



Australian Government
Bureau of Meteorology

Tropical Cyclone *Leon* 1-9 February 2000

Perth Tropical Cyclone Warning Centre
Bureau of Meteorology
31 July 2008

A. Summary

Tropical Cyclone *Leon* formed about 200 km to the southeast of Christmas Island early on 4 February. It moved generally west southwest and intensified rapidly reaching category 3 intensity later on 5 February. From 7 February *Leon* felt the influence of wind shear, weakening as it moved west before crossing west of 90°E into La Reunion's area of responsibility at about midnight WST 8 February as a category 1 cyclone.

Leon was renamed as *Eline* and traversed the Indian Ocean re-intensifying passing north of Mauritius and La Reunion before making landfall on Madagascar on 17 February causing considerable damage. *Eline* again redeveloped in the Mozambique Channel before crossing the Mozambique coast on 22 February and contributed to an already widespread and serious flooding situation. In all *Leon-Eline* was a cyclone for two and a half weeks across the Indian Ocean.

Leon had little impact on either Christmas or Cocos Islands.

B. Meteorological Description

Intensity Analysis

The formation of *Leon* was preceded by a strong cross equatorial surge in the northwest monsoon together with a surge in the easterly flow to the south.

Leon formed in a relatively low shear area and intensified steadily until 6 February. There was no clear eye visible and the centre was embedded underneath deep cold cloud during its period of maximum intensity.

The effects of strong northeasterly shear became apparent on 7 February and steady weakening occurred as it moved to the south of Cocos Islands across to the Perth TCWC boundary (90°E).

Motion

Leon was steered around the northwest flank of a high located over central Australia. The amplification of a trough south of the cyclone during 4 February caused a break in the ridge producing a more southwest movement in the

period 4 – 6 February. The trough subsequently relaxed enabling the ridge to build westward in its wake and Leon resumed a more westward track again.

C. Impact

There were no reports of impact or damage to the Cocos or Christmas islands.

Table 1. Best track summary for *Leon*, 1 – 8 February 2000.

Note: Add 8 hours to convert to WST.

Year	Month	Day	Hour (UTC)	Position Latitude S	Position Longitude E	Max wind 10min knots	Central Pressure hPa	Rad. of Gales nm
2000	02	1	0400	10.5	115.5	25	1000	
2000	02	1	1000	10.5	114.7	25	1000	
2000	02	1	1600	10.5	113.9	25	1000	
2000	02	1	2200	10.5	113.2	25	1000	
2000	02	2	0400	10.5	112.5	25	1000	
2000	02	2	1000	10.6	111.8	25	1000	
2000	02	2	1600	10.8	111.2	25	1000	
2000	02	2	2200	11.0	110.5	25	1000	
2000	02	3	0400	11.2	109.9	25	1000	
2000	02	3	1000	11.5	109.2	25	1000	
2000	02	3	1600	11.8	108.1	25	1000	
2000	02	3	2200	12.2	107.0	35	995	80
2000	02	4	0400	12.5	106.2	40	990	80
2000	02	4	1000	12.8	105.3	50	985	80
2000	02	4	1600	13.2	104.6	50	985	80
2000	02	4	2200	13.7	104.1	55	980	80
2000	02	5	0400	14.1	103.6	60	975	80
2000	02	5	1000	14.6	103.0	65	970	80
2000	02	5	1600	15.1	102.2	70	965	80
2000	02	5	2200	15.7	101.3	75	960	80
2000	02	6	0400	16.1	100.5	75	960	80
2000	02	6	1000	16.8	99.6	75	960	80
2000	02	6	1600	16.8	98.9	75	960	80
2000	02	6	2200	16.8	98.2	70	965	80
2000	02	7	0400	16.9	97.3	65	970	80
2000	02	7	1000	17.0	96.0	55	980	80
2000	02	7	1600	17.3	94.5	50	985	80
2000	02	7	2200	17.6	93.2	40	990	80
2000	02	8	0400	17.6	92.1	40	990	80
2000	02	8	1000	17.7	91.0	40	990	80
2000	02	8	1600	17.7	90.0	40	990	80
2000	02	8	2200	17.7	89.0	40	990	80

Figure 1. Track of Tropical Cyclone *Leon*, 1 – 9 February 2000. All times in WST.

