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## New Electronic Switching Arrangement for mm-Wave Radiometer Calibration

- FSS switches that control the signals to calibration targets and scene radiation
- System concept aims to reduce payload mass, footprint, power consumption and increase instrument reliability



## **Freestanding 664 GHz FSS**

• The filter satisfies the specification requirement for the MWI and CIWSIR/GOMAS space borne missions to separate the 664 GHz channel from four frequency bands in the range 183 GHz – 448 GHz



## Dual Polarisation FSS

- Low loss quasi-optical FSS which facilitates the detection of polarised radiation in radiometers
- Aims to improve the quality of data for Earth Observation studies



Frequency (GHz)

Transmission TE/TM: 316-326GHz

## Printed FSS – European Space Agency MWS Breadboard Radiometer

Microwave Sounder Instrument, 23-229 GHz derivation of temperature and water profiles and information on cloud liquid water for numerical weather prediction and climate monitoring







