

## A discovery of Amagi-Kawagodaira tephra(Kg) from core samples taken at the connecting bar in Kushimoto, southern tip of Kii peninsula, Pacific coast of western Japan

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We report a new discovery of Amagi-Kawagodaira tephra(Kg) from two core samples taken at the connecting bar in Kushimoto, southern tip of Kii peninsula, Pacific coast of western Japan. We have taken five core samples at the elevation of 5.7 m a.s.l., in the high school ground located on the connecting bar (tombolo) in order to know the huge tsunami cycles which must have occurred along the Nankai trough subduction zone. We found a very clear tephra layer of Kikai-Akahoya(K-Ah) in one of the core samples, however no other tephra layers could be seen apparently. We divide core samples into every five centimeters and examine them with microscope. We can see many glass particles originated in volcanic ash through microscope in many core samples. Refractive index of every glass particles is measured to identify crypt tephra. Most tephra are identified to Kikai-Akahoya(K-Ah) or Aira-Tn(AT) reworked from surrounding slopes. Only two samples can be identified to Amagi-Kawagodaira tephra(Kg). We examined index of chemical components of volcanic glasses by EPMA. Consequently, we could discover Kg tephra not only at new locality, but also determine the period of a huge tsunami deposit occurred along the Nankai trough.

Keywords: Nankai Trough, crypt tephra, Amagi-Kawagodaira(Kg), tsunami deposit