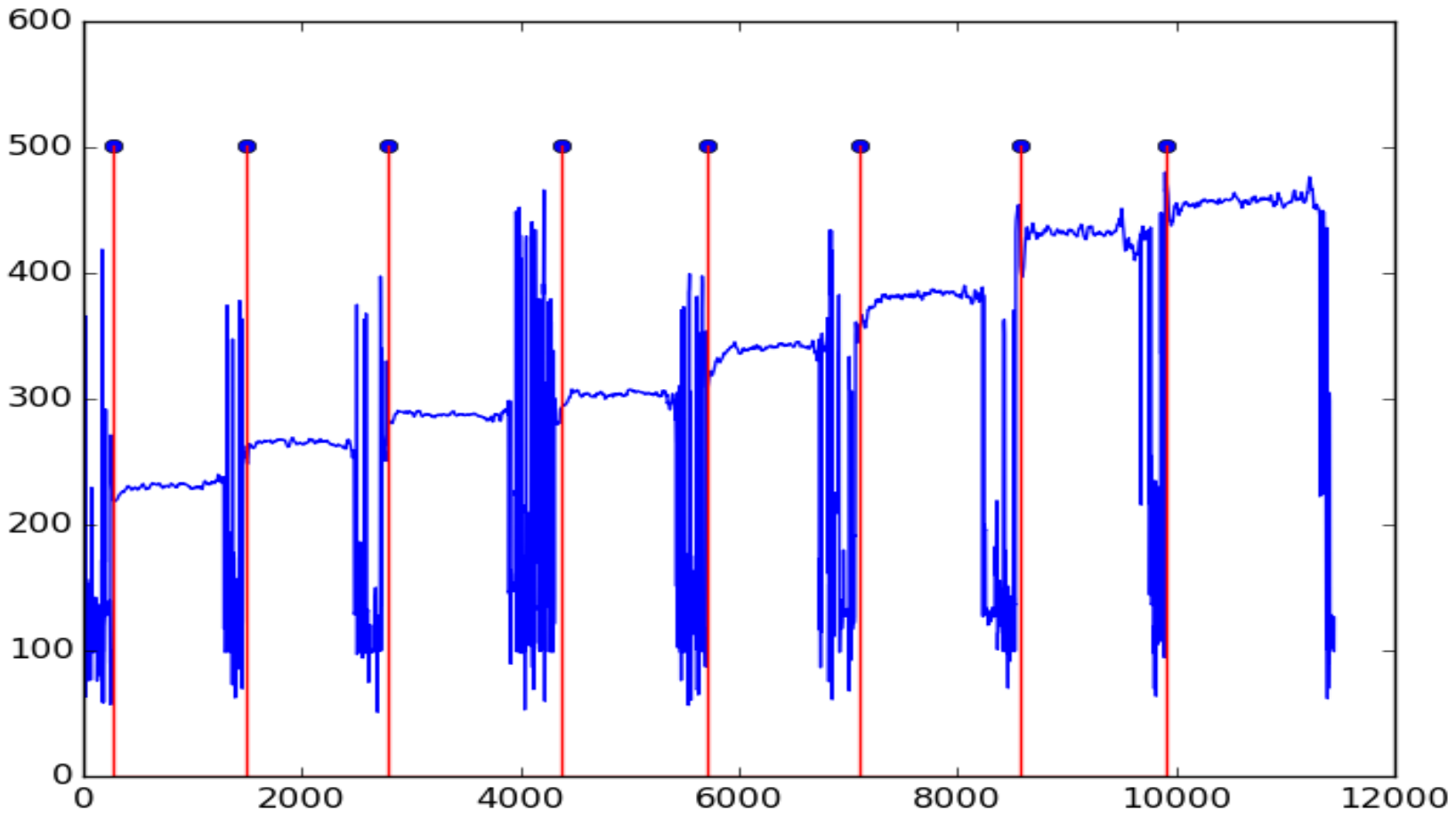
SARGAM Note Deviation Indicator

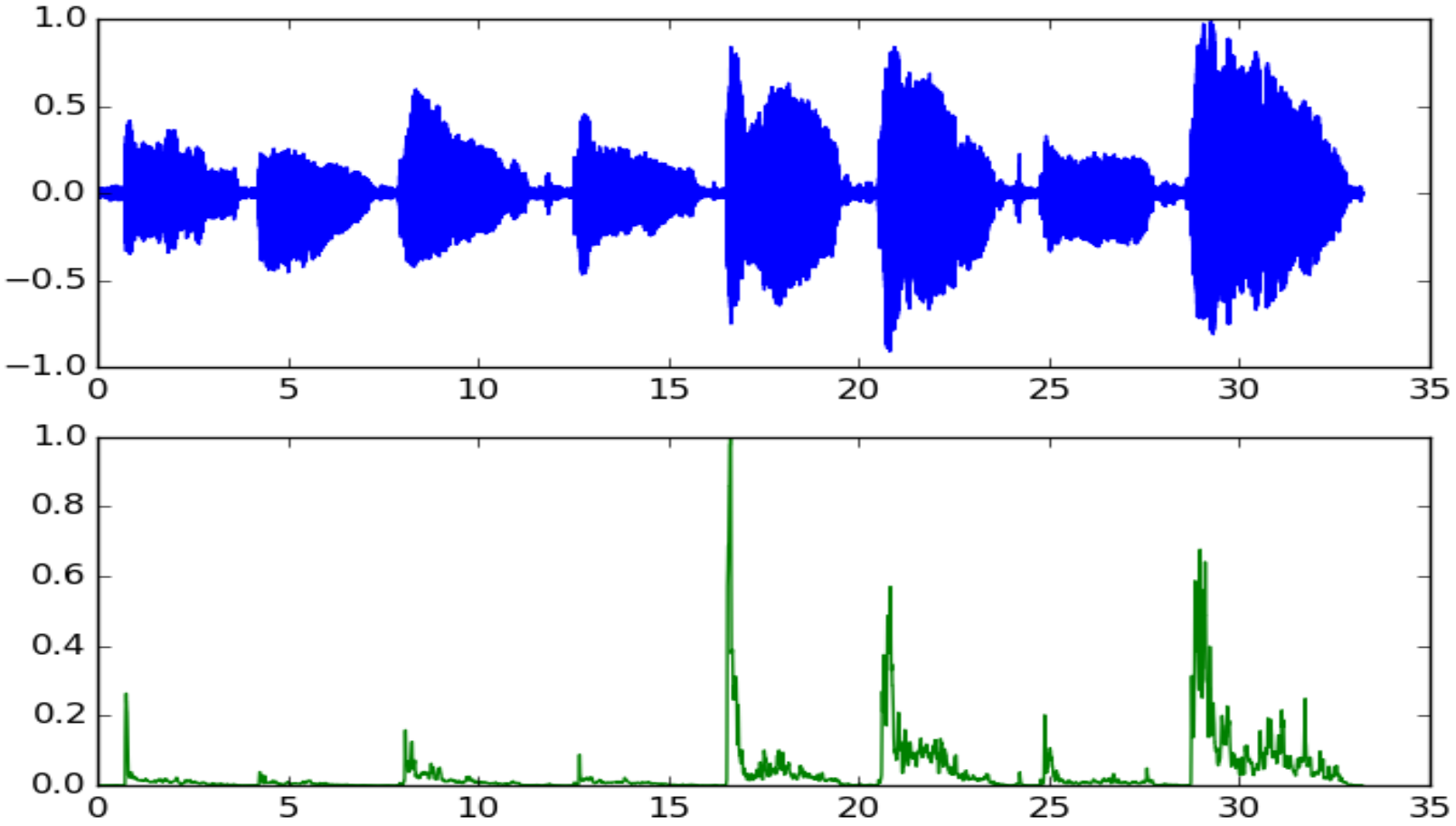
Sequence of Notes



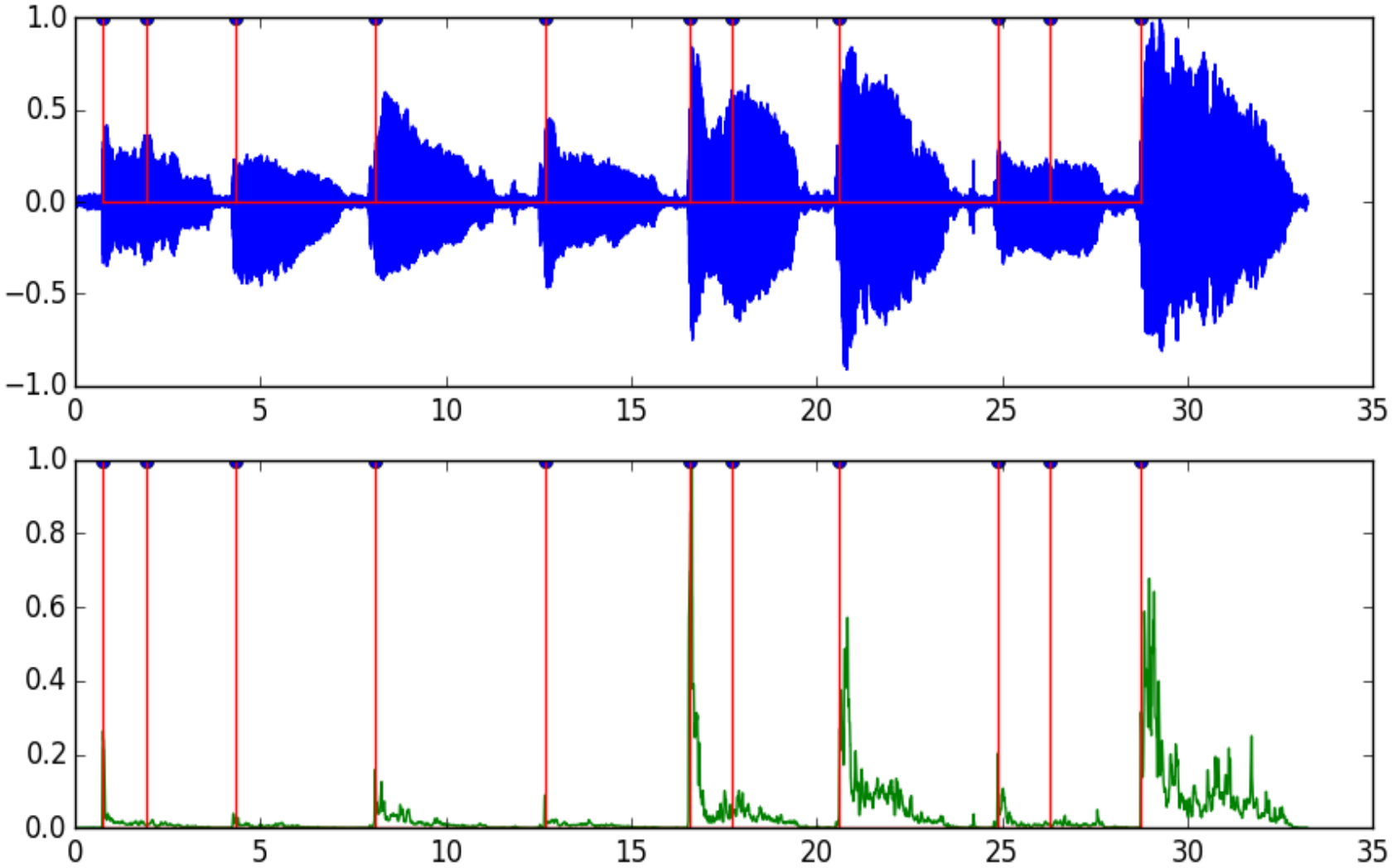
Identifying out of tune notes

Pure Tuning Shruti Name	Pure Tuning Ratios & Fractions 12 of 22 tones (Closest to ET)	Pure Tuning Cents of 12 closest tones
SA	1.0000	0000
re	1.0666 = 16/15	111.308
RE	1.125 = 9/8	203.910
ga	1.2 = 6/5	315.641
GA	1.25 = 5/4	386.314
ma	1.333 = 4/3	498.043
MA	1.406 = 45/32	590.224
PA	1.5 = 3/2	701.995
dha	1.6 = 8/5	813.686
DHA	1.666 = 5/3	884.357
ni	1.8 = 9/5	1017.596
NI	1.875 = 15/8	1088.269
SA	2.0000	1200

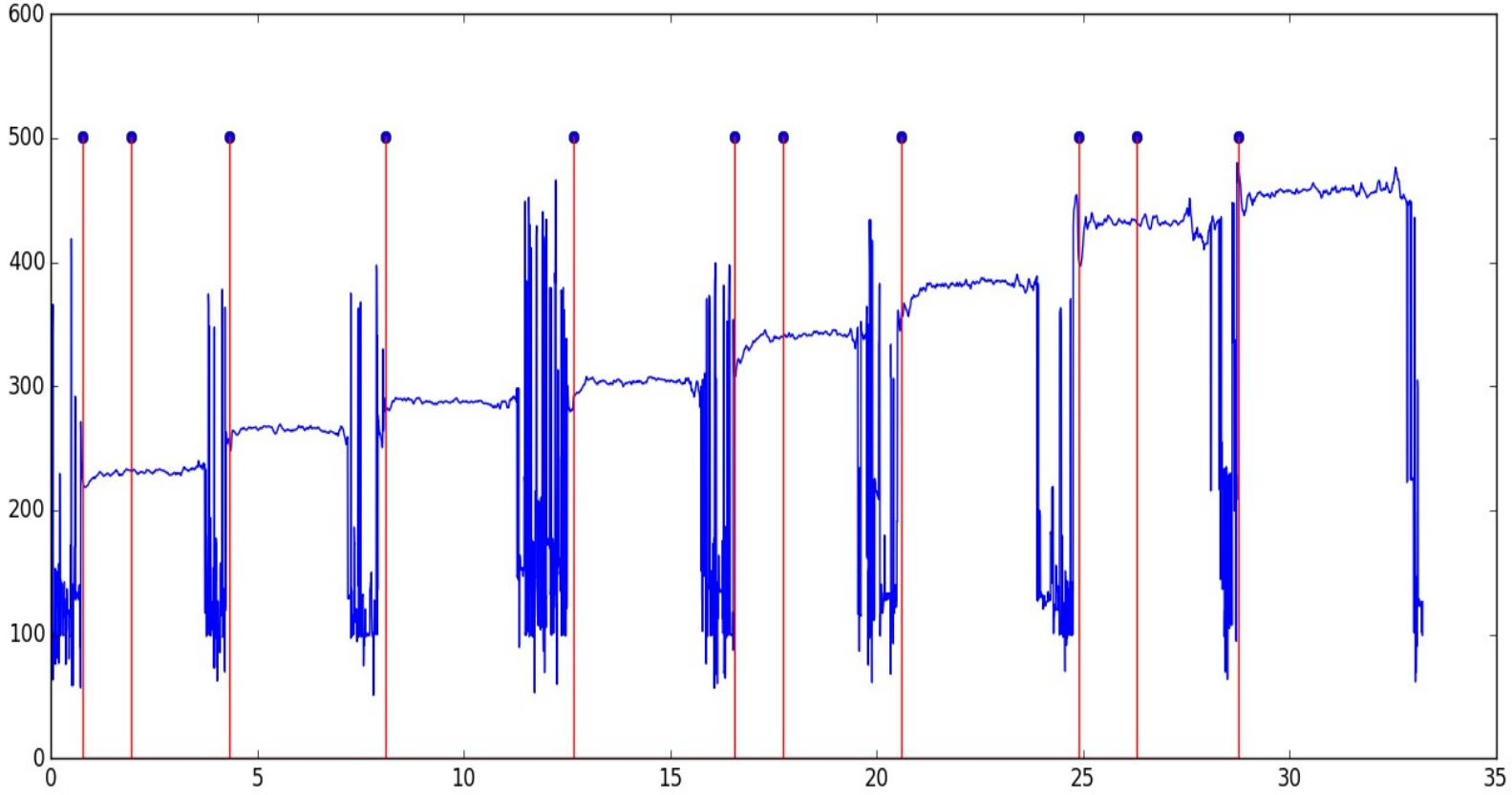
Note onset detection



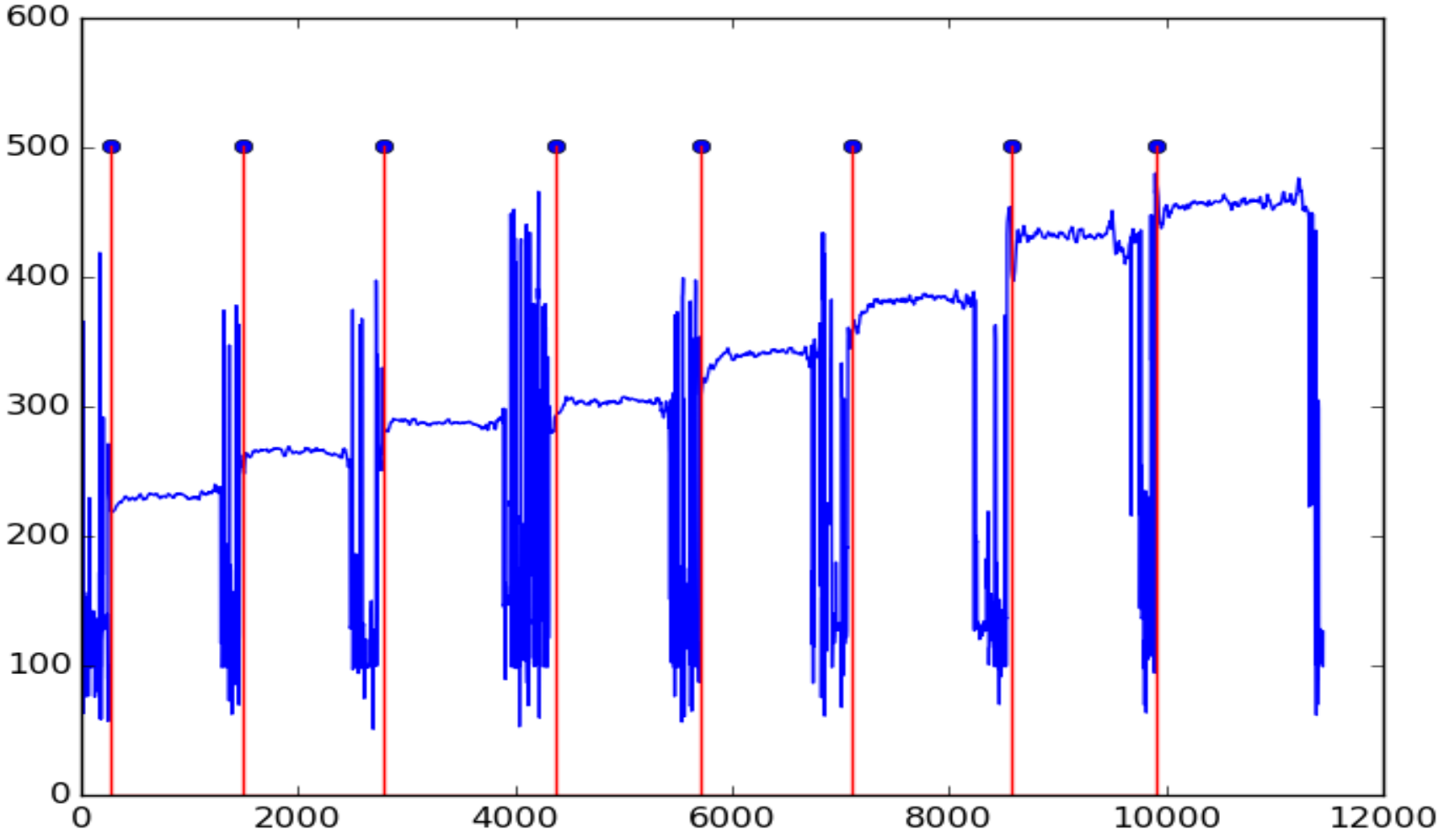
Spurious Onsets



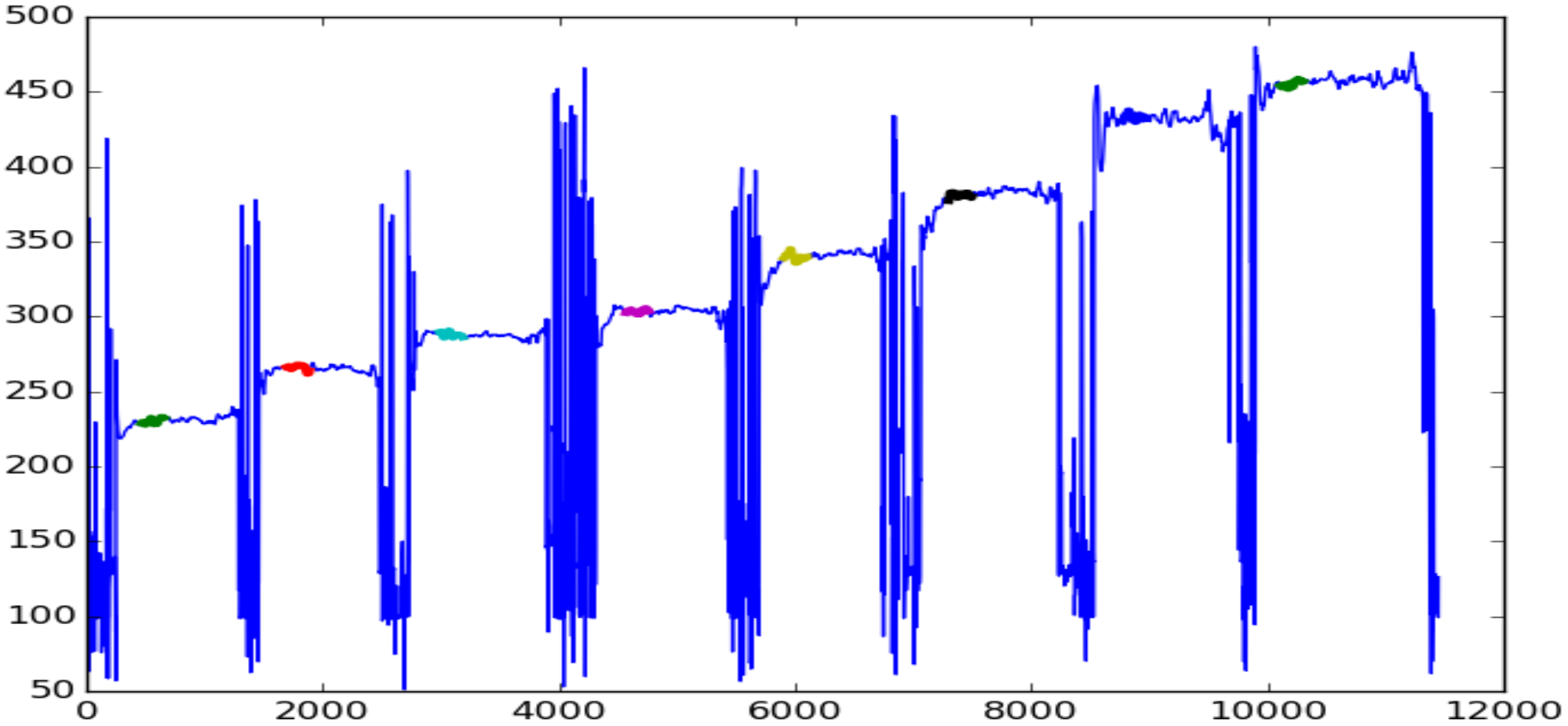
Pitch as a secondary clue



True onsets = spectral change + pitch



Pitch Detection from Stable Note Region



Note Deviation Plot in Cents