

# **MEMORANDUM OF AGREEMENT**

**between**

**The Planetary Data System Geosciences Node  
Washington University, St. Louis, Missouri**

**and**

**The MGS TES Data Node  
Arizona State University, Phoenix, Arizona**

**Prepared by  
Susan Slavney, PDS Geosciences Node  
May 21, 2003**

**Accepted by**

---

**Philip Christensen** **Date**  
**Director, MGS TES Data Node**

---

**Raymond E. Arvidson** **Date**  
**Director, PDS Geosciences Node**

---

**Laverne Hall** **Date**  
**Project Manager, Planetary Data System**

## Overview

The Planetary Data System (PDS) consists of a set of Discipline Nodes located at various institutions for the purpose of archiving and distributing planetary data. Each Node is responsible for data within a particular scientific discipline. Occasionally the PDS establishes Data Nodes for a limited time period to archive and distribute specific data sets. A Data Node reports to and receives assistance from one of the permanent Discipline Nodes. At the end of the time period the Data Node must transfer its data sets and related materials and services to the Discipline Node.

This Memorandum of Agreement (MOA) defines the purpose of the MGS TES Data Node and its relationship to the Geosciences Discipline Node. The MOA specifies the services to be performed by the Data Node and the responsibilities of both nodes toward maintaining those services. The MOA may be revised by consent of both nodes.

## Purpose of the MGS TES Data Node

Data products from the Thermal Emission Spectrometer (TES) on the Mars Global Surveyor (MGS) spacecraft are currently generated by the Mars Space Flight Facility at Arizona State University (ASU) and delivered to the PDS Geosciences Node at Washington University, where they are validated, made available on the Internet for public access, and archived on permanent media. With the establishment of the MGS TES Data Node at ASU, the data will also become available on a TES Data Node web site at ASU. The Data Node will provide online tools for searching and extracting data from the TES products and will be responsible for responding to questions from users. The Geosciences Node will continue to validate the data and store it on physical media, and will maintain a second online copy of the data for backup.

The advantages provided by the TES Data Node are more timely access to new data, a search capability tailored to TES, and user support provided by those most knowledgeable about the data set, the data producers.

The TES Data Node is expected to remain active throughout the MGS Mission and for some time afterward as funding permits. When the Data Node is dissolved, responsibility for its data and services will revert to the Geosciences Node.

## Responsibilities of the MGS TES Data Node

The TES Data Node assumes the following responsibilities.

- a) Provide public Internet access to the MGS TES data set via a TES Data Node web site.
- b) Make the TES data repository at ASU accessible by the PDS-D software. This requires installation of PDS-D product server software at ASU. The software will be provided by the PDS Central Node. The product server accepts queries for TES data from other PDS Nodes and returns TES products.
- c) Develop and maintain a user interface for searching and extracting TES data. Details of this interface are TBD.

- d) Notify the Geosciences Node when new TES data are ready to be validated and make the data available to the Geosciences Node. It is expected that the established schedule of deliveries every three months will be continued.
- e) Be the primary contact for questions about TES data from users. Include a contact email address on the TES Data Node web site.
- f) Report status monthly to the Geosciences Node for inclusion in regular reports to the PDS Project Manager.
- g) Work with the Geosciences Node to prepare a plan for the transition of data and services to Geosciences at the end of the performance period.

## **Responsibilities of the Geosciences Node**

The Geosciences Node assumes the following responsibilities.

- a) Continue to validate new TES data when notified by the TES Data Node.
- b) Include links to the TES Data Node web site as appropriate on the Geosciences Node web site.
- c) Make copies of the TES archive on PDS-approved physical media (e.g. CD or DVD). Make at least one copy for storage at the Geosciences Node, send one to the PDS Central Node, and send one to the National Space Science Data Center (NSSDC).
- d) Maintain a copy of the TES data set online as a backup resource, accessible via a PDS-D product server.
- e) Include TES Data Node status in regular reports to the PDS Project Manager.
- f) Work with the TES Data Node to prepare a plan for the transition of data and services to Geosciences at the end of the performance period.
- g) Provide other assistance to the TES Data Node as needed.

## **Schedule and Funding**

The TES Data Node will begin operations on or before June 1, 2003.

The nominal period for operation of the Data Node will be concurrent with Mars Global Surveyor Phase E operations, ending October 1, 2008 (end of Extended Mission 3).

---

# **AMENDMENT TO THE MEMORANDUM OF AGREEMENT**

**between**

**The Planetary Data System Geosciences Node  
Washington University, St. Louis, Missouri**

**and**

**The MGS TES Data Node  
Arizona State University, Phoenix, Arizona**

**Prepared by  
Susan Slavney, PDS Geosciences Node  
February 7, 2007**

**Accepted by**

---

**Philip Christensen** **Date**  
**Director, MGS TES Data Node**

---

**Raymond E. Arvidson** **Date**  
**Director, PDS Geosciences Node**

---

**Edwin Grayzeck** **Date**  
**Program Manager, Planetary Data System**

## **Amendment to the TES Data Node Period of Operations**

**February 7, 2007**

Communication with the MGS spacecraft ended unexpectedly on November 2, 2006. Efforts to restore communication were unsuccessful. The official date of the end of the MGS mission was therefore set to May 31, 2007.

At the request of the Mars Space Flight Facility at Arizona State University, and with the concurrence of the PDS Geosciences Node at Washington University, the TES Data Node established by this MOA will continue to operate at ASU for two years following the end of the mission, until May 31, 2009. At that time the data and services provided by the Data Node will be transferred to the Geosciences Node, and the TES Data Node will be dissolved.

Funding for the TES Data Node during this period is the responsibility of ASU.

Other than the change in the ending date of the Data Node operations, all provisions originally established by this MOA remain in effect.

This MOA may be amended again by consent of both parties.