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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, as well as 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 5.0.

ArcGIS Notebooks Runtime

Python 3 Standard Version 5.0

RELEASED

April 2021

TOTAL PACKAGES

327

SUPPORTED IN

ArcGIS Enterprise 10.9 and
ArcGIS Online April 2021
release

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

Library Name	Version
_libgcc_mutex	0.1
_pytorch_select	0.2
_tflow_select	2.3.0
absl-py	0.11.0
affine	2.3.0
ansiwrap	0.8.4
appdirs	1.4.4
arcgis	1.8.4
argon2-cffi	20.1.0
arviz	0.6.1
astunparse	1.6.3
async_generator	1.1
attrs	20.3.0
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
bleach	3.2.3
blinker	1.4
blosc	1.20.1
bokeh	2.2.1
boto3	1.7.62
botocore	1.10.62
bottleneck	1.3.2
brotlipy	0.7.0
bzip2	1.0.8
c-ares	1.17.1
ca-certificates	2021.1.19
cachetools	4.2.1
catalogue	1.0.0
certifi	2020.12.5
cffi	1.14.4
cftime	1.0.0b1
chardet	4.0.0
chart-studio	1.1.0
click	7.1.2
click-plugins	1.1.1
cligj	0.7.1
cloudpickle	1.6.0
colorlover	0.3.0
conda	4.8.3
conda-package-handling	1.7.2
cryptography	3.3.1
cuda-toolkit	10.1.243
cuda-nn	7.6.5
cufflinks-py	0.17.3
curl	7.69.1
cycler	0.10.0
cymem	2.0.4
cython	0.29.21
cython-blis	0.4.1
cytoolz	0.11.0
dask	2.27.0

Library Name	Version
dask-core	2.27.0
dask-glm	0.2.0
dask-ml	1.6.0
dbus	1.13.18
decorator	4.4.2
defusedxml	0.6.0
dill	0.3.2
distributed	2.30.1
docutils	0.16
entrypoints	0.3
expat	2.2.10
fastai	1.0.60
fastcache	1.1.0
fastprogress	0.2.3
fiona	1.7.12
freetype	2.9.1
freexl	1.0.6
fsspec	0.8.3
gast	0.3.3
gcc_impl_linux-64	7.3.0
gcc_linux-64	7.3.0
gdal	2.2.4
geos	3.7.1
giflib	5.1.4
glib	2.66.1
gmp	6.1.2
gmpy2	2.0.8
google-auth	1.21.3
google-auth-oauthlib	0.4.2
google-pasta	0.2.0
grpcio	1.31.0
gxx_impl_linux-64	7.3.0
gxx_linux-64	7.3.0
h5py	2.10.0
hdf4	4.2.13
hdf5	1.10.4
heapdict	1.0.1
holoviews	1.13.4
html5lib	1.1
icu	58.2
idna	2.1
imageio	2.9.0
importlib-metadata	2.0.0
importlib_metadata	2.0.0
intel-openmp	2019.4
ipykernel	5.3.4
ipympl	0.5.8
ipython	7.19.0
ipython_genutils	0.2.0
ipywidgets	7.5.1
jedi	0.17.2
jeepney	0.6.0
jinja2	2.11.2
jmespath	0.10.0
joblib	1.0.0

Library Name	Version
jpeg	9b
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	4.7.0
jupyter_highlight_selected_word	0.2.0
jupyter_latex_envs	1.4.4
jupyter_nbextensions_configurator	0.4.1
kealib	1.4.12
keras-preprocessing	1.1.0
keyring	21.4.0
kiwisolver	1.3.0
krb5	1.17.1
lcms2	2.11
ld_impl_linux-64	2.33.1
lerc	2.2
libboost	1.67.0
libcurl	7.69.1
libdap4	3.19.1
libedit	
libffi	3.3
libgcc-ng	9.1.0
libgdal	2.2.4
libgfortran-ng	7.3.0
libgpparray	0.7.6
libkml	1.3.0
libllvm10	10.0.1
libnetcdf	4.7.3
libpng	1.6.37
libpq	12.2
libprotobuf	3.13.0.1
libsodium	1.0.18
libspatialindex	1.9.3
libspatialite	4.3.0a
libssh2	1.9.0
libstdcxx-ng	9.1.0
libtiff	4.1.0
libuuid	1.0.3
libxml2	2.9.10
libxslt	1.1.34
llvmlite	0.34.0
locket	0.2.1
lxml	4.5.2
lz4-c	1.9.3
lzo	2.1
mako	1.1.4
markdown	3.3.3
markupsafe	1.1.1
matplotlib	3.2.1
matplotlib-base	3.2.1
mistune	0.8.4

02
03
04
05

ArcGIS Notebooks Runtime

Python 3 Standard Version 5.0

Library Name	Version	Library Name	Version	Library Name	Version
mkl	2019.4	prompt-toolkit	3.0.8	six	1.15.0
mkl-service	2.3.0	protobuf	3.13.0.1	snuggs	1.4.7
mkl_fft	1.2.0	psutil	5.7.2	sortedcontainers	2.3.0
mkl_random	1.1.0	ptyprocess	0.7.0	soupsieve	2.1
mock	4.0.3	pyasn1	0.4.8	spacy	2.2.4
mpc	1.1.0	pyasn1-modules	0.2.8	sqlalchemy	1.3.19
mpfr	4.0.2	pycosat	0.6.3	sqlite	3.33.0
mpmath	1.1.0	pycparser	2.2	srsly	1.0.5
msgpack-python	1.0.1	pycrypto	2.6.1	statsmodels	0.11.1
multipledispatch	0.6.0	pyct	0.4.8	sympy	1.6.2
munch	2.5.0	pygments	2.7.0	tbb	2020.3
murmurhash	1.0.5	pygpu	0.7.6	tblib	1.7.0
mypy_extensions	0.4.3	pyjwt	1.7.1	tenacity	5.1.1
nbclient	0.5.0	pykerberos	1.2.1	tensorboard	2.3.0
nbconvert	5.6.1	pymc3	3.8	tensorboard-plugin-wit	1.6.0
nbformat	5.0.7	pyopenssl	20.0.1	tensorflow	2.2.0
ncurses	6.2	yparsing	2.4.7	tensorflow-base	2.2.0
nest-asyncio	1.3.2	pysistent	0.17.3	tensorflow-estimator	2.2.0
netcdf4	1.5.3	pyshp	2.1.0	termcolor	1.1.0
networkx	2.5	pysocks	1.7.1	terminado	0.9.2
ninja	1.10.2	pytables	3.6.1	testpath	0.4.4
notebook	6.1.4	python	3.7.9	textwrap3	0.9.2
ntlm-auth	1.4.0	python-cufflinks	0.17.3	theano	1.0.4
numba	0.51.2	python-dateutil	2.8.1	thinc	7.4.0
numexpr	2.7.1	pytorch	1.4.0	threadpoolctl	2.1.0
numpy	1.19.2	pytz	2020.5	tini	0.18.0
numpy-base	1.19.2	pyviz_comms	2.0.1	tk	8.6.10
nvidia-ml-py3	7.352.0	pywavelets	1.1.1	toml	0.10.1
oauthlib	3.1.0	pyyaml	5.4.1	toolz	0.11.1
olefile	0.46	pyzmq	20.0.0	torchvision	0.5.0
opencv	4.0.1.24	rasterio	0.36.0	tornado	6.1
openjpeg	2.3.0	rasterstats	0.13.0	tqdm	4.56.0
openssl	1.1.1i	readline	8.1	traitlets	5.0.5
opt_einsum	3.1.0	regex	2020.11.13	typed-ast	1.4.2
packaging	20.9	requests	2.25.1	typing_extensions	3.7.4.3
pandas	1.1.1	requests-kerberos	0.12.0	ujson	4.0.2
pandocfilters	1.4.3	requests-oauthlib	1.3.0	urllib3	1.26.3
panel	0.10.3	requests-toolbelt	0.9.1	vincent	0.4.4
papermill	2.2.0	requests_ntlm	1.1.0	wasabi	0.8.1
param	1.10.1	retrying	1.3.3	wcwidth	0.2.5
parso	0.7.0	rise	5.6.1	webencodings	0.5.1
partd	1.1.0	rsa	4.7	werkzeug	1.0.1
pathspec	0.7.0	rtree	0.9.4	wheel	0.36.2
patsy	0.5.1	ruamel_yaml	0.15.87	widgetsnbextension	3.5.1
pcre	8.44	s3transfer	0.1.13	wrapt	1.12.1
pexpect	4.8.0	scikit-image	0.16.2	xarray	0.16.2
pickleshare	0.7.5	scikit-learn	0.23.2	xerces-c	3.2.3
pillow	7.2.0	scipy	1.5.2	xlrd	1.2.0
pillow-simd	7.1.2	seaborn	0.11.0	xz	5.2.5
pip	20.3.3	secretstorage	3.3.0	yaml	0.2.5
plac	1.1.0	send2trash	1.5.0	zeromq	4.3.3
plotly	4.5.4	setuptools	52.0.0	zict	2.0.0
preshed	3.0.2	shapely	1.6.4	zipp	3.4.0
proj4	5.2.0	simplejson	3.17.2	zlib	1.2.11
prometheus_client	0.8.0			zstd	1.4.5

02
03
04
05

ArcGIS Notebooks Runtime

Python 3 Advanced Version 5.0

RELEASED

April 2021

TOTAL PACKAGES

336

SUPPORTED IN

ArcGIS Enterprise 10.9 and ArcGIS Online April 2021 release

The use of either the Advanced or Advanced with GPU runtime, or both, consumes credits within ArcGIS Online. See ArcGIS Online [Credits by capability](#) for more details.

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

Library Name	Version	Library Name	Version	Library Name	Version
_libgcc_mutex	0.1	dask-glm	0.2.0	joblib	1.0.0
_pytorch_select	0.2	dask-ml	1.6.0	jpeg	9b
_tflow_select	2.3.0	dbus	1.13.18	json-c	0.13.1
absl-py	0.11.0	decorator	4.4.2	jsonschema	3.2.0
affine	2.3.0	defusedxml	0.6.0	jupyter_client	6.1.7
ansiwrap	0.8.4	dill	0.3.2	jupyter_contrib_core	0.3.3
appdirs	1.4.4	distributed	2.30.1	jupyter_contrib_nbextensions	0.5.1
arcgis	1.8.4	docutils	0.16	jupyter_core	4.7.0
arcgis-server-py3	10.9.0	entrypoints	0.3	jupyter_highlight_selected_word	0.2.0
argon2-cffi	20.1.0	et_xmlfile	1.0.1	jupyter_latex_envs	1.4.4
arviz	0.6.1	expat	2.2.10	jupyter_nbextensions_configurator	0.4.1
astunparse	1.6.3	fastai	1.0.60	kealib	1.4.12
async_generator	1.1	fastcache	1.1.0	keras-preprocessing	1.1.0
attrs	20.3.0	fastprogress	0.2.3	keyring	21.4.0
backcall	0.2.0	fiona	1.7.12	kiwisolver	1.3.0
beautifulsoup4	4.9.1	freetype	2.9.1	krb5	1.17.1
binutils_impl_linux-64	2.33.1	freexl	1.0.6	lcms2	2.11
binutils_linux-64	2.33.1	fsspec	0.8.3	ld_impl_linux-64	2.33.1
black	19.10b0	future	0.18.2	lerc	2.2
blas	1	gast	0.3.3	libboost	1.67.0
bleach	3.2.3	gcc_impl_linux-64	7.3.0	libcurl	7.69.1
blinker	1.4	gcc_linux-64	7.3.0	libdap4	3.19.1
blosc	1.20.1	gdal	2.2.4	libedit	3.1.20191231
bokeh	2.2.1	geos	3.7.1	libffi	3.3
boto3	1.7.62	giflib	5.1.4	libgcc-ng	9.1.0
botocore	1.10.62	glib	2.66.1	libgdal	2.2.4
bottleneck	1.3.2	gmp	6.1.2	libgfortran-ng	7.3.0
brotlipy	0.7.0	gmpy2	2.0.8	libgppuarray	0.7.6
bzip2	1.0.8	google-auth	1.21.3	libkml	1.3.0
c-ares	1.17.1	google-auth-oauthlib	0.4.2	libllvm10	10.0.1
ca-certificates	2021.1.19	google-pasta	0.2.0	libnetcdf	4.7.3
cachetools	4.2.1	grpcio	1.31.0	libpng	1.6.37
catalogue	1.0.0	gxx_impl_linux-64	7.3.0	libpq	12.2
certifi	2020.12.5	gxx_linux-64	7.3.0	libprotobuf	3.13.0.1
cffi	1.14.4	h5py	2.10.0	libsodium	1.0.18
cftime	1.0.0b1	hdf4	4.2.13	libspatialindex	1.9.3
chardet	4.0.0	hdf5	1.10.4	libspatialite	4.3.0a
chart-studio	1.1.0	heapdict	1.0.1	libssh2	1.9.0
click	7.1.2	holoviews	1.13.4	libstdcxx-ng	9.1.0
click-plugins	1.1.1	html5lib	1.1	libtiff	4.1.0
clij	0.7.1	icu	58.2	libuuid	1.0.3
cloudpickle	1.6.0	idna	2.1	libxml2	2.9.10
colorlover	0.3.0	imageio	2.9.0	libxslt	1.1.34
conda	4.8.3	importlib-metadata	2.0.0	llvmlite	0.34.0
conda-package-handling	1.7.2	importlib_metadata	2.0.0	locket	0.2.1
cryptography	3.3.1	intel-openmp	2019.4	lxml	4.5.2
cuda-toolkit	10.1.243	ipykernel	5.3.4	lz4-c	1.9.3
cudnn	7.6.5	ipyml	0.5.8	lzo	2.1
cufflinks-py	0.17.3	ipython	7.19.0	mako	1.1.4
curl	7.69.1	ipython_genutils	0.2.0	markdown	3.3.3
cycler	0.10.0	ipywidgets	7.5.1	markupsafe	1.1.1
cymem	2.0.4	jdcal	1.4.1	matplotlib	3.2.1
cython	0.29.21	jedi	0.17.2	matplotlib-base	3.2.1
cython-blis	0.4.1	jeepney	0.6.0	mistune	0.8.4
cytoolz	0.11.0	jinja2	2.11.2		
dask	2.27.0	jmespath	0.10.0		
dask-core	2.27.0				

ArcGIS Notebooks Runtime

Python 3 Advanced Version 5.0

Library Name	Version	Library Name	Version	Library Name	Version
mkl	2019.4	prometheus_client	0.8.0	simplejson	3.17.2
mkl-service	2.3.0	prompt-toolkit	3.0.8	six	1.15.0
mkl_fft	1.2.0	protobuf	3.13.0.1	snuggs	1.4.7
mkl_random	1.1.0	psutil	5.7.2	sortedcontainers	2.3.0
mock	4.0.3	ptyprocess	0.7.0	soupsieve	2.1
mpc	1.1.0	py	1.10.0	spacy	2.2.4
mpfr	4.0.2	pyasn1	0.4.8	sqlalchemy	1.3.19
mpmath	1.1.0	pyasn1-modules	0.2.8	sqlite	3.33.0
msgpack-python	1.0.1	pycosat	0.6.3	srsly	1.0.5
multipledispatch	0.6.0	pycparser	2.2	statsmodels	0.11.1
munch	2.5.0	pycrypto	2.6.1	sympy	1.6.2
murmurhash	1.0.5	pyct	0.4.8	tbb	2020.3
mypy_extensions	0.4.3	pygments	2.7.0	tblib	1.7.0
nbclient	0.5.0	pygpu	0.7.6	tenacity	5.1.1
nbconvert	5.6.1	pyjwt	1.7.1	tensorboard	2.3.0
nbformat	5.0.7	pykerberos	1.2.1	tensorboard-plugin-wit	1.6.0
ncurses	6.2	pymc3	3.8	tensorflow	2.2.0
nest-asyncio	1.3.2	pyopenssl	20.0.1	tensorflow-base	2.2.0
netcdf4	1.5.3	pyparsing	2.4.7	tensorflow-estimator	2.2.0
networkx	2.5	pypdf2	1.26.0	termcolor	1.1.0
ninja	1.10.2	pyrsistent	0.17.3	terminado	0.9.2
nose	1.3.7	pyshp	2.1.0	testpath	0.4.4
notebook	6.1.4	pysocks	1.7.1	textwrap3	0.9.2
ntlm-auth	1.4.0	pytables	3.6.1	theano	1.0.4
numba	0.51.2	python	3.7.9	thinc	7.4.0
numexpr	2.7.1	python-cfflinks	0.17.3	threadpoolctl	2.1.0
numpy	1.19.2	python-dateutil	2.8.1	tini	0.18.0
numpy-base	1.19.2	pytorch	1.4.0	tk	8.6.10
nvdiia-ml-py3	7.352.0	pytz	2020.5	toml	0.10.1
oauthlib	3.1.0	pyviz_comms	2.0.1	toolz	0.11.1
olefile	0.46	pywavelets	1.1.1	torchvision	0.5.0
opencv	4.0.1.24	pyyaml	5.4.1	tornado	6.1
openjpeg	2.3.0	pyzmq	20.0.0	tqdm	4.56.0
openpyxl	3.0.6	rasterio	0.36.0	traitlets	5.0.5
openssl	1.1.1i	rasterstats	0.13.0	typed-ast	1.4.2
opt_einsum	3.1.0	readline	8.1	typing_extensions	3.7.4.3
packaging	20.9	regex	2020.11.13	ujson	4.0.2
pandas	1.1.1	requests	2.25.1	urllib3	1.26.3
pandocfilters	1.4.3	requests-kerberos	0.12.0	vincent	0.4.4
panel	0.10.3	requests-oauthlib	1.3.0	wasabi	0.8.1
papermill	2.2.0	requests-toolbelt	0.9.1	wcwidth	0.2.5
param	1.10.1	requests_ntlm	1.1.0	webencodings	0.5.1
parso	0.7.0	retrying	1.3.3	werkzeug	1.0.1
partd	1.1.0	rise	5.6.1	wheel	0.36.2
pathspec	0.7.0	rsa	4.7	widgetsnbextension	3.5.1
patsy	0.5.1	rtree	0.9.4	wrapt	1.12.1
pcre	8.44	ruamel_yaml	0.15.87	xarray	0.16.2
pexpect	4.8.0	s3transfer	0.1.13	xerces-c	3.2.3
pickleshare	0.7.5	scikit-image	0.16.2	xlrd	1.2.0
pillow	7.2.0	scikit-learn	0.23.2	xlwt	1.3.0
pillow-simd	7.1.2	scipy	1.5.2	xz	5.2.5
pip	20.3.3	seaborn	0.11.0	yaml	0.2.5
plac	1.1.0	secretstorage	3.3.0	zeromq	4.3.3
plotly	4.5.4	send2trash	1.5.0	zict	2.0.0
prshed	3.0.2	setuptools	52.0.0	zipp	3.4.0
proj4	5.2.0	shapely	1.6.4	zlib	1.2.11
				zstd	1.4.5