

## GasumNow! - service for the Finnish pipeline company

Pulkinen A., A. Viljanen, R. Pirjola, A. Mälkki, K. Kauristie, K. Pajunpää and M. Kuitunen

## Background

- GasumNow! is a relatively independent part in the AurorasNow! Service Development Activity (SDA)
- Motivated by the 25-year experience on ground effects of space weather at the Finnish Meteorological Institute and by the 25-year experience on collaboration with the Finnish pipeline and power transmission industry
- All methods published in international journals (see Pulkinen, Geomagnetic induction during highly disturbed space weather conditions: Studies of ground effects, Ph.D. thesis, FMI contributions, 2003)

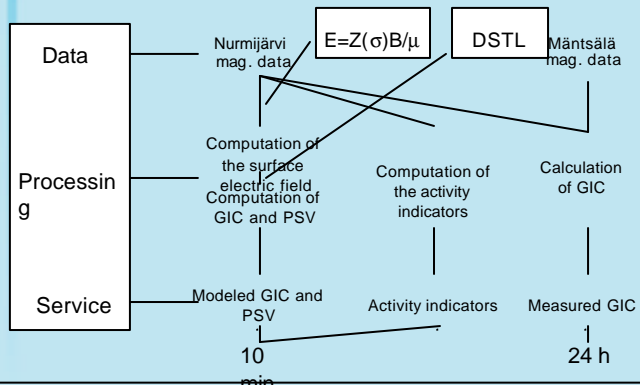
## GasumNow!

- Service concerns ground effects of space weather, i.e. geomagnetically induced currents (GIC)
- Service is composed of public and restricted parts
  - In the public part (called GICnow!) a general presentation of the phenomenon and view to the real-time GIC activity indicators and to actual GIC measurements are given
  - In the restricted part a real-time view to modeled GIC and pipe-to-soil voltages (PSV) at different sites along the Finnish natural gas pipeline is given

## GasumNow!



## GasumNow!-operation



## GasumNow!- operation

- Errors in the data traced and automatically corrected
- Log of errors is kept
- Customer's feedback used to further develop the service
- Test phase of the real-time service started in June 2003
- Test phase of the complete service started in October 2003 (temporarily at [www.geo.fmi.fi/MAGN/GIC/gicnow](http://www.geo.fmi.fi/MAGN/GIC/gicnow))

## GasumNow!- now on the web

