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Type: **Poster**

Monitoring along the Brazilian Coast

Brazilian Navy is monitoring the concentration of the radionuclides, Cesium 137 and Strontium 90, in samples of water, sediment, fish, and mussels from the marine environment along the Brazilian Coast, since 1996. The aim of this work is to know the background of these radionuclides to assess possible increasing of the values due to human activities with nuclear test, nuclear power station accident or other event. The results are in a database at the Admiral Paulo Moreira Marine Research Institute. Twenty three sites are monitored annually, between the latitudes of $0^{\circ} 36' 49''\text{S}$ and $32^{\circ} 02' 06''\text{S}$ and longitudes of $34^{\circ} 50' 0''\text{W}$ and $52^{\circ} 05' 55''\text{W}$. The highest values of Cesium 137 measured were 4.1 Bq.m^{-3} in seawater at Atafona, in 2001; 4.14 Bq.kg^{-1} in the sediment at Santos, in 1998; 1.72 Bq.kg^{-1} in fish at Macae, in 2000; and 1.75 Bq.kg^{-1} in mussels at Angra dos Reis, in 2000. The highest values of Strontium 90 measured were 0.23 Bq.kg^{-1} in fish at Santos, in 2000 and 0.175 Bq.kg^{-1} in mussels at Vitoria, in 2006. The only source known of these radionuclides is probably from the nuclear atmospheric tests made before the end of the II World War.

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