

Return-Path: <Deborah.G.Vane@jpl.nasa.gov>  
Return-Path: <Deborah.G.Vane@jpl.nasa.gov>  
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03 Nov 1997 14:00:12 -0800  
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03 Nov 1997 14:00:12 -0800  
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Original-Encoded-Information-Types: IA5-Text  
Priority: normal  
Disclose-Recipients: Prohibited  
Alternate-Recipient: Allowed  
X400-Originator: Deborah.G.Vane@jpl.nasa.gov  
X400-Recipients: non-disclosure;  
Date: 03 Nov 1997 14:00:12 -0800  
From: Deborah G Vane <Deborah.G.Vane@jpl.nasa.gov>  
To: Charlotte S Marsh <Charlotte.S.Marsh@jpl.nasa.gov> (1PM Return requested)  
cc: Robert T Menzies <Robert.T.Menzies@jpl.nasa.gov> (1PM Return requested),  
Steven J Walter <Steven.J.Walter@jpl.nasa.gov> (1PM Return requested)  
Subject: Steve Walter, abstract

Charlotte,

Here's the abstract for Steve Walter's talk in Germany.

Deb

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Subject: Re: workshop  
From: Steven J Walter at JPL-38DIVISION  
Date: 10/30/97 10:11 AM

Dr. Quante,

Below is a title and abstract for my talk. I look forward to attending your meeting.

Steve Walter

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CLOUDSAT: A Space Mission to Profile the Vertical Structure of Clouds

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Abstract

CloudSat is a space-based approach to measure the vertical structure of clouds. This mission is being proposed to investigate how clouds affect climate. Existing models relating cloudiness, atmospheric circulation, and temperature lack the accuracy needed to meet climate modeling needs. Current and planned observation systems are unable to probe the structure of multilayer clouds which are key to deciphering a range of climate feedback mechanisms. CloudSat is

uniquely suited to resolve the mechanisms interrelating climate and clouds.

The original CloudSat mission concept was developed for the cost-constrained NASA Earth System Science Pathfinder (ESSP) mission series. The proposed payload consists of a 94-GHz cloud profiling radar (CPR), an oxygen A-band infrared spectrometer integrated with a visible imager (ABSI) , and a submillimeter-wave cloud ice radiometer (CLIR) . This payload would be able to determine the vertical distribution of clouds, measure cloud optical depth, retrieve cirrus ice content, and assist in validating measurements made by the NASA Earth Observing System (EOS). In future CloudSat proposals, it is hoped that a lidar can be included to improve retrieval of aerosols and thin clouds.

----- Forwarded with Changes ----- ..-----  
From: Steven J Walter at JPL-38DIVISION  
Date: 10/30/97 10:11AM  
\*To: Markus.Quante@gkss.de at Internet  
Receipt Requested  
cc : Deborah G Vane at JPL-700-B301  
'cc: Robert T Menzies at Gateway  
'cc; Graeme Stephens at Internet  
Subject: Re: workshop  
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