SOLAR AND SKY RADIATION MEASUREMENTS DURING AUGUST, 1925

By HERBERT H. KIMBALL, Solar Radiation Investigations

For a description of instruments and exposures and an account of the method of obtaining and reducing the measurements, the reader is referred to the Review for January, 1924, 52:42 and January, 1925, 53:29.

From Table 1 it is seen that solar radiation measurements averaged slightly below normal values for August at Lincoln, Nebr., and close to normal at Washington, D.C., and Madison, Wis.

Table 2 shows that the total solar and sky radiation received on a horizontal surface averaged above the August normal at Washington and Madison, and slightly below normal at Lincoln.

At Washington skylight polarization measurements made on 5 days give a mean of 51 per cent, with a maximum of 56 per cent on the 22d. At Madison, measurements made on 5 days give a mean of 55 per cent with a maximum of 65 per cent on the 21st. These are slightly below the normal values for August at both Washington and Madison.

### Table 2.—Solar and sky radiation received on a horizontal surface

<table>
<thead>
<tr>
<th>Date</th>
<th>Average daily radiation</th>
<th>Average daily departure from normal</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Washington</td>
<td>Madison</td>
</tr>
<tr>
<td></td>
<td>cal.</td>
<td>cal.</td>
</tr>
<tr>
<td>July 30</td>
<td>528</td>
<td>518</td>
</tr>
<tr>
<td>Aug. 1</td>
<td>404</td>
<td>414</td>
</tr>
<tr>
<td>Aug. 2</td>
<td>333</td>
<td>265</td>
</tr>
<tr>
<td>Aug. 3</td>
<td>509</td>
<td>511</td>
</tr>
<tr>
<td>Aug. 4</td>
<td>511</td>
<td>450</td>
</tr>
</tbody>
</table>

Excess since first of year on Sept. 2, 1925: +1,558.5 +2,233.5 +797.5