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KISAP: New in situ seafloor velocity measurement tool

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The KISAP (KIGAM Seafloor Acoustic Prober) is an instrument developed to obtain *in situ* compressional wave velocity and attenuation profiles for upper several meters of sedimentary layer at the sediment-seawater interface. This instrument consists of independent recording channels (NI cDAQ-9132, National Instruments) with a linear array of receivers (5 Hz-20 kHz, GeoSpectrum Technologies Inc) with depth below acoustic source (acoustic pinger, 1-50 kHz frequency, GeoSpectrum Technologies Inc). It provides *in situ* recording of full waveforms to determine interval velocity and attenuation. The system can be attached to a corer (gravity and/or piston corer) or to a specially designed prober. The experiments for *in situ* test were carried out in east coast of Korea and Songjeong beach, Pusan, Korea. We collected good waveform data to be calculated *in situ* velocity from KISAP test. Therefore KISAP can be used to collect *in situ* acoustic data. In addition, it can be effectively used to calibrate previous laboratory data to *in situ* data.