ric accuracy at the given magnitude (e.g., a Jupiter size planet around a M-dwarf). On other hand, VVV observations saturate at $K_s \lesssim 10$, that allow the detection of even smaller rocky planets, such as Earth analogs around dwarfs in the Solar vicinity ($d < 100$ pc).

5. FOLLOW-UP OBSERVATIONS

Follow-up observations are mandatory in order to confirm the planet candidates detected by the VVV Survey. These studies can be done using the astronomical facilities located in Chile. High-cadence photometry combined with radial velocities measurements are able to define all the basics planet parameters (i.e., mass, radius, period, inclination and semi-major axis). In order to characterize faint objects the upcoming Extremely Large Telescopes (ELT's) may be used. One example is the use of the SIMPLE spectrograph for the European ELT, designed to detect atmospheric features of exoplanets during eclipses (Origlia et al. 2010).

We gratefully acknowledge use of data from the ESO Public Survey programme ID 179.B-2002 taken with the VISTA telescope, and data products from the Cambridge Astronomical Survey Unit. We acknowledge funding from the FONDAP Center for Astrophysics 15010003, the BASAL CATA Center for Astrophysics and Associated Technologies PFB-06, the Milky Way Millennium Nucleus from the Ministry for the Economy, Development, and Tourism's Programa Iniciativa Científica Milenio through grant P07-021-F, and by FONDECYT Regular 1071002, 1090213 and 3100029. RS and DM acknowledge financial support from CONICYT through GEMINI Project 32080016.

REFERENCES

Arnaboldi, M., et al. 2010, The Messenger, 139, 6
Borissova, J., et al. 2011, RevMexAA (SC), 40, 267
Catelan, M., et al. 2011, RevMexAA (SC), 40, 269
Emerson, J., & Sutherland, W. 2010, The Messenger, 139, 2
Kovács, G., Zucker, S., & Mazeh, T. 2002, A&A, 391, 369
Minniti, D., et al. 2010a, New Astronomy, 15, 433
Minniti, D., et al. 2010b, A&A, 527, A81
Minniti, D., et al. 2011, ApJ, 733, L43
Origlia, L., et al. 2010, Proc. SPIE, 7735, 77352B
Peñaloza, F., et al. 2011, RevMexAA (SC), 40, 284
Saito, R., et al. 2010, The Messenger, 141, 24