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**CONFIRMATION - ABSTRACT SUBMITTED** Thank you for your abstract submission for the 26<sup>th</sup> IUGG 2015 General Assembly.

#### Abstract overview

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Abstract title **Magnetic and Sedimentological data as a contribution for mass transport deposits identification on Southern Portuguese Margin**

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Abstract text **The contribution of this work is to define the sedimentological and magnetic characteristics of mass transport deposits (MTD's) of the south flank of Portimão Bank (Southern of Portugal). *We used two piston cores* PC7 and PC6 located at the slope (2876 mbsl) and the base of the slope (3520 mbsl) of Portimão Bank, respectively. Both cores were submitted to a multidisciplinary study, including visual core description, high-resolution photo, X-ray radiograph, magnetic (fabric and rock magnetism) and grain-size analyses, that were complemented by <sup>14</sup>C geochronological results. The sedimentary facies of both cores are essentially characterized by alternation between silt and very fine silt. In general, X-ray imagery shows horizontal/sub-horizontal layers, despite some more inclined layers can be also observed. Anisotropy of magnetic susceptibility – AMS shows a sedimentary fabric that is abruptly interrupted by a sedimentary interval of approximately one meter thick with distinct properties. When the AMS ellipsoid of such sedimentary interval is compared with the one achieved for the sediments located above and below, it is observed an abrupt decrease of the anisotropy, changes of the maximum and minimum principal directions and variation from oblate to neutral shape. Such interval is here interpreted as a MTD layer. This interpretation is also supported by geochronological results, since such layer shows a more recent age than the upward sedimentary column.**

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mass transport deposits  
magnetic fabric  
sedimentary facies**