

# The New VLA Correlator Controller

History

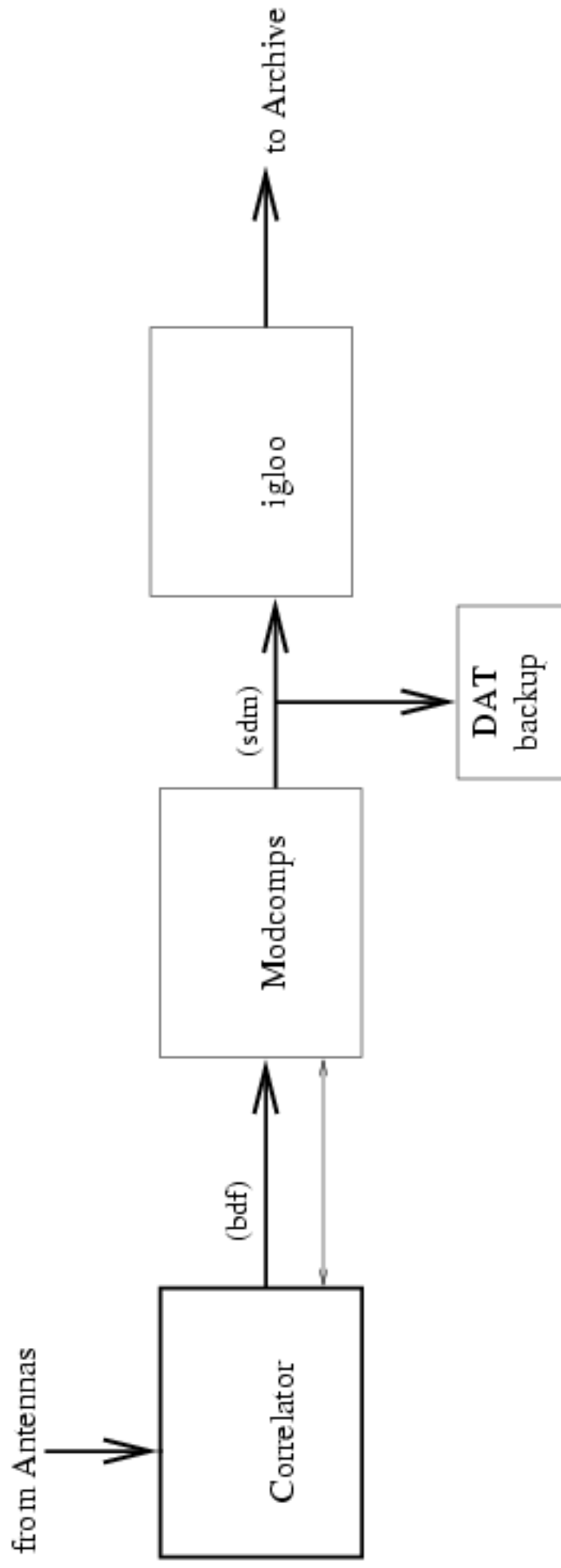
Workers: B. Rowen, R. Ferraro

New System

Capabilities, changes

Future

# VLA Correlator System Overview



# The New VLA Correlator Controller

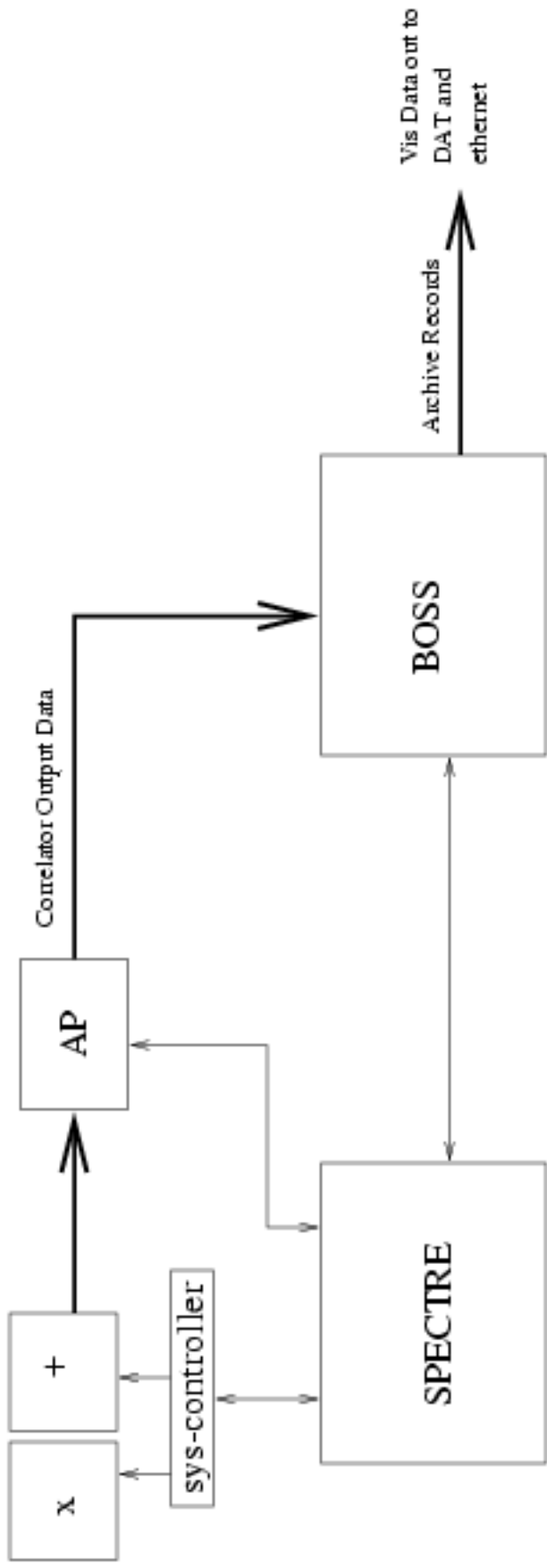
## *Ancient History*

Correlator placed in service in 1978; hardware even older

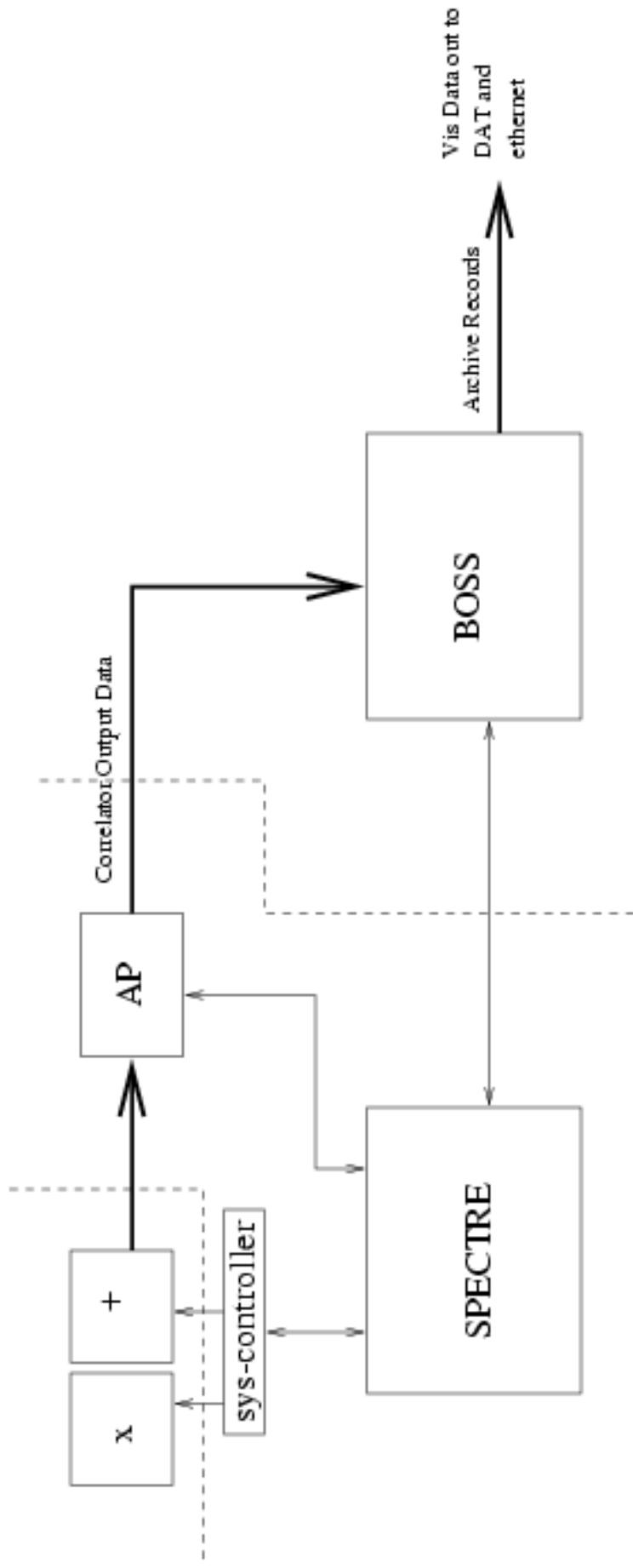
Proprietary interfaces

Maintenance Headache

# VLA Correlator System as Built



## Boundaries of the VLA Correlator System



Everything between the dashed lines is to be replaced.

# The New VLA Correlator Controller

## New System

System Commissioned September 2006

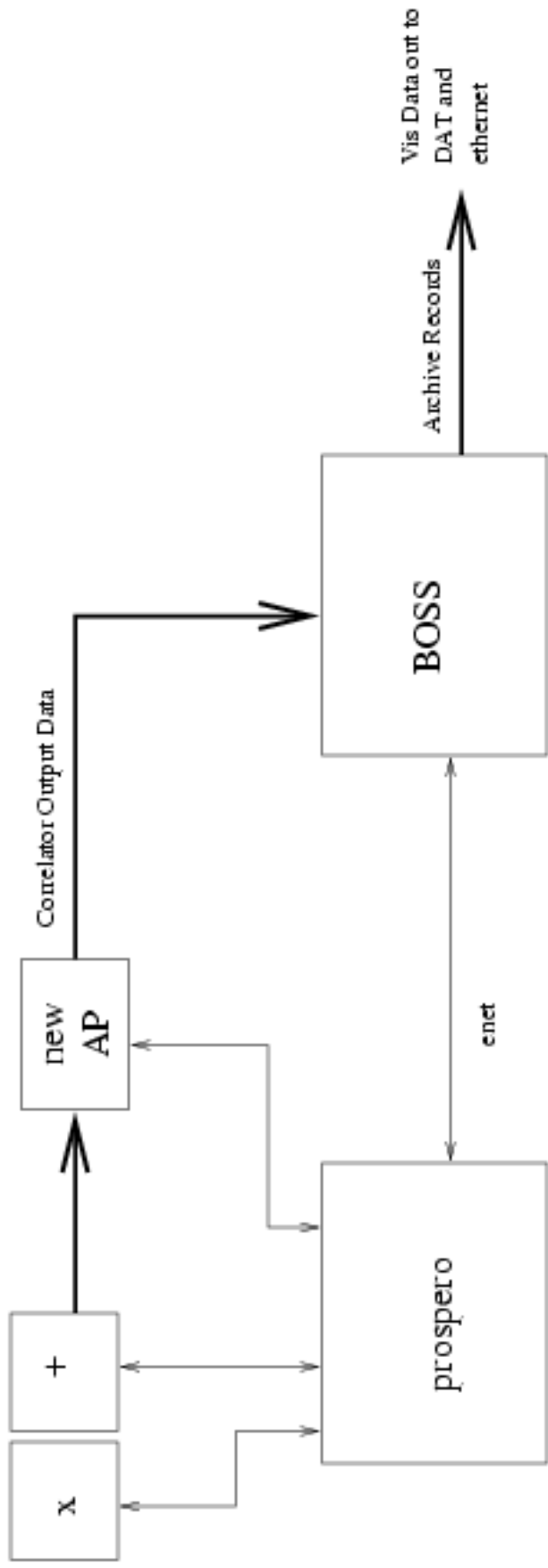
Control interface ethernet

More modern hardware

VME based processors and IO

Easier maintenance; HW and SW

# Current Correlator System



# The New VLA Correlator Controller

## Capabilities

Faster than the old system

Bandpass normalization forbidden

Data selection forbidden

New 'Z' option

Easier visibility into the system

Error reporting and logging

Virtual front panel



# The New VLA Correlator Controller

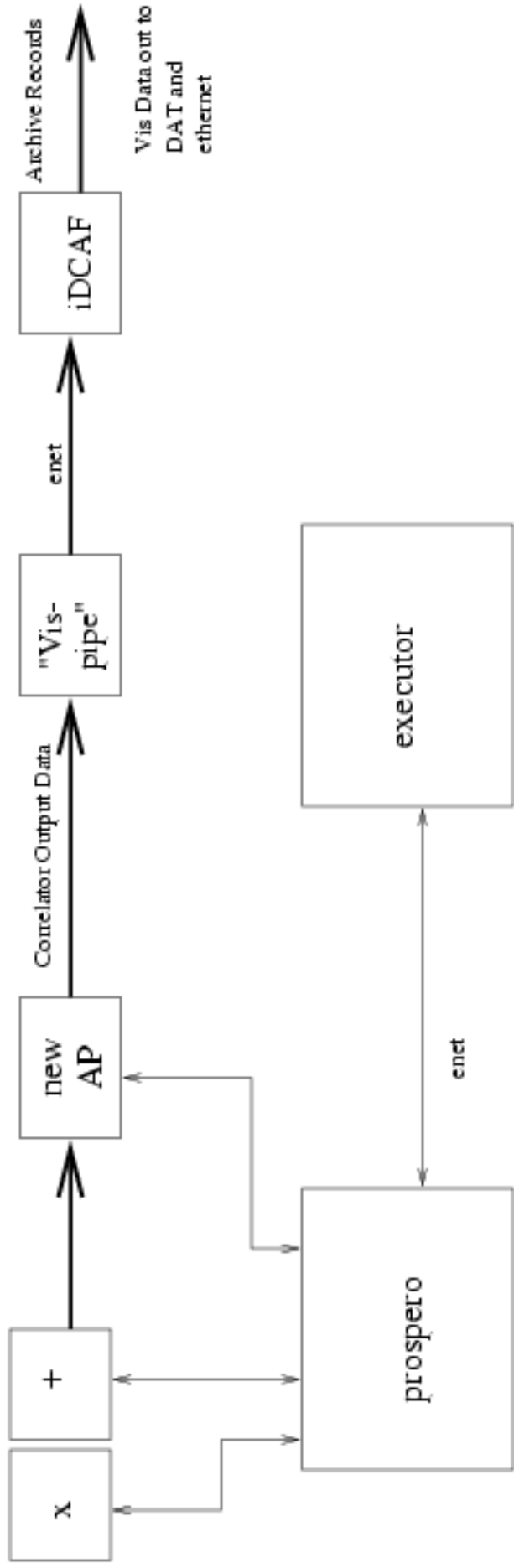
## Future

Provide second visibility path

Continue testing/verification

Possible modifications for transition EVLA

# Future Visibility Data Flow



Details of correlator  
data flow

