

Matthias Eiswirth 1965-2003

**IGC, Florence,
Italy, 2004**

Session T - 38.02

**Groundwater
Management in
Urban Areas**

**Matthias Eiswirth
Memorial Session**





Matthias and his one year old son Lennert were tragically killed by an avalanche in Switzerland on December 30th, 2003.

We remember Matthias as a good friend who made countless contributions to Geology and Hydrogeology. Listed here are his many memberships:

- DGG (German Geological Society) since 1994
- FH-DGG (Subsection Hydrogeology) since 1990
- **IAH (International Association of Hydrogeologists) since 1994, and
President of the German Chapter of IAH since 2001**
- **Vice-President of IAH-CGUA (IAH Commission on Groundwater in
Urban Areas) since 1997**
- ATH (Intern. Ass. on Tracer Hydrology)
- IAHS (Intern. Ass. of Hydrological Sciences)
- ICT (Intern. Committee on Tracers)
- Vereinigung für Hydrogeologische Forschung (Graz, Austria)
- IGCP (International Geological Correlation Program)
- IGU (International Geographical Union)

**Today, through our session,
we celebrate
the life and work of Matthias.
We open this session with
a brief tribute to his work...**

- Matthias was born 4th January 1965 in Karlsruhe, Germany
- In 1992 he gained his MSc Hydrogeology, at the University of Karlsruhe
- 3 years later he received his PhD (magna cum laude) also at the University of Karlsruhe

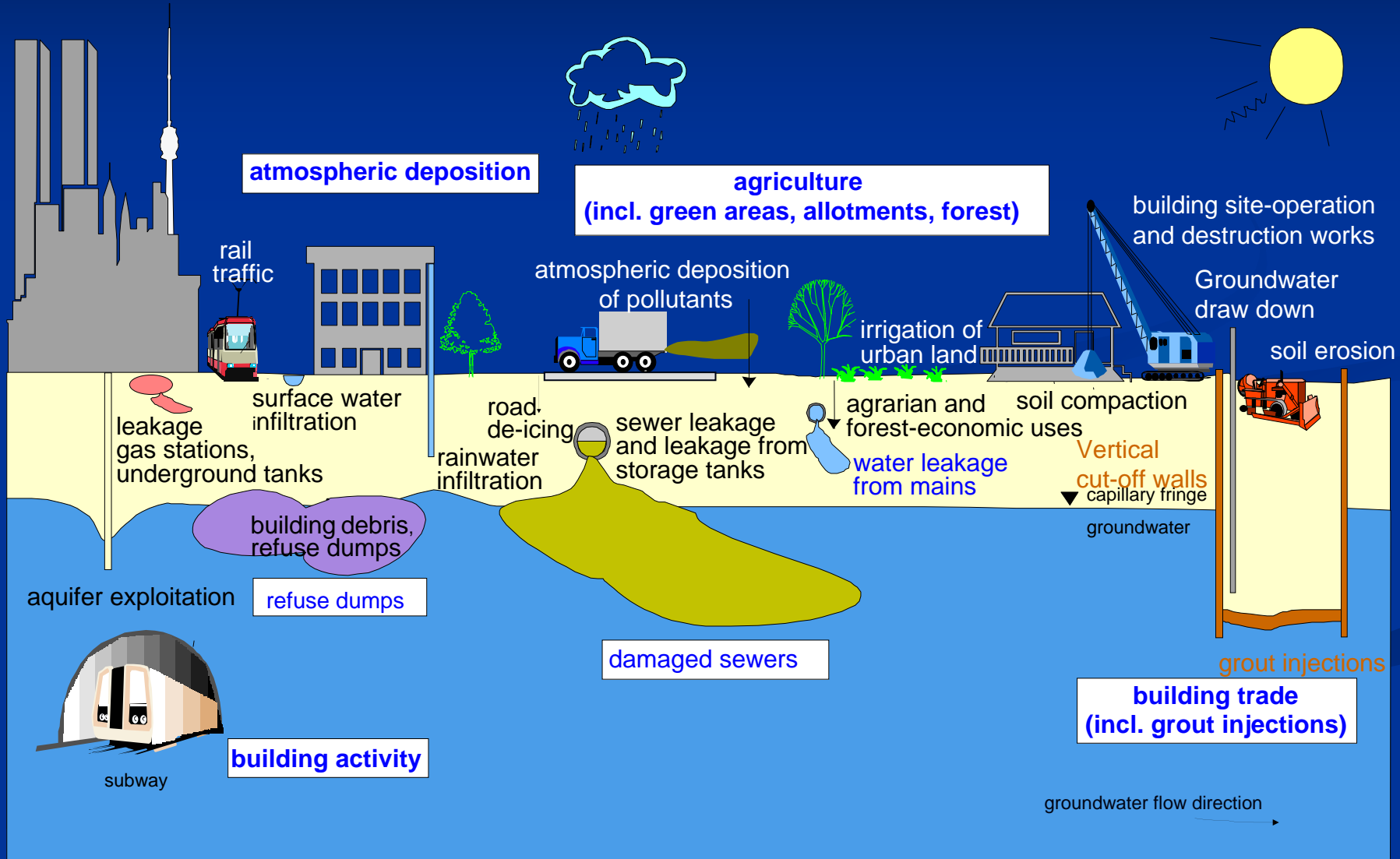
2002 was a special year

It was the year he achieved full professorial status at the University of Karlsruhe - his 'Habilitation'

It was also the year he married Claudia, his long-time partner, and Lennert was born.

Matthias was a man of many talents:

His research interests were many and varied but all related to urban groundwater:



- Diploma Thesis: concerned sewer leakage, tracer techniques and contaminant spreading
- Dissertation: involved both sewer leakage and leaking landfills
- PostDoc : concerned the environmental risks associated with the use of soft gels for grouting, together with broader aspects of urban hydrogeology and monitoring
- Habilitation: involved chemical and water balance studies for groundwater underlying Rastatt, Germany in the context of the sustainability of urban water systems

He published over 100 articles

Many of his recent projects attracted excellent funding and involved strong international collaboration e.g.:

- Impact of chemical grout injections on urban groundwater (German Ministry of Research BMBF)
- Sewer Defect Characterization by Multisensor Systems (German Research Foundation DFG)
- Waste water in the urban groundwater: Input, transformation, and risk potential (DFG)
- Assessing and improving the sustainability of urban water resources and systems (AISUWRS) (EU FP5)
- Network of European Research Projects on Integrated Urban Water Management (CITYNET) (EU FP5)
- COST C.19 (EU Cost Action)
- ASIALINK (EU EuropeAid Project)

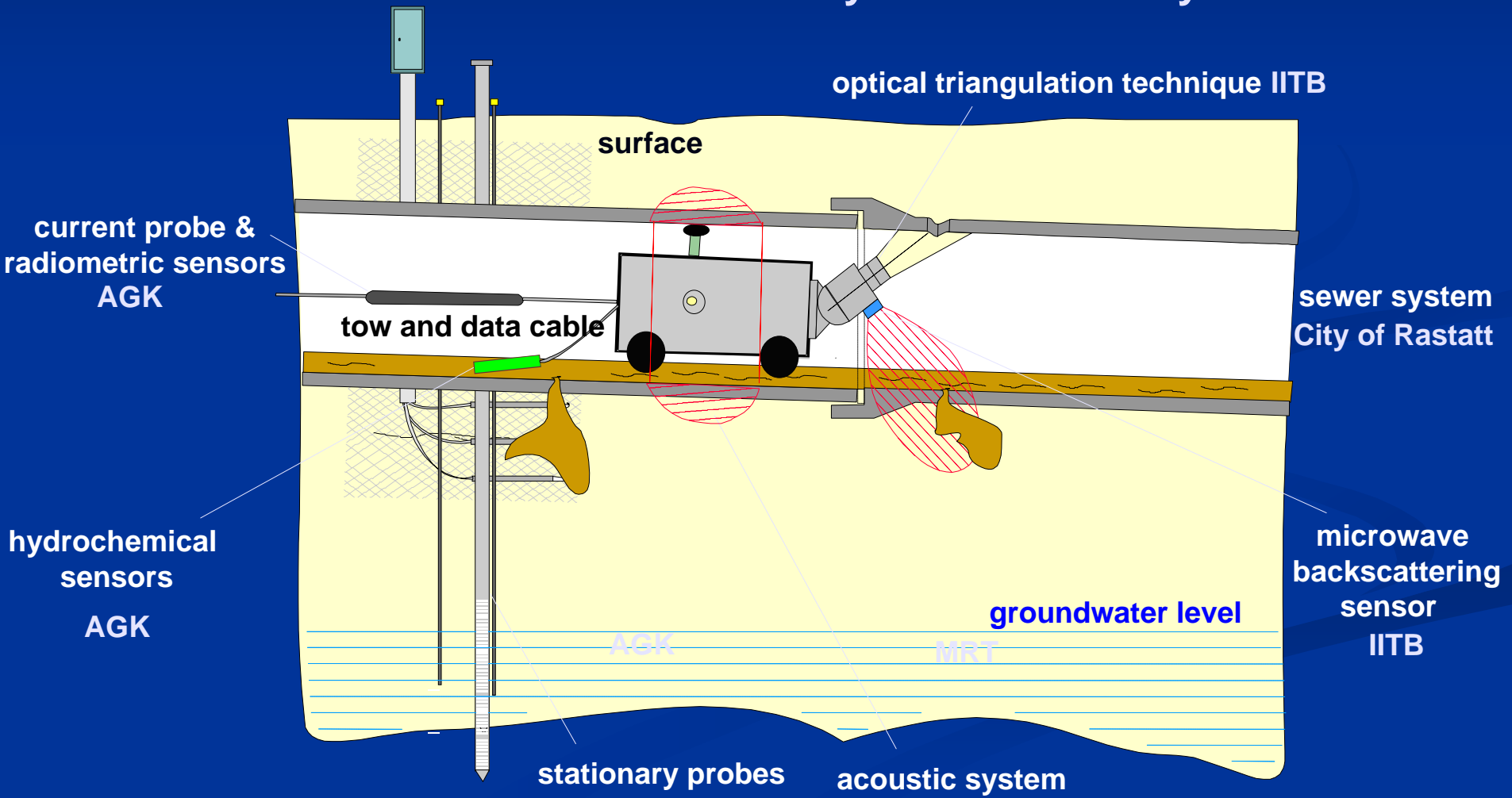
No problem was too difficult to attemptsome involved large scale field and laboratory tests:



Some involved sophisticated experimentation and monitoring e.g. :

SAM

Sewer defect characterization by Multi-Sensor-Systems



Other work, such as his Habilitation scholarship research in Australia, in co-operation with CSIRO, and funded by the German Research Foundation, involved complex numerical modeling :



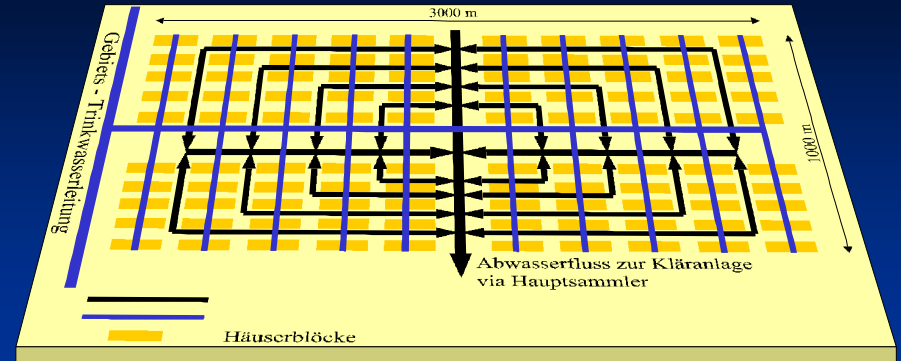
CSIRO

Title: Balance, modelling and development of sustainable urban water and sewage systems - comparison and optimization of Australian and German research activities -

Model concept

UVQ

Topographic Digital Map



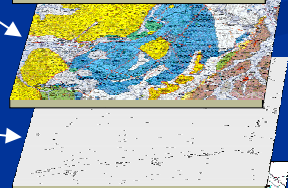
Digital Landscape Model



Digital Soil & Soil Parameter Map



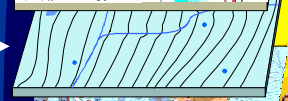
GIS Digital Sewer Map



Property Map



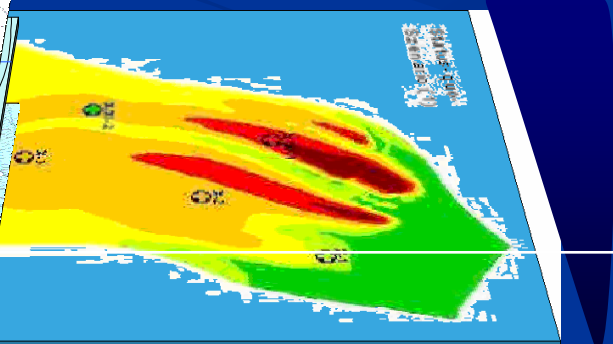
Hydrogeological Map



Digital Geological Map



Unsaturated zone & groundwater model



Matthias was an excellent teacher

Seminars

- Urban Hydrogeology

Supervisor of numerous

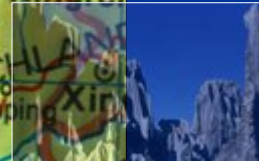
- Master Students and
- PhD Students

He also had a special passion for the mountains and involved his students whenever possible.



Hydrogeology of Yunnan and Myanmar

13 – 28 March 1999

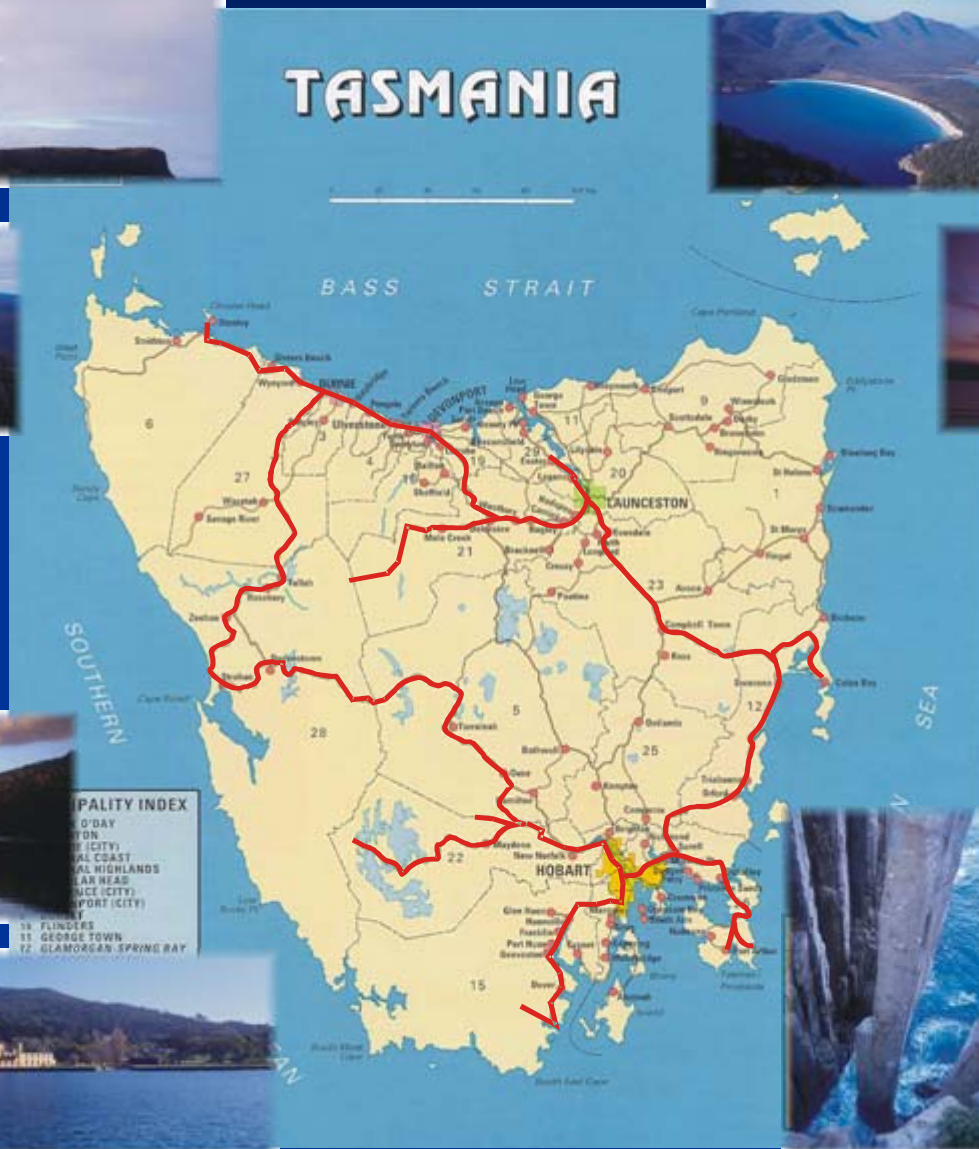


Geological Field Trip Tasmania

13.02.2004 – 01.03.2004



TASMANIA



Today, let us take a few moments
to remember



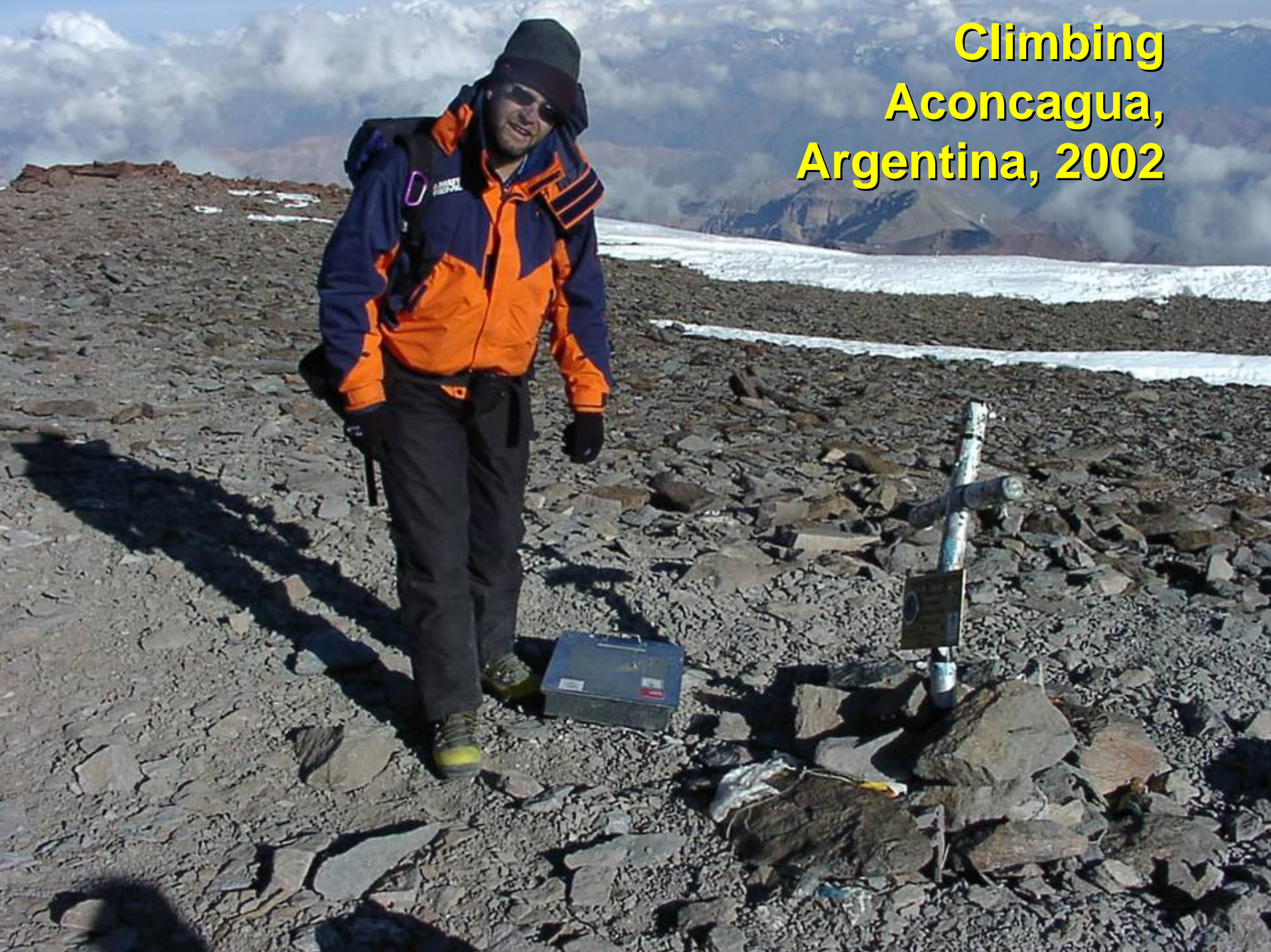
**Matthias....
the adventurer**







Climbing Aconcagua, Argentina, 2002







**Matthias....
as a good
friend and
colleague ...**













**Matthias.....
the husband, father
and family man**























**special thanks to
Inka Held and Leif Wolf...**





As a tribute to Matthias, the proceedings of the IGC Urban Groundwater Session will be published by the International Association of Hydrogeologists as a “**Memorial Volume**” in the **IAH Special Paper Series**.

Colleagues of Matthias around the world who are unable to attend the meeting will also be contributing to this book.

More information is available at the IAH CGUA website:
<http://www.utsc.utoronto.ca/~gwater/IAHCGUA>