



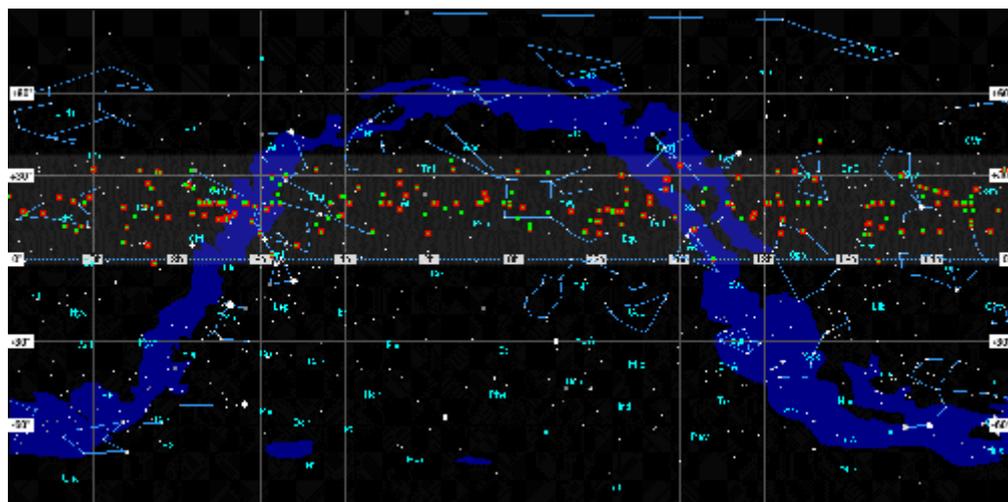
## Reports of SETI@home Extraterrestrial Signal Highly Exaggerated

by Amir Alexander

September 2, 2004:

A rash of reports in recent days that SETI@home has discovered a likely signal from an alien civilization are highly exaggerated, says SETI@home Chief Scientist Dan Werthimer of U.C. Berkeley.

The storm was initiated by an article in *New Scientist* magazine, which reported about SETI@home's most promising candidate signal to date, and speculated about its possible origins. Like all of SETI@home's 5 billion potential signals, this candidate, labeled SHGb02+14a, was assigned a numerical score representing the statistical likelihood that it is indeed an intelligent extraterrestrial signal. Its relatively high score placed it among the 200 "top candidates" selected for the targeted [reobservation sessions](#) that took place in March of 2003 at the Arecibo Radio Observaotry. Of all the candidates targeted in the sessions, however, SHGb02+14a was one of the very few to be confirmed during the reobservations, and the only one whose score following the sessions actually went up.



A sky map of the reobservations that took place at Arecibo in March of 2003. The blue areas represent the plane of the Milky Way, the gray strip the band of sky seen from Arecibo. The squares mark the locations of the signal candidates revisited during the reobservation sessions.

Image: University of California/SETI@home

While this makes SHGb02+14a interesting, the chances that it actually represents an intelligent signal from beyond remain extremely slim. Random chance alone would make it probable that at least one of the billions of candidates detected by SETI@home would be observed on three separate occasions, as was the case for this candidate. Furthermore, as we reported in the [SETI@home Update of May 17,](#)

2004, the fact that this candidate's frequency drifts rapidly makes it extremely improbable that it is a transmission from extraterrestrials. Because of the drift, explained Werthimer, "if we had looked at the sky even a few seconds later we wouldn't have found a match" for this candidate. A signal that drifts so quickly that it can only be heard for seconds at a time at a given frequency can only be detected by blind luck. Needless to say, such a transmission is an unlikely vehicle for message from an advanced civilization.

In addition, SETI@home Project Director David Anderson of U.C. Berkeley pointed out that SHGb02+14a is a candidate of a type known as a "[barycentrically corrected gaussian](#)." A true transmission of this type, he explained, would remain in a more or less fixed narrow-band frequency, and not drift rapidly as this signal does.

At Arecibo the giant radio telescope still scans the sky, looking for an alien transmission. Around the world, millions are still crunching SETI@home data on their personal computers. The Search for extraterrestrial intelligence continues at full speed, but as of now there is no breakthrough.

Of course, this could change at any time... We promise to keep you posted.

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