

Delft, 23 of July of 2021,

Dear
Board of Examiners
Faculty of Civil Engineering and Geosciences
TU-Delft

Subject: Reviewing document for the article thesis “Developing a framework for the assessment of current and future flood risk in Venice, Italy”, written by student Julius Schlumberger (5001870)

General Comments:

The committee commonly agreed that the author (Julius Schlumberger) has completed excellent and thorough work by developing a framework to assess flood risk drivers like the economic damage caused by the event of 2019 and a combination of Sea Level Rise (SLR) and MOSE barrier operation. Also, we recognize in the article an extensive hydrodynamic modelling by means of Delft3d- FM both together with a damage model (INSYDE) in which newer components were added to perform a better estimation of the aforementioned drivers.

In addition, the committee considers the document to be suitable for publication in an indexed journal after some minor suggestions and improvements are included (see specific comments in the document attached).

Originality of the research

The research generated new knowledge in a scientific area of flood damage that can be transferable to various spatial scales. The research can help inform both more robust and transparent current and future flood risk management and cultural heritage management. The empirical knowledge about flood risk and potential damage and losses is well grounded and the master student places the research aims and research results in a societal context. The student demonstrates the ability to collect and analyse quantitative and qualitative data and synthesize new ideas.

Scientific quality and clarity of the chapters

The main structure of the article/thesis is adequate and well summarized. Research sections have clear cohesion and show good technical quality. Application of research design and methodological rigor, including analytical and scientific levels, clarity, completeness and interpretation of findings and how these fit into the existing knowledge needs are well developed and presented. However, proof-reading is needed to align it with standard scientific English usage and to reach the scientific quality of thesis to be publishable in form of peer-reviewed publication.

The Thesis committee:

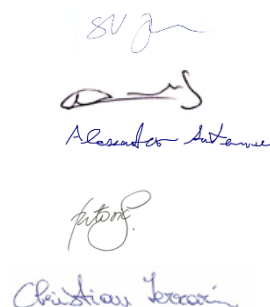
Prof. Dr. ir. S.N. Jonkman

Dr. ir. M. A. Diaz Loaiza

Dr. ir. A. Antonini

Dr. S. Fatorić

Dr. ir. C. Ferrarin



Handwritten signatures of the thesis committee members: S.N. Jonkman, M. A. Diaz Loaiza, A. Antonini, S. Fatorić, and C. Ferrarin.