

NESDIS: WHO WE ARE, WHAT WE DO

Greg Withee, Assistant Administrator for Satellite and Information Services:

“NOAA’s National Satellite Data and Information Service (NEDIS), plays a critical role in providing valuable services to the Nation. If we take a look at whether it be hurricane landfall, next week’s rainfall, prediction for seasonal to annual drought, all of these take satellite input. Without the satellite, without the global view, we can’t make these predictions. So, when we are looking on the television and we see our favorite weather broadcaster, showing the satellite imagery and the clouds moving by and talking about prediction and analysis, those are from NOAA.”

Narrator:

NESDIS operates the United States geostationary and polar-orbiting environmental satellites. The two satellite systems are complimentary and essential to monitoring daily weather and longer term climate changes. 22,450 miles above the Earth, two geostationary operational environmental or GOES satellites, orbit the Earth at a speed that matches the Earth’s rotation. These satellites track severe storms as well as solar disturbances. The GOES satellite imagery is critical to forecasting the location of life threatening weather.

450 miles above the earth, two polar-orbiting environmental satellites circle the Earth from pole-to-pole in sun synchronous orbits, measuring atmospheric wind and temperature conditions for input into daily computer weather forecast models. In addition, polar satellites measure global ocean temperatures for research into longer term climate patterns.

NESDIS scientists work closely with partners in the media, private sector and university communities, to officially deliver environmental data and imagery to the public.

Ray Ban, Senior Vice President Meteorological Operations:

“The private/public partnership that exists in the United States, for the provision of weather services is unique in all the world. And I think beyond a doubt, it results in the citizens of the United States receiving the best weather information than any other country on the planet.”

“Clearly, the cost of establishing and operating a weather satellite program are beyond the private sector at this point. The private sector is able to utilize the data, which is funded by the tax payers. It’s able to take the data, tailor it, fine tune it, and provide it to specific segments. Therefore, a farmer interested in agricultural information, can get all of what he or she needs from the satellite data, while at the same time, the private sector can provide information a mariner or aviator from the same set of data. Those users then are responsible for paying for those services to the private enterprise, which is providing

them. And that enterprise in turn continues to fund public programs through corporate taxes.”

Greg Withee:

“In NESDIS, we have three data centers, which respond both to NOAA’s needs as well as needs of the Nation. We have the National Oceanographic Data Center, we also have a geophysical data center, in Boulder Colorado. Our largest center is the National Climatic Data Center in Asheville, North Carolina. Here, we look at problems like building bridges and roads, planning cities...all planning which require environmental information in order to proceed. What’s the highest wind over the last decade, over the last couple of years? What’s the hottest temperature that’s going to be expected? What’s the rainfall? In many cases, you can’t build a road, you can’t build your bridge, you can’t build your city planning project without these data.”

Ray Ban:

“Although, the cost of archiving this data and keeping it in an accessible form, once again will be probably beyond that in the private sector. The government does an excellent job in this area. Once again, the data is readily accessible to the private sector for tailoring and making specific use for its particular customers.”

Narrator:

NOAA’s Satellite, Data and Information Service continues to set the standard for world class environmental satellite and data services. Through daily operations and research, our goal is to be the world’s first stop for scientific information on the oceans, the atmosphere, the sun and the Earth.