Exposure to Ionising Radiation, Blast and Thermal Effects from Nuclear Detonations

The following diagrams show the various effects resulting from weapon detonations and the range of these effects.

They support the fact that no-one was exposed to ionising radiations on Kiritimati at the instant of detonation since to be close enough for exposure, they would have been killed by accompanying blast and thermal effects.

To ensure participants were not exposed to prompt ionising radiation, they were positioned at safe distances, or in protected shelters.
**Kiloton Detonation**

- **Film Badge threshold range**: 1 μSv
- **Ionising Radiation**
- **Blast Pressure**
- **Thermal Radiation**

**Kilometres**

**Megaton Detonation**

- **Film Badge threshold range**: 1 μSv
- **Ionising Radiation**: Nausea, Ear drum rupture, Possible injuries from flying objects
- **Blast Pressure**: Lung damage, Second degree burns, First degree burns
- **Thermal Radiation**: Third degree burns

**Kilometres**