Evolution of the Southern Annular Mode during the past millennium

Close reading Questions:

   1. The JRI ice core is using what as a proxy for temperature?

   2. How would you interpret the correlation coefficients per proxy in figure 2a?

   3. In Figure 2c, what is the reduction of error plot demonstrating? What units is the Reduction of Error axis in?

   4. Part of this paper compares the SAM index to the Niño3.4 sea surface temperature (SST) index back to 1200 AD. How was the Niño3.4 index constructed?

Take homes:

* 1. Does the SAM reconstruction agree/ disagree with CMIP5 model simulations? How does radiation confirm or invalidate that relationship?
  2. How is the SAM related to the tropical pacific?
  3. How is SAM likely to behave in the future?

Response of the Midlatitude Jets, and of Their Variability, to Increased Greenhouse Gases in the CMIP5 Models

Close reading:

1. Why does this study use both EOF’s and simple geometric jet statistics?
2. The star in the figure denotes comparisons to reanalysis data.  What reanalysis, and when do the reanalysis and model runs agree, and when do they disagree?

Take Homes:

1. How are the Southern Hemisphere Jet & the North Atlantic Jet going to change with climate change?

1. What dominates their variability now, what will dominates their variability in the future?

        2. How will the North Pacific Jet change with climate change?

2. What dominates its variability now, what will dominate its variability in the future?

        3. What is the proposed mechanism that explains why the North Pacific Jet is different from the Southern Hemisphere Jet & the North Atlantic Jet?

Synthesis:

1. How do these two studies inform one another? Do they agree?

        2. What would you change about the analysis in either paper?