

	Comparison of 500K <u>GeoidHeights.dat.gz</u> tests for 2 PyGeodesy interpolators <u>GeoidKarney</u> (Karney's C++ class <u>Geoid</u> transcoded to Python) and <u>GeoidPGM</u> (based on <u>SciPy/NumPy's cubic RectBivariateSpline</u>).			
	pygeodesy.GeoidKarney			
	egm2008-1.pgm	egm96-5.pgm	egm84-15.pgm	
Eps Max*	0.002186	0.002603	0.017281	meter
Eps Mean*	0.000533	0.000539	0.000821	meter
Eps Stdev*	0.000372	0.000377	0.000807	meter
Python 2.7.16	263.259	261.003	278.959	secs**1
Python 3.7.2	148.373	150.067	153.365	secs**1
Python 3.8.10	48.406	47.955	46.147	secs**2
Python 3.9.6	137.616	82.536	76.668	secs**3
Python 3.10.1	26.411	25.888	24.789	secs**4
PyPy 6 / 2.7.13	67.497	67.611	59.374	secs**1
PyPy 6 / 3.5.3	88.427	83.209	70.575	secs**1
	pygeodesy.GeoidPGM			
	egm2008-1.pgm	egm96-5.pgm	egm84-15.pgm	
Eps Max*	0.010985	0.017929	0.022971	meter
Eps Mean*	0.000629	0.000631	0.000637	meter
Eps Stdev*	0.000421	0.000425	0.000445	meter
Python 2.7.16	121.390***	49.753	48.561	secs**1
Python 3.7.2	113.012***	40.963	38.983	secs**1
Python 3.8.10	35.922***	15.566	14.373	secs**2
	*) Eps Max, Mean, Stdev are the maximum, mean and standard deviation of the (abs) difference between the <i>GeoidHeights.dat</i> and PyGeodesy heights.			
	**1) Run times for Python 2.7.16, 3.7.2 and PyPy 6 on macOS 10.13.6 High Sierra and iMac, 12 GB, 3 GHz Core i3, all in 64-bit only.			
	**2) Run time for Python 3.8.10 on macOS 12.1 Monterey and MacBook Air (M1, 2020), 16 GB, Apple M1 Silicon, Intel emulation in 64-bit.			
	**3) Run time for Python 3.9.6 on macOS 10.16 Big Sur (aka 11.6.1) and MacBook Air (Retina 2020), 16 GB, 1.2 GHz Quad-Core i7 in 64-bit.			
	**4) Run time for Python 3.10.1 on macOS 12.1 Monterey and MacBook Air (M1, 2020), 16 GB, Apple M1 Silicon, 64-bit natively.			
	***) About half is needed to load the 466 MB+ egm2008-1.pgm file and convert 233 M+ 2-byte <i>ushorts</i> to 8-byte <i>float64s</i> for SciPy/NumPy.			