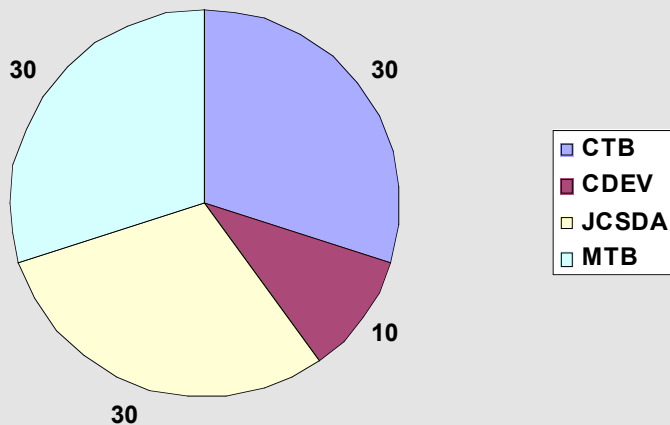


NOAA Computing Resources and Operational Requirements for Climate Forecasting at NCEP

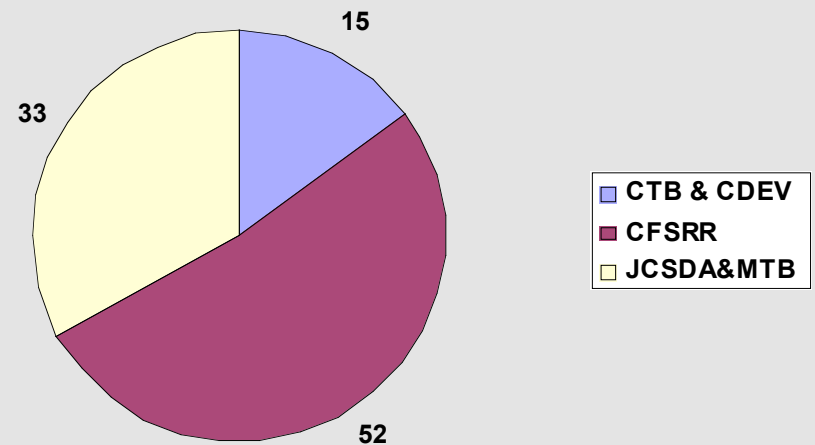
- Research
 - Including CFSRR
- Operations

Climate R&D Computing for Week2 to S/I

NOAA R&D Computer through November 2007



November 2007 - June 2008

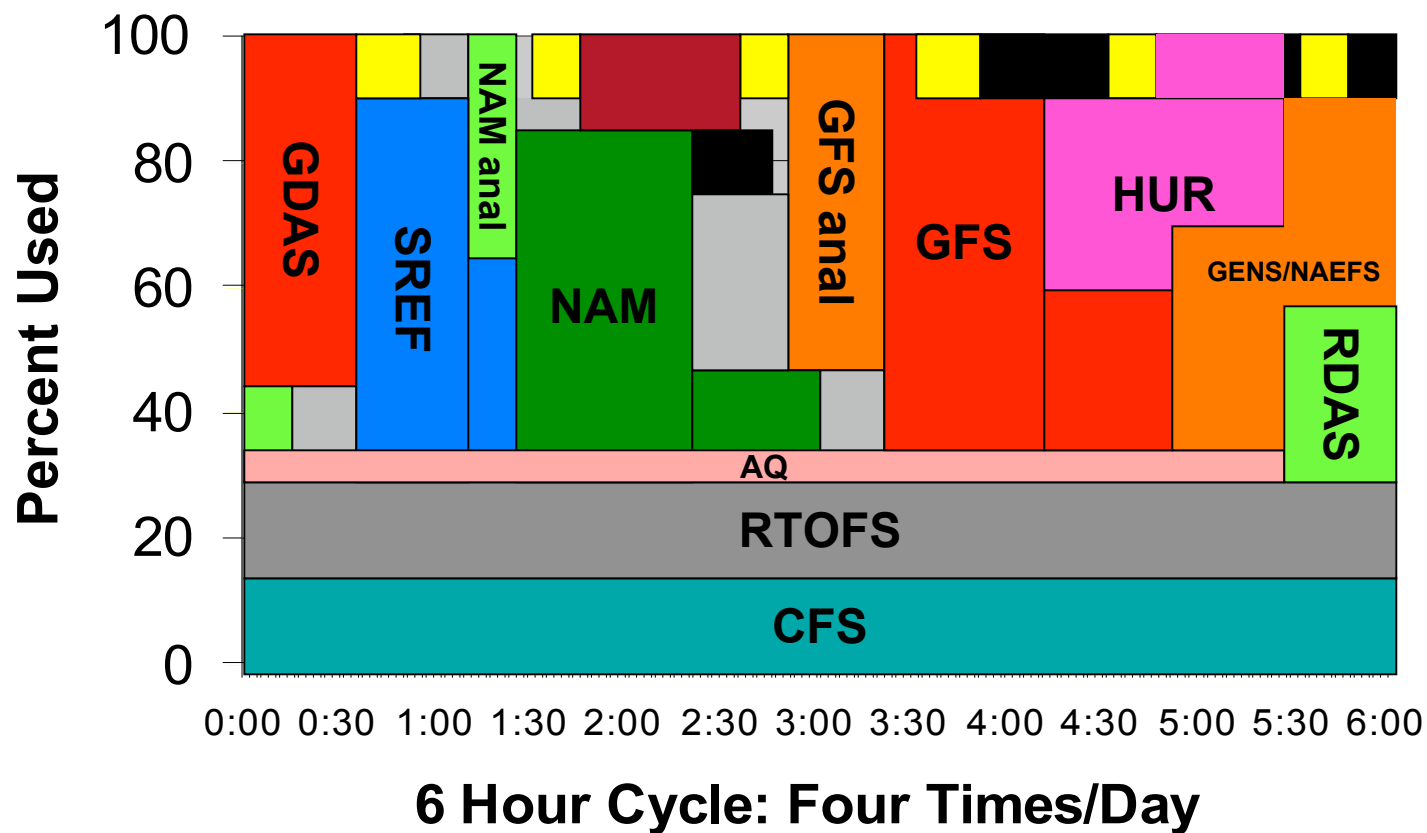


Enables CFSRR to
execute $\frac{3}{4}$ of required
production rate

June 2008+
New Power6 system for CTB, CDEV, JCSDA, MTB (same % as previous)
CFSRR will use all Power5 system

NCEP Production Suite Weather, Ocean, Land & Climate Forecast Systems

Current - 2007



Climate Requirements for NCEP's Next Operational System (2011)

Application	Operational System	Computing X factor	Requirement Generator
Seasonal-Monthly Climate	CFS	32	Climate Prediction Center
	Monthly fcst system	10 ⁺	“
	GLDAS, NLDAS	2.5*	NIDIS, CPC
	Reforecast	9*	“

- Ratio of ops:R2O computing

- Currently 1:1.3

- Requesting

- 2011: 1:2.0
- 2013: 1:3.0
- 2015: 1:4.0

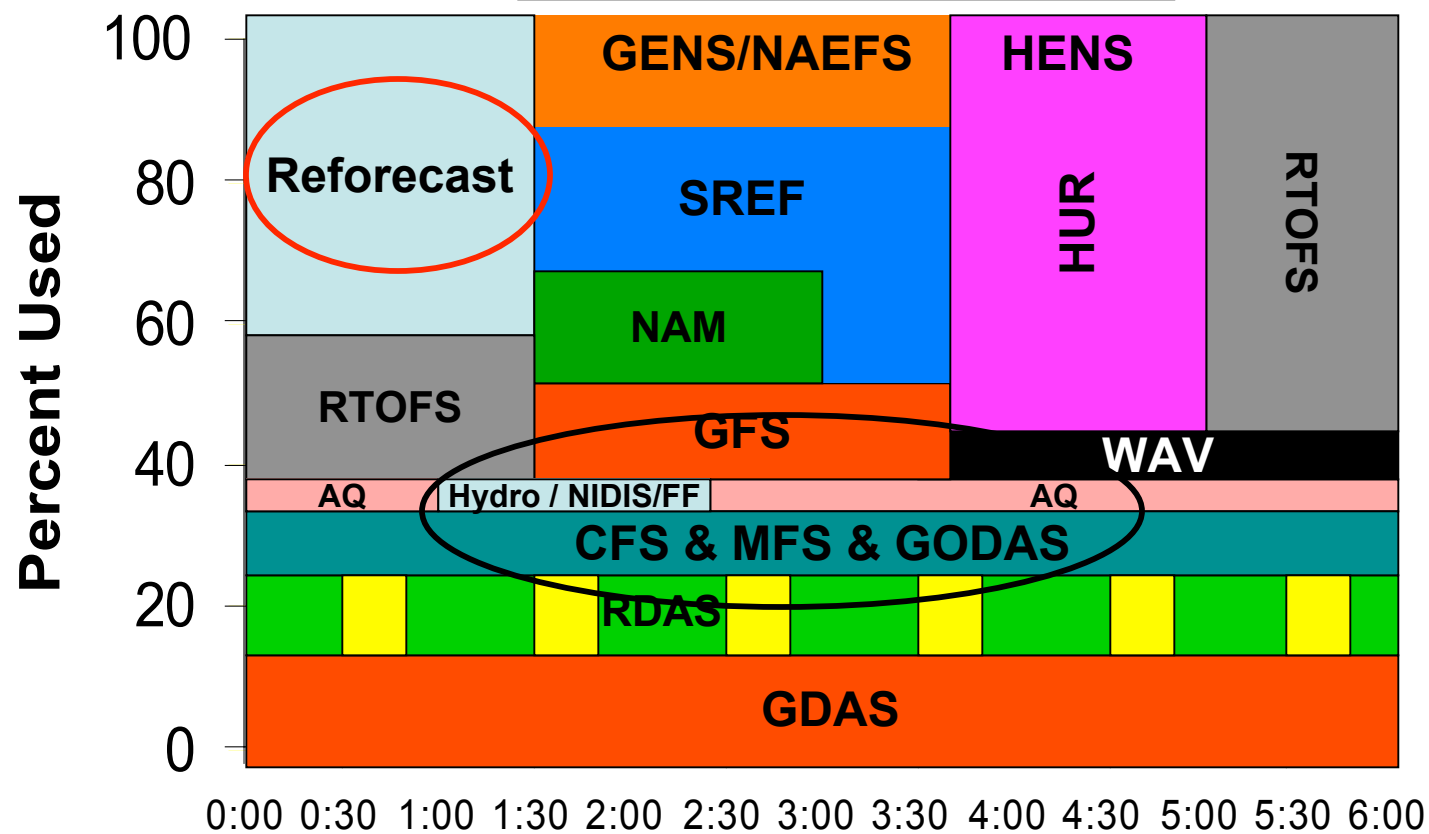
+ Extension of Week2 system

* New system

Climate (and other) computing requirements total a factor of 3X in additional funding (above Moore's Law – constant \$\$ capability)

NCEP Production Suite Weather, Ocean, Land & Climate Forecast Systems

Next Generation Prototype



6 Hour Cycle: Four Times/Day