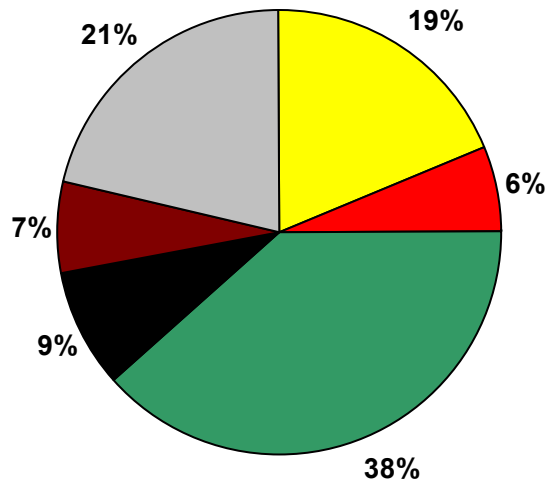


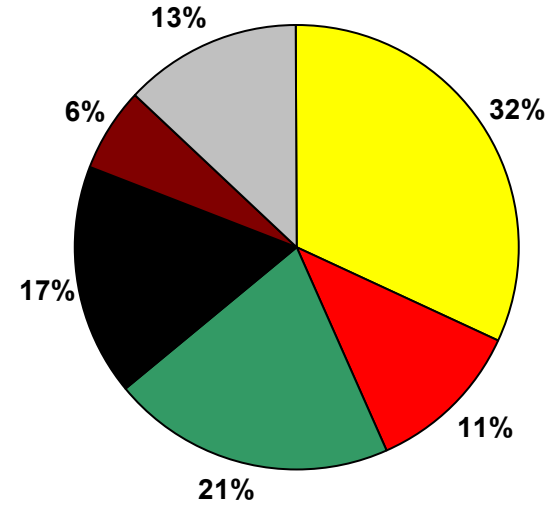
MONITORING DATA

**Petrified Forest National Park, AZ
2002 Reconstructed Extinction
PEFO1 Monitoring Data (every third day)**

20% Worst Visibility Days
Aerosol Extinction* = 40 Mm⁻¹ (24 to 155 Mm⁻¹)

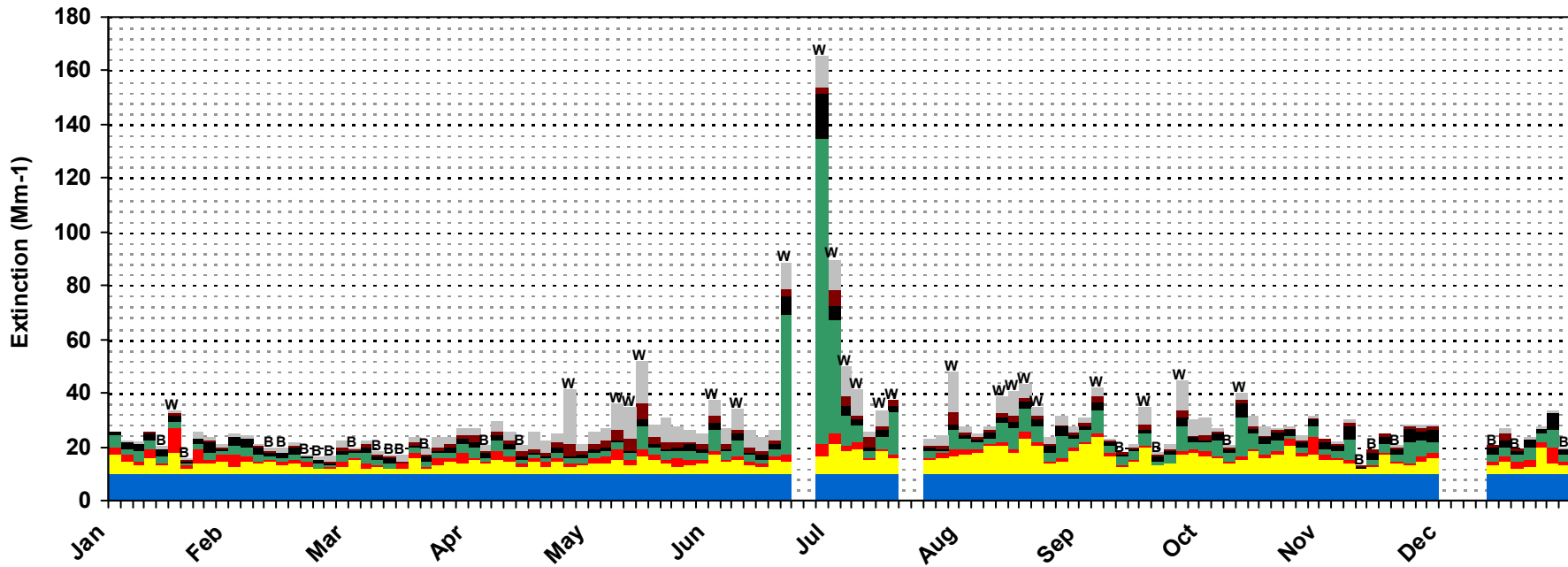


20% Best Visibility Days
Aerosol Extinction* = 9 Mm⁻¹ (3 to 10 Mm⁻¹)



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

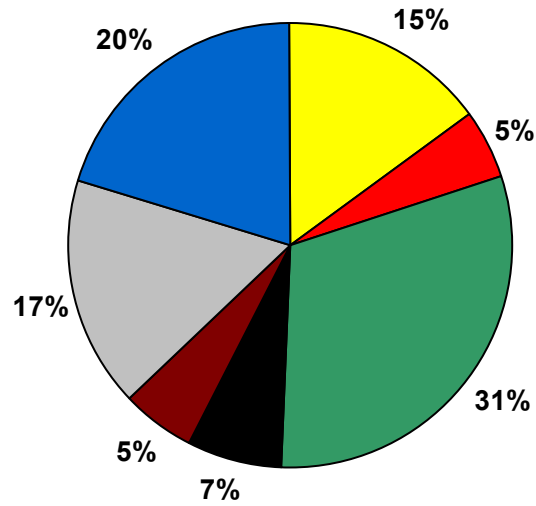
*Excludes Rayleigh Extinction



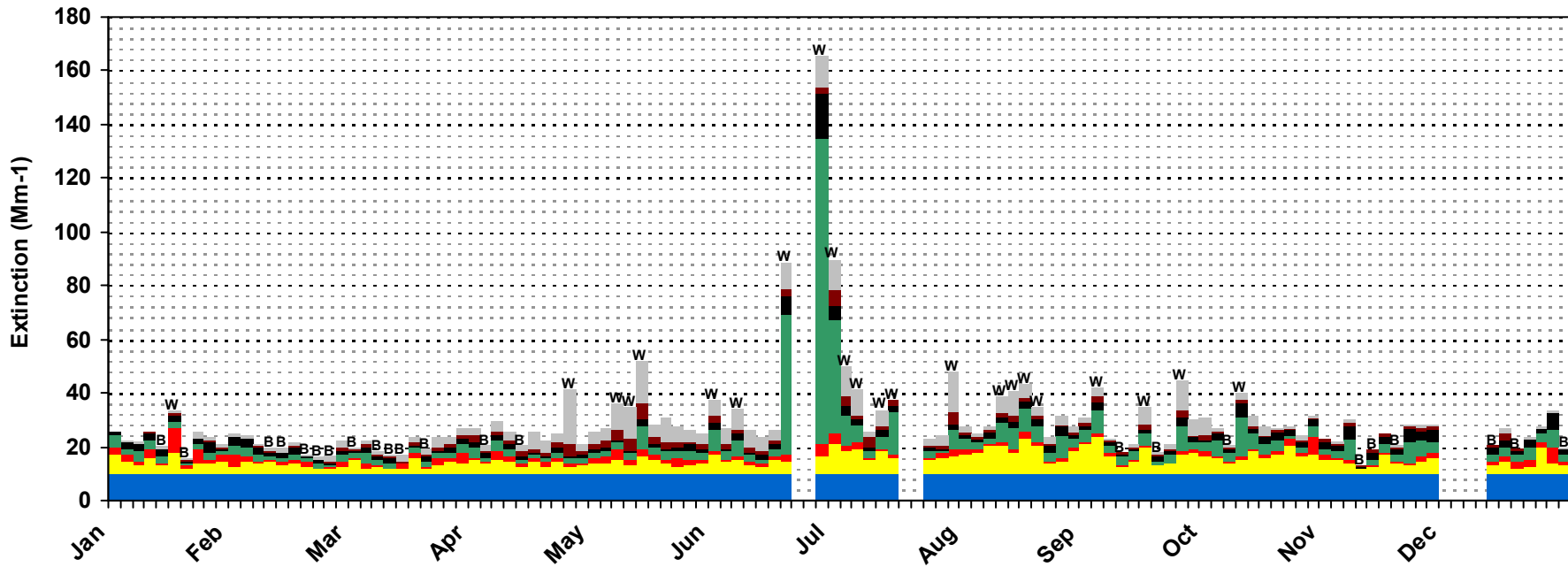
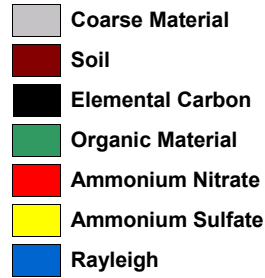
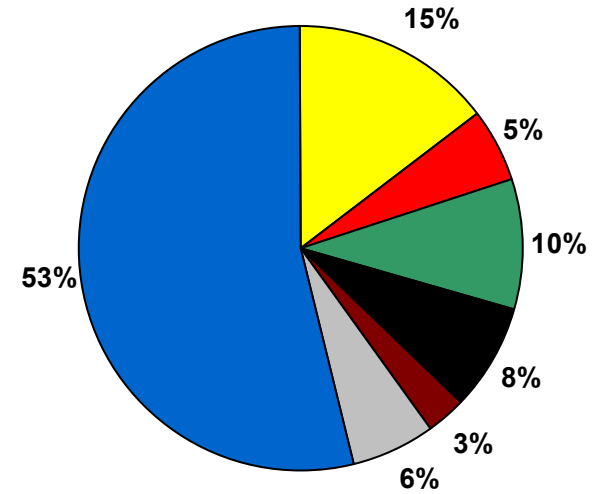
MONITORING DATA

**Petrified Forest National Park, AZ
2002 Reconstructed Extinction
PEFO1 Monitoring Data (every third day)**

20% Worst Visibility Days
Total Extinction = 50 Mm-1 (34 to 165 Mm-1)



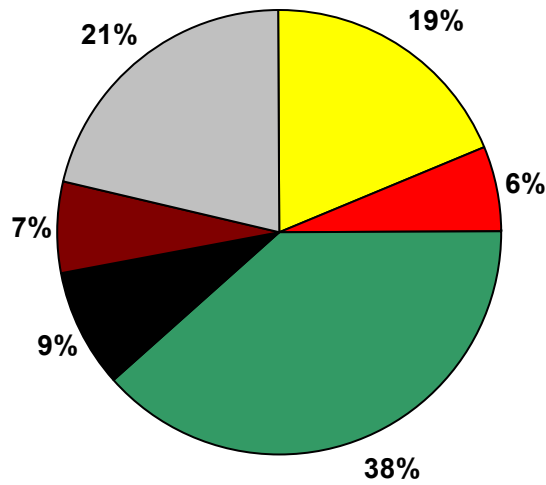
20% Best Visibility Days
Total Extinction = 19 Mm-1 (13 to 20 Mm-1)



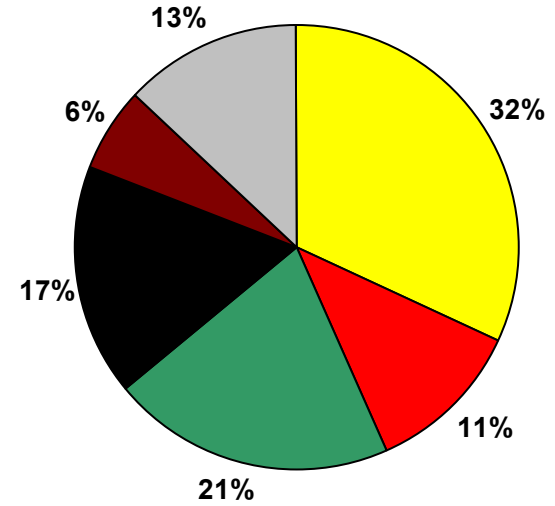
MONITORING DATA

**Petrified Forest National Park, AZ
2002 Reconstructed Extinction
PEFO1 Monitoring Data (every third day)**

20% Worst Visibility Days
Aerosol Extinction* = 40 Mm-1 (24 to 155 Mm-1)

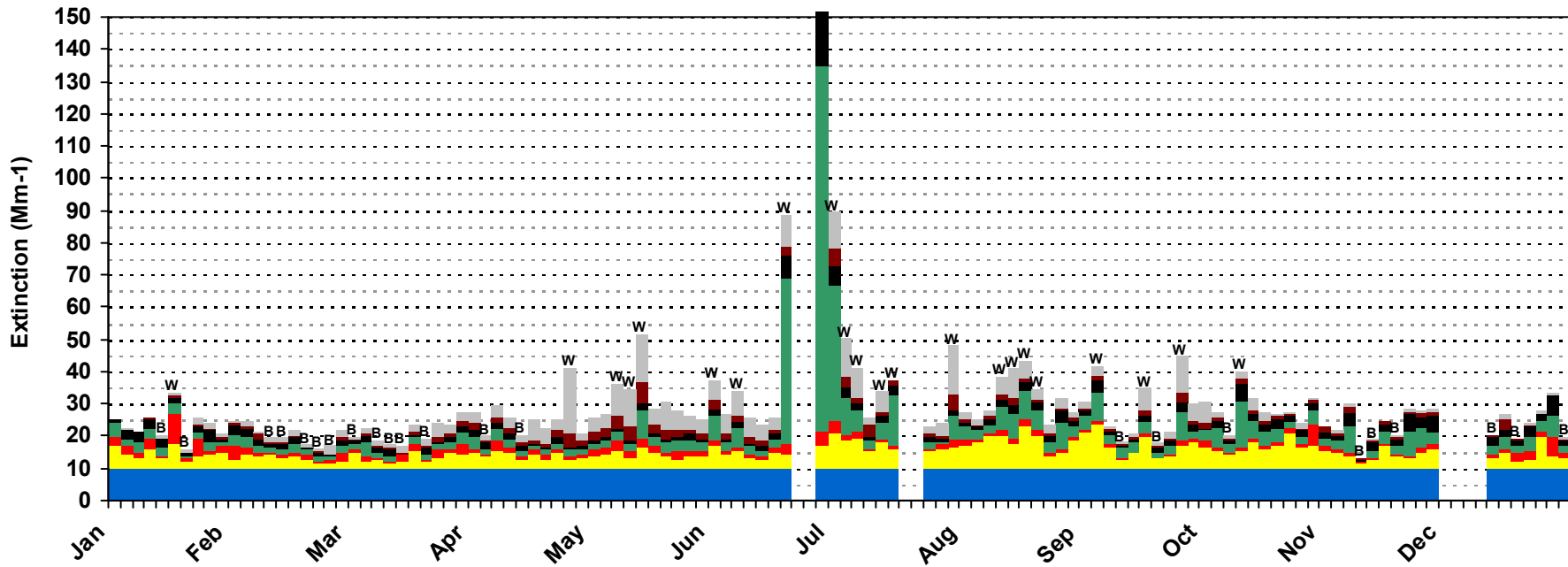


20% Best Visibility Days
Aerosol Extinction* = 9 Mm-1 (3 to 10 Mm-1)



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

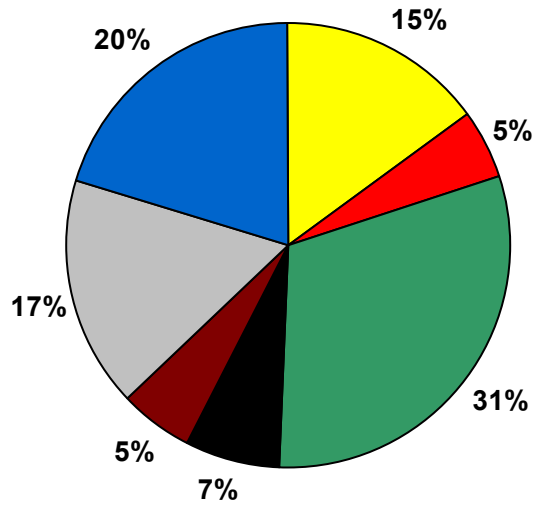
*Excludes Rayleigh Extinction



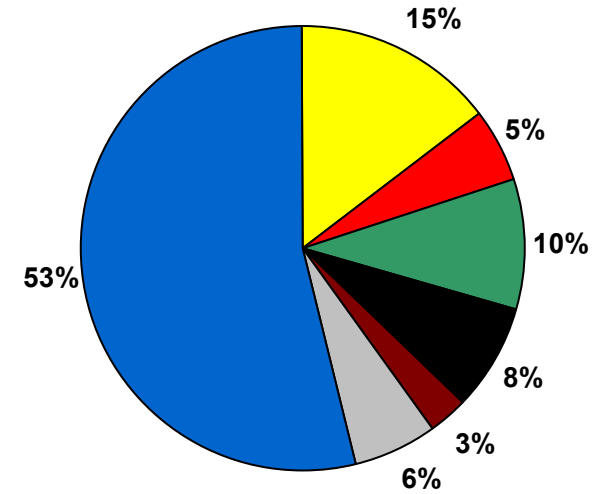
MONITORING DATA

**Petrified Forest National Park, AZ
2002 Reconstructed Extinction
PEFO1 Monitoring Data (every third day)**

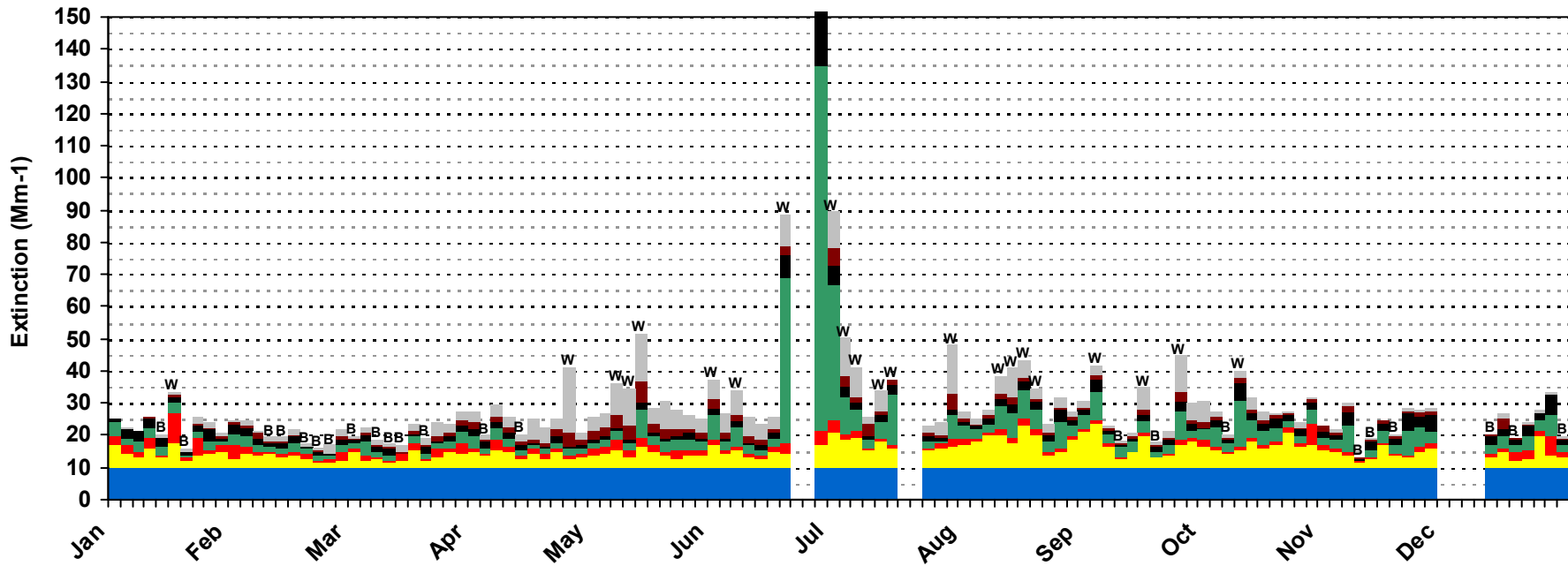
20% Worst Visibility Days
Total Extinction = 50 Mm-1 (34 to 165 Mm-1)



20% Best Visibility Days
Total Extinction = 19 Mm-1 (13 to 20 Mm-1)



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



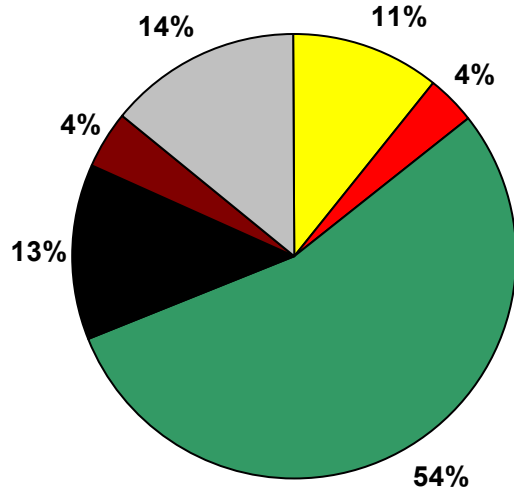
MONITORING DATA

**Petrified Forest National Park, AZ
2002 Reconstructed Extinction
PEFO1 Monitoring Data (every third day)**

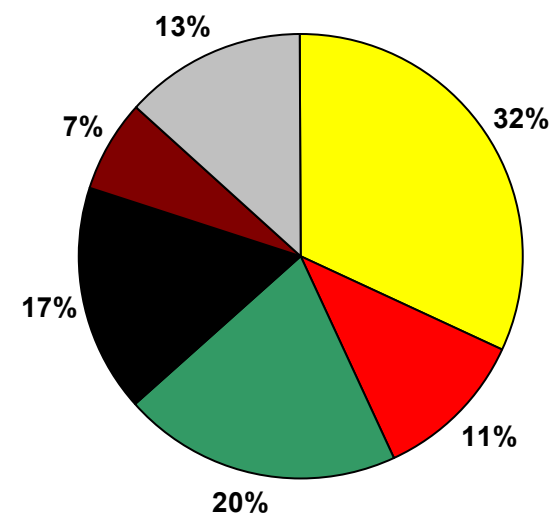
"RAW" DATA

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

20% Worst Visibility Days
Aerosol Extinction* = 67 Mm-1 (24 to 395 Mm-1)

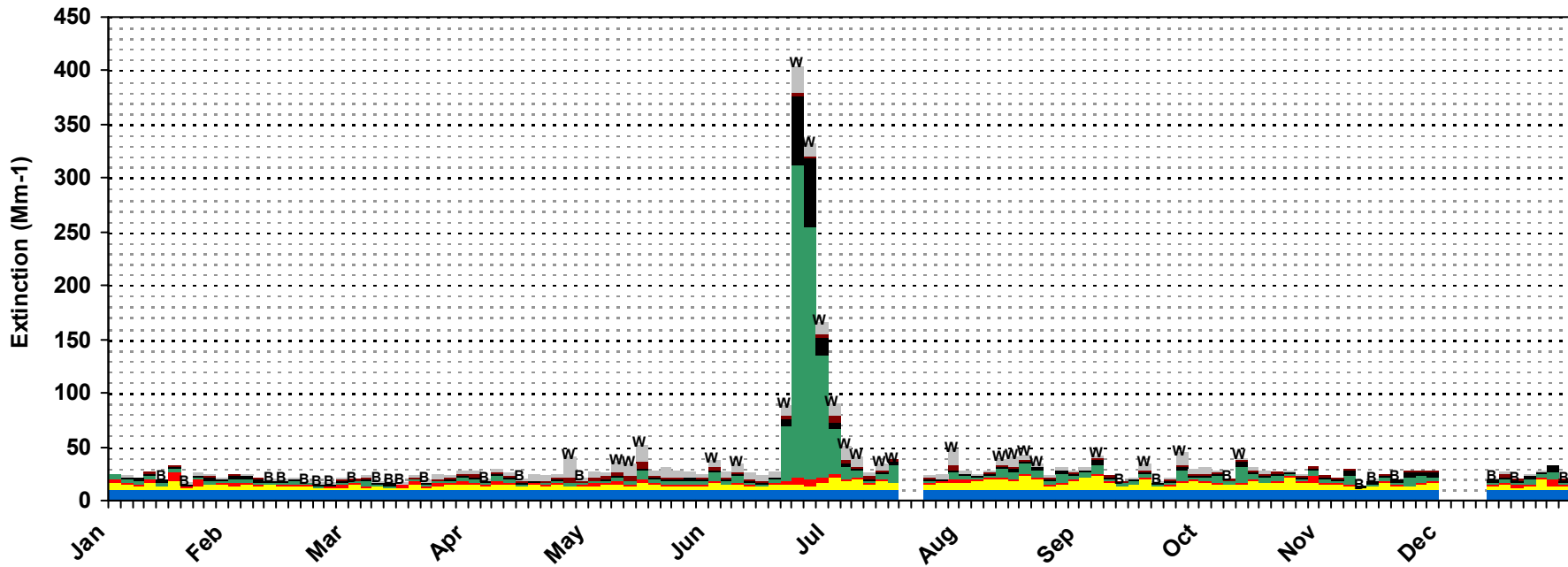


20% Best Visibility Days
Aerosol Extinction* = 9 Mm-1 (3 to 11 Mm-1)



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

*Excludes Rayleigh Extinction



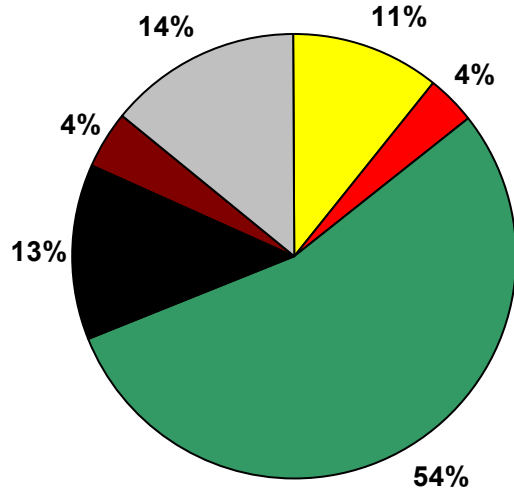
MONITORING DATA

**Petrified Forest National Park, AZ
2002 Reconstructed Extinction
PEFO1 Monitoring Data (every third day)**

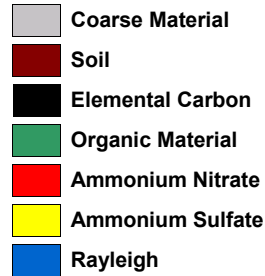
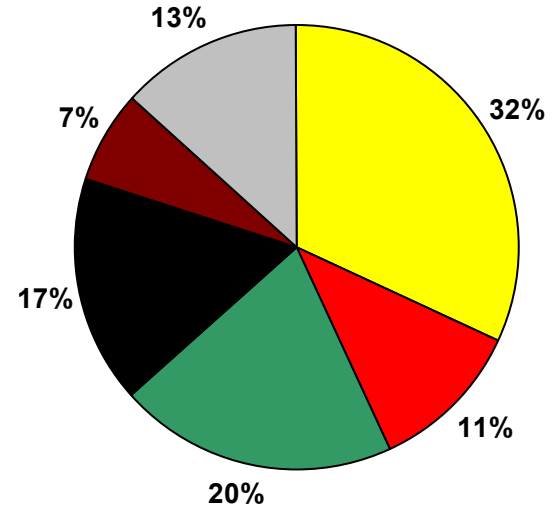
"RAW" DATA

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

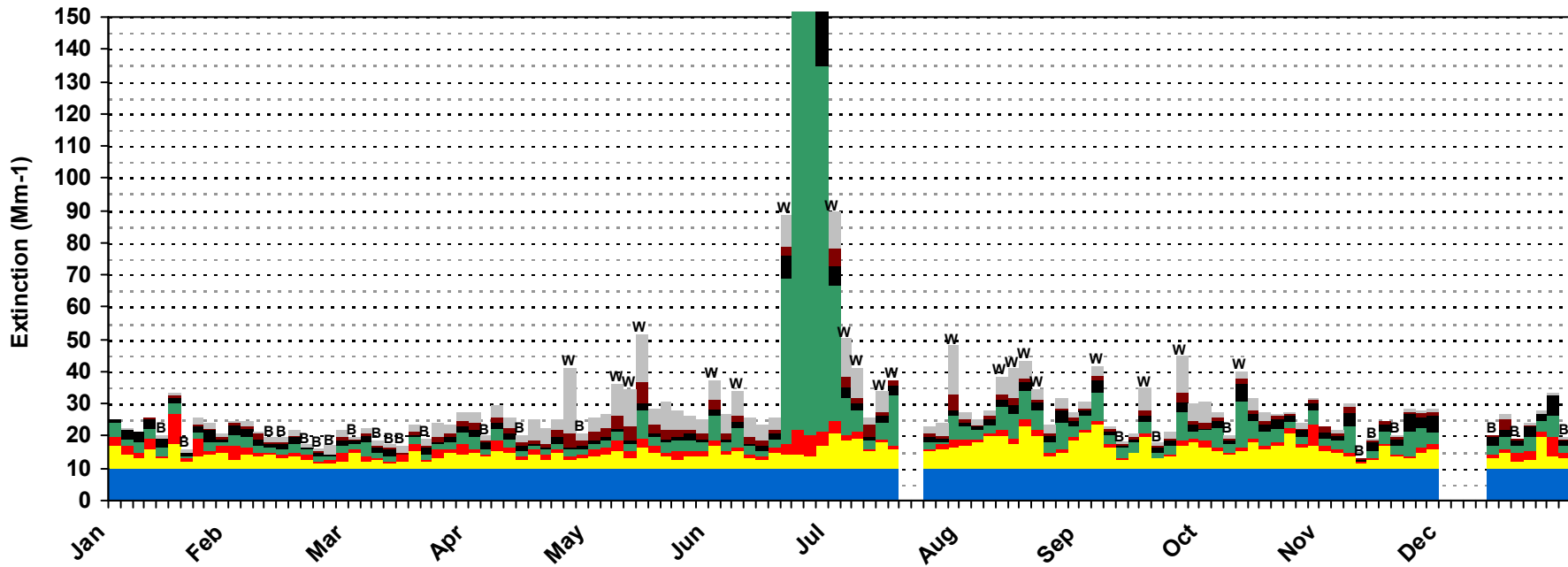
20% Worst Visibility Days
Aerosol Extinction* = 67 Mm-1 (24 to 395 Mm-1)



20% Best Visibility Days
Aerosol Extinction* = 9 Mm-1 (3 to 11 Mm-1)



*Excludes Rayleigh Extinction



MONITORING DATA

Petrified Forest National Park, AZ 2002 Reconstructed Extinction Values PEFO1 Monitoring Data (every third day)

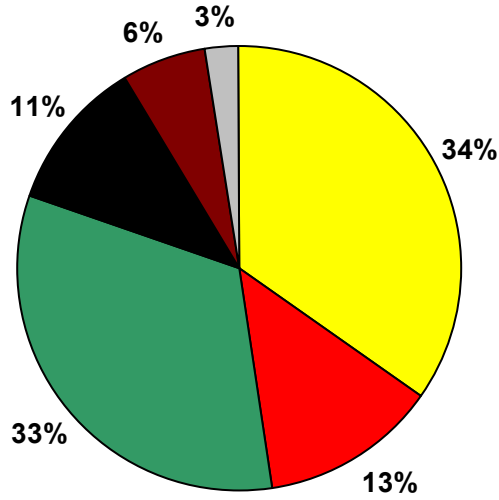
20% Worst Visibility Days			
	Average (Mm-1)	Minimum (Mm-1)	Maximum (Mm-1)
Total Extinction:	49.6 (16.0 dv)	33.6 (12.1 dv)	165.5 (28.1 dv)
Aerosol Extinction*:	39.6	23.6	155.5
	Average (Mm-1)	% of Tot. Extinction	% of Aer. Extinction
Ammonium Sulfate:	7.5	15%	19%
Ammonium Nitrate:	2.4	5%	6%
Organic Material:	15.3	31%	38%
Elemental Carbon:	3.4	7%	9%
Soil:	2.7	5%	7%
Coarse Material:	8.4	17%	21%
Rayleigh:	10.0	20%	N/A
20% Best Visibility Days			
	Average (Mm-1)	Minimum (Mm-1)	Maximum (Mm-1)
Total Extinction:	18.5 (6.2 dv)	13.3 (2.9 dv)	20.5 (7.2 dv)
Aerosol Extinction*:	8.5	3.3	10.5
	Average (Mm-1)	% of Tot. Extinction	% of Aer. Extinction
Ammonium Sulfate:	2.7	15%	32%
Ammonium Nitrate:	1.0	5%	11%
Organic Material:	1.8	10%	21%
Elemental Carbon:	1.4	8%	17%
Soil:	0.5	3%	6%
Coarse Material:	1.1	6%	13%
Rayleigh:	10.0	54%	N/A

*Excludes Rayleigh Extinction

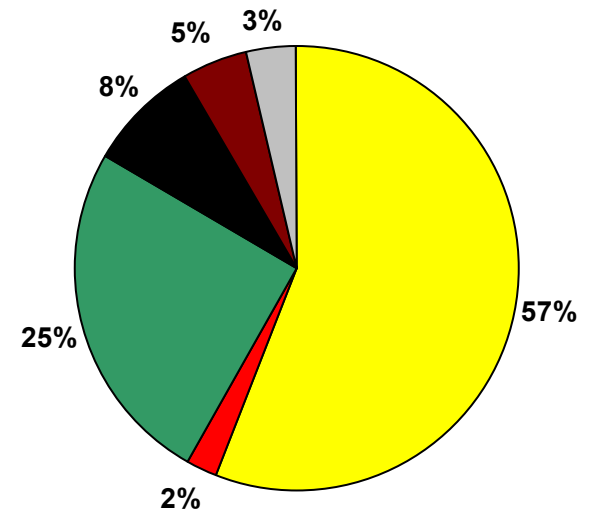
MODEL RESULTS

**Petrified Forest National Park, AZ
2002 Reconstructed Extinction
CMAQ Model Results (every day)**

20% Worst Visibility Days
Aerosol Extinction* = 22 Mm-1 (16 to 54 Mm-1)

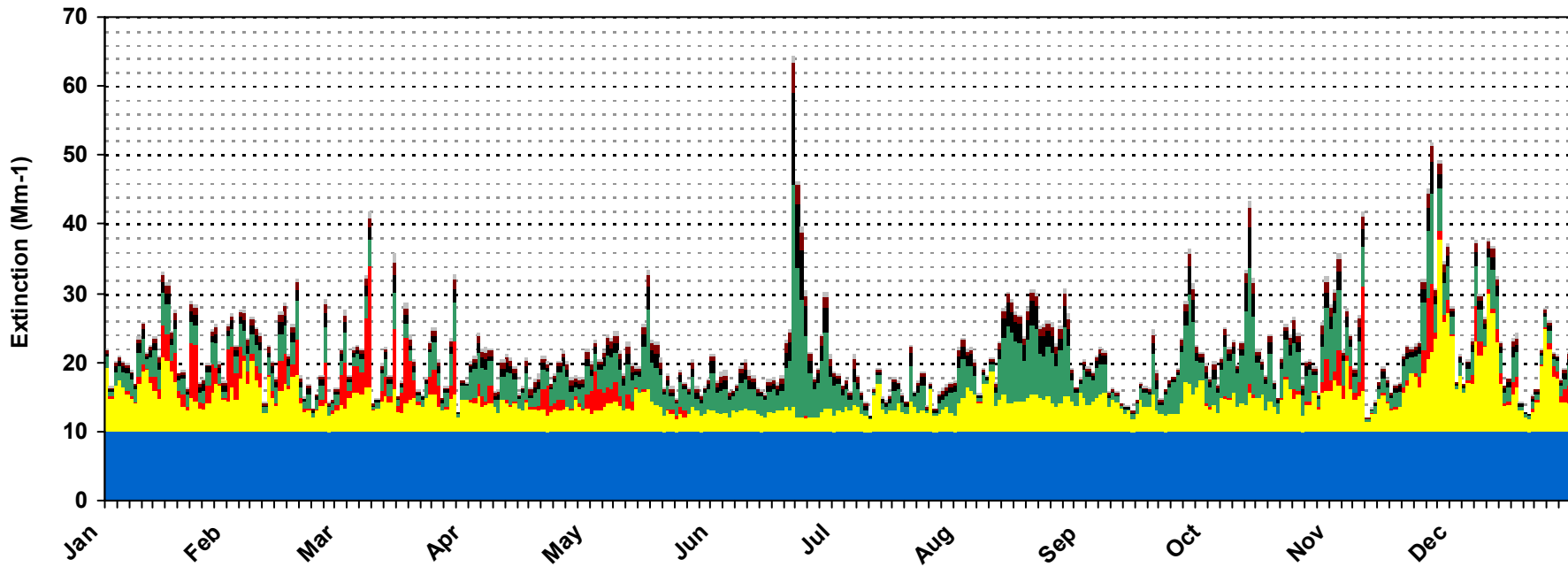


20% Best Visibility Days
Aerosol Extinction* = 5 Mm-1 (2 to 7 Mm-1)



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

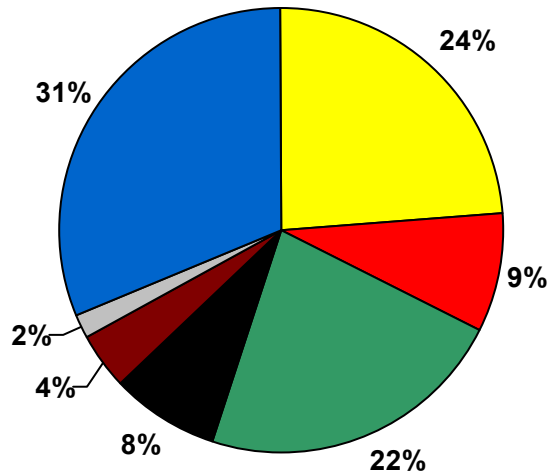
*Excludes Rayleigh Extinction



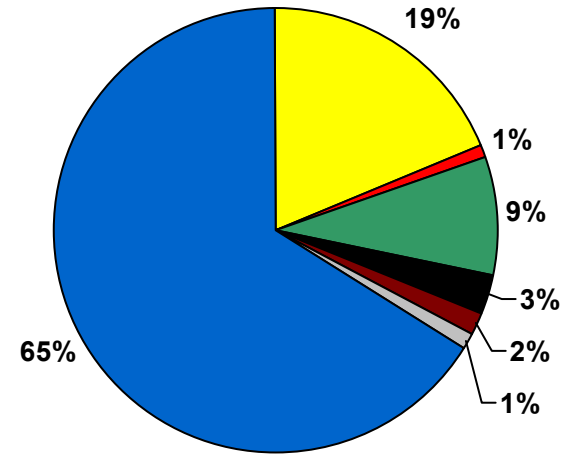
MODEL RESULTS

**Petrified Forest National Park, AZ
2002 Reconstructed Extinction
CMAQ Model Results (every day)**

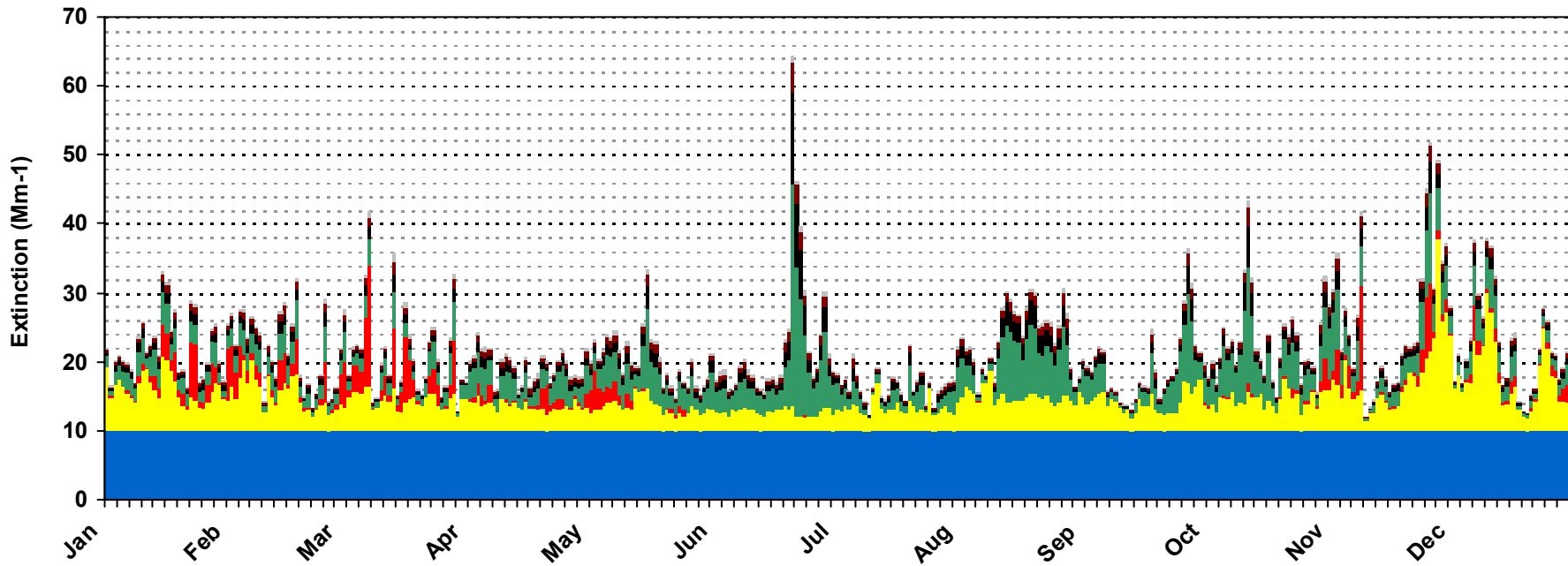
20% Worst Visibility Days
Total Extinction = 32 Mm-1 (26 to 64 Mm-1)



20% Best Visibility Days
Total Extinction = 15 Mm-1 (12 to 17 Mm-1)



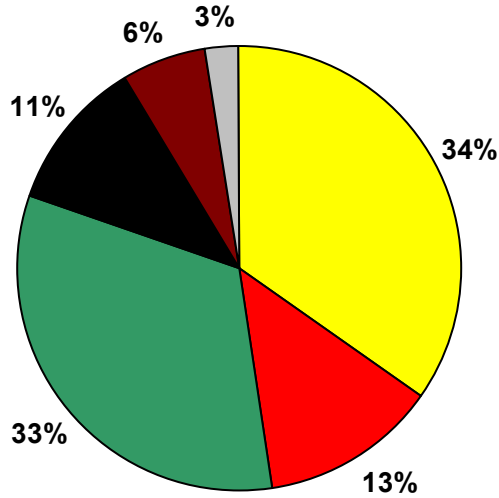
- Coarse Material
- Soil
- Elemental Carbon
- Organic Material
- Ammonium Nitrate
- Ammonium Sulfate
- Rayleigh



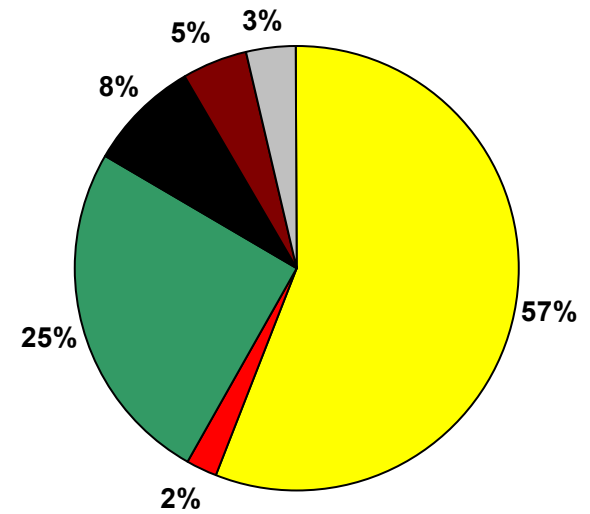
MODEL RESULTS

Petrified Forest National Park, AZ 2002 Reconstructed Extinction CMAQ Model Results (every day)

20% Worst Visibility Days
Aerosol Extinction* = 22 Mm-1 (16 to 54 Mm-1)

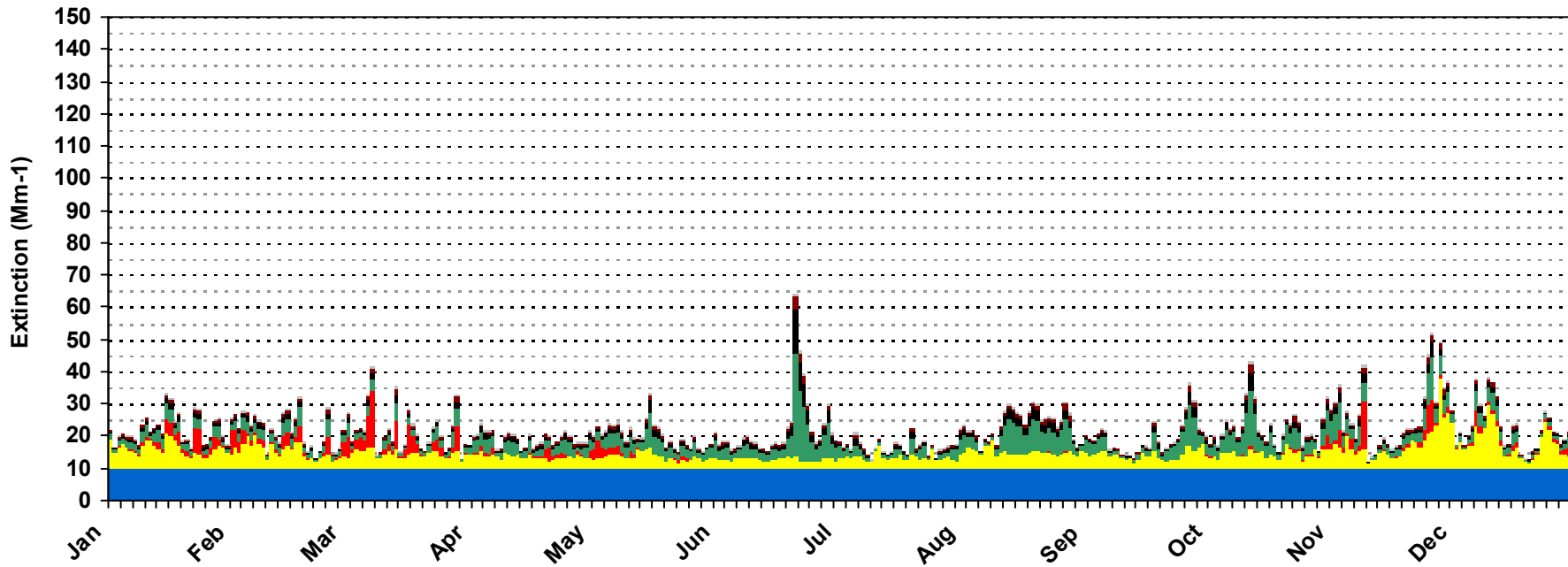


20% Best Visibility Days
Aerosol Extinction* = 5 Mm-1 (2 to 7 Mm-1)



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

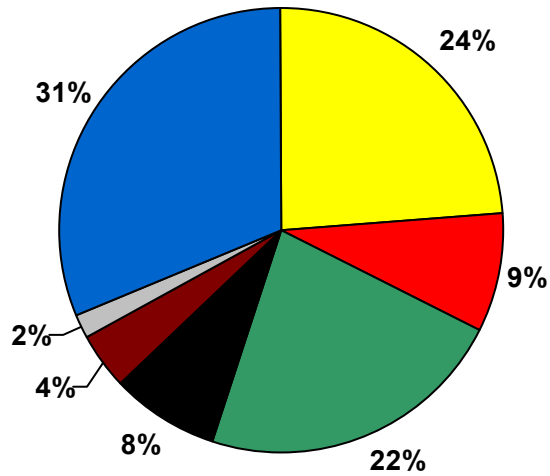
*Excludes Rayleigh Extinction



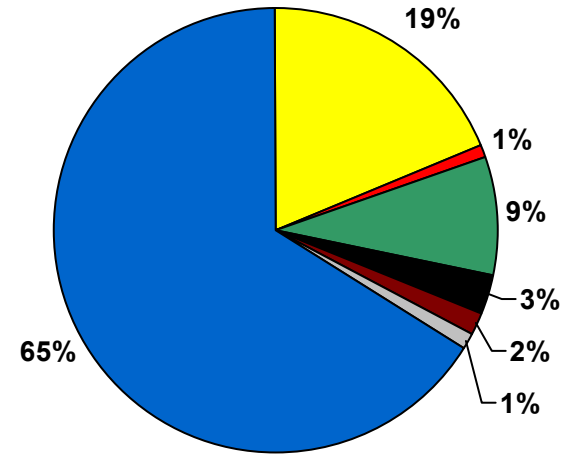
MODEL RESULTS

Petrified Forest National Park, AZ 2002 Reconstructed Extinction CMAQ Model Results (every day)

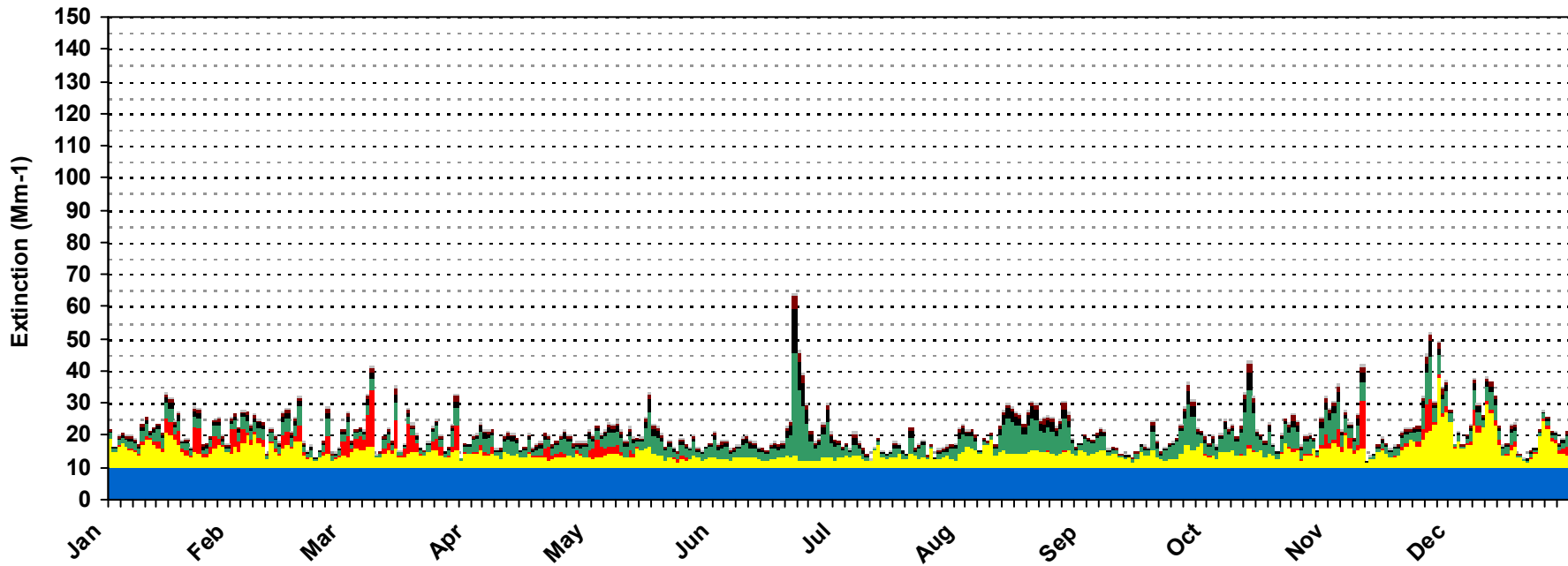
20% Worst Visibility Days
Total Extinction = 32 Mm-1 (26 to 64 Mm-1)



20% Best Visibility Days
Total Extinction = 15 Mm-1 (12 to 17 Mm-1)



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



MODEL RESULTS

Petrified Forest National Park, AZ 2002 Reconstructed Extinction CMAQ Model Results (every day)

20% Worst Visibility Days			
	Average (Mm-1)	Minimum (Mm-1)	Maximum (Mm-1)
Total Extinction:	32.0 (11.6 dv)	25.6 (9.4 dv)	64.3 (18.6 dv)
Aerosol Extinction*:	22.0	15.6	54.3
	Average (Mm-1)	% of Tot. Extinction	% of Aer. Extinction
Ammonium Sulfate:	7.6	24%	35%
Ammonium Nitrate:	2.8	9%	13%
Organic Material:	7.2	22%	33%
Elemental Carbon:	2.5	8%	11%
Soil:	1.3	4%	6%
Coarse Material:	0.6	2%	3%
Rayleigh:	10.0	31%	N/A
20% Best Visibility Days			
	Average (Mm-1)	Minimum (Mm-1)	Maximum (Mm-1)
Total Extinction:	15.1 (4.1 dv)	12.1 (1.9 dv)	16.6 (5.1 dv)
Aerosol Extinction*:	5.1	2.1	6.6
	Average (Mm-1)	% of Tot. Extinction	% of Aer. Extinction
Ammonium Sulfate:	2.9	19%	56%
Ammonium Nitrate:	0.1	1%	2%
Organic Material:	1.3	9%	25%
Elemental Carbon:	0.4	3%	8%
Soil:	0.2	2%	5%
Coarse Material:	0.2	1%	3%
Rayleigh:	10.0	66%	N/A

*Excludes Rayleigh Extinction