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THE SEARCH FOR TECHNOSIGNATURES: HUMANS VS ARTIFICIAL INTELLIGENCE

Abstract

We are living nowadays a surge of artificial intelligence uses in many scientific and technological applications including SETI. However human perception and decision making is still the last part of the chain in any data analysis and results interpretation task. In this study we review results of an experiment based on planetary imaging reconnaissance task performed with 300 volunteers compared to an artificial intelligence computer vision model. To test the model we used an image of Occator crater in Ceres where some participants perceived some geometrical formations. We wanted to test how the search for technosignatures may be influenced by our cognitive skills and consciousness and see how artificial intelligence may help in this task or not. This article also discusses how human cognitive unintentional bias may affect Search of Extraterrestrial Intelligence (SETI) and technosignatures search compared to artificial intelligence models and how these artificial intelligence models may be influenced by human characteristics of neural processing. We discuss how searching for unexpected infrequent elements may prevent us to detect other nearside infrequent unexpected signs. Results confirmed the real possibility that human brain functioning or consciousness aspects may be limiting our search and understanding of the topic implications and maybe other universe aspects to an extent.