Massive Heat Dome Toppling Records in Pacific Northwest

By Don Sutherland

During late June 2021, a more than 4-sigma heat dome brought unthinkable and historic heat to the Pacific Northwest. During the height of the heat, Olympia hit 110°, Portland topped out at 116°, and Seattle reached 108°. The tiny British Columbia community of Lytton saw the temperature soar to 121° just before a raging wildfire consumed a large part of Lytton.

Now, for the second time in three years, a 4-sigma heat dome developed in the Pacific Northwest. The heat is less intense than it was two years ago on account of its development toward mid-May. Nevertheless, records have been tumbling.

Some records include:

Florence, OR: 97° (old record: 72°, 2008). That set a new monthly record.

Hoquiam, WA: 89° on May 13 and then 91° on May 14 (old monthly record: 87°, May 29, 2007)

Portland: 62° low temperature on May 14 (tied record for earliest 60° or above mean temperature, which was set in 1997). Tied the monthly record of 62°, which was set on May 28, 1983 and tied on May 31, 1986 and May 17, 2008. Portland also recorded only its second May heatwave on record with 3 consecutive 90° or above temperatures.

Quillayute, WA: 2 consecutive 90° or above readings on May 13-14 (previous earliest 2 consecutive 90° or above temperatures: June 25-26, 2006). No May had ever seen more than one such day. On May 14, Quillayute hit 92°, which tied the May record.

Seattle: 89° on May 14 (old record: 88°, 2018). This was Seattle's highest temperature on record for the first half of May.

Scorching heat also affected British Columbia. Four locations hit 95° or above, which Lytton leading the way with a reading of 97°.

Climate change has increased the frequency, duration, and magnitude of such heat.