#Review comments on "Reviews and syntheses: The biogeochemical cycle of silicon in the modern ocean" by Tréguer et al.,

L48: 24 % change for 24%

L53: 6 Tmol-Si yr-1, too many spaces

L68-69: … with nitrogen (N), phosphorous (P) and inorganic carbon (C), …

L92: did you mean "with an error of one standard deviation"?

L113: "processes at work mostly in deep waters" did you mean "processes that work mostly in deep waters"

L121: no space between 5 and %, check in the rest of the manuscript. Also what do you mean with 0.5-5% yr-1? Is it a percentage per gram of sediment, per m2 of sediment?

L143: need a space ". More"

L157-158: did you mean "Fabre et al 2019 calculated that the potential flux of dissolution of siliceous sandy beaches is driven by wave and tidal action."

L159: too many spaces ". If, "

L213: space after "of"

L280: "using ~~on~~ a database"

L344: Did you mean " The new best estimates ~~(Maldonado et al (2019)~~ for Fsp is …"

L450: error in reference format (G+T, 1999)

L514: In table 1B reference 1 correspond to Nelson et al 1995, did you mean Treguer et al 1995? If not it is confusing as the Nelson et al 1995 reference is not mentioned in this paragraph but the Gross bSi pelagic prod value of 240 TmolSi y-1 correspond to Nelson et al 1995.

L529: (Fig4)

L531: 13.9/255=5.45%

L544: The transition between Conley et al 2017 hypothesis and the sponges is not clear. Also The sentence "Sponges exposed … Maldonado 2020." Needs to be rephrased. Here is a suggestion: A consequence of the dSi decline is observed on modern sponges that are exposed to relatively low concentrations (give a value) which is typical for most of the

modern ocean. As a results modern sponges have a poor skeletal development () and low dSi consumption rates ().

L550-558:
L551: remove the brackets and replace with "… production rate of both pelagic and benthic silicifiers, as shown above"

L554-558: It is not clear, why if there are no negative feedbacks between the supply rates and production or burial rates will climatic changes or anthropogenic change it. This needs to be re-phrased, here is a suggestion: "Today, on short timescales the supply rates are balanced by the production or burial rates which suggest that the marine Si cycle is at steady state. However, climatic changes or anthropogenic impact that affect dSi input to the ocean… ocean."

L592-595: why are these bSi production data not included in figure 3

L595: move the % after bSi

L604-605: a word is missing in the sentence

L740: did you mean "should be addressed to examine …"

L757: The use of geochemical tools is emerging, there are to date a list of papers using stable isotopes to elucidate sedimentary processes such as Pickering et al., 2020, Geilert et al., 2020, Ehlert et al., 2016, Ng et al., 2019, Cassarino et al., in press.
(Cassarino, L., Hendry, K. R., Henley S. F., MacDonald E., Arndt S., Sales de Freitas F., Pike J., Firing Y. L. Sedimentary nutrient supply in productive hotspots off the West Antarctic Peninsula revealed by silicon isotopes. GBC, in press)