Probe Plus missions, both to be launched in 2018. Solar Orbiter will be leaving the plane of the ecliptic to explore the uncharted polar regions of the Sun, as well as investigate the connections between the Sun and its surrounding heliosphere from inside planet Mercury’s orbit. Solar Probe Plus, on the other hand, will be approaching the Sun even further — to within 10 solar radii — to sample the plasma of the hot and tenuous solar corona in situ.

Acknowledgements
The great success of the SOHO mission is a tribute to the many people – too many to name here – who designed and built this exquisite spacecraft and these excellent instruments, to the engineers who brought it back from the dead (twice), and to the many people who diligently work behind the scenes to keep it up and running.

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Further reading


SOHO Web Site: http://soho.nascom.nasa.gov and http://soho.esac.esa.int

[Letter to the Editors]

by Miguel Ferrero

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The world is better than it has ever been

Reading the brief opinion article of C. Hidalgo in the 47/1 number of Europhysicsnews one may get the impression that the world is falling apart. The pessimism permeates the two columns of the paper, in which strong words and expressions (inequality, social instability, unemployment, etc.; by the way, the word inequality is repeated eleven times) are used. This pessimism is very old. Against Enlightenment, the Romantic and all kind of pessimist counter-Enlightenment were opposed, Schopenhauer being one of the most notorious. But, fortunately, the state of the world is not as bad as the “declinists” seem to think. From my point of view the questions to answer in this respect are:

First.- Have we (humans) made progress in the last 70 years, let us say?, and

Second.- Is it possible to quantify the progress or regression? To answer these questions a physicist should look to the data, not to personal intuitions, subjective impressions or following the opinions of any other scholar. And the reality is that, in this lapse of time:

1. Extreme poverty has more than halved worldwide (more than a billion people have escaped it).
2. Material wellbeing has increased at its greater pace ever, measured by increase of life expectancy; worldwide access to education, including women; income; decline of mortality; and so on.
3. The number of people killed in armed conflicts has decreased by at least 60%.
4. The number of democracies has tripled.
5. etc. This is not the place to make a detailed account of these data. For a critical and personal assessment, the interested reader may consult: https://ourworldindata.org (Max Roser) and http://humanprogress.org (Marian Tupy). I also recommend reading: The Better Angels of our Nature (Steven Pinker, 2011). So, progress can and has been quantified and the result is that the world is better than it has ever been. Does this mean that we have to fall into complacency? A clear no should be given: we must keep the pace to further improve. But to push in the good direction we need to know the reality that the data is giving to us.