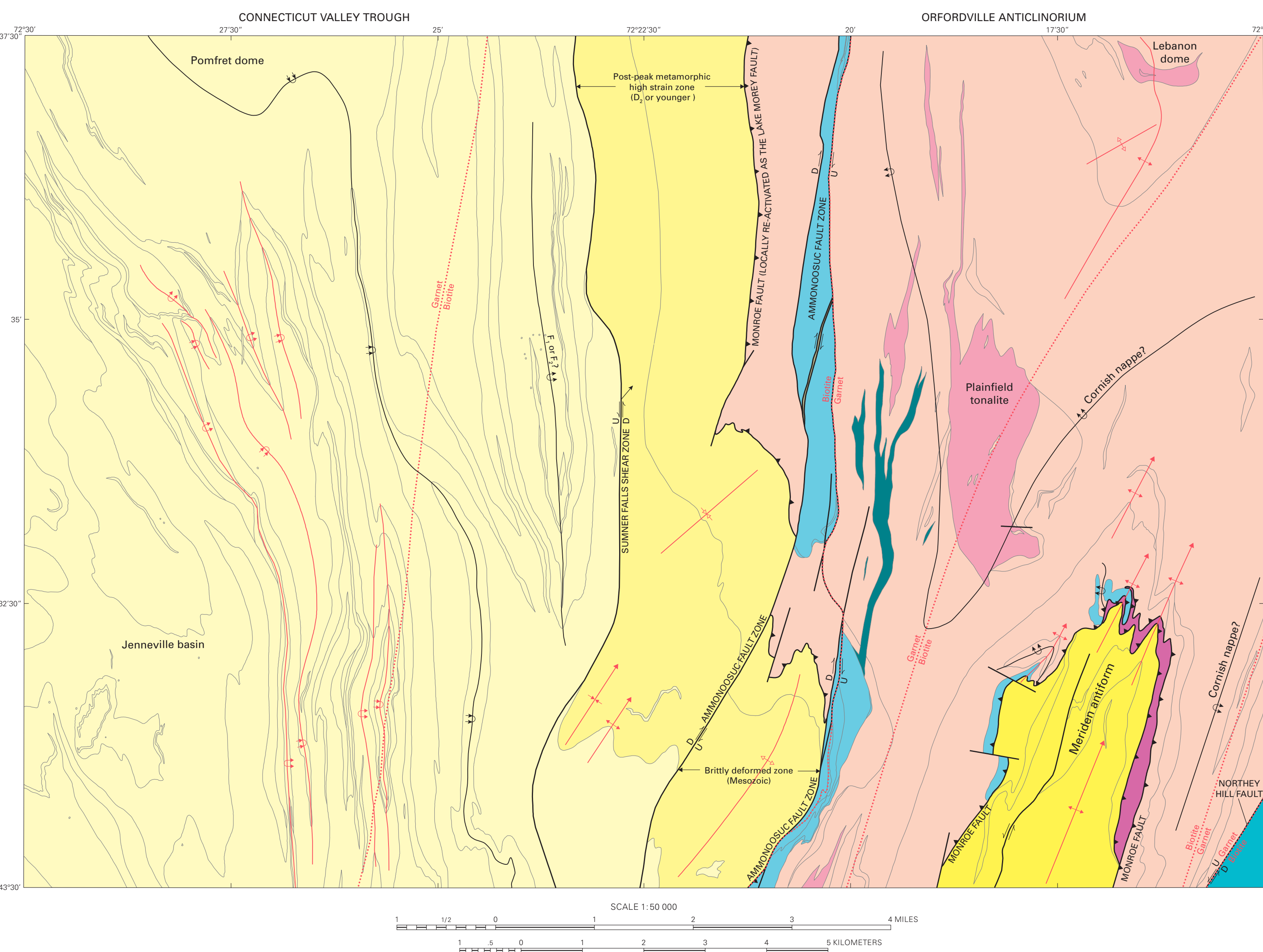


Figure 1.—Tectonic map showing major structural features of the Hartland and North Hartland quadrangles.



- EXPLANATION**
- Tectonic Belt**
- Mesozoic fault rock
 - Mélange (Devonian and Silurian?)
- Connecticut Valley trough**
- Waits River and Gile Mountain Formations (Devonian and Silurian)
- Orfordville anticlinorium**
- Rocks in the Monroe thrust sheet (Devonian and Silurian)—Clough, Fish, and Littleton Formations
 - Rocks in the Northey Hill thrust sheet (Devonian and Silurian)—Littleton Formation
 - Comerford Intrusive Complex (Silurian)
- Bronson Hill arc**
- Metaplutonic rock (Ordovician)
 - Ammonoosuc Volcanics and Partridge Formation (Ordovician)
- Contact**
- D₁ thrust fault (Monroe thrust fault)—Sawtooth on upper plate
 - Fault or shear zone, undifferentiated D₁ or younger—Arrows indicate relative motion where known; U, upthrown side; D, downthrown side; long arrow shows dominant lineation trend where known
 - F₁ overturned anticline—Locally recumbent, the conjectured Cornish nappe of Lyons and others (1996) is queried
 - F₁ overturned syncline—Locally recumbent
 - F₂ antiform—Arrow shows plunge direction
 - F₂ synform—Arrow shows plunge direction
 - F₂ overturned antiform
 - F₂ overturned synform
 - F₂ or younger antiform
 - F₂ or younger synform
 - Garnet-biotite isograd or coincident fault contact

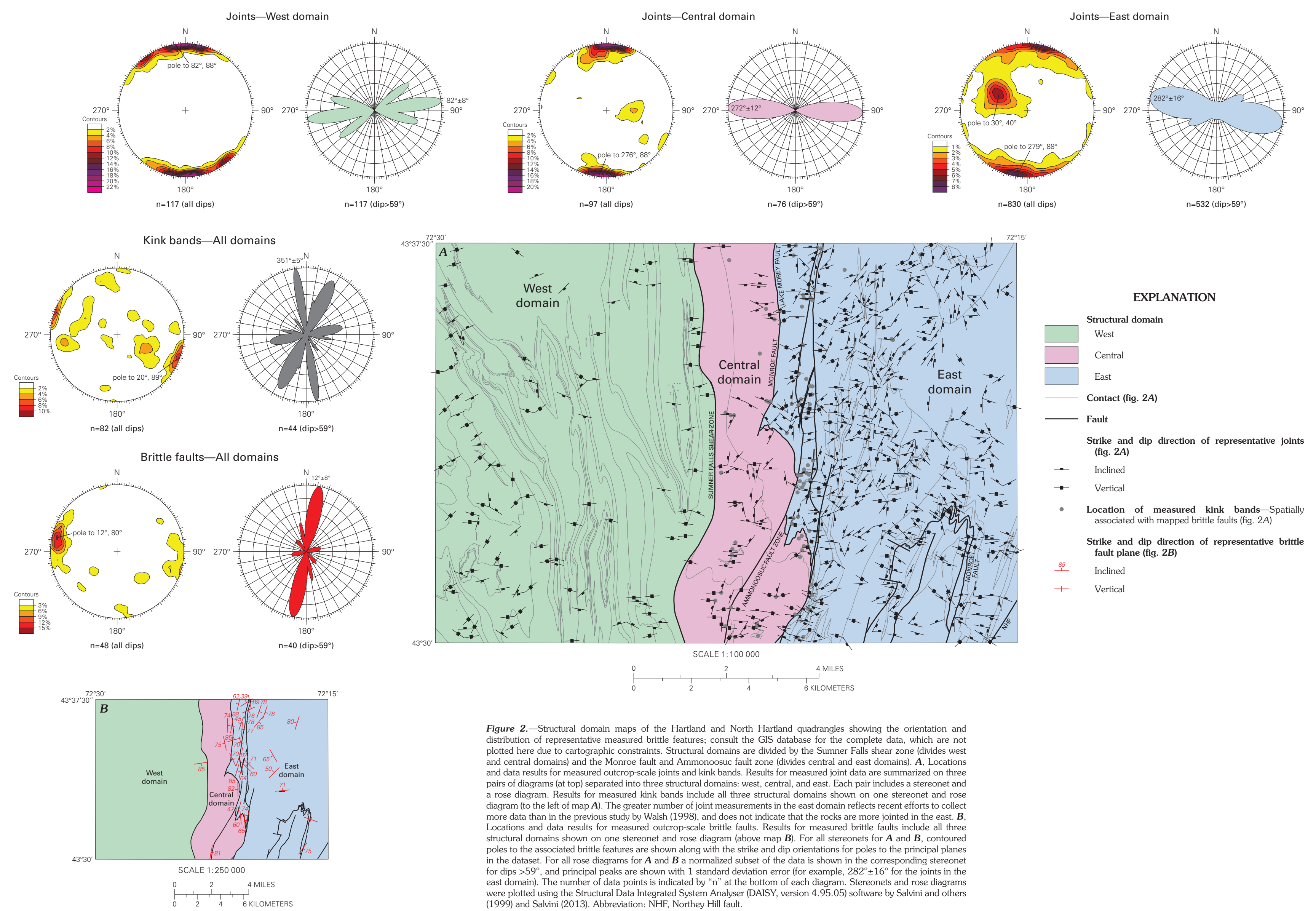


Figure 2.—Structural domain maps of the Hartland and North Hartland quadrangles showing the orientation and distribution of representative brittle features: consult the GIS database for the complete data, which are not plotted here due to cartographic constraints. Structural domains are divided by the Sumner Falls shear zone (divides west and central domains) and the Monroe fault and Ammonoosuc fault zone (divides central and east domains). A, Locations and data results for measured outcrop-scale joints and kink bands. Results for measured joint data are summarized on three pairs of diagrams (at top) separated into three structural domains: west, central, and east. Each pair includes a stereonet and a rose diagram. Results for measured kink bands include all three structural domains shown on one stereonet and rose diagram to the left of map A). The greater number of joint measurements in the east domain reflects recent efforts to collect more data than in the previous study by Walsh (1998), and does not indicate that the rocks are more jointed in the east. B, Locations and data results for measured outcrop-scale brittle faults. Results for measured brittle faults include all three structural domains shown on one stereonet and rose diagram (below map B). For all stereonets for A and B, contoured poles to the associated brittle features are shown along with the strike and dip orientations for poles to the principal planes in the dataset. For all rose diagrams for A and B a normalized subset of the data is shown in the corresponding stereonet for dips >55°; and principal poles are shown with 1 standard deviation error (for example, 282°±16° for the joints in the east domain). The number of data points is indicated by "n" at the bottom of each diagram. Stereonets and rose diagrams were plotted using the Structural Data Integrated System Analyzer (DAISY, version 4.95.05) software by Salvini and others (1999) and Salvini (2013). Abbreviation: NHF, Northey Hill fault.

BEDROCK GEOLOGIC MAP OF THE HARTLAND AND NORTH HARTLAND QUADRANGLES, WINDSOR COUNTY, VERMONT, AND SULLIVAN AND GRAFTON COUNTIES, NEW HAMPSHIRE