

APE Perceptual Evaluation - Bug #1492

Loudness script issues

2015-12-09 04:02 PM - Brecht De Man

<b>Status:</b>	New	<b>Start date:</b>	2015-12-09
<b>Priority:</b>	Normal	<b>Due date:</b>	
<b>Assignee:</b>		<b>% Done:</b>	0%
<b>Category:</b>		<b>Estimated time:</b>	0.00 hour
<b>Target version:</b>			
<b>Description</b>			
<p>The loudness calculation seems off, partly due this error:</p> <pre>maxl = floor( length(vector)/olapSize - winSize/olapSize + 1 );</pre> <p>should be</p> <pre>maxl = floor( length(vector)/(winSize-olapSize) - winSize/(winSize-olapSize) + 1 );</pre> <p>(The ITU_R BS.1770 standard says the overlap between each gating block must be 75% of block duration. Consider a block length of 100 samples (say). Overlap between consecutive blocks must be 75 samples. So if the total duration of signal is 150 samples, then there will be 3 blocks formed: Samples 1-100, 26-125, and 51-150. )</p> <p>And probably similar with the 'blockEnergy' calculation.</p> <p>But also, the filter coefficients may be off, and should change with sample rate.</p>			