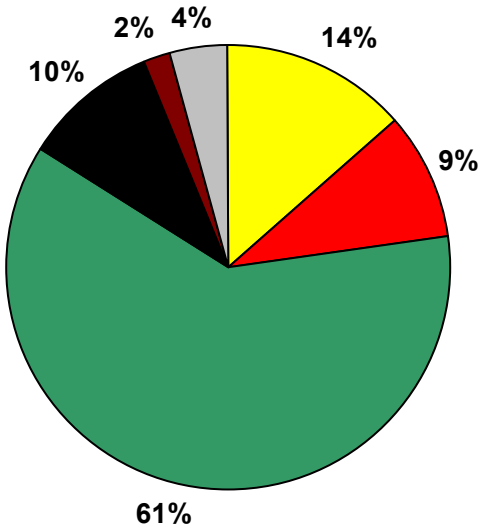
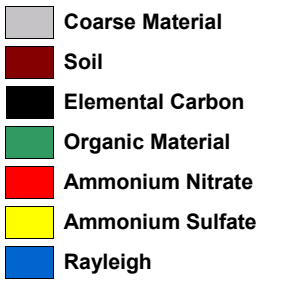
MONITORING DATA

Lava Beds National Monument, CA
2002 Reconstructed Extinction
LABE1 Monitoring Data (every third day)

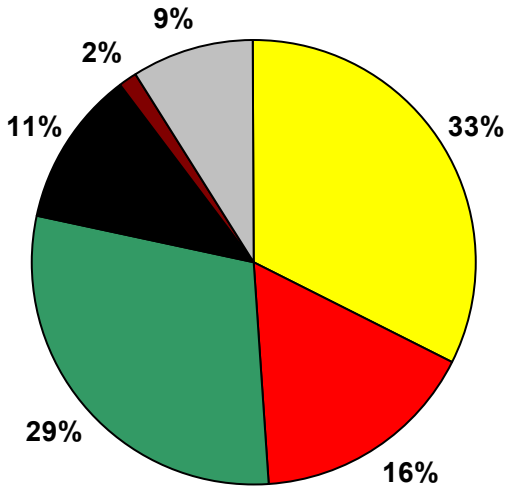
20% Worst Visibility Days
Aerosol Extinction* = 53 Mm-1 (26 to 180 Mm-1)

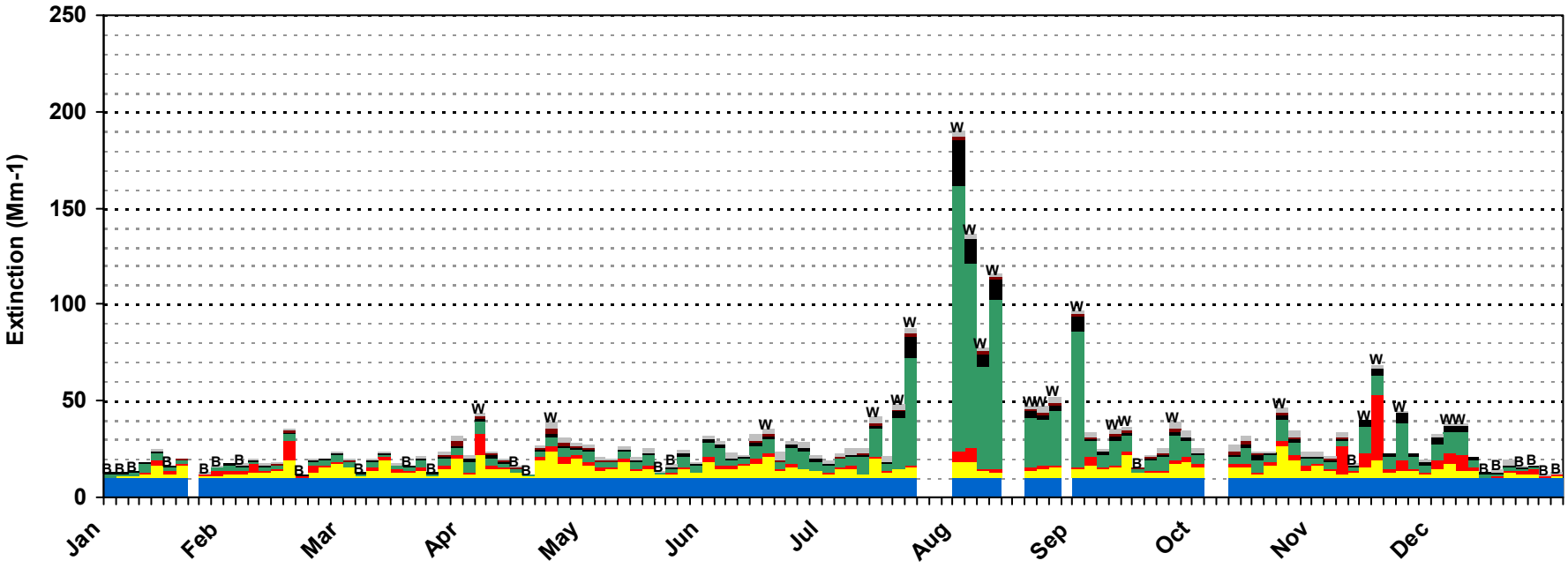




*Excludes Rayleigh Extinction

20% Best Visibility Days
Aerosol Extinction* = 4 Mm-1 (1 to 7 Mm-1)

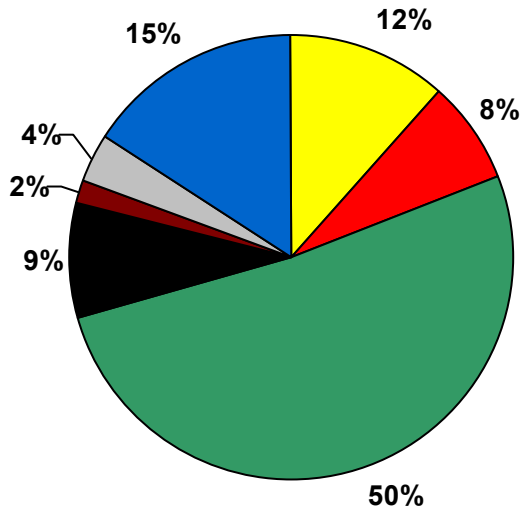


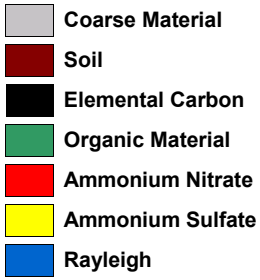


MONITORING DATA

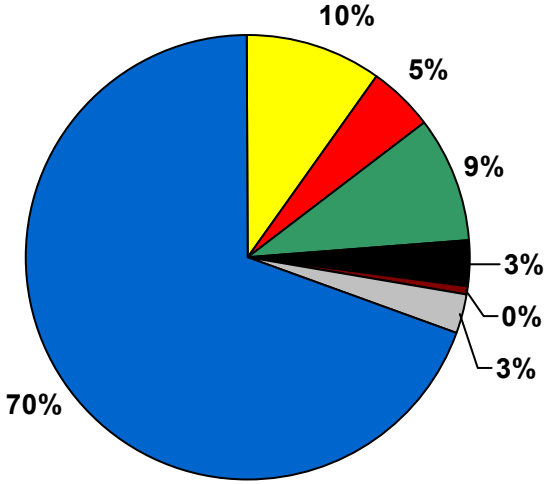
Lava Beds National Monument, CA
2002 Reconstructed Extinction
LABE1 Monitoring Data (every third day)

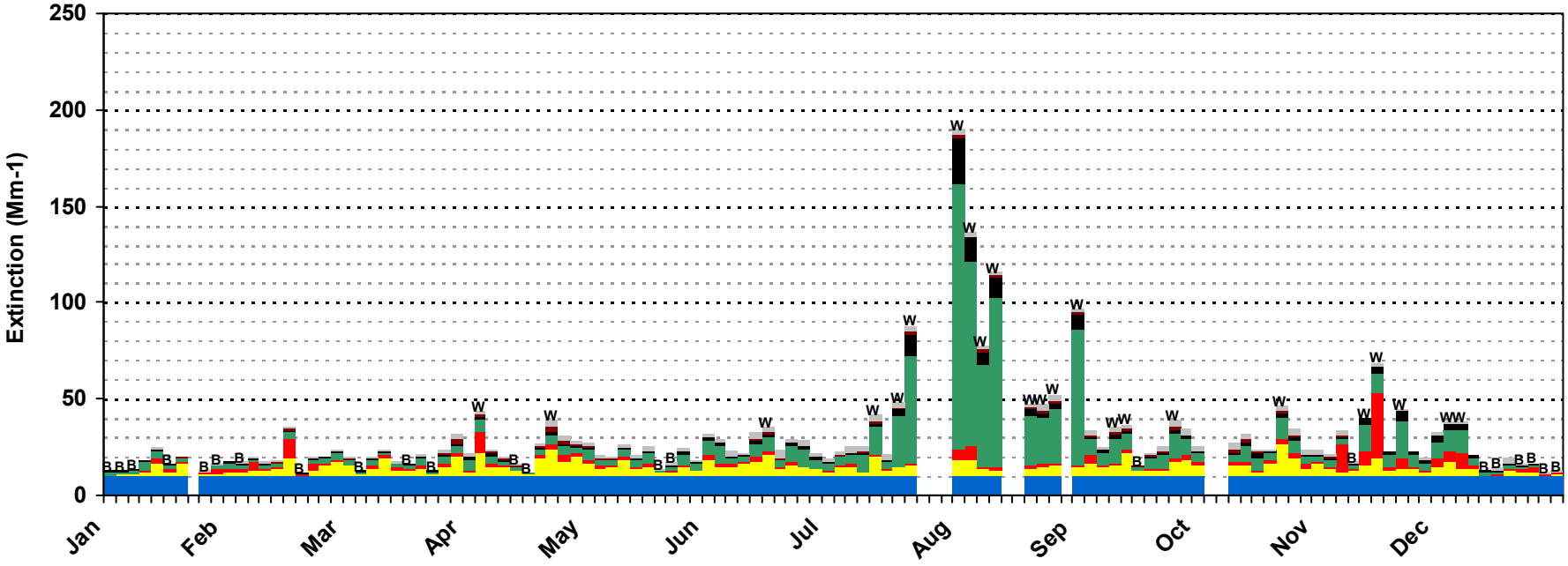
20% Worst Visibility Days
Total Extinction = 63 Mm-1 (36 to 190 Mm-1)





20% Best Visibility Days
Total Extinction = 14 Mm-1 (11 to 17 Mm-1)

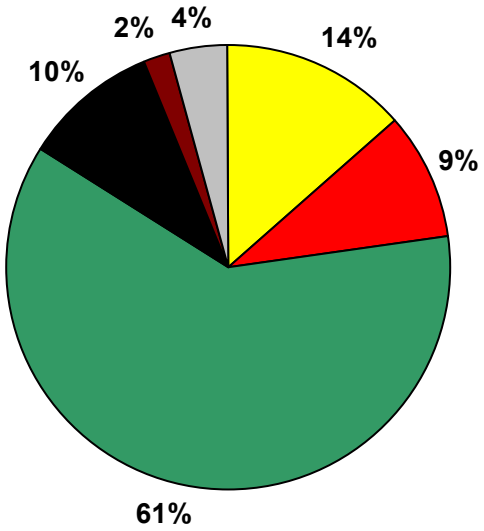


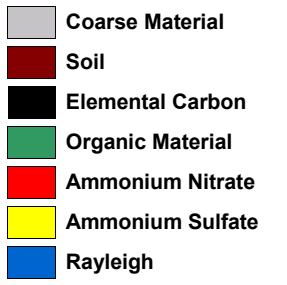


MONITORING DATA

Lava Beds National Monument, CA
2002 Reconstructed Extinction
LABE1 Monitoring Data (every third day)

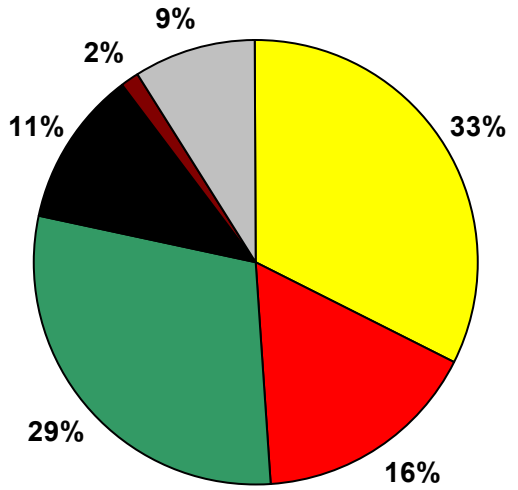
20% Worst Visibility Days
Aerosol Extinction* = 53 Mm-1 (26 to 180 Mm-1)

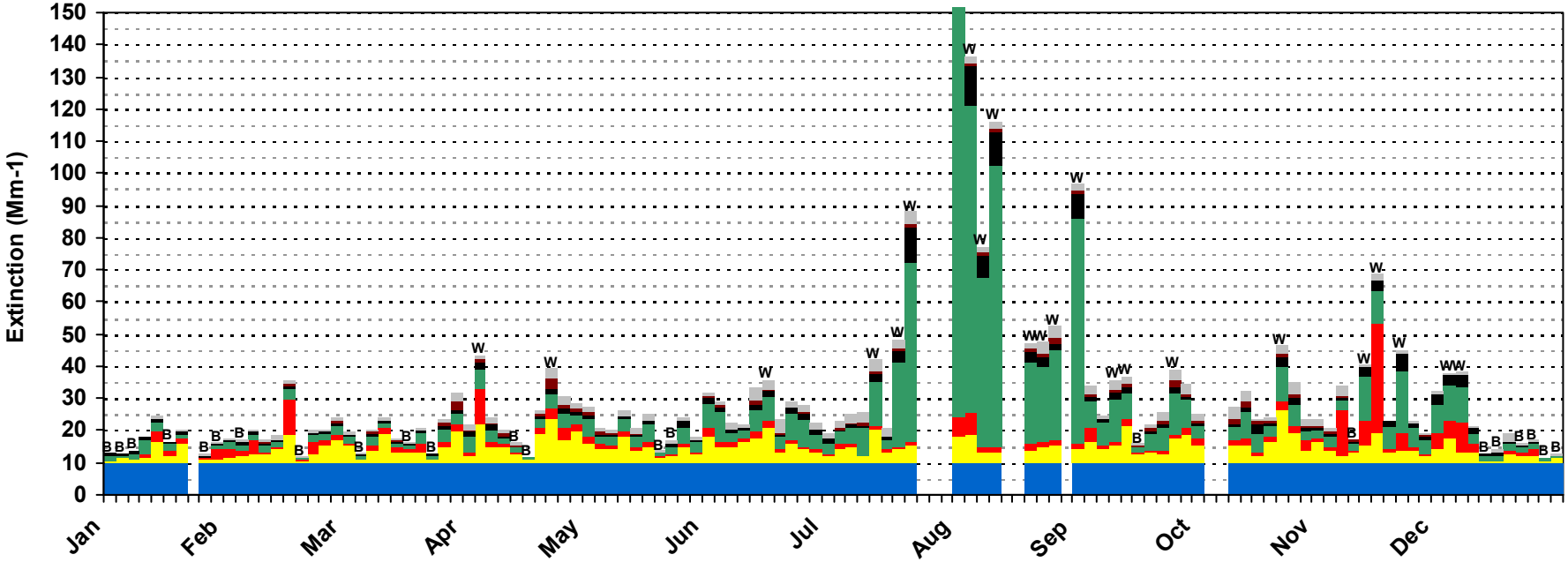




*Excludes Rayleigh Extinction

20% Best Visibility Days
Aerosol Extinction* = 4 Mm-1 (1 to 7 Mm-1)

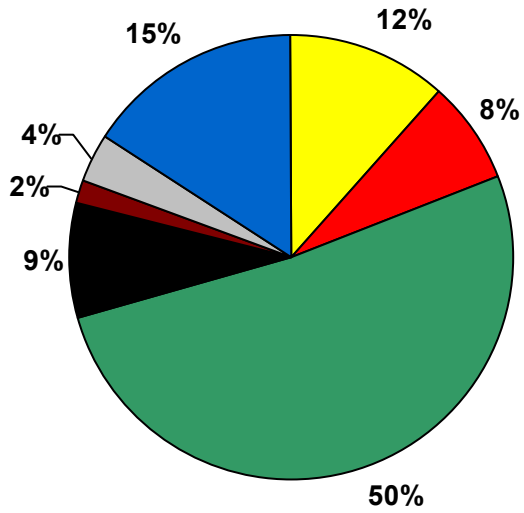


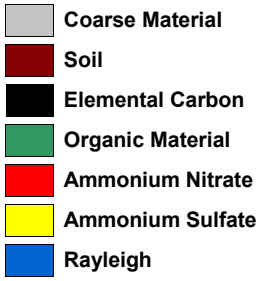


MONITORING DATA

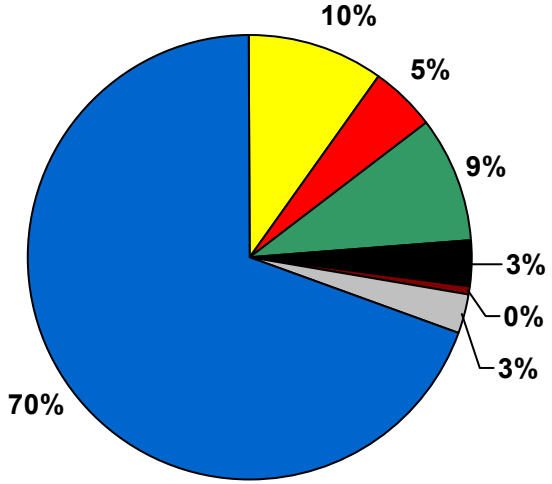
Lava Beds National Monument, CA
2002 Reconstructed Extinction
LABE1 Monitoring Data (every third day)

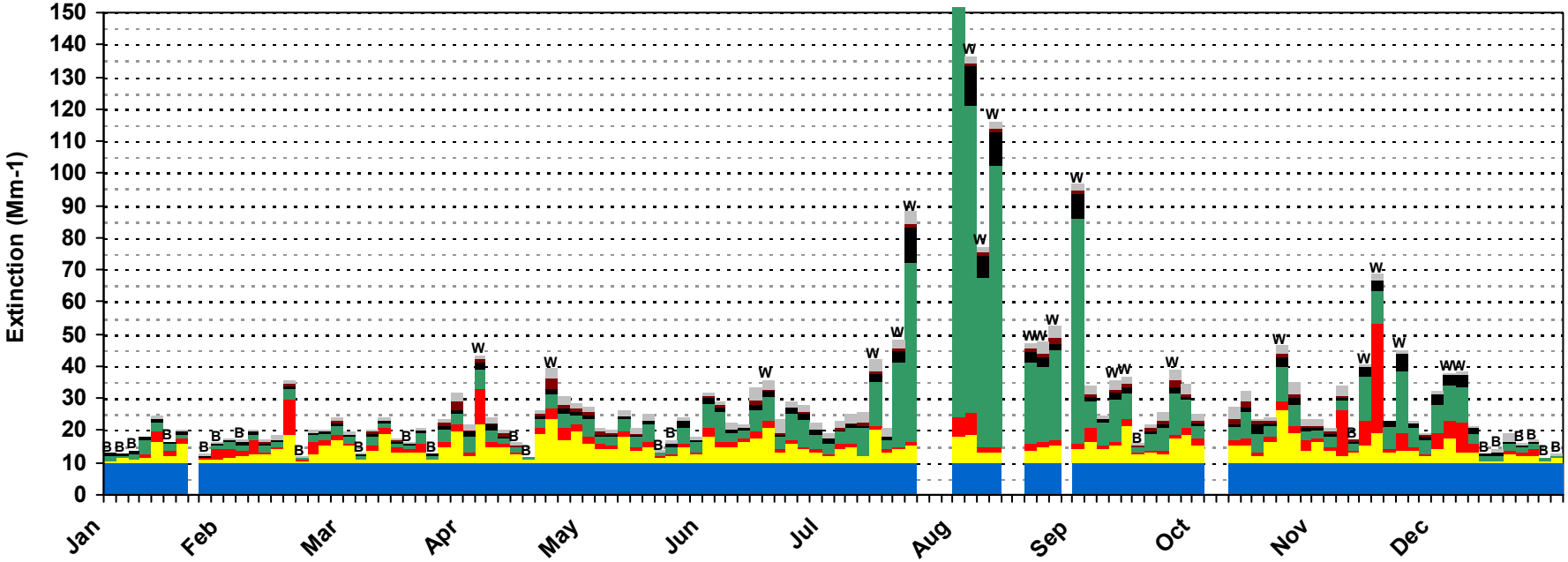
20% Worst Visibility Days
Total Extinction = 63 Mm-1 (36 to 190 Mm-1)





20% Best Visibility Days
Total Extinction = 14 Mm-1 (11 to 17 Mm-1)



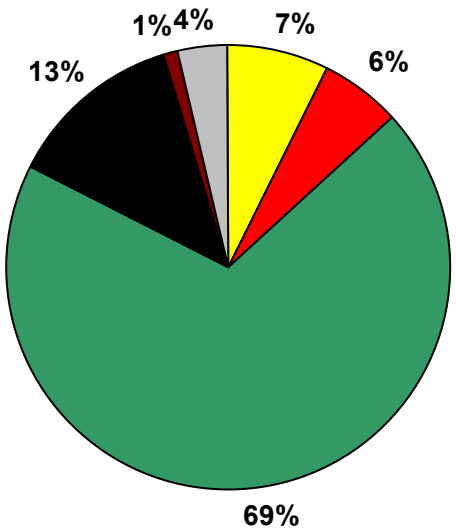


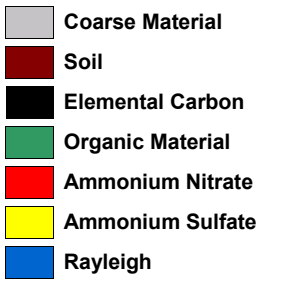
MONITORING DATA

Lava Beds National Monument, CA
2002 Reconstructed Extinction
LABE1 Monitoring Data (every third day)

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

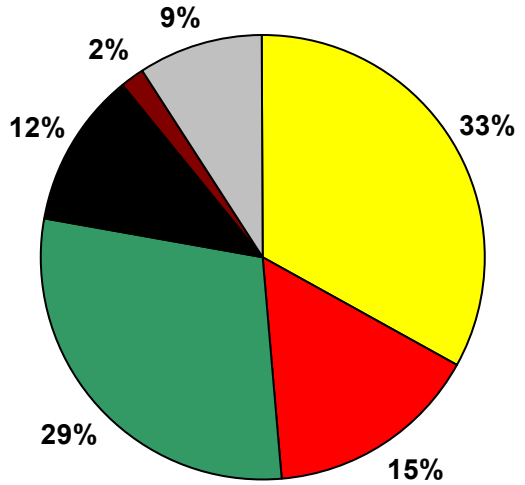
20% Worst Visibility Days
Aerosol Extinction* = 91 Mm-1 (29 to 236 Mm-1)

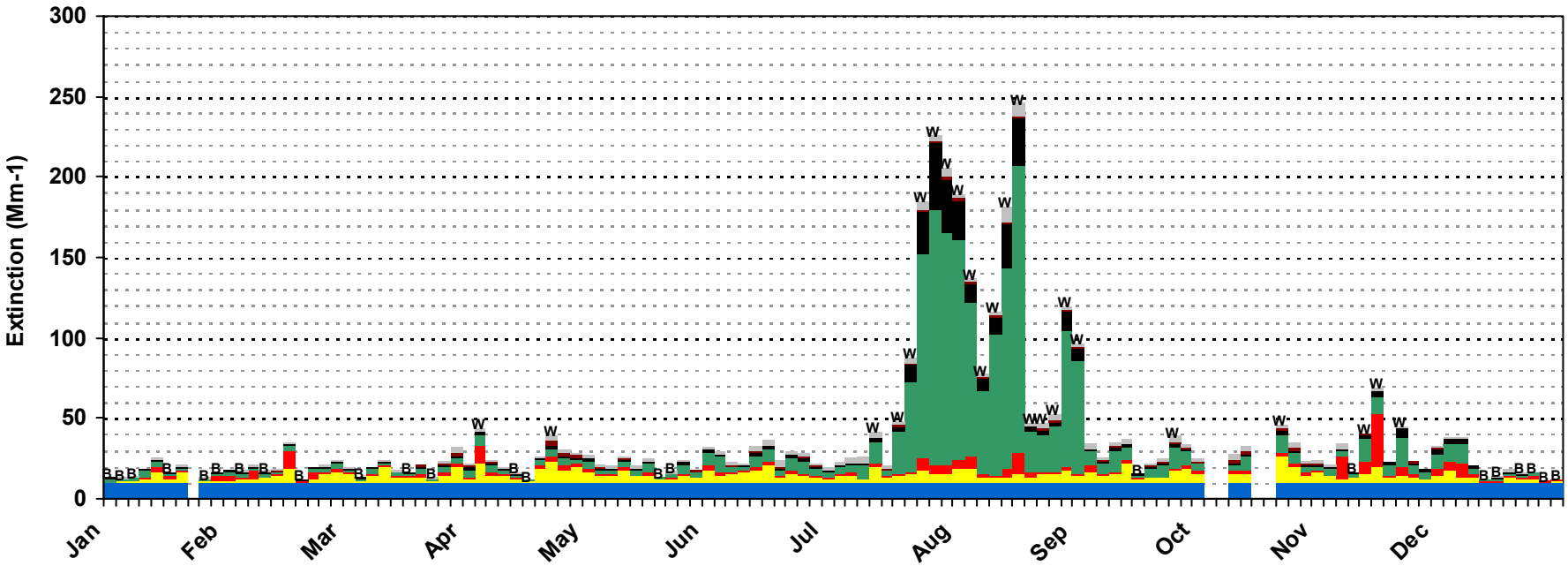




*Excludes Rayleigh Extinction

20% Best Visibility Days
Aerosol Extinction* = 4 Mm-1 (1 to 7 Mm-1)



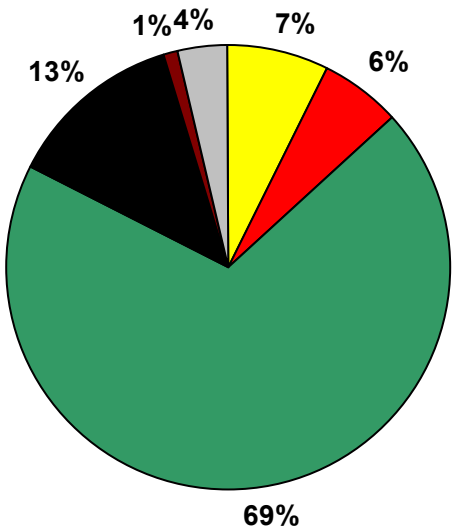


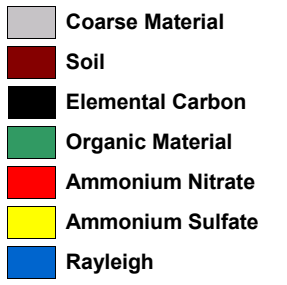
MONITORING DATA

Lava Beds National Monument, CA
2002 Reconstructed Extinction
LABE1 Monitoring Data (every third day)

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

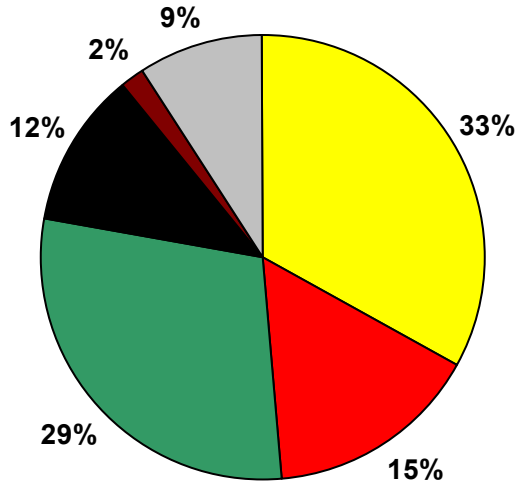
20% Worst Visibility Days
Aerosol Extinction* = 91 Mm-1 (29 to 236 Mm-1)

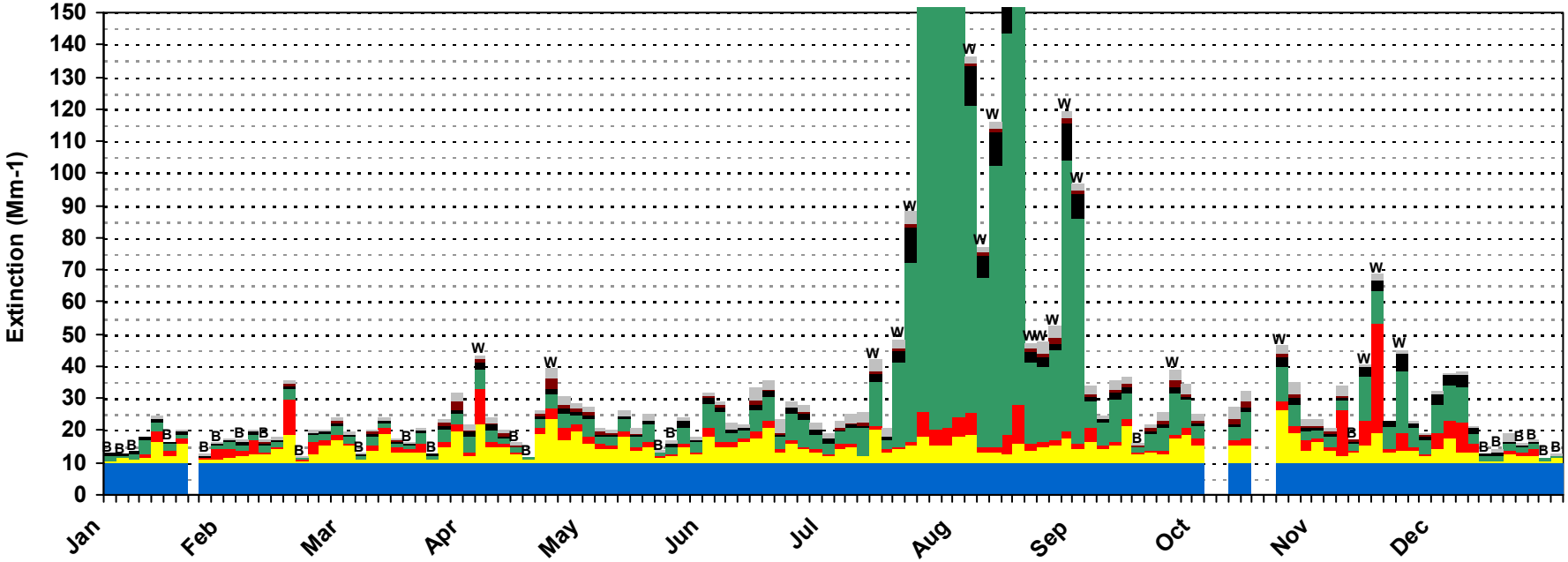




*Excludes Rayleigh Extinction

20% Best Visibility Days
Aerosol Extinction* = 4 Mm-1 (1 to 7 Mm-1)





MONITORING DATA

Lava Beds National Monument, CA
2002 Reconstructed Extinction Values
LABE1 Monitoring Data (every third day)

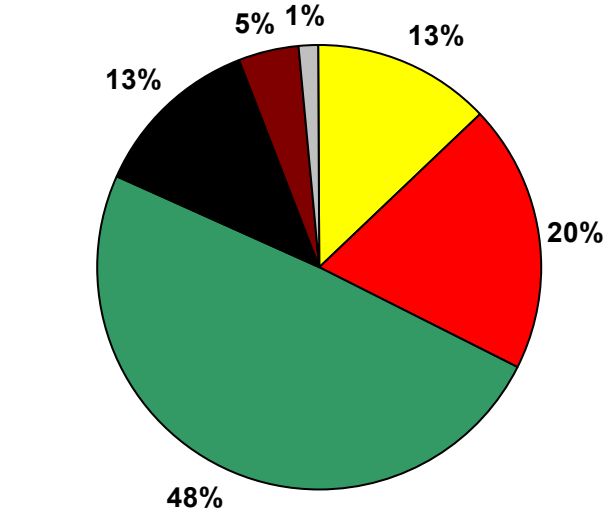
20% Worst Visibility Days			
	Average (Mm-1)	**Minimum (Mm-1)**	**Maximum (Mm-1)**
Total Extinction:	62.9 (18.4 dv)	35.5 (12.7 dv)	189.6 (29.4 dv)
Aerosol Extinction*:	52.9	25.5	179.6
	Average (Mm-1)	**% of Tot. Extinction**	**% of Aer. Extinction**
Ammonium Sulfate:	7.3	12%	14%
Ammonium Nitrate:	4.8	8%	9%
Organic Material:	32.3	51%	61%
Elemental Carbon:	5.4	9%	10%
Soil:	1.0	2%	2%
Coarse Material:	2.2	3%	4%
Rayleigh:	10.0	16%	N/A
20% Best Visibility Days			
	Average (Mm-1)	**Minimum (Mm-1)**	**Maximum (Mm-1)**
Total Extinction:	14.4 (3.6 dv)	11.4 (1.3 dv)	17.1 (5.4 dv)
Aerosol Extinction*:	4.4	1.4	7.1
	Average (Mm-1)	**% of Tot. Extinction**	**% of Aer. Extinction**
Ammonium Sulfate:	1.4	10%	33%
Ammonium Nitrate:	0.7	5%	16%
Organic Material:	1.3	9%	29%
Elemental Carbon:	0.5	3%	11%
Soil:	0.1	0%	2%
Coarse Material:	0.3	2%	7%
Rayleigh:	10.0	70%	N/A

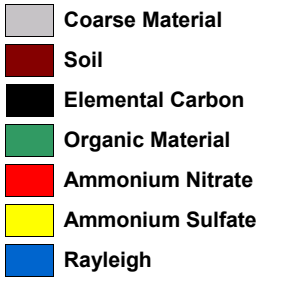
*Excludes Rayleigh Extinction

MODEL RESULTS

Lava Beds National Monument, CA
2002 Reconstructed Extinction
CMAQ Model Results (every day)

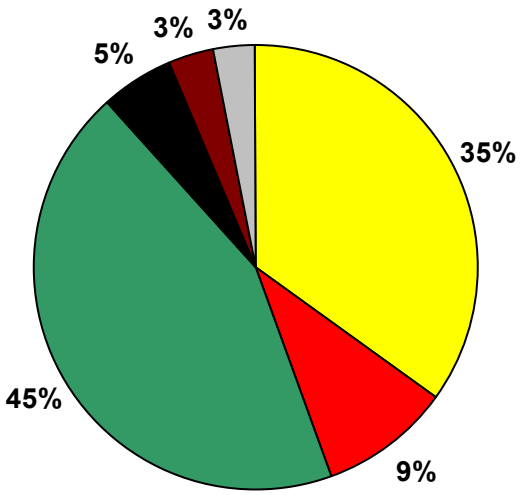
20% Worst Visibility Days
Aerosol Extinction* = 62 Mm-1 (33 to 281 Mm-1)

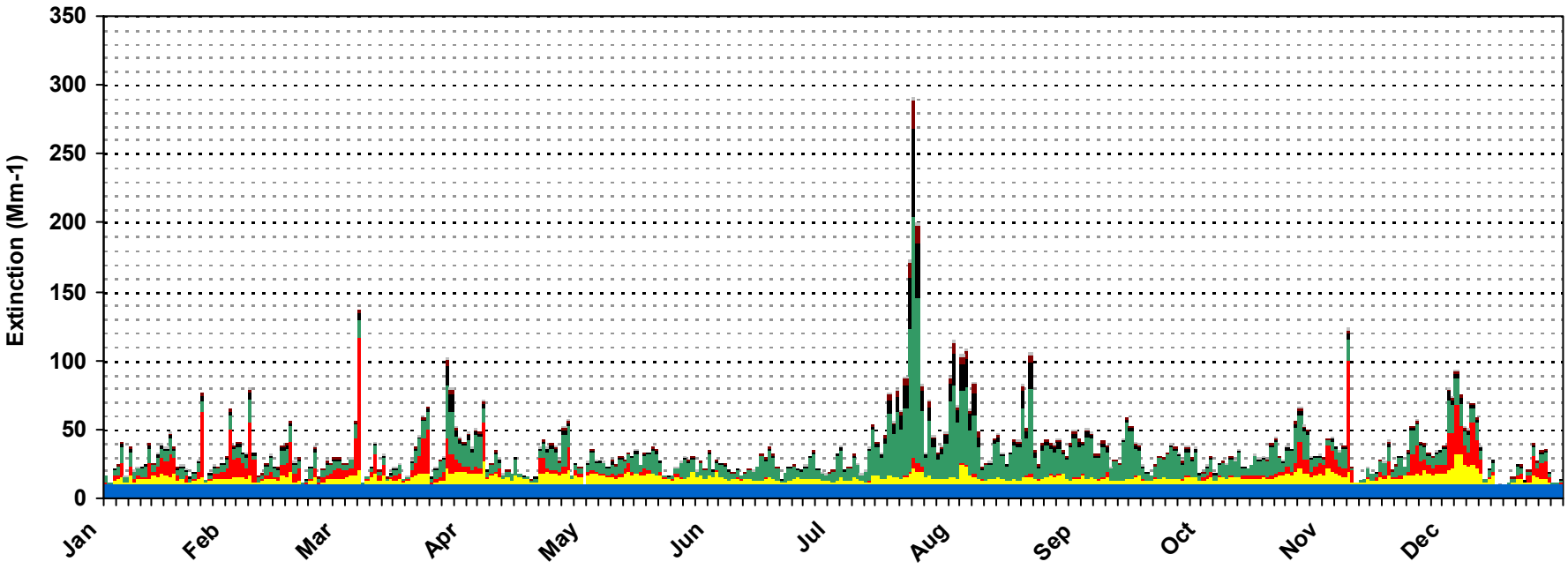




*Excludes Rayleigh Extinction

20% Best Visibility Days
Aerosol Extinction* = 6 Mm-1 (0 to 11 Mm-1)

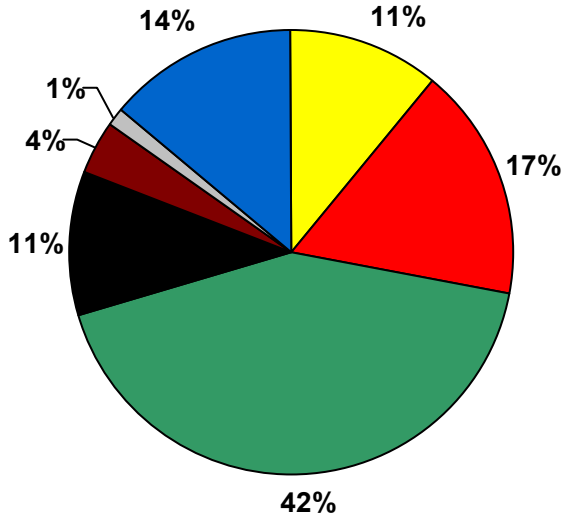


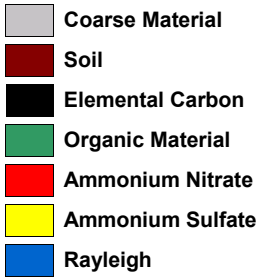


MODEL RESULTS

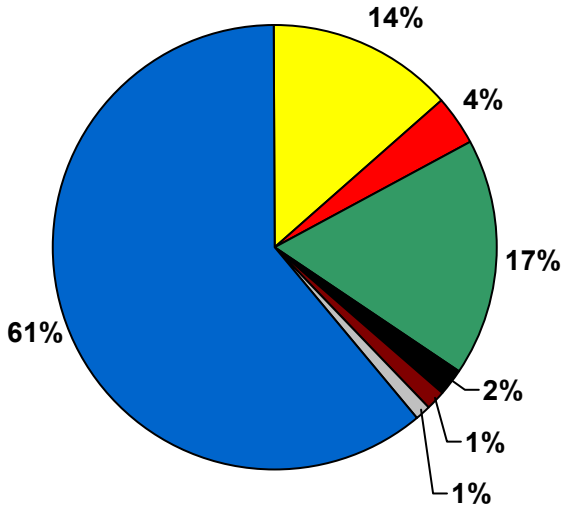
Lava Beds National Monument, CA
2002 Reconstructed Extinction
CMAQ Model Results (every day)

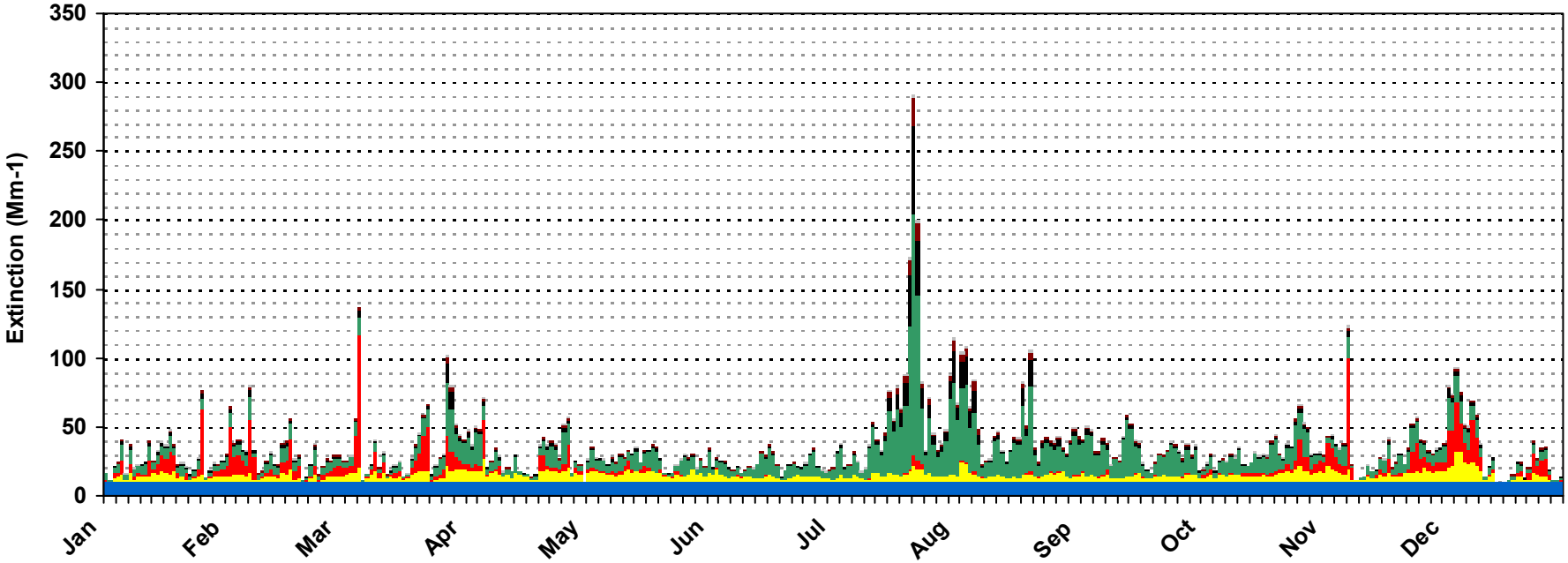
20% Worst Visibility Days
Total Extinction = 72 Mm-1 (43 to 291 Mm-1)





20% Best Visibility Days
Total Extinction = 16 Mm-1 (10 to 21 Mm-1)

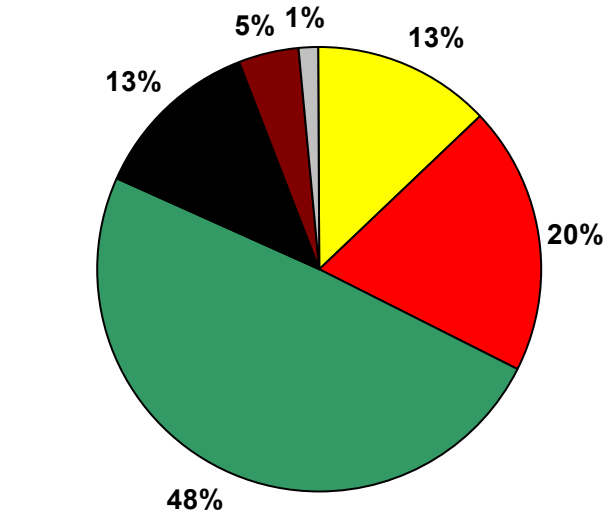


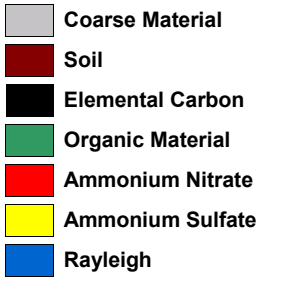


MODEL RESULTS

Lava Beds National Monument, CA
2002 Reconstructed Extinction
CMAQ Model Results (every day)

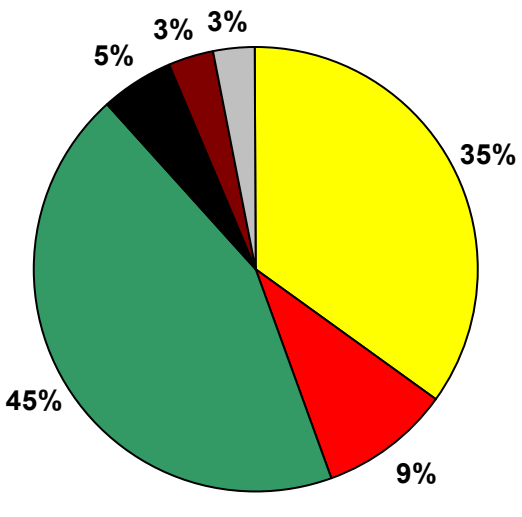
20% Worst Visibility Days
Aerosol Extinction* = 62 Mm-1 (33 to 281 Mm-1)

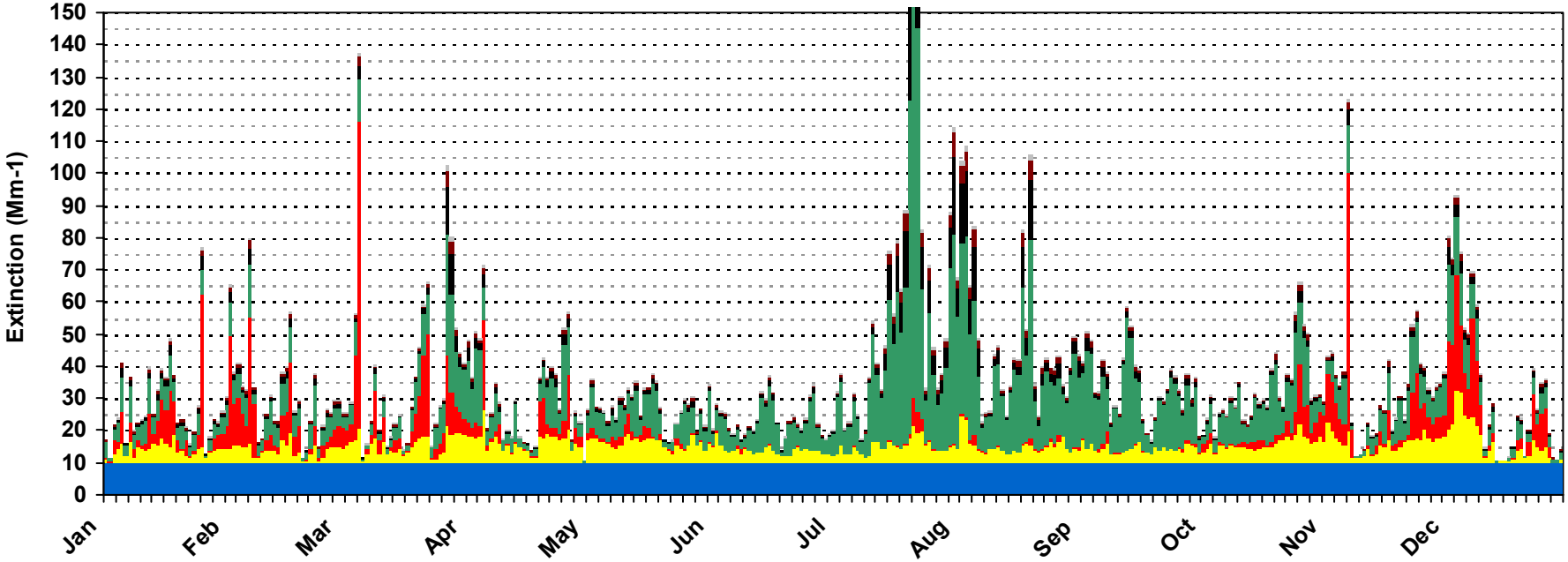




*Excludes Rayleigh Extinction

20% Best Visibility Days
Aerosol Extinction* = 6 Mm-1 (0 to 11 Mm-1)

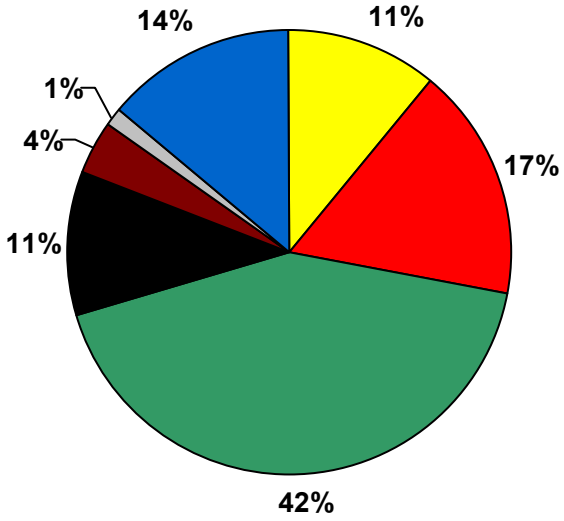


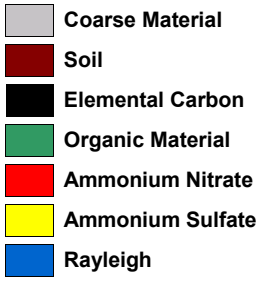


MODEL RESULTS

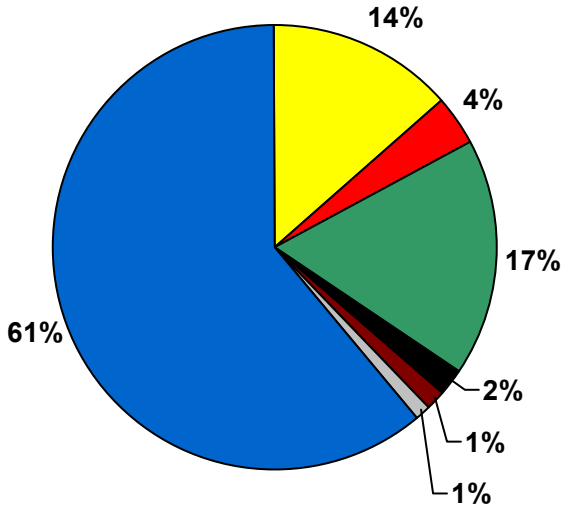
Lava Beds National Monument, CA
2002 Reconstructed Extinction
CMAQ Model Results (every day)

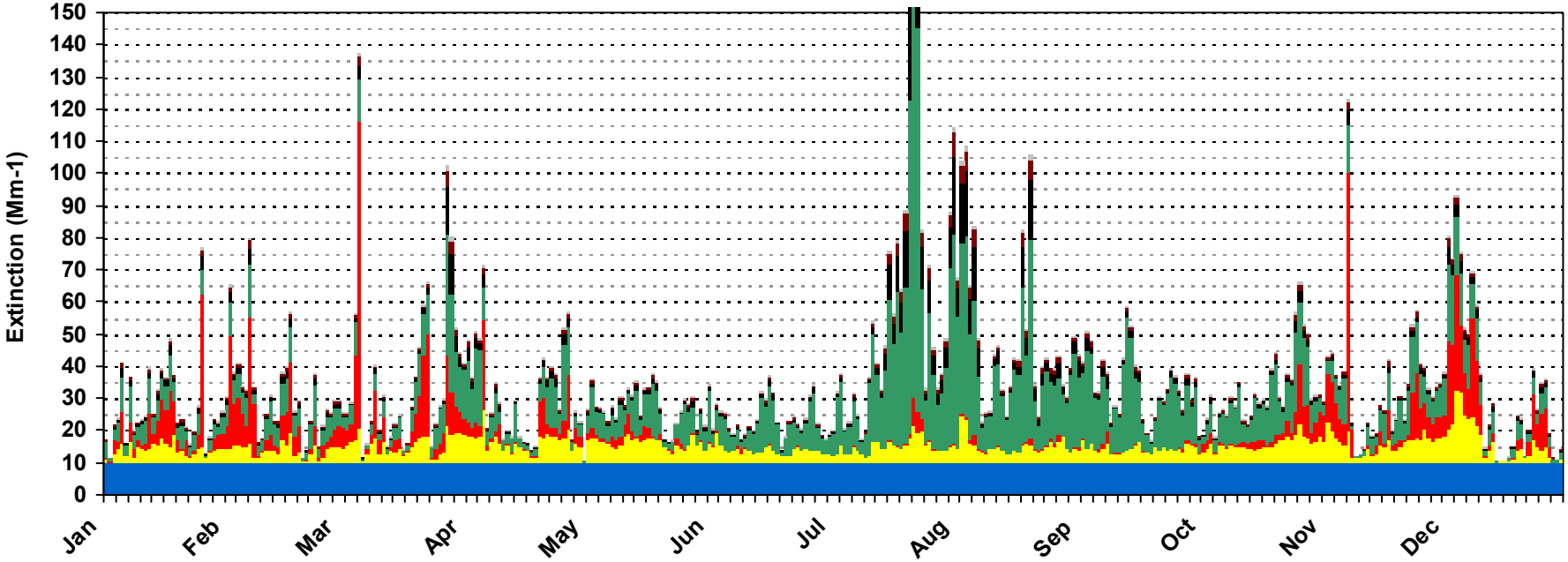
20% Worst Visibility Days
Total Extinction = 72 Mm-1 (43 to 291 Mm-1)





20% Best Visibility Days
Total Extinction = 16 Mm-1 (10 to 21 Mm-1)





MODEL RESULTS

Lava Beds National Monument, CA
2002 Reconstructed Extinction
CMAQ Model Results (every day)

20% Worst Visibility Days			
	Average (Mm-1)	**Minimum (Mm-1)**	**Maximum (Mm-1)**
Total Extinction:	71.6 (19.7 dv)	42.8 (14.5 dv)	291.5 (33.7 dv)
Aerosol Extinction*:	61.6	32.8	281.5
	Average (Mm-1)	**% of Tot. Extinction**	**% of Aer. Extinction**
Ammonium Sulfate:	8.0	11%	13%
Ammonium Nitrate:	12.1	17%	20%
Organic Material:	30.2	42%	49%
Elemental Carbon:	7.7	11%	13%
Soil:	2.8	4%	5%
Coarse Material:	0.9	1%	1%
Rayleigh:	10.0	14%	N/A
20% Best Visibility Days			
	Average (Mm-1)	**Minimum (Mm-1)**	**Maximum (Mm-1)**
Total Extinction:	16.4 (4.9 dv)	10.2 (0.2 dv)	20.9 (7.4 dv)
Aerosol Extinction*:	6.4	0.2	10.9
	Average (Mm-1)	**% of Tot. Extinction**	**% of Aer. Extinction**
Ammonium Sulfate:	2.2	14%	35%
Ammonium Nitrate:	0.6	4%	9%
Organic Material:	2.8	17%	44%
Elemental Carbon:	0.3	2%	5%
Soil:	0.2	1%	3%
Coarse Material:	0.2	1%	3%
Rayleigh:	10.0	61%	N/A

*Excludes Rayleigh Extinction