The Carboniferous sediments reveal presence of anhydrite mineral in association with dolomite, which either crystallized in pore spaces or has replaced other components of the sediments. In any case it suggests leaching from the overlying evaporite sequence.

Linear magnetic anomalies extending for approximately 150 km have been observed offshore of the NE England on the magnetic maps. Available magnetic and gravity data concerning igneous intrusives can be interacted with 3D seismic data in order to produce an accurate picture of the pattern of igneous dykes in the Southern North Sea and extend the interpretation of dykes further offshore.

The origin of the Tertiary dykes is related with the opening of the Atlantic Ocean during the Early Tertiary times.