Sept 25 Summary

Puerto Rico/ US Virgin Islands

– The eastern third of St. Croix was under thick cloud, the rest of the island had significantly reduced power compared to the reference image.
– St. Thomas and the US Virgin Islands were under scattered cloud, but lights could be seen on those islands. However, no comparisons to reference can be done in those areas.
– Isla de Culebra and Isla de Vieques were both completely clear.
  • Culebra showed some lights on it, though reduced from the reference.
  • There were a few point sources of light on Vieques, but by in large it was significantly reduced as compared to the reference image
– The region south of Arecibo (including the region near Guajataca Lake) was under cloud, so no real analysis can be done in that region.
– Clear area analysis
  • The major cities of San Juan, Caguas, Ponce and Mayagüez all showed significantly reduced lighting compared to reference. But there is noticeable lighting in those cities.
  • The other larger cities (ex. Humacao, Fajardo), while darker compared to the reference image, do have some power in them.
  • Some point sources in the interior part of the island, indicating some sort of power
  • The region right near Rafael Hernández Airport on the northwest side of Puerto Rico does have power of some sort.
  • The western and southern parts of Puerto Rico looks particularly dark, as compared to reference
Sept 26 Summary

• Puerto Rico continued to have thin cloud overhead for this mornings SNPP overpass at ~2:01am AST (0601UTC) S-NPP pass, but that still allowed for some analysis from the DNB.

• Basically Puerto Rico showed no significant change from yesterday (25 September), though some rural areas that were cloudy yesterday only had thin clouds over head today, indicating limited lights/power in those regions. St. Croix was under thick cloud. However, the southwest part of the island, which is where the airport is, was visible through the clouds, indicating a moderate amount of lights. St. Thomas was slightly obscured by cloud, but could be seen. In comparing to the reference imagery, it still has less light. The rest of the US and British Virgin islands were under relatively thick clouds, so no real comparison could be made. However, Tortola can still be seen. Isla de Culebra and Isla de Vieques were both had thin cloud overhead, but Culebra continued to show lights on it, though reduced from the reference, and there were still a few point sources of light on Vieques seen through the clouds. The area that was cloudy yesterday Arecibo (including the region near Guajataca Lake) with thick cloud only had thin cloud today. This revealed point light sources that weren't visible in the DNB imagery yesterday, indicating limited lights/power in those regions.
VIIRS – Day Night Band
26 September 2017, 2:01 am AST

- No major change in lighting in San Juan from yesterday
- Culebra obscured by thin cloud, but light can be seen through clouds
- Thin clouds over this region
- Vieques obscured by thin cloud, but single light source can be seen through clouds
- Saint Croix cloudy, but some lights visible
- Thick cloud over St. Croix
- US and British Virgin Islands obscured by clouds, but lights can be seen
- St. Thomas
- Tortola
- Cloudy

- Rafael Hernández Airport
- Arecibo
- San Juan
- Ponce
- Mayaguez
- Thin clouds over this region
- Continued reduction in lighting around coastal areas
- Ships
Sept 27

• While not a significant change (i.e. half the island didn't suddenly turn on), there was a noticeable increase in lighting along the coastal and rural areas of Puerto Rico as compared to 25 September (the first clear day after Maria impacted the island). However, the lighting is still well below the levels of the reference imagery. This increase could be an indication of actual increase in lighting or it could be due to scan geometry differences between the reference and current pass. But, as mentioned, there is an increase in lighting from two days ago.