

Observation of EAS using a large water tank

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Using a large water tank (30 m in diameter, 4.5 m in depth) transition of EAS has been investigated at Taro (200 m above sea level). There are set 150 0.4 m^2 proportional counters to the bottom of the water tank. A conventional EAS array of 25 plastic scintillation detectors has been arranged within several tens meter from the water tank. Proportional counter ($10 \times 10 \times 200 \text{ cm}^3 \times 2$) is made of a square shaped pipe of iron. Tungsten wire ($100 \mu\text{m} \phi$) is tight stretched in the center of counter. A gas mixture of 90 % argon and 10 % methane is used at 760 mmHg. A set of proportional counter is shown in figure. About 3000 EAS have been obtained through 1 m of water since 1984.

