

# Isotopic monitoring of carbon dioxide emission

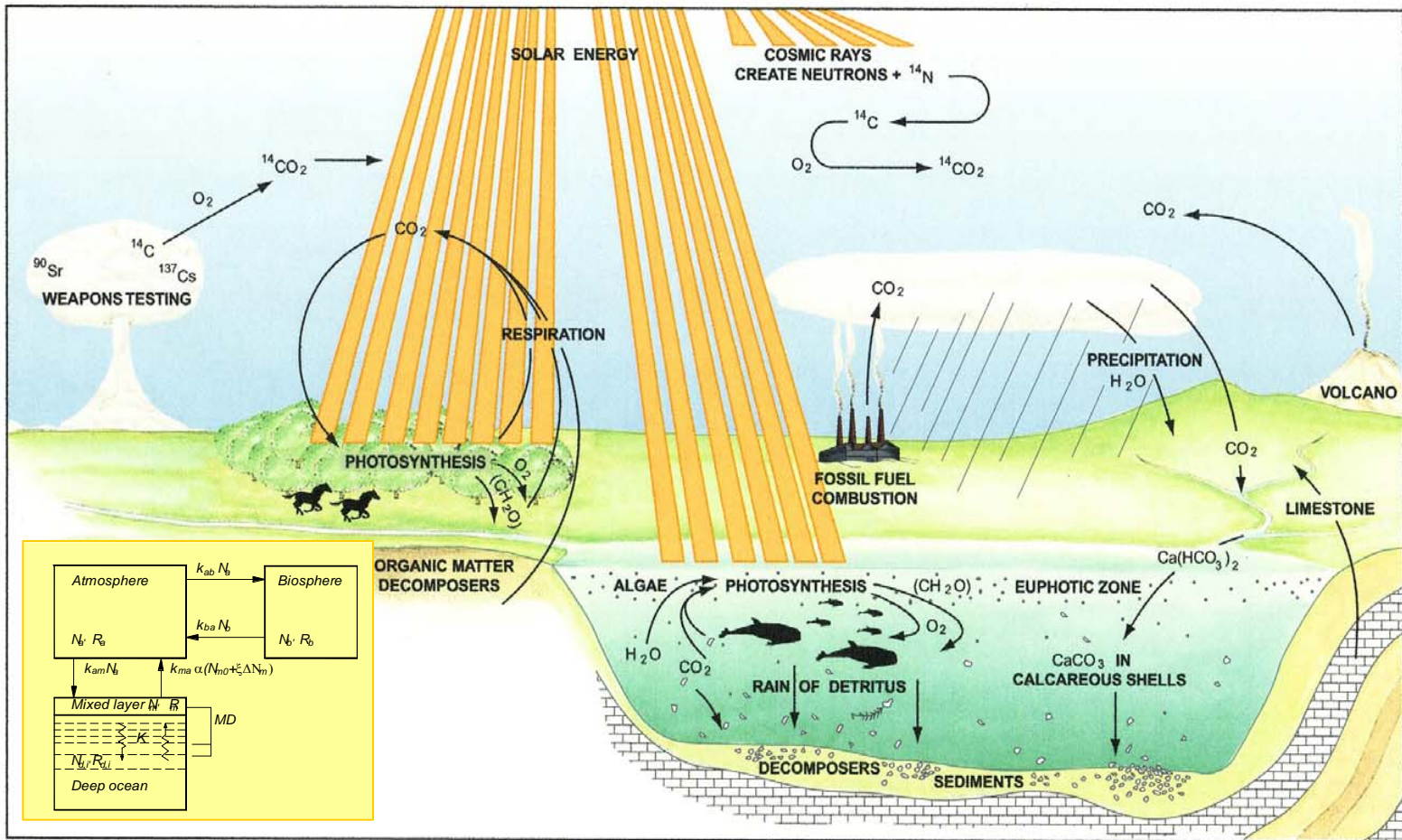
Jacek Pawlyta, Anna Pazdur, Andrzej Rakowski

GADAM Centre of Excellence  
Institute of Physics  
Silesian University of Technology

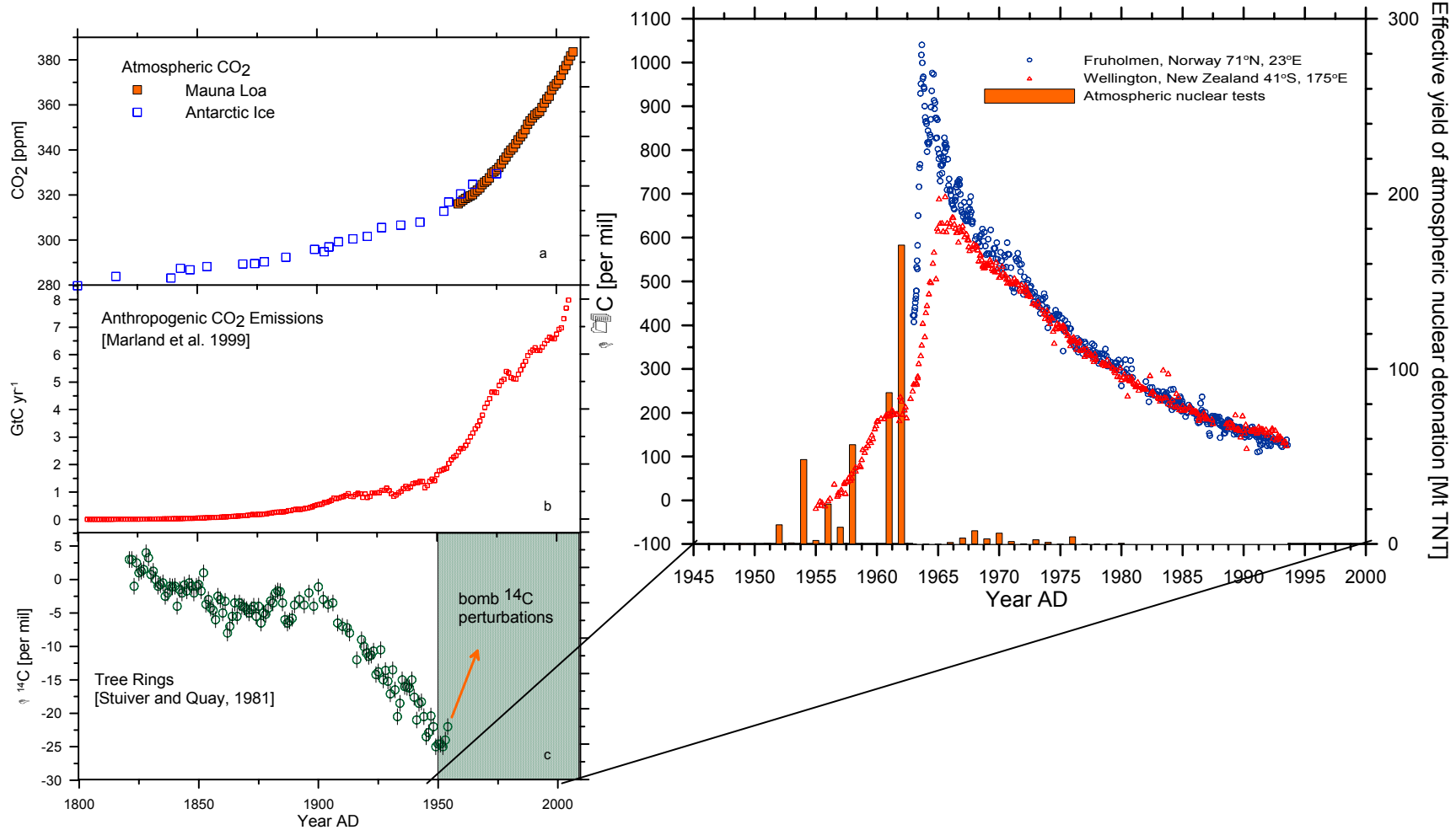
[www.carbon14.pl](http://www.carbon14.pl)

anna.pazdur@polsl.pl

# Natural carbon cycle

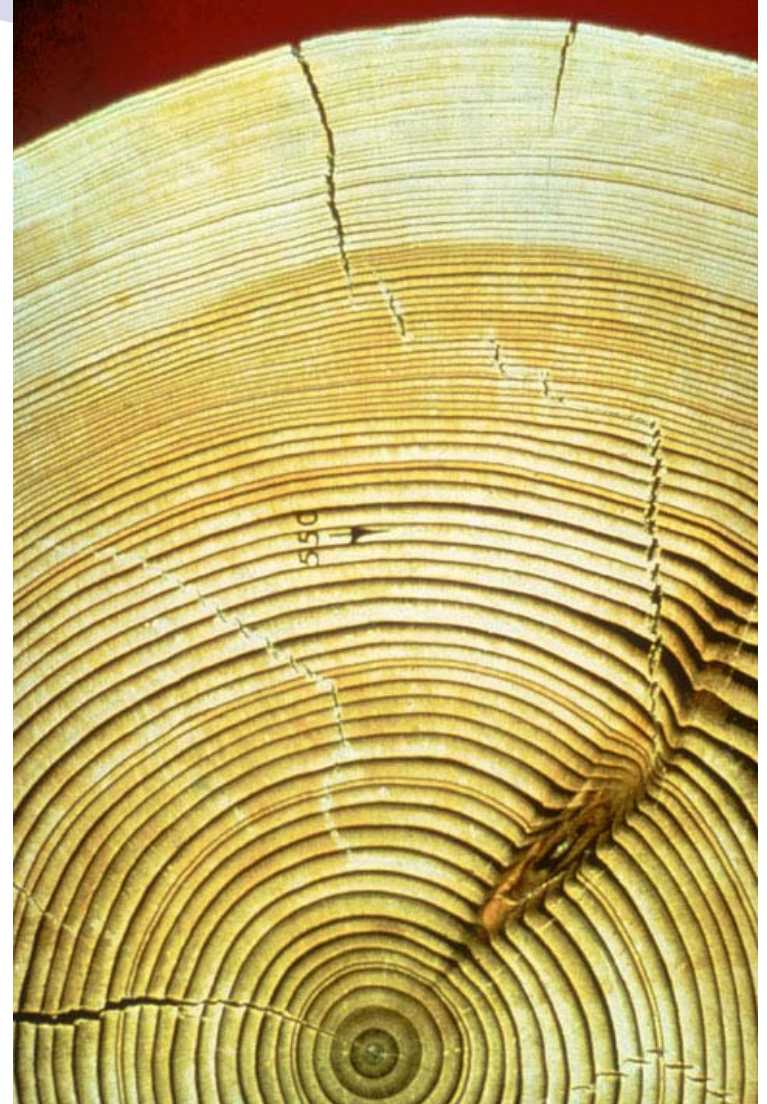


# Radiocarbon concentration





# Tree rings



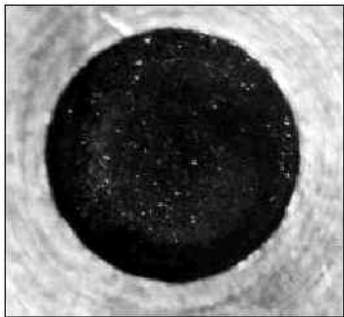
# Accelerator Mass Spectrometry



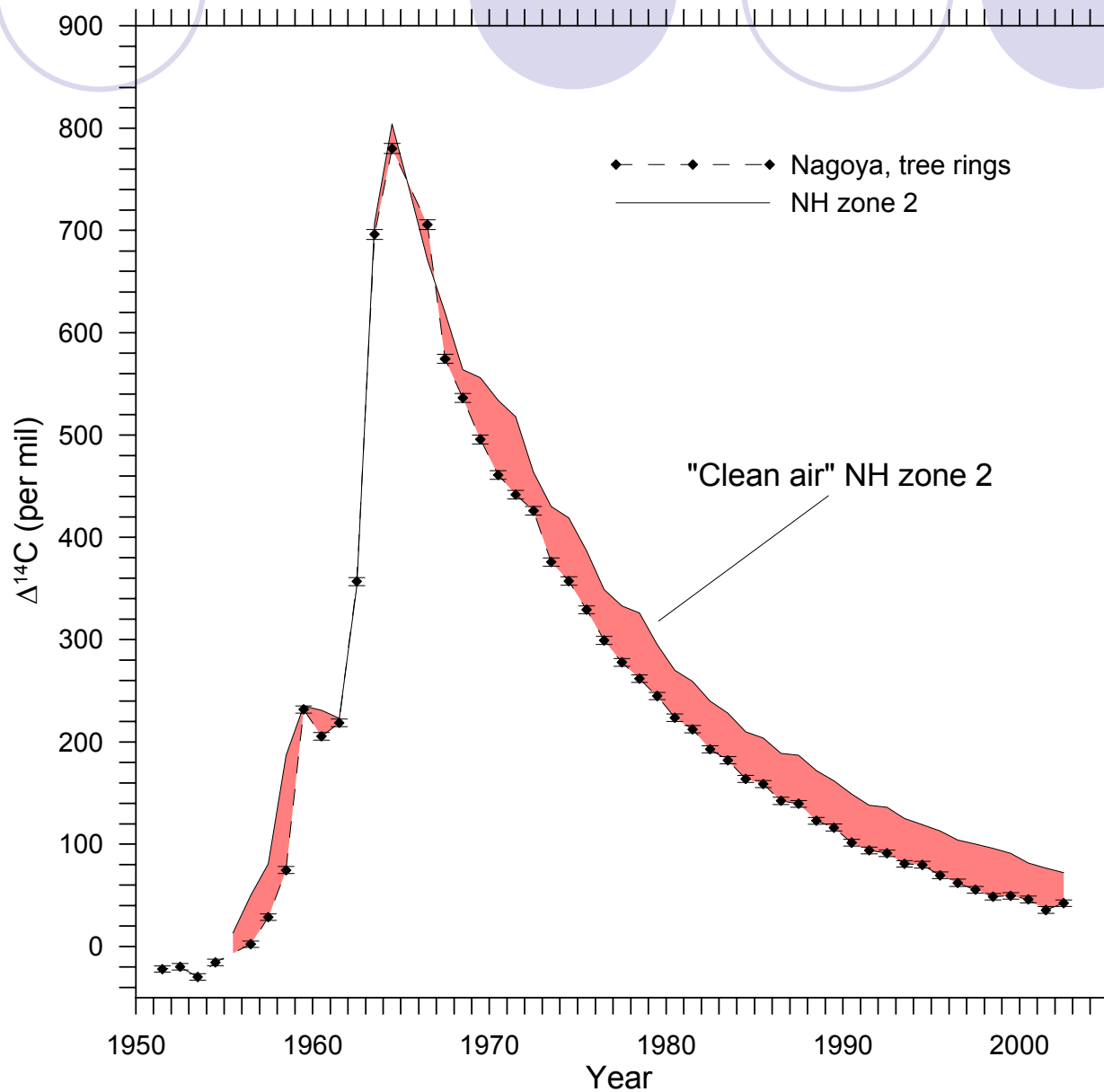
graphite

wood

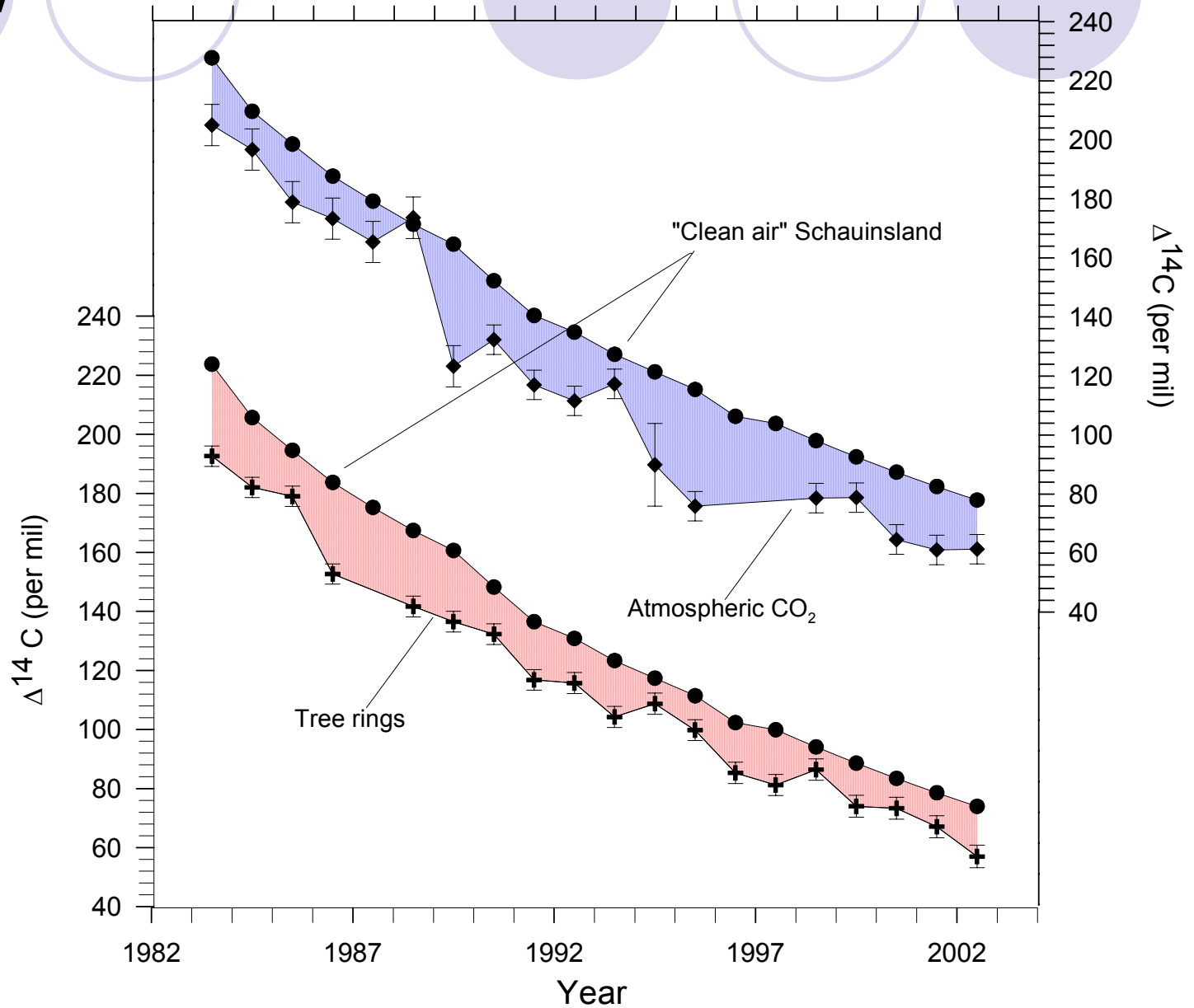
– 2 -10 mg



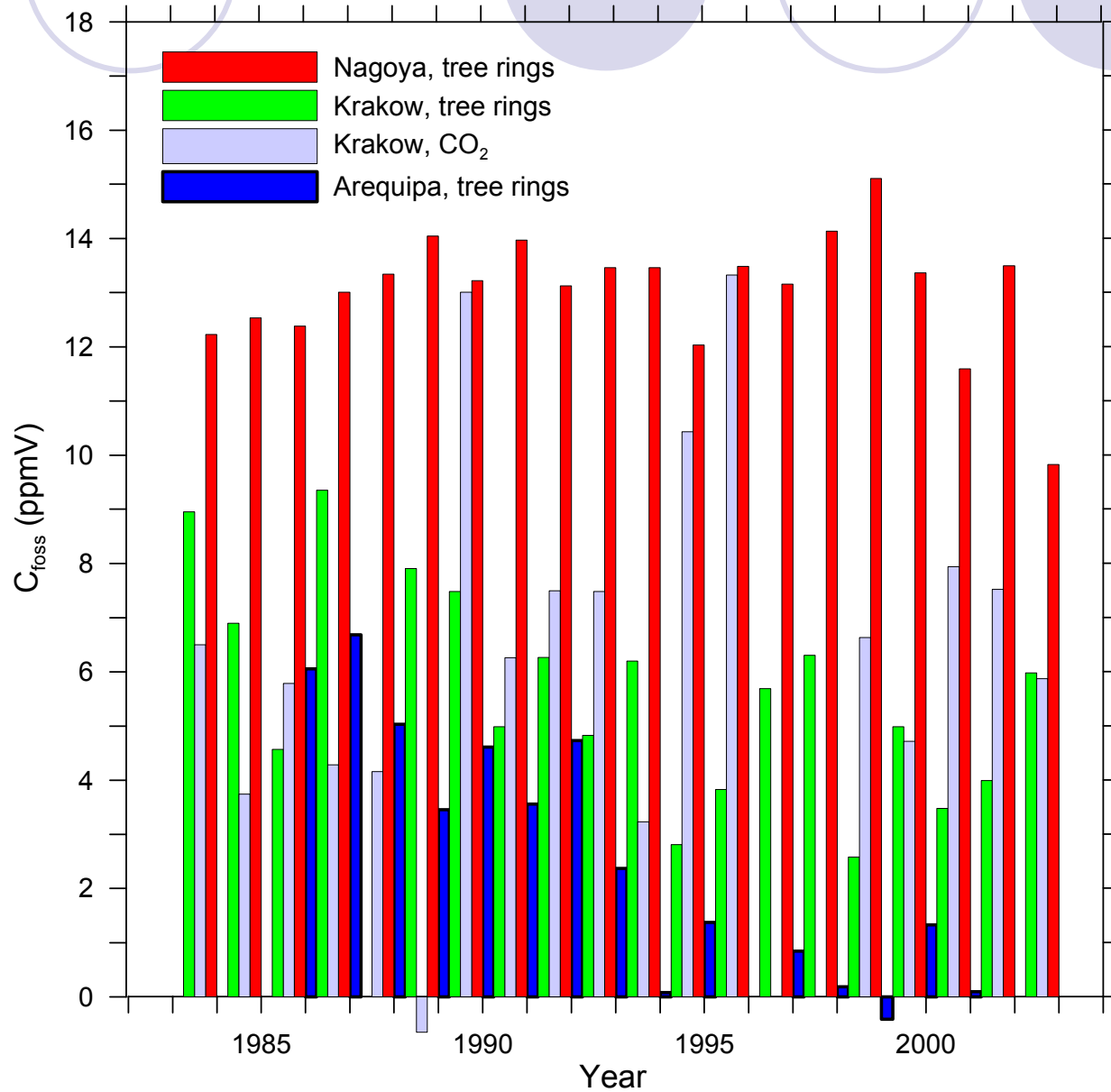
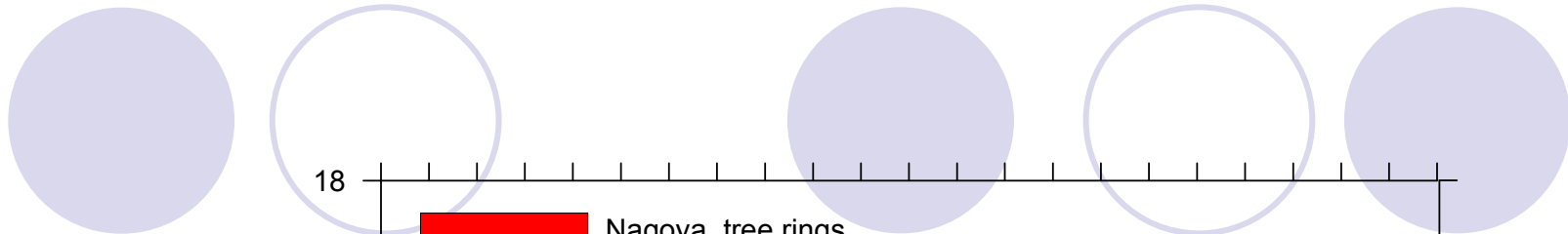
# Nagoya



# Kraków

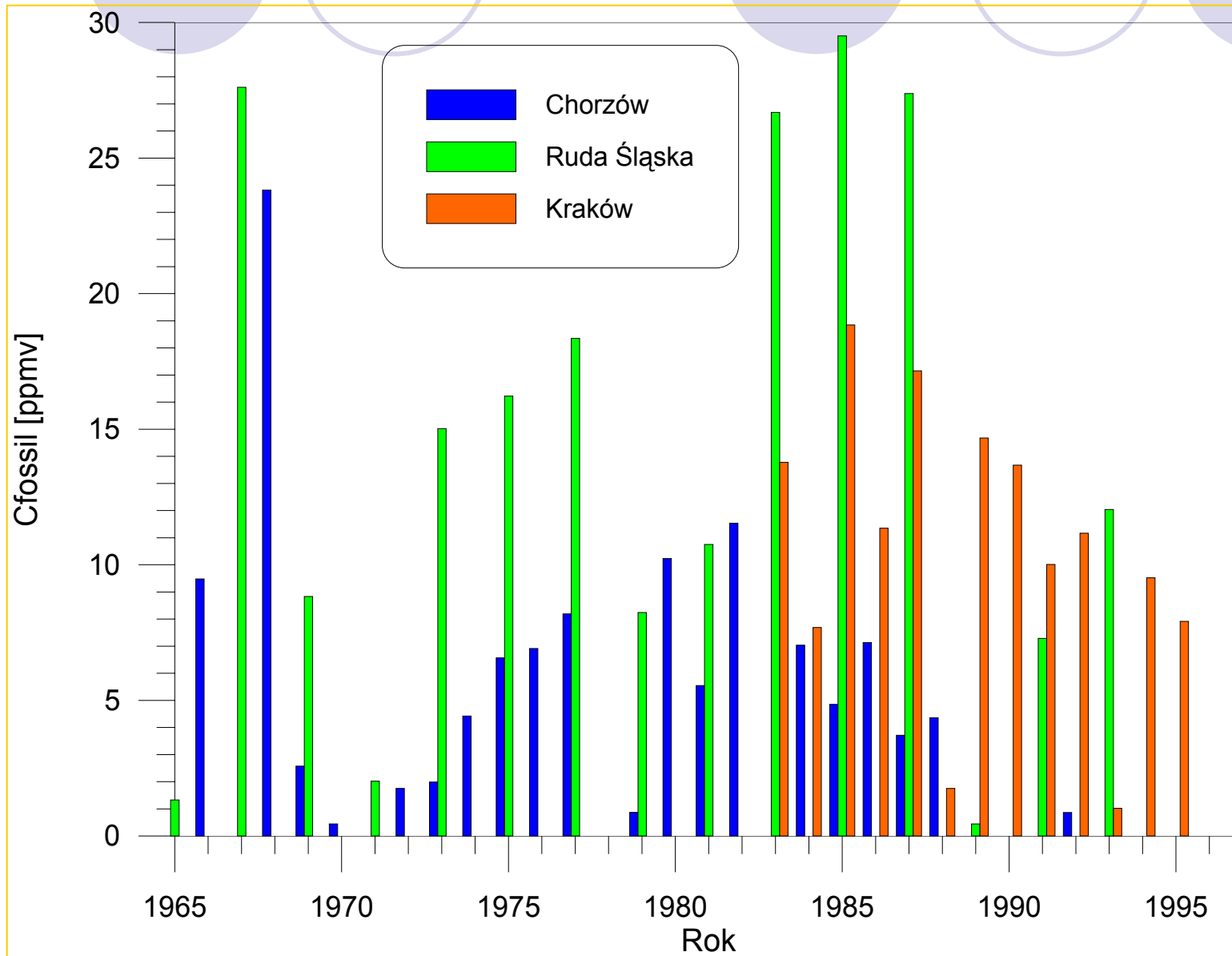








# Upper Silesia Region



*Proposal full title:*

**Developing the Methods of Isotope Investigations for  
Environment,  
Climate and Human Impact**

*Proposal acronym:*

**DEMETIS**

*Type of funding scheme:* **Coordination and support actions (Supporting)**

*Work programme topics addressed:*

**6.1 Climate change, pollution and risks**

**6.1.1 Pressures on environment and climate**

**6.1.1.1 The Earth System and Climate: Functioning and abrupt changes**

**6.1.1.3 The global carbon cycle – Greenhouse Gas budgets**

**6.1.1.4 Future Climate**

**6.1.1.5 Climate Change Natural and Socio – economic Impacts**

**6.1.1.6 Response strategies: Adaptation, Mitigation and Policies**

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