

Science experts in the GLOBE program in Hungary

András Victor, György Gyúró, Tamás Weidinger & Tibor Kalapos
Loránd Eötvös University, Budapest, Hungary



Since the beginnings (1999) science experts assist
- university lecturers at the Faculty of Science,
Loránd Eötvös University, Budapest

András Victor

György Gyúró

Tamás Weidinger

Tibor Kalapos

+

Anikó Orgoványi

András Juracskó

István Dőry

chemistry

meteorology

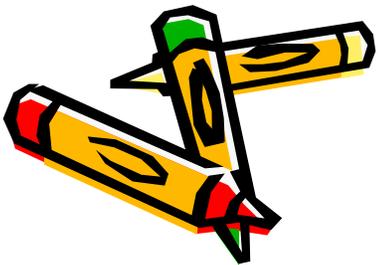
meteorology

biology

arts

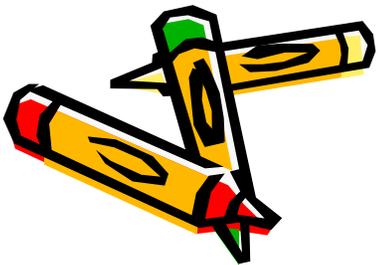
informatics

GPS, automated measurements



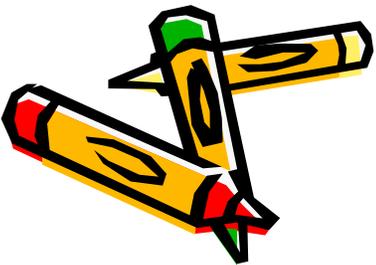
The role of experts in GLOBE

- provide disciplinar support for GLOBE teachers
- training teachers (classroom & field)
 - 9 tranings / teachers' meeting since 1999



The role of experts in GLOBE

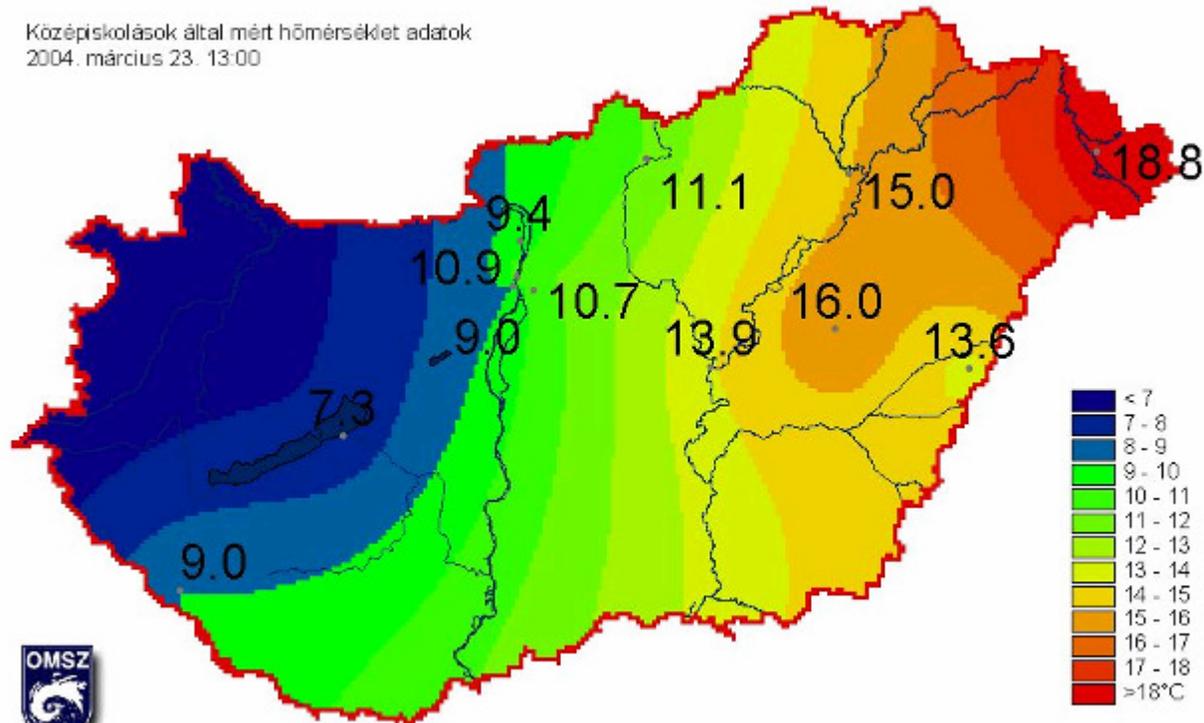
- easy-to-reach advisors
 - @, , 
 - visiting GLOBE schools



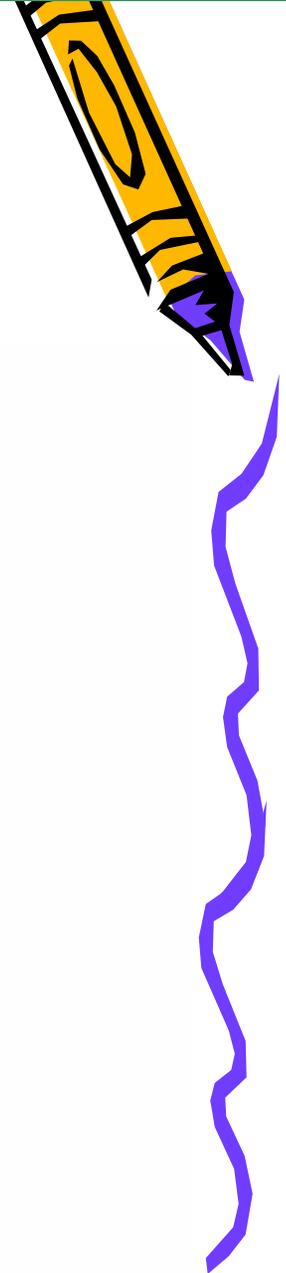
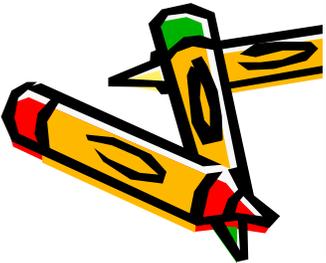
The role of experts in GLOBE

- help understand the scientific background of measurements
- quality control of data collection

Középiskolások által mért hőmérséklet adatok
2004. március 23. 13:00

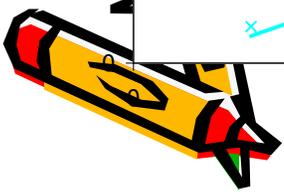
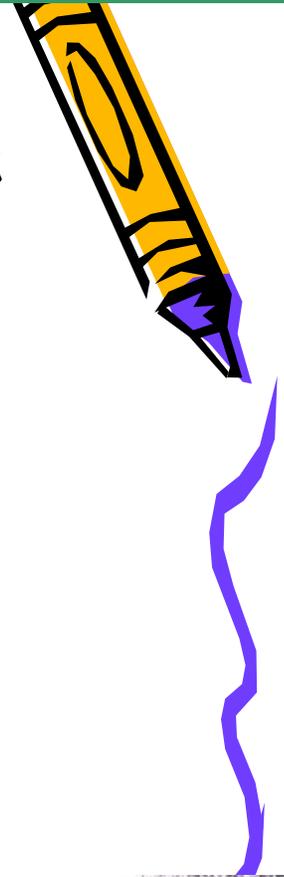
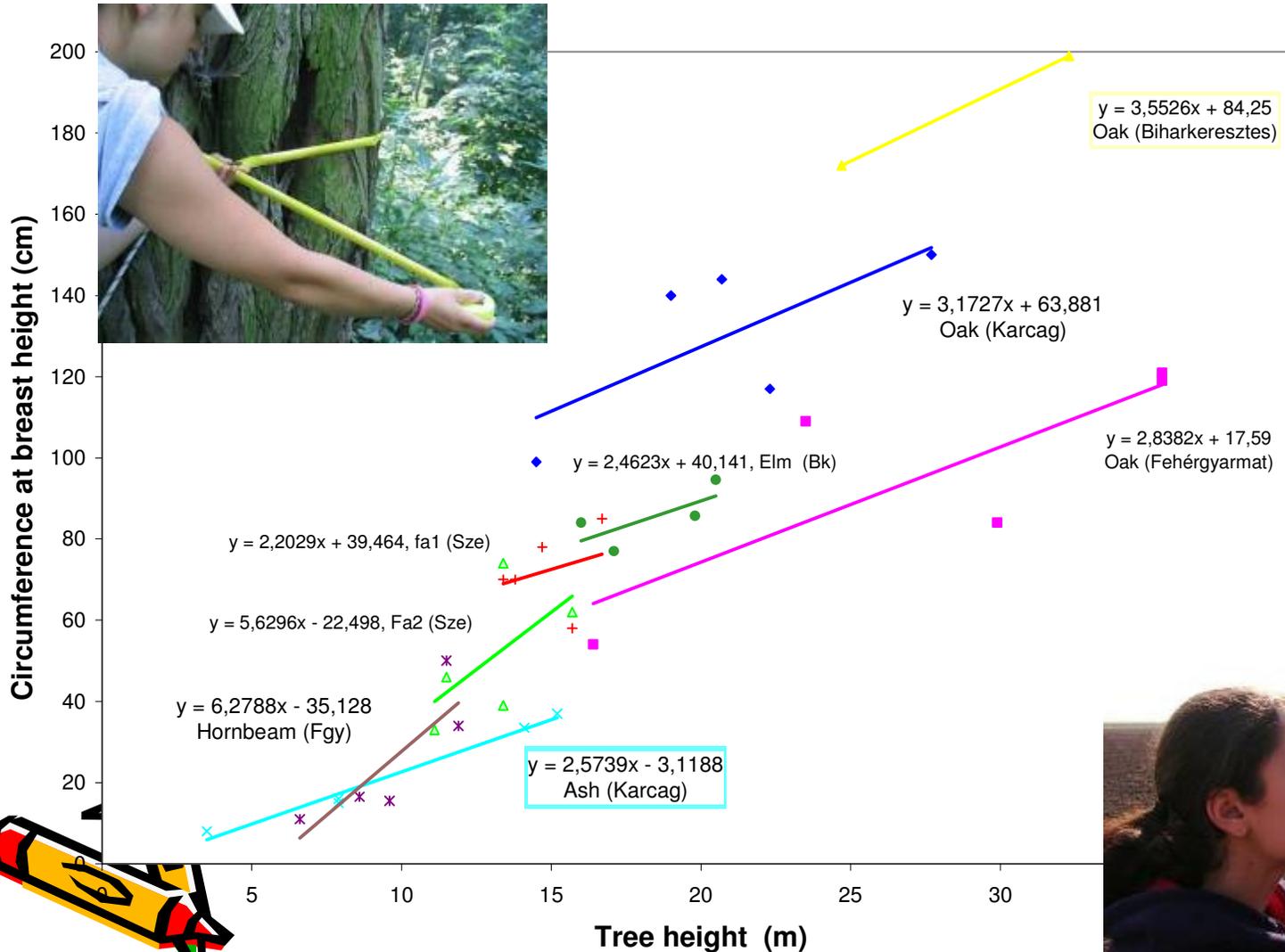


Készült az Országos Meteorológiai Szolgálat Adatbázis Módszertani Osztályán



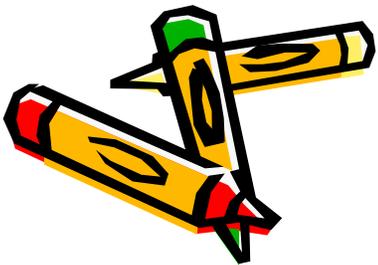
The role of experts in GLOBE

- promote and help interpretation of measured data



The role of experts in GLOBE

- promote and help interpretation of measured data
 - annual calls for student competition in small research works
 - 2-3 themes in each of 4 fields
 - meteorology
 - water chemistry
 - land cover / biology
 - arts
 - evaluate and interpret their own data collected through years
 - cross-school comparisons using data downloaded from GLOBE www
 - specific field observations or lab experiments on environmental issues
 - students are particularly enthusiastic

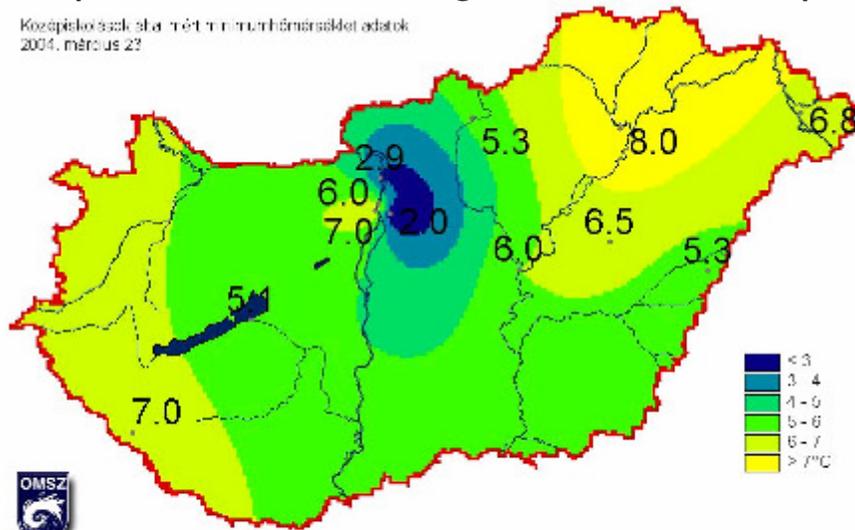


The role of experts in GLOBE

- promote and help interpretation of measured data
- campaigns of day for synchronous measurements

Daily minimum temperatures measured by GLOBE students 23 March 2004 plotted on the respective Meteorological Service map

Középsőkeletiek által mért napi minimumhőmérséklet adatok 2004. március 23.



Háttérkép: Országos Meteorológiai és Hidrológiai Intézet, Műszertani Osztályán



Results of water chemistry measurements, day of synchronous measurements 2006

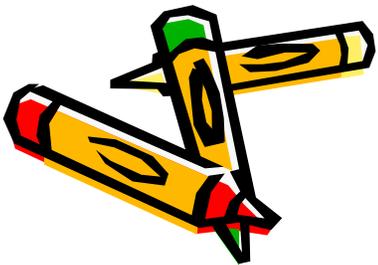
Dissolved oxigen	Early Morning			Late morning		Afternoon		
	oC	mg/l	%	oC	mg/l	oC	mg/l	%
Debrecen, Tóció	7,2	10,0				9,8	12,5	
Fehérgyarmat, Szamos	9,0	12,4				7,0	13,0	
Holt-Szamos	10,0	5,0				10,0	13,6	
Kiskunhalas	6,0	4,0				8,5	3,5	
Siófok, Balaton	11,2	9,5	89,4			12,4	9,0	87,0
Tiszaújváros, Dísztó	5,0	11,5		8,5	10,5	12,5	10,0	
Szolnok, Zagyva	9,0	10,0				10,0	12,0	
Karcag, Téglagyári tó	11,0	8,2				11,5	8,6	
Sopron, Ikva	9,9	5,2				17,5	5,2	



The role of experts in GLOBE

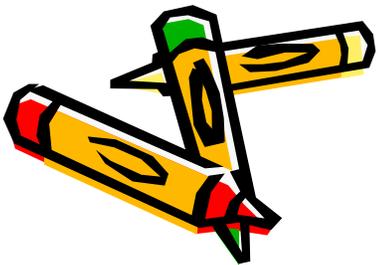
- increase the knowledge of students in environmental science

visiting the Weather Station
of the Hungarian
Meteorological Service,
Siófok (Lake Balaton),
October 2006.

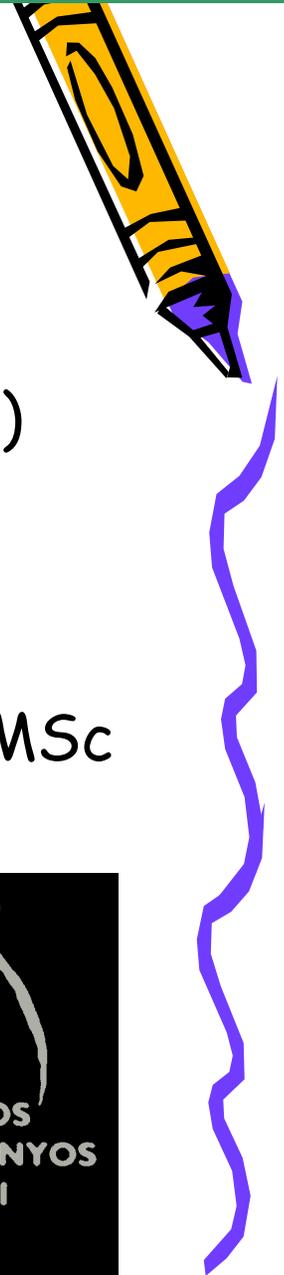


The role of experts in GLOBE

- special attention to the particularly talented
- recruit interested GLOBE students into university education
- at university: Scientific Student Association (SSA)
 - e.g. Meteorology SSA at Loránd Eötvös University
 - biannual student competitions
 - summer / winter schools
- former GLOBE student from Kiskunhalas finishes MSc in meteorology



logo of the National
Scientific Student Association



Thank you for your attention!

