

GRAND JUNCTION GEOLOGICAL SOCIETY

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JANUARY MEETING

WEDNESDAY, JANUARY 22, 2020

Joint meeting with the CMU Geology Students

7:30 PM

Sacomanno Lecture Hall

(In the Wubben-Science Building)

Dr. Greg Baker

Geosciences Program

Colorado Mesa University

Will Speak On

**“An overview of sUAS (“drones”) applications in the
Geosciences”**

Guests Are Always Welcome

Abstract on Next Page

An overview of sUAS (“drones”) applications in the Geosciences

Abstract

Although small unmanned aerial systems have been used by numerous investigators throughout the geoscience community over the past decade, basic knowledge of the rapidly-evolving technology, rules/regulations, and applications have not been widely dispersed. Small unmanned aircraft systems (sUAS)—also known to the general public as “drones”—are one potential “black box” technology that has clear and exciting Earth-science applications: capturing geological features at different scales, generating three-dimensional models, accessing remote locations, time-lapse analysis of geologic/anthropogenic processes, and other applications that can be a significant addition to project data. To improve experimental design/application, however, practicalities and pitfalls of the technique(s) should be studied. In addition to the more familiar hardware/software learning curve, there is also (i) the associated intersection with government agencies (e.g., the Federal Aviation Administration) related to licensing & waivers, (ii) personal safety & piloting skills, and (iii) weather limitations. The objective of this talk will be to provide an introduction to students, faculty, and professionals who may know nothing (or only a little) about these topics and desire a way to “jump start” potential collaborations or science initiatives. Case studies will be used throughout the talk.