

Latitudinal variations of sunspots and active regions in the cycle 23 and the periodicity of a global magnetic field of the Sun

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We investigate latitudinal activity of sunspots and plages in the cycle 23 extracted from the Solar Feature Catalogues (<http://solar.inf.brad.ac.uk>) and compare them with large scale magnetic field variations extracted from the MDI and WSO magnetograms. The area and magnetic field variations in time and cumulative variations in the butterfly diagrams for sunspots and plages are compared with the zone structure and periodicity of the global magnetic field detected by different instruments for the cycles 23 (MDI and WSO) and 22 (WSO). The results are discussed in applications to the theoretical dynamo models.