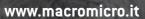
On the Trails of the Glaciers

A project by non-profit association Macromicro

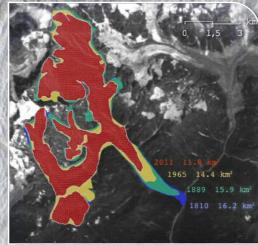


ON THE TRAILS OF THE GLACIERS

Science and photography supporting the environment, on the verge of climate changes of global significance













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The Chaalati glacier and the Ushba mountain. Ph.: Fabiano Ventura 2011

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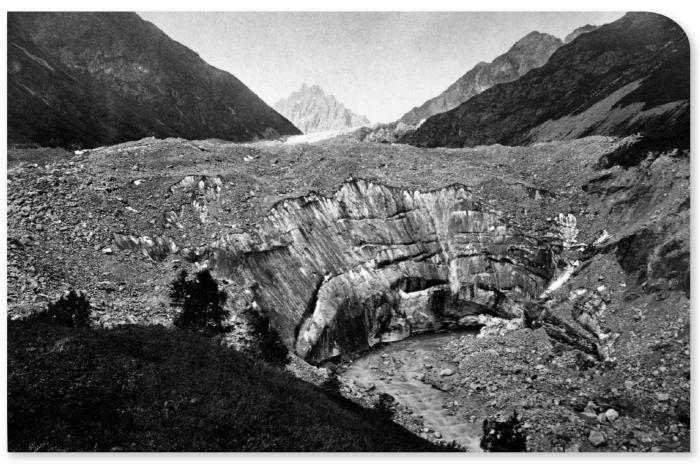
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The huge terminus of the Tviberi glacier, Caucasus range. Ph.: Mor von Dechy 1884



"ON THE TRAILS OF THE GLACIERS" - THE PROJECT

"On the Trails of the Glaciers" is an interdisciplinary project of Macromicro, a no profit Association. The project, thanks to specialized photographers and a unique international Scientific Committee, conjugates photographic comparison and scientific research to analyze the effects of climatic changes on the biggest mountain glaciers of the Heart.

Glaciers are indeed the most sensitive and reliable climatic indicators, which allow the study of the current climatic situation and of its evolution through the time. Analyzing the glaciers is somehow like opening a database, a natural archive, which describes past and present history of our living environment.

Through different expeditions to the most important mountain chains of the world, the project realizes glaciological measurements and new photographic images. The latter reproduce those taken by photographer-explorers at the beginning of the '900, and are shot from the same exact geographic spot and in the same period of the year.

The comparisons between the historical and the new pictures, and the on field measurements, are so far providing data for the Scientific Committee to analyze the actual health of the glaciers.

The project, by an original and innovative combination of scientific research and photography, is intended to convey to a wide public values such as:

- sustainable development and safeguard of the natural resources, especially water;
- the role of the scientific research to improve knowledge;
- •recovery and valorization of historical and cultural patronages like the photographic archives

The first two expeditions of the project, which took place in 2009 and in 2011 respectively in Karakorum and in Caucasus, successfully reached all the aims planned; participants and sponsors all obtained many goals in terms of data collection and of the high-qualified visibility.

The next expeditions of the project are already planned with the same objectives and working methodology. The destinations have been chosen between regions of primary photographic and scientific relevance in the world. Macromicro Association is currently organizing the third expedition, which will head to Alaska in the summer of 2012. Next expeditions are expected in the Ande, Alps and Himalaya.

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KARAKORUM EXPEDITION - 2009

When and where

- Karakorum, Pakistan (Asian mountain chain of 800 km, north-west of the Himalayan chain; with 4 mountains higher than 8000 meters, one of these, K2 (8611m), is the second highest mountain of the world).
- 6 weeks (July September 2009)
- the 100 anniversary of the 1909 Duca degli Abruzzi expedition

• The team

- Fabiano Ventura, photographer and head of the expedition
- Kenneth Hewitt, Claudio Smiraglia and Pinuccio D'Aquila, researchers
- 1 alpine guide, 60 regular porters, 3 high-quote porters, 1 interpreter, 3 drivers, 2 cookers
- Documentary troupe

With the precious support of:

- Italian Foreign Ministry
- Pakistani Embassy in Italy
- Pakistani Ministries of Intern and Defense
- Hunza Guides (tour operator in Islamabad dedicated to the logistic organization of the expedition)
- Macromicro press and communication office



Team of the Karakorum expedition



One of the tents of the base camp at Concordia Circle



Baltoro glacier and Trango Towers on the background. Ph.: Vittorio Sella 1909 $_{
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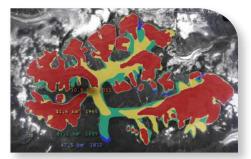
Baltoro glacier and Trango Towers on the background, 100 years later. Ph.: Fabiano Ventura 2009

• The photographic work

- 20 comparative pictures, taken by Fabiano Ventura after 100 years from the same point of view and in the same period of the year of those taken by the first photographers-explorers (Vittorio Sella and Massimo Terzano)
- Before the expedition: from 2007 intense studies and research were required to find photographs,
 travel diaries and cartographies of the first expeditions in the historical archives
- After the expedition: post-production and remodeling of the historical and new images were carried
- Images of impressive high-quality were obtained thanks to high-format film and modern digital technologies
- Geo-reference of all the photos was utilized to facilitate the work of future scientist and photographers

• The scientific results

- Karakorum glaciers close to each other differentially behave in response to climatic changes
- Reduced thickness of about 50-60 meters of the inferior part of the Baltoro Glacier (the fifth longer glaciers of the world)
- Retraction of more than 3 km of the Biafo glacier fronthead
- The photographic comparisons were a valid instrument for the scientific analyses and confirmed the results of the on field measurements



Scientific elaboration on glaciers retreat



Fabiano Ventura in Karakorum

CAUCASUS EXPEDITION - 2011

Where and when

- In Georgia, in the Bigger Caucasus, a Svanezia region (a mountain chain of 1200 km between the Black sea and the Caspian sea, almost completely uncontaminated and unexplored, with peaks among 3000 and 5000 m)
- Five weeks (July August 2011)

The team

- Fabiano Ventura, photographer and head of the expedition
- Kenneth Hewitt and Riccardo Scotti, researchers
- 3 alpine guides, 2 interpreters, 3 drivers 20 porters, 3 helicopter's pilots
- The documentary troupe directed by Marco Preti

With the precious support of:

- Italian Foreign Ministry
- Italian Embassy in Gerogia
- Georgian Embassy in Italy
- Georgian Ministries of Environment, Culture, Intern and Defense
- Macromicro press and communication office

Team of the Caucasus expedition



Team of the Caucasus expedition



Terminus of the Adishi glacier and Tetnuldi mountain. Ph: Mor von Dechy 1884

Terminus of the Adishi glacier and Tetnuldi mountain 127 years later. Ph.: Fabiano Ventura 2011

• The photographic work

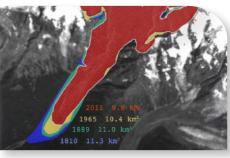
- 18 comparative pictures, taken by Fabiano Ventura after 120 years from the same point of view and in the same period of the year of those taken by the first photographers-explorers (Vittorio Sella and Mor von Dechy)
- The photographic spot from which 127 years ago Mor von Dechy shot the historical image of the front of the Tviberi glacier was found
- The Banguriani peak (3885 metri), from which 121 years ago Vittorio Sella took the spectacular panoramic pictures of more than 180°, was reached
- Before the expedition: intense studies and research in the historical archives were carried out
- After the expedition: post-production and remodeling of the historical and new images were done
- Images of impressive high-quality were obtained thanks to high-format film and modern digital technologies
- Geo-reference of all the photos was utilized to facilitate the work of future scientist and photographers

• The scientific results

- The Caucasus glaciers are melting faster than in previous years: the reduction of the glacier's surface in the last considered interval (1965-2011) is indeed quickly accelerating compared to the previous intervals
- Loss of Tviberi glacier's surface 3,2 times more than the previous interval, and almost 50 times quicker compared to the XIX siecle
- A similar loss of surface was documented for the Chaalati and Adishi glaciers
- Trees instead of glaciers. As evidenced by the photographic comparisons of Fabian Ventura, thick woods grew were once extended huge glaciers' tongues



Fabiano Ventura on the top of mount Banguriani 3885r



Adishi glacier retreat in different time steps

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OBTAINED RESULTS AND EVENTS

Photographic exhibitions:

Photographic exhibition on the Karakorum expedition (February – Aprile 2010)

- With the patronage and the collaboration of the Comune of Rome, the support of Enel Green Power and the technical participation of Epson Italia, Sony Italia and 10b Photography
- It took place in the Santa Rita's Room, prestigious institutional hall in the historical center of Rome
- 38 prints of big dimensions and high quality: comparing the historical images of Massimo Terzano and Vittorio Sella, with the modern ones signed by Fabiano Ventura
- It received big interest by the media, and the presence of the public overcame any expectation, with more than 6000 people in about a month
- Other expositions have been requested from different national and international cities and are currently being defined

Photographic exhibition on the Caucasus expedition

- 50 fine art prints of big dimensions and high quality: comparing the historical images of Mor von Dechy e Vittorio Sella, with the modern ones signed by Fabiano Ventura will be displayed in the prestigious Messner Mountain Museum in Bolzano, Italy, from 3 march at the 17 november 2013.
- Subsequent location: The Museum of the La Sapienza University of Rome The Natural History Museum of Torin The City of Science of Naples The Natural Science Museum of Berlin The Alpines Museum of Munich The Foundation of CosmoCaixa in Barcelona

The photographic exhibition, Santa Rita Hall, Rome



Messner Mountain Museum in Bolzano

Congresses, conferences and meetings

Several meetings with institutional, informative and scientific purposes have been organized after the two expeditions. These events represented important visibility occasions for the sponsors.

- Alpine Glaciology Meeting (Zurig, February 2012), is one of the most prestigious glaciological meetings. The researchers of the Caucasus mission presented the scientific results of the expedition, which were received a huge interest by the international scientific community
- Scientific congress "1909 2009: one hundred years of glaciology and photography on. History of a secular symbiosis" (October 2010). The meeting, organized by Micromicro association at the Geographic Italian Society, was attended by several researchers and more than 100 persons
- Congress "Ardito Desio and the earth science after 10 years from his passing" (December 2011). It took place at the University of Milan with a photographic exposition dedicated to Ardito Desio, which also exposed a selection of pictures realized during the Karakorum expedition
- Vette in Vista Film festival (January 2010), survey of mountain and exploration movies, organized by Stefano Zavka Association in Terni, Italy, with the presentation of the project by Fabiano Ventura and a discussion with Fabiano Ventura, Luigi Bignami, geologist and scientific journalist, and with Prof. Claudio Smiraglia
- Forum Ecomunica (October 2011): Fabiano Ventura was one of the protagonist of "ECOMUNICA", first Forum on waste recycling and green energy which took place in Rome, in Piazza del Popolo







Alpine Glaciology Meeting, Zurich, 201

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TV documentaries

"On the Trails of the Glaciers - Mission to Karakorum"

- Produced by SD Cinematografica in 2010; shot in HD; duration 52 min
- Broadcasted on the main TV channels worldwide such as:
 ZDF (Germany), Artè (France/Germany/Austria), NHK
 (Japan), RTSI (Switzerland), RAI (Italy).
- Selected and showed in more than 30 International Film Festival. Obtained several awards and nominations
- Showed in several public Universities, associations and environmental and mountain festivals

"On the Trails of the Glaciers – Mission to Caucasus"

- Produced by SD Cinematografica; shot in HD; under final optimization; duration about 52 min
- Directed by Marco Preti, well-known director of mountain and nature documentaries and movies
- Distribution envisioned by autumn 2012
- The main TV channels of the world already expressed their interest to to buy the documentary to SD Cinematografica
- Broadcasted on the RSI (Switzerland) LA1 channel at the 22:30 - 8 november 2012.
- Showed in several environmental and mountain festivals

Awards

• National award for the Environment "Gianfranco Merli", promoted by the Movimento Azzurro Association, awarded to Fabiano Ventura on June 8th 2012 "as exceptionally sensitive photographer in his long lasting professional commitment to environmental themes especially related to glaciers" in a official ceremony in the Deputy Chamber. Several other personalities have been awarded along with Fabiano Ventura, such as: Corrado Clini – Environmental Ministry; Nicola Zingaretti – President of the Rome Province; Franco Iseppi – President of the Italian Touring Club; Cesare Patrone – Head of the Capo Forest's State Corps; Paolo Giuntarelli – President of the Roman Bioparco and many others



Shooting the documentary in Karakorum



Shooting the documentary in Caucasus



F. Ventura during the the cerimony of the National award for the Environment



Fabiano Ventura during the "Gianfranco Merli" award at the Deputy Chamber

Media and Publications

- 18 publications on national daily newspapers (such as: La Repubblica, Il Corriere della Sera, La Stampa, L'Unità, Liberazione, Avvenire, La Nazione, Il Giorno, Il Resto del Carlino, Terra, Italia Oggi, Libero, L'Eco di Bergamo)
- 16 publications on national and international magazines (such as: National Geographic Italia, L'espresso, il Venerdì di Repubblica, Famiglia Cristiana, Alpinist, Montagnes, American Scientist, Issues, Tutti i Fotografi)
- 200 publication on national and international websites (such as: Repubblica.it, Corriere.it, National-geographic.it, Esteri.it, Almanaccocnr.it, Ilsole24ore.it, Tmnews.it, Focus.it, Adnkronos.it, Epson.it, Comune.roma.it)
- 9 tv and radio shows on the main national media (Rai2 TG Montagne, TGcom24, ClassTV, ALPChannel, GR Radio Rai, Radio 24, Radio enel, Rai Radio1, Rai Radio2)

The complete press is accessible on the Macromicro Association website.





Some publications of the 2011 and 2012 press release

A **sponsorship** will result in benefits in terms of visibility and brand promotion. As described and proved by the aforementioned facts, the strong environmental connotation and the clear-cut scientific nuance of the whole project allow to set exactly a sponsorship in a context which clearly brings out widespread and highly esteemed themes and values shared virtually by any social group.

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ALASKA EXPEDITION - 2013

The scientific, photographic and mediatic success of the first two expeditions and the attention they obtained from the public and from the relevant scientific community, envision a clear interest also for the future activities of the project; specifically for the next expedition. Macromicro association is indeed organizing the third expedition, which will take place in Alaska in the summer of 2013, and which will actually enter in the heart of the project.

Glaciers in Alaska, thanks to the cold weather and to the frequent precipitations, are found at low quote; they pass through long valley and merge until they arrive to the sea. Their peculiar characteristics makes therefore Alaska's glaciers very interesting from a scientific point of view.

Macromicro association has currently established collaborations with some important research Institutes, specifically: the *National Snow and Ice Data Center* of Boulder, Colorado, a prestigious international Institute that manage the world photographic and scientific data archives of the glaciers; and the *Italian Geological Committee*, that since 1895 promotes and coordinates glaciological researches in Italy.

The informatics technologies for satellite communication and the real time web publication, already utilized in the previous expeditions, will be employed again to provide to the media and to the readers of the website, constant updates of the on fields activities.

Several photographers — explorers have been to Alaska since the late nineteenth century. Among these: Bradford Washburn, O.J. Klotz, Vittorio Sella, William O. Field, Ulysses Sherman Grant, H.F. Lambart, A.H. MacCarthy, Austin Post, la spedizione Havard e Dartmouth e Walter A. Wood.

All these photographers – explorers left a huge archive of high quality images, which will constitute the historical base for the photographic comparisons on the status of the Alaska's glaciers.



Malaspina glacier in 1966. Ph.: anonymous copyright NSIDC



Malaspina glacier in 1966. Ph.: anonymous copyright NSIDC

THE TEAM

Organization, communication and logistics

Non-profit Association Macromicro

www.macromicro.it



Project Manager

Fabiano Ventura

Photographer and President of non-profit Association Macromicro www.fabianoventura.it



Scientific Committee

Prof. Claudio Smiraglia

Full Professor at Università degli Studi di Milano Former President of Italian Glaciological Committee



Prof. Kenneth Hewitt

Professor Emeritus in Geography and Environmental Studies at Wilfrid Laurier University in Waterloo (Ontario, Canada)



Dr. Christoph Mayer

Glaciologist, Member of the Bavarian Academy of Sciences (Germany)



Dr. Riccardo Scotti

Geologist of the Department of Geological Sciences and Geotechnologies of the University of Milano Bicocca.



Dr. Stefano Urbini

Geologist, PhD in Geophysics, he is a researcher of the Italian National Institute for Geophysics and Volcanology



Television troupe

SD Cinematografica www.sdcinematografica.com



On the Trails of the Glaciers

Is a project by



The non-profit Association Macromicro is devoted to environmental themes, and organizes environmental conservation and protection events and projects, employing photography as a media supporting science and environment.

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Valeria Li Causi