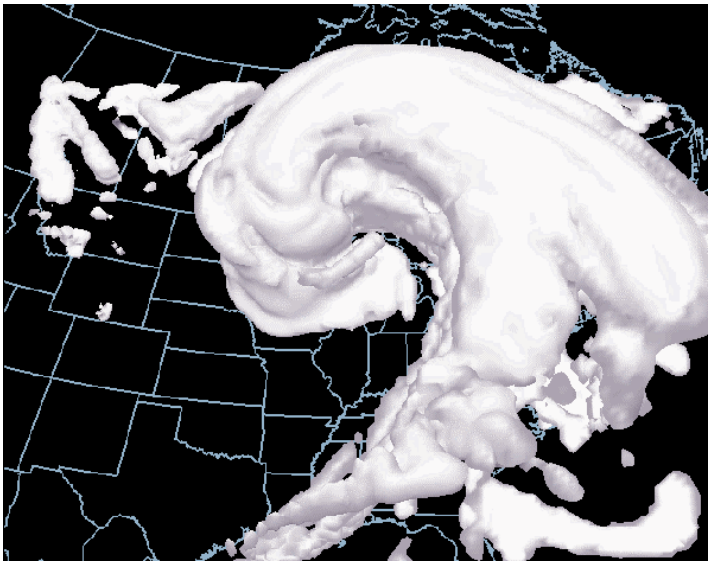
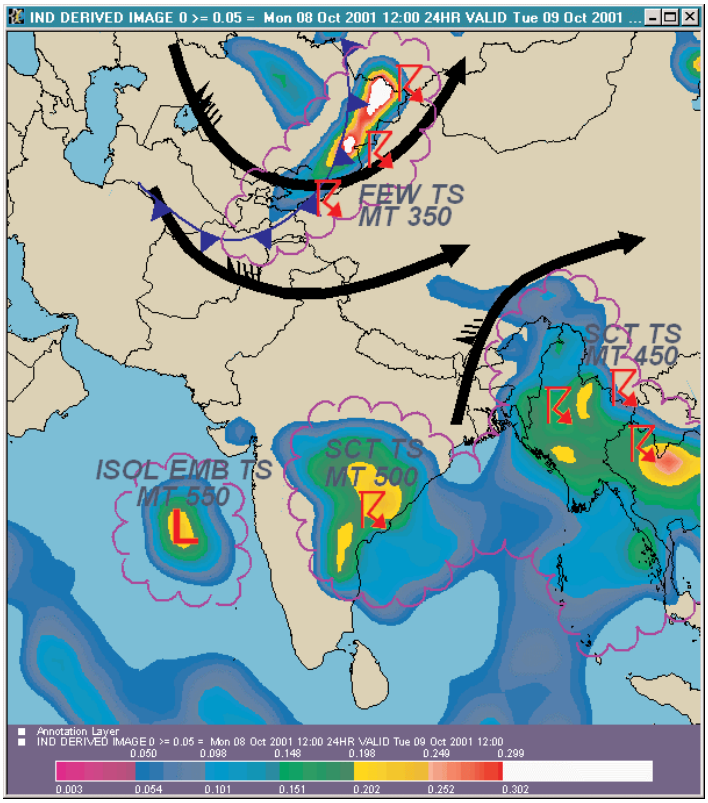
Solutions Guide

SGI, IPS Meteostar, and SSESCO Offer Complete Operational Forecast System





SGI, IPS Meteostar, Inc., and SSESCO, Inc., have come together to offer an advanced MM5-based operational weather-forecasting system. The system is based on the SGI® line of high-performance compute servers, data storage products, and graphics workstations along with the state-of-the-art IPS Meteostar LEADS and SSESCO Environmental WorkBench™ (EWB) weather-visualization packages. The entire system draws on SGI, IPS Meteostar, and SSESCO experience in the fields of scientific computing, operational meteorology and forecasting, and advanced scientific visualization. SGI, IPS Meteostar, and SSESCO offer a complete and reliable mesoscale forecasting system scalable to exact customer requirements.

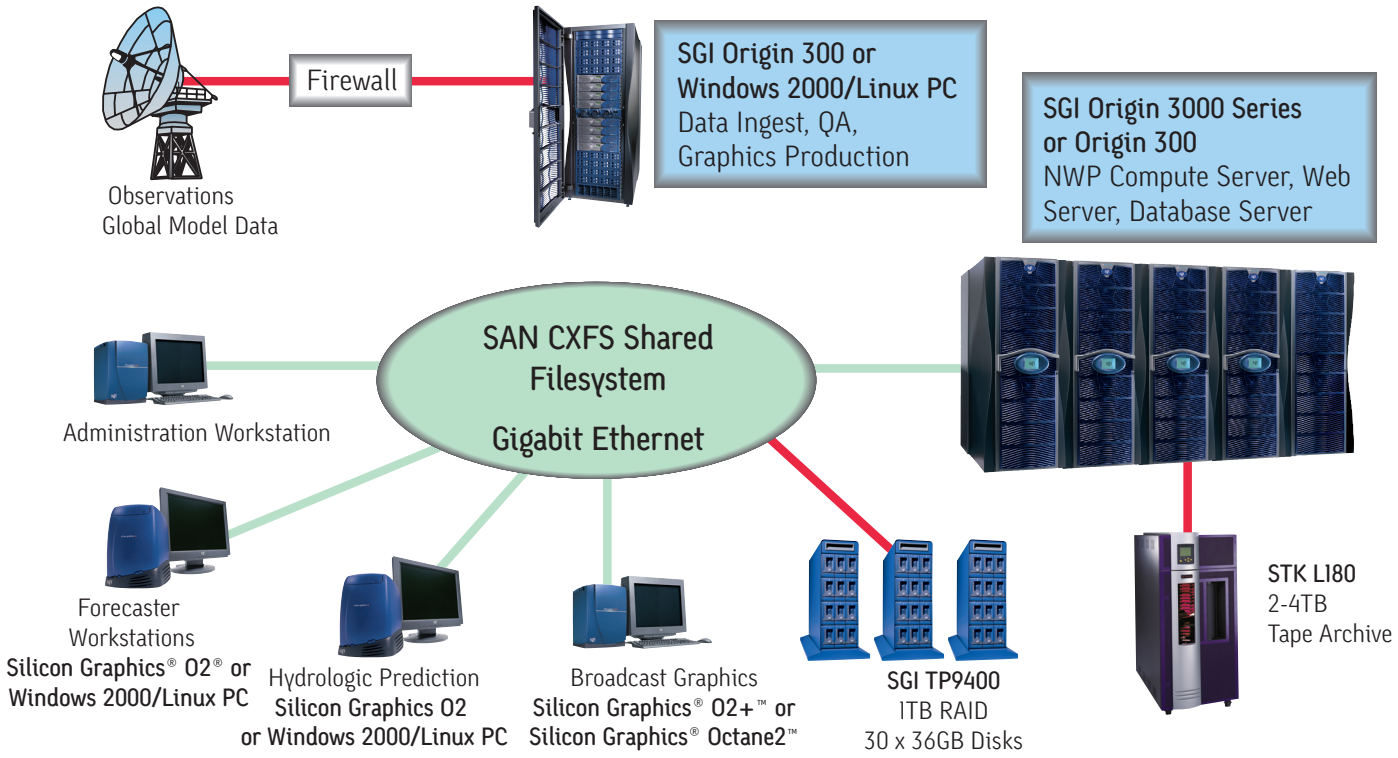
This complete forecasting system includes:

- All of the computer hardware required to become operational from the first day
- An advanced real-time forecasting package
- A complete package for meteorological data visualization
- Complete support for system integration, installation, and end-user training

Typical Operational Forecasting System Configuration

Features:

- Run a 72-hour forecast over a continental area in under one hour with an SGI® Origin® 3000 series or SGI® Origin® 300 server running forecast models and all preprocessing and postprocessing
- SGI® TP9400 RAID file-storage solution handles all data requirements, coupled with SAN solution using SGI® CXFS™ file sharing over a Gigabit Ethernet LAN with optional tape backup and archive
- Graphics workstations for forecasters and system administrators include a choice of the IRIX®, Linux®, or Windows® 2000 operating system
- Redundant servers for data ingest and verification handle all incoming ground, upper air, satellite, and radar observations
- Advanced real-time mesoscale forecasting model (MM5 or equivalent) utilizes sophisticated data assimilation to handle most types of weather observations: Expert configuration and tuning produces forecasts on a continuous basis using four-dimensional data-nudging technology



- Optional relational database for climatalogical use and optional packages are available for flood prediction, air-dispersion modeling, and air pollution analysis
- IPS Meteostar and SSESCO packages for meteorological data visualization to display current observations and forecast parameters, satellite and radar images, overlays and animations, and system monitoring and control
- Full customization to accommodate specific forecaster requirements and data sources and Web product dissemination
- Complete customer support for system integration, installation, and end-user training

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