

## ***Interactive comment on “Alpine Holocene Tree-Ring Dataset: Age-related trends in the stable isotopes of cellulose show species-specific patterns” by Tito Arosio et al.***

### **Anonymous Referee #1**

Received and published: 3 June 2020

The Papier deals Witz stabile Isotope in trees at treeline Unsinn holocene tree rings. Although ist is a valuable contribution to the Journal, there are some Major flaws. In the introduction the authors should mention why Isotope data Derived from tree rings are powerful Tools for climate Reconstructions There is also evidence that in both Spezies investigated isotope signatures derived from cellulose are comparable to those from bulk wood. See Frontiers in plant science2016,7;799 and agformet 2018,248;251: In fig 1and table 1 please give full namens of all the sites. The results section line 119 - 143 should be moved to methods. In the discussion I miss studies carried out in pine and larch at various treeline Sites in the Swiss and Austrian alps. These data also Show that cembran pine and larch Show similar growt and isotope responses duing the

C1

last decades. This is in contarst to this manuscript and Henne should be discussed.

---

Interactive comment on Biogeosciences Discuss., <https://doi.org/10.5194/bg-2020-166>, 2020.

C2