

# Space observation to assist risk management in the Alps

Satellites are to be used in a bid to improve the risk management of landslides, avalanches, mudslides and floods in Alpine regions. This is the objective of the latest ASSIST (Alpine Safety, Security and Informational Services and Technologies) research project......more on page 1

# Insufficient snowfall a cause of recessive glaciers

Lower winter precipitation has been one of the causes, along with global warming, behind melting glaciers over the past 150 years. These are the main findings of a study by researchers at the Laboratoire de glaciologie et géophysique de Grenoble/F and the Eidgenössische Technische Hochschule Zurich/CH, published in the Geophysical Research Letters........more on page 2

# CIPRA's Future in the Alps competition – 570 projects online

The Future in the Alps competition being held across the Alps has been very well received. By the July 20 submission deadline individuals and organisations from all eight Alpine countries had submitted more than 570 projects. All the competition contributions can now be viewed at www.cipra.org/future. The six winning projects will be notified during the first half of September and announced on 22 September.

# Space observation to assist risk management in the Alps

(14.07.2005) Satellites are to be used in a bid to improve the risk management of landslides, avalanches, mudslides and floods in Alpine regions. This is the objective of the latest ASSIST (Alpine Safety, Security and Informational Services and Technologies) research project, which is currently being launched as part of the European "Global Monitoring for Environment and Security" (GMES) initiative. The seven project partners from Austria, Germany, Italy and Switzerland are collaborating on the development and testing of generally applicable approaches for generating and networking data on risk prediction and risk management. While the project is focused on the Alps, the results are to be easily extended to other mountainous regions. In the EU alone mountainous regions account for around 30 per cent of the total territory and are home to some 30 million citizens. The project will combine satellite-based observation data with existing aerial photographs and meteorological data to establish and further develop integrated safety and information systems for the Alps. For the actual risk management the project will establish 'service nodes' such as police stations, hospitals, fire fighters, and air and mountain rescue. These autonomous centres will be able to call up raw data (e.g. from satellite observation) and process it for day-to-day risk prediction and risk management; they will also co-operate closely with other comparable centres.

The European Commission is supporting ASSIST with €1.1 million under the Aeronautics and Space priority. Its purpose is twofold: to increase safety in mountainous regions and to make the European GMES industry more competitive.

Sources and information:

http://europa.eu.int/rapid/pressReleasesAction.do?reference=IP/05/756&format=HTML&ag ed=0&language=EN&guiLanguage=en (de/fr/en); http://dbs.cordis.lu/fepcgi/srchidadb?ACTION=D&SESSION=28872005-7-13&DOC=36&TBL=EN\_NEWS&RCN=EN\_RCN\_ID:24013&CALLER=EN\_NEWS (de/fr/it/en) June/ July Summary 12/05-15/05 Copy date: 29.07.2005

# Contents

Space observation to assist risk management in the Alps
Insufficient snowfall a cause of recessive glaciers 2
Partnership between the Alps and the Carpathians 2
Trading emissions to achieve "zero emissions" target at the Olympic Games
Berchtesgaden National Park in a wheelchair 2
CIPRA's Future in the Alps competition – 570 projects online
Exchange of know-how on hydrogeological disruptions
New publication: Mountaineering villages to enjoy3
Climate protection measures for a hot Bavaria
Miscellaneous 4
Agenda <u>4</u>
Oh!

#### alpMedia News summary 12-15/2005



#### A CIPRA information service

# Insufficient snowfall a cause of recessive glaciers

(16.06.2005) Lower winter precipitation has been one of the causes, along with global warming, behind melting glaciers over the past 150 years. These are the main findings of a study by researchers at the *Laboratoire de glaciologie et géophysique de Grenoble*/F and the *Eidgenössische Technische Hochschule Zurich*/CH, published in the Geophysical Research Letters.

Alpine glaciers rapidly increased in size during the Little Ice Age between 1550 and 1850, only to shrink again thereafter. Scientists had been puzzled by the strong period of growth between 1760 and 1830, given that average summer temperatures over that period were higher than in the 20<sup>th</sup> century. The study shows that this was due to winter precipitation, which decreased by 25% during the 19<sup>th</sup> century. Since this causal relationship does not apply to the 20<sup>th</sup> century, recessive glaciers are due largely to higher summer temperatures.

The researchers used a broad spectrum of data sources for their work. The oldest data pertains to the Clariden Glacier in Switzerland, which has been observed in detail since 1914. Scientists also analysed old maps, which accurately depicted the spread of the glaciers at the time. The study concludes that if alpine glaciers are to stabilise at their current levels in spite of a temperature increase of one degree centigrade, winter precipitation would have to increase by 300 to 400 mm a year.

Bibliography: Vincent, C. et al. "Solving the paradox of the end of the Little Ice Age in the Alps" in Geophysical Research Letters, Vol. 32, No. 9, 2005

## Partnership between the Alps and the Carpathians

(30.06.2005) On 16 June UNEP, the United Nations Environment Programme, and the WWF launched a new partnership between the Alps and the Carpathians in Montecatini/I. Long-term co-operation between the Alps and the Carpathians is required in order to create ecological corridors for species migration and genetic exchange, explained Fulco Pratesi, President of WWF Italy. The event entitled "A Vision for Biodiversity in the Alps and the Carpathians" also provided a platform for the visions of the WWF, UNEP, Birdlife and the European Union with regard to biodiversity conservation.

In terms of surface area the Carpathians are one of Europe's largest mountain ranges and home to not only its last primeval forests but also many large mammals and predators such as the wolf and bear. Some 4,000 plant species, many of them greatly endangered, are to be found in the Carpathians. The Framework Convention on the Protection and Sustainable Development of the Carpathians was signed in 2003. Unlike the Alpine Convention it explicitly provides for the development of an ecological network of protected areas as an official inter-state implementation initiative of the Convention.

Sources and information: http://www.montagna.org/node/651 (it); WWF Italia; http://www.carpathianconvention.org (en)

## Trading emissions to achieve "zero emissions" target at the Olympic Games

(30.06.2005) Turin/I is aiming to maximise the reduction in the output of greenhouse gases during the forthcoming Winter Olympics with the aid of its HECTOR (Heritage Climate Torino) programme launched in 2004. Just how many additional  $CO_2$  equivalents are to be expected from staging the Olympic Games was calculated using a range of factors such as the number and nature of the participants at the Games, the anticipated transport traffic and the energy requirements of industry and accommodation facilities.

As part of the HECTOR programme the Olympic Committee is now looking for partners to help subsidise climatefriendly activities. Businesses that implement  $CO_2$ -saving projects with these donations can then transfer the emission savings to the Olympic Games. The Region of Piedmont is the first public-sector partner to support the HECTOR programme, with a sum of the  $\leq 3$  million.

Information and source: http://www.regione.piemonte.it/ambiente/energia/bando.htm (it)

## Berchtesgaden National Park in a wheelchair

(14.07.2005) The model project "No Barriers at the Berchtesgaden National Park" is to get underway in Berchtesgaden/D in July 2005. The project is to look at ways in which people with physical disabilities or restricted mobility can gain access to unspoilt natural environments. In future an Alpine national park should no longer be offlimits to wheelchair users, senior citizens with walkers or people with impaired senses or mental disorders; instead it should offer an unlimited experience of nature and educational opportunities.

According to Bavaria's Environmental and Health Minister Werner Schnappauf the concept also has considerable economic potential for the tourism industry. The project could also serve as a model and source of ideas for other parks in Germany. The model project is being financed until mid-2006 by Bavaria's Ministry of the Environment and the environmental foundation *Deutsche Bundesstiftung Umwelt*. Source and information: <u>http://www.umweltpakt.bayern.de</u> (de)

alpMedia Newsletter. CIPRA - two-monthly information service (www.alpmedia.net)



The golden eagle is an

endangered species worldwide, but is still

indigenous to the

Carpathians.





#### A CIPRA information service

# **CIPRA's Future in the Alps competition – 570 projects online**

(28.07.2005) The Future in the Alps competition being held across the Alps has been very well received. By the July 20 submission deadline individuals and organisations from all eight Alpine countries had submitted more than 570 projects. All the competition contributions can now be viewed at <u>www.cipra.org/future</u>. The six winning projects will be notified during the first half of September and announced on 22 September.

Under the terms of the competition we were looking for the best projects on sustainable development in the Alpine region. As part of its Future in the Alps Project the International Commission for the Protection of the Alps (CIPRA) is compiling and rewarding innovative ideas that have already been implemented. Switzerland's MAVA Foundation for Nature Conservation is financing the Project and prize money worth a total of 150,000 euros.

We received 200 projects from Switzerland and 186 from Italy. The response from Austria was also strong, with 153 projects submitted. Other entries came from France (82), Germany (57), Slovenia (27), Liechtenstein (15) and Monaco (5). Many of the contributions concern cross-national projects.

Infos: <u>http://www.cipra.org/future</u> (de/fr/it/sl/en)

# Exchange of know-how on hydrogeological disruptions

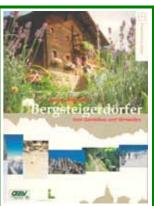
(14.07.2005) The CATCHRISK project (mitigation of hydro-geological risk in alpine catchments) is in its end phase. The main objectives of the INTERREG IIIB project were to draw up a knowledge base and methods for the improved management of landscape and nature to prevent or mitigate natural catastrophes. The partners (I, CH, D, A) exchanged their views on methodology, GIS data systems and tools, and experience in test areas.

CATCHRISK's main findings are the development of three informative systems for determining risk scenarios in Alpine regions, the development of analysis methods for evaluating the triggering mechanisms of landslides and rock falls, and the application of morphological and numerical models for simulating boulder movements. The methodology developed has already been applied in test areas. General criteria for gathering and organising the information were also determined. A comprehensive final report can be downloaded from the project homepage. Information and source: <a href="http://www.catchrisk.org">http://www.catchrisk.org</a> (de/it/en)

# New publication: Mountaineering villages to enjoy

(14.07.2005) The latest brochure of the Austrian Alpine Association (ÖAV) features hiking and mountaineering regions in Austria which actively implement the Alpine Convention's Tourism Protocol. The authors selected 13 mountain regions with villages which, among other things, promote public transport, dispense with large-scale tourist infrastructure such as international hotel complexes, encourage environmentally friendly tourism, and contribute towards protecting alpine areas.

Each chapter begins with a presentation of the region, followed by basic information on the villages, how to get there and the mountain huts on site. The finest summer and winter tours are presented in two sections. There is also a bibliography and map recommendations. The final section offers bad-weather alternatives such as museums and sights.



Bibliography: Austrian Alpine Association (publisher) (2005): *Kleine und feine Bergsteigerdörfer zum Geniessen und Verweilen*, Innsbruck, 132 pages. To order: <u>http://www.alpenverein.or.at/naturschutz/Publikationen</u> (de)

## Climate protection measures for a hot Bavaria

(28.07.2005) Representatives of Bavaria's Ministries of the Environment, Economic Affairs, Agriculture and the Interior, and of the *Bund Naturschutz* have agreed on around a dozen climate protection measures in a further step in implementing the Climate Protection Alliance they concluded in 2004. "Protecting the climate – Saving energy – Saving money" is the motto of the Land's climate protection and energy-saving initiative. It is aimed first and foremost at owners of individual dwellings and apartments, providing information on heat-loss insulation for buildings, building refurbishment, and modernising heating and hot-water installations. The measures also include a study on economically efficient rehabilitation of buildings, the European Energy Award for the best energy-saving municipality, and energy-saving measures in public buildings.

The current summary report on the Bavarian – Baden-Württemberg co-operation project "Climate Change in Bavaria 2021-2050", launched in 1999, shows that Bavaria is set to hot up as a result of the global climate change: On average there will be 50 per cent more hot summer days (temps in excess of 25 °C), and the number of very hot days (temps in excess of 30 °C) will approximately double.

Source and information: http://www.klima.bayern.de (de),

summary report: http://www.stmugv.bayern.de/de/klima/kliwa zukunftsber.pdf (de)



#### A CIPRA information service

## Miscellaneous

#### Why wait? Pull down those unused mountain installations now!

(30.06.2005) Anyone who comes across unused installations or buildings while out hiking or mountaineering in the Swiss Alps should take part in the Wilderness Olympics 2005 and notify Mountain Wilderness (MW) of their "find". MW advocates the dismantling of such installations – rusty masts, concrete foundations, unfinished and abandoned buildings, disused cable railways, ski lifts, etc. – and demands that dismantling costs be budgeted for whenever new installations are constructed. MW has been running a campaign since 2001 in the mountainous regions of France to draw the attention of local authorities, local players and broad sections of the population to these uncompleted and abandoned buildings. It regularly looks for volunteers to help with the dismantling and clearing-up campaigns. These obsolete installations are currently the topic of an exhibition at the National Park Centre in Mercantour/F. Sources and information: <a href="http://france.mountainwilderness.org/index.php?action=afficher&rub=42&from=1">http://france.mountainwilderness.org/index.php?action=afficher&rub=42&from=1</a> (fr),

http://www.mountainwilderness.ch (de/fr)

## **Nepalese Sherpas in Tyrol**

(30.06.2005) 27 Sherpas from Nepal are currently attending training courses at refuges in Austria's Tyrol province. The three-month programme covers topics such as refuge management, hygiene, environmental protection, nature conservation, maintaining and improving trails, cooking and service. The training course is designed to teach standard alpine refuge management skills for use in other extreme mountain regions. 16 Nepalese Sherpas had received training in alpine tourism in Tyrol the previous year. The project was initiated by Tyrolean mountaineer Wolfgang Nairz and *Nepal Hilfe Tirol*.

Source: http://www.tirol.com/chronik/innsbruck/12798/index.do (de)

#### Red deer a tasty treat for Italian wolves

(14.07.2005) Italian researchers have been analysing the excrements of two packs of wolves roaming Italy's Alpine region. The examination of excreted fur and bone fragments has revealed that red deer and roe deer are a favourite item on the wolves' menu. The collected carcasses of ungulate indicate that wolves are the principal cause of death in red deer. Farm animals accounted for a surprisingly low share of the prey, at 7 per cent. Indeed, in the French and Swiss Alps farm animals are prey to wolves far more often as the density of farm animals is higher than in Italy's western Alps.

Sources: Journal of Zoology 266; pages 205-213 (2005); http://www.nzz.ch/2005/07/06/ft/articleCWMLK.html (de)

## Agenda

International Conference: **Benefits from Space for Sectorial Policy for High Mountain Security**; 08-09.09.2005, Geneva/CH; conference language: English; organisers: Swiss government agencies; Information: http://www.asaspace.at/download/Genf%20High%20Mountain.pdf (en)

International and interdisciplinary workshops: "Climate, Climatic Change, and Human Health"; 12-14.09.2005, Wengen/CH; workshop language: English; organisers: Institut de Géographie, Fribourg University/CH; Information: http://www.unifr.ch/geosciences/geographie/EVENTS/Wengen/05/Wengen2005.html

http://www.unifr.ch/geosciences/geographie/EVENTS/Wengen/05/Wengen2005.html (en)

International Conference: **Alplakes Network**; 20-23.09.2005, Aix les Bains, Annecy and Evian/F; conference languages: French, English; organisers: Région Rhône-Alpes, Alpine lakes network; Information: http://www.institut-montagne.org/news/newscomplete.php?id=100 (fr)

International Conference: **Biodiversity conservation and sustainable** development in mountain areas of Europe: the challenge of interdisciplinary research; 20-24.09.2005, Ioannina Epirus/Greece; conference language: English; organisers: Bioscene Conference Organizing Committee;

Information: http://www.bioscene.co.uk (en)

Open Science Conference: **Global Change in Mountain Regions**; 02-06.10.2005, Perth/Scotland; conference language: English; organisers: Centre for Mountain Studies, UNESCO, MAB; Information: <u>http://www.mountain.conf.uhi.ac.uk</u> (en)

## Oh!...

governor ..."Tvrol's provincial and government have stated that Tyrol's hydropower needs to be expanded if Tyrol is to be secured as a business location, the province is to retain its independence from abroad, the TIWAG utility is to remain in Tyrol's ownership, and electricity is to be produced cheaply and cleanly. In the light of the above do you agree absolutely, mostly or not at all to the expansion of hydropower?" This is one of the questions drawn up by the IMAD opinion research institute on behalf of the provincial government of Tyrol in a move to survey the attitude of Tyrol's population to the highly controversial expansion plans the Tiroler of Wasserkraft AG (TIWAG) utilitv. Lieselotte Stalzer, President of VMÖ, the Association of Austrian Market Researchers, has this to say about this manipulative way of asking questions: "You just can't do this. I can't imagine how a pollster could come up with such a voluntarily." auestion Source: http://www.dietiwag.at/index.php?id=2320 (de)