

List of file formats supported in Avizo

Avizo Standard Edition

Name	Description	Import	Export
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3D scene/geometry formats

DXF	Drawing Interchange Format for AutoCAD 3D models	Yes	Yes
HxSurface	Avizo's native format for triangular surfaces	Yes	Yes
Open Inventor	Open Inventor file format for 3D models	Yes	Yes
Ply Format	Stanford triangle format for points and surfaces	Yes	Yes
STL	Simple format for triangular surfaces	Yes	Yes
VRML	Virtual reality markup language for 3D models	Yes	Yes
Wavefront OBJ	Wavefront OBJ generic 3D file format	No	Yes

2D/3D image formats

ACR-NEMA	Predecessor of the DICOM format for medical images	Yes	No
AmiraMesh Format	Avizo's native general purpose format	Yes	Yes
AmiraMesh as LargeDiskData	Access image data blockwise	Yes	No
Analyze 7.5	3D image data with separate header file	Yes	Yes
AnalyzeAVW	2D and 3D medical image data	Yes	Yes
BMP Image Format	Uncompressed Windows bitmap format	Yes	Yes
DICOM	Standard file format for medical images	Yes	Yes
Encapsulated PostScript	For 2D raster images only	No	Yes
Interfile	Interfile file reader	Yes	No
JPEG Image Format	2D image format with lossy compression	Yes	Yes
LDA	VolumeViz native file format	Yes	No
LargeDiskData	Access image data blockwise	Yes	Yes
PNG Image Format	Portable network graphics format for 2D images	Yes	Yes
PNM Image Format	Simple uncompressed 2D image format	Yes	Yes
Raw Data	Binary data as a 3D uniform field	Yes	Yes
Raw Data as LargeDiskData	Access image data blockwise	Yes	No
SGL-RGB Image Format	2D image format with run-length encoding	Yes	Yes
Stacked-Slices	Info file grouping together 2D images	Yes	No
Stacked-Slices as LargeDiskData	Access image data blockwise	Yes	No
TIFF Image Format	Standard format for 2D and 3D image data	Yes	Yes
Vevo Mode Raw Images	2D and 3D ultrasound images from Visual Sonics' Vevo 770	Yes	No

Scientific FEA/CFD formats

AmiraMesh Format	Avizo's native general purpose format	Yes	Yes
AVS Field	Stores data defined on regular grid	Yes	Yes
AVS UCD Format	Stores unstructured cell data	Yes	Yes
FIDAP NEUTRAL	Stores FEM meshes and solution data	Yes	No
Fluent / UNS	Contains FEM meshes, boundary ids, solution data	Yes	Yes
Hypermesh	Used by Altair HyperWorks FEM software	Yes	Yes
IDEAS universal format	Describes FEM grids and simulation data	Yes	Yes
MATLAB Binary Format (.mat)	MATLAB matrices	Yes	Yes
MATLAB M-files Format (.m)	MATLAB script	Yes	Yes
Plot 3D Single Structured	Stores curvilinear grids and associated data	Yes	Yes
PSI format	ASCII format for 3D points and associated data values	Yes	Yes
Tecplot	Tecplot ASCII and Binary file reader	Yes	No

Microscopy formats

Bio-Rad Confocal Format	Simple uncompressed format for 3D image stacks	Yes	No
FEIStackedScalarField3	Scalar fields consisting of parallel slices (MRC format)	Yes	No
FEIUniformScalarField3	Scalar fields defined on a uniform lattice (MRC format)	Yes	No
Leica 3D TIFF	Contains 3D image data with voxel sizes	Yes	No
Leica Binary Format (.lei)	3D image stacks, time series, and meta information	Yes	No
Leica Image Format (.lif)	3D image stacks, time series, and meta information	Yes	No
Leica Slice Series (.info)	Contains list of 2D TIFF files and meta information	Yes	No
MRC	MRC file format for electron microscopy	Yes	Yes
Metamorph STK Format	Special TIFF variant for 3D image stacks	Yes	No
Olympus (.oib/.oif)	File formats used by the Olympus FluoView 1000F	Yes	No
Zeiss LSM	3D raster image format	Yes	No
Nifti	Nifti file reader	Yes	Yes

Molecular formats

AMBER	Assisted Model Building with energy refinement format	Yes	No
AMF	Amira Molecule Format	Yes	Yes
DX	APBS DX electrostatic field file	Yes	No
GROMACS	Groningen Machine for chemical simulations format	Yes	Yes
MAP	Autogrid interaction field file	Yes	No
MDL	MDL file format saving chemical structures	Yes	Yes
PDB	Protein data base file format	Yes	Yes
PHI	Congen PHI Electrostatic field file	Yes	No
PSF/DCD (CHARMM)	File format used by CHARMM	Yes	No
Tripos	File format used to save Tripos Sybyl mol2 molecules	Yes	Yes
UniChem	File format used by the UniChem molecular software	Yes	Yes
ZIB Molecular File Format	Structured molecular file format	Yes	Yes

CAD formats (optional)

Name	Description	Import	Export
CATIA5	Computer Aided Three-dimensional Interactive Application V5	Yes	No
IGES	Initial Graphics Exchange Specification	Yes	No
STEP	Standard for The Exchange of Product data	Yes	No

Avizo Earth Edition

Name	Description	Import	Export
All Avizo Standard file format plus:			
CPS-3	Seismic grid files and fault sticks files	Yes	No
IESX-Card7	Horizons and fault sticks files	Yes	No
LAS20	Log ASCII Standard v2.0	Yes	No
Photon	Horizons files	Yes	No
SEG-Y	Society of Exploration Geophysicists format Y	Yes	No

Avizo Wind Edition

Name	Description	Import	Export
All Avizo Standard file format plus: (some file formats readers from the standard edition are replaced and extended)			
Abaqus	Abaqus ODB file format	Yes	Yes
Ansys	Ansys file format	Yes	Yes
CGNS	CGNS file format	Yes	Yes
Ensignt	Ensignt file format	Yes	Yes
Fluent/UNS	Fluent file format (replace and extend standard reader)	Yes	No
Madymo	Madymo kinematics format	Yes	No
Madymo Time-history	Time-history output from Madymo	Yes	No
NASA/Plot3D	Nase Plot3D file format (replace and extend standard reader)	Yes	No
Nastran Bulk Data	Nastran bulk data file format	Yes	Yes
Nastran Output2	Nastran Ourput2 file format	Yes	No
Radioss	Mecalog Radioss format for simulations	Yes	No
SDRC/IDEAS Universal	IDEAS universal file format	Yes	Yes
STAR-CCM	Star-CCM file format	Yes	No
Tecplot	Tecplot file format (replace and extend standard reader)	Yes	Yes

Avizo Green Edition

Name	Description	Import	Export
All Avizo Standard file format plus:			
NetCDF	Network Common Data Form	Yes	No

Avizo Fire Edition

Name	Description	Import	Export
All Avizo Standard file format plus:			
Visilog IM5	Visilog native file format (V5)	Yes	Yes
Visilog IM6	Visilog native file format (V6)	Yes	Yes

Remarks:

TCL scripts can be used to read or write specific data formats.
 Custom readers/writers can be added to Avizo using C++ modules (Avizo XPand pack).
 Contact us if you need to read or write data formats not listed here.