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Quantum computing in the service of satellite data processing

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Earth observation data are constantly being produced by constantly growing number of satellites. Processing these data efficiently consists a major challenge and not all the produced data is processed and analyzed. At the same time Earth observation provides important information about our ecosystems in the age of rapidly changing climate. For this reason research on application of quantum computing for Earth observation data analysis has been initiated be a couple of research institutions. For me personally participation in this field allows me to study how one can apply a variety of quantum algorithmic techniques to image processing and to join efforts aiming at reducing the impact of climate change. I will present a short review of ideas and activities that aim at finding, possibly impactful, new methods of satellite data processing using quantum computing techniques.

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