Summary of Software Using HDF5 Type (January 2017)

Name (with Product URL)	Application Type	Open Source / Commercial	Platforms	Languages	Short Description
HDF5 Indexing Prototype	API for fast querying in HDF5	Open Source			Prototype for storing bitmap and projection indices in HDF5
HDF5-FastQuery	API for fast querying in HDF5				APIs to extend HDF5 selection and accelerate queries
H5MD	API for HDF5	Open Source			File format specification for efficient and portable storage of molecular data
h5py	API for HDF5	Open Source	Linux, Mac, Windows	Python	Python interface to HDF5
HDF Java Products	API for HDF5	Open Source	Many	Java	Java API for HDF and HDF5 and HDFView tool
HDF5 and .NET	API for HDF5	Open Source			P/Invoke declarations for core HDF5 C-API

HDF5 bindings for Delphi	API for HDF5	Open Source			Delphi module with HDF5 bindings
HDF5 High Level APIs	API for HDF5	Open Source		C, Fortran	High Level APIs that come with HDF5 to simplify code and provide standards
JHDF5	API for HDF5	Open Source		Java	High Level Java API for HDF5
MXA	API for HDF5	Open Source			File format and API for managing data from scientific experiments using XML
NetCDF-4	API for HDF5	Open Source	Many	Fortran, C++, Jav	Set of interfaces for array-oriented data access
NeXus	API for HDF5	Open Source			Common data format for neutron, x-ray and muon science
pandas (http://pandas.pyd	API for HDF5	Open Source			Python Data Analysis Library
SPDLib	API for HDF5	Open Source			Software for processing laser scanning data (i.e., LiDAR)

lvhdf5	API for HDF5	Open Source			HDF5 API for Labview
HDF Explorer	Browser/Editor	Commercial	Windows		Data Visualization program for HDF and HDF5
HDFView	Browser/Editor	Open Source	Many		Java-based tool for viewing and editing HDF and HDF5 files
pyqt-h5browser	Browser/Editor	Open Source			HDF5 Python browser
ViTables	Browser/Editor	Open Source	Many		PyTables and HDF5 file viewer and editor
PyTables	Database	Open Source		Python	Python API to organize and manipulate scientific data tables and other numeric objects
CSP	Format Conversion	Open Source			Command-line tool to convert/plot a Perkin Elmer sp3 spectra file into HDF5
dxhdf5	Format Conversion	Open Source			Import HDF5 data into Open DX

H5utils	Format Conversion	Open Source			Conversion and Visualization tools for HDF5
HDF4 to HDF5 Conversion Library	Format Conversion	Open Source	Linux, Solaris		Library and tools to convert HDF4 files to HDF5 files
HDF5 XML	Format Conversion	Open Source			An HDF5 DTD and tool
ActivePapers (http://www.	General Problem Solving	Open Source			File format for storing computations.
Cactus	General Problem Solving				Problem solving environment
GriKSL	General Problem Solving	Open Source			Develop grid-based simulation and viz techniques for CACTUS
h5edit	General Problem Solving	Open Source	Linux, Windows		Command-line tool to edit HDF5 files. Currently limited to operations on attributes
hdf5read	General Problem Solving	Open Source		Fortran 90	Module to read selected datasets and attributes from HDF5/HDF-EOS data files

PSH5X	General Problem Solving	Open Source	Windows		Windows powershell module for HDF5
PyHexad	General Problem Solving	Open Source			Python-based Excel add-in for HDF5
Salome	General Problem Solving	Open Source			A journaling filesystem driver for HDF5 based on SEC2 driver
h5check	HDF Tools	Open Source	Linux, Solaris		A tool to check the validity of an HDF5 file
HDF5 Utilities	HDF Tools	Open Source	All		Utilities that come with HDF5 for analyzing and converting HDF5 files and compiling HDF5 applications
h5labview	Instrumentation	Open Source			Interface between NI LabVIEW and HDF5
NI-HWS	Instrumentation	Commercial			Uses limited subset of HDF5 for storage and retrieval of waveforms and attributes
MDSplus	Management and Access	Open Source			Tools for data acquisition and storage; methodology for management of complex scientific data

Mirador	Management and Access				Earth Science Data Search Tool
OPeNDAP	Management and Access	N/A			Software framework for remote scientific data transfer and access
Pomegranate	Management and Access	Open Source	Independent	Python	Web service software, web API, library and command line tool
H5WS API	Remote Access	Open Source	Linux	C	API that allows remote HDF5 data access using Web Services.
HDF Server	Remote Access	Open Source			Python-based web service to send/receive HDF5 data using HTTP-based REST interface
DIAdem (HDF5 DataPlugin)	Sci Data Mgmt	Commercial			Helps engineers and scientists to quickly locate, inspect, analyze, and report on measurement data
HDF5 Mesh API	Sci Data Mgmt	Open Source		C	Prototype for storing structured and unstructured grids in HDF5
HL-HDF	Sci Data Mgmt	Open Source		C, Python	C & Python high level library for scientific data in HDF5

Adaptive Entropy Encoding	Special Purpose	Open Source			Freely available SZIP implementation available from the German Climate Computing Center
ADIOS	Special Purpose	Open Source			IO componentization of different IO transport methods
Amelet-HDF	Special Purpose	Open Source			API to provide standard for working with electromagnetic data
Bathymetric Attributed Grid Data Format	Special Purpose	Open Source	Linux, Win32		File format for storing bathymetric data
BEAM	Special Purpose	Open Source			Basic ENVISAT Toolbox for (A)ATSR and MERIS data
Bear	Special Purpose	Open Source			Bers slices and holomy representations
Ceemple	Special Purpose	Commercial		C++	Rapid C++ technical computing environment,with built-in HDF support
CGNS	Special Purpose	Open Source			Software for working with CFD Analysis data

Chombo	Special Purpose	Open Source			Tools for working with partial differential equations
Derby	Special Purpose	Open Source			Data browser for exploring product types from GCM
FLASH	Special Purpose	Open Source			Code for simulation of thermonuclear flashes
Galacticus	Special Purpose	Open Source			A semi-analytic model of galaxy formation
Globe Claritas	Special Purpose	Commercial	Linux, Windows, Solaris		Seismic processing software (geophysics)
H5hut	Special Purpose	Open Source	Many	C, C++, Fortran	High performance I/O library for particle based simulations.
HDF5 Plugin for ImageJ and	Special Purpose	Open Source			Java plugin for ImageJ and Fij image processing package
HDF-EOS	Special Purpose	Open Source			Software for working with remote-sensed data from Earth Observing System

ITK	Special Purpose	Open Source	Many	Many	Toolkit for performing registration and segmentation of medical images
LIBGPIV	Special Purpose	Open Source			Library for (Digital) Particle Image Velocimetry Technique
MED	Special Purpose	Open Source			Standard for storing and recovering data associated with numerical meshes and fields.
Million Song Dataset	Special Purpose	Open Source			Collection of audio features and metadata for a million contemporary music tracks
MOAB	Special Purpose	Open Source	Linux/Unix	C++	Component for representing and evaluating mesh data
Mosaik	Special Purpose			Python	A flexible smart grid co-simulation framework
mz5	Special Purpose	Open Source			Space- and time-efficient storage of mass spectrometry data sets
NeuroHDF	Special Purpose	Open Source			Software to manage neuroscience data

OpticsBenchUI	Special Purpose	Open Source	Linux	C, Fortran	Demo of integrated solution to manage a simple optics bench of cameras, motors and DACs
PAM-CRASH	Special Purpose	Commercial	Unix, Linux, Windows	C, Fortran	ESI's open HDF5 database format to store results of FEM-based simulations
Paramesh	Special Purpose	Open Source			Fortran subroutines to extend serial AMR code to parallel
pconvert	Special Purpose	Open Source			Command-line tool to convert BEAM and ENVISAT products to HDF5
PhDC4D	Special Purpose	Commercial			Software for maintenance management of ships, offshore structures and static equipment
pyrat	Special Purpose	Open Source		Python	Simplifies handling of large multi-frequency radio interferometric visibility datasets and images
Q5Cost	Special Purpose			Fortran	Library and interface used in Quantum Chemistry
RAMS	Special Purpose	Open Source			Atmospheric Modeling System

RESQML	Special Purpose	Open Source			Exchange standard for subsurface data
Rybo Geo Data	Special Purpose				Processing of Airborne Geophysical Data
Salome	Special Purpose	Open Source	Linux		CAD/CAE integration and development platform
Scilab	Special Purpose	Open Source			Scientific software package for numerical computations
SeisHDF plug-in	Special Purpose	Commercial			Plug-in for Petrel 2013 for exporting to and importing from HDF5 files.
Silo	Special Purpose	Open Source		C, C++	A mesh and field I/O library and scientific database
STAR-CCM+	Special Purpose	Commercial			CFD software
Swarm	Special Purpose	Open Source			Simulator for fine-grained, composable scheduling

SWX	Special Purpose	Open Source			Space Weather Explorer to visualize space weather model output in 3D
THESEUS-FE	Special Purpose	Commercial	Linux, Windows		Simulation software based on Finite-Element solver methodology for handling thermal radiation
TPC5	Special Purpose	Commercial			HDF5-based format for multi-channel data acquisition
VSIM	Special Purpose	Commercial	Many	C++, GUI	PIC (particle-in-cell) simulation tool to run plasma, electromagnetic and electrostatic problems
WaveCut	Special Purpose	Commercial	Linux,Windows		Application with GUI for analyzing large amounts of signal waveform data
XDMF	Special Purpose	Open Source		Many	Data format and library using XML and HDF5 in High Performance Computing
Zori	Special Purpose	Open Source			Calculate properties of atoms/molecules using quantum Monte Carlo methods
R	Statistics, Graphics	Open Source		R	System for statistical computation and graphics, has HDF5 interface

Alembic	Visualization	Open Source			Computer graphics interchange framework
Field3D	Visualization	Open Source	Linux, Mac	C++	Library/format for storing voxel data
HDF Compass	Visualization	Open Source			A visual tool to navigate HDF5 files
OSSIM	Visualization	Open Source			Open Source Software Image Map library for geospatial image processing
Tecplot	Visualization	Commercial	Many		Interactive visualization program
Adxv	Visualization/Analysis	Open Source	Linux, Mac, Winc		Software for the display and analysis of X-Ray diffraction images
BEAT	Visualization/Analysis	Open Source	Unix, Windows,Mac		Toolkit for working w/atmospheric data
Data Visualizer for O-Matrix	Visualization/Analysis	Commercial	Windows		O-Matrix command-line interface that works with Intel Array Visualizer

Dawn	Visualization/Analysis	Open Source		Python	Visualization and Analysis platform for synchrotron data
DREAM.3D	Visualization/Analysis	Open Source			A software environment for analyzing digital microstructure dataA
EnSight	Visualization/Analysis	Commercial	Many		Tools for engineering and scientific simulation
Fiberbundle HDF5 (F5)	Visualization/Analysis	Open Source		C	I/O library that implements a common data model for scientific visualization
Geomatica	Visualization/Analysis	Commercial			Integrated software system for remote sensing and image processing
GNU Octave	Visualization/Analysis	Open Source			MATLAB-like tool
HydroVISH	Visualization/Analysis	Commercial	Linux, Mac, Windows	C++	Visualization framework built on top of Vish for lidar and multisensor mass data
IDL	Visualization/Analysis	Commercial	Many	IDL	Visualize and analyze HDF data with IDL. Query, read HDF files.

Igor Pro	Visualization/Analysis	Commercial	Windows, Mac	C, Igor	Visualize/analyze 1D, 2D, 3D data
Intel Array Visualizer	Visualization/Analysis	Commercial	Windows		Windows app to read, write, display array data from HDF4, HDF5, others
Mathematica	Visualization/Analysis	Commercial			Environment for technical tasks ranging from computations to visualizing or modeling data
MATLAB	Visualization/Analysis	Commercial	Many		Numeric computation, advanced graphics and visualization. Query, read HDF files
MeteoInfo	Visualization/Analysis	Open Source		C#	Software to view and analyze meteorological and spatial data interactively
MultiSpec	Visualization/Analysis	Open Source			Remote sensing analysis application for multispectral and hyperspectral data
NCL (NCAR Command Language)	Visualization/Analysis	Open Source			Interpreted language for sci data analysis and visualization
O-Matrix	Visualization/Analysis	Commercial			Interpreted matrix language for data analysis and visualization

OpenCV	Visualization/Analysis	Open Source			Computer vision and machine learning software library
Opticks	Visualization/Analysis	Open Source			Expandable remote sensing and imagery analysis platform
ParaView	Visualization/Analysis	Open Source			Visualize large data sets in serial or parallel environments, using VTK
PV-WAVE	Visualization/Analysis	Commercial	Many	PV-WAVE	Visualization and Analysis language and environment
SCiLS Lab	Visualization/Analysis	Commercial			Software for statistical analysis of MALDI imaging data
SLh5	Visualization/Analysis	Open Source		S-Lang	Open source HDF5 module for S-Lang
SYSTEMA / THERMICA	Visualization/Analysis	Commercial	Linux, Solaris, Windows		Spacecraft modeler and thermal analyser
Veusz	Visualization/Analysis	Open Source	Many		Scientific plotting and graphing package to provide publication-ready output and edit/view data.

VisAD	Visualization/Analysis	Open Source		Java	Java toolkit for interactive and collaborative viz and analysis
Vish	Visualization/Analysis	Open Source	Linux, Mac, Windows		Flexible software environment for processing and visualizing spatio-temporal data (uses F5)
VisIt	Visualization/Analysis	Open Source			Tool for visualizing fields in 2D and 3D meshes
Yorick	Visualization/Analysis	Open Source	Many	Yorick	Interpreted programming language