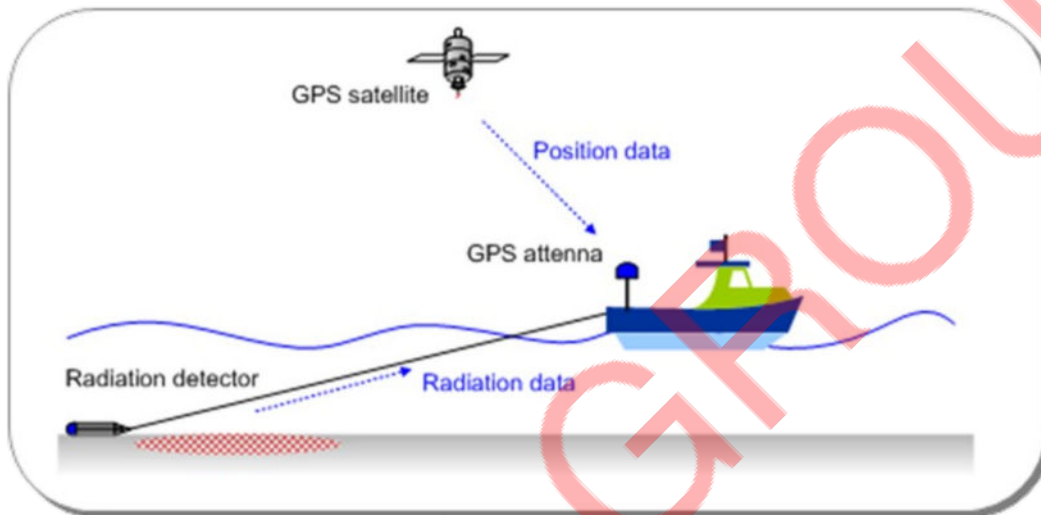


B Scan, Mk 2—System for Radiotracers Application in sediment

Maintenance of rivers, including restoration, protection of eco-systems, navigation and other equipment such as pumps, requires the accurate comprehension of sediment transport

The B-SCAN Model 02 system is specifically constructed for this purpose.



Applications

Measurement of natural radioactivity and lithology of the sea bed

Measurement of bed-load transport using radiotracer

Functions

Measurement of natural radioactivity of the sea bottom

Mapping of radiotracer concentration in the sea bed

Continuous operation

GPS

The GPS antenna and receiver supplied may be integrated with a Laptop by USB NMEA183 protocol, .

Natural precision 5-7 m

Necessary connectors and cables between winch and DAS, GPS antenna/receiver and DAS are supplied.



Specifications

Measurement head	
Sledge Material	Steel and Lead
Weight	About 80 kg
Dimensions	1000 x 500 x 100 mm
Maximal use depth	30 m approx
Detector NaI(Tl) waterproof 50m depth	Φ 38 x 50 mm
Housing stainless steel, with Fisher 105 connector	
Distance detector – sea bed	5 cm
Typical count rate	100 Cps/μCi/m ² for Ir-192
Measurement time	min 1 sec



Sledge and detector (waterproof DSE)

Specifications Cont

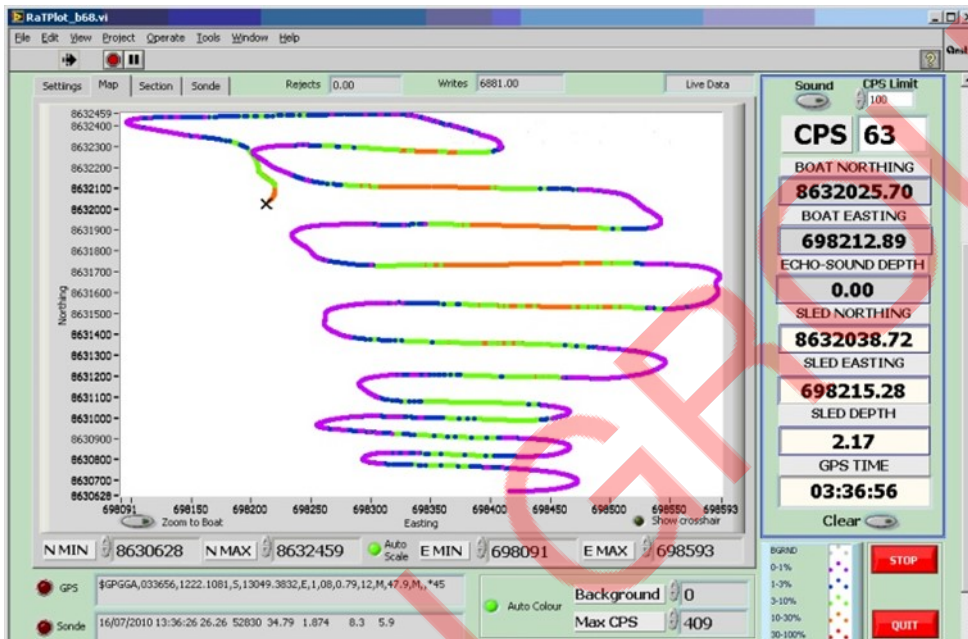
Winch	
W8274	Electric 12 VDC with 4 channels rotating contact
Cable	Electro-towing 4 wires. Max load 1500 DaN or towing cable plus electrical coupling cable



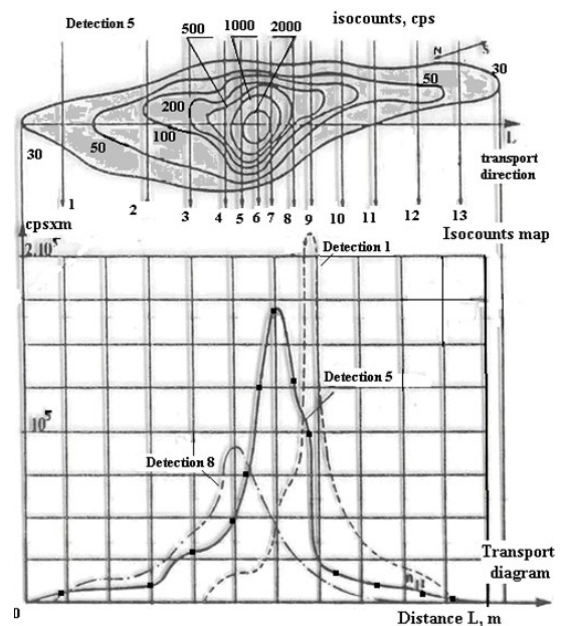
Note: Winch construction may vary from specimen shown

Software

This software has been developed to be fully integrated with the T-DAS acquisition system. The user's manual provides detailed information on its use.



Main screen of the software showing the trajectory of the detector and the intensity of the measured radiation coded in colours



From the resulting the isocount contours' evolution, one may obtain the transport diagram and thus speed, thickness and mass transport rate of sediment using the Total Count Rate Balance method for radiotracers application and lithology of the see bottom regarding natural radioactivity mapping.