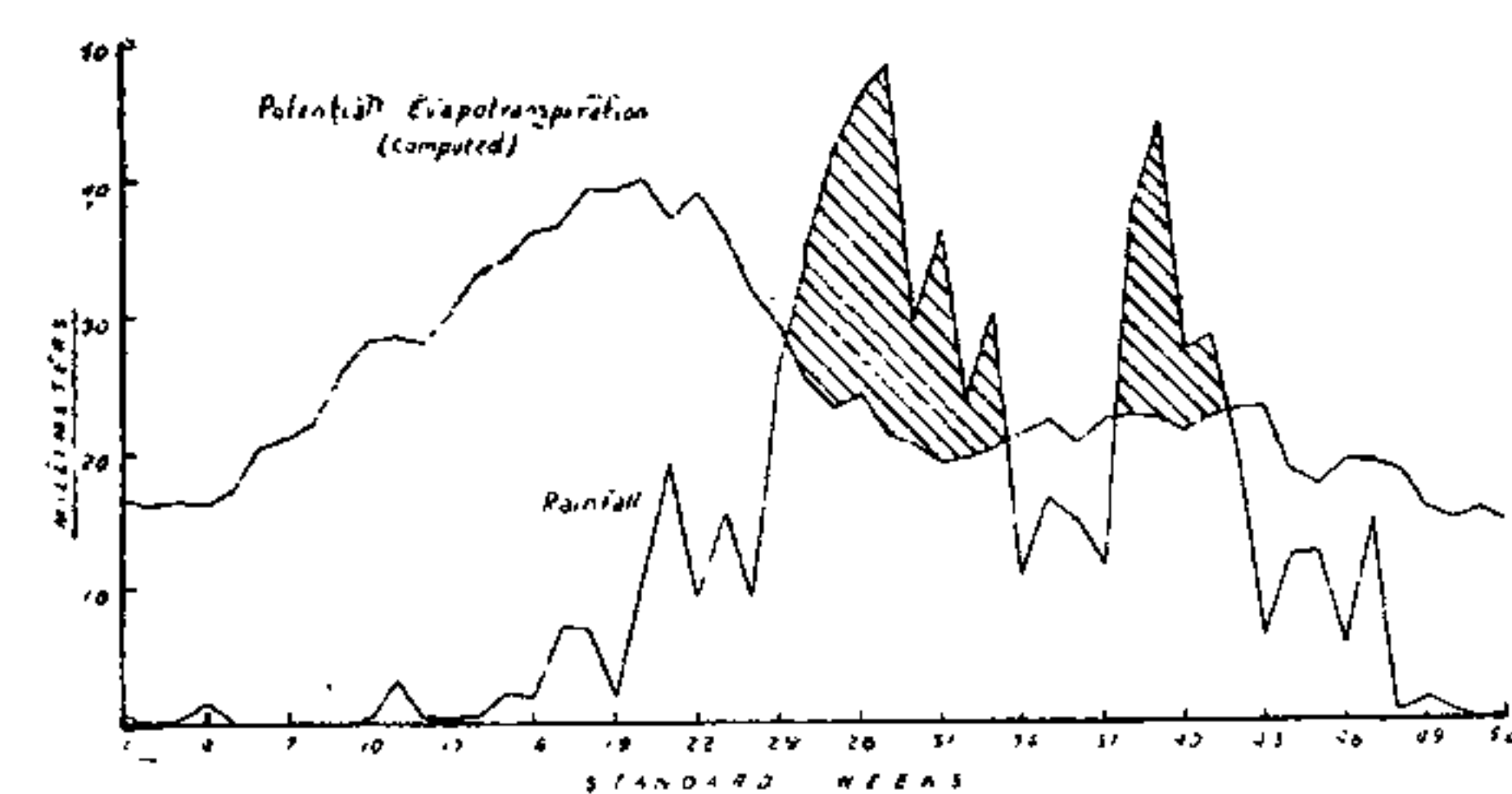
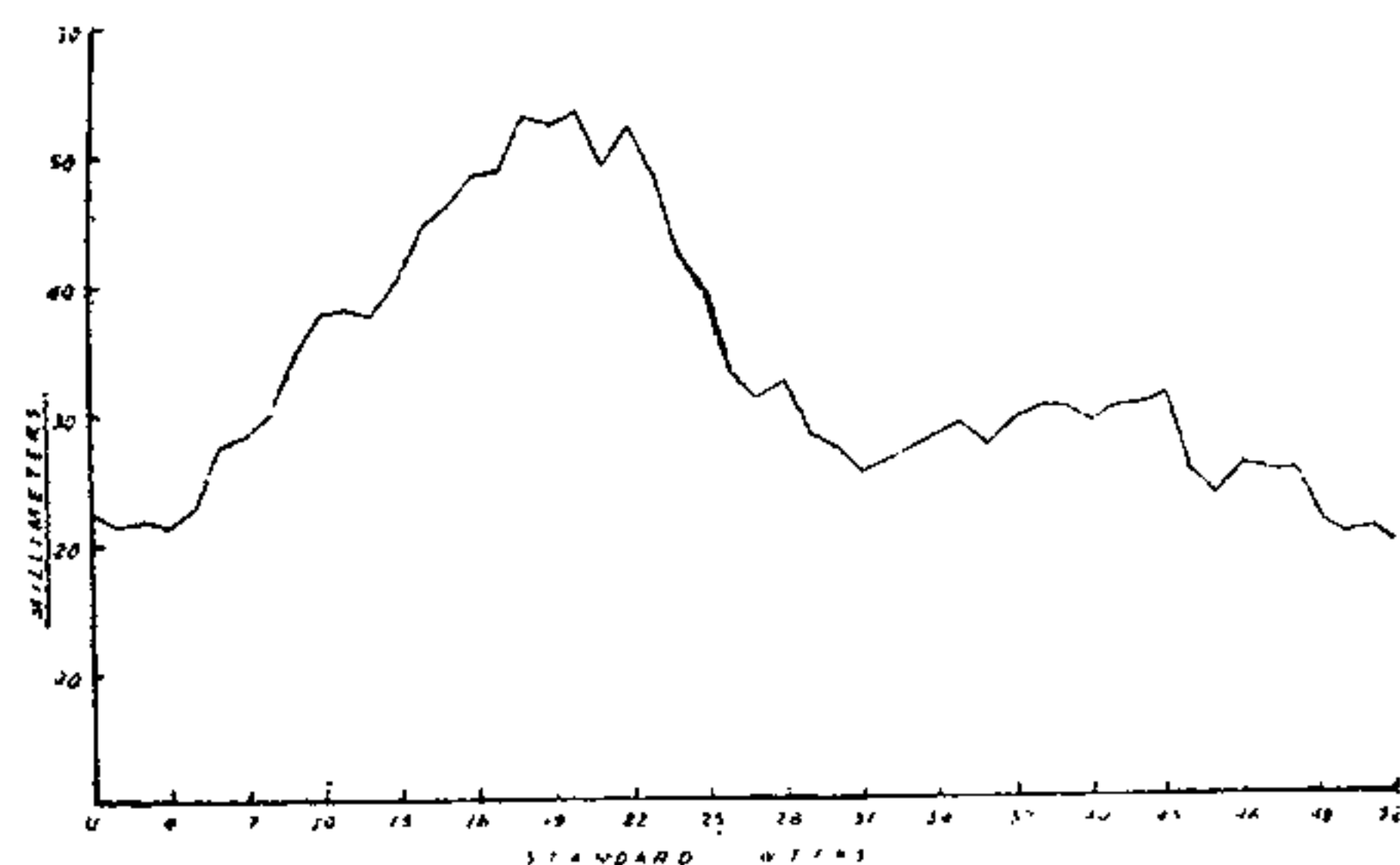


excess is assumed to replenish soil moisture. The shaded area in Fig. 2 represents the weeks

tion, the amount of water lost by evapotranspiration constitutes the minimum demand that has to be met with. Similar studies to determine potential evapotranspiration according to Penman using the valuable data collected at Crop-weather and Agrometeorological stations in India are in progress and it is proposed to publish potential evapotranspiration maps of India for each of the 52 weeks of the year which are so essential for finding out the water requirement of crops.

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FIGS. 1-2

with water surplus. A knowledge of evapotranspiration is important in irrigation agriculture. In raising crops with the help of irriga-

ROTATION OF PLANET MERCURY FROM RADIO-ASTRONOMY OBSERVATIONS

MEASUREMENT of Doppler shifts in radio-echoes from Mercury seems to have yielded results contrary to what has been the general belief so long regarding the period of rotation of the planet. In the case of the two inner planets of the solar system, Mercury and Venus, it has always been thought that the planet's period of axial rotation is the same as its period of revolution around the Sun. For Mercury it is about 88 days each, and for Venus it is about 225 days each. Thus they are supposed to be presenting the same side to the Sun—as in the case of Moon around the Earth.

G. H. Pettingill and R. H. Dyce of Cornell University, reporting their measurements of radio-echoes from Mercury, studied with the 1000 ft. fixed radio-telescope in Puerto Rico, find that the rotation period of the planet is 59 ± 5 days. The direction of this rotation, like that of most planets, is counterclockwise with respect to a view from above its north pole. The exception, as other radio-astronomical studies have shown, is Venus which rotates slowly in a clockwise direction.—(*Scientific American*, June 1965).