Description of Support Levels for File Formats

Support Level	Description
minimal	*This is a file format that is only minimally supported and/or not well tested in ParaView currently. Not all features of this file format are fully implemented. Only minimal support for these file formats will be provided as part of a maintenance agreement. Kitware will do a cursory investigation on any reported issues. A valid resolution of the reported issue is for Kitware to (if necessary) update the documentation to more clearly indicate that a particular aspect of the file format is not supported. Kitware will not develop new functionality under a maintenance agreement to extend/enhace a partially implemented file format.*
✓	*This is a file format that is supported and is covered by the maintenance agreement. The supported features of this file format are those documented in the ParaView Users Guide or the doxygen documentation for this particular reader/writer/importer/exporter. The file format may support more features than are implemented in ParaView; those additional features are not supported by this agreement. Kitware will not develop new functionality under a maintenance agreeement to extend/enhance a partially implemented file format.*

File→Open Formats

File Format	Common Extensions	Supported Level
ADAPT	(.nc, .cdf, .elev, .ncd)	*minimal*
Adaptive cosmo files	(.cosmo)	*minimal*
ADIOS2 BP (4/5) Directory (CoreImage)	(.bp, .bp4, .bp5)	✓
ADIOS2 BP3 File (CoreImage)	(.bp)	✓
ADIOS2 BP3 File (using Fides)	(.bp)	✓
ADIOS2 BP4 Metadata File (CoreImage)	(md.idx)	✓
ADIOS2 BP4/5 Directory (using Fides)	(.bp, .bp4, .bp5)	✓
AMR Enzo Files	(.boundry, .hierarchy)	*minimal*
AMR Flash Files	(.Flash, .flash)	*minimal*
AMR Velodyne Files	(xamr, .Xamr, .XAMR)	*minimal*
AMReX/BoxLib plotfiles (grids)	(plt)	✓
AMReX/BoxLib plotfiles (particles)	(plt)	✓
ANALYZE	(.img, .hdr)	*minimal*
ANSYS	(.inp)	*minimal*
AUXFile Files	(.aux)	*minimal*
AVS UCD	(.inp)	*minimal*
AVS UCD Binary/ASCII Files	(.inp)	*minimal*
BOV	(.bov)	*minimal*
BYU	(.g)	✓
CAM NetCDF	(.nc, .ncdf)	✓
Case file for restarted CTH outputs	(.spcth-timeseries)	✓
CCSM MTSD	(.nc, .cdf, .elev, .ncd)	*minimal*
CCSM STSD	(.nc, .cdf, .elev, .ncd)	*minimal*
CEAucd	(.ucd, .inp)	*minimal*
CellGrid	(.dg)	✓
CGNS	(*.cgns)	✓
Chombo	(.hdf5, .h5)	*minimal*
CityGML	(.gml, .xml)	✓
Claw	(.claw)	*minimal*
CMAT	(.cmat)	*minimal*
CML	(.cml)	*minimal*
CONVERGE CFD	(.h5)	✓
CONVERGE CGNS Files	(.cgns)	✓
Comma Separated Values	(.csv)	✓
Cosmology Files	(.cosmo, .cosmo64, .gadget2)	*minimal*
CTRL	(.ctrl)	*minimal*
Curve2D	(.curve, .ultra, .ult, .u)	*minimal*
DDCMD	(.ddcmd)	*minimal*
Delimited Text	(.csv, .tsv, .txt, .CSV, .TSV, .TXT)	✓
DICOM Files (directory)	(.dcm)	*minimal*
DICOM Files (single)	(.dcm)	*minimal*

Digital Elevation Map	(.dem)	*minimal*
Dyna3D	(.dyn)	*minimal*
EnSight	(.case, .CASE, .Case, .encas, .Encas, .ENCAS)	✓
EnSight Master Server Files	(.sos, .SOS)	✓
ENZO AMR Particles Reader	(.boundry, .hierarchy)	*minimal*
ExodusII	(.g, .e, .exe, .ex2, .ex2v.., etc)	✓
ExtrudedVol	(.exvol)	*minimal*
Facet Polygonal Data	(.facet)	✓
Fides Data Model File (JSON)	(.json)	✓
FLASH AMR Particles Reader	(.Flash, .flash)	*minimal*
FLASH Files (VisIt)	(.flash, .f5)	*minimal*
Fluent Case Files	(.cas)	*minimal*
Fluent CFF Case Files	(.cas.h5)	*minimal*
Fluent Files (VisIt)	(.cas)	*minimal*
FVCOM MTMD Files	(.nc, .cdf, .elev, .ncd)	*minimal*
FVCOM MTSD Files	(.nc, .cdf, .elev, .ncd)	*minimal*
FVCOM Particle Files	(.nc, .cdf, .elev, .ncd)	*minimal*
FVCOM STSD Files	(.nc, .cdf, .elev, .ncd)	*minimal*
Gadget	(.gadget)	*minimal*
Gaussian Cube File	(.cube)	*minimal*
GDAL Raster Files	(.tif, .gen, .thf, .adf, .arg, .blx, .xlb, .kap, .bt, .byn, .cad, .cpg, .ctg, .doq, .dt0, .dt1, .dt2, .ers, .nl, .hdr, .gif, .grb, .img, .mpr, .mpl, .mem, .kro, l1b, .lan, .gis, .lcp, .los, .map, .mff, .nat, .ntf, .nsf, .ppm, .pgm, .prf, .x-dem, .rik, .rsw, .mtw, .grd, .ter, .til, .dem, .vrt, .xpm)	*minimal*
GDAL Vector Files	(.shp, .faa, .bnn, .dxf, .csv, .geojson, .gml, .gmlas, .gmt, .gpx, .htf, .vct, .jml, .kml, .dgn, .mvt, .pdf, .pds, .rec, .enc, .segy, .sua, .sxf, .ntf, .vdv, .vrt)	✓
GenericIO files to MultiBlockDataSet	(.gio)	*minimal*
GenericIO files to UnstructuredGrid	(.gio)	*minimal*
GGCM	(.3df, .mer)	*minimal*
glTF 2.0 Files	(.gltf, .glb)	✓
GTC	(.h5)	*minimal*
GULP	(.trg)	*minimal*
H5Nimrod Files	(.h5nimrod)	*minimal*
H5Part particles files	(.h5part)	*minimal*
HyperTreeGrid	(.htg)	✓
HyperTreeGrid (partitioned)	(.phtg)	✓
IGES File Reader	(.iges)	✓
Image Files	(.pnm, .ppm, .sdt, .spr, .imgvol)	✓
IOSS Files	(.g, .e, .h, .gc, .ex2, .ex2v2, .exo, .gen, .par, .exoll, .exii, .ex-timeseries, .cgns, .e-s, .exo-s)	✓
JPEG Image	(.jpg, .jpeg)	✓
LAMPPS Dump	(.dump)	*minimal*
LAMPPS Structure Files	(.eam, .meam, .rigid, .lammps)	*minimal*
Legacy VTK Files	(.vtk, .vtk.series)	✓
Legacy VTK Files (partitioned)	(.pvtk, .pvtk.series)	✓
Lines Files	(.lines)	*minimal*
LODI	(.nc, .cdf, .elev, .ncd)	*minimal*
LODI Particle	(.nc, .cdf, .elev, .ncd)	*minimal*
LSDyna	(.k, .lsdyna, .d3plot, d3plot)	*minimal*
M3DC1 Files	(.h5)	*minimal*
Meta Image	(.mhd, .mha)	✓
Meta-GenericIO files	(.gios)	*minimal*
MFiX netcdf Files	(.nc)	*minimal*
MFiX Res Files (VisIt)	(.RES)	*minimal*
MFIX Unstructred Grid	(.RES)	*minimal*
Mili Files	(.m, .mili)	*minimal*
Miranda	(.mir, .raw)	*minimal*

MM5	(.mm5)	*minimal*
MotionFX CFG Files	(.cfg)	*minimal*
MPAS NetCDF (Unstructured)	(.nc, .ncdf)	*minimal*
MRC Image Files	(.mrc, .ali, .st, .rec)	*minimal*
Multilevel 3d Plasma	(.m3d, .h5)	*minimal*
NASTRAN	(.nas, .f06)	*minimal*
Nastran BDF Files	(.bdf)	*minimal*
Nek5000 Files	(.nek3d, .nek2d, .nek5d, .nek5000, .nek)	✓
netCDF files generic and CF conventions	(.ncdf, .nc)	✓
Nrrd Raw Image	(.nrrd, .nhdr)	✓
OME TIFF Files	(.ome.tif, .ome.tiff)	✓
Open Mining Format (.omf) Files	(.omf)	*minimal*
OpenFOAM Files	(.foam)	*minimal*
OpenFOAM Files (VisIt)	(.controlDict)	*minimal*
openPMD files	(.pmd)	✓
OpenVDB files	(.vdb)	✓
OVERFLOW Files (VisIt)	(.dat, .save)	*minimal*
ParaDIS Files	(.prds, .data, .dat)	*minimal*
ParaDIS Tecplot Files	(.fld, .field, .cyl, .cylinder, .dat)	*minimal*
Parallel POP Ocean NetCDF (Rectilinear)	(.pop.ncdf, .pop.nc)	*minimal*
ParaView Data	(.pvd)	✓
ParaView Ensemble Data	(.pve)	✓
Parflow	(.pfb)	✓
Partitioned VTK	(.pvtu, .pvti, .pvts, .pvtr)	✓
PATRAN	(.neu)	*minimal*
PDAL Files	(.bin, .bpf, .csd, .csv, .greyhound, .gpkg, .icebride, .las, .laz, .mat, .nitf, .nsf, .ntf, .pcd, .ply, .pts, .qi, .rxp, .sbet, .sqlite, .sid, .tindex, .txt, .h5)	✓
PFLOTRAN	(.h5)	*minimal*
Phasta Files	(.pht)	✓
PIO Dump Files	(.pio)	*minimal*
Pixie Files	(.h5)	*minimal*
PLOT2D	(.p2d)	*minimal*
PLOT3D	(.xyz, .q, .x, .vp3d)	*minimal*
PLOT3D Meta Files	(.p3d)	*minimal*
PLY Polygonal File Format	(.ply, .ply.series)	✓
PNG Image Files	(.png)	✓
POINT3D Files	(.3D)	*minimal*
POP Ocean NetCDF (Rectilinear)	(.pop.ncdf, .pop.nc)	*minimal*
POP Ocean NetCDF (Unstructured)	(.pop.ncdf, .pop.nc)	*minimal*
ProSTAR	(.cel, .vrt)	*minimal*
Protein Data Bank	(.pdb, .ent, .pdb)	✓
PTS (Point Cloud) Files	(.pts)	*minimal*
Radiance HDR file	(.hdr)	*minimal*
Rage HDF Files	(.h5rage)	*minimal*
Raw (binary) Files	(.raw)	✓
Raw Image Files	(.raw)	✓
Raw NRRD image files	(.nrrd)	✓
SAMRAI series Files	(.samrai)	*minimal*
SAR	(.SAR, .sar)	*minimal*
SAS	(.sasgeom, .sas, .sasdata)	*minimal*
SAVG files	(.savg)	✓
SEG-Y Files	(.sgv, .segy)	✓
SEP file (Plugin)	(.H)	*minimal*
SESAME Tables		✓
Silo Files	(.silo, .pdb, .silo.series, .pdb.series)	*minimal*
SLAC Mesh Files	(.ncdf, .nc)	✓
SLAC Particle Files	(.ncdf, .netcdf)	✓

SmokeView Files	(.smv)	*minimal*
Spheral	(.spheral, .sv)	*minimal*
SpyPlot History Files	(.hscth, .hsct)	*minimal*
SpyPlot CTH dataset	(.spct)	*minimal*
STEP File Reader	(.step, .stp)	✓
Stereo Lithography	(.stl)	✓
Tecplot Files	(.tec, .TEC, .Tec, .tp, .TP, .dat)	*minimal*
Tecplot Files (VisIt)	(.tec, .TEC, .Tec, .tp, .TP)	*minimal*
Tecplot Binary (VisIt)	(.plt)	*minimal*
Tecplot Table	(.dat, .DAT)	*minimal*
Tetrad	(.hdf5, .h5)	*minimal*
TFT Files	(.dat, .tft)	*minimal*
TIFF Image Files	(.tif, .tiff)	✓
TRUCHAS dataset	(.hdf5, .h5)	*minimal*
TSurf Files	(.ts_deg83)	*minimal*
UGRID NetCDF (Unstructured)	(.nc, .ncdf)	*minimal*
UNIC	(.h5)	*minimal*
VASP Animation Files	(.out)	*minimal*
VASP CHGCA	(.CHG)	*minimal*
VASP OUT	(.OUT)	*minimal*
VASP POSTCAR	(.POS)	*minimal*
VASP Tessellation Files	(.out)	*minimal*
Velodyne	(.vld, .rst)	*minimal*
VisIt MetaPLOT3D Files (VisIt)	(.vp3d)	*minimal*
VizSchema	(.h5, .vsh5)	*minimal*
VPIC	(.vpc)	*minimal*
VRML 2 Files	(.wrl, .vrml)	✓
VTK Hierarchical Box Data Files	(.vthb, .vthb.series, .vth, .vth.series)	✓
VTK ImageData Files	(.vti, .vti.series)	✓
VTK ImageData Files (partitioned)	(.pvti, .pvti.series)	✓
VTK MultiBlock Data Files	(.vtm, .vtm.series, .vtmb, .vtmb.series)	✓
VTK Particle Files	(.particles)	✓
VTK Partitioned Dataset Collection Files	(.vtpc, .vtpc.series)	✓
VTK Partitioned Dataset Files	(.vtpd, .vtpd.series)	✓
VTK PolyData Files	(.vtp, .vtp.series)	✓
VTK PolyData Files (partitioned)	(.pvtp, .pvtp.series)	✓
VTK Rectilinear Grid Files	(.vtr, .vtr.series)	✓
VTK Rectilinear Grid Files (partitioned)	(.pvtr, .pvtr.series)	✓
VTK StructuredGrid Files	(.vts, .vts.series)	✓
VTK StructuredGrid Files (partitioned)	(.pvts, .pvts.series)	✓
VTK Table (partitioned)	(.pvtt, .pvtt.series)	✓
VTK Table	(.vtt, .vtt.series)	✓
VTK Unstructured Grid Files	(.vtu, .vtu.series)	✓
VTK Unstructured Grid Files (partitioned)	(.pvtu, .pvtu.series)	✓
VTKHDF Files	(.vtkhdf, .vtkhdf.series, .hdf, .hdf.series)	*minimal*
VTX reader: ADIOS2 BP3 File	(.bp)	*minimal*
VTX reader: ADIOS2 BP4 Directory File	(.bp, .bp4)	*minimal*
VTK	(.vtp, .vtu, .vti, .vts, .vtr)	✓
VTK Legacy	(.vtk)	✓
VTK Multi Block	(.vtm,.vtmb,.vtmg,.vthd,.vthb)	✓
Wavefront Polygonal Data	(.obj)	✓
WindBlade	(.wind)	*minimal*
Xdmf Reader	(.xmf, .xmf2, .xdmf, .xdmf2)	*minimal*
Xdmf3 Reader	(.xmf, .xmf3, .xdmf, .xdmf3)	*minimal*
Xdmf3 Reader (Top Level Partition)	(.xmf, .xmf3, .xdmf, .xdmf3)	*minimal*
Xmdv Files	(.okc)	*minimal*
XMol Molecule	(.xyz)	*minimal*

XYZ Files	(.xyz)	*minimal*

File→Save Dave Formats

File Format	Common Extensions	Supported Level
ParaView Data Files	(.pvd)	✓
CGNS Files	(.cgns)	✓
Comma or Tab Delimited Files	(.csv, .tsv, .txt)	✓
Exodus II File	(.e, .ex2, .ex2v2, .exoll, .exoii, .g, .gen)	*minimal*
Houdini File Format	(.geo)	*minimal*
IOSS Exodus File	(.exo)	✓
Legacy VTK Files	(.vtk)	✓
OpenVDB File Format	(.vdb)	*minimal*
PLY Polygonal File Format	(.ply)	✓
PVTK PolyDate Files	(.pvtp)	✓
Stereo Lithography File Format	(.stl)	✓
VTK PolyData Files	(.vtp)	✓
Wavefront OBJ File Format	(.obj)	✓
Xdmf Data File	(.xmf)	*minimal*
Xdmf3 Data File	(.xmf)	*minimal*
JPEG Image Files	(.jpg)	✓
json Image Files	(.json)	✓
Meta Image Files	(.mhd)	✓
ParaView Data Files	(.pvd)	✓
PNG Image Files	(.png)	✓
TIFF Image Files	(.tiff)	✓
VTK ImageData Files	(.vti)	✓
HyperTreeGrid Files	(.htg)	✓
PVTK Hyper Tree Grid Files	(.phtg)	✓

File→Save State Formats

File Format	Common Extensions	Supported Level
ParaView state file	(.pvsm)	✓
Python State file	(.pv)	✓

File→Save Catalyst State Formats

File Format	Common Extensions	Supported Level
Catalyst state file	(.py)	✓

File→Save Screenshot Formats

File Format	Common Extensions	Supported Level
Bitmap images	(.bmp)	✓
JPEG Images	(.jpeg, .jpg)	✓
PNG Images	(.png)	✓
TIFF images	(.tiff, .tif)	✓
VTK Images	(.vtk)	✓

File→Save Animation Formats

File Format	Common Extensions	Supported Level
Bitmap images	(.bmp)	✓
FFMPEG AVI files	(.avi)	✓
JPEG Images	(.jpeg, .jpg)	✓
Ogg-Theora video files	(.ogv)	*minimal*

| PNG Images | (.png) | ✓ |
| TIFF images | (.tiff, .tif) | ✓ |