Clouds First Report
Flow Visualization Spring 2018
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Section: MCEN 4151-001 MWF 11:00-11:50
03/19/18

Post Processed Image

Original Image

The context of this image is the western horizon sunset at Ocean Beach in San Diego, California. I had taken a trip over the first weekend of March and was fortunate enough to be on the pier during sunset that following Monday. The purpose and intent of the image is to highlight the water line, tanker ship, and beautiful hue of natural coloring that took place.

The image was taken from a pier approximately 16-20 feet above sea level facing west. The clouds displayed in the image are primarily Stratus, sub specifically Nimbostratus. I suspect that the tanker ship was somewhere between 5-10 miles off of shore and was most likely headed up north toward Alaska. Listed below is a list of the image, camera, and location parameters used.

- **Location:** Ocean Beach Pier, San Diego, California (Appx: 32.75162,-117.25099)
- **Date Taken**: 03/05/18
- **Time Taken:** 7:16 PM (PST)
- **Camera:** Canon EOS 80D
- **Lens:** EF-S18-55mm STM
- **Focal Length:** 55.0 mm
- **Aperture:** 5.7
- **Flash:** Off
- **Shutter Speed:** 1/8
- **ISO:** 1600
- **X-Resolution:** 72
- **Y-Resolution:** 72
- **Focal Plane X-Resolution:** 6514
- **Focal Plane Y-Resolution:** 6734

The only post processing done was cropping the water line a little bit shorter than the horizon. The reason for this was to draw the audience from the bottom, up, and then out toward the tanker ship in the center of the pink light. The time resolution came out nicely and can most notably be seen in the crispness of the ocean waves.

The image reveals the power and beauty of the ocean and sunset at sea level. Due to being so close to the ocean, the horizontal line is incredibly defined and draws attention to a beautiful array of natural colors. The reason the pink is so great and vivid is because of the abundance of undisturbed air space. When looking at the horizon hundreds of miles of air are at your exposure, this acts as a filter for the blue light that reveals warmer colors such as the

pinks and oranges displayed in the image. Wind speed was 5 mph and therefore causing primarily Stratus clouds to float along the skyline undisturbed.

References:

- "Cloud Types." *Cloud Types | UCAR Center for Science Education*, scied.ucar.edu/webweather/clouds/cloud-types.
- *Elevation Finder*, www.freemaptools.com/elevation-finder.htm.
- "Online Metadata and Exif Viewer." *Online Metadata and Exif Viewer*, metapicz.com/#landing.
- *Summary of Cloud Types*, apollo.lsc.vsc.edu/classes/met130/notes/chapter5/summary.html.
- "Weather History for KSAN - March, 2018." *Weather Underground* (10.226.236.3), www.wunderground.com/history/airport/KSAN/2018/3/5/DailyHistory.html?req_city=San%2BDiego&req_state=CA&req_statename=California&reqdb.zip=92101&reqdb.magic=1&reqdb.wmo=99999.