

A topographic map showing contour lines and elevation. The map features several green shaded regions of varying intensity, likely representing a specific data set or terrain feature. The text "Rex Block" is overlaid in the center in a large, bold, blue font with a white outline. The map includes contour lines with numerical labels such as 315, 312, 309, 306, 303, 300, 297, 294, 291, 288, 285, 282, 279, 276, 273, 270, 267, 264, 261, 258, 255, 252, 249, 246, 243, 240, 237, 234, 231, 228, 225, 222, 219, 216, 213, 210, 207, 204, 201, 198, 195, 192, 189, 186, 183, 180, 177, 174, 171, 168, 165, 162, 159, 156, 153, 150, 147, 144, 141, 138, 135, 132, 129, 126, 123, 120, 117, 114, 111, 108, 105, 102, 99, 96, 93, 90, 87, 84, 81, 78, 75, 72, 69, 66, 63, 60, 57, 54, 51, 48, 45, 42, 39, 36, 33, 30, 27, 24, 21, 18, 15, 12, 9, 6, 3, 0. The map also shows a network of roads and other geographical features.

# Rex Block

# What Is “Blocking”?

In meteorology, blocking happens when centers of high pressure and low pressure set up over a region in such a way that they prevent other weather systems from moving through. While the block is in place other systems are forced to go around it.

Blocks can remain in place for several days, resulting in monotonous weather for locations under the block.



# Discovery of the Rex Block

The “rex block” is named after Dr. Daniel F. Rex, who discovered and analyzed the pattern in 1950. Dr. Rex was a Commander in the Office of Naval Aerology and one of the founding members of today’s National Centers for Environmental Prediction (where our weather forecasting computer models are developed and run).

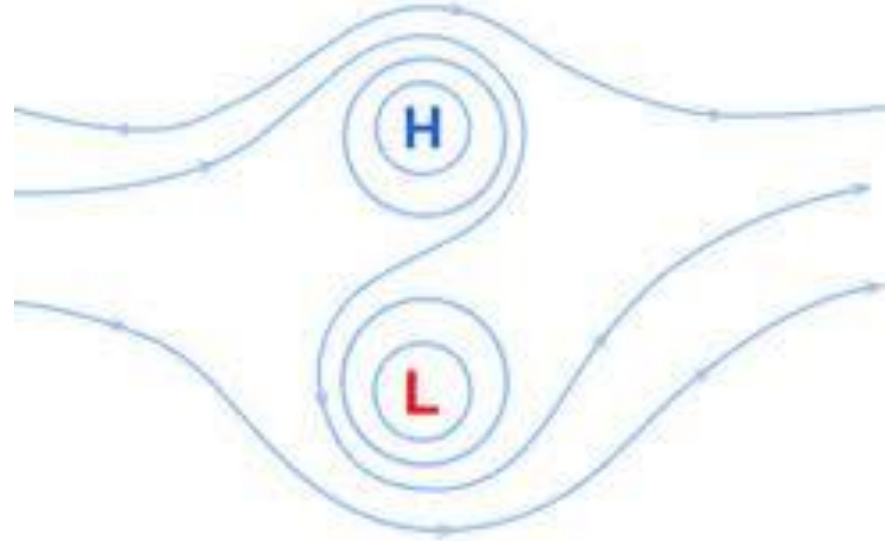




# Rex Block Pattern

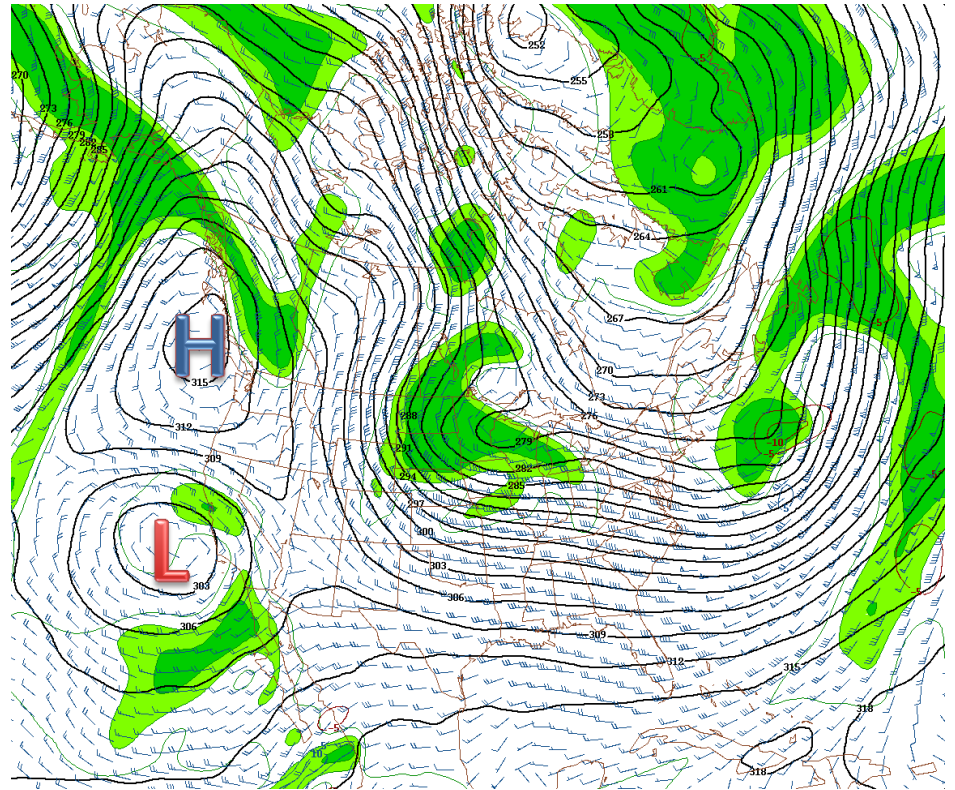
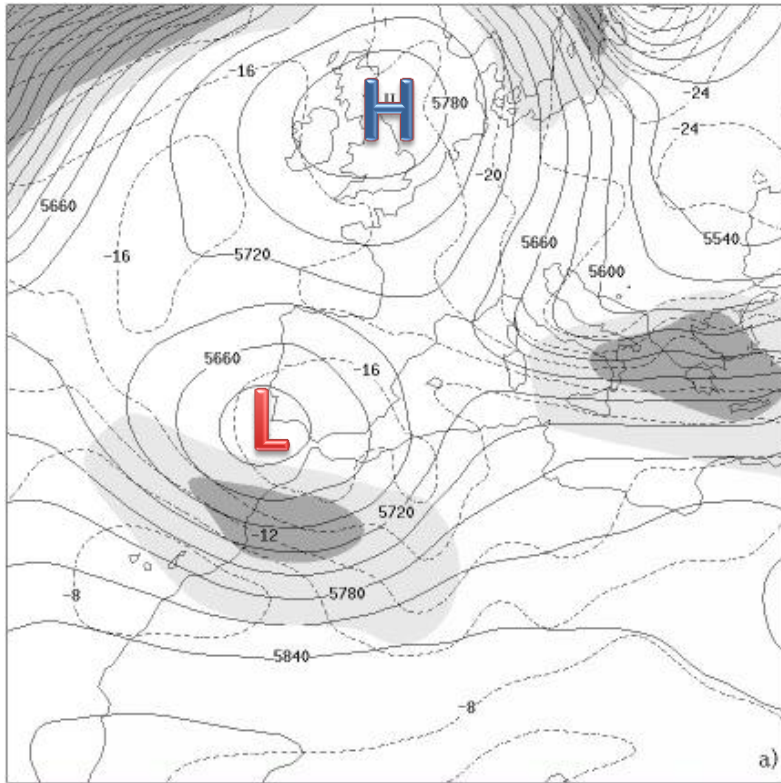
Rex blocks are characterized by a high pressure system located immediately north of a low pressure system. These systems are usually analyzed aloft, around heights of ten to twenty thousand feet above the ground.

Air circulates clockwise around the east and south sides of the high to the north, and then turns to the south to go around the west and south sides of the counterclockwise-turning low to the south. Because the flow of the air is basically north-south, there is very little eastward progression of the system.



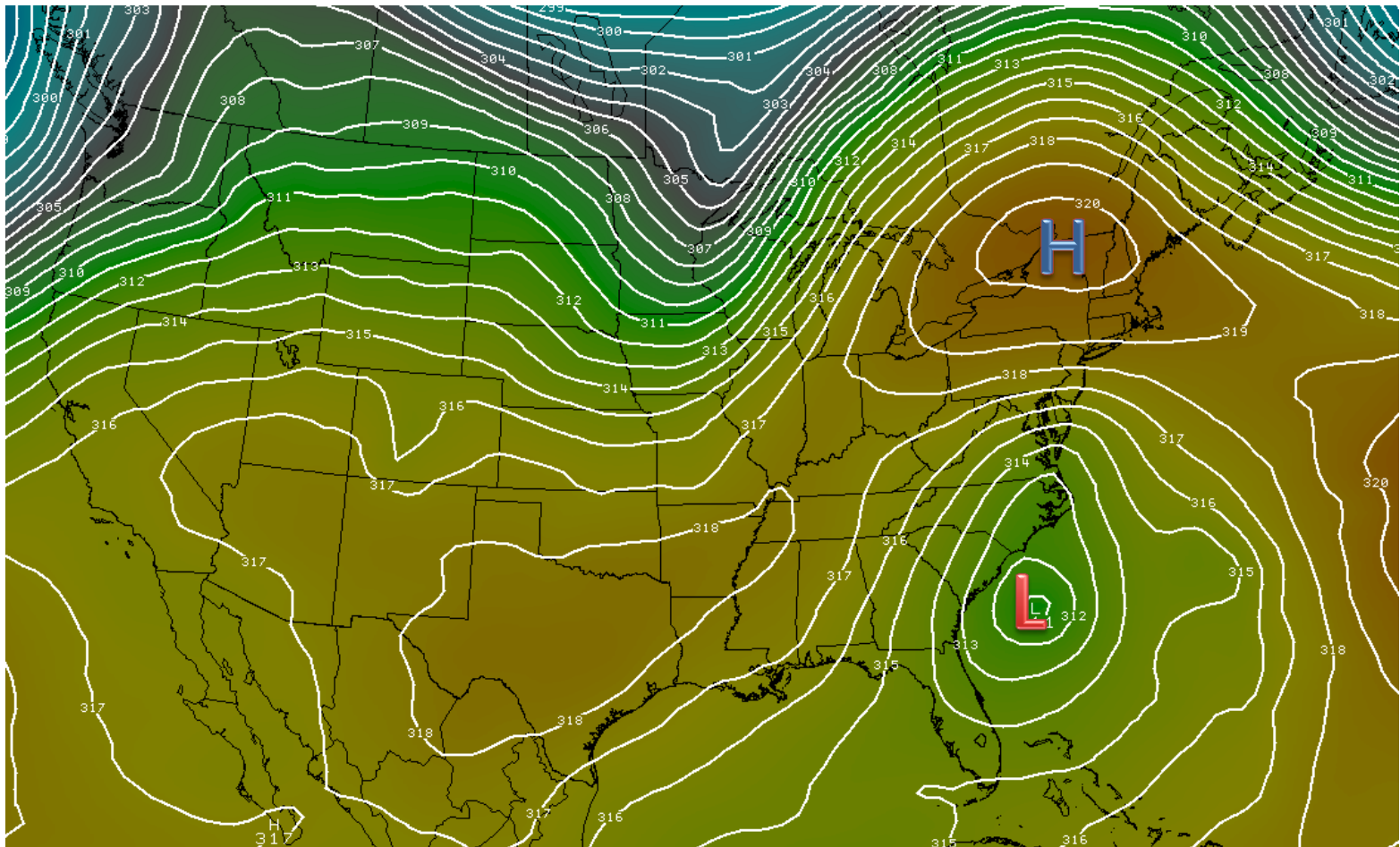
# Preferred Rex Block Locations

Rex blocks are most often found over western Europe and the west coast of the United States.



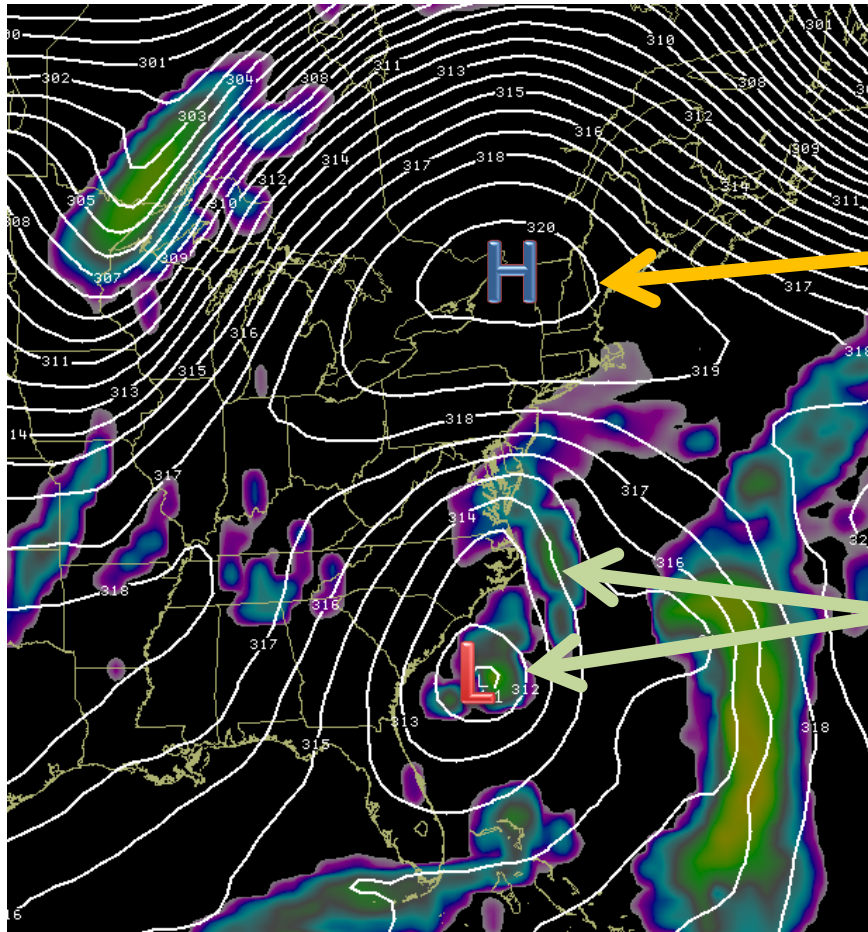
# Preferred Rex Block Locations

However, rex blocks can be found other places too, such as the one pictured below over the east coast of the United States.



# Rex Block Weather

Unsettled, stormy weather is usually found near the low pressure while dry conditions are typical with the high pressure. Strong, particularly persistent rex blocks can cause flooding in the southern part of the block and short-term drought in the north.



dry

precipitation