Visualization 1 - Instructor Guide

- Since this is only a 25 minutes module, the wave equation and PDE ideas could already be covered in previous modules. Otherwise, start with the image cube of floats as an a prior given data set.   The focus of this module should only be on movie making implementations and its use cases in different scientific applications
- Instructors should review the materials covered in the presentation slide set and do further readings of the concepts being presented
- This module will start with presentation slides that show movies.
- Instructors should use simple random array with lines/objects examples to demonstrate primary color images.
- Understand and present the idea of a post processing step to develop visual graphics animations and know how to use ImageMagik.

Common Pitfalls

- Watch out for IO, outputs data writes in Fortran is NOT the same as C, Fortran random access is needed for compatibility.
- Beware of making many changes and then testing results. Use an incremental approach – make one change – then test entire program. See what image improvements happened.
- In the beginning, do a paper design of image layout.