

When using BIOPAC Basic Scripting (BBS) for event marking or searching, the user must be cognizant of the event code label. This label is in the form of a four character string comprised of alphanumeric symbols.

Find Cycle/Peak Script Command

The Find Cycle/Peak commands make use of markers to determine waveform events. The specific command(s) that require(s) event specification include the following:

Transform FindPeak Cycle Event




















1. Arguments within this command
2. *styp*
3. *etyp* represent the four-character code that should match an id from the marker configuration XML file.




















Event marker Codes available for BBS

General Markers	Hemodynamics	Other
Waveform Edits	- ECG Complexes	Pharmacology
Selections	- Beat Classification	Respiration
Annotations	- Blood Pressure	Sleep
B-Alert X10 EEG	- Impedance	SMI Import
BioHarness	Mobita	Stim/Resposne
Clustering	Monophasic Action Potential	User-defined
Electrodermal Activuty (EDA)	Neurophysiology	







































Table 1—Event ID Codes and Image References






















Asterisks within any four-character id code denote a space; asterisks are **NOT** used as part of the identification.









ID code <i>* = space</i>	Event Marker Description	Sample image file name(s)	Sample image(s)
General Markers			
alm	User Alarm	user_alarm.jpg user_alarm_selected.jpg	 
apnd	Append	append.jpg append_selected.jpg	 
audn	Audio Note	audio_note.jpg audio_note_selected.jpg	 
cmlb	Communication lost begin	default.jpg default_selected.jpg	 
cmle	Communication lost end	default.jpg default_selected.jpg	 
defl	Default	default.jpg default_selected.jpg	 
max	Maximum	maximum.jpg maximum_selected.jpg	 
min	Minimum	minimum.jpg minimum_selected.jpg	 
nois	Change in Signal Quality	phys_noise.jpg	~
nrto	New rate has been detected	newRateOutput.jpg newRateOutput_selected.jpg	 
recv	Recovery	recovery.jpg	







ID code * = space	Event Marker Description	Sample image file name(s)	Sample image(s)
rhyt	Change in Rhythm	phys_rhythm.jpg	+
rset	Reset	reset.jpg reset_selected.jpg	 
stul	Stimulator	stimulator.jpg stimulator_selected.jpg	 
wfof	Waveform End	phys_wfoff.jpg)
wfon	Waveform Onset	phys_wfon.jpg	(
Waveform Edits			
cut	Cut	cut.jpg	
vb	Paste Begin	paste_begin.jpg	
ve	Paste End	paste_end.jpg	
Selections			
selb	Selection Begin	selection_begin.jpg	
sele	Selection End	selection_end.jpg	
Annotations			
ansh	Short Arrow	arrow_short.jpg arrow_short_selected.jpg	 
anmd	Medium Arrow	arrow.jpg arrow_selected.jpg	 
anlg	Long Arrow	arrow_long.jpg arrow_long_selected.jpg	 
star	Star	star.jpg star_selected.jpg	 
flag	Flag	flag.jpg flag_selected.jpg	 


































ID code * = space	Event Marker Description	Sample image file name(s)	Sample image(s)
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B-Alert X10 EEG			
steb	Start of Eye Blink artifact	balertStartEB.jpg balertStartEB_selected.jpg	 
eneb	End of Eye Blink artifact	balertEndEB.jpg balertEndEB_selected.jpg	 
sexc	Start of Excursion artifact	balertStartExc.jpg balertStartExc_selected.jpg	 
eexc	End of Excursion artifact	balertEndExc.jpg balertEndExc_selected.jpg	 
ssat	Start of Saturation artifact	balertStartSat.jpg balertStartSat_selected.jpg	 
esat	End of Saturation artifact	balertEndSat.jpg balertEndSat_selected.jpg	 
sspk	Start of Spike artifact	balertStartSpk.jpg balertStartSpk_selected.jpg	 
espk	End of Spike artifact	balertEndSpk.jpg balertEndSpk_selected.jpg	 
semg	Start of EMG artifact	balertStartEMG.jpg balertStartEMG_selected.jpg	 
eemg	End of EMG artifact	balertEndEMG.jpg balertEndEMG_selected.jpg	 
wles	Workload - EMG Start	balertStartEMG.jpg balertStartEMG_selected.jpg	 
wlee	Workload - EMG End	balertEndEMG.jpg balertEndEMG_selected.jpg	 
ipss	Workload - Invalid PSD Start	balertStartPSD.jpg	
ipse	Workload - Invalid PSD End	balertEndPSD.jpg	
ddst	Dummy Data Start	balertStartDum.jpg	
dded	Dummy Data End	balertEndDum.jpg	
idst	Misaligned data	misaligned_data.jpg misaligned_data_selected.jpg	 
BioHarness			
bprs	Button pressed	bprs.jpg bprs_selected.jpg	 
Clustering Events			
ctr1	Cluster 1	cluster_1.jpg cluster_1_selected.jpg	 
ctr2	Cluster 2	cluster_2.jpg cluster_2_selected.jpg	 
ctr3	Cluster 3	cluster_3.jpg	 

ID code * = space	Event Marker Description	Sample image file name(s)	Sample image(s)
		cluster_3_selected.jpg	
ctr4	Cluster 4	cluster_4.jpg cluster_4_selected.jpg	 
ctr5	Cluster 5	cluster_5.jpg cluster_5_selected.jpg	 
ctr6	Cluster 6	cluster_6.jpg cluster_6_selected.jpg	 
ctr7	Cluster 7	cluster_7.jpg cluster_7_selected.jpg	 
ctr8	Cluster 8	cluster_8.jpg cluster_8_selected.jpg	 
ctr9	Cluster 9	cluster_9.jpg cluster_9_selected.jpg	 
ctrn	Cluster n	cluster_n.jpg cluster_n_selected.jpg	 
cend	End Cluster	cluster_end.jpg cluster_end_selected.jpg	 
outl	Outlier	cluster_out.jpg cluster_out_selected.jpg	 
tran	Training Set	cluster_train.jpg cluster_train_selected.jpg	T T
Electrodermal Activity (EDA)			
scr	Skin Conductance Response	scr.jpg scr_selected.jpg	 
sscr	Specific SCR	specific_scr.jpg	
Hemodynamics			
Hemodynamics > ECG Complexes			
u	U-wave Peak	phys_uwave.jpg	u
pq	PQ Junction	phys_pq.jpg	^
jpt	J-point	phys_jpt.jpg	'
stch	ST Segment Change	phys_stch.jpg	s
tch	T-wave Change	phys_tch.jpg	T
q	Q-wave Peak	q.jpg	q
s	S-wave Peak	s.jpg	s
Hemodynamics > Beat Classifications from Physiobank			
nrml	Normal Beat	phys_normal.jpg	N
pace	Paced Beat	phys_pace.jpg	/
pfus	Fusion of Paced and Normal Beat	phys_pfus.jpg	f
unkn	Unclassifiable Beat	phys_unknown.jpg	Q
lbbb	Left Bundle Branch Block Beat	phys_lbbb.jpg	L

ID code * = space	Event Marker Description	Sample image file name(s)	Sample image(s)
rbbb	Right Bundle Branch Block Beat	phys_rbbb.jpg	R
bbb	Bundle Branch Block Beat	phys_bbb.jpg	B
apc	Atrial Premature Beat	phys_apc.jpg	A
aber	Aberrated Atrial Premature Beat	phys_aberr.jpg	a
npc	Nodal Premature Beat	phys_npc.jpg	J
svpb	Supraventricular Premature Beat	phys_svpb.jpg	S
pvc	Premature Ventricular Contraction	phys_pvc.jpg	V
ront	R-on-T Premature Ventricular Contraction	phys_ront.jpg	r
fusi	Fusion of Ventricular and Normal Beat	phys_fusion.jpg	F
aesc	Atrial Escape Beat	phys_aesc.jpg	e
nesc	Nodal Escape Beat	phys_nesc.jpg	j
sves	Supraventricular Escape Beat	phys_svesc.jpg	n
vesc	Ventricular Escape Beat	phys_vesc.jpg	E
Hemodynamics > Blood Pressure			
syst	Systole	phys_systole.jpg	*
dias	Diastole	phys_diastole.jpg	D
esp	End Systolic Pressure	lvesp.jpg	S _e
edp	End Diastolic Pressure	lvedp.jpg	D _e
Hemodynamics > Impedance			
aptz	A-point	imp_a.jpg	A
bptz	B-point	imp_b.jpg	B
cptz	C-point	imp_c.jpg	C
xptz	X-point	imp_x.jpg	X
yptz	Y-point	imp_y.jpg	Y
optz	O-point	imp_o.jpg	O
Mobita			
mors	Start out of range	default.jpg default_selected.jpg	 
more	End out of range	default.jpg default_selected.jpg	 
Monophasic Action Potential			
plat	Plateau	plateau.jpg	R
upst	Upstroke	upstroke.jpg	U
Neurophysiology			
apon	Spike Episode Begin	action_potential.jpg action_potential_sel.jpg	 
apof	Spike Episode End	action_potential_end.jpg action_potential_end_sel.jpg	 

ID code * = space	Event Marker Description	Sample image file name(s)	Sample image(s)
Other			
vfon	Start of Ventricular Flutter	phys_vfon.jpg	[
flwa	Ventricular Flutter Wave	phys_flwav.jpg	!
vfof	End of Ventricular Flutter	phys_vfoff.jpg]
pesp	Pacemaker Artifact	phys_pacesp.jpg	^
arfc	Isolated QRS-like Artifact	phys_arfct.jpg	
napc	Non-conducted P Wave	phys_napc.jpg	x
Pharmacology			
base	Baseline	base.jpg	B
dose	Dose	dose.jpg dose_selected.jpg	 
wash	Wash	wash.jpg wash_selected.jpg	 
Respiration			
rein	Inspire Start	inhale.jpg inhale_selected.jpg	 
reot	Expire Start	exhale.jpg exhale_selected.jpg	 
reap	Apnea Start	apnea.jpg apnea_selected.jpg	 
Sleep Scoring			
wkon	Wake Onset	sleepStageWakeOnset.jpg	W→
wkof	Wake End	sleepStageWakeEnd.jpg	←W
rmon	REM Onset	sleepStageREMONset.jpg	R→
rmof	REM End	sleepStageREMEnd.jpg	←R
s1on	Sleep Stage 1 Onset	sleepStage1Onset.jpg	1→
s1of	Sleep Stage 1 End	sleepStage1End.jpg	←1
s2on	Sleep Stage 2 Onset	sleepStage2Onset.jpg	2→
s2of	Sleep Stage 2 End	sleepStage2End.jpg	←2
s3on	Sleep Stage 3 Onset	sleepStage3Onset.jpg	3→
s3of	Sleep Stage 3 End	sleepStage3End.jpg	←3
s4on	Sleep Stage 4 Onset	sleepStage4Onset.jpg	4→
s4of	Sleep Stage 4 End	sleepStage4End.jpg	←4
sson	Sleep Spindle Onset	sleepSpindleOnset.jpg	SS→
ssof	Sleep Spindle End	sleepSpindleEnd.jpg	←SS
swon	Slow Wave Onset	slowWaveOnset.jpg	SW→

ID code <i>* = space</i>	Event Marker Description	Sample image file name(s)	Sample image(s)
swof	Slow Wave End	slowWaveEnd.jpg	
unon	Unscored Onset	sleepUnscoredOnset.jpg	
unof	Unscored End	sleepUnscoredEnd.jpg	
aton	Artifact Onset	ArtifactOnset.jpg	
atof	Artifact End	ArtifactEnd.jpg	
SMI Import			
leho	Left eye hit object	rightEyeHitObject.jpg rightEyeHitObject_selected.jpg	 
reho	Right eye hit object	leftEyeHitObject.jpg leftEyeHitObject_selected.jpg	 
smis	SMI stimulus image has been presented to the subject	SMI_stimulus.jpg SMI_stimulus_selected.jpg	 
smid	SMI data segment origin	SMI_data.jpg SMI_data_selected.jpg	 
Stim/Response			
stim	Stimulus Delivery	stimulus.jpg stimulus_selected.jpg	 
resp	Response	response.jpg response_selected.jpg	 
User-defined			
usr1	User Type 1	user_1.jpg user_1_selected.jpg	 
usr2	User Type 2	user_2.jpg user_2_selected.jpg	 
usr3	User Type 3	user_3.jpg user_3_selected.jpg	 
usr4	User Type 4	user_4.jpg user_4_selected.jpg	 
usr5	User Type 5	user_5.jpg user_5_selected.jpg	 
usr6	User Type 6	user_6.jpg user_6_selected.jpg	 
usr7	User Type 7	user_7.jpg user_7_selected.jpg	 
usr8	User Type 8	user_8.jpg user_8_selected.jpg	 
usr9	User Type 9	user_9.jpg user_9_selected.jpg	