

MAP NEWS

Internal Newsletter of the Multinational Andean Project

http://www.pma-map.com/newsletter/v1n5.html

Vancouver, BC, September 1st, 1998

A Monthly Update of Internal Project News

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Washington State, USA

Mt. Rainier:

(August 11th, 1998) Geologists from Argentina, Chile, Peru, United States and Canada visited Mt. Rainier (here viewing Nisqually Glacier) as part of the Volcanology Field Course led by MAP manager Dr. Catherine J. Hickson.

Photo: Dr. C.J. Hickson

Activities Reports

Volcanology Field Course Report Part 1 (Activity: **B.98/M-3**)

The volcanology field course led by Catherine Hickson proceeded smoothly between Monday, August 10 and Friday, August 21, 1998. Participants (Patricia Sruoga and Daniel Rubiolo (Argentina), Jorge Clavero (Chile), Michael Valencia (Peru) and special guest Beatrice Coira (Argentina) first flew to Seattle where they were met by debris flow specialist Patrick Pringle (Washington State Geological Survey). Various types of volcanic deposits were reviewed around Mt. Rainier with Patrick. Patrick then left the group as they continued south to Mt. St. Helens (MSH). At MSH the impact of the 1980 eruption was reviewed, focusing on the initial "directed blast" (pyroclastic surge) and debris avalanche deposits. The group returned to Vancouver late Thursday evening and left Friday morning for the Wells Gray region of east-central British Columbia accompanied by igneous petrologist Kelly Russell (University of British Columbia). Ice contact deposits were the focus of the next two days. In Wells Gray the group was joined by 10 lay people as part of the GSC's outreach program through the not-for-profit society

"Friends of Wells Gray". On Sunday evening the group headed west and on Monday were joined by structural geologist Murray Journeay. Monday and Tuesday were spent reviewing welded breccia and catastrophic flood deposits from the 2350 y.b.p. eruption of Mt. Meager. Journeay provided a review of the tectonics of the western Cordillera and suggested the regional structural context for volcanism in the southern Coast Mountains. On Wednesday and Thursday, sample collection was carried out in the poorly studied Mt. Cayley area of southwestern British Columbia. Course participants collected samples for dating and geochemistry and made observations of volcanic deposits in the area. The volcanic formations ranged from ice contact deposits to subaerial flows and domes. The final day was spent reviewing regional tectonics and volcanism during the drive back to Vancouver.

Volcanology Field Course

The second part of the volcanology course will commence following the November 1998 Executive Council Meetings. The field course will be led by Dr. Moyra Gardeweg of SERNAGEOMIN Chile. It is tentatively planned for the course to run from November 18-23 out of Antofagasta. It is recommended that each country send the same participants to the

Volcanology Field Course Part 2 as they sent to Part 1. Please submit participant names to:

Dr. Gardeweg (mgardeweg@sernageomin.cl) and Mike Ellerbeck (mellerbeck@gsc.nrcan.gc.ca).

PIMA Update (Activity: **B.97/M-2**)

From August 17 to 20 Dr. Andre Panteleyev received preliminary training on the MAP PIMA mass spectrometer from Anne Thompson of Petrascience Consultants Inc. of Vancouver, B.C. The training was conducted at the facilities of the GSC Vancouver and the MAP PIMA was used. Dr. Panteleyev will be bringing the PIMA to Peru in October (Activity: A.98/ P-1) using it during field work with INGEMMET geologists. It is currently planned to begin some case histories using the PIMA to show its capabilities. It should be noted that for other MAP members interested in the PIMA capabilities and applications it is available for their use and a full training program can be organized.

Airborne Survey in Argentina (Activity: **D.96/A-2**)



After a slow beginning due to poor weather brought about by "El Niño", the end is in sight for the Puna Austral Airborne Survey. According to the most recent reports from SIAL, the flying is approximately 80% complete.

Cartographic Standards Committee (Activity: **B.98/M-2**)

Continued planning is underway for this activity. The on-line conference is tentatively scheduled for October. Each MAP member will be contacted to determine a date and time. MAP Technical Advisor, Dr. Constantino Mpodozis is working with administrative staff to create an agenda for the online meeting.

SERNAGEOMIN Geologist at University of Waterloo (Activity: D.96/C-14)

SERNAGEOMIN geologist Sergio Iriarte spent two weeks at the University of Waterloo with Dr.'s Ramon Aravena (Department of Earth Sciences) and David Rudolf (Waterloo Centre for Groundwater Research). Iriarte's visit is part of the hydrogeology project development in Chile which commenced in January of this year with the visit of Aravena and Rudolf to the MAP area in Chile.

SERNAGEOMIN Geologist at GSC Ottawa (Activity: D.96/C-13)

SERNAGEOMIN geologist Carlos Perez de Arce was at the GSC Ottawa Ar40-Ar39 facilities in July. Perez de Arce will be involved in setting up the new Ar-Ar geochronological program at the SERNAGEOMIN facilities in Santiago and was in Canada to work with GSC scientist Mike Villeneuve. Perez de Arce and Villeneuve concentrated primarily on looking over the GSC collection of data, discussing interpretation of various patterns, approaches to solving equivocal results, researching and comparing results to critical papers published on argon systematics, discussing how to organize a "Survey" style geochronological program, and the need for continuous feedback between geologists geochronologists.

Upcoming Activities

Dr. Steve Gordey to Peru (Activity: A.96/P-4)

INGEMMET (Peru) has requested GSC Pacific geologist Dr. Steve Gordey to go to the field with local geologists in October. Together they will examine lower Palaeozoic stratigraphy in region north of Lake Titicaca.

Dr. Andre Panteleyev to Peru (Activity: A.98/P-1)

INGEMMET has also requested the visit of Dr. Andre Panteleyev of XDM Geological Consultants (Victoria, B.C.). He will give a one week course on mineral deposits and metallogeny. Dr. Panteleyev will also be doing field work and will spend one month in Peru (mid-October to mid-November).

Geophysical Modeling Course in Chile (Activity: D.97/C-4)

Dr. Carmel Lowe of GSC Pacific will be giving a short course on magnetics and gravity to SERNAGEOMIN geologists in November. The three-day course will consist of:

- Basics and applications of Gravity and Magnetics.
- Interpretation of data and case studies.
- Discussions of specific Chilean cases.

Verifiable Indicators



It is important for project members to remember that Verifiable Indicators are the tools for measuring the progress of MAP. It is necessary to demonstrate that MAP is accomplishing its goals and therefore the information that you provide is very valuable. The following list describes the information required for the Verifiable Indicator report that will be submitted to CIDA. As was done in November of 1997 please forward MAP administrative staff the requested information.

- 1. Have there been new maps or publications since November 1997?
- 2. Have you attended any conferences, talks or seminars as a MAP participant? If yes, could you indicate where, when, title of the event, for whom it was intended, how was the attendance?
- 3. Have you given any presentations or talks on subjects related to MAP? If yes, when, where, title, attendance, audience?
- 4. Have you done any work/travel that involved any type of cooperation with another MAP participant, in your country or in another one of the other participant

countries? If yes, what type of work, when, what countries participated, what were the results?

Administrative staff appreciates your cooperation and requests that you send this or any other information that can be considered a verifiable indicator as soon as possible to:

Rocío López Tel. (604) 666-0183 Fax (604) 666-7507

E-mail: rolopez@gsc.nrcan.gc.ca

Sample Analysis



Good Bye Paul

As of September 1, 1998 summer employee Paul Cordy will be leaving the MAP team to resume his studies at the University of British Columbia.

Ben's Replacement

Applications have been received for a replacement for Ben Edwards. Unfortunately, due to Hickson's busy schedule during July and August, interviews have not yet been held. She hopes to complete the hiring sometime in September.

The WEB Page Update

With the continued popularity in the MAP WEB Page it has become apparent that it is necessary to update and correct the information presently on the page. It would be helpful if each MAP member designated one person from their survey to be responsible for reviewing MAP Web page material pertaining to their survey.

For further MAP information please consult the project Web page at:

http://www.pma-map.com

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