Reply to comment by E.R. Williams on the paper "11-year solar cycle in Schumann resonance data as observed in Antarctica" by A.P. Nickolaenko, A.V. Koloskov, M. Hayakawa, Yu.M. Yampolski, O.V. Budanov, V.E. Korepanov, Sun and Geosphere, 2015; 10 (1), 15 –20

In our paper we presented the ten-year Antarctic records of Schumann resonance at the "Vernadsky" station and interpret them. Data analysis and the model computations were based on the dual approach: we considered all possible explanations. In the text, we outlined the motivation, on which the particular interpretations were chosen.

Unfortunately, Dr. Williams was not convinced by our reasoning, he preferred using the mechanisms we had put aside. This is his qualified and respected opinion. His qualitative arguments did not change the model data and thus could not change our mind: we prefer the interpretations suggested in the paper.

We were grateful to Dr. Williams for his interest in the paper, though not agree with his reasoning.

On behalf of Authors

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Reviewer reply:

The first discussion is concerned with whether X-ray enhancement or GCR decreasing is the dominant factor to cause the increase of SR modal frequency at solar maximum, while X-ray enhancement and GCR decreasing coexist at solar maximum. It depends on which one, X-ray enhancement or GCR decreasing, affects the conductivity more seriously and there penetration altitudes in the cavity. As far as I know, there seems no final conclusions. So I think different opinions are allowable.