## **Preferred formats**

Format	File extension	Remarks
Text file formats		
PDF (PDF/1)	.pdf	Adobe's Portable Document Format (open since 2008), but the specification allows some proprietary extensions
Plain Text UTF-8 (unicode)	.txt	
SGML w/DTD	.sgm, .sgml	Standard Generalized Markup Language (SGML, ISO 8879:1986) is a platform independent ISO standard for the syntax of markup languages. With DTD's one can make a subset of SGML for a specific purpose.
XML w/DTD	.xml	Extensible Markup Language (XML) is a markup language that defines a set of rules for encoding documents in a format that is both human-readable and machine-readable.
Image file formats		
JPEG	.jpg	JPEG (Joint Photographic Experts Group) is a lossy compression method; JPEG-compressed images are usually stored in the JFIF (JPEG File Interchange Format) file format.
TIFF	.tif	The Tagged Image File Format (TIFF) is a computer file format for storing raster graphics images, popular among graphic artists, the publishing industry,[1] and both amateur and professional photographers in general. The format was originally created by the company Aldus[2] for use in desktop publishing, but as of 2009, it is under the control of Adobe Systems.
Audio file formats		
Waveform Audio File Format (WAVE)	.wav	Waveform Audio File Format (WAVE, or more commonly known as WAV due to its filename extension) is a Microsoft and IBM audio file formatstandard for storing an audio bitstream on PCs.
Geospatial data		
ESRI Shapefile	.shp, .shx, .dbf, optional - .prj, .sbx, .sbn	The <b>Esri shapefile</b> , or simply a <b>shapefile</b> , is a popular geospatial vector data format for geographic information system software. It is developed and regulated by Esri as a (mostly) open specification for data interoperability among Esri and other GIS software products.

Geo-referenced TIFF	.tif, .tfw	GeoTIFF is a public domain metadata standard which allows georeferencing information to be embedded within a TIFF file.
Google-earth	.kml	
Geographical Mark-up Language	.gml	
Chemistry data		Convert NMR, IR, Raman, UV, Mass Spectrometry, files to JCAMP format for ease in sharing.
NMR		spectroscopy data and other plots which require the capability of representing contours as well as peak position and intensity
IR		
Raman		Ramanspectroscopie
UV		
Mass Spectrometry		
JCAMP (format for ease in sharing)		http://www.jcamp-dx.org/protocols.html
ChemDoodle		Proprietary software tool for drawing chemical structures, diagrams and figures
Databases		
Delimited Flat File w/DDL		A flat file database describes any of various means to encode a database model (most commonly a table) as a single file.
Spreadsheets/Quantitative tabular data with minimal metadata		a matrix of data with or without column headings or variable names, but no other metadata or labelling
Comma-separated values	.csv	
Tab-delimited file	.tab	
PDF/A	.pdf	
Numerical Data		
Netcdf	.nc, .cdf	NetCDF file format with CF medata conventions for earth science data. Binary storage in open format with optional compression. Allows for direct web-access of subsets/aggregations of maps through OPeNDAP protocol.