Recycling in reefs: Corals secrete vast quantities of slime to protect themselves against drying out and being colonized by foreign growths (fouling). Not only do they themselves benefit from this, it also helps stabilize the reef ecosystem – as scientists from the Max Planck Institute for Marine Microbiology in Bremen, along with colleagues from Australia and Jordan, discovered on Heron Island in the Great Barrier Reef (photo). They analyzed the slime on its entire journey – from source to breakdown in the lagoon's carbonate sand. Dissolved in water, most of the slime provides nutrition for microorganisms, while the rest forms carpets in which plankton and filamentous algae, microcrustaceans and fish eggs become trapped. This carpet disintegrates after a few hours and aggregate particles sink to the ocean floor, providing food for fish, crustaceans and snails. When water flows out of the lagoon at low tide, dissolved and gelatinous slime enters into the sediment, where it finds further hungry customers. PHOTO: SPACE IMAGE