

9.14A THE PROUST RADAR

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RADAR CHARACTERISTICS

Location: Saint-Santin, France (incoherent facility)

Operating frequency: 935 MHz

Bistatic

Transmitting facility: incoherent scatter transmitter
and antenna150 kW
2000 m²Pulse width: 4 μ s

PRF: 7.5 kHz

- Receiving facility: Parabolic antenna: 95 m²
Receiver noise: 300 K

- Coherent integration 64

- Digital recording

- FFT: 512 complex points - off line

- Profile - height resolution: 600 m
number of gates: 32

Results of the March 1984 campaign are shown in Figures 1 and 2

FUTURE

- pseudo complementary coding with 20 sub-codes; height resolution/30 m
- December 1984: 32 gates of 30 m height resolution contiguous or not
- FFT in real time - TMS 320 - (1985)

ORIGINAL FACSIMILE
OF POOR QUALITY

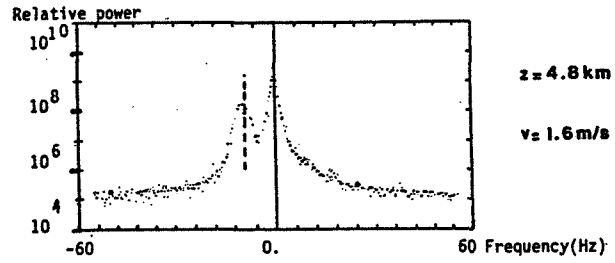


Figure 1. Example of a spectrum.

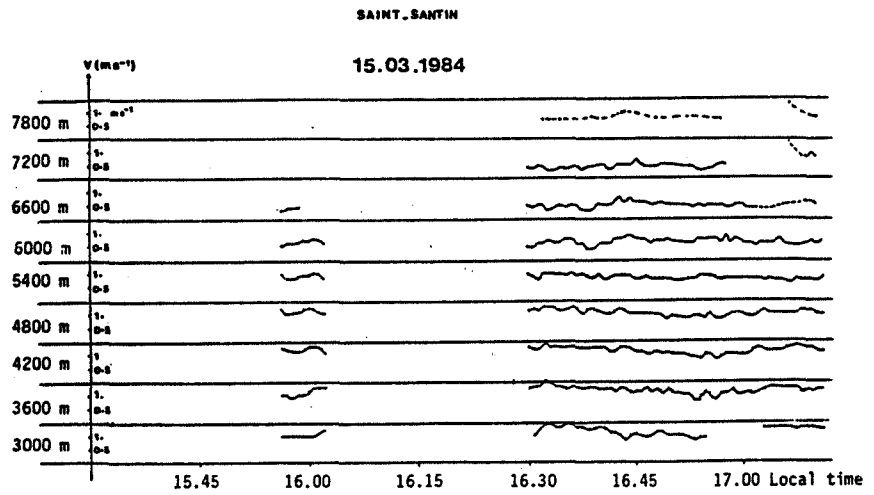


Figure 2. Wind as a function of time and altitude.