The Venus Life Equation

• The chance of life existing today in the clouds of Venus is estimable from what we know about life on Earth and the history of Venus.

• We define and consider Origination, Robustness, and Continuity factors, and conclude that the chance life exists on Venus today is non-zero.

• Better understanding of Venus’ history and current conditions through new missions including in-situ investigations would constrain the Venus Life Equation, even in absence of direct detection of life.

Venus Life Equation factors are estimated to be non-zero, yielding a probability for extant life of $\leq 0.1$. 

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