



Continuous GPS monitoring of velocities on Pine Island Glacier shows ongoing speed up

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On Pine Island Glacier (PIG), West Antarctica, a network of GPS sensors was installed directly upstream from the grounding line in Jan 2013. The area is heavily crevassed and not accessible over ground. The difficulty of instrumenting this area was overcome by deploying the GPS units directly from an aircraft. For this purpose a new instrument system ADIOS (Aircraft-Deployable Ice Observation System) was developed. The data is transmitted back using a satellite link. This is the first time that in-situ data on velocity change from this critical area is collected. We present initial findings from the network. Our analysis shows that the velocities continue to increase. The current acceleration phase of PIG shows now indications of coming to an end.