**Location guided attention KWS phase1 result**

| th | 1 | 0.9 | 0.8 | 0.7 | 0.6 | 0.5 | 0.4 | 0.3 | 0.2 | 0.1 |
|---|---|---|---|---|---|---|---|---|---|---|
| acc | x | x | 0.32 | 0.47 | 0.59 | 0.63 | 0.66 | 0.66 | 0.71 | 0.83 |

**Transformer CTC Model PER： < 40%（greedy search）**

**Frame down sampling is important for CTC Model**

**FNN without frame down sampling PER: 53%**
**FNN with frame down sampling PER: 70% !!!**

**The assumption behind CTC: the output is not continuous. Just like Chain model in Kaldi. Each state in Chain HMM only have two PDF class forward pdf class and self-loop pdf class (actually BLANK in CTC model)**

**Next plan:**

1. **Copy Transformer in WeNet make a reasonable PER model.**
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