

## The MDACS guide for kids who can't code good And who wanna learn to do other stuff good too

| > 0                               | 0     | Embrace the Zen of Python   |
|-----------------------------------|-------|---|
| Stay<br>Sane                      |       | ·   |
| Write Readable Code S             | 3 4 5 | Use an IDE that speaks your language  Python was designed to be a readable language so make your code readable.  Code in blocks  Reflow long lines  Avoid "one-liners" and other write-only coding styles  Use consistent indentation. Spaces, not tabs, NEVER mixed.  Use consistent naming convention  CAPS, CamelCase, with_underscores  Functions are verbs, variables and classes are nouns  Group code into sections  Preamble  Imports  Metadata and Static variables  Classes  Functions  Ifname == "main": |
|                                   |       | Use Idiomatic Python  Document your work:   |
| Write Usable and<br>Portable Code | 8     | Docstrings for users Comments for developers  Separate code and data Leap before you look Try/Except/Else Raise exceptions instead of using sys.exit()  |
| erforma<br>Code                   | 10    | DRY or DIE: Don't repeat yourself (or others) a.k.a Duplication is Evil   |
|                                   |       | Write functions and modules   |
|                                   |       | Astropy, Numpy, Scipy, Matplotlib, and Pandas probably have what you need   |
| /rite                             |       | Write tests as you write code (bugs = test cases)   |
| ≥                                 | 12    | Vectorise as you go   |