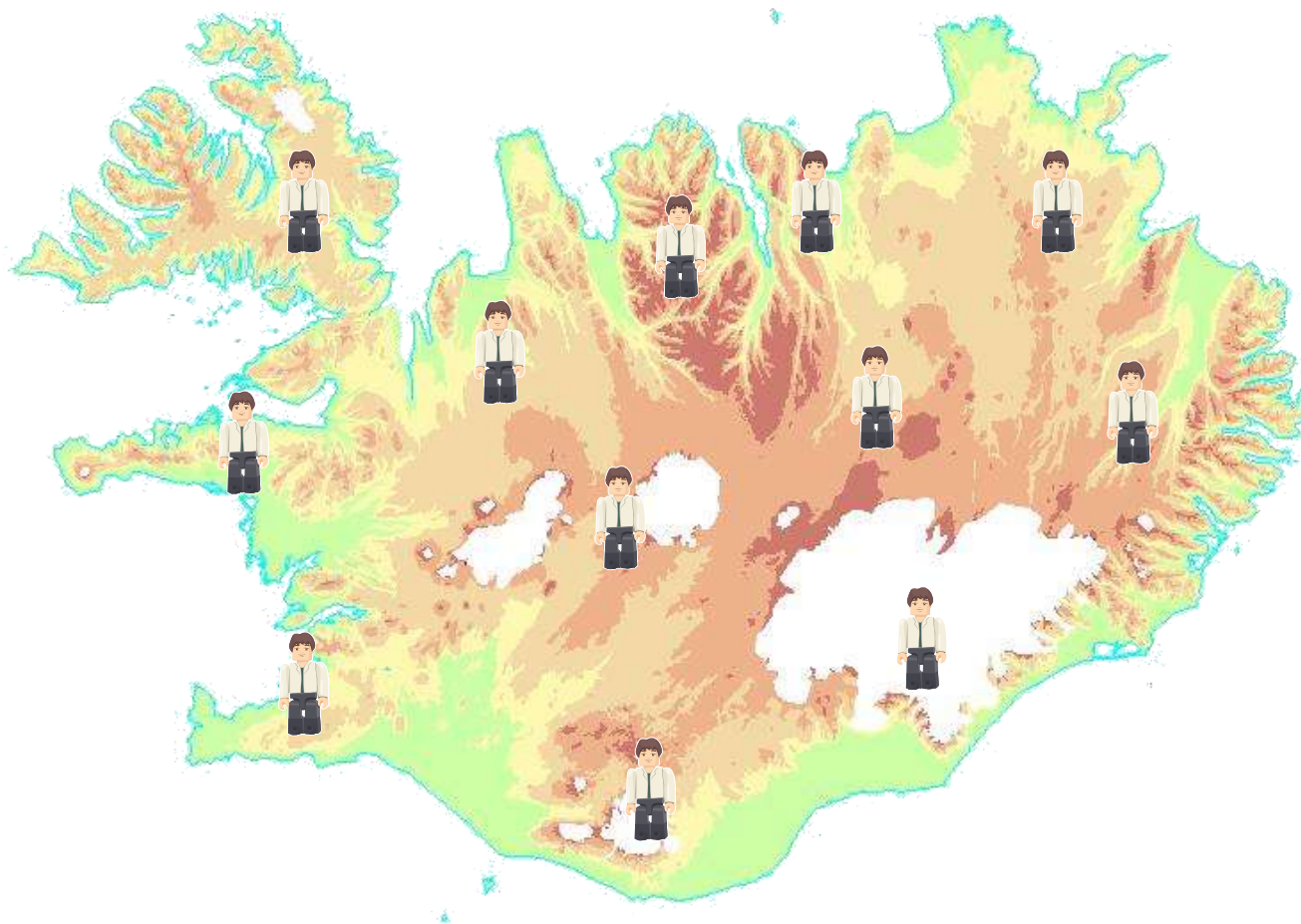


A photograph of a volcanic eruption. In the foreground, there is a dark, textured, and sloping volcanic ash field. In the background, a bright, intense orange-red glow from the lava flow is visible, with a massive, billowing plume of grey ash and white smoke rising into the sky, partially obscuring the upper part of the frame.

Geodesy and Geographical Information

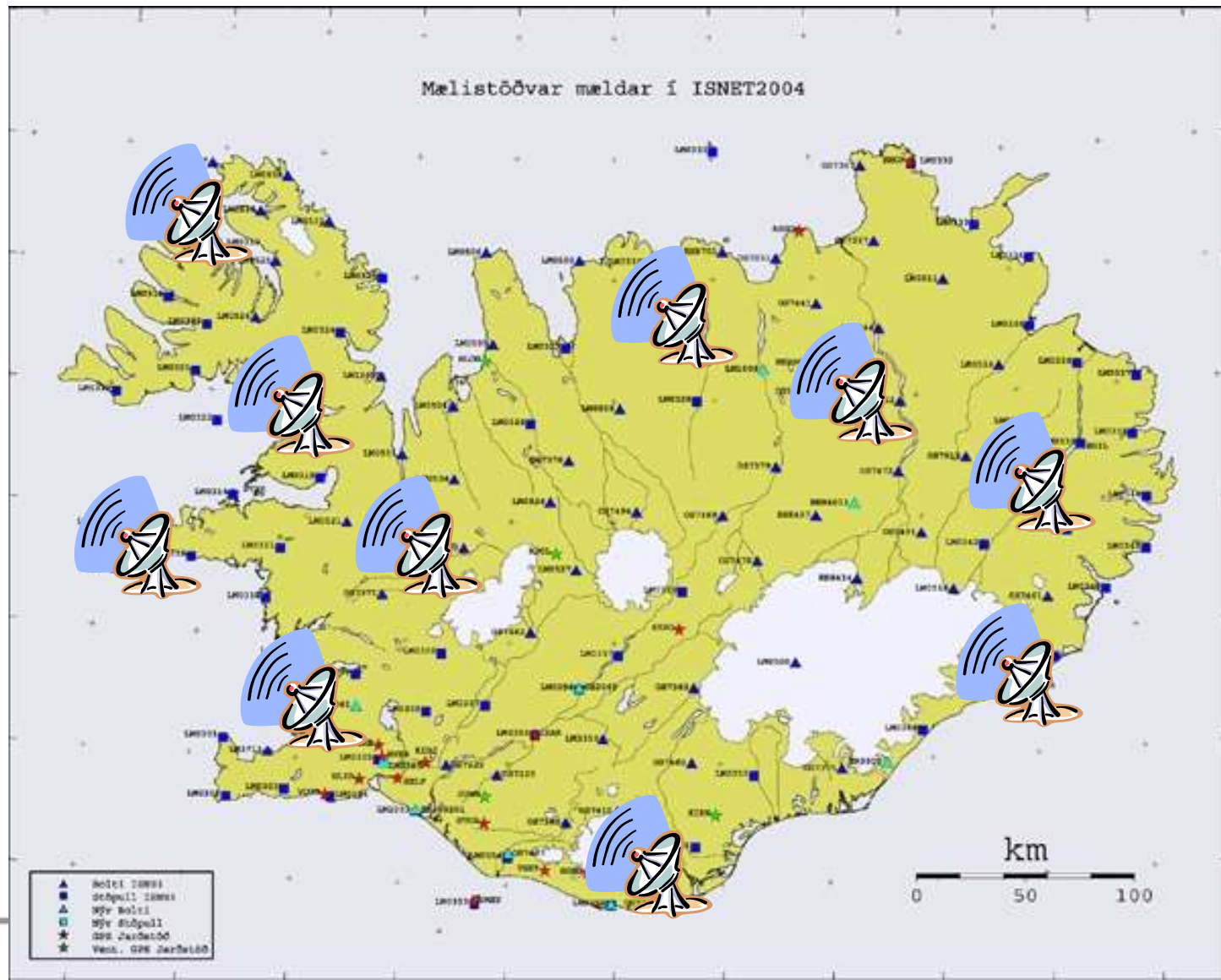
The problem/task



So, how do we do it?

- Scale
- Re-use
- Cooperation
- Technologi
- Well educated employees
- Patience! (persistence)

The base



Vertical reference system



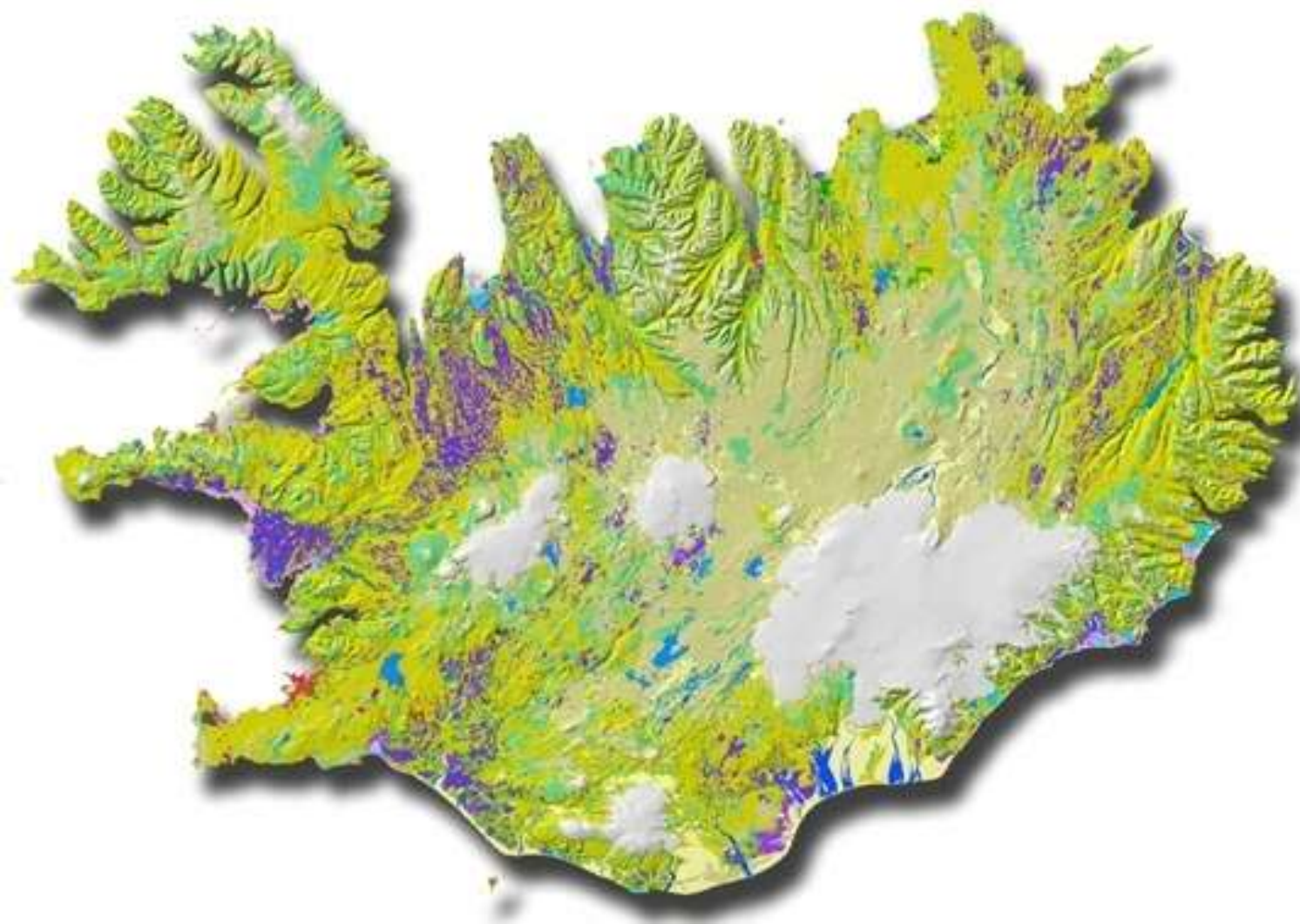
Ártal

- 1992
- 1994
- 1995
- 1996
- 1997
- 1998
- 1999
- 2000
- 2001
- 2002
- 2003
- 2004
- 2005
- 2006
- 2007
- 2008
- 2009



Remote sensing





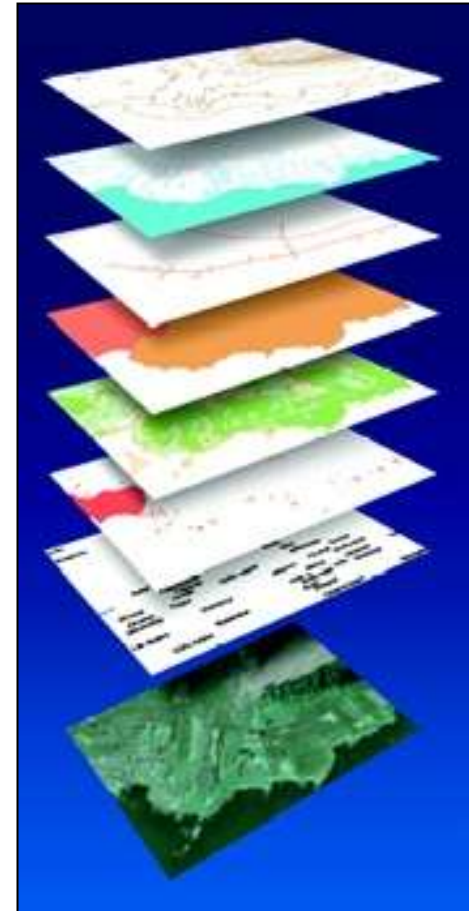
Changes

Blue = yr 2000
Green = yr 2006



IS 50V

- Seven layers
 - hydrology
 - boundaries
 - contours
 - place names
 - transportation networks
 - structures
 - surface
- The only “full cover” GIS database of Iceland



So, how do we do it?

- Scale
- Re-use
- Cooperation
- Technology
- Well educated employees
- Patience! (persistence)
- “It’s good enough!” (or better than nothing!)



Is it working?

- IS 50V is the most used GI database in Iceland
- Users are:
 - National television
 - Rescue teams
 - Iceland internet phonebook
 - Garmin GPS
 - University of Iceland
 - etc.

Other databases and services

- IS 500V
- ExM databases
- Cocodati transformation tool
- Map archive
- Map viewer
- www.lmi.is