TPC OPERATION IT INFRASTRUCTURE

PLATFORM	HARDWARE	SOFTWARE (OS)	SOFTWARE (APPLICATION)	COMMENT
N-AWIPS	Linux Workstations HP work-stations	RedHat Linux Enterprise 3.0 HP-UX 11.0	GEMPAK	Migrating from UNIX to Linux
SATELLITE PROCESSOR	Linux Server HP UNIX server (backup)	RedHat Linux Enterprise 3.0 HP-UX 11.0	MCIDAS-X	
ATCF	Linux Workstations	RedHat Linux Enterprise 3.0	ATCF	
AWIPS	Linux Workstations	RedHat	AWIPS	

TPC COMMUNICATION LINKS

One Ds-3 and two T1 lines.

AWIPS satellite ingest and WAN.

TPC SATELLITE IMAGERY DATA FEED

SATELLITE	SOURCE	FORMAT	FREQUENCY
GOES-E	Direct ingest	McIDAS	Full disk: every 3 hours N. hemi: every 30 min. Conus: every 15 min. RSO: every 7 min. SRSO: every 1 min.
GOES-W	Direct ingest	McIDAS	Same as GOES-E
METEOSAT	From NESDIS servers	McIDAS	IR: every 30 min. WV: mix of hourly and 3 hourly VIS: every 30 min. During daytime
GLOBAL MOSAIC	From AWC	McIDAS	Half hourly
GOES-9	From NESDIS	McIDAS	Half hourly

servers

TPC OBSERVATIONS DATA FEED

FOS data of METAR, radiosonde, synoptic, ship, buoy, C-man,

DATA TYPE	INGEST/PROTOCOL	FORMAT	COMMENTS
FOS	X.25 satellite ingest	GEMPAK (N-AWIPS) NetCDF (AWIPS)	METAR, radiosonde, synoptic, ship, buoys, C-man
Aircraft	X.25	GEMPAK	recon, vortex, GPS dropsondes
Satellite high density winds	ftp from NESDIS server	GEMPAK	Every three hours
Satellite QuikSCAT winds	ftp from NESDIS server	binary and GEMPAK	Hourly

ATCF MODEL TRACK DATA

Downloaded from NCO SP as text files.

MODEL DATA AND FLOW AT TPC

MODEL	FORMAT	PROTOCOL	FORECAST PERIOD	FIELDS
GFS	GRID (GEMPAK) 6 HR Incremental	DBNet	f00-f384 for 00Z,06Z,12Z and 18Z runs	wind, temp, relh, omeg,avor,hght, cape,cins,lift,pmsl, pr06,p06m,wxtr06, wxtz06,wxtp06, wxts06,lwrd06, lwru06,swru06, swrd06,ghfx06, ice,albd06,vwsh,

				swem,fxsh06,fxlh06
GFS	GRIB	DBNet	f00-f126	same as above
ECMWF	GRID	DBNet	f00-f144 every 24 hours for 12Z	1000mb-hght 850 mb-temp 700mb-hght 500mb-hght,avor surface-pmsl 200mb-wind 850mb-wind
ENS	GRID	DBNet	f00-f384 every 12 hours for 00Z,12Z	surface-wind,temp, pmsl,p12m,tmxk12, tmnk12 1000mb-hght 850mb-temp,wind 700mb-relh 500mb-hght,wind 250mb-wind
ETA	GRID	DBNet	f00-f84 every 6 hours for 00Z,06Z, 12Z,18Z	temp,spfh,wind, omeg,lift,cape, cins,relh,pwtr, frzl,mcnv,hlcy, avor,hght,vwsh
GFDL	GRID	FTP	f00-f126 every 6 hours for 00Z,06Z, 12Z,18Z	Basic Parameters
GFDN (nested)	GRID	FTP	f00-f126 every 6 hours for 00Z,06Z, 12Z,18Z	Basic Parameters
MM5	GRID	DBNet	f00-f60 every 3 hours for 00Z,06Z, 12Z,18Z	temp,dewp,wind omeg,pmsl,p03m, pwtr,lift,pcptyp
NGM	GRID	DBNet	f00-f48 every 3 hours for 00Z,12Z	wind,temp,relh,hght, omeg,avor,lift,p12m , pmsl,ifws,sndw,evap c12m,s12m
NOGAPS	GRIB/GRID	FTP from	f00-f144 every 12	wind,temp,hght,avor

		FNMOC/ DBNet (backup from NCEP /nogaps1)	hours for 00Z,12Z	omeg,cxxm,pxxm, pmsl
NWW3	GRID	DBNet	f00-f126 every 3 hours for 00Z,12Z	wind,htsgw,wvper, wvdir,perpw,dirpw. persw,dirsw
WAVE	GRID	DBNet	f00-f96 every 6 hrs thru f48 every 12 hrs through f96 for 00Z & 12Z	same as NWW3
GFDN (gfd_navy)	GRIB	FTP FROM FNMOC to TPC	f00-f126 every 12 hours for 12Z & 18Z	same as GFD
UKMET	GRID	DBNet	f00-f72 every 6 hours f72-f144 every 12 hours for 00Z,12Z	hght,temp,wind, omeg,pmsl

<u>JOINT HURRICANE TESTBED EQUIPMENT SPECIFICATIONS</u>

JHT Server – Physically located in the computer equipment room.
    Hewlett-Packard 9000 A-class (A500 Enterprise Server)
    Operating System: HP-UX 11i
    24x7 HP System Support

    2 – 550 MHz Risc Processor
    1 – 128 MB RAM
    2 – 73 GB Ultra 160 SCSI Hard Disks
    2 – additional 73 GB Ultra 3 SCSI Hard Disks in rack array
    4 – 1 GB Memory

    Dual Port Ultra 2 SCSI Adapter
    PCI FWD SCSI 2 Card
    1000BaseSX PCI Lan Adapter (GIGE Card)
    DLT 8000 Tape Drive

CDROM

HP 9000 Rack Structure and mounting equipment

(A Linux server running RedHat Linux Enterprise OS is proposed for 2005.)

JHT Workstations
One Hewlett-Packard Workstation c3600
Operating System: HP-UX 11.0
HP-UX support next day

1 - 552 MHz Risc Processor
2 - 36 GB LVD 10K RPM Hard Disk
1 - 1GB Memory
1 - 512 MB RAM
1 - 32X API CD-ROM for PA8500
2 - 21" Color Monitor
2 - Visualize FXE Graphic Card

One Linux workstation for JHT IT facilitator
Computer: Hewlett-Packard Workstation x2100
Operating System: Linux RedHat Linux Enterprise 3.0

Two Linux workstations
Computer: Hewlett-Packard Workstation XW4100
Operating System: RedHat Linux Enterprise 3.0.