

3.7.7 Lightning

3.7.7.1 Distribution

Annual Time Series Distribution

Figure 66 shows that the occurrences of lightning throughout the year have taken on a cyclical pattern. However, it can be pointed out that lightning is generally low with one sudden peak in 1995 and another gradual peak in 2007. These are the two highest peaks with the first peak experiencing nearly 24 events and the second, nearly 35 events.

Seasonal Distribution

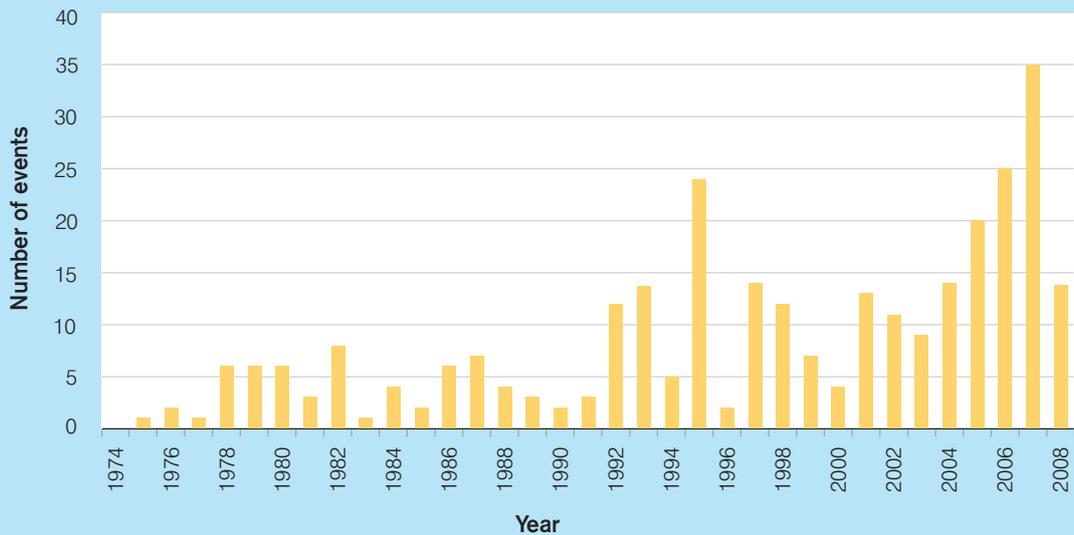
The seasonal distribution of lightning also takes on a cyclical pattern as can be seen from Figure 67. There are two peaks, one which can be seen from October

and November and the other in April and May. The peaks in April and May are much higher and surpass 60 events.

Spatial Distribution

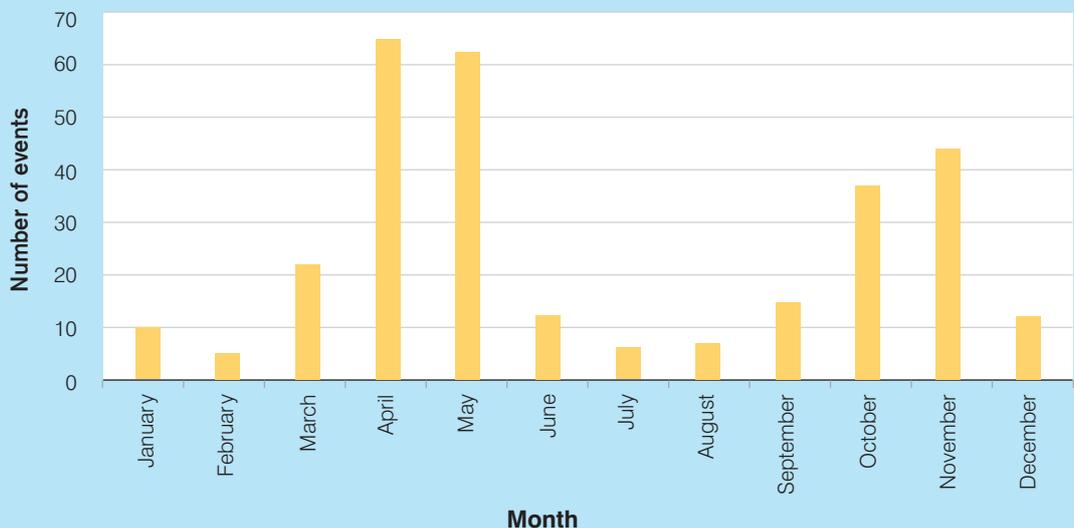
In general it can be seen that all districts have experienced lightning and the occurrences are quite high (Map 42). However, districts like Gampaha, Kalutara and Rathnapura are the most affected with the number of events greater than 21. However, districts like Batticaloa, Trincomalee and Mullaitivu have less than three events occurring because of unavailability of data. DS divisions where lightning has occurred are scattered about the island and no particular cluster can be observed. Only few DS divisions have surpassed the upper limit of 5.

Figure 66 :
Annual Time Series Distribution of Lightning



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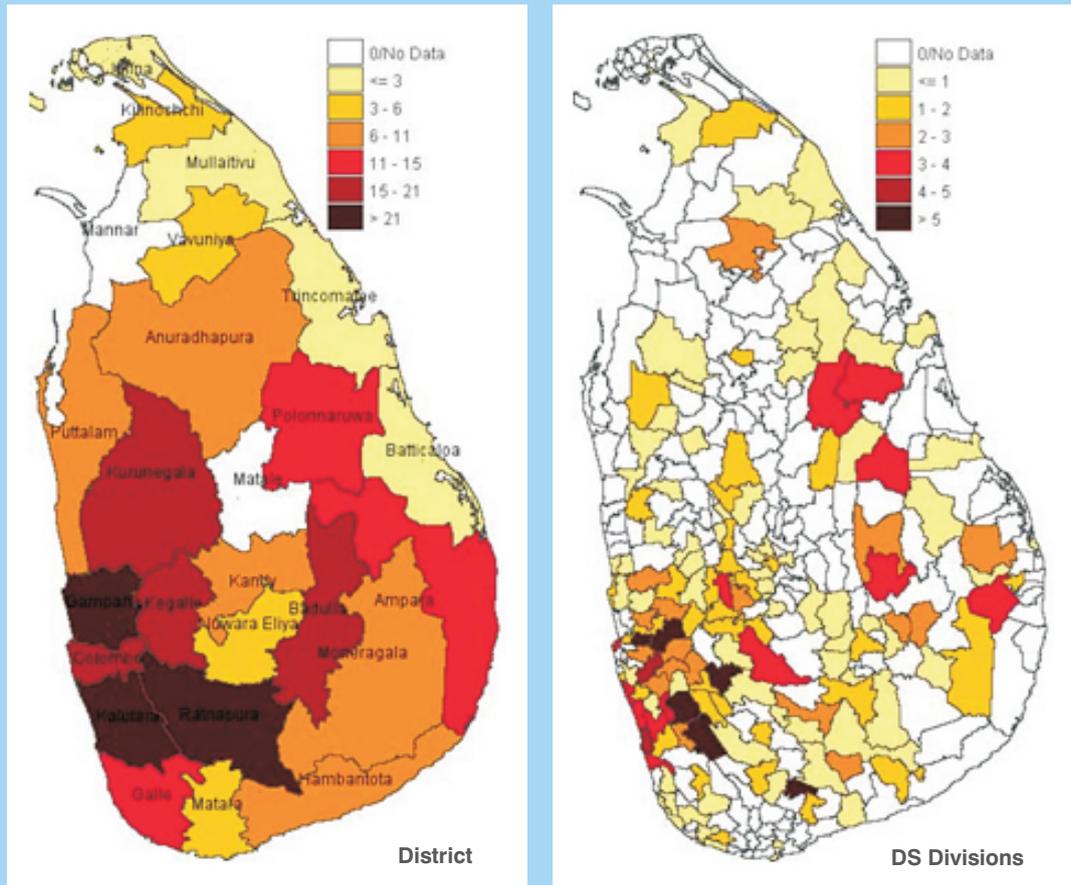
Figure 67 :
Seasonal Distribution of Lightning : 1974 - 2008



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Map 42 :
Spatial
Distribution
of Lightning :
1974 -2008

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3.7.7.2 Impacts

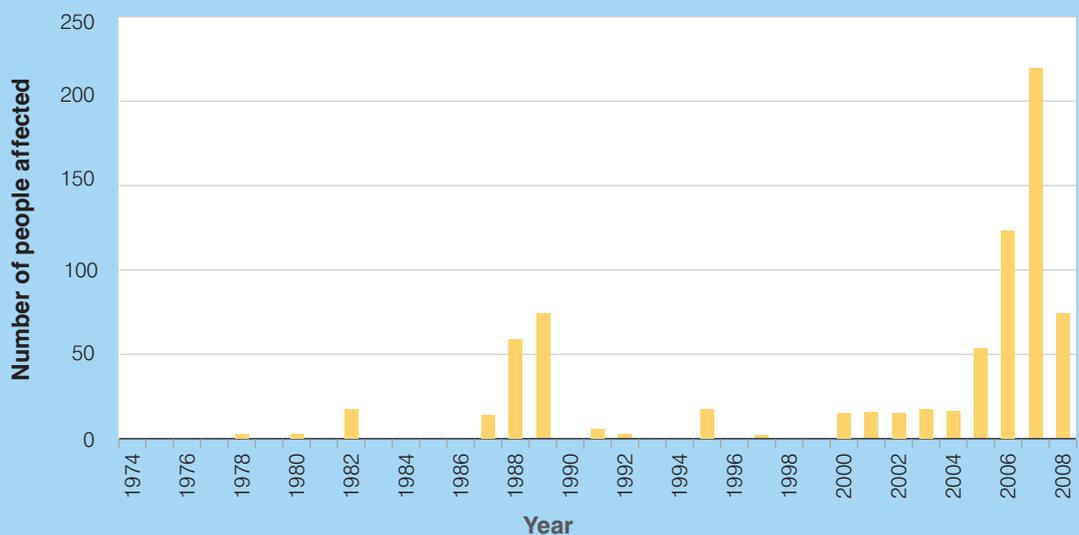
People Affected (Annual Time Series Distribution)

According to Figure 68 the number of people affected by lightning appears to be quite low till 2000 with a few years showing a relatively high number of

people being affected in between. Thereafter, there has been a gradual rise in the number of people affected with the highest number of people being affected in 2007.

Figure 68 :
People Affected
Due to Lightning
– Annual Time
Series
Distribution

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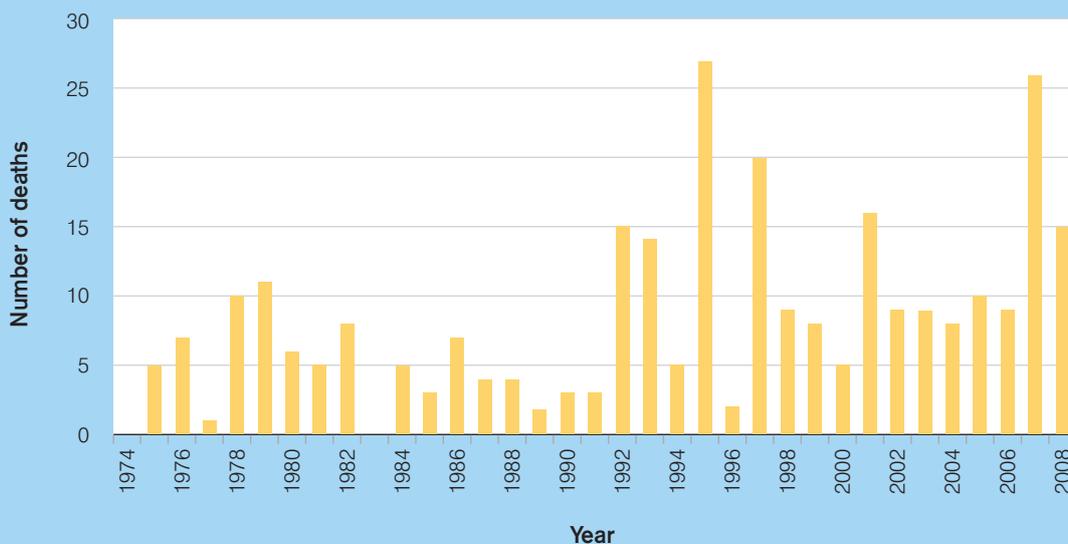
Loss of Life (Annual Time Series and Spatial Distribution)

The loss of life due to lightning is quite cyclical as can be seen from Figure 69. In most of the years deaths caused by lightning has been below 10. However, in 1995 and 2007 it has shot up to very high levels, exceeding 25 deaths. Spatially, most districts appear to have high levels of death due to lightning

(Map 43). However, the districts with the highest impact appear to be the districts of Polonnaruwa, Gampaha and Kalutara. However, in other districts like Mullaitivu, Vavuniya, Trincomalee and Batticaloa, the occurrence of deaths are quite low. With respect to DS divisions, a few of them have experienced very high losses of life, while in most of them the numbers are quite low.

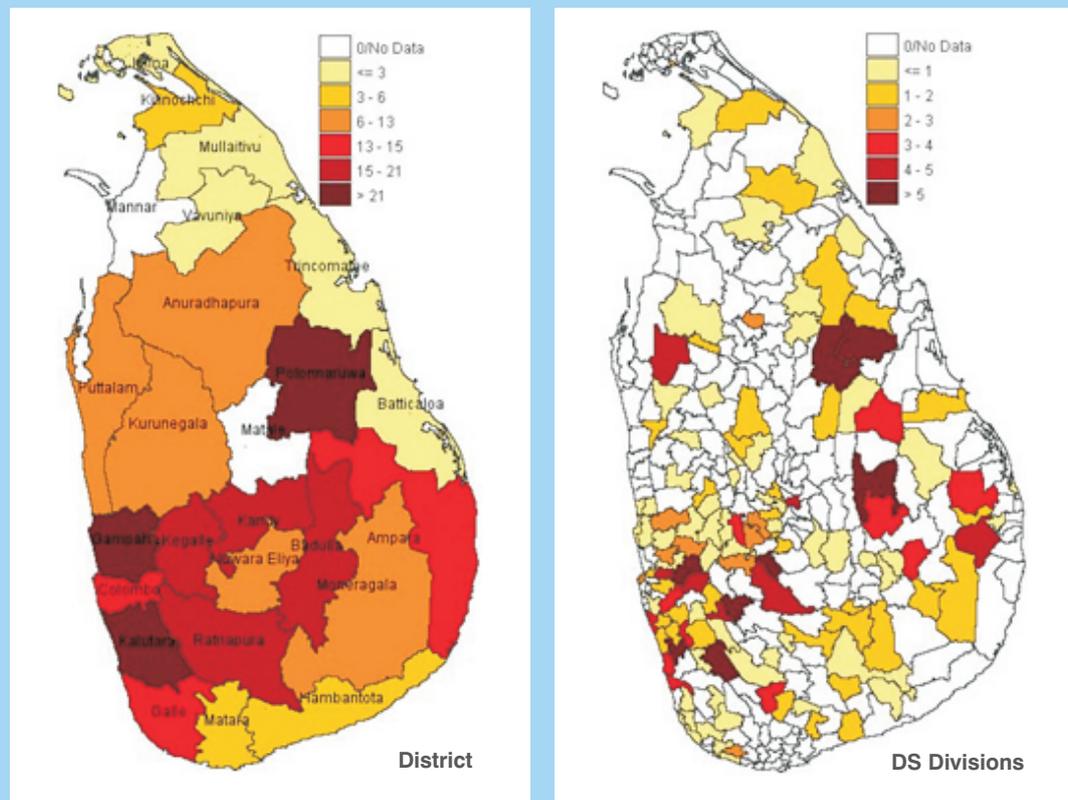
Figure 69 :
Loss of Life Due to Lightning – Annual Time Series Distribution

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Map 43 :
Loss of Life Due to Lightning Spatial Distribution: 1974 - 2008

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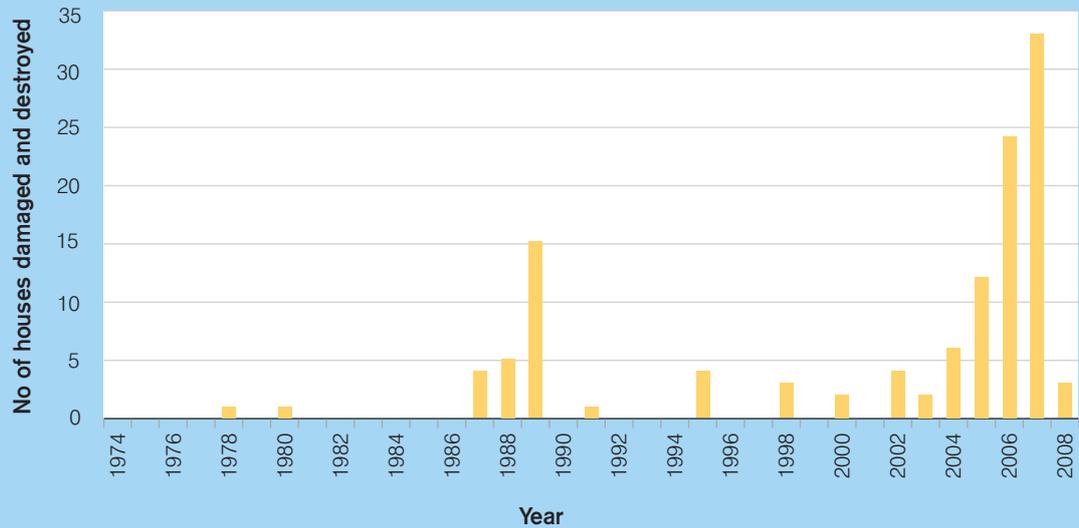


Destroyed and Damaged Houses (Annual Time Series and Spatial Distribution)

Damage to houses due to lightning appears to be quite low during the 34 years as can be seen from Figure 70. However, a gradual increase towards the end of the period can be seen with the highest

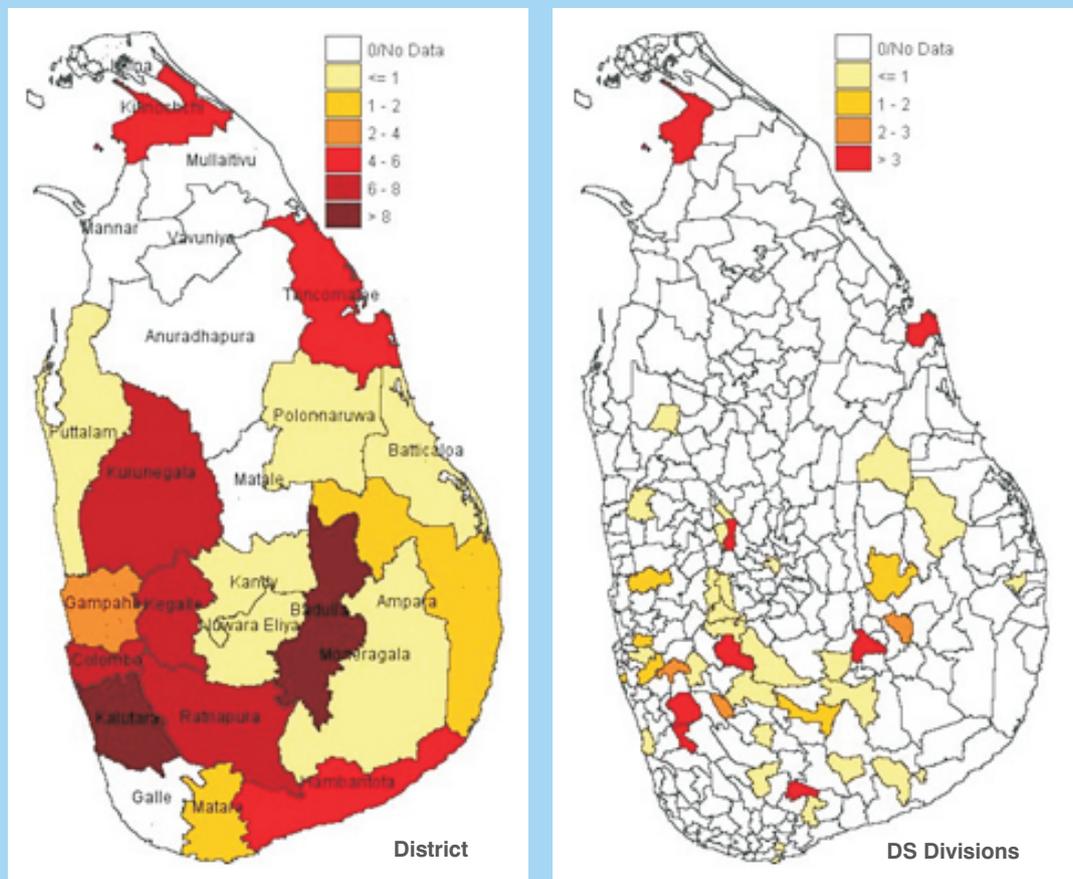
damage with nearly 35 houses being destroyed in 2007. Spatially, most districts do not appear to have very high damage to houses, except Badulla and Kalutara (Map 44). Most of the other districts have low levels. A similar pattern can be seen with respect to the DS divisions as well.

Figure 70 :
No of Houses
Destroyed
and Damaged
Due to
Lightning –
Annual Time
Series
Distribution



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Map 44 :
No of Houses
Destroyed
and Damaged
Due to
Lightning -
Spatial
Distribution :
1974-2008



source
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<p>Box 13 : Conclusions on Distribution and Impacts of Lightning</p>	<p>Lightning is a disaster that has occurred throughout the period with a cyclical pattern. Seasonally, too, it has taken on a cyclical pattern. Although the number of people affected, damage to houses and agricultural loss are not very high, there have been relatively high levels of death due to lightning.</p>
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