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Short Communication

**Macroseismic Intensity Map
of the Federal Republic of Germany
for the Friuli Earthquake of May 6, 1976**

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The earthquake of May 6, 1976 in Friuli, Northern Italy, with magnitude $M_s = 6.5$ and $m_b = 6.0$ (US Geological Survey, Colorado) and macroseismic intensity $I_0 = X$ was felt over a large area in Central Europe (Karnik et al., 1976; Karnik et al., 1977). The macroseismic map of the FRG (Fig. 1) shows only a small part of the whole shaken area, but gives detailed information on observations.

These observations are not as complete and well distributed as they could be, since at the time of the earthquake only few newspapers were available for some days due to a strike. Therefore people could not be asked this way to send us their observations; only the knowledge about the effects north of Hannover results from a call in a small regional newspaper. Most data from Bavaria ensue from letters to the Geophysical Observatory in Fürstenfeldbruck after an announcement in the regional Bavarian television. The rest of the observations are from people who had been disturbed and than had called by telephone a police-station or a geophysical observatory. Inaccurate reports had been reexamined by macroseismic lists of queries.

The observed effects are classified according to the macroseismic scale MSK 1964. Because of strong long-period waves, resonances of multi-story buildings have been observed, which cannot be classified in MSK values. Therefore only reports from first and second floor were used.

At larger distances – and even in towns North of Hannover – free suspended objects like lustres oscillated for up to some minutes. It can roughly be supposed that these last effects have been observed in most parts of Germany. If only these oscillations were reported, the intensity value II was attached.

According to Figure 1, the area near the southern border of Germany was shaken with an intensity of V and nearly the whole Molasse basin with an intensity of IV. Due to missing data the change from intensity III to II cannot be established very accurately and for the same reason an effect of geological structures upon macroseismic intensities cannot be attached. Roughly one can

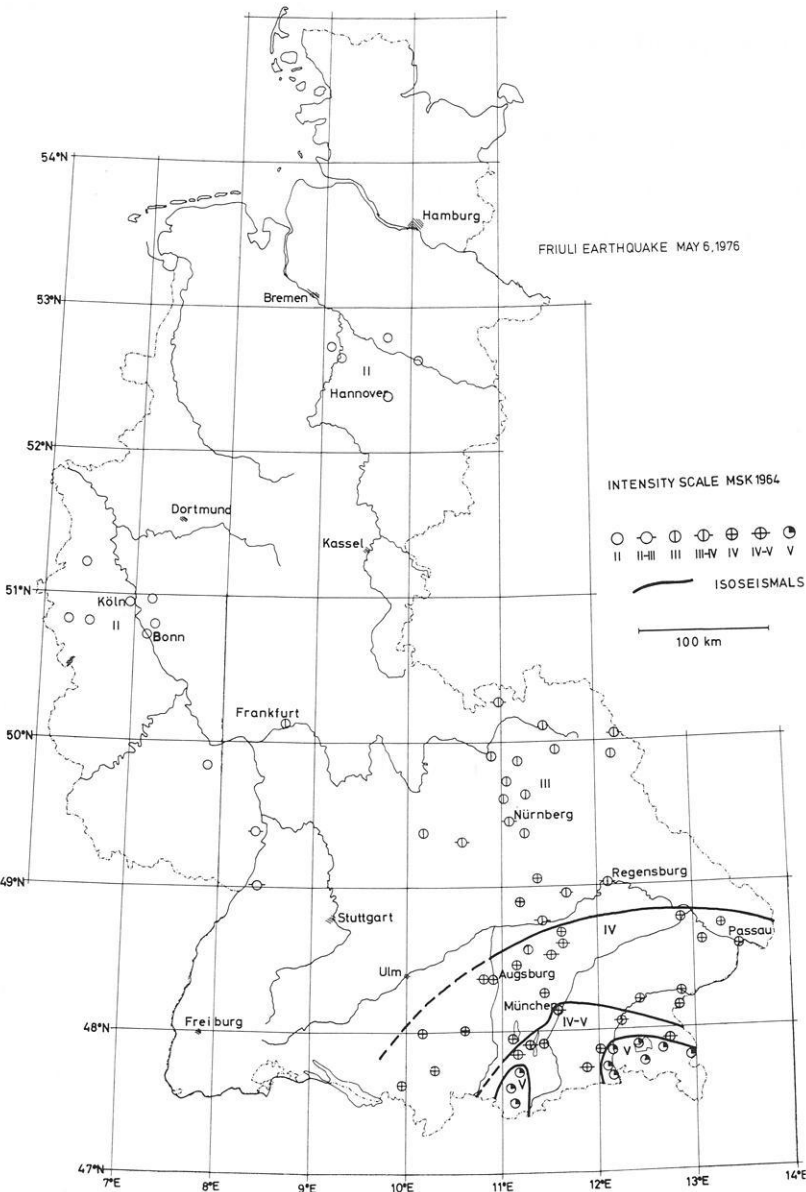


Fig. 1. Macroseismic map of the Federal Republic of Germany for the Friuli earthquake of May 6, 1976

say that between the rivers Danube and Main an intensity of III was observed, while North of the river Main only intensity II was reached.

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References

- Kárník, V., Procházková, D., Ruprechtová, L., Schenková, Z., Dudek, A., Drimmel, J., Schmedes, E., Leydecker, G., Rothé, J.P., Guterch, B., Lewandowska, H., Mayer-Rosa, D., Cvijanovič, D.: Macroseismic effects of the Friuli earthquake of May 6, 1976 in Austria, Czechoslovakia, F.G.R., France, Poland and Yugoslavia. Proc. Intern. Meet. Friuli Earthqu., Udine, Dec. 4–5, 1976. *Boll. Geofis. Teor. Appl.*, **19**, part 1, 729–737, 1976
- Kárník, V., Procházková, D., Schenková, Z., Ruprechtová, L., Dudek, A., Drimmel, J., Schmedes, E., Leydecker, G., Rothé, J.P., Guterch, B., Lewandowska, H., Mayer-Rosa, D., Cvijanovič, D., Kuk, V., Giorgetti, F., Grünthal, G., Hurtig, E.: Map of isoseismals of the main Friuli earthquake of May 6, 1976. *Pure Appl. Geophys.*, 1977 (in press)

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