

KIC 005552761

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})
005552761-01	OBS	No	2.789242	133.343296	40.0	18.006	9.8	6.6	1.20	6611	0.76	1464.88
005552761-02	OBS	No	359.297934	132.646674	2300.4	64.233	22.0	15.3	1.20	6611	10.52	2.25
005552761-03	OBS	No	84.444693	215.445111	448.5	21.091	10.9	8.2	1.20	6611	3.02	15.53
005552761-04	OBS	No	371.100386	338.196161	423.6	12.149	10.3	9.2	1.20	6611	2.62	2.16
005552761-05	OBS	No	45.144567	149.322342	342.7	10.178	10.4	10.3	1.20	6611	2.45	35.78
005552761-06	OBS	No	53.529865	138.894361	216.0	12.463	8.9	4.7	1.20	6611	1.99	28.51
005552761-07	OBS	No	404.442174	379.886035	675.1	7.444	8.5	9.0	1.20	6611	3.46	1.92

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
005552761-01	OBS	FP	0.00	1	0	0	0	SWEET_NTL—LPP_DV
005552761-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_SKYE—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—INCONSISTENT_TRANS—CENT_FEW_DIFFS
005552761-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT
005552761-04	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_MARSHALL—LPP_DV—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_POS_ALT—CENT_FEW_DIFFS
005552761-05	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT
005552761-06	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT
005552761-07	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_CHASES_MARSHALL—LPP_DV—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_NONUNIQ_ALT—MOD_TER_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.

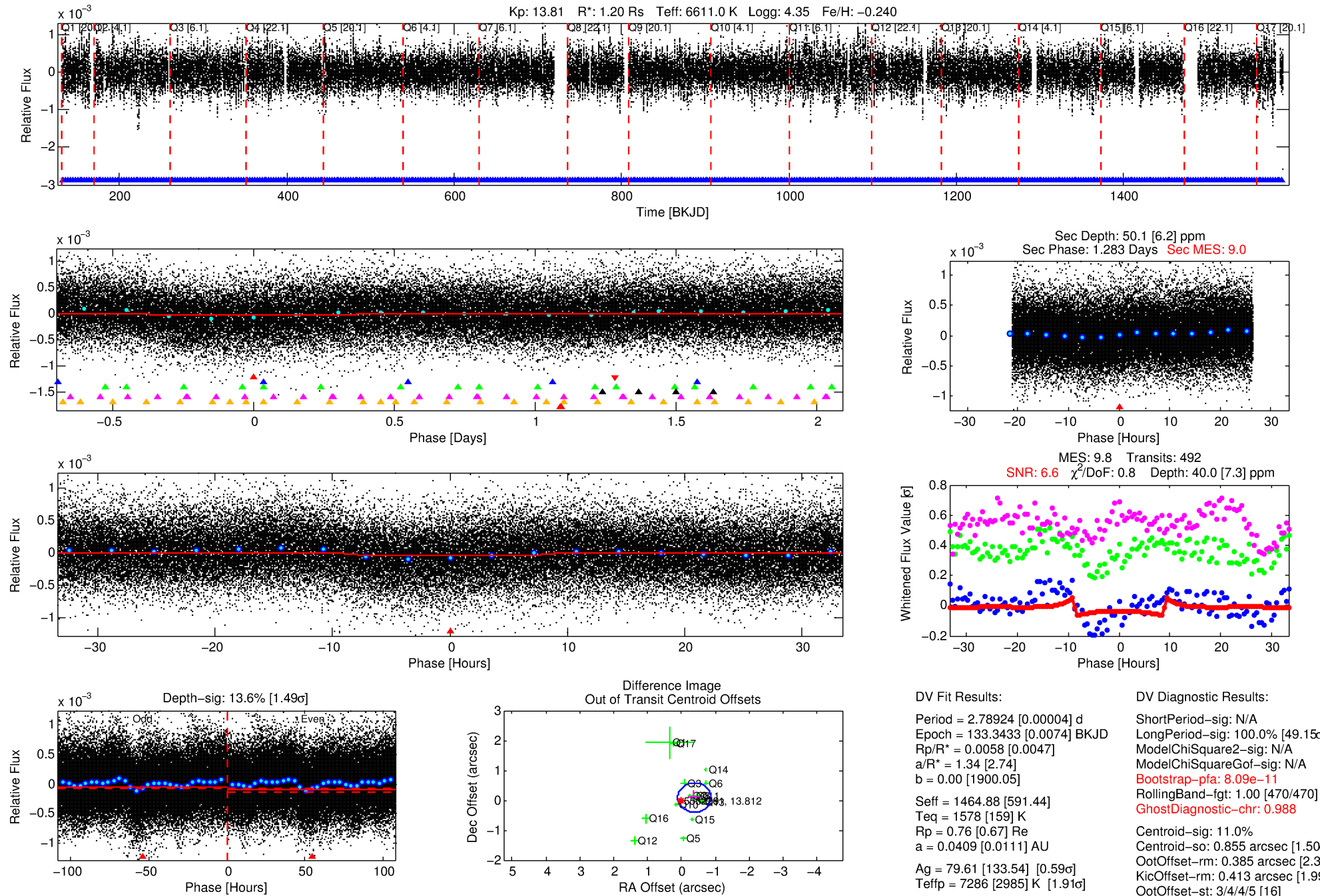
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 005552761-01

No Significant Match Found

DV One-Page Summary

KIC: 5552761 Candidate: 1 of 7 Period: 2.789 d



DV Fit Results:

Period = 2.78924 [0.00004] d
Epoch = 133.3433 [0.0074] BKJD
Rp/R* = 0.0058 [0.0047]
a/R* = 1.34 [2.74]
b = 0.00 [1900.05]
Seff = 1464.88 [591.44]
Teff = 1578 [159] K
Rp = 0.76 [0.67] Re
a = 0.0409 [0.0111] AU
Ag = 79.61 [133.54] [0.59 σ]
Teffp = 7286 [2985] K [1.91 σ]

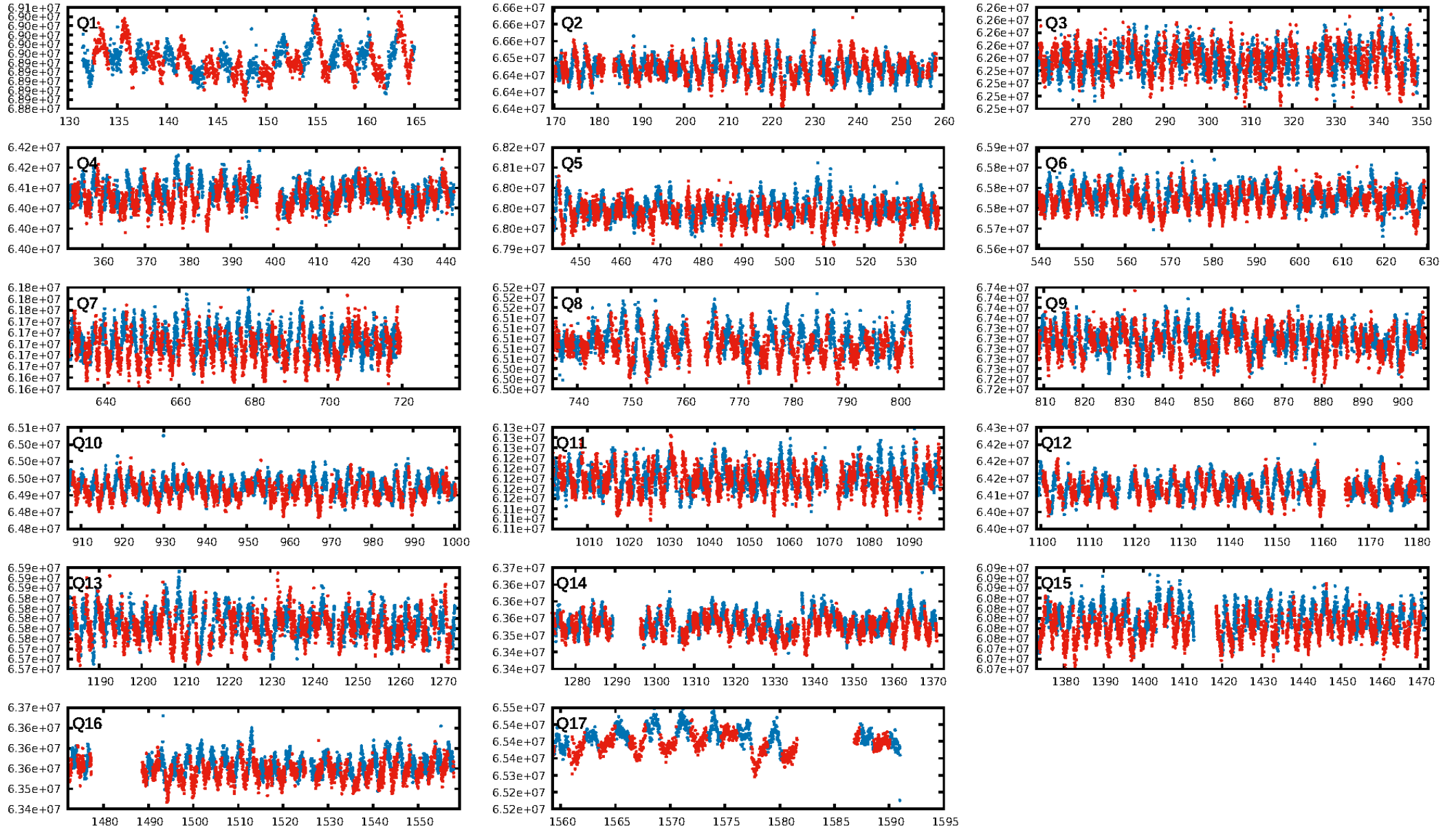
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: 100.0% [49.15 σ]
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 8.09e-11
RollingBand-fgt: 1.00 [470/470]
GhostDiagnostic-chr: 0.988
Centroid-sig: 11.0%
Centroid-so: 0.855 arcsec [1.50 σ]
OotOffset-rm: 0.385 arcsec [2.37 σ]
KicOffset-rm: 0.413 arcsec [1.99 σ]
OotOffset-st: 3/4/4/5 [16]
KicOffset-st: 3/4/4/5 [16]
DiffImageQuality-fgm: 0.94 [15/16]
DiffImageOverlap-fno: 1.00 [17/17]

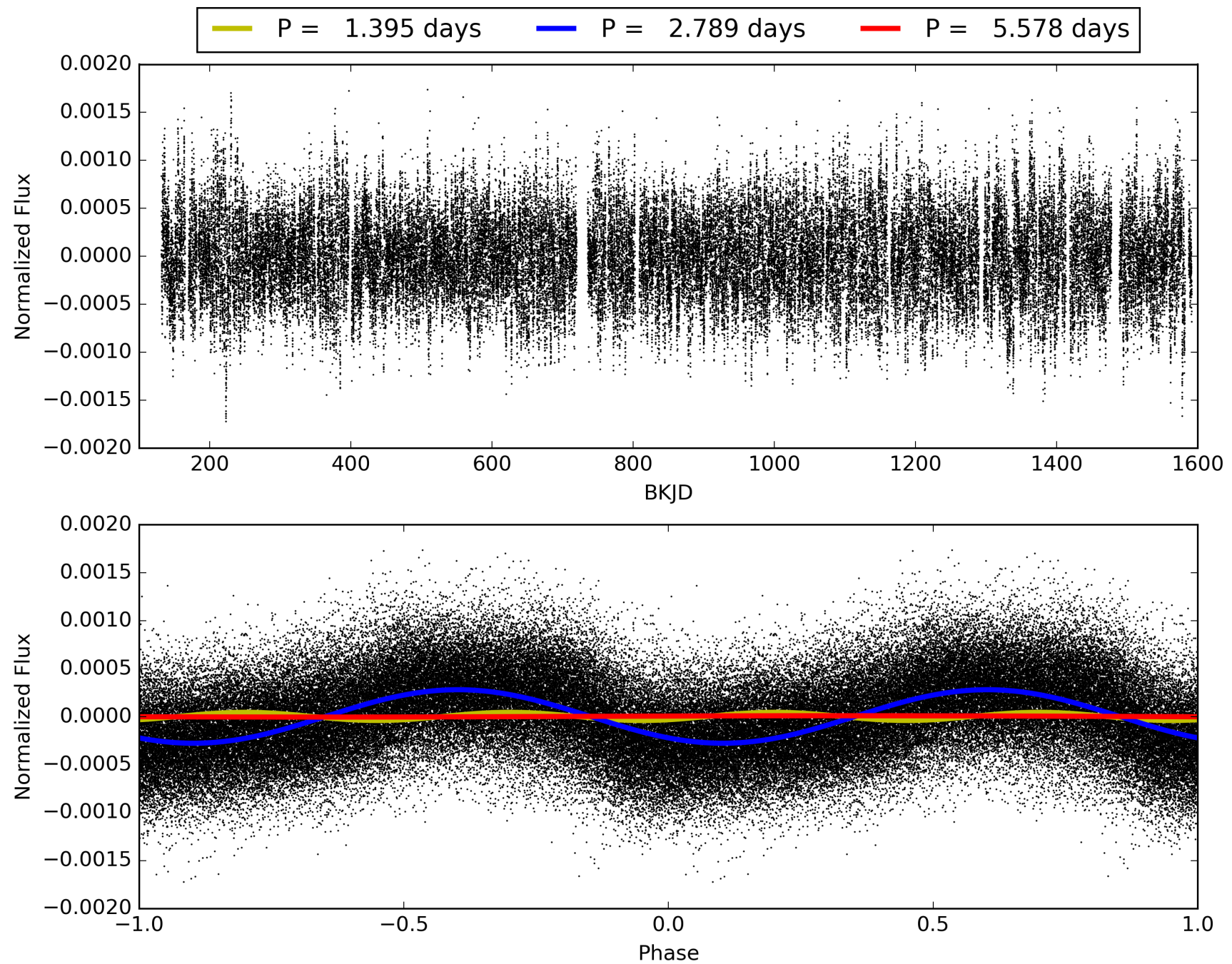
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 03-Feb-2016 08:31:44 Z

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

TCE 005552761-01, PDC Light Curves

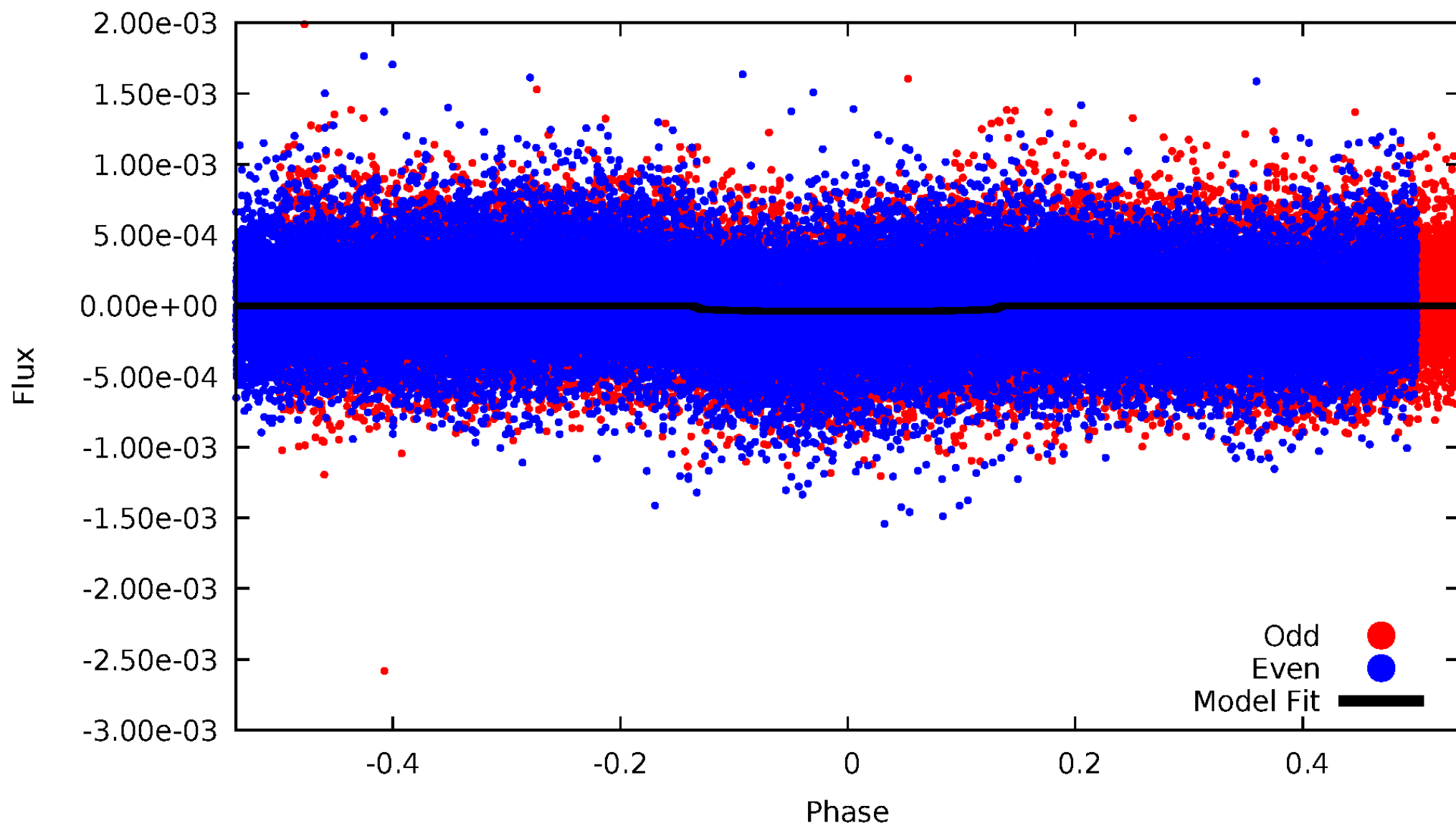


TCE 005552761-01



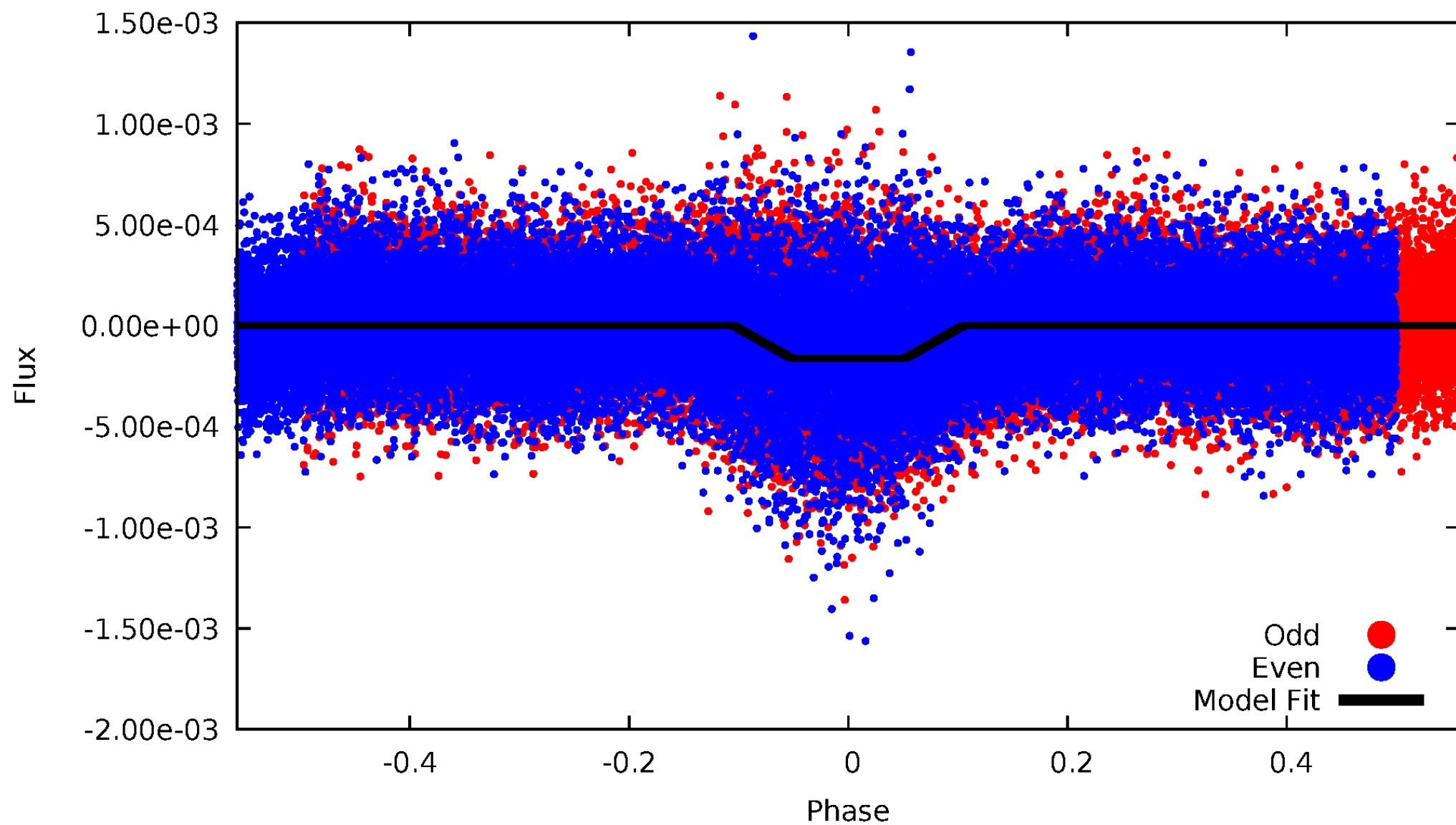
DV Odd/Even

TCE 005552761-01

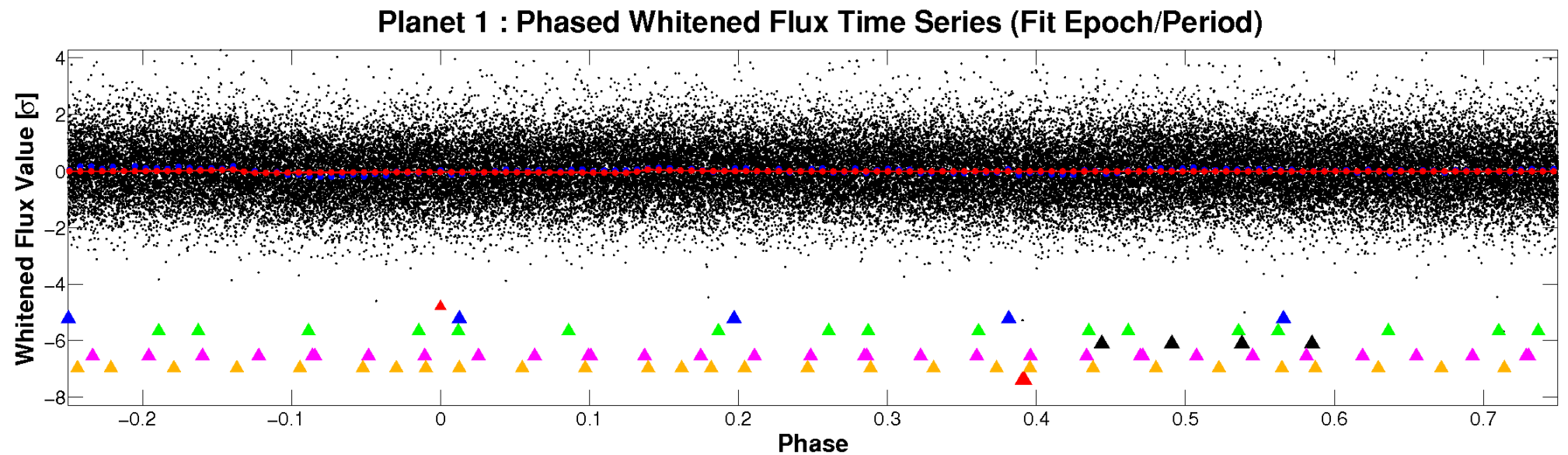
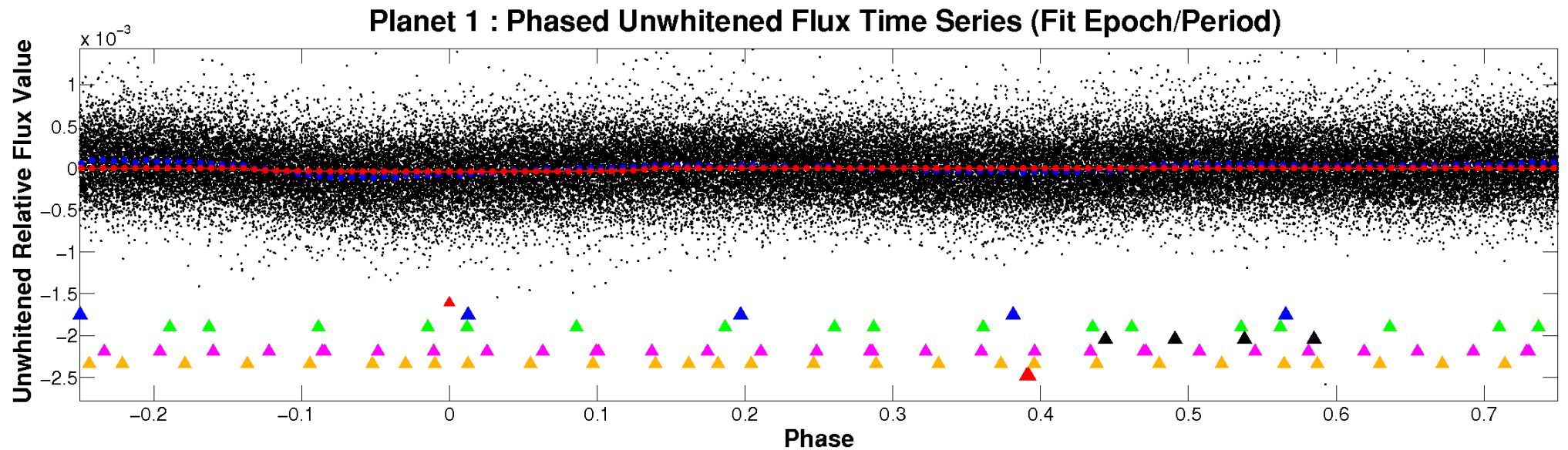


ALT Odd/Even

TCE 005552761-01

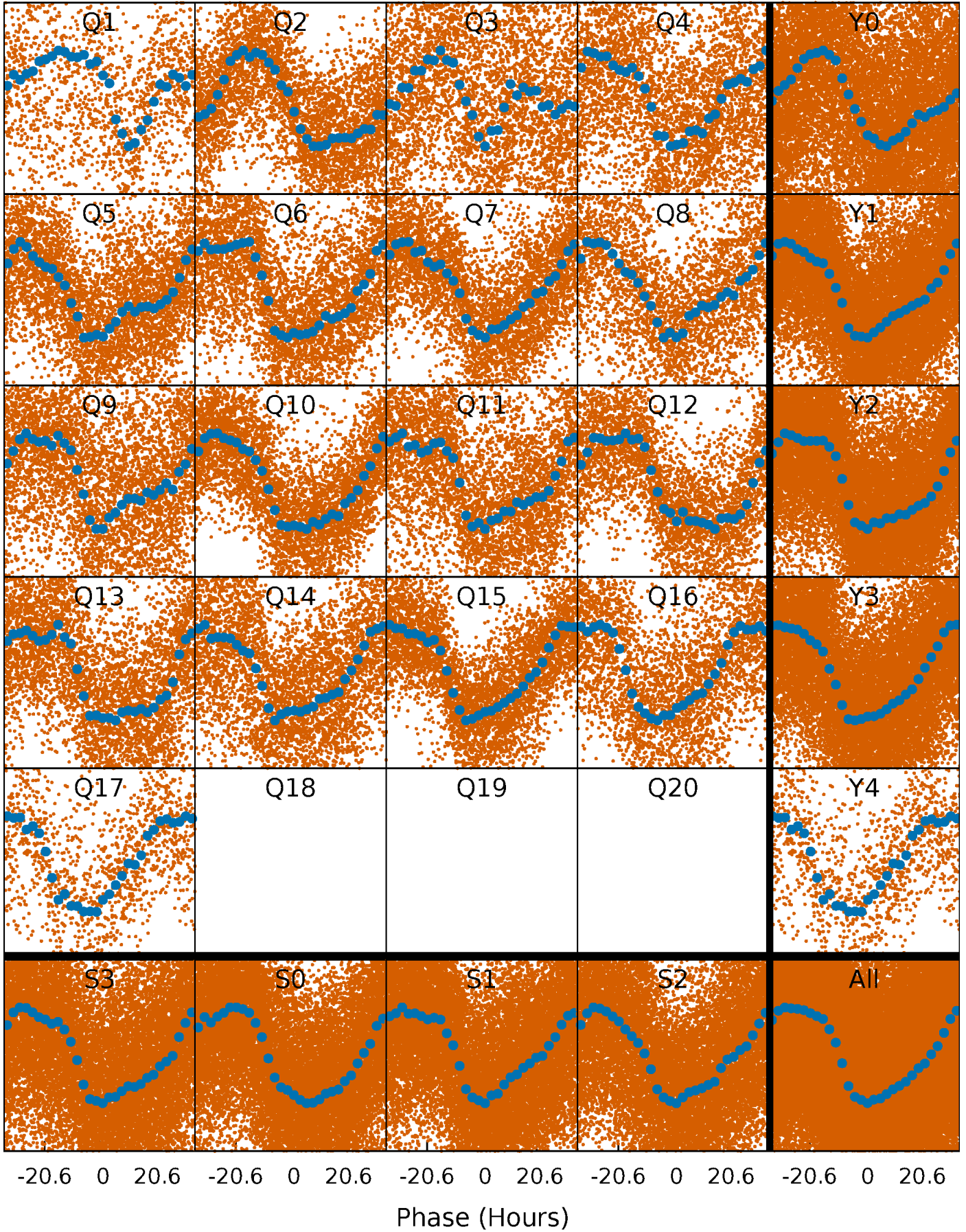


Non-Whitened Vs. Whitened Light Curve



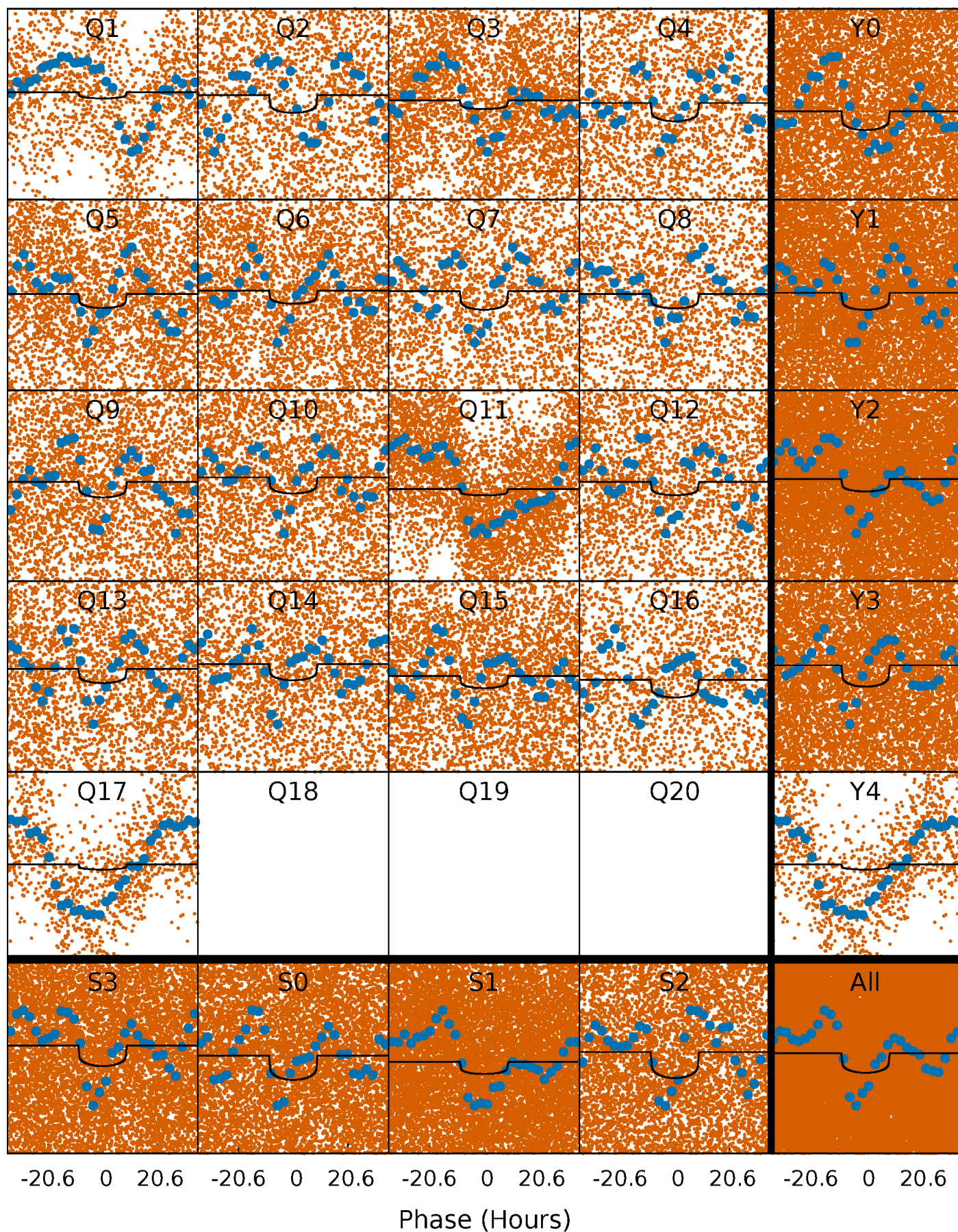
PDC Quarter-Phased Transit Curves

TCE 005552761-01 P= 2.789242 Days $T_0=133.343296$ (BKJD)



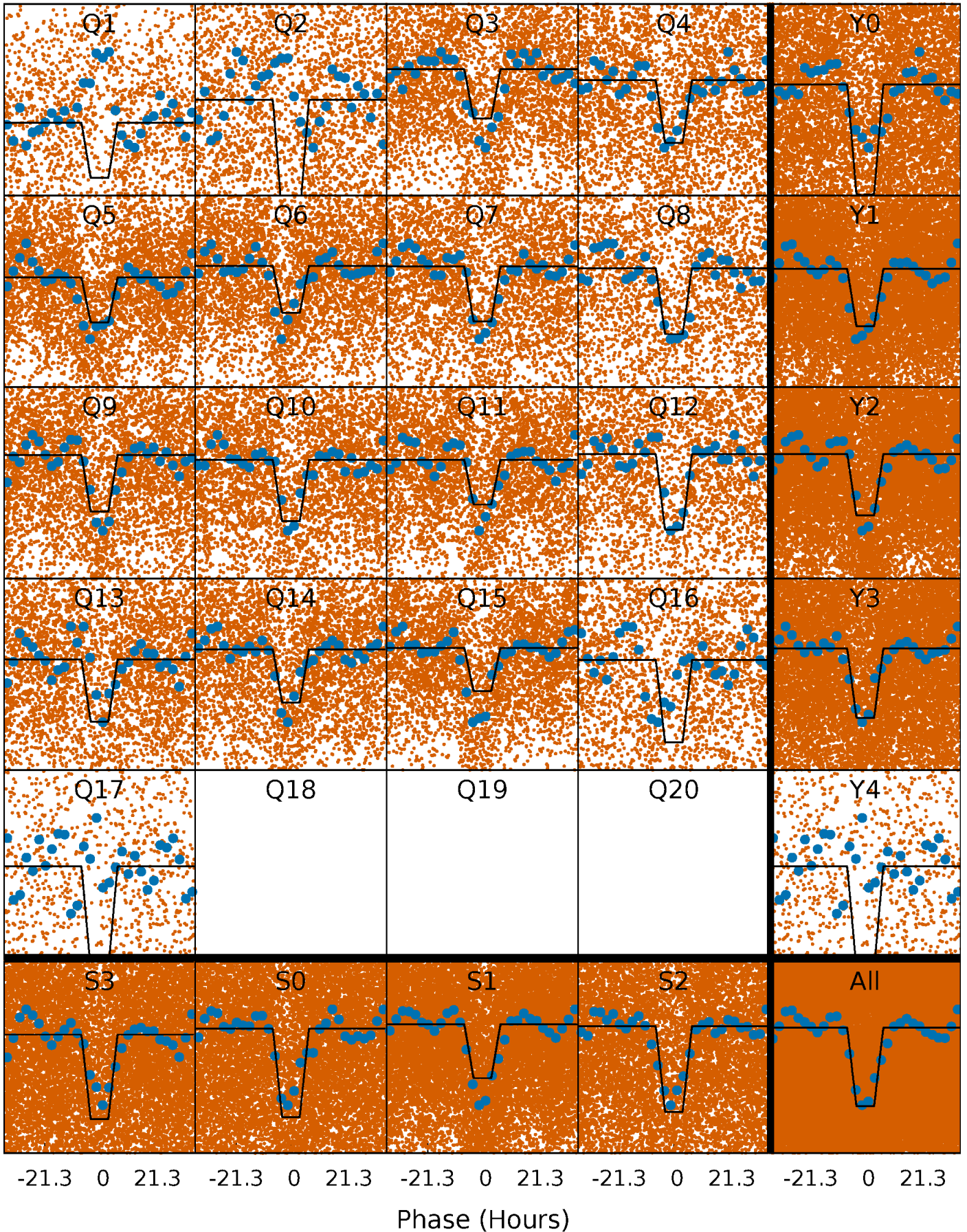
DV Quarter-Phased Transit Curves

TCE 005552761-01 P= 2.789242 Days $T_0=133.343296$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

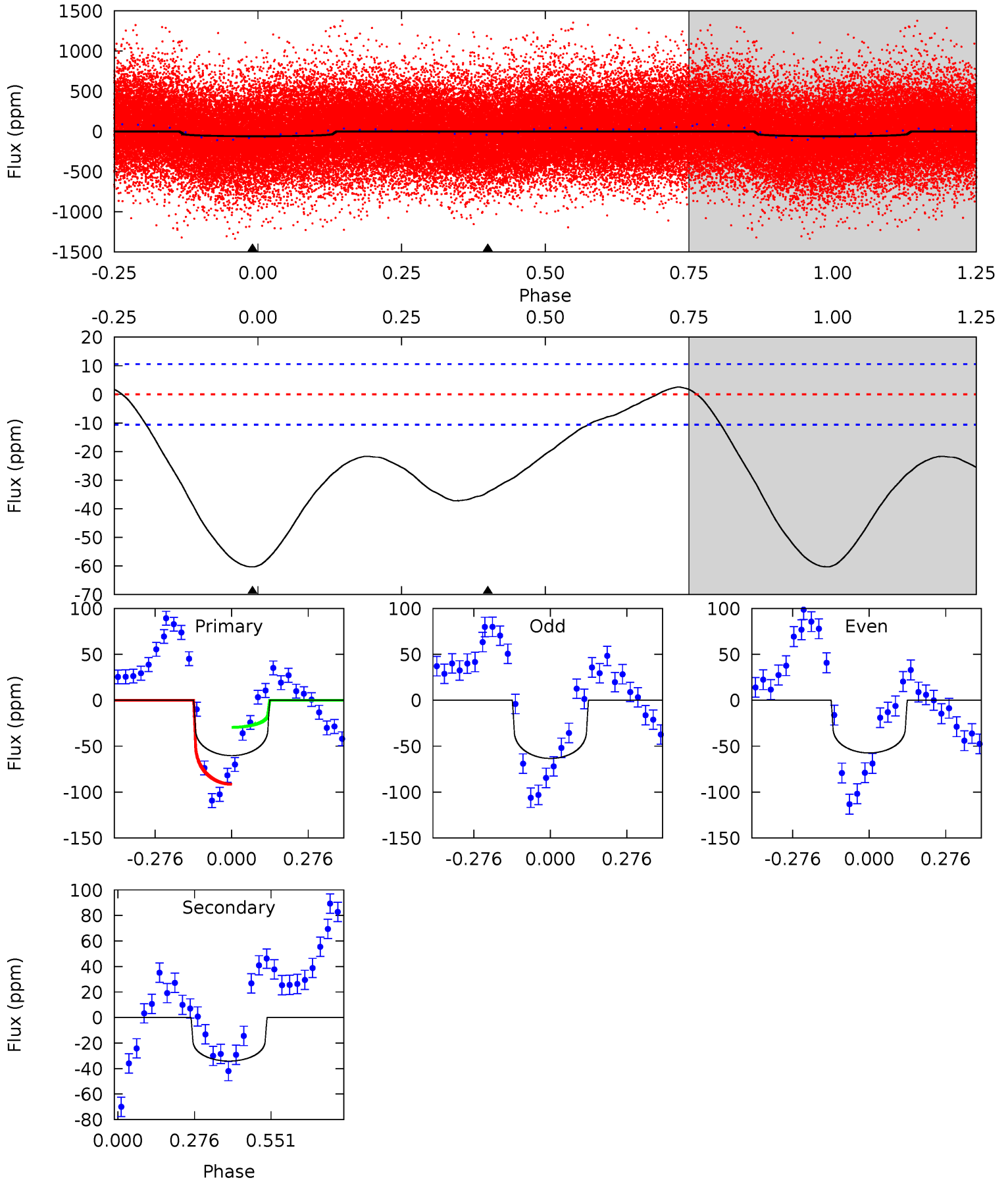
TCE 005552761-01 P= 2.788747 Days $T_0=133.346881$ (BKJD)



DV Model-Shift Uniqueness Test

005552761-01, P = 2.789242 Days, E = 130.554054 Days

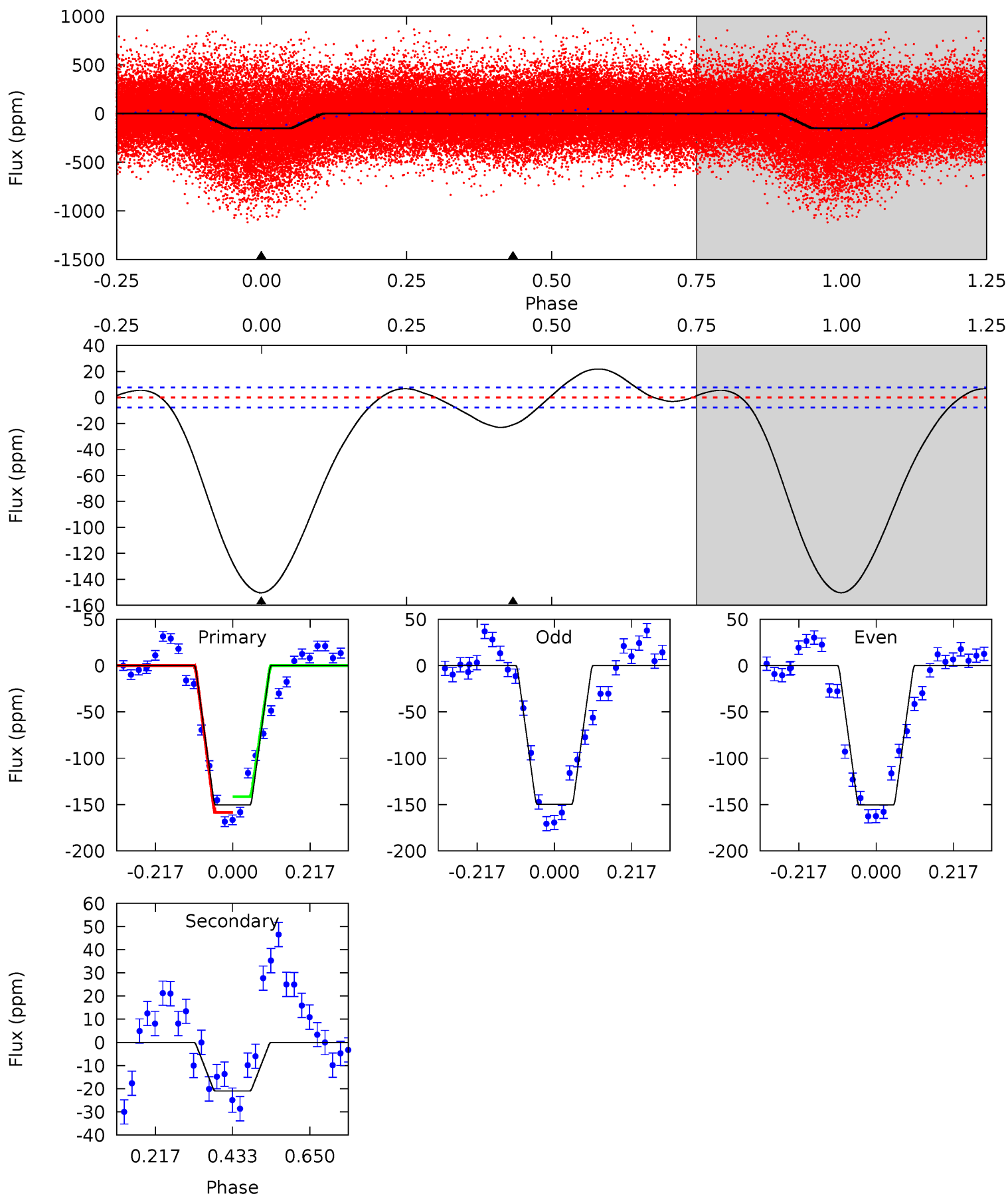
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
24.8	14.0	0	0	4.35	1.09	0.97	24.8	24.8	14.0	14.0	1.24	1.17	0.04	12.5



Alt Model-Shift Uniqueness Test

005552761-01, P = 2.788747 Days, E = 130.558134 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
85.0	11.9	0	0	4.40	1.24	1.60	85.0	85.0	11.9	11.9	0.21	0.99	0.13	4.80



Stellar Parameters For KIC 005552761

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6611^{+158}_{-218}	$4.351^{+0.081}_{-0.202}$	$-0.240^{+0.250}_{-0.300}$	$1.196^{+0.399}_{-0.160}$	$1.178^{+0.175}_{-0.158}$	$0.970^{+0.354}_{-0.501}$
	+2%/-3%	+2%/-5%	+104%/-125%	+33%/-13%	+15%/-13%	+36%/-52%
Source	PHO1	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 005552761-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-34 ± 2	$0.87^{+0.63}_{-0.50}$	2225^{+169}_{-107}	6250^{+4652}_{-1352}	41^{+185}_{-27}
Alt.	-21 ± 2	$1.72^{+0.72}_{-0.67}$	2227^{+165}_{-113}	4175^{+915}_{-486}	$6.397^{+11.156}_{-3.102}$

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

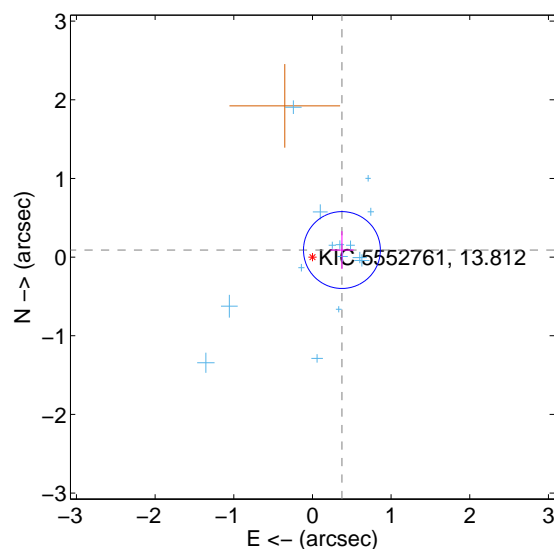
Supplemental centroid analysis for 005552761-01. Kepler magnitude: 13.81. Transit SNR 6.64

There are 15 quarters with good PRF difference image offsets

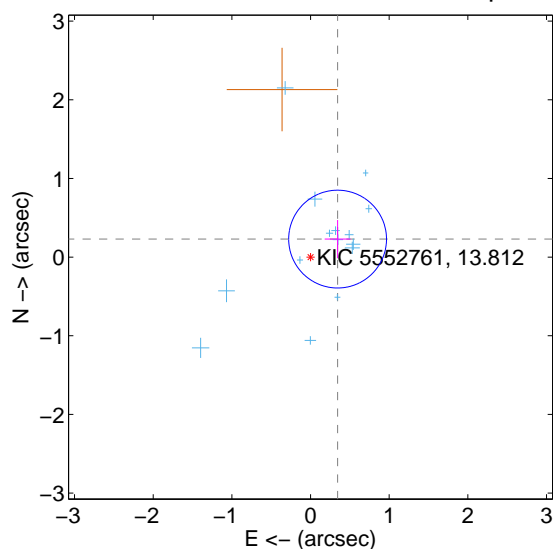
The direct PRF centroid is offset from the target star catalog position by about 0.26 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.385 ± 0.163	2.37	-0.375 ± 0.148	0.090 ± 0.240
PRF-fit source offset from KIC position	0.413 ± 0.207	1.99	-0.344 ± 0.164	0.229 ± 0.242
photometric centroid source offset	0.86 ± 0.57	1.50	-0.49 ± 0.57	0.70 ± 0.57

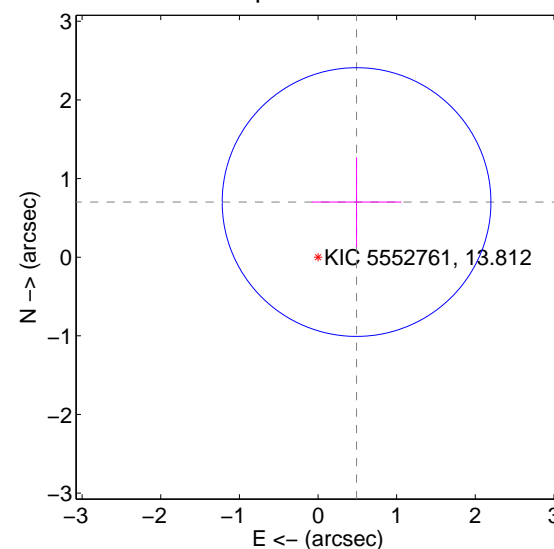
offset from difference PRF-fit to OOT PRF-fit



offset from difference PRF-fit to KIC position

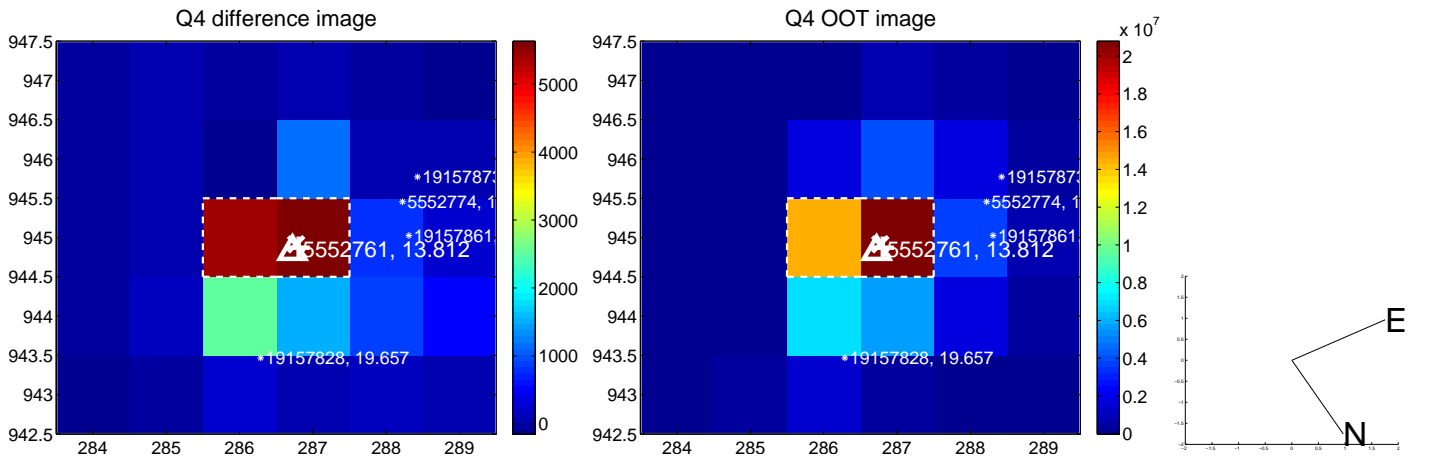
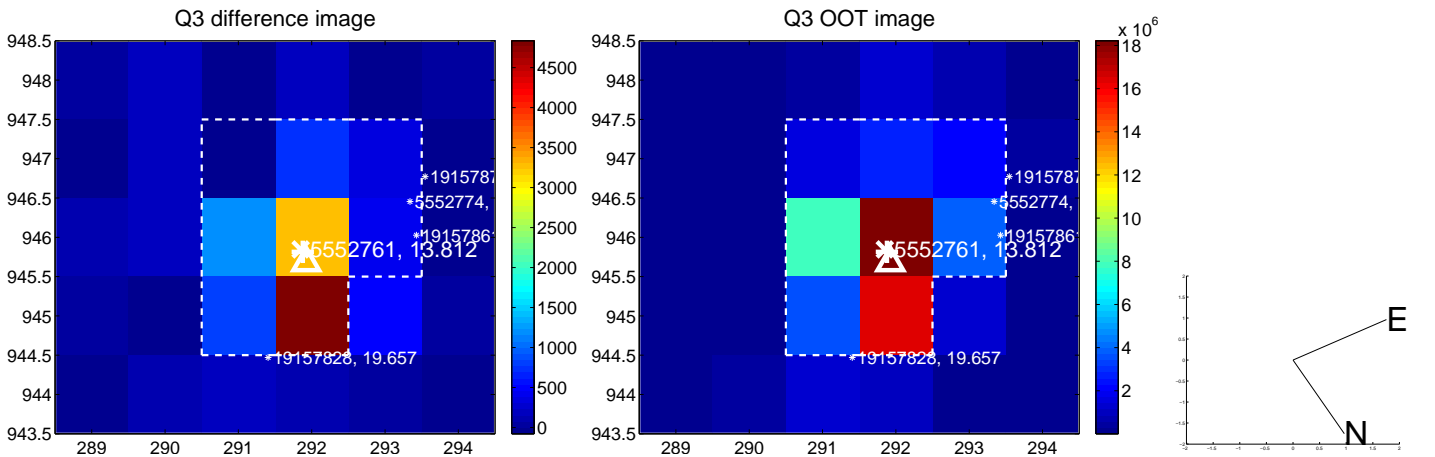
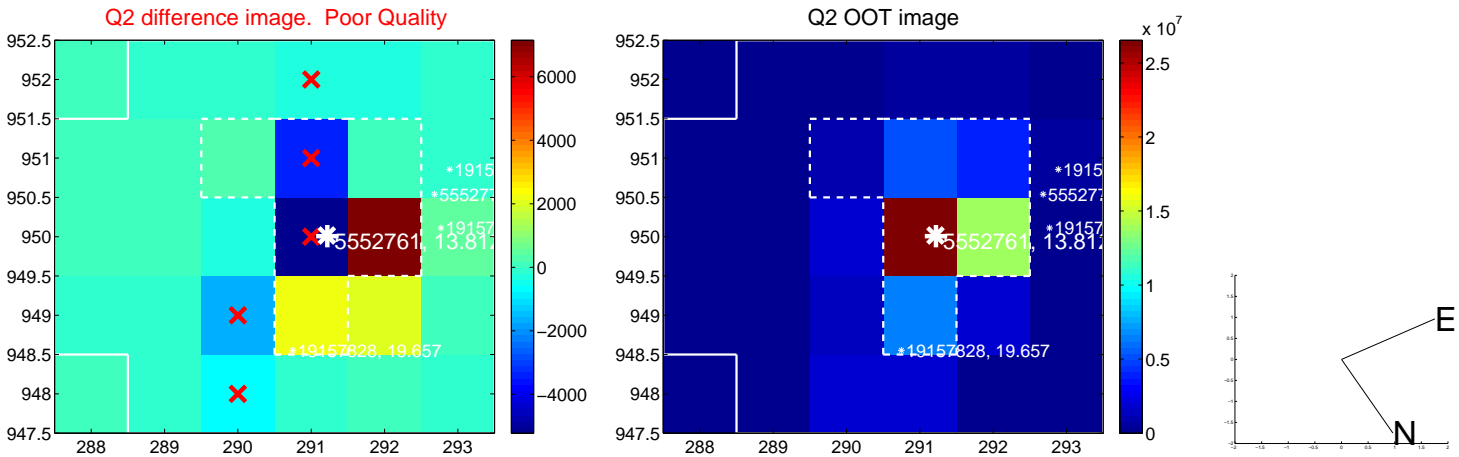
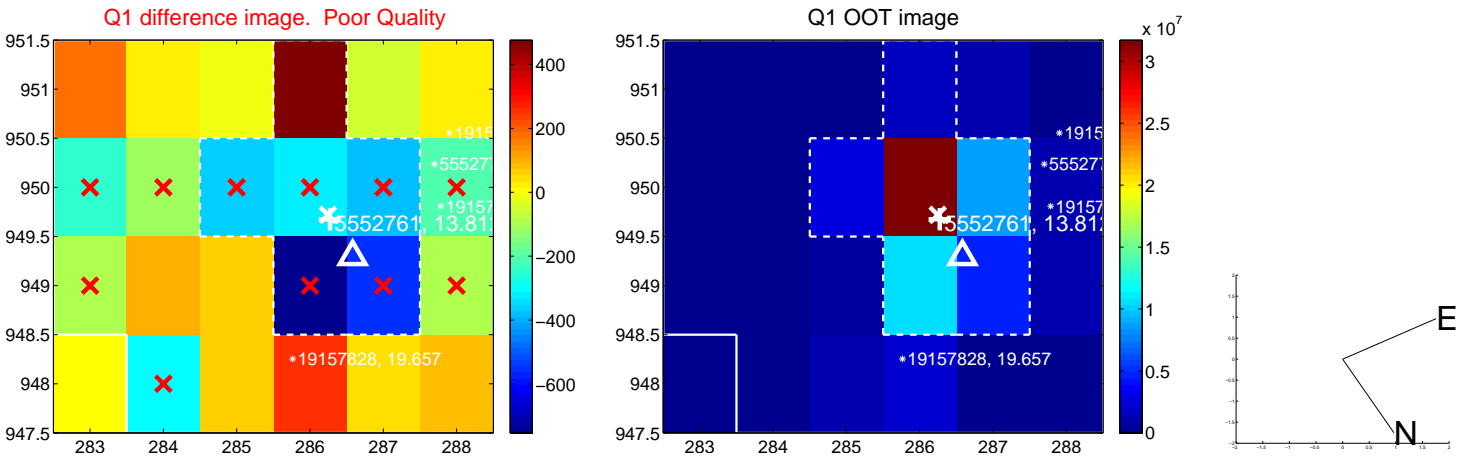


offset from photometric centroids

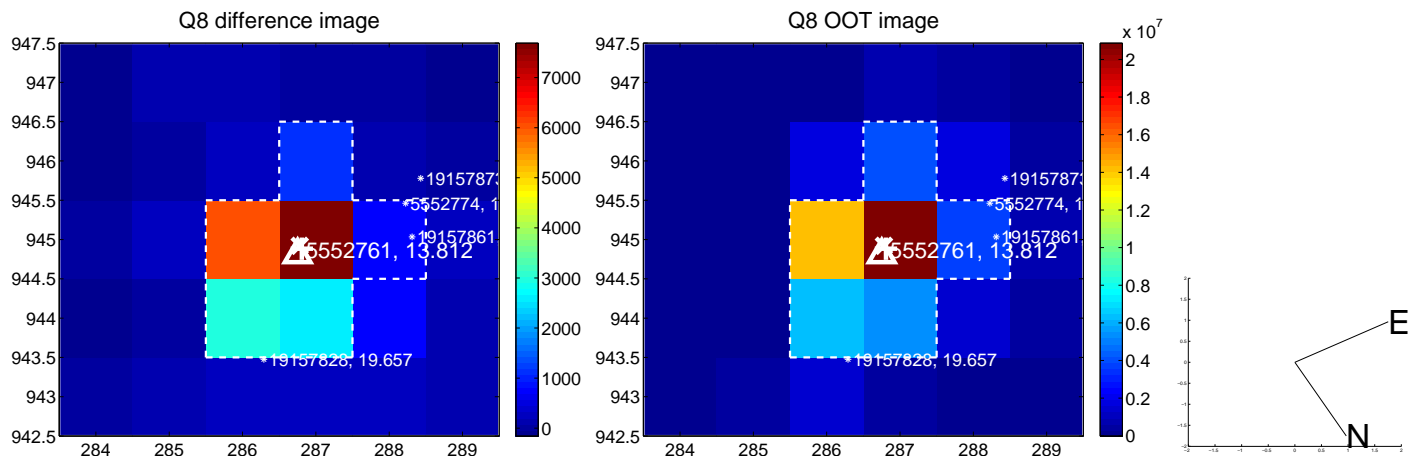
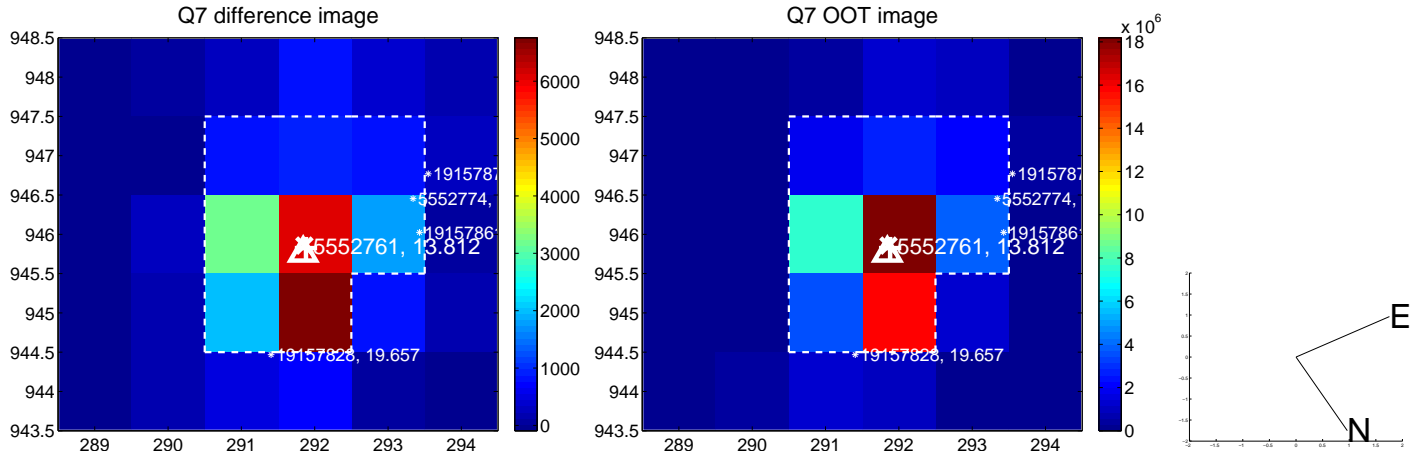
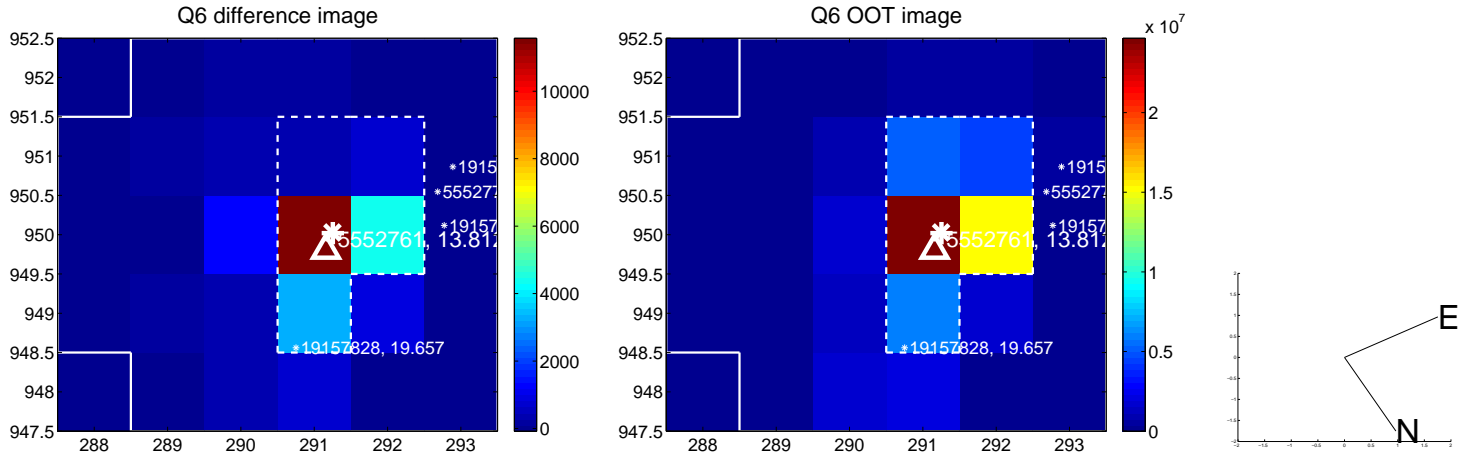
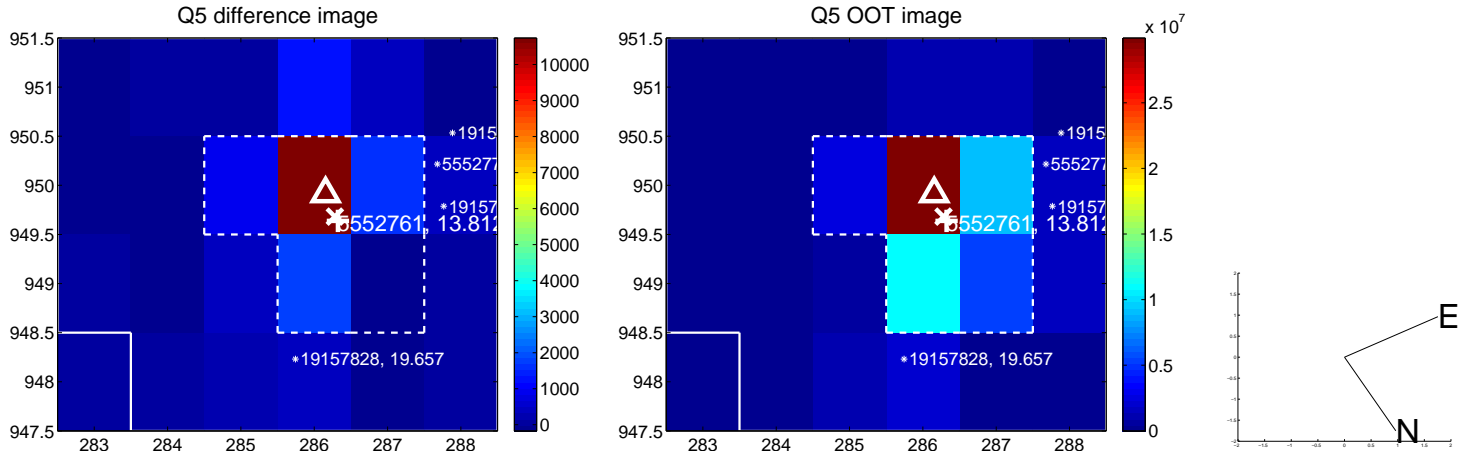


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets**; **Vermillion crosses: bad quarterly centroid offsets**; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

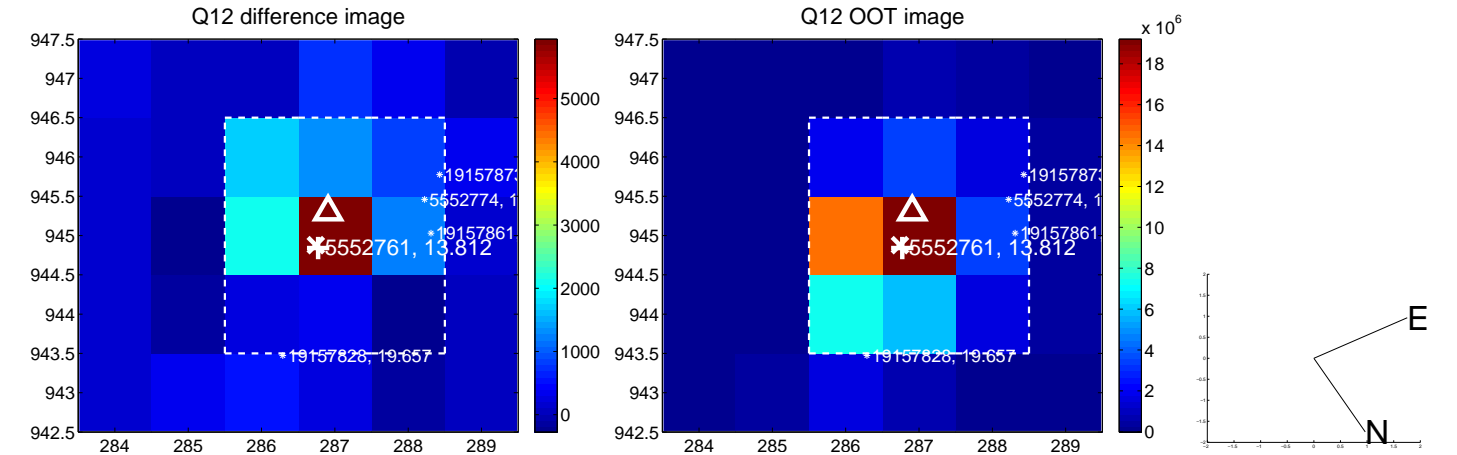
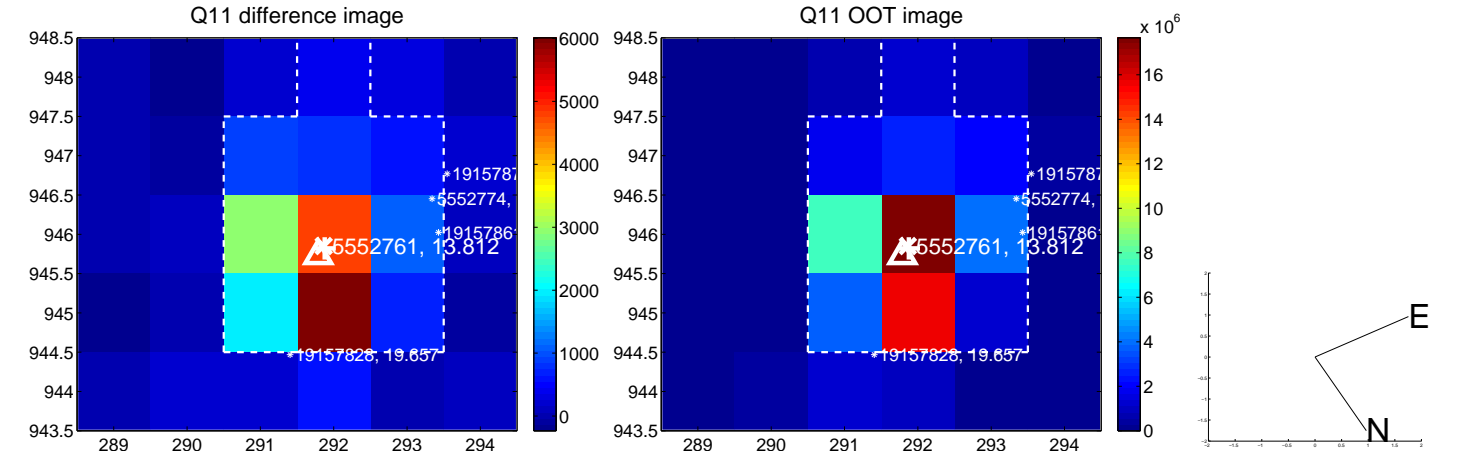
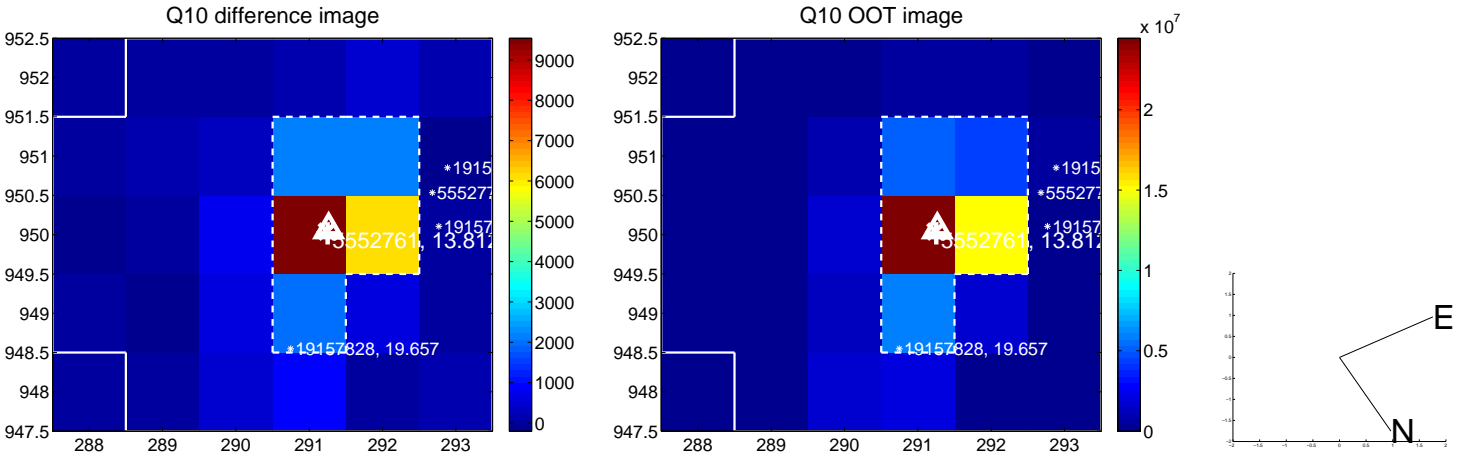
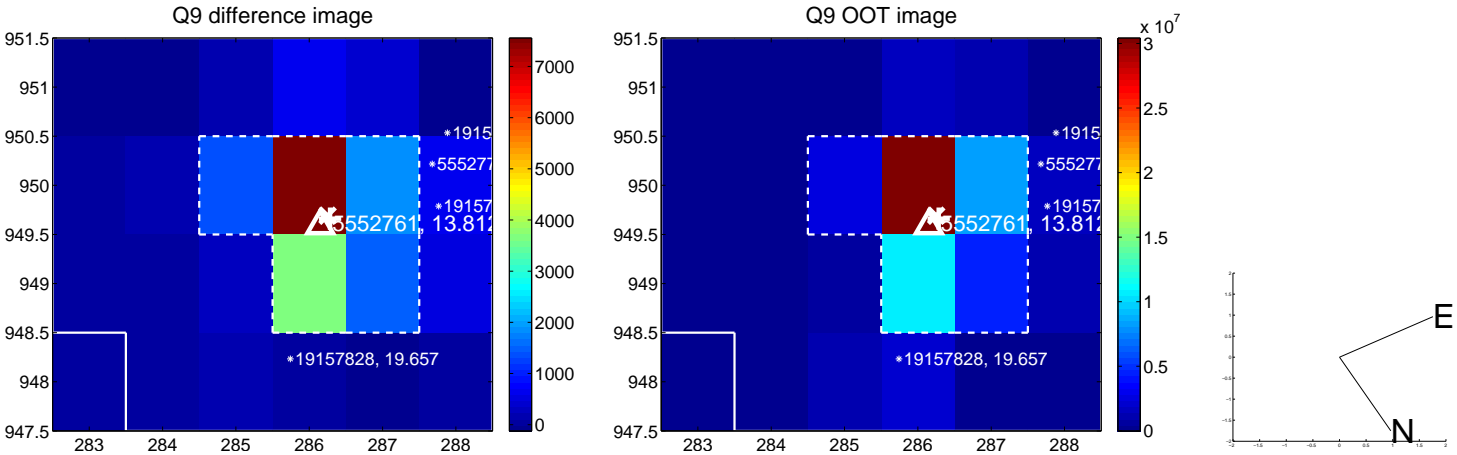
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



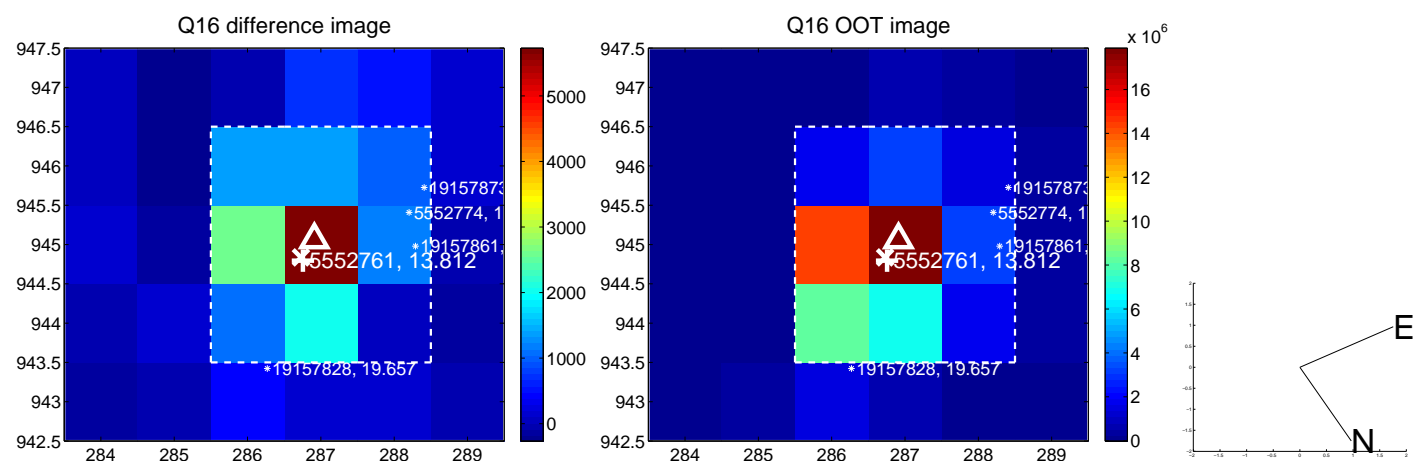
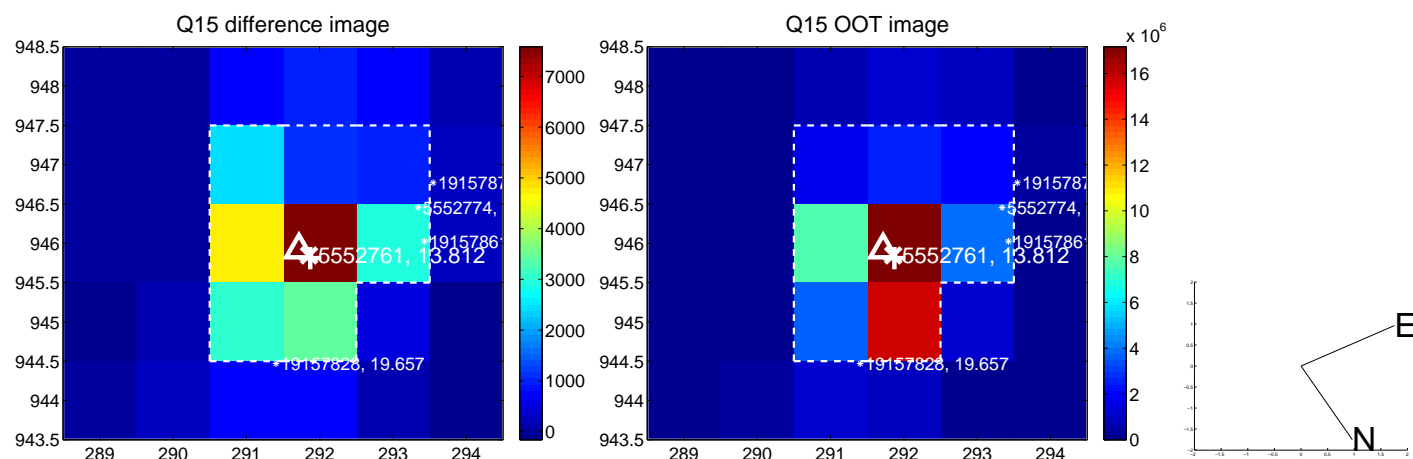
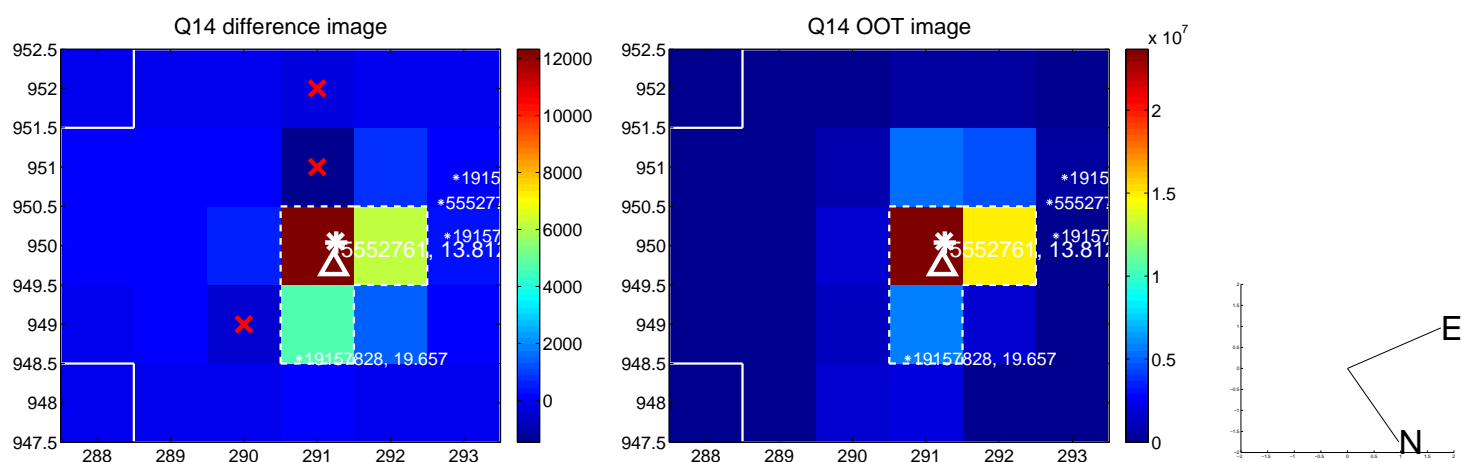
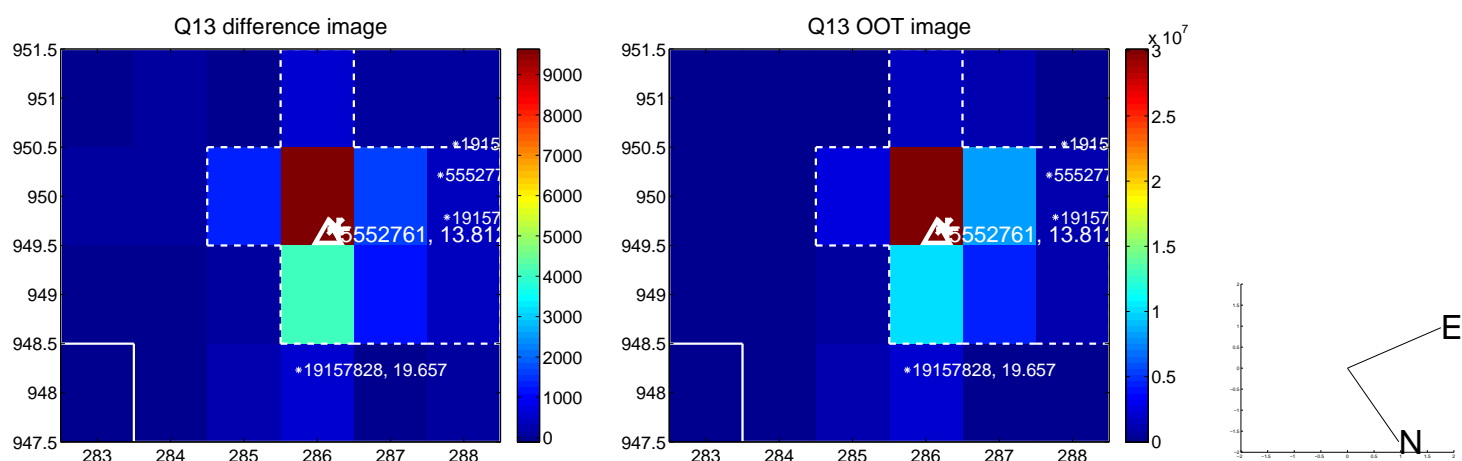
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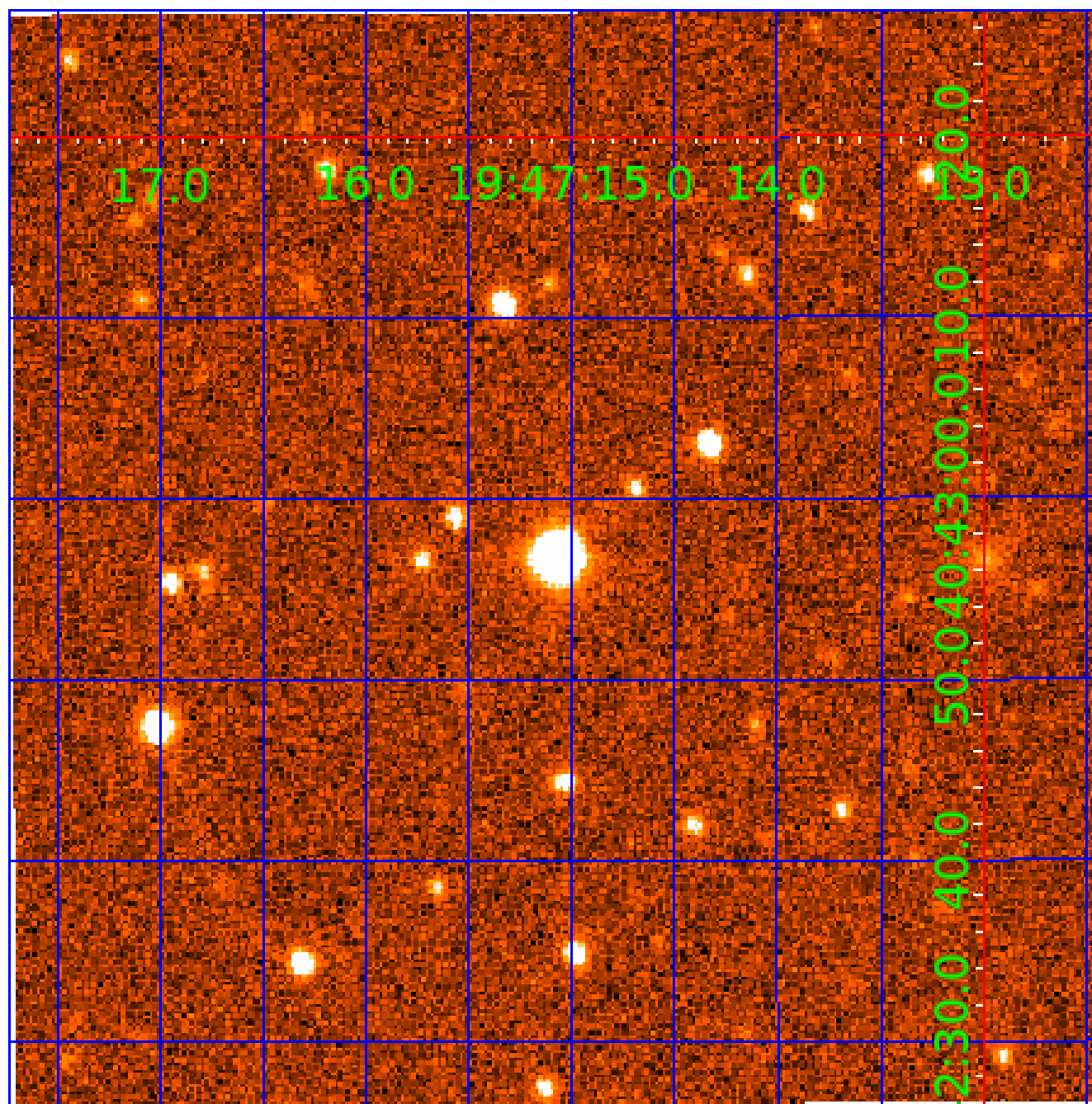


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 005552761

Q1-17 DR25 TCE Parameters

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Robovetter Results

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005552761-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT
005552761-04	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_MARSHALL—LPP_DV—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_POS_ALT—CENT_FEW_DIFFS
005552761-05	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT
005552761-06	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT
005552761-07	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_CHASES_MARSHALL—LPP_DV—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_NONUNIQ_ALT—MOD_TER_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.

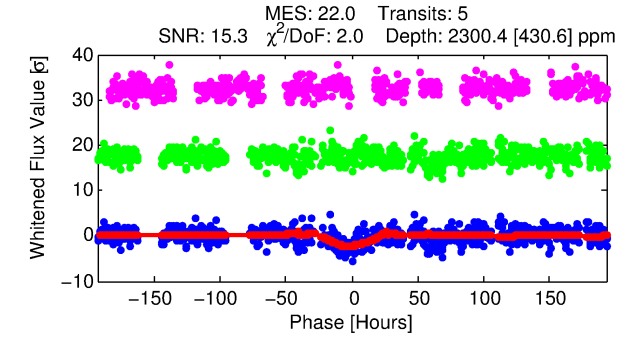
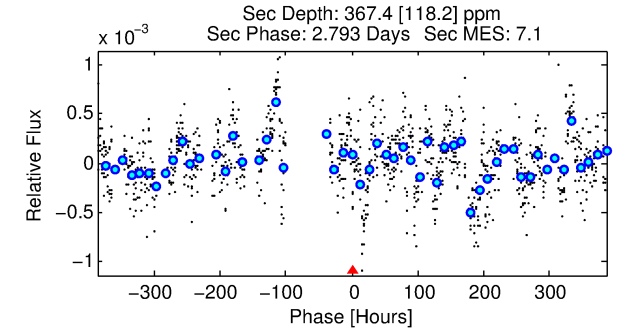
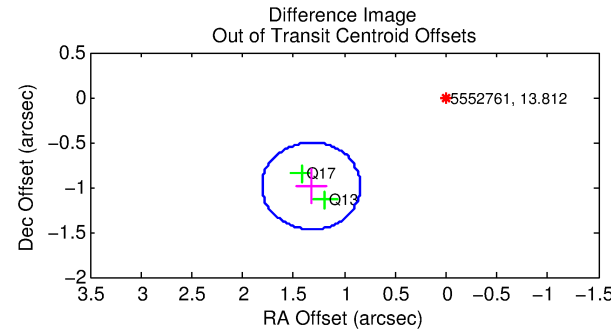
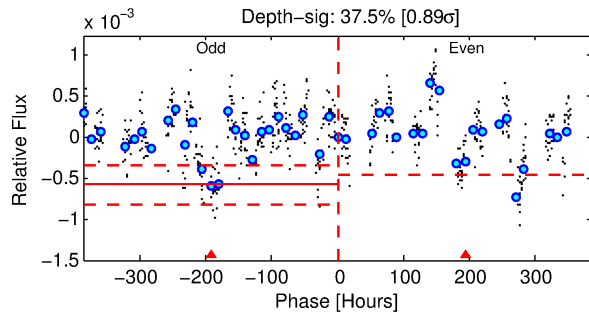
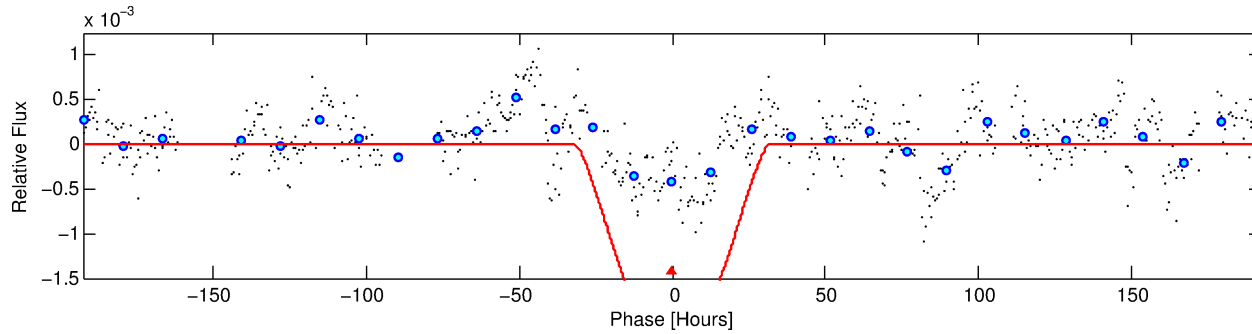
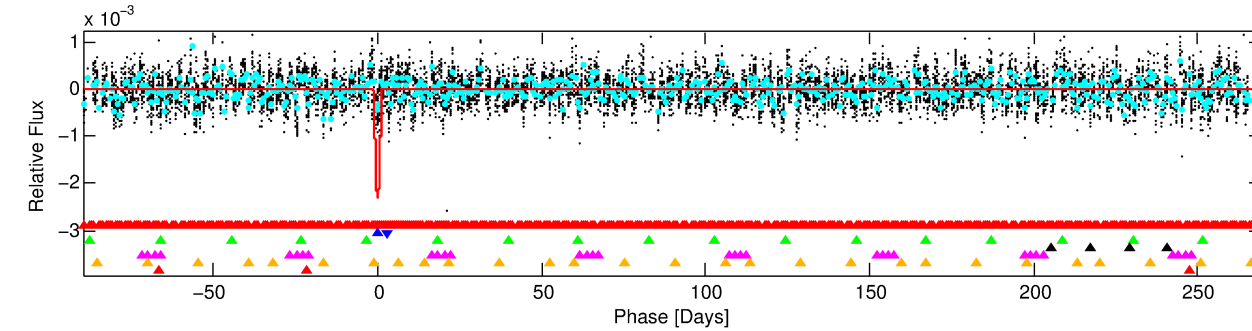
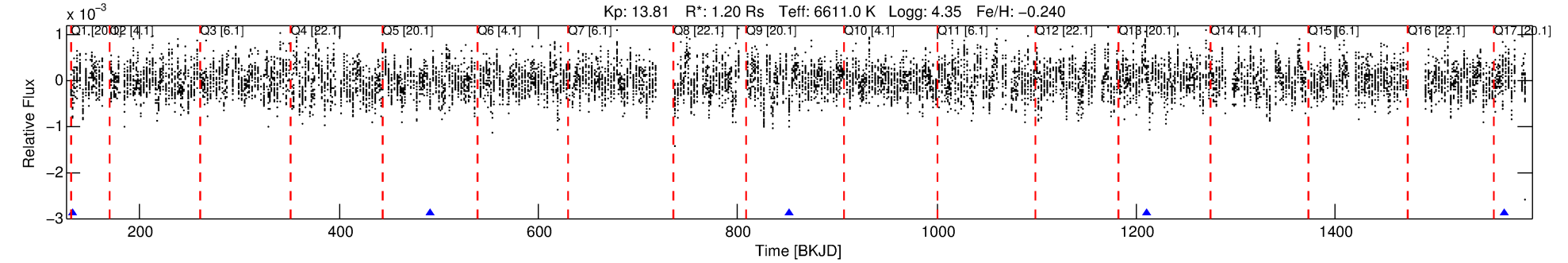
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 005552761-02

No Significant Match Found

DV One-Page Summary

KIC: 5552761 Candidate: 2 of 7 Period: 359.298 d



DV Fit Results:

Period = 359.29793 [0.04479] d
Epoch = 132.6467 [0.1028] BKJD
Rp/R* = 0.0806 [0.1308]
a/R* = 17.53 [5.96]
b = 1.00 [0.18]
Seff = 2.25 [0.91]
Teq = 312 [32] K
Rp = 10.52 [17.42] Re
a = 1.0427 [0.2827] AU
Ag = 1986.90 [6524.77] [0.30 σ]
Teffp = 3224 [2631] K [1.11 σ]

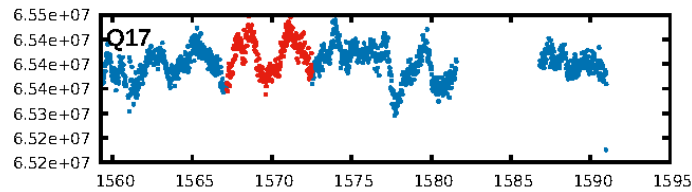
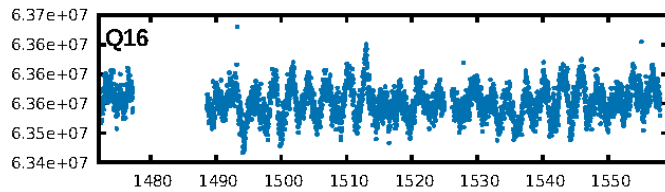
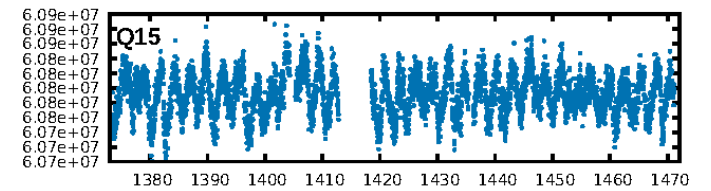
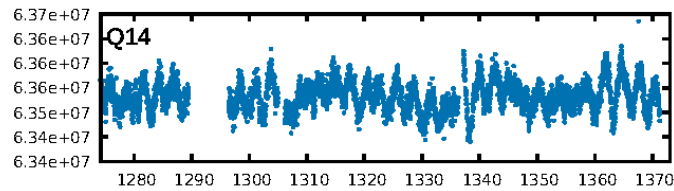
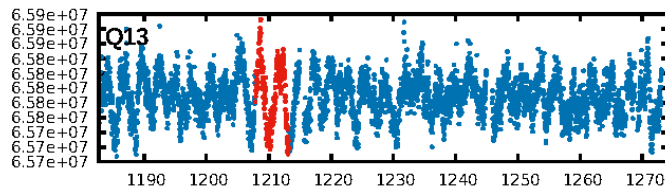
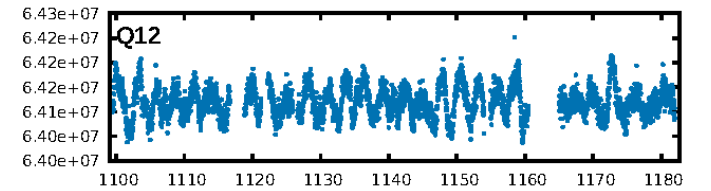
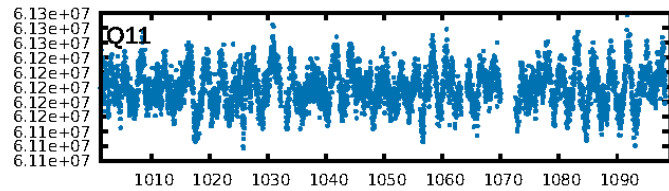
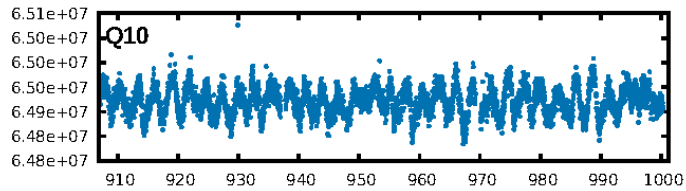
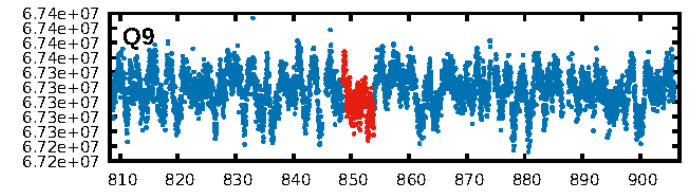
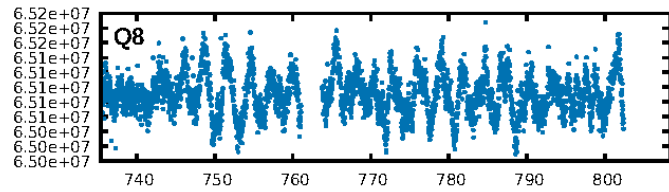
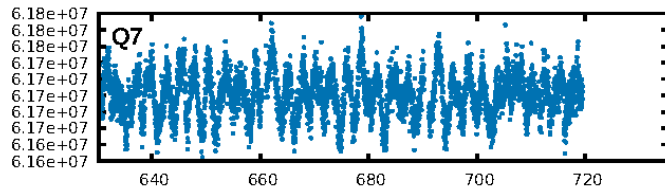
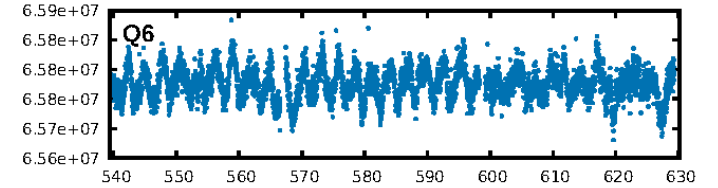
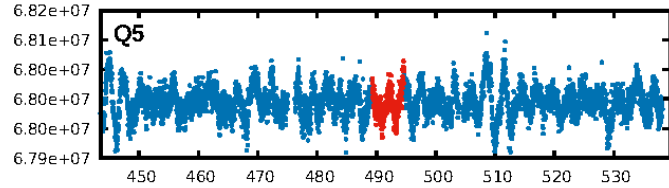
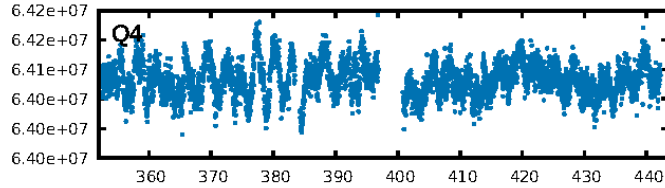
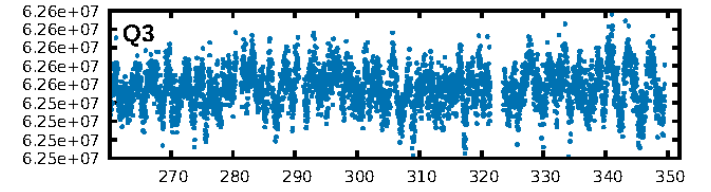
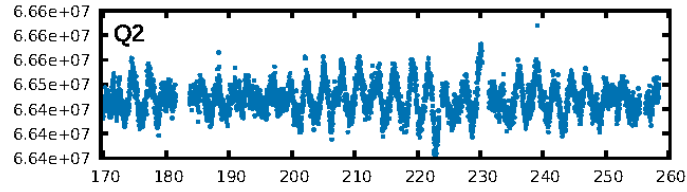
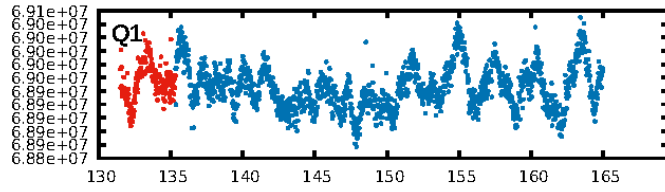
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [97.57 σ]
LongPeriod-sig: 100.0% [4.33 σ]
ModelChiSquare2-sig: 0.0%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: 1.89e-40
RollingBand-fgt: 1.00 [3/3]
GhostDiagnostic-chr: 1.355
Centroid-sig: 29.2%
Centroid-so: 0.215 arcsec [3.36 σ]
OotOffset-rm: 1.652 arcsec [10.23 σ]
KicOffset-rm: 1.606 arcsec [10.20 σ]
OotOffset-st: 0/0/0/2 [2]
KicOffset-st: 0/0/0/2 [2]
DiffImageQuality-fgm: 1.00 [2/2]
DiffImageOverlap-fno: 0.00 [0/4]

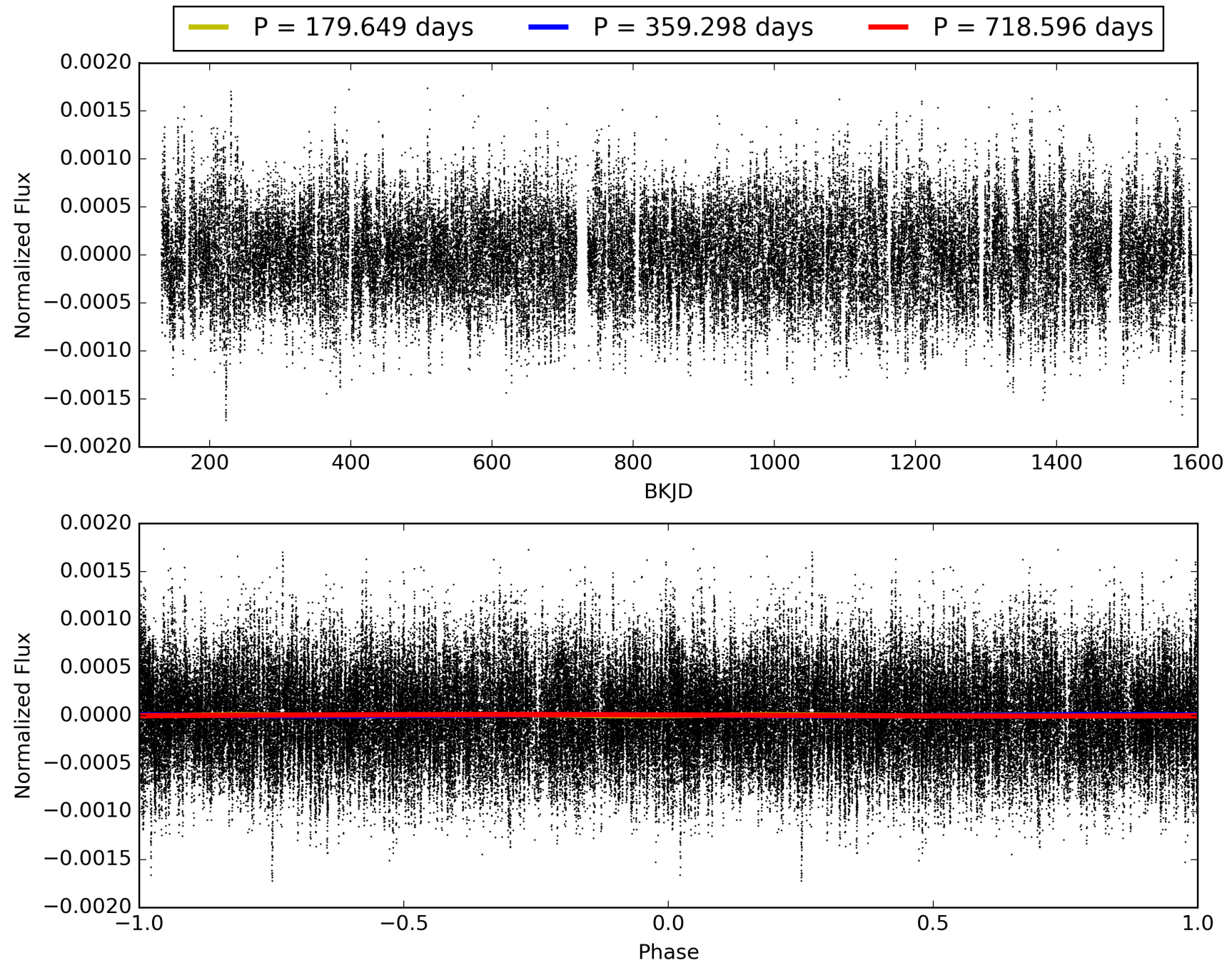
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 03-Feb-2016 08:31:57 Z

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

TCE 00552761-02, PDC Light Curves

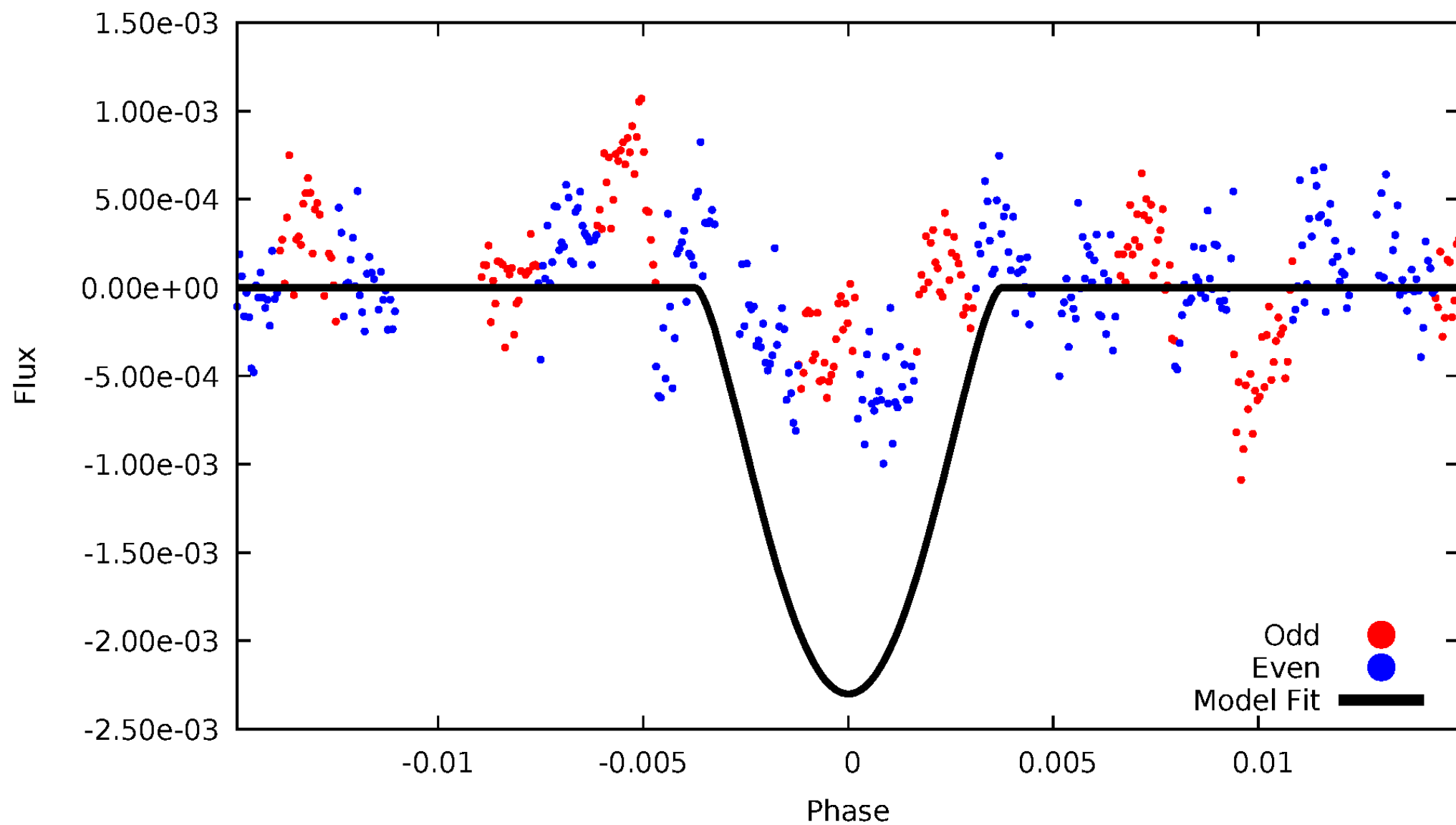


TCE 005552761-02



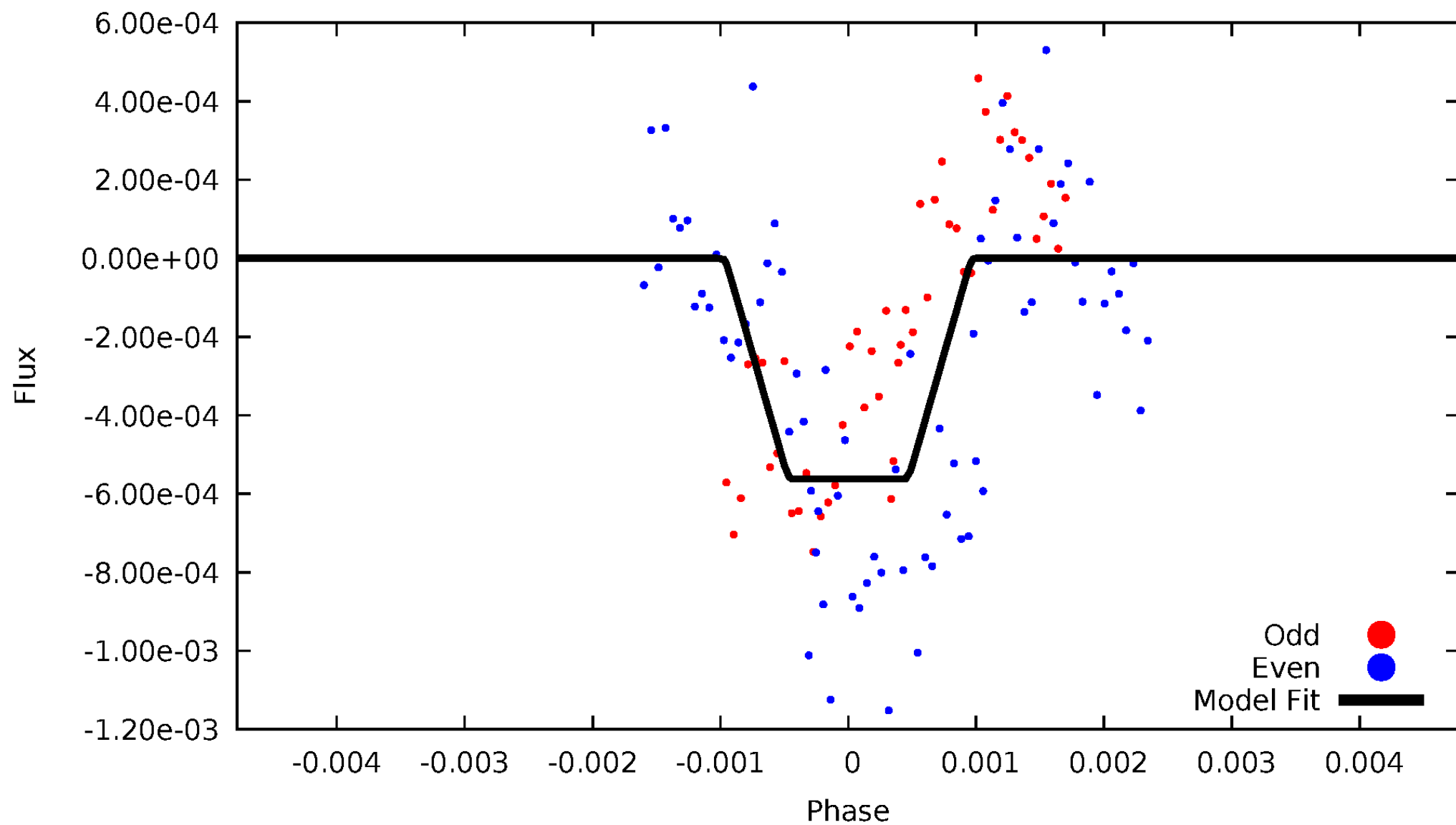
DV Odd/Even

TCE 005552761-02



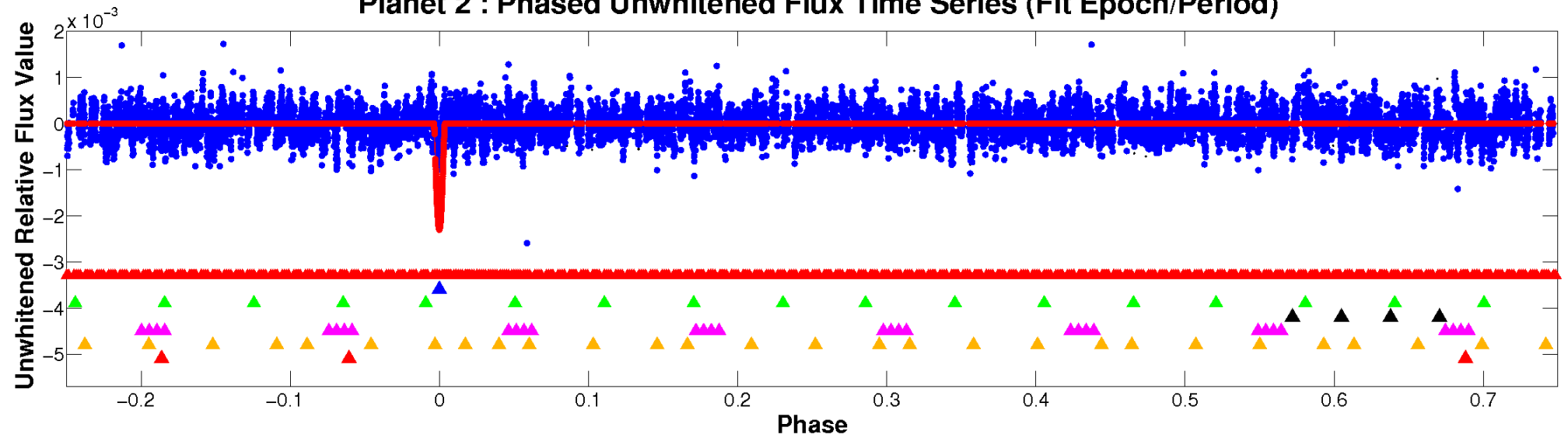
ALT Odd/Even

TCE 005552761-02

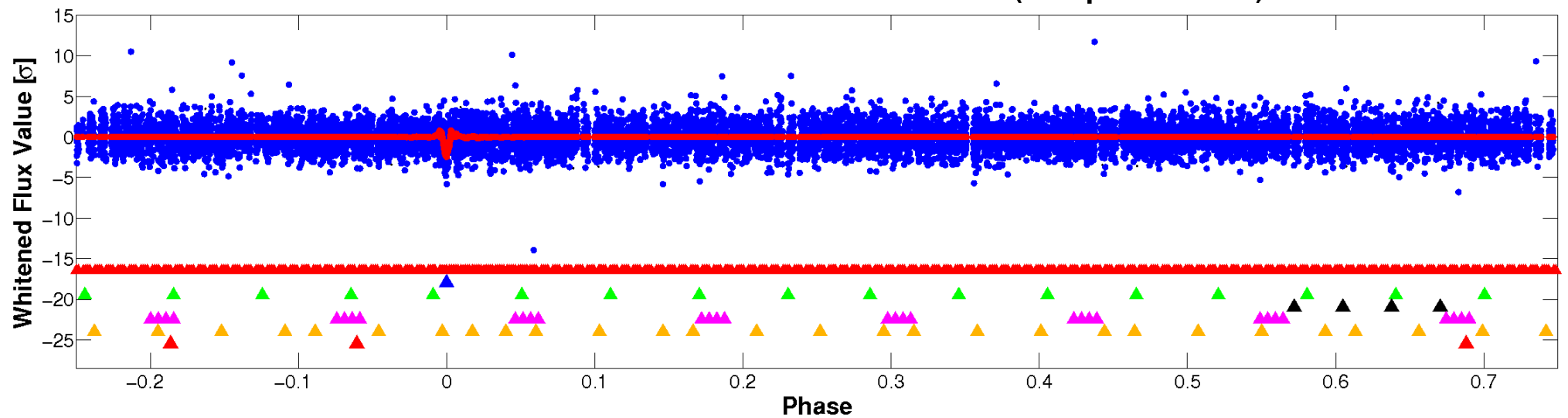


Non-Whitened Vs. Whitened Light Curve

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

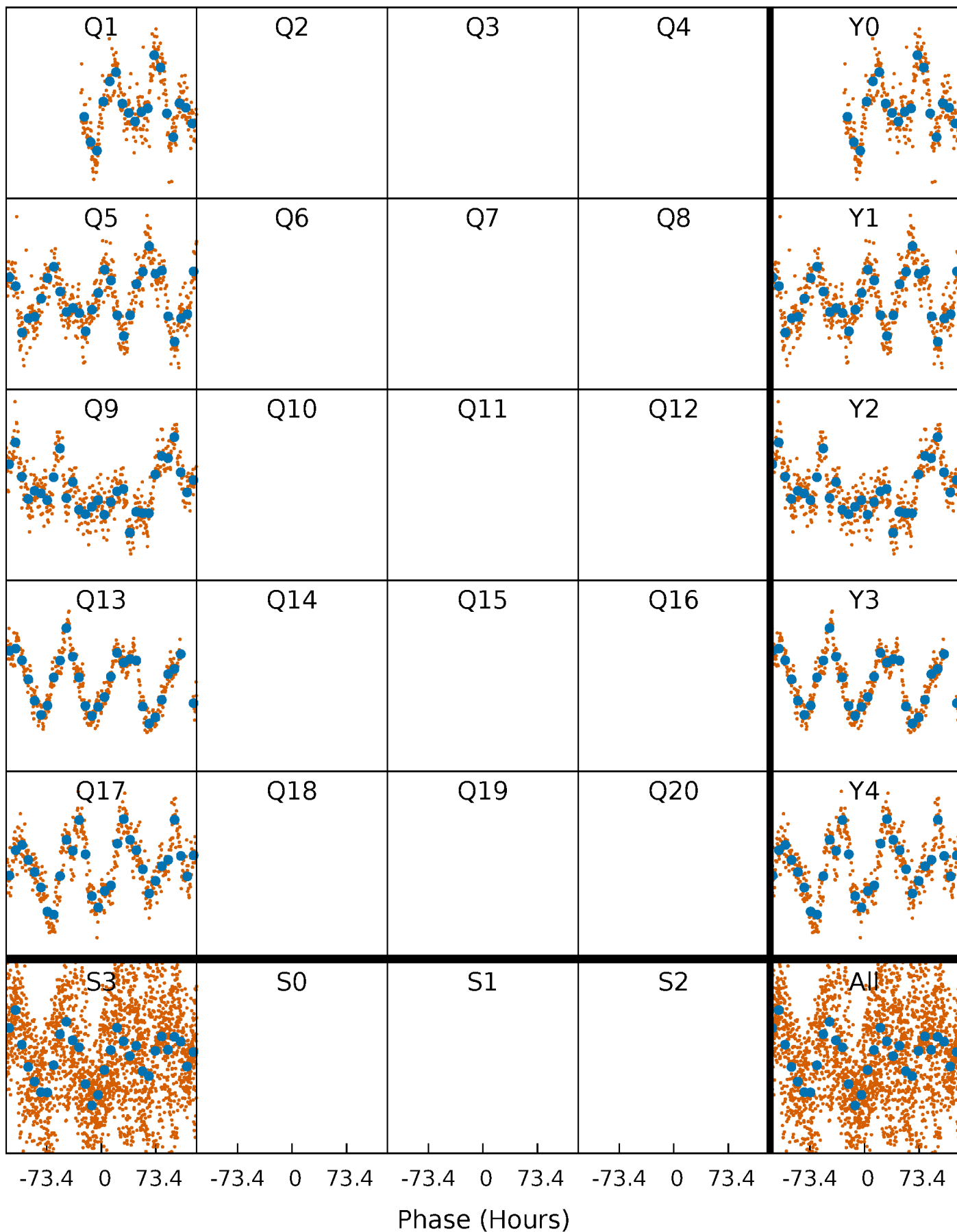


Planet 2 : Phased Whitened Flux Time Series (Fit Epoch/Period)



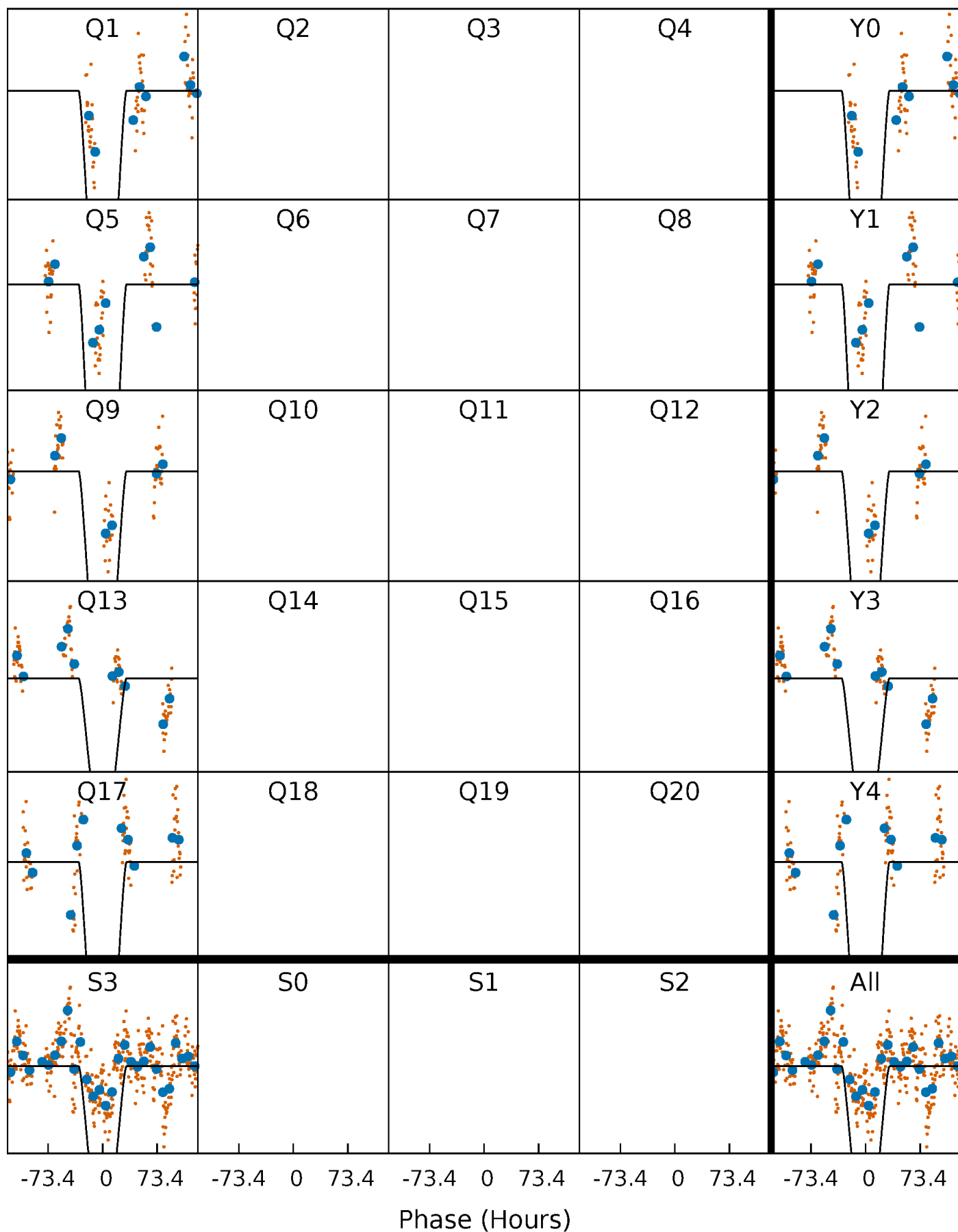
PDC Quarter-Phased Transit Curves

TCE 005552761-02 $P=359.297934$ Days $T_0=132.646674$ (BKJD)



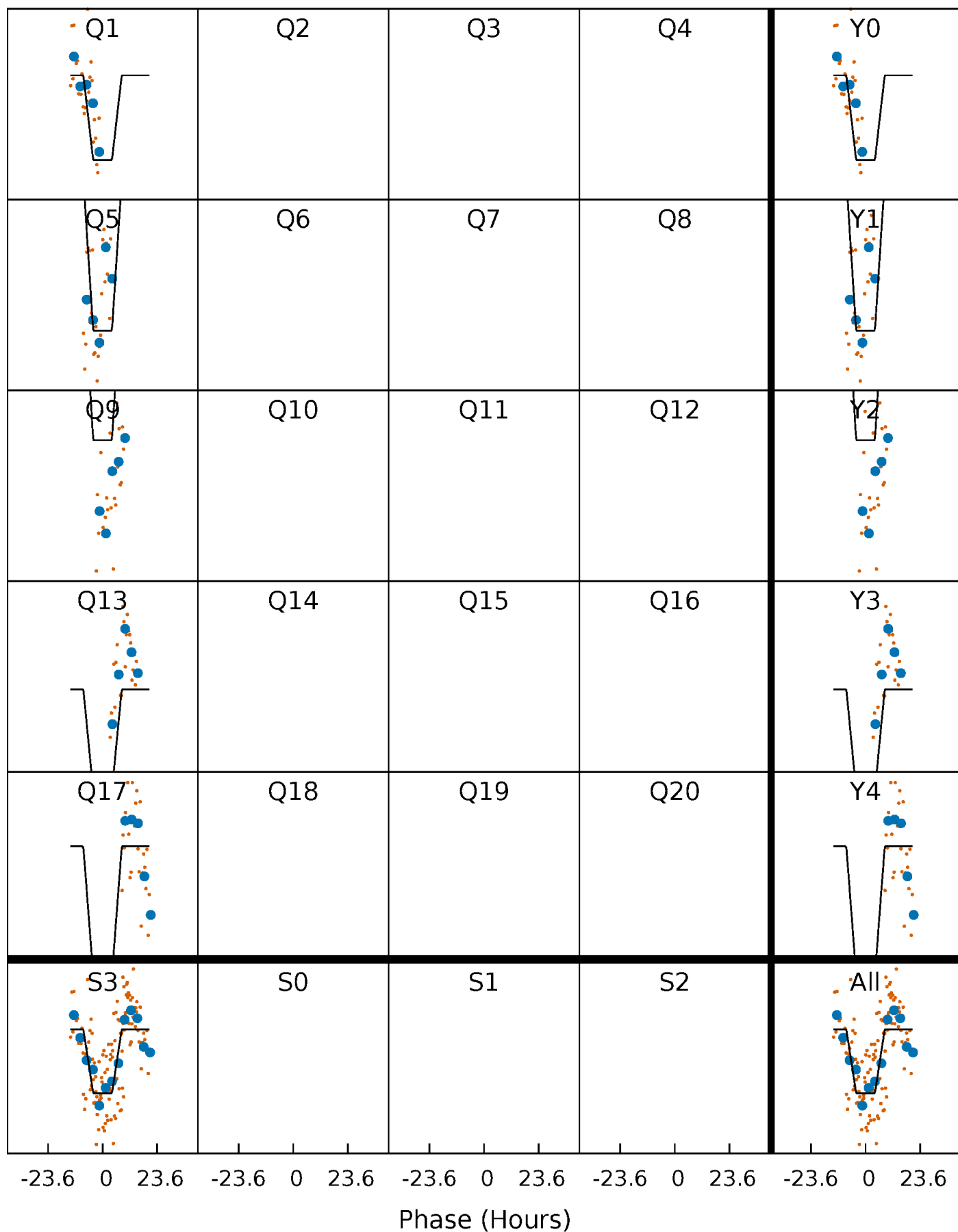
DV Quarter-Phased Transit Curves

TCE 005552761-02 $P=359.297934$ Days $T_0=132.646674$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

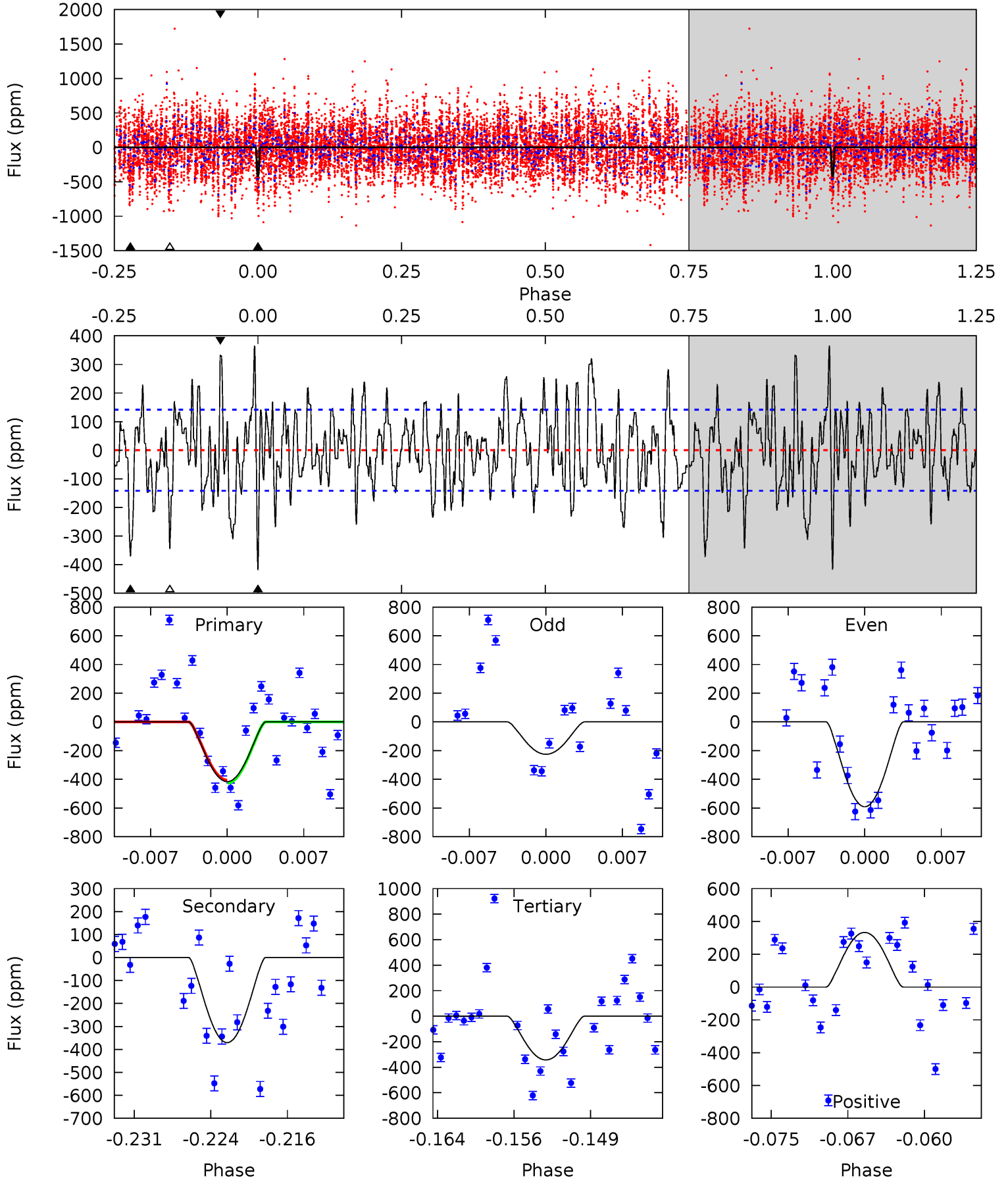
TCE 005552761-02 P=359.582978 Days $T_0=132.270888$ (BKJD)



DV Model-Shift Uniqueness Test

005552761-02, P = 359.297934 Days, E = 132.646674 Days

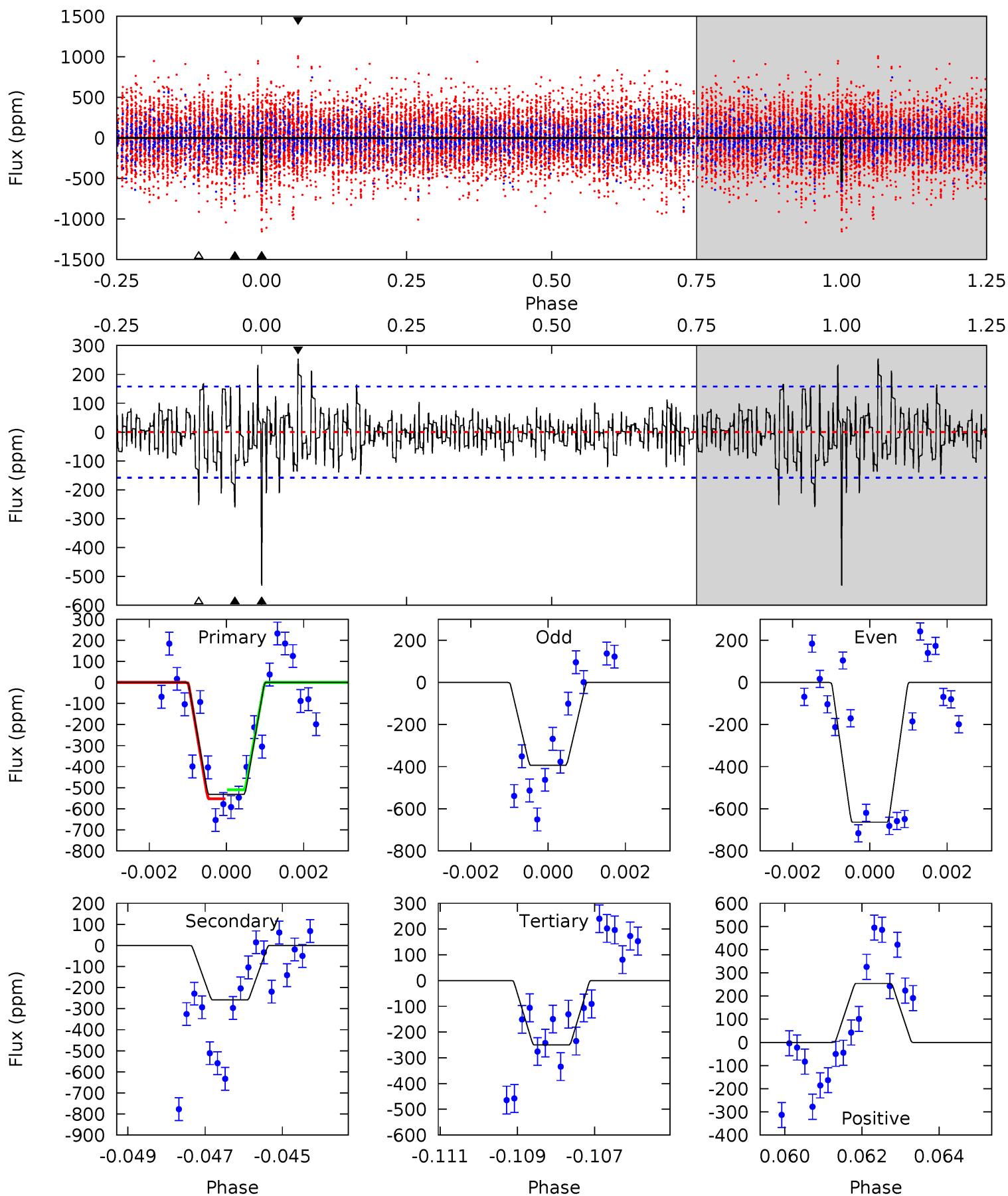
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
14.9	13.3	12.3	11.9	5.08	2.68	4.24	2.64	2.98	1.00	1.34	6.46	-1.17	0.47	0.38



Alt Model-Shift Uniqueness Test

005552761-02, P = 359.582978 Days, E = 132.270888 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
17.9	8.73	8.45	8.58	5.33	3.10	2.10	9.49	9.37	0.28	0.16	4.57	1.14	0.32	0.71



Stellar Parameters For KIC 005552761

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6611^{+158}_{-218}	$4.351^{+0.081}_{-0.202}$	$-0.240^{+0.250}_{-0.300}$	$1.196^{+0.399}_{-0.160}$	$1.178^{+0.175}_{-0.158}$	$0.970^{+0.354}_{-0.501}$
	+2%/-3%	+2%/-5%	+104%/-125%	+33%/-13%	+15%/-13%	+36%/-52%
Source	PHO1	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 005552761-02 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-371 ± 28	$16.77^{+16.71}_{-11.23}$	443^{+31}_{-23}	3187^{+1466}_{-538}	769^{+6669}_{-574}
Alt.	-259 ± 30	$12.65^{+13.66}_{-8.70}$	442^{+32}_{-23}	3281^{+1590}_{-582}	938^{+8768}_{-711}

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

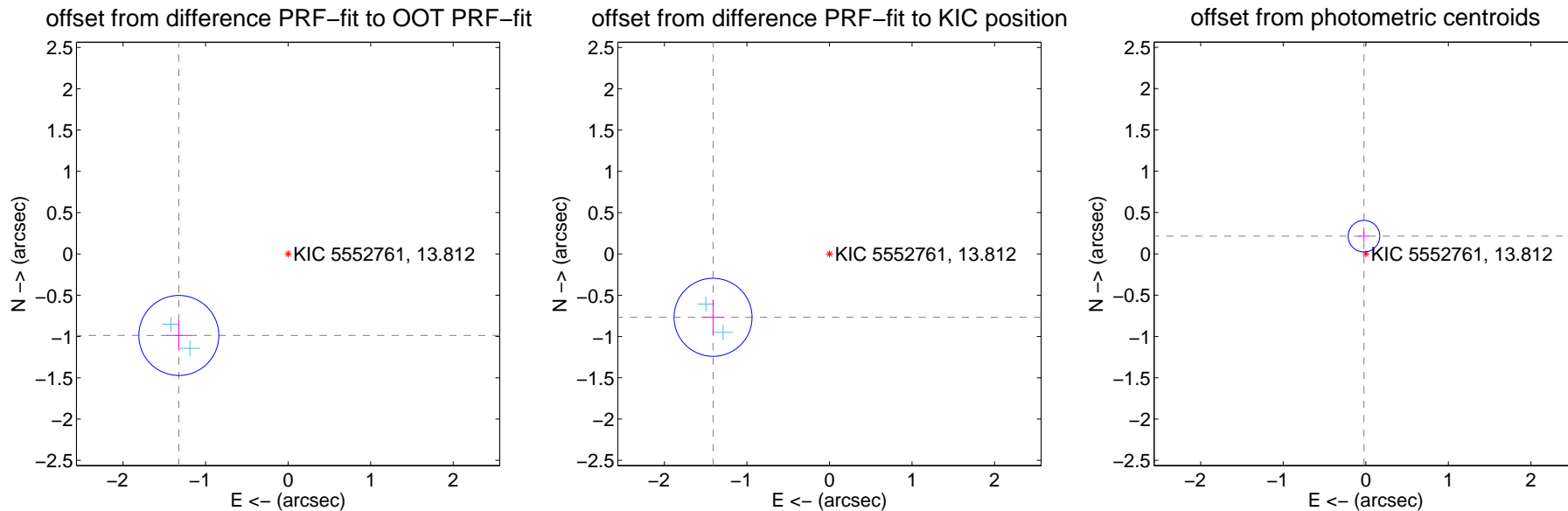
DV Centroid Data

Supplemental centroid analysis for 005552761-02. Kepler magnitude: 13.81. Transit SNR 15.35

There are 2 quarters with good PRF difference image offsets

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

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	1.652 ± 0.161	10.23	1.324 ± 0.148	-0.988 ± 0.183
PRF-fit source offset from KIC position	1.606 ± 0.157	10.20	1.411 ± 0.138	-0.768 ± 0.211
photometric centroid source offset	0.21 ± 0.06	3.36	0.02 ± 0.06	0.21 ± 0.06

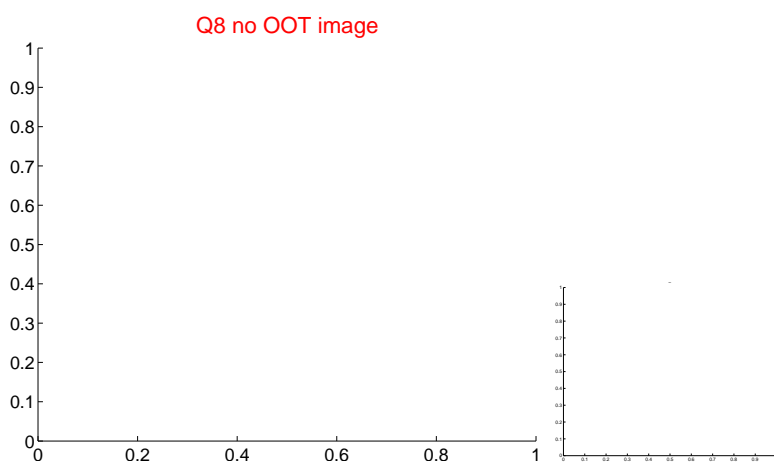
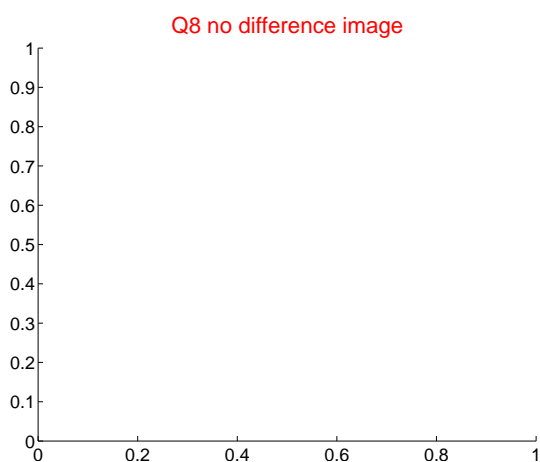
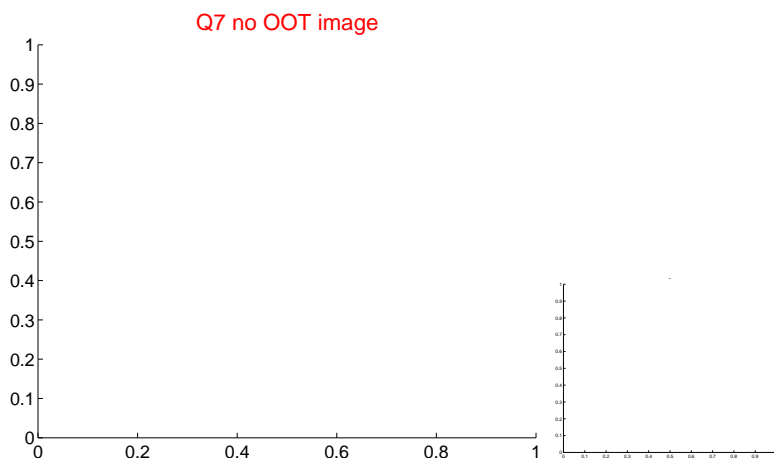
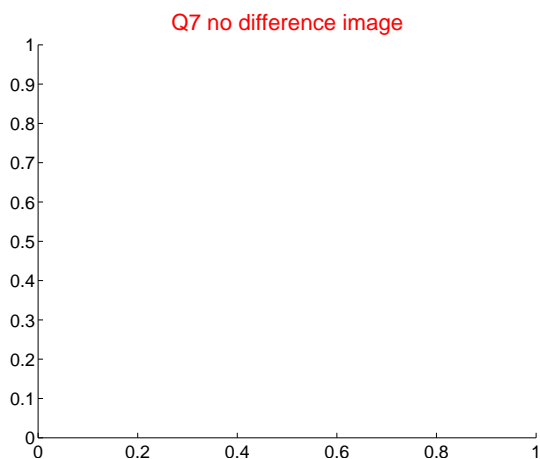
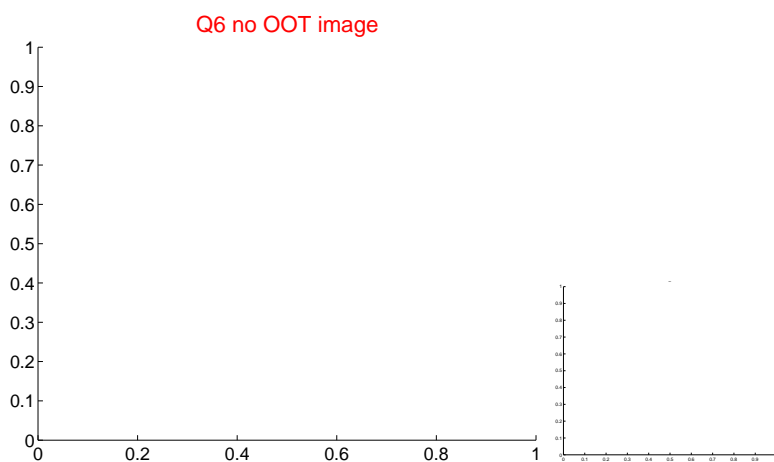
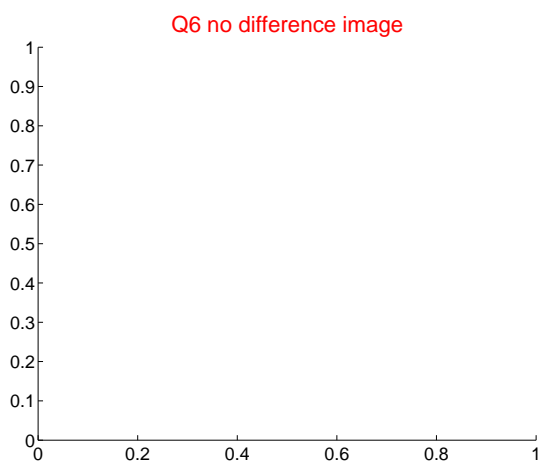
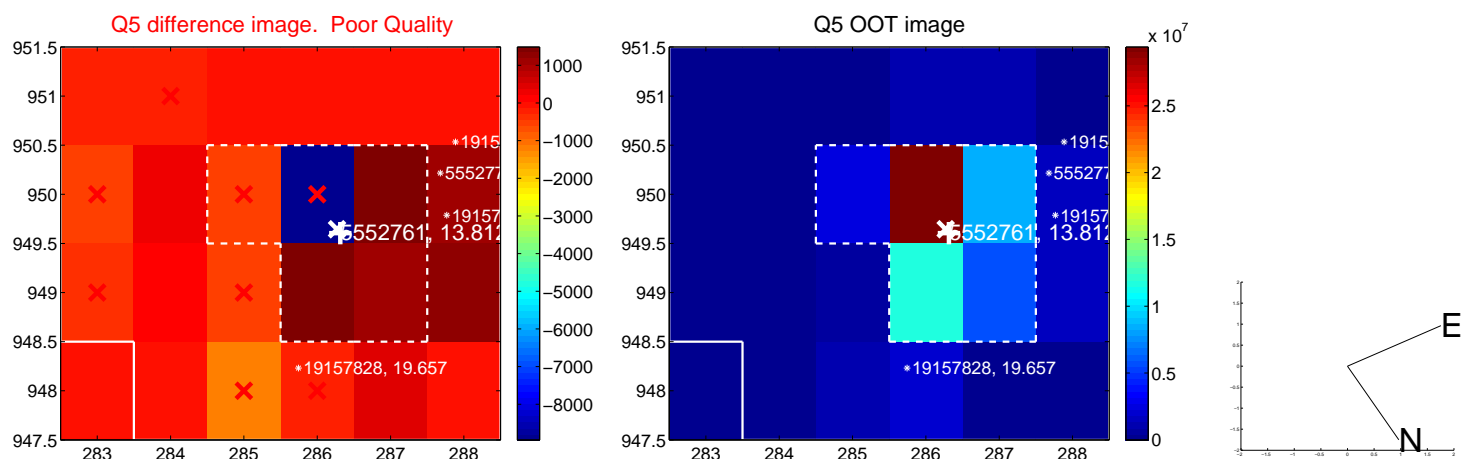


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

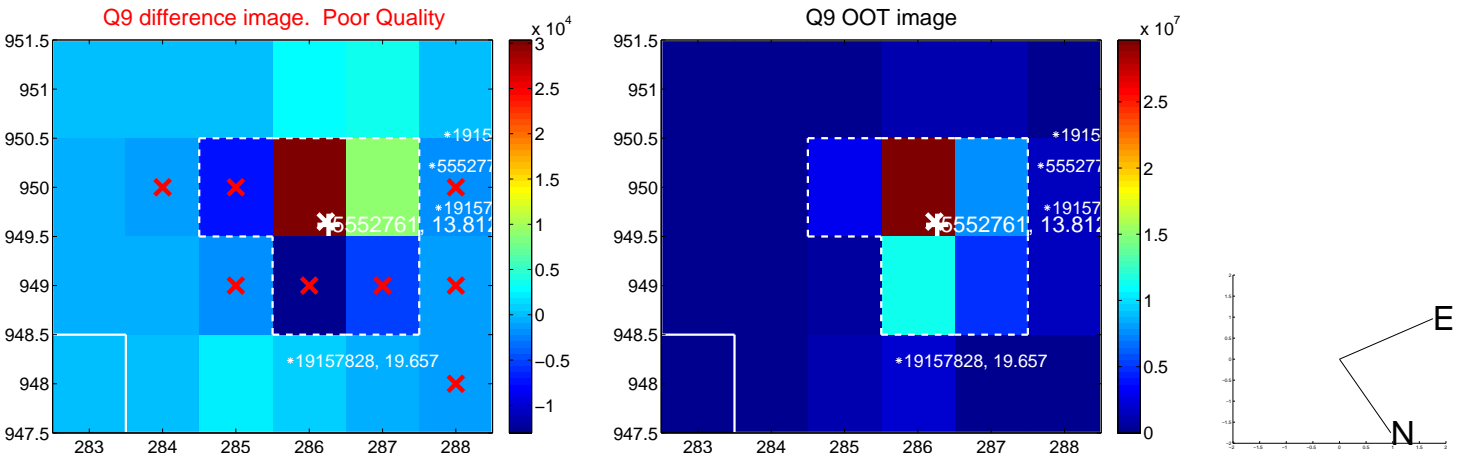
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



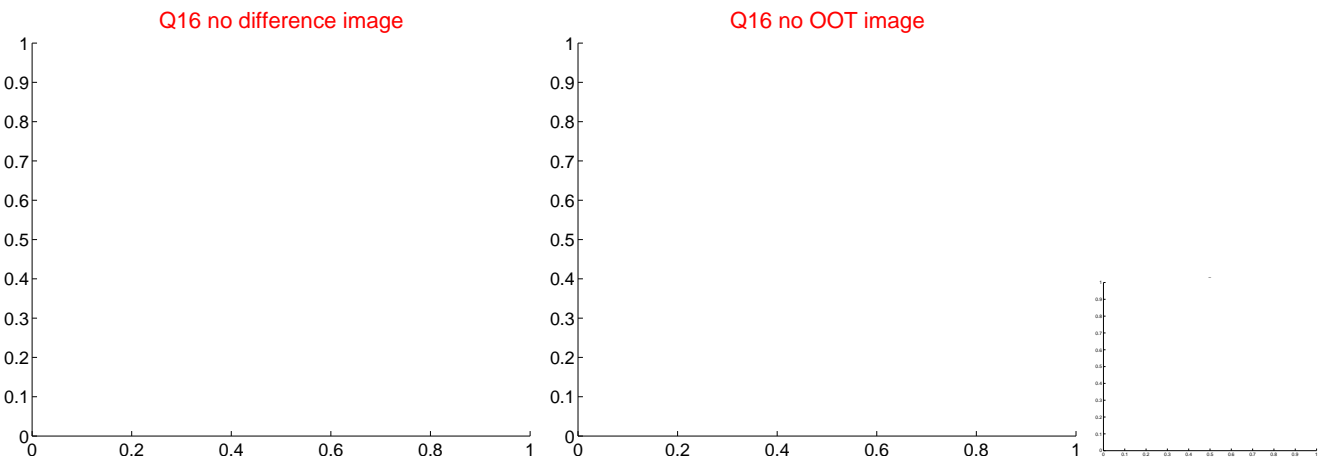
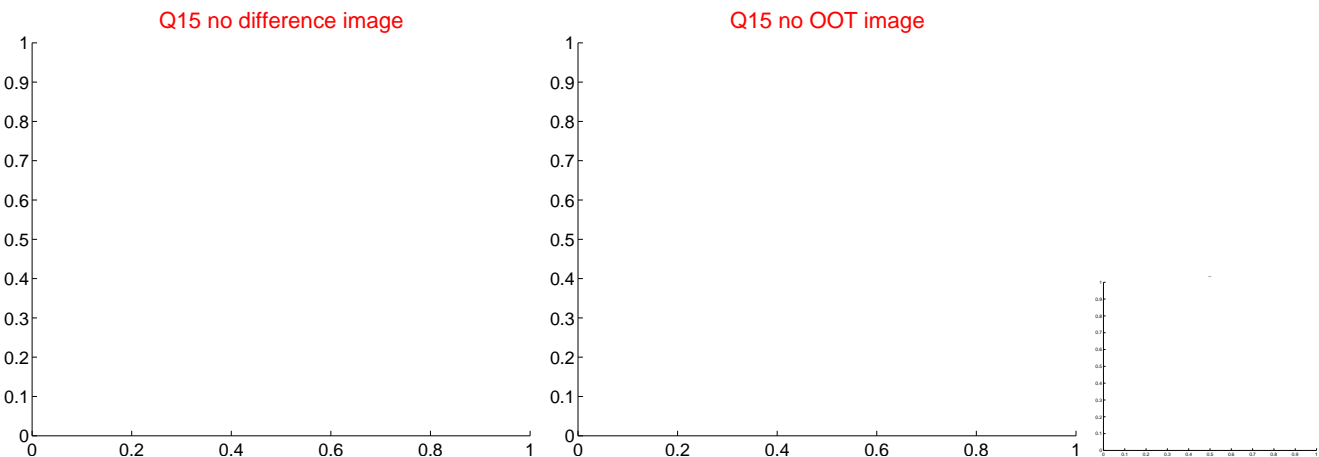
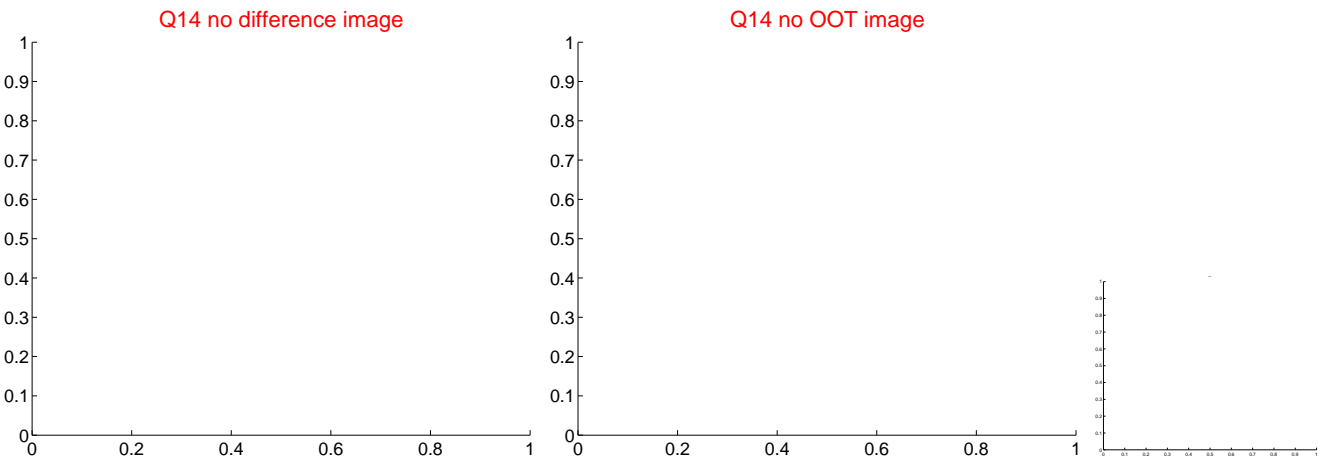
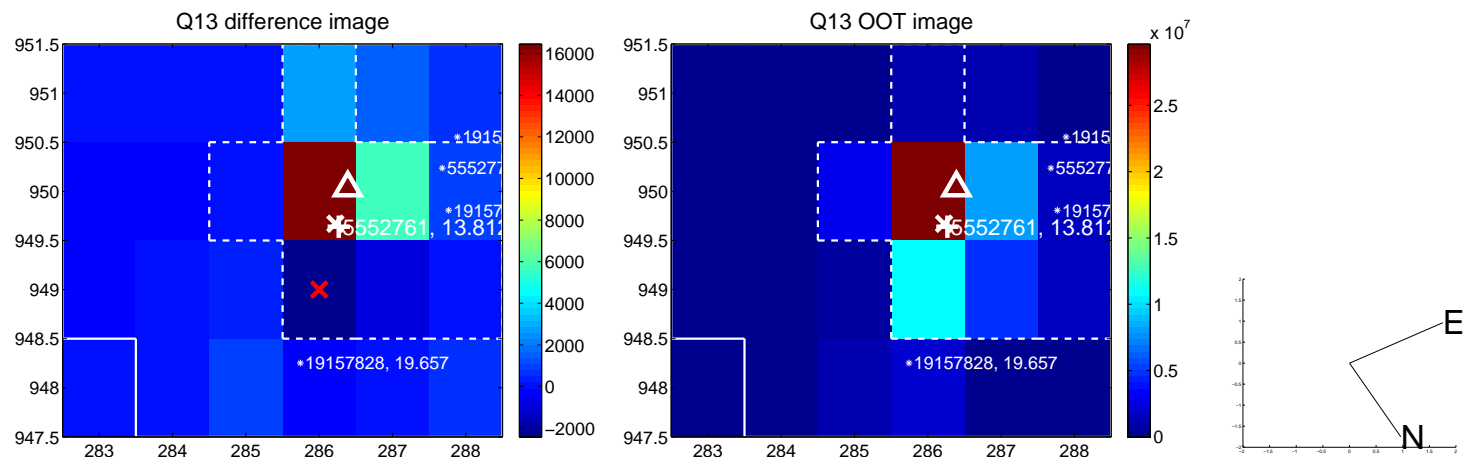
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value



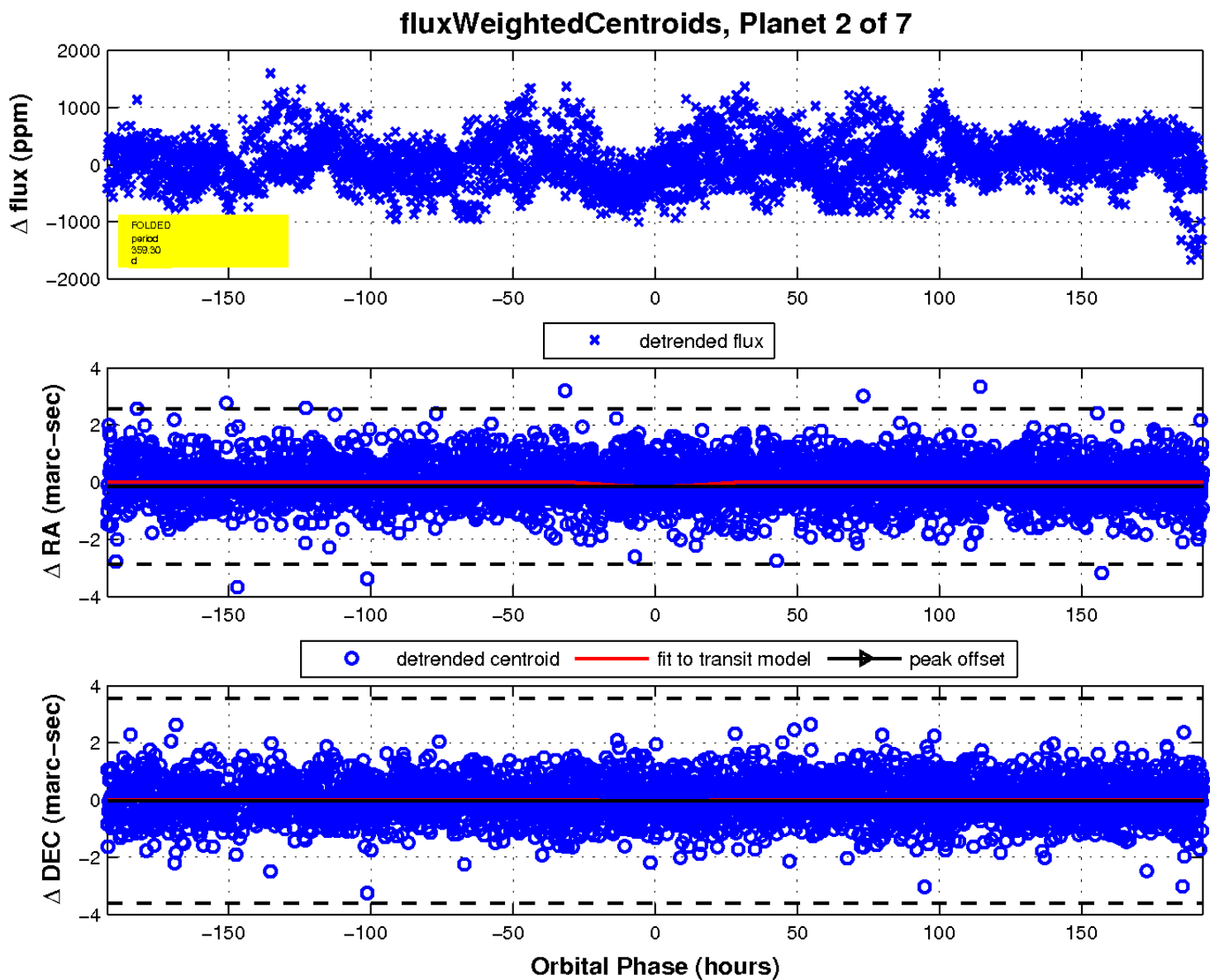
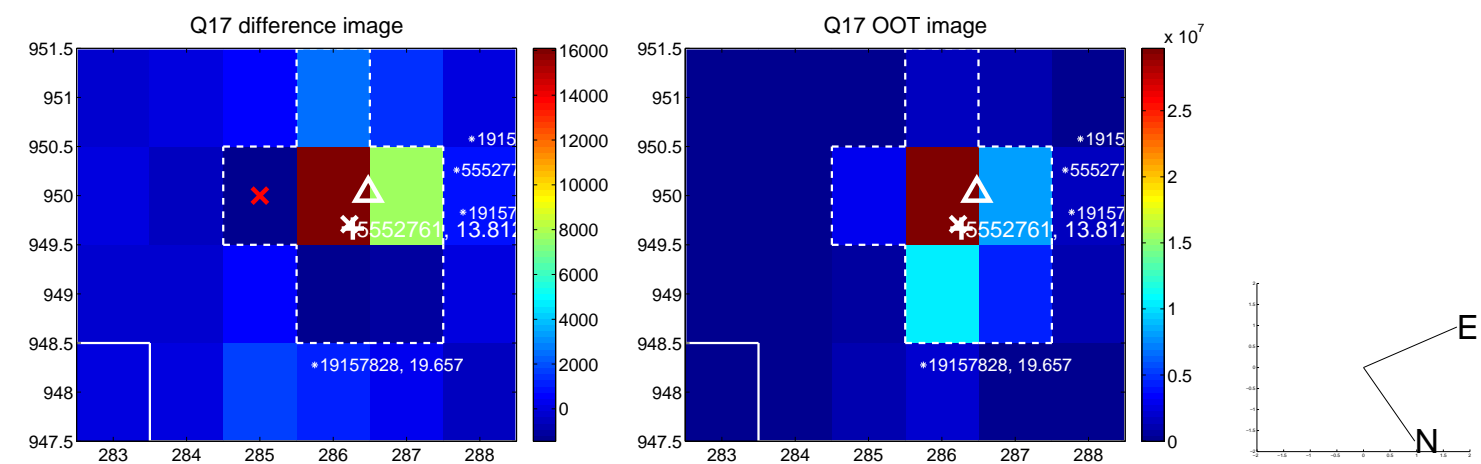
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

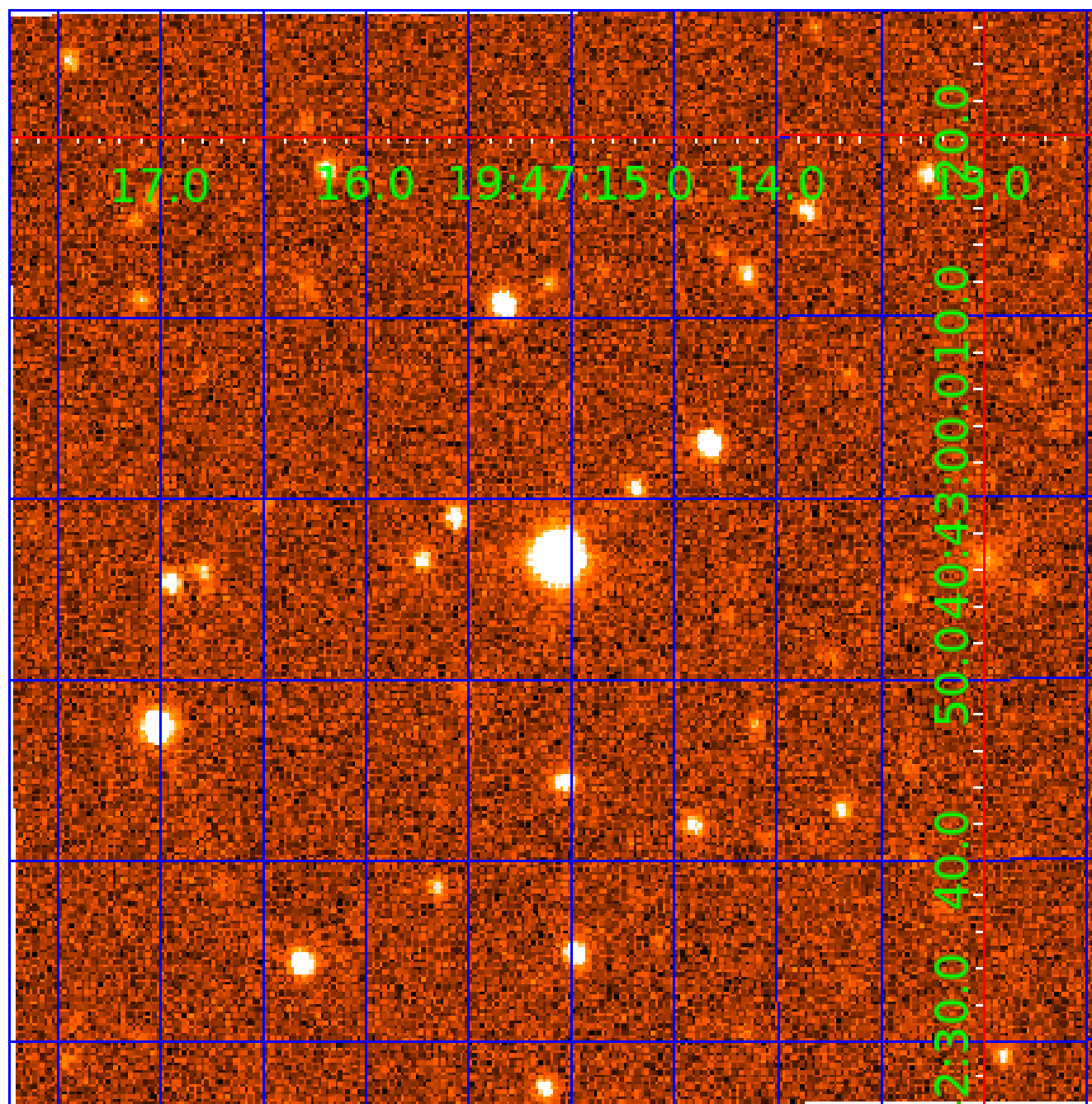


white \times : KIC target position; $+$: OOT centroid; Δ : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 005552761

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})
005552761-01	OBS	No	2.789242	133.343296	40.0	18.006	9.8	6.6	1.20	6611	0.76	1464.88
005552761-02	OBS	No	359.297934	132.646674	2300.4	64.233	22.0	15.3	1.20	6611	10.52	2.25
005552761-03	OBS	No	84.444693	215.445111	448.5	21.091	10.9	8.2	1.20	6611	3.02	15.53
005552761-04	OBS	No	371.100386	338.196161	423.6	12.149	10.3	9.2	1.20	6611	2.62	2.16
005552761-05	OBS	No	45.144567	149.322342	342.7	10.178	10.4	10.3	1.20	6611	2.45	35.78
005552761-06	OBS	No	53.529865	138.894361	216.0	12.463	8.9	4.7	1.20	6611	1.99	28.51
005552761-07	OBS	No	404.442174	379.886035	675.1	7.444	8.5	9.0	1.20	6611	3.46	1.92

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
005552761-01	OBS	FP	0.00	1	0	0	0	SWEET_NTL—LPP_DV
005552761-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_SKYE—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—INCONSISTENT_TRANS—CENT_FEW_DIFFS
005552761-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT
005552761-04	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_MARSHALL—LPP_DV—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_POS_ALT—CENT_FEW_DIFFS
005552761-05	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT
005552761-06	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT
005552761-07	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_CHASES_MARSHALL—LPP_DV—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_NONUNIQ_ALT—MOD_TER_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.

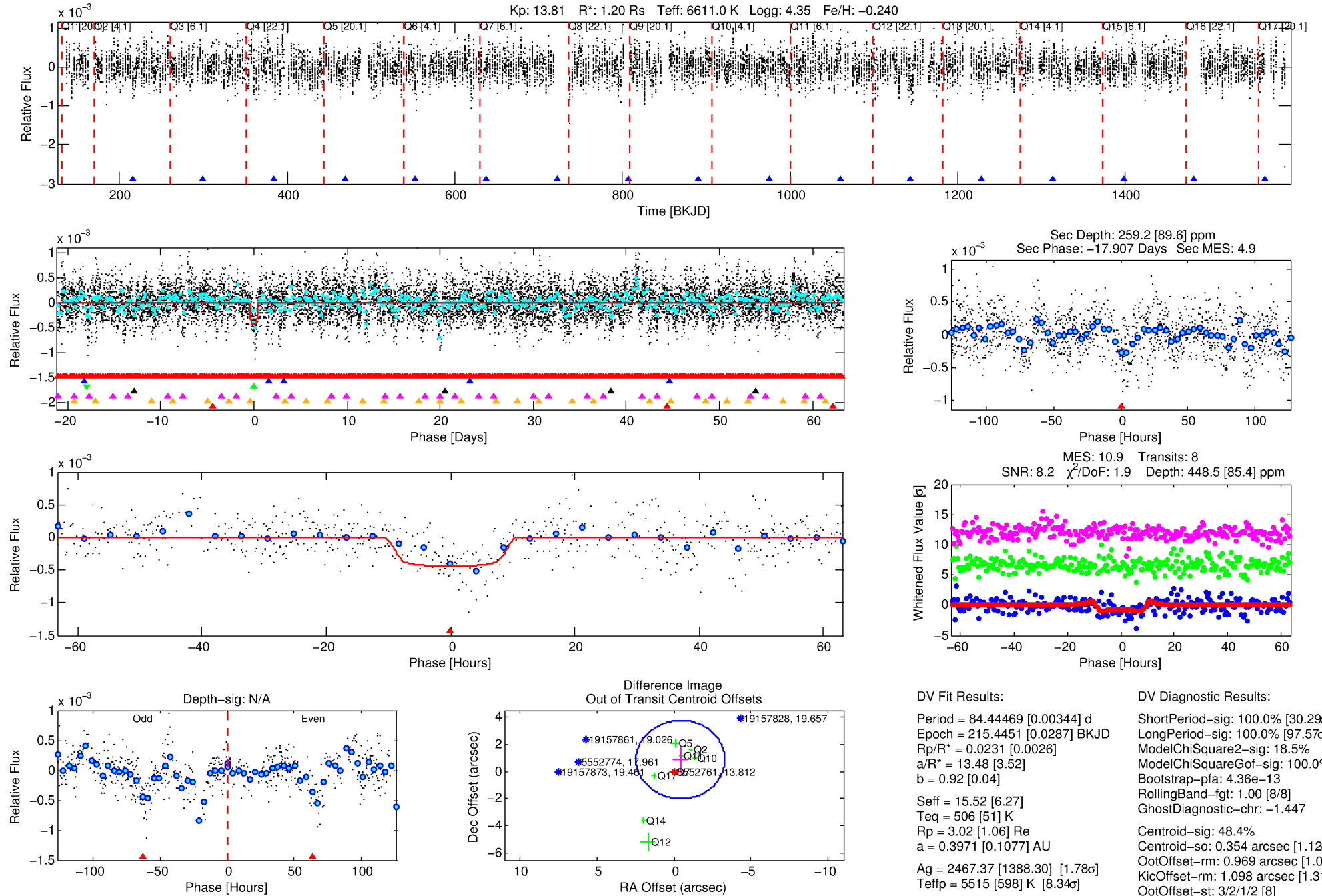
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 005552761-03

No Significant Match Found

DV One-Page Summary

KIC: 5552761 Candidate: 3 of 7 Period: 84.445 d



DV Fit Results:

Period = 84.44469 [0.00344] d
Epoch = 215.4451 [0.0287] BKJD
Rp/R* = 0.0231 [0.0026]
a/R* = 13.48 [3.52]
b = 0.92 [0.04]
Seff = 15.52 [6.27]
Teq = 506 [51] K
Rp = 3.02 [1.06] Re
a = 0.3971 [0.1077] AU
Ag = 2467.37 [1388.30] [1.78 σ]
Teffp = 5515 [598] K [8.34 σ]

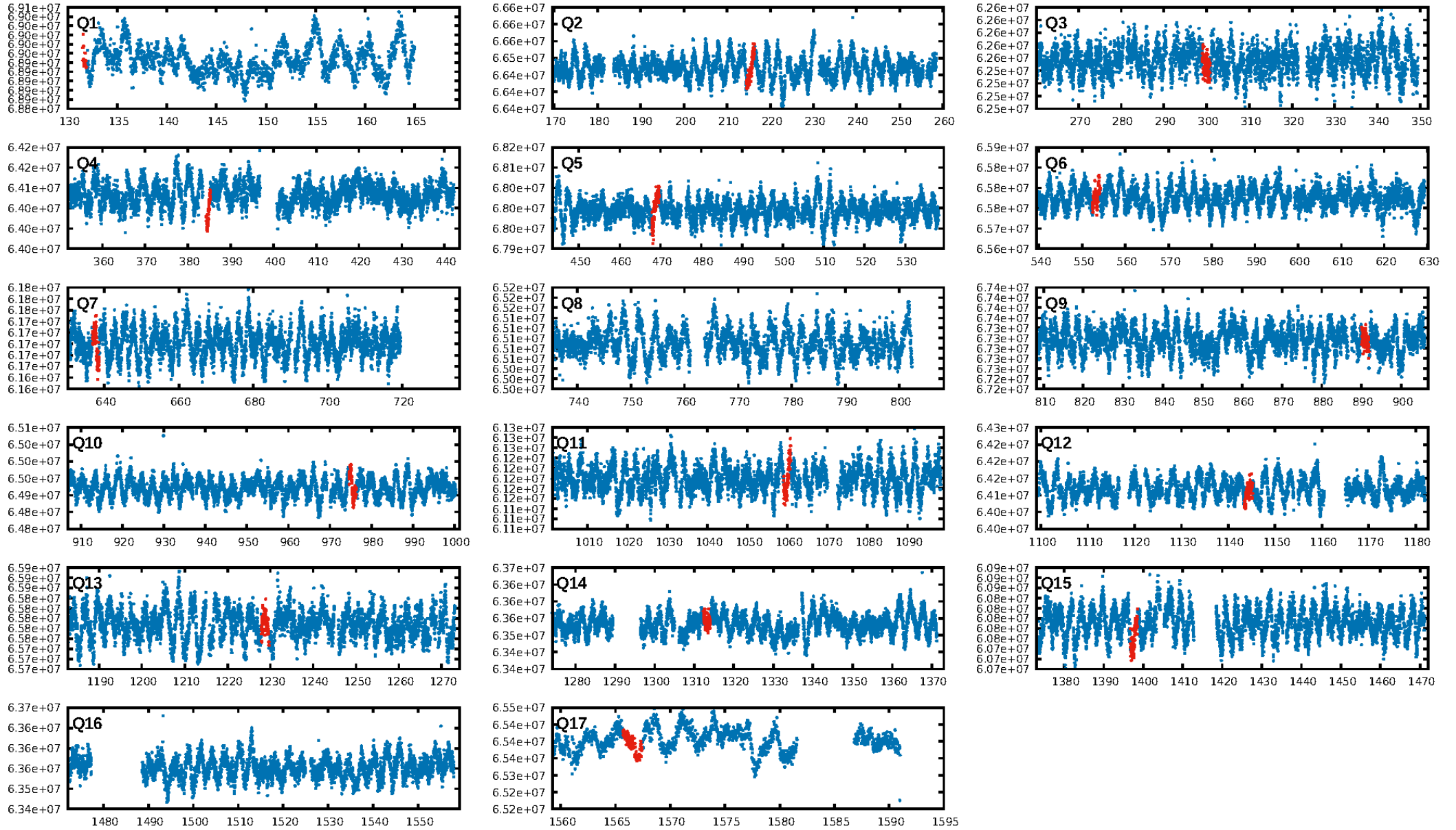
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [30.29 σ]
LongPeriod-sig: 100.0% [97.57 σ]
ModelChiSquare2-sig: 18.5%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: 4.36e-13
RollingBand-fgt: 1.00 [8/8]
GhostDiagnostic-chr: -1.447
Centroid-sig: 48.4%
Centroid-so: 0.354 arcsec [1.12 σ]
OotOffset-rm: 0.969 arcsec [1.01 σ]
KicOffset-rm: 1.098 arcsec [1.31 σ]
OotOffset-st: 3/2/1/2 [8]
KicOffset-st: 3/2/1/2 [8]
DiffImageQuality-fgm: 0.50 [4/8]
DiffImageOverlap-fno: 0.00 [0/11]

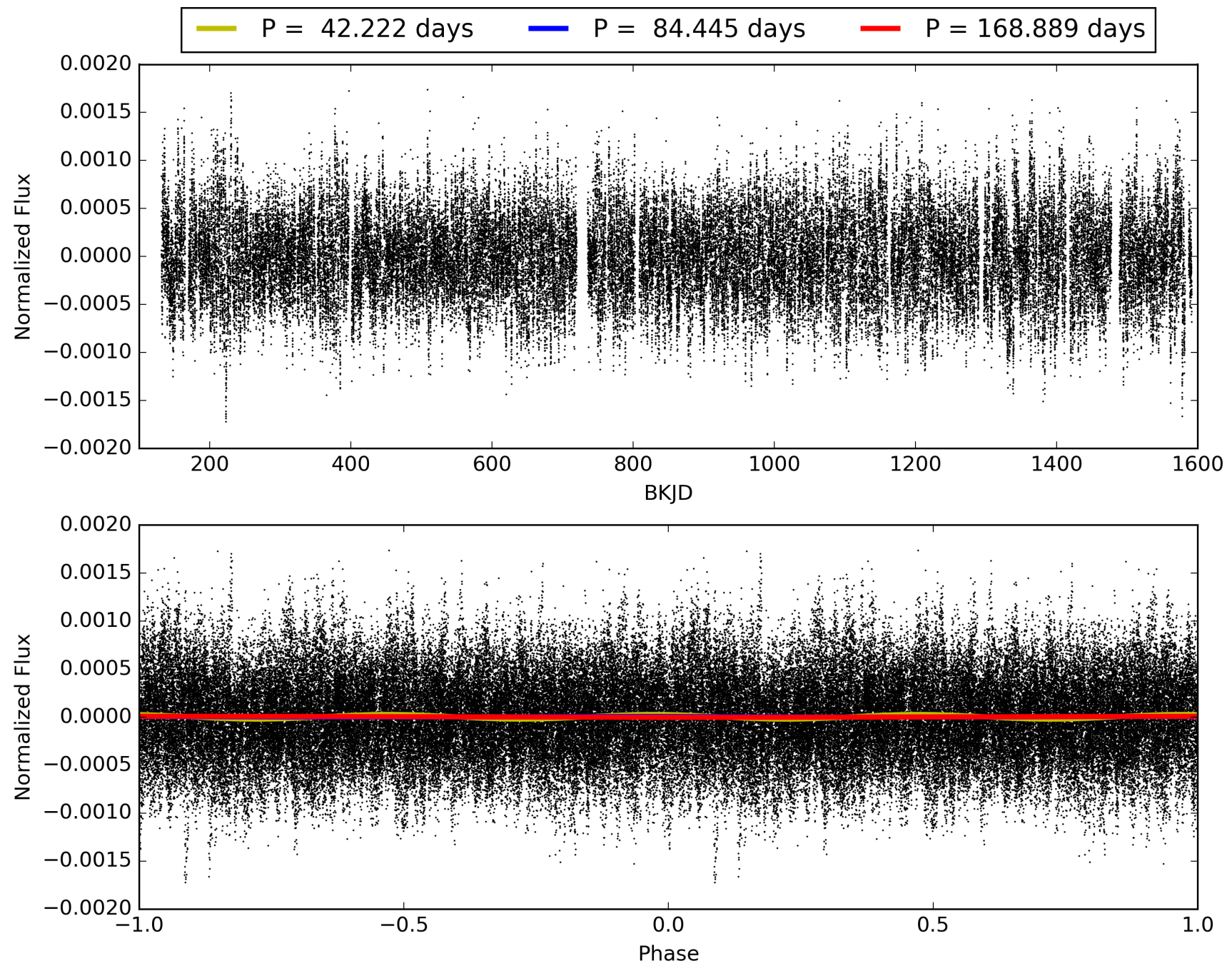
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 03-Feb-2016 08:32:01 Z

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

TCE 005552761-03, PDC Light Curves

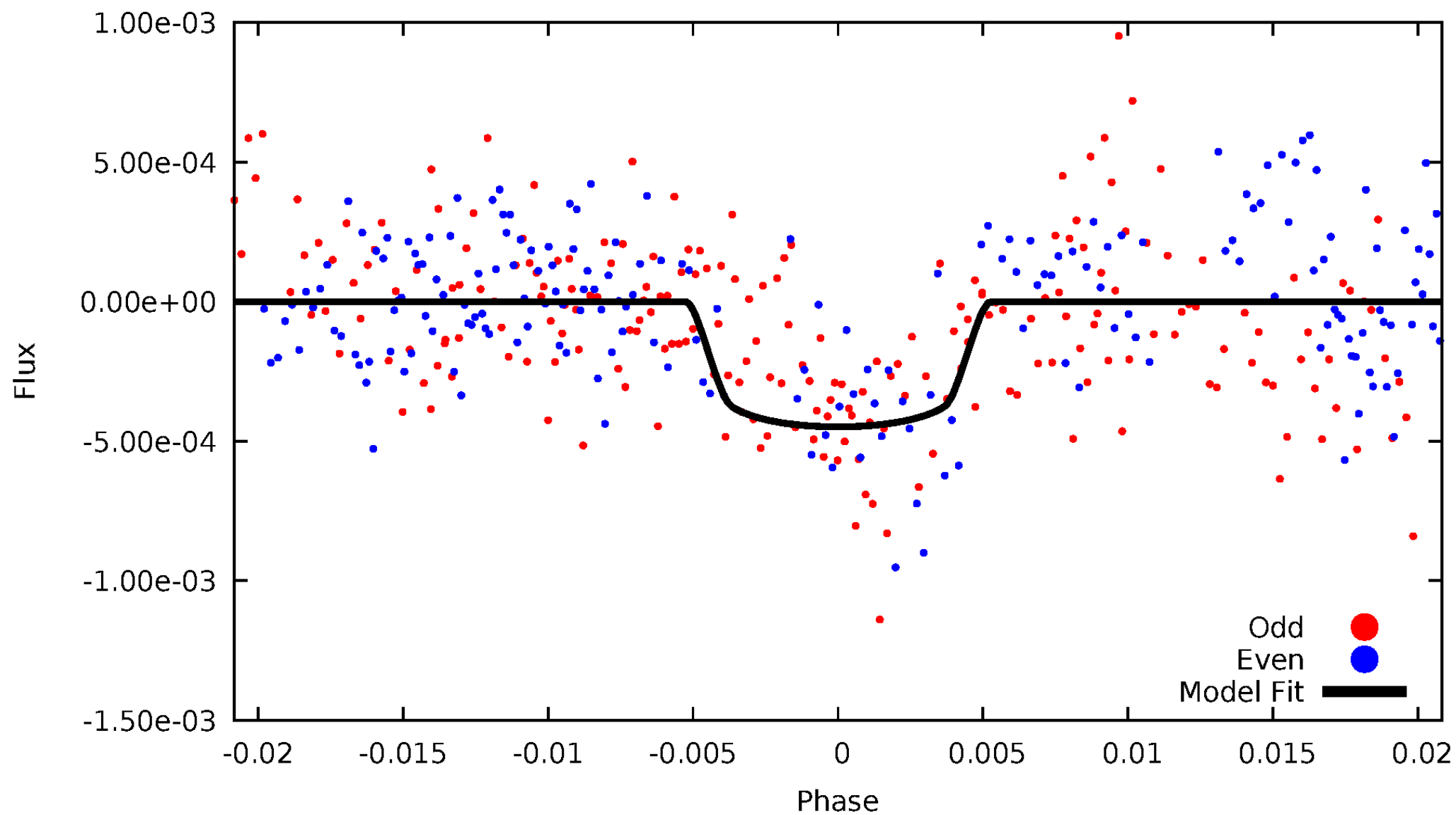


TCE 005552761-03



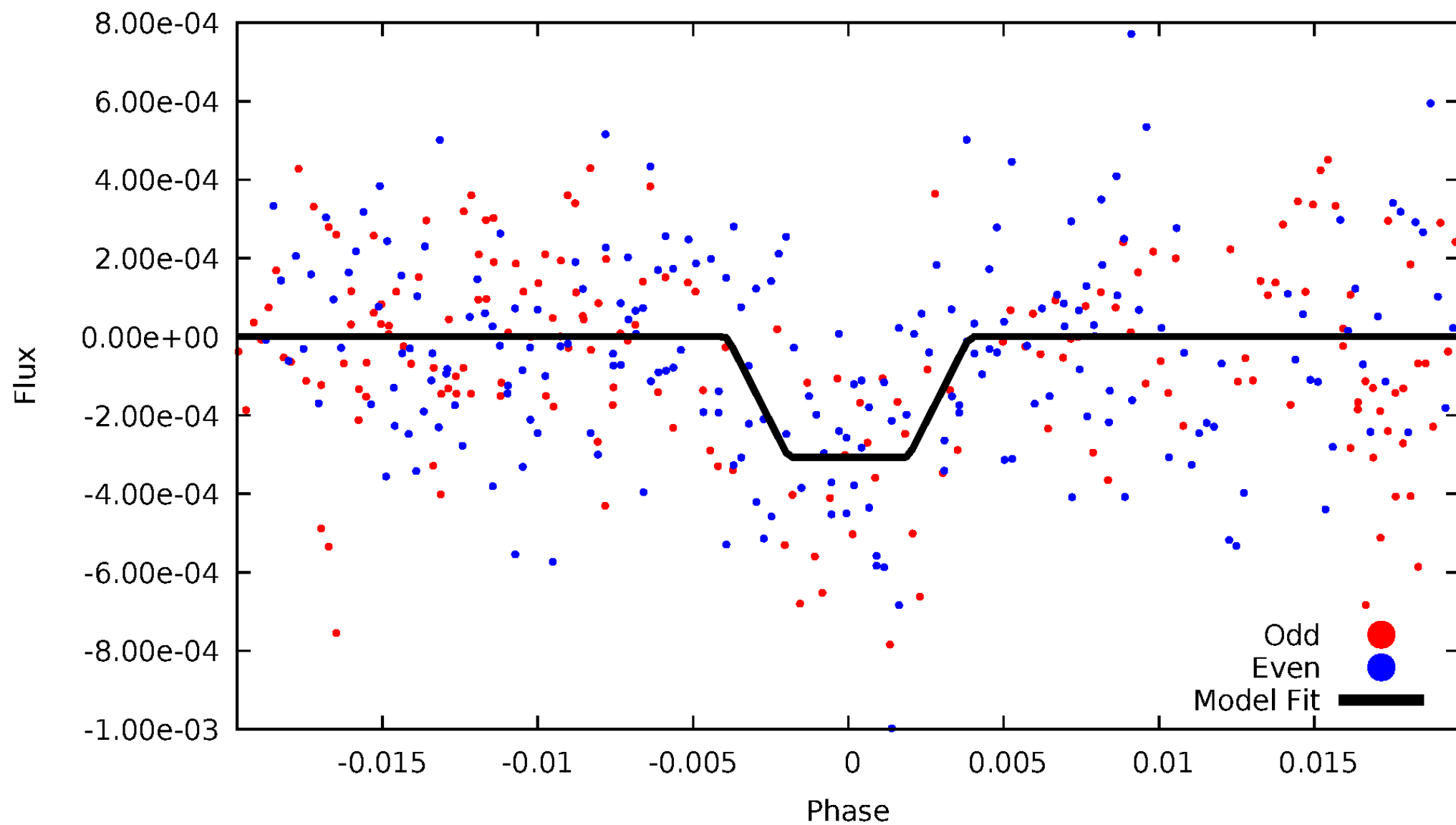
DV Odd/Even

TCE 005552761-03



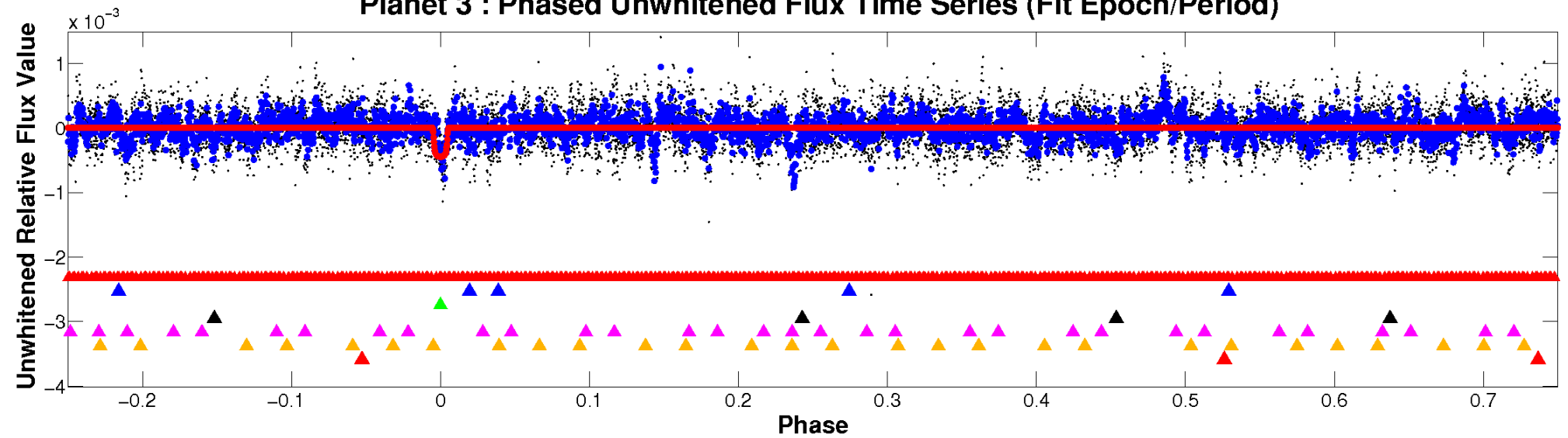
ALT Odd/Even

TCE 005552761-03

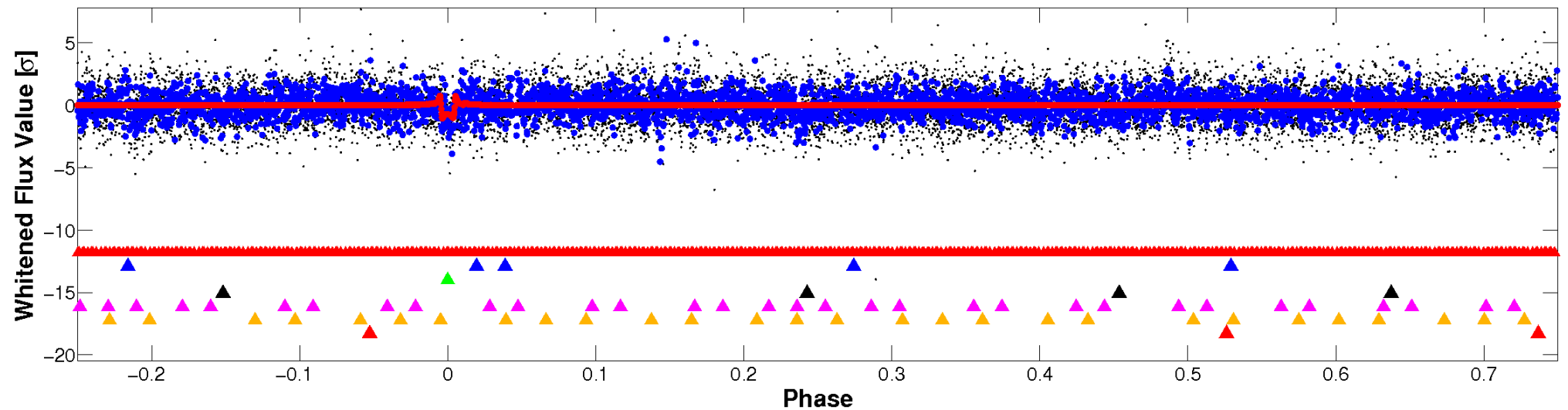


Non-Whitened Vs. Whitened Light Curve

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

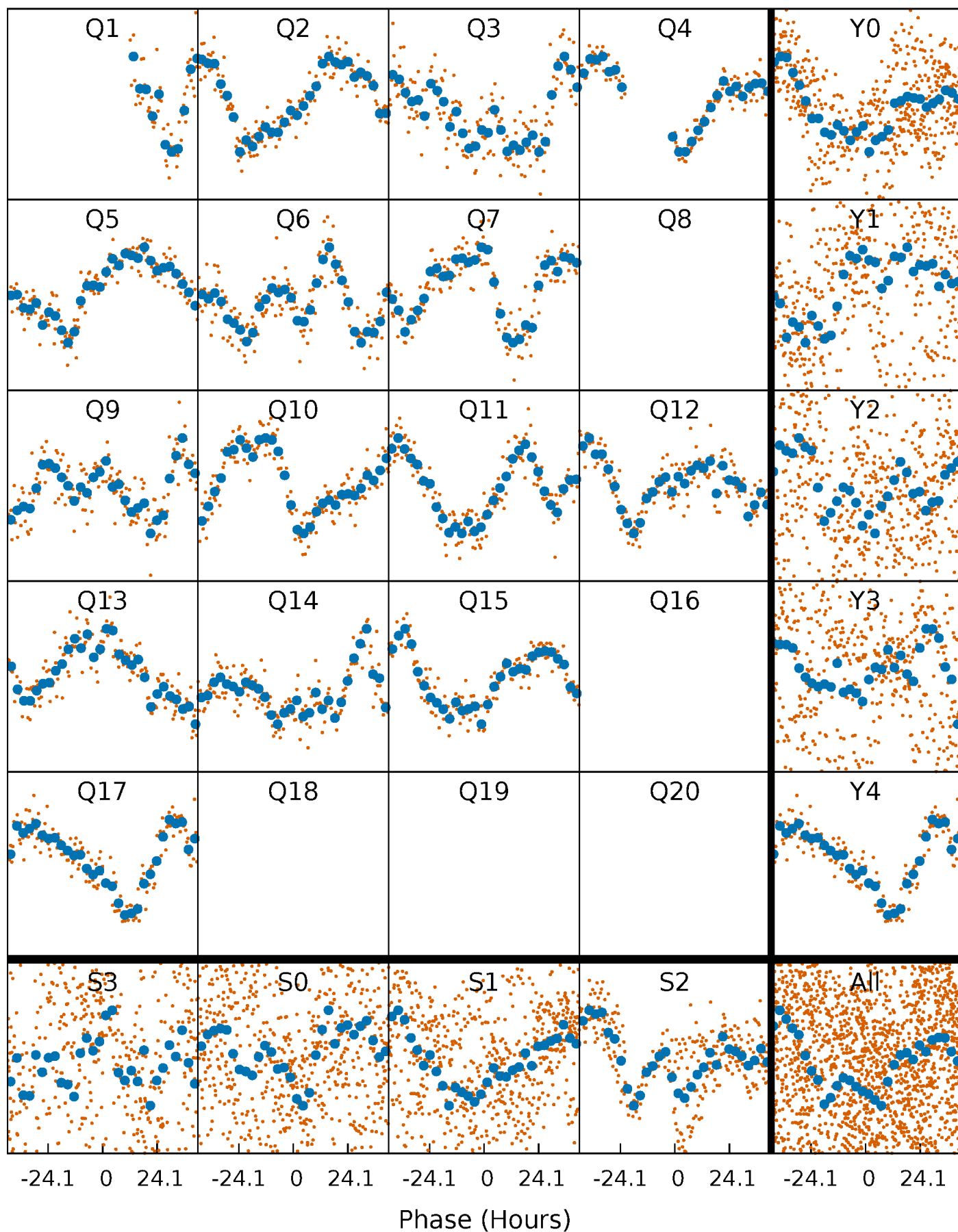


Planet 3 : Phased Whitened Flux Time Series (Fit Epoch/Period)



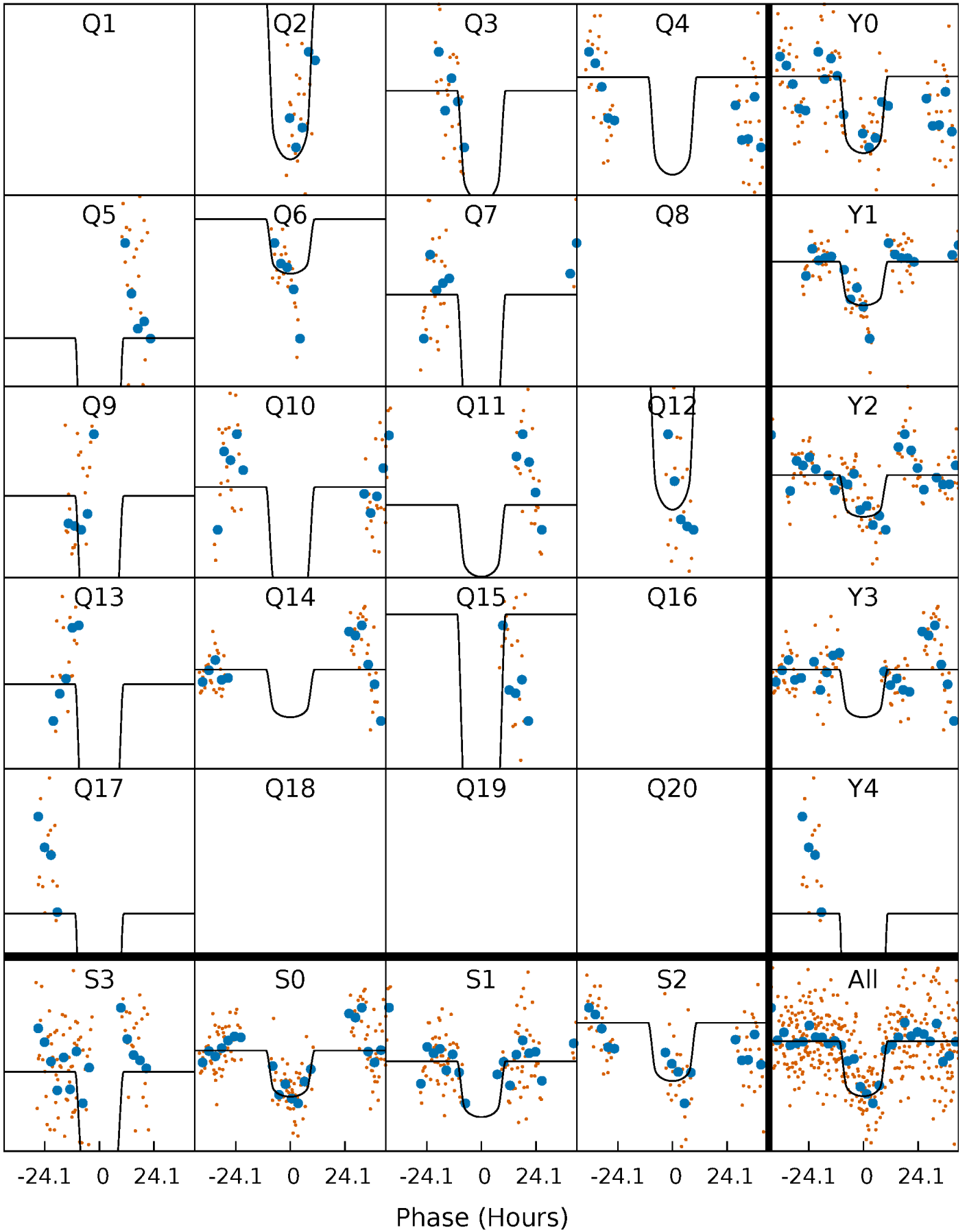
PDC Quarter-Phased Transit Curves

TCE 005552761-03 P= 84.444693 Days $T_0=215.445111$ (BKJD)



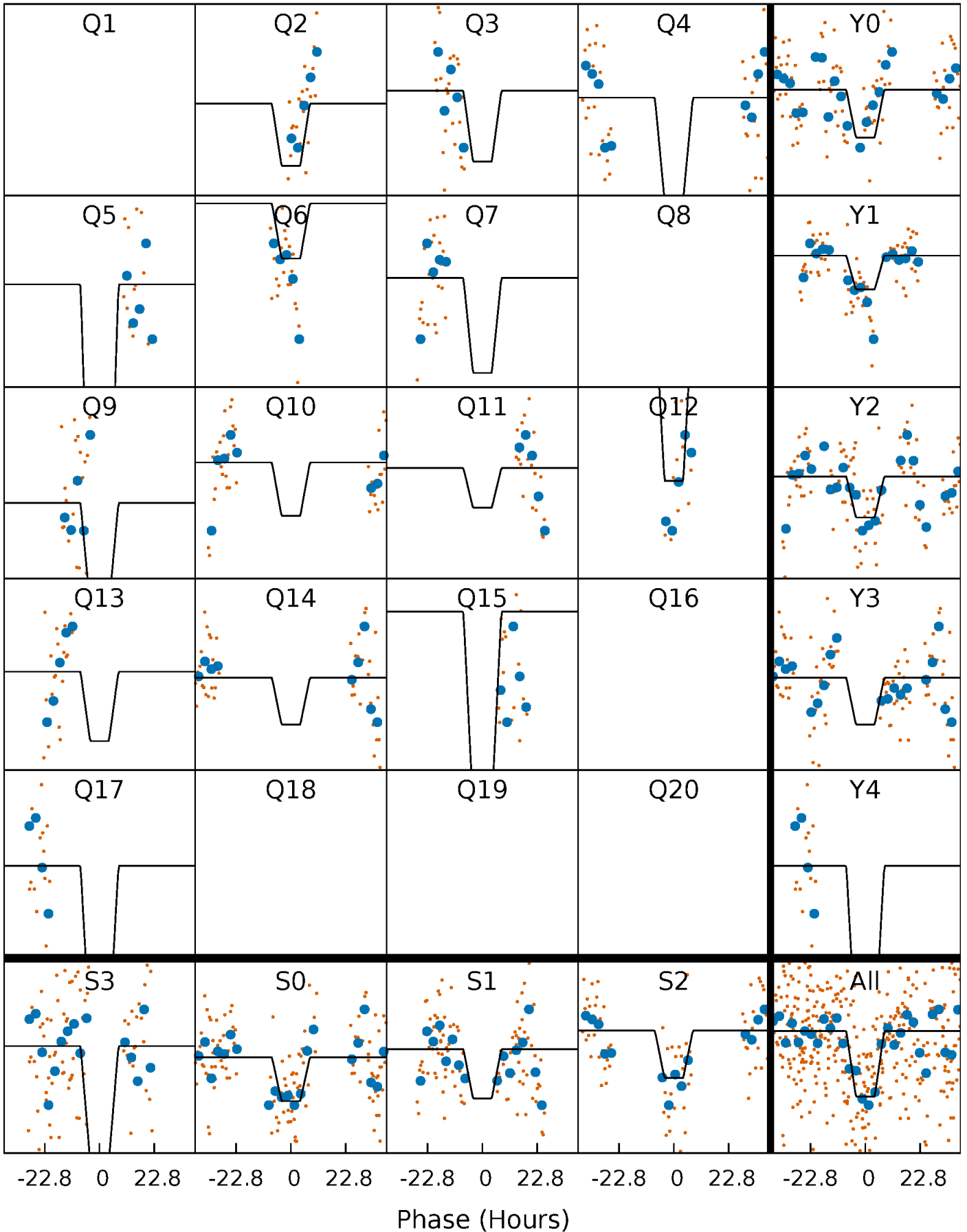
DV Quarter-Phased Transit Curves

TCE 005552761-03 P= 84.444693 Days $T_0=215.445111$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

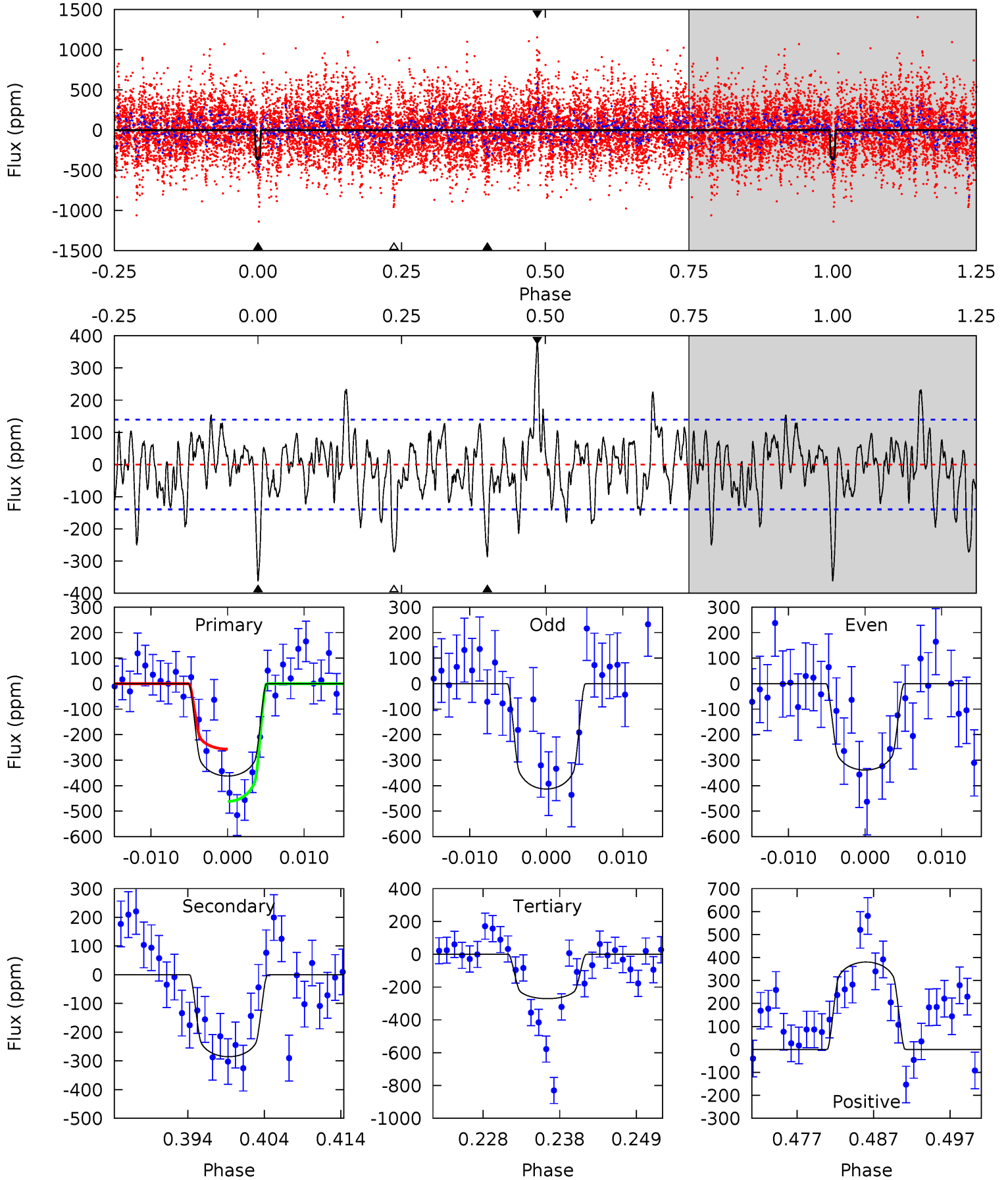
TCE 005552761-03 P= 84.451903 Days $T_0=215.420122$ (BKJD)



DV Model-Shift Uniqueness Test

005552761-03, P = 84.444693 Days, E = 131.000418 Days

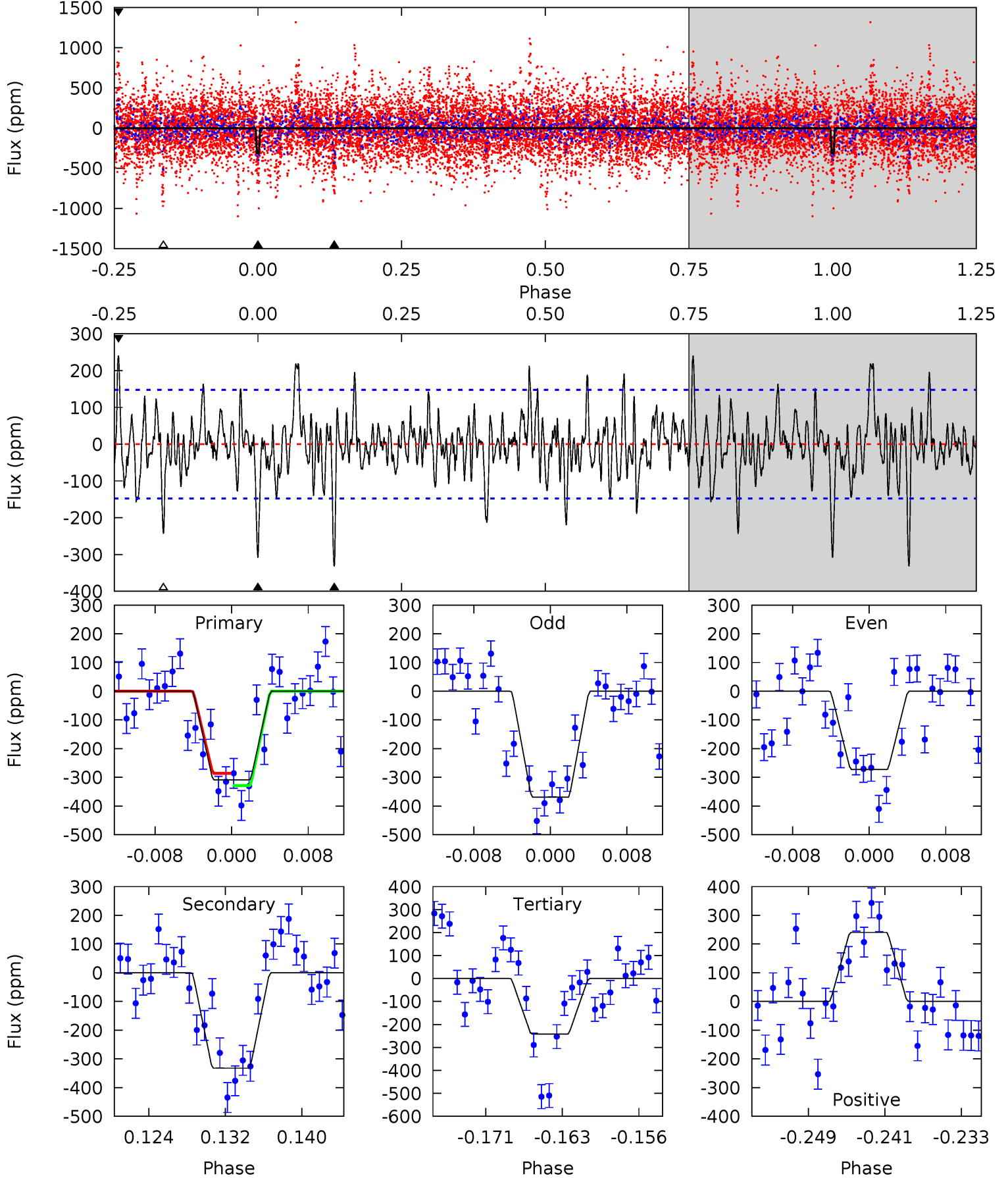
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
13.0	10.3	9.76	13.7	5.02	2.56	2.99	3.29	-0.65	0.53	-3.41	1.27	-0.90	0.51	3.71



Alt Model-Shift Uniqueness Test

005552761-03, P = 84.451903 Days, E = 130.968219 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
10.6	11.4	8.31	8.27	5.07	2.66	2.35	2.30	2.34	3.11	3.16	1.56	2.11	0.42	0.73



Stellar Parameters For KIC 005552761

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6611^{+158}_{-218}	$4.351^{+0.081}_{-0.202}$	$-0.240^{+0.250}_{-0.300}$	$1.196^{+0.399}_{-0.160}$	$1.178^{+0.175}_{-0.158}$	$0.970^{+0.354}_{-0.501}$
	+2%/-3%	+2%/-5%	+104%/-125%	+33%/-13%	+15%/-13%	+36%/-52%
Source	PHO1	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 005552761-03 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-286 ± 28	$3.10^{+0.62}_{-0.41}$	717^{+47}_{-39}	5629^{+372}_{-337}	2533^{+891}_{-757}
Alt.	-332 ± 29	$2.35^{+0.49}_{-0.40}$	717^{+50}_{-32}	6735^{+729}_{-528}	5092^{+2321}_{-1527}

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 $A_{obs} \gg 1.0$

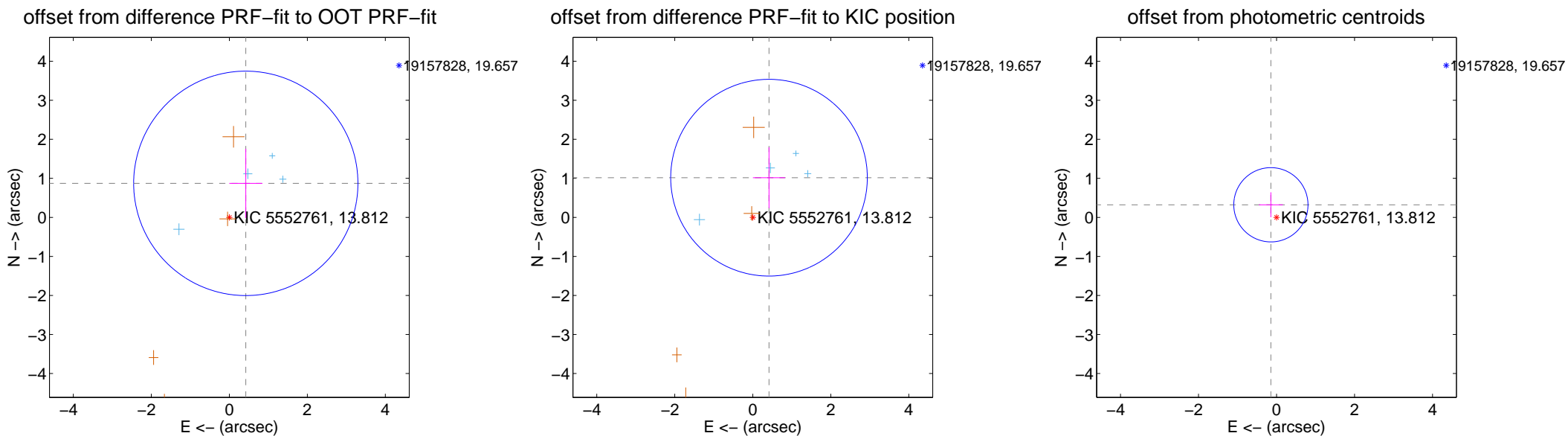
DV Centroid Data

Supplemental centroid analysis for 005552761-03. Kepler magnitude: 13.81. Transit SNR 8.22

There are 4 quarters with good PRF difference image offsets

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

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.969 ± 0.958	1.01	-0.422 ± 0.423	0.872 ± 0.885
PRF-fit source offset from KIC position	1.098 ± 0.840	1.31	-0.416 ± 0.413	1.017 ± 0.779
photometric centroid source offset	0.35 ± 0.32	1.12	0.14 ± 0.31	0.32 ± 0.32



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

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

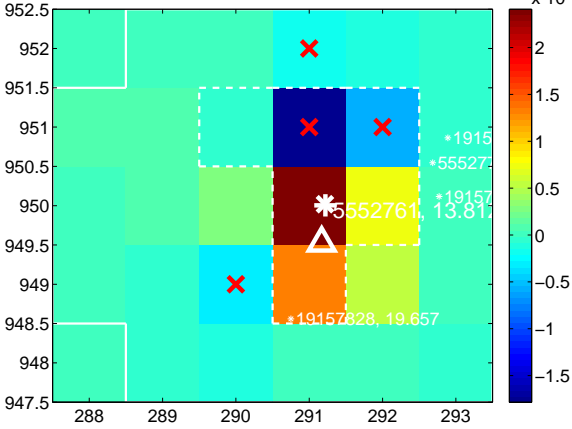
Q1 no difference image



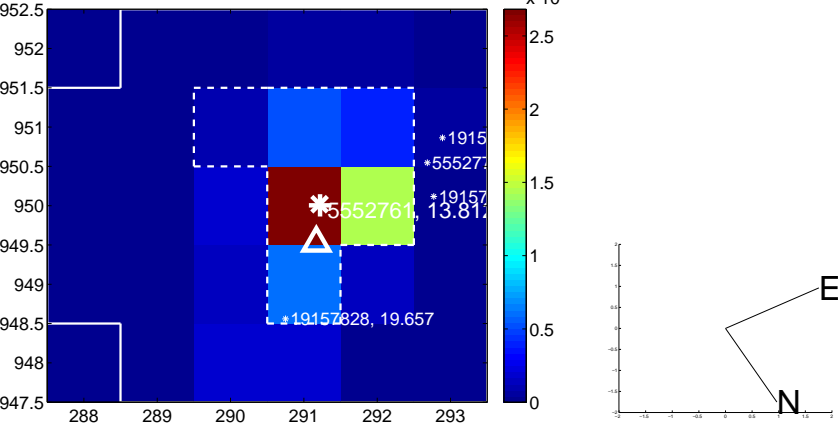
Q1 no OOT image



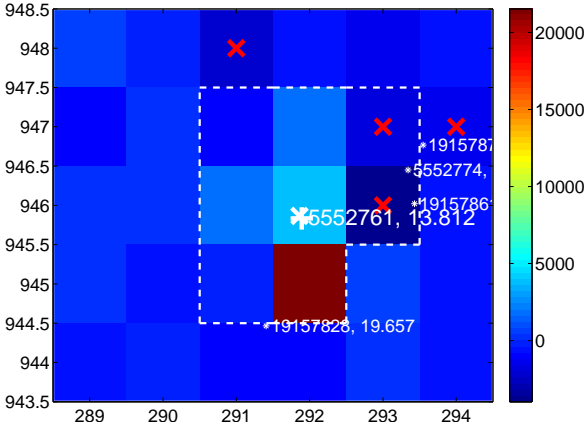
Q2 difference image



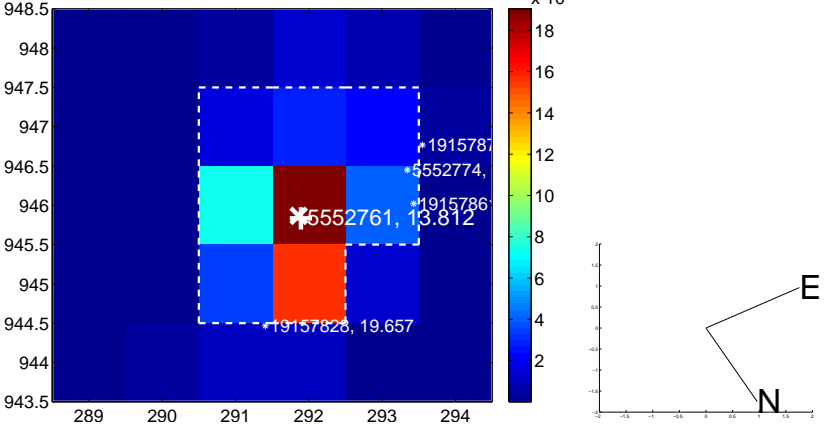
Q2 OOT image



Q3 difference image. Poor Quality



Q3 OOT image



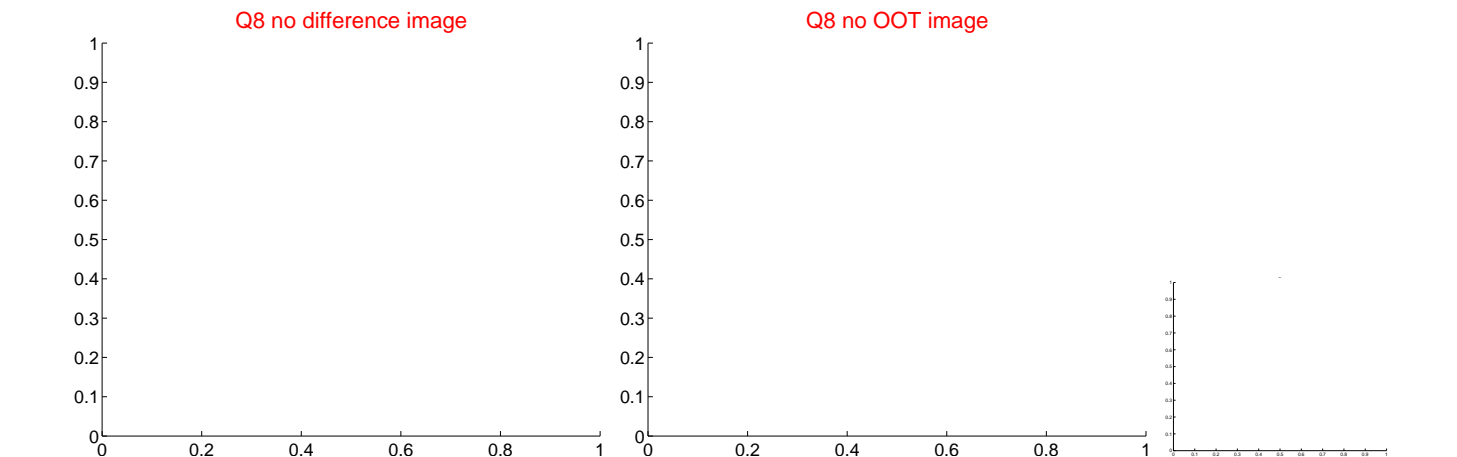
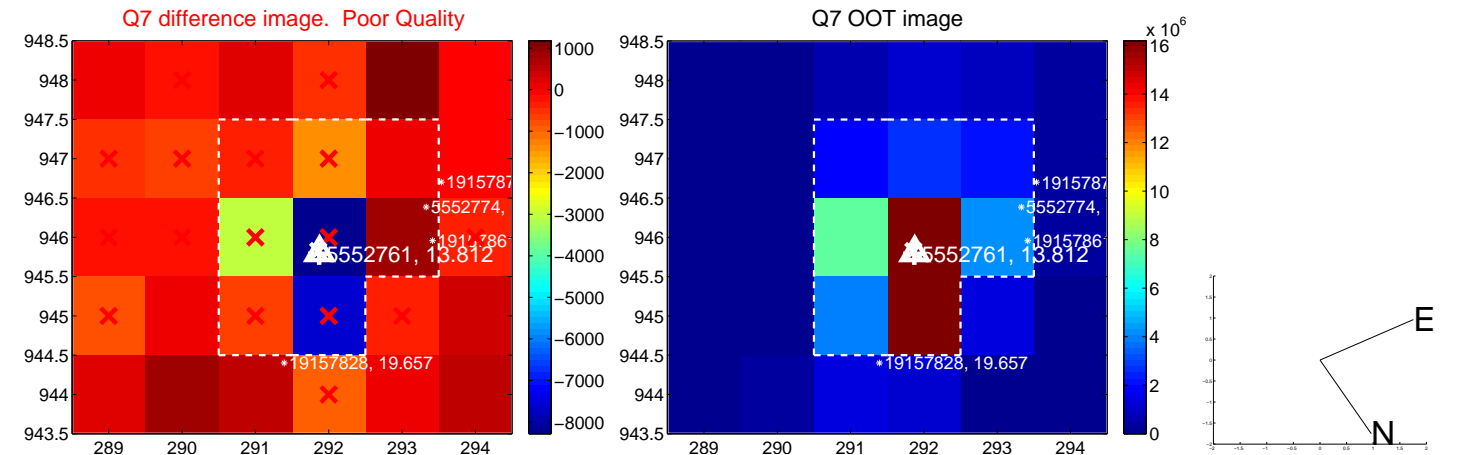
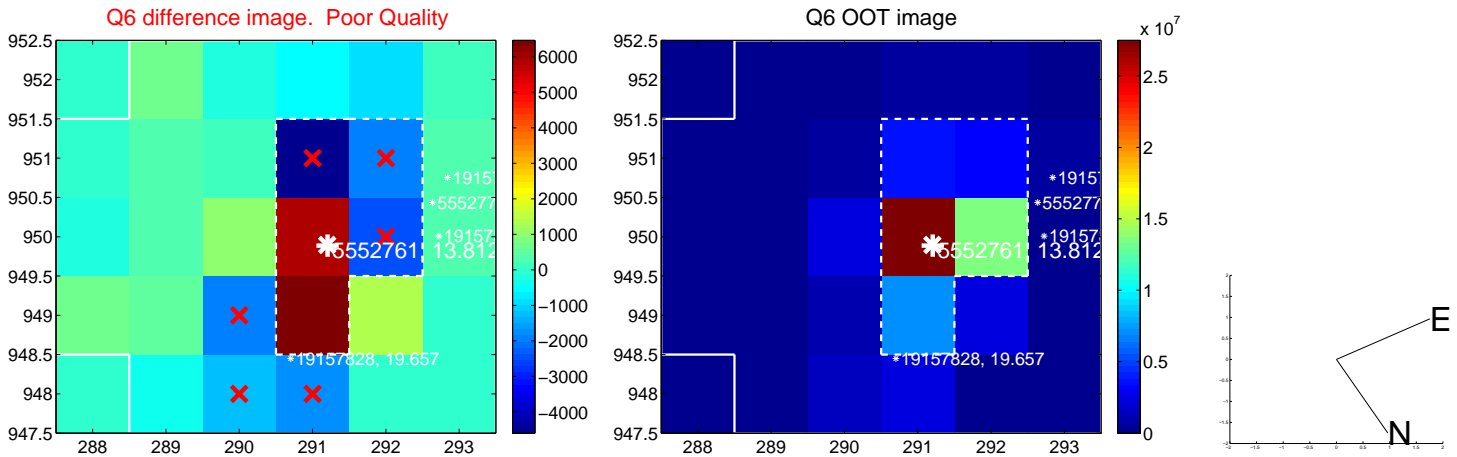
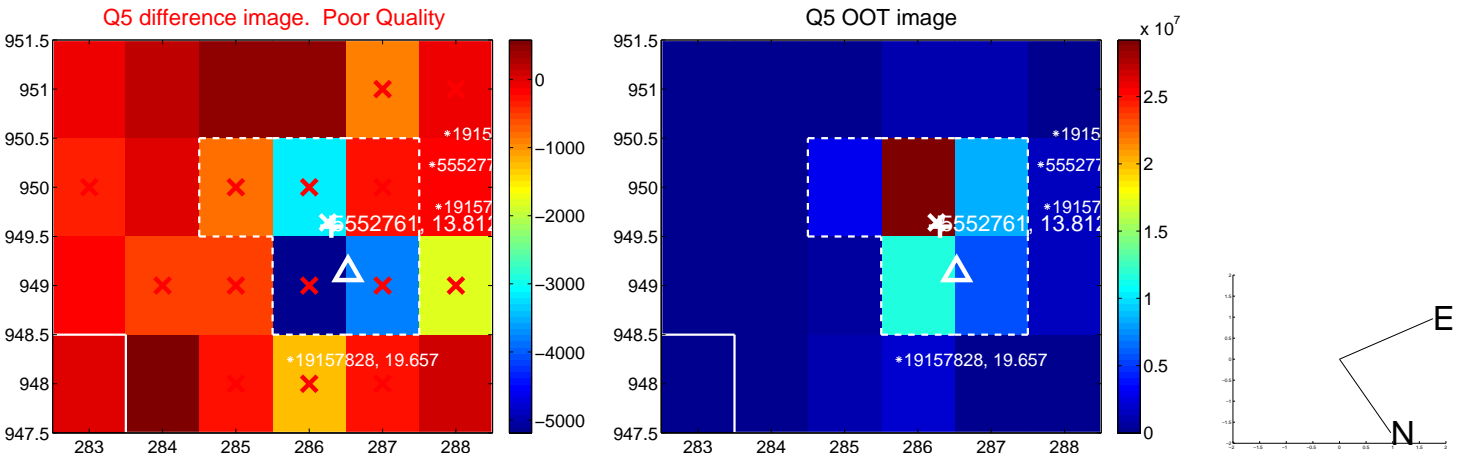
Q4 no difference image



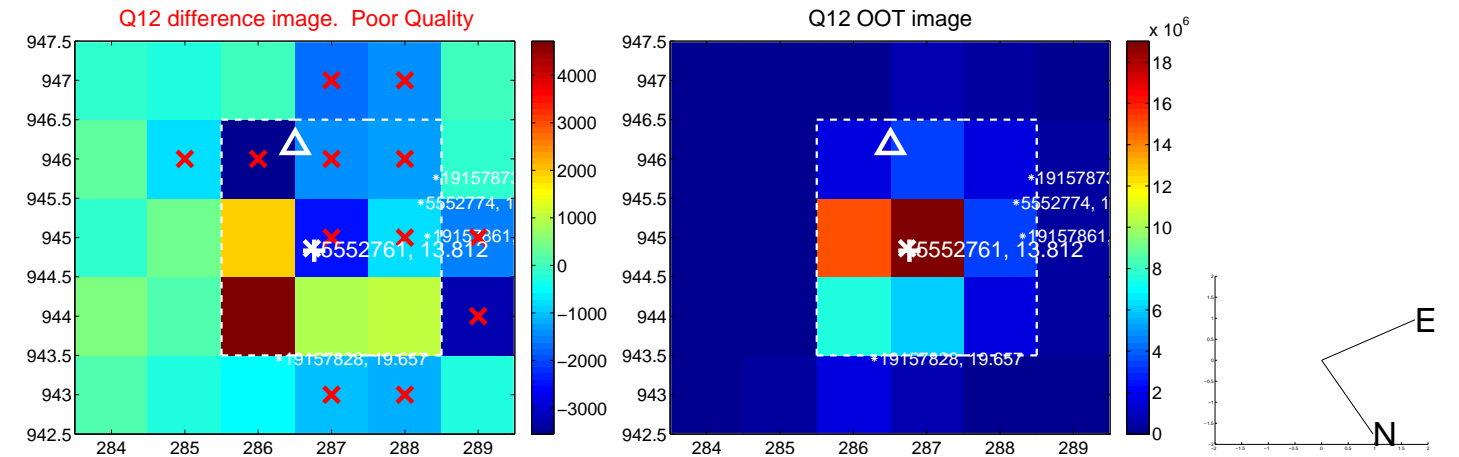
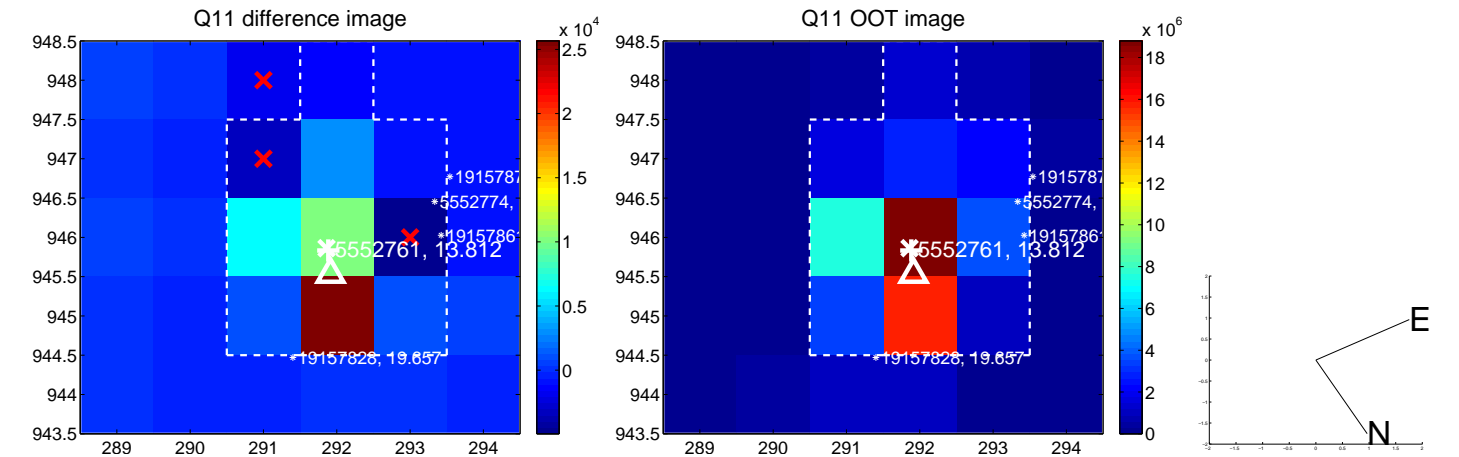
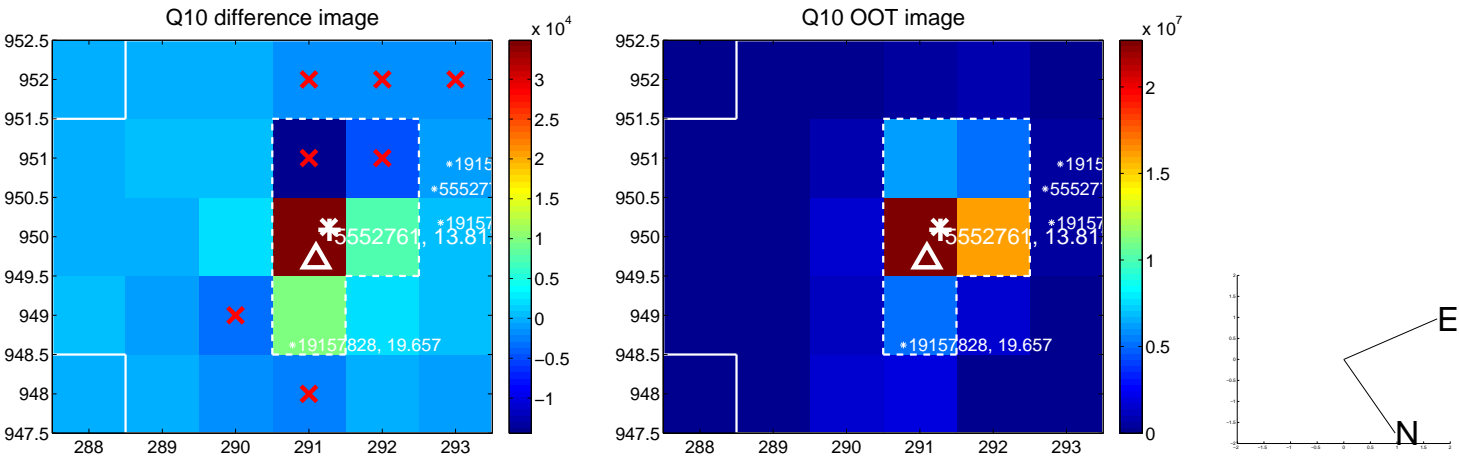
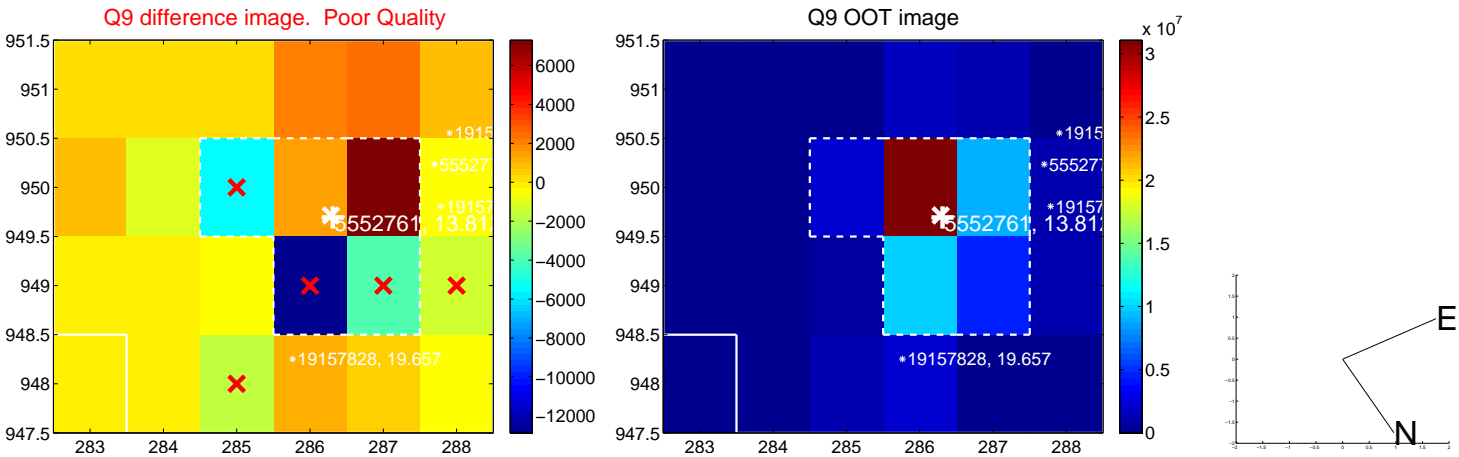
Q4 no OOT image



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

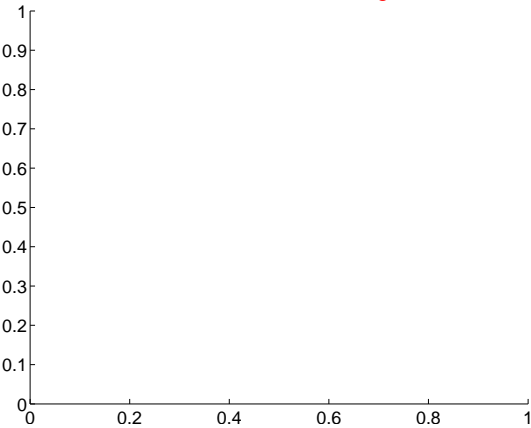


white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.

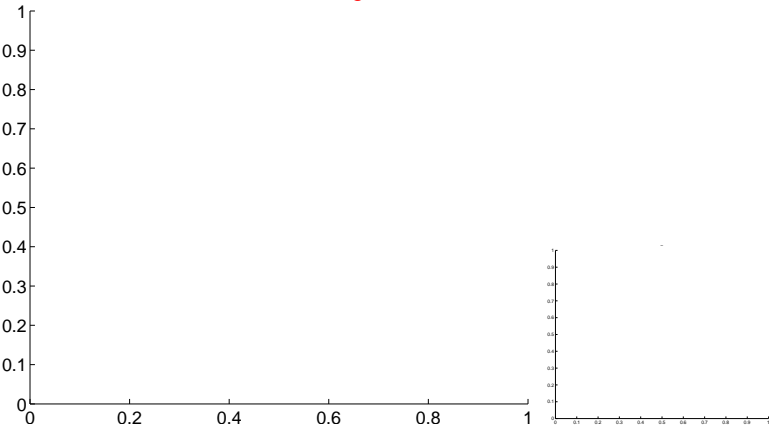


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.

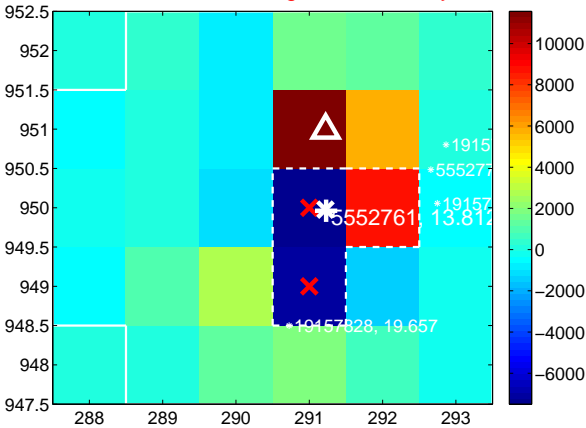
Q13 no difference image



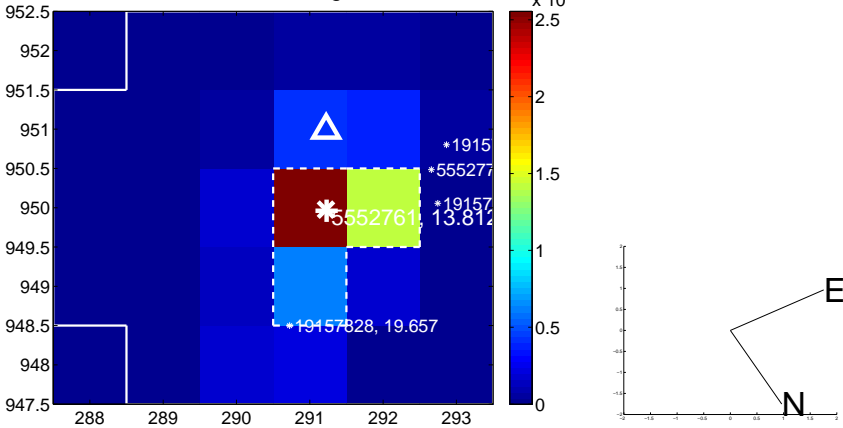
Q13 no OOT image



Q14 difference image. Poor Quality



Q14 OOT image



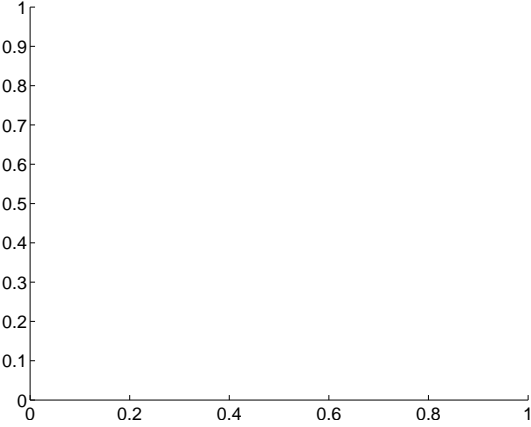
Q15 no difference image



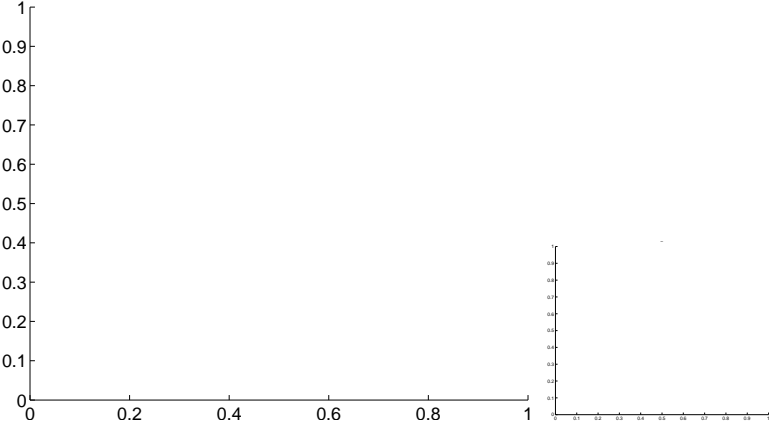
Q15 no OOT image



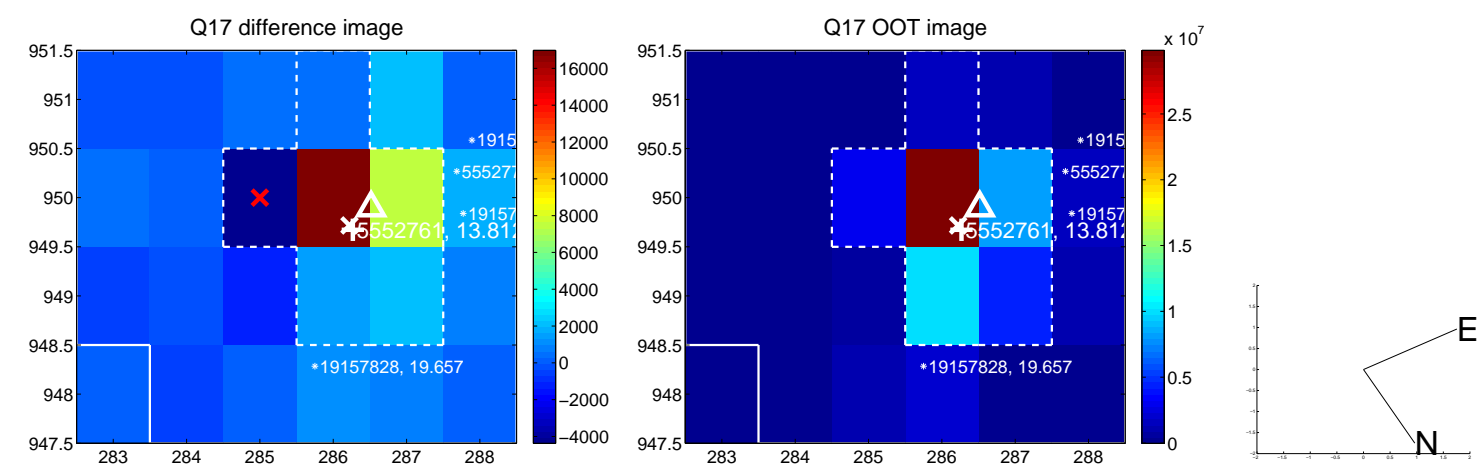
Q16 no difference image



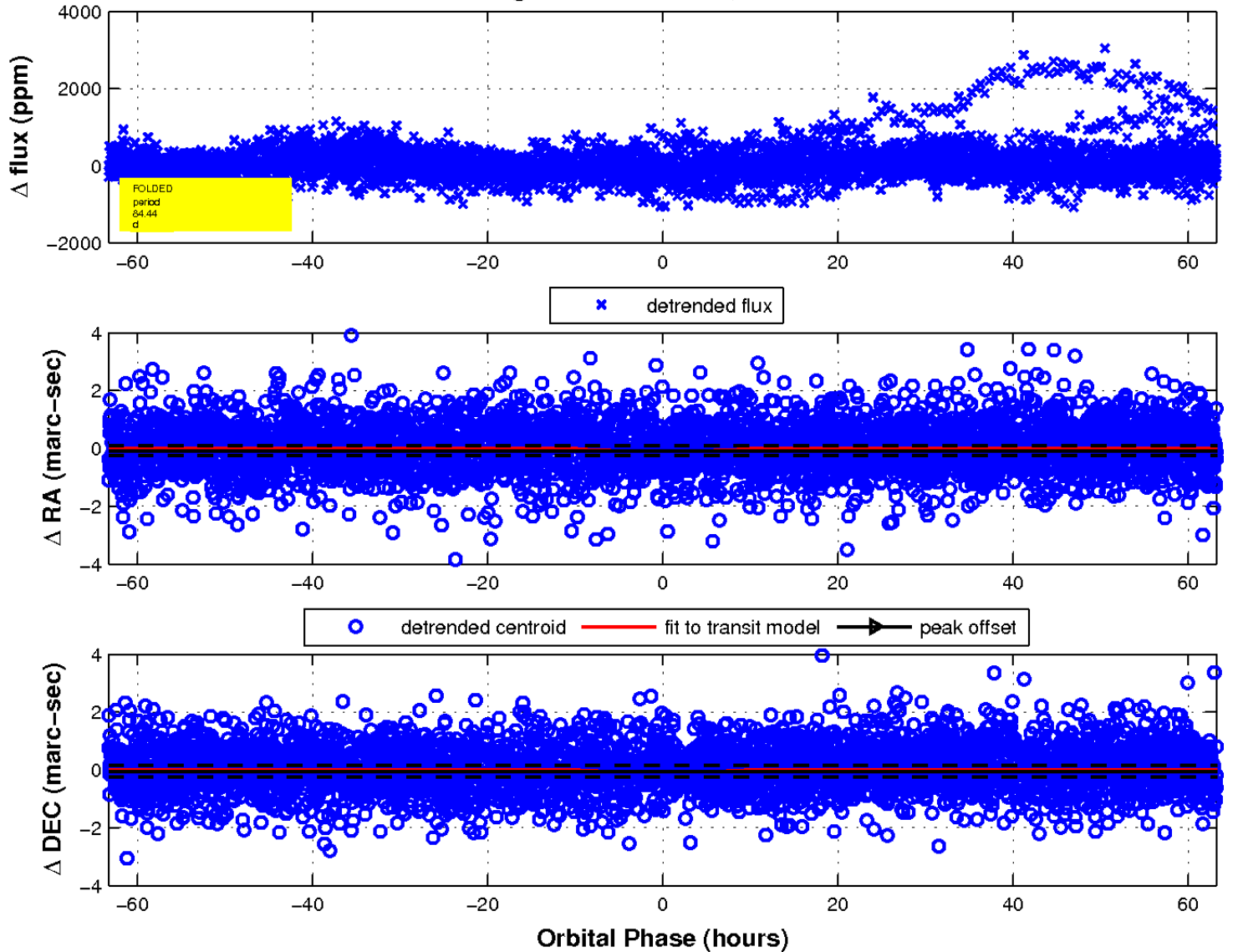
Q16 no OOT image



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

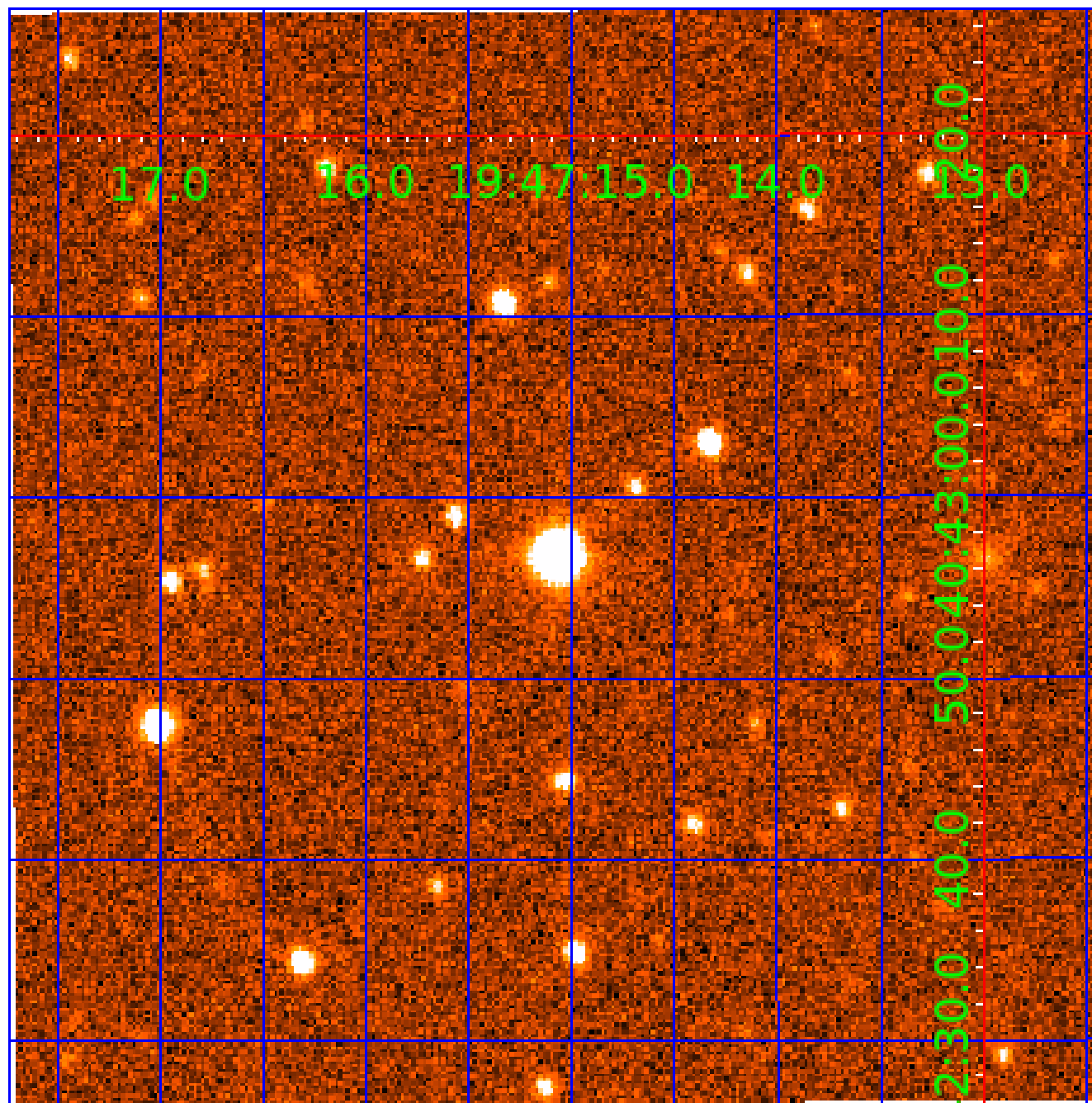


fluxWeightedCentroids, Planet 3 of 7



UKIRT Image

Declination



KIC 005552761

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})
005552761-01	OBS	No	2.789242	133.343296	40.0	18.006	9.8	6.6	1.20	6611	0.76	1464.88
005552761-02	OBS	No	359.297934	132.646674	2300.4	64.233	22.0	15.3	1.20	6611	10.52	2.25
005552761-03	OBS	No	84.444693	215.445111	448.5	21.091	10.9	8.2	1.20	6611	3.02	15.53
005552761-04	OBS	No	371.100386	338.196161	423.6	12.149	10.3	9.2	1.20	6611	2.62	2.16
005552761-05	OBS	No	45.144567	149.322342	342.7	10.178	10.4	10.3	1.20	6611	2.45	35.78
005552761-06	OBS	No	53.529865	138.894361	216.0	12.463	8.9	4.7	1.20	6611	1.99	28.51
005552761-07	OBS	No	404.442174	379.886035	675.1	7.444	8.5	9.0	1.20	6611	3.46	1.92

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
005552761-01	OBS	FP	0.00	1	0	0	0	SWEET_NTL—LPP_DV
005552761-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_SKYE—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—INCONSISTENT_TRANS—CENT_FEW_DIFFS
005552761-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT
005552761-04	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_MARSHALL—LPP_DV—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_POS_ALT—CENT_FEW_DIFFS
005552761-05	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT
005552761-06	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT
005552761-07	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_CHASES_MARSHALL—LPP_DV—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_NONUNIQ_ALT—MOD_TER_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.

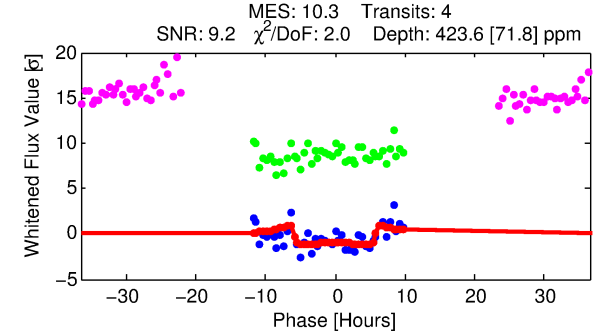
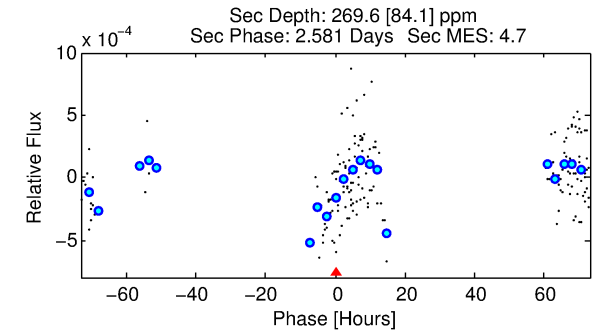
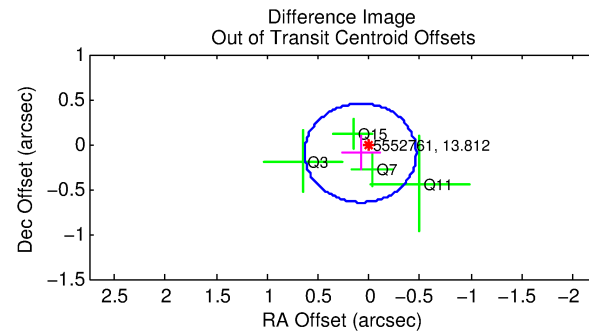
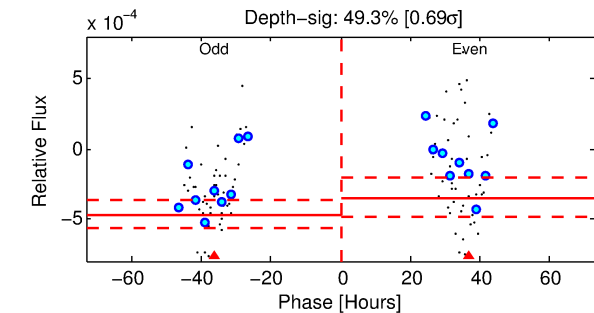
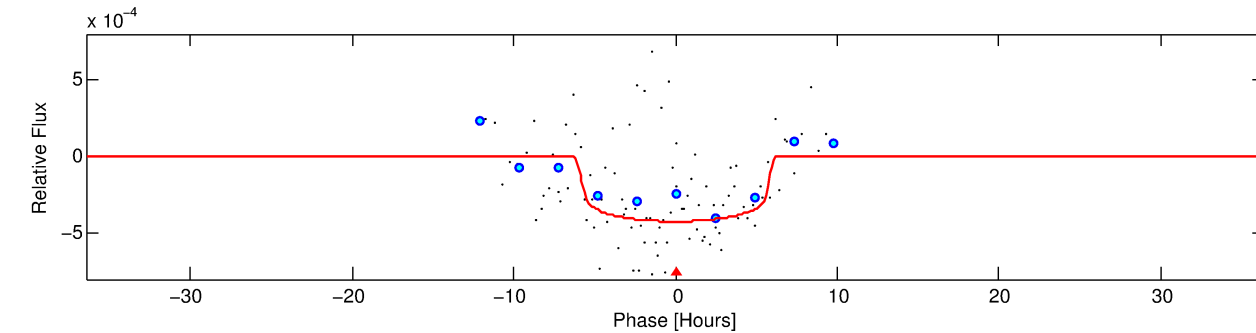
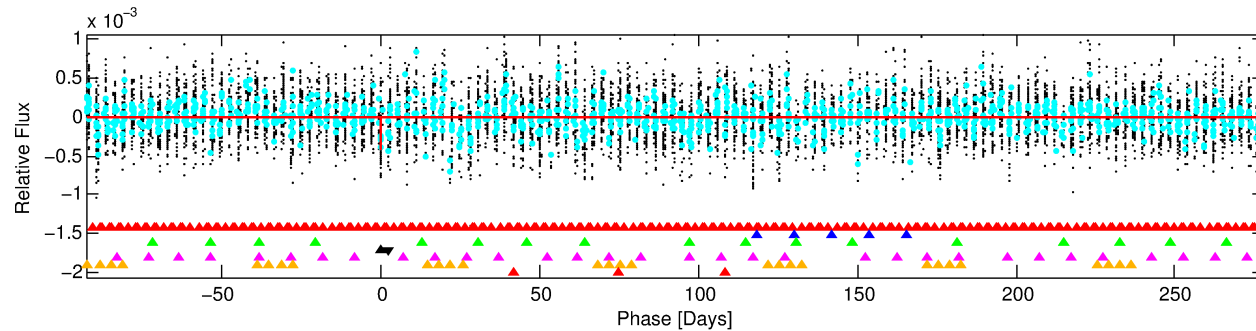
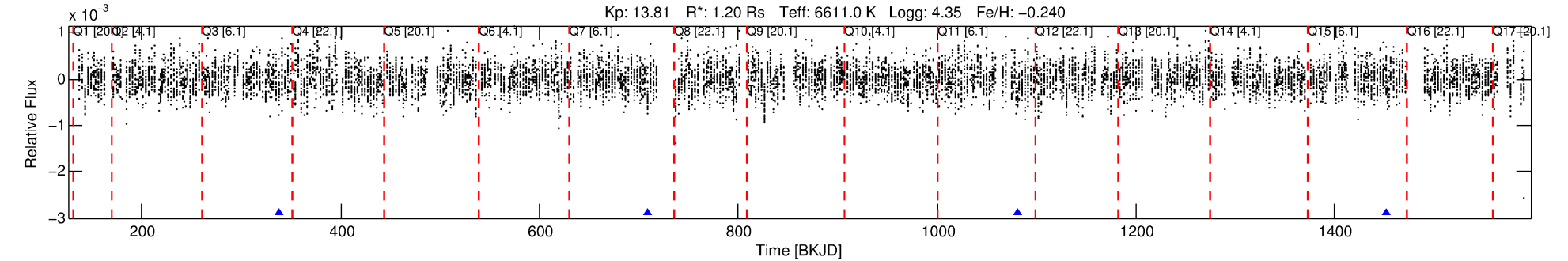
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 005552761-04

No Significant Match Found

DV One-Page Summary

KIC: 5552761 Candidate: 4 of 7 Period: 371.100 d



DV Fit Results:

Period = 371.10039 [0.01615] d
Epoch = 338.1962 [0.0267] BKJD
Rp/R* = 0.0201 [0.0109]
a/R* = 178.63 [522.40]
b = 0.67 [2.34]
Seff = 2.16 [0.87]
Teq = 309 [31] K
Rp = 2.62 [1.67] Re
a = 1.0654 [0.2888] AU
Ag = 24540.78 [29189.91] [0.84 σ]
Teffp = 5980 [1696] K [3.34 σ]

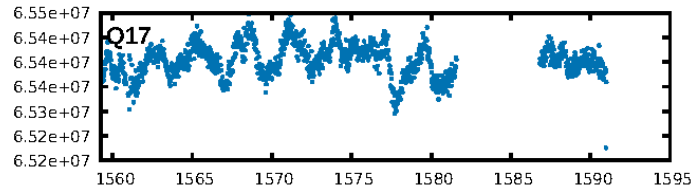
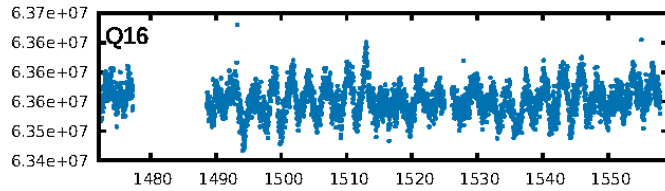
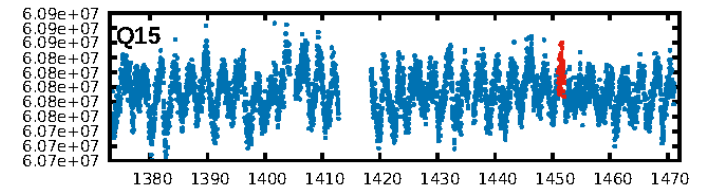
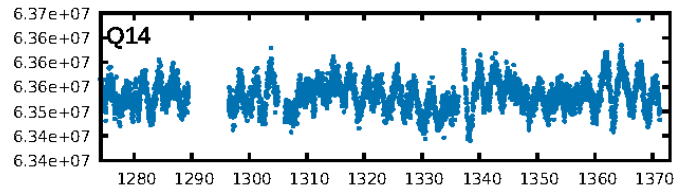
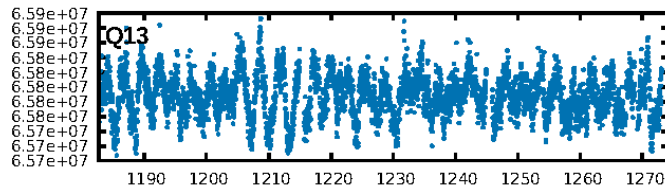
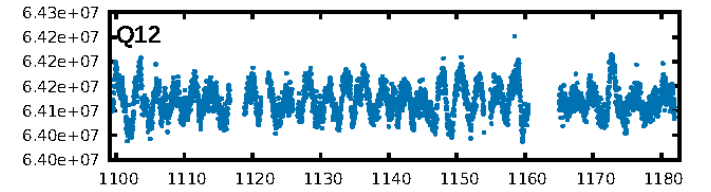
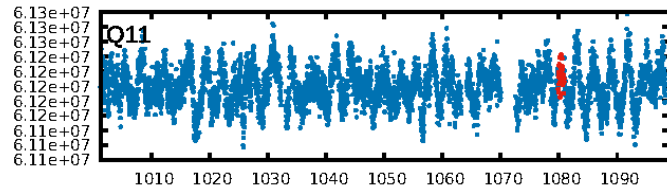
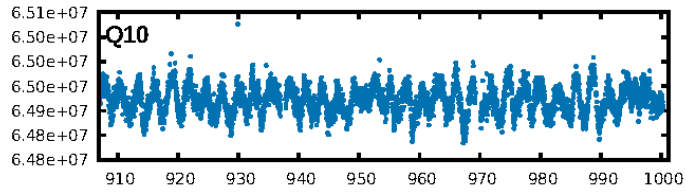
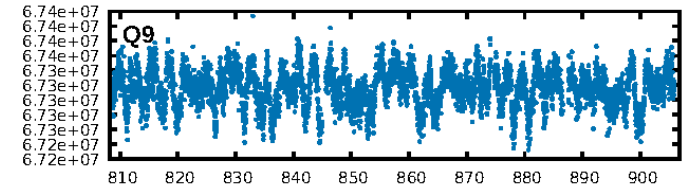
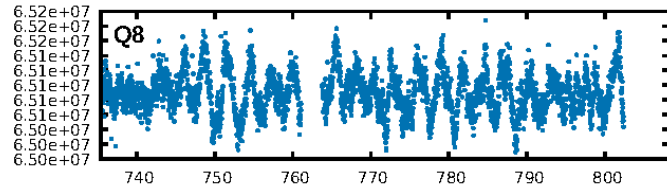
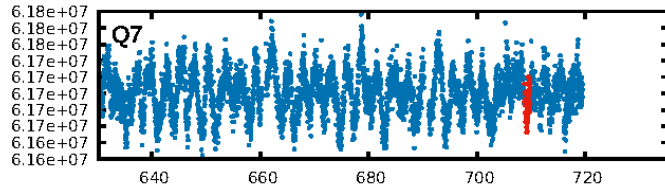
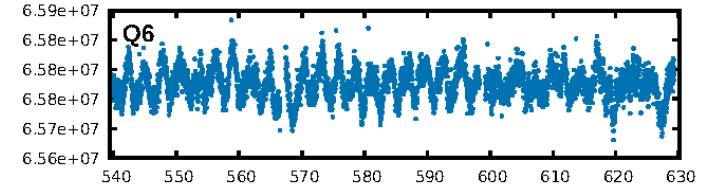
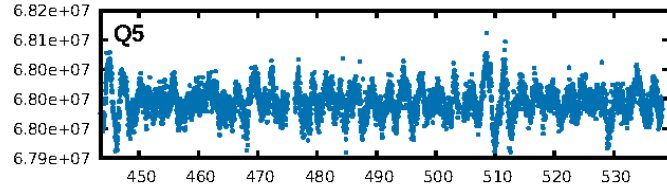
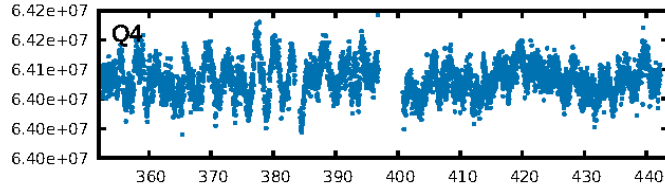
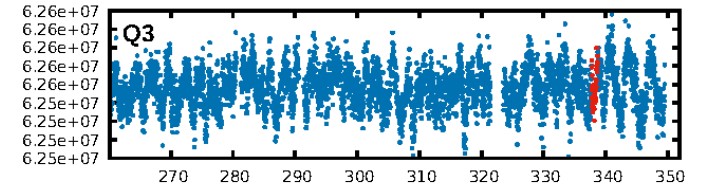
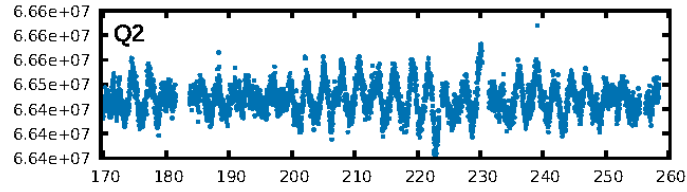
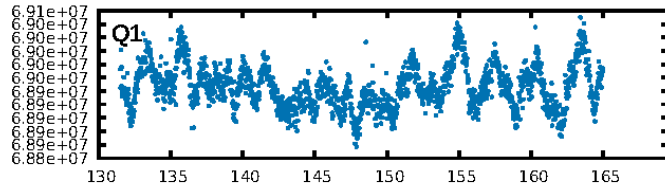
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [4.33 σ]
LongPeriod-sig: 100.0% [56.16 σ]
ModelChiSquare2-sig: 0.0%
ModelChiSquareGof-sig: 34.8%
Bootstrap-pfa: 1.15e-09
RollingBand-fgt: 1.00 [4/4]
GhostDiagnostic-chr: 2.163
Centroid-sig: 4.8%
Centroid-so: 1.008 arcsec [1.25 σ]
OotOffset-rm: 0.128 arcsec [0.70 σ]
KicOffset-rm: 0.125 arcsec [0.52 σ]
OotOffset-st: 0/4/0/0 [4]
KicOffset-st: 0/4/0/0 [4]
DiffImageQuality-fgm: 0.50 [2/4]
DiffImageOverlap-fno: 0.50 [2/4]

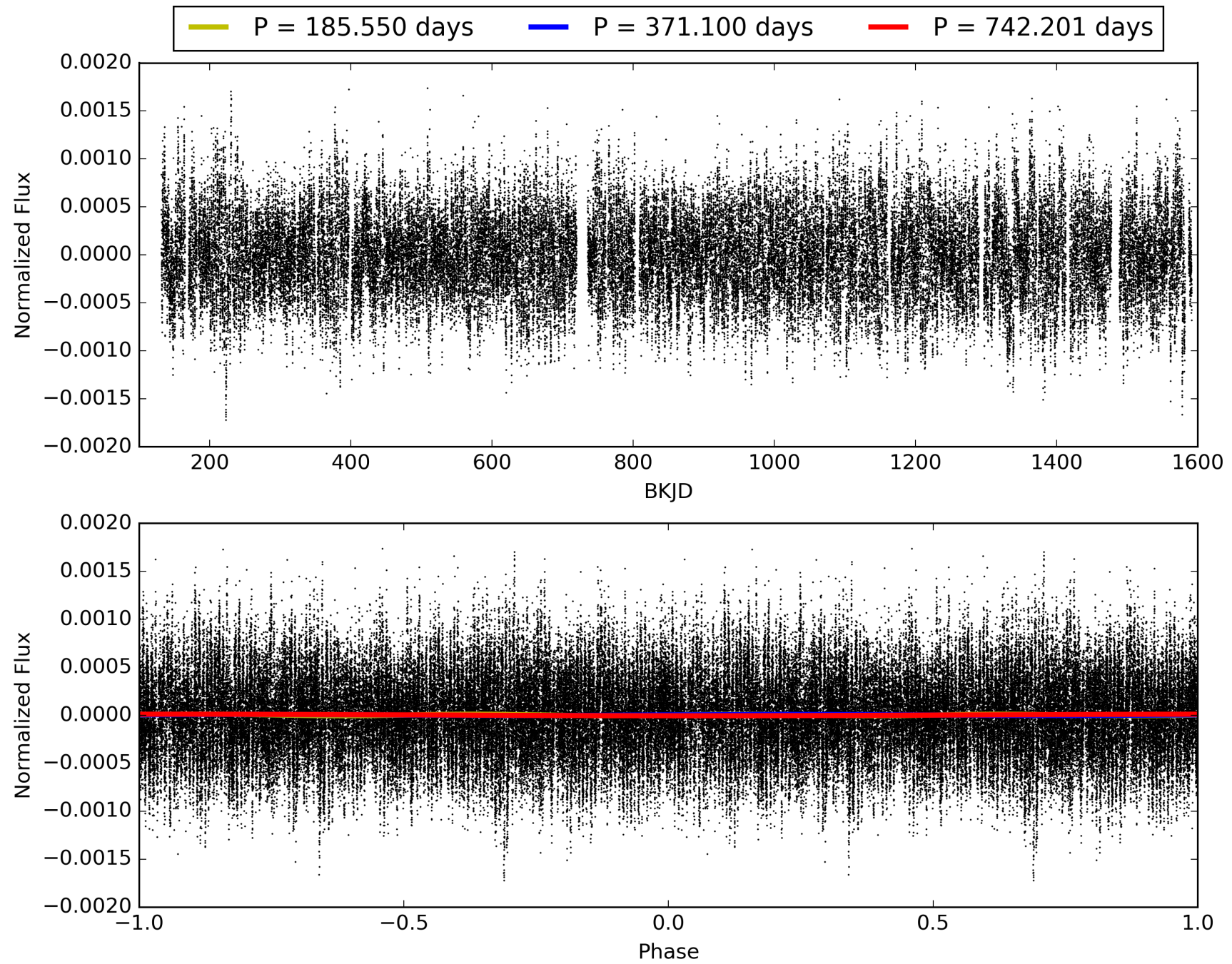
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 03-Feb-2016 08:32:05 Z

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

TCE 005552761-04, PDC Light Curves

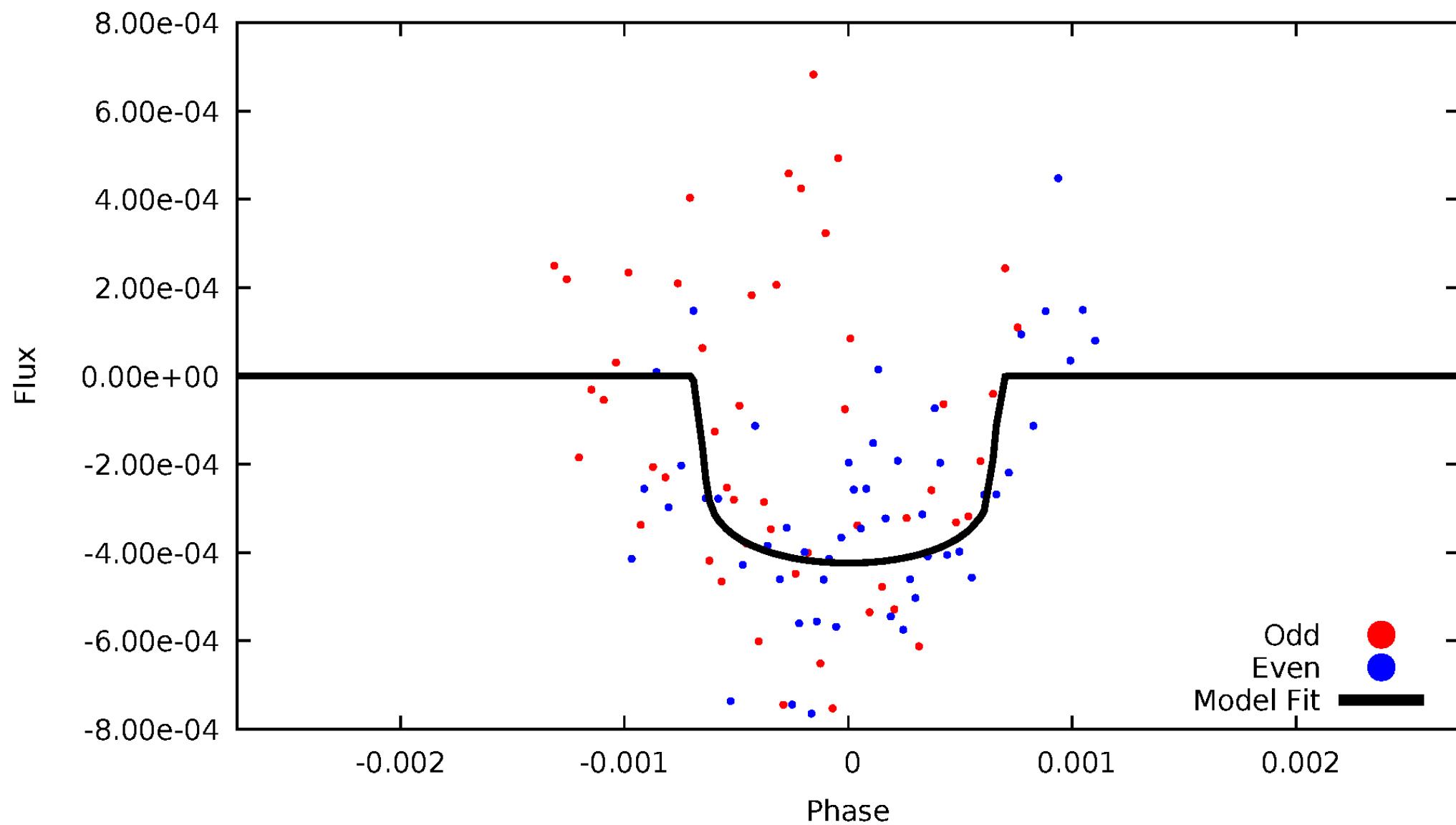


TCE 005552761-04



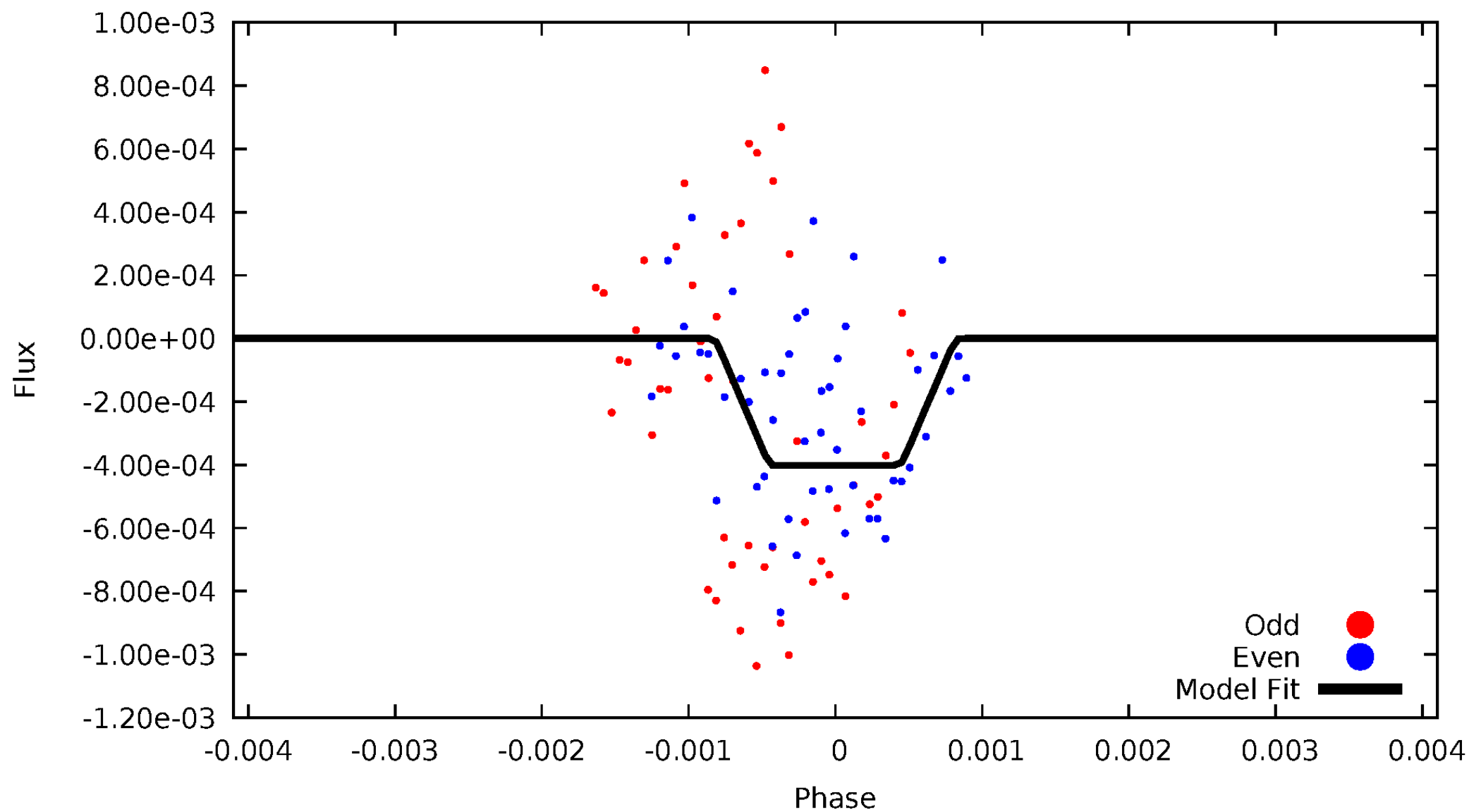
DV Odd/Even

TCE 005552761-04



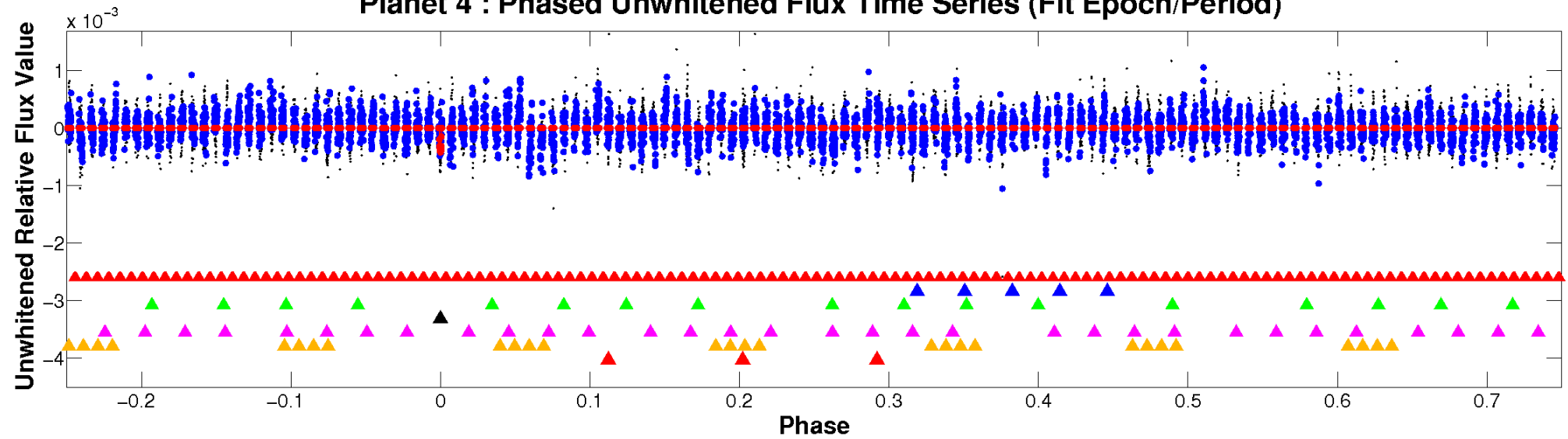
ALT Odd/Even

TCE 005552761-04

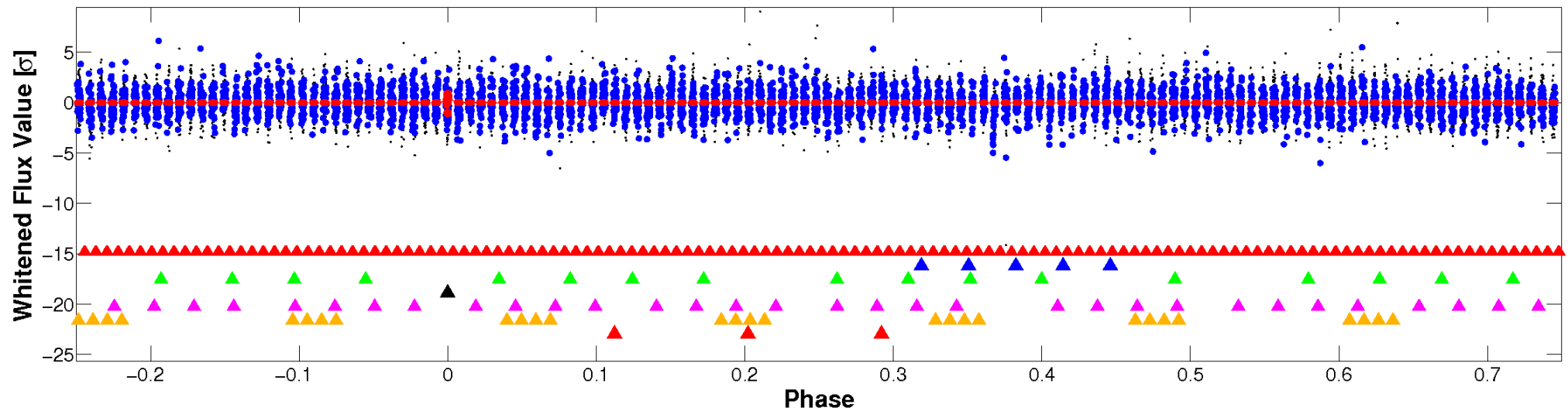


Non-Whitened Vs. Whitened Light Curve

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

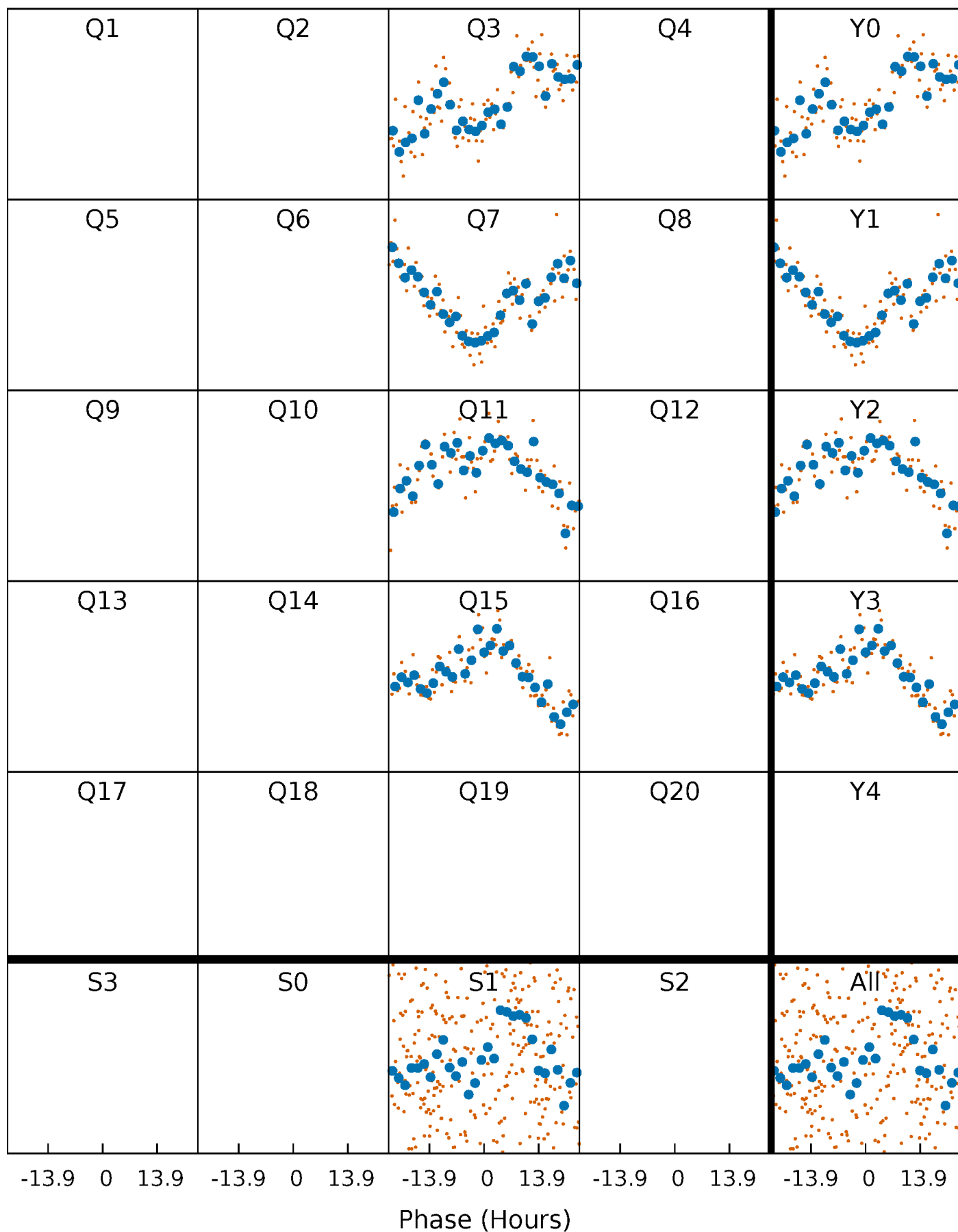


Planet 4 : Phased Whitened Flux Time Series (Fit Epoch/Period)



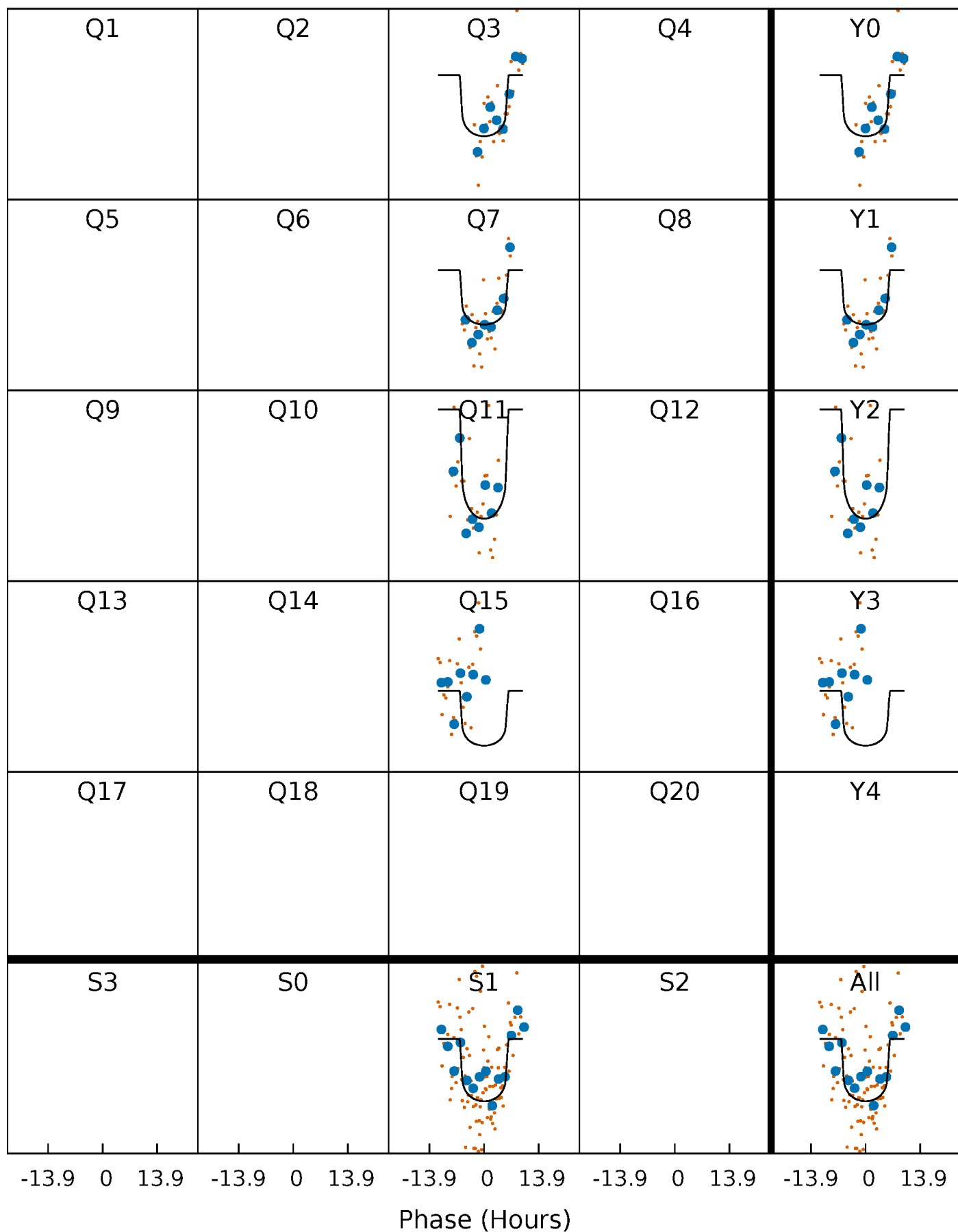
PDC Quarter-Phased Transit Curves

TCE 005552761-04 $P=371.100386$ Days $T_0=338.196161$ (BKJD)



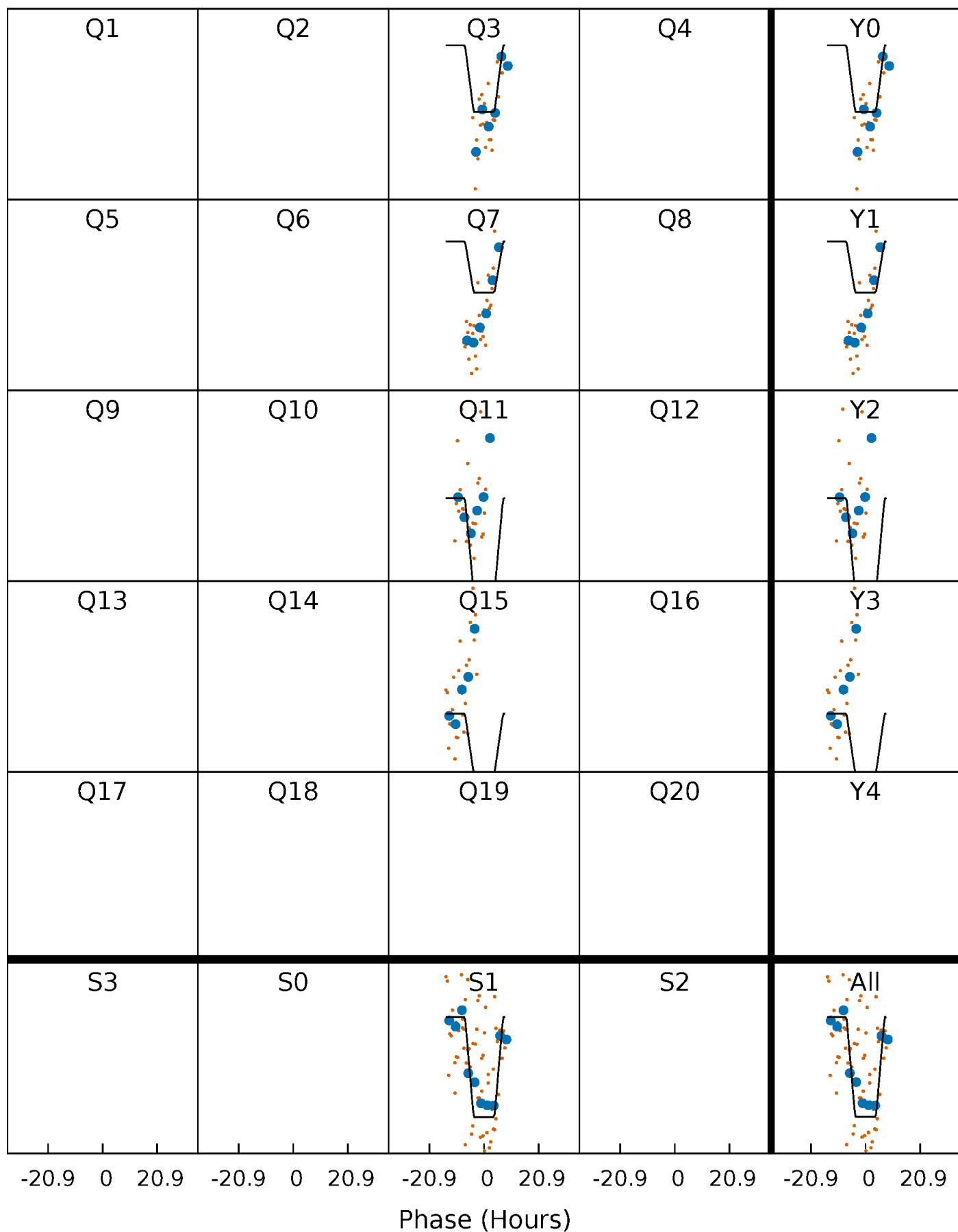
DV Quarter-Phased Transit Curves

TCE 005552761-04 P=371.100386 Days $T_0=338.196161$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

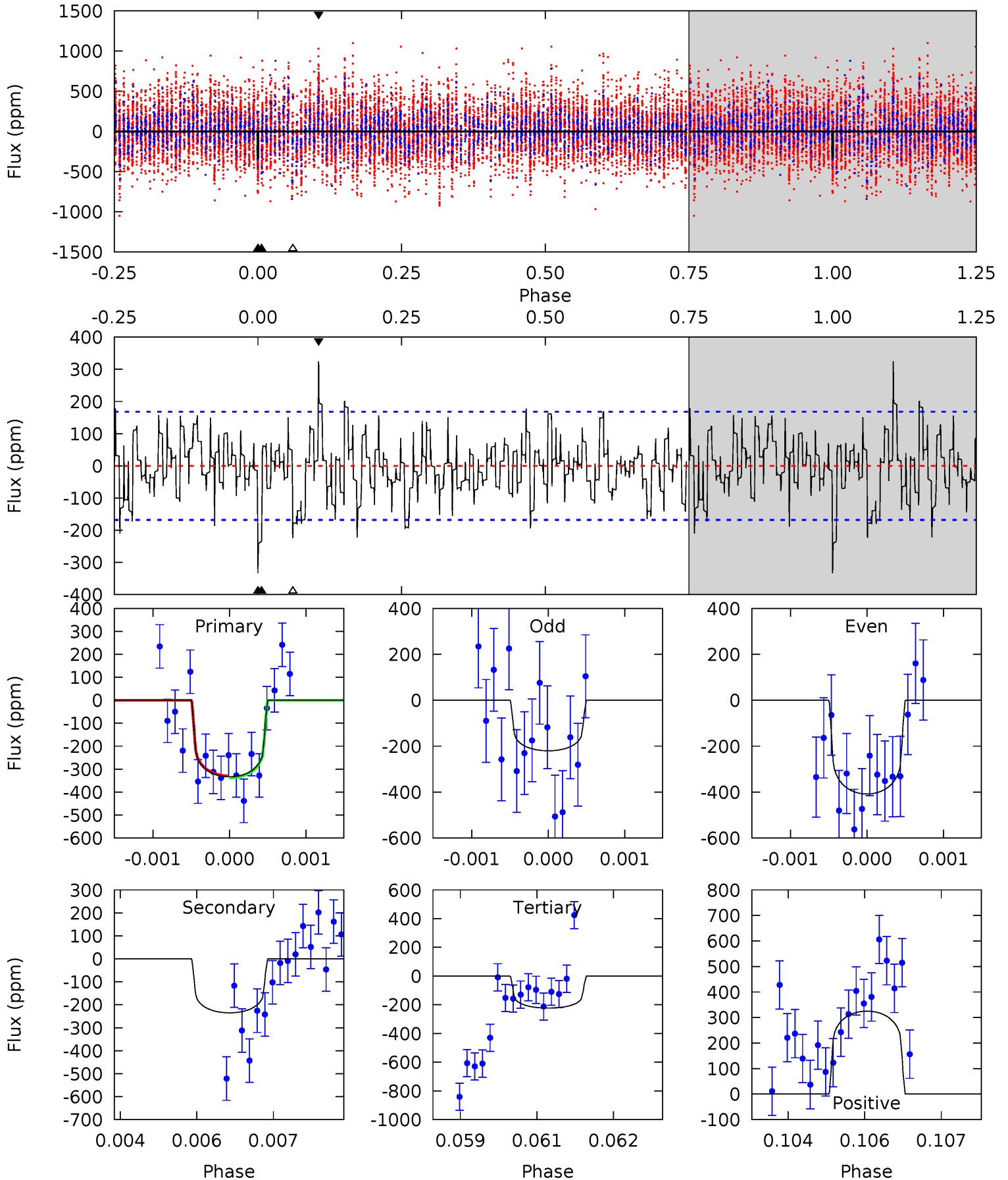
TCE 005552761-04 P=371.114317 Days $T_0=338.273821$ (BKJD)



DV Model-Shift Uniqueness Test

005552761-04, P = 371.100386 Days, E = 338.196161 Days

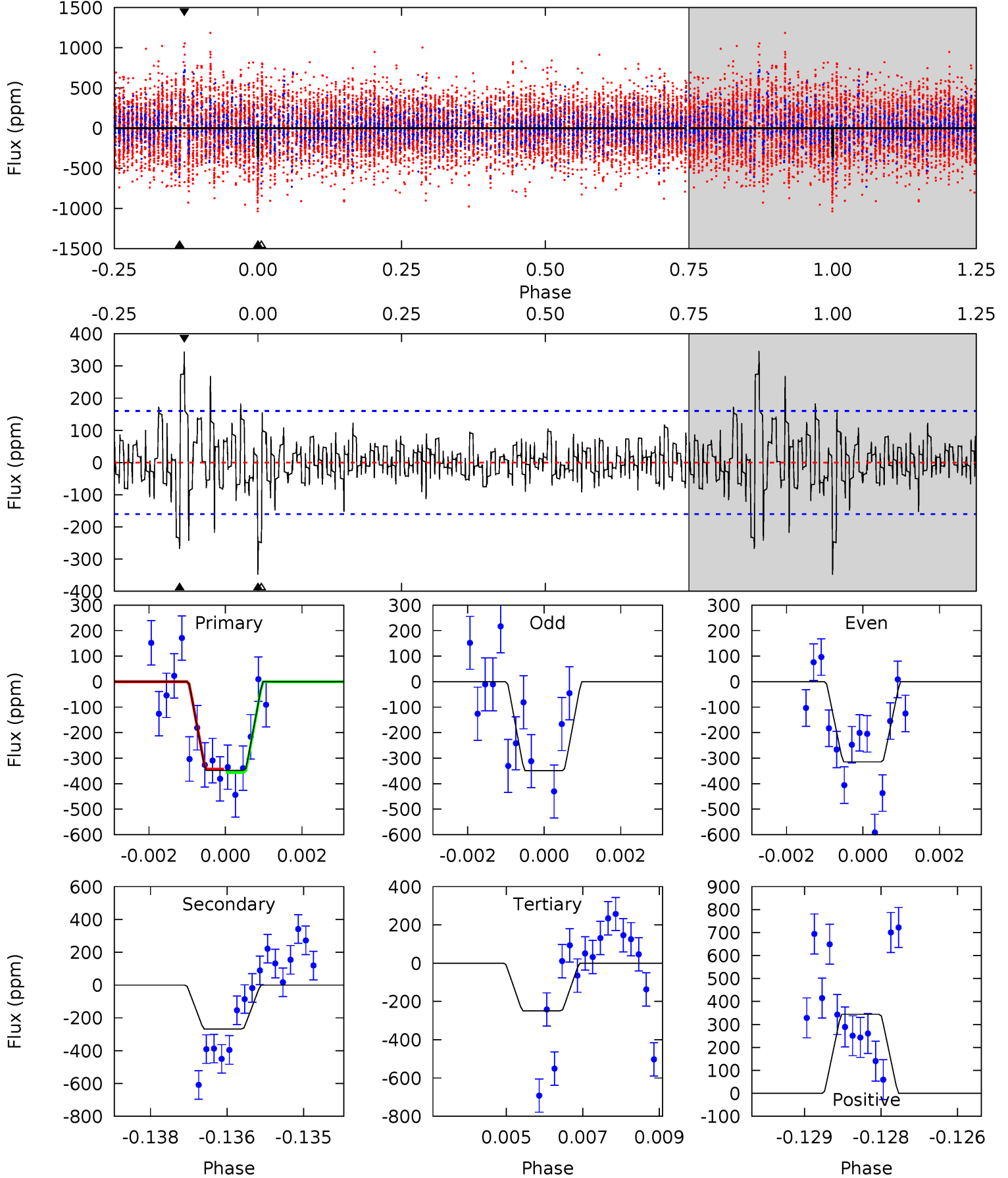
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
10.7	7.54	7.16	10.4	5.39	3.19	2.55	3.54	0.27	0.38	-2.88	3.05	0.65	0.49	0.12



Alt Model-Shift Uniqueness Test

005552761-04, P = 371.114317 Days, E = 338.273821 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
11.7	8.95	8.33	11.5	5.36	3.14	2.01	3.33	0.13	0.62	-2.57	0.58	0.48	0.50	0.21



Stellar Parameters For KIC 005552761

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6611^{+158}_{-218}	$4.351^{+0.081}_{-0.202}$	$-0.240^{+0.250}_{-0.300}$	$1.196^{+0.399}_{-0.160}$	$1.178^{+0.175}_{-0.158}$	$0.970^{+0.354}_{-0.501}$
	+2%/-3%	+2%/-5%	+104%/-125%	+33%/-13%	+15%/-13%	+36%/-52%
Source	PHO1	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 005552761-04 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-235 ± 31	$2.73^{+1.71}_{-1.49}$	437^{+35}_{-22}	5759^{+3006}_{-1030}	19340^{+71088}_{-11635}
Alt.	-267 ± 30	$2.72^{+1.49}_{-1.33}$	436^{+32}_{-22}	5934^{+2734}_{-1072}	22228^{+64626}_{-13208}

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

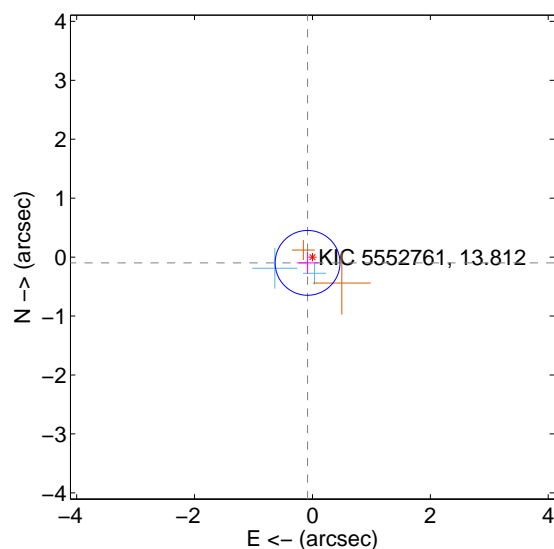
Supplemental centroid analysis for 005552761-04. Kepler magnitude: 13.81. Transit SNR 9.24

There are 2 quarters with good PRF difference image offsets

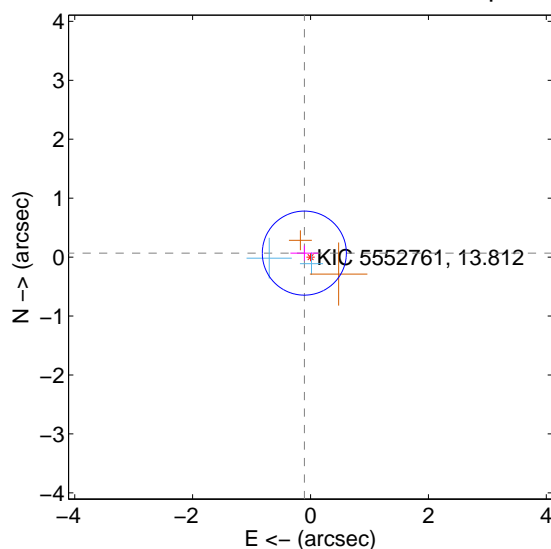
The direct PRF centroid is offset from the target star catalog position by about 0.17 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.128 ± 0.183	0.70	0.083 ± 0.182	-0.098 ± 0.184
PRF-fit source offset from KIC position	0.125 ± 0.238	0.52	0.105 ± 0.237	0.068 ± 0.127
photometric centroid source offset	1.01 ± 0.80	1.25	-0.79 ± 0.80	-0.62 ± 0.82

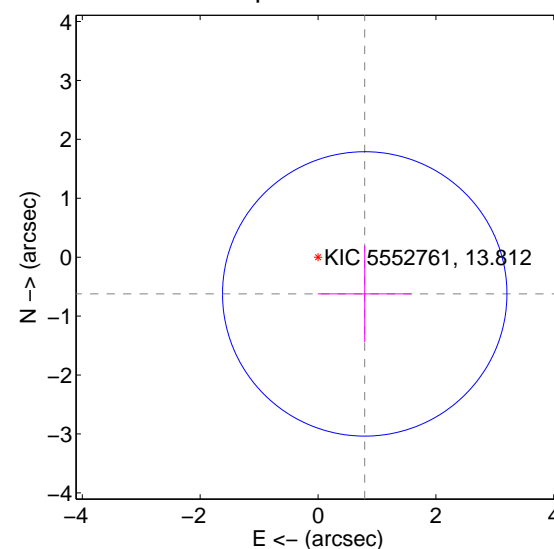
offset from difference PRF-fit to OOT PRF-fit



offset from difference PRF-fit to KIC position

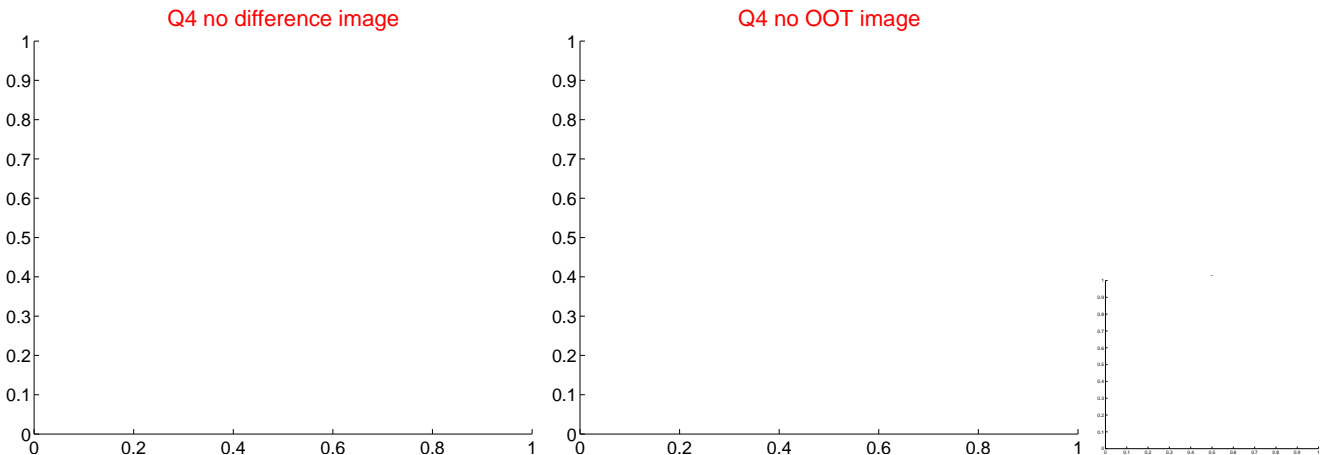
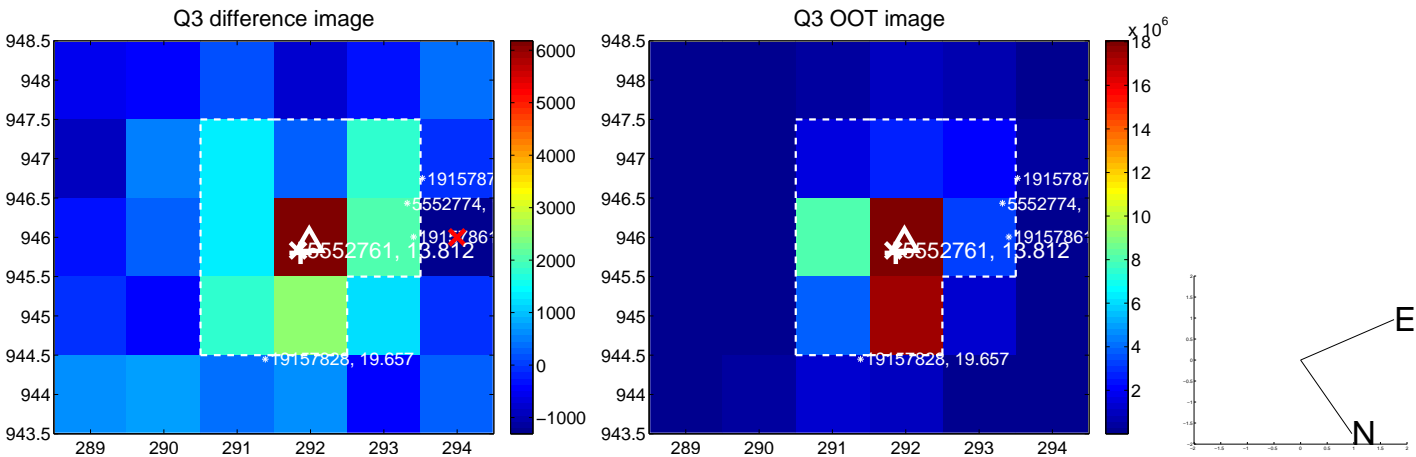
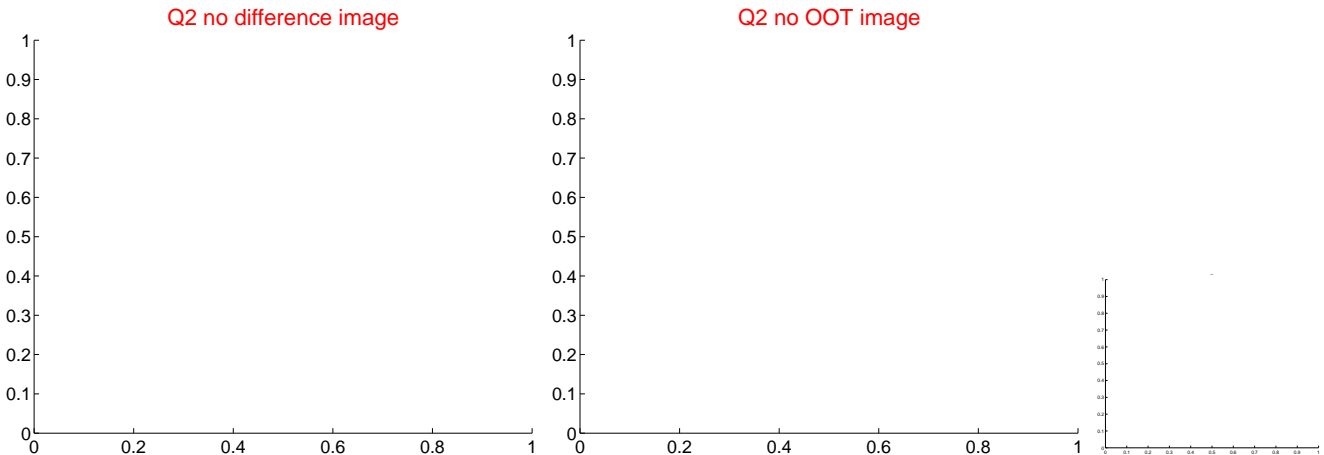
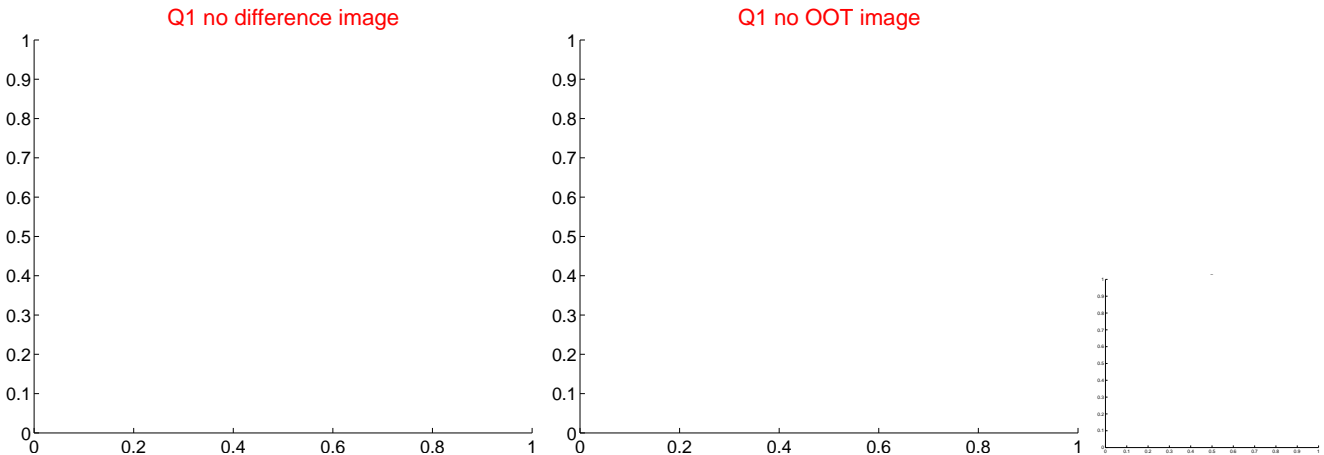


offset from photometric centroids

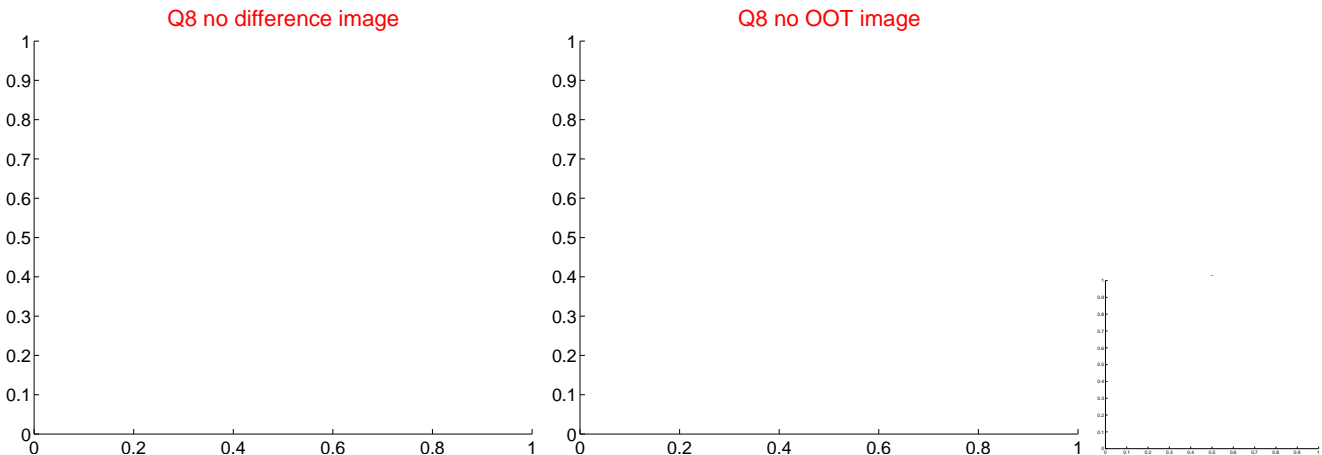
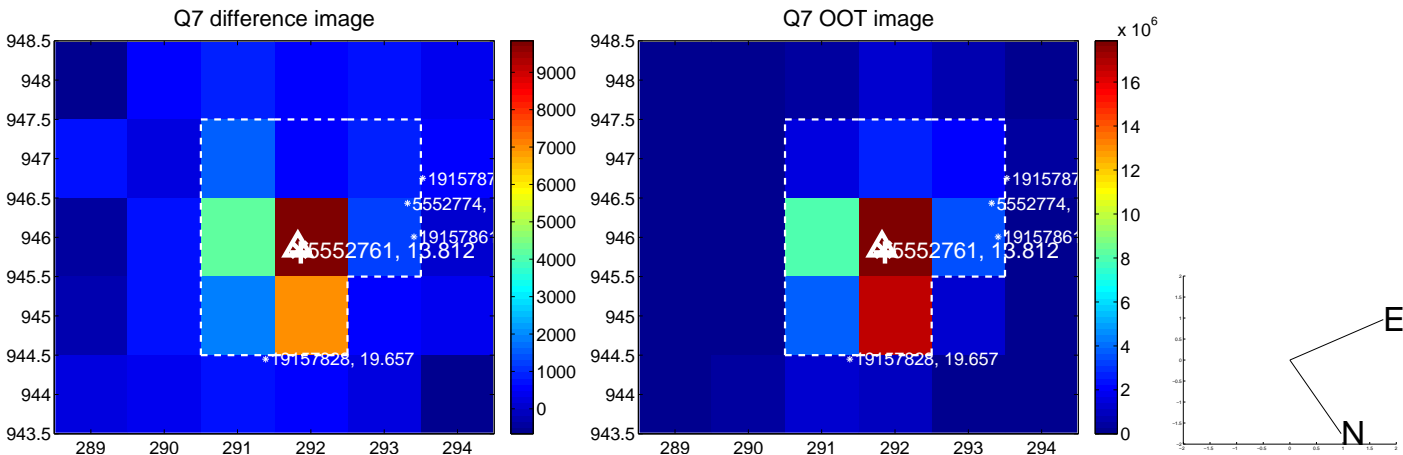
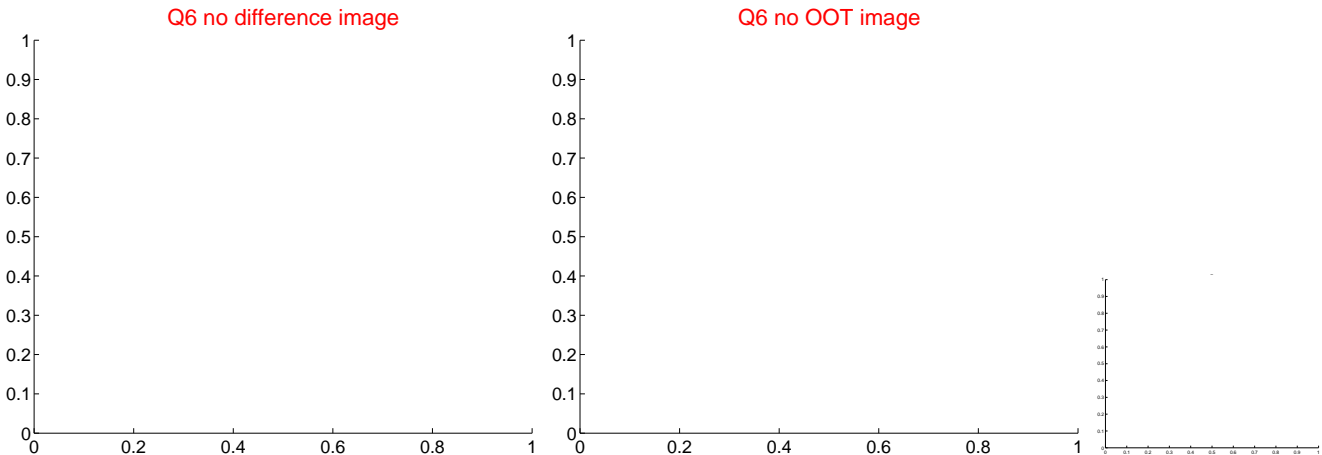
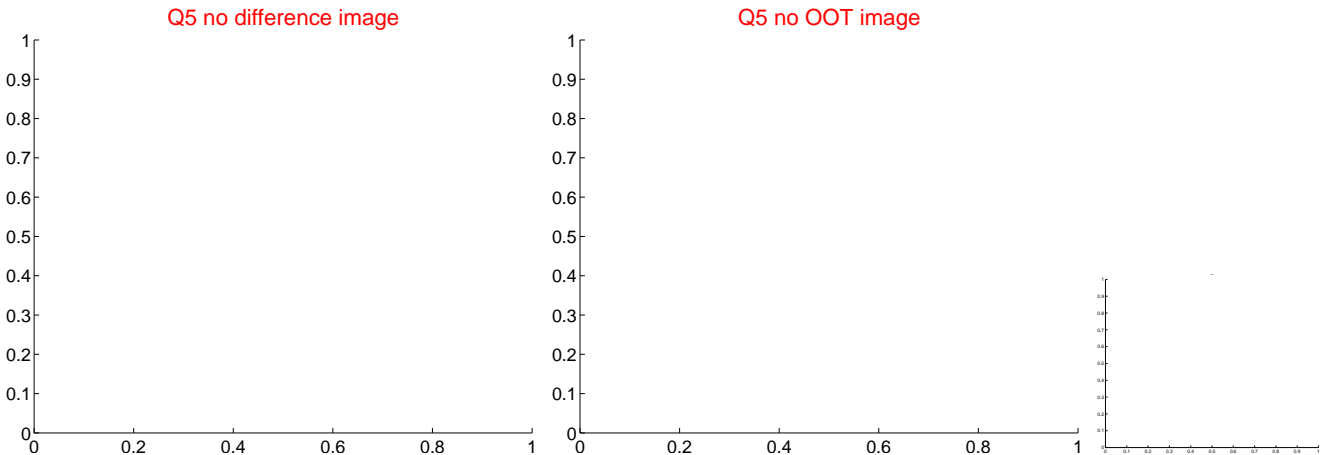


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

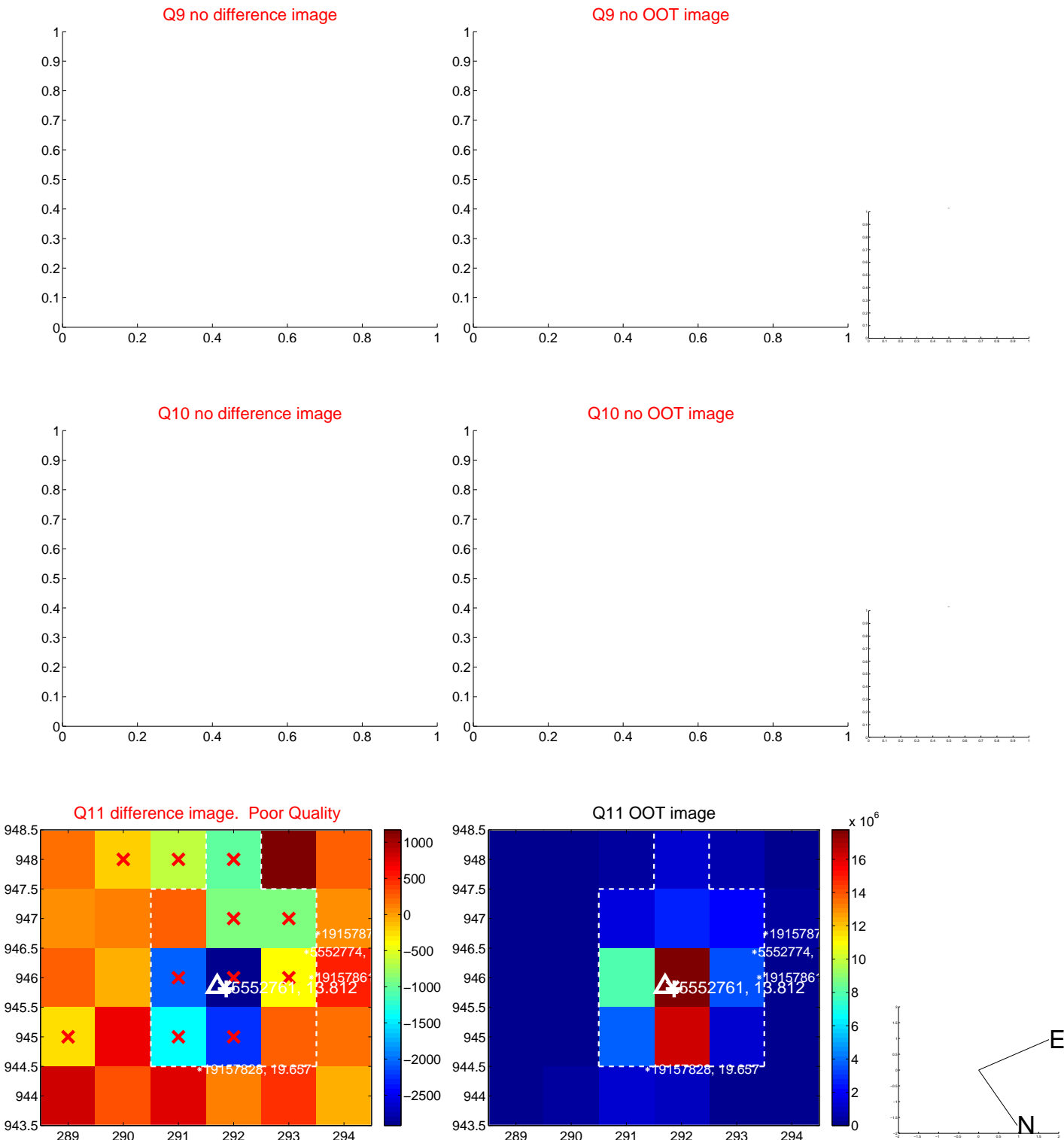
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value



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

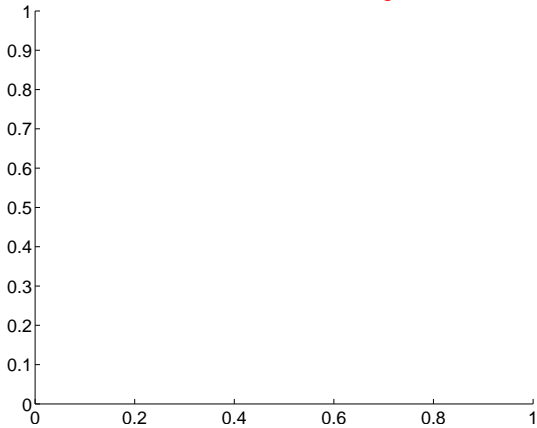


white ×: KIC target position; +: OOT centroid; △: difference centroid. red ✕: large negative pixel value.

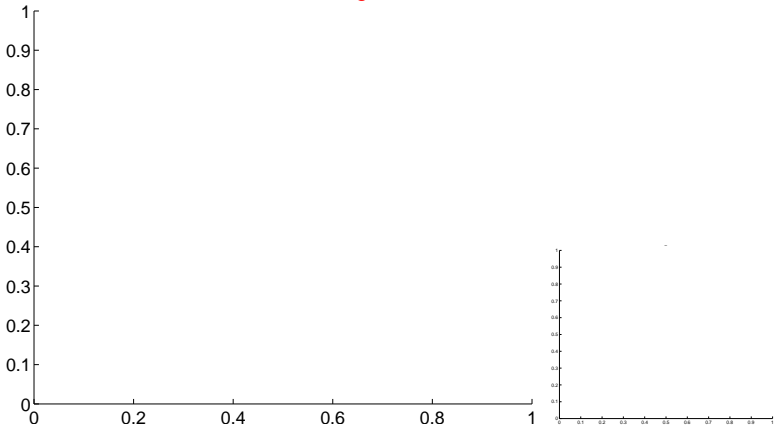


white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.

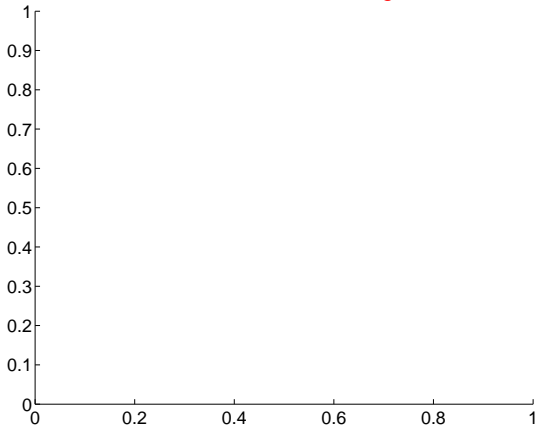
Q13 no difference image



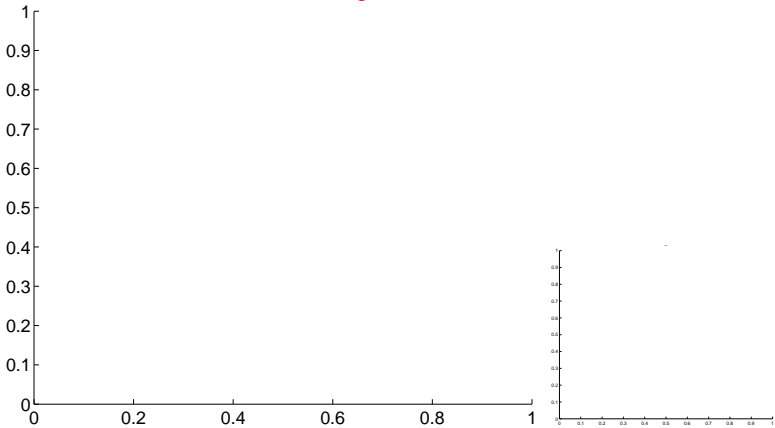
Q13 no OOT image



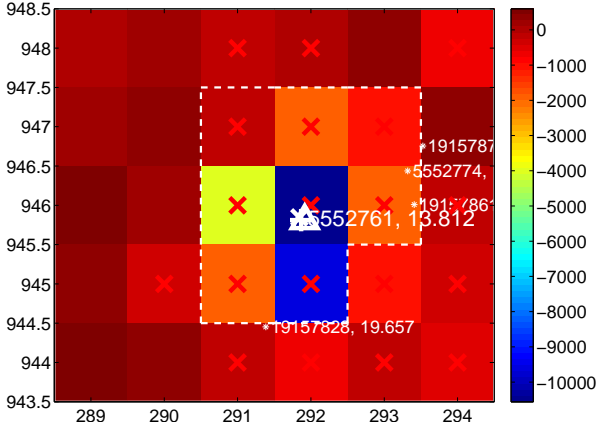
Q14 no difference image



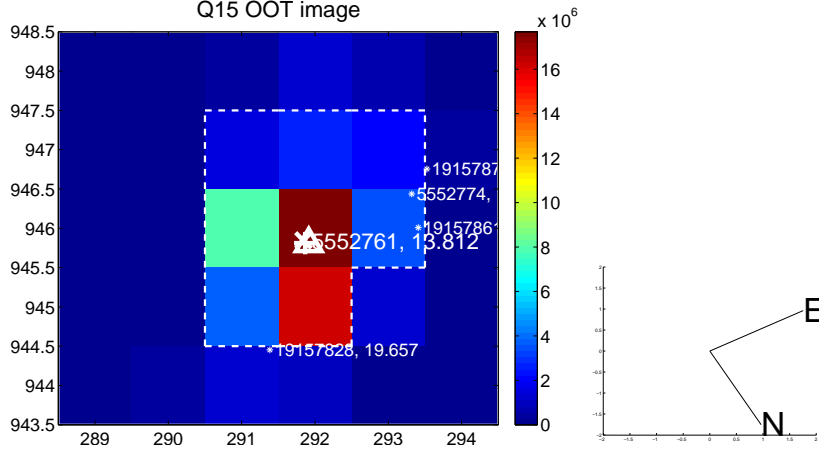
Q14 no OOT image



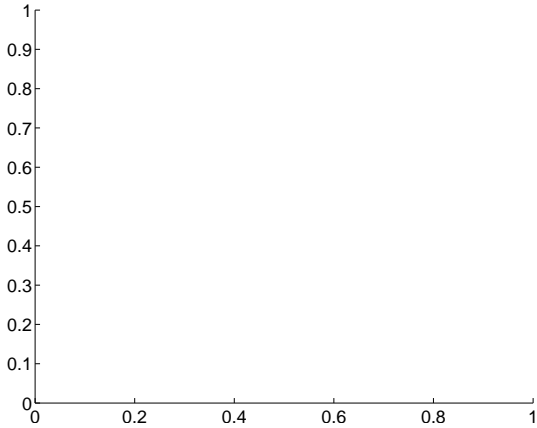
Q15 difference image. Poor Quality



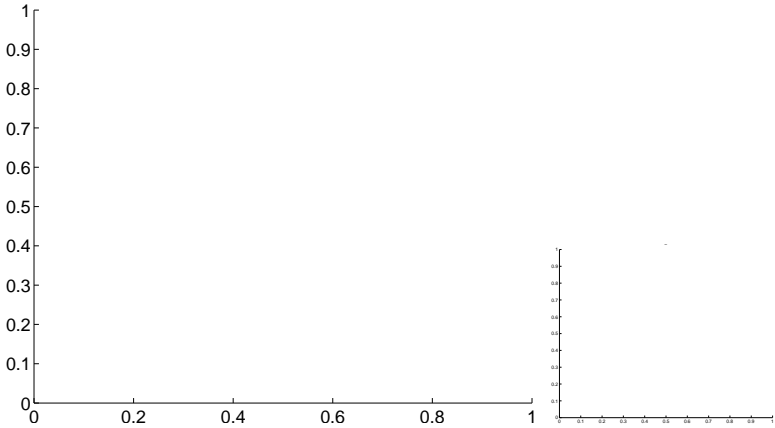
Q15 OOT image



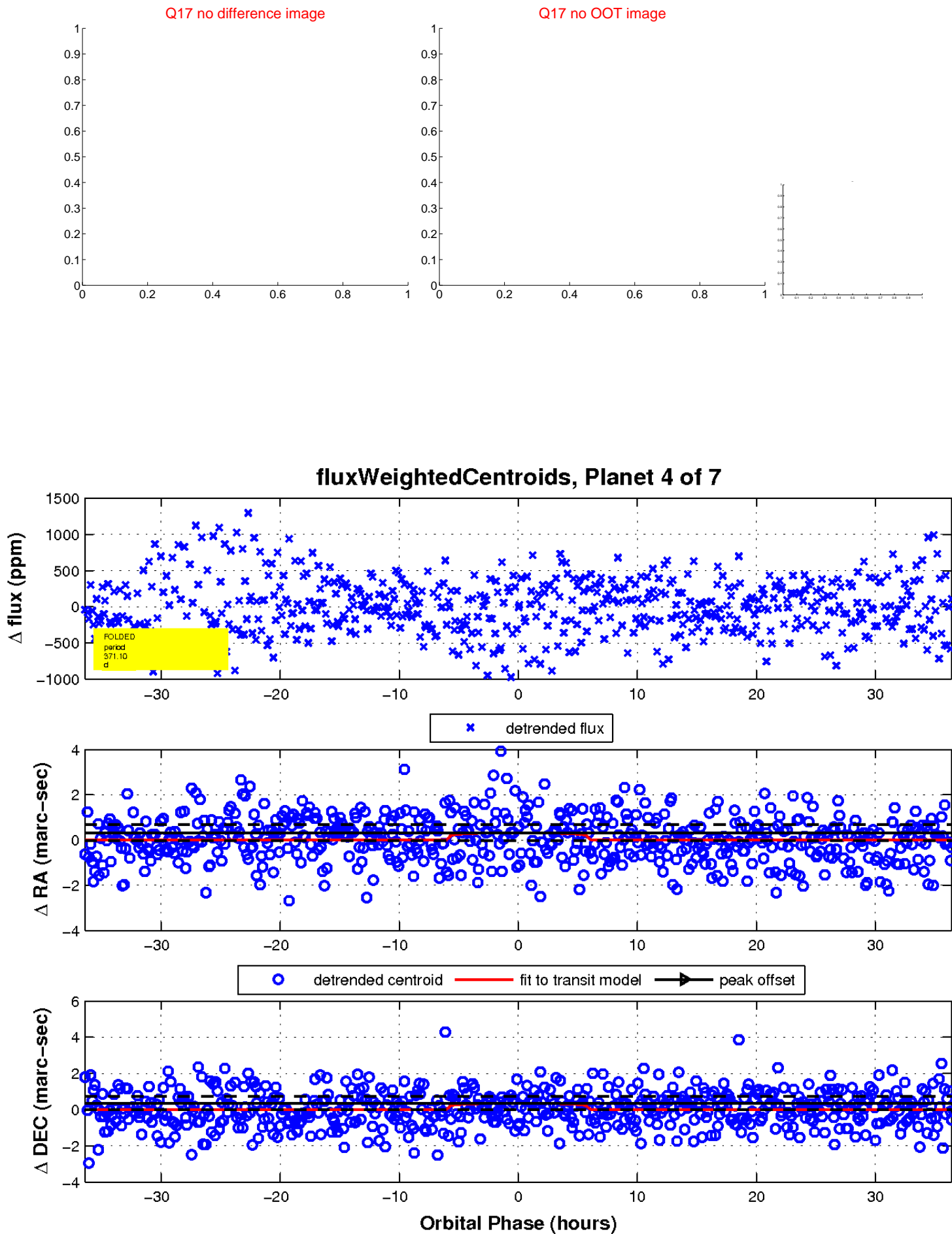
Q16 no difference image



Q16 no OOT image

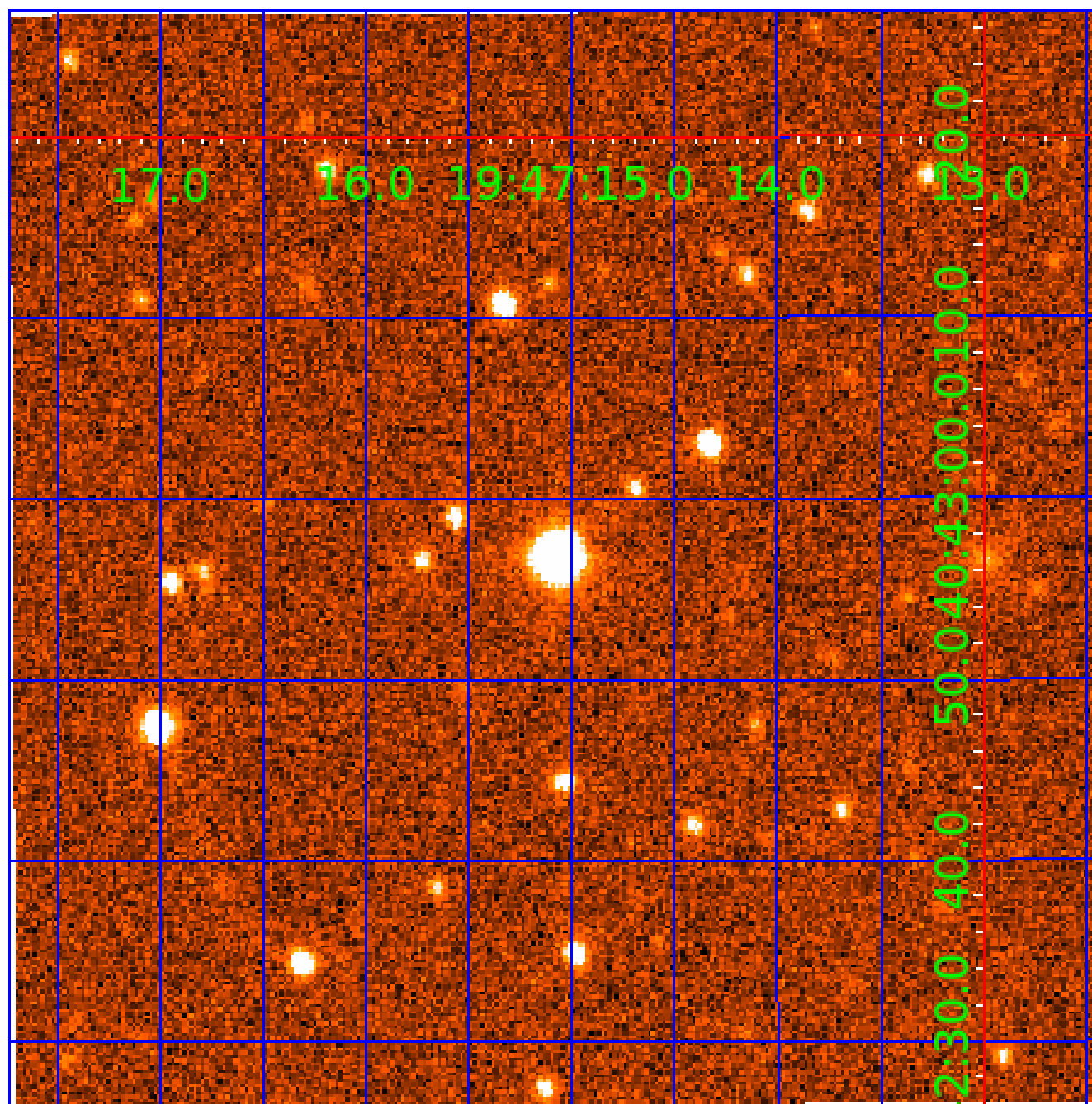


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 005552761

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})
005552761-01	OBS	No	2.789242	133.343296	40.0	18.006	9.8	6.6	1.20	6611	0.76	1464.88
005552761-02	OBS	No	359.297934	132.646674	2300.4	64.233	22.0	15.3	1.20	6611	10.52	2.25
005552761-03	OBS	No	84.444693	215.445111	448.5	21.091	10.9	8.2	1.20	6611	3.02	15.53
005552761-04	OBS	No	371.100386	338.196161	423.6	12.149	10.3	9.2	1.20	6611	2.62	2.16
005552761-05	OBS	No	45.144567	149.322342	342.7	10.178	10.4	10.3	1.20	6611	2.45	35.78
005552761-06	OBS	No	53.529865	138.894361	216.0	12.463	8.9	4.7	1.20	6611	1.99	28.51
005552761-07	OBS	No	404.442174	379.886035	675.1	7.444	8.5	9.0	1.20	6611	3.46	1.92

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
005552761-01	OBS	FP	0.00	1	0	0	0	SWEET_NTL—LPP_DV
005552761-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_SKYE—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—INCONSISTENT_TRANS—CENT_FEW_DIFFS
005552761-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT
005552761-04	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_MARSHALL—LPP_DV—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_POS_ALT—CENT_FEW_DIFFS
005552761-05	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT
005552761-06	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT
005552761-07	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_CHASES_MARSHALL—LPP_DV—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_NONUNIQ_ALT—MOD_TER_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.

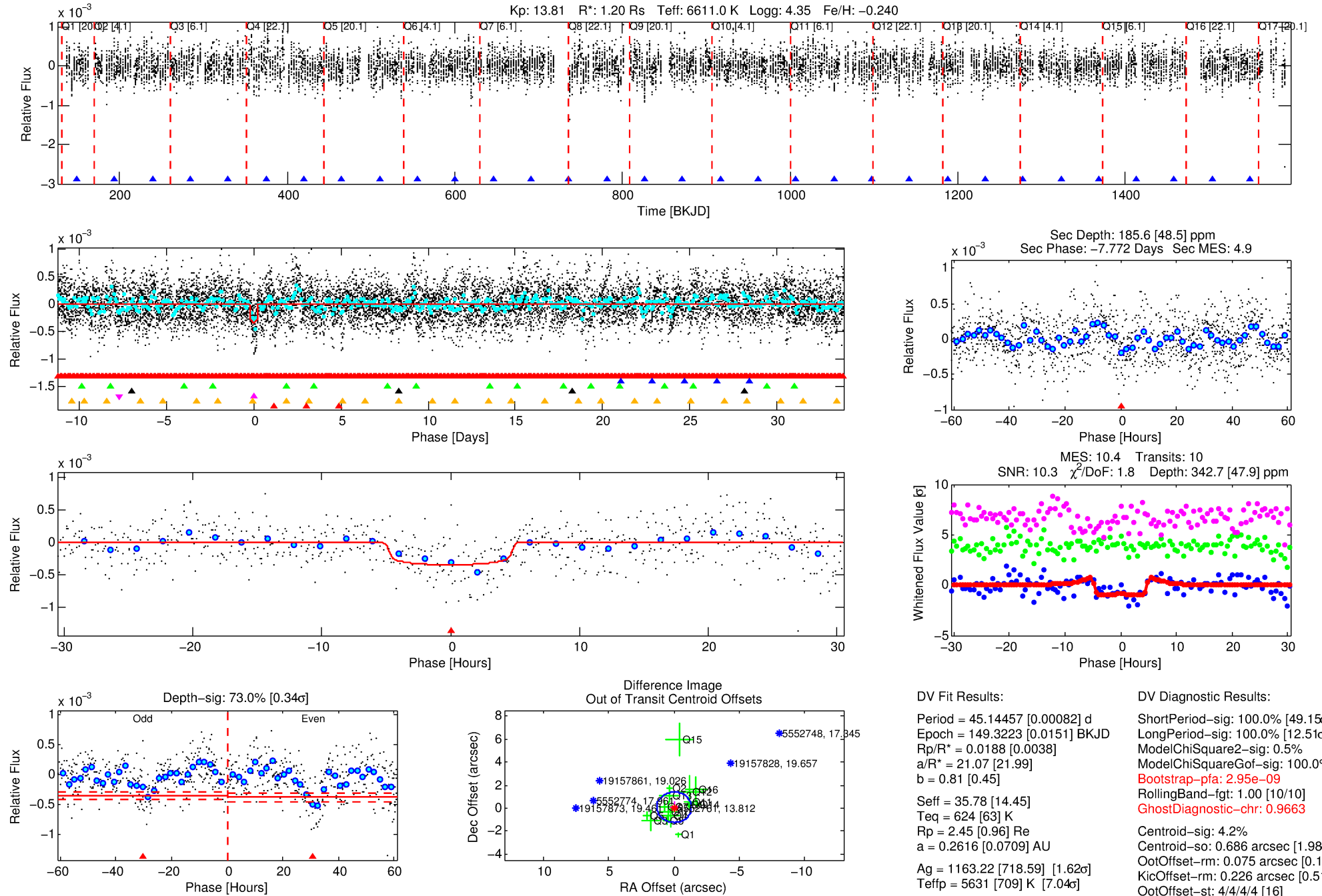
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 005552761-05

No Significant Match Found

DV One-Page Summary

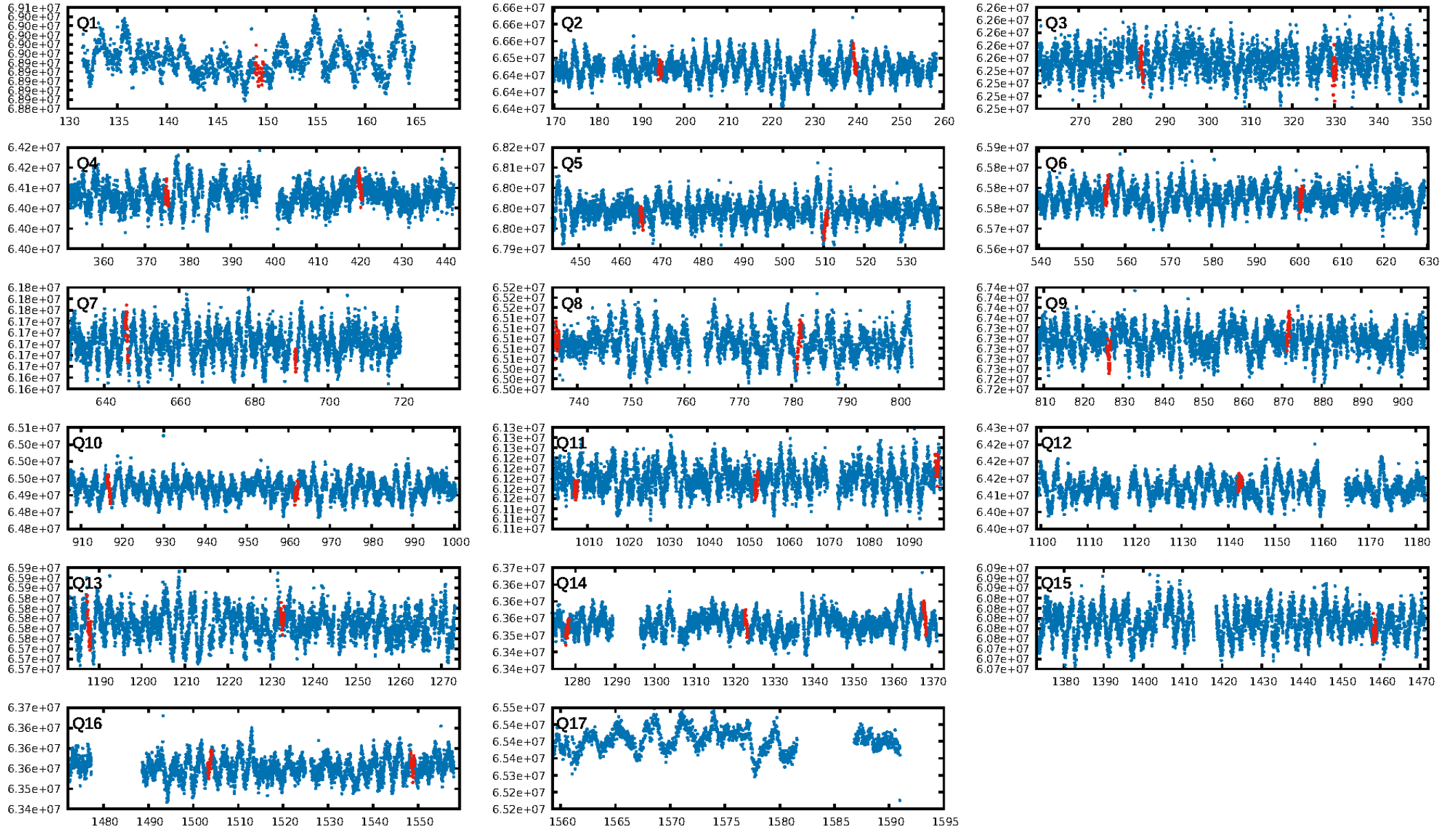
KIC: 5552761 Candidate: 5 of 7 Period: 45.145 d



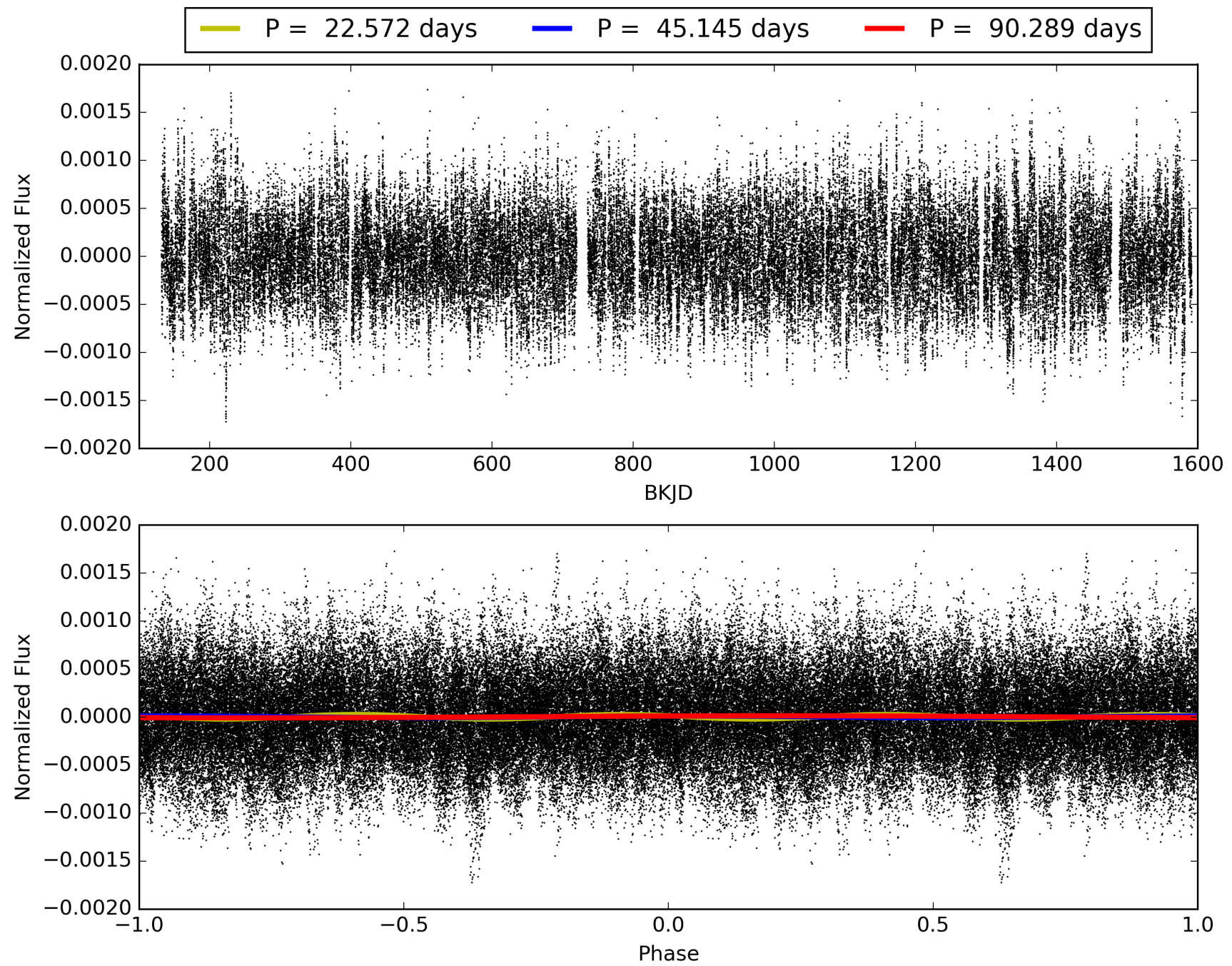
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 03-Feb-2016 08:32:09 Z

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

TCE 00552761-05, PDC Light Curves

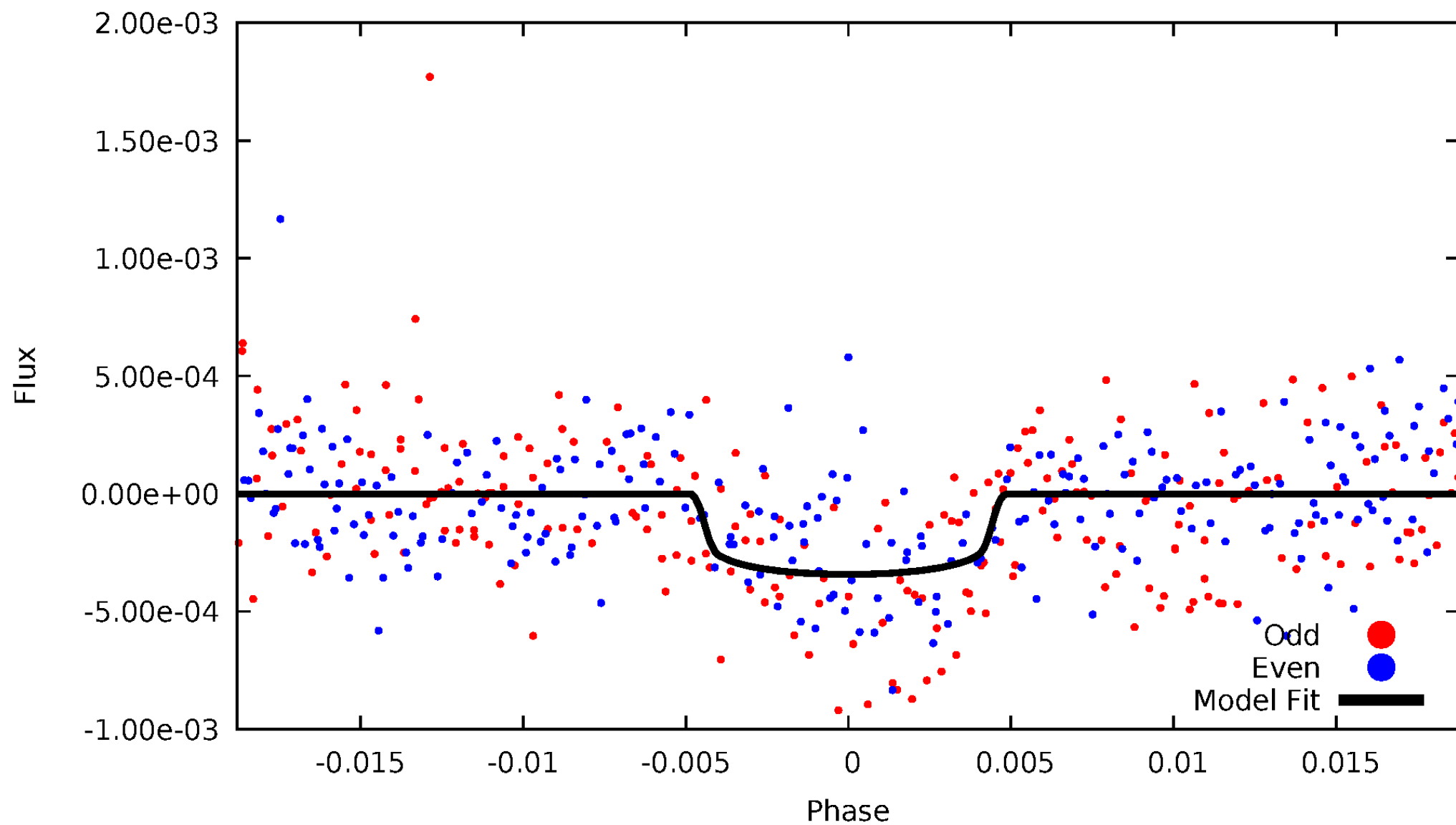


TCE 005552761-05



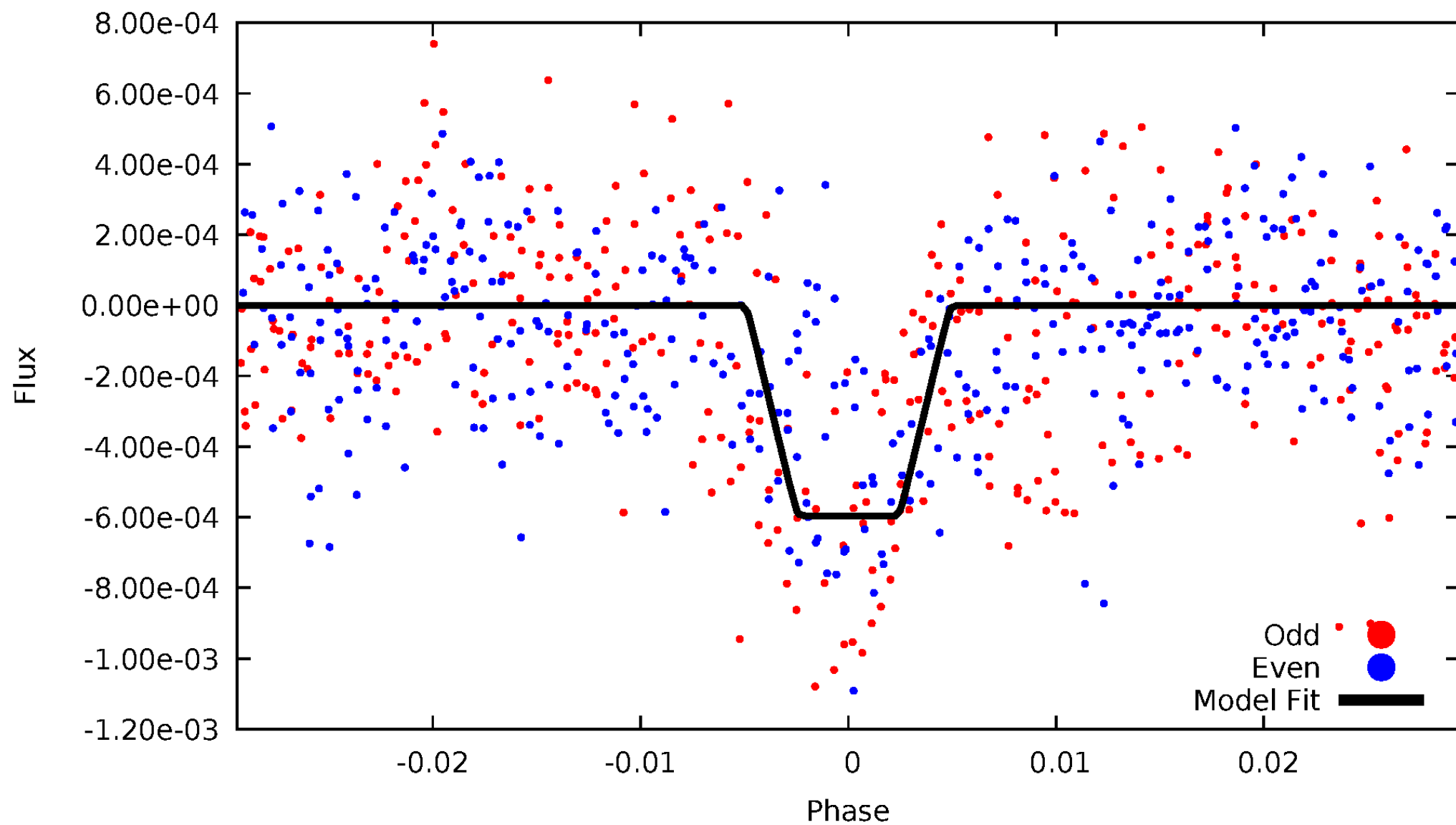
DV Odd/Even

TCE 005552761-05

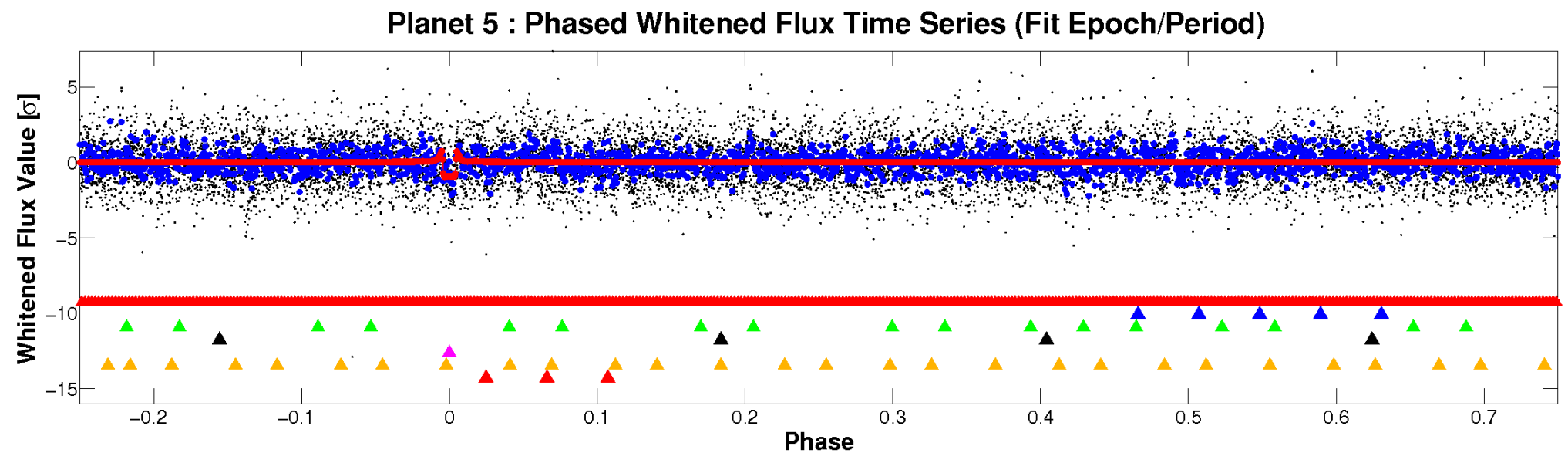
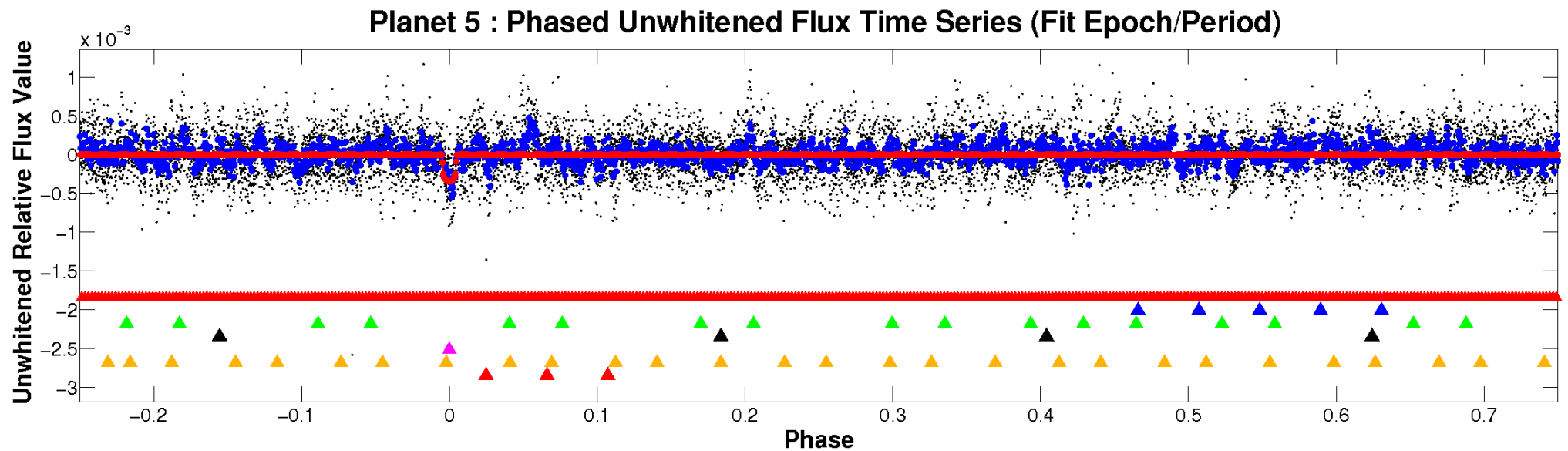


ALT Odd/Even

TCE 005552761-05

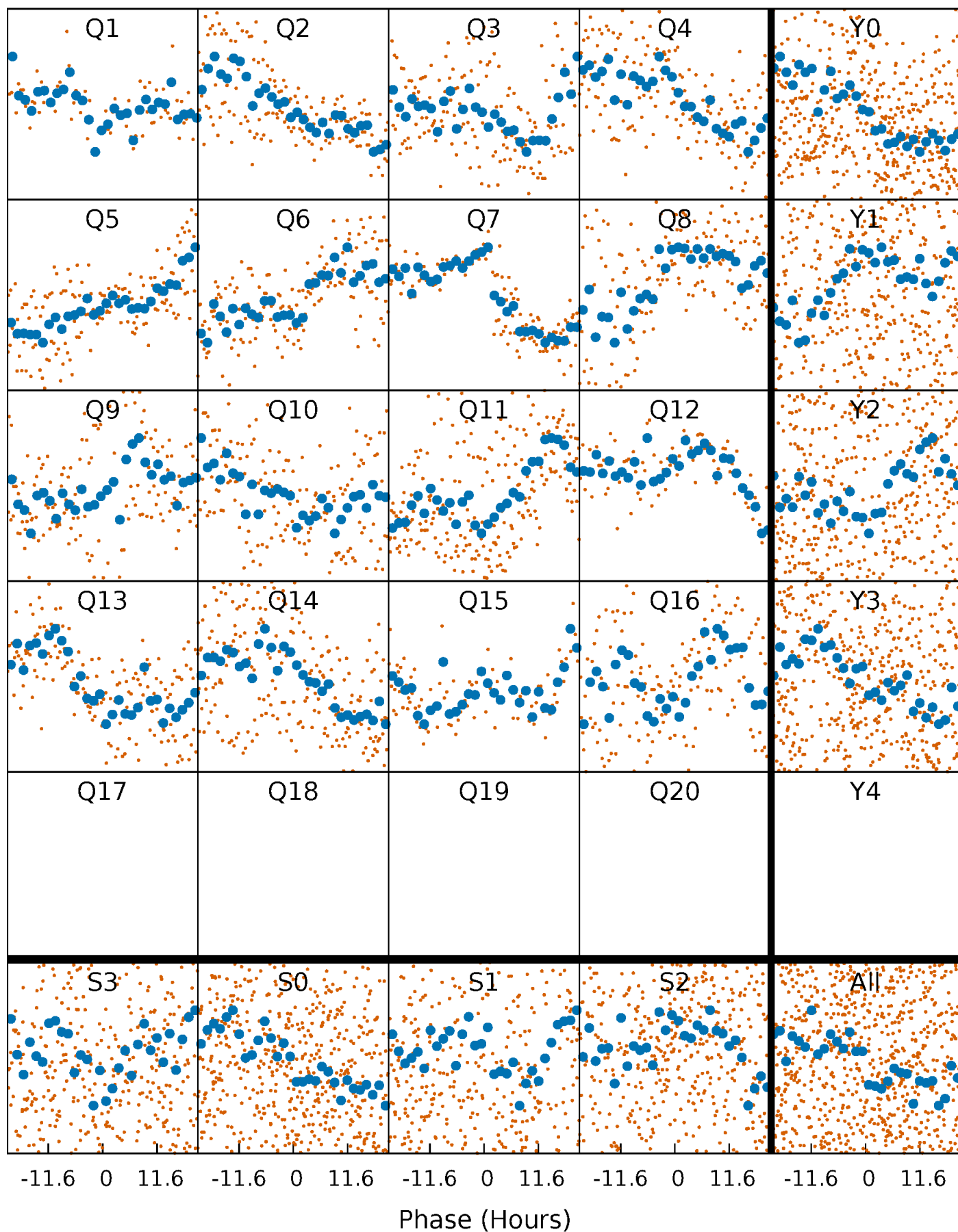


Non-Whitened Vs. Whitened Light Curve



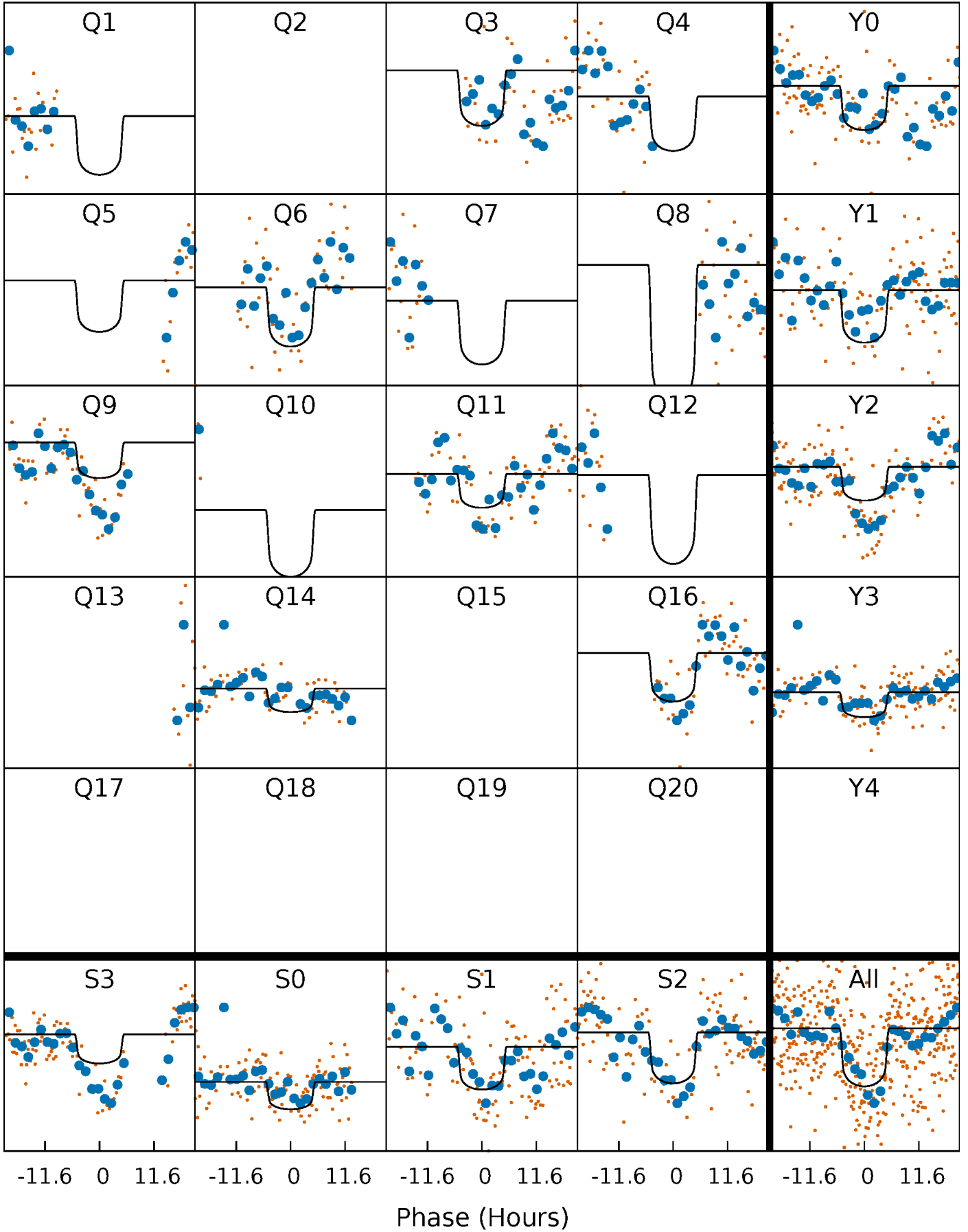
PDC Quarter-Phased Transit Curves

TCE 005552761-05 P= 45.144567 Days $T_0=149.322342$ (BKJD)



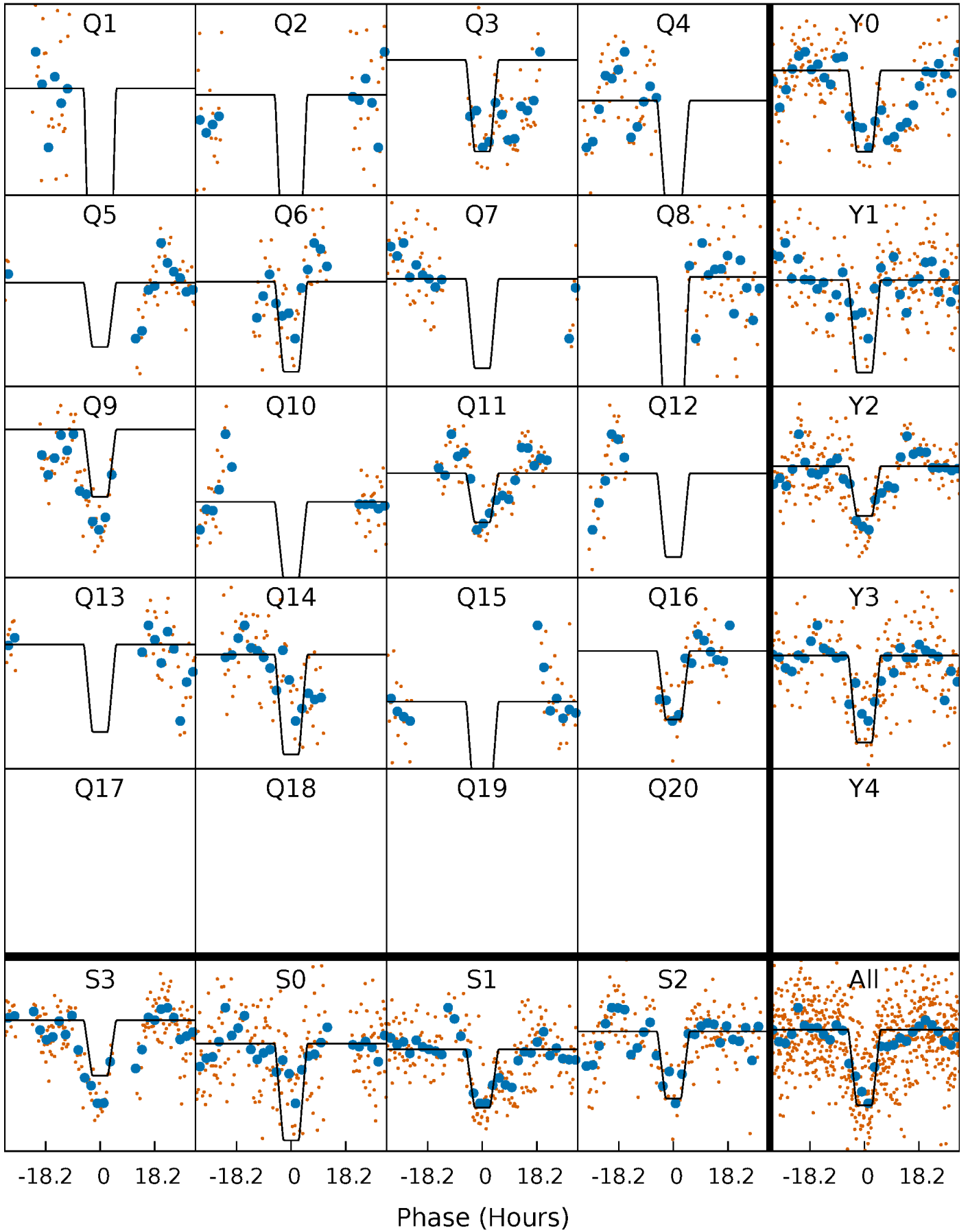
DV Quarter-Phased Transit Curves

TCE 005552761-05 P= 45.144567 Days $T_0=149.322342$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

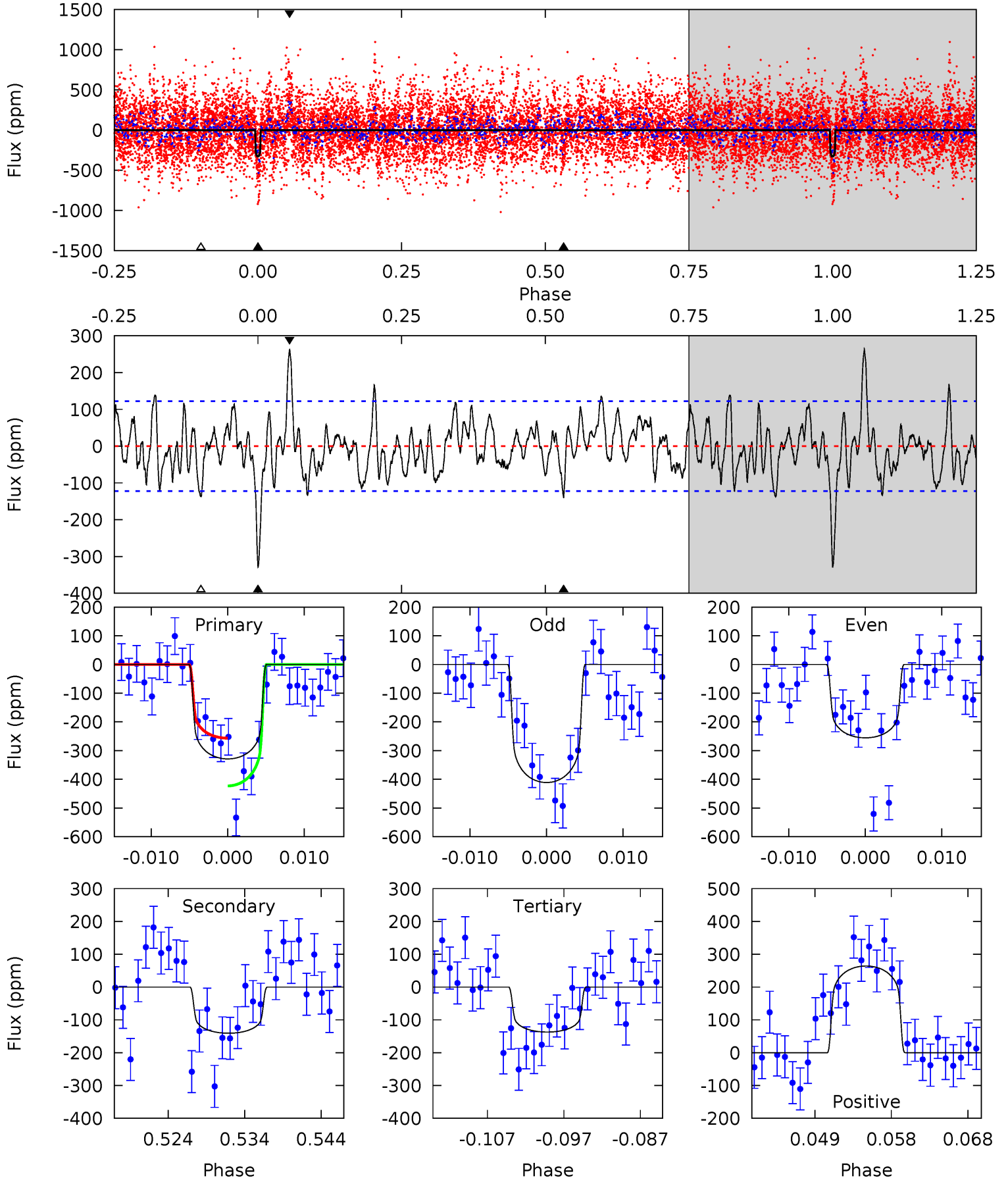
TCE 005552761-05 P= 45.145318 Days $T_0=149.369427$ (BKJD)



DV Model-Shift Uniqueness Test

005552761-05, P = 45.144567 Days, E = 104.177775 Days

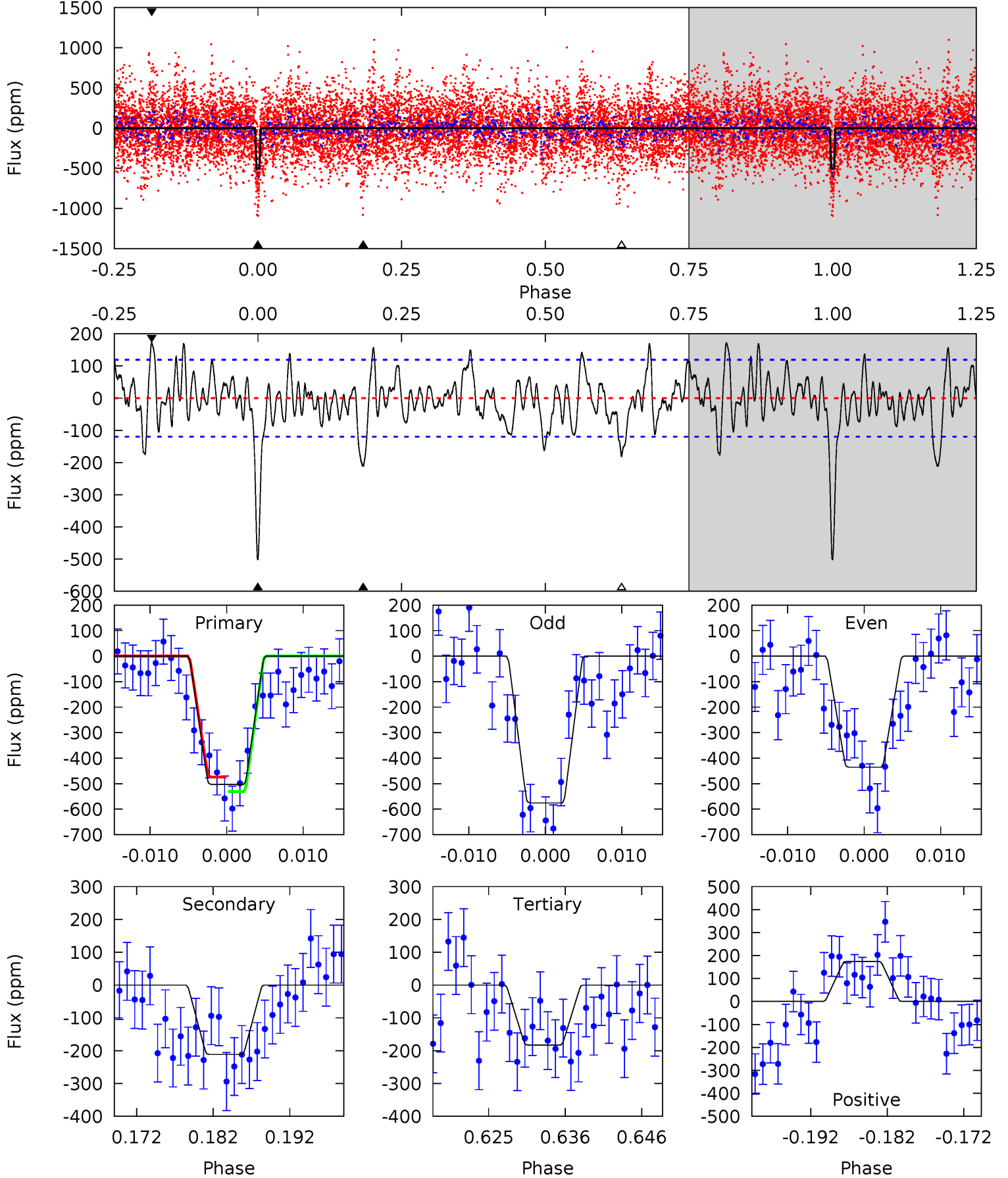
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
13.5	5.79	5.65	10.9	5.03	2.59	2.43	7.90	2.67	0.15	-5.08	3.23	1.25	0.45	3.41



Alt Model-Shift Uniqueness Test

005552761-05, P = 45.145318 Days, E = 104.224109 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
21.2	8.90	7.68	7.31	5.02	2.57	2.59	13.5	13.8	1.21	1.59	2.96	0.96	0.26	1.19



Stellar Parameters For KIC 005552761

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6611^{+158}_{-218}	$4.351^{+0.081}_{-0.202}$	$-0.240^{+0.250}_{-0.300}$	$1.196^{+0.399}_{-0.160}$	$1.178^{+0.175}_{-0.158}$	$0.970^{+0.354}_{-0.501}$
	+2%/-3%	+2%/-5%	+104%/-125%	+33%/-13%	+15%/-13%	+36%/-52%
Source	PHO1	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 005552761-05 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-141 ± 24	$2.55^{+0.62}_{-0.56}$	886^{+69}_{-49}	5297^{+618}_{-477}	799^{+531}_{-297}
Alt.	-212 ± 24	$3.31^{+0.69}_{-0.63}$	885^{+65}_{-49}	5173^{+438}_{-374}	726^{+367}_{-236}

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 $A_{obs} \gg 1.0$

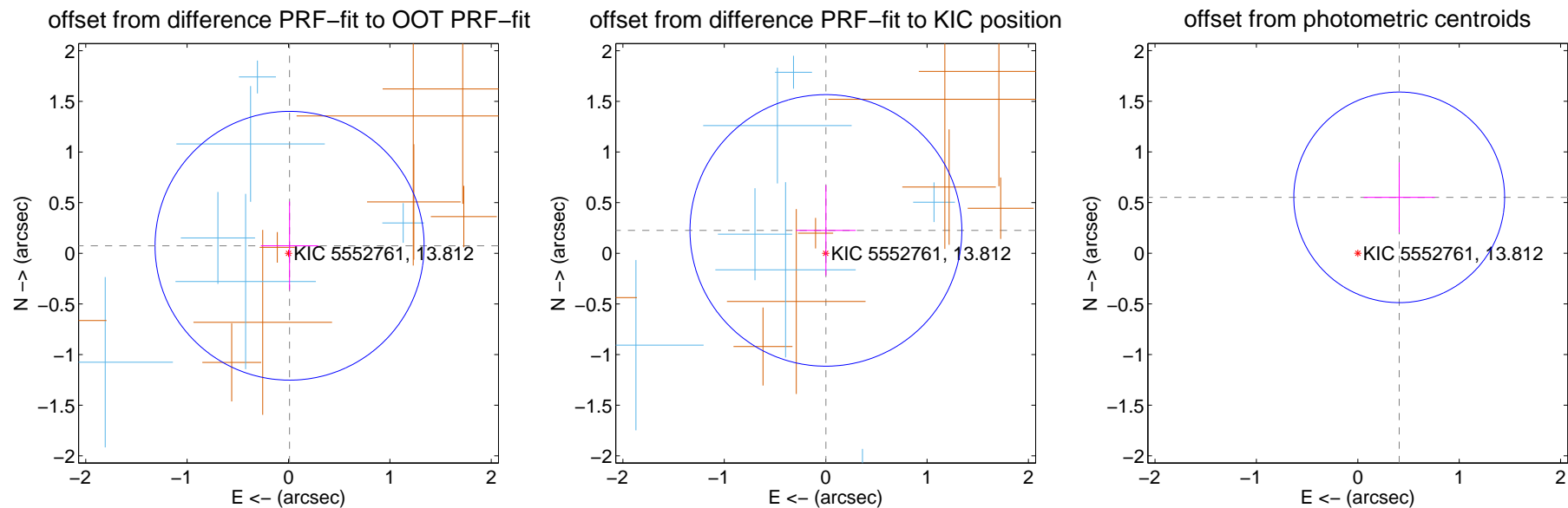
DV Centroid Data

Supplemental centroid analysis for 005552761-05. Kepler magnitude: 13.81. Transit SNR 10.34

There are 7 quarters with good PRF difference image offsets

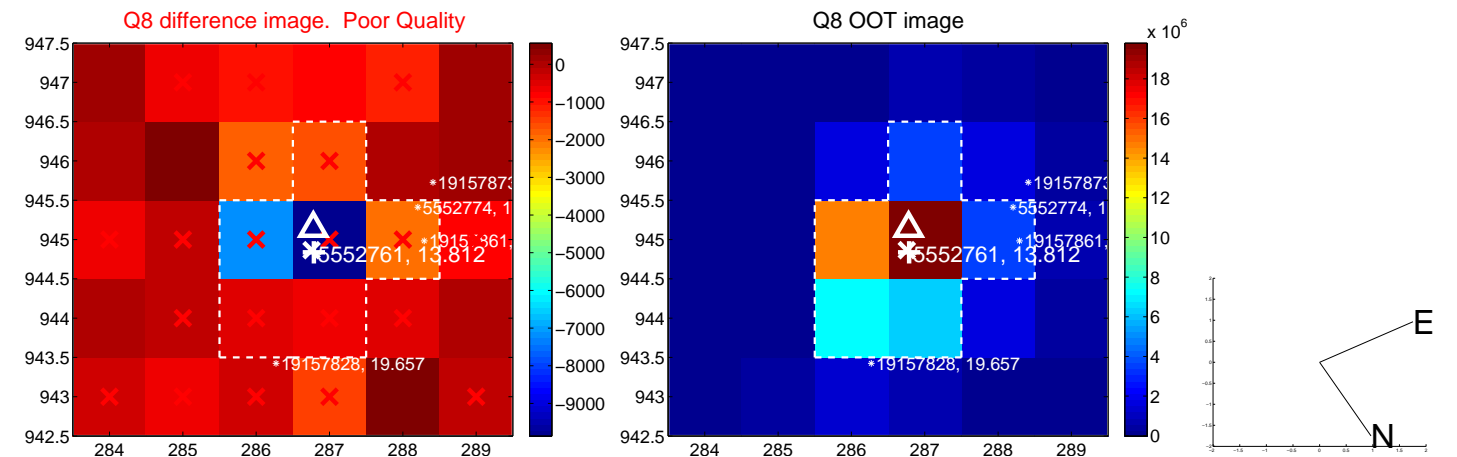
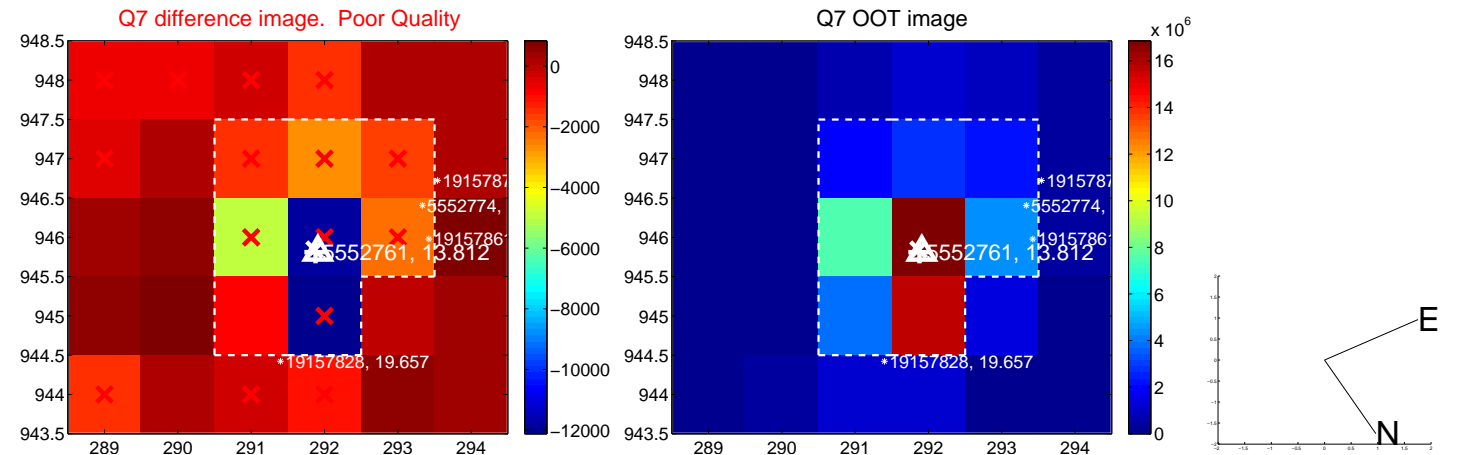
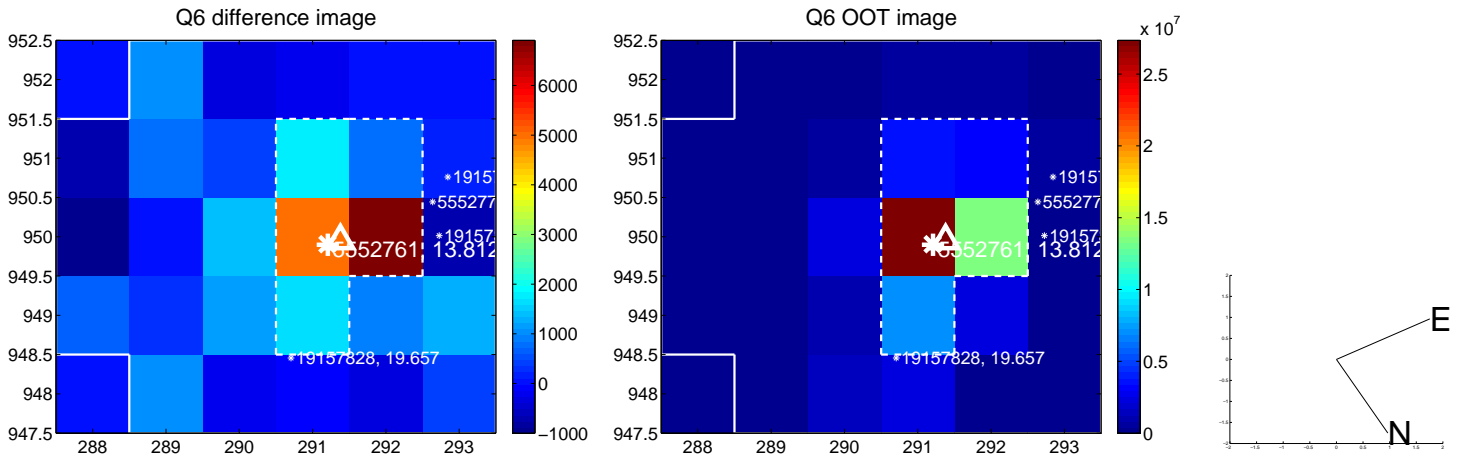
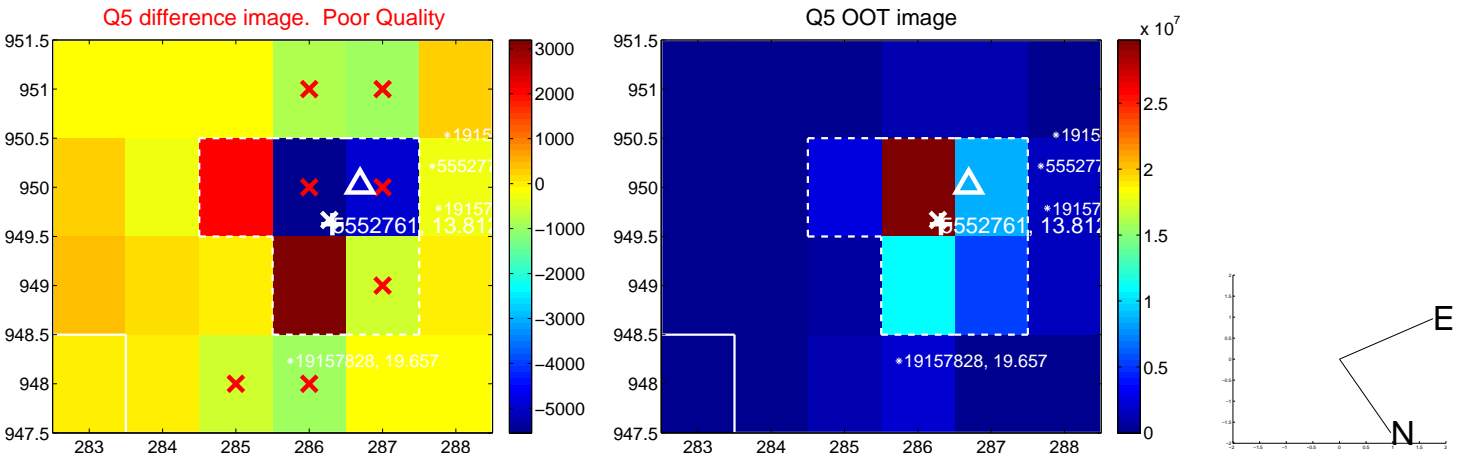
The direct PRF centroid is offset from the target star catalog position by about 0.17 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.075 ± 0.442	0.17	-0.011 ± 0.282	0.074 ± 0.435
PRF-fit source offset from KIC position	0.226 ± 0.447	0.51	-0.002 ± 0.294	0.226 ± 0.446
photometric centroid source offset	0.69 ± 0.35	1.98	-0.41 ± 0.35	0.55 ± 0.34

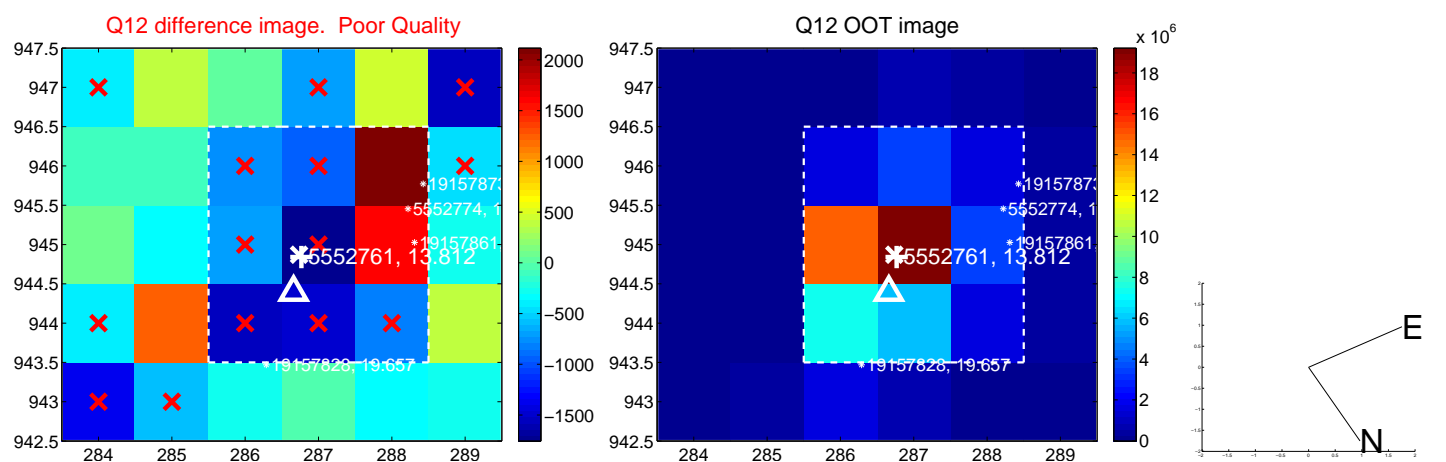
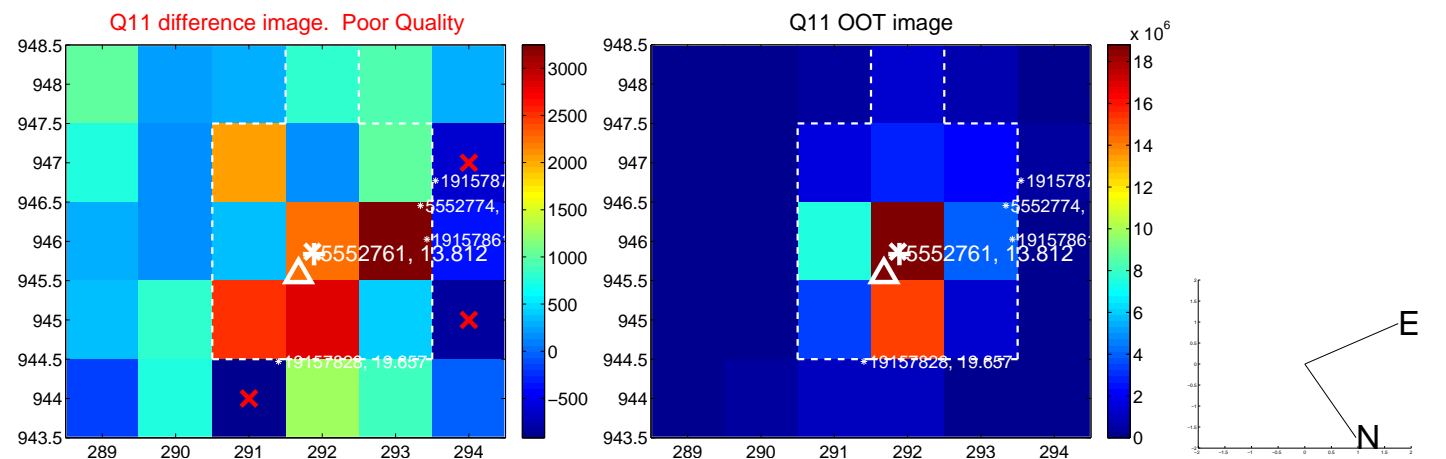
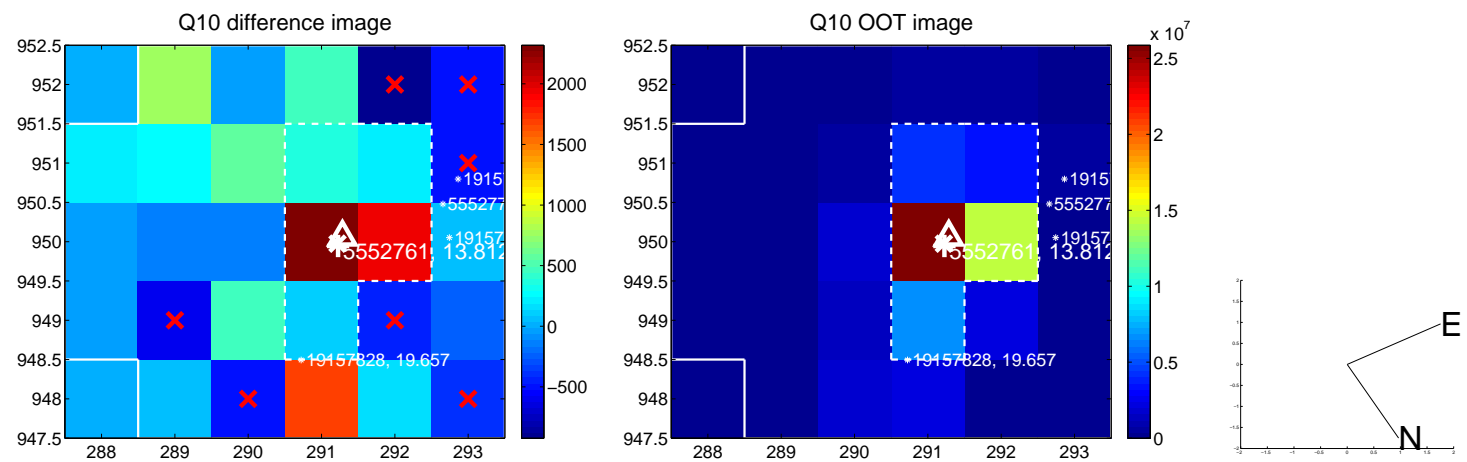
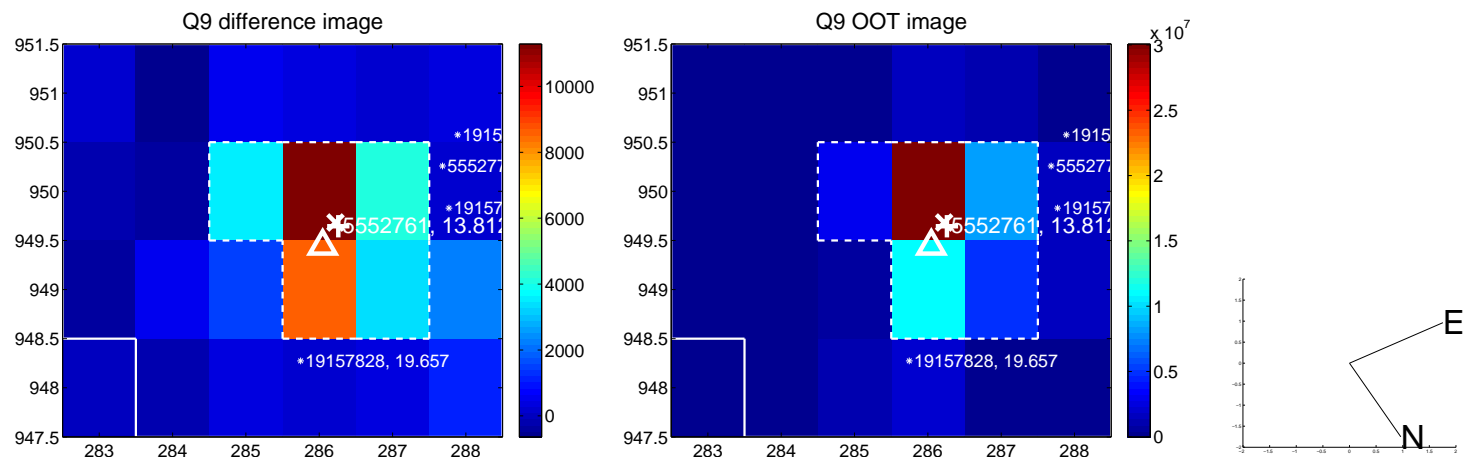


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses:** good quarterly centroid offsets; **Vermillion crosses:** bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

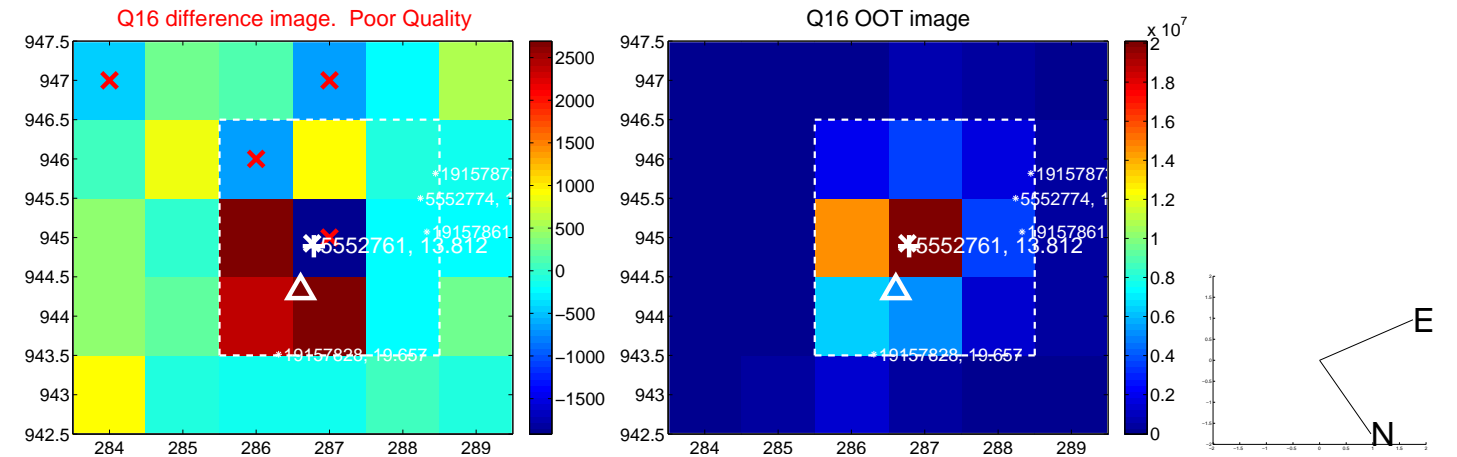
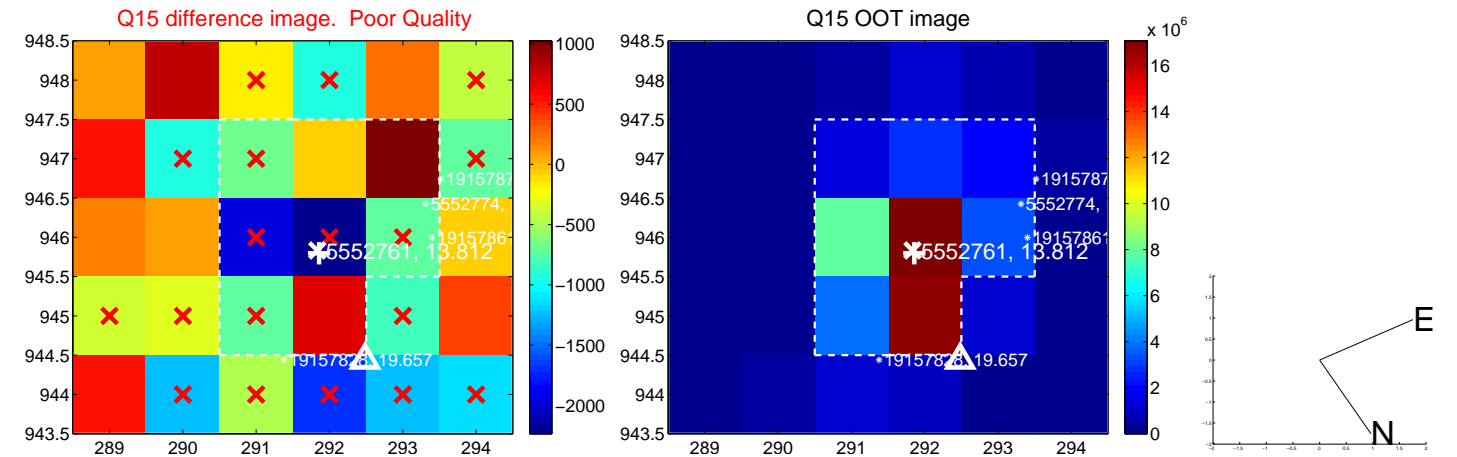
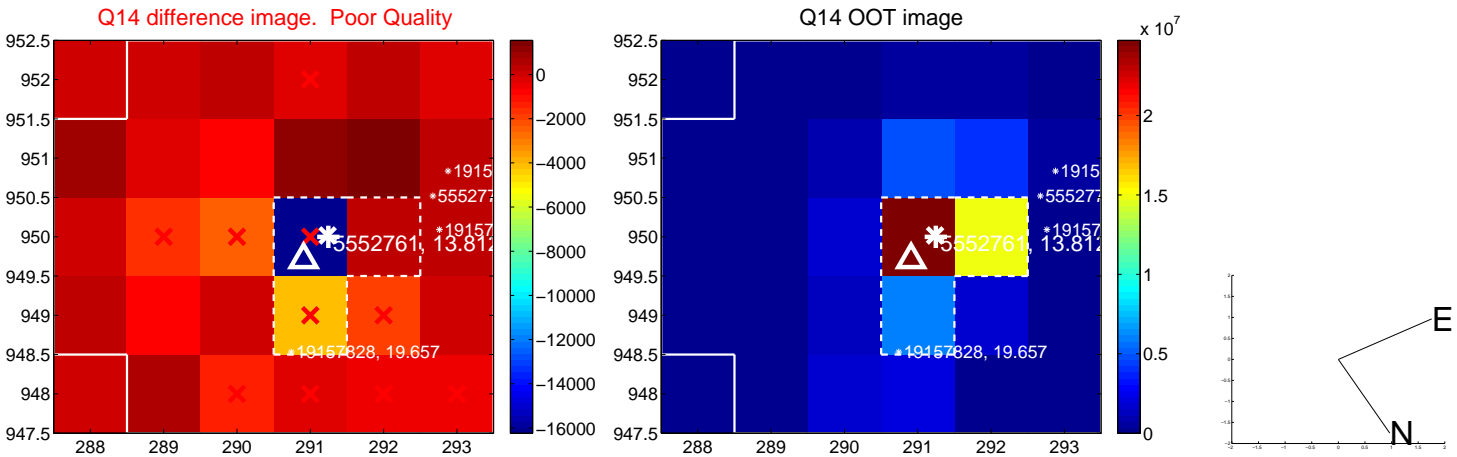
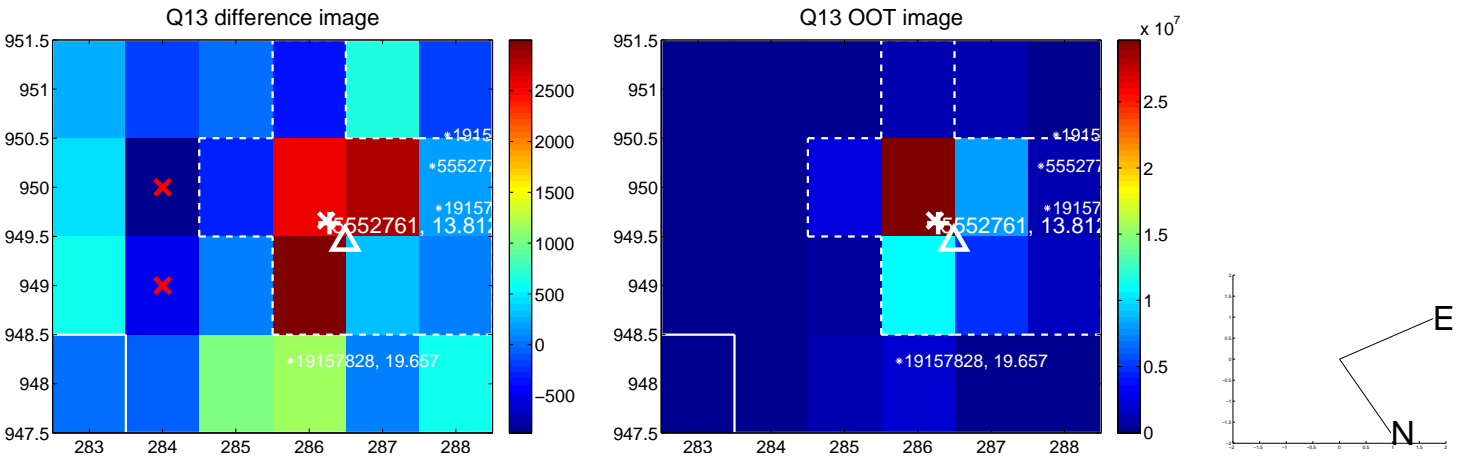
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



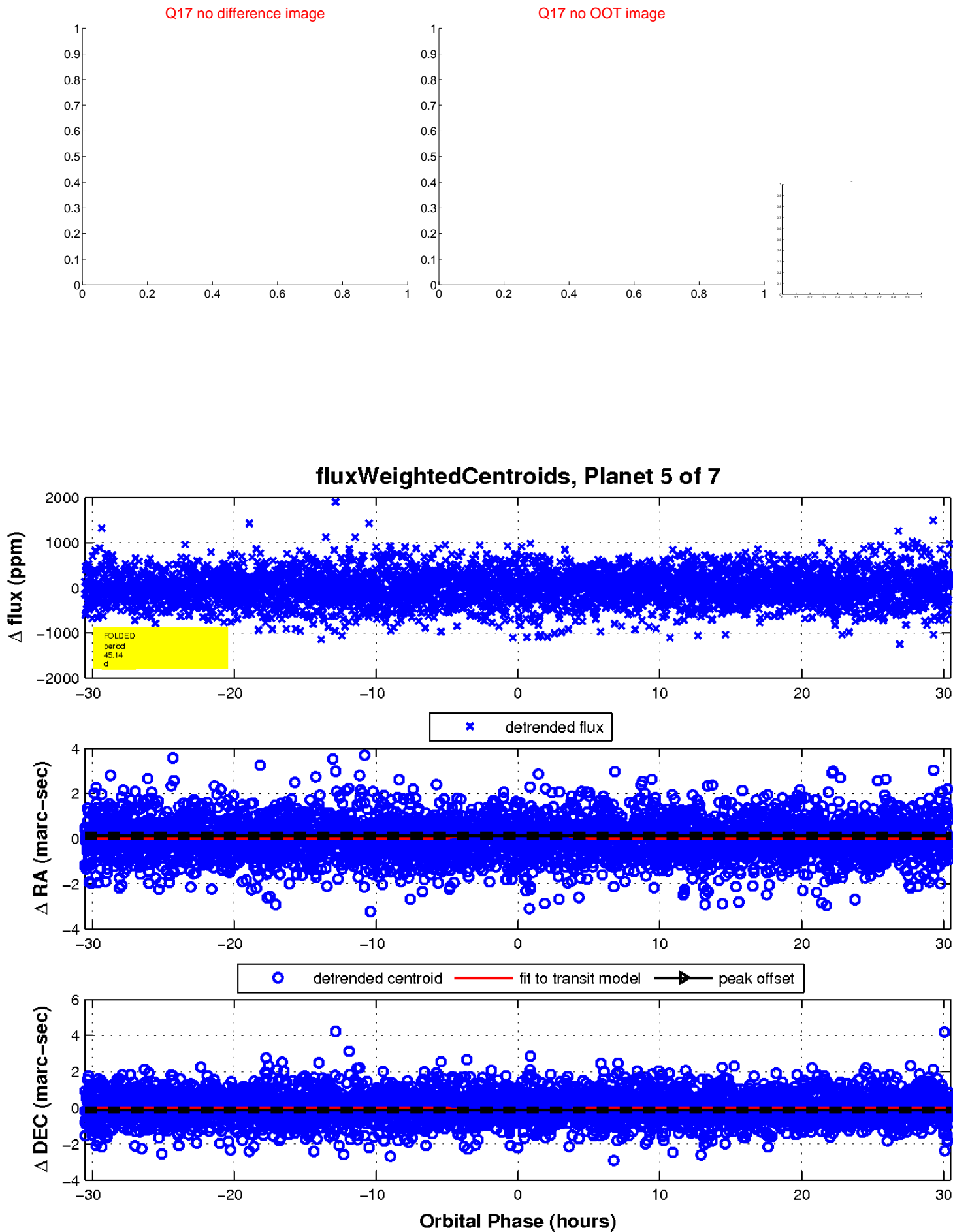
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

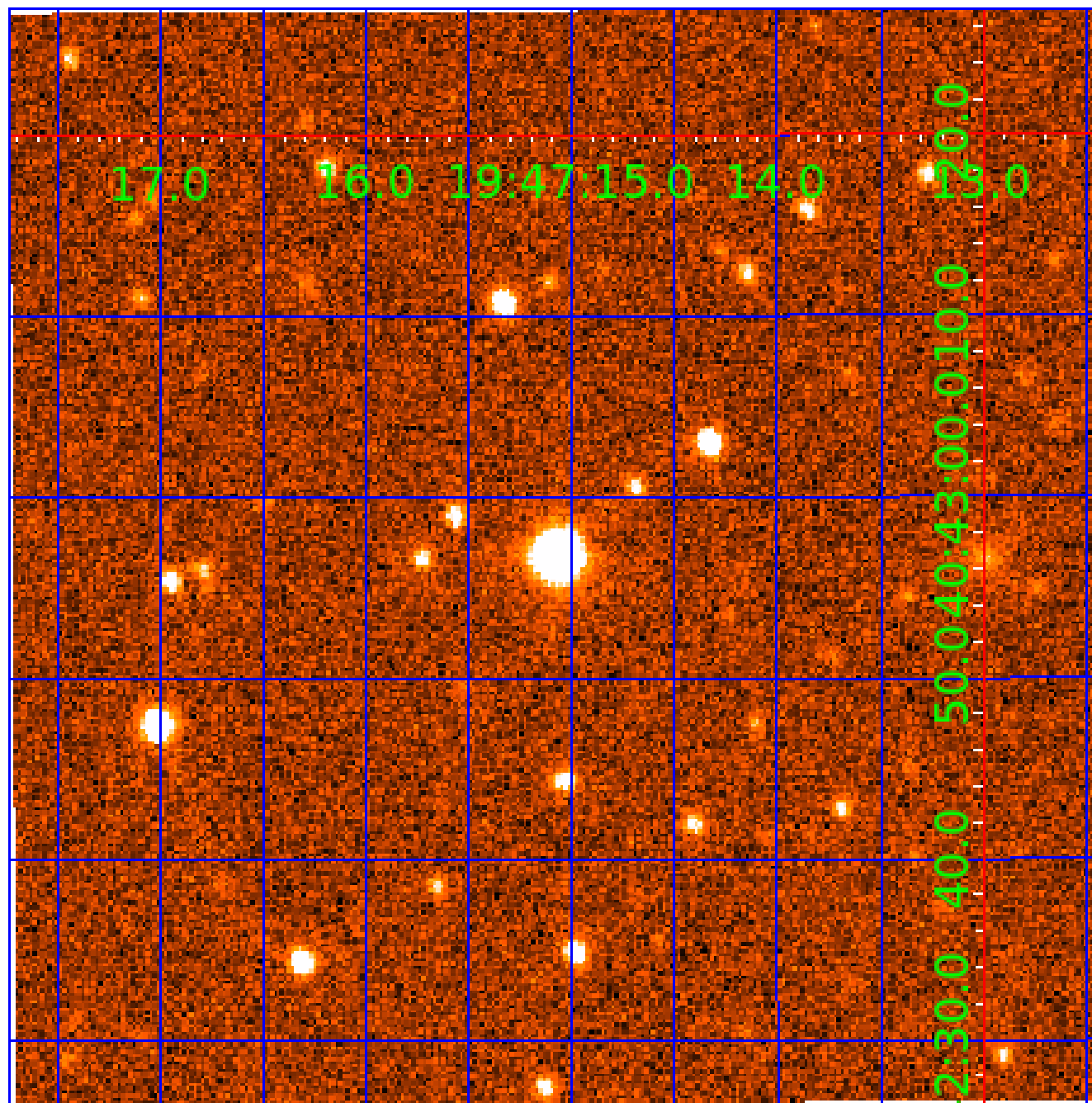


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 005552761

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})
005552761-01	OBS	No	2.789242	133.343296	40.0	18.006	9.8	6.6	1.20	6611	0.76	1464.88
005552761-02	OBS	No	359.297934	132.646674	2300.4	64.233	22.0	15.3	1.20	6611	10.52	2.25
005552761-03	OBS	No	84.444693	215.445111	448.5	21.091	10.9	8.2	1.20	6611	3.02	15.53
005552761-04	OBS	No	371.100386	338.196161	423.6	12.149	10.3	9.2	1.20	6611	2.62	2.16
005552761-05	OBS	No	45.144567	149.322342	342.7	10.178	10.4	10.3	1.20	6611	2.45	35.78
005552761-06	OBS	No	53.529865	138.894361	216.0	12.463	8.9	4.7	1.20	6611	1.99	28.51
005552761-07	OBS	No	404.442174	379.886035	675.1	7.444	8.5	9.0	1.20	6611	3.46	1.92

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
005552761-01	OBS	FP	0.00	1	0	0	0	SWEET_NTL—LPP_DV
005552761-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_SKYE—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—INCONSISTENT_TRANS—CENT_FEW_DIFFS
005552761-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT
005552761-04	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_MARSHALL—LPP_DV—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_POS_ALT—CENT_FEW_DIFFS
005552761-05	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT
005552761-06	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT
005552761-07	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_CHASES_MARSHALL—LPP_DV—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_NONUNIQ_ALT—MOD_TER_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.

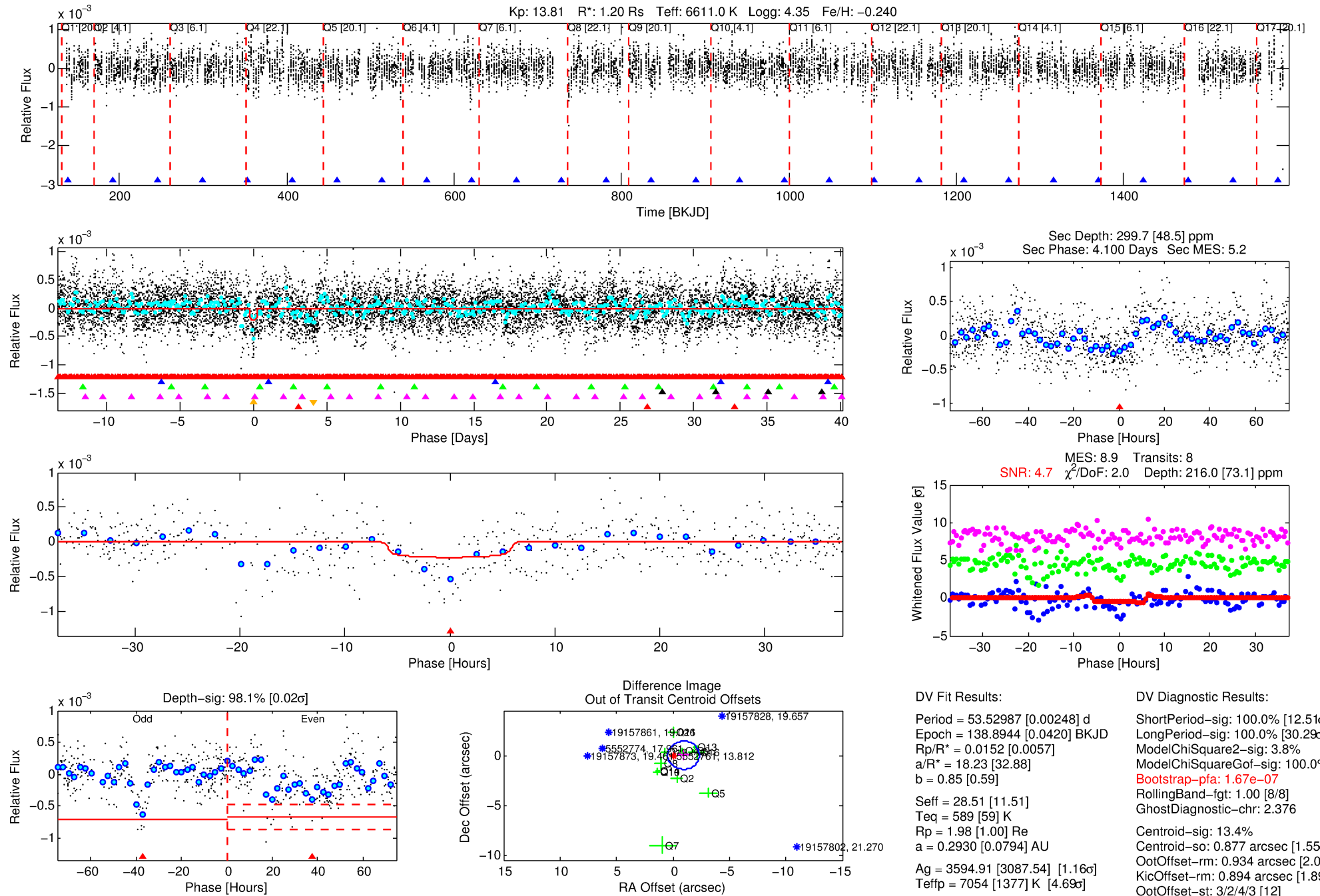
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 005552761-06

No Significant Match Found

DV One-Page Summary

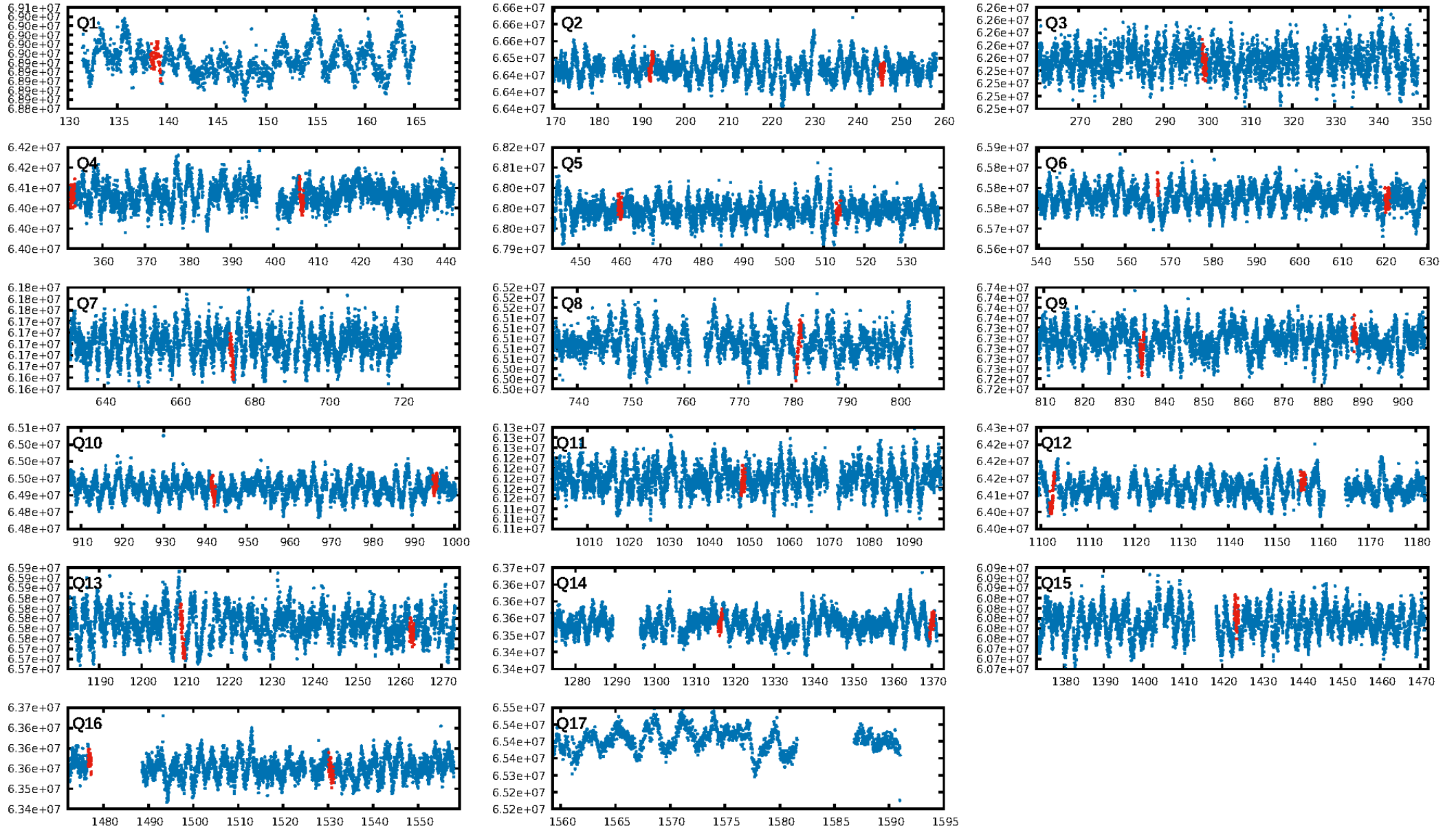
KIC: 5552761 Candidate: 6 of 7 Period: 53.530 d



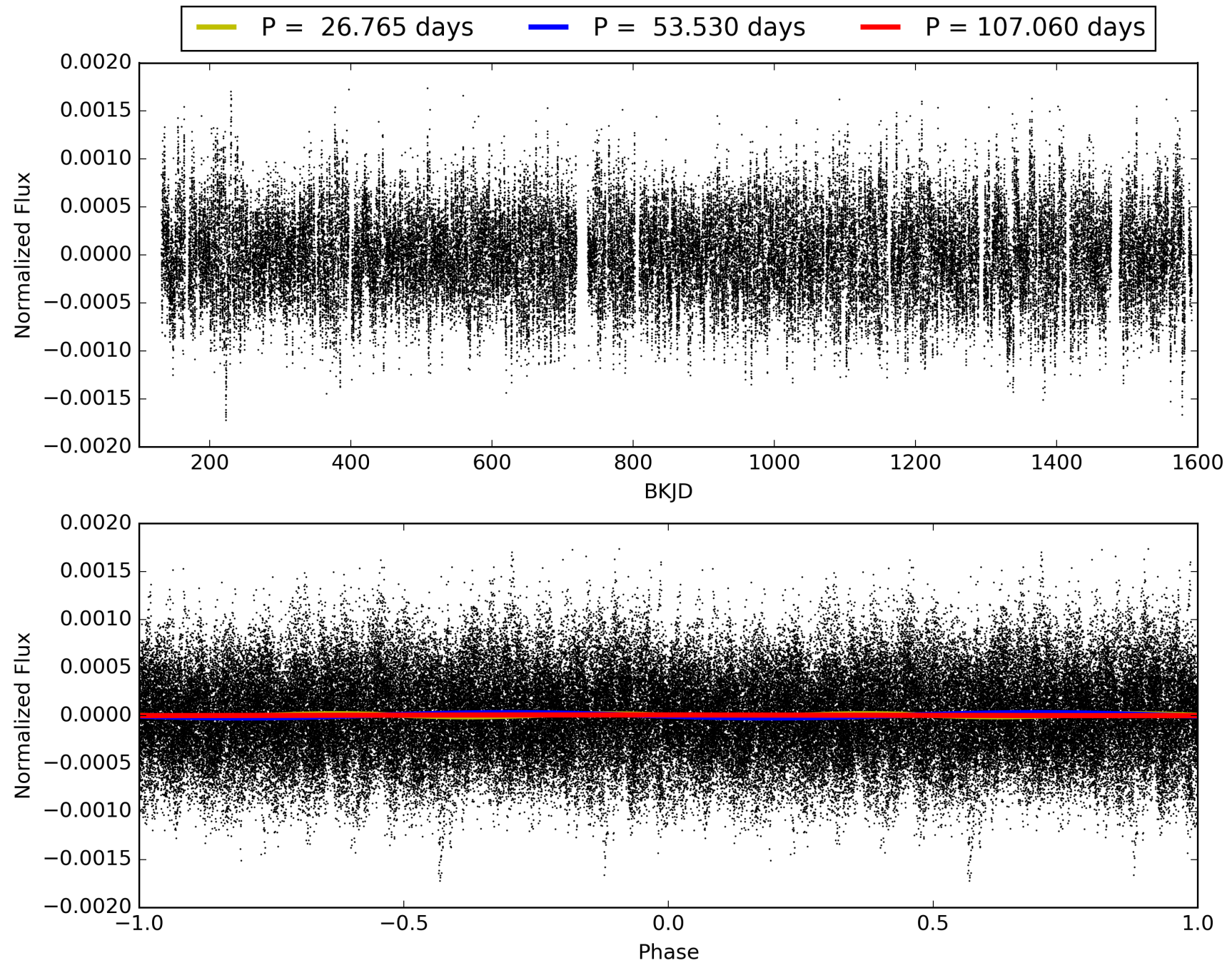
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 03-Feb-2016 08:32:12 Z

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

TCE 00552761-06, PDC Light Curves

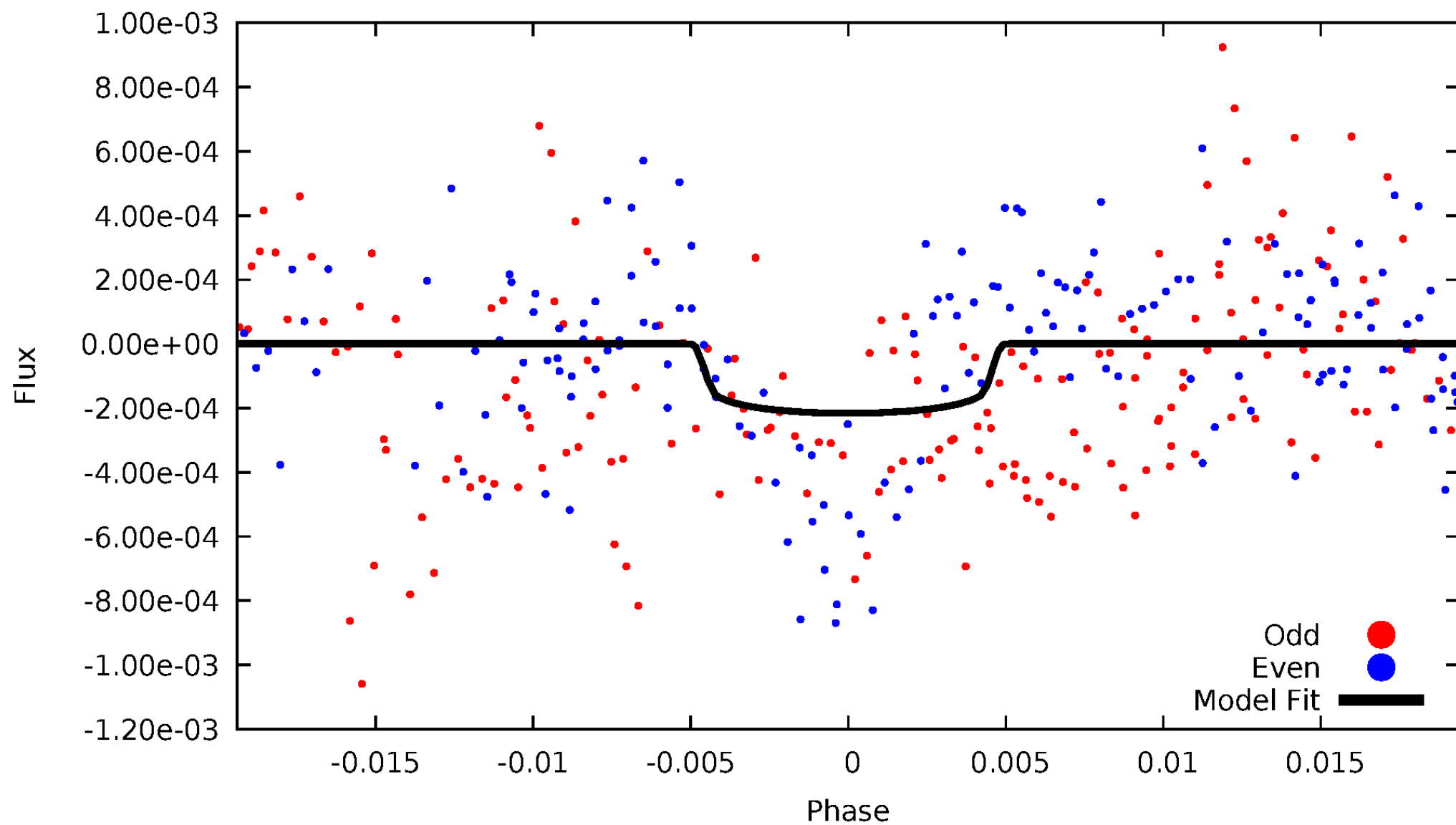


TCE 005552761-06



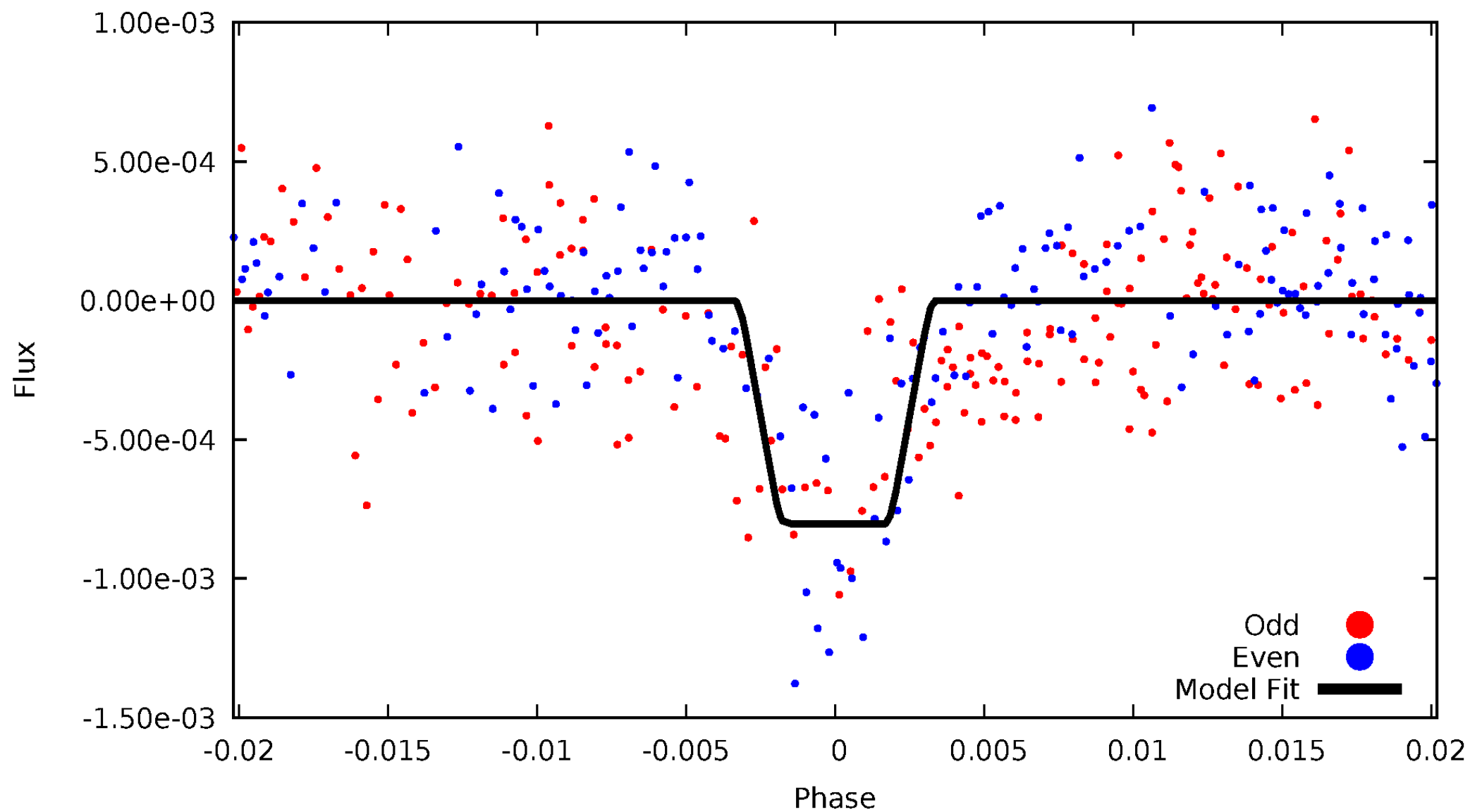
DV Odd/Even

TCE 005552761-06



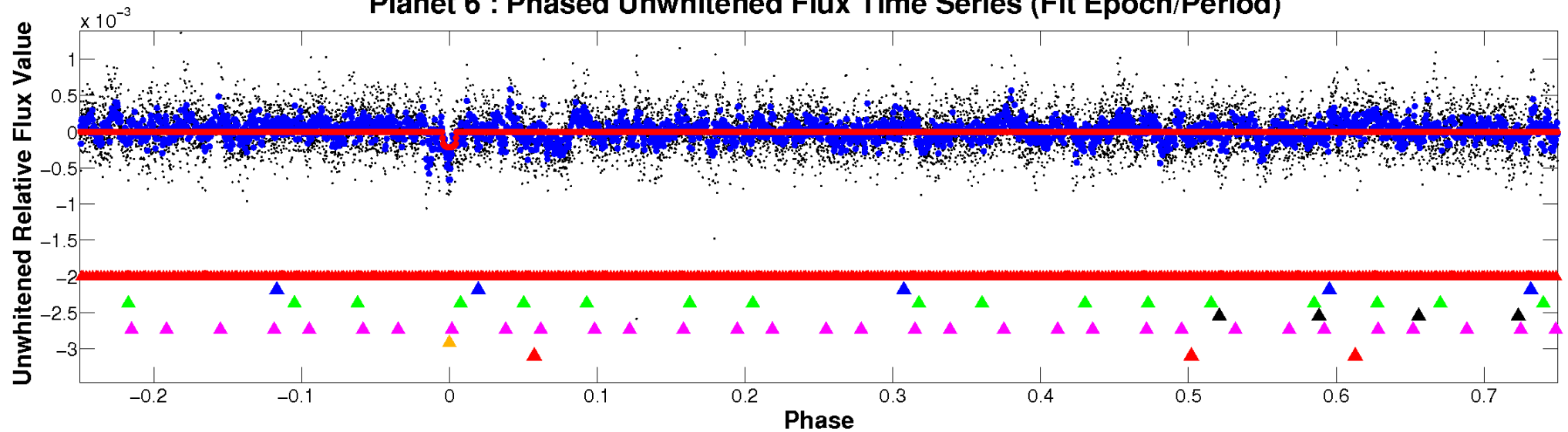
ALT Odd/Even

TCE 005552761-06

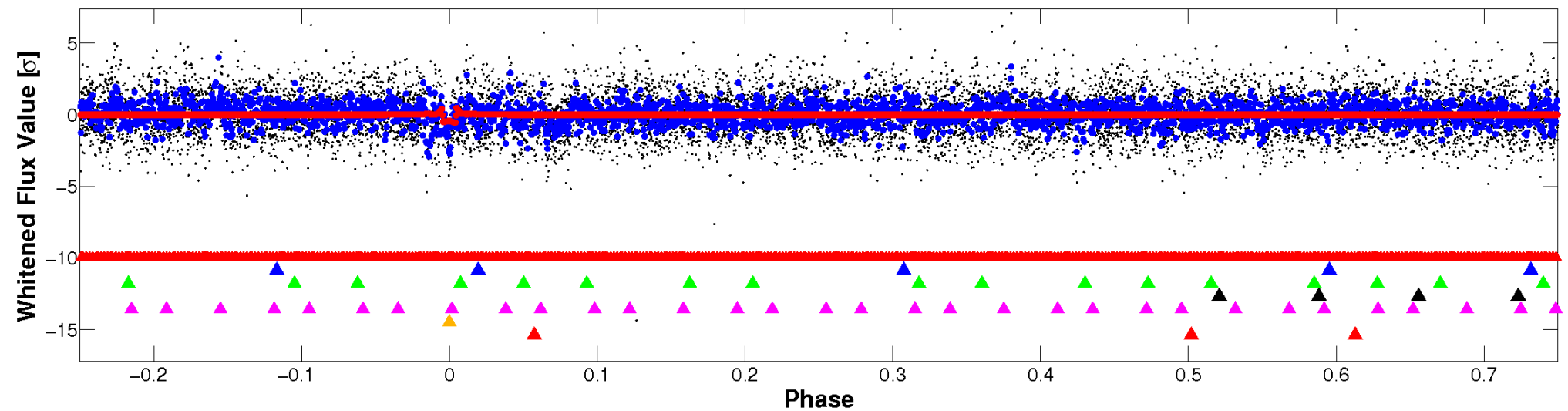


Non-Whitened Vs. Whitened Light Curve

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

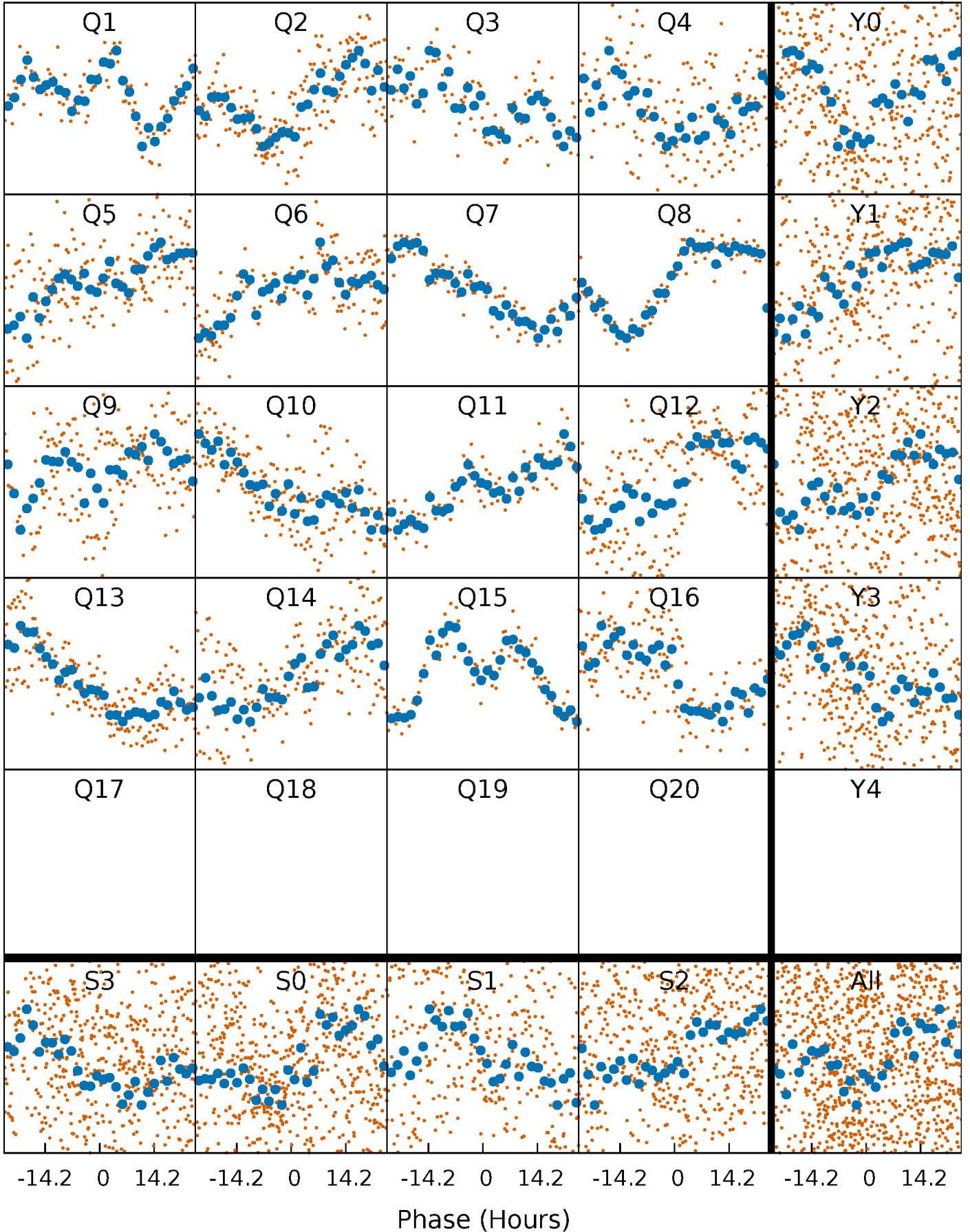


Planet 6 : Phased Whitened Flux Time Series (Fit Epoch/Period)



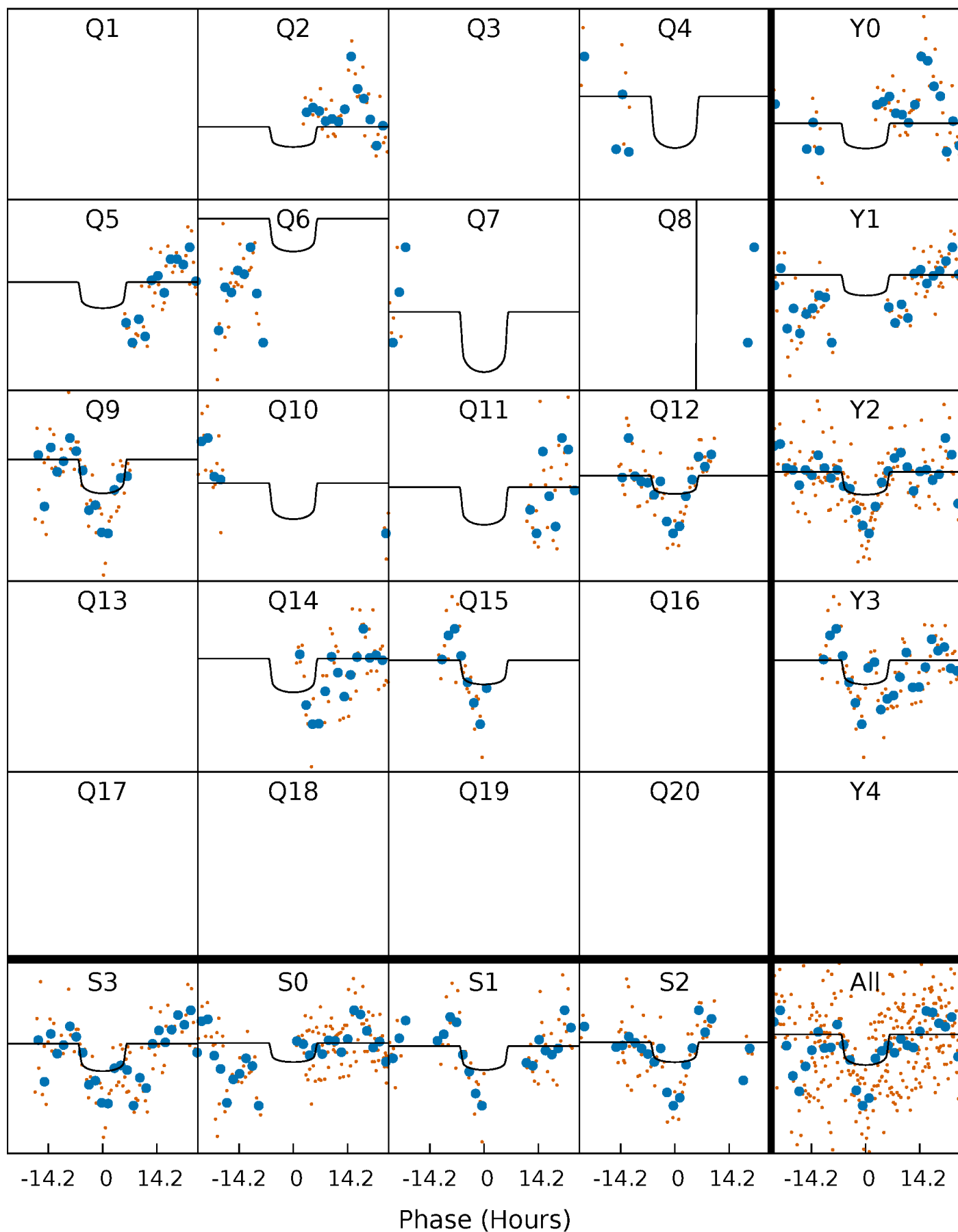
PDC Quarter-Phased Transit Curves

TCE 005552761-06 P= 53.529865 Days $T_0=138.894361$ (BKJD)



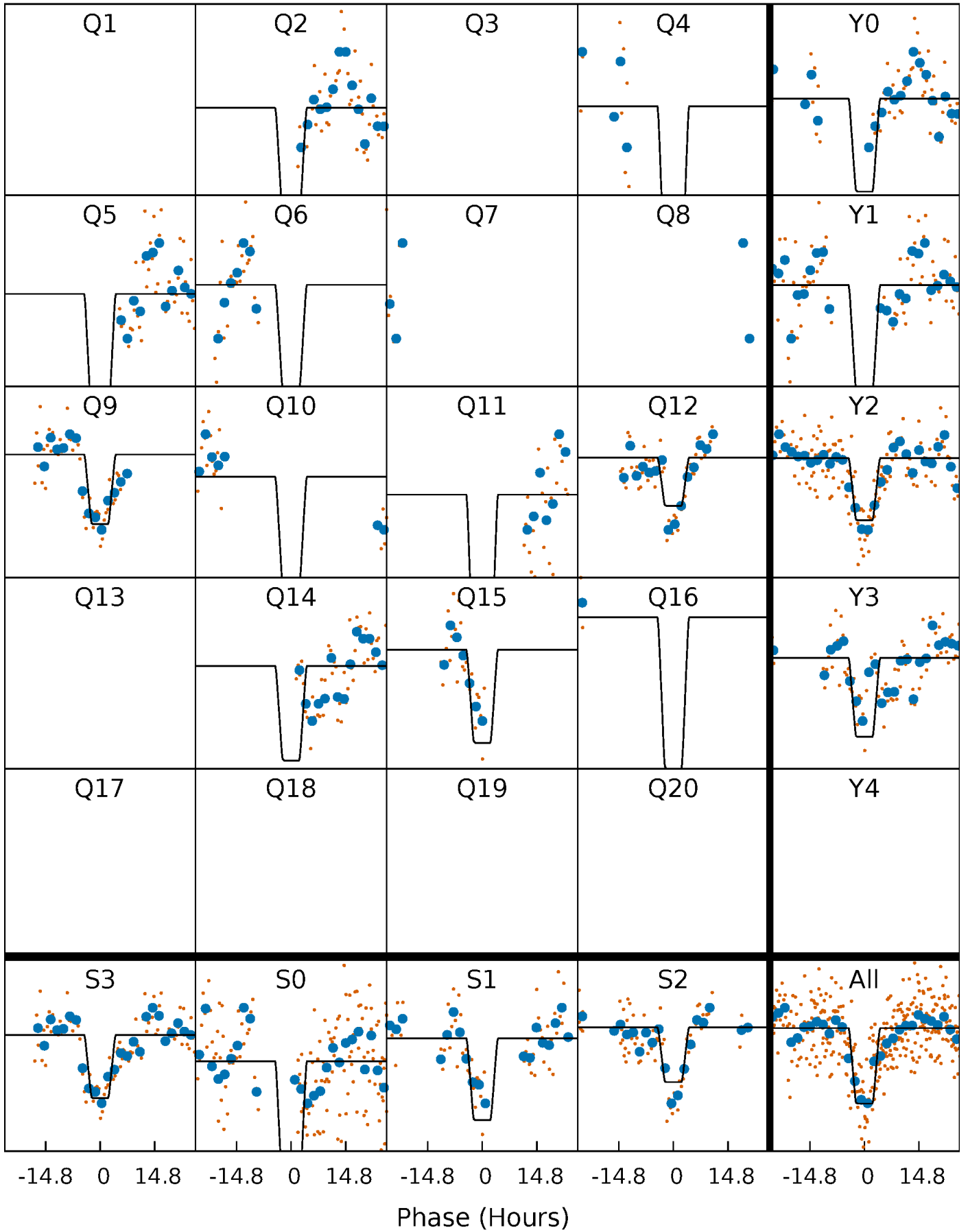
DV Quarter-Phased Transit Curves

TCE 005552761-06 P= 53.529865 Days $T_0=138.894361$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

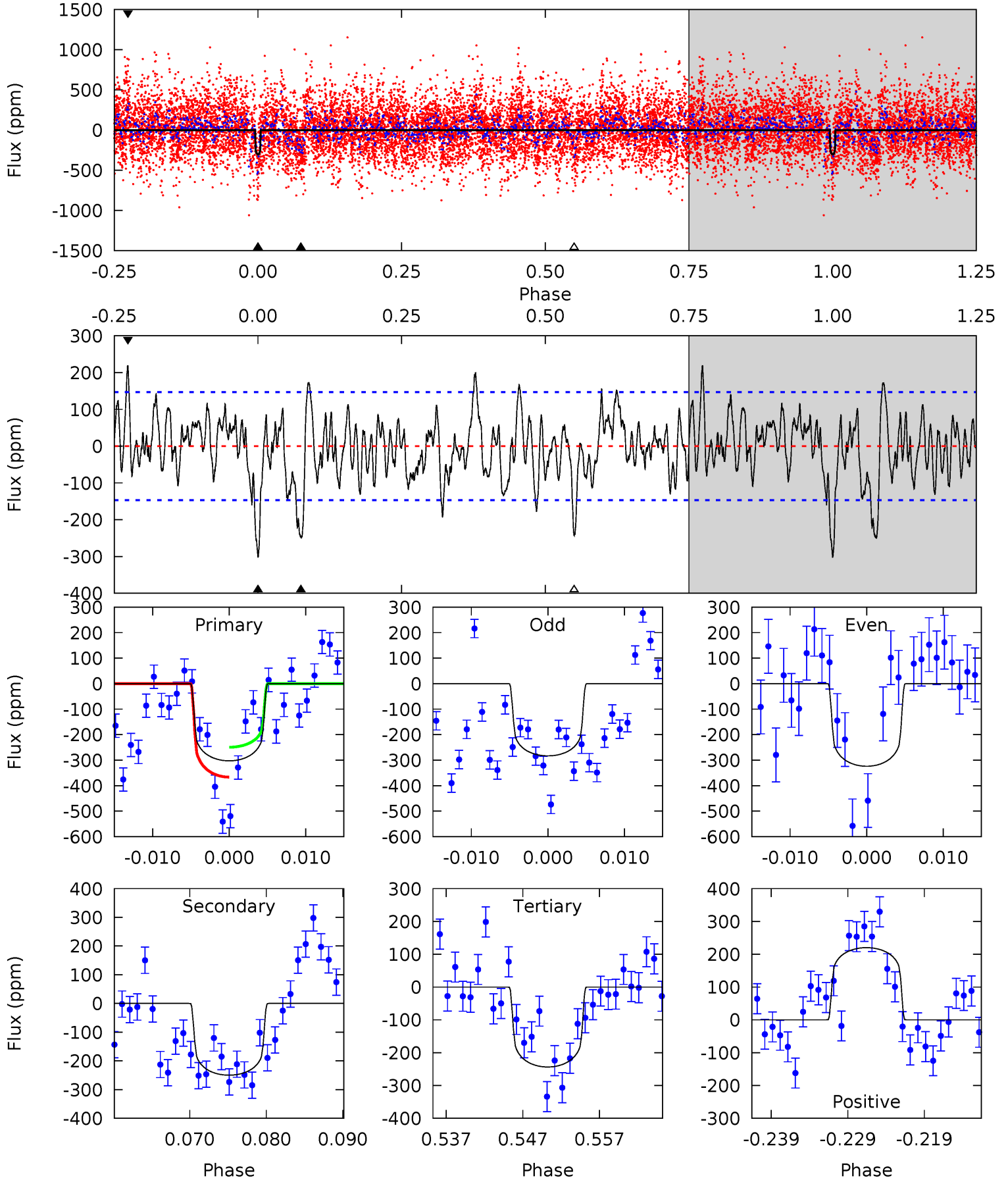
TCE 005552761-06 P= 53.527229 Days $T_0=138.932633$ (BKJD)



DV Model-Shift Uniqueness Test

005552761-06, P = 53.529865 Days, E = 85.364496 Days

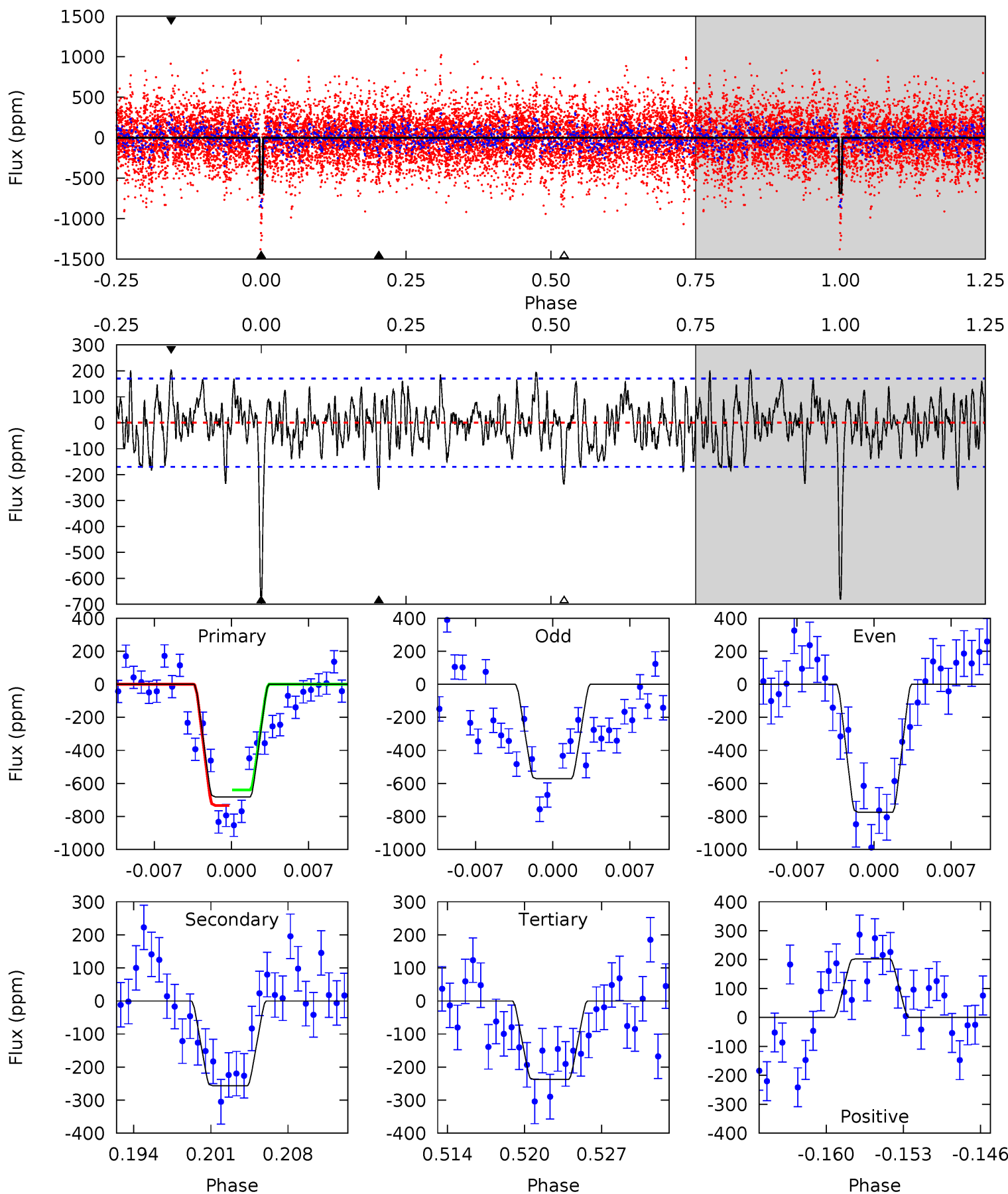
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
10.4	8.55	8.34	7.53	5.03	2.58	2.39	2.02	2.82	0.21	1.02	0.69	0.93	0.42	1.99



Alt Model-Shift Uniqueness Test

005552761-06, P = 53.527229 Days, E = 85.405404 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
20.4	7.68	7.11	6.06	5.10	2.70	2.17	13.3	14.4	0.57	1.62	3.05	1.12	0.23	1.39



Stellar Parameters For KIC 005552761

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6611^{+158}_{-218}	$4.351^{+0.081}_{-0.202}$	$-0.240^{+0.250}_{-0.300}$	$1.196^{+0.399}_{-0.160}$	$1.178^{+0.175}_{-0.158}$	$0.970^{+0.354}_{-0.501}$
	+2%/-3%	+2%/-5%	+104%/-125%	+33%/-13%	+15%/-13%	+36%/-52%
Source	PHO1	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 005552761-06 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-250 ± 29	$2.06^{+0.84}_{-0.78}$	831^{+60}_{-42}	6639^{+2218}_{-978}	2692^{+4222}_{-1310}
Alt.	-256 ± 33	$3.83^{+0.92}_{-0.77}$	836^{+56}_{-45}	5000^{+553}_{-377}	780^{+533}_{-249}

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

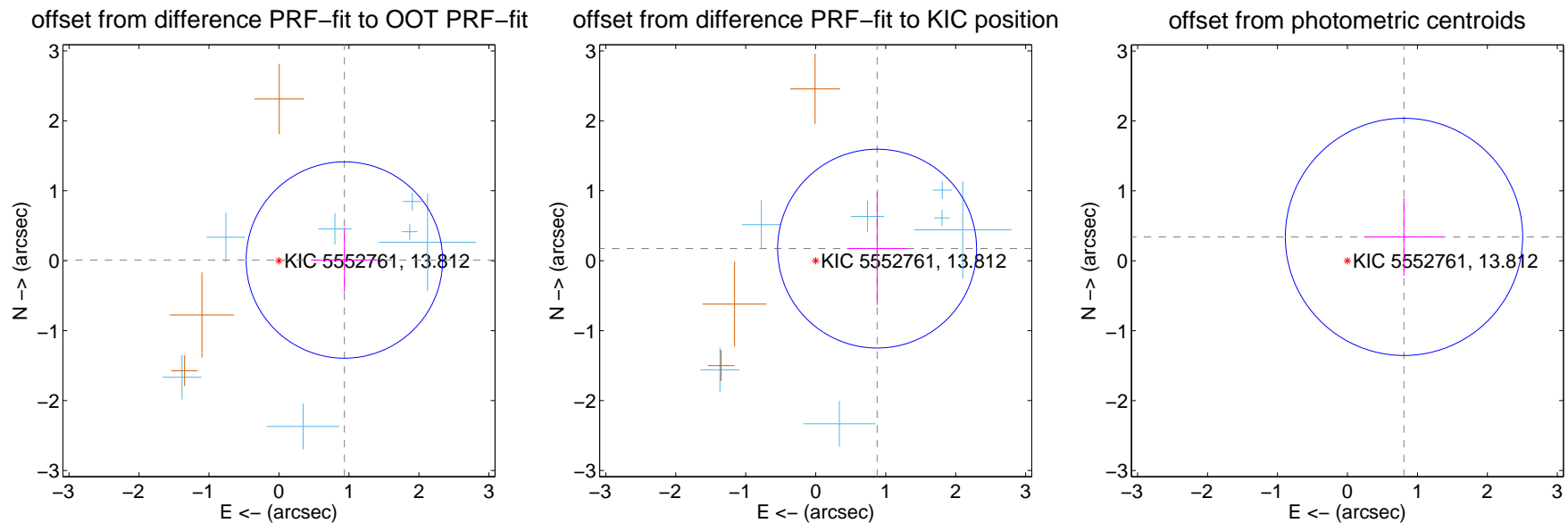
DV Centroid Data

Supplemental centroid analysis for 005552761-06. Kepler magnitude: 13.81. Transit SNR 4.66

There are 7 quarters with good PRF difference image offsets

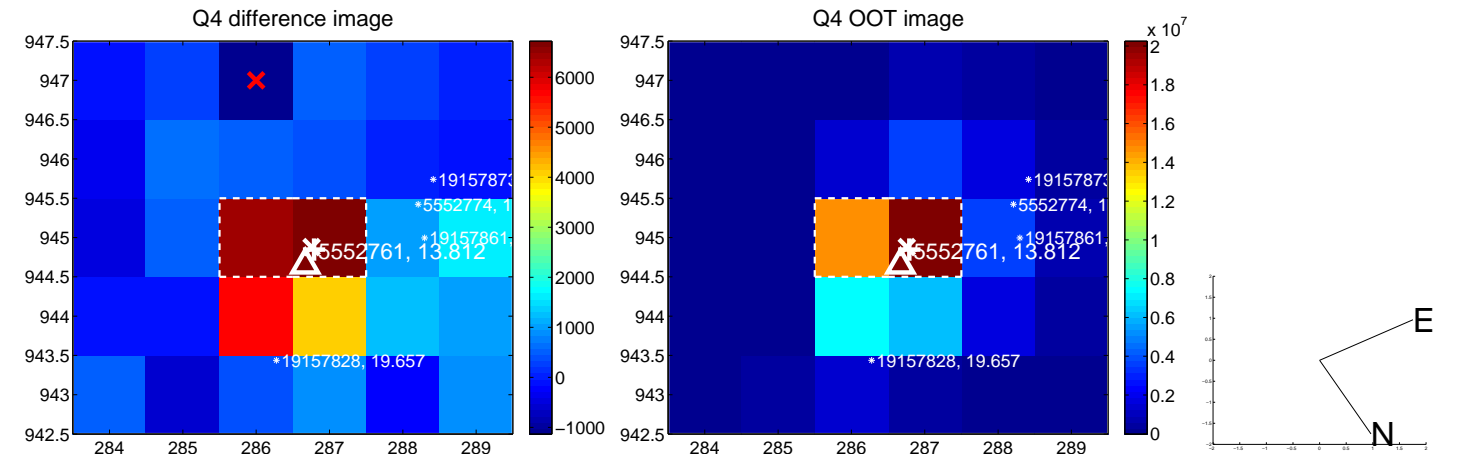
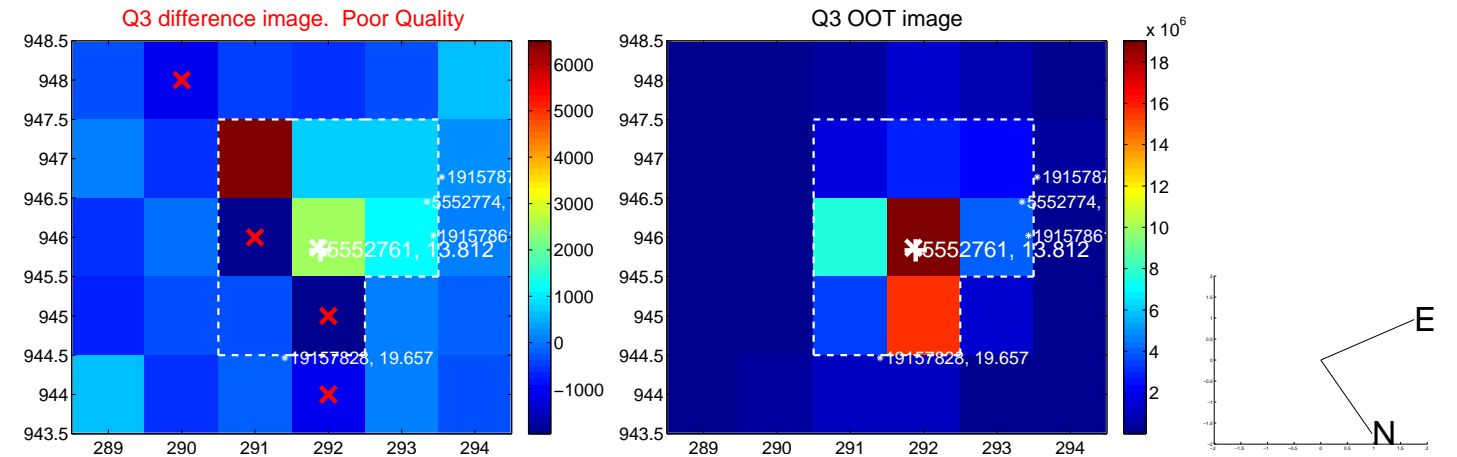
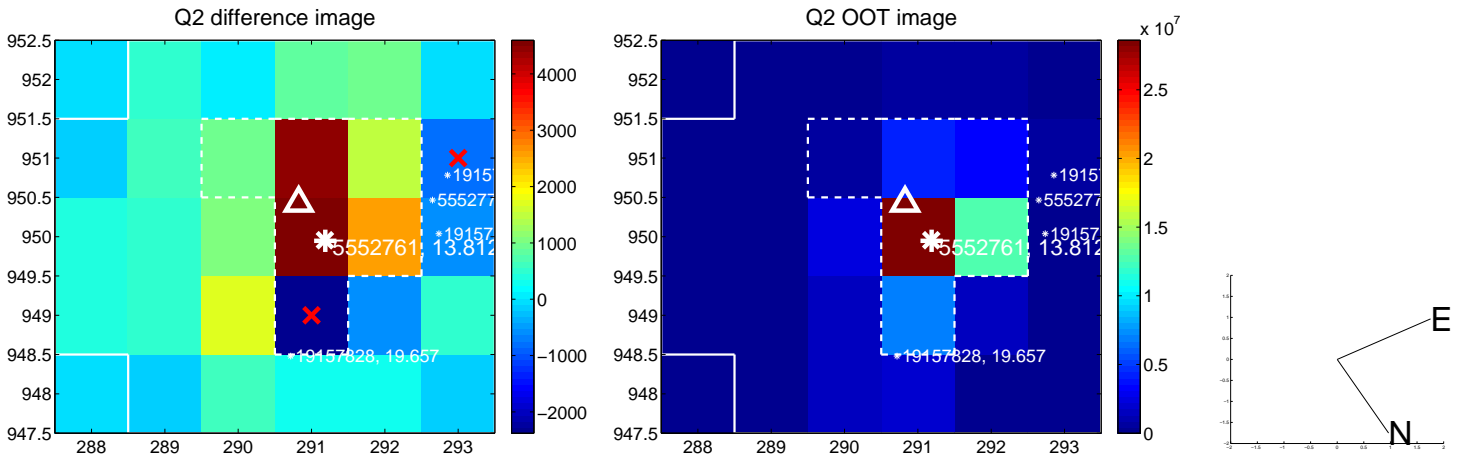
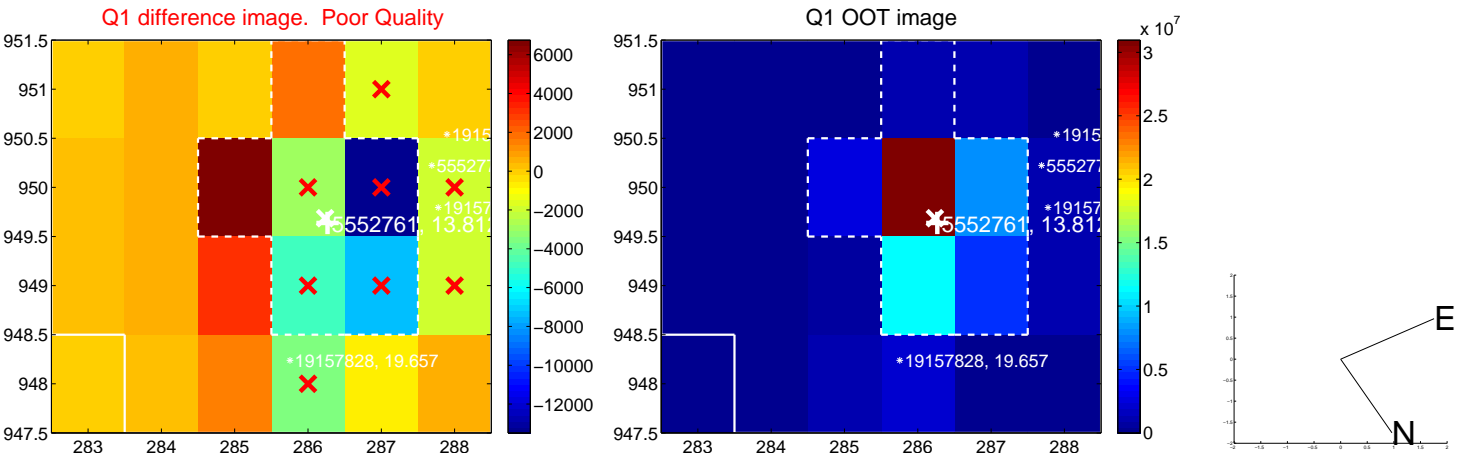
The direct PRF centroid is offset from the target star catalog position by about 0.18 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.934 ± 0.468	2.00	-0.934 ± 0.468	0.010 ± 0.457
PRF-fit source offset from KIC position	0.894 ± 0.474	1.89	-0.877 ± 0.430	0.173 ± 0.805
photometric centroid source offset	0.88 ± 0.57	1.55	-0.81 ± 0.57	0.34 ± 0.56

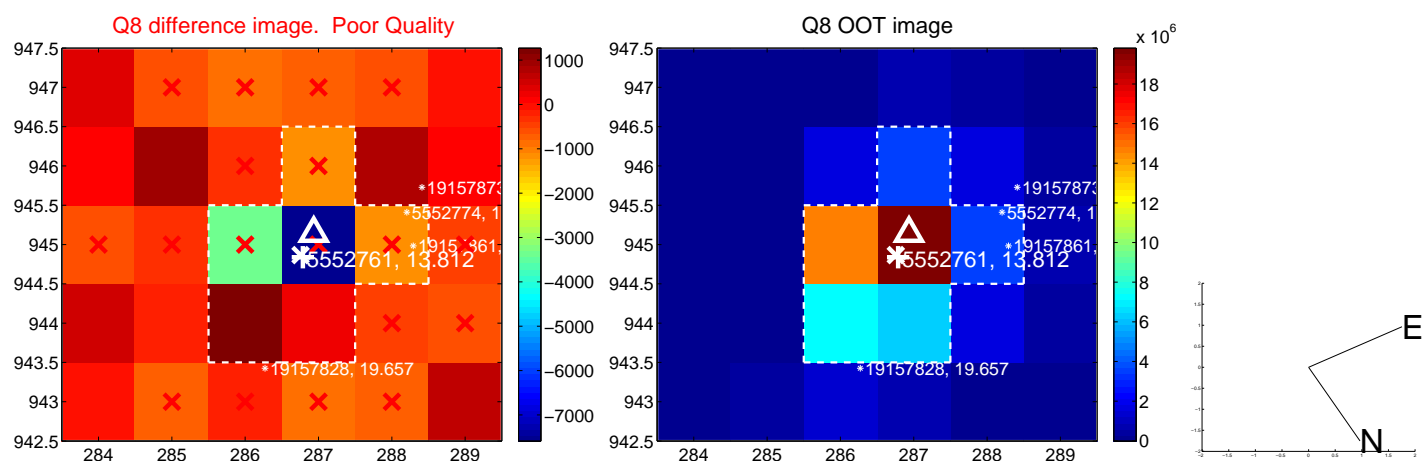
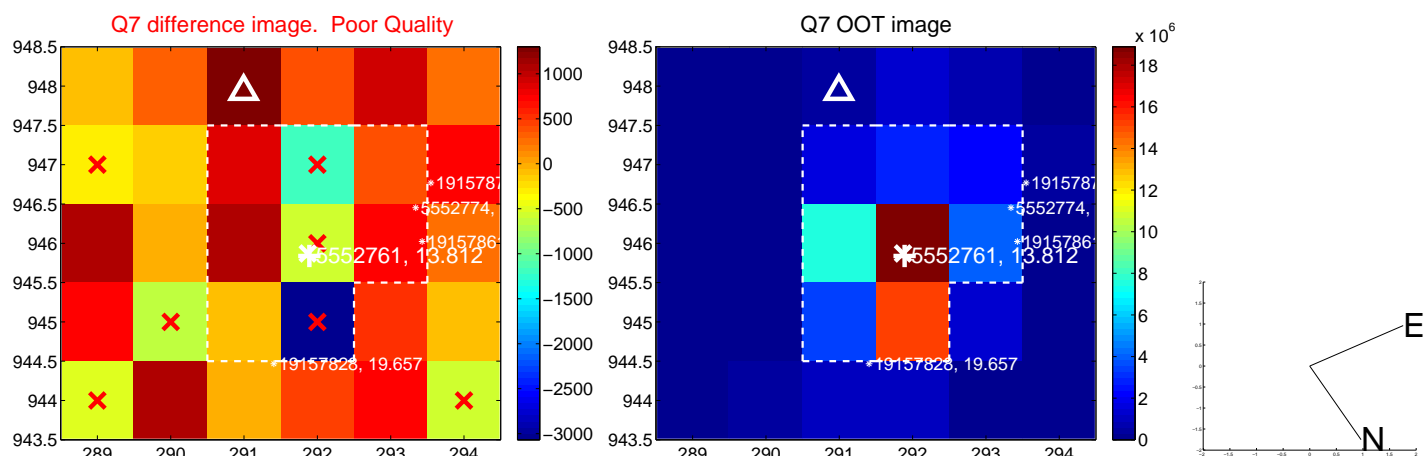
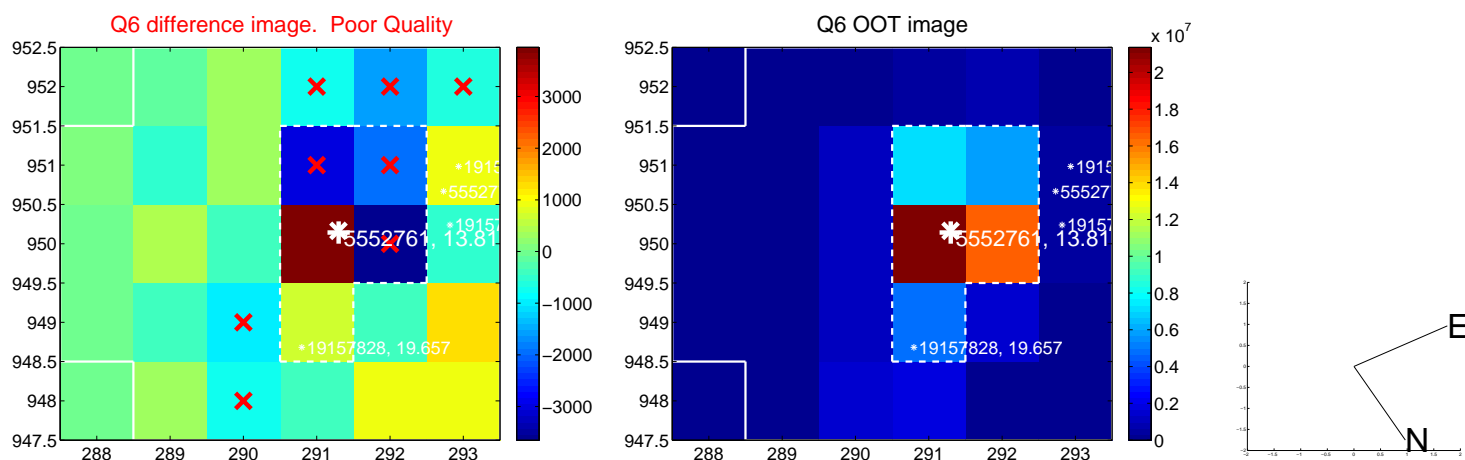
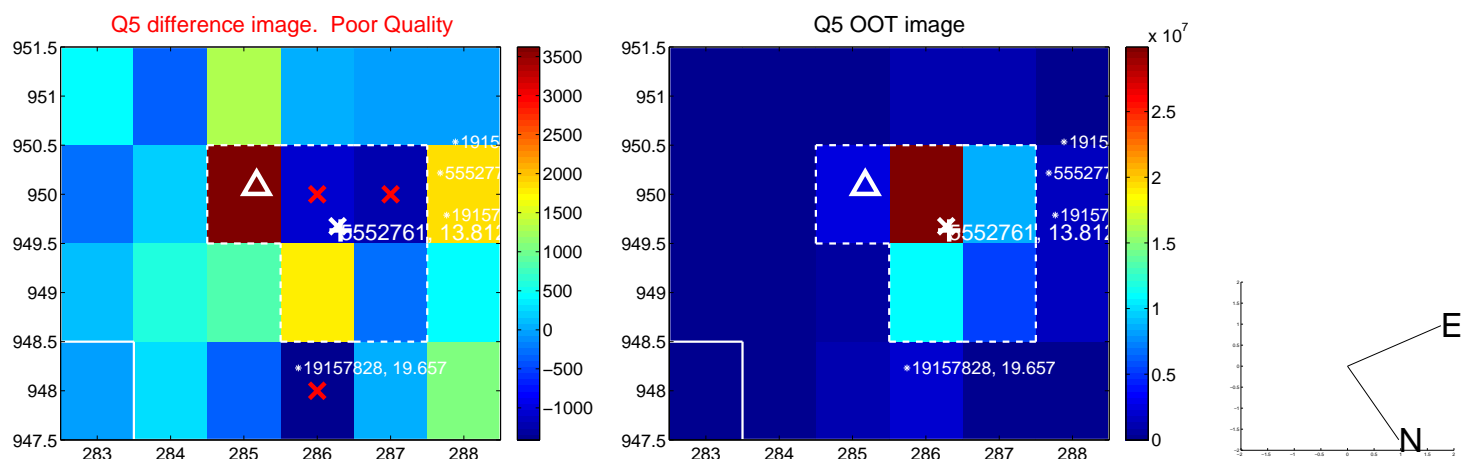


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets**; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

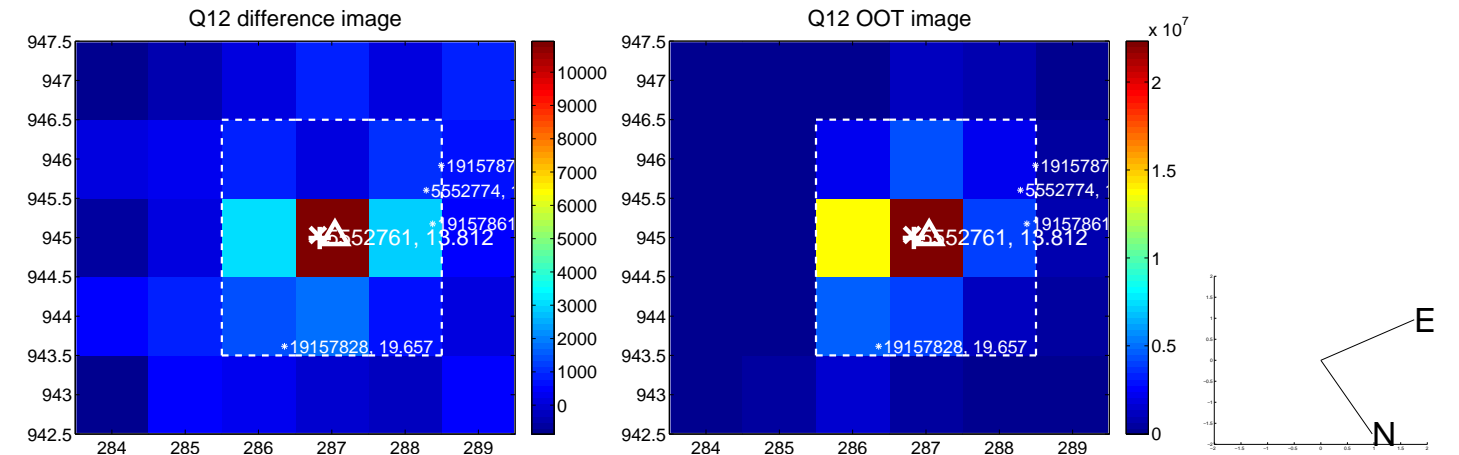
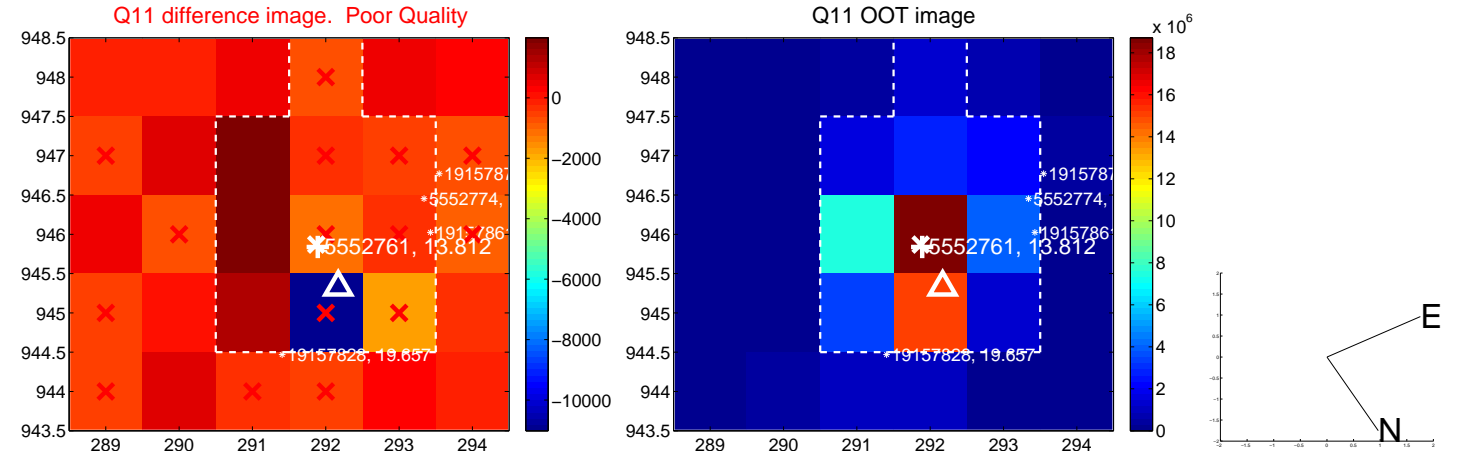
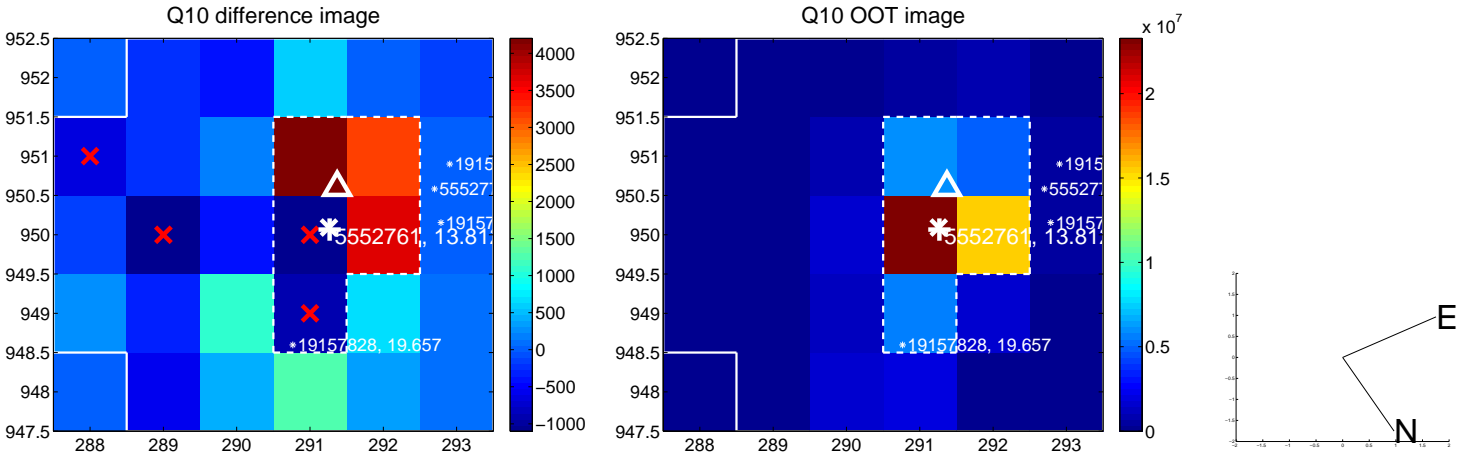
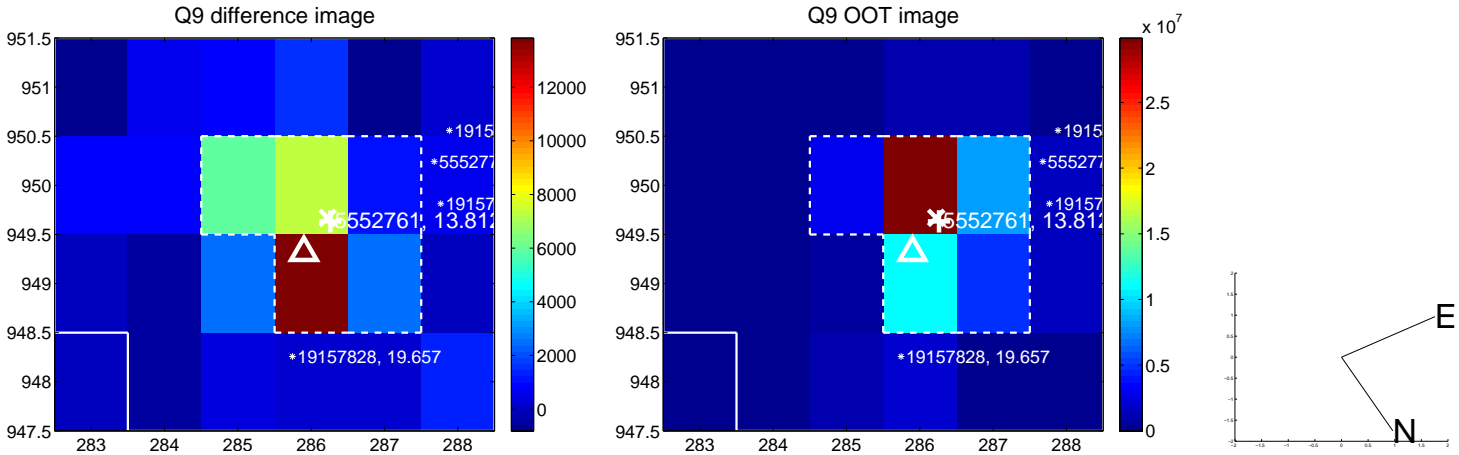
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



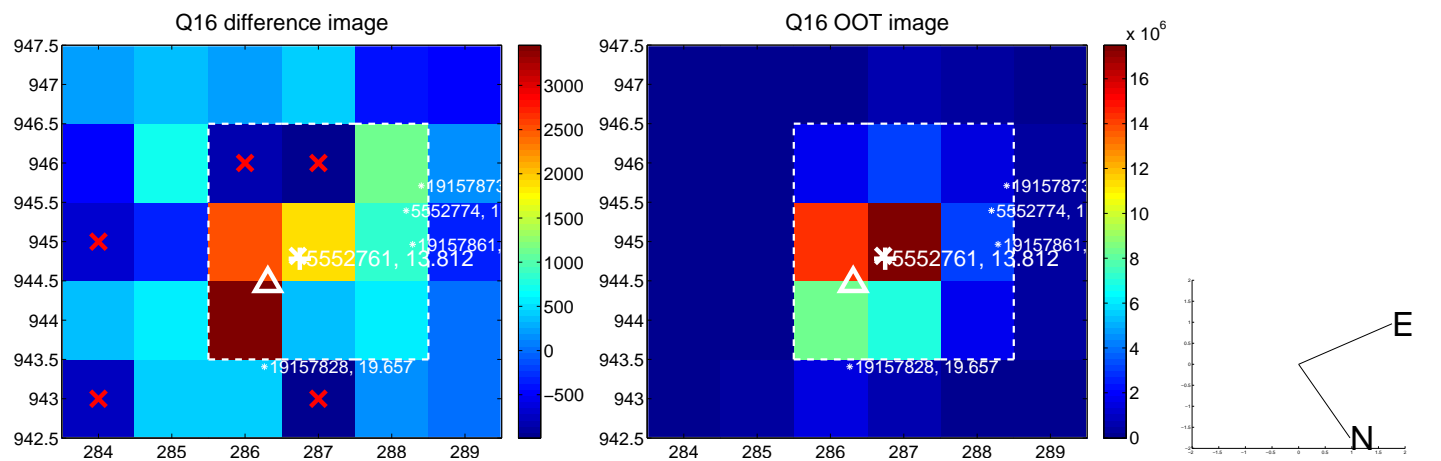
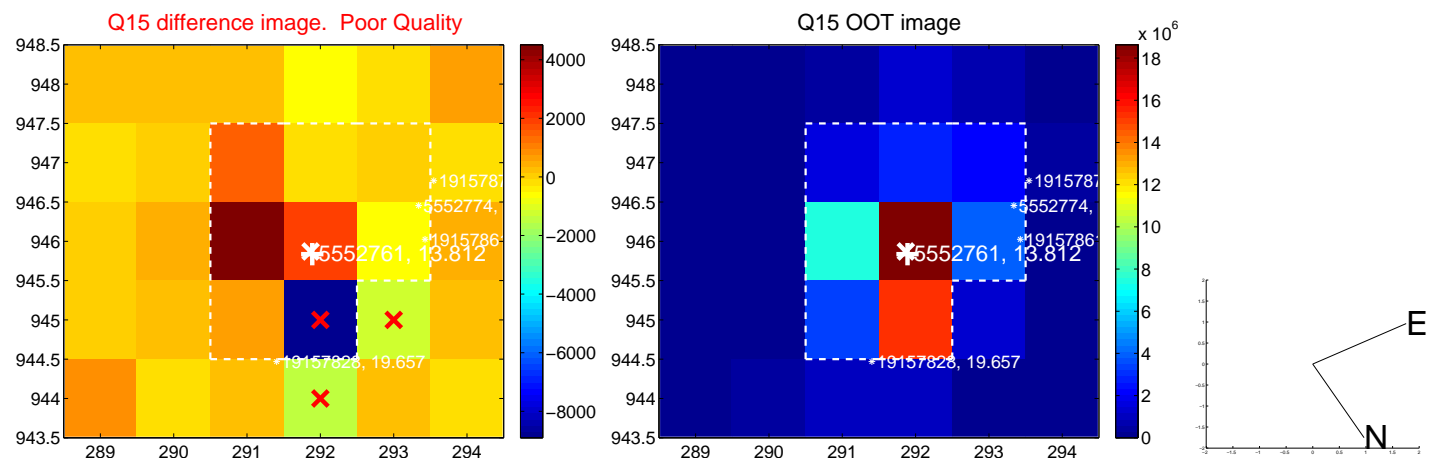
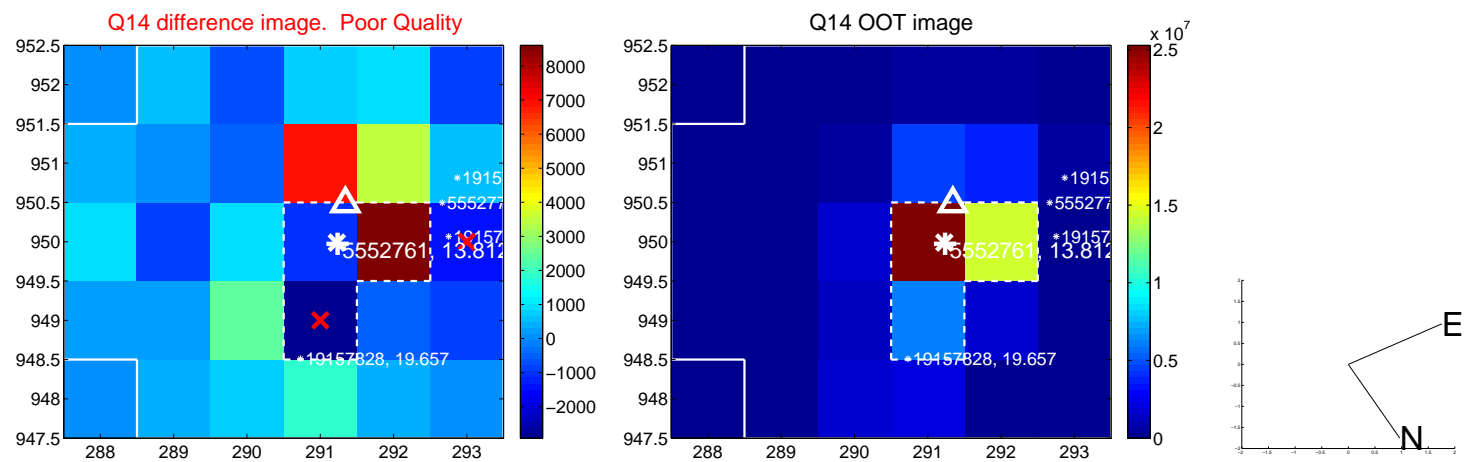
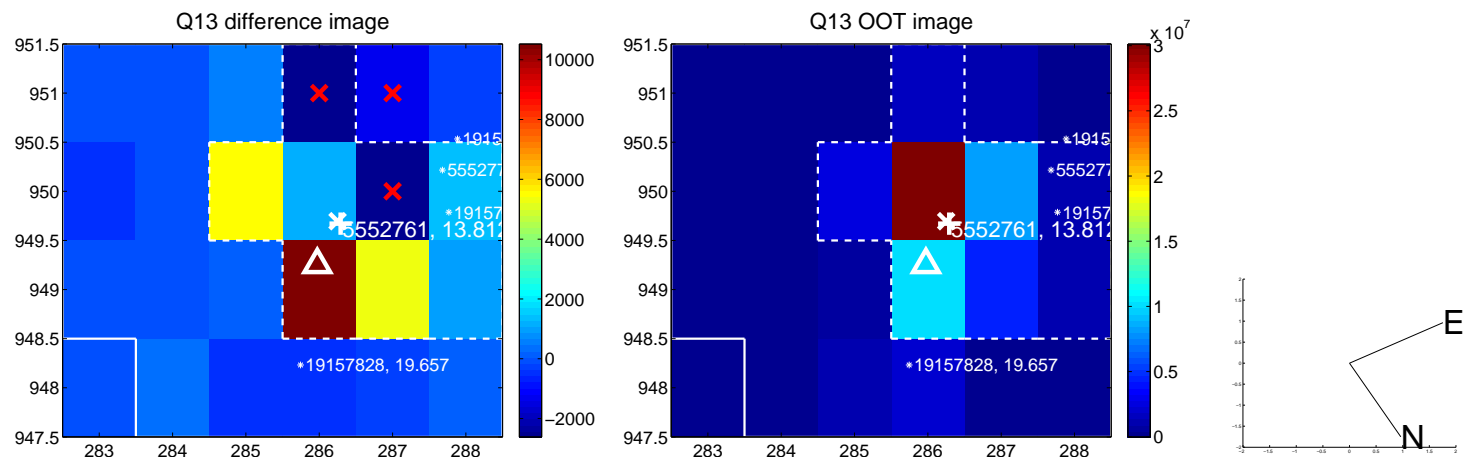
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



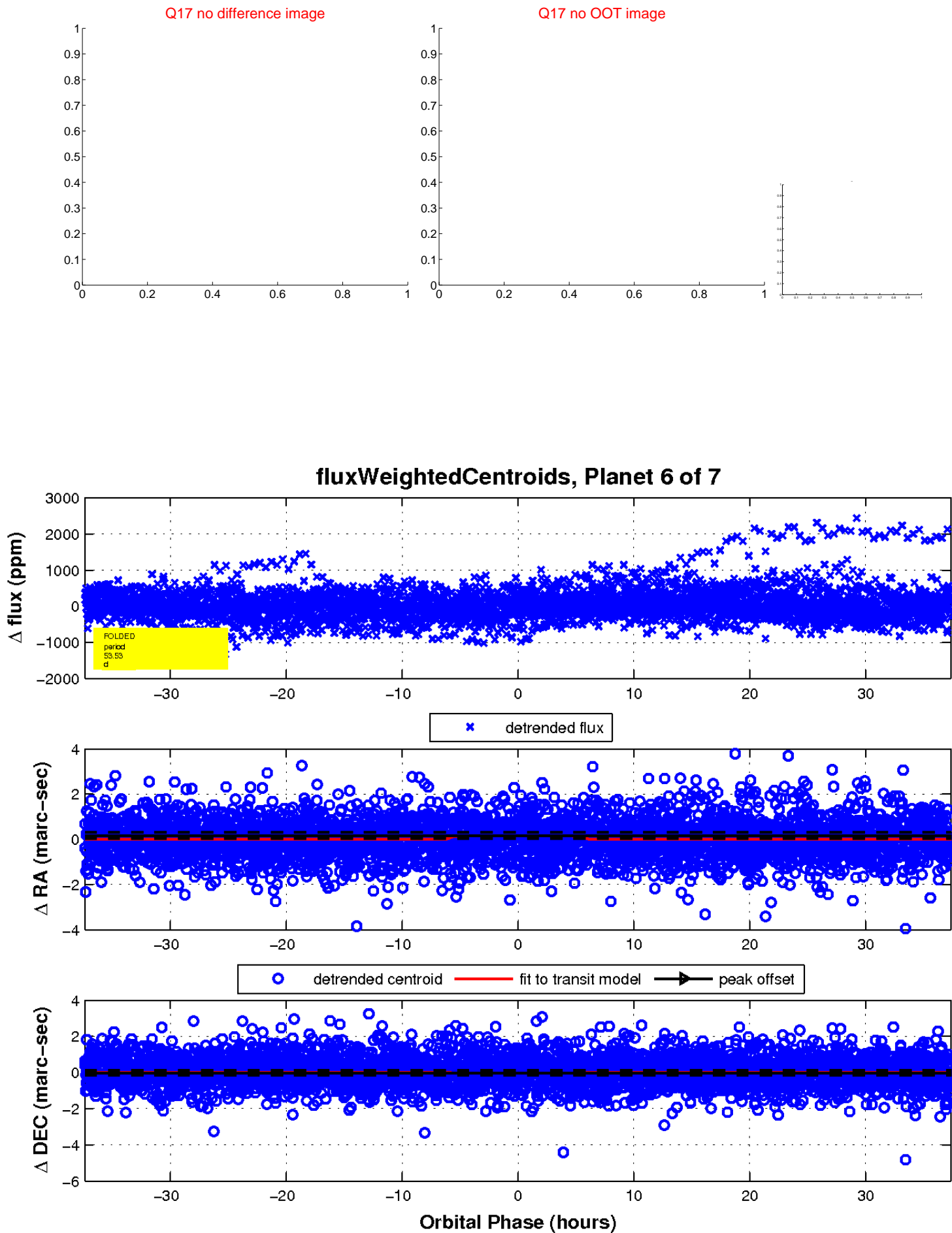
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

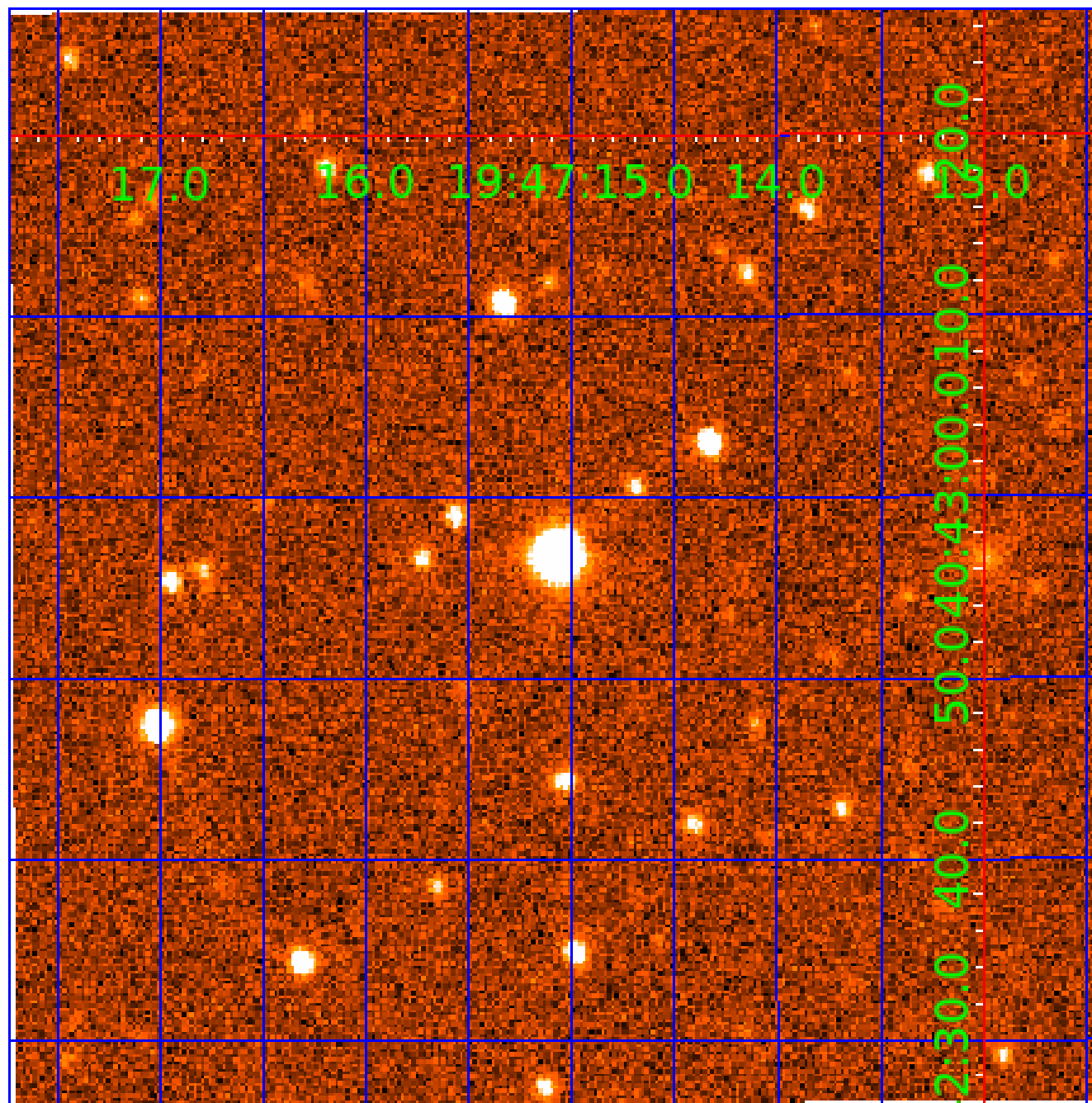


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 005552761

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})
005552761-01	OBS	No	2.789242	133.343296	40.0	18.006	9.8	6.6	1.20	6611	0.76	1464.88
005552761-02	OBS	No	359.297934	132.646674	2300.4	64.233	22.0	15.3	1.20	6611	10.52	2.25
005552761-03	OBS	No	84.444693	215.445111	448.5	21.091	10.9	8.2	1.20	6611	3.02	15.53
005552761-04	OBS	No	371.100386	338.196161	423.6	12.149	10.3	9.2	1.20	6611	2.62	2.16
005552761-05	OBS	No	45.144567	149.322342	342.7	10.178	10.4	10.3	1.20	6611	2.45	35.78
005552761-06	OBS	No	53.529865	138.894361	216.0	12.463	8.9	4.7	1.20	6611	1.99	28.51
005552761-07	OBS	No	404.442174	379.886035	675.1	7.444	8.5	9.0	1.20	6611	3.46	1.92

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
005552761-01	OBS	FP	0.00	1	0	0	0	SWEET_NTL—LPP_DV
005552761-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_SKYE—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—INCONSISTENT_TRANS—CENT_FEW_DIFFS
005552761-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT
005552761-04	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_MARSHALL—LPP_DV—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_POS_ALT—CENT_FEW_DIFFS
005552761-05	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT
005552761-06	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT
005552761-07	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_CHASES_MARSHALL—LPP_DV—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_NONUNIQ_ALT—MOD_TER_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.

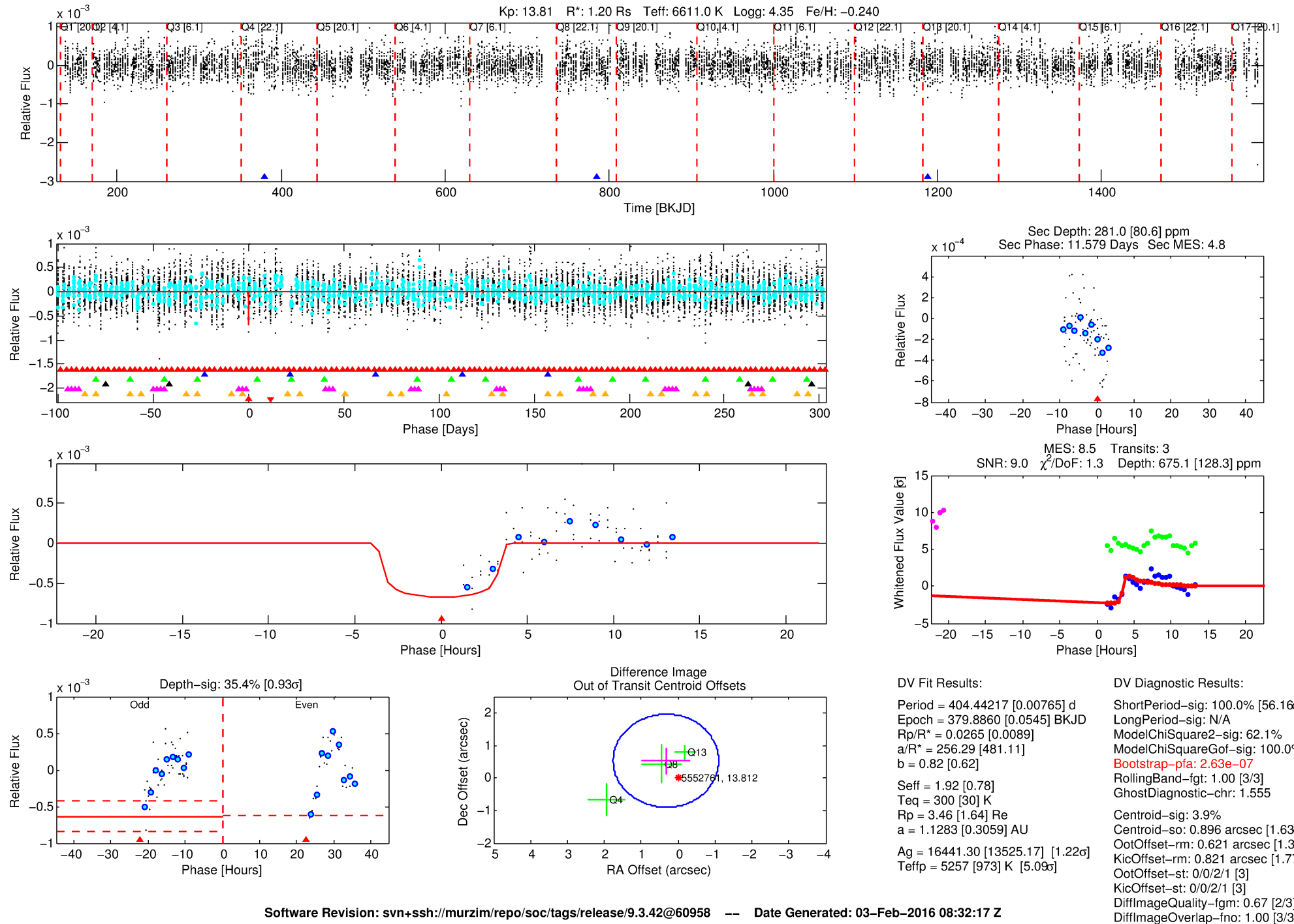
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 005552761-07

No Significant Match Found

DV One-Page Summary

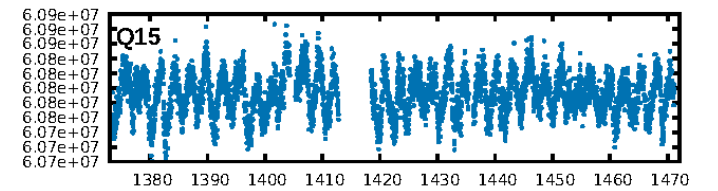
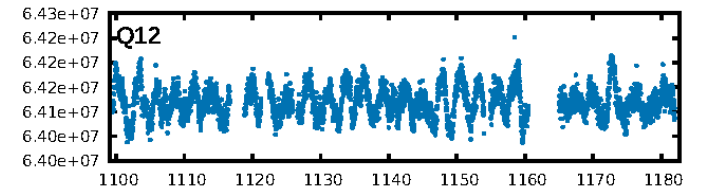
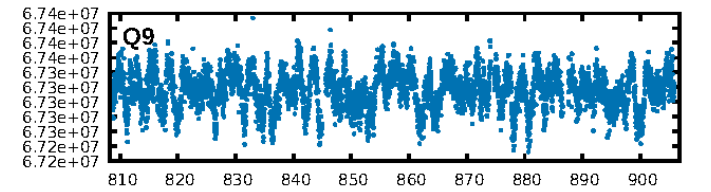
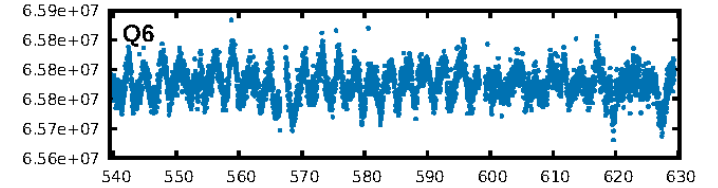
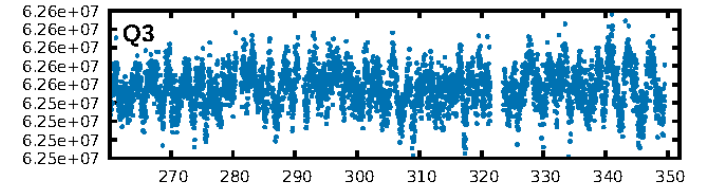
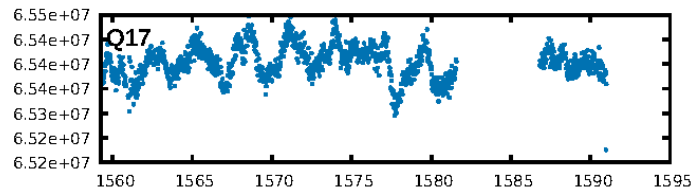
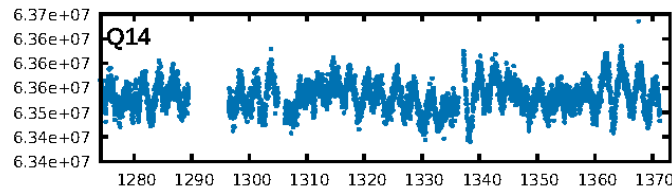
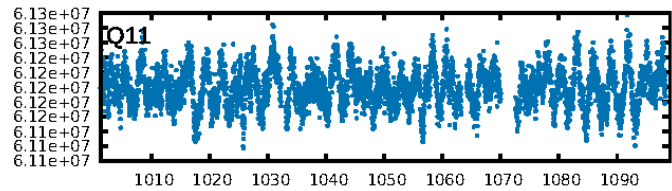
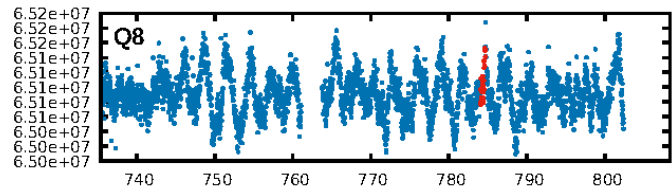
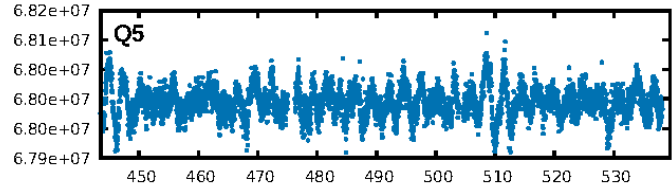
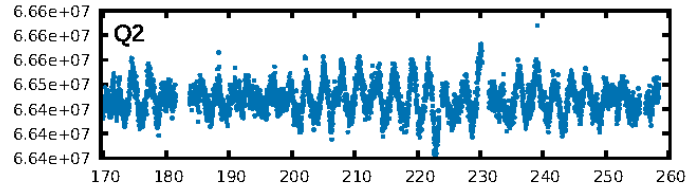
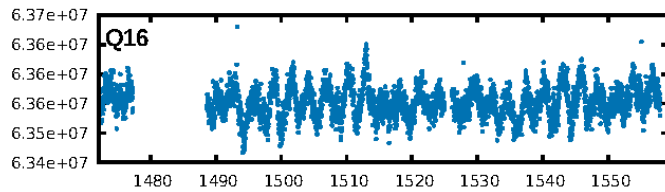
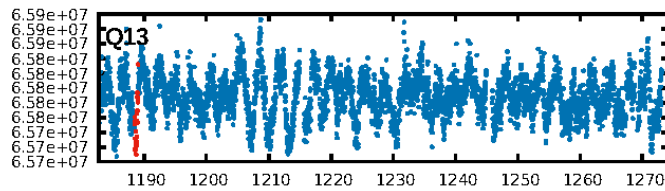
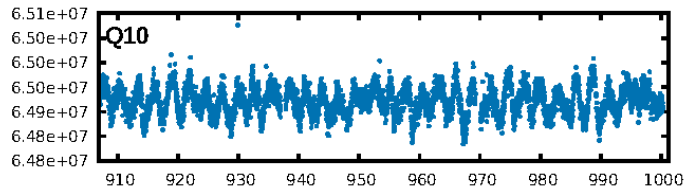
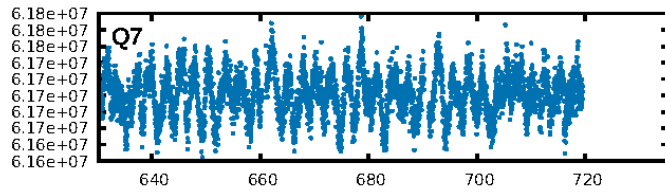
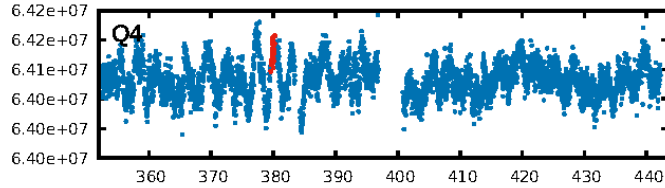
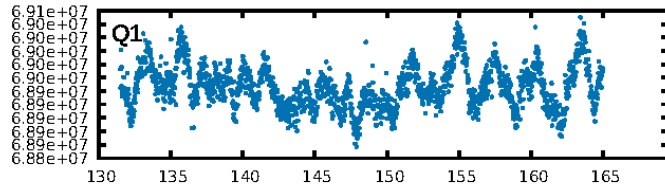
KIC: 5552761 Candidate: 7 of 7 Period: 404.442 d



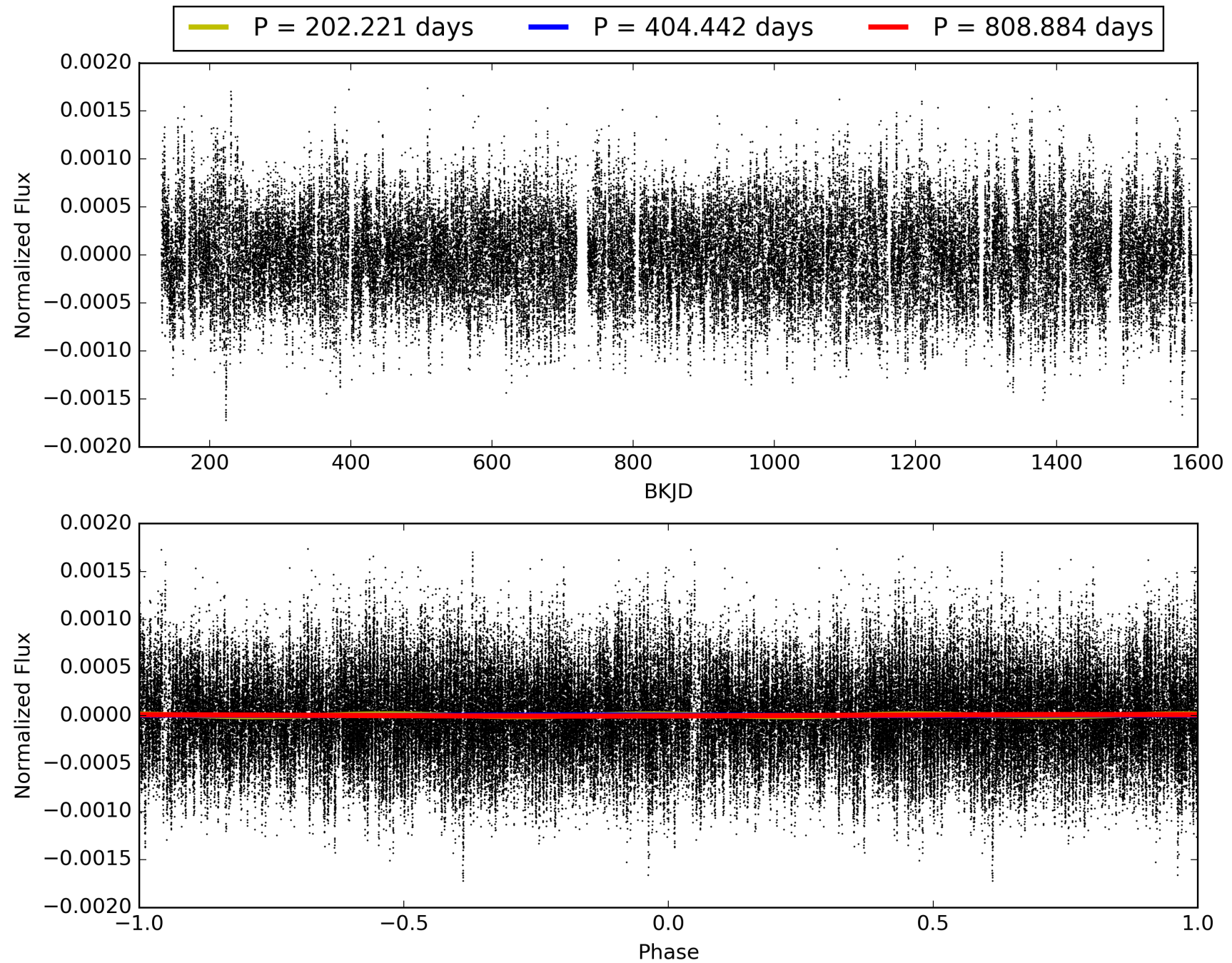
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This Data Validation Report Summary was produced in the Kepler Science Operations Center Pipeline at NASA Ames Research Center

TCE 005552761-07, PDC Light Curves

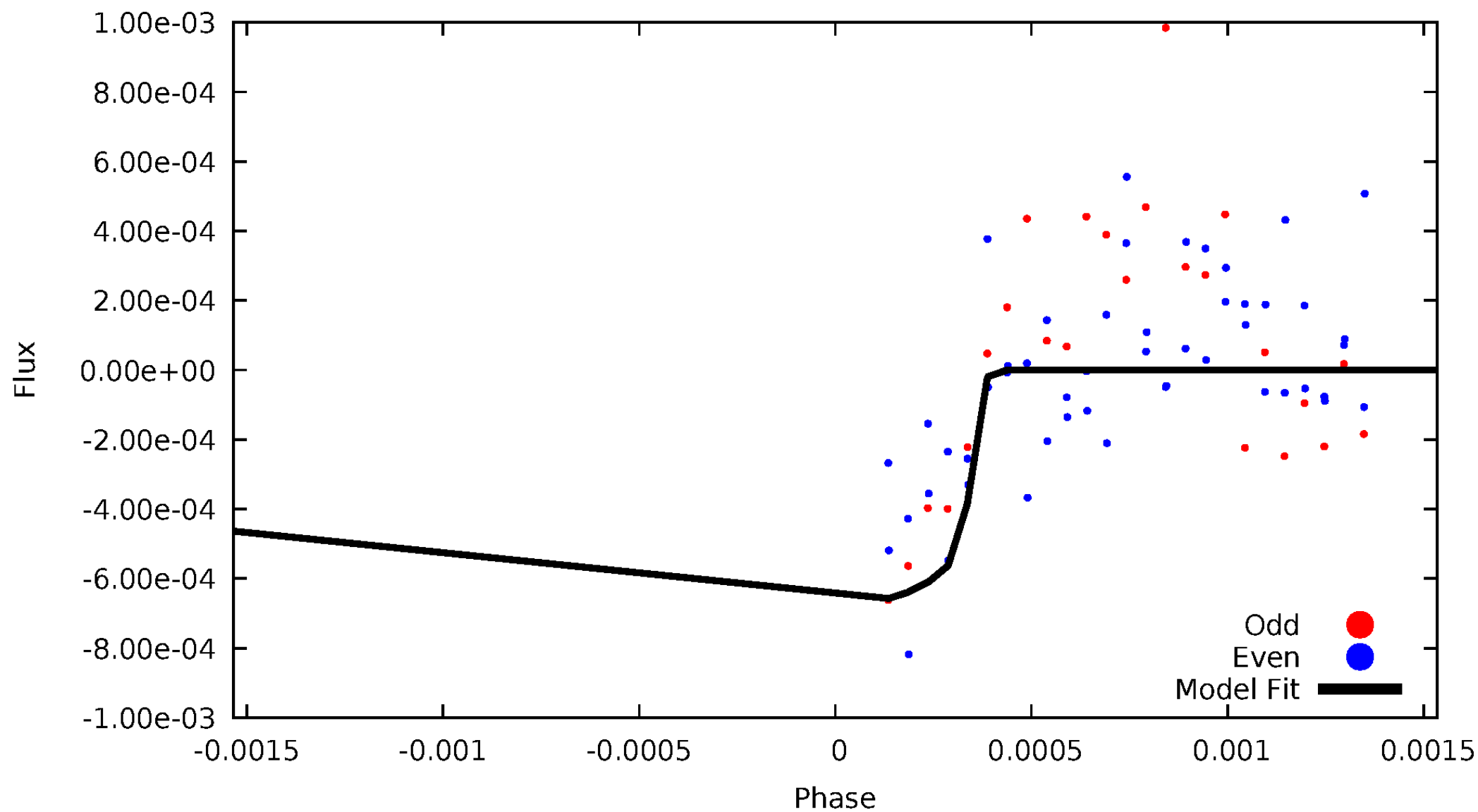


TCE 005552761-07



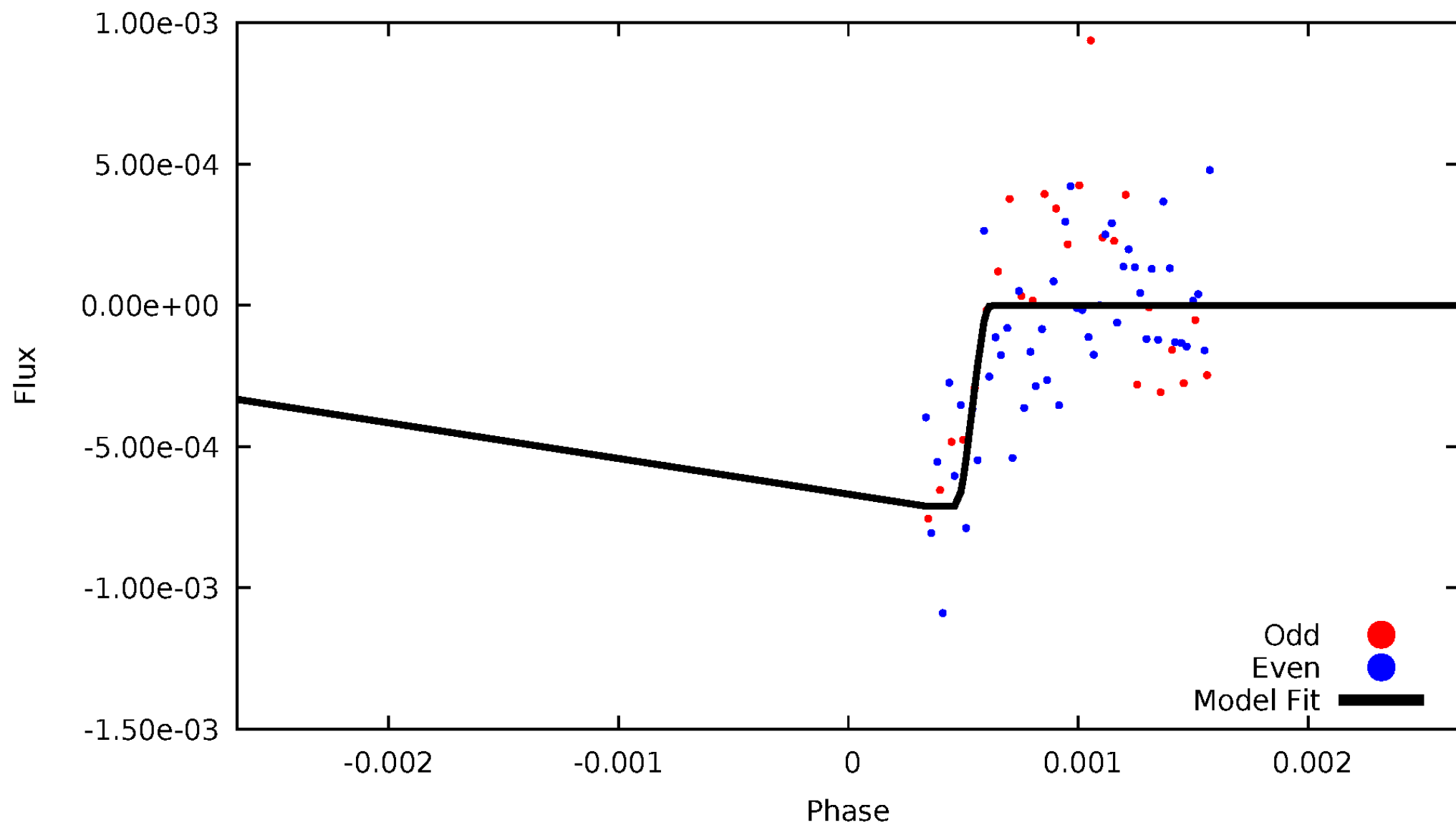
DV Odd/Even

TCE 005552761-07



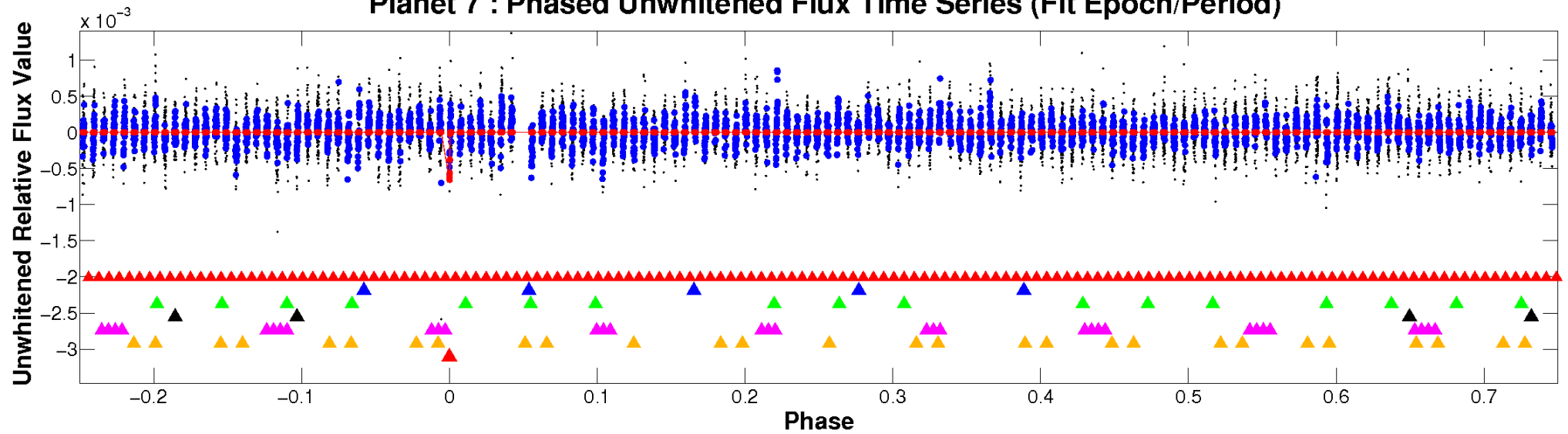
ALT Odd/Even

TCE 005552761-07

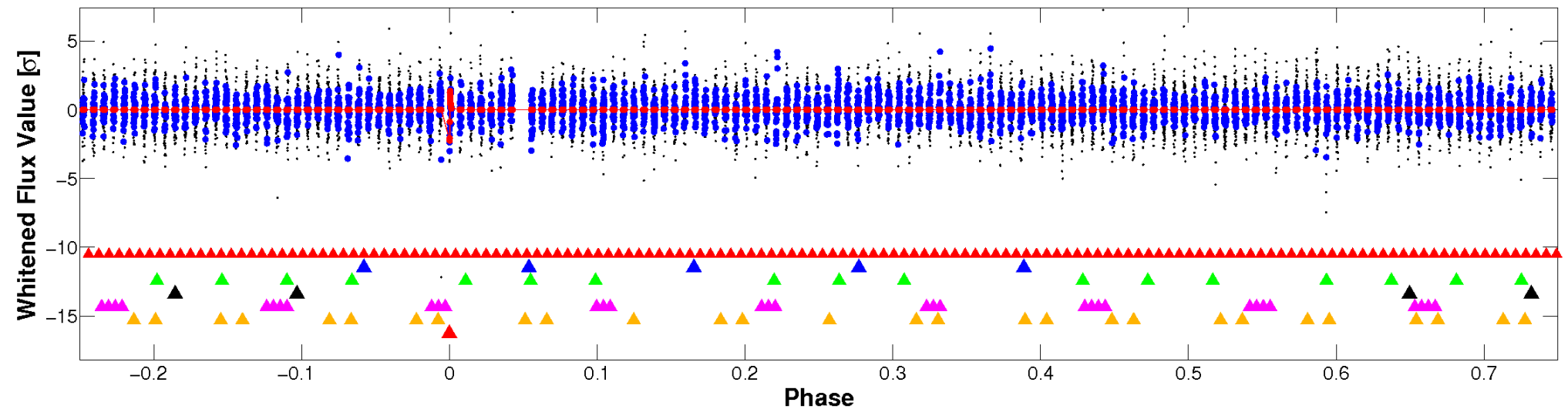


Non-Whitened Vs. Whitened Light Curve

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

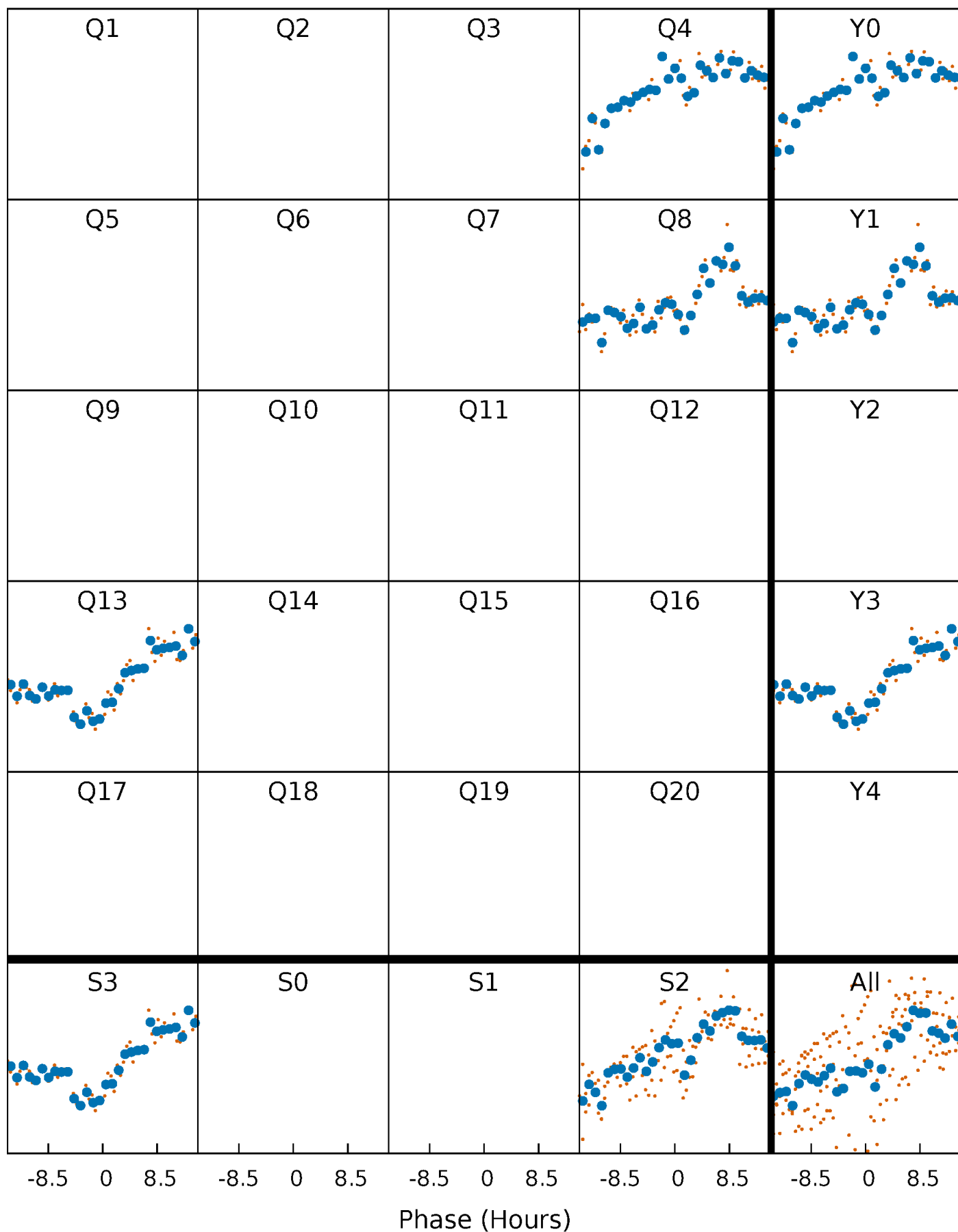


Planet 7 : Phased Whitened Flux Time Series (Fit Epoch/Period)



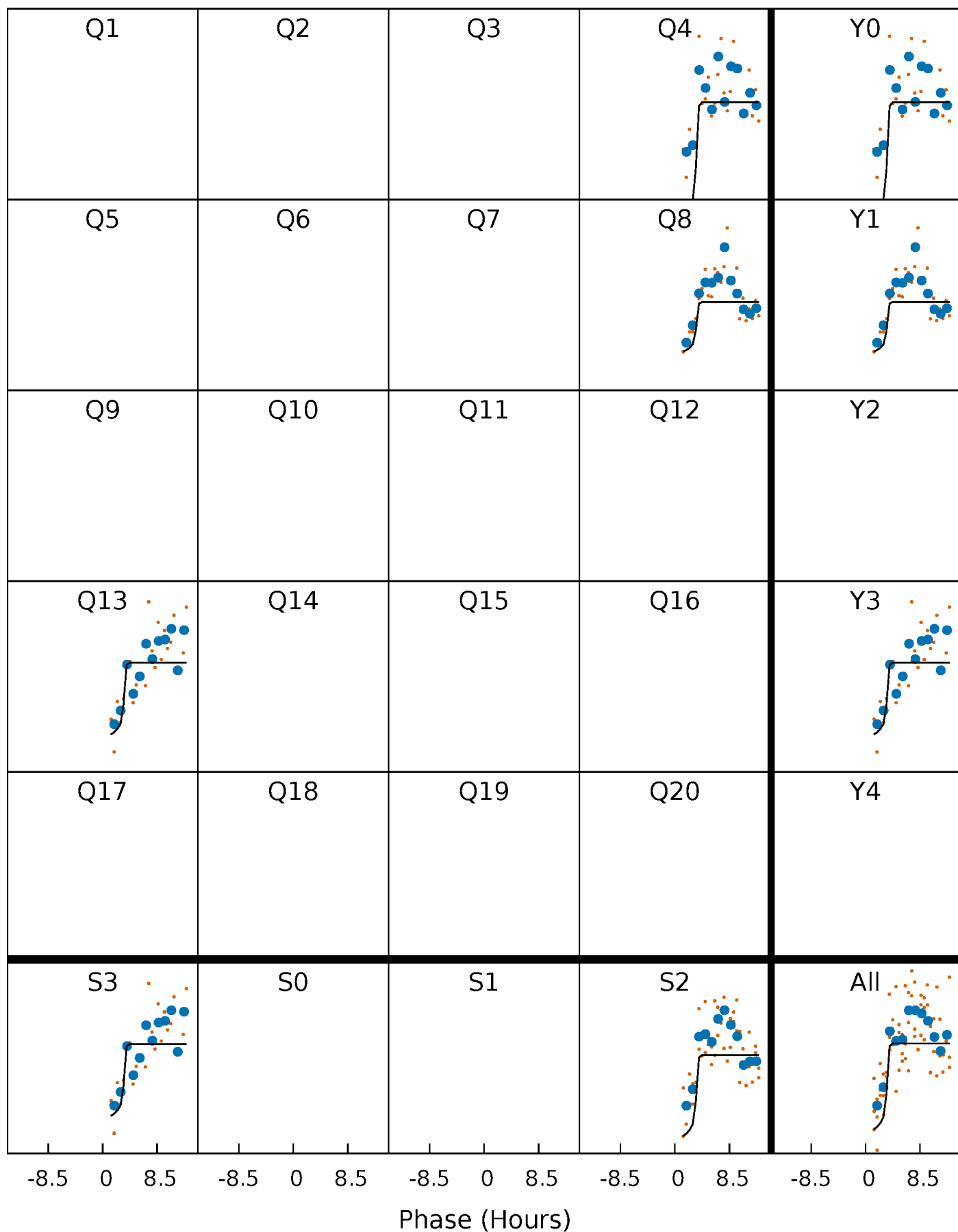
PDC Quarter-Phased Transit Curves

TCE 005552761-07 $P=404.442174$ Days $T_0=379.886035$ (BKJD)



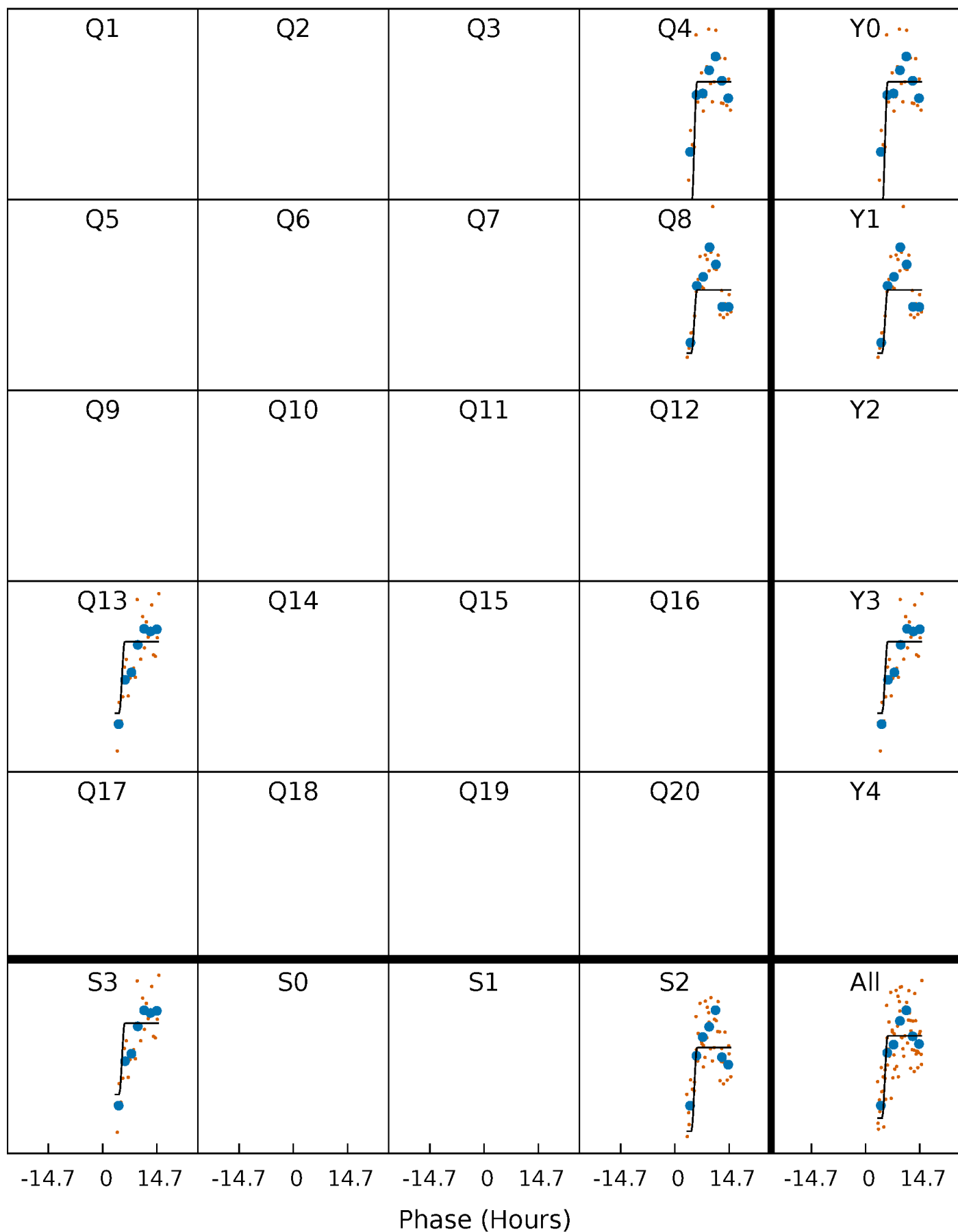
DV Quarter-Phased Transit Curves

TCE 005552761-07 $P=404.442174$ Days $T_0=379.886035$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

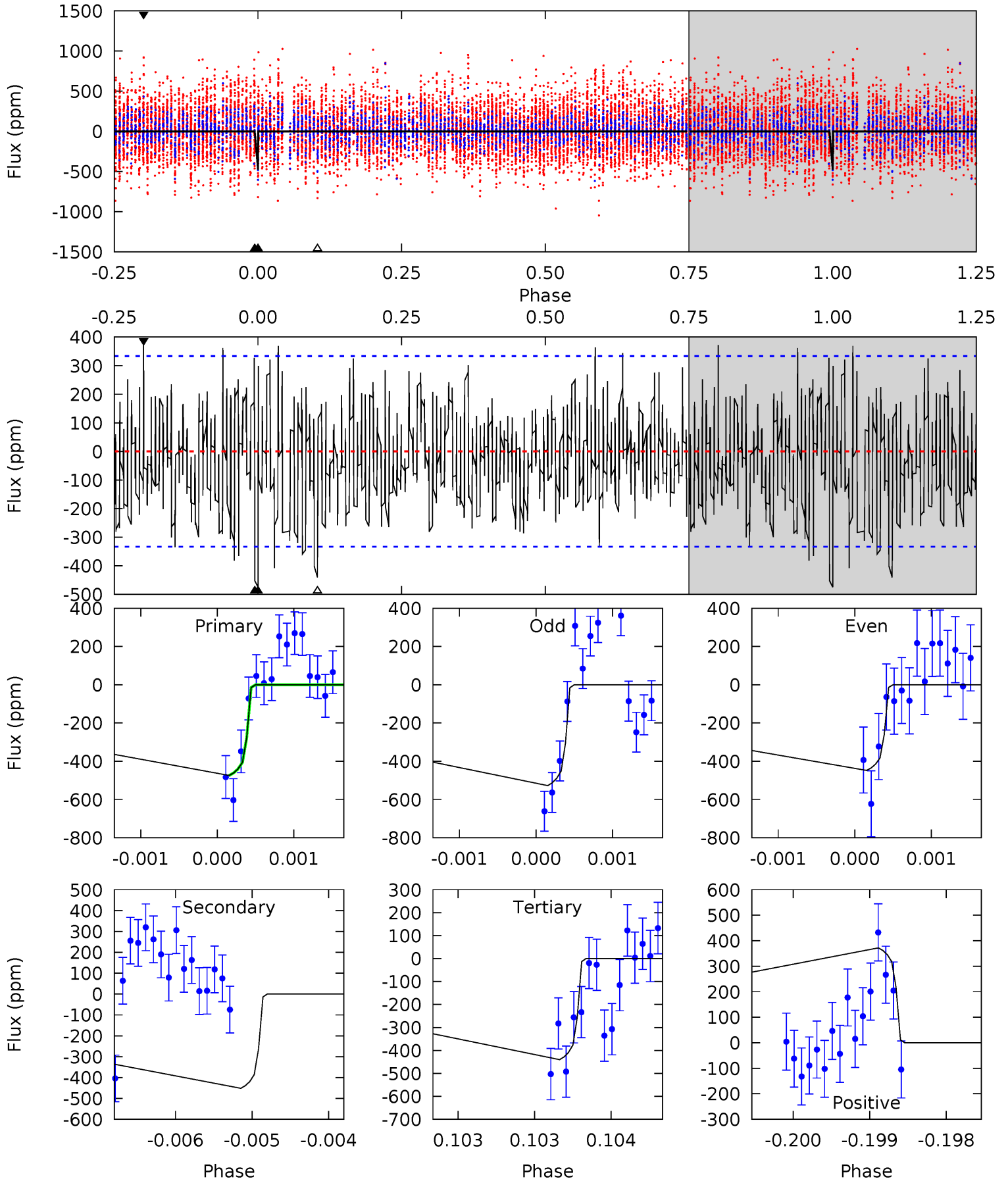
TCE 005552761-07 $P=404.437843$ Days $T_0=379.804178$ (BKJD)



DV Model-Shift Uniqueness Test

005552761-07, P = 404.442174 Days, E = 379.886035 Days

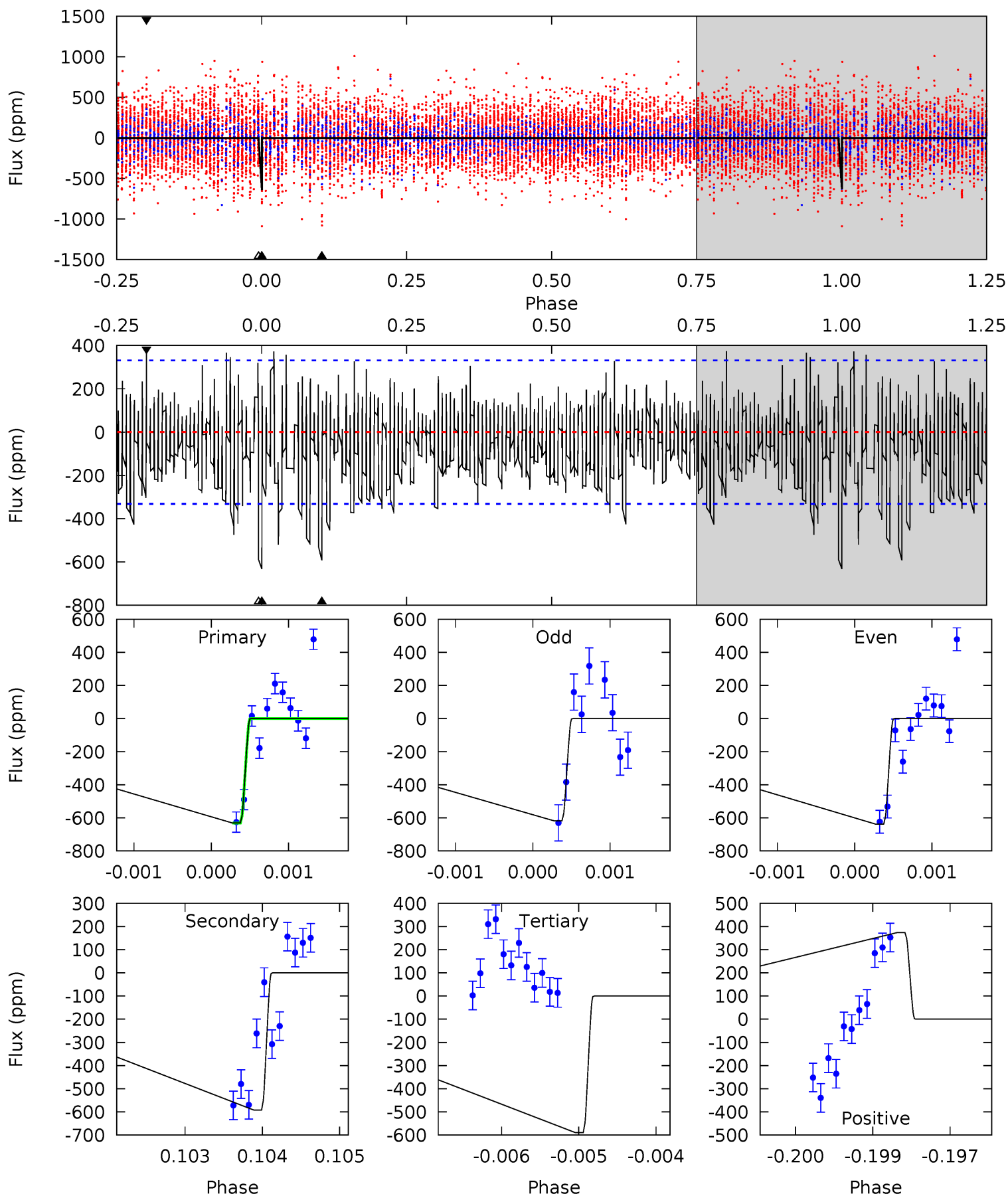
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
7.79	7.42	7.23	6.11	5.47	3.33	1.93	0.56	1.68	0.18	1.30	0.62	0.90	0.44	0



Alt Model-Shift Uniqueness Test

005552761-07, P = 404.437843 Days, E = 379.804178 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
10.3	9.68	9.63	6.10	5.41	3.23	2.04	0.69	4.22	0.04	3.57	0.16	1.04	0.37	0



Stellar Parameters For KIC 005552761

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6611^{+158}_{-218}	$4.351^{+0.081}_{-0.202}$	$-0.240^{+0.250}_{-0.300}$	$1.196^{+0.399}_{-0.160}$	$1.178^{+0.175}_{-0.158}$	$0.970^{+0.354}_{-0.501}$
	+2%/-3%	+2%/-5%	+104%/-125%	+33%/-13%	+15%/-13%	+36%/-52%
Source	PHO1	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 005552761-07 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-451 ± 61	$3.52^{+1.36}_{-1.17}$	424^{+36}_{-20}	5946^{+1387}_{-820}	25328^{+31028}_{-12484}
Alt.	-592 ± 61	$3.59^{+1.40}_{-1.19}$	425^{+31}_{-23}	6264^{+1534}_{-809}	31917^{+38880}_{-15244}

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

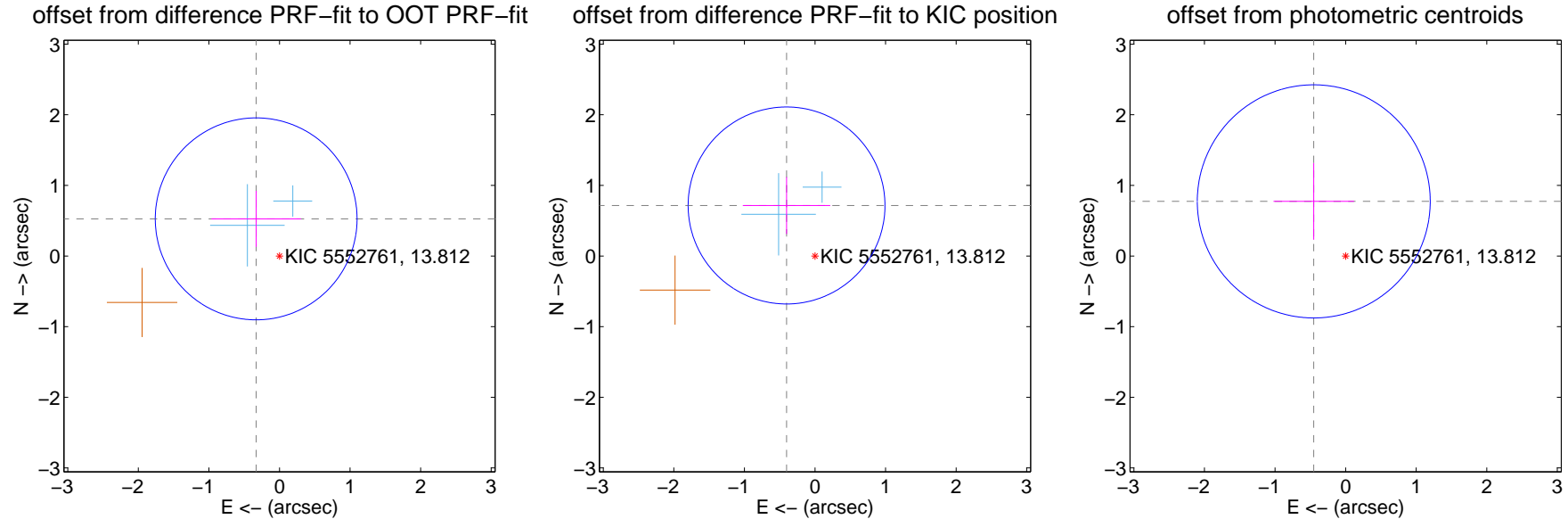
DV Centroid Data

Supplemental centroid analysis for 005552761-07. Kepler magnitude: 13.81. Transit SNR 8.96

There are 2 quarters with good PRF difference image offsets

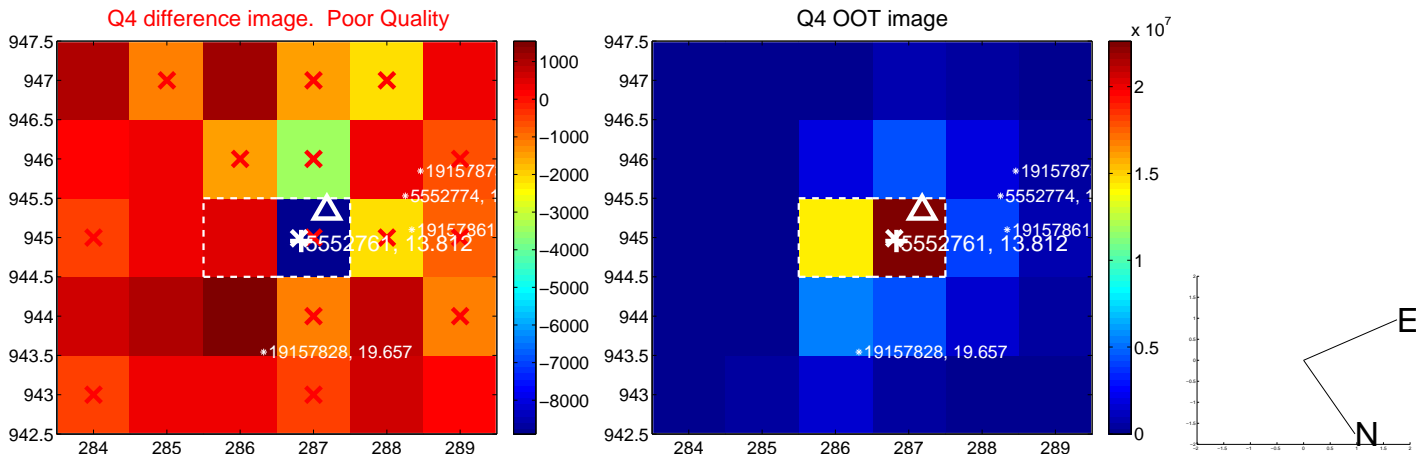
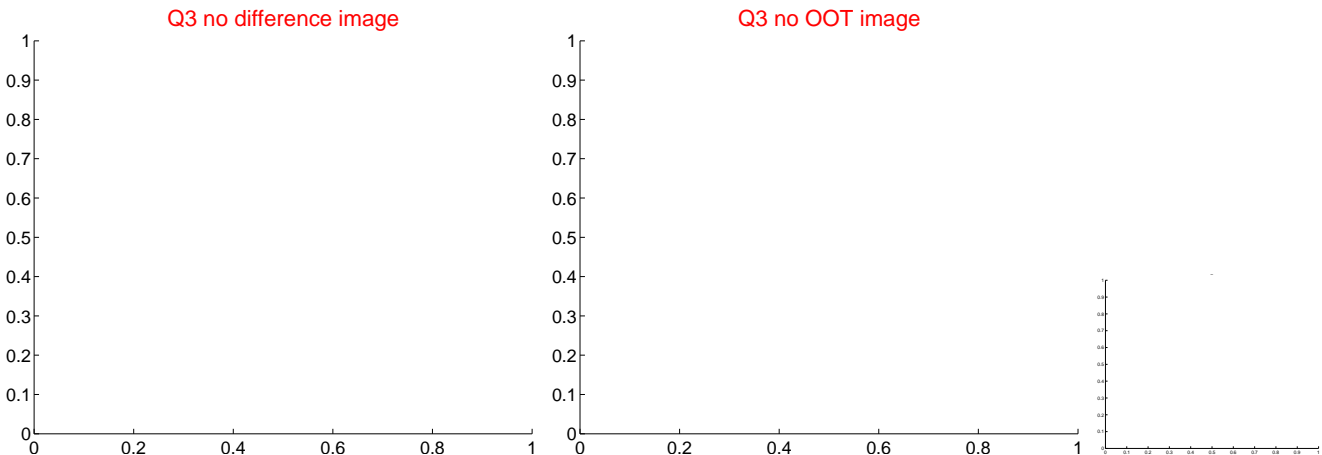
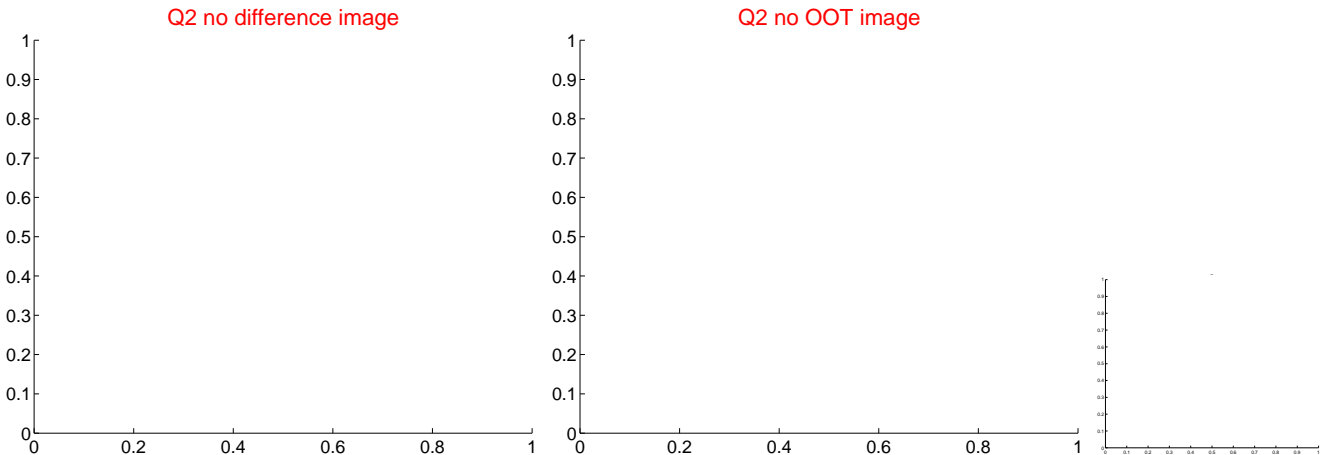
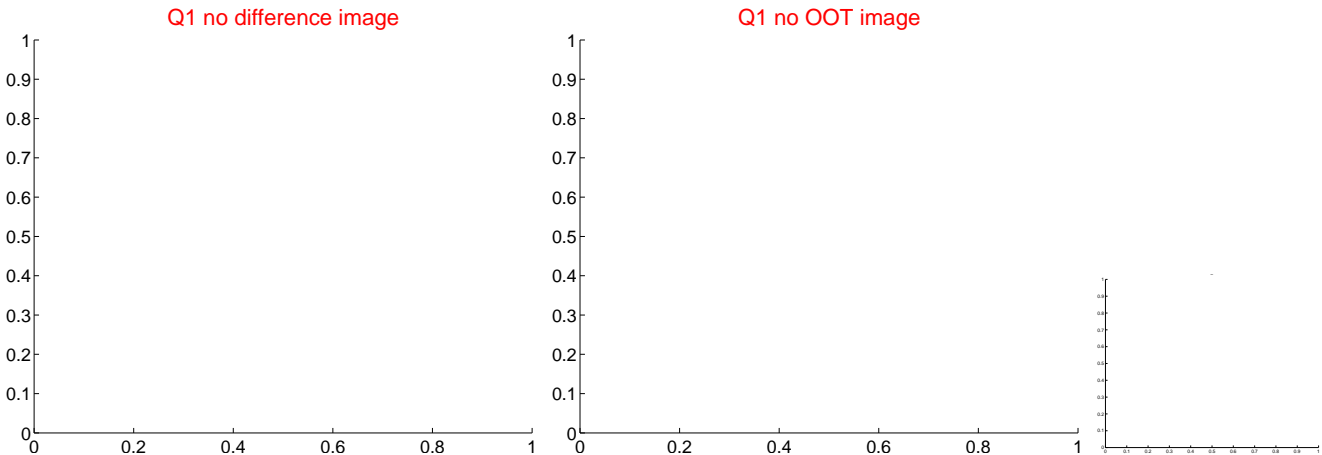
The direct PRF centroid is offset from the target star catalog position by about 0.22 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.621 ± 0.477	1.30	0.330 ± 0.635	0.526 ± 0.397
PRF-fit source offset from KIC position	0.821 ± 0.465	1.77	0.403 ± 0.620	0.716 ± 0.404
photometric centroid source offset	0.90 ± 0.55	1.63	0.45 ± 0.57	0.77 ± 0.54

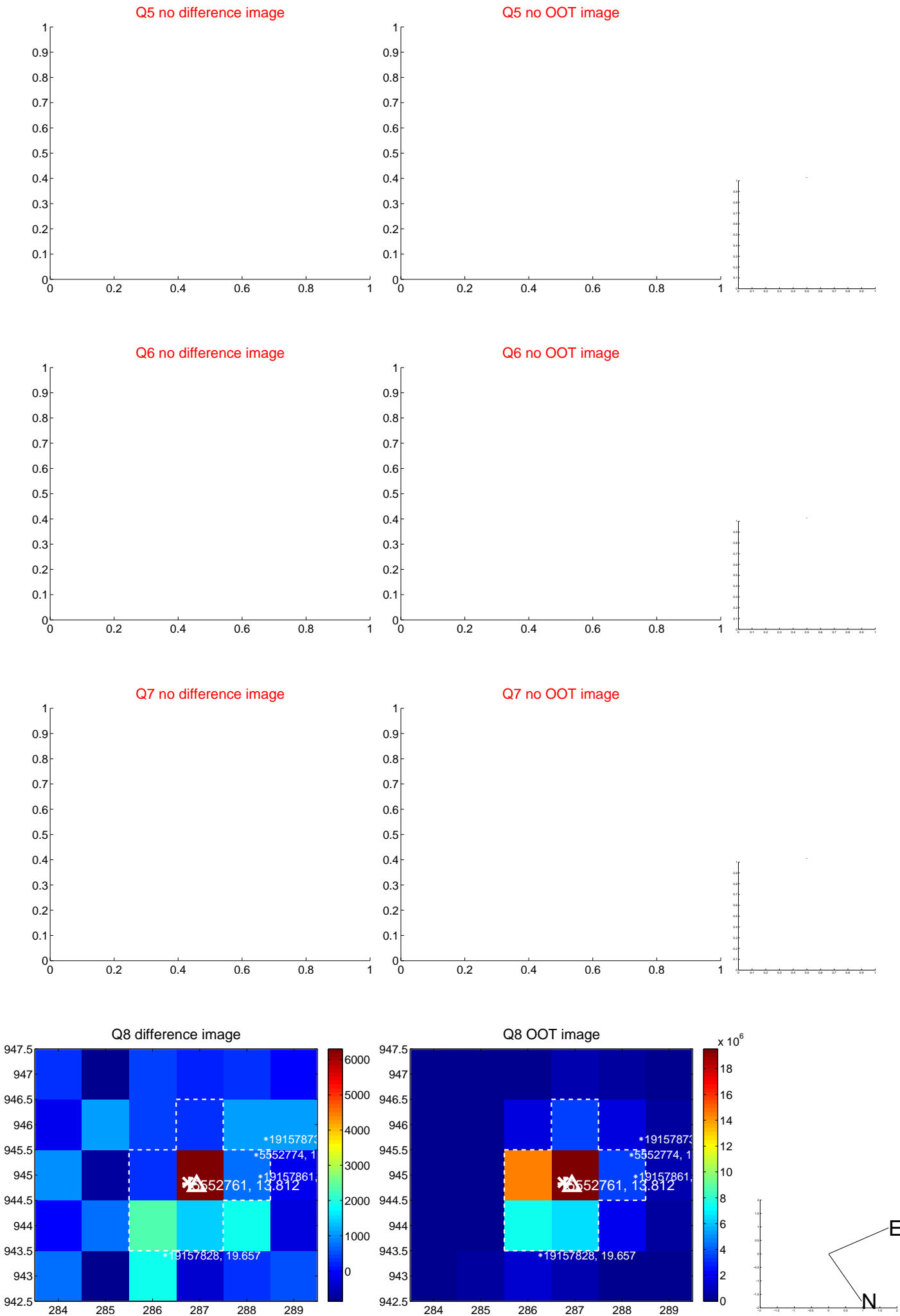


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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



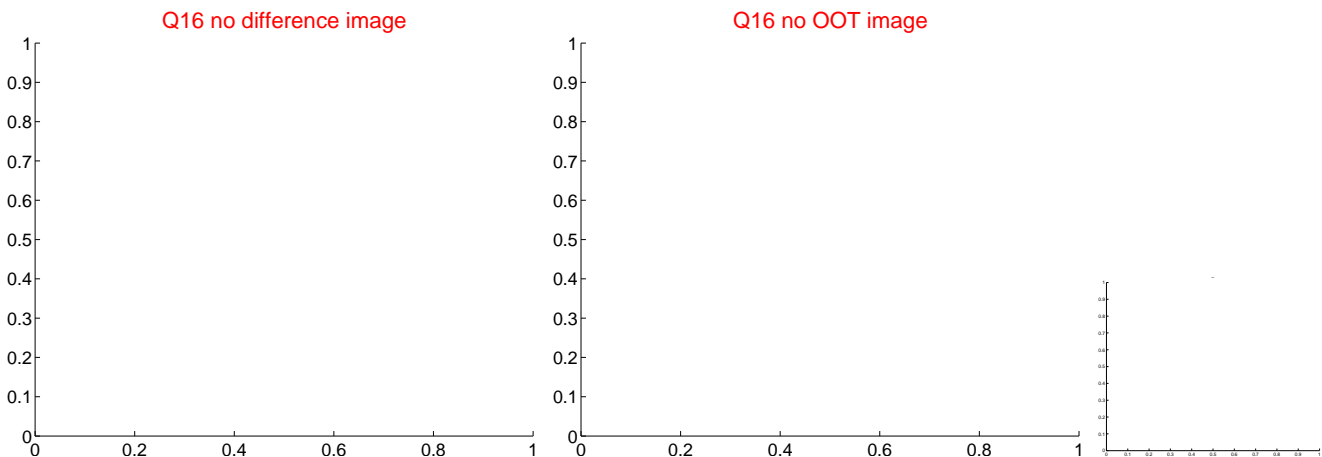
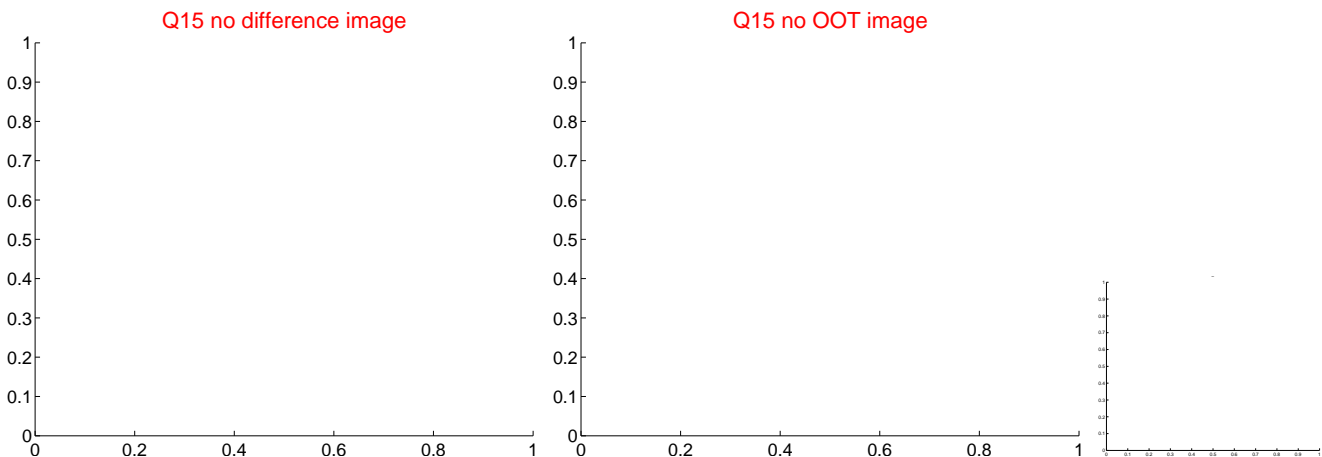
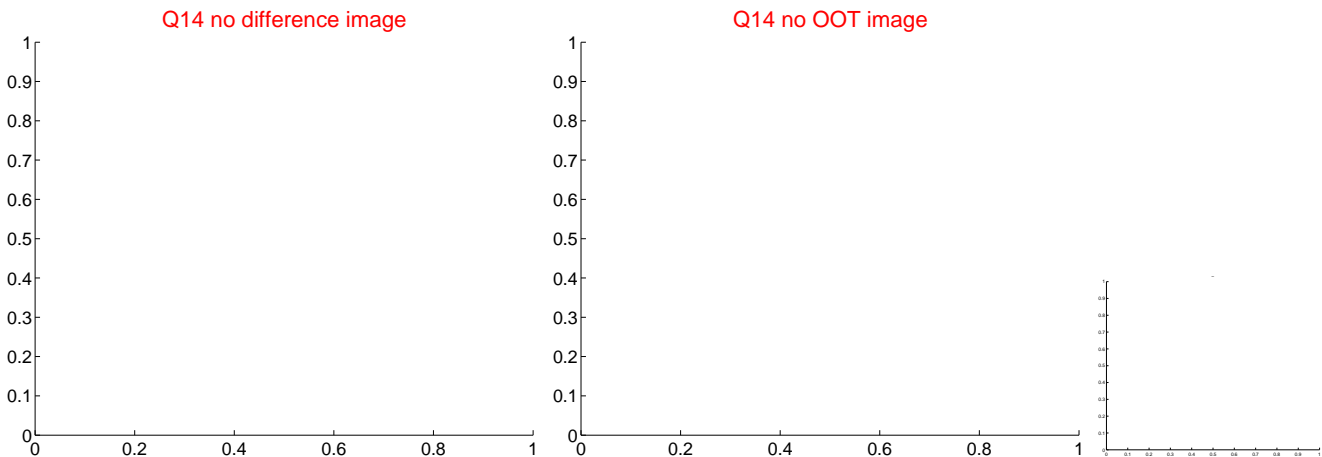
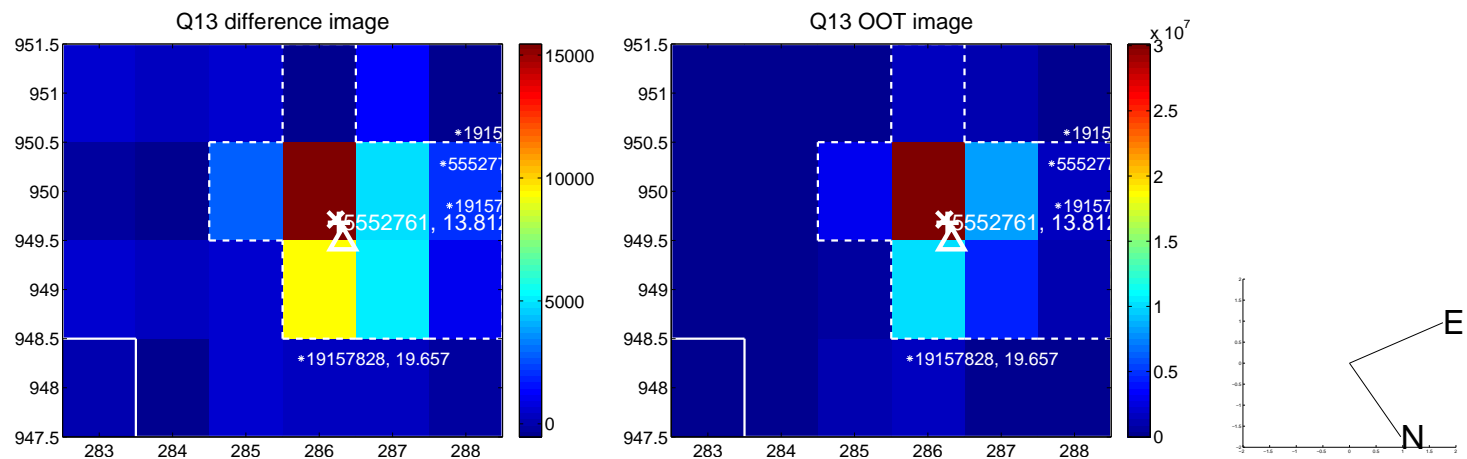
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



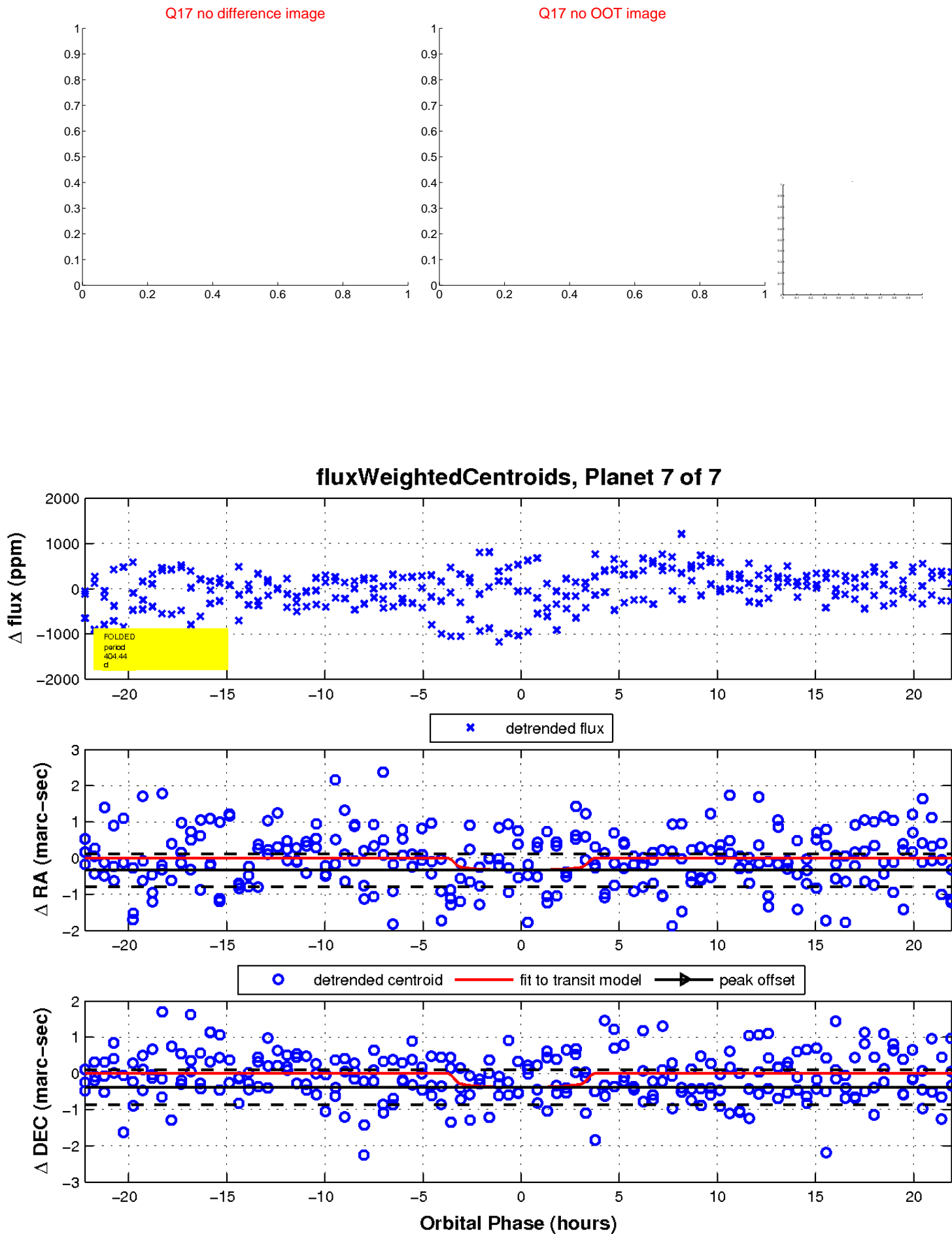
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

