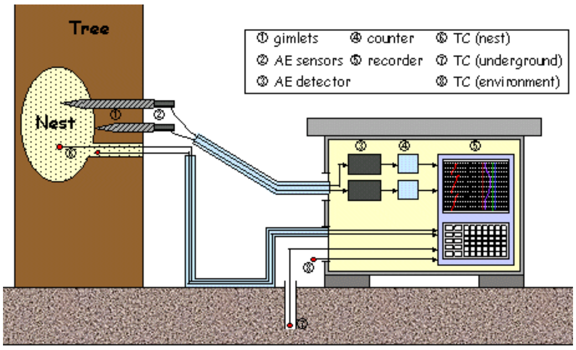
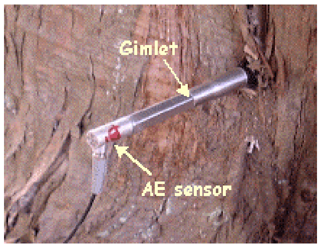
Continuous Monitoring of AE Generated from Nest of *Coptotermes formosanus*

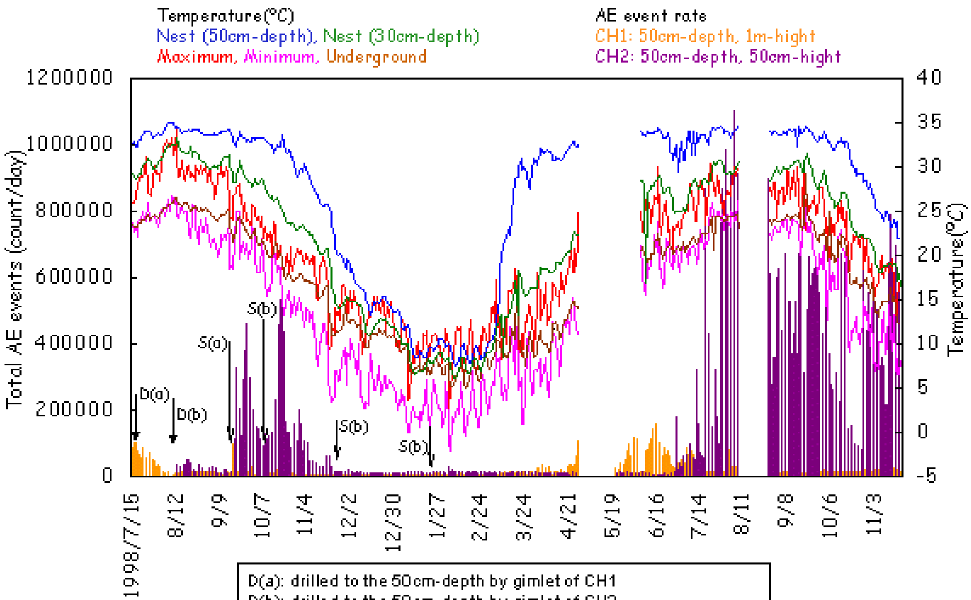
AEs generated from a colony of Coptotermes formosanus Shiraki in a standing tree were detected continuously. AEs were monitored at two points using wave-guides inserted in the stem, at the nest center and underneath the nest sphere, respectively. The four temperature changes were also measured continuously for about one year using thermocouples, at the center of the nest, underneath the nest sphere, in the environment of the tree and underground, respectively.



Measurement methods of AE and temperatures



Attachment of AE sensor and gimlet



D(a): drilled to the 50cm-depth by gimlet of CH1
D(b): drilled to the 50cm-depth by gimlet of CH2
S(a): rotate gimlet of CH1 to 360 degree, and hit the gimlet of CH2
S(b): rotate gimlet of CH1 to the right- and left-handed 360 degree

Soldier termites from drilled hole

Soldier termites on the gimlet