The larger the improvement in PESQ scores, the more nonstationary the noise, the larger values show better performance. For all performance measures
\[ \text{APESQ} = \text{PESQ}_0 - \text{PESQ}_0, \]
\[ \text{Speech quality improvement} = \log(\frac{\text{APESQ}}{\text{PESQ}_0}), \]
\[ \text{Estimation error reduction} = \log(\frac{\text{APESQ}}{\text{PESQ}_0}). \]

The more nonstationary the noise, the larger the improvement in speech quality of estimated speech.

Overall performance measures
- Quality of estimated speech
- Noise PSD estimation performance
- Overall noise PSD estimation performance
- Estimation error reduction
- Estimation error reduction
- Estimation error reduction

Experimental Setup

- No additional latency
- Computational effort not multiplied
- Improved noise tracking and speech quality
- Reduced noise-based error
- Improved speech tracking

Introduction

Experimental Results

- MAP-B Noise Tracker
  - An extensive performance evaluation for nonstationary noise
  - MAP-B estimation of noise variance in the presence of noise degradation
  - MAP-B estimation of noise variance in the presence of noise degradation
  - MAP-B estimation of noise variance in the presence of noise degradation
  - MAP-B estimation of noise variance in the presence of noise degradation

MAP-B Optimizer

- MAP-B noise PSD estimate $\hat{x}$
- MAP-B Noise PSD estimate $\hat{x}$
- MAP-B Noise PSD estimate $\hat{x}$
- MAP-B Noise PSD estimate $\hat{x}$
- MAP-B Noise PSD estimate $\hat{x}$

- Improved single-channel nonstationary noise tracking
- By an optimized MAP-B based postprocessor