

From lidar scans to roughness maps for wind resource modeling in forested areas

by Floors et al.

The paper presents different ways of taking surface roughness and tree height into account when using WASP.

I think it's an interesting paper and I recommend that it should be accepted.

Some detailed comments are given below.

p. 2, line 20 Reads *driven by lines of roughness change lines*. Is this correct?

p. 7, Table 3 What is the relation between *Equivalent Roughness Length (m)* and z_0 in Eq. 1?

p. 3, line 3, typo It reads *height was used, therefore, the displacement*

p. 8, bottom, typo It reads *testing the different as the*

p. 9, line 15, typo It reads *had their roughness was set to 0.1 m*

p. 9, below eq. 2 It reads *the forest height was used to 20 calculate a zero-plane displacement height d* . I don't understand. Why is the displacement height related to the tree height?