SCR 3-1123

Title:

Correct UNIT_ID Values for VELOCITY Keywords

Submission Date:

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Submitter:

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History:

pre-2007: Submitted by Raugh as request for a typo correction.

2007-07-05: Resubmitted as a problem statement by Raugh, assigned SCR number.

2007-10-31: C. Isbell noted that SC_SUN_VELOCITY_VECTOR has the same problem.

2007-10-31: Converted to SCR format by Simpson.

Problem:

When the SC_TARGET_VELOCITY_VECTOR and SC_SUN_VELOCITY_VECTOR keywords were originally ingested, they apparently contained typos in the UNIT_ID field. The UNIT_ID is currently "KM," which is not a valid unit for velocity.

Milestones: None

Immediacy: This change should be implemented now.

Proposed Solution: Change the Data Dictionary to show UNIT_ID = "KM/S"

Impact Assessment:

PDS Standards Reference:	None	(Simpson)
Data Dictionary:	Edit master file, generate derivatives	(Simpson)

PDS Tools:	None	(Simpson)
Other Documents:	None	(Simpson)
External Agencies:	None	(Simpson)
External Interfaces:	None	(Simpson)
Compliance/Compatibility:	None	(Simpson)

Priority:

(1) This should be worked immediately. A simple typo correction, which should be approved and implemented ASAP

Recommended Approval Authority:

TG_APPROVED without need for Management Council vote

Working Group:

R. Simpson (lead), E. Rye, R. Joyner, A. Raugh (honorary)

Additional Information:

None

Dependencies/Contingencies:

None

Requested Changes:

For SC_TARGET_VELOCITY_VECTOR the following:

```
OBJECT = ELEMENT_DEFINITION
  NAME = SC_TARGET_VELOCITY_VECTOR
  STATUS_TYPE = APPROVED
  GENERAL_DATA_TYPE = REAL
  UNIT_ID = KM
  STANDARD_VALUE_TYPE = RANGE
  DESCRIPTION = "
    The sc_target_velocity_vector element indicates the x-, y-,
    z- components of the velocity vector of target relative to
    observer, expressed in J2000 coordinates, and corrected for
    light time, evaluated at epoch at which image was taken."
END_OBJECT = ELEMENT_DEFINITION
END
```

becomes (red denotes modified line)

```
OBJECT = ELEMENT_DEFINITION
  NAME = SC_TARGET_VELOCITY_VECTOR
  STATUS_TYPE = APPROVED
  GENERAL_DATA_TYPE = REAL
  UNIT_ID = KM/S
  STANDARD_VALUE_TYPE = RANGE
  DESCRIPTION = "
     The sc_target_velocity_vector element indicates the x-, y-,
     z- components of the velocity vector of target relative to
     observer, expressed in J2000 coordinates, and corrected for
     light time, evaluated at epoch at which image was taken."
END_OBJECT = ELEMENT_DEFINITION
END
```

For SC_SUN_VELOCITY_VECTOR the following:

```
OBJECT = ELEMENT_DEFINITION
  NAME = SC_SUN_VELOCITY_VECTOR
  STATUS_TYPE = APPROVED
  GENERAL_DATA_TYPE = REAL
  UNIT_ID = KM
  STANDARD_VALUE_TYPE = RANGE
  DESCRIPTION = "
     The sc_sun_velocity_vector element indicates the x-, y-,
     and z- components of the velocity vector of sun relative to
     observer, expressed in J2000 coordinates, and corrected for
     light time, evaluated at epoch at which image was taken."
END_OBJECT = ELEMENT_DEFINITION
END
```

becomes (red denotes modified line)

```
OBJECT = ELEMENT_DEFINITION
  NAME = SC_SUN_VELOCITY_VECTOR
  STATUS_TYPE = APPROVED
  GENERAL_DATA_TYPE = REAL
  UNIT_ID = KM/S
  STANDARD_VALUE_TYPE = RANGE
  DESCRIPTION = "
     The sc_sun_velocity_vector element indicates the x-, y-,
     and z- components of the velocity vector of sun relative to
     observer, expressed in J2000 coordinates, and corrected for
     light time, evaluated at epoch at which image was taken."
END_OBJECT = ELEMENT_DEFINITION
END
```