

## Optics- and Radar-based Observations ${\rm F7003R}$

## General Radar Theory

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In this Assignment, Problem 2 - general radar theory, ...

## 1 Operational frequency for scientific radar

- 1.a Frequency ranges
- 1.b Information gathered by radar measurement
- 2 The radar equation
- 3 Cross section calculation
- 4 MST radars
- 4.a SNR as function of universal time and altitude
- 4.b Pulse calculations
- 4.c Transmitted pulse length and received signal strength
- 4.d Atmospheric parameters

include matlab codes here

## References