The need of a cryospheric network in Chile

Jorge Carrasco Cerda
Universidad de Magallanes
Land Glacier Ice Loss. (Source: IPCC AR4 (2007) based on Dyurgenov and Meyer (2004).) Figure (a) shows the cumulative mass lost over time; Figure (b) shows the relative contribution of loss in each region to sea-level rise.
Projected changes of runoff for 2090-2099, respect to 1980-1999
Current network to monitoring changes in the cryosphere in South America?
Atmospheric data use as a proxy for cryosphere monitoring

Altitude of the zero isotherm

+ 

Precipitation

Equilibrium Line Altitude (ELA)

Snowline
Sonic Ranging Sensor

Fig. 5. Site photos: (a) Buffalo, NY; (b) Cheyenne, WY; and (c) Davis, WV.
Conclusion

There is a need for establishing a cryosphere network, or ….

Rescue data and archiving