

44th SYMPOSIUM ON THE SEARCH FOR EXTRATERRESTRIAL INTELLIGENCE (SETI) – The
Next Steps (A4)
SETI 1: SETI Science and Technology (1)

Author: Ms. Daniela de Paulis
University of Amsterdam, Italy, selavyrose@gmail.com

ONE EARTH: NEW HORIZONS MESSAGE INITIATIVE

Abstract

Artist Jon Lomberg, Design Director for the Voyager Golden Record, had the original idea of uploading an universal message into the New Horizons spacecraft, after this has completed its scientific mission in 2015-2016. The idea which has lead to the One Earth: New Horizons Message initiative, has been further developed with the assistance of an international Advisory Board and the New Horizons mission. Based on bandwidth and New Horizons onboard computers, it will be possible to send pictures and sounds, as well as new kinds of files as well, such as software, 3D files and whatever other good ideas the world's creative minds can suggest. The challenge will be to create the richest and most durable message possible that is also as easy as possible for hypothetical ETs to decode. The objective is to hold a worldwide search for the specific pictures and other materials to send. Finalists will be selected by online voting in various categories of content. The resulting message will have been crowd-sourced from people around the world, creating a self-portrait of Earth in the second decade of the 21st Century. There is no room on the computer memory for the 'One Earth' message until all the data from the Pluto encounter have been downloaded. That could take an entire year, so the message will probably be uploaded not sooner than 2016, however the final approval document is now in preparation by NASA. One of the novel features of this digital message format is that it can be updated. Unlike the Voyager Records or Pioneer plaques which are beyond human reach after they are launched, the NH message can be enlarged or corrected so long as the spacecraft is in communication with Earth, perhaps for several decades. So the message could be improved and updated to reflect events on Earth during the post-Pluto phase of the mission. The spacecraft is heading in the direction of the constellation Sagittarius, toward the center of our Milky Way Galaxy. Unlike radio messages, this message is inside the computer, so it travels at the speed of the spacecraft, taking tens of thousands of years to get far enough from Earth that our planet. The message is sent to the spacecraft on the normal radio link that connects Earth to all NASA spacecraft, so represents no increase of the risk of detection over what it is anyway.