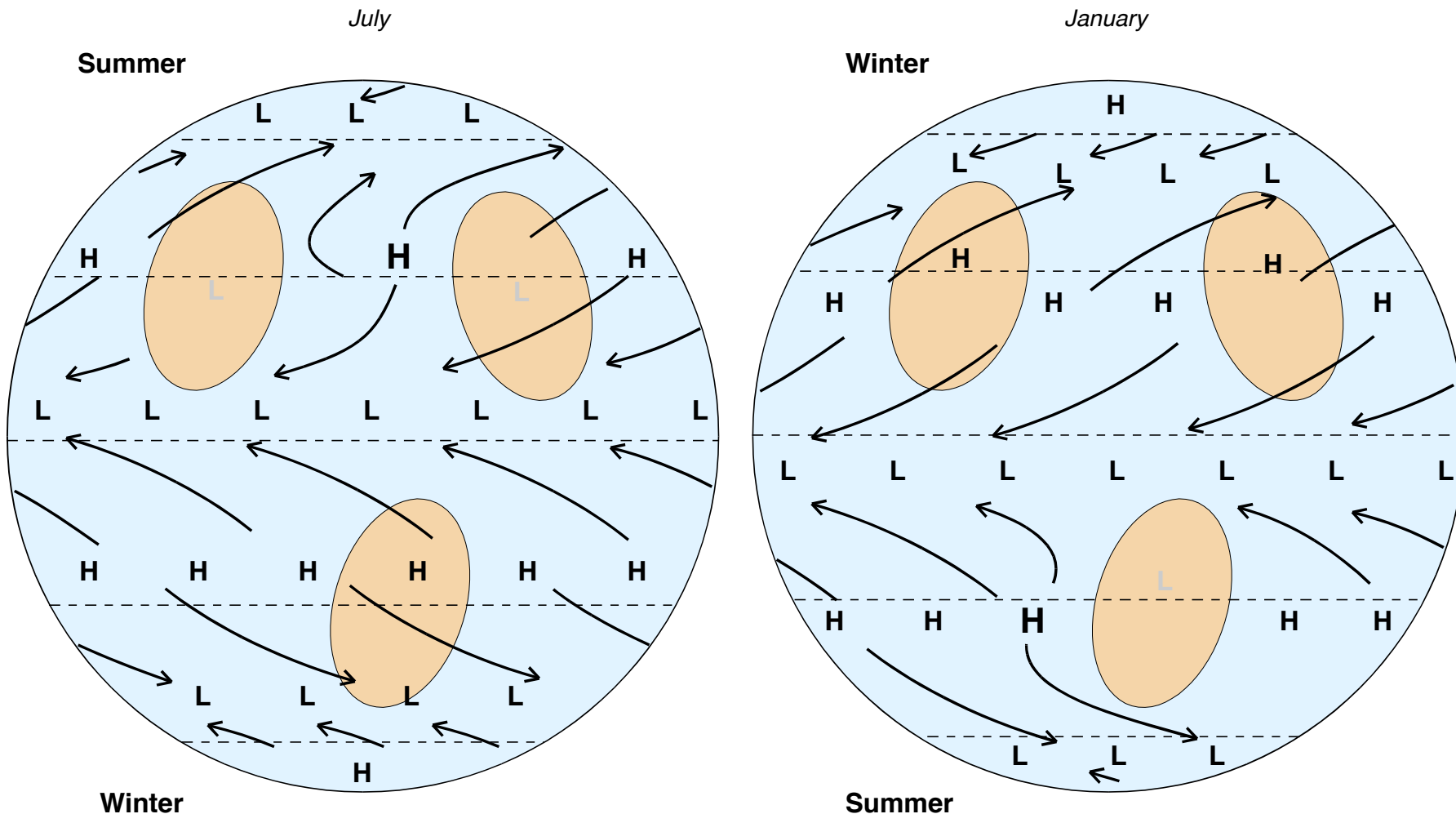


## Global climate zones IV: an idealized simple view, with seasons and continents



Part III of this series showed a schematic pattern of atmospheric circulation on Earth. That simplified Earth had a uniform surface, presumably of a global ocean of water. Earth of course has continents of land, which are suggested here with tan ovoids. Continents are significant because, compared to the oceans, they lack water and its heat capacity. Continents thus

undergo seasonal temperature changes far more extreme than those of oceans. As a result, warmed air rises from continents in summer to give lows that disrupt the zone of high pressure in the Horse Latitudes, so that the subtropical highs are instead focused over the oceans. On the other hand, chilled air sinks over the continents in winter

to give pronounced areas of high pressure. Thus, to a climatologist, "continent" might be defined as "a land mass sufficiently large to develop seasonal anomalies of atmospheric pressure".

Part V of this series considers what happens when a very large continent develops summer lows and winter highs.