

Radar		
Type	FM-CW	
Central frequency	3.298 GHz	S-band
Transmitted power	100 W	Automatic decrease by step of 10 dB in case of receiver saturation
Signal generation		
Sweep time	0.5 ms	
No. of range bins	512	
Range resolution	30 m	Height resolution = 21.2 m
Time resolution	2.56 s	
Polarimetry		
Polarization	VV HV HH	Main beam only
Measurement cycle	VV HV HH OB1 OB2	Main beam + 2 offset beams
Doppler		
No. of Doppler bins	512	
Doppler resolution	$0.036 \text{ m s}^{-1}$	
Max. unambiguous vel.	$\pm 9.1 \text{ m s}^{-1}$	
Max. vel. main beam	$\pm 45.5 \text{ m s}^{-1}$	After spectral polarimetric dealiasing (Unal and Moisseev, 2004)
Max. vel. offset beams	$\pm 45.5 \text{ m s}^{-1}$	After spectral dealiasing
Antennas		
Beam width	$2.1^\circ$	
Gain	38.8 dB	
Near field	$\leq 200 \text{ m}$	
Beams	Elevation	Azimuth (North = $0^\circ$ )
Main beam	$45^\circ$	$246.5^\circ$
Offset beam 1	$60^\circ$	$246.5^\circ$
Offset beam 2	$43.1^\circ$	$267.3^\circ$
Clutter suppression		
Hardware	Antennas	Low side lobes
Processing	Doppler spectrum	Spectral polarimetry (main beam)