GPS on BM Network

a.k.a. The “Supernet”

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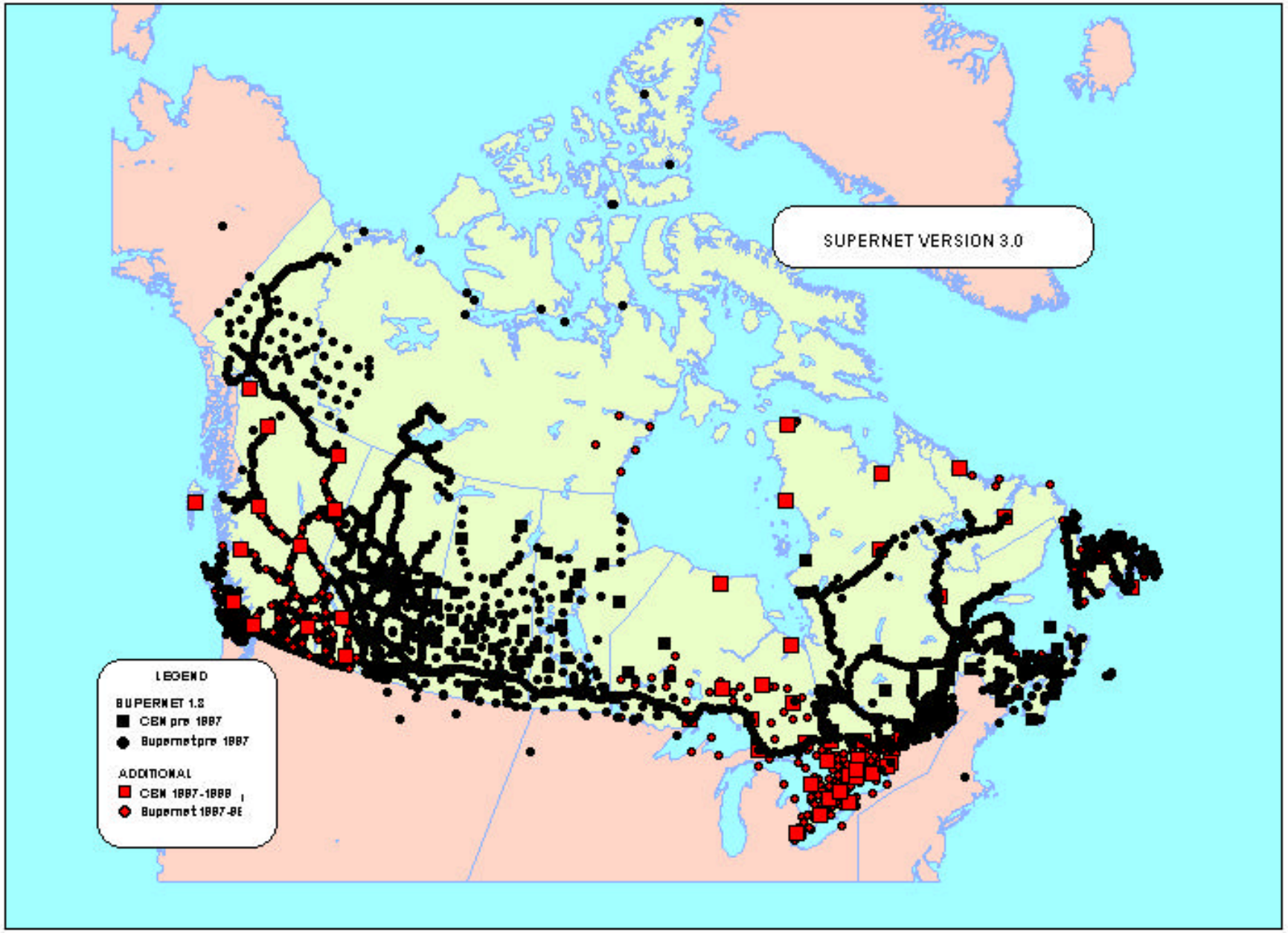
Purpose

- Ellipsoidal–orthometric height transformation (HT)
- Testing & refinement of the geoid model
- Reconciliation of CHS chart datums ??

Version 3.0

- Latest available (on CGRSC data archive)
- Integrated into CBN 3.0


SUPERNET VERSION 3.0
LEGEND
SUPERNET 1.3
CEN pre 1997
Supernetpre 1997
ADDITIONAL
CEN 1997-1998
Supernet 1997-98

New Solutions

- *Version 3.1 – Available soon*
  - To be integrated into CBN 3.1
  - New projects
    - CBN 2000 (northern CBNs and BMs)
    - Eastern validation networks (few BMs)
    - **GPS on BM in N. Yukon –> most important contribution**
- *Future Solutions to include*
  - CHS GPS at tide gauges along St. Lawrence in 2000
  - GPS projects from provinces (NF, QC, AB)

Requirements

- Static surveys since about 1993
- Occupation of primary vertical control benchmarks (consult with Marc or Andre for other benchmarks)
- Short to medium length baselines (preferably less than 30 km)
- Occupation times of at least 2 hours, preferably at least 3 to 6
- Multiple occupation of benchmarks in same or other GPS surveys
- IGS precise orbits; broadcast orbits also acceptable for short lines
- Session GPS processing, or all possible single baselines, preferred
- 95% confidence regions of the order of 5 cm or less in vertical

- Adjusted ellipsoidal coordinates (GHOST code 4 or GeoLab PLH format)
- GHOST (INTCOBS) or GeoLab (IOB) input observations file
- Auxiliary information (Survey description, GPS software, integration method)