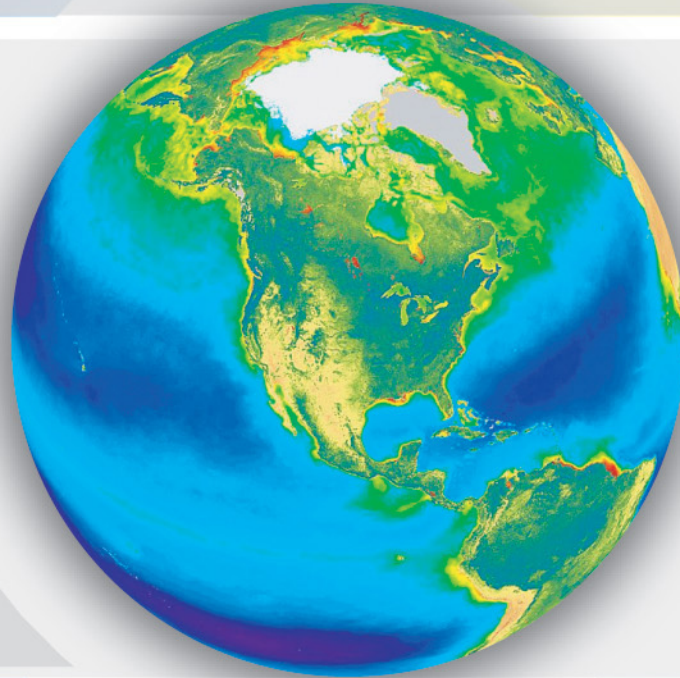
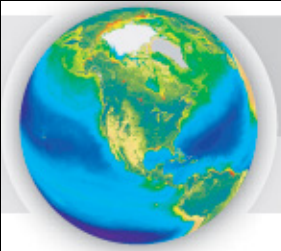


PACE SDT Polarimeter Characteristic Discussion



Hal Maring, NASA Headquarters
Steve Platnick, NASA GSFC
PACE SDT Meeting
16-18 November 2011



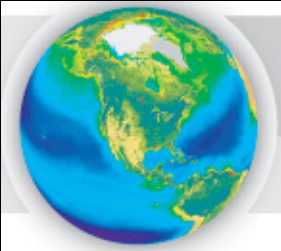


PACE Polarimeter Discussion Points

Introduction

- **Acknowledge the ambiguity of the situation**
 - **Do not know the relationship of PACE to ACE, if any; so develop a solid stand-alone mission**
 - **Contributed instrument:**
 - **Commitment for contributed instrument not firm**
 - **Is it useful to recommend requirements for, or assess the capability of, a contributed instrument?! Good thing we have an excellent working relationship with CNES and our French colleagues**
 - **A NASA-provided polarimeter is not in the budget profile**
 - **More?**



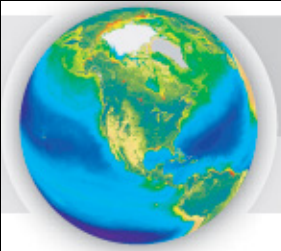


PACE Polarimeter Discussion Points

Suggested (1 of 3)

- **Purposes of the PACE Polarimeter**
 - **Climate data record continuity**
 - **Process Studies – aerosols, clouds, ocean-aerosols**
 - **Data Assimilation**
 - **Atmospheric Correction for Ocean Ecosystem Radiometer**
- **Climate data record continuity for aerosols and clouds:**
 - **POLDER**
 - **MODIS**
 - **MISR**
 - **More?**



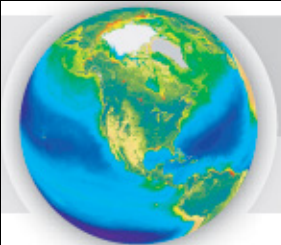


PACE Polarimeter Discussion Points

Suggested (2 of 3)

- **Process Studies of Aerosols and Clouds**
 - Subject to “answers” from slide 2, what wavelength bands, polarization accuracy, sensitivity, spatial resolution ... are necessary/desired?
 - More?
- **Data Assimilation for Research and Operational Uses**
 - What are the key aerosol/cloud assimilation issues and approaches likely to be relevant at the end of this decade?
 - What data latency, spectral bands, polarization accuracy, sensitivity, spatial resolution ... are necessary/desired?
 - More?





PACE Polarimeter Discussion Points

Suggested (3 of 3)

- **Enhanced atmospheric correction for Ocean Ecosystem Radiometer (OES):**
 - **What aerosol properties and retrieval accuracies are needed to provide meaningful corrections beyond those expected to be available from OES?**
 - **What sensitivity, accuracy, and other characteristics are required of the polarimeter to provide the required retrieval properties/accuracies?**
 - **Does the polarimeter need to have the same spectral bands as the OES? (SWIR, VNIR, UV)**
 - **Does the polarimeter need to have a similar swath and spatial resolution as the Ocean Color Radiometer?**
 - **More?**

