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COVER

False-colored electron micrograph of the rough endoplasmic reticulum (ER, light green), which consists of elongated membrane structures studded with ribosomes (dark green dots) and is adjacent to the nuclear envelope (dark green, right). The ER is the entry portal for newly synthesized membrane and secretory proteins (circular mitochondrion: ~0.49 micrometers wide). Two Reviews (pages 1081 and 1086) describe the ER's role in protein quality control. A News package (beginning on page 1046) discusses a number of fundamental mysteries in cell biology.

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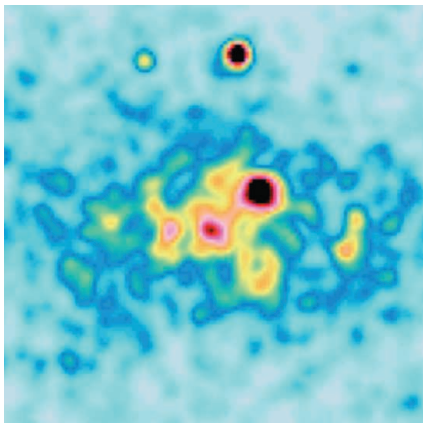

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Last Glacial Maximum temperature reconstructions and model simulations can constrain the equilibrium climate sensitivity.
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