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The Martian 'blueberries' and Earth's tektites.

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Enigmatic discoveries made by the Mars Rover Opportunity at the Meridiani Planum landing site are so-called 'blueberries spherules' [1]. They show similarities to terrestrial tektites, and in addition, strong spectral signature of hematite [1]. We assume that the formation mechanism of 'blueberries' is related to dense (rheo)ignimbrite currents, analogous to the formation of Earth's tektites [2]. Taking into account the Coriolis force on Mars [3], a distal ignimbrite volcano can a cause of 'blueberries'[4]. As well as 'blueberries' on Mars, so-called 'red stones' in the Ries crater are associated with mantle hematites [4]. The double-layer ejecta and distinctions between inner and outer suevites in the Ries crater can be explained by blasts of anisotropic laminated mantle-crust layers beneath SW Germany since the lowermost Moldanubian Ostrong zone comprises [5] ancient ignimbrites (it points to volcanic blasts in the past). Thus, as in the Ries crater, double-layer ejecta of Mars craters are most likely not impactites [4].

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