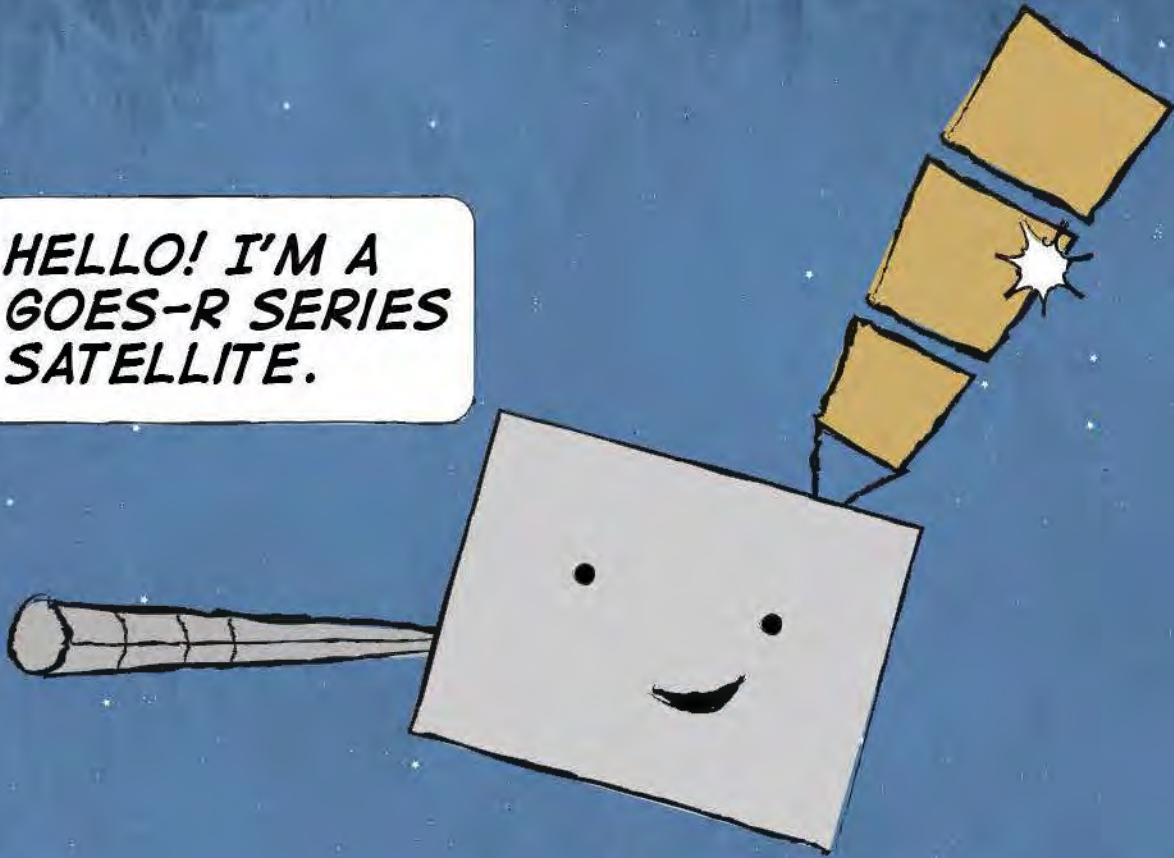


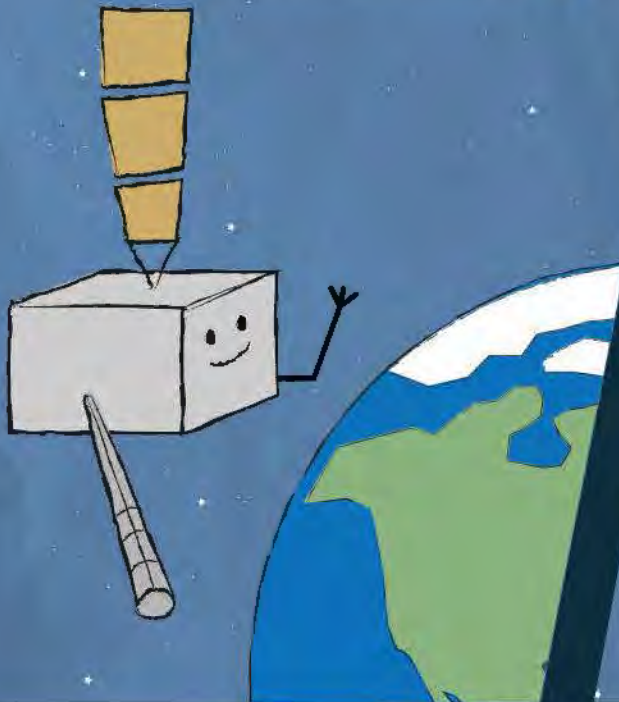


*MEET THE
GEOSTATIONARY OPERATIONAL
ENVIRONMENTAL SATELLITE - R SERIES*

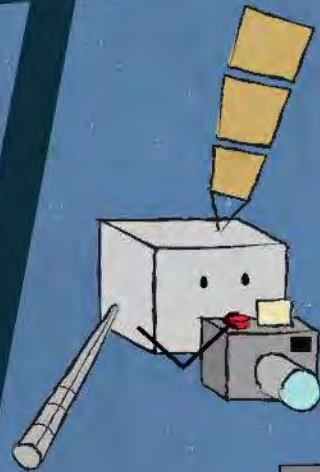
**HELLO! I'M A
GOES-R SERIES
SATELLITE.**



**I'M ORBITING 22,000
MILES ABOVE EARTH.**

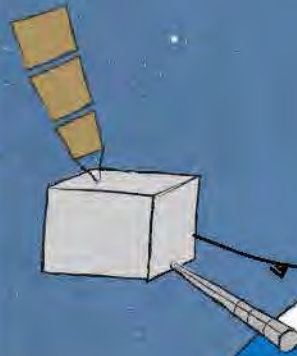


**I CAN SEE A LOT
OF COOL STUFF
FROM UP HERE,
AND I TAKE
PICTURES OF IT
WITH MY SPIFFY
CAMERA THAT HAS
16 DIFFERENT
SETTINGS.**

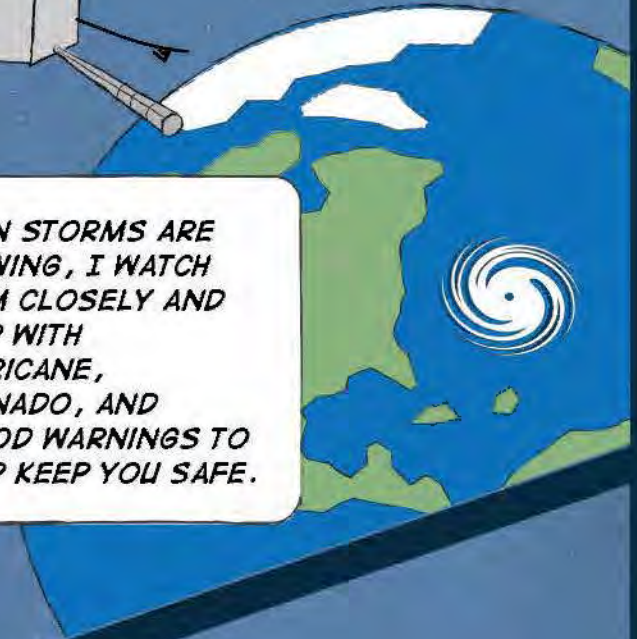




I HAVE SUCH GOOD EYESIGHT, I CAN SEE CLOUDS, SNOW, SMOKE, SMOG, AND ASH, SO I CAN WARN YOU ABOUT DANGEROUS CONDITIONS AND HELP YOU AVOID THEM.

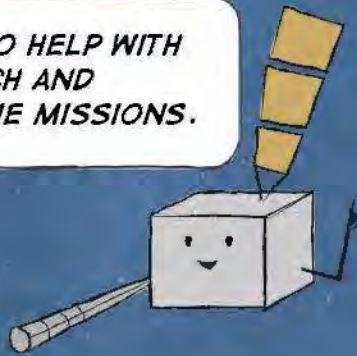


WHEN STORMS ARE BREWING, I WATCH THEM CLOSELY AND HELP WITH HURRICANE, TORNADO, AND FLOOD WARNINGS TO HELP KEEP YOU SAFE.

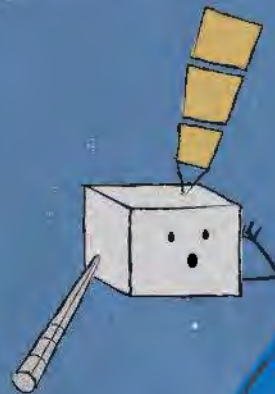


AND MY LIGHTNING MAPPING TRACKS LIGHTNING STRIKES WAY UP IN THE SKY, EVEN THROUGH DARK, DENSE CLOUDS.

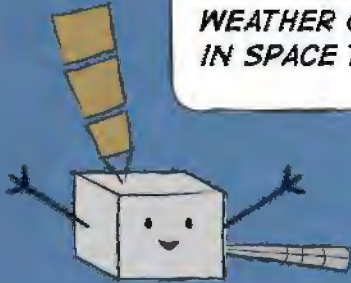
I ALSO HELP WITH SEARCH AND RESCUE MISSIONS.



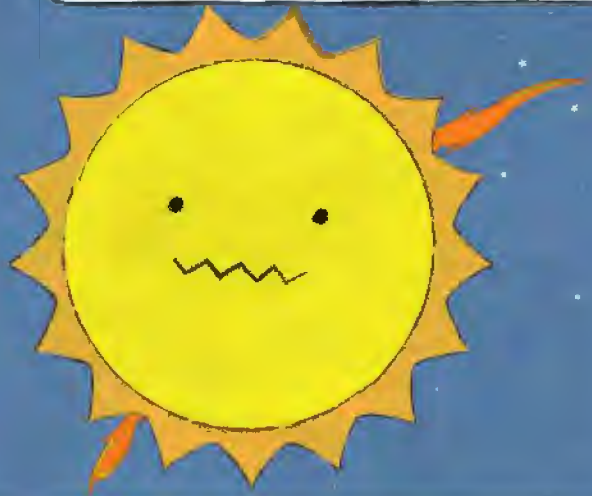
I LISTEN FOR DISTRESS SIGNALS FROM EMERGENCY BEACONS AND TELL SEARCH AND RESCUE TEAMS JUST WHERE TO FIND PEOPLE WHO NEED HELP.



BUT EVEN WHEN I'M KEEPING A CLOSE EYE ON THE EARTH, I'M MONITORING WEATHER OUT HERE IN SPACE TOO.



I WATCH THE SUN FOR BIG BURSTS OF ENERGY, WHICH SEND WAVES OF RADIATION TOWARD EARTH THAT CAN...



AFFECT POWER GRIDS,

BLOCK COMMUNICATION WITH PLANES,

UM, HELLO?



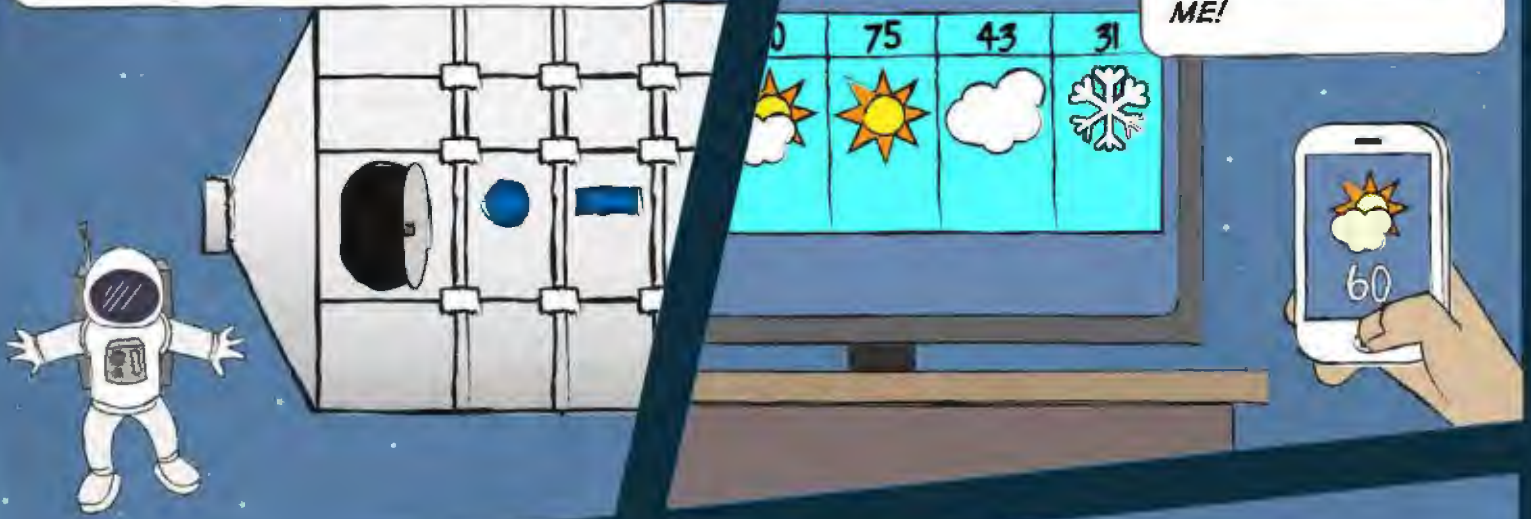
CAUSE ERRORS IN GPS,



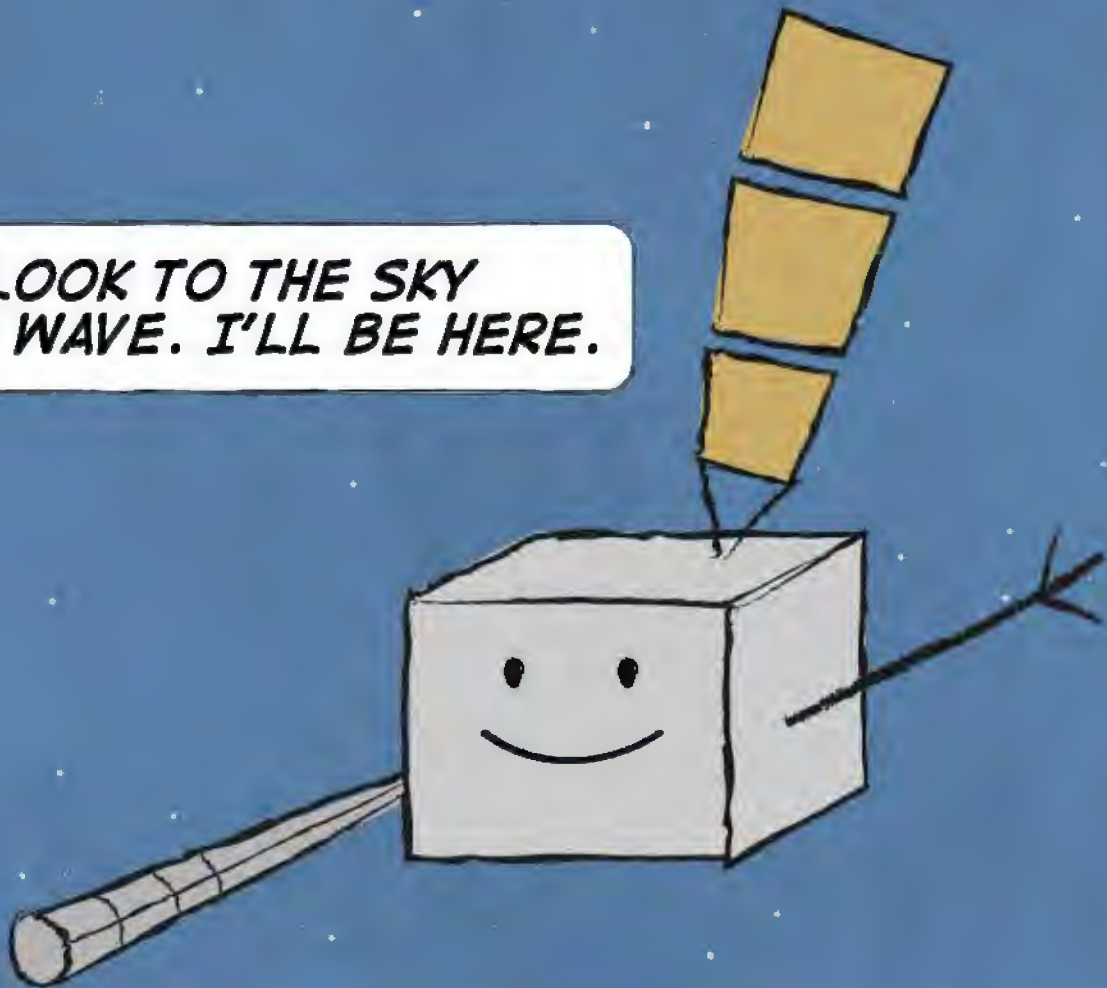
AND DAMAGE SATELLITES.

SPACE WEATHER IS ALSO VERY DANGEROUS FOR ASTRONAUTS WORKING OUTSIDE THE INTERNATIONAL SPACE STATION. I WARN THEM SO THEY CAN GET INSIDE WHERE THEY'LL BE SAFE.

SO THE NEXT TIME YOU WATCH A WEATHER REPORT OR CHECK YOUR PHONE FOR THE FORECAST, REMEMBER THAT'S ME!



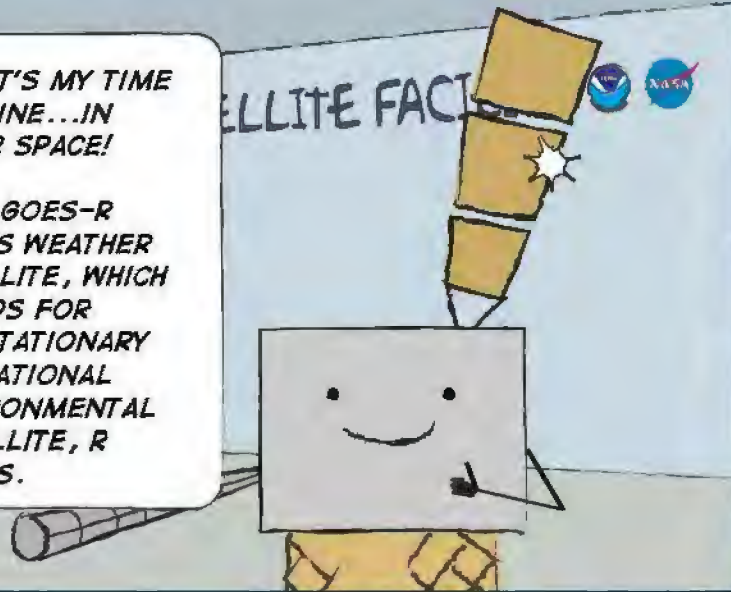
SO LOOK TO THE SKY AND WAVE. I'LL BE HERE.



NOW IT'S MY TIME
TO SHINE...IN
OUTER SPACE!

I'M A GOES-R
SERIES WEATHER
SATELLITE, WHICH
STANDS FOR
GEOSTATIONARY
OPERATIONAL
ENVIRONMENTAL
SATELLITE, R
SERIES.

ELLITE FACT



THE "R" STANDS FOR MY
ORDER IN THE SERIES OF
WEATHER SATELLITES.



LIKE MY OLDER SIBLINGS
BEFORE ME I DO A LOT
FOR WATCHING WEATHER,
BUT I'M PRETTY SPECIAL
BECAUSE I HAVE A LOT OF
NEW GADGETS.

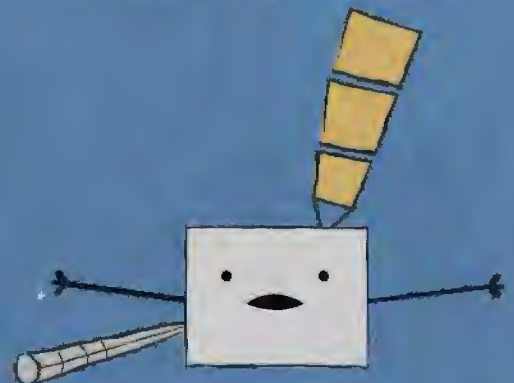


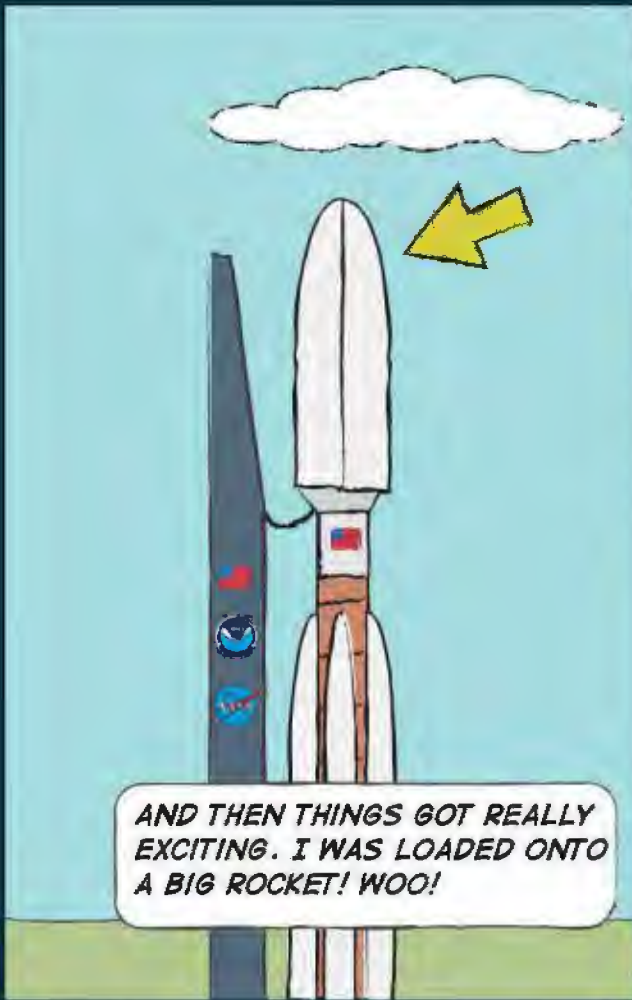
I'M ORIGINALLY FROM
COLORADO, BUT MY
JOURNEY TO SPACE HAD A
FEW STOPS ALONG THE
WAY.

I WAS SHIPPED IN A VERY
SPECIAL SATELLITE
SHIPPING CONTAINER TO
KENNEDY SPACE CENTER.



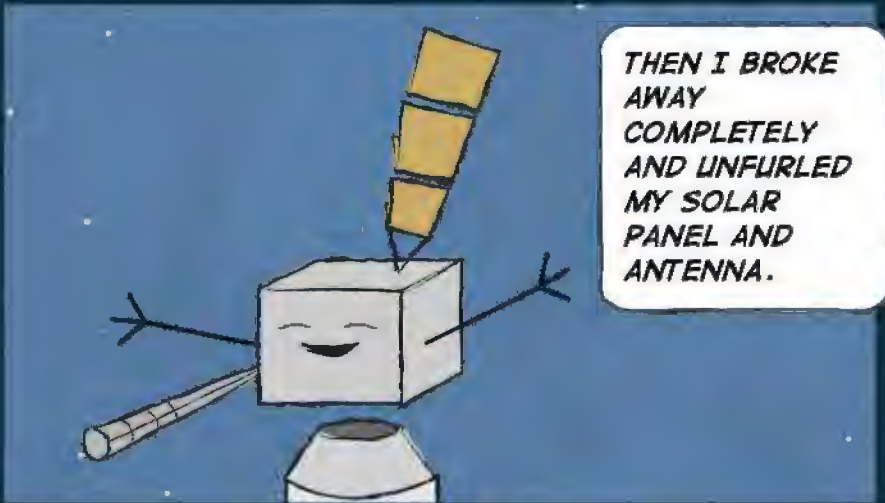
MOVING AROUND WAS NOT
EASY. I'M OVER 18 FEET
WIDE AND WEIGH SIX
THOUSAND POUNDS.



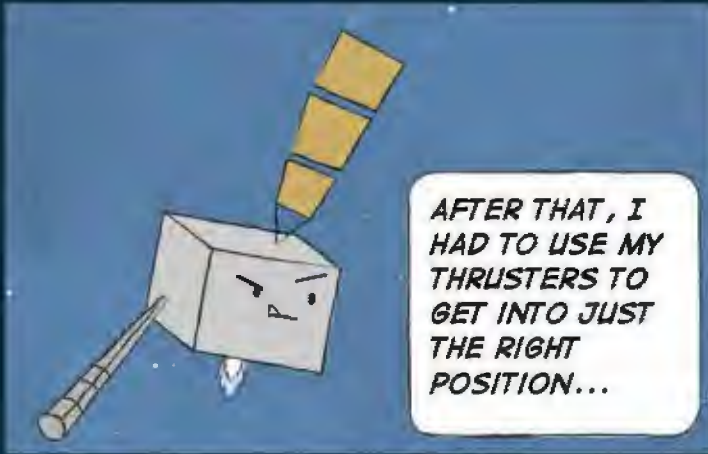


AND THEN THINGS GOT REALLY EXCITING. I WAS LOADED ONTO A BIG ROCKET! WOO!

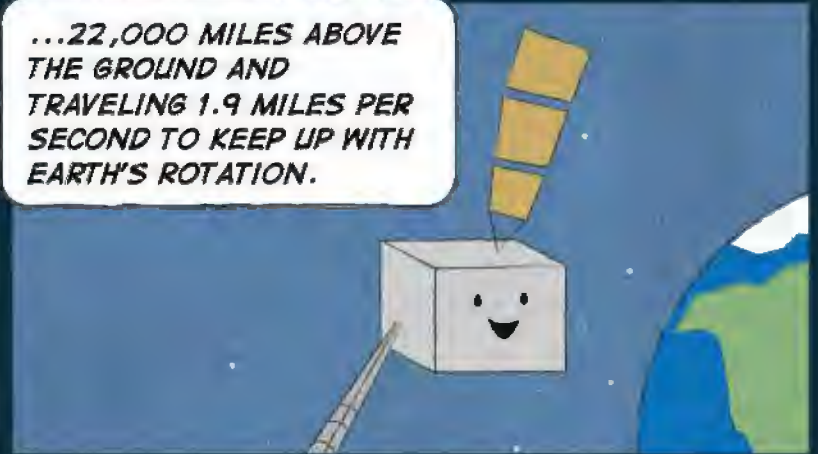
AFTER WE BLASTED OFF TOGETHER, MY COMPARTMENT SEPARATED FROM THE LAUNCH VEHICLE AND I CONTINUED TO CLIMB HIGHER AND HIGHER.



THEN I BROKE AWAY COMPLETELY AND UNFURLED MY SOLAR PANEL AND ANTENNA.



AFTER THAT, I HAD TO USE MY THRUSTERS TO GET INTO JUST THE RIGHT POSITION...



...22,000 MILES ABOVE THE GROUND AND TRAVELING 1.9 MILES PER SECOND TO KEEP UP WITH EARTH'S ROTATION.

AND THEN I OFFICIALLY STARTED MY JOB ALONG WITH MY SISTER SATELLITES, WHERE I TAKE ADVANCED PICTURES FOR MORE ACCURATE WEATHER FORECASTS, MAP LIGHTNING IN REAL TIME, AND IMPROVE THE MONITORING OF THE SUN'S ACTIVITY.



IT'S SO AWESOME!

ON THE SATELLITE'S FIRST DAY AT WORK...

WHOA! THINGS ARE LOOKING PRETTY BAD DOWN THERE.



BUT DON'T WORRY. I'M GOING TO GIVE WEATHER FORECASTERS A HEADS UP AND HELP YOU STAY SAFE!



ONE OF MY JOBS IS TO KEEP AN EYE ON EARTH'S WEATHER AS I ORBIT ABOVE.



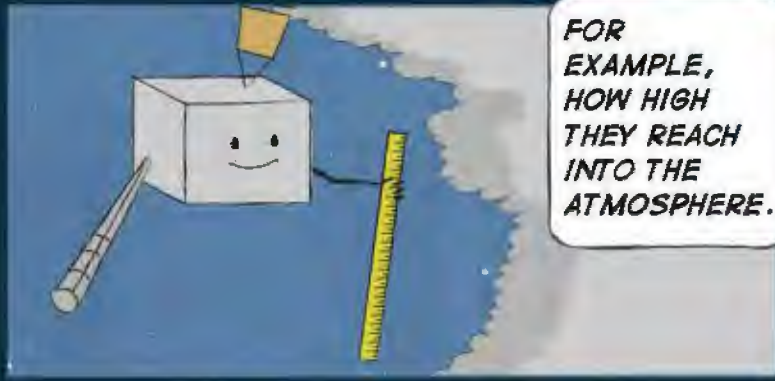
BUT I'M 22,000 MILES ABOVE EARTH! HOW DOES YOUR LOCAL WEATHER FORECASTER KNOW WHAT I SEE ALL THE WAY UP HERE?



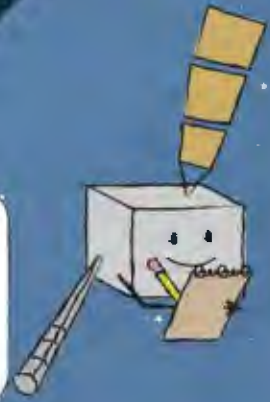
FIRST I HAVE TO FIGURE OUT WHAT'S GOING ON. I POINT MY SPECIAL CAMERA AT THE EARTH AND TAKE PICTURES OF THE CLOUDS I SEE BELOW.



FOR EXAMPLE, HOW HIGH THEY REACH INTO THE ATMOSPHERE.



MY PICTURES SHOW WHERE THE CLOUDS ARE, BUT I ALSO TAKE LOTS OF OTHER NOTES ABOUT THE CLOUDS.



AND HOW MUCH RAIN THEY MIGHT CAUSE.

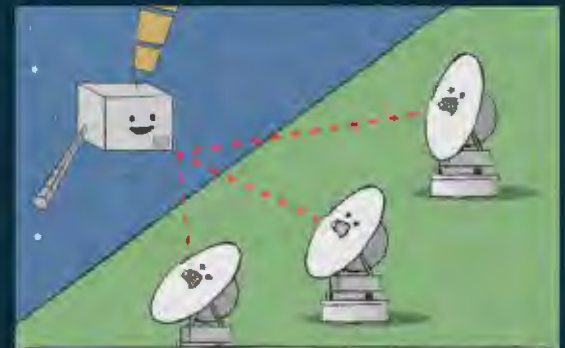
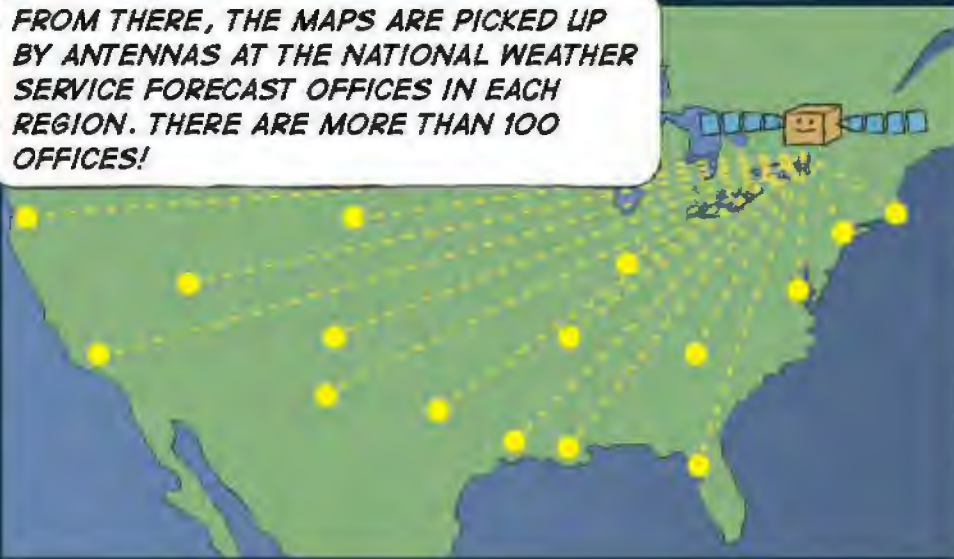


ANOTHER COPY OF THE MAPS IS SPLIT INTO SMALLER PIECES. THIS HELPS THE MAPS MOVE FASTER FROM ONE PLACE TO ANOTHER.



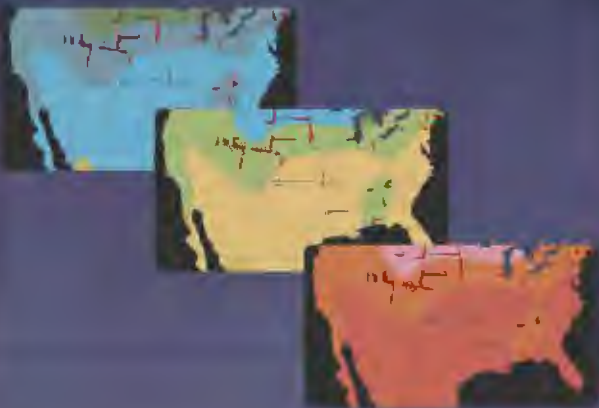
THE MAP PIECES ARE THEN SENT FOR PROCESSING BEFORE BEING SENT BACK UP IN THE SKY TO A COMMUNICATIONS SATELLITE.

FROM THERE, THE MAPS ARE PICKED UP BY ANTENNAS AT THE NATIONAL WEATHER SERVICE FORECAST OFFICES IN EACH REGION. THERE ARE MORE THAN 100 OFFICES!

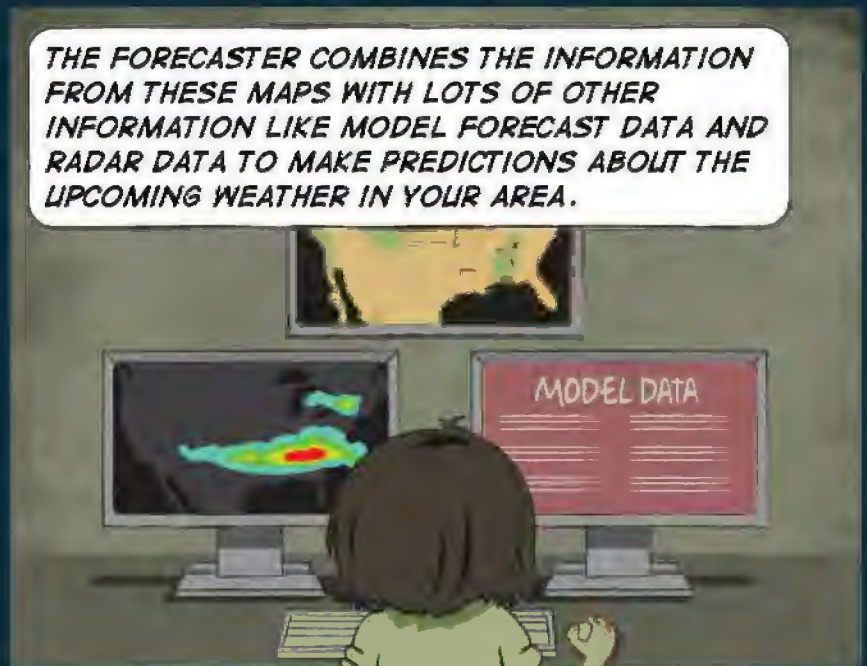


I ALSO TAKE THE MAPS THAT I RECEIVED AND SEND THEM OUT TO COMPANIES THAT SPECIALIZE IN MAKING THE MAPS MORE COLORFUL AND BETTER FOR VIEWING ON TVS AND COMPUTERS.

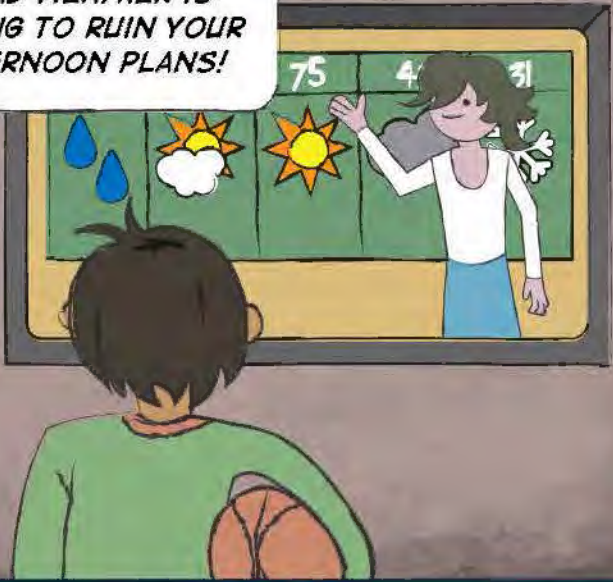
THE FORECASTER COMBINES THE INFORMATION FROM THESE MAPS WITH LOTS OF OTHER INFORMATION LIKE MODEL FORECAST DATA AND RADAR DATA TO MAKE PREDICTIONS ABOUT THE UPCOMING WEATHER IN YOUR AREA.



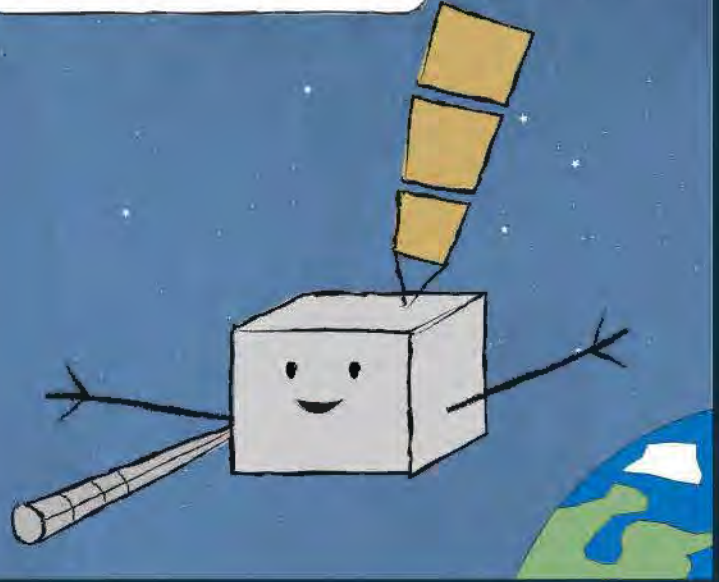
THE COLORFUL MAPS—AND THE MAPS FROM THE FORECAST OFFICES—THEN GO TO YOUR LOCAL WEATHER FORECASTER.



AND THAT'S HOW I
HELP YOU FIND OUT
IF BAD WEATHER IS
GOING TO RUIN YOUR
AFTERNOON PLANS!



YOU'RE WELCOME!



**FOLLOW THE GOES-R SERIES SATELLITES
ON ALL OF THEIR ADVENTURES!**

A large illustration of the satellite character from the previous panel, floating in space. The satellite is smiling and has its arms outstretched. A red YouTube play button is overlaid on the image. The Earth is visible in the background, showing the Americas. The text "MEET THE GOES-R SERIES" is written in large, white, stylized letters at the bottom of the illustration.

**MEET THE
GOES-R SERIES**


**FOR THE COMPLETE VIDEO SERIES AND MORE, VISIT:
WWW.SCIJINKS.GOV/GOES-R**





*FOR MORE INFORMATION, VISIT THE GOES-R SERIES WEBSITE AT
WWW.GOES-R.GOV.*


*FOR INFORMATION FOR STUDENTS, VISIT THE NOAA SCIJINKS WEBSITE AT
SCIJINKS.GOV.*

 *GOES-R SERIES FACEBOOK: WWW.FACEBOOK.COM/GOESRSATELLITE*


 *NOAA SATELLITES FACEBOOK: WWW.FACEBOOK.COM/NOAANESDIS*

 *NOAA SATELLITES TWITTER: WWW.TWITTER.COM/NOAASATELLITES*

 *NOAA SATELLITES YOUTUBE: WWW.YOUTUBE.COM/USER/NOAASATELLITES*

 *NOAA SATELLITES FLICKR: WWW.FLICKR.COM/NOAASATELLITES*

 *SCIJINKS FACEBOOK: WWW.FACEBOOK.COM/SCIJINKS*

 *SCIJINKS TWITTER: WWW.TWITTER.COM/SCIJINKS*

