



6.0

ArcGIS® Notebooks

Python Libraries Manifest

ArcGIS® Notebooks provides a spatially optimized Jupyter experience to create, share, and run data science, data management, and administrative scripts.

With ArcGIS Notebooks, you can perform analysis, automate workflows, and immediately visualize data and analysis results in a geographic context. It is an efficient, modern environment that combines code, real-time visualizations and maps and data tools.

ArcGIS Notebooks features the ArcGIS Python libraries, the ArcGIS API for Python, and ArcPy™. ArcGIS Notebooks also includes access to hundreds of open-source Python libraries and packages.

This publication provides a complete list of the Python libraries—including their versions—that are packaged in the ArcGIS Notebooks runtime version 6.0.

ArcGIS Notebooks Runtime

Python 3 Standard Version 6.0

RELEASED

November 2021

TOTAL PACKAGES

369

SUPPORTED IN

ArcGIS Enterprise 10.9.1 and the December 2021 release of ArcGIS Online

In ArcGIS Enterprise, you can customize your notebook environment. Learn more—read [Extend a Notebook Runtime](#).

Library Name	Version
_libgcc_mutex	0.1
_openmp_mutex	4.5
_tflow_select	2.1.0
absl-py	0.13.0
affine	2.3.0
aiohttp	3.7.4.post0
ansiwrap	0.8.4
appdirs	1.4.4
arcgis	1.9.1
argcomplete	1.12.3
argon2-cffi	20.1.0
astor	0.8.1
astunparse	1.6.3
async-timeout	3.0.1
async_generator	1.10
attrs	21.2.0
backcall	0.2.0
beautifulsoup4	4.9.1
binutils_impl_linux-64	2.33.1
binutils_linux-64	2.33.1
black	19.10b0
blas	1.0
bleach	4.0.0
blinker	1.4
blosc	1.21.0
bokeh	2.2.1
boto3	1.18.21
botocore	1.21.21
bottleneck	1.3.2
brotli	1.0.9
brotlipy	0.7.0
brunli	0.1
bzip2	1.0.8
c-ares	1.17.1
ca-certificates	2021.9.30
cachetools	4.2.2
cairo	1.16.0
catalogue	1.0.0
certifi	2021.10.8
cffi	1.14.6
cftime	1.5.0
chardet	4.0.0
charls	2.2.0
charset-normalizer	2.0.4
chart-studio	1.1.0
click	8.0.1
click-plugins	1.1.1
cligj	0.7.2
cloudpickle	1.6.0
colorlover	0.3.0
conda	4.10.3
conda-package-handling	1.7.3
coverage	5.5
cryptography	3.4.8
cuda-toolkit	11.1.1

Library Name	Version
cudnn	8.1.0.77
cufflinks-py	0.17.3
curl	7.71.1
cycler	0.10.0
cymem	2.0.5
cython	0.29.21
cython-blis	0.4.1
cytoolz	0.11.0
dask	2021.8.0
dask-core	2021.8.0
dask-glm	0.2.0
dask-ml	1.9.0
dataclasses	0.8
dbus	1.13.18
debugpy	1.4.1
decorator	5.1.0
defusedxml	0.7.1
dill	0.3.2
distributed	2021.8.0
entrypoints	0.3
expat	2.4.1
fastai	1.0.63
fastcache	1.1.0
fastprogress	0.2.3
ffmpeg	4.0
fiona	1.7.12
fontconfig	2.13.1
fonttools	4.25.0
freelut	3.0.0
freetype	2.10.4
freexl	1.0.6
fsspec	2021.8.1
gast	0.5.2
gcc_impl_linux-64	7.3.0
gcc_linux-64	7.3.0
gdal	2.2.4
geomet	0.3.0
geos	3.7.1
giflib	5.1.4
glib	2.69.1
gmp	6.2.1
gmpy2	2.0.8
google-auth	1.33.0
google-auth-oauthlib	0.4.1
google-pasta	0.2.0
graphite2	1.3.14
grpcio	1.36.1
gxx_impl_linux-64	7.3.0
gxx_linux-64	7.3.0
h5py	2.10.0
harfbuzz	2.8.1
hdf4	4.2.13
hdf5	1.10.4
heapdict	1.0.1
holoviews	1.13.4

Library Name	Version
html5lib	1.1
icu	58.2
idna	3.2
imagecodecs	2021.4.28
imageio	2.9.0
importlib-metadata	4.8.1
importlib_metadata	4.8.1
intel-openmp	2021.3.0
ipykernel	6.2.0
ipyml	0.5.8
ipython	7.27.0
ipython_genutils	0.2.0
ipywidgets	7.5.1
jasper	2.0.14
jedi	0.17.2
jeepney	0.7.1
jinjia2	3.0.1
jmespath	0.10.0
joblib	1.0.1
jpeg	9d
json-c	0.13.1
jsonschema	3.2.0
jupyter_client	6.1.7
jupyter_contrib_core	0.3.3
jupyter_contrib_nbextensions	0.5.1
jupyter_core	4.7.1
jupyter_highlight_selected_word	0.2.0
jupyter_latex_envs	1.4.6
jupyter_nbextensions_configurator	0.4.1
jxrllib	1.1
kealib	1.4.12
keras-preprocessing	1.1.2
keyring	21.4.0
kiwisolver	1.3.1
krb5	1.18.2
lcms2	2.12
ld_impl_linux-64	2.33.1
lerc	2.2.1
libaec	1.0.4
libboost	1.73.0
libcurl	7.71.1
libdap4	3.19.1
libdeflate	1.7
libedit	3.1.20210714
libev	4.33
libffi	3.3
libgcc-ng	9.3.0
libgdal	2.2.4
libgfortran-ng	7.5.0
libgfortran4	7.5.0
libglu	9.0.0
libgomp	9.3.0
libgpparray	0.7.6

02
03
04
05

ArcGIS Notebooks Runtime

Python 3 Standard Version 6.0

Library Name	Version	Library Name	Version	Library Name	Version
libev	4.33	munch	2.5.0	pycparser	2.20
libffi	3.3	munkres	1.1.4	pycrypto	2.6.1
libgcc-ng	9.3.0	murmurhash	1.0.5	pyct	0.4.8
libgdal	2.2.4	mypy_extensions	0.4.3	pygments	2.9.0
libgfortran-ng	7.5.0	nbclient	0.5.0	pygpu	0.7.6
libgfortran4	7.5.0	nbconvert	5.6.1	pyjwt	2.1.0
libglu	9.0.0	nbformat	5.1.3	pykerberos	1.2.1
libgomp	9.3.0	ncurses	6.2	pymc3	3.8
libgppuarray	0.7.6	nest-asyncio	1.3.2	pyopenssl	20.0.1
libkml	1.3.0	networkx	2.6.2	yparsing	2.4.7
libllvm10	10.0.1	ninja	1.10.2	pyrsistent	0.17.3
libnetcdf	4.7.3	notebook	6.1.6	pyshp	2.1.3
libnghttp2	1.41.0	ntlm-auth	1.4.0	pysocks	1.7.1
libopencv	4.5.2	numba	0.51.2	pytables	3.6.1
libopus	1.3.1	numexpr	2.7.1	python	3.7.11
libpng	1.6.37	numpy	1.19.2	python-cufflinks	0.17.3
libpq	12.2	numpy-base	1.19.2	python-dateutil	2.8.2
libprotobuf	3.13.0.1	nvdiia-ml-py3	7.352.0	python-flatbuffers	1.12
libsodium	1.0.18	oauthlib	3.1.1	pytorch	1.8.2
libspatialindex	1.9.3	olefile	0.46	pytz	2021.1
libspatialite	4.3.0a	opencv	4.5.2	pyviz_comms	2.0.2
libssh2	1.9.0	openjpeg	2.4.0	pywavelets	1.1.1
libstdcxx-ng	9.3.0	openssl	1.1.1l	pyyaml	5.4.1
libtiff	4.1.0	opt_einsum	3.3.0	pyzmq	22.2.1
libuuid	1.0.3	packaging	21.0	rasterio	0.36.0
libuv	1.40.0	pandas	1.2.3	rasterstats	0.13.0
libvpx	1.7.0	pandocfilters	1.4.3	readline	8.1
libwebp	1.0.1	panel	0.10.3	regex	2021.8.3
libxcb	1.14	papermill	2.3.3	requests	2.26.0
libxml2	2.9.12	param	1.11.1	requests-kerberos	0.12.0
libxslt	1.1.34	parso	0.7.0	requests-oauthlib	1.3.0
libzopfli	1.0.3	partd	1.2.0	requests-toolbelt	0.9.1
llvmlite	0.34.0	pathspec	0.7.0	requests_ntlm	1.1.0
locket	0.2.1	patsy	0.5.1	retrying	1.3.3
lxml	4.5.2	pcre	8.45	rise	5.7.1
lz4-c	1.9.3	pexpect	4.8.0	rsa	4.7.2
lzo	2.10	pickleshare	0.7.5	rtree	0.9.4
mako	1.1.4	pillow	7.1.2	ruamel_yaml	0.15.100
markdown	3.3.4	pillow-simd	7.1.2	s3transfer	0.5.0
markupsafe	2.0.1	pip	21.1.3	scikit-image	0.17.2
matplotlib	3.4.2	pixman	0.40.0	scikit-learn	0.23.2
matplotlib-base	3.4.2	plac	1.1.0	scipy	1.6.2
matplotlib-inline	0.1.2	plotly	4.5.4	seaborn	0.11.0
mistune	0.8.4	pooch	1.4.0	secretstorage	3.3.1
mk1	2020.2	prshred	3.0.5	send2trash	1.8.0
mk1-service	2.3.0	proj4	5.2.0	setuptools	58.0.4
mk1_fft	1.3.0	prometheus_client	0.8.0	shapely	1.6.4
mk1_random	1.1.1	prompt-toolkit	3.0.20	simplejson	3.17.3
mock	4.0.3	protobuf	3.13.0.1	six	1.15.0
mpc	1.1.0	psutil	5.8.0	snappy	1.1.8
mpfr	4.0.2	ptyprocess	0.7.0	snuggs	1.4.7
mpmath	1.2.1	py-opencv	4.5.2	sortedcontainers	2.4.0
msgpack-python	1.0.2	pyasn1	0.4.8	soupsieve	2.2.1
multidict	5.1.0	pyasn1-modules	0.2.8	spacy	2.2.4
multipledispatch	0.6.0	pycosat	0.6.3	sqlalchemy	1.3.19

ArcGIS Notebooks Runtime

Python 3 Standard Version 6.0

Library Name	Version
sqlite	3.36.0
srsly	1.0.5
statsmodels	0.11.1
sympy	1.6.2
tbb	2021.3.0
tblib	1.7.0
tenacity	5.1.1
tensorboard	2.6.0
tensorboard-plugin-wit	1.6.0
tensorflow-estimator	2.5.0
tensorflow-gpu	2.5.1
termcolor	1.1.0
terminado	0.9.4
testpath	0.5.0
textwrap3	0.9.2
theano	1.0.4
thinc	7.4.0
threadpoolctl	2.2.0
tifffile	2021.7.2

Library Name	Version
tk	8.6.11
toml	0.10.2
toolz	0.11.1
torchvision	0.9.2
tornado	6.1
tqdm	4.62.2
traitlets	5.1.0
typed-ast	1.4.3
typing-extensions	3.10.0.2
typing_extensions	3.10.0.2
ujson	4.0.2
urllib3	1.25.11
vincent	0.4.4
wasabi	0.8.2
wcwidth	0.2.5
webencodings	0.5.1
werkzeug	2.0.1
wheel	0.37.0
widgetsnbextension	3.5.1

Library Name	Version
wrapt	1.12.1
xerces-c	3.2.3
xlrd	1.2.0
xz	5.2.5
yaml	0.2.5
yaml	1.6.3
zeromq	4.3.4
zfp	0.5.5
zict	2.0.0
zipp	3.5.0
zlib	1.2.11
zstd	1.4.5

ArcGIS Notebooks Runtime

Python 3 Advanced Version 6.0

RELEASED

November 2021

TOTAL PACKAGES

379

SUPPORTED IN

Supported in ArcGIS Enterprise 10.9.1 and the December 2021 release of ArcGIS Online

The use of the Advanced and/ or Advanced with GPU runtime consumes credits within ArcGIS Online. See [Credits by Capability](#) for more details.

In ArcGIS Enterprise, you can customize your notebook environment. Learn more—read [Extend a Notebook Runtime](#).

Library Name	Version	Library Name	Version	Library Name	Version
_libgcc_mutex	0.1	cuda	8.1.0.77	holoviews	1.13.4
_openmp_mutex	4.5	cufflinks-py	0.17.3	html5lib	1.1
_tflow_select	2.1.0	curl	7.71.1	icu	58.2
absl-py	0.13.0	cycler	0.10.0	idna	3.2
affine	2.3.0	cymem	2.0.5	imagecodecs	2021.4.28
aiohttp	3.7.4.post0	cython	0.29.21	imageio	2.9.0
ansiwrap	0.8.4	cython-blis	0.4.1	importlib-metadata	4.8.1
appdirs	1.4.4	cytoolz	0.11.0	importlib_metadata	4.8.1
arcgis	1.9.1	dask	2021.8.0	intel-openmp	2021.3.0
arcgis-server-py3	10.9.1	dask-core	2021.8.0	ipykernel	6.2.0
argcomplete	1.12.3	dask-glm	0.2.0	ipyml	0.5.8
argon2-cffi	20.1.0	dask-ml	1.9.0	ipython	7.27.0
astor	0.8.1	dataclasses	0.8	ipython_genutils	0.2.0
astunparse	1.6.3	dbus	1.13.18	ipywidgets	7.5.1
async-timeout	3.0.1	debugpy	1.4.1	jasper	2.0.14
async-generator	1.10	decorator	5.1.0	jedi	0.17.2
attrs	21.2.0	defusedxml	0.7.1	jeepney	0.7.1
backcall	0.2.0	dill	0.3.2	jinjia2	3.0.1
beautifulsoup4	4.9.1	distributed	2021.8.0	jmespath	0.10.0
binutils_impl_linux-64	2.33.1	entrypoints	0.3	joblib	1.0.1
binutils_linux-64	2.33.1	et_xmlfile	1.1.0	jpeg	9d
black	19.10b0	expat	2.4.1	json-c	0.13.1
blas	1.0	fastai	1.0.63	jsonschema	3.2.0
bleach	4.0.0	fastcache	1.1.0	jupyter_client	6.1.7
blinker	1.4	fastprogress	0.2.3	jupyter_contrib_core	0.3.3
blosc	1.21.0	ffmpeg	4.0	jupyter_contrib_nbextensions	0.5.1
bokeh	2.2.1	fiona	1.7.12	jupyter_core	4.7.1
boto3	1.18.21	fontconfig	2.13.1	jupyter_highlight_selected_word	0.2.0
botocore	1.21.21	fonttools	4.25.0	jupyter_latex_envs	1.4.6
bottleneck	1.3.2	freeglut	3.0.0	jupyter_nbextensions_configurator	0.4.1
brotli	1.0.9	freetype	2.10.4	jxrllib	1.1
brotlipy	0.7.0	freexl	1.0.6	kealib	1.4.12
brunsli	0.1	fsspec	2021.8.1	keras-preprocessing	1.1.2
bzip2	1.0.8	future	0.18.2	keyring	21.4.0
c-ares	1.17.1	gast	0.5.2	kiwisolver	1.3.1
ca-certificates	2021.9.30	gcc_impl_linux-64	7.3.0	krb5	1.18.2
cachetools	4.2.2	gcc_linux-64	7.3.0	lcms2	2.12
cairo	1.16.0	gdal	2.2.4	ld_impl_linux-64	2.33.1
catalogue	1.0.0	geomet	0.3.0	lerc	2.2.1
certifi	2021.10.8	geos	3.7.1	libaec	1.0.4
cffi	1.14.6	giflib	5.1.4	libboost	1.73.0
cftime	1.5.0	glib	2.69.1	libcurl	7.71.1
chardet	4.0.0	gmp	6.2.1	libdap4	3.19.1
charls	2.2.0	gmpy2	2.0.8	libdeflate	1.7
charset-normalizer	2.0.4	google-auth	1.33.0	libedit	3.1.20210714
chart-studio	1.1.0	google-auth-oauthlib	0.4.1	libev	4.33
click	8.0.1	google-pasta	0.2.0	libffi	3.3
click-plugins	1.1.1	graphite2	1.3.14	libgcc-ng	9.3.0
cligj	0.7.2	grpcio	1.36.1	libgdal	2.2.4
cloudpickle	1.6.0	gxx_impl_linux-64	7.3.0	libgfortran-ng	7.5.0
colorlover	0.3.0	gxx_linux-64	7.3.0	libgfortran4	7.5.0
conda	4.10.3	h5py	2.10.0	libglu	9.0.0
conda-package-handling	1.7.3	harfbuzz	2.8.1	libgomp	9.3.0
coverage	5.5	hdf4	4.2.13	libgpparray	0.7.6
cryptography	3.4.8	hdf5	1.10.4		
cuda-toolkit	11.1.1	heapdict	1.0.1		

ArcGIS Notebooks Runtime

Python 3 Advanced Version 6.0

Library Name	Version	Library Name	Version	Library Name	Version
libkml	1.3.0	networkx	2.6.2	pymc3	3.8
libllvm10	10.0.1	ninja	1.10.2	pyopenssl	20.0.1
libnetcdf	4.7.3	nose	1.3.7	pyparsing	2.4.7
libnghttp2	1.41.0	notebook	6.1.6	pypdf2	1.26.0
libopencv	4.5.2	ntlm-auth	1.4.0	pyrsistent	0.17.3
libopus	1.3.1	numba	0.51.2	pyshp	2.1.3
libpng	1.6.37	numexpr	2.7.1	pysocks	1.7.1
libpq	12.2	numpy	1.19.2	pytables	3.6.1
libprotobuf	3.13.0.1	numpy-base	1.19.2	python	3.7.11
libsodium	1.0.18	nvidia-ml-py3	7.352.0	python-cufflinks	0.17.3
libspatialindex	1.9.3	oauthlib	3.1.1	python-dateutil	2.8.2
libspatialite	4.3.0a	olefile	0.46	python-flatbuffers	1.12
libssh2	1.9.0	opencv	4.5.2	pytorch	1.8.2
libstdcxx-ng	9.3.0	openjpeg	2.4.0	pytz	2021.1
libtiff	4.1.0	openpyxl	3.0.9	pyviz_comms	2.0.2
libuuid	1.0.3	openssl	1.1.1l	pywavelets	1.1.1
libuv	1.40.0	opt_einsum	3.3.0	pyyaml	5.4.1
libvpx	1.7.0	packaging	21.0	pyzmq	22.2.1
libwebp	1.0.1	pandas	1.2.3	rasterio	0.36.0
libxcb	1.14	pandocfilters	1.4.3	rasterstats	0.13.0
libxml2	2.9.12	panel	0.10.3	readline	8.1
libxslt	1.1.34	papermill	2.3.3	regex	2021.8.3
libzopfli	1.0.3	param	1.11.1	requests	2.26.0
llvmlite	0.34.0	parso	0.7.0	requests-kerberos	0.12.0
locket	0.2.1	partd	1.2.0	requests-oauthlib	1.3.0
lxml	4.5.2	pathspec	0.7.0	requests-toolbelt	0.9.1
lz4-c	1.9.3	patsy	0.5.1	requests_ntlm	1.1.0
lzo	2.10	pcre	8.45	retrying	1.3.3
mako	1.1.4	pexpect	4.8.0	rise	5.7.1
markdown	3.3.4	pickleshare	0.7.5	rsa	4.7.2
markupsafe	2.0.1	pillow	7.1.2	rtree	0.9.4
matplotlib	3.4.2	pillow-simd	7.1.2	ruamel_yaml	0.15.100
matplotlib-base	3.4.2	pip	21.1.3	s3transfer	0.5.0
matplotlib-inline	0.1.2	pixman	0.40.0	scikit-image	0.17.2
mistune	0.8.4	plac	1.1.0	scikit-learn	0.23.2
mkl	2020.2	plotly	4.5.4	scipy	1.6.2
mkl-service	2.3.0	pooch	1.4.0	seaborn	0.11.0
mkl_fft	1.3.0	prshred	3.0.5	secretstorage	3.3.1
mkl_random	1.1.1	proj4	5.2.0	send2trash	1.8.0
mock	4.0.3	prometheus_client	0.8.0	setuptools	58.0.4
mpc	1.1.0	prompt-toolkit	3.0.20	shapely	1.6.4
mpfr	4.0.2	protobuf	3.13.0.1	simplejson	3.17.3
mpmath	1.2.1	psutil	5.8.0	six	1.15.0
msgpack-python	1.0.2	ptyprocess	0.7.0	snappy	1.1.8
multidict	5.1.0	py	1.10.0	snuggs	1.4.7
multipledispatch	0.6.0	py-opencv	4.5.2	sortedcontainers	2.4.0
munch	2.5.0	pyasn1	0.4.8	soupsieve	2.2.1
munkres	1.1.4	pyasn1-modules	0.2.8	spacy	2.2.4
murmurhash	1.0.5	pycosat	0.6.3	sqlalchemy	1.3.19
mypy_extensions	0.4.3	pycparser	2.20	sqlite	3.36.0
nbclient	0.5.0	pycrypto	2.6.1	srsly	1.0.5
nbconvert	5.6.1	pyct	0.4.8	statsmodels	0.11.1
nbformat	5.1.3	pygments	2.9.0	sympy	1.6.2
ncurses	6.2	pygpu	0.7.6	tbb	2021.3.0
nest-asyncio	1.3.2	pyjwt	2.1.0	tblib	1.7.0
netcdf4	1.5.3	pykerberos	1.2.1	tenacity	5.1.1

02
03
04
05

ArcGIS Notebooks Runtime

Python 3 Advanced Version 6.0

Library Name	Version	Library Name	Version	Library Name	Version
tensorboard	2.6.0	tornado	6.1	xarray	0.19.0
tensorboard-plugin-wit	1.6.0	tqdm	4.62.2	xerces-c	3.2.3
tensorflow-estimator	2.5.0	traitlets	5.1.0	xlrd	1.2.0
tensorflow-gpu	2.5.1	typed-ast	1.4.3	xlwt	1.3.0
termcolor	1.1.0	typing-extensions	3.10.0.2	xz	5.2.5
terminado	0.9.4	typing_extensions	3.10.0.2	yaml	0.2.5
testpath	0.5.0	ujson	4.0.2	yaml	1.6.3
textwrap3	0.9.2	urllib3	1.25.11	zeromq	4.3.4
theano	1.0.4	vincent	0.4.4	zfp	0.5.5
thinc	7.4.0	wasabi	0.8.2	zict	2.0.0
threadpoolctl	2.2.0	wcwidth	0.2.5	zipp	3.5.0
tifffile	2021.7.2	webencodings	0.5.1	zlib	1.2.11
tk	8.6.11	werkzeug	2.0.1	zstd	1.4.5
toml	0.10.2	wheel	0.37.0		
toolz	0.11.1	widgetsnbextension	3.5.1		
torchvision	0.9.2	wrapt	1.12.1		

02

03

04

05