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Natural Geoengineering

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The assessment of known risk and allowance for unknown risk is paramount in all consideration of geoengineering. Earth's past climate cycles demonstrate a proven mechanism of global cooling. Following nature minimizes risk. Here I present evidence that Earth's natural mechanism of global cooling, operating on all timescales, is an equatorially symmetric La Niña (ESLN) mode triggered in part by internal tide resonance in the equatorial wave guide. A very large passive wave-making device anchored in the shear surface below the Pacific Equatorial Undercurrent (EUC) may amplify existing internal waves to the same effect. The EUC is rich in iron and surfaces during ESLN. The equatorial plankton bloom observed during the 1998 ESLN is consistent with high sediment accumulation rates during ESLN at glacial maxima, indicating a possibly significant role in carbon sequestration.