

# **Konzentrationen von SO<sub>2</sub>, NO<sub>2</sub>, O<sub>3</sub> und PM<sub>10</sub> aus dem Luftmessnetz des Umweltbundesamtes**

## **September 2013**

**Basis der Statistik sind Halbstundenwerte kontinuierlich registrierender Messgeräte. Die 5-jährige Monatsstatistik berücksichtigt alle Halbstundenwerte aus dem jeweiligen Monat der vorangegangenen 5 Jahre.**

**Die Nachweisgrenzen sind: SO<sub>2</sub> 0.2 µg/m<sup>3</sup>, NO<sub>2</sub> 0.3 µg/m<sup>3</sup>, Ozon 2 µg/m<sup>3</sup>. Die Messwerte der Gase und PM<sub>10</sub> sind auf 20 °C bezogen.**

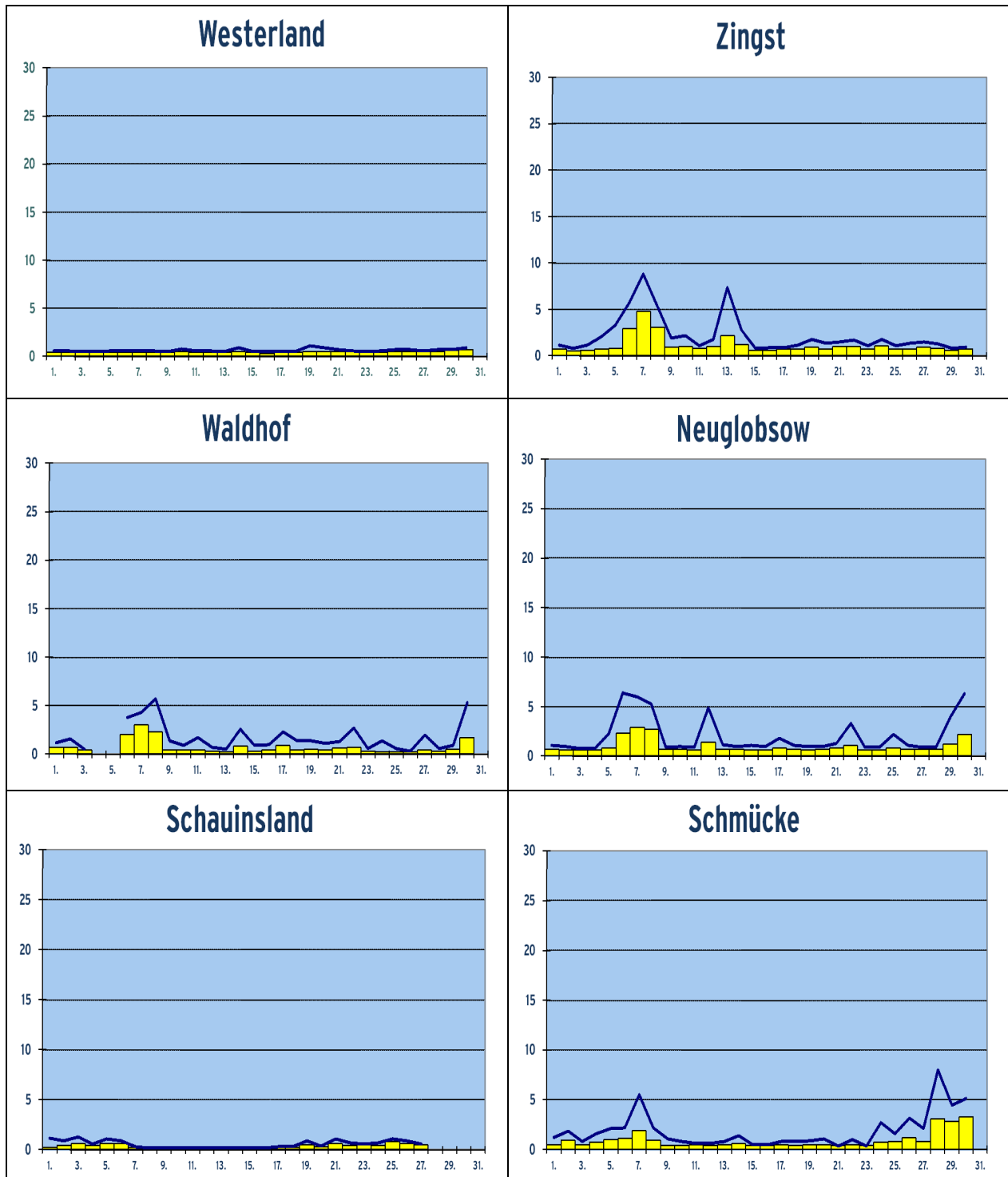
# Schwefeldioxid

in  $\mu\text{g}/\text{m}^3$ , bezogen auf 20 °C

|                 |                          | Westerland | Zingst | Neuglobsow | Waldhof | Schmücke | Schauinsland |
|-----------------|--------------------------|------------|--------|------------|---------|----------|--------------|
| Tagesmittel     | 1.                       | 0.4        | 0.7    | 0.7        | 0.7     | 0.5      | 0.2          |
|                 | 2.                       | 0.4        | 0.5    | 0.6        | 0.7     | 0.9      | 0.4          |
|                 | 3.                       | 0.4        | 0.6    | 0.6        | 0.4     | 0.5      | 0.6          |
|                 | 4.                       | 0.4        | 0.7    | 0.6        | -       | 0.7      | 0.4          |
|                 | 5.                       | 0.4        | 0.8    | 0.8        | -       | 1.0      | 0.6          |
|                 | 6.                       | 0.4        | 2.9    | 2.3        | 2.0     | 1.1      | 0.6          |
|                 | 7.                       | 0.4        | 4.8    | 2.9        | 3.0     | 1.9      | 0.2          |
|                 | 8.                       | 0.4        | 3.1    | 2.7        | 2.3     | 0.9      | 0.2          |
|                 | 9.                       | 0.4        | 0.9    | 0.7        | 0.4     | 0.4      | 0.2          |
|                 | 10.                      | 0.5        | 1.0    | 0.7        | 0.4     | 0.4      | 0.2          |
|                 | 11.                      | 0.4        | 0.8    | 0.6        | 0.4     | 0.5      | 0.2          |
|                 | 12.                      | 0.4        | 1.0    | 1.4        | 0.3     | 0.4      | 0.2          |
|                 | 13.                      | 0.4        | 2.2    | 0.7        | 0.2     | 0.5      | 0.2          |
|                 | 14.                      | 0.5        | 1.2    | 0.7        | 0.8     | 0.6      | 0.2          |
|                 | 15.                      | 0.4        | 0.6    | 0.6        | 0.3     | 0.4      | 0.2          |
|                 | 16.                      | 0.3        | 0.6    | 0.6        | 0.4     | 0.4      | 0.2          |
|                 | 17.                      | 0.4        | 0.7    | 0.8        | 0.9     | 0.5      | 0.2          |
|                 | 18.                      | 0.4        | 0.7    | 0.7        | 0.4     | 0.4      | 0.2          |
|                 | 19.                      | 0.5        | 0.9    | 0.6        | 0.5     | 0.5      | 0.5          |
|                 | 20.                      | 0.5        | 0.7    | 0.7        | 0.4     | 0.5      | 0.3          |
|                 | 21.                      | 0.5        | 1.0    | 0.8        | 0.6     | 0.4      | 0.6          |
|                 | 22.                      | 0.5        | 1.0    | 1.1        | 0.7     | 0.5      | 0.4          |
|                 | 23.                      | 0.4        | 0.7    | 0.6        | 0.3     | 0.4      | 0.5          |
|                 | 24.                      | 0.4        | 1.1    | 0.6        | 0.2     | 0.7      | 0.4          |
|                 | 25.                      | 0.5        | 0.7    | 0.8        | 0.2     | 0.8      | 0.8          |
|                 | 26.                      | 0.5        | 0.7    | 0.7        | 0.2     | 1.2      | 0.6          |
|                 | 27.                      | 0.5        | 0.9    | 0.7        | 0.4     | 0.8      | 0.5          |
|                 | 28.                      | 0.5        | 0.8    | 0.7        | 0.3     | 3.1      | -            |
|                 | 29.                      | 0.6        | 0.6    | 1.2        | 0.5     | 2.8      | -            |
|                 | 30.                      | 0.7        | 0.7    | 2.2        | 1.7     | 3.3      | -            |
|                 | 31.                      | -          | -      | -          | -       | -        | -            |
| Monatsstatistik | Monatsmittel             | 0.5        | 1.1    | 1.0        | 0.7     | 0.9      | 0.3          |
|                 | Maximales Tagesmittel    | 0.7        | 4.8    | 2.9        | 3.0     | 3.3      | 0.8          |
|                 | Median                   | 0.4        | 0.7    | 0.7        | 0.4     | 0.5      | 0.2          |
|                 | 98-Perzentil             | 0.7        | 5.4    | 4.2        | 4.0     | 3.8      | 0.9          |
|                 | 5-jähr. Monatsmittel     | 0.5        | 1.0    | 1.1        | 1.0     | 1.0      | 0.6          |
|                 | 5-jähr. max. Tagesmittel | 1.6        | 3.8    | 4.1        | 3.4     | 4.4      | 2.4          |

# Schwefeldioxid

in  $\mu\text{g}/\text{m}^3$ , bezogen auf 20 °C



Tagesmittel
  Tagesmaxima

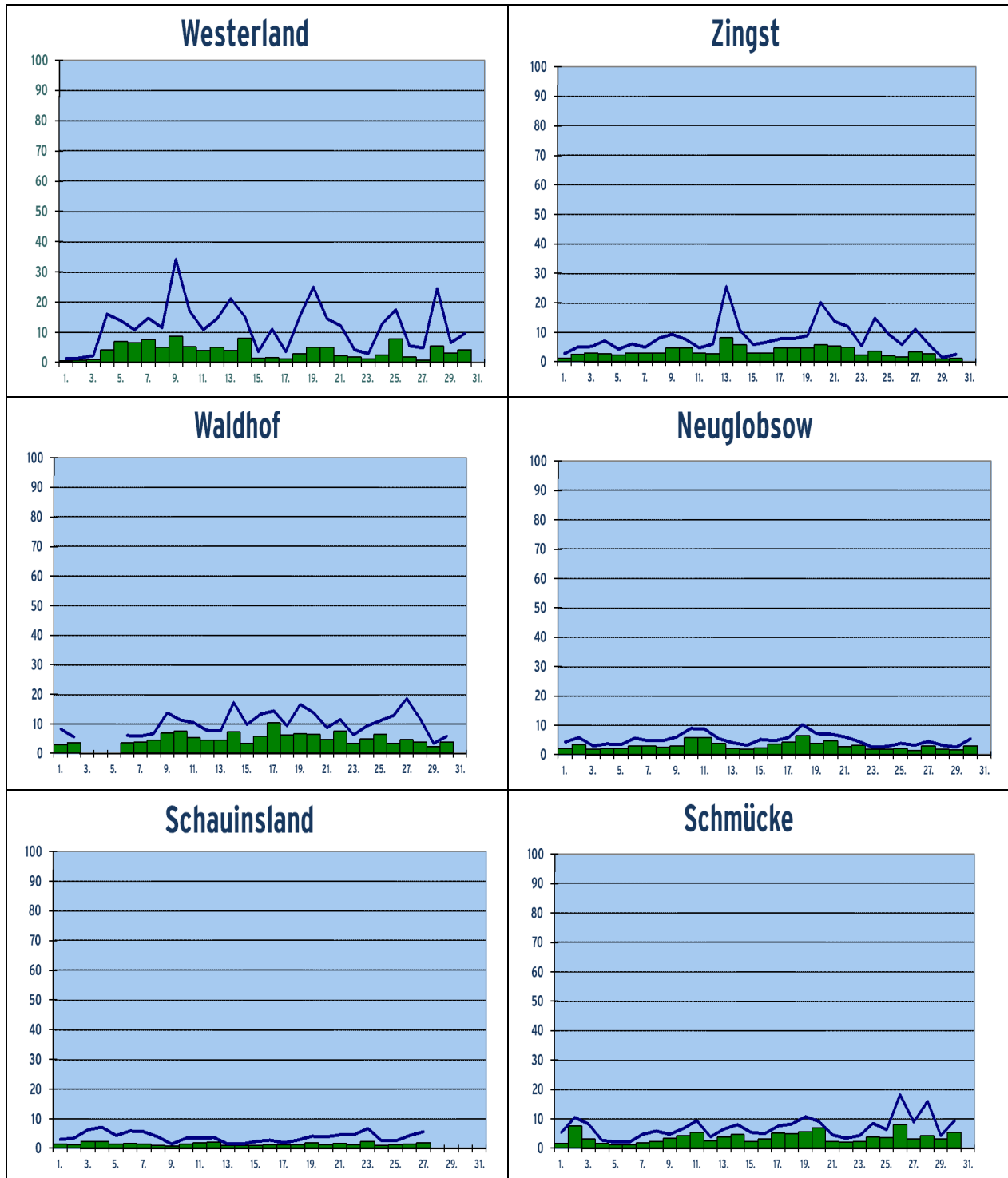
# Stickstoffdioxid

in  $\mu\text{g}/\text{m}^3$ , bezogen auf 20 °C

|                 |                          | Westerland | Zingst | Neuglobsow | Waldhof | Schmücke | Schauinsland |
|-----------------|--------------------------|------------|--------|------------|---------|----------|--------------|
| Tagesmittel     | 1.                       | 0.6        | 1.3    | 2.2        | 3.0     | 1.7      | 1.4          |
|                 | 2.                       | 0.8        | 2.6    | 3.4        | 3.7     | 7.6      | 1.1          |
|                 | 3.                       | 0.9        | 2.9    | 1.8        | -       | 3.2      | 2.3          |
|                 | 4.                       | 4.1        | 2.7    | 2.1        | -       | 1.7      | 2.3          |
|                 | 5.                       | 7.0        | 2.3    | 2.2        | -       | 1.2      | 1.4          |
|                 | 6.                       | 6.5        | 3.0    | 3.0        | 3.6     | 1.3      | 1.6          |
|                 | 7.                       | 7.5        | 2.9    | 3.0        | 3.9     | 1.9      | 1.5          |
|                 | 8.                       | 5.0        | 2.9    | 2.6        | 4.4     | 2.4      | 0.9          |
|                 | 9.                       | 8.6        | 4.8    | 3.0        | 7.0     | 3.4      | 0.8          |
|                 | 10.                      | 5.3        | 4.7    | 5.8        | 7.6     | 4.3      | 1.5          |
|                 | 11.                      | 4.0        | 2.9    | 5.9        | 5.4     | 5.5      | 1.9          |
|                 | 12.                      | 5.1        | 2.7    | 3.9        | 4.5     | 2.5      | 2.0          |
|                 | 13.                      | 3.9        | 8.1    | 2.0        | 4.5     | 3.8      | 0.9          |
|                 | 14.                      | 8.1        | 5.7    | 1.9        | 7.4     | 4.8      | 0.9          |
|                 | 15.                      | 1.3        | 2.9    | 2.4        | 3.3     | 2.4      | 1.0          |
|                 | 16.                      | 1.6        | 3.0    | 3.6        | 5.7     | 3.3      | 1.2          |
|                 | 17.                      | 1.2        | 4.8    | 4.3        | 10.5    | 5.2      | 1.1          |
|                 | 18.                      | 2.9        | 4.7    | 6.6        | 6.3     | 4.9      | 1.3          |
|                 | 19.                      | 5.0        | 4.8    | 3.9        | 6.6     | 5.6      | 1.9          |
|                 | 20.                      | 5.0        | 5.9    | 4.7        | 6.5     | 7.0      | 1.3          |
|                 | 21.                      | 2.3        | 5.4    | 2.7        | 4.8     | 2.3      | 1.7          |
|                 | 22.                      | 1.8        | 5.0    | 3.3        | 7.5     | 2.0      | 1.2          |
|                 | 23.                      | 1.1        | 2.3    | 1.9        | 3.5     | 2.4      | 2.2          |
|                 | 24.                      | 2.5        | 3.7    | 1.9        | 4.9     | 3.8      | 1.0          |
|                 | 25.                      | 7.7        | 2.0    | 2.1        | 6.5     | 3.7      | 1.2          |
|                 | 26.                      | 1.8        | 1.7    | 1.5        | 3.5     | 8.0      | 1.4          |
|                 | 27.                      | 0.7        | 3.5    | 3.0        | 4.8     | 3.2      | 1.8          |
|                 | 28.                      | 5.5        | 2.8    | 1.9        | 3.8     | 4.2      | -            |
|                 | 29.                      | 3.2        | 0.9    | 1.7        | 2.2     | 3.1      | -            |
|                 | 30.                      | 4.2        | 1.2    | 3.0        | 3.8     | 5.3      | -            |
|                 | 31.                      | -          | -      | -          | -       | -        | -            |
| Monatsstatistik | Monatsmittel             | 3.8        | 3.5    | 3.0        | 5.2     | 3.7      | 1.4          |
|                 | Maximales Tagesmittel    | 8.6        | 8.1    | 6.6        | 10.5    | 8.0      | 2.3          |
|                 | Median                   | 2.4        | 3.1    | 2.6        | 4.6     | 3.2      | 1.1          |
|                 | 98-Perzentil             | 15.0       | 10.1   | 7.7        | 12.9    | 9.8      | 6.3          |
|                 | 5-jähr. Monatsmittel     | 4.0        | 4.6    | 3.4        | 6.0     | 3.5      | 2.0          |
|                 | 5-jähr. max. Tagesmittel | 30.3       | 12.8   | 8.6        | 14.5    | 9.3      | 7.4          |

# Stickstoffdioxid

in  $\mu\text{g}/\text{m}^3$ , bezogen auf 20 °C



■ Tagesmittel

— Tagesmaxima

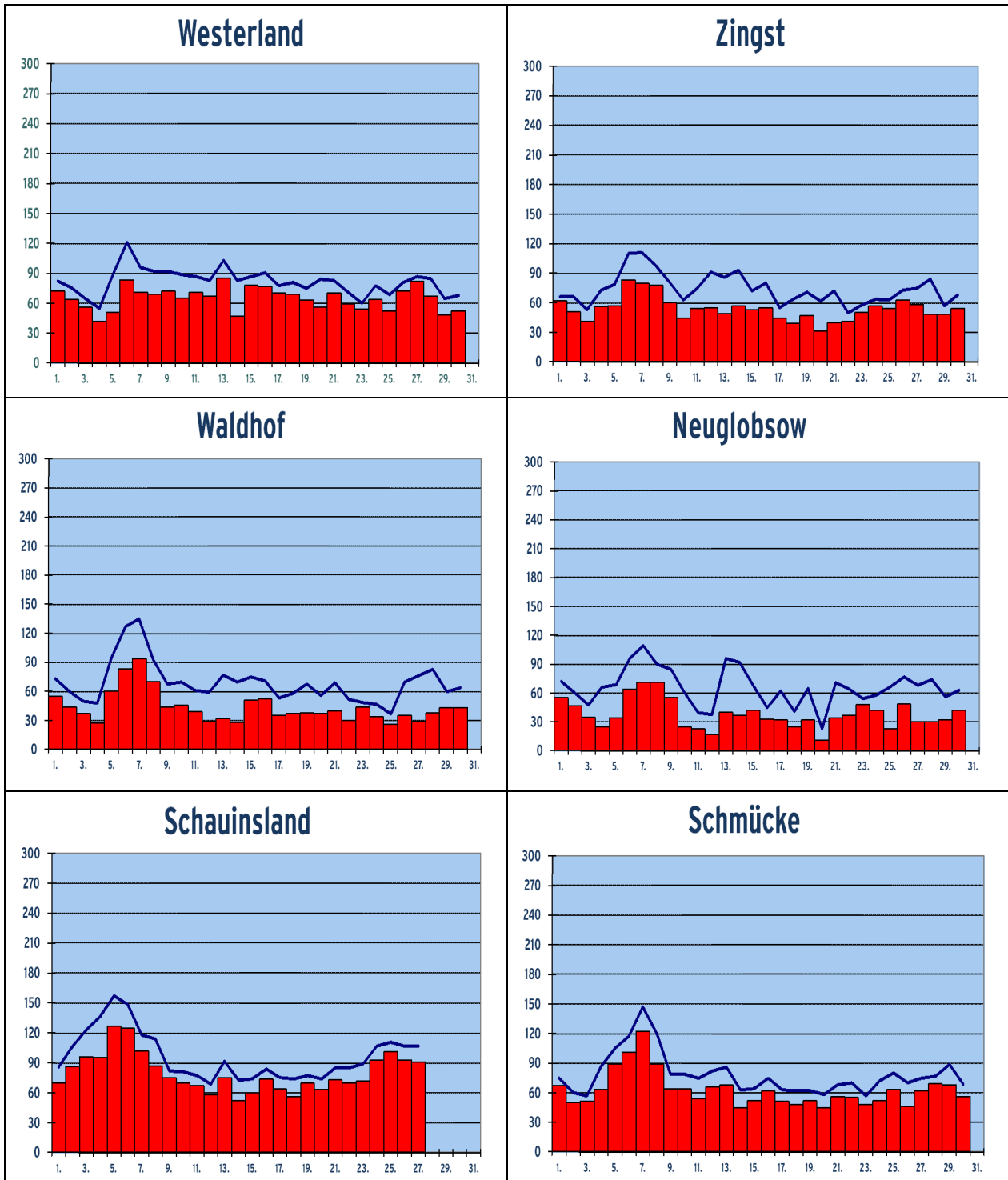
# Ozon

in  $\mu\text{g}/\text{m}^3$ , bezogen auf 20 °C

|                 |                          | Wester-<br>land | Zingst | Neu-<br>globso<br>w | Waldhof | Schmücke | Schau-<br>insland |
|-----------------|--------------------------|-----------------|--------|---------------------|---------|----------|-------------------|
| Tagesmittel     | 1.                       | 72              | 62     | 55                  | 55      | 67       | 70                |
|                 | 2.                       | 64              | 51     | 47                  | 44      | 50       | 86                |
|                 | 3.                       | 56              | 41     | 35                  | 37      | 51       | 96                |
|                 | 4.                       | 42              | 56     | 25                  | 27      | 63       | 95                |
|                 | 5.                       | 51              | 57     | 34                  | 60      | 89       | 127               |
|                 | 6.                       | 83              | 83     | 64                  | 83      | 101      | 125               |
|                 | 7.                       | 71              | 80     | 71                  | 94      | 122      | 102               |
|                 | 8.                       | 69              | 78     | 71                  | 70      | 89       | 87                |
|                 | 9.                       | 72              | 60     | 55                  | 44      | 64       | 75                |
|                 | 10.                      | 65              | 44     | 25                  | 46      | 64       | 70                |
|                 | 11.                      | 71              | 54     | 23                  | 39      | 54       | 67                |
|                 | 12.                      | 67              | 55     | 17                  | 29      | 66       | 58                |
|                 | 13.                      | 85              | 49     | 40                  | 32      | 68       | 75                |
|                 | 14.                      | 47              | 57     | 37                  | 28      | 45       | 52                |
|                 | 15.                      | 78              | 53     | 42                  | 51      | 52       | 60                |
|                 | 16.                      | 77              | 55     | 33                  | 52      | 62       | 74                |
|                 | 17.                      | 70              | 44     | 32                  | 35      | 51       | 64                |
|                 | 18.                      | 69              | 39     | 25                  | 37      | 48       | 56                |
|                 | 19.                      | 63              | 47     | 32                  | 38      | 52       | 70                |
|                 | 20.                      | 56              | 31     | 11                  | 37      | 45       | 63                |
|                 | 21.                      | 70              | 40     | 34                  | 40      | 56       | 73                |
|                 | 22.                      | 59              | 41     | 37                  | 30      | 55       | 70                |
|                 | 23.                      | 54              | 50     | 48                  | 44      | 48       | 72                |
|                 | 24.                      | 64              | 57     | 42                  | 34      | 52       | 93                |
|                 | 25.                      | 52              | 54     | 23                  | 26      | 63       | 101               |
|                 | 26.                      | 72              | 63     | 49                  | 35      | 46       | 93                |
|                 | 27.                      | 82              | 58     | 30                  | 29      | 62       | 91                |
|                 | 28.                      | 67              | 48     | 30                  | 38      | 69       | -                 |
|                 | 29.                      | 48              | 48     | 32                  | 43      | 68       | -                 |
|                 | 30.                      | 52              | 54     | 42                  | 43      | 56       | -                 |
|                 | 31.                      | -               | -      | -                   | -       | -        | -                 |
| Monatsstatistik | Monatsmittel             | 65              | 54     | 38                  | 43      | 63       | 80                |
|                 | Maximales Tagesmittel    | 85              | 83     | 71                  | 94      | 122      | 127               |
|                 | Median                   | 66              | 54     | 38                  | 41      | 58       | 76                |
|                 | 98-Perzentil             | 95              | 94     | 89                  | 110     | 116      | 137               |
|                 | Max. 1-Stundenmittel     | 120             | 110    | 108                 | 134     | 146      | 157               |
|                 | 5-jähr. Monatsmittel     | 64              | 55     | 44                  | 48      | 67       | 83                |
|                 | 5-jähr. max. Tagesmittel | 92              | 91     | 91                  | 91      | 117      | 123               |

# Ozon

in  $\mu\text{g}/\text{m}^3$ , bezogen auf 20 °C



■ Tagesmittel

— Tagesmaxima

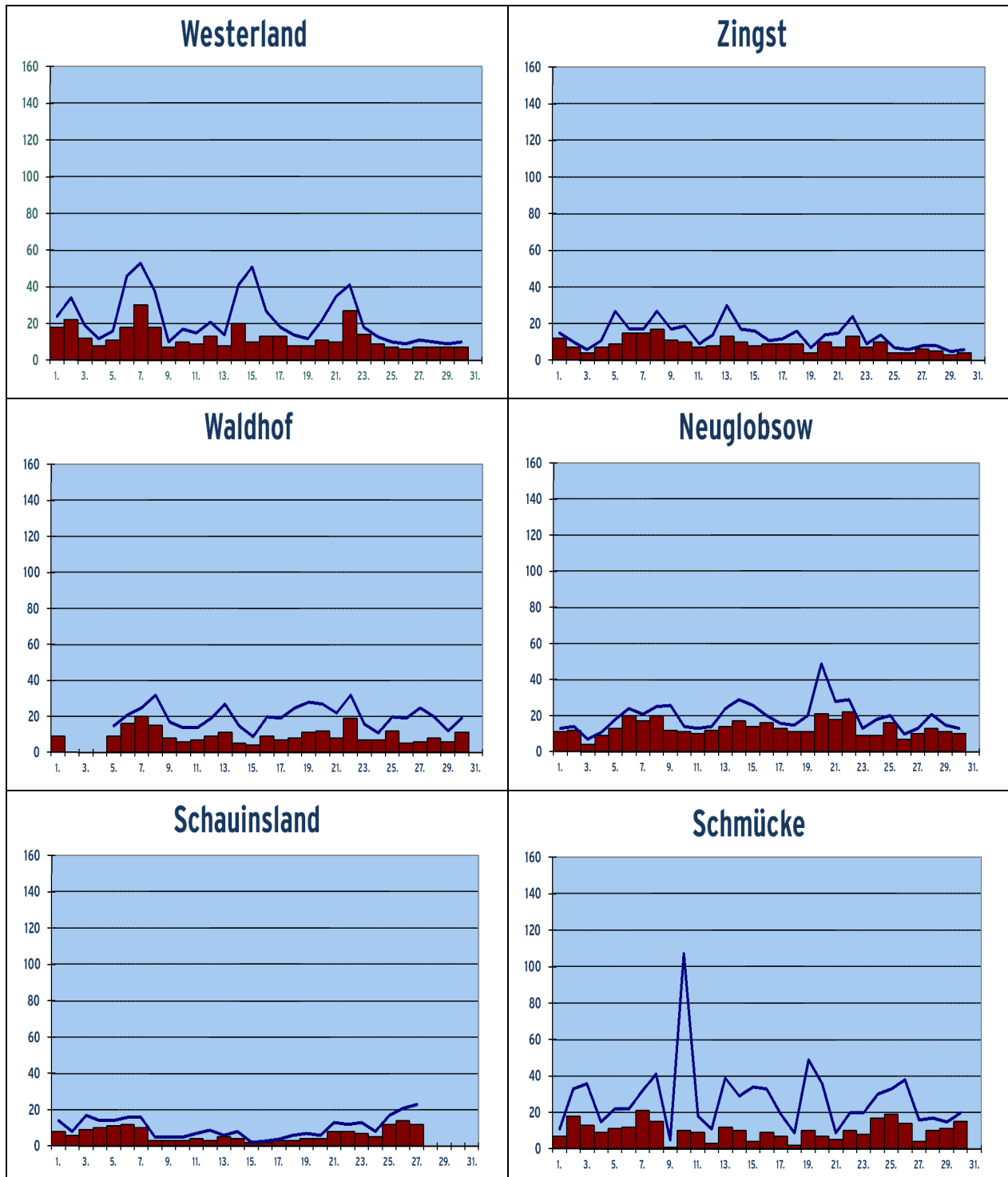
# Feinstaub PM<sub>10</sub>

in µg/m<sup>3</sup>, bezogen auf 20 °C

|                 |                          | Westerland | Zingst | Neuglobsow | Waldhof | Schmücke | Schauinsland |
|-----------------|--------------------------|------------|--------|------------|---------|----------|--------------|
| Tagesmittel     | 1.                       | 18         | 12     | 11         | 9       | 7        | 8            |
|                 | 2.                       | 22         | 7      | 12         | -       | 18       | 6            |
|                 | 3.                       | 12         | 4      | 4          | -       | 13       | 9            |
|                 | 4.                       | 8          | 7      | 9          | -       | 9        | 10           |
|                 | 5.                       | 11         | 9      | 13         | 9       | 11       | 11           |
|                 | 6.                       | 18         | 15     | 20         | 16      | 12       | 12           |
|                 | 7.                       | 30         | 15     | 17         | 20      | 21       | 10           |
|                 | 8.                       | 18         | 17     | 20         | 15      | 15       | 3            |
|                 | 9.                       | 7          | 11     | 12         | 8       | 1        | 3            |
|                 | 10.                      | 10         | 10     | 11         | 6       | 10       | 3            |
|                 | 11.                      | 9          | 7      | 10         | 7       | 9        | 4            |
|                 | 12.                      | 13         | 8      | 12         | 9       | 3        | 3            |
|                 | 13.                      | 8          | 13     | 14         | 11      | 12       | 5            |
|                 | 14.                      | 20         | 10     | 17         | 5       | 10       | 4            |
|                 | 15.                      | 10         | 8      | 14         | 4       | 4        | 2            |
|                 | 16.                      | 13         | 9      | 16         | 9       | 9        | 2            |
|                 | 17.                      | 13         | 9      | 13         | 7       | 7        | 3            |
|                 | 18.                      | 8          | 9      | 11         | 8       | 2        | 3            |
|                 | 19.                      | 8          | 4      | 11         | 11      | 10       | 4            |
|                 | 20.                      | 11         | 10     | 21         | 12      | 7        | 4            |
|                 | 21.                      | 10         | 7      | 18         | 8       | 5        | 8            |
|                 | 22.                      | 27         | 13     | 22         | 19      | 10       | 8            |
|                 | 23.                      | 14         | 7      | 9          | 7       | 8        | 7            |
|                 | 24.                      | 9          | 10     | 9          | 7       | 17       | 5            |
|                 | 25.                      | 7          | 4      | 16         | 12      | 19       | 12           |
|                 | 26.                      | 6          | 4      | 7          | 5       | 14       | 14           |
|                 | 27.                      | 7          | 6      | 10         | 6       | 4        | 12           |
|                 | 28.                      | 7          | 5      | 13         | 8       | 10       | -            |
|                 | 29.                      | 7          | 3      | 11         | 6       | 11       | -            |
|                 | 30.                      | 7          | 4      | 10         | 11      | 15       | -            |
|                 | 31.                      | -          | -      | -          | -       | -        | -            |
| Monatsstatistik | Monatsmittel             | 12         | 9      | 13         | 9       | 10       | 6            |
|                 | Maximales Tagesmittel    | 30         | 17     | 22         | 20      | 21       | 14           |
|                 | Median                   | 10         | 7      | 12         | 8       | 9        | 5            |
|                 | 98-Perzentil             | 36         | 18     | 25         | 25      | 31       | 17           |
|                 | 5-jähr. Monatsmittel     | 15         | 12     | 14         | 13      | 12       | 11           |
|                 | 5-jähr. max. Tagesmittel | 40         | 28     | 70         | 27      | 59       | 40           |



# PM<sub>10</sub> in µg/m<sup>3</sup>, bezogen auf 20 °C



■ Tagesmittel

— Tagesmaxima