REGISTRATION FORM

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Event Info:

8:30 AM – 10:00 AM Poster Set up and Refreshments
10:00 AM – 10:15 AM Welcome
10:30 AM – 12:00 PM Poster Session #1/Dept. Tours
12:00 PM – 1:30 PM Networking Lunch
1:30 PM – 3:00 PM Poster Session #2/Dept. Tours
3:00 PM – 3:30 PM UTSA Graduate School Info

Session/Closing

(All Events in the BSE Atrium)

Poster Session Information

Please Place an “X” in the line your poster best fits:

_____ Chemistry _____ Biology _____ Mathematics _____ Physics

____X Geological Sciences _____ Computer Science _____ Engineering

Poster Title: MODIS-based snow cover variability of the Upper Rio Grande Basin
Abstracts (Please paste your abstract immediately below. Abstracts should be 250 words or less.)

Snow cover variability of the Upper River Grande Basin has been studied using the MODIS snow cover products for the year 2000-2007. MODIS instruments (on Terra and Aqua) have provided time series of snow cover products since 2000, but suffering with cloud contaminations. In this study, we evaluated four newly developed cloudless snow cover products (less than 10%) and four standard products: daily (MOD10A1, MYD10A1) and 8-day (MOD10A2, MYD10A2), in comparison with in situ Snowpack Telemetry (SNOTEL) measurements for the hydrological year 2003-2004. The four new products are daily composite of Terra and Aqua (MODMYD10DC), multi-day composites of Terra (MOD10MC), Aqua (MYD10MC), and Terra and Aqua (MODMYD10MC). The standard daily and 8-day products can classify land correctly, but had fairly low accuracy in snow classification due to cloud contamination (a average of 39.4% for Terra and 45% for Aqua in the year 2003-2004). All the
new multi-day composite products tended to have high accuracy in classifying both snow and
land (over 90%), as the cloud cover has been reduced to less than 10% (~5% for the year) under
the new algorithm. Therefore, MOD10MC (before the Aqua data available) and
MODMYD10MC products are used to get the mean snow cover of the Upper Rio Grande Basin
from 2000 to 2007. The snow depletion curve derived from the new cloud-free snow cover map
will be used to examine its effect on stream discharge.

_Deckline for all abstracts is 9am August 16, 2008._
Please email your abstract to Antonio.rivera@utsa.edu