

300hPa

IVT

Discussion

Date Issued: 4-28-2022

Activate TOPS Day 1-3 ● No
 Activate TOPS Day 4-6 ● No
 Activate TOPS Day 7-10 ● No

Activate TOPS Day 1-3 ● No
 Activate TOPS Day 4-6 ● No
 Activate TOPS Day 7-10 ● No

Activate TOPS Day 1-3 ● No
 Activate TOPS Day 4-6 ● Weak
 Activate TOPS Day 7-10 ● No

Activate TOPS Day 1-3 ● Weak
 Activate TOPS Day 4-6 ● Weak
 Activate TOPS Day 7-10 ● No

Davis

Casey

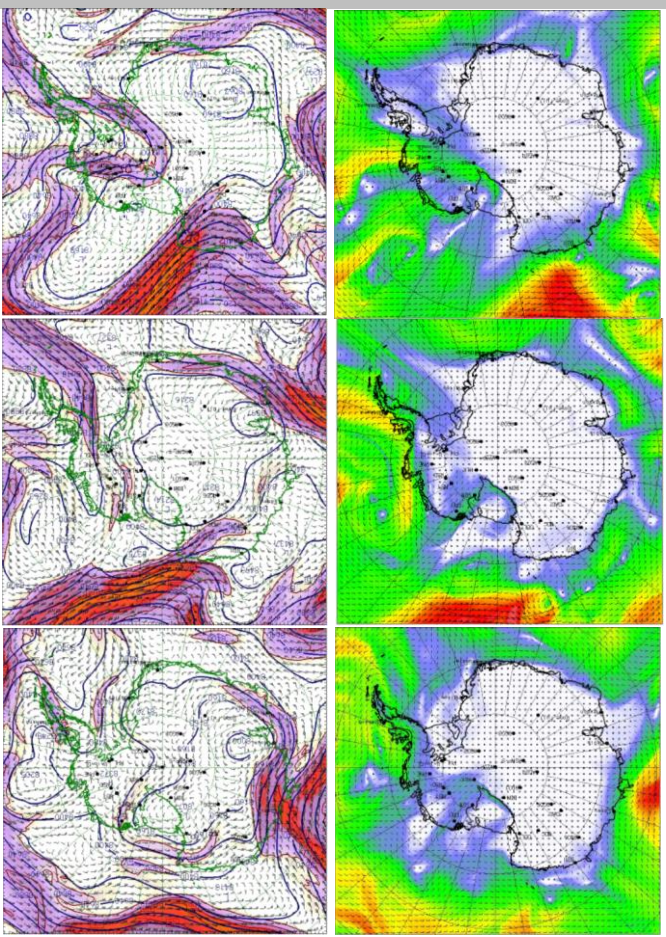
McMurdo

Palmer

Fri

Sun

Tue (UTC)



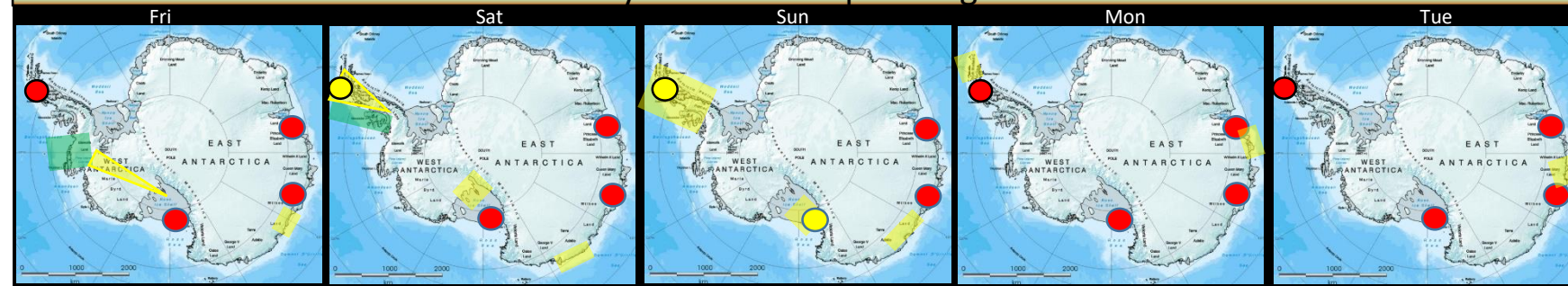
The steering pattern took strong dives northward over the Pacific and Indian Oceans but the returns southward did not yield an equal response over our regions of concern. Both ECMWF and GFS on the long range show the upper level vortex will retreat to East Antarctica and a more zonal flow will follow into next week.

The intrusion of the AR into west Antarctica will push into the Ross Ice Shelf while the main thrust migrates east into the Bellingshausen Sea. This flow will be cut off from the mid latitude source as the jet splits and weakens the impact of the AR approaching the Peninsula this weekend. The Jet core will pass rapidly north of San Rafael Chile and set up a predominate zonal flow over the Drake Passage by Tuesday.

The AR intruding over West Antarctic will gain a second feed from the Ross Sea as it pushes into the Ross Ice Shelf on Saturday feeding a weak and stale AR around a decaying low pressure system. This Low will become vertically challenged as an opposing westerly flow sets up over Victoria Land sweeping over the Ross Sea and Ice Shelf above the 500hPa level.

No changes for Davis and Casey Station as they continue the parade of migrating lows passing seaward with temporary pushes that will have only slight gains inland.

6 Day Predicted Impact Regions



Best Guess for 10 Day Outlook "not so good for AR's"

AUS NZ
 turning mostly zonal next week

GFS- 4 May 2022 12Z 400hPa Wind/Temp

Princess E.-Wilkes Land 4 May

George V - M. Byrd Land 4 May

Antarctic Peninsula 4 May

Outlook:
 Davis - Casey: The best activity will be possibly Tues/Wed but will be another glancing system.

Ross Island area: West Antarctica flow is too weak to provide a solid Atmospheric River into Ross Island region but the area will experience stormy conditions as the low pressure systems pass on its northward track into the Ross Sea on Sunday.

Palmer area: A weak AR will pass over the Central and Northern portions on Sunday and Monday with no signs of any other advancing AR through the week.