

Europe may be slowly disappearing under Africa: research

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The tectonic plates underlying the continents and oceans. Image: USGS

(PhysOrg.com) -- At the European Geosciences Union (EGU) meeting last week, lead researcher Rinus Wortel from the University of Utrecht presented the findings that Europe is slowly moving under Africa, creating a new subduction zone.

For many millions of years, the two continents have been converging

with the northern edge of the African tectonic plate slowly descending underneath the Eurasian plate. However, Wortel's research has showed that this process seems to have stalled and may be in the process of changing roles.

While the dense rock of the northern African plate has been drawn into the Earth's mantle, the remaining portion of the African land mass is too light. With this being the case, Wortel points to the possible reversal of roles, seeing the heavier Eurasian plate now moving below the African plate and creating a new [subduction zone](#).

With this possible switch in roles, scientists are warning of an increased risk of seismic activity in the Mediterranean. Because of this, and in light of the recent earthquakes and tsunamis in Japan, scientists are voicing concern that European countries are not putting enough resources into a tsunami warning system. While earthquakes in the Mediterranean region are traditionally smaller than those found in the Pacific Rim, there have been recorded magnitude 8 earthquakes.

Researchers are hopeful that this confirmation of a European subduction will lead the way to allow scientists to better model the region and assess the risks of earthquake and tsunami activity in the area.

More information: [meetingorganizer.copernicus.org ... 011/EGU2011-3397.pdf](http://meetingorganizer.copernicus.org/011/EGU2011-3397.pdf)

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