

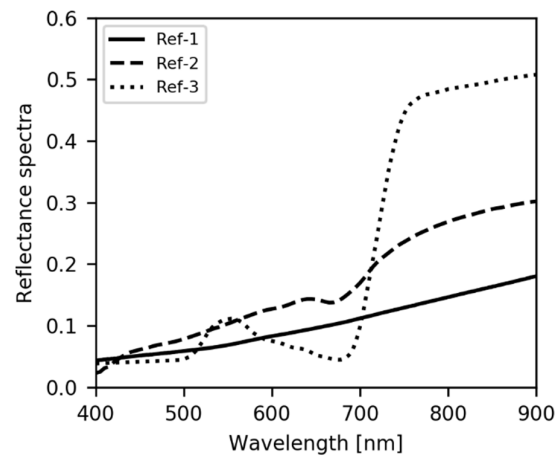


Figure S1. Three background reflectance spectra used for DART simulations (Ref-1: bare soil; Ref-2: soil is partly covered by vegetation; Ref-3: soil is totally covered by vegetation).

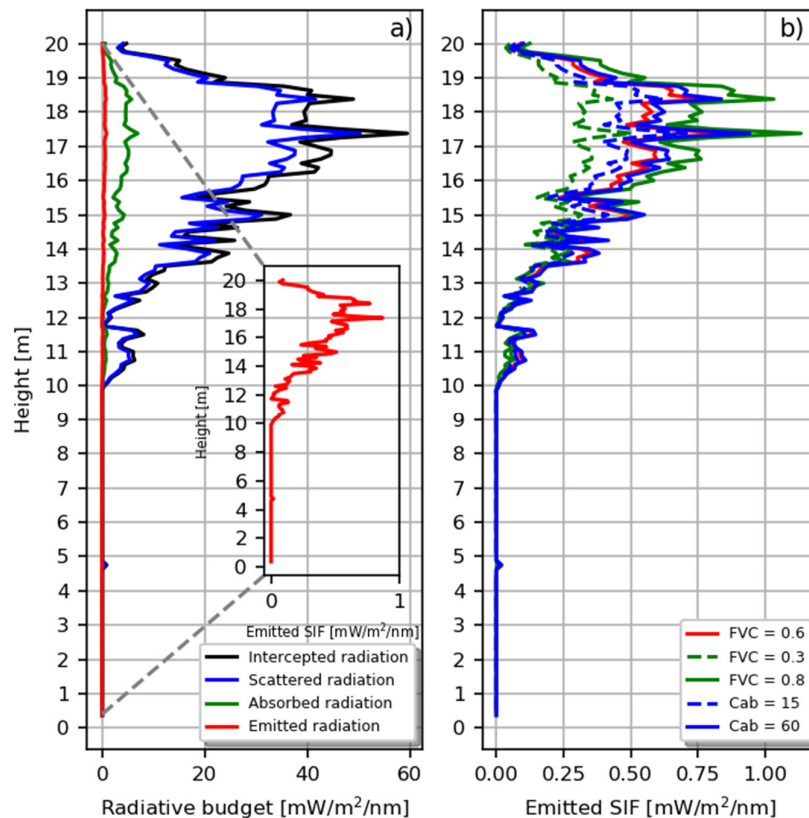


Figure S2. DART simulated radiative budgets (Intercepted, Scattered, Absorbed, and Emitted radiance) at each layer of the forest crown (a), Emitted SIF at each layer under different simulation settings (b). SIF was simulated at 740 nm. The solar zenith angle was set to 30 for all simulations.

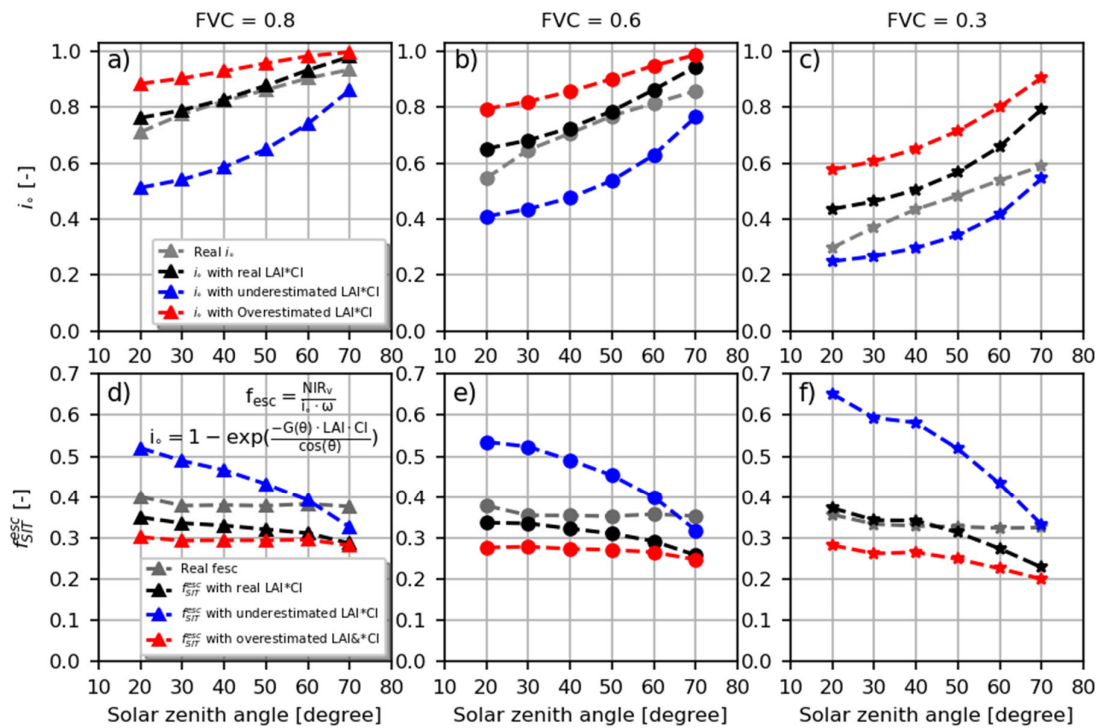


Figure S3. Simulated canopy interception (i.e. first row) and corresponding SIF escape probabilities (i.e. second row) using 'real' LAI*CI, -50% error LAI*CI, and +50% error LAI*CI. a) and d) FVC=0.8; b) and e) FVC=0.6; c) and f) FVC=0.3.

