Highlighted = really good / try to read into next…

Visualizing Science (blog and videos and introductory lessons)

<https://www.youtube.com/watch?v=7BnXaA_6mfg&list=PLGOijEF21VbPw00f0FWBMLlm5YTdUUdyU&index=3&t=396s>

<https://www.youtube.com/watch?v=oZDMRMPehs8&t=697s>

<https://visualizingscience.ryanwyatt.net/>

and general list of resourceS with books: <http://visualizingscience.ryanwyatt.net/resources/>

Books: (designing) Data Visualization by ?, Data points/visualize this by Nathan Yau…

For generic processing of raw data:

Fits liberator (<https://noirlab.edu/public/products/fitsliberator/>)

Gmic (<http://gmic.eu/>)

CFA glue: <https://www.cfa.harvard.edu/research/glue> (related = cosmicDS and mini data stories as well as milkyway3D)

GIMP, McGIMP (<https://www.partha.com/> ), affinity (<https://affinity.serif.com/en-us/>)

Imagej / astroimagej

DS9/JS9

For “image tile pyramids”: <https://toasty.readthedocs.io/en/latest/>

COLORS

Another blog (no more rainbow colorbars): <https://rockcontent.com/blog/rainbow-color-scales/>

Colorblindness explanation: <https://davidmathlogic.com/colorblind/#%23D81B60-%231E88E5-%23FFC107-%23004D40>

Colorblindness simulator: <http://colororacle.org/>

Looking at all color possibilities (by adobe!): <https://spectrum.adobe.com/page/color-for-data-visualization/> and by Vega (<https://vega.github.io/vega/docs/schemes/>)

Interactive environments and other techniques (multi-dimensional or hyper-spectral images, spatially 3D information, and 2.5D data data):

Partiview for stereoscopic software: <https://virdir.ncsa.illinois.edu/partiview/>

Glue combining databases and multi-interactive plots like in CARTA: <https://glueviz.org/>

LIVE (super-glue): <https://sites.google.com/gluesolutions.io/live-environments> or <https://sites.google.com/gluesolutions.io/live-environments/learn-more/talks?authuser=0>

“Sculpted Decoupage”: <https://illuminateduniverse.org/2021/05/20/flight-to-ag-carinae/> (often done in Maya)

Outreach and inspiring

Astrophoto challenge with JS9 <https://www.universe-of-learning.org/resources/projects/nasas-astrophoto-challenge> and JS9: [https://js9.si.edu](https://js9.si.edu/)

Milkyway 3d: https://sites.google.com/view/milkyway3d/home?authuser=0

pixar <https://www.amazon.com/Creativity-Inc-Overcoming-Unseen-Inspiration/dp/0812993012>

interactive Astro: <https://www.rocketcenter.com/INTUITIVEPlanetarium/interactiveastronomy> (+ worldwide telescope, using sounds or 3d surfaces/touch with consideration to visual impairment)

lots more images: <https://www.openspaceproject.com/images>

EVEN MORE IMAGES: <https://www.astropix.org/>

Combining telescopes around the world: <https://worldwidetelescope.org/home/>

OpenSpace for the entire universe in realistic ways: <https://www.openspaceproject.com/>

Data repositories:

astroPix: astropix.org

Mast: <https://mast.stsci.edu>

Aladin: <https://aladin.cds.unistra.fr/AladinLite>

ESO: <https://www.eso.org/public/images>

ESAHubble: <https://esahubble.org>

SkyView: <https://skyview.gsfc.nasa.gov/>

IRSA: <https://irsa.ipac.caltech.edu>

CHASER: <https://cda.harvard.edu/chaser>

JWST: <https://webbtelescope.org/images>

ESOJWST: <https://www.esa.int/Space_Science/Webb/(archive)/0>

SDSS: <https://www.sdss4.org/science/data-release-publications#dr17>

Contacts and People:

Frank Summers (STScI): story telling

Rob Hurt (IPA): colors, rainbows bad

Kim ? (Chandra x-ray): 3d modeling for full accessibility, sonification projects, 3D printing

Nancy Wolk (CfA): Chandra and raw data

Lars Christiensen: image processing for EPO use

Alyssa Goodman (CfA): Glue, evolved beyond jdaviz

Jackie Faherty (AMNH): OpenSpace, maybe blender