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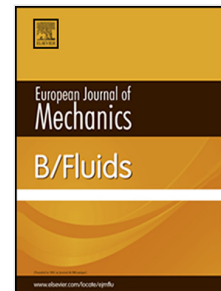
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Experimental Investigation of the Velocity Time-Traces of the Turbulent flow in a Rectangular Channel with a Lateral Slot

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Highlights

- ✓ spectral features of velocity time-trace in a simulated compound channel was investigated;
- ✓ classic approach through PSD and Continuous Wavelet Transform (CWT) was employed as novelty;
- ✓ large vortices formation were found to depend on the channels length and the gap width;
- ✓ the Strouhal number gets close to those previously noticed in the literature as the channel becomes longer;
- ✓ CWT revealed that different frequencies are excited as the time passes causing the broadness of the main frequency peak in PSD;
- ✓ some degree of unsteadiness of the coherent motion could be seen from high energetic coefficients computed in CWT.

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