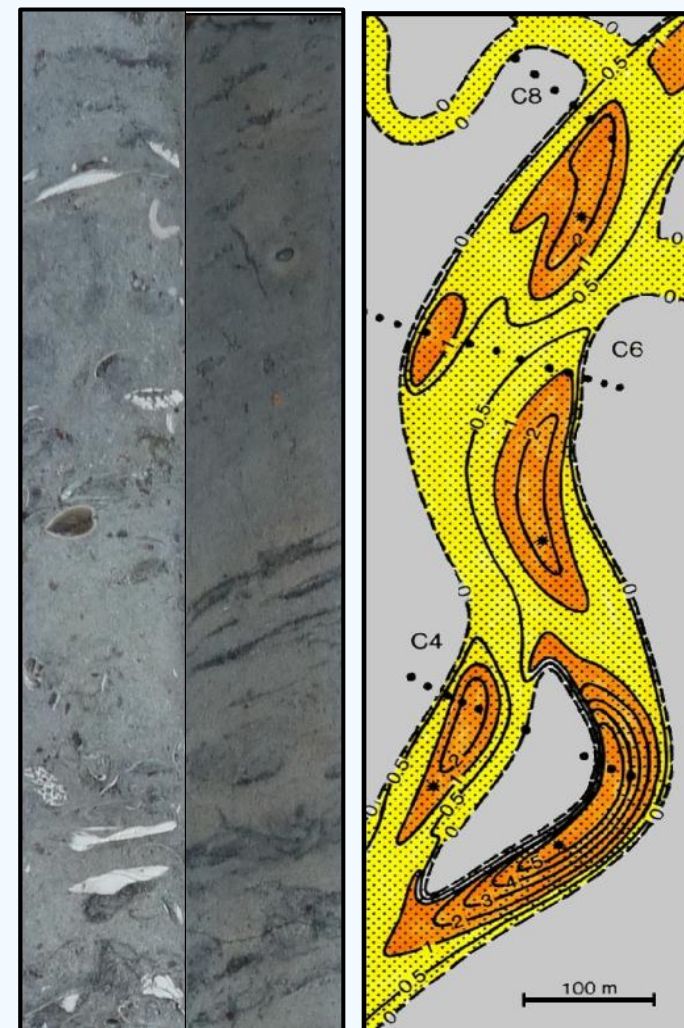
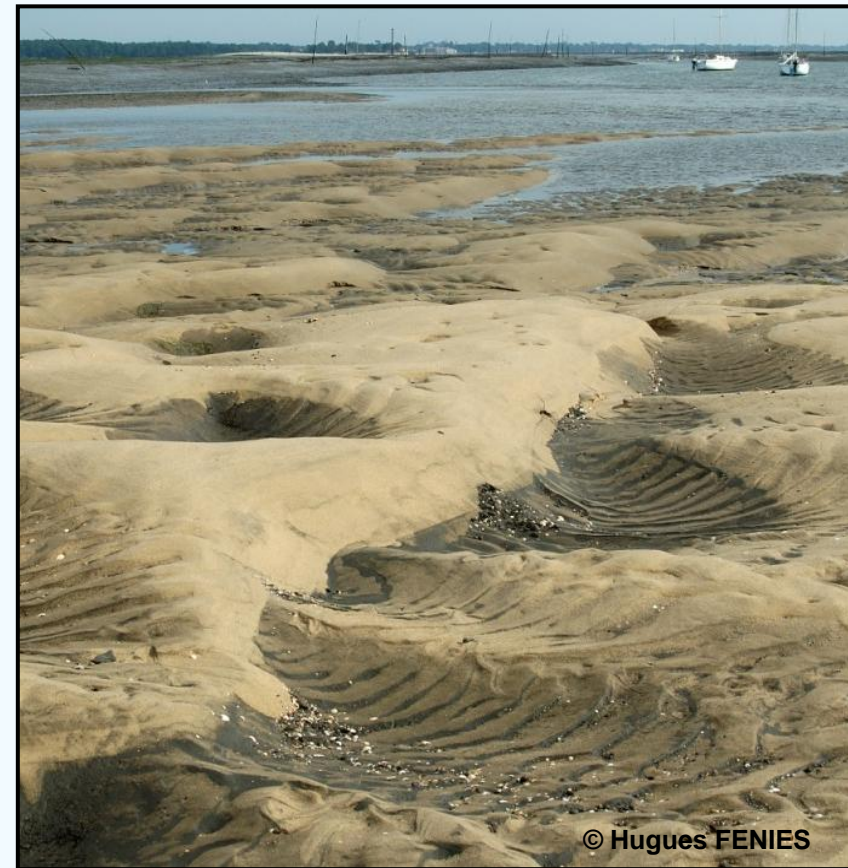
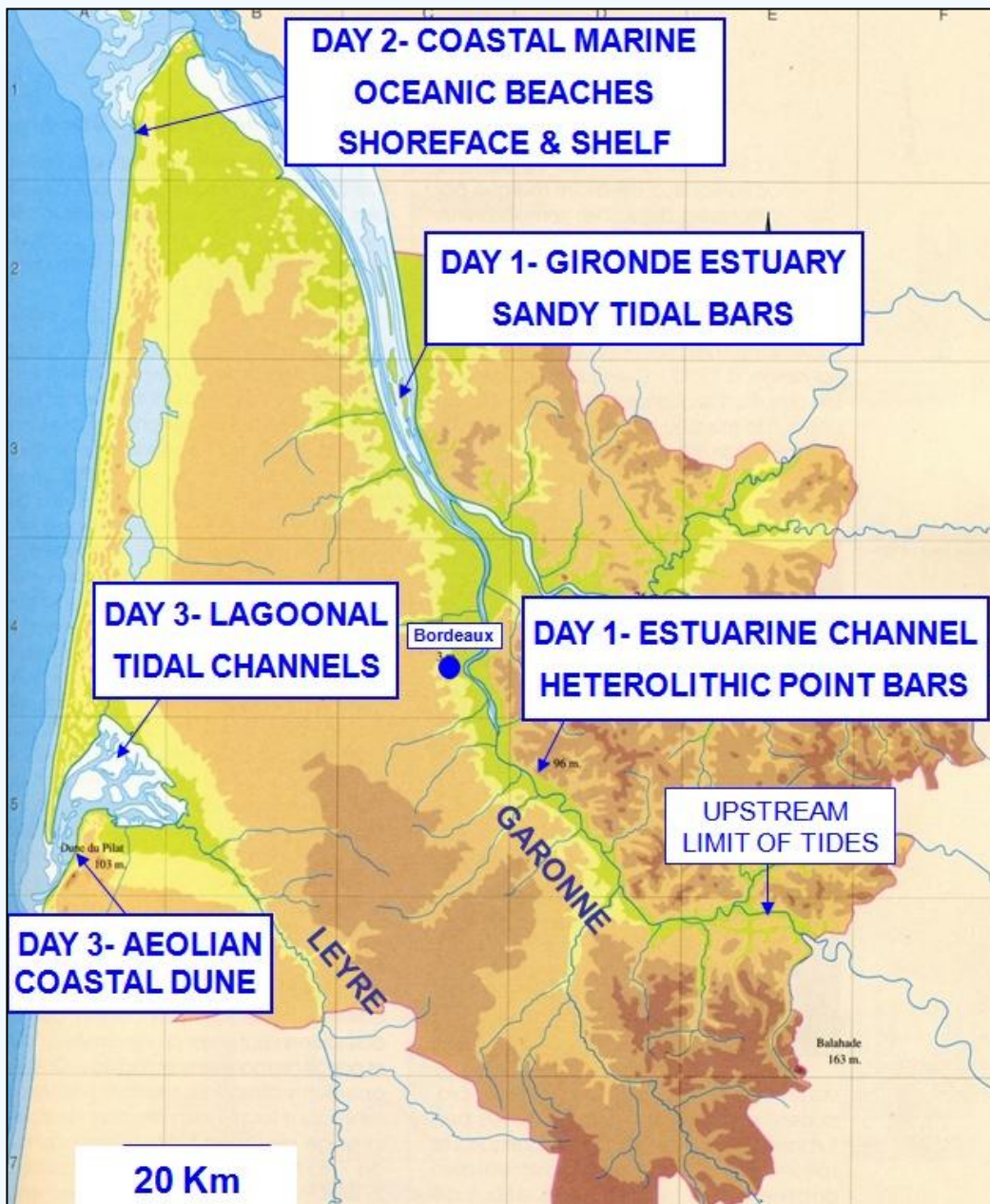


# Field trip in Gironde estuary and Aquitaine coast: modern reference models for reservoir development in tide- and wave-dominated incised valleys (SW France)



## FIELD TRIP PROGRAM

The **Gironde estuary** is a worldwide reference model for tide-dominated incised valleys, the field trip will focus on heterolithic estuarine channels and sandy tidal bars. Detailed facies analysis and internal architecture of these deposits will be presented, based on cores and very high resolution seismic lines.

The **Arcachon lagoon** is a wave-dominated estuary (Leyre estuary), the field trip will focus on the facies and geometry of the sandy tidal channel-fill deposits. The sequence stratigraphic models of the Gironde and Arcachon incised valleys will be compared and specific processes controlling reservoir geometry will be assessed.

The **oceanic coastline** adjacent to these embayments is wave-dominated. Beach, shoreface and coastal aeolian dune facies will be presented, thanks to trenches, cores and a radar line.

**3 DAYS AGENDA : 18 th June - 20 th June 2012**

**COST : 1300 Euros / person ( 15 participants, from / to : Bordeaux city FRANCE)**

**GUIDE : Hugues FENIES      ORGANISING COMMITTEE : Kjell-Sigve Lervik ksl@statoil.com**

## FIELD TRIP OBJECTIVE: RESERVOIR CHARACTERIZATION

- DETAILED FACIES ANALYSIS (Trenches & Cores)
- RESERVOIR HETEROGENEITY (Cores & VHR Seismic)
- CONTROLS ON RESERVOIR GEOMETRY (Sedimentary Processes / Reservoir Maps)

## DETAILED 3 DAYS FIELD TRIP AGENDA:

- DAY 1: Estuarine Heterolithic Point Bars + Tidal Bars
- DAY 2 : Oceanic Beach + Shoreface + Shelf
- DAY 3 : Lagoonal Tidal Channels + Tidal Inlet + Aeolian Coastal Dunes

## FIELD TRIP COST INCLUDES (budget calculated for 15 participants):

- HOTEL: 4 nights + breakfasts
- LUNCH TIME MEALS : 3 lunch time catering meals + coffee/tea breaks
- DINNERS: 3 SELECTED RESTAURANTS
- TRANSPORTATION: BUS + BOATS (Estuary + Lagoon)
- WINE TASTING SESSIONS (Côtes de Bourg + Médoc + Entre Deux Mers)
- GUIDE BOOK

## SELECTED PUBLICATIONS RELATED TO FIELD TRIP SITES:

- **HETEROLITHIC POINT BARS** : MUSIAL, REYNAUD, GINGRAS, FENIES, LABOURDETTE, 2011  
SUBSURFACE AND OUTCROP CHARACTERIZATION OF LARGE TIDALLY INFLUENCED POINT BARS OF THE CRETACEOUS Mc MURRAY FORMATION (ALBERTA, CANADA)  
Special issue of *Sedimentary Geology: Tidal Depositional Systems*. In Press.
- **TIDAL BARS** : FENIES and TASTET, 1998  
FACIES AND ARCHITECTURE OF AN ESTUARINE TIDAL BAR (The Trompeloup Tidal Bar, Gironde Estuary, SW France)  
*Marine Geology*, N° 150, 149-169.
- **TIDAL CHANNELS** : FENIES and FAUGERES, 1998  
FACIES AND GEOMETRY OF TIDAL CHANNEL-FILL DEPOSITS (Arcachon Lagoon, SW France). *Marine Geology*, N° 150, 131-148.
- **INCISED VALLEY SEQUENCE STRATIGRAPHY** : LERICOLAIS, BERNE, FENIES, 2001  
SEAWARD PINCHING OUT AND INTERNAL STRATIGRAPHY OF THE GIRONDE INCISED VALLEY ON THE SHELF  
*Marine Geology*, N° 175, 183-197.
- **CONTROLS ON RESERVOIR GEOMETRY** : FENIES, LERICOLAIS, POSAMENTIER, 2010  
COMPARISON OF WAVE-AND TIDE-DOMINATED INCISED VALLEYS:  
SPECIFIC PROCESSES CONTROLLING SYSTEMS TRACT ARCHITECTURE AND RESERVOIR GEOMETRY  
*Bulletin of the French Geological Society*, t. 181, N°2, pp. 171-181.

# ILLUSTRATION OF SOME RESERVOIR FACIES

Estuarine tidal bar / High water turbidity



HIGH RESERVOIR  
HETEROGENEITY

Lagoonal tidal channel / Low water turbidity



Oceanic beach backshore / Very low water turbidity



LOW RESERVOIR  
HETEROGENEITY