

MORE Science at UTSA

Environment Science and Engineering

Spring 2007 Seminar Series

Where: Loeffler room (3.03.02) in the BioScience Building

When: 4:00 PM – 5:00 PM on March 9, 2007

Snack and drinks will be served

Speaker: Dr. Achim Stossel



Dr. Stossel is currently Associate Professor in the [Department of Oceanography, Texas A&M University](#) where he teaches classes in physical oceanography, numerical modeling of ocean circulation, and dynamics of the ocean and atmosphere. He received his B.S., M.S. and PhD degrees in Germany in 1977, 1985, and 1990, respectively. He was a research scientist at Max-Planck-Institute for Meteorology from 1990-1994 and joined Texas A&M as an assistant professor in 1994.

Dr. Stossel's research interests include sea ice – ocean modeling, interactions of atmosphere, sea ice, and ocean, polar boundary-layer processes, impact of polar processes on global ocean properties and circulation, and variability of deep western boundary currents.

Topic: **Southern ocean sea ice and convection in global ocean general circulation models**

This presentation is to address a series of problems associated with the simulation of the high-latitude Southern Ocean in the framework of a global ocean general circulation model (GCM). These problems evolve mainly around the model representation of sea ice and oceanic convection, such as their link to the global thermohaline circulation, their link to interdecadal variability, as well as their high-resolution representation in the framework of a coarse-resolution ocean GCM that is sufficiently economic for investigations of the long-term global deep-ocean's response. Other problems to be briefly discussed include the possibility of representing snow on sea ice more reliably by assimilating satellite-derived snow thickness, the effect of upgrading the sea-ice component by multi ice-thickness categories, and the effect of considering sea-ice feedback for determining the strength of the atmospheric forcing of sea ice.