

## ILTS Weather Radar System

\*Scientific significance (purposes)

\*Conditions of deployment and operation

### Objective of observation

Long-term (more than 5 years) monitoring of 3D distribution of radar echoes.



RADAR-Climatology

(Diurnal, Seasonal, Annual Variability)

LAPAN

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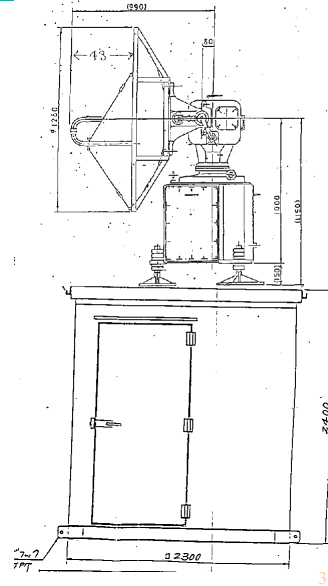
## Characteristics

- ◆ Frequency: 9740 MHz ( $\lambda = 3\text{cm}$ )
- ◆ Peak power: 40 kW
- ◆ Pulse length: 0.5mS, 750 PPS
- ◆ Smin:  $< -103\text{ dBm}$
- ◆ 2 rpm (1 Volume scan :16 steps, 8 min)
- ◆ Detection Range: 64km (500m resolution)
- ◆ Power Supply: 2f(100V 20A(2KVA), 50/60Hz)
- ◆ Size and Weight: Shelter (240x240x240, 1.3t)  
Antenna(120cm diameter, 250Kg)

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## Outlook and Operation

- ◆ All instruments are installed in the shelter.
- ◆ Installation at a place with good clearance required.
- ◆ CPU-control (automatic)
- ◆ Data should be saved from MO to DAT (every 3 days) or from Hard disc to DAT (option; every week).



## Summary

- We hope to use an X-band weather radar system from 2004 continuously to obtain 3D structure of rain.
- We need to find a good location to install the radar. One possibility is the top roof of LAPAN building nearby the EAR.
- We hope that BPPT/BMG can cooperate in the operation of the radar.

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