

## TITLE:

Space Weather Education at the University of Colorado Boulder

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## ABSTRACT

The University of Colorado Boulder recently incorporated the Space Weather Technology, Research, and Education Center (SWx-TREC) in response to the Chancellor's Grand Challenge "Our space. Our future." SWx-TREC serves as a focal point for space weather related activities at the University, facilitating new partnerships between academia, commercial partners, industry, and federal agencies.

Its Education Office ensures that students are brought into all levels of this collaborative process, and so far it has helped to develop new course content, develop new certifications, and lead extracurricular efforts such as summer schools.

SWx-TREC has developed a new Graduate Certificate in Space Weather and Applications (SWA), which involves courses from a broad range of engineering, science, and mathematics departments.

The purpose of the certificate is to develop interdisciplinary skills in the field of space weather, which often requires knowledge about both fundamental processes in science and practical applications to space-based and ground-based technology. We envision this certificate as one way of extending the highly successful "Space Minor" to the realm of graduate education.

In addition, SWx-TREC is working with the co-located National Solar Observatory (NSO) on methodologies for distance learning in space weather and solar/space physics courses, based on the multi-institution Hale COLLAGE program inaugurated in 2013.

A few in-progress outreach activities of SWx-TREC include the development of a Space Weather student blogging site (similar to the popular site "AstroBites") and producing an array of new planetarium materials suitable for domes or "science-on-a-sphere" projection systems.