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FROM SURVEILLANCE TO SCIENCE: EVALUATING MODELS FOR CIVIL USE OF U.S.
NATIONAL SECURITY SATELLITE DATA

Abstract

It may seem surprising that the National Geospatial Intelligence Agency, which analyzes data from United States reconnaissance satellites and other sources, considers sharing its data outside the intelligence community. However, not only has a policy of data sharing been considered and implemented, but the amount of data that is shared and the extent to which it is shared has increased over time. This paper reviews the evolution of NGA data sharing policies over time and examines how these policies have affected the civil geospatial information community.

The United States began a reconnaissance satellite program at the very outset of the space age, successfully launching more than 100 national security surveillance satellites over the decades. Beginning in the late 1990s, data from these government-owned satellites was augmented with data purchased from the newly-established U.S. commercial remote sensing sector, increasing the repository even further. Although the purpose of these programs was to provide intelligence for national security purposes, and the data was classified, it was clear from the beginning that the data could also be valuable to civilian researchers and operators. High-resolution imagery could be used to update maps, provide assistance in recovery from natural disasters, support natural resource management, enable environmental research, and inform decision-making.

Since the U.S. government has already paid for these systems and the data has already been collected (or is being collected), making the data available for additional purposes makes it possible to increase the benefits to society at a very low additional cost. These potential benefits were deemed to be large enough that it was worth making some effort to provide the civil community with access to the data.

In the past few decades, the United States has experimented with at least five different models for making national security satellite data available to the civil community: 1) transferring data to an operational agency for development of a specific product (e.g. U.S. maps), 2) declassifying large swaths of data which are then made openly available via a civil agency, 3) providing a select group of civilian experts with security clearances to identify useful data and conduct research, 4) providing data of a specific geographic area to a civilian agency for use by government-affiliated researchers, and 5) providing a broad set of data to a civilian agency for use by government-affiliated researchers. This paper examines those five models in detail.