The news about Vienna Atomic Line Data Base

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Abstract.

We describe the main changes in the "Vienna Atomic Line Data Base" (VALD, Piskunov et al., 1995) and Piskunov, 1996) that have been made since the first release in 1994. The original VALD lists have been complemented with critically evaluated data obtained from experimental measurements and theoretical calculations which are necessary for computing state-of-the-art line opacities in stellar atmospheres, as well as for spectral synthesis for high precision studies (e.g. abundances, radial velocities etc.). In this paper we present new and improved data sets for chemical elements that have already been included in VALD, for new elements and for additional higher ionized species.

Software modifications allow remote users of VALD to specify individual extraction parameters as an alternative to the default settings of the VALD team and to have direct control over the quality ranking of line data. The new World-Wide-Web interface provides easy access to all new features. The support for the mirror site permitted opening of two additional VALD servers at Hoddard Space Flight Center (USA) and at Uppsala Astronomical Observatory (Sweden). For proper crediting of all authors of atomic data, VALD now includes a compilation of all publications used to any replies.