

# Data Background (1) - Wavelengths and Time

- GOES-13, Bands 3-19
- 2012-10-18 to 2012-11-09
- 4 measurements per day, spaced 6 hours apart, starting at 02:20:16 UTC

**Table 4-3. Sounder Detectors Channel Allocation**

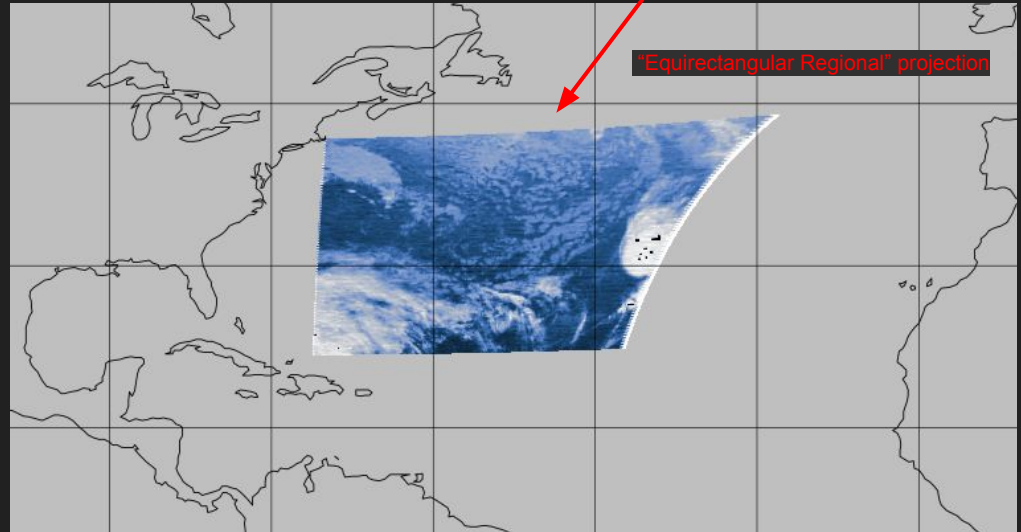
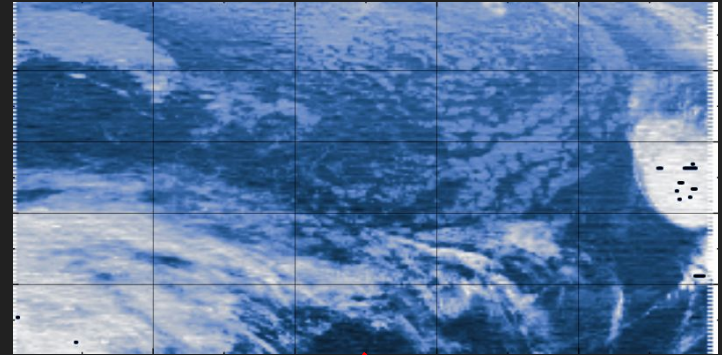
<b>Detector</b>	<b>Channel No.</b>	<b>Wavelength, <math>\mu\text{m}</math></b>	<b>Wave No., <math>\text{cm}^{-1}</math></b>	<b>Meteorological Objective and Max. Temp. Range</b>
Longwave	1	14.71	680	Temperature Sounding (space-260 K)
	2	14.37	696	Temperature Sounding (space-260 K)
	3	14.06	711	Temperature Sounding (space-270 K)
	4	13.64	733	Temperature Sounding (space-290 K)
	5	13.37	748	Temperature Sounding (space-300 K)
	6	12.66	790	Temperature Sounding (space-315 K)
	7	12.02	832	Surface Temperature (space-330 K)
Midwave	8	11.03	907	Surface temperature (space-335 K)
	9	9.71	1030	Total Ozone (space-310 K)
	10	7.43	1345	Water Vapor Sounding (space-300 K)
	11	7.02	1425	Water Vapor Sounding (space-285 K)
	12	6.51	1535	Water Vapor Sounding (space-265 K)
Shortwave	13	4.57	2188	Temperature Sounding (space-310 K)
	14	4.52	2210	Temperature Sounding (space-295 K)
	15	4.45	2245	Temperature Sounding (space-275 K)
	16	4.13	2420	Temperature Sounding (space-330 K)
	17	3.98	2513	Surface Temperature (space-335 K)
	18	3.74	2671	Surface Temperature (space-335 K)
Visible	19	0.70	14367	Cloud (visible)

Note: All channels have sufficient dynamic range to view the internal blackbody calibration target at 320 K.

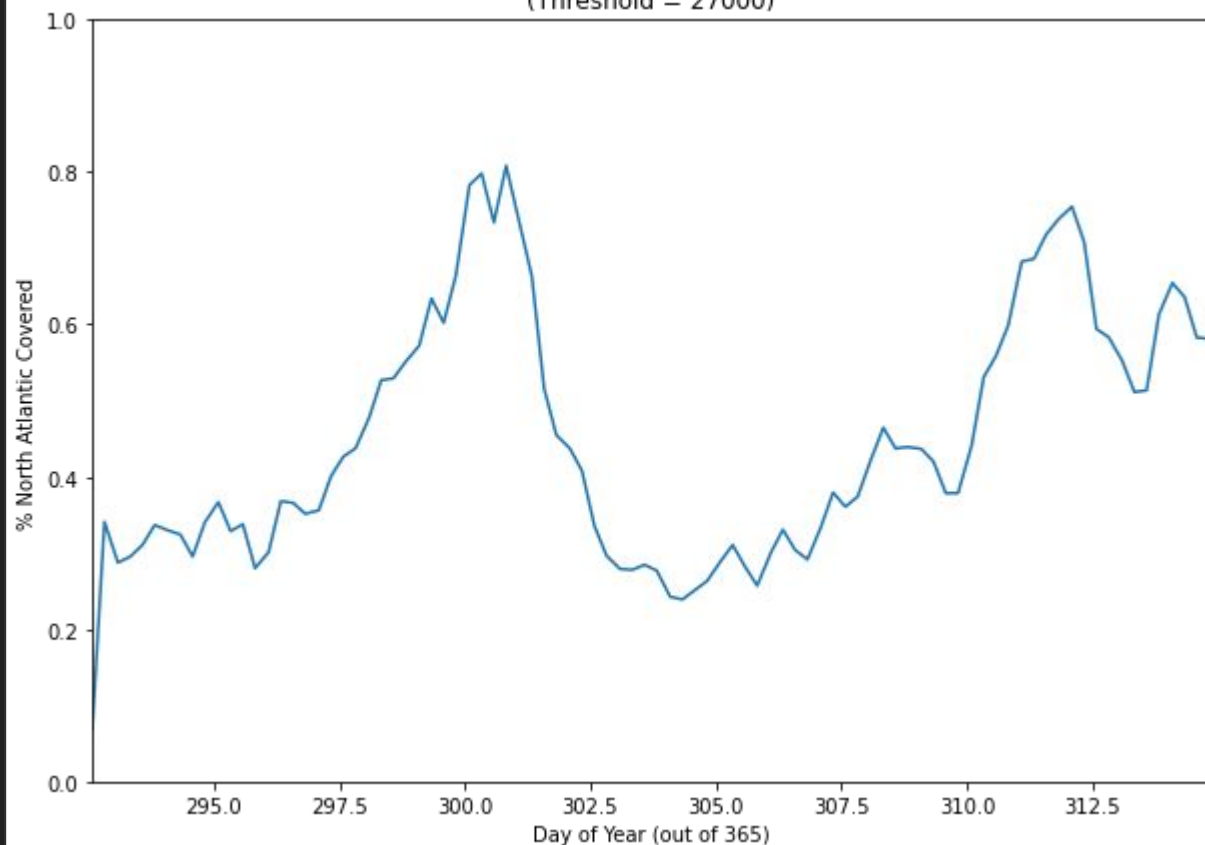
[Source](#) (page 60). More wavelength info [here](#)

# Data Background (2) - Spatial

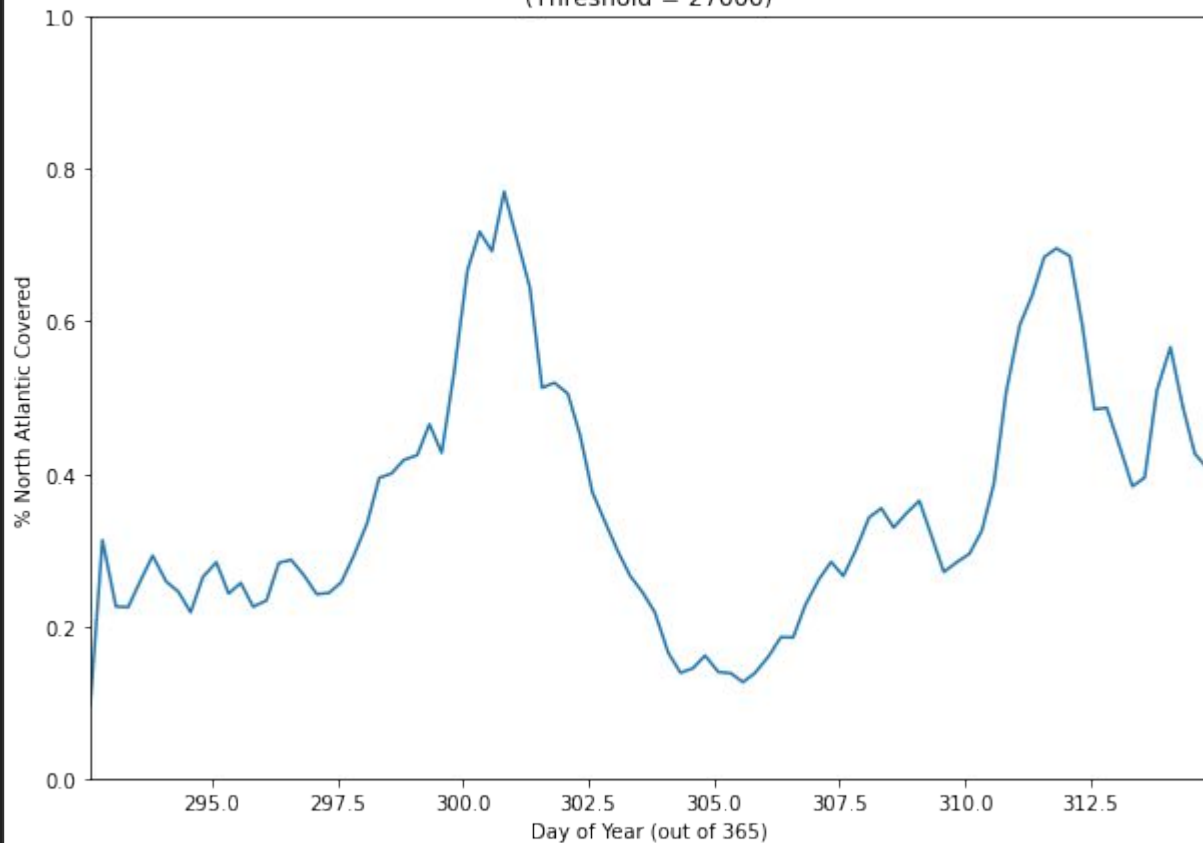
- Latitude (degrees north)  
21.7 to 44.0
- Longitude (degrees east)  
-71.2 to -27.8



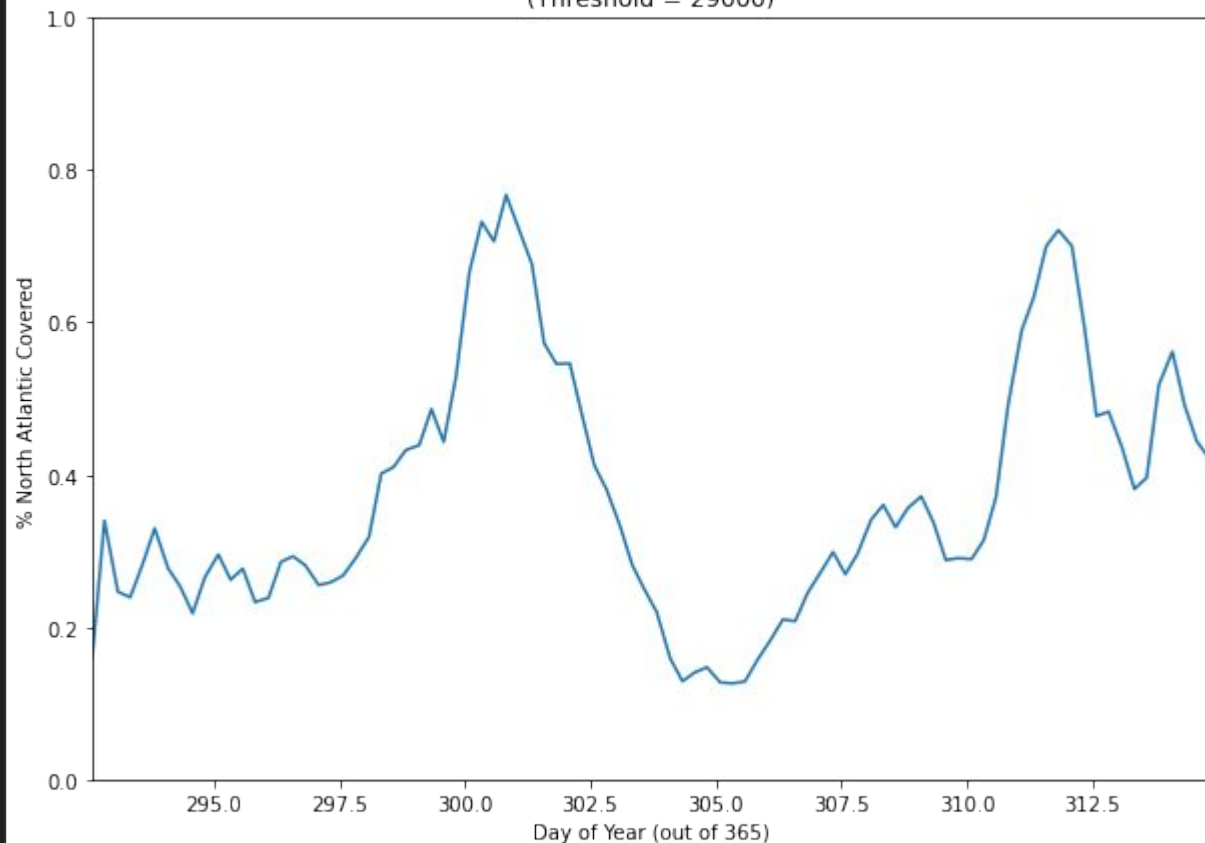
Cloud Cover Over Northern Atlantic During Hurricane Sandy, as Measured by BAND\_03  
(Threshold = 27000)



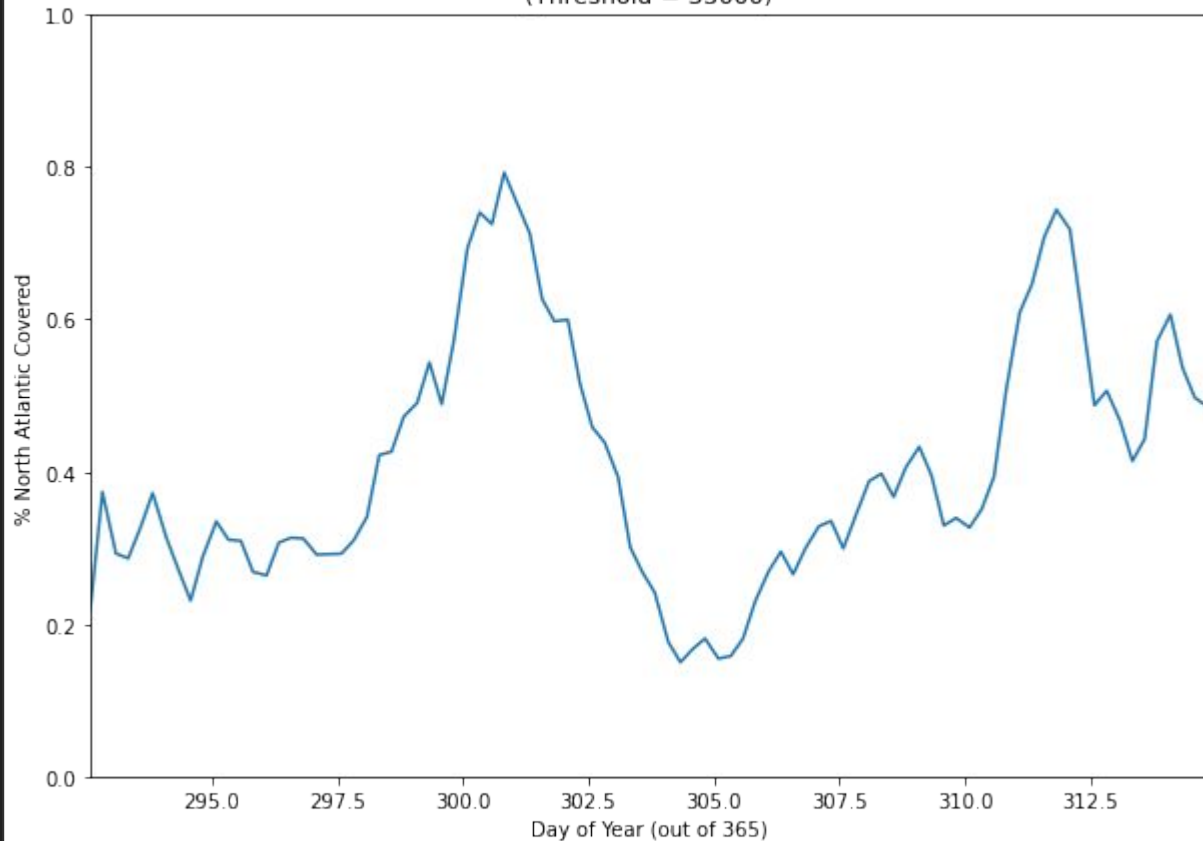
Cloud Cover Over Northern Atlantic During Hurricane Sandy, as Measured by BAND\_04  
(Threshold = 27000)



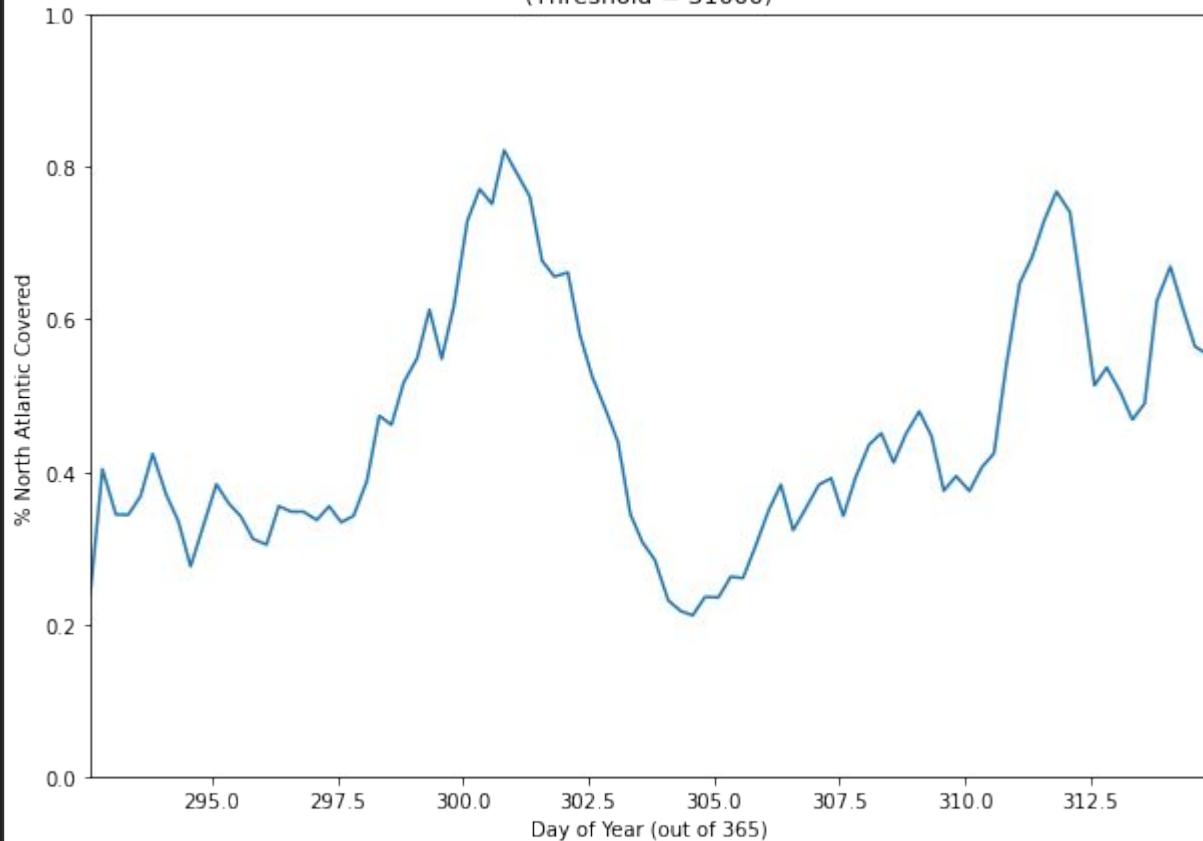
Cloud Cover Over Northern Atlantic During Hurricane Sandy, as Measured by BAND\_05  
(Threshold = 29000)



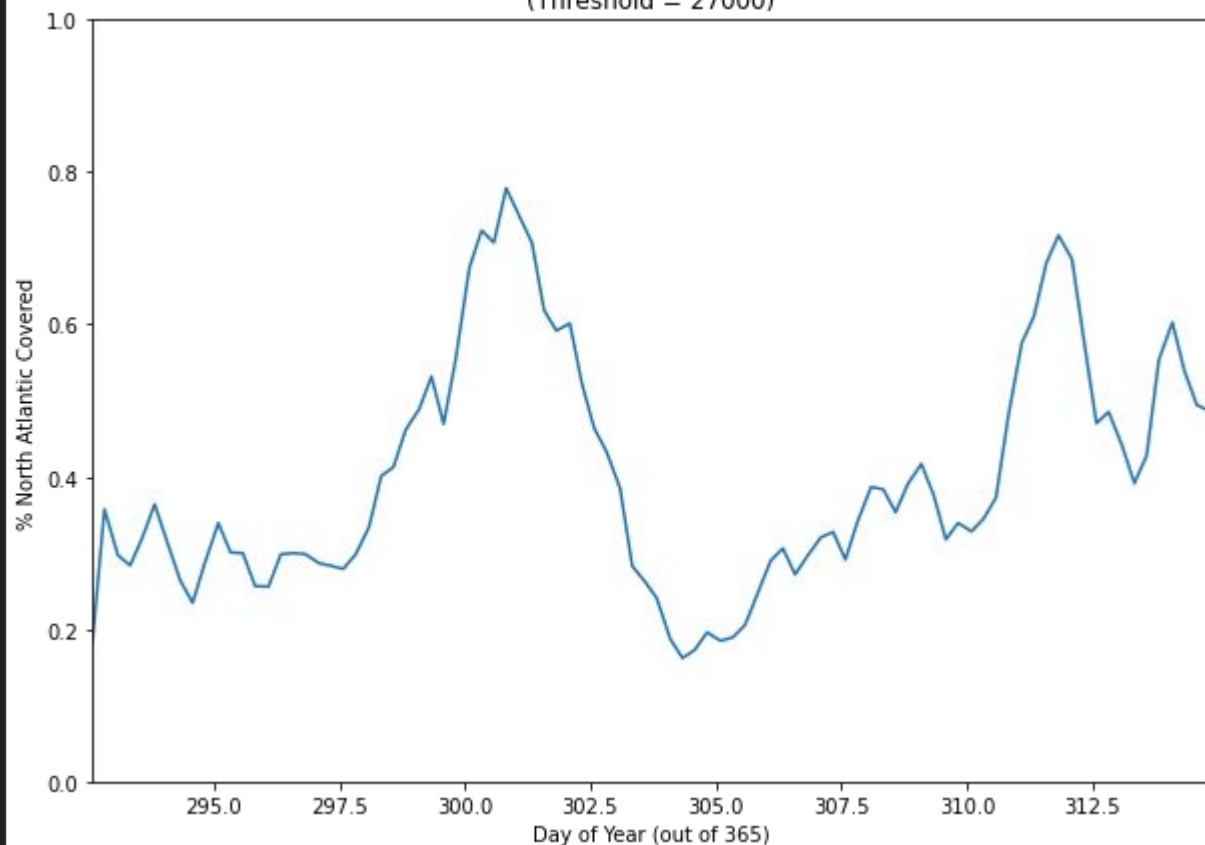
Cloud Cover Over Northern Atlantic During Hurricane Sandy, as Measured by BAND\_06  
(Threshold = 33000)



Cloud Cover Over Northern Atlantic During Hurricane Sandy, as Measured by BAND\_07  
(Threshold = 31000)

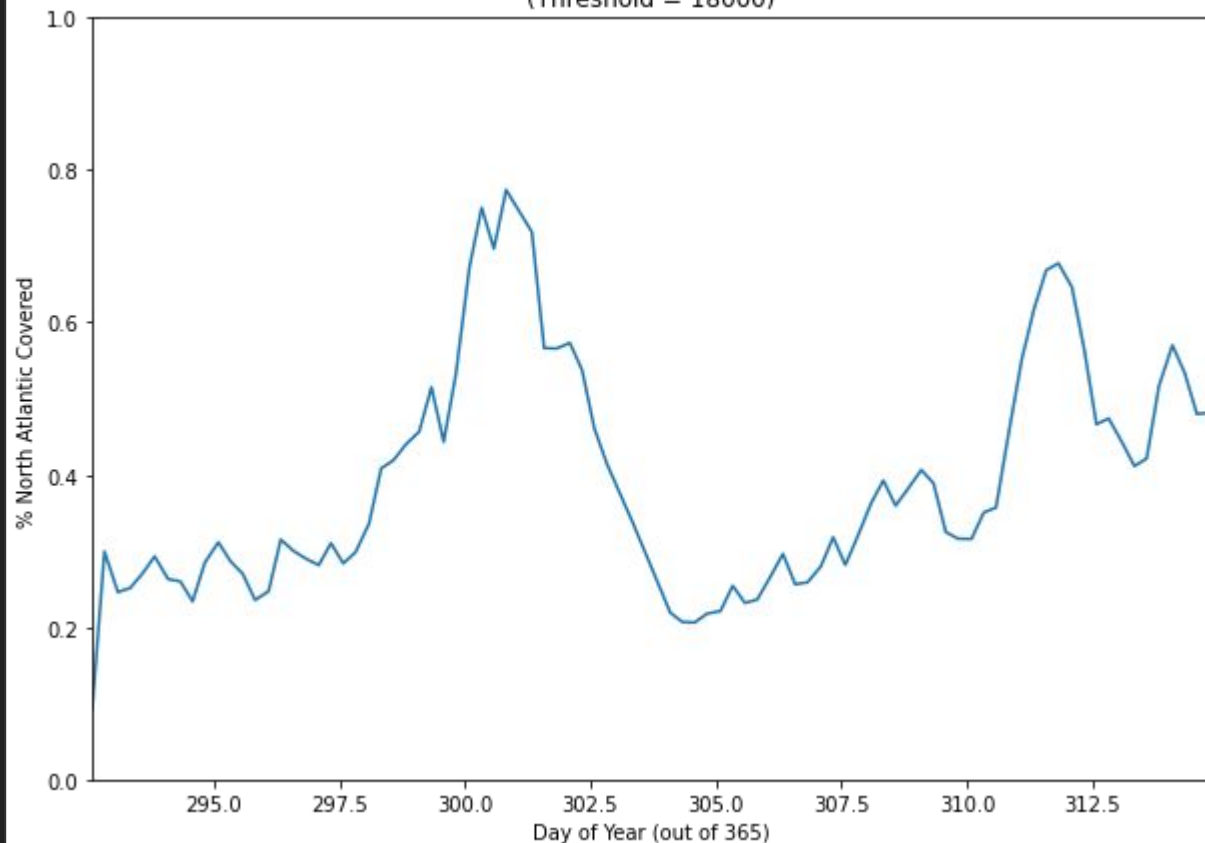


Cloud Cover Over Northern Atlantic During Hurricane Sandy, as Measured by BAND\_08  
(Threshold = 27000)

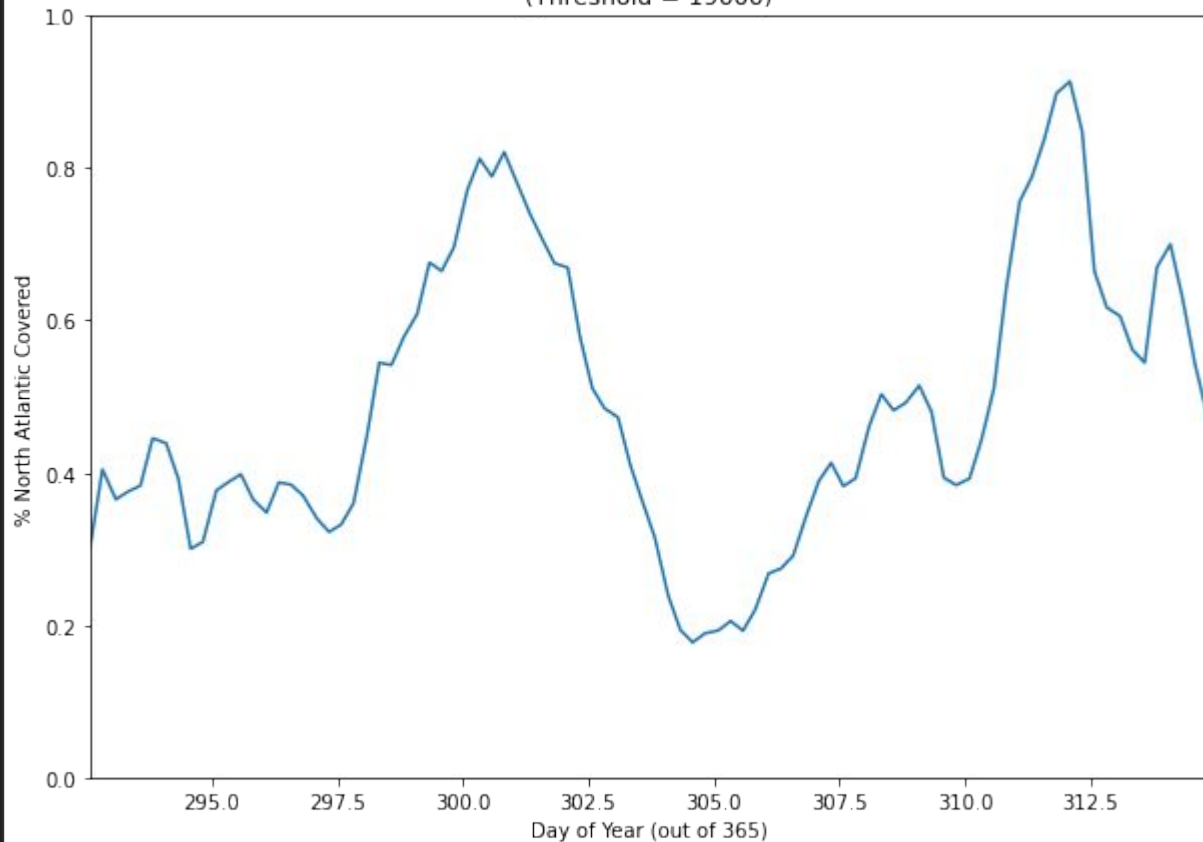




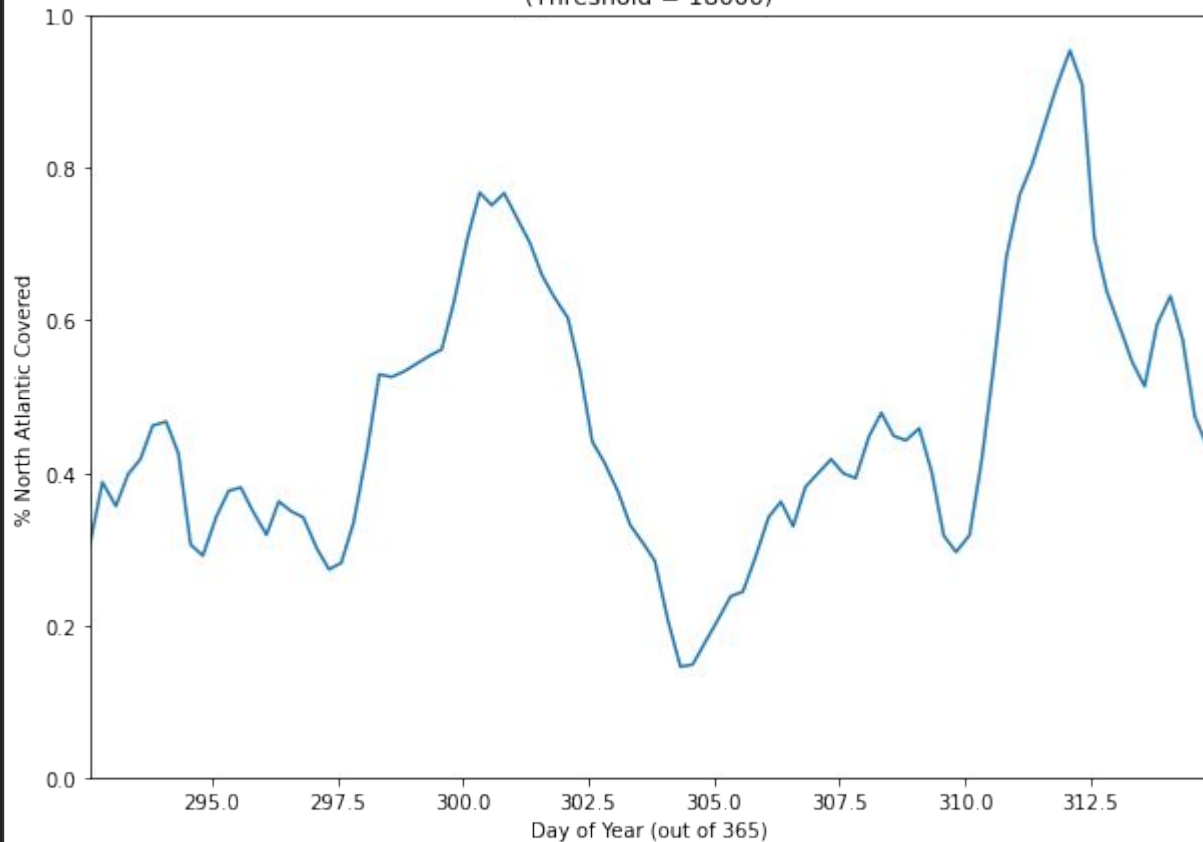
Cloud Cover Over Northern Atlantic During Hurricane Sandy, as Measured by BAND\_09  
(Threshold = 18000)



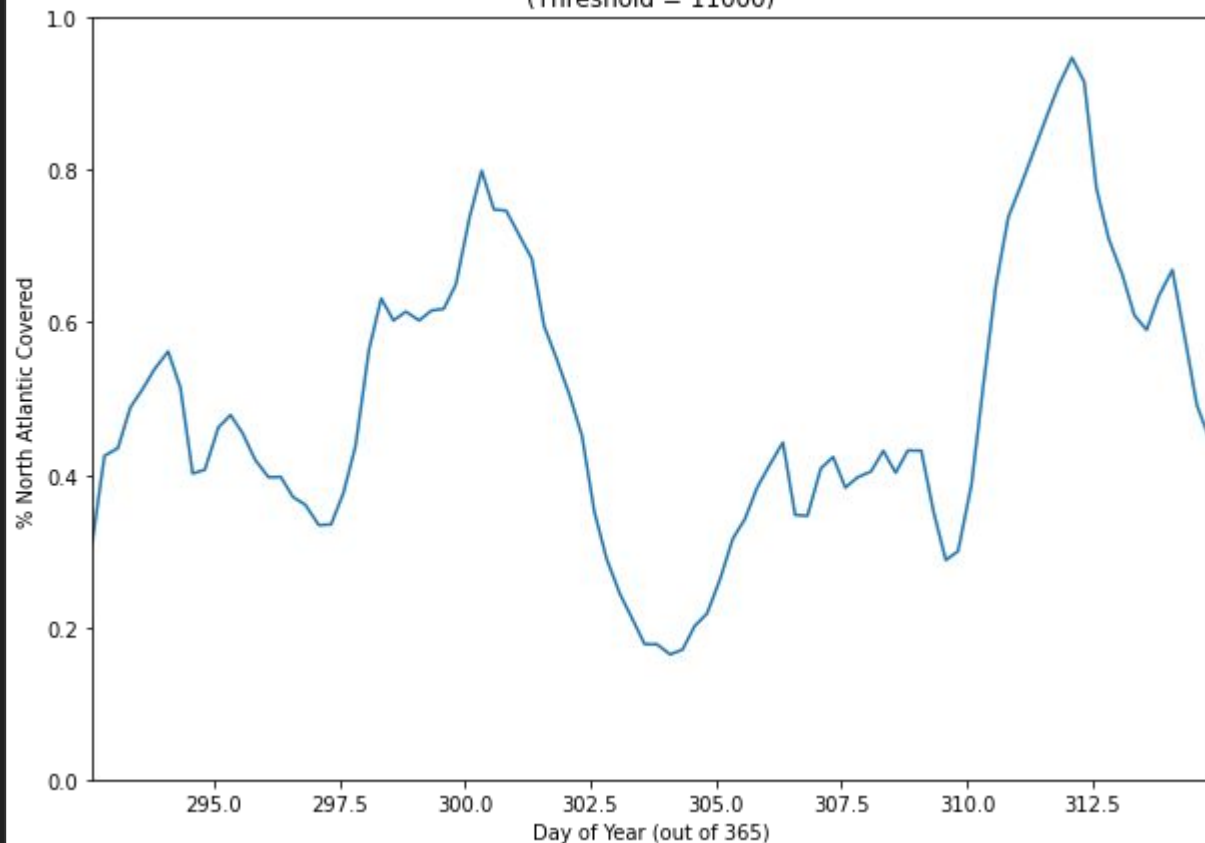
Cloud Cover Over Northern Atlantic During Hurricane Sandy, as Measured by BAND\_10  
(Threshold = 19000)



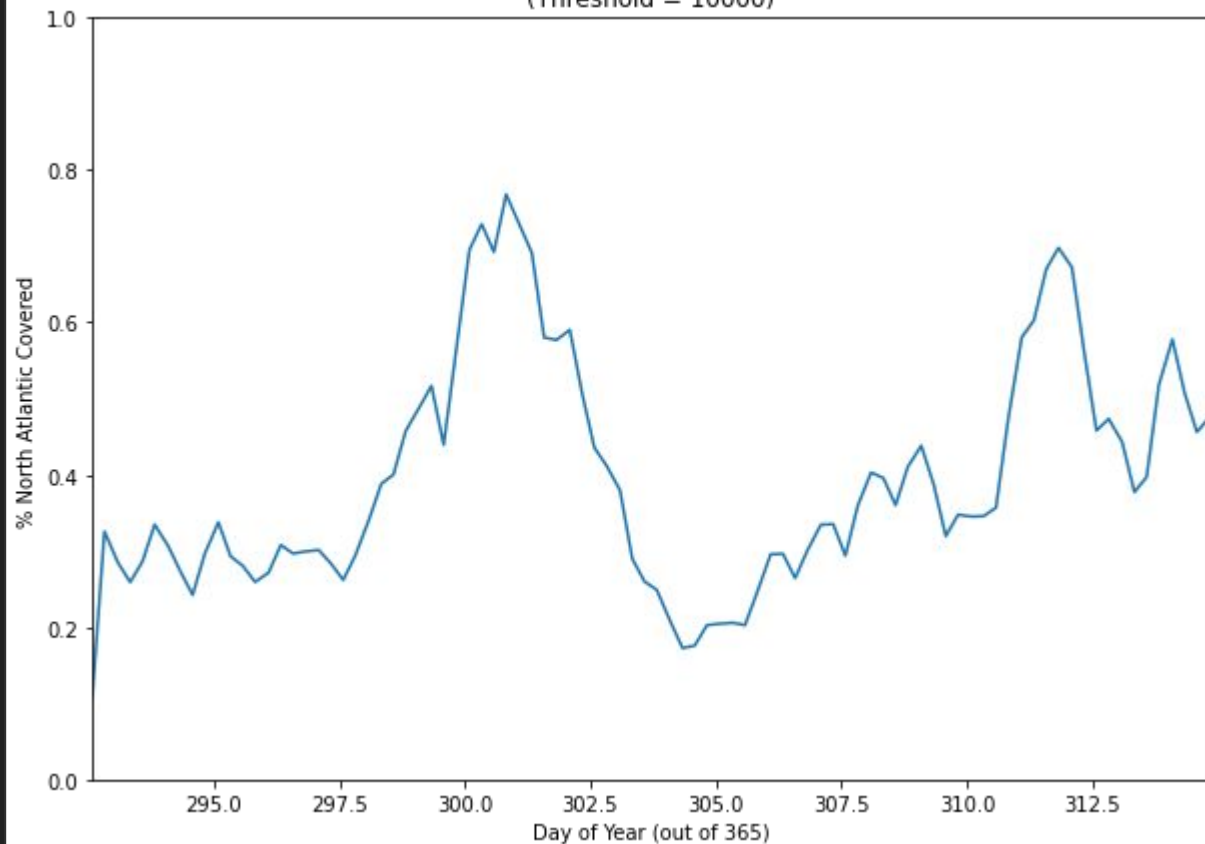
Cloud Cover Over Northern Atlantic During Hurricane Sandy, as Measured by BAND\_11  
(Threshold = 18000)



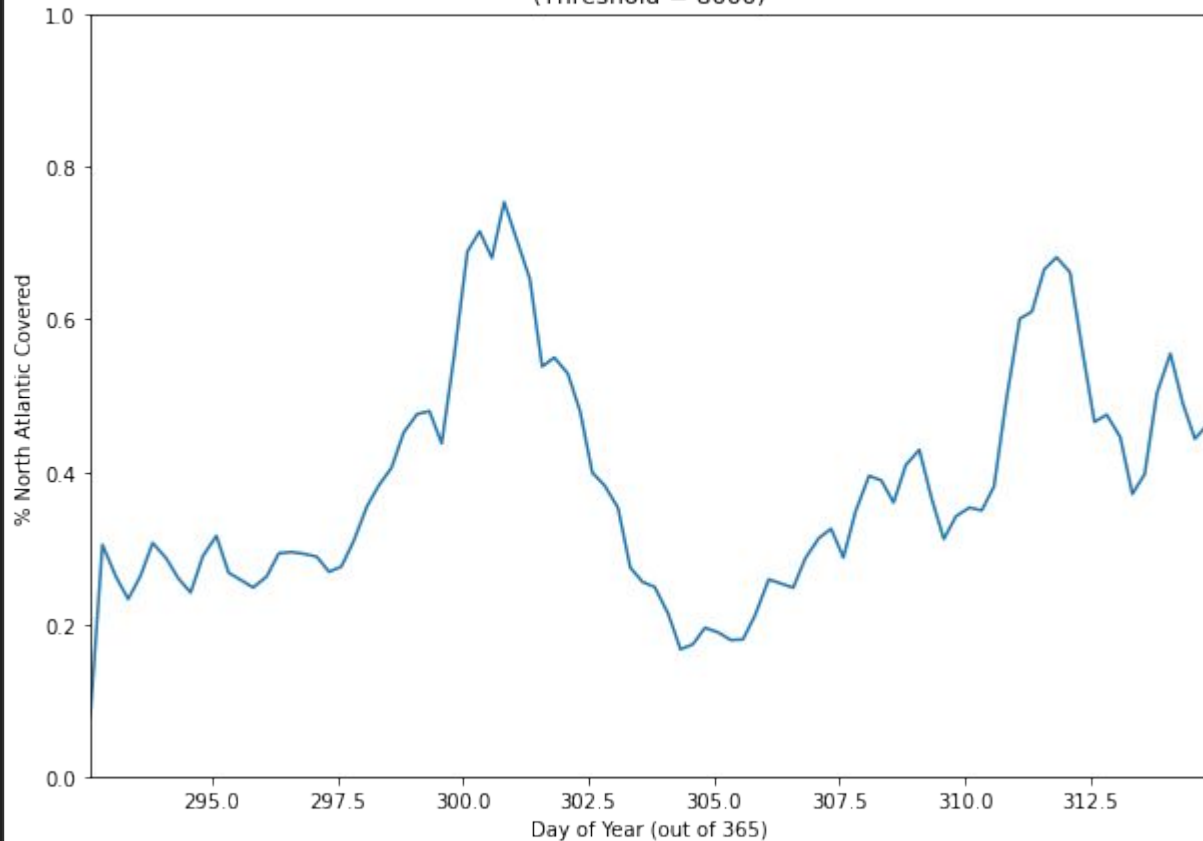
Cloud Cover Over Northern Atlantic During Hurricane Sandy, as Measured by BAND\_12  
(Threshold = 11000)



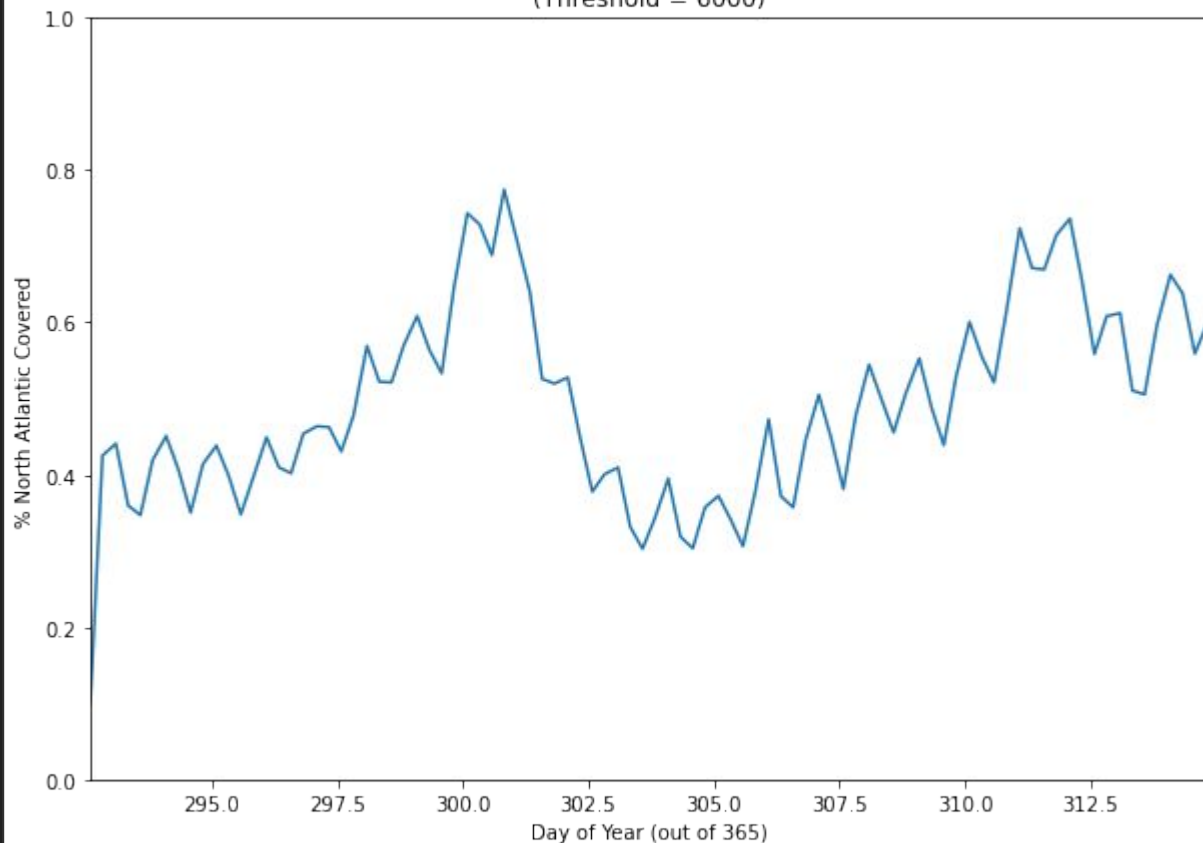
Cloud Cover Over Northern Atlantic During Hurricane Sandy, as Measured by BAND\_13  
(Threshold = 10000)



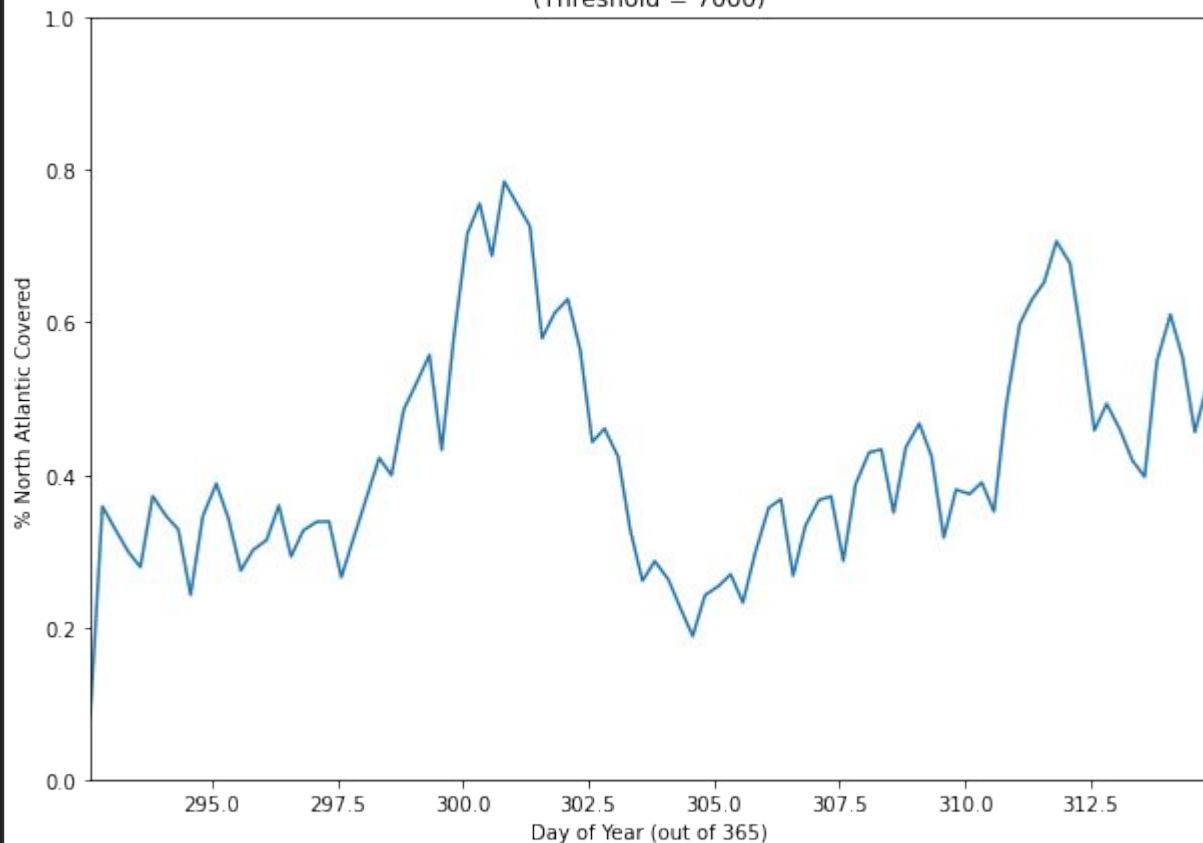
Cloud Cover Over Northern Atlantic During Hurricane Sandy, as Measured by BAND\_14  
(Threshold = 8000)



Cloud Cover Over Northern Atlantic During Hurricane Sandy, as Measured by BAND\_15  
(Threshold = 6000)

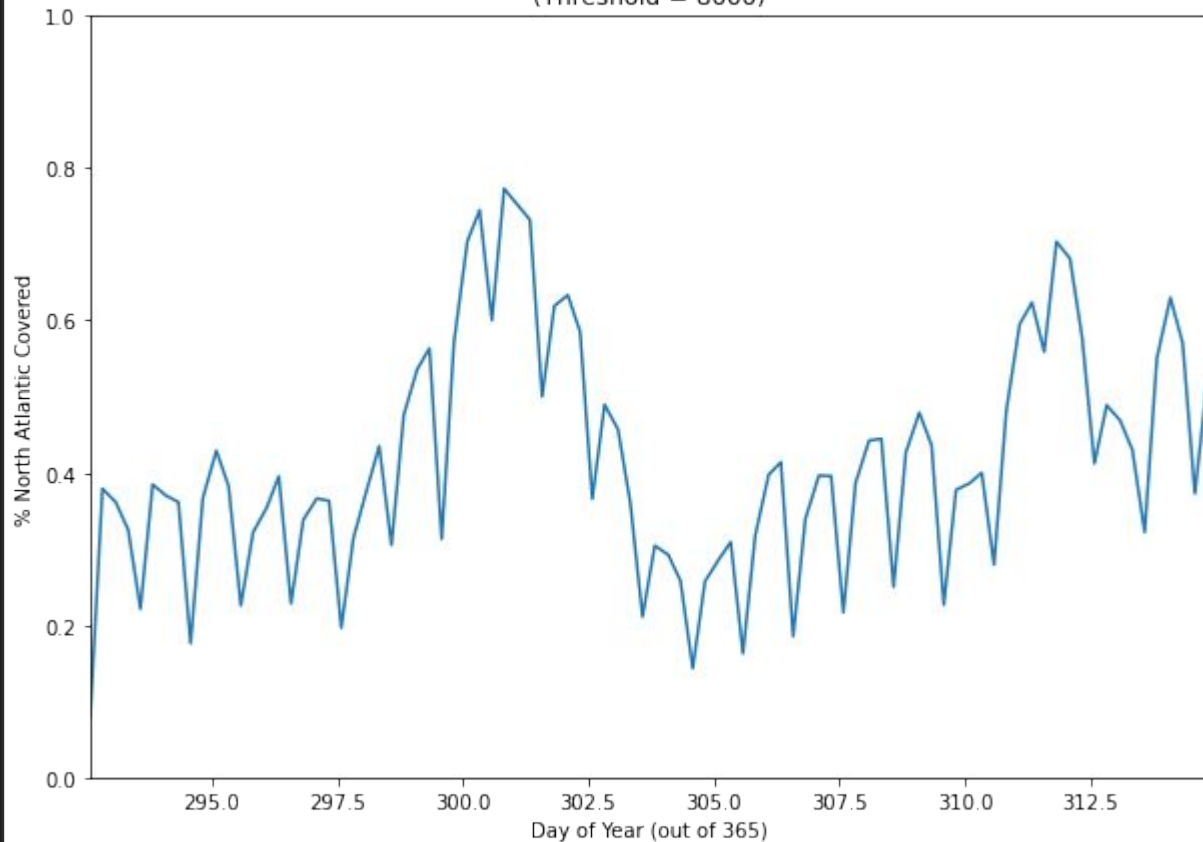


Cloud Cover Over Northern Atlantic During Hurricane Sandy, as Measured by BAND\_16  
(Threshold = 7000)

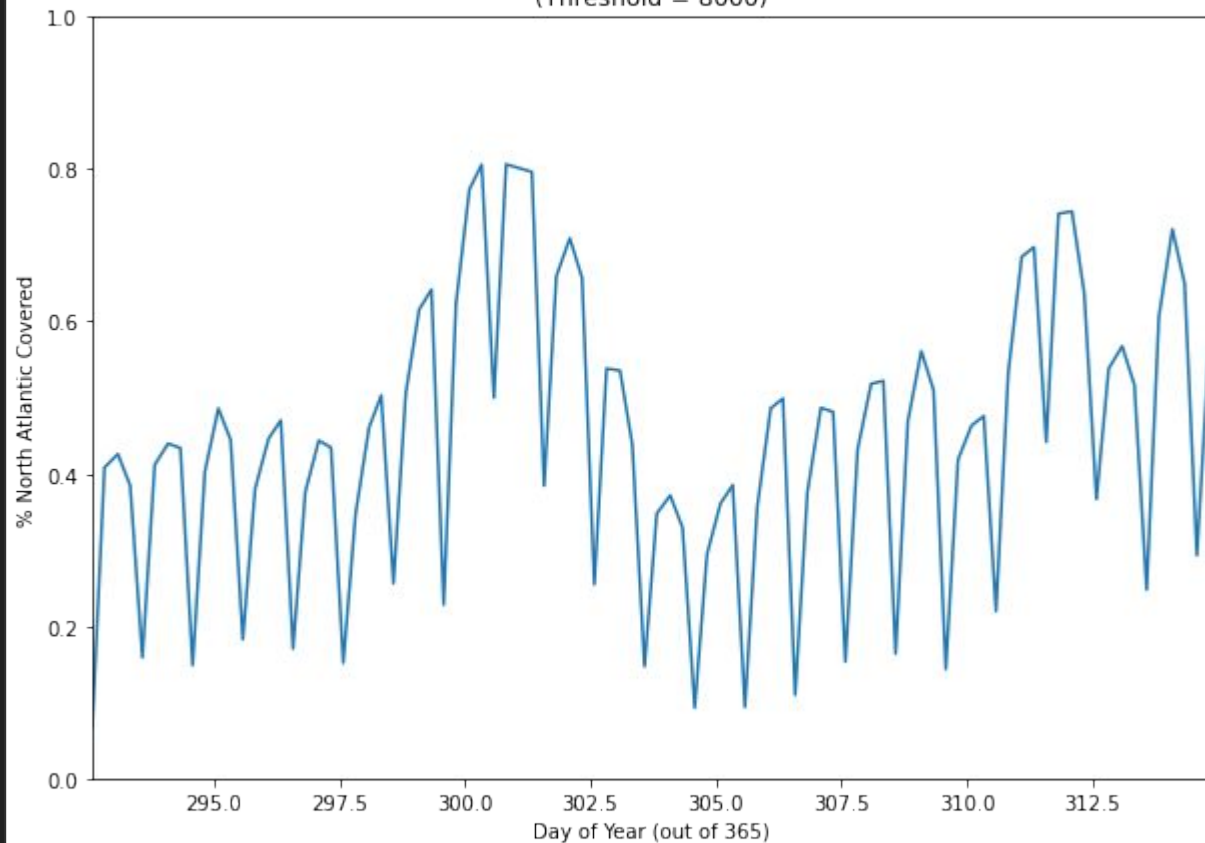




Cloud Cover Over Northern Atlantic During Hurricane Sandy, as Measured by BAND\_17  
(Threshold = 8000)



Cloud Cover Over Northern Atlantic During Hurricane Sandy, as Measured by BAND\_18  
(Threshold = 8000)



Cloud Cover Over Northern Atlantic During Hurricane Sandy, as Measured by BAND\_19  
(Threshold = 10000)

