

Gamma Detector of the Shintake monitor

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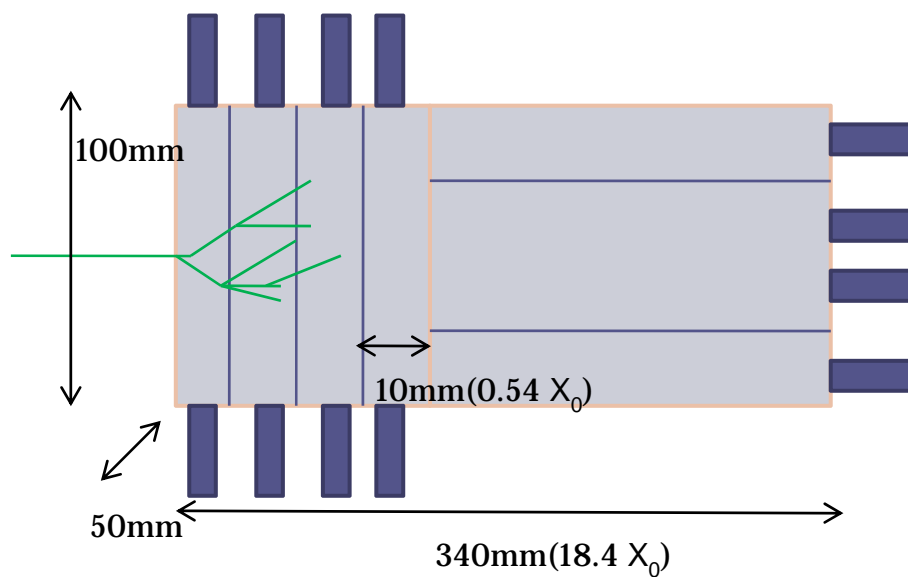
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Overview

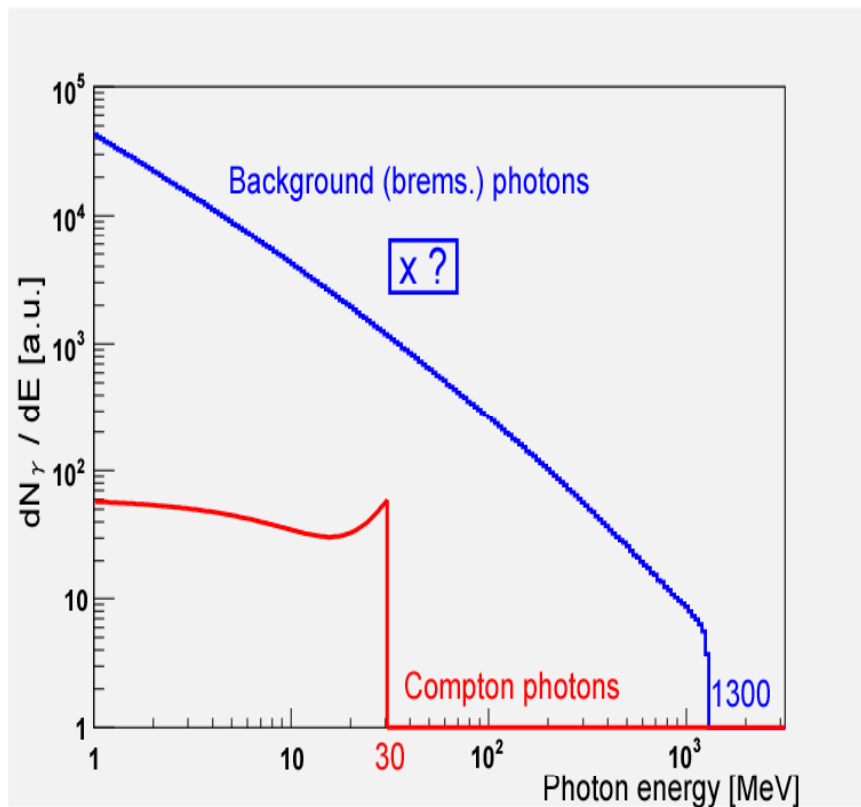
- **Framework of the detector**
- **Report of beam time 2007 Dec.**
- **Plans : what to do next**

Gamma detector for Shintake monitor

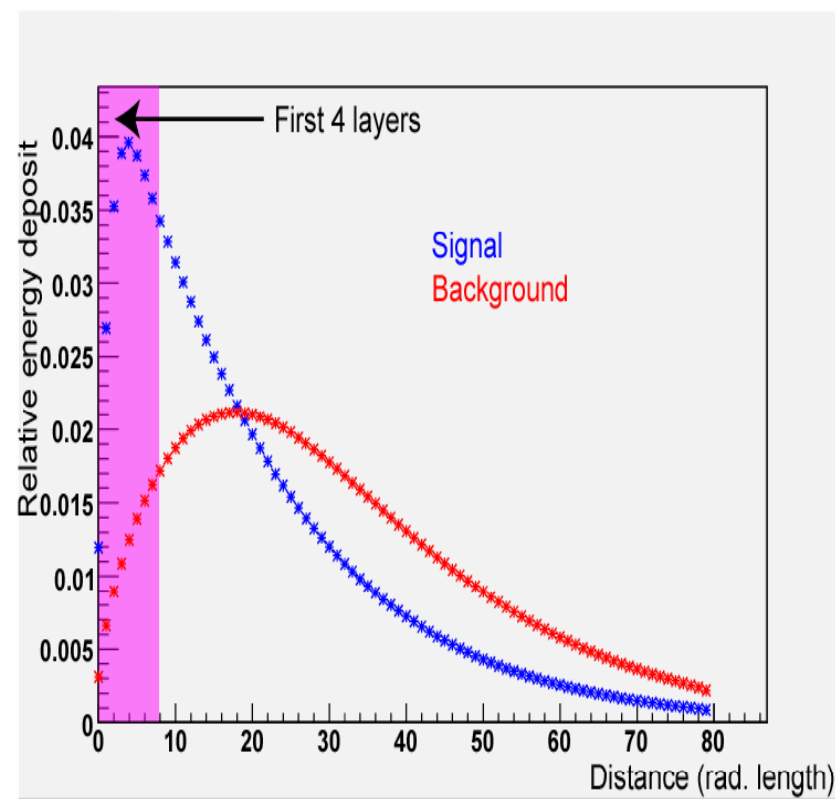


**CsI(Tl) crystals (from the Belle group)
wrapped with teflon sheet and the Al foil**

The difference of energy distribution



Energy distribution of photons



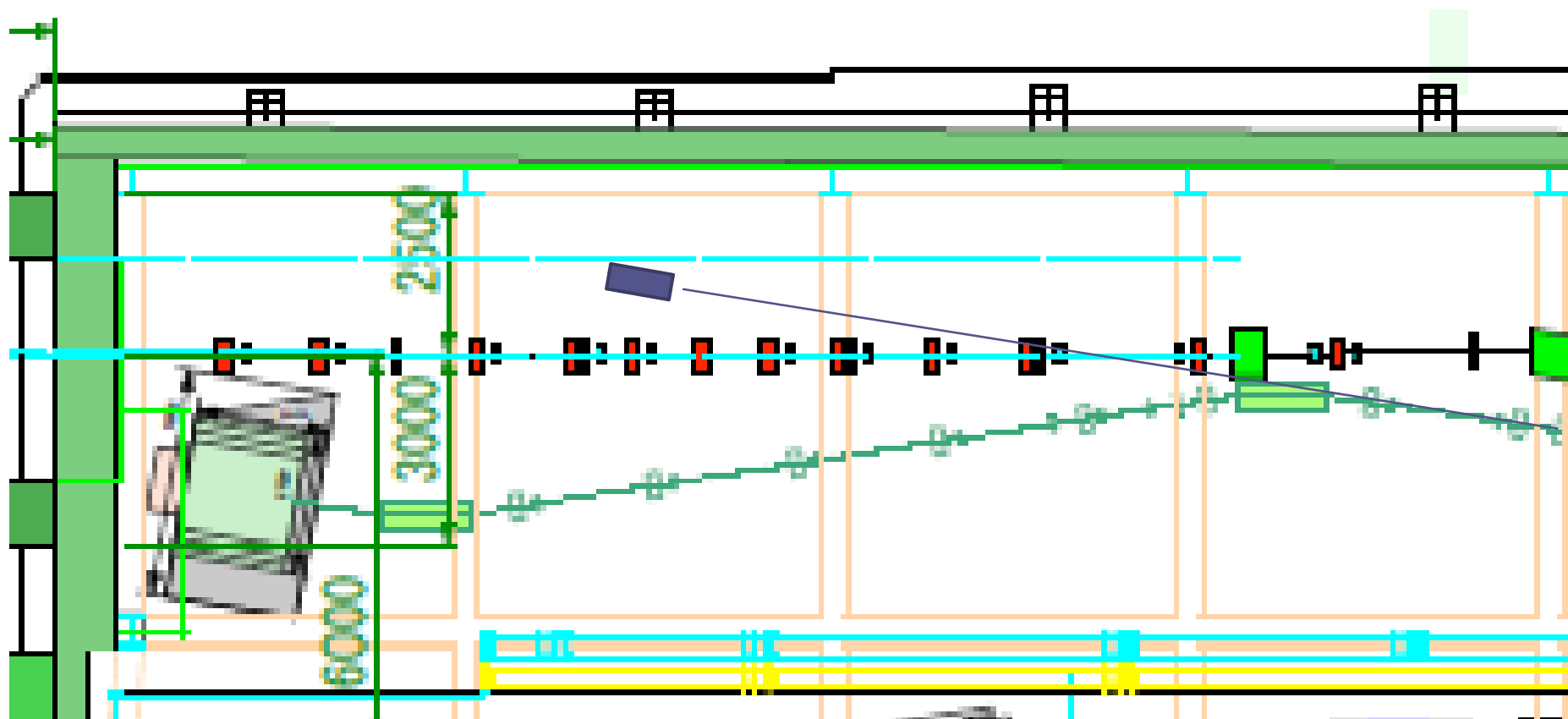
energy deposit in the scintillator



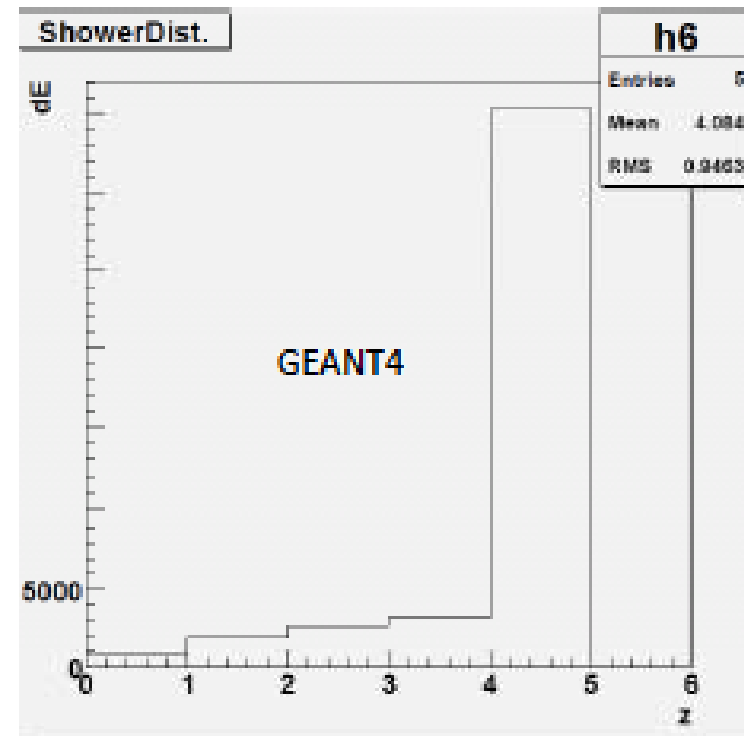
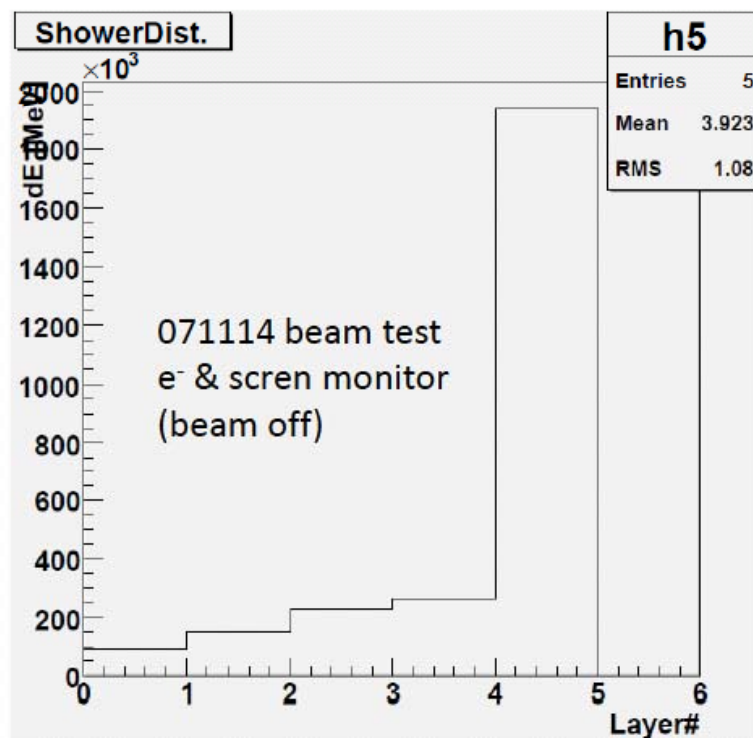
Goals of Beam Time

- **Check the calorimeter performance**
- **Test capability to distinguish signal from background**

Layout of the test at this beam time



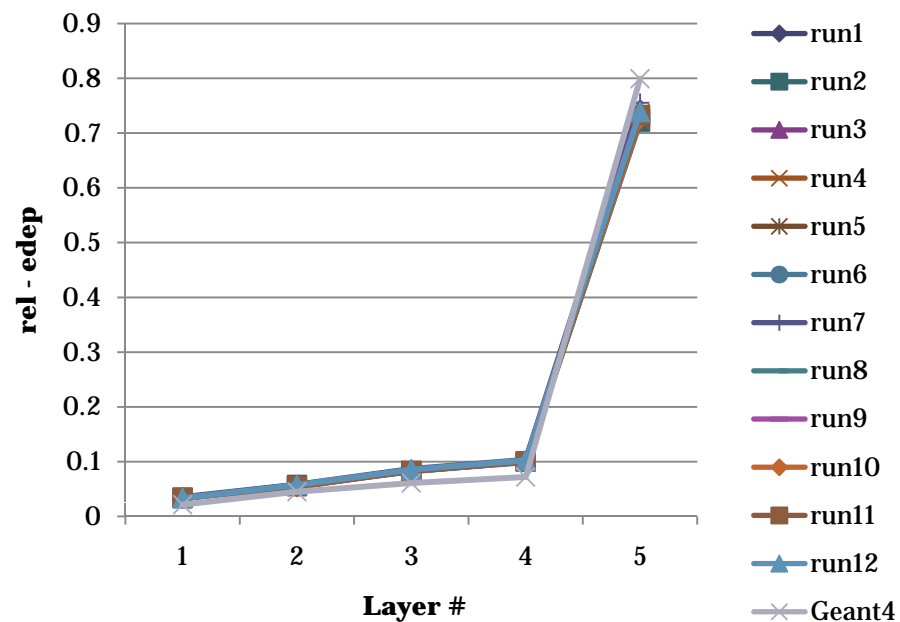
Shower development



from screen monitor

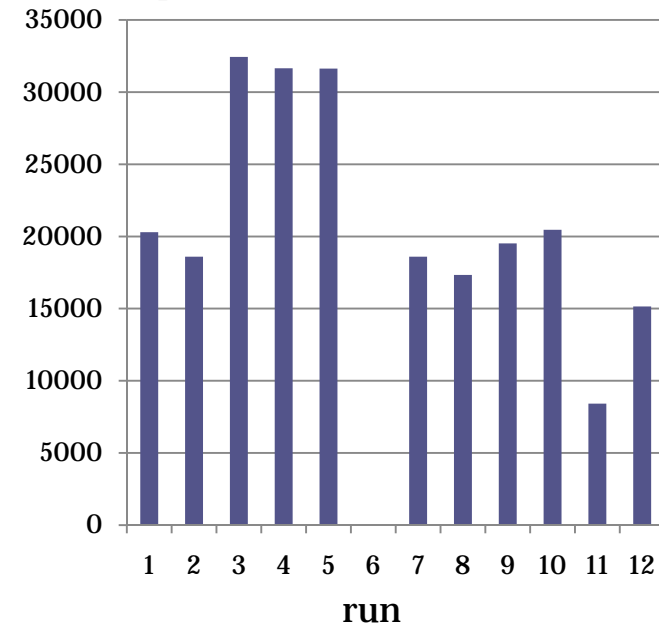
Photon intensity and shower

Shower development is independent of intensity

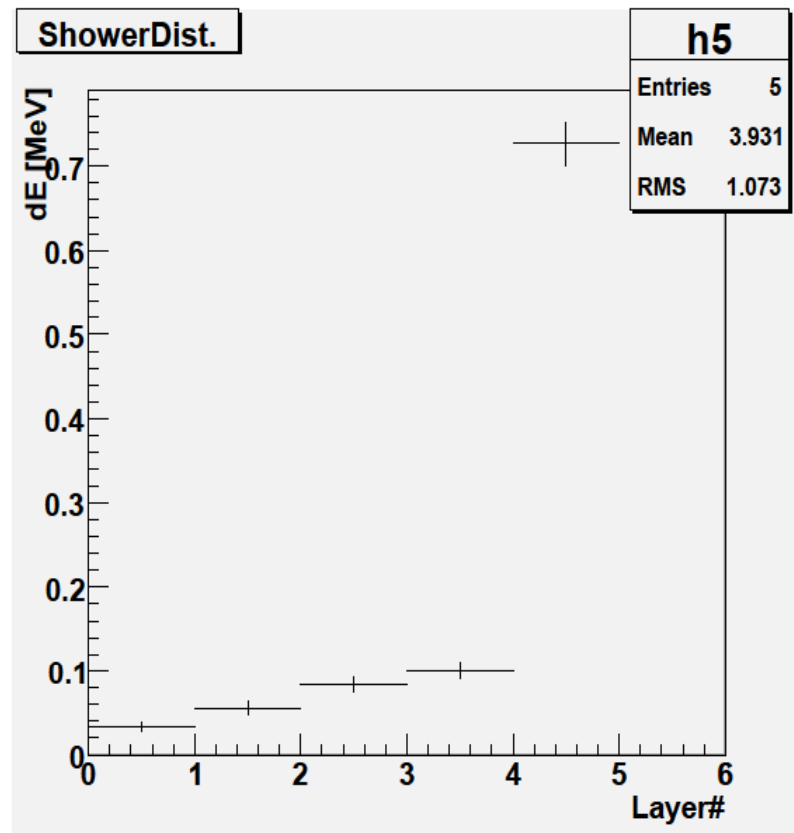


Shower development for several intensity

Energy total deposit [MeV]



Shower development with error bar



Relative energy deposit

layer	1	2	3	4	5
Beam Test Geant 4	0.034	0.056	0.084	0.10	0.73



Laser compton

- **signals at ATF2 are considered to be similar to those from photons from laser wire**
- **We have not yet run with the laser wire on.**



conclusion

- Shower development of background photons is independent of the intensity
- Even if background at ATF2 is large, we hope that signals can be separated