Establishment of an absolute gravity network in east- and southeast-Asia

Abstract

Taking part in the Asia-Pacific Space Geodynamics (APSG) Project cooperation campaigns in IAG and the work plan in the Permanent Committee on GIS Infrastructure for Asia & the Pacific (PCGIAP), we have collaborated to establish the Absolute Gravity Standard Station Network in East Asia and South-East Asia (AGSSN-ESEA) with FG-5 absolute gravimeters. During the period from 2002 to 2005, we have already determined absolute gravity values in the order of μGal at Wuhan, Nanning, Shanghai, Beijing, Kunming, Lhasa, Hong-Kong Wulumuqi, Xi'an and Xining in China, Hsinchu in Taiwan, Bandung, Yogyakarta Cibinong and Pontianak in Indonesia, Kuala Lumpur and Kota Kinabalu in Malaysia, Bangkok and Cheng-Mai in Thailand, and Manila in Philippines as well as Kyoto, Esashi, Matsushiro, Kamioka, Muroto, Aso, Mizunami and Naha in Japan. As an extension of this campaign in the southern hemisphere, we have conducted absolute gravity measurements in Perth and Canberra in Australia, and the Syowa Station in Antarctica in 2003-2004.