Instead of sending three separate packets for each ttl I just send one.

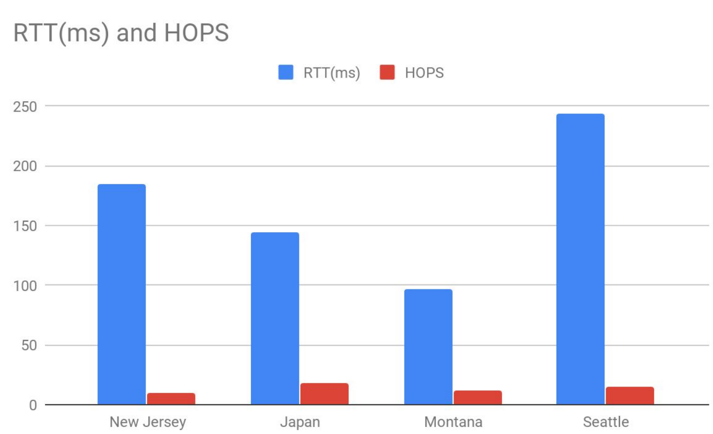
1.

The traceroute program works similarly to my ping program. By sending packets to the target IP address and waiting for the response. The time to live of the packets start at 1, so upon the first router it passes through, the packet it “dies”. Then you increment the ttl and send the next packet. When the packet “dies”, the router it died at sends a response back letting you know where it died. Thus by increasing the ttl slowly you can find out the set of routers it takes.

2.

Order of hops greatest to smallest, of reachable routers, unless specified target was not reached

Chicago: planetlab5.cs.uiuc.edu; 20
Philadelphia: planetlab1.cis.upenn.edu; 19
Japan: planetlab4.goto.info.waseda.ac.jp (reachable); 18
Israel: planetlab2.tau.ac.il; 18
New York: planetlab1.cs.columbia.edu; 17
Boston: lefthand.eecs.harvard.edu; 16
France: planetlab2.utt.fr; 15
Germany: planet1.zib.de; 15
Seattle: planetlab02.cs.washington.edu (reachable); 14
Colorado: planetlab2.cs.colorado.edu; 14
Atlanta: planet1.cc.gt.atl.ga.us; 13
Montana: pl1.cs.montana.edu (reachable); 12
New Jersey: planetlab1.rutgers.edu (reachable); 10
Houston: ricepl-4.cs.rice.edu; 8
Palo Alto: pllx1.parc.xerox.com; 0 seg fault
Korea: netapp6.cs.kookmin.ac.kr; 0 seg fault
England: planetlab-1.imperial.ac.uk; 0 seg fault
DC: planetlab1.cs.georgetown.edu; 0 seg fault



There does not seem to be any correlation.

4.

Unfortunately these do not help as my maxttl was very high at a 30, which according to linux traceroute is the default for -m operand. Some I let run for close to 100 for no better of a result. Same thing with -f, since -f just starts the ttl at a higher point in the traceroute, meaning that even if I started at 50, if I wasn't getting a good response 100 I won’t get one starting at 50.