

## Instruction Worksheet Case study: Understanding the environment

### 1. Getting started: systems and briefing

1.2 Open a web browser:

1.3 Identify a circulation (current TC or potential TC) in the Pacific:

Name and general region:

### 2. Analysis of broadscale circulation

#### 2.1 Low levels

View the appropriate information to gain an understanding of the broadscale environment.

**Q. Describe the low level environment. Streamline charts, scatterometry, What are the main synoptic features that might influence the cyclone/potential cyclone? How do models compare with the analyses? What are the most useful web sites?**

---

---

---

---

#### 2.2 mid-upper levels

View the appropriate information to gain an understanding of the broadscale environment.

**Q. Describe the mid-upper level environment. Imagery, charts (winds, shear, RH), model What are the main synoptic features that might influence the cyclone/potential cyclone? What are the most useful web sites?**

---

---

---

---

#### 2.3 Ocean

View the appropriate information to gain an understanding of the broadscale environment.

**Q. Describe the ocean temperatures and how this might affect the cyclone. What are the most useful web sites?**

---

---

---

---

### 3. Potential for development

#### 3.1 Subjective

**Q. Based on the current patterns, overall how would you describe the general environment in terms of development of the cyclone in the next 24 hours?  
Will it develop/stay the same/weaken? At what rate – quickly, slowly?  
What are the most important factors affecting your decision?**

---

---

---

---

#### 3.2 Model and official view

**Q. How does your evaluation compare with the official forecasts and from NWP?**

---

---

---

---

**OPTIONAL EXTRA for ADVANCED USERS**

#### 3.3 Changes to the environment.

**Q. How are the broadscale influences expected to change in the next 72h?  
Use models, official track, policy descriptions.**

---

---

---

---

### 4. Learnings

**What have you learned from this exercise?**

---

---

---