SUMMARY OF CHANGES TO "POINTWISE ASSOUAD DIMENSION FOR MEASURES"

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I have implemented most of the changes suggested by the referee. The first three sections of the document received the most changes and especially the introduction got a big overhaul. The goal behind the changes to the introduction was to make it more concrete, make the main results stand out more and introduce the main definition earlier.

The referee made a comment about the shortening the paper, and the changes I have made, shortened the length of the document by four pages.

- Fixed the typos and slight mistakes indicated by the referee.
- Moved the definitions of the Assouad dimension of the measure, the local dimensions of the measure and the pointwise Assouad dimension of the measure from the "Preliminaries" section to the introduction, to make the introduction more concrete.
- Added some discussion to the introduction about similar concepts considered in [BBL17].
- Added Subsection 1.1 for the discussion of the main results in an attempt to make them stand out.
- Removed Lemma 2.3 due to its simplicity.
- Moved Example 2.2 to the same place as the other examples.
- Combined the simple results in Section 3 to a single proposition (Proposition 3.1).
- Moved Example 3.7 to the end of Section 6 as suggested by the referee. Also fixed the slight mistakes in the formulae for the Minkowski dimension and the Assouad dimension.
- Moved the examples illustrating the relationships of the pointwise Assouad dimension to their own subsection (Subsection 3.1) Also removed unnecessary steps in the calculations of the examples.
- Added Remark 3.2 about the definition of a pointwise lower dimension.
- Moved statement of the main result of Section 4 to the beginning of the section to make it stand out.
- Moved some definitions from Section 2 to a more natural spot in Subsection 4.2. Also added the definitions for equivalence of measures and ergodicity.
- Fixed the constants in the proof of Proposition 4.7.
- Replaced the proof of Lemma 5.2 with a reference.
- Clarified discussion before the proof of Theorem 6.4.
- Made many small changes to wording and sentence structure.
- Added thanks to the referee in the Acknowledgements.

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Departures from suggested changes

The referee suggested removing the proof of Lemma 4.5 and referring to existing literature. Even though the proof is quite simple, I decided against this, since it seems to be difficult to track down in the literature.

References

[BBL17] A. Björn, J. Björn, and J. Lehrbäck, *Sharp capacity estimates for annuli in weighted* $\mathbb{R}^n$ *and in metric spaces.*, Math. Z. **286** (2017), 1173–1215.