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False color map of intracellular calcium concentration in a guinea pig cerebellar Purkinje cell at the onset of a wave of complex spike activity. A high calcium concentration is observed in the distal dendritic tree. The map was produced from microfluorometric imaging of the fluorescent calcium indicator fura-2. See page 773. [D. W. Tank and J. A. Connor, Molecular Biophysics Research Department, AT&T Bell Laboratories, Murray Hill, NJ 07974; M. Sugimori and R. R. Llinás, Department of Physiology and Biophysics, New York University School of Medicine, New York, NY 10016]

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