



Riding the Waves Mauritania

You cannot see it directly, but air masses from Africa and the Atlantic Ocean are colliding in this Landsat 8 image from August 2016. The collision off the coast of Mauritania produces a wave structure in the atmosphere.

Called an undular bore or solitary wave, this cloud formation was created by the interaction between cool, dry air coming off the continent and running into warm, moist air over the ocean. The winds blowing out from the land push a wave of air ahead like a bow wave moving ahead of a boat.

Parts of these waves are favorable for cloud formation, while other parts are not. The dust blowing out from Africa appears to be riding these waves. Dust has been known to affect cloud growth, but it probably has little to do with the cloud pattern observed here.