

## Arrangement of depressions situated on the geanticlines, and active transverse faults in southern Okinawa-jima Island, Japan.

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Koba (2003) proposed a new big collapse for the first time at the meeting of the Japan Association for Quaternary Research, titled [Multitudes of landslides recognized on a hump (Okinawa-jima Island) of the geanticlines of Ryukyu island arc, and their role to the destruction of islands]. Furthermore, Koba, Morimoto, and M. Ozaki (2004) presented relations with micro earthquakes at the meeting of the Association of Japanese Geographers, titled [Multiple giant rock slides found in granite and sedimentary rocks of middle Hokusetsu Mountains, Osaka, Japan].

The northern and middle parts of Okinawa-jima Island running from southwest to northeast are divided by dozens of NW-SE transverse faults as shown in Koba (2003). Such faults and undermentioned structural depressions are recognized in the southern part. Nakagusuku Dome here was demonstrated by Cederstrom (1947) and Flint et al. (1959). They thought that its doming structure was formed by warping of the late Miocene to early Pleistocene Shimajiri Formation. H. Ujiie, M. Kimura, and others of University of the Ryukyus recognized that it had almost started after deposition of the Ryukyu Formation characterized by coral reef limestone.

We recognize the same kinds of domes, Haeburu-cho and Kin-wan depressions as well as Nakagusuku depression. Nakagusuku depression and its periphery seem to have been sheared and shifted by some transverse faults. These depressions seem to have occurred after doming on the anticlines. Nakagusuku-wan and Haeburu-cho plain seem to have collapsed on the anticline in the southern part, and Kin-wan in the middle part as well. We speculate a hinge line between the middle and southern anticlines. Please see an attached figure.

