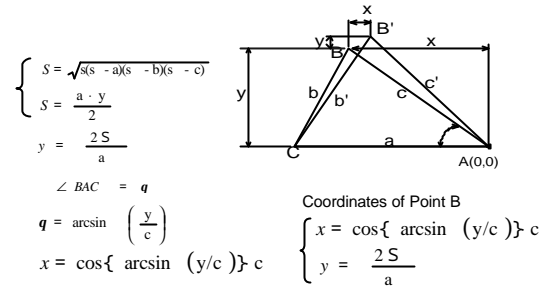


# Monitoring Method of Slope Behavior by Optical Fiber

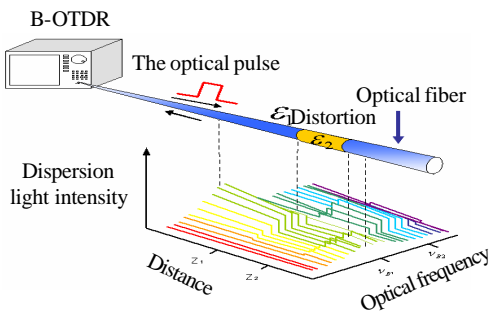
## The feature of the optical fiber sensor (B-OTDR)

- It is easy to take the influence by temperature into consideration.
- it is measurable in field or a line.
- Measurement time is about 10 minutes from several minutes.
- A power supply is unnecessary in the spot and remote maintenance can be performed.

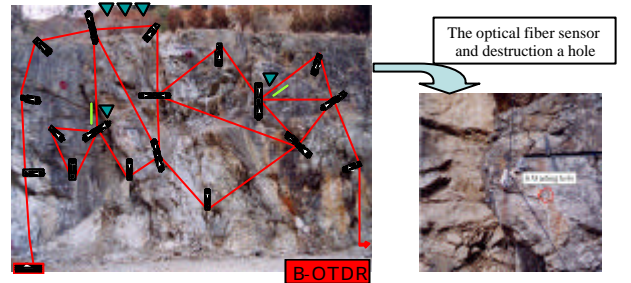
## The decision method of two dimensional moving location



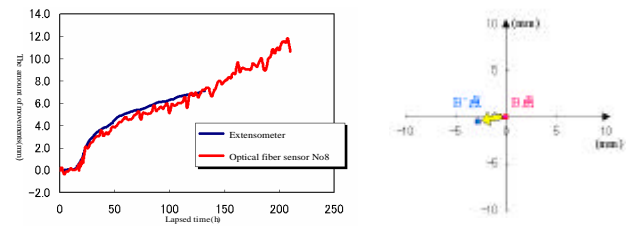
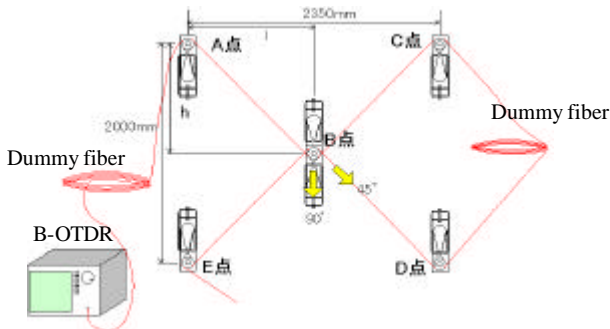
## Monitoring concept of the optical fiber sensor



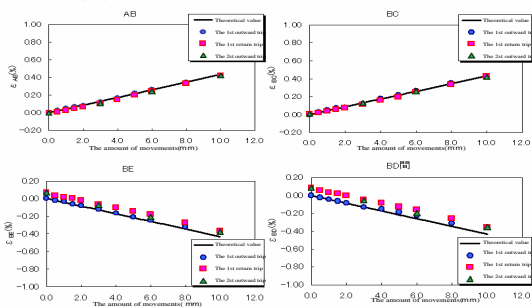
## Monitoring of rock rock slope using optical fiber



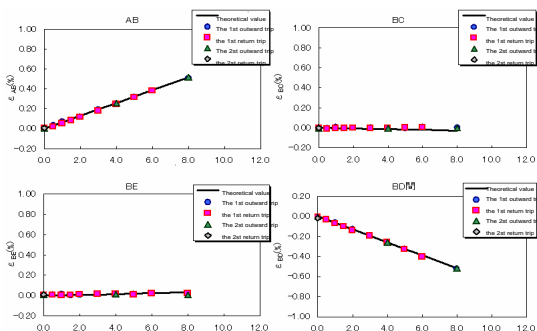
## The laboratory test displacement for various direction



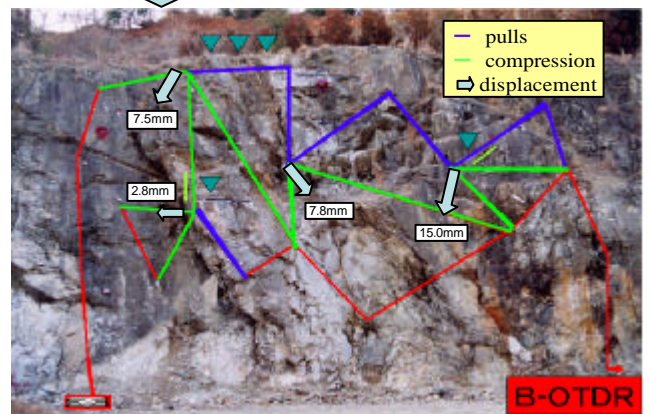
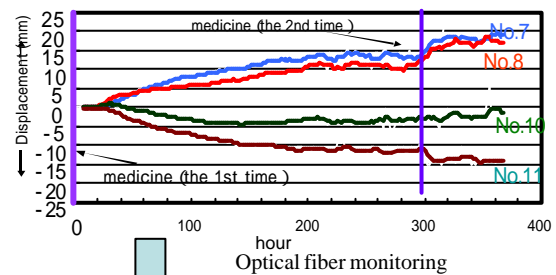
An extensometer and an optical fiber      The displacement of B points



### 1) At the time of 90°



### 2) At the time of 45°



Monitoring result