Distribution of M5 and greater shallow earthquakes and active faults on the Japanese islands

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Spatial relations of active faults to inland earthquakes greater than Magnitude 5 and shallower than 20 km occurring in 1900-1999 are shown on geotectonic map of Japan, Sheet-maps of 200,000 :1, and Prefecture map. The density distributions of earthquakes and faults are significantly different between areas depending on their position in the island arc sysytem, but there is a good coincidence between Outer and Inner zones of arcs. The Outer zones of all the arcs are remarkably lower in the distribution density both of earthquakes and faults than the Inner zones .This indicates that not only great earthquakes of M7 and greater, but also moderate-size earthquakes of 5<M<7 will generate more frequently in areas where active faults density is higher.