

Item 6. Space-system-based disaster management support

The Israel Space Agency have been promoting the usage of Space driven data as an enabler for the government agencies monitor and control of the environment. For this purpose, we decided to tackle the problem of Asbestos usage in Israel as a pilot project.

Even today Asbestos is still a major problem since it was widely used for a long period of time as roof tiling and other products here in Israel, we have joined forces with the Ministry of Environmental protection and the Tel-Aviv university (prof. Eyal Ben Dor).

The University of Tel Aviv has taken upon itself to develop an algorithm which will enable us to detect Asbestos. The first stage of the project was a study based on the German earth observation satellite-EnMap, hyperspectral data to analyze various signatures of asbestos and to ground truth the output.

Our preliminary analysis indicated a high correlation between the analyzed data from EnMap and the ground truthing. We are now in the process of fine tuning our detection algorithm and to customize it to run on data from WorldView3. Once this is done we shall create a layer of data which will map the location and type of asbestos in Israel. This information will enable the ministry of Environmental protection to perform to better understand the asbestos location and to better prepare to clean and dispose of it.