TERASCAN

Brought to you by Courtney Farmer
Created by Courtney Farmer and Kalyx McDonald

SEASPACE.

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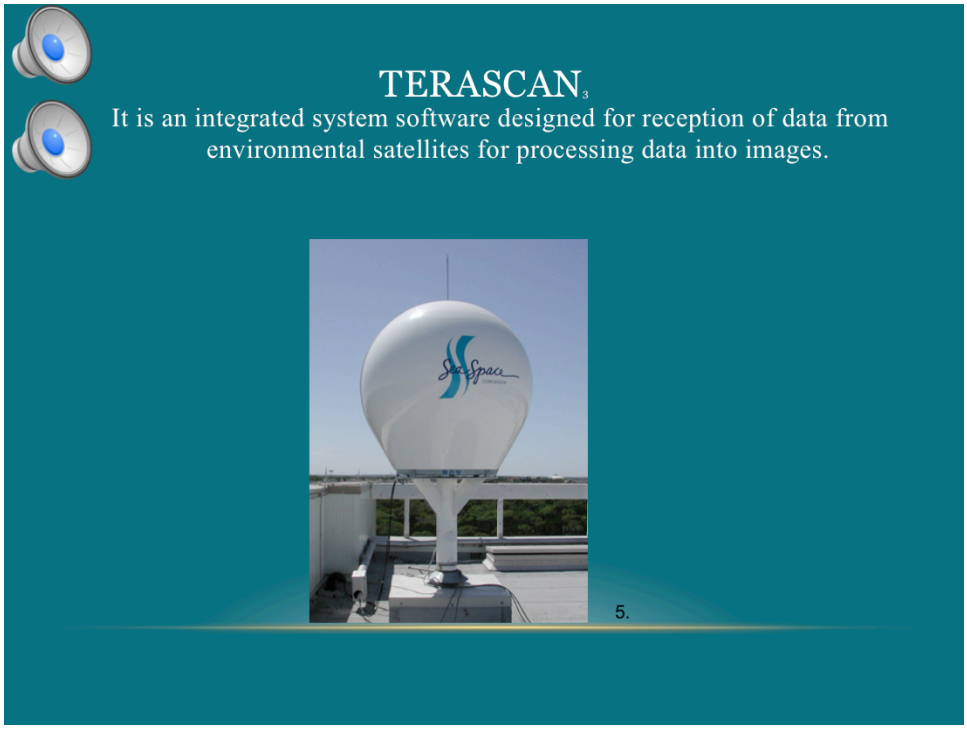
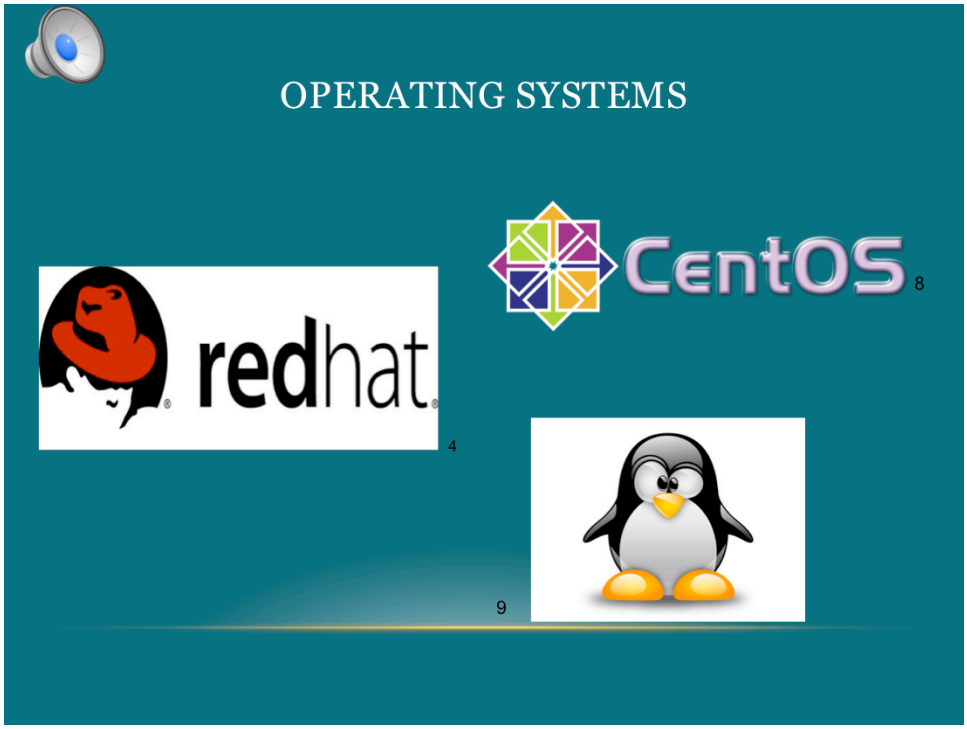
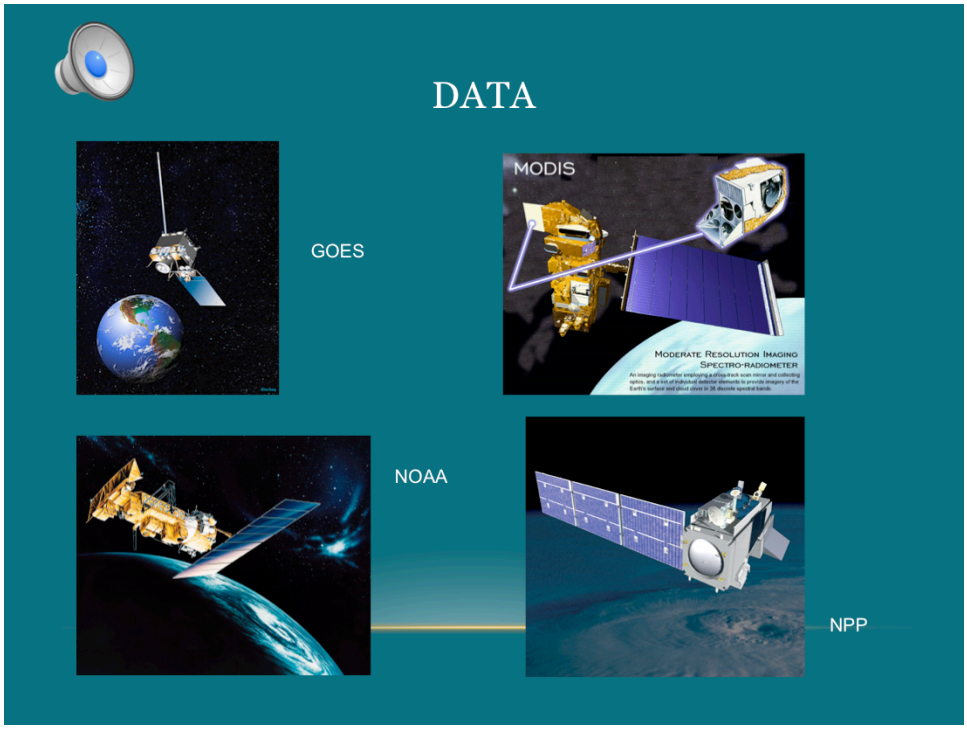


In order for your TeraScan operating system to work affectively, you will need this list of things:

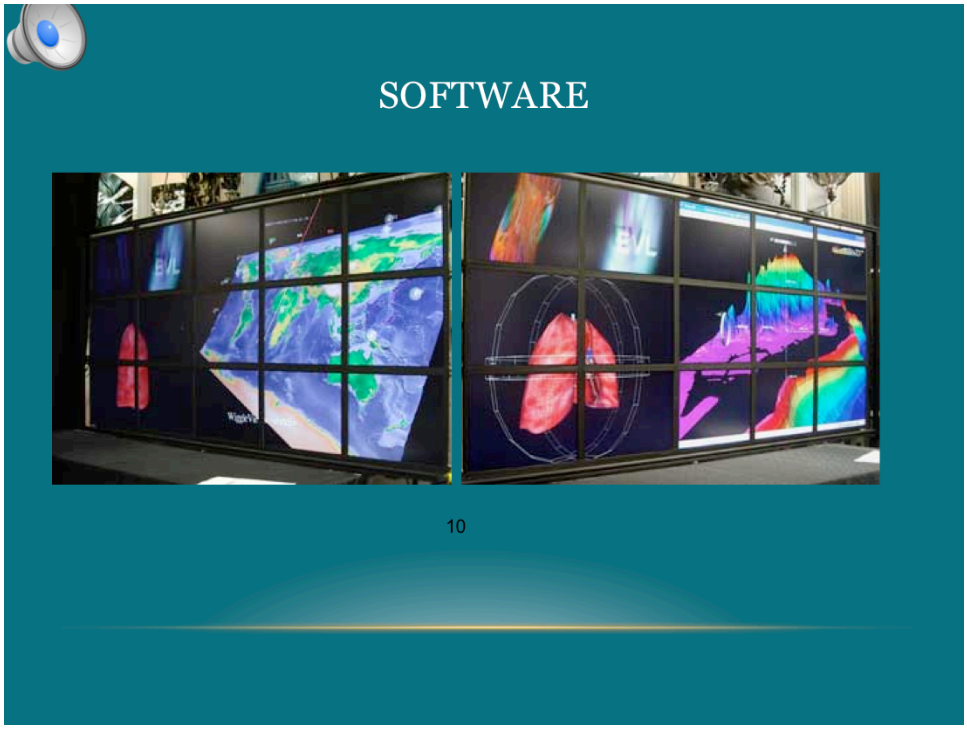
A interface
Bit synchronizer
Frame synchronizer
Antenna for satellite signal
Uninterruptible power supply (UPS)
Global Positioning System (GPS) antenna
Computer workstations with TeraScan software
A receiver for tuning to the correct satellite and the sensor data



SeaSpace supports TeraScan on two platforms which are CentOS & Redhat Enterprise Linux

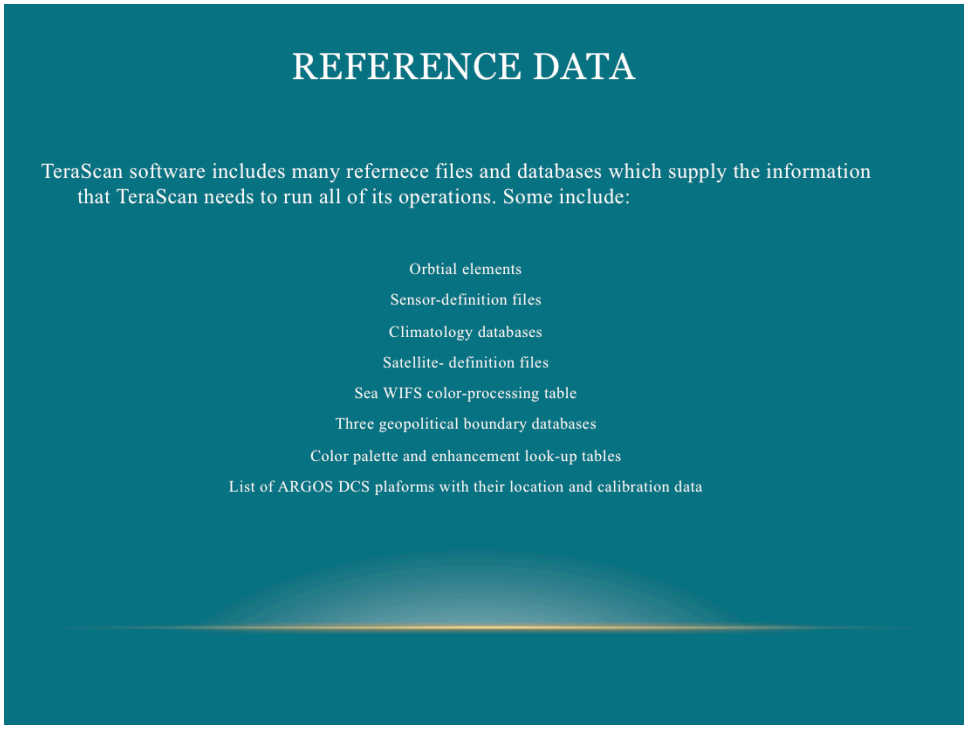


TeraScan system can receive data through the x-band, c-band, and L- band from various telemetries including GOES, MODIS, NOAA(noah) EOS, NPP, TERRA, AQUA, AND LANDSAT



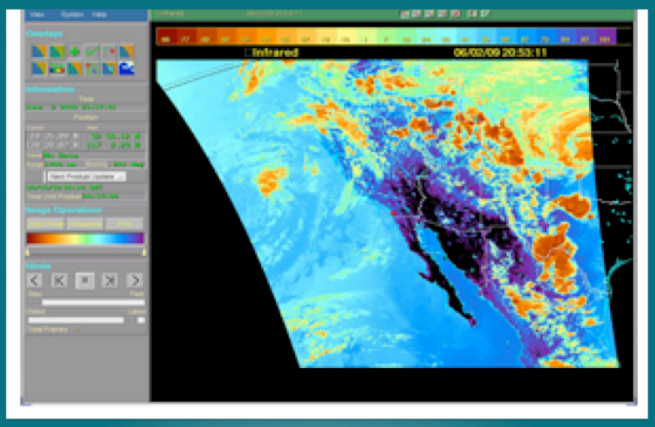
TeraScan software is based on the Linux operating system which consist of :

TeraScan Data Format (TDF)
A set of daemons and services
A set of reference files and databases
600 or more command- line functions
A set of graphical user interfaces (GUIs)



Climatology databases: required for processing NOAA TOVS data, DMSP Special Sensor data, and SeaWiPS data

TERASCAN DATA FORMAT (TDF)



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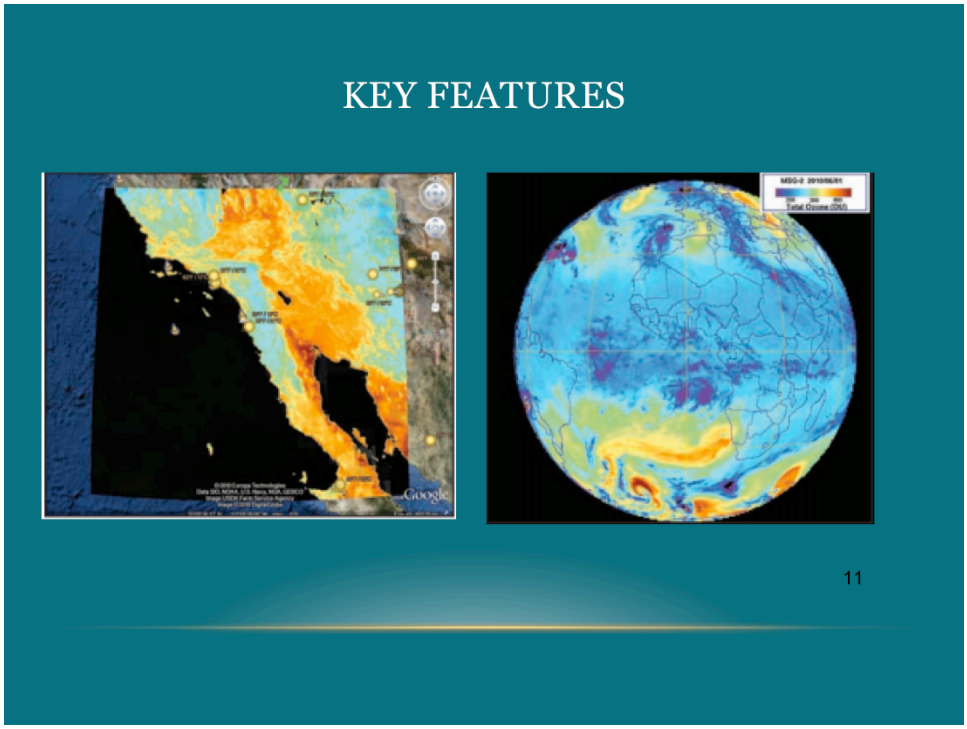
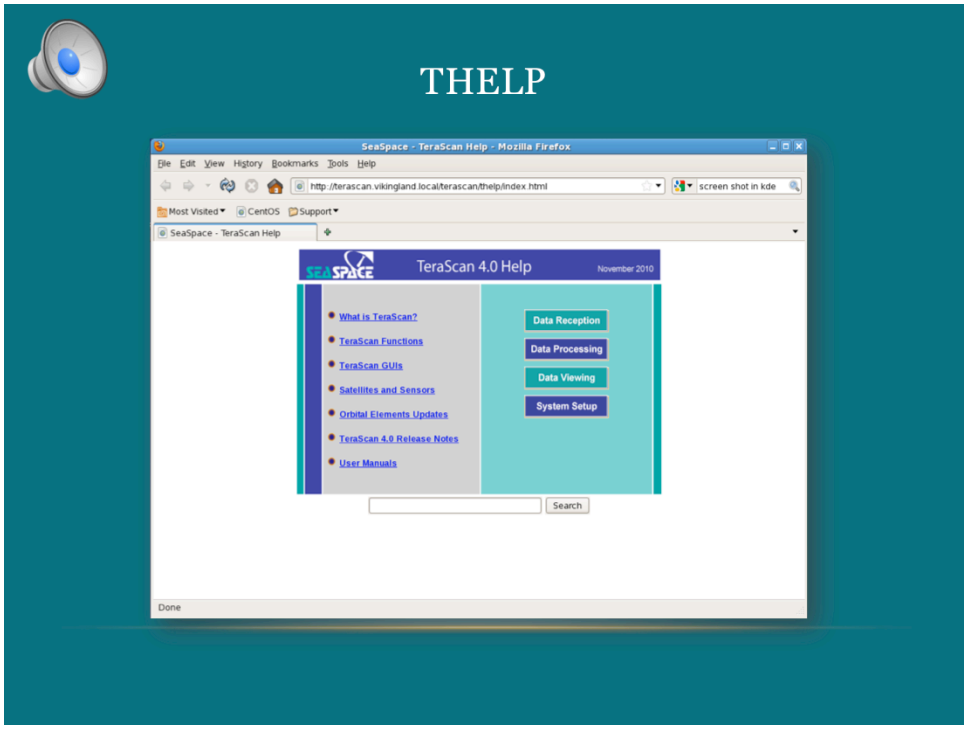
TERASCAN DATA FORMAT OR TDF PROVIDES METADATA INFORMATION ON TDF FORMAT TO USE FOR INGESTION INTO THIRD PARTY SOFTWARE
It takes a multi layered data format that also contains geo-referenced information. Although TDF is the recommend format to use with TERAVISION, TeraScan is capable of exporting more common formats as well.
Some examples are KML, PNG AND GEOTIFF



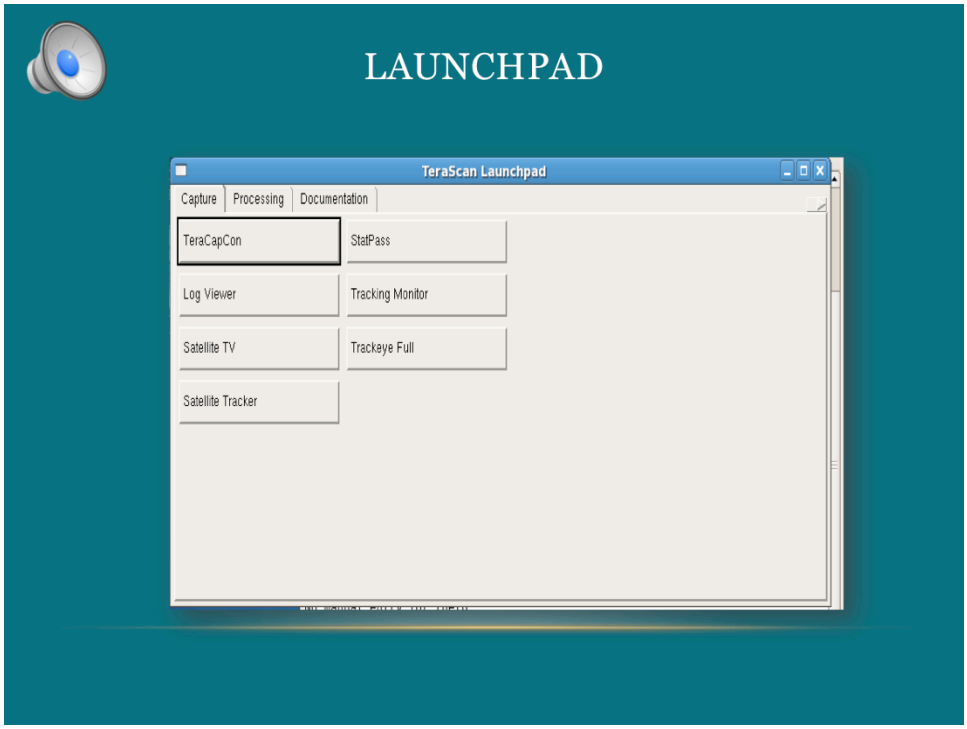
Some key features are:

Advance Dvorak Technique : it is the standard method for estimating tropical cyclone intensity
Automated Data Retrieval: Automated data retrieval from NASA LAADS
COMS Functions: Ingest and process geostationary data from the Korean COMS satellite
Doppler Radar Import: displays radar imagery along the side of satellite imagery for improved analysis
GOES Ingestion: added ingest capability for updates to post –launch calibrations
MODIS: Batch processing has added a new product using MODIS data
PULSE: pulse provides a graphical display of the status information found in the processing log file
Shapefile Import: Import ArcGIS shape files into teraScan for display over satellite data

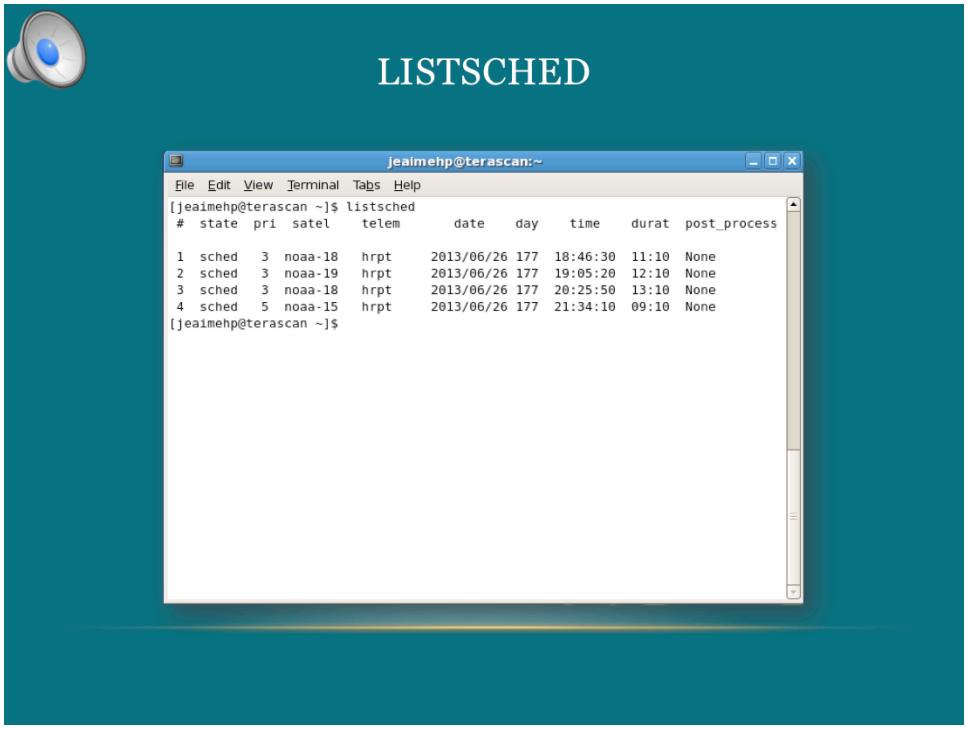
Some of TeraScan commands are listed on this side. Now I will explain each one of them



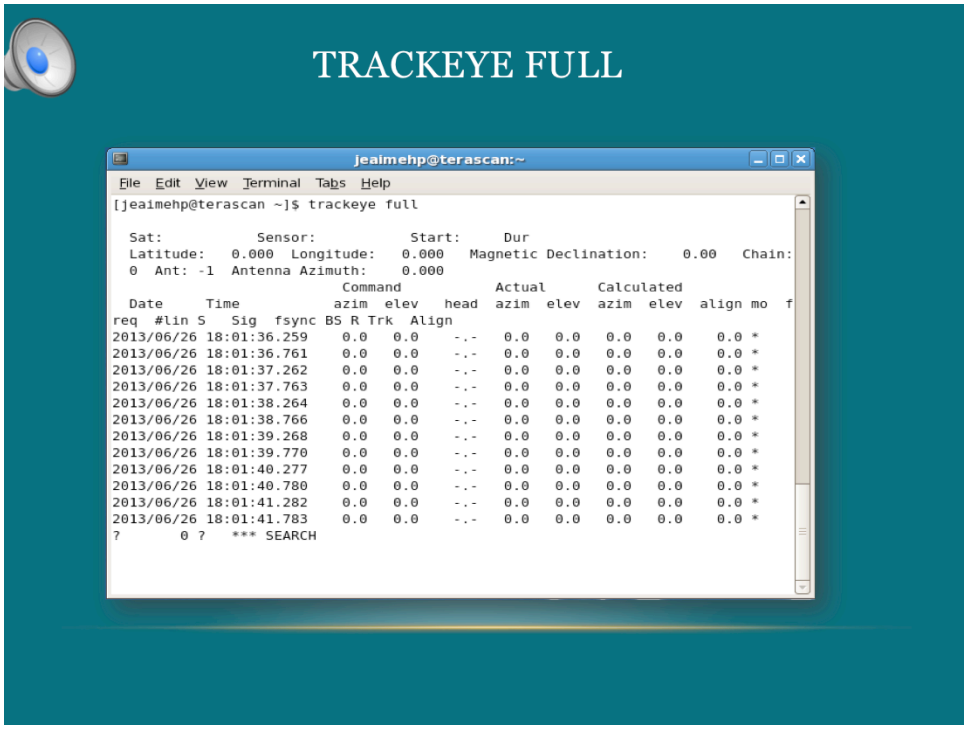
The command thelp is used to open the help center, which provides the TeraScan Manual



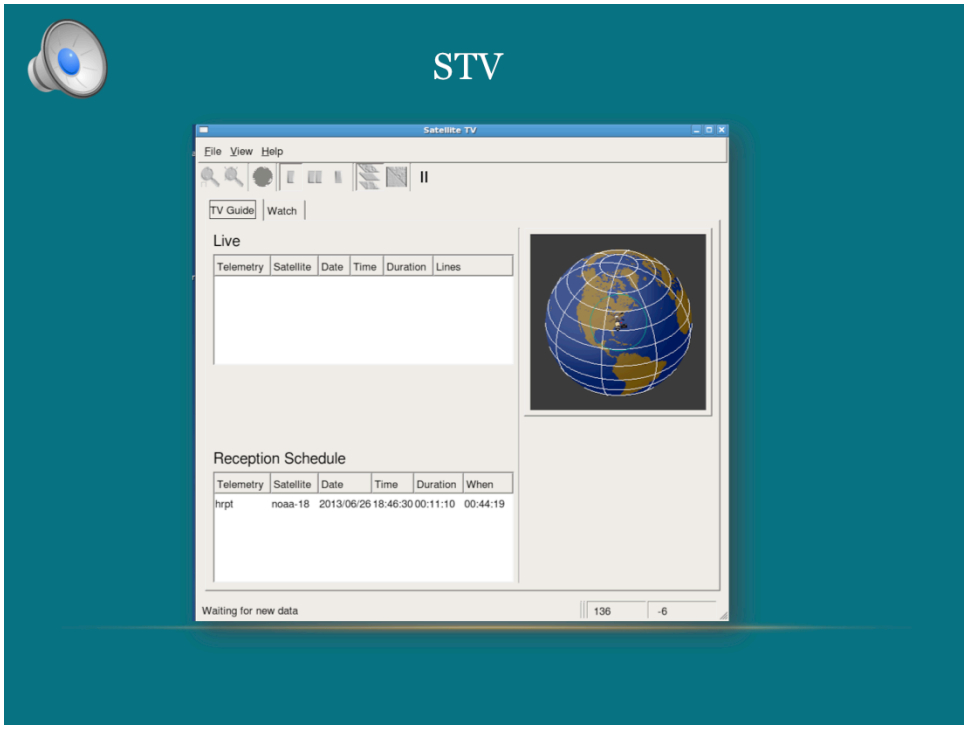
Launchpad leads to access of buttons to get to other software packages



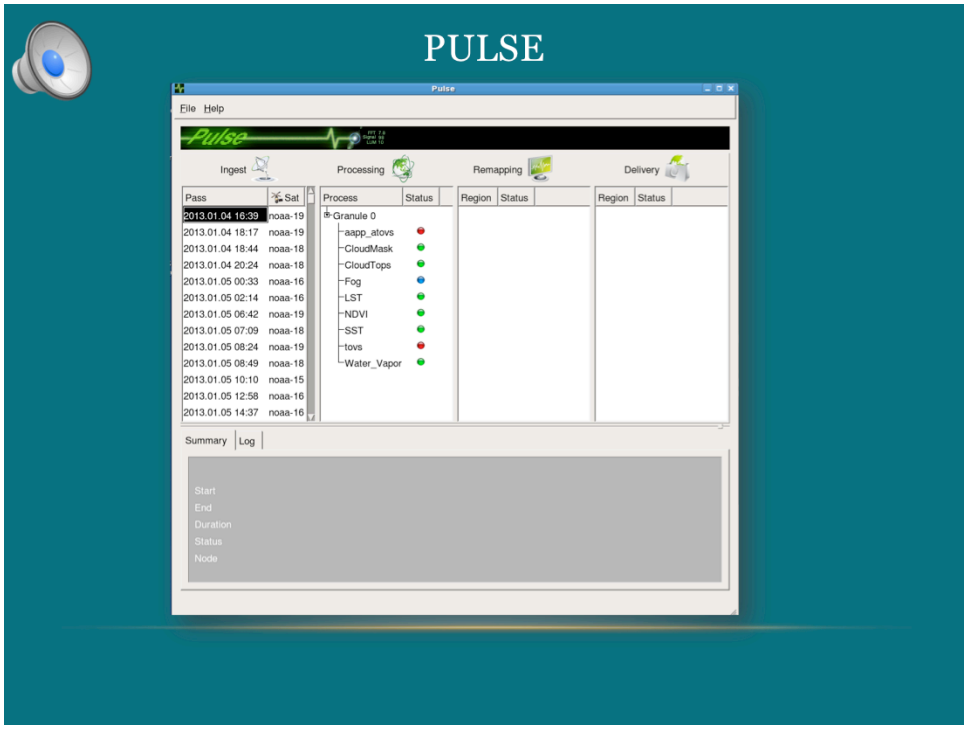
List schedule or listsched command is used to view the satellite schedule



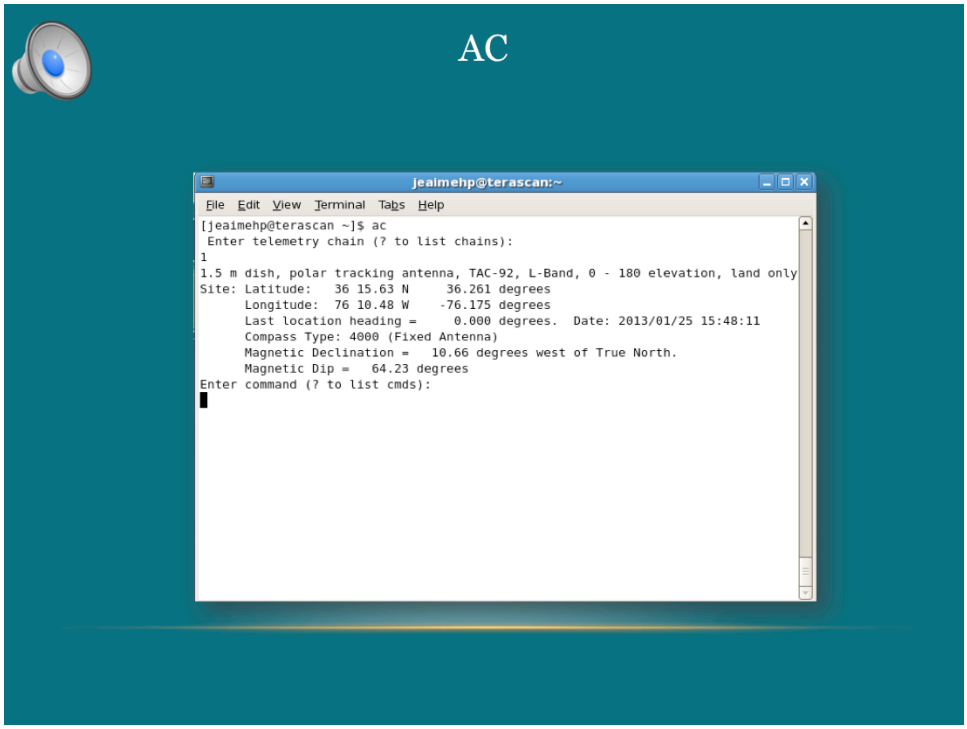
Trackeye full is used to watch a satellite pass come in.



Satellite tv or Stv allows you to watch the data coming in raw and unreferenced.

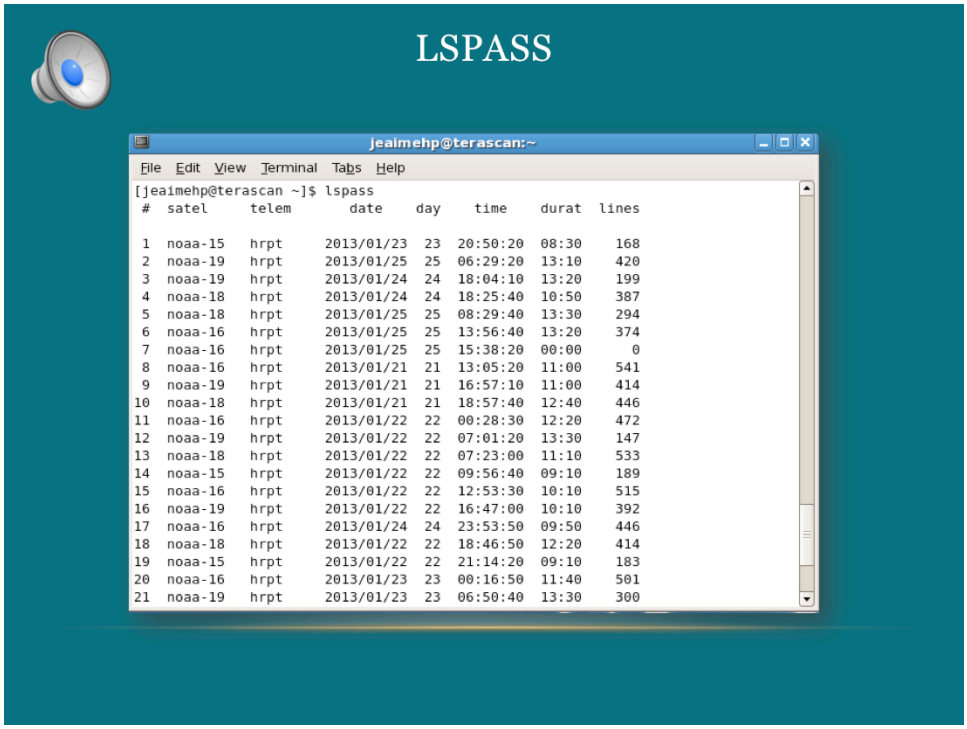


The command pulse is a display of information found in the processing log file



AC gives you ground stations location and system information

The Tvis command will open the TeraVision software package



List pass or Lspass gives you a list of recent data recordings

REFERENCES

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4.http://www.linux.org/article/view/distro-red-hat
5. http://magic.csr.utexas.edu/Station/facility.cfm
6. http://www.coastalwiki.org/wiki/Waves_and_currents_by_X-band_radar
7. TeraScan training guide
8. https://aws.amazon.com/marketplace/seller-profile?id=16cb8b03-256e-4dde-8f34-1b0f377efe89
9. http://kleanpc.com/cms/services/linux-implementations/
10. http://www.evl.uic.edu/cavern/teranode/teravision
11. http://seaspace.com/docs/terascan40_flyer.pdf

YOU CAN FIND MORE INFORMATION AT THE FOLLOWING SITE

CERSER

http://cerser.ecsu.edu/