

Objective:

Most of time people do not want to make any efforts to read a scientific article! Our objective is to extract main ideas of a scientific NASA article that can shock the user so that we can influence his behaviour and make him more interested to read the article.

Problem:

The best way to do that is to employ creative humans to extract this information, but the cost (time, price, size...) is very high, so we are trying to develop a model that can do that.

Solution:

Usually we find critical points in articles that influence readers in:

Statistics- Information from history- People statements- Graphs- Photos...

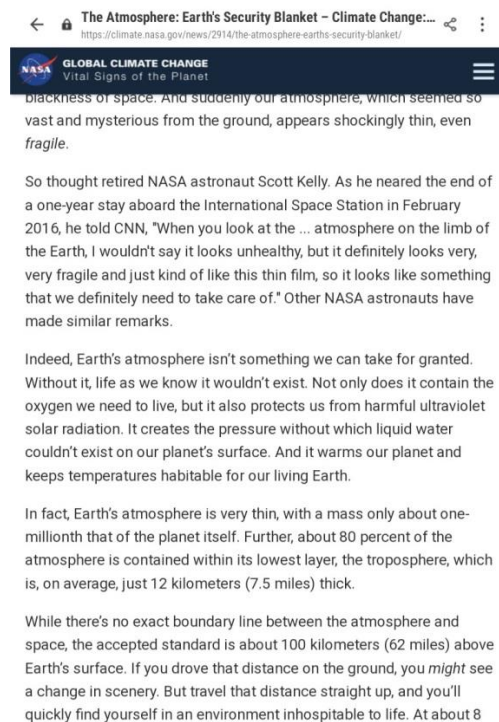
In an article we can detect:

- Statistics **by** numbers.
- Some information from history **by** dates.
- People statements **by** phrases between “....”

Our model is very simple, it extracts phrases that contain numbers, all phrases between “...” and photos.

How it does that?

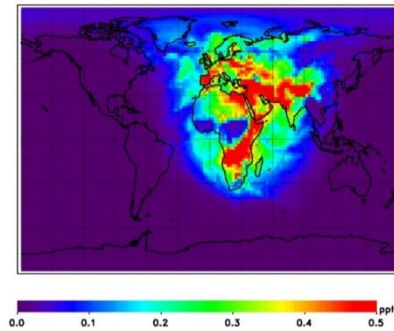
For example, taking this screenshots from Nasa's news:



broader Earth system are key research tasks in atmospheric chemistry."

Bowman said one key to that stability is the hydroxyl radical (OH), a chemical that plays a central role in the ability of Earth's atmosphere to cleanse itself of pollutants. One of the most reactive gases in our atmosphere, OH is like a global detergent that helps keep things in balance by removing pollutants from the lower atmosphere. It's the main check on concentrations of carbon monoxide, sulfur dioxide, hydrogen sulfide, methane and higher hydrocarbons.

04:30 EST



An animated map of model output of hydroxyl radical (OH) primary production over a 24-hour period in July 2000. The concentration tracks with the movement of sunlight across the globe. Higher levels

STEP 1:

We will extract from this part all phrases that contain numbers (whenever our model finds a number, it will extract all the phrases between 2 points "....."), phrases between "....." and photos.



blackness of space. And suddenly our atmosphere, which seemed so vast and mysterious from the ground, appears shockingly thin, even fragile.

So thought retired NASA astronaut Scott Kelly. As he neared the end of a one-year stay aboard the International Space Station in February 2016, he told CNN, "When you look at the ... atmosphere on the limb of the Earth, I wouldn't say it looks unhealthy, but it definitely looks very, very fragile and just kind of like this thin film, so it looks like something that we definitely need to take care of." Other NASA astronauts have made similar remarks.

Indeed, Earth's atmosphere isn't something we can take for granted. Without it, life as we know it wouldn't exist. Not only does it contain the oxygen we need to live, but it also protects us from harmful ultraviolet solar radiation. It creates the pressure without which liquid water couldn't exist on our planet's surface. And it warms our planet and keeps temperatures habitable for our living Earth.

In fact, Earth's atmosphere is very thin, with a mass only about one-millionth that of the planet itself. Further, about 80 percent of the atmosphere is contained within its lowest layer, the troposphere, which is, on average, just 12 kilometers (7.5 miles) thick.

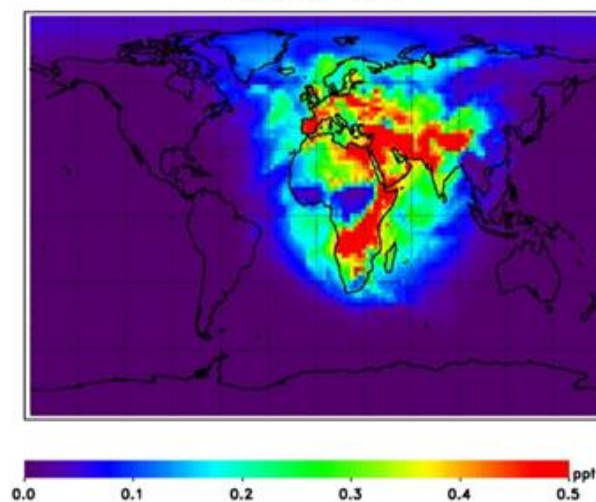
While there's no exact boundary line between the atmosphere and space, the accepted standard is about 100 kilometers (62 miles) above Earth's surface. If you drove that distance on the ground, you *might* see a change in scenery. But travel that distance straight up, and you'll quickly find yourself in an environment inhospitable to life. At about 8



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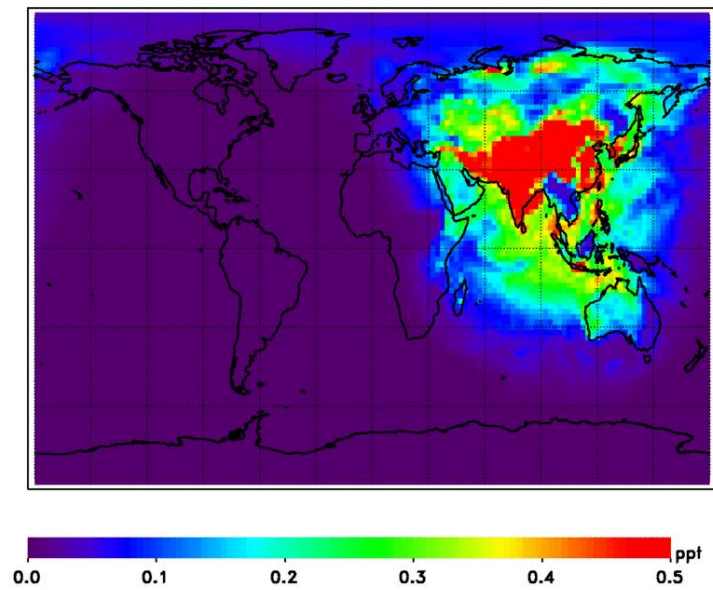
The result:

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00:00 EST



Our next step:

This model is very simple and it needs more work to be more efficient, our plan is to develop this idea using LDA Topic modelling, statistics and probabilities.

