

## Discussion

Davis Date Issued: 4-11-2022

Princess E.-Wilkes Land 16 Apr

McMurdo Day 7-10

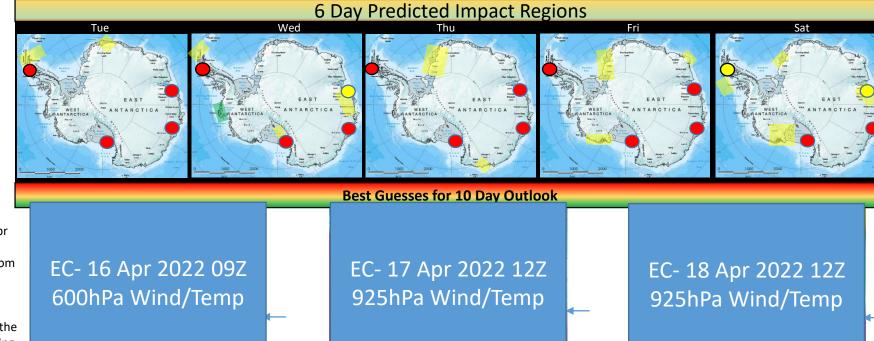
Palmer

Antarctic Peninsula 18 Apr

Zonal flow around Antarctica will produce no measurable opportunities until this weekend. The East Antarctica coast will continue to have major occluded lows approach with the most significant on Friday near Davis then the system fills and migrates eastward. Upper level jet support at 300hPa and above does not project any major intrusion. The 400hPa and below does provide a moderate steering flow southward for vertically shallow system moving into Antarctica for both Ross Island region and the Peninsula this weekend.

Due to the lack of jet support, no major intrusions are expected for the next ten days. Ross Island region will have a depression drop directly south just past the 180W longitude late this week. The low pressure system will drag a measurable mass from the polar front into the Ford Ranges. Stormy condition will impact the Ice Shelf into Ross Island but the mid-latitude airmass will be entrained and mixed with the continental katabatic air and barrier winds during its resident time over the ice shelf presenting a dynamic system but highly modified.

The Peninsula will have several systems migrate through the Drake Passage. Tuesday (tomorrow's) system will have a minor intrusion and a potential next Monday for the greatest chance of a supported warm air advection that could move southward over Palmer Land.



George V – M. Byrd Land 17 Apr

- Davis Casey: Very weak occurrences for Davis only 11 and 16 Apr
- Ross Island: A Low pressure system will; drop into the Ice Shelf from the north this weekend causing stormy condition on Sunday through Monday.
- Peninsula: Steering flow will guide most systems rapidly through the Drake Passage with highest probability of a meridional flow causing any measurable warm air advection occurring early next week.