

射电天文学笔记

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目录

第一章 射电信号的探测方法

射电 (10MHz–1THz) \neq 无线电 (3kHz–3GHz).

白天可测: 波长远大大气尘埃, 无散射; 太阳射电信号少.

排除水汽: 高地, 旱地.

- 镜面精度低 ($\lambda/20$).
- λ 大, 在 λ^3 范围内放很多带点粒子, 形成相干辐射.
- 波长远大星际尘埃, 透明.
- $h\nu/kT \ll 1$, 所有天体都辐射.
- $\theta \sim \lambda/D$, 需要大 D .