



# 2.0

# 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, 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 for runtime version 2.0.

# ArcGIS Notebooks Runtime

## Python 3 Standard Version 2.0

### RELEASED

June 27, 2019

### TOTAL PACKAGES

272

### SUPPORTED IN

ArcGIS Enterprise 10.7.1 and the ArcGIS Notebooks private beta in ArcGIS Online (June and December 2019)

With ArcGIS Enterprise you can customize your notebook environment. Learn more at the [ArcGIS Notebook Server website](#).

Library Name	Version
_tflow_select	2.3.0
absl-py	0.7.1
affine	2.2.2
arcgis	1.6.1
asn1crypto	0.24.0
astor	0.7.1
attrs	19.1.0
backcall	0.1.0
beautifulsoup4	4.7.1
blas	1
blosc	1.16.3
bokeh	1.0.4
boto3	1.9.134
botocore	1.12.153
bottleneck	1.2.1
bzip2	1.0.6
c-ares	1.15.0
ca-certificates	2019.3.9
cairo	1.14.12
certifi	2019.3.9
cfffi	1.12.3
chardet	3.0.4
click	7
click-plugins	1.1.1
cligj	0.5.0
cloudpickle	0.8.1
colorlover	0.2.1
conda	4.6.2
conda-env	2.6.0
cryptography	2.6.1
cufflinks-py	0.13.0
curl	7.64.1
cycler	0.10.0
cymem	2.0.2
cython	0.29.8
cytoolz	0.9.0.1
dask	1.1.5
dask-core	1.1.5
dask-glm	0.2.0
dask-ml	0.12.0
dask-searchcv	0.2.0
dataclasses	0.6
decorator	4.4.0
defusedxml	0.6.0
dill	0.2.9
distributed	1.28.1
docutils	0.14
entrypoints	0.3
expat	2.2.6
fastai	1.0.50.post1

Library Name	Version
fastcache	1.1.0
fastprogress	0.1.21
ffmpeg	4
fiona	1.7.12
fontconfig	2.13.0
freeglut	3.0.0
freetype	2.9.1
freexl	1.0.5
gast	0.2.2
gdal	2.2.4
geos	3.6.2
giflib	5.1.4
glib	2.56.2
gmp	6.1.2
gmpy2	2.0.8
graphite2	1.3.13
grpcio	1.16.1
h5py	2.8.0
harfbuzz	1.8.8
hdf4	4.2.13
hdf5	1.10.2
heapdict	1.0.0
holoviews	1.10.4
html5lib	1.0.1
icu	58.2
idna	2.8
imageio	2.5.0
intel-openmp	2019.3
ipykernel	5.1.0
ipython	7.5.0
ipython_genutils	0.2.0
ipywidgets	7.3.1
jasper	2.0.14
jedi	0.13.3
jeepney	0.4
jinja2	2.10.1
jmespath	0.9.4
joblib	0.13.2
jpeg	9b
json-c	0.13.1
jsonschema	3.0.1
jupyter	1.0.0
jupyter_client	5.2.4
jupyter_console	6.0.0
jupyter_core	4.4.0
jupyterlab	0.35.5
jupyterlab_server	0.2.0
kealib	1.4.7
keras	2.2.4
keras-applications	1.0.7

Library Name	Version
keras-base	2.2.4
keras-preprocessing	1.0.9
keyring	13.2.1
kiwisolver	1.1.0
krb5	1.16.1
libboost	1.67.0
libcurl	7.64.1
libdap4	3.19.1
libedit	3.1.20181209
libffi	3.2.1
libgcc-ng	8.2.0
libgdal	2.2.4
libgfortran-ng	7.3.0
libglu	9.0.0
libgpubarray	0.7.6
libkml	1.3.0
libnetcdf	4.6.1
libopencv	3.4.2
libopus	1.3
libpng	1.6.37
libpq	11.2
libprotobuf	3.6.1
libsodium	1.0.16
libspatialite	4.3.0a
libssh2	1.8.2
libstdcxx-ng	8.2.0
libtiff	4.0.10
libuuid	1.0.3
libvpx	1.7.0
libxcb	1.13
libxml2	2.9.9
libxslt	1.1.33
llvmlite	0.27.0
locket	0.2.0
lxml	4.2.3
lz4-c	1.8.1.2
mako	1.0.10
markdown	3.1
markupsafe	1.1.1
matplotlib	3.0.1
mistune	0.8.4
mkl	2019.1
mkl-service	1.1.2
mkl_fft	1.0.10
mkl_random	1.0.2
mpc	1.1.0
mpfr	4.0.1
mpmath	1.1.0
msgpack-numpy	0.4.3.2
msgpack-python	0.6.1

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# ArcGIS Notebooks Runtime

## Python 3 Standard Version 2.0

Library Name	Version	Library Name	Version	Library Name	Version
multipledispatch	0.6.0	pyshp	1.2.12	torchvision	0.2.1
munch	2.3.2	pysocks	1.7.0	tornado	5.1.1
murmurhash	1.0.2	pytables	3.4.4	tqdm	4.31.1
nbconvert	5.4.0	python	3.6.8	traitlets	4.3.2
nbformat	4.4.0	python-dateutil	2.8.0	typing	3.6.4
ncurses	6.1	pytorch	1.0.0	ujson	1.35
networkx	2.3	pytz	2019.1	urllib3	1.24.2
ninja	1.9.0	pywavelets	1.0.3	vincent	0.4.4
nodejs	10.13.0	pyyaml	5.1	wcwidth	0.1.7
notebook	5.7.7	pyzmq	18.0.0	webencodings	0.5.1
numba	0.42.0	rasterio	0.36.0	werkzeug	0.15.2
numexpr	2.6.9	rasterstats	0.13.0	wheel	0.33.4
numpy	1.16.2	readline	7	widgetsnbextension	3.3.1
numpy-base	1.16.2	regex	2018.01.10	wrapt	1.10.11
nvidia-ml-py3	7.352.0	requests	2.21.0	xerces-c	3.2.2
olefile	0.46	retrying	1.3.3	xlrd	1.2.0
opencv	3.4.2	rise	5.4.1	xz	5.2.4
openjpeg	2.3.0	ruamel_yaml	0.15.46	yaml	0.1.7
openssl	1.1.1c	s3transfer	0.2.0	zeromq	4.3.1
packaging	19	scikit-image	0.14.2	zict	0.1.4
pandas	0.23.4	scikit-learn	0.20.3	zlib	1.2.11
pandocfilters	1.4.2	scipy	1.2.1	zstd	1.3.7
param	1.9.0	seaborn	0.9.0	wrapt	1.10.11
parso	0.4.0	secretstorage	3.1.0	xerces-c	3.2.2
partd	0.3.10	send2trash	1.5.0	xlrd	1.2.0
patsy	0.5.1	setuptools	41.0.1	xz	5.2.4
pcre	8.43	shapely	1.6.4	yaml	0.1.7
pexpect	4.7.0	simplejson	3.16.0	zeromq	4.2.5
pickleshare	0.7.5	six	1.12.0	zict	0.1.3
pillow	6.0.0	snappy	1.1.7	zlib	1.2.11
pip	19.1.1	snuggs	1.4.3	zstd	1.3.7
pixman	0.38.0	sortedcontainers	2.1.0		
plac	0.9.6	soupsieve	1.8		
plotly	3.2.1	spacy	2.0.18		
prshed	2.0.1	sqlalchemy	1.3.3		
proj4	4.9.3	sqlite	3.28.0		
prometheus_client	0.6.0	statsmodels	0.9.0		
prompt_toolkit	2.0.9	sympy	1.3		
protobuf	3.6.1	tblib	1.4.0		
psutil	5.6.2	tensorboard	1.12.2		
ptyprocess	0.6.0	tensorflow	1.12.0		
py-opencv	3.4.2	tensorflow-base	1.12.0		
pycosat	0.6.3	termcolor	1.1.0		
pycparser	2.19	terminado	0.8.2		
pygments	2.4.0	testpath	0.4.2		
pygpu	0.7.6	theano	1.0.3		
pymc3	3.5	thinc	6.12.1		
pyopenssl	19.0.0	tini	0.18.0		
pyparsing	2.4.0	tk	8.6.8		
pyrsistent	0.14.11	toolz	0.9.0		

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_tflow_select	2.3.0
absl-py	0.7.1
affine	2.2.2
arcgis	1.6.1
arcgis-server-py3	10.7.1
asn1crypto	0.24.0
astor	0.7.1
attrs	19.1.0
backcall	0.1.0
beautifulsoup4	4.7.1
blas	1
blosc	1.16.3
bokeh	1.0.4
boto3	1.9.134
botocore	1.12.153
bottleneck	1.2.1
bzip2	1.0.6
c-ares	1.15.0
ca-certificates	2019.3.9
cairo	1.14.12
certifi	2019.3.9
cfffi	1.12.3
cftime	1.0.0b1
chardet	3.0.4
click	7
click-plugins	1.1.1
cligj	0.5.0
cloudpickle	0.8.1
colorlover	0.2.1
conda	4.6.2
conda-env	2.6.0
cryptography	2.6.1
cufflinks-py	0.13.0
curl	7.64.1
cycler	0.10.0
cymem	2.0.2
cython	0.29.8
cytoolz	0.9.0.1
dask	1.1.5
dask-core	1.1.5
dask-glm	0.2.0
dask-ml	0.12.0
dask-searchcv	0.2.0
dataclasses	0.6
decorator	4.4.0
defusedxml	0.6.0
dill	0.2.9
distributed	1.28.1
docutils	0.14
entrypoints	0.3

Library Name	Version
et_xmlfile	1.0.1
expat	2.2.6
fastai	1.0.50.post1
fastcache	1.1.0
fastprogress	0.1.21
ffmpeg	4
fiona	1.8.4
fontconfig	2.13.0
freeglut	3.0.0
freetype	2.9.1
freexl	1.0.5
future	0.17.1
gast	0.2.2
gdal	2.3.3
geos	3.7.1
giflib	5.1.4
glib	2.56.2
gmp	6.1.2
gmpy2	2.0.8
graphite2	1.3.13
grpcio	1.16.1
h5py	2.9.0
harfbuzz	1.8.8
hdf4	4.2.13
hdf5	1.10.4
heapdict	1.0.0
holoviews	1.10.4
html5lib	1.0.1
icu	58.2
idna	2.8
imageio	2.5.0
intel-openmp	2019.3
ipykernel	5.1.0
ipython	7.5.0
ipython_genutils	0.2.0
ipywidgets	7.3.1
jasper	2.0.14
jdcal	1.4.1
jedi	0.13.3
jeepney	0.4
jinjia2	2.10.1
jmespath	0.9.4
joblib	0.13.2
jpeg	9b
json-c	0.13.1
jsonschema	3.0.1
jupyter	1.0.0
jupyter_client	5.2.4
jupyter_console	6.0.0
jupyter_core	4.4.0

Library Name	Version
jupyterlab	0.35.5
jupyterlab_server	0.2.0
kealib	1.4.7
keras	2.2.4
keras-applications	1.0.7
keras-base	2.2.4
keras-preprocessing	1.0.9
keyring	13.2.1
kiwisolver	1.1.0
krb5	1.16.1
libboost	1.67.0
libcurl	7.64.1
libdap4	3.19.1
libedit	3.1.20181209
libffi	3.2.1
libgcc-ng	8.2.0
libgdal	2.3.3
libgfortran-ng	7.3.0
libglu	9.0.0
libgpubarray	0.7.6
libkml	1.3.0
libnetcdf	4.6.1
libopus	1.3
libpng	1.6.37
libpq	11.2
libprotobuf	3.6.1
libsodium	1.0.16
libspatialite	4.3.0a
libssh2	1.8.2
libstdcxx-ng	8.2.0
libtiff	4.0.10
libuuid	1.0.3
libvpx	1.7.0
libxcb	1.13
libxml2	2.9.9
libxslt	1.1.33
llvmlite	0.27.0
locket	0.2.0
lxml	4.2.3
lz4-c	1.8.1.2
lzo	2.1
mako	1.0.10
markdown	3.1
markupsafe	1.1.1
matplotlib	3.0.1
mistune	0.8.4
mk1	2019.1
mk1-service	1.1.2
mk1_fft	1.0.10
mk1_random	1.0.2

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# ArcGIS Notebooks Runtime

## Python 3 Advanced Version 2.0

Library Name	Version	Library Name	Version	Library Name	Version
mpc	1.1.0	py	1.8.0	tensorflow	1.12.0
mpfr	4.0.1	pycosat	0.6.3	tensorflow-base	1.12.0
mpmath	1.1.0	pycparser	2.19	termcolor	1.1.0
msgpack-numpy	0.4.3.2	pygments	2.4.0	terminado	0.8.2
msgpack-python	0.6.1	pygpu	0.7.6	testpath	0.4.2
multipledispatch	0.6.0	pymc3	3.5	theano	1.0.3
munch	2.3.2	pyopenssl	19.0.0	thinc	6.12.1
murmurhash	1.0.2	yparsing	2.4.0	tini	0.18.0
nbconvert	5.4.0	pypdf2	1.26.0	tk	8.6.8
nbformat	4.4.0	pyrsistent	0.14.11	toolz	0.9.0
ncurses	6.1	pyshp	1.2.12	torchvision	0.2.1
netcdf4	1.4.2	pysocks	1.7.0	tornado	5.1.1
networkx	2.3	pytables	3.4.4	tqdm	4.31.1
ninja	1.9.0	python	3.6.8	traitlets	4.3.2
nodejs	10.13.0	python-dateutil	2.8.0	typing	3.6.4
nose	1.3.7	pytorch	1.0.0	ujson	1.35
notebook	5.7.7	pytz	2019.1	urllib3	1.24.2
numba	0.42.0	pywavelets	1.0.3	vincent	0.4.4
numexpr	2.6.9	pyyaml	5.1	wcwidth	0.1.7
numpy	1.16.2	pyzmq	18.0.0	webencodings	0.5.1
numpy-base	1.16.2	rasterio	1.0.21	werkzeug	0.15.2
nvidia-ml-py3	7.352.0	rasterstats	0.13.0	wheel	0.33.4
olefile	0.46	readline	7	widgetsnbextension	3.3.1
openjpeg	2.3.0	regex	2018.01.10	wrapt	1.10.11
openpyxl	2.6.2	requests	2.21.0	xerces-c	3.2.2
openssl	1.1.1c	retrying	1.3.3	xlrd	1.2.0
packaging	19	rise	5.4.1	xlwt	1.3.0
pandas	0.24.2	ruamel_yaml	0.15.46	xz	5.2.4
pandocfilters	1.4.2	s3transfer	0.2.0	yaml	0.1.7
param	1.9.0	scikit-image	0.14.2	zeromq	4.3.1
parso	0.4.0	scikit-learn	0.20.3	zict	0.1.4
partd	0.3.10	scipy	1.2.1	zlib	1.2.11
patsy	0.5.1	seaborn	0.9.0	zstd	1.3.7
pcre	8.43	secretstorage	3.1.0	xlrd	1.2.0
pexpect	4.7.0	send2trash	1.5.0	xlwt	1.3.0
pickleshare	0.7.5	setuptools	41.0.1	xz	5.2.4
pillow	6.0.0	shapely	1.6.4	yaml	0.1.7
pip	19.1.1	simplejson	3.16.0	zeromq	4.2.5
pixman	0.38.0	six	1.12.0	zict	0.1.3
plac	0.9.6	snappy	1.1.7	zlib	1.2.11
plotly	3.2.1	snuggs	1.4.3	zstd	1.3.7
poppler	0.65.0	sortedcontainers	2.1.0		
poppler-data	0.4.9	soupsieve	1.8		
prshed	2.0.1	spacy	2.0.18		
proj4	5.2.0	sqlalchemy	1.3.3		
prometheus_client	0.6.0	sqlite	3.28.0		
prompt_toolkit	2.0.9	statsmodels	0.9.0		
protobuf	3.6.1	sympy	1.3		
psutil	5.6.2	tblib	1.4.0		
ptyprocess	0.6.0	tensorboard	1.12.2		