

| Instrument          | Observation<br>Frequency <sup>a</sup> | Pixel resolution<br>(km <sup>2</sup> ) | Precision<br>(ppb) |
|---------------------|---------------------------------------|--|--------------------|
| Hi-res <sup>b</sup> | hourly                                | $1.3 \times 1.3$                       | 1.0                |
| GeoCARB (hourly)    | hourly                                | $2.7 \times 3.0$                       | 4.0                |
| GeoCARB             | twice daily                           | $2.7 \times 3.0$                       | 4.0                |
| GeoCARB (daily)     | daily                                 | $2.7 \times 3.0$                       | 4.0                |
| TROPOMI             | daily                                 | $7.0 \times 7.0$                       | 10.8               |