

## ***Interactive comment on “Short-term cropland responses to temperature extreme events during late winter” by G. De Simon et al.***

**Anonymous Referee #1**

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The paper presents an interesting analysis of the effects of changing soil temperatures on CO<sub>2</sub> evolution from soil and the associated plant growth. There are some worrding changes which need to be made in the final version. These are given as page 6494, line 14, there is no such thing as anticipation in seed germination, it is actually emergence which is observed in this study. page 6497, line 15, is the 0 depth, the depth before the addition of the mulch material? page 6497, line 16, superficial should be surface and how were these sensors protected from direct solar radiation? page 6498, line 7 and 9, seed birth is really emergence and the correct term should be used page 6498, line 20, does the sum of the crop residues include the roots of the previous crop? page 6501, line 1-3, what is really being stated is that the temperature variations occurred in the upper 10 cm and the fact that soil temperature decreases with depth is widely known. page 6502, line 15, temperature doesn't have a transient effect on crop development it

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has a cumulative effect as evidenced by the effect of phenological development. Is this strictly an effect of temperature or a combination of temperature and soil water content. page 6505, line 24, need a spece between winter and early spring

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