Rig MDX 901 is shown here moving from Site 5 A to 5B where it spudded the last borehole of the BASE drilling program on June 3. Drill crew and rig are amazing. Despite the remote location in the grasslands of the eastern Stolzburg Syncline at 1600 m elevation and 32 km from Barberton, the rig reliably drills about 30 m per day and is, after two weeks, more than halfway on reaching its target depth of ca. 500 m. The rig currently mostly drills thinbedded, fine- to medium-grained sandstones, possibly a series of stacked delta mouth bars and/or (sub-)tidal channels, and went into the weekend at 296 m depth.

At ca. 137-142 m depth, the borehole unexpectedly penetrated a fine-grained mafic (sub-)volcanic unit, probably a dike or sill (shown as a green line in the cross section). The borehole’s remaining objectives are to drill through shoreline-facies sandstones and a thick dacitic air-fall tuff, and to terminate in gypsum-concretion-bearing coastal-plain sandstone of the lower Moodies Group.

The weather has turned cooler, sometimes outright chilly, the grass has turned brown, and prescribed burns prepare the region for the fire season.

One evening last week, the BASE team took a break from logging core and participated in a quiz competition organized by a congregation in Nelspruit, naturally in full work gear. After a fun-filled evening, the team reached 5th place, taking home chocolates as the prize for best team spirit (please ask participants for details). About 200 people were in attendance. Go BASE!

Rig MDX 900 at Site 1A in the Eureka Syncline has had some mechanical problems and also struggled with broken formation and fluid losses for the past two weeks while drilling on either side of the Sheba Fault Zone. It has now reached solid Moodies strata west of that fault zone, is making good progress, and even set a new all-time daily record of drilling 36 m of solid HQ3 (61 mm diameter) core on June 17, reaching 241 m at the end of the day.

Frohes Forschen!