If the season is early storms, and the days since last rain is less than or equal to 3
Then the available biomass is negligible

\*

#### Rule Number 2

If the season is early storms, and
 the days since last rain is greater than 3, and
 the grass biomass is X
Then
 the available biomass is X

## Rule Number 100

If the season is early storms, and
 the days since last rain is greater than 3, and
 the litter mass is X
Then
 the available biomass is X

## Rule Number 3

If the season is monsoon, and
the years since fire is greater than 1, and
the days since last rain is less than 3
Then
the available biomass is negligible

#### Rule Number 4

If the season is monsoon, and
the years since fire is less than or equal to 1
Then
the available biomass is negligible

### Rule Number 5

If the season is one of [cool,cold,hot], and
 the grass biomass is X
Then
 the available biomass is X

#### Rule Number 101

If the season is one of [cool,cold,hot], and
 the litter mass is X
Then
 the available biomass is X

If the season is hot Then the degree of curing is 100

Rule Number 6

If the season is monsoon, and the years since fire is less than 1
Then the fire danger is negligible

Rule Number 7

If the season is monsoon, and
the years since fire is greater than or equal to 1, and
the days since last rain is less than 3
Then
the fire danger is negligible

Rule Number 8

If the season is cold, and
the 3pm humidity is less than 40, and
the wind strength is high
Then
the fire danger is very high

Rule Number 9

If the season is cold, and
the 3pm humidity is less than 40, and
the wind strength is calm
Then
the fire danger is low

Rule Number 10

If the season is cold, and
the 3pm humidity is greater than or equal to 40, and
the wind strength is calm
Then
the fire danger is low

Rule Number 11

If the season is cold, and
the 3pm humidity is greater than or equal to 40, and
the wind strength is moderate

Then

If the season is cold, and the 3pm humidity is greater than or equal to 40, and the wind strength is high

\*

Then the fire danger is high

## Rule Number 13

If the season is hot, and the wind strength is calm
Then the fire danger is moderate

## Rule Number 14

If the season is hot, and the wind strength is moderate
Then the fire danger is very high

# Rule Number 15

If the season is hot, and the wind strength is high Then the fire danger is extreme

## Rule Number 16

If the season is cool, and
the degree of curing is less than 60
Then
the fire danger is negligible

## Rule Number 17

If the season is cool, and
the degree of curing is greater than or equal to 60, and
the degree of curing is less than 100

Then
the fire danger is low

#### Rule Number 18

If the season is cold, and the 3pm humidity is less than 40, and the wind strength is moderate
Then

the fire danger is high

## Rule Number 19

If the season is cool, and
the 3pm humidity is greater than or equal to 40, and
the wind strength is low, and
the degree of curing is 100
Then
the fire danger is low

## Rule Number 20

If the season is hot, and the wind strength is low Then the fire danger is high

#### Rule Number 21

If the season is early storms, and
the days since last rain is less than or equal to 3
Then
the fire danger is negligible

#### Rule Number 22

If the season is knock em down storms
Then
the fire danger is negligible

#### Rule Number 23

If the season is early storms, and
the wind strength is calm, and
the days since last rain is greater than 3
Then
the fire danger is low

## Rule Number 24

If the season is early storms, and the wind strength is low, and the days since last rain is greater than 3. Then the fire danger is low.

## Rule Number 25

If the season is cold, and the 3pm humidity is greater than or equal to 40, and the wind strength is low

the fire danger is low

## Rule Number 26

the season is cold, and the 3pm humidity is less than 40, and the wind strength is low

Then

the fire danger is moderate

## Rule Number 27

the season is cool, and the 3pm humidity is less than 40, and the wind strength is moderate, and the degree of curing is 100 Then the fire danger is moderate

#### Rule Number 28

the season is early storms, and the 3pm humidity is less than 40, and the wind strength is moderate, and the days since last rain is greater than 3 Then the fire danger is moderate

### Rule Number 29

the season is early storms, and the 3pm humidity is less than 40, and the wind strength is high, and the days since last rain is greater than 3 Then the fire danger is high

#### Rule Number 30

the season is early storms, and the 3pm humidity is greater than or equal to 40, and the days since last rain is greater than 3 Then the fire danger is low

## Rule Number 31

the season is cool, and the 3pm humidity is less than 40, and the wind strength is less than moderate, and the degree of curing is 100 Then the fire danger is low

If the season is cool, and
the 3pm humidity is less than 40, and
the wind strength is high, and
the degree of curing is 100
Then
the fire danger is high

Rule Number 33

If the grass flame is none
Then
the fire duration is 0 mins

Rule Number 34

If the litter density is greater than 60 Then there is strong evidence that the fire duration is 1-2 mins

Rule Number 35

If the litter density is less than 25 Then there is strong evidence that the fire duration is 0-30 secs

Rule Number 36

If the litter density is greater than or equal to 25, and the litter density is less than or equal to 60

Then there is strong evidence that the fire duration is 30secs - 1min

Rule Number 37

If the season is knock em down storms
Then
the grass flame is none

Rule Number 38

If the season is monsoon, and the years since fire is less than 1
Then the grass flame is none

Rule Number 39

If the season is monsoon, and
the years since fire is greater than or equal to 1, and
the days since last rain is less than 3

Then
the grass flame is none

Rule Number 40

If the season is early storms, and the days since last rain is less than 3
Then the grass flame is none

Rule Number 41

If the litter density is greater than 50 Then the grass flame is none

Rule Number 42

If the fire danger is negligible Then the grass flame is none

Rule Number 43

If the available biomass is negligible
Then
the grass flame is none

Rule Number 44

If the season is knock em down storms
Then
the grass flame is none

Rule Number 45

If the degree of curing is less than or equal to 60 Then the grass flame is none

Rule Number 46

If the fire danger is high, and the grass type is annual, and the grass biomass is low
Then there is strong evidence that the grass flame is 1500-2000 mm

use avail biomass

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If the fire danger is very high, and the grass type is annual, and the grass biomass is low
Then there is strong evidence that the grass flame is 2000-2500 mm

#### Rule Number 48

If the fire danger is extreme, and the grass type is annual, and the grass biomass is low
Then there is strong evidence that the grass flame is > 2500 mm

#### Rule Number 49

If the fire danger is moderate, and the grass type is annual, and the grass biomass is low
Then there is strong evidence that the grass flame is 1200-1500 mm

#### Rule Number 50

If the fire danger is moderate, and the grass type is annual, and the grass biomass is high Then there is strong evidence that the grass flame is 2000-2500 mm

# Rule Number 51

If the fire danger is low, and the grass type is annual Then there is strong evidence that the grass flame is < 1000 mm

### Rule Number 52

If the fire danger is very high, and the grass type is annual, and the grass biomass is high Then there is strong evidence that the grass flame is 3000-3500 mm

## Rule Number 53

If the fire danger is very high, and the grass type is annual, and the grass biomass is moderate.
Then there is strong evidence that

If the fire danger is high, and the grass type is annual, and the grass biomass is high Then there is strong evidence that the grass flame is 2500-3000 mm

#### Rule Number 55

If the fire danger is extreme, and the grass type is annual, and the grass biomass is high Them there is strong evidence that the grass flame is > 3500 mm

#### Rule Number 56

If the fire danger is extreme, and the grass type is annual, and the grass biomass is moderate
Then there is strong evidence that the grass flame is > 3000 mm

## Rule Number 57

If the fire danger is high, and the grass type is annual, and the grass biomass is moderate Then there is strong evidence that the grass flame is 2000-2500 mm

#### Rule Number 58

If the fire danger is moderate, and the grass type is annual, and the grass biomass is moderate Then there is strong evidence that the grass flame is 1500-2000 mm

#### Rule Number 59

If the years since fire is less than 1
Then there is strong evidence that
the litter density is 0

## Rule Number 60

If the tree canopy cover is greater than or equal to 40, and the years since fire is 2.

If the tree canopy cover is greater than or equal to 40, and the years since fire is greater than or equal to 3

Then there is strong evidence that the litter density is 60

Rule Number 62

If the tree canopy cover is greater than or equal to 40, and the years since fire is 1
Then there is strong evidence that the litter density is 25

Rule Number 63

If the tree canopy cover is less than 40 Then there is strong evidence that the litter density is 0

Rule Number 64

If the litter density is less than or equal to 50 Then
the litter flame is none

Rule Number 65

If the season is monsoon, and
the years since fire is less than 1
Then
the litter flame is none

Rule Number 66

If the season is monsoon, and
the years since fire is greater than or equal to 1, and
the days since last rain is less than 3

Then
the litter flame is none

Rule Number 67

If the fire danger is extreme, and
the litter mass is high, and
the litter density is greater than 50
Then there is strong evidence that
the litter flame is > 12000 mm

If the fire danger is extreme, and the litter mass is moderate, and the litter density is greater than 50 Then there is strong evidence that the litter flame is 6000-12000 mm

## Rule Number 69

If the fire danger is extreme, and the litter mass is low, and the litter density is greater than 50 Then there is strong evidence that the litter flame is 3000-6000 mm

#### Rule Number 70

If the fire danger is very high, and the litter mass is high, and the litter density is greater than 50 Then there is strong evidence that the litter flame is 6000-12000 mm

## Rule Number 71

If the fire danger is very high, and the litter mass is moderate, and the litter density is greater than 50 Then there is strong evidence that the litter flame is 3000-6000 mm

### Rule Number 72

If the fire danger is high, and
the litter mass is moderate, and
the litter density is greater than 50
Then there is strong evidence that
the litter flame is 1500-3000 mm

## Rule Number 73

If the fire danger is high, and the litter mass is low, and the litter density is greater than 50 Then there is strong evidence that the litter flame is 1000-1500 mm

## Rule Number 74

If the fire danger is moderate, and the litter mass is high, and

the litter density is greater than 50 Then there is strong evidence that the litter flame is 1500-3000 mm

## Rule Number 75

If the fire danger is moderate, and the litter mass is moderate, and the litter density is greater than 50 Then there is strong evidence that the litter flame is 1000-1500 mm

#### Rule Number 76

If the fire danger is moderate, and the litter mass is low, and the litter density is greater than 50 Then there is strong evidence that the litter flame is 500-1000 mm

## Rule Number 77

If the fire danger is low, and the litter mass is high, and the litter density is greater than 50 Then there is strong evidence that the litter flame is < 1500 mm

#### Rule Number 78

If the fire danger is low, and the litter mass is moderate, and the litter density is greater than 50 Then there is strong evidence that the litter flame is < 1000 mm

#### Rule Number 79

If the fire danger is low, and the litter mass is low, and the litter density is greater than 50 Then there is strong evidence that the litter flame is < 500 mm

### Rule Number 80

If the fire danger is high, and
the litter mass is high, and
the litter density is greater than 50
Then there is strong evidence that
the litter flame is 3000-6000 mm

If the fire danger is very high, and the litter mass is low, and the litter density is greater than 50.
Then there is strong evidence that the litter flame is 1500-3000 mm

## Rule Number 82

If the grass flame is none, and the litter flame is none
Then the scorch height is none

Rule Number 83

If the litter flame is > 12000 mm Then the scorch height is > 48 m

Rule Number 84

If the litter flame is 6000-12000 mm Then the scorch height is 24-48 m

Rule Number 85

If the litter flame is 3000-6000 mm Then the scorch height is 12-24 m

Rule Number 86

If the litter flame is 500-1000 mm Then the scorch height is 2-4 m

Rule Number 87

If the litter flame is < 500 mm Then the scorch height is < 2 m

Rule Number 88

If the litter flame is 1500-3000 mm Then the scorch height is 6-12 m

If the litter flame is 1000-1500 mm Then the scorch height is 4-6 m

Rule Number 90

If the grass flame is < 1000 mm Then the scorch height is < 4 m

Rule Number 91

If the grass flame is 1200-1500 mm Then the scorch height is 4-6 m

Rule Number 92

If the grass flame is 1500-2000 mm Then the scorch height is 6-8 m

Rule Number 93

If the grass flame is 2000-2500 mm Then the scorch height is 8-10 m

Rule Number 94

If the grass flame is 2500-3000 mm Then the scorch height is 10-12 m

Rule Number 95

If the grass flame is 3000-3500 mm Then the scorch height is 12-14 m

Rule Number 96

If the grass flame is > 2500 mm Then the scorch height is > 10 m If the grass flame is > 3000 mm Then the scorch height is > 12 m

Rule Number 98

If the grass flame is > 3500 mm

Then the scorch height is > 14 m

no ?-