

We want to express our gratitude to Dr. Tripathy for the constructive review. Please find below a quick response to the major comments of the paper.

1. Although the Xishui River is a typical silicate watershed, its Sr isotopic characteristics do not match with common silicate weathering. They are attributed to low $^{87}\text{Sr}/^{86}\text{Sr}$ ratios of the ultrahigh pressure metamorphic rocks (mainly composed of eclogite, gneiss, and amphibolite) and some granite widely distributed in the catchment, instead of carbonate rocks. Relative confusional sentences will be modified in the revised version. The Guijiang River is a typical carbonate watershed, but a few detrital rocks and granitic rocks with extremely high $^{87}\text{Sr}/^{86}\text{Sr}$ ratios (up to ~ 1) importantly increase the $^{87}\text{Sr}/^{86}\text{Sr}$ ratios in the watershed. Relative discussions could be seen in section 5.2.
2. Good suggestions! The influence of the Xishui River on the Sr budget of the Yangtze River will be quantified in the revised version. About the comment (the discussions on the "Influence on the Sr isotope evolution of seawater and implication" seem less convincing), our answers are as follows: we did not intend to discuss the contribution of single the Xishui River and the Guijiang River to the Sr isotope evolution of seawater. As the reviewer has said, the Sr flux from the very small streams is certainly insignificant to total riverine Sr flux to oceans. We would like to say that for the sort of small silicate watersheds with lower $^{87}\text{Sr}/^{86}\text{Sr}$ ratios than seawater, such as the Xishui River (also includes many basalt watersheds), they have a decreasing influence on the Sr isotopic compositions of seawater. Therefore, it may be questionable that using the variations of seawater $^{87}\text{Sr}/^{86}\text{Sr}$ ratio to indicate the continental silicate weathering intensity.
3. Good suggestion. The table 6 listing the contribution of each source to the river geochemistry of each analyzed samples will replace the original one in the revised version. About the comment ("Source of Sr in the Guijiang River" in the section 5.2.2. should also be quantified using the inverse model for consistency), it is hard to do at present. This study is a cooperation project and the concentrations of major ions were analyzed by partners in other organization, but the quality of major ion data was poor because of instrument malfunction and could not be used

in an inverse model.

4. The silicate erosion rates were calculated by using the silicate-derived cations in a companion paper (Wu et al., *Chemical Geology*, in revised). Relative comparison between these mountainous rivers and those reported earlier in the plain areas of the Yangtze and the Pearl river and the controlling factors for the chemical weathering also were discussed in that paper.