

Come to Think of It ...Pack Two Sweaters

The Urth list — 1 messages, 1 voices, 16 Dec 2000

<https://urth.darkrealm.vip/thread/urth/2513>

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Talarican — 16 Dec 2000, 10:32

I stand clarified now, 402 Annese days was the length of year for St. Anne/St.Croix given in the text, and Mantis' analysis aimed to deduce the length of the Annese day.

All I can say is, either there is something very peculiar going on with St. Anne/St. Croix' sun, as with our Old Sun, allowing it to be high mass and large (therefore more luminous), but low temperature, a beast which sits above the main sequence on the Hertzsprung-Russell diagram.

I considered the possibility of coarse "reddening" dust in the sun's ecliptic plane, but that again should attenuate the energy reaching the twin planets, effectively reducing the radius of the habitable zone.

It seems there is a class or subclass of star called "subgiant", such as Rana, a K type star which is 2.8 times as luminous as Sol, with 2.7 times Sol's diameter but only about 0.79 solar mass. Rana's present habitable zone is estimated to lie at radius 1.7 a.u. It may be that some such star could have the magic combination of properties for St. Croix/St. Anne's sun, but such a star is shortlived and prone to pulsation. The flora and fauna which occurs on St. Croix and St. Anne almost certainly would have to have been "imported" from elsewhere after the star expanded enough to warm the previously frozen twin planets. Could that be the key to this paradox?

The Mad, Puzzled Exultant