

Interactive comment on “ICGEM – 15 years of successful collection and distribution of global gravitational models, associated services and future plans” by E. Sinem Ince et al.

Anonymous Referee #3

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The paper gives an extensive description of the scientific activities of ICGEM. The paper is unusually long but I think that its length is adequate to fully and properly describe the services provided by ICGEM. Also, the paper is well organised and written in a good English language. I only have some minor comments on the paper that are listed below.

- page 9, 15: the discussion on the terms "gravitational" and "gravity" is quite misleading. I don't agree with the authors' statement, i.e. to use "gravity" instead of "gravitational". I think that we must stay strictly in the geodetic tradition and use properly the two terms throughout the paper.

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- page 10, 10-15: this comment connects to the previous one. The authors stated that "gravity" has to be used and then they write "Geodesy describes the gravitational potential only in empty space,...". This is not in the line that they stated. So, again, I would ask the authors to stick to the standard notation of Geodesy, which is clear, without contradiction and used for many years.

- page 10: it is frequently used the sentence "real gravity field". I would use "gravity field" only

- page 11, Eq. (8): P_{nm} is normalised so it should have the bar on top.

- page 13, before Eq. (10): "and valid in space". I would write "in space"

- page 17, 10: "physical heights". I would add "physical heights (i.e. orthometric heights)"

- page 23, 20-25. I would skip the sentence "(ellipsoidal equipotential...over the oceans)" which could be misleading

- page 29, 15: instead of "different models quickly" write "different models" because "quickly" is written in the same line.

- page 32, Eq. (13): please replace "s" with the greek letter sigma to be coherent with the statement above

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