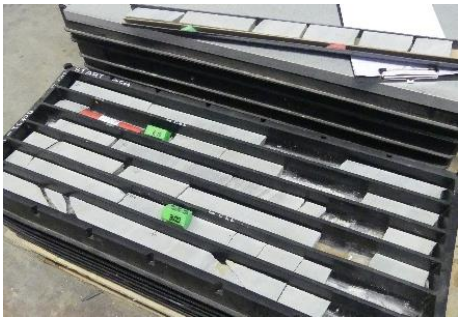
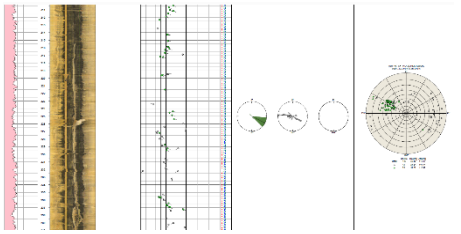
en route, February 28, 2023

The BASE Newsletter, vol. IV, issue 4

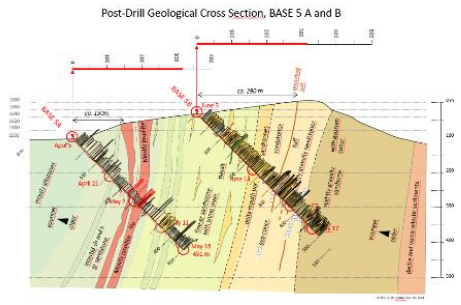


Amandine Migeon (Brest; PhD-student of Stefan Lalonde) spent about four weeks in Spandau XRF-scanning all cores to generate the geochemical reference data set. She scanned most of the core at "low resolution", that is, approximately every 1 m; some particularly interesting sections were done at a somewhat higher resolution. Amandine is currently processing the scanned data; powdered samples are being processed in Utrecht.



Geophysical logs are now uploaded to our ICDP data repository. Because these are tight rocks, we ran only GR, magnetic susceptibility, borehole resistivity imager, and caliber, aside from the directional data. These will be of interest for a variety of studies. Most prominent in the logs are structural features. Taufeeq Dhansay expressed interest to study them; please contact him if interested !

While at the Spandau core repository last week, I took high-resolution scans of 29 particularly attractive dry and wet core trays. Each of those scans has > 11000 by >4000 px, allowing them to be plotted at 1:1 scale without pixelation; surely useful for cyclostratigraphic research. I had some of them printed out at full size. They are currently travelling with me to Barberton so that we can show there "cores" in the field, at workshops and in the museum without having to borrow archive core from Donkerhoek. The images look great !



I also completed a first set of medium-resolution lithologic logs for all boreholes, using ppt for ease of use and versatility. Each borehole is shown on a single A3 page at identical scale; I hope they will serve us for orientation and selection. The logs show the features apparent in core tray photos, such as rock type, sedimentary structures, faults and fractures, clast composition, tuff beds etc. From there, it was only a small step to hang the stratigraphic columns into the cross sections. Both the logs and the cross sections have been uploaded to the server.

Save the date: BASE Core Workshop Sept. 12 and 13, 2023, in Berlin-Spandau – see Newsletter IV/3.

Frohes Forschen !

Christoph Heubeck and the SMB

Science Team members, don't forget to log in frequently for updates:
https://www.icdp-online.org/projects/by-continent/africa/base-south-africa