JET PROPULSION LABORATORY INTEROFFICE MEMORANDUM

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August 1, 1988

The Slooow Benchmark

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The Slooow benchmark has three versions. Slooow Mark One produced the wildly irratic times with TW109. Slooow Mark Two produced mildly irratic times with TW110 by swamping the message system. Slooow Mark Three has been designed but has yet to be implemented.

Slooow Philosophy

The limits the Slooow benchmark attempt to stress include: high fan in, high fan out

Mark One Slooow:

Event steps:

1. for each message magic.number += message.contents.
2. magic.number -= number.of.Slooow.objects.
3. out.message.contents = magic.number.
4. for each Slooow.object send it out.message for time now + 1.

Mark Two Slooow:

Event steps:

1. out.message.contents = message.count.
2. for each object.in.list send it out.message for time now + 1.

Mark Three Slooow:

Event steps:

if now mod (number.of.Slooow.objects + 1) is not zero

1A. for each message magic.number += message.contents.

else

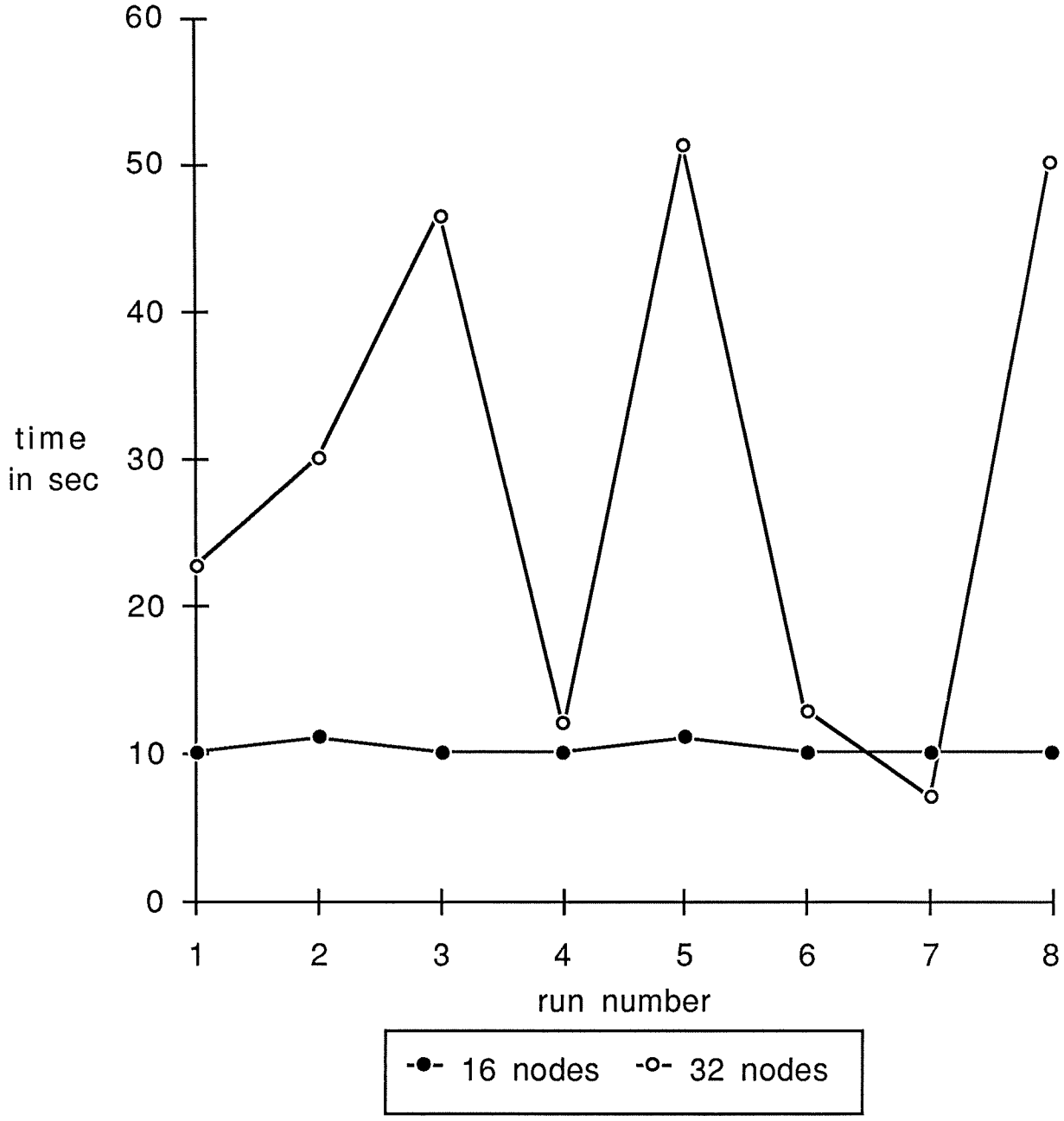
1B. magic.number -= number.of.Slooow.objects.

2B. out.message.contents = magic.number.

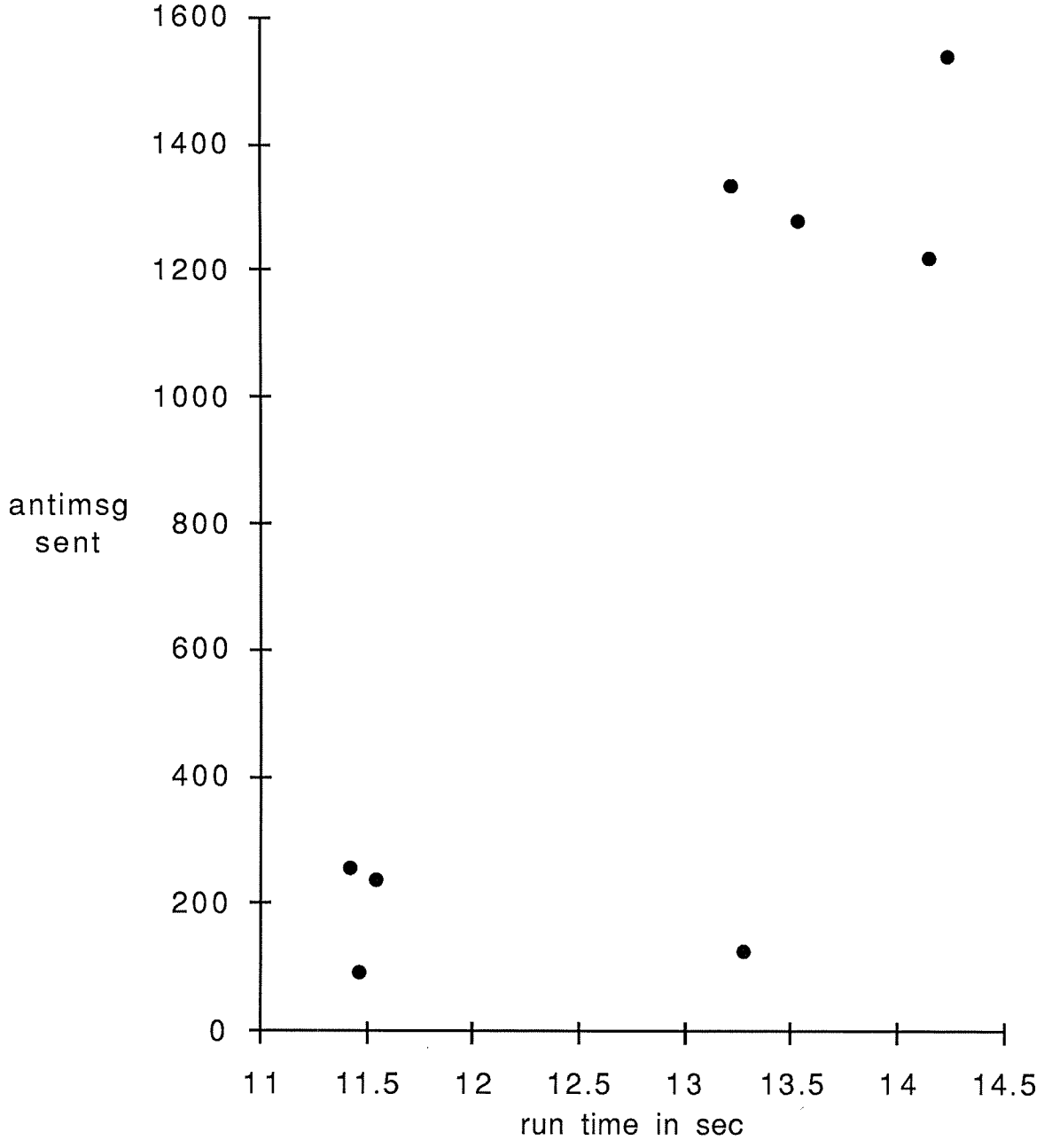
3B. for each Slooow.object send it out.message for time now + 1 + my.Slooow.object.number.

4B. send wake.up.message to self for time
now + 1 + number.of.Slooow.objects.

Slooow Benchmark
16 vs 32 node runs
sfb 27 May 1988



Slooow Benchmark
16 node runs
sfb 3 jun 1988
tw110 end time 20



Slooow Benchmark
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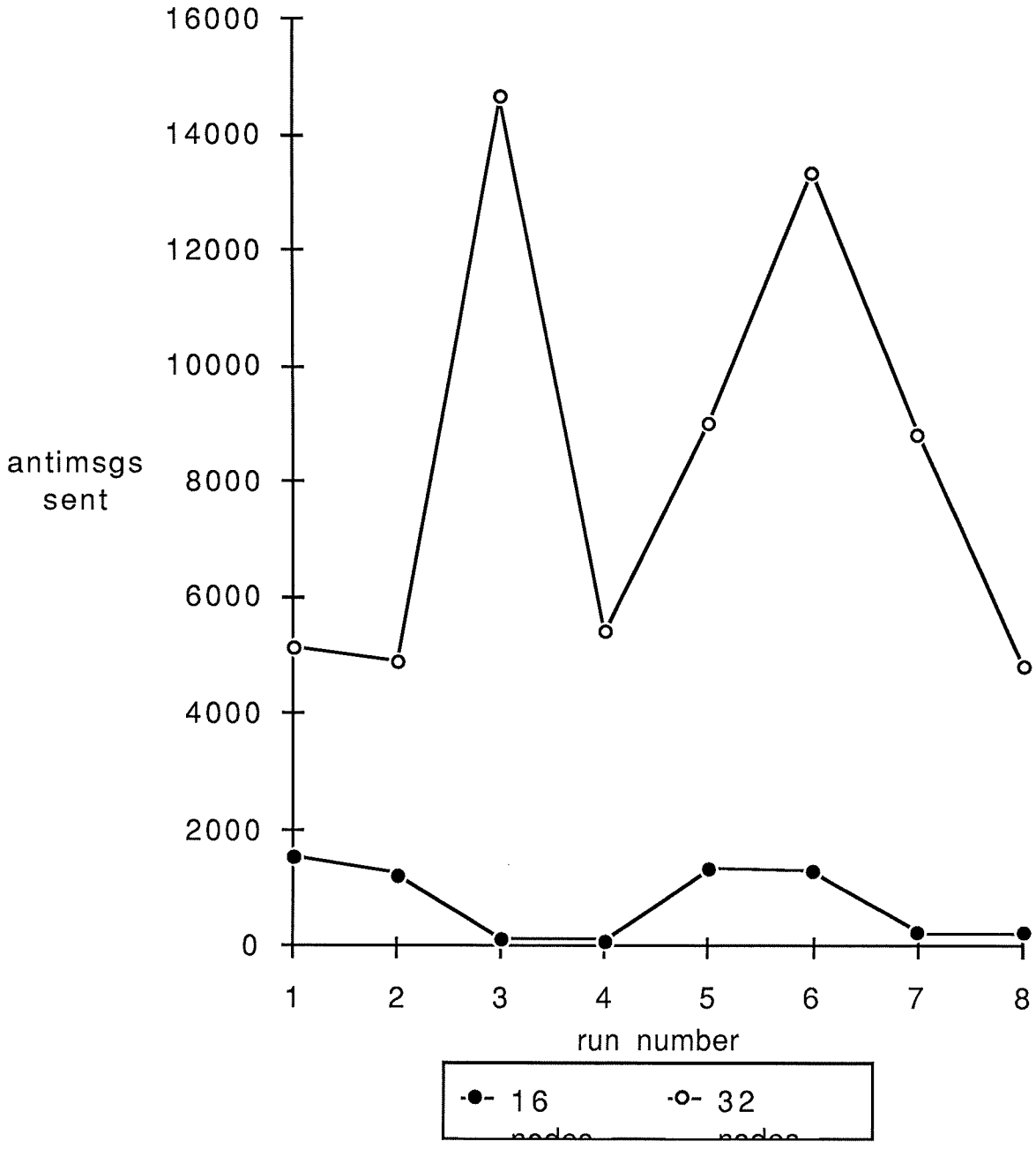

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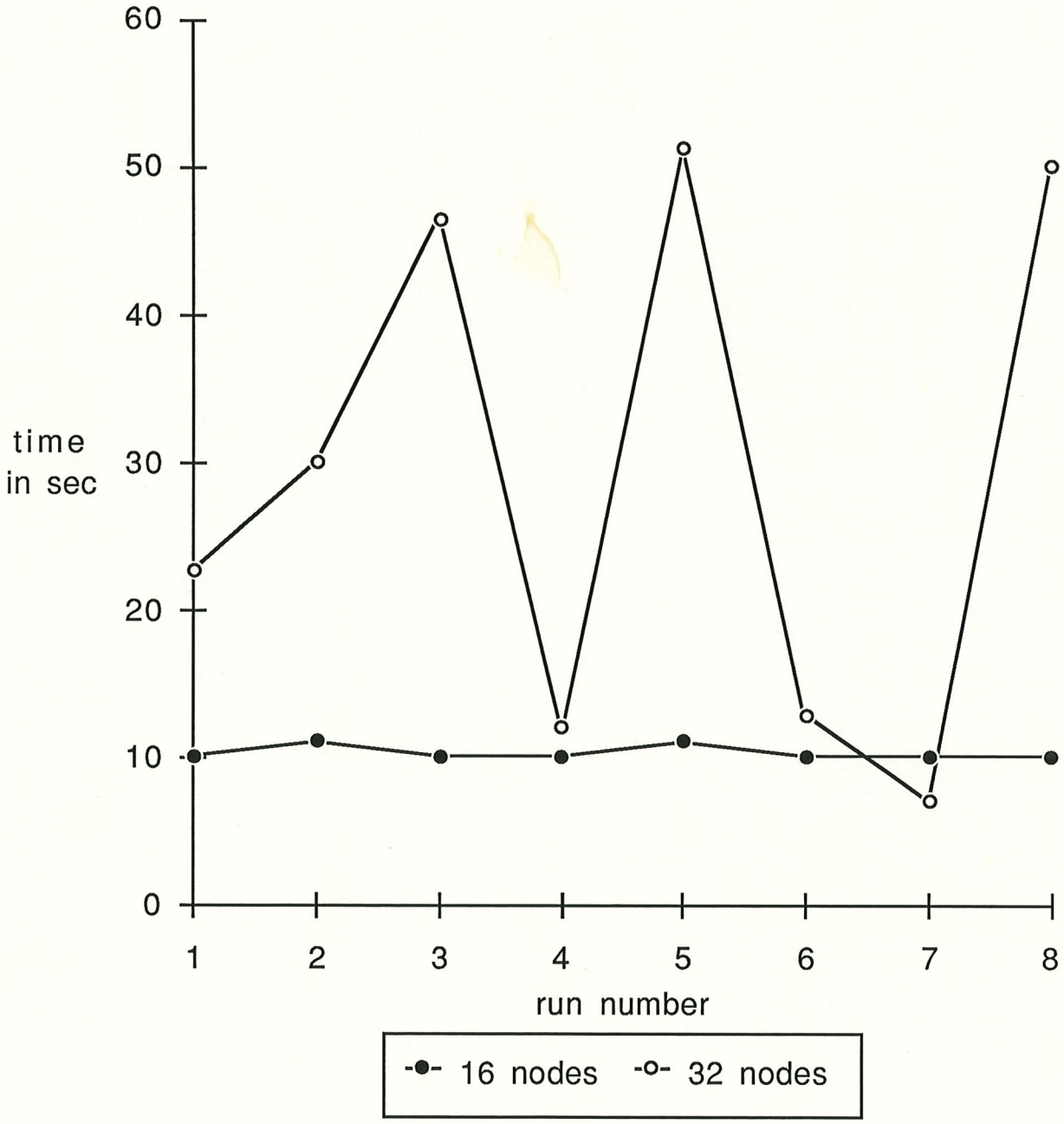

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