
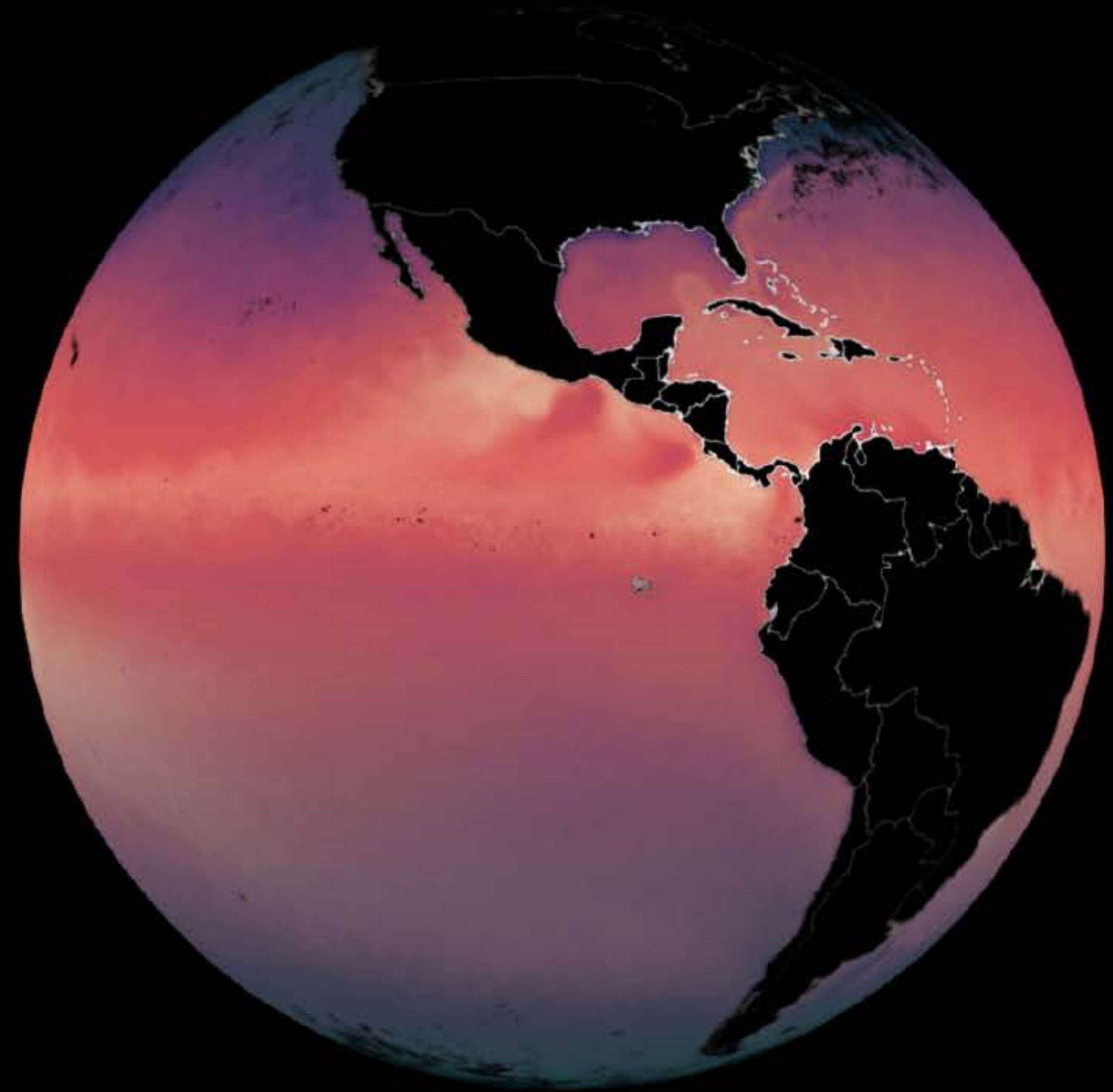


2014  Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec



The ocean receives most of its heat
along the equator from incoming
direct radiation from the sun.



(Earth is rotating around sun; globe can be rotated with trackball and is showing sea surface temperature)

2014

Jan

Feb

Mar

Apr

May

Jun

Jul

Aug

Sep

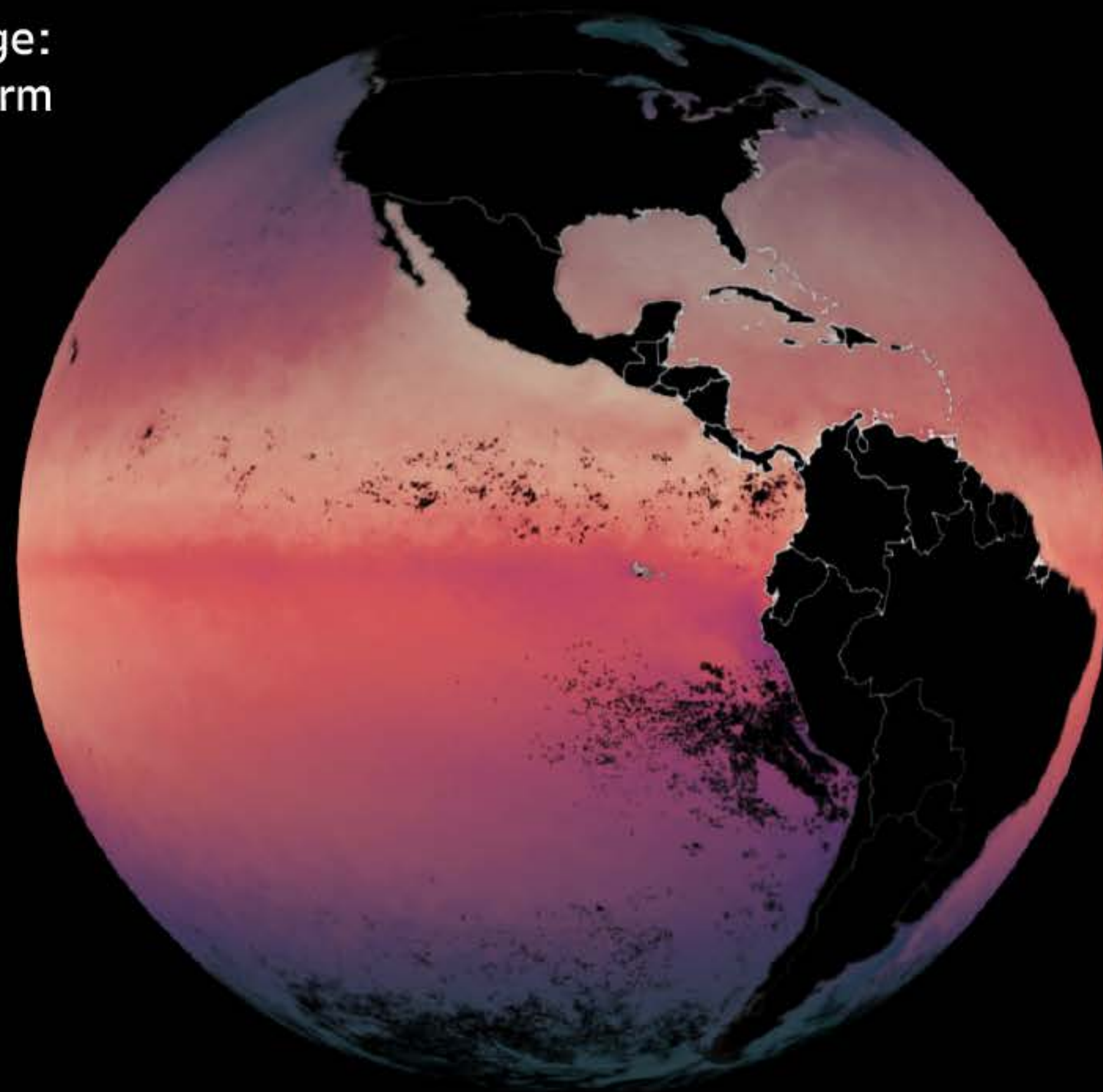
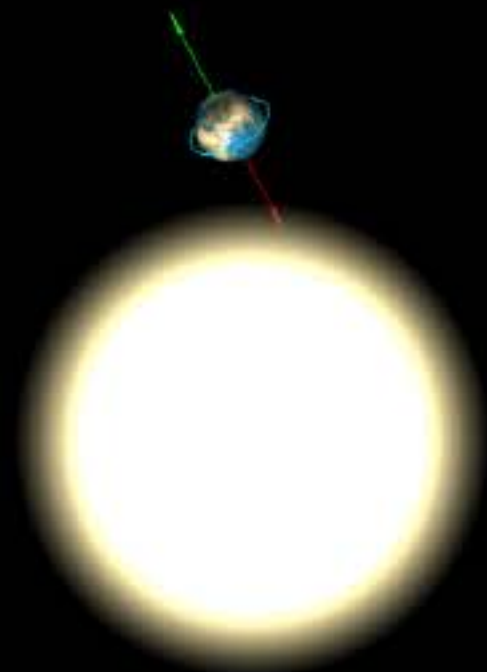
Oct

Nov


Dec

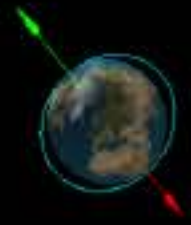


Over time, seasonal patterns emerge:
due to the Earth's tilt, a band of warm
water shifts north and south as the
Earth revolves around the sun.

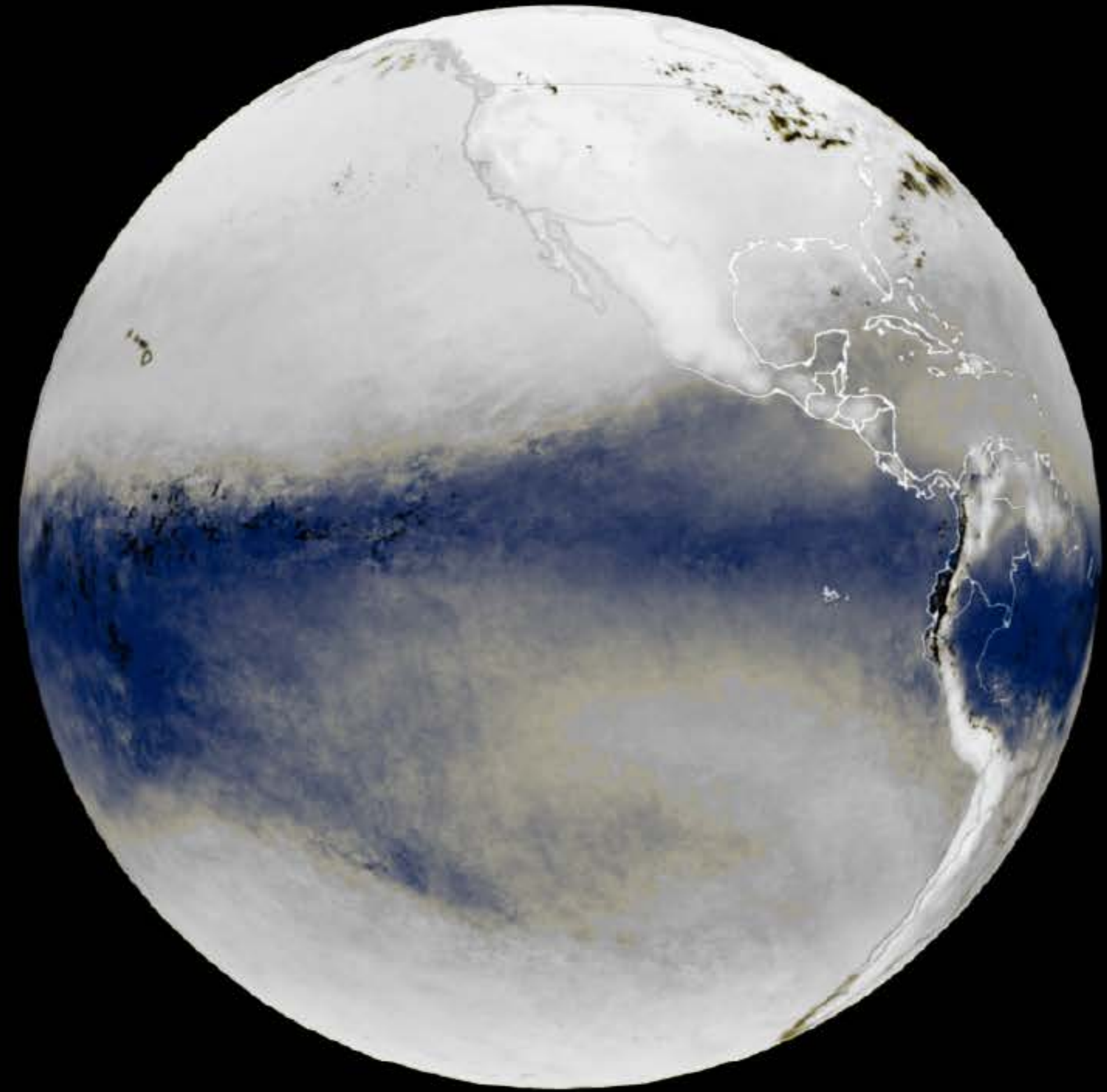


(time speeds up to show band going up and down; text/arrow follows the band)

2016  Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec



Heat escapes the ocean as
water vapor and rises to warm
the overlying atmosphere.



(time slows back down to normal speed)

2016

Jan

Feb

Mar

Apr

May

Jun

Jul

Aug

Sep

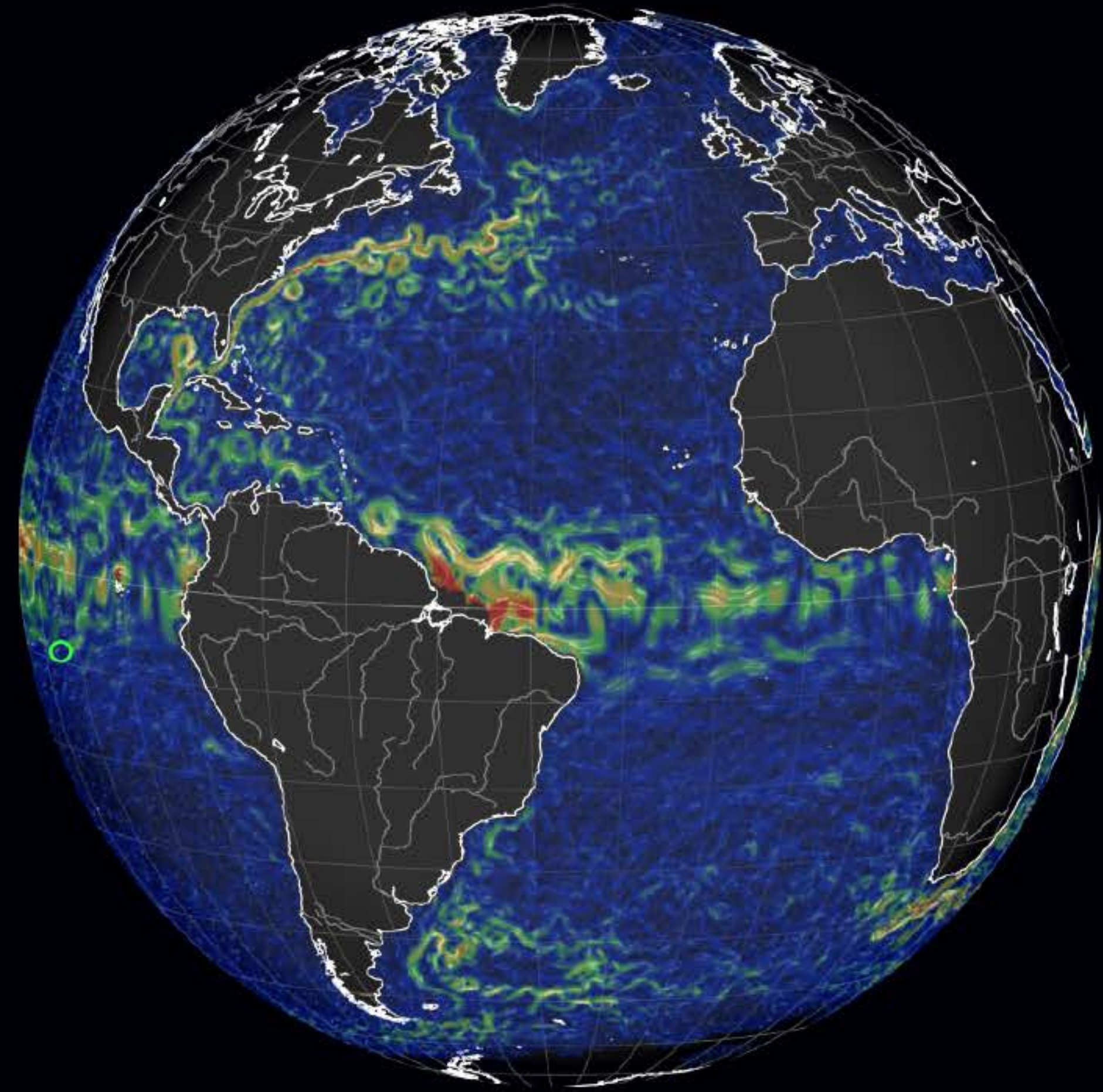
Oct

Nov

Dec



Warm air creates air temperature gradients making wind that drives ocean current patterns.



(time slows down to a speed where you can see the wind/currents)