



***“Advancing Ocean Knowledge,
Fostering Sustainable Development:
from the Indo-Pacific to the Globe”***

Causes and consequences of the 2015-16 El Niño

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An El Niño of surprising intensity developed in 2015-16, affecting patterns of weather variability worldwide. The event rivaled the 1997-98 El Niño, the strongest on record, in its magnitude and impacts. El Niño-related drought, flooding, severe weather, and wild fires affected far reaching parts of the globe in 2015-16, with consequences for agriculture, power generation, economic development, and human health. In some regions such as Ethiopia, the lack of rainfall led to a humanitarian crisis because of the severity of drought and its effects on food security. This 2015-16 El Niño also affected Pacific marine ecosystems and fisheries, most notably contributing to record coral bleaching event that affected approximately 40% of the world's coral reefs.

This presentation will describe the evolution of the 2015-16 El Niño, how it compared to previous El Niño events, and how well it was predicted by various forecasting centers. The physical mechanisms that gave rise to it, and the widespread climatic and ecosystem impacts that resulted from it, will also be highlighted. The question of whether global warming has had an effect on El Niño will also be addressed.