

PRELIMINARY Schedule as of February 1, 2017

“3D-Visualization of climate model data with Avizo” Timetable of the 2-Day-Workshop

Monday, March 27, 2017

09.00	Welcome and Motivation: Example visualizations produced with Avizo Agenda of this workshop
9.20	Introduce yourself: What kind of model/data are you working with, and which variables do you want to visualize?
9.30	Presentation <ul style="list-style-type: none"> • Introduction to DKRZ, the supercomputer Mistral and the vis-nodes • Requirements on NetCDF data by Avizo, preprocessing
10.15	Guided work: Reserving an vis-node, starting a remote VNC/VGL session & login procedure
10.40	Guided work & self-study: Getting started with Avizo [chapter 3] <ul style="list-style-type: none"> • Spatial navigation • Time animation • Toggles in combination with 2 (vertical or horizontal) and 4 panels • Metadata
11.00	<i>Break</i>
11.15	Guided work & self-study: Visualizing 2D scalar datasets [chapters 4.1-4.5, 4.9-4.10] <ul style="list-style-type: none"> • Slice • Producing and editing colormaps • Legend: Display of time, colormaps and text annotations • Mapping projections • Earth-Module • Saving your Avizo script (*.hx)
13.00	<i>Lunch break</i>
14.00	Guided work & self-study: 3D-Visualization of 2D scalar data [chapter 4.6-4.7, 4.11-4.12] <ul style="list-style-type: none"> • “Bar Chart Slice” • Shading with “Embossed Slice” • “Height Map Slice”
15.30	<i>Break</i>
15.45	Guided work & self-study: Visualizing 3D scalar data [chapter 4.13, 4.17, 4.21] <ul style="list-style-type: none"> • Moving Slices in xy, xz and yz orientation • Isosurface • Volume Rendering
17.30	<i>End</i>

PRELIMINARY Schedule as of February 1, 2017

Tuesday, March 28, 2017

9.00	Presentation: Introduction to Advanced Vector Field Visualization
9.45	Guided work & self-study: Visualizing 2D vector data [chapter 5.1-5.2] <ul style="list-style-type: none"> • Vector arrows • Line Integral Convolution (LIC)
11.00	<i>Break</i>
11.15	Guided work & self-study: Visualizing 3D vector data [chapter 6] <ul style="list-style-type: none"> • Illuminated Streamlines • Trajectories
13.00	<i>Lunch break</i>
14.00	Guided work: Producing movies [chapter 7] <ul style="list-style-type: none"> • MovieMaker: Simple time dependent animations • Animation Producer: Complex animations with Camera Paths and toggling
15.30	<i>Break</i>
15.45	Limitations when working with curvilinear or unstructured grids
16.15	Try to visualize your own data!
17.15	Feedback: What was good, what was bad? What should be changed or added in further workshops?
17.30	<i>End</i>