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Title: HARPS-N and SOPHIE joint follow-up of Kepler planetary candidates
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Abstract: Radial velocity follow-up is mandatory to establish the nature of most of the transiting planet candidates detected with Kepler, then to characterize them and in particular to measure their mass and eccentricity. We started follow-up programs with the spectrograph HARPS-N that benefit from our SOPHIE observations on Kepler Objects of Interest. The goal of our HARPS-N programs is mainly to extend the SOPHIE results toward Kepler planetary candidates having lower masses, smaller radii, and/or fainter host stars. It already allowed the detection and characterization of the planets KOI-200b and KOI-889b, the two first ones with HARPS-N. These results were obtained despite a moderate amount of HARPS-N nights devoted to these programs thanks to the synergy with the SOPHIE observations. This shows the gain that could be obtained for the follow-up of transiting planet candidates from coordinated observations secured with spectrographs with different sensitivities, precisions, and accessibilities. Our HARPS-N programs on Kepler planetary candidates will be presented and discussed, as well as our latest results from the 2013 season, including new planets detection and characterization.

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