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Variance change point detection for fractional Brownian motion based on the likelihood ratio test

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## \*Highlights (for review)

Highlights:

- Variance change point analysis of fractional Brownian Motion is proposed
- The variance change point analysis is based on the likelihood ratio test
- The obtained results are consistent with the well-known results for Brownian motion
- Performance of the proposed method for time series with short-memory (H < 0.5) is very good
- Perfromance of the proposed method declines for time series with long-memory (H>0.5)

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