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Ontario Geoscience Video 1

## **Ontario Geological Survey Virtual Field Trip: Geology of the Sudbury Impact Structure**

by C.A. Gordon, A.S. Pélouquin and P.A. Gervais

This publication can be downloaded from [www.geologyontario.mines.gov.on.ca/persistent-linking?publication=ONGeoSciVid001](http://www.geologyontario.mines.gov.on.ca/persistent-linking?publication=ONGeoSciVid001).

Other Ontario Geological Survey (OGS) publications can be downloaded from GeologyOntario ([www.hub.geologyontario.mines.gov.on.ca](http://www.hub.geologyontario.mines.gov.on.ca)).

### **Introduction**

This virtual field trip provides an overview of the geology of the Sudbury Impact Structure, including the evidence of impact in the footwall and hanging wall, the effects of the impact on the footwall, and the rocks formed by the impact (melt sheet, sublayer and impact melt dikes, and pseudotachylite (Sudbury Breccia)). The field trip is based on the Sudbury Structure field trips that have been given for over 20 years by the Sudbury District Office of the Ontario Geological Survey Resident Geologist Program, recent work in the southwest Sudbury Structure by Gordon and others, previously published Sudbury geology field guides, and works by numerous researchers.

This publication is part of the Ontario Geological Survey “Ontario Geoscience Video” series and was presented at the *Ontario Geological Survey Virtual Showcase 2022*. The target audience is the geological community.

### **Contents**

The following files are included in this publication:

*ONGeoSciVid001\_Sudbury Impact Structure.mp4* is the video of the virtual field trip in compressed MP4 format.

*ONGeoSciVid001\_Sudbury Impact Structure\_subtitled.mp4* is a version with embedded subtitles;  
note: the subtitles overlap the content of some images.

*ONGeoSciVid001\_Sudbury Impact Structure\_video transcript.pdf* is the transcript of the audio on the video (and is used for the subtitles).

*ONGeoSciVid001\_Sudbury Impact Structure\_Selected Bibliography.pdf* provides the references for citations appearing on figures and photographs in the video, and the sources used as a basis for the information in the video.