USARRAY SHORTCOURSE
UNIX, SCRIPTING, AWK, AND GMT
Some Reflection on IRIS and USArray

IRIS is a Community of Practice

“Communities of Practice are groups of people who share a concern or a passion for something they do, and learn how to do it better as they interact regularly.”

- They strengthen the practice at both the group and individual level.
- They energize their participants and engender deep loyalty.
- They accomplish amazing feats relative to their available resources.

USArray Short Course 2009

Slide based off of Kim Kastens from EER 2016
My Programming Style and Philosophy
UNIX and Shell Scripting

UNIX Operating System

**Kernel** – Hub
Allocates time and memory

**Shell**
Interface between user and the kernel
Command Line Interpreter (CLI)

**Programs**
For example – GMT, awk, SAC

Shell Scripting
Create commands and series of commands to automate tasks

In Jurassic Park – they had a GUI
Programs in UNIX

open source collection of about 80 command-line tools for manipulating geographic and Cartesian data sets

AWK is an interpreted programming language designed for text processing such as searching files for lines (or other units of text) that contain certain patterns.

SEISMIC ANALYSIS CODE (SAC)
general-purpose interactive program designed for the study of sequential signals, especially time-series data.
Tutorials on Virtual Box and Moodle

- TODAY - Scripting and GMT
- PreCourse – Tutorials 1-9
- Now – Tutorials
  - 10 – Travel Times and Ray Paths
  - 11 – Magnitude and Frequency Plots
  - 13 – Cross Sections
  - Sorry No Tutorial 12

- On Wed – work more on SAC


If you haven’t logged in yet and installed your virtual machine – check your email “USArray Pre-Course Homework”

Mike Brudzinski was a main author on the tutorials, but couldn’t be with us this week.