

Obtaining, Processing, and Managing Current and Widespread Coverage of the Western Canadian Sedimentary Basin with High Resolution Satellite Imagery

Sam Lieff*

TELUS, Edmonton AB

sam.lieff@terraengine.com

In the last decade, satellite imagery has rapidly become one of the most sought after data for mapping and planning applications in the Canadian Oil & Gas industry. With a wide range of uses, the amount of satellite imagery consumed by this particular market grows each year.

Through the use of a commercially dedicated ground receiving station, and exclusive relationship with SPOT Image, TELUS, and its partner Iunctus Geomatics collect and process more high resolution satellite imagery than any other commercial vendor in Canada. Since 2003 a current and complete imagery mosaic of the Western Canadian Sedimentary Basin (WCSB) over the provinces of British Columbia, Alberta, Saskatchewan and Manitoba has been assembled. This mosaic, comprised of SPOT high resolution satellite imagery is updated on an annual basis and covers approximately 1,500,000 km².

This ongoing project has lead to a significant amount of time and effort directed towards planning, managing, and developing workflows for satellite tasking, imagery acquisition, and data storage and processing. With each successive imaging season, the workflow and management strategies regarding imagery acquisition and processing have become more effective, and have allowed Iunctus to collect, process, and make available to users more and more up-to-date imagery every year. This presentation will look at a selection of Iunctus' workflows and strategies, and also, the challenges that have been encountered acquiring, processing and managing these vast amounts of spatial data.