

Magellan's Leadership: Did the Weather Change History?

El Nino may have eased voyage

Researchers speculate that Ferdinand Magellan's passage across the Pacific Ocean 500 years ago may have been dictated by mild conditions and favorable winds during an El Niño.



The weather pattern caused by an El Niño may have helped Ferdinand Magellan cross the Pacific Ocean nearly 500 years ago.

JAKARTA, Indonesia (Achieve3000, May 15, 2008). In recent decades, the weather pattern caused by an El Niño has puzzled weather experts. Now, scientists say that this mysterious warming of the Pacific Ocean may have played a role in history. It may have allowed explorer Ferdinand Magellan to lead a great journey. That journey went all the way around the world.

About 500 years ago, Magellan's fleet of ships sailed west from Spain. Magellan was looking for a westward route to the Pacific Ocean. His goal was the Spice Islands. (The Spice Islands are now part of Indonesia.)



About 500 years ago, Ferdinand Magellan left Spain. He sailed west. The ships were headed for the Spice Islands. They landed in the Philippines instead.

The voyage was riddled with difficulties. As the crew sailed farther from the equator, the seas grew stormy. One of the vessels was lost. Over a year after leaving Spain, Magellan's remaining ships finally reached the Pacific Ocean. According to Magellan's journal, it was there that the fleet was greeted by unusually calm weather.

At that point, Magellan believed that success was his. He predicted that he would reach the Spice Islands in only a few days. He did not know that the Pacific Ocean was so large, however. It took longer to cross than he thought. Meanwhile, his men were dying. Many suffered from

scurvy. Scurvy is a disease. It is caused by a lack of vitamin C. After four months, the ships finally crossed the Pacific Ocean. They docked in the Philippines. This was north of Magellan's plotted course.

It was in the Philippines that the journey ended for Magellan. He was killed while fighting with native people.

For centuries, scientists have had questions about Magellan's journey. They have wondered why the explorer sailed farther north than he had planned. They have also wondered why the Pacific was unusually calm during the voyage. Now, two scientists think they may have some answers.

Scott M. Fitzpatrick is from North Carolina State University. Richard Callaghan is from the University of Calgary in Canada. Fitzpatrick and Callaghan suspect that Magellan's passage across the Pacific Ocean may have been eased by the calming effects of an El Niño-caused weather pattern.

During an El Niño, the waters of the Equatorial Pacific become warmer than usual. This creates rising currents of air that change wind and weather patterns. The effects can be seen worldwide. An El Niño causes droughts in some places and floods in others. Scientists know from tree rings that an El Niño was in fact happening in 1519 and 1520.

So why did Magellan go to the Philippines? The two scientists suspect that it was the El Niño-generated winds that took the fleet north. The prevailing winds would have allowed Magellan's ships to simply sail, needing fewer crew members. This may have been necessary since many members of the crew had been struck down with scurvy. It is possible that it was the El Niño that allowed the fleet to make it across the Pacific.

It is also possible that Magellan *wanted* to go north. The explorer's writings indicate that he chose a northerly route because of reports of a famine in the Spice Islands. Scientists say that this supports the El Niño idea. El Niño events often result in famine-producing droughts in that region.

Although Magellan did not live to see the completion of the voyage, his name lives on. This is due to the fact that his remaining crew members pressed on. They took two ships to the Spice Islands. Once loaded with spices, one ship headed back to Spain the way it had come. The other continued westward. It reached Spain in September 1522. It became the first ship to sail around the world.

The Associated Press contributed to this story.

Dictionary

famine (*noun*) a severe lack of food

indicate (*verb*) to show or point to

prevailing (*adjective*) most commonly found in the area at that time