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CORRECTIONS

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¹ Kings, 18:41-45. The Jewish Family Bible. Sinai Publishing. Tel-Aviv, 1975.

correspondence

A Biblical Lesson for the Modern Meteorologist

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The following passage from the first book of Kings chapter 18 has some interesting lessons for the modern Israeli forecaster:

And Elijah said unto Ahab, "Get thee up eat and drink: for there is a *sound of abundance* of rain." So Ahab went up to eat and to drink and Elijah went *up to the top of Carmel*; and he cast himself down upon the earth, and put his face between his knees, and said to his servant, "Go up now, *look toward the sea.*" And he went up, and *looked*; and said, "There is nothing." And he said, "Go again seven times." And it came to pass at the seventh time, that he said, "Behold, *there ariseth a little cloud out of the sea (west) like a man's hand.*" And he said, "Go up, say unto Ahab, prepare thy chariot and get thee down, that the rain stop thee not." And it came to pass *in the mean while*, that the *heaven was black with clouds and wind*, and there was a great rain. And Ahab rode and went to Jezreel. ¹[Italics added by author.]

The steps which Elijah took remind me very much of the way a forecaster should sometimes behave, even though the prophet had Divine support. Most of the rain in Israel comes from Cyprus surface lows, which are difficult to locate accurately, even today: the cold fronts that emerge from these lows can hardly be drawn on the synoptic maps due to the lack of data in the Eastern Mediterranean. This situation has improved slightly as the first satellite photographs have begun to reach Israeli forecasters. But, even today, Elijah's experience makes a lot of sense to the modern Israeli forecaster who can rely on only three to four satellite photographs daily to accurately predict the time that a cold front will impinge on Israel's Mediterranean shore. From my experience as a forecaster, I found that Elijah's steps still are most useful to forecasters in our area.

The absence of clouds and presence of strong south-westerly to southerly dry winds precede a front's arrival. These winds are probably the sound mentioned in the passage before the clouds appeared. The best location for good observation at the time of these winds is at the coast and, if possible, at a high elevation. This makes the top of Carmel an ideal observation point on Israel's coast. It is obvious to the local forecaster that the direction in which to look is the west, i.e., towards the sea ("sea" in the Bible is a synonym for "west"). Elijah sent his observer even higher to report on the clouds. The report of the absence of clouds, i.e., "there is nothing," is very important to the forecaster.

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Patience in continuing the observations (even when the sky is clear) is demonstrated by the seven times Elijah's observer goes up the hill only to report that the cloud cover is actually zero. The importance of the first appearance of the small cloud (i.e. "like a man's hand") in the west on the seventh report in the story is as important today as it was then. The appearance of that little cloud is the sign of the clockwise veering of the wind which precedes the immediate arrival of the front, as the humid air starts advancing towards the coast. It is really a matter of only a few hours from the appearance of that cloud that Israel's coast is flushed with heavy rains from black cumulonimbus (Cb) and strong winds.

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The message of this short note is to show how an old lesson from a good observer more than 2000 years ago, may teach us some basics of observing and forecasting, which are still applicable for the modern forecaster. The message is an important one, especially today, when computers, satellites, and other remote sensing methods and data gathering techniques might cause the forecaster to neglect the special importance of the direct observation of the weather. ●