set val(chan) Channel/WirelessChannel;

set val(prop) Propagation/TwoRayGround;

set val(netif) Phy/WirelessPhy;

set val(mac) Mac/802\_11;

set val(ifq) Queue/DropTail/PriQueue;

set val(ll) LL;

set val(ant) Antenna/OmniAntenna;

set val(ifqlen) 50;

set val(nn) 6;

set val(rp) AODV;

set val(x) 500;

set val(y) 500;

set ns [new Simulator]

set tracefile [open wireless.tr w]

$ns trace-all $tracefile

set namfile [open wireless.nam w]

$ns namtrace-all-wireless $namfile $val(x) $val(y)

set topo [new Topography]

$topo load\_flatgrid $val(x) $val(y)

create-god $val(nn)

set channel1 [new $val(chan)]

set channel2 [new $val(chan)]

set channel3 [new $val(chan)]

$ns node-config -adhocRouting $val(rp) \

-llType $val(ll) \

-macType $val(mac) \

-ifqType $val(ifq) \

-ifqLen $val(ifqlen) \

-antType $val(ant) \

-propType $val(prop) \

-phyType $val(netif) \

-topoInstance $topo \

-agentTrace ON\

-macTrace ON\

-routerTrace ON\

-movementTrace ON\

-channel $channel1

set n0 [$ns node]

set n1 [$ns node]

set n2 [$ns node]

set n3 [$ns node]

set n4 [$ns node]

set n5 [$ns node]

$n0 random-motion 0

$n1 random-motion 0

$n2 random-motion 0

$n3 random-motion 0

$n4 random-motion 0

$n5 random-motion 0

$ns initial\_node\_pos $n0 20

$ns initial\_node\_pos $n1 20

$ns initial\_node\_pos $n2 20

$ns initial\_node\_pos $n3 20

$ns initial\_node\_pos $n4 20

$ns initial\_node\_pos $n5 50

$n0 set X\_ 10.0

$n0 set Y\_ 20.0

$n0 set Z\_ 0.0

$n1 set X\_ 210.0

$n1 set Y\_ 230.0

$n1 set Z\_ 0.0

$n2 set X\_ 100.0

$n2 set Y\_ 200.0

$n2 set Z\_ 0.0

$n3 set X\_ 150.0

$n3 set Y\_ 230.0

$n3 set Z\_ 0.0

$n4 set X\_ 430.0

$n4 set Y\_ 320.0

$n4 set Z\_ 0.0

$n5 set X\_ 270.0

$n5 set Y\_ 120.0

$n5 set Z\_ 0.0

$ns at 1.0 "$n1 setdest 490.0 340.0 25.0"

$ns at 1.0 "$n4 setdest 300.0 130.0 5.0"

$ns at 1.0 "$n5 setdest 190.0 440.0 15.0"

$ns at 20.0 "$n5 setdest 100.0 200.0 30.0"

set tcp [new Agent/TCP]

set sink [new Agent/TCPSink]

$ns attach-agent $n0 $tcp

$ns attach-agent $n5 $sink

$ns connect $tcp $sink

set ftp [new Application/FTP]

$ftp attach-agent $tcp

$ns at 1.0 "$ftp start"

set udp [new Agent/UDP]

set null [new Agent/Null]

$ns attach-agent $n2 $udp

$ns attach-agent $n3 $null

$ns connect $udp $null

set cbr [new Application/Traffic/CBR]

$cbr attach-agent $udp

$ns at 1.0 "$cbr start"

$ns at 30.0 "finish"

proc finish {} {

global ns tracefile namfile

$ns flush-trace

close $tracefile

close $namfile

exit 0

}

puts "Starting Simulation"

$ns run