

Tectonic models II: The Dutch Central Graben and its margins

Publieke samenvatting / Public summary

Aanleiding

Owing to the large amounts of Late Cretaceous-Paleocene inversion and deep burial of Paleozoic strata, the tectonic history and associated vertical and horizontal motions of the southern offshore and onshore Netherlands are less constrained than the Dutch Central Graben and other offshore structures. This Dutch Central Graben has recorded all thermo-tectonic deformations that have affected the Southern North Sea and adjacent onshore starting with the Dinantian early Variscan extensional event. Furthermore, a wealth of data (borehole, 2D and 3D seismic, gravimetric and magnetic) is readily available for the Dutch Central Graben. Therefore, this graben is an optimal location for a focussed study on the reactivation of Paleozoic structures and implications of the recent tectonic reconstruction in understanding the mechanics of Mesozoic extension and inversion and its inferences for sedimentary basins evolution.

Doelstelling

We aim to decipher the temporal and spatial distribution of faulting and vertical motions combined with a quantification of the associated sedimentation and erosion.

Korte omschrijving

This will be achieved by structural analysis combined with restoration and modelling, including gravimetry and magnetic.

Resultaat

Projectinformatie / Project information

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Subsidiebedrag / Grant amount
€ 273.211,00

Algemene informatie / General information

Penvoerder / Secretariat
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The results are of major importance for understanding the genesis and mechanics of faulting and basin formation in the onshore and offshore Netherlands. The modern quantitative results have major potential a step wise re-definition of the potential for new geo-resources, both conventional and unconventional, such as geothermal energy potential in the onshore.

De data in deze applicatie is afkomstig van de Rijksdienst voor Ondernemend Nederland (RVO) en wordt in samenwerking met de Topsector Energie ontsloten.

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