

International Geoid School on the Determination and Use of the Geoid

Rio de Janeiro 10-16 September 1997

During the period September 10 to 16 1997 the Second International School on the Determination and Use of the Geoid has been held in Brazil with the support of IBGE which IAG gratefully. This is a detailed report from the school proposed by Cristina Lobianco in cooperation with Mike Sideris.

First Contact

During the GRAGEOMAR96 meeting in Tokyo, Japan, I was contacted by Dr. Michael Sideris in order to verify the possibility of IBGE host The Second International School for the Determination and Use of the Geoid. The idea was to take advantage of the IAG meeting that would happen in Rio de Janeiro, Brazil, when the teachers and many possible students would come and the expenses of air tickets for the school would be cut. At that time, the following items were stated:

Teachers:

Day	Teacher	Topic
1 st	Fernando Sansó	Fundamentals of Geoid Computation
2 nd	Nikos Pavlis	Geopotential Models
3 rd	Christian Tscherning	Collocation
4 th	René Forsberg	Terrain Effects on Geoid
5 th	Michael Sideris	FFT Computation

As the teachers would be already in Rio for the IAG meeting and the only support they agreed was just receive the accomodation and living expenses.

Students:

The school would be opened to graduate students, teachers and government employees.

Registration Fee:

Typical US\$ 500. Would be checked the possibility of including accommodation, local transportation and one or two dinners. The lecture notes and all software would be provided free only for research use by universities and government agencies.

Lectures:

5 days from 9 - 12 each morning for the theoretical part and 14 -18 for practical experience of using the software.

Computers:

At least 2 UNIX - workstations with FORTRAN and C or C++ compilers.

- Several PC's (5 to 8) all networked together and with the workstations- Xwindows software would be desirable.
- All computers should have ETHERNET connections for E-mail and for software transfer.
- Some graphical capabilities for displaying geoid and gravity anomaly maps.
- RAM requirements: 16MB computer minimum and 32 MB preferable (at least for each of the workstation)
- Hard disk space of 500 MB.

Advertising:

EOS (AGU), Journal of Geodesy, IGeS Bulletin, E-mail, Brazilian geophysical and geodesy societies and web page.

INVITATION AND PLANNING

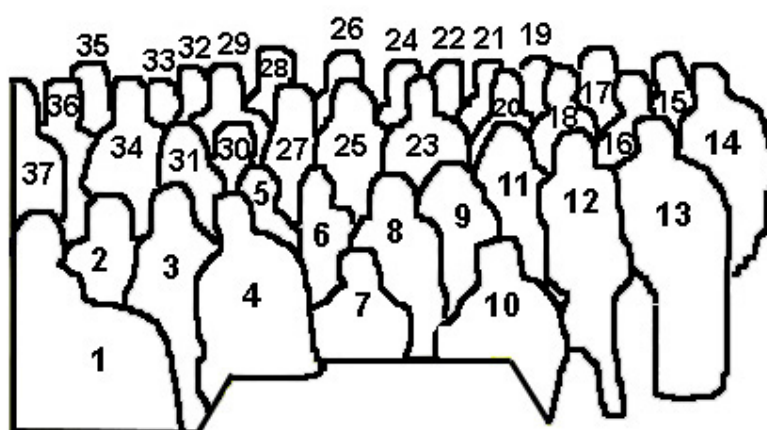
The first circular was sent to the following groups:

IAG web page;

- SIRGAS (South American Geocentric Reference System) representatives and many other research institutions, universities and every group that used to receive the SIRGAS bulletin;
- IAG/SBC meeting circular;
- by fax to the representatives of the South America Geoid Commission;
- by E-mail to the Brazilian Universities that have regular courses on geodesy (graduation and post-graduation);
- Brazilian Oil Company;
- Bernese GPS software students of February and march 1997.

Students:

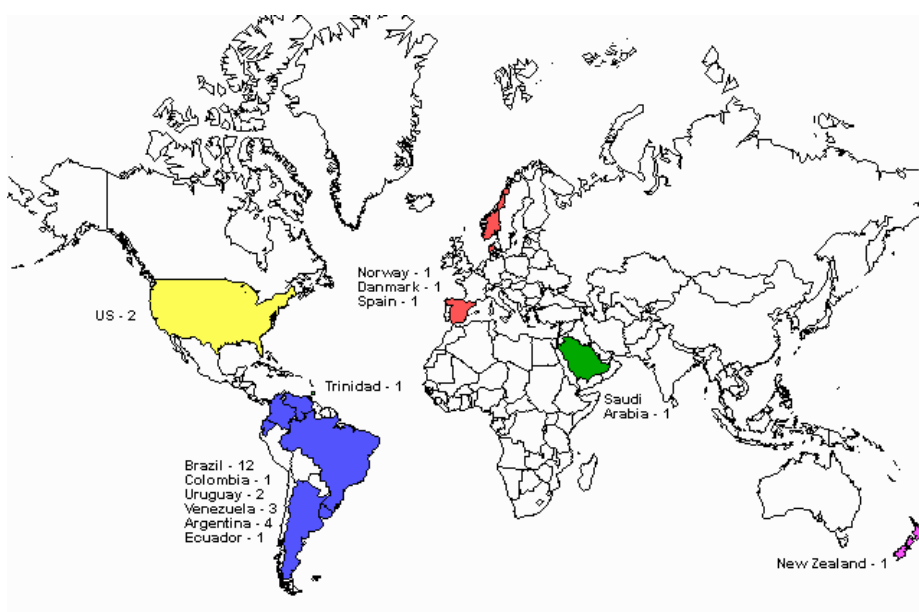
We were contacted by 45 people from the first announcement to the end. We've got a final number of 31 students.



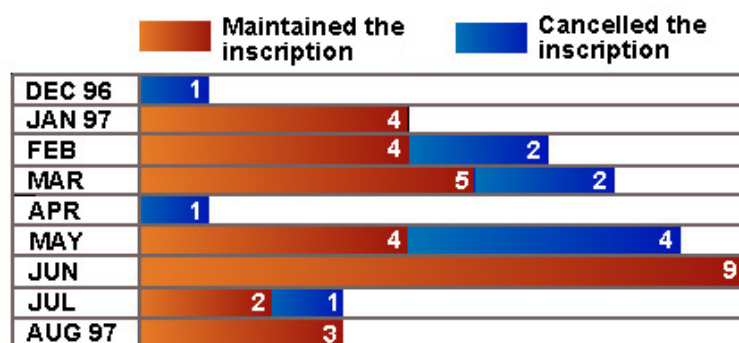
1	Sonia Costa	20	Nelsi Cogo de Sá
2	Frank Lemoine	21	Silvio R. Freitas
3	Merrin Pearse	22	Luciano Montenegro
4	Fabian Barbato	23	Alfonso Tierra
5	Karla Edwards	24	Fernando Sansó
6	Assumpcio Termens	25	Laura Sanchez
7	Denizar Blitzkow	26	Tscherning
8	Graciela Font	27	Nikos Pavlis
9	Elaine Nunes Jordan	28	Steve Kenyon
10	Michael Sideris	29	René Forsberg

11	Cláudia Tocho	30	Kátia Duarte Pereira
12	M. Cristina Pacino	31	Cristina Lobianco
13	Melvin Hoyer	32	Ove Christian Dahl
14	Freddy Fernandez	33	A. Simões Silva
15	Guilhem Moreaux	34	Walter Subiza
16	Mario E. Borgna	35	Luiz Paulo S. Fortes
17	Eugen Wildermann	36	Marco A. da Silva
18	José Milton Arana	37	Frederico Marinho
19	Mauro A. Sousa		

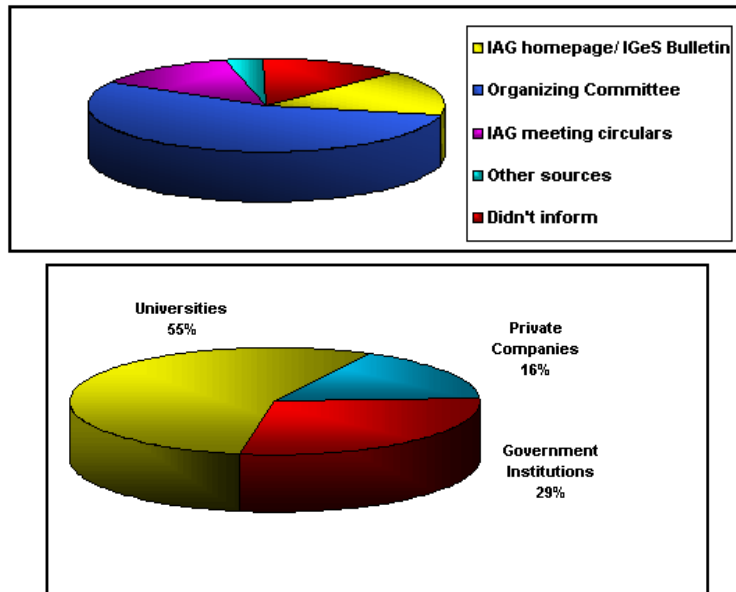
Distribution of the students by country:



Month and number of students that made their inscription to the Geoid School:



How did they hear about the Geoid School:



Main activity of the students:

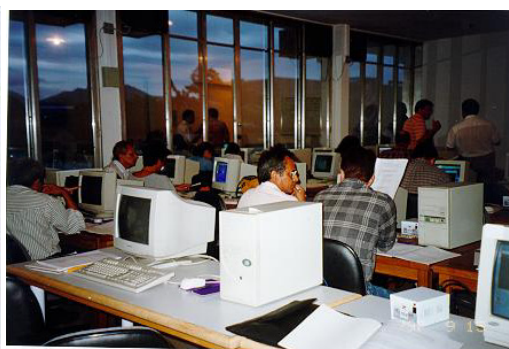
Recommended Facilities:

- Overhead projector (preferable 2)
 - Screens for projection (preferable 2)
 - white or blackboard
 - Datashow
 - Fax and telephone
 - Secretary
 - Photocopies
 - PC connected to INTERNET
 - Two rooms (one for the theoretical part and the other with the computers for the exercises). Changing the room we can reduce the risks of staying too long on the same place.
 - Coffee break (twice a day)
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- Coffee break (twice a day)



Auditorium

Secretaries



Computer's room

For the students:

- Notepad, pen and pencil
- Map indicating the main places of interest near the School (banks, restaurants, drugstores, photo studios, transportation)
- Badge
- Briefcase of the School - was made an agreement with the company that provided the briefcases for the IAG/SBC meeting in order to extend its support for the Geoid School (free of charge) with more 40 briefcases.
- CD for each student including all Geoid School software.
- The opening dinner was planned to happen in the second day to join the greater number of students and teachers. The choice of the restaurant considered the following items:
 - Not to be far from the hotels and to allow a better communication between the students and the teachers;
 - To offer a good price and diversity of food; and
 - No need of controlling the beverage and food consumed (to have a fixed price per person)
- Faxes were sent to some restaurants asking for a proposal with discount and the final price was R\$35,24 per person, including free drinking (soft drinks, fruit juices, mineral water and beer), salads, vegetables, meat, fish, chicken and dessert (ice cream). Two bottles of liqueur were served after the dinner. The final bill was of R\$ 1,233.40.
- Only two students and one teacher (Fernando Sansó returned to Italy just after his class on the first day) couldn't be present at the dinner.







Transportation:

Some bus companies were contacted in order to verify the best price of a bus to move the group from the hotels to the school, and viceversa, and stay available during the day. At the Opening Dinner, on the second day, the bus took the students from the school directly to the restaurant. The best price was of R\$1,250.



SUGGESTIONS

- Considering the good experience from the Rio School, provide the software of the Geoid School on the CD, also including the examples files.
- Have some people to help the teachers running the exercises for the students.