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### **ACCEPTED MANUSCRIPT**

# Numerical modeling of bottom trawling-induced sediment transport and accumulation in La Fonera submarine canyon, northwestern Mediterranean Sea

M. Payo-Payo<sup>1,2</sup>, R. S. Jacinto<sup>1</sup>, G. Lastras<sup>3</sup>, M. Rabineau<sup>2</sup>, P. Puig<sup>4</sup>, J. Martín<sup>5</sup>, M. Canals<sup>3</sup> and N. Sultan<sup>1</sup>

<sup>1</sup>IFREMER, Géosciences Marines-EDROME, Centre de Brest, BP70, CS10070, 29280 Plouzané, France.

<sup>2</sup>Université de Brest, IUEM, UMR CNRS 6538, Domaines Océaniques, Place Nicolas Copernic, 29280 Plouzané, France.

<sup>3</sup>CRG Marine Geosciences, Department de Dinàmica de la Terra i dels Oceans, Universitat de Barcelona, E-08028 Barcelona, Spain.

<sup>4</sup>Institute of Marine Sciences, CSIC, E-08003 Barcelona, Spain.

<sup>5</sup>Centro Austral de Investigaciones Científicas (CADIC-CONICET), Bernardo Houssay 200, V9410CAB Ushuaia, Tierra del Fuego, Argentina.

Corresponding author: Marta Payo-Payo (marta.payo.payo@ifremer.fr)

#### **Highlights:**

- A novel framework for estimating bottom-trawling sediment resuspension and transport is provided.
- The results yield a spatial view of submarine canyon sediment dynamics and sedimentation patterns.
- Model results are in good agreement with in situ data and sedimentation rates.

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