6C-Seismology

During the EAGE conference in Toulouse an interesting paper on 6-component seismic was given. The idea is to record the translational and rotational accelerations along three coordinate axes. The rotational data are transformed using a S-Transform to enable subtractions from the translational components, resulting in a separation of pure P-waves and Rayleigh wave on the vertical component. The results were compared with those derived from closely spaced geophones and a hydrophone. Although the recording instrument was not that small, the method would remove the use of arrays and allow fewer stations. Application on North Sea data was successful, but on Gulf of Mexico data less, possibly due to complex subsurface geology or surface geometry. I found it an interesting development