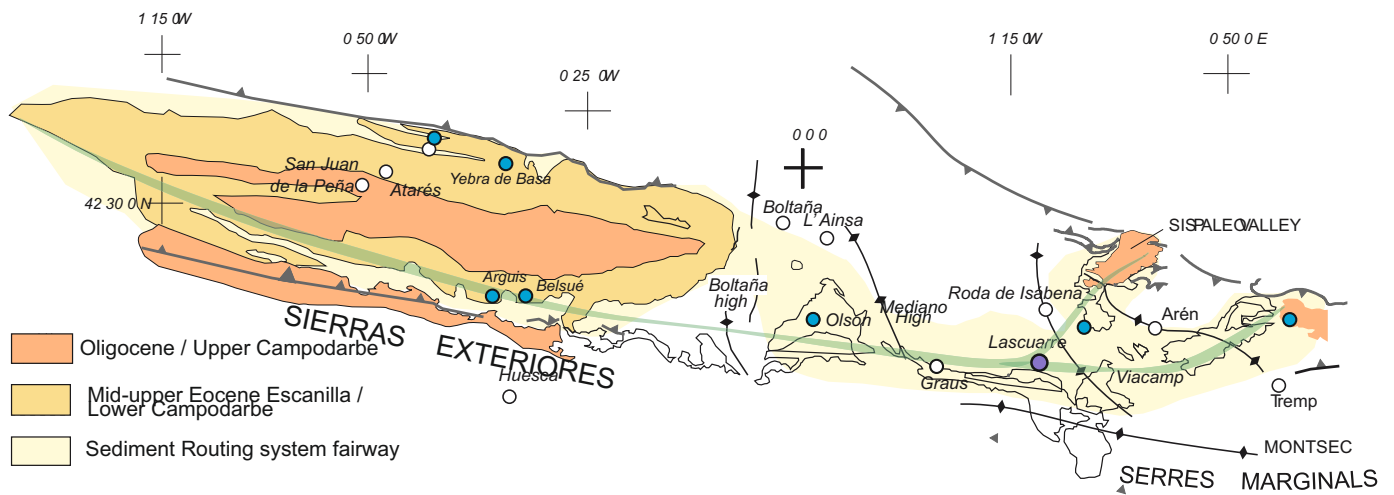


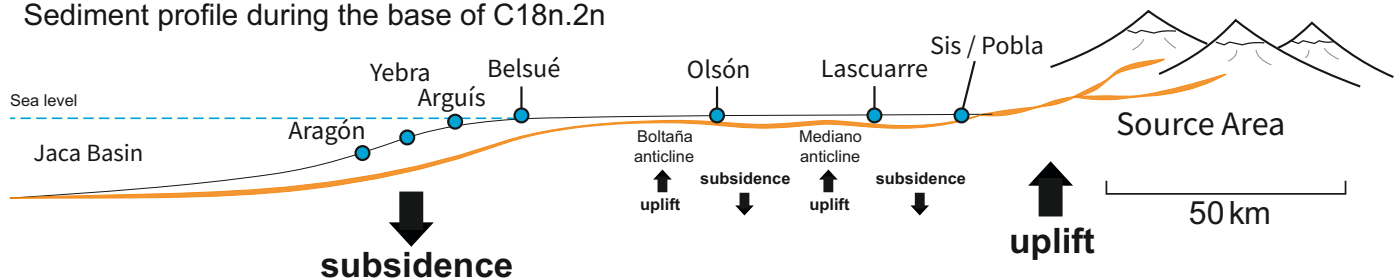
Origin and propagation of sedimentary sequences throughout the Escanilla fluvial routing system (South Pyrenean foreland basin)

Luis Valero, Elisabet Beamud, Miguel Garcés, Andreu Vinyoles, Nikhil Sharma, Stephen E. Watkins, Maxime Tremblin, Cai Puigdefàbregas, François Guillocheau, Alex C. Whittaker, Miguel López-Blanco, Pau Arbués and Sébastien Castelltort

During middle Eocene, the Escanilla fluvial system transported and deposited material from East to West in the southern Pyrenees foreland basin. The paleogeography and sedimentology of the source to sink system is well established. The temporal framework is made of scattered low resolution magnetostratigraphies, and a robust temporal framework in the most distal (Olson) and most proximal (Sis) parts of the system. We built a new high resolution magnetostratigraphy from the middle part of the system, the Lascuarre section. The correlation of Lascuarre with the high resolution magnetostratigraphies and the integration of these data with other available chronological constraints results into a robust complete temporal framework from source to sink.

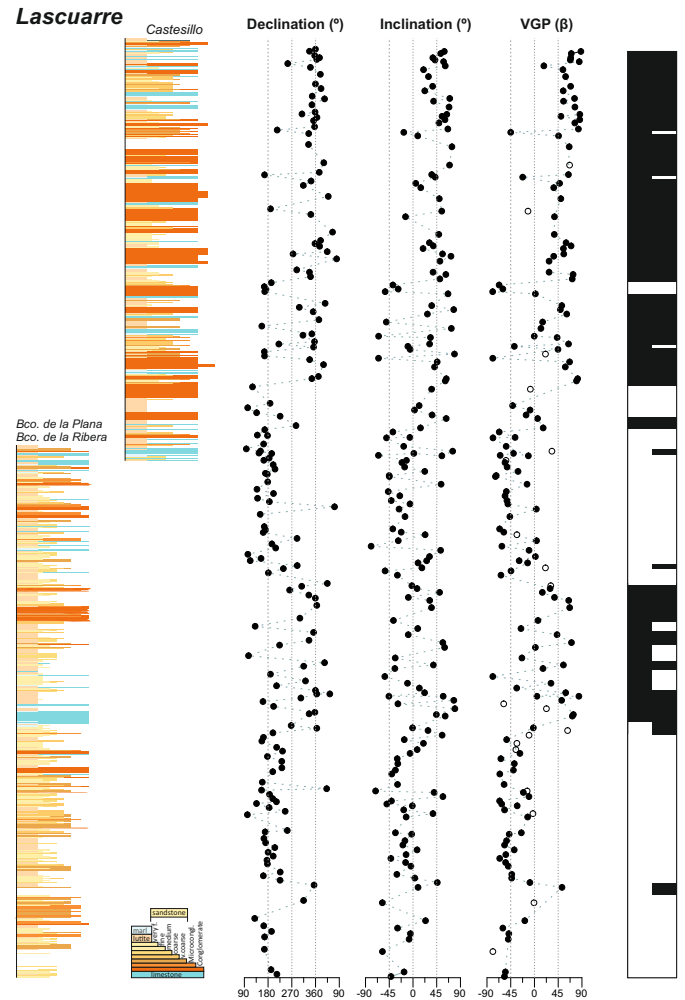
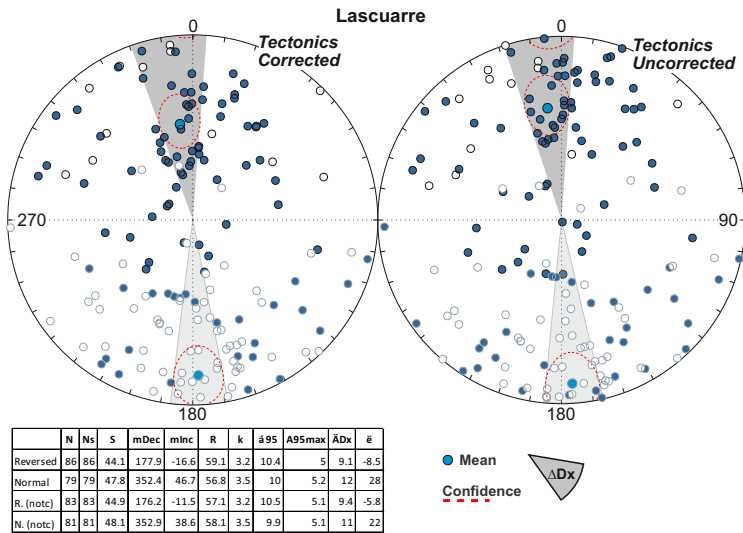


Sediment profile during the base of C18n.2n



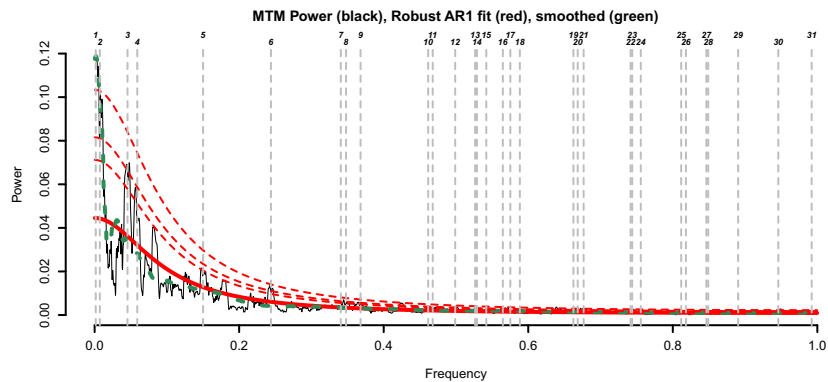
Magnetostratigraphy of the Lascurarre section

A magnetostratigraphy in the Lascurarre section allows recognizing a primary polarity reversals pattern which allows a high resolution correlation with the Geological Polarity Time Scale.

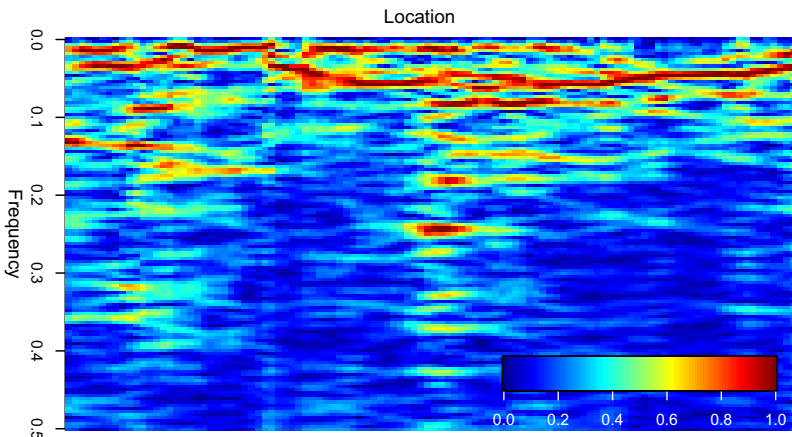


Cyclostratigraphy in the Escanilla system

Sedimentological analyses of the Lascurarre section allow recognizing a set of sedimentary sequences throughout the record. Here we present the first results of such analyses. we are particularly interested into elucidating the role of tectonics in relation to subsidence distribution patterns, and also the distinct expression of climate variations along the routing system.



(b) EHA: Normalized Amplitude (unity)



An article in preparation will show further details in the identification and exploration of the signal propagation mechanisms of both particular climate aberrations and also of quasi-regular orbital variations along the routing system.