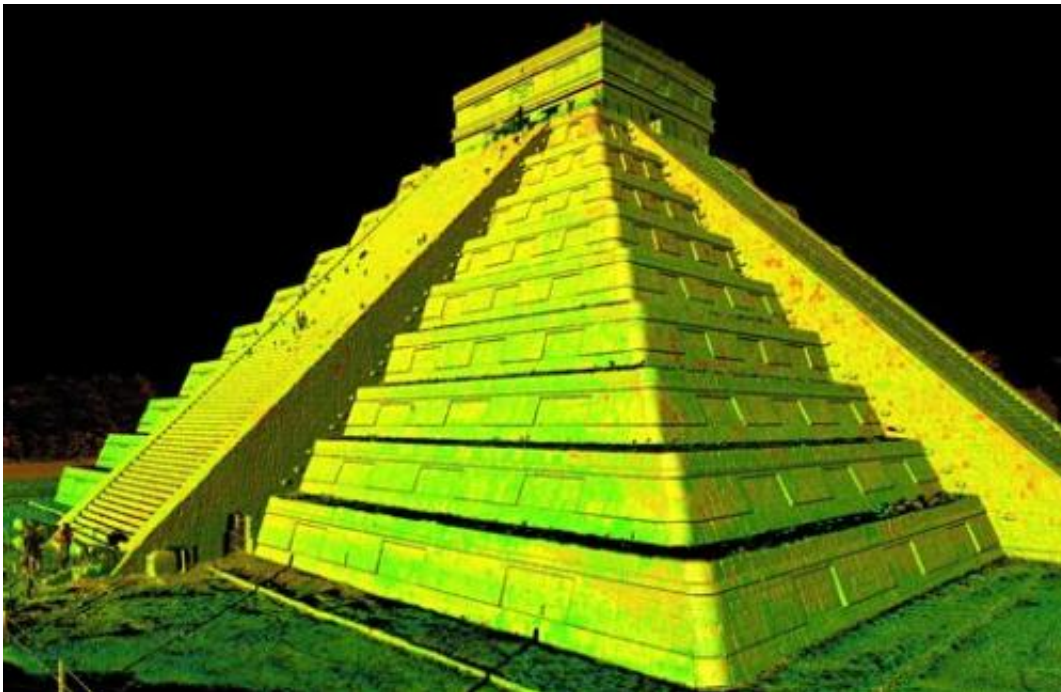# Group makes 3-D backups of world landmarks (Update)

October 21 2013, by Raphael Satter

In this photo provided by CyArk, on Monday, Oct. 21, 2013, an image generated by 3D laser scan data, shows a perspective of Chichen Itza, in Mexico. We all know to back up our files and photos, but what about our castles and churches? A nonprofit named CyArk has created digital copies of more than 100 of the world's best-known monuments, mapping Roman ruins, ancient statues, and even an entire island. Now it plans 400 more, with the goal of preserving the world's most important sites against war, wear, and the impact of climate change. (AP Photo/CyArk)

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A nonprofit named CyArk has created digital copies of more than 100 of the world's best-known monuments, mapping Roman ruins, ancient statues, and even an entire island.

Now it plans 400 more, with the goal of digitally preserving the world's most important sites against war, wear, and the impact of climate change.

"There is never going to be enough time or money to preserve everything," CyArk co-founder Barbara Kacyra said Monday at a launch event at the Tower of London.

"If you can't physically save something, your next best thing is to digitally preserve it."

Oakland, California-based CyArk works by using 3-D laser scanners, radar, and a host of other technologies to create detailed maps of famous monuments—from Mayan pyramids in Chichen Itza to the Leaning Tower of Pisa—measuring nooks and nicks with millimeter precision.

Not only do the lasers capture minute damage invisible to most cameras, the 3-D data can be used to create hyper-realistic models and flyover programs used by tourists and educators.

Master copies of the measurements are kept by Iron Mountain Inc., which stores some 2 petabytes' worth of data on magnetic tape in its secure underground archive at the bottom of a former limestone mine in Pennsylvania.

Kacyra said the project was born out of the heartbreak of seeing the

Taliban pulverize the Afghan Buddha statues in 2001, but Gustavo Araoz, a senior preservationist who's helping CyArk draw up a list of its next 400 sites, says similar destruction is playing out in slow motion across the globe.

"This happens every day at a smaller and much less dramatic scale," he said.

There's already some evidence that the preservation project is paying dividends. Ugandan diplomat Sam Muhwezi told The Associated Press that a 3-D model drawn up by CyArk was being used to help restore the country's fire-damaged royal tomb complex.

"It's the perfect example of why this kind of project is important," he said.

More information: CyArk: archive.cyark.org/

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