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Paper Title:	Arctic Weather Every 10 Minutes: Exelis' ABI on PCW

The US, Japanese, Korean, and European meteorological agencies are all upgrading their geostationary weather imagers to provide much more frequent Full Disk Earth images (every 5 to 10 minutes). Exelis' Advanced Baseline Imager (ABI) will fly on GOES-R East, GOES-R West, Himawari (Japan), and GEO-KOMPSAT-2A (Korea), providing these missions the additional capability for interleaved mesoscales delivering storm observations every 30 to 60 seconds. Arctic weather observation, however, is still limited to a few passes a day from low Earth orbit (LEO) satellites, many of which are well beyond their intended operational life.

Abstract:

Arctic weather could obtain the same temporal fidelity as equatorial and mid-latitude weather if Canada's Polar Communication and Weather (PCW) mission flies with ABI imagers. This would provide full images of the Arctic every 10 minutes plus interleaved storm watches every minute, rather than just a swath every 100 minutes. Such coverage would dramatically improve the quality of Arctic weather observation and prediction.

This paper will explain the capabilities of ABI on PCW and discuss how these capabilities would significantly improve Arctic weather models and forecasting.
