

**South Africa Flash Flood Guidance (SAFFG)**  
**Feasibility Assessment – June 2007**

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**SAFFG Implementation  
Planning Summary**

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# SAFFG Hardware

- (1) National Processing Server
  - Red Hat Enterprise Linux
  - 2x4 CPU, 4GB RAM
  - RAID1 for OS
  - RAID5 for SAFFG/Data
  - E.g. Dell PowerEdge 2900
  
- (1) Secondary Processing Server
  - Red Hat Enterprise Linux
  - 2x4 CPU, 4 GB RAM
  - RAID1 for OS/SAFFG/Data
  - E.g. Dell PowerEdge 840
  
- (4) Regional Servers
  - Red Hat Enterprise Linux
  - 2x2 CPU, 4GB RAM
  - RAID1 for OS/SAFFG/Data
  - E.g., Dell PowerEdge 840
  
- Procurements by SAWS prior to operational deployment



# SAFFG Infrastructure/Integration

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- Servers will be rack mount or tower chassis according to each locale
- UPS (power backup) provided by each locale
- Server backup hardware, software, media and protocol will be provided and managed by each locale



# SAFFG Redundancy

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- National processing server may assume the additional role of any regional server
  - Any role change manually initiated by operators at NFC
- National processing server may failover to alternate processing server at designated RFO
  - Role-change manually initiated by operators at NFC/RFO
  - LAN input product delivery at NFC must be redirected to alternate processing server on WAN at RFO



# SAFFG Output Products

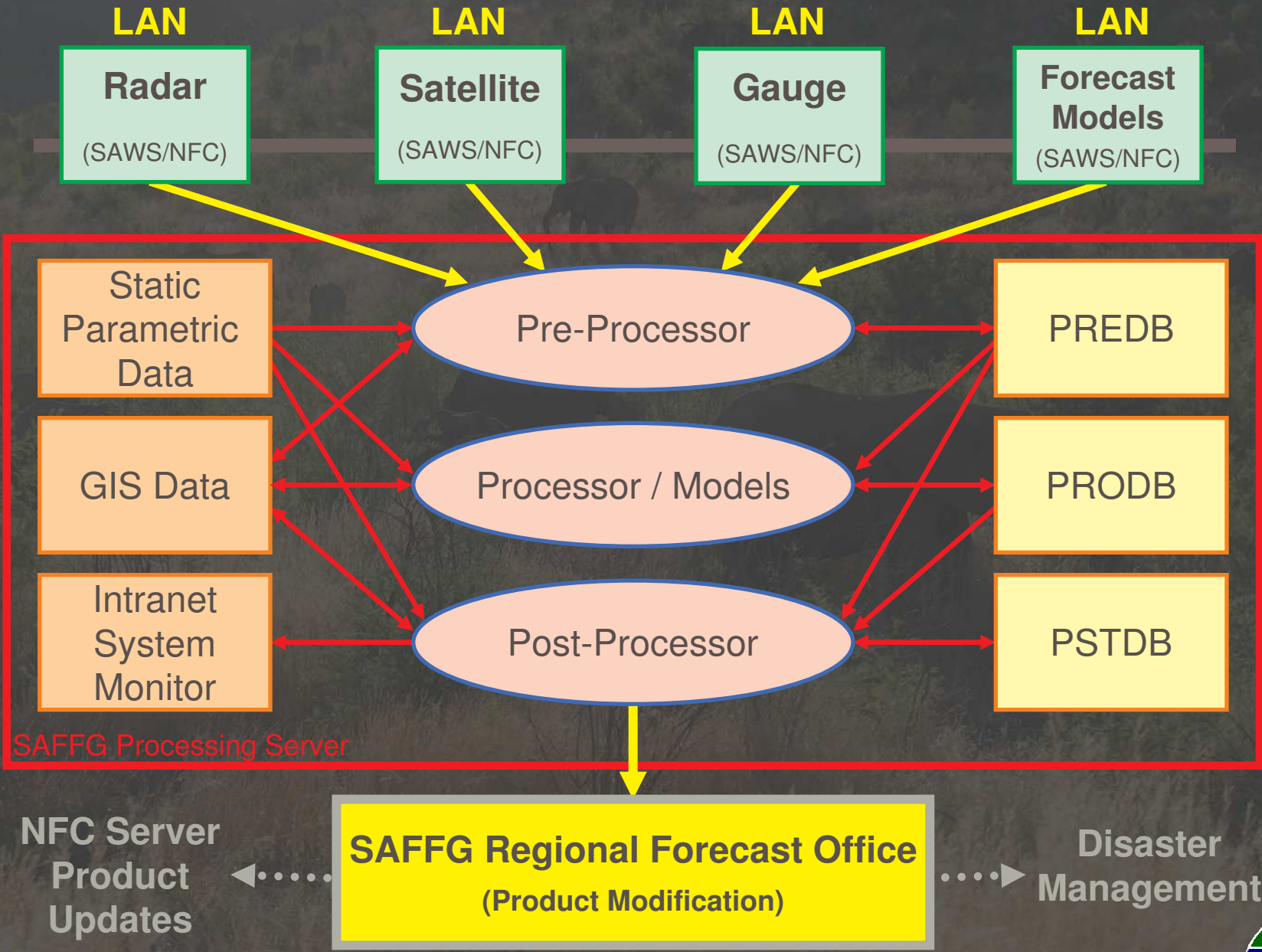
- Text / Data and National Images
  - MAP
  - MAT
  - ASM
  - FFG
  - FMAP
  - FFT
  
- Input product image export under consideration (Radar, Satellite, Gauge, Forecast Products)
  - NINJO display of input products independent of SAFFG



# Product Dissemination

- Output products will be automatically pushed from NFC to RFO's
  - Text/Data files via SCP
  - National image files via SCP
  - Database-direct transfers of data via TCP/IP
  
- RFO-modified products will be automatically pushed back to NFC
  - Text/Data files via SCP
  - Regional image files via SCP
  - Database-direct transfers of data via TCP/IP
  
- Forecaster-reviewed/modified products provided to Disaster Management Agencies via manual initiation/transfer by RFO (or NFC)
  - NFC-modified regional products (during role change) provided directly to DMA's via manual initiation/transfer
  - NFC-modified regional products (during role change) will be automatically (or manually) pushed to corresponding RFO





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*Thank you!*

