

Session DD 1.3 Precipitation, discharge and flooding







## FINE SEDIMENT FEEDING **ASSESSMENT AT PARANA DELTA** IN TIMES OF CLIMATE CHANGE

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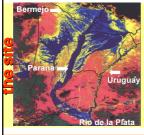


Precipitation, discharge and flooding









The Rio de la Plata (Argentina) is a large estuarine system receiving waters of the La Plata Basin. The principle fine sediment feeding of the Delta comes by the wash load (mostly from Bermejo) of the Parana river. The sediment layer deposition produce aggradation of the area during floods.



Assessment of fine sediment feeding at the Parana Delta using 1D HECRAS model.

The prediction of sediment feeding at the Delta for most probable scenarios in 2030 decade.

 Decrease of liquid discharge and rise concentration downstream in future:

•Future increase of fine sediment feeding at Delta

		Past (1993-2007)	Future (2030-2040)
Liquid Discharge		21300 mc/s	16500 mc/s
Sediment		200 mil ton/y	
Volume /y	Downstream	60 mil ton/y	90 mil ton/y
Deposition on floodplain and banks		140 mil ton/y	60 mil ton/y