Introducing the Latest Version of the Global Elevation Testing Facility

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SUMMARY

Airport runways are linear structures found on all continents of the globe. Both temporal and long-term physical properties of runways are constantly monitored and maintained by aviation authorities to guarantee safety of air travel. The data on a several technical parameters of runways are freely available to the public, but spread across many databases across the Internet. Runways are constructed as flat with surfaces made of concrete, asphalt or similar materials. Some 10 years ago it was discovered that runways can be used as convenient test beds for validation and calibration of digital elevation models. To facilitate these and similar activities, e.g., calibration of other remote sensing instruments, the Global Elevation Data Testing Facility (GEDTF) was conceived and developed. The GEDTF was introduced during the XXIV FIG Congress in Sydney in 2010. The GEDTF is a database containing location and some of the technical parameters of approximately 8,000 runways spread across the globe. The GEDTF database is available over the Internet. In the recent years the GEDTF was significantly enhanced by inclusion of some 4000 extra runways. An additional technical attribute for runways has also been added, including detailed centerline cross-section. In the present contribution, the feature of the latest version of the GEDTF along with some examples of application of the database will be outlined. The GEDTF database has been an ongoing project. Its success depends on the generosity of sponsors, but also participation of members of geospatial community who could help to enhance and update the GEDTF facility. This presentation will seek also all forms of support and declarations of participation in the project from the participants of the XXVI FIG International Congress & General Assembly in Istanbul, Turkey.

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