A GPS Occultation Study of Polar Stratospheric Waves.
Impacts on Polar Stratospheric Cloud Formation.

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GPS occultations have been used to observe the signature
of atmospheric waves in stratospheric temperature profiles.
Such waves determine the thermodynamic conditions under
which polar chemistry occurs and in the Arctic they have
been suggested to play a dominant role in the creation of
air masses conducive to Polar Stratospheric Cloud formation.
We illustrate cases where this occurs and we observe large
differences with Global Circulation Models.
We also present validation rules about how to discern
if it is the model or the occultation closer to the atmospheric
state in cases of disagreement.

1. Chapman Conference on Gravity Waves Processes and Parameterization.
2. Contributed.
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4. No

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Topography causes wide variations in the properties of alpine snow within small areas, and a knowledge of the spatial variation of many properties is essential for the application of distributed hydrologic models and for establishing the surface boundary condition for regional climate models. However, the topography affects the electromagnetic remote sensing signal by shadowing some terrain and by modifying the angles of incidence, emission, and reflection of the signal, and our knowledge of the elevation model is usually not precise enough to allow a priori calculation of the geometric relationships between the surface, sensor, and the Sun. Hence remote sensing algorithms must be robust to such uncertainties, except in areas where topographic knowledge is especially good. The most elementary snow property is the presence or absence of a snow cover, and snow mapping -- discrimination of snow from other types of surfaces and from clouds -- is best accomplished with a combination of visible and near-infrared wavelengths.

1. Chapman Conference on Gravity Waves Processes and Parameterization
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4. No

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Travel Support:

Application Deadline: 30 September 2003.

Applications are being made to several U.S. agencies to support travel of conference participants. Graduate students and young scientists will receive priority for funding. To apply for travel funds, please print and complete the Chapman Conference Travel Grant Application, and return it to the AGU Meetings Department by **30 September 2003**.

Meeting Location and Hotel Information

Specially discounted rooms have been reserved at the Waikoloa Beach Marriott on Hawaii's Big Island. All attendees will be responsible for making their own reservations. Housing will begin on October 01, 2003 at which time instructions for making reservations will be available. Participants should reserve sleeping rooms early to ensure that you receive the $130 specially discounted AGU group rate. Visit the hotel website to see all the wonderful amenities the hotel has to offer.

Further Information:

Additional information will be placed on the conference web page www.agu.org./ccgravitywaves/ when it becomes available. To be placed on a mailing list e-mail meetinginfo@agu.org or call +1-202-777-7332.

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