

# **Revisions to RFC2001**

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TCPIMPL Working Group,  
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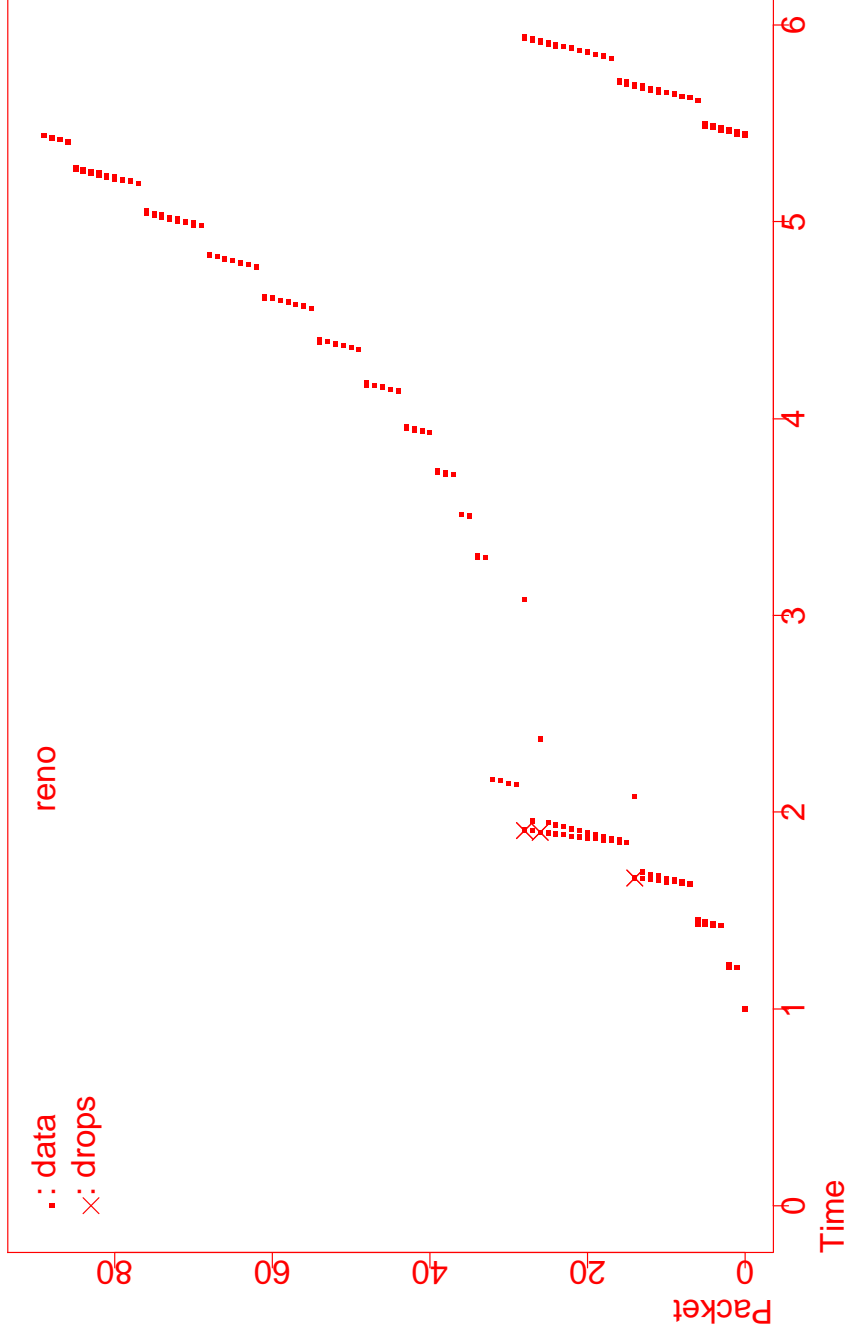
## **References for NewReno:**

Hoe, J., "Improving the Start-up Behavior of a Congestion Control Scheme for TCP", SIGCOMM 96, August 1996.

Fall, K. and Floyd, S., "Simulation-based Comparisons of Tahoe, Reno, and Sack TCP", CCR, July 1996.

URL "<http://www-nrg.ee.lbl.gov/nrg-papers.html>".

## Reno: Unnecessary retransmit timeout:

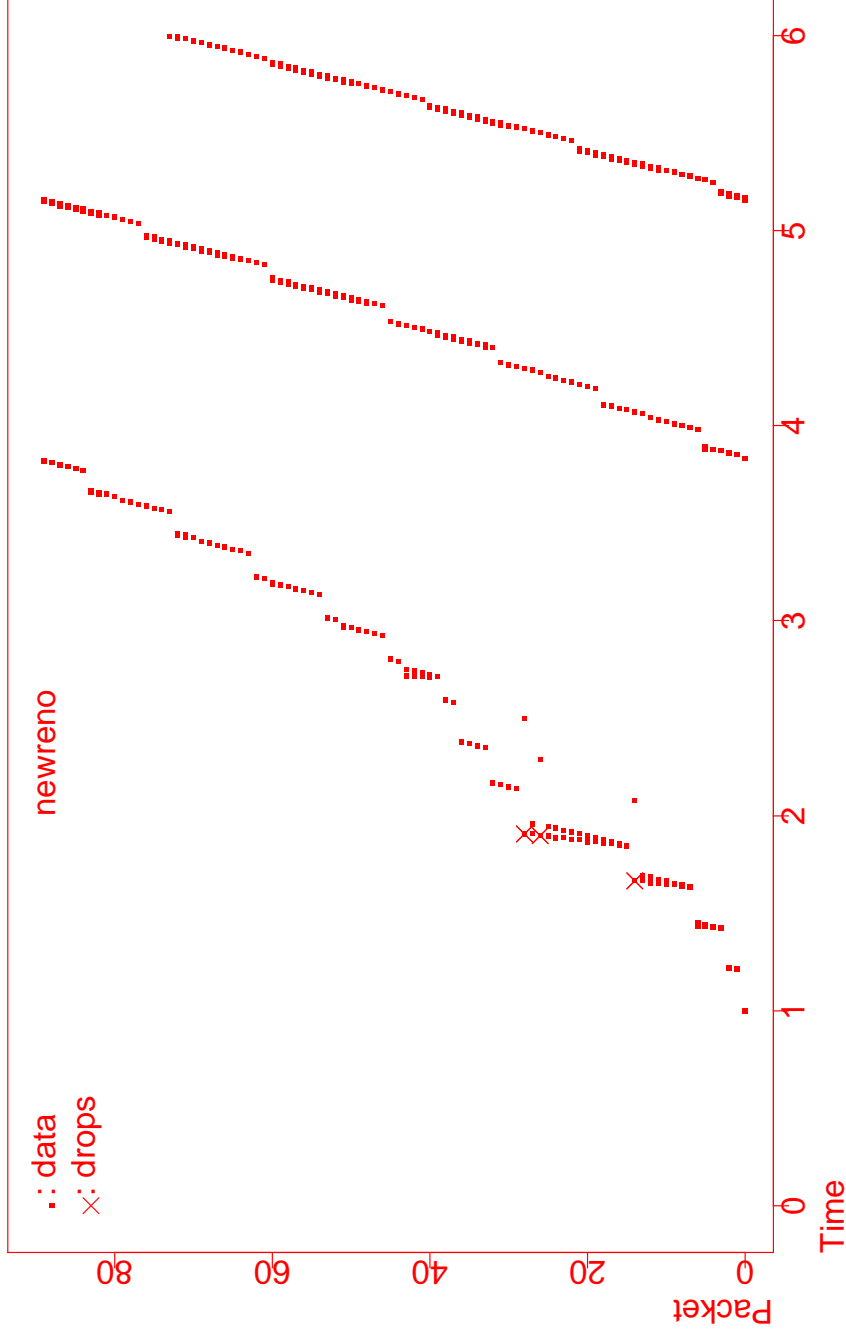


Reno congestion control, unnecessary retransmit timeout.

In ns-2, in tcl/test:

```
ns test-suite-rfc2001.tcl reno
```

## NewReno: No unnecessary retransmit timeout:



NewReno congestion control - no unnecessary retransmit timeout.

In ns-2, in tcl/test:

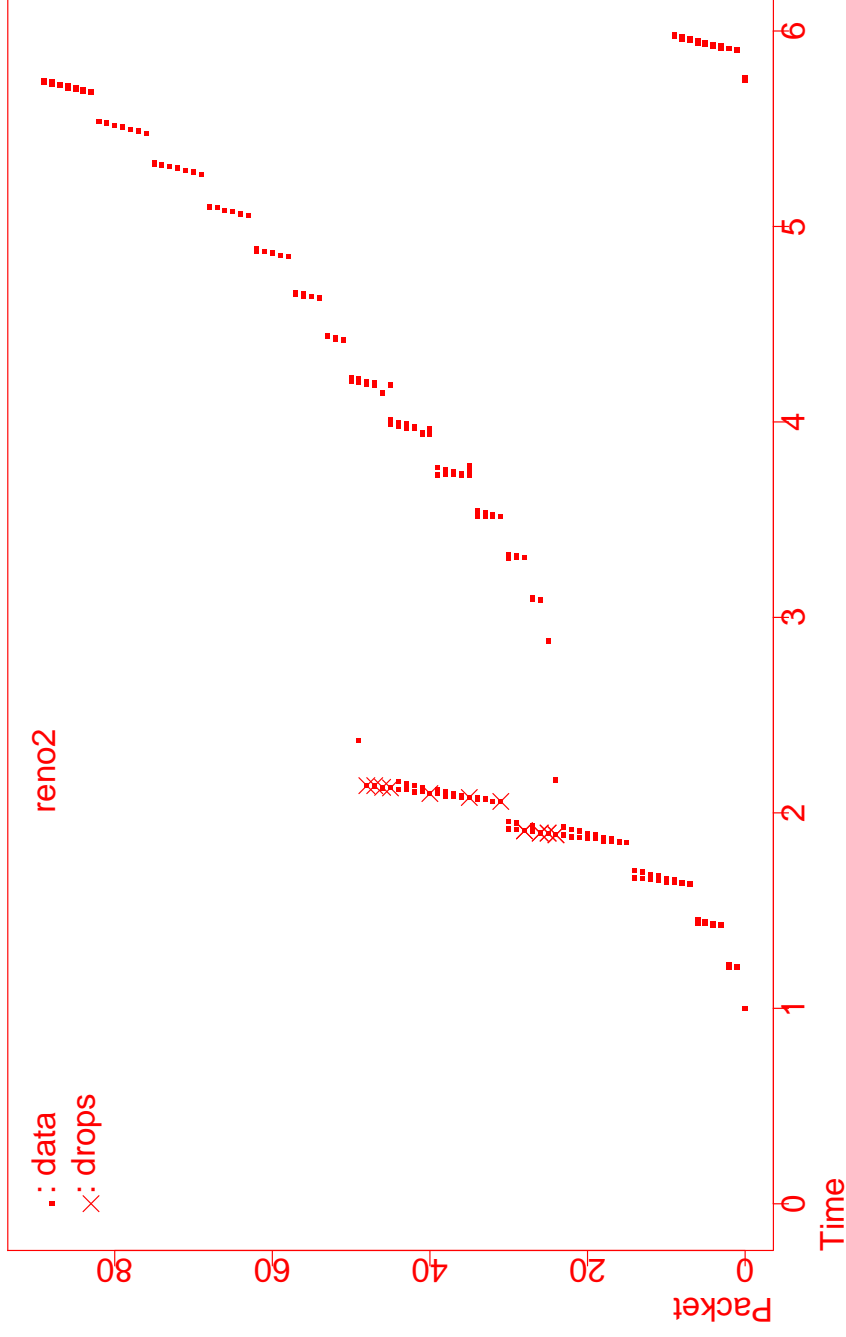
```
ns test-suite-rfc2001.tcl newreno
```

### **References for avoiding multiple fast retransmits:**

Floyd, S., "TCP and Successive Fast Retransmits". Technical report, October 1994.

Available from "<http://www-nrg.ee.lbl.gov/floyd/notes.html>".

## Reno, with unnecessary multiple fast retransmits.

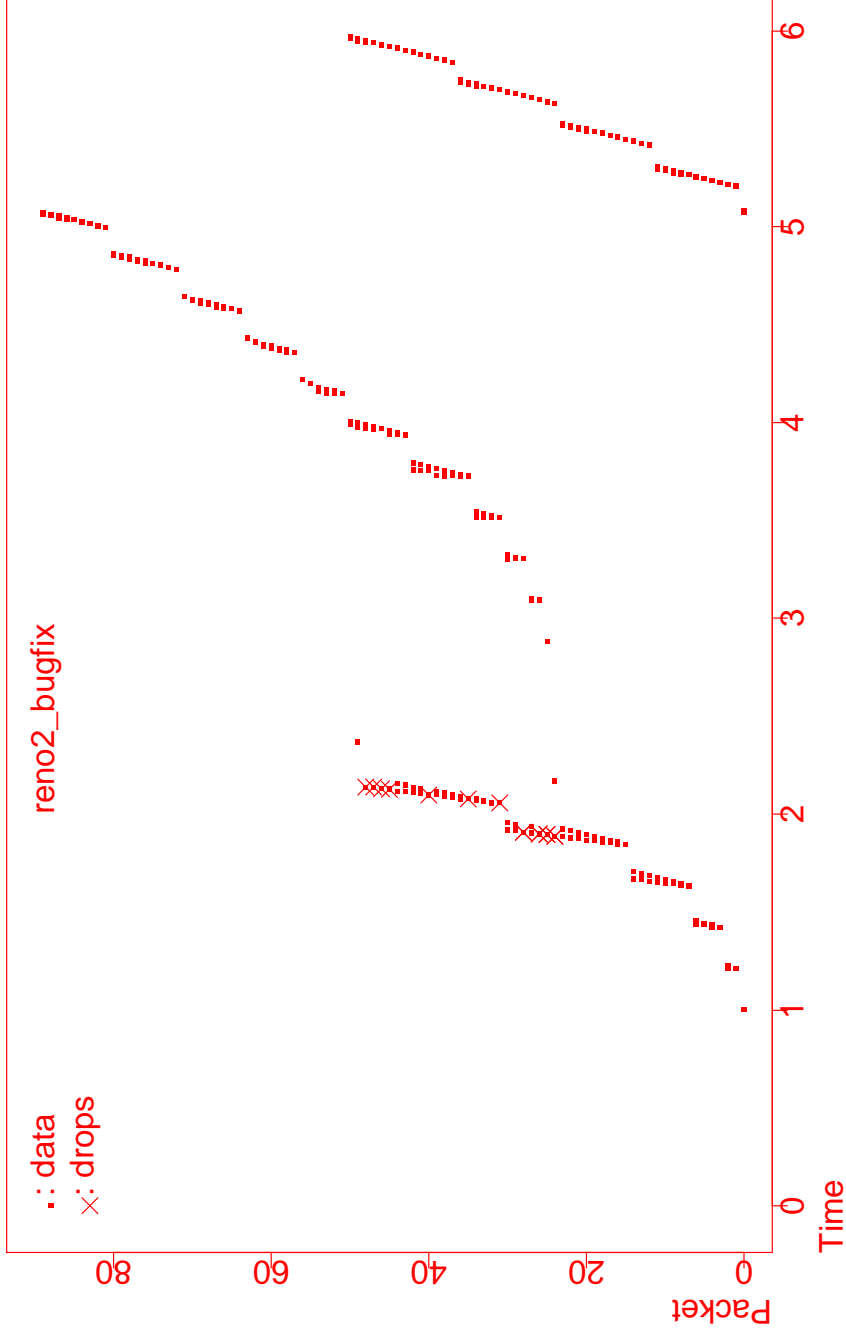


Reno congestion control. Unnecessary multiple fast retransmits.

In ns-2, in tcl/test:

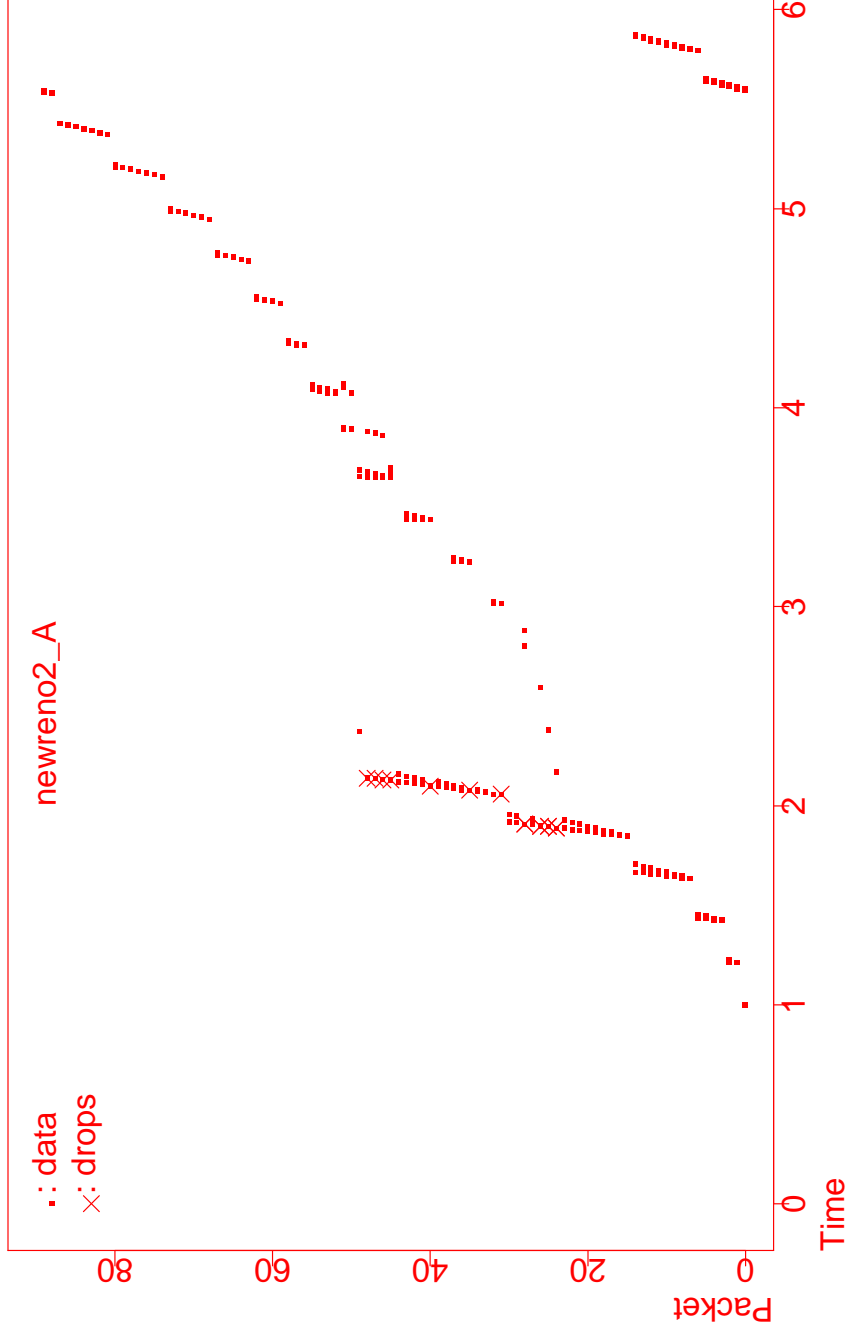
```
ns test-suite-rfc2001.tcl reno2
```

## Reno, with bugfix for unnecessary multiple fast retransmits.



In ns-2, in tcl/test:  
ns test-suite-rfc2001.tcl reno2\_bugfix

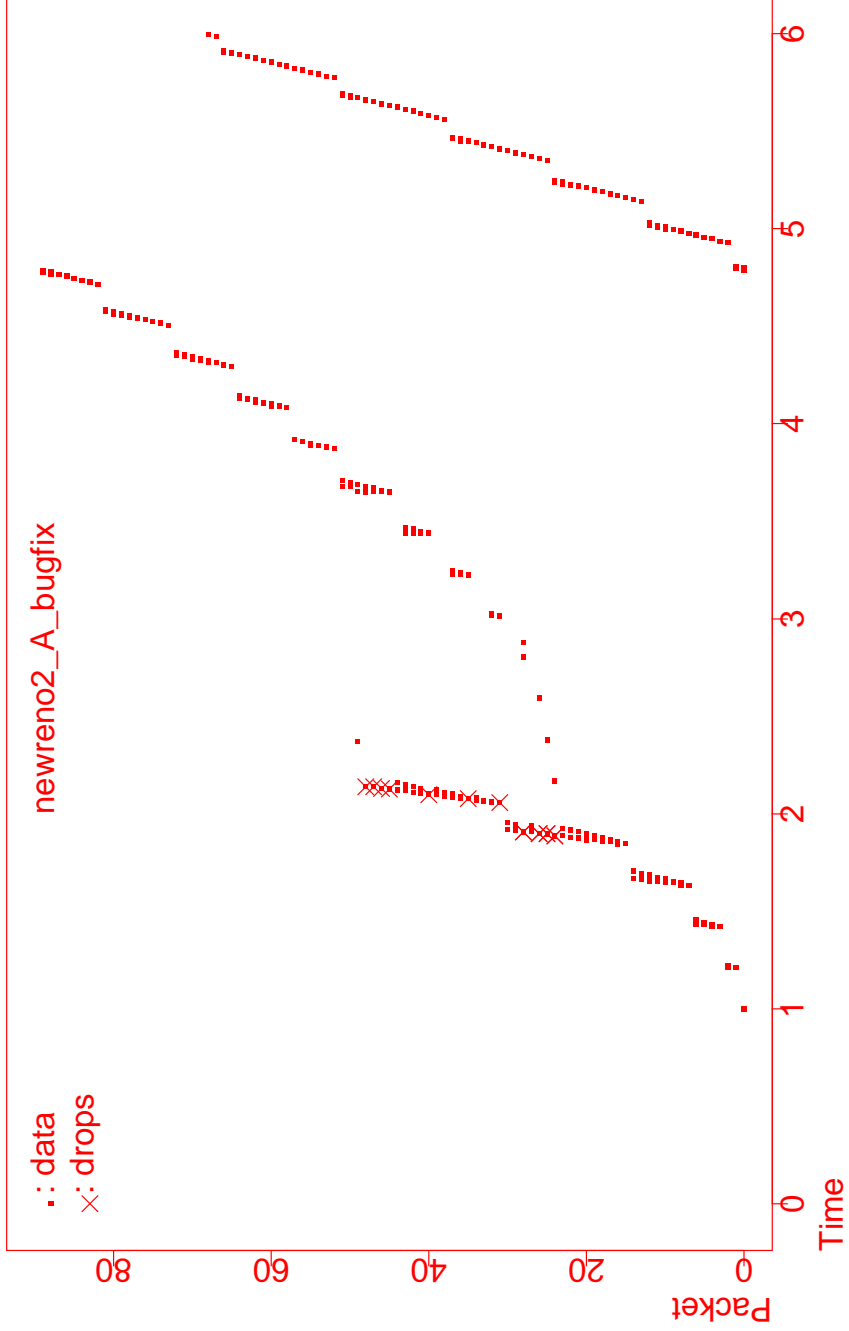
# NewReno Version A, with unnecessary multiple fast retransmits.



In ns-2, in tcl/test:  
ns test-suite-rfc2001.tcl newreno2\_A

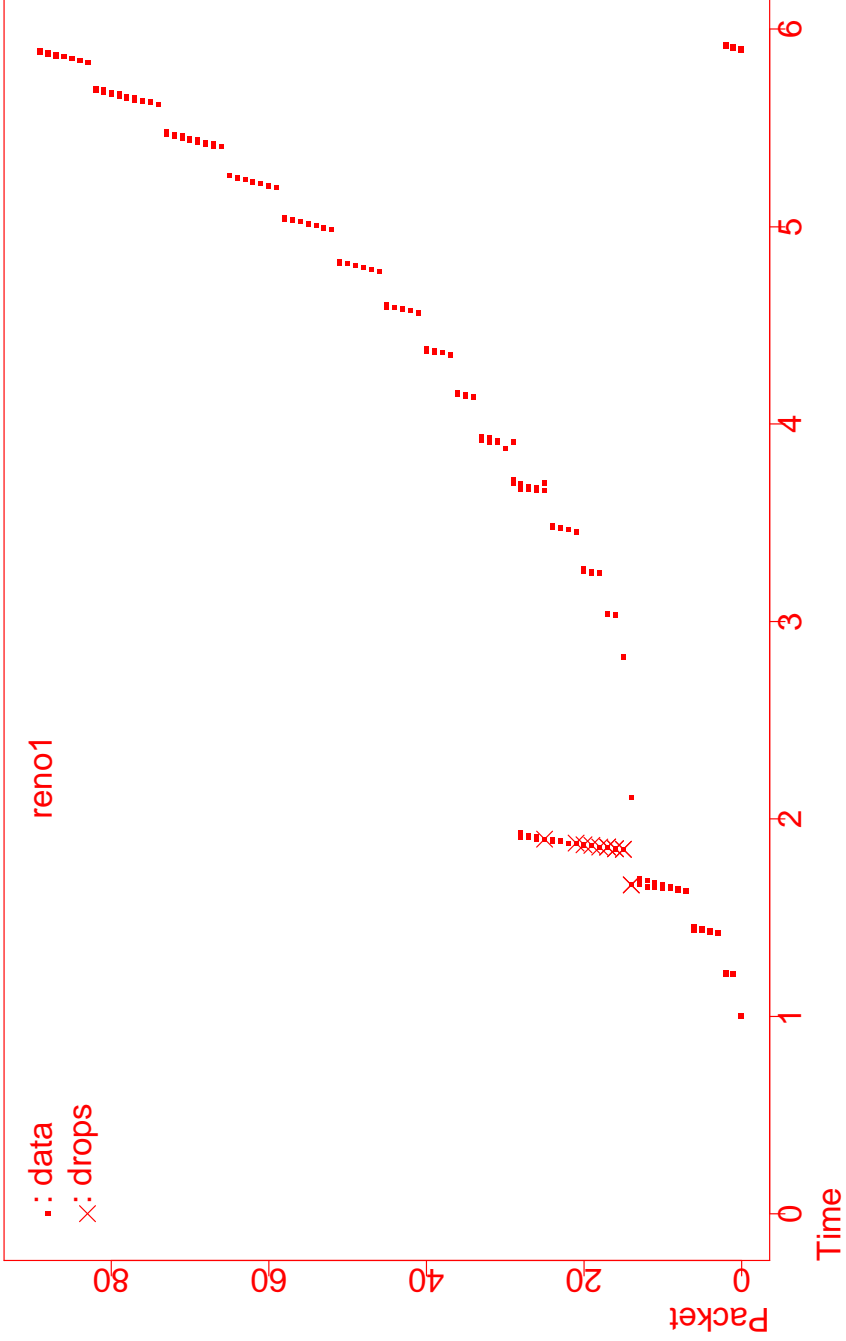


# NewReno, with bugfix for unnecessary multiple fast retransmits.



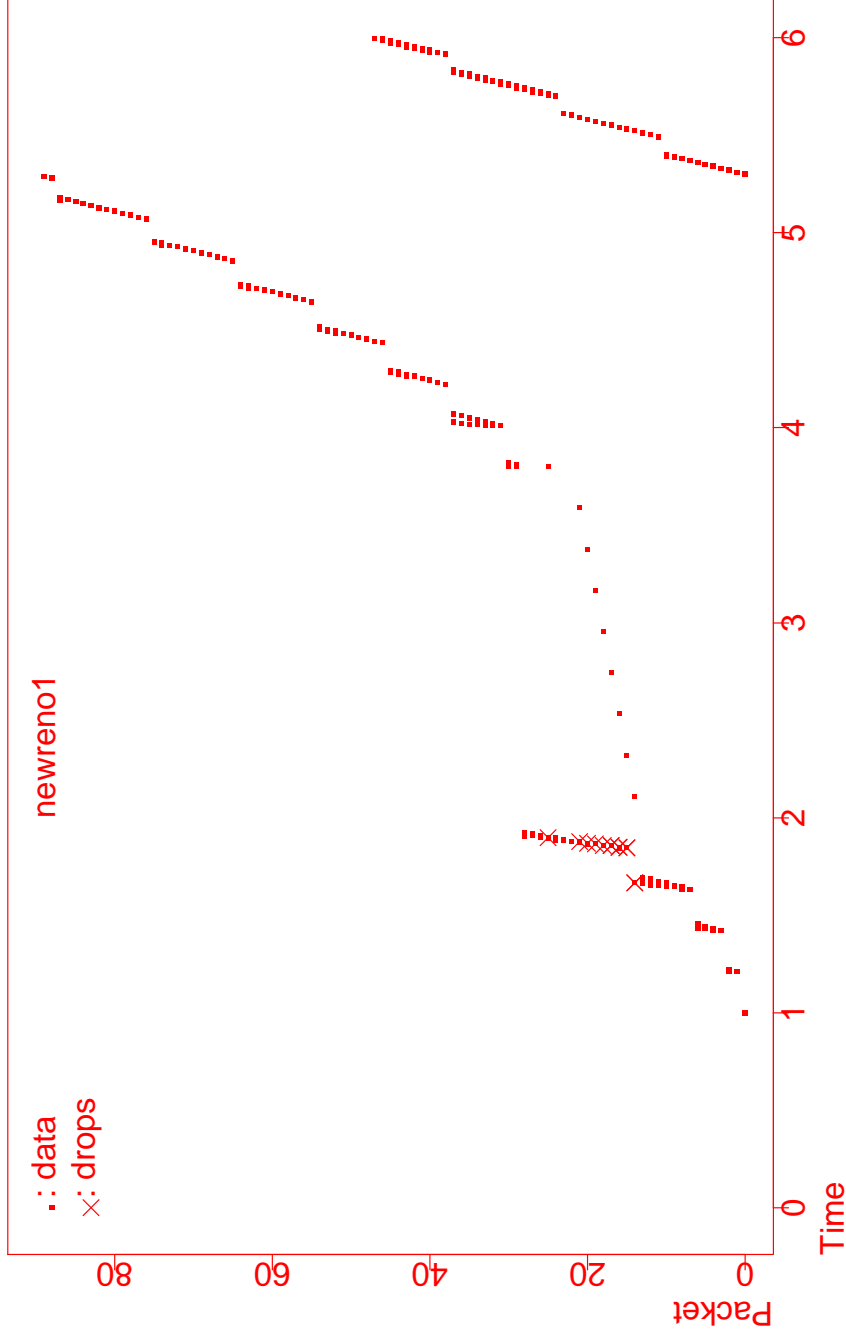
In ns-2, in tcl/test:  
ns test-suite-rfc2001.tcl newreno2\_A\_bugfix

**Reno: Unnecessary retransmit timeout, and unnecessary fast retransmit:**



In ns-2, in tcl/test:  
ns test-suite-rfc2001.tcl reno1

## NewReno:

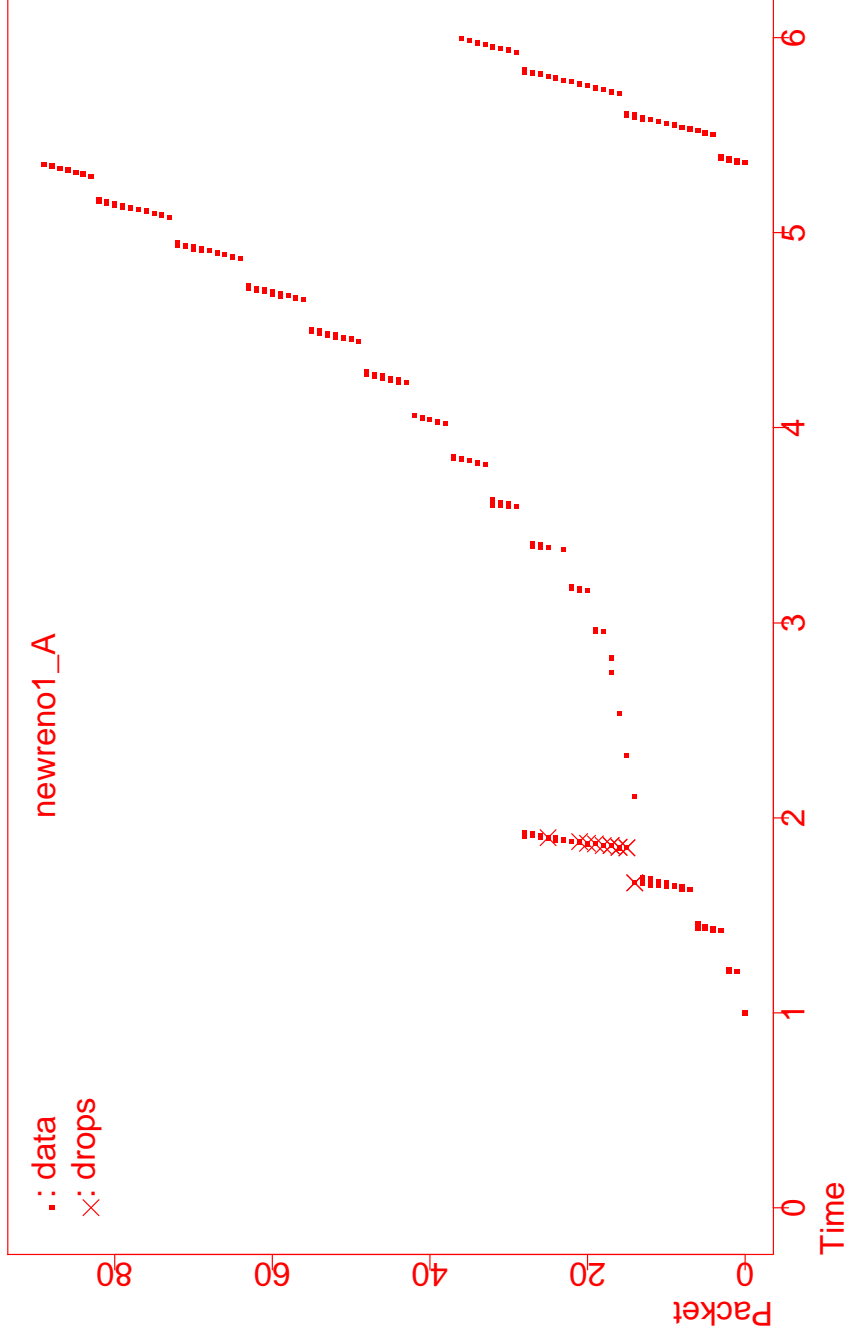


NewReno congestion control.

In ns-2, in tcl/test:

```
ns test-suite-rfc2001.tcl newreno1
```

## NewReno, version A:



NewReno congestion control. Version A.

In ns-2, in tcl/test:

```
ns test-suite-rfc2001.tcl newreno1_A
```