August 7 1984

Sabine Coquillart Ecole Nationale Superieure des Mines de Sainte-Etienne 158 Cours Fauriel 42023 Saint-Etienne Cedex France

Dear Ms Coquillart

The Computer Museum is mounting a major exhibition on computer graphics and image processing due to open to the public this autumn. We are including a number of images and working demonstrations on the theme of terrain synthesis and i was most interested to see your paper with Michel Gangnet in the July issue of the IEEE Computer Graphics and Applications.

We might be interested in exhibiting some of your synthesised images of the Vosges mountains and I wonder if you might send us good quality slides of figures 3,4,5,8,9 and 10 in your paper. We would of course credit you and your institution. Perhaps you could also give us some information on the hardware used - was it all done on the HP 9000?

I look forward an early response and hope that you will participate in our exhibition. All included images will have to be received by the end of August - I apologise for this tight timescale.

Yours sincerely

Dr Oliver Strimpel Curator

# ECOLE NATIONALE SUPERIEURE DES MINES DE SAINT-ETIENNE



### MINISTERE DE L'INDUSTRIE ET DE LA RECHERCHE

158 COURS FAURIEL 42023 SAINT-ETIENNE CEDEX

TEL.: (77) 25.20.23 - TELEX 300923

Saint-Etienne, le 10-09-84

Dr. Oliver Strimpel The Computer Museum 300 Congress Street Boston, MA 02210 USA

Dear Dr Strimpel,

Thank you for your letter about our paper in IEEE Computer Graphics and Applications. We would be very glad if some of our work on terrain synthesis could be presented at the exhibition you are mounting.

You will find here included slides of our work. I do not know if they will be projected as slides or if you will have them reproduced on paper, in the later case do not hesitate to correct them for over or under exposure and color balance.

We also include a technical note giving some explanations about the slides and the credits, you can of course edit this material as you like, specially about our english which may be sometimes shaky.

Sincerely yours,

Sabine COQUILLART, Chargée de Mission

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## Technical Note:

This work has been done at Ecole Nationale Supérieure des Mines de Saint-Etienne, France, by Sabine COQUILLART and Michel GANGNET.

More technical explanations can be found in the July 84 issue of IEEE Computer Graphics and Applications, Vol. 4, Number 7, pp. 35-43.

The displayed region is a part of the Vosges mountains in northeastern France. The original data was a regular grid of the terrain heights. It is rendered here with two methods, priority list on slides 1,2,3,4 and ray-tracing on slides 5,6 and 7.

The skies have been rendered using fractal modeling and some overground elements have been added on slides 6 and 7.

The hardware used was a HP-9000 and a Lexidata frame-buffer with a resolution of 512x640 pixels and 4096 simultaneously displayable colors.

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