

Figure_S1



Figure S2

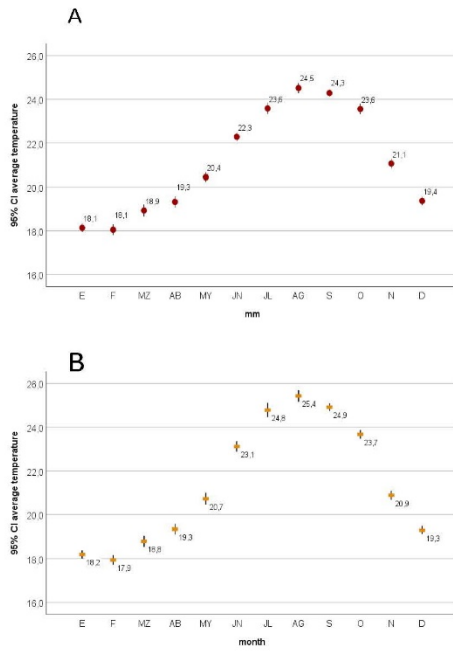


Figure S3

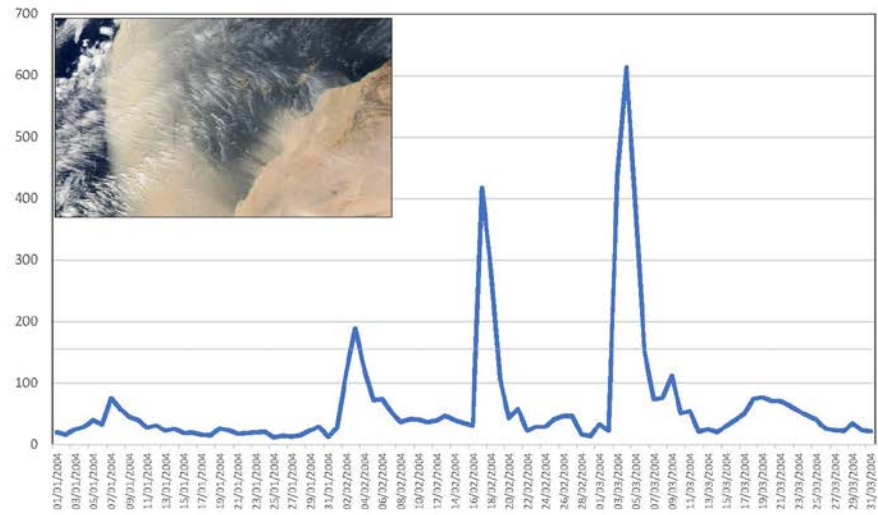


Table S1.- Heavy SDDs¹, and duration² of each SDE³ in L/P de Gran Canaria and S/C de Tenerife. 2001-2005

| | | Las Palmas de G/C | | | S/C de Tenerife | | |
|------|-------|-------------------|-------------------------------|----------|-----------------|------------------|----------|
| Year | Month | Day | PM ₁₀ ⁴ | Duration | Day | PM ₁₀ | Duration |
| 2001 | 2 | 11 | 164.0 | 7 | 11 | 399.3 | |
| | | | | | 12 | 247.6 | 7 |
| | | | | | 13 | 206.7 | |
| | 12 | 29 | 205.6 | | | | |
| | | 30 | 466.9 | 3 | 29 | 351.9 | 3 |
| 2002 | 1 | 6 | 252.8 | | 7 | 350.0 | |
| | | 7 | 393.1 | | 10 | 258.9 | 10 |
| | | | | 10 | 11 | 196.6 | |
| | | | | 10 | 12 | 172.2 | |
| | 2 | 10 | 203.7 | 9 | 9 | 159.1 | |
| | | | | | 10 | 219.3 | 7 |
| | 4 | | | | 13 | 153.6 | |
| | | | | | 23 | 155.8 | 9 |
| | 10 | 5 | 192.1 | 5 | 5 | 229.3 | 5 |
| | | 6 | 157.9 | | 6 | 202.9 | |
| 2003 | 2 | 3 | 255.6 | 4 | 3 | 238.6 | 4 |
| | | | | | 2 | 398.3 | |
| | 3 | 2 | 347.3 | 10 | | | 9 |
| | | 3 | 208.7 | | 3 | 159.4 | |
| | 9 | 17 | 164.5 | 11 | 17 | 161.4 | 10 |
| 12 | | | | 13 | 161.8 | 4 | |
| 2004 | 2 | 3 | 188.8 | 20 | 3 | 169.9 | |
| | | | | | 4 | 201.1 | 23 |
| | | 17 | 416.9 | | 17 | 248.8 | |

| | | | | | | | |
|------|--|----|-------|---|----|--------|---|
| | | 18 | 284.2 | | 18 | 203.2 | |
| | | 3 | 437.6 | | 3 | 333.9 | |
| | | 4 | 612.3 | 9 | 4 | 600.9 | 9 |
| 3 | | 5 | 386.0 | | 5 | 453.6 | |
| | | 6 | 151.2 | | 6 | 207.6 | |
| | | 26 | 155.1 | 7 | 24 | 183.1 | 8 |
| 7 | | | | | 26 | 181.9 | |
| | | | | | 26 | 242.4 | 9 |
| 8 | | | | | | | |
| | | | | | 6 | 156.1 | 7 |
| | | | | | 17 | 333.1 | 4 |
| 1 | | 17 | 334.2 | 4 | 18 | 227.0 | |
| | | | | | 23 | 191.4 | 6 |
| 2005 | | | | | 14 | 510.22 | 7 |
| | | 14 | 178.6 | 7 | 15 | 317.6 | |
| 2 | | 15 | 356.6 | | 10 | 232.1 | 3 |
| | | | | | 11 | 311.9 | |
| 3 | | 11 | 179.8 | 2 | | | |

¹ Saharan Dust Days with PM₁₀ > 150 μg/m³; ² duration in days; ³ Saharan Dust Episode in which they are located; ⁴ μg/m³

Table S2 Percent increases (95% CI) in risk of hospital admissions associated with 10 $\mu\text{g}/\text{m}^3$ increase in PM fractions and the presence or absence of Saharan Dust day

| | Las Palmas de Gran Canaria | | | | | | Santa Cruz de Tenerife | | | | | |
|-----------------|----------------------------|----------|---------------------------------|----------|----------------------------|----------|---------------------------------|----------|-----------------------------|----------|----------------------------|----------|
| | PM _{2.5} | | PM _{10-2.5} | | PM ₁₀ | | PM _{2.5} | | PM _{10-2.5} | | PM ₁₀ | |
| | %IR (95%CI) | <i>p</i> | %IR (95%CI) | <i>p</i> | %IR (95%CI) | <i>p</i> | %IR (95%CI) | <i>p</i> | %IR (95%CI) | <i>p</i> | %IR (95%CI) | <i>p</i> |
| All respiratory | 1.64 (0.28, 3.02) | | 0.65 (-0.37, 1.68) | - | 0.54 (-0.07, 1.15) | | 2.24 (0.76, 3.74) | | 1.60 (0.39, 2.83) | | 1.07 (0.36, 1.78) | |
| Non-SDD | -1.36 (-9.24, 7.20) | | -1.19 (-7.58, 5.63) | - | -0.93 (-6.10, 4.52) | | 2.79 (-6.67, 13.21) | | 5.5 (-4.12, 16.06) | | 6.04 (- 1.56, 14.22) | |
| SDD | 1.62 (0.15, 3.11) | 0.49 | 0.54 (- 0.56, 1.65) | 0.61 | 0.54 (-0.14, 1.22) | 0.59 | 2.03 (0.42, 3.66) | 0.87 | 1.20 (-0.15, 2.57) | 0.40 | 0.85 (0.06, 1.65) | 0.18 |
| COPD | 3.28 (0.43, 6.20) | | 2.16 (0.06, 4.31) | | 1.48 (0.21, 2.76) | | 4.14 (1.55, 6.80) | | 4.17 (2.22, 6.16) | | 2.55 (1.44, 3.68) | |
| Non-SDD | 11.43 (-6.20, 32.37) | | -1.47 (- 14.68, 13.79) | | 4.15 (-7.55, 17.33) | | -4.60 (- 21.70, 16.24) | | 6.47 (-11.76, 8.45) | | 2.28 (-11.44, 18.12) | |
| SDD | 3.17 (0.07, 6.37) | 0.38 | 2.33 (0.08, 4.64) | 0.60 | 1.52 (0.14, 2.91) | 0.67 | 3.67 (0.89, 6.52) | 0.40 | 3.94 (1.84, 6.19) | 0.80 | 2.47 (1.24, 3.72) | 0.97 |
| Asthma | 4.36 (-0.84, 9.84) | | 2.25 (-1.49, 6.17) | | 1.69 (-0.60, 4.04) | | -0.26 (-4.75, 4.43) | | 3.40 (-4.91, 12.45) | | -0.88 (-3.20, 1.49) | |
| Non-SDD | 33.79 (-0.72, 80.31) | | -0.62 (- 22.83, 27.98) | | 11.67 (-9.10, 37.18) | | 14.49 (- 14.44, 53.01) | | 18.15 (-11.30, 57.38) | | 15.52 (-7.47, 44.21) | |
| SDD | 2.24 (-3.64, 8.47) | 0.08 | 1.25 (-2.91, 5.59) | 0.88 | 0.91 (-1.70, 3.59) | 0.34 | -1.16 (-6.21, 4.16) | 0.31 | -1.96 (- 6.44,2.74) | 0.20 | -1.60 (- 4.31,1.18) | 0.15 |

The *p*-value is for the interaction between PM fractions and the Saharan dust indicator