SitRep EastGRIP ice core processing 2023 week 7 & 8 (6/11/2023 – 14/11/2023)

Week 7 was a full week of processing again here at AWI in Bremerhaven. As we managed to finish the processing ⁽²⁾ on Monday of week 8, this SitRep covers both calendar weeks.

We had a significant crew change in the processing lab: Chantal, Jochen, Eirini, Michael, Eliza and Nanna joined the team. Jon and Miguel provided continuity and helped us to get started. Julien trained the new VisStrat LineScan experts Micha and Chantal on Monday and Tuesday of week 7. Thanks to these 3 experts and a generally excellent working mood and enthusiasm we quickly made good progress. Our back office in level 3 of AWI HausD (Denise, Sören, Daniela, Melanie) helped us out of minor challenges (e.g. missing labels >#4800; missing discrete isotope baggies #4802 to #4821 each 22) such that we could proceed without any delay.

First Processed Bag: 4698 Last Processed Bag: 4831

We finished the horizontal saw and ECM on Friday Nov 10, and finalized LineScan, Tephra, CFA and isotope cutting on Monday Nov 13. Tuesday the last strapping and ordering was done. Now Denise, Johannes, Sören and Iben take care of the box logistics.

End of week 7 we made an exciting discovery: a tiny brown particle in the top 5 cm of bag #4824. Chantal detected it in the VisStrat LineScan slab thanks to the polished surfaces for this method. We obviously missed it due to the rough drill surface of the just drilled core during logging in camp. As the particle (named "Basmati" for its shape) is close to the Tephra cut surface we decided to cut this Tephra piece (ca. 5 cm only due to a core break there) slightly thinner, in order not to loose "Basmati" in the saw dust. So it is now sitting in the CFA slab at in the top end of bag #4824.

Water stable isotope progress:

With Nanna taking over the IsoCFA ice cutting responsibilities in the freezer, Paloma and Valerie ended week 7 on bag number 4376, which is 53% complete for the analysis period. Bo Vinter joined the team on Monday of week 8 and was a very quick study of the system, and we ended this week on bag number 4506, 67% completed. We are also collecting waste water for diatom analysis for every stadial and interstadial period which is long enough to collect 0.5-1.0 liters.

This week we said good-bye to all team members (IsoCFA crew stays fortunately ⁽²⁾), and thank all processers for excellent work and a great time. It was fantastique having you all at AWI and in Bremerhaven. Good job, girls and guys!

Ilka

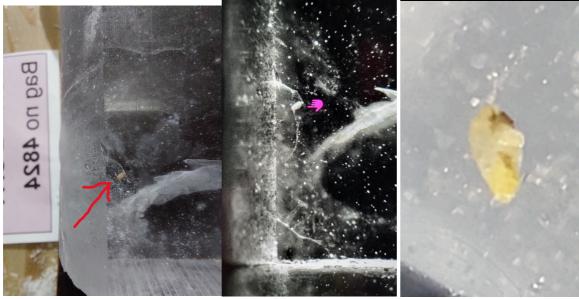


Figure 1: "Basmati" in the VisStrat LineScan slab at the top of bag #4824 as visible by eye (left) and in the dark-field by the VisStrat LinScanner (middle) and in the CFA slab after cutting a slightly thinner Tephra strip (right). Pictures by Jon, Miguel, Eirini, Chantal.

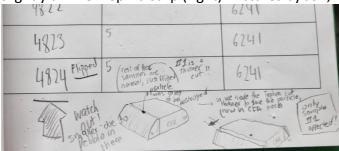


Figure 2: Documentation of "Basmati's" existence on Tephra cutting protocol.



Figure 3: The team of week 7 & 8. It was outstanding fun with you all! Please come back to Bremerhaven!