Steps to validate transcendental functions:

1) Add a file 'umath-validation-set-<ufuncname>.txt', where ufuncname is name of

the function in NumPy you want to validate

2) The file should contain 4 columns: dtype,input,expected output,ulperror

a. dtype: one of np.float16, np.float32, np.float64

b. input: floating point input to ufunc in hex. Example: 0x414570a4

represents 12.340000152587890625

c. expected output: floating point output for the corresponding input in hex.

This should be computed using a high(er) precision library and then rounded to

same format as the input.

d. ulperror: expected maximum ulp error of the function. This

should be same across all rows of the same dtype. Otherwise, the function is

tested for the maximum ulp error among all entries of that dtype.

3) Add file umath-validation-set-<ufuncname>.txt to the test file test\_umath\_accuracy.py

which will then validate your ufunc.