

KIC 011127641

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})
011127641-01	OBS	No	0.827116	131.746829	12.4	6.140	8.6	4.8	1.89	7311	0.68	22884.11
011127641-02	OBS	No	6.195654	136.748929	460.6	1.410	17.0	14.7	1.89	7311	4.38	1561.37
011127641-03	OBS	No	8.138607	131.833482	98.7	6.690	12.6	6.9	1.89	7311	2.18	1085.32
011127641-04	OBS	No	16.897915	137.465436	464.9	2.313	12.2	11.0	1.89	7311	7.29	409.74
011127641-05	OBS	No	21.505833	134.667245	549.1	1.500	12.1	-1.0	1.89	7311	4.50	297.08

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
011127641-01	OBS	FP	0.00	1	0	0	0	LPP_DV
011127641-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT
011127641-03	OBS	FP	0.00	1	0	1	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_FEW_MEAS—HALO_GHOST
011127641-04	OBS	FP	0.00	1	0	1	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV—HALO_GHOST
011127641-05	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_NOFITS

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

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

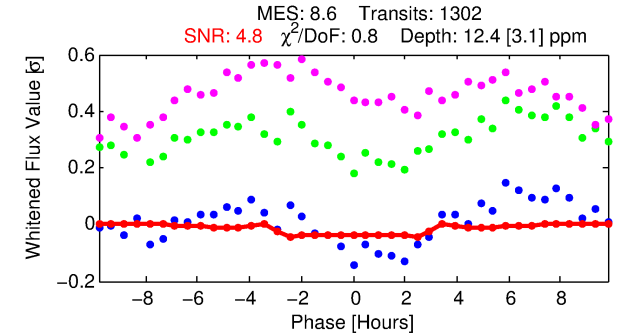
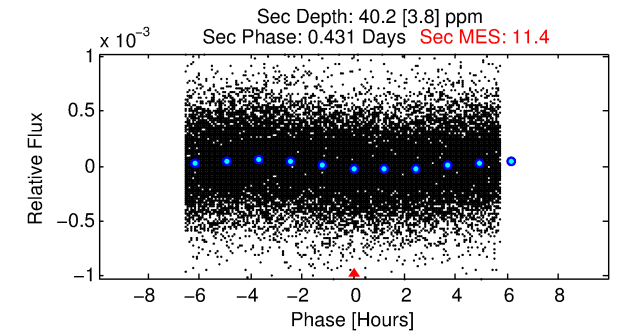
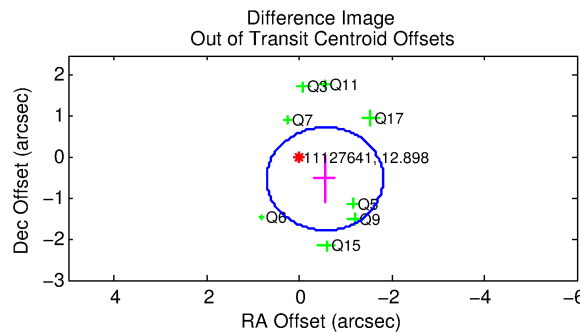
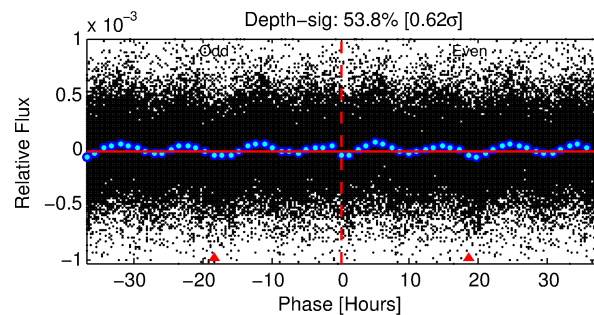
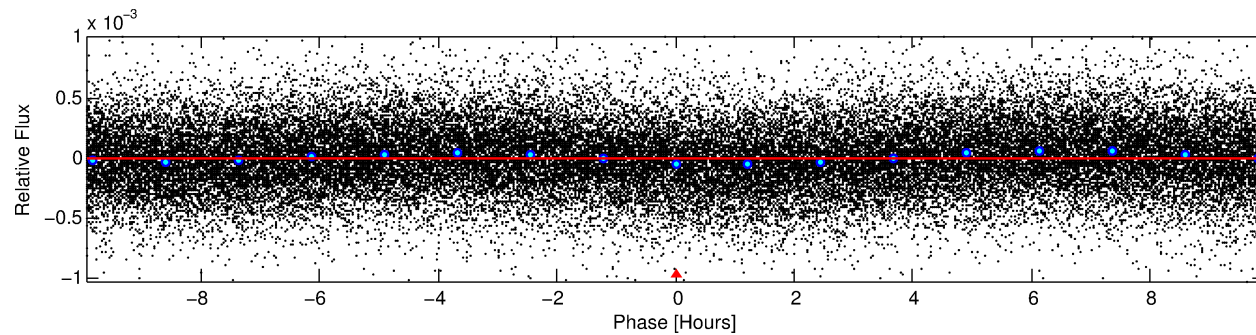
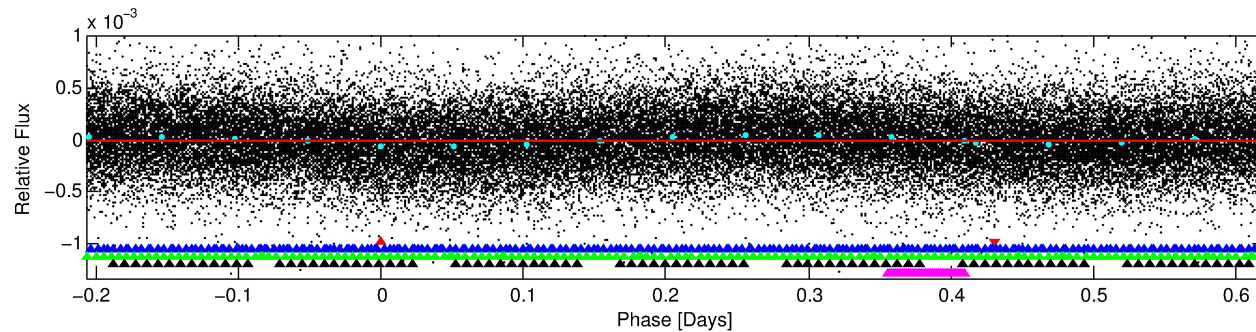
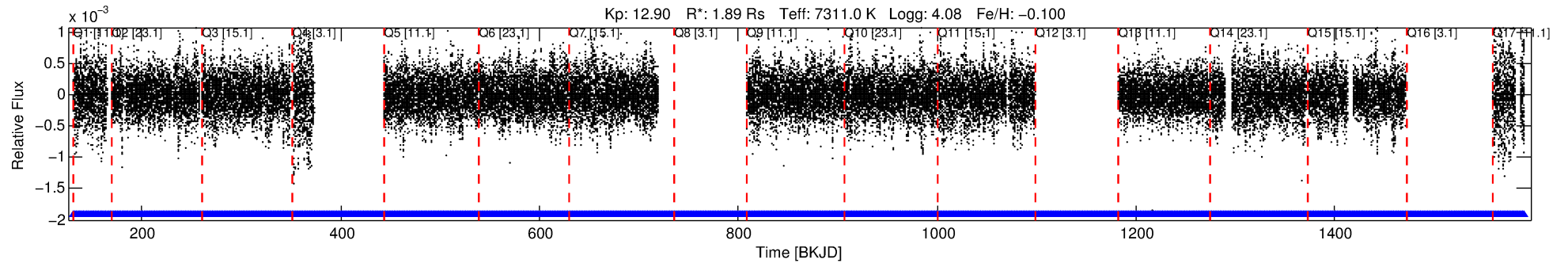
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 011127641-01

No Significant Match Found

DV One-Page Summary

KIC: 11127641 Candidate: 1 of 5 Period: 0.827 d



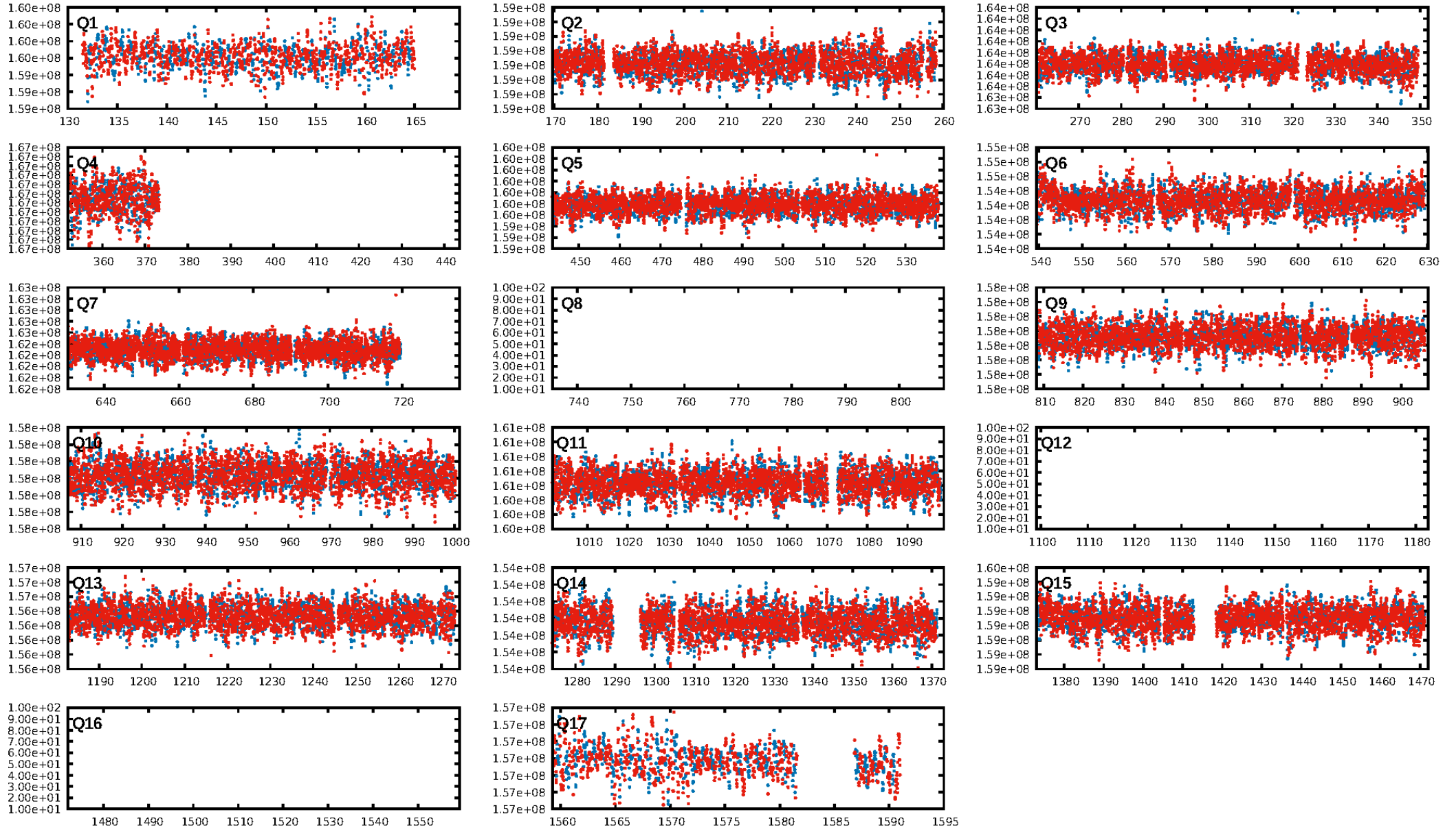
DV Fit Results:

Period = 0.82712 [0.00003] d
Epoch = 131.7468 [0.0072] BKJD
Rp/R* = 0.0033 [0.0046]
a/R* = 1.20 [3.17]
b = 0.25 [32.59]
Seff = 22884.11 [8500.01]
Teq = 3136 [291] K
Rp = 0.68 [0.98] Re
a = 0.0200 [0.0047] AU
Ag = 19.26 [54.73] [0.33 σ]
Teffp = 10158 [7185] K [0.98 σ]

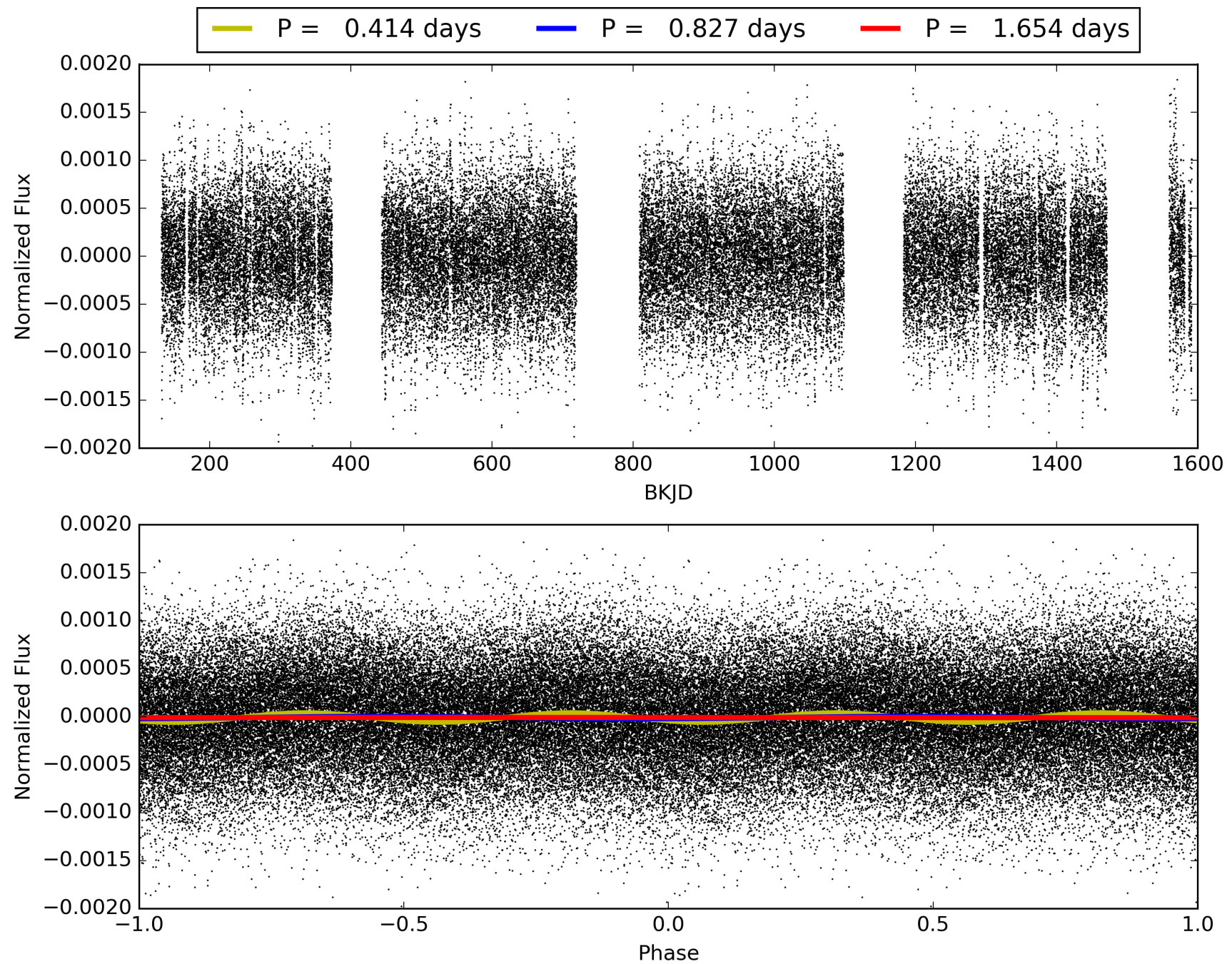
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: 100.0% [20.45 σ]
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 2.80e-08
RollingBand-fgt: 1.00 [1202/1202]
GhostDiagnostic-chr: 2.772
Centroid-sig: 5.3%
Centroid-so: 1.955 arcsec [1.91 σ]
OotOffset-rm: 0.762 arcsec [1.81 σ]
KicOffset-rm: 0.779 arcsec [1.76 σ]
OotOffset-st: 1/4/0/3 [8]
KicOffset-st: 1/4/0/3 [8]
DiffImageQuality-fgm: 0.88 [7/8]
DiffImageOverlap-fno: 1.00 [14/14]

TCE 011127641-01, PDC Light Curves

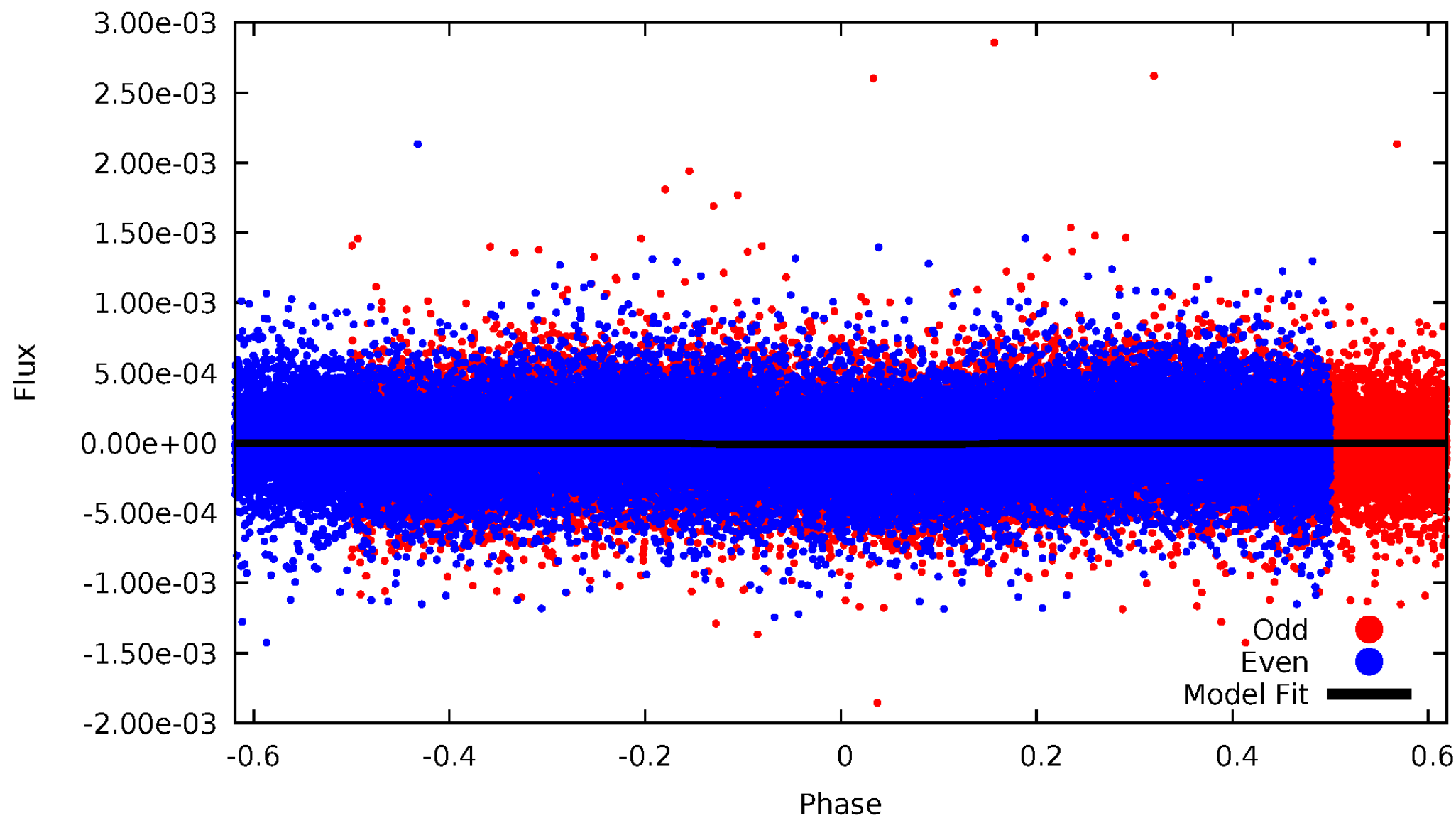


TCE 011127641-01



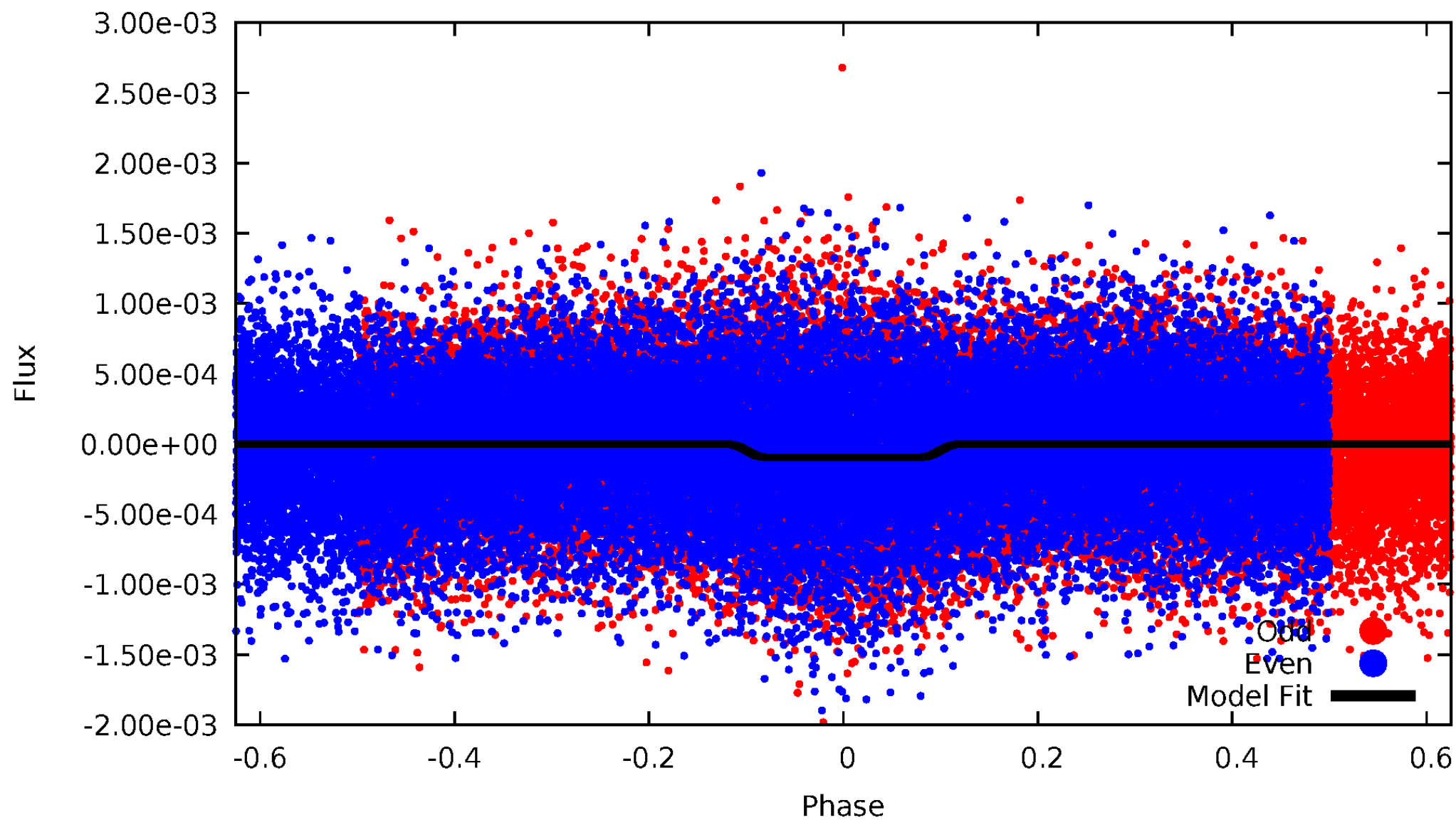
DV Odd/Even

TCE 011127641-01

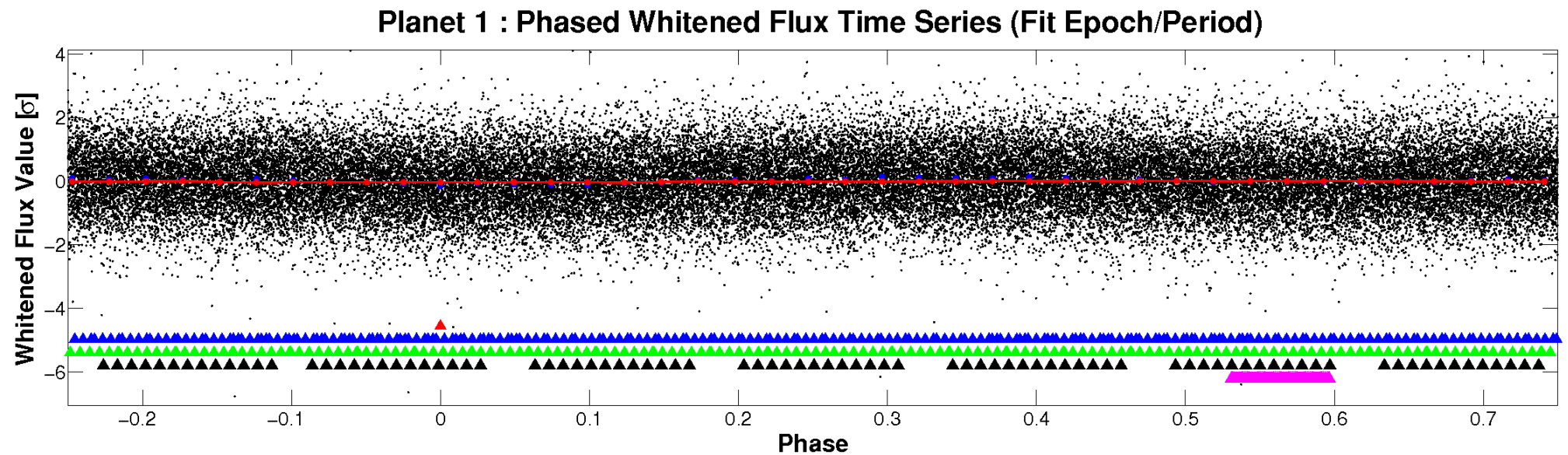
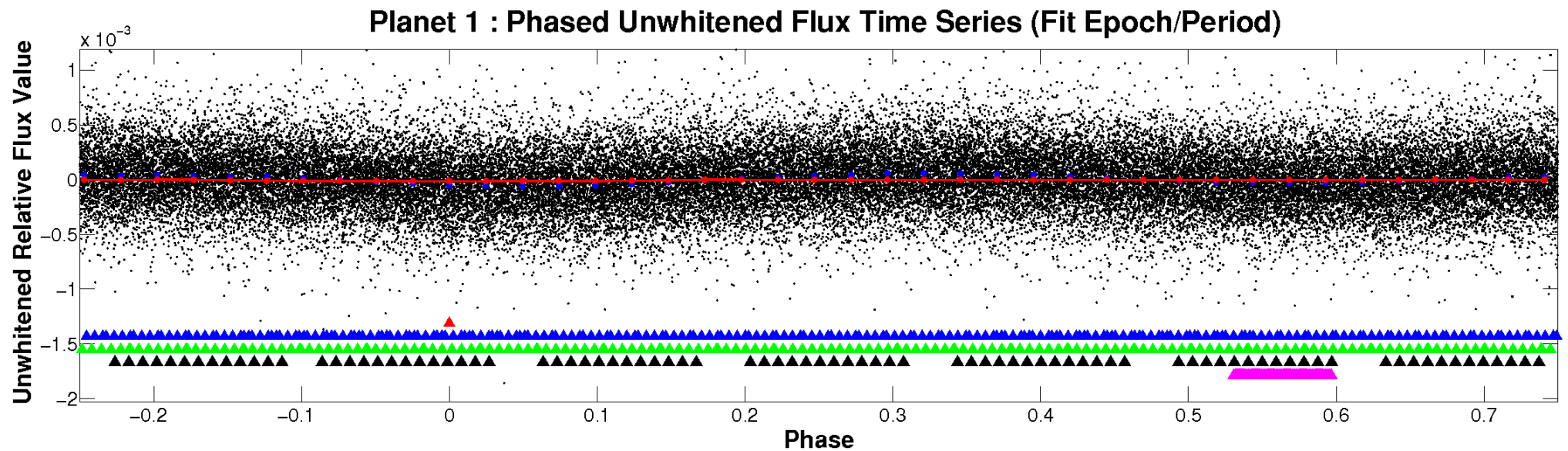


ALT Odd/Even

TCE 011127641-01

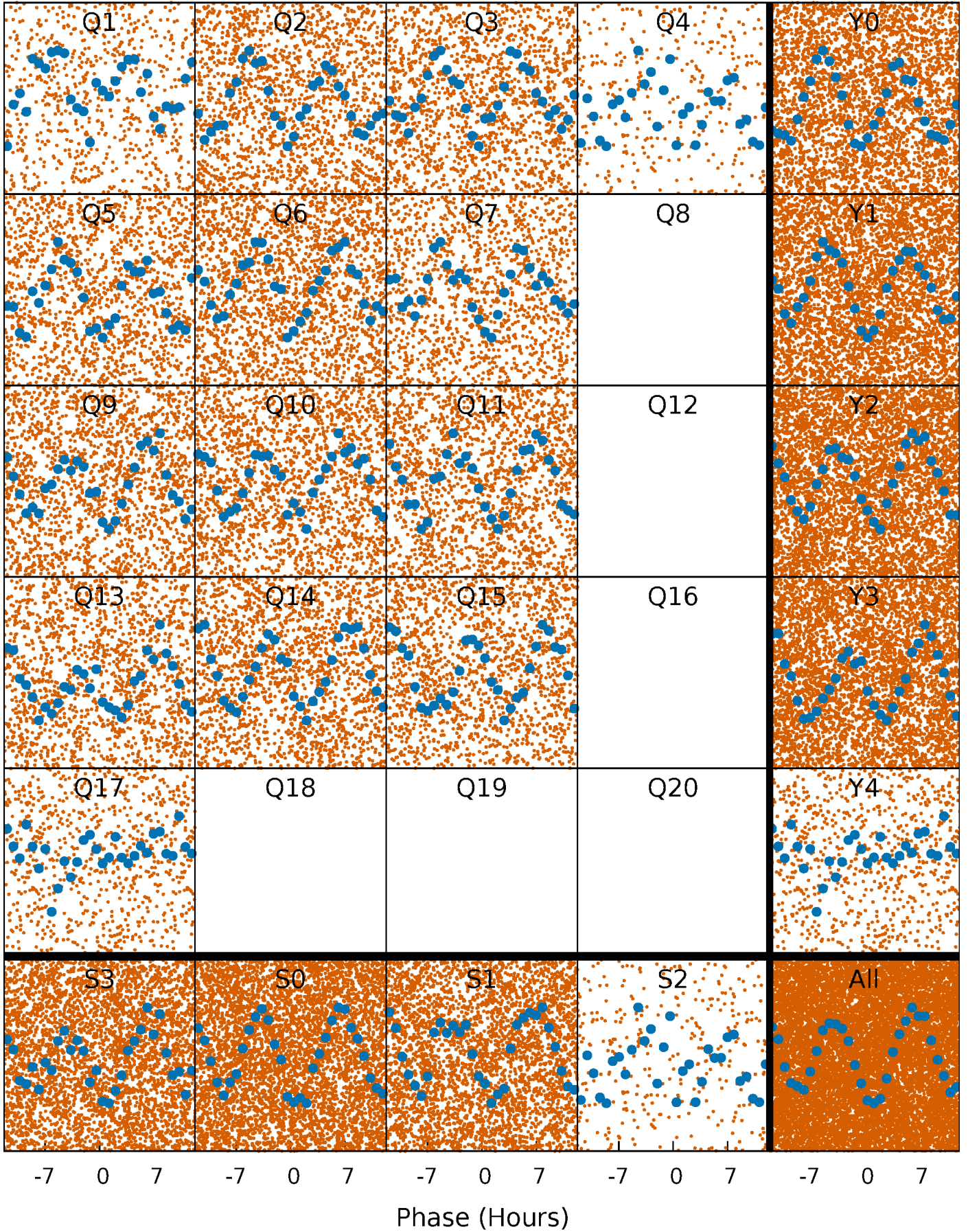


Non-Whitened Vs. Whitened Light Curve



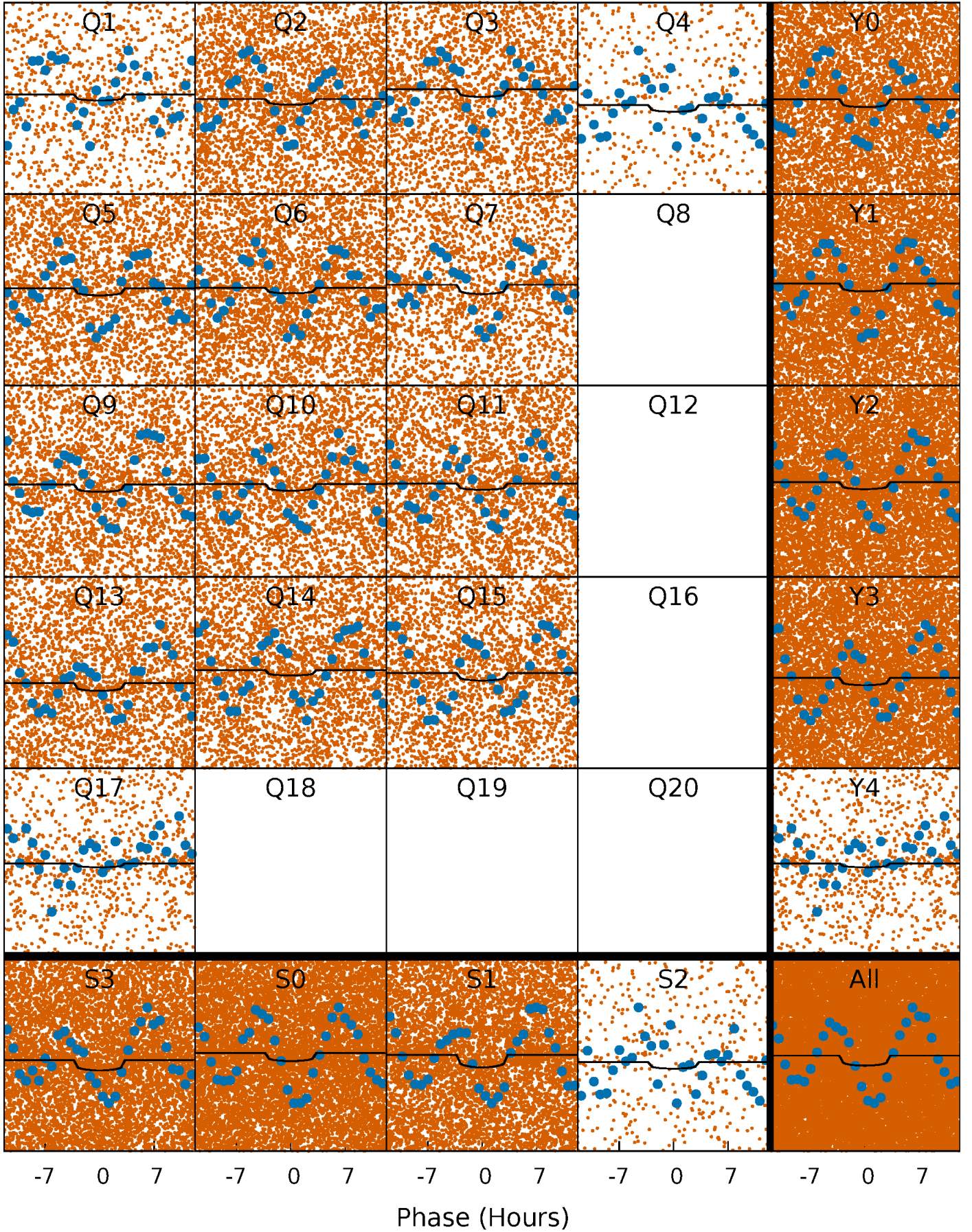
PDC Quarter-Phased Transit Curves

TCE 011127641-01 P= 0.827116 Days $T_0=131.746828$ (BKJD)



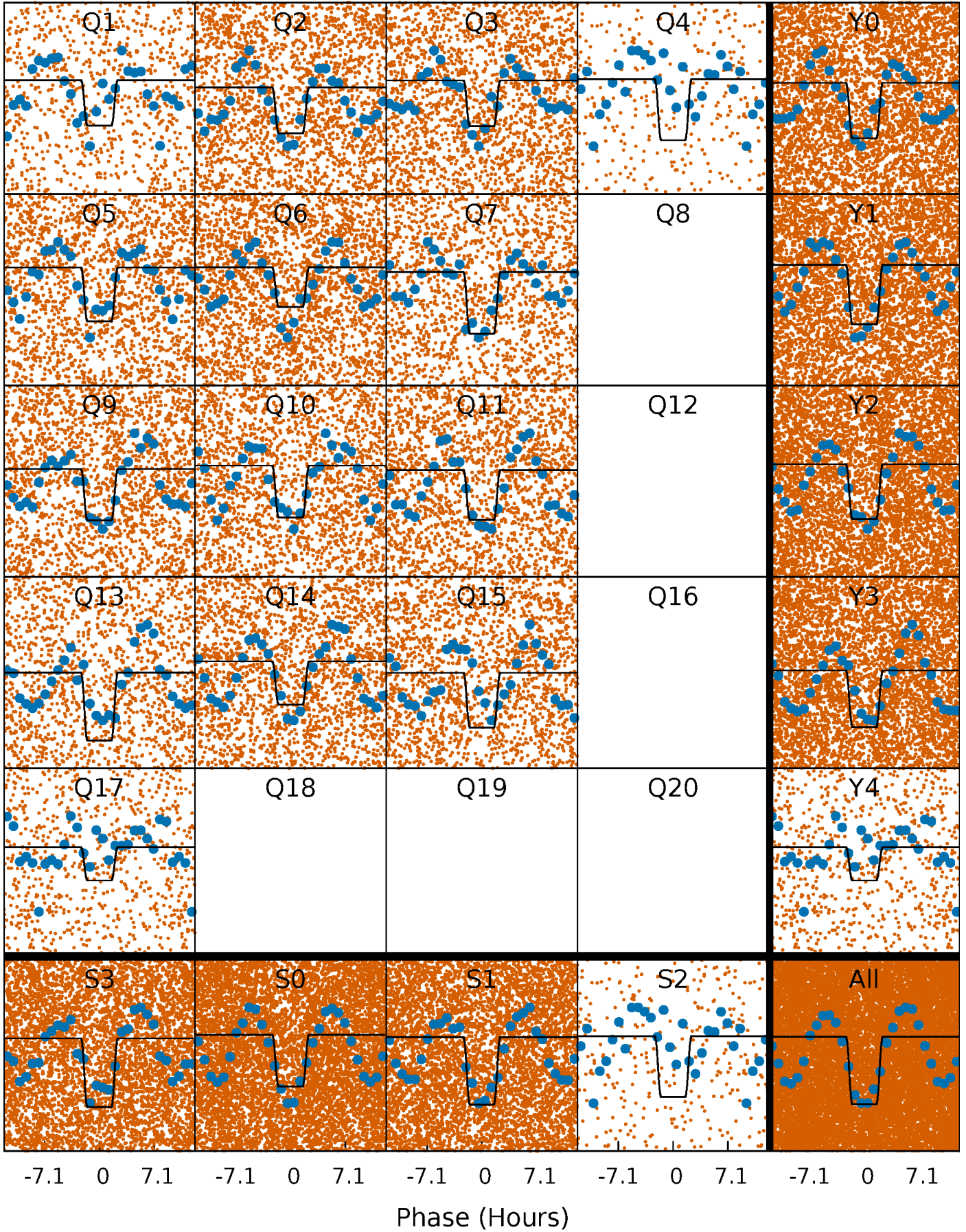
DV Quarter-Phased Transit Curves

TCE 011127641-01 P= 0.827116 Days $T_0=131.746828$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

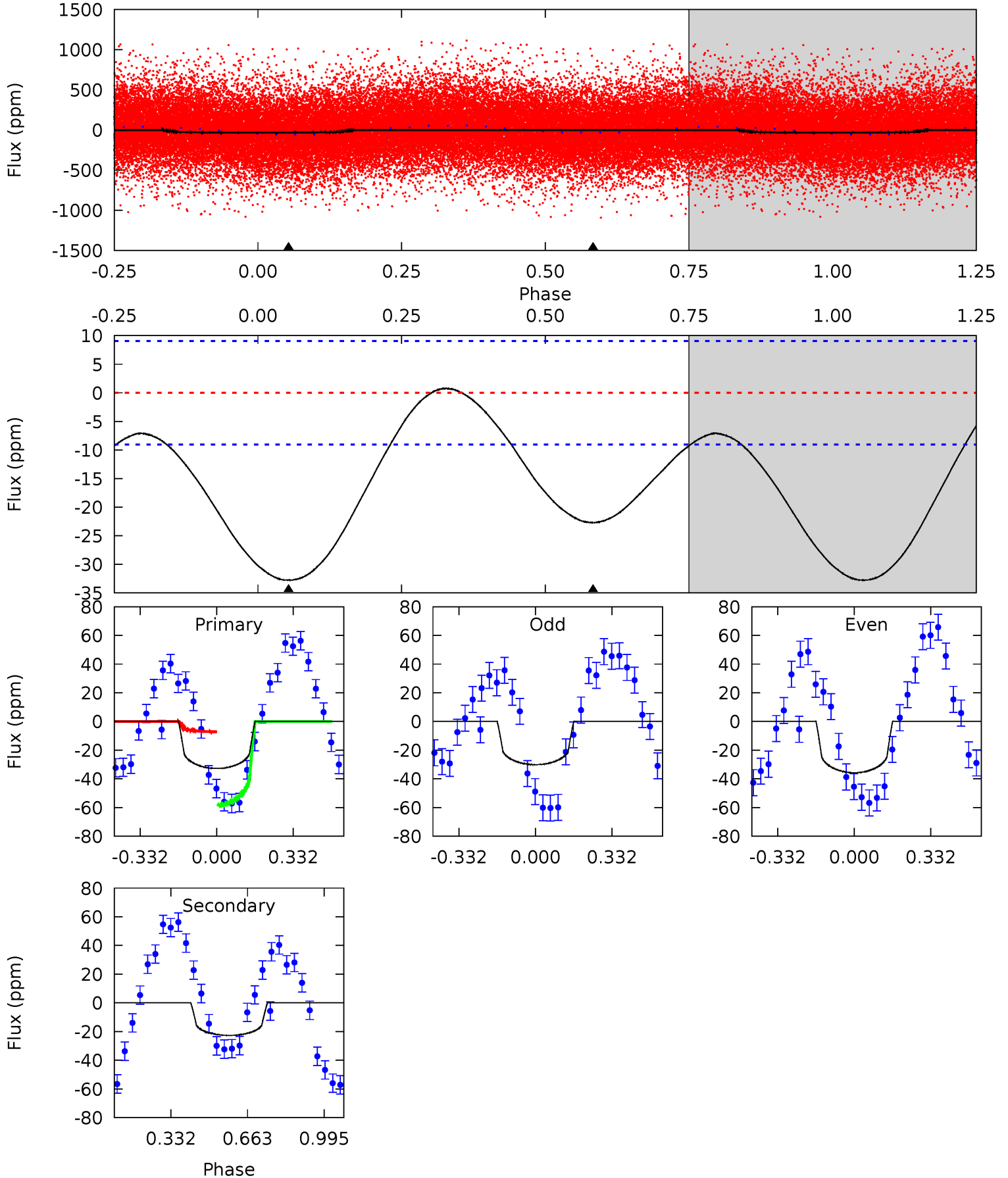
TCE 011127641-01 P= 0.827165 Days $T_0=131.752224$ (BKJD)



DV Model-Shift Uniqueness Test

011127641-01, P = 0.827116 Days, E = 130.919712 Days

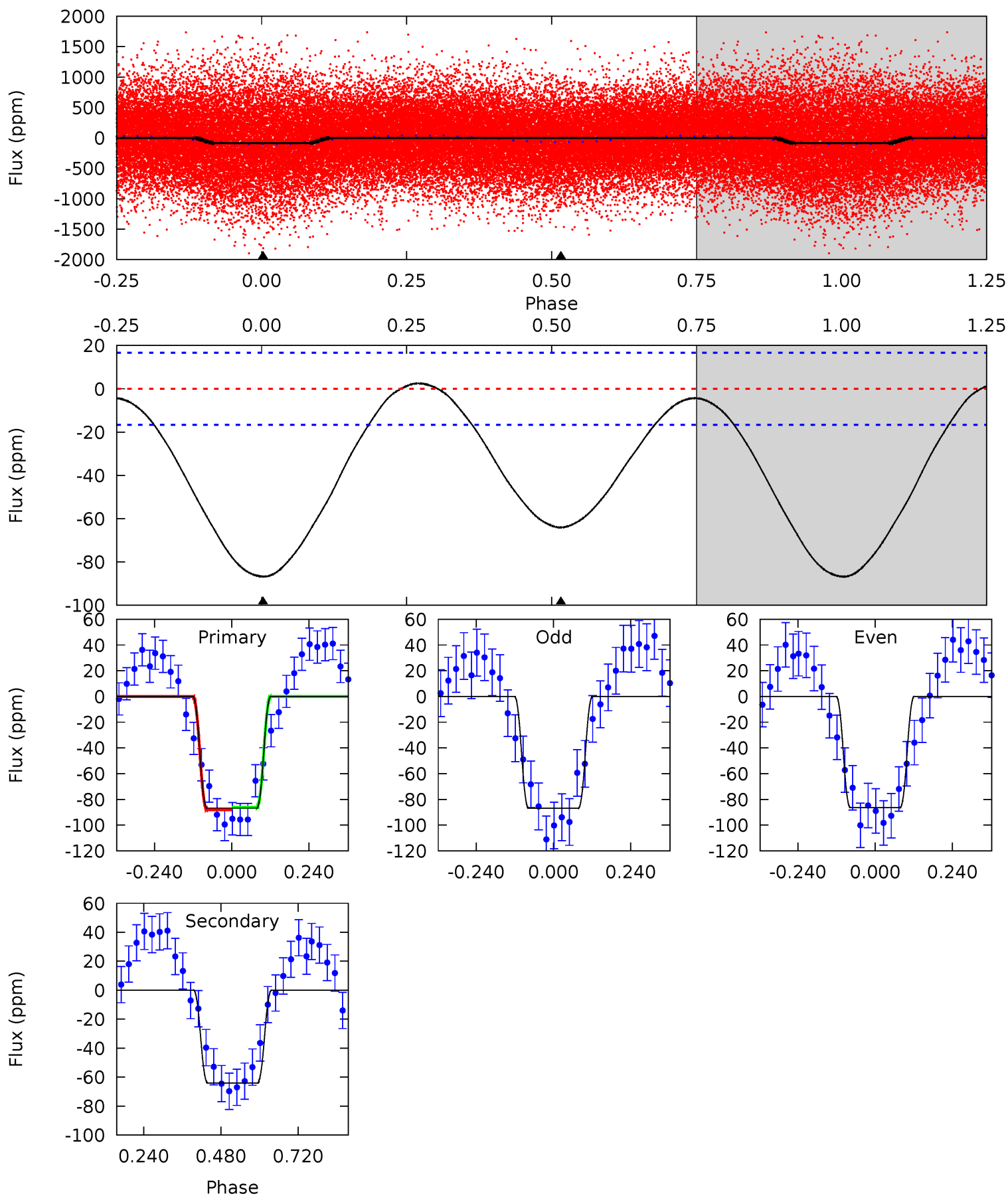
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
15.6	10.8	0	0	4.31	0.97	1.54	15.6	15.6	10.8	10.8	1.34	1.11	0.02	12.4



Alt Model-Shift Uniqueness Test

011127641-01, P = 0.827165 Days, E = 130.925059 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
22.8	16.9	0	0	4.38	1.18	0.86	22.8	22.8	16.9	16.9	0.06	0.82	0.03	0.22



Stellar Parameters For KIC 011127641

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	7311^{+228}_{-330}	$4.077^{+0.170}_{-0.170}$	$-0.100^{+0.250}_{-0.350}$	$1.889^{+0.547}_{-0.448}$	$1.551^{+0.211}_{-0.257}$	$0.324^{+0.296}_{-0.153}$
	+3%/-5%	+4%/-4%	+250%/-350%	+29%/-24%	+14%/-17%	+91%/-47%
Source	KIC0	KIC0	KIC0	DSEP		

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

Secondary Eclipse Parameters for KIC 011127641-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-23 ± 2	$0.95^{+0.96}_{-0.60}$	4380^{+328}_{-341}	7226^{+7902}_{-2260}	$5.478^{+33.869}_{-4.138}$
Alt.	-64 ± 4	$2.04^{+0.98}_{-0.99}$	4369^{+327}_{-334}	6294^{+3058}_{-1188}	$3.385^{+9.276}_{-1.843}$

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 $A_{obs} \gg 1.0$

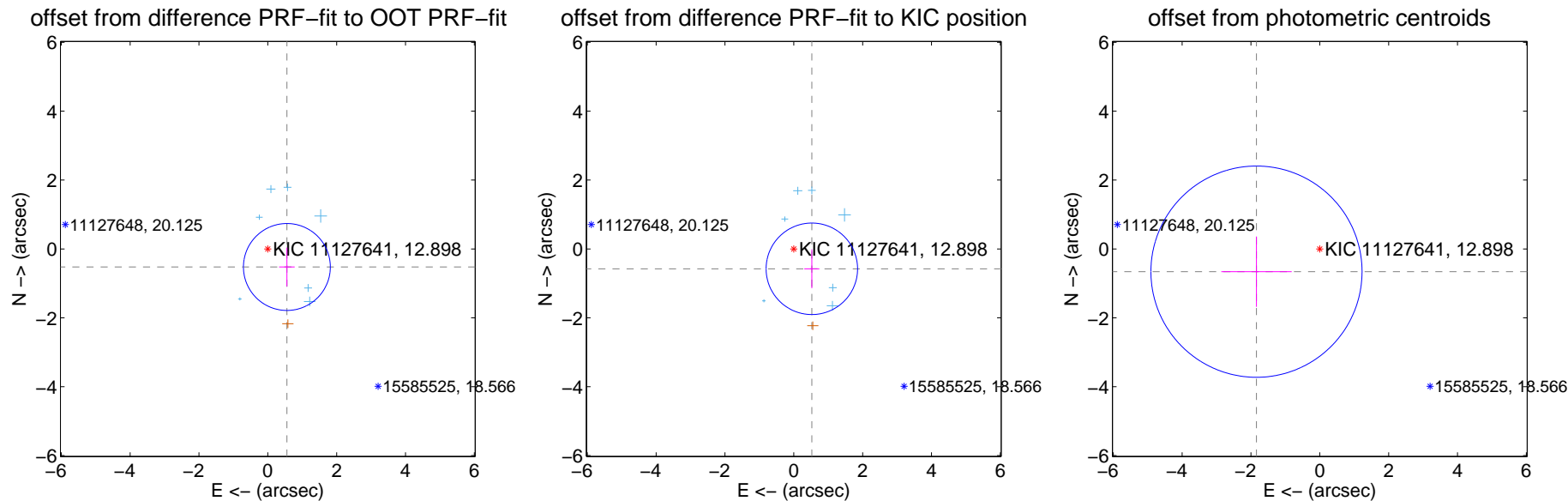
DV Centroid Data

Supplemental centroid analysis for 011127641-01. Kepler magnitude: 12.90. Transit SNR 4.76

There are 7 quarters with good PRF difference image offsets

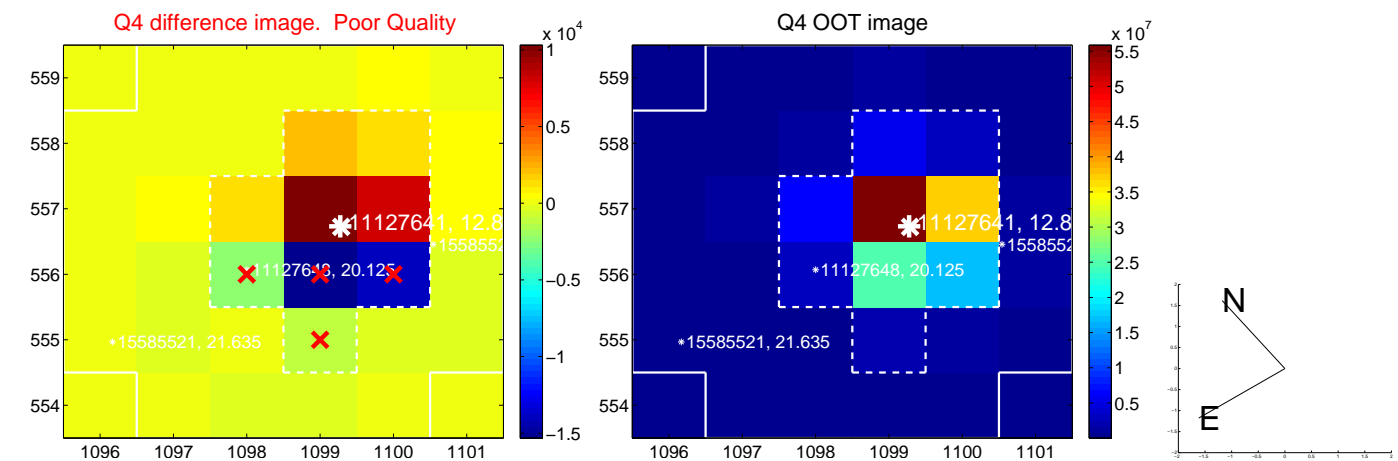
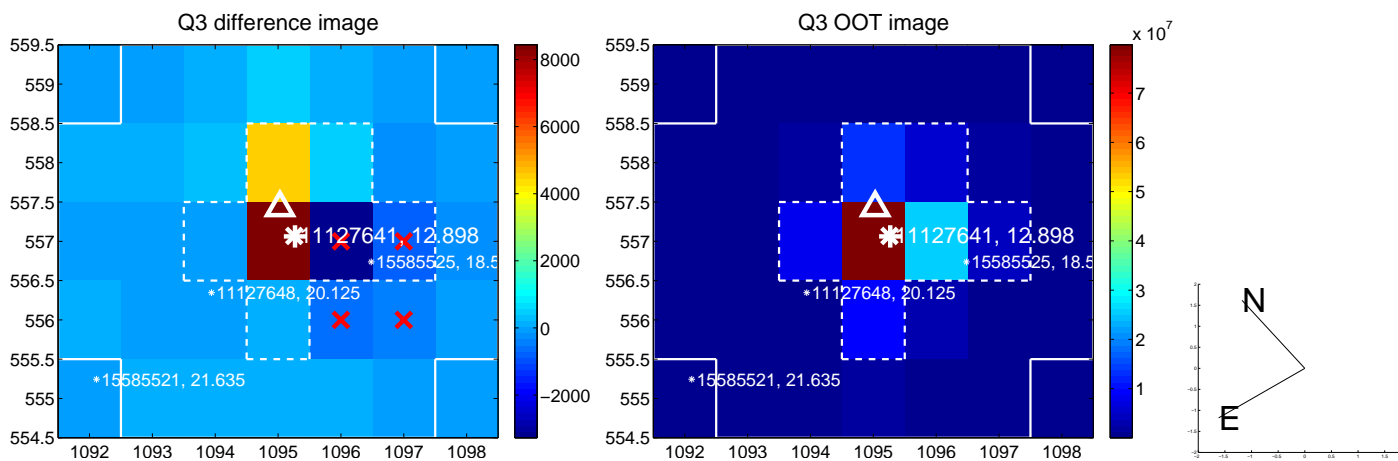
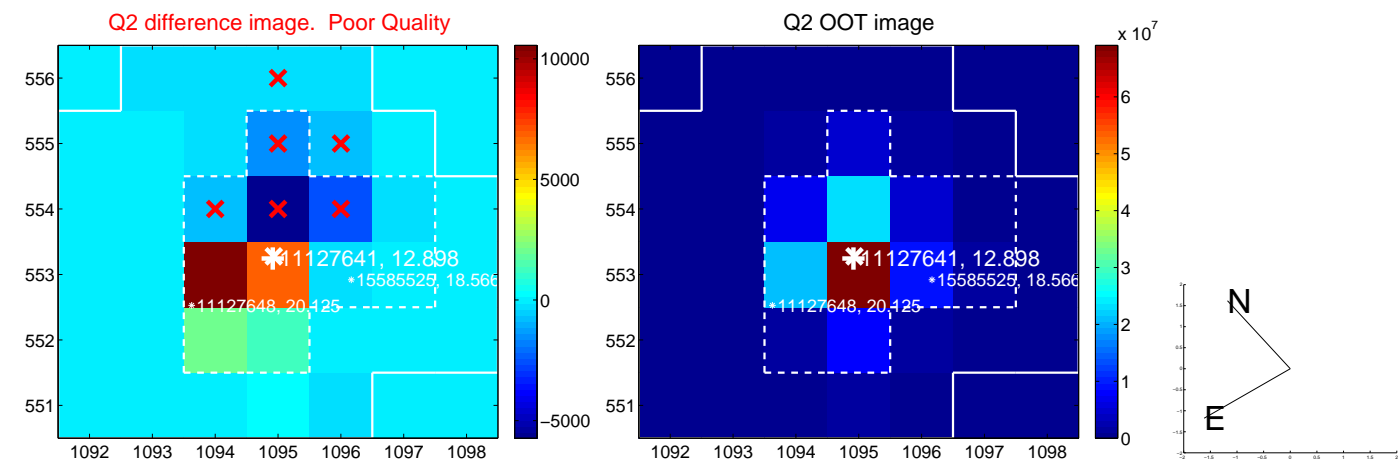
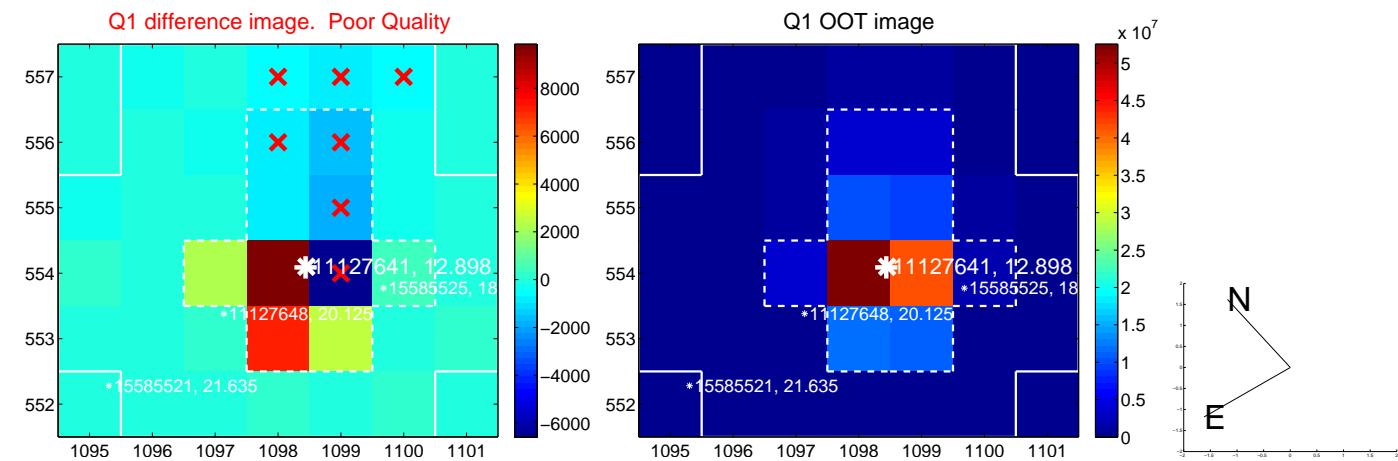
The direct PRF centroid is offset from the target star catalog position by about 0.07 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.762 ± 0.421	1.81	-0.554 ± 0.226	-0.524 ± 0.564
PRF-fit source offset from KIC position	0.779 ± 0.443	1.76	-0.524 ± 0.220	-0.577 ± 0.564
photometric centroid source offset	1.96 ± 1.02	1.91	1.84 ± 1.02	-0.66 ± 1.02

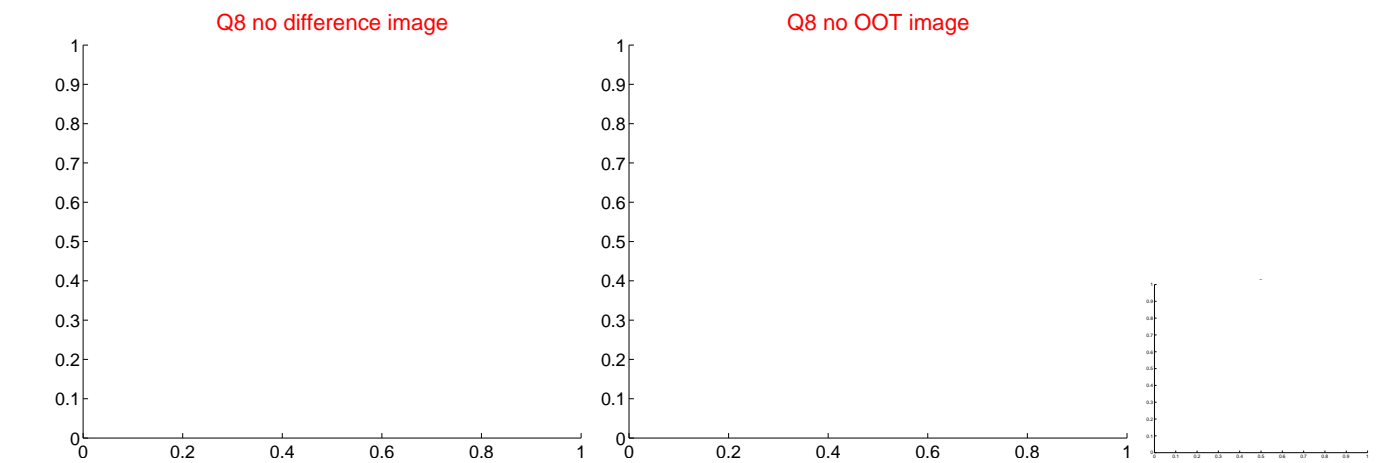
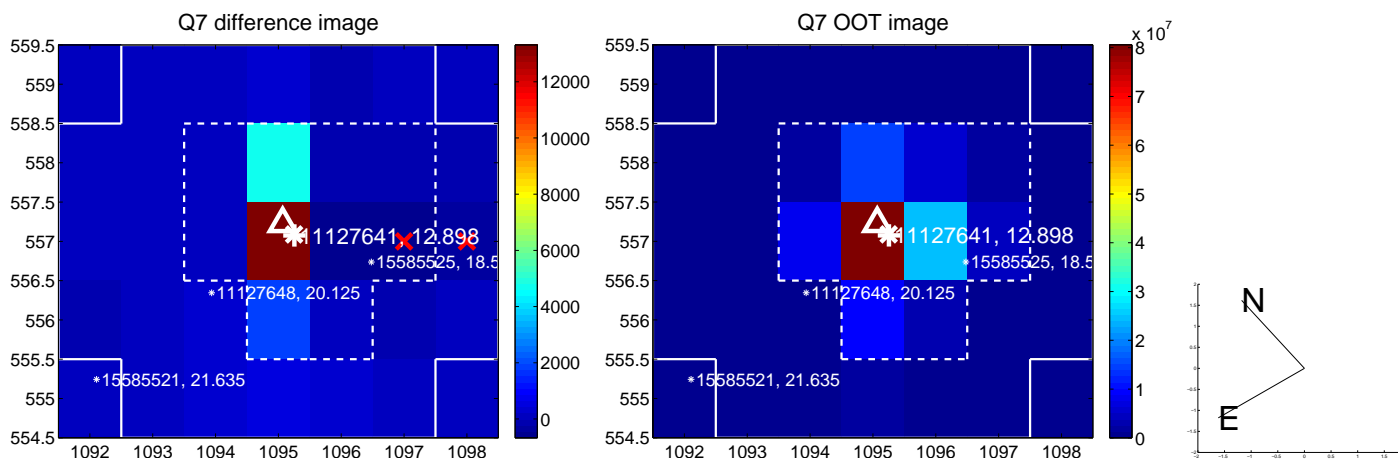
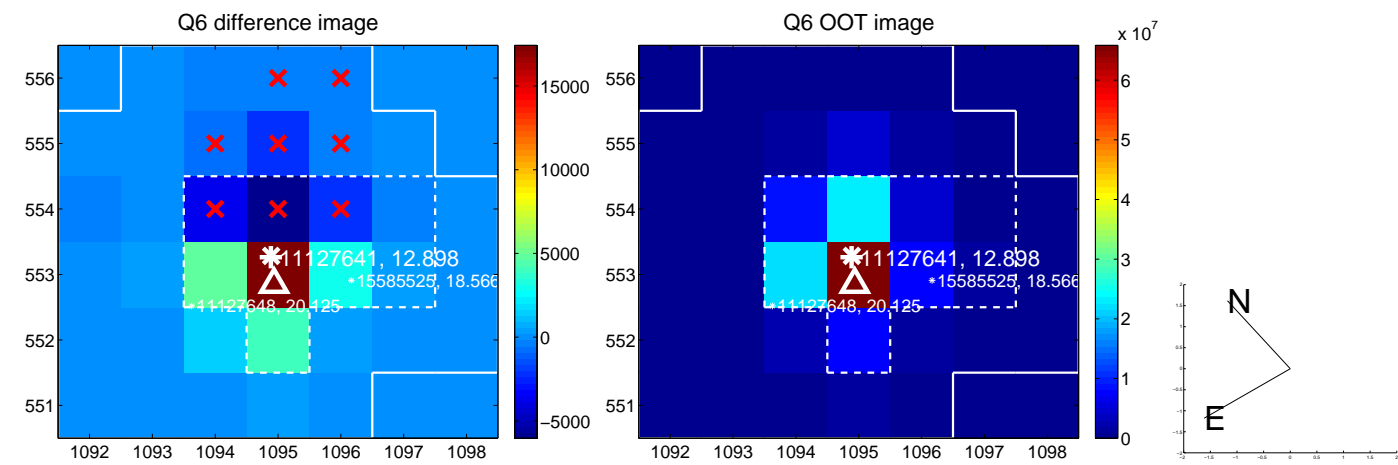
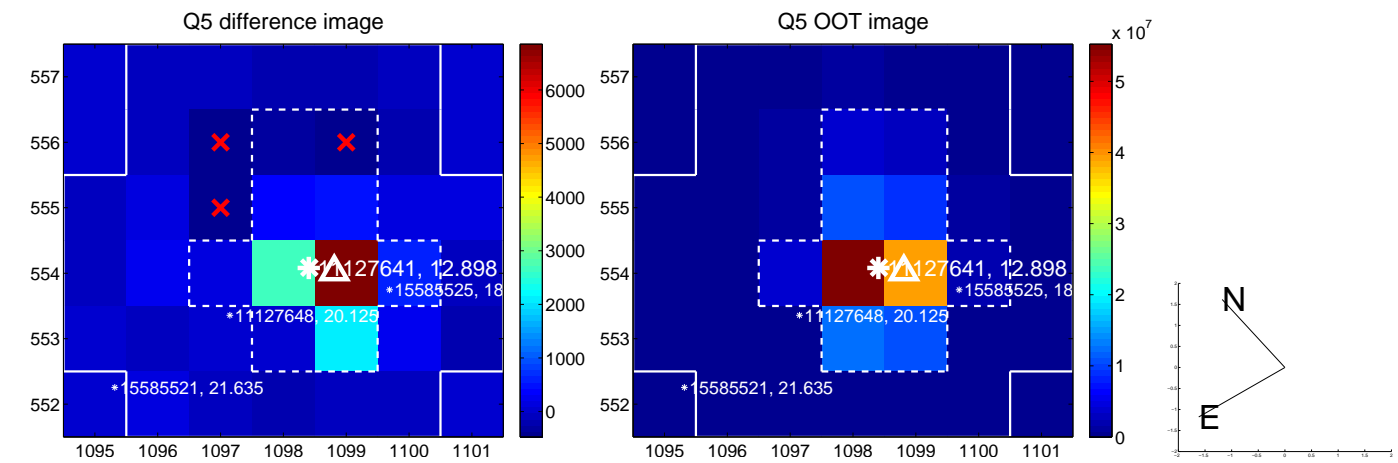


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets**; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

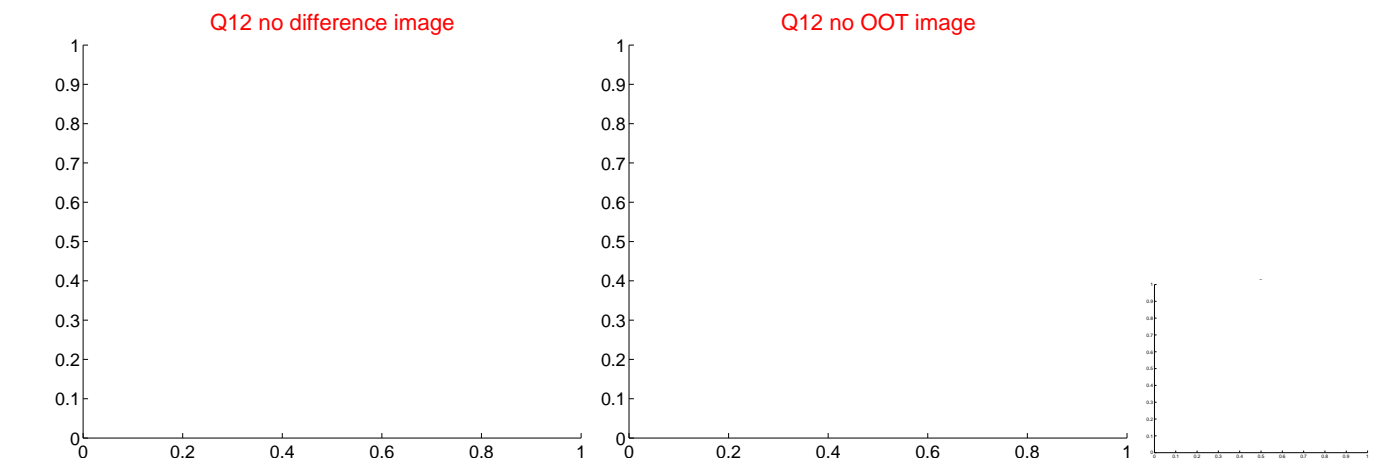
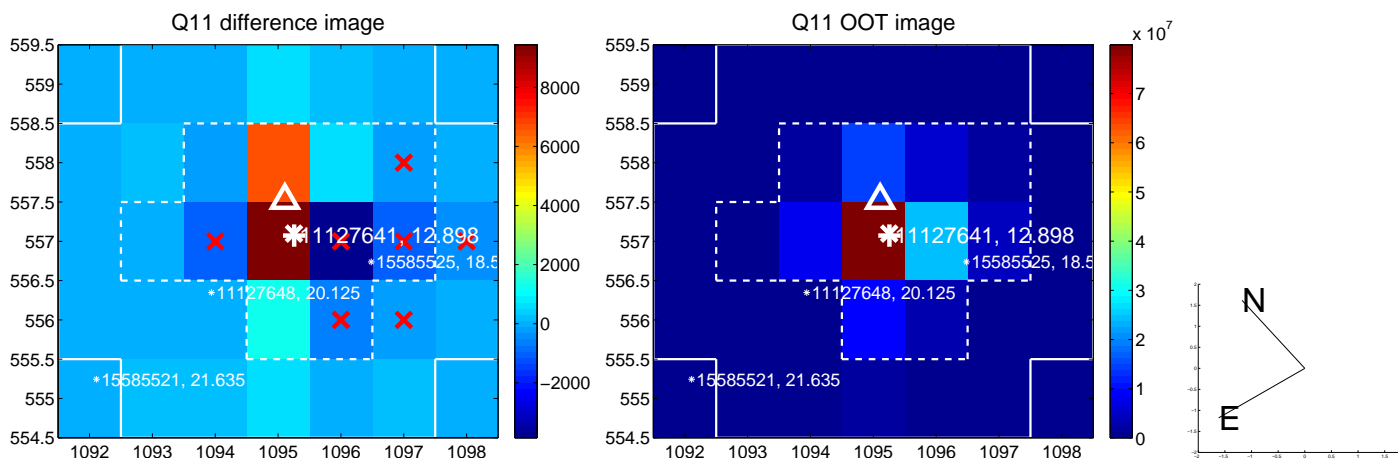
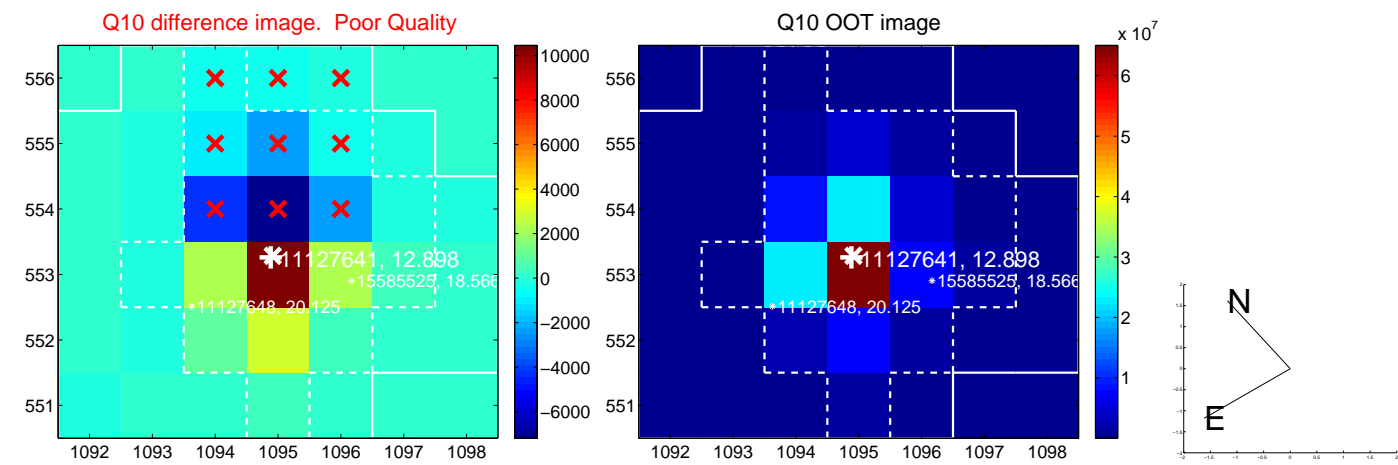
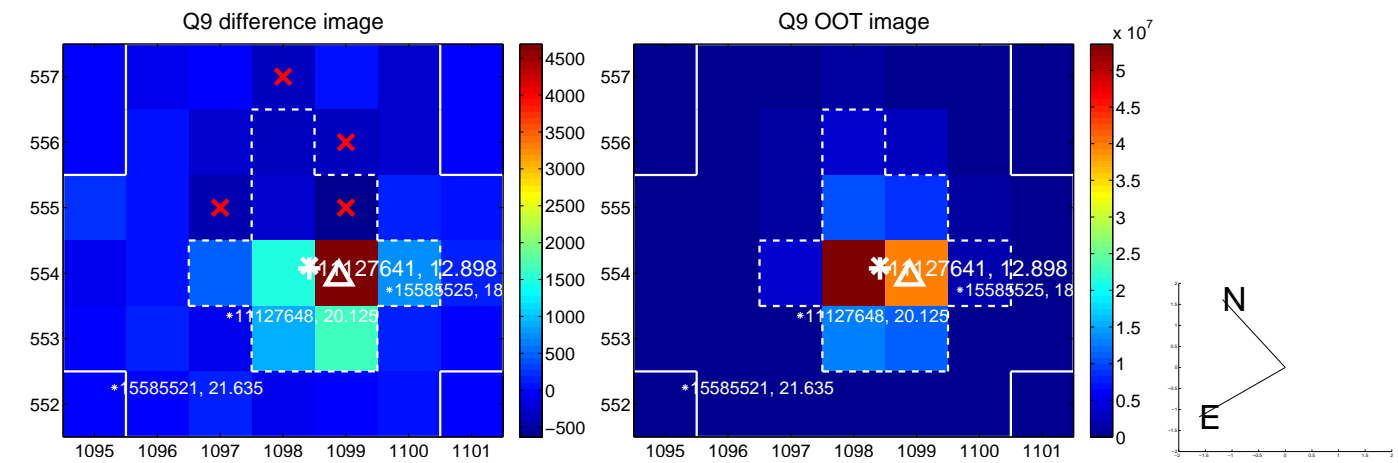
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



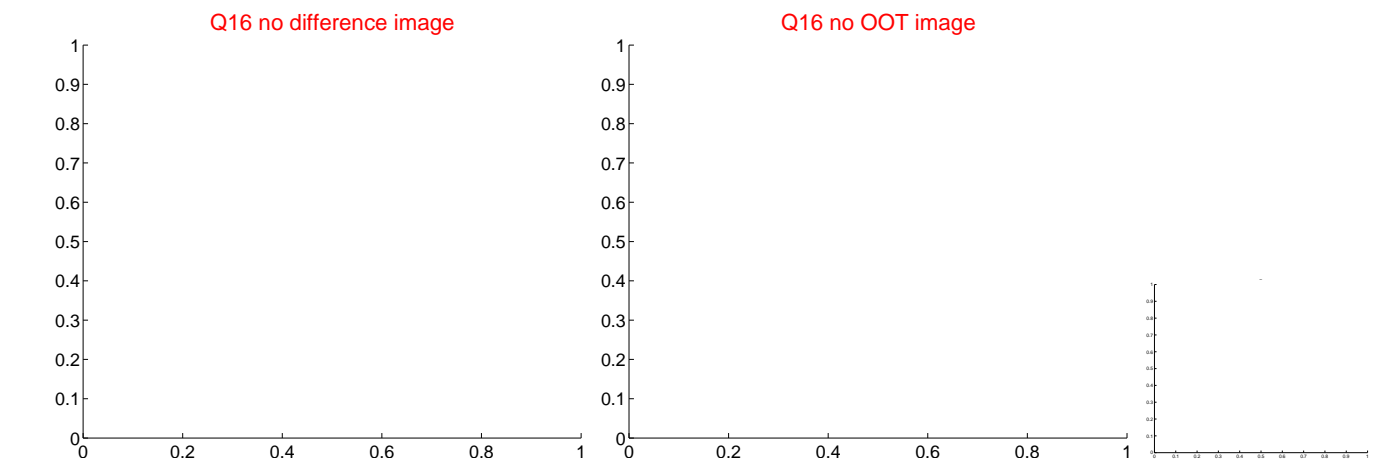
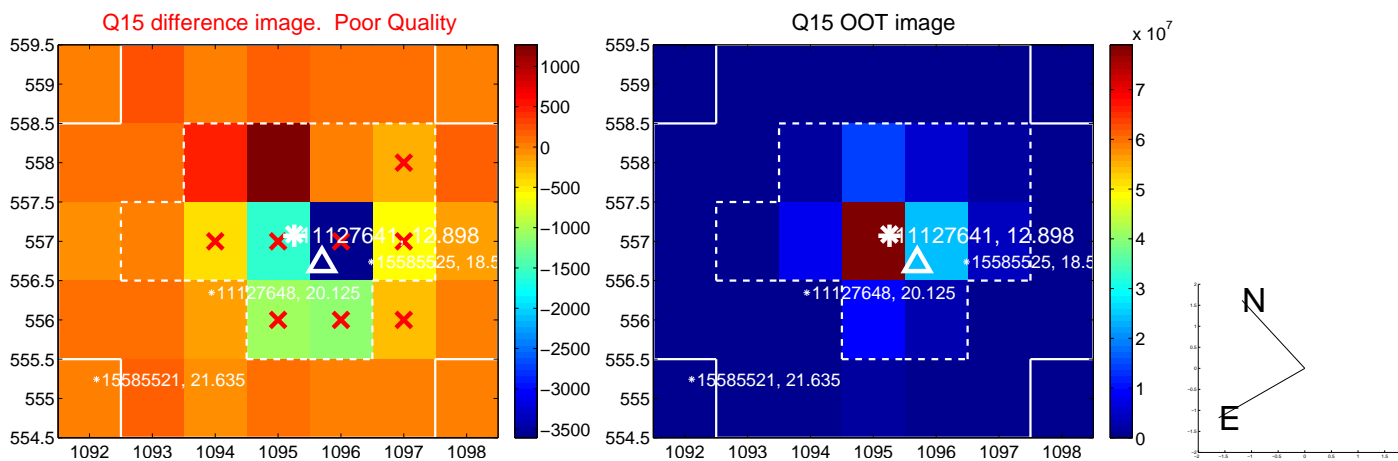
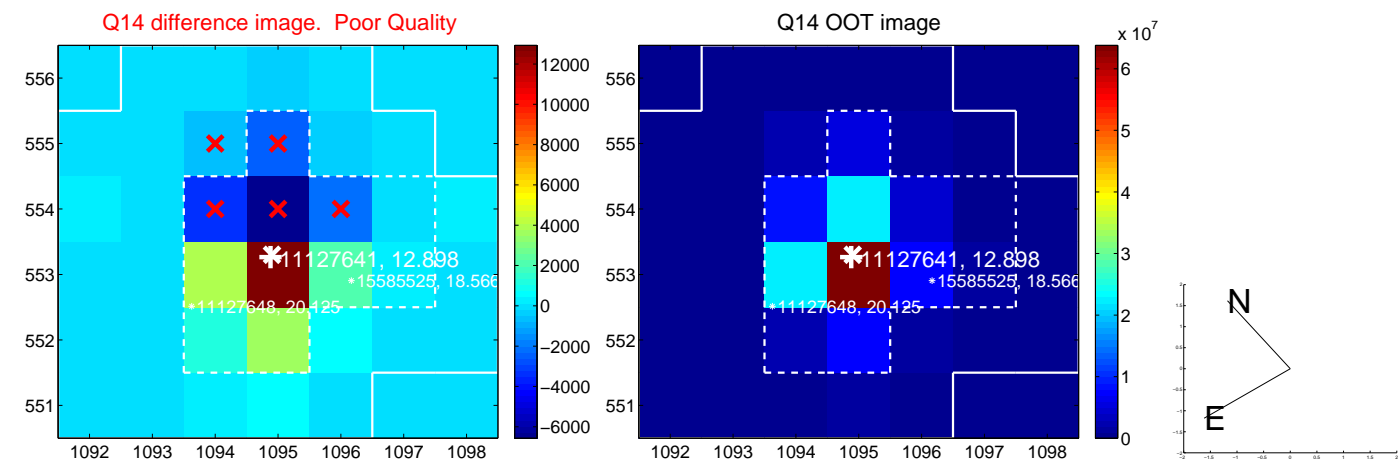
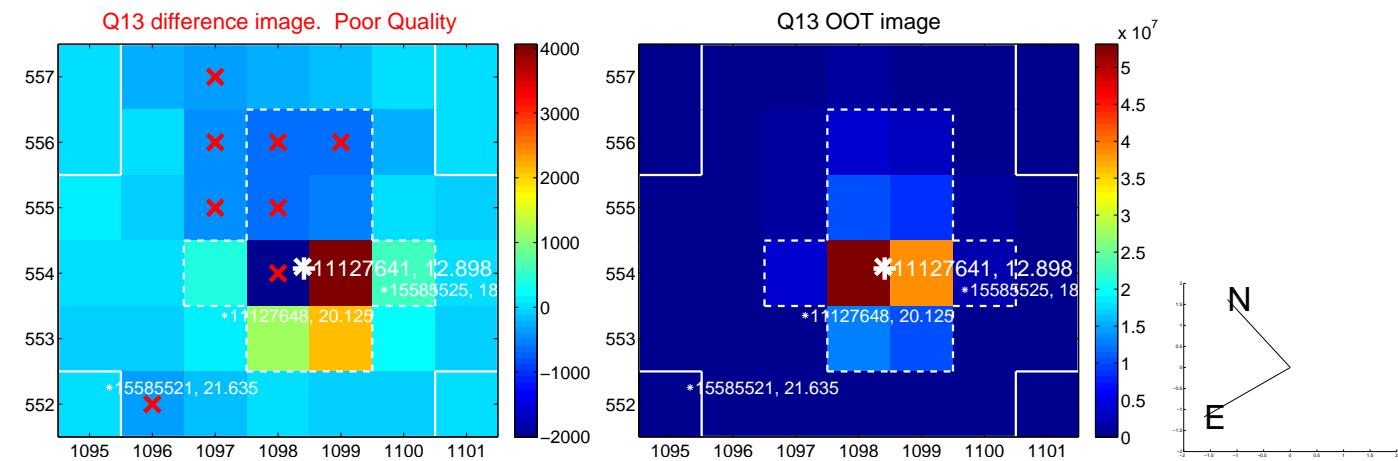
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white ×: KIC target position; +: OOT centroid; △: difference centroid. red ×: large negative pixel value.

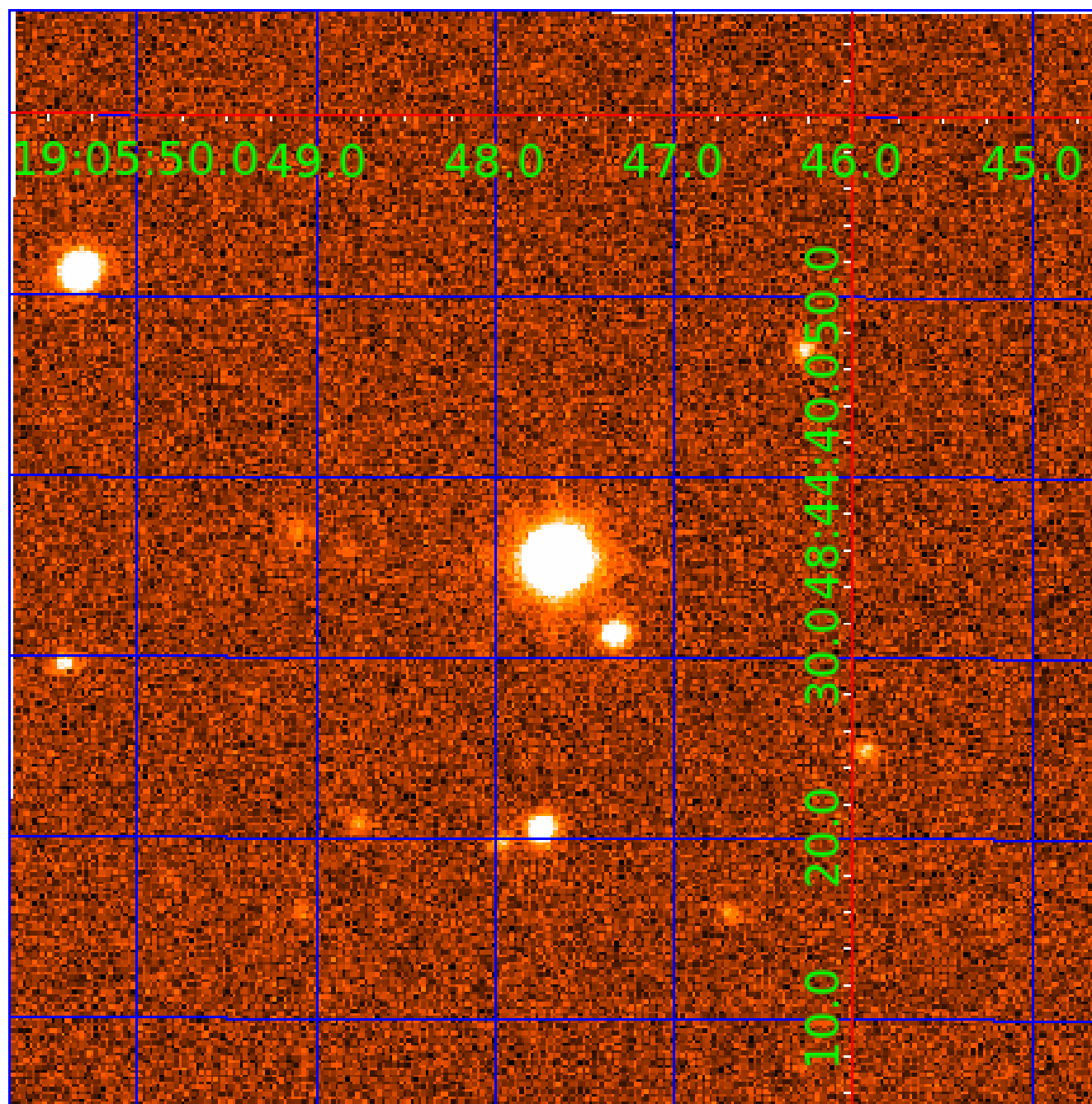


white ×: KIC target position; +: OOT centroid; △: difference centroid. red ×: large negative pixel value.



UKIRT Image

Declination



KIC 011127641

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})
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Robovetter Results

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011127641-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT
011127641-03	OBS	FP	0.00	1	0	1	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_FEW_MEAS—HALO_GHOST
011127641-04	OBS	FP	0.00	1	0	1	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV—HALO_GHOST
011127641-05	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_NOFITS

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

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

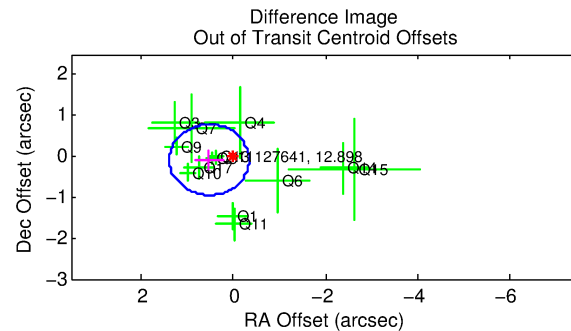
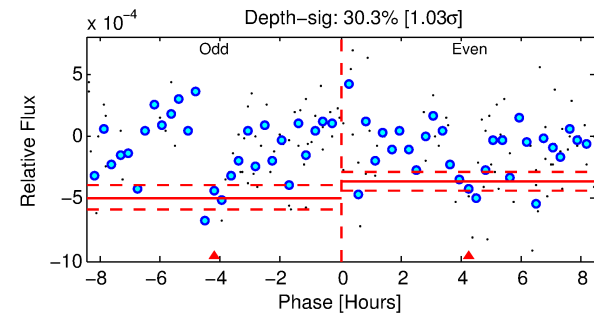
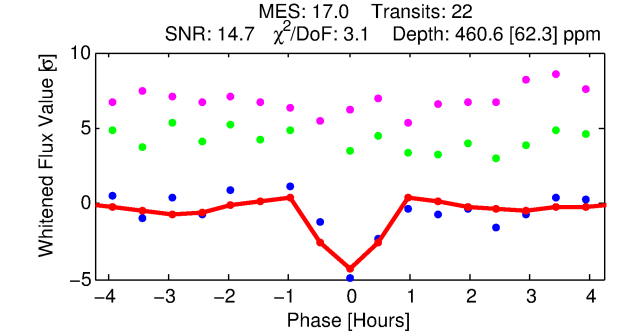
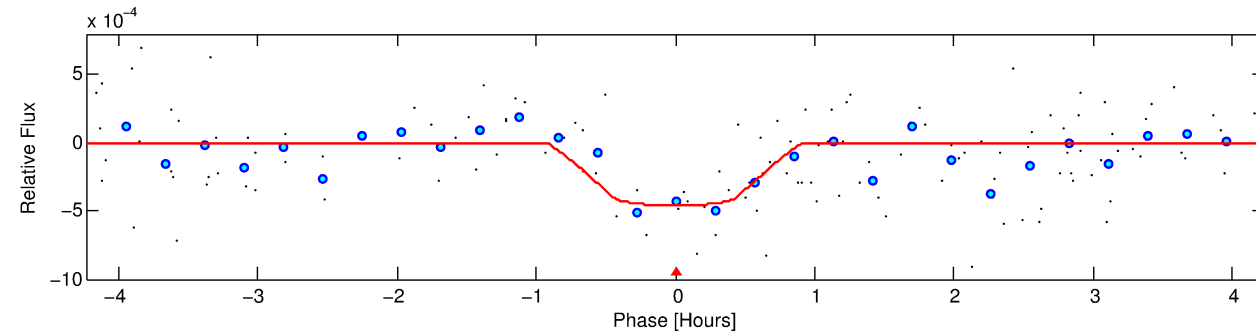
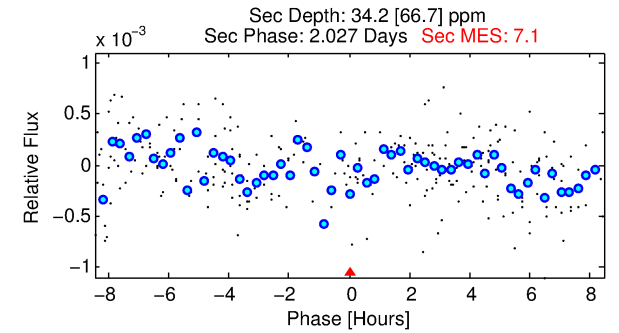
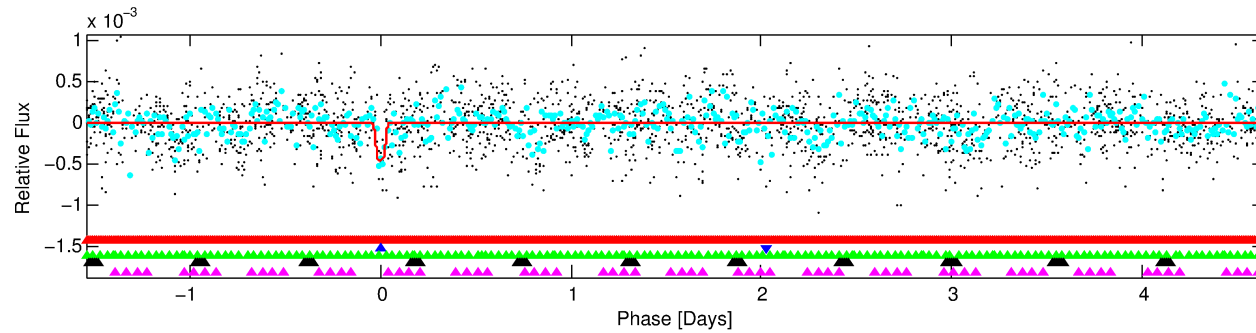
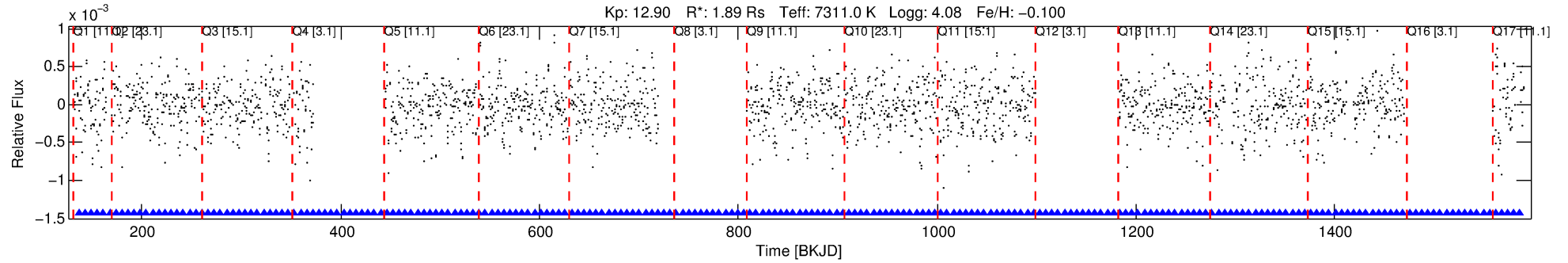
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 011127641-02

No Significant Match Found

DV One-Page Summary

KIC: 11127641 Candidate: 2 of 5 Period: 6.196 d



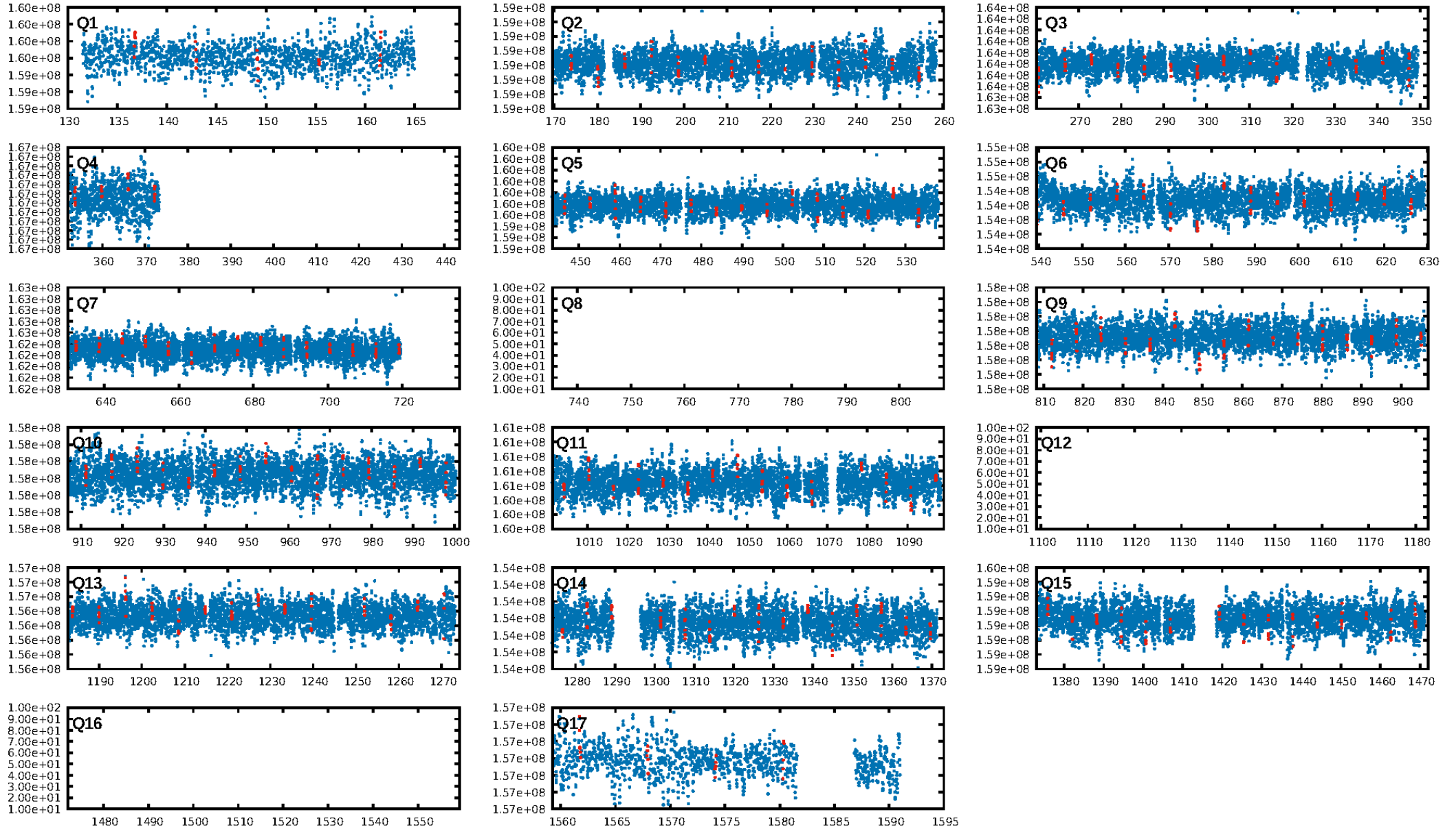
DV Fit Results:

Period = 6.19565 [0.00004] d
Epoch = 136.7489 [0.0034] BKJD
Rp/R* = 0.0212 [0.0194]
a/R* = 24.38 [134.58]
b = 0.72 [3.75]
Seff = 1561.37 [579.95]
Teq = 1603 [149] K
Rp = 4.38 [4.19] Re
a = 0.0765 [0.0178] AU
Ag = 5.74 [15.44] [0.31σ]
Teffp = 3835 [2568] K [0.87σ]

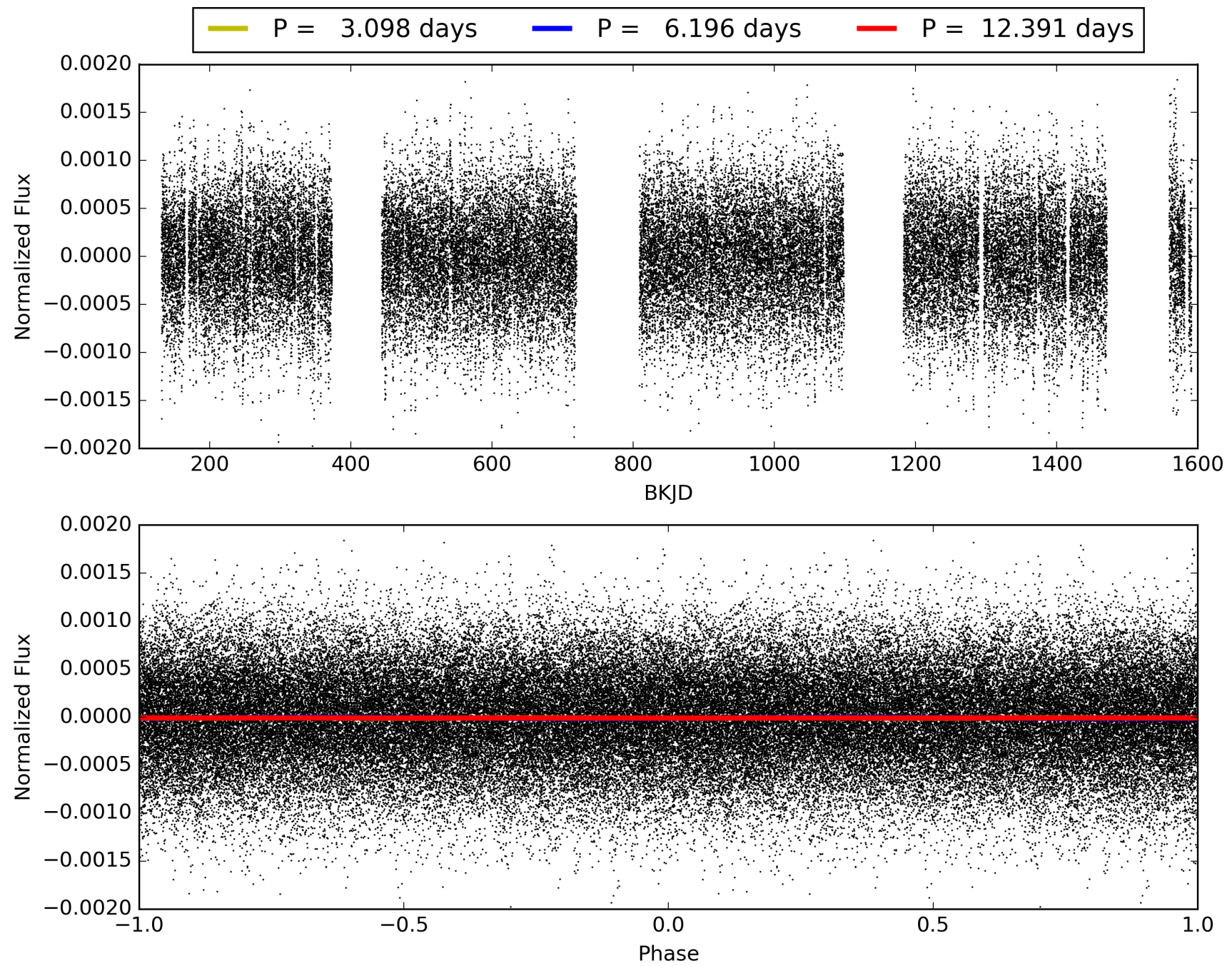
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [20.45σ]
LongPeriod-sig: 100.0% [6.82σ]
ModelChiSquare2-sig: 0.0%
ModelChiSquareGof-sig: 94.0%
Bootstrap-pfa: 6.50e-35
RollingBand-fgt: 1.00 [20/20]
GhostDiagnostic-chr: -0.3801
Centroid-sig: 84.9%
Centroid-so: 0.132 arcsec [0.84σ]
OotOffset-rm: 0.520 arcsec [1.81σ]
KicOffset-rm: 0.573 arcsec [1.81σ]
OotOffset-st: 3/4/1/5 [13]
KicOffset-st: 3/4/1/5 [13]
DiffImageQuality-fgm: 0.46 [6/13]
DiffImageOverlap-fno: 0.43 [6/14]

TCE 011127641-02, PDC Light Curves

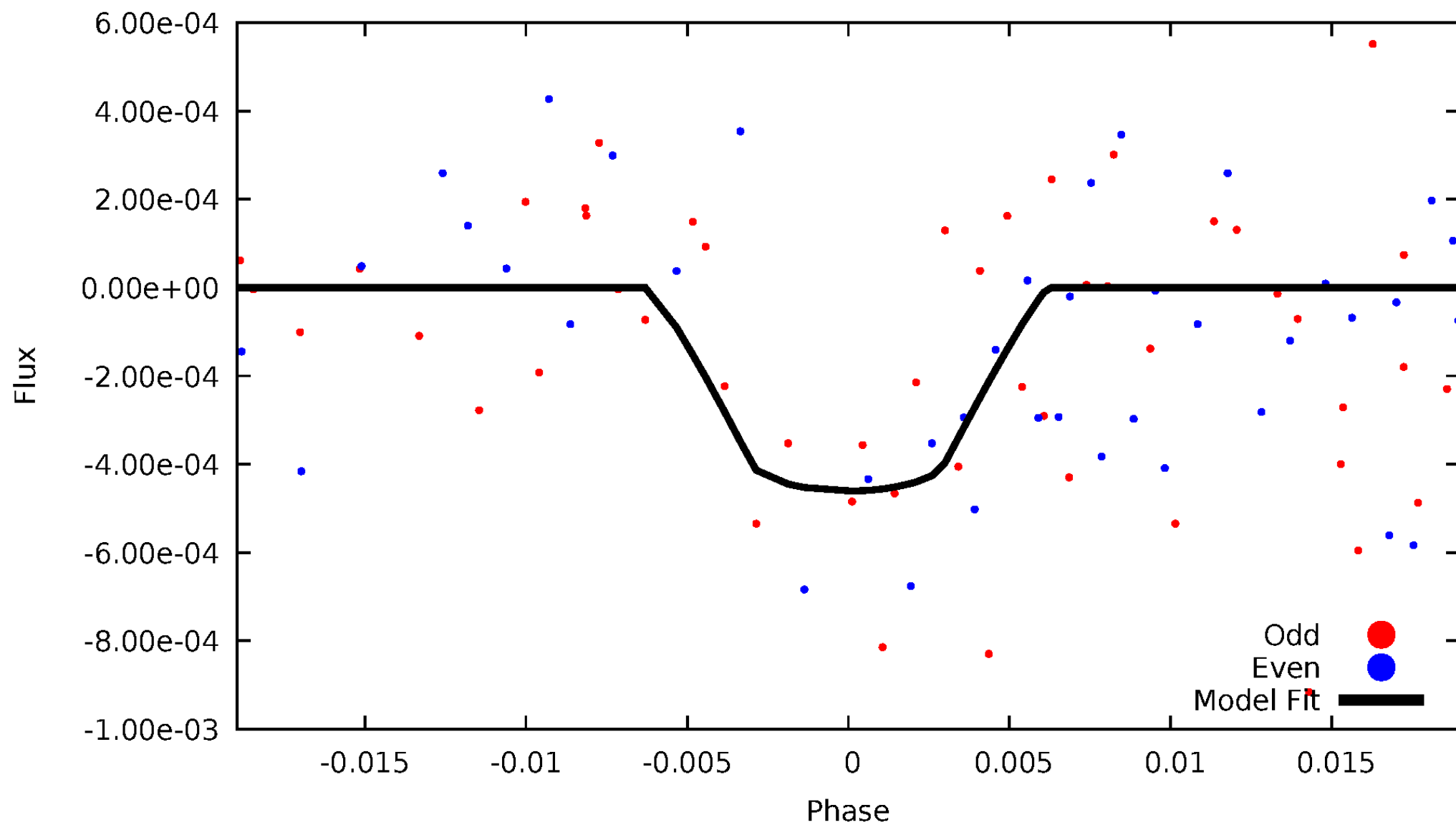


TCE 011127641-02



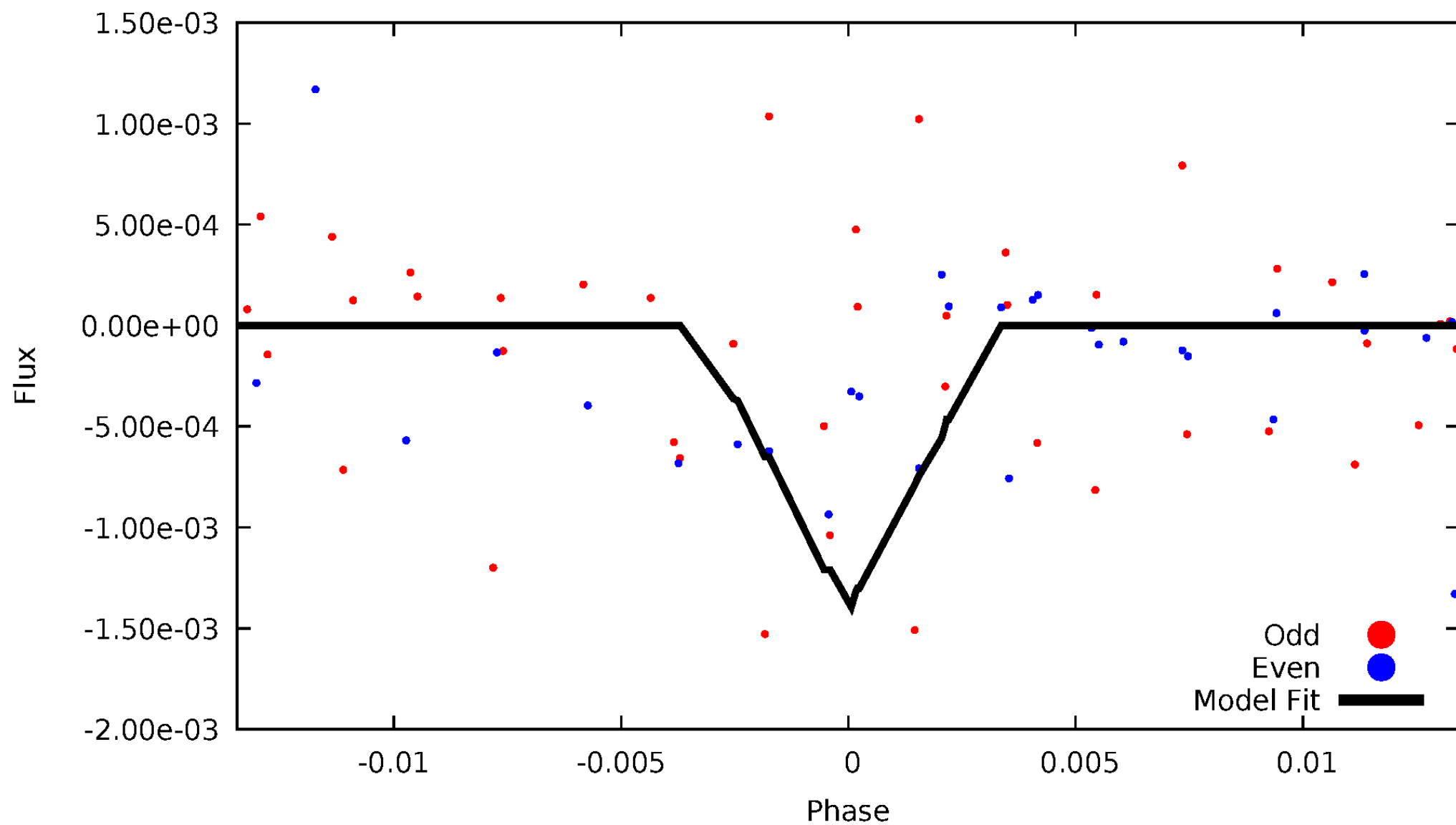
DV Odd/Even

TCE 011127641-02



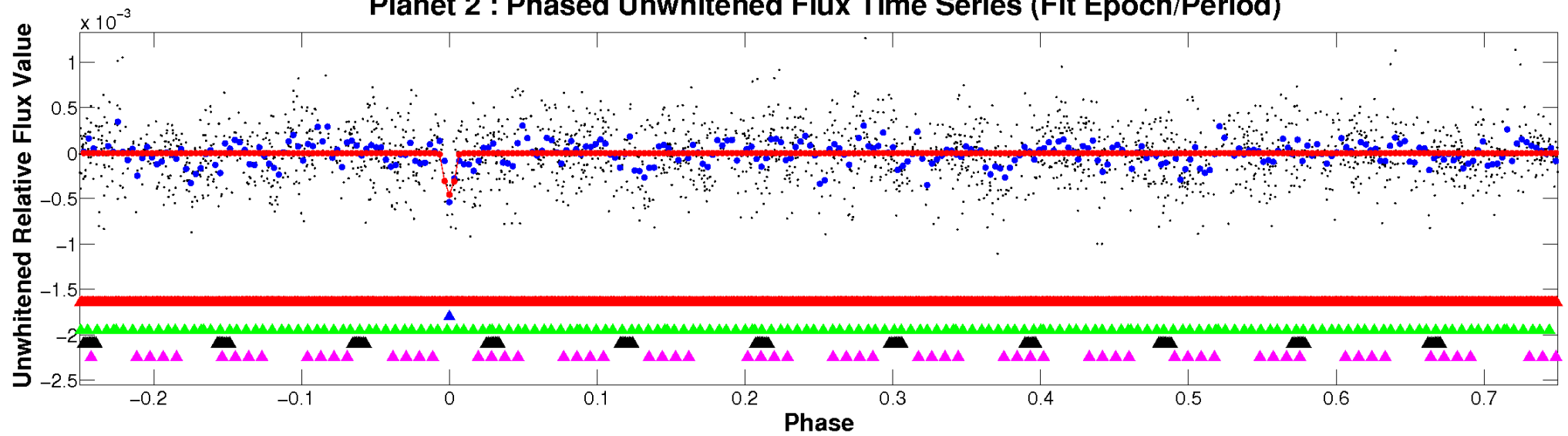
ALT Odd/Even

TCE 011127641-02

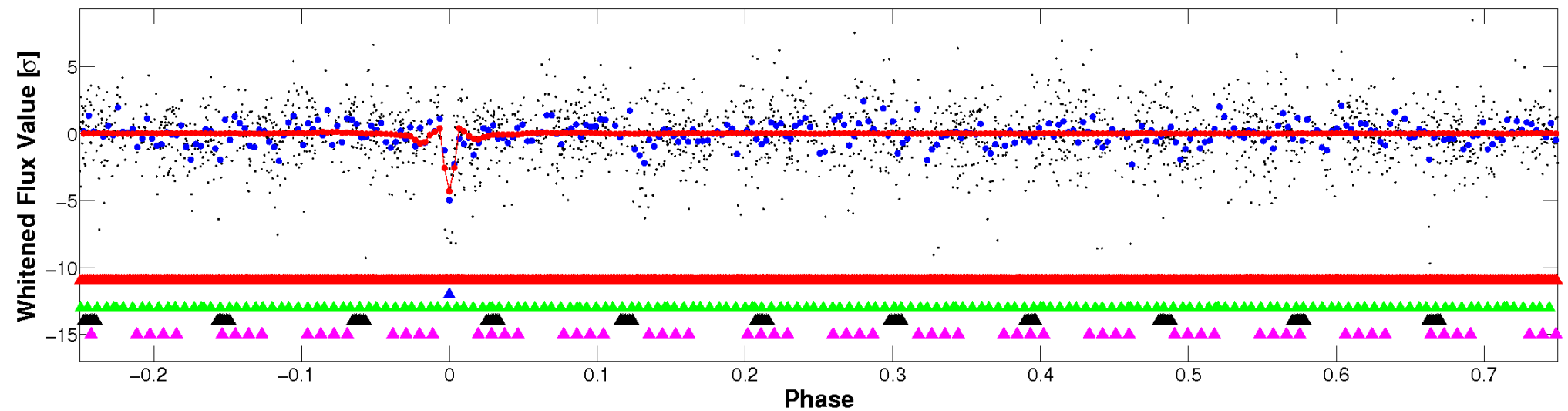


Non-Whitened Vs. Whitened Light Curve

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

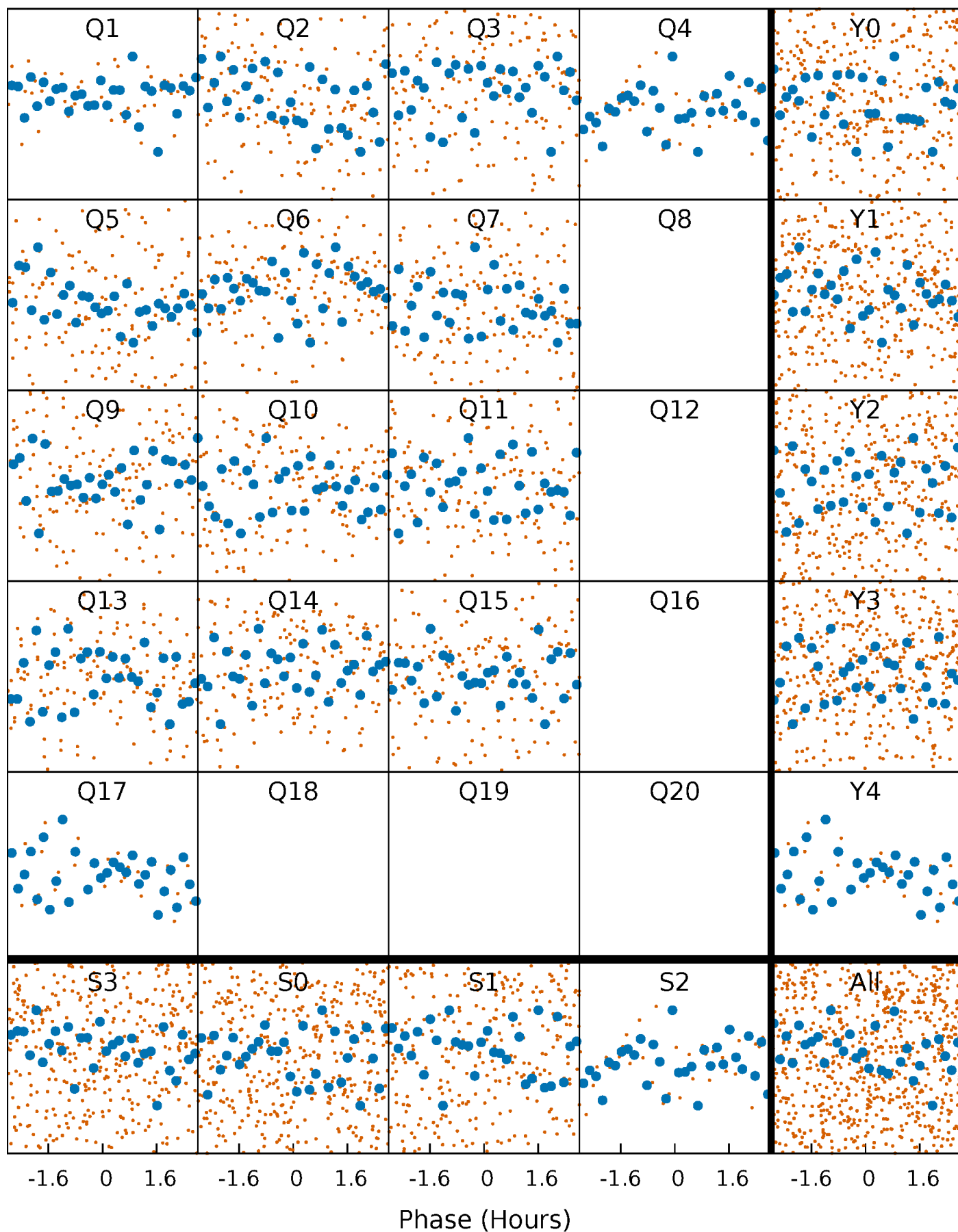


Planet 2 : Phased Whitened Flux Time Series (Fit Epoch/Period)



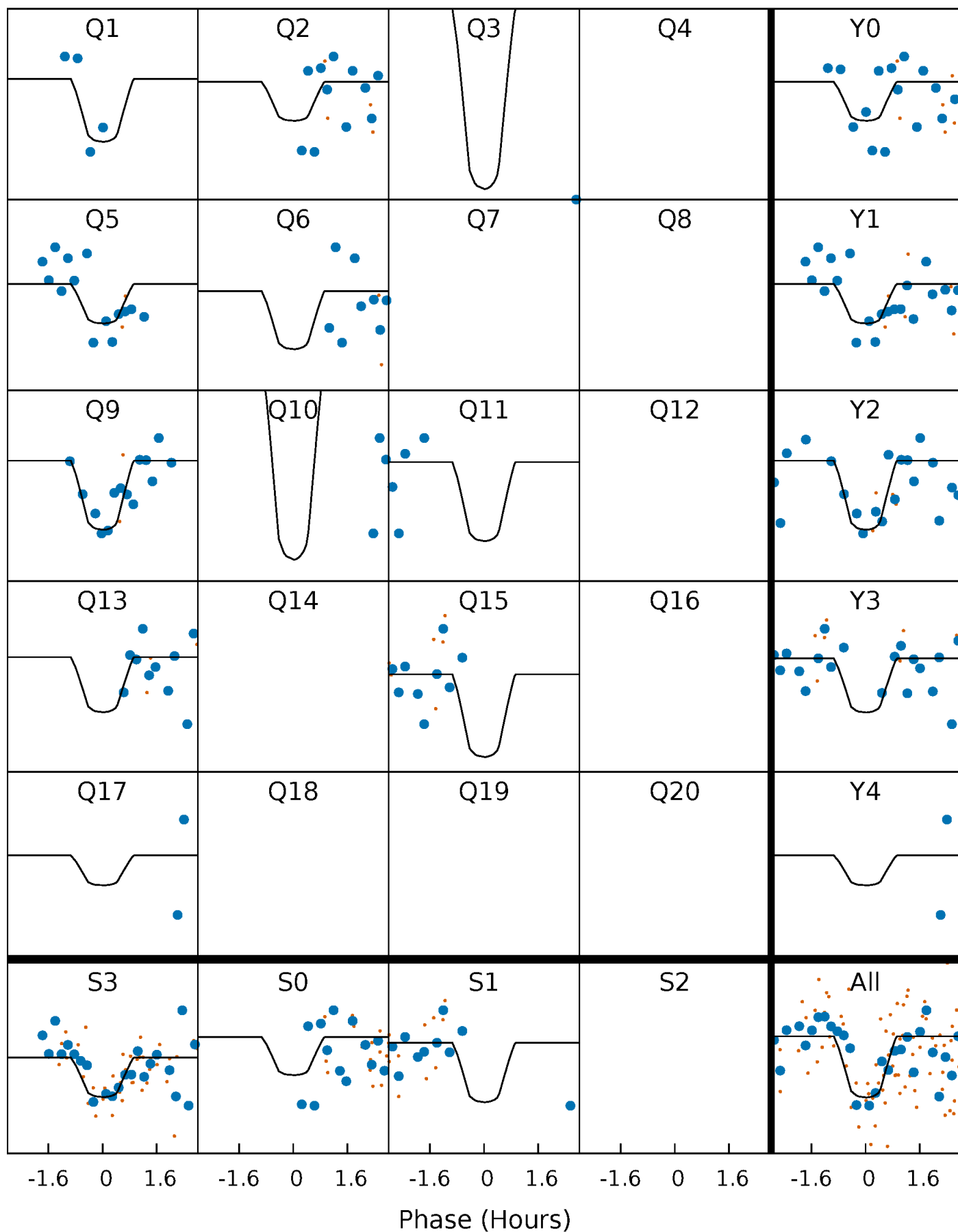
PDC Quarter-Phased Transit Curves

TCE 011127641-02 P= 6.195654 Days $T_0=136.748929$ (BKJD)



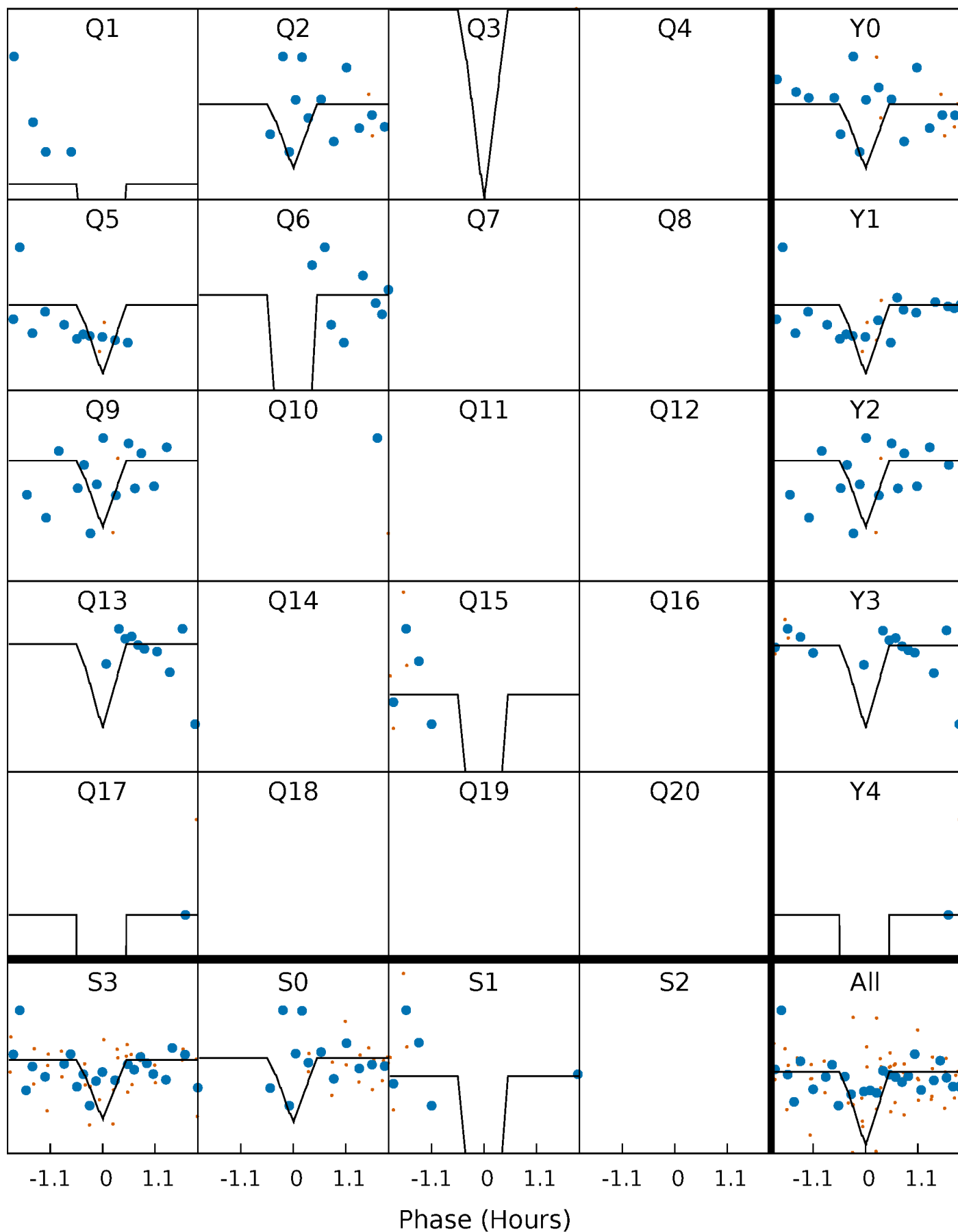
DV Quarter-Phased Transit Curves

TCE 011127641-02 P= 6.195654 Days $T_0=136.748929$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

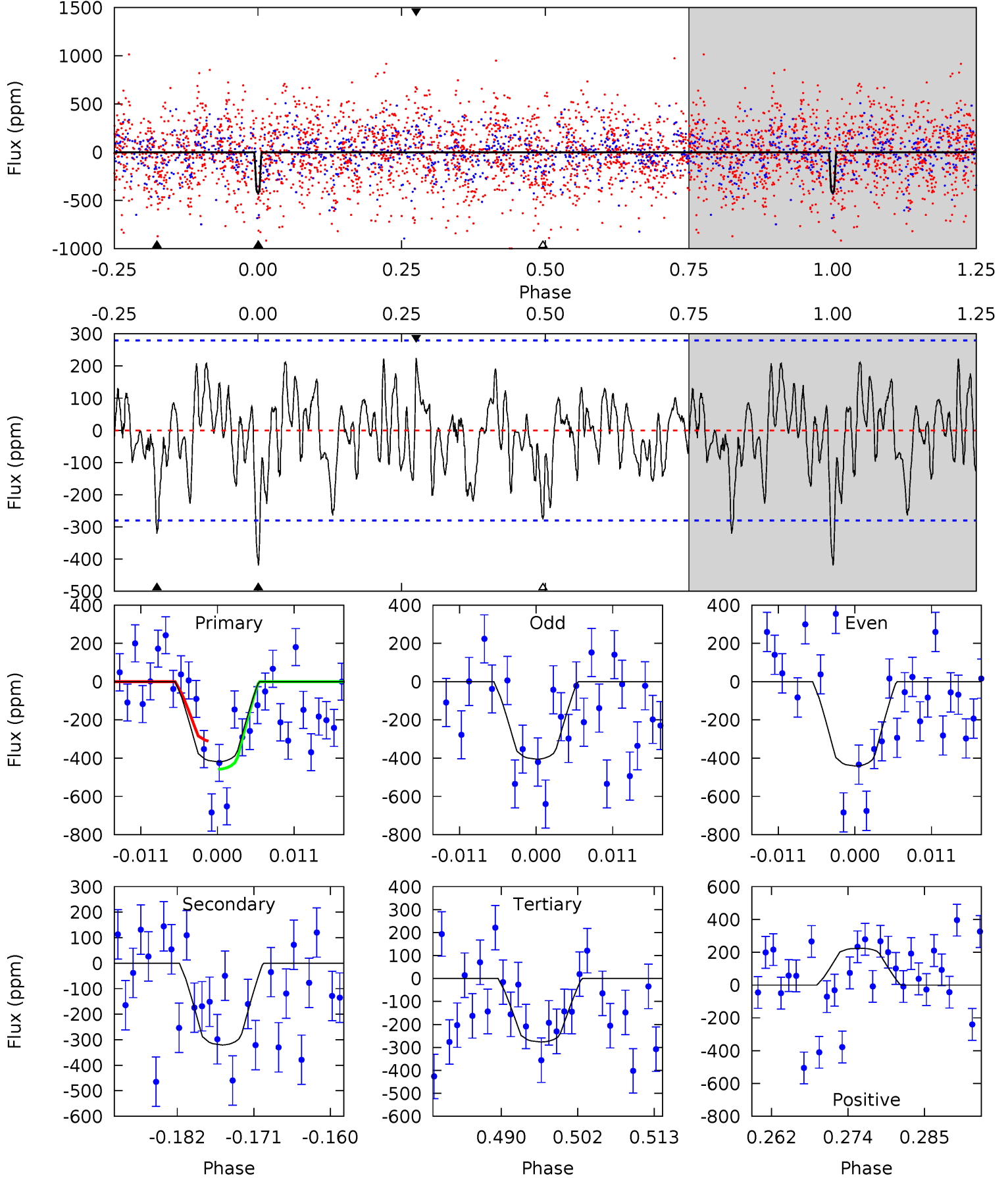
TCE 011127641-02 $P = 6.195607$ Days $T_0 = 136.778764$ (BKJD)



DV Model-Shift Uniqueness Test

011127641-02, P = 6.195654 Days, E = 130.553275 Days

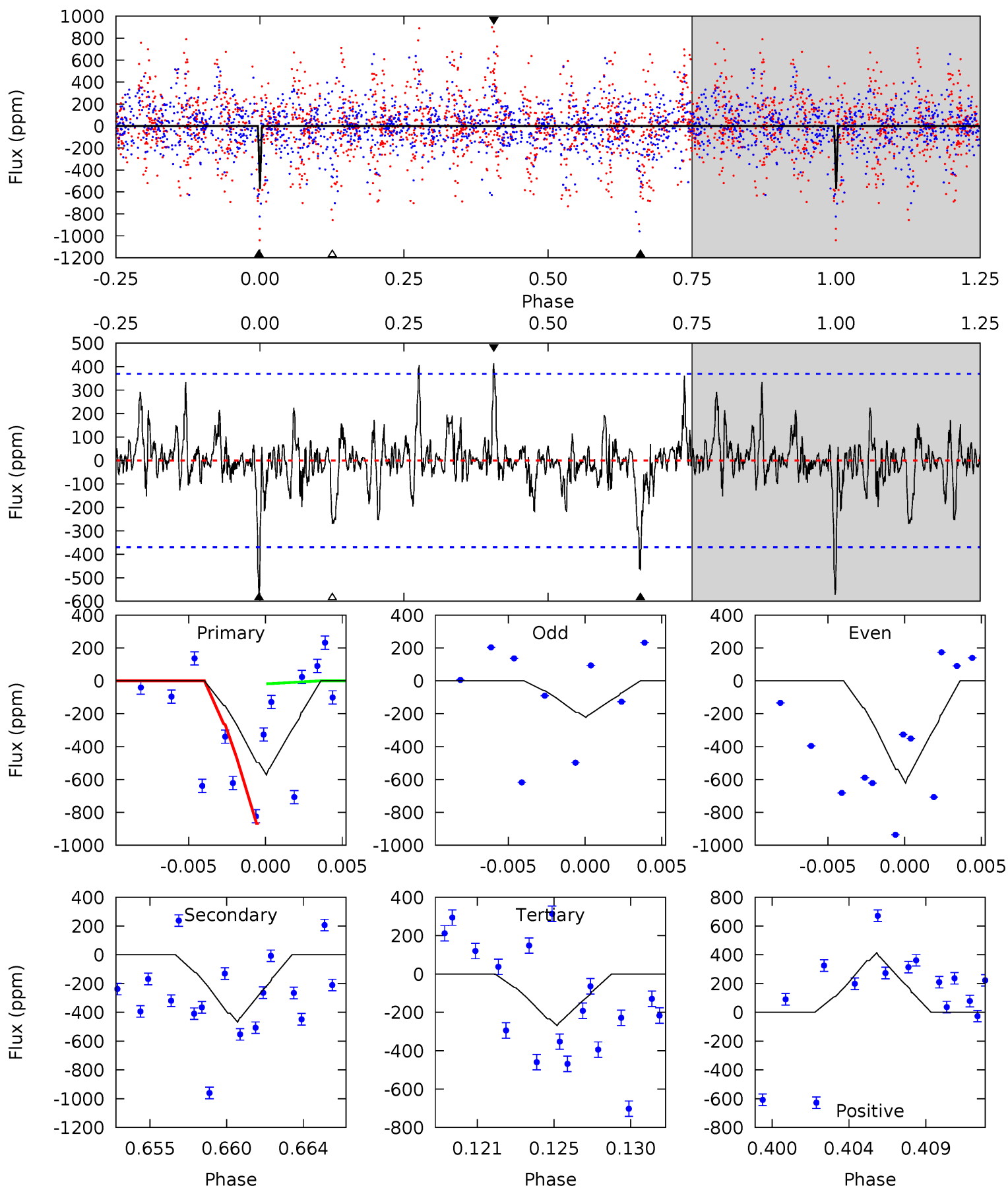
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
7.50	5.73	4.94	4.02	5.00	2.53	1.72	2.55	3.48	0.79	1.72	0.32	1.10	0.35	1.21



Alt Model-Shift Uniqueness Test

011127641-02, P = 6.195607 Days, E = 130.583157 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
8.01	6.54	3.76	5.80	5.17	2.83	1.23	4.25	2.20	2.78	0.74	2.65	0.55	0.42	5.71



Stellar Parameters For KIC 011127641

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	7311^{+228}_{-330}	$4.077^{+0.170}_{-0.170}$	$-0.100^{+0.250}_{-0.350}$	$1.889^{+0.547}_{-0.448}$	$1.551^{+0.211}_{-0.257}$	$0.324^{+0.296}_{-0.153}$
	+3%/-5%	+4%/-4%	+250%/-350%	+29%/-24%	+14%/-17%	+91%/-47%
Source	KIC0	KIC0	KIC0	DSEP		

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

Secondary Eclipse Parameters for KIC 011127641-02 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-321 ± 56	$4.98^{+3.84}_{-3.01}$	2234^{+153}_{-165}	6099^{+4911}_{-1337}	40^{+213}_{-27}
Alt.	-468 ± 71	$7.51^{+4.10}_{-3.33}$	2243^{+165}_{-168}	5509^{+2104}_{-938}	26^{+63}_{-15}

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

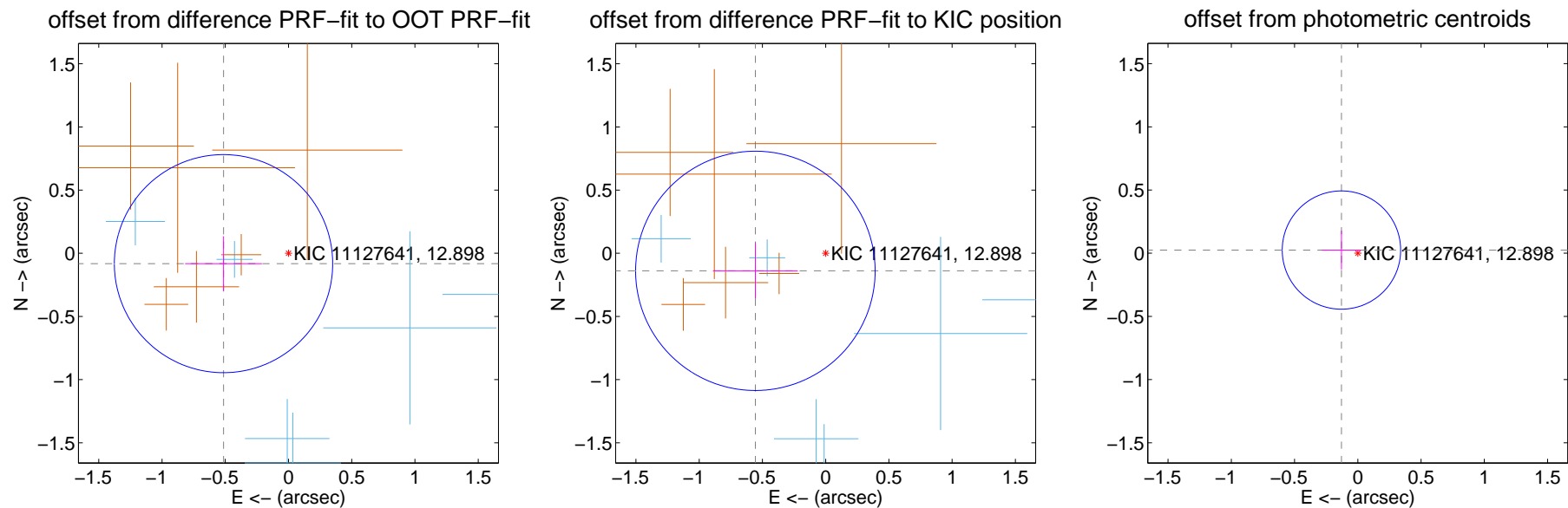
DV Centroid Data

Supplemental centroid analysis for 011127641-02. Kepler magnitude: 12.90. Transit SNR 14.66

There are 6 quarters with good PRF difference image offsets

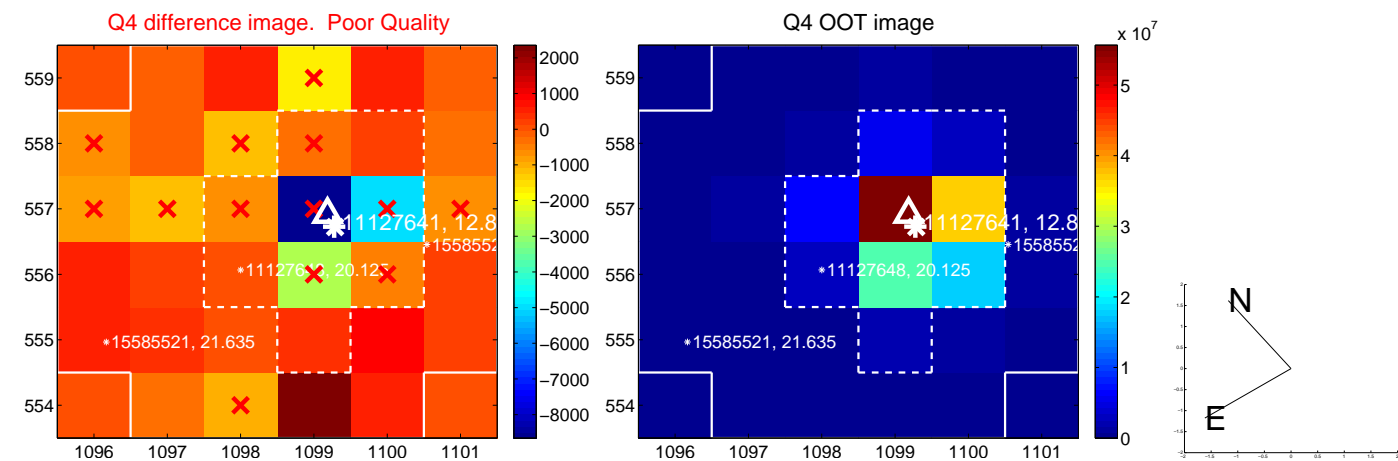
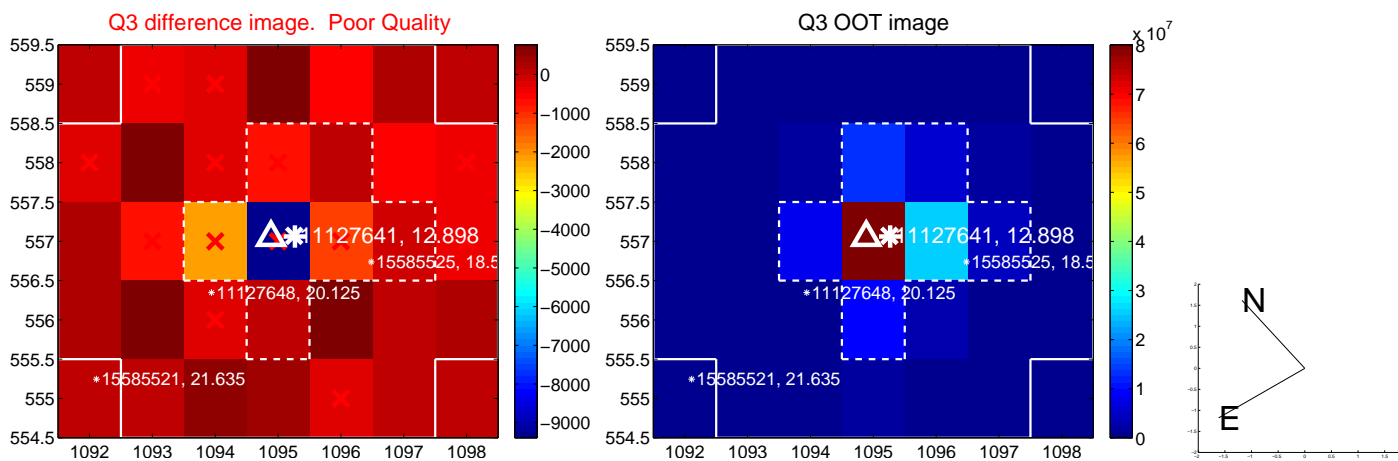
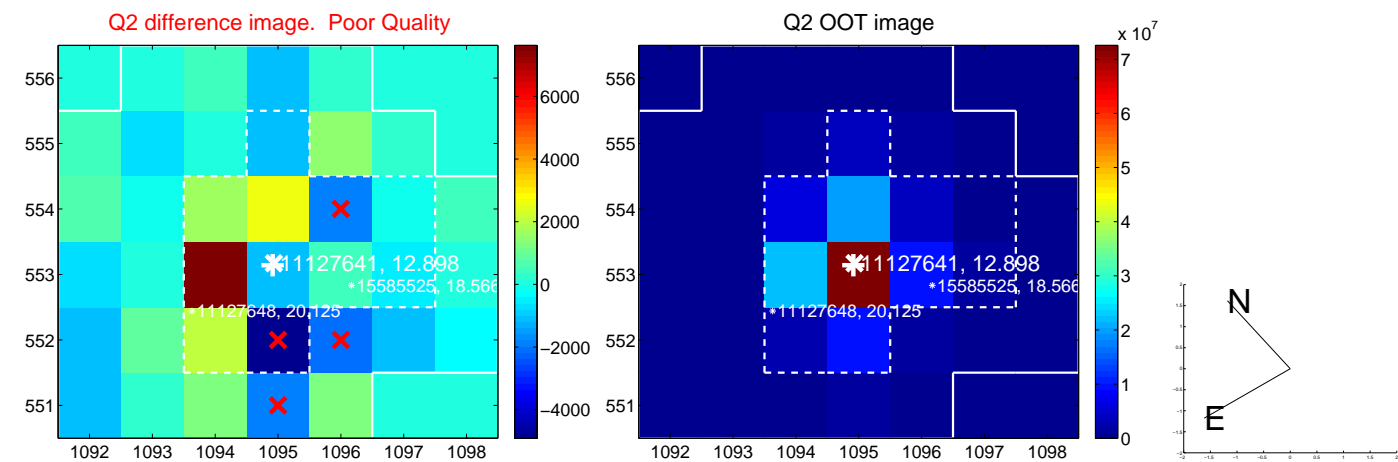
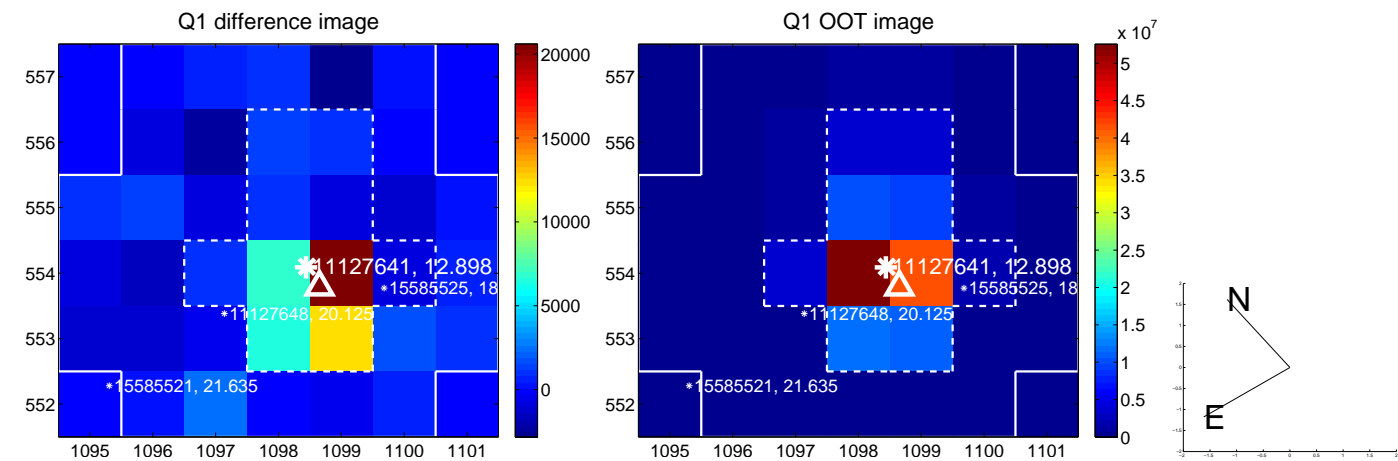
The direct PRF centroid is offset from the target star catalog position by about 0.07 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.520 ± 0.288	1.81	0.514 ± 0.304	-0.082 ± 0.217
PRF-fit source offset from KIC position	0.573 ± 0.316	1.81	0.556 ± 0.336	-0.139 ± 0.221
photometric centroid source offset	0.13 ± 0.16	0.84	0.13 ± 0.16	0.03 ± 0.15

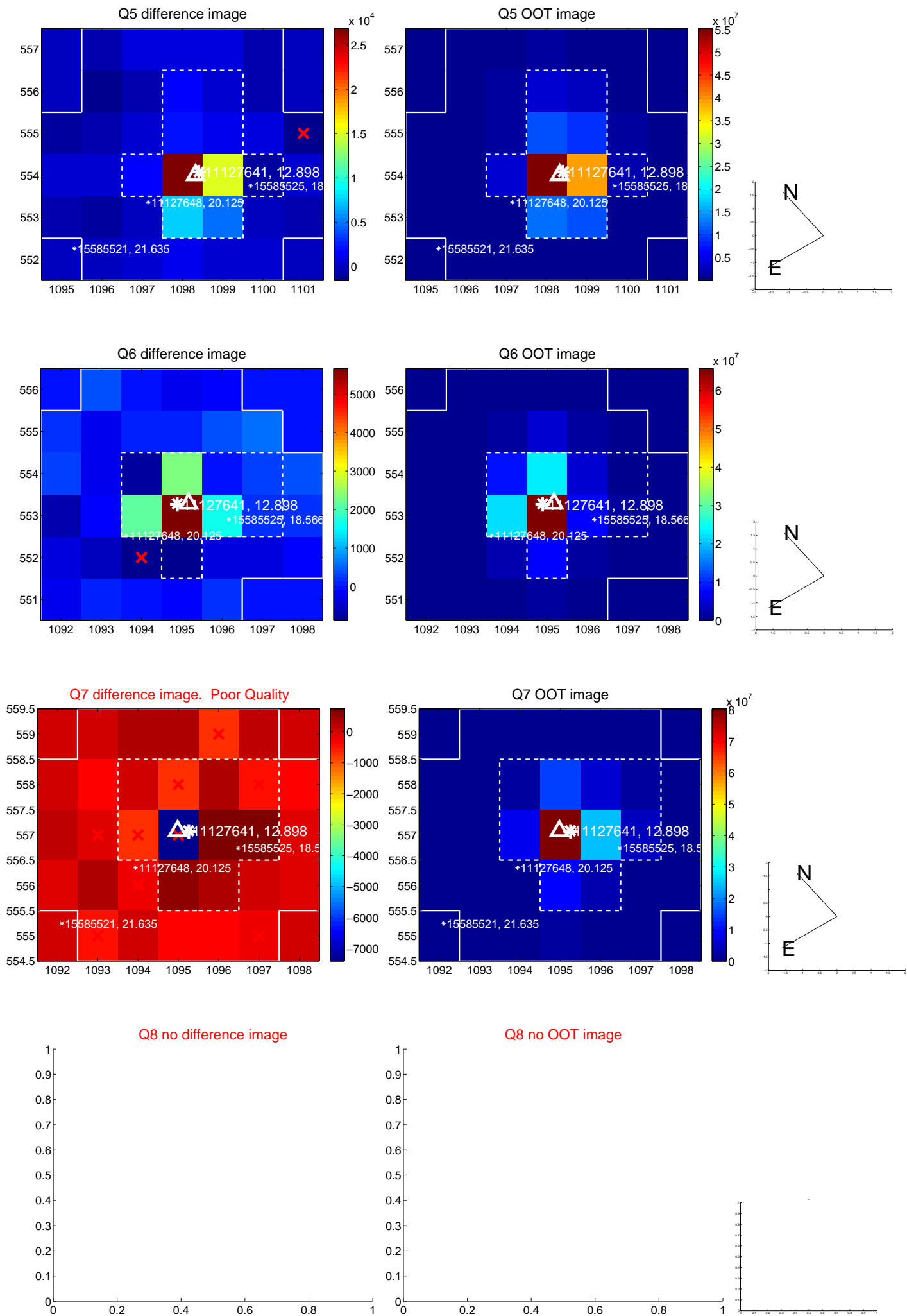


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses:** good quarterly centroid offsets; **Vermillion crosses:** bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

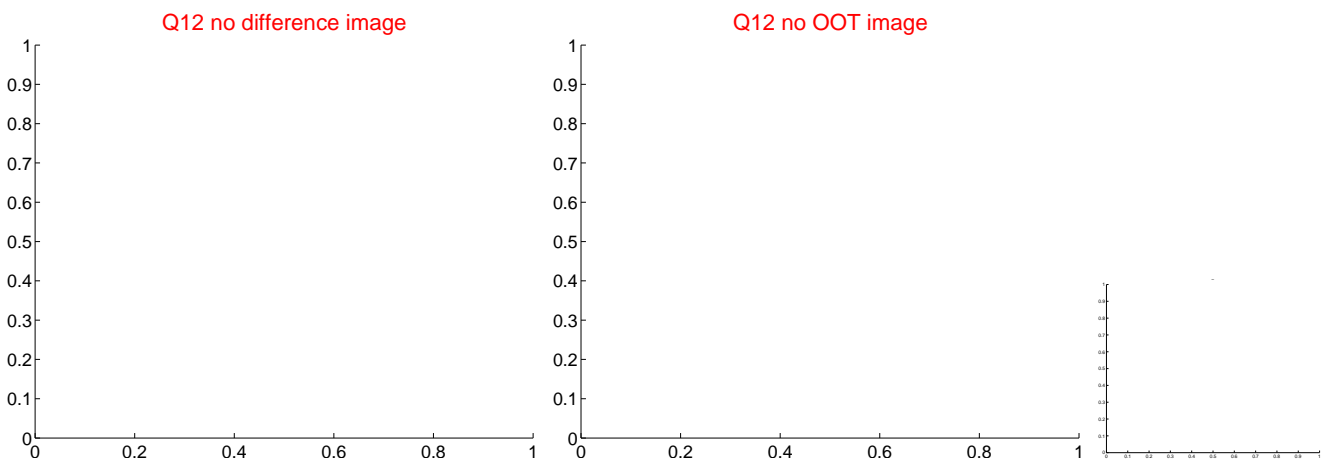
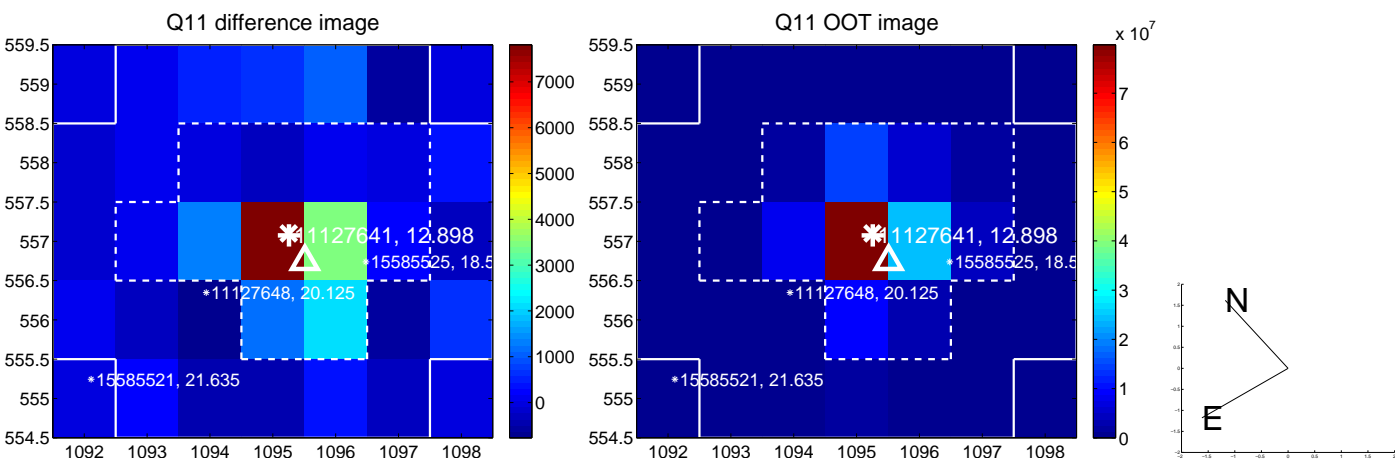
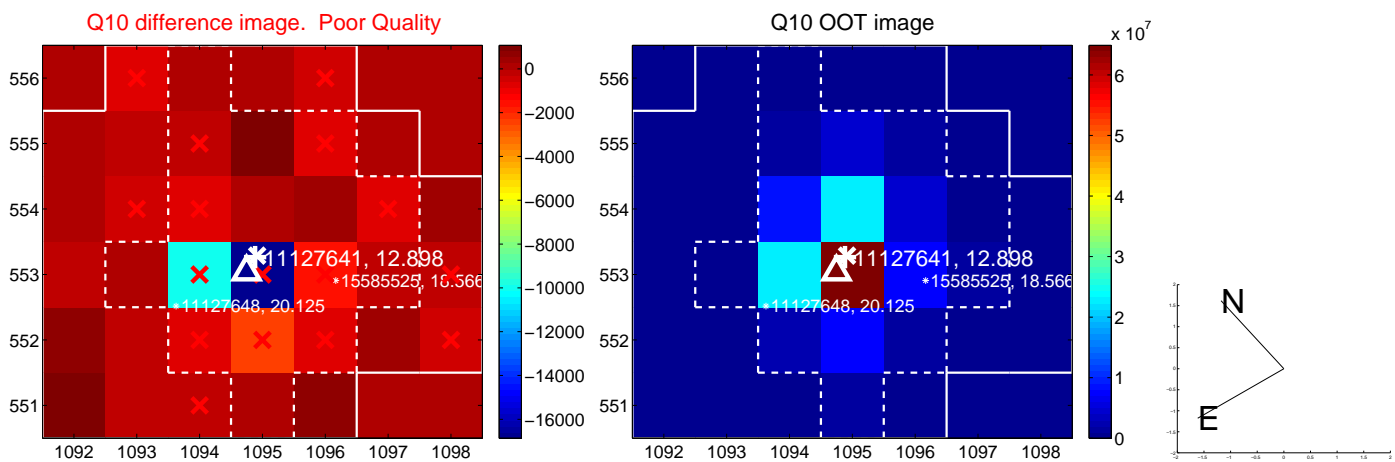
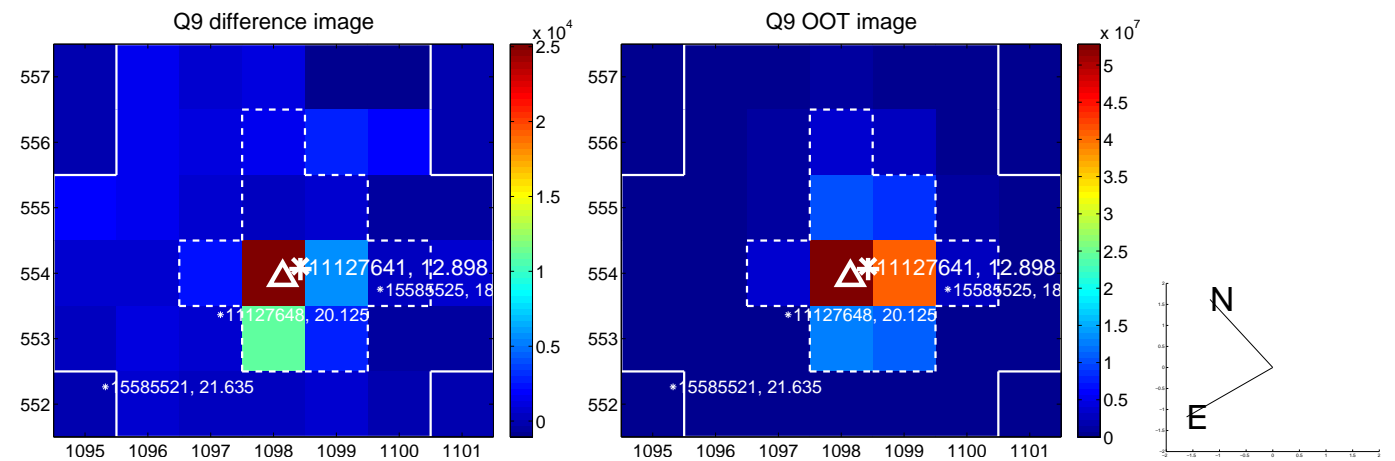
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



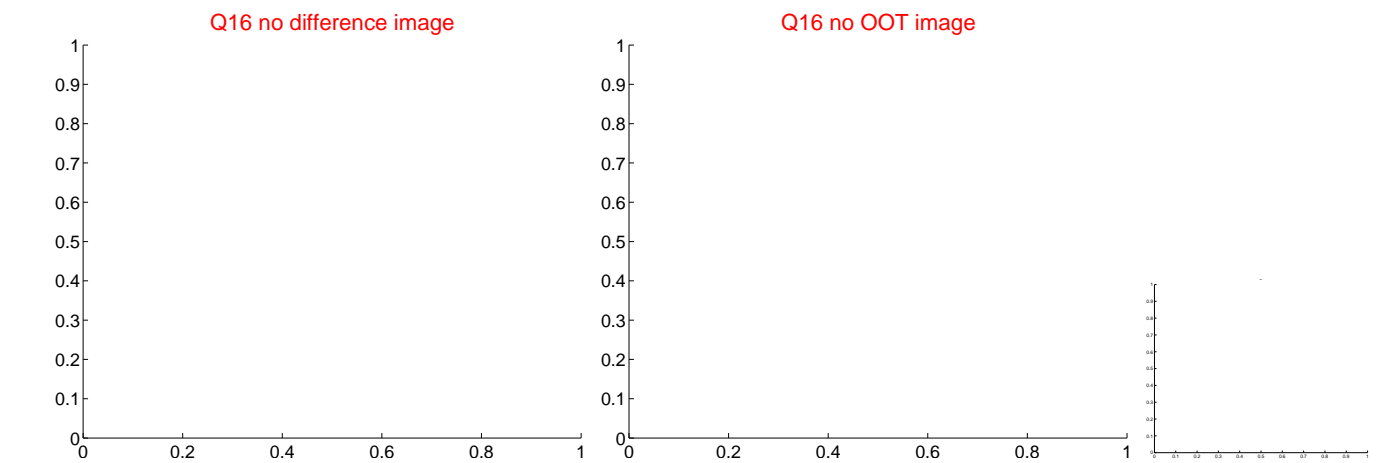
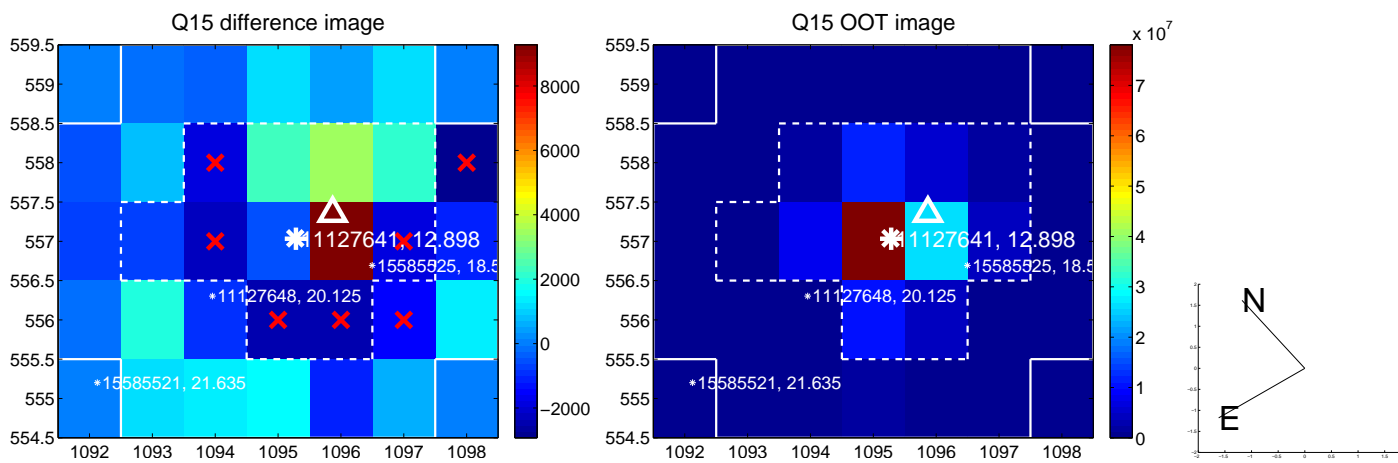
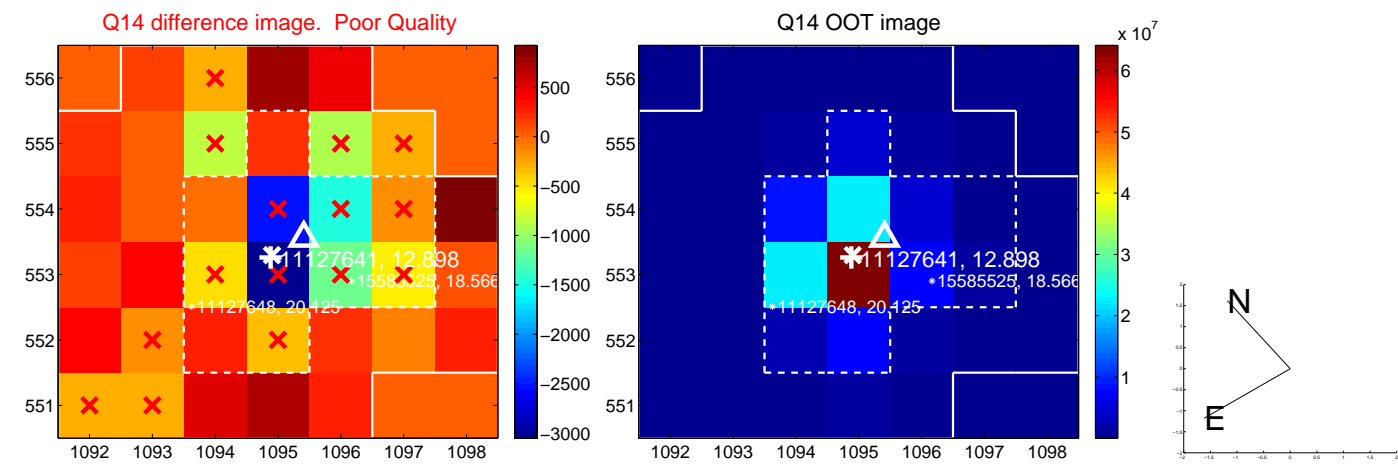
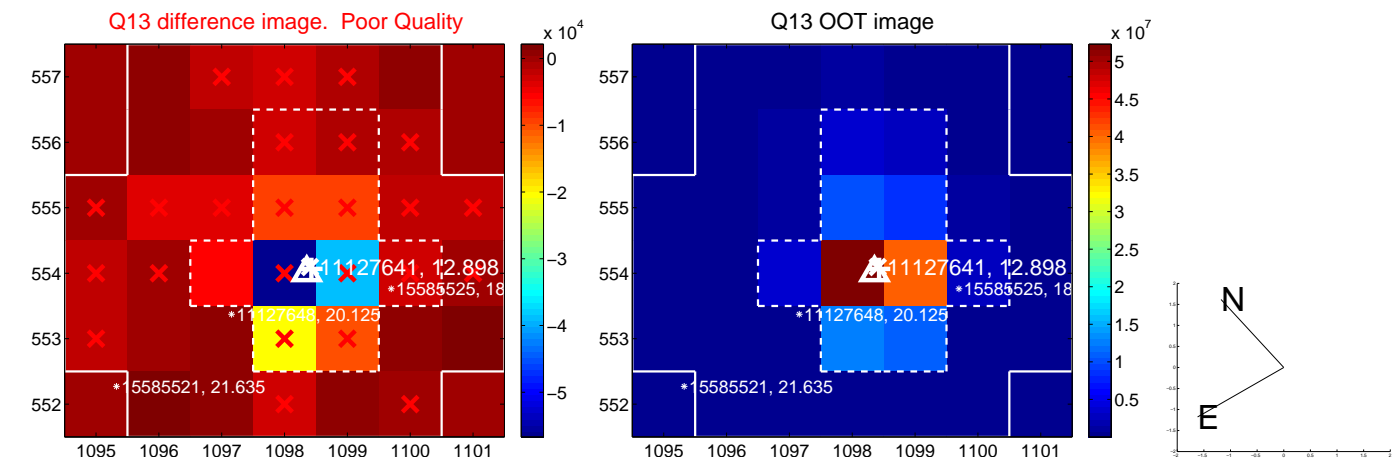
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



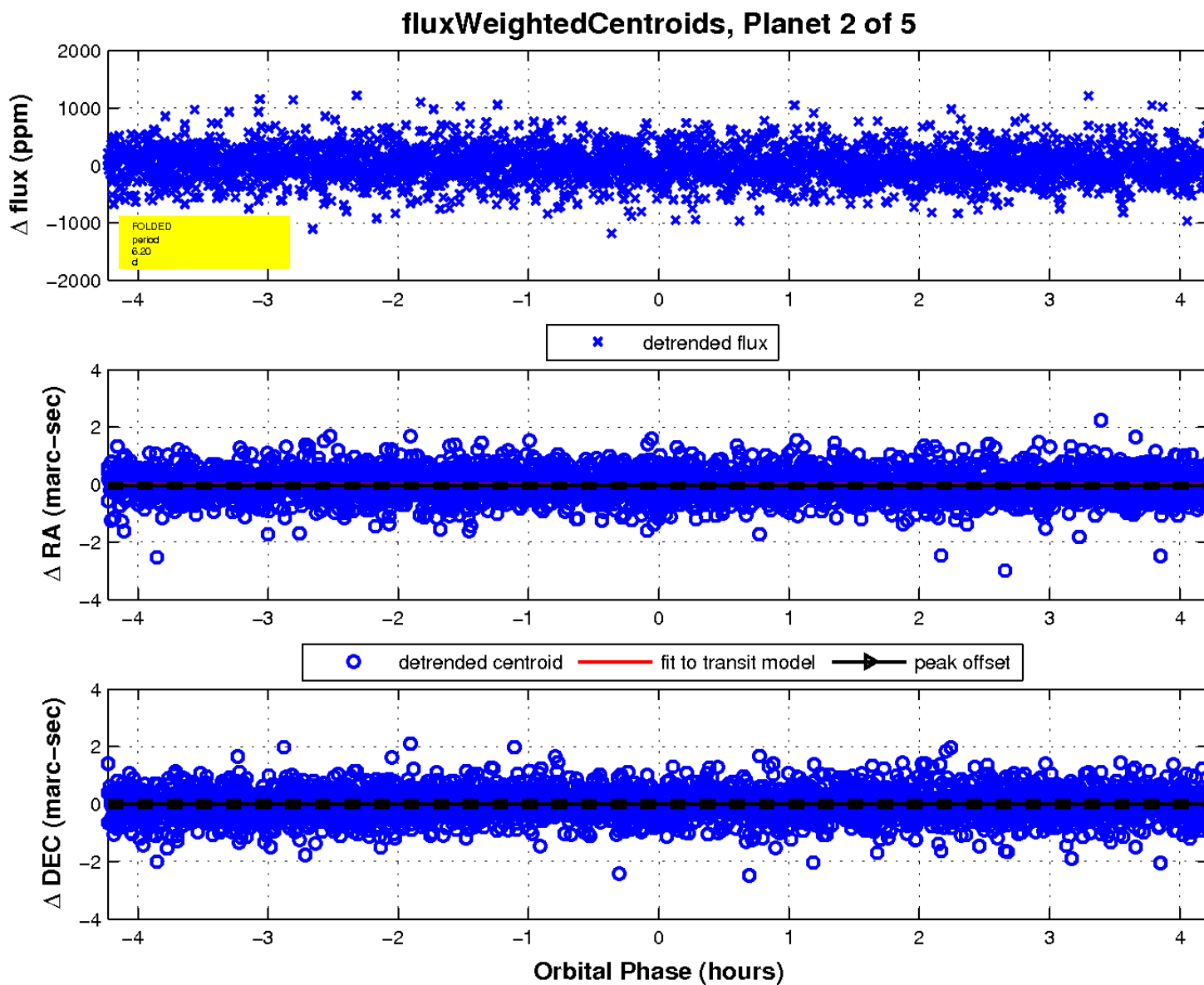
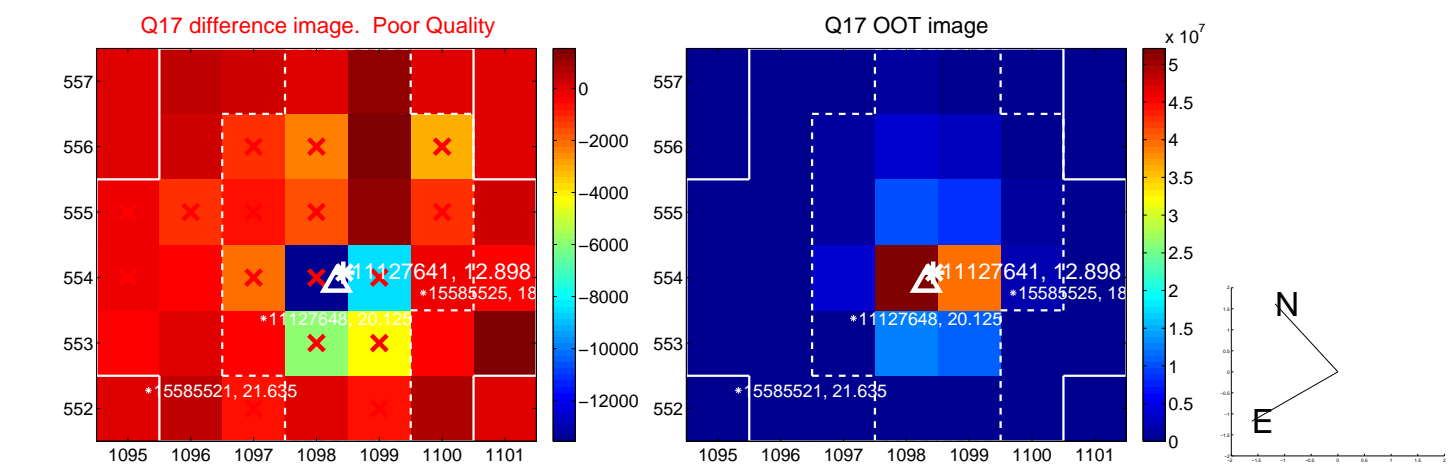
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

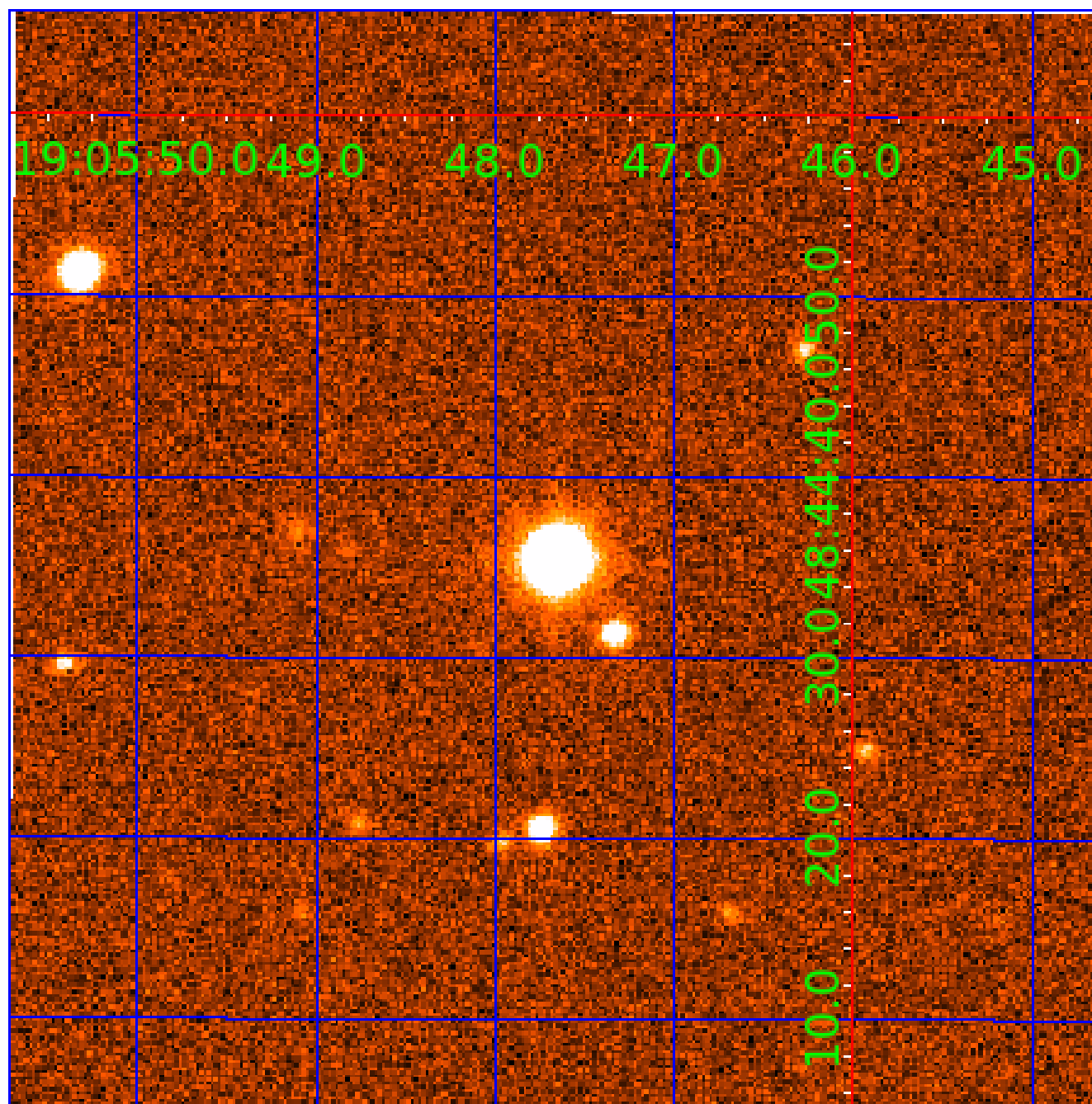


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 011127641

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})
011127641-01	OBS	No	0.827116	131.746829	12.4	6.140	8.6	4.8	1.89	7311	0.68	22884.11
011127641-02	OBS	No	6.195654	136.748929	460.6	1.410	17.0	14.7	1.89	7311	4.38	1561.37
011127641-03	OBS	No	8.138607	131.833482	98.7	6.690	12.6	6.9	1.89	7311	2.18	1085.32
011127641-04	OBS	No	16.897915	137.465436	464.9	2.313	12.2	11.0	1.89	7311	7.29	409.74
011127641-05	OBS	No	21.505833	134.667245	549.1	1.500	12.1	-1.0	1.89	7311	4.50	297.08

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
011127641-01	OBS	FP	0.00	1	0	0	0	LPP_DV
011127641-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT
011127641-03	OBS	FP	0.00	1	0	1	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_FEW_MEAS—HALO_GHOST
011127641-04	OBS	FP	0.00	1	0	1	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV—HALO_GHOST
011127641-05	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_NOFITS

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

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

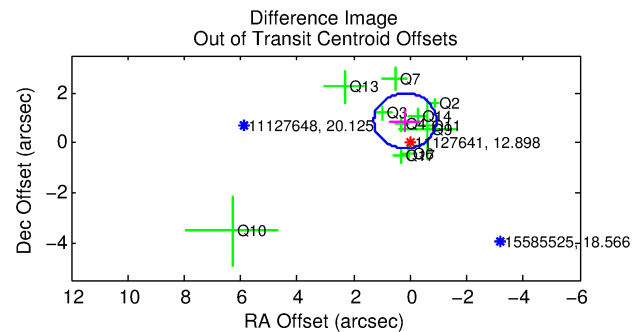
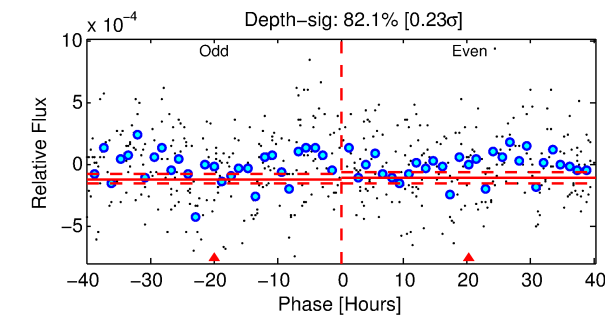
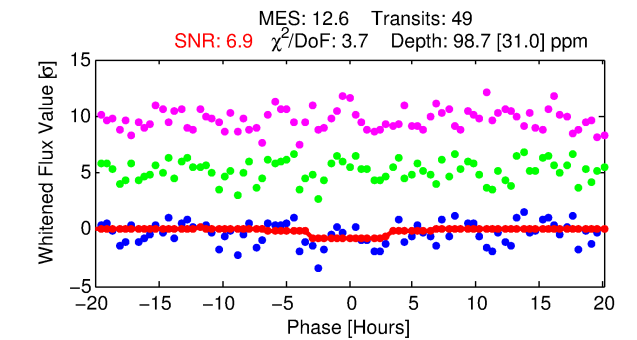
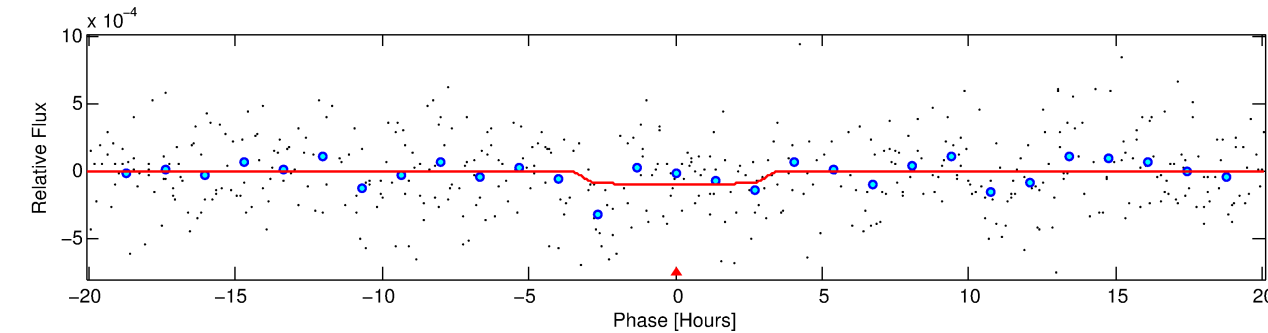
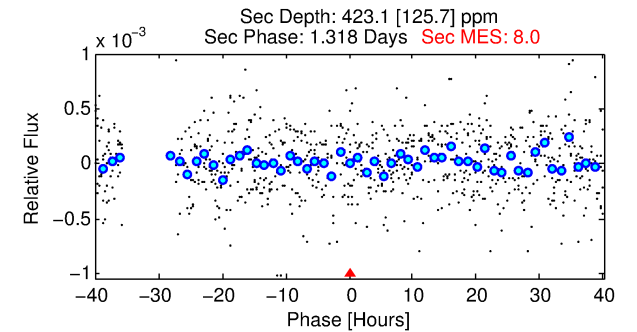
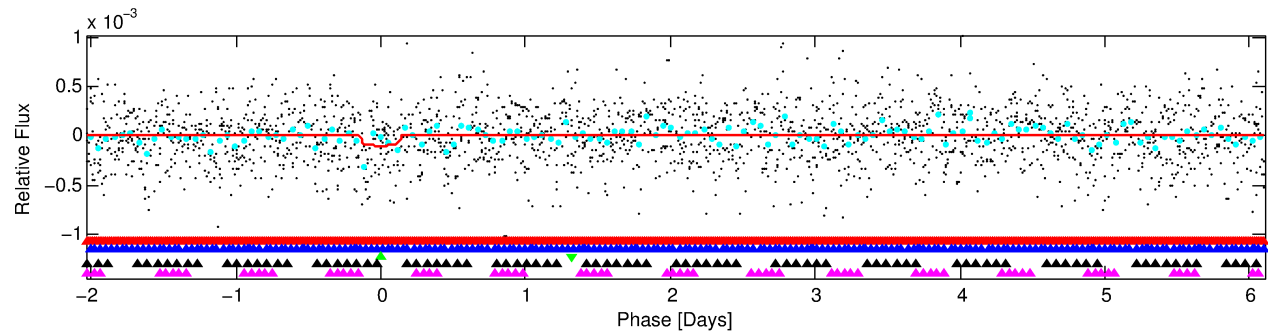
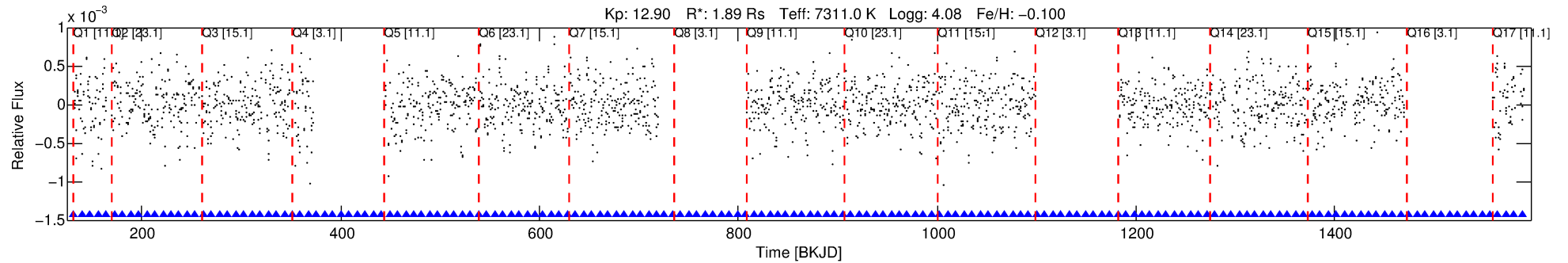
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 011127641-03

No Significant Match Found

DV One-Page Summary

KIC: 11127641 Candidate: 3 of 5 Period: 8.139 d



DV Fit Results:

Period = 8.13861 [0.00037] d
Epoch = 131.8335 [0.0359] BKJD
Rp/R* = 0.0106 [0.0084]
a/R* = 4.34 [20.87]
b = 0.90 [1.05]
Seff = 1085.32 [403.13]
Teff = 1464 [136] K
Rp = 2.18 [1.83] Re
a = 0.0917 [0.0214] AU
Ag = 413.35 [678.59] [0.61 σ]
Teffp = 10203 [4131] K [2.11 σ]

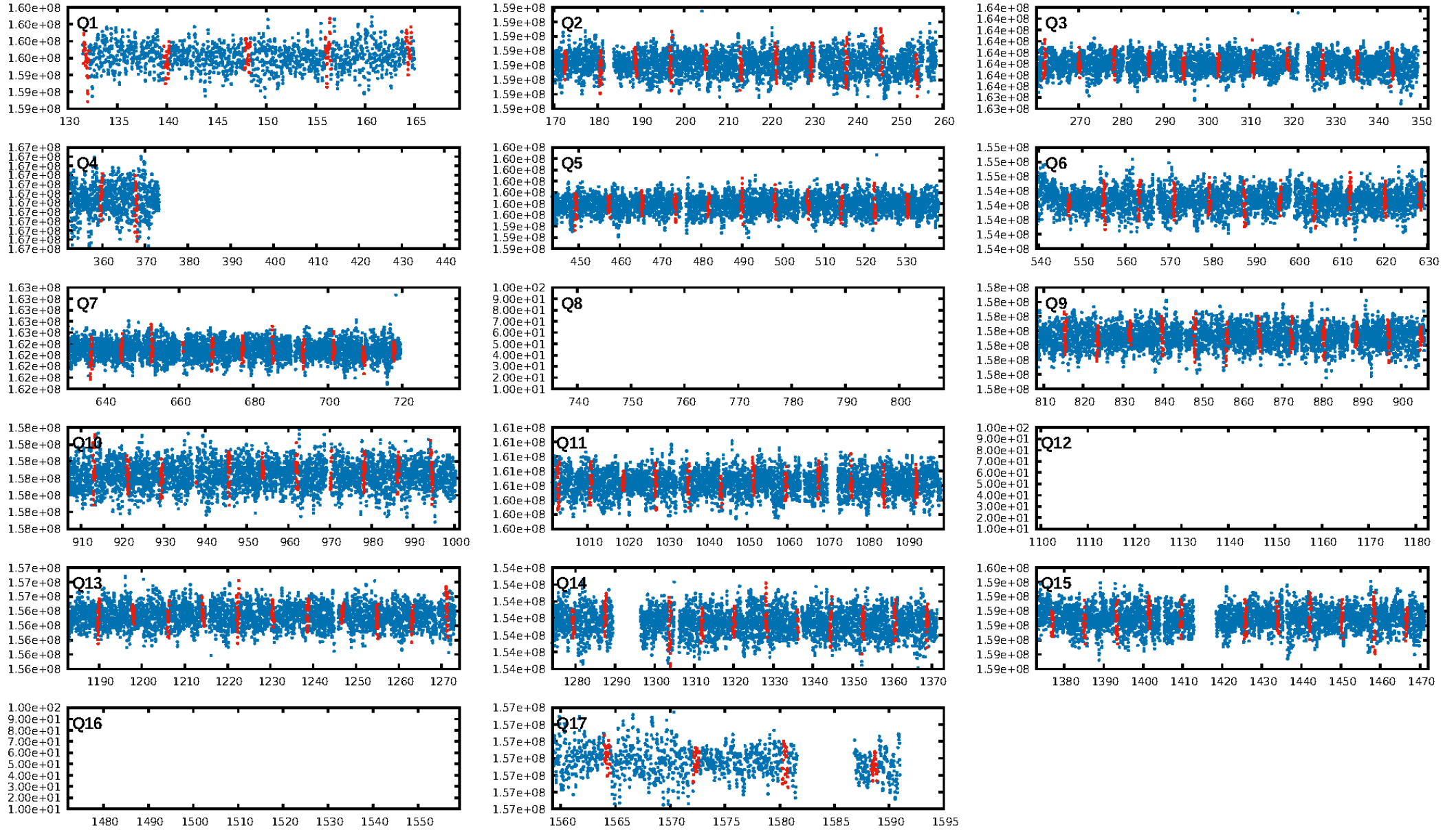
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [6.82 σ]
LongPeriod-sig: 100.0% [29.70 σ]
ModelChiSquare2-sig: 0.0%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: 6.03e-18
RollingBand-fgt: 1.00 [43/43]
GhostDiagnostic-chr: -0.1988
Centroid-sig: 1.3%
Centroid-so: 0.713 arcsec [1.74 σ]
OotOffset-rm: 0.891 arcsec [2.42 σ]
KicOffset-rm: 0.877 arcsec [2.41 σ]
OotOffset-st: 4/3/1/3 [11]
KicOffset-st: 4/3/1/3 [11]
DiffImageQuality-fgm: 0.27 [3/11]
DiffImageOverlap-fno: 0.00 [0/14]

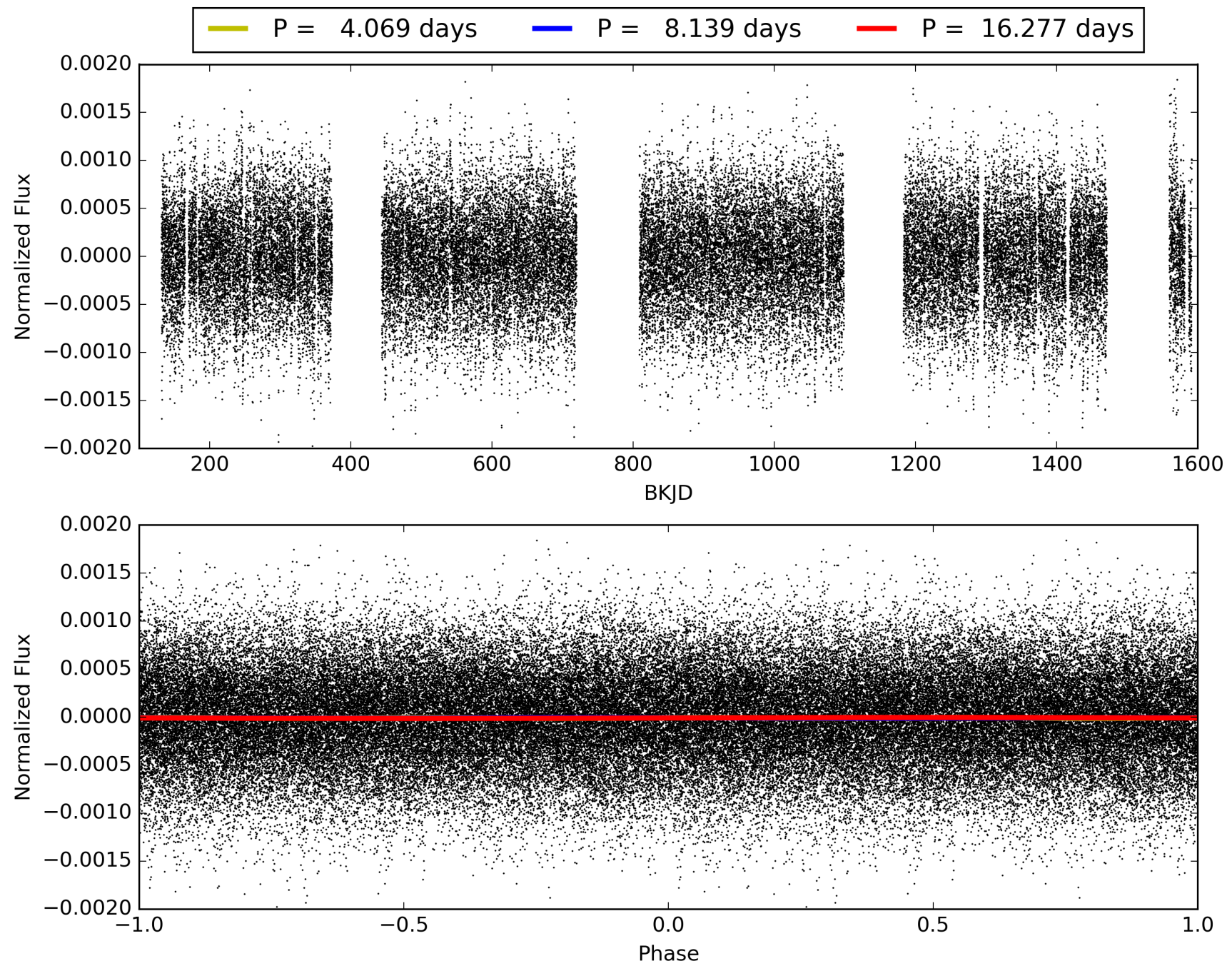
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 29-Jan-2016 19:27:02 Z

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

TCE 011127641-03, PDC Light Curves

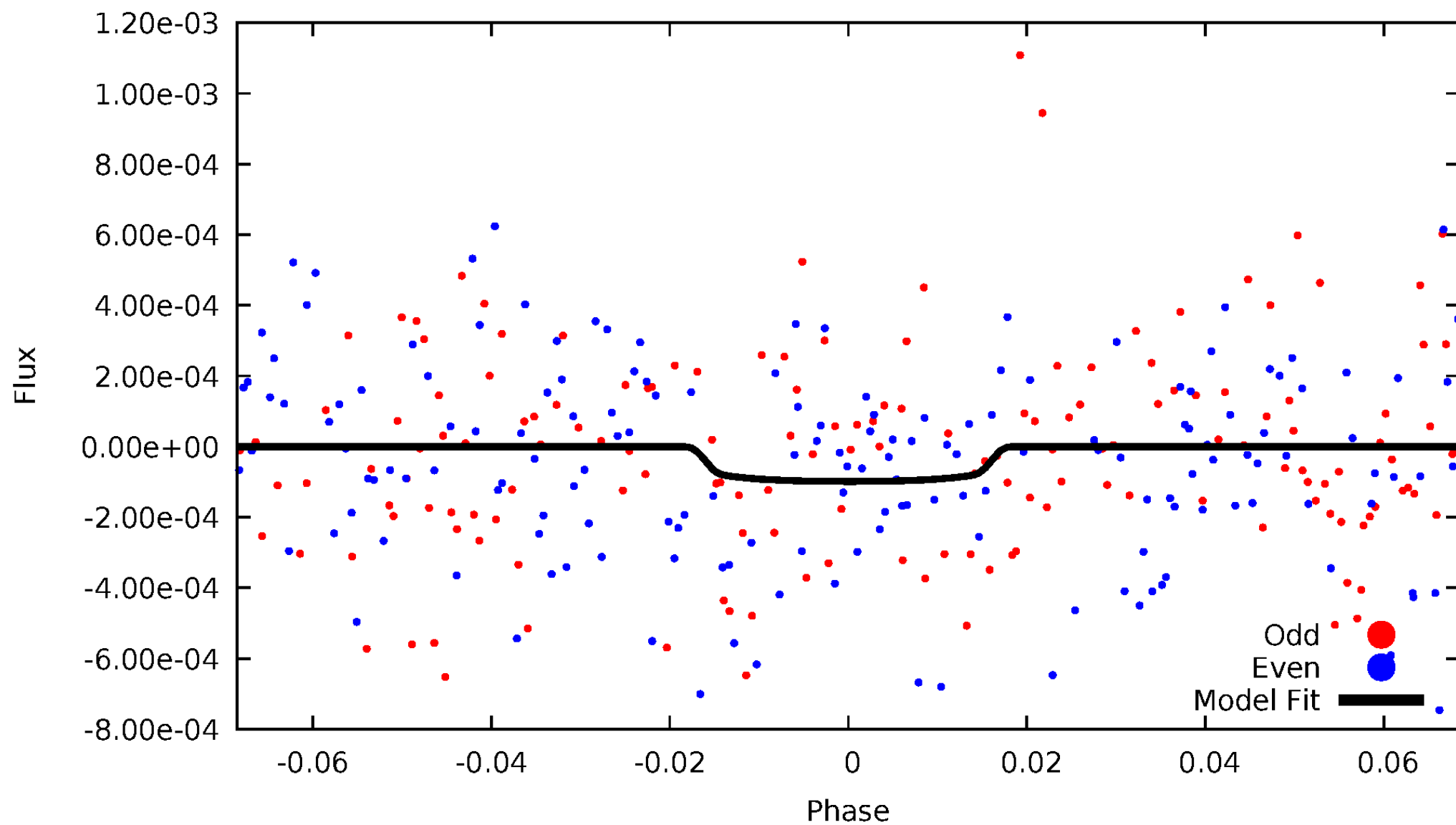


TCE 011127641-03



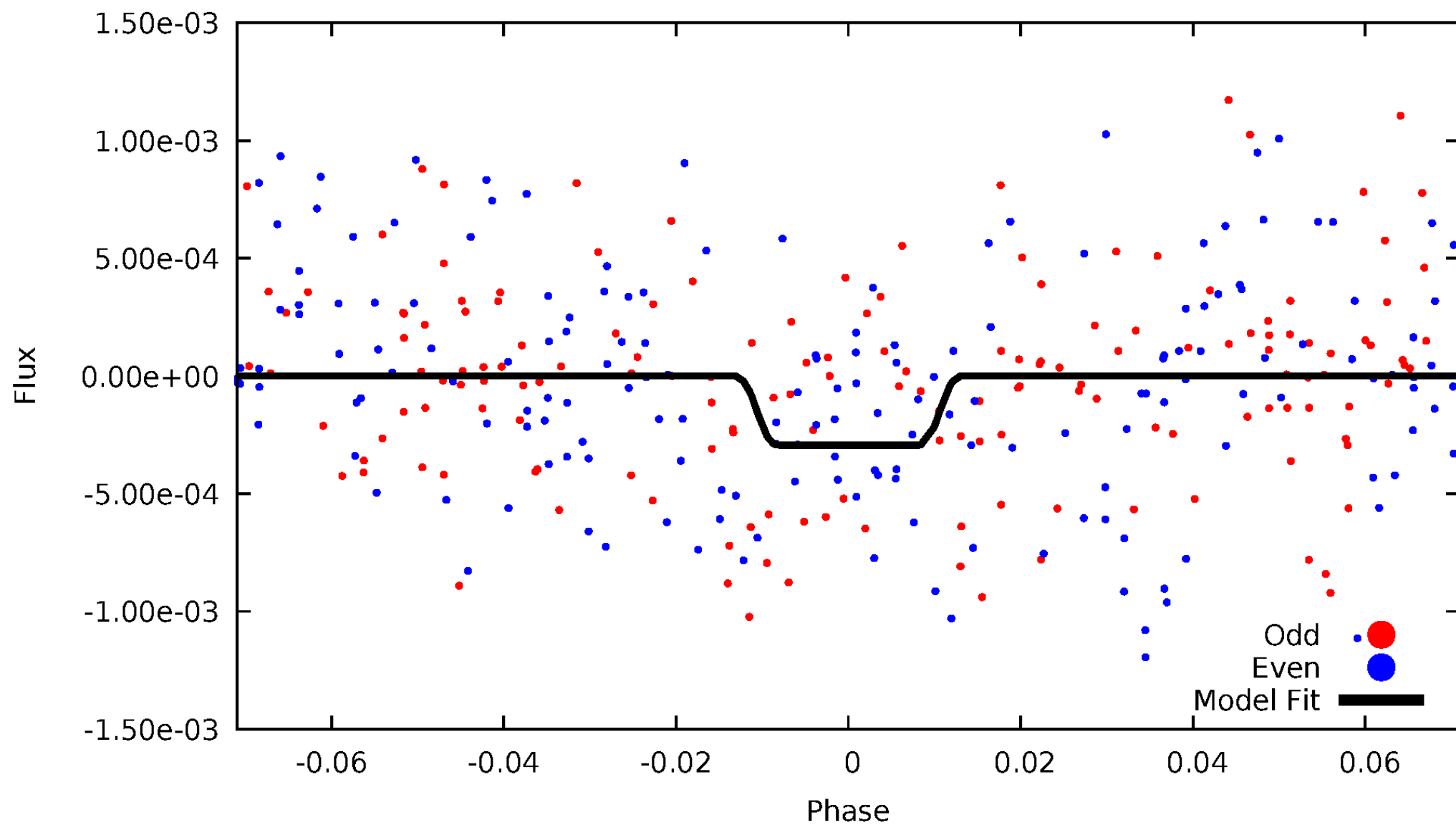
DV Odd/Even

TCE 011127641-03



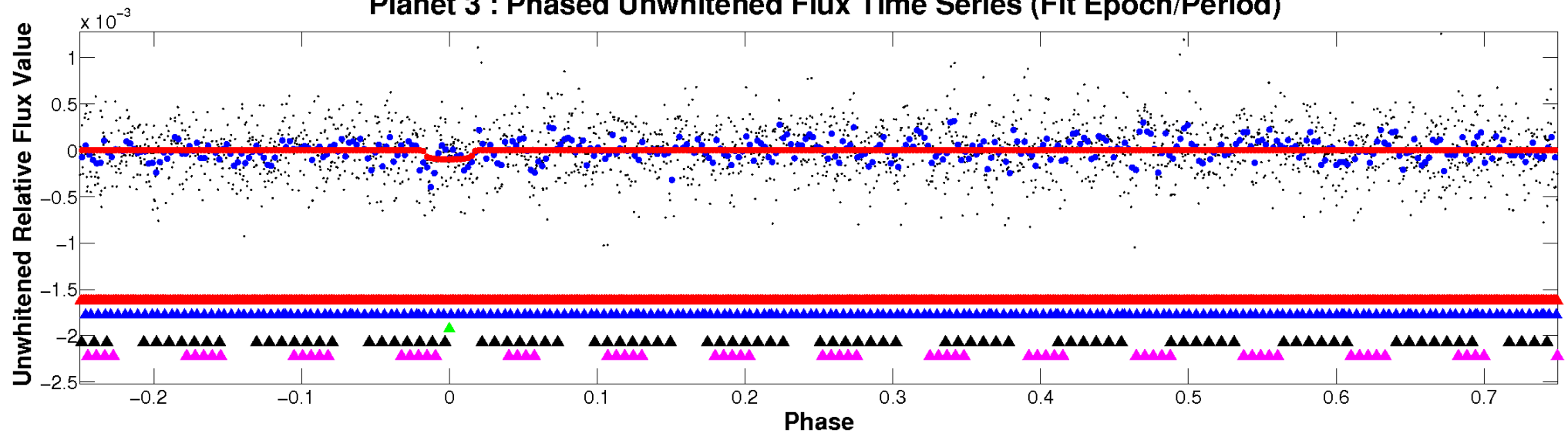
ALT Odd/Even

TCE 011127641-03

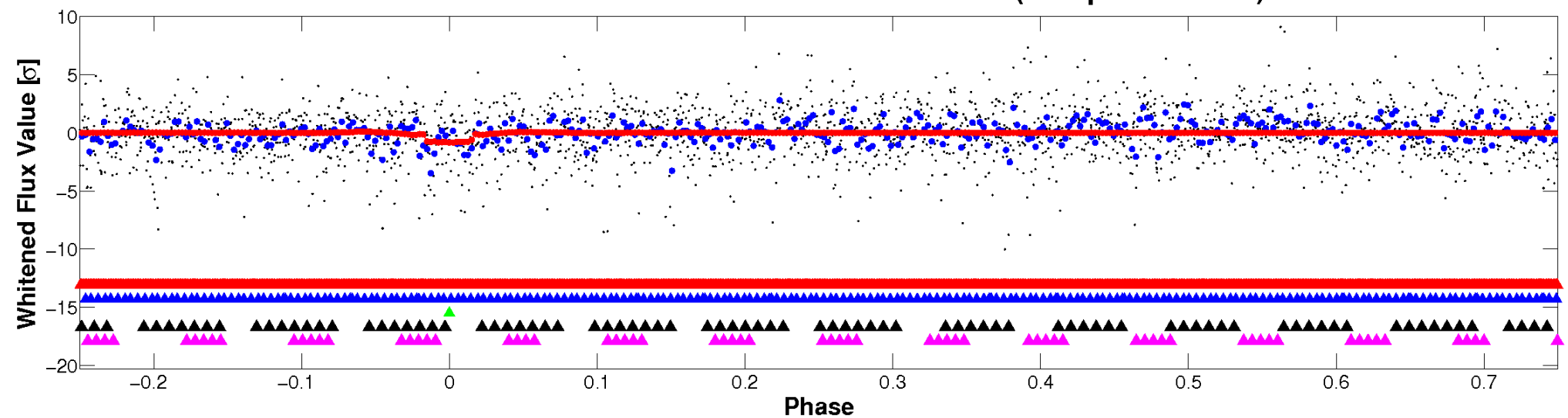


Non-Whitened Vs. Whitened Light Curve

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

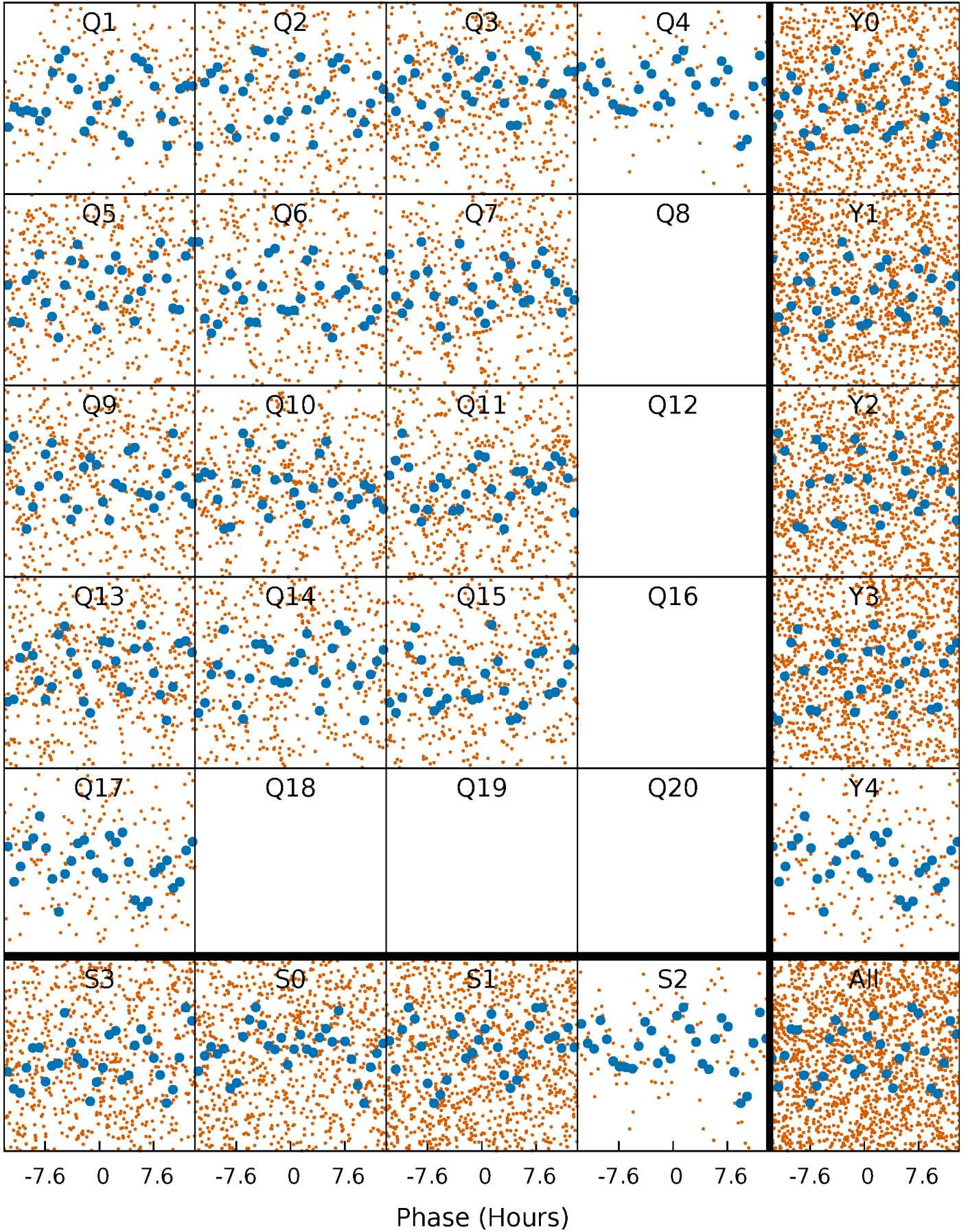


Planet 3 : Phased Whitened Flux Time Series (Fit Epoch/Period)



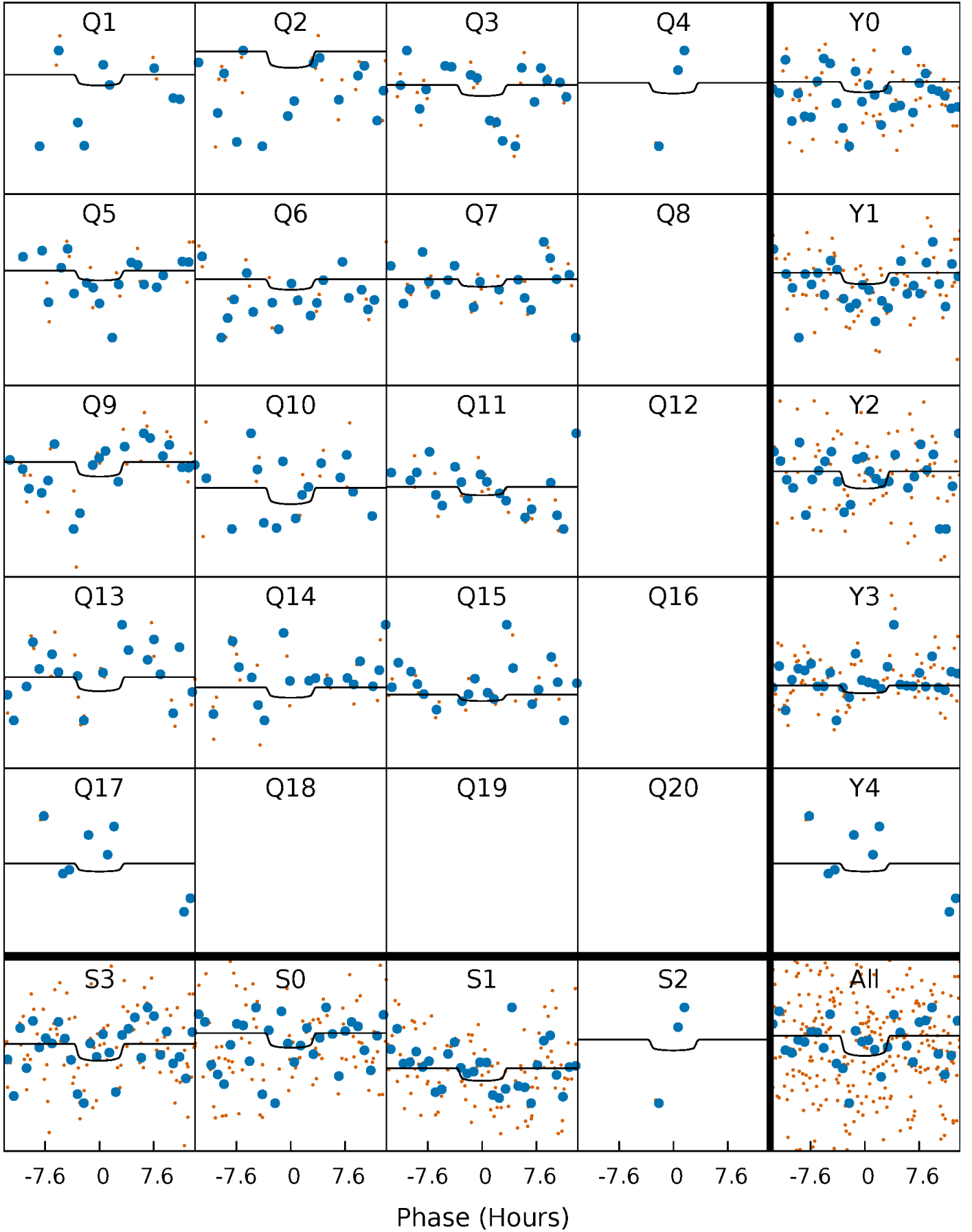
PDC Quarter-Phased Transit Curves

TCE 011127641-03 P= 8.138607 Days $T_0=131.833482$ (BKJD)



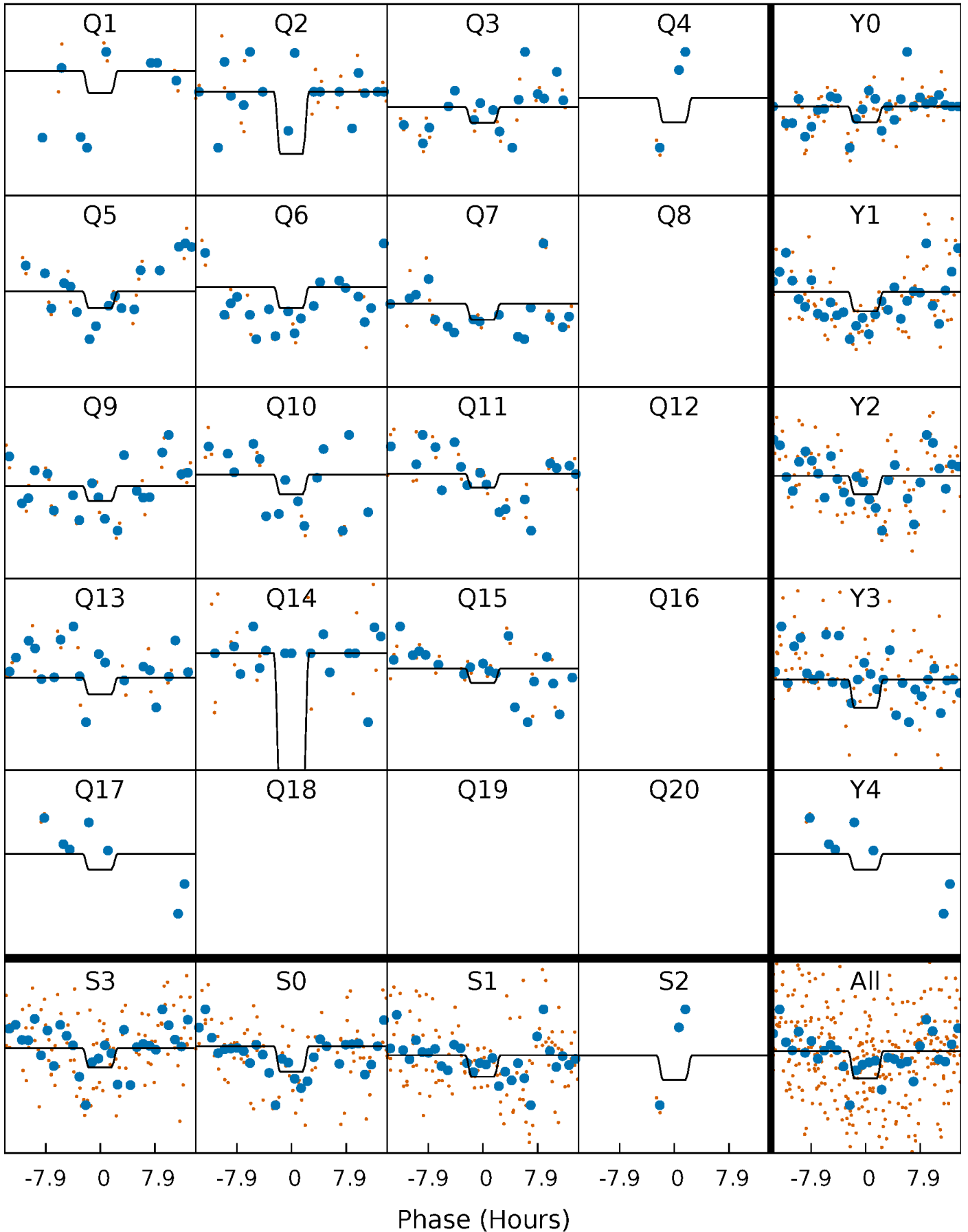
DV Quarter-Phased Transit Curves

TCE 011127641-03 P= 8.138607 Days $T_0=131.833482$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

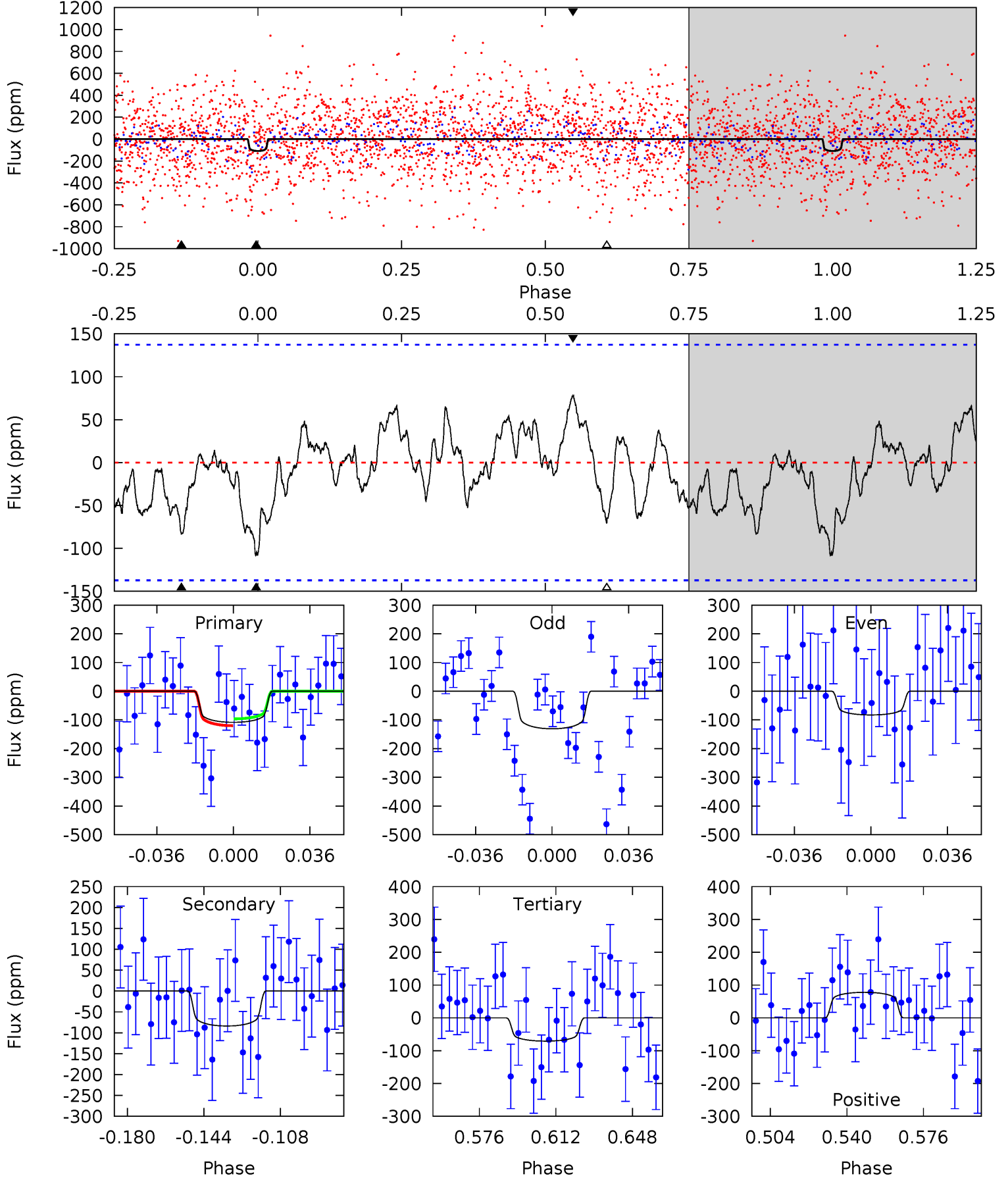
TCE 011127641-03 P= 8.138687 Days $T_0=131.833416$ (BKJD)



DV Model-Shift Uniqueness Test

011127641-03, P = 8.138607 Days, E = 131.833482 Days

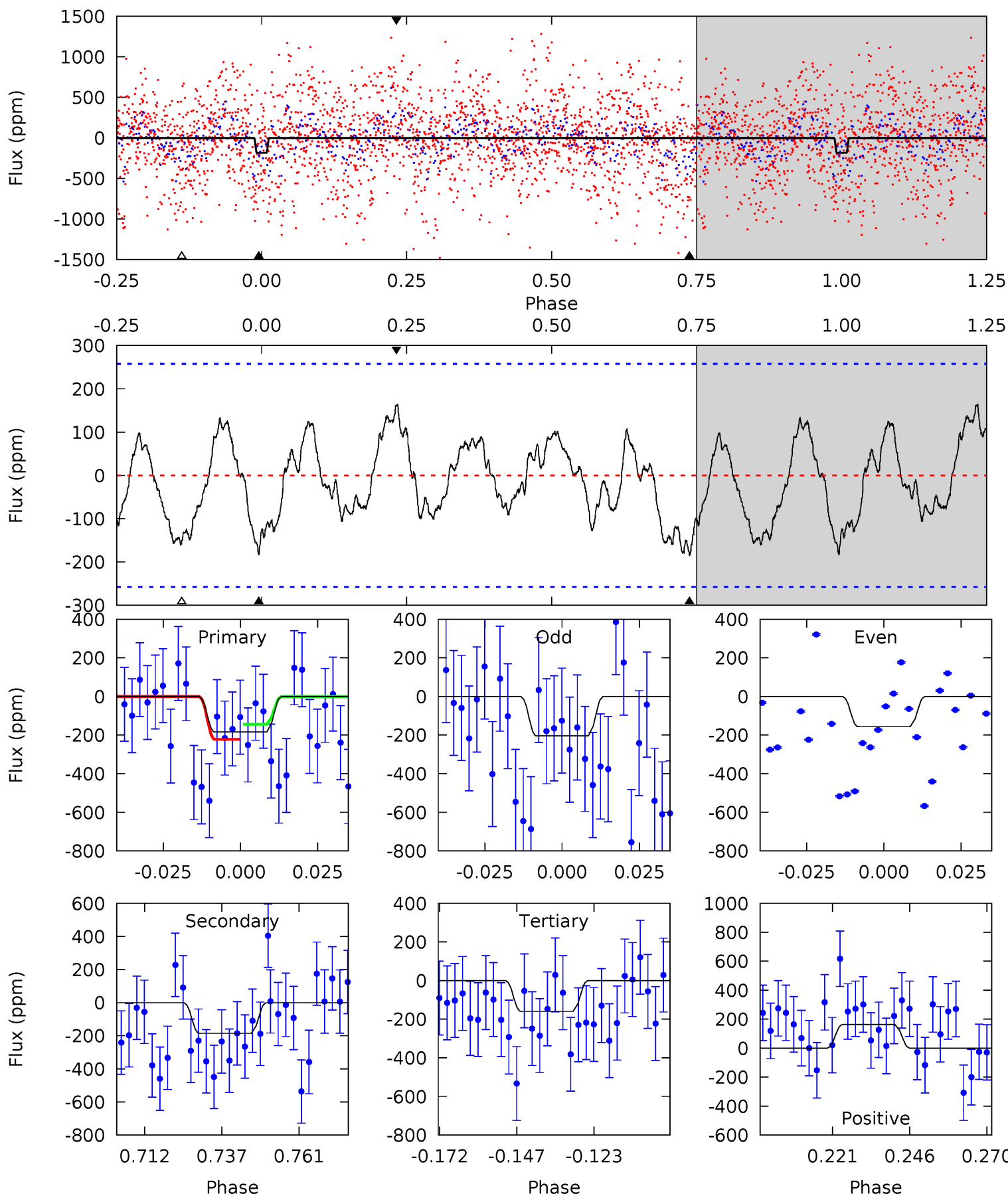
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
3.77	2.91	2.46	2.71	4.77	2.10	1.12	1.31	1.07	0.45	0.21	0.84	1.90	0.42	0.42



Alt Model-Shift Uniqueness Test

011127641-03, P = 8.138687 Days, E = 131.833416 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
3.47	3.50	3.01	3.08	4.85	2.25	1.43	0.46	0.39	0.48	0.42	0.46	1.30	0.47	0.74



Stellar Parameters For KIC 011127641

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	7311^{+228}_{-330}	$4.077^{+0.170}_{-0.170}$	$-0.100^{+0.250}_{-0.350}$	$1.889^{+0.547}_{-0.448}$	$1.551^{+0.211}_{-0.257}$	$0.324^{+0.296}_{-0.153}$
	+3%/-5%	+4%/-4%	+250%/-350%	+29%/-24%	+14%/-17%	+91%/-47%
Source	KIC0	KIC0	KIC0	DSEP		

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

Secondary Eclipse Parameters for KIC 011127641-03 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-84 ± 29	$2.38^{+1.66}_{-1.37}$	2056^{+160}_{-167}	6349^{+4677}_{-1415}	66^{+306}_{-45}
Alt.	-185 ± 53	$3.50^{+1.90}_{-1.56}$	2028^{+155}_{-138}	6321^{+2780}_{-1104}	69^{+162}_{-41}

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

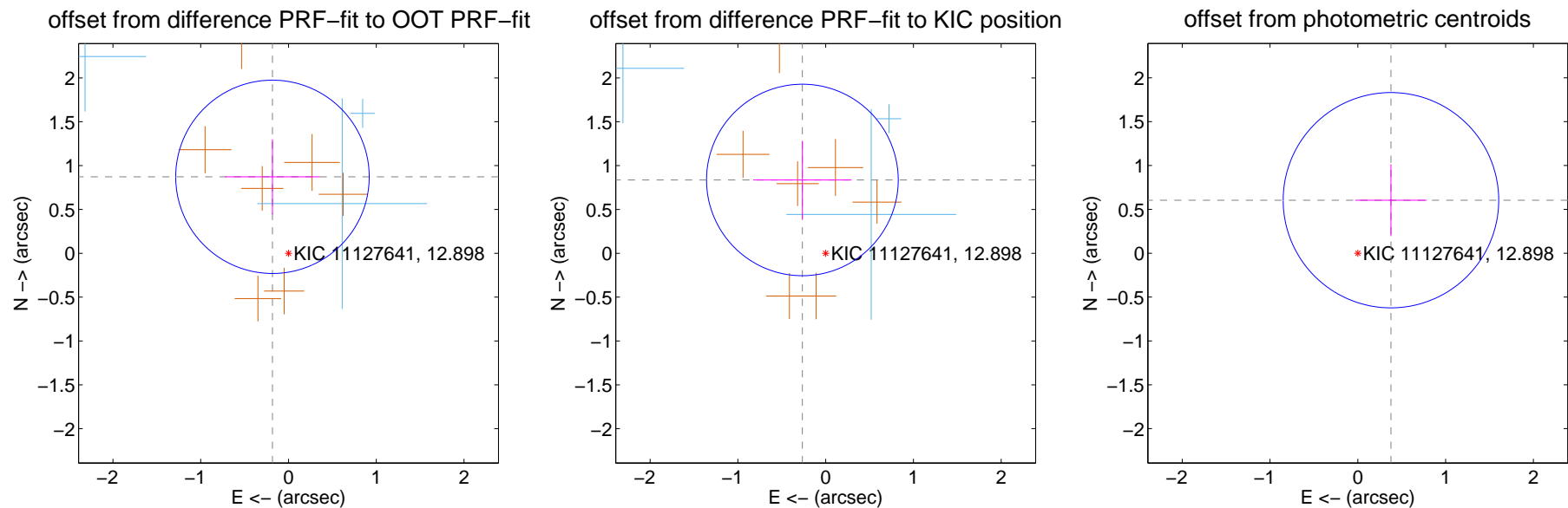
DV Centroid Data

Supplemental centroid analysis for 011127641-03. Kepler magnitude: 12.90. Transit SNR 6.87

There are 3 quarters with good PRF difference image offsets

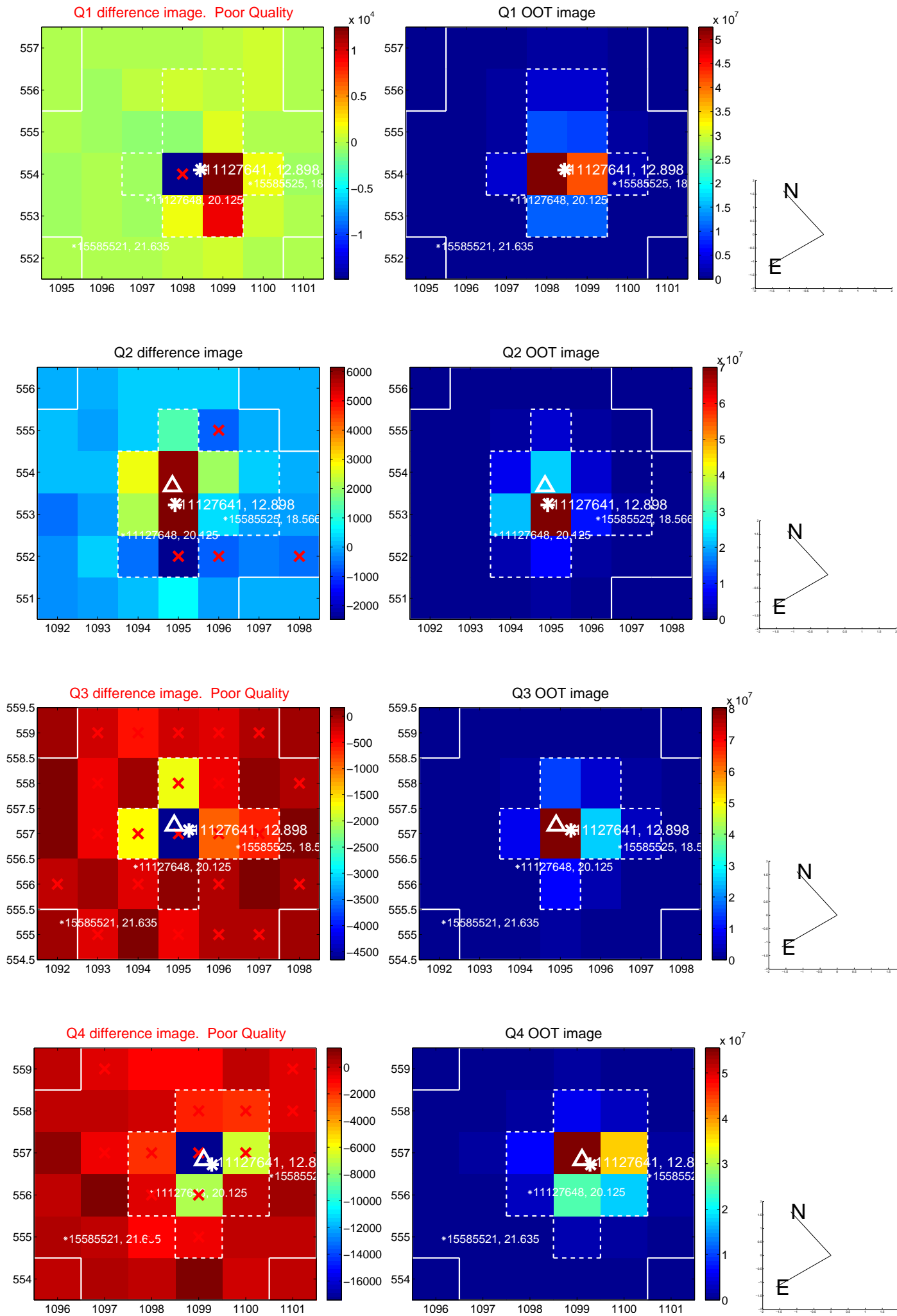
The direct PRF centroid is offset from the target star catalog position by about 0.07 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.891 ± 0.367	2.42	0.183 ± 0.540	0.872 ± 0.428
PRF-fit source offset from KIC position	0.877 ± 0.364	2.41	0.265 ± 0.560	0.836 ± 0.446
photometric centroid source offset	0.71 ± 0.41	1.74	-0.38 ± 0.41	0.60 ± 0.41

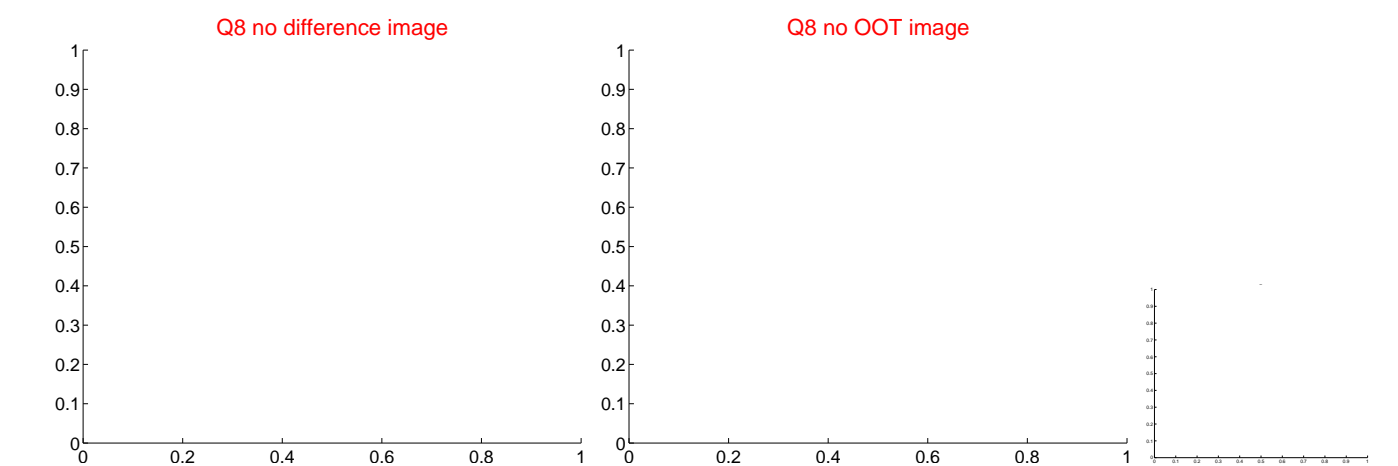
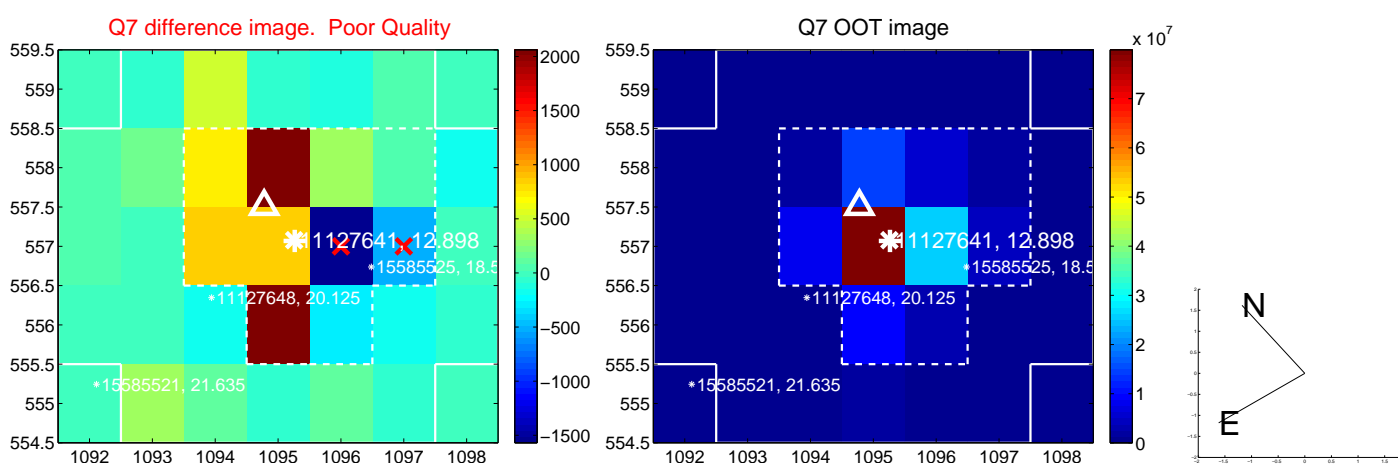
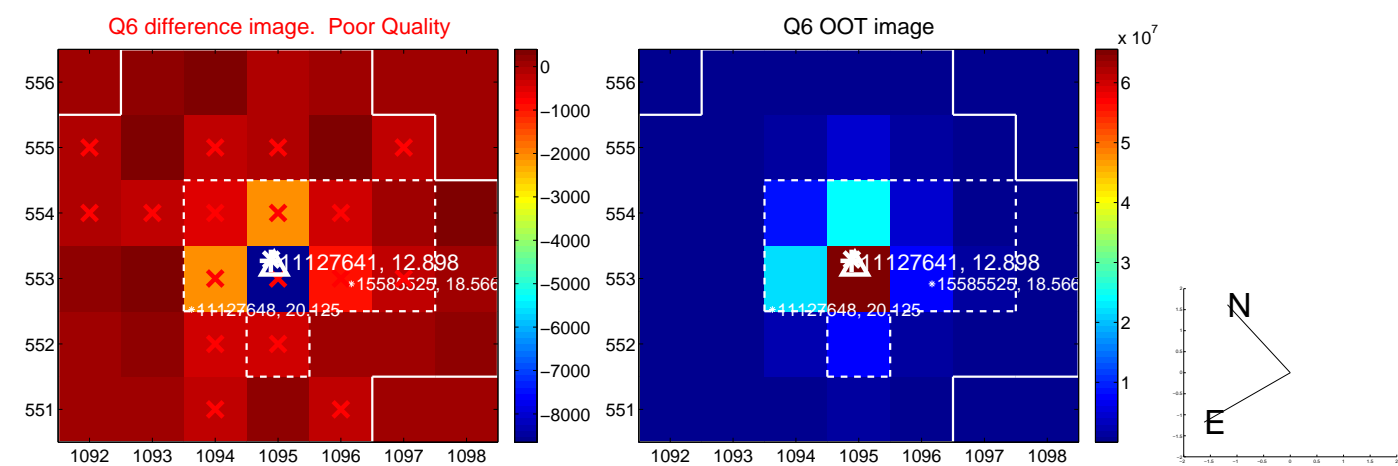
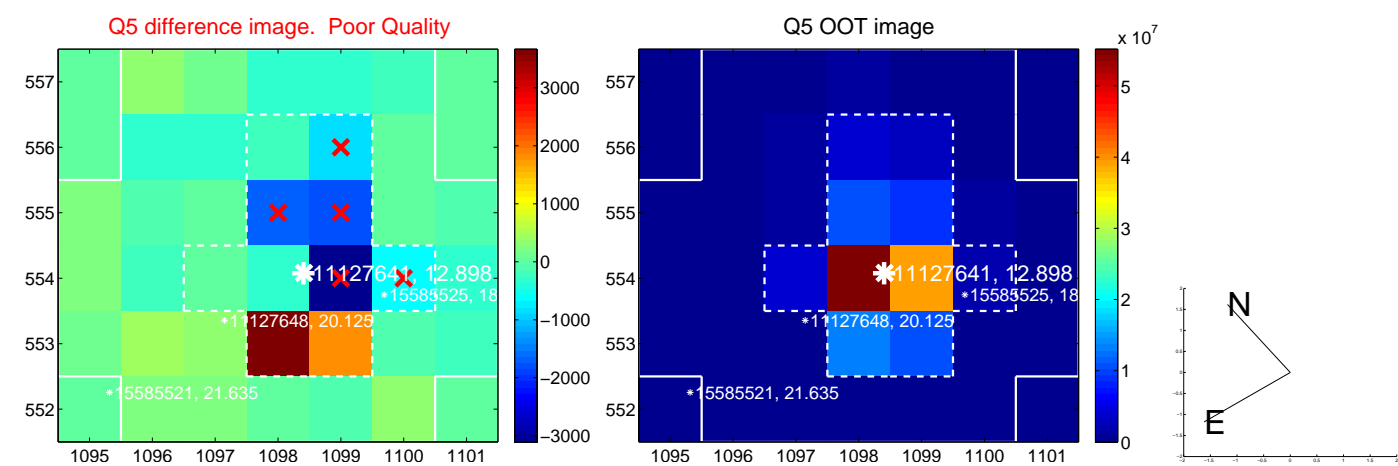


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

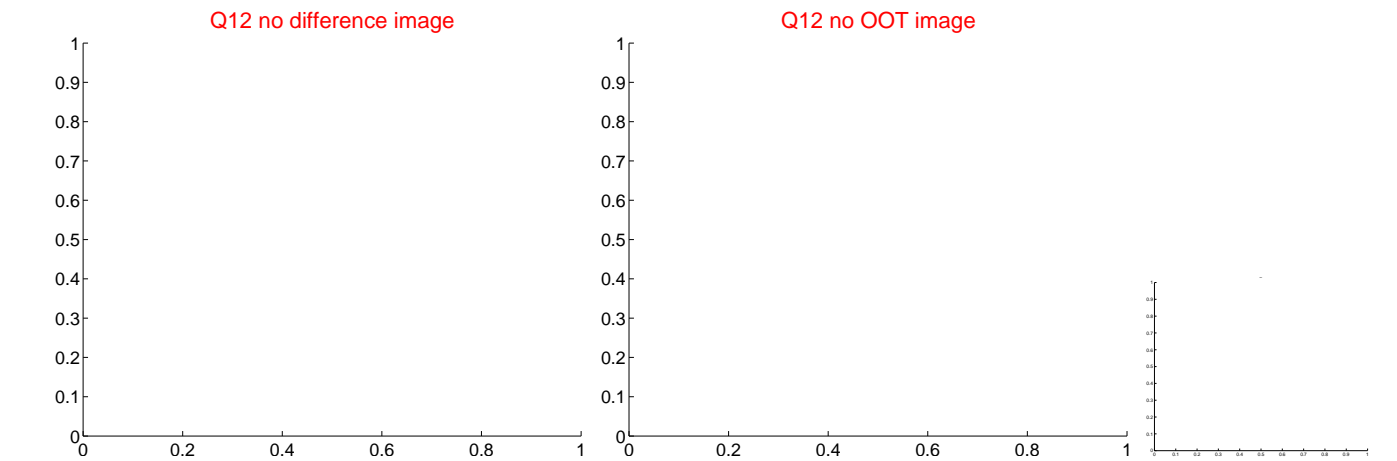
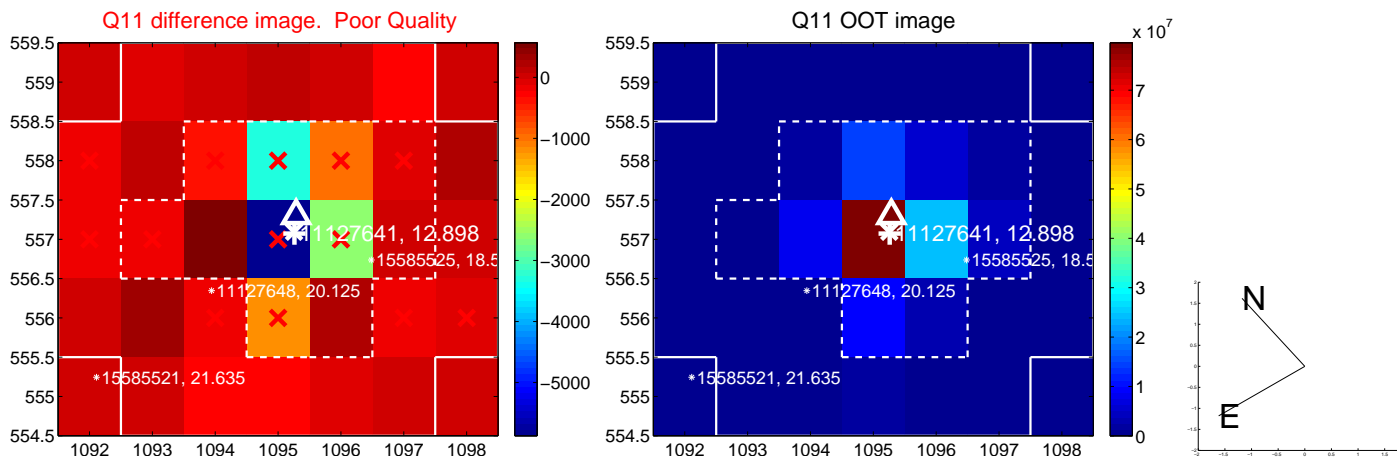
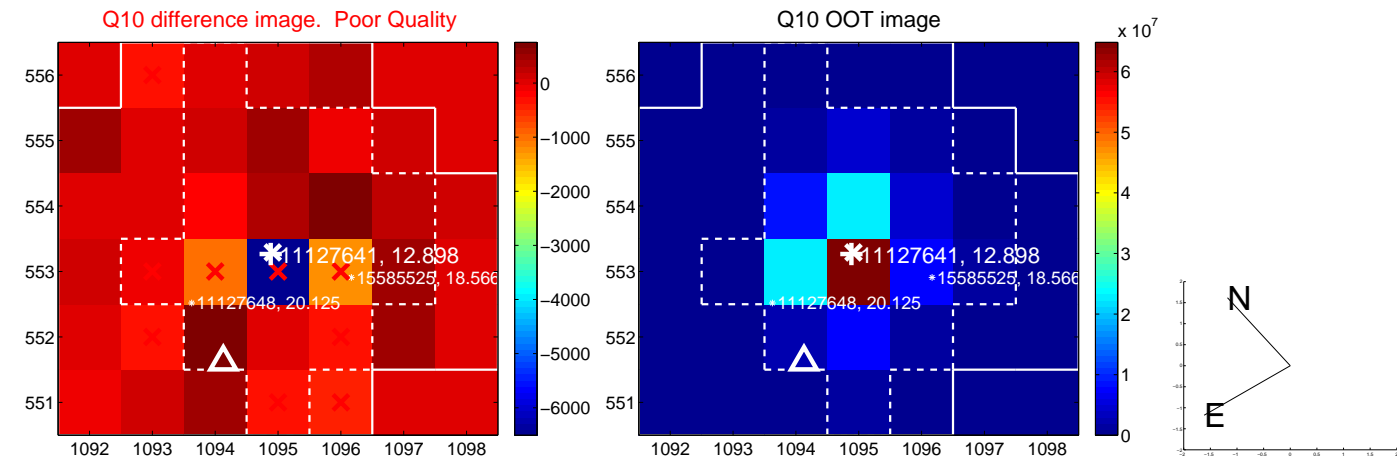
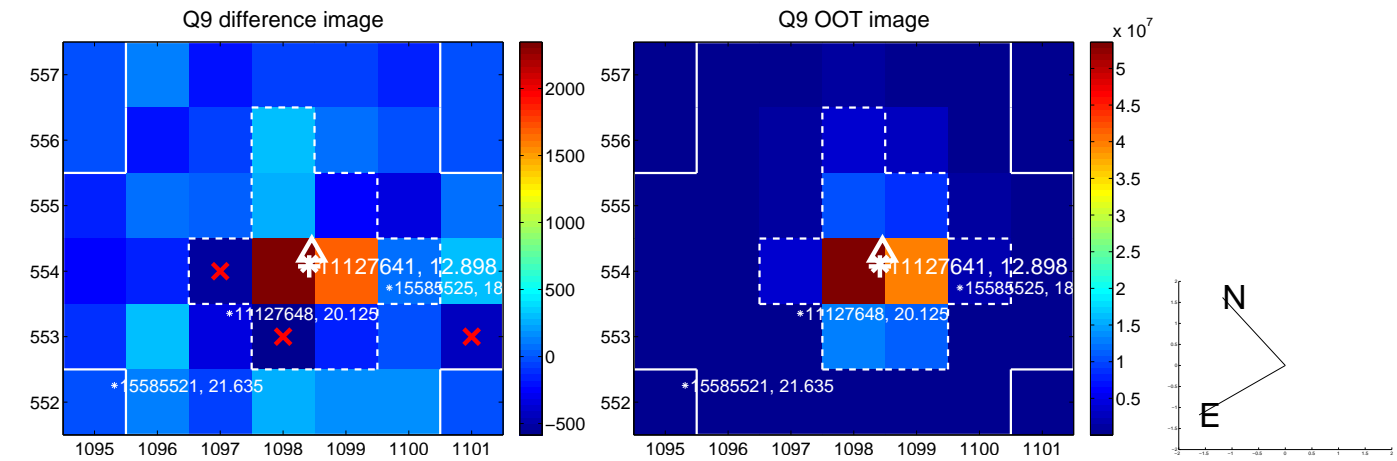
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



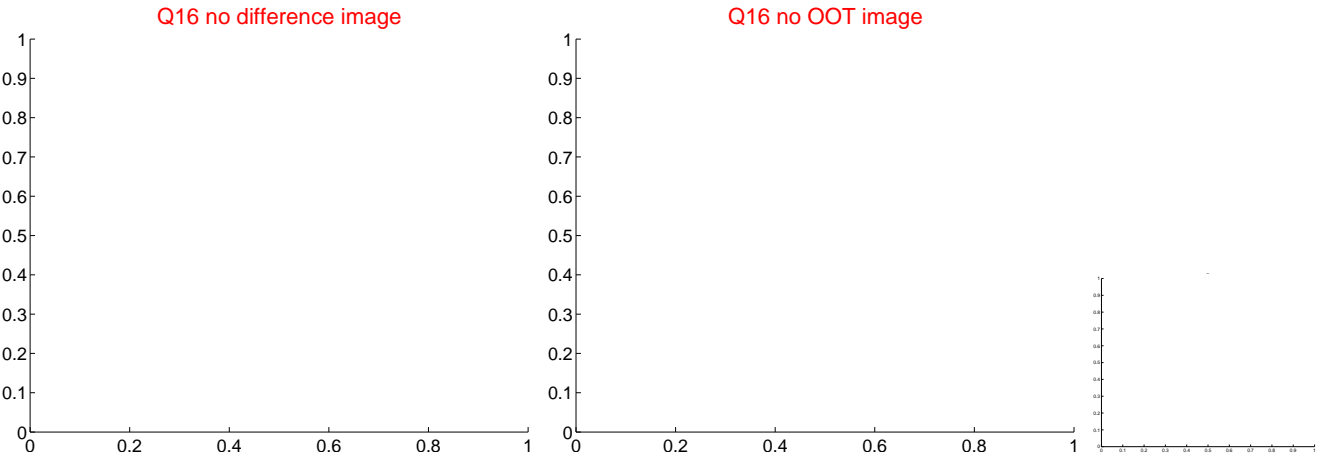
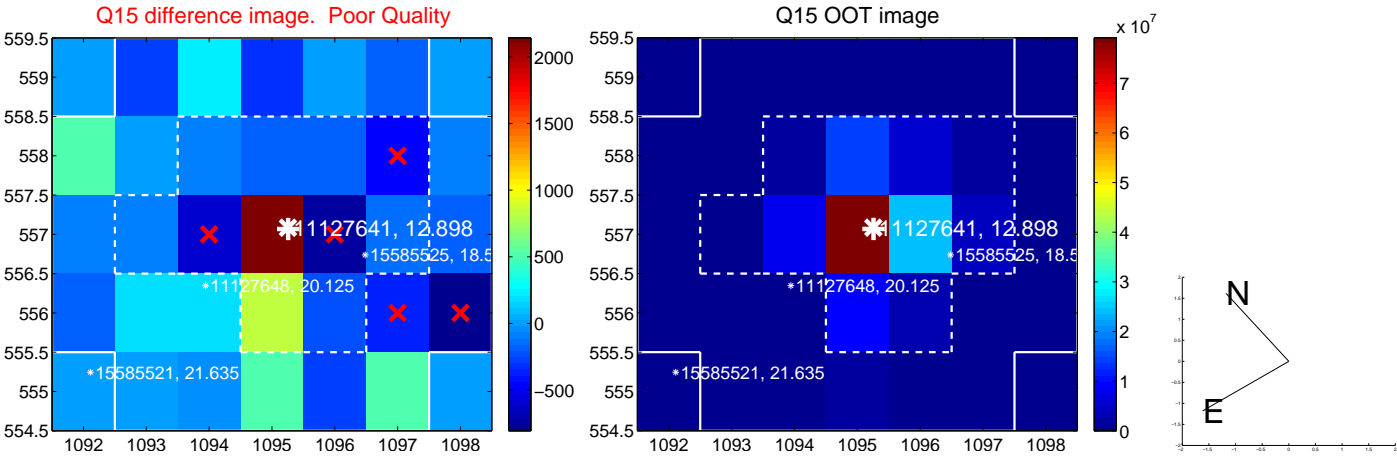
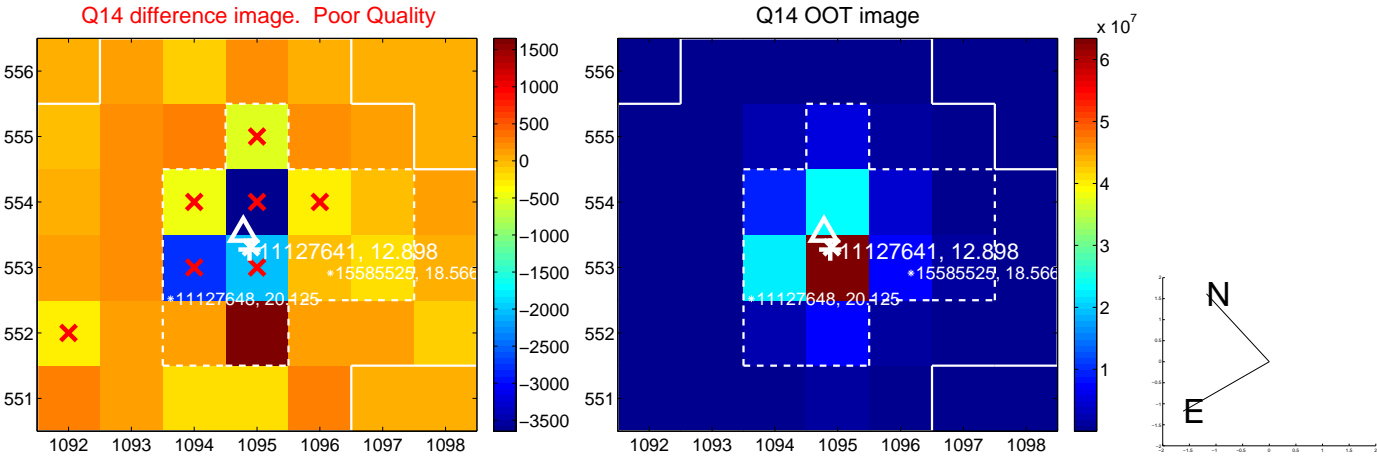
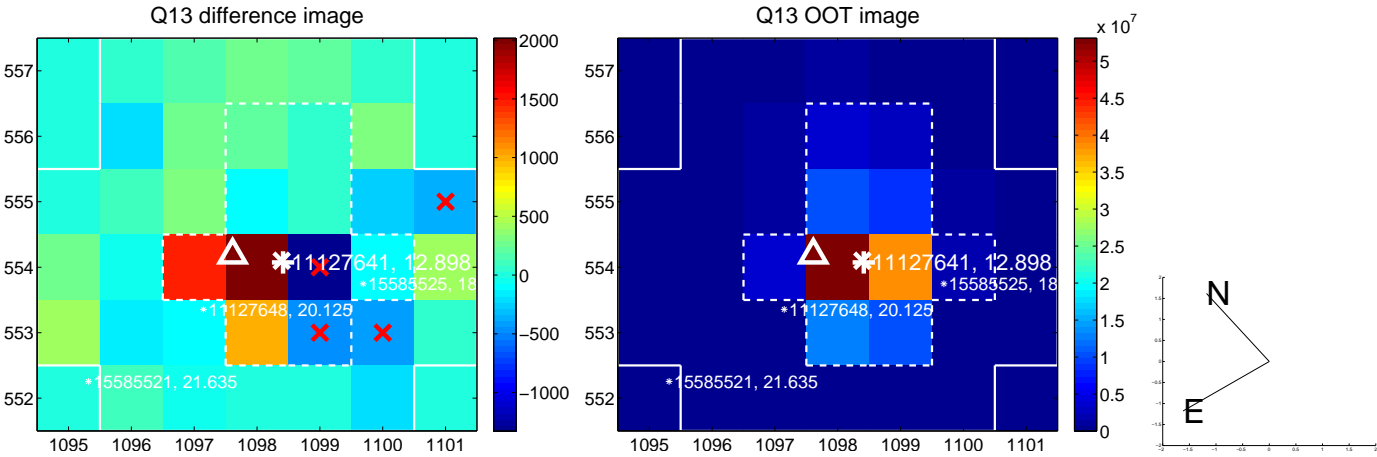
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



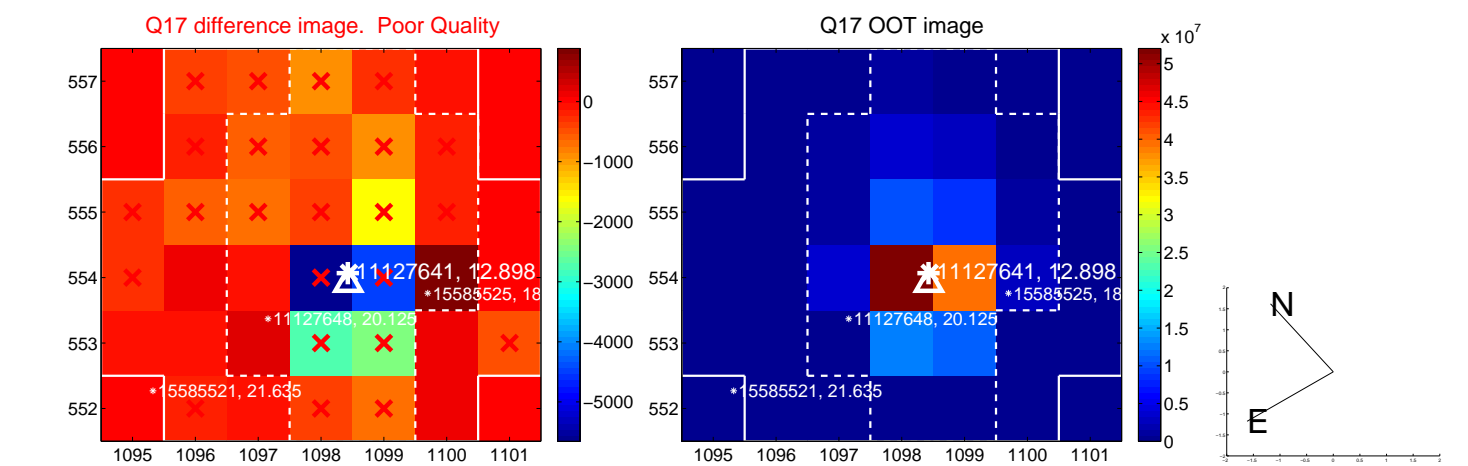
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



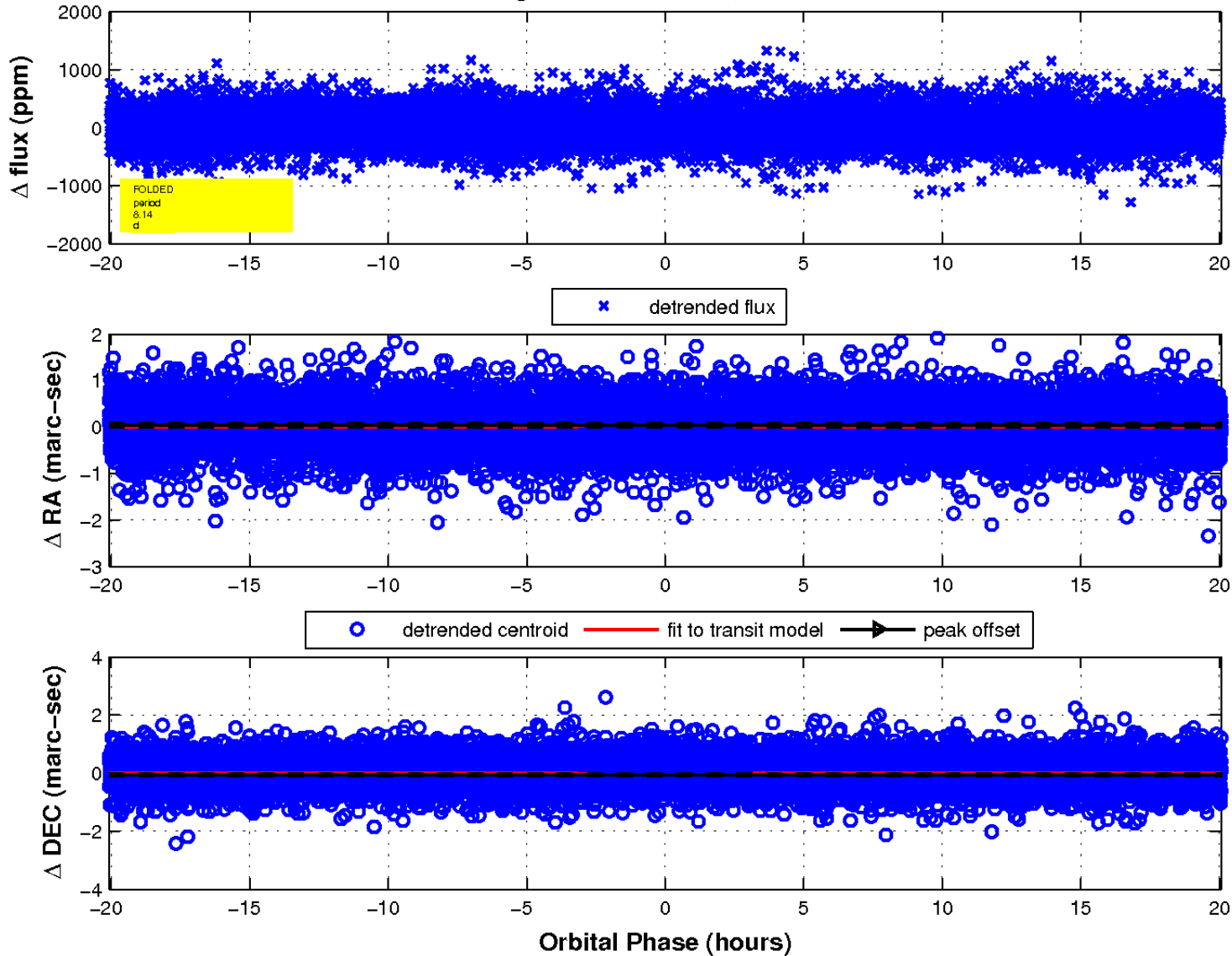
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

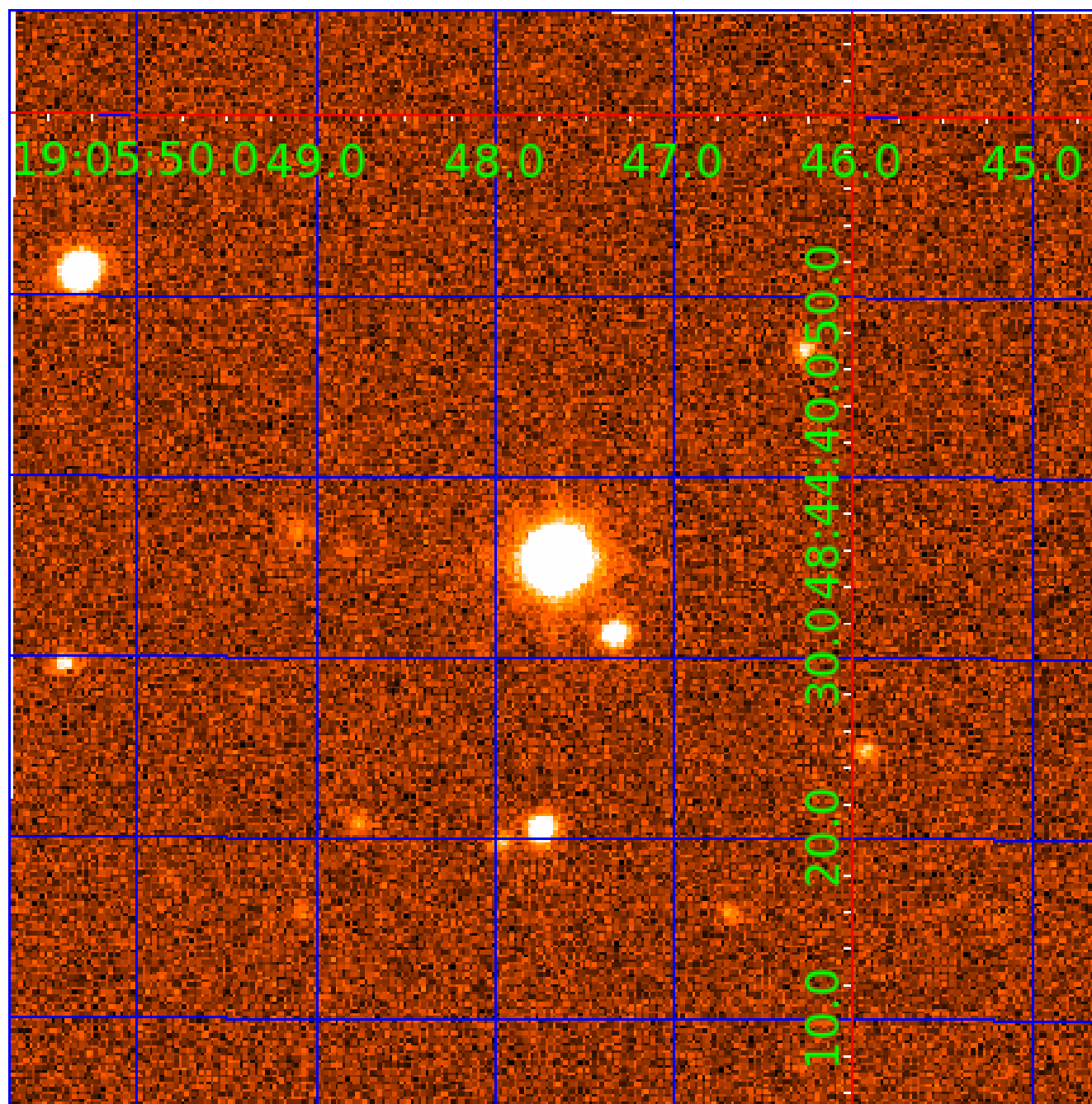


fluxWeightedCentroids, Planet 3 of 5



UKIRT Image

Declination



KIC 011127641

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})
011127641-01	OBS	No	0.827116	131.746829	12.4	6.140	8.6	4.8	1.89	7311	0.68	22884.11
011127641-02	OBS	No	6.195654	136.748929	460.6	1.410	17.0	14.7	1.89	7311	4.38	1561.37
011127641-03	OBS	No	8.138607	131.833482	98.7	6.690	12.6	6.9	1.89	7311	2.18	1085.32
011127641-04	OBS	No	16.897915	137.465436	464.9	2.313	12.2	11.0	1.89	7311	7.29	409.74
011127641-05	OBS	No	21.505833	134.667245	549.1	1.500	12.1	-1.0	1.89	7311	4.50	297.08

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
011127641-01	OBS	FP	0.00	1	0	0	0	LPP_DV
011127641-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT
011127641-03	OBS	FP	0.00	1	0	1	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_FEW_MEAS—HALO_GHOST
011127641-04	OBS	FP	0.00	1	0	1	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV—HALO_GHOST
011127641-05	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_NOFITS

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

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

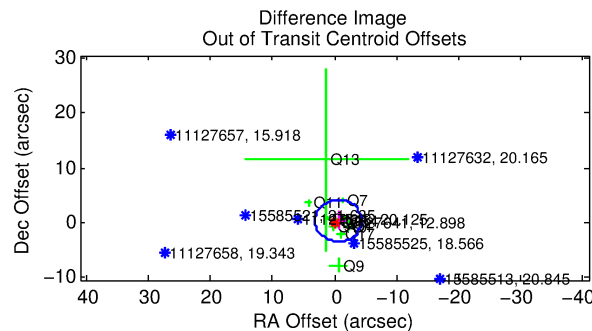
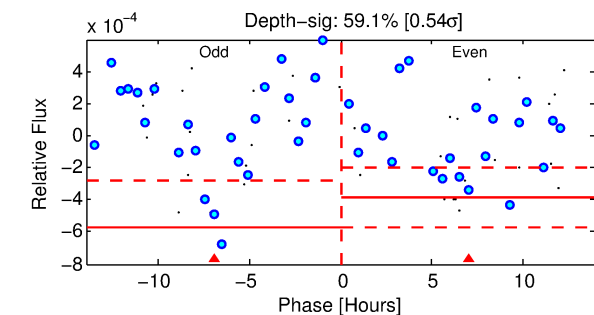
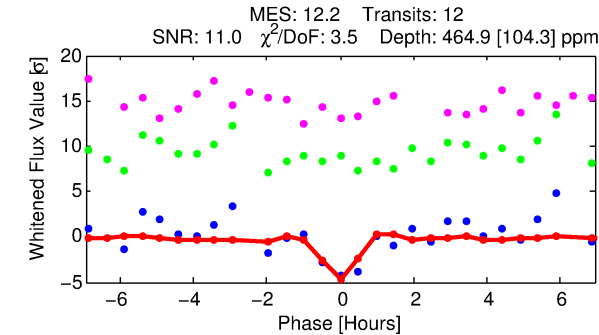
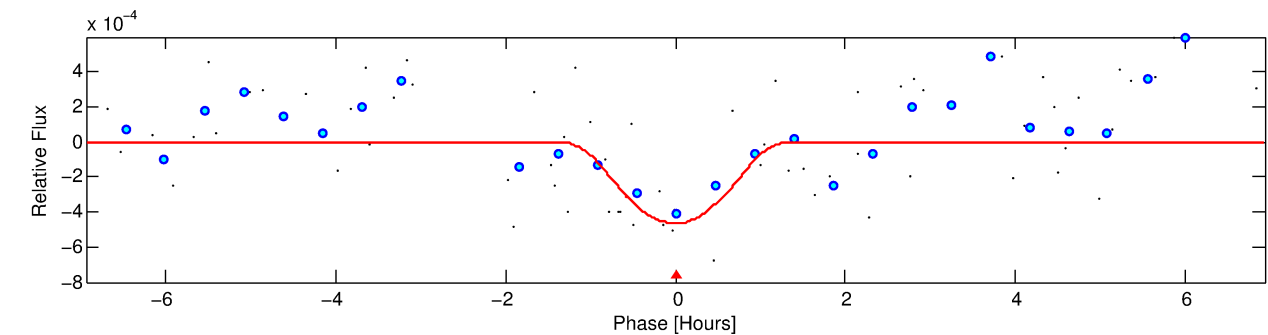
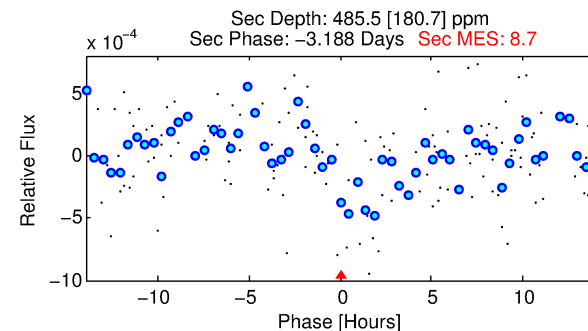
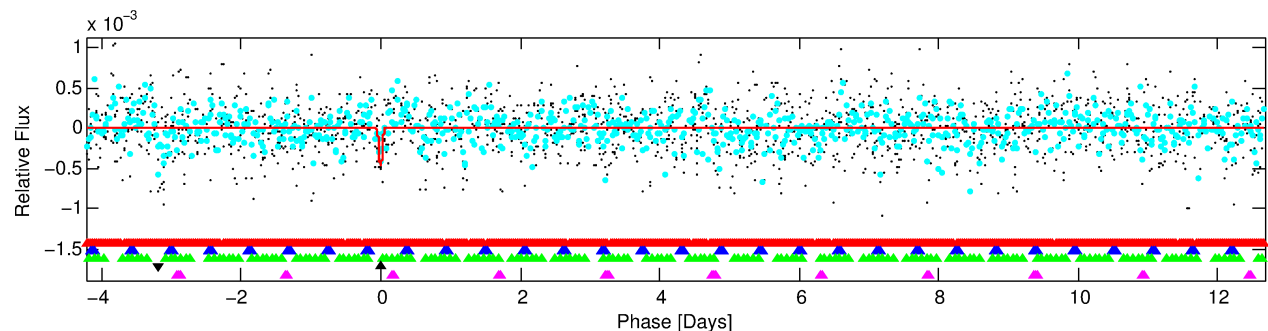
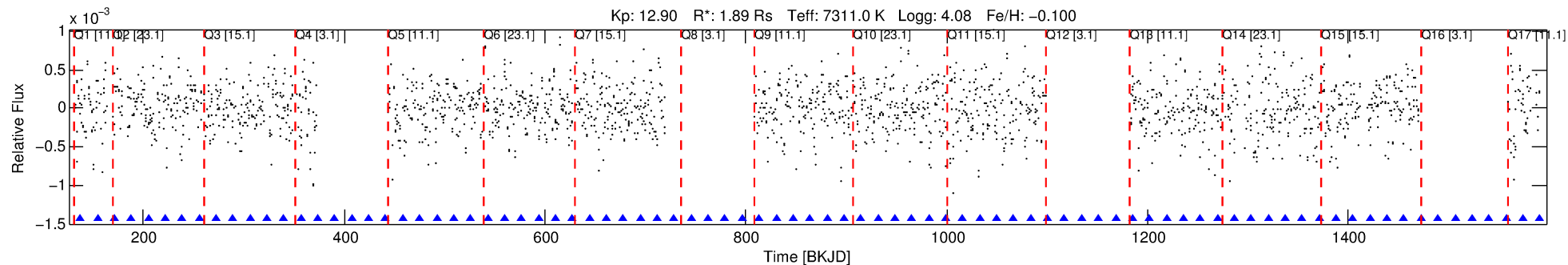
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 011127641-04

No Significant Match Found

DV One-Page Summary

KIC: 11127641 Candidate: 4 of 5 Period: 16.898 d



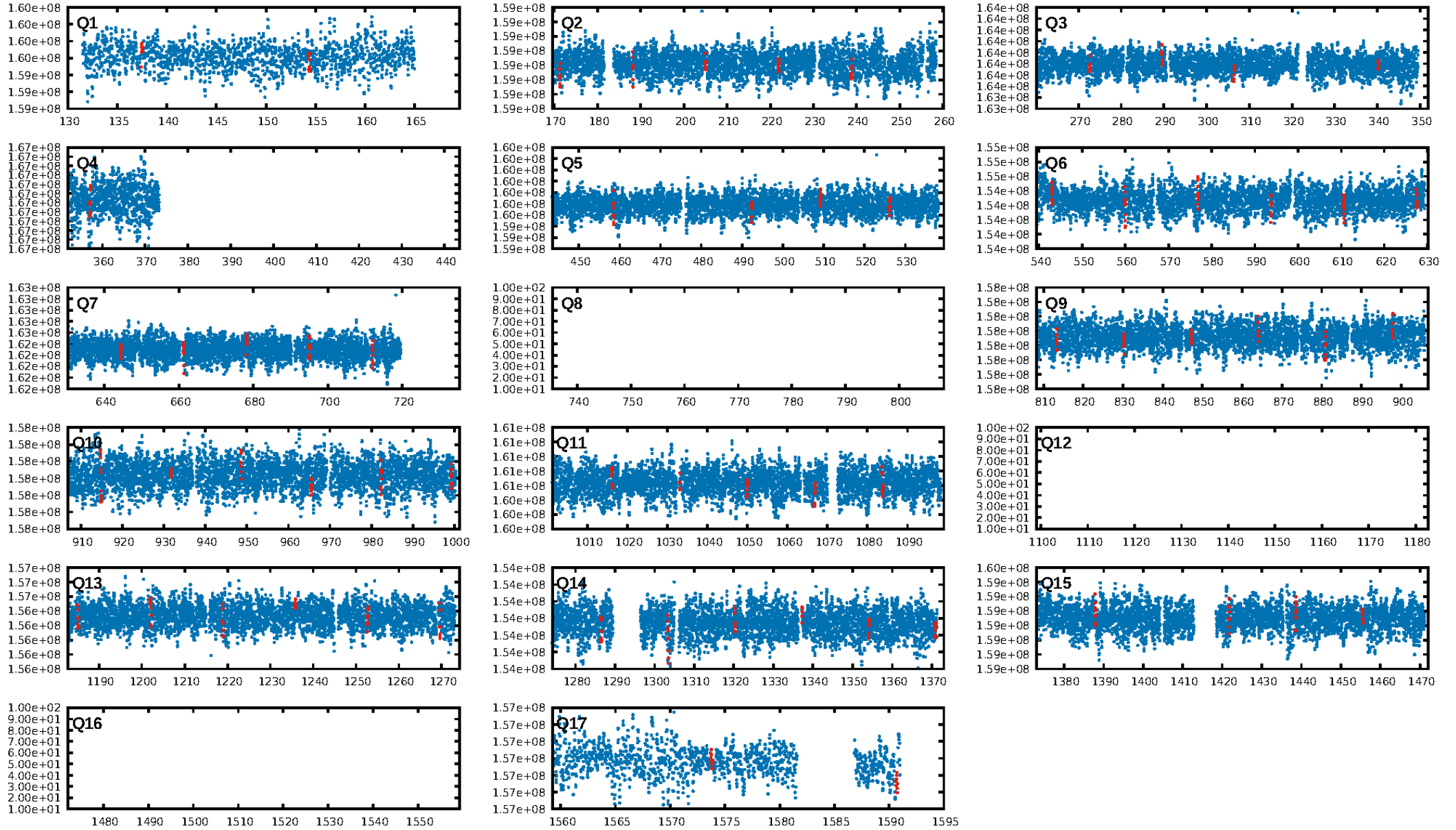
DV Fit Results:

Period = 16.89792 [0.00025] d
Epoch = 137.4654 [0.0127] BKJD
Rp/R* = 0.0354 [0.2106]
a/R* = 15.76 [27.29]
b = 1.00 [0.33]
Seff = 409.74 [152.19]
Teff = 1147 [107] K
Rp = 7.29 [43.47] Re
a = 0.1493 [0.0348] AU
Ag = 111.91 [1333.49] [0.08 σ]
Teffp = 5769 [17181] K [0.27 σ]

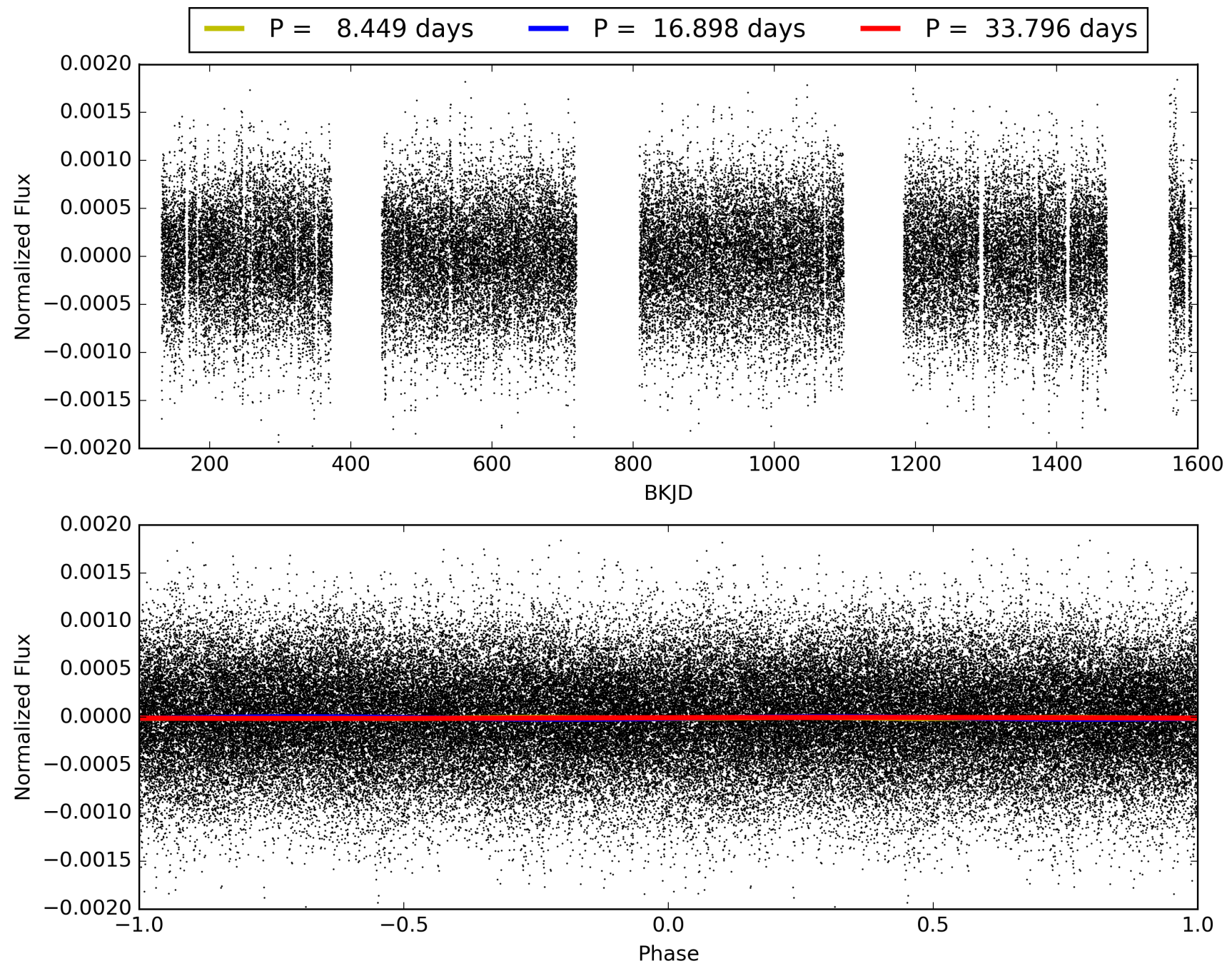
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [29.70 σ]
LongPeriod-sig: 100.0% [40.11 σ]
ModelChiSquare2-sig: 3.6%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: 3.22e-16
RollingBand-fgt: 1.00 [10/10]
GhostDiagnostic-chr: -0.06173
Centroid-sig: 86.6%
Centroid-so: 0.074 arcsec [0.29 σ]
OotOffset-rm: 0.675 arcsec [0.53 σ]
KicOffset-rm: 0.691 arcsec [0.55 σ]
OotOffset-st: 2/4/0/5 [11]
KicOffset-st: 2/4/0/5 [11]
DiffImageQuality-fgm: 0.45 [5/11]
DiffImageOverlap-fno: 0.14 [2/14]

TCE 011127641-04, PDC Light Curves

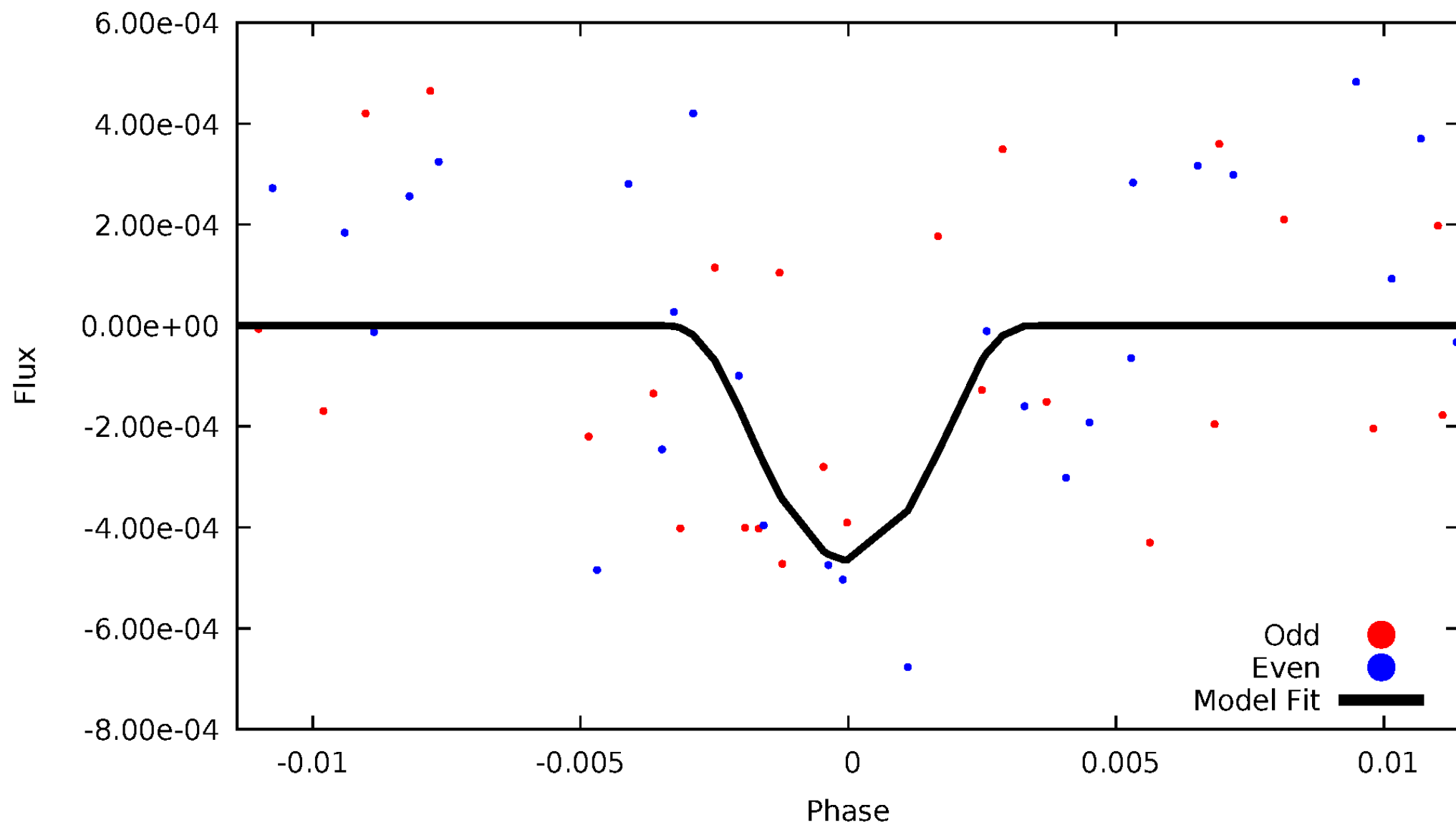


TCE 011127641-04



DV Odd/Even

TCE 011127641-04

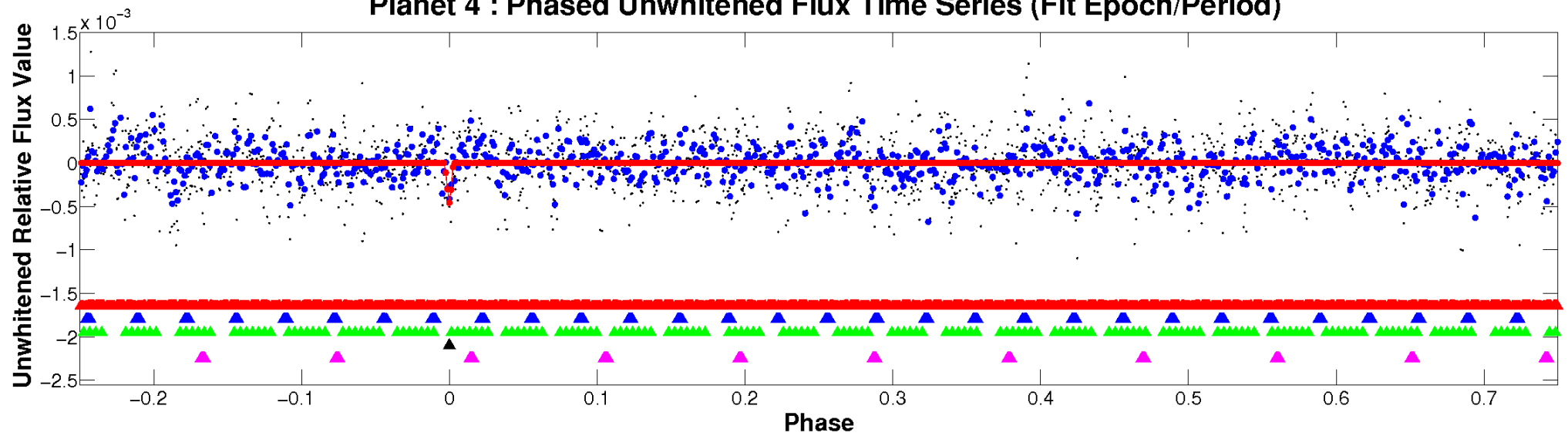


ALT Odd/Even

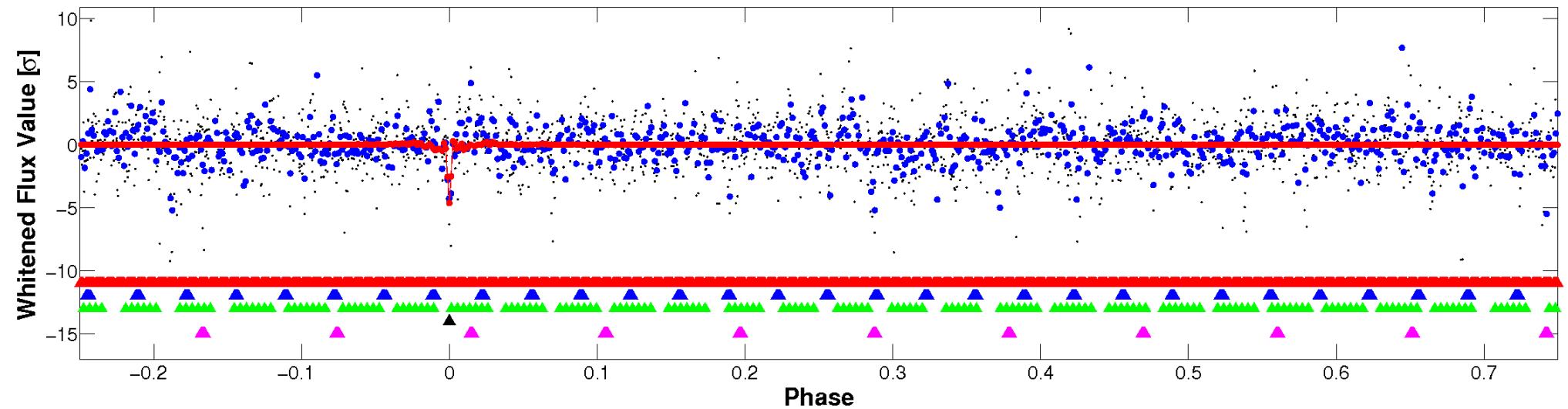
This plot does not exist for this TCE.

Non-Whitened Vs. Whitened Light Curve

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

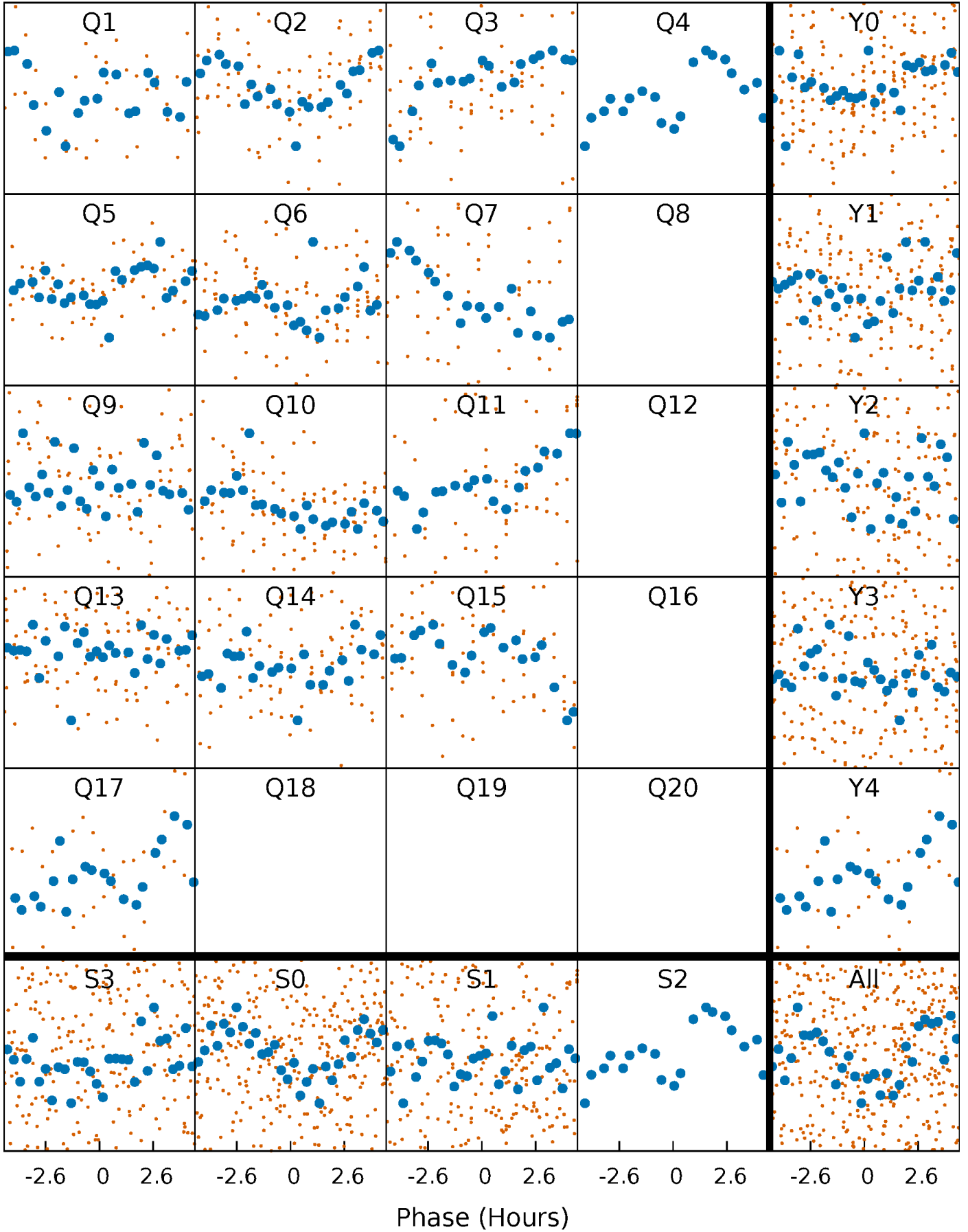


Planet 4 : Phased Whitened Flux Time Series (Fit Epoch/Period)



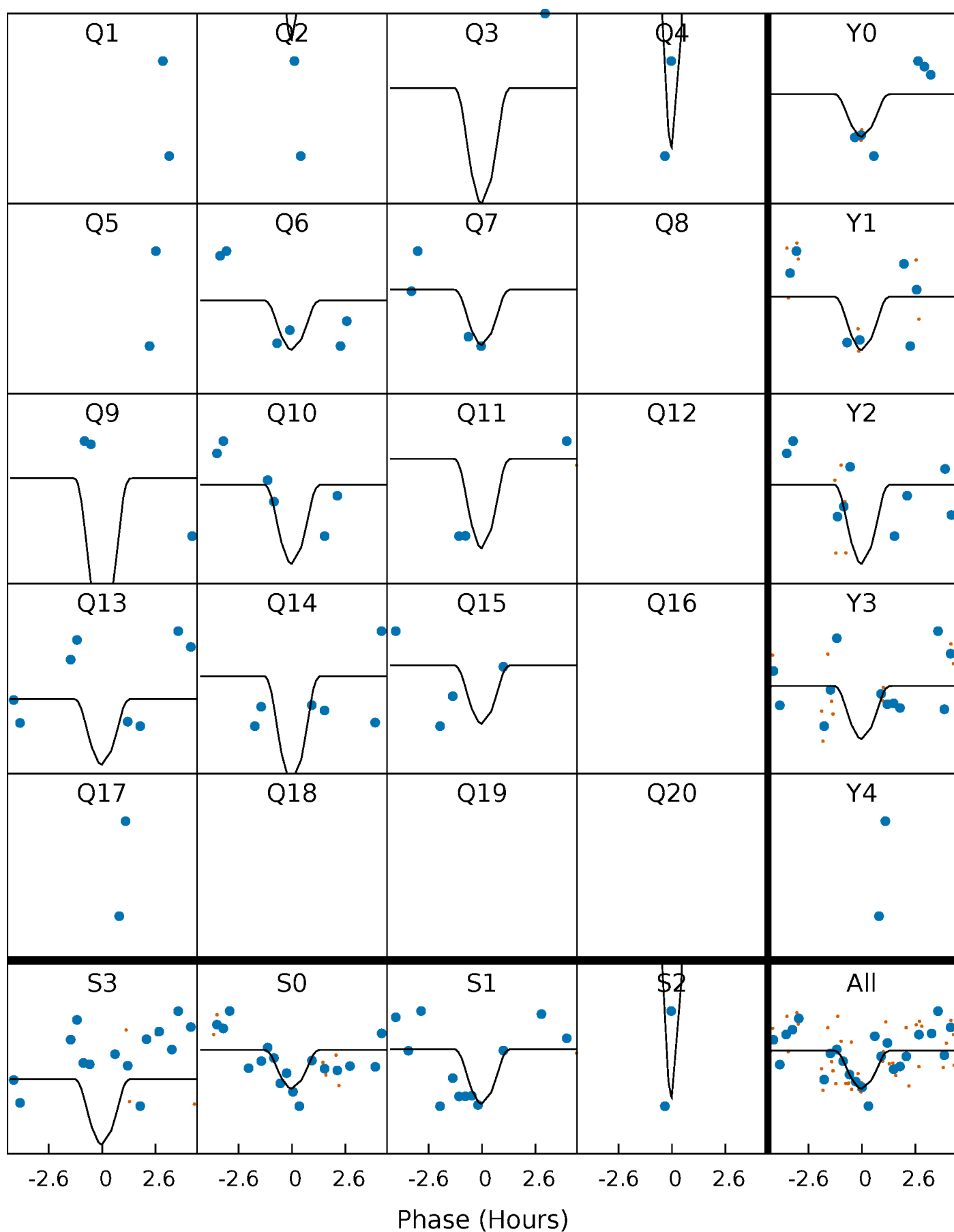
PDC Quarter-Phased Transit Curves

TCE 011127641-04 P= 16.897915 Days $T_0=137.465436$ (BKJD)



DV Quarter-Phased Transit Curves

TCE 011127641-04 P= 16.897915 Days $T_0=137.465436$ (BKJD)

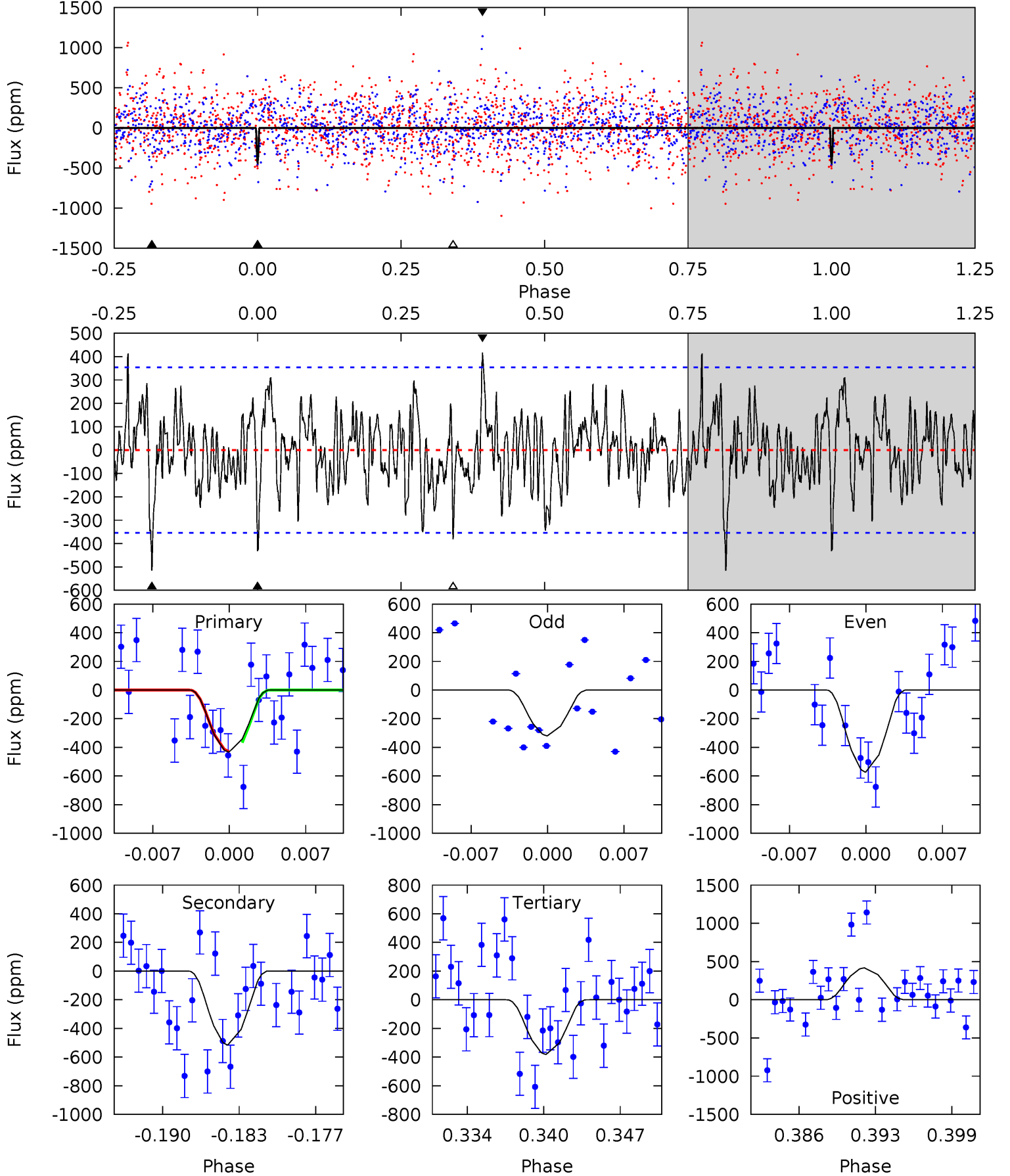


This plot does not exist for this TCE.

DV Model-Shift Uniqueness Test

011127641-04, P = 16.897915 Days, E = 120.567521 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
6.24	7.43	5.50	6.01	5.11	2.72	1.87	0.74	0.23	1.93	1.42	1.78	0.79	0.45	0.40



Alt Model-Shift Uniqueness Test

This plot does not exist for this TCE.

Stellar Parameters For KIC 011127641

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	7311^{+228}_{-330}	$4.077^{+0.170}_{-0.170}$	$-0.100^{+0.250}_{-0.350}$	$1.889^{+0.547}_{-0.448}$	$1.551^{+0.211}_{-0.257}$	$0.324^{+0.296}_{-0.153}$
	+3%/-5%	+4%/-4%	+250%/-350%	+29%/-24%	+14%/-17%	+91%/-47%
Source	KIC0	KIC0	KIC0	DSEP		

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

Secondary Eclipse Parameters for KIC 011127641-04 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-515 ± 69	$31.64^{+34.09}_{-22.67}$	1594^{+124}_{-116}	3280^{+1977}_{-647}	$6.279^{+69.900}_{-4.816}$
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 $T_{\text{obs}} \gg T_{\text{max}}$ AND $A_{\text{obs}} \gg 1.0$

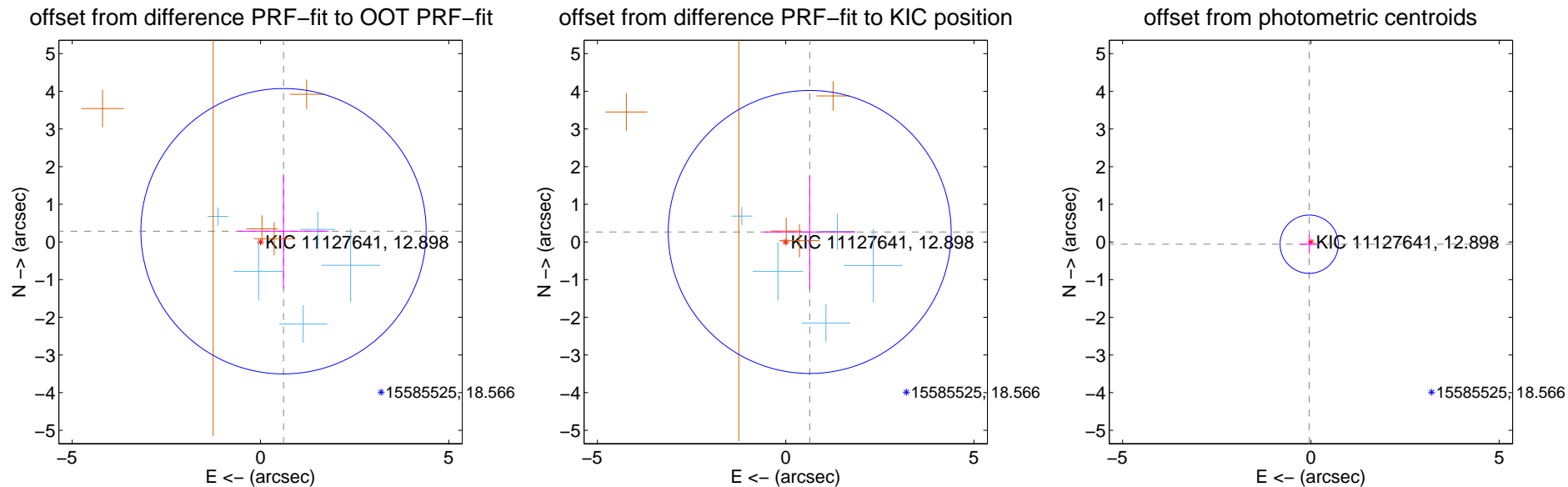
DV Centroid Data

Supplemental centroid analysis for 011127641-04. Kepler magnitude: 12.90. Transit SNR 10.95

There are 5 quarters with good PRF difference image offsets

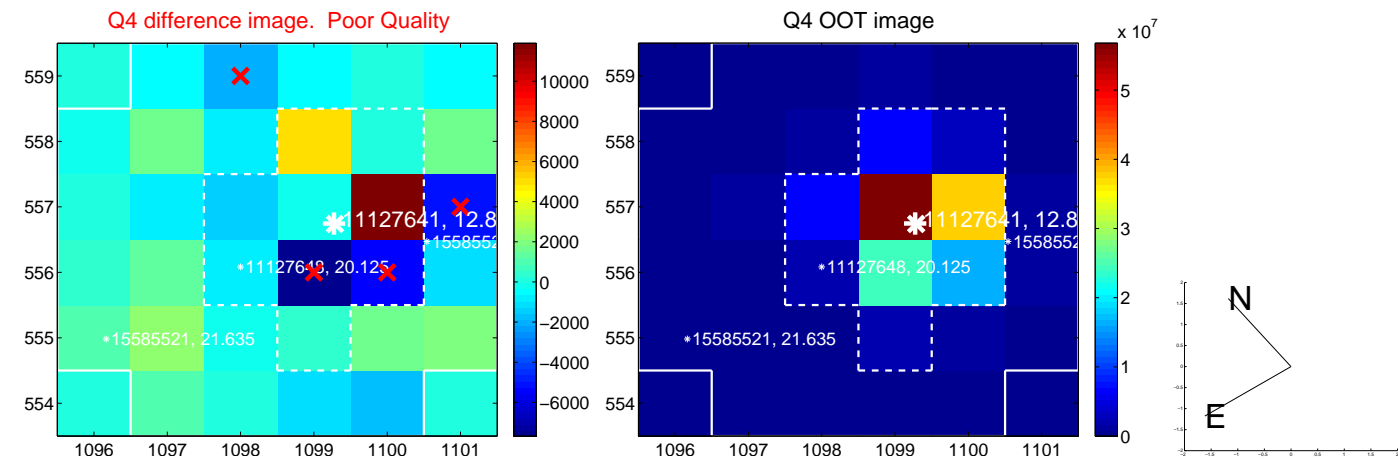
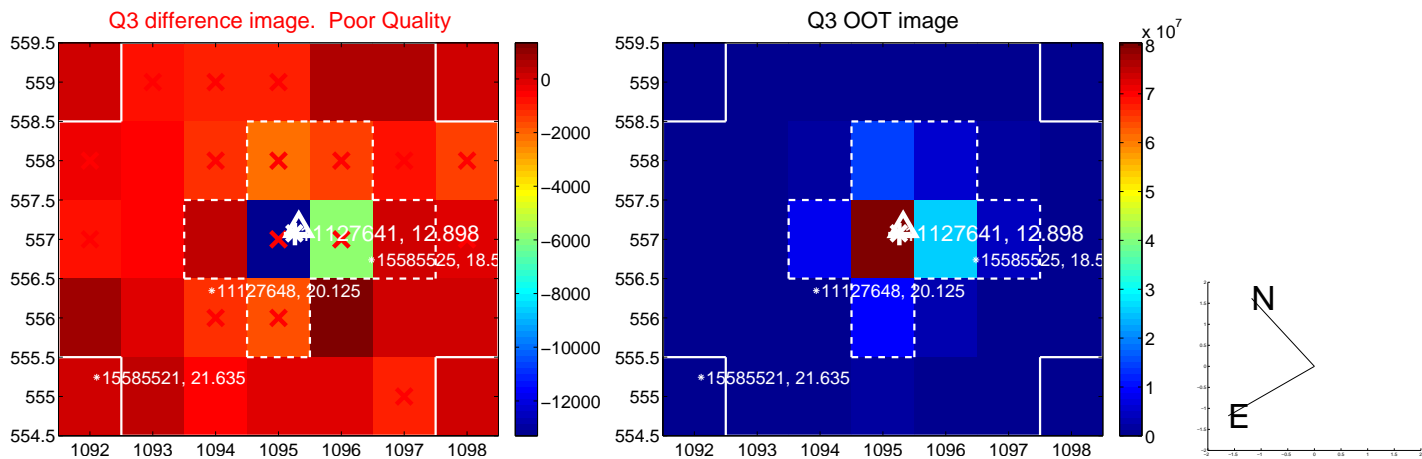
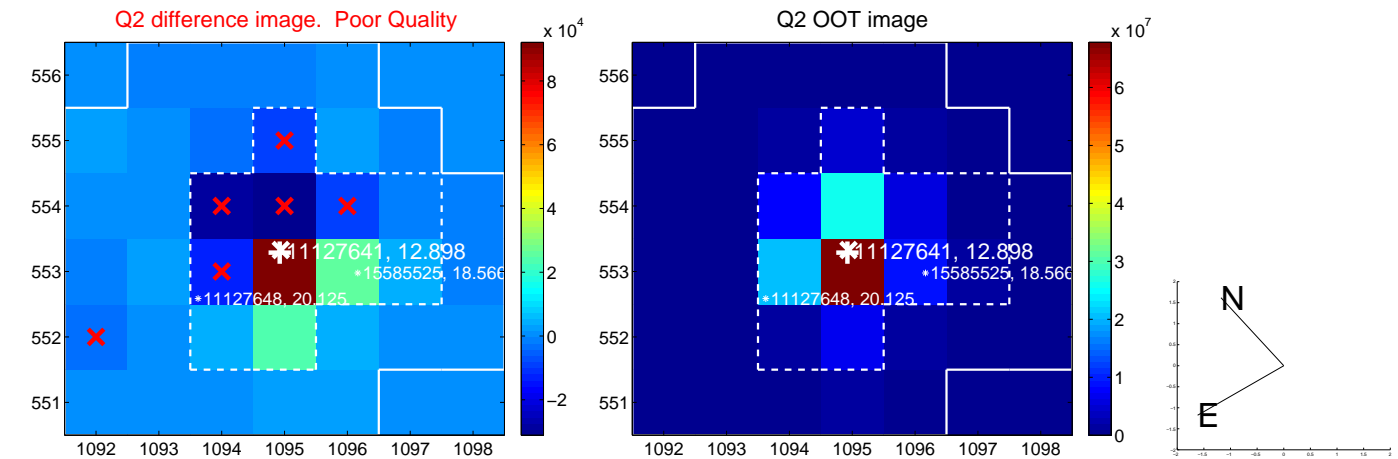
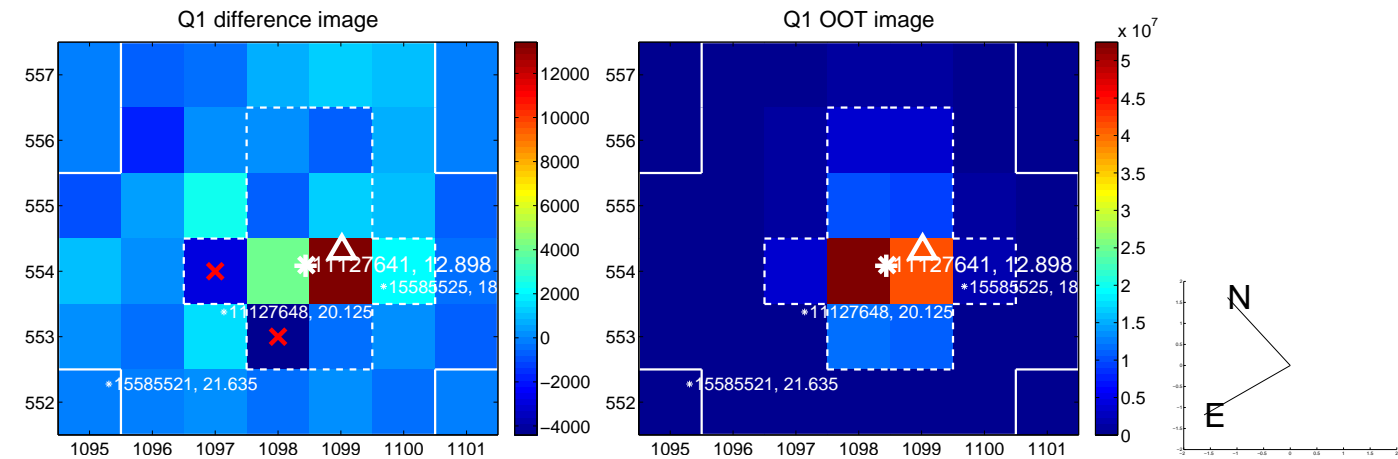
The direct PRF centroid is offset from the target star catalog position by about 0.07 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.675 ± 1.263	0.53	-0.612 ± 1.201	0.285 ± 1.516
PRF-fit source offset from KIC position	0.691 ± 1.252	0.55	-0.638 ± 1.201	0.266 ± 1.516
photometric centroid source offset	0.07 ± 0.26	0.29	0.05 ± 0.26	-0.06 ± 0.26

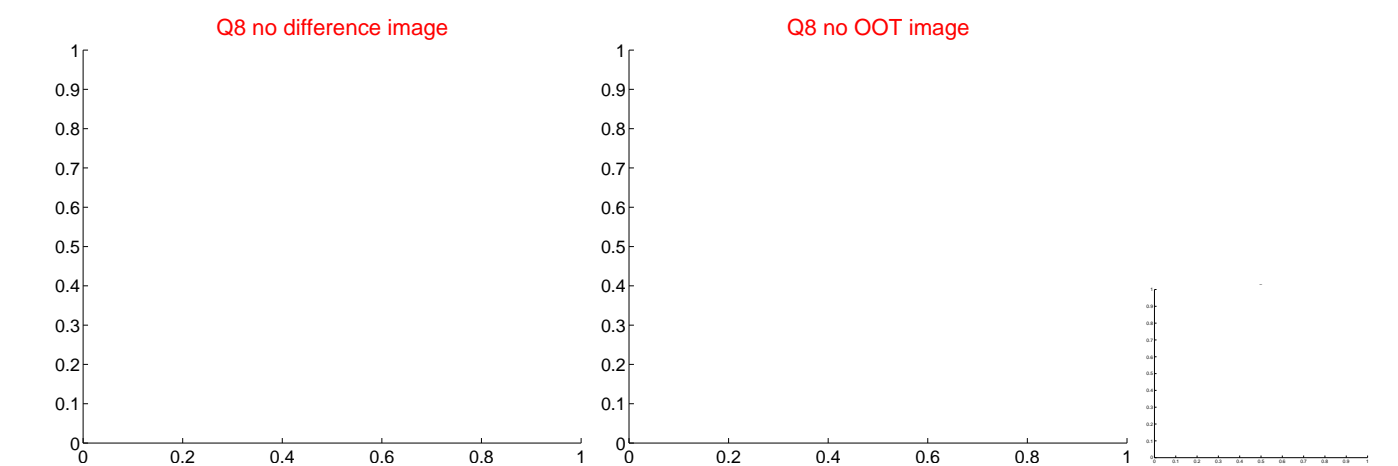
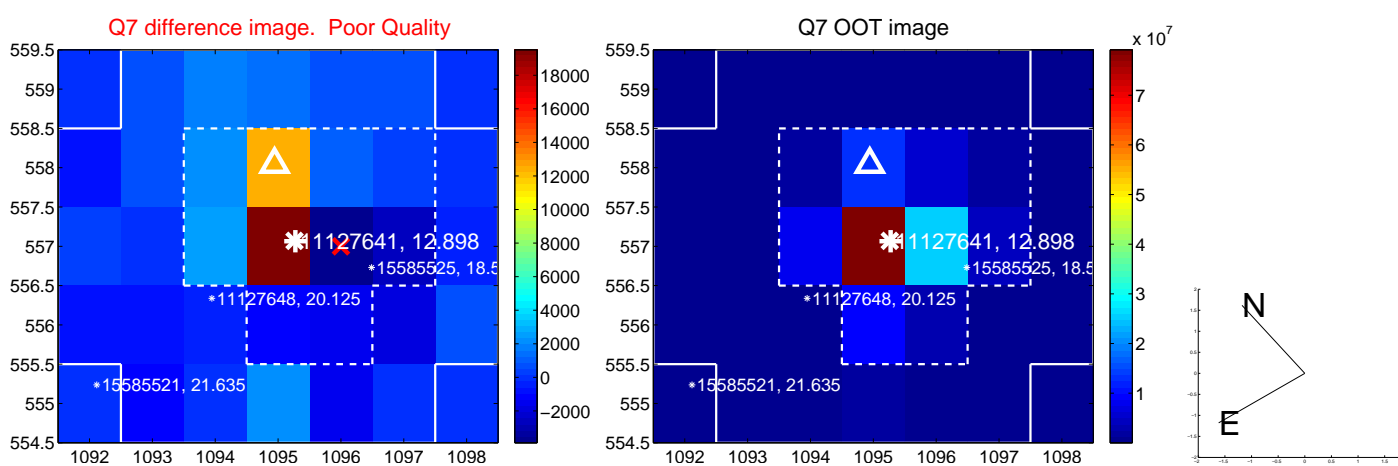
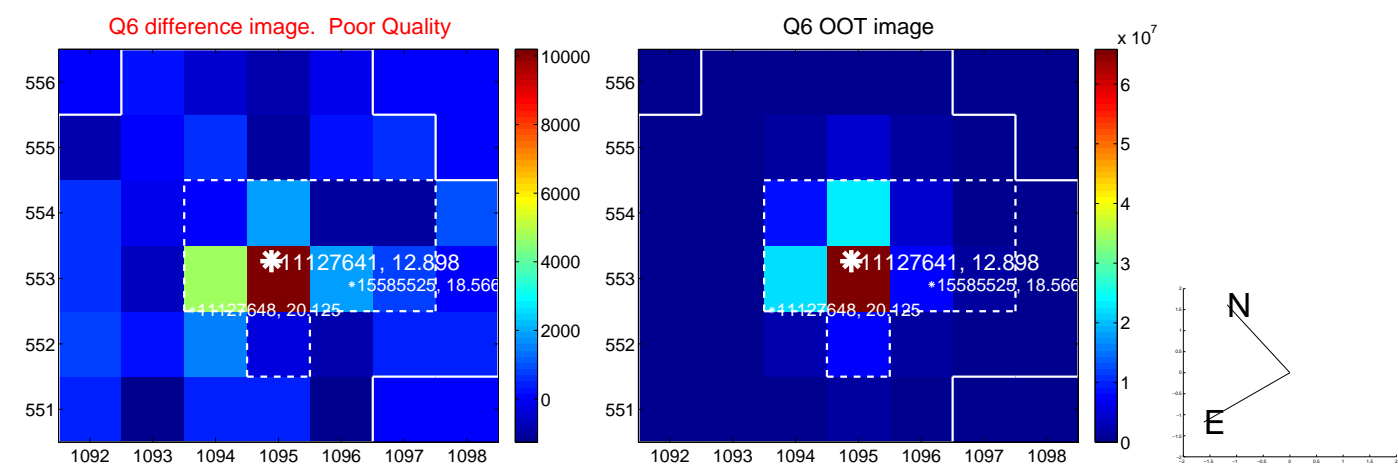
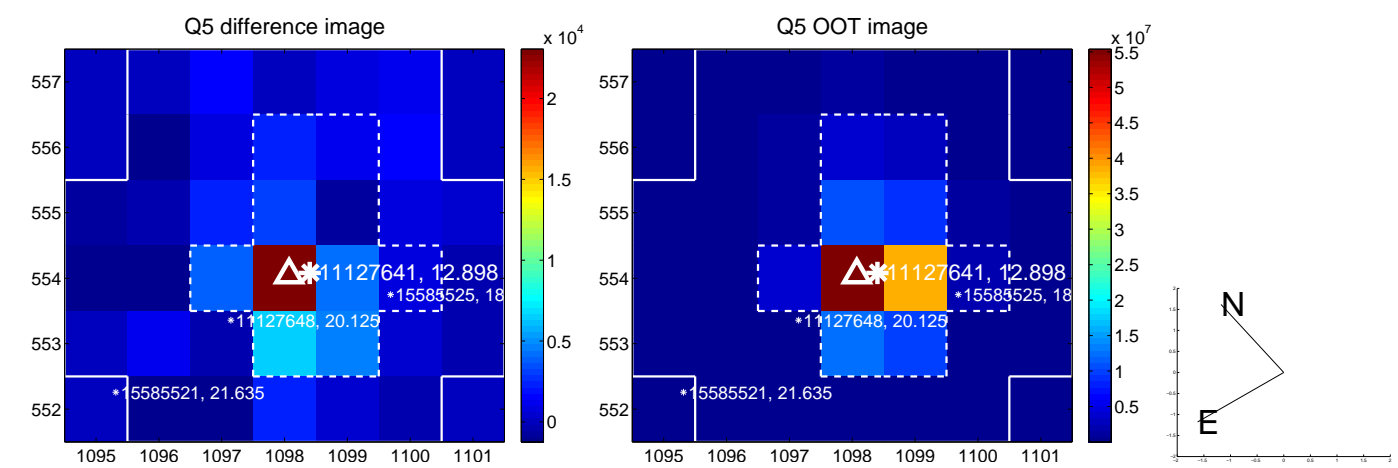


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets**; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

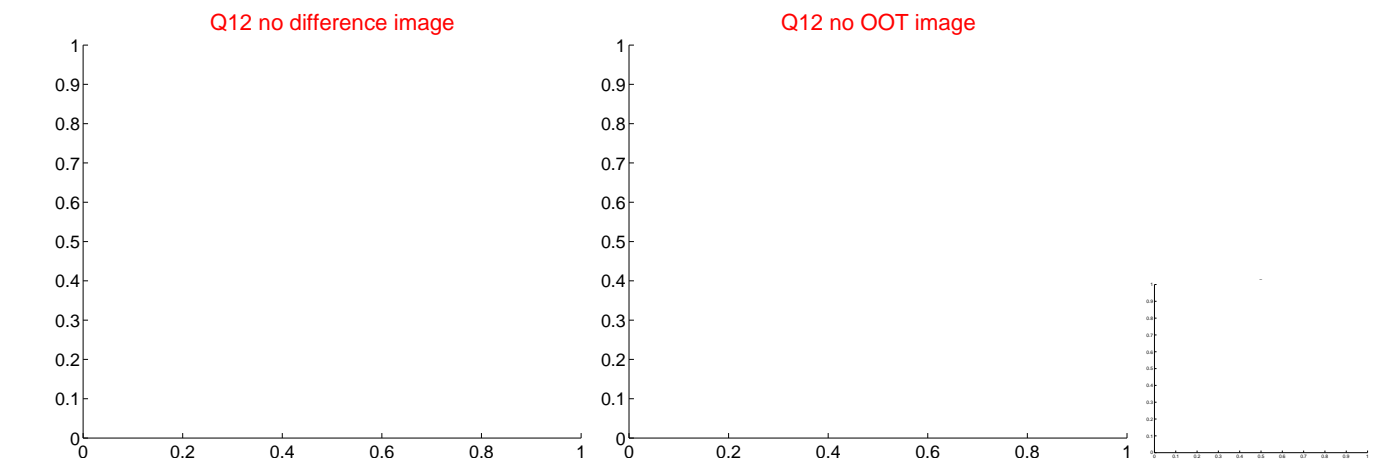
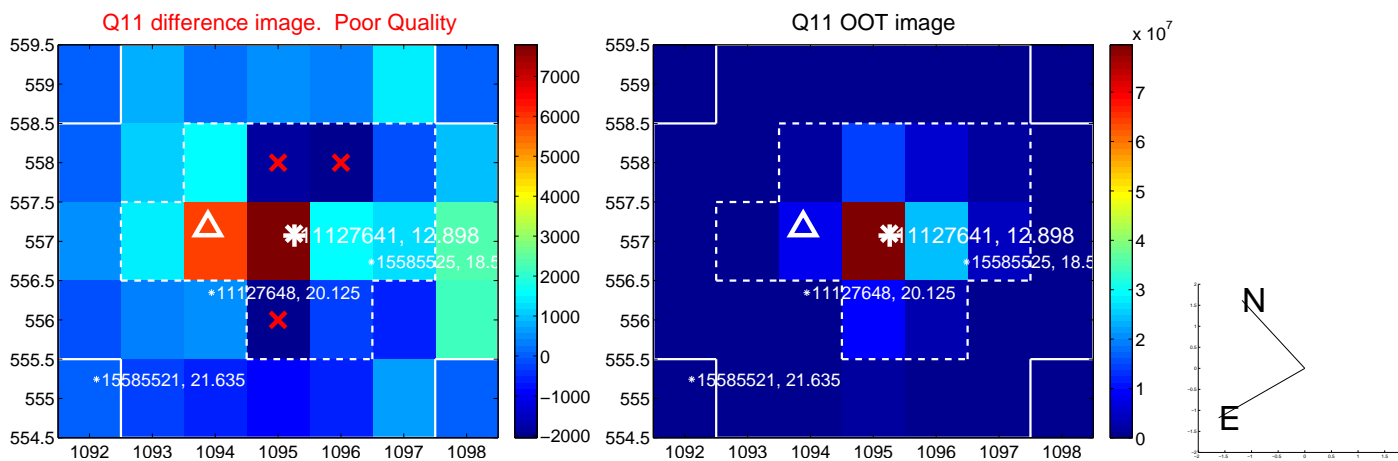
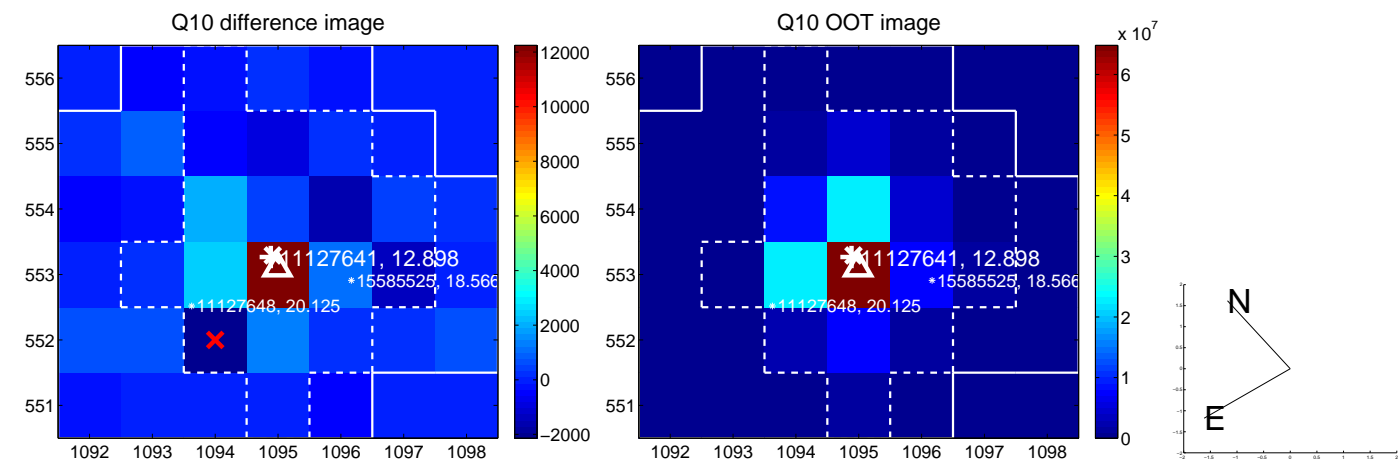
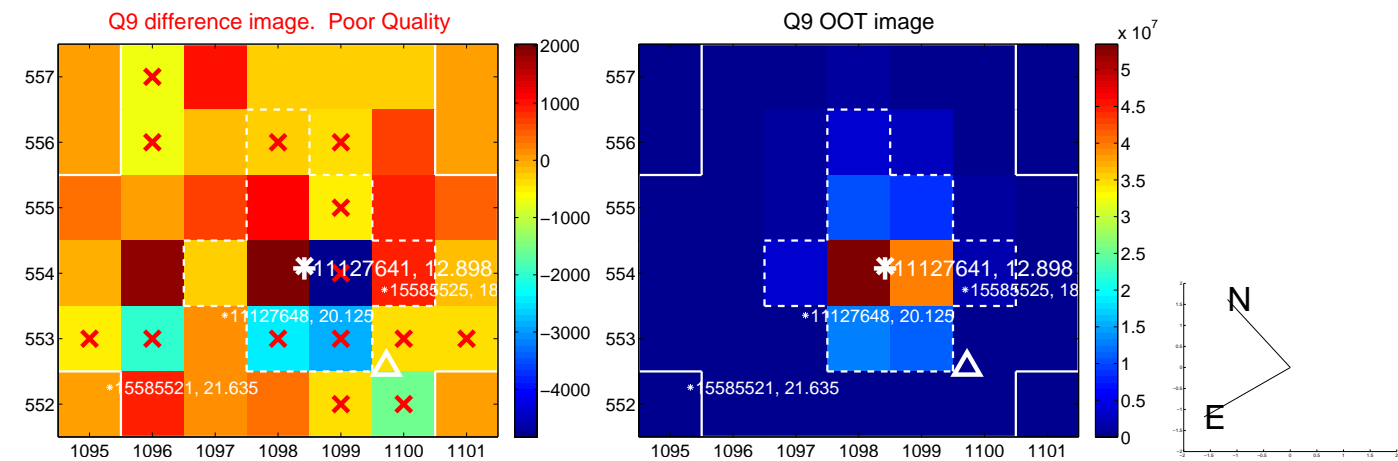
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



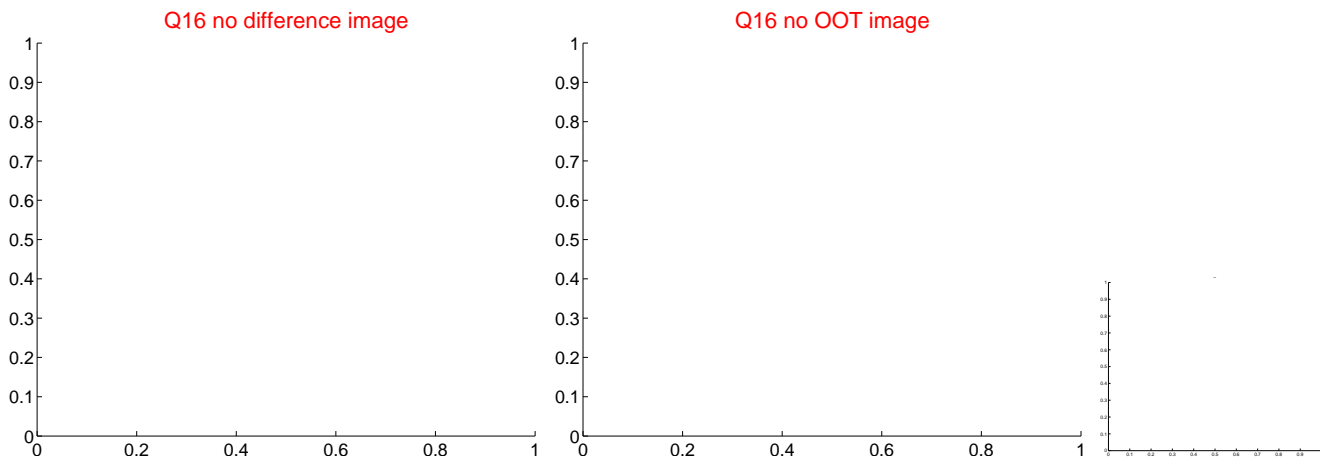
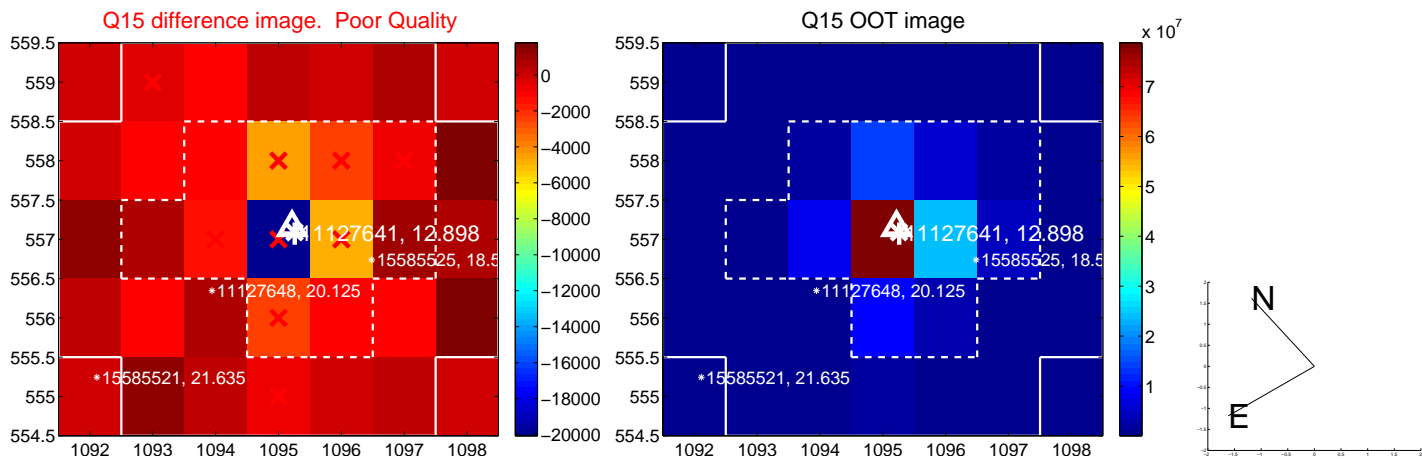
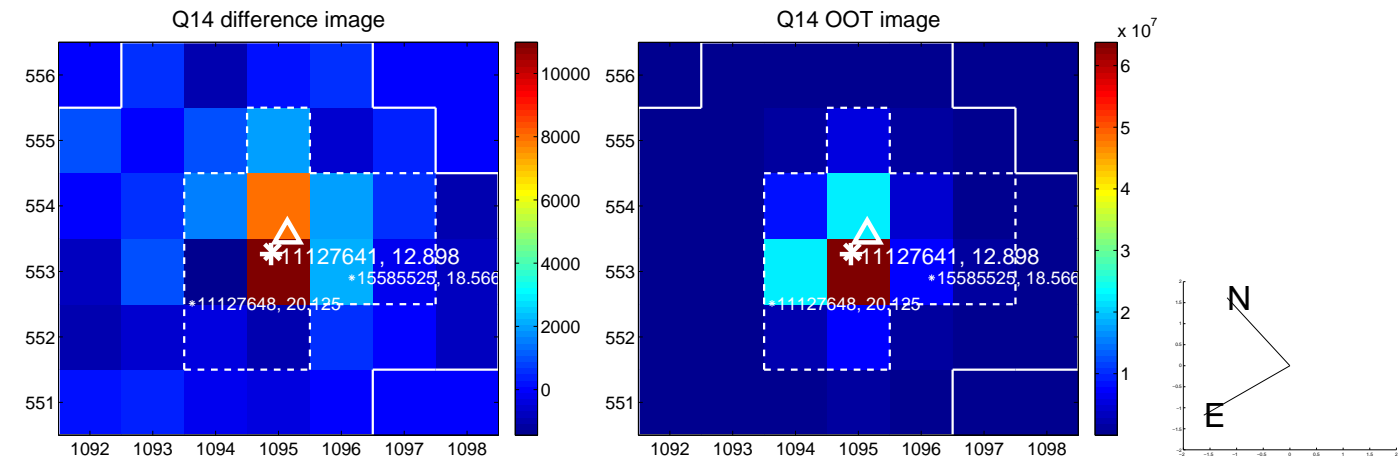
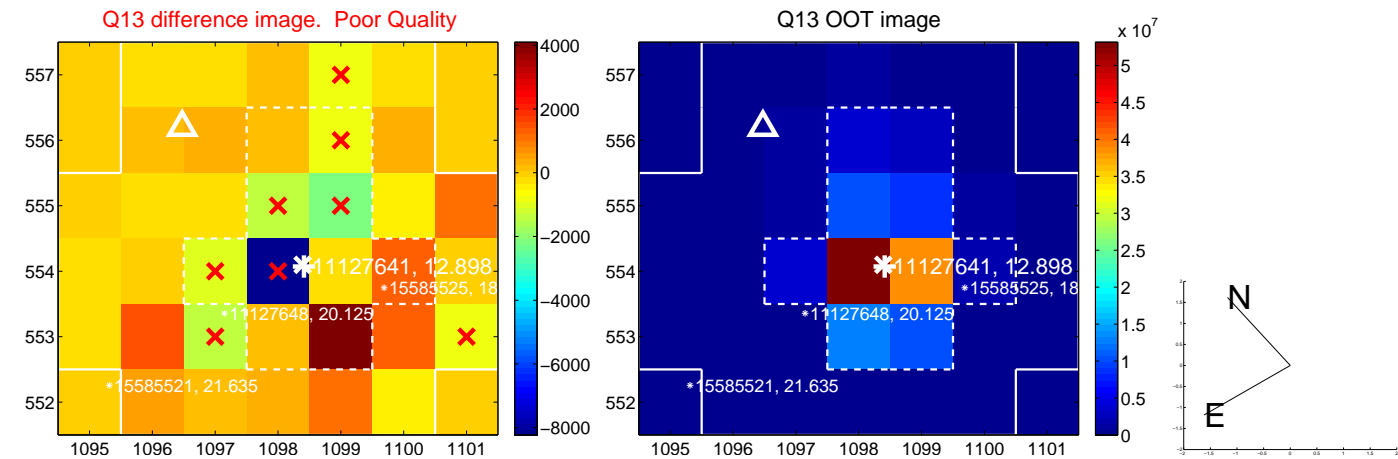
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



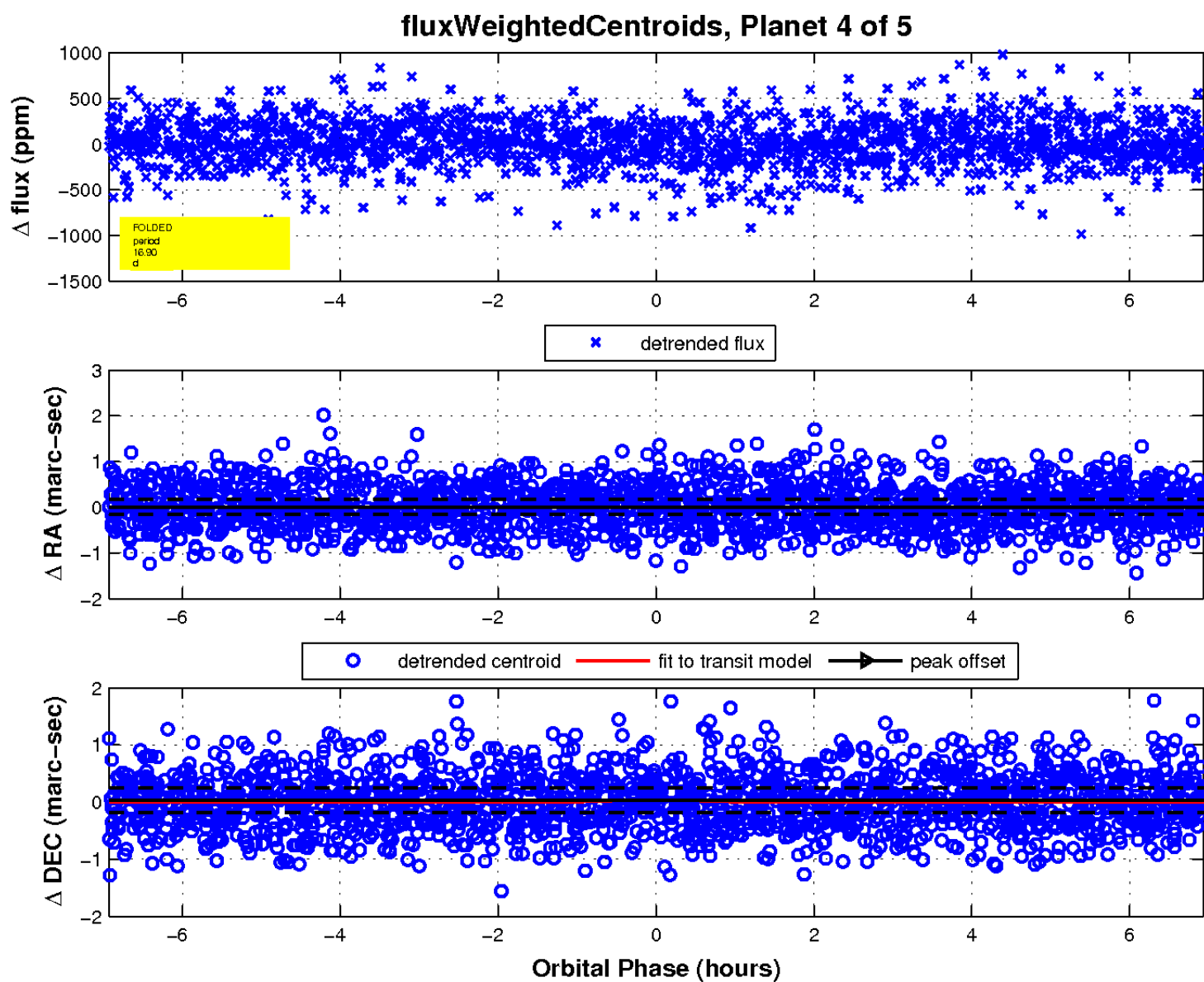
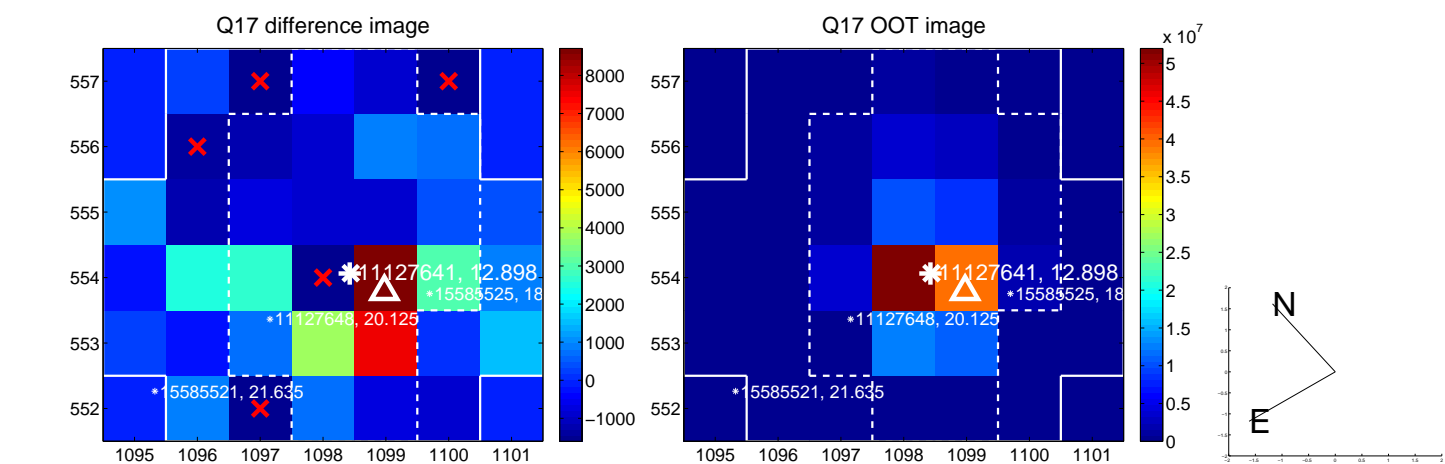
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

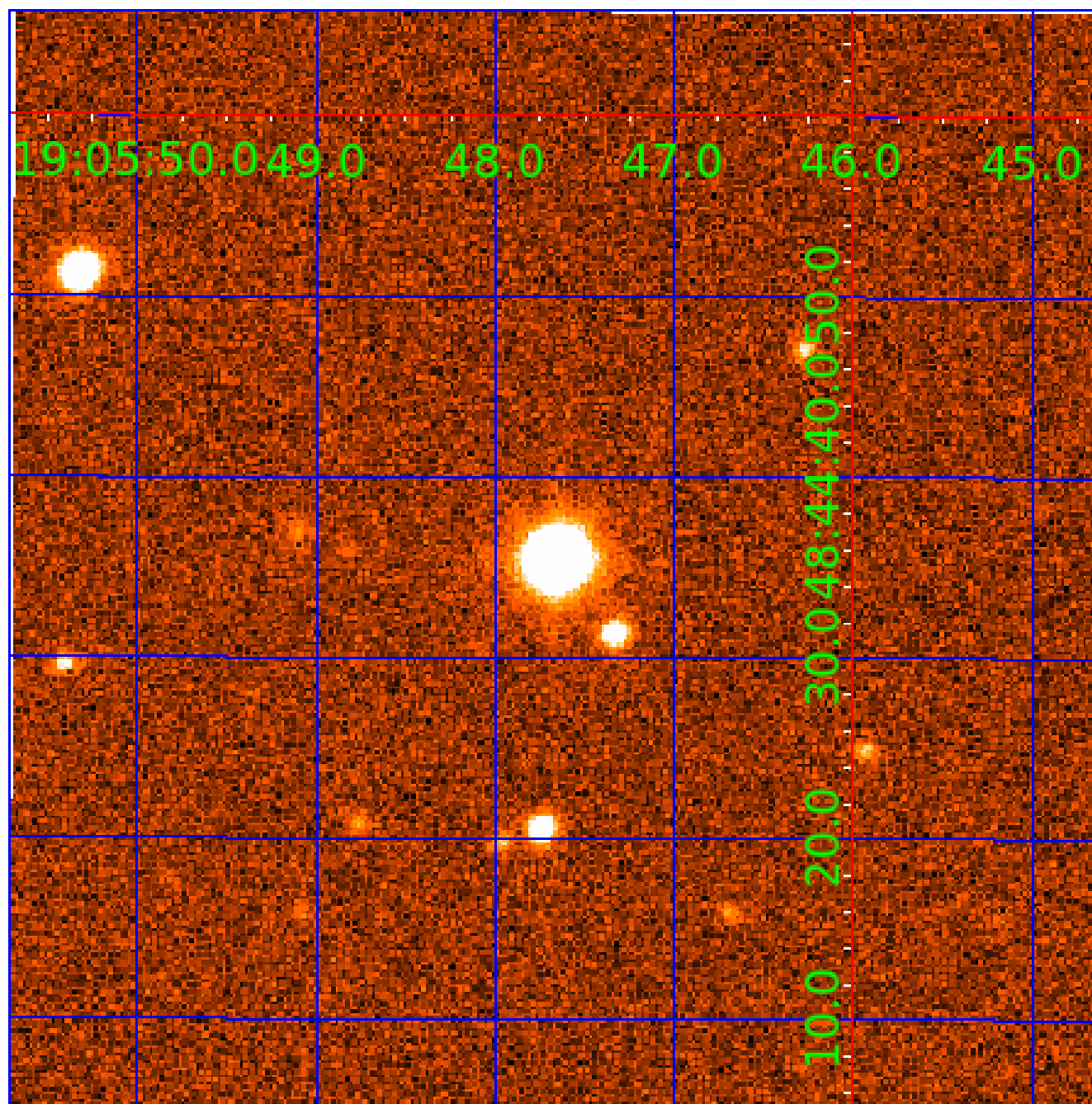


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 011127641

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})
011127641-01	OBS	No	0.827116	131.746829	12.4	6.140	8.6	4.8	1.89	7311	0.68	22884.11
011127641-02	OBS	No	6.195654	136.748929	460.6	1.410	17.0	14.7	1.89	7311	4.38	1561.37
011127641-03	OBS	No	8.138607	131.833482	98.7	6.690	12.6	6.9	1.89	7311	2.18	1085.32
011127641-04	OBS	No	16.897915	137.465436	464.9	2.313	12.2	11.0	1.89	7311	7.29	409.74
011127641-05	OBS	No	21.505833	134.667245	549.1	1.500	12.1	-1.0	1.89	7311	4.50	297.08

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
011127641-01	OBS	FP	0.00	1	0	0	0	LPP_DV
011127641-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT
011127641-03	OBS	FP	0.00	1	0	1	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_FEW_MEAS—HALO_GHOST
011127641-04	OBS	FP	0.00	1	0	1	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV—HALO_GHOST
011127641-05	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_NOFITS

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

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

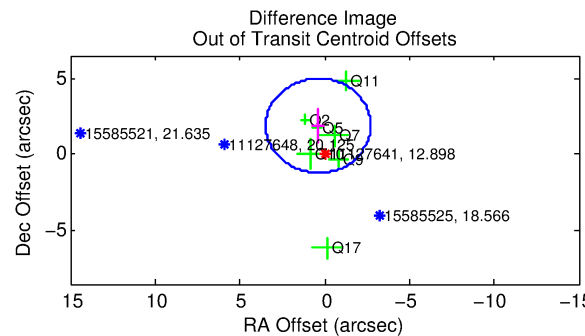
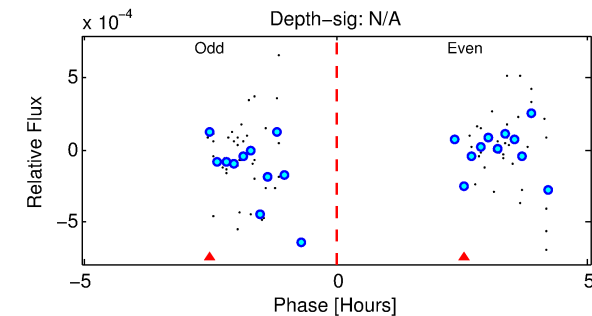
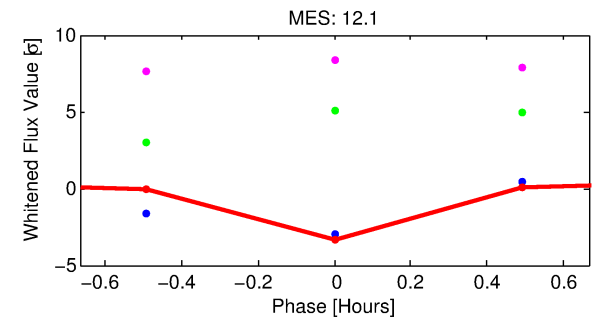
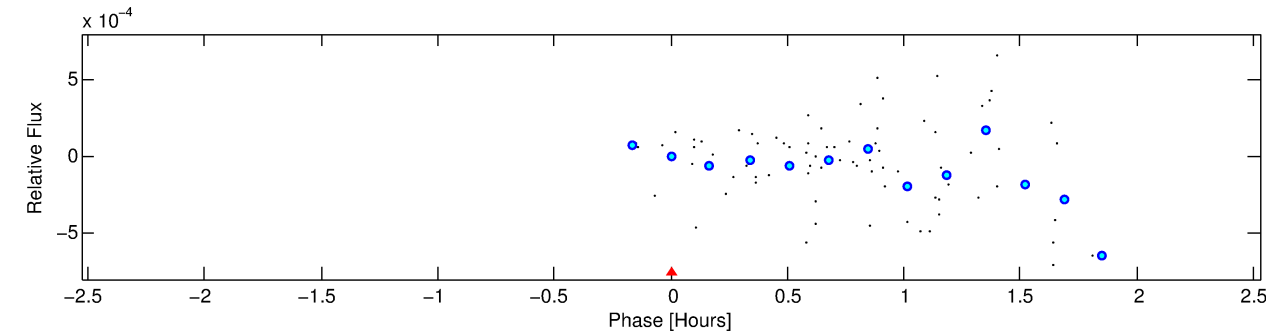
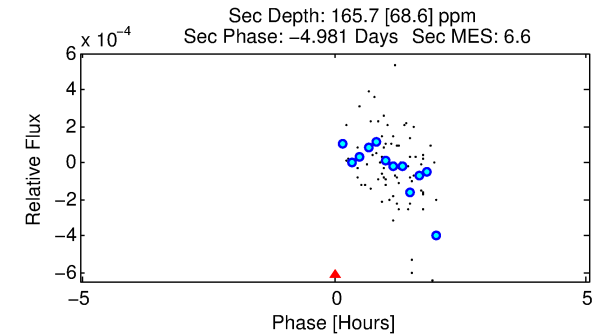
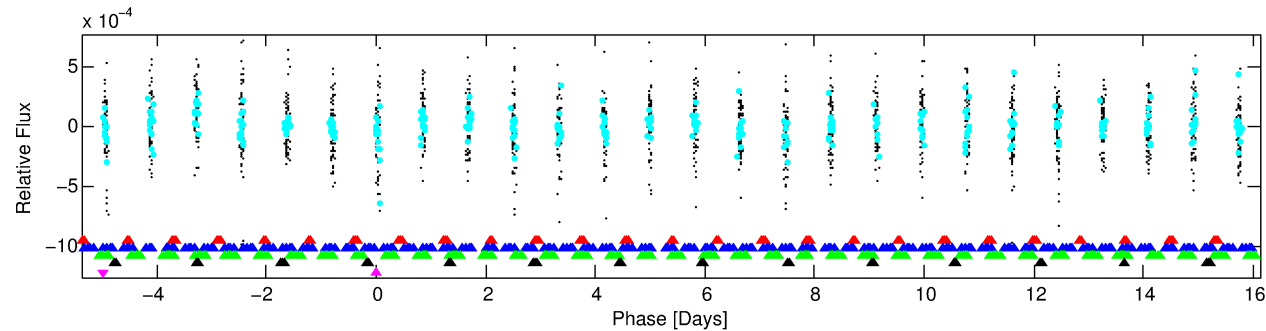
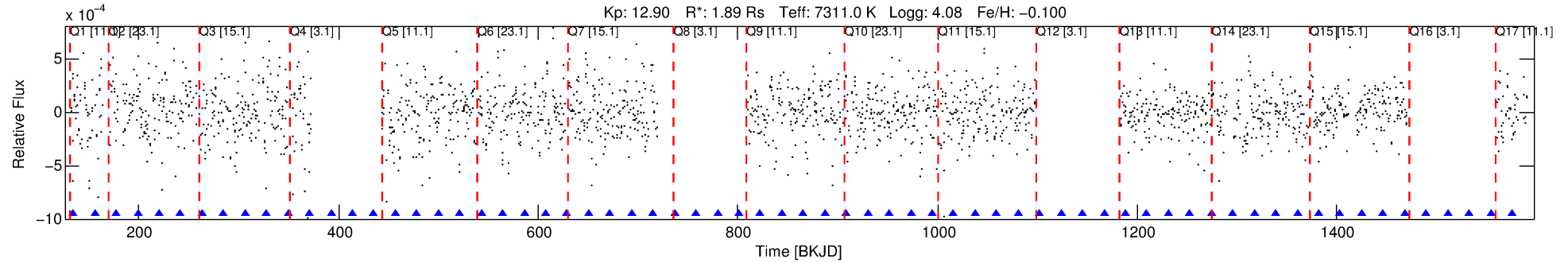
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 011127641-05

No Significant Match Found

DV One-Page Summary

KIC: 11127641 Candidate: 5 of 5 Period: 21.506 d



TPS TCE Results:

Period = 21.50583 d
Epoch = 134.6672 BKJD

DV fit results are unavailable

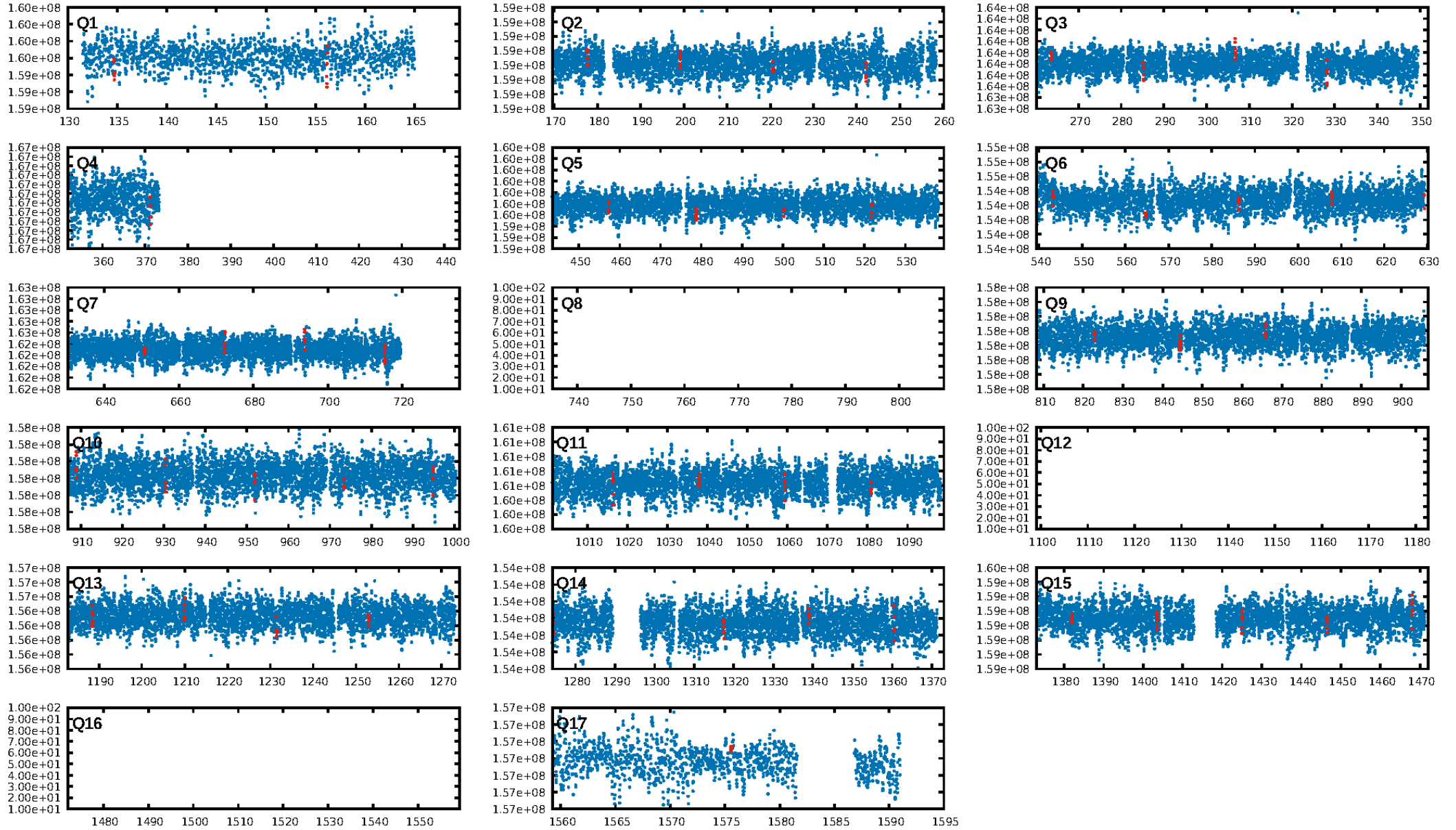
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [40.11 σ]
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 3.97e-17
RollingBand-fgt: 1.00 [35/35]
GhostDiagnostic-chr: 0.4903
Centroid-sig: 26.3%
Centroid-so: 0.480 arcsec [1.35 σ]
OotOffset-rm: 1.934 arcsec [1.87 σ]
KicOffset-rm: 1.922 arcsec [1.45 σ]
OotOffset-st: 2/2/0/3 [7]
KicOffset-st: 2/2/0/3 [7]
DiffImageQuality-fgm: 0.43 [3/7]
DiffImageOverlap-fno: 1.00 [14/14]

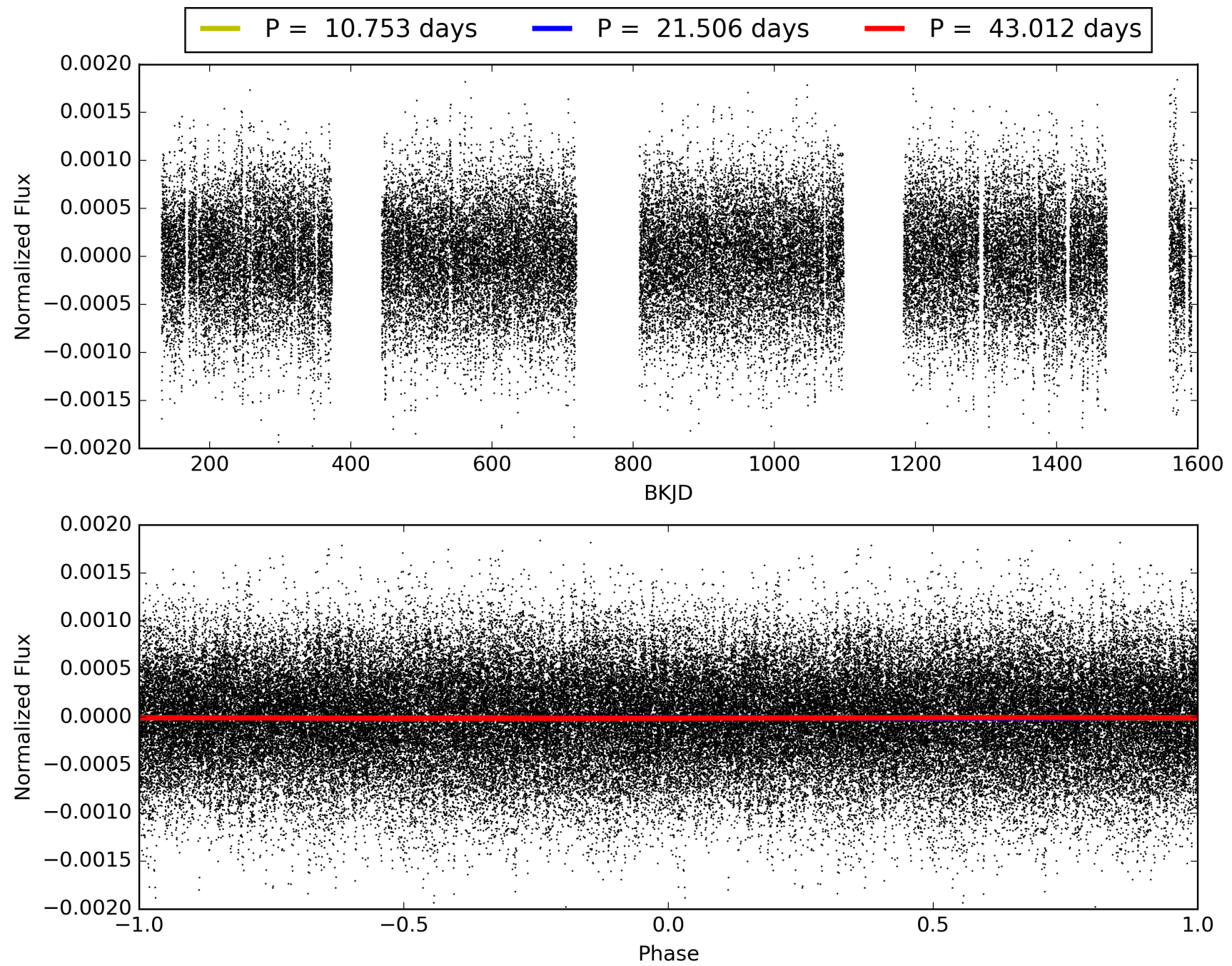
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 29-Jan-2016 19:27:08 Z

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

TCE 011127641-05, PDC Light Curves

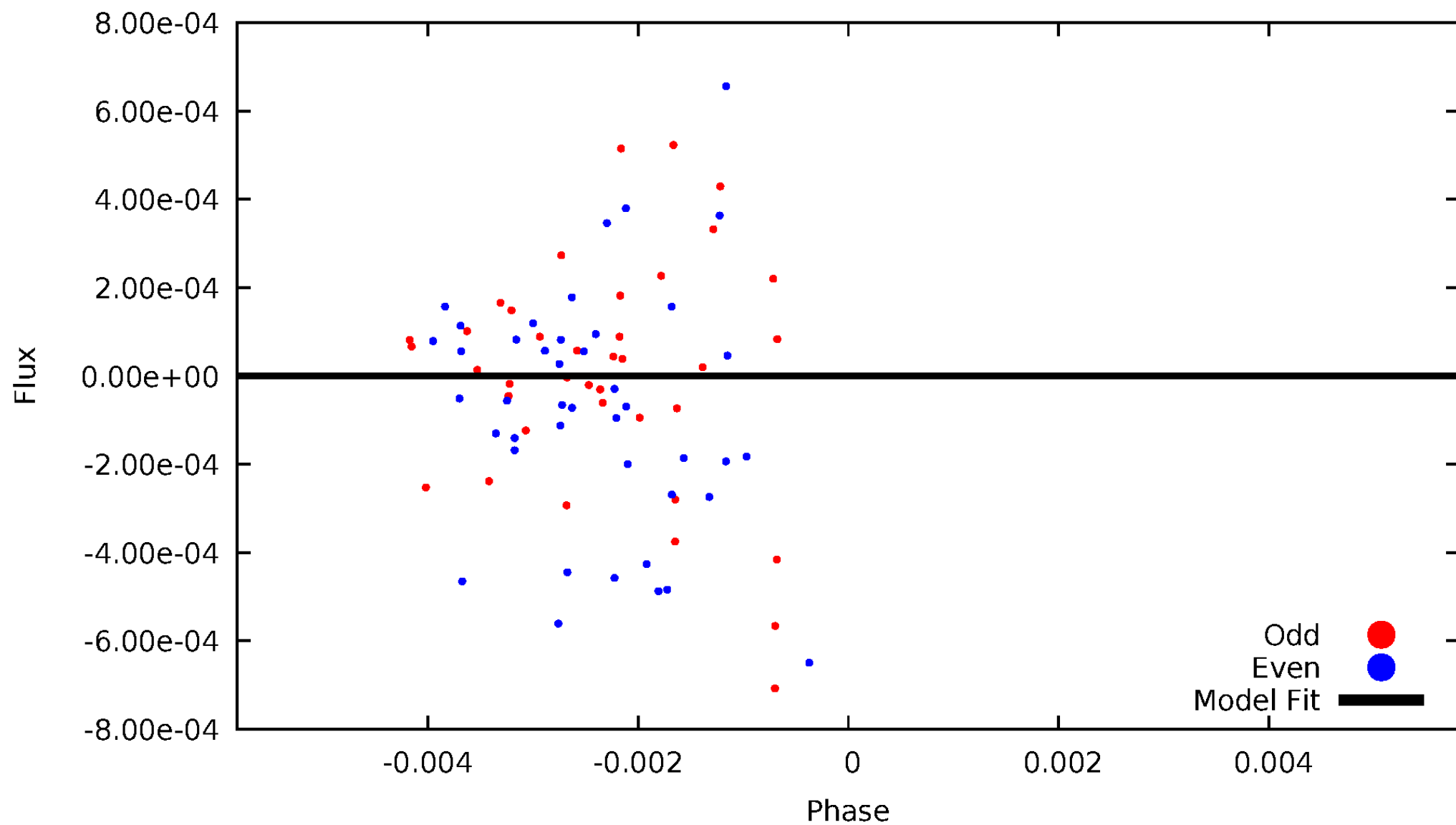


TCE 011127641-05



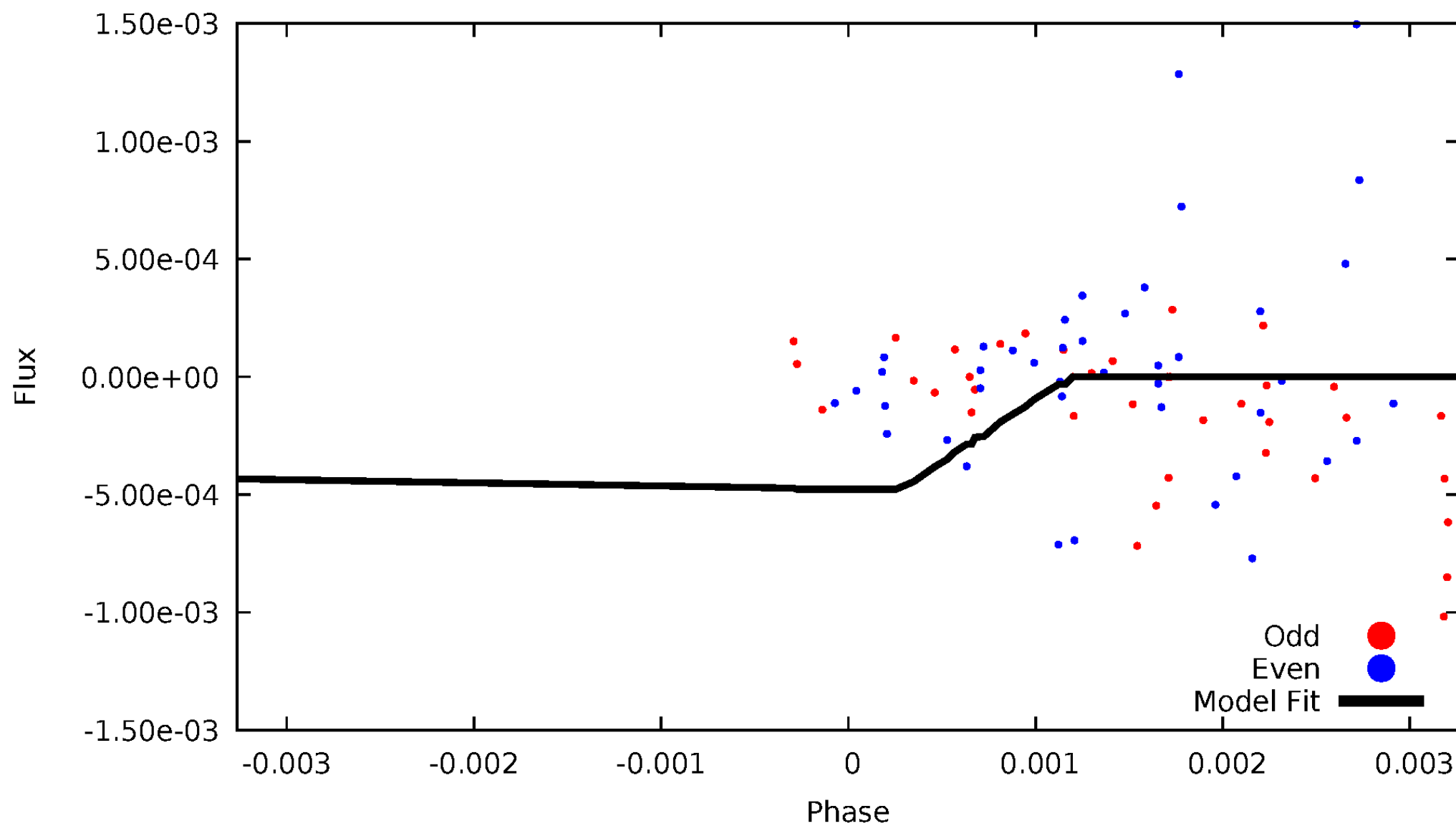
DV Odd/Even

TCE 011127641-05



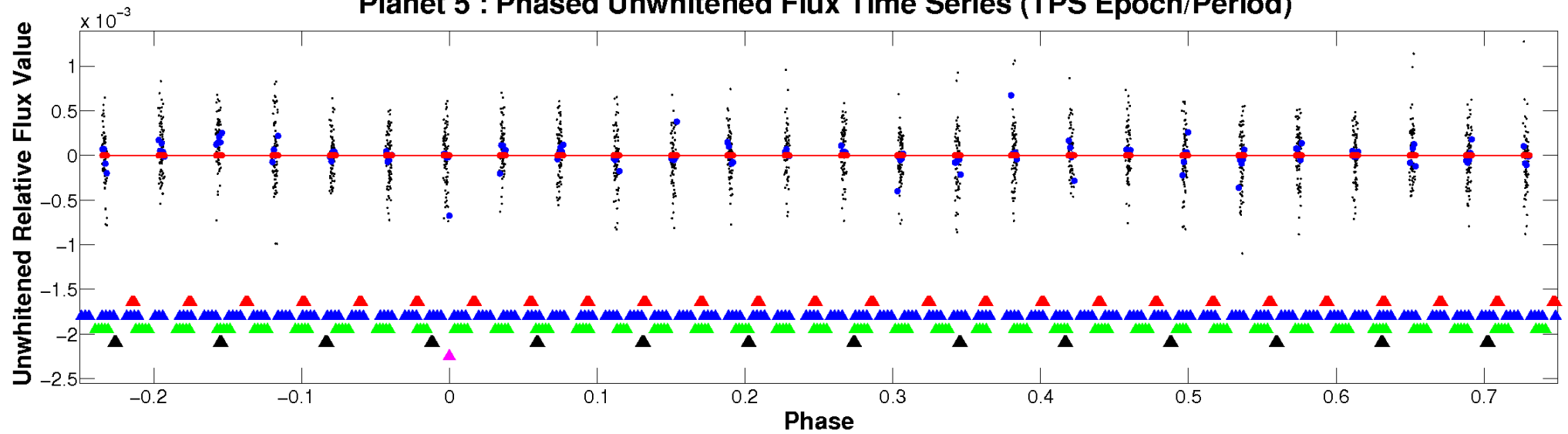
ALT Odd/Even

TCE 011127641-05

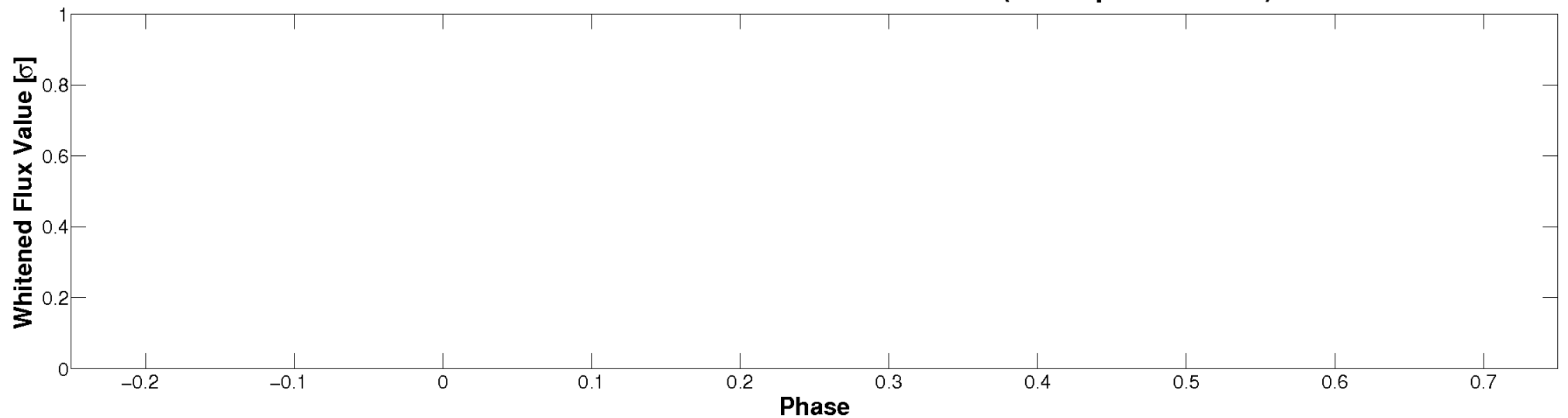


Non-Whitened Vs. Whitened Light Curve

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

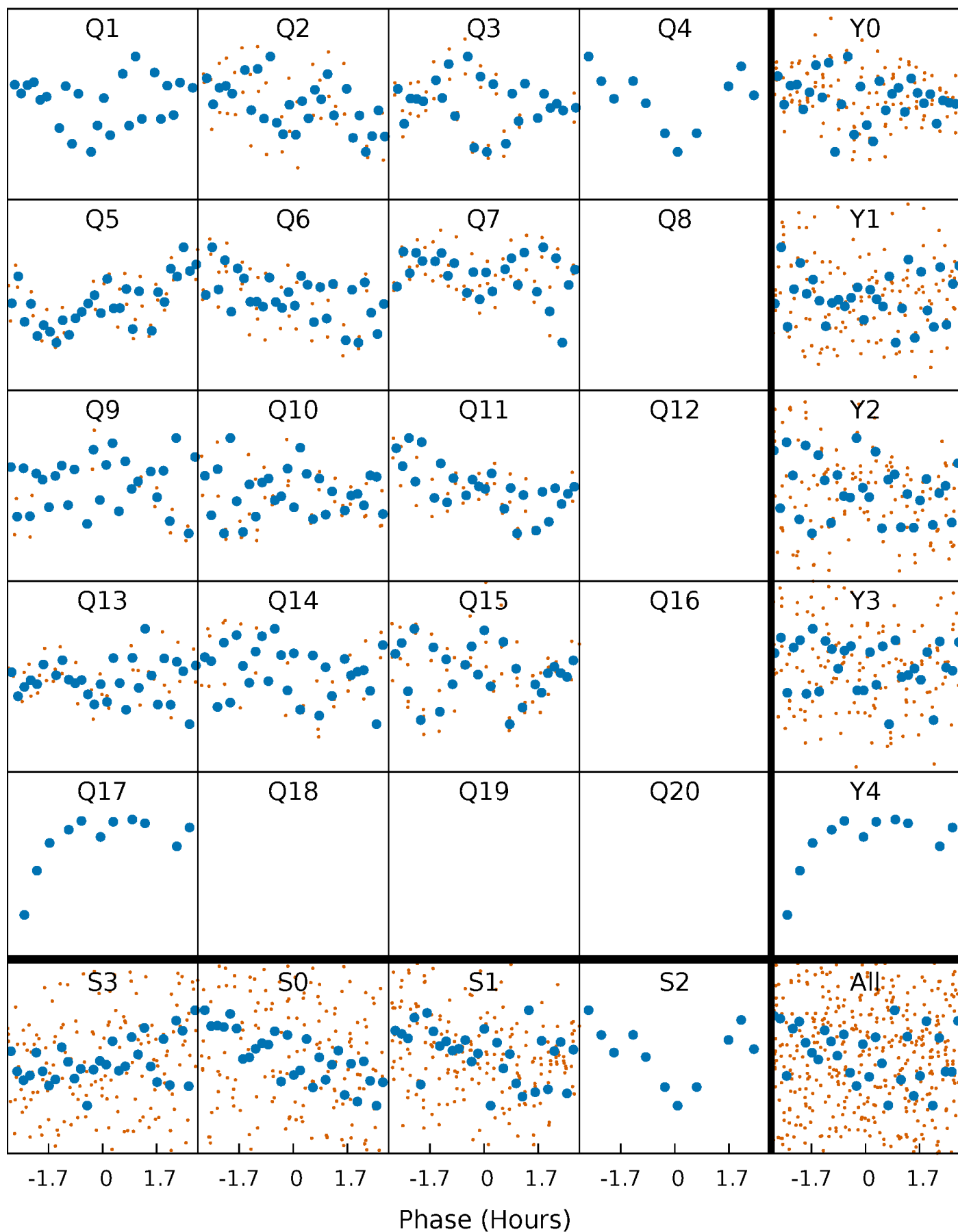


Planet 5 : Phased Whitened Flux Time Series (TPS Epoch/Period)



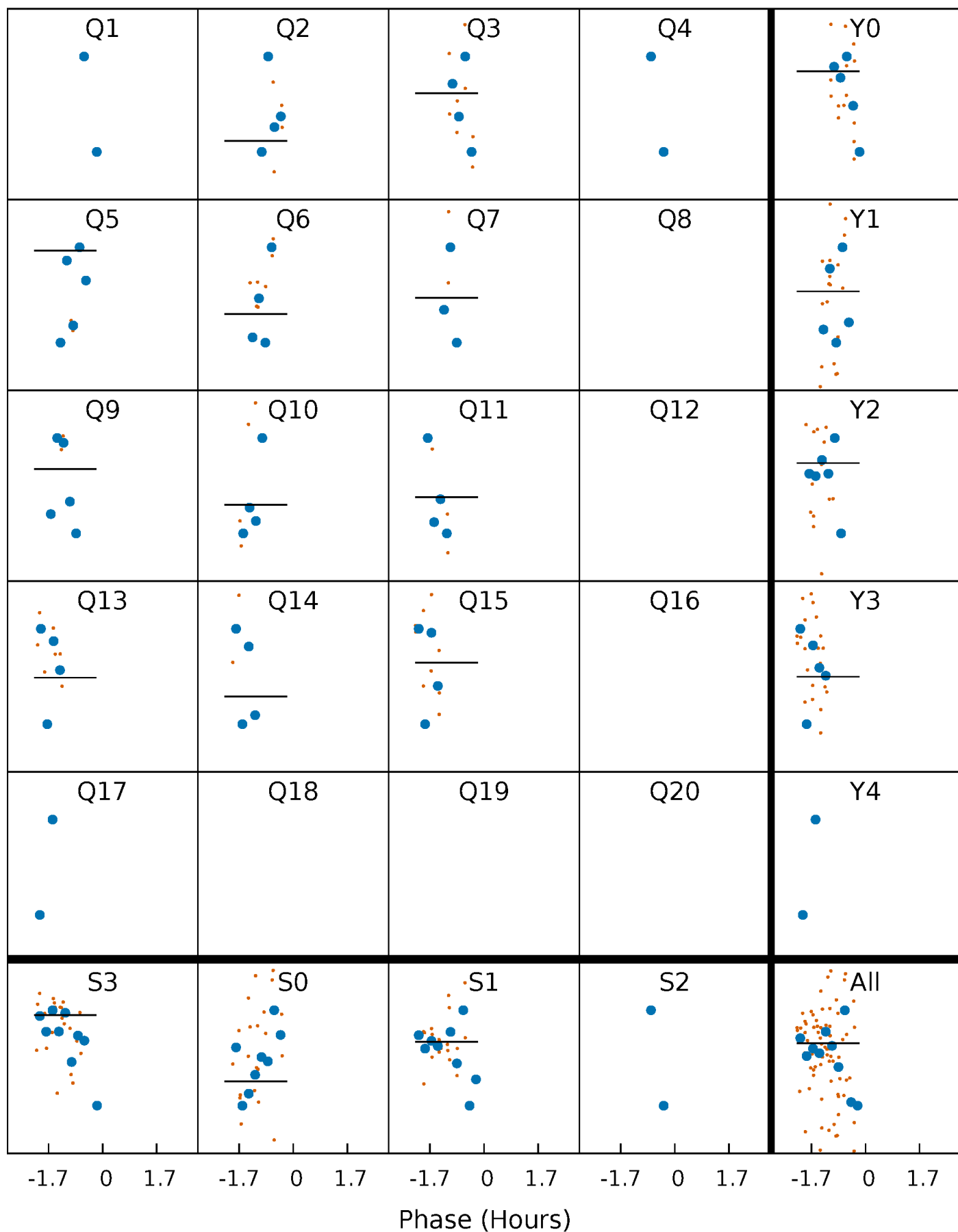
PDC Quarter-Phased Transit Curves

TCE 011127641-05 P= 21.505833 Days $T_0=134.667245$ (BKJD)



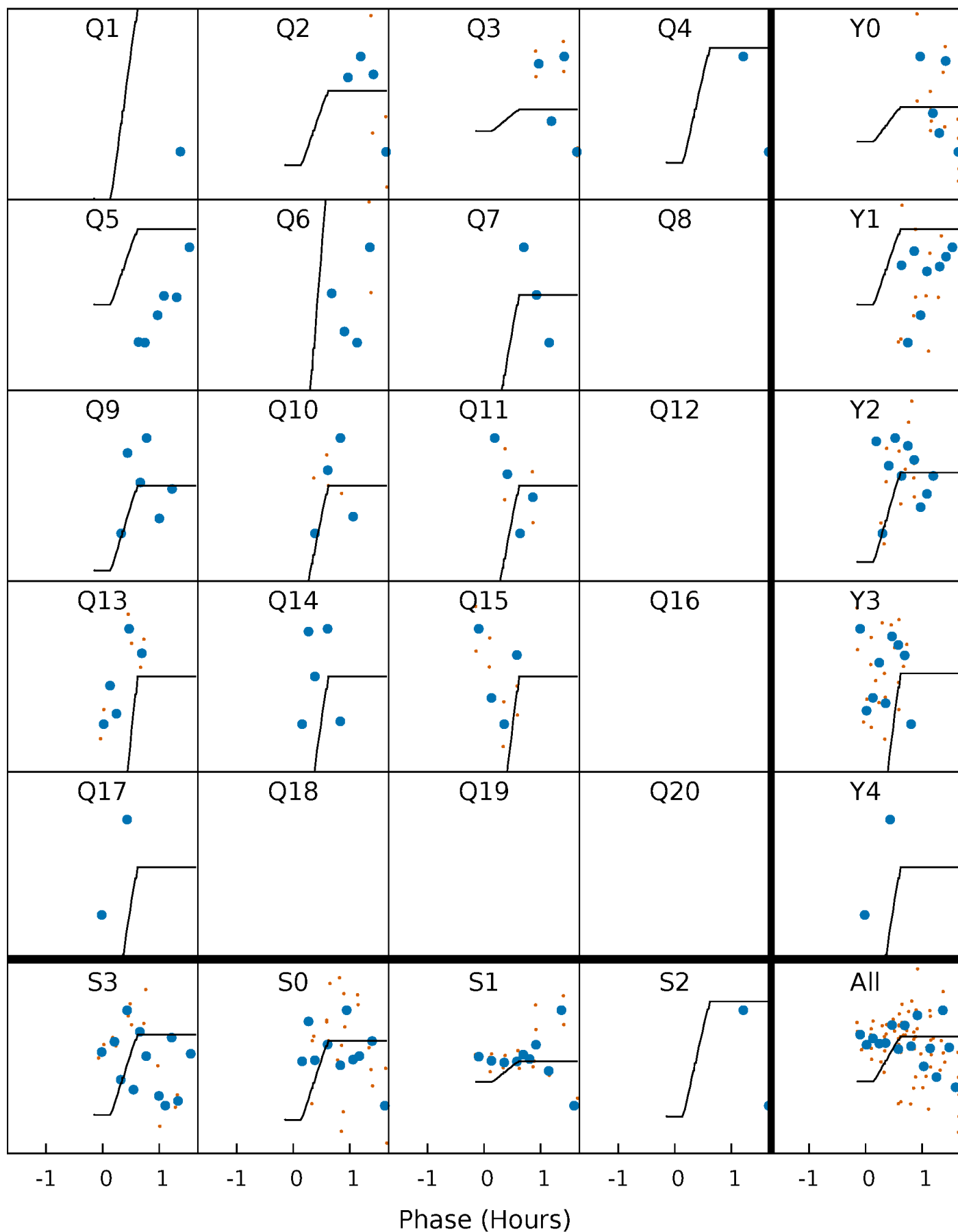
DV Quarter-Phased Transit Curves

TCE 011127641-05 $P = 21.505833$ Days $T_0 = 134.667245$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

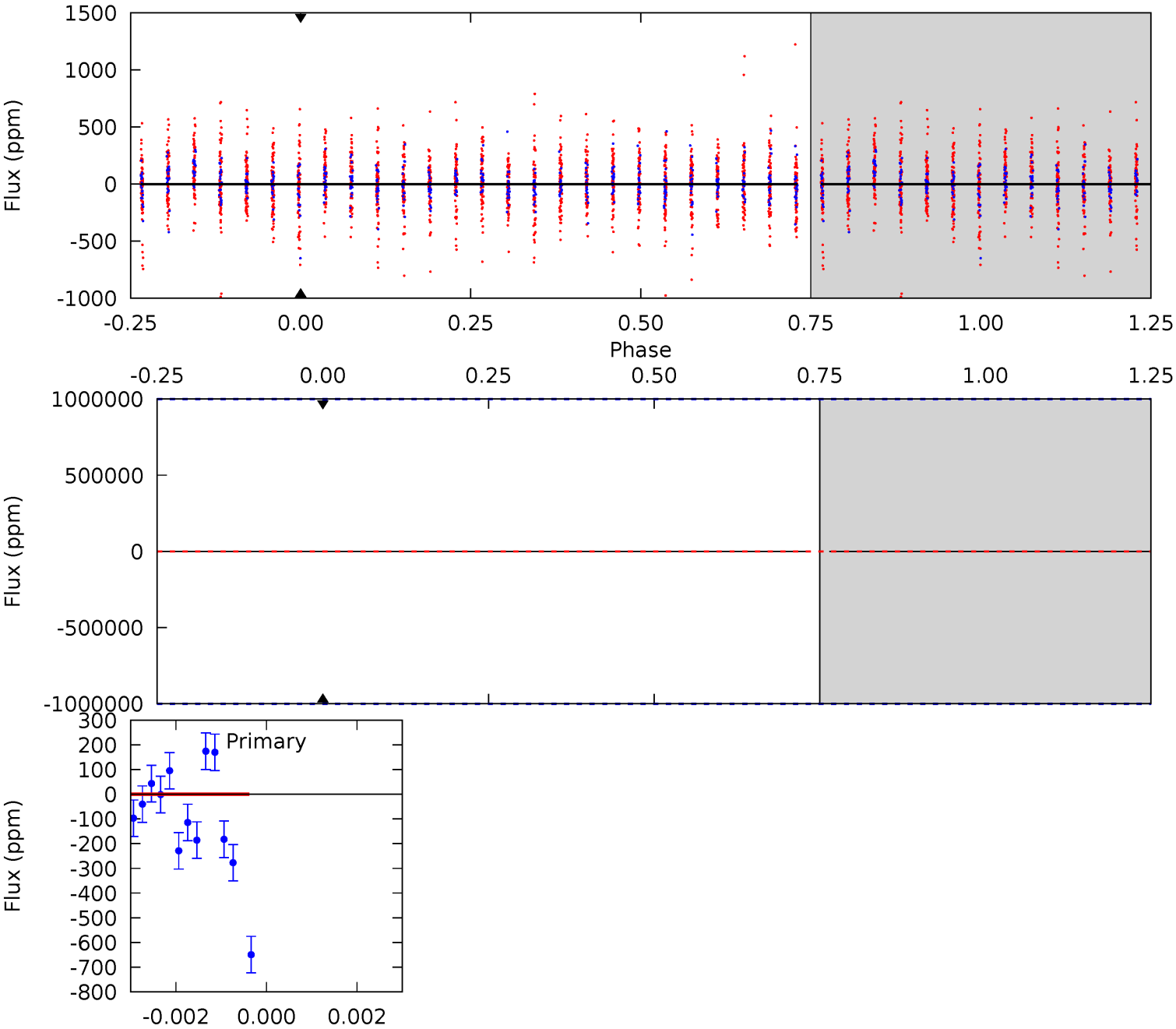
TCE 011127641-05 P= 21.505833 Days $T_0=134.583810$ (BKJD)



DV Model-Shift Uniqueness Test

011127641-05, P = 21.505833 Days, E = 113.161412 Days

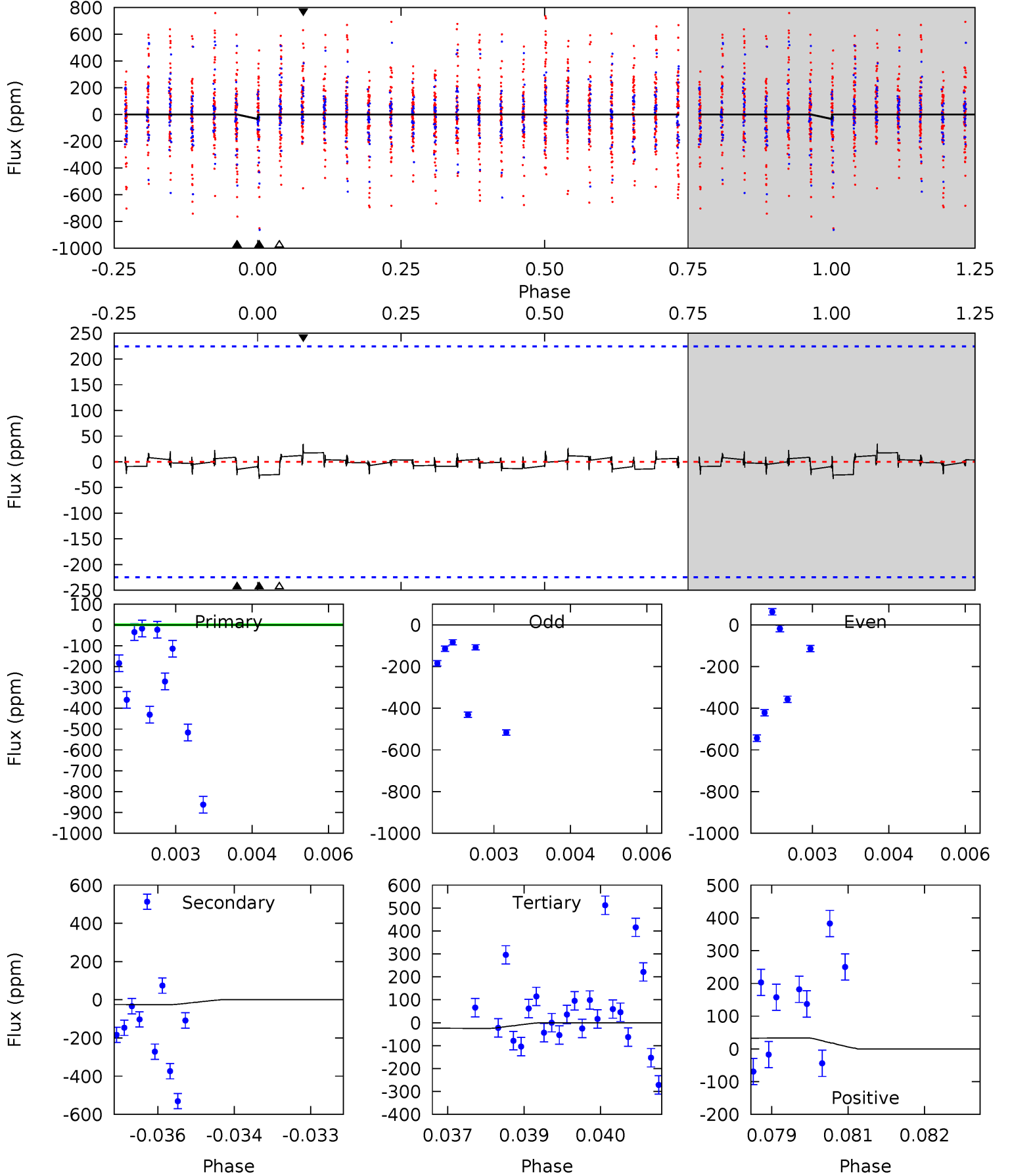
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
0	0	0	0	1.00	1.00	1.00	0	0	0	0	0	0	0	0



Alt Model-Shift Uniqueness Test

011127641-05, P = 21.505833 Days, E = 113.077977 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
0.79	0.61	0.59	0.80	5.38	3.18	0.20	0.20	-0.01	0.02	-0.19	0.67	0.89	0.50	0.20



Stellar Parameters For KIC 011127641

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	7311^{+228}_{-330}	$4.077^{+0.170}_{-0.170}$	$-0.100^{+0.250}_{-0.350}$	$1.889^{+0.547}_{-0.448}$	$1.551^{+0.211}_{-0.257}$	$0.324^{+0.296}_{-0.153}$
	+3%/-5%	+4%/-4%	+250%/-350%	+29%/-24%	+14%/-17%	+91%/-47%
Source	KIC0	KIC0	KIC0	DSEP		

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

Secondary Eclipse Parameters for KIC 011127641-05 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	0 ± 1000000	$14.98^{+17.12}_{-10.73}$	1479^{+113}_{-107}	-6379^{+42440}_{-34530}	$-248.911^{+13024.604}_{-14928.069}$
Alt.	-26 ± 42	$14.19^{+17.88}_{-9.18}$	1480^{+107}_{-116}	2396^{+1239}_{-5018}	$1.022^{+14.688}_{-2.332}$

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

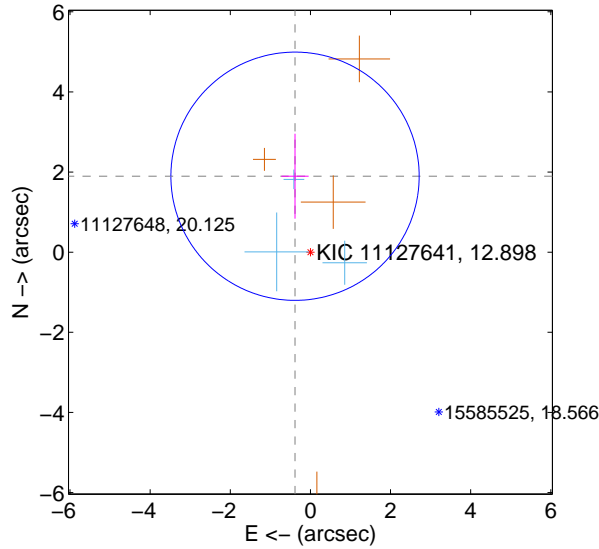
Supplemental centroid analysis for 011127641-05. Kepler magnitude: 12.90. Transit SNR -1.00

There are 3 quarters with good PRF difference image offsets

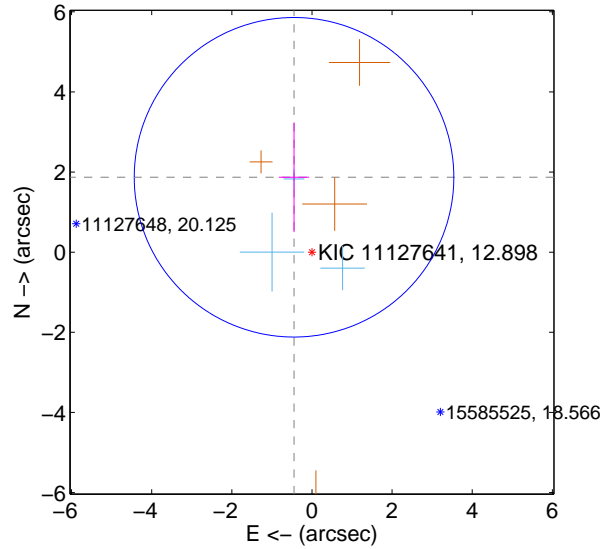
The direct PRF centroid is offset from the target star catalog position by about 0.07 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	1.934 ± 1.033	1.87	0.384 ± 0.340	1.896 ± 1.060
PRF-fit source offset from KIC position	1.922 ± 1.329	1.45	0.448 ± 0.377	1.870 ± 1.368
photometric centroid source offset	0.48 ± 0.36	1.35	0.42 ± 0.36	0.23 ± 0.35

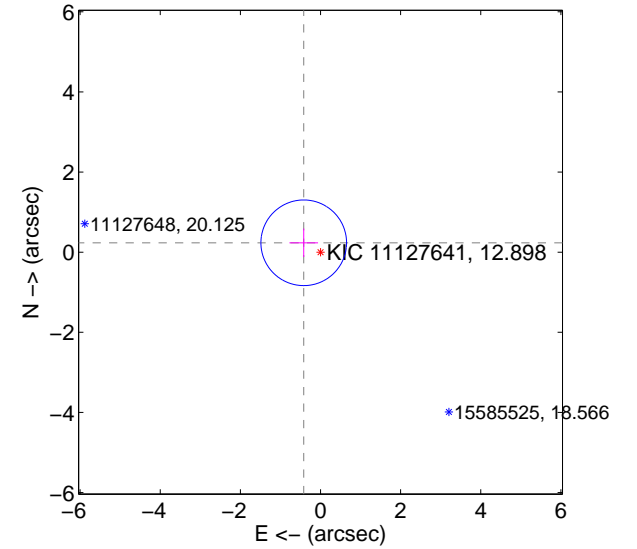
offset from difference PRF-fit to OOT PRF-fit



offset from difference PRF-fit to KIC position

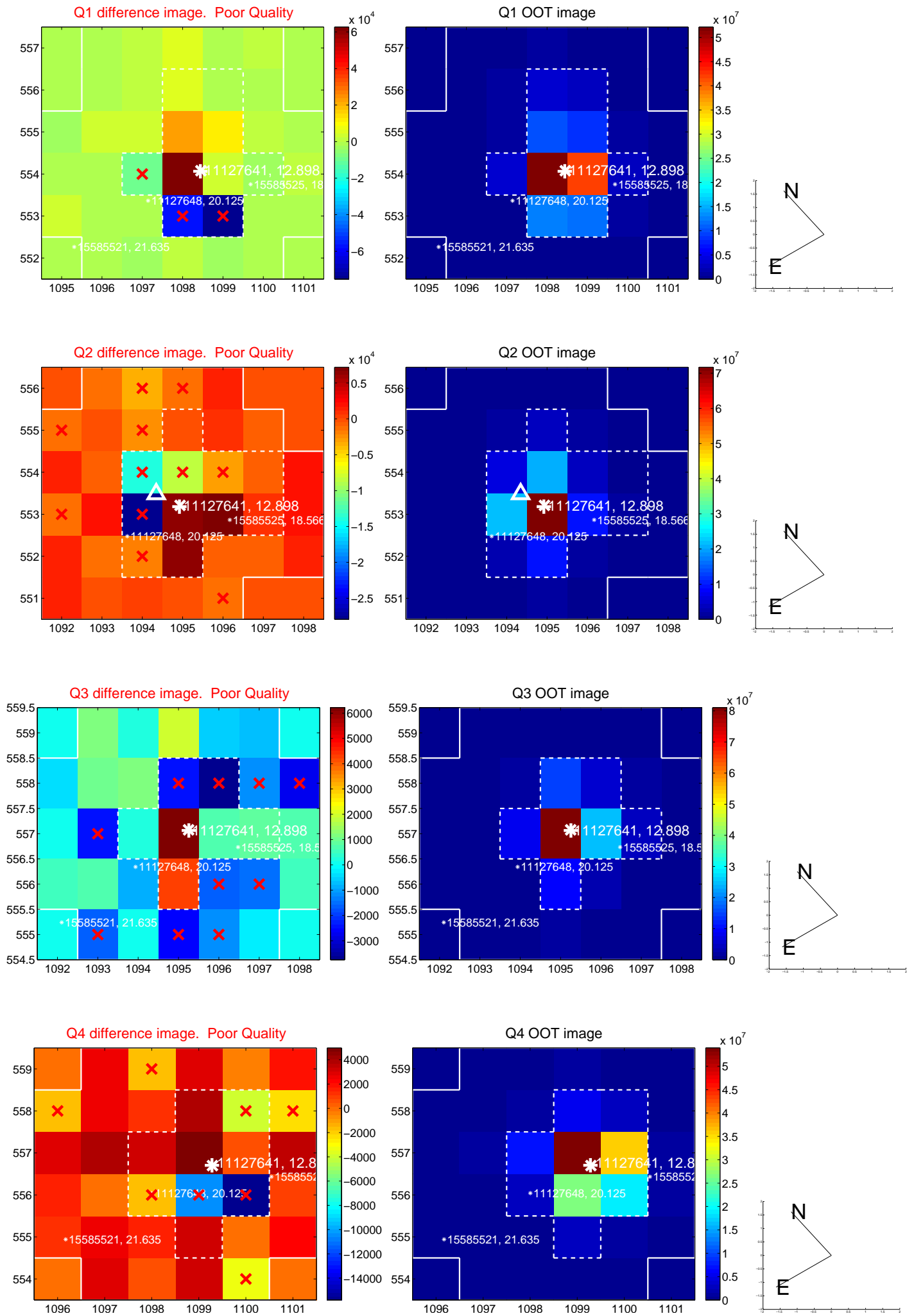


offset from photometric centroids

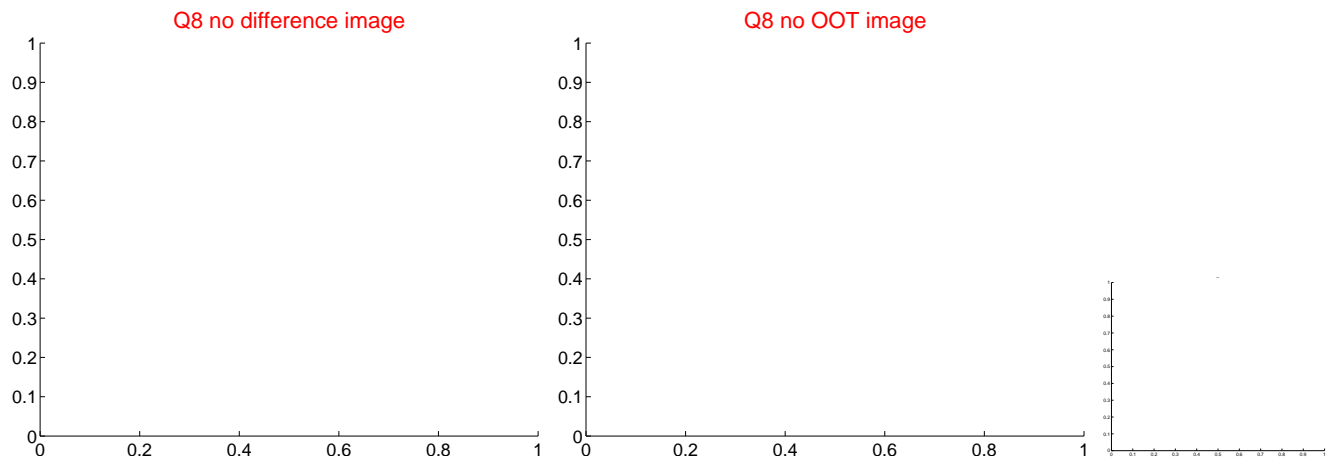
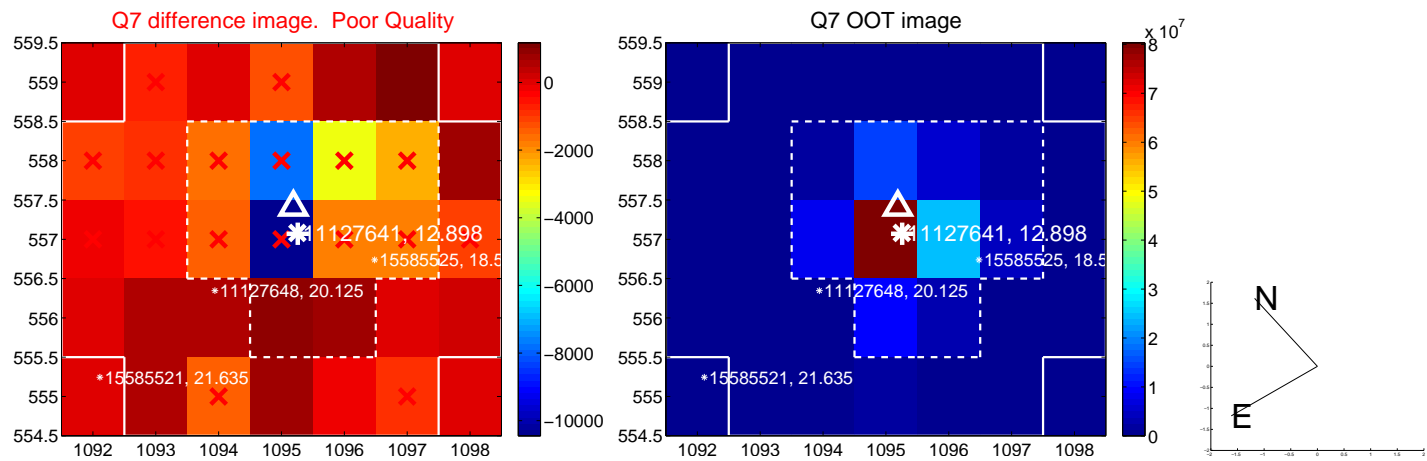
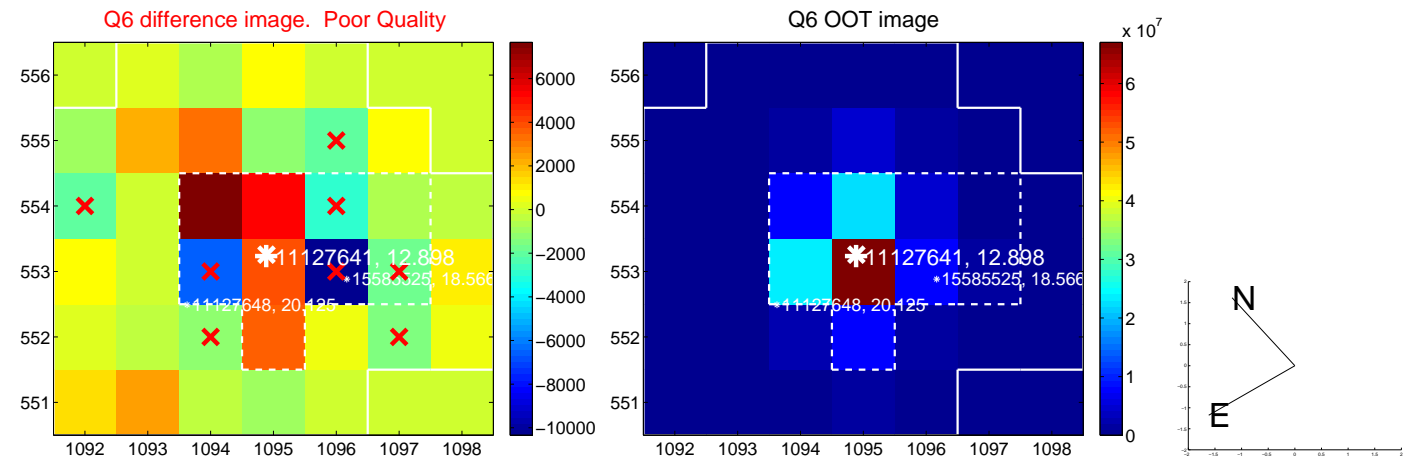
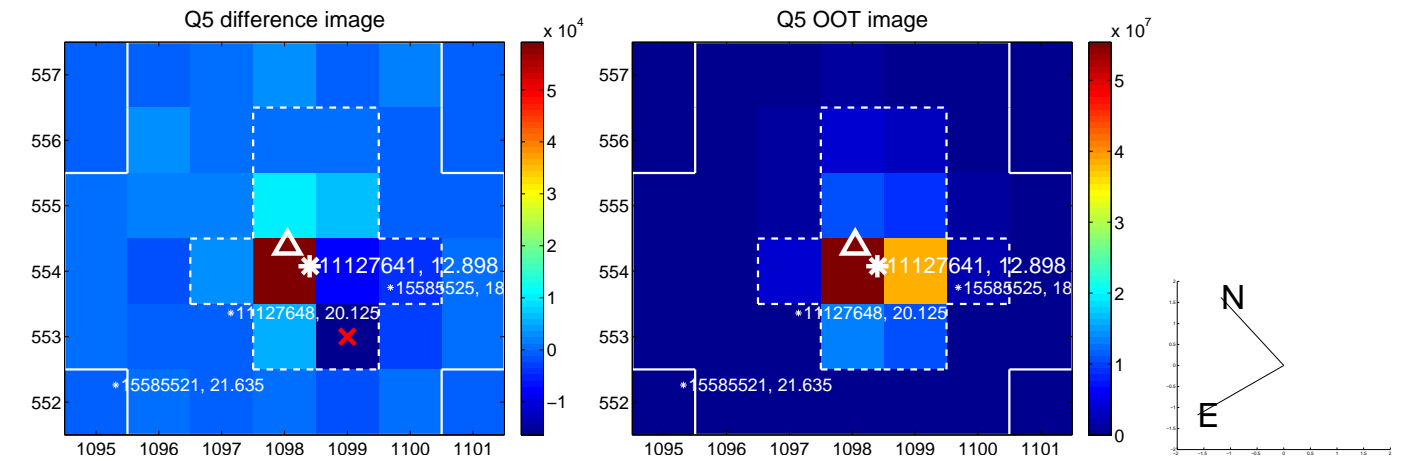


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

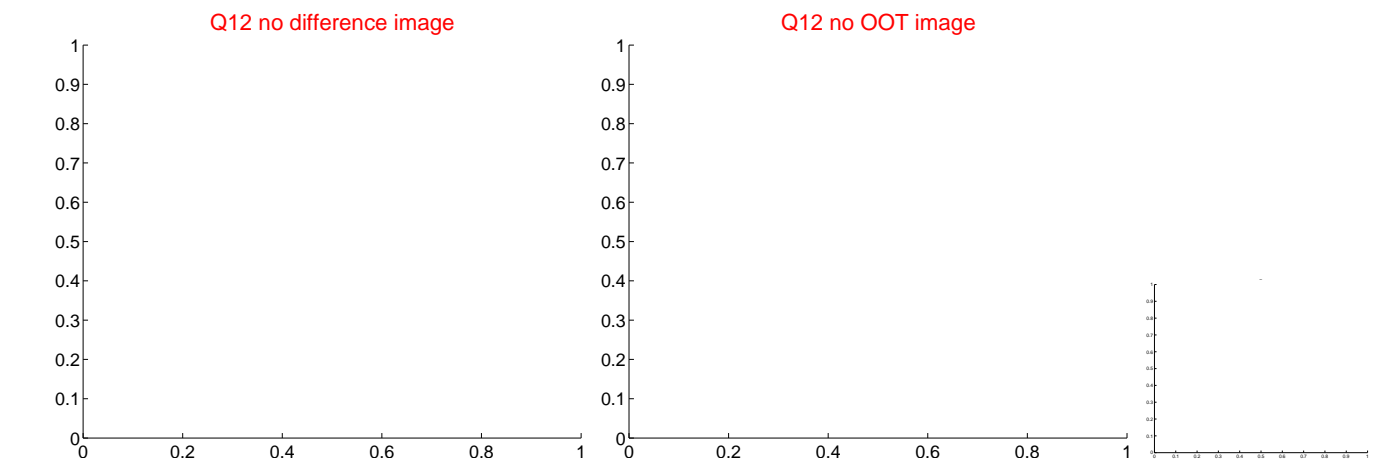
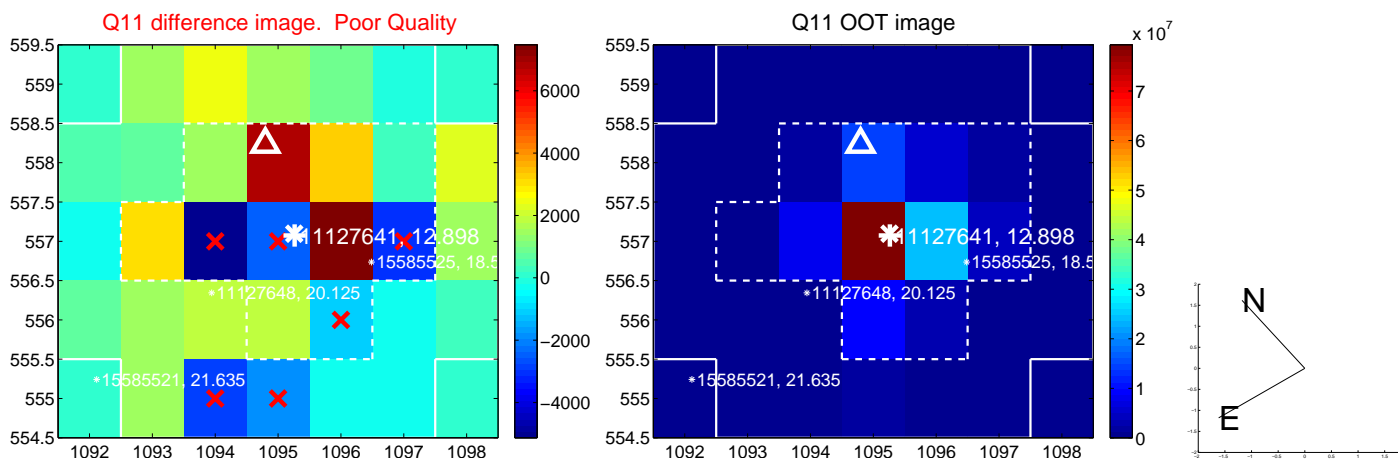
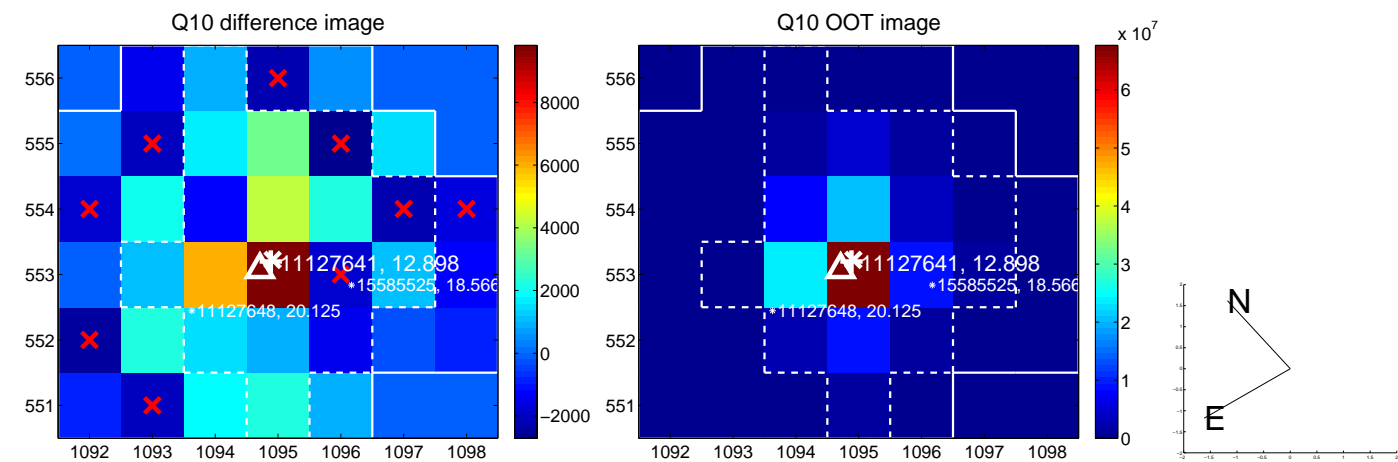
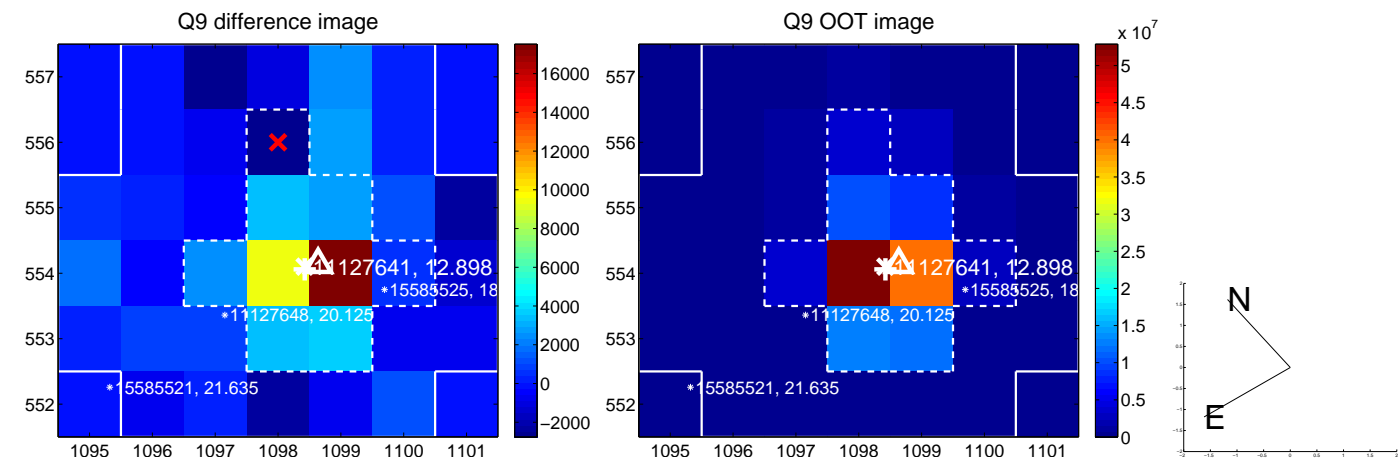
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



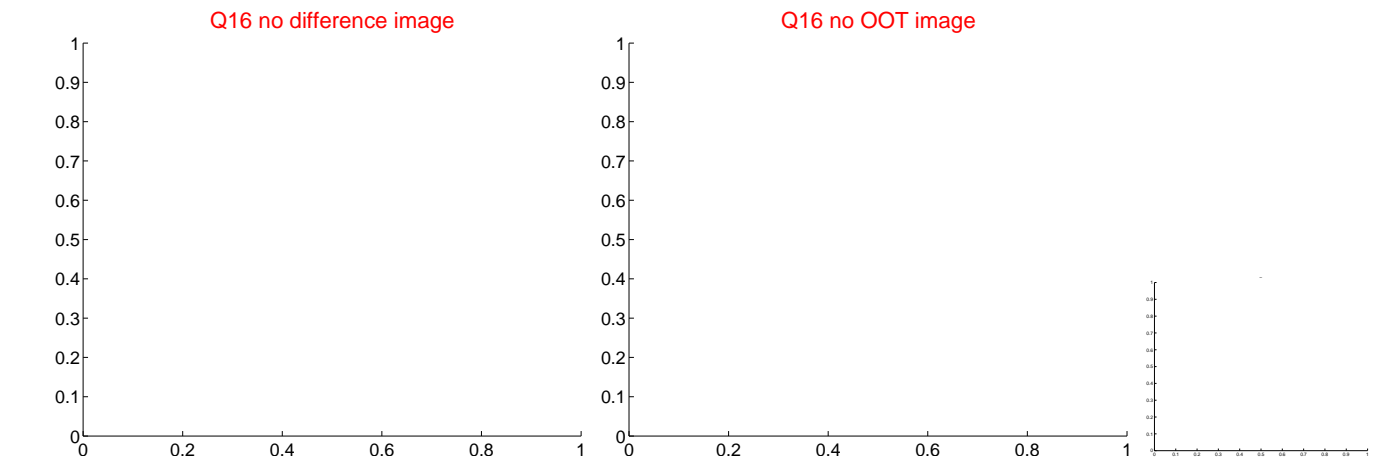
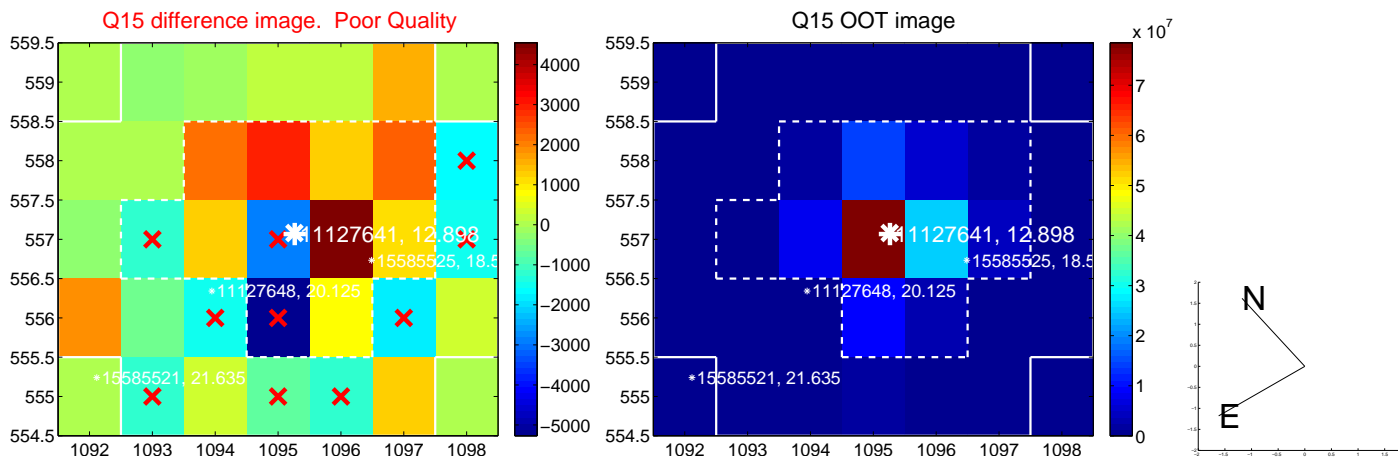
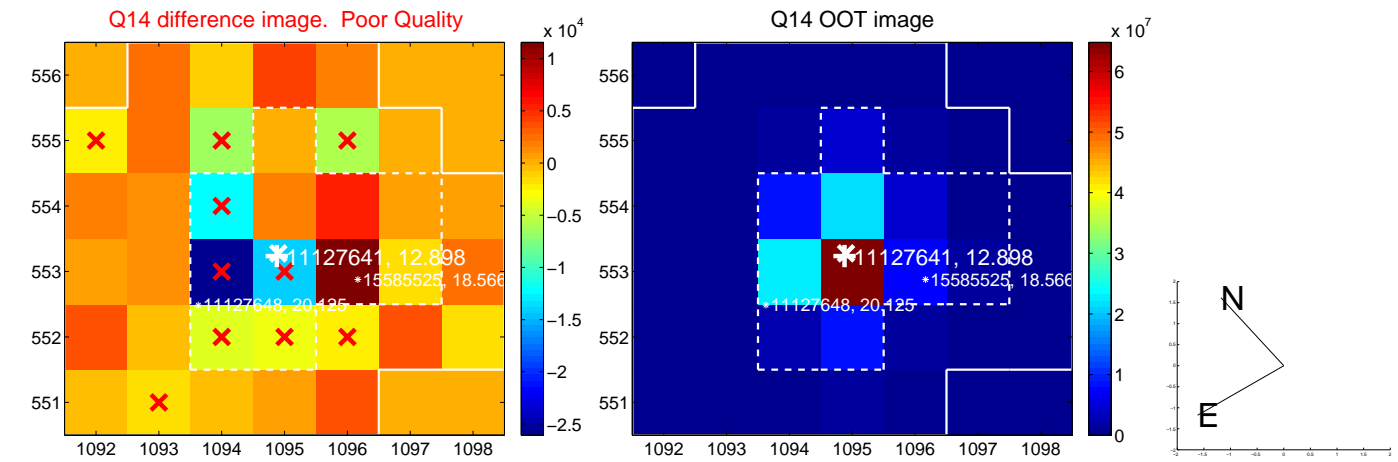
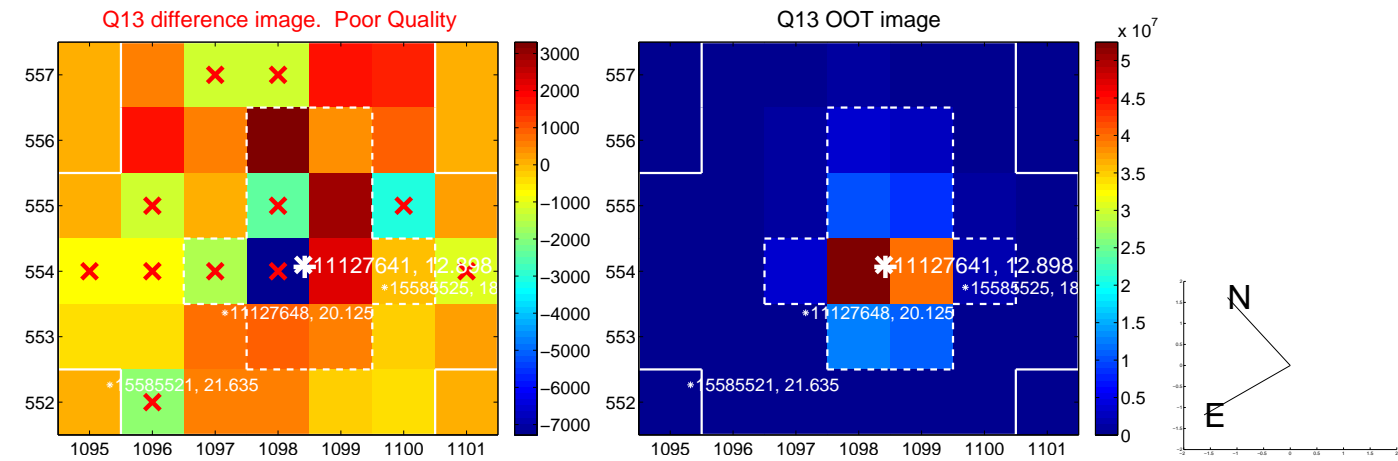
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



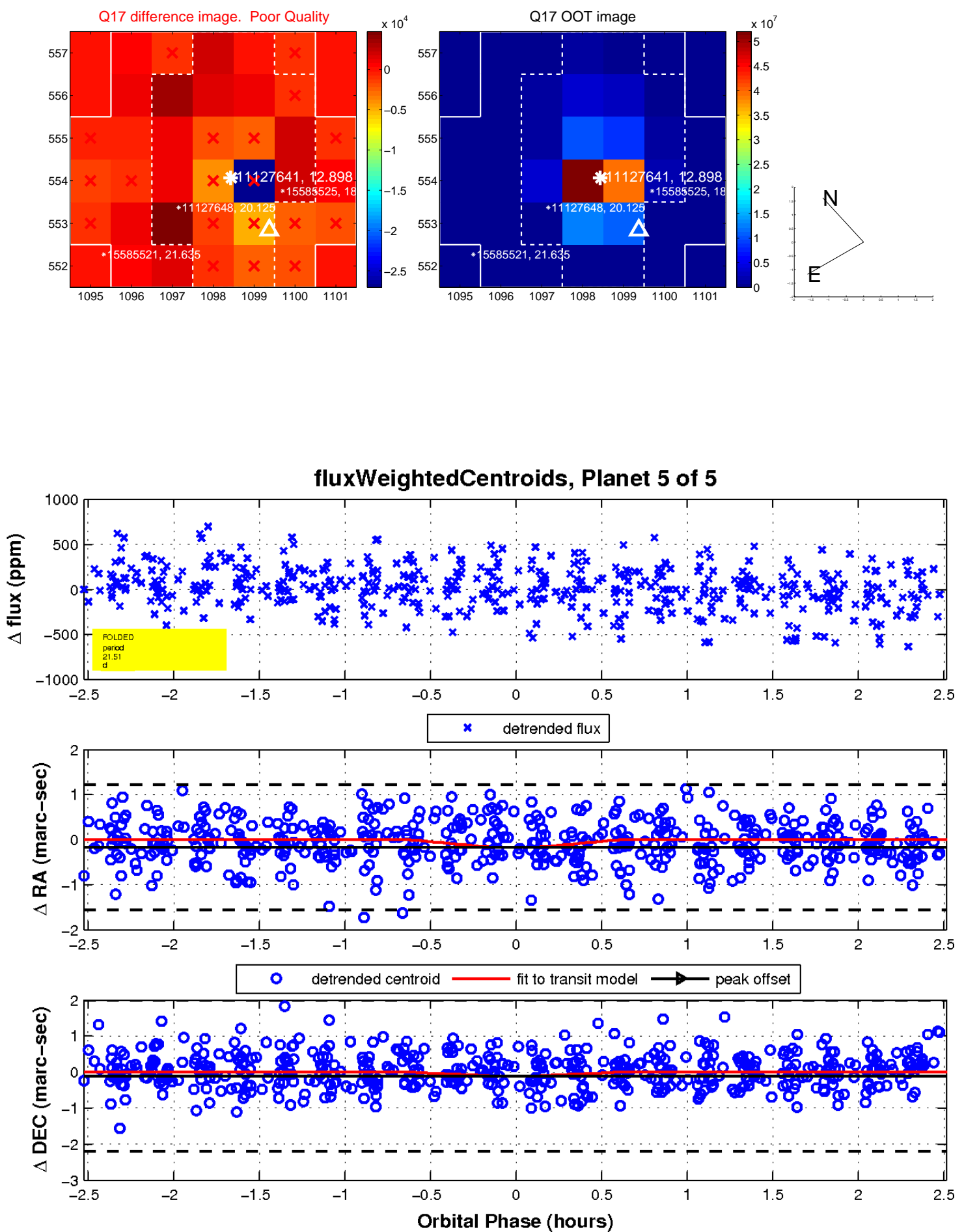
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



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



UKIRT Image

Declination

