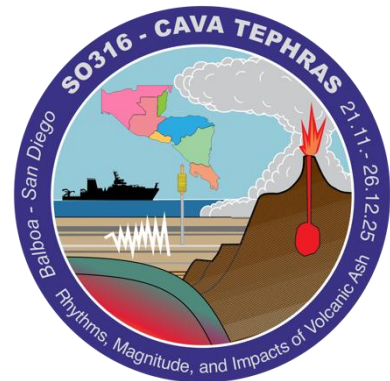


## RV SONNE Expedition SO316 CAVA Tephtras

21.11. – 26.12.2025

Balboa (Panama) – San Diego (USA)



### 2. Weekly report (24.-30.11.2025)

The second week of cruise SO316 was focused on the working area off Nicaragua. On 24 November, at approximately 21:00, the SONNE arrived in the working area and conducted the first bathymetric and Parasound survey at Station SO316-01. This survey served to precisely define the working areas for the subsequent stations. On 25 November, at around 06:00, the research vessel arrived at Station SO316-02 (10°30.617'N, 087°40.135'W) in a water depth of approximately 2900 m. The final station position was determined on the basis of the previously collected Parasound data.



First gravity corer and multicorer of SO316 were successfully recovered. Photos: Ben Holzamnn and Emma Hadré.

The following operations were then carried out:

SO316-02-1: Deployment of a multicorer (MUC) in combination with an SVP.

SO316-02-2: Deployment of a 10-m gravity corer (GC). Due to the relatively low core recovery, a second attempt at the same position was necessary.

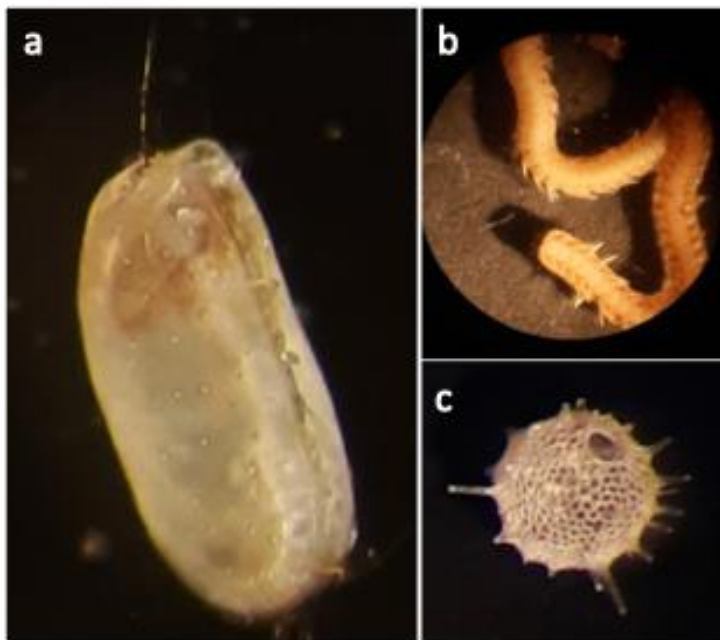
SO316-02-3: A second 10-m gravity corer deployment at the same location. During recovery of the device, a winch failure occurred, requiring immediate and complex retrieval operations to rescue the instrument. These were successfully completed on 26 November in the early afternoon. The scientific party extends its sincere gratitude to the crew for their highly professional and dedicated efforts.

Following the completion of the retrieval, the seismic equipment was deployed, and the first 2D seismic profile (approx. 180 nautical miles) using a 200-m streamer and a seismic source was acquired.

On 27 November, the U.S. holiday Thanksgiving was observed on board with a turkey-themed craft activity organized by the US-American cruise participants, providing a welcome change from the daily research routine.

On 28 November, a live video broadcast with several German-Danish schools took place. The students showed great interest in the scientific work and asked numerous questions regarding the research programme and life on board.

Later in the week, additional multicorer and gravity cores were successfully collected off the coast of Nicaragua. Description, sampling and first geochemical analyses have been started.



*Photos taken under the binocular. A) Ostracod, b) Polychaete, c) radiolaria. Photos: Liseth Pérez*

In parallel, intensive efforts continued to secure the required research permits for Guatemala and Mexico in order to ensure the planned progress of the cruise programme.

All participants are doing well and the chief scientist sends greetings on behalf of all the scientific participants.

Steffen Kutterolf  
(GEOMAR Helmholtz Centre for Ocean Research Kiel, Germany)