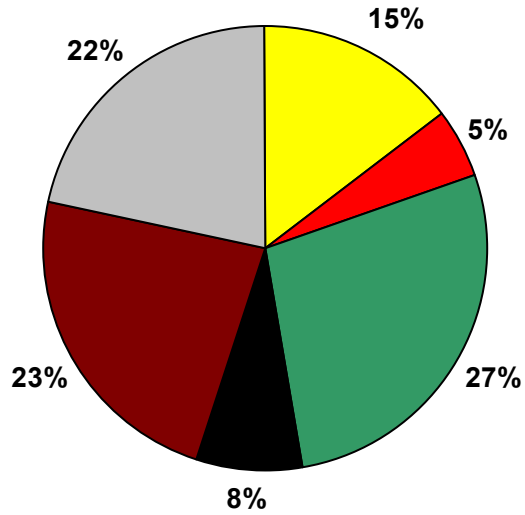


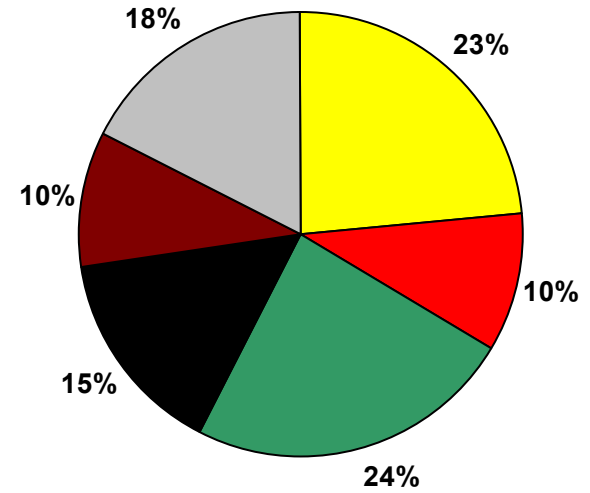
**MONITORING DATA**

**Sycamore Canyon Wilderness Area, AZ  
2002 Reconstructed Extinction  
SYCA1 Monitoring Data (every third day)**

**20% Worst Visibility Days**  
Aerosol Extinction\* = 41 Mm-1 (31 to 60 Mm-1)

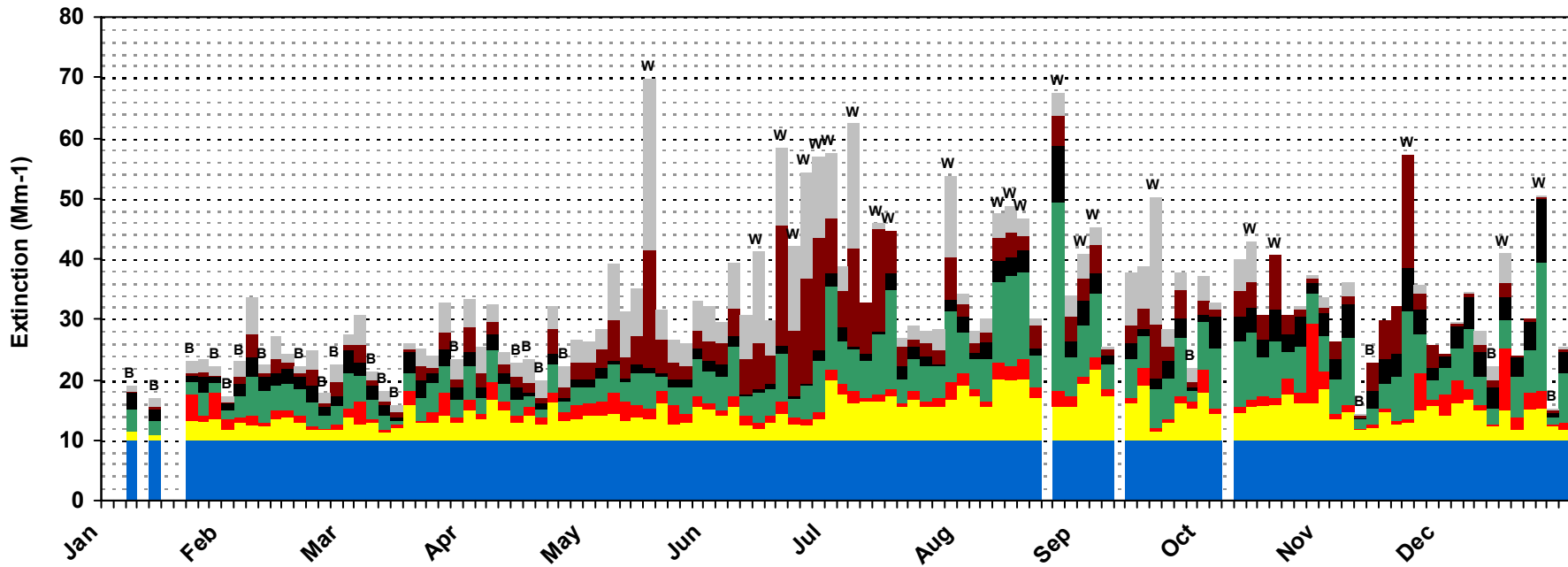


**20% Best Visibility Days**  
Aerosol Extinction\* = 10 Mm-1 (4 to 13 Mm-1)



- Coarse Material
- Soil
- Elemental Carbon
- Organic Material
- Ammonium Nitrate
- Ammonium Sulfate
- Rayleigh

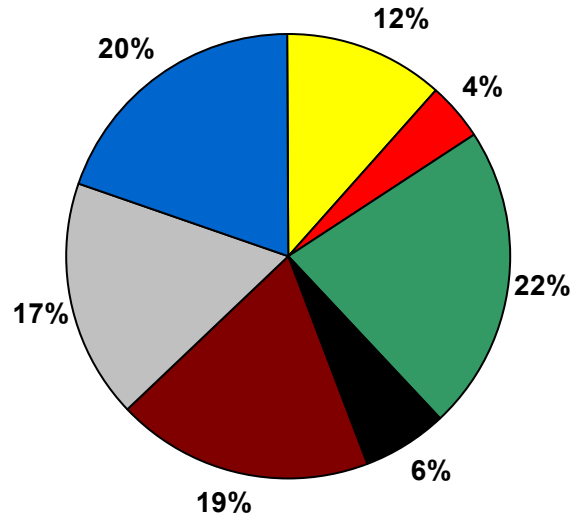
\*Excludes Rayleigh Extinction



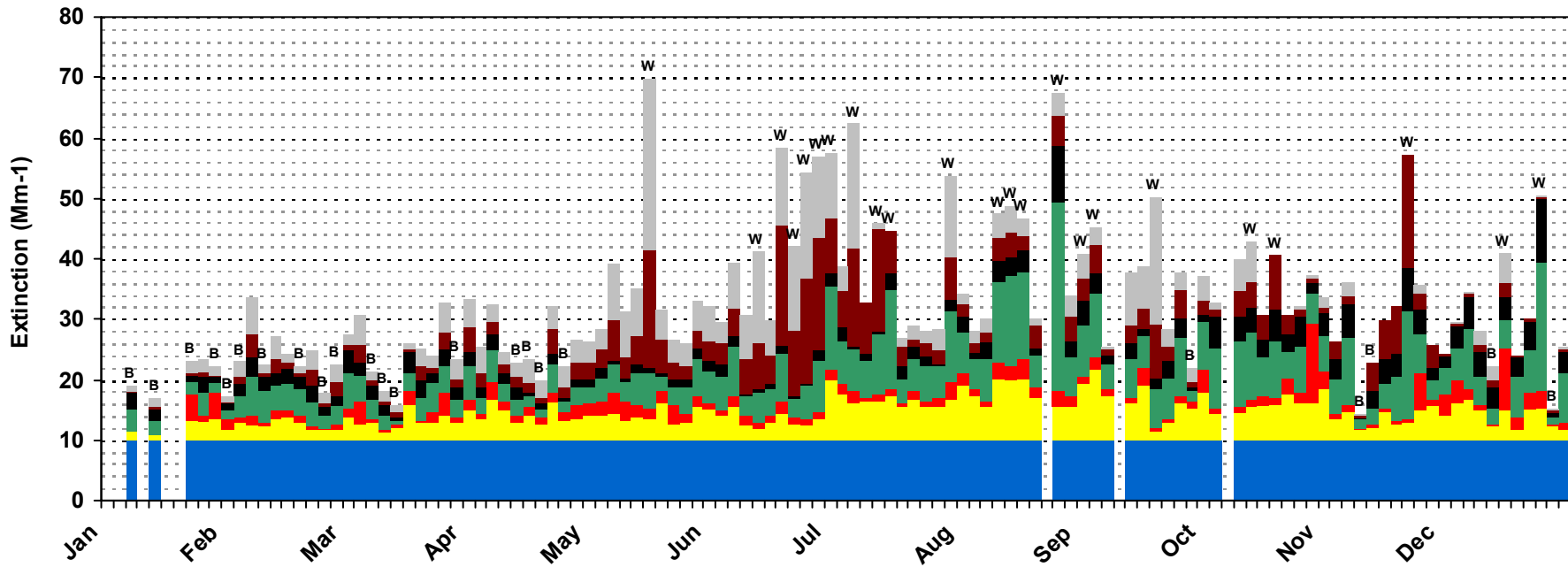
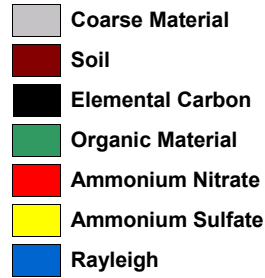
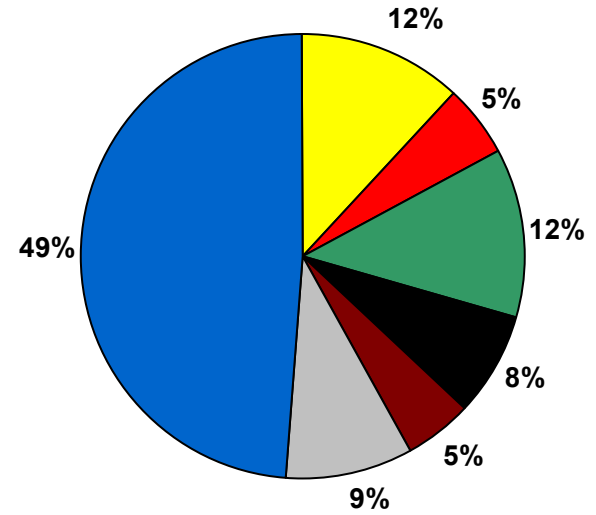
**MONITORING DATA**

**Sycamore Canyon Wilderness Area, AZ  
2002 Reconstructed Extinction  
SYCA1 Monitoring Data (every third day)**

**20% Worst Visibility Days**  
Total Extinction = 51 Mm-1 (41 to 70 Mm-1)



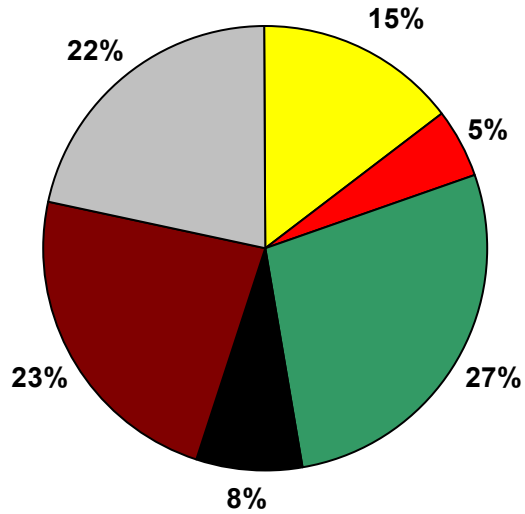
**20% Best Visibility Days**  
Total Extinction = 20 Mm-1 (14 to 23 Mm-1)



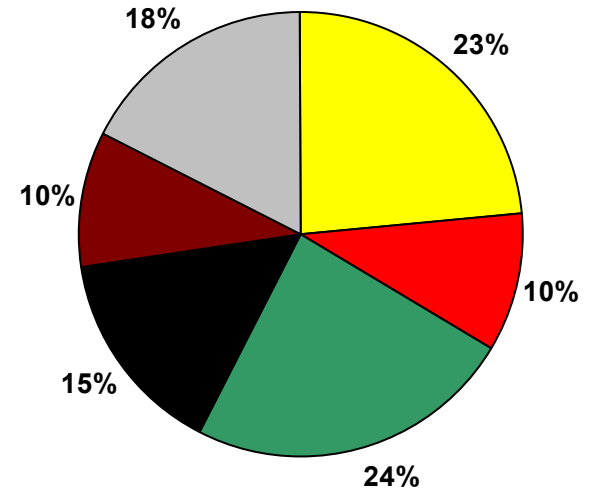
**MONITORING DATA**

**Sycamore Canyon Wilderness Area, AZ  
2002 Reconstructed Extinction  
SYCA1 Monitoring Data (every third day)**

**20% Worst Visibility Days**  
Aerosol Extinction\* = 41 Mm-1 (31 to 60 Mm-1)

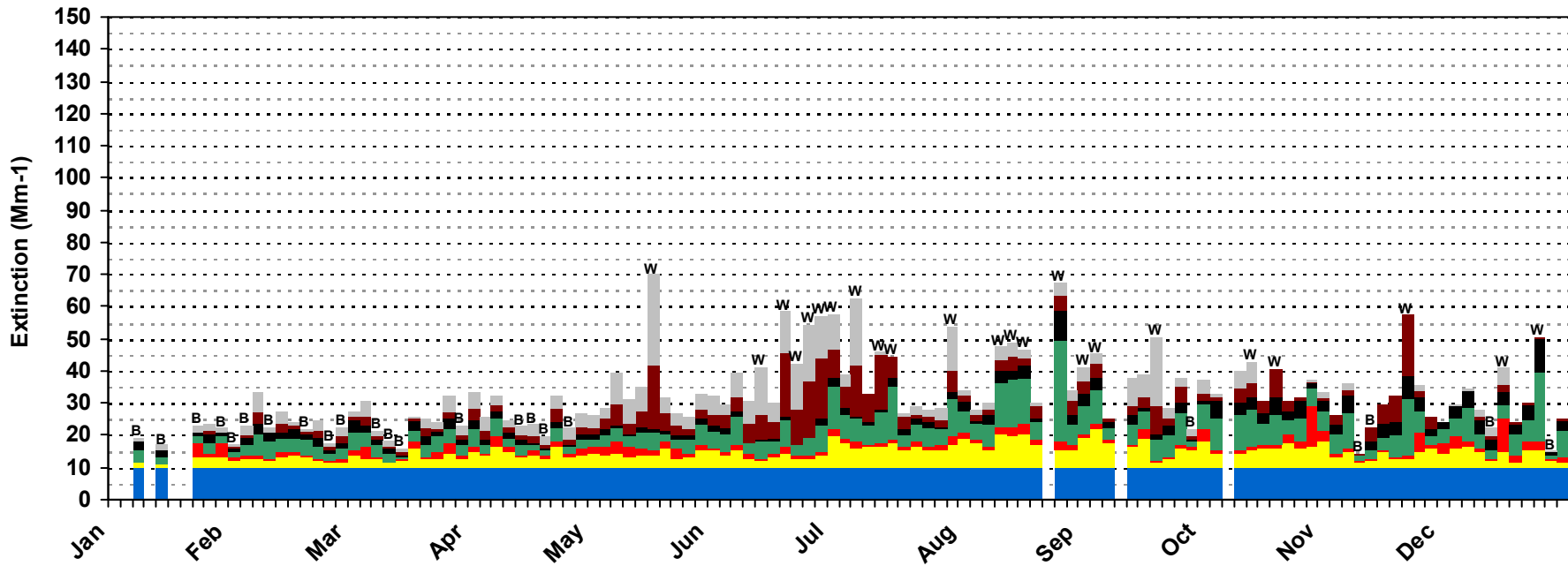


**20% Best Visibility Days**  
Aerosol Extinction\* = 10 Mm-1 (4 to 13 Mm-1)



- Coarse Material
- Soil
- Elemental Carbon
- Organic Material
- Ammonium Nitrate
- Ammonium Sulfate
- Rayleigh

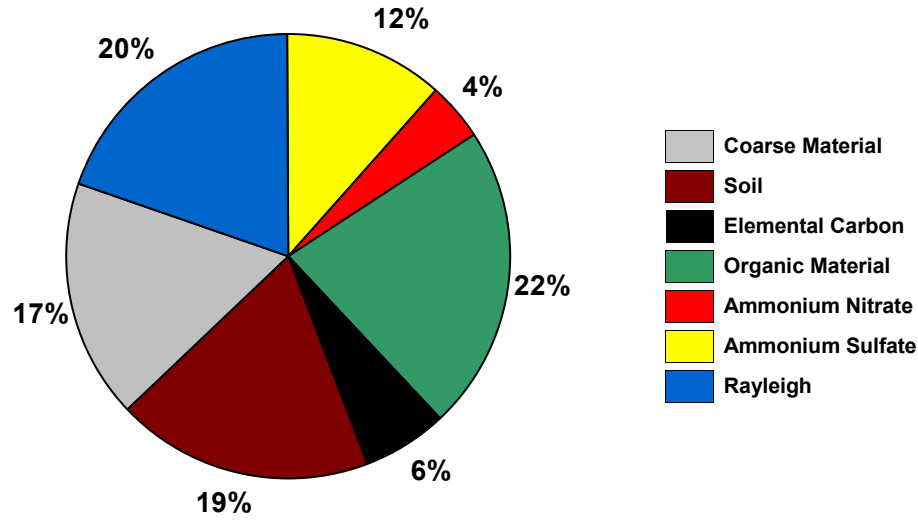
\*Excludes Rayleigh Extinction



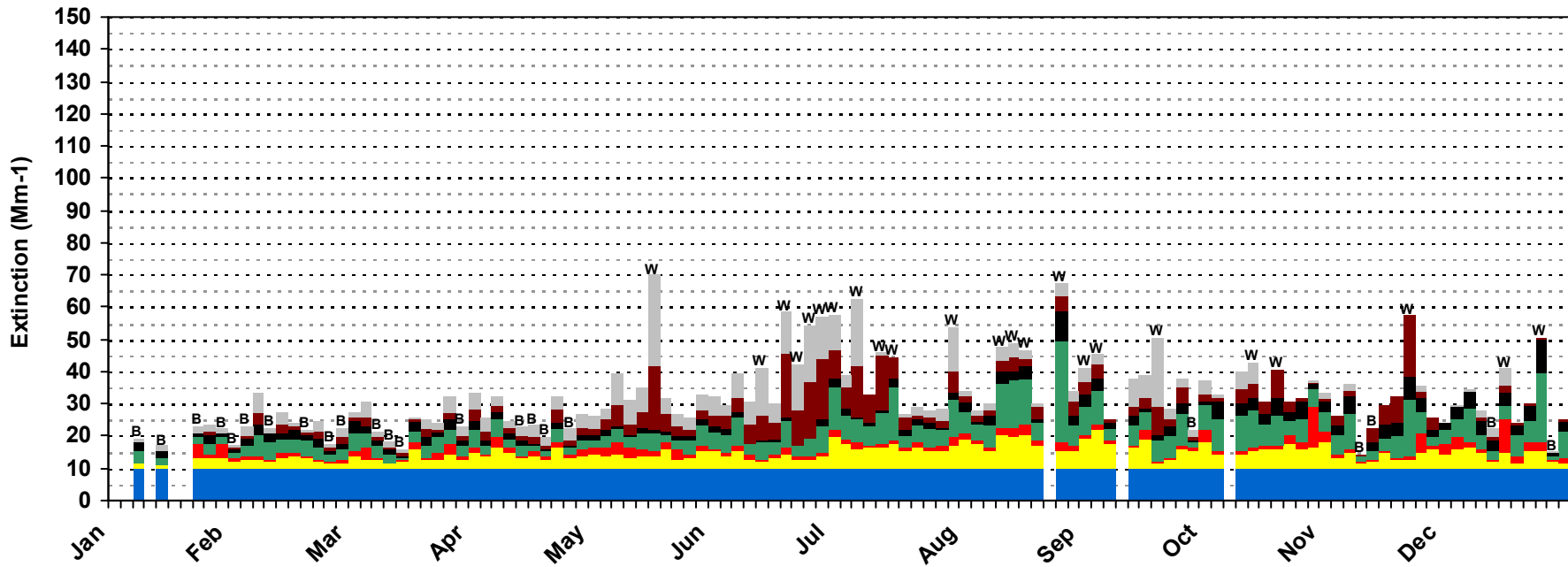
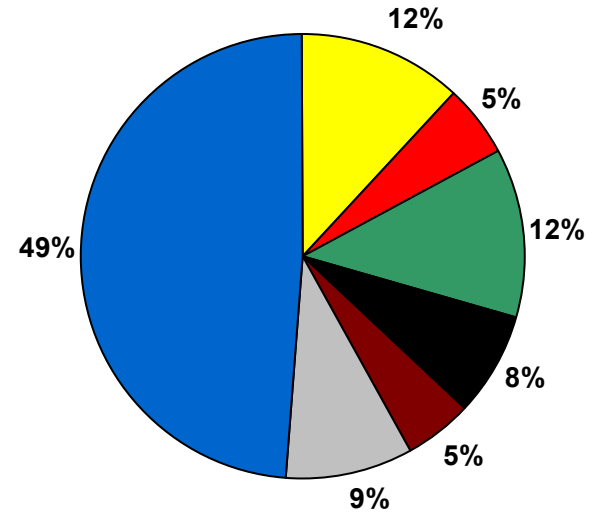
**MONITORING DATA**

**Sycamore Canyon Wilderness Area, AZ  
2002 Reconstructed Extinction  
SYCA1 Monitoring Data (every third day)**

**20% Worst Visibility Days**  
Total Extinction = 51 Mm-1 (41 to 70 Mm-1)



**20% Best Visibility Days**  
Total Extinction = 20 Mm-1 (14 to 23 Mm-1)



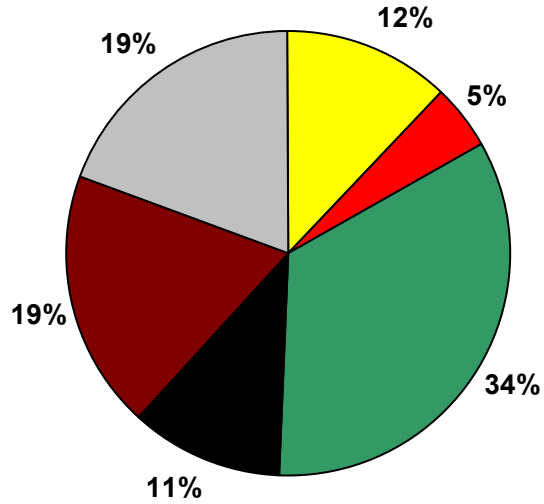
**MONITORING DATA**

**Sycamore Canyon Wilderness Area, AZ  
2002 Reconstructed Extinction  
SYCA1 Monitoring Data (every third day)**

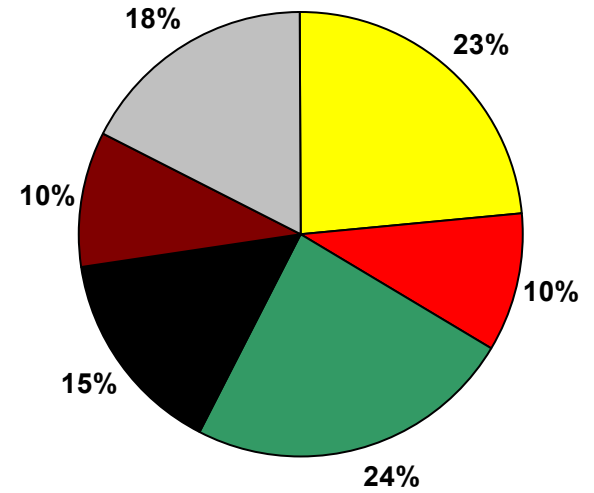
**"RAW" DATA**

- No RHR data substitutions
- Includes available data from days with clogged filters

**20% Worst Visibility Days**  
Aerosol Extinction\* = 48 Mm-1 (31 to 201 Mm-1)

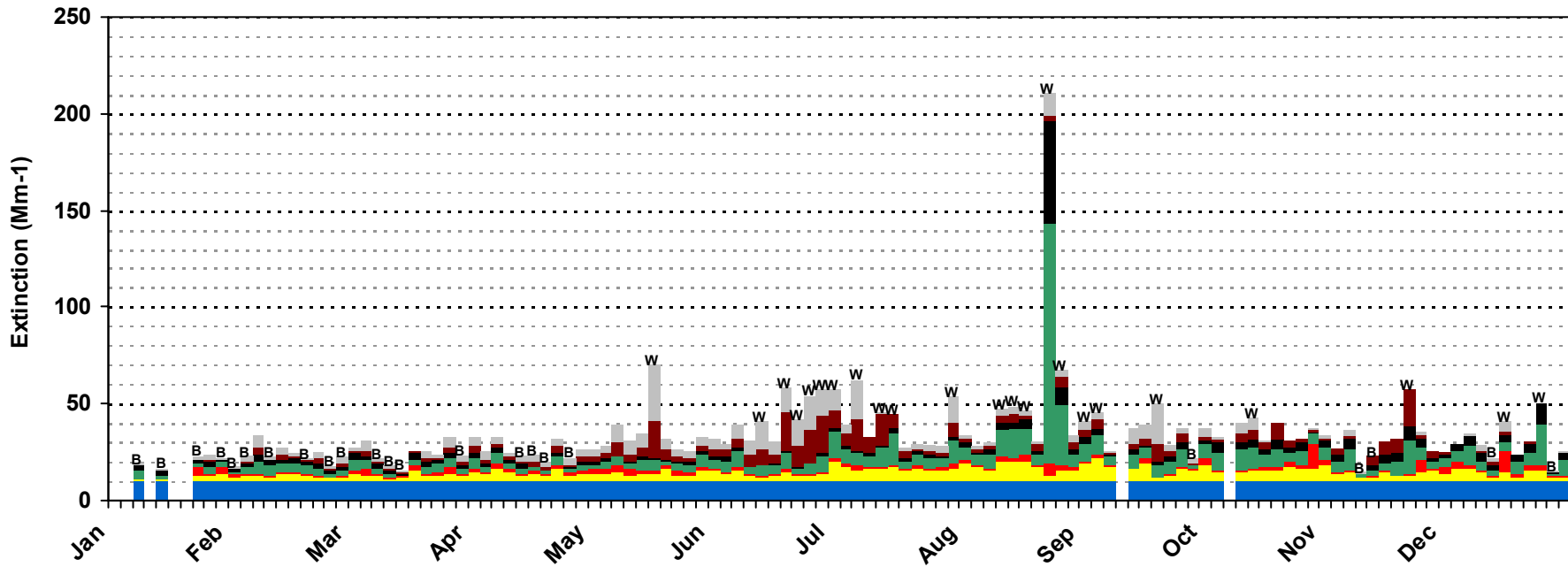


**20% Best Visibility Days**  
Aerosol Extinction\* = 10 Mm-1 (4 to 13 Mm-1)



- Coarse Material
- Soil
- Elemental Carbon
- Organic Material
- Ammonium Nitrate
- Ammonium Sulfate
- Rayleigh

\*Excludes Rayleigh Extinction



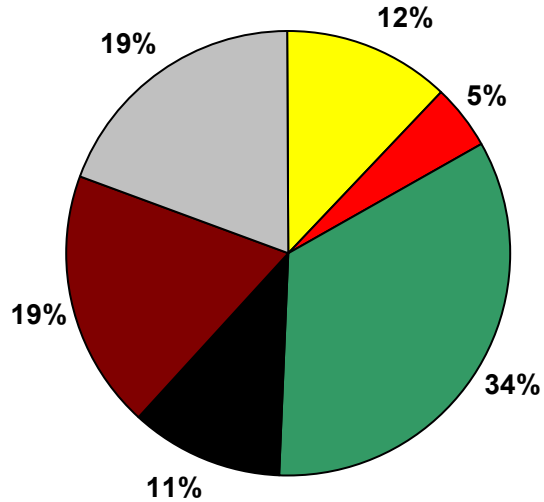
**MONITORING DATA**

**Sycamore Canyon Wilderness Area, AZ  
2002 Reconstructed Extinction  
SYCA1 Monitoring Data (every third day)**

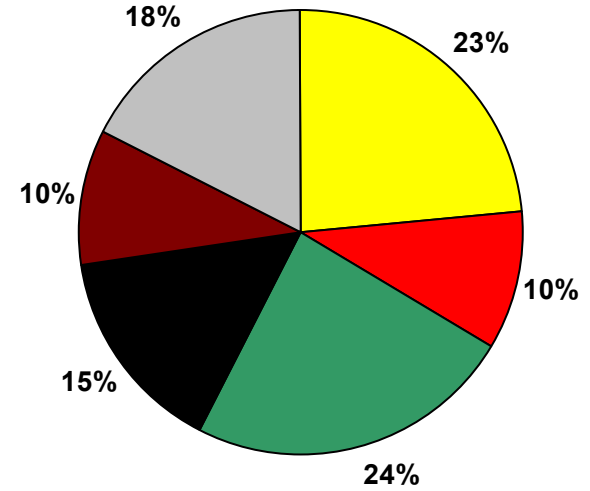
**"RAW" DATA**

- No RHR data substitutions
- Includes available data from days with clogged filters

**20% Worst Visibility Days**  
Aerosol Extinction\* = 48 Mm-1 (31 to 201 Mm-1)

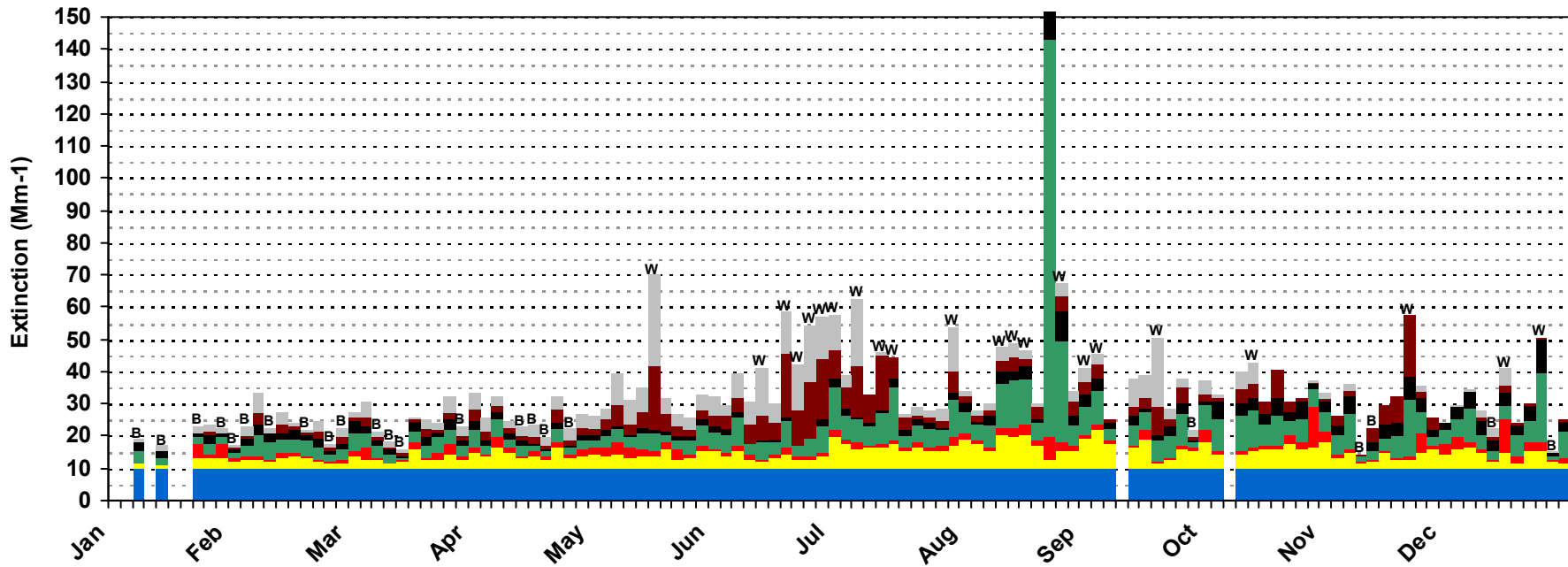


**20% Best Visibility Days**  
Aerosol Extinction\* = 10 Mm-1 (4 to 13 Mm-1)



- Coarse Material
- Soil
- Elemental Carbon
- Organic Material
- Ammonium Nitrate
- Ammonium Sulfate
- Rayleigh

\*Excludes Rayleigh Extinction



## MONITORING DATA

### Sycamore Canyon Wilderness Area, AZ 2002 Reconstructed Extinction Values SYCA1 Monitoring Data (every third day)

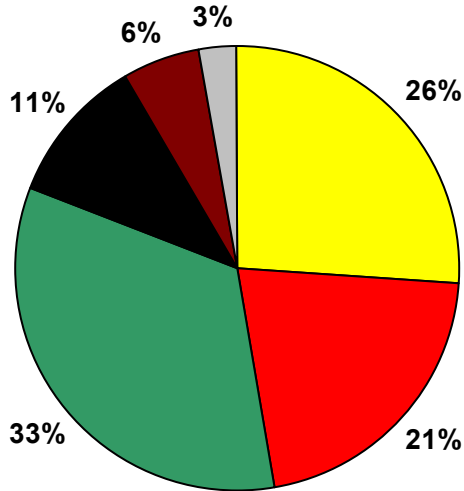
<b>20% Worst Visibility Days</b>			
	<b>Average (Mm-1)</b>	<b>Minimum (Mm-1)</b>	<b>Maximum (Mm-1)</b>
<b>Total Extinction:</b>	50.7 (16.2 dv)	40.6 (14.0 dv)	69.9 (19.4 dv)
<b>Aerosol Extinction*:</b>	40.7	30.6	59.9
	<b>Average (Mm-1)</b>	<b>% of Tot. Extinction</b>	<b>% of Aer. Extinction</b>
<b>Ammonium Sulfate:</b>	5.9	12%	15%
<b>Ammonium Nitrate:</b>	2.0	4%	5%
<b>Organic Material:</b>	11.2	22%	28%
<b>Elemental Carbon:</b>	3.2	6%	8%
<b>Soil:</b>	9.5	19%	23%
<b>Coarse Material:</b>	8.8	17%	22%
<b>Rayleigh:</b>	10.0	20%	N/A
<b>20% Best Visibility Days</b>			
	<b>Average (Mm-1)</b>	<b>Minimum (Mm-1)</b>	<b>Maximum (Mm-1)</b>
<b>Total Extinction:</b>	20.4 (7.1 dv)	14.4 (3.7 dv)	23.3 (8.5 dv)
<b>Aerosol Extinction*:</b>	10.4	4.4	13.3
	<b>Average (Mm-1)</b>	<b>% of Tot. Extinction</b>	<b>% of Aer. Extinction</b>
<b>Ammonium Sulfate:</b>	2.4	12%	24%
<b>Ammonium Nitrate:</b>	1.0	5%	10%
<b>Organic Material:</b>	2.5	12%	24%
<b>Elemental Carbon:</b>	1.6	8%	15%
<b>Soil:</b>	1.0	5%	10%
<b>Coarse Material:</b>	1.8	9%	17%
<b>Rayleigh:</b>	10.0	49%	N/A

\*Excludes Rayleigh Extinction

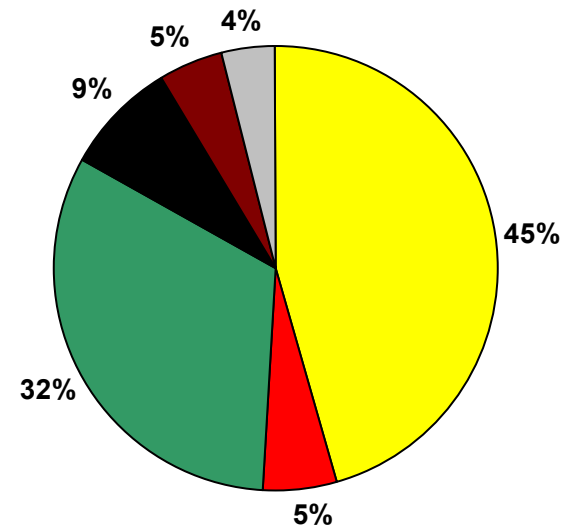
**MODEL RESULTS**

**Sycamore Canyon Wilderness Area, AZ  
2002 Reconstructed Extinction  
CMAQ Model Results (every day)**

**20% Worst Visibility Days**  
Aerosol Extinction\* = 26 Mm-1 (19 to 52 Mm-1)

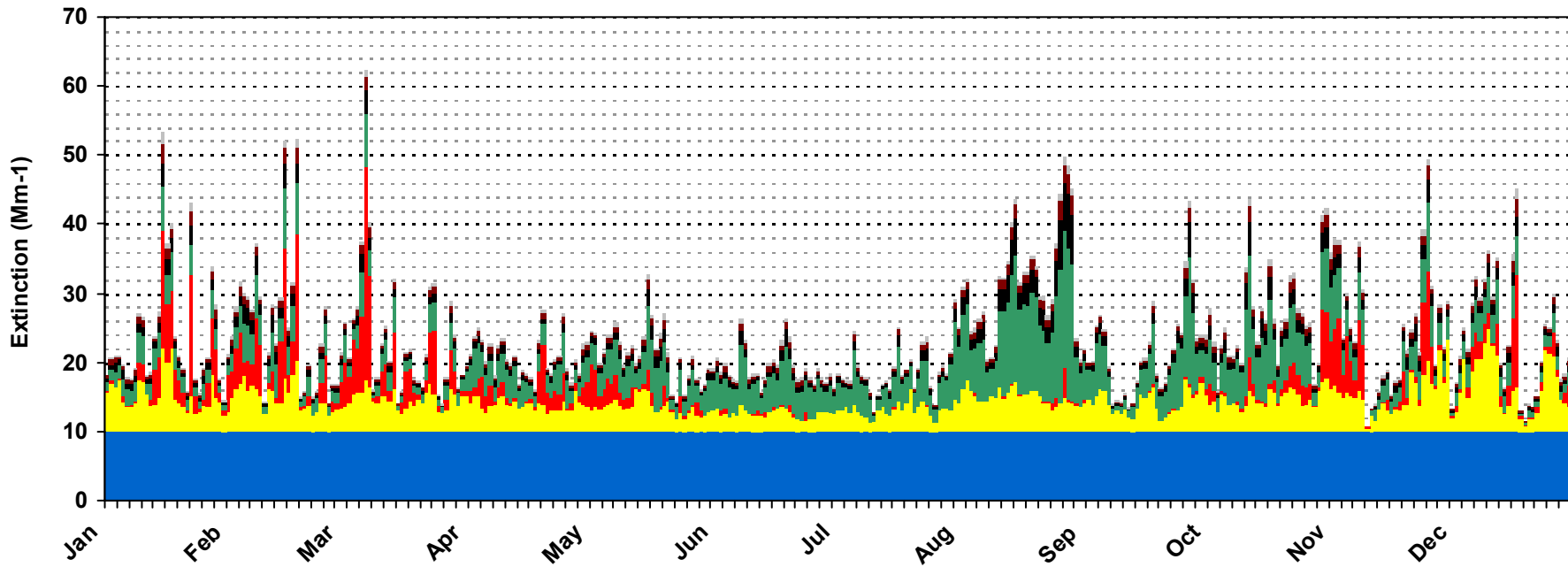


**20% Best Visibility Days**  
Aerosol Extinction\* = 6 Mm-1 (1 to 8 Mm-1)



- Coarse Material
- Soil
- Elemental Carbon
- Organic Material
- Ammonium Nitrate
- Ammonium Sulfate
- Rayleigh

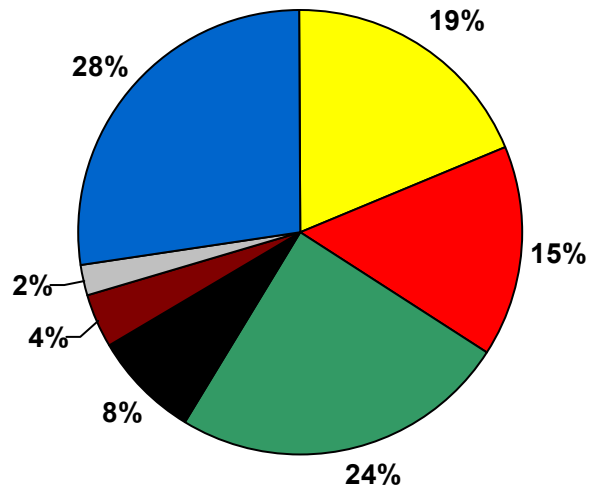
\*Excludes Rayleigh Extinction



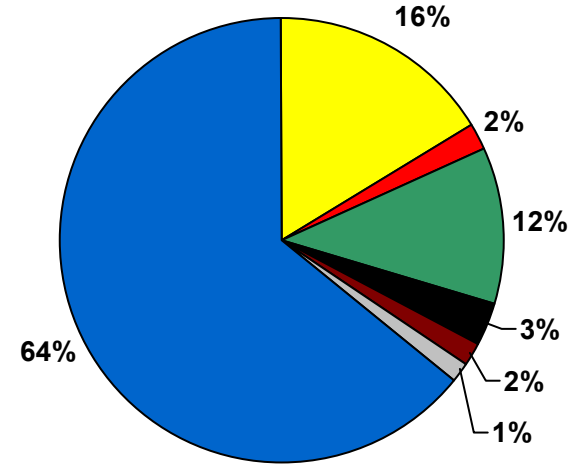
**MODEL RESULTS**

**Sycamore Canyon Wilderness Area, AZ  
2002 Reconstructed Extinction  
CMAQ Model Results (every day)**

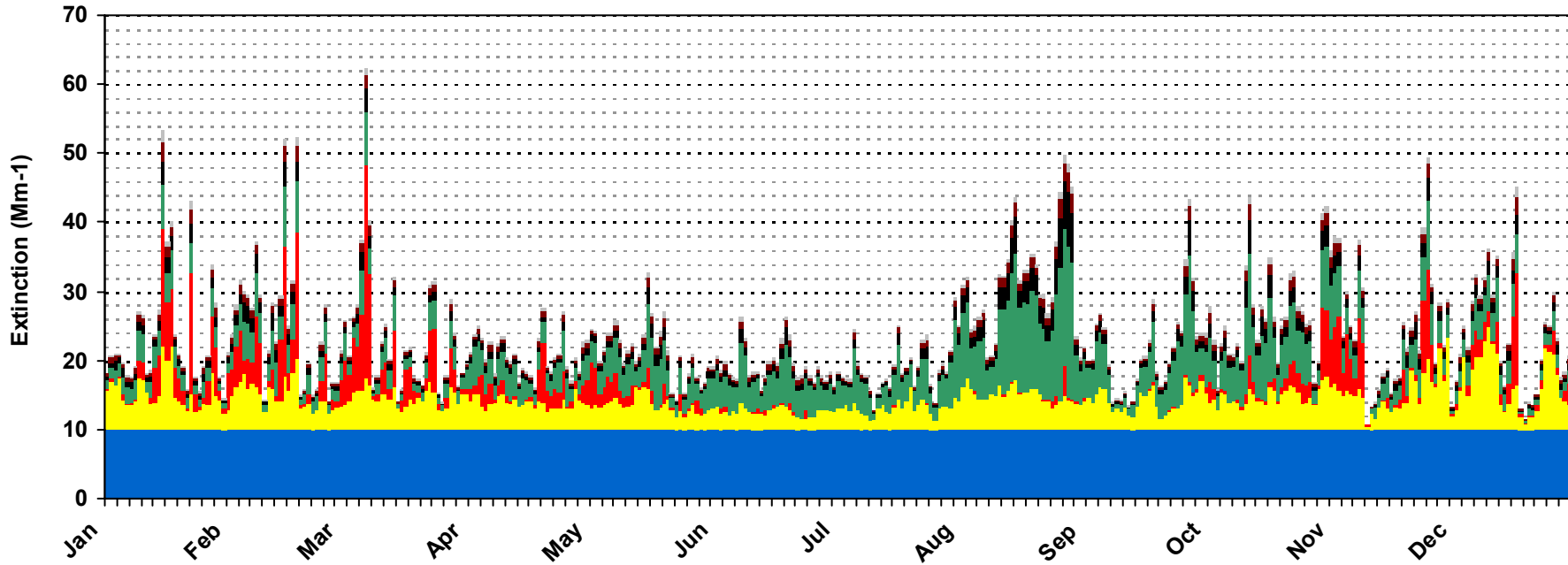
**20% Worst Visibility Days**  
Total Extinction = 36 Mm-1 (29 to 62 Mm-1)



**20% Best Visibility Days**  
Total Extinction = 16 Mm-1 (11 to 18 Mm-1)



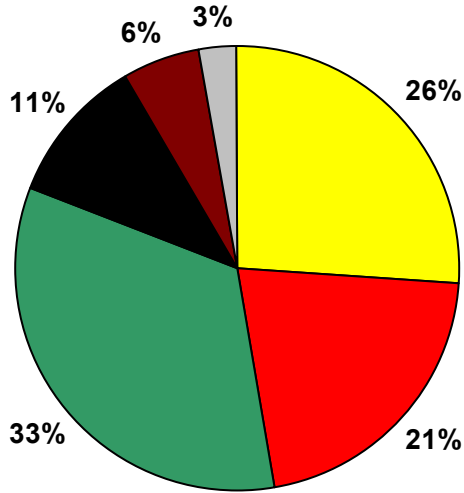
- Coarse Material
- Soil
- Elemental Carbon
- Organic Material
- Ammonium Nitrate
- Ammonium Sulfate
- Rayleigh



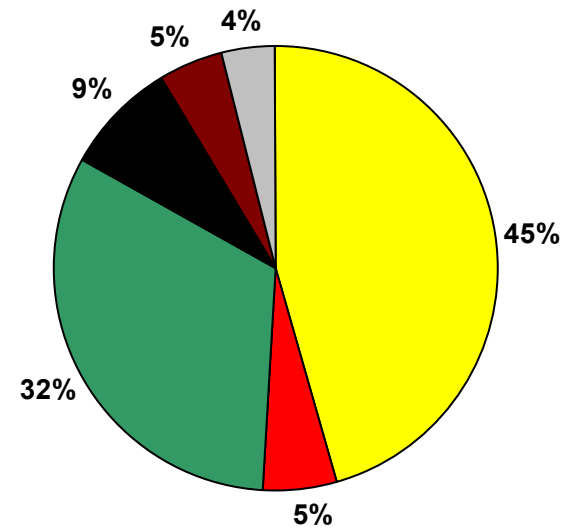
**MODEL RESULTS**

**Sycamore Canyon Wilderness Area, AZ  
2002 Reconstructed Extinction  
CMAQ Model Results (every day)**

**20% Worst Visibility Days**  
Aerosol Extinction\* = 26 Mm-1 (19 to 52 Mm-1)

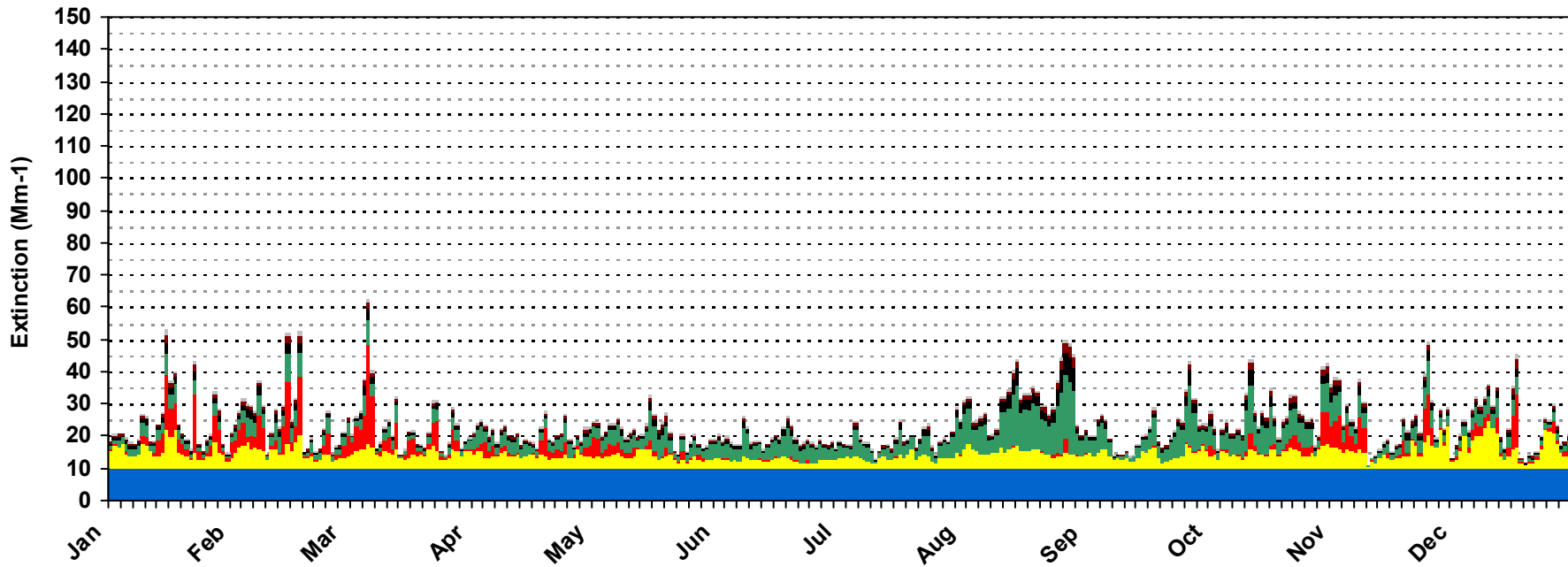


**20% Best Visibility Days**  
Aerosol Extinction\* = 6 Mm-1 (1 to 8 Mm-1)



- Coarse Material
- Soil
- Elemental Carbon
- Organic Material
- Ammonium Nitrate
- Ammonium Sulfate
- Rayleigh

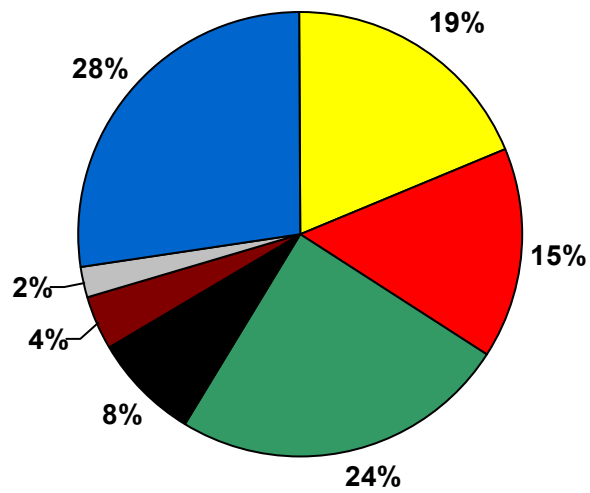
\*Excludes Rayleigh Extinction



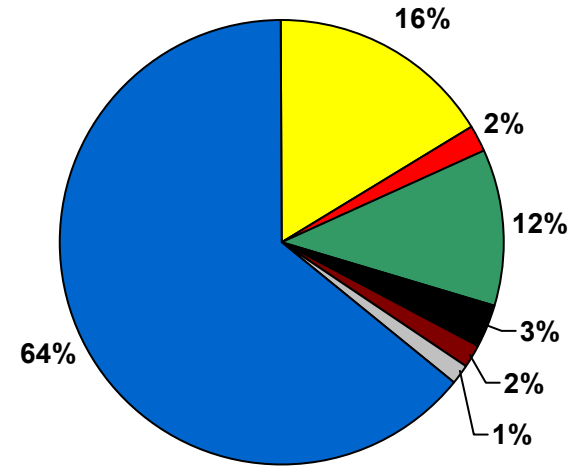
# MODEL RESULTS

## Sycamore Canyon Wilderness Area, AZ 2002 Reconstructed Extinction CMAQ Model Results (every day)

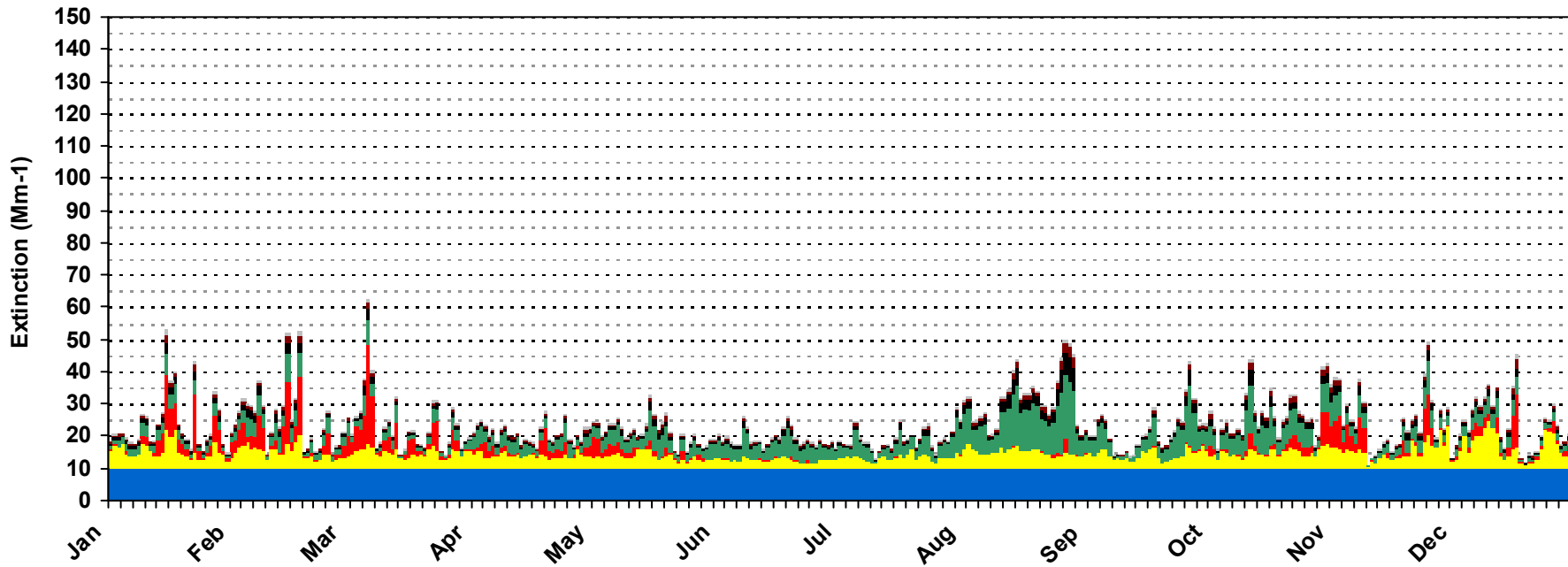
**20% Worst Visibility Days**  
Total Extinction = 36 Mm-1 (29 to 62 Mm-1)



**20% Best Visibility Days**  
Total Extinction = 16 Mm-1 (11 to 18 Mm-1)



- Coarse Material
- Soil
- Elemental Carbon
- Organic Material
- Ammonium Nitrate
- Ammonium Sulfate
- Rayleigh



## MODEL RESULTS

### Sycamore Canyon Wilderness Area, AZ 2002 Reconstructed Extinction CMAQ Model Results (every day)

<b>20% Worst Visibility Days</b>			
	<b>Average (Mm-1)</b>	<b>Minimum (Mm-1)</b>	<b>Maximum (Mm-1)</b>
<b>Total Extinction:</b>	36.3 (12.9 dv)	28.8 (10.6 dv)	62.4 (18.3 dv)
<b>Aerosol Extinction*:</b>	26.3	18.8	52.4
	<b>Average (Mm-1)</b>	<b>% of Tot. Extinction</b>	<b>% of Aer. Extinction</b>
<b>Ammonium Sulfate:</b>	6.9	19%	26%
<b>Ammonium Nitrate:</b>	5.6	15%	21%
<b>Organic Material:</b>	8.9	24%	34%
<b>Elemental Carbon:</b>	2.8	8%	11%
<b>Soil:</b>	1.5	4%	6%
<b>Coarse Material:</b>	0.7	2%	3%
<b>Rayleigh:</b>	10.0	28%	N/A
<b>20% Best Visibility Days</b>			
	<b>Average (Mm-1)</b>	<b>Minimum (Mm-1)</b>	<b>Maximum (Mm-1)</b>
<b>Total Extinction:</b>	15.6 (4.5 dv)	10.8 (0.8 dv)	17.6 (5.6 dv)
<b>Aerosol Extinction*:</b>	5.6	0.8	7.6
	<b>Average (Mm-1)</b>	<b>% of Tot. Extinction</b>	<b>% of Aer. Extinction</b>
<b>Ammonium Sulfate:</b>	2.6	16%	46%
<b>Ammonium Nitrate:</b>	0.3	2%	5%
<b>Organic Material:</b>	1.8	12%	32%
<b>Elemental Carbon:</b>	0.5	3%	9%
<b>Soil:</b>	0.3	2%	5%
<b>Coarse Material:</b>	0.2	1%	4%
<b>Rayleigh:</b>	10.0	64%	N/A

\*Excludes Rayleigh Extinction