

## **Field test research regarding application of optical fiber sensor to landslide research.**

### **[ Point ]**

We grasped landslide range using optical fiber sensor in Okimi landslide area, which is test site of Nigata Landslide Research Centre and verified regarding applicability of stress distribution grasp in anchor construction.

As a result, we could grasp block boundary by earth surface measures displacement using the B-OTDR, which couldn't be grasped by transfer piles, we clarified its efficiency for establishment of initial system at landslide occurrence time, and determination of block boundary. Moreover, in the measuring by FBG sensor, we could get the almost same result as current strain gauge, then we need more verification of applicability to long-term management purpose.

Keyword : landslide, landslide research, optical fiber sensor, B-OTDR,FBG