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Abstract title	Seismic studies of the Groningen gasfield: past, present and future
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Abstract text	

The Groningen gasfield is one of the world's largest onshore gasfields. Gas extraction started in 1963 and induced seismicity was first recorded in 1986. Through the years, seismic monitoring in the region improved from a 4-station borehole network in 1995 to a dense 69-station network that was installed in 2014-2015. The data of this network open ample opportunities to analyse the seismicity and to image the subsurface structure. Where conventional methods are often based on arrival times and ray theory, new techniques employ the full waveform information contained in the seismograms. Synthetic modelling as well as data driven techniques such as seismic interferometry, Marchenko imaging and neural networks will allow modelling of wave propagation, imaging of the seismic structure and determination of earthquake parameters. Examples and some first results will be presented.

URL

Focus session Yes

