

We cannot but believe, on the basis of our current knowledge, would have a civilization resembling our own in some remote future. It is particularly unlikely that their civilization would be within a half-century of our own state of development. Not in 50-100 years we have just started to dig through and in the next 50 years we still almost certainly must explore space.

Does it appear that there could be another planet within the Solar system? It is possible but very unlikely. There are at least a thousand known planets in it.

This leaves the possibility of planets of other stars in the Galaxy as possible sources. Any space astronomer knows that planets are fairly common in our Solar system. In the life history of a star (rather than its development) as most other planets can be expected to exist in space.

To narrow the field a little, we have specifications can be written for the star about which the time base almost would provide. Let us say that the star should have a fairly reasonable to the Sun, which is a member of the so-called "main sequence" of stars, that, we eliminate white dwarfs, red giants and supergiants. For a description of these types, see reference 2, chapter 2. There is no specific reason for stating this assumption except to simplify discussion; we are still considering the majority of stars.

Next, true variable stars but be eliminated. Since conditions on a planet attached to a variable star would fluctuate too widely to permit life. The number of stars selected here is negligibly small. Reference 3, pages 76 and 77 indicate that the most common types are too bright to be in nearby space mentioned. Lastly, we still must consider multiple stars, where the conditions for stable planet orbits are obscure in such cases. About a third of the stars are eliminated by this restriction.

As our best known sample of space we can take a volume with one Sun at the center and a radius of 15 light years. A compilation of the 47 known stars, including the Sun, within this volume is given in reference 4, pages 32 to 37. Filtering according to the above discussions. There are white dwarfs, eight binaries against for 15 stars and two binaries account for 6 stars. The remainder, 22 stars, can be considered as eligible for habitable planets.