# Litho 2: Enabling the Power of Mobile Devices and Cloud Computing for Creating Comprehensive Sedimentary Logs from Outcrop, Core and Mud Logging

**Javier Iparraguirre[1], Carlos Zavala[2], Mariano Arcuri[2], Mariano Di Meglio[2], and Agustin Zorzano[2]**

[1]Universidad Tecnológica Nacional
[2]GCS ARGENTINA

## Abstract

Since the beginning of modern Geology, representation of core and outcrop data in on-scale sedimentary columns became a fundamental tool for sedimentological and stratigraphic analysis of ancient sedimentary successions. Initially, sedimentary logs were sketched in the field or core facilities, and then redrawn in the lab, often requiring long time of processing with the associated risk of data lost. Later, personal computers provided new resources with applications that facilitate the column drawing, but the problem of data acquisition in the field was still unsolved. In recent years, two new technologies irrupted allowing new possibilities to solve this problem. In first place, smart phones became powerful devices allowing the user to interact with data using multi-touch screens. The other game-changer technology is cloud computing. Litho is an application that allows the creation of sedimentary logs in a complete new way. The user literally interacts with the sedimentary column using the device screen. Additionally, the data is transparently synchronized across multiple platforms. Litho was initially launched as an Android application and it is currently available as a free tool at the Google Play Store. Typical applications of this software are the description of stratigraphic columns from outcrops, cores, and mud logging. In this work, we introduce the version 2.0 of this free software. The new release enables the benefits of the latest disruptive technologies making the creation of sedimentary logs a complete new experience.