

Interactive comment on “Effects of moisture absorption on damage progression and strength of unidirectional and cross-ply fiberglass-epoxy composites” by Jake D. Nunemaker et al.

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1 General Comments

The authors thank the reviewer for the thorough review of the paper. We feel your comments will create a better publication, and that we can address all of the specific comments with modifications to the final manuscript. A brief comment on each of the specific comments is provided below, along with potential additions to the final manuscript.

2 Specific Comments

C1

Point 1- The authors have data on this material system where the coupons were aged at in the 50 °C oven, but not in water. This data shows no effect from the elevated temperature aging. This data has not yet been published, but is pending a conference proceeding. A reference to this data can support this comment.

Point 2 - Saturation curves were measured from witness coupons, without tabs. The final manuscript can clarify this.

Point 3 - As the volume fraction for all coupons are similar, the 2-ply and 4-ply coupons should achieve the same uptake level, simply at different times. This fact supported the decision that saturation was complete. A more descriptive initial condition will be added to the final manuscript.

Point 4 - The author's do not believe the increased stiffness is from reorientation. Rather, the drop in damage tolerance in the saturated coupons does not allow for the transfer of load into the remaining backing fibers, therefore eliminating the stiffness (and added strain) increase.

Point 5 - The authors have an extensive literature review into this very topic, and we will add it into the final manuscript.

Point 6 - The authors agree with the assessment of the reviewer on the effect of the swelling stress on material strength. A discussion of this concept will be added to the final manuscript.

Interactive comment on Wind Energ. Sci. Discuss., <https://doi.org/10.5194/wes-2018-11>, 2018.

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