Mid to late Holocene Sea-level changes in Philippines

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Coastline of the Philippines is one of the ideal place to monitor the sea-level changes for the last 10,000 years as geological gauges such as uplifted coral reefs and tidal notches abound. It is also located far-away from the North American continent and Northern Europe where enormous ice sheets existed during the last ice age, hence sea-level observations mainly reflect the melting history of the global ice sheet instead of the solid earth deformation due to the changes in surface loading (glacio-isostasy). We have been investigating all over the Philippines coast to reconstruct paleo-sea-level changes using geological measures. More than 600 sites with uplift coral reefs and tidal notches have been examined and age determinations were conducted by 66 AMS C-14 dates from coral, molluscan shells wood and peat of which are calibrated to calendar years using INTCAL04

(Stuiver et al. 2005). Additional 50 corals were analyzed for Th-230, U-234 at Kanazawa University. Radiometric dating for corals bored shells revealed ages of the highest, middle and lowest notch formation were respectively 5.5-4ka BP, 7.5-6ka BP, and 2.5-1.4ka BP. We therefore report the timing of the ceasing of the major postglacial melting of the global ice sheets was 5.5-4ka BP.