



# Meteorology

# Warm season

### Mid November to mid April

### Fair weather

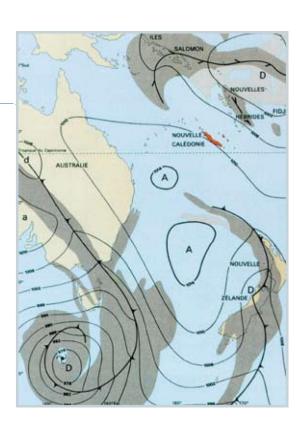
During the warm (and humid) season, periods of sunshine (8 to 15 days) alternate with the raining periods preceding or following tropical cyclones. ESE tradewinds prevail over area.

A high pressure area at 1014 to 1020 hPa covers the Tasman Sea and the *South Pacific Convergence Zone* is more or less centered on the parallel  $10^{\circ}$  S.

D uring the day, clouds develop over the mainland and build up against the mountain slopes where warm moist air is forced to rise. Occasional showers may occur then and spread over the littoral. By late afternoon, clouds break up and vanish. In the lagoon, the ESE tradewinds freshen with the sun ascension to reach force 5 to 6 by 2 PM.

This type of summer fair weather only deteriorates when the Tasman Sea High weakens or drifts eastward.

Then the SPCZ moves south, the wind falls and thunderstorms appear.



### Inter Season

Mid April to mid May

The SPCZ moves north. Tropical disturbances become scarce and are generally weak at the latitude of New Caledonia.

Cold fronts begin to affect the southern part of the mainland and the Isle of Pines.





# Cool season

### Mid May to mid September

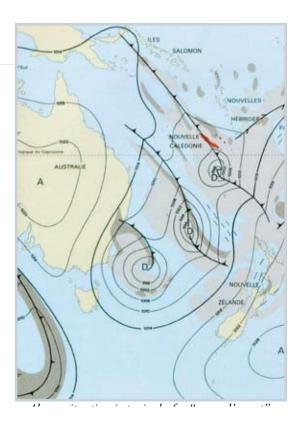
### Disturbed weather

During the period from mid May to mid September, the SPCZ continues shifting north.

Tropical active depressions are exceptional.

Cold fronts associated to the depressions crossing the Tasman Sea, reach New Caledonia at times. The air mass from the polar regions pushes under the tropical warm air forcing the latter to ascend rapidly. The rear boundary of the warm sector defines the front, where the cold air replaces the warm air. Heavy rain and strong westerly winds, gusting at times, accompany the passing cold fronts. They are locally called "coups d'ouest" (westerly blows).

In Noumea, the great roadstead (Grande Rade) is not sheltered from westerly winds. Therefore, forecasting these gales is essential to the comfort of ships alongside or at anchor.



### Fair weather

These stormy days are followed by fair periods as in situation opposite.

The Australian anticyclone reaches its maximum strength and New Caledonia is directly under its influence.

The South Pacific Convergence Zone is pushed back to the equator. The prevailing wind is ESE with clear skies on the west coast, sheltered by the central ridge but, cloudy with scattered showers on the east coast and over the Loyalty Islands.

Such fair periods last for 2 to 5 days in the cool season.

# NOUVELLES NOUVEL

## Inter Season

### Mid September to mid November

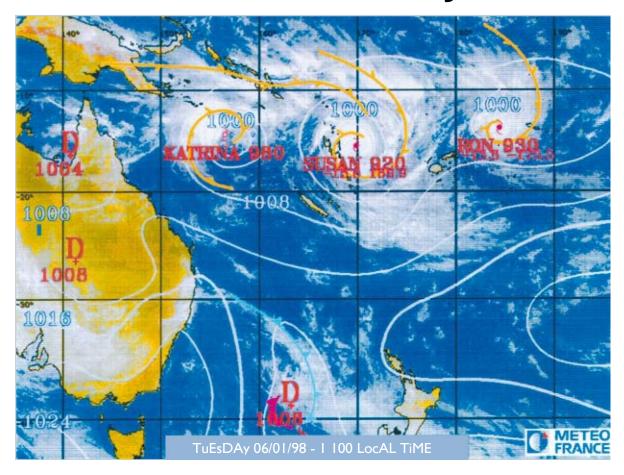
The SPCZ moves back south. The subtropical ridge stretches over the Southwest Pacific. Tradewinds strengthen and blow almost permanently. This is the driest and the sunniest period in the year.

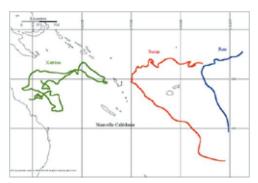
Active cold fronts may however reach the south of the mainland until October and first tropical depressions may affect the territory as early as beginning of November.





# **Cyclones**





Statistics clearly show that cyclones are more frequent during La Nina periods than during El Nino periods, though the risk remains non negligible when the latter occurs: the names of Colleen (Feb. 69), Patsy (Dec. 86), and more recently Esau and Frank (Mar. 92) are still present in the memories to keep us alert.

Above is an interesting January situation. 1998 was the turning point between a La Nina cycle and an El Nino cycle!

Above documents published by courtesy of: