



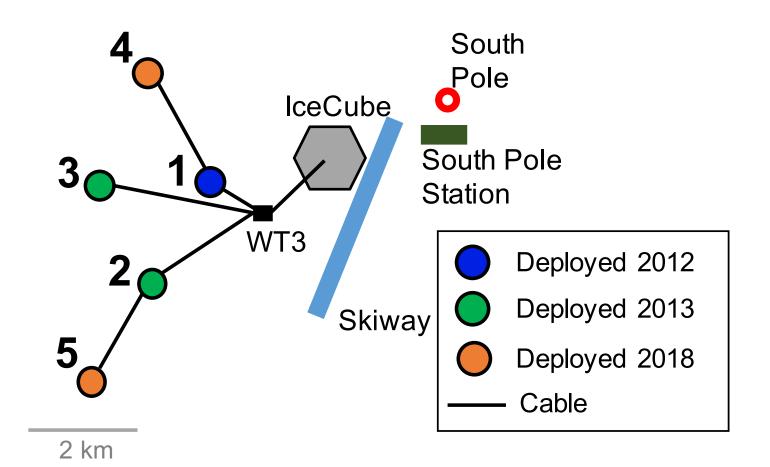


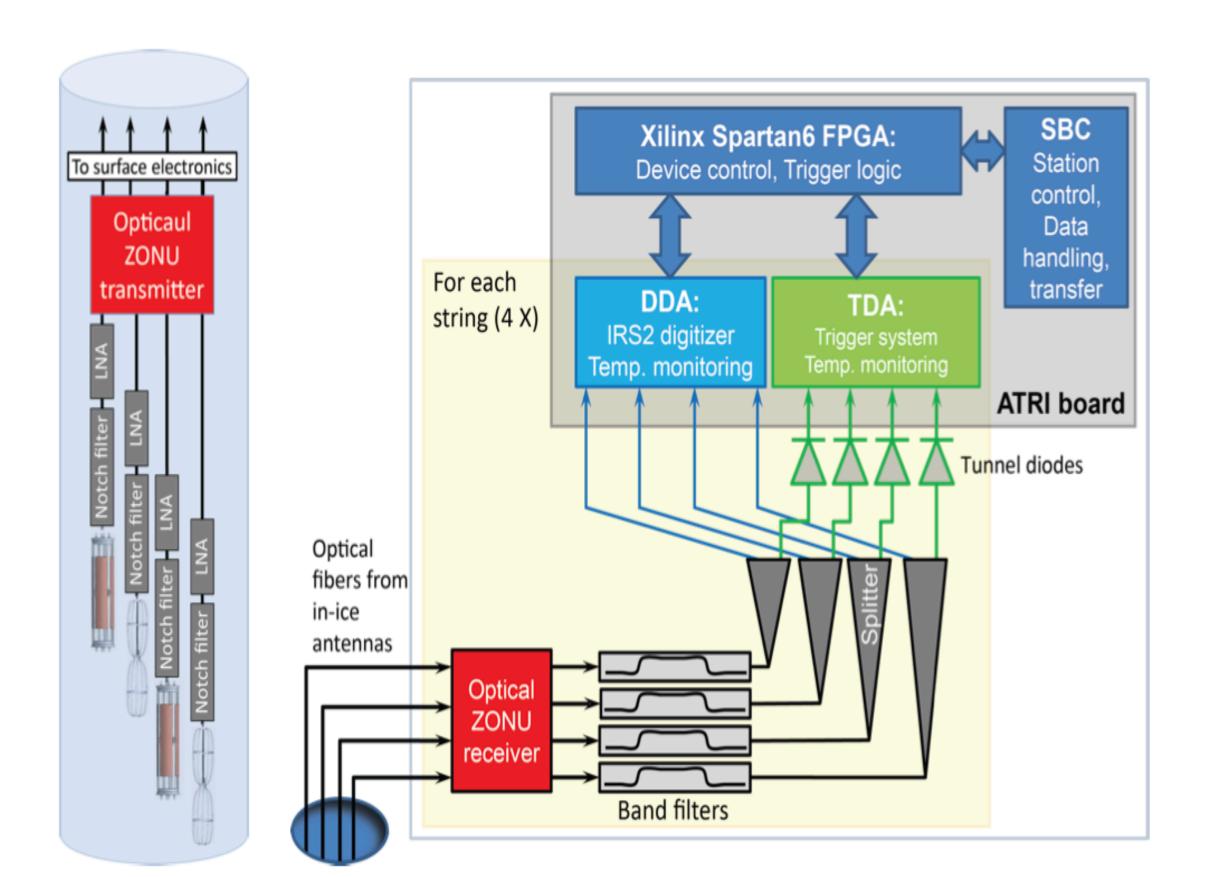


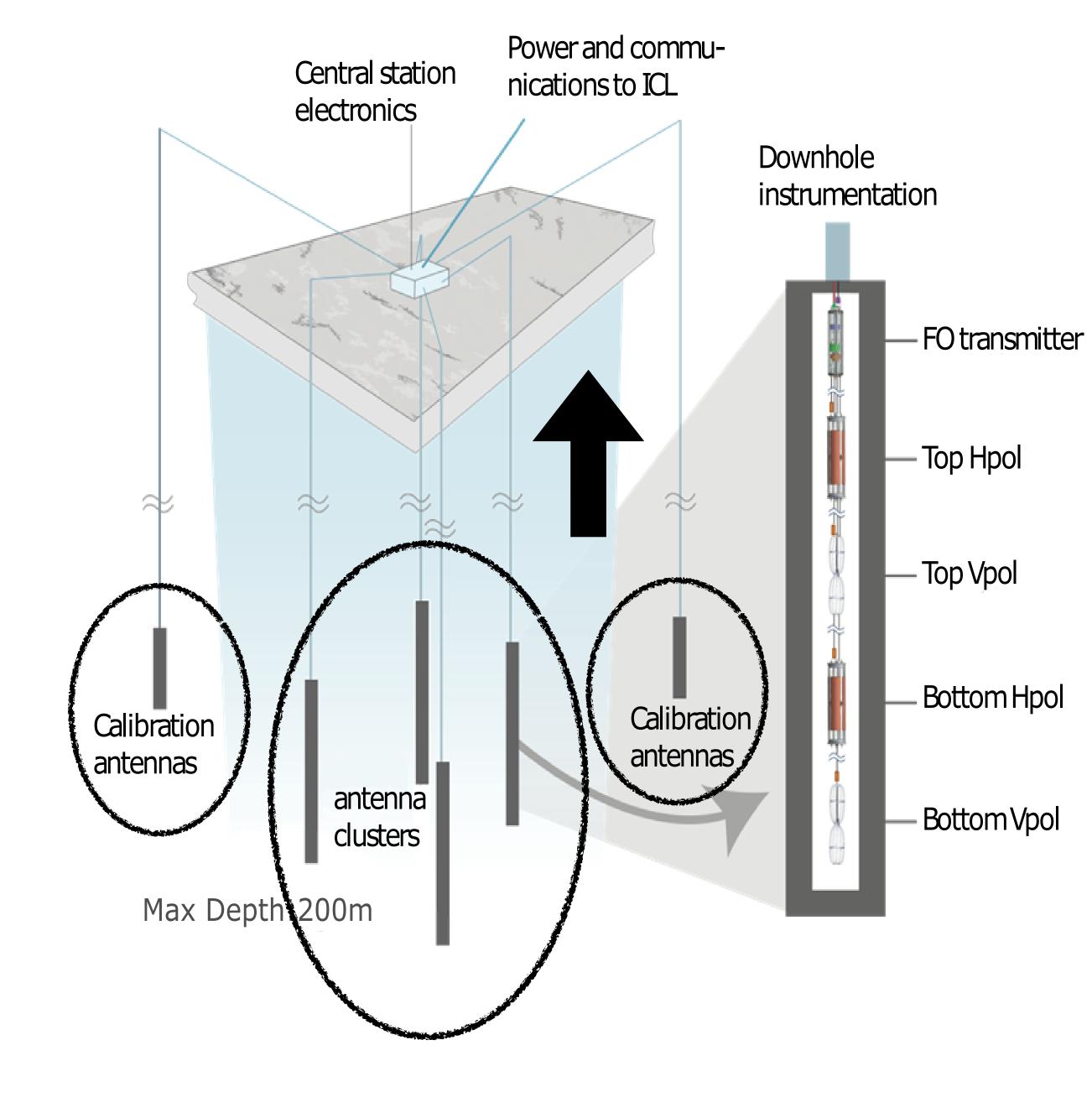


The Calibration of the Geometry and Antenna delay in Askaryan Radio Array Station 4 and 5

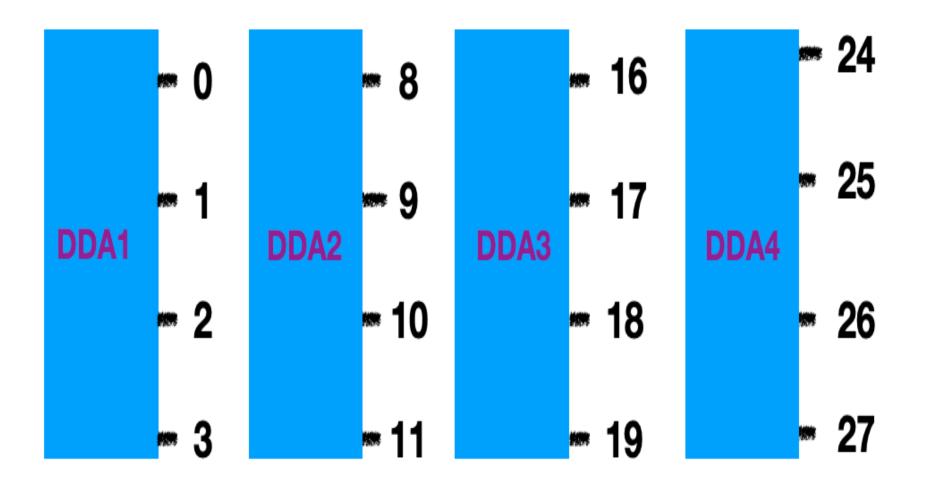
Paramita Dasgupta, Université Libre de Bruxelles, Belgium For The ARA Collaboration

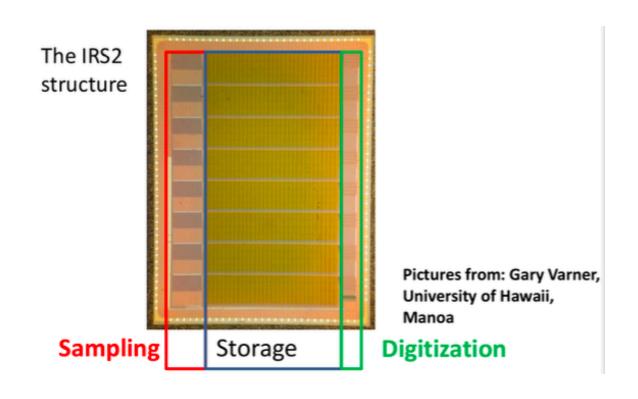






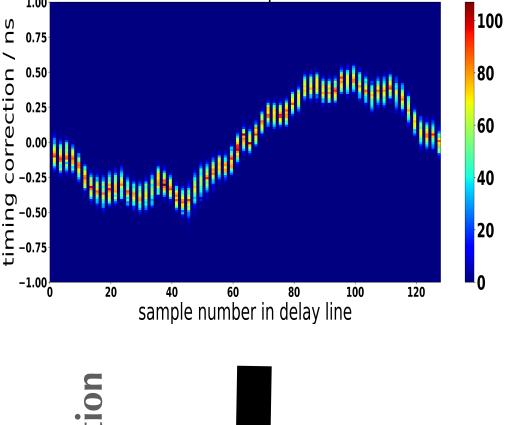
4 IRS2 Digitizing chips in each ARA station: total 16 RF channels

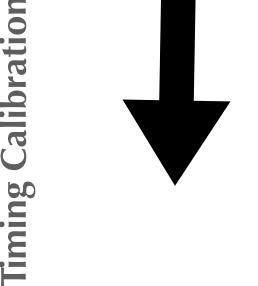




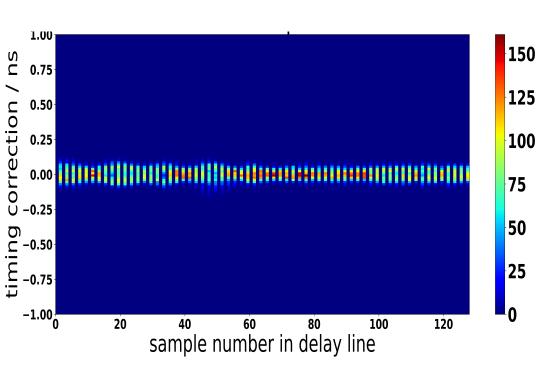
128 sampling capacitor to sample input RF signal

Before Timing Calibration

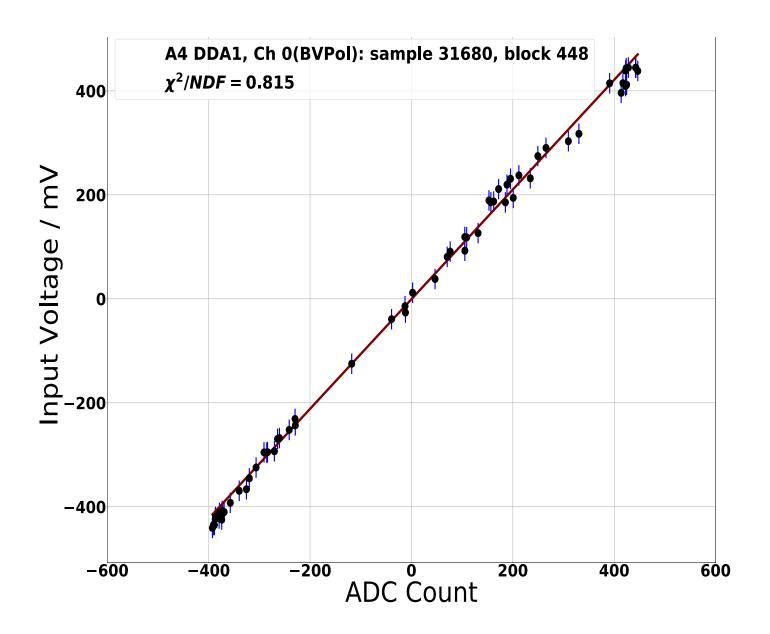




After Timing Calibration

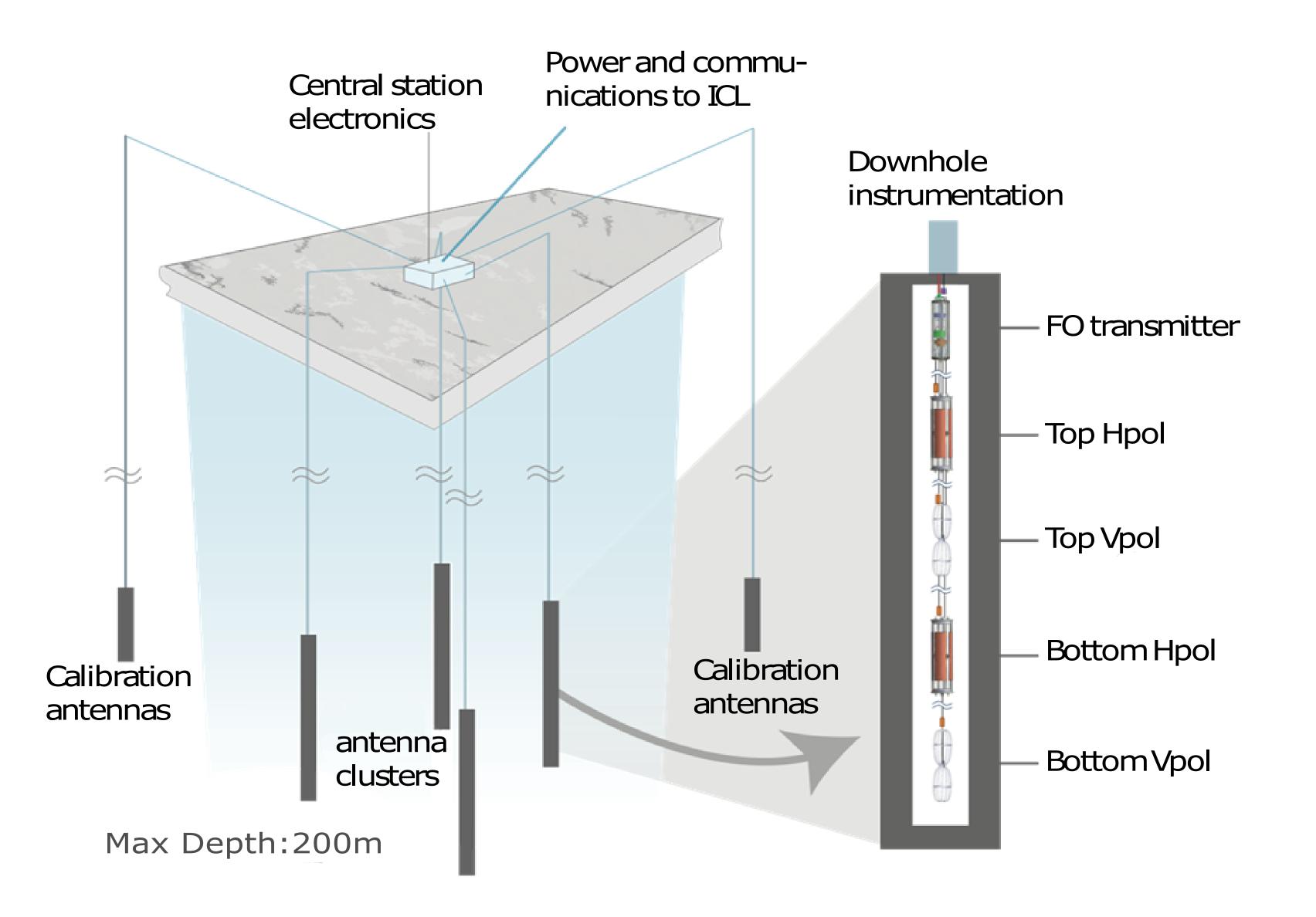


Voltage Calibration



32,768 storage capacitors to store input RF signal

Calibration of ARA Station Geometry and Antenna location in the ice



The antenna positioning with ~10 cm precision is obtained with our calibration methodology.

A5: fully calibrated

A4: work in progress

