

Spotlight

Atoll Formation (Standard Theory)



The standard theory of atoll formation states that a volcanic island forms in deep tropical waters, giving coral polyps a foundation to grow on (above, top). In time, the volcano becomes dormant and the island begins to subside. Coral reefs, originally fringing the edges of the island, become a barrier reef outlining the contour of the original coastline (above, middle). After the original island slips entirely beneath the waves, all that is left is a coral atoll (above, bottom). (Images by Robert Simmon, NASA GSFC)