

Mathematics Awareness Month - April 2009

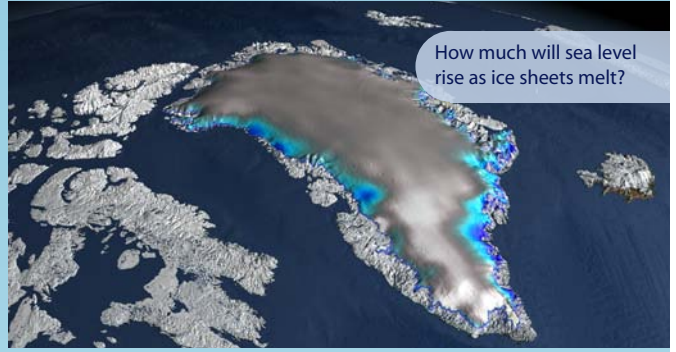
# Mathematics and Climate

Discover how math and science are used to address questions of climate change:

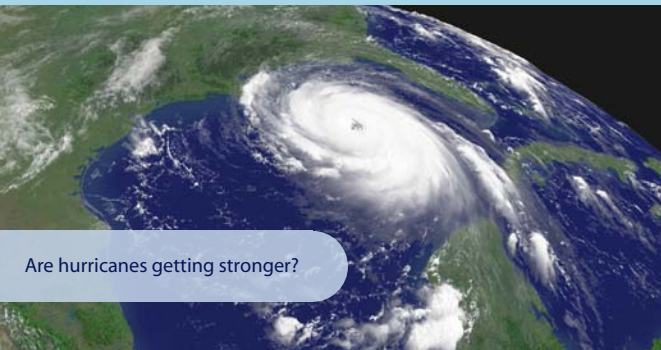
How long will the summer Arctic sea ice pack survive?



How much will sea level rise as ice sheets melt?



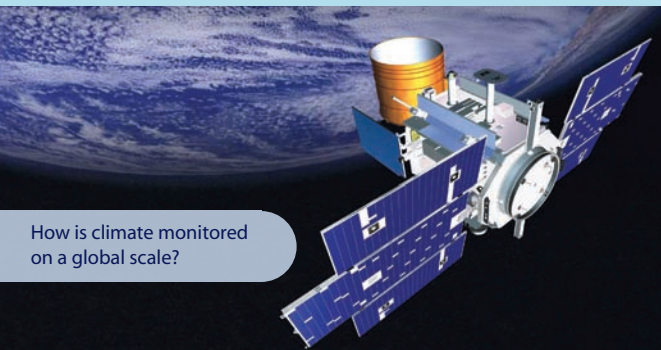
Are hurricanes getting stronger?



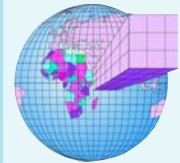
How do human activities impact global warming?



How is climate monitored on a global scale?



How can we improve our understanding of climate change and what can we do about it?



$$\frac{\partial \mathbf{u}}{\partial t} + (\mathbf{u} \cdot \nabla) \mathbf{u} = -\frac{1}{\rho} \nabla p + \mathbf{F} + \frac{\mu}{\rho} \nabla^2 \mathbf{u}$$

$$\frac{\partial \rho}{\partial t} + \nabla \cdot (\rho \mathbf{u}) = 0$$



[www.mathaware.org](http://www.mathaware.org)

Committee  
Chair: Kenneth Golden (University of Utah)

Kerry Emanuel (MIT)  
Margot Gerritsen (Stanford)  
Jon Huntsman, Jr. (Governor of Utah)  
Mary Lou Zeeman (Bowdoin)

Inez Fung (UC Berkeley)  
David Holland (NYU)  
David Neelin (UCLA)  
Jay Zwally (NASA)

**Joint Policy Board for Mathematics: American Mathematical Society, Mathematical Association of America, Society for Industrial and Applied Mathematics, American Statistical Association**

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