

# H5edit MODIFY Command

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## 1 Purpose

This describes the requirements and design of the MODIFY command of the H5edit tool. Section 2 lists the function requirements of the command. Section 3 shows some examples of the commands.

## 2 Use Case

Users may want to pull out a subset of the content in an NPP file, copy them to a new file, set the times and orbit numbers (they are in forms of attributes) to new values and run them through ingest. They would like to use h5edit to modify the values of the few attributes such as:

- AggregateBeginningDate
- AggregateBeginningOrbitNumber
- AggregateBeginningTime
- AggregateEndingDate
- AggregateEndingOrbitNumber
- AggregateEndingTime
- Beginning\_Date
- Beginning\_Time
- Ending\_Date
- Ending\_Time
- N\_Beginning\_Orbit\_Number

## 3 Requirement Specifications

In this section, I will describe the functionality of the MODIFY command of the H5edit tool.

### 3.1 MODIFY Command

This command modifies the value of an existing attribute.

#### 3.1.1 Command Syntax

```
MODIFY <old_attribute_name> {<data>} ;
```

#### 3.1.2 Function Definition

Upon a successful execution of the command, the value of the old attribute is modified to be the given data.

## 4 Examples:

### 4.1 Examples of the MODIFY Command

#### 4.1.1 `MODIFY /group1/dataset1 attribute1 {201};`

The value of `/group1/dataset1/attribute1` becomes 201.

#### 4.1.2 `MODIFY /group1/dataset1/attribute1 {201};`

Same effect as the previous example.

## 5 Testing Requirements

### 5.1 Validation Tests

#### 5.1.1 H5edit tool should accept the MODIFY command as specified in Section 2 for attributes of the following data types:

- Single integer, floating point, or string
- Array of integers or floating points

### 5.2 Verification Tests

#### 5.2.1 Syntax error checking

H5edit tool should reject MODIFY commands with incorrect or incomplete syntax.

For examples,

- `MODIFY /group1/dataset1 attribute1; # missing data part`
- `MODIFY /group1/dataset1/attribute1 1,2; # Missing enclosing brackets.`

#### 5.2.2 Bad data type

H5Edit tool should reject MODIFY commands with the incorrect type of data. For examples,

- `MODIFY /group1/data1/attribute1 {12.5} # Attribute1 expects integer values`

#### 5.2.3 Bad attribute name

H5edit tool should reject MODIFY commands with non-existing attributes. For examples,

- `MODIFY /group1/data1/nosuch {201} # nosuch does not exist.`

## Revision History

Date	Revisions
2013-05-17	Rev 1: Requirements Specification defined.