

Can we use new weather satellites for climate research?

Bjorn Lambrigtsen[†];

[†] Jet Propulsion Laboratory, USA

Leading author: lambrigtsen@jpl.nasa.gov

The first in a new series of US weather satellites, the NPOESS Preparatory Project (NPP) mission, is set to launch in late 2011. Originally intended as a "bridging mission" between the NASA Earth Observing System (EOS) Terra and Aqua research satellites and the planned National Polar-orbiting Operational Environmental Satellite System (NPOESS), NPP is now slated to become the first operational weather satellite in the reconfigured Joint Polar Satellite System (JPSS). NASA has a dual role in the development of NPP and JPSS. First, it is to develop or procure the sensors and satellites and transition them to NOAA as soon as they are operational. Secondly, it is to use the observations from these systems to support climate research. It is by no means obvious that weather satellite data are of sufficient quality to support current and future climate research, and NASA formed a science team to address this question. We discuss related issues and challenges. Copyright 2011 California Institute of Technology