

Tropical Cyclone Zelia

8 – 10 October 1998

Perth Tropical Cyclone Warning Centre Bureau of Meteorology

A. Summary

Zelia developed from a convective cloud cluster in the near equatorial trough to the southwest of Sumatra. Intensifying and moving to the southeast on the southern side of the middle level ridge it soon encountered low-level southeasterly flow following the passage of a cold front to the south. This weakened the system and rapidly reversed its path. Zelia then dissipated as a TC over water in a high shear environment, but maintained its identity as a tropical depression for several more days

B. Meteorological Description

Zelia formed within the monsoon trough in a region of low shear and favourable upper outflow. It then tracked on the southern side of the mid-level ridge. Its movement changed abruptly following shearing. Zelia moved into a region of strong shear south of the mid-level ridge axis and weakened rapidly.

C. Impact

There is no known damage associated with Tropical Cyclone Zelia.

D. Observations

Zelia was located well out to sea during its lifecycle and therefore no observations were recorded.

Table 1. Best track summary for *Zelia*, 7 - 10 October 1998

Note: Add 8 hours to convert to WST. Refer to best track database for complete track details.

						Max		
				Position	Position	wind	Central	Rad. of
.,		_	Hour	Latitude	Longitude	10min	Pressure	Gales
Year	Month	,	(UTC)	S	E	knots	hPa	nm
1998	10	7	0600	11.3	93.0	25	1002	
1998	10	7	0900	11.9	93.6	25	1000	
1998	10	7	1200	12.4	93.8	30	999	
1998	10	7	1500	12.9	94.0	30	998	
1998	10	7	1800	13.2	94.0	35	996	15
1998	10	7	2100	13.5	94.1	35	995	15
1998	10	8	0000	13.9	94.2	35	994	15
1998	10	8	0300	14.2	94.4	35	993	30
1998	10	8	0600	14.4	94.6	40	992	30
1998	10	8	0900	14.6	94.8	40	990	50
1998	10	8	1200	14.7	95.0	40	990	50
1998	10	8	1500	14.8	95.1	40	990	50
1998	10	8	1800	14.9	95.2	40	992	30
1998	10	8	2100	14.9	95.3	40	992	30
1998	10	9	0000	14.8	95.4	35	994	15
1998	10	9	0300	14.7	95.5	35	996	15
1998	10	9	0600	14.6	95.6	30	998	
1998	10	9	0900	14.5	95.8	30	999	
1998	10	9	1200	14.5	96.0	25	1000	
1998	10	9	1500	14.5	96.3	25	1001	
1998	10	9	1800	14.5	96.5	25	1001	
1998	10	9	2100	14.5	96.5	25	1002	
1998	10	10	0000	14.4	96.2	25	1002	
1998	10	10	0300	14.2	95.8	25	1003	
1998	10	10	0600	14.0	95.5	20	1004	
1998	10	10	0900	13.9	95.3	20	1005	

Figure 1. Track of Tropical Cyclone *Zelia* 7 – 10 October 1998. All times in WST.

