of ^{13}C-labelled methane to tank water established that the tanks were the source of the methane. Molecular techniques revealed the presence of well-known methanogens in the tank water.

Unfortunately, extrapolating methane fluxes from small-scale studies such as this one to larger spatial and temporal scales is notoriously difficult. Methane dynamics are complex. For example, methane emitted to the atmosphere represents only a portion of that produced by microorganisms[6]. Flux from the anoxic site of production to the atmosphere can be quite tortuous. And the introduction of oxygen, such as that derived from plant photosynthesis, can stimulate aerobic methane-consuming bacteria, diminishing methane emissions. Some plants can serve as a conduit to bypass the oxidizers. Other plants enhance the flux of atmospheric oxygen to their roots, which forces methane into the atmosphere through pressurized ventilation[7], and thereby increases methane emissions. Whether such mass flow operates in tank bromeliads is unclear.

Martinson *et al.*[1] show that tank bromeliads foster unexpected wetlands, which serve as a source of methane in the tropics, and conservatively estimate that these plants contribute 1.2 Tg of methane per year. Clearly, bromeliad emissions are unable to account for the high methane concentrations observed above tropical forests. But hopefully, the work will spur the search for cryptic wetlands lurking in other remote places. Personally, I believe that we have missed many obscure wetlands out there and they are waiting to be discovered. At least that's how I like to justify my day-off jaunts into the woods to search for wetlands. ❐

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OCEAN SCIENCE

Last-minute monitoring

Hurricanes are notoriously difficult to measure. As well as devastating houses, roads and coastlines, the strongest tropical cyclones tend to destroy any measurement equipment put in their path. As a consequence, it is difficult to reconstruct ocean and atmospheric conditions during these storms. For example, during Hurricane Katrina none of the tidal stations survived where the storm hit the shore, and only one wave record was retrieved.

By the time Hurricane Gustav struck the Gulf of Mexico three years later, a strategy to counter the problem was in place. Andrew Kennedy and colleagues report observations from 20 pressure sensors that were designed to withstand the forces of a hurricane (*Cont. Shelf Res.* **30,** 1743–1752; 2010). The devices were deployed by helicopter close to the expected region of landfall just two days before the storm struck, and collected again by divers shortly after. Fourteen of the sensors delivered data from water depths of 1.4–23.1 m and documented highly heterogeneous characteristics of waves and inundation along the coast.

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On the western, weaker side of Hurricane Gustav, maximum wave heights amounted to a modest 2 m or less. In contrast, wave heights rose to 5.2 m where the storm hit the land. On the eastern side of the Mississippi Delta, pressure gauges that were hundreds of kilometres away from the point of landfall still recorded wave heights of up to 5.6 m.

These regional differences resulted from the angle of the hurricane's approach towards the land, the sheltering effect of the Mississippi Delta. The area of water available to the wind to whip up large waves, and water depth as well as seafloor roughness near the coast also affected wave heights.

To make full sense of the data, many more storms will need to be sampled in similar detail. This may well be realistic: the equipment was relatively inexpensive and it was ready for reuse after just a few days. The procedure of deployment was also swift: it took just one to two minutes to deploy each sensor, and ten minutes for its retrieval.

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