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Remote Sensing; it's not only about satellites!!

Anglo Platinum is the world's largest platinum producer and consequently has the largest platinum exploration program worldwide. Diverse exploration techniques are widely used to identify, evaluate and grow platiniferrous mineral resources and replace mined-out ore reserves.

As an aid to the exploration programs, remote sensing techniques are used at every stage of the exploration cycle; from target generation through to mining. Satellite imagery is used in all facets of the exploration program and ranges from low resolution imagery such as Landsat and Aster at the early reconnaissance phase through to high resolution imagery such as Quickbird, GeoEye and Ikonos which is used at the mine deployment phase. Other techniques that are commonly employed but which are not commonly referred to as remote sensing are airborne magnetics, radiometrics, gravity, EM and gradiometer surveys. On the surface 2D and 3D seismic surveys are utilised extensively to map underground structure, while at the borehole level hand held spectrometers and high resolution core scanners are used to extract as much information as possible from the core that has cost so much to retrieve.

At every stage remote sensing plays an important role in the successful completion of the exploration program and helps to ensure the sustainability of the mining operation, the local communities and the surrounding environment.