

# The Porto Climate Conference: Perspectives and Conclusions

by  
Nils-Axel Mörner

The Porto Climate Conference on *Basic Science of a Changing Climate: How process in the Sun, Atmosphere and Ocean affect Weather and Climate*, Porto September 8 and 8, 2018 included 35 paper, 4 posters and 2 discussion sessions. Below follows a number of statements and conclusions with respect to the material presented and discussed.

- The study of climate change and sea level changes was earlier subjects with the geological, paleontological and geographical disciplines. This meant a deep anchoring in observational facts. Meteorology was confined to the study and forecasting of weather. It is a scientific tragedy that much work on climate change and sea level variability is now (after the IPCC project commenced in the late 80s) taken over by the meteorological discipline, which has no tradition in historical analyses. “The best we have to perceive it is in the rocks, mathematics, physics and our wits” [1].
- What we today often term “extreme weather” is by no means extreme and unusual; rather is it a natural characteristic of our weather machinery. Time/event analyses fail to record trends increasing dramatically towards the present.
- CO<sub>2</sub> as main driver of climate change is a serious mistake [2]. Indeed, it is based on “an elementary and grave error that have until now provided the pretext for misplaced worldwide concern about climate change” [3]. By 2100 temperature is likely not to rise more than 0.3 °C [4]. Human emissions add only 18 ppm and nature adds 392 ppm of today’s 410 ppm CO<sub>2</sub> in the atmosphere [5], implying that the temperature effect of human emission is very small to negligible [4, 5, 6, 7].
- An increased level of CO<sub>2</sub> in the atmosphere acts as a fertilizer for the Plant Kingdom [8]; on land as well as in the sea.
- Ocean acidification is a present-day concept not founded in oceanography and geological history [9]. In fact, marine life flourishes where CO<sub>2</sub> is abundant [10]. Carbon dioxide in seawater does not dissolve coral reefs, but is essential for their survival. The Great Barrier Reef is, in fact, doing well [11]. Sea level has risen linearly over the last century at a rate of 1.1 mm/yr [12].
- Variations in total atmospheric pressure were proposed as an alternative explanation to observed changes in climate [13, 14]. This also explains changes in global temperature gradients back in time.
- The Sun and the variations in solar activity with time are, of course, the main drivers of changes in climate and related parameters on Planet Earth [15-22]. The planetary motions and its effects on the solar variability generate changes in luminosity as well as in solar wind. Solar variability (the solar wind effect on the geomagnetic field and its shielding capacity) is recorded by the changes in atmospheric <sup>14</sup>C and <sup>10</sup>Be isotope concentrations [17]. A number of cycles are detected, which coincide with the planetary beat on the Sun [18, 20, 22]. There is a clear 60-year cycle [4, 15, 19, 21, 22], which is documented in a large number of earth parameters indicating that it must be driven primarily by solar wind variations (also linked to changes in luminosity). The alternations between Grand Solar Maxima and Grand Solar Minima [21] are especially powerful in climate (warm phases alternation with Little Ice Ages), ocean circulation (e.g. the Gulf Stream penetrating all the way up into the Barents Sea alternating with restriction to low latitudes) and changes in sea level (high sea level in the north and low sea levels in the equatorial region alternating with

low sea levels in the north and high sea levels in the equatorial region). Future Grand Solar Minima (with assumed Little Ice Age climatic conditions) are predicted to occur at about 2030-2050 and at about 2080-2100 [15, 19, 20, 21].

- The issue of global warming, climate change and rapid sea level rise is a sad politicization of geoscience [23] with the onset of the IPCC project. Quite correctly, it has been called “*The Greatest Lie Ever Told*” [24].
- The general discussions were intensive and constructive. The CO<sub>2</sub> concept of global warming (AGW) seemed to have no proponents. Instead, there seemed to be a general agreement on solar forcing. The situation is well described by Claus Rieth [25].

All participants seemed very satisfied with the conference and congratulated the organizers. The webpage [www.portoconference2018.org](http://www.portoconference2018.org) serves an excellent source of information and updates [25, 26] thanks to Maria da Assunção Araújo, whom we owe our deep appreciation.

## References

Abstracts in: <https://www.researchgate.net/publication/326882331>

Presentations (ppt) in: <https://www.portoconference2018.org/presentations--posters.html>

- [1] Christopher Essex: Day-1, Paper-1
- [2] Piers Corbyn: Day-1, Paper-2
- [3] Christopher Monckton of Brenchley: Day-1, Paper-9
- [4] Francois Gervais: Day-, Paper-8
- [5] Edwin Berry: Day-1, Paper-11
- [6] Camille Veyers: Day-1, Paper-10
- [7] Herman Harde: Day-1, Paper-12
- [8] Albrecht Gratzle: Day-1, Paper-15
- [9] Cliff Ollier: Day-2, Paper-15
- [10] Martin Hovland: studies of biological life in pockmarks with methane seepage
- [11] Peter Ridd: Day-2, Paper-16
- [12] Thomas Wusmuller: Day-2, Paper-10
- [13] Karl Zeller & Ned Nikolov: Day-1, Paper-6
- [14] Ned Nikolov & Karl Zeller: Day-1, Paper-7
- [15] Piers Corbyn: Day-2, Paper-1
- [16] Pavel Kalenda: Day-2, Paper-3
- [17] Don Easterbrook: Day-2, Paper-4
- [18] Roger Tattersall & Stuart Graham: Day-2, Paper-5
- [19] Jan-Erik Solheim: Day-2, Paper-6
- [20] Harald Yndestad: Day-2, Paper-7
- [21] Nils-Axel Mörner: Day-2, Paper-8
- [22] Nicola Scafetta: Day-2, Paper-9
- [23] Aziz Adam: Day-2, Paper-20
- [24] Nils-Axel Mörner: *The Greatest Lie Ever Told*, 2007
- [25] <https://www.portoconference2018.org/news.html>
- [26] <https://www.portoconference2018.org/links.html>