**Geological Magazine**

**Deformation Partitioning in Mountain Belts, insights from analogue modeling experiments and the Taiwan collisional orogen**

1-2MALAVIEILLE Jacques, 1-2DOMINGUEZ Stéphane, 2-3LU Chia-Yu, 4CHEN Chih-Tung & 5KONSTANTINOVSKAYA Elena

1Géosciences Montpellier, CNRS-Université de Montpellier, 34095 Montpellier Cedex 5, France

2LIA D3E, C.N.R.S.-M.O.S.T. France-Taiwan International Laboratory, France, Taiwan

3Department of Geosciences, National Taiwan University, No. 1, Sec. 4, Roosevelt Road, Taipei, Taiwan, ROC

4Department of Earth Sciences, National Central University, No. 300, Zhongda Road, Zhongli, Taiwan, ROC

5Integrated Petroleum Geosciences, Earth and Atmospheric Sciences, 1-26 Earth Sciences Building, University of Alberta, Edmonton, Alberta, Canada

Corresponding author: [malavie@gm.univ-montp2.fr](mailto:malavie@gm.univ-montp2.fr) or [J.Malavie@gmail.com](mailto:J.Malavie@gmail.com)

***Supplementary Material (online)***

**Movie S1.**

Movie showing the growth of a doubly vergent wedge model subjected to erosion. A weak layer (décollement) is located in the incoming continental margin sequence (see figure 13, for details of the set-up, boundary conditions and results of the experiment). Notice the dynamics of the wedge induced by contemporaneous frontal accretion and basal accretion. Horizontal shortening concentrates in the frontal part of the wedge and in the retrowedge. The inner part of the proto-wedge is passively uplifted above the domain of underplating.