Format Translation Overview

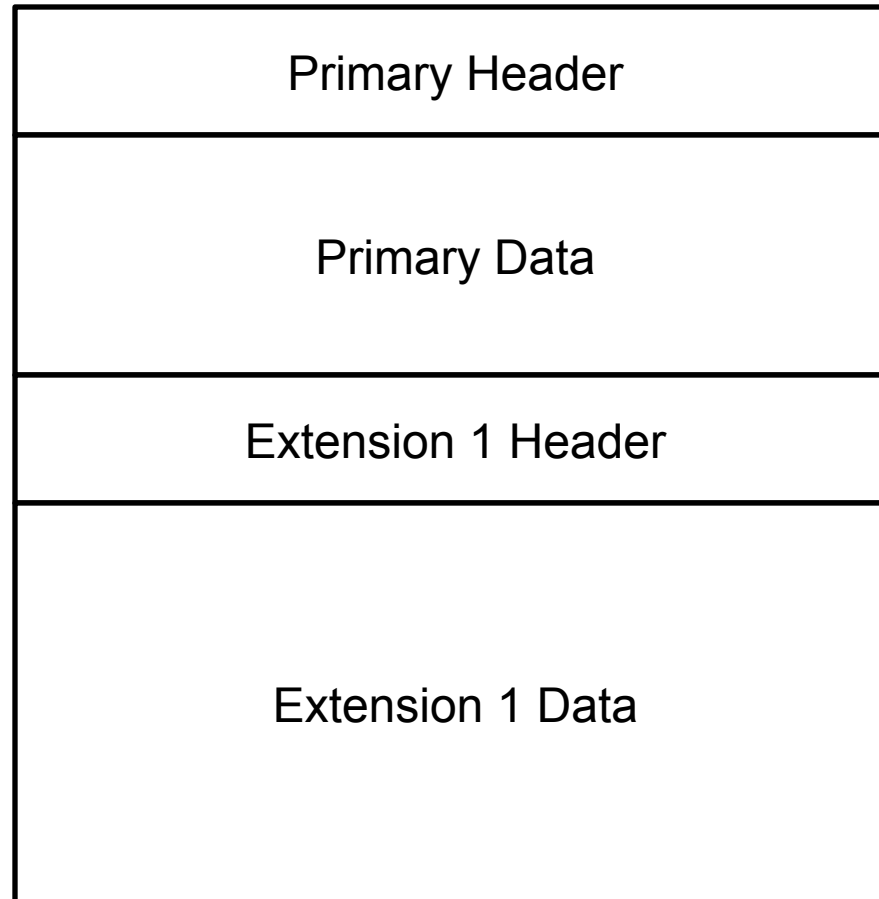## PDS 2010 Tech Session

June 10, 2009

PDS 2010 Data Design WG

Assumptions

- **Data Types**

- **Array Storage Order**

- **File Division**

- **Label Grammar**

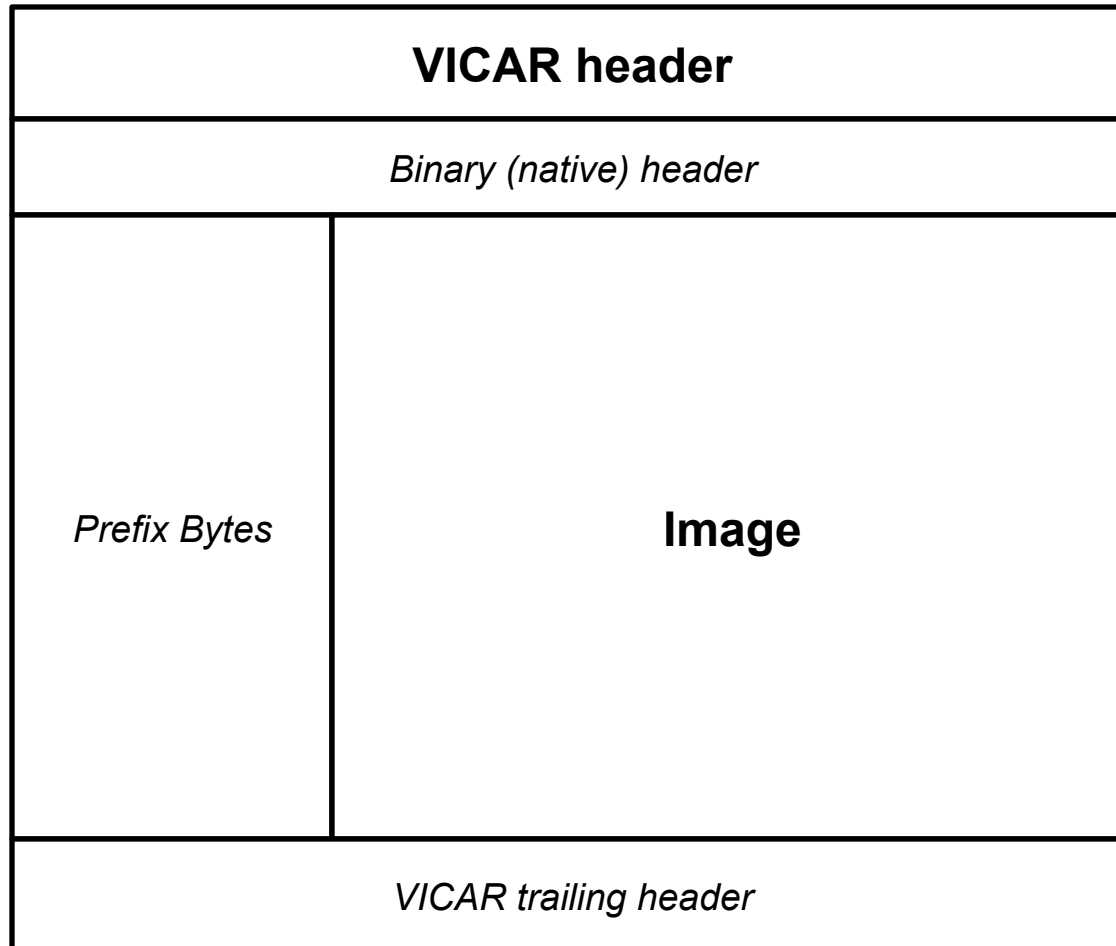- **Reconstruction Information**

FITS File Structure

Primary Header
Primary Data
Extension 1 Header
Extension 1 Data

FITS to PDS4

- **Almost trivial because of assumptions**

Prototype took < 4 hours to code and test.

VICAR File Structure

VICAR header
Binary (native) header

Prefix Bytes	**Image**

VICAR trailing header

VICAR to PDS4

- **Data type issues**

- **Byte sequence preservation in interleaved logical segments**

- **Reconstruction information preservation**

Prototype took approximately 8 hours to code and test.

PDS4 to FITS

- **Add FITS header to a PDS4 ARRAY object for import via a FITS reader into analysis environment; output a conformant FITS file.**

- **Nearly trivial because of archive format assumptions**

About 1 hour to code prototype

Backup