Abstract Triglav, J.

Significance Analysis of Geolocation as a Function of Time:

Geodesy has to use a dynamic and interdisciplinary approach now to empower it as a basis of precise spatial geoinformation infrastructure to provide quality, precise and reliable use of the rapidly growing amount of global spatial data from various sources. This basis has to be accessible on a global level in a simple way equally to all relevant scientific disciplines and to the entire global community in its widest spectre of daily life applications, which form the key segments of a functioning society, economy and individual. Therefore it is necessary that they are lead safely, reliably, efficiently, with accuracy and great care for the environment. The included applications are characterized by different levels of change dynamics, which demand from geodesy an adapted quality approach for every field in order to define geolocation as a function of time. To the entire variety of relevant applications geodesy has to provide appropriate geodetic framework that is fulfilling the requirements of the standard quality model for spatial data. That is one of the additional reasons for the need of a systematic overview regarding the criteria of required accuracy and reliability of defining spatial geolocation and the criteria of necessary temporal density in the relevant individual application fields. The user should be able to comprehend most clearly which of his requirements can objectively be fulfilled. An analysis of the requirements of individual applications with regard to applying GNSS technologies is described as well as the analysis of advantages of GNSS usage in individual relevant applications.