

## Article Title:

# Interaction of Interplanetary Shocks with the Moon: Hybrid Simulations and ARTEMIS Observations

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**Total Data Size:** 294 Mb

**Data Description:** Data for all Figures in the paper is provided in this location. Both the 3-D and 1-D data are in “Direct Access” (.gda) format (readable by visualization packages such as IDL). The dimensions of the data files are provided below.

## Information on Units:

The units for the data provided here is the same as that noted in the paper.

## Generic Code for Reading 3-D Data (e.g. logden.gda):

```
RecordLength (in bytes) = 4 x (size_in_X x size_in_Y x size_in_Z)
```

```
OPEN (10,file='logden.gda',form='unformatted',access='direct',status= &
```

```
'unknown',recl= RecordLength)
```

Note: 10 is arbitrary I/O unit ID number chosen here for example. This number is used when reading 'logden.gda' file as shown below.

```
READ (10,rec=1-6) (((((logden(i,j,k),i=1, size_in_X),j=1, size_in_Y), k=1, size_in_Z))
```

Note: Here rec= 1-6 since 3-D data is shown at 6 different times.

## Generic Code for Reading 1-D Data (e.g. bx.gda):

```
RecordLength (in bytes) = 4 x (size_in_X)
```

```
OPEN (20,file='bx.gda',form='unformatted',access='direct',status= &  
'unknown',recl= RecordLength)
```

```
READ (20,rec=1) (bx(i),i=1, size_in_X)
```

Note: Here rec=1 since 1-D data is shown at one time during the run.

## Files Sizes:

### Files in Figure 14:

X	Y	Z	time
400	1	1	1

### Files For All Figures Except 14:

X	Y	Z	time
132	94	94	6