

## Extreme caution advised for anchors in tropical, marine areas

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Disturbed by recent accidents caused by fixed anchors that failed, the UIAA is warning climbers to be extremely vigilant in checking for corrosion on anchors in tropical, marine environments.

Early results from a study prompted by the accidents are startling. Among fixed anchors in tropical, marine locales examined for far, 10 to 20 percent would fail with a force of 1 to 5 kN applied. The UIAA standard for fixed anchors is a minimum of 22 kN (1 kN is the weight of a mass of 100 kg).

In addition, while some weakened fixed anchors had visible cracks, others had no cracks and appeared only somewhat corroded. Some of these seemingly less compromised anchors also broke with 1 to 5 kN of force.

Overall, some fixed anchors broke bearing only the weight of a climber. And all examined were stainless steel, which meets the UIAA safety standard and has a reputation of holding up well against corrosion. The corrosion in this particular locale appears to be accelerated by the proximity of the sea and year-round warm, wet weather.

The UIAA Safety Commission, in cooperation with Petzl, launched the study earlier this year. Jean-Franck Charlet, president of the commission, says the UIAA wanted to alert climbers about the danger as soon as possible.

### **Dominican Republic**

Once the study is complete, he added, the Safety Commission will start talking about solutions. The final study will be posted on the UIAA Web site.

Charlet said an incident in the Dominican Republic last winter led to the study. A fixed anchor on a route failed with the weight of just one climber, who fell to the ground and was injured.

Petzl sent a representative to the area, who discovered many anchors affected by corrosion. It's difficult to know worldwide how widespread this problem is, Charlet said. "It is impossible to check all the routes and every place is different: distance from the sea, wind direction, exposure to the sun."

In the meantime, the UIAA advises climbers to abide by the following:

- Before climbing, talk to local climbers and with local people who equipped the routes about the quality of the anchors in place.
- Find out if a climbing area is regularly re-equipped. Experience to date shows that if anchors are less than three years old, they are less likely to be weakened.
- Look for tracks of rust on anchors. If you see such marks, do not load the anchor and stop the climb, as it is just these sorts of anchors that have been dangerous in the study. Alert locals so they can deal with the situation. You can also change the weakened anchor.
- As a precautionary principle, the UIAA highly advises climbers to not climb on routes in tropical, marine environments that show rust, or for which you don't know who maintains the routes or when the equipment was put in place.
- Even with positive knowledge about the climbing routes, know that you ultimately must verify for yourself the quality of the anchors in place.

Read full [Safety Commission report](#).