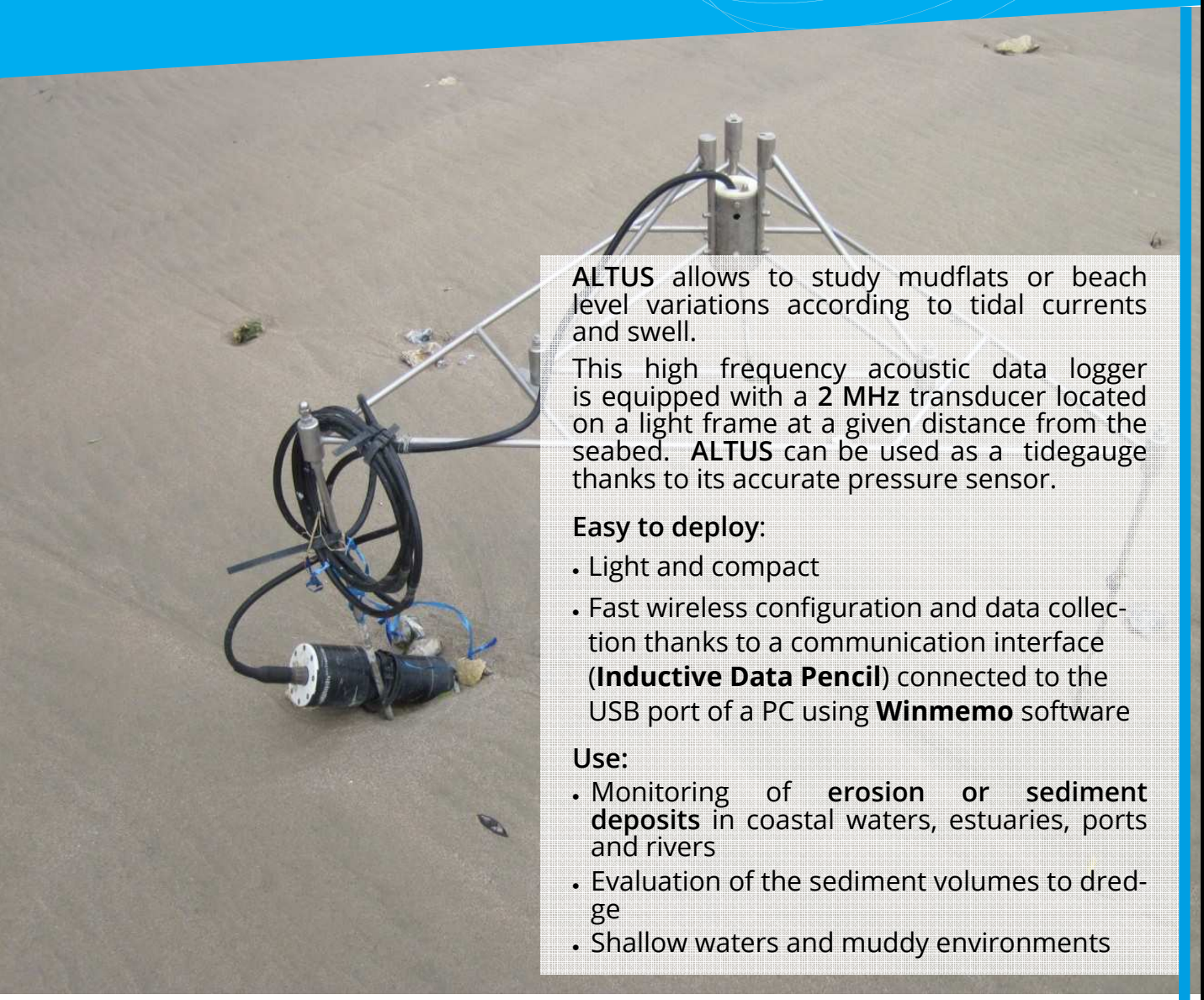
ALTUS *submersible altimeter*

Sediment monitoring in bays and estuaries

Data loggers



ALTUS allows to study mudflats or beach level variations according to tidal currents and swell.

This high frequency acoustic data logger is equipped with a **2 MHz** transducer located on a light frame at a given distance from the seabed. **ALTUS** can be used as a tidegauge thanks to its accurate pressure sensor.

Easy to deploy:

- Light and compact
- Fast wireless configuration and data collection thanks to a communication interface (**Inductive Data Pencil**) connected to the USB port of a PC using **Winmemo** software

Use:

- Monitoring of **erosion or sediment deposits** in coastal waters, estuaries, ports and rivers
- Evaluation of the sediment volumes to dredge
- Shallow waters and muddy environments

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Data loggers

ALTUS *autonomous data logger*

Sediment monitoring

Main features:

- 4 programmable detection thresholds giving 4 altitude measurements simultaneously, depending on the sedimentation level ;
- Millimetric measurements of the elevation changes of the seabed ;
- Recorded parameters:

  4 distances from seabed,
  1 «maximum echo » value to validate the data,
  1 absolute pressure for water height and wave ;
- A specific stand can be provided for the transducer.

DESIGNATION		ALTUS
Order code		60-07-024
Altitude	Range	20 to 200 cm
	Resolution	0.6 mm
	Accuracy	2 mm in the 20 to 70 cm range
		5 mm in the 20 to 200 cm range
	Acoustic frequency	2 MHz Beam 3.6°
Water height range		0 to 20m (maximum 30m depth)
		Accuracy <6 cm Resolution 0,8 cm
Time		Internal clock with calendar
Automatic start /stop		On/Off controlled by pressure sensor (burst mode available)
Sampling rate		Programmable from <1 second to 99 hours
Autonomy	Memory	Up to 8 months autonomy, sampling rate 5 mn
		Up to 4 years autonomy, sampling rate 5 mn
	Energy	Replaceable Lithium batteries
Mechanical features	Altus housing	Length 240mm x Ø 80 mm max.
	Tip	Length 300mm x Ø 20 mm
	Transducer	Length 300mm x Ø 58 mm
	Cable	Length 5.5 m x Ø 9mm
	Weight in air	2.6kg

Examples of use

- Sedimentation and erosion rates assessment
- Mathematic models validation
- Harbour silting monitoring and estimation of the volumes to be dredged

Photos : Heidi Burgess / University of Brighton ,
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