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## Swedish supercomputing started in Linköping with Cray 1 (no. 09)



- European Weather
   Forecasting Center
   in Reading, UK. First time
   forecasting by solving
   equations! Today Climate
   Modeling
- Aquired 1983 by Saab, Linköping (2nd hand, 33 million SwCr) for development of JAS jet fighter (aerodynamics solid mechanics)

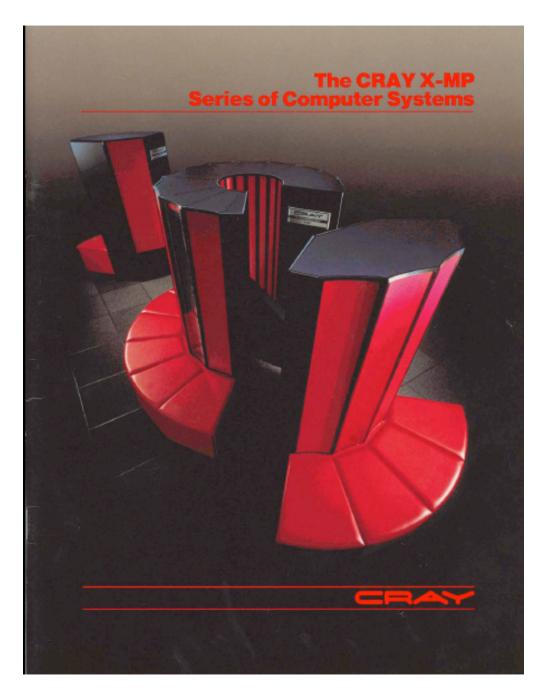


## Cray 1 (no. 09)

- Owned by Saab, available to academic user via the Swedish Research Council.
- Served between 1983-89.
- Now at the National
   Museum of Science and
   Technology in Stockholm.
   (cf an airplane museum
   must have a Spitfire)

## National Supercomputer Centre (NSC) at Linköping University

- NSC was created 88/89, first academic super-computer centre with Saab as partner.
- A Cray XMP, also 2nd hand was aquired for 55 million SwCr.
- New feature: The SSD (Solid State Storage Device)
- Availble via Sunet (64 kbit/s), smart card login
- (Too) strict security



Served from 1989...
replaced by other
Cray vector, T3E,...
more and more
parallel machines,
grids and storage for
LHC to find Higg's

Sunet upgraded

"Webinterfaced" computing



CRAY X-MP/416 supercomputer in C building at Linköping University, Linköping, Sweden. This computer was in service at the university from 1989 to 1993, replacing an earlier CRAY-1.

## New hardware ideas?

- Optical computers
- New materials like GaAs, Organic,
   Graphene, etc. Silicon remains.
- Quantum computers
- Spintronics (Thin Film Physics), nanopatterned materials (quantum dots)

