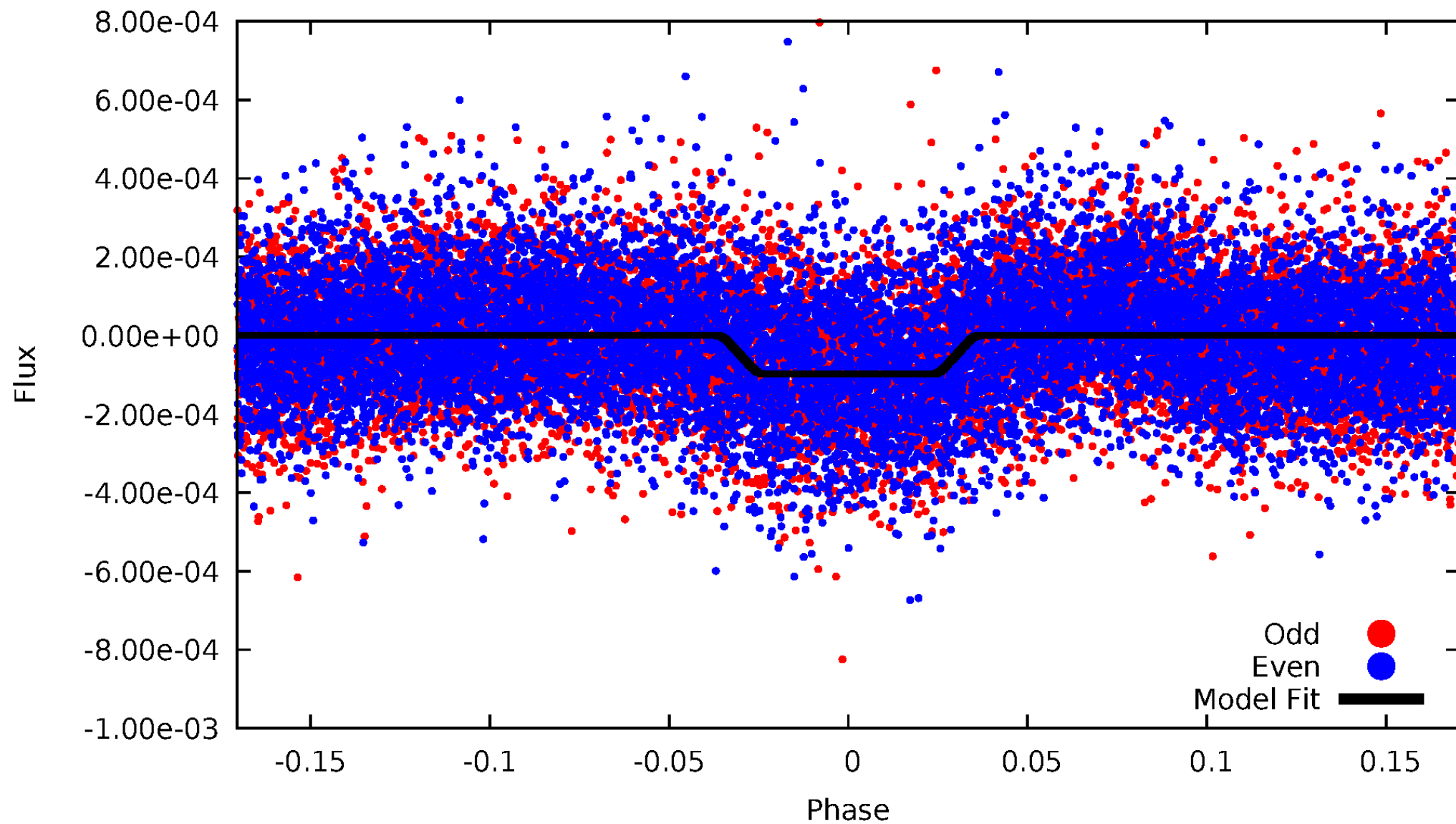
DV Odd/Even

TCE 005641294-01

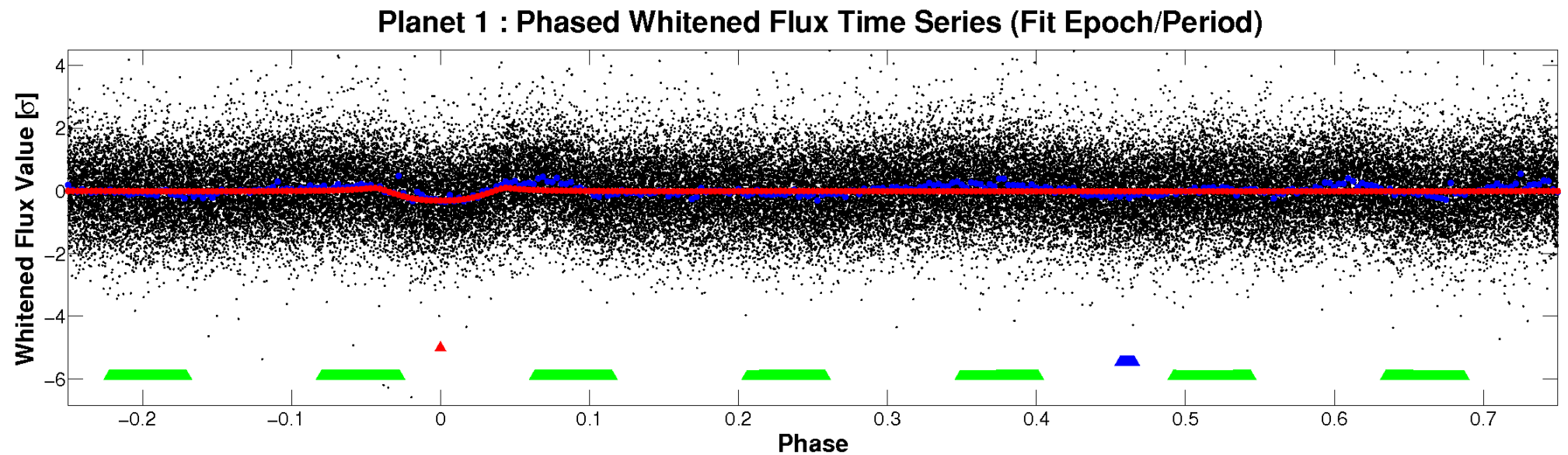
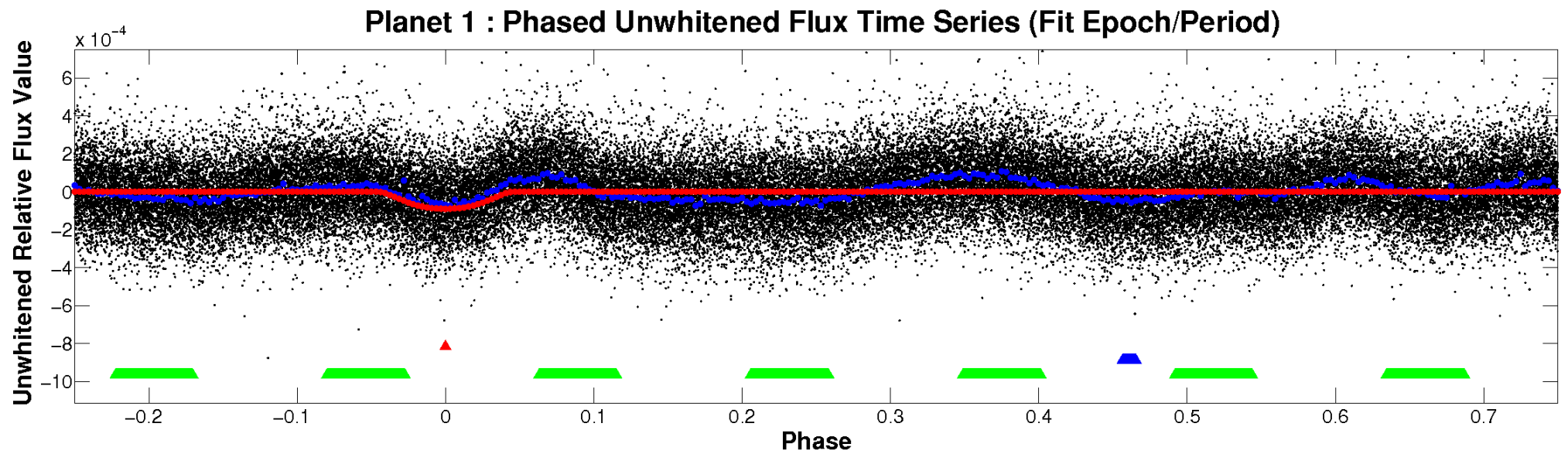


ALT Odd/Even

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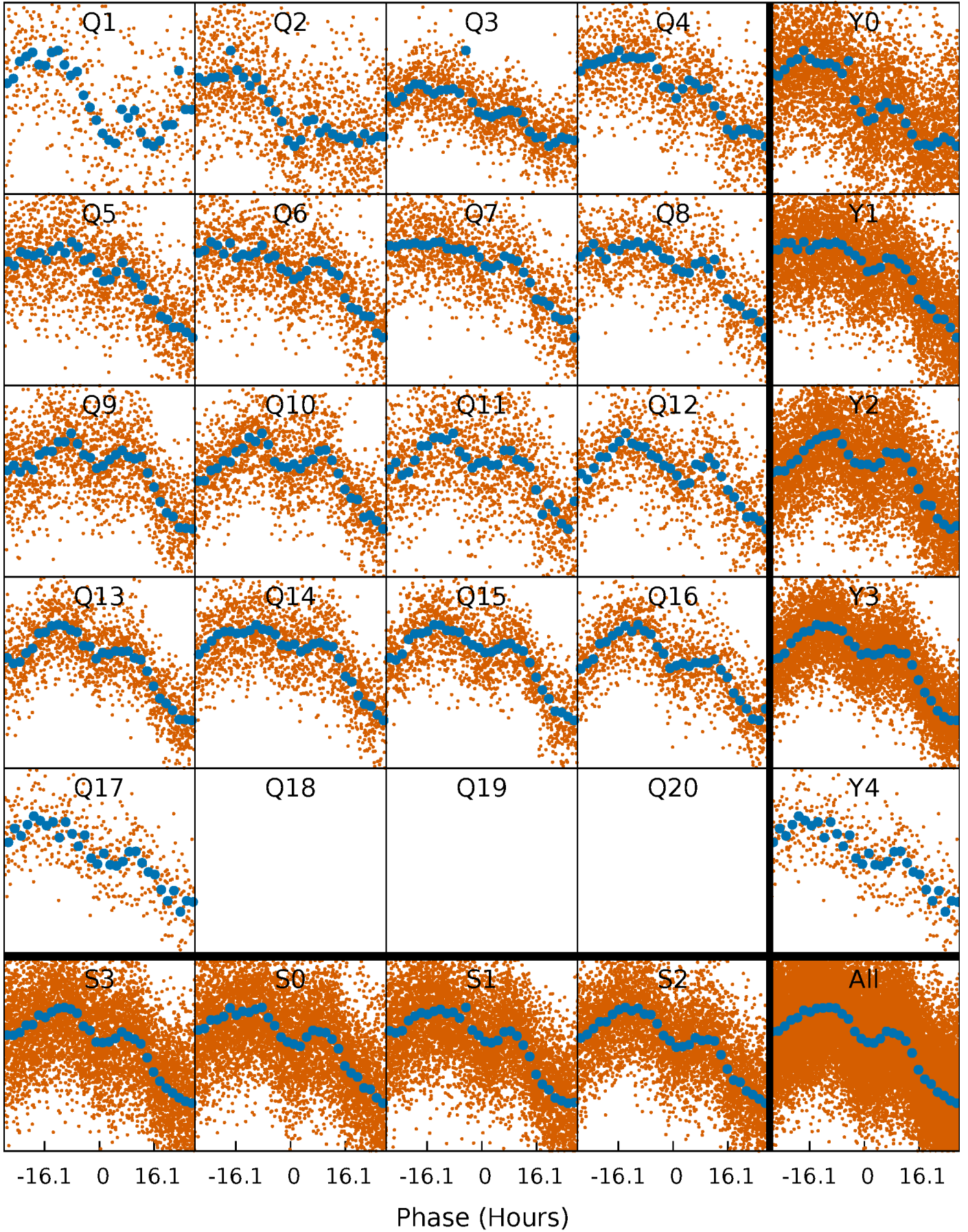


Non-Whitened Vs. Whitened Light Curve



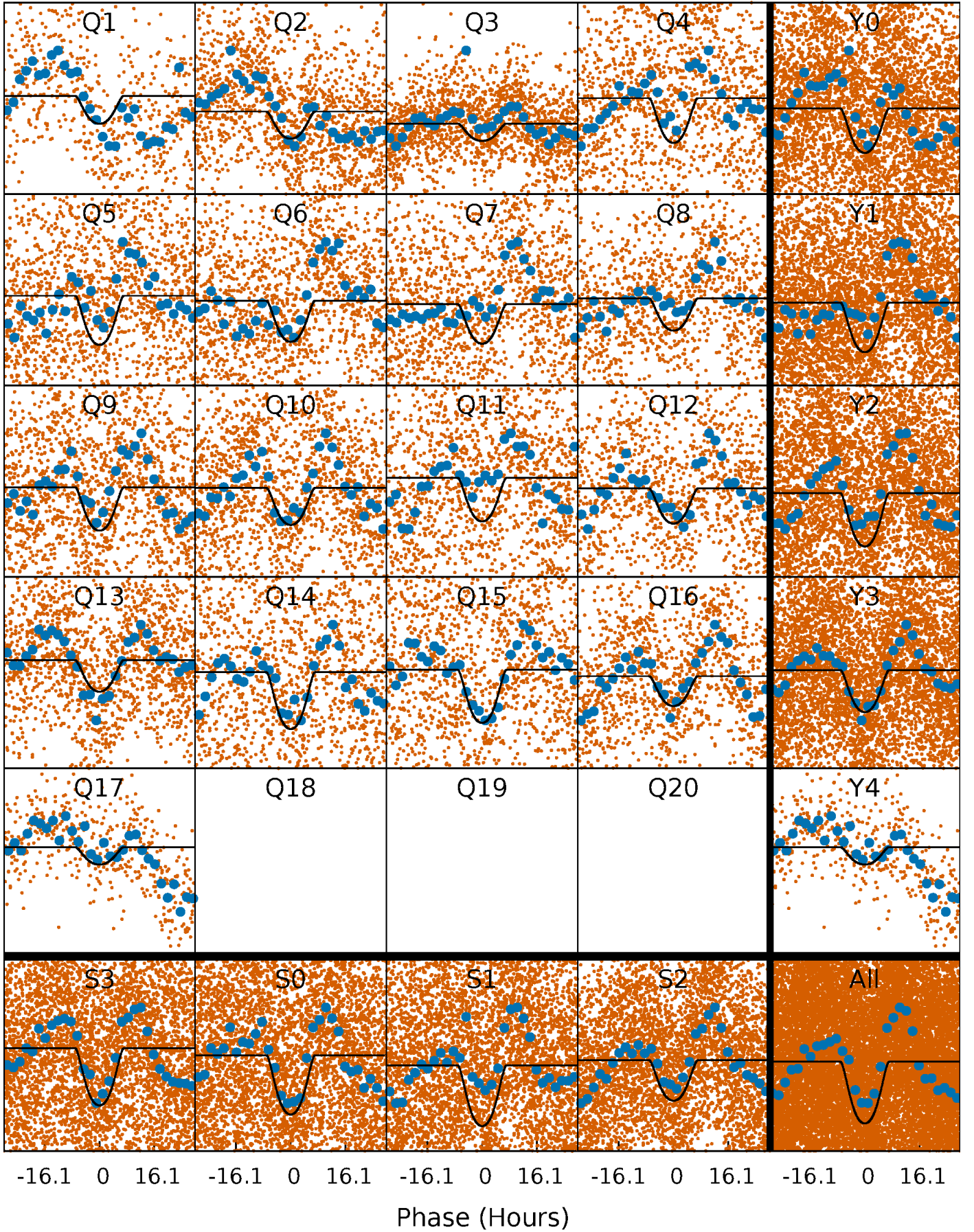
PDC Quarter-Phased Transit Curves

TCE 005641294-01 P= 6.539597 Days $T_0=137.443103$ (BKJD)



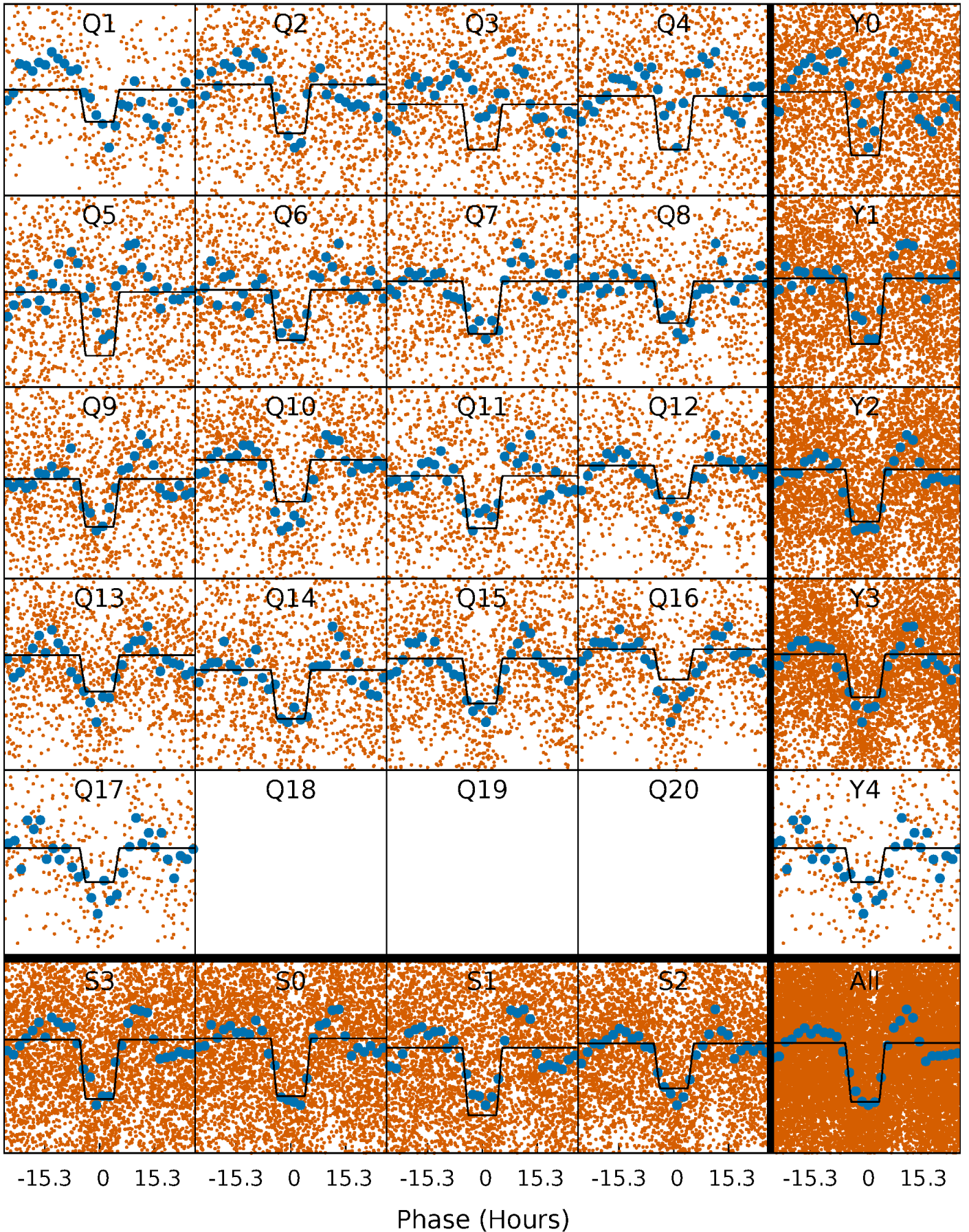
DV Quarter-Phased Transit Curves

TCE 005641294-01 P= 6.539597 Days $T_0=137.443103$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

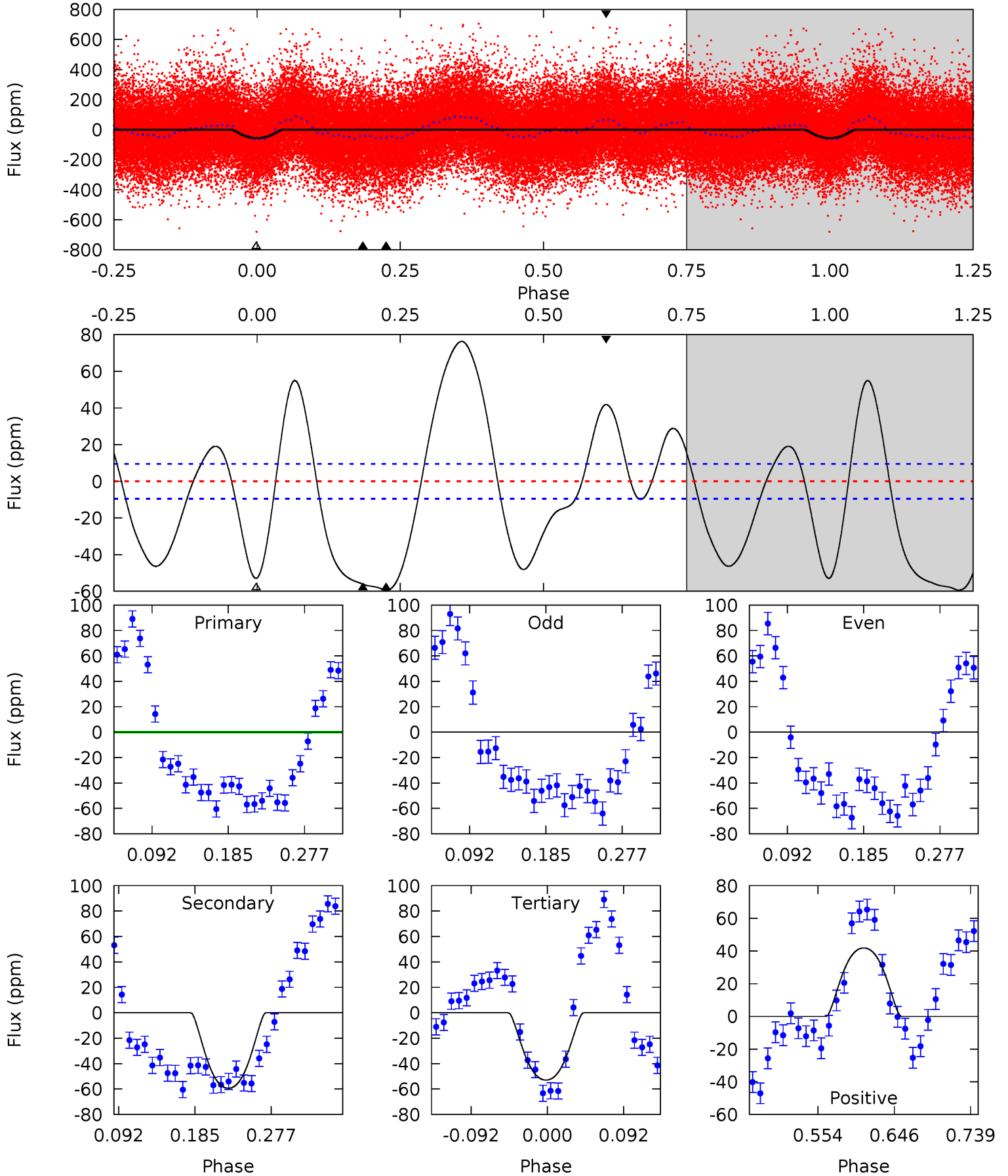
TCE 005641294-01 P= 6.539691 Days $T_0=137.427693$ (BKJD)



DV Model-Shift Uniqueness Test

005641294-01, P = 6.539597 Days, E = 130.903506 Days

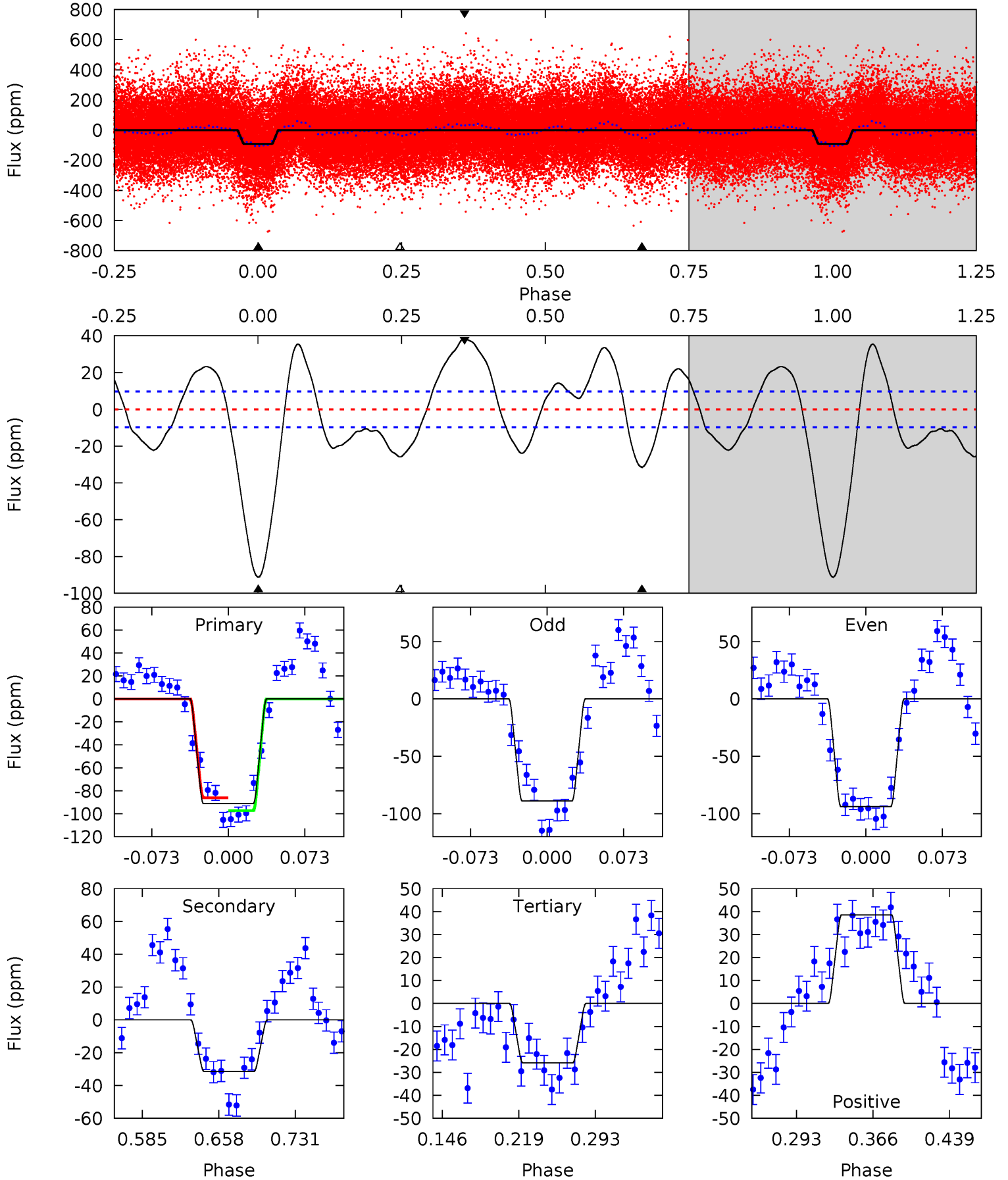
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
27.1	28.7	25.6	20.2	4.58	1.68	16.7	1.54	6.89	3.10	8.45	0.86	0.93	0.56	0.80



Alt Model-Shift Uniqueness Test

005641294-01, P = 6.539691 Days, E = 130.888002 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
43.4	15.0	12.3	18.4	4.63	1.79	8.90	31.1	25.0	2.67	-3.41	1.18	1.06	0.30	2.65



Stellar Parameters For KIC 005641294

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6651^{+187}_{-258}	$4.268^{+0.105}_{-0.195}$	$-0.140^{+0.250}_{-0.300}$	$1.355^{+0.440}_{-0.237}$	$1.247^{+0.187}_{-0.187}$	$0.707^{+0.411}_{-0.370}$
	+3%/-4%	+2%/-5%	+179%/-214%	+32%/-17%	+15%/-15%	+58%/-52%
Source	PHO54	PHO54	PHO54	DSEP		

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

Secondary Eclipse Parameters for KIC 005641294-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-59 ± 2	$1.88^{+0.39}_{-0.34}$	1777^{+126}_{-107}	5270^{+422}_{-354}	50^{+23}_{-16}
Alt.	-31 ± 2	$1.48^{+0.38}_{-0.31}$	1778^{+137}_{-110}	5065^{+509}_{-391}	42^{+24}_{-14}

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 $A_{obs} \gg 1.0$

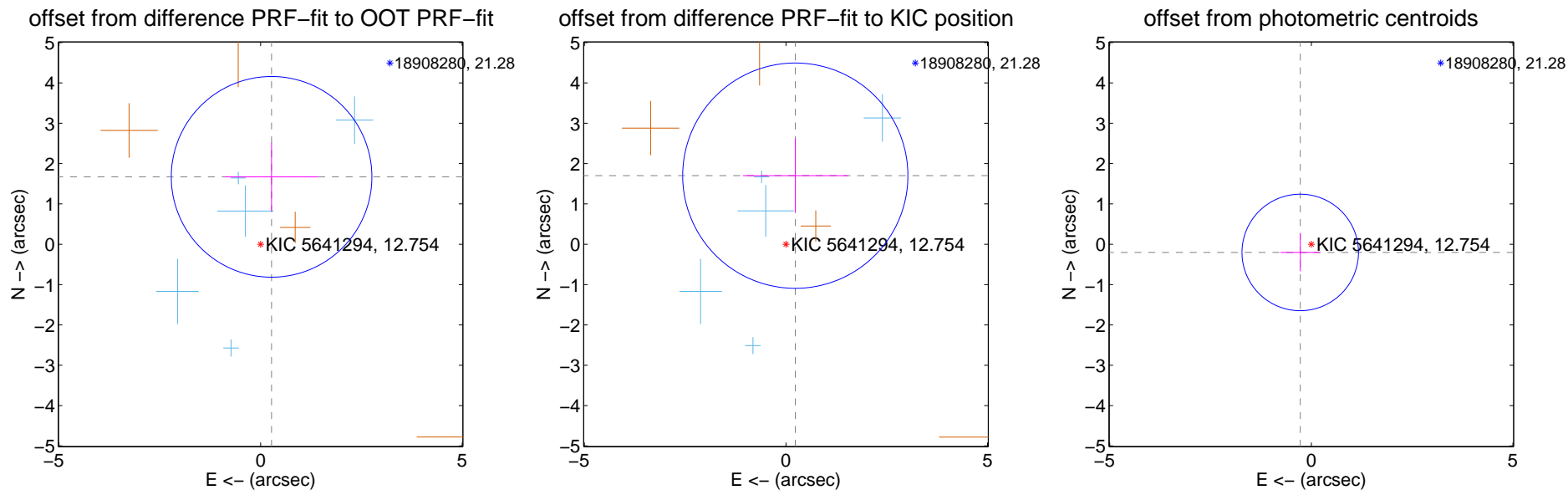
DV Centroid Data

Supplemental centroid analysis for 005641294-01. Kepler magnitude: 12.75. Transit SNR 16.18

There are 5 quarters with good PRF difference image offsets

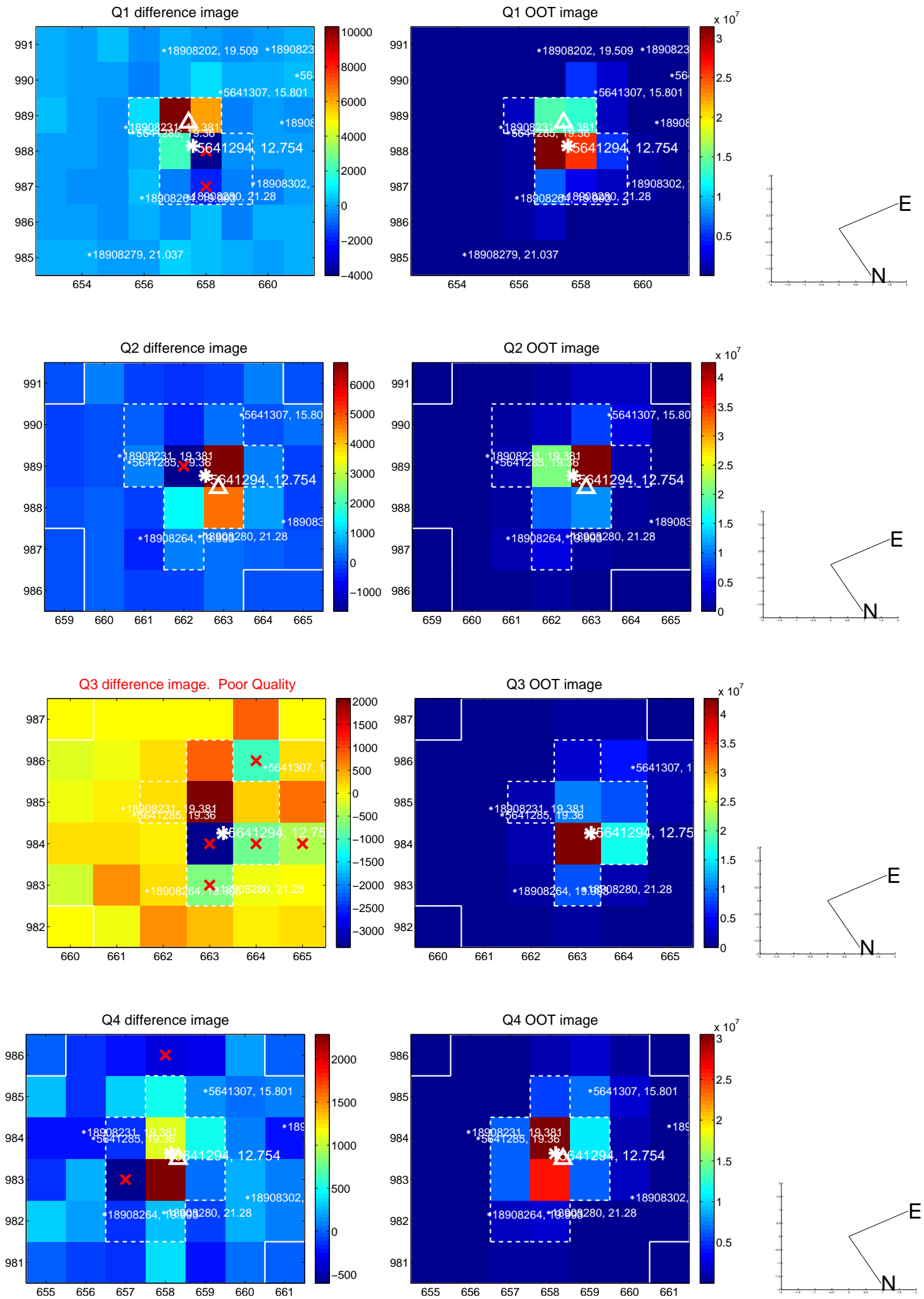
The direct PRF centroid is offset from the target star catalog position by about 0.09 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	1.693 ± 0.829	2.04	-0.273 ± 1.160	1.671 ± 0.849
PRF-fit source offset from KIC position	1.716 ± 0.931	1.84	-0.232 ± 1.300	1.700 ± 0.925
photometric centroid source offset	0.34 ± 0.48	0.71	0.28 ± 0.49	-0.20 ± 0.47

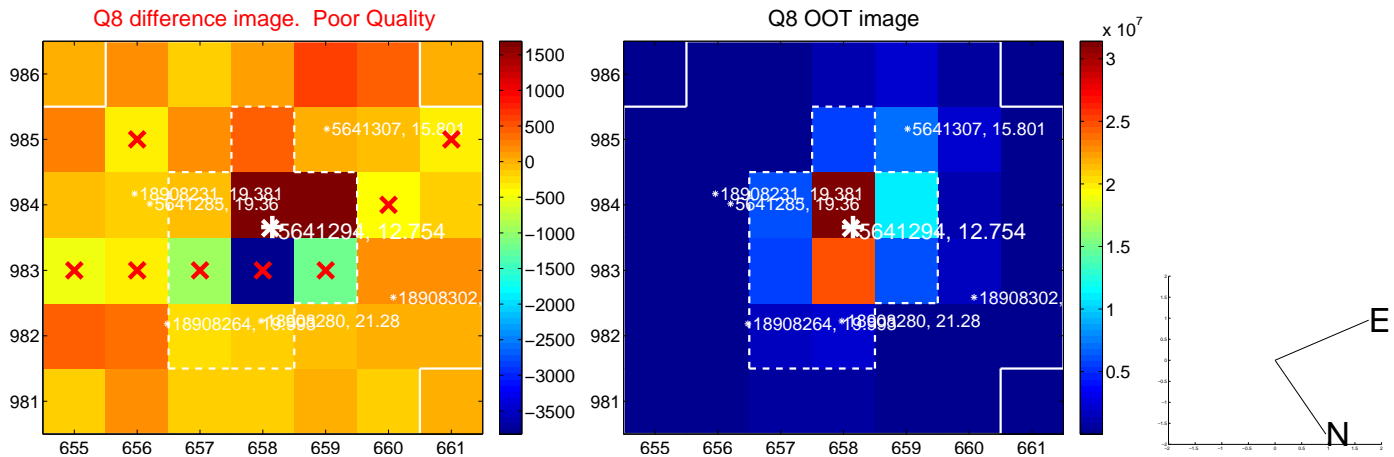
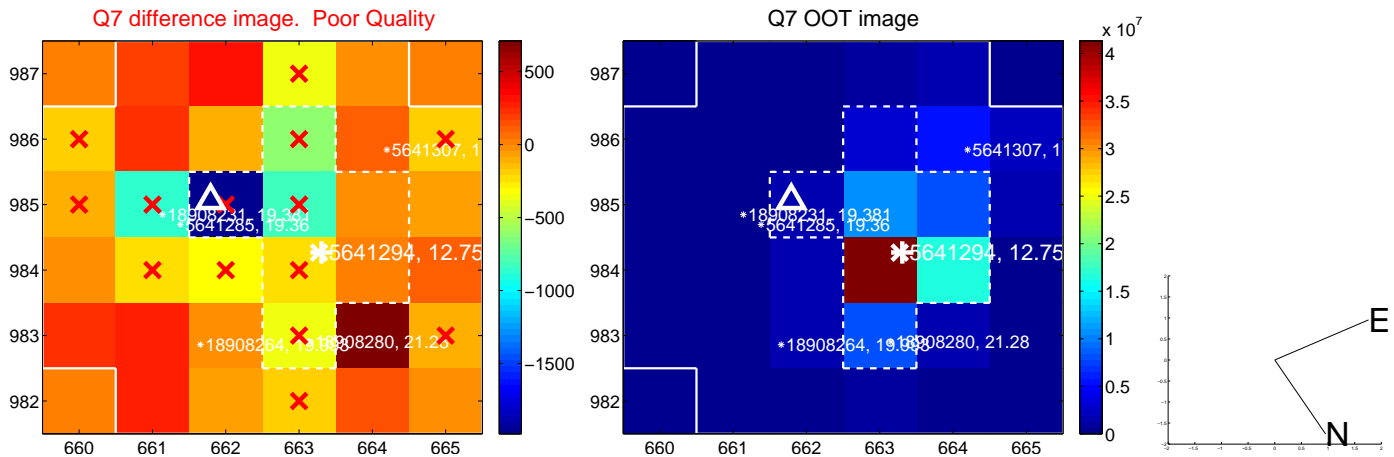
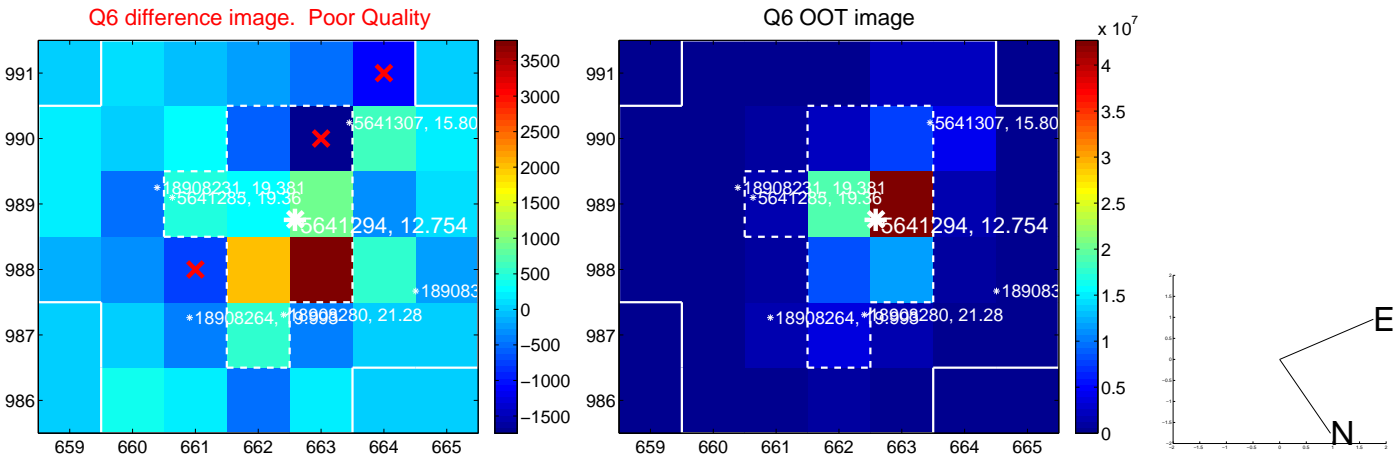
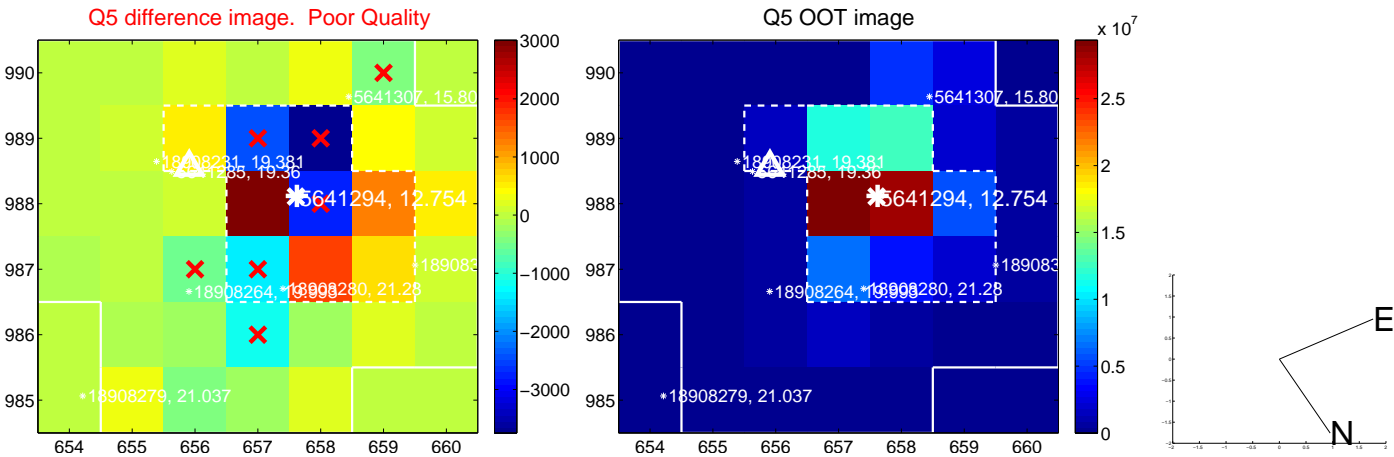


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets**; **Vermillion crosses: bad quarterly centroid offsets**; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

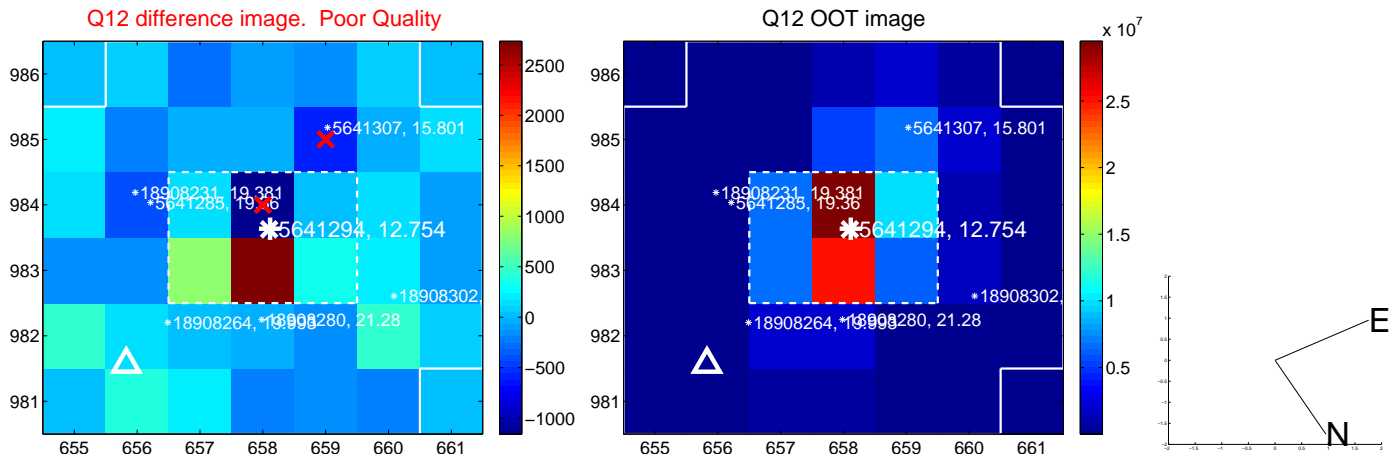
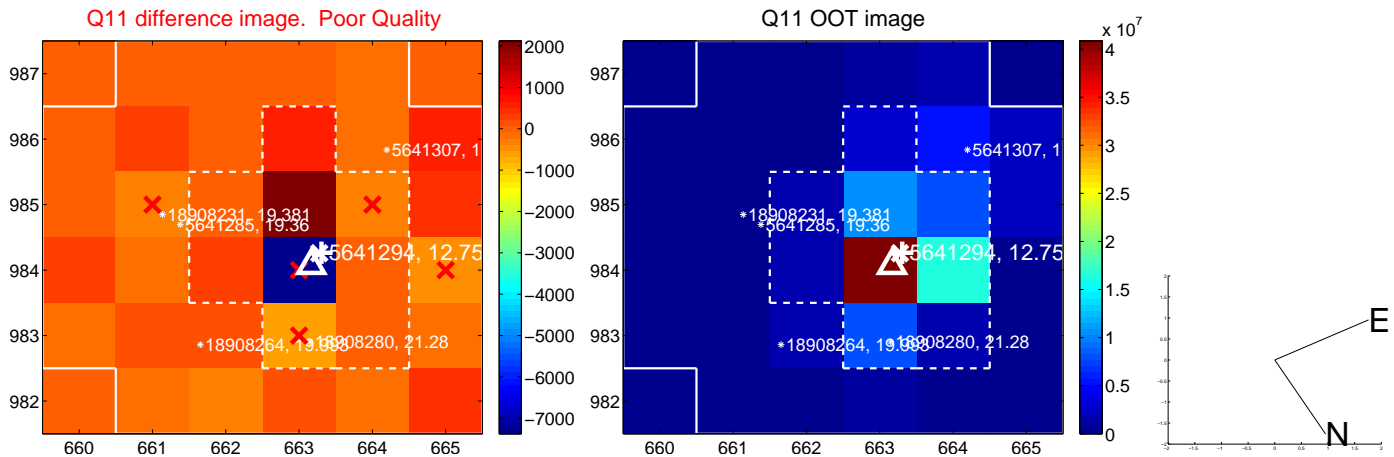
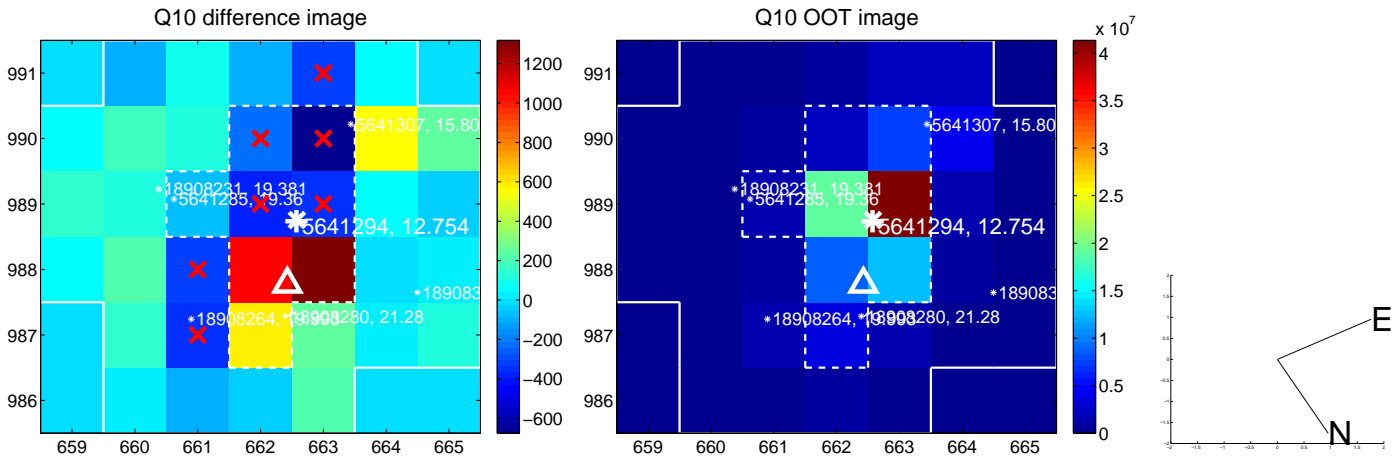
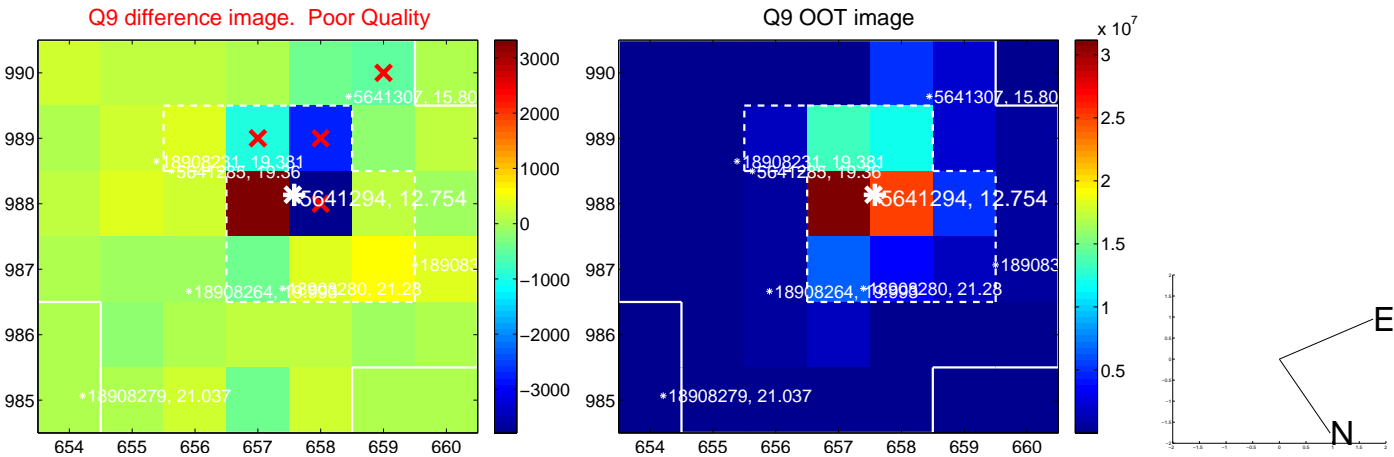
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



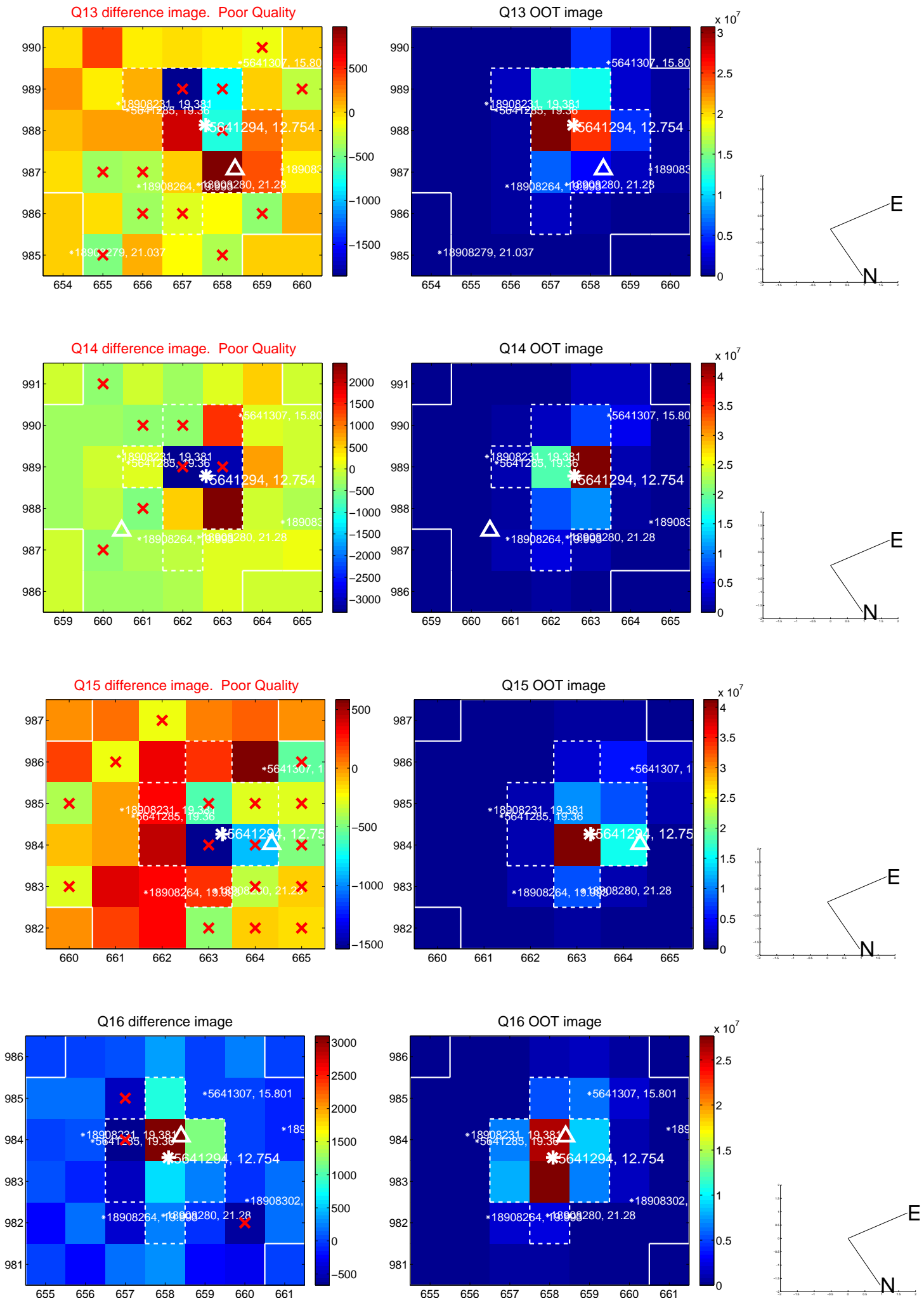
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



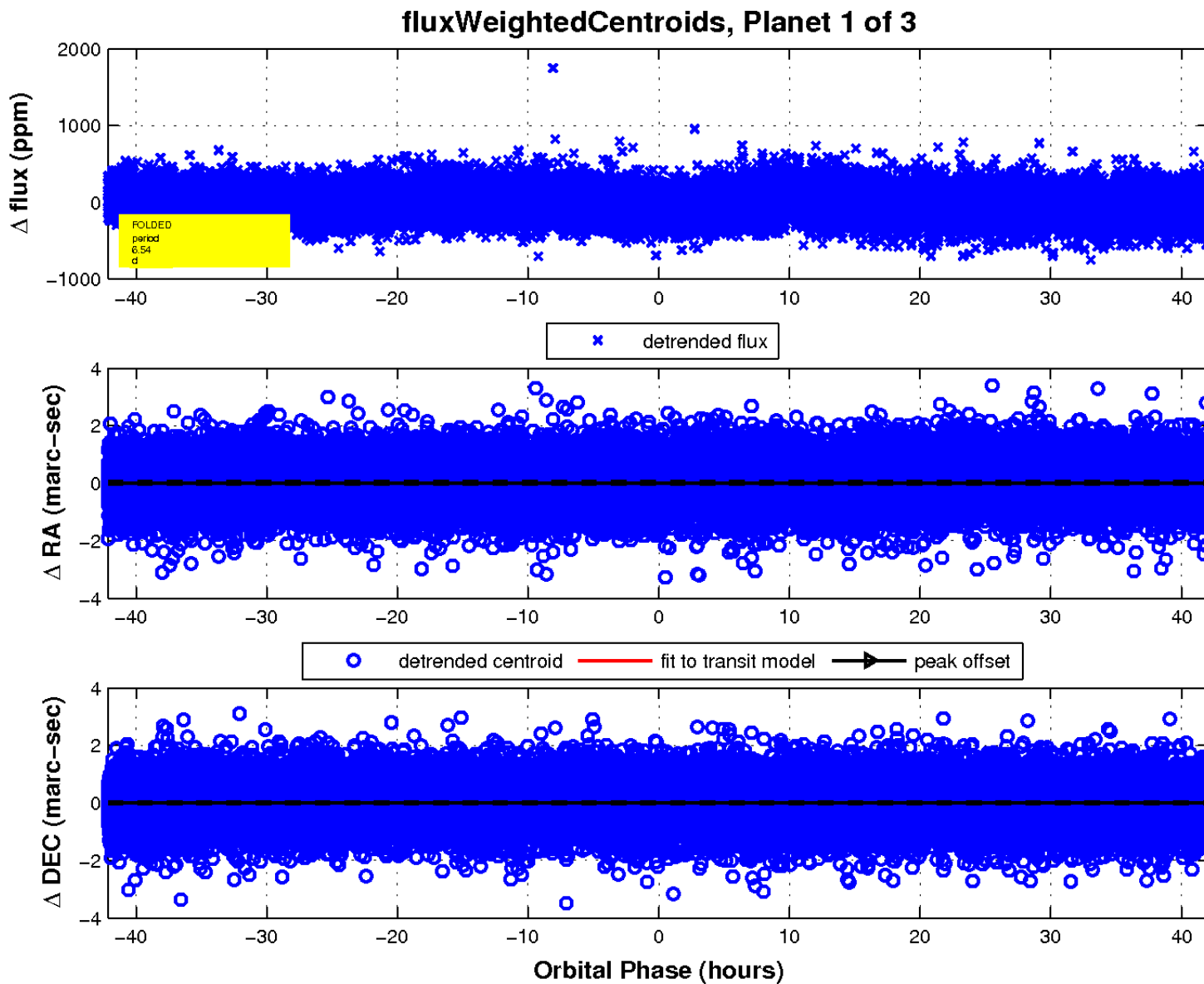
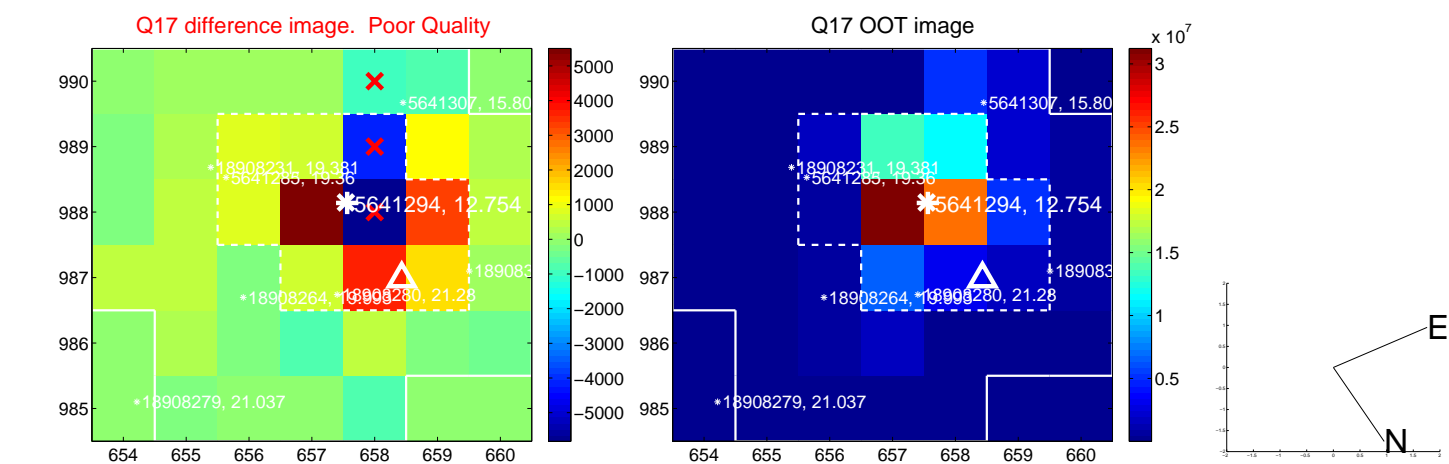
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

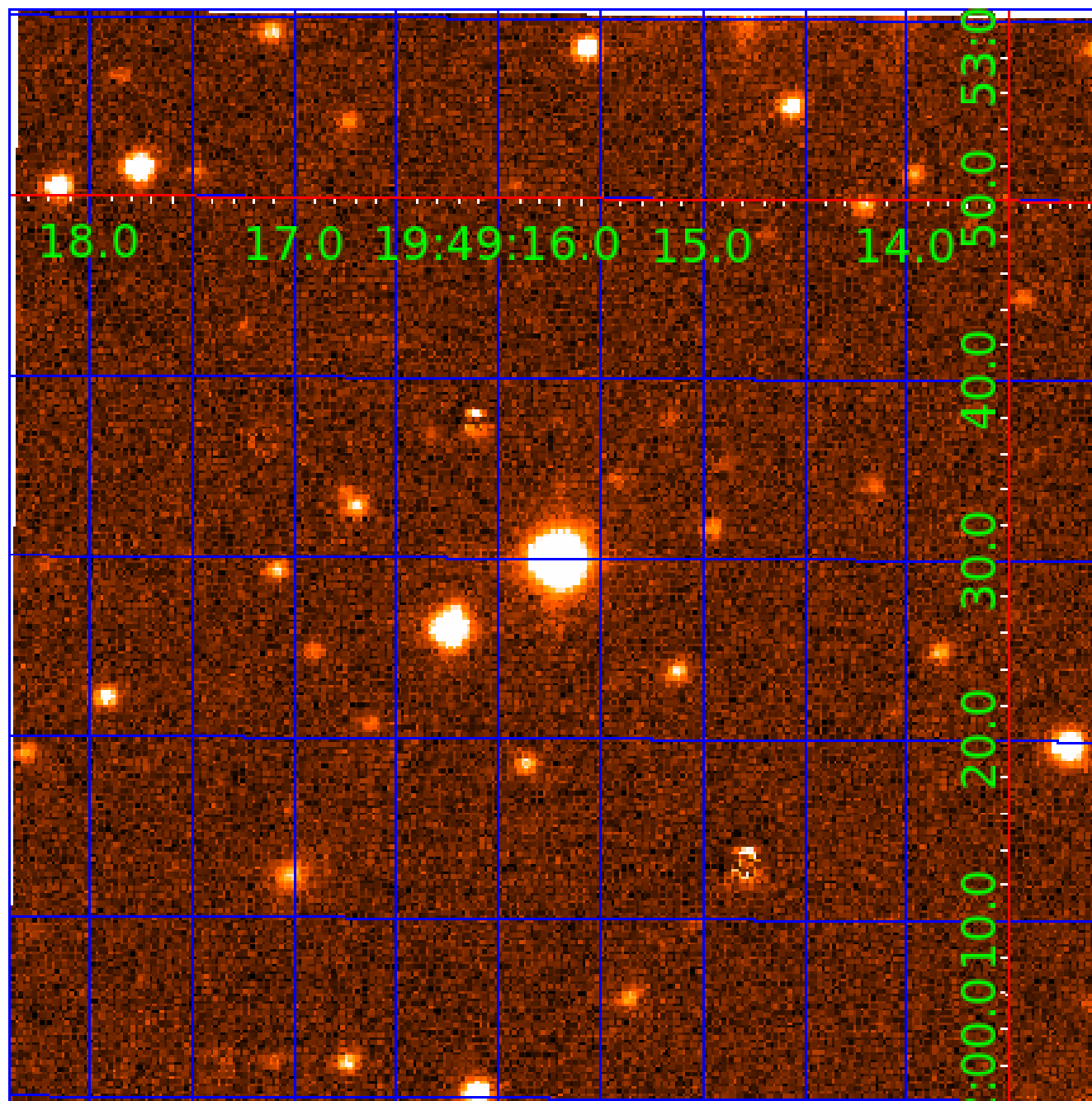


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 005641294

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})
005641294-01	OBS	No	6.539597	137.443103	90.1	14.050	14.1	16.2	1.35	6651	1.83	594.75
005641294-02	OBS	No	6.539327	133.948165	60.7	16.398	11.3	12.8	1.35	6651	1.45	594.78
005641294-03	OBS	No	1.868016	133.527144	0.1	21.105	9.0	0.0	1.35	6651	0.03	3161.51

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
005641294-01	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT
005641294-02	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—SAME_NTL_PERIOD—CENT_FEW_DIFFS
005641294-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_SKYE_ZUMA—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_ALT—CENT_FEW_DIFFS

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

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

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

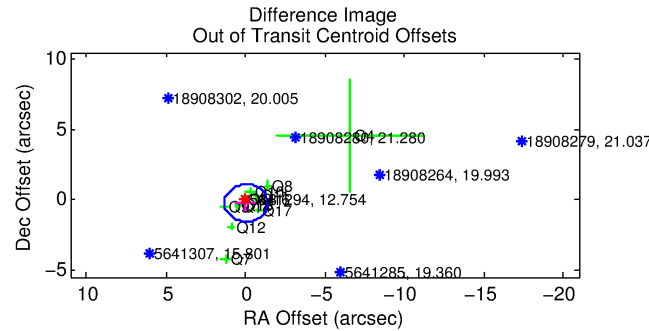
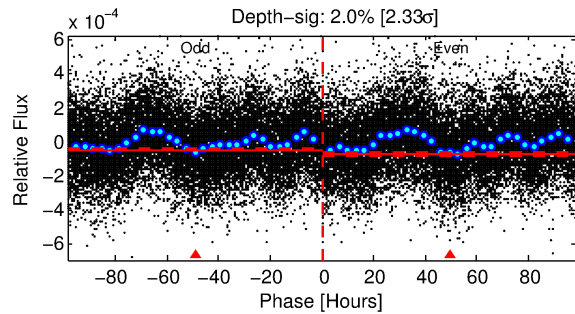
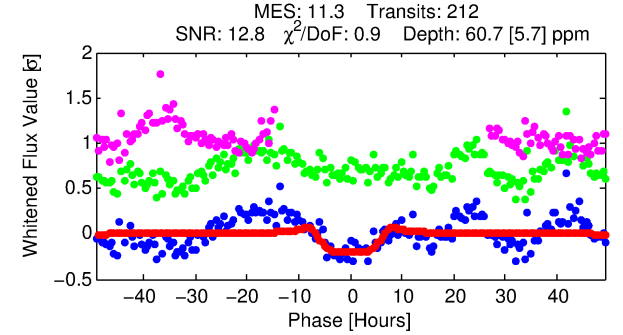
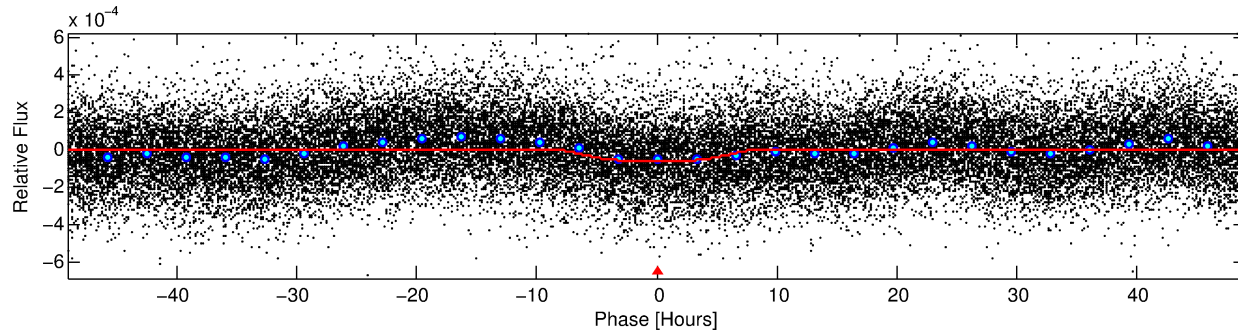
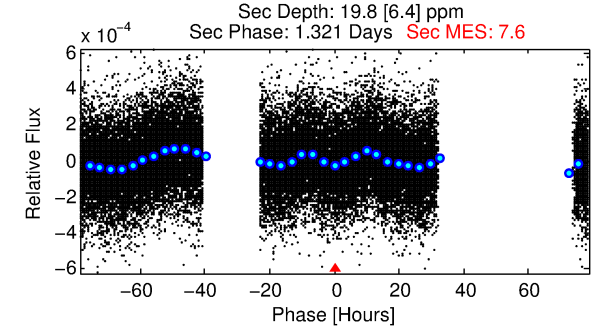
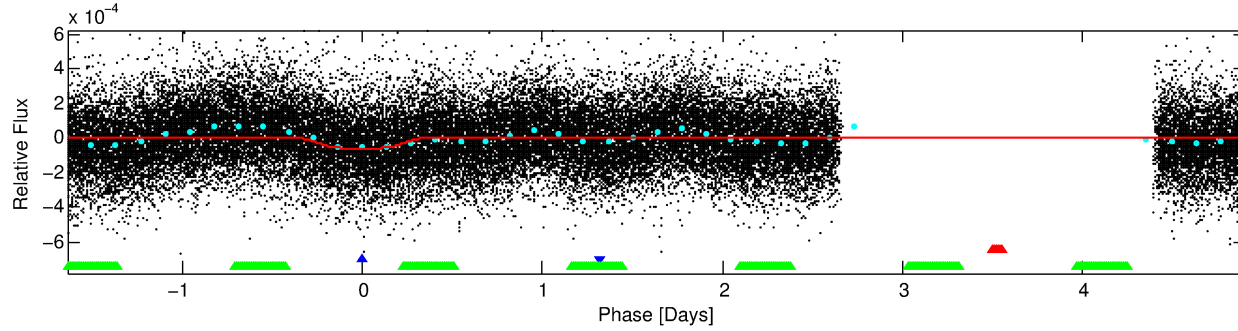
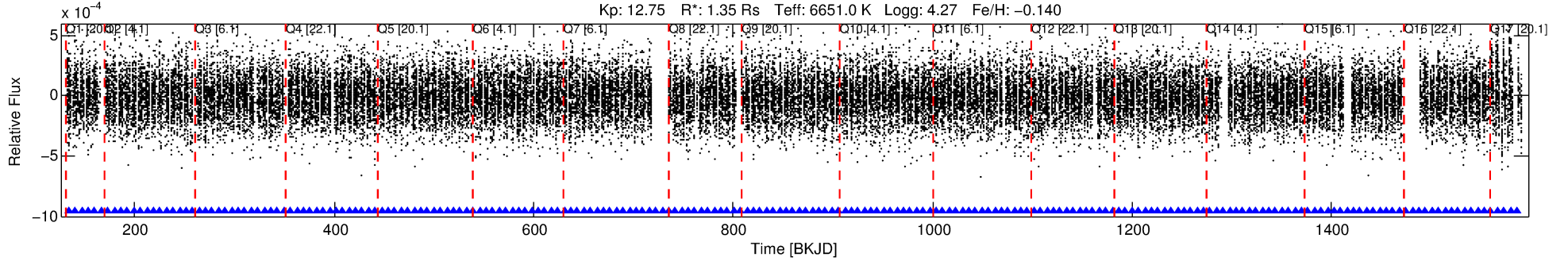
Ephemeris Match Information For 005641294-02

No Significant Match Found

DV One-Page Summary

KIC: 5641294 Candidate: 2 of 3 Period: 6.539 d
KOI: K06133 Corr: No Ephemeris Match

Kp: 12.75 R*: 1.35 Rs Teff: 6651.0 K Logg: 4.27 Fe/H: -0.140



DV Fit Results:

Period = 6.53933 [0.00018] d
Epoch = 133.9482 [0.0224] BKJD
Rp/R* = 0.0098 [0.0006]
a/R* = 1.18 [0.03]
b = 0.99 [0.00]
Seff = 594.78 [238.32]
Teq = 1259 [126] K
Rp = 1.45 [0.48] Re
a = 0.0736 [0.0194] AU
Ag = 28.06 [14.12] [1.92σ]
Teffp = 4481 [420] K [7.34σ]

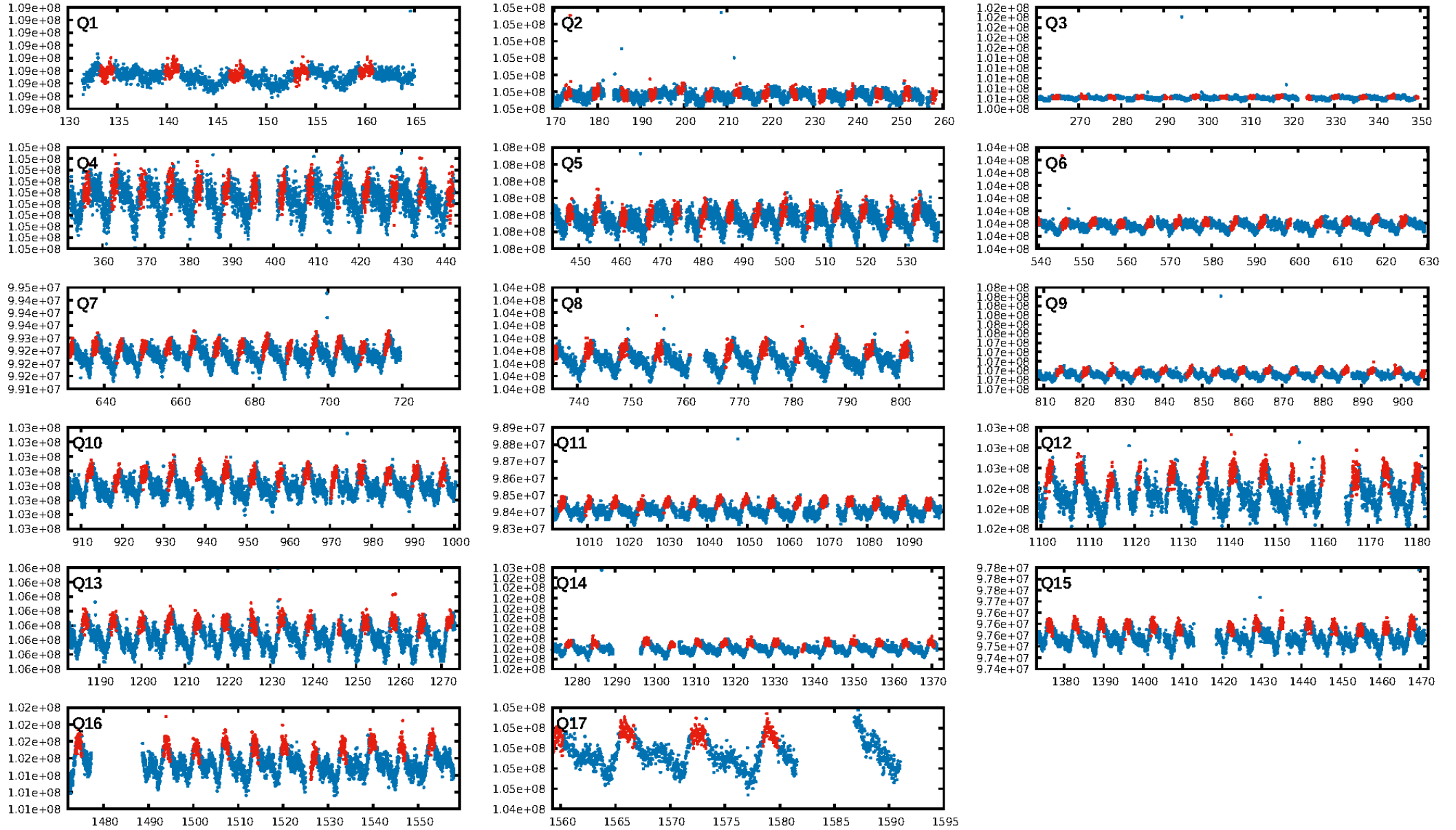
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [4.19σ]
LongPeriod-sig: 0.0% [0.00σ]
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [203/203]
GhostDiagnostic-chr: -2.017
Centroid-sig: 0.0%
Centroid-so: 3.166 arcsec [4.93σ]
OotOffset-rm: 0.244 arcsec [0.55σ]
KicOffset-rm: 0.186 arcsec [0.29σ]
OotOffset-st: 2/3/4/3 [12]
KicOffset-st: 2/3/4/3 [12]
DiffImageQuality-fgm: 0.00 [0/12]
DiffImageOverlap-fno: 0.00 [0/17]

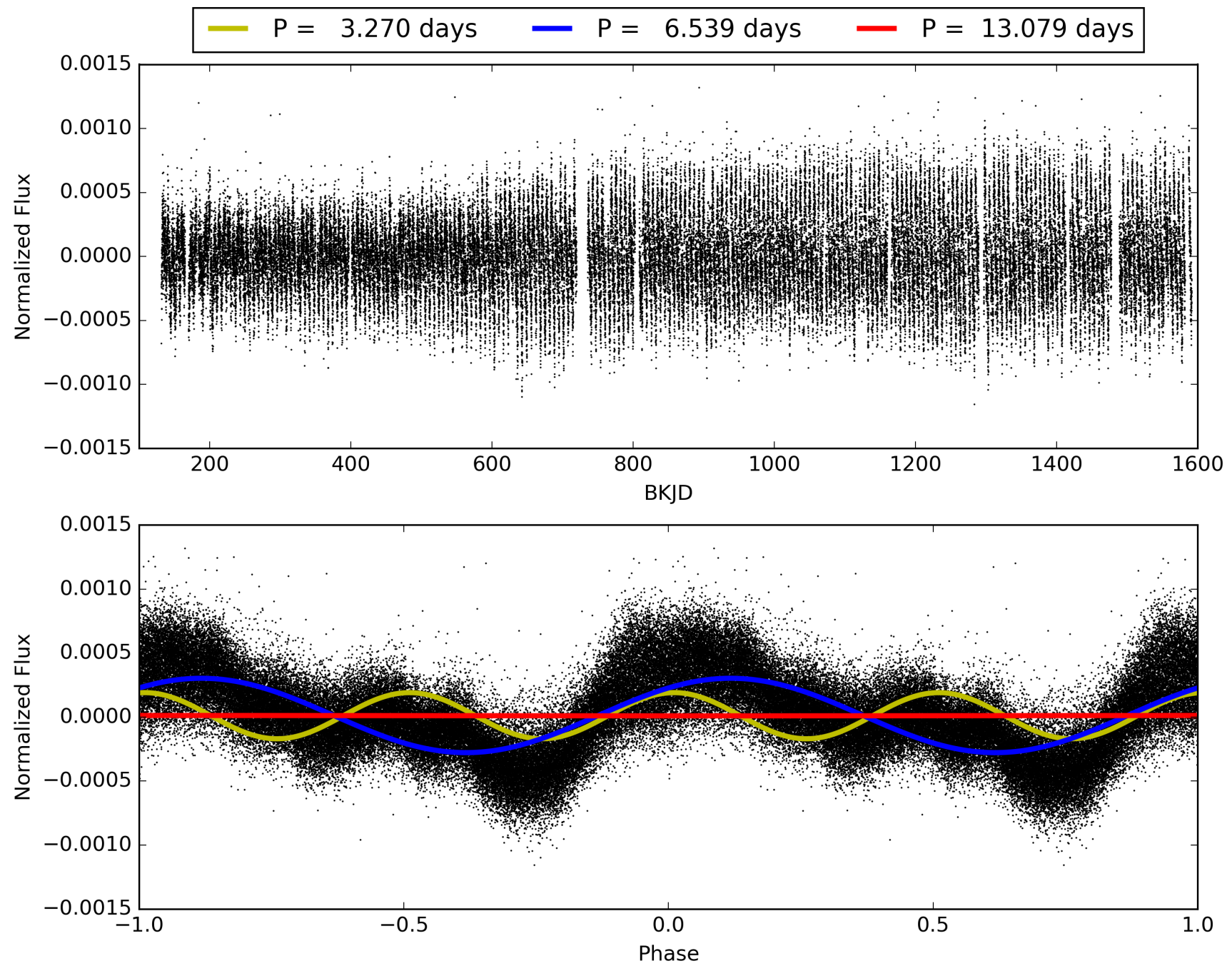
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 31-Jan-2016 05:13:52 Z

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TCE 005641294-02, PDC Light Curves

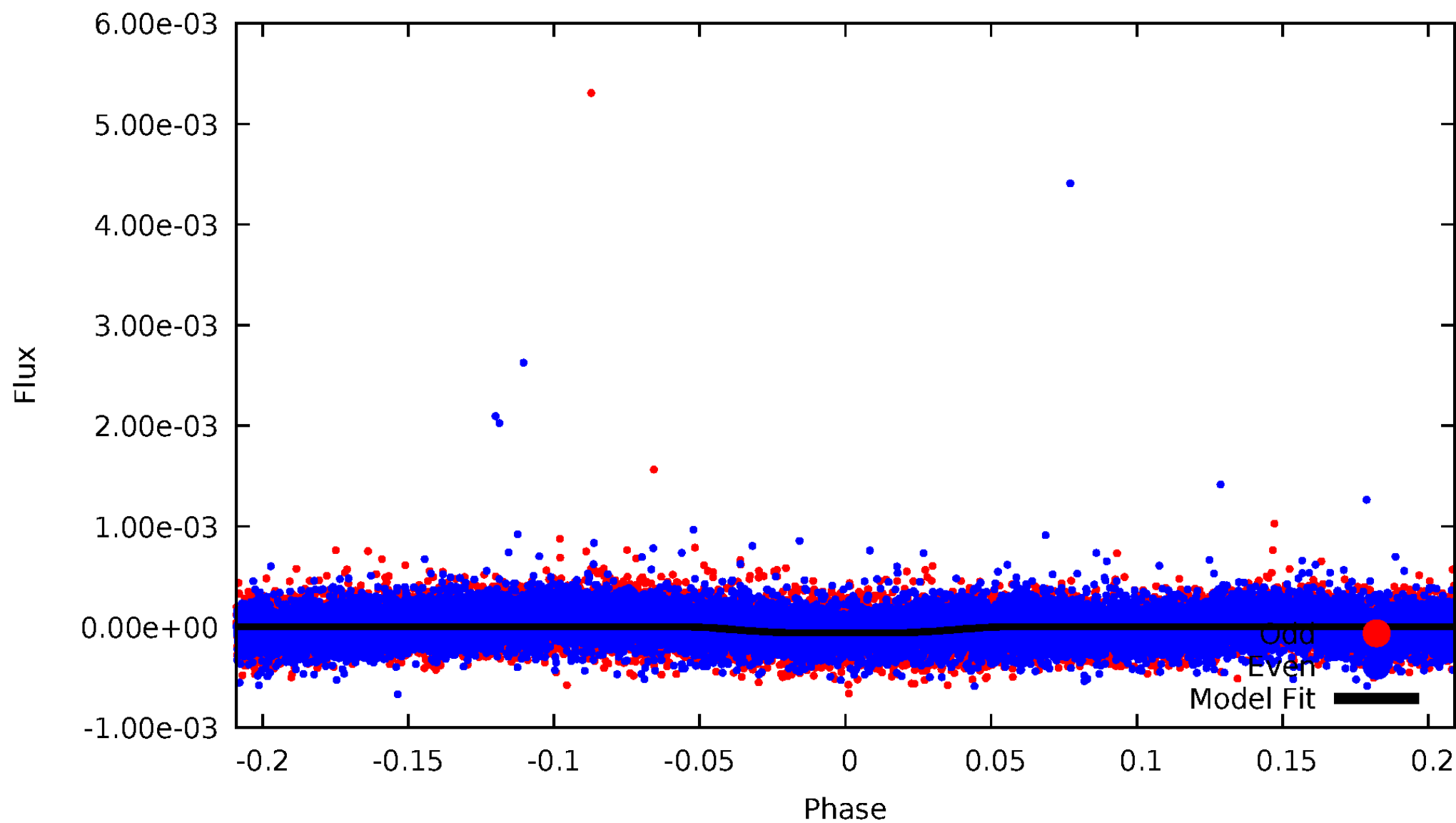


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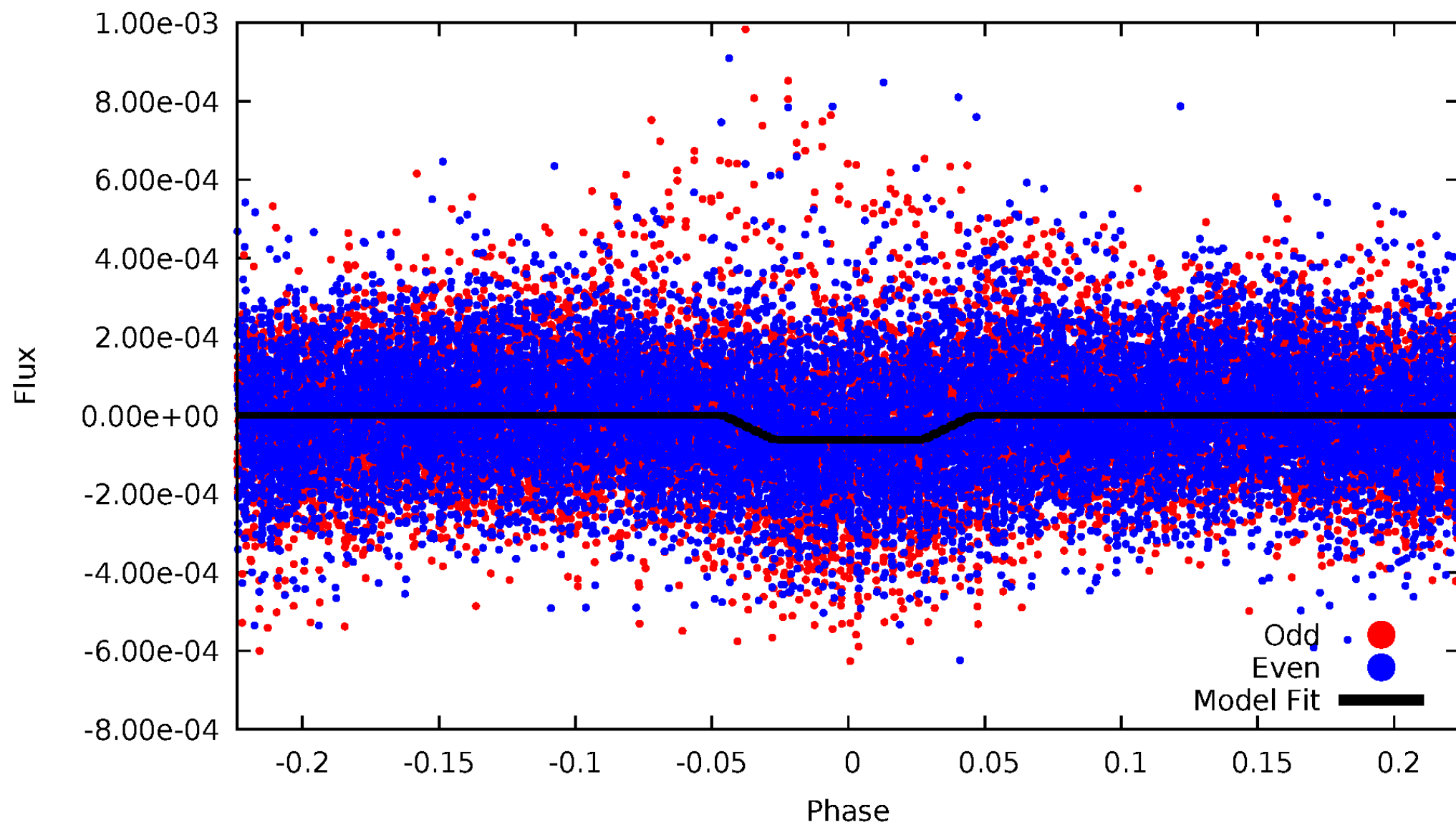
DV Odd/Even

TCE 005641294-02



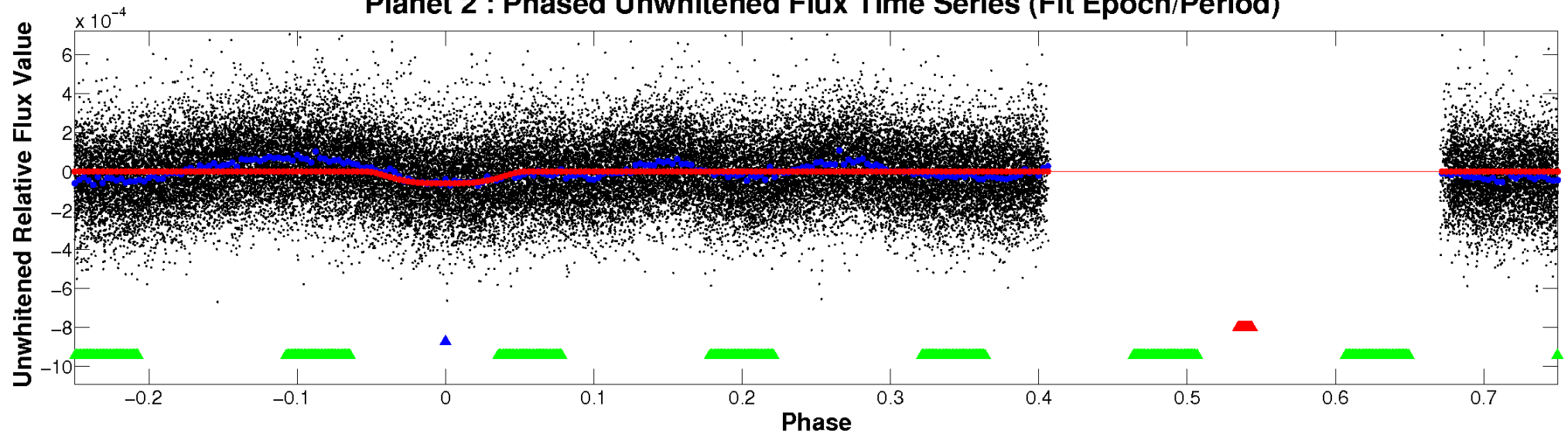
ALT Odd/Even

TCE 005641294-02

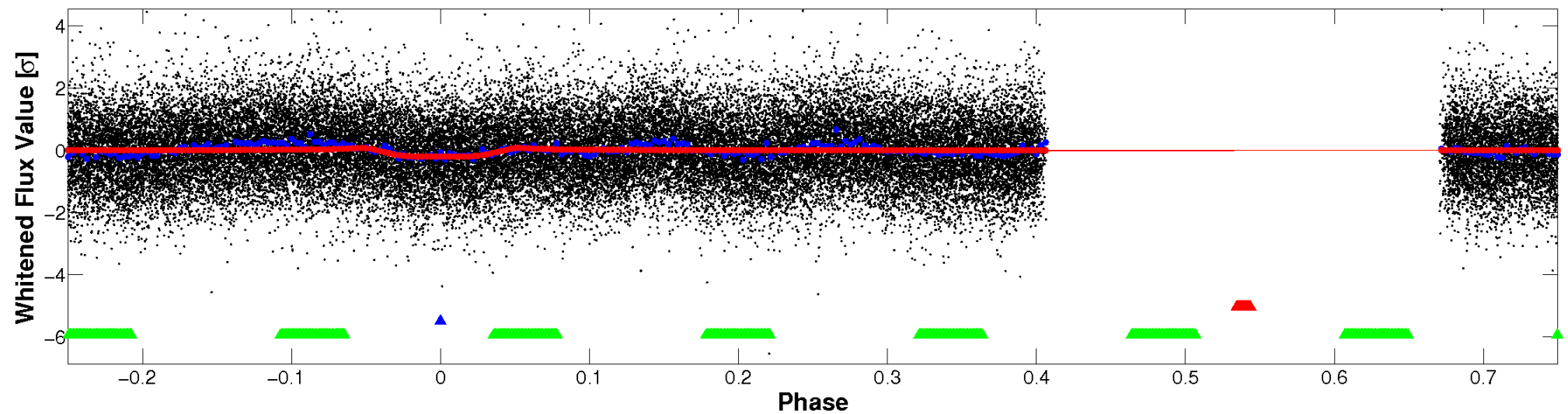


Non-Whitened Vs. Whitened Light Curve

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

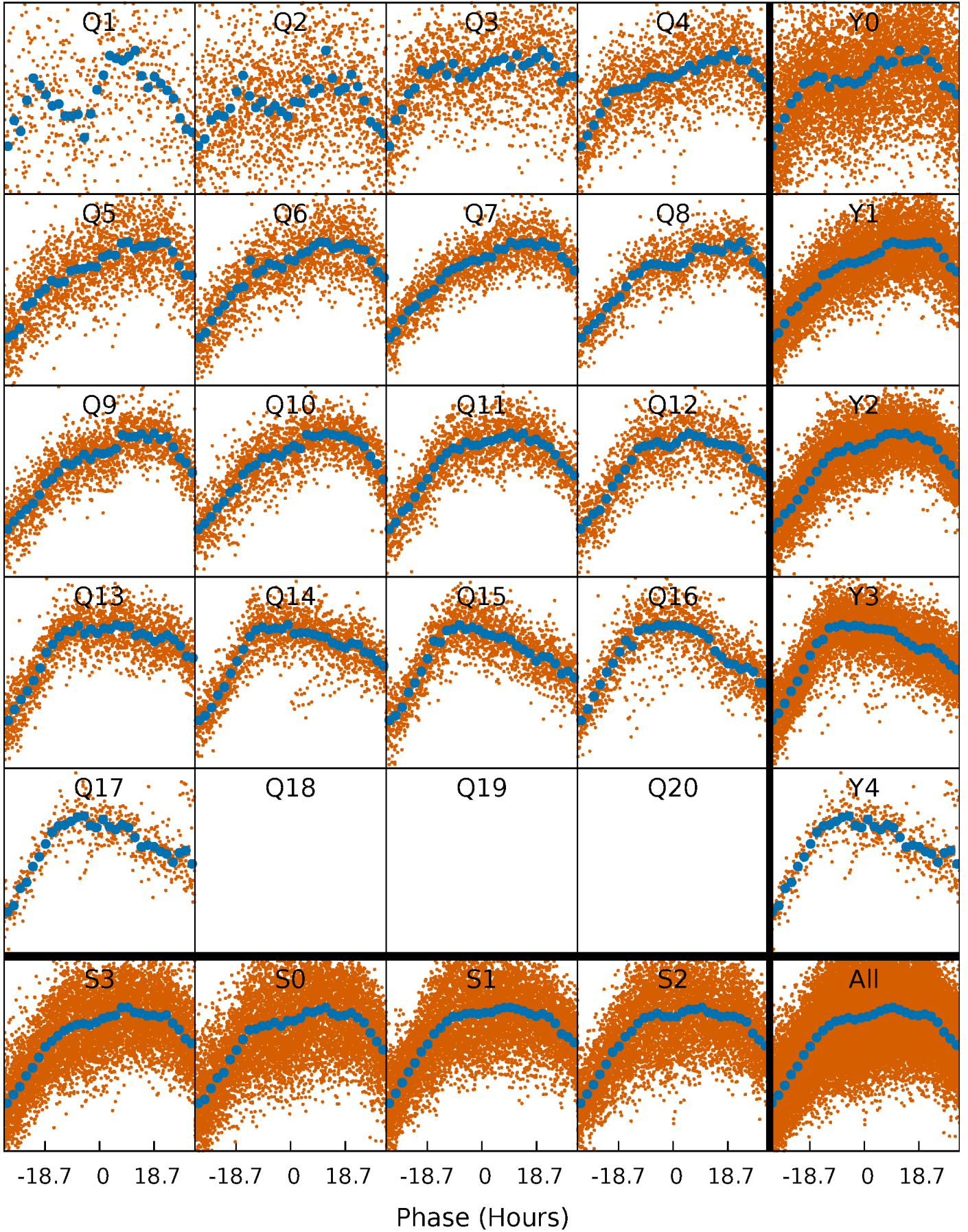


Planet 2 : Phased Whitened Flux Time Series (Fit Epoch/Period)



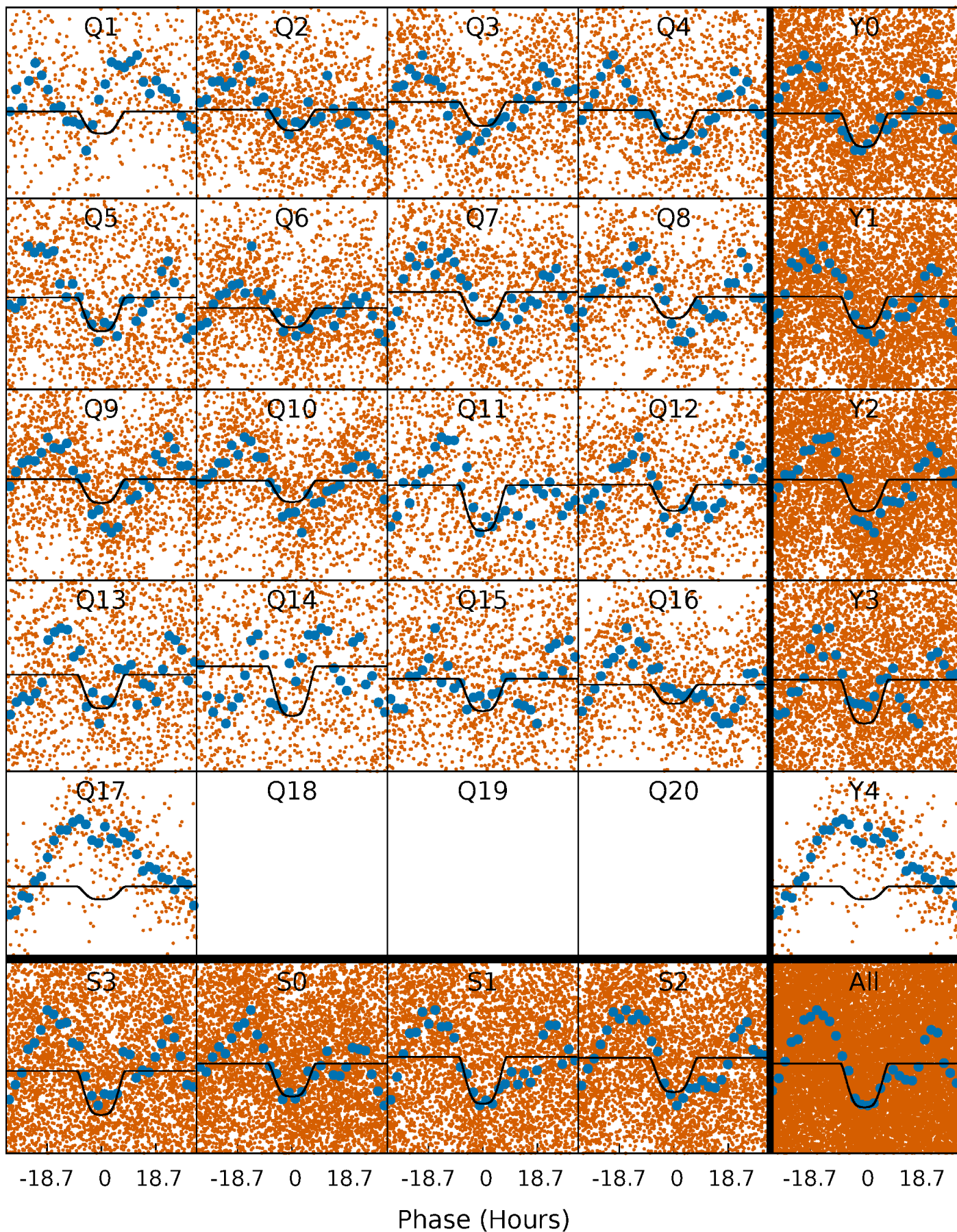
PDC Quarter-Phased Transit Curves

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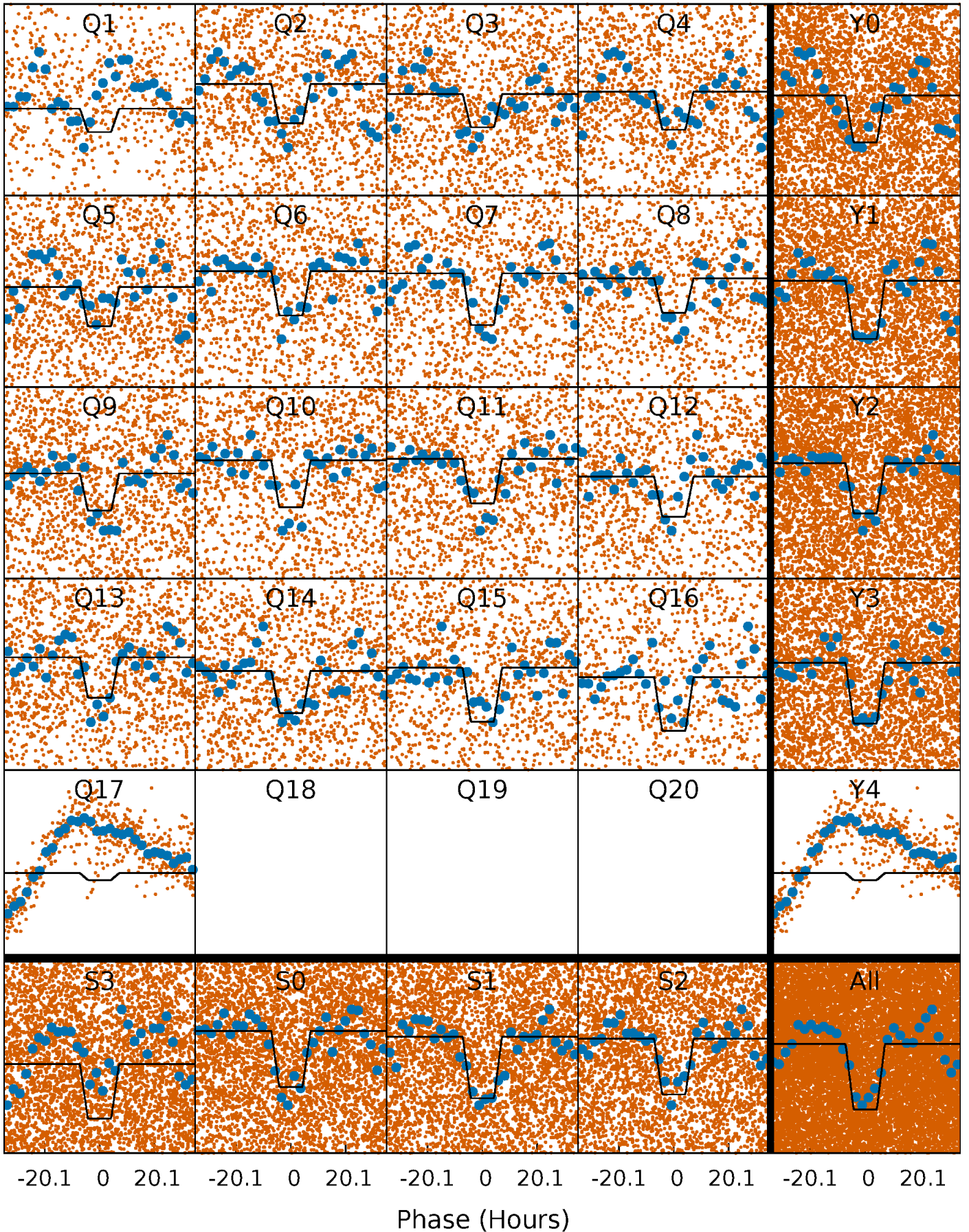
DV Quarter-Phased Transit Curves

TCE 005641294-02 P= 6.539327 Days $T_0=133.948165$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

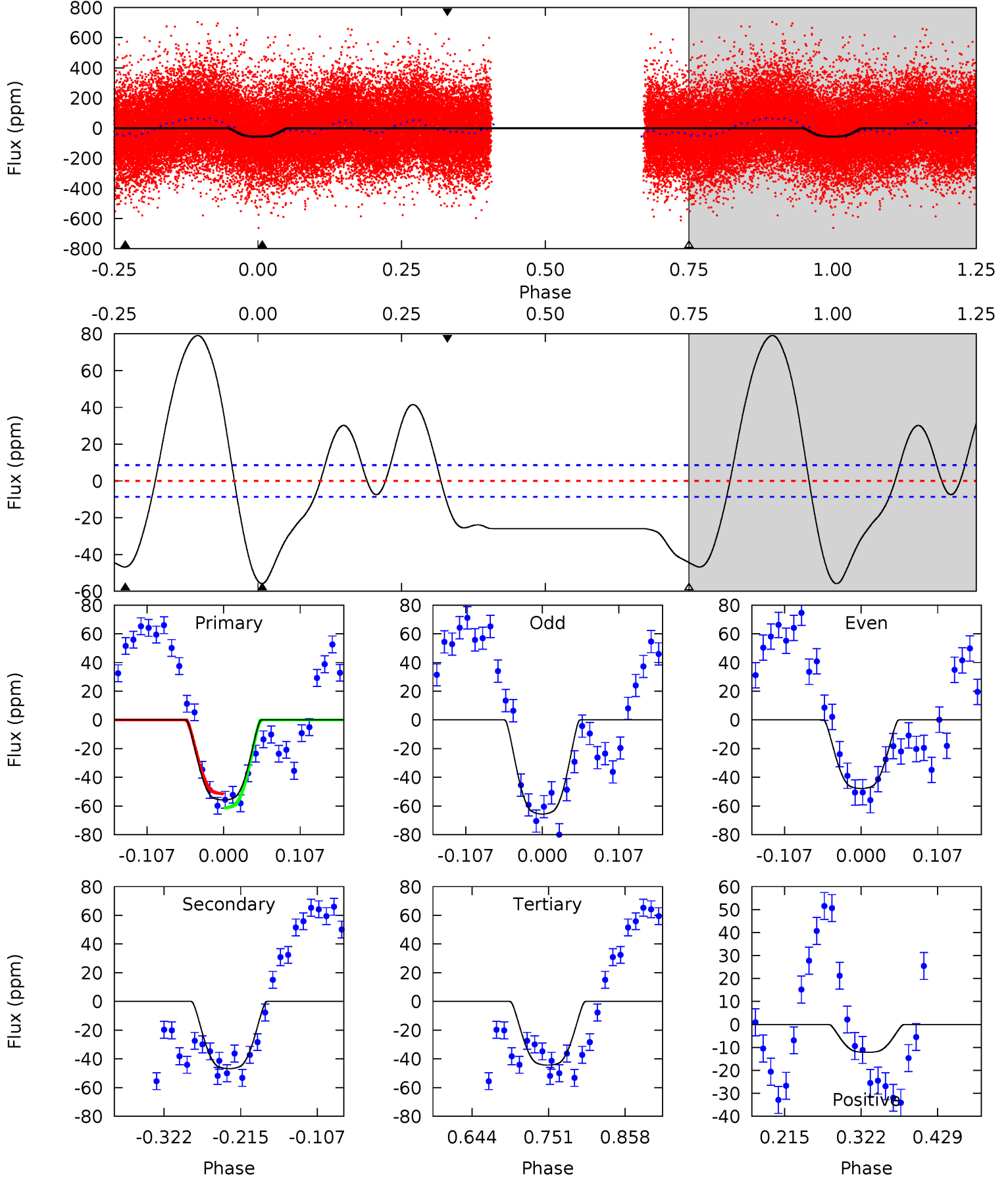
TCE 005641294-02 P= 6.538790 Days $T_0=133.975261$ (BKJD)



DV Model-Shift Uniqueness Test

005641294-02, P = 6.539327 Days, E = 127.408838 Days

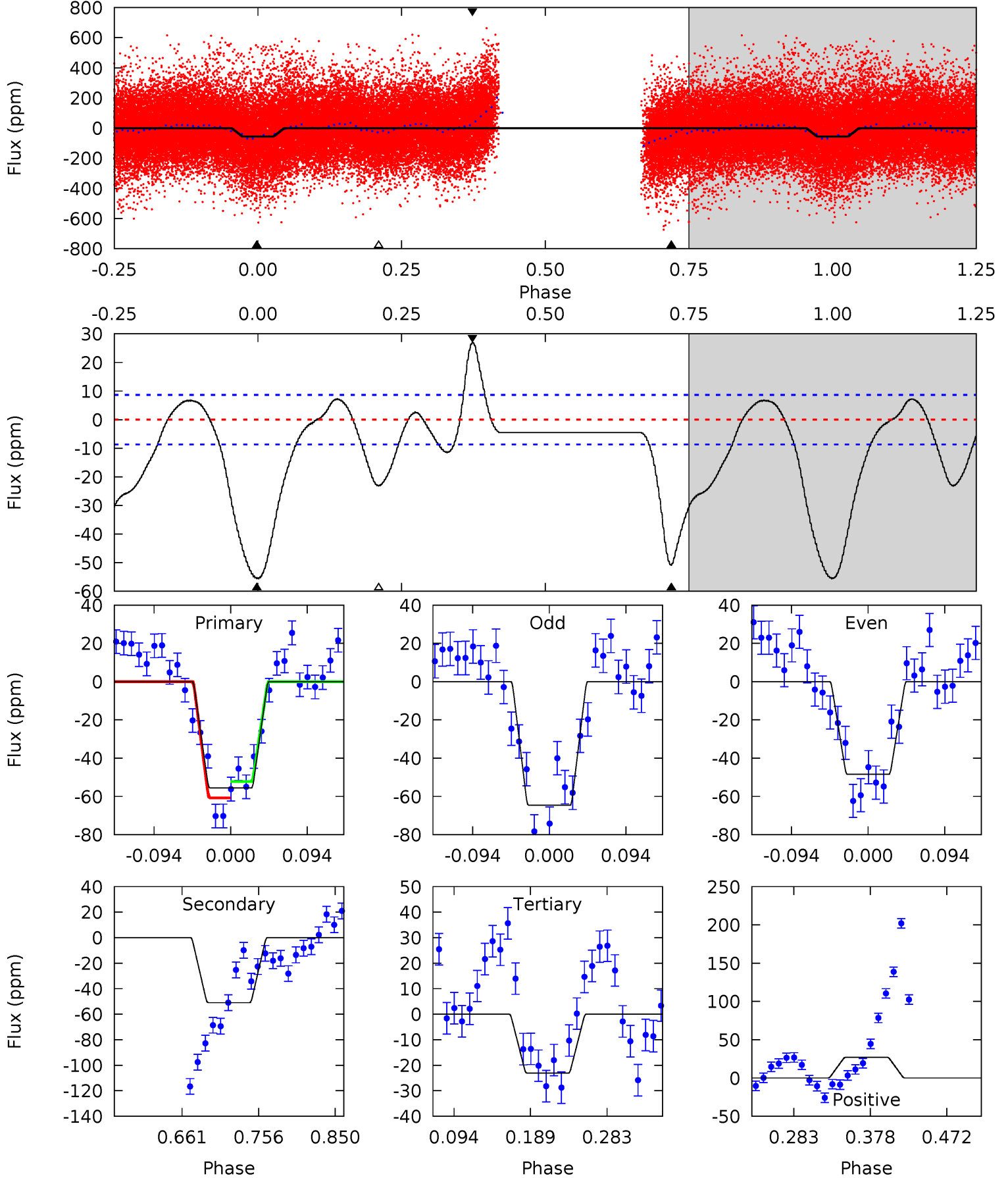
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
29.5	24.7	23.4	-6.42	4.55	1.61	16.8	6.04	35.9	1.27	31.1	4.69	0.86	0.59	2.56



Alt Model-Shift Uniqueness Test

005641294-02, P = 6.538790 Days, E = 127.436471 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
29.4	26.9	12.2	14.3	4.58	1.67	5.65	17.2	15.1	14.7	12.7	4.27	0.83	0.33	2.32



Stellar Parameters For KIC 005641294

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6651^{+187}_{-258}	$4.268^{+0.105}_{-0.195}$	$-0.140^{+0.250}_{-0.300}$	$1.355^{+0.440}_{-0.237}$	$1.247^{+0.187}_{-0.187}$	$0.707^{+0.411}_{-0.370}$
	+3%/-4%	+2%/-5%	+179%/-214%	+32%/-17%	+15%/-15%	+58%/-52%
Source	PHO54	PHO54	PHO54	DSEP		

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

Secondary Eclipse Parameters for KIC 005641294-02 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-47 ± 2	$1.47^{+0.27}_{-0.17}$	1774^{+147}_{-102}	5556^{+215}_{-220}	63^{+17}_{-16}
Alt.	-51 ± 2	$1.20^{+0.21}_{-0.16}$	1776^{+145}_{-106}	6300^{+291}_{-311}	106^{+31}_{-27}

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 $A_{obs} \gg 1.0$

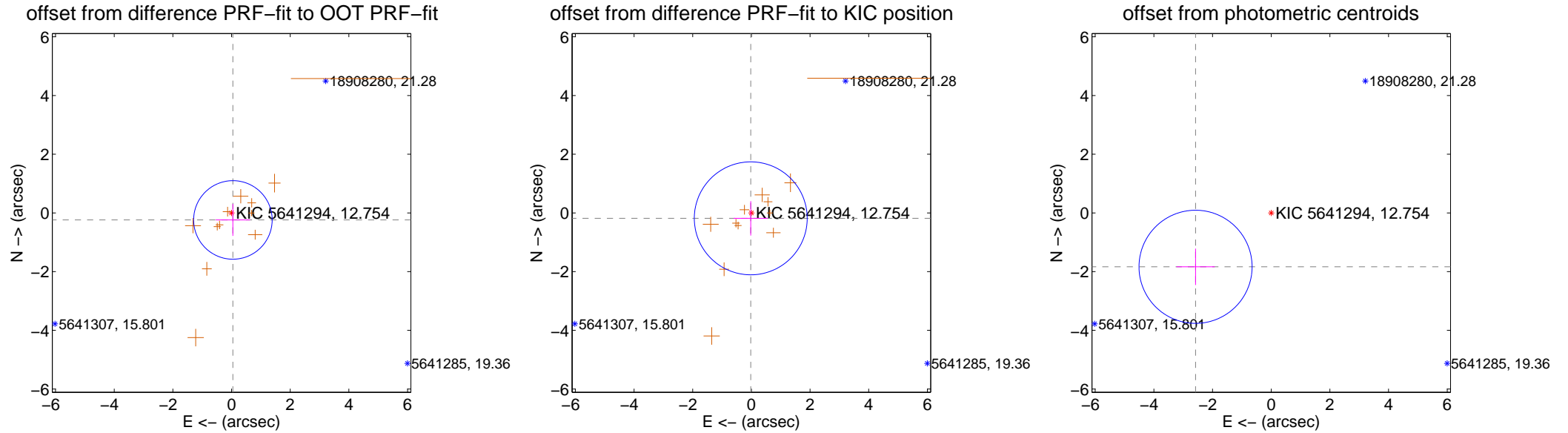
DV Centroid Data

Supplemental centroid analysis for 005641294-02. Kepler magnitude: 12.75. Transit SNR 12.83

There are 0 quarters with good PRF difference image offsets

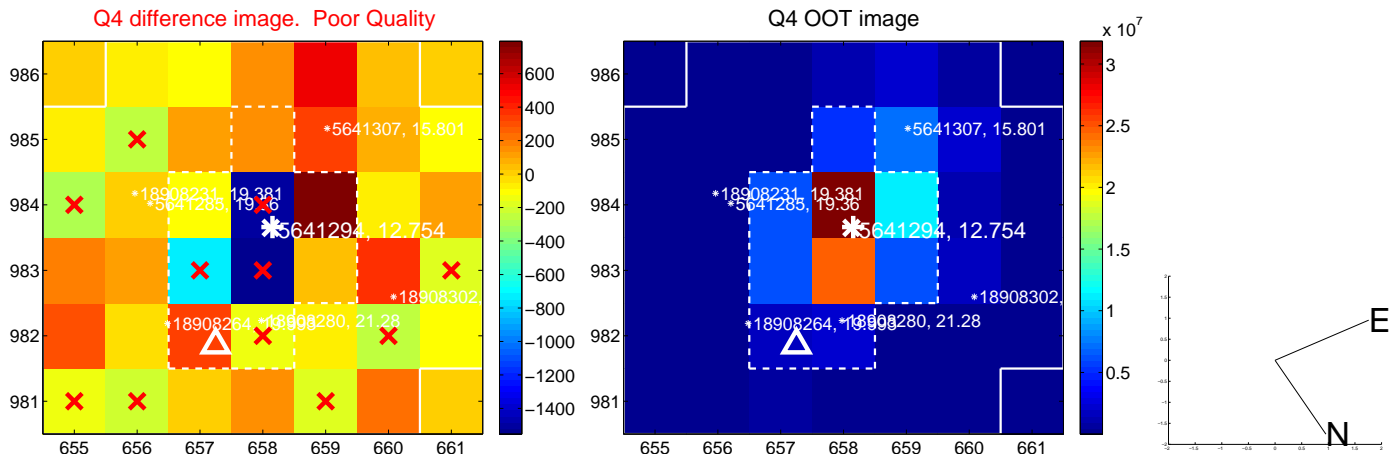
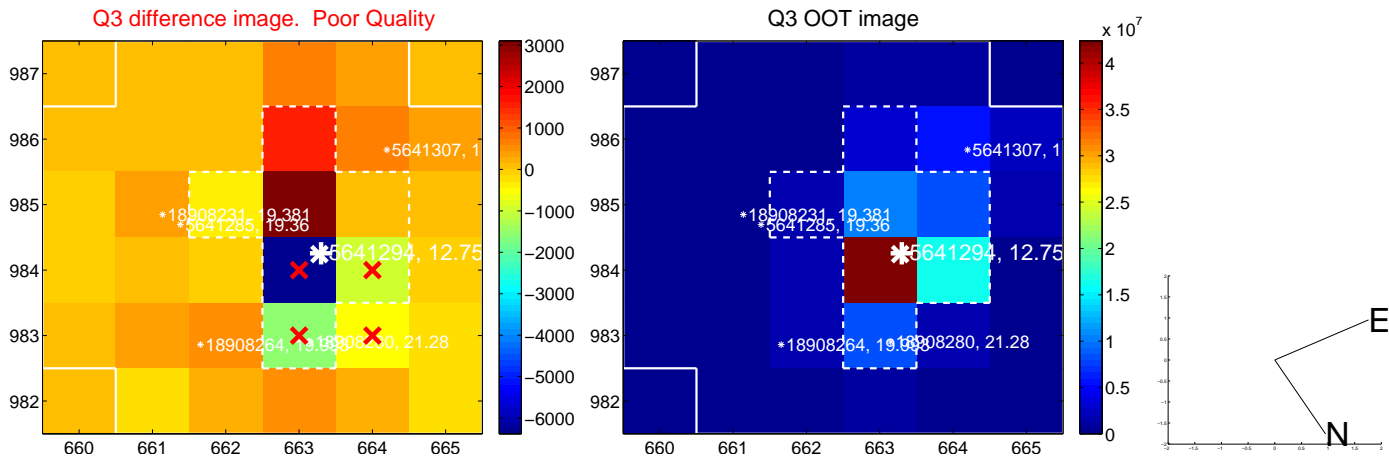
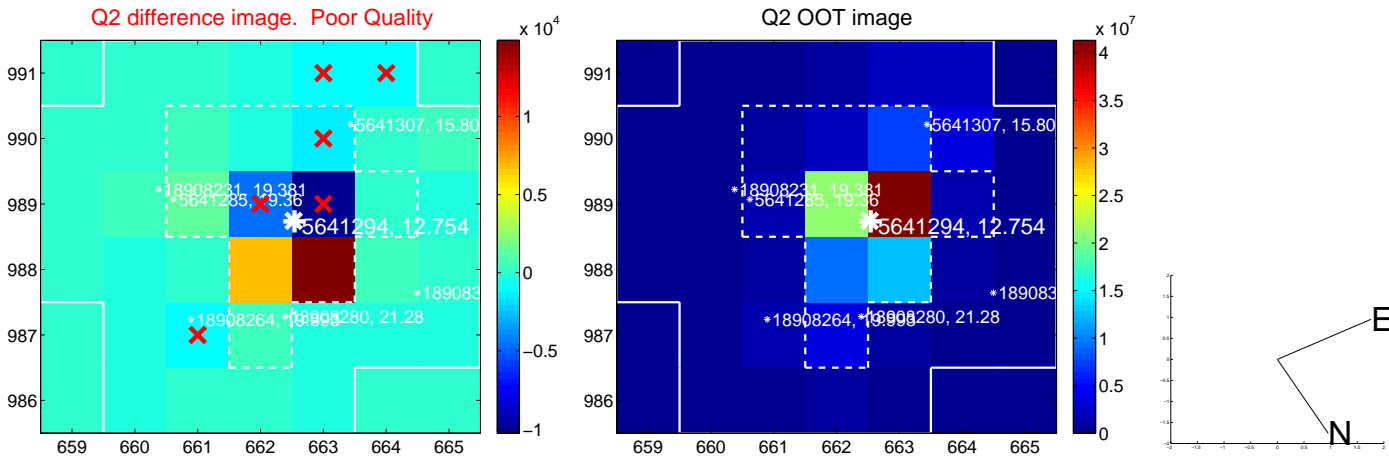
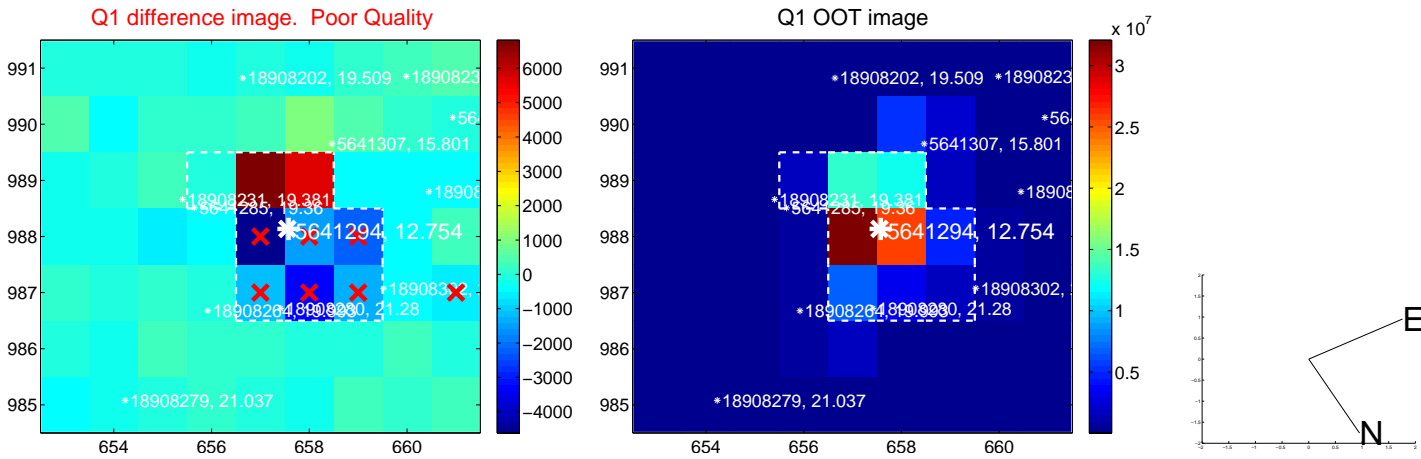
The direct PRF centroid is offset from the target star catalog position by about 0.09 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.244 ± 0.446	0.55	-0.046 ± 0.586	-0.239 ± 0.544
PRF-fit source offset from KIC position	0.186 ± 0.641	0.29	0.021 ± 0.585	-0.184 ± 0.586
photometric centroid source offset	3.17 ± 0.64	4.93	2.58 ± 0.65	-1.84 ± 0.62

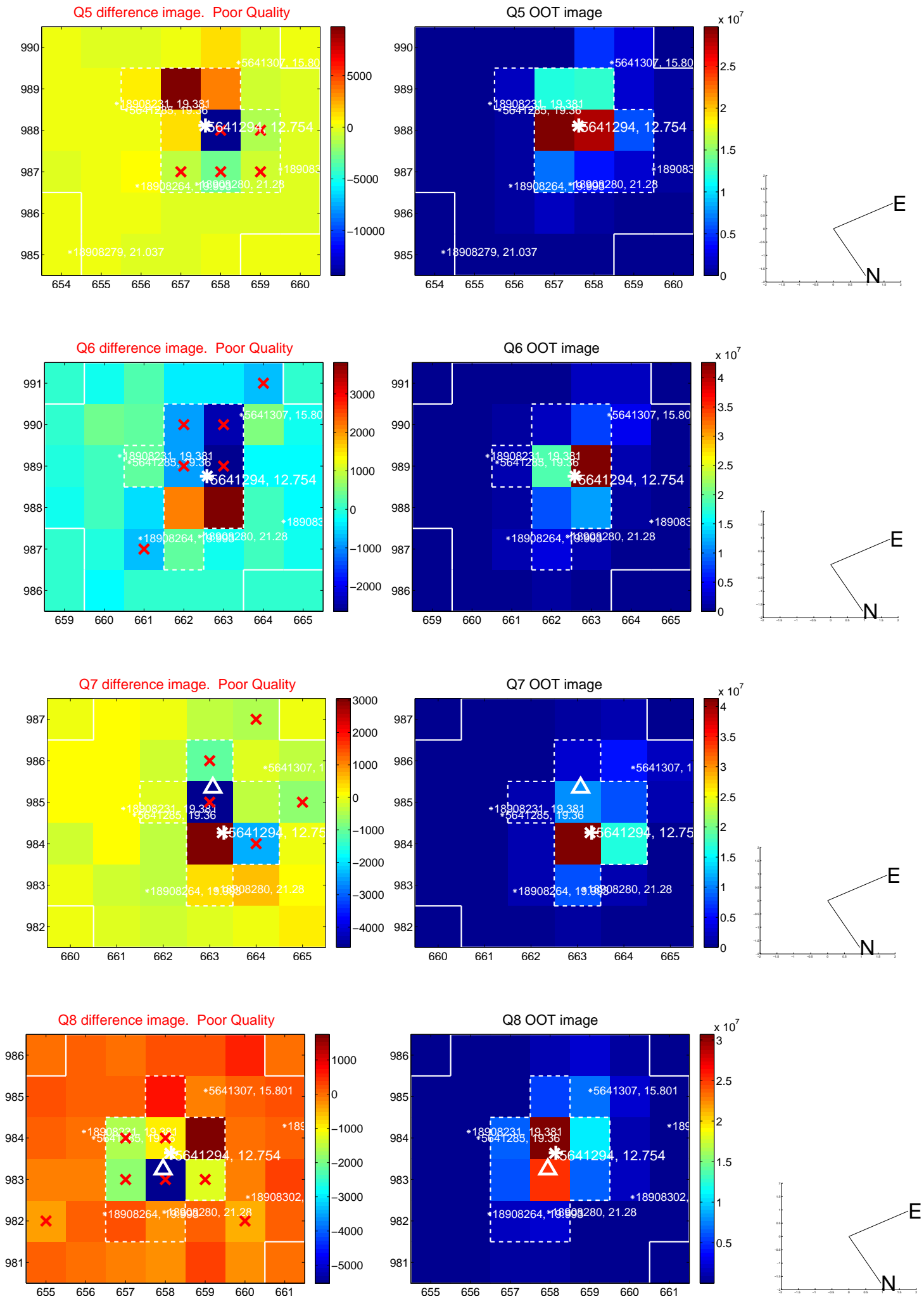


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

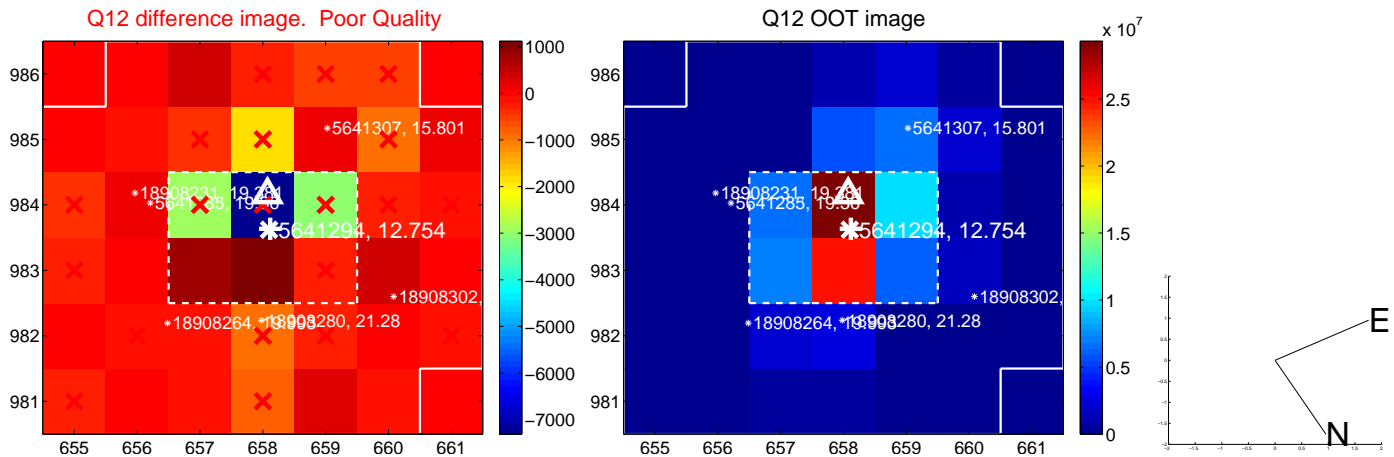
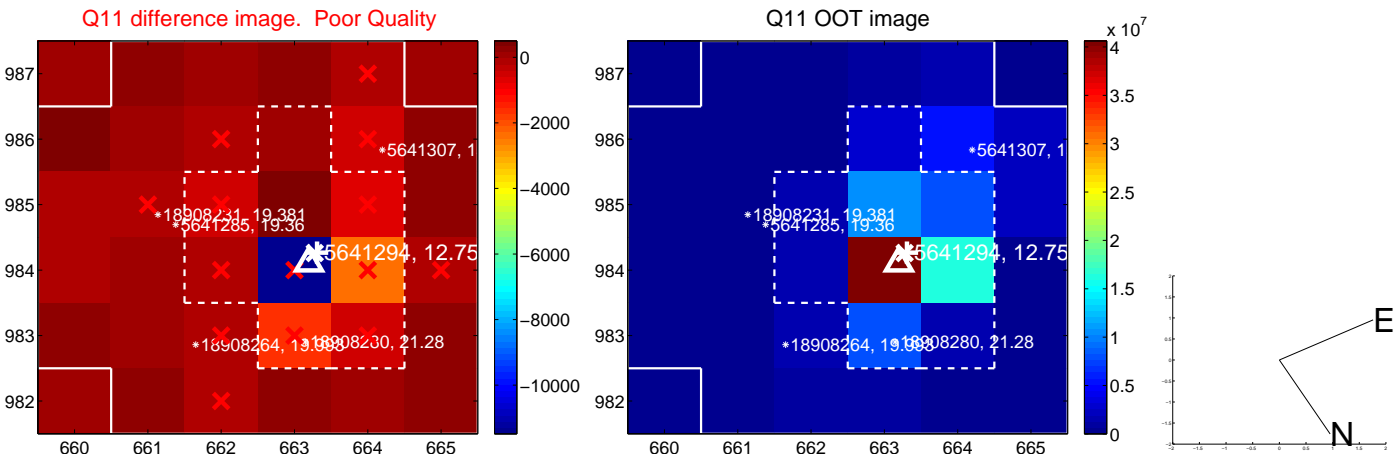
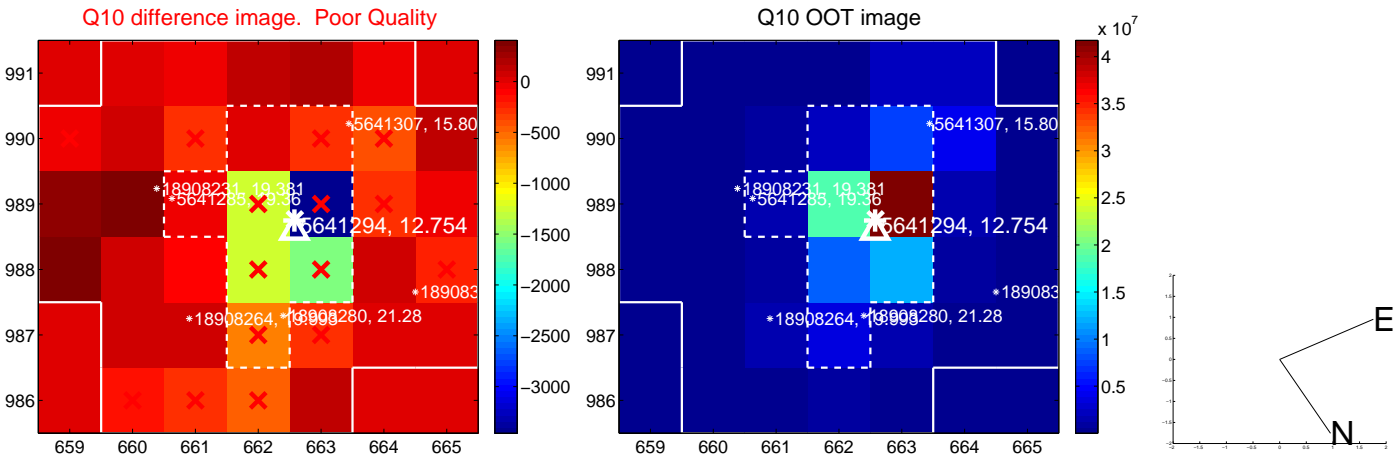
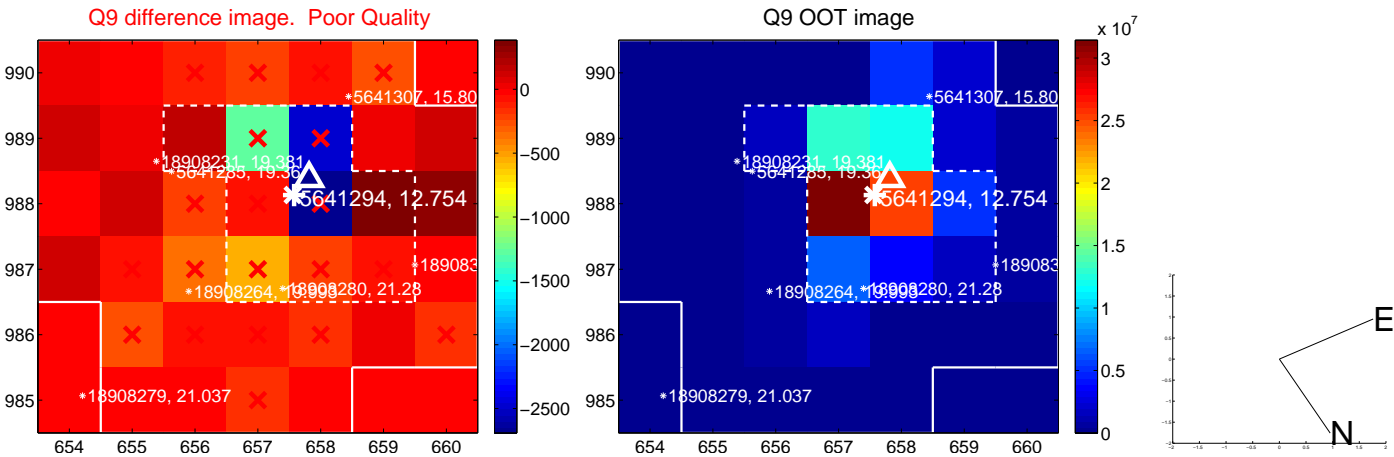
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



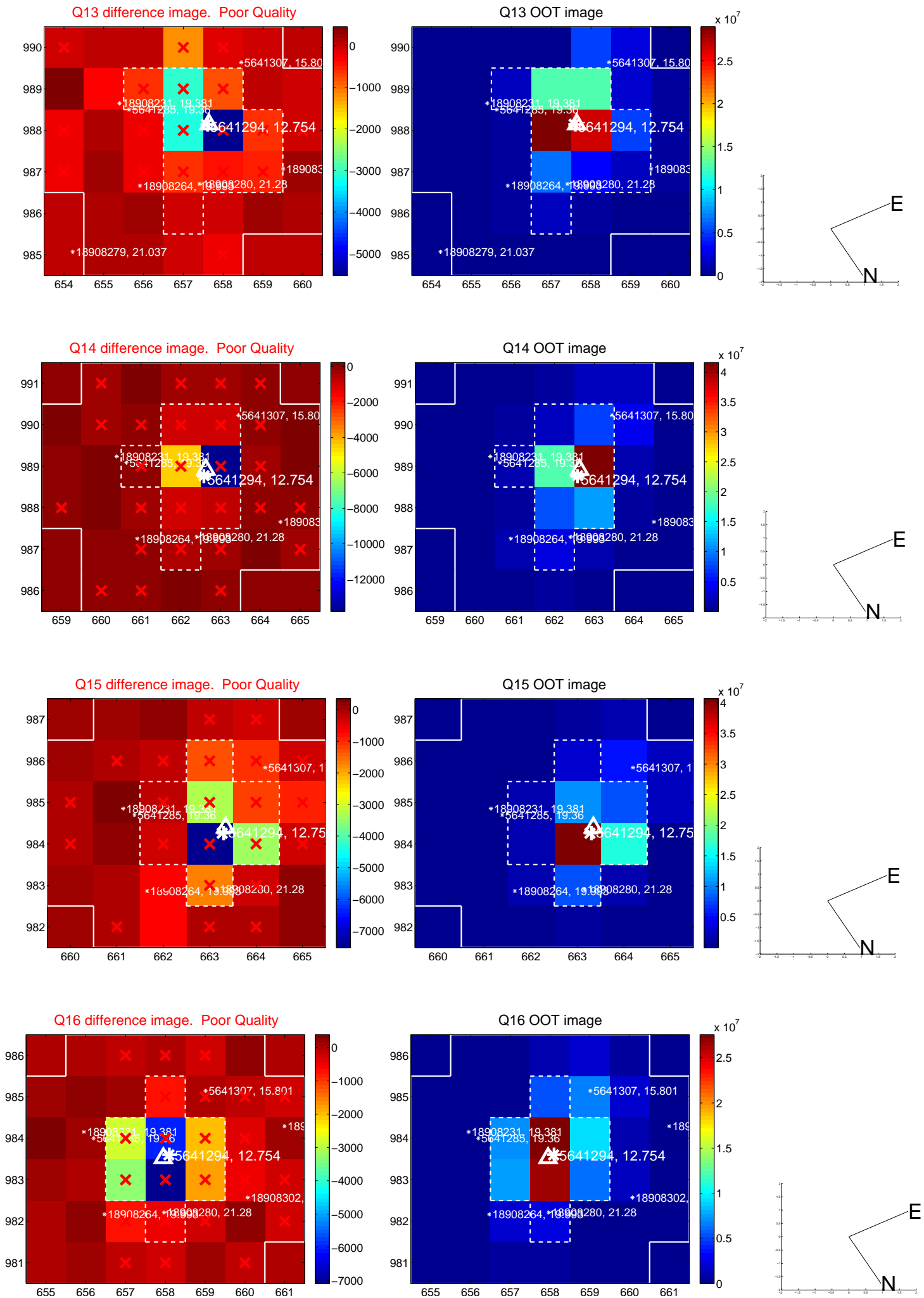
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



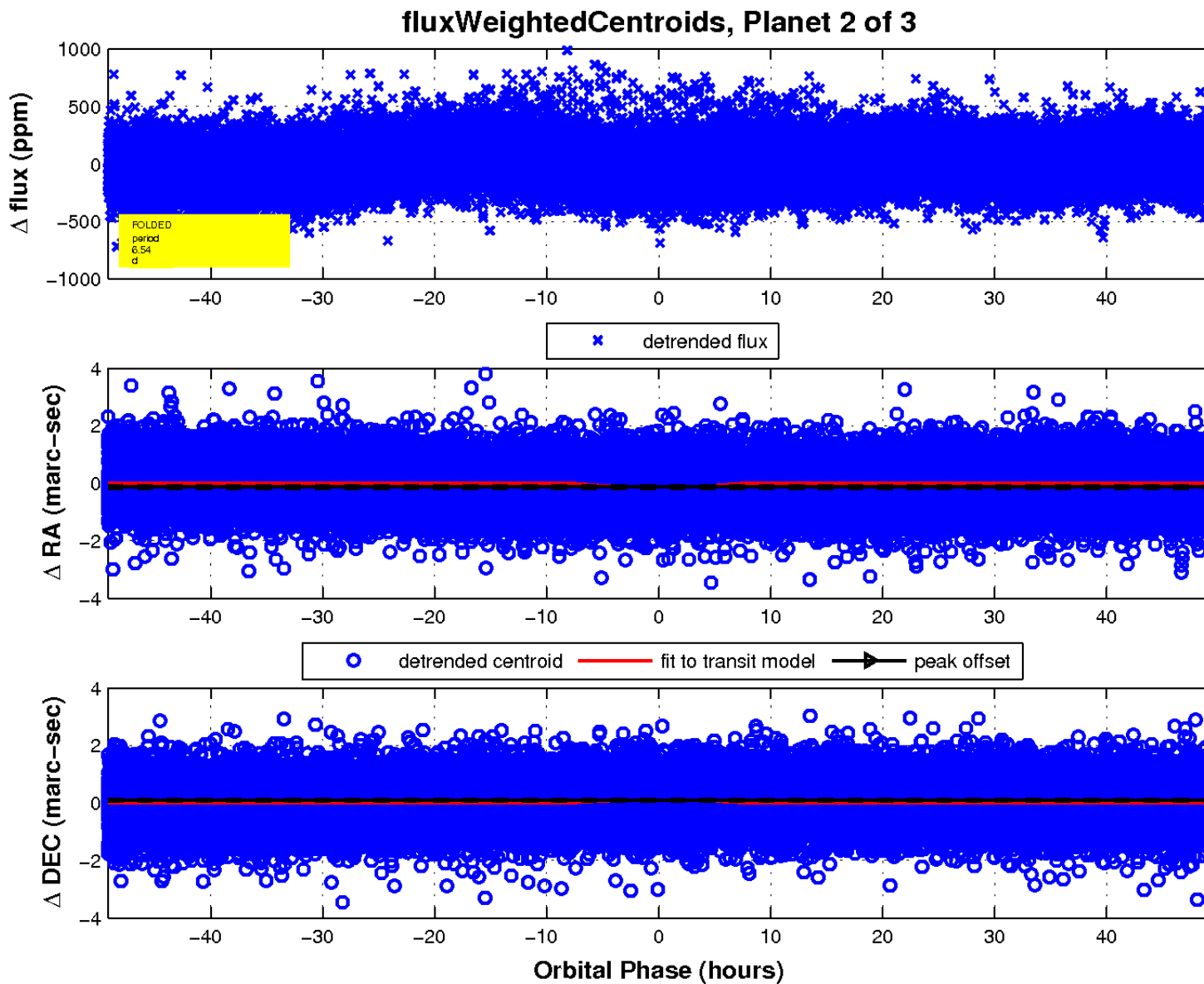
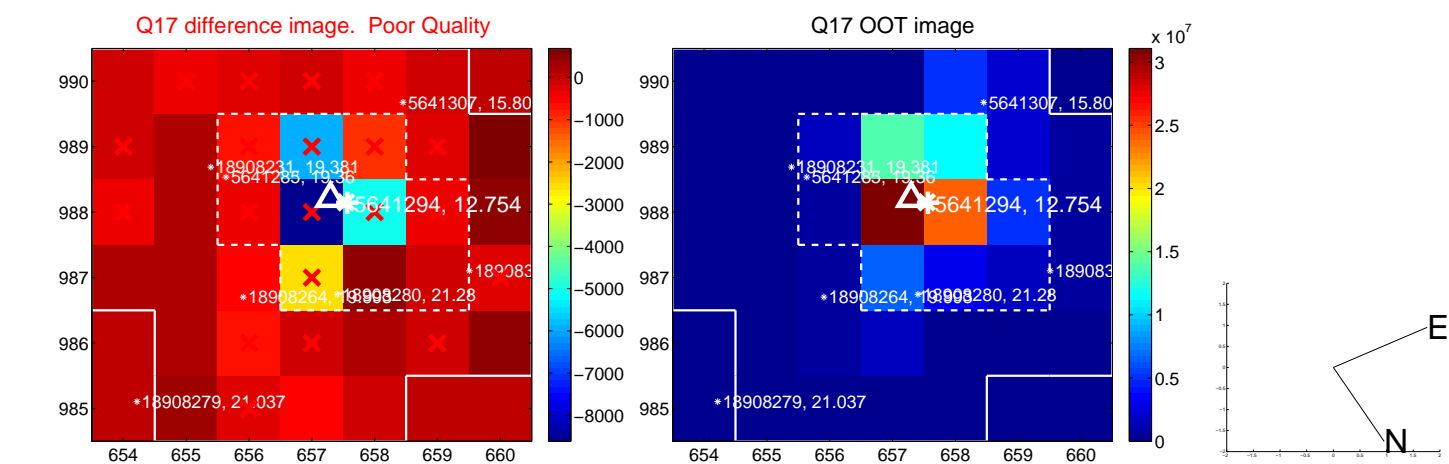
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

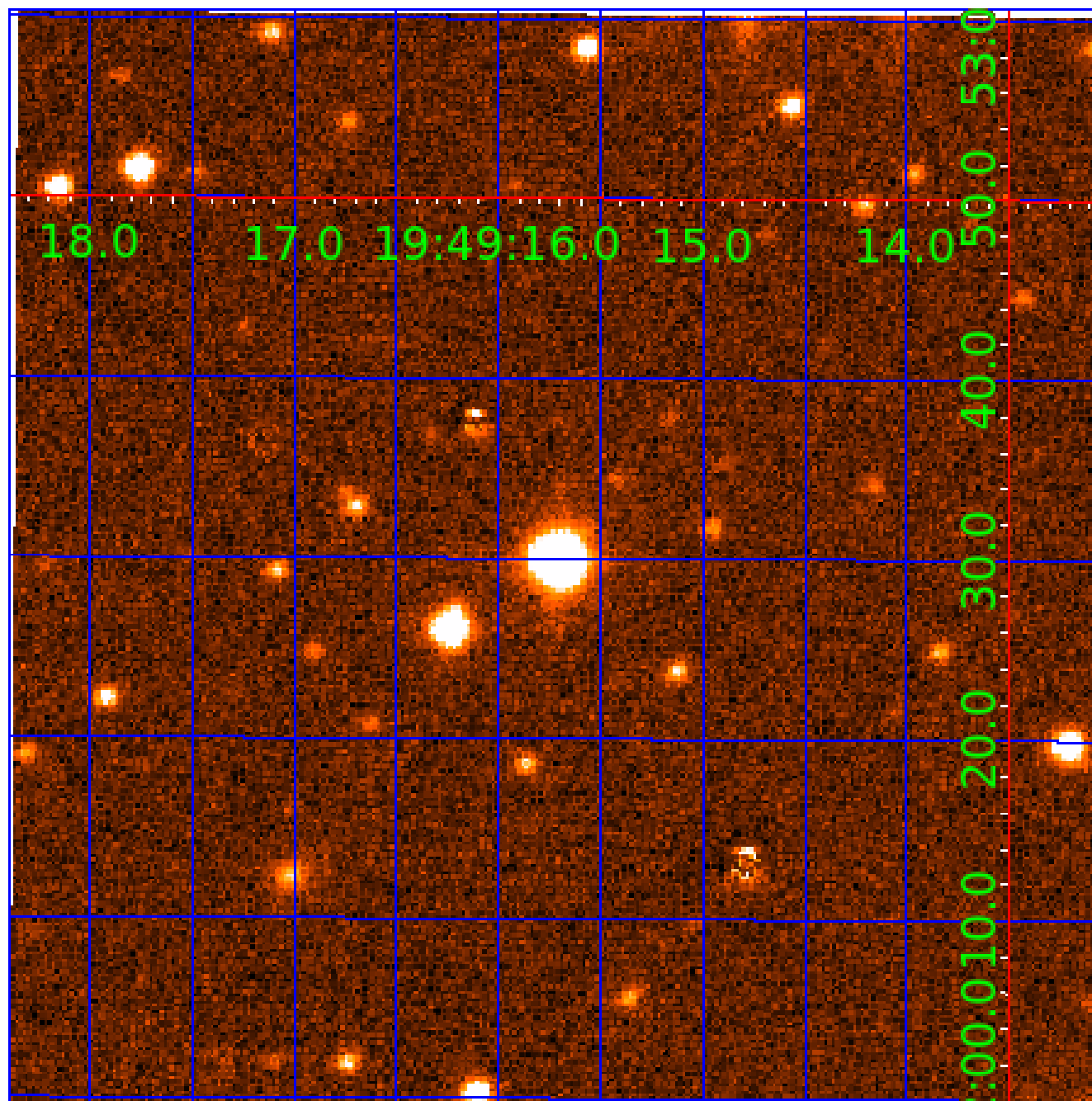


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 005641294

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})
005641294-01	OBS	No	6.539597	137.443103	90.1	14.050	14.1	16.2	1.35	6651	1.83	594.75
005641294-02	OBS	No	6.539327	133.948165	60.7	16.398	11.3	12.8	1.35	6651	1.45	594.78
005641294-03	OBS	No	1.868016	133.527144	0.1	21.105	9.0	0.0	1.35	6651	0.03	3161.51

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
005641294-01	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT
005641294-02	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—SAME_NTL_PERIOD—CENT_FEW_DIFFS
005641294-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_SKYE_ZUMA—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_ALT—CENT_FEW_DIFFS

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

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

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

Ephemeris Match Information For 005641294-03

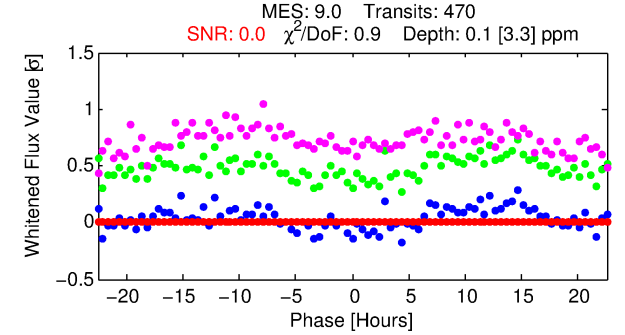
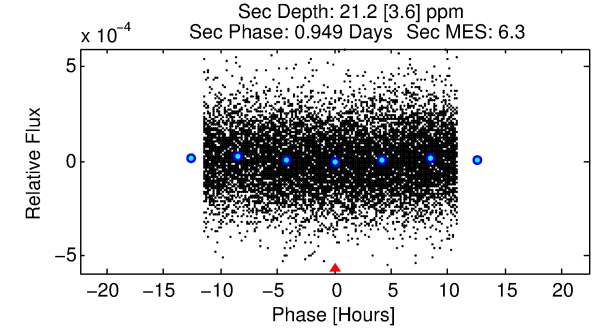
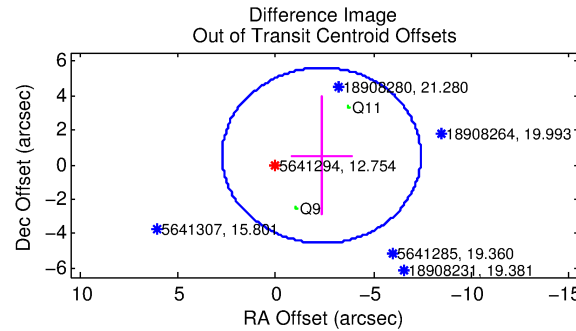
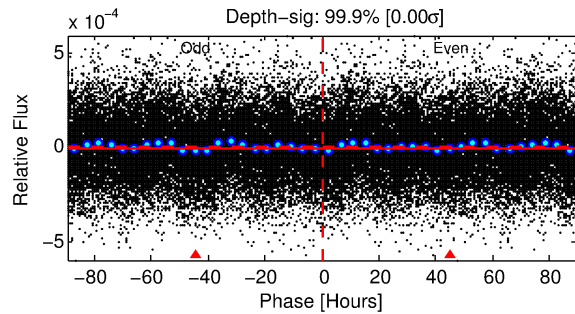
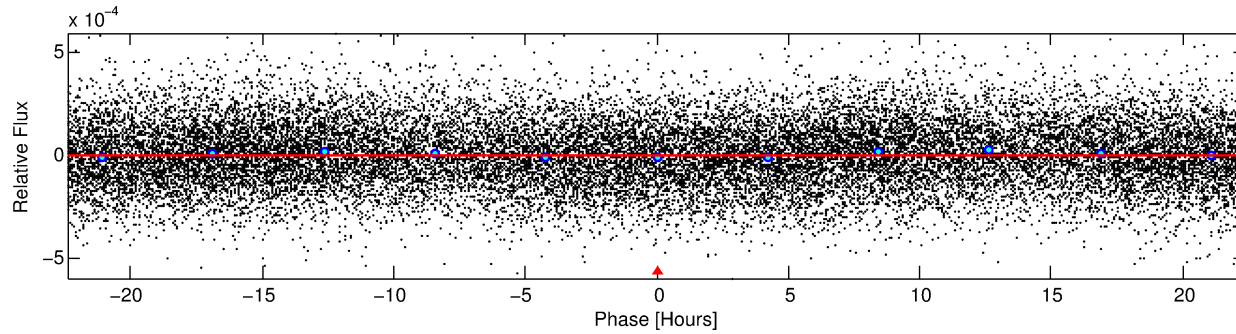
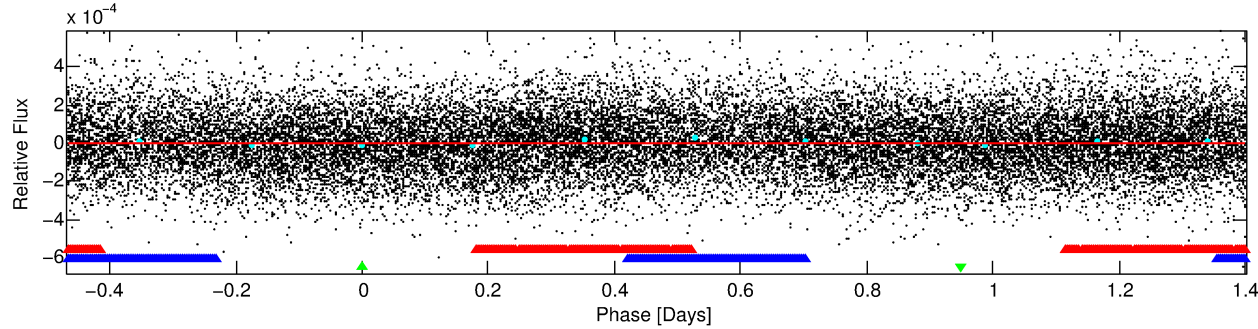
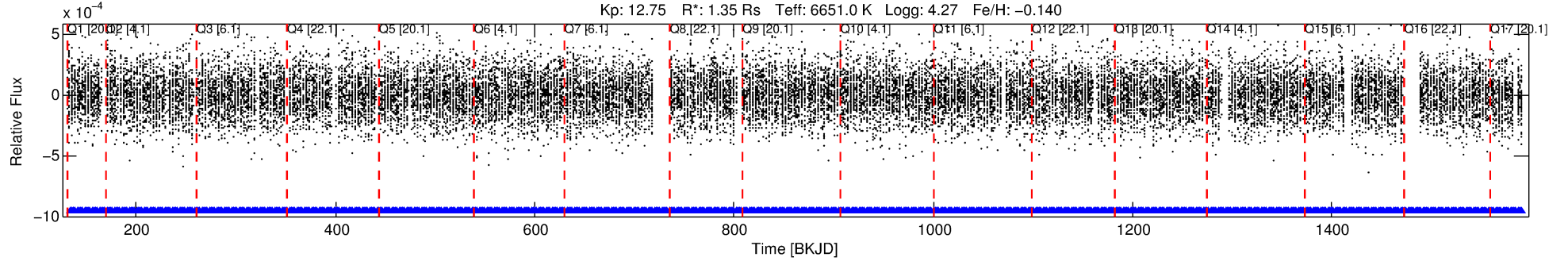
No Significant Match Found

DV One-Page Summary

KIC: 5641294 Candidate: 3 of 3 Period: 1.868 d

KOI: K06133 Corr: No Ephemeris Match

Kp: 12.75 R*: 1.35 Rs Teff: 6651.0 K Logg: 4.27 Fe/H: -0.140



DV Fit Results:

Period = 1.86802 [0.01729] d
Epoch = 133.5271 [5.0385] BKJD
Rp/R* = 0.0002 [0.0465]
a/R* = 1.00 [9.31]
b = 0.06 [18448.40]
Seff = 3161.51 [1267.35]
Teq = 1912 [192] K
Rp = 0.03 [6.88] Re
a = 0.0319 [0.0084] AU
Ag = 10005.46 [3997222.88] [0.00σ]
Teffp = 29566 [2953007] K [0.01σ]

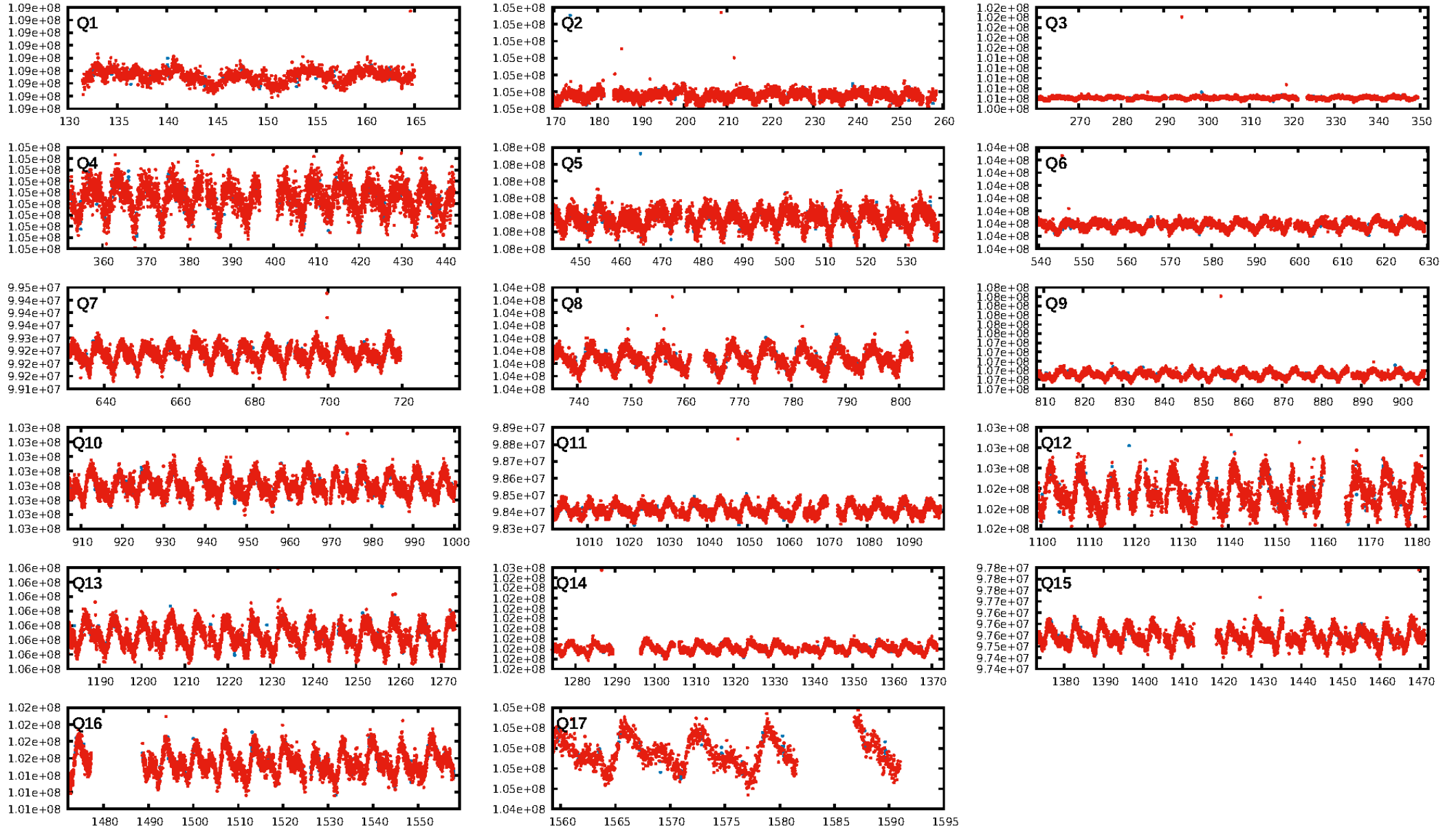
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: 100.0% [4.19σ]
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [447/447]
GhostDiagnostic-chr: N/A
Centroid-sig: N/A
Centroid-so: N/A
OotOffset-rm: 2.404 arcsec [1.42σ]
KicOffset-rm: 2.310 arcsec [1.36σ]
OotOffset-st: 0/1/0/1 [2]
KicOffset-st: 0/1/0/1 [2]
DiffImageQuality-fgm: 0.50 [1/2]
DiffImageOverlap-fno: 1.00 [17/17]

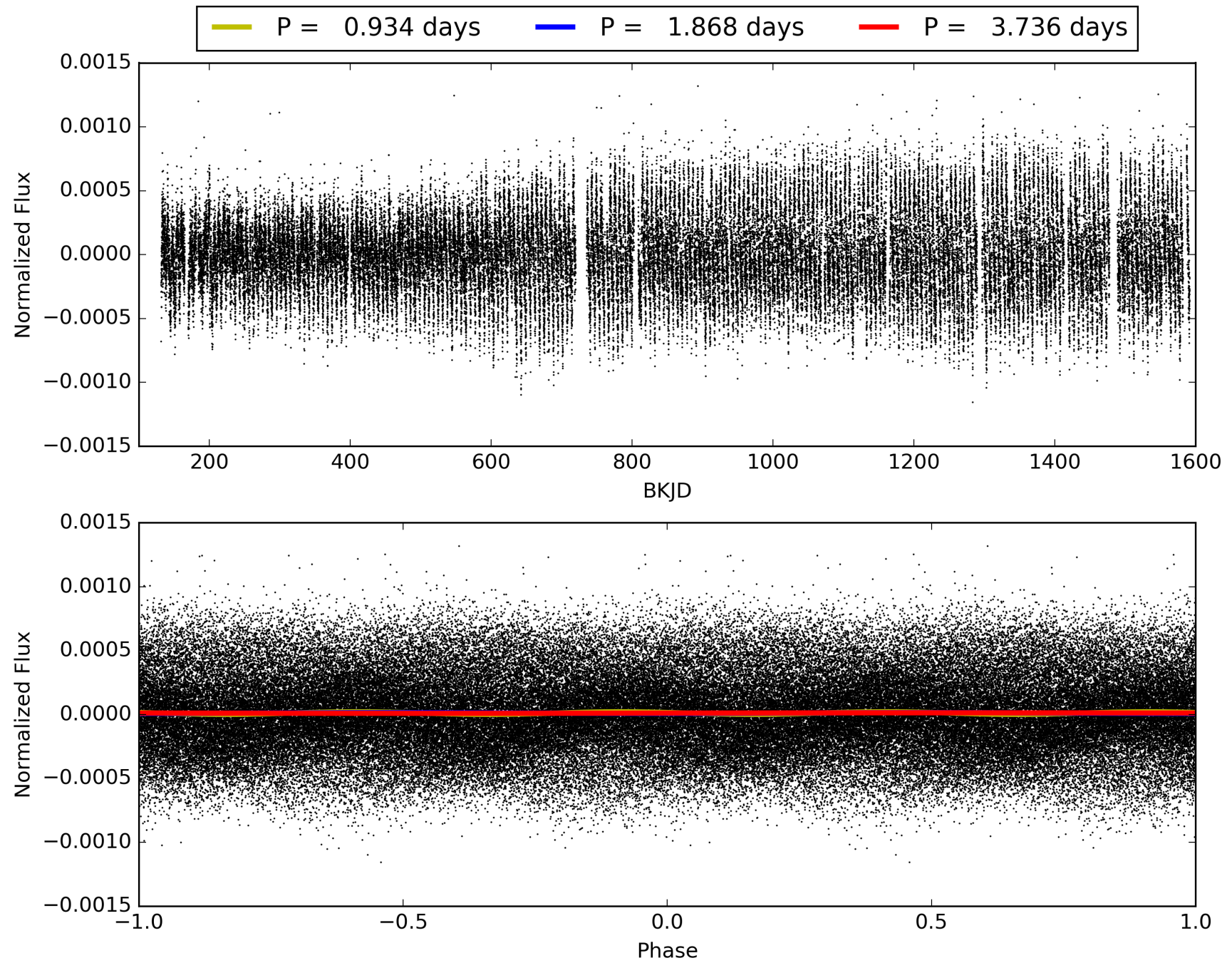
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 31-Jan-2016 05:14:06 Z

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

TCE 005641294-03, PDC Light Curves

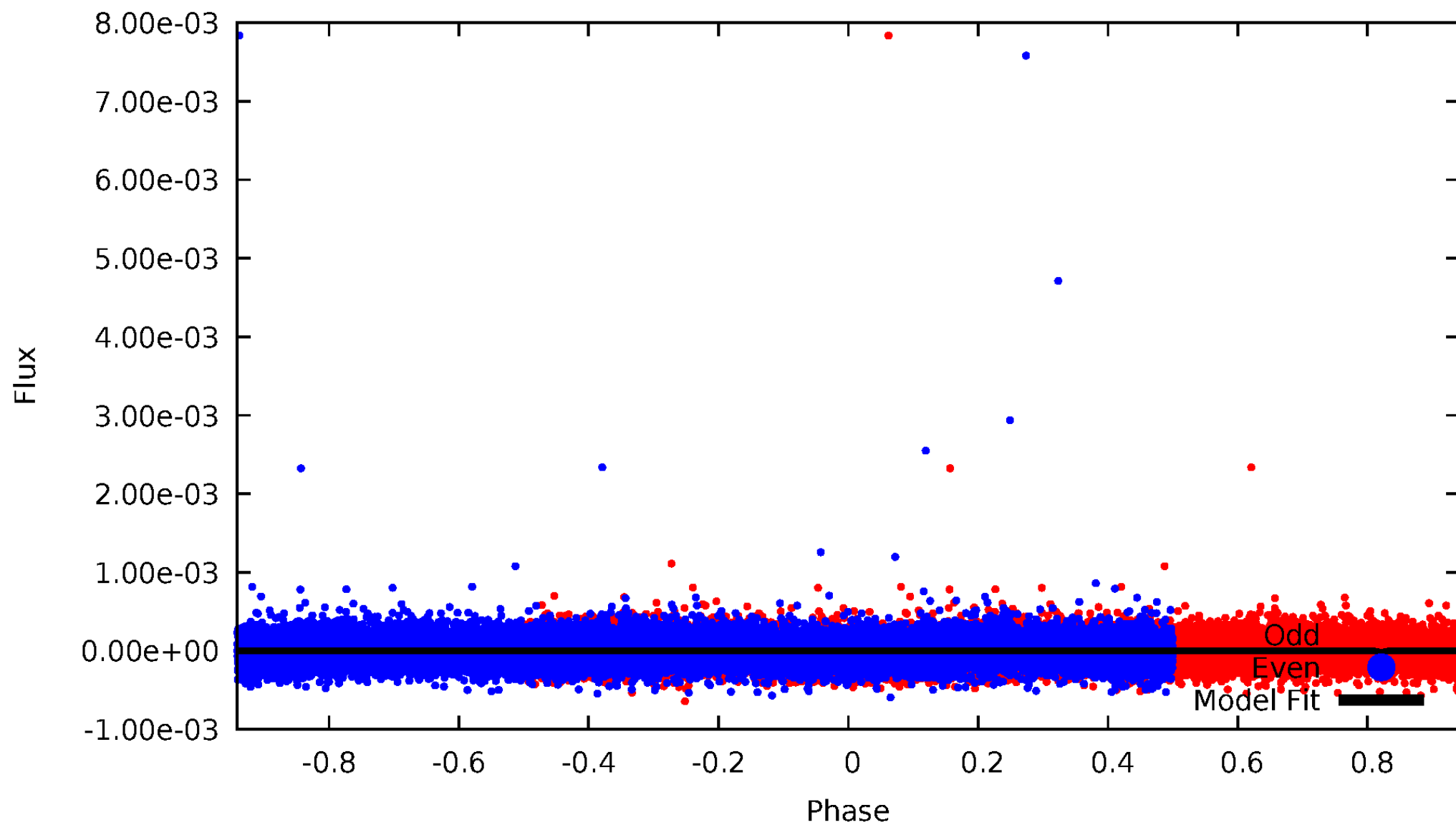


TCE 005641294-03



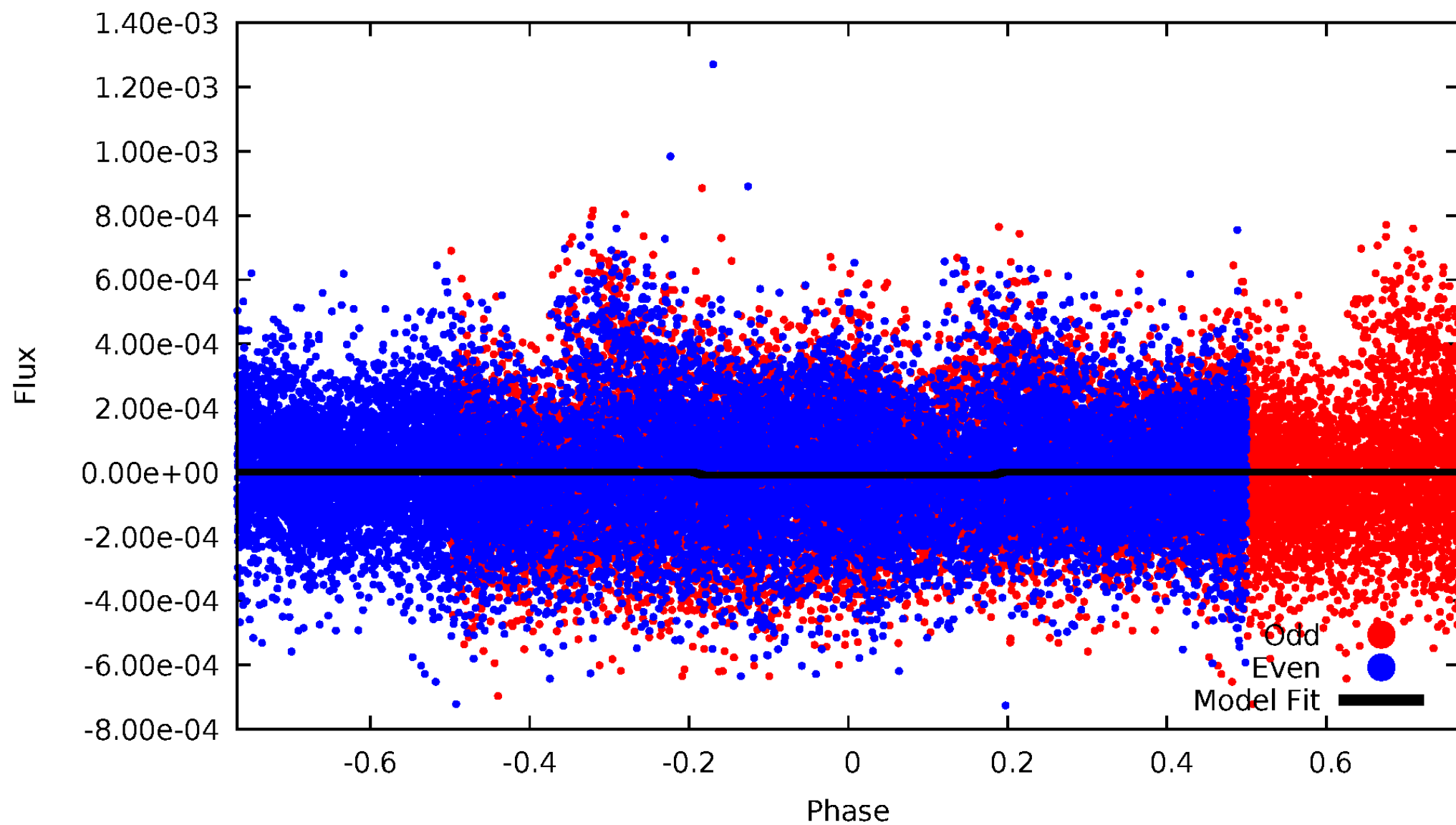
DV Odd/Even

TCE 005641294-03



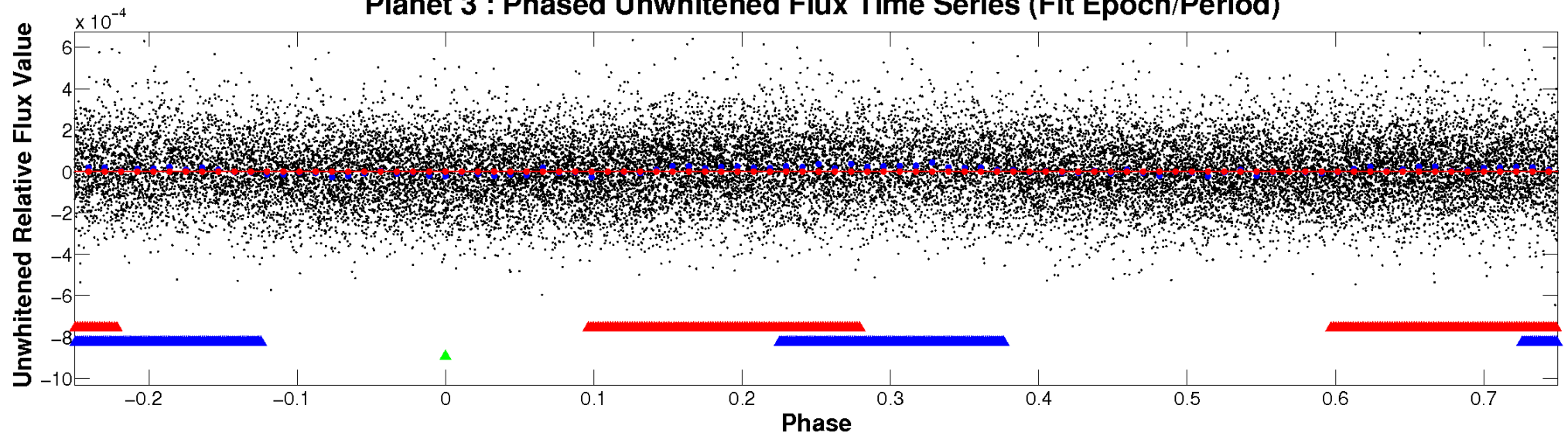
ALT Odd/Even

TCE 005641294-03

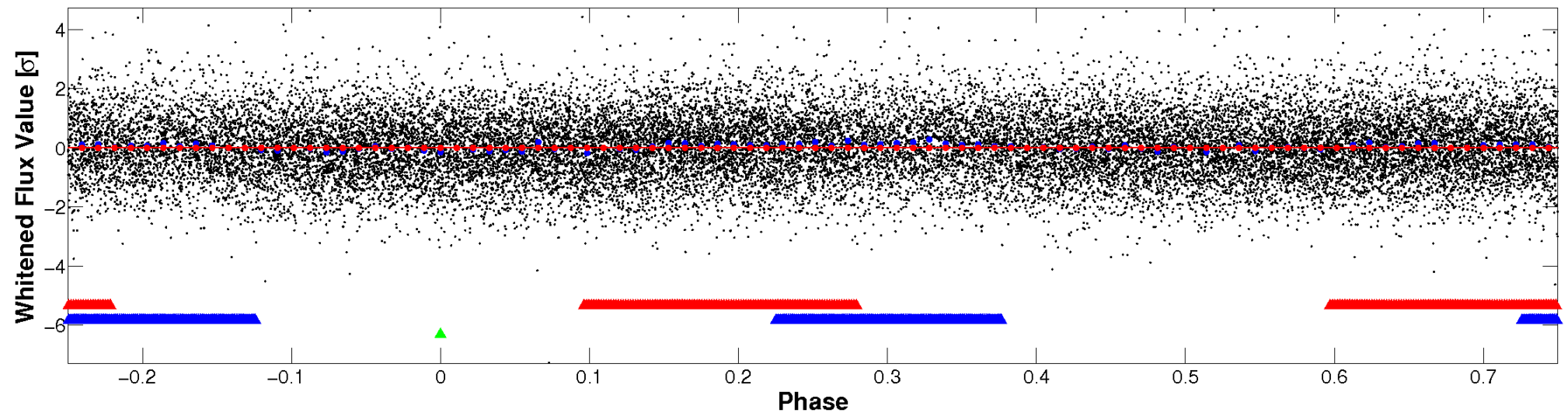


Non-Whitened Vs. Whitened Light Curve

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

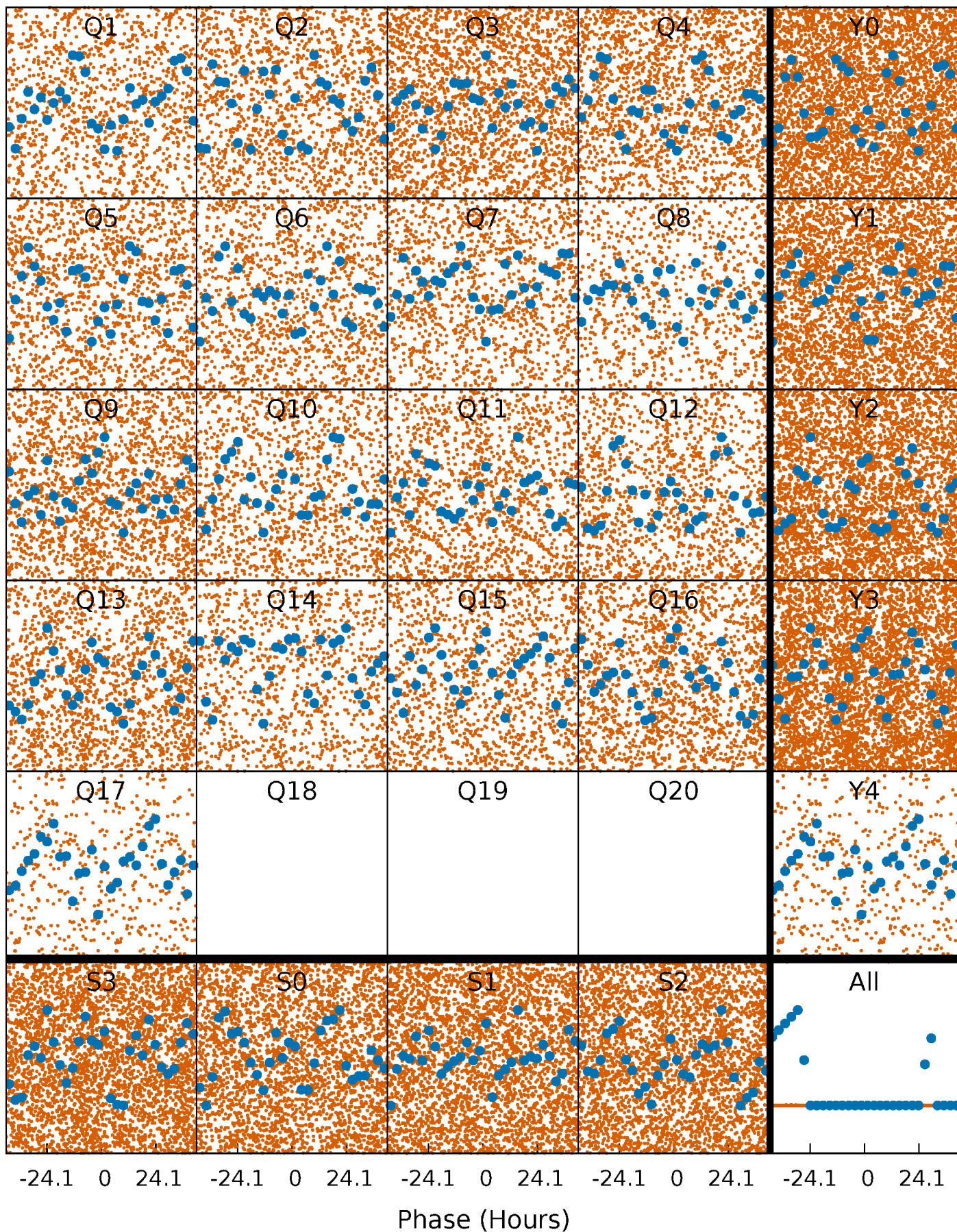


Planet 3 : Phased Whitened Flux Time Series (Fit Epoch/Period)



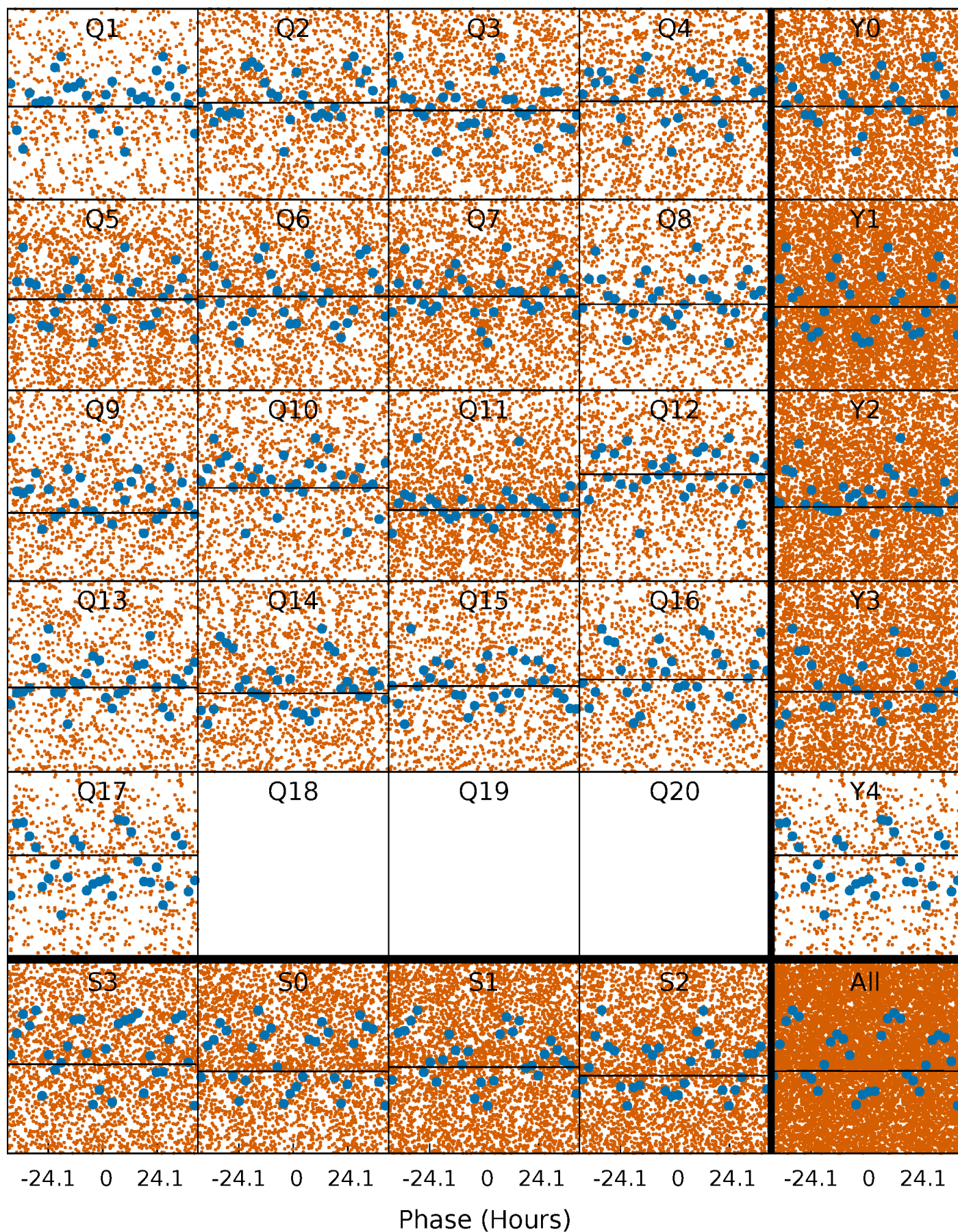
PDC Quarter-Phased Transit Curves

TCE 005641294-03 P= 1.868016 Days $T_0=133.527144$ (BKJD)



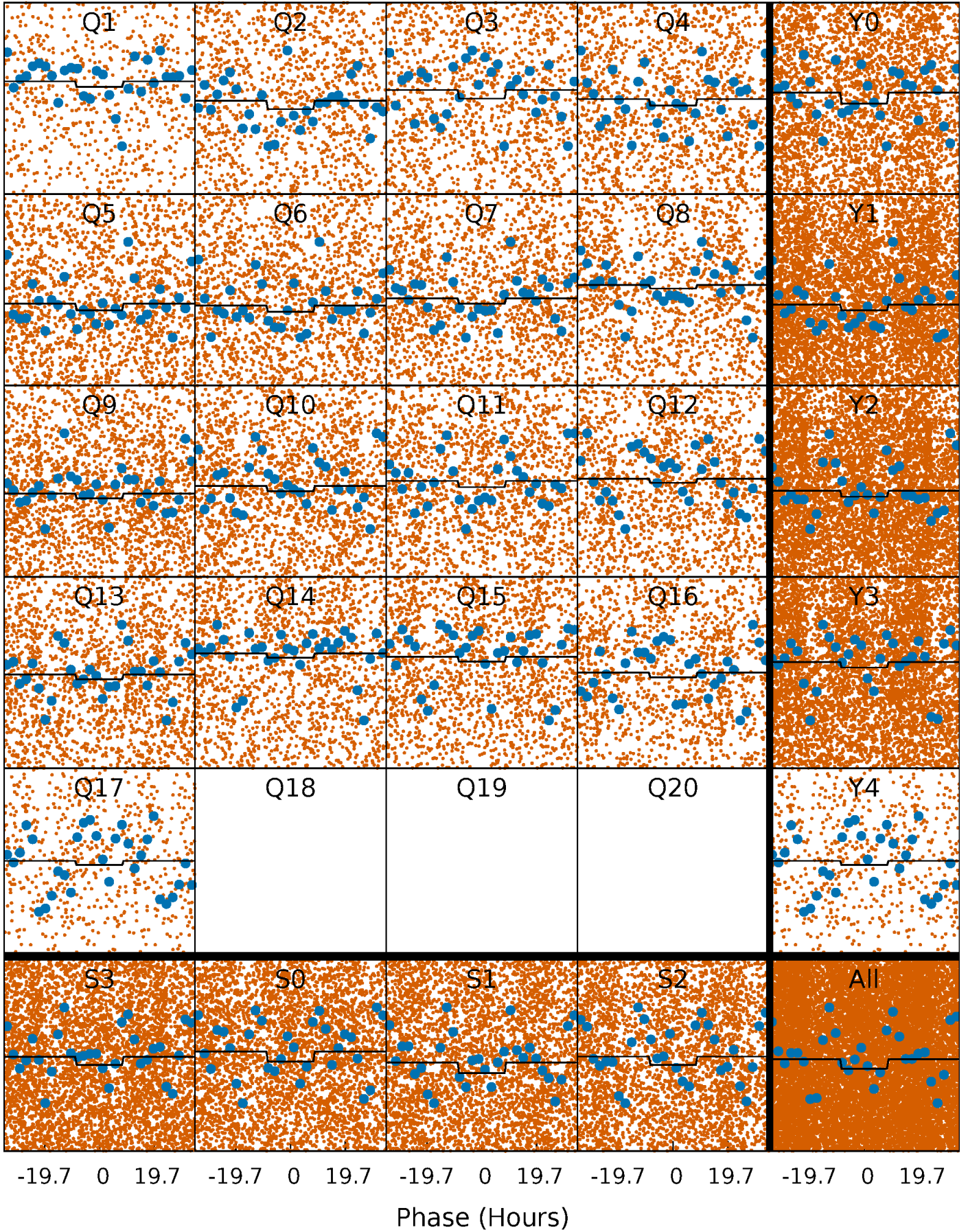
DV Quarter-Phased Transit Curves

TCE 005641294-03 P= 1.868016 Days $T_0=133.527144$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

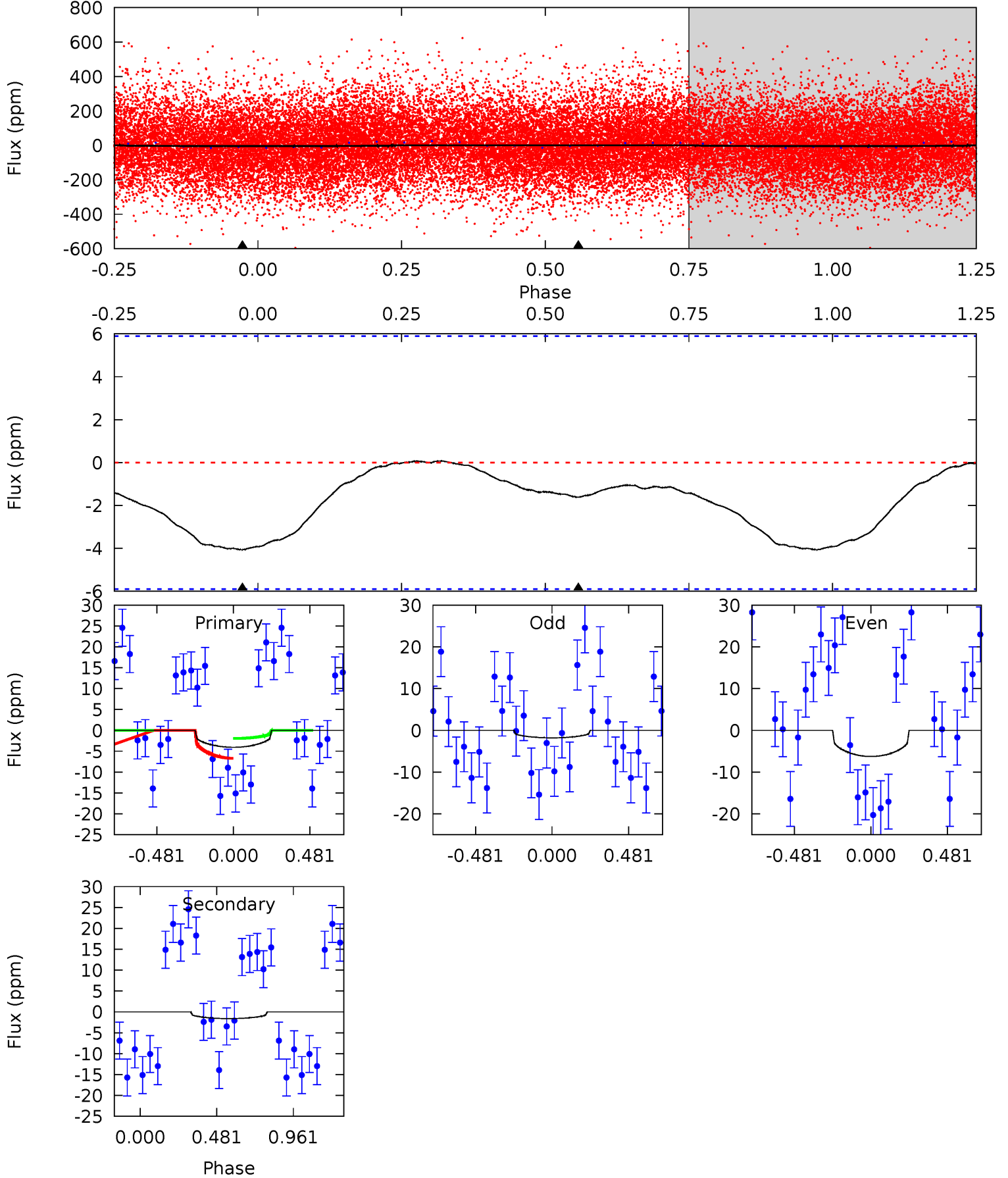
TCE 005641294-03 P= 1.868706 Days $T_0=133.589440$ (BKJD)



DV Model-Shift Uniqueness Test

005641294-03, P = 1.868016 Days, E = 131.659128 Days

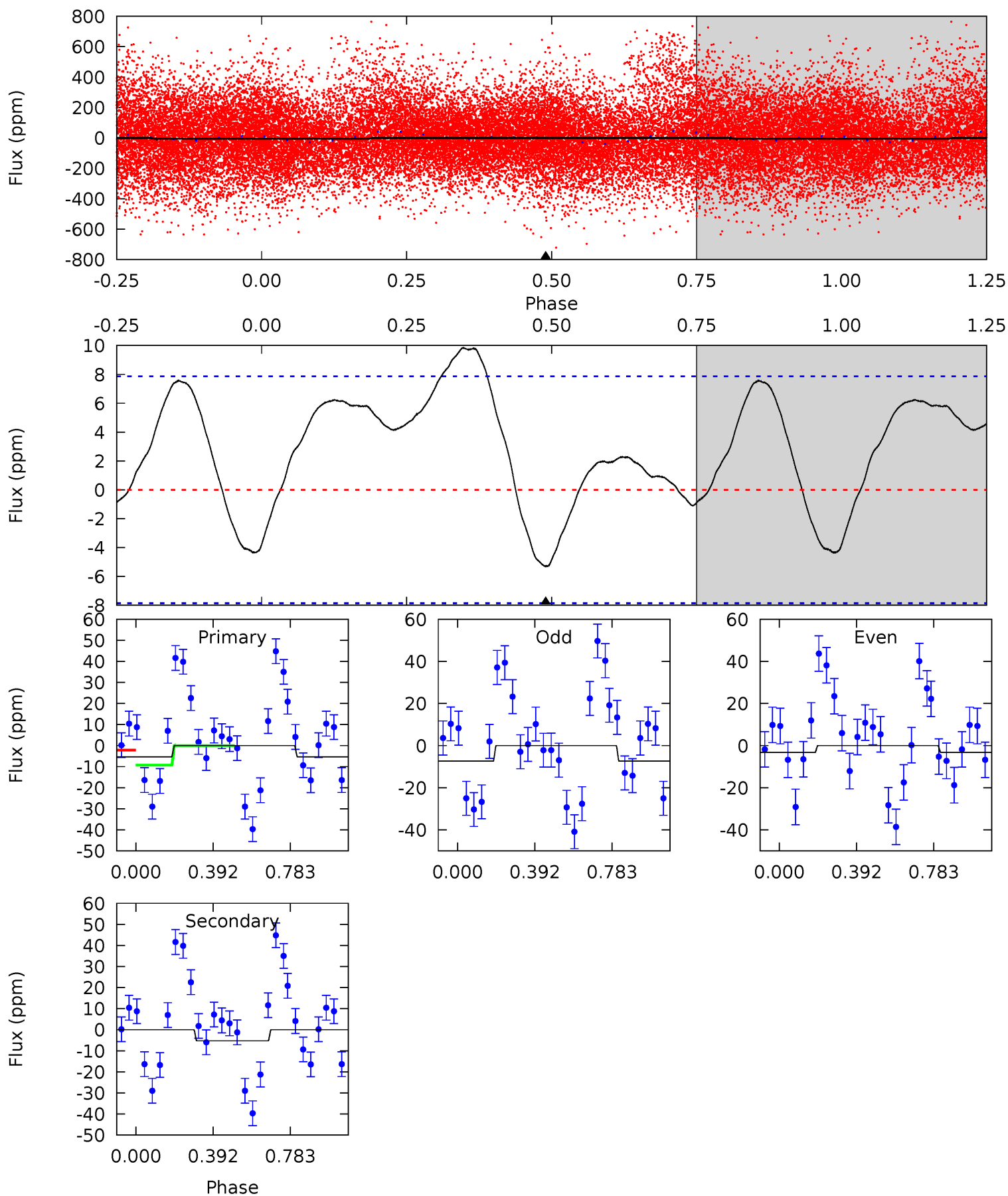
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
2.91	1.16	0	0	4.22	0.71	0.06	2.91	2.91	1.16	1.16	1.61	-0.33	0.02	1.78



Alt Model-Shift Uniqueness Test

005641294-03, P = 1.868706 Days, E = 131.720734 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
2.88	2.88	0	0	4.27	0.86	1.85	2.88	2.88	2.88	2.88	1.12	-11.8	0.65	1.92



Stellar Parameters For KIC 005641294

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6651^{+187}_{-258}	$4.268^{+0.105}_{-0.195}$	$-0.140^{+0.250}_{-0.300}$	$1.355^{+0.440}_{-0.237}$	$1.247^{+0.187}_{-0.187}$	$0.707^{+0.411}_{-0.370}$
	+3%/-4%	+2%/-5%	+179%/-214%	+32%/-17%	+15%/-15%	+58%/-52%
Source	PHO54	PHO54	PHO54	DSEP		

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

Secondary Eclipse Parameters for KIC 005641294-03 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-2 ± 1	$5.31^{+5.49}_{-3.59}$	2711^{+203}_{-165}	-2846^{+522}_{-158}	$0.023^{+0.225}_{-0.021}$
Alt.	-5 ± 2	$5.30^{+5.73}_{-3.62}$	2705^{+206}_{-159}	-2731^{+6033}_{-199}	$0.100^{+0.924}_{-0.078}$

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 $A_{obs} \gg 1.0$

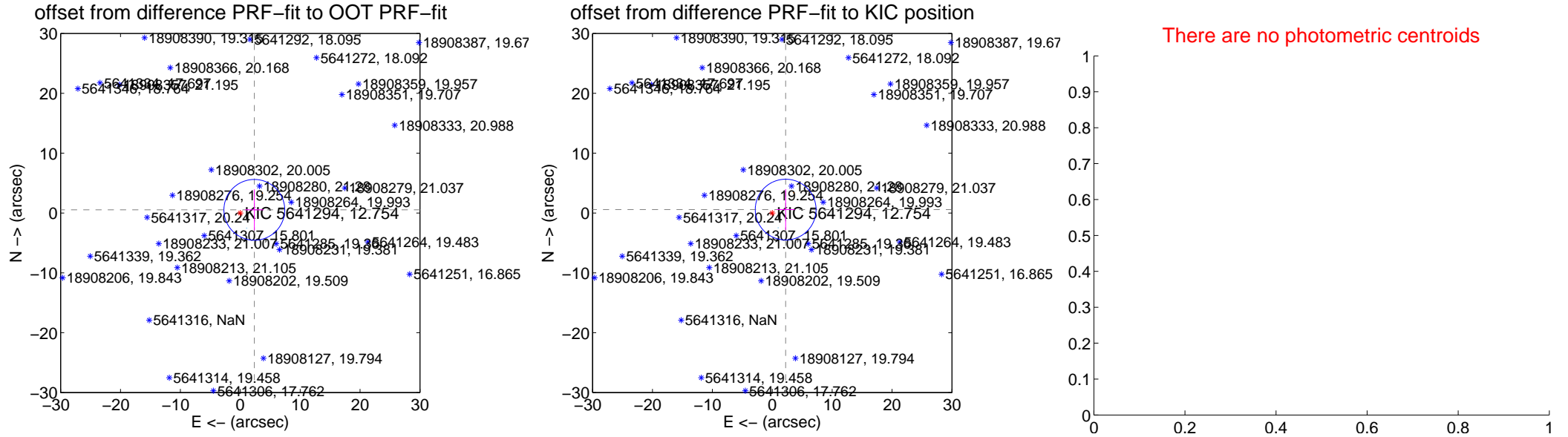
DV Centroid Data

Supplemental centroid analysis for 005641294-03. Kepler magnitude: 12.75. Transit SNR 0.02

There are 1 quarters with good PRF difference image offsets

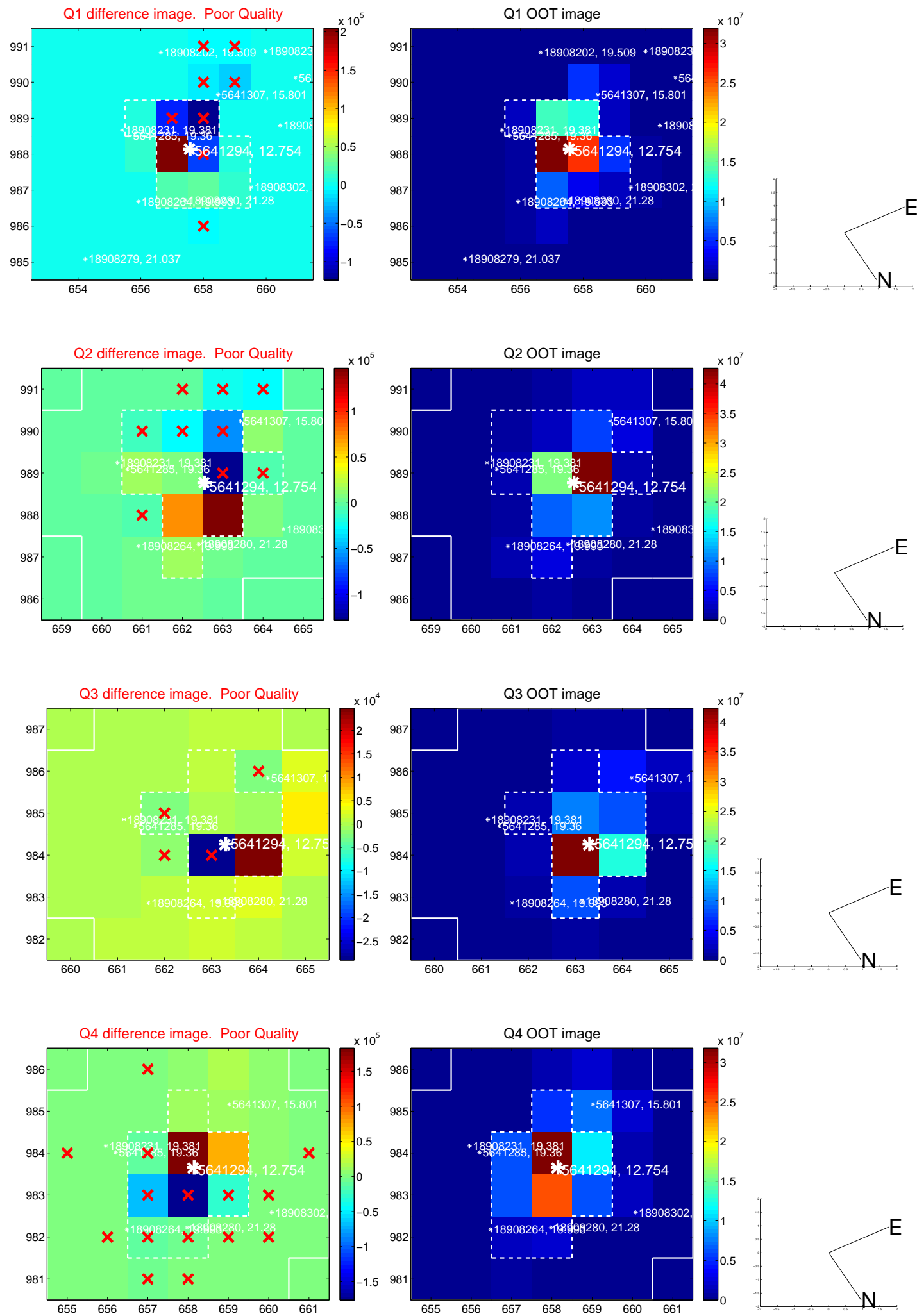
The direct PRF centroid is offset from the target star catalog position by about 0.15 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	2.404 ± 1.693	1.42	-2.345 ± 1.554	0.530 ± 3.420
PRF-fit source offset from KIC position	2.310 ± 1.692	1.36	-2.238 ± 1.514	0.570 ± 3.417
photometric centroid source offset	—	—	—	—

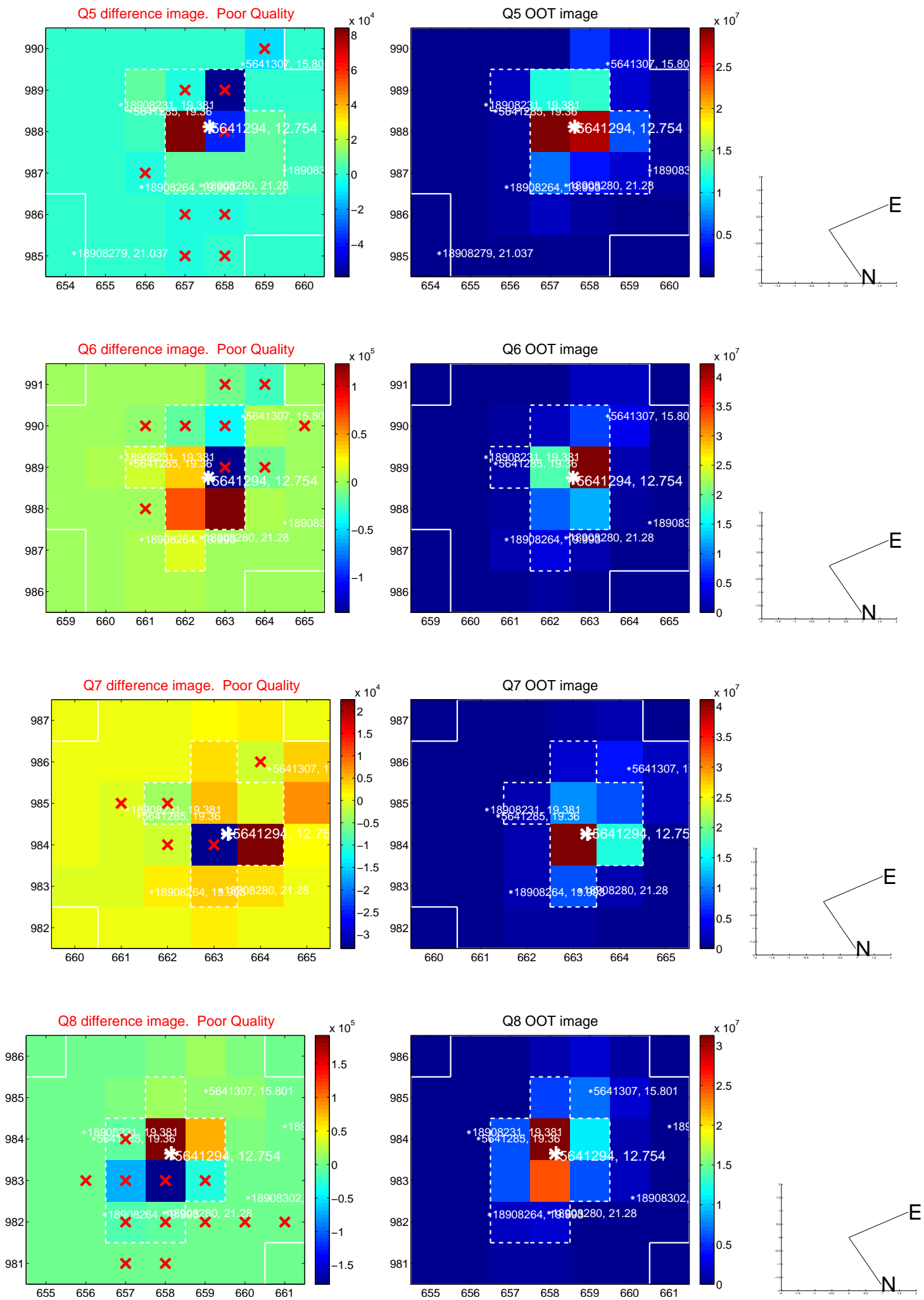


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

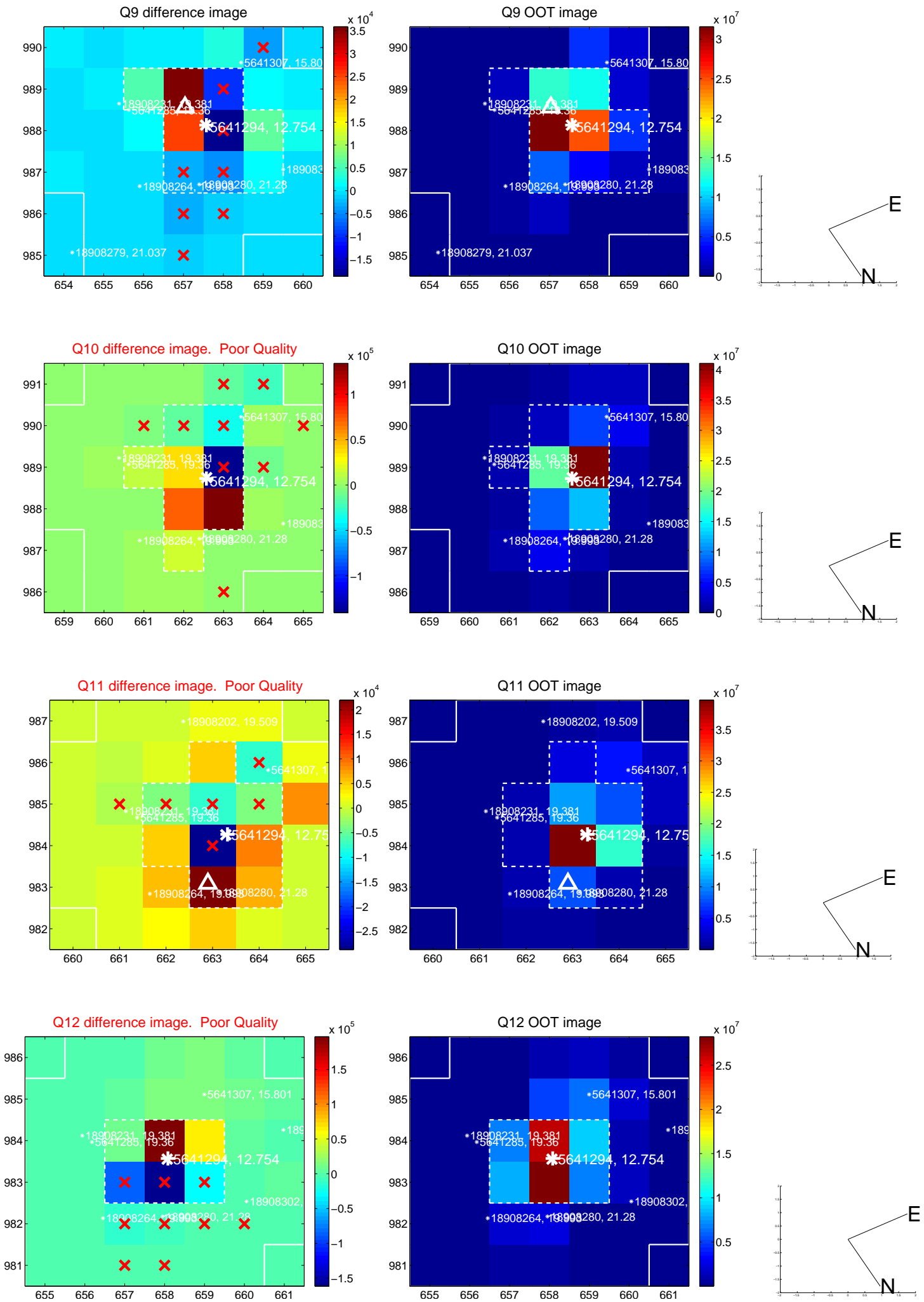
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



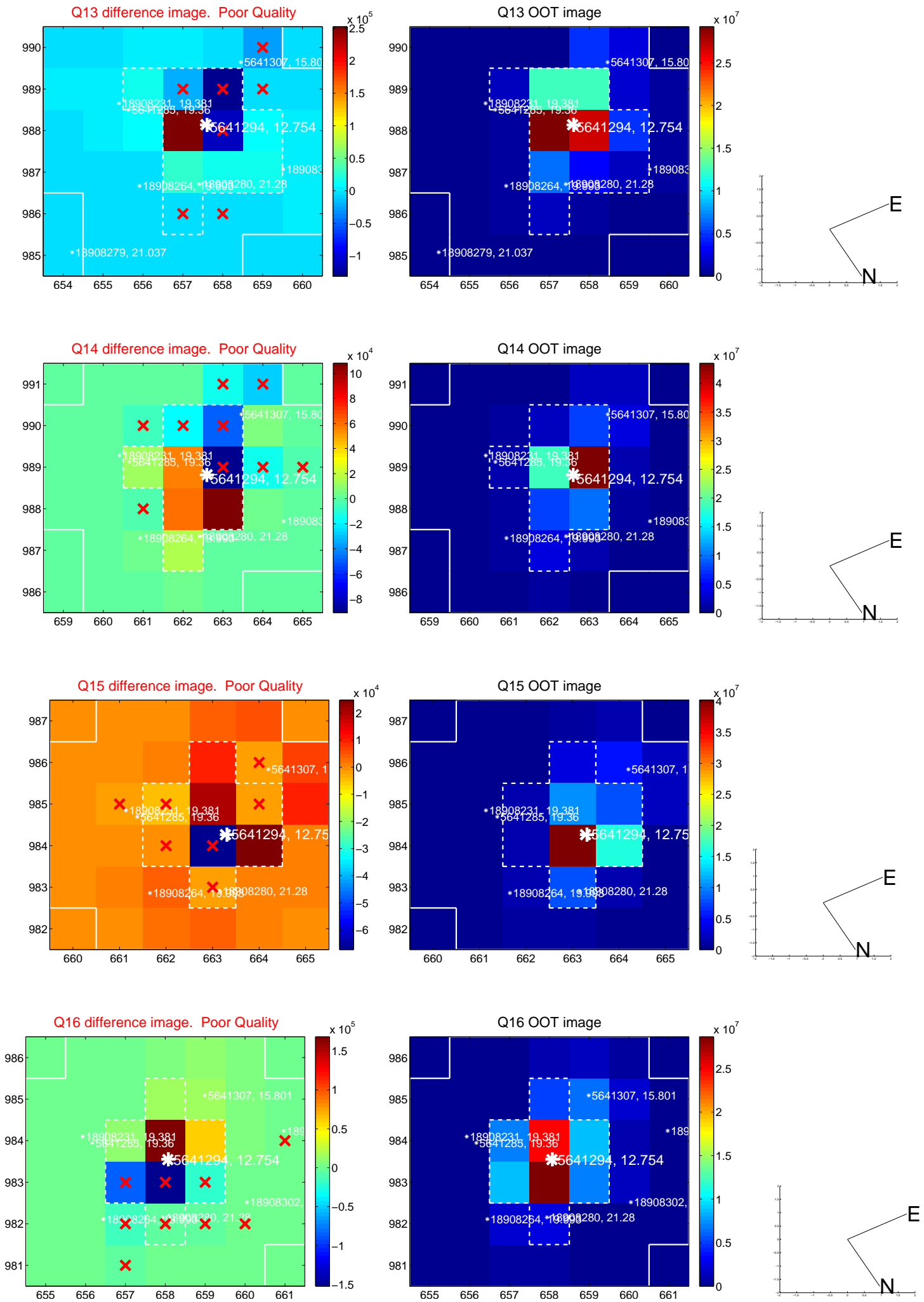
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



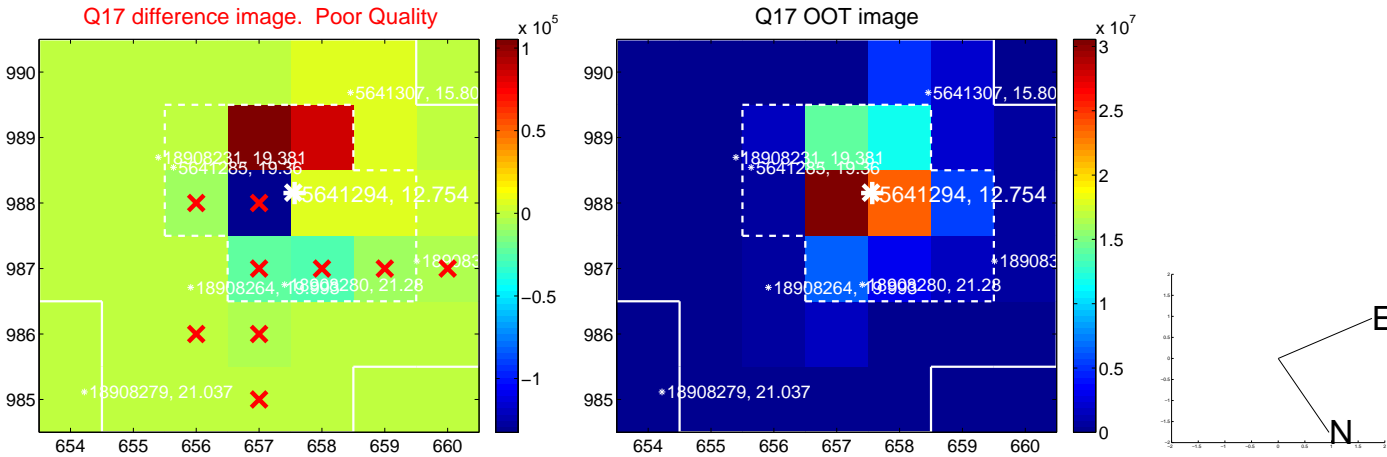
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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.



folded centroid time series figure for this object.

UKIRT Image

Declination

