Two referees have sent their evaluations. They are the same as the referees of version 1.

Referee 2 recommends acceptance of the paper as it stands.

Referee 1 is more critical. He/she answers *No* to the question *Is the presentation clear and concise* ?, and writes *The authors have addressed most of the comments, but from my point of view several issues remain*. He/she mentions a few specific points which have to do with basic clarification of the approach taken by the authors, and not on the results nor on the conclusions the authors draw from those results. He/she recommends acceptance subject to minor revisions, but does not rule out a possible further review. It is for keeping that possibility open that I ask as Editor for major revision.

In addition, I have as Editor a number of suggestions for corrections that are mostly independent of the scientific content of the paper, but could in my opinion improve its readability. I put them here in approximate order of decreasing importance.

1 Figure 14. Contrary to what the authors write, no error bars are visible on panel (a). The panel is actually identical with panel (a) of Fig. 11.

2 The authors write in subsection 2.5 (ll. 362-363) … *entropic regularisation is enforced via* …, but say nothing about entropic regularization in subsection 2.4. Does that mean that entropic regularization is not implemented in the algorithm described in subsection 2.4 ?

3 Ll. 335 and 597, what is a *Monge map* (a scheme of the form of Fig. 3) ?

4 Ll. 469- 471, I find the sentence starting *If* $\mathbf{y}^b$ *and* $\mathbf{y}^o$ *were* … rather vague. What does it mean that *the classical analysis would be as good as can be, while the OTDA solution may be too safe* ? That the sharp transitions visible on panel 12 (b) would not be there, and that the OTDA solution would be too smooth ? Or something else ?

5 L. 478, What does it mean that the first guess is *weak* ? That it is numerically small so as to be negligible, or erroneous, unreliable, or what ?

6 Caption of Fig. 12, what is a *heatmap* (I suspect a typo) ?

7 L. 155, *the kernel of* $\mathbf{H}$ *is non-trivial*. May be confusing. I suggest you simply write *The main caveat of Eq. (7) comes from the fact that the system is only partially observed.*

8 L. 537, … *conformally to the spaces …* → *… onto the spaces …*

9 L. 285 … *the same tensor index* ***is*** *present …*

10 From what I can judge, the English is correct and perfectly understandable. A few corrections will however have to be made here and there. The paper will be copy-edited anyway, but I mention one point. The authors repeatedly write *associated to* (l. 288 for instance). That should be *associated with* (incidentally, that is a great classic of French authors when writing English).

I look forward to receiving a new version of the paper, taking into account the comments and suggestions of referee 1, as well as my own. Should the authors disagree with a particular comment or decide not to follow a particular suggestion, they must state their reasons for that. I may submit the revised version to a new review by Referee 1.