



ROMA 6<sup>TH</sup> 10<sup>TH</sup> JULY 2009

**S4FE**

SUSTAINABLE FOSSIL FUELS  
FOR FUTURE ENERGY

# Welcome

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CO<sub>2</sub>GeoNet

**CO<sub>2</sub>Club**



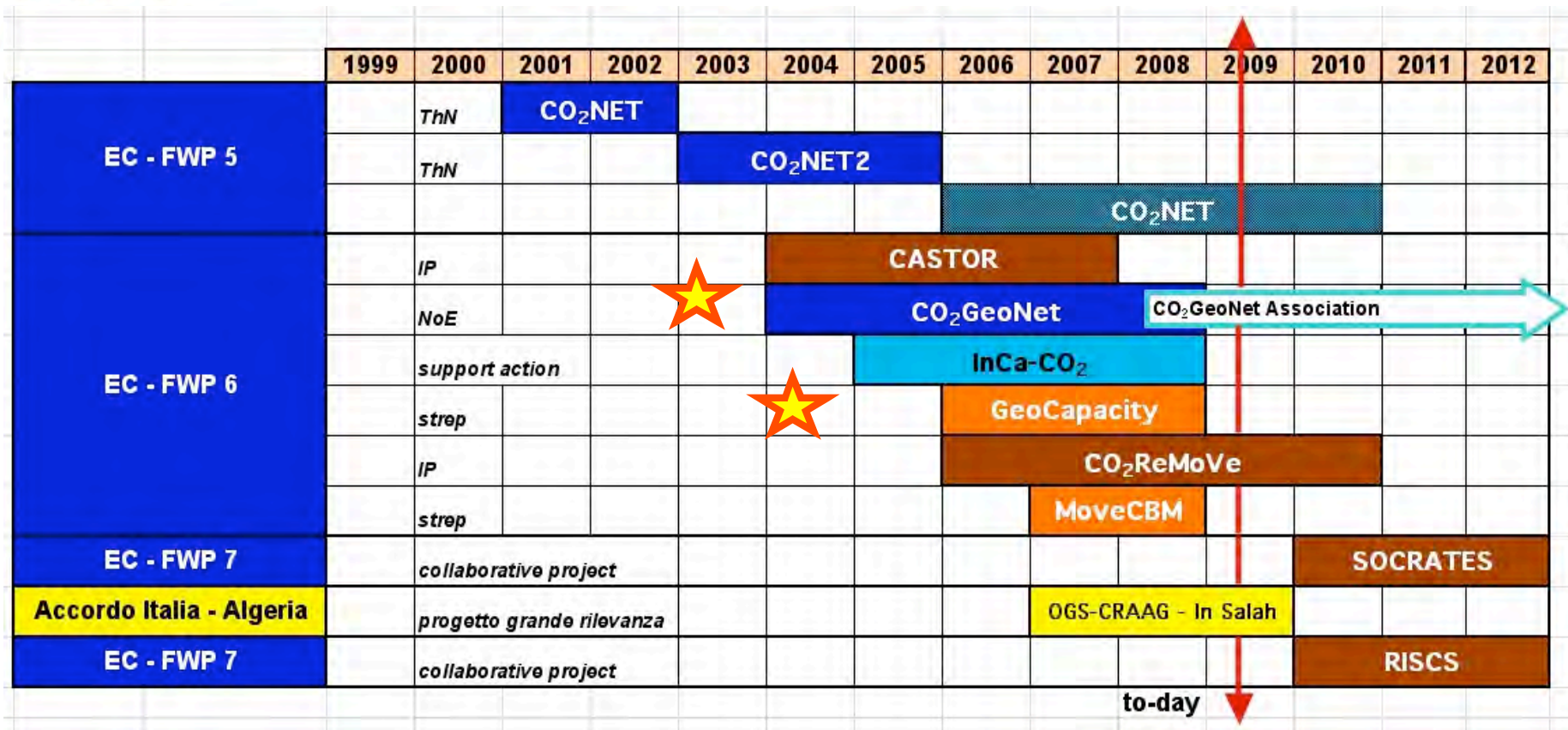


## The idea of CO<sub>2</sub> Club

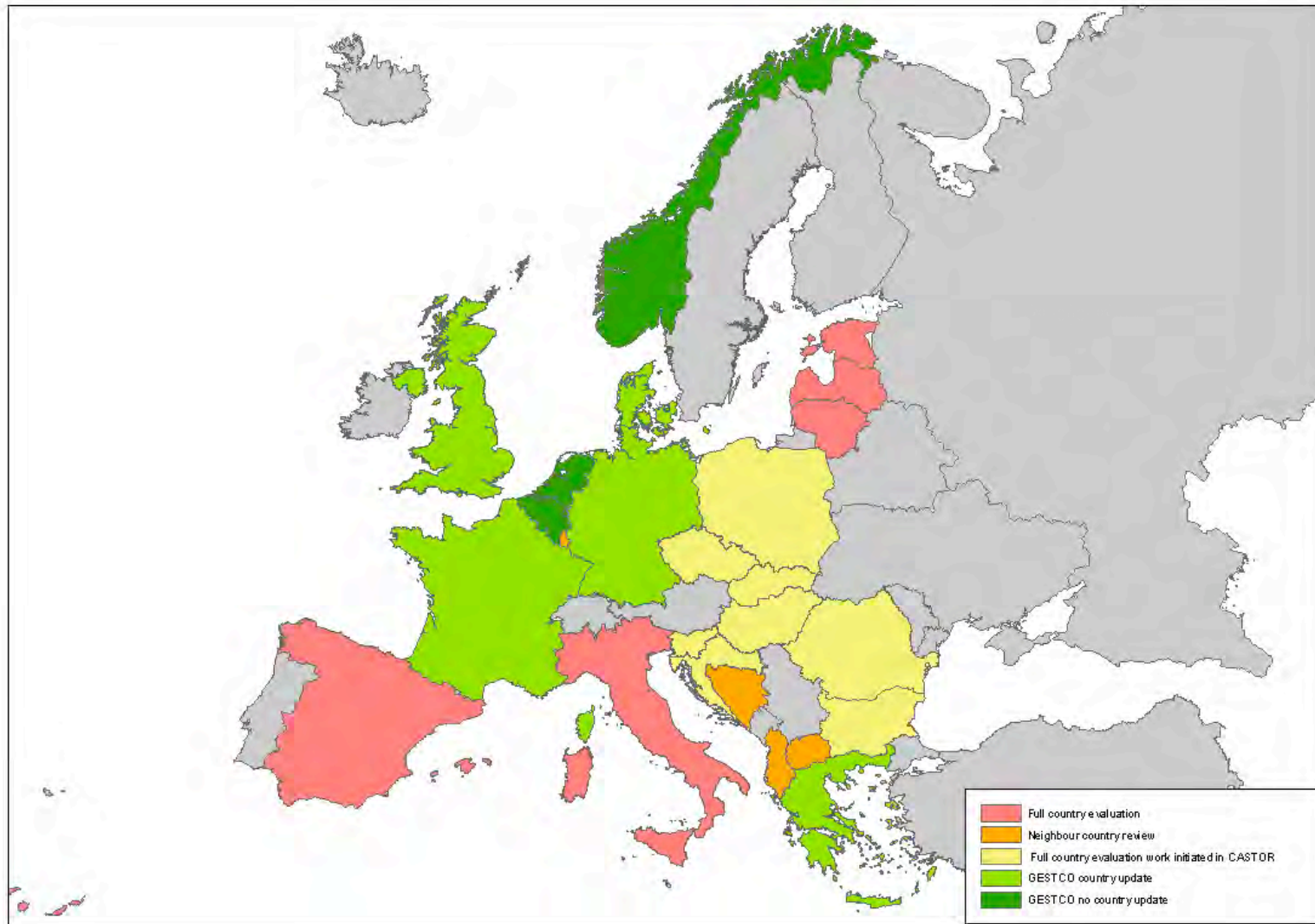
- to replicate positive experiences of similar initiatives in other European countries
- to recognize that CCS requires multi-disciplinary approaches
- to recognize that :
  - ✓ geological storage is useful only is applied at large scale ... and this implies to “capture” at affordable costs
  - ✓ “capture” is useless ... without suitable storage sites
  - ✓ the various communities of scientists, engineers and many more (policy makers, companies, entrepreneurs, NGOs ....) have to talk to each others
  - ✓ also in Italy there are many players



# One of the players in Italy - OGS



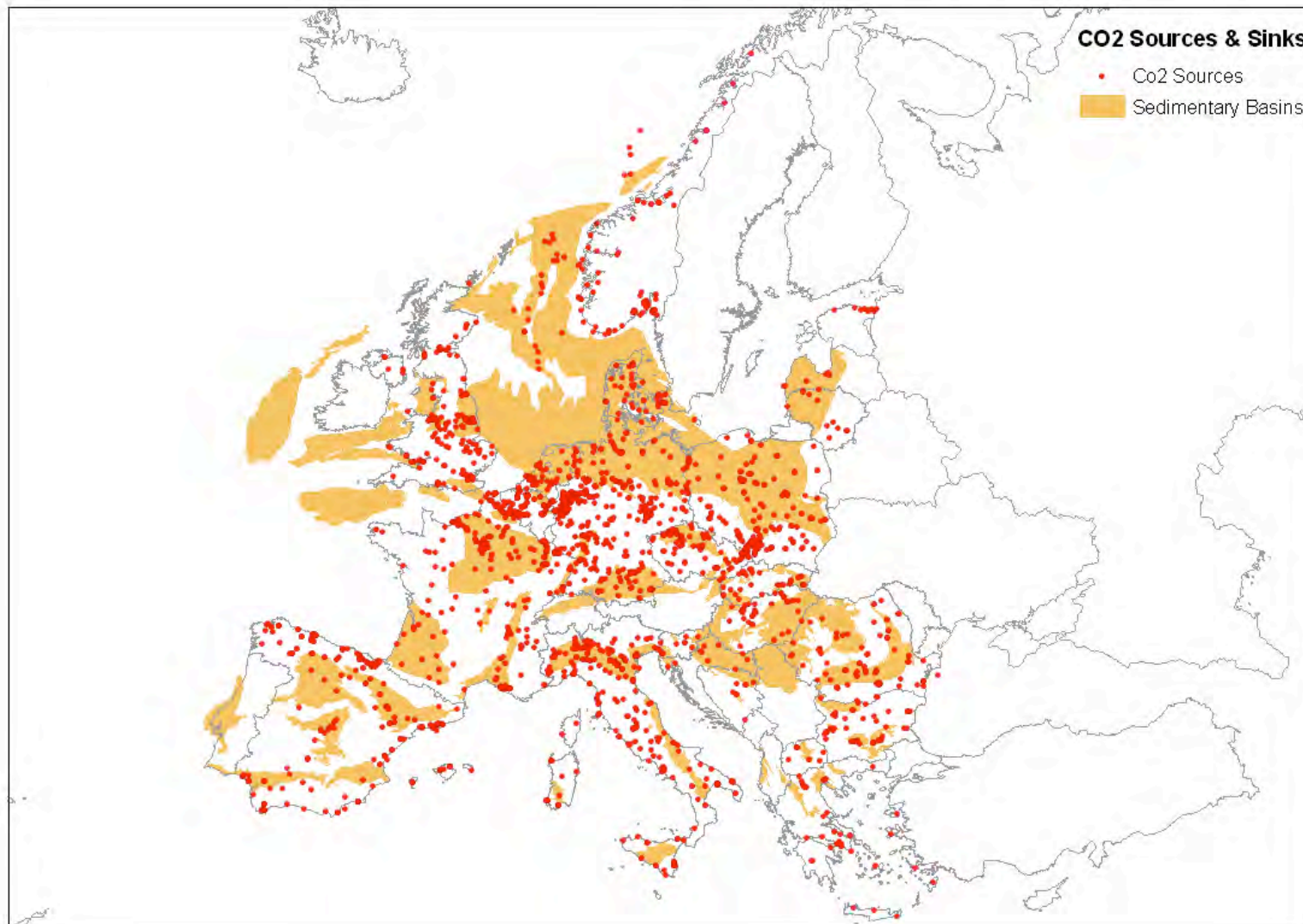
# GeoCapacity



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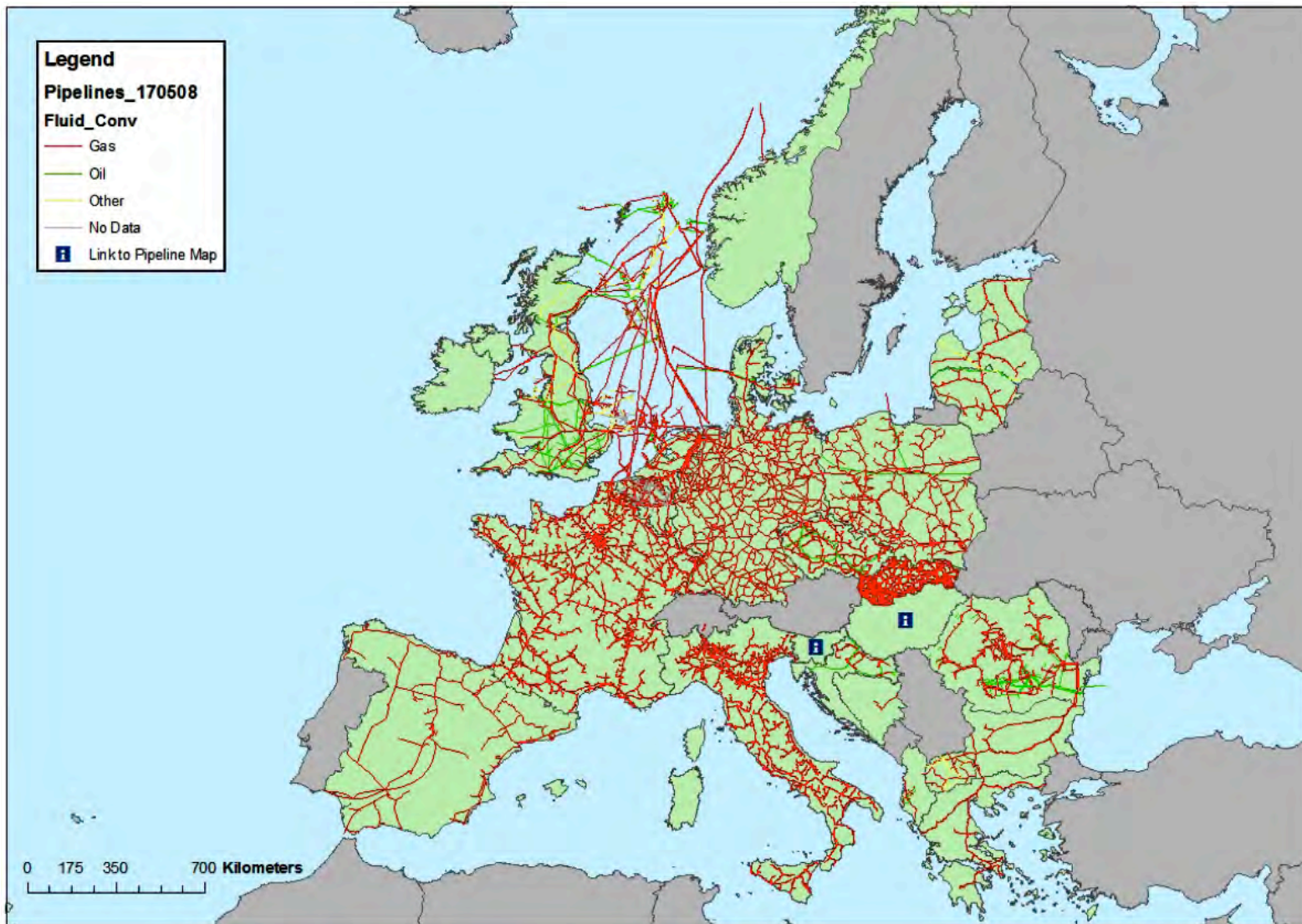
# GeoCapacity



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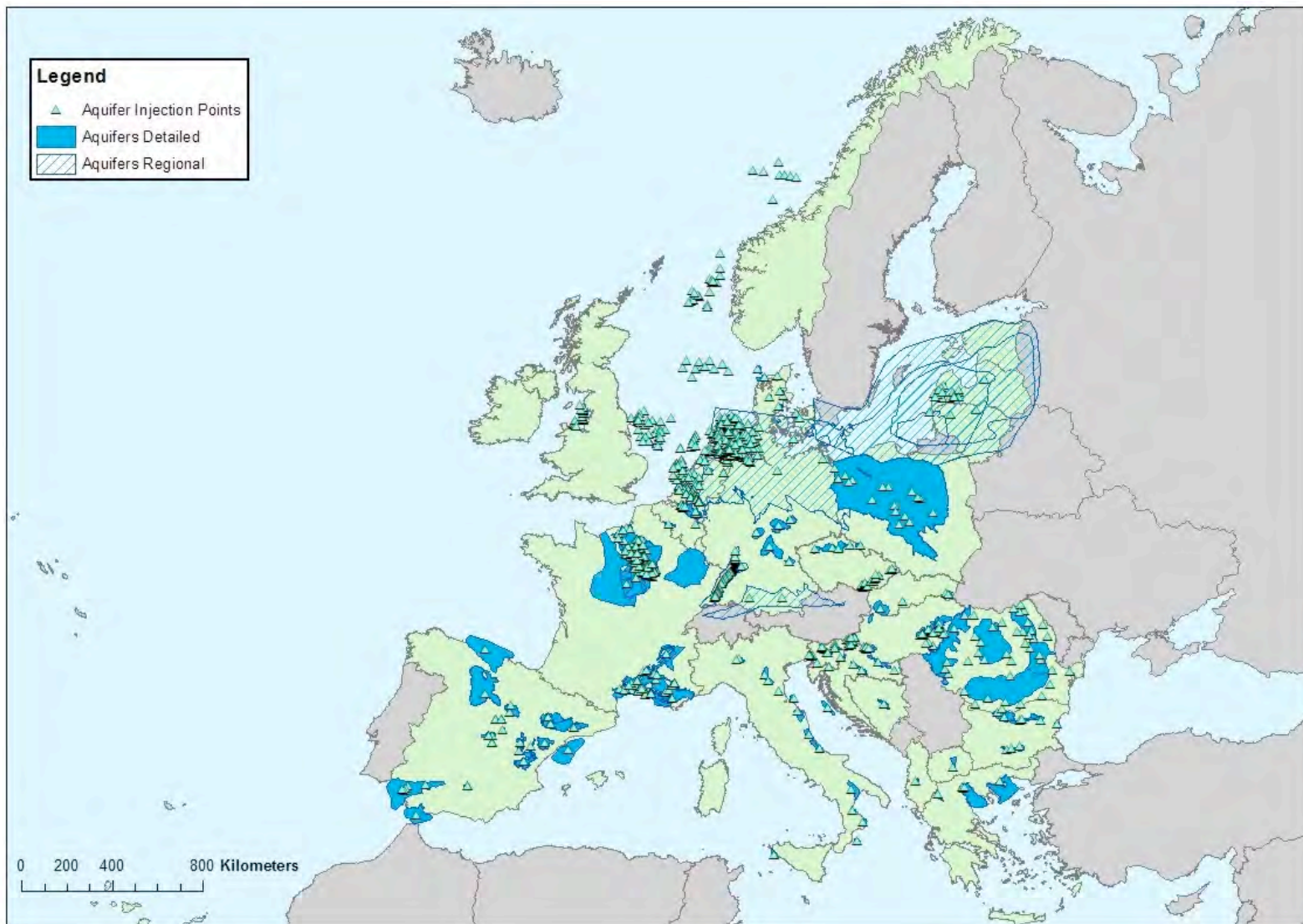
# GeoCapacity



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# GeoCapacity



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# CO<sub>2</sub> GeoNet



- **13 research centers in 7 countries, more than 300 involved researchers; started during FP6 as a NoE**
- **Activities:**
  - on all the facets of CO<sub>2</sub> geological storage
  - Training / education of young researchers
  - Information / communication
  - Scientific advice
- **Members have formed in 2008 a new legal entity, registered in France as a scientific no-profit Association, to foster the mutual integration**

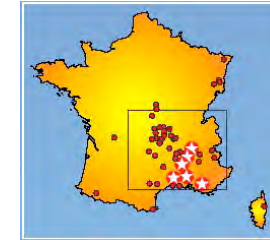
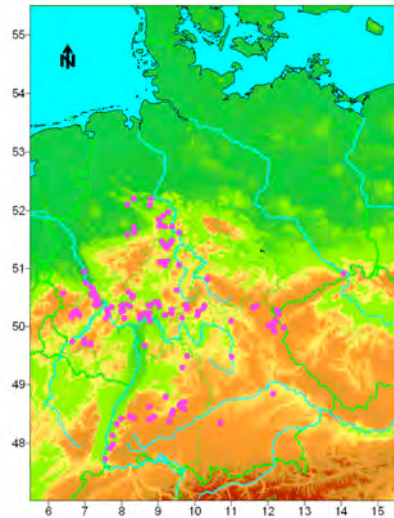
**CO<sub>2</sub>GeoNet is the independent scientific reference in Europe for the geological storage of CO<sub>2</sub>**



Denmark: **GEUS**  
France: **BRGM, IFP**  
Germany: **BGR**  
Italy: **OGS, URS**  
The Netherlands: **TNO**  
Norway: **NIVA, IRIS, SPR**  
UK: **BGS, HWU, IMPERIAL**

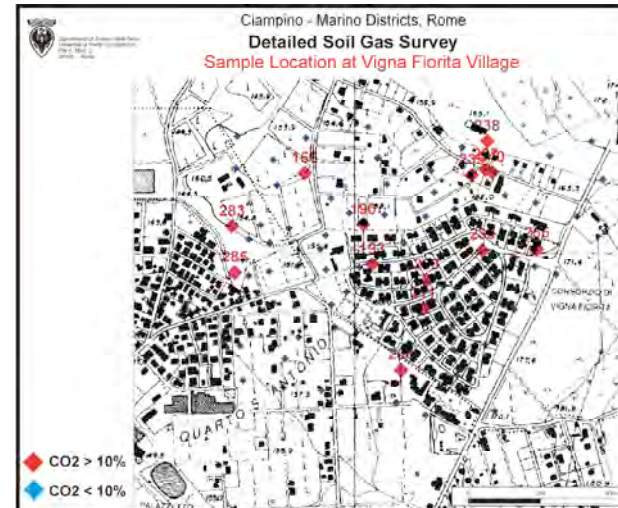
# CO<sub>2</sub> GeoNet - what did we learn ?

Natural emissions of CO<sub>2</sub> are common phenomena



# CO<sub>2</sub> GeoNet - what did we learn ?

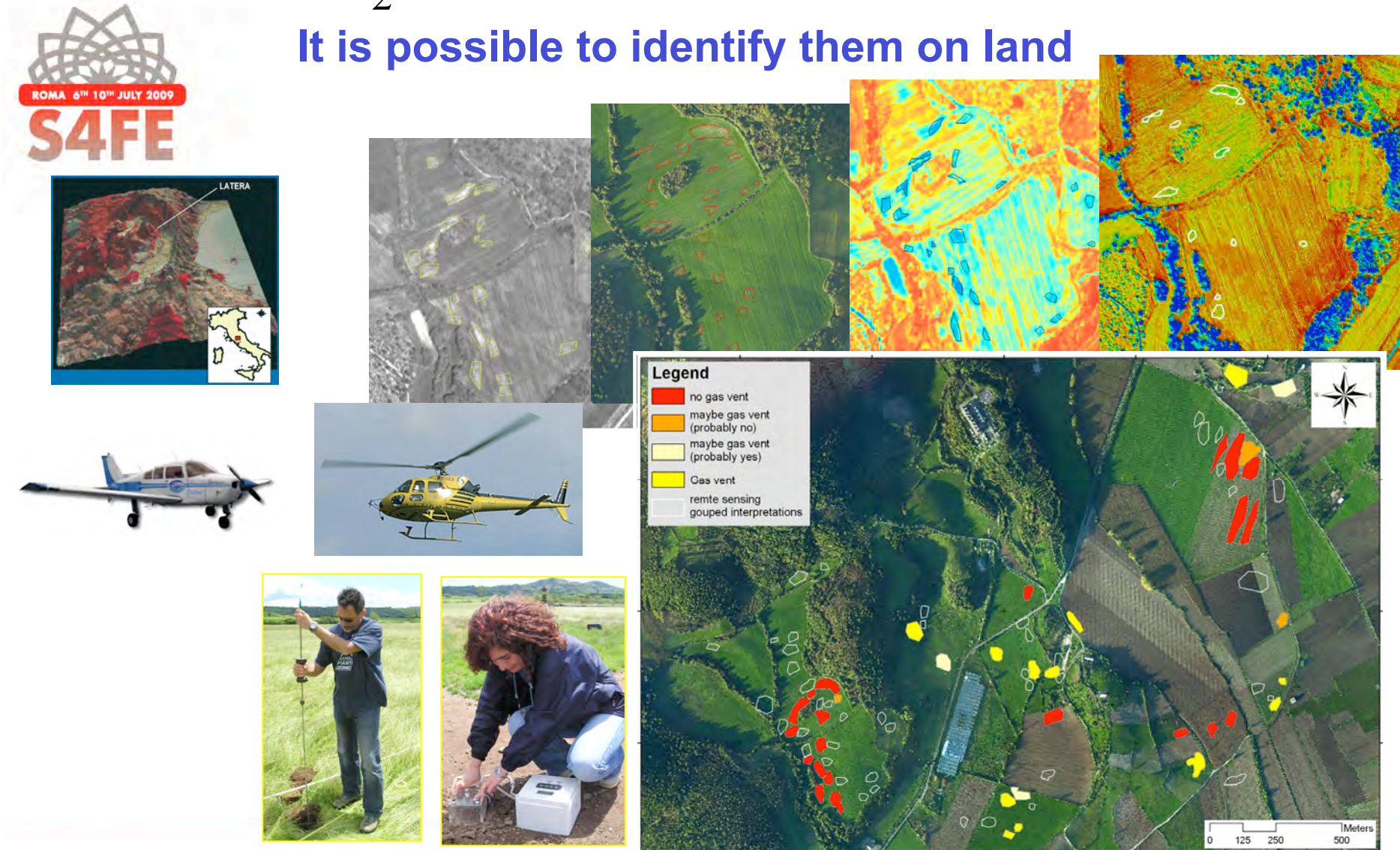
They are very localized



Gas vent at Latera caldera

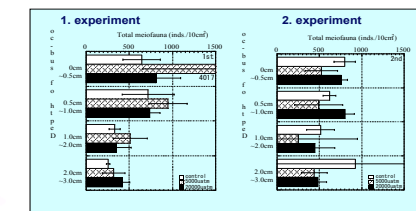
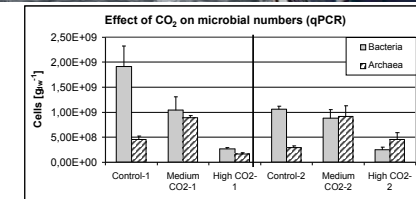
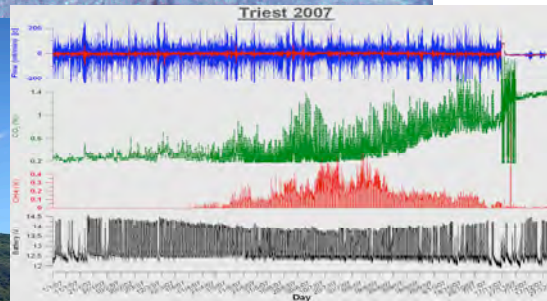
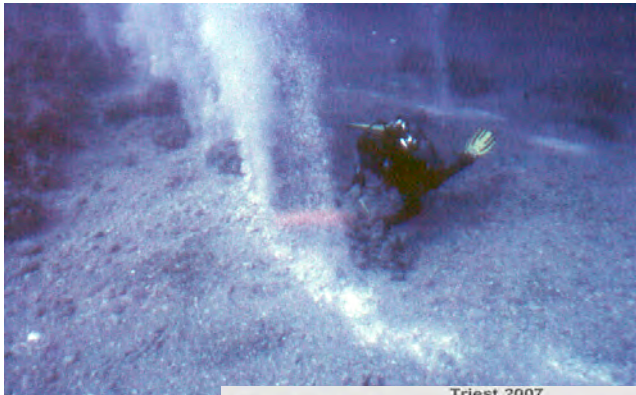
# CO<sub>2</sub> GeoNet - what did we learn ?

It is possible to identify them on land



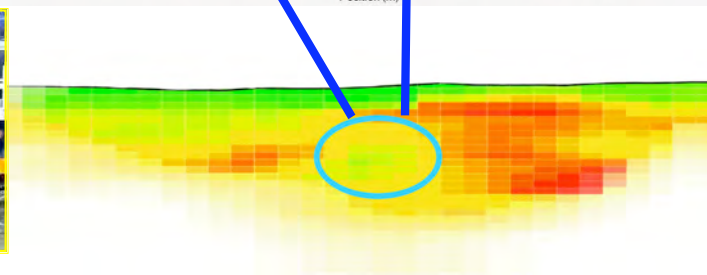
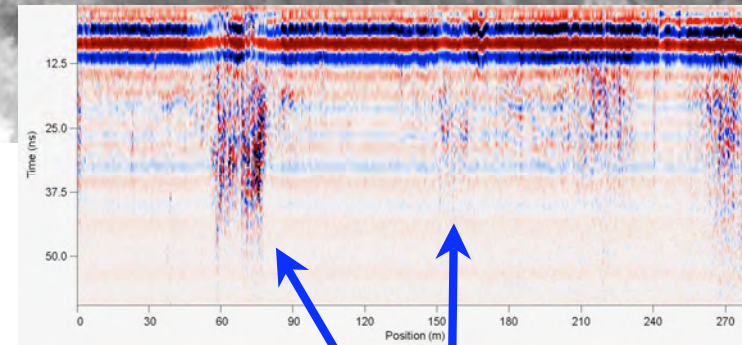
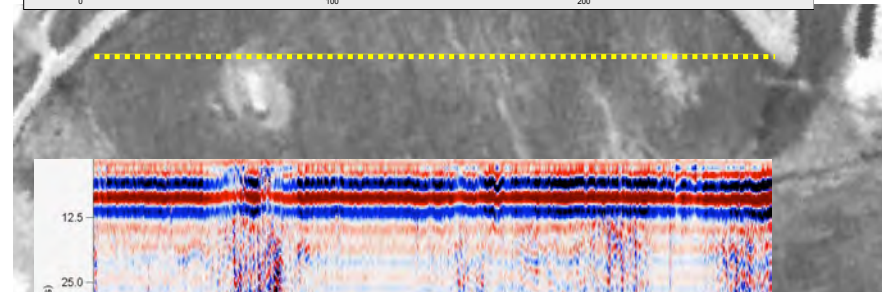
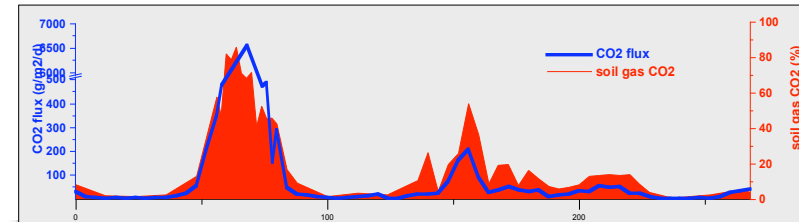
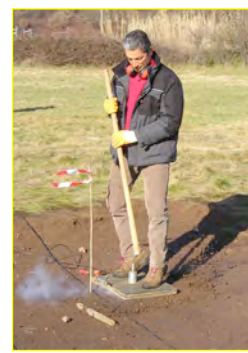
# CO<sub>2</sub> GeoNet - what did we learn ?

It is possible to identify them off-shore



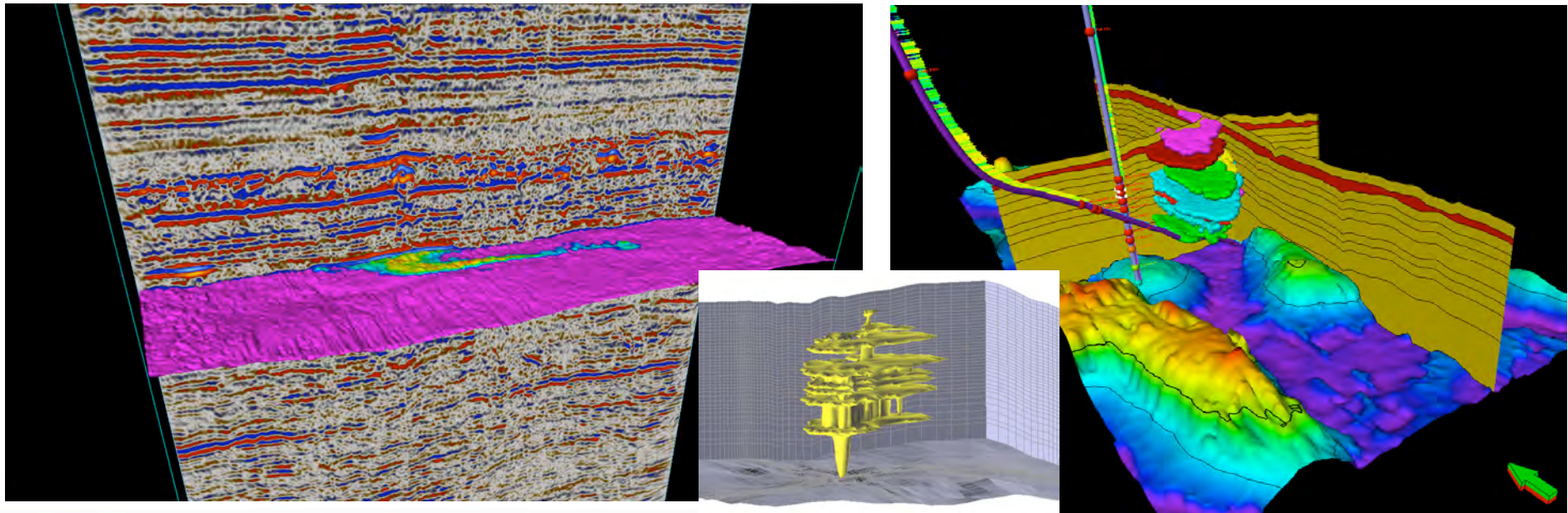
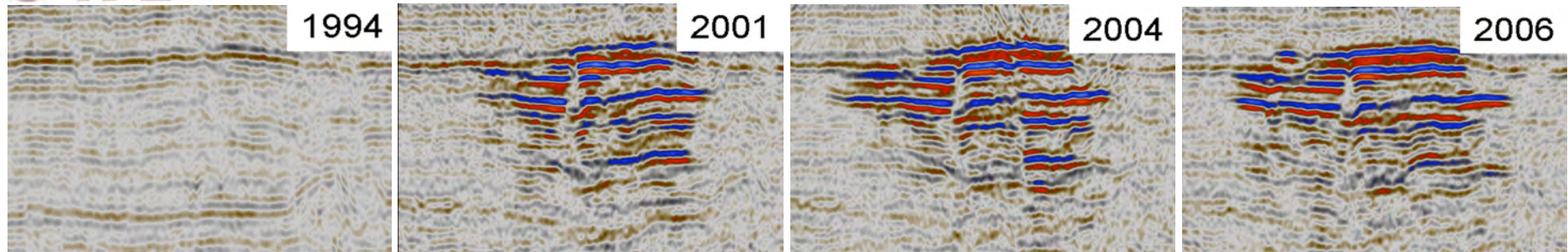
# CO<sub>2</sub> GeoNet - what did we learn ?

It is possible to identify them ... before they leak



# CO<sub>2</sub> GeoNet - what did we learn ?

It is possible to map the evolution of the injected CO<sub>2</sub> in the storage reservoir



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## The idea of CO<sub>2</sub> Club

- It is worthy to improve the networking of the involved stakeholders
- We are glad to have S4FE as the first International Conference held in Italy
- We have decided this year to focus the attention on the “Capture” component of CCS: key element for a wide application of the technology
- We are looking for a future Conference in Italy supported as well by ENEA and CO<sub>2</sub> Club, devoted more to geological storage and the Italian contributions to the running projects in Europe and elsewhere