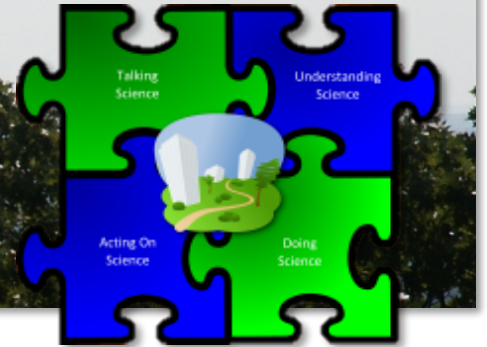


Urban EcoLab Curriculum

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Increasing Temperatures and Stronger Hurricanes

What is happening over time?

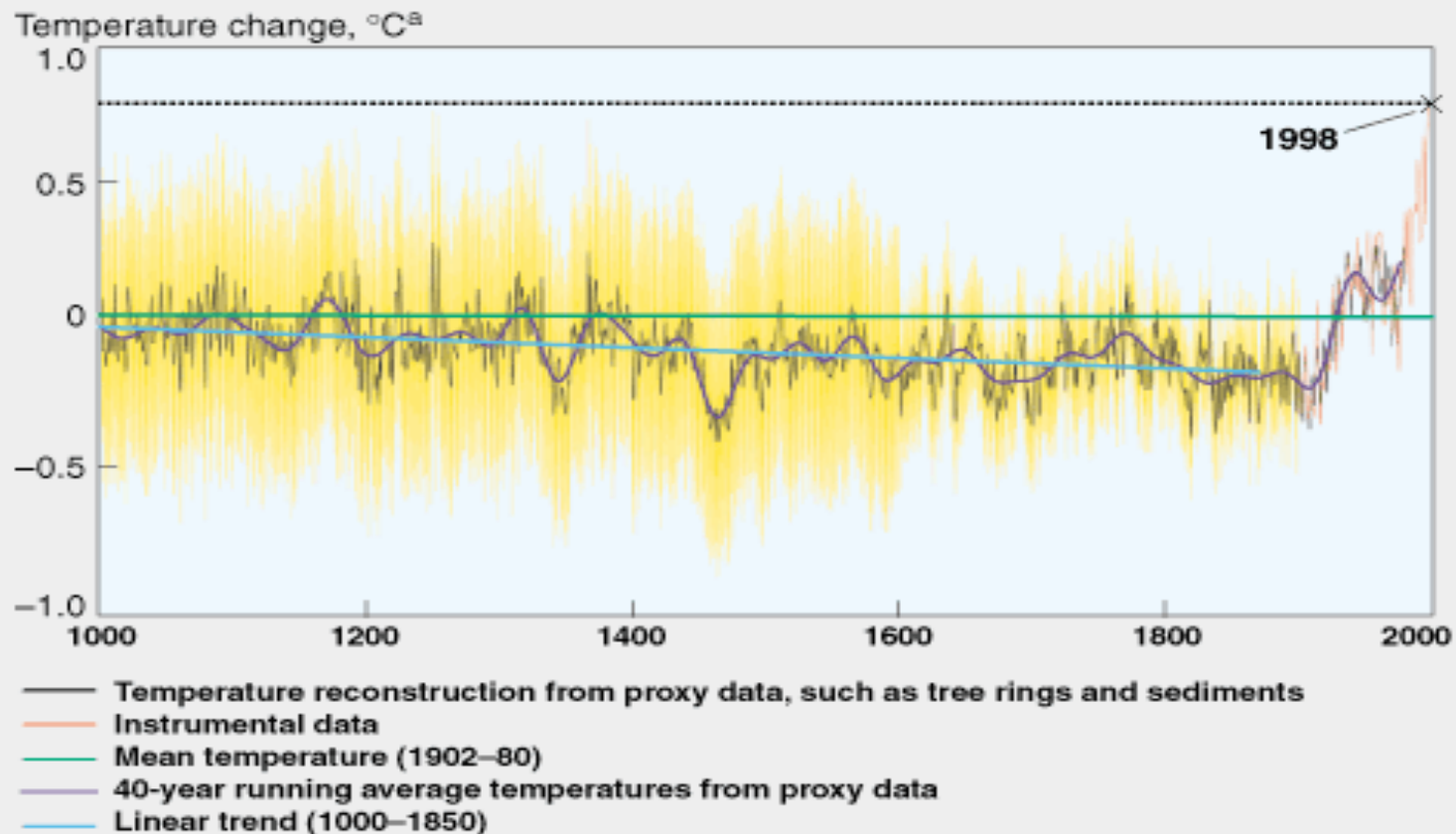
Module 3 Lesson 3



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Temperature over the past 1000 years

Average global temperature in 1998 was higher than it has been for 1,000 years

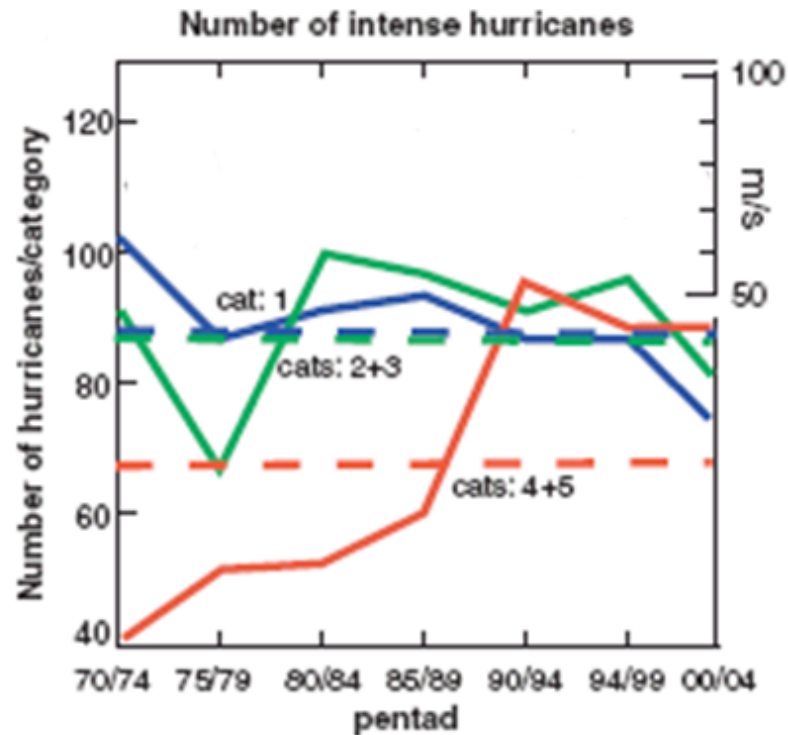


Note: Yellow region indicates uncertainties. ^a Temperature change from the 1902–80 mean.

Source: *Geophys. Res. Lett.*, **26**, 759 (1999)

NUMBER OF HURRICANES:

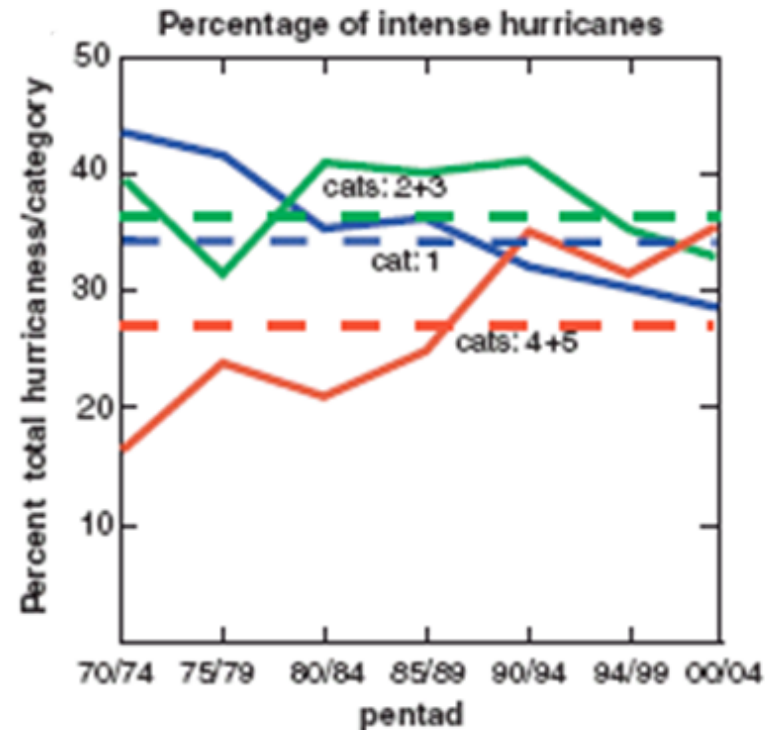
What is happening to the number of Category 4 & 5 storms over time?



Webster, P. J., Holland, G. J., Curry, J. A., and Chang, H.-R. (2005). Changes in Tropical Cyclone Number, Duration, and Intensity in a Warming Environment. *Science*, 309, 1844 – 1846.

What are the trends?

1. In 1970-1974, which category of hurricanes was the most common?
2. In 1980-1984, which category of hurricanes was the most common?
3. In 1990-1994, which category of hurricanes was the most common?
4. What is the trend from 1970 to now? Should we be concerned?



Webster, P. J., Holland, G. J., Curry, J. A., and Chang, H.-R. (2005). Changes in Tropical Cyclone Number, Duration, and Intensity in a Warming Environment. *Science*, 309, 1844 – 1846.