



SDI Review Form 1.6

Journal Name:	Advances in Research
Manuscript Number:	Ms_AIR_20223
Title of the Manuscript:	The Significance of Time Step Size in Simulating the Thermal Performance of Buildings
Type of the Article	Original Research Article

General guideline for Peer Review process:

This journal's peer review policy states that **NO** manuscript should be rejected only on the basis of '**lack of Novelty**', provided the manuscript is scientifically robust and technically sound.

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PART 1: Review Comments

	Reviewer's comment	Author's comment (if agreed with reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)
<u>Compulsory</u> REVISION comments	<p>Please add some photos of the full-scale test modules</p> <p>The process of the tests.</p>	<p><i>Thank you for the great comments that helped to improve the manuscript.</i></p> <p>The reviewer's comment was addressed as outlined below.</p> <p>New photos for full-scale test modules were added in Figure 1.</p> <p>This has been already discussed in Full-Scale Test Modules Section, but more details have been also provided as following:</p> <p>The modules internal temperatures and heat flux (not discussed here) and external weather conditions were recorded with 5 minutes interval by more than 100 sensors over the last 10 years.</p> <p>This has been added in Section 2.</p> <p>An automatic mesh was generated for analysis of the modules using an automatic topological</p>



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		<p>examination for entire geometry to find the distribution of nodes and the mesh size. In this analysis 264534 nodes and k-epsilon turbulence modelling were used. Finally, a grid independence test was conducted to ensure the CFD simulation accuracy.</p> <p>This has been also added in Section 3.1</p> <p>The internal air temperature from CFD simulations compared to real module temperature was steady and consistent throughout the 7 days experimental analysis. The smaller temperature fluctuations were only observed (see Figure 10).</p>
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<p><u>Minor</u> REVISION comments</p>	<p>1. Please pay more attention to the format. For example, Figure 2 and its title are not in the same line. 2. There's no title 3.2, only 3.1 in line 194. Please change line 170 to 3.1, line 180 to 3.2, and line 194 to 3.3.</p>	<p>This was amended throughout (e.g. Figure 2(3)).</p> <p>The new subtitles created as suggested.</p> <p>3.1 Detailed analyses of the InsCB module simulations for a summer week,</p> <p>3.2 Detailed analyses of the InsCB module simulations for a winter week</p> <p>3.3 Comprehensive simulation results for all modules.</p>
<p><u>Optional/General</u> comments</p>	<p>1. Figure 6 is not necessary, due to the literary descriptions above it is clear enough. 2. Table 3 makes little sense in this paper.</p>	<p>Fixed accordingly. Figure 6 deleted. Table 3 deleted.</p>