



THE LARGE SUN SPOT OF JULY 12

In first photo, the spot is on upper left side of solar disc; second photo is an enlargement of the spot.

BLAME IT ON THE SUN

Recently, long-distance short-wave radio communications were interrupted by serious and sustained blackouts. Radiomen found their earphones silent for hours.

These were serious and costly interruptions. What was to blame? Certainly not the costly electronic equipment nor the well-trained personnel. The causes were identified quickly. They originated on the smiling surface of the sun above us, hovering a bit too close.

Noting these sudden changes in the incandescent furnace of the sun and in the ionospheric regions of our atmosphere is part of the work of the

radio reports sent out by the Manila Observatory to the scientific world.

The picture of the disc of the sun on this page shows the large sun spot of July 12. The photo is known as a Calcium Filtergram — the result of light coming from the sun's calcium. The spot looks like a Greek tragic mask. In the six years of continuous operation of the ionospheric work of the Manila Observatory, the mornings of July 10, 14 and 16 will be historic. For close to two hours each morning, the upper atmosphere was found so disturbed that no long distance radio waves could penetrate to their reflect-

ing layers in the ionosphere. Instead, they were absorbed and dissipated, their all-important messages vanishing into thin air. The trouble on July 16 was not an S.I.D. but an ionospheric and magnetic storm, expected after the appearance of the S.I.D. of the days before. This also caused vast disruption of radio services.

Sun spots are not the small blemishes they seem to be on our photograph. The area of the large one is in the neighborhood of two million sq. miles, which is 40 times the cross sectional area of our earth. There is a certain beauty to it but it is a deadly dan-

gerous beauty. In its magnetic field is stored up more energy than Ambuklao Dam could supply in 40 million years. When such an amount of energy is released into space, it is not surprising that we find ourselves in a certain amount of trouble. — FR. PAUL B. HUGENDOBLE, S.J., Baguio City.



Phenomenal Memory

The man moved from one row to another of the speeding passenger bus, inquiring from each of us 48 passengers our respective destinations. Then, whistling a merry tune, he went back to his conductor's seat, took out his sheaf of tickets, hurriedly made 48 different sets of punches, and then handed us our tickets. Finally, after some three hours, and just when some passengers were nearing their destinations, he stopped his merry whistling and once more approached us — this time to collect our fares. And he remembered every single destination and how much fare each of us should pay! He didn't have to ask us again.

That conductor apparently possesses a very good memory, but I have met another man with an even more phenomenal memory.

It was in a town north of Manila, at a cockpit. Just before the game-cocks were released in the arena, there were three to four minutes of frenzied betting among the crowd. I saw the hero of my story at the edge of the arena, both hands uplifted and gesticulating in a manner that unmistakably indicated he was for a particular game-cock and was calling for bets against his choice from the packed gallery. "Your 10 pesos is accepted," he yelled at an equally frantic man in the upper tier of the gallery. "Your 15 pesos is accepted," he yelled to another just behind the first bettor. "Yes, your five pesos... and your 30 pesos... and your 25 pesos." He kept