

## Sample uses of HDF 2006



- When someone downloads HDF5 from the HDF
   Group website, we ask them to identify the "project field."
- In 2006 we took the list of project fields, which included about 600 entries, eliminated obvious duplicates and irrelevant entries, and came up with the following list of approximately 250 entries.
- There is still probably quite a bit of overlap, and some entries aren't really project fields, but the message seems clear that there are a lot of different uses of HDF5.



## "Uses of HDF" from webpage

- Academy of Sciences, Russia
- Accelerators & FEL Physics
- Acoustics
- Advanced Fuel Cycle
- Advanced Parallel Numerical Simulation
- Aeronautic testing
- Aeronautics
- Aerosol Analysis from MISR data
- Aerospace
- Agent Based Modeling
- Agricultural research

- Air Traffic Control
- Airbourne Laser Project (ABL)
- Aircraft Emissions Database
- Airborne Remote Sensing
- Air-Sea Interaction
- Animal Functional Genomics
- APAC National Facility Scientific Staff
- Applied Mathematics
- Archeology
- Astronomy
- Astrophysics
- astrophysics / supernovae



- Astrophysics/Computation
  Science
- Atmosphere
- Atmospheric Chemistry
- Atmospheric Physics & Dynamical Meteorology
- Atmospheric radiation
- automotive
- band gap
- Bathymetric database
- Bioeffects of Electromagnetic Fields
- Bioengineering
- Bioinformatics

- biological
- Biomedical Applications
- biomolecular modeling
- biophysics
- biostatistics
- biotech
- Brain Research
- bridge C++/java
- build and install packages for researchers
- cdf
- CEM Simulation
- CERSAT



- CFD
- Chemical Reaction Engineering
- chemistry
- Climate Change
- Climate Modeling
- Climate Physics
- Climatology, Hydrology
- cloud physical
- Comp Accelerator Physics
- computational biology
- computational chemistry
- Comp Electromagnetics
- Computational Grid
- Computational Mathematics

- Computational Physics &
- Computational Astrophysics
- Computational Science/HPC
- Computer Aided Engineering (Durability/Safety)
- computer modeling
- Computers for Nuclear fuel design
- Computer simulation
- Condensed Matter Theory and materials science
- construction of a Beowulf class computer
- Cosmic ray modulation in the heliosphere
- cosmology
- Cplant IO



- data assimilation in meteorology
- Data structures, programming abstraction, and run time support for parallel computation of adaptive and irregular problems
- Data Viewer
- Dawning Cluster File System
- derivation of cloud characteristics
- development of magnetic mass spectrometers
- Diffusion Tensor Magnetic Resonance Imaging
- dislocation dynamics material modeling
- Displaying WSI's Nexrad Image

- DOD Testing and Evaluation
- Earth and Space Science visualization
- Earth Observation / Remote Sensing
- Earth Observation/Atmospheric Science
- Earth Resources
- Earth Science, Applied Info Sys
- ecology
- EDC/ECS Operations Operator
- education
- Electrical and Computer Engineering
- electromagnetics
- Electronics
- Environmental modeling



- Environmental modeling and soil science
- Environmental monitoring
- Environmental Research
- environmental/meteorological
- Failure Analysis
- Fast searching, sorting and retrieval
- FEL Physics
- final year dissertation
- financial research
- Flight test data analysis
- Fluid Mechanics

- Fluid Dynamics
- Fracture Mechanics
- Fundamental Physics in Space
- Fusion Plasma Physics
- Fusion Science
- Geodetic Science
- Geographic map updating
- Geology
- geology, environment science
- Geophysics
- Geostationary Earth Radiation Budget Sensor



- GERB instrument on MSG satellite
- GIS
- GIS & Remote Sensing
- Globus Project
- GrADS, MicroGrid
- Gravitational physics
- Groundwater heat and solut transport with reactions
- Guinean Research Institute Support
- HIRDLS/AURA

- HPUX Porting and Archive Centre
- Hurricane Research
- Hydrodynamics
- hydraulics
- Hydrology
- ILUMASS Integrated Land-Use Modeling and Transportation System Simulation
- Image Processing
- Information Technology
- integrated optics



- Interpretation of Aeroelectromagnetic Data
- Land surface modeling (water, carbon)
- Land use and land cover maps in Senegal
- LANL ASCI program
- Laser Plasma experiments
- magnetohydrodynamics
- Marine Biology Ecology
- marine fishery
- MAT
- material physical
- materials simulation

- Mechanical Engineering; To be used by MIT Photonic Bands package to output the field information
- medical physics
- Meteorology
- Metrology
- Microscopy
- Modeling
- Molecular Biology: Tech Development
- Molecular Level Physiology
- N3C GAB
- Nano device simulation



- NASA EOS Land Data
- NASA SORCE Mission
- Naval Arch & Marine Engineering
- Neural analog/digital VLSI IC
- Neuroscience research
- Neutron Scattering
- nonlinear optics
- NPOESS Software Development
- Nuclear Engineering
- Numerical fluid dynamics
- numerical general relativity
- numerical relativity

- NYSCEDII
- ocean color
- Ocean Dynamics
- Ocean Physics
- Ocean Remote Sensing
- Oceanography
- Oceanography surface currents radar
- Oil & Gas Visualization
- Oil Exploration
- optical information technology
- Optical Integrated Circuit Design



- Optics
- Optoelectronics
- Ozone Monitoring Instrument
- Parallel Programming
- PDE
- Performance Modeling and Evaluation
- Petroleum Engineering
- petrology
- photonic band gap studies
- Photonic Crystals, INFM PRA

- Photonics
- Physical Oceanography
- physics
- Physics (Medical Physics)
- physics / numerical simulation
- Physics, Optics
- Physics, Photonic band gaps
- Physics/Materials Science
- Physics, Optics, Metrology
- Plasma / Electromagnetics
- Plasma Physics



- Plasma Physics Nuclear Fusion
- Polymer physics
- Post-fire erosion analysis
- Processing of (weather) radar images
- Process-understanding arsenic groundwater contamination in West Bengal/Bangladesh
- protein crystallography, molecular modeling
- Protostellar accretion discs
- Quantitative Precipitation Forecast

- Quantum Chemistry
- Radar
- Radar and Satellite data processing
- Radar Science
- remote science
- Remote Sensing
- Remote sensing, satellite meteorology
- Research
- Robotics
- SAF
- SAMRAI
- SAR processing
- SATC



- satellite
- Satellite Climate Monitoring
- satellite Image
- satellite image viewer
- Satellite meteorology
- Satellite oceanography
- satellite remote sensing
- Satellite/weather radar remote sensing
- Scanning Near Field Optical Microscopy
- SciDAC
- science
- scientific graph and data analysis

- Sea Ice
- seafloor modeling
- Seismology
- Semiconductor Process Simulation
- Ship hydrodynamics
- Signal Processing
- signal processing
- SNOW melting
- Software Engineering, Distributed Systems
- Solid State Physics
- Southern Ocean predator ecology



- Space Geodesy
- Space Modeling
- Space Physics
- Space Plasma Physics
- Space Sciences
- Statistics
- Student just looking for a way to view hdf files
- supercomputing
- Support to geophysical applications
- Surface water flow and sediment transport
- SWX: Space Weather Explorer

- System support/integration/flight test
- Systems Analysis
- telecommunications
- theoretical chemistry
- To retrieve SST from MODIS data in Indian Ocean
- trabajo académicamente dirigido
- TRMM
- Underwater acoustics
- vision research, neuroscience
- Visualization
- Visualization and Analysis Software
- Volcano Simulation project



- Volcanology
- Water Modeling
- Water Resources Management
- Weather Data Display
- X-ray physics