Airborne gravity field Measurements - status and developments

English Abstract: DTU-Space has since 1996 carried out large area airborne surveys over both polar, tropical and temperate regions, especially for geoid determination and global geopotential models. Recently we have started flying two gravimeters (LCR and Chekan-AM or inertial navigation systems) side by side for increased reliability and redundancy. Typical gravity results are at the 2 mGal rms level, translating into 5-10 cm accuracy in geoid. However, in rough mountainous areas results can be noisier, mainly due to long-period mountain waves and turbulence. In the paper we outline results of aerogravity surveys and examples of recent geoid determinations in Indonesia, the Philippines and Tanzania, based on DTU-Space aerogravity and satellite data (GOCE/GRACE).