

# **Apparent changes in the WAIS surface elevation, 2003-2004**

*Ben Smith*

As of October 2004, NASA's ICESat/GLAS mission will have been operating for eighteen months. Using cross-over data from this it is already possible to make estimates of the rate of elevation change in West Antarctica from these data for areas of a few hundreds of square kilometers with decimeter per year accuracy. The short period over which these observations were made implies that densification- and accumulation-rate variabilities may be making a significant contribution to apparent elevation change, and changes in the configuration of the GLAS instrument may have introduced small time-varying biases into the data, so care is required in interpreting apparent elevation changes. However, some parts of the Siple Coast ice stream region have large rates of apparent elevation change that cannot be dismissed as errors. We refrain from reporting apparent elevation changes in this abstract pending a late-breaking data-release in mid September, but we promise the freshest of results.