



GEOSTATISTICAL ASSOCIATION OF AUSTRALASIA

Newsletter No. 5 June 1998

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IN BRIEF

The second year of the GAA is underway with the 2nd AGM having taken place on May15 at Edith Cowan University. Attendance was good and the business of the meeting was finished very quickly – including the election of new office bearers - followed by a very interesting presentation by Roussos Dimitrakopoulos on the present and future of geostatistics.

The theme of the new president, Louis Voortman, is “beware of bad information” – a very important consideration in any geostatistical work.

The “Beyond Ordinary Kriging” symposium for looking at non-linear estimation methods is drawing closer and there is still a need for papers. The date for abstracts has been extended so get those together and get them in. It’s a great opportunity to increase awareness and understanding of the advanced techniques available - particularly through case studies.

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Sponsor Information

Beyond Ordinary Kriging:

Non-Linear Geostatistical Methods in Practice

**A 1 day Symposium to be held at Rydges Hotel
in Perth on Friday 30th October 1998**

Final date for abstracts: June 30

**... for more information (including sponsorship
and booths) contact the Convenors:**

Dr. Julian Barnes Tel: 08 9481 0885

Dr. Lyn Bloom Tel: 08 9370 6360

Mr. John Vann Tel: 08 9221 0600



<p style="text-align: center;">HIGHLIGHTS OF FOUNDATION YEAR 1997-1998</p> <ul style="list-style-type: none">• Membership after one year stands at over 90 members• Healthy financial position (positive end-of-year of AU\$ 2334.00)• Overseas members are Professor Danie Krige, Johannesburg (Honorary Life Membership) Margaret Armstrong, Fontainebleau Professor Andre Journal, Stanford Professor Peter Dowd, Leeds• Four presentations and one general discussion organised in Perth, one presentation held in Kalgoorlie• Professional contacts established with GASA (South Africa), Fontainebleau, Stanford, WH Bryan Mining Geology Research Centre (Queensland), Edith Cowan University Mount Lawley Campus (Perth), Statistical Association of Australia (Perth Branch), AIG (Perth Branch) and AusIMM (Perth Branch)• GAA Constitution accepted by GAA members at the 2nd AGM (will be subjected to further legal advice and be updated/amended as necessary during the 1998/99 year)	<p style="text-align: center;">GAA 1998-1999 Executive Committee</p> <p>Louis Voortman (President) lvoortman@snowdenau.com</p> <p>John Henstridge (Vice President) john@daa.com.au</p> <p>Julian Barnes (Treasurer) rsg_perth@rsg.com.au</p> <p>Ian Glacken (Secretary) iglacken@snowdenau.com</p> <p>John Vann geoval@ozemail.com</p> <p>Brian Davis briand@avi.com.au</p> <p>Lyn Bloom l.bloom@cowan.edu.au</p> <p>Bill Shaw mrt@mrtconsulting.com.au</p> <hr/> <p style="text-align: center;">Membership</p> <p>There are four types of Membership:</p> <ul style="list-style-type: none">• Ordinary Membership (full voting rights)• Associate Membership (no voting rights)• Student Membership (no voting rights)• Corporate Membership (by invitation of the Executive Committee) <p>Membership forms are available by email from:</p> <p style="text-align: center;">Ian Glacken GAA Secretary, PO Box 1719 West Perth, WA, 6872</p> <p style="text-align: center;">email: iglacken@snowdenau.com</p>
<p style="text-align: center;">Review of GAA's Inaugural Year by John Vann, President 1997-1998</p> <p>The 2nd Annual General Meeting was held on Friday 15 May 1998 at Edith Cowan's Mount Lawley Campus. Nearly all attendants were GAA members and it was good to see that the AGM was also attended by two very interested ECU students (we hope that they will join our fast-growing Association). John Vann, our first President, reviewed the past year in which GAA was established. John reviewed our short history and thanked Louis Voortman, who had announced the intention to start a Geostatistical Association in September 1996 at the 5th International Geostatistical Congress in Wollongong, for his efforts in getting the association off the ground. John emphasised the importance of having had very supportive inaugural corporate sponsors and members during our first year.</p> <p style="text-align: right;"><i>cont'd page 3</i></p>	



Review of GAA's Inaugural Year by John Vann, President 1997-1998

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He stressed that the financial and moral support of the following organisations, in alphabetical order, Data Analysis Australia, Exploration and Mining Consultants, GCM, Geoval, KCGM, Snowden Associates, RSG and WMC was a major contributing factor for GAA having had such an excellent start. In addition we have had the moral support from Danie Krige, Margaret Armstrong, Andre Journal, Peter Dowd and Peter Brooker from day-one which also greatly helped. John mentioned the aims of the Association as they are described in our Constitution and pointed specifically at the fact that we aim to be a professional organisation for promoting the use of spatial statistics in all possible fields including mining, oil reservoir modelling and environmental sciences. The fact, John said, that the first Executive Committee has consisted of 6 mining professionals but also two professionals in the field of applied statistics, was not coincidental.

John thanked by name all members of the first Executive Committee who had worked hard behind the scenes to establish the Association: Lyn Bloom, Louis Voortman, Julian Barnes, John Henstridge, Ian Glacken, Brian Davies, Donna Kelly and Roussos Dimitrakopoulos. John regretted that Ian Glacken, our Secretary could not attend the AGM as he was away on a project in Indonesia (given the political situation there, we could only hope that Ian would be safe and sound) but thanked Ian for producing an interesting overview of our membership status. Ian's pie charts were handed out, showing our membership by area (most members are in Western Australia), by category (87% are ordinary members, 3% are company members, 8% are associate members and 2% are student members), by activity (most members are in the mining industry) and by location (9% of members reside in Kalgoorlie, 3% in the Pilbara and 3% around Leinster).

John said he felt that one of the highlights of the year was when GAA honoured Professor Danie Krige with Honorary Life Membership at our Christmas Dinner in December 1997,

and how Danie had really appreciated this. But then, GAA really appreciated Danie's very interesting lecture at that meeting and John said he hoped that Danie would soon return to Perth for another presentation. A vote of thanks also went to the other speakers during the year: Margaret Armstrong, Geoff Riley, Ian Glacken, John Vann and Brett Gossage in Perth and Michelle Franks and Louis Voortman in Kalgoorlie. John was pleased to note that a well attended meeting had already taken place in Kalgoorlie in October 1998 and hoped that this would be repeated soon. He also mentioned the regular circulation of GAA's Newsletter during the year and thanked those who had been instrumental in getting this done, Louis Voortman, Brian Davis and Ian Glacken, for their effort. As John said, we all know that getting the Newsletter out is a lot more work than many people realise.

John discussed the importance of our first professional Seminar "Beyond Ordinary Kriging" which is planned for Friday 30 October 1998 in Perth. The sub-committee responsible for organising this event has met a few times already and John stressed that these effort should be kept up as much as possible to meet our deadlines. John mentioned that GAA had already provided input to the AusIMM with regard to an article by Swain, that GAA had officially written to the JORC Committee and offered its services whenever the JORC Committee would find this opportune, that GAA had established official contacts with GASA in Johannesburg, with the AusIMM and the AIG and with a number of universities overseas and in Australia. John wished to thank Donna Kelly for "starting the ball rolling" in Kalgoorlie and Phil Agnew for doing this presently in Queensland. John noted that Craig Moulton had travelled to Perth for the day to attend the AGM and had offered to be the local representative in the Hamersley area. Support from Hamersley Iron Ore for Craig Moulton to do so, and to try and attend as many meetings in Perth as possible, was thankfully acknowledged. John

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Address by Louis Voortman, incoming GAA president 1998-1999	Review of GAA's Year by John Vann, <i>cont'd from page 3</i>
<p>Louis started by thanking the first Executive Committee for all the "hidden" hard work done during the inaugural year, and especially for the positive and constructive way the Association was established. He then gave a brief presentation emphasising the position of the current GAA membership in Australasia: we are at present functioning mainly in the mining industry where we can contribute to the profit of mining companies by "weeding out bad information". Using a Power Point presentation, Louis showed the very close similarities of how the variance formula is derived for sample data, how the moment of inertia formula is derived for a scatterplot and how the semivariogram formula is established for data in space. His main point was that these formulas are so similar that it is quite surprising that variance and moment of inertia are such well-accepted phenomena while the semivariogram appears to remain an "exotic" issue to many people in industry.</p> <p>As this appears to be the case, he concluded that we geostatisticians are doing something wrong because we are not getting the message across. Louis then compared the building of a house, with a solid foundation and a waterproof roof, to the successful mining operation that needs a solid resource base as well as watertight</p>	<p>ended by emphasising that GAA is more than just a "club of geostats professionals". He was very pleased that the AGM was so well attended, on a Friday night, with 23 members present and 10 apologies received. But then, John said, we were very fortunate to have Professor Roussos Dimitrakopolos at this AGM to give us an interesting presentation entitled "Present needs and future directions in geostatistics".</p> <hr/> <p style="text-align: center;">GASA offer</p> <p>An offer has been made to GASA (Geostatistical Association of South Africa) on behalf of the GAA and JORC to give any assistance possible for their involvement in setting up a JORC body in South Africa. John Vann, through his association with GAA as past president and JORC as a committee member, sent a letter to GASA chairman Martin Baker last month. The experiences of Australia should prove invaluable for our South African colleagues. We wish them all the best.</p> <hr/> <p>DO YOU HAVE ANY REQUESTS FOR GEOSTATISTICAL ARTICLES ON PARTICULAR TOPICS? If so, please pass these on to the editors or the secretary.</p>

AIG SEMINAR

MORE MEANINGFUL SAMPLING IN THE MINING INDUSTRY or "WHY BUSANG OR JOSH COULD NOT HAPPEN IN AUSTRALIA"

The Western Australian Branch of the Australian Institute of Geoscientists is holding a one-day seminar at the Novotel Langley Hotel, Perth on **Friday 19 June 1998**.

Please note that this has been changed from the previously advertised 12th June.

A preliminary program, list of speakers and papers has been published in the AIG News of February 1997. Please see this publication for more details.

The subject undoubtedly is of great interest to geostatisticians and the GAA urges its members to attend. Bookings paid prior to April 30th 1998 are \$280 to AIG members and \$300 to non-members. After this date the entry fee is \$350 per person. Entry fee includes morning and afternoon teas, buffet lunch, happy hour and a copy of the proceedings. If the previous AIG sampling seminar is anything to go by, they had a record attendance and are still selling copies of the published bulletin 11 years later!

The preliminary topics and the speakers are:

W.J.Shaw (M&RT) Keynote address on the role of the AIG in maintaining industry standards.

I.Neuss (Outokumpu) Sampling myths and legends or what we have learned from Busang.

M.J.Freeman (DME) Karpa Spring Gold Prospect – more lessons from the fraud.

B.Davis (AIG) What is a sample? What does it represent? (Quality Control in sampling)

G.Leppard (Analabs) The Laboratory Quality Control trail- confidence in results.

A.Wesson (Geoval) Can you afford not to bulk sample?

L.Voortman (Snowden) Avoiding over- or under-estimation of grade by using correct sample preparation methods.

J.F.H.Barnes (RSG) Sampling to suit the orebody.

S.Denn (Centaur) Large diameter hole sampling at Cawse nickel project – an innovative solution to metallurgical testing.

J.M.Chisholm (CRM) Sampling practises abroad.

There is room for a further two speakers on similar themes. Also other contributions, especially for posters or short articles that do not necessarily require a speaker are welcome.

There will be some space available for trade displays or company promotions and details can be obtained from the following:

Brian Davis, Convenor at phone (08) 9327 8211, fax (08) 9321 0294 Email briand@avi.com.au

or

Jocelyn Thomson, WA Branch Secretariat on (08) 9310 8405 (phone/fax)

Email aigwa@opera.iinet.net.au

The Geostatistical Association of Australasia

Beyond  **Ordinary**
Kriging:

Non-Linear Geostatistical Methods in Practice

A 1 day Symposium to be held in Perth on
Friday 30th October 1998

Call for Papers

Suggested Topics:

- **Mining** — Recoverable Resources, Indicator & Non-Indicator Methods, Estimation of Non-Grade Variables, Geological and Metallurgical Applications.
- **Environment** — Contamination Mapping, Biological Applications, Ecological Mapping, Medical Applications, Soil Sciences & Agriculture.
- **Petroleum** — Reservoir Mapping, Recoverable Resources/Reserves, Geological Applications.
- **Other** — Hydrogeology, Engineering Geology, Forestry, Fisheries, Geophysics.

Potential authors are requested to submit titles and abstracts (300 word maximum) of their papers to —

The Convenors — Beyond Ordinary Kriging
C/- Geostatistical Association of Australasia
PO Box 1719, West Perth, Western Australia, 6872
by 30th April, 1998

... for more information contact the Convenors:

Dr. Julian Barnes Tel: 08 9481 0885
Dr. Lyn Bloom Tel: 08 9370 6360
Mr. Brian Davis Tel: 08 9327 8211
Mr. John Vann Tel: 08 9221 0600