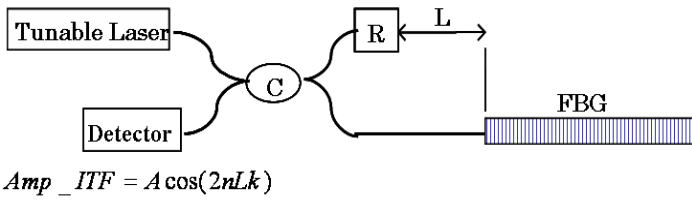


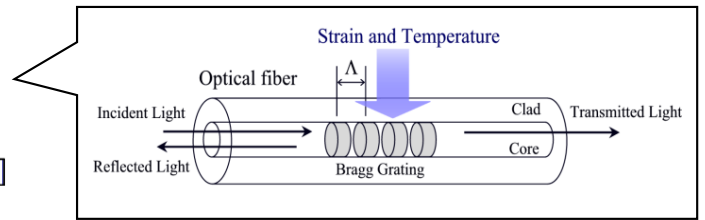
# FBG/OFDR Sensing System

**Sub-millimeter spatial resolved strain distribution is possible**  
**Water-tough, Explosion-proof, Applicable for strain monitor for important parts**

## OFDR Principle Optical Frequency Domain Reflectometry

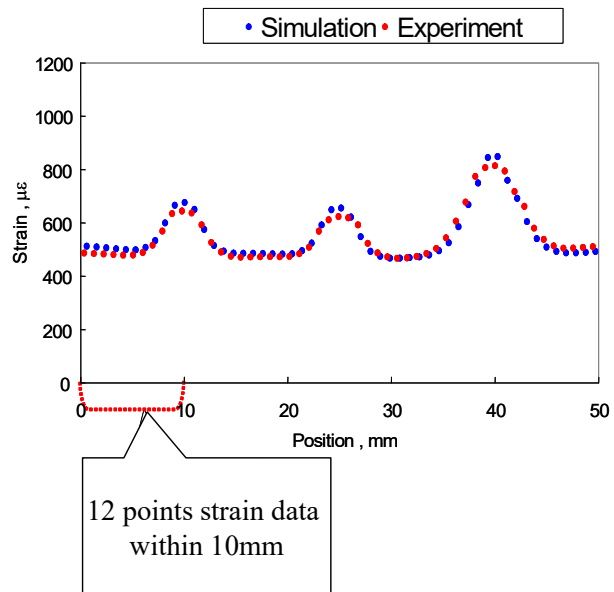
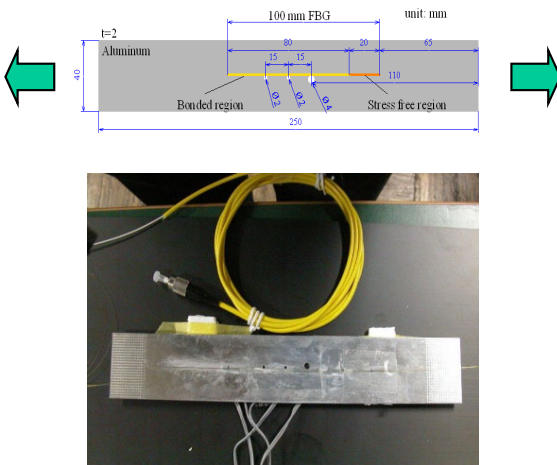


## Fiber Bragg Grating sensor



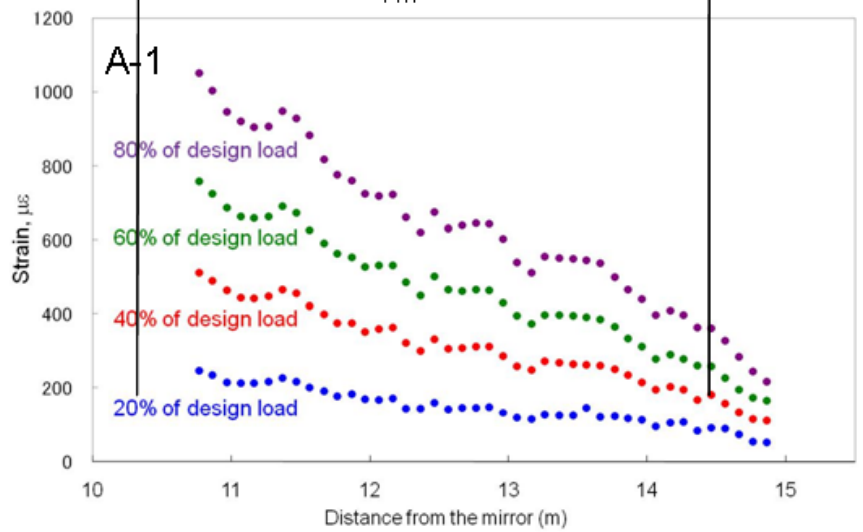
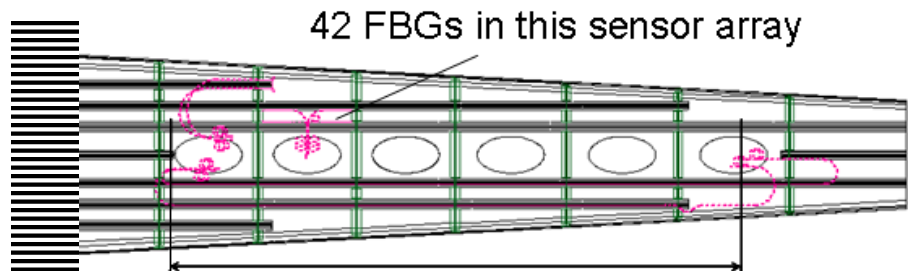
- 【Performance】**
- Max. 20 meters
  - Spatial resolution : 0.6mm (typical)
  - Strain resolution :  $1 \mu \epsilon$
  - Sampling : 1Hz (typical)

## Spatial resolution





VaRTM Composite Full-scale Wing Demonstrator (length = 6 m) by JAXA

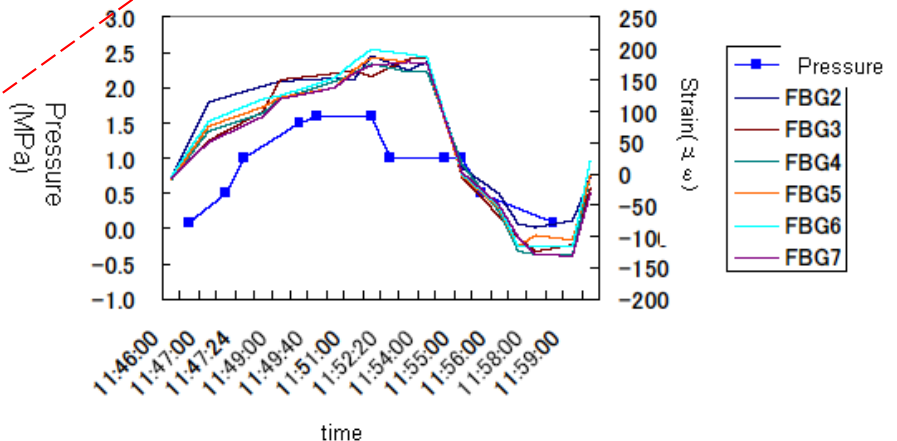


Strain distribution at different loads

Pressure Vessel at Oil refinery



FBG array



Linear strain movement along with pressure operation