

SOLID EARTH SEMINARS

SEDIMENT CONCENTRATION AND PARTICLE SIZE IN WATER COLUMN USING ACOUSTIC METHODS: APPLICATION TO THE DOURO AND MINHO ESTUARIES



WHAT'S THIS
ABOUT?

In the past, several long term datasets of Acoustic Doppler Current Profilers (ADCP) were collected in Portuguese transitional areas covering different seasonal regimes. These datasets, collected with diverse objectives in mind, were processed and interpreted to establish the hydrodynamic regime in their respective study areas, but no attempt was made to establish suspended sediment patterns during the duration of their deployment. The possibility of extracting estimates of sediment concentration and grain size from these ADCP datasets is explored in this research, and the results from these findings are then used to reprocess and reinterpret datasets collected in two major NW Portuguese estuaries: The Douro and the Minho. As a final objective we aim to quantify and qualify the effective sediment exchanges from these estuaries and the coastal shelf, and consequently determining the fate and destination of these sediments, by describing different seasonal transport patterns based on sediment dynamics conceptual models of both estuaries built based on previously collected ADCP data time series.

ZOOM



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<https://videoconf-colibri.zoom.us/j/89018419156>