The dependence of the PollnSAR degree of coherence on forest parameters

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:: Objective

:: Real dataset

Looking at different Polarimetric and Interferometric SAR acquisitions...

degree of coherence

depend on forest

structural parameters?

E-SAR airborne sensor L-band (Traunstein, Germany) H = 3670m $B_h = 10.1 m$, $B_v = -0.3m$ look = 50 deg

HH

: PoISARPro-SIM

>> Maxwell-based electromagnetic model



>> Fully Coherent PolInSAR simulator
>> 3-D realization of imaged scene
>> Ground surface + short vegetation + forest



Example of simulated Pine forest (master images) for (a) $h_v = 5$ m and (b) $h_v = 20$ m.

: Results Simulations of Pine forest using the viewing geometry of the E-SAR sensor.

