

EPOS, THE EUROPEAN PLATE OBSERVING SYSTEM, IS A LONG-TERM PLAN TO FACILITATE INTEGRATED USE OF DATA, DATA PRODUCTS AND FACILITIES FROM DISTRIBUTED RESEARCH INFRASTRUCTURES FOR SOLID EARTH SCIENCE IN EUROPE.

www.epos-ip.org

EPOS MULTI-SCALE LABORATORIES

The EPOS Thematic Core Service [MULTI-SCALE LABORATORIES](#) includes a wide range of world-class laboratory infrastructures.

The **TRANS-NATIONAL ACCESS (TNA)** program will increase European state-of-the-art solid earth science laboratories attractiveness for researchers and contribute to increased researcher's mobility, cooperation and exchange.

EPOS TNA CALL FOR MULTI-SCALE LABORATORIES FACILITIES IS
NOW OPEN

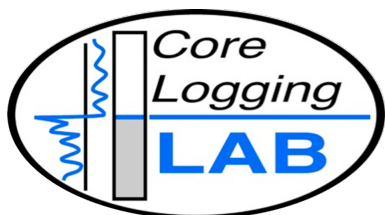
Physical access or remote service to 38 facilities across Europe are offered to RESEARCHERS AFFILIATED WITH EUROPEAN AND NON-EUROPEAN RESEARCH INSTITUTES

ONLINE APPLICATION SUBMISSION

<https://www.epos-ip.org/tcs/multi-scale-laboratories/data-services/transnational-access-tna>

DEADLINE FOR APPLICATION : APRIL 21ST, 2019

In the EPOS TNA call for Multi-Scale Laboratories, the [CoreLoggingLAB](#) is offered for **FREE ACCESS** for **30 DAYS** maximum to **UP TO 5 PERSON**



The Core Logging LAB, a joint laboratory between OGS-National Institute of Oceanography and applied Geophysics and the Department of Mathematics and Geosciences of the University of Trieste (Italy), focuses on NON-DESTRUCTIVE ANALYSIS for PHYSICAL PROPERTIES and STRUCTURE'S VISUALIZATION on sediment cores (whole or split) and rock samples.

It's equipped with:

GEOTEK® MULTISENSOR CORE LOGGER (MSCL)

Logging at mm scale on whole or split cores up to 150 cm long and from 5 to 15 cm in diameter.

The Core Logging LAB MSCL is equipped with the following sensors:



CORE DIAMETER MEASUREMENTS

P-WAVE VELOCITY

250-500 kHz piezo-electric ceramic transducers; accurate to about 0.2% (depending on core condition)

GAMMA DENSITY (BULK DENSITY)

¹³⁷Cs gamma source with 2.5mm or 5mm collimators; density resolution up to 1% (depending upon counting time)

MAGNETIC SUSCEPTIBILITY

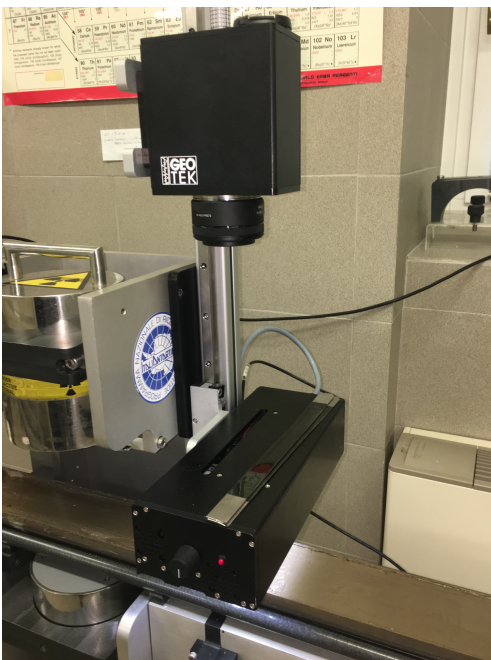
Bartington loop sensor 60-130mm diameter, or point sensor (on split cores) giving 5% calibration accuracy.

GEOSCAN V LINESCAN IMAGING

HR photography by using digital camera with dedicated lighting system with true RGB colour separation.

Specification

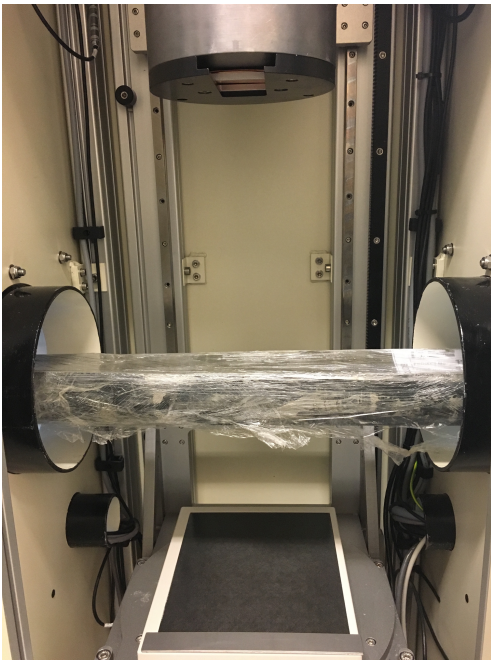
Pixel sensor: 1x5K CCD
 ADC resolution: 14 bits per colour channel
 MAX pixel rate: 3.2M pixel/sec
 MAX scan rate: 200 lines/sec
 Down core res: up to 10 microns
 Output: 48-bit RGB TIFF



GEOTEK® STANDARD X-RAY CT SYSTEM (MSCL-XCT)

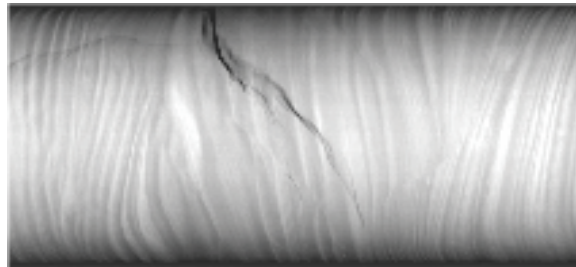
A cabinet based lead-lined steel system fully enclosing an X-ray source, detector and samples to be imaged. The instrument will be specifically calibrated for different core samples and will collect images on split or whole cores on plastic or metal liners, up to 150cm long and 15cm diameter.

X-ray data are acquired in accordance with ASTM D4452-14.



Specification

X-ray source:	65W
Voltage range:	45 to 130 kV
X-ray spot size:	50 to 100µm
Detector:	1920x1536 pixel
Image resolution:	40 to 300µm
Output:	16-bit TIFF
Rotation accuracy:	0.002 degree



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