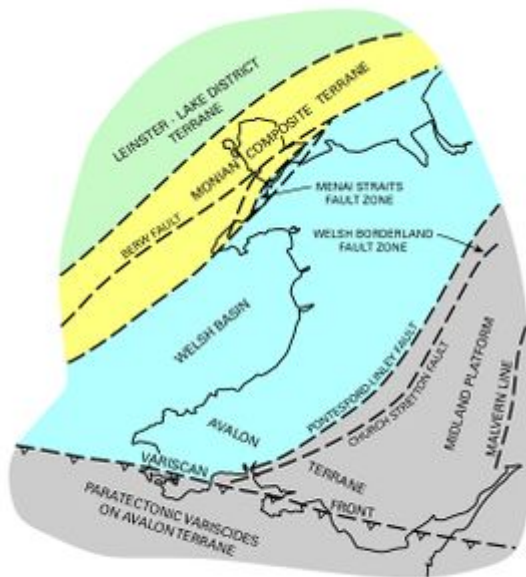


Precambrian and ?Cambrian, introduction, Wales

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Terranes of the Caledonian and Variscan orogens (adapted from Cope et al., 1992). P916145.

Precambrian (Proterozoic) rocks in Wales crop out most extensively on Anglesey and Llŷn but also occur in inliers in Arfon, between Bangor and Caernarfon, and smaller inliers in Pembrokeshire, Carmarthenshire and Radnorshire. Throughout the 20th century, the relationship between the rocks at these localities has been a subject of intense discussion and it is only in recent years that the terrane model provided the most satisfactory explanation of the disparate relationships seen at outcrop. The model proposes that all the outcrops are of late Precambrian age, and that they formed as a series of smaller terranes of markedly different geological characteristics, which were accreted together between 700 and 540 Ma.

Two major terranes have been defined: the Monian Composite Terrane, which includes Anglesey and the main part of the Llŷn outcrops, and the Avalon Terrane, which includes small localities on Llŷn, Arfon, Pembrokeshire and the Welsh borders ([P916145](#)). These terranes are juxtaposed by the Menai Straits Fault System, a complex of steeply inclined shear zones and brittle faults, but there are no exposures displaying the stratigraphical relationships between rocks on either side. The Monian Composite Terrane is equivalent to the Rosslare Terrane in south-east Ireland and both are bound to the north-west by the Leinster-Lake District Terrane.

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