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# The 3-Phase evolution of a long-lived low-latitude coronal hole.

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High speed solar wind streams (HSS) emanating from coronal holes, and associated stream interaction regions, may cause geomagnetic storms and deflect coronal mass ejections propagation in interplanetary space. By understanding the evolution and the relations between coronal holes and solar wind parameters, we increase our knowledge for improving space weather forecasts. We investigate the evolution of a persistent coronal hole using EUV data from STEREO-A/B and SDO over the timerange February 2012 –October 2012. Combined STEREO-SDO data enable a continuous observation of the CH covering 360° degrees over several rotations. Together with magnetic field measurements from SDO filtergrams and in-situ solar wind observations, we analyze during different evolutionary states of the CH, the solar surface properties of the CH (intensity, area, shape, magnetic flux) and its effects at 1AU (solar wind speed). As a result we find an evolutionary pattern in most parameters, clearly showing a three-phase evolution (growing, maximum and decaying phase).