

Fieldwork in 2020:

I started my new job (CNRS researcher in the LIENSs in La Rochelle) by taking part of a 5 weeks GPS experiment in southeast Bangladesh. Coming from New York for this new job, I did a one-day stop in La Rochelle for officially taking my new researcher position then I flew to Bangladesh for meeting my Bengali and American colleagues there. This field experiment is part of the Coastal Embankment Improvement Project Phase 1 (CEIP-1), funding by the Worldbank. This project was a long shot. I recalled doing the last read of the second submission when Michael Steckler was working on it. It was the first summer I spent at Columbia University, back in 2015 and it eventually happens in 2020! The target of this part of the project is to resurvey 55 geodetic monuments in southeast Bangladesh built up by the Survey of Bangladesh (SoB) 20-30 years ago. We survey the sites with precise GPSs during 24-36 h. The main target is to estimate the change of land elevation with a good spatial coverage (monuments are ~ 20 km apart). The overall goal is to be able to determine the coastal subsidence in the region over the last 20 years. This is very critical to determine the present relative sea level rise in southeast Bangladesh.



Pictures: Left: Nahin hoping that I won't say that we should reaching the monument flooded by laterite. Right: A monument in perfect shape in Southeast Bangladesh that we have occupied.

During the first part of the field experiment, we worked on the sites near Barisal and Kuakata. We were 2 different teams (with our Bengali colleagues from the Institute of Water Modelling, SoB, Dhaka and Barisal Universities, Michael Steckler and myself). Then, most of the colleagues left and Hasnat Jamal's students from Barisal University, and myself continues the campaign. We build up two teams and once we finished the work near Barisal, we move to Khulna for surveying the sites in this region. We also took the opportunity to be there for servicing the permanent GPS station deployed during the Band-Aid project in Paigasha with the support of colleague from IWM. The last site we did where at only few kilometers from the world largest protected mangrove forest: the Sundarbans. Hasnat and his students finish the 11 stations in the forest after I left.

The overall campaign was a large success. We have been able to survey 44 sites over my stay. Also, some monuments were in better shape than others, few were in the middle of latrine, some others were totally covered by trees and even after large tree cut the data are not very good. Some roads were complicated, some lines for taking ferryboat look infinite, but some rickshaw vans were super-efficient to reach some isolated sites.

Before going back in La Rochelle, I did few meetings in Dhaka, and service the other permanent station deployed during the Band-Aid project in Chittagong. I had the chance to meet Frank Gruetzmacher, the Deputy Head of Mission of the French Embassy in Dhaka. He provide critical helps and advises for scholarship applications for few Bengali students who join our Master program in La

Rochelle, this semester! Then, I left Dhaka the day after the first CoVid case was declared officially in Bangladesh.



Maliha, Nahin, Setu and myself gathering for games and French learning one Saturday afternoon in between 2 lock-downs. All the three are coming from Bangladesh and have joined the Master Program in La Rochelle University. I helped them on getting a Scholarship, to setting up in La Rochelle.