

[P-062/ORB-1] Ground Track Display for the KOMPSAT Series Satellites

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Satellite ground track is the projection of the satellite orbital trace onto the surface of the Earth. Real-time or offline satellite ground track display with ground station coverage and satellite communication coverage is truly a 'must have' item in the real satellite operations environment. Satellite ground track display program can be used independently or merged into the satellite mission control system. The KOMPSAT series satellite ground track display programs have been developed since the first launch of the KOMPSAT-1 in 1999. The computer programs have been evolving during the past 10 years from simple satellite ground track display on engineering workstation into complicated satellite mission display on PC. In the age of KOMPSAT-3 and KOMPSAT-5 satellite Mission Control Element (MCE), there are four different ground track display programs in terms of the functionality, performance, platform, and operating system. In this paper, satellite ground track display programs for the KOMPSAT series satellites are investigated in order to apply the programs to the related area such as satellite mission analysis and satellite surveillance

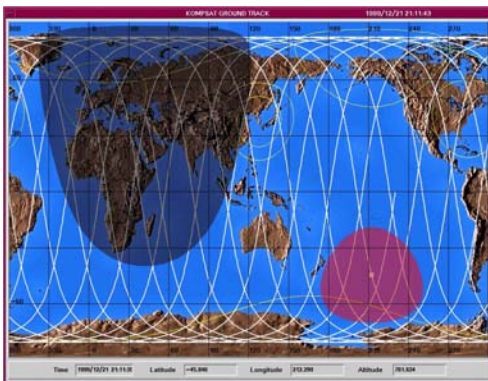


Figure 1. KOMPSAT-1 Ground Track Display

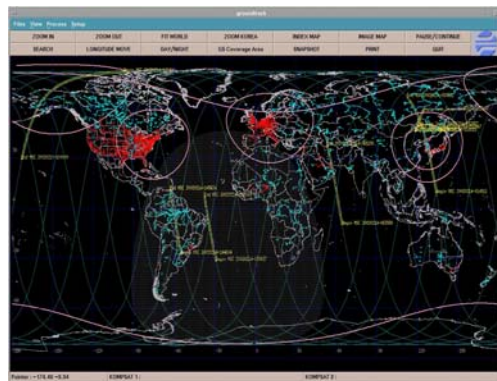


Figure 2. KOMPSAT-2 Ground Track Display

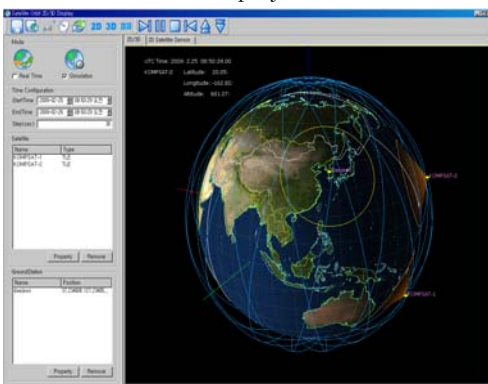


Figure 3. KOMPSAT-3 Ground Track Display

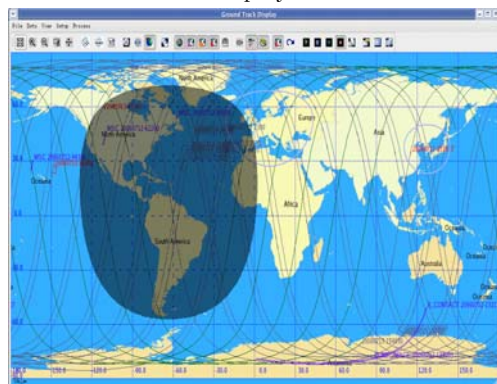


Figure 4. KOMPSAT-5 Ground Track Display