

HELP FROM ABOVE - ADDRESSING THE CHALLENGE OF RAIL INFRASTRUCTURE MONITORING

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ABSTRACT

The rail infrastructure in South Africa extends over 22 000 route kilometres in length. When considering the additional need for ongoing bridge inspections as well as encroachment detection we face a daunting task in monitoring the condition and safety of this infrastructure. But there is help available from the skies. In this presentation we will look at how freely available Copernicus Sentinel-1 satellite radar data is being used for remote infrastructure monitoring. We will also look at how this process is being automated to make it easily accessible to planners and decision-makers. This provides valuable planning and early warning information regarding railway networks, bridges and related infrastructure.