

Deployment of the IceCube Upgrade Camera System in the SPICEcore hole



ICRC2021

Danim Kim, Christoph Tönnis,
Anna Pollmann, Carsten Rott



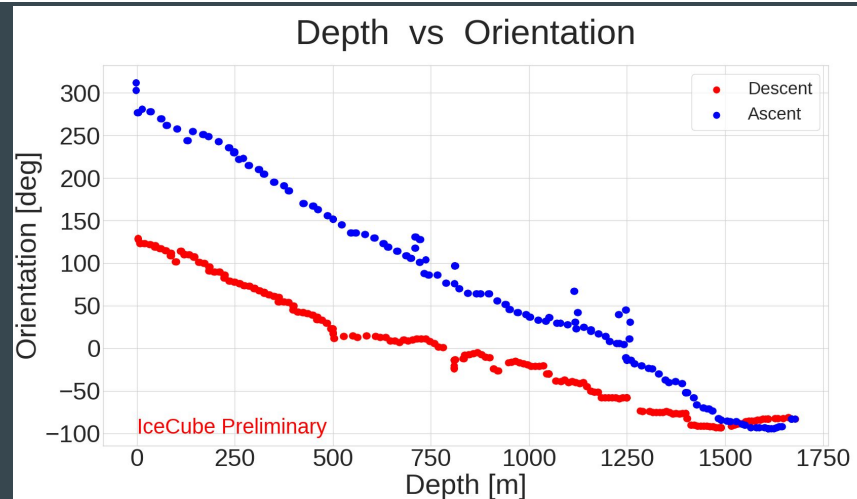
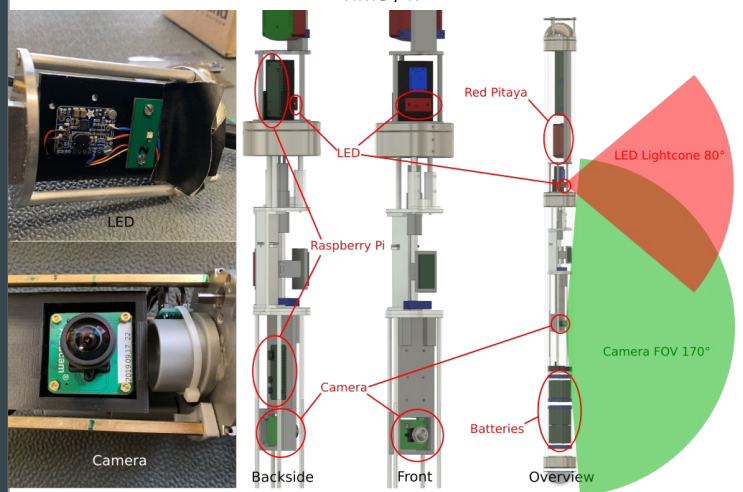
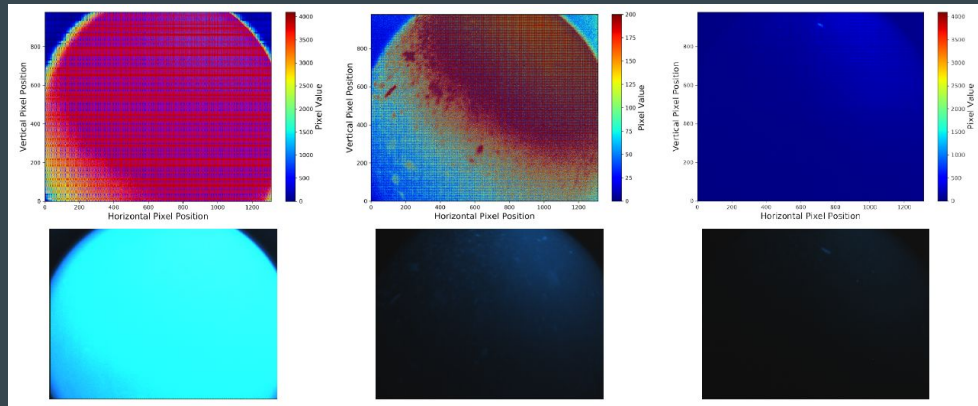
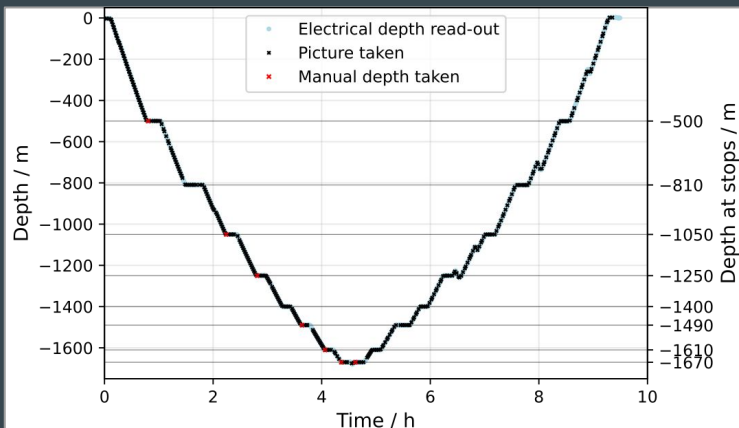
ICECUBE
SOUTH POLE NEUTRINO OBSERVATORY



성균관대학교
SUNG KYUN KWAN UNIVERSITY(SKKU)

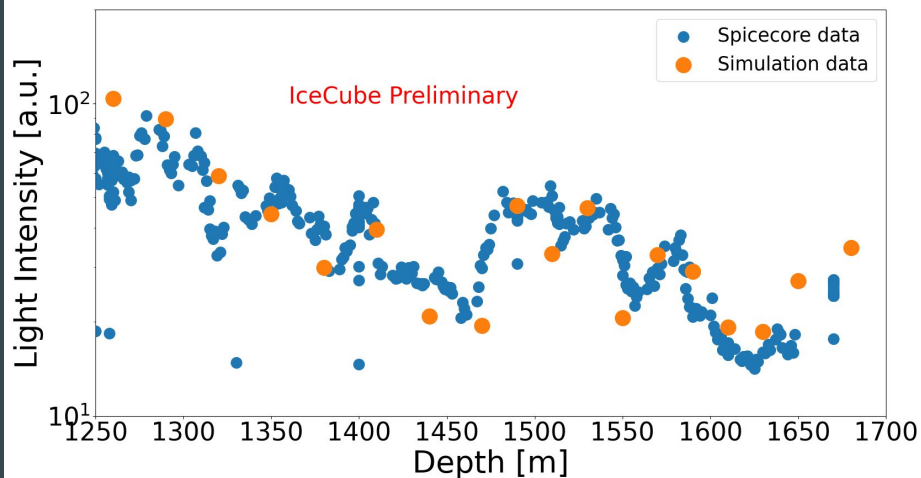


The IceCube upgrade camera in the SPICEcore hole

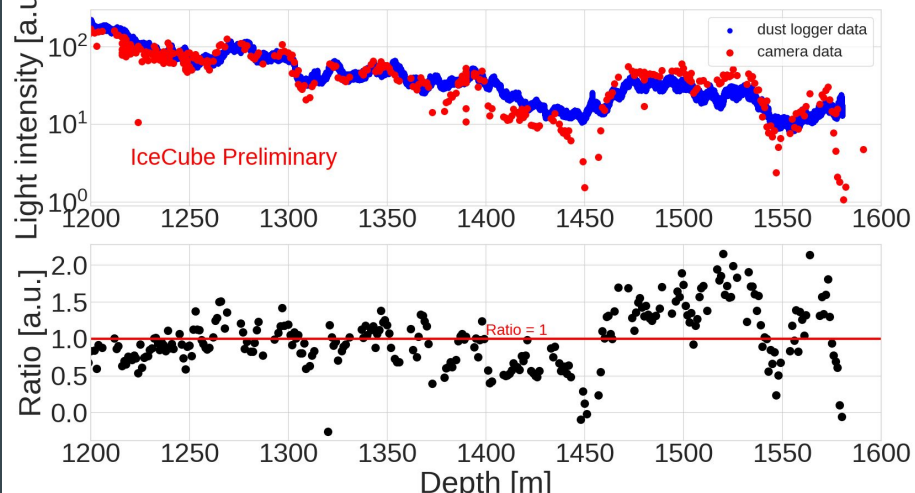


Results

Simulation data vs Spicecore data



Camera data vs Dust logger data (under 1200m)



- Demonstrated how to use camera data to measure Antarctic ice properties
- Strong correlation between camera logger and dust logger data show sensitivity of the camera based method
- Successful field test of the IceCube Upgrade camera system under the extreme Antarctic conditions
- Further analyses will be performed to attempt to extract quantitative information about scattering, absorption length or anisotropies in the light propagation in the Antarctic ice