|  |  |  |  |
| --- | --- | --- | --- |
| Timescale | Example climate information  products – which may be available  and relevant in some regions and  seasons |  |  |
|  |  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  | Example health-decision applications Status: Experimentala, |
|  |  |  | Operationalb, Researchc |
|  |  |  | HISTORIC |
|  |  |  | RECORD OF |
|  |  |  | CLIMATE |
|  |  |  | OBSERVATIONS |
|  |  |  | Historic time series data, |
|  |  |  | summary statistics and other |
|  |  |  | information products |
|  |  |  | Epidemiological trend and regression |
|  |  |  | analysis to understand associations of |
|  |  |  | climate and health; develop disease |
|  |  |  | forecasting from current and recent |
|  |  |  | observation data, particularly for infectious |
|  |  |  | diseases with time lags between observed |
|  |  |  | ambient conditions |
|  |  |  | and diseases onset |
|  |  |  | OPERATIONAL |
|  |  |  | WEATHER |
|  |  |  | INFORMATION |
|  |  |  | (HOURLY, DAILY, |
|  |  |  | WEEKLY, 30 DAYS) |
|  |  |  | Real-time monitoring of daily |
|  |  |  | weather: temperature, precipitation, |
|  |  |  | humidity, etc. |
|  |  |  | 8-14 probabilistic outlooks |
|  |  |  | Extended range forecasts from |
|  |  |  | 10-40 days |
|  |  |  | Tercile forecasts (above normal, |
|  |  |  | normal, below normal) probabilistic |
|  |  |  | prediction of rainfall and |
|  |  |  | temperature |
|  |  |  | Extreme weather probability |
|  |  |  | prediction |
|  |  |  | Short-term operational decisions such |
|  |  |  | as public weather advisories, and |
|  |  |  | thresholds that trigger action plans for staff |
|  |  |  | deployment, delivery of supplies, and |
|  |  |  | public protection |
|  |  |  | OPERATIONAL |
|  |  |  | EXPERIMENTAL |
|  |  |  | SHORT-TERM |
|  |  |  | CLIMATE |
|  |  |  | INFORMATION |
|  |  |  | (1 – 12 MONTHS) |
|  |  |  | 􀀴is􀁍 inde􀁚es of c􀁛c􀁎ones􀀎 􀆃oods􀀎 |
|  |  |  | dust storms, wind storms, extreme |
|  |  |  | temperature􀀎 fire |
|  |  |  | Long-range forecasts of average, |
|  |  |  | maximum and minimum |
|  |  |  | temperature and precipitation |
|  |  |  | conditions 1 - 9 months ahead |
|  |  |  | (e.g. seasonal forecasts and trends) |
|  |  |  | Tercile forecasts (above normal, |
|  |  |  | normal, below normal) probabilistic |
|  |  |  | prediction of rainfall and |
|  |  |  | temperature. |
|  |  |  | Short-term operational investment in |
|  |  |  | preparedness, outbreak prevention, |
|  |  |  | resource needs |
|  |  |  | EXPERIMENTAL |
|  |  |  | OPERATIONAL |
|  |  |  | MID-TERM |
|  |  |  | CLIMATE |
|  |  |  | INFORMATION |
|  |  |  | (ANNUAL TO |
|  |  |  | MULTI-YEAR) |
|  |  |  | Annual to interannual forecasts |
|  |  |  | (several years ahead) describing |
|  |  |  | large scale state of the climate |
|  |  |  | Status of El Niño Southern |
|  |  |  | Oscillation (ENSO) Conditions |
|  |  |  | Dynamic and statistical climate |
|  |  |  | models |
|  |  |  | 1-5 year policy decisions for disease control, |
|  |  |  | research, health systems planning |
|  |  |  | LIMITED APPLICATION |
|  |  |  | OF INFORMATION |
|  |  |  | BEYOND ENSO |
|  |  |  | LONG-RANGE |
|  |  |  | CLIMATE |
|  |  |  | INFORMATION |
|  |  |  | (DECADES) |
|  |  |  | 10-30 year decadal forecasts of |
|  |  |  | surface temperature, precipitation, |
|  |  |  | sea surface temperatures, etc. |
|  |  |  | Climate change scenarios, |
|  |  |  | dynamic climate models, global |
|  |  |  | circulation models |
|  |  |  | Long-term health infrastructure |
|  |  |  | investments, research, demographic and |
|  |  |  | population models, health system planning |
|  |  |  | Increase understanding of disease trends, |
|  |  |  | epidemic behaviour on a regional scale |
|  |  |  | RESEARCH |
|  |  |  | EXPERIMENTAL |