EVEX Parameter Tables, Rev 1.0
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Introduction

The EVEX ('experiment VEX') file is the top-level VEX file for an experiment. Normally, there will be just a single EVEX file with a 'def' for each experiment to be processed. The 'def' for each experiment contains the names of the other VEX files and parameters to be used during the processing of that experiment.

The EVEX Block Structure

The EVEX block structure is indicated diagrammatically as follows, where each indentation implies another level of referencing:

$EVEX_REV	specifies revision level of EVEX file
$EVEX	one 'def' for each experiment to be processed

$EVEX_REV Block

The $EVEX_REV block specifies the revision level of the parameters structure of the EVEX file

Parameter	Field	Description	Type	Allowed values	Units	Comments
rev	1	EVEX revision number	real	1.0		Will be revised as necessary

$EVEX Block

Each 'def' in the $EVEX block contains high-level information for the processing of one experiment:

Parameter	Field	Description	Type	Allowed values	Units	Comments
corr_exp#	1	Correlator experiment number	int			Defined at correlator
ovex_file	1	ovex filename	char			Assumed to be in standard directory, unless otherwise specified.
lvex_file	1	lvex filename	char			Assumed to be in standard directory, unless otherwise specified.
cvex_file	1	evex filename	char			Assumed to be in standard directory, unless otherwise specified.
svex_file	1	svex filename	char			Assumed to be in standard directory, unless otherwise specified.
AP_length	1	Accumulation period length	real		time	Specified in record-time units. Must be multiple of correlator-frame period. Must be evenly divisible into 60 secs.
speedup_factor	1	Playback speed/record speed	real	2^n; n=-4 to +4		
tape_mode	1	Mode in which tape is to be handled by correlator	char	random| sequential| synchronous| continuous		See Notes

mirror	1	Mirror allocate mode	char	allocate| no_allocate		Redundant correlator mirrors may be used to check/diagnose hardware problems
	2	Mirror compare mode	char	compare| no_compare		If 'compare', mirrors are compared to the primary correlators
	3	Mirror save mode	char	no_save save_different| save_all		Specifies whether mirror data is never saved, saved only on mis-compares, or always saved.
ref $SU_CONFIG	1	SU configuration key	char	keywd		Reference to svex file
	(2)		char			Station qualifier (may be multiple station qualifiers separated by colons).

Notes:

1. A 'ref $SU_CONFIG' without station qualifiers applies to all stations unless specifically overridden for specific stations by other 'ref $SU_CONFIG' statements.

   – Tape modes:
   – 'Random' – first scan on tape, or processing of non-contiguous scans
   – 'Sequential' – uncontrolled or poorly controlled start/stops during recording
   – 'Synchronous' – start/stops controlled to within a few seconds when recording
   – 'Continuous' – tapes not stopped between scans during recording