



A NON-SEPARABLE 2D COMPLEX MODULATED LAPPED TRANSFORM AND ITS APPLICATIONS TO SEISMIC DATA FILTERING (MonPmOR5)

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✳ **Abstract :** Oversampled transforms are useful tools for data analysis, since redundancy increases freedom in the choice of the processing. We propose here a framework for oversampled lapped transform of images. More specifically, we establish conditions for perfect reconstruction of 2D data using non-separable windows. We also provide an example of a transform which relies on this approach. We also show the benefit of this technique in directional filtering applications encountered in the field of seismic data processing.