Initial conditions:

No of locations: 7

Threshold: 60

No of supply centres: 2

Capacity of Large vehicle:40

No of large vehicles at the supply centres: 1

No of small vehicles at supply centres: 3

loc 1: (15,14) resources: 30 large vehicles: 0 small vehicle: 1

loc 2: (10,18) resources: 30 large vehicles: 0 small vehicle: 1

loc 3: (6,9) resources: 40 large vehicles: 0 small vehicles: 0

loc 4: (10,2) resources: 30 large vehicles: 0 small vehicles: 0

loc 5: (5,16) resources: 30 large vehicles: 0 small vehicles: 0

loc 6: (19,20) resources: 80 large vehicles: 0 small vehicles: 1

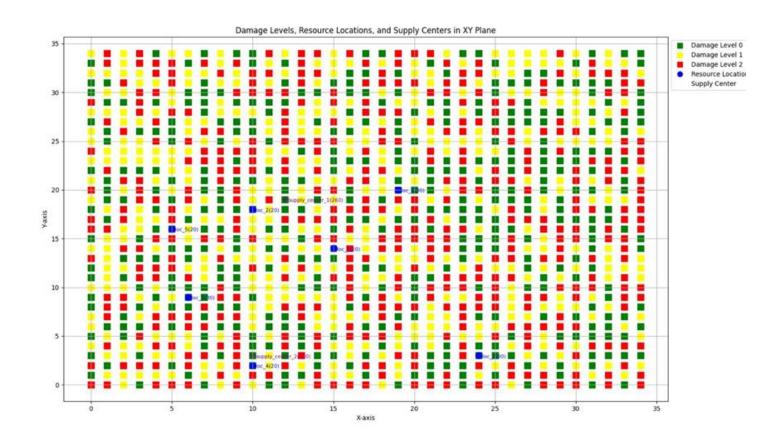
loc 7: (24,3) resources: 90 large vehicles: 0 small vehicles: 0

supply 1: (12,19) resources: 260

supply 2: (10,3) resources: 130

X: 10

Plot of damage level at every point and locations



Assumptions:

supply 1: (S1,S2,S3,L1)

supply 2: (S4,S5,S6,L2)

loc 1: (S7)

loc 2: (S8)

loc 6: (S9)

Output:

 $S1:(12,19)(s,(10,18,20))\rightarrow(12,18)\rightarrow(11,18)\rightarrow(10,18)(d)$

 $S2:(12,19),(s,(10,18,20))\rightarrow(12,18)\rightarrow(11,18)\rightarrow(10,18)(d)$

S3:(12,19),(s,(15,14,20))->(12,18)->(11,18)->(11,17)->(11,16)->(11,15)->(11,14)->(12,14)->(13,14)->(14,14)->(15,14)(d)

\$7:(15, 14)->(14, 14)->(13, 14)->(12, 14)->(11, 14)->(11, 15)->(11, 16)->(11, 17)->(11, 18)->(12,18)->(12,19),(s,(15,14),20)->(12,18)->(11,18)->(11,17)->(11,16)->(11,15)->(11,14)->(12,14)->(13,14)->(14,14)->(15,14)(d)

S4:(10,3),(s,(6,9,20))->(10,4))->(10,5))->(10,6)->(10,7)->(10,8)->(10,9)->(10,10)->(10,11)->(9,11)->(8,11)->(7,11)->(7,10)->(7,9)->(6,9)(d)

S5:(10,3),(s,(6,9,20))->(10,4))->(10,5))->(10,6)->(10,7)->(10,8)->(10,9)->(10,10)->(10,11)->(9,11)->(8,11)->(7,11)->(7,10)->(7,9)->(6,9)(d,s,(5,16),10))->(7,9)->(7,10)->(7,11)->(7,12)->(7,13)->(6,13)->(6,14)->(6,15)->(6,16)->(5,16)(d)

S6:(10,3),(s,(5,16,20))->(10,4))->(10,5))->(10,6)->(10,7)->(10,8)->(10,9)->(10,10)->(10,11)->(9,11)->(8,11)->(7,11)->(7,12)->(7,13)->(6,13)->(6,14)->(6,15)->(6,16)->(5,16)(d)

L2:(10,3),(s,(10,2,40))->(10,2)(d)

Destination: Time

loc 1:20

loc 2:3

loc 3:14

loc 4:1

loc 5:24

loc 6:0

loc 7:0