



COST Action ES1206: Advanced GNSS Tropospheric Products for Monitoring Severe Weather Events and Climate (GNSS4SWEC)

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GNSS is now an established atmospheric observing system which can accurately sense water vapour, the most abundant greenhouse gas, accounting for 60-70% of atmospheric warming. Water vapour observations are currently under-sampled and obtaining and exploiting additional high-quality humidity observations is essential to severe weather forecasting and climate monitoring..

COST Action ES1206 addresses new and improved capabilities from developments in both the GNSS and meteorological communities to address these requirements. For the first time, the synergy of multi-GNSS (GPS, GLONASS and Galileo) will be used to develop new, advanced tropospheric products, exploiting the full potential of multi-GNSS water vapour estimates on a wide range of temporal and spatial scales, from real-time monitoring and forecasting of severe weather, to climate research. In addition the Action will promote the use of meteorological data in GNSS positioning, navigation, and timing services and stimulate knowledge and data transfer throughout Europe.